

FCC Radio Test Report

FCC ID: EROTSW1580

Report No. : BTL-FCCP-5-2509T114
Equipment : 15 inch Touch Screen wall mount
Model Name : M202404008
Brand Name : CRESTRON
Applicant : Crestron Electronics, Inc.
Address : 15 Volvo Drive, Rockleigh, NJ 07647

Equipment Class : 6XD - 15E 6 GHz Low Power Indoor Client

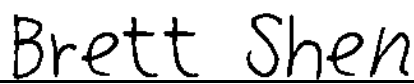
Radio Function : U-NII 6 GHz (U-NII 5, U-NII 6, U-NII 7, U-NII 8)

FCC Rule Part(s) : FCC CFR Title 47, Part 15, Subpart E (15.407)
Measurement Procedure(s) : ANSI C63.10-2020

Date of Receipt : 2025/10/22
Date of Test : 2025/10/30 ~ 2025/12/19
Issued Date : 2026/1/7

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

Prepared by


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Declaration

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

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** assumes no responsibility for the data provided by the Customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

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BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

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

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

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-5-2509T114	R00	Original Report.	2026/1/5	Invalid
BTL-FCCP-5-2509T114	R01	Revised Typo.	2026/1/7	Valid

1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

Standard(s) Section	Description	Test Result	Judgement	Remark
15.407(a)	Maximum e.i.r.p.	APPENDIX A	Pass	-----
15.203 15.407(a)	Antenna requirement	-----	Pass	-----
15.407(a)	Maximum transmitter channel bandwidth	APPENDIX B	Pass	-----
15.407(a)	Maximum power spectral density	APPENDIX C	Pass	-----
15.407(b) 15.209 15.407(b) 15.205	Undesirable emissions and Restricted bands of operation	APPENDIX D APPENDIX E APPENDIX F	Pass	-----
15.407(b)	In-band emission (Mask)	APPENDIX G	Pass	-----
15.407(b)	AC power line conducted emissions	-----	N/A	NOTE (4)
15.407(d)	Contention-based protocol	APPENDIX H	Pass	NOTE (2)

Statement of Conformity

The statement of conformity is based on the binary decision rule according to IEC Guide 115 and ILAC G8 "simple acceptance" principle. Without considering measurement uncertainty, its specific risk is less than 50% PFA. (PFA: Probability of False Accept)

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) Contention-Based Protocol Uses conducted method for testing.
- (3) The report format version is TP.1.1.1.
- (4) This is a DC input device.

1.1 TEST FACILITY

The test locations stated below are under the TAF Accreditation Number 0659.

The test location(s) used to collect the test data in this report are:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

☐ C05 ☐ CB08 ☐ CB11 ☒ SR10 ☒ SR11

No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

☐ C06 ☒ CB21 ☐ CB22

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k = 2$, providing a level of confidence of approximately **95 %**.

A. Conducted test:

Test Item	U
Occupied Bandwidth	0.83 %
Output power	0.8909 dB
Power Spectral Density	0.8903 dB
In-Band Emissions	0.8974 dB
Contention Based Protocol	1.1027 dB

B. Undesirable emissions test:

Test Site	Measurement Frequency Range (GHz)	U (dB)
CB21 (3m)	0.03~0.2	4.35
	0.02~1	4.78
	1 ~ 6	5.45
	6 ~ 18	5.04
	18 ~ 26	4.03
	26 ~ 40	4.33

NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
Maximum e.i.r.p.	24.8 °C, 55 %	DC 48V	Ken Lan
Maximum transmitter channel bandwidth	24.5 °C, 52 %	DC 48V	Ken Lan
Maximum power spectral density	24.5 °C, 54 %	DC 48V	Ken Lan
Undesirable emissions below 1 GHz	Refer to data	DC 48V	Mark Wang
Undesirable emissions above 1 GHz	Refer to data	DC 48V	Mark Wang
In-band emission (Mask)	24.5 °C, 52 %	DC 48V	Ken Lan
Contention-based protocol	25.5 °C, 56 %	DC 48V	Winston Fang

1.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

Test Software	Qualcomm Radio Control Toolkit V 4.0.00203.0
---------------	--

U-NII 5				
Mode	5955 MHz	6175 MHz	6415 MHz	Data Rate
IEEE 802.11ax (HE20)	-1.5	-3	-1.5	MCS 0
Mode	5965 MHz	6165 MHz	6405 MHz	Data Rate
IEEE 802.11ax (HE40)	2	2.5	3.5	MCS 0
Mode	5985 MHz	6145 MHz	6385 MHz	Data Rate
IEEE 802.11ax (HE80)	5	5.5	5.5	MCS 0
Mode	6025 MHz	6345 MHz		Data Rate
IEEE 802.11ax (HE160)	8	8		MCS 0

U-NII 6				
Mode	6435 MHz	6475 MHz	6515 MHz	Data Rate
IEEE 802.11ax (HE20)	-3	0.5	1	MCS 0
Mode	6405 MHz	6445 MHz		Data Rate
IEEE 802.11ax (HE40)	4.5	4.5		MCS 0
Mode	6465 MHz			Data Rate
IEEE 802.11ax (HE80)	6.5			MCS 0
Mode	6505 MHz			Data Rate
IEEE 802.11ax (HE160)	8.5			MCS 0

U-NII 7				
Mode	6535 MHz	6695 MHz	6855 MHz	Data Rate
IEEE 802.11ax (HE20)	0.5	0	0.5	MCS 0
Mode	6525 MHz	6685 MHz	6845 MHz	Data Rate
IEEE 802.11ax (HE40)	4	4	4	MCS 0
Mode	6545 MHz	6625 MHz	6705 MHz	Data Rate
IEEE 802.11ax (HE80)	6	6	6.5	MCS 0
Mode	6665 MHz			Data Rate
IEEE 802.11ax (HE160)	9			MCS 0

U-NII 8				
Mode	6875 MHz	6995 MHz	7115 MHz	Data Rate
IEEE 802.11ax (HE20)	3	2	-10	MCS 0
Mode	6885 MHz	6965 MHz	7085 MHz	Data Rate
IEEE 802.11ax (HE40)	6.5	5.5	4.5	MCS 0
Mode	6865 MHz	6945 MHz	7025 MHz	Data Rate
IEEE 802.11ax (HE80)	9.5	8.5	7	MCS 0
Mode	6985 MHz			Data Rate
IEEE 802.11ax (HE160)	10			MCS 0

For RU Configuration:

U-NII 5					
Mode	5955 full	26 Tones	52 Tones	106 Tones	Data Rate
IEEE 802.11ax (HE20)	-1.5	-11	-8.5	-5.5	MCS 0
Mode	5965 full	242 Tones			Data Rate
IEEE 802.11ax (HE40)	2	-1			MCS 0
Mode	5985 full	484 Tones			Data Rate
IEEE 802.11ax (HE80)	5	2			MCS 0
Mode	6025 full	996 Tones			Data Rate
IEEE 802.11ax (HE160)	8	5.5			MCS 0

U-NII 6					
Mode	6435 full	26 Tones	52 Tones	106 Tones	Data Rate
IEEE 802.11ax (HE20)	-3	-12.5	-9.5	-7	MCS 0
Mode	6445 full	242 Tones			Data Rate
IEEE 802.11ax (HE40)	4.5	1.5			MCS 0
Mode	6465 full	484 Tones			Data Rate
IEEE 802.11ax (HE80)	6.5	4.5			MCS 0
Mode	6505 full	996 Tones			Data Rate
IEEE 802.11ax (HE160)	8.5	6			MCS 0

U-NII 7					
Mode	6535 full	26 Tones	52 Tones	106 Tones	Data Rate
IEEE 802.11ax (HE20)	0.5	-9	-7	-3	MCS 0
Mode	6525 full	242 Tones			Data Rate
IEEE 802.11ax (HE40)	4	0.5			MCS 0
Mode	6545 full	484 Tones			Data Rate
IEEE 802.11ax (HE80)	6	4			MCS 0
Mode	6665 full	996 Tones			Data Rate
IEEE 802.11ax (HE160)	9	6.5			MCS 0

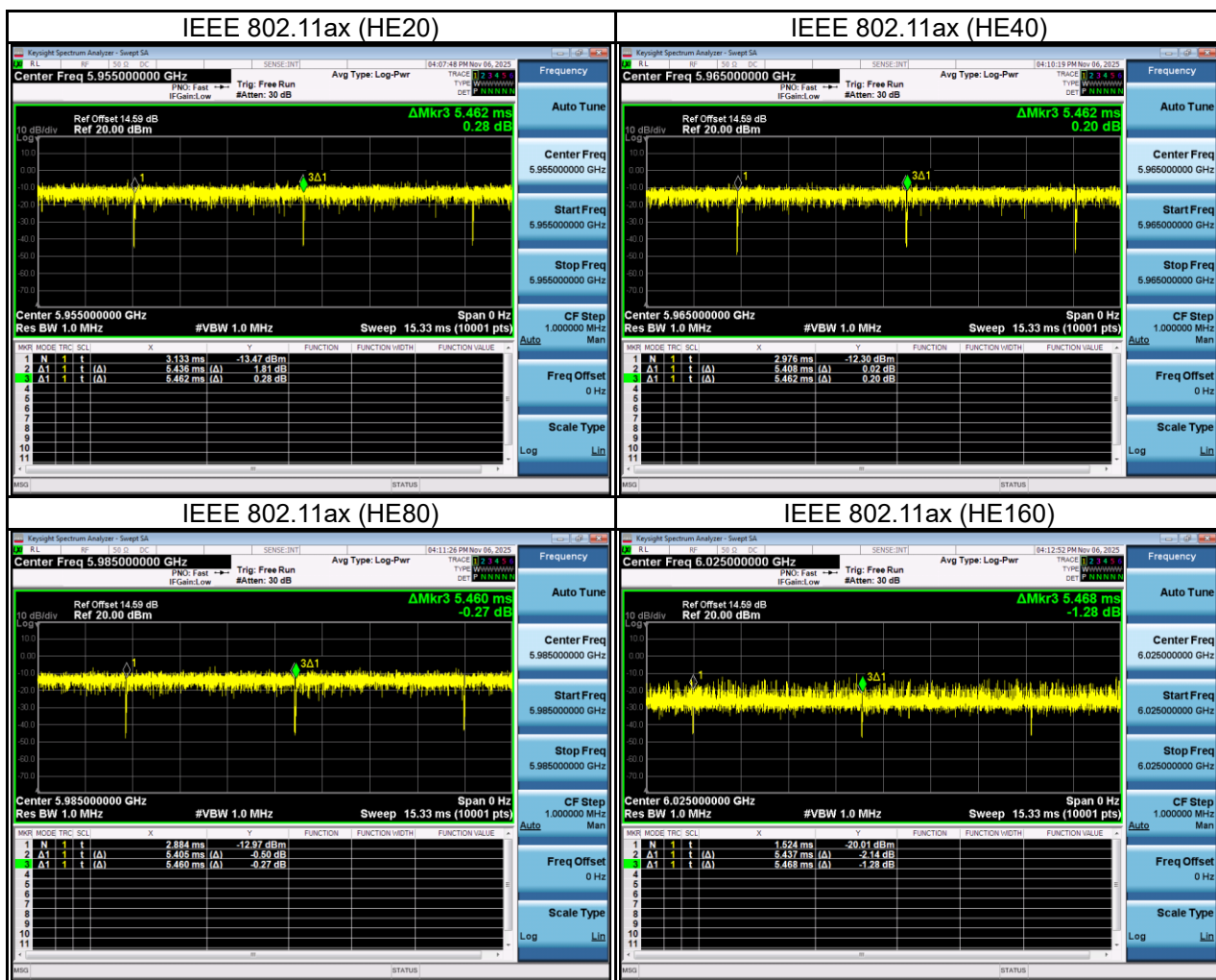
U-NII 8					
Mode	6875 full	26 Tones	52 Tones	106 Tones	Data Rate
IEEE 802.11ax (HE20)	3	-8.5	-5.5	-2.5	MCS 0
Mode	6885 full	242 Tones			Data Rate
IEEE 802.11ax (HE40)	6.5	3.5			MCS 0
Mode	6865 full	484 Tones			Data Rate
IEEE 802.11ax (HE80)	9.5	6			MCS 0
Mode	6985 full	996 Tones			Data Rate
IEEE 802.11ax (HE160)	10	8			MCS 0

1.5 DUTY CYCLE

If duty cycle is $\geq 98\%$, duty factor is not required.

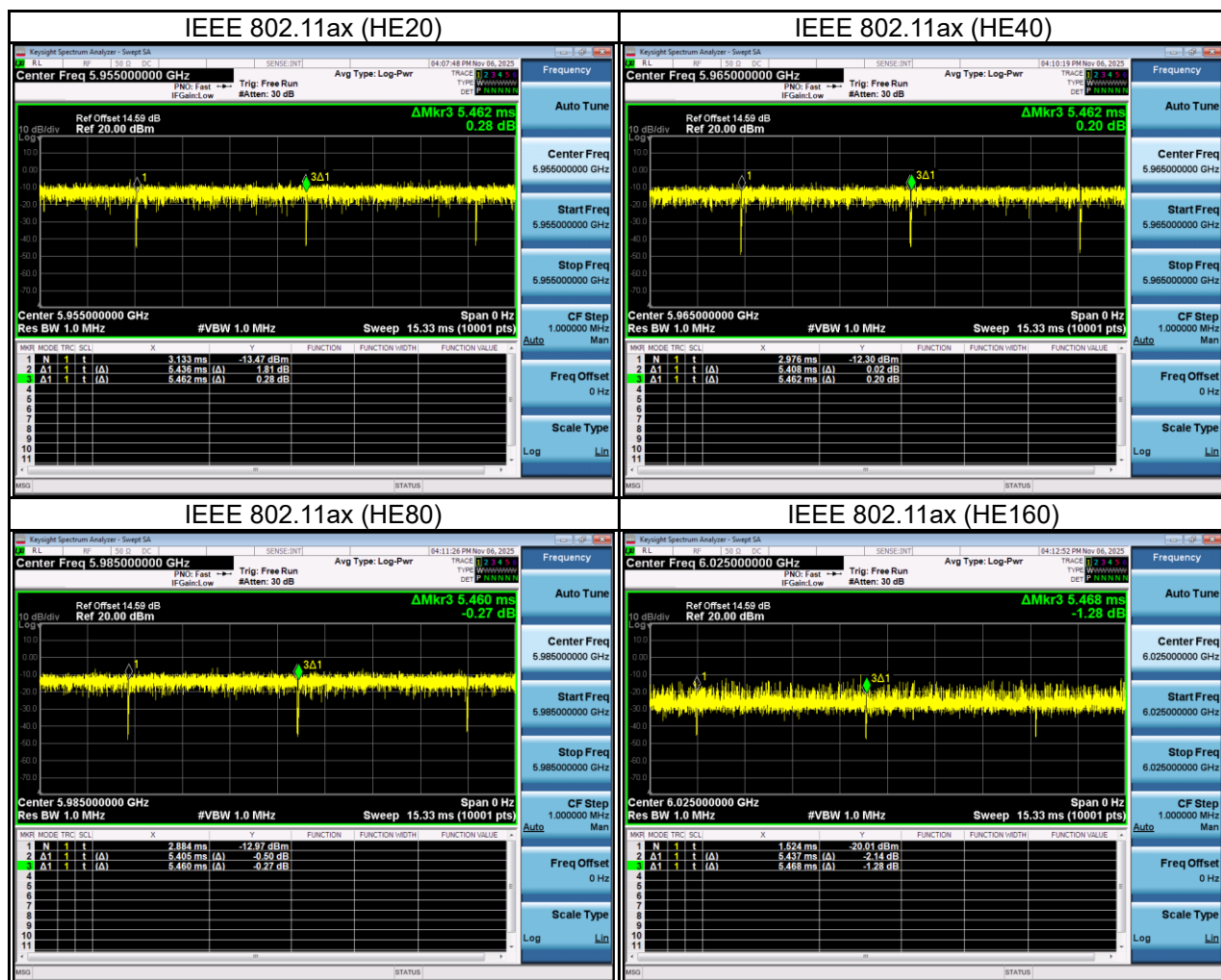
If duty cycle is $< 98\%$, duty factor shall be considered.

Remark	Delta 1			Delta 2	On Time/Period	10 log(1/Duty Cycle)	1/On Time (B)
Mode	ON (ms)	Numbers (ON)	On Time (B) (ms)	Period (ON+OFF) (ms)	Duty Cycle (%)	Duty Factor (dB)	1/B Minimum VBW (kHz)
IEEE 802.11ax (HE20)	5.436	1	5.436	5.462	99.52%	0.02	0.010
IEEE 802.11ax (HE40)	5.408	1	5.408	5.462	99.01%	0.04	0.010
IEEE 802.11ax (HE80)	5.405	1	5.405	5.460	98.99%	0.04	0.010
IEEE 802.11ax (HE160)	5.437	1	5.437	5.468	99.43%	0.02	0.010



For RU Configuration:

Remark	Delta 1			Delta 2	On Time/Period	10 log(1/Duty Cycle)	1/On Time (B)
Mode	ON (ms)	Numbers (ON)	On Time (B) (ms)	Period (ON+OFF) (ms)	Duty Cycle (%)	Duty Factor (dB)	1/B Minimum VBW (kHz)
IEEE 802.11ax (HE20)	5.436	1	5.436	5.462	99.52%	0.02	0.010
IEEE 802.11ax (HE40)	5.408	1	5.408	5.462	99.01%	0.04	0.010
IEEE 802.11ax (HE80)	5.405	1	5.405	5.460	98.99%	0.04	0.010
IEEE 802.11ax (HE160)	5.437	1	5.437	5.468	99.43%	0.02	0.010



2 GENERAL INFORMATION

2.1 EUT INFORMATION

Equipment	15 inch Touch Screen wall mount
Model Name	M202404008
Brand Name	CRESTRON
Model Difference	N/A
Power Source	DC voltage supplied from PoE.
Power Rating	Input 48 VDC 350mA (802.3at type 1); Input 48 VDC 600mA (802.3at type 2)
Products Covered	N/A
Frequency Range	U-NII 5: 5925 MHz ~ 6425 MHz U-NII 6: 6425 MHz ~ 6525 MHz U-NII 7: 6525 MHz ~ 6875 MHz U-NII 8: 6875 MHz ~ 7125 MHz
Operation Frequency	UNII-5: 5955 MHz ~ 6435 MHz UNII-6: 6435 MHz ~ 6515 MHz UNII-7: 6525 MHz ~ 6875 MHz UNII-8: 6895 MHz ~ 7115 MHz
Modulation Technology	OFDMA
Transfer Rate	IEEE 802.11ax: up to 2402 Mbps
Maximum E.I.R.P. for UNII-5	IEEE 802.11ax (HE20): 10.10 dBm (0.0102 W) IEEE 802.11ax (HE40): 14.06 dBm (0.0255 W) IEEE 802.11ax (HE80): 17.03 dBm (0.0505 W) IEEE 802.11ax (HE160): 19.03 dBm (0.0800 W)
Maximum E.I.R.P. for UNII-6	IEEE 802.11ax (HE20): 9.54 dBm (0.0090 W) IEEE 802.11ax (HE40): 13.57 dBm (0.0228 W) IEEE 802.11ax (HE80): 16.39 dBm (0.0436 W) IEEE 802.11ax (HE160): 18.55 dBm (0.0715 W)
Maximum E.I.R.P. for UNII-7	IEEE 802.11ax (HE20): 11.82 dBm (0.0152 W) IEEE 802.11ax (HE40): 13.48 dBm (0.0223 W) IEEE 802.11ax (HE80): 16.82 dBm (0.0480 W) IEEE 802.11ax (HE160): 19.13 dBm (0.0818 W)
Maximum E.I.R.P. for UNII-8	IEEE 802.11ax (HE20): 9.97 dBm (0.0099 W) IEEE 802.11ax (HE40): 15.26 dBm (0.0335 W) IEEE 802.11ax (HE80): 17.35 dBm (0.0543 W) IEEE 802.11ax (HE160): 19.26 dBm (0.0843 W)
Maximum E.I.R.P. for UNII-5 -RU Configuration	IEEE 802.11ax (HE20): 9.77 dBm (0.0095 W) IEEE 802.11ax (HE40): 13.43 dBm (0.0220 W) IEEE 802.11ax (HE80): 16.26 dBm (0.0423 W) IEEE 802.11ax (HE160): 18.96 dBm (0.0786 W)
Maximum E.I.R.P. for UNII-6 -RU Configuration	IEEE 802.11ax (HE20): 9.53 dBm (0.0090 W) IEEE 802.11ax (HE40): 13.65 dBm (0.0232 W) IEEE 802.11ax (HE80): 16.50 dBm (0.0447 W) IEEE 802.11ax (HE160): 18.45 dBm (0.0700 W)
Maximum E.I.R.P. for UNII-7 -RU Configuration	IEEE 802.11ax (HE20): 9.86 dBm (0.0097 W) IEEE 802.11ax (HE40): 13.27 dBm (0.0212 W) IEEE 802.11ax (HE80): 16.23 dBm (0.0419 W) IEEE 802.11ax (HE160): 18.99 dBm (0.0792 W)
Maximum E.I.R.P. for UNII-8 -RU Configuration	IEEE 802.11ax (HE20): 10.50 dBm (0.0112 W) IEEE 802.11ax (HE40): 14.84 dBm (0.0305 W) IEEE 802.11ax (HE80): 17.58 dBm (0.0573 W) IEEE 802.11ax (HE160): 19.18 dBm (0.0828 W)
Test Model	M202404008
Sample Status	Engineering Sample
EUT Modification(s)	N/A

NOTE:

(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

(2) Channel List:

UNII-5							
IEEE 802.11ax (HE20)		IEEE 802.11ax (HE40)		IEEE 802.11ax (HE80)		IEEE 802.11ax (HE160)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5955	3	5965	7	5985	15	6025
5	5975	11	6005	23	6065	47	6185
9	5995	19	6045	39	6145	79	6345
13	6015	27	6085	55	6225		
17	6035	35	6125	71	6305		
21	6055	43	6165	87	6385		
25	6075	51	6205				
29	6095	59	6245				
33	6115	67	6285				
37	6135	75	6325				
41	6155	83	6365				
45	6175	91	6405				
49	6195						
53	6215						
57	6235						
61	6255						
65	6275						
69	6295						
73	6315						
77	6335						
81	6355						
85	6375						
89	6395						
93	6415						

UNII-6							
IEEE 802.11ax (HE20)		IEEE 802.11ax (HE40)		IEEE 802.11ax (HE80)		IEEE 802.11ax (HE160)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
97	6435	99	6445	103	6465	111	6505
101	6455	107	6485				
105	6475						
109	6495						
113	6515						

UNII-7							
IEEE 802.11ax (HE20)		IEEE 802.11ax (HE40)		IEEE 802.11ax (HE80)		IEEE 802.11ax (HE160)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
117	6535	115	6525*	119	6545*	143	6665
121	6555	123	6565	135	6625	175	6825
125	6575	131	6605	151	6705		
129	6595	139	6645	167	6785		
133	6615	147	6685	183	6865*		
137	6635	155	6725				
141	6655	163	6765				
145	6675	171	6805				
149	6695	179	6845				
153	6715						
157	6735						
161	6755						
165	6775						
169	6795						
173	6815						
177	6835						
181	6855						

UNII-8							
IEEE 802.11ax (HE20)		IEEE 802.11ax (HE40)		IEEE 802.11ax (HE80)		IEEE 802.11ax (HE160)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
185	6875*	187	6885	199	6945	207	6985
189	6895	195	6925	215	7025		
193	6915	203	6965				
197	6935	211	7005				
201	6955	219	7045				
205	6975	227	7085				
209	6995						
213	7015						
217	7035						
221	7055						
225	7075						
229	7095						
233	7115						

Note: * means this is a straddle channel

(3) Table for Filed Antenna:

Antenna	Manufacture	Part number	Type	Connector	Operation Frequency (MHz)	Gain (dBi)
Main	SHENZHEN SUNWAY COMMUNICATIO N CO., LTD.	1100023025	FPC	I-PEX	2412-2472	3.07
					5180-5240	4.18
					5745-5825	4.39
					5955-6435	5.19
					6435-6515	4.58
					6525-6875	4.61
Aux	SHENZHEN SUNWAY COMMUNICATIO N CO., LTD.	1100023025	FPC	I-PEX	6895-7115	2.72
					2412-2472	2.75
					5180-5240	4.32
					5745-5825	4.71
					5955-6435	5.32
					6435-6515	5.30
					6525-6875	5.88
					6895-7115	2.73

NOTE:

- Antenna gain higher is used for testing.
- The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R).
- $\text{UNII-5 Directional Gain} = 10\log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{\text{ANT}}] = 8.27 \text{ dBi.}$
 $\text{UNII-6 Directional Gain} = 10\log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{\text{ANT}}] = 7.96 \text{ dBi.}$
 $\text{UNII-7 Directional Gain} = 10\log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{\text{ANT}}] = 8.28 \text{ dBi.}$
 $\text{UNII-8 Directional Gain} = 10\log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{\text{ANT}}] = 5.74 \text{ dBi.}$

- The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

(5) Operating Mode and Antenna Configuration

TX Mode	Operating Mode	2TX
IEEE 802.11ax (HE20)		V (Main+ Aux)
IEEE 802.11ax (HE40)		V (Main+ Aux)
IEEE 802.11ax (HE80)		V (Main+ Aux)
IEEE 802.11ax (HE160)		V (Main+ Aux)

2.2 TEST MODES

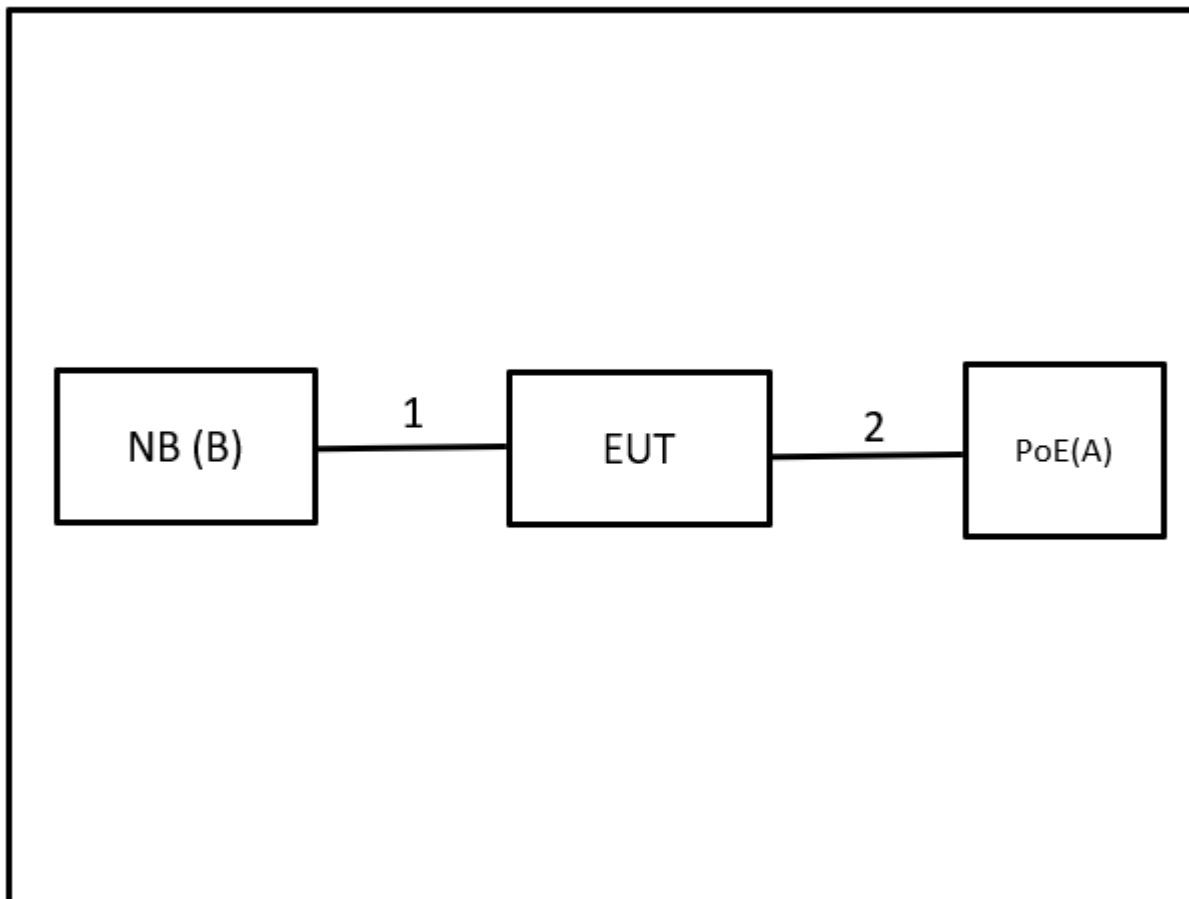
Test Items	Test mode	Channel	Note
Undesirable emissions (below 1GHz)	IEEE 802.11ax (HE20)	233	-
Undesirable emissions (above 1GHz)	IEEE 802.11ax (HE20)	1/93, 97/113 117/181, 185/209/233	Bandedge
	IEEE 802.11ax (HE40)	3/43/91, 99/107 115/179, 187/203/227	
	IEEE 802.11ax (HE80)	7/39/87, 103 119/135/151/167, 183/199/215	
	IEEE 802.11ax (HE160)	15/79, 111 143, 207	
	IEEE 802.11ax (HE20)	1/45/93 97/105/113 117/149/181 185/209/233	Harmonic
	IEEE 802.11ax (HE40)	3/43/91, 99/107 115/147/179 187/203/227	
	IEEE 802.11ax (HE80)	7/39/87, 103 119/135/151/167 183/199/215	
	IEEE 802.11ax (HE160)	15/79, 111 143, 207	
Undesirable emissions (above 18GHz)	IEEE 802.11ax (HE20)	233	-
Maximum e.i.r.p. & Maximum transmitter channel bandwidth & Maximum power spectral density & In-band emission (Mask)	IEEE 802.11ax (HE20)	1/45/93 97/105/113 117/149/181 185/209/233	-
	IEEE 802.11ax (HE40)	3/43/91, 99/107 115/147/179 187/203/227	
	IEEE 802.11ax (HE80)	7/39/87, 103 119/135/151/167 183/199/215	
	IEEE 802.11ax (HE160)	15/79, 111 143, 207	
Contention-based protocol	IEEE 802.11ax (HE20)	37, 101 149, 213	-
	IEEE 802.11ax (HE160)	47, 111 143, 207	

NOTE:

- (1) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Vertical) is recorded.
- (2) All X, Y and Z axes are evaluated, but only the worst case (X axis) is recorded.
- (3) The output power and power spectral density of all supported configurations of Full and Partial RU were all tested and recorded in the report, for other test items only the worst RU mode was tested and recorded.

2.3 TESTED CONFIGURATION DIAGRAM

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	PoE	NETGEAR	GS305EPP	N/A	Supplied by test requester
B	NB	dyna	Portege-X40 G	N/A	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	1.5m	TypeC to TypeC	Supplied by test requester
2	N/A	N/A	1m	RJ45	Supplied by test requester

3 MAXIMUM E.I.R.P. TEST

3.1 LIMITS

According to 15.407(a)(4)(5)(6)(7)(8) the limits are as follows:

Equipment Category	Band	Maximum e.i.r.p. Limit
Standard power access point* Fixed client*	U-NII 5 (5.925-6.425 GHz)	36 dBm
	U-NII 7 (6.525-6.875 GHz)	
Indoor access point Subordinate device	U-NII 5 (5.925-6.425 GHz)	30 dBm
	U-NII 6 (6.425-6.525 GHz)	
	U-NII 7 (6.525-6.875 GHz)	
	U-NII 8 (6.875-7.125 GHz)	
Standard power access point client devices	U-NII 5 (5.925-6.425 GHz)	30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power
	U-NII 6 (6.425-6.525 GHz)	
	U-NII 7 (6.525-6.875 GHz)	
	U-NII 8 (6.875-7.125 GHz)	
Indoor access point client devices	U-NII 5 (5.925-6.425 GHz)	24 dBm
	U-NII 6 (6.425-6.525 GHz)	
	U-NII 7 (6.525-6.875 GHz)	
	U-NII 8 (6.875-7.125 GHz)	

* For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

According to 15.407(a)(11):

The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

3.2 TEST PROCEDURE

Referring to FCC KDB 987594 D02, clause E. and FCC KDB 789033 D02, clause E. 3 Measurement using a Power Meter (PM):

- a. The maximum peak conducted output power was performed in accordance with method of clause E. 3. a) Method PM (Measurement using an RF average power meter):
 - (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
 - The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
 - (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal.
 - (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
 - (iv) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25%).
- b. The maximum peak conducted output power was performed in accordance with method of clause E. 3. b) Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Referring to FCC KDB 987594 D02, clause H. Measurement of emission at elevation angles higher than 30° from horizon:

Note: Elevation angle is defined as 0° is horizontal and 90° is straight-up.

For fixed infrastructure, not electrically or mechanically steerable beam antenna

- a. If elevation plane radiation pattern is available:
 - (i) Determine the device intended mounting elevation angle and define 0° reference angle on the elevation plane radiation pattern.
 - (ii) Indicate any radiation pattern between 30° and 90° which has the highest gain.
 - (iii) Calculate the EIRP based on this highest gain and conducted output power.
 - (iv) Compare to the 125 mW limit to establish compliance.
 - (v) Include the elevation pattern data in the application filing with the test report to show how the calculations are made.

Note: For MIMO devices, take the maximum gain of each antenna and apply the guidance in KDB Publication 662911 for calculating the overall gain including directional gain for the maximum EIRP calculation.

- b. If the elevation plane radiation pattern is not available, but the antenna type (such as dipole omnidirectional, Yagi, parabolic, or sector antenna) has a symmetrical elevation plane pattern referenced at the main beam and all lobes on the main beam elevation plane have highest gains, then the following measurement method is acceptable to determine compliance:
 - (i) Determine the device's intended mounting elevation angle referenced to the horizon.
 - (ii) Rotate the EUT antenna by 90° around the main beam axis in a horizontal position to transform the measurement in elevation angle into an azimuth angle and define a 0° reference angle based on the device's intended mounting elevation angle.
 - (iii) Move the test antenna along the horizontal arc, or rotate the turntable with the EUT antenna placed at the center, between 30° and 90° relative to the 0° reference angle, and then continuing down from 90° to 30° on the other side of the pattern, while maintaining the test antenna pointing with constant distance to the EUT antenna. Search for the spot which has the highest measured emission. Both horizontal and vertical polarization shall be investigated to determine the maximum radiated emission level.

Note: Moving the test antenna along the horizontal arc, or rotating the turntable, shall be performed in an angular step size as small as possible, but not larger than 3°.

- (iv) Calculate the EIRP based on the highest measured emission. Compare to the limit of 125 mW to determine compliance.
- (v) The antenna pattern measurements must be included in the filing.

For All Other Antenna Types

For all other antenna types (such as patch antennas, array antennas, antennas with irregular radiator shapes, etc.) which have any combination of following characteristics:

- Asymmetrical, complex radiation patterns
- 2-D or 3-D steerable beam
- Portable/mobile, not fixed infrastructure device

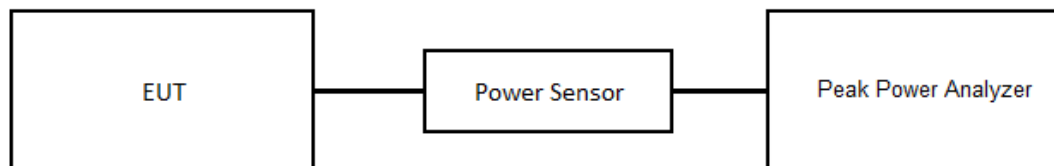
Provide the following information in the report:

- a. Describe what type of antenna is used.
- b. Determine by calculation, measurement or simulation, all radiation lobes/beams, which have EIRP higher than 125 mW within a 3-dB elevation beamwidth.
- c. Provide an explanation of how these antenna beams are controlled to be kept below the 30° elevation angle. The explanation should include device installation instructions, mechanical control, electro-mechanical control or software algorithms, if the beams are electrically controlled by software.

3.3 DEVIATION FROM TEST STANDARD

No deviation.

3.4 TEST SETUP



3.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

3.6 TEST RESULT

Please refer to the APPENDIX A.

4 MAXIMUM TRANSMITTER CHANNEL BANDWIDTH TEST

4.1 LIMITS

According to 15.407(a)(10):

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

4.2 TEST PROCEDURE

For Emission Bandwidth (EBW):

Referring to FCC KDB 987594 D02, clause C. and FCC KDB 789033 D02, clause C. 1. Emission Bandwidth (EBW):

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) 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% Occupied Bandwidth:

Referring to FCC KDB 987594 D02, clause D. and FCC KDB 789033 D02, clause D. 99% Occupied Bandwidth:

The 99% occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. Measurement of the 99% occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques. Measurements of 99% occupied bandwidth may also optionally be used in lieu of the EBW to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with Section 15.407(a).

The following procedure shall be used for measuring (99%) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1% to 5% of the OBW
4. Set VBW $\geq 3 \times$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99% power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99% power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

4.3 DEVIATION FROM TEST STANDARD

No deviation.

4.4 TEST SETUP**4.5 EUT OPERATING CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT

Please refer to the APPENDIX B.

5 MAXIMUM POWER SPECTRAL DENSITY TEST

5.1 LIMITS

According to 15.407(a)(4)(5)(6)(7)(8) the limits are as follows:

Equipment Category	Band	Maximum Power Spectral Density (e.i.r.p.) Limit
Standard power access point Fixed client	U-NII 5 (5.925-6.425 GHz)	23 dBm/MHz
	U-NII 7 (6.525-6.875 GHz)	
Indoor access point Subordinate device	U-NII 5 (5.925-6.425 GHz)	5 dBm/MHz
	U-NII 6 (6.425-6.525 GHz)	
	U-NII 7 (6.525-6.875 GHz)	
	U-NII 8 (6.875-7.125 GHz)	
Standard power access point client devices	U-NII 5 (5.925-6.425 GHz)	17 dBm/MHz
	U-NII 6 (6.425-6.525 GHz)	
	U-NII 7 (6.525-6.875 GHz)	
	U-NII 8 (6.875-7.125 GHz)	
Indoor access point client devices	U-NII 5 (5.925-6.425 GHz)	-1 dBm/MHz
	U-NII 6 (6.425-6.525 GHz)	
	U-NII 7 (6.525-6.875 GHz)	
	U-NII 8 (6.875-7.125 GHz)	

5.2 TEST PROCEDURE

Referring to FCC KDB 987594 D02, clause F. and FCC KDB 789033 D02, clause F. Maximum Power Spectral Density (PSD):

Method SA-1 is used.

- Set Attenuation = auto.
- Span Frequency = Encompass the entire emissions bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW > 3 MHz.
- Detector = RMS.
- Trace mode = max hold.
- Sweep time = auto.
- Record the maximum value.
- Record the maximum value and add 10 log (1/ duty cycle).
- Record the maximum value and add 1 dB.

5.3 DEVIATION FROM TEST STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULT

Please refer to the APPENDIX C.

6 UNDESIRABLE EMISSIONS TEST

6.1 LIMITS

According to 15.407(b)(6) the limits are as follows:

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.

According to FCC KDB 987594 D02, clause G. Unwanted Emission Measurement:

Use guidance in KDB 789033 for measurements below 1000 MHz and above 1000 MHz. 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

Item	Maximum e.i.r.p. Limit	Maximum field strength Limit @ 3m
Any emissions outside of the 5.925-7.125 GHz band	Peak: -7 dBm/MHz	88.2 dBuV/m
	Average: -27 dBm/MHz	68.2 dBuV/m

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

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

According to 15.407(b)(9) the limits are as follows:

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

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

NOTE:

- (1) e.i.r.p. Limit (dBuV/m at 3m) = Power Limit(dBm) + 95.2. (Referring to FCC KDB 987594 D02, clause G.2.d)(iii))
- (2) Emission level (dBuV/m) = 20log Emission level (uV/m).
3 m Emission level = 10 m Emission level + 20log(10 m/3 m).

(3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain (if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level (dB μ V)		Correct Factor (dB/m)		Measurement Value (dB μ V/m)
19.11	+	2.11	=	21.22

Measurement Value (dB μ V/m)		Limit Value (dB μ V/m)		Margin Level (dB)
21.22	-	68.2	=	-46.98

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average

Spectrum Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

6.2 TEST PROCEDURE

Referring to FCC KDB 987594 D02, clause G. and FCC KDB 789033 D02, clause G. Unwanted Emission Measurement:

For measurements below 30 MHz:

- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

For measurements 30 MHz to 40 GHz:

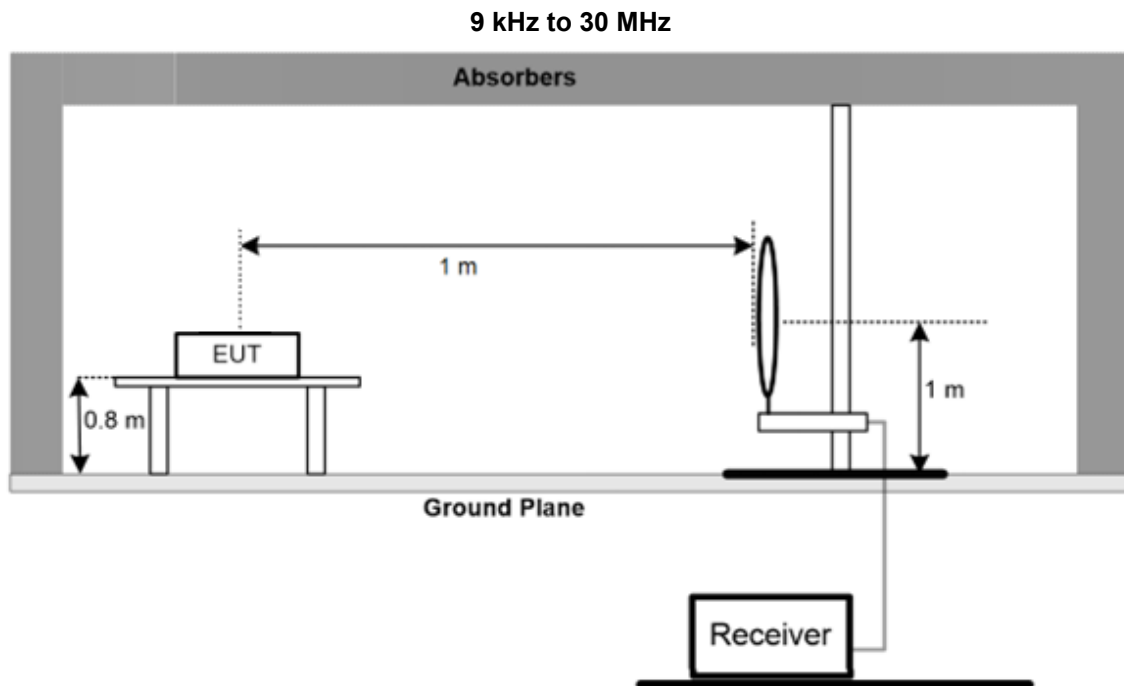
- The measuring distance of 1 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 30MHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. (between 30 MHz to 1 GHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. (between 1 GHz to 40 GHz)

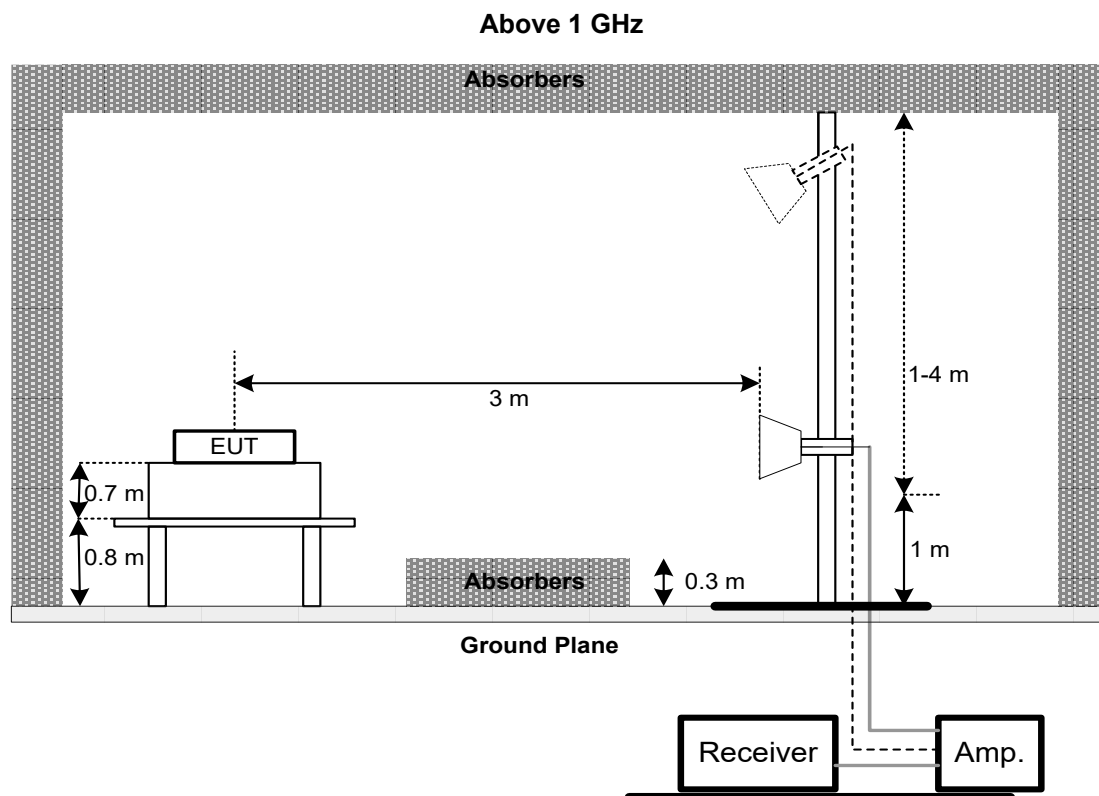
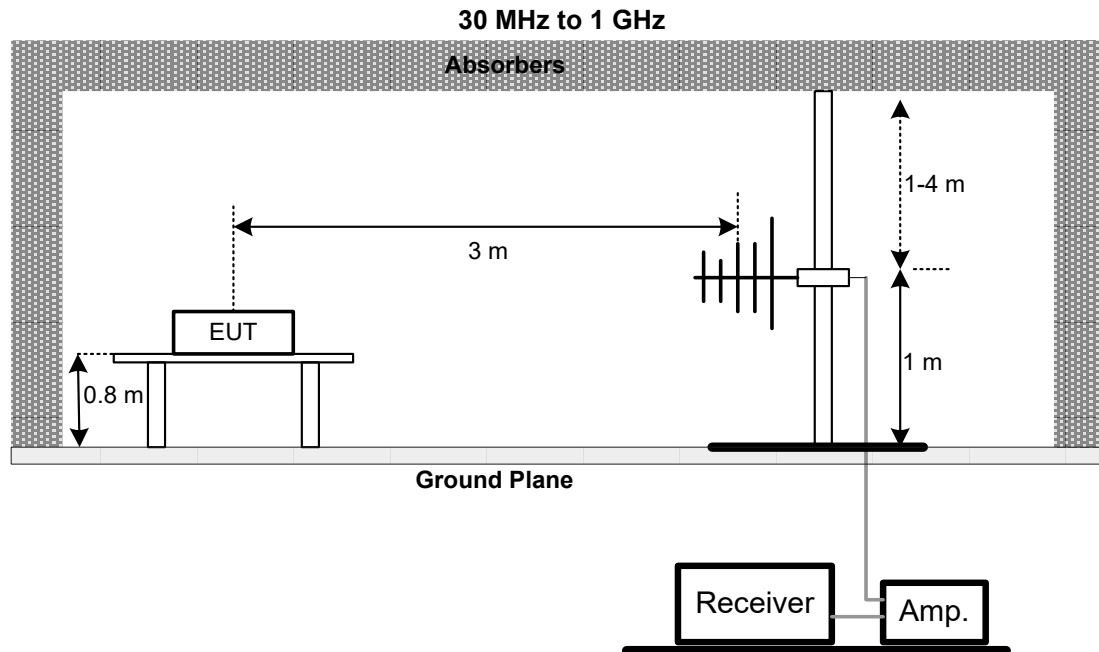
- d. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- f. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- g. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- h. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (between 30 MHz to 1 GHz)
- i. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (between 30 MHz to 1 GHz)

6.3 DEVIATION FROM TEST STANDARD

No deviation.

6.4 TEST SETUP





6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

NOTE:

- (1) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

6.6 TEST RESULT – 9 KHZ TO 30 MHZ

Please refer to the APPENDIX D.

6.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX E.

6.8 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX F.

7 IN-BAND EMISSION (MASK) TEST

7.1 LIMITS

According to 15.407(b)(7) the limits are as follows:

Item	Test Frequency Range	Power spectral density suppressed Limit
In-Band Emissions (Mask)	at 1 MHz outside of channel edge	20 dB
	at one channel bandwidth from the channel center	28 dB
	at one- and one-half times the channel bandwidth away from channel center	40 dB
	Emissions removed from the channel center by more than one- and one-half times the channel bandwidth	40 dB

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.

7.2 TEST PROCEDURE

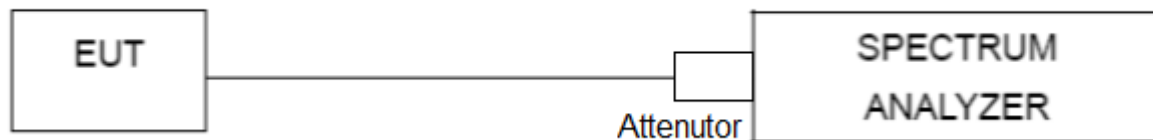
Referring to FCC KDB 987594 D02, clause J. In-Band Emissions:

- a. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
- b. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
- c. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
- d. 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.
- e. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW.
- f. 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:
 - g. Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
 - h. Suppressed by 28 dB at one channel bandwidth from the channel center.
 - i. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
 - j. Adjust the span to encompass the entire mask as necessary.
 - k. Clear trace.
 - l. Trace average at least 100 traces in power averaging (rms) mode.
 - m. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

7.3 DEVIATION FROM TEST STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULT

Please refer to the APPENDIX G.

8 CONTENTION-BASED PROTOCOL TEST

8.1 LIMITS

According to 15.407(d)(6) the limits are as follows:

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

According to FCC KDB 987594 D02, clause I. Contention Based Protocol:

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 (-62 dBm)¹. The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 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.

8.2 TEST PROCEDURE

Referring to FCC KDB 987594 D02, clause I. Contention Based Protocol:

Table 1. Criteria to determine 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}
$2BW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is located as closely as possible to the lower edge and upper edge, respectively, of the EUT channel
$BW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel

For Conducted measurement:

- a. Configure the EUT to transmit with a constant duty cycle.
- b. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
- c. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- d. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step b.
- e. 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.
- f. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- g. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- h. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- i. (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 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- j. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step e, choose a different center frequency for the AWGN signal and repeat the process.

For Radiated measurement:

- a. Using the 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.
- b. Connect the AWGN signal source to antenna 1 and transmit the signal (RF ON).
- c. Using signal analyzer 1 and antenna 2, measure the AWGN signal power level. Align antenna 2 and antenna 1 to maximize emission.
- d. Using equation $P_2 = P_{\text{meas}} + L - G_2$, correct the measured power P_{meas} by the gain of antenna 2, G_2 and all cable losses and attenuations L to obtain the AWGN signal power level at antenna 2, P_2 .
- e. Set the corrected power P_2 to an extremely low level (more than 20 dB below the -62 dBm threshold).
- f. Place the EUT exactly where antenna 2 was. Configure the EUT to transmit a constant duty cycle.
- g. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
- h. Set the signal analyzer 1 center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of EUT.
- i. Monitor the signal analyzer 1 to verify if AWGN signal has been detected and EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- j. Determine and record the AWGN signal power level at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect the AWGN signal with 90% (or better) level of certainty.
- k. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step a, choose a different center frequency for the AWGN signal and repeat the process.

8.3 DEVIATION FROM TEST STANDARD

No deviation.

8.4 TEST SETUP

For Conducted measurement:

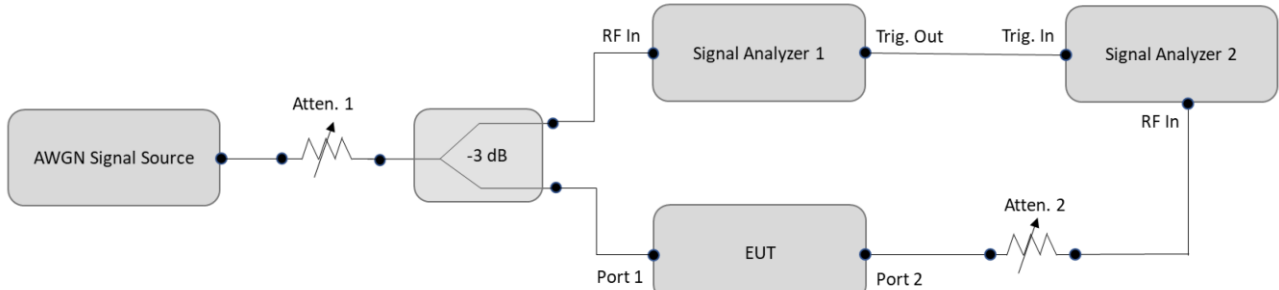


Figure 2. Contention-based protocol test setup, conducted method Step-by-Step Procedure, Conducted Setup

For Radiated measurement:

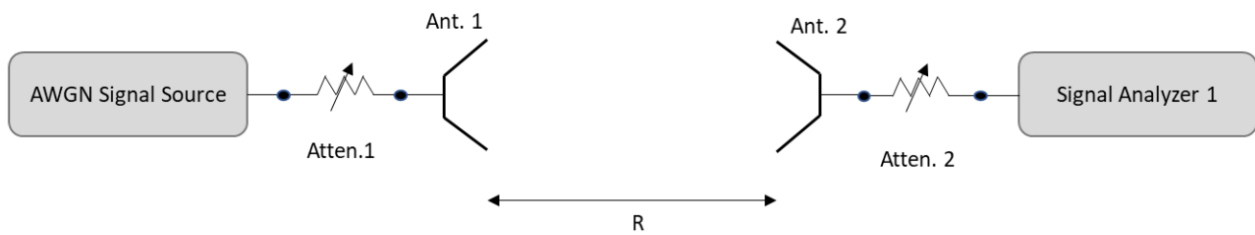


Figure 3. Contention-based protocol test setup, radiated method, power measurement

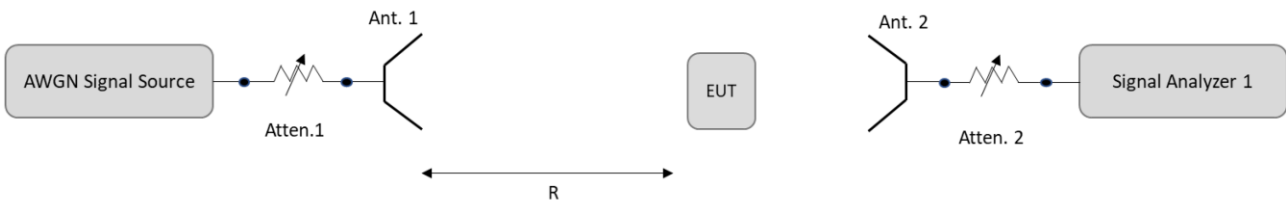


Figure 4. Contention-based protocol test setup, radiated method, detection threshold measurement

8.5 EUT OPERATING CONDITIONS

The EUT was Configured to be in normally transmitting mode with a constant duty cycle.

8.6 TEST RESULT

Please refer to the APPENDIX H.

9 LIST OF MEASURING EQUIPMENTS

Maximum e.i.r.p.						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Peak Power Analyzer	Keysight	8990B	MY51000517	2025/3/16	2026/3/15
2	Power Sensor	Keysight	N1923A	MY58310005	2025/3/18	2026/3/17

Maximum transmitter channel bandwidth & Maximum power spectral density & In-band emission (Mask)						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	EXA Spectrum Analyzer	Keysight	N9010A	MY54200240	2025/6/26	2026/6/25

Undesirable Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC330N	980850	2025/9/3	2026/9/2
2	Preamplifier	EMCI	EMC118A45SE	980819	2025/3/5	2026/3/4
3	Pre-Amplifier	EMCI	EMC184045SE	980907	2025/9/3	2026/9/2
4	Preamplifier	EMCI	EMC001340	980579	2025/9/3	2026/9/2
5	Test Cable	EMCI	EMC104-SM-1000	180809	2025/3/5	2026/3/4
6	Test Cable	EMCI	EMC104-SM-SM-3000	220322	2025/3/5	2026/3/4
7	Test Cable	EMCI	EMC105-SM-SM-8000	220422	2025/10/15	2026/10/14
8	EXA Signal Analyzer	keysight	N9020B	MY57120120	2025/2/19	2026/2/18
9	Loop Ant	Electro-Metrics	EMCI-LPA600	291	2025/9/1	2026/8/31
10	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2025/5/9	2026/5/8
11	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2025/5/15	2026/5/14
12	Log-bicon Antenna	Schwarzbeck	VULB9168	1369	2025/7/4	2026/7/3
13	6dB Attenuator	EMCI	EMCI-N-6-06	AT-06001	2025/7/4	2026/7/3
14	Test Cable	EMCI	EMC101G-KM-KM-3000	220329	2025/3/12	2026/3/11
15	Test Cable	EMCI	EMC102-KM-KM-1000	220327	2025/3/12	2026/3/11
16	Measurement Software	EZ	EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A

Contention Based Protocol						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	MXA Signal Analyzer	Keysight	N9020B	MY63490160	2025/2/6	2026/2/5
2	MXG Vector Signal Generator	Agilent	N5182B	MY51350711	2025/2/21	2026/2/20
3	Frequency Extender	Keysight	N5182BX07	MY59360246	2025/2/21	2026/2/20

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

10 EUT TEST PHOTOS

Please refer to document Appendix No.: TP-2509T114-FCCP-1 (APPENDIX-TEST PHOTOS).

11 EUT PHOTOS

Please refer to document Appendix No.: EP-2509T114-2 (APPENDIX-EUT PHOTOS).

APPENDIX A MAXIMUM E.I.R.P.

Test Mode	IEEE 802.11ax (HE20)_ Main Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5955	-1.71	0.0007	6.56	0.0045	24.00	0.2512	Pass
6175	-1.45	0.0007	6.82	0.0048	24.00	0.2512	Pass
6415	-1.68	0.0007	6.59	0.0046	24.00	0.2512	Pass
6435	-1.39	0.0007	6.57	0.0045	24.00	0.2512	Pass
6475	-1.54	0.0007	6.42	0.0044	24.00	0.2512	Pass
6515	-1.12	0.0008	6.84	0.0048	24.00	0.2512	Pass
6535	-1.68	0.0007	6.60	0.0046	24.00	0.2512	Pass
6695	-2.00	0.0006	6.28	0.0042	24.00	0.2512	Pass
6855	-2.21	0.0006	6.07	0.0040	24.00	0.2512	Pass
6875	0.28	0.0011	6.02	0.0040	24.00	0.2512	Pass
6995	0.06	0.0010	5.80	0.0038	24.00	0.2512	Pass
7115	-10.84	0.0001	-5.10	0.0003	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE20)_ Aux Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5955	-1.23	0.0008	7.04	0.0051	24.00	0.2512	Pass
6175	-0.92	0.0008	7.35	0.0054	24.00	0.2512	Pass
6415	-1.71	0.0007	6.56	0.0045	24.00	0.2512	Pass
6435	-1.51	0.0007	6.45	0.0044	24.00	0.2512	Pass
6475	-1.88	0.0006	6.08	0.0041	24.00	0.2512	Pass
6515	-1.76	0.0007	6.20	0.0042	24.00	0.2512	Pass
6535	1.99	0.0016	10.27	0.0106	24.00	0.2512	Pass
6695	-0.75	0.0008	7.53	0.0057	24.00	0.2512	Pass
6855	-0.77	0.0008	7.51	0.0056	24.00	0.2512	Pass
6875	1.99	0.0016	7.73	0.0059	24.00	0.2512	Pass
6995	1.96	0.0016	7.70	0.0059	24.00	0.2512	Pass
7115	-9.75	0.0001	-4.01	0.0004	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE20)_ Total	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5955	1.55	0.0014	9.82	0.0096	24.00	0.2512	Pass
6175	1.83	0.0015	10.10	0.0102	24.00	0.2512	Pass
6415	1.32	0.0014	9.59	0.0091	24.00	0.2512	Pass
6435	1.56	0.0014	9.52	0.0090	24.00	0.2512	Pass
6475	1.30	0.0014	9.26	0.0084	24.00	0.2512	Pass
6515	1.58	0.0014	9.54	0.0090	24.00	0.2512	Pass
6535	3.54	0.0023	11.82	0.0152	24.00	0.2512	Pass
6695	1.68	0.0015	9.96	0.0099	24.00	0.2512	Pass
6855	1.58	0.0014	9.86	0.0097	24.00	0.2512	Pass
6875	4.23	0.0026	9.97	0.0099	24.00	0.2512	Pass
6995	4.12	0.0026	9.86	0.0097	24.00	0.2512	Pass
7115	-7.25	0.0002	-1.51	0.0007	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE40)_ Main Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5965	1.42	0.0014	9.69	0.0093	24.00	0.2512	Pass
6165	2.50	0.0018	10.77	0.0119	24.00	0.2512	Pass
6405	2.14	0.0016	10.41	0.0110	24.00	0.2512	Pass
6445	2.76	0.0019	10.72	0.0118	24.00	0.2512	Pass
6485	2.15	0.0016	10.11	0.0103	24.00	0.2512	Pass
6525	1.69	0.0015	9.97	0.0099	24.00	0.2512	Pass
6685	1.72	0.0015	10.00	0.0100	24.00	0.2512	Pass
6845	1.39	0.0014	9.67	0.0093	24.00	0.2512	Pass
6885	4.97	0.0031	10.71	0.0118	24.00	0.2512	Pass
6965	5.41	0.0035	11.15	0.0130	24.00	0.2512	Pass
7085	4.05	0.0025	9.79	0.0095	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE40)_ Aux Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5965	1.93	0.0016	10.20	0.0105	24.00	0.2512	Pass
6165	3.04	0.0020	11.31	0.0135	24.00	0.2512	Pass
6405	2.08	0.0016	10.35	0.0108	24.00	0.2512	Pass
6445	2.44	0.0018	10.40	0.0110	24.00	0.2512	Pass
6485	1.92	0.0016	9.88	0.0097	24.00	0.2512	Pass
6525	1.82	0.0015	10.10	0.0102	24.00	0.2512	Pass
6685	2.39	0.0017	10.67	0.0117	24.00	0.2512	Pass
6845	2.86	0.0019	11.14	0.0130	24.00	0.2512	Pass
6885	6.39	0.0044	12.13	0.0163	24.00	0.2512	Pass
6965	7.38	0.0055	13.12	0.0205	24.00	0.2512	Pass
7085	5.56	0.0036	11.30	0.0135	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE40)_ Total	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5965	4.69	0.0029	12.96	0.0198	24.00	0.2512	Pass
6165	5.79	0.0038	14.06	0.0255	24.00	0.2512	Pass
6405	5.12	0.0033	13.39	0.0218	24.00	0.2512	Pass
6445	5.61	0.0036	13.57	0.0228	24.00	0.2512	Pass
6485	5.05	0.0032	13.01	0.0200	24.00	0.2512	Pass
6525	4.77	0.0030	13.05	0.0202	24.00	0.2512	Pass
6685	5.08	0.0032	13.36	0.0217	24.00	0.2512	Pass
6845	5.20	0.0033	13.48	0.0223	24.00	0.2512	Pass
6885	8.75	0.0075	14.49	0.0281	24.00	0.2512	Pass
6965	9.52	0.0089	15.26	0.0335	24.00	0.2512	Pass
7085	7.88	0.0061	13.62	0.0230	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE80)_ Main Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5985	4.59	0.0029	12.86	0.0193	24.00	0.2512	Pass
6145	5.33	0.0034	13.60	0.0229	24.00	0.2512	Pass
6385	4.45	0.0028	12.72	0.0187	24.00	0.2512	Pass
6465	5.30	0.0034	13.26	0.0212	24.00	0.2512	Pass
6545	4.56	0.0029	12.84	0.0192	24.00	0.2512	Pass
6625	4.85	0.0031	13.13	0.0206	24.00	0.2512	Pass
6705	5.20	0.0033	13.48	0.0223	24.00	0.2512	Pass
6785	4.64	0.0029	12.92	0.0196	24.00	0.2512	Pass
6865	7.64	0.0058	13.38	0.0218	24.00	0.2512	Pass
6945	7.16	0.0052	12.90	0.0195	24.00	0.2512	Pass
7025	6.15	0.0041	11.89	0.0155	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE80)_ Aux Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5985	5.10	0.0032	13.37	0.0217	24.00	0.2512	Pass
6145	6.13	0.0041	14.40	0.0275	24.00	0.2512	Pass
6385	5.28	0.0034	13.55	0.0226	24.00	0.2512	Pass
6465	5.54	0.0036	13.50	0.0224	24.00	0.2512	Pass
6545	4.83	0.0030	13.11	0.0205	24.00	0.2512	Pass
6625	4.86	0.0031	13.14	0.0206	24.00	0.2512	Pass
6705	5.59	0.0036	13.87	0.0244	24.00	0.2512	Pass
6785	6.26	0.0042	14.54	0.0284	24.00	0.2512	Pass
6865	9.38	0.0087	15.12	0.0325	24.00	0.2512	Pass
6945	8.95	0.0079	14.69	0.0294	24.00	0.2512	Pass
7025	9.17	0.0083	14.91	0.0310	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE80)_ Total	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5985	7.86	0.0061	16.13	0.0410	24.00	0.2512	Pass
6145	8.76	0.0075	17.03	0.0505	24.00	0.2512	Pass
6385	7.90	0.0062	16.17	0.0414	24.00	0.2512	Pass
6465	8.43	0.0070	16.39	0.0436	24.00	0.2512	Pass
6545	7.71	0.0059	15.99	0.0397	24.00	0.2512	Pass
6625	7.87	0.0061	16.15	0.0412	24.00	0.2512	Pass
6705	8.41	0.0069	16.69	0.0467	24.00	0.2512	Pass
6785	8.54	0.0071	16.82	0.0480	24.00	0.2512	Pass
6865	11.61	0.0145	17.35	0.0543	24.00	0.2512	Pass
6945	11.16	0.0131	16.90	0.0489	24.00	0.2512	Pass
7025	10.93	0.0124	16.67	0.0464	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE160)_ Main Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
6025	7.52	0.0056	15.79	0.0379	24.00	0.2512	Pass
6345	7.44	0.0055	15.71	0.0372	24.00	0.2512	Pass
6505	7.56	0.0057	15.52	0.0356	24.00	0.2512	Pass
6665	7.65	0.0058	15.93	0.0392	24.00	0.2512	Pass
6985	8.91	0.0078	14.65	0.0292	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE160)_ Aux Antenna	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
6025	7.97	0.0063	16.24	0.0421	24.00	0.2512	Pass
6345	8.03	0.0064	16.30	0.0427	24.00	0.2512	Pass
6505	7.59	0.0057	15.55	0.0359	24.00	0.2512	Pass
6665	8.02	0.0063	16.30	0.0427	24.00	0.2512	Pass
6985	11.67	0.0147	17.41	0.0551	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE160)_ Total	Tested Date	2025/10/30 ~ 11/5
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
6025	10.76	0.0119	19.03	0.0800	24.00	0.2512	Pass
6345	10.76	0.0119	19.03	0.0799	24.00	0.2512	Pass
6505	10.59	0.0114	18.55	0.0715	24.00	0.2512	Pass
6665	10.85	0.0122	19.13	0.0818	24.00	0.2512	Pass
6985	13.52	0.0225	19.26	0.0843	24.00	0.2512	Pass

For RU Configuration:

Test Mode	IEEE 802.11ax (HE20)_ Main Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5955_full	-1.85	0.0007	6.42	0.0044	24.00	0.2512	Pass
26_Tones	-11.40	0.0001	-3.13	0.0005	24.00	0.2512	Pass
52_Tones	-8.98	0.0001	-0.71	0.0008	24.00	0.2512	Pass
106_Tones	-6.06	0.0002	2.21	0.0017	24.00	0.2512	Pass
6435_full	-1.48	0.0007	6.48	0.0044	24.00	0.2512	Pass
26_Tones	-10.61	0.0001	-2.65	0.0005	24.00	0.2512	Pass
52_Tones	-7.88	0.0002	0.08	0.0010	24.00	0.2512	Pass
106_Tones	-5.37	0.0003	2.59	0.0018	24.00	0.2512	Pass
6535_full	-1.51	0.0007	6.77	0.0048	24.00	0.2512	Pass
26_Tones	-10.33	0.0001	-2.05	0.0006	24.00	0.2512	Pass
52_Tones	-8.52	0.0001	-0.24	0.0009	24.00	0.2512	Pass
106_Tones	-4.63	0.0003	3.65	0.0023	24.00	0.2512	Pass
6875_full	0.65	0.0012	6.39	0.0044	24.00	0.2512	Pass
26_Tones	-9.35	0.0001	-3.61	0.0004	24.00	0.2512	Pass
52_Tones	-6.39	0.0002	-0.65	0.0009	24.00	0.2512	Pass
106_Tones	-3.25	0.0005	2.49	0.0018	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE20)_ Aux Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5955_full	-1.19	0.0008	7.08	0.0051	24.00	0.2512	Pass
26_Tones	-10.41	0.0001	-2.14	0.0006	24.00	0.2512	Pass
52_Tones	-8.07	0.0002	0.20	0.0010	24.00	0.2512	Pass
106_Tones	-5.12	0.0003	3.15	0.0021	24.00	0.2512	Pass
6435_full	-1.41	0.0007	6.55	0.0045	24.00	0.2512	Pass
26_Tones	-10.62	0.0001	-2.66	0.0005	24.00	0.2512	Pass
52_Tones	-7.70	0.0002	0.26	0.0011	24.00	0.2512	Pass
106_Tones	-5.22	0.0003	2.74	0.0019	24.00	0.2512	Pass
6535_full	-1.36	0.0007	6.92	0.0049	24.00	0.2512	Pass
26_Tones	-10.06	0.0001	-1.78	0.0007	24.00	0.2512	Pass
52_Tones	-8.18	0.0002	0.10	0.0010	24.00	0.2512	Pass
106_Tones	-4.31	0.0004	3.97	0.0025	24.00	0.2512	Pass
6875_full	2.63	0.0018	8.37	0.0069	24.00	0.2512	Pass
26_Tones	-7.10	0.0002	-1.36	0.0007	24.00	0.2512	Pass
52_Tones	-4.33	0.0004	1.41	0.0014	24.00	0.2512	Pass
106_Tones	-1.36	0.0007	4.38	0.0027	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE20)_Total	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5955_full	1.50	0.0014	9.77	0.0095	24.00	0.2512	Pass
26_Tones	-7.87	0.0002	0.40	0.0011	24.00	0.2512	Pass
52_Tones	-5.49	0.0003	2.78	0.0019	24.00	0.2512	Pass
106_Tones	-2.55	0.0006	5.72	0.0037	24.00	0.2512	Pass
6435_full	1.57	0.0014	9.53	0.0090	24.00	0.2512	Pass
26_Tones	-7.60	0.0002	0.36	0.0011	24.00	0.2512	Pass
52_Tones	-4.78	0.0003	3.18	0.0021	24.00	0.2512	Pass
106_Tones	-2.28	0.0006	5.68	0.0037	24.00	0.2512	Pass
6535_full	1.58	0.0014	9.86	0.0097	24.00	0.2512	Pass
26_Tones	-7.18	0.0002	1.10	0.0013	24.00	0.2512	Pass
52_Tones	-5.34	0.0003	2.94	0.0020	24.00	0.2512	Pass
106_Tones	-1.46	0.0007	6.82	0.0048	24.00	0.2512	Pass
6875_full	4.76	0.0030	10.50	0.0112	24.00	0.2512	Pass
26_Tones	-5.07	0.0003	0.67	0.0012	24.00	0.2512	Pass
52_Tones	-2.23	0.0006	3.51	0.0022	24.00	0.2512	Pass
106_Tones	0.81	0.0012	6.55	0.0045	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE40)_ Main Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5965_full	1.93	0.0016	10.20	0.0105	24.00	0.2512	Pass
242_Tones	-1.50	0.0007	6.77	0.0048	24.00	0.2512	Pass
6445_full	2.83	0.0019	10.79	0.0120	24.00	0.2512	Pass
242_Tones	0.33	0.0011	8.29	0.0067	24.00	0.2512	Pass
6525_full	1.83	0.0015	10.11	0.0103	24.00	0.2512	Pass
242_Tones	-1.73	0.0007	6.55	0.0045	24.00	0.2512	Pass
6885_full	5.04	0.0032	10.78	0.0120	24.00	0.2512	Pass
242_Tones	1.15	0.0013	6.89	0.0049	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE40)_ Aux Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5965_full	2.35	0.0017	10.62	0.0115	24.00	0.2512	Pass
242_Tones	-0.44	0.0009	7.83	0.0061	24.00	0.2512	Pass
6445_full	2.53	0.0018	10.49	0.0112	24.00	0.2512	Pass
242_Tones	-0.58	0.0009	7.38	0.0055	24.00	0.2512	Pass
6525_full	2.12	0.0016	10.40	0.0110	24.00	0.2512	Pass
242_Tones	-1.71	0.0007	6.57	0.0045	24.00	0.2512	Pass
6885_full	6.93	0.0049	12.67	0.0185	24.00	0.2512	Pass
242_Tones	2.80	0.0019	8.54	0.0071	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE40)_ Total	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5965_full	5.16	0.0033	13.43	0.0220	24.00	0.2512	Pass
242_Tones	2.07	0.0016	10.34	0.0108	24.00	0.2512	Pass
6445_full	5.69	0.0037	13.65	0.0232	24.00	0.2512	Pass
242_Tones	2.91	0.0020	10.87	0.0122	24.00	0.2512	Pass
6525_full	4.99	0.0032	13.27	0.0212	24.00	0.2512	Pass
242_Tones	1.29	0.0013	9.57	0.0091	24.00	0.2512	Pass
6885_full	9.10	0.0081	14.84	0.0305	24.00	0.2512	Pass
242_Tones	5.06	0.0032	10.80	0.0120	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE80)_ Main Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5985_full	4.43	0.0028	12.70	0.0186	24.00	0.2512	Pass
484_Tones	1.37	0.0014	9.64	0.0092	24.00	0.2512	Pass
6465_full	5.42	0.0035	13.38	0.0218	24.00	0.2512	Pass
484_Tones	2.80	0.0019	10.76	0.0119	24.00	0.2512	Pass
6545_full	4.69	0.0029	12.97	0.0198	24.00	0.2512	Pass
484_Tones	1.73	0.0015	10.01	0.0100	24.00	0.2512	Pass
6865_full	7.65	0.0058	13.39	0.0218	24.00	0.2512	Pass
484_Tones	4.45	0.0028	10.19	0.0104	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE80)_ Aux Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5985_full	5.47	0.0035	13.74	0.0237	24.00	0.2512	Pass
484_Tones	2.42	0.0017	10.69	0.0117	24.00	0.2512	Pass
6465_full	5.64	0.0037	13.60	0.0229	24.00	0.2512	Pass
484_Tones	2.61	0.0018	10.57	0.0114	24.00	0.2512	Pass
6545_full	5.17	0.0033	13.45	0.0221	24.00	0.2512	Pass
484_Tones	1.96	0.0016	10.24	0.0106	24.00	0.2512	Pass
6865_full	9.76	0.0095	15.50	0.0355	24.00	0.2512	Pass
484_Tones	6.14	0.0041	11.88	0.0154	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE80)_ Total	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
5985_full	7.99	0.0063	16.26	0.0423	24.00	0.2512	Pass
484_Tones	4.94	0.0031	13.21	0.0209	24.00	0.2512	Pass
6465_full	8.54	0.0071	16.50	0.0447	24.00	0.2512	Pass
484_Tones	5.72	0.0037	13.68	0.0233	24.00	0.2512	Pass
6545_full	7.95	0.0062	16.23	0.0419	24.00	0.2512	Pass
484_Tones	4.86	0.0031	13.14	0.0206	24.00	0.2512	Pass
6865_full	11.84	0.0153	17.58	0.0573	24.00	0.2512	Pass
484_Tones	8.39	0.0069	14.13	0.0259	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE160)_ Main Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
6025_full	7.35	0.0054	15.62	0.0365	24.00	0.2512	Pass
996_Tones	5.39	0.0035	13.66	0.0232	24.00	0.2512	Pass
6505_full	7.37	0.0055	15.33	0.0341	24.00	0.2512	Pass
996_Tones	5.18	0.0033	13.14	0.0206	24.00	0.2512	Pass
6665_full	7.42	0.0055	15.70	0.0372	24.00	0.2512	Pass
996_Tones	5.60	0.0036	13.88	0.0244	24.00	0.2512	Pass
6985_full	8.84	0.0077	14.58	0.0287	24.00	0.2512	Pass
996_Tones	7.29	0.0054	13.03	0.0201	24.00	0.2512	Pass

Test Mode	IEEE 802.11ax (HE160)_ Aux Antenna	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
6025_full	7.98	0.0063	16.25	0.0422	24.00	0.2512	Pass
996_Tones	6.24	0.0042	14.51	0.0282	24.00	0.2512	Pass
6505_full	7.59	0.0057	15.55	0.0359	24.00	0.2512	Pass
996_Tones	5.52	0.0036	13.48	0.0223	24.00	0.2512	Pass
6665_full	7.96	0.0063	16.24	0.0421	24.00	0.2512	Pass
996_Tones	5.67	0.0037	13.95	0.0248	24.00	0.2512	Pass
6985_full	11.59	0.0144	17.33	0.0541	24.00	0.2512	Pass
996_Tones	10.03	0.0101	15.77	0.0378	24.00	0.2512	Pass

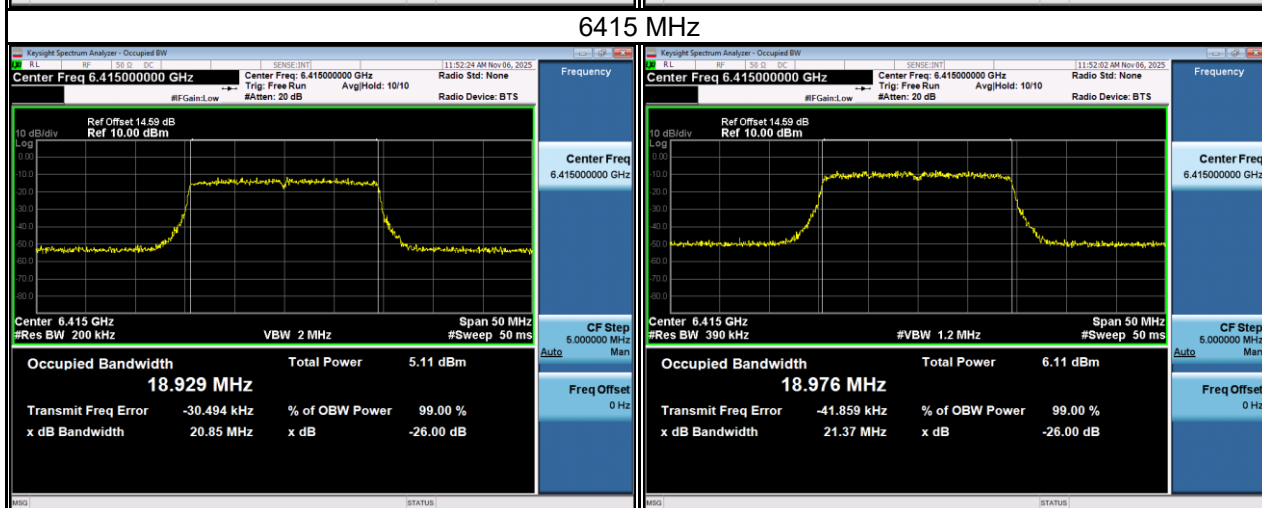
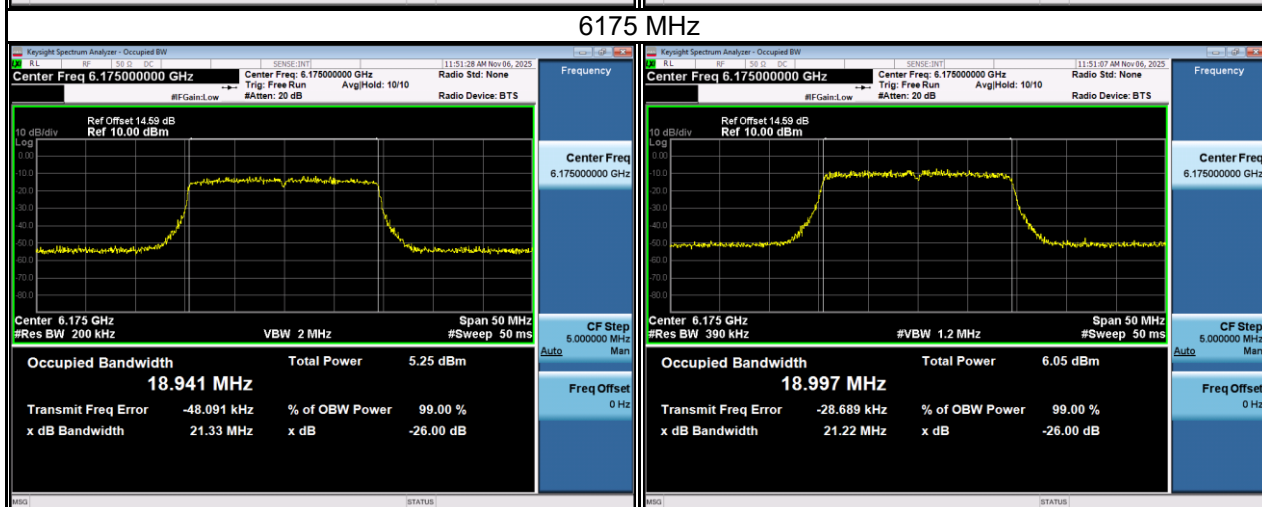
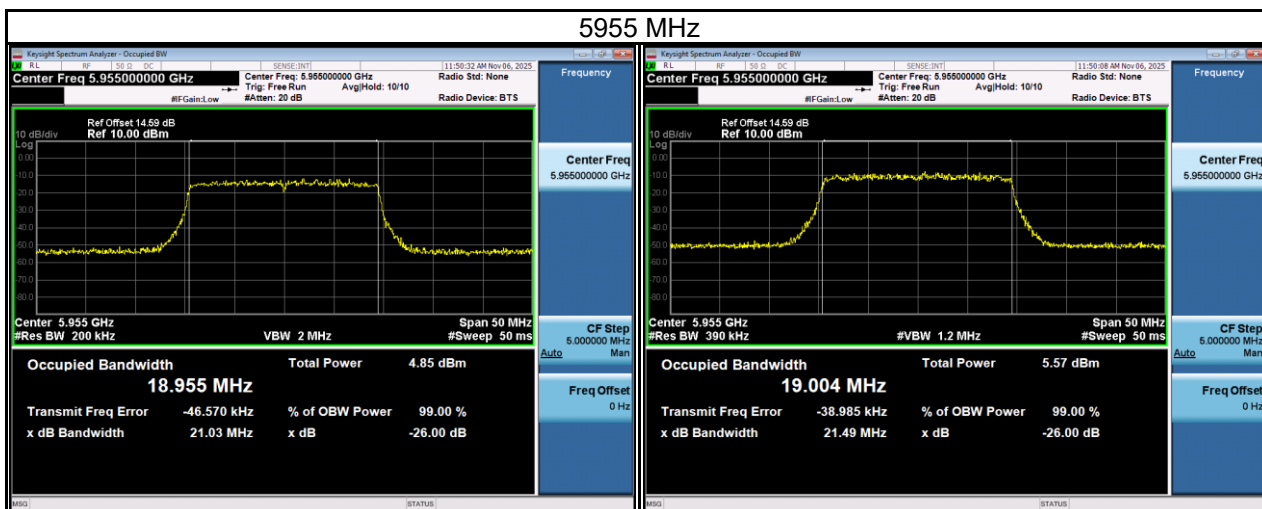
Test Mode	IEEE 802.11ax (HE160)_ Total	Tested Date	2025/11/7
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Test Frequency (MHz)	Average Power (dBm)	Average Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
6025_full	10.69	0.0117	18.96	0.0786	24.00	0.2512	Pass
996_Tones	8.85	0.0077	17.12	0.0515	24.00	0.2512	Pass
6505_full	10.49	0.0112	18.45	0.0700	24.00	0.2512	Pass
996_Tones	8.36	0.0069	16.32	0.0429	24.00	0.2512	Pass
6665_full	10.71	0.0118	18.99	0.0792	24.00	0.2512	Pass
996_Tones	8.65	0.0073	16.93	0.0493	24.00	0.2512	Pass
6985_full	13.44	0.0221	19.18	0.0828	24.00	0.2512	Pass
996_Tones	11.88	0.0154	17.62	0.0578	24.00	0.2512	Pass

APPENDIX B MAXIMUM TRANSMITTER CHANNEL BANDWIDTH

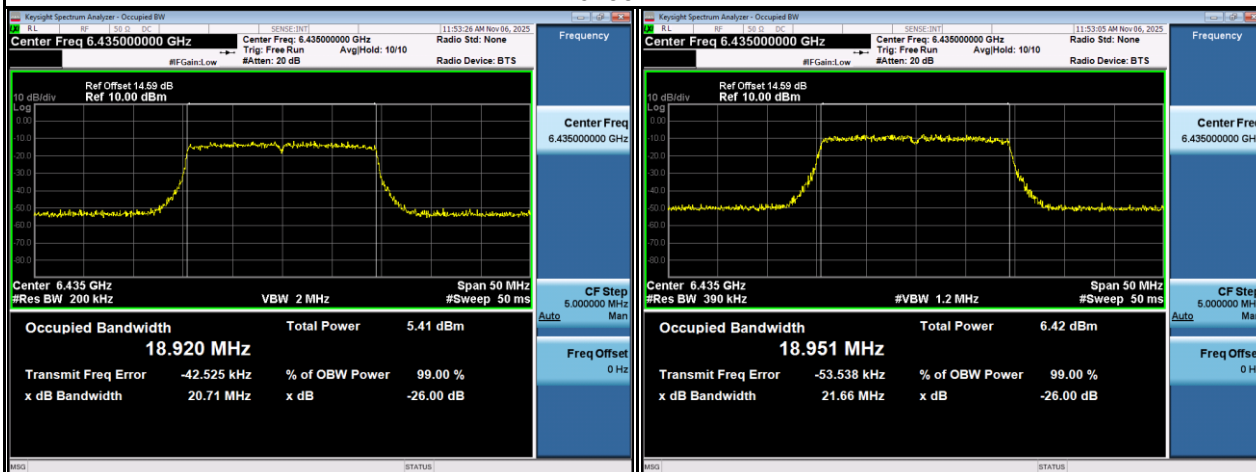
Test Mode	IEEE 802.11ax (HE20)_ Main Antenna
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Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit (MHz)	Result
5955	21.03	19.00	20	Pass
6175	21.33	19.00	20	Pass
6415	20.85	18.98	20	Pass

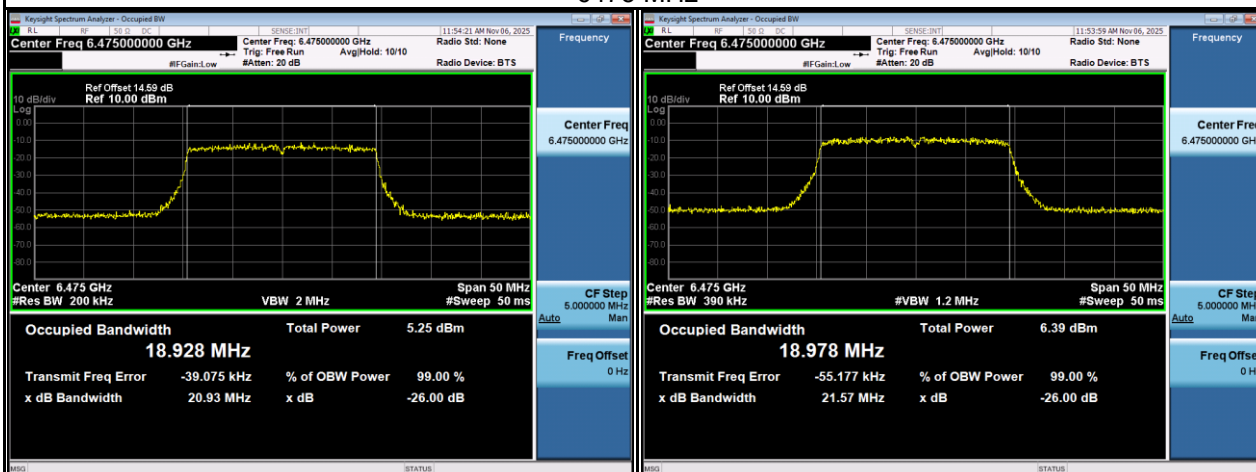


Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit (MHz)	Result
6435	20.71	18.95	20	Pass
6475	20.93	18.98	20	Pass
6515	20.83	19.00	20	Pass

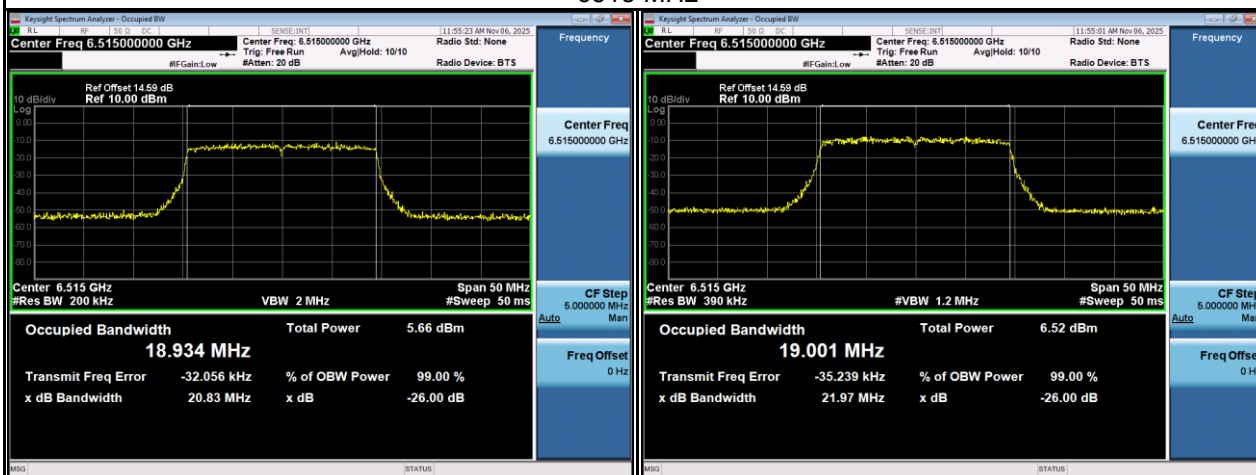
6435 MHz



6475 MHz

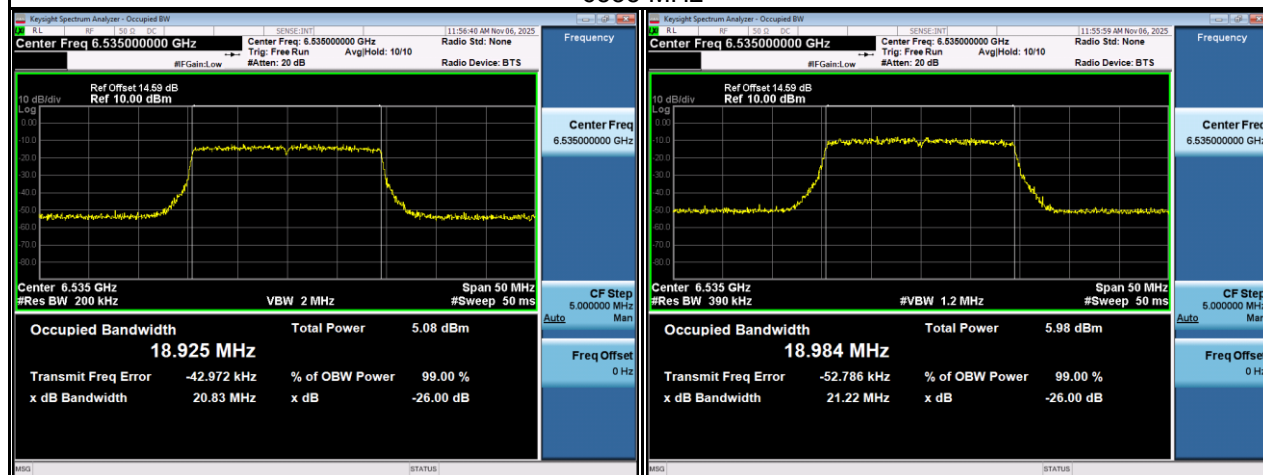


6515 MHz

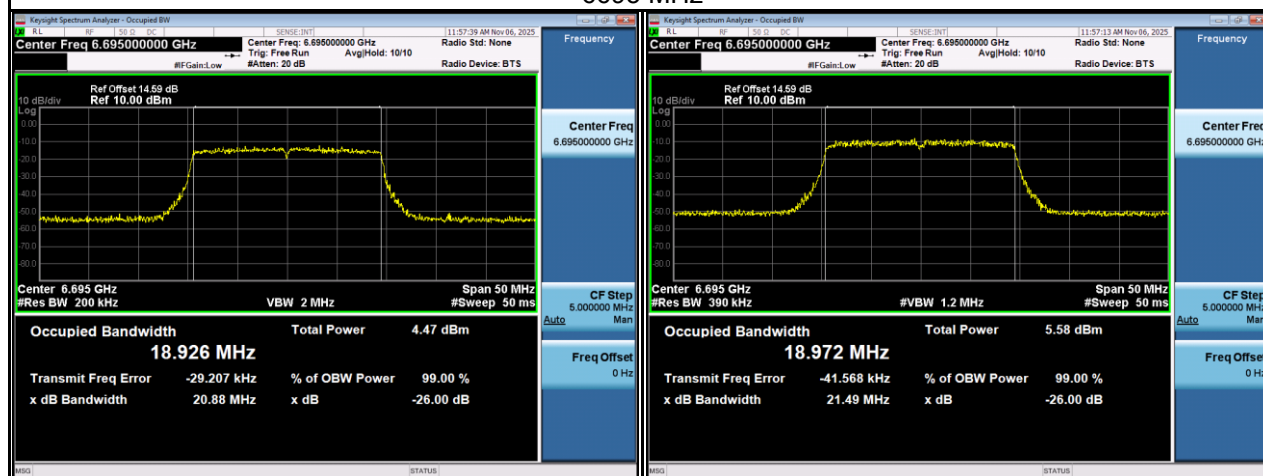


Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit (MHz)	Result
6535	20.83	18.98	20	Pass
6695	20.88	18.97	20	Pass
6855	20.96	18.99	20	Pass

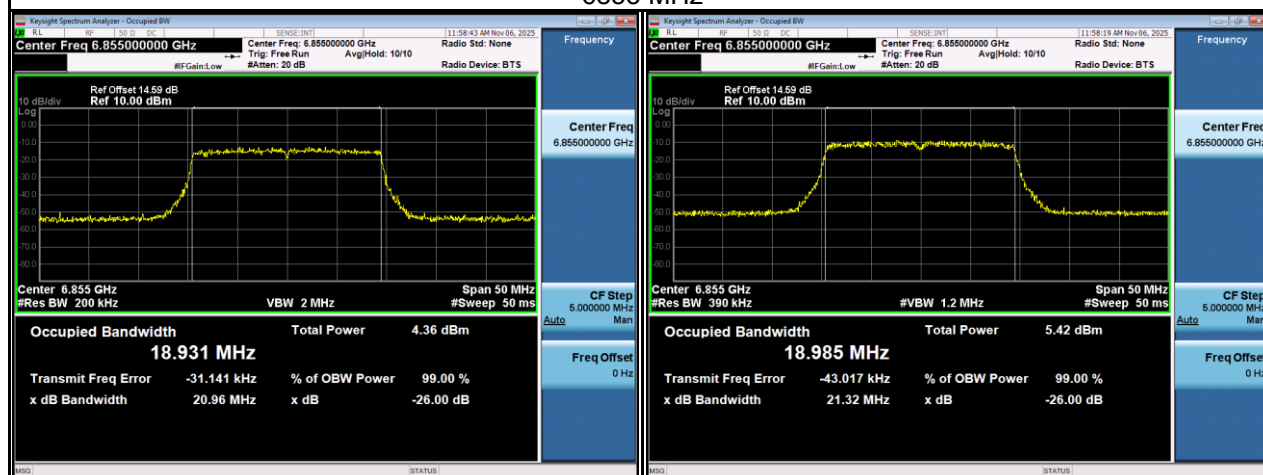
6535 MHz



6695 MHz

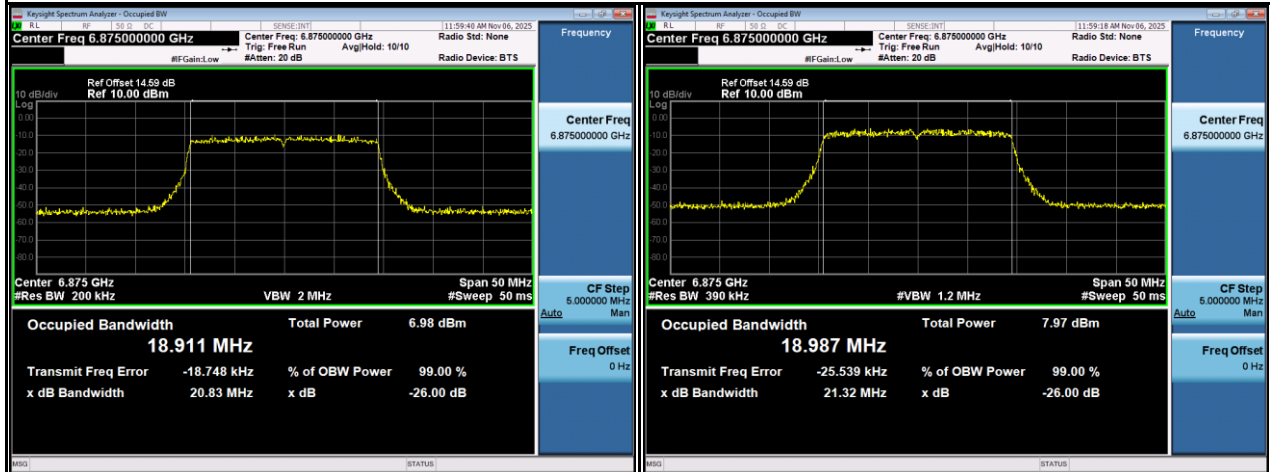


6855 MHz

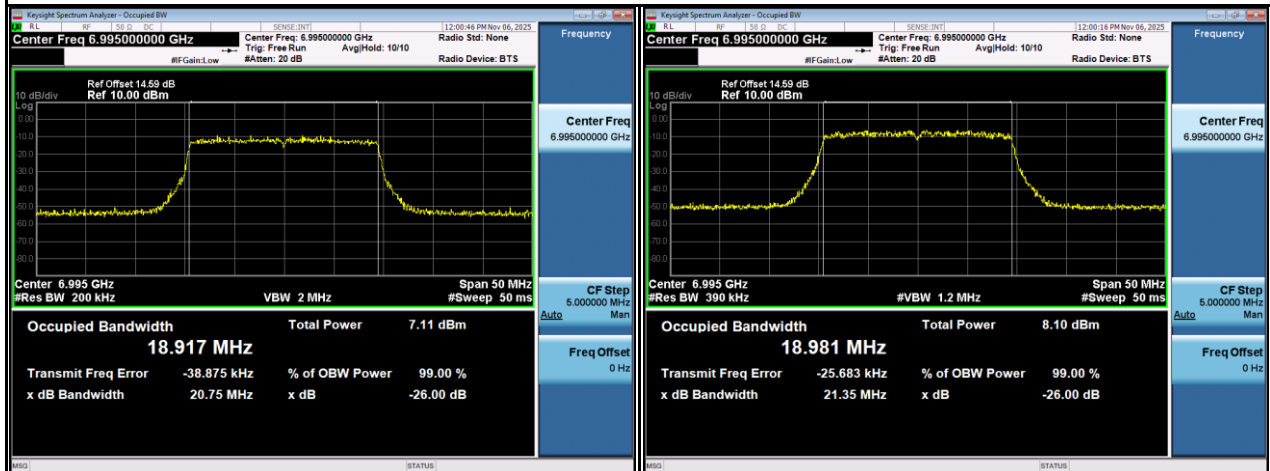


Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit (MHz)	Result
6875	20.83	18.99	20	Pass
6995	20.75	18.98	20	Pass
7115	20.82	18.99	20	Pass

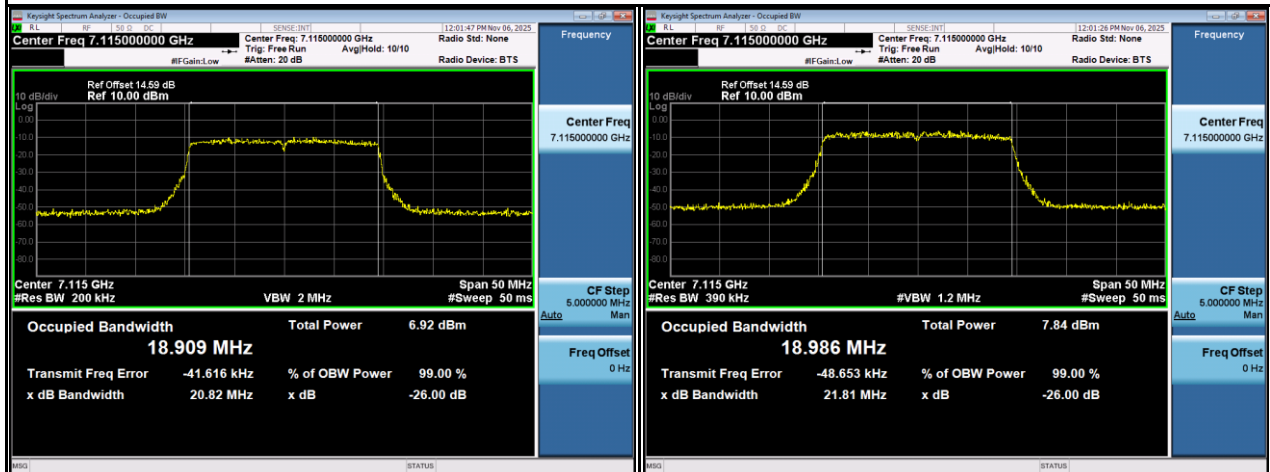
6875 MHz



6995 MHz



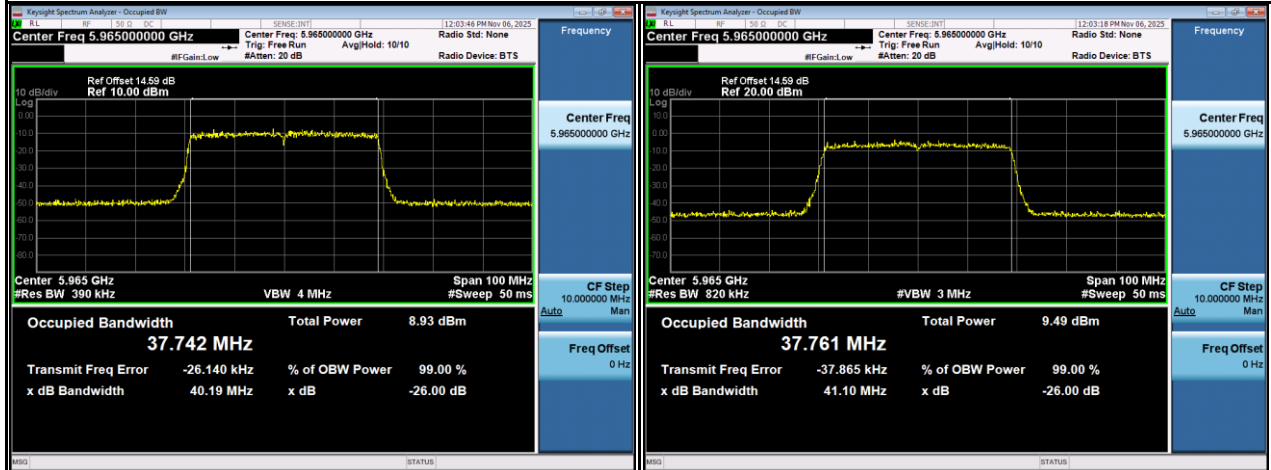
7115 MHz



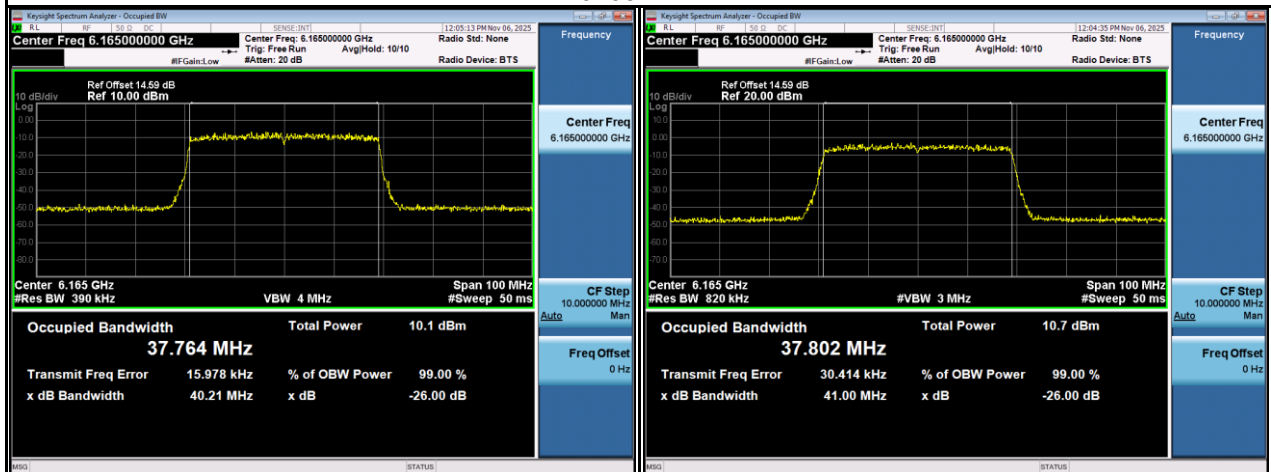
Test Mode	IEEE 802.11ax (HE40)_ Main Antenna
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Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit (MHz)	Result
5965	40.19	37.76	40	Pass
6165	40.21	37.80	40	Pass
6405	40.79	37.87	40	Pass

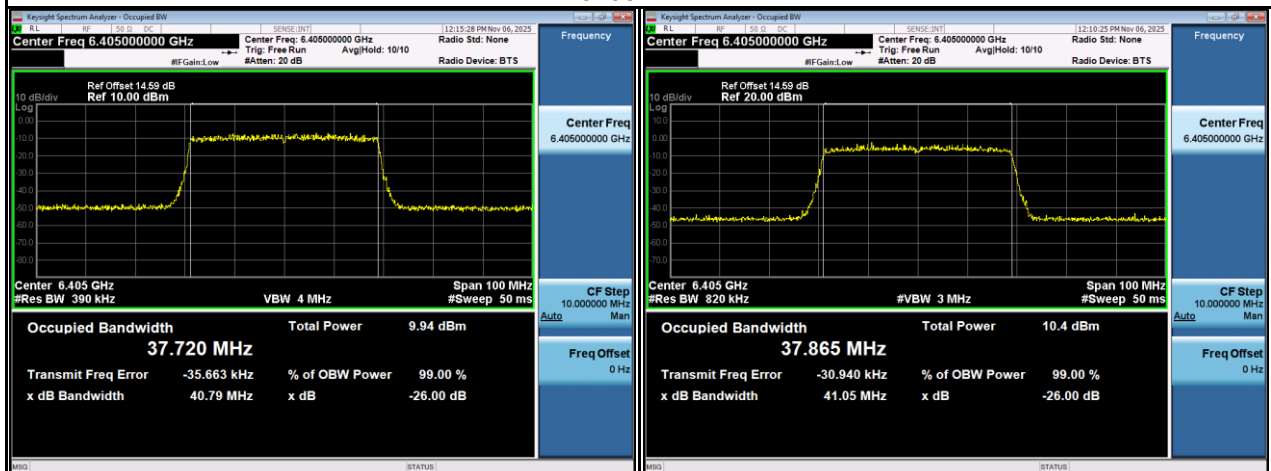
5965 MHz



6165 MHz

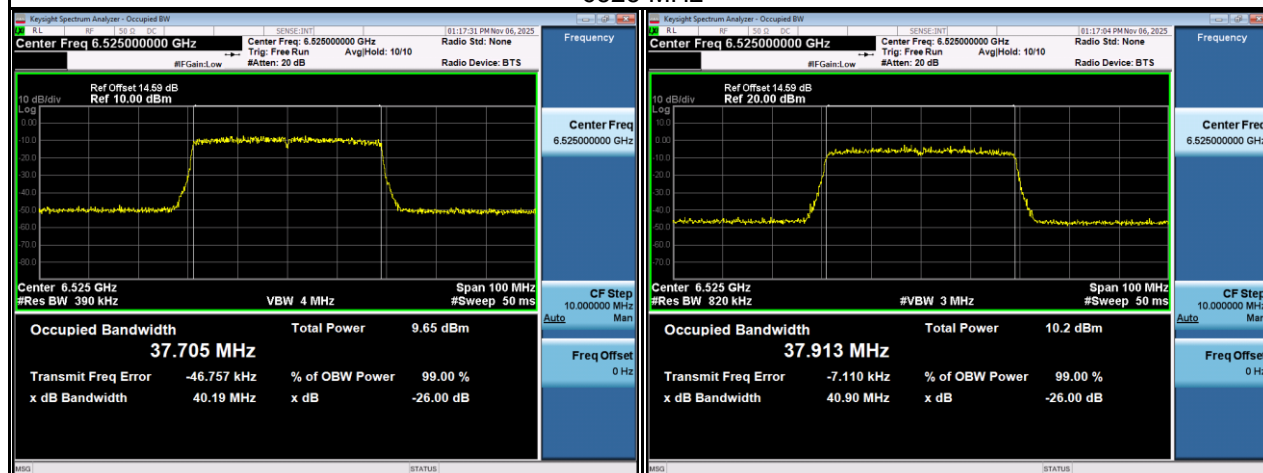


6405 MHz



Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit (MHz)	Result
6525	40.19	37.91	40	Pass
6685	40.27	37.92	40	Pass
6845	40.58	37.93	40	Pass

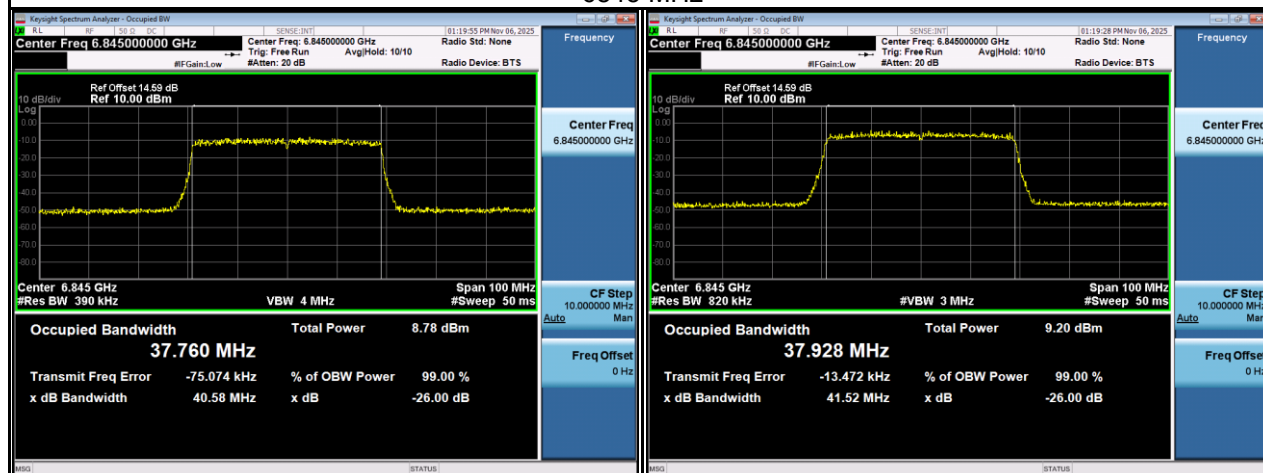
6525 MHz



6685 MHz

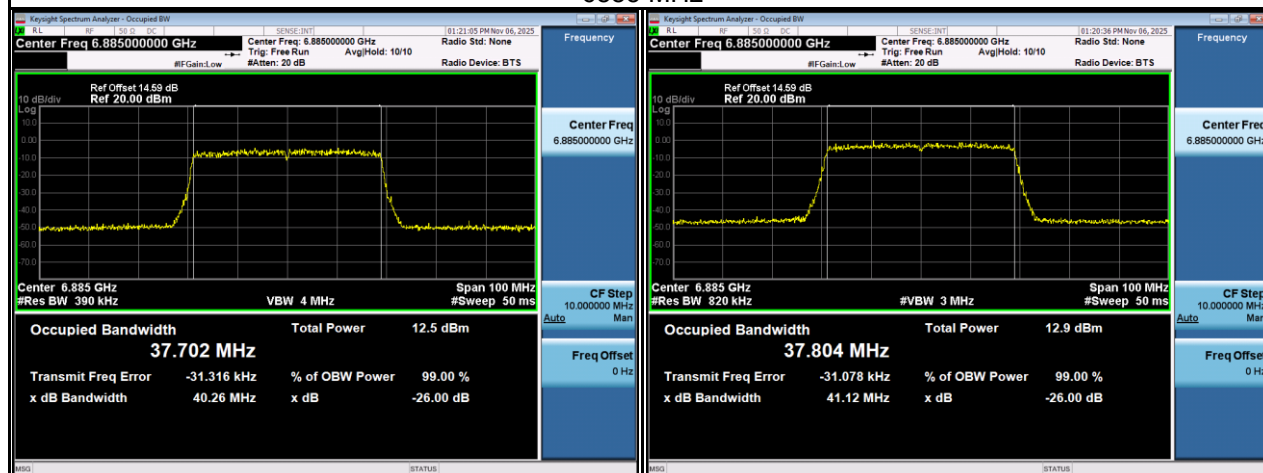


6845 MHz

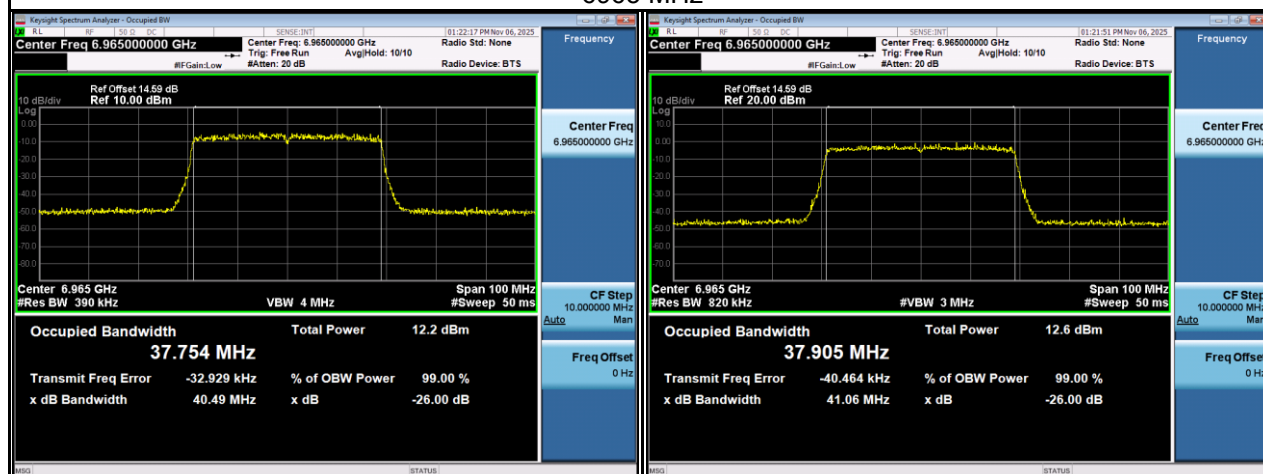


Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit (MHz)	Result
6885	40.26	37.80	40	Pass
6965	40.49	37.91	40	Pass
7085	40.19	37.90	40	Pass

6885 MHz



6965 MHz



7085 MHz

