



TEST REPORT

Applicant Name: MERCURY Corporation
Address: 90, Gajaeul-ro, Seo-Gu, Incheon, 22830, Republic of Korea
Report Number: 2504Z00193E-RF-00A
FCC ID: 2AVW5MCR-AP19000

Test Standard (s)

FCC PART 15 SUBPART E(15.407)

Sample Description

Product Name: AP
Model No.: MCR-AP19000
Trade Mark: MERCURY
Date Received: 2025-11-12
Report Date: 2025-12-17

Test Result:	The EUT complied with the standards above.
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Prepared and Checked By:

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Approved By:

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EMC Engineer

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2504Z00193E-RF-00A	Original Report	2025-12-17

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name	AP	
Tested Model	MCR-AP19000	
Frequency Range	U-NII 5: 5925-6425 MHz, U-NII 6: 6425-6525 MHz U-NII 7: 6525-6875 MHz, U-NII 8: 6875-7125 MHz	
Mode	802.11ax20/ax40/ax80/ax160/be20/be40/be80/be160/be320	
Maximum EIRP	5925-6425 MHz: 20.28 dBm	
	6425-6525 MHz: 19.75 dBm	
	6525-6875 MHz: 20.43 dBm	
	6875-7125 MHz: 20.37 dBm	
Modulation Technique	OFDMA-BPSK,QPSK,16QAM,64QAM,256QAM,1024QAM,4096QAM	
Antenna Specification [#]	Internal Antenna Antenna gain is as blow, which was provided by the applicant.	
	Ant0(Chain 0): 4.53 dBi	Ant1(Chain 1): 4.45 dBi
	Ant2(Chain 2): 4.98 dBi	Ant3(Chain 3): 4.78 dBi
Voltage Range [#]	DC 12V from Adapter	
Sample Serial Number	For CE&RSE Test: 3CUK-1 For RF Conducted Test: 3CUK-2 (Assigned by ATC, Shenzhen)	
Sample/EUT Status	Good condition	
Adapter Information [#]	Model: KA4801A-1204000US Input:100-240V~50/60Hz 1.2A Max Output: 12V 4000mA	
Note: The device is belong an indoor access point type.		

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033 D02 General U-NII Test Procedures New Rules v02r01, KDB 987594 D02 U-NII 6 GHz EMC Measurement v03

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5 %
RF Frequency		0.064×10^{-7}
RF output power, conducted		0.3 dB
Unwanted Emission, conducted		1.2 dB
AC Power Lines Conducted Emissions		2.7 dB
Radiated Spurious Emissions	9kHz - 30MHz	2.1 dB
	30MHz - 1GHz	4.3 dB
	1GHz - 18GHz	4.9 dB
	18GHz - 26.5GHz	5.2 dB
	26.5GHz - 40GHz	4.6 dB
Temperature		1 °C
Humidity		7 %
Supply voltages		0.4 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

The device support 802.11ax he20/ax he40/ax he80/ax he160/be eht20/be eht40/be eht80/be eht160/be eht320, ax he20/ax he40/ax he80/ax he160 were reduced since the identical parameters with be eht20/be eht40/be eht80/be eht160.

U-NII 5 Band(5925-6425 MHz):

802.11ax he20 802.11be eht20		802.11ax he40 802.11be eht40		802.11ax he80 802.11be eht80		802.11ax he160 802.11be eht160	
Channel	Freq. (MHz)	Channel	Freq. MHz)	Channel	Freq. MHz)	Channel	Freq.(MHz)
1	5955	3	5965	7	5985	15	6025
5	5975	11	6005	23	6065	/	/
~	~	~	~	/	/	47	6185
45	6175	43	6165	39	6145	/	/
~	~	~	~	~	~	/	/
89	6395	83	6365	71	6305	79	6345
93	6415	91	6405	87	6385		

802.11be eht320	
Channel	Freq.(MHz)
31	6105
63	6265

Crossed U-NII 5 and U-NII 6:

802.11be eht320	
Channel	Freq.(MHz)
95	6425

U-NII 6 Band (6425-6525 MHz):

802.11ax he20 802.11be eht20		802.11ax he40 802.11be eht40		802.11ax he80 802.11be eht80		802.11ax he160 802.11be eht160	
Channel	Freq. (MHz)	Channel	Freq. MHz)	Channel	Freq. MHz)	Channel	Freq.(MHz)
97	6435	99	6445	/	/	/	/
101	6455	/	/	/	/	/	/
105	6475	/	/	103	6465	/	/
109	6495	107	6485	/	/	/	/
113	6515	/	/	/	/	/	/

Crossed U-NII 6 and U-NII 7:

802.11ax he20 802.11be eht20		802.11ax he40 802.11be eht40		802.11ax he80 802.11be eht80		802.11ax he160 802.11be eht160		802.11be eht320	
Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
/	/	115	6525	119	6545	111	6505	127	6585

U-NII 7 Band (6525-6875 MHz):

802.11ax he20 802.11be eht20		802.11ax he40 802.11be eht40		802.11ax he80 802.11be eht80		802.11ax he160 802.11be eht160	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
117	6535	123	6565	135	6625	/	/
121	6555	131	6605	/	/	/	/
~	~	~	~	/	/	/	/
149	6695	147	6685	151	6705	143	6665
~	~	~	~	/	/	/	/
177	6835	171	6805	/	/	/	/
181	6855	179	6845	167	6785	/	/

Crossed U-NII 7 and U-NII 8:

802.11ax he20 802.11be eht20		802.11ax he40 802.11be eht40		802.11ax he80 802.11be eht80		802.11ax he160 802.11be eht160		802.11be eht320	
Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
185	6875	187	6885	183	6865	175	6825	159	6745
/	/	/	/	/	/	/	/	191	6905

U-NII 8 Band (6875-7125 MHz):

802.11ax he20 802.11be eht20		802.11ax he40 802.11be eht40		802.11ax he80 802.11be eht80		802.11ax he160 802.11be eht160	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
189	6895	195	6925	199	6945	/	/
193	6915	~	~	/	/	/	/
~	~	~	~	/	/	/	/
209	6995	211	7005	/	/	207	6985
~	~	~	~	/	/	/	/
225	7075	~	~	/	/	/	/
229	7095	227	7085	215	7025	/	/

Note: The above frequencies in bold were performed the test.

EUT Exercise Software and Power Level #

EUT Exercise Software:	QATool_Dbg.exe
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RU Power Level Setting:

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
U-NII 5 Band(5925-6425 MHz):								
be20	Lowest	5955	26/0	EHT MCS0	-9	-10	-10	-9
			52/37	EHT MCS0	-6.5	-7.5	-7.5	-6.5
			106/53	EHT MCS0	-4	-5	-4.5	-4
			242/61	EHT MCS0	-0.5	-1.5	-1	-1
	Middle	6175	26/0	EHT MCS0	-10	-10.5	-11	-10.5
			52/37	EHT MCS0	-7	-8	-8.5	-7.5
			106/53	EHT MCS0	-4	-4.5	-5.5	-5
			242/61	EHT MCS0	-1	-1	-1.5	-1
	Highest	6415	26/8	EHT MCS0	-8	-9	-9	-9
			52/40	EHT MCS0	-5	-6	-6	-6
			106/54	EHT MCS0	-2	-3	-3	-3.5
			242/61	EHT MCS0	1	0	0	0
be40	Lowest	5965	26/0	EHT MCS0	-5	-5	-5.5	-4.5
			52/37	EHT MCS0	-4	-4	-4	-3
			106/53	EHT MCS0	-2	-2	-2	-1.5
			242/61	EHT MCS0	0	0.5	0.5	1
			484/65	EHT MCS0	3	3	3	3
	Middle	6165	26/0	EHT MCS0	-5	-5.5	-6.5	-6.5
			52/37	EHT MCS0	-4	-4	-5	-5
			106/53	EHT MCS0	-2	-2.5	-3	-3
			242/61	EHT MCS0	1	1	0	0
			484/65	EHT MCS0	3	2.5	2	2.5
	Highest	6405	26/17	EHT MCS0	-4	-5	-5	-5
			52/44	EHT MCS0	-3	-3	-3	-3.5
			106/56	EHT MCS0	0	-1	-1	-1
			242/62	EHT MCS0	3	1.5	1.5	1.5
			484/65	EHT MCS0	4	3	3.5	3.5

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be80	Lowest	5985	26/0	EHT MCS0	3.5	4.5	3.5	3.5
			52/37	EHT MCS0	5	4.5	4.5	4.5
			106/53	EHT MCS0	4	4	3.5	3.5
			242/61	EHT MCS0	3	3	3	3.5
			484/65	EHT MCS0	5.5	5.5	5.5	5
			996/67	EHT MCS0	6	5.5	5.5	5.5
	Middle	6145	26/0	EHT MCS0	4.5	3.5	3	3
			52/37	EHT MCS0	5.5	4.5	4	4
			106/53	EHT MCS0	4.5	4	3.5	3
			242/61	EHT MCS0	4	3	2	2.5
			484/65	EHT MCS0	6	5.5	5	5
			996/67	EHT MCS0	6	5.5	4.5	4.5
	Highest	6385	26/0	EHT MCS0	3.5	2.5	4	3
			52/37	EHT MCS0	4.5	4	4	4.5
			106/53	EHT MCS0	3.5	2.5	4	3.5
			242/61	EHT MCS0	3	2.5	2.5	4
			484/65	EHT MCS0	6	5	5	6
			996/67	EHT MCS0	6	5.5	5.5	5.5
be160	Lowest	6025	26/0	EHT MCS0	10	9	9.5	10
			52/37	EHT MCS0	7.5	7.5	7.5	8.5
			106/53	EHT MCS0	6.5	6	6.5	7
			242/61	EHT MCS0	6.5	5.5	6	6.5
			484/65	EHT MCS0	5.5	5	5.5	6
			996/67	EHT MCS0	8.5	7.5	8.5	8.5
			2*996/68	EHT MCS0	9	9	9	9
	Middle	6185	26/0	EHT MCS0	10	10	9	9
			52/37	EHT MCS0	8.5	8	6.5	7
			106/53	EHT MCS0	7.5	6.5	5.5	6
			242/61	EHT MCS0	7	6	5	6
			484/65	EHT MCS0	6	5.5	5.5	5.5
			996/67	EHT MCS0	8.5	7.5	7	8
			2*996/68	EHT MCS0	9	9	8	7.5
	Highest	6345	26/0	EHT MCS0	10	9	9	9.5
			52/37	EHT MCS0	8.5	8	8	7
			106/53	EHT MCS0	7	6	7.5	6.5
			242/61	EHT MCS0	7.5	6	6.5	6.5
			484/65	EHT MCS0	6.5	5.5	5.5	6
			996/67	EHT MCS0	9	7.5	8	8.5
			2*996/68	EHT MCS0	10	9	8.5	9

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be320	Lowest	6105	26/0	EHT MCS0	17.5	17	16.5	17.5
			52/37	EHT MCS0	15	15	13.5	14.5
			106/53	EHT MCS0	12	12.5	11	12
			242/61	EHT MCS0	11.5	11	10.5	11
			484/65	EHT MCS0	10.5	11	9.5	10.5
			996/67	EHT MCS0	11	10.5	9.5	10
			2*996/68	EHT MCS0	13.5	13	12	11.5
			4*996/69	EHT MCS0	13.5	13.5	13	12.5
	Highest	6265	26/0	EHT MCS0	18	18	17.5	17.5
			52/37	EHT MCS0	16	15.5	14.5	14.5
			106/53	EHT MCS0	13.5	13	12	12.5
			242/61	EHT MCS0	12.5	11.5	11.5	11
			484/65	EHT MCS0	11.5	11	11	11
			996/67	EHT MCS0	11	10	9.5	10.5
			2*996/68	EHT MCS0	13	12	11.5	11.5
			4*996/69	EHT MCS0	13.5	13	13	12.5
U-NII 6 Band (6425-6525 MHz):								
be20	Lowest	6435	26/0	EHT MCS0	-9.5	-10	-10	-9.5
			52/37	EHT MCS0	-6.5	-7	-6.5	-6.5
			106/53	EHT MCS0	-3	-4	-4	-4
			242/61	EHT MCS0	0	-1	0	0
	Middle	6475	26/0	EHT MCS0	-8.5	-9	-9	-8.5
			52/37	EHT MCS0	-6	-6.5	-6.5	-6
			106/53	EHT MCS0	-3	-3	-3	-3
			242/61	EHT MCS0	1	0.5	0.5	1
	Highest	6515	26/8	EHT MCS0	-8.5	-9	-8	-8
			52/40	EHT MCS0	-5.5	-6	-5.5	-5.5
			106/54	EHT MCS0	-2.5	-3	-2.5	-2.5
			242/61	EHT MCS0	1	0	1.5	1.5
be40	Lowest	6445	26/0	EHT MCS0	-5	-6	-5	-5
			52/37	EHT MCS0	-3.5	-4	-4	-4
			106/53	EHT MCS0	-1.5	-2	-2	-2
			242/61	EHT MCS0	2	1.5	1	1.5
			484/65	EHT MCS0	4	3	3	4
	Highest	6485	26/17	EHT MCS0	-3.5	-4.5	-4.5	-4.5
			52/44	EHT MCS0	-2	-3	-2.5	-2.5
			106/56	EHT MCS0	-0.5	-1	-1	-1
			242/62	EHT MCS0	2.5	2	2.5	2.5
			484/65	EHT MCS0	5	4	4	5
	Additional	6525	26/0	EHT MCS0	-4	-4.5	-4	-4
			52/37	EHT MCS0	-2.5	-3	-3	-2.5
			106/53	EHT MCS0	-1	-0.5	-0.5	-0.5
			242/61	EHT MCS0	2	2	2	2.5
			484/65	EHT MCS0	5	4.5	5	5

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be80	Middle	6465	26/0	EHT MCS0	3.5	3.5	3.5	4.5
			52/37	EHT MCS0	3.5	2.5	3	4
			106/53	EHT MCS0	2.5	1.5	2.5	3
			242/61	EHT MCS0	2	1.5	2	3
			484/65	EHT MCS0	5	4.5	5	6
			996/67	EHT MCS0	6.5	6.5	6.5	6.5
	Additional	6545	26/0	EHT MCS0	4.5	4.5	4.5	5.5
			52/37	EHT MCS0	4.5	3.5	4	5
			106/53	EHT MCS0	3	3	3.5	4.5
			242/61	EHT MCS0	3	2.5	3.5	4
			484/65	EHT MCS0	5.5	5.5	6	7
			996/67	EHT MCS0	7.5	7.5	7.5	7.5
be160	Additional	6505	26/0	EHT MCS0	10	9	10	11
			52/37	EHT MCS0	8	7.5	7.5	9
			106/53	EHT MCS0	7	6	7	8
			242/61	EHT MCS0	6.5	5.5	5.5	7.5
			484/65	EHT MCS0	6.5	5.5	5.5	7.5
			996/67	EHT MCS0	9	8	9	10
			2*996/68	EHT MCS0	10	9	9	10
			be320	Additional	6425	26/0	EHT MCS0	16
52/37	EHT MCS0	13.5				13.5	14	13.5
106/53	EHT MCS0	11				10.5	11.5	11
242/61	EHT MCS0	10				9.5	10	10
484/65	EHT MCS0	10				9	10	10
996/67	EHT MCS0	9.5				8.5	9	10
2*996/68	EHT MCS0	12.5				11	11	12.5
4*996/69	EHT MCS0	13.5				13	13	12.5
U-NII 7 Band (6525-6875 MHz):								
be20	Lowest	6535	26/0	EHT MCS0	-8.5	-9.5	-9	-8.5
			52/37	EHT MCS0	-6	-6	-6	-5.5
			106/53	EHT MCS0	-3	-3.5	-3	-3
			242/61	EHT MCS0	1	0.5	0.5	1
	Middle	6695	26/0	EHT MCS0	-11	-11.5	-11.5	-12
			52/37	EHT MCS0	-8.5	-8	-9	-9
			106/53	EHT MCS0	-6	-6	-6	-6.5
			242/61	EHT MCS0	-1.5	-2	-2	-2.5
	Highest	6855	26/8	EHT MCS0	-11	-11	-10	-10
			52/40	EHT MCS0	-8	-8	-8	-7.5
			106/54	EHT MCS0	-5	-5	-4.5	-4.5
			242/61	EHT MCS0	-1	-1	-1	-1

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be40	Lowest	6565	26/0	EHT MCS0	-5	-5	-5	-4
			52/37	EHT MCS0	-3.5	-3.5	-3.5	-3
			106/53	EHT MCS0	-1.5	-1.5	-1	-0.5
			242/61	EHT MCS0	2	2	2	2.5
			484/65	EHT MCS0	4	4	4	5
	Middle	6685	26/0	EHT MCS0	-6.5	-6.5	-6.5	-8
			52/37	EHT MCS0	-5.5	-5.5	-5.5	-6.5
			106/53	EHT MCS0	-3.5	-3.5	-3.5	-4.5
			242/61	EHT MCS0	-1	-0.5	-0.5	-1.5
			484/65	EHT MCS0	2	1.5	1.5	1
	Highest	6845	26/17	EHT MCS0	-7	-7	-6	-6.5
			52/44	EHT MCS0	-5	-5.5	-4.5	-5
			106/56	EHT MCS0	-3	-3.5	-3.5	-3
			242/62	EHT MCS0	0	-0.5	0.5	0
			484/65	EHT MCS0	2	2	2.5	3
be80	Lowest	6625	26/0	EHT MCS0	4	4	4	4.5
			52/37	EHT MCS0	4	4	3	4
			106/53	EHT MCS0	3	2.5	2.5	3
			242/61	EHT MCS0	2.5	2.5	1.5	2.5
			484/65	EHT MCS0	4.5	5	4.5	5.5
			996/67	EHT MCS0	6	5.5	4.5	5.5
	Middle	6705	26/0	EHT MCS0	2.5	2.5	2.5	3
			52/37	EHT MCS0	3	2	2	2
			106/53	EHT MCS0	1	1	1.5	1.5
			242/61	EHT MCS0	1	0.5	0.5	1
			484/65	EHT MCS0	3.5	3	3	4
			996/67	EHT MCS0	5	4.5	4.5	4
	Highest	6785	26/0	EHT MCS0	2	1	2	2
			52/37	EHT MCS0	1.5	0.5	1	1
			106/53	EHT MCS0	0	-0.5	0.5	0
			242/61	EHT MCS0	0	-1	0	0
			484/65	EHT MCS0	2.5	2	3	2.5
			996/67	EHT MCS0	4	3.5	4	4
	Additional	6865	26/0	EHT MCS0	2.5	2.5	3.5	2
			52/37	EHT MCS0	1.5	2	3	2
			106/53	EHT MCS0	1	1	2.5	0.5
			242/61	EHT MCS0	1.5	1	1.5	0.5
			484/65	EHT MCS0	3.5	4	4.5	3
			996/67	EHT MCS0	6	5	6	6

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be160	Middle	6665	26/0	EHT MCS0	10.5	10.5	10	11
			52/37	EHT MCS0	9	9	8	9
			106/53	EHT MCS0	7.5	6.5	7	7
			242/61	EHT MCS0	7	6.5	6	6.5
			484/65	EHT MCS0	6.5	6.5	6	6.5
			996/67	EHT MCS0	8.5	8	8	8
			2*996/68	EHT MCS0	9	8	8	8
	Additional	6825	26/0	EHT MCS0	7.5	7	8	8
			52/37	EHT MCS0	6	5	6	6
			106/53	EHT MCS0	4.5	4	4.5	4.5
			242/61	EHT MCS0	4	3.5	4.5	4
			484/65	EHT MCS0	4	3.5	4.5	4
			996/67	EHT MCS0	7	6	7	6
			2*996/68	EHT MCS0	8	7	8	7.5
be320	Lowest	6585	26/0	EHT MCS0	17	17	18	19
			52/37	EHT MCS0	14.5	14.5	15	16.5
			106/53	EHT MCS0	11.5	12	13	14
			242/61	EHT MCS0	10.5	10.5	10	13
			484/65	EHT MCS0	10.5	10	11	12.5
			996/67	EHT MCS0	10.5	10	10	12.5
			2*996/68	EHT MCS0	13	12.5	13	15
			4*996/69	EHT MCS0	13.5	13.5	14	14.5
	Highest	6745	26/0	EHT MCS0	17.5	17.5	18	18
			52/37	EHT MCS0	15	15	15.5	15
			106/53	EHT MCS0	12	12.5	13	13
			242/61	EHT MCS0	11.5	11.5	11.5	11.5
			484/65	EHT MCS0	10.5	11	11	11
			996/67	EHT MCS0	10.5	10	10	11
			2*996/68	EHT MCS0	10.5	10.5	11	10.5
			4*996/69	EHT MCS0	12.5	12.5	13	11

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
U-NII 8 Band (6875-7125 MHz):								
be20	Additional	6875	26/0	EHT MCS0	-10.5	-11	-10.5	-10
			52/37	EHT MCS0	-7.5	-8	-7.5	-8
			106/53	EHT MCS0	-4.5	-5	-4	-4.5
			242/61	EHT MCS0	-1.5	-1.5	-0.5	-1
	Lowest	6895	26/0	EHT MCS0	-10.5	-11	-10	-10
			52/37	EHT MCS0	-7.5	-8	-7	-8
			106/53	EHT MCS0	-4.5	-5	-4	-4.5
			242/61	EHT MCS0	-1.5	-1.5	-0.5	-0.5
	Middle	6995	26/0	EHT MCS0	-10.5	-10	-10	-9.5
			52/37	EHT MCS0	-7.5	-7	-7	-6.5
			106/53	EHT MCS0	-4.5	-4	-4	-4
			242/61	EHT MCS0	-2	-1.5	-1	-1.5
	Highest	7095	26/8	EHT MCS0	-10.5	-10	-10	-10
			52/40	EHT MCS0	-7.5	-7	-7	-7
			106/54	EHT MCS0	-4.5	-3.5	-4	-4.5
			242/61	EHT MCS0	-2	-1	-1	-1
be40	Additional	6885	26/0	EHT MCS0	-6	-6.5	-6.5	-6
			52/37	EHT MCS0	-5	-5.5	-5	-5
			106/53	EHT MCS0	-3	-3.5	-3	-3
			242/61	EHT MCS0	0	0	1.5	0.5
			484/65	EHT MCS0	2	2.5	2.5	2.5
	Lowest	6925	26/0	EHT MCS0	1	1	2.5	0.5
			52/37	EHT MCS0	0	-0.5	0	-1.5
			106/53	EHT MCS0	-2	-2	-1	-2
			242/61	EHT MCS0	0.5	0.5	1.5	0.5
			484/65	EHT MCS0	3	2.5	2.5	3
	Middle	7005	26/0	EHT MCS0	1.5	2	2.5	0.5
			52/37	EHT MCS0	-0.5	0.5	0.5	-1.5
			106/53	EHT MCS0	-1	-1	-0.5	-2
			242/61	EHT MCS0	0.5	1	1	0
			484/65	EHT MCS0	2	2.5	2.5	2.5
	Highest	7085	26/17	EHT MCS0	1.5	1.5	2.5	-1
			52/44	EHT MCS0	0	0.5	0.5	2
			106/56	EHT MCS0	-1	-0.5	-0.5	-3
			242/62	EHT MCS0	1	2	2	-0.5
			484/65	EHT MCS0	2	2.5	3	2.5

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be80	Lowest	6945	26/0	EHT MCS0	3.5	3	3.5	2.5
			52/37	EHT MCS0	2.5	2.5	3	2.5
			106/53	EHT MCS0	1.5	1.5	2.5	1
			242/61	EHT MCS0	1.5	1.5	1.5	1
			484/65	EHT MCS0	4	3.5	4.5	3.5
			996/67	EHT MCS0	5.5	6	6.5	6.5
	Highest	7025	26/0	EHT MCS0	3.5	4	4.5	3
			52/37	EHT MCS0	3	3.5	3.5	2.5
			106/53	EHT MCS0	2	2.5	3	1
			242/61	EHT MCS0	1	1.5	1.5	0.5
			484/65	EHT MCS0	3.5	4	4	3
			996/67	EHT MCS0	5.5	6	6	6
be160	Middle	6985	26/0	EHT MCS0	9	8.5	9.5	8.5
			52/37	EHT MCS0	7	7	8	7
			106/53	EHT MCS0	6	5	6.5	5.5
			242/61	EHT MCS0	6	5.5	6	5
			484/65	EHT MCS0	5.5	5	6	5
			996/67	EHT MCS0	8	8	9	7.5
			2*996/68	EHT MCS0	8.5	8.5	9	9
be320	Additional	6905	26/0	EHT MCS0	14.5	15	16.5	17
			52/37	EHT MCS0	12.5	12.5	13.5	14.5
			106/53	EHT MCS0	10	10	11	11.5
			242/61	EHT MCS0	9	9	10	10.5
			484/65	EHT MCS0	9	9	9.5	10
			996/67	EHT MCS0	8	8	9.5	8
			2*996/68	EHT MCS0	12	11	11	10.5
			4*996/69	EHT MCS0	12.5	12.5	13.5	13

MRU Power Level Setting:

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
U-NII 5 Band(5925-6425 MHz):								
be20	Lowest	5955	MRU1 52+26	EHT MCS0	-6	-6.5	-6	-5.5
			MRU1 106+26	EHT MCS0	-3.5	-4	-4	-4
	Middle	6175	MRU1 52+26	EHT MCS0	-6	-6.5	-7.5	-6
			MRU1 106+26	EHT MCS0	-4	-4	-5	-4
	Highest	6415	MRU3 52+26	EHT MCS0	-4	-5.5	-5.5	-4.5
			MRU2 106+26	EHT MCS0	-2	-3	-3	-2
be40	Lowest	5965	MRU1 52+26	EHT MCS0	-1	-1	-1	-0.5
			MRU1 106+26	EHT MCS0	-0.5	-0.5	-0.5	0
	Middle	6165	MRU1 52+26	EHT MCS0	-1	-1.5	-2	-1
			MRU1 106+26	EHT MCS0	-0.5	-1	-2	-1
	Highest	6405	MRU6 52+26	EHT MCS0	1	-0.5	-0.5	1
			MRU4 106+26	EHT MCS0	1.5	0	0	1
be80	Lowest	5985	MRU2 52+26	EHT MCS0	3	3	2.5	3
			MRU1 106+26	EHT MCS0	3	2.5	2.5	3
			MRU4 484+242	EHT MCS0	5.5	5	5.5	5.5
	Middle	6145	MRU2 52+26	EHT MCS0	4	3	2	2
			MRU1 106+26	EHT MCS0	3.5	3	2	2
			MRU4 484+242	EHT MCS0	6	5	5	5.5
	Highest	6385	MRU11 52+26	EHT MCS0	4.5	3	3	4.5
			MRU8 106+26	EHT MCS0	4.5	3.5	3.5	5
			MRU1 484+242	EHT MCS0	6	5.5	5.5	7

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be160	Lowest	6025	MRU2 52+26	EHT MCS0	6	7	6	7
			MRU1 106+26	EHT MCS0	7	6	6	7
			MRU8 484+242	EHT MCS0	7	6.5	6.5	7
			MRU4 996+484	EHT MCS0	9.5	8.5	9.5	9.5
			MRU8 996+484+242	EHT MCS0	10	9.5	10	10
	Middle	6185	MRU2 52+26	EHT MCS0	7	7	7	6
			MRU1 106+26	EHT MCS0	8	6.5	6	5.5
			MRU8 484+242	EHT MCS0	7	7	6	7
			MRU4 996+484	EHT MCS0	9	8.5	8	9
			MRU8 996+484+242	EHT MCS0	10	9.5	9	9.5
	Highest	6345	MRU23 52+26	EHT MCS0	9	7	8	9.5
			MRU16 106+26	EHT MCS0	10.5	8.5	7.5	9.5
			MRU1 484+242	EHT MCS0	9.5	7.5	7.5	9
			MRU1 996+484	EHT MCS0	10.5	9.5	9	10
			MRU1 996+484+242	EHT MCS0	11	9.5	9.5	10
be320	Lowest	6105	MRU2 52+26	EHT MCS0	11	11	10.5	11.5
			MRU1 106+26	EHT MCS0	12.5	12.5	11.5	12.5
			MRU16 484+242	EHT MCS0	10.5	11	10	10.5
			MRU8 996+484	EHT MCS0	12	11.5	11.5	11
			MRU16 996+484+242	EHT MCS0	11.5	11.5	11	10.5
			MRU6 996*2+484	EHT MCS0	13	13	12.5	13
			MRU4 996*2+996	EHT MCS0	13	13.5	12.5	13.5
			MRU8 996*2+996+484	EHT MCS0	13.5	13.5	12.5	13.5
	Highest	6265	MRU47 52+26	EHT MCS0	14	13	14	13.5
			MRU32 106+26	EHT MCS0	14.5	15.5	14.5	14
			MRU1 484+242	EHT MCS0	12.5	13	12.5	11.5
			MRU1 996+484	EHT MCS0	11.5	12	10	10
			MRU1 996+484+242	EHT MCS0	12.5	11.5	11.5	12
			MRU7 996*2+484	EHT MCS0	11.5	12	12.5	11
			MRU1 996*2+996	EHT MCS0	13	12.5	13	13.5
			MRU1 996*2+996+484	EHT MCS0	14	13.5	14.5	13

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
U-NII 6 Band (6425-6525 MHz)								
be20	Lowest	6435	MRU1 52+26	EHT MCS0	-5.5	-6	-5.5	-4
			MRU1 106+26	EHT MCS0	-3	-3.5	-3	-2
	Middle	6475	MRU1 52+26	EHT MCS0	-4.5	-5	-5	-3.5
			MRU1 106+26	EHT MCS0	-2.5	-3	-2.5	-1.5
	Highest	6515	MRU3 52+26	EHT MCS0	-5	-5	-4.5	-3.5
			MRU2 106+26	EHT MCS0	-2.5	-2.5	-2	-1
be40	Lowest	6445	MRU1 52+26	EHT MCS0	-0.5	-1	-0.5	1
			MRU1 106+26	EHT MCS0	0	-1	-0.5	1
	Highest	6485	MRU6 52+26	EHT MCS0	1	0	0.5	1.5
			MRU4 106+26	EHT MCS0	1.5	0.5	0.5	1.5
	Additional	6525	MRU6 52+26	EHT MCS0	1	0.5	1	2
			MRU4 106+26	EHT MCS0	1.5	0.5	1	1.5
be80	Middle	6465	MRU2 52+26	EHT MCS0	3	2	3	4
			MRU1 106+26	EHT MCS0	3	3	2.5	4
			MRU4 484+242	EHT MCS0	6.5	5	6	7
	Additional	6545	MRU11 52+26	EHT MCS0	4.5	3.5	4	5.5
			MRU8 106+26	EHT MCS0	4.5	4	4.5	5.5
			MRU1 484+242	EHT MCS0	7.5	7.5	7.5	8.5
be160	Additional	6505	MRU23 52+26	EHT MCS0	7	7.5	8.5	8
			MRU16 106+26	EHT MCS0	9.5	8	9	9.5
			MRU1 484+242	EHT MCS0	9.5	8.5	9	10
			MRU1 996+484	EHT MCS0	11.5	10.5	11	12
			MRU1 996+484+242	EHT MCS0	11	10.5	11	11.5
be320	Additional	6425	MRU2 52+26	EHT MCS0	10	9	11	10
			MRU1 106+26	EHT MCS0	11.5	11	11.5	11.5
			MRU16 484+242	EHT MCS0	10	9	10	9.5
			MRU8 996+484	EHT MCS0	11	10	11.5	11
			MRU16 996+484+242	EHT MCS0	11	10	10.5	11
			MRU6 996*2+484	EHT MCS0	13	12	12	13
			MRU4 996*2+996	EHT MCS0	13.5	12.5	13	13.5
			MRU8 996*2+996+484	EHT MCS0	13.5	13	13	13.5

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
U-NII 7 Band (6525-6875 MHz)								
be20	Lowest	6535	MRU1 52+26	EHT MCS0	-4	-5	-4.5	-3
			MRU1 106+26	EHT MCS0	-2.5	-3	-2.5	-1
	Middle	6695	MRU1 52+26	EHT MCS0	-7	-7	-7	-7
			MRU1 106+26	EHT MCS0	-5	-5	-4.5	-4.5
	Highest	6855	MRU3 52+26	EHT MCS0	-6.5	-6.5	-5.5	-6.5
			MRU2 106+26	EHT MCS0	-4	-4.5	-3.5	-5.5
be40	Lowest	6565	MRU1 52+26	EHT MCS0	0	0	0	1.5
			MRU1 106+26	EHT MCS0	0	0	0.5	2
	Middle	6685	MRU1 52+26	EHT MCS0	-2	-2	-2	-1.5
			MRU1 106+26	EHT MCS0	-2	-2	-2	-2
	Highest	6845	MRU6 52+26	EHT MCS0	-1.5	-1.5	-0.5	-2.5
			MRU4 106+26	EHT MCS0	-1	-1	-1.5	-2.5
be80	Lowest	6625	MRU2 52+26	EHT MCS0	3.5	3	3	3.5
			MRU1 106+26	EHT MCS0	3	3	3.5	3.5
			MRU4 484+242	EHT MCS0	6	6	5.5	7
	Middle	6705	MRU2 52+26	EHT MCS0	1.5	2	1.5	2
			MRU1 106+26	EHT MCS0	1.5	1	1.5	1
			MRU4 484+242	EHT MCS0	5	4.5	5	5
	Highest	6785	MRU11 52+26	EHT MCS0	1.5	1	1.5	1
			MRU8 106+26	EHT MCS0	2	1.5	2	1.5
			MRU1 484+242	EHT MCS0	4	4	4	4
	Additional	6865	MRU11 52+26	EHT MCS0	2.5	2.5	2.5	2.5
			MRU8 106+26	EHT MCS0	2	2.5	2.5	3
			MRU1 484+242	EHT MCS0	5	5	5	5

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
be160	Middle	6665	MRU2 52+26	EHT MCS0	7	8	7	8
			MRU1 106+26	EHT MCS0	8	8	7.5	7.5
			MRU8 484+242	EHT MCS0	8	8	6.5	8
			MRU4 996+484	EHT MCS0	9	9	8	9
			MRU8 996+484+242	EHT MCS0	9.5	9	9	9.5
	Additional	6825	MRU23 52+26	EHT MCS0	6	5	5.5	4
			MRU16 106+26	EHT MCS0	7	7	8	5.5
			MRU1 484+242	EHT MCS0	7	6	7	5.5
			MRU1 996+484	EHT MCS0	8.5	7.5	9	7.5
			MRU1 996+484+242	EHT MCS0	8.5	8	9	8
be320	Lowest	6585	MRU2 52+26	EHT MCS0	11	10.5	10.5	10
			MRU1 106+26	EHT MCS0	12	12	12.5	14
			MRU16 484+242	EHT MCS0	10.5	10	11.5	12.5
			MRU8 996+484	EHT MCS0	12	11.5	12	13.5
			MRU16 996+484+242	EHT MCS0	12	11.5	12	13
			MRU6 996*2+484	EHT MCS0	13.5	13	13.5	15.5
			MRU4 996*2+996	EHT MCS0	13.5	13.5	13.5	16
			MRU8 996*2+996+484	EHT MCS0	13.5	13.5	13.5	16
	Highest	6745	MRU47 52+26	EHT MCS0	11	11.5	11	10.5
			MRU32 106+26	EHT MCS0	12.5	13	12.5	12.5
			MRU1 484+242	EHT MCS0	10.5	10	10	9.5
			MRU1 996+484	EHT MCS0	9.5	9.5	10	9
			MRU1 996+484+242	EHT MCS0	10.5	9.5	10.5	9.5
			MRU7 996*2+484	EHT MCS0	11.5	11.5	12	11.5
			MRU1 996*2+996	EHT MCS0	12	11	12.5	11.5
			MRU1 996*2+996+484	EHT MCS0	12.5	12	12	11

Test Modes	Test Channels	Test Frequency (MHz)	Tones/ RU Index	Data rate	Power Level Setting			
					Chain 0	Chain 1	Chain 2	Chain 3
U-NII 8 Band (6875-7125 MHz)								
be20	Additional	6875	MRU 52+26	EHT MCS0	-6	-6.5	-5.5	-6.5
			MRU 106+26	EHT MCS0	-4	-4.5	-3.5	-4.5
	Lowest	6895	MRU 52+26	EHT MCS0	-6	-6	-5.5	-7
			MRU 106+26	EHT MCS0	-4	-4.5	-3.5	-4.5
	Middle	6995	MRU 52+26	EHT MCS0	-6	-5.5	-5.5	-6
			MRU 106+26	EHT MCS0	-3.5	-3.5	-2.5	-4
	Highest	7095	MRU 52+26	EHT MCS0	-6.5	-5.5	-5.5	-7.5
			MRU 106+26	EHT MCS0	-4.5	-3.5	-3.5	-5.5
be40	Additional	6885	MRU6 52+26	EHT MCS0	-1.5	-1.5	0	-1.5
			MRU4 106+26	EHT MCS0	-1	-0.5	-0.5	-1.5
	Lowest	6925	MRU1 52+26	EHT MCS0	-1.5	-1.5	-1	-2
			MRU1 106+26	EHT MCS0	-1.5	-1.5	-0.5	-2
	Middle	7005	MRU1 52+26	EHT MCS0	-1.5	-1	-0.5	-1.5
			MRU1 106+26	EHT MCS0	-1.5	-0.5	0	-1.5
	Highest	7085	MRU6 52+26	EHT MCS0	-1.5	-0.5	-0.5	-3
			MRU4 106+26	EHT MCS0	-1	-0.5	0	-2.5
be80	Lowest	6945	MRU2 52+26	EHT MCS0	2	2	2.5	1.5
			MRU1 106+26	EHT MCS0	2.5	3	2	3
			MRU4 484+242	EHT MCS0	5.5	5.5	5	5
	Highest	7025	MRU11 52+26	EHT MCS0	2.5	4	2.5	4
			MRU8 106+26	EHT MCS0	3	4.5	3.5	1.5
			MRU1 484+242	EHT MCS0	5.5	5.5	5.5	4.5
be160	Middle	6985	MRU2 52+26	EHT MCS0	6.5	6	7	5.5
			MRU1 106+26	EHT MCS0	6	6	7	5.5
			MRU8 484+242	EHT MCS0	7	7	7.5	6.5
			MRU4 996+484	EHT MCS0	8.5	9	10	8.5
			MRU8 996+484+242	EHT MCS0	9.5	10	10	9
be320	Additional	6905	MRU2 52+26	EHT MCS0	9	9.5	9	8
			MRU1 106+26	EHT MCS0	10	10	10.5	11
			MRU16 484+242	EHT MCS0	9	9	9.5	9
			MRU8 996+484	EHT MCS0	10	10.5	10.5	9
			MRU16 996+484+242	EHT MCS0	10	9.5	10.5	8.5
			MRU6 996*2+484	EHT MCS0	12	12	12	11
			MRU4 996*2+996	EHT MCS0	13	12.5	12.5	11.5
			MRU8 996*2+996+484	EHT MCS0	13.5	12.5	13	12

Note 1: The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations.

Note 2: The device supports SISO and MIMO in all modes, per pretest, 4T5R mode was the worst mode and reported for 802.11ax and 802.11 be mode.

Note 3: The full and partial RU was used to test Conducted Transmitter Output Power and Power Spectral Density, other test items used full RU to test.

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

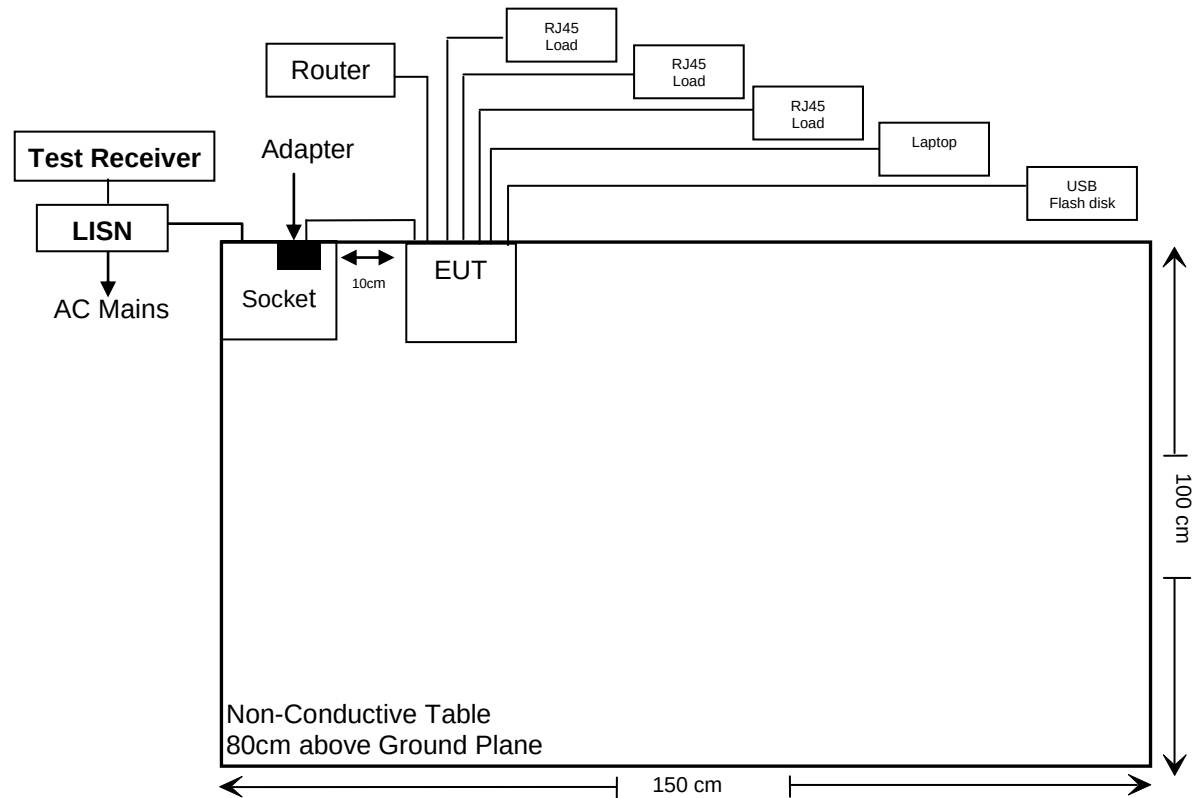
Manufacturer	Description	Model	Serial Number
Grand stream Networks, Inc	Router	GWN7665 (FCC ID: YZZGWN7665)	C074AB240E1B
unknown	RJ45 Load*3	unknown	unknown
LENOVO	Laptop	ThinkPad x240	SL10F31638JS
Kingston	USB Flash Disk	32G	unknown

External I/O Cable

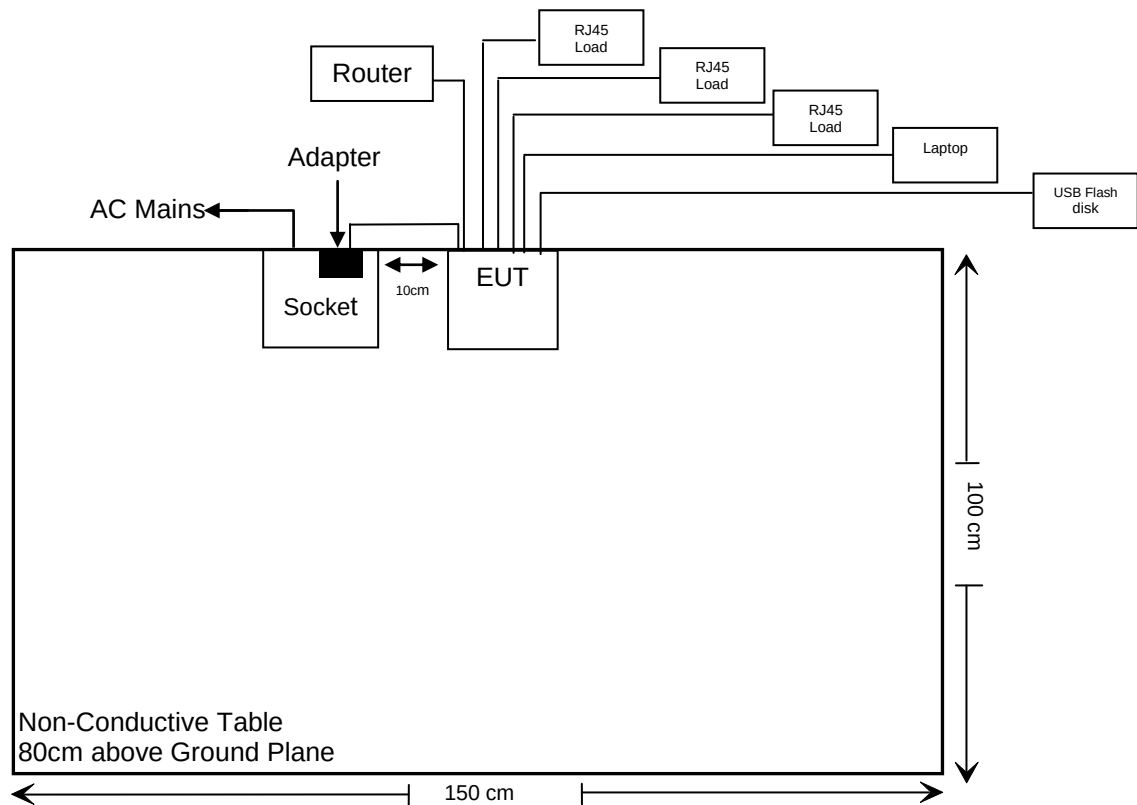
Cable Description	Shielding Type	Length (m)	From Port	To
DC Cable	No	1.5	EUT	Adapter
RJ45 Cable	Yes	5	EUT	Router
RJ45 Cable*3	No	5	EUT	RJ45 Load
RJ45 Cable	No	5	EUT	Laptop
USB Cable	No	1.8	EUT	USB Flash Disk

Block Diagram of Test Setup

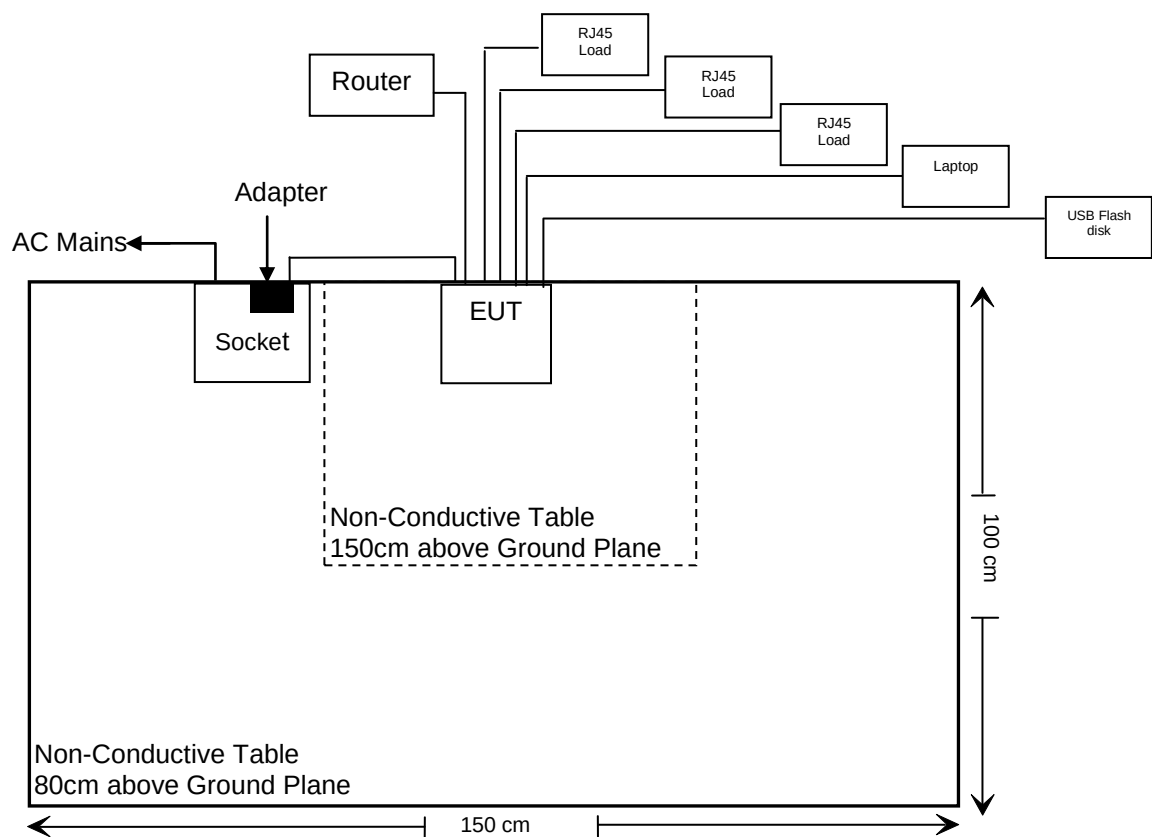
For Conducted Emission:



For Radiated Emission Below 1GHz:



For Radiated Emission Above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.407 (f); §1.1310; §2.1091	Maximum Permissible Exposure(MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.407(b)(9); §15.207(a)	Conducted Emissions	Compliance
§15.205; §15.209 §15.407(b)	Undesirable Emission & Restricted Bands	Compliance
§15.407(a)(11)	26 dB Emission Bandwidth & 99% Occupied bandwidth	Compliance
§15.407(a)(5)	Conducted Transmitter Output Power	Compliance
§15.407(a)(5)	Power Spectral Density	Compliance
§15.407(b)(7)	In-Band Emissions	Compliance
§15.407(d)(6)	Contention Based Protocol	Compliance

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Spurious Emission Test(Below 1GHz)					
Rohde & Schwarz	Test Receiver	ESR	102725	2025/09/18	2026/09/17
SONOMA INSTRUMENT	Amplifier	310N	186131	2025/03/26	2026/03/25
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2024/08/08	2027/08/07
Unknown	RF Coaxial Cable	No.12	N040	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.13	N300	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.14	N800	2025/05/30	2026/05/29
BACL	LOOP ANTENNA	1313-1A	3110711	2024/01/16	2027/01/15
Test Software: e3 191218 (V9)					
Radiated Spurious Emission Test(Above 1GHz)					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2025/09/17	2026/09/16
Decentest	Filter Switch Unit	DT7220FSU	DQ77927	2025/09/18	2026/09/17
Decentest	Multiplex Switch Test Control Set	DT7220CSU	DQ77924	2025/09/18	2026/09/17
COM-MW	Band Reject Filter	K6	01252003	2025/10/13	2026/10/12
A.H. Systems, inc.	Preamplifier	PAM-0118	226	2025/03/20	2026/03/19
Schwarzbeck	Horn Antenna	BBHA9120D	837	2023/02/22	2026/02/21
Unknown	RF Coaxial Cable	No.10	N050	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.11	N1000	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.19	N500	2025/05/30	2026/05/29
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2023/12/12	2026/12/11
BACL	Amplifier	BACL-1313-A1840	4012521	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.15	N600	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.16	N650	2025/05/30	2026/05/29
Test Software: e3 191218 (V9)					
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101948	2025/09/18	2026/09/17
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101590	2025/09/17	2026/09/16
Anritsu	Microwave Peak Power Sensor	MA24418A	12619	2025/03/26	2026/03/25
Agilent	10dB Attenuator	8491B	A5825	2025/09/18	2026/09/17
Test Software: JDAutoTestSystem V1.0.0					

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §1.1310,15.247(i) and 15.407(f) systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

TABLE 1 TO § 1.1310(E)(1)—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*(900/f ²)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f ²)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

*f = frequency in MHz. * = Plane-wave equivalent power density.*

Calculated Formulary:

According to §1.1310 and §2.1091 RF exposure is calculated.

- Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

- For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Result:

Operation Modes	Frequency (MHz)	Antenna Gain [#]		Conducted output power including Tune-up Tolerance [#]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	5.08	3.22	1.0	1.26	20.00	0.001	1.0
2.4G WIFI	2412-2462	4.92	3.10	22.5	177.83	20.00	0.110	1.0
5G WIFI	5150-5250	4.98	3.15	21.0	125.89	20.00	0.079	1.0
	5250-5350	4.98	3.15	20.5	112.20	20.00	0.070	1.0
	5470-5725	4.98	3.15	18.5	70.79	20.00	0.044	1.0
	5725-5850	4.98	3.15	20.5	112.20	20.00	0.070	1.0
6G WIFI	5925-6425	4.98	3.15	20.5	112.20	20.00	0.070	1.0
	6425-6525	4.98	3.15	20.0	100.00	20.00	0.063	1.0
	6525-6875	4.98	3.15	20.5	112.20	20.00	0.070	1.0
	6875-7125	4.98	3.15	20.5	112.20	20.00	0.070	1.0

Note 1: The Antenna Gain and Conducted output power including Tune-up Tolerance provided by manufacturer.

Note 2: The BLE, 2.4G WIFI, 5G WIFI, 6G WIFI can transmit simultaneously.

Simultaneous transmitting consideration (worst case):

$$\begin{aligned} \text{The ratio} &= S_{BLE} / S_{limit-BLE} + S_{2.4G\ Wifi} / S_{limit-2.4G\ Wifi} + S_{5G\ Wifi} / S_{limit-5G\ Wifi} + S_{6G\ Wifi} / S_{limit-6G\ Wifi} \\ &= 0.001/1.0 + 0.11/1.0 + 0.079/1.0 + 0.07/1.0 \\ &= 0.26 \\ &< 1.0 \end{aligned}$$

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliance

ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- Antenna must be permanently attached to the unit.
- Antenna must use a unique type of connector to attach to the EUT.
- Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has four internal TX antenna arrangements for 6G Wi-Fi, which were permanently attached. Please refer to the EUT photos.

Frequency Range	Antenna	Antenna Gain [#]	Impedance
5925-6425 MHz	Ant0	4.53 dBi	50Ω
6425-6525 MHz	Ant1	4.45 dBi	50Ω
6525-6875 MHz	Ant2	4.98 dBi	50Ω
6875-7125 MHz	Ant3	4.78 dBi	50Ω

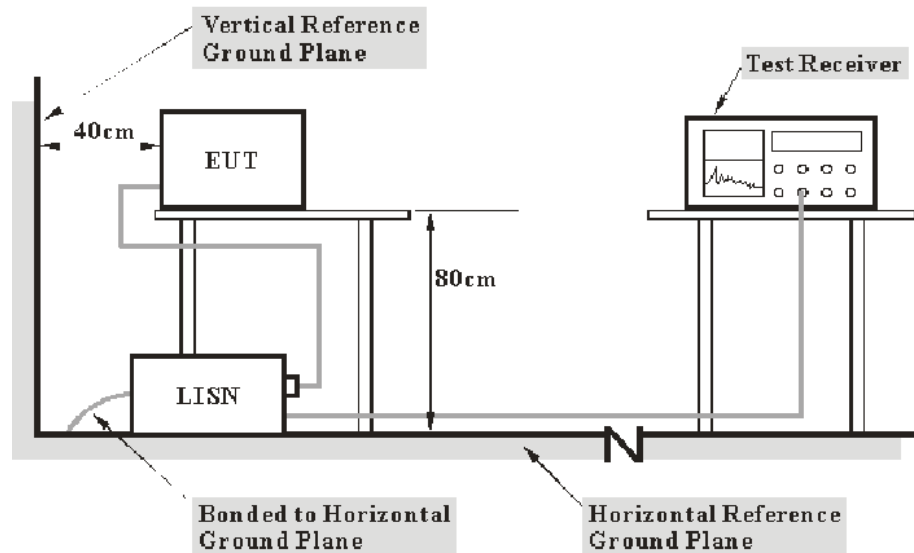
Result: Compliant.

CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a), §15.407(b) (9)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss} + 10\text{dB Attenuation(Limiter)}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\text{Over Limit} = \text{Level} - \text{Limit}$$

$$\text{Level} = \text{Read Level} + \text{Factor}$$

Test Data

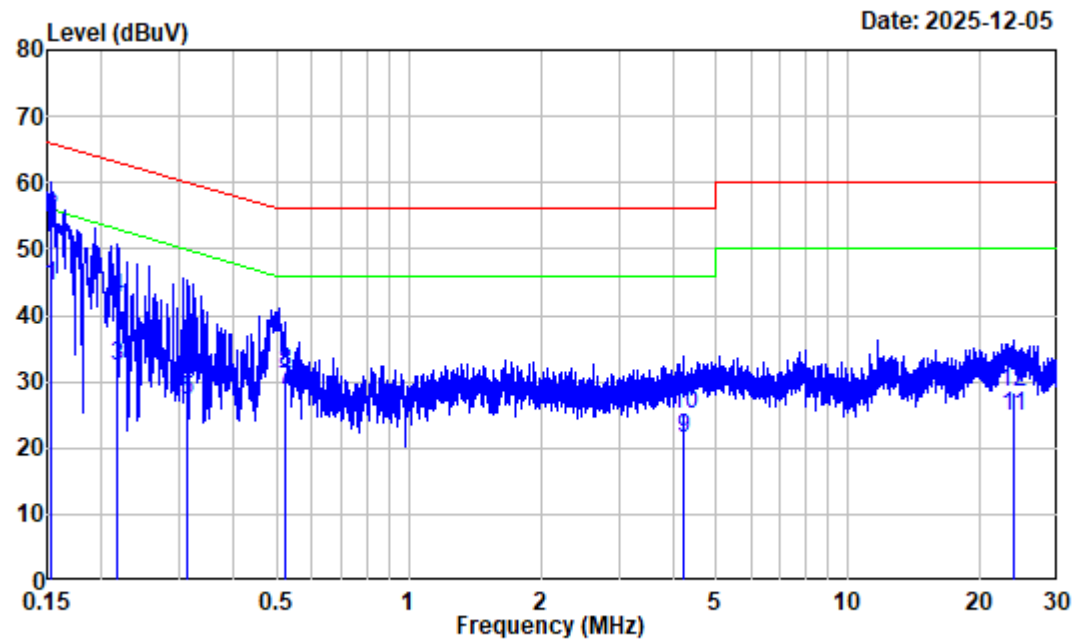
Environmental Conditions

Temperature:	23.9 °C
Relative Humidity:	43 %
ATM Pressure:	100.9 kPa
Test Engineer:	Jason Fan
Test Date:	2025-12-05
EUT Operation Mode:	Transmitting

Test Result: Compliance, please refer to the below data.

Note: The maximum output power mode and channel: 802.11be320 Additional Channel 6745MHz was tested.

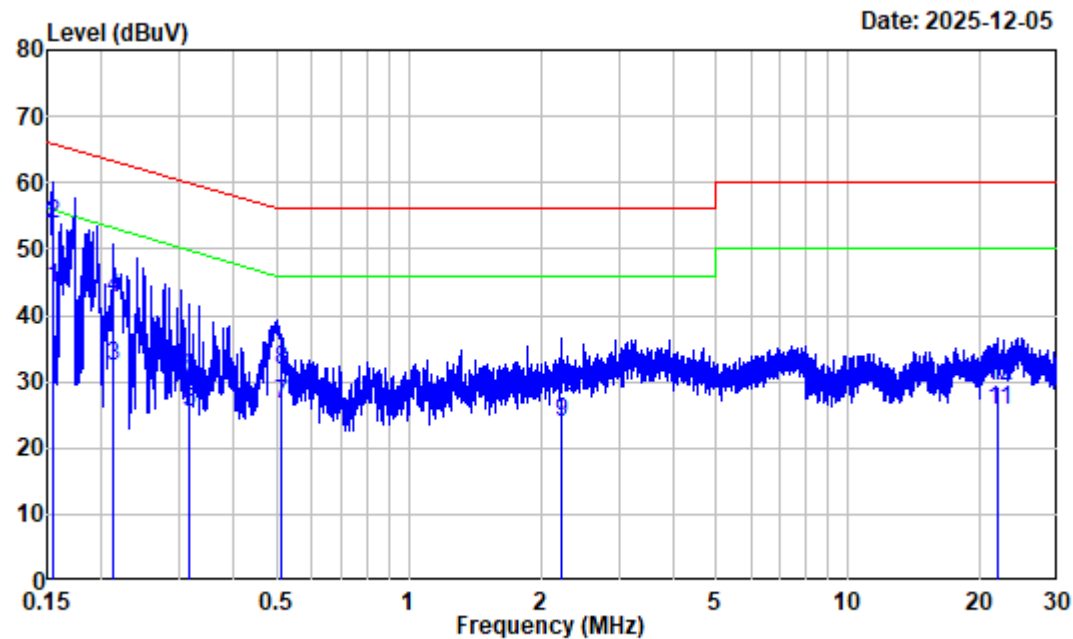
AC 120V/60Hz, Line:



Site : Shielding Room
Condition : Line
Job No. : 2504Z00193E-RF
Test Mode : Transmitting
Tester : Jason Fan
Receiver Setting: IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.153	19.97	24.51	44.48	55.86	-11.38	Average
2	0.153	19.97	34.72	54.69	65.86	-11.17	QP
3	0.217	19.98	12.25	32.23	52.93	-20.70	Average
4	0.217	19.98	22.59	42.57	62.93	-20.36	QP
5	0.312	19.97	7.19	27.16	49.92	-22.76	Average
6	0.312	19.97	13.94	33.91	59.92	-26.01	QP
7	0.525	20.03	8.71	28.74	46.00	-17.26	Average
8	0.525	20.03	11.44	31.47	56.00	-24.53	QP
9	4.213	21.53	-0.16	21.37	46.00	-24.63	Average
10	4.213	21.53	3.52	25.05	56.00	-30.95	QP
11	23.699	24.34	0.53	24.87	50.00	-25.13	Average
12	23.699	24.34	4.13	28.47	60.00	-31.53	QP

AC 120V/60Hz, Neutral:



Site : Shielding Room
Condition : Neutral
Job No. : 2504Z00193E-RF
Test Mode : Transmitting
Tester : Jason Fan
Receiver Setting: IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.154	19.86	24.07	43.93	55.77	-11.84	Average
2	0.154	19.86	33.97	53.83	65.77	-11.94	QP
3	0.213	19.92	12.32	32.24	53.09	-20.85	Average
4	0.213	19.92	22.79	42.71	63.09	-20.38	QP
5	0.315	19.97	5.36	25.33	49.84	-24.51	Average
6	0.315	19.97	10.43	30.40	59.84	-29.44	QP
7	0.510	20.03	6.46	26.49	46.00	-19.51	Average
8	0.510	20.03	11.70	31.73	56.00	-24.27	QP
9	2.215	20.98	2.99	23.97	46.00	-22.03	Average
10	2.215	20.98	6.79	27.77	56.00	-28.23	QP
11	21.961	24.24	1.35	25.59	50.00	-24.41	Average
12	21.961	24.24	5.01	29.25	60.00	-30.75	QP

UNDESIRABLE EMISSION & RESTRICTED BANDS

Applicable Standard

FCC§15.205; §15.209; §15.407 (b)

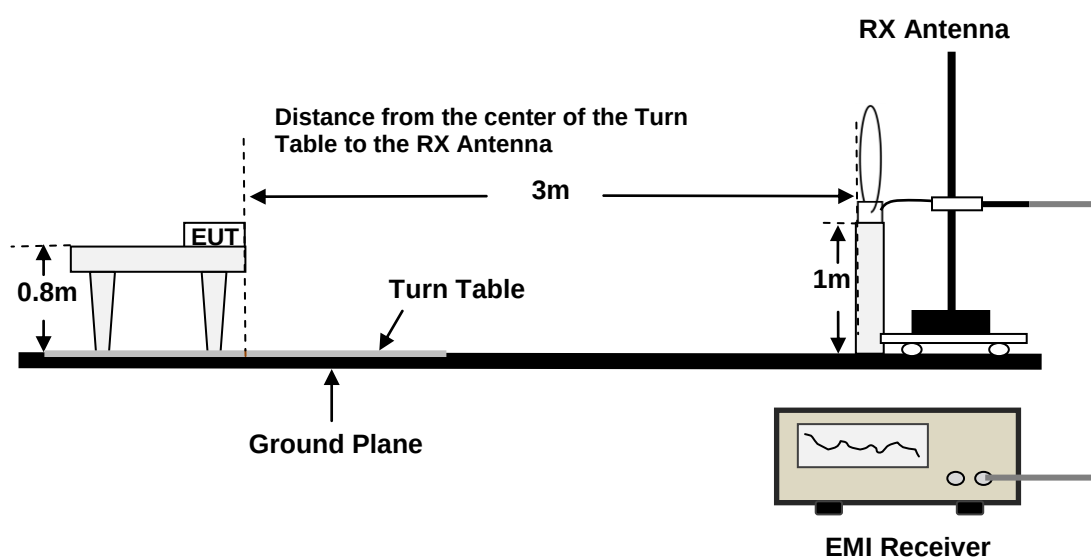
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(6) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

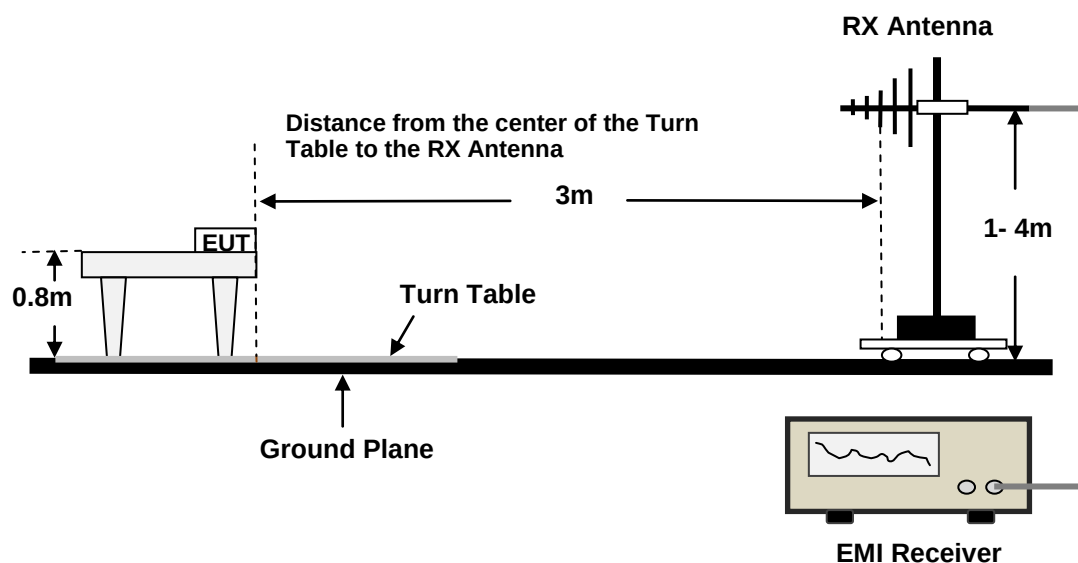
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

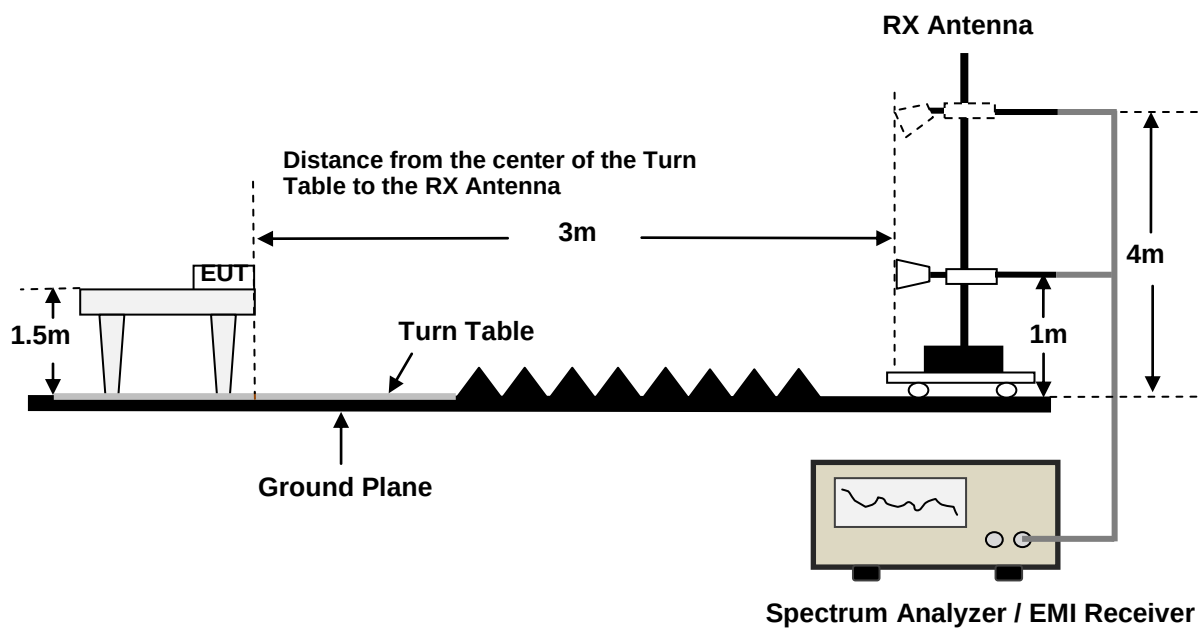
9kHz - 30MHz:



30MHz - 1GHz:



Above 1GHz:



The radiated emission performed in the 3 meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9kHz to 40GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

9kHz - 1000MHz:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
9kHz - 150kHz	PK	0.3kHz	1kHz	/	PK
	QP/AV	/	/	200Hz	QP/AV
150kHz - 30MHz	PK	10kHz	30kHz	/	PK
	QP/AV	/	/	9kHz	QP/AV
30MHz - 1000MHz	PK	100kHz	300kHz	/	PK
	QP	/	/	120kHz	QP

1GHz - 40GHz:

Pre-scan:

Measurement	Detector	Duty cycle	RBW	Video B/W
PK	Peak	Any	1MHz	3MHz
Ave.	Peak	>98%	1MHz	3kHz/5kHz
		<98%	1MHz	≥1/T, no less than 3kHz

Final measurement for emission identified during the pre-scan:

Measurement	Detector	Duty cycle	RBW	Video B/W
PK	Peak	Any	1MHz	3MHz
Ave.	Peak	>98%	1MHz	10Hz
		<98%	1MHz	≥1/T

Note 1: T is minimum transmission duration

Note 2: The 1GHz-8GHz testing use the notch filter and the 8GHz-18GHz testing use high-pass filter.

Note 3: The band edge testing use 10dB attenuator.

Note 4: The filters and attenuators are all integrated within the filter switch unit.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

According to ANSI C63.10-2020, 9.2: For field strength measurements made at other than the distance specified by the limit, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance).

$$E_{SpecLimit} = E_{Meas} + 20 \log \left(\frac{D_{Meas}}{D_{SpecLimit}} \right)$$

where

$E_{SpecLimit}$	is the field strength of the emission at the distance specified by the limit, in dBuV/m
E_{Meas}	is the field strength of the emission at the measurement distance, in dBuV/m
D_{Meas}	is the measurement distance, in m
$D_{SpecLimit}$	is the distance specified by the limit, in m

Note 1: If the maximized peak measured value is under the QP/Average limit by more than 6dB, then it is unnecessary to perform an QP/Average measurement.

Note 2: For above 1GHz, the test result of peak was 20dB below to the limit of peak, which can be compliant to the average limit, so just peak value was recorded.

Note 3: Unwanted emissions outside of restricted bands are measured with a RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.

Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\begin{aligned} \text{Over Limit/Margin} &= \text{Level / Corrected Amplitude} - \text{Limit} \\ \text{Level / Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

Test Data

For Radiated Spurious Emissions, after pre-scan testing in the X, Y and Z axes of orientation, the worst case as setup photos was recorded.

9kHz-1GHz

Environmental Conditions

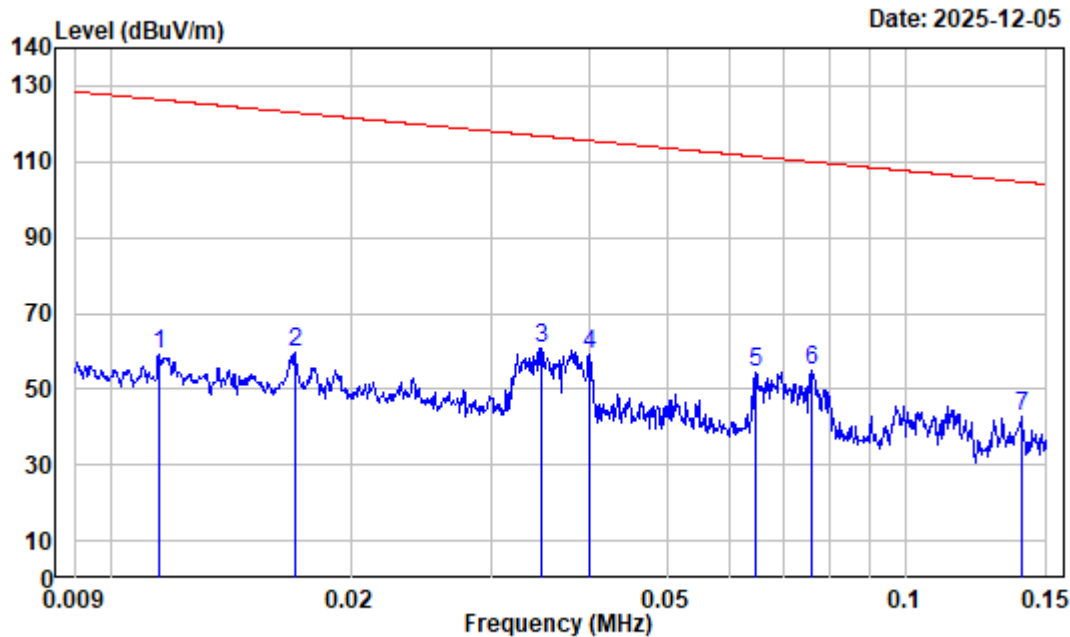
Temperature:	23.2 °C
Relative Humidity:	52 %
ATM Pressure:	100.9 kPa
Test Engineer:	Colin Lin
Test Date:	2025-12-05
EUT Operation Mode:	Transmitting

Test Result: Compliance, please refer to the below data.

Note 1: The Loop Antenna were tested in parallel, perpendicular, and ground-parallel. The worst orientation was parallel and the data was recorded in report.

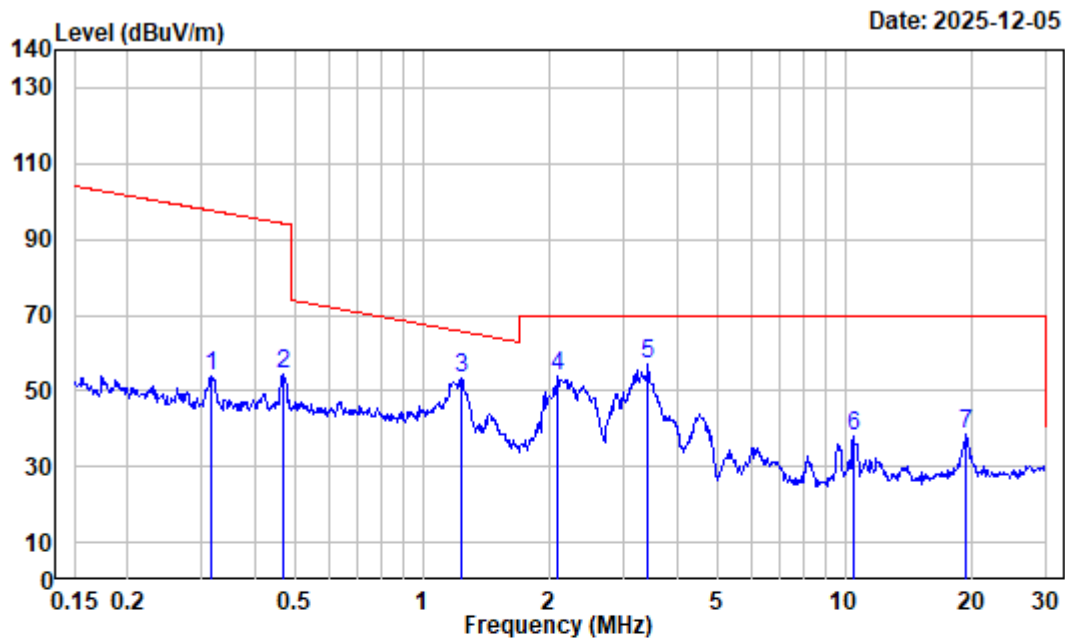
Note 2: The maximum output power mode and channel: 802.11be320 Additional Channel 6745MHz was tested.

9kHz~30MHz:



Site : chamber
Condition : 3m
Job No. : 2504Z00193E-RF
Polarization : Parallel Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:300Hz VBW:1kHz

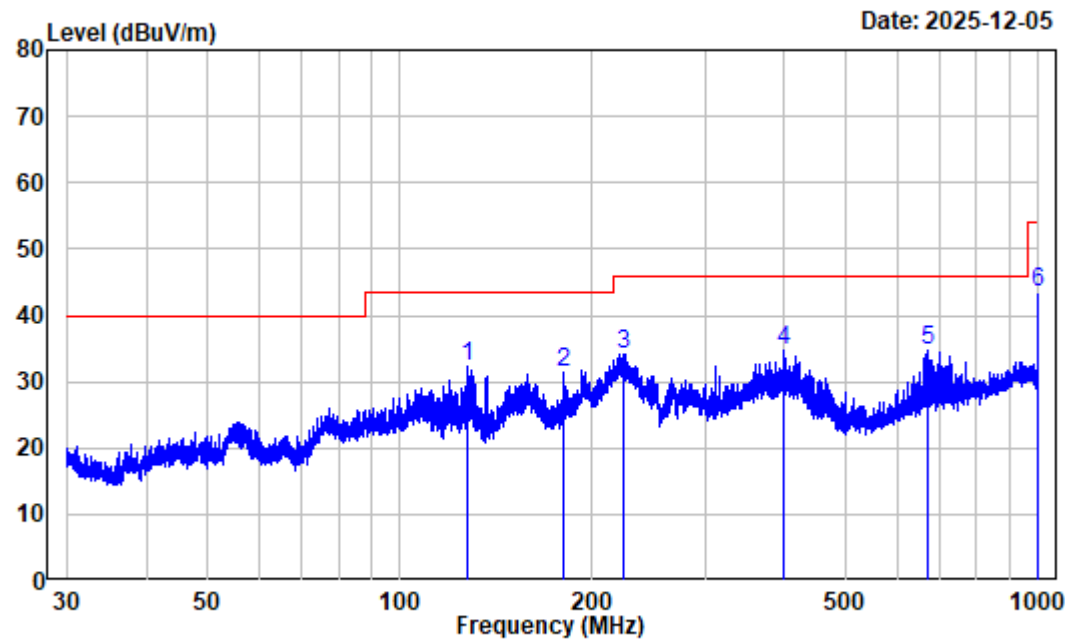
	Freq Factor		Read Level		Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.011	35.16	23.76	58.92	126.39	-67.47	Peak
2	0.017	32.70	27.01	59.71	122.97	-63.26	Peak
3	0.035	25.97	34.76	60.73	116.79	-56.06	Peak
4	0.040	24.91	34.04	58.95	115.59	-56.64	Peak
5	0.065	20.72	33.88	54.60	111.39	-56.79	Peak
6	0.076	19.11	35.75	54.86	110.00	-55.14	Peak
7	0.140	14.63	27.93	42.56	104.69	-62.13	Peak



Site : chamber
Condition : 3m
Job No. : 2504Z00193E-RF
Polarization : Parallel Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:10kHz VBW:30kHz

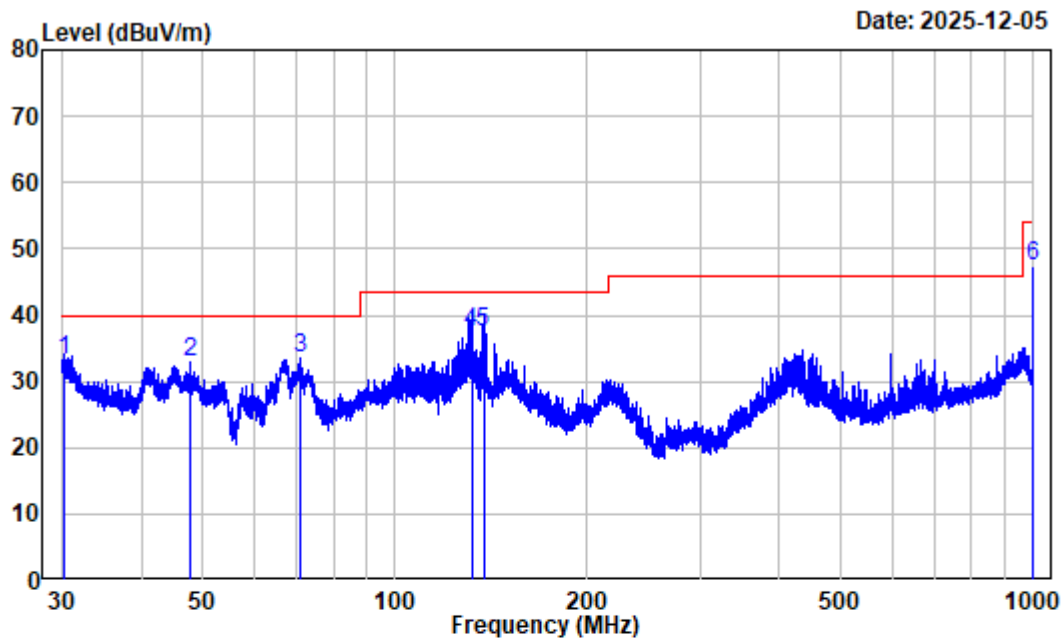
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.315	6.96	46.78	53.74	97.64	-43.90	Peak
2	0.466	3.97	50.36	54.33	94.23	-39.90	Peak
3	1.236	-2.67	55.98	53.31	65.60	-12.29	Peak
4	2.077	-5.42	59.43	54.01	69.54	-15.53	Peak
5	3.417	-6.03	62.98	56.95	69.54	-12.59	Peak
6	10.452	-5.24	43.10	37.86	69.54	-31.68	Peak
7	19.428	-3.48	41.89	38.41	69.54	-31.13	Peak

30MHz~1GHz:



Site : chamber
Condition : 3m HORIZONTAL
Job No. : 2504Z00193E-RF Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	127.721	-14.47	46.80	32.33	43.50	-11.17	Peak
2	180.807	-12.44	43.82	31.38	43.50	-12.12	Peak
3	224.618	-10.53	44.63	34.10	46.00	-11.90	Peak
4	397.808	-6.10	40.76	34.66	46.00	-11.34	Peak
5	669.021	-1.17	35.77	34.60	46.00	-11.40	Peak
6	1000.000	2.84	40.55	43.39	54.00	-10.61	Peak



Site : chamber

Condition : 3m VERTICAL

Job No. : 2504Z00193E-RF Tester: Colin Lin

Test Mode : Transmitting

Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	30.238	-11.82	45.15	33.33	40.00	-6.67 QP
2	47.679	-9.84	42.77	32.93	40.00	-7.07 Peak
3	71.174	-14.94	48.35	33.41	40.00	-6.59 Peak
4	131.642	-14.63	52.00	37.37	43.50	-6.13 QP
5	137.481	-14.81	52.30	37.49	43.50	-6.01 QP
6	1000.000	2.84	44.43	47.27	54.00	-6.73 Peak

The test data of 1GHz-40GHz, please refer to the attachment of “2504Z00193E-RF-00A-Appendix A”.

26 DB EMISSION BANDWIDTH & 99% OCCUPIED BANDWIDTH

Applicable Standard

According to FCC§15.407(a)(10),

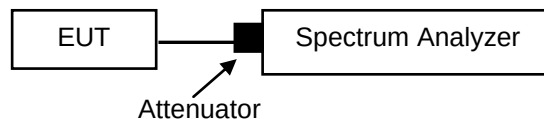
The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

Test Procedure

Test Method: KDB789033 D02 Clause II.C

Emission Bandwidth (EBW)

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
- For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 \times$ RBW.
- Measure and record the results in the test report.



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the attachment of "2504Z00193E-RF-00A-Appendix B.1/B.2".

CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

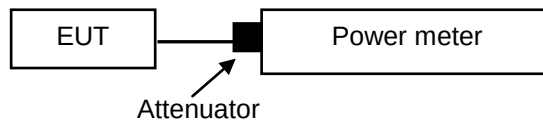
According to the FCC §15.407(a)(5),

For an indoor access point operating in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p. in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

Test Procedure

Test Method: KDB789033 D02 Clause II.E.3

- Place the EUT on a bench and set it in transmitting mode.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- Add a correction factor to the display.



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the attachment of "2504Z00193E-RF-00A-Appendix C".

POWER SPECTRAL DENSITY

Applicable Standard

According to the FCC §15.407(a)(5),

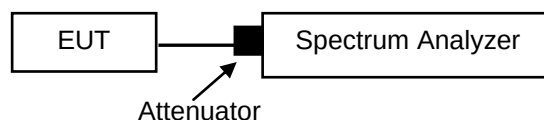
For an indoor access point operating in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p. in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

Test Procedure

Test Method: KDB789033 D02 Clause II.F

For devices operating in the band 5.925-7.125 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(8). Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- Set $VBW \geq 3 RBW$.
- If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log(500 \text{ kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the attachment of “2504Z00193E-RF-00A-Appendix D”.

IN-BAND EMISSIONS

Applicable Standard

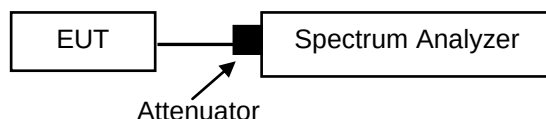
According to FCC§15.407(b) (7),

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

Test Procedure

Test Method: KDB 987594 D02 Clause J

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2020.
3. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth.
4. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
5. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a. Suppressed by 20 dB at 1 MHz outside of the channel edge.
 - b. Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
6. Adjust the span to encompass the entire mask as necessary.
7. Clear trace.
8. Trace average at least 100 traces in power averaging (rms) mode.
9. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the attachment of “2504Z00193E-RF-00A-Appendix E”.

CONTENTION BASED PROTOCOL

Applicable Standard

According to FCC 15.407(d) (6) & KDB 987594 D02.

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band . To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band , unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold(-62dBm)1.The -62dBm(or lower) Threshold is referenced to a 0dBi antenna gain.

To ensure incumbent operations are reliably detected in the band , low power indoor devices must detect RF energy throughout intended operating channel . For example , an 802 .device that plans to transmit a 40 MHz-wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally , low-power indoor devices must detect co-channel energy with 90% or greater certainty.

Table 1. Criteria to determine the number of times detection threshold test may be performed

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1} = f_{c2}$)
$BW_{Inc} < BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$TwoBW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is close to the EUT channel's lower and upper edges.
$fourBW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of the EUT channel, and as closely as possible to the upper edge of the EUT channel.

Where:

BW_{EUT} : Transmission bandwidth of EUT signal

BW_{Inc} : Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal)

f_{c1} : The center frequency of EUT transmission

f_{c2} : Center frequency of the simulated incumbent signal

Test Procedure

Test Method: According to KDB 987594 D02 U-NII 6 GHz EMC Measurement v03 Clause I

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the EUT's operating parameters, including power level, operating frequency, modulation, and bandwidth.
3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The signal analyzer's span range shall be between two times and five times the EUT's OBW. Connect the EUT's output port to signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to prevent the signal analyzer two receiver overloading.
4. Monitor signal analyzer two and verify that the EUT operates and transmits with the parameters set in step 2.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to a shallow level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source via a 3-dB splitter to signal analyzer one and the EUT, as shown in Figure 2.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, incrementally increase the AWGN signal power level until it stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least ten times to verify the EUT can detect an AWGN signal with a 90% (or better) level of certainty.
10. Refer to Table 1 to determine the number of times the detection threshold testing needs to be repeated. If testing is required more than once, go back to step 5, choose a different center frequency for the AWGN signal, and repeat the process.

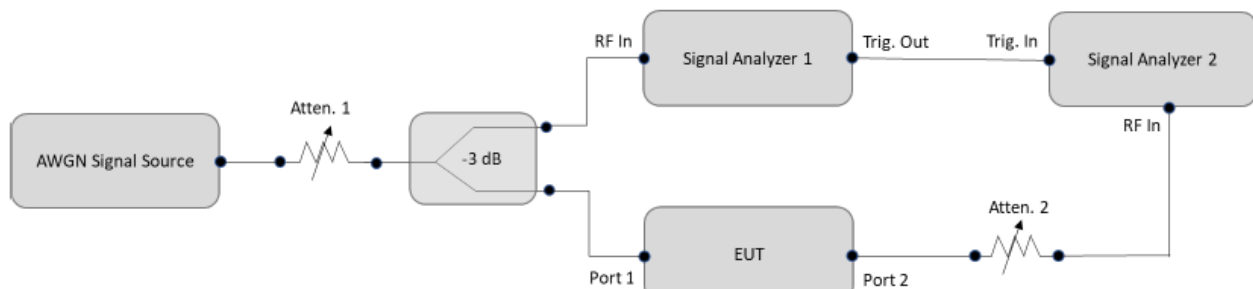


Figure 2. Contention-based protocol test setup conducted method

Test Data

Test Result: Compliance. Please refer to the attachment of "2504Z00193E-RF-00A-Appendix F".

DUTY CYCLE

Test Procedure

According to ANSI C63.10-2020 Section 12.2:

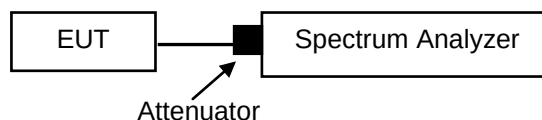
The following procedure shall be used for determining duty cycle, transmission duration, and maximum power control level for U-NII devices:

a) All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, D, and maximum-power transmission duration, T, are required for each tested mode of operation:

- 1) T refers to the minimum transmission duration over which the transmitter is ON and is transmitting at its maximum power control level for the tested mode of operation.
- 2) Duty cycle (D), as used in this clause, refers to the fraction of time over which the transmitter is ON and is transmitting at its maximum power control level.
- 3) The term "maximum power control level" is intended to distinguish between operating power levels of the EUT and differences in power levels of individual symbols that occur with some modulation types, such as quadrature amplitude modulation (QAM). During testing, the EUT is not required to transmit continuously with its highest possible symbol power level. Rather, it shall transmit all of the symbols, and shall do so at the highest power control level (i.e., highest operating power level) of the EUT.

b) Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

- 1) A diode detector and an oscilloscope that together have sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.
- 2) The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:
 - i) Set the center frequency of the instrument to the center frequency of the transmission.
 - ii) Set RBW $\geq$ EBW if possible; otherwise, set RBW to the largest available value.
 - iii) Set VBW $\geq$ RBW.
 - iv) Set detector = peak.
 - v) The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in item a1) of 12.2, and the number of sweep points across duration T exceeds 100.
For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7 \mu\text{s}$.



Note: Offset = RF cable loss(1.0dB[#]) + Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the attachment of "2504Z00193E-RF-00A-Appendix F".

EXHIBIT A-EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2504Z00193E-RF EUT External Photos and Attachment No.2 2504Z00193E-RF EUT Internal Photos.

EXHIBIT B-TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2504Z00193E-RF-00A Test Photos.

***** END OF REPORT *****