

EN 300 440 RF Test Report

Report No.: REBARR-WTW-P23110067A-5

Model No.: MT7925B14L

Received Date: 2023/12/6

Test Date: 2024/4/9 ~ 2024/4/13

Issued Date: 2024/4/26

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Release Control Record

Issue No.	Description	Date Issued
REBARR-WTW-P23110067A-5	Original release.	2024/4/26

1 Certificate of Conformity

Product: 2TX 11be (WiFi7) BW160 + BT/BLE Combo Card

Brand: MediaTek

Test Model: MT7925B14L

Sample Status: Engineering sample

Applicant: MediaTek Inc.

Test Date: 2024/4/9 ~ 2024/4/13

Standards: EN 300 440 V2.2.1 (2018-07)

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** 2024/4/26
Celine Chou / Senior Specialist

Approved by : Jeremy Lin , **Date:** 2024/4/26
Jeremy Lin / Project Engineer

2 Summary of Test Results

The EUT has been tested according to the following specifications:

EN 300 440 V2.2.1		
Clause	Test Parameter	Result
	Transmitter Parameters	
4.2.2	Equivalent Isotropic Radiated Power	Pass
4.2.3	Permitted Range of Operating Frequency	Pass
4.2.4	Unwanted Emission in the Spurious Domain	Pass
4.2.5	Duty Cycle	Not Applicable
	Receiver Parameters	
4.3.5	Receiver spurious radiations	Pass
4.3.3	Adjacent channel selectivity (Applied to Receiver Category 1)	Refer to Note 1
4.3.4	Blocking or desensitization (Applied to Receiver Category 1, 2, and 3)	Refer to Note 1

Note:

1. Adjacent channel selectivity and blocking or desensitization testing data please refer to BV CPS report no.: REBARR-WTW-P23110067-6.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
3. The radiated spurious emission of the transmitter on standby mode is equal to that of receiver mode.

2.1 Test Instruments

For Equivalent Isotropic Radiated Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
Temperature & Humidity Chamber Terchy	HRM-120RF	931022	2023/12/19	2024/12/18
USB Wideband Power Sensor Keysight	U2021XA	MY55050005/MY5519 0004/MY55190007/MY 55210005	2023/7/19	2024/7/18

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/4/12 ~ 2024/4/13

For Permitted Range of Operating Frequency

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	HRM-120RF	931022	2023/12/19	2024/12/18

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/4/12 ~ 2024/4/13

For Spurious Domain below 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna and Turntable controller Max-Full	MF7802	MF780208363	N/A	N/A
Antenna tower Max-Full	MFA-440H	A440H102-019	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-161	2023/10/17	2024/10/16
Preamplifier Agilent	8447D	2944A10634	2023/7/8	2024/7/7
PXA Signal Analyzer Agilent	N9030A	MY53120770	2024/3/13	2025/3/12
RF Coaxial Cable Woken	8D-FB	Cable-RF2-01	2023/7/8	2024/7/7
Signal Analyzer R&S	FSV40	100980	2023/5/3	2024/5/2
Software ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table ADT	N/A	SN30303	N/A	N/A

Notes:

1. The test was performed in HY - RF chamber 2
2. Tested Date: 2024/4/9

For Spurious Domain above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna and Turntable controller Max-Full	MF7802	MF780208363	N/A	N/A
Antenna tower Max-Full	MFA-440H	A440H102-019	N/A	N/A
Horn Antenna ETS-Lindgren	3117	00034130	2023/11/12	2024/11/11
Horn Antenna Schwarzbeck	BBHA 9170	BBHA9170243	2023/11/12	2024/11/11
Preamplifier Agilent	8449B	3008A01976	2023/7/8	2024/7/7
Preamplifier EMCI	EMC184045B	980175	2023/9/2	2024/9/1
PXA Signal Analyzer Agilent	N9030A	MY53120770	2024/3/13	2025/3/12
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-RF2-03(246272/ 4)	2023/7/8	2024/7/7
RF Coaxial Cable INFINET	CA3501-3501-G.90(3m) &CA3501-3501-F.90(2m)	INF090(3m)*2&TCF42 7S(2m)*1	2023/7/8	2024/7/7
Signal Analyzer R&S	FSV40	100980	2023/5/3	2024/5/2
Software ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table ADT	N/A	SN30303	N/A	N/A

Notes:

1. The test was performed in HY - RF chamber 2
2. Tested Date: 2024/4/9

2.2 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Parameter	Uncertainty
Radio frequency	$\pm 1.06 \times 10^{-8}$
RF power (conducted)	± 1.371 dB
Radiated emission of transmitter, valid up to 26.5GHz	± 3.29 dB
Radiated emission of transmitter, valid between 26.5 GHz and 66 GHz	± 4.29 dB
Radiated emission of receivers, valid up to 26.5GHz	± 3.29 dB
Radiated emission of receiver, valid between 26.5 GHz and 66 GHz	± 4.29 dB
Temperature	± 0.23 °C
Humidity	± 0.3 %
Voltages(DC)	± 0.1 %
Voltages(AC, <10kHz)	± 0.22 %

2.3 Maximum Measurement Uncertainty

For the test methods, according to ETSI EN 300 440 standard, the measurement uncertainty figures shall be calculated 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)). Principles for the calculation of measurement uncertainty are contained in ETSI TR 100 028 [i.4], in particular in annex D of the ETSI TR 100 028-2 [i.4].

Maximum measurement uncertainty

Parameter	Uncertainty
Radio frequency	$\pm 1 \times 10^{-7}$
RF power (conducted)	± 1.5 dB
Radiated emission of transmitter, valid up to 26.5GHz	± 6.0 dB
Radiated emission of transmitter, valid between 26.5 GHz and 66 GHz	± 8 dB
Radiated emission of receivers, valid up to 26.5GHz	± 6.0 dB
Radiated emission of receiver, valid between 26.5 GHz and 66 GHz	± 8 dB
Temperature	± 1 °C
Humidity	± 5.0 %
Voltages(DC)	± 1.0 %
Voltages(AC, <10kHz)	± 2.0 %

2.4 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand	MediaTek
Test Model	MT7925B14L
Status of EUT	Engineering sample
Nominal Voltage	3.3Vdc from host equipment
Voltage Operation Range	$V_{nom} = 3.3Vdc$ $V_{min} = 2.97Vdc$ $V_{max} = 3.63Vdc$
Temperature Operating Range	-10 °C ~ 70 °C
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax mode 4096QAM for OFDMA in 11be mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	Up to 300 Mbps Up to 866.7 Mbps in 11ac mode Up to 1201.0 Mbps in 11ax mode Up to 1441.2 Mbps in 11be mode
Operating Frequency	5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40): 2 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80): 1
Resource Unit (RU)	Single RU: 26-tone, 52-tone, 106-tone, 242-tone, 484-tone, 996-tone Multi-RU (Small RU): 52-tone + 26-tone, 106-tone + 26-tone Multi-RU (Large RU): 484-tone + 242-tone
EIRP Power (Measured Max. Average)	1TX: 13.97 dBm 2TX: 13.89 dBm
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	NA
Cable Supplied	NA
Receiver Category	Category 1

Note:

1. This report is issued as a supplementary report to the original BV CPS report no.: REBARR-WTW-P23110067-6. The difference is increasing conducted power for dynamic mode. Therefore, all tests test had been re-tested except Adjacent channel selectivity and blocking or desensitization test. Other testing data refer to original report.
2. The EUT incorporates a MIMO function:

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	1TX(diversity)/2TX	2RX
802.11n (HT20)	1TX(diversity)/2TX	2RX
802.11n (HT40)	1TX(diversity)/2TX	2RX
802.11ac (VHT20)	1TX(diversity)/2TX	2RX
802.11ac (VHT40)	1TX(diversity)/2TX	2RX
802.11ac (VHT80)	1TX(diversity)/2TX	2RX
802.11ax (HE20)	1TX(diversity)/2TX	2RX
802.11ax (HE40)	1TX(diversity)/2TX	2RX
802.11ax (HE80)	1TX(diversity)/2TX	2RX
802.11be (EHT20)	1TX(diversity)/2TX	2RX
802.11be (EHT40)	1TX(diversity)/2TX	2RX
802.11be (EHT80)	1TX(diversity)/2TX	2RX
802.11ax (RU26/52/106/242/484/996)	1TX(diversity)/2TX	2RX
802.11be (RU26/52/106/242/484/996) (MRU52+26/106+26/484+242)	1TX(diversity)/2TX	2RX

Note: The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz), 802.11ax mode for 20 MHz (40 MHz, 80 MHz) and 802.11be mode for 20 MHz (40 MHz, 80 MHz), therefore the manufacturer will control the power for 802.11n/ac/ax mode is the same as the 802.11be or more lower than it and investigated worst case to representative mode in test report.

3. There are Bluetooth and WLAN (2.4GHz & 5GHz & 6GHz) technology used for the EUT.
4. The Multi-RU mode is listed as below.

BW	Small size		Large size
	52+26	106+26	484+242
20MHz	v	v	-
40MHz	v	v	-
80MHz	v	v	v

5. Simultaneously transmission condition.

Condition	Technology	
1	WLAN 5GHz (2TX)	Bluetooth
2	WLAN 6GHz (2TX)	Bluetooth
3	WLAN 2.4GHz (1TX)	WLAN 5GHz (1TX)
4	WLAN 2.4GHz (1TX)	WLAN 6GHz (1TX)
5	WLAN 5GHz (1TX)	WLAN 6GHz (1TX)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

6. The antenna information is listed as below.

Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
1	Chain 0	PSA	RFMTA340718EM LB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)
	Chain 1	PSA	RFMTA340718EM LB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)
2	Chain 0	PSA	RFMTA311020EM MB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)
	Chain 1	PSA	RFMTA311020EM MB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)
3	Chain 0	PSA	RFMTA421230IM MB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)
	Chain 1	PSA	RFMTA421230IM MB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)
4 Dynamic Gain	Chain 0	Declared antenna	-	-10.00 -9.92 -10.02 -16.52	2.4~2.4835 5.15~5.725 5.725~5.85 5.925~7.125	PIFA	i-pex(MHF)
	Chain 1	Declared antenna	-	-10.00 -9.92 -10.02 -16.52	2.4~2.4835 5.15~5.725 5.725~5.85 5.925~7.125	PIFA	i-pex(MHF)

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

*From the above transmission chains, the worst case was found in transmission on Chain 1 for 1TX diversity sample. Therefore only the test data of the mode was recorded in this report.

7. The EUT support OFDMA and RU mode, therefore partial RU combination were investigated and the worst case scenario was identified. (The worst case data were presented in section 3.4)

8. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 Description of Test Modes

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20) and 802.11be (EHT20):

Channel	Frequency	Channel	Frequency
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40) and 802.11be (EHT40):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80) and 802.11be (EHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description
	EIRP	PR	SE<1G	SE≥1G	
A1	-	√	√	√	Dynamic mode 1TX (EUT Maximum Conducted Power + Ant. 1)
A2	-	√	√	√	Dynamic mode 2TX (EUT Maximum Conducted Power + Ant. 1)
B1	√	-	-	-	Dynamic mode 1TX (EUT Maximum Conducted Power + Ant. 4)
B2	√	-	-	-	Dynamic mode 2TX (EUT Maximum Conducted Power + Ant. 4)

Where EIRP: Equivalent Isotropic Radiated Power

PR: Permitted Range

SE<1G: Spurious Emissions below 1GHz

SE≥1G: Spurious Emissions above 1GHz

ACS: Adjacent Channel Selectivity

B/D: Blocking or Desensitization

Note:

1. The EUT (PIFA antenna) had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Z-plane (for PIFA antenna).
2. "-": Means no effect.

Equivalent Isotropic Radiated Power:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	RU/MRU Index
B1, B2	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0	NA
B1, B2	802.11ax (HE20)	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0	NA
B1, B2	802.11ax (HE40)	151 to 159	151, 159	OFDMA	BPSK	MCS0	NA
B1, B2	802.11ax (HE80)	155	155	OFDMA	BPSK	MCS0	NA
B1, B2	802.11be (EHT20)	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0	NA
B1, B2	802.11be (EHT40)	151 to 159	151, 159	OFDMA	BPSK	MCS0	NA
B1, B2	802.11be (EHT80)	155	155	OFDMA	BPSK	MCS0	NA
B1, B2	802.11be (EHT20) 26-tone RU	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0	0, 8, 0, 8
B1, B2	802.11be (EHT20) 52-tone RU	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0	37, 40, 37, 40
B1, B2	802.11be (EHT20) 106-tone RU	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0	53, 54, 53, 54
B1, B2	802.11be (EHT20) 52+26-tone MRU	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0	82, 83, 82, 83
B1, B2	802.11be (EHT20) 106+26-tone MRU	149 to 165	149, 157, 165	OFDMA	BPSK	MCS0	70, 72, 70, 72
B1, B2	802.11be (EHT80) 484+242-tone MRU	155	155	OFDMA	BPSK	MCS0	93, 90, 93, 90

Permitted Range Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	RU/MRU Index
A1, A2	802.11a	149 to 165	149, 165	OFDM	BPSK	6.0	NA
A1, A2	802.11be (EHT20)	149 to 165	149, 165	OFDMA	BPSK	MCS0	NA
A1, A2	802.11be (EHT40)	151 to 159	151, 159	OFDMA	BPSK	MCS0	NA
A1, A2	802.11be (EHT80)	155	155	OFDMA	BPSK	MCS0	NA

Spurious Emissions Test (Below 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	RU/MRU Index
A1	802.11a	149 to 165	165	OFDM	BPSK	6.0	NA
A2	802.11be (EHT20)	149 to 165	165	OFDMA	BPSK	MCS0	NA

Spurious Emissions Test (Above 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	RU/MRU Index
A1	802.11a	149 to 165	149, 165	OFDM	BPSK	6.0	NA
A2	802.11be (EHT20)	149 to 165	149, 165	OFDMA	BPSK	MCS0	NA

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
EIRP	25 deg. C, 60% RH	3.3Vdc	Jisyong Wang,
PR	25 deg. C, 60% RH	3.3Vdc	Jisyong Wang,
SE<1G	22 deg. C, 74% RH	230Vac, 50Hz (System)	Vanness Huang
SE≥1G	22 deg. C, 74% RH	230Vac, 50Hz (System)	Vanness Huang

3.3 Description of Support Units

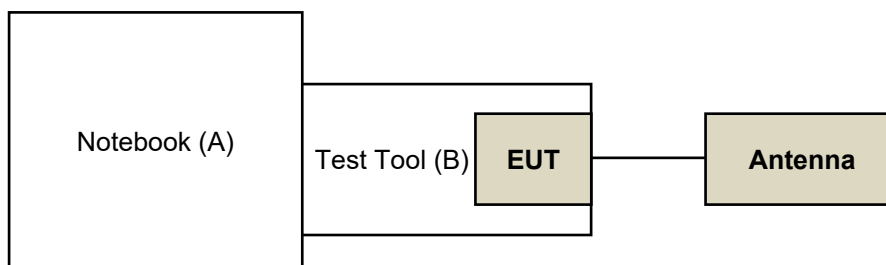
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Notebook	DELL	E5410	1HC2XM1	N/A	Provided by Lab
B	Test Tool	Mediatek	MTK1849	NA	NA	Supplied by applicant

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

EN 300 440 V2.2.1 (2018-07)

All test items have been performed and recorded as per the above standards.

4 Test Types and Results

Transmitter Parameters

4.1 Equivalent Isotropic Radiated Power

4.1.1 Limits of Equivalent Isotropic Radiated Power

Maximum radiated peak power (e.i.r.p.)

Frequency Bands	Power	Application	The EUT Application
2400MHz to 2483.5MHz	10 mW e.i.r.p.	Non-specific short range devices	-
2400MHz to 2483.5MHz	25 mW e.i.r.p.	Radio determination devices	-
(a)2446MHz to 2454MHz	500 mW e.i.r.p.	Radio Frequency Identification (RFID) devices	-
(b)2446MHz to 2454MHz	4 W e.i.r.p.	Radio Frequency Identification (RFID) devices	-
5725MHz to 5875MHz	25 mW e.i.r.p.	Non-specific short range devices	√
9200MHz to 9500MHz	25 mW e.i.r.p.	Radio determination devices	-
9500MHz to 9975MHz	25 mW e.i.r.p.	Radio determination devices	-
10.5GHz to 10.6GMHz	500 mW e.i.r.p.	Radio determination devices	-
13.4GHz to 14GHz	25 mW e.i.r.p.	Radio determination devices	-
17.1GHz to 17.3GHz	400 mW e.i.r.p.	Radio determination devices	-
24GHz to 24.25GHz	100 mW e.i.r.p.	Non-specific short range devices and Radio determination devices	-

For Extreme temperature ranges

Category	Temperature range	The EUT Category
I (General)	-20°C to +55°C	-
II (Portable)	-10°C to +55°C	-
III (Equipment for normal indoor use)	5°C to +35°C	-
Declared by the provider	-10°C to +70°C	√

4.1.2 Test Procedures

Refer to EN 300 440 V2.2.1 clause 4.2.2.3

4.1.3 Deviation from Test Standard

No deviation.

4.1.4 Test Setup

The test setup has been constructed as the normal use condition. Controlling software (provided by manufacturer) has been activated to set the EUT on specific status.

4.1.5 Test Results

Test Mode B1 (1TX)

802.11a

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.63	13.24	13.31	13.82	13.89	14	Pass
157	5785	13.70	13.28	13.36	13.86	13.91	14	Pass
165	5825	13.69	13.28	13.38	13.82	13.97	14	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.72	13.34	13.41	13.89	13.95	14	Pass
157	5785	13.67	13.26	13.34	13.82	13.92	14	Pass
165	5825	13.66	13.27	13.36	13.80	13.88	14	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
151	5755	13.69	13.31	13.37	13.86	13.93	14	Pass
159	5795	13.68	13.28	13.37	13.83	13.93	14	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	13.71	13.32	13.39	13.84	13.94	14	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.74	13.36	13.43	13.91	13.97	14	Pass
157	5785	13.69	13.28	13.36	13.84	13.94	14	Pass
165	5825	13.69	13.30	13.39	13.83	13.91	14	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
151	5755	13.72	13.34	13.40	13.89	13.96	14	Pass
159	5795	13.71	13.31	13.40	13.86	13.96	14	Pass

802.11be (EHT80)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	13.74	13.35	13.42	13.87	13.97	14	Pass

802.11be (EHT20) 26-tone RU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.72	13.34	13.41	13.89	13.95	14	Pass
157	5785	13.63	13.22	13.30	13.78	13.88	14	Pass
165	5825	13.66	13.27	13.36	13.80	13.88	14	Pass

802.11be (EHT20) 52-tone RU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.71	13.33	13.40	13.88	13.94	14	Pass
157	5785	13.58	13.17	13.25	13.73	13.83	14	Pass
165	5825	13.65	13.26	13.35	13.79	13.87	14	Pass

802.11be (EHT20) 106-tone RU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.70	13.32	13.39	13.87	13.93	14	Pass
157	5785	13.59	13.18	13.26	13.74	13.84	14	Pass
165	5825	13.63	13.24	13.33	13.77	13.85	14	Pass

802.11be (EHT20) 52+26-tone MRU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.72	13.34	13.41	13.89	13.95	14	Pass
157	5785	13.51	13.10	13.18	13.66	13.76	14	Pass
165	5825	13.61	13.22	13.31	13.75	13.83	14	Pass

802.11be (EHT20) 106+26-tone MRU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.69	13.31	13.38	13.86	13.92	14	Pass
157	5785	13.48	13.07	13.15	13.63	13.73	14	Pass
165	5825	13.59	13.20	13.29	13.73	13.81	14	Pass

802.11be (EHT80) 484+242-tone MRU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	13.70	13.31	13.38	13.83	13.93	14	Pass

Test Mode B2 (2TX)

802.11a

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.46	13.07	13.14	13.65	13.72	14	Pass
157	5785	13.54	13.12	13.20	13.70	13.75	14	Pass
165	5825	13.54	13.13	13.23	13.67	13.82	14	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.59	13.21	13.28	13.76	13.82	14	Pass
157	5785	13.60	13.19	13.27	13.75	13.85	14	Pass
165	5825	13.62	13.23	13.32	13.76	13.84	14	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
151	5755	13.56	13.18	13.24	13.73	13.80	14	Pass
159	5795	13.58	13.18	13.27	13.73	13.83	14	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	13.56	13.17	13.24	13.69	13.79	14	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.62	13.24	13.31	13.79	13.85	14	Pass
157	5785	13.64	13.23	13.31	13.79	13.89	14	Pass
165	5825	13.65	13.26	13.35	13.79	13.87	14	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
151	5755	13.62	13.24	13.30	13.79	13.86	14	Pass
159	5795	13.62	13.22	13.31	13.77	13.87	14	Pass

802.11be (EHT80)

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	13.61	13.22	13.29	13.74	13.84	14	Pass

802.11be (EHT20) 26-tone RU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.57	13.19	13.26	13.74	13.80	14	Pass
157	5785	13.57	13.16	13.24	13.72	13.82	14	Pass
165	5825	13.59	13.20	13.29	13.73	13.81	14	Pass

802.11be (EHT20) 52-tone RU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.54	13.16	13.23	13.71	13.77	14	Pass
157	5785	13.54	13.13	13.21	13.69	13.79	14	Pass
165	5825	13.56	13.17	13.26	13.70	13.78	14	Pass

802.11be (EHT20) 106-tone RU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.55	13.17	13.24	13.72	13.78	14	Pass
157	5785	13.56	13.15	13.23	13.71	13.81	14	Pass
165	5825	13.56	13.17	13.26	13.70	13.78	14	Pass

802.11be (EHT20) 52+26-tone MRU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.55	13.17	13.24	13.72	13.78	14	Pass
157	5785	13.56	13.15	13.23	13.71	13.81	14	Pass
165	5825	13.58	13.19	13.28	13.72	13.80	14	Pass

802.11be (EHT20) 106+26-tone MRU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	13.56	13.18	13.25	13.73	13.79	14	Pass
157	5785	13.55	13.14	13.22	13.70	13.80	14	Pass
165	5825	13.54	13.15	13.24	13.68	13.76	14	Pass

802.11be (EHT80) 484+242-tone MRU

Channel	Frequency (MHz)	EIRP (dBm)					Limit (dBm)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	13.57	13.18	13.25	13.70	13.80	14	Pass

4.2 Permitted Range of Operating Frequency

4.2.1 Limits of Permitted Range of Operating Frequency

The width of the power envelope is $f_H - f_L$ for a give operating frequency. In equipment that allow adjustment or selection of different frequencies, the power envelope take up different positions in the allowed band. The frequency range is determined by the lowest value of f_L and the highest value of f_H resulting from the adjustment of the equipment to the lowest and highest operating frequency.

For all equipment the frequency range shall lie within the frequency band given by below table

Frequency Bands	Application	The EUT Application
2400MHz to 2483.5MHz	Non-specific short range devices	-
2400MHz to 2483.5MHz	Radio determination devices	-
(a)2446MHz to 2454MHz	Radio Frequency Identification (RFID) devices	-
(b)2446MHz to 2454MHz	Radio Frequency Identification (RFID) devices	-
5725MHz to 5875MHz	Non-specific short range devices	√
9200MHz to 9500MHz	Radio determination devices	-
9500MHz to 9975MHz	Radio determination devices	-
10.5GHz to 10.6GHz	Radio determination devices	-
13.4GHz to 14GHz	Radio determination devices	-
17.1GHz to 17.3GHz	Radio determination devices	-
24GHz to 24.25GHz	Non-specific short range devices and Radio determination devices	-

For non-harmonized frequency bands the available frequency range may differ between national administrations.

4.2.2 Test Procedure

Refer to EN 300 440 V2.2.1 clause 4.2.3.3.

4.2.3 Deviation from Test Standard

No deviation.

4.2.4 Test Setup

The EUT has been placed in an environment where the temperature can be controlled. The power source should be replaced by a power supply for voltage change. Before testing, the transmitter has to be able to send signal to receiver.

4.2.5 Test Results

Test Mode A1 (1TX)

802.11a

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	5729.68	5729.66	5729.63	5729.61	5729.58	> 5725	Pass
165	5825	5841.58	5841.56	5841.53	5841.51	5841.52	< 5875	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	5735.23	5735.21	5735.18	5735.25	5735.30	> 5725	Pass
165	5825	5837.51	5837.49	5837.47	5837.44	5837.39	< 5875	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
151	5755	5735.81	5735.79	5735.76	5735.71	5735.68	> 5725	Pass
159	5795	5814.23	5814.21	5814.18	5814.10	5814.09	< 5875	Pass

802.11be (EHT80)

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	5735.85	5735.82	5735.79	5735.78	5735.76	> 5725	Pass
155	5775	5814.16	5814.13	5814.12	5814.10	5814.16	< 5875	Pass

Test Mode A2 (2TX)

802.11a

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	5736.00	5736.02	5736.03	5736.00	5735.99	> 5725	Pass
165	5825	5834.05	5833.99	5734.03	5833.99	5833.99	< 5875	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
149	5745	5735.38	5735.36	5735.33	5735.41	5735.42	> 5725	Pass
165	5825	5834.62	5834.67	5834.64	5834.65	5834.68	< 5875	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
151	5755	5735.84	5735.81	5735.83	5735.82	5735.88	> 5725	Pass
159	5795	5814.14	5814.12	5814.13	5814.16	5814.47	< 5875	Pass

802.11be (EHT80)

Channel	Frequency (MHz)	Operating Frequencies (MHz)					Limit (MHz)	Test Result
		Test Conditions						
		25 °C	-10 °C		70 °C			
		3.3 Vdc	2.97 Vdc	3.63 Vdc	2.97 Vdc	3.63 Vdc		
155	5775	5735.90	5735.92	5735.89	5735.87	5735.84	> 5725	Pass
155	5775	5814.10	5814.09	5814.03	5814.07	5814.03	< 5875	Pass

4.3 Unwanted Emissions in the Spurious Domain

4.3.1 Limit of Unwanted Emissions in the Spurious Domain

Frequency Range	47MHz to 74MHz 87.5MHz to 118MHz 174MHz to 230MHz 470MHz to 862MHz	Other Frequencies Below 1GHz	>1GHz
Limit (Operating)	4nW (–54dBm)	250nW (–36dBm)	1μW (–30dBm)
Limit (Standby)	2nW (–57dBm)	2nW (–57dBm)	2nW (–47dBm)

4.3.2 Test Procedure

Refer to EN 300 440 V2.2.1 clause 4.2.4.3.3.

4.3.3 Deviation from Test Standard

No deviation.

4.3.4 Test Setup

1. For the actual test configuration, please refer to the related Item in this test report (Photographs of the Test Configuration).
2. The test setup has been constructed as the normal use condition. Controlling software (provided by manufacturer) has been activated to set the EUT on specific status.

4.3.5 Test Results

Test Mode A1 (1TX)

Below 1GHz worst-case data:

802.11a

Frequency Range	25MHz ~ 1GHz	Operating Channel	165
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Spurious Emission Level				
Frequency (MHz)	Antenna Polarization	Level (dBm)	Limit (dBm)	Margin (dB)
63.06	H	-75.98	-54.00	-21.98
68.92	V	-74.82	-54.00	-20.82
99.17	H	-69.08	-54.00	-15.08
100.15	V	-68.23	-54.00	-14.23
199.70	V	-75.53	-54.00	-21.53
203.60	H	-76.22	-54.00	-22.22
497.37	V	-62.74	-54.00	-8.74
498.35	H	-59.55	-54.00	-5.55
570.57	H	-70.31	-54.00	-16.31
592.04	V	-71.78	-54.00	-17.78
623.27	H	-67.57	-54.00	-13.57
670.12	V	-70.22	-54.00	-16.22

Above 1GHz worst-case data:

802.11a

Frequency Range	1GHz ~ 40GHz	Operating Channel	149, 165
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Spurious Emission Level					
Channel	Frequency (MHz)	Antenna Polarization	Level (dBm)	Limit (dBm)	Margin (dB)
149	11490.00	H	-40.73	-30.00	-10.73
	11490.00	V	-40.39	-30.00	-10.39
165	11650.00	H	-40.33	-30.00	-10.33
	11650.00	V	-40.17	-30.00	-10.17

Test Mode A2 (2TX)

Below 1GHz worst-case data:

802.11be (EHT20)

Frequency Range	25MHz ~ 1GHz	Operating Channel	165
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Spurious Emission Level				
Frequency (MHz)	Antenna Polarization	Level (dBm)	Limit (dBm)	Margin (dB)
62.09	H	-73.82	-54.00	-19.82
63.06	V	-74.02	-54.00	-20.02
99.17	V	-63.66	-54.00	-9.66
100.15	H	-61.31	-54.00	-7.31
198.72	H	-71.53	-54.00	-17.53
198.72	V	-73.56	-54.00	-19.56
498.35	H	-59.24	-54.00	-5.24
498.35	V	-62.70	-54.00	-8.70
527.63	H	-66.51	-54.00	-12.51
527.63	V	-68.41	-54.00	-14.41
623.27	H	-65.10	-54.00	-11.10
623.27	V	-69.86	-54.00	-15.86

Above 1GHz worst-case data:

802.11be (EHT20)

Frequency Range	1GHz ~ 40GHz	Operating Channel	149, 165
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Spurious Emission Level					
Channel	Frequency (MHz)	Antenna Polarization	Level (dBm)	Limit (dBm)	Margin (dB)
149	11490.00	H	-40.44	-30.00	-10.44
	11490.00	V	-41.30	-30.00	-11.30
165	11650.00	H	-40.40	-30.00	-10.40
	11650.00	V	-40.89	-30.00	-10.89

4.4 Duty Cycle

4.4.1 Limit of Duty Cycle

Frequency Band	Duty Cycle	Application	The EUT Application
2400MHz to 2483.5MHz	No Restriction	Generic use	-
2400MHz to 2483.5MHz	No Restriction	Radiodetermination	-
(a) 2446MHz to 2454MHz	No Restriction	RFID	-
(b) 2446MHz to 2454MHz	15%	RFID	-
5725MHz to 5875MHz	No Restriction	Generic use	√
9200MHz to 9500MHz	No Restriction	Radiodetermination	-
9500MHz to 9975MHz	No Restriction	Radiodetermination	-
10.5GHz to 10.6GHz	No Restriction	Radiodetermination	-
13.4GHz to 14.0GHz	No Restriction	Radiodetermination	-
17.1GHz to 17.3GHz	DDA or equivalent techniques	Radiodetermination, limited to GBSAR detecting and movement and alert applications	-
24.00GHz to 24.25GHz	No Restriction	Generic use and for radiodetermination	-

4.4.2 Test Procedures

Refer to EN 300 440 V2.2.1 clause 4.2.5.3.

4.4.3 Test Setup

The EUT was operated in normal operation condition.

4.4.4 Test Results

The duty cycle of this device declared by client is 100%.

Receiver Parameters

Receiver category	Risk assessment of receiver performance
1	Highly reliable SRD communication media; e.g. serving human life inherent systems (may result in a physical risk to a person).
2	Medium reliable SRD communication media e.g. causing inconvenience to persons, which cannot simply be overcome by other means.
3	Standard reliable SRD communication media e.g. Inconvenience to persons, which can simply be overcome by other means (e.g. manual).

For the purpose of the receiver performance tests, the receiver shall produce an appropriate output under normal conditions as indicated below:

- a SND/ND ratio of 20 dB, measured at the receiver output through a telephone psophometric weighting network as described in Recommendation ITU T O.41; or
- after demodulation, a data signal with a bit error ratio of 10^{-2} without correction; or
- after demodulation, a message acceptance ratio of 80 %;
- an appropriate false alarm rate or sensing criteria as declared by the manufacturer.

Where the indicated performance cannot be achieved, the performance criteria used to determine the performance of the receiver shall be declared and published by the manufacturer.

4.5 Receiver Spurious Emissions

4.5.1 Limits of Receiver Spurious Emissions

Frequency Range	Frequencies below 1GHz	Frequencies above 1GHz
Limit	2nW (–57dBm)	20nW (–47dBm)

4.5.2 Test Procedure

Refer to EN 300 440 V2.2.1 clause 4.3.5.3.3.

4.5.3 Deviation from Test Standard

No deviation.

4.5.4 Test Setup

1. For the actual test configuration, please refer to the related Item in this test report (Photographs of the Test Configuration).
2. The test setup has been constructed as the normal use condition. Controlling software (provided by manufacturer) has been activated to set the EUT on specific status.

4.5.5 Test Results

Test Mode A2

Below 1GHz worst-case data:

802.11be (EHT20)

Frequency Range	25MHz ~ 1GHz	Operating Channel	165
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Spurious Emission Level				
Frequency (MHz)	Antenna Polarization	Level (dBm)	Limit (dBm)	Margin (dB)
114.79	V	-76.34	-57.00	-19.34
122.60	H	-73.94	-57.00	-16.94
232.88	H	-75.59	-57.00	-18.59
299.25	H	-68.39	-57.00	-11.39
299.25	V	-73.09	-57.00	-16.09
431.98	H	-74.84	-57.00	-17.84
431.98	V	-78.42	-57.00	-21.42
498.35	V	-71.78	-57.00	-14.78
594.97	H	-78.49	-57.00	-21.49
678.90	V	-77.67	-57.00	-20.67
853.60	V	-75.69	-57.00	-18.69
854.58	H	-76.46	-57.00	-19.46

Above 1GHz worst-case data:

802.11be (EHT20)

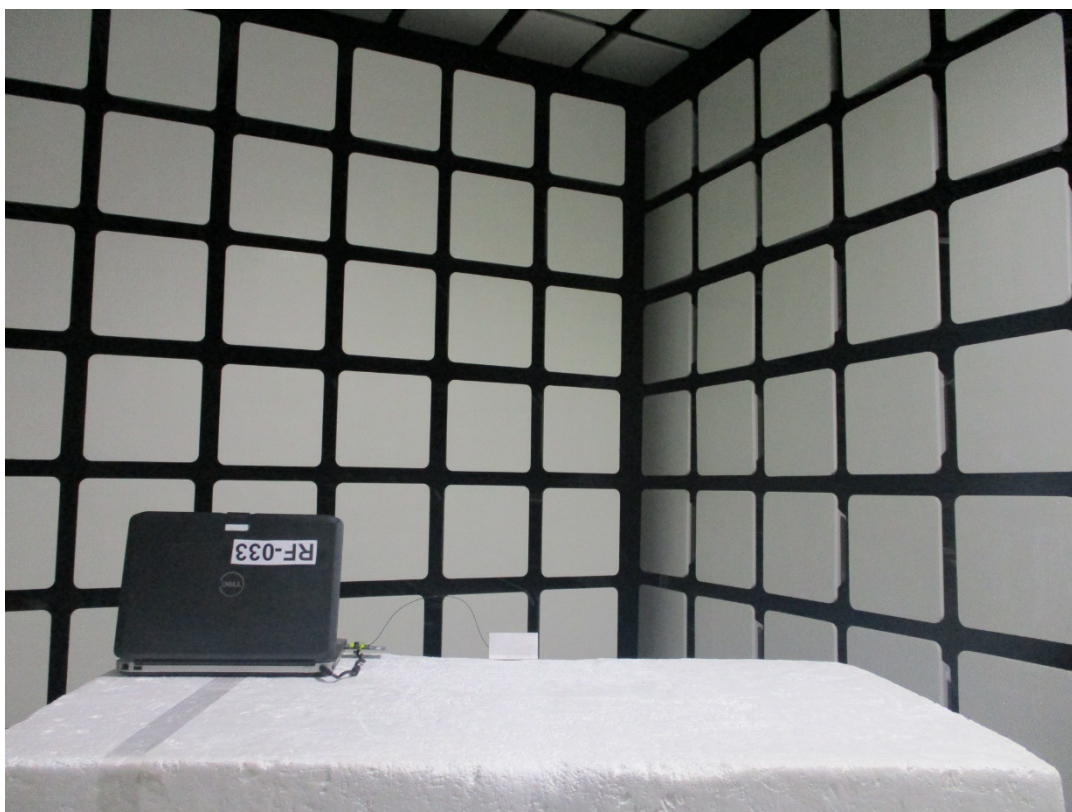
Frequency Range	1GHz ~ 40GHz	Operating Channel	149, 165
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Spurious Emission Level					
Channel	Frequency (MHz)	Antenna Polarization	Level (dBm)	Limit (dBm)	Margin (dB)
149	11490.00	H	-52.56	-47.00	-5.56
	11490.00	V	-52.84	-47.00	-5.84
165	11650.00	H	-52.19	-47.00	-5.19
	11650.00	V	-52.33	-47.00	-5.33

5 Photographs of the Test Configuration

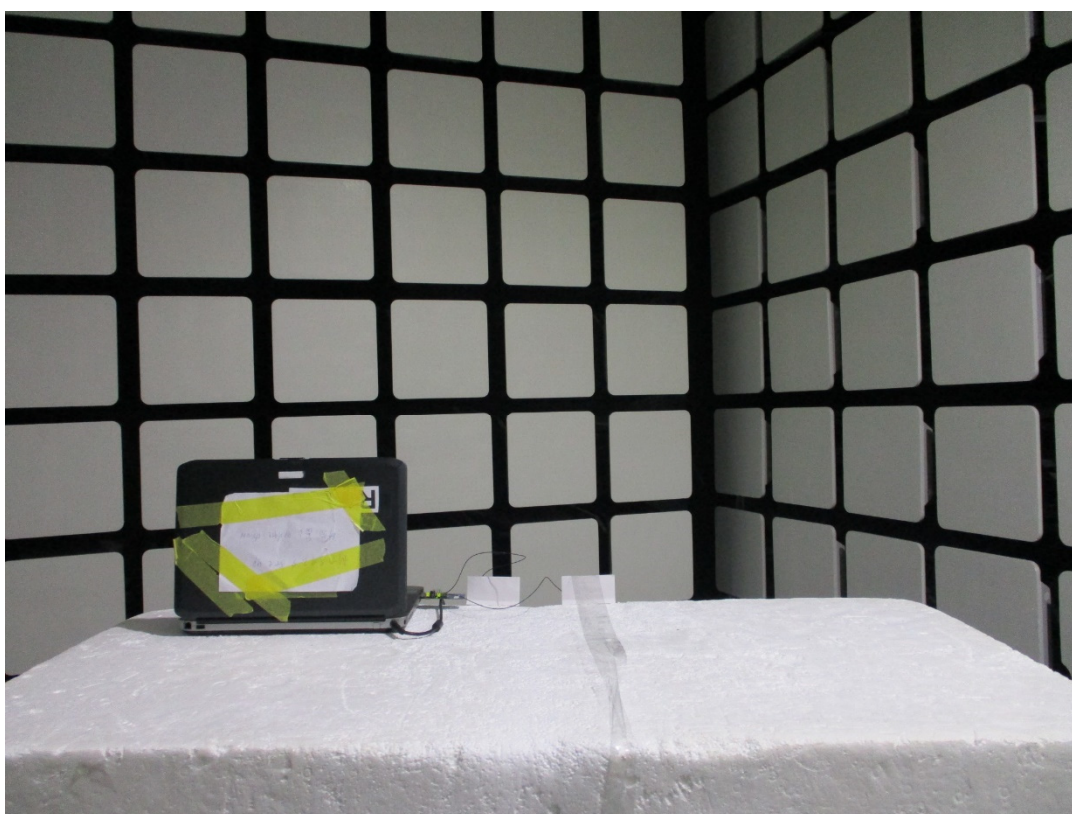
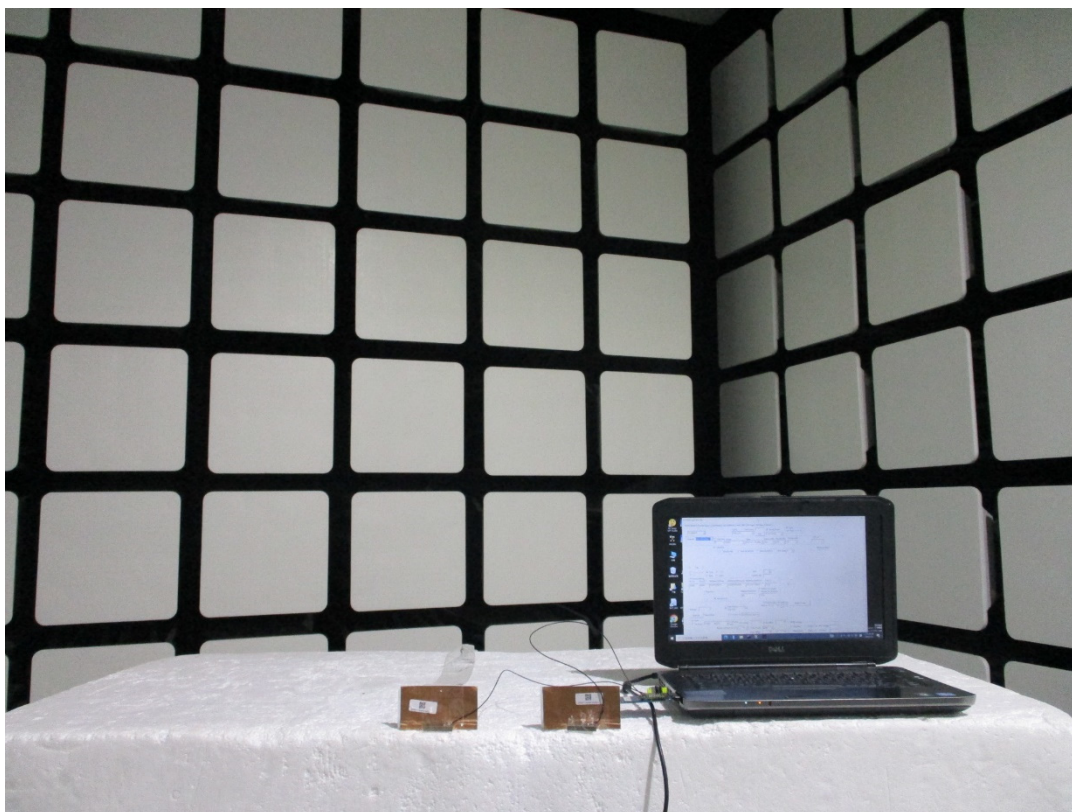
Spurious Emission Test

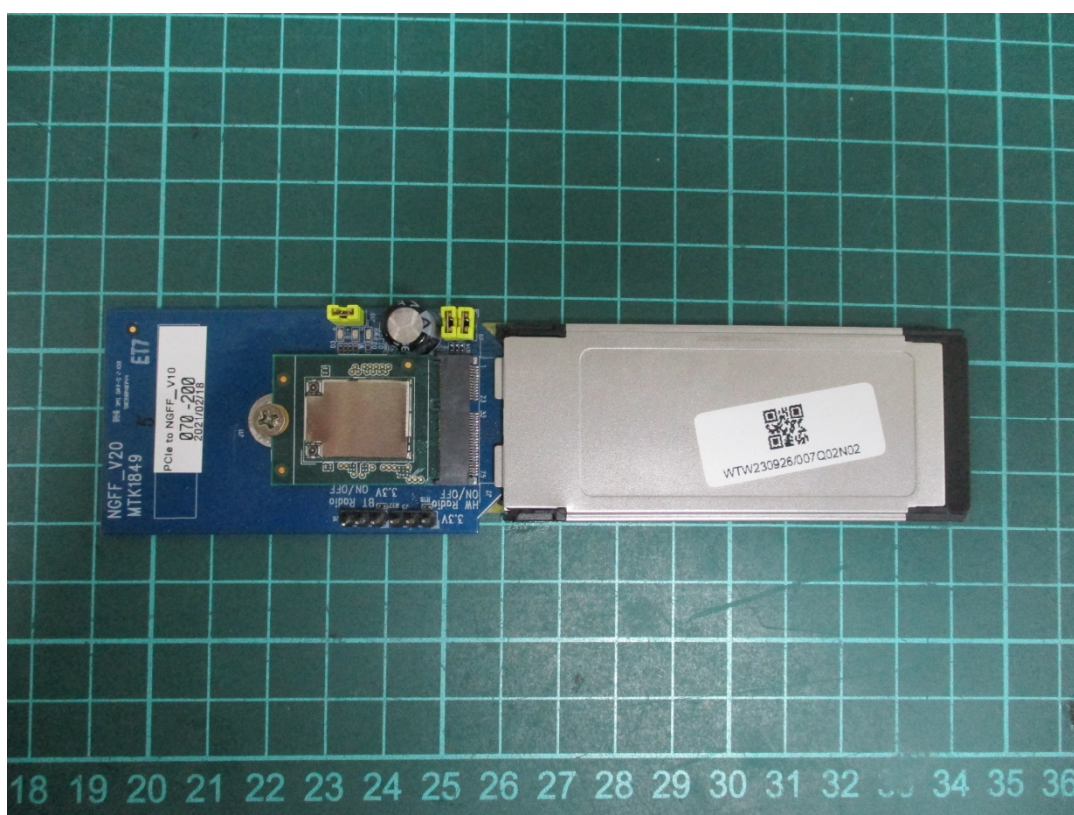
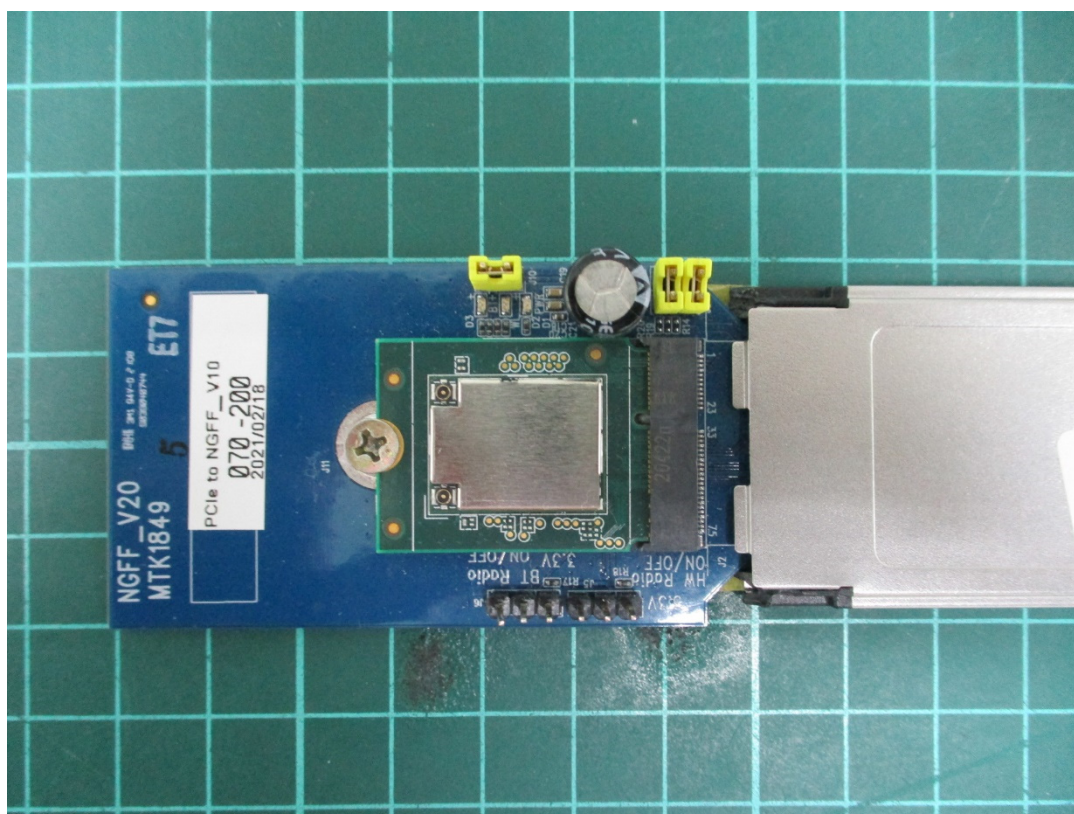
1TX



Spurious Emission Test

2TX





Annex A-Conducted Output Power

Test Mode B1 (1TX)

Mode	Channel	Frequency (MHz)	Conducted Average (dBm)
11a	149	5745	23.65
	157	5785	23.72
	165	5825	23.71
802.11ax (HE20)	149	5745	23.74
	157	5785	23.69
	165	5825	23.68
802.11ax (HE40)	151	5755	23.71
	159	5795	23.70
802.11ax (HE80)	155	5775	23.73
802.11be (EHT20)	149	5745	23.76
	157	5785	23.71
	165	5825	23.71
802.11be (EHT40)	151	5755	23.74
	159	5795	23.73
802.11be (EHT80)	155	5775	23.76
802.11be (EHT20) 26-tone RU	149	5745	23.74
	157	5785	23.65
	165	5825	23.68
802.11be (EHT20) 52-tone RU	149	5745	23.73
	157	5785	23.60
	165	5825	23.67
802.11be (EHT20) 106-tone RU	149	5745	23.72
	157	5785	23.61
	165	5825	23.65
802.11be (EHT20) 52+26-tone MRU	149	5745	23.74
	157	5785	23.53
	165	5825	23.63
802.11be (EHT20) 106+26-tone MRU	149	5745	23.71
	157	5785	23.50
	165	5825	23.61
802.11be (EHT80) 484+242-tone MRU	155	5775	23.72

Test Mode B2 (2TX)

Mode	Channel	Frequency (MHz)	Conducted Average (dBm)		
			Chain 0	Chain 1	Total
11a	149	5745	20.26	20.67	23.48
	157	5785	20.23	20.84	23.56
	165	5825	20.30	20.78	23.56
802.11ax (HE20)	149	5745	20.34	20.84	23.61
	157	5785	20.27	20.93	23.62
	165	5825	20.36	20.88	23.64
802.11ax (HE40)	151	5755	20.37	20.77	23.58
	159	5795	20.36	20.81	23.60
802.11ax (HE80)	155	5775	20.26	20.86	23.58
802.11be (EHT20)	149	5745	20.37	20.88	23.64
	157	5785	20.31	20.96	23.66
	165	5825	20.40	20.91	23.67
802.11be (EHT40)	151	5755	20.41	20.83	23.64
	159	5795	20.39	20.86	23.64
802.11be (EHT80)	155	5775	20.31	20.90	23.63
802.11be (EHT20) 26-tone RU	149	5745	20.31	20.83	23.59
	157	5785	20.23	20.91	23.59
	165	5825	20.34	20.85	23.61
802.11be (EHT20) 52-tone RU	149	5745	20.29	20.79	23.56
	157	5785	20.20	20.88	23.56
	165	5825	20.29	20.83	23.58
802.11be (EHT20) 106-tone RU	149	5745	20.29	20.81	23.57
	157	5785	20.23	20.89	23.58
	165	5825	20.30	20.83	23.58
802.11be (EHT20) 52+26-tone MRU	149	5745	20.29	20.82	23.57
	157	5785	20.23	20.88	23.58
	165	5825	20.34	20.83	23.60
802.11be (EHT20) 106+26-tone MRU	149	5745	20.30	20.83	23.58
	157	5785	20.22	20.88	23.57
	165	5825	20.31	20.78	23.56
802.11be (EHT80) 484+242-tone MRU	155	5775	20.29	20.86	23.59

Appendix - Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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