

CE Radio Test Report

Project No.	:	2501C072
Equipment	:	(1) BE6500 2.5G Dual-Band Wi-Fi 7 Router (2) BE6500 Dual-Band Wi-Fi 7 Router
Brand Name	:	Cudy
Test Model	:	(1) WR6500H
Series Model	:	(2) WR6500
Applicant	:	Shenzhen Cudy Technology Co., Ltd.
Address	:	7/F, Lepu Tower (West), 66 Xingke Rd, Nanshan, Shenzhen, China
Manufacturer	:	Shenzhen Cudy Technology Co., Ltd.
Address	:	7/F, Lepu Tower (West), 66 Xingke Rd, Nanshan, Shenzhen, China
Factory	:	Shenzhen Cudy Technology Co., Ltd.
Address	:	7/F, Lepu Tower (West), 66 Xingke Rd, Nanshan, Shenzhen, China
Date of Receipt	:	Jan. 08, 2025
Date of Test	:	Jan. 14, 2025 ~ Apr. 02, 2025
Issued Date	:	Apr. 16, 2025
Report Version	:	R00
Test Sample	:	Engineering Sample No.: SSL2025010825 for conducted and power and adaptivity, SSL2025010826 for radiated and blocking.
Standard(s)	:	ETSI EN 301 893 V2.1.1 (2017-05)

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

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BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective. Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

Table of Contents Page

REPORT ISSUED HISTORY 7

1 . RF EMISSIONS MEASUREMENT 8

1.1 TEST FACILITY 8

1.2 MEASUREMENT UNCERTAINTY 8

1.3 TEST ENVIRONMENT CONDITIONS 8

1.4 TEST CHANNEL 9

1.5 TEST METHODOLOGY AND RESULTS 10

2 . GENERAL INFORMATION 11

2.1 GENERAL DESCRIPTION OF EUT 11

2.2 DESCRIPTION OF TEST MODES 14

2.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING 15

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED 16

2.5 DESCRIPTION OF SUPPORT UNITS 16

2.6 EUT OPERATING CONDITIONS 16

2.7 CUSTOMER INFORMATION DESCRIPTION 16

3 . CENTRE FREQUENCIES 17

3.1 LIMIT 17

3.2 TEST PROCEDURES 17

3.3 TEST SETUP LAYOUT 17

3.4 TEST DEVIATION 17

3.5 EUT OPERATION DURING TEST 17

3.6 TEST RESULTS 17

4 . NOMINAL / OCCUPIED CHANNEL BANDWIDTH 18

4.1 LIMIT 18

4.2 TEST PROCEDURES 18

4.3 TEST SETUP LAYOUT 18

4.4 TEST DEVIATION 18

4.5 EUT OPERATION DURING TEST 18

4.6 TEST RESULTS 18

5 . RF OUTPUT POWER 19

5.1 LIMIT 19

5.2 TEST PROCEDURES 19

Table of Contents Page

5.3 TEST SETUP LAYOUT 20
5.4 TEST DEVIATION 20
5.5 EUT OPERATION DURING TEST 20
5.6 TEST RESULTS 20
6 . POWER DENSITY 21
6.1 LIMIT 21
6.2 TEST PROCEDURES 21
6.3 TEST SETUP LAYOUT 21
6.4 TEST DEVIATION 21
6.5 EUT OPERATION DURING TEST 21
6.6 TEST RESULTS 21
7 . TRANSMITTER UNWANTED EMISSIONS (OUTSIDE THE 5 GHZ RLAN BANDS) 22
7.1 LIMIT 22
7.2 TEST PROCEDURES 22
7.3 TEST SETUP LAYOUT 22
7.4 TEST DEVIATION 23
7.5 EUT OPERATION DURING TEST 23
7.6 TEST RESULTS (30MHZ TO 1000MHZ) 23
7.7 TEST RESULTS (ABOVE 1000MHZ) 23
8 . TRANSMITTER UNWANTED EMISSIONS(WITHIN THE 5 GHZ RLAN BANDS) 24
8.1 LIMIT 24
8.2 TEST PROCEDURES 24
8.3 TEST SETUP LAYOUT 24
8.4 TEST DEVIATION 24
8.5 EUT OPERATION DURING TEST 24
8.6 TEST RESULTS 24
9 . RECEIVER SPURIOUS EMISSIONS 25
9.1 LIMIT 25
9.2 TEST PROCEDURES 25
9.3 TEST SETUP LAYOUT 25
9.4 TEST DEVIATION 25
9.5 EUT OPERATION DURING TEST 25

Table of Contents Page

9.6 TEST RESULTS (30 MHZ TO 1000 MHZ) 25
9.7 TEST RESULTS (ABOVE 1000 MHZ) 25
10 . ADAPTIVITY (CHANNEL ACCESS MECHANISM) 26
10.1 LIMIT 26
10.2 TEST PROCEDURES 26
10.3 TEST SETUP 26
10.4 TEST DEVIATION 26
10.5 EUT OPERATION DURING TEST 26
10.6 TEST RESULTS 26
11 . RECEIVER BLOCKING 27
11.1 LIMIT 27
11.2 TEST PROCEDURES 27
11.3 TEST SETUP 27
11.4 TEST DEVIATION 27
11.5 EUT OPERATION DURING TEST 27
11.6 TEST RESULTS 27
12 . MEASUREMENT INSTRUMENTS LIST 28
13 . EUT TEST PHOTO 32
APPENDIX A - CENTRE FREQUENCIES 35
APPENDIX B - NOMINAL / OCCUPIED CHANNEL BANDWIDTH 37
APPENDIX C - RF OUTPUT POWER 39
APPENDIX D - POWER DENSITY 45
APPENDIX E - TRANSMITTER UNWANTED EMISSIONS 47
OUTSIDE THE 5 GHZ RLAN BANDS (30MHZ TO 1000MHZ) 47
APPENDIX F - TRANSMITTER UNWANTED EMISSIONS 52
OUTSIDE THE 5 GHZ RLAN BANDS (ABOVE 1000MHZ) 52
APPENDIX G - TRANSMITTER UNWANTED EMISSIONS 75
WITHIN THE 5 GHZ RLAN BANDS 75
APPENDIX H - RECEIVER SPURIOUS EMISSIONS (30MHZ TO 1000MHZ) 94
APPENDIX I - RECEIVER SPURIOUS EMISSIONS (ABOVE 1000MHZ) 99

Table of Contents Page

APPENDIX J - ADAPTIVITY **106**

APPENDIX K - RECEIVER BLOCKING **116**

APPENDIX L - INFORMATION AS REQUIRED BY EN 301 893 V2.1.1, CLAUSE 5.4.1 **118**

REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-ETSP-2-2501C072	R00	Original Report.	Apr. 16, 2025	Valid

1. RF EMISSIONS MEASUREMENT

1.1 TEST FACILITY

The test facilities used to collect the test data in this report
SSL-CB05/SSL-TR08/TR19 at the location of Room 108-116, 309-310, Building 2, No.1, Yile Road, Songshan Lake Zone, Dongguan City, Guangdong, People's Republic of China.
DG-CB12/TR17 at the location of 1-2/F, 4/F, Building A, 1-2/F, Building B, 3/F, Building C, No.3, Jinshagang 1st Road, Dalang Town, Dongguan City, Guangdong People's Republic of China.

1.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor) k=1.96 or k=2(which provide confidence levels of respectively 95% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).
Measurement Uncertainty for a Level of Confidence of 95.45%, $U=2\times u_c(y)$.

The BTL measurement uncertainty as below table:

Item	**Uncertainty**
Radio Frequency	2.7 ppm
RF Power, Conducted	0.95 dB
Power Density	1.4 dB
Temperature	0.8 °C
Humidity	2.2 %
Time	10 %
Spurious Emissions, Conducted	1.9 dB
Spurious Emissions, Radiated f ≤ 1GHz(**SSL-CB05**)	3.76 dB
Spurious Emissions, Radiated 1GHz < f ≤ 18GHz(**SSL-CB05**)	3.76 dB
Spurious Emissions, Radiated 1GHz < f ≤ 18GHz(**DG-CB12**)	3.78 dB
Spurious Emissions, Radiated 18GHz < f ≤ 26.5GHz(**SSL-CB05**)	4.02 dB

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
Centre frequencies	Normal & Extreme	47%	AC 230V/50Hz	Andrew Jiang	Feb. 10, 2025
Occupied Channel Bandwidth	22°C	47%	AC 230V/50Hz	Andrew Jiang	Feb. 10, 2025
RF output power	Normal & Extreme	60%	AC 230V/50Hz	Evan Fang	Jan. 21, 2025
Power Density	22°C	47%	AC 230V/50Hz	Andrew Jiang	Feb. 10, 2025
Transmitter unwanted emissions outside the 5 GHz RLAN bands	23°C	48%	AC 230V/50Hz	Young Zou	Feb. 13, 2025
	22°C	43%	AC 230V/50Hz	Young Zou	Mar. 19, 2025
Transmitter unwanted emissions within the 5 GHz RLAN bands	22°C	47%	AC 230V/50Hz	Andrew Jiang	Feb. 10, 2025
Receiver spurious emissions	23°C	48%	AC 230V/50Hz	Young Zou	Feb. 13, 2025
	22°C	43%	AC 230V/50Hz	Young Zou	Mar. 19, 2025
	21°C	56%	AC 230V/50Hz	Jojo Xiao	Apr. 02, 2025
Adaptivity	22°C	55%	AC 230V/50Hz	Hagen He	Jan. 20, 2025
Receiver Blocking	22°C	59%	AC 230V/50Hz	Hagen He	Jan. 24, 2025

1.4 TEST CHANNEL

IEEE 802.11a / IEEE 802.11be(EHT20)		
Test Channel	EUT Channel	Test Frequency
Low High	CH36	5180 MHz
	CH64	5320 MHz
	CH100	5500 MHz
	CH140	5700 MHz

IEEE 802.11be(EHT40)		
Test Channel	EUT Channel	Test Frequency
Low High	CH38	5190 MHz
	CH62	5310 MHz
	CH102	5510 MHz
	CH134	5670 MHz

IEEE 802.11be(EHT80)		
Test Channel	EUT Channel	Test Frequency
Low High	CH42	5210 MHz
	CH58	5290 MHz
	CH106	5530 MHz
	CH122	5610 MHz

IEEE 802.11be(EHT160)		
Test Channel	EUT Channel	Test Frequency
Low High	CH50	5250 MHz
	CH114	5570 MHz

1.5 TEST METHODOLOGY AND RESULTS

Harmonised Standard ETSI EN 301 893					
Requirement			Requirement Conditionality		Observations
No	Description	Reference: Clause No	U/C	Condition	
1	Carrier frequencies	4.2.1	U	-	Pass
2	Nominal, and occupied channel bandwidth	4.2.2	U	-	Pass
3	RF output power	4.2.3	U	-	Pass
	Transmit Power Control (TPC)	4.2.3	C	1)Not required for channels whose nominal bandwidth falls completely within the band 5150 MHz to 5250 MHz. 2)Not required for devices that operate at a maximum mean e.i.r.p. of 20 dBm when operating in 5250 MHz to 5350 MHz or 27 dBm when operating in 5470 MHz to 5725 MHz.	Pass
	Power Density	4.2.3	U	-	Pass
4	Transmitter unwanted emissions outside the 5 GHz RLAN bands	4.2.4.1	U	-	Pass
5	Transmitter unwanted emissions within the 5 GHz RLAN bands	4.2.4.2	U	-	Pass
6	Receiver spurious emissions	4.2.5	U	-	Pass
7	Adaptivity	4.2.7	U	-	Pass
8	Receiver Blocking	4.2.8	U	-	Pass
9	User Access Restrictions	4.2.9	U	-	Pass **Note 1**
10	Geo-location capability	4.2.10	C	Where implemented by the manufacturer.	N/A

Note:

1. No related options for DFS functions will be provided in the software interfaces.
   DFS functions can be changed only by telnet command. Before the shipment of the product the telnet will be closed so that it will be inaccessible for the end user.
2. U/C Indicates whether the requirement is unconditionally applicable (U) or is conditional upon the manufacturer's claimed functionality of the equipment (C).
3. “N/A” indicates that it does not apply to this device.

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	(1) BE6500 2.5G Dual-Band Wi-Fi 7 Router (2) BE6500 Dual-Band Wi-Fi 7 Router
Brand Name	Cudy
Test Model	(1) WR6500H
Series Model	(2) WR6500
Model Difference(s)	The chip scheme is the same, only differ in the RJ45 port, and the rest is exactly the same.
Hardware Version	V1
Software Version	2.2.10
Power Source	DC Voltage supplied from AC adapter. Model: TPA259-18120-EU
Power Rating	I/P: 100-240V~ 50/60Hz, 0.6A O/P: 12.0V⎓ 1.5A 18.0W
Operation Frequency Band(s)	5150 MHz ~ 5250 MHz 5250 MHz ~ 5350 MHz 5470 MHz ~ 5725 MHz
Modulation Type	IEEE 802.11a/n/ac: OFDM IEEE 802.11ax/be: OFDMA
Bit Rate of Transmitter	IEEE 802.11a: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps IEEE 802.11ac: up to 1733.4 Mbps IEEE 802.11ax: up to 2402 Mbps IEEE 802.11be: up to 2882 Mbps
Max. e.i.r.p.	IEEE 802.11a: 26.36 dBm (432.51 mW) IEEE 802.11be(EHT20): 27.05 dBm (506.99 mW) IEEE 802.11be(EHT40): 29.69 dBm (931.11 mW) IEEE 802.11be(EHT80): 29.81 dBm (957.19 mW) IEEE 802.11be(EHT160): 29.84 dBm (963.83 mW)

Note:
1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

IEEE 802.11a IEEE 802.11n(HT20) IEEE 802.11ac(VHT20) IEEE 802.11ax(HE20) IEEE 802.11be(EHT20)		IEEE 802.11n(HT40) IEEE 802.11ac(VHT40) IEEE 802.11ax(HE40) IEEE 802.11be(HE40)		IEEE 802.11ac(VHT80) IEEE 802.11ax(HE80) IEEE 802.11be(HE80)	
Band 1		Band 1		Band 1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

IEEE 802.11a IEEE 802.11n(HT20) IEEE 802.11ac(VHT20) IEEE 802.11ax(HE20) IEEE 802.11be(EHT20)		IEEE 802.11n(HT40) IEEE 802.11ac(VHT40) IEEE 802.11ax(HE40) IEEE 802.11be(HE40)		IEEE 802.11ac(VHT80) IEEE 802.11ax(HE80) IEEE 802.11be(HE80)	
Band 2		Band 2		Band 2	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

IEEE 802.11a IEEE 802.11n(HT20) IEEE 802.11ac(VHT20) IEEE 802.11ax(HE20) IEEE 802.11be(EHT20)		IEEE 802.11n(HT40) IEEE 802.11ac(VHT40) IEEE 802.11ax(HE40) IEEE 802.11be(HE40)		IEEE 802.11ac(VHT80) IEEE 802.11ax(HE80) IEEE 802.11be(HE80)	
Band 3		Band 3		Band 3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	102	5510	106	5530
104	5520	110	5550	122	5610
108	5540	118	5590		
112	5560	126	5630		
116	5580	134	5670		
120	5600				
124	5620				
128	5640				
132	5660				
136	5680				
140	5700				

IEEE 802.11ac(VHT160) IEEE 802.11ax(HE160) IEEE 802.11be(EHT160)	
Channel	Frequency (MHz)
50	5250
114	5570

3. Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Dipole	IPEX	5.53
2	N/A	N/A	Dipole	IPEX	5.53
3	N/A	N/A	Dipole	IPEX	5.53
4	N/A	N/A	Dipole	IPEX	5.14

Note:
1) The EUT supports CDD. Physically, the EUT provides four completed transmitters and receivers (4T4R).
2) Beamforming Gain: 6 dB.

4. The worst case for 4TX as follow:
For Non Beamforming

Operating Mode / TX Mode	4TX
IEEE 802.11a	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11n(HT20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11n(HT40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT80)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT160)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE80)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE160)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT80)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT160)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)

For Beamforming

Operating Mode / TX Mode	4TX
IEEE 802.11n(HT20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11n(HT40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT80)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ac(VHT160)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE80)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11ax(HE160)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT20)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT40)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT80)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)
IEEE 802.11be(EHT160)	V (Ant. 1+Ant. 2+Ant. 3+Ant. 4)

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test	Clause	Test channels		
		Lower sub-band (5150 MHz to 5350 MHz)		Higher sub-band 5470 MHz to 5725 MHz
		5150 MHz to 5250 MHz	5250 MHz to 5350 MHz	
Centre frequencies	5.4.2	C7(see note 1)		C8(see note 1)
Occupied Channel Bandwidth	5.4.3	C7		C8
Power, power density	5.4.4	C1	C2	C3,C4
Transmitter unwanted emissions outside the 5 GHz RLAN bands	5.4.5	C7(see note 1)		C8(see note 1)
Transmitter unwanted emissions within the 5 GHz RLAN bands	5.4.6	C1	C2	C3,C4
Receiver spurious emissions	5.4.7	C7(see note 1)		C8(see note 1)
Transmit Power Control (TPC)	5.4.4	N/A(see note 2)	C2(see note 1)	C3,C4(see note 1)
Adaptivity	5.4.9	C9		
Receiver Blocking	5.4.10	C7		C8

C1,C3	The lowest declared channel for every declared Nominal Channel Bandwidth within this band. For the Power Density testing, it is sufficient to only perform this test using the lowest Nominal Channel Bandwidth.
C2, C4	The highest declared channel for every declared Nominal Channel Bandwidth withinthis band. For the Power Density testing, it is sufficient to only perform this test using the lowest Nominal Channel Bandwidth.
C7, C8	One channel out of the declared channels for this sub-band. For Occupied Channel Bandwidth, testing shall be repeated for every declared Nominal Channel Bandwidth within this sub-band.
C9	One channel (in case of single-channel testing) or a group of channels (in case of multi-channel testing) out of the declared channels.

Note :

(1) In case of more than 1 channel plan has been declared, testing of these specific requirements need only be performed using one of the declared channel plans.

(2) Testing is not required for nominal channel bandwidths that fall completely within the frequency range 5150 MHz to 5250 MHz.

(3) EHT20/EHT40/EHT80/EHT160 covers HT20/HT40, VHT20/VHT40/VHT80/VHT160 and HE20/HE40/HE80/HE160, due to same modulation (in full RU). The power setting for 802.11n HT20/HT40, 802.11ac VHT20/VHT40/VHT80/VHT160 and 802.11ax HE20/HE40/HE80/HE160 are the same or lower than 802.11be EHT20/EHT40/EHT80/EHT160.

(4) For radiated spurious emissions above 18 GHz test, only tested the worst case and recorded.

(5) For radiated spurious emissions below 1 GHz and receiver spurious emissions above 1 GHz test, the IEEE 802.11be(EHT160) channel 50/114 are found to be the worst case and recorded.

(6) IEEE 802.11ax mode and IEEE 802.11be mode only supports full RU, so only the full RU is evaluated and measured inside report.

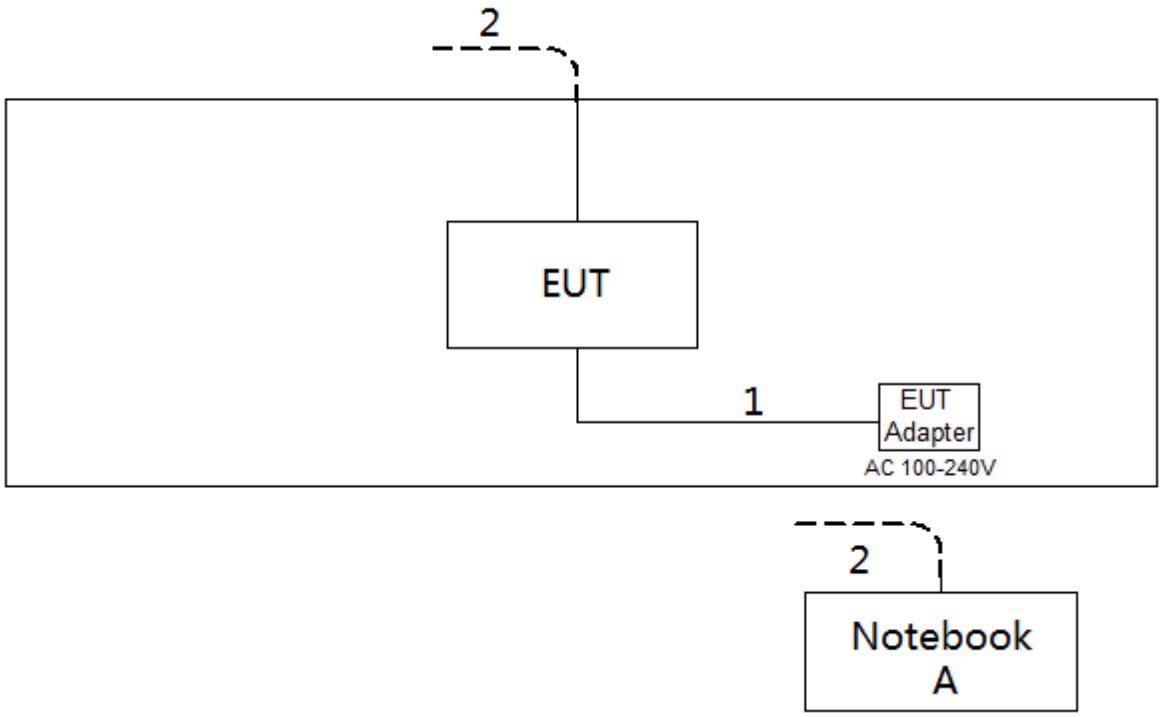
(7) The EIRP of the Beamforming mode will be lower than that of the non-Beamforming mode. Only non-Beamforming mode will be evaluated and recorded in the report.

2.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

Test Software Version	accessMTool_REL_3_3_0_6			
Frequency (MHz)	5180	5320	5500	5700
IEEE 802.11a	41	41	67	68
IEEE 802.11be(EHT20)	41	42	69	69
Frequency (MHz)	5190	5310	5510	5670
IEEE 802.11be(EHT40)	48	46	78	80
Frequency (MHz)	5210	5290	5530	5610
IEEE 802.11be(EHT80)	47	46	77	77
Frequency (MHz)	5250	5570		
IEEE 802.11be(EHT160)	44	77		

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Honor	14SER5 3500	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.5m
2	RJ45 Cable	NO	NO	10m

2.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

2.7 CUSTOMER INFORMATION DESCRIPTION

1) The antenna gain and beamforming gain are provided by the manufacturer.
2) Except for radiated spurious emissions, the results of all test items include cable losses. All cable losses are provided by the testing laboratory.

3. CENTRE FREQUENCIES

3.1 LIMIT

Clause	Test Item	Limit
4.2.1	Centre Frequencies	F(c) ±20ppm

3.2 TEST PROCEDURES

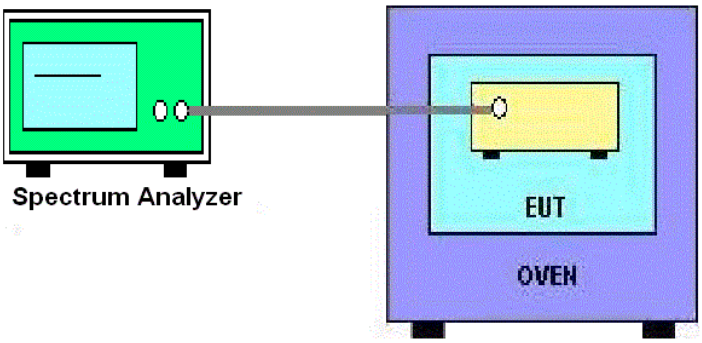
Refer to ETSI EN 301 893, clause 5.4.2.2.1.

3.3 TEST SETUP LAYOUT

Normal Condition



Extreme Condition



3.4 TEST DEVIATION

There is no deviation with the original standard.

3.5 EUT OPERATION DURING TEST

The measurements shall be performed during continuously transmitting.

3.6 TEST RESULTS

Please refer to the Appendix A.

4. NOMINAL / OCCUPIED CHANNEL BANDWIDTH

4.1 LIMIT

The Nominal Channel Bandwidth for a single Operating Channel shall be 20 MHz.

Alternatively, equipment may implement a lower Nominal Channel Bandwidth with a minimum of 5 MHz, providing they still comply with the Nominal Centre Frequencies defined in clause 4.2.1 of EN 301 893 (20 MHz raster).

The Occupied Channel Bandwidth shall be between 80 % and 100 % of the Nominal Channel Bandwidth. In case of smart antenna systems (devices with multiple transmit chains) each of the transmit chains shall meet this requirement. The Occupied Channel Bandwidth might change with time/payload.

During a Channel Occupancy Time (COT), equipment may operate temporarily with an Occupied Channel Bandwidth of less than 80 % of its Nominal Channel Bandwidth with a minimum of 2 MHz.

4.2 TEST PROCEDURES

Refer to ETSI EN 301 893, clause 5.4.3.2.1.

4.3 TEST SETUP LAYOUT



4.4 TEST DEVIATION

There is no deviation with the original standard.

4.5 EUT OPERATION DURING TEST

The measurements shall be performed during continuously transmitting.

4.6 TEST RESULTS

Please refer to the Appendix B.

5. RF OUTPUT POWER

5.1 LIMIT

Mean e.i.r.p. Limits for RF Output Power at the Highest Power Level		
Frequency Range (MHz)	Mean e.i.r.p. Limit for P_H (dBm)	
	With TPC	Without TPC
5150 to 5350	23	20/23 (see note1)
5470 to 5725	30 (see note2)	27 (see note2)

Note:	
(1)	The applicable limit is 20 dBm, except for transmissions whose nominal bandwidth falls completely within the band 5150 MHz to 5250 MHz, in which case the applicable limit is 23 dBm.
(2)	Slave devices without a Radar Interference Detection function shall comply with the limits for the band 5250 MHz to 5350 MHz.

Mean e.i.r.p. Limits for RF Output Power at the Lowest Power Level(see note1)	
Frequency Range	Mean e.i.r.p. for P_L
5250 MHz to 5350 MHz	17 dBm
5470 MHz to 5725 MHz	24 dBm (see note2)

Note:	
(1)	For devices without TPC, the limits in the table do not apply.
(2)	Slave devices without a Radar Interference Detection function shall comply with the limits for the band 5250 MHz to 5350 MHz.

5.2 TEST PROCEDURES

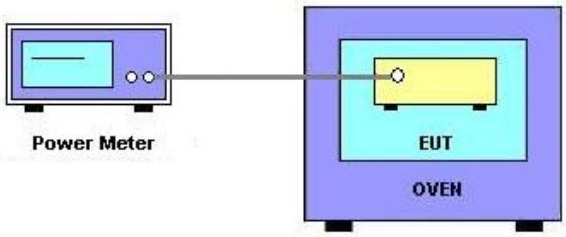
Refer to ETSI EN 301 893, clause 5.4.4.2.1.

5.3 TEST SETUP LAYOUT

Normal Condition



Extreme Condition



5.4 TEST DEVIATION

There is no deviation with the original standard.

5.5 EUT OPERATION DURING TEST

The measurements shall be performed during continuously transmitting.

5.6 TEST RESULTS

Please refer to the Appendix C.

6. POWER DENSITY

6.1 LIMIT

Mean e.i.r.p. Limits for Power Density at the Highest Power Level		
Frequency Range (MHz)	Mean e.i.r.p. Density Limit (dBm/MHz)	
	With TPC	Without TPC
5150 to 5350	10	7/10 (see note1)
5470 to 5725	17 (see note2)	14 (see note2)

Note:	
(1)	The applicable limit is 7 dBm/MHz, except for transmissions whose nominal bandwidth falls completely within the band 5150 MHz to 5250 MHz, in which case the applicable limit is 10 dBm/MHz.
(2)	Slave devices without a Radar Interference Detection function shall comply with the limits for the band 5250 MHz to 5350 MHz.

6.2 TEST PROCEDURES

Refer to ETSI EN 301 893, clause 5.4.4.2.1.

6.3 TEST SETUP LAYOUT



6.4 TEST DEVIATION

There is no deviation with the original standard.

6.5 EUT OPERATION DURING TEST

The measurements shall be performed during continuously transmitting.

6.6 TEST RESULTS

Please refer to the Appendix D.

7. TRANSMITTER UNWANTED EMISSIONS (OUTSIDE THE 5 GHZ RLAN BANDS)

7.1 LIMIT

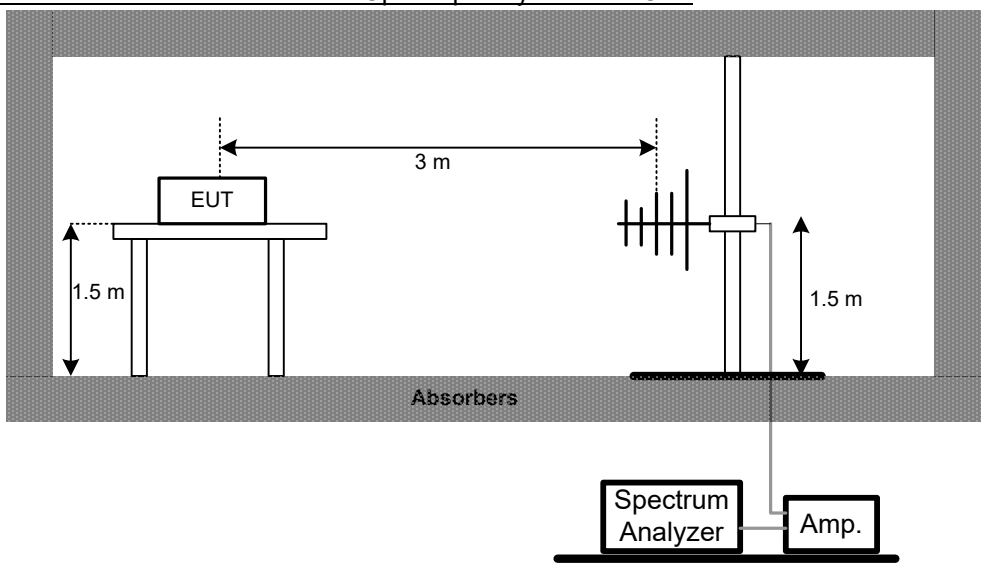
Clause	Test Item	Frequency(MHz)	Limit (dBm)
4.2.4.1	Transmitter Unwanted Emissions (Outside The 5 GHz RLAN Bands)	47 MHz to 74 MHz 87,5 MHz to 118 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	-54
		Other frequencies Below 1GHz	-36
		1GHz~26.5 GHz (Outside frequency ranges)	-30

7.2 TEST PROCEDURES

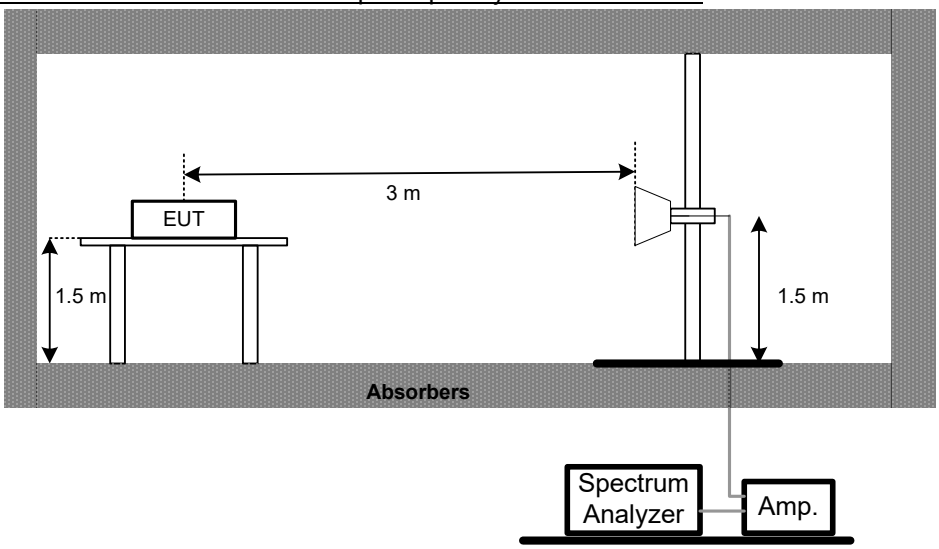
Refer to ETSI EN 301 893, clause 5.4.5.2.2.

7.3 TEST SETUP LAYOUT

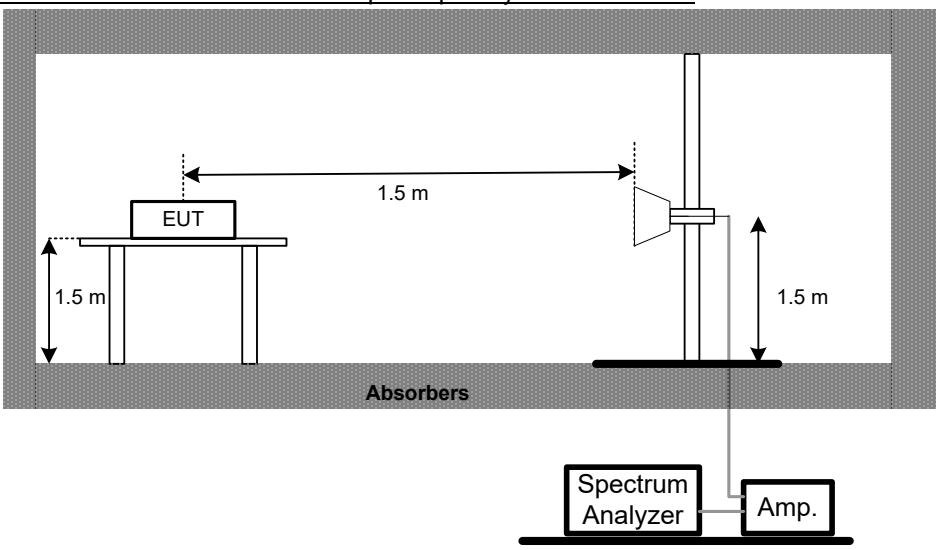
Emission Radiated Measurement Test Set-Up Frequency Below 1 GHz



Emission Radiated Measurement Test Set-Up Frequency 1 GHz - 18 GHz



Emission Radiated Measurement Test Set-Up Frequency Above 18 GHz



7.4 TEST DEVIATION

There is no deviation with the original standard.

7.5 EUT OPERATION DURING TEST

The measurements shall be performed during continuously transmitting.

7.6 TEST RESULTS (30MHZ TO 1000MHZ)

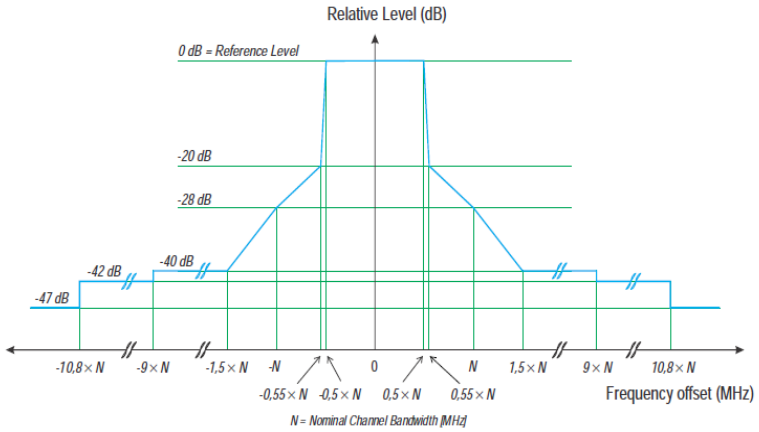
Please refer to the Appendix E.

7.7 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the Appendix F.

8. TRANSMITTER UNWANTED EMISSIONS(WITHIN THE 5 GHZ RLAN BANDS)

8.1 LIMIT

Clause	Test Item	Limit
4.2.4.2	Transmitter Unwanted Emissions (Within the 5 GHz RLAN bands)	

8.2 TEST PROCEDURES

Refer to ETSI EN 301 893, clause 5.4.6.2.1.

8.3 TEST SETUP LAYOUT



8.4 TEST DEVIATION

There is no deviation with the original standard.

8.5 EUT OPERATION DURING TEST

The measurements shall be performed during continuously transmitting.

8.6 TEST RESULTS

Please refer to the Appendix G.

9. RECEIVER SPURIOUS EMISSIONS

9.1 LIMIT

Clause	Test Item	Frequency(MHz)	Limit
4.2.5	Receiver spurious emissions	30-1000	-57dBm
		1000~26500	-47dBm

9.2 TEST PROCEDURES

Refer to ETSI EN 301 893, clause5.4.7.2.2.

9.3 TEST SETUP LAYOUT

Please refer to clause 7.3.

9.4 TEST DEVIATION

There is no deviation with the original standard.

9.5 EUT OPERATION DURING TEST

The measurements shall be performed during continuously receiving.

9.6 TEST RESULTS (30 MHZ TO 1000 MHZ)

Please refer to the Appendix H.

9.7 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Appendix I.

10. ADAPTIVITY (CHANNEL ACCESS MECHANISM)

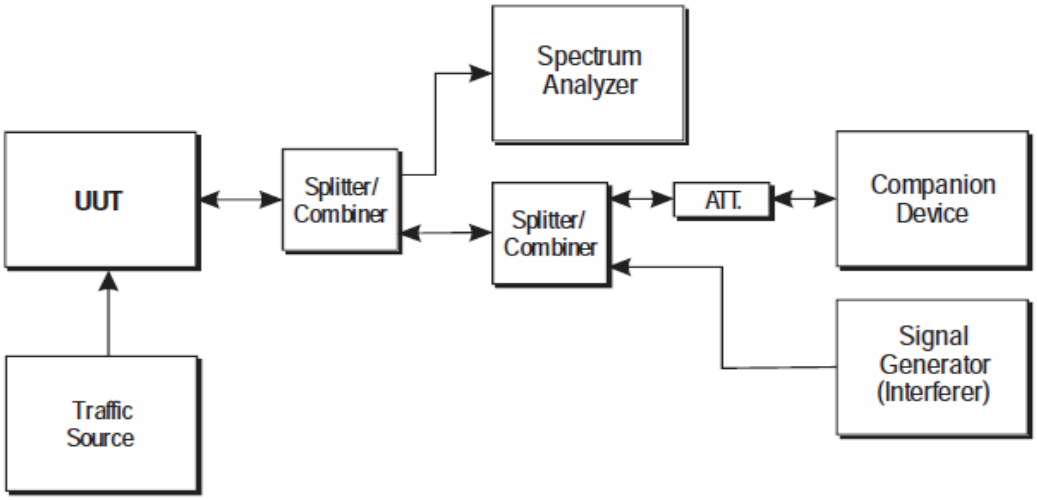
10.1 LIMIT

Refer to ETSI EN 301 893, clause 4.2.7

10.2 TEST PROCEDURES

Refer to ETSI EN 301 893, clause 5.4.9.3.2.

10.3 TEST SETUP



10.4 TEST DEVIATION

There is no deviation with the original standard.

10.5 EUT OPERATION DURING TEST

The measurements shall be performed during normal operation.

10.6 TEST RESULTS

Please refer to the Appendix J.

11. RECEIVER BLOCKING

11.1 LIMIT

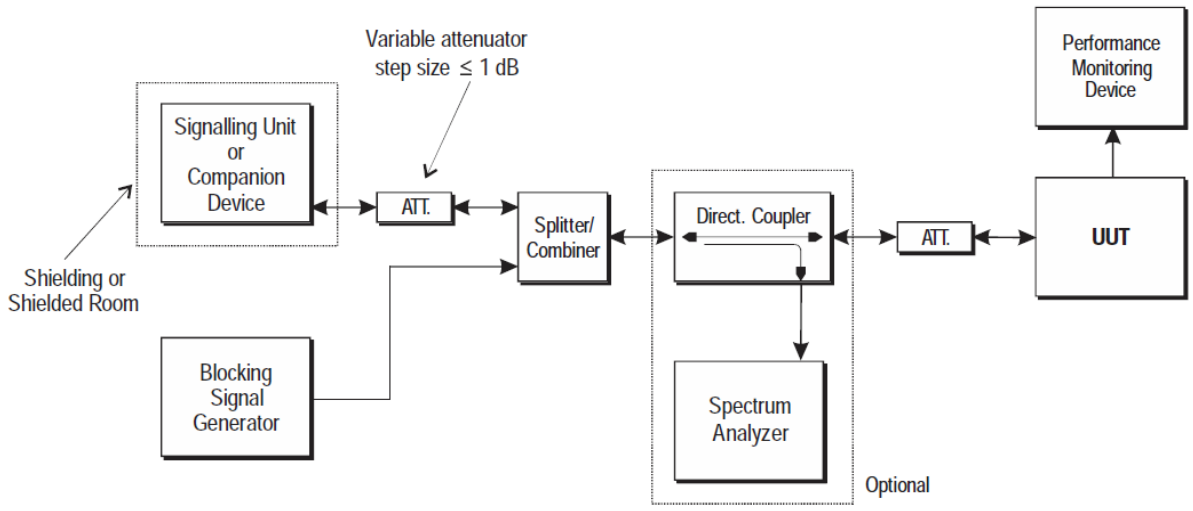
The minimum performance criterion shall be a PER of less than or equal to 10 %.

Wanted signal mean power from companion device (dBm)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 2)		Type of blocking signal
		Master or Slave with radar detection (see table D.2, note 2)	Slave without radar detection (see table D.2, note 2)	
Pmin + 6 dB	5 100	-53	-59	Continuous Wave
Pmin + 6 dB	4 900 5 000 5 975	-47	-53	Continuous Wave
NOTE 1: P_{min} is the minimum level of the wanted signal (in dBm) required to meet the minimum performance criteria as defined clause 4.2.8.3 in the absence of any blocking signal. NOTE 2: The levels specified are levels in front of the UUT antenna. In case of conducted measurements, the same levels should be used at the antenna connector irrespective of antenna gain.				

11.2 TEST PROCEDURES

Refer to ETSI EN 301 893, clause 5.4.10.2.1.

11.3 TEST SETUP



11.4 TEST DEVIATION

There is no deviation with the original standard.

11.5 EUT OPERATION DURING TEST

The measurements shall be performed during normal receiving.

11.6 TEST RESULTS

Please refer to the Appendix K.

12. MEASUREMENT INSTRUMENTS LIST

Centre Frequency					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	BTL TestSystem	BTL	TestSoftware	N/A	N/A
2	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A
3	EXA Spectrum Analyzer	Keysight	N9010A	MY55150209	Aug. 20, 2025
4	Desktop Constant Temperature Chamber	BELL	BTH-50C	20170306001	Jan. 10. 2026

Nominal / Occupied Channel Bandwidth & Power Density & Transmitter Unwanted Emissions Within The 5 GHz RLAN Bands					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	BTL TestSystem	BTL	TestSoftware	N/A	N/A
2	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A
3	EXA Spectrum Analyzer	Keysight	N9010A	MY55150209	Aug. 20, 2025

RF Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	X-series USB Peak and Average Power Sensor	Keysight	U2021XA	MY55190003	Jun. 20, 2025
2	X-series USB Peak and Average Power Sensor	Keysight	U2021XA	MY55190006	Jun. 20, 2025
3	Attenuator	RegalWay	RWA-201-S-10	N/A	Jun. 28, 2025
4	Attenuator	RegalWay	RWA-201-S-10	N/A	Jun. 28, 2025
5	Temperature Chamber	ESPEC CORP	SU-242	93018736	Jun. 28, 2025
6	Cable	RegalWay	SMA-SMA-1M	N/A	N/A
7	Cable	RegalWay	RWP50-402-SMSM-1M	N/A	N/A
8	BTL Test System	BTL	TestSoftware	N/A	N/A

Adaptivity					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	MXG Vector Signal Generator	Keysight	N5182B	MY57300318	Jan.10,2026
2	MXA Signal Analyzer	Keysight	N9010A	MY56480543	Jan.10,2026
3	date Acquisition Unit	Keysight	AD211	TW54033508	N/A
4	Shielding box	JiaChen	JC-PB2015	PB20132310378A	N/A
5	Cable	RegalWay	RWP50-402-SMSM-1M	N/A	N/A
6	Cable	RegalWay	RWP50-402-SMSM-1M	N/A	N/A
7	Cable	RegalWay	RWP50-402-SMSM-1.5M	N/A	N/A
8	Cable	RegalWay	RWP50-402-SMSM-1.5M	N/A	N/A
9	Cable	RegalWay	RWP50-402-SMSM-2M	N/A	N/A
10	Cable	RegalWay	RWP50-402-SMSM-2M	N/A	N/A
11	Power Divider	RegalWay	RW-PD2-0118SF30	N/A	Jun. 28, 2025
12	Power Divider	RegalWay	RW-PD2-0118SF30	N/A	Jun. 28, 2025
13	Power Divider	RegalWay	RW-PD2-0118SF30	N/A	Jun. 28, 2025
14	Power Divider	RegalWay	RWPD2-DC27-S	N/A	Jun. 28, 2025
15	BTL Test System	BTL	TestSoftware	N/A	N/A
16	Attenuator	RegalWay	RWPA-6000-110-MA	N/A	Jun. 28, 2025
17	Attenuator	RegalWay	RWA-201-S-20	N/A	Jun. 28, 2025
18	Notebook	Lenovo	ThinkBook14/16	N/A	N/A

Receiver Blocking					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Wideband Radio Communication tester	R&S	CMW500	168838	June. 28, 2025
2	MXG Vector Signal Generator	Keysight	N5182B	MY57300318	Jan. 10, 2026
3	Power Divider	RegalWay	RW-PD2-0118SF30	N/A	Jun. 28, 2025
4	Shielding box	JiaChen	JC-PB2015	PB20132310378A	N/A
5	Cable	RegalWay	RWP50-402-SMSM-1M	N/A	N/A
6	Cable	RegalWay	RWP50-402-SMSM-1.5M	N/A	N/A
7	Cable	RegalWay	RWP50-402-SMSM-1.5M	N/A	N/A
8	Cable	RegalWay	RWP50-402-SMSM-2M	N/A	N/A

Transmitter and Receiver Spurious Emission (Radiated Measurement)_Below 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01381	Sep. 26, 2025
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Sep. 26, 2025
3	Preamplifier	EMC INSTRUMENT	EMC330N	980855	Jun. 28, 2025
4	Cable	RegalWay	SW50T-CA038-3000	N/A	N/A
5	Cable	RegalWay	SW50T-CA038-4000	N/A	N/A
6	Cable	RegalWay	SW50T-CA038-4000	N/A	N/A
7	Signal & Spectrum Analyzer	R&S	FSV3004	101285	Jun. 28, 2025
8	Top precision	Pneumatic Mast Contorller	N/A	N/A	N/A
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	Chamber room	ETS	1055	Q2162	Aug. 21, 2027

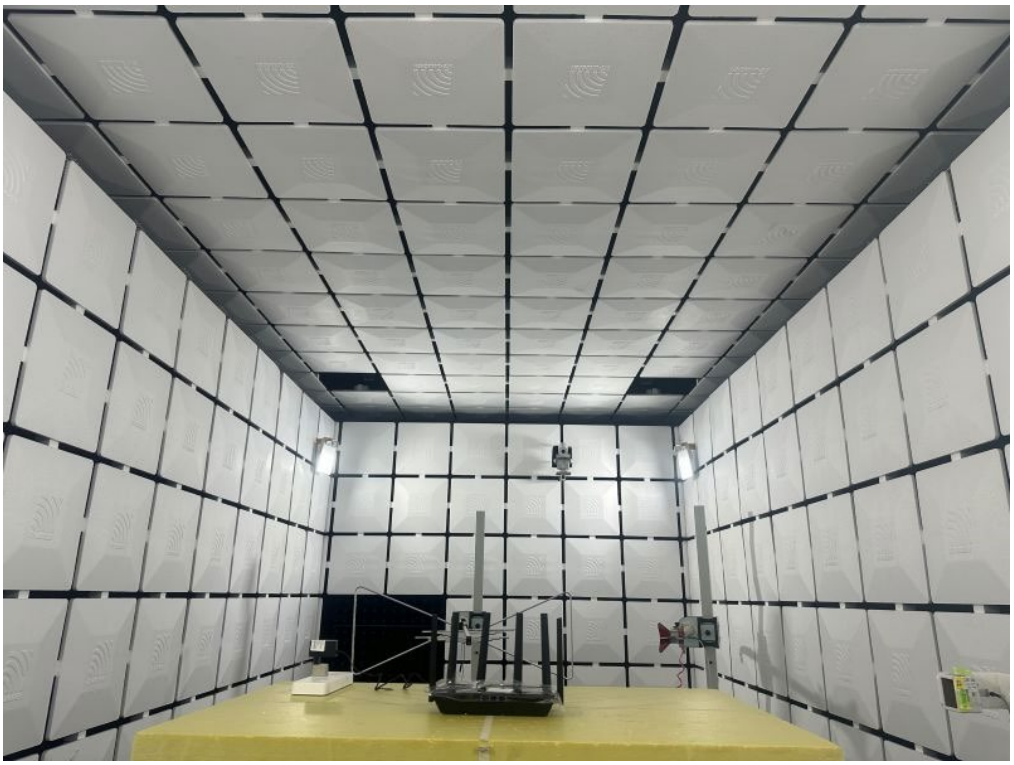
Transmitter and Receiver Spurious Emission (Radiated Measurement)_Above 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Top precision	Pneumatic Mast Contorller	N/A	N/A	N/A
2	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
3	Signal & Spectrum Analyzer	R&S	FSV3044	101377	Jun. 28, 2025
4	Cable	RegalWay	SW50T-CA004-4000	NA	NA
5	Cable	RegalWay	SW50T-CA0037-2500	NA	NA
6	Cable	RegalWay	SW50T-CA004-3000	NA	NA
7	Double-Ridged Waveguide Horn Antennas	ETS-LINDGREN	3117-PA	00252542	Sep. 13, 2025
8	Preamplifier	ETS-LINDGREN	3117-PA	00252542	Jun. 28, 2025
9	Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	1137	Oct. 12, 2025
10	Pre-Amplifier	EMC INSTRUMENT	EMC184045SE	980911	Jun. 28, 2025
11	Cable	RegalWay	RWLP50-2.6A-2.92M 2.92M-5M	NA	NA
12	Cable	RegalWay	RWLP50-2.6A-2.92M 2.92M-1.5M	NA	NA
13	Chamber room	ETS	1055	Q2162	Aug. 21, 2027
14	Band Reject Filter	COM-MW	ZHPF6-M6500-18000-547	07213124	Jun. 28, 2025

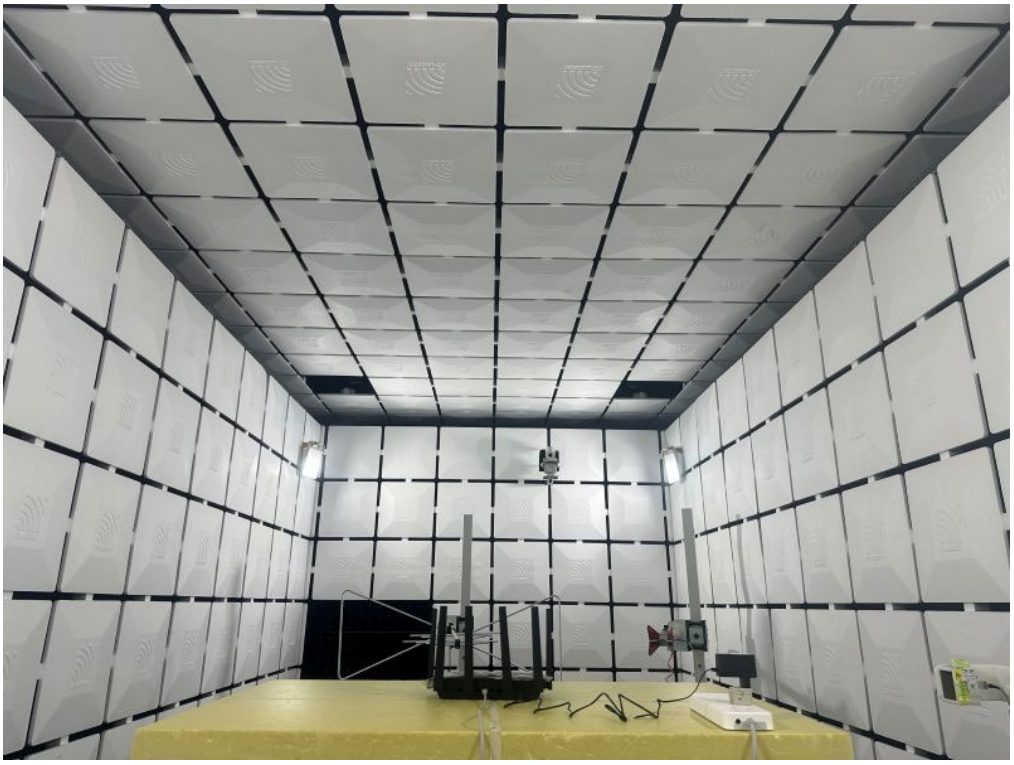
Receiver Spurious Emission (Radiated Measurement)_ 1GHz to 18GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	FSV Signal Analyzer	R&S	FSV40	101423	May 31, 2025
2	Cable	Tonscend	SFT205-NMNMR-2.50M	N/A	N/A
3	Preamplifier	ETS-LINDGREN	3117-PA	224172	May 31, 2025
4	DRG Horn Antenna	ETS	3117-PA	221576	Jul. 17, 2025
5	Controller	ETS-Lindgren	2090	N/A	N/A
6	Automatic Switching unit of high and low frequency line wave device	Tonscend	JS0806-F	20E8060252	N/A
7	Pre-Amplifier	Tonscend	TAP-011858	AP20E806077	May 31, 2025
8	Measurement Software	Tonscend	RSE JS36-RSE 2.5.1.5	N/A	N/A

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

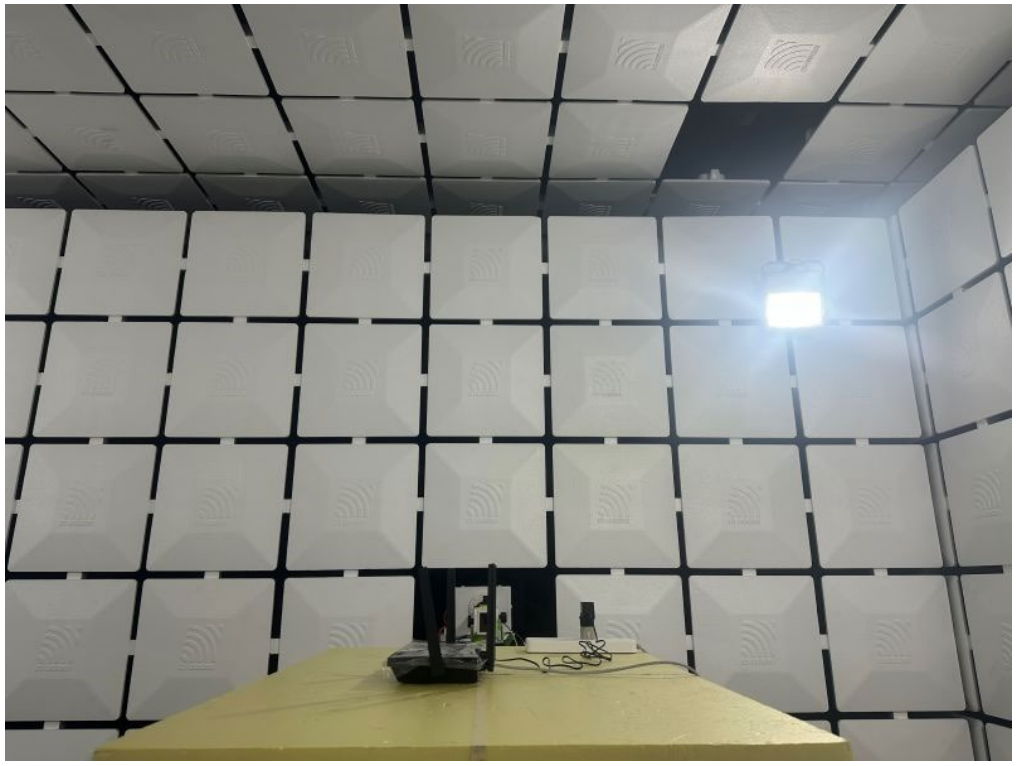
13. EUT TEST PHOTO

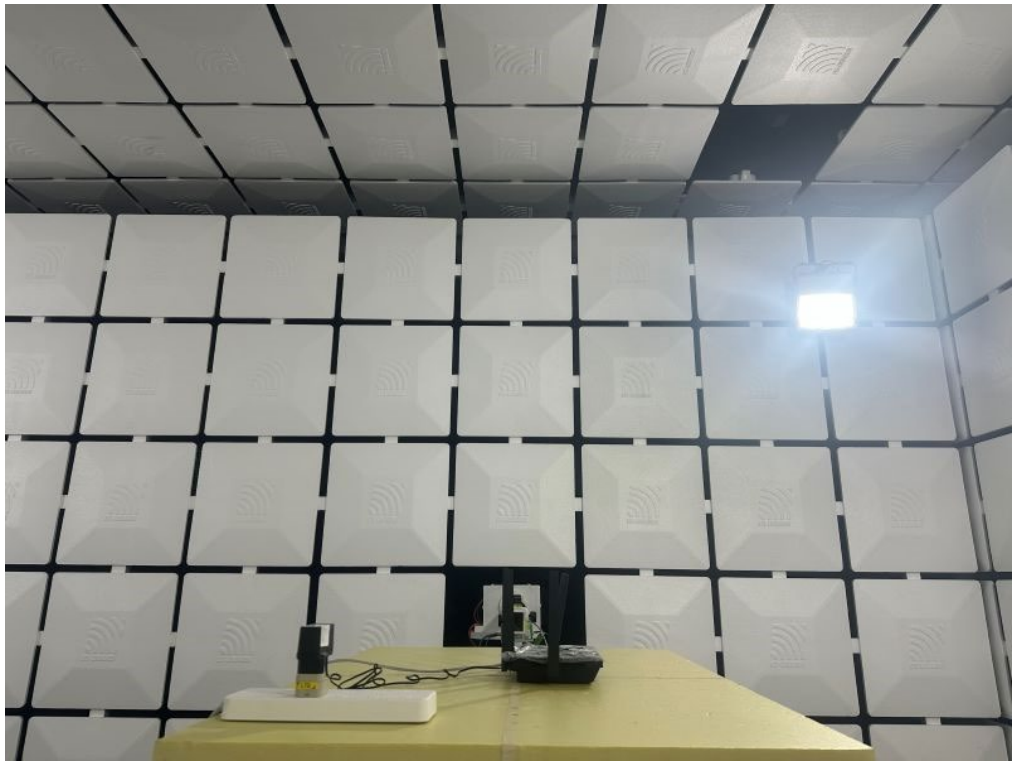
Radiated Emissions Test Photos - Below 18 GHz (SSL-CB05)



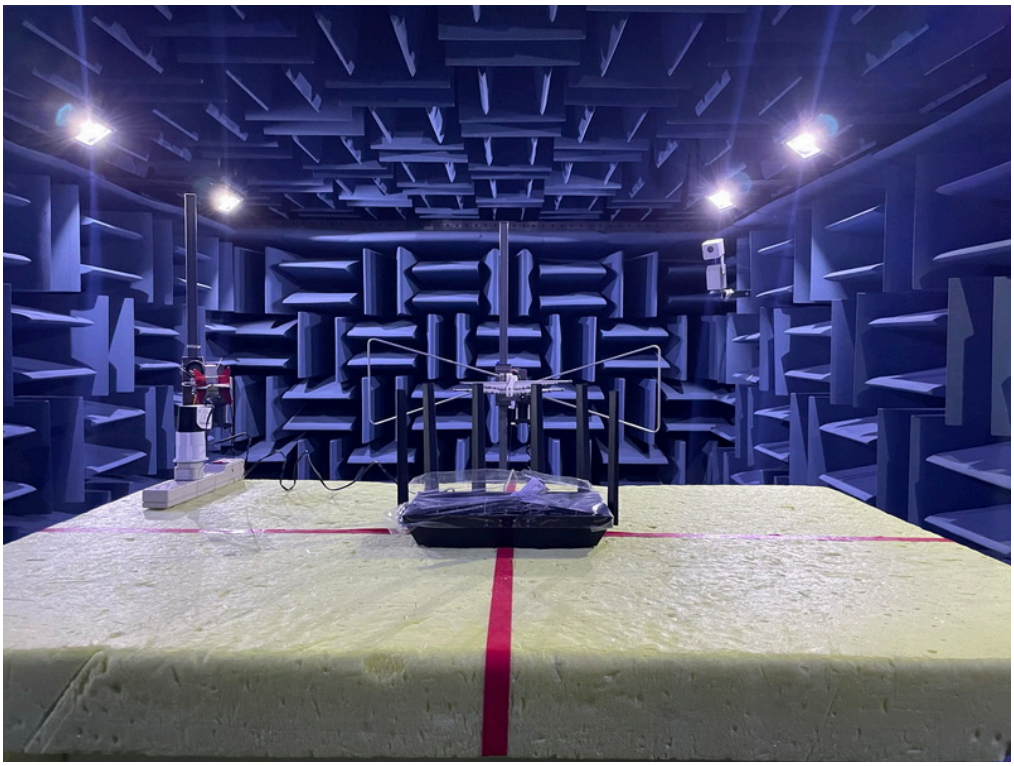


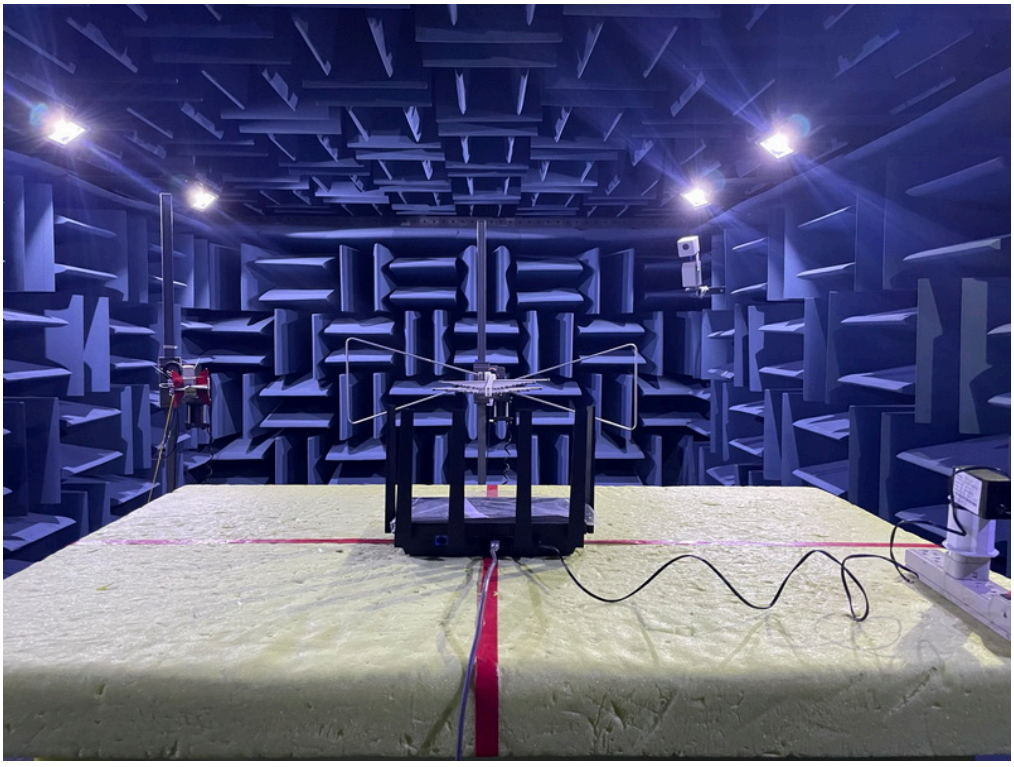
Radiated Emissions Test Photos - Above 18 GHz (SSL-CB05)





Radiated Emissions Test Photos (DG-CB12)





APPENDIX A - CENTRE FREQUENCIES

Test Mode: IEEE 802.11a Mode			
Test Conditions		Measurement Frequency (MHz)	
		5180MHz	5500MHz
T nom(°C)	22	5179.9960	5499.9700
T min(°C)	0	5180.0360	5500.0260
T max(°C)	40	5179.9660	5499.9820
Max. Deviation Frequency		0.0360	-0.0300
Max. Frequency Error (ppm)		6.95	-5.45
Limit (ppm)		±20.00	
Result		Pass	

APPENDIX B - NOMINAL / OCCUPIED CHANNEL BANDWIDTH

Test Mode: IEEE 802.11a Mode			
Test Conditions		Occupied Channel Bandwidth (MHz)	
		5180MHz	5500MHz
T nom (°C)	22	16.50	16.51
Limits		16~20	
Result		Pass	

Test Mode: IEEE 802.11be(EHT20) Mode			
Test Conditions		Occupied Channel Bandwidth (MHz)	
		5180MHz	5500MHz
T nom (°C)	22	19.01	19.01
Limits		16~20	
Result		Pass	

Test Mode: IEEE 802.11be(EHT40) Mode			
Test Conditions		Occupied Channel Bandwidth (MHz)	
		5190MHz	5510MHz
T nom (°C)	22	37.75	37.74
Limits		32~40	
Result		Pass	

Test Mode: IEEE 802.11be(EHT80) Mode			
Test Conditions		Occupied Channel Bandwidth (MHz)	
		5210MHz	5530MHz
T nom (°C)	22	77.17	77.16
Limits		64~80	
Result		Pass	

Test Mode: IEEE 802.11be(EHT160) Mode			
Test Conditions		Occupied Channel Bandwidth (MHz)	
		5250MHz	5570MHz
T nom (°C)	22	156.03	155.96
Limits		128~160	
Result		Pass	

APPENDIX C - RF OUTPUT POWER

Test Mode: IEEE 802.11a Mode at the Highest Power Level					
Test Conditions		e.i.r.p. (dBm)			
		5180MHz	5320MHz	5500MHz	5700MHz
T nom (°C)	25	20.81	20.82	26.09	25.68
T min (°C)	0	21.10	21.06	26.36	25.97
T max (°C)	40	20.53	20.58	25.81	25.39
Max. e.i.r.p.		21.10	21.06	26.36	
Limits		23	23	30	
Result		Pass			

Test Mode: IEEE 802.11a Mode at the Lowest Power Level				
Test Conditions		e.i.r.p. (dBm)		
		5320MHz	5500MHz	5700MHz
T nom (°C)	25	14.82	20.09	19.68
T min (°C)	0	15.06	20.36	19.97
T max (°C)	40	14.58	19.81	19.39
Max. e.i.r.p.		15.06	20.36	
Limits		17	24	
Result		Pass		

Test Mode: IEEE 802.11be(EHT20) Mode at the Highest Power Level					
Test Conditions		e.i.r.p. (dBm)			
		5180MHz	5320MHz	5500MHz	5700MHz
T nom (°C)	25	20.69	20.93	26.78	26.14
T min (°C)	0	20.98	21.17	27.05	26.43
T max (°C)	40	20.41	20.69	26.50	25.84
Max. e.i.r.p.		20.98	21.17	27.05	
Limits		23	23	30	
Result		Pass			

Test Mode: IEEE 802.11be(EHT20) Mode at the Lowest Power Level				
Test Conditions		e.i.r.p. (dBm)		
		5320MHz	5500MHz	5700MHz
T nom (°C)	25	14.93	20.78	20.14
T min (°C)	0	15.17	21.05	20.43
T max (°C)	40	14.69	20.50	19.84
Max. e.i.r.p.		15.17	21.05	
Limits		17	24	
Result		Pass		

Test Mode: IEEE 802.11be(EHT40) Mode at the Highest Power Level					
Test Conditions		e.i.r.p. (dBm)			
		5190MHz	5310MHz	5510MHz	5670MHz
T nom (°C)	25	22.65	22.47	29.40	29.36
T min (°C)	0	22.92	22.76	29.66	29.69
T max (°C)	40	22.38	22.18	29.15	29.03
Max. e.i.r.p.		22.92	22.76	29.69	
Limits		23	23	30	
Result		Pass			

Test Mode: IEEE 802.11be(EHT40) Mode at the Lowest Power Level				
Test Conditions		e.i.r.p. (dBm)		
		5310MHz	5510MHz	5670MHz
T nom (°C)	25	16.47	23.40	23.36
T min (°C)	0	16.76	23.66	23.69
T max (°C)	40	16.18	23.15	23.03
Max. e.i.r.p.		16.76	23.69	
Limits		17	24	
Result		Pass		

Test Mode: IEEE 802.11be(EHT80) Mode at the Highest Power Level					
Test Conditions		e.i.r.p. (dBm)			
		5210MHz	5290MHz	5530MHz	5610MHz
T nom (°C)	25	22.52	22.54	29.56	29.42
T min (°C)	0	22.79	22.83	29.81	29.75
T max (°C)	40	22.25	22.25	29.30	29.09
Max. e.i.r.p.		22.79	22.83	29.81	
Limits		23	23	30	
Result		Pass			

Test Mode: IEEE 802.11be(EHT80) Mode at the Lowest Power Level				
Test Conditions		e.i.r.p. (dBm)		
		5290MHz	5530MHz	5610MHz
T nom (°C)	25	16.54	23.56	23.42
T min (°C)	0	16.83	23.81	23.75
T max (°C)	40	16.25	23.30	23.09
Max. e.i.r.p.		16.83	23.81	
Limits		17	24	
Result		Pass		

Test Mode: IEEE 802.11be(EHT160) Mode at the Highest Power Level			
Test Conditions		e.i.r.p. (dBm)	
		5250MHz	5570MHz
T nom (°C)	25	22.41	29.59
T min (°C)	0	22.70	29.84
T max (°C)	40	22.12	29.33
Max. e.i.r.p.		22.70	29.84
Limits		23	30
Result		Pass	

Test Mode: IEEE 802.11be(EHT160) Mode at the Lowest Power Level			
Test Conditions		e.i.r.p. (dBm)	
		5250MHz	5570MHz
T nom (°C)	25	16.41	23.59
T min (°C)	0	16.70	23.84
T max (°C)	40	16.12	23.33
Max. e.i.r.p.		16.70	23.84
Limits		17	24
Result		Pass	

Note:
1) e.i.r.p. = Conducted output power + G (Ant Gain)
2) Conducted output power = Measure result + Cable loss

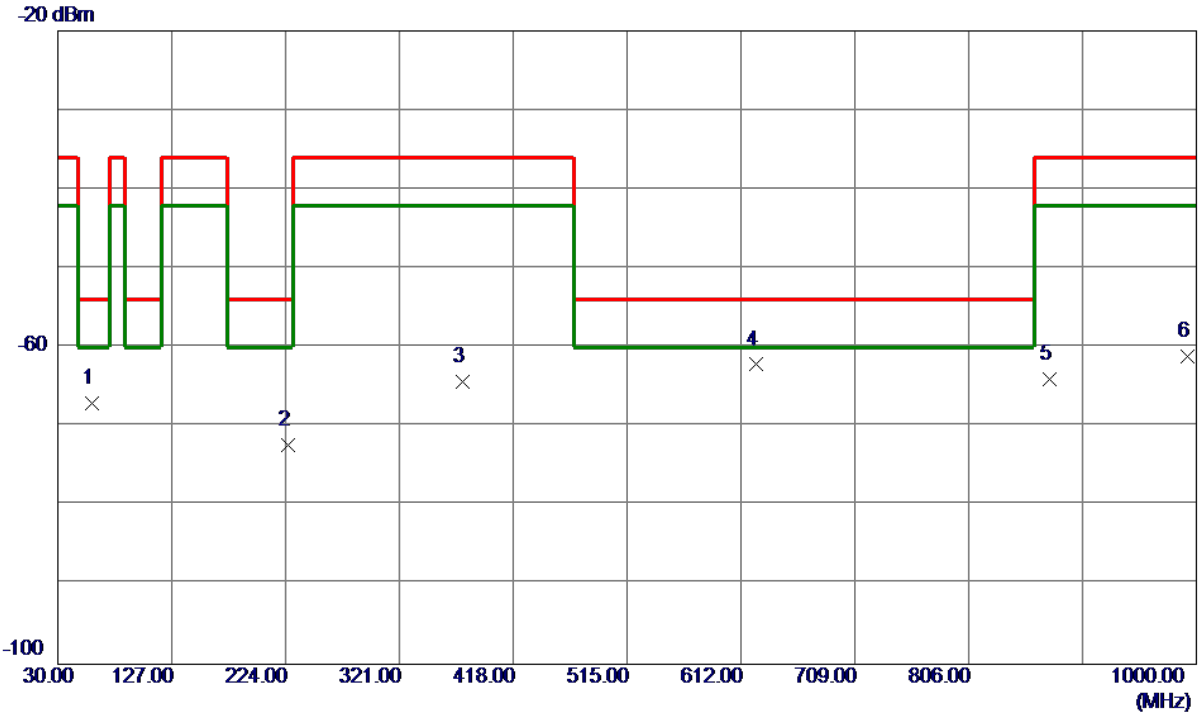
APPENDIX D - POWER DENSITY

Test Mode: IEEE 802.11a Mode					
Test Conditions		Spectral Power Density e.i.r.p. (dBm / MHz)			
		5180MHz	5320MHz	5500MHz	5700MHz
T nom (°C)	22	9.82	9.90	16.82	16.87
Limits		10	10	17	
Result		Pass			

Test Mode: IEEE 802.11be(EHT20) Mode					
Test Conditions		Spectral Power Density e.i.r.p. (dBm / MHz)			
		5180MHz	5320MHz	5500MHz	5700MHz
T nom (°C)	22	9.69	9.73	16.83	16.96
Limits		10	10	17	
Result		Pass			

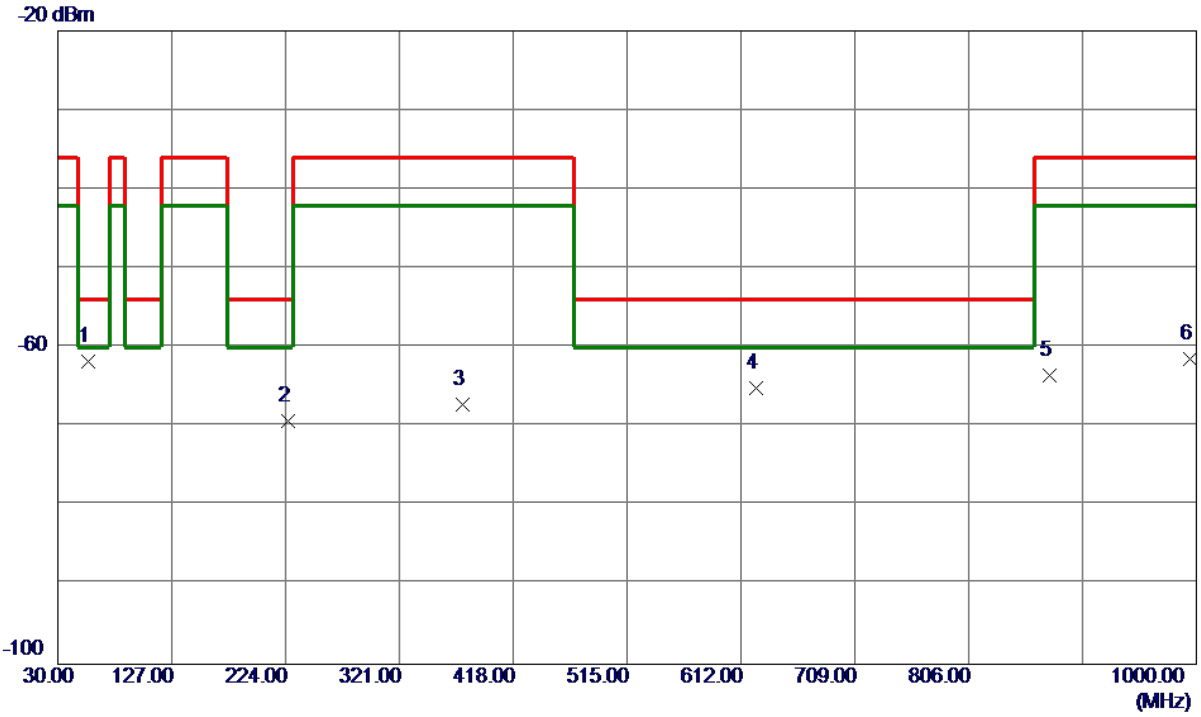
APPENDIX E - TRANSMITTER UNWANTED EMISSIONS OUTSIDE THE 5 GHZ RLAN BANDS (30MHZ TO 1000MHZ)

Test Mode	TX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Vertical



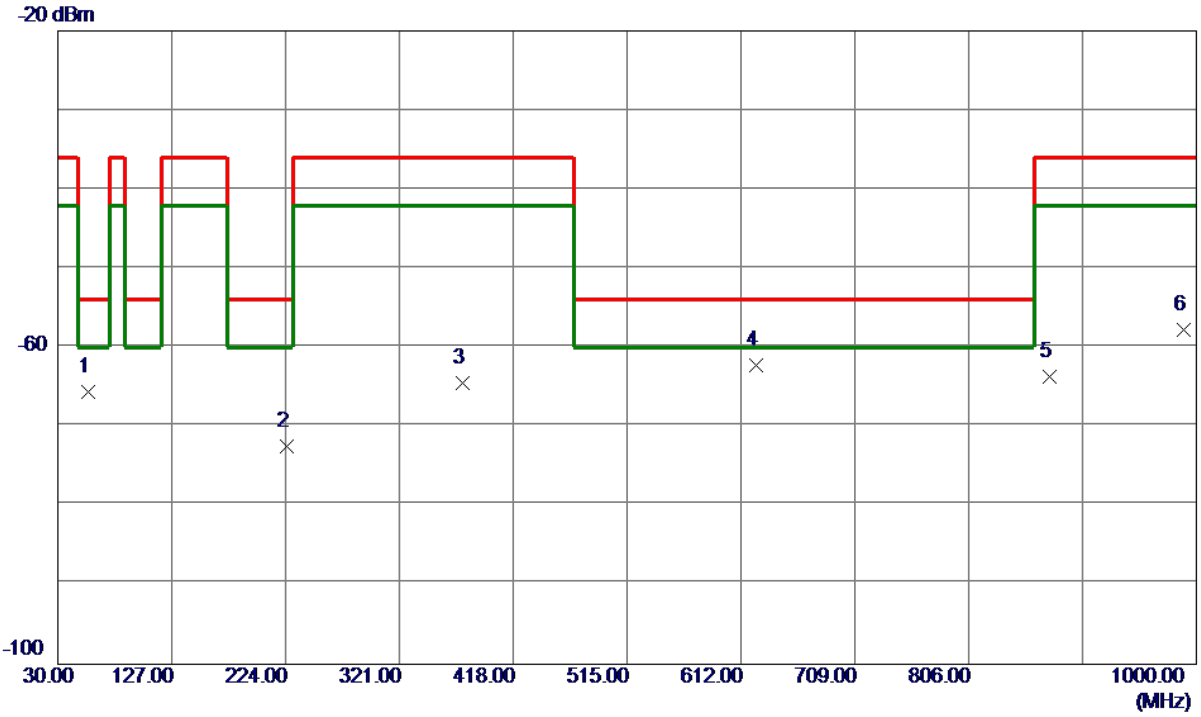
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	59.5850	-65.15	-1.94	-67.09	-54.00	-13.09	RMS	
2	225.9400	-67.90	-4.41	-72.31	-54.00	-18.31	RMS	
3	374.9320	-64.27	-0.05	-64.32	-36.00	-28.32	RMS	
4 *	624.9980	-66.35	4.19	-62.16	-54.00	-8.16	RMS	
5	874.9670	-71.66	7.60	-64.06	-36.00	-28.06	RMS	
6	991.9490	-70.37	9.28	-61.09	-36.00	-25.09	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Horizontal



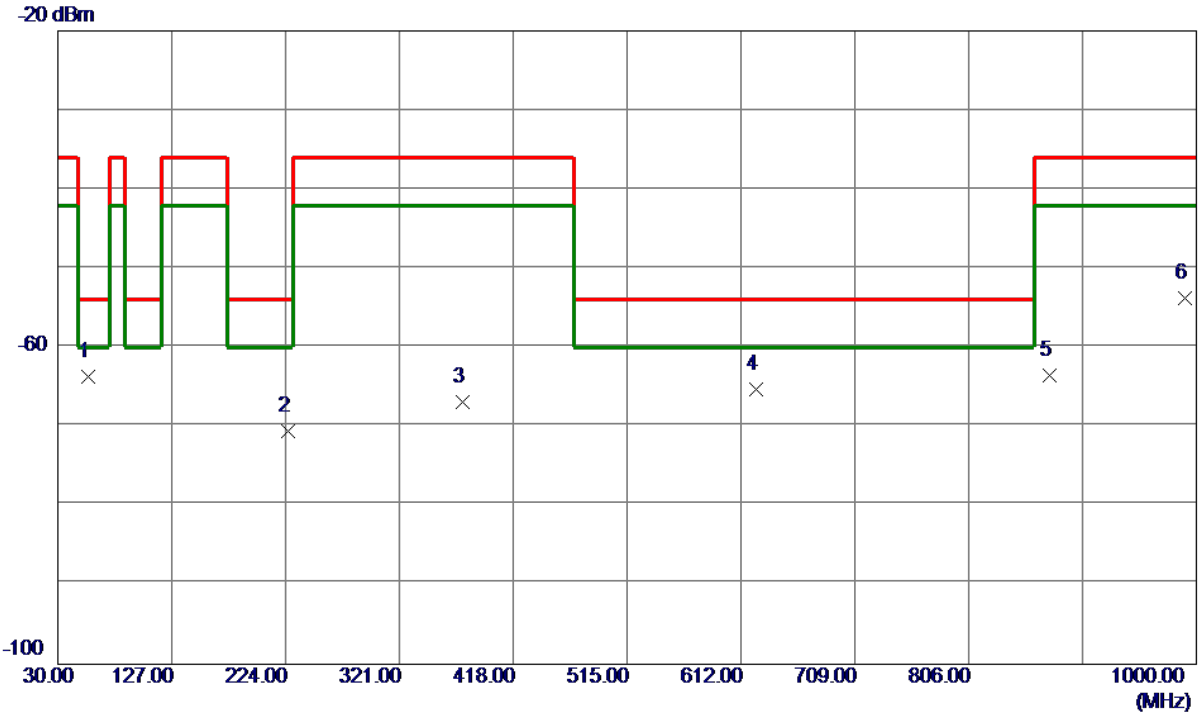
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	55.7050	-60.60	-1.10	-61.70	-54.00	-7.70	RMS	
2	226.1340	-65.68	-3.66	-69.34	-54.00	-15.34	RMS	
3	374.9320	-67.12	-0.08	-67.20	-36.00	-31.20	RMS	
4	624.9980	-69.48	4.31	-65.17	-54.00	-11.17	RMS	
5	874.9670	-71.26	7.68	-63.58	-36.00	-27.58	RMS	
6	994.0830	-70.83	9.33	-61.50	-36.00	-25.50	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	55.8990	-64.92	-0.75	-65.67	-54.00	-11.67	RMS	
2	225.3580	-68.07	-4.43	-72.50	-54.00	-18.50	RMS	
3	374.9320	-64.44	-0.05	-64.49	-36.00	-28.49	RMS	
4 *	624.9980	-66.42	4.19	-62.23	-54.00	-8.23	RMS	
5	874.9670	-71.21	7.60	-63.61	-36.00	-27.61	RMS	
6	989.0390	-67.03	9.25	-57.78	-36.00	-21.78	RMS	

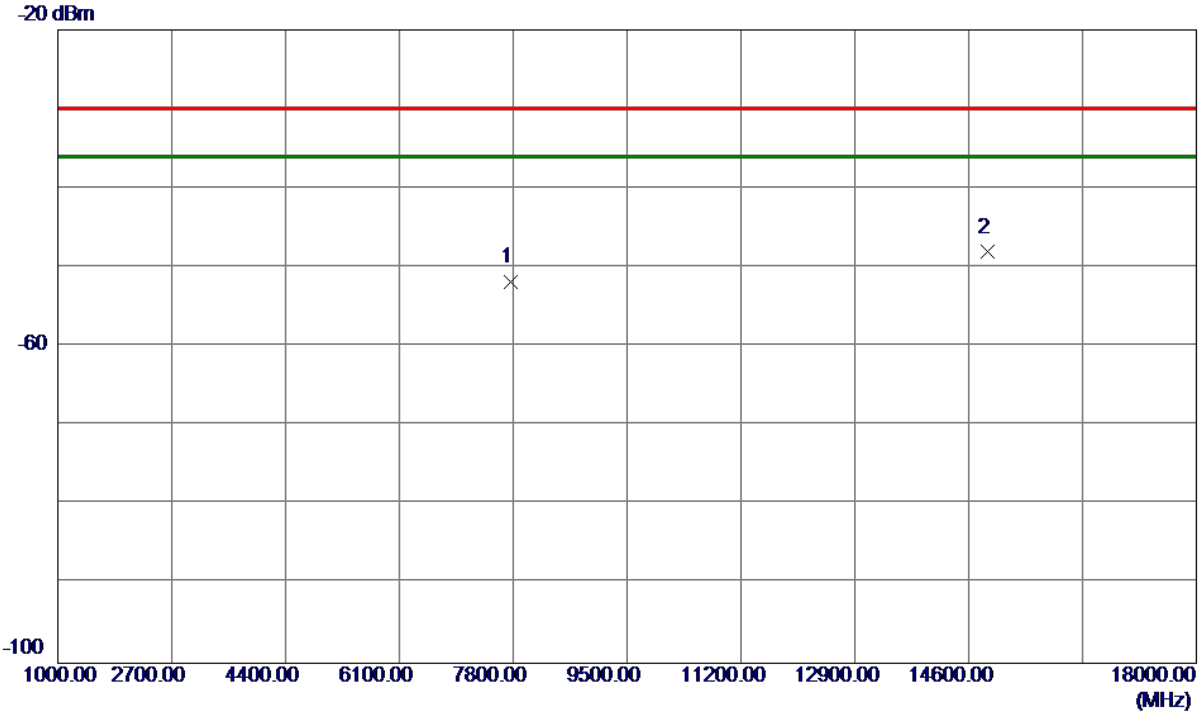
Test Mode	TX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	55.8020	-62.59	-1.13	-63.72	-54.00	-9.72	RMS	
2	226.1340	-66.83	-3.66	-70.49	-54.00	-16.49	RMS	
3	374.9320	-66.82	-0.08	-66.90	-36.00	-30.90	RMS	
4	624.9980	-69.58	4.31	-65.27	-54.00	-11.27	RMS	
5	874.9670	-71.24	7.68	-63.56	-36.00	-27.56	RMS	
6	990.5910	-62.97	9.28	-53.69	-36.00	-17.69	RMS	

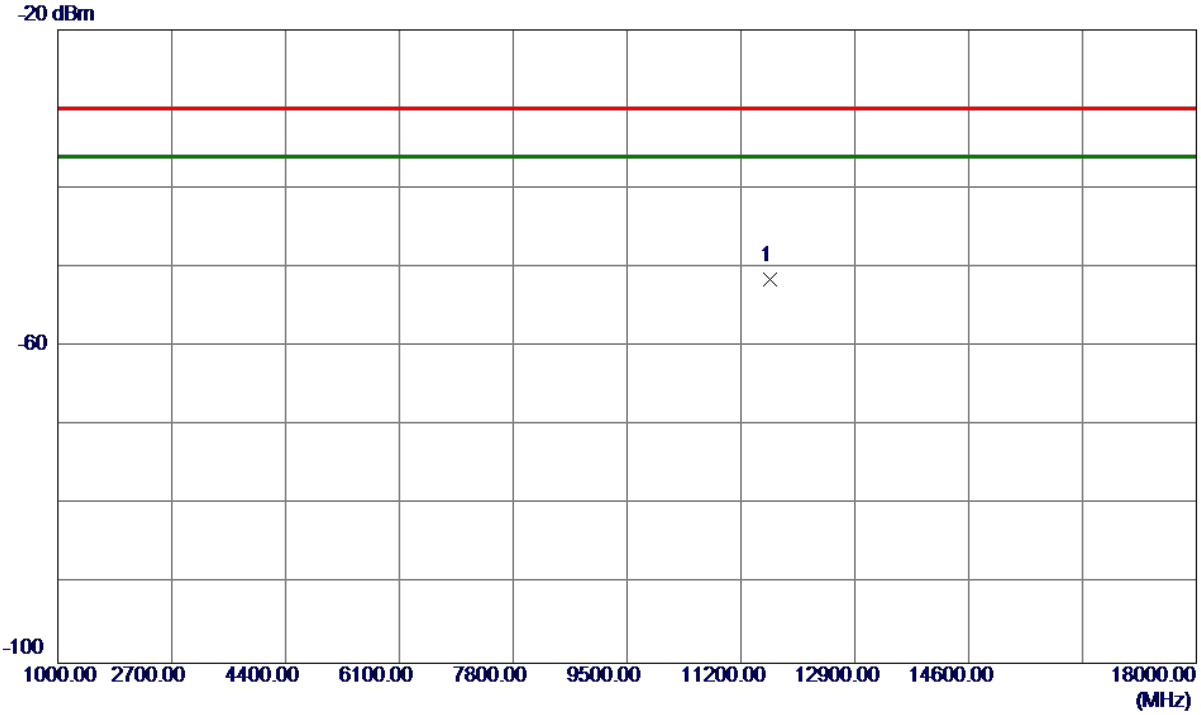
APPENDIX F - TRANSMITTER UNWANTED EMISSIONS OUTSIDE THE 5 GHZ RLAN BANDS (ABOVE 1000MHZ)

Test Mode	TX Mode IEEE 802.11a_5180MHz	Polarization	Vertical



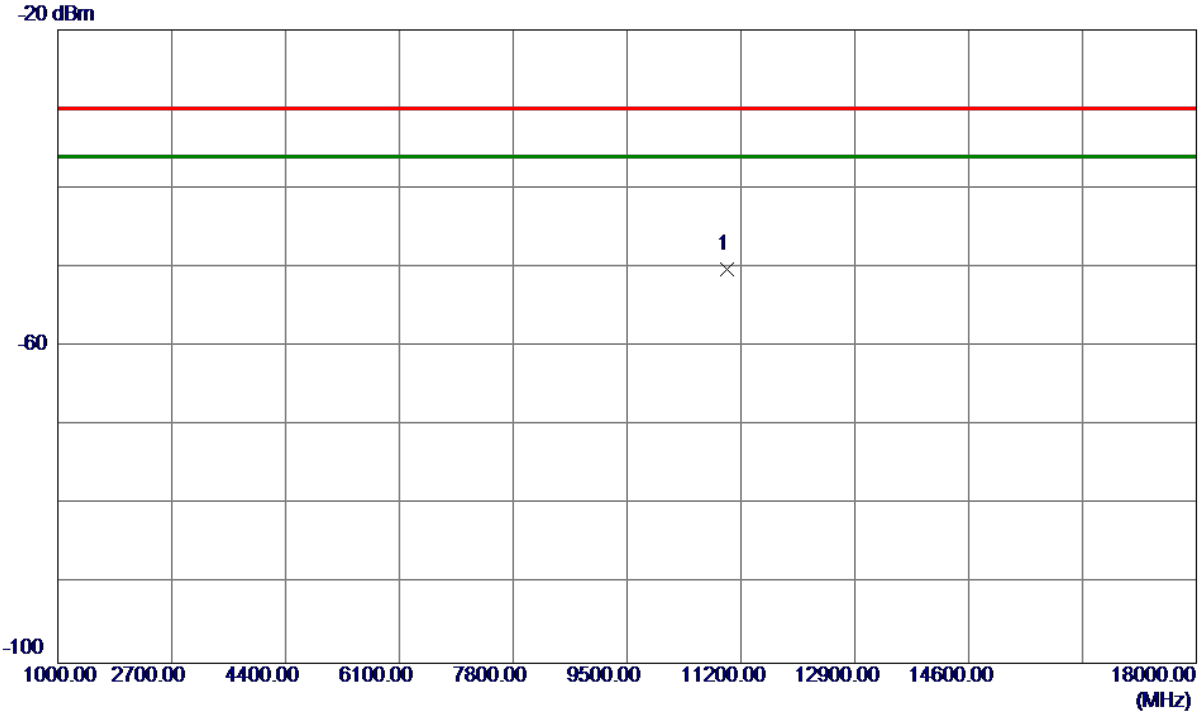
No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	7770.2500	-60.94	9.17	-51.77	-30.00	-21.77	RMS	
2 *	14874.5500	-61.22	13.14	-48.08	-30.00	-18.08	RMS	

Test Mode	TX Mode IEEE 802.11a_5180MHz	Polarization	Horizontal



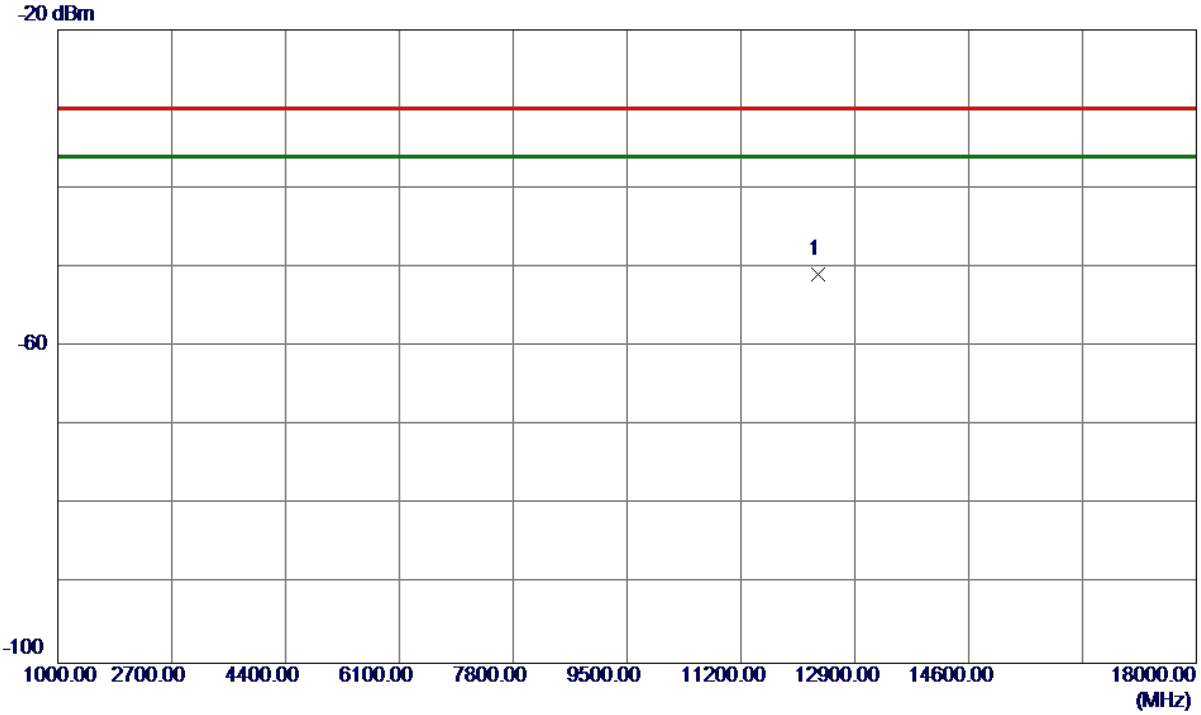
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11631.8000	-63.42	11.82	-51.60	-30.00	-21.60	RMS	

Test Mode	TX Mode IEEE 802.11a_5500MHz	Polarization	Vertical



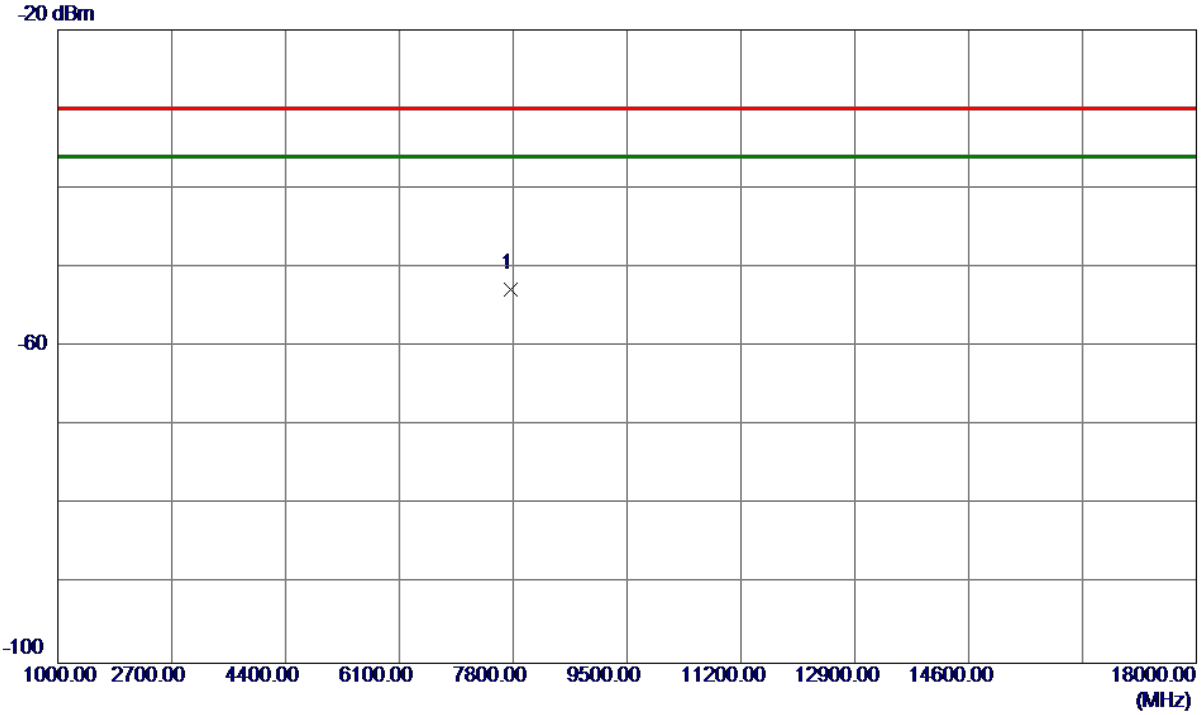
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	10998.5500	-61.27	11.02	-50.25	-30.00	-20.25	RMS	

Test Mode	TX Mode IEEE 802.11a_5500MHz	Polarization	Horizontal



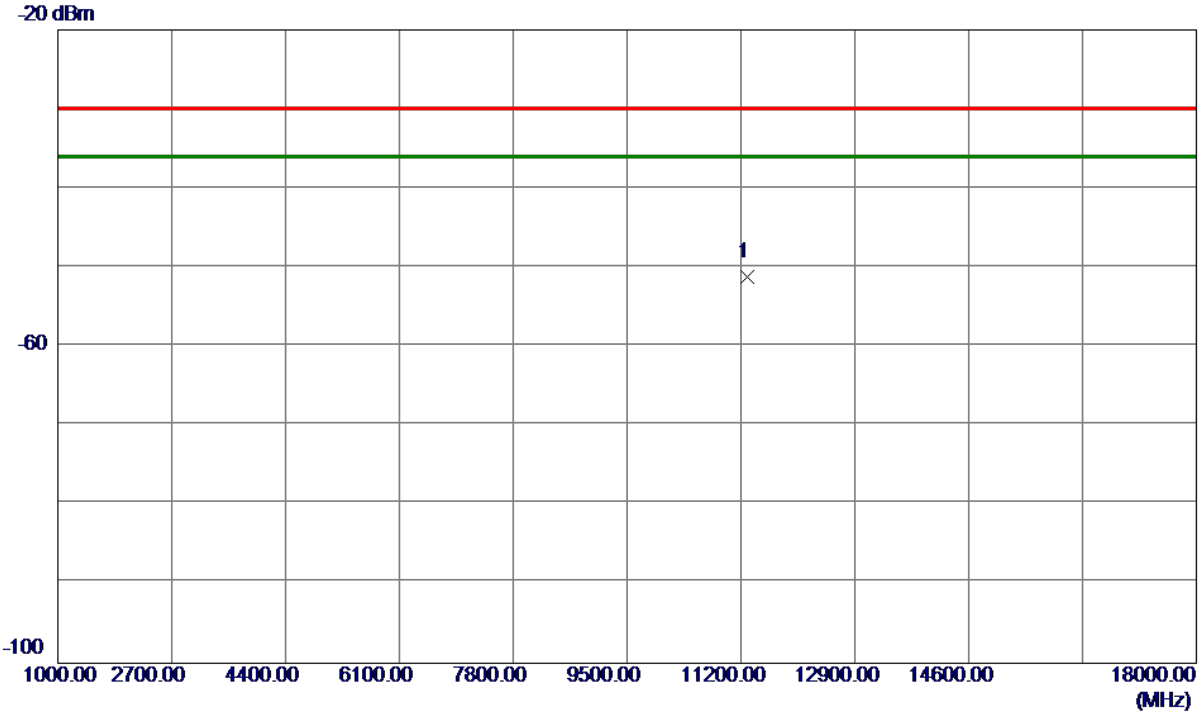
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	12353.4500	-62.69	11.78	-50.91	-30.00	-20.91	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT20)_5180MHz	Polarization	Vertical



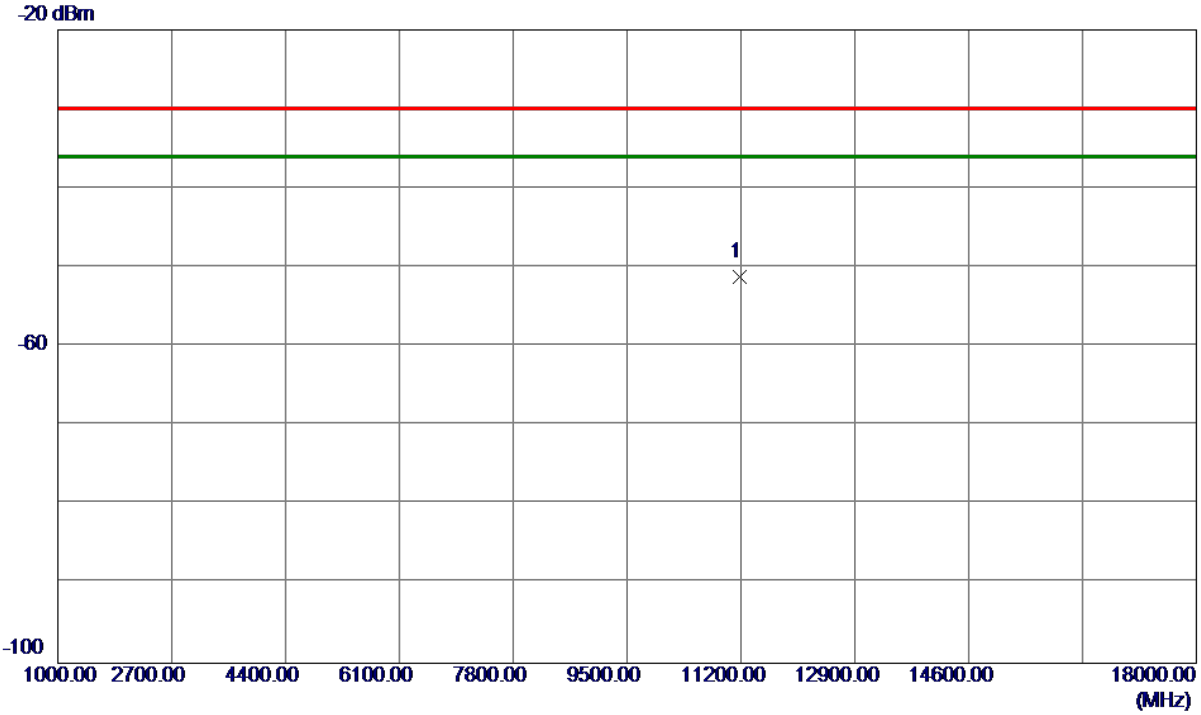
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	7770.2500	-61.89	9.17	-52.72	-30.00	-22.72	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT20)_5180MHz	Polarization	Horizontal



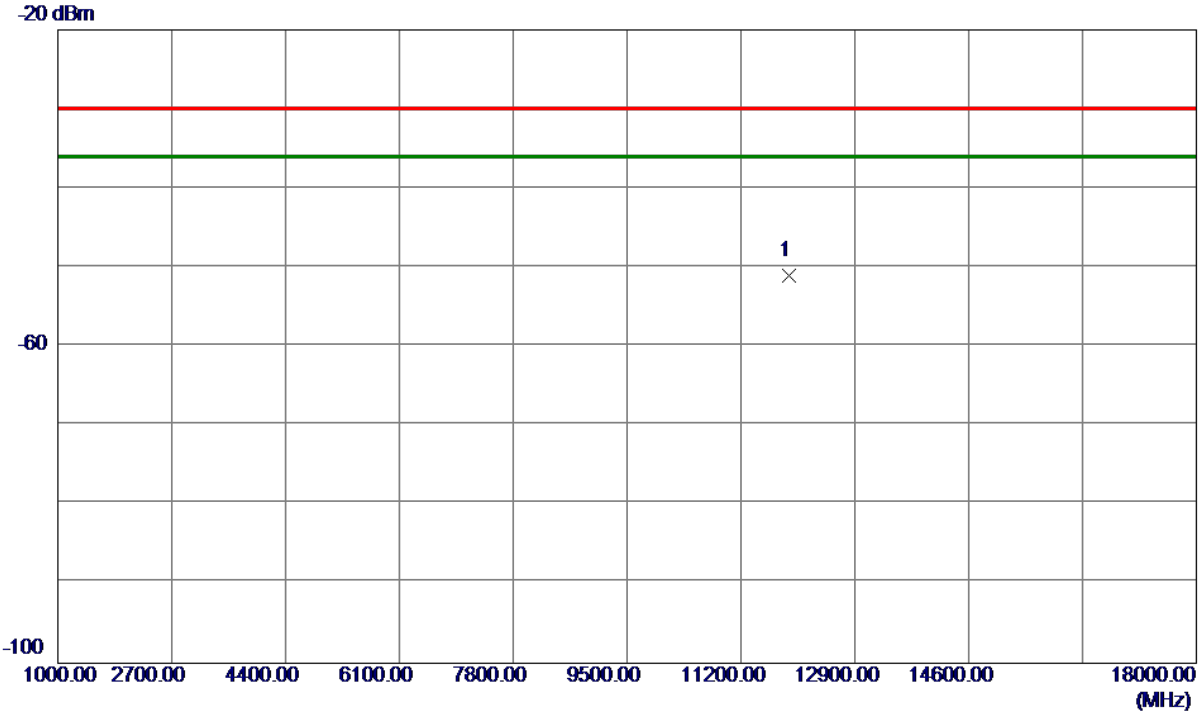
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11298.6000	-62.55	11.40	-51.15	-30.00	-21.15	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT20)_5500MHz	Polarization	Vertical



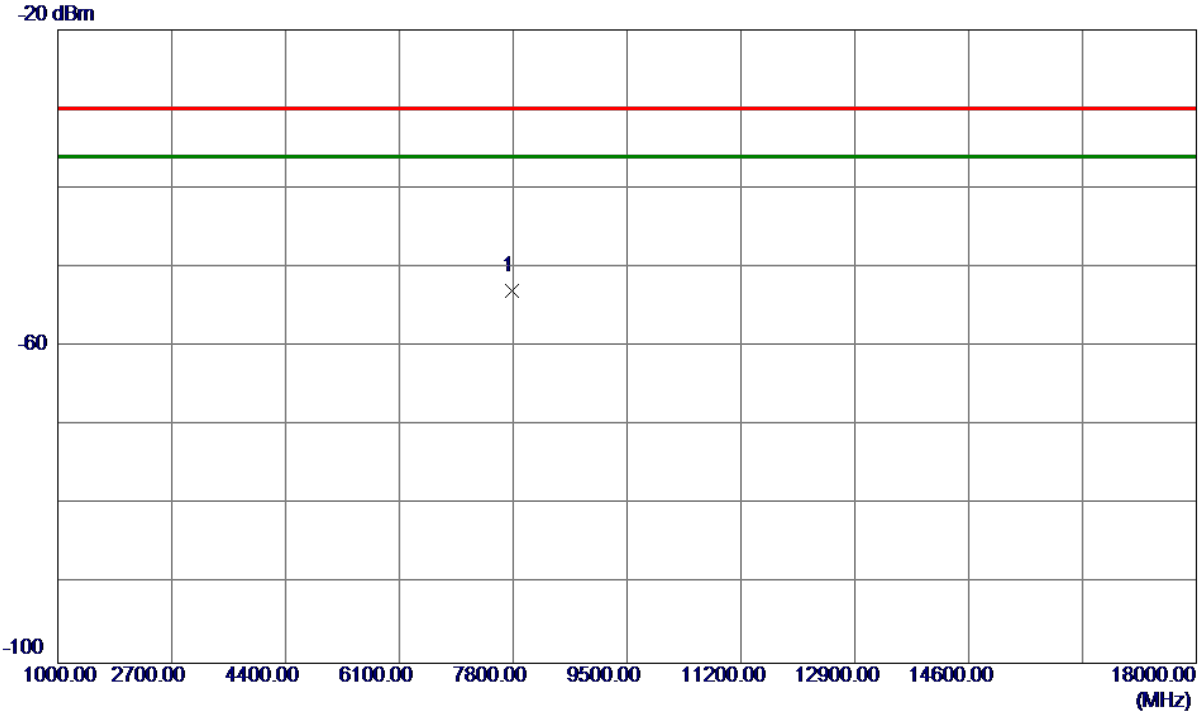
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11187.2500	-62.49	11.35	-51.14	-30.00	-21.14	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT20)_5500MHz	Polarization	Horizontal



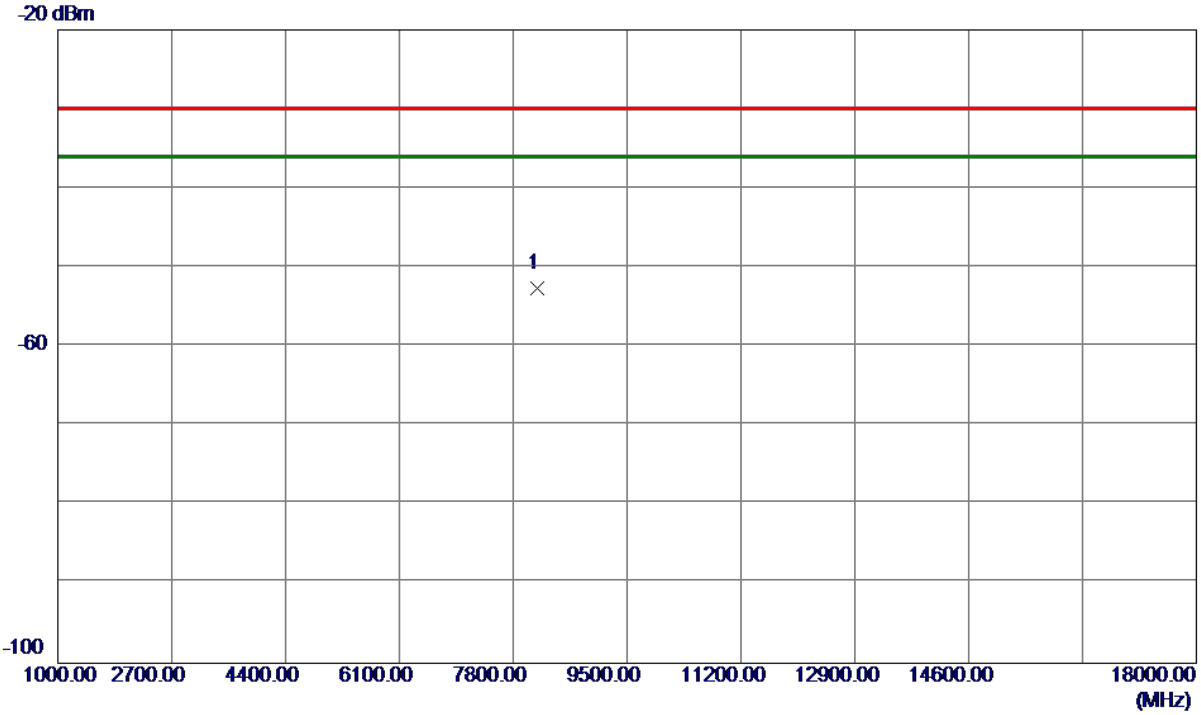
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11926.7500	-63.04	11.93	-51.11	-30.00	-21.11	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT40)_5190MHz	Polarization	Vertical



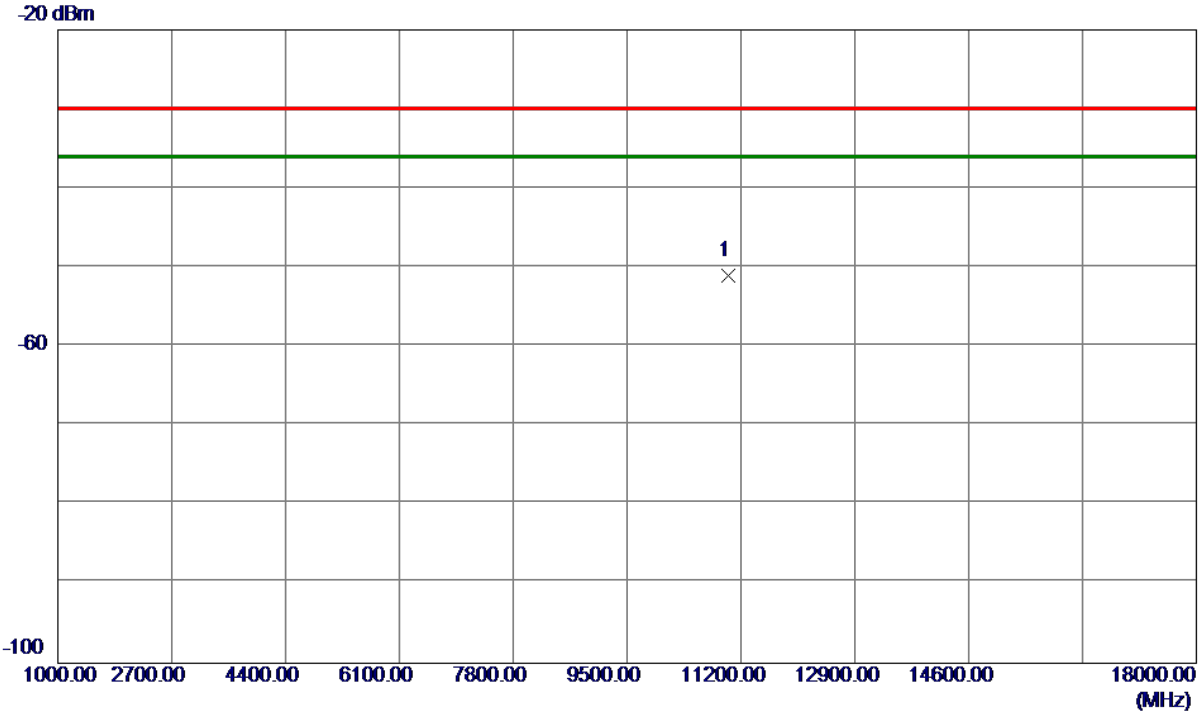
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	7785.5500	-62.18	9.16	-53.02	-30.00	-23.02	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT40)_5190MHz	Polarization	Horizontal



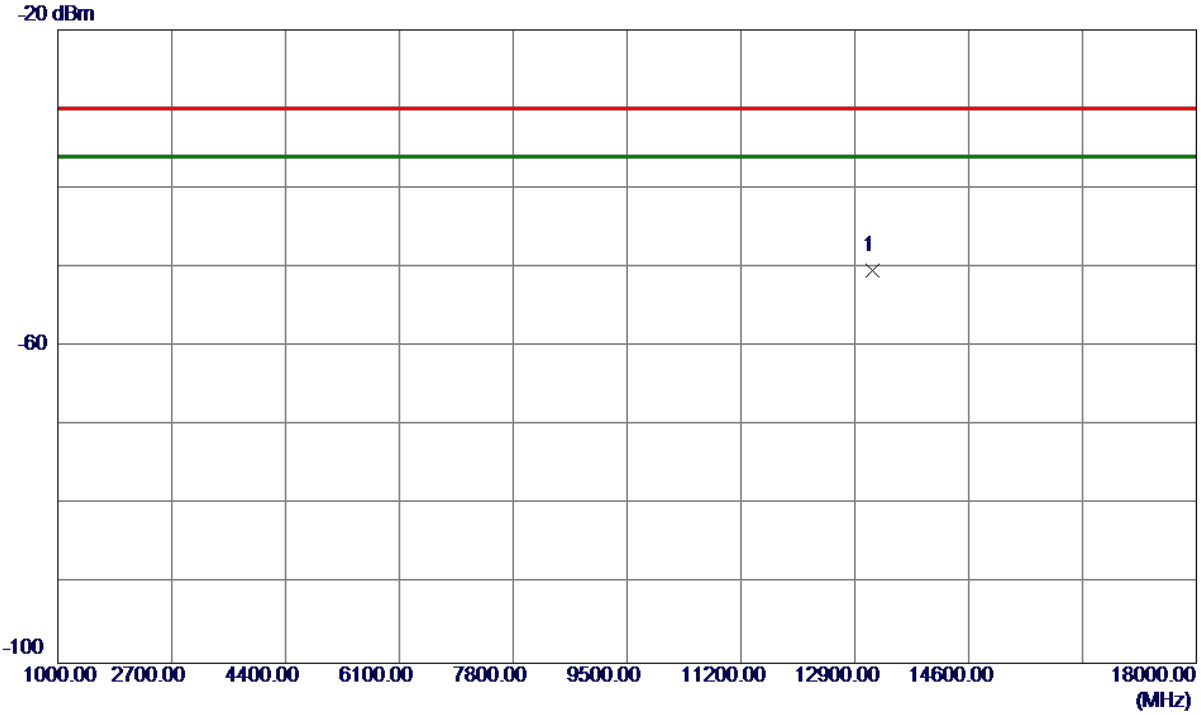
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	8166.3500	-61.32	8.65	-52.67	-30.00	-22.67	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT40)_5510MHz	Polarization	Vertical



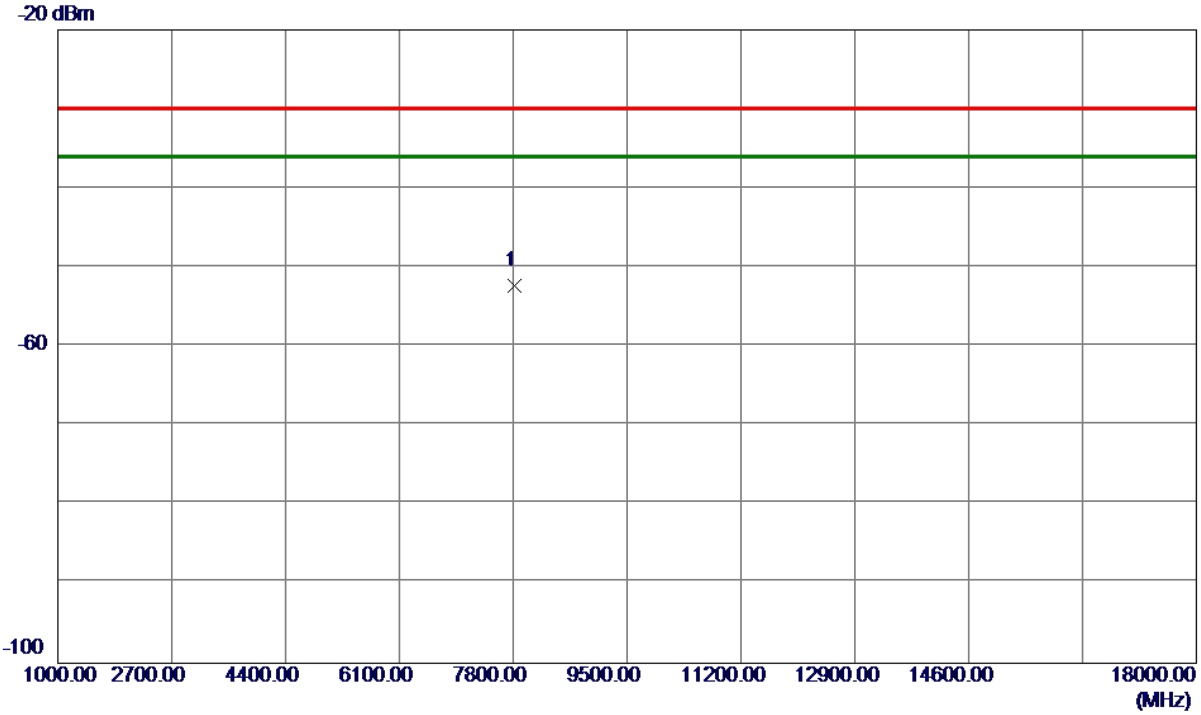
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11018.1000	-62.10	11.05	-51.05	-30.00	-21.05	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT40)_5510MHz	Polarization	Horizontal



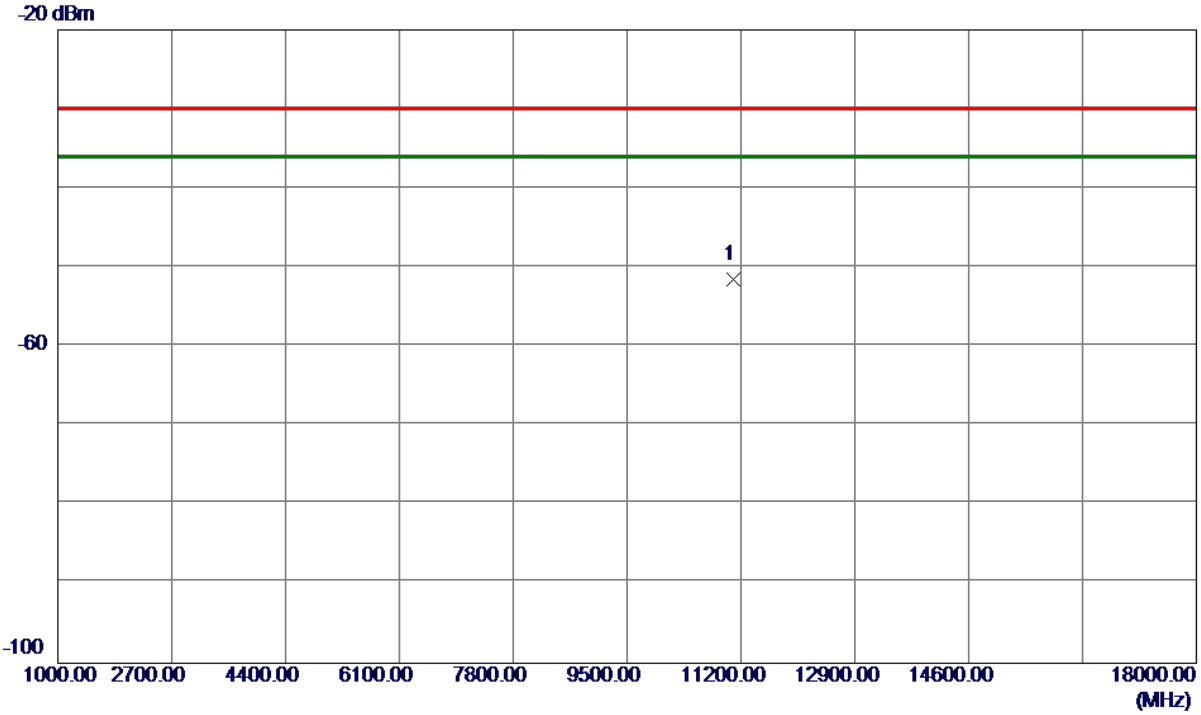
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	13164.3500	-63.01	12.64	-50.37	-30.00	-20.37	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT80)_5210MHz	Polarization	Vertical



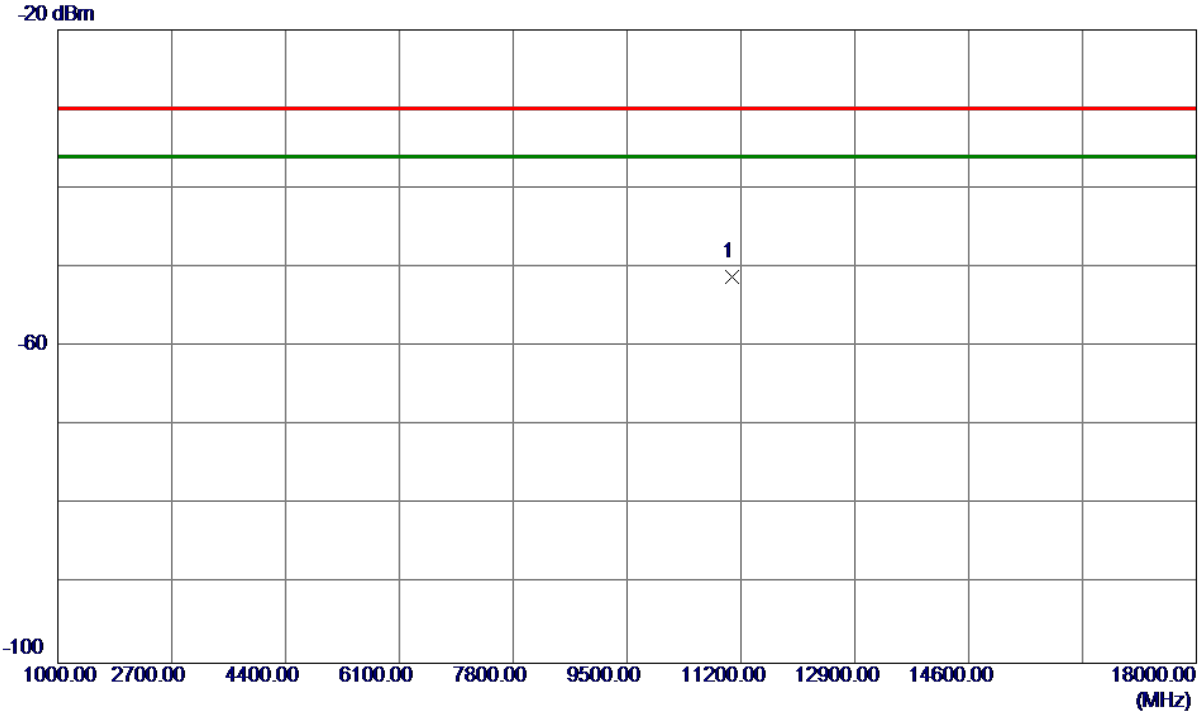
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	7815.3000	-61.41	9.14	-52.27	-30.00	-22.27	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT80)_5210MHz	Polarization	Horizontal



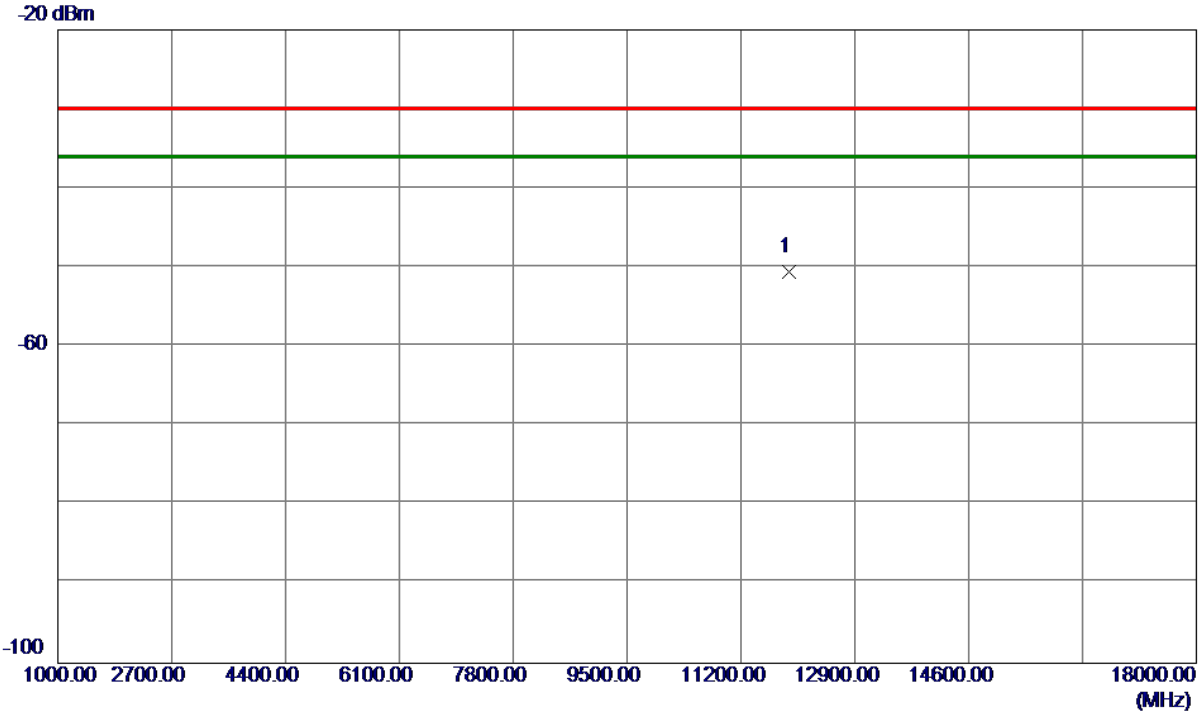
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11095.4500	-62.50	11.02	-51.48	-30.00	-21.48	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT80)_5530MHz	Polarization	Vertical



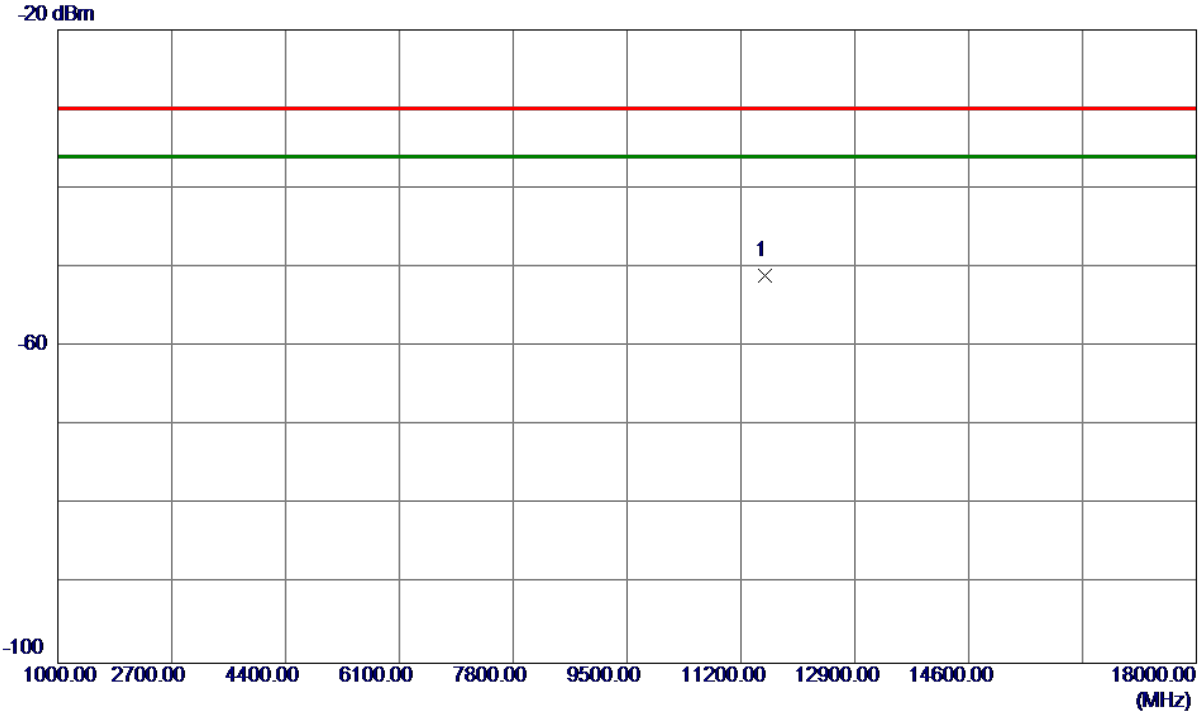
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11076.7500	-62.32	11.15	-51.17	-30.00	-21.17	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT80)_5530MHz	Polarization	Horizontal



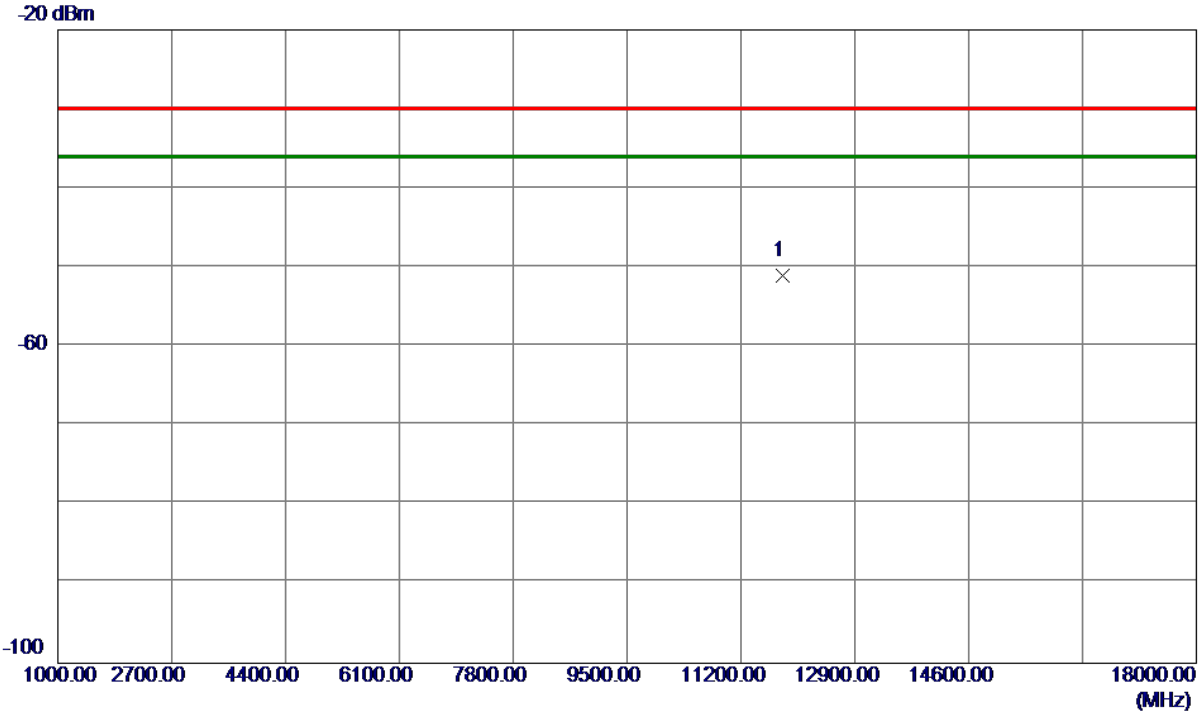
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11915.7000	-62.44	11.93	-50.51	-30.00	-20.51	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Vertical



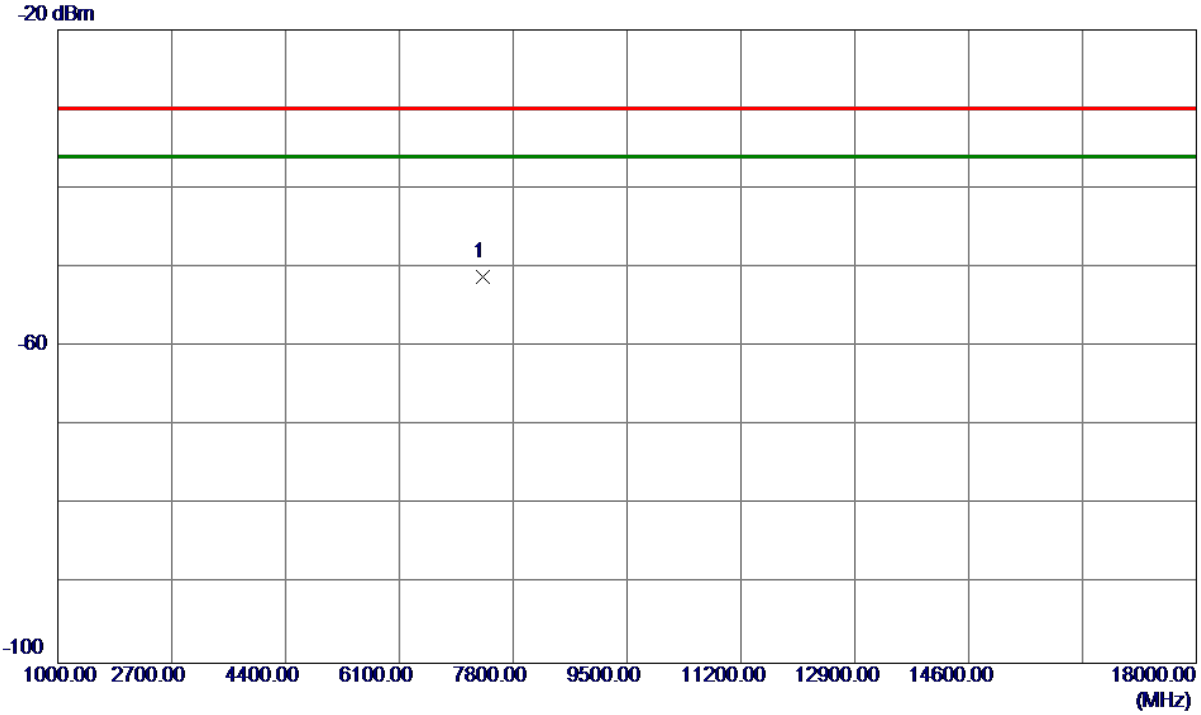
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11550.2000	-63.02	11.92	-51.10	-30.00	-21.10	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Horizontal



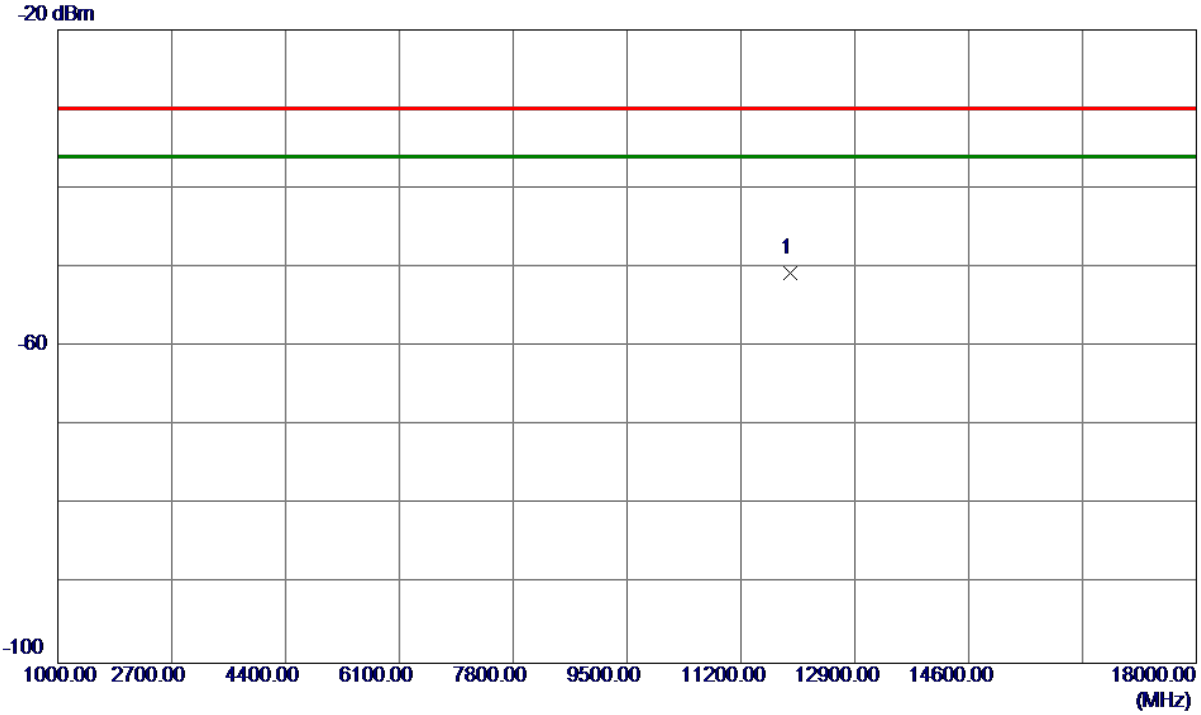
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11822.2000	-62.89	11.89	-51.00	-30.00	-21.00	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Vertical



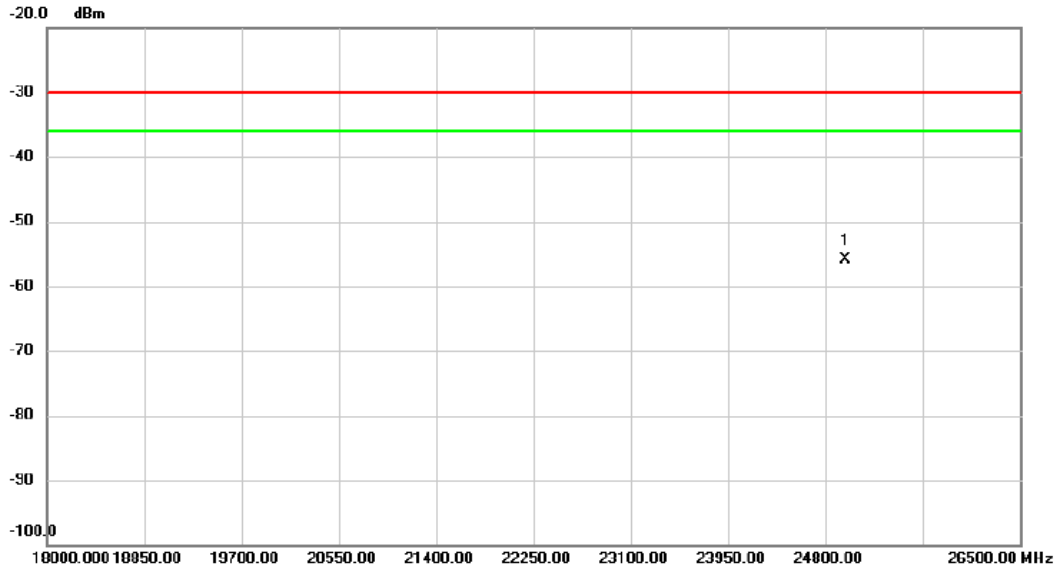
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	7352.0500	-60.38	9.25	-51.13	-30.00	-21.13	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Horizontal



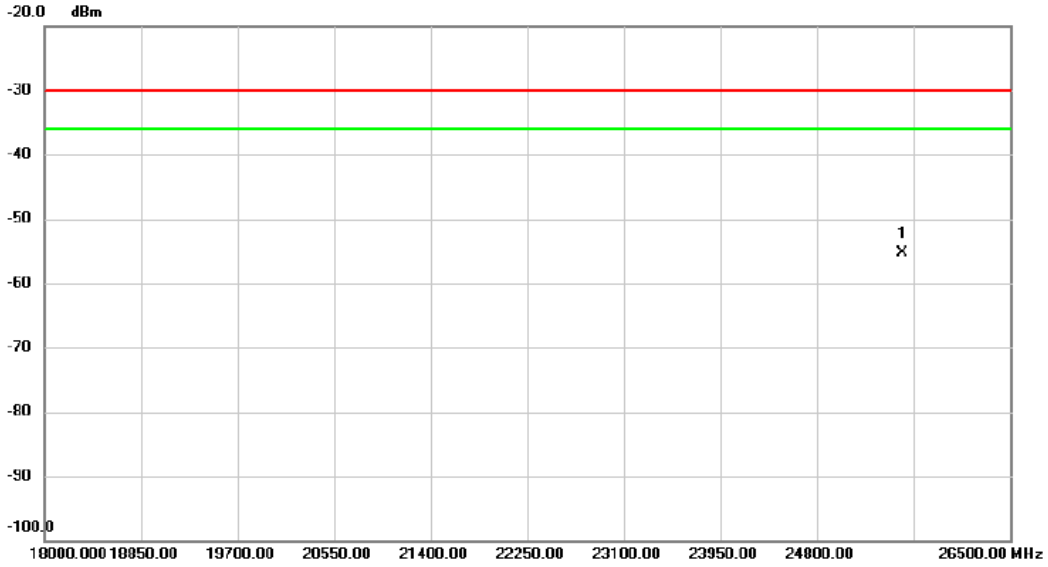
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	11936.1000	-62.70	11.94	-50.76	-30.00	-20.76	RMS	

Test Mode	TX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	24971.700	-63.31	7.40	-55.91	-30.00	-25.91	RMS	

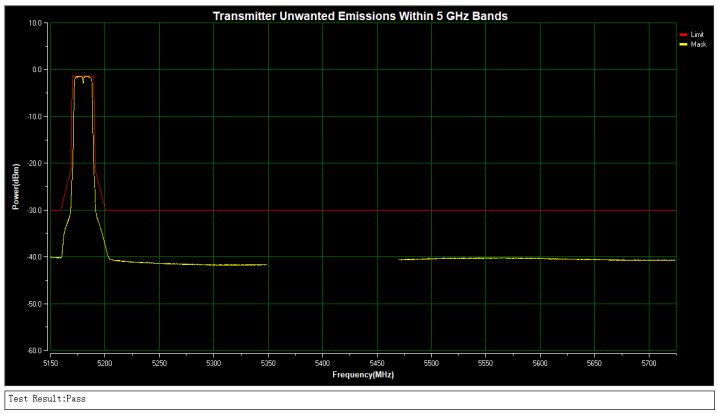
Test Mode	TX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	25552.250	-62.75	7.54	-55.21	-30.00	-25.21	RMS	

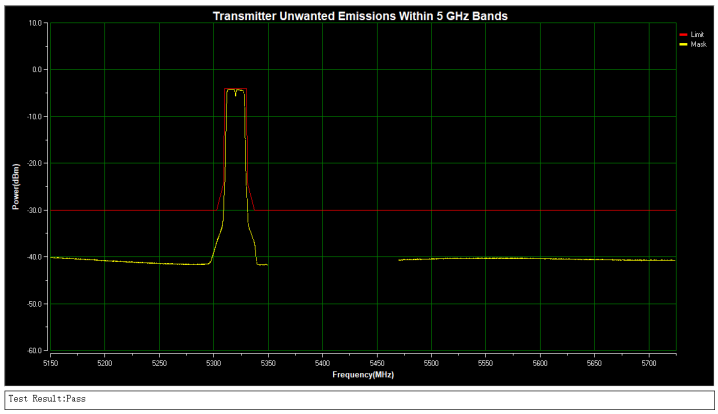
APPENDIX G - TRANSMITTER UNWANTED EMISSIONS WITHIN THE 5 GHZ RLAN BANDS

Test Mode :	IEEE 802.11a_5180MHz



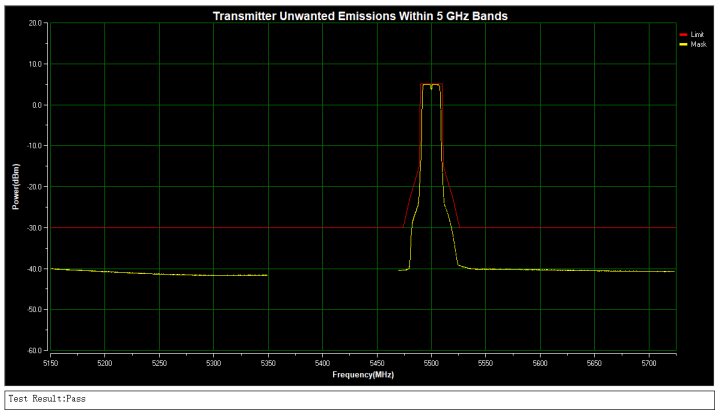
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11a_5320MHz



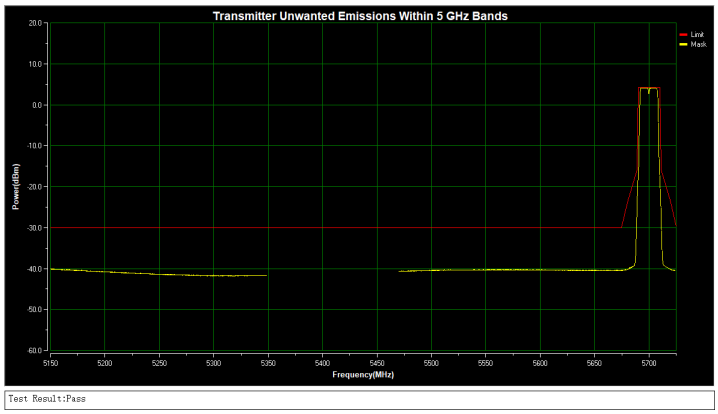
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11a_5500MHz



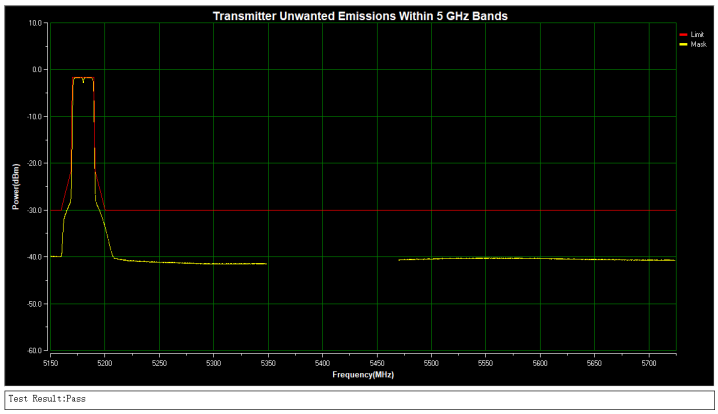
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11a_5700MHz



Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

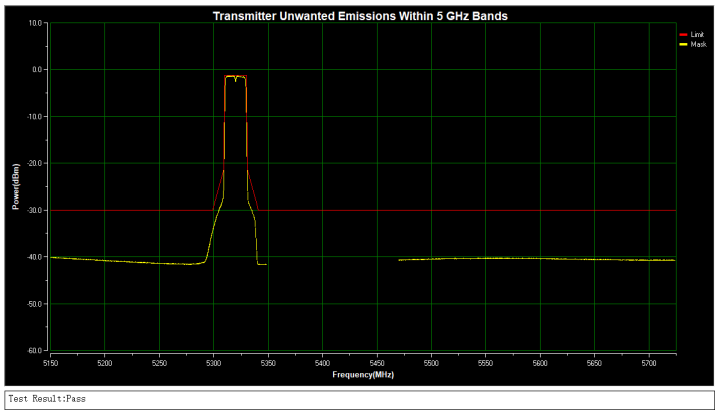
Test Mode :	IEEE 802.11be(EHT20)_5180MHz



Test Result:Pass

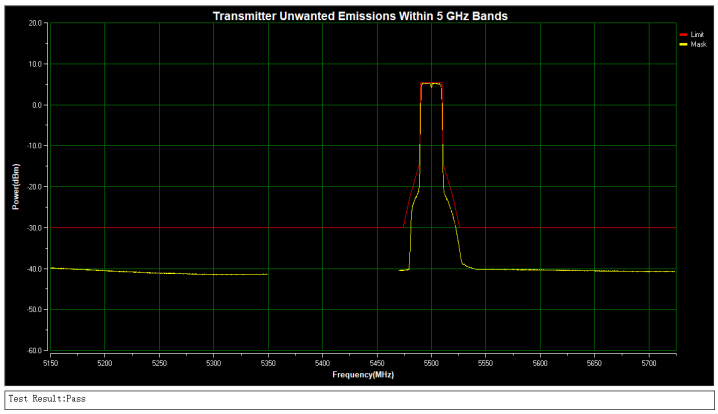
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT20)_5320MHz



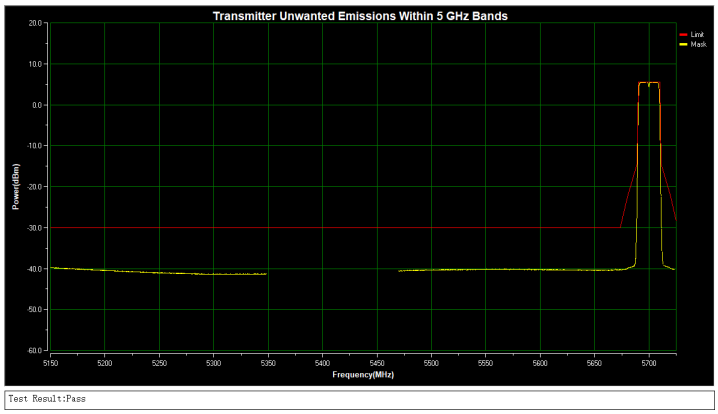
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT20)_5500MHz



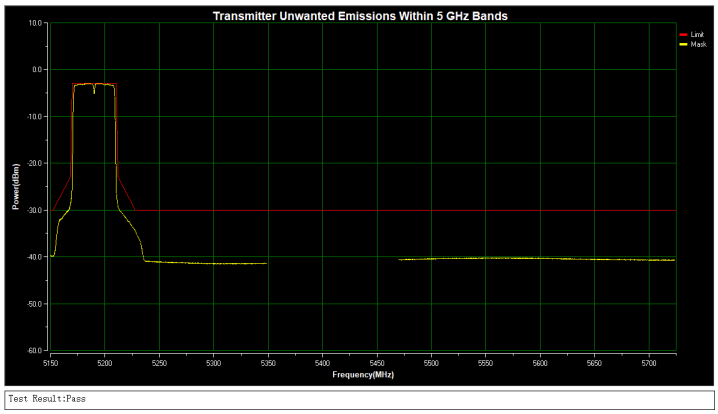
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT20)_5700MHz



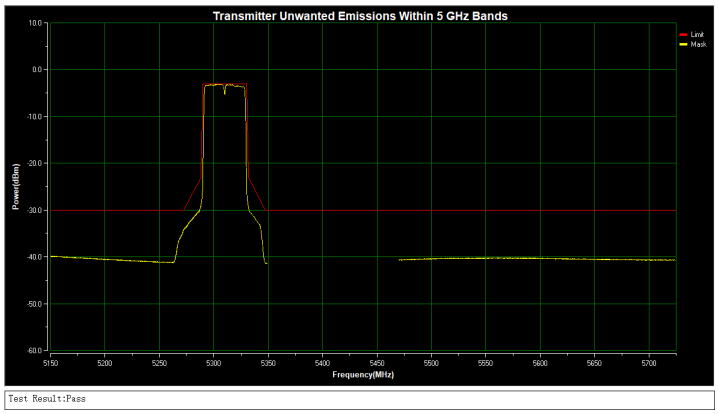
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT40)_5190MHz



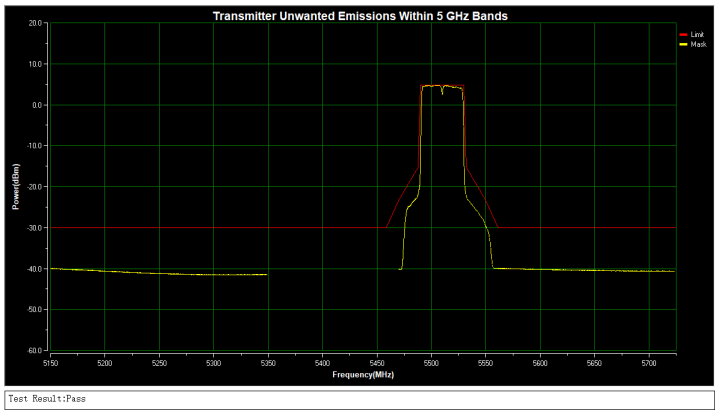
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT40)_5310MHz



Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

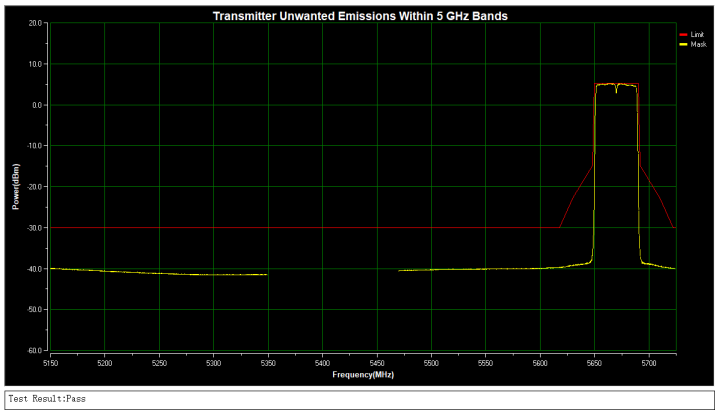
Test Mode :	IEEE 802.11be(EHT40)_5510MHz



Test Result:Pass

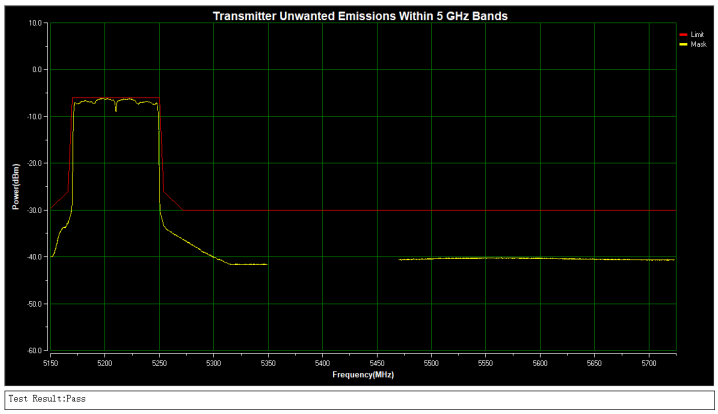
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT40)_5670MHz



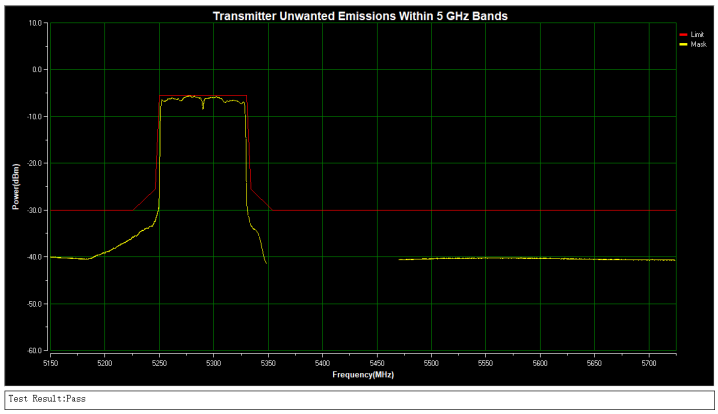
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT80)_5210MHz



Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT80)_5290MHz



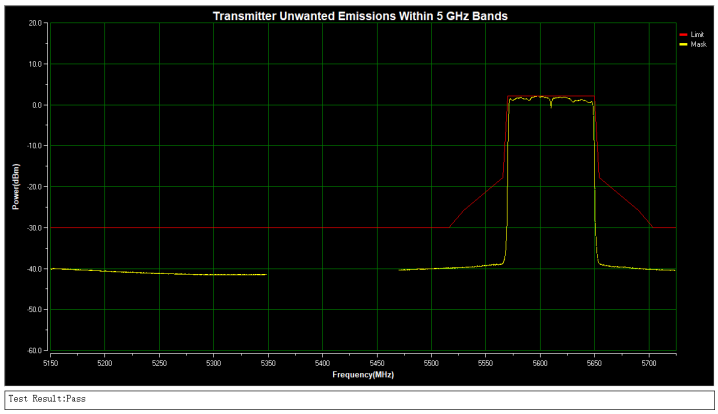
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT80)_5530MHz



Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

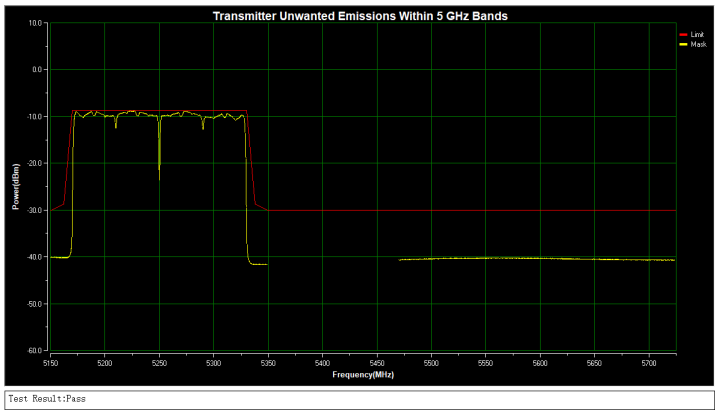
Test Mode :	IEEE 802.11be(EHT80)_5610MHz



Test Result:Pass

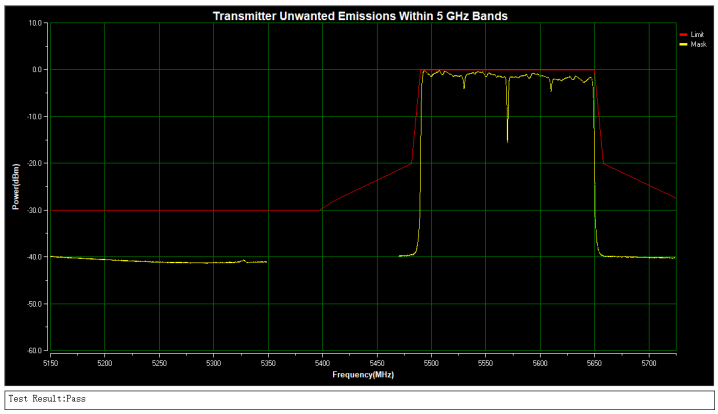
Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

Test Mode :	IEEE 802.11be(EHT160)_5250MHz



Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

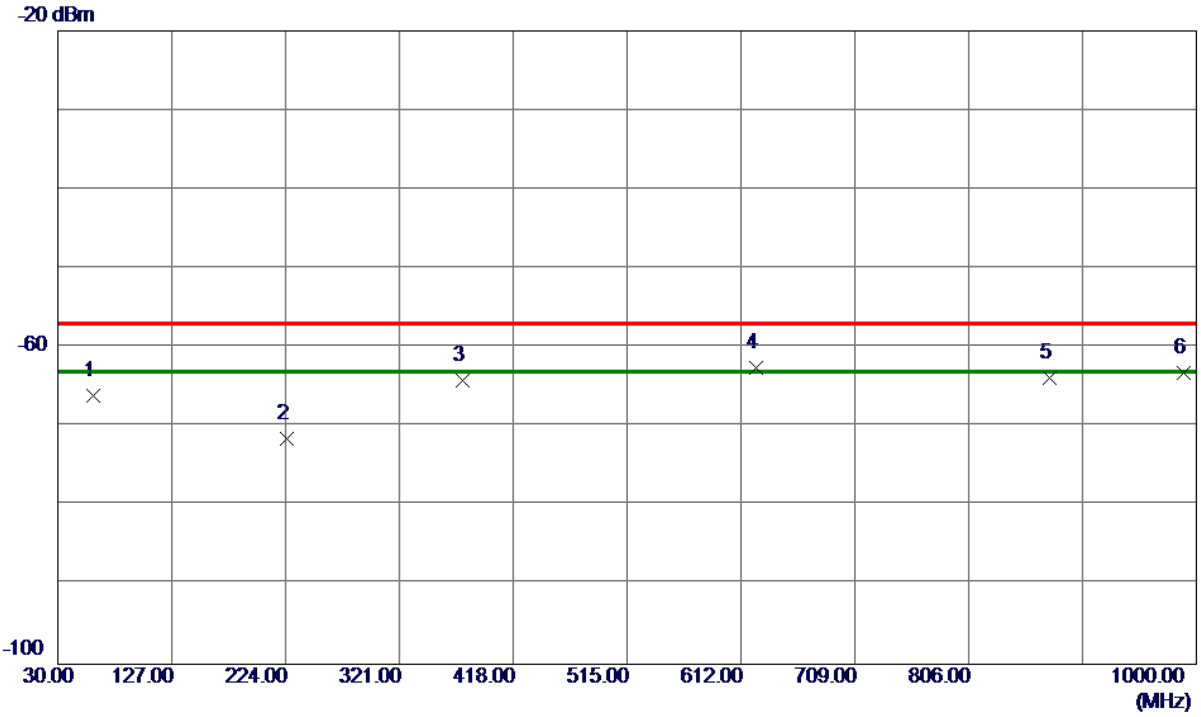
Test Mode :	IEEE 802.11be(EHT160)_5570MHz



Note:
The MASK is only applicable within the 5150MHz to 5350MHz and 5470MHz to 5725MHz. 5350MHz to 5470MHz is applicable within the Radiation spurious,so the waveform is not displayed in the test data.

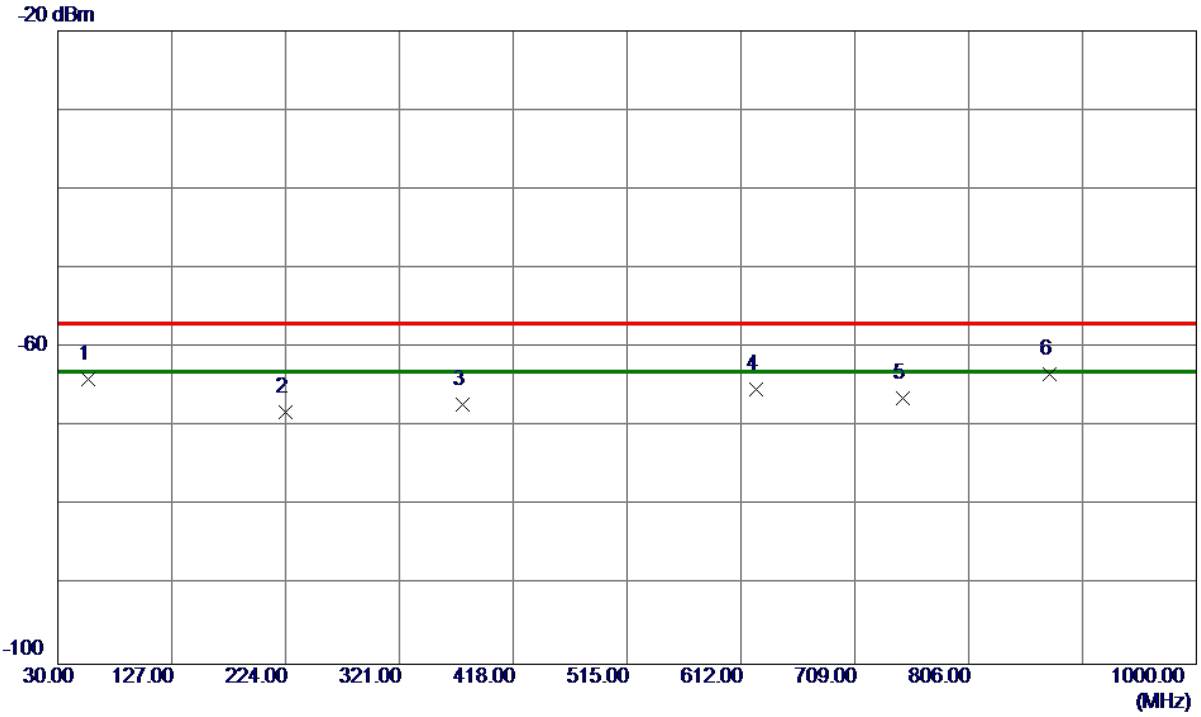
APPENDIX H - RECEIVER SPURIOUS EMISSIONS (30MHZ TO 1000MHZ)

Test Mode	RX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Vertical



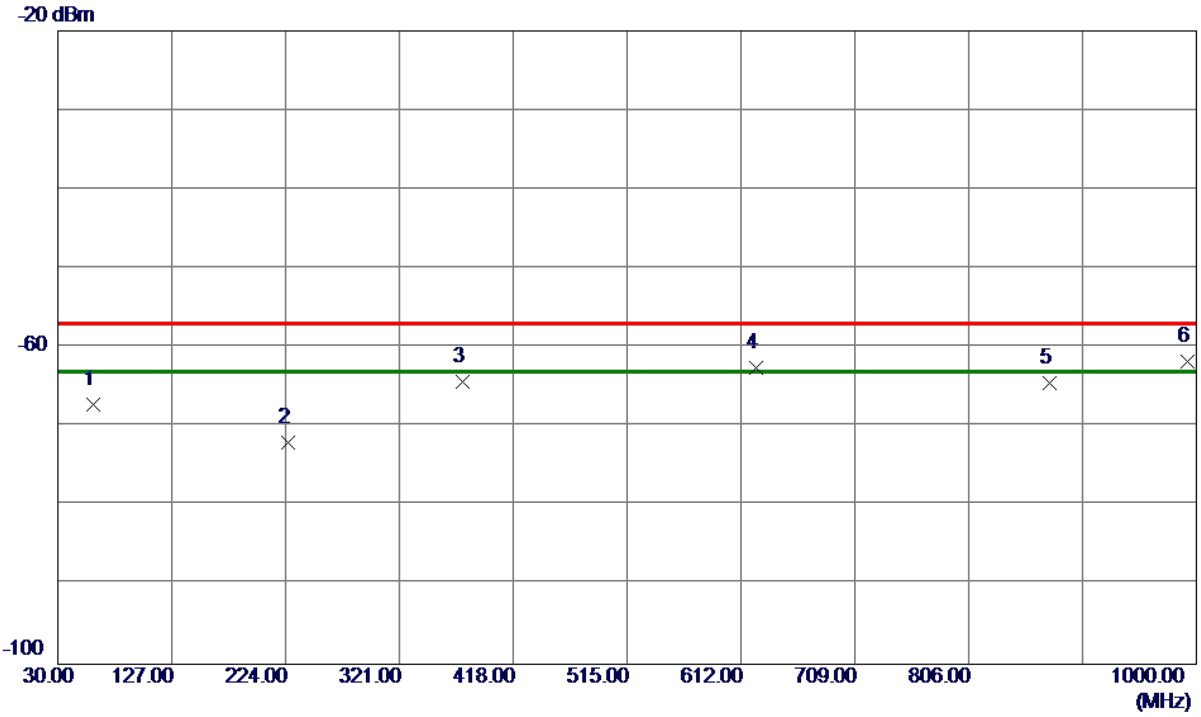
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	59.7790	-64.04	-2.00	-66.04	-57.00	-9.04	RMS	
2	225.3580	-67.12	-4.43	-71.55	-57.00	-14.55	RMS	
3	374.9320	-64.07	-0.05	-64.12	-57.00	-7.12	RMS	
4 *	624.9980	-66.81	4.19	-62.62	-57.00	-5.62	RMS	
5	874.9670	-71.47	7.60	-63.87	-57.00	-6.87	RMS	
6	989.6210	-72.39	9.25	-63.14	-57.00	-6.14	RMS	

Test Mode	RX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Horizontal



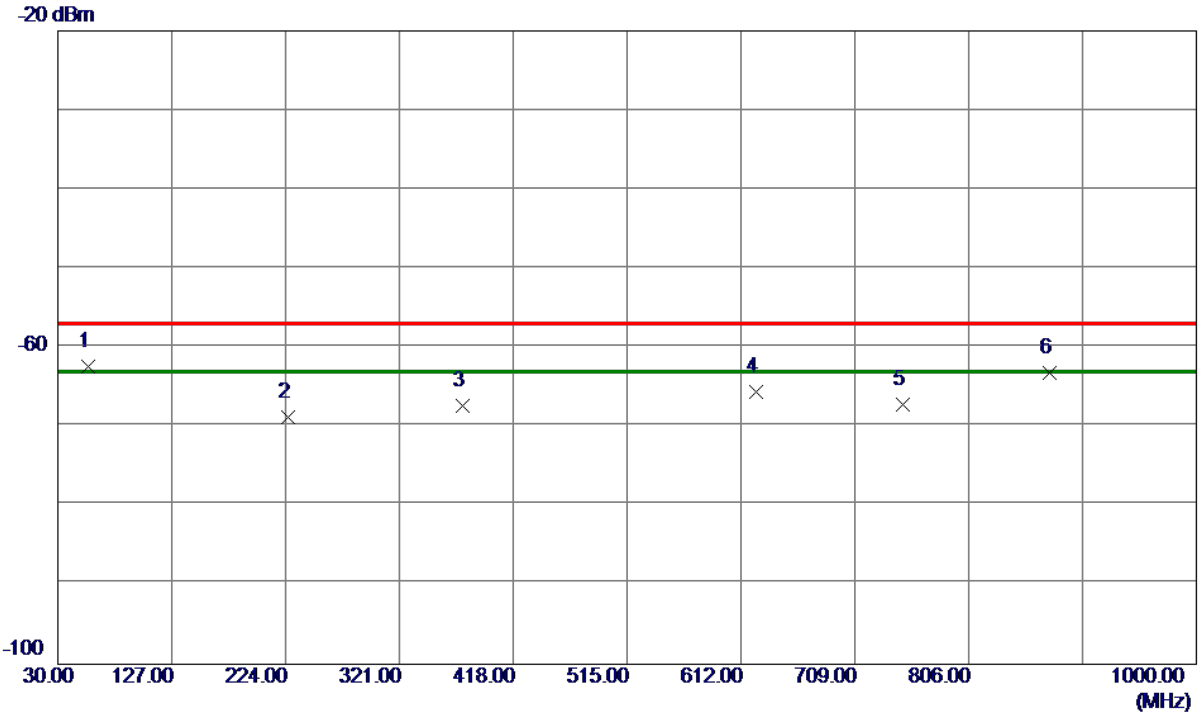
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	55.6080	-62.96	-1.08	-64.04	-57.00	-7.04	RMS	
2	224.0970	-64.34	-3.84	-68.18	-57.00	-11.18	RMS	
3	374.9320	-67.19	-0.08	-67.27	-57.00	-10.27	RMS	
4	624.9980	-69.61	4.31	-65.30	-57.00	-8.30	RMS	
5	750.0310	-73.10	6.76	-66.34	-57.00	-9.34	RMS	
6 *	874.9670	-71.09	7.68	-63.41	-57.00	-6.41	RMS	

Test Mode	RX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	59.9730	-65.13	-2.06	-67.19	-57.00	-10.19	RMS	
2	226.4250	-67.55	-4.38	-71.93	-57.00	-14.93	RMS	
3	374.9320	-64.21	-0.05	-64.26	-57.00	-7.26	RMS	
4	624.9980	-66.76	4.19	-62.57	-57.00	-5.57	RMS	
5	874.9670	-72.08	7.60	-64.48	-57.00	-7.48	RMS	
6 *	992.5310	-71.05	9.29	-61.76	-57.00	-4.76	RMS	

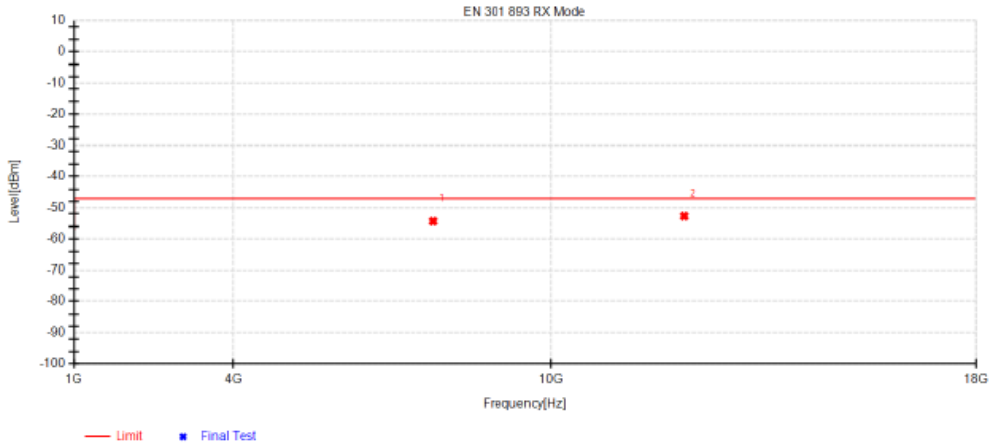
Test Mode	RX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	55.9960	-61.27	-1.18	-62.45	-57.00	-5.45	RMS	
2	226.4250	-65.16	-3.63	-68.79	-57.00	-11.79	RMS	
3	374.9320	-67.24	-0.08	-67.32	-57.00	-10.32	RMS	
4	624.9980	-69.91	4.31	-65.60	-57.00	-8.60	RMS	
5	750.0310	-74.03	6.76	-67.27	-57.00	-10.27	RMS	
6	874.9670	-70.82	7.68	-63.14	-57.00	-6.14	RMS	

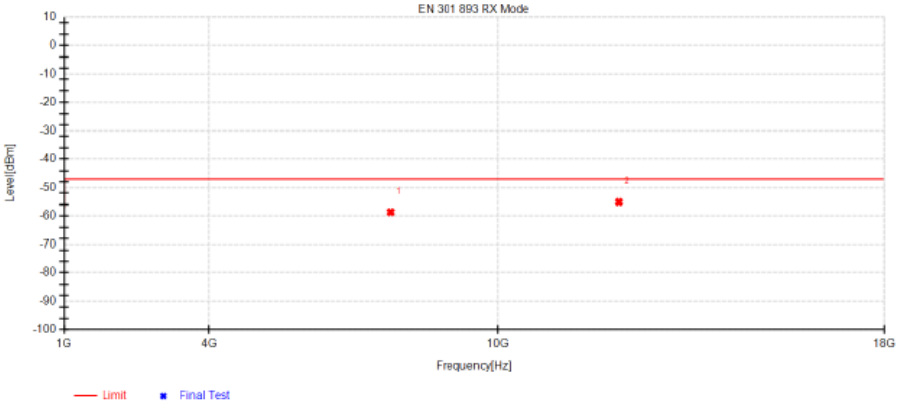
APPENDIX I - RECEIVER SPURIOUS EMISSIONS (ABOVE 1000MHZ)

Test Mode	RX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Vertical



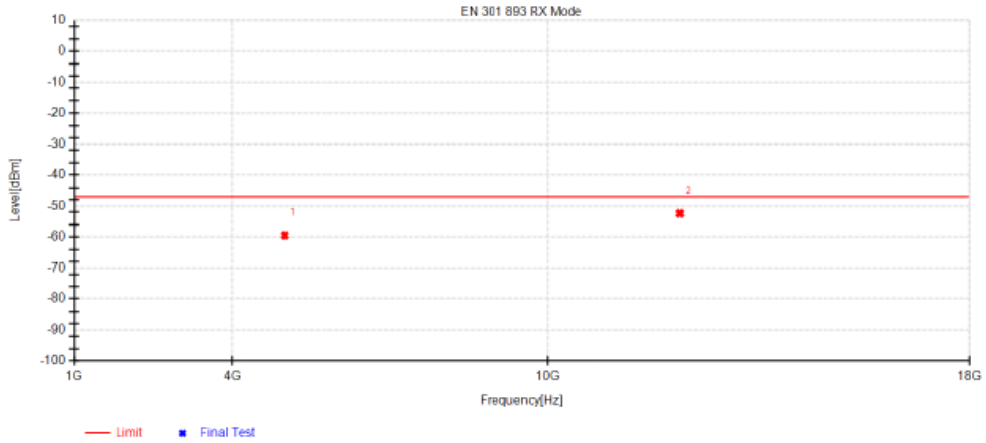
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity
1	7770.250	-60.89	6.54	-54.35	-47.00	7.35	RMS	Vertical
2	12500.50	-66.84	14.14	-52.70	-47.00	5.70	RMS	Vertical

Test Mode	RX Mode IEEE 802.11be(EHT160)_5250MHz	Polarization	Horizontal



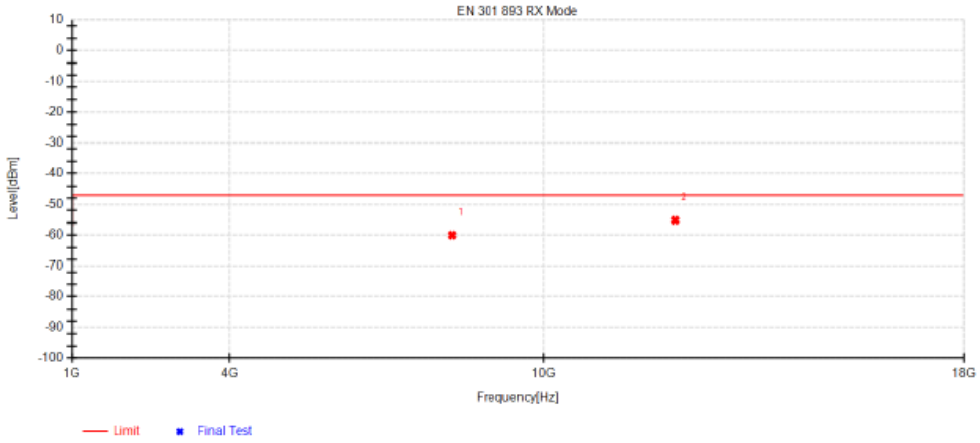
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity
1	7769.400	-64.95	6.33	-58.62	-47.00	11.62	RMS	Horizontal
2	12499.65	-69.12	14.06	-55.06	-47.00	8.06	RMS	Horizontal

Test Mode	RX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Vertical



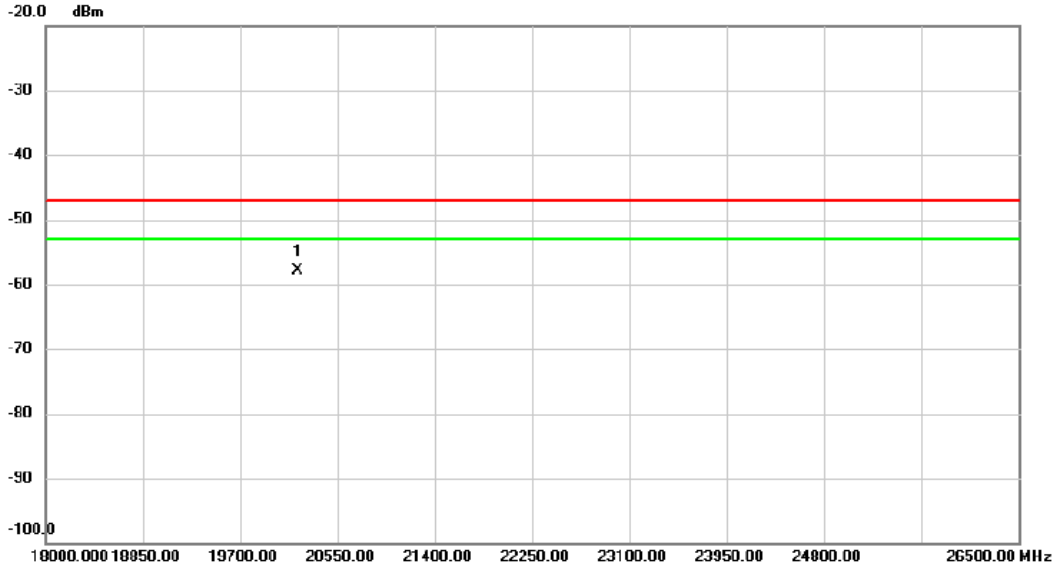
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity
1	5000.100	-60.07	0.64	-59.43	-47.00	12.43	RMS	Vertical
2	12500.50	-66.49	14.14	-52.35	-47.00	5.35	RMS	Vertical

Test Mode	RX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Horizontal



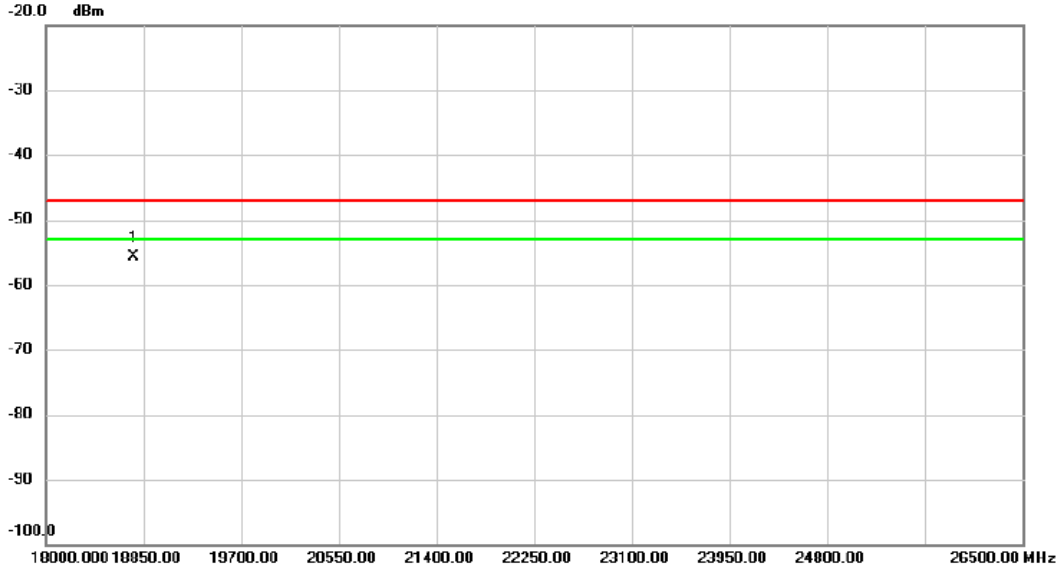
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Detector	Polarity
1	8252.200	-66.78	6.80	-59.98	-47.00	12.98	RMS	Horizontal
2	12499.65	-69.22	14.06	-55.16	-47.00	8.16	RMS	Horizontal

Test Mode	RX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	20203.200	-59.34	1.42	-57.92	-47.00	-10.92	RMS	

Test Mode	RX Mode IEEE 802.11be(EHT160)_5570MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	18765.000	-59.89	4.11	-55.78	-47.00	-8.78	RMS	

APPENDIX J - ADAPTIVITY

EUT Operational Mode	Frame Based Equipment	
	Load Based Equipment (CCA using 'energy detect')	√
	Load Based Equipment (CCA not using any of the mechanisms referenced)	

Clause	Test□Para□eter	Remark	Pass/Fail
4.2.7.3.1	Adaptive (Frame Based Equipment)	Not Applicable	N/A
4.2.7.3.2	Adaptive (Load Based Equipment)	Applicable	Pass
4.2.7.3.3	Short Control Signalling Transmissions	Applicable	Pass

Test Mode:	TX Mode_ IEEE 802.11be(EHT20)_5180MHz,IEEE 802.11be(EHT40)_5190MHz

Channel Occupancy Time and Priority Class Measured Results		
Freq.(MHz)	Channel Occupancy Time (ms)	Priority Class
5180	5.811	2
5190	5.659	2

Adaptivity Results				
Detection Threshold Level			-69.86 dBm/MHz	
Interference Signal	Freq.(MHz)		Short Control Signalling Transmissions (ms)	Number of Short Control Signalling Transmissions
AWGN	BE20	5180	0	0
OFDM		5180	0	0
LTE		5180	0	0
AWGN	BE40	5180	0	0
		5200	0	0
Limit			2.5	≤ 50
Result			Pass	

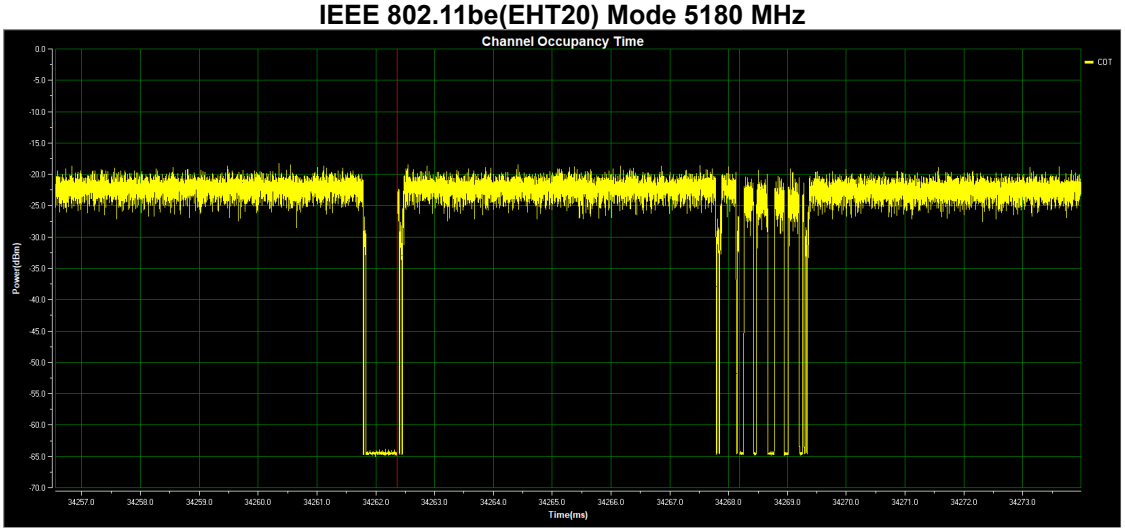
Note:
1. For an EUT with a non-zero dBi antenna gain, the final interference detection threshold level T_L at the port of the radio module in a conducted test setup shall be adjusted by the gain of the bypassed antenna and is calculated using below formulas:

Threshold Level =-75 dBm/MHz +EUT Antenna Gain.

2. Short Control Signalling Transmissions = 50 (ms) * Duty cycle (%)

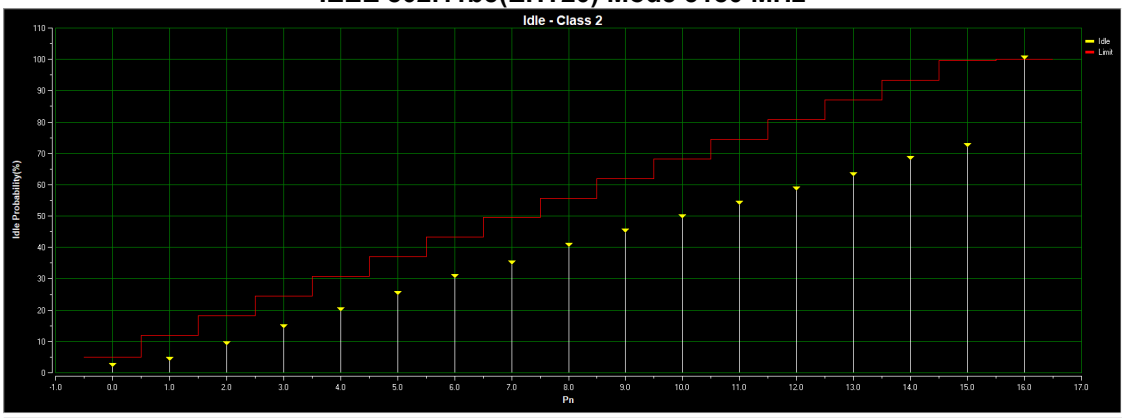
Single Channel device test results

IEEE 802.11be(EHT20) Mode 5180 MHz



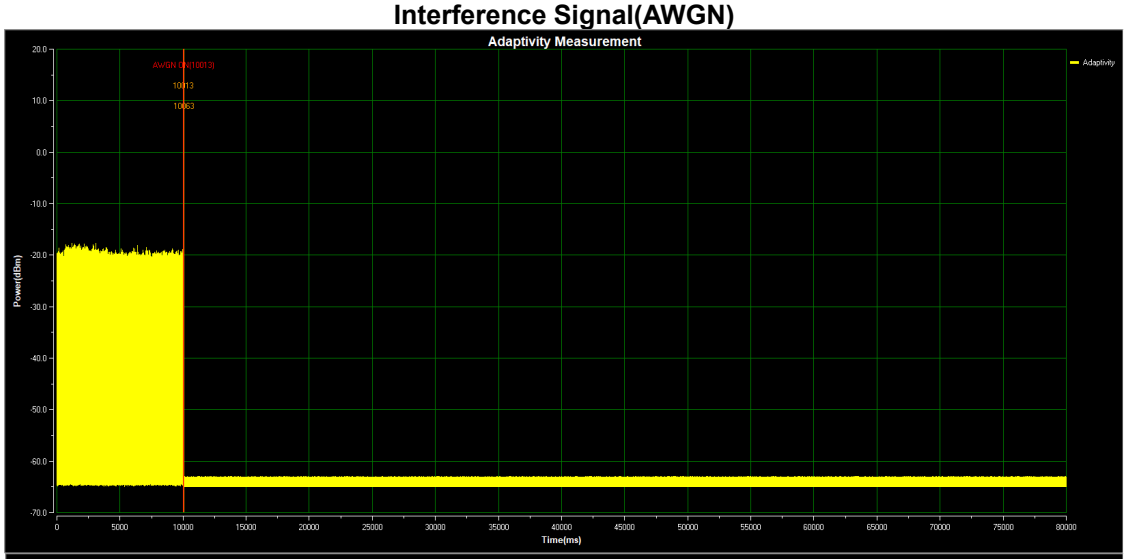
COT Number:10029	Idle Number:9799
Maximum COT(ms):5.811	Minimum Idle Time(us):32

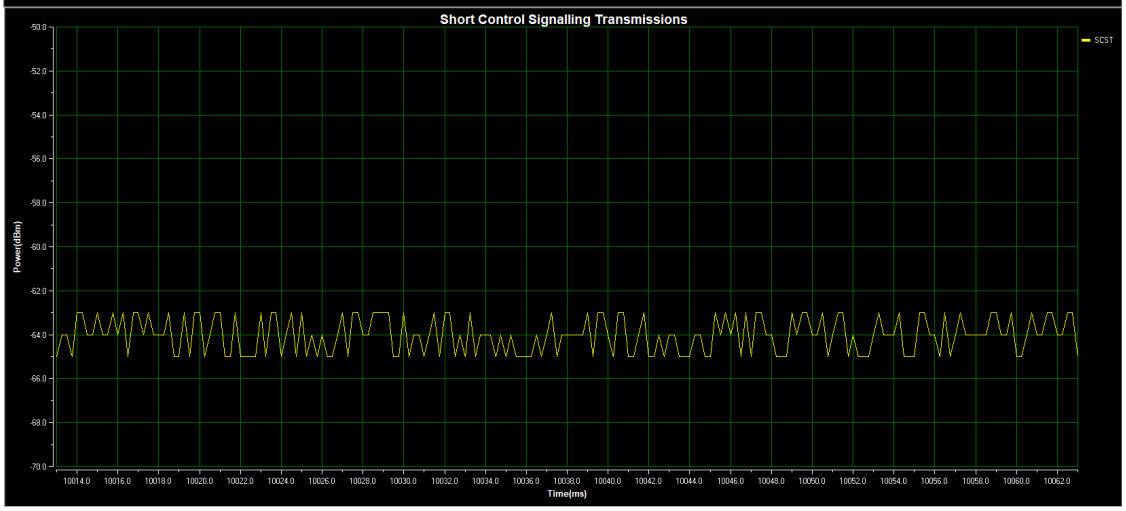
IEEE 802.11be(EHT20) Mode 5180 MHz



Pn	Idle Num	Result(%)	Limit(%)	Status
0	187	1.908	5	Pass
1	202	3.97	12	Pass
2	480	8.868	18.25	Pass
3	542	14.399	24.5	Pass
4	526	19.767	30.75	Pass
5	500	24.87	37	Pass
6	538	30.36	43.25	Pass
7	427	34.718	49.5	Pass
8	535	40.178	55.75	Pass
9	448	44.749	62	Pass
10	449	49.332	68.25	Pass
11	422	53.638	74.5	Pass
12	444	58.169	80.75	Pass
13	446	62.721	87	Pass
14	507	67.895	93.25	Pass
15	404	72.018	99.5	Pass
16	2742	100	100	Pass

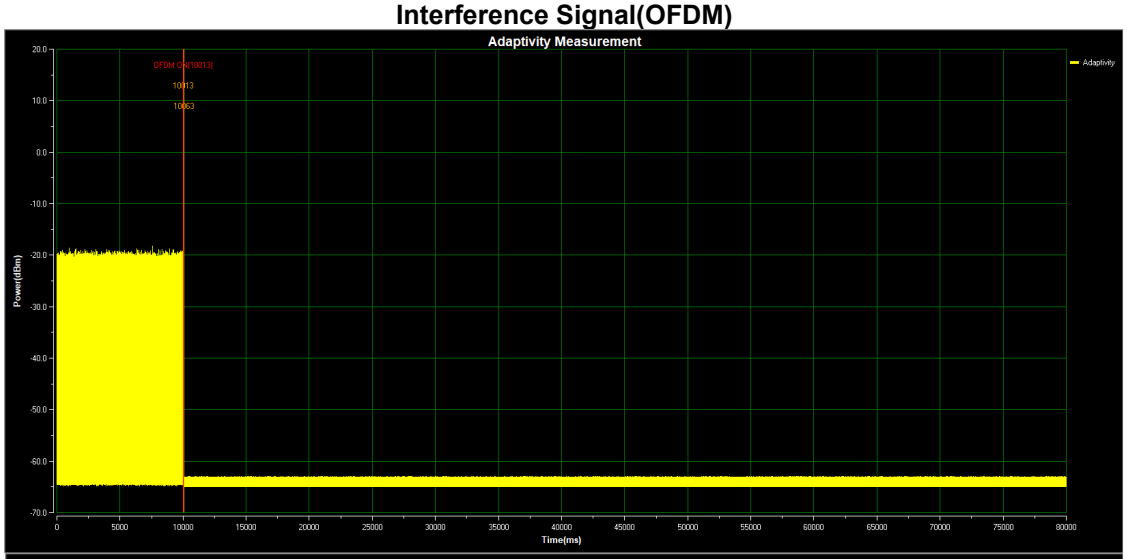
IEEE 802.11be(EHT20) Mode 5180 MHz
Interference Signal(AWGN)

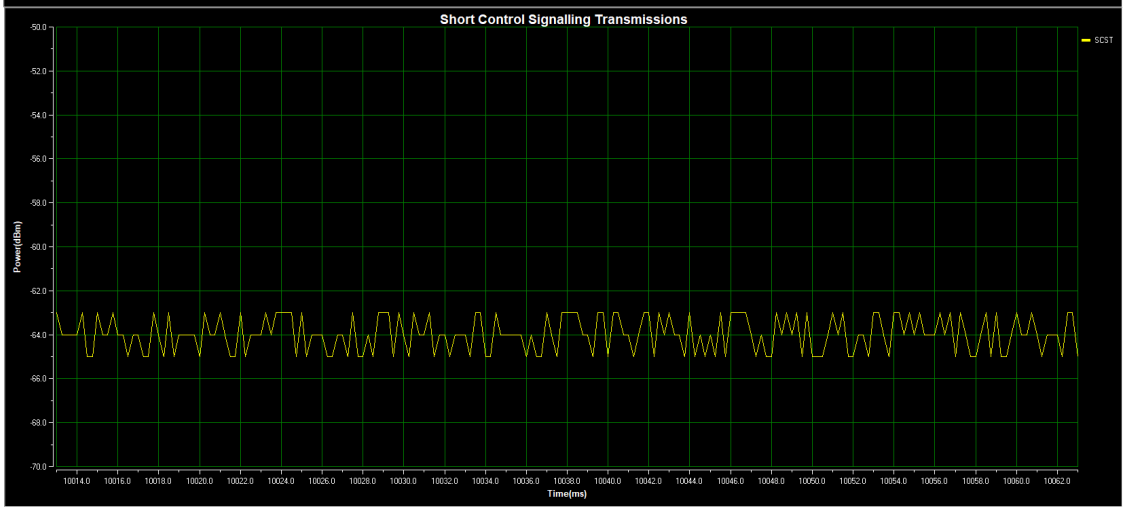




Duty Cycle(%):0.00 Short Control Signalling Transmissions Time(ms):0.00
Test Result:Pass

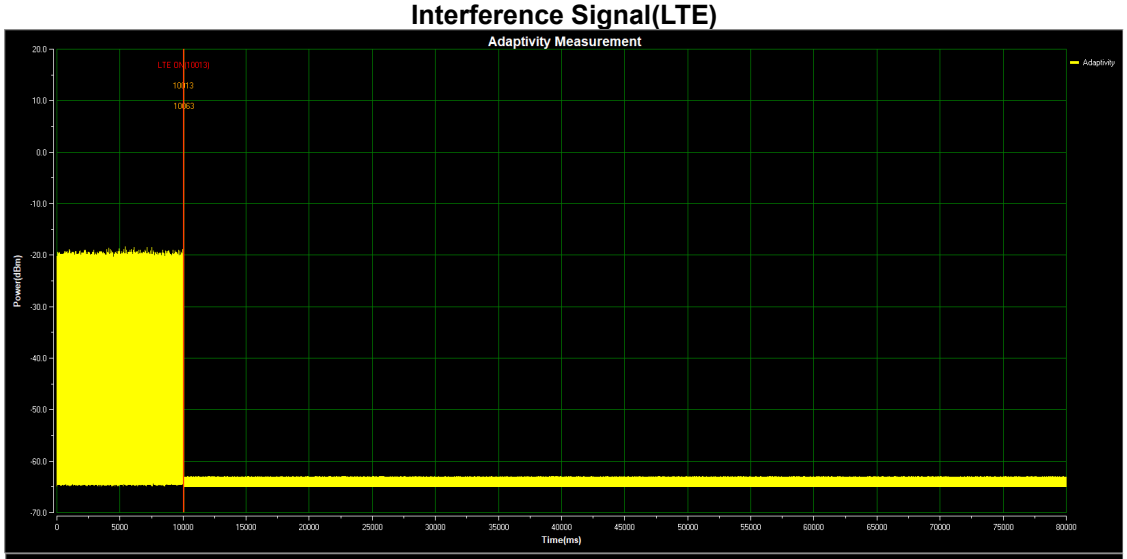
IEEE 802.11be(EHT20) Mode 5180 MHz
Interference Signal(OFDM)

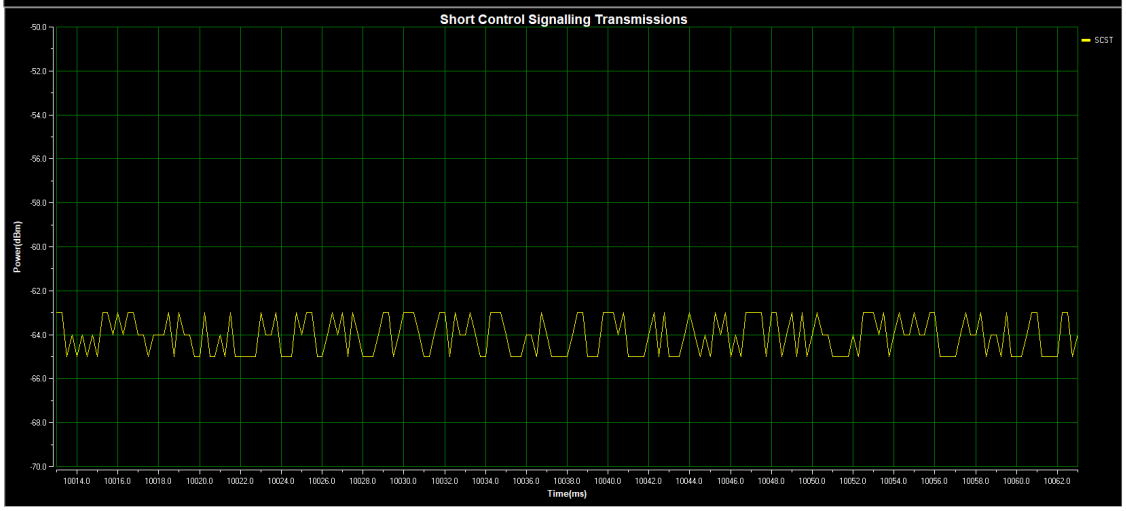




Duty Cycle(%):0.00 Short Control Signalling Transmissions Time(ms):0.00
Test Result:Pass

IEEE 802.11be(EHT20) Mode 5180 MHz
Interference Signal(LTE)



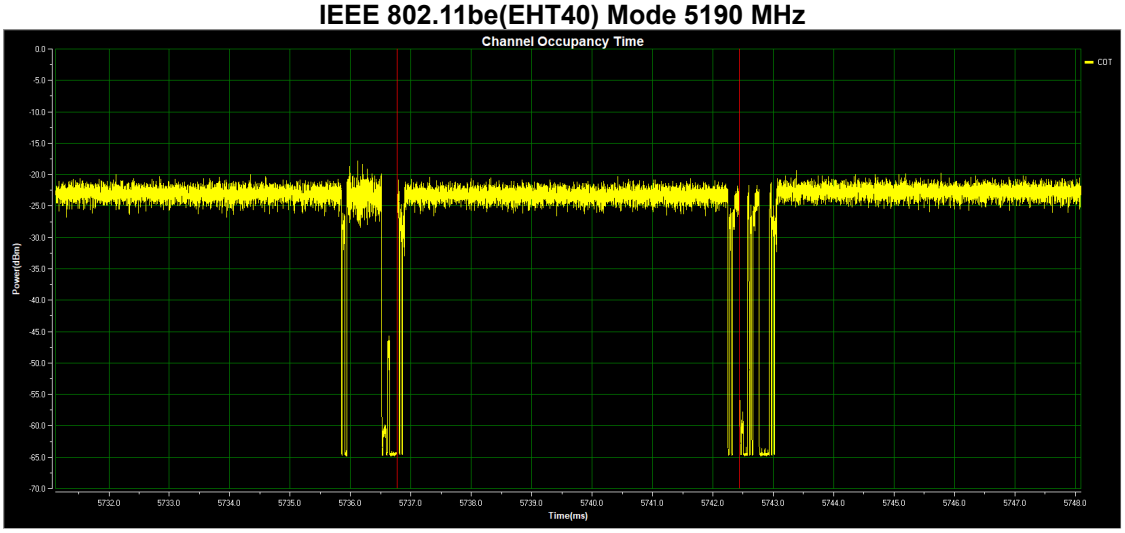


Duty Cycle(%):0.00 Short Control Signalling Transmissions Time(ms):0.00
Test Result:Pass

Multi-Channel device test results

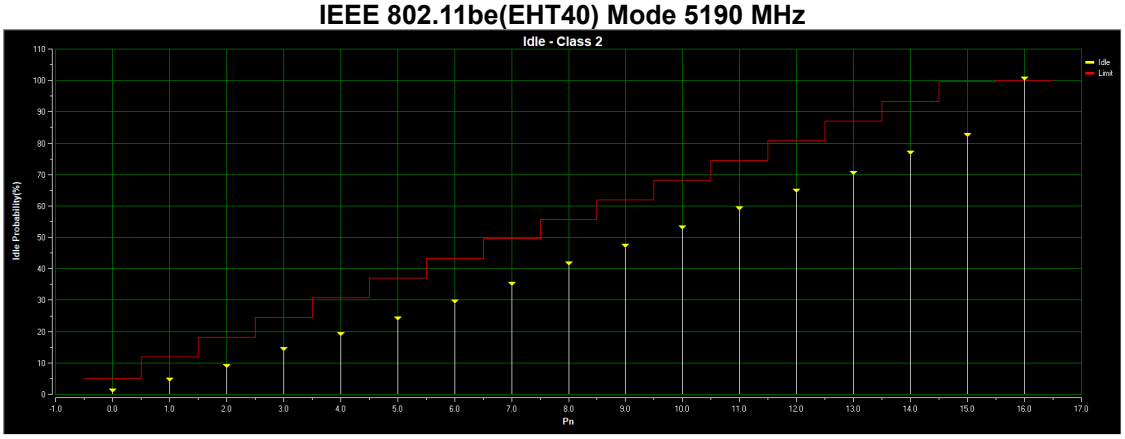
Option 2:
The EUT is set to a channel bandwidth of 40MHz with the primary operating channel 5180MHz. One additional adjacent 20MHz operating channel that constructs the full 40 MHz channel bandwidth is located at 5200 MHz. Data traffic is started and then an interfering signal is injected into the EUT at 5200 MHz.

IEEE 802.11be(EHT40) Mode 5190 MHz



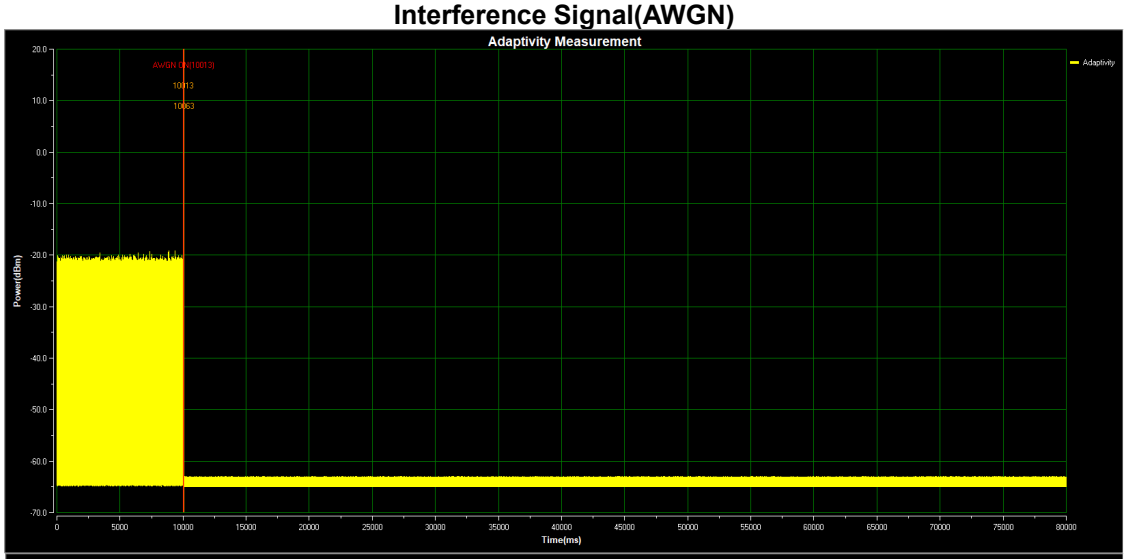
COT Number:10019	Idle Number:9951
Maximum COT(ms):5.659	Minimum Idle Time(us):27

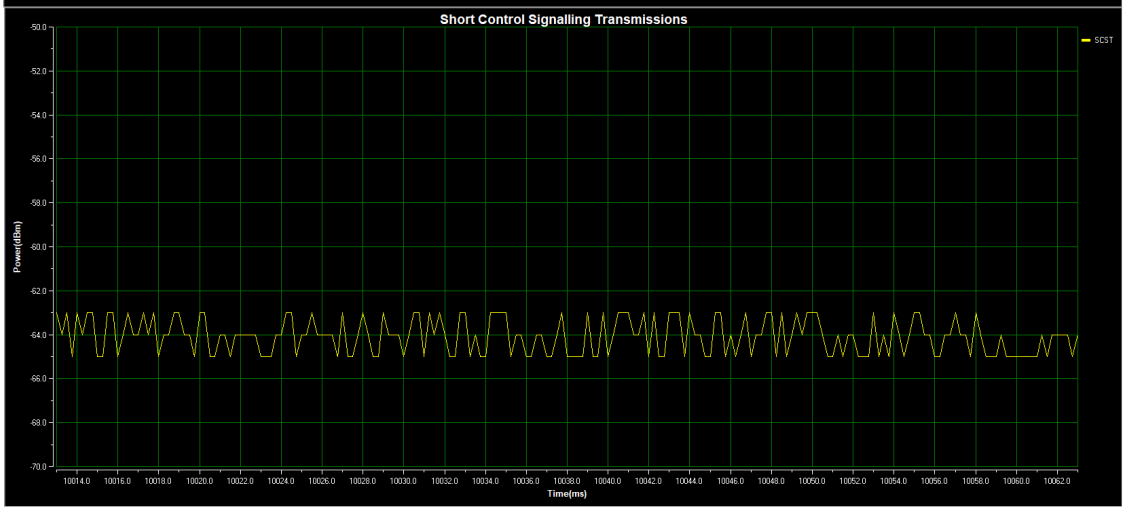
IEEE 802.11be(EHT40) Mode 5190 MHz



Pn	Idle Num	Result(%)	Limit(%)	Status
0	75	0.754	5	Pass
1	338	4.15	12	Pass
2	419	8.361	18.25	Pass
3	541	13.798	24.5	Pass
4	474	18.561	30.75	Pass
5	505	23.636	37	Pass
6	537	29.032	43.25	Pass
7	567	34.73	49.5	Pass
8	632	41.081	55.75	Pass
9	574	46.85	62	Pass
10	583	52.708	68.25	Pass
11	601	58.748	74.5	Pass
12	555	64.325	80.75	Pass
13	551	69.862	87	Pass
14	650	76.394	93.25	Pass
15	567	82.092	99.5	Pass
16	1782	100	100	Pass

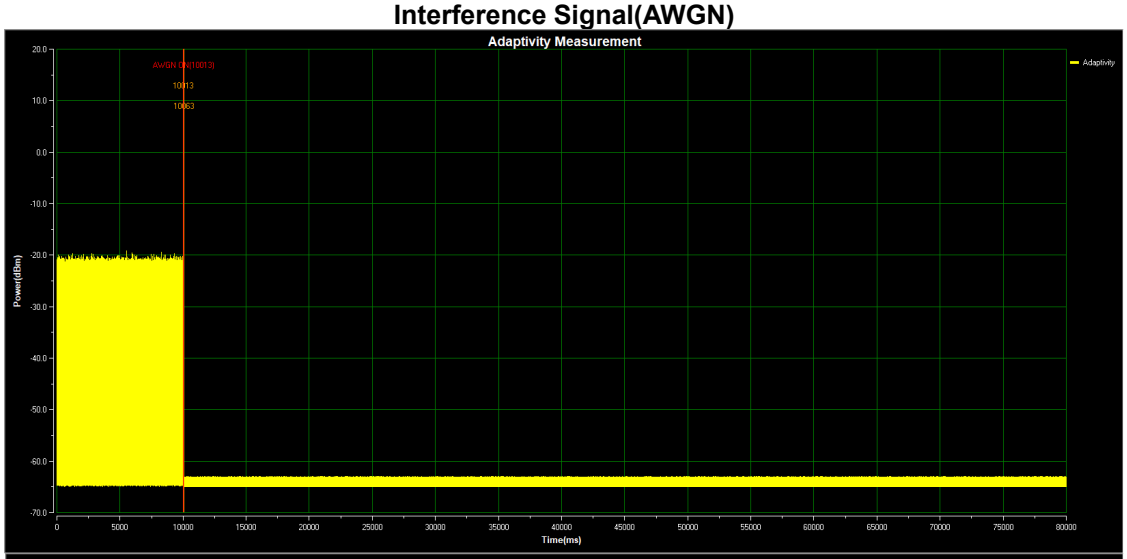
IEEE 802.11be(EHT40) Mode 5180 MHz
Interference Signal(AWGN)

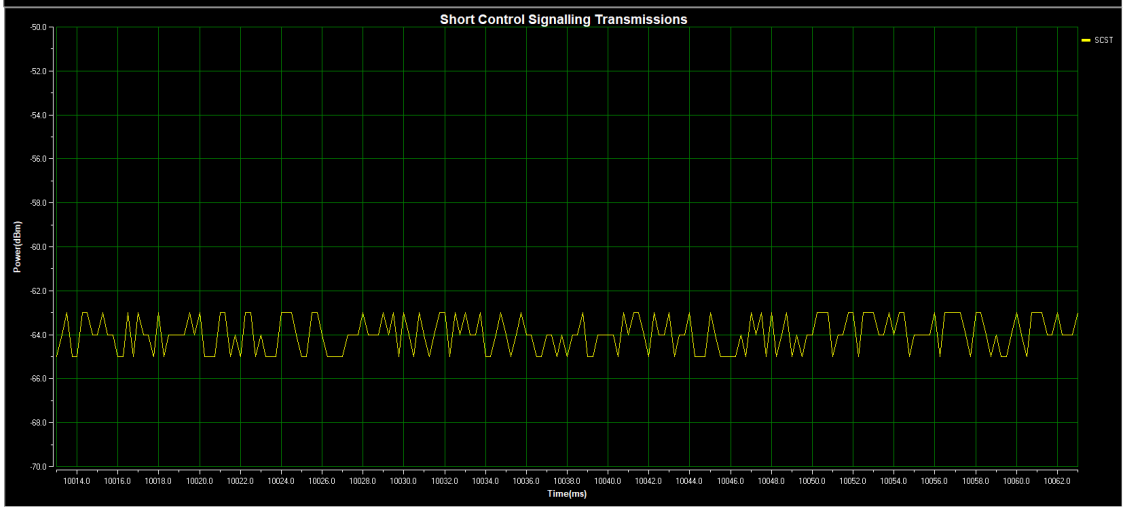




Duty Cycle(%):0.00 Short Control Signalling Transmissions Time(ms):0.00
Test Result:Pass

IEEE 802.11be(EHT40) Mode 5200 MHz
Interference Signal(AWGN)





Duty Cycle(%):0.00 Short Control Signalling Transmissions Time(ms):0.00
Test Result:Pass

APPENDIX K - RECEIVER BLOCKING

Receiver Blocking Result						
P_{min}(dBm)	-90					
Modulation Mode	Operation Freq. (MHz)	Wanted Signal Mean Power from Companion Device (dBm) P_{min} + 6 dB	Blocking Signal Freq. (MHz)	Receiver Blocking Power (dBm)	PER (%)	Blocking Signal Level at which the Performance Criteria is no longer met(dBm) **(See Note)**
IEEE 802.11a 6 Mbps	5180	-84	5100	-53	1.40	-25
			4900	-47	1.80	-23
			5000	-47	2.80	-20
			5975	-47	2.20	-19
Limit	PER(Packet Error Rate) ≤ 10%					N/A
Result	Pass					Record Only

Receiver Blocking Result						
P_{min}(dBm)	-90					
Modulation Mode	Operation Freq. (MHz)	Wanted Signal Mean Power from Companion Device (dBm) P_{min} + 6 dB	Blocking Signal Freq. (MHz)	Receiver Blocking Power (dBm)	PER (%)	Blocking Signal Level at which the Performance Criteria is no longer met(dBm) **(See Note)**
IEEE 802.11a 6 Mbps	5700	-84	5100	-53	2.00	-24
			4900	-47	1.20	-22
			5000	-47	1.80	-20
			5975	-47	2.60	-21
Limit	PER(Packet Error Rate) ≤ 10%					N/A
Result	Pass					Record Only

Note:
The performance criteria had been met, the level of the blocking signal at the UUT were further increased in steps of 1 dB until the level whereby the performance criteria were no longer met.

APPENDIX L - INFORMATION AS REQUIRED BY EN 301 893 V2.1.1, CLAUSE 5.4.1

In accordance with ETSI EN 301 893, clause 5.4.1, the following information is provided by the manufacturer.

a) The Nominal Channel Bandwidth(s):

Nominal Channel Bandwidth 1: 20 MHz

Nominal Channel Bandwidth 2: 40 MHz

Nominal Channel Bandwidth 3: 80 MHz

Nominal Channel Bandwidth 4: 160 MHz

The associated centre frequencies: in clause 1.4 of the test report.

b) For Load Based Equipment that supports multi-channel operation:

☐ The LBE equipment supports Option 1 as described in clause 4.2.7.3.2.3

☒ The LBE equipment supports Option 2 as described in clause 4.2.7.3.2.3

• The (maximum) number of channels used for multi-channel operation: 18

• These channels are adjacent channels: ☒ Yes ☐ No

• In case of non-adjacent channels, whether or not these channels are in different sub-bands:

☐ Yes ☐ No

• for LBE equipment implementing option 1 (see clause 4.2.7.3.2.3), the number of channels used for multi-channel operation when performing the test described in clause 5.4.9.3.2.3.1: N/A

In case of multi-channel operation, further information defining the channels used for these simultaneous transmissions may be required.

c) The different transmit operating modes (see clause 5.3.3.2) (tick all that apply):

☐ **Operating mode 1:** Single Antenna Equipment

☐ a) Equipment with only 1 antenna

☐ b) Equipment with diversity antennas but only 1 antenna active at any moment in time

☐ c) Smart Antenna Systems with 2 or more antennas, but operating in a (legacy) mode where only 1 antenna is used.

☐ **Operating mode 2:** Smart Antenna Systems - Multiple Antennas without beamforming

☐ a) Single spatial stream/Standard throughput

☐ b) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 1

☐ c) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 2

☐ d) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 3

☐ e) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 4

☒ **Operating mode 3:** Smart Antenna Systems - Multiple Antennas with beamforming

☒ a) Single spatial stream/Standard throughput

☒ b) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 1

☒ c) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 2

☒ d) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 3

☒ e) High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 4

d) In case of Smart Antenna Systems or multiple antenna systems:

• The number of Receive chains: 4

• The number of Transmit chains: 4

• Equal power distribution among the transmit chains: ☒ Yes ☐ No

• In case of beamforming, the maximum (additional) beamforming gain: 6 dB

NOTE: Beamforming gain does not include the basic gain of a single antenna (assembly).

e) TPC feature available: ☒ Yes ☐ No

h) The DFS related operating mode(s) of the equipment:

☒Master

☐Slave with radar detection

☐Slave without radar detection

i) User access restrictions (please check box below to confirm):

☒the equipment is constructed to comply with the requirements contained in clause 4.2.9 in ETSI EN 301 893 V2.1.1.

j) For equipment with Off-Channel CAC functionality:

The equipment has an *"Off-Channel CAC"* function: ☐Yes ☒No

If yes, specify the *"Off-Channel CAC Time"*

• For channels outside the 5 600 MHz to 5 650 MHz range: _____hours

• If applicable, for channels (partially) within the 5 600 MHz to 5 650 MHz range: _____ hours

k) The equipment can operate in ad-hoc mode:

☒ no ad-hoc operation

☐ ad-hoc operation in the frequency range 5 150 MHz to 5 250 MHz without DFS

☐ ad-hoc operation with DFS

l) Operating Frequency Range(s):

Range 1: ☒5 150 MHz to 5 350 MHz and 5 470 MHz to 5 725 MHz

Range 2: ☐5 470 MHz to 5 725 MHz

Range 3: ☐5 150 MHz to 5 250 MHz (ad-hoc without DFS)

Range 4: ☐other, please specify: _____

If the equipment has more than one Operating Frequency Range, tick all that apply.

m) The extreme operating temperature and supply voltage range that apply to the equipment:

☐-20 °C to +55 °C (Outdoor & Indoor usage)

☐0 °C to +35 °C (Indoor usage only)

☒Other: 0℃ to 40℃.

The supply voltages of the stand-alone radio equipment or the supply voltages of the combined (host) equipment or test jig in case of plug-in devices:

Details provided are for the:

☒stand-alone equipment

☐combined (or host) equipment

☐test jig

Supply Voltage ☐AC mains State AC voltage: Minimum: 100V Nominal: 230V Maximum: 240V

☐DC State DC voltage: Minimum: Nominal: Maximum:

In case of DC, indicate the type of power source:

☐Internal Power Supply

☐External Power Supply or AC/DC adapter

☐Battery ☐Nickel Cadmium

☐Alkaline

☐Nickel-Metal Hydride

☐Lithium-Ion

☐Lead acid (Vehicle regulated)

☐Other

☐Other_____

n) The test sequence/test software used (see also ETSI EN 301 893 (V2.1.1), clause 5.3.1.2):

accessMTool_REL_3_3_0_6

o) Type of Equipment:

☒Stand-alone

☐Combined Equipment (Equipment where the radio part is fully integrated within another type of equipment)

☐Plug-in radio device (Equipment intended for a variety of host systems)

☐Other____

p) Adaptivity (Channel Access Mechanism):

☐Frame Based Equipment

☒Load Based Equipment

r) With regards to Adaptivity for Load Based Equipment:

☒ The Load Based Equipment operates as a Supervising Device

☐ The Load Based Equipment operates as a Supervised Device

☐ The Load Based Equipment can operate as a Supervising and as a Supervised Device

☐ The Load Based Equipment makes use of note 1 in table 7 or note 1 in table 8 of ETSI EN 301 893 V2.1.1

The Priority Classes implemented by the Load Based Equipment

- When operating as a Supervising Device

☐ Priority Class 4 (Highest priority)

☐ Priority Class 3

☒ Priority Class 2

☐ Priority Class 1 (Lowest priority)

- When operating as a Supervised Device

☐ Priority Class 4 (Highest priority)

☐ Priority Class 3

☐ Priority Class 2

☐ Priority Class 1 (Lowest priority)

☒ The Load Based Equipment operates as an Initiating Device

☐ The Load Based Equipment operates as an Responding Device

☐ The Load Based Equipment can operate as an Initiating Device and as a Responding Device

With regard to Energy Detection Threshold, the Load Based Equipment has implemented either option 1 of clause 4.2.7.3.2.5 of ETSI EN 301 893 V2.1.1 or option 2 of clause 4.2.7.3.2.5 of ETSI EN 301 893 V2.1.1:

☒ Option 1

☐ Option 2

Specify which protocol has been implemented:

☒ IEEE 802.11™

☐ Other:____

s) The equipment supports a geo-location capability as defined in clause 4.2.10 of ETSI EN 301 893 V2.1.1:

☐ Yes

☒ No

End of Test Report