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Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.3	15.203	Antenna Requirement	PASS	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Output Power	PASS	-
3.3	15.407(a)	Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty"

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen**Report Producer: Vicky Huang**



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	8TX
5.15-5.25GHz	802.11n HT20	20	8TX
5.15-5.25GHz	802.11n HT20-BF	20	8TX
5.15-5.25GHz	802.11ac VHT20	20	8TX
5.15-5.25GHz	802.11ac VHT20-BF	20	8TX
5.15-5.25GHz	802.11ax HEW20	20	8TX
5.15-5.25GHz	802.11ax HEW20-BF	20	8TX
5.15-5.25GHz	802.11n HT40	40	8TX
5.15-5.25GHz	802.11n HT40-BF	40	8TX
5.15-5.25GHz	802.11ac VHT40	40	8TX
5.15-5.25GHz	802.11ac VHT40-BF	40	8TX
5.15-5.25GHz	802.11ax HEW40	40	8TX
5.15-5.25GHz	802.11ax HEW40-BF	40	8TX
5.15-5.25GHz	802.11ac VHT80	80	8TX
5.15-5.25GHz	802.11ac VHT80-BF	80	8TX



5.15-5.25GHz	802.11ax HEW80	80	8TX
5.15-5.25GHz	802.11ax HEW80-BF	80	8TX
5.25-5.35GHz	802.11a	20	8TX
5.25-5.35GHz	802.11n HT20	20	8TX
5.25-5.35GHz	802.11n HT20-BF	20	8TX
5.25-5.35GHz	802.11ac VHT20	20	8TX
5.25-5.35GHz	802.11ac VHT20-BF	20	8TX
5.25-5.35GHz	802.11ax HEW20	20	8TX
5.25-5.35GHz	802.11ax HEW20-BF	20	8TX
5.25-5.35GHz	802.11n HT40	40	8TX
5.25-5.35GHz	802.11n HT40-BF	40	8TX
5.25-5.35GHz	802.11ac VHT40	40	8TX
5.25-5.35GHz	802.11ac VHT40-BF	40	8TX
5.25-5.35GHz	802.11ax HEW40	40	8TX
5.25-5.35GHz	802.11ax HEW40-BF	40	8TX
5.25-5.35GHz	802.11ac VHT80	80	8TX
5.25-5.35GHz	802.11ac VHT80-BF	80	8TX
5.25-5.35GHz	802.11ax HEW80	80	8TX
5.25-5.35GHz	802.11ax HEW80-BF	80	8TX
5.47-5.725GHz	802.11a	20	8TX
5.47-5.725GHz	802.11n HT20	20	8TX
5.47-5.725GHz	802.11n HT20-BF	20	8TX
5.47-5.725GHz	802.11ac VHT20	20	8TX
5.47-5.725GHz	802.11ac VHT20-BF	20	8TX
5.47-5.725GHz	802.11ax HEW20	20	8TX
5.47-5.725GHz	802.11ax HEW20-BF	20	8TX
5.47-5.725GHz	802.11n HT40	40	8TX
5.47-5.725GHz	802.11n HT40-BF	40	8TX
5.47-5.725GHz	802.11ac VHT40	40	8TX
5.47-5.725GHz	802.11ac VHT40-BF	40	8TX
5.47-5.725GHz	802.11ax HEW40	40	8TX
5.47-5.725GHz	802.11ax HEW40-BF	40	8TX
5.47-5.725GHz	802.11ac VHT80	80	8TX

5.47-5.725GHz	802.11ac VHT80-BF	80	8TX
5.47-5.725GHz	802.11ax HEW80	80	8TX
5.47-5.725GHz	802.11ax HEW80-BF	80	8TX
5.725-5.85GHz	802.11a	20	8TX
5.725-5.85GHz	802.11n HT20	20	8TX
5.725-5.85GHz	802.11n HT20-BF	20	8TX
5.725-5.85GHz	802.11ac VHT20	20	8TX
5.725-5.85GHz	802.11ac VHT20-BF	20	8TX
5.725-5.85GHz	802.11ax HEW20	20	8TX
5.725-5.85GHz	802.11ax HEW20-BF	20	8TX
5.725-5.85GHz	802.11n HT40	40	8TX
5.725-5.85GHz	802.11n HT40-BF	40	8TX
5.725-5.85GHz	802.11ac VHT40	40	8TX
5.725-5.85GHz	802.11ac VHT40-BF	40	8TX
5.725-5.85GHz	802.11ax HEW40	40	8TX
5.725-5.85GHz	802.11ax HEW40-BF	40	8TX
5.725-5.85GHz	802.11ac VHT80	80	8TX
5.725-5.85GHz	802.11ac VHT80-BF	80	8TX
5.725-5.85GHz	802.11ax HEW80	80	8TX
5.725-5.85GHz	802.11ax HEW80-BF	80	8TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Table for 80+80 MHz Mode

Type	Channel No.	Frequency
1	42+58	5210+5290 MHz
2	106+122	5530+5610 MHz

1.1.3 Antenna Information

Ant.	Port		Brand	P/N	Antenna Type	Connector	Gain (dBi)
	2.4GHz	5GHz					
1	3	3	WNC	ATKK RANQ-AK74	PIFA	I-PEX	Note1
2	4	4	WNC	ATKK RANQ-AK74	PIFA	I-PEX	
3	2	2	WNC	ATKK RANQ-AK74	PIFA	I-PEX	
4	1	1	WNC	ATKK RANQ-AK74	PIFA	I-PEX	
5	-	5	WNC	ATKK RANQ-AK74	PIFA	I-PEX	
6	-	8	WNC	ATKK RANQ-AK74	PIFA	I-PEX	
7	-	7	WNC	ATKK RANQ-AK74	PIFA	I-PEX	
8	-	6	WNC	ATKK RANQ-AK74	PIFA	I-PEX	

Note1:

Ant.	Gain (dBi)				
	2.4GHz	5GHz U-NII 1	5GHz U-NII 2A	5GHz U-NII 2C	5GHz U-NII 3
1	3.03	5.59	5.80	5.35	5.51
2	4.38	5.68	5.73	5.92	5.66
3	3.46	5.55	5.69	5.70	5.70
4	2.42	5.54	5.88	5.71	5.90
5	-	5.66	5.66	5.22	5.92
6	-	5.32	5.67	4.88	5.78
7	-	5.47	5.93	5.76	5.81
8	-	5.66	5.80	5.04	5.95
Directional Gain (dBi) (4T1S)	6.27	-	-	-	-
Directional Gain (dBi) (4T2S)	3.28	-	-	-	-
Directional Gain (dBi) (4T4S)	0.73	-	-	-	-
Directional Gain (dBi) (8T1S)	-	8.07	7.57	8.48	7.1
Directional Gain (dBi) (8T2S)	-	5.47	4.57	5.48	5.65
Directional Gain (dBi) (8T4S)	-	5.47	4.14	4.77	5.65
Directional Gain (dBi) (8T8S)	-	1.73	0.55	1.21	1.44

Note2: The above information was declared by manufacturer.

Note3: The directional gain is measured which follows the procedure of KDB 662911 D03. The antenna report is provided in the operational description for this application.



Note4:

For 2.4GHz function:

For IEEE 802.11b/g/n/VHT/ax (4TX/4RX):

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11a/n/ac/ax (8TX/8RX):

Port 1, Port 2, Port 3, Port 4, Port 5, Port 6, Port 7 and Port 8 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3, Port 4, Port 5, Port 6, Port 7 and Port 8 could transmit/receive simultaneously.

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.927	0.33	1.433m	1k
802.11ax HEW20	0.944	0.25	5.452m	300
802.11ax HEW40	0.952	0.21	5.449m	300
802.11ax HEW80	0.948	0.23	5.448m	300
802.11ax HEW80+80	0.866	0.62	5.452m	300

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

1.1.5 EUT Operational Condition

EUT Power Type	From power adapter or PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
	For 802.11n/ax/VHT in 2.4GHz, 802.11n/ac/ax in 5GHz.			
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
TPC Function	☒	With TPC	☐	Without TPC
Test Software Version	Others: QLibDemo-MSVC10_Txpower.exe, 80+80:QSPR.exe			

Note: The above information was declared by manufacturer.

1.1.6 Table for Multiple Listing

Model Name	Description
AT-TQ6702 GEN2	All the models are identical; different models serve as marketing strategy.
AT-TQm6702 GEN2	

Note 1: From the above models, model: AT-TQ6702 GEN2 was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.1.7 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR152528-01AB

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding 5GHz U-NII 2A and U-NII 2C (5250~5350 MHz, 5470~5725 MHz) for this device. 2. Adding 80+80MHz mode	1. Emission Bandwidth 2. Maximum Output Power 3. Power Spectral Density 4. Unwanted Emissionser above 1GHz



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 789033 D02 v02r01

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 662911 D03 v01
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	TEL: 886-3-656-9065 FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.
	Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	23.5~25.4 / 54~56	Aug. 16, 2021~Aug. 31, 2021
Radiated	03CH01-CB	Eason Chen	24.4~25.5 / 55~58	Aug. 13, 2021~Aug. 14, 2021

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For non beamforming mode

For 20/40/80MHz

Mode	Power Setting
802.11a_Nss1,(6Mbps)_8TX	-
5260MHz	11.5
5300MHz	11.5
5320MHz	11.5
5500MHz	11.5
5580MHz	11
5700MHz	11.5
5720MHz Straddle 5.47-5.725GHz	10.5
5720MHz Straddle 5.725-5.85GHz	10.5
802.11ax HEW20_Nss1,(MCS0)_8TX	-
5260MHz	11.5
5300MHz	11.5
5320MHz	11.5
5500MHz	11.5
5580MHz	11.5
5700MHz	11.5
5720MHz Straddle 5.47-5.725GHz	11
5720MHz Straddle 5.725-5.85GHz	11
802.11ax HEW40_Nss1,(MCS0)_8TX	-
5270MHz	14
5310MHz	14
5510MHz	14.5
5550MHz	14
5670MHz	14
5710MHz Straddle 5.47-5.725GHz	14
5710MHz Straddle 5.725-5.85GHz	14
802.11ax HEW80_Nss1,(MCS0)_8TX	-
5290MHz	14.5
5530MHz	14.5
5610MHz	14.5
5690MHz Straddle 5.47-5.725GHz	14.5
5690MHz Straddle 5.725-5.85GHz	14.5

**For 80+80MHz**

Mode	Power Setting
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-
#5210MHz,5290MHz	15
5210MHz,#5290MHz	15
802.11ax HEW80+80_Nss2,(MCS0)_8TX	-
#5530MHz,#5610MHz	14.5

**For beamforming mode****For 20/40/80MHz**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	-
5260MHz	11.5
5300MHz	11.5
5320MHz	11.5
5500MHz	11.5
5580MHz	11.5
5700MHz	11.5
5720MHz Straddle 5.47-5.725GHz	11
5720MHz Straddle 5.725-5.85GHz	11
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	-
5270MHz	12.5
5310MHz	12.5
5510MHz	12
5550MHz	12
5670MHz	11.5
5710MHz Straddle 5.47-5.725GHz	12
5710MHz Straddle 5.725-5.85GHz	12
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	-
5290MHz	13
5530MHz	12
5610MHz	12
5690MHz Straddle 5.47-5.725GHz	12
5690MHz Straddle 5.725-5.85GHz	12

For 80+80MHz

Mode	Power Setting
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	-
#5210MHz,5290MHz	15
5210MHz,#5290MHz	15
802.11ax HEW80+80-BF_Nss2,(MCS0)_8TX	-
#5530MHz,#5610MHz	14.5

Note:

- HEW20/HEW40/HEW80 covers HT20/HT40/VHT20/VHT40/VHT80, due to similar modulation. The power setting for HT20/HT40/VHT20/VHT40/VHT80 are the same or lower than HEW20/HEW40/HEW80.
- The EUT supports non-beamforming and beamforming modes, after evaluating, the non-beamforming mode has been selected to execute all tests. The beamforming mode evaluates the output power only.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Output Power Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position for Radiated emission test, and the worst case was found at X axis. So the measurement will follow this same test configuration.
1	EUT in X axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA152528-02 for Co-location RF Exposure Evaluation.	

Note: The Adapter and PoE was for measurement only, would not be marketed.

The detail information as below

Support Unit	Brand	Model Name
Adapter	APD	DA-48Z12
PoE	DELTA	ADP-60HR B



2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Wall-mounted rack*1

2.5 Support Equipment

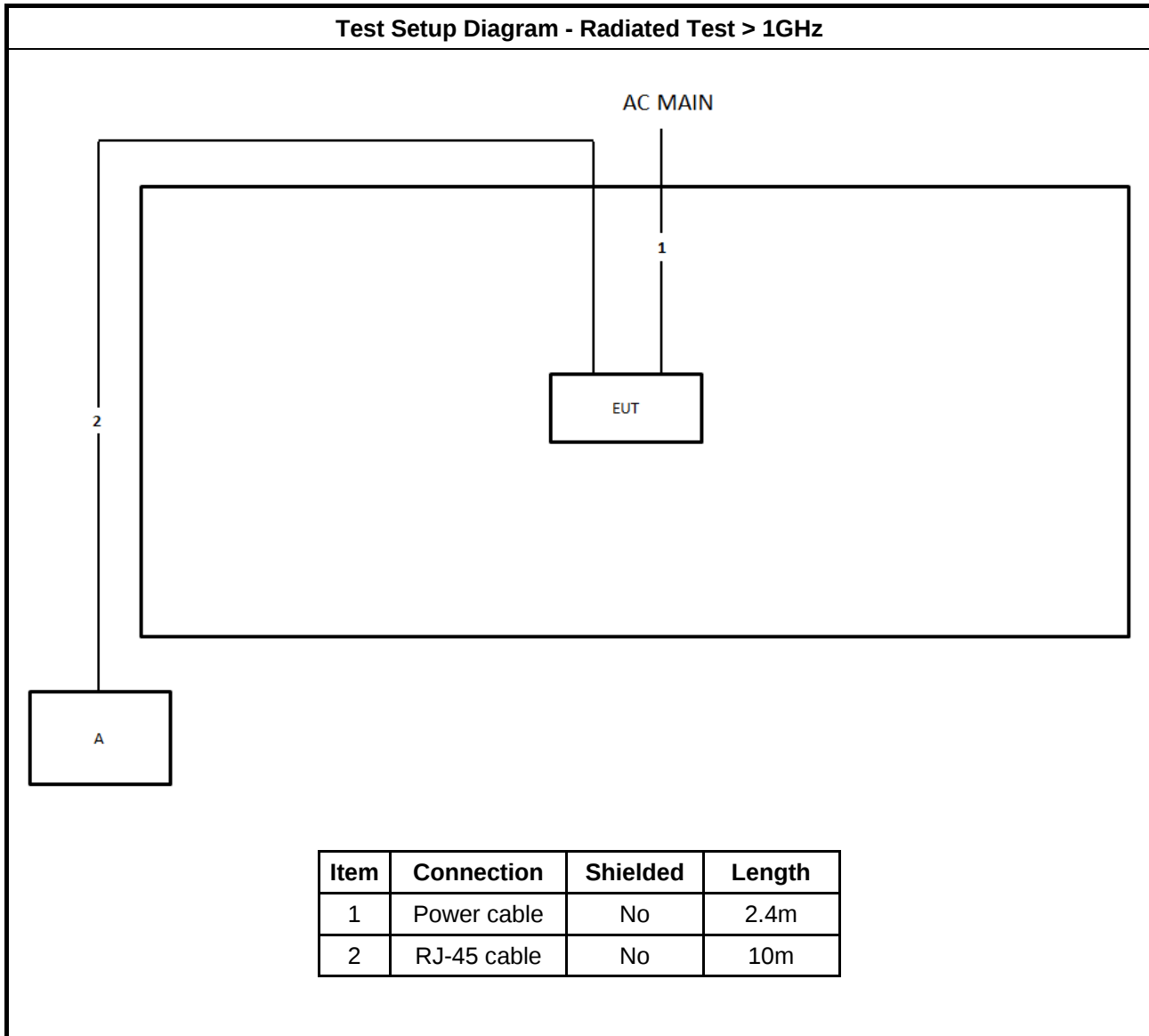
For Radiated (above 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Adapter	APD	DA-48Z12	N/A

For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE	DELTA	ADP-60HR B	N/A

2.6 Test Setup Diagram



3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☒	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.
☐	For the 5.85-5.895 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

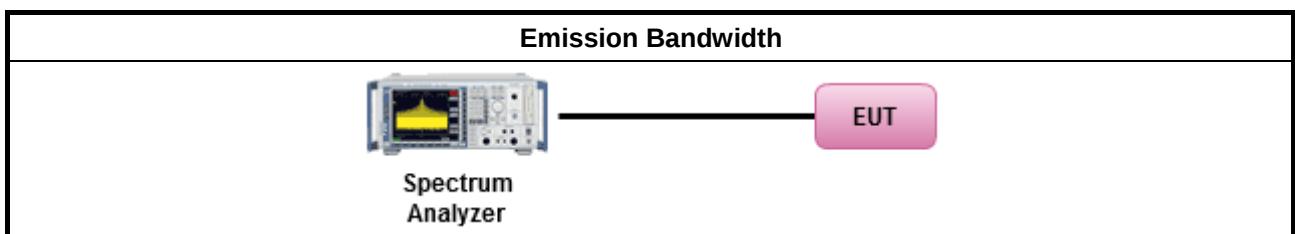
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.1.4 Test Setup





3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A



lesser of 1 W.

P_{Out} = maximum conducted output power in dBm,

G_{Tx} = the maximum transmitting antenna directional gain in dBi.

3.2.2 Measuring Instruments

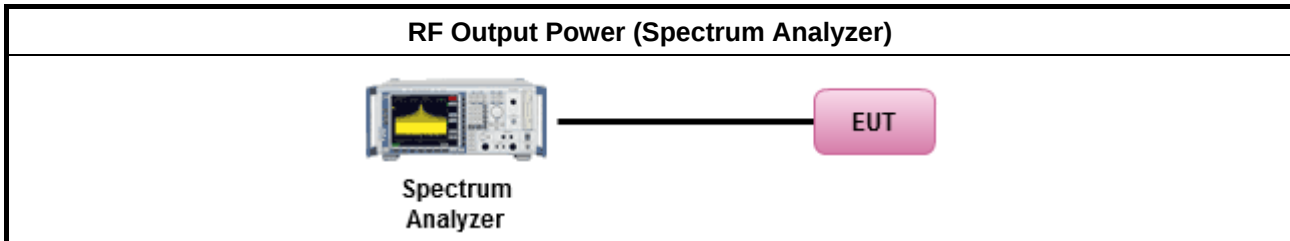
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

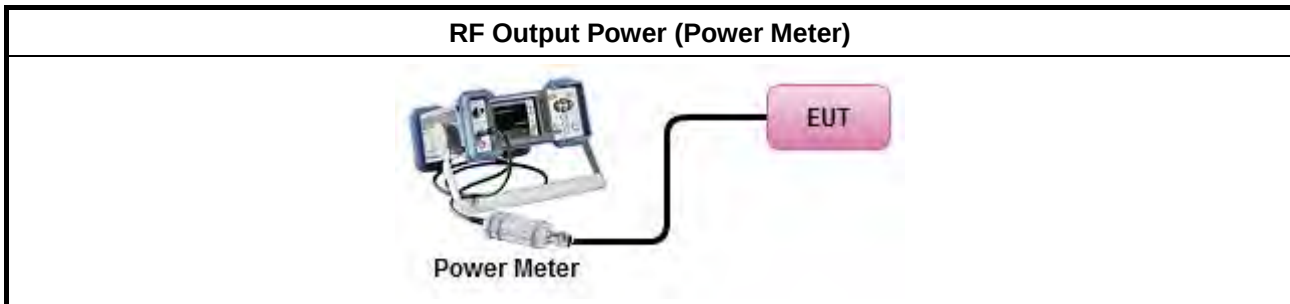
Test Method	
▪ Maximum Conducted Output Power	
	Average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$

3.2.4 Test Setup

For straddle channel



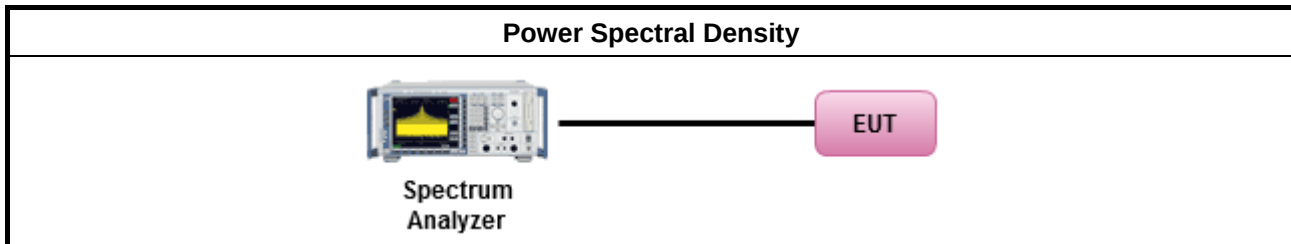
For others channel



3.2.5 Test Result of Maximum Output Power

Refer as Appendix B

3.3.4 Test Setup

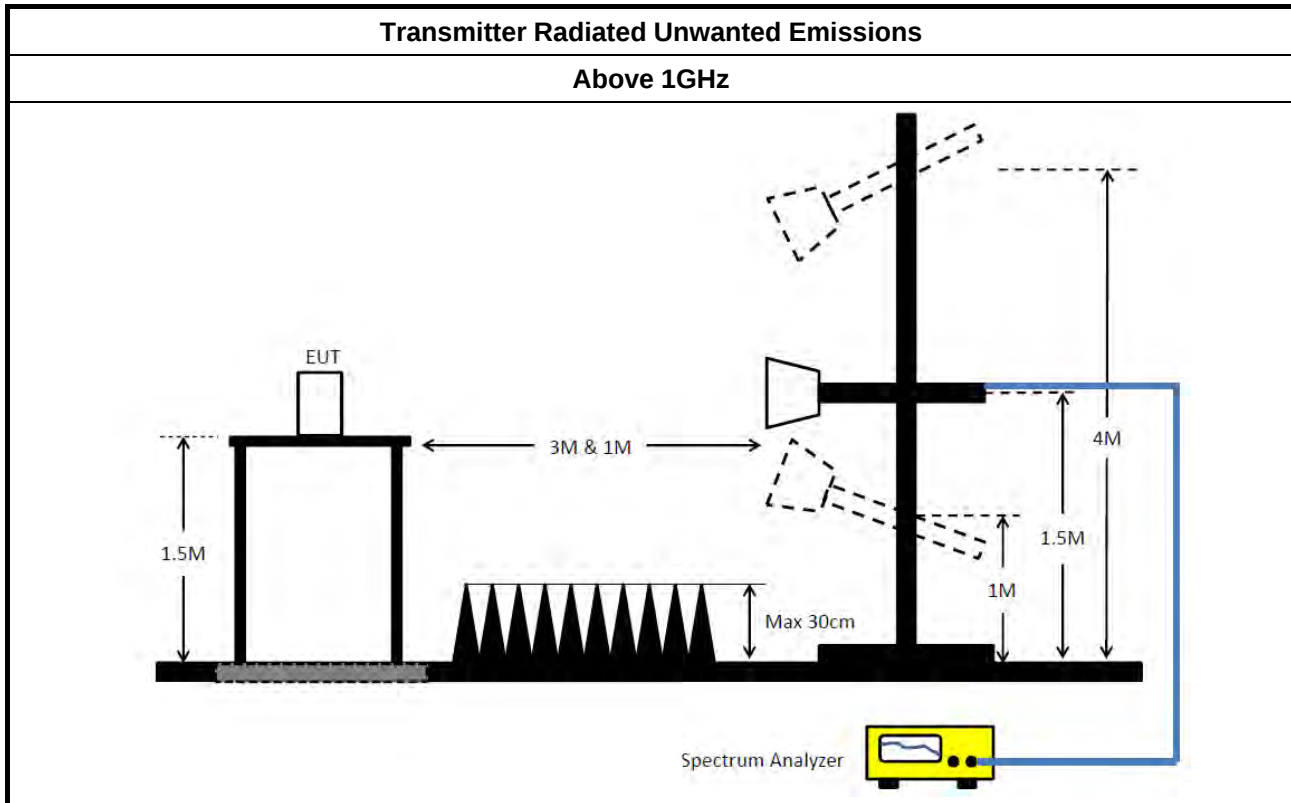


3.3.5 Test Result of Power Spectral Density

Refer as Appendix C

Test Method

- All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.4.4 Test Setup

3.4.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



For non beamforming mode
For 20/40/80MHz
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	19.77M	16.582M	16M6D1D	19.02M	16.312M
802.11ax HEW20_Nss1,(MCS0)_8TX	21.69M	19.04M	19M0D1D	20.61M	18.681M
802.11ax HEW40_Nss1,(MCS0)_8TX	41.22M	38.201M	38M2D1D	40.56M	37.781M
802.11ax HEW80_Nss1,(MCS0)_8TX	82.68M	77.721M	77M7D1D	81.6M	77.241M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	19.83M	16.582M	16M6D1D	14.475M	13.223M
802.11ax HEW20_Nss1,(MCS0)_8TX	21.69M	19.07M	19M1D1D	15.195M	14.378M
802.11ax HEW40_Nss1,(MCS0)_8TX	41.28M	38.201M	38M2D1D	35.245M	33.723M
802.11ax HEW80_Nss1,(MCS0)_8TX	82.68M	77.961M	78M0D1D	75.75M	72.714M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	3.12M	3.638M	3M64D1D	3M	3.418M
802.11ax HEW20_Nss1,(MCS0)_8TX	4.52M	4.638M	4M64D1D	3.62M	4.538M
802.11ax HEW40_Nss1,(MCS0)_8TX	4.08M	4.238M	4M24D1D	3.86M	4.098M
802.11ax HEW80_Nss1,(MCS0)_8TX	4.08M	4.418M	4M42D1D	3.8M	4.158M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth



80+80MHz
For non beamforming mode
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	82.2M	77.361M	77M4D1D	81.24M	77.001M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	82.68M	77.601M	77M6D1D	81.96M	77.001M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW80+80_Nss2,(MCS0)_8TX	82.56M	77.721M	77M7D1D	81.48M	76.762M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)	Port 5-N dB (Hz)	Port 5-OBW (Hz)	Port 6-N dB (Hz)	Port 6-OBW (Hz)	Port 7-N dB (Hz)	Port 7-OBW (Hz)	Port 8-N dB (Hz)	Port 8-OBW (Hz)
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	Inf	81.72M	77.361M	81.24M	77.001M	81.96M	77.241M	82.2M	77.121M								
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	Inf									82.32M	77.601M	82.68M	77.601M	81.96M	77.001M	81.96M	77.481M
802.11ax HEW80+80_Nss2,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	Inf	81.84M	77.361M	81.72M	77.361M	81.48M	76.762M	82.2M	76.882M	82.56M	77.721M	81.72M	77.241M	82.32M	77.721M	82.2M	77.241M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth



For non beamforming mode
For 20/40/80MHz
Summary

Mode	Total Power (dBm)	Total Power (W)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	20.65	0.11614
802.11ax HEW20_Nss1,(MCS0)_8TX	21.01	0.12618
802.11ax HEW40_Nss1,(MCS0)_8TX	23.56	0.22699
802.11ax HEW80_Nss1,(MCS0)_8TX	23.83	0.24155
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	20.74	0.11858
802.11ax HEW20_Nss1,(MCS0)_8TX	20.99	0.12560
802.11ax HEW40_Nss1,(MCS0)_8TX	23.94	0.24774
802.11ax HEW80_Nss1,(MCS0)_8TX	23.97	0.24946
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	12.89	0.01945
802.11ax HEW20_Nss1,(MCS0)_8TX	14.57	0.02864
802.11ax HEW40_Nss1,(MCS0)_8TX	13.47	0.02223
802.11ax HEW80_Nss1,(MCS0)_8TX	9.76	0.00946



For beamforming mode
For 20/40/80MHz
Summary

Mode	Total Power (dBm)	Total Power (W)
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	21.01	0.12618
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	22.09	0.16181
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	22.28	0.16904
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	20.99	0.12560
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	21.47	0.14028
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	21.40	0.13804
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	14.57	0.02864
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	12.52	0.01786
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	8.20	0.00661



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	7.57	11.78	12.37	12.4	11.27	12.17	11.67	12.23	11.83	21.01	22.41
5300MHz	Pass	7.57	11.47	12.01	11.6	11	11.3	11.59	12.79	11.39	20.71	22.41
5320MHz	Pass	7.57	11.79	12.7	11.76	10.99	11.83	12.17	11.7	11.63	20.88	22.41
5500MHz	Pass	8.48	11.21	11.53	12.1	12.2	12.38	11.22	12.19	11.93	20.90	21.50
5580MHz	Pass	8.48	11.59	11.3	11.48	11.97	12.87	12.2	12.31	11.71	20.99	21.50
5700MHz	Pass	8.48	11.97	12.1	11.85	11.11	12.19	11.4	11.99	11.39	20.80	21.50
5720MHz Straddle 5.47-5.725GHz	Pass	8.48	11.2	11.1	11.34	10.37	10.57	10.43	10.98	10.39	19.84	20.34
5720MHz Straddle 5.725-5.85GHz	Pass	7.10	5.06	4.14	7.06	5.38	5.75	5.81	4.94	5.57	14.57	28.90
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	7.57	13.17	13.23	13.15	12.74	13.17	12.68	13.43	12.84	22.09	22.41
5310MHz	Pass	7.57	13.04	12.90	12.93	12.23	12.39	12.82	13.72	12.85	21.91	22.41
5510MHz	Pass	8.48	12.56	11.69	11.56	12.53	12.57	11.89	12.62	11.36	21.16	21.50
5550MHz	Pass	8.48	12.73	11.63	11.94	12.69	12.77	12.19	12.52	12.50	21.42	21.50
5670MHz	Pass	8.48	12.28	11.68	11.75	12.28	12.09	11.77	12.25	12.04	21.05	21.50
5710MHz Straddle 5.47-5.725GHz	Pass	8.48	12.84	12.65	12.70	12.11	12.23	12.08	12.55	12.28	21.47	21.50
5710MHz Straddle 5.725-5.85GHz	Pass	7.10	3.68	1.85	2.40	4.55	4.05	4.25	3.80	2.58	12.52	28.90
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	7.57	13.20	13.37	13.40	12.76	13.37	12.79	13.80	13.22	22.28	22.41
5530MHz	Pass	8.48	12.76	11.76	11.85	12.64	12.82	12.29	12.17	12.53	21.40	21.50
5610MHz	Pass	8.48	12.43	12.02	11.91	12.12	12.35	12.16	12.55	12.22	21.26	21.50
5690MHz Straddle 5.47-5.725GHz	Pass	8.48	12.44	12.11	12.23	12.10	12.26	11.84	12.30	12.05	21.20	21.50
5690MHz Straddle 5.725-5.85GHz	Pass	7.10	-0.76	-2.47	-2.13	0.10	0.21	-0.19	-0.52	-1.71	8.20	28.90

DG = Directional Gain; Port X = Port X output power



80+80MHz
For non beamforming mode
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	21.16	0.13062
5.25-5.35GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_8TX	21.39	0.13772
5.47-5.725GHz	-	-
802.11ax HEW80+80_Nss2,(MCS0)_8TX	23.74	0.23659



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW80+80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	5.68	14.52	15.95	15.37	14.56					21.16	30.00
5210MHz,#5290MHz	Pass	5.93	-	-	-	-	15.88	14.59	15.23	15.68	21.39	23.98
802.11ax HEW80+80_Nss2,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	5.92	14.69	14.96	13.58	15.21	15.08	14.57	14.42	14.93	23.74	23.98

DG = Directional Gain; Port X = Port X output power



For beamforming mode
Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	21.16	0.13062	26.63	0.46026
5.25-5.35GHz	-	-	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	21.39	0.13772	25.96	0.39446
5.47-5.725GHz	-	-	-	-
802.11ax HEW80+80-BF_Nss2,(MCS0)_8TX	23.74	0.23659	29.22	0.83560



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW80+80-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	5.47	14.52	15.95	15.37	14.56					21.16	30.00	26.63	36.00
5210MHz,#5290MHz	Pass	4.57	-	-	-	-	15.88	14.59	15.23	15.68	21.39	23.98	25.96	30.00
802.11ax HEW80+80-BF_Nss2,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	5.48	14.69	14.96	13.58	15.21	15.08	14.57	14.42	14.93	23.74	23.98	29.22	30.00

DG = Directional Gain; Port X = Port X output power



For non beamforming mode
For 20/40/80MHz
Summary

Mode	PD (dBm/RBW)
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_8TX	8.22
802.11ax HEW20_Nss1,(MCS0)_8TX	8.22
802.11ax HEW40_Nss1,(MCS0)_8TX	8.12
802.11ax HEW80_Nss1,(MCS0)_8TX	5.02
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_8TX	8.43
802.11ax HEW20_Nss1,(MCS0)_8TX	8.08
802.11ax HEW40_Nss1,(MCS0)_8TX	8.13
802.11ax HEW80_Nss1,(MCS0)_8TX	5.22
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_8TX	5.32
802.11ax HEW20_Nss1,(MCS0)_8TX	6.29
802.11ax HEW40_Nss1,(MCS0)_8TX	4.85
802.11ax HEW80_Nss1,(MCS0)_8TX	1.13

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

