FCC TEST REPORT
FCC ID:2BMKZ-SOL-A01

Report Number.....:	**ZKT-24110414621E-4**
Date of Test.....	Nov. 11, 2024 to Nov. 25, 2024
Date of issue.....:	Nov. 25, 2024
Total number of pages.....	166
Test Result .....:	PASS
Testing Laboratory.....:	**Shenzhen ZKT Technology Co., Ltd.**
Address .....:	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Applicant's name .....:	**Duoping Technologies HK Limited**
Address .....:	Unit 1003, 10/F., Tower 2, Silvercord, 30 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong
Manufacturer's name .....:	**Duoping Technologies HK Limited**
Address .....:	Unit 1003, 10/F., Tower 2, Silvercord, 30 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong
Test specification:	
Standard.....:	FCC CFR Title 47 Part 15 Subpart E Section 15.407 ANSI C63.10:2013 KDB 789033 D02 v02r01
Test procedure.....:	/
Non-standard test method .....:	N/A
Test Report Form No.....:	/
Test Report Form(s) Originator.....:	ZKT Testing
Master TRF .....:	Dated: 2020-01-06

This device described above has been tested by ZKT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
This report shall not be reproduced except in full, without the written approval of ZKT, this document may be altered or revised by ZKT, personal only, and shall be noted in the revision of the document.

Product name.....:	**INAIR Pod**
Trademark .....:	N/A
Model/Type reference.....:	Sol-A01
Ratings.....:	Input: 9V⎓2A Battery: DC 3.85V, 5000mAh, 19.25Wh

Testing procedure and testing location:

Testing Laboratory..... :	**Shenzhen ZKT Technology Co., Ltd.**
Address..... :	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Tested by (name + signature)..... :	Jim Liu
Reviewer (name + signature)..... :	Jackson Fang
Approved (name + signature)..... :	Lake Xie

Table of Contents Page

1. VERSION 5
2. SUMMARY OF TEST RESULTS 6
2.1 TEST FACILITY 7
2.2 MEASUREMENT UNCERTAINTY 7
3. GENERAL INFORMATION 8
3.1 GENERAL DESCRIPTION OF EUT 8
3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED 11
3.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE) 11
3.5 EQUIPMENTS LIST FOR ALL TEST ITEMS 12
4.EMC EMISSION TEST 14
4.1 CONDUCTED EMISSION MEASUREMENT 14
4.1.1 POWER LINE CONDUCTED EMISSION Limits 14
4.1.2 TEST PROCEDURE 14
4.1.3 DEVIATION FROM TEST STANDARD 14
4.1.4 TEST SETUP 15
4.1.5 EUT OPERATING CONDITIONS 15
4.1.6 TEST RESULT 16
4.2 RADIATED EMISSION MEASUREMENT 20
4.2.1 APPLICABLE STANDARD 20
4.2.2 CONFORMANCE LIMIT 20
4.2.3 MEASURING INSTRUMENTS 20
4.2.4 TEST CONFIGURATION 21
4.2.5 TEST PROCEDURE 22
4.2.6 TEST RESULT 22
5. POWER SPECTRAL DENSITY TEST 39
5.1 APPLIED PROCEDURES / LIMIT 39
5.2 TEST PROCEDURE 40
5.3 DEVIATION FROM STANDARD 40
5.4 TEST SETUP 40
5.5 EUT OPERATION CONDITIONS 40
5.6 TEST RESULTS 41
6. 26DB EMISSION BANDWIDTH & 6DB OCCUPIED BANDWIDTH 59
6.1 APPLIED PROCEDURES / LIMIT 59
6.2 TEST PROCEDURE 59
6.3 EUT OPERATION CONDITIONS 59
6.4 TEST RESULTS 60

Table of Contents **Page**

7.MAXIMUM CONDUCTED OUTPUT POWER 87
7.1 PPLIED PROCEDURES / LIMIT 87
7.2 TEST PROCEDURE 87
7.3 DEVIATION FROM STANDARD 88
7.4 TEST SETUP 88
7.5 EUT OPERATION CONDITIONS 88
7.6 TEST RESULTS 89
8.OUT OF BAND EMISSIONS 93
8.1 APPLICABLE STANDARD 93
8.2 TEST PROCEDURE 93
8.3 DEVIATION FROM STANDARD 93
8.4 TEST SETUP 93
8.5 EUT OPERATION CONDITIONS 93
8.6 TEST RESULTS 94
9.SPURIOUS RF CONDUCTED EMISSIONS 112
9.1 CONFORMANCE LIMIT 112
9.2 MEASURING INSTRUMENTS 112
9.3 TEST SETUP 112
9.4 TEST PROCEDURE 112
9.5 TEST RESULTS 112
10.FREQUENCY STABILITY MEASUREMENT 131
10.1 LIMIT 131
10.2 TEST PROCEDURES 131
10.3 TEST SETUP LAYOUT 131
10.4 EUT OPERATION DURING TEST 131
10.5 TEST RESULTS 131
11. DUTY CYCLE 144
11.1 APPLIED PROCEDURES / LIMIT 144
11.2 DEVIATION FROM STANDARD 144
11.3 TEST SETUP 144
12. ANTENNA REQUIREMENT 165
13. TEST SETUP PHOTO 166
14. EUT CONSTRUCTIONAL DETAILS 166

1. VERSION

Report No.	Version	Description	Approved
ZKT-24110414621E-4	Rev.01	Initial issue of report	Nov. 25, 2024

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart E			
Standard Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emission	PASS	
789033 D02 General U-NII	Duty Cycle	PASS	
15.209(a) 15.407 (b)(1) 15.407 (b)(4) 15.407 (b)(8)	Spurious Radiated Emissions	PASS	
15.407 (a)(12) 15.407(e)	26dB Emission Bandwidth & 6dB Occupied Bandwidth	PASS	
15.407 (a)(1) 15.407 (a)(3)	Maximum Conducted Output Power	PASS	
2.1051, 15.407(b)(1) 15.407(b)(4)	Band Edge	PASS	
15.407 (a)(1) 15.407 (a)(3)	Power Spectral Density	PASS	
2.1051, 15.407(b)	Spurious Emissions at Antenna Terminals	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

2.1 TEST FACILITY

Shenzhen ZKT Technology Co., Ltd.
Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 692225
Designation Number: CN1299
IC Registered No.: 27033
CAB identifier: CN0110

2.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	3m camber Radiated spurious emission(9KHz-30MHz)	U=4.5dB
2	3m camber Radiated spurious emission(30MHz-1GHz)	U=4.8dB
3	3m chamber Radiated spurious emission(1GHz-6GHz)	U=4.9dB
4	3m chamber Radiated spurious emission(6GHz-40GHz)	U=5.0dB
5	Conducted disturbance	U=3.2dB
6	RF Band Edge	U=1.68dB
7	RF power conducted	U=1.86dB
8	RF conducted Spurious Emission	U=2.2dB
9	RF Occupied Bandwidth	U=1.8MHz
10	RF Power Spectral Density	U=1.75dB
11	humidity uncertainty	U=5.3%
12	Temperature uncertainty	U=0.59℃

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Product Name:	INAIR Pod			
Model No.:	Sol-A01			
Serial Model:	N/A			
Model Different.:	N/A			
Sample ID	ZKT-2312019373E-4-1			
Sample(s) Status:	Engineer sample			
Product Description	IEEE 802.11 WLAN Mode Supported	☒ 802.11a/n/ac/ax		
	Modulation Technology	802.11a/n/ac: Orthogonal Frequency Division Multiplexing(OFDM) 802.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)		
	Data Rate	802.11a: 6/9/12/24/18/36/48/54Mbit/s 802.11n: MCS0-MCS7 802.11ac: MCS0-MCS9 802.11ax: MCS0-MCS11		
	Operating Frequency Range	☒ 5180-5240MHz for 802.11 a/n/ac/ax (20M); ☒ 5190-5230MHz for 802.11 n/ac/ax (40M); ☒ 5210MHz for 802.11 ac/ax (80M). ☒ 5745-5825 MHz for 802.11 a/n/ac/ax (20M); ☒ 5755-5795 MHz for 802.11 n/ac/ax (40M); ☒ 5775MHz for 802.11 ac/ax (80M).		
	Number of Channels	☒ 4 channels for 802.11 a/n/ac/ax (20M) in the 5180-5240MHz band ; ☒ 2 channels for 802.11 n/ac/ax (40M) in the 5190-5230 MHz band ; ☒ 1 channels for 802.11 ac/ax (80M) in the 5210MHz band. ☒ 5 channels for 802.11 a/n/ac/ax (20M) in the 5745-5825MHz band ; ☒ 2 channels for 802.11 n/ac/ax (40M) in the 5755-5795 MHz band ; ☒ 1 channels for 802.11 ac/ax (80M) in the 5775MHz band		
Antenna Type:	FPC Antenna A&B			
Antenna Gain:	Band	SISO ANT A	SISO ANT B	MIMO A+B
	5.2G	2.0dBi	1.2dBi	4.62dBi
	5.8G	2.1dBi	2.2dBi	5.16dBi
	5.2G Band Working in MIMO model, then the antenna gain as below: Directional gain = 10 log[($10^{2/20}$ + $10^{1.2/20}$)^2 /2] = 4.62 dBi; 5.8G Band Working in MIMO model, then the antenna gain as below: Directional gain = 10 log[($10^{2.1/20}$ + $10^{2.2/20}$)^2 /2] = 5.16 dBi.			
Power supply:	Input: 9V⎓2A			
Battery capacity:	DC 3.85V, 5000mAh, 19.25Wh			

Note:

For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

802.11a/n/ac/ax (20MHz) Frequency Channel For 5.2G							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5200	40	5220	48	5240
802.11a/n/ac/ax (20 MHz) Frequency Channel For 5.8G							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	153	5765	157	5785	161	5805
165	5825	-	-	-	-	-	-

802.11n/ac/ax (40MHz) Frequency Channel For 5.2G							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230	-	-	-	-
802.11n/ac/ax (40MHz) Frequency Channel For 5.8G							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)		
151	5755	159	5795	-	-		

802.11ac/ax (80MHz) Frequency Channel For 5.2G	
Channel	Frequency (MHz)
42	5210
802.11ac/ax (80MHz) Frequency Channel For 5.8G	
Channel	Frequency (MHz)
155	5775

3.2 DESCRIPTION OF TEST MODES

Transmitting mode	Keep the EUT in continuously transmitting mode
Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.	
We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows: For battery operated equipment, the equipment tests shall be performed using a new battery.	
Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.	

Mode	802.11a	802.11n	802.11ac	802.11ax
Data rate	6Mbps	MCS0(HT0)	MCS0(VHT0)	MCS0(HE0)

Test Software	Qualcomm Radio Control Tool
Power level setup	TxPowverAuto

Pretest Mode	Description
Mode 1	802.11 a/n/ac/ax (20M) CH 36/CH 40/CH 48 For 5.2G CH 149/CH 157/CH 165 For 5.8G
Mode 2	802.11 n/ac/ax (40M) CH 38/CH 46 For 5.2G CH 151/CH 159 For 5.8G
Mode 3	802.11 ac/ax (80M) CH 42 For 5.2G CH 155 For 5.8G

Final Test Mode	For Conducted Emission
	Description
Mode 1	802.11 a/n/ac/ax (20M) CH 36/CH 40/CH 48 For 5.2G CH 149/CH 157/CH 165 For 5.8G
Mode 2	802.11 n/ac/ax (40M) CH 38/CH 46 For 5.2G CH 151/CH 159 For 5.8G
Mode 3	802.11 ac/ax (80M) CH 42 For 5.2G CH 155 For 5.8G

Final Test Mode	For Radiated Emission
	Description
Mode 1	802.11 a/n/ac/ax (20M) CH 36/CH 40/CH 48 For 5.2G CH 149/CH 157/CH 165 For 5.8G
Mode 2	802.11 n/ac/ax (40M) CH 38/CH 46 For 5.2G CH 151/CH 159 For 5.8G
Mode 3	802.11 ac/ax (80M) CH 42 For 5.2G CH 155 For 5.8G

3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission

Radiated Emission

Conducted Spurious

3.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	INAIR Pod	N/A	Sol-A01	N/A	EUT
E-2	AC/DC Adapter	HUAWEI	HW-050450C00	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

(2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

(3) EUT is tested with new battery.

3.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Conduction Emissions Test

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	N/A	Sep. 30, 2024	Sep. 29, 2025
2	LISN	CYBERTEK	EM5040A	E1850400149	N/A	Sep. 30, 2024	Sep. 29, 2025
3	Test Cable	N/A	C-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
4	EMI Test Receiver	R&S	ESCI3	101393	4.42 SP3	Sep. 29, 2024	Sep. 28, 2025
5	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	N/A	\	\

Radiation Emissions & Radiation Spurious Emissions Test

Item	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	N9020A	MY55370835	A.17.05	Sep. 29, 2024	Sep. 28, 2025
2	Spectrum Analyzer (10kHz-39.9GHz)	R&S	FSV40-N	100363	1.71 SP2	Sep. 30, 2024	Sep. 29, 2025
3	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	100969	4.32	Sep. 29, 2024	Sep. 28, 2025
4	Bilog Antenna (30MHz-1500MHz)	Schwarzbeck	VULB9168	00877	N/A	Sep. 30, 2024	Sep. 29, 2025
5	Horn Antenna (1GHz-18GHz)	Agilent	AH-118	071145	N/A	Sep. 30, 2024	Sep. 29, 2025
6	Horn Antenna (15GHz-40GHz)	A.H.System	SAS-574	588	N/A	Sep. 30, 2024	Sep. 29, 2025
7	Loop Antenna	TESEQ	HLA6121	58357	N/A	Oct. 11, 2024	Oct. 10, 2025
8	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	60747	N/A	Sep. 29, 2024	Sep. 28, 2025
9	Amplifier (1GHz-26.5GHz)	HuiPu	8449B	3008A00315	N/A	Sep. 29, 2024	Sep. 28, 2025
10	Amplifier (500MHz-40GHz)	QuanJuDa	DLE-161	097	N/A	Sep. 30, 2024	Sep. 29, 2025
11	Test Cable	N/A	R-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
12	Test Cable	N/A	R-02	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
13	Test Cable	N/A	R-03	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
14	D.C. Power Supply	LongWei	TPR-6405D	GQ7516	N/A	Sep. 29, 2024	Sep. 28, 2025
15	EMC Software	Frad	EZ-EMC	Ver.EMC-CO N 3A1.1	N/A	\	\
16	Turntable	MF	MF-7802BS	N/A	N/A	\	\
17	Antenna tower	MF	MF-7802BS	N/A	N/A	\	\

RF Conducted Test

Item	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	N9020A	MY55370835	A.17.05	Sep. 29, 2024	Sep. 28, 2025
2	Spectrum Analyzer (10kHz-39.9GHz)	R&S	FSV40-N	100363	1.71 SP2	Sep. 30, 2024	Sep. 29, 2025
3	Test Cable	N/A	RF-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
4	Test Cable	N/A	RF-02	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
5	Test Cable	N/A	RF-03	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
6	ESG Signal Generator	Agilent	E4421B	GB40051203	B.03.84	Sep. 29, 2024	Sep. 28, 2025
7	Signal Generator	Agilent	N5182A	MY47420215	A.01.87	Sep. 29, 2024	Sep. 28, 2025
8	Magnetic Field Probe Tester	Narda	ELT-400	0-0344	N/A	Sep. 29, 2024	Sep. 28, 2025
9	Van der Hoofden measuring head	Schwarzbeck Mess-elektronik	VDHH 9502	9502-039	N/A	Sep. 30, 2024	Sep. 29, 2025
10	Wideband Radio Communication Test	R&S	CMW500	106504	V 3.7.22	Sep. 30, 2024	Sep. 29, 2025
11	MWRF Power Meter Test system	MW	MW100-RFCB	10371	N/A	Sep. 29, 2024	Sep. 28, 2025
12	Power Meter	KEYSIGHT	N1912AP	926431	A.05.00	Sep. 29, 2024	Sep. 28, 2025
13	D.C. Power Supply	LongWei	TPR-6405D	GQ7516	N/A	Sep. 29, 2024	Sep. 28, 2025
14	RF Software	MW	MTS8310	V2.0.0.0	N/A	\	\

4.EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

4.1.1 POWER LINE CONDUCTED EMISSION Limits

FREQUENCY (MHz)	Limit (dBuV)		Standard
	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

(1) *Decreases with the logarithm of the frequency.

4.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

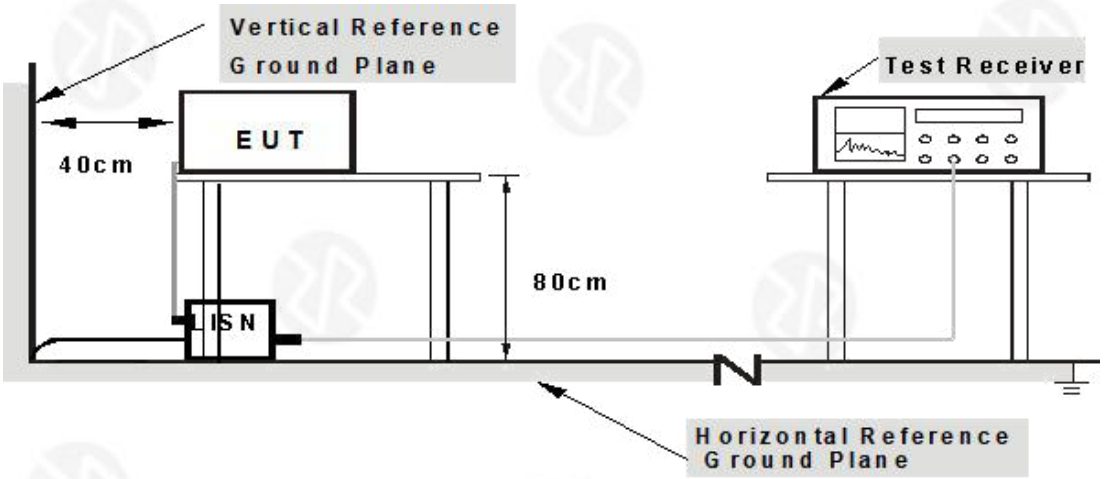
d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



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

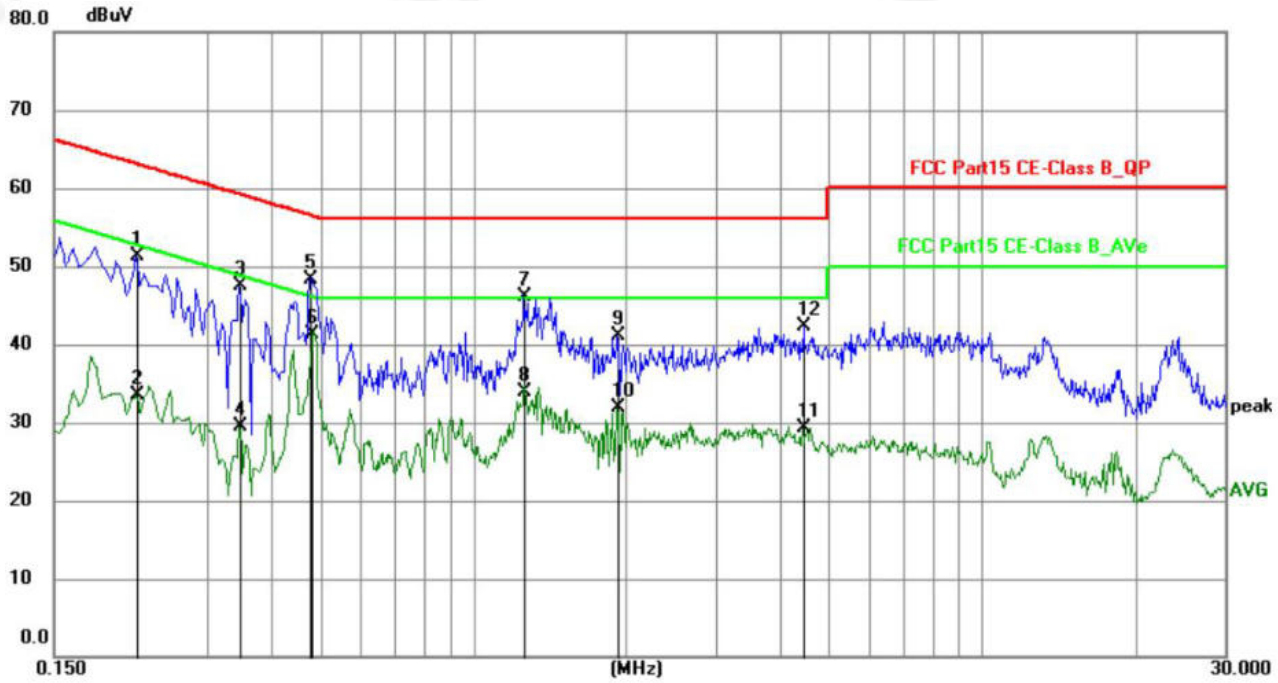
4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 TEST RESULT

5.2G:

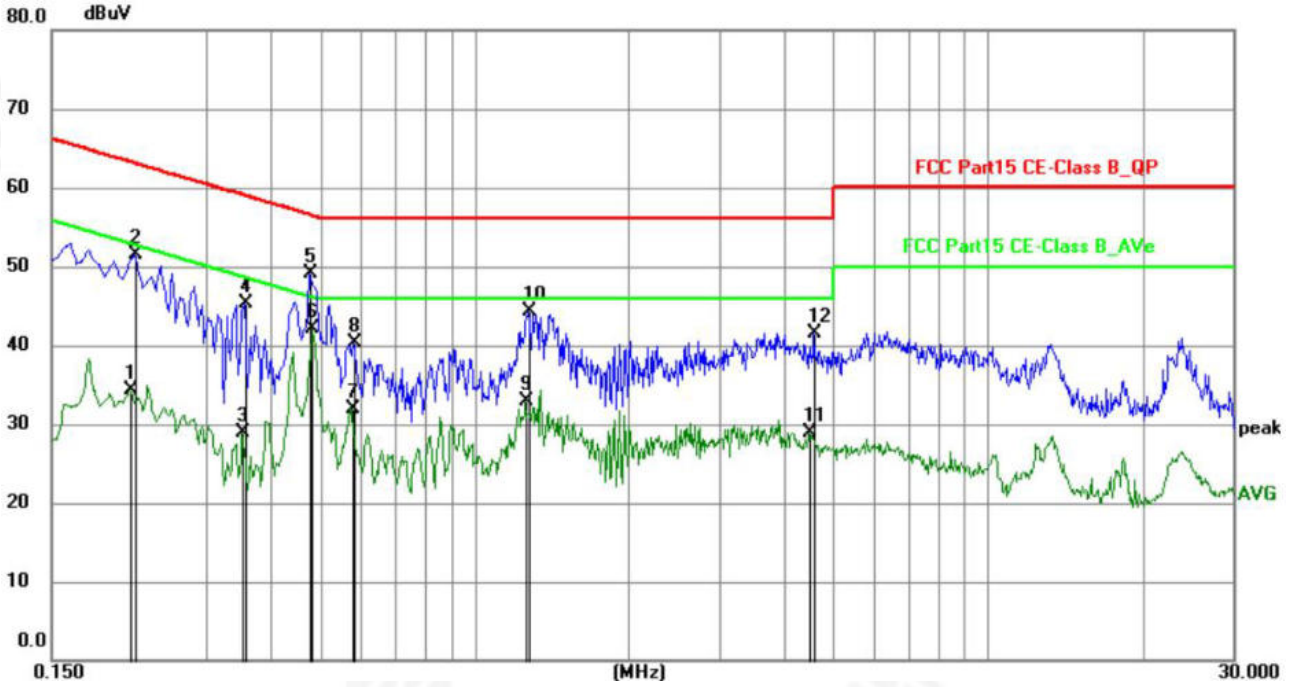
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	L
Test Voltage:	AC 120V/60Hz	Test Mode:	MIMO A+B 802.11n20 - 5180MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2174	30.95	20.38	51.33	62.92	-11.59	QP	P	
2	0.2174	13.14	20.38	33.52	52.92	-19.40	AVG	P	
3	0.3477	27.17	20.34	47.51	59.02	-11.51	QP	P	
4	0.3477	9.10	20.34	29.44	49.02	-19.58	AVG	P	
5	0.4783	28.02	20.31	48.33	56.37	-8.04	QP	P	
6	0.4828	21.09	20.30	41.39	46.29	-4.90	AVG	P	
7	1.2614	25.83	20.31	46.14	56.00	-9.86	QP	P	
8	1.2614	13.68	20.31	33.99	46.00	-12.01	AVG	P	
9	1.9229	20.78	20.31	41.09	56.00	-14.91	QP	P	
10	1.9229	11.52	20.31	31.83	46.00	-14.17	AVG	P	
11	4.4519	8.90	20.35	29.25	46.00	-16.75	AVG	P	
12	4.4653	21.92	20.35	42.27	56.00	-13.73	QP	P	

Note:
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Reading level + Correct Factor.
4. Correct Factor= Lisn factor+ Cable loss factor + limiter factor.
5. Margin= Measurement Level-Limit.
6. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5180MHz.

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	N
Test Voltage:	AC 120V/60Hz	Test Mode:	MIMO A+B 802.11n20 - 5180MHz

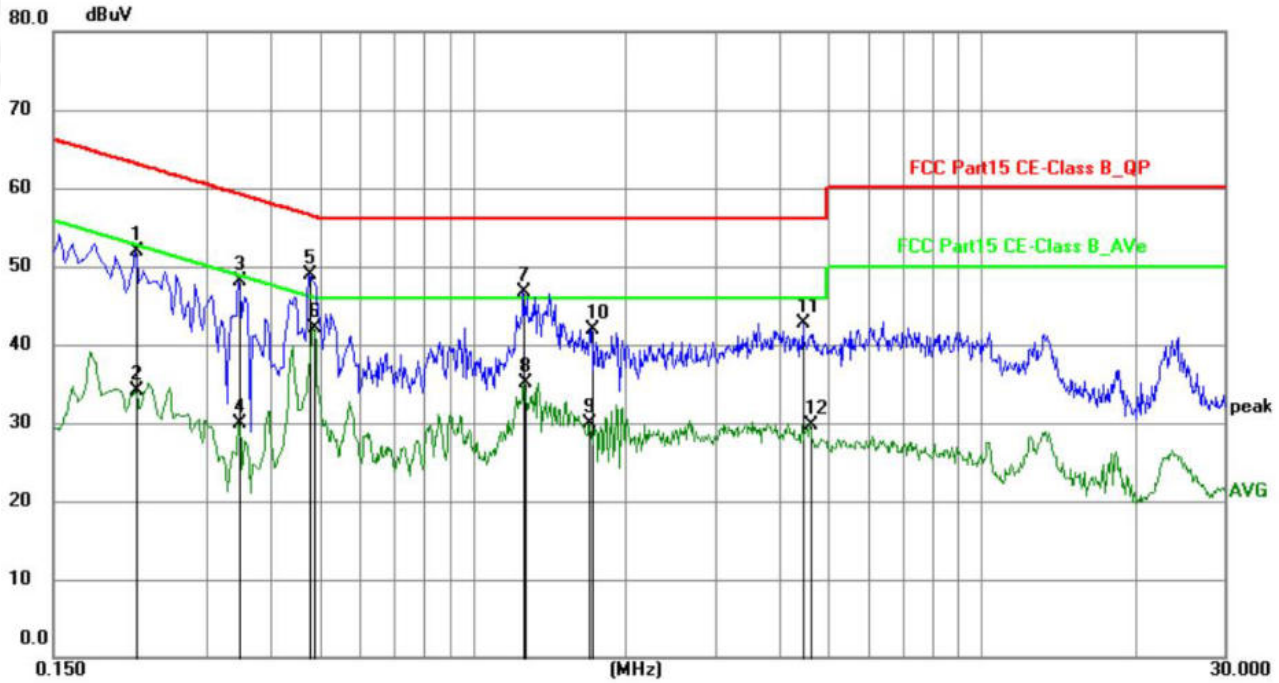


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2129	13.96	20.37	34.33	53.09	-18.76	AVG	P	
2	0.2174	31.14	20.37	51.51	62.92	-11.41	QP	P	
3	0.3523	8.51	20.33	28.84	48.91	-20.07	AVG	P	
4	0.3568	24.90	20.33	45.23	58.80	-13.57	QP	P	
5	0.4783	28.74	20.31	49.05	56.37	-7.32	QP	P	
6	0.4828	21.78	20.30	42.08	46.29	-4.21	AVG	P	
7	0.5774	11.66	20.30	31.96	46.00	-14.04	AVG	P	
8	0.5816	19.98	20.30	40.28	56.00	-15.72	QP	P	
9	1.2614	12.56	20.31	32.87	46.00	-13.13	AVG	P	
10	1.2746	24.00	20.31	44.31	56.00	-11.69	QP	P	
11	4.4790	8.57	20.34	28.91	46.00	-17.09	AVG	P	
12	4.5868	21.21	20.34	41.55	56.00	-14.45	QP	P	

Note:
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Reading level + Correct Factor.
4. Correct Factor= Lisn factor+ Cable loss factor + limiter factor.
5. Margin= Measurement Level-Limit.
6. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5180MHz.

5.8G:

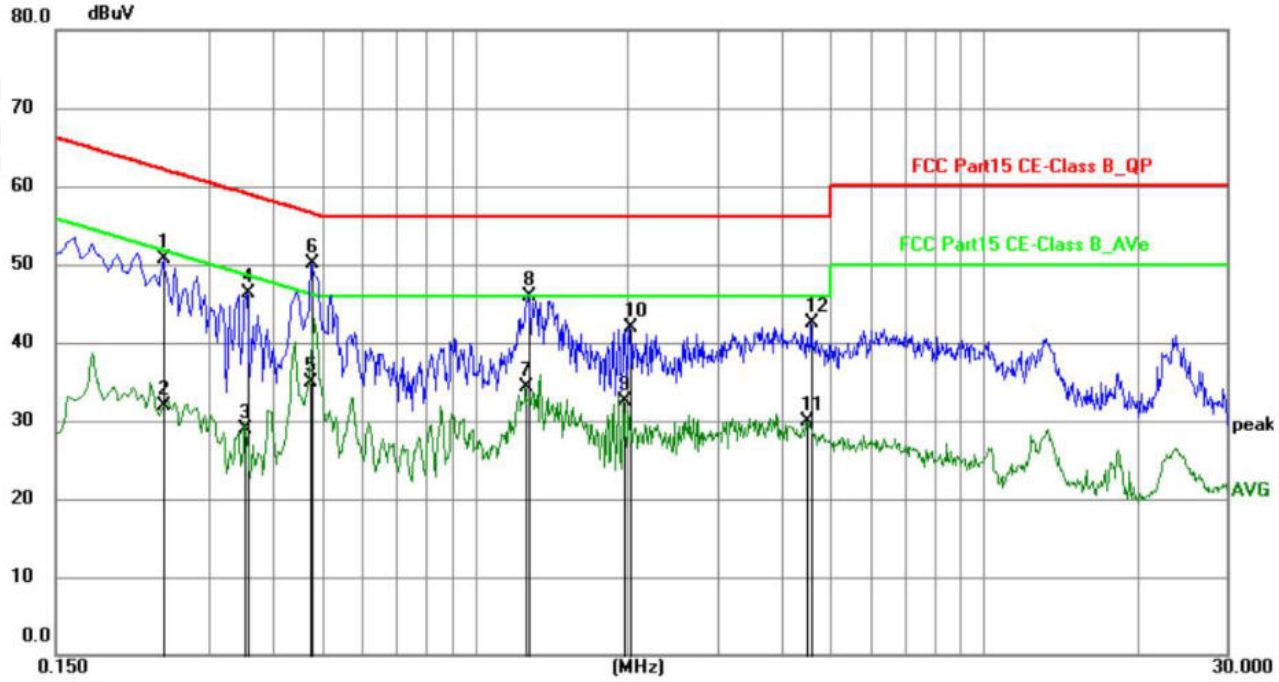
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	L
Test Voltage:	AC 120V/60Hz	Test Mode:	MIMO A+B 802.11n20 - 5745MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2174	31.45	20.38	51.83	62.92	-11.09	QP	P	
2	0.2174	13.64	20.38	34.02	52.92	-18.90	AVG	P	
3	0.3477	27.67	20.34	48.01	59.02	-11.01	QP	P	
4	0.3477	9.60	20.34	29.94	49.02	-19.08	AVG	P	
5	0.4783	28.52	20.31	48.83	56.37	-7.54	QP	P	
6	0.4873	21.89	20.30	42.19	46.21	-4.02	AVG	P	
7	1.2614	26.33	20.31	46.64	56.00	-9.36	QP	P	
8	1.2659	14.80	20.31	35.11	46.00	-10.89	AVG	P	
9	1.6975	9.51	20.30	29.81	46.00	-16.19	AVG	P	
10	1.7114	21.57	20.30	41.87	56.00	-14.13	QP	P	
11	4.4653	22.42	20.35	42.77	56.00	-13.23	QP	P	
12	4.6093	9.45	20.35	29.80	46.00	-16.20	AVG	P	

Note:
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Reading level + Correct Factor.
4. Correct Factor= Lisn factor+ Cable loss factor + limiter factor.
5. Margin= Measurement Level-Limit.
6. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5745MHz.

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	N
Test Voltage:	AC 120V/60Hz	Test Mode:	MIMO A+B 802.11n20 - 5745MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2444	30.30	20.36	50.66	61.95	-11.29	QP	P	
2	0.2454	11.61	20.36	31.97	51.91	-19.94	AVG	P	
3	0.3537	8.67	20.33	29.00	48.88	-19.88	AVG	P	
4	0.3568	25.90	20.33	46.23	58.80	-12.57	QP	P	
5	0.4737	14.59	20.31	34.90	46.45	-11.55	AVG	P	
6	0.4783	29.74	20.31	50.05	56.37	-6.32	QP	P	
7	1.2614	14.06	20.31	34.37	46.00	-11.63	AVG	P	
8	1.2745	25.50	20.31	45.81	56.00	-10.19	QP	P	
9	1.9677	12.23	20.31	32.54	46.00	-13.46	AVG	P	
10	2.0129	21.68	20.31	41.99	56.00	-14.01	QP	P	
11	4.4790	9.57	20.34	29.91	46.00	-16.09	AVG	P	
12	4.5868	22.21	20.34	42.55	56.00	-13.45	QP	P	

Note:
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Reading level + Correct Factor.
4. Correct Factor= Lisn factor+ Cable loss factor + limiter factor.
5. Margin= Measurement Level-Limit.
6. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5745MHz.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 APPLICABLE STANDARD

According to FCC Part 15.407(d) and 15.209

4.2.2 CONFORMANCE LIMIT

According to FCC Part 15.407(b)(7): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).
According to FCC Part15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

.

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009~0.490	2400/F(KHz)	20 log (uV/m)	300
0.490~1.705	2400/F(KHz)	20 log (uV/m)	30
1.705~30.0	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

Frequency(MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

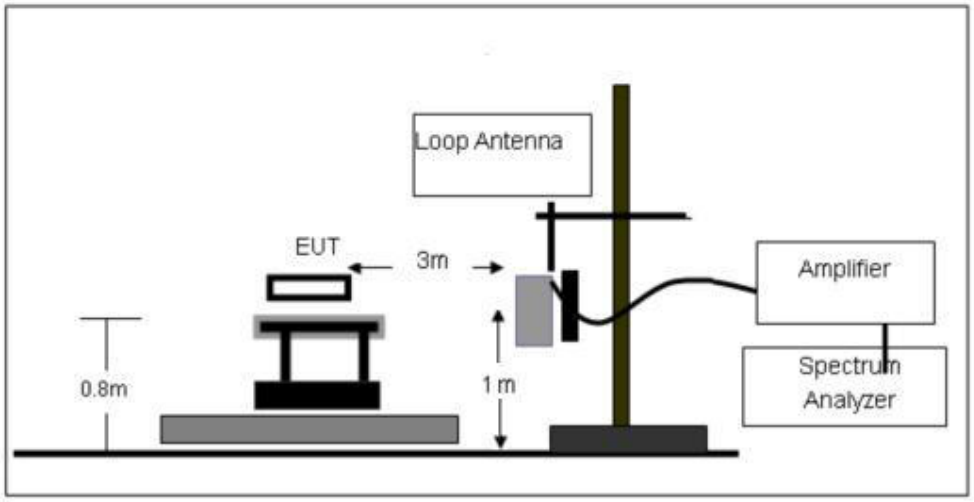
Remark :1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Distance extrapolation factor =40log(Specific distance/ test distance)(dB);
Limit line=Specific limits(dBuV) + distance extrapolation factor.

4.2.3 MEASURING INSTRUMENTS

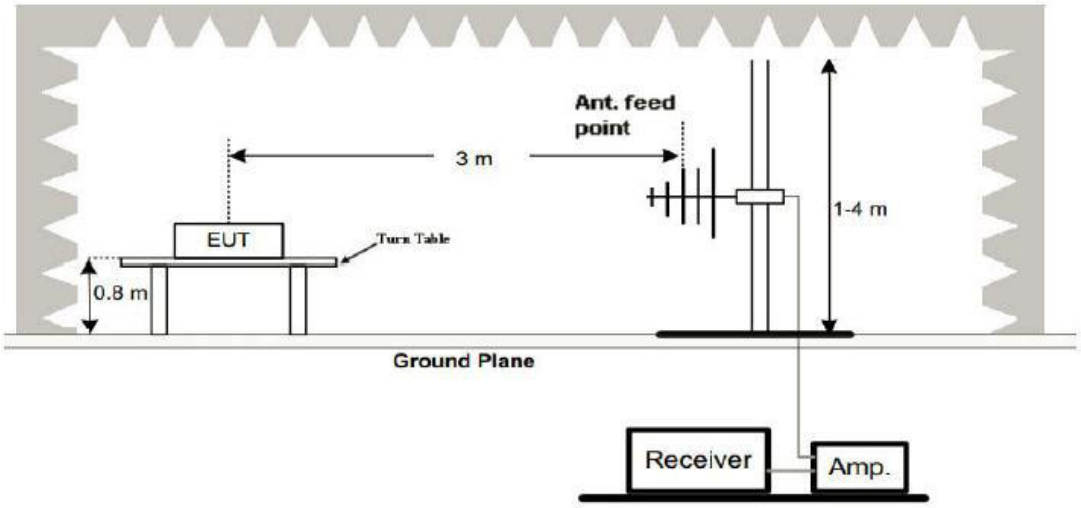
The Measuring equipment is listed in the section 6.3 of this test report.

4.2.4 TEST CONFIGURATION

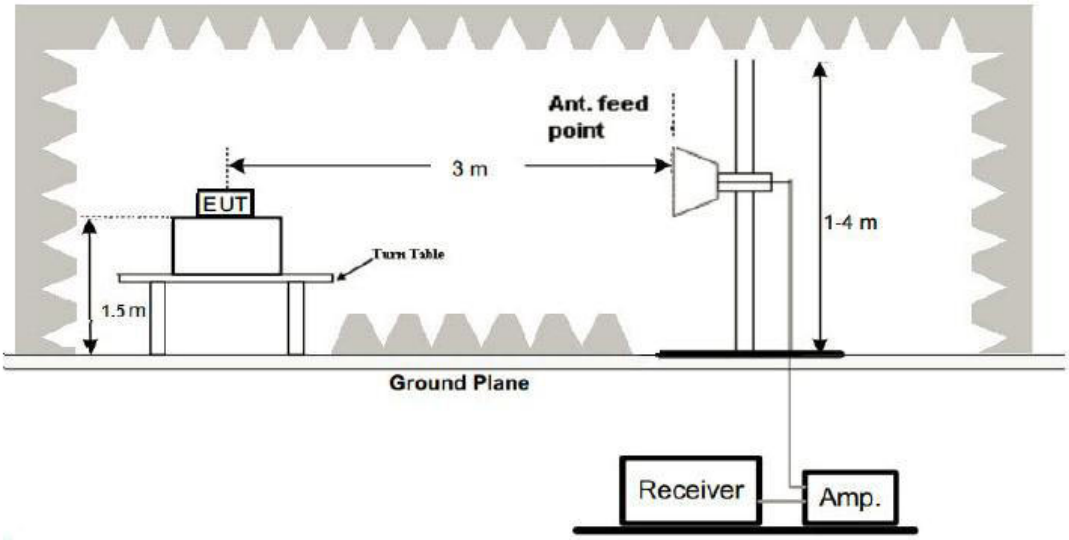
1.For radiated emissions below 30MHz



2.For radiated emissions from 30MHz to 1000MHz



3. Radiated Emission Test-Up Frequency Above 1GHz



4.2.5 TEST PROCEDURE

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.
This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT.
Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; 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.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item – EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] =10*lg(100 [kHz]/narrower RBW [kHz]). , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

4.2.6 TEST RESULT

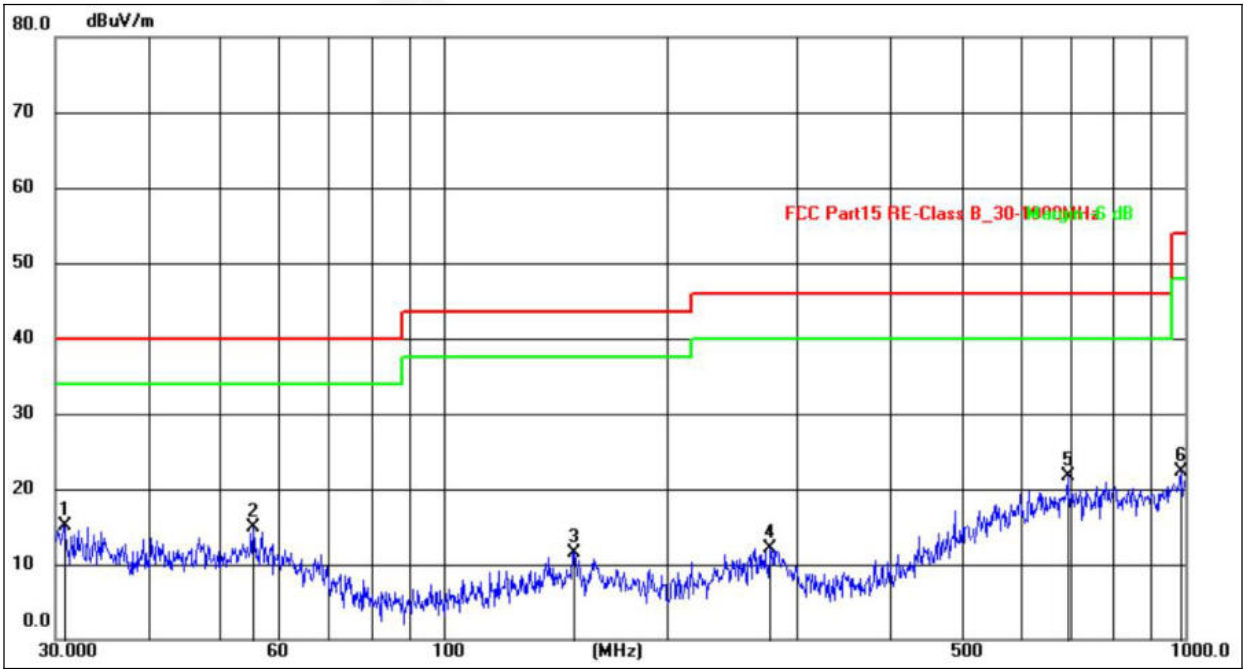
Between 9KHz – 30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

Between 30MHz – 1GHz

5.2G:

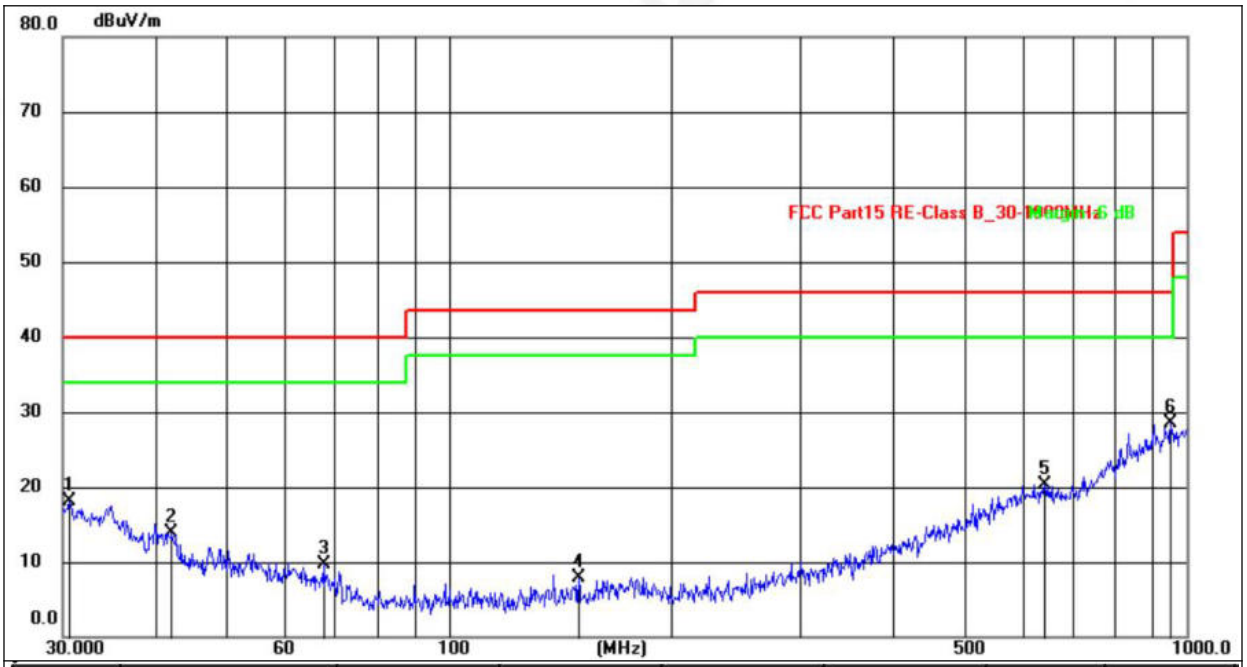
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC 3.85V	Test Mode :	MIMO A+B 802.11n20 - 5745MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.8534	29.39	-14.25	15.14	40.00	-24.86	QP
2	55.4147	29.01	-14.04	14.97	40.00	-25.03	QP
3	150.0108	27.95	-16.35	11.60	43.50	-31.90	QP
4	276.1235	26.28	-14.17	12.11	46.00	-33.89	QP
5	694.4174	28.29	-6.54	21.75	46.00	-24.25	QP
6	986.0716	27.08	-4.86	22.22	54.00	-31.78	QP

Note:
1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor.
5. Correct Factor= Antenna factor+ Cable loss factor - Amplifier factor.
6. Margin= Measurement Level-Limit.
7. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5180MHz.

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC 3.85V	Test Mode :	MIMO A+B 802.11n20 - 5745MHz

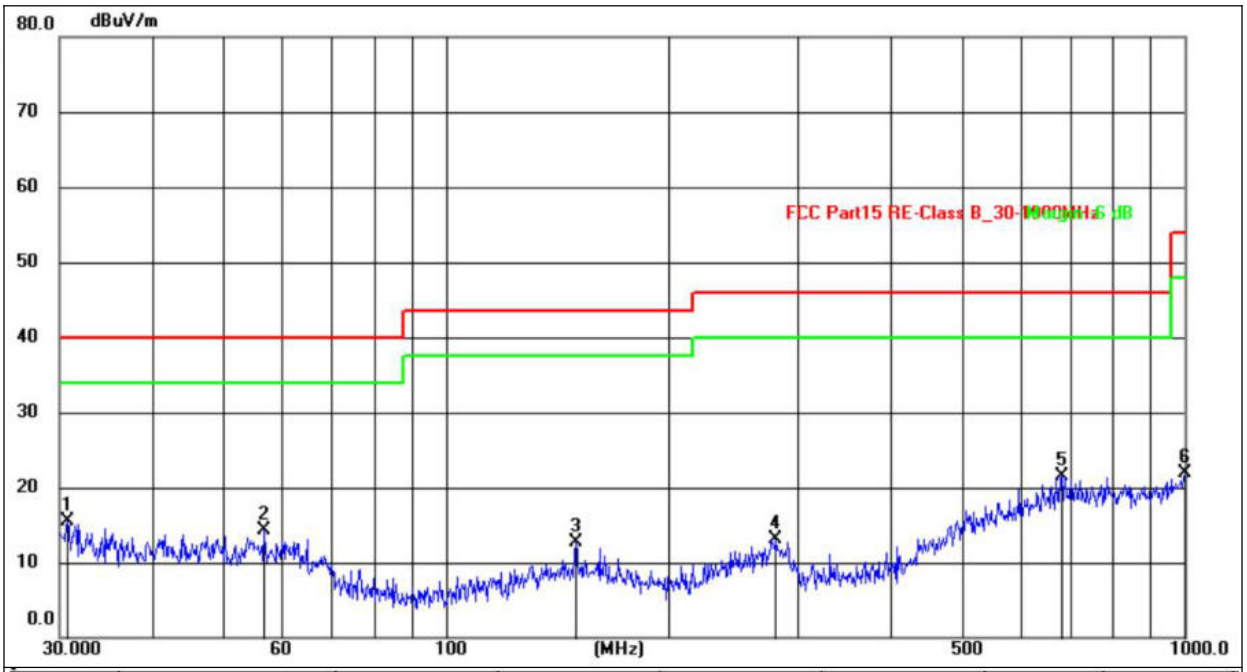


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.6378	36.29	-18.23	18.06	40.00	-21.94	QP
2	42.1541	30.77	-16.85	13.92	40.00	-26.08	QP
3	67.6751	28.72	-18.99	9.73	40.00	-30.27	QP
4	150.0108	28.24	-20.35	7.89	43.50	-35.61	QP
5	642.8612	27.65	-7.34	20.31	46.00	-25.69	QP
6	952.0937	28.68	-0.17	28.51	46.00	-17.49	QP

Note:
1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor.
5. Correct Factor= Antenna factor+ Cable loss factor - Amplifier factor.
6. Margin= Measurement Level-Limit.
7. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5180MHz.

5.8G:

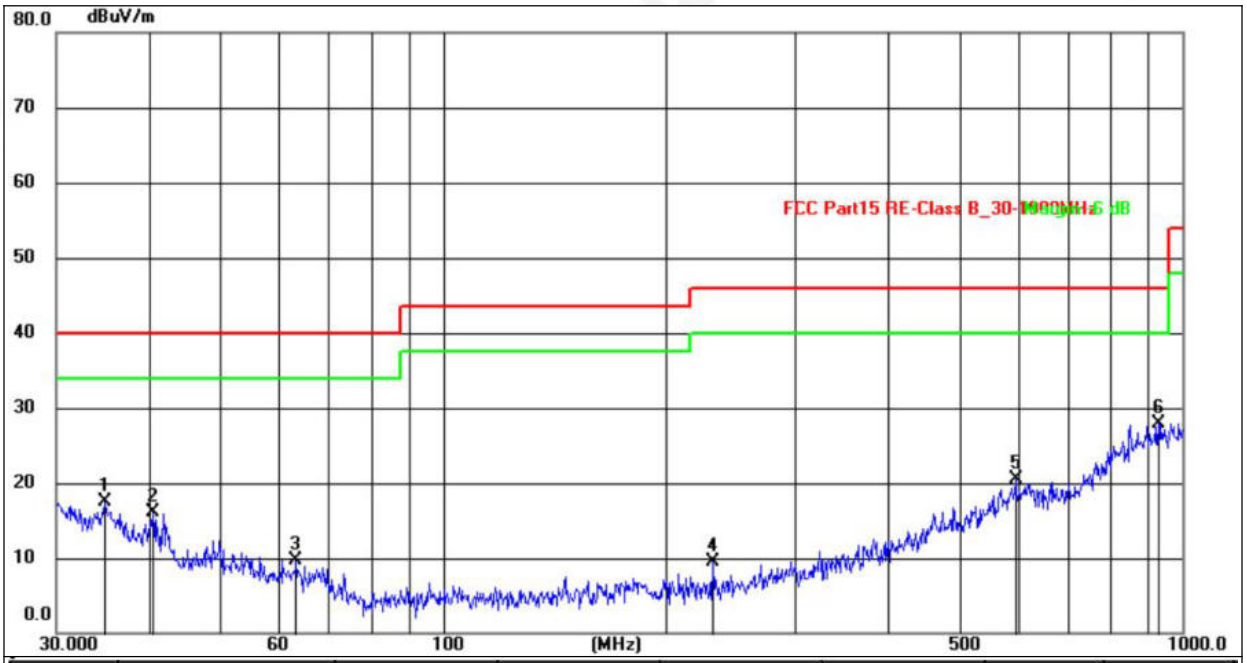
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC 3.85V	Test Mode :	MIMO A+B 802.11n20 - 5745MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.7454	29.79	-14.23	15.56	40.00	-24.44	QP
2	56.7917	28.37	-14.06	14.31	40.00	-25.69	QP
3	150.0108	28.96	-16.35	12.61	43.50	-30.89	QP
4	280.0237	27.03	-13.94	13.09	46.00	-32.91	QP
5	682.3484	28.31	-6.78	21.53	46.00	-24.47	QP
6	1000.0000	26.44	-4.56	21.88	54.00	-32.12	QP

Note:
1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor.
5. Correct Factor= Antenna factor+ Cable loss factor - Amplifier factor.
6. Margin= Measurement Level-Limit.
7. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5745MHz.

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC 3.85V	Test Mode :	MIMO A+B 802.11n20 - 5745MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	34.8822	34.98	-17.52	17.46	40.00	-22.54	QP
2	40.5591	32.83	-16.79	16.04	40.00	-23.96	QP
3	63.3132	28.34	-18.54	9.80	40.00	-30.20	QP
4	231.7178	29.53	-19.98	9.55	46.00	-36.45	QP
5	595.1327	27.99	-7.51	20.48	46.00	-25.52	QP
6	929.0081	28.19	-0.28	27.91	46.00	-18.09	QP

Note:
1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor.
5. Correct Factor= Antenna factor+ Cable loss factor - Amplifier factor.
6. Margin= Measurement Level-Limit.
7. Both SISO ANT A and ANT B passed the test, the test data shows only the worst case MIMO A+B 802.11n20 - 5745MHz.

Between 1GHz – 40GHz

Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 3.85V
Test Mode :	5.2G TX - 802.11a / n20 / n40 / ac20 / ac40 / ac80 / ax20 / ax40 / ax80		
Note: All patterns have been tested, and only the worst test data recorded in this report is 802.11n20.			

SISO ANT A - 802.11n20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5180MHz									
V	5150.00	41.68	30.45	8.77	38.66	58.66	74.00	-15.34	PK
V	5150.00	30.21	30.45	8.77	38.66	47.19	54.00	-6.81	AV
V	10360.00	52.73	30.55	5.77	24.66	52.61	74.00	-21.39	PK
V	10360.00	42.83	30.55	5.77	24.66	42.71	54.00	-11.29	AV
V	15540.00	53.58	30.33	6.32	24.55	54.12	74.00	-19.88	PK
V	15540.00	43.25	30.33	6.32	24.55	43.79	54.00	-10.21	AV
V	20720.00	49.95	30.85	7.45	24.69	51.24	74.00	-22.76	PK
V	20720.00	43.09	30.85	7.45	24.69	44.38	54.00	-9.62	AV
V	25900.00	52.13	31.02	8.99	25.57	55.67	74.00	-18.33	PK
V	25900.00	43.38	31.02	8.99	25.57	46.92	54.00	-7.08	AV
H	5150.00	41.98	30.45	8.77	38.66	58.96	74.00	-15.04	PK
H	5150.00	30.31	30.45	8.77	38.66	47.29	54.00	-6.71	AV
H	10360.00	50.52	30.55	5.77	24.66	50.40	74.00	-23.60	PK
H	10360.00	42.21	30.55	5.77	24.66	42.09	54.00	-11.91	AV
H	15540.00	52.86	30.33	6.32	24.55	53.40	74.00	-20.60	PK
H	15540.00	43.38	30.33	6.32	24.55	43.92	54.00	-10.08	AV
H	20720.00	51.17	30.85	7.45	24.69	52.46	74.00	-21.54	PK
H	20720.00	43.46	30.85	7.45	24.69	44.75	54.00	-9.25	AV
H	25900.00	49.79	31.02	8.99	25.57	53.33	74.00	-20.67	PK
H	25900.00	42.11	31.02	8.99	25.57	45.65	54.00	-8.35	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5200MHz									
V	5150.00	41.28	30.45	8.77	38.66	58.26	74.00	-15.74	PK
V	5150.00	28.66	30.45	8.77	38.66	45.64	54.00	-8.36	AV
V	10400.00	51.07	30.55	5.77	24.66	50.95	74.00	-23.05	PK
V	10400.00	43.25	30.55	5.77	24.66	43.13	54.00	-10.87	AV
V	15600.00	53.60	30.33	6.32	24.55	54.14	74.00	-19.86	PK
V	15600.00	42.85	30.33	6.32	24.55	43.39	54.00	-10.61	AV
V	20800.00	48.82	30.85	7.45	24.69	50.11	74.00	-23.89	PK
V	20800.00	42.53	30.85	7.45	24.69	43.82	54.00	-10.18	AV
V	26000.00	51.30	31.02	8.99	25.57	54.84	74.00	-19.16	PK
V	26000.00	42.91	31.02	8.99	25.57	46.45	54.00	-7.55	AV
H	5150.00	40.91	30.45	8.77	38.66	57.89	74.00	-16.11	PK
H	5150.00	29.28	30.45	8.77	38.66	46.26	54.00	-7.74	AV
H	10400.00	48.65	30.55	5.77	24.66	48.53	74.00	-25.47	PK
H	10400.00	41.58	30.55	5.77	24.66	41.46	54.00	-12.54	AV

H	15600.00	52.53	30.33	6.32	24.55	53.07	74.00	-20.93	PK
H	15600.00	41.90	30.33	6.32	24.55	42.44	54.00	-11.56	AV
H	20800.00	49.92	30.85	7.45	24.69	51.21	74.00	-22.79	PK
H	20800.00	42.32	30.85	7.45	24.69	43.61	54.00	-10.39	AV
H	26000.00	50.15	31.02	8.99	25.57	53.69	74.00	-20.31	PK
H	26000.00	42.42	31.02	8.99	25.57	45.96	54.00	-8.04	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5240MHz									
V	5350.00	41.66	30.45	8.77	38.66	58.64	74.00	-15.36	PK
V	5350.00	28.86	30.45	8.77	38.66	45.84	54.00	-8.16	AV
V	10480.00	52.05	30.55	5.77	24.66	51.93	74.00	-22.07	PK
V	10480.00	41.59	30.55	5.77	24.66	41.47	54.00	-12.53	AV
V	15720.00	54.54	30.33	6.32	24.55	55.08	74.00	-18.92	PK
V	15720.00	42.20	30.33	6.32	24.55	42.74	54.00	-11.26	AV
V	20960.00	48.75	30.85	7.45	24.69	50.04	74.00	-23.96	PK
V	20960.00	42.82	30.85	7.45	24.69	44.11	54.00	-9.89	AV
V	26200.00	51.97	31.02	8.99	25.57	55.51	74.00	-18.49	PK
V	26200.00	43.00	31.02	8.99	25.57	46.54	54.00	-7.46	AV
H	5350.00	41.02	30.45	8.77	38.66	58.00	74.00	-16.00	PK
H	5350.00	28.89	30.45	8.77	38.66	45.87	54.00	-8.13	AV
H	10480.00	50.35	30.55	5.77	24.66	50.23	74.00	-23.77	PK
H	10480.00	41.83	30.55	5.77	24.66	41.71	54.00	-12.29	AV
H	15720.00	52.07	30.33	6.32	24.55	52.61	74.00	-21.39	PK
H	15720.00	41.64	30.33	6.32	24.55	42.18	54.00	-11.82	AV
H	20960.00	50.23	30.85	7.45	24.69	51.52	74.00	-22.48	PK
H	20960.00	42.75	30.85	7.45	24.69	44.04	54.00	-9.96	AV
H	26200.00	49.70	31.02	8.99	25.57	53.24	74.00	-20.76	PK
H	26200.00	42.74	31.02	8.99	25.57	46.28	54.00	-7.72	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

SISO ANT B - 802.11n20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5180MHz									
V	5150.00	41.84	30.45	8.77	38.66	58.82	74.00	-15.18	PK
V	5150.00	30.15	30.45	8.77	38.66	47.13	54.00	-6.87	AV
V	10360.00	52.62	30.55	5.77	24.66	52.50	74.00	-21.50	PK
V	10360.00	43.13	30.55	5.77	24.66	43.01	54.00	-10.99	AV
V	15540.00	53.45	30.33	6.32	24.55	53.99	74.00	-20.01	PK
V	15540.00	42.02	30.33	6.32	24.55	42.56	54.00	-11.44	AV
V	20720.00	48.67	30.85	7.45	24.69	49.96	74.00	-24.04	PK
V	20720.00	42.78	30.85	7.45	24.69	44.07	54.00	-9.93	AV
V	25900.00	51.15	31.02	8.99	25.57	54.69	74.00	-19.31	PK
V	25900.00	43.15	31.02	8.99	25.57	46.69	54.00	-7.31	AV
H	5150.00	41.37	30.45	8.77	38.66	58.35	74.00	-15.65	PK
H	5150.00	29.28	30.45	8.77	38.66	46.26	54.00	-7.74	AV
H	10360.00	50.34	30.55	5.77	24.66	50.22	74.00	-23.78	PK
H	10360.00	41.40	30.55	5.77	24.66	41.28	54.00	-12.72	AV
H	15540.00	51.85	30.33	6.32	24.55	52.39	74.00	-21.61	PK
H	15540.00	43.35	30.33	6.32	24.55	43.89	54.00	-10.11	AV
H	20720.00	50.78	30.85	7.45	24.69	52.07	74.00	-21.93	PK
H	20720.00	42.86	30.85	7.45	24.69	44.15	54.00	-9.85	AV
H	25900.00	49.23	31.02	8.99	25.57	52.77	74.00	-21.23	PK
H	25900.00	42.66	31.02	8.99	25.57	46.20	54.00	-7.80	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5200MHz									
V	5150.00	42.35	30.45	8.77	38.66	59.33	74.00	-14.67	PK
V	5150.00	29.49	30.45	8.77	38.66	46.47	54.00	-7.53	AV
V	10400.00	52.60	30.55	5.77	24.66	52.48	74.00	-21.52	PK
V	10400.00	43.20	30.55	5.77	24.66	43.08	54.00	-10.92	AV
V	15600.00	53.65	30.33	6.32	24.55	54.19	74.00	-19.81	PK
V	15600.00	42.58	30.33	6.32	24.55	43.12	54.00	-10.88	AV
V	20800.00	49.35	30.85	7.45	24.69	50.64	74.00	-23.36	PK
V	20800.00	42.65	30.85	7.45	24.69	43.94	54.00	-10.06	AV
V	26000.00	51.52	31.02	8.99	25.57	55.06	74.00	-18.94	PK
V	26000.00	42.71	31.02	8.99	25.57	46.25	54.00	-7.75	AV
H	5150.00	41.22	30.45	8.77	38.66	58.20	74.00	-15.80	PK
H	5150.00	29.18	30.45	8.77	38.66	46.16	54.00	-7.84	AV
H	10400.00	50.47	30.55	5.77	24.66	50.35	74.00	-23.65	PK
H	10400.00	42.14	30.55	5.77	24.66	42.02	54.00	-11.98	AV
H	15600.00	52.69	30.33	6.32	24.55	53.23	74.00	-20.77	PK
H	15600.00	43.10	30.33	6.32	24.55	43.64	54.00	-10.36	AV
H	20800.00	50.77	30.85	7.45	24.69	52.06	74.00	-21.94	PK
H	20800.00	42.59	30.85	7.45	24.69	43.88	54.00	-10.12	AV
H	26000.00	49.64	31.02	8.99	25.57	53.18	74.00	-20.82	PK
H	26000.00	42.49	31.02	8.99	25.57	46.03	54.00	-7.97	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5240MHz									
V	5350.00	41.83	30.45	8.77	38.66	58.81	74.00	-15.19	PK
V	5350.00	29.31	30.45	8.77	38.66	46.29	54.00	-7.71	AV
V	10480.00	51.94	30.55	5.77	24.66	51.82	74.00	-22.18	PK
V	10480.00	42.56	30.55	5.77	24.66	42.44	54.00	-11.56	AV
V	15720.00	52.83	30.33	6.32	24.55	53.37	74.00	-20.63	PK
V	15720.00	43.73	30.33	6.32	24.55	44.27	54.00	-9.73	AV
V	20960.00	49.20	30.85	7.45	24.69	50.49	74.00	-23.51	PK
V	20960.00	42.57	30.85	7.45	24.69	43.86	54.00	-10.14	AV
V	26200.00	51.22	31.02	8.99	25.57	54.76	74.00	-19.24	PK
V	26200.00	43.17	31.02	8.99	25.57	46.71	54.00	-7.29	AV
H	5350.00	40.97	30.45	8.77	38.66	57.95	74.00	-16.05	PK
H	5350.00	29.53	30.45	8.77	38.66	46.51	54.00	-7.49	AV
H	10480.00	50.16	30.55	5.77	24.66	50.04	74.00	-23.96	PK
H	10480.00	43.49	30.55	5.77	24.66	43.37	54.00	-10.63	AV
H	15720.00	52.72	30.33	6.32	24.55	53.26	74.00	-20.74	PK
H	15720.00	42.79	30.33	6.32	24.55	43.33	54.00	-10.67	AV
H	20960.00	51.51	30.85	7.45	24.69	52.80	74.00	-21.20	PK
H	20960.00	42.84	30.85	7.45	24.69	44.13	54.00	-9.87	AV
H	26200.00	50.26	31.02	8.99	25.57	53.80	74.00	-20.20	PK
H	26200.00	42.00	31.02	8.99	25.57	45.54	54.00	-8.46	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

MIMO A+B - 802.11n20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5180MHz									
V	5150.00	43.60	30.45	8.77	38.66	60.58	74.00	-13.42	PK
V	5150.00	31.49	30.45	8.77	38.66	48.47	54.00	-5.53	AV
V	10360.00	53.50	30.55	5.77	24.66	53.38	74.00	-20.62	PK
V	10360.00	44.35	30.55	5.77	24.66	44.23	54.00	-9.77	AV
V	15540.00	54.69	30.33	6.32	24.55	55.23	74.00	-18.77	PK
V	15540.00	43.56	30.33	6.32	24.55	44.10	54.00	-9.90	AV
V	20720.00	51.63	30.85	7.45	24.69	52.92	74.00	-21.08	PK
V	20720.00	44.24	30.85	7.45	24.69	45.53	54.00	-8.47	AV
V	25900.00	53.06	31.02	8.99	25.57	56.60	74.00	-17.40	PK
V	25900.00	44.21	31.02	8.99	25.57	47.75	54.00	-6.25	AV
H	5150.00	42.60	30.45	8.77	38.66	59.58	74.00	-14.42	PK
H	5150.00	31.82	30.45	8.77	38.66	48.80	54.00	-5.20	AV
H	10360.00	52.10	30.55	5.77	24.66	51.98	74.00	-22.02	PK
H	10360.00	44.82	30.55	5.77	24.66	44.70	54.00	-9.30	AV
H	15540.00	54.84	30.33	6.32	24.55	55.38	74.00	-18.62	PK
H	15540.00	43.83	30.33	6.32	24.55	44.37	54.00	-9.63	AV
H	20720.00	52.78	30.85	7.45	24.69	54.07	74.00	-19.93	PK
H	20720.00	44.67	30.85	7.45	24.69	45.96	54.00	-8.04	AV
H	25900.00	52.25	31.02	8.99	25.57	55.79	74.00	-18.21	PK
H	25900.00	45.29	31.02	8.99	25.57	48.83	54.00	-5.17	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5200MHz									
V	5150.00	43.27	30.45	8.77	38.66	60.25	74.00	-13.75	PK
V	5150.00	31.03	30.45	8.77	38.66	48.01	54.00	-5.99	AV
V	10400.00	53.09	30.55	5.77	24.66	52.97	74.00	-21.03	PK
V	10400.00	44.34	30.55	5.77	24.66	44.22	54.00	-9.78	AV
V	15600.00	55.39	30.33	6.32	24.55	55.93	74.00	-18.07	PK
V	15600.00	45.39	30.33	6.32	24.55	45.93	54.00	-8.07	AV
V	20800.00	50.99	30.85	7.45	24.69	52.28	74.00	-21.72	PK
V	20800.00	45.28	30.85	7.45	24.69	46.57	54.00	-7.43	AV
V	26000.00	54.39	31.02	8.99	25.57	57.93	74.00	-16.07	PK
V	26000.00	44.74	31.02	8.99	25.57	48.28	54.00	-5.72	AV
H	5150.00	43.22	30.45	8.77	38.66	60.20	74.00	-13.80	PK
H	5150.00	31.72	30.45	8.77	38.66	48.70	54.00	-5.30	AV
H	10400.00	51.84	30.55	5.77	24.66	51.72	74.00	-22.28	PK
H	10400.00	44.33	30.55	5.77	24.66	44.21	54.00	-9.79	AV
H	15600.00	54.37	30.33	6.32	24.55	54.91	74.00	-19.09	PK
H	15600.00	44.48	30.33	6.32	24.55	45.02	54.00	-8.98	AV
H	20800.00	52.18	30.85	7.45	24.69	53.47	74.00	-20.53	PK
H	20800.00	44.01	30.85	7.45	24.69	45.30	54.00	-8.70	AV
H	26000.00	51.12	31.02	8.99	25.57	54.66	74.00	-19.34	PK
H	26000.00	44.80	31.02	8.99	25.57	48.34	54.00	-5.66	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5240MHz									
V	5350.00	43.25	30.45	8.77	38.66	60.23	74.00	-13.77	PK
V	5350.00	30.87	30.45	8.77	38.66	47.85	54.00	-6.15	AV
V	10480.00	53.81	30.55	5.77	24.66	53.69	74.00	-20.31	PK
V	10480.00	44.59	30.55	5.77	24.66	44.47	54.00	-9.53	AV
V	15720.00	54.98	30.33	6.32	24.55	55.52	74.00	-18.48	PK
V	15720.00	44.76	30.33	6.32	24.55	45.30	54.00	-8.70	AV
V	20960.00	50.55	30.85	7.45	24.69	51.84	74.00	-22.16	PK
V	20960.00	43.93	30.85	7.45	24.69	45.22	54.00	-8.78	AV
V	26200.00	52.77	31.02	8.99	25.57	56.31	74.00	-17.69	PK
V	26200.00	43.97	31.02	8.99	25.57	47.51	54.00	-6.49	AV
H	5350.00	43.10	30.45	8.77	38.66	60.08	74.00	-13.92	PK
H	5350.00	31.14	30.45	8.77	38.66	48.12	54.00	-5.88	AV
H	10480.00	51.95	30.55	5.77	24.66	51.83	74.00	-22.17	PK
H	10480.00	43.38	30.55	5.77	24.66	43.26	54.00	-10.74	AV
H	15720.00	54.39	30.33	6.32	24.55	54.93	74.00	-19.07	PK
H	15720.00	43.89	30.33	6.32	24.55	44.43	54.00	-9.57	AV
H	20960.00	52.79	30.85	7.45	24.69	54.08	74.00	-19.92	PK
H	20960.00	44.56	30.85	7.45	24.69	45.85	54.00	-8.15	AV
H	26200.00	51.20	31.02	8.99	25.57	54.74	74.00	-19.26	PK
H	26200.00	43.28	31.02	8.99	25.57	46.82	54.00	-7.18	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 3.85V
Test Mode :	5.8G TX - 802.11a / n20 / n40 / ac20 / ac40 / ac80 / ax20 / ax40 / ax80		
Note: All patterns have been tested, and only the worst test data recorded in this report is 802.11n20.			

SISO ANT A - 802.11n20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5745MHz									
V	11490.00	50.92	30.55	5.77	24.66	50.80	74.00	-23.20	PK
V	11490.00	43.52	30.55	5.77	24.66	43.40	54.00	-10.60	AV
V	17235.00	52.58	30.33	6.32	24.55	53.12	68.20	-15.08	PK
V	17235.00	41.91	30.33	6.32	24.55	42.45	54.00	-11.55	AV
V	22980.00	49.49	30.85	7.45	24.69	50.78	74.00	-23.22	PK
V	22980.00	42.81	30.85	7.45	24.69	44.10	54.00	-9.90	AV
V	28725.00	53.55	31.02	8.99	25.57	57.09	68.20	-11.11	PK
V	28725.00	43.17	31.02	8.99	25.57	46.71	54.00	-7.29	AV
H	11490.00	52.23	30.55	5.77	24.66	52.11	74.00	-21.89	PK
H	11490.00	43.49	30.55	5.77	24.66	43.37	54.00	-10.63	AV
H	17235.00	52.77	30.33	6.32	24.55	53.31	68.20	-14.89	PK
H	17235.00	43.14	30.33	6.32	24.55	43.68	54.00	-10.32	AV
H	22980.00	51.67	30.85	7.45	24.69	52.96	74.00	-21.04	PK
H	22980.00	43.62	30.85	7.45	24.69	44.91	54.00	-9.09	AV
H	28725.00	52.45	31.02	8.99	25.57	55.99	68.20	-12.21	PK
H	28725.00	43.18	31.02	8.99	25.57	46.72	54.00	-7.28	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5785MHz									
V	11570.00	49.09	30.55	5.77	24.66	48.97	74.00	-25.03	PK
V	11570.00	41.94	30.55	5.77	24.66	41.82	54.00	-12.18	AV
V	17355.00	48.48	30.33	6.32	24.55	49.02	68.20	-19.18	PK
V	17355.00	41.67	30.33	6.32	24.55	42.21	54.00	-11.79	AV
V	23140.00	50.36	30.85	7.45	24.69	51.65	68.20	-16.55	PK
V	23140.00	41.21	30.85	7.45	24.69	42.50	54.00	-11.50	AV
V	28925.00	48.74	31.02	8.99	25.57	52.28	68.20	-15.92	PK
V	28925.00	41.35	31.02	8.99	25.57	44.89	54.00	-9.11	AV
H	11570.00	48.44	30.55	5.77	24.66	48.32	74.00	-25.68	PK
H	11570.00	41.94	30.55	5.77	24.66	41.82	54.00	-12.18	AV
H	17355.00	52.98	30.33	6.32	24.55	53.52	68.20	-14.68	PK
H	17355.00	41.26	30.33	6.32	24.55	41.80	54.00	-12.20	AV
H	23140.00	50.32	30.85	7.45	24.69	51.61	68.20	-16.59	PK
H	23140.00	41.63	30.85	7.45	24.69	42.92	54.00	-11.08	AV
H	28925.00	48.55	31.02	8.99	25.57	52.09	68.20	-16.11	PK
H	28925.00	41.72	31.02	8.99	25.57	45.26	54.00	-8.74	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5825MHz									
V	11650.00	50.13	30.55	5.77	24.66	50.01	74.00	-23.99	PK
V	11650.00	41.72	30.55	5.77	24.66	41.60	54.00	-12.40	AV
V	17475.00	48.15	30.33	6.32	24.55	48.69	68.20	-19.51	PK
V	17475.00	41.49	30.33	6.32	24.55	42.03	54.00	-11.97	AV
V	23300.00	49.60	30.85	7.45	24.69	50.89	68.20	-17.31	PK
V	23300.00	41.27	30.85	7.45	24.69	42.56	54.00	-11.44	AV
V	29125.00	52.06	31.02	8.99	25.57	55.60	68.20	-12.60	PK
V	29125.00	41.30	31.02	8.99	25.57	44.84	54.00	-9.16	AV
H	11650.00	50.88	30.55	5.77	24.66	50.76	74.00	-23.24	PK
H	11650.00	40.81	30.55	5.77	24.66	40.69	54.00	-13.31	AV
H	17475.00	51.19	30.33	6.32	24.55	51.73	68.20	-16.47	PK
H	17475.00	41.46	30.33	6.32	24.55	42.00	54.00	-12.00	AV
H	23300.00	52.40	30.85	7.45	24.69	53.69	68.20	-14.51	PK
H	23300.00	41.09	30.85	7.45	24.69	42.38	54.00	-11.62	AV
H	29125.00	48.37	31.02	8.99	25.57	51.91	68.20	-16.29	PK
H	29125.00	41.45	31.02	8.99	25.57	44.99	54.00	-9.01	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

SISO ANT B - 802.11n20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5745MHz									
V	11490.00	50.04	30.55	5.77	24.66	49.92	74.00	-24.08	PK
V	11490.00	43.30	30.55	5.77	24.66	43.18	54.00	-10.82	AV
V	17235.00	52.37	30.33	6.32	24.55	52.91	68.20	-15.29	PK
V	17235.00	42.55	30.33	6.32	24.55	43.09	54.00	-10.91	AV
V	22980.00	48.85	30.85	7.45	24.69	50.14	74.00	-23.86	PK
V	22980.00	43.32	30.85	7.45	24.69	44.61	54.00	-9.39	AV
V	28725.00	52.44	31.02	8.99	25.57	55.98	68.20	-12.22	PK
V	28725.00	41.90	31.02	8.99	25.57	45.44	54.00	-8.56	AV
H	11490.00	51.57	30.55	5.77	24.66	51.45	74.00	-22.55	PK
H	11490.00	43.03	30.55	5.77	24.66	42.91	54.00	-11.09	AV
H	17235.00	52.72	30.33	6.32	24.55	53.26	68.20	-14.94	PK
H	17235.00	42.25	30.33	6.32	24.55	42.79	54.00	-11.21	AV
H	22980.00	52.00	30.85	7.45	24.69	53.29	74.00	-20.71	PK
H	22980.00	42.16	30.85	7.45	24.69	43.45	54.00	-10.55	AV
H	28725.00	51.50	31.02	8.99	25.57	55.04	68.20	-13.16	PK
H	28725.00	42.45	31.02	8.99	25.57	45.99	54.00	-8.01	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5785MHz									
V	11570.00	49.29	30.55	5.77	24.66	49.17	74.00	-24.83	PK
V	11570.00	41.72	30.55	5.77	24.66	41.60	54.00	-12.40	AV
V	17355.00	48.34	30.33	6.32	24.55	48.88	68.20	-19.32	PK
V	17355.00	41.60	30.33	6.32	24.55	42.14	54.00	-11.86	AV
V	23140.00	50.80	30.85	7.45	24.69	52.09	68.20	-16.11	PK
V	23140.00	41.34	30.85	7.45	24.69	42.63	54.00	-11.37	AV
V	28925.00	48.25	31.02	8.99	25.57	51.79	68.20	-16.41	PK
V	28925.00	41.48	31.02	8.99	25.57	45.02	54.00	-8.98	AV
H	11570.00	48.64	30.55	5.77	24.66	48.52	74.00	-25.48	PK
H	11570.00	41.84	30.55	5.77	24.66	41.72	54.00	-12.28	AV
H	17355.00	52.88	30.33	6.32	24.55	53.42	68.20	-14.78	PK
H	17355.00	41.15	30.33	6.32	24.55	41.69	54.00	-12.31	AV
H	23140.00	50.35	30.85	7.45	24.69	51.64	68.20	-16.56	PK
H	23140.00	41.52	30.85	7.45	24.69	42.81	54.00	-11.19	AV
H	28925.00	48.33	31.02	8.99	25.57	51.87	68.20	-16.33	PK
H	28925.00	41.89	31.02	8.99	25.57	45.43	54.00	-8.57	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5825MHz									
V	11650.00	50.45	30.55	5.77	24.66	50.33	74.00	-23.67	PK
V	11650.00	41.77	30.55	5.77	24.66	41.65	54.00	-12.35	AV
V	17475.00	48.04	30.33	6.32	24.55	48.58	68.20	-19.62	PK
V	17475.00	41.36	30.33	6.32	24.55	41.90	54.00	-12.10	AV
V	23300.00	49.73	30.85	7.45	24.69	51.02	68.20	-17.18	PK
V	23300.00	41.08	30.85	7.45	24.69	42.37	54.00	-11.63	AV
V	29125.00	51.95	31.02	8.99	25.57	55.49	68.20	-12.71	PK
V	29125.00	41.33	31.02	8.99	25.57	44.87	54.00	-9.13	AV
H	11650.00	50.54	30.55	5.77	24.66	50.42	74.00	-23.58	PK
H	11650.00	41.31	30.55	5.77	24.66	41.19	54.00	-12.81	AV
H	17475.00	51.25	30.33	6.32	24.55	51.79	68.20	-16.41	PK
H	17475.00	41.13	30.33	6.32	24.55	41.67	54.00	-12.33	AV
H	23300.00	52.31	30.85	7.45	24.69	53.60	68.20	-14.60	PK
H	23300.00	41.56	30.85	7.45	24.69	42.85	54.00	-11.15	AV
H	29125.00	48.20	31.02	8.99	25.57	51.74	68.20	-16.46	PK
H	29125.00	41.53	31.02	8.99	25.57	45.07	54.00	-8.93	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

MIMO A+B - 802.11n20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5745MHz									
V	11490.00	50.81	30.55	5.77	24.66	50.69	74.00	-23.31	PK
V	11490.00	43.85	30.55	5.77	24.66	43.73	54.00	-10.27	AV
V	17235.00	52.23	30.33	6.32	24.55	52.77	68.20	-15.43	PK
V	17235.00	42.40	30.33	6.32	24.55	42.94	54.00	-11.06	AV
V	22980.00	49.76	30.85	7.45	24.69	51.05	74.00	-22.95	PK
V	22980.00	42.28	30.85	7.45	24.69	43.57	54.00	-10.43	AV
V	28725.00	53.21	31.02	8.99	25.57	56.75	68.20	-11.45	PK
V	28725.00	43.93	31.02	8.99	25.57	47.47	54.00	-6.53	AV
H	11490.00	53.00	30.55	5.77	24.66	52.88	74.00	-21.12	PK
H	11490.00	44.30	30.55	5.77	24.66	44.18	54.00	-9.82	AV
H	17235.00	53.67	30.33	6.32	24.55	54.21	68.20	-13.99	PK
H	17235.00	44.15	30.33	6.32	24.55	44.69	54.00	-9.31	AV
H	22980.00	50.90	30.85	7.45	24.69	52.19	74.00	-21.81	PK
H	22980.00	42.30	30.85	7.45	24.69	43.59	54.00	-10.41	AV
H	28725.00	53.48	31.02	8.99	25.57	57.02	68.20	-11.18	PK
H	28725.00	44.69	31.02	8.99	25.57	48.23	54.00	-5.77	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5785MHz									
V	11570.00	50.04	30.55	5.77	24.66	49.92	74.00	-24.08	PK
V	11570.00	42.47	30.55	5.77	24.66	42.35	54.00	-11.65	AV
V	17355.00	48.87	30.33	6.32	24.55	49.41	68.20	-18.79	PK
V	17355.00	41.85	30.33	6.32	24.55	42.39	54.00	-11.61	AV
V	23140.00	50.91	30.85	7.45	24.69	52.20	68.20	-16.00	PK
V	23140.00	41.86	30.85	7.45	24.69	43.15	54.00	-10.85	AV
V	28925.00	48.96	31.02	8.99	25.57	52.50	68.20	-15.70	PK
V	28925.00	41.95	31.02	8.99	25.57	45.49	54.00	-8.51	AV
H	11570.00	49.22	30.55	5.77	24.66	49.10	74.00	-24.90	PK
H	11570.00	42.16	30.55	5.77	24.66	42.04	54.00	-11.96	AV
H	17355.00	53.22	30.33	6.32	24.55	53.76	68.20	-14.44	PK
H	17355.00	41.71	30.33	6.32	24.55	42.25	54.00	-11.75	AV
H	23140.00	51.06	30.85	7.45	24.69	52.35	68.20	-15.85	PK
H	23140.00	42.50	30.85	7.45	24.69	43.79	54.00	-10.21	AV
H	28925.00	48.77	31.02	8.99	25.57	52.31	68.20	-15.89	PK
H	28925.00	42.55	31.02	8.99	25.57	46.09	54.00	-7.91	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5825MHz									
V	11650.00	51.06	30.55	5.77	24.66	50.94	74.00	-23.06	PK
V	11650.00	41.99	30.55	5.77	24.66	41.87	54.00	-12.13	AV
V	17475.00	49.03	30.33	6.32	24.55	49.57	68.20	-18.63	PK
V	17475.00	41.94	30.33	6.32	24.55	42.48	54.00	-11.52	AV
V	23300.00	50.05	30.85	7.45	24.69	51.34	68.20	-16.86	PK
V	23300.00	41.67	30.85	7.45	24.69	42.96	54.00	-11.04	AV
V	29125.00	52.34	31.02	8.99	25.57	55.88	68.20	-12.32	PK
V	29125.00	42.18	31.02	8.99	25.57	45.72	54.00	-8.28	AV
H	11650.00	51.34	30.55	5.77	24.66	51.22	74.00	-22.78	PK
H	11650.00	42.00	30.55	5.77	24.66	41.88	54.00	-12.12	AV
H	17475.00	51.74	30.33	6.32	24.55	52.28	68.20	-15.92	PK
H	17475.00	41.88	30.33	6.32	24.55	42.42	54.00	-11.58	AV
H	23300.00	52.73	30.85	7.45	24.69	54.02	68.20	-14.18	PK
H	23300.00	41.65	30.85	7.45	24.69	42.94	54.00	-11.06	AV
H	29125.00	48.45	31.02	8.99	25.57	51.99	68.20	-16.21	PK
H	29125.00	42.52	31.02	8.99	25.57	46.06	54.00	-7.94	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

5. POWER SPECTRAL DENSITY TEST

5.1 APPLIED PROCEDURES / LIMIT

According to FCC §15.407(3)

Power limits:

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. 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).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

5.2 TEST PROCEDURE

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. 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:

a) Set RBW ≥ 1/T, where T is defined in section II.B.I.a).

b) Set VBW ≥ 3 RBW.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

e) 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: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since RBW=100 KHZ is available on nearly all spectrum analyzers.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP

5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULTS

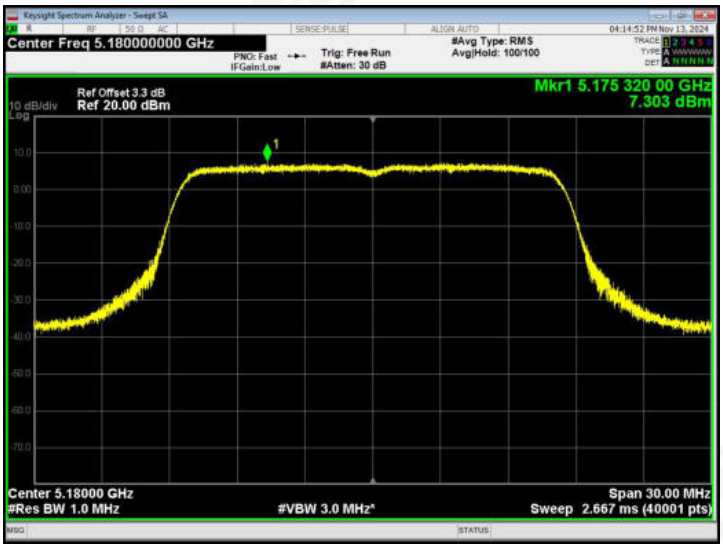
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1015 hPa	Test Voltage :	DC 3.85V
Test Band :	5.2G		

Mode	Antenna	Frequency (MHz)	PSD (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Result
802.11a	SISO ANT A	5180	7.303	0.198	7.501	11	Pass
		5200	7.437	0.198	7.635	11	Pass
		5240	6.918	0.198	7.116	11	Pass
	SISO ANT B	5180	6.509	0.202	6.711	11	Pass
		5200	6.044	0.202	6.246	11	Pass
		5240	6.139	0.202	6.341	11	Pass
802.11n20	SISO ANT A	5180	5.643	0.204	5.847	11	Pass
		5200	5.761	0.204	5.965	11	Pass
		5240	5.477	0.204	5.681	11	Pass
	SISO ANT B	5180	5.003	0.204	5.207	11	Pass
		5200	4.571	0.204	4.775	11	Pass
		5240	4.880	0.204	5.084	11	Pass
	MIMO A+B	5180	8.345	0.069	8.414	11	Pass
		5200	8.217	0.069	8.286	11	Pass
		5240	8.199	0.069	8.268	11	Pass
802.11n40	SISO ANT A	5190	3.529	0.205	3.734	11	Pass
		5230	3.578	0.205	3.783	11	Pass
	SISO ANT B	5190	2.610	0.206	2.816	11	Pass
		5230	2.397	0.206	2.603	11	Pass
	MIMO A+B	5190	6.104	0.070	6.174	11	Pass
		5230	6.038	0.070	6.108	11	Pass
802.11ac20	SISO ANT A	5180	5.768	0.203	5.971	11	Pass
		5200	5.691	0.203	5.894	11	Pass
		5240	5.407	0.203	5.610	11	Pass
	SISO ANT B	5180	4.982	0.204	5.186	11	Pass
		5200	4.722	0.204	4.926	11	Pass
		5240	4.379	0.204	4.583	11	Pass
	MIMO A+B	5180	8.403	0.069	8.472	11	Pass
		5200	8.244	0.069	8.313	11	Pass
		5240	7.934	0.069	8.003	11	Pass

802.11ac40	SISO ANT A	5190	3.427	0.207	3.634	11	Pass
		5230	3.495	0.207	3.702	11	Pass
	SISO ANT B	5190	2.505	0.209	2.714	11	Pass
		5230	2.396	0.209	2.605	11	Pass
	MIMO A+B	5190	6.001	0.073	6.074	11	Pass
		5230	5.990	0.073	6.063	11	Pass
802.11ac80	SISO ANT A	5210	0.342	0.205	0.547	11	Pass
	SISO ANT B	5210	-0.788	0.205	-0.583	11	Pass
	MIMO A+B	5210	2.824	0.070	2.894	11	Pass
802.11ax20	SISO ANT A	5180	7.070	0.006	7.076	11	Pass
		5200	7.280	0.006	7.286	11	Pass
		5240	6.924	0.006	6.930	11	Pass
	SISO ANT B	5180	5.246	0.004	5.250	11	Pass
		5200	5.327	0.004	5.331	11	Pass
		5240	4.883	0.004	4.887	11	Pass
	MIMO A+B	5180	9.263	0	9.263	11	Pass
		5200	9.423	0	9.423	11	Pass
		5240	9.033	0	9.033	11	Pass
802.11ax40	SISO ANT A	5190	3.947	0.006	3.953	11	Pass
		5230	4.123	0.006	4.129	11	Pass
	SISO ANT B	5190	2.538	0.006	2.544	11	Pass
		5230	2.254	0.006	2.260	11	Pass
	MIMO A+B	5190	6.310	0	6.310	11	Pass
		5230	6.299	0	6.299	11	Pass
802.11ax80	SISO ANT A	5210	0.956	0.004	0.960	11	Pass
	SISO ANT B	5210	-0.657	0.004	-0.653	11	Pass
	MIMO A+B	5210	3.234	0	3.234	11	Pass
Note: Total PSD = PSD + Duty Cycle Factor.							

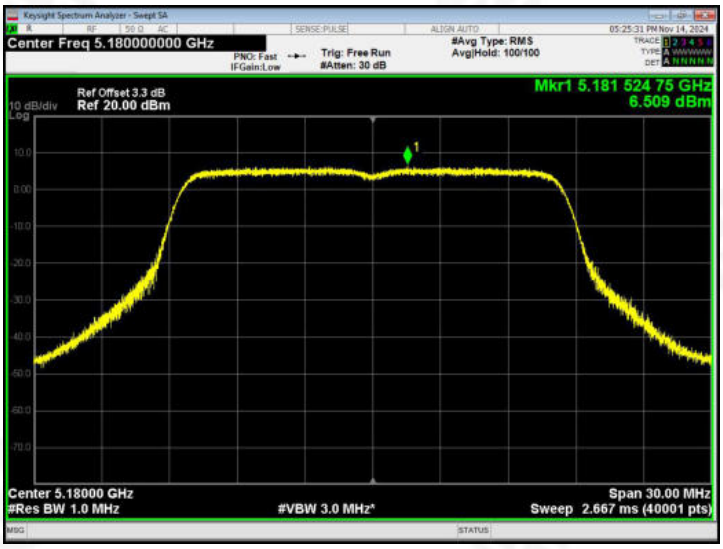
SISO ANT A - 802.11a

CH 36

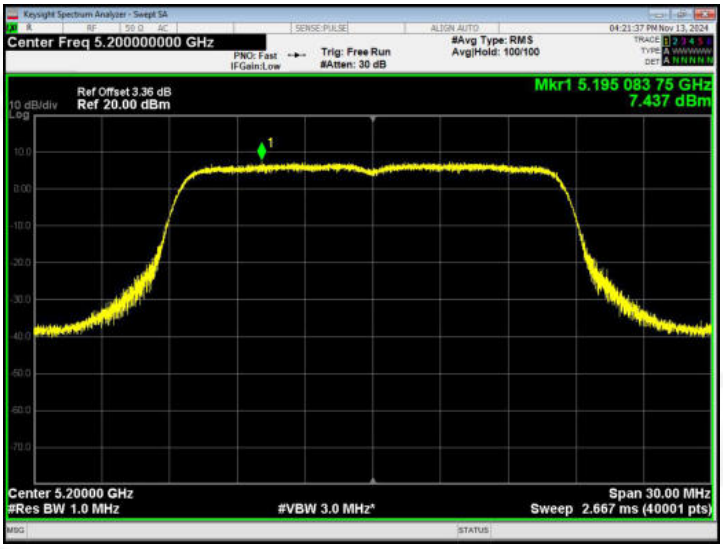


SISO ANT B - 802.11a

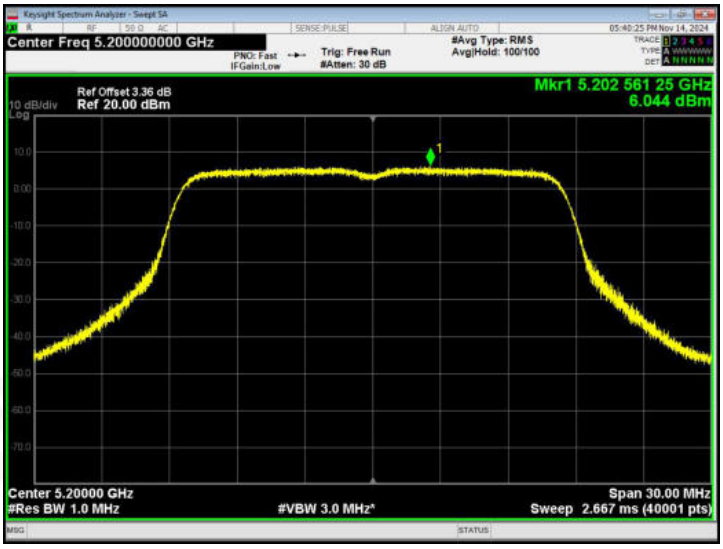
CH 36



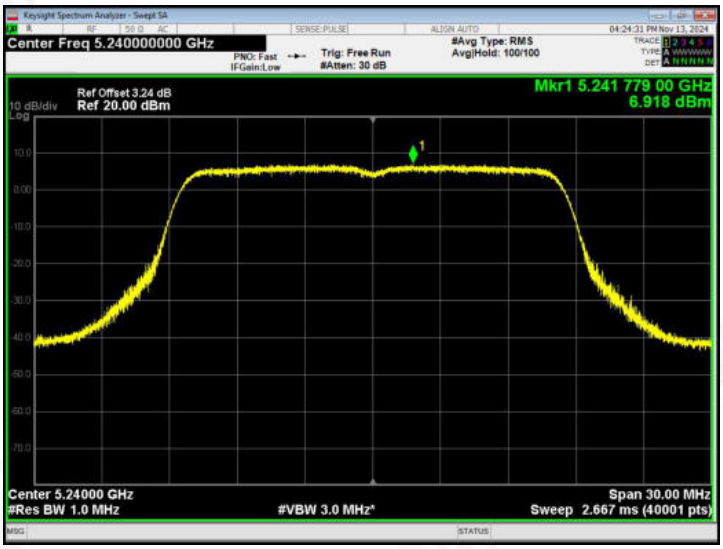
CH 40



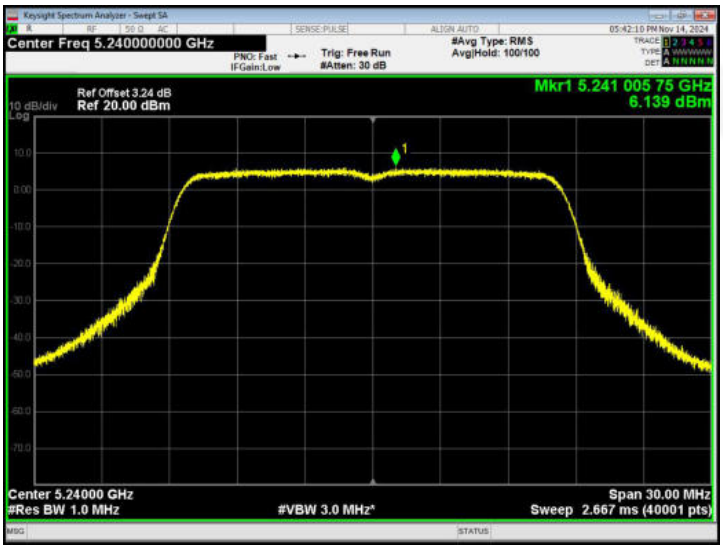
CH 40



CH 48

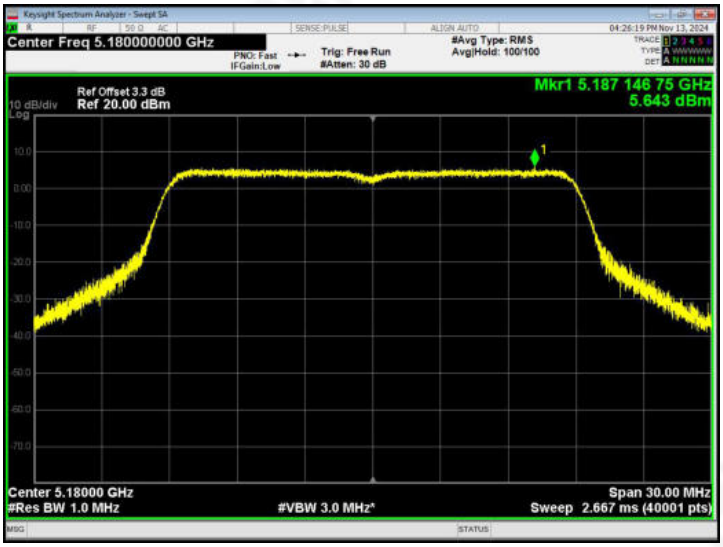


CH 48



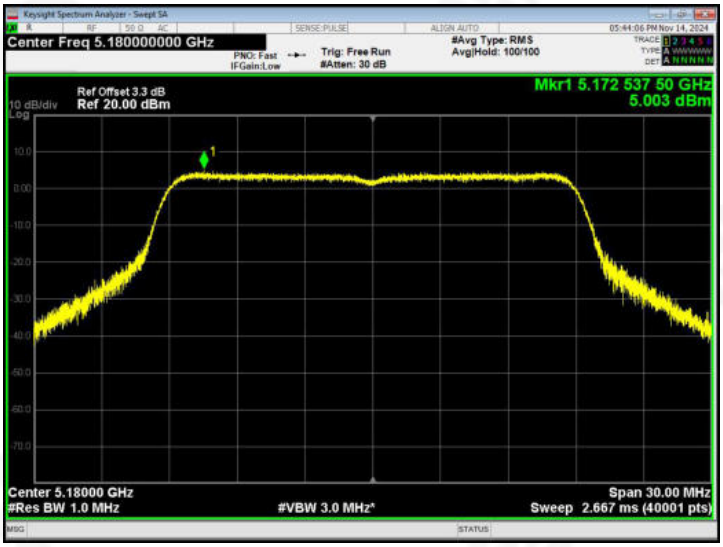
SISO ANT A - 802.11n20

CH 36

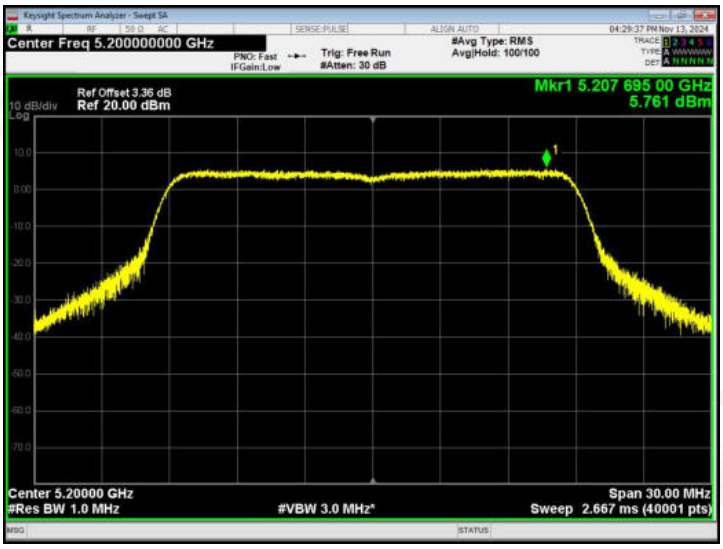


SISO ANT B - 802.11n20

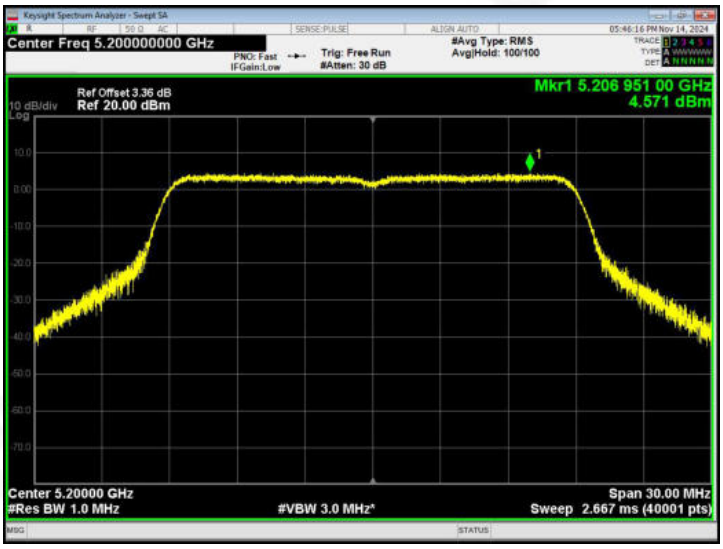
CH 36



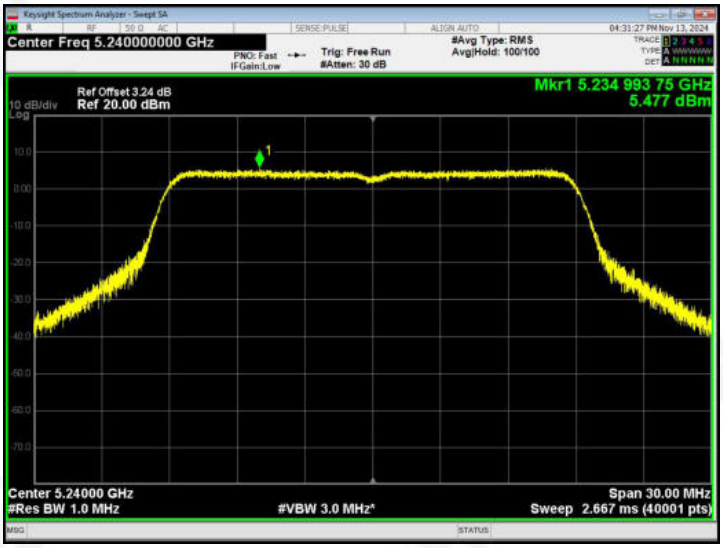
CH 40



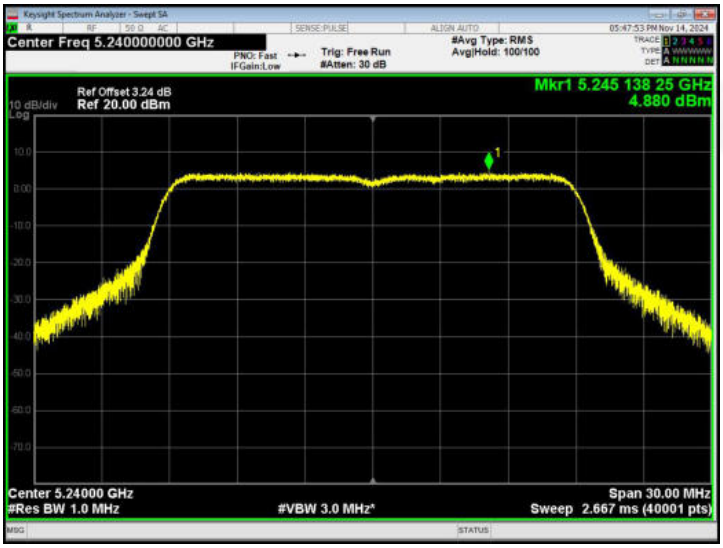
CH 40



CH 48

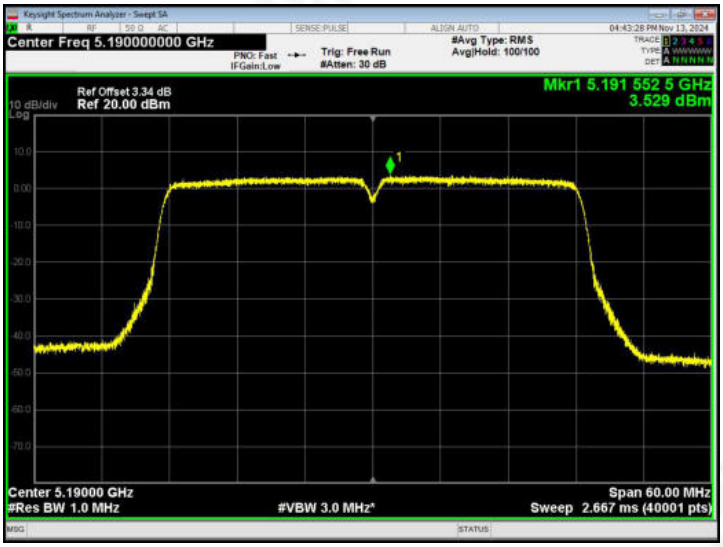


CH 48



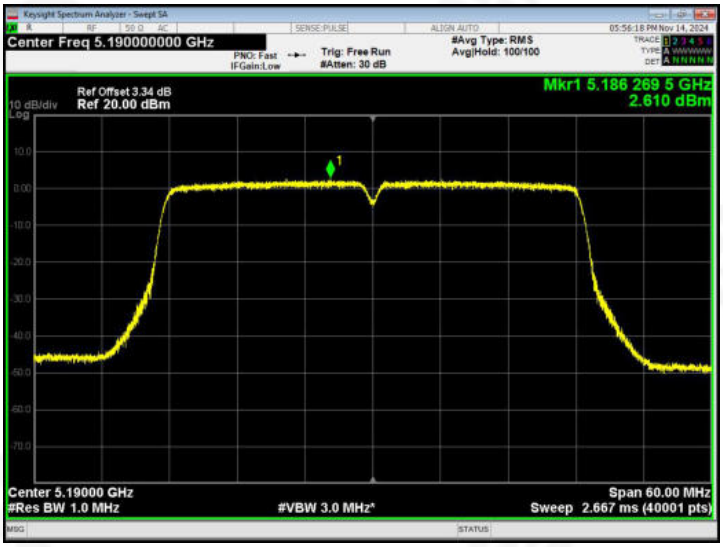
SISO ANT A - 802.11n40

CH 38

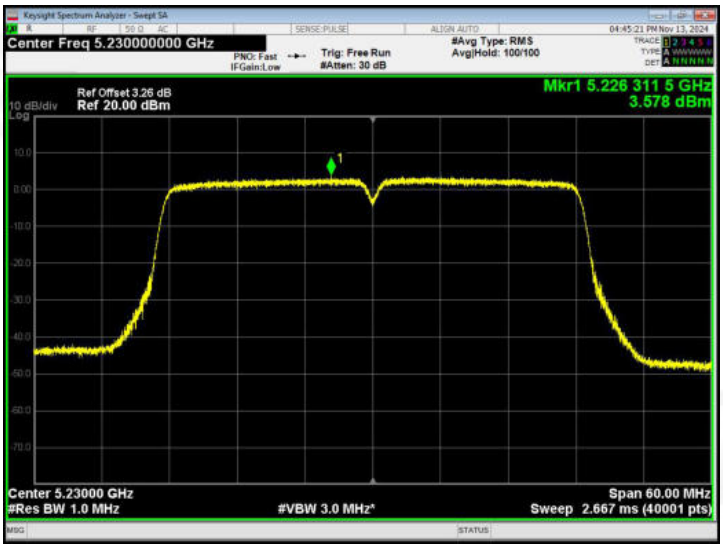


SISO ANT B - 802.11n40

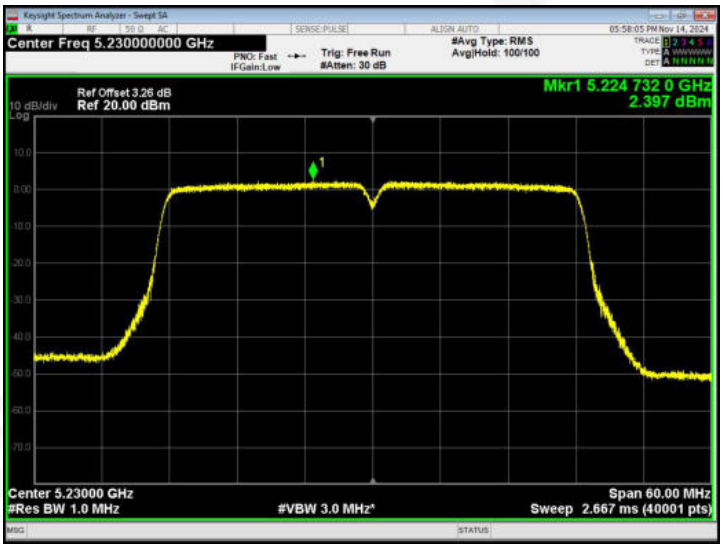
CH 38



CH 46

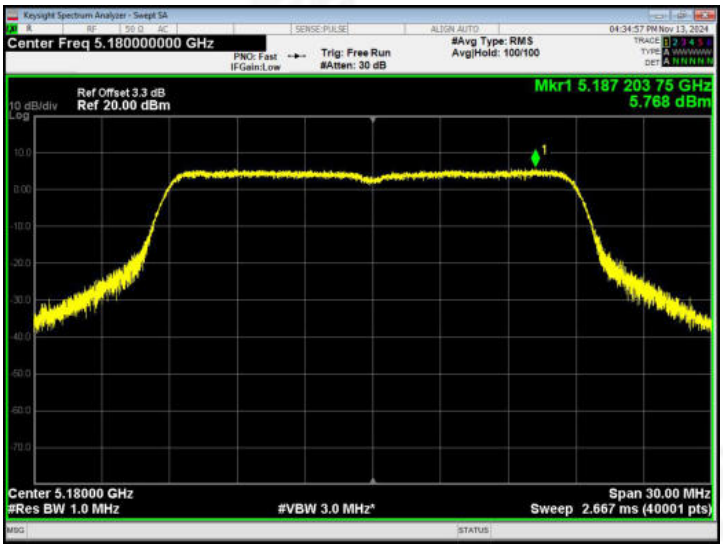


CH 46



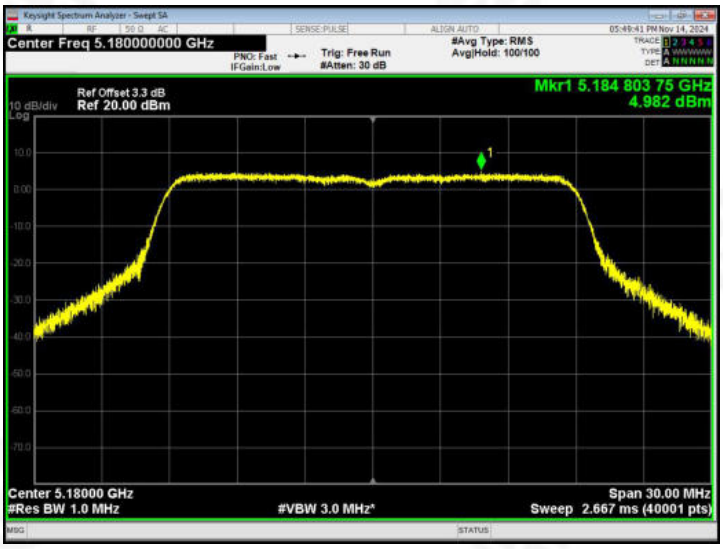
SISO ANT A - 802.11ac20

CH 36

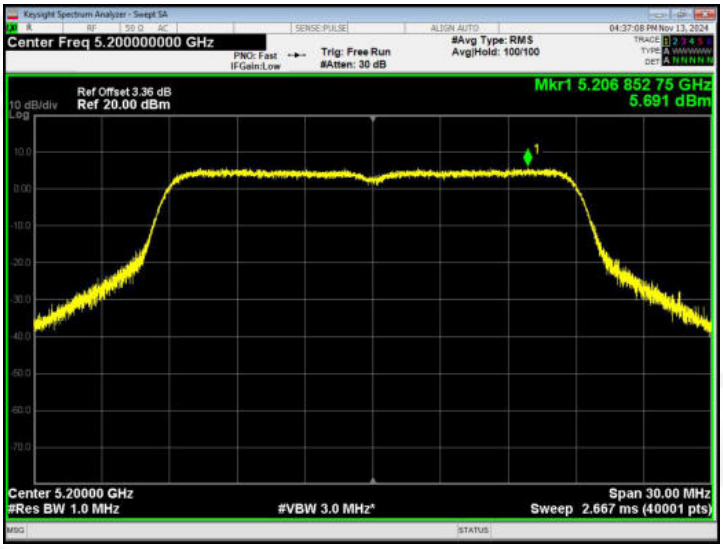


SISO ANT B - 802.11ac20

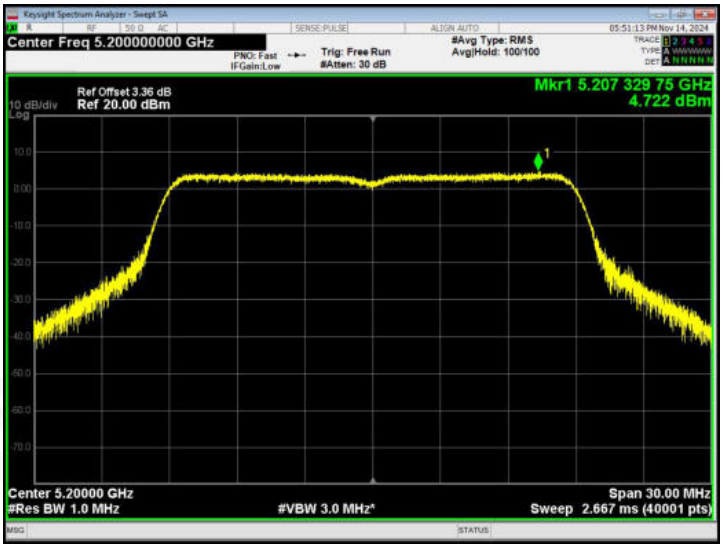
CH 36



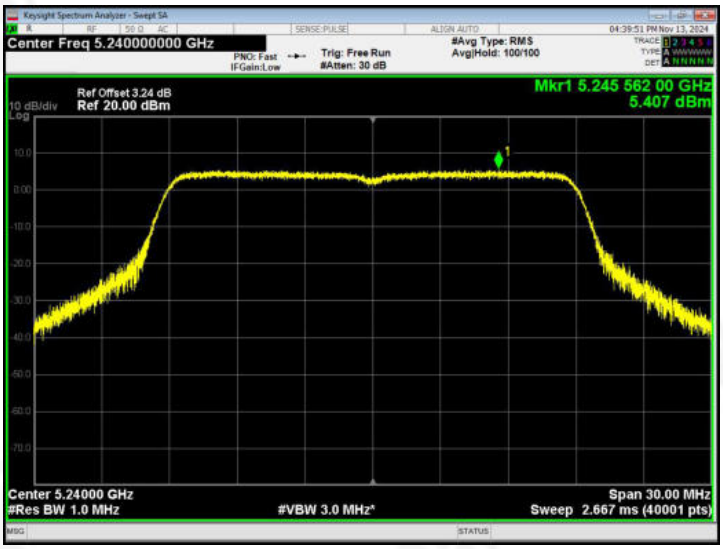
CH 40



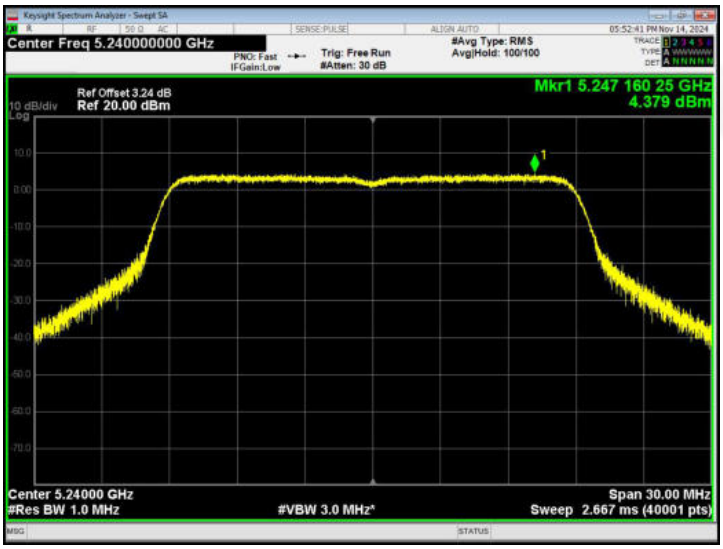
CH 40



CH 48

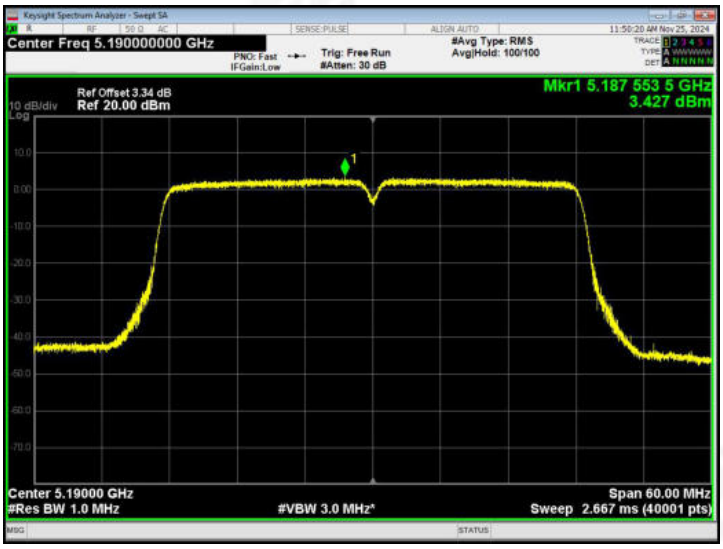


CH 48



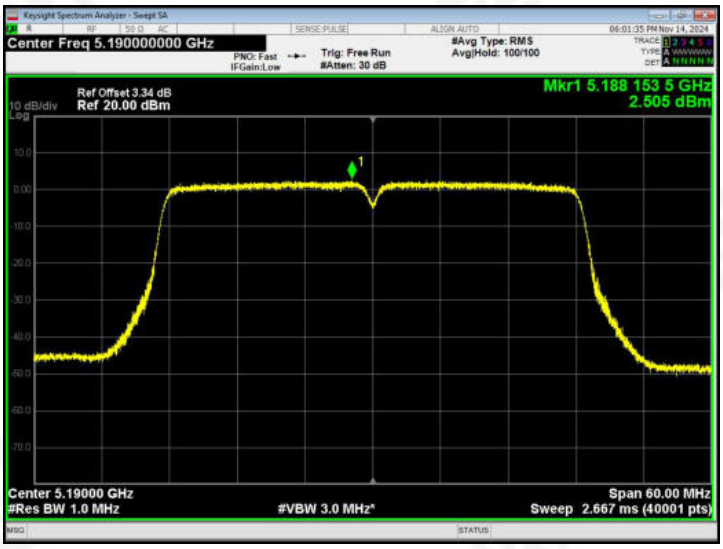
SISO ANT A - 802.11ac40

CH 38

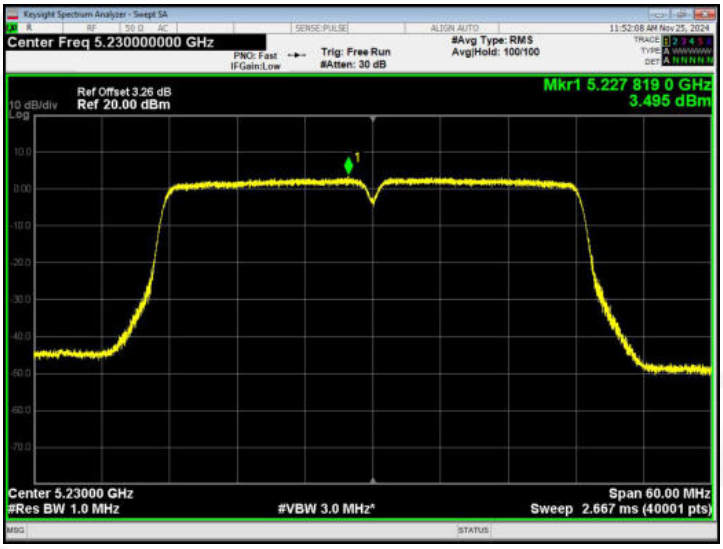


SISO ANT B - 802.11ac40

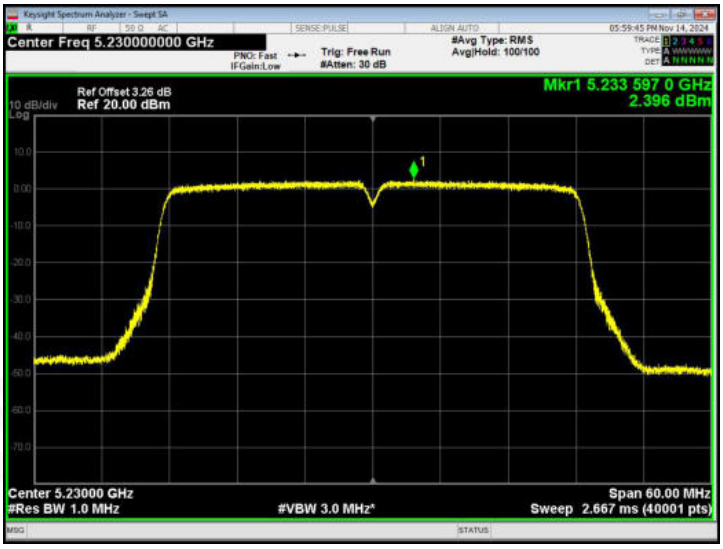
CH 38



CH 46

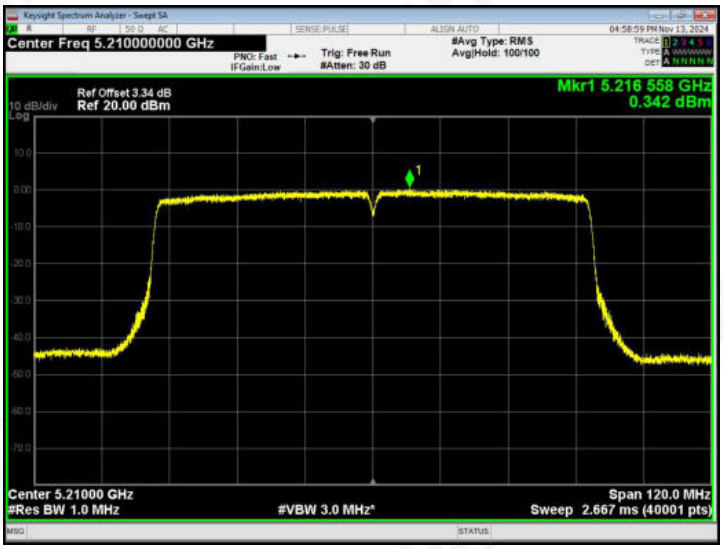


CH 46



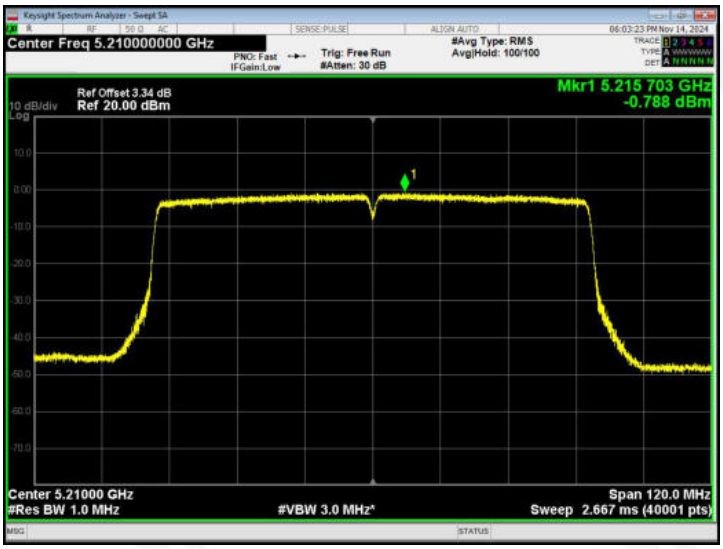
SISO ANT A - 802.11ac80

CH 42



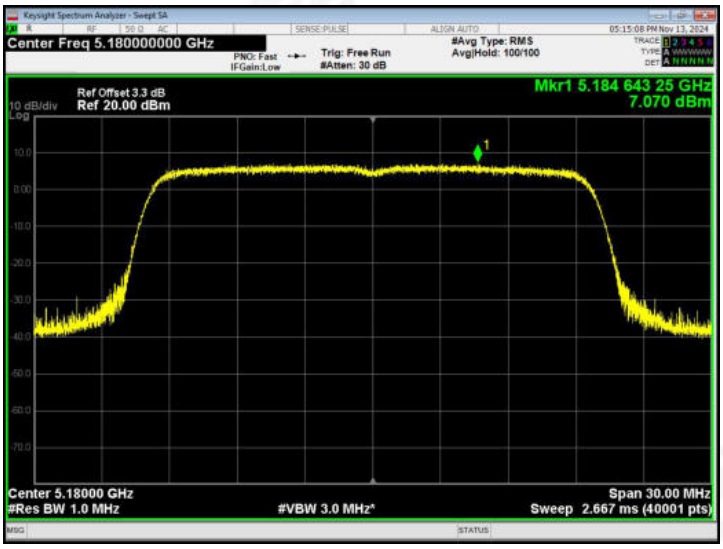
SISO ANT B - 802.11ac80

CH 42



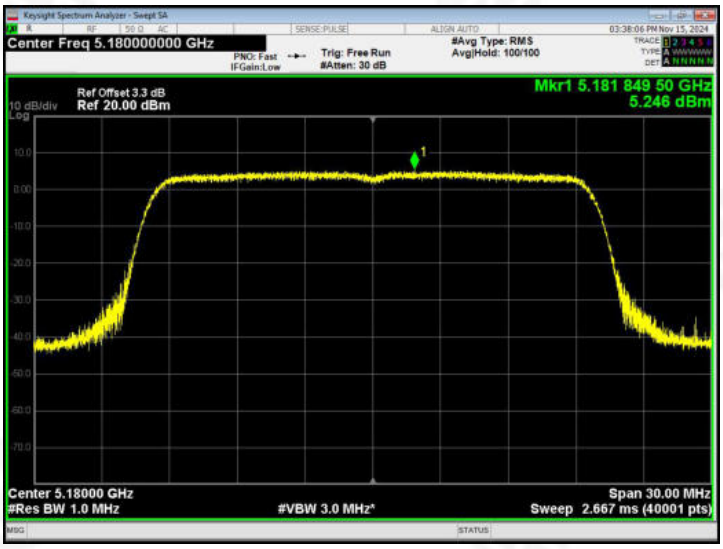
SISO ANT A - 802.11ax20

CH 36

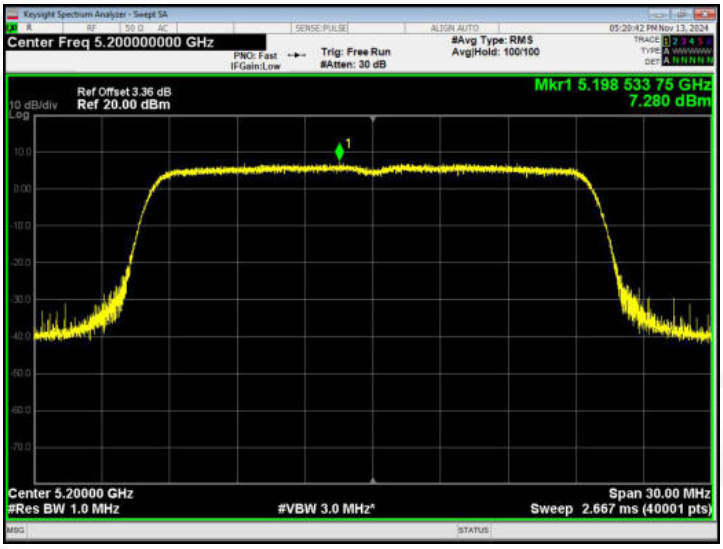


SISO ANT B - 802.11ax20

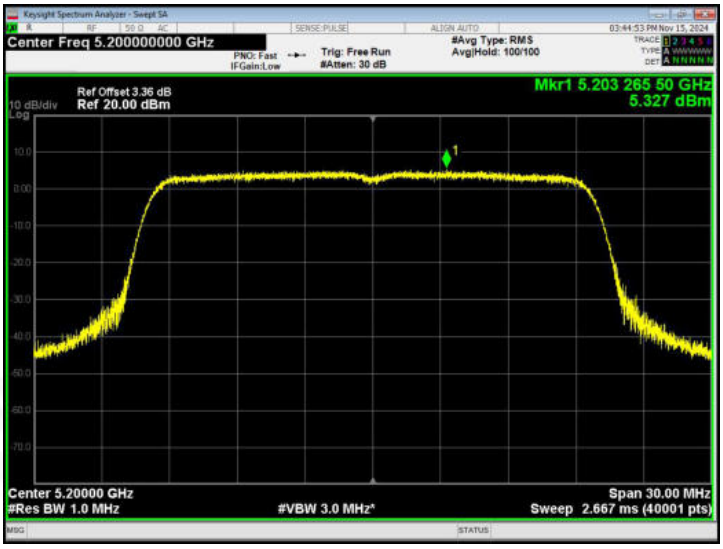
CH 36



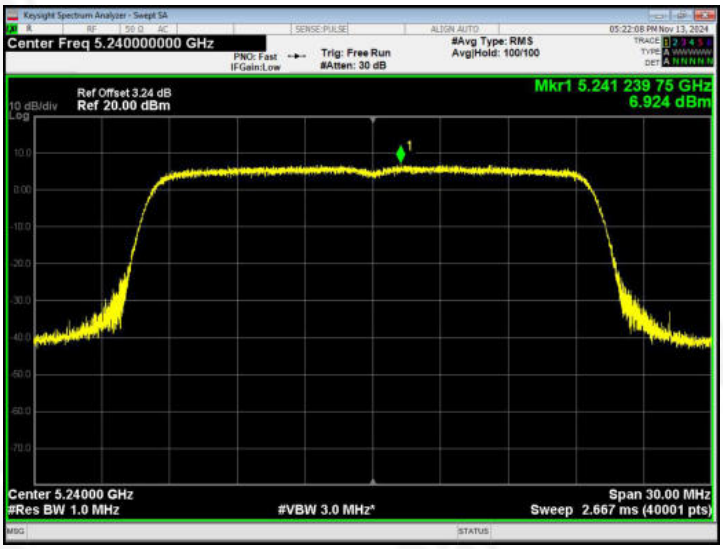
CH 40



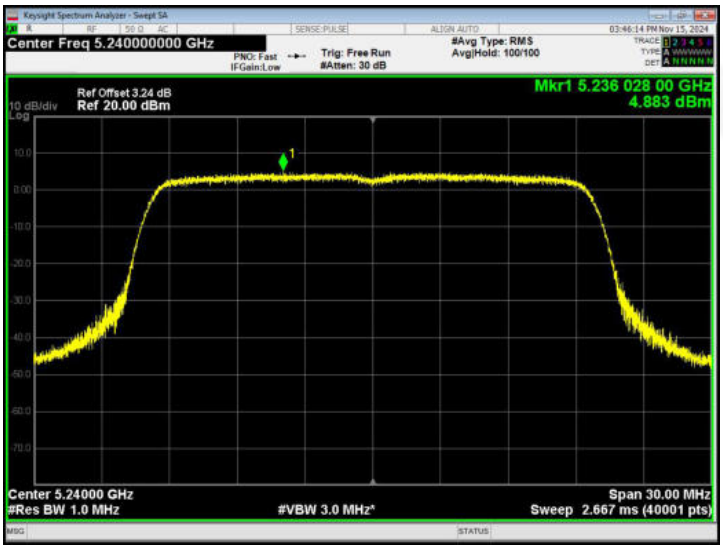
CH 40



CH 48

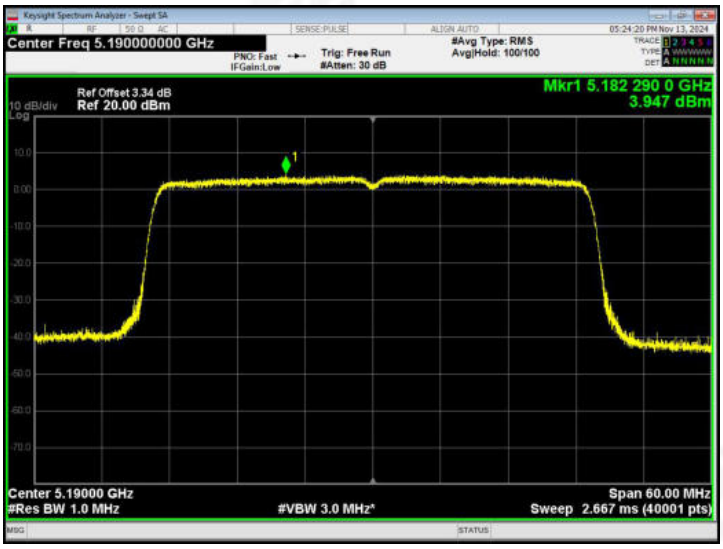


CH 48



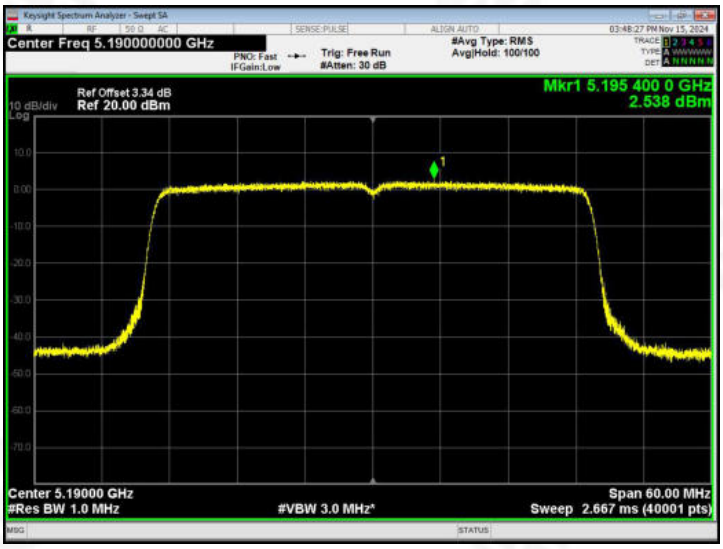
SISO ANT A - 802.11ax40

CH 38

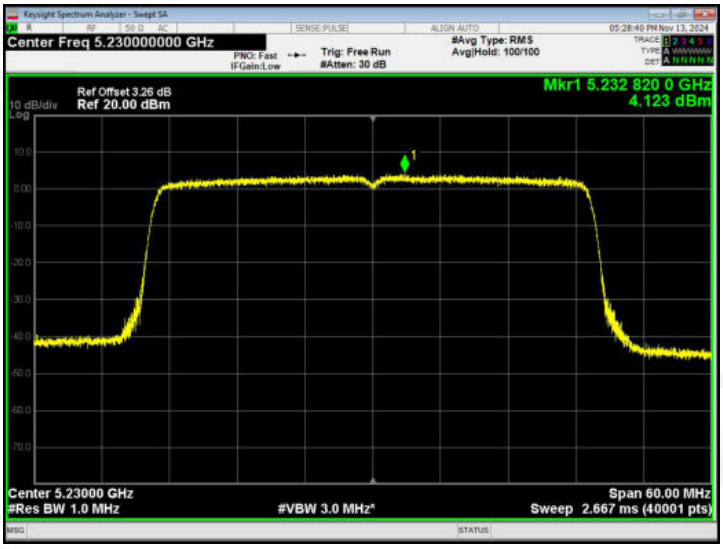


SISO ANT B - 802.11ax40

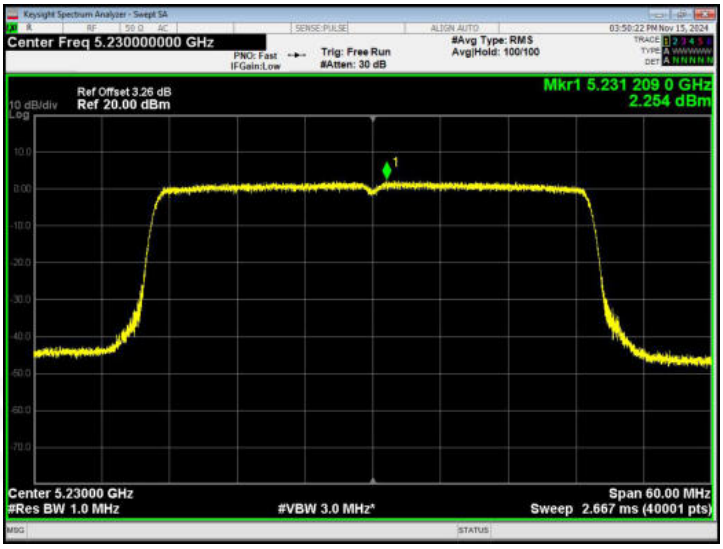
CH 38



CH 46

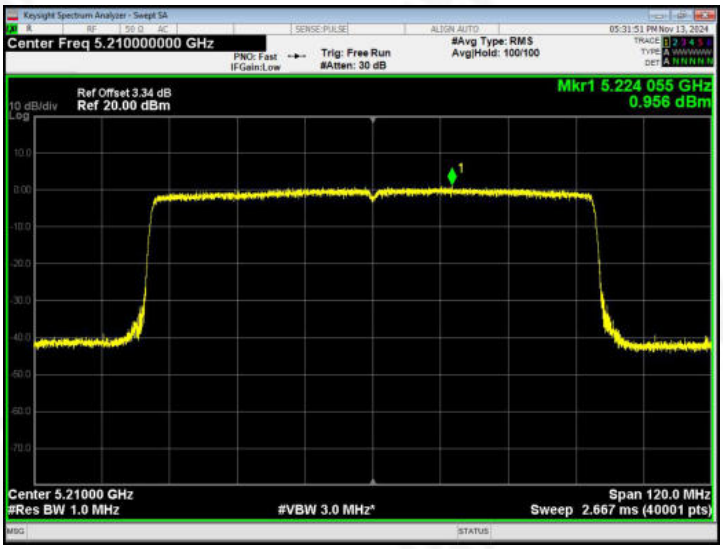


CH 46



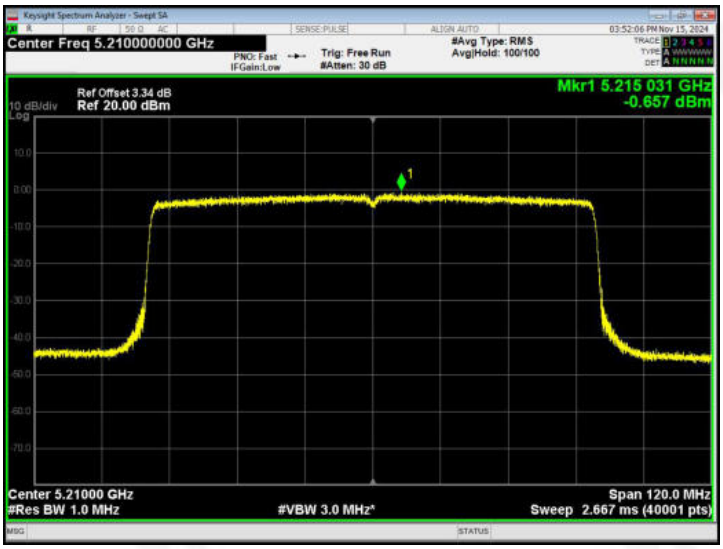
SISO ANT A - 802.11ax80

CH 42



SISO ANT B - 802.11ax80

CH 42



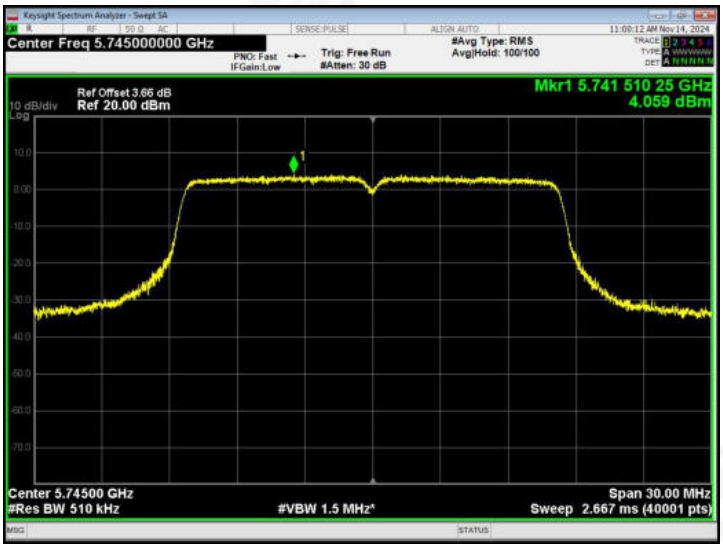
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1015 hPa	Test Voltage :	DC 3.85V
Test Band :	5.8G		

Mode	Antenna	Frequency (MHz)	PSD (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Result
802.11a	SISO ANT A	5745	4.059	0.202	4.261	30	Pass
		5785	4.118	0.202	4.320	30	Pass
		5825	3.956	0.202	4.158	30	Pass
	SISO ANT B	5745	1.424	0.202	1.626	30	Pass
		5785	2.357	0.202	2.559	30	Pass
		5825	2.602	0.202	2.804	30	Pass
802.11n20	SISO ANT A	5745	3.134	0.006	3.140	30	Pass
		5785	3.215	0.006	3.221	30	Pass
		5825	3.169	0.006	3.175	30	Pass
	SISO ANT B	5745	0.813	0.006	0.819	30	Pass
		5785	1.970	0.006	1.976	30	Pass
		5825	1.957	0.006	1.963	30	Pass
	MIMO A+B	5745	5.137	0	5.137	30	Pass
		5785	5.647	0	5.647	30	Pass
		5825	5.615	0	5.615	30	Pass
802.11n40	SISO ANT A	5755	0.384	0.206	0.590	30	Pass
		5795	0.297	0.206	0.503	30	Pass
	SISO ANT B	5755	-1.331	0.208	-1.123	30	Pass
		5795	-0.955	0.208	-0.747	30	Pass
	MIMO A+B	5755	2.621	0.071	2.692	30	Pass
		5795	2.726	0.071	2.797	30	Pass
802.11ac20	SISO ANT A	5745	3.706	0.006	3.712	30	Pass
		5785	3.548	0.006	3.554	30	Pass
		5825	3.479	0.006	3.485	30	Pass
	SISO ANT B	5745	1.280	0.006	1.286	30	Pass
		5785	2.205	0.006	2.211	30	Pass
		5825	2.128	0.006	2.134	30	Pass
	MIMO A+B	5745	5.671	0.006	5.677	30	Pass
		5785	5.939	0.006	5.945	30	Pass
		5825	5.866	0.006	5.872	30	Pass

802.11ac40	SISO ANT A	5755	0.071	0.207	0.278	30	Pass
		5795	0.405	0.207	0.612	30	Pass
	SISO ANT B	5755	-1.326	0.207	-1.119	30	Pass
		5795	-1.077	0.207	-0.870	30	Pass
	MIMO A+B	5755	2.439	0.072	2.511	30	Pass
		5795	2.737	0.072	2.809	30	Pass
802.11ac80	SISO ANT A	5775	-2.779	0.203	-2.576	30	Pass
	SISO ANT B	5775	-4.314	0.203	-4.111	30	Pass
	MIMO A+B	5775	-0.469	0.068	-0.401	30	Pass
802.11ax20	SISO ANT A	5745	3.314	0.006	3.320	30	Pass
		5785	3.802	0.006	3.808	30	Pass
		5825	3.640	0.006	3.646	30	Pass
	SISO ANT B	5745	2.419	0.006	2.425	30	Pass
		5785	2.824	0.006	2.830	30	Pass
		5825	2.842	0.006	2.848	30	Pass
	MIMO A+B	5745	5.900	0	5.900	30	Pass
		5785	6.351	0	6.351	30	Pass
		5825	6.270	0	6.270	30	Pass
802.11ax40	SISO ANT A	5755	0.640	0.007	0.647	30	Pass
		5795	0.977	0.007	0.984	30	Pass
	SISO ANT B	5755	-0.570	0.006	-0.564	30	Pass
		5795	-0.417	0.006	-0.411	30	Pass
	MIMO A+B	5755	3.087	0	3.087	30	Pass
		5795	3.346	0	3.346	30	Pass
802.11ax80	SISO ANT A	5775	-2.118	0.006	-2.112	30	Pass
	SISO ANT B	5775	-3.798	0.006	-3.792	30	Pass
	MIMO A+B	5775	0.133	0	0.133	30	Pass
Note: Total PSD = PSD + Duty Cycle Factor.							

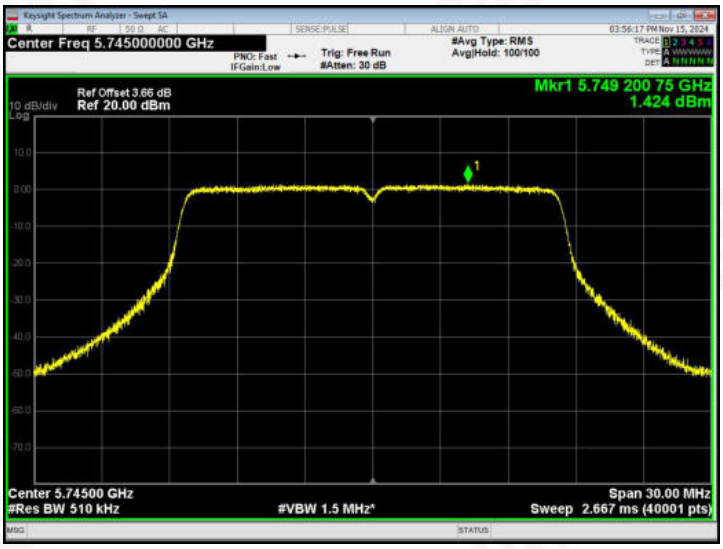
SISO ANT A - 802.11a

CH 149

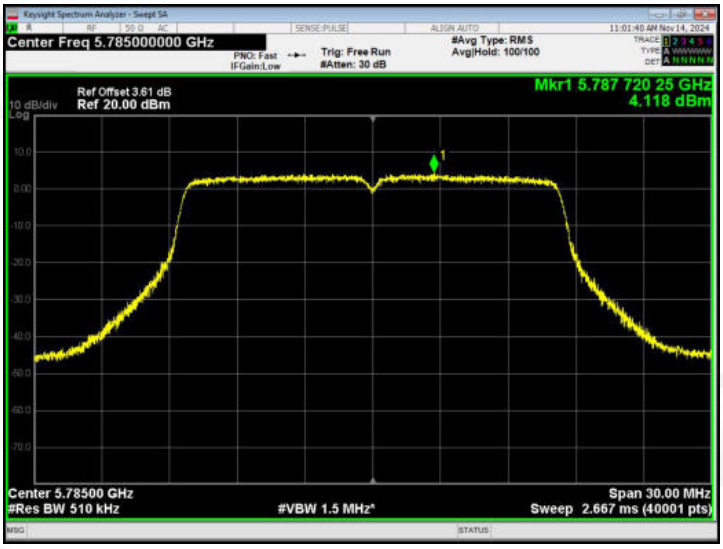


SISO ANT B - 802.11a

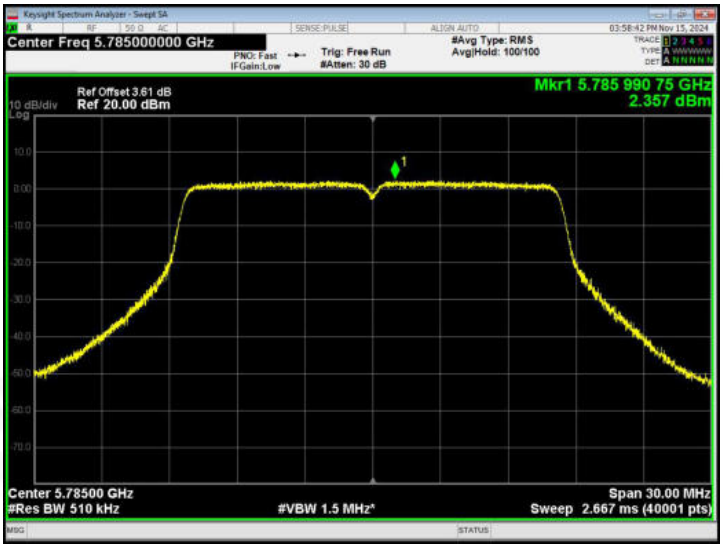
CH 149



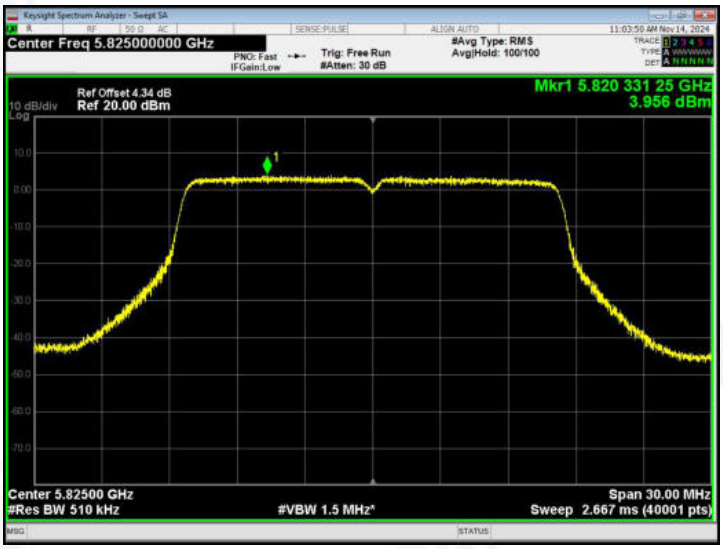
CH 157



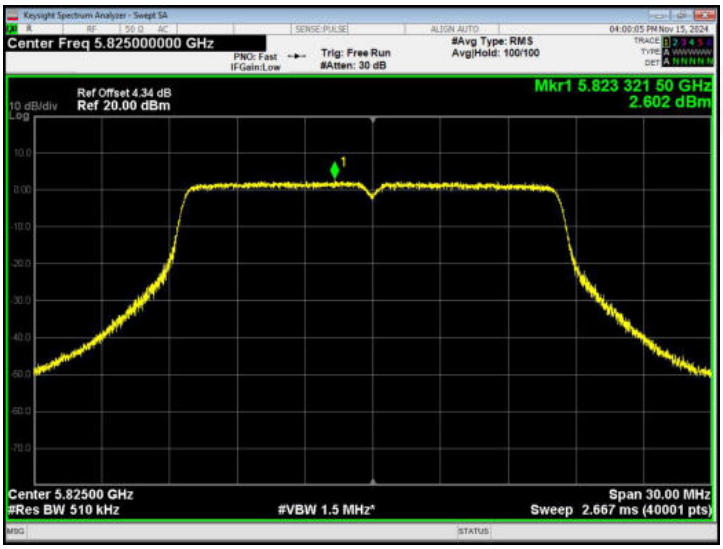
CH 157



CH 165

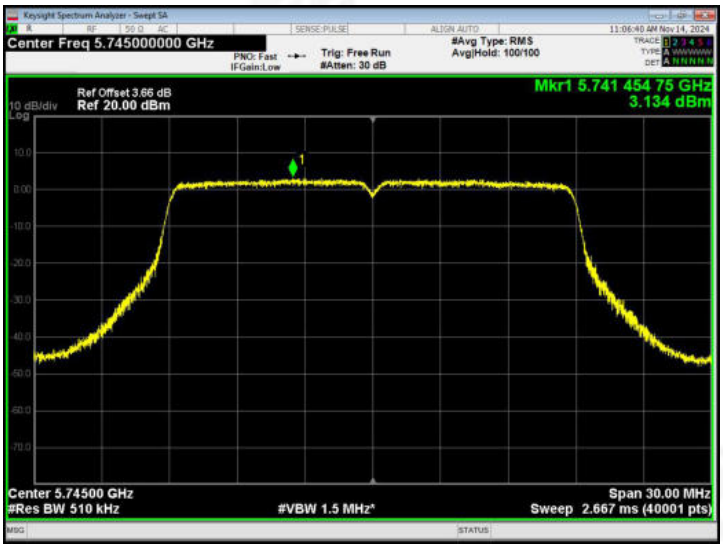


CH 165



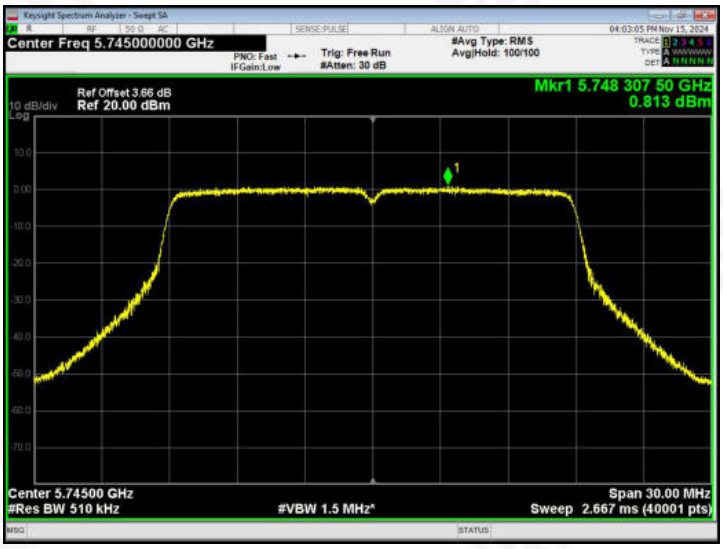
SISO ANT A - 802.11n20

CH 149

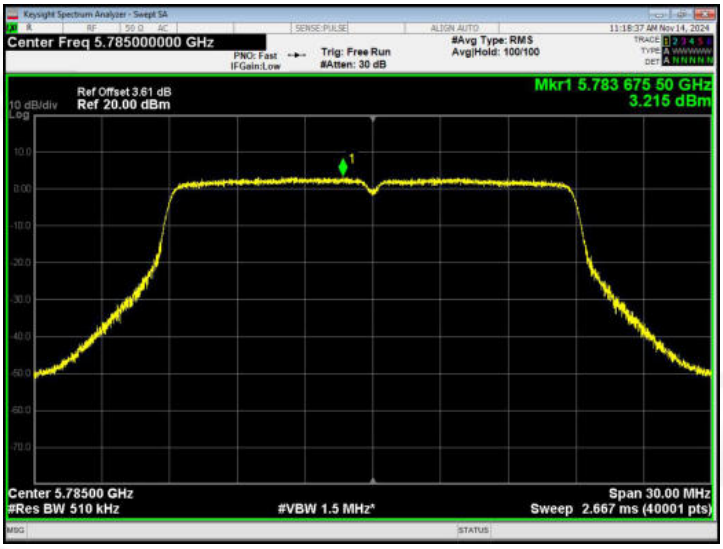


SISO ANT B - 802.11n20

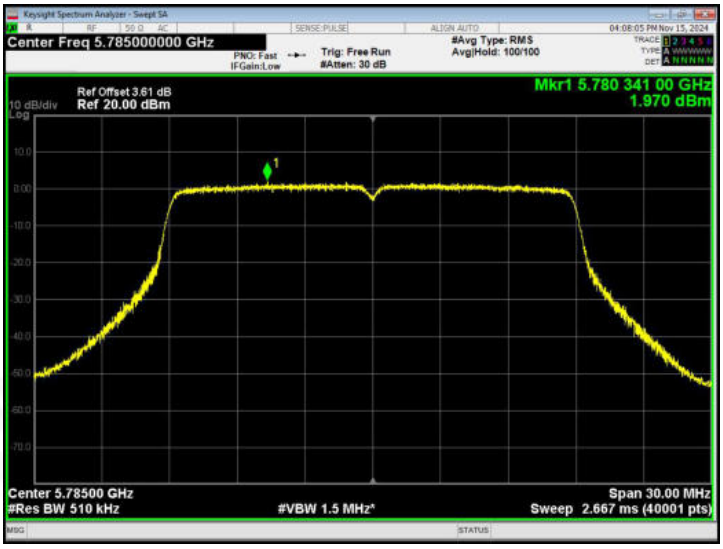
CH 149



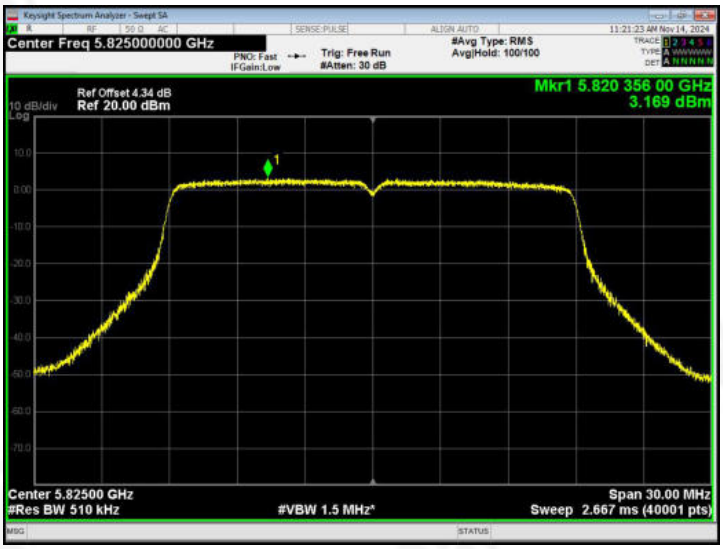
CH 157



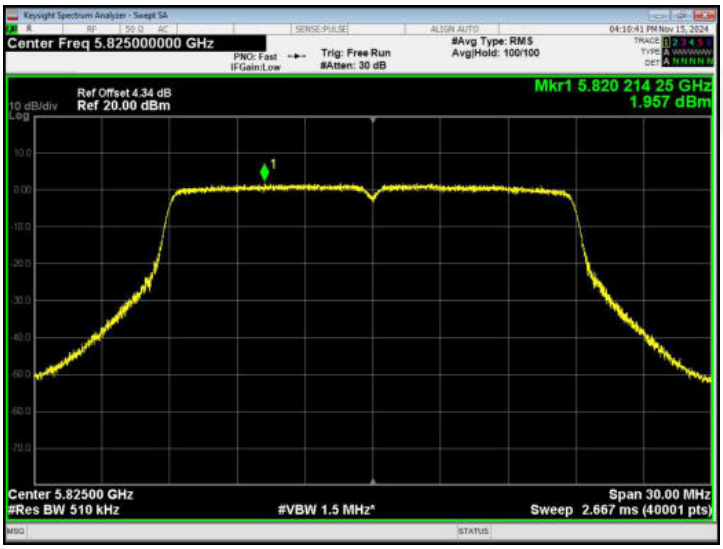
CH 157



CH 165

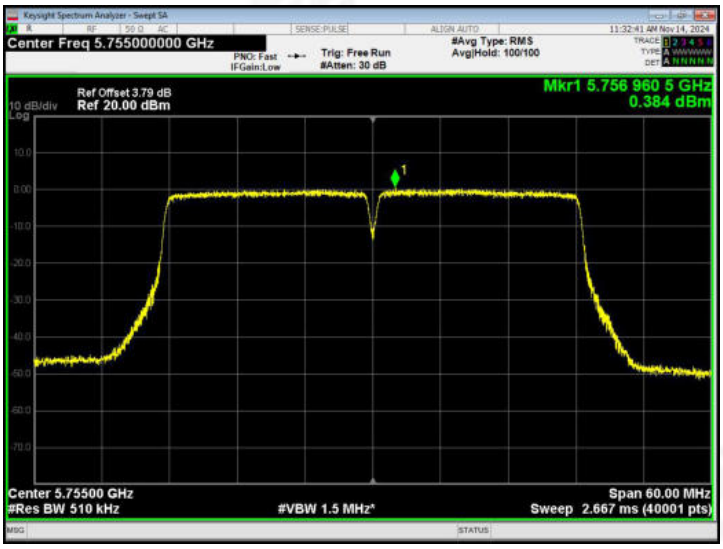


CH 165



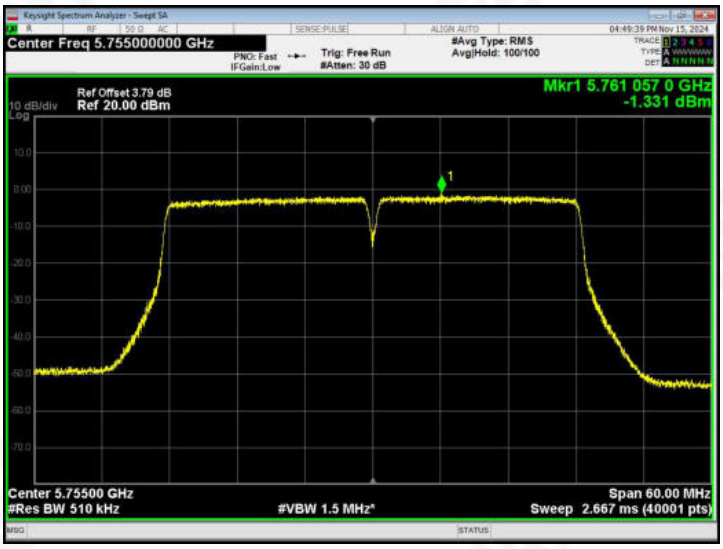
SISO ANT A - 802.11n40

CH 151

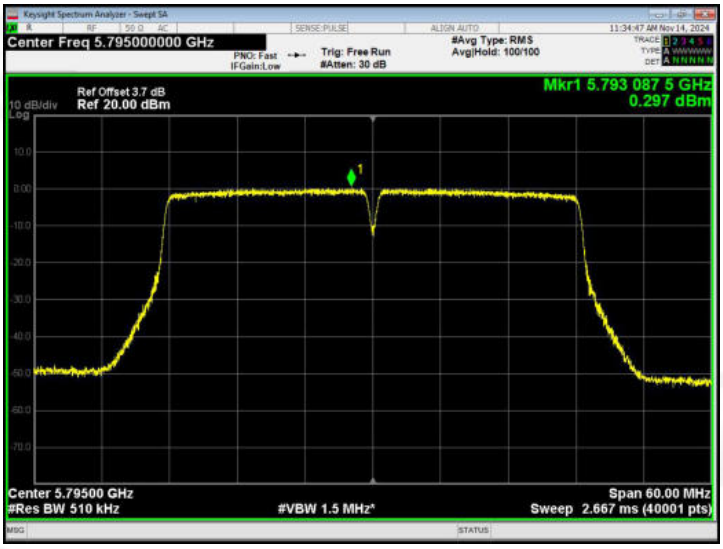


SISO ANT B - 802.11n40

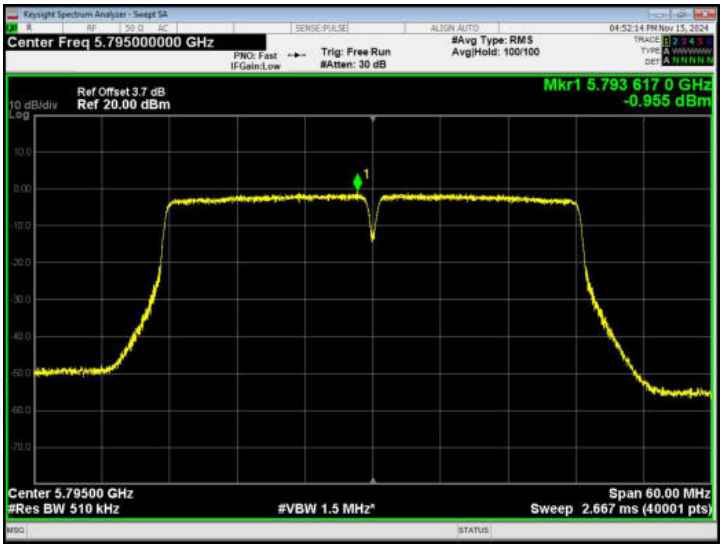
CH 151



CH 159

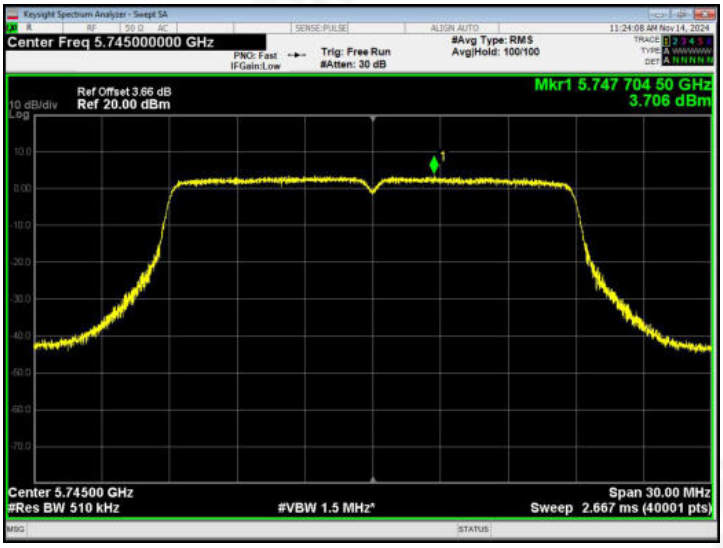


CH 159



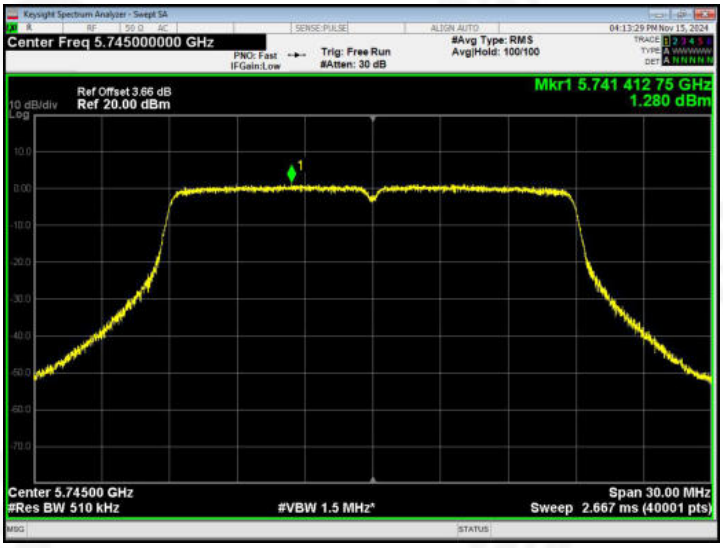
SISO ANT A - 802.11ac20

CH 149

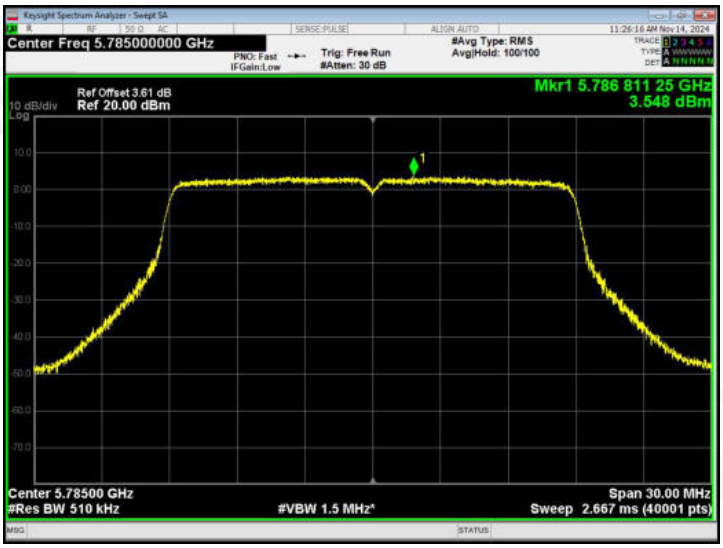


SISO ANT B - 802.11ac20

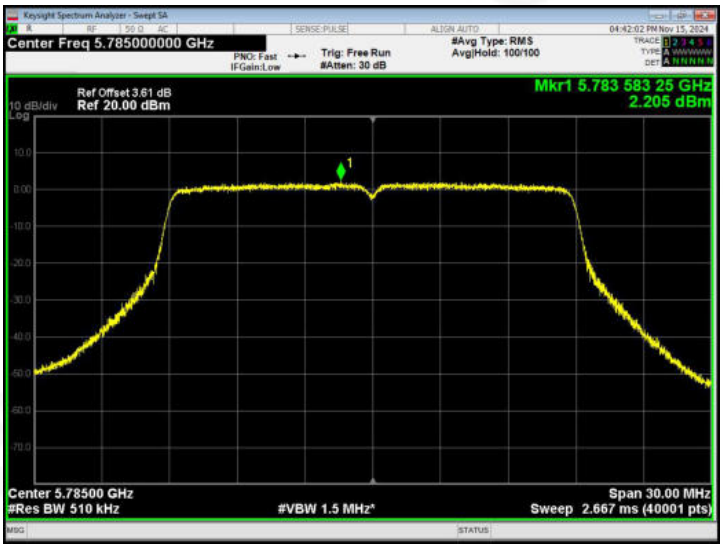
CH 149



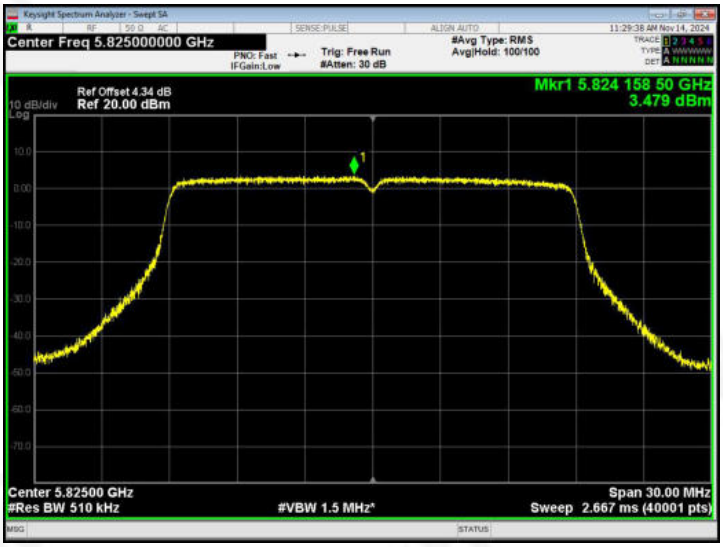
CH 157



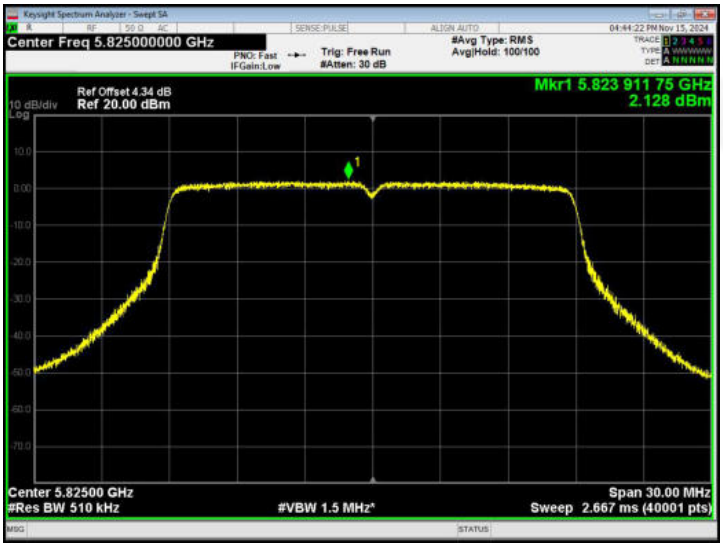
CH 157



CH 165

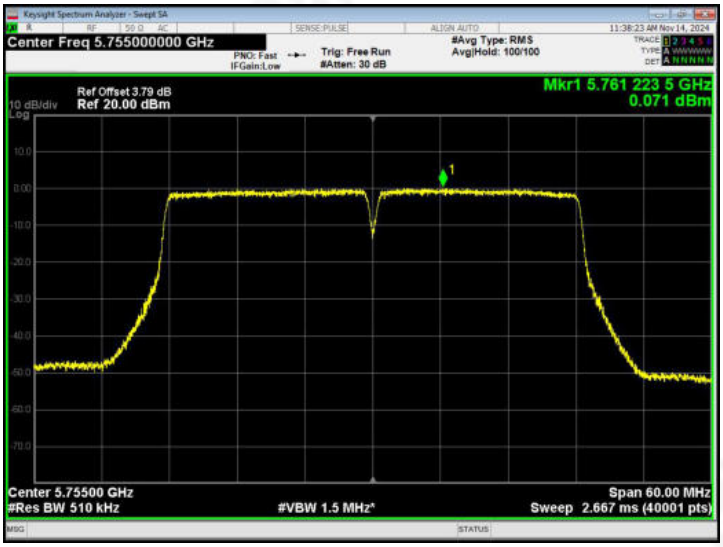


CH 165



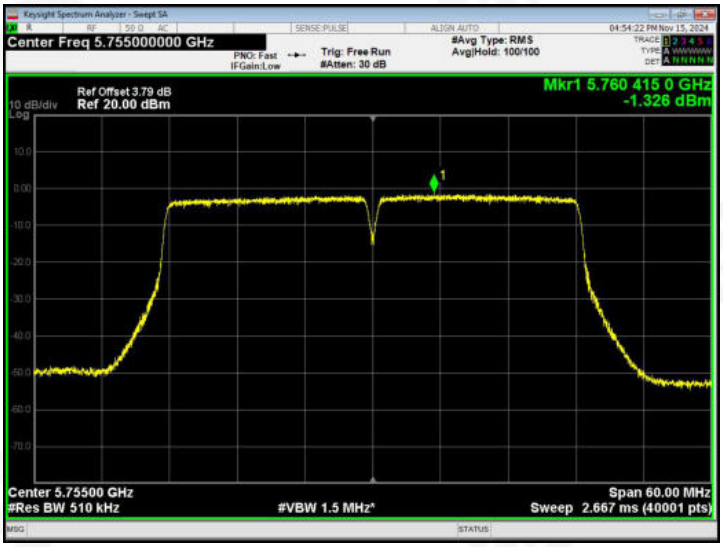
SISO ANT A - 802.11ac40

CH 151

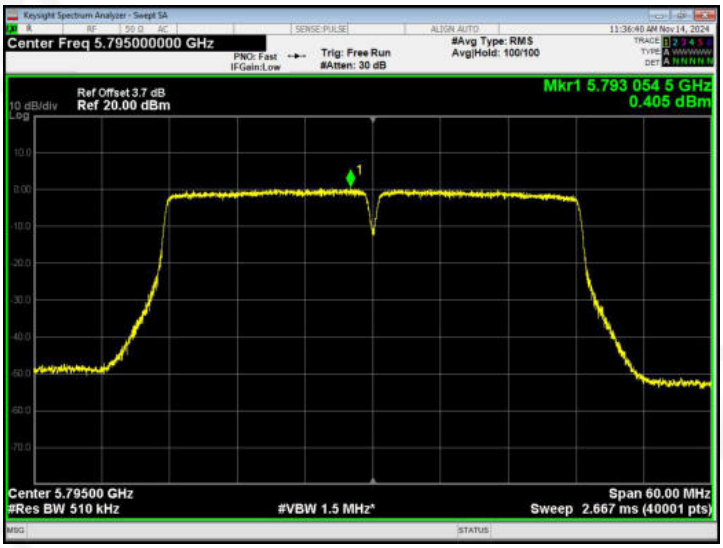


SISO ANT B - 802.11ac40

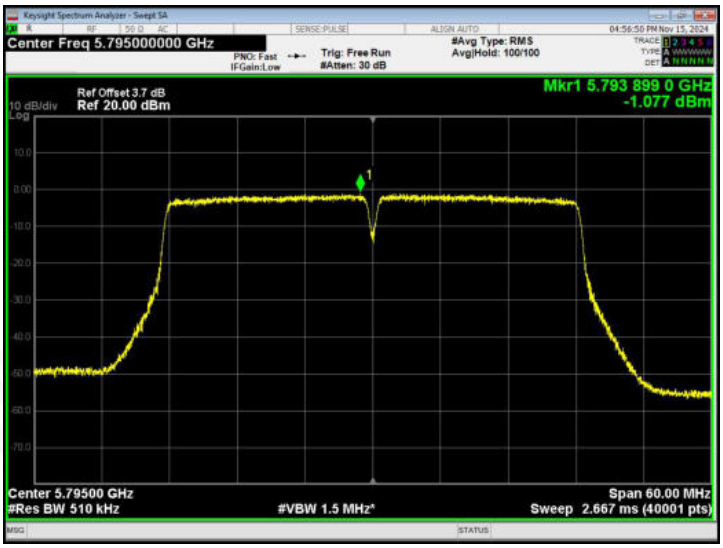
CH 151



CH 159

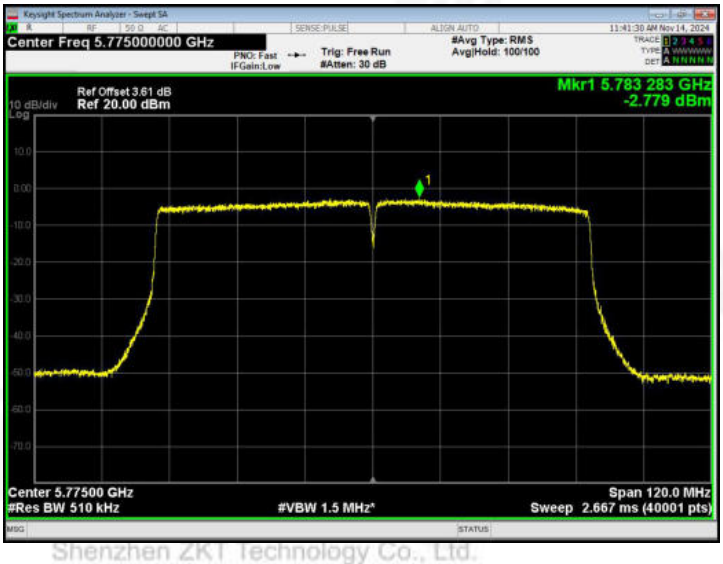


CH 159



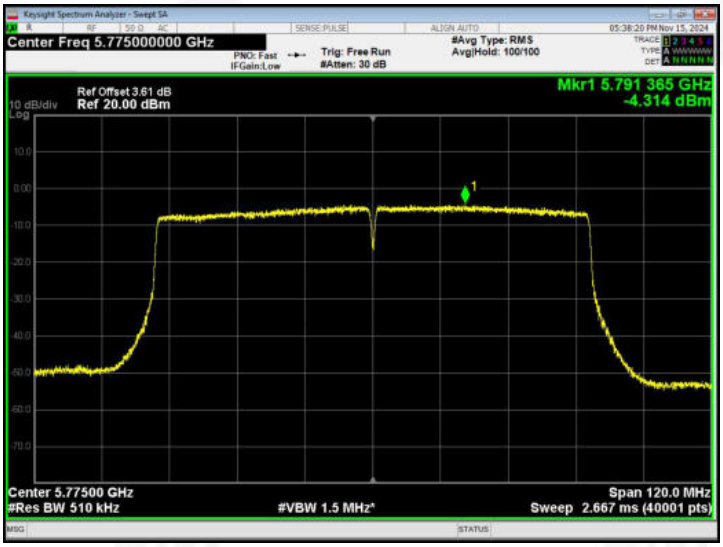
SISO ANT A - 802.11ac80

CH 155



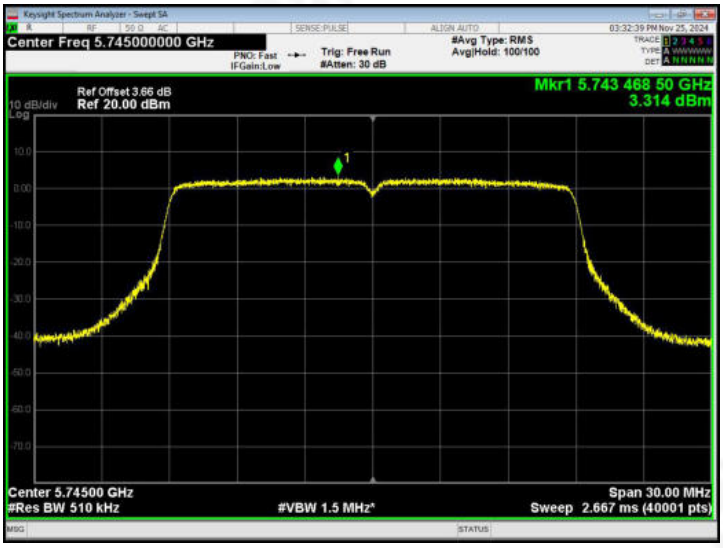
SISO ANT B - 802.11ac80

CH 155



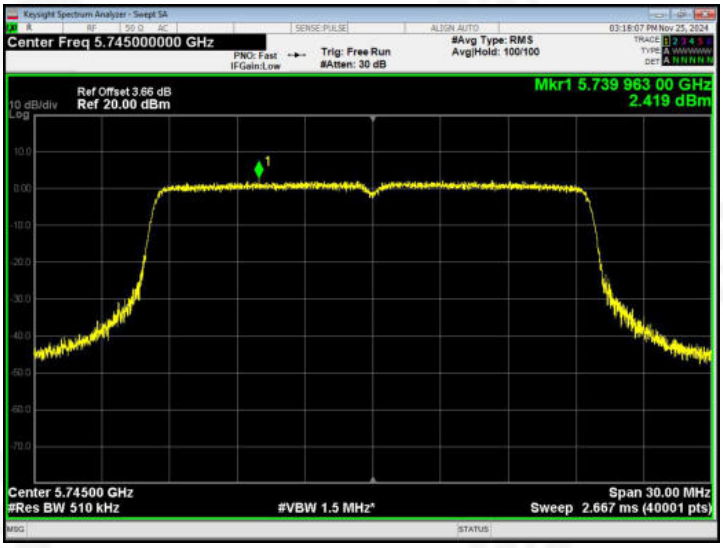
SISO ANT A - 802.11ax20

CH 149

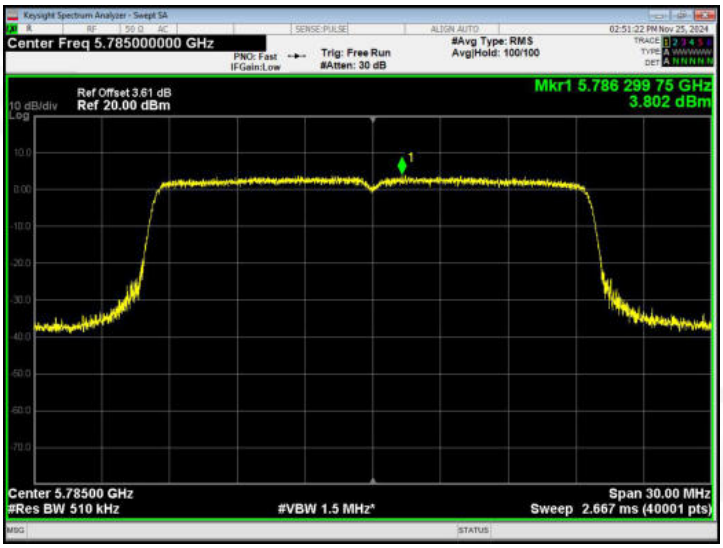


SISO ANT B - 802.11ax20

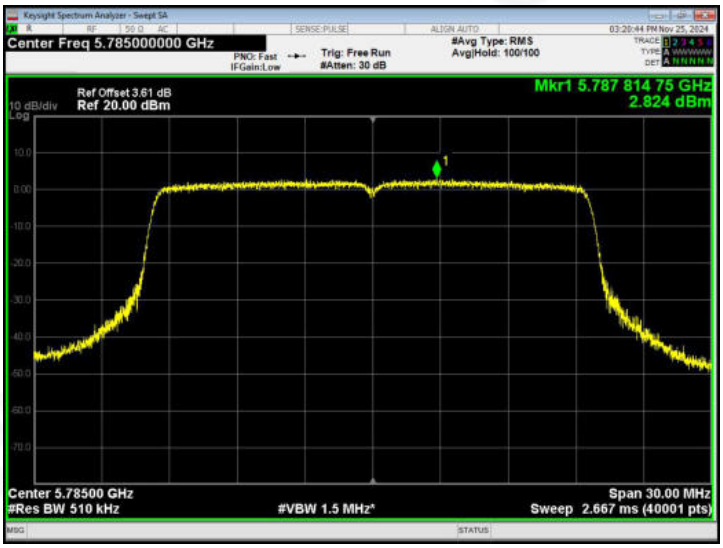
CH 149



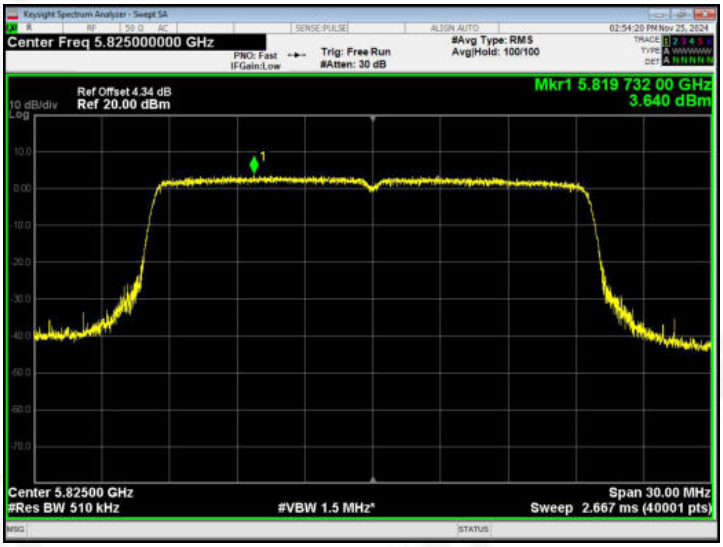
CH 157



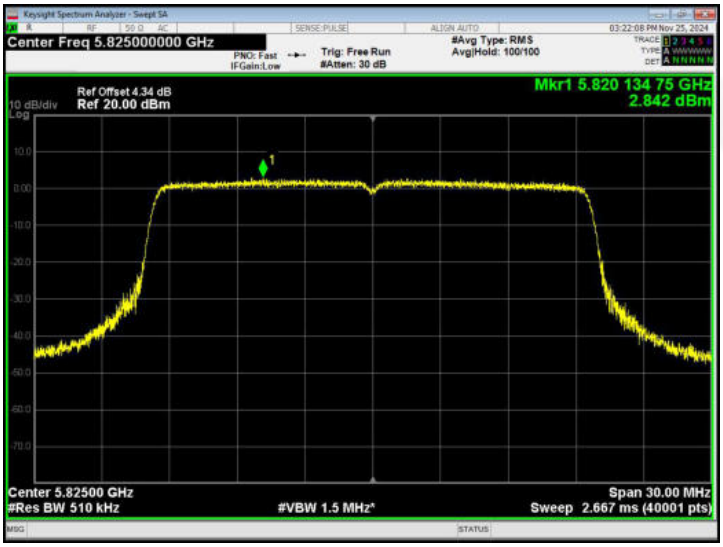
CH 157



CH 165

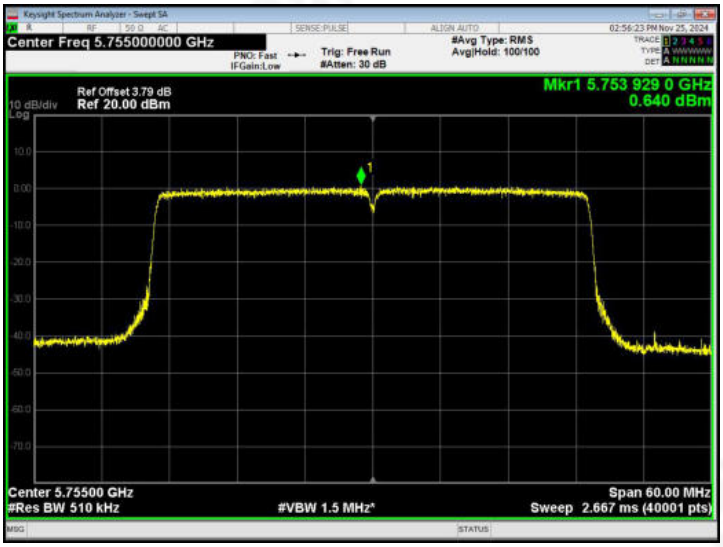


CH 165



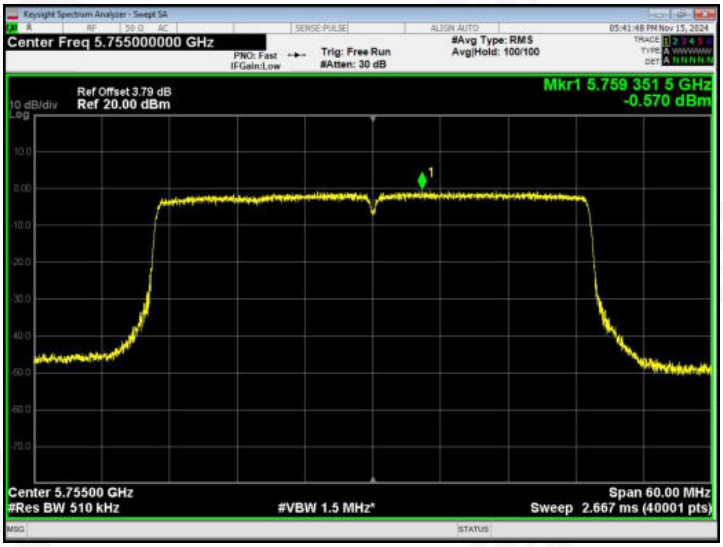
SISO ANT A - 802.11ax40

CH 151

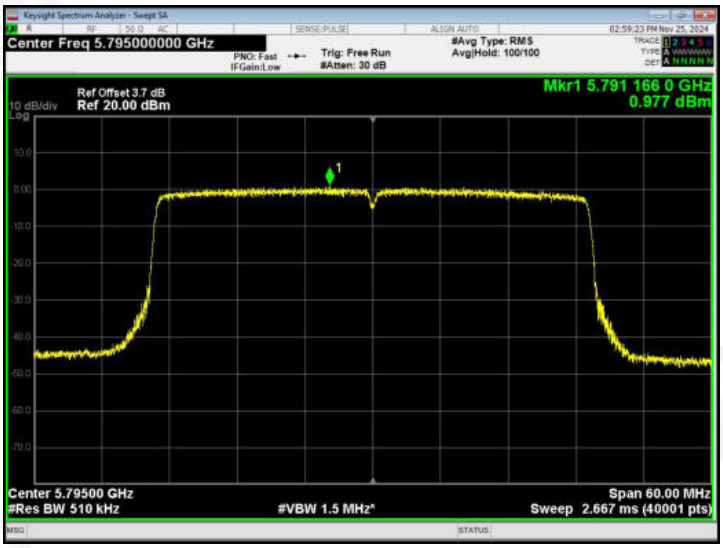


SISO ANT B - 802.11ax40

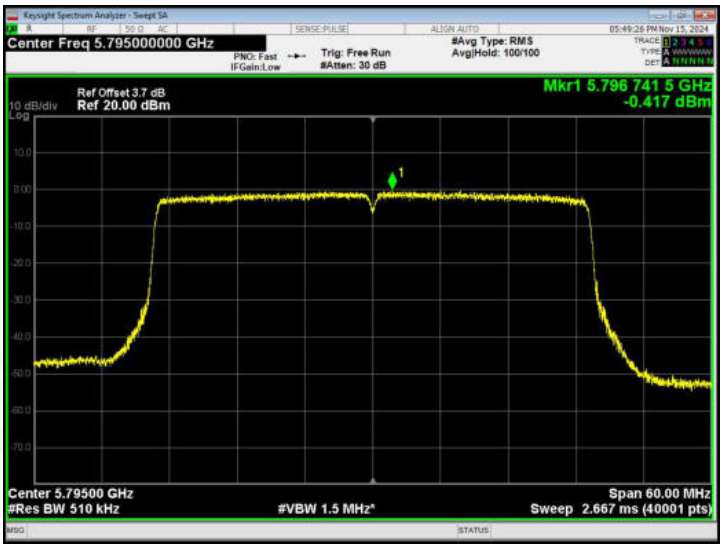
CH 151



CH 159

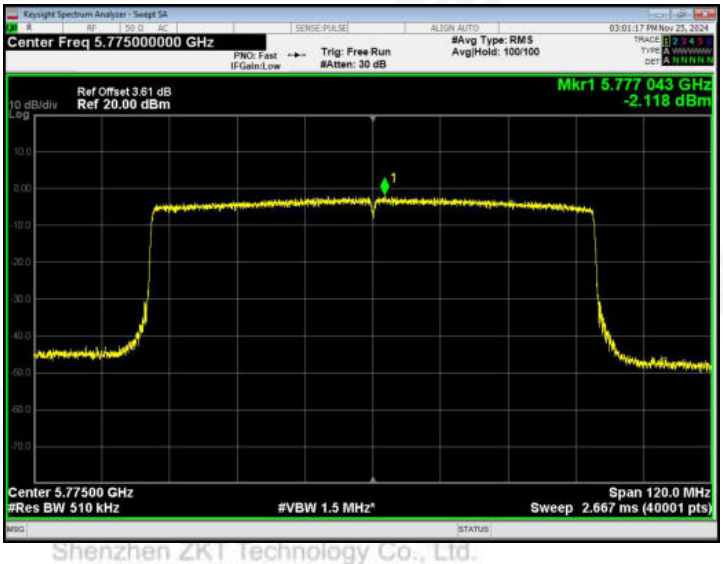


CH 159



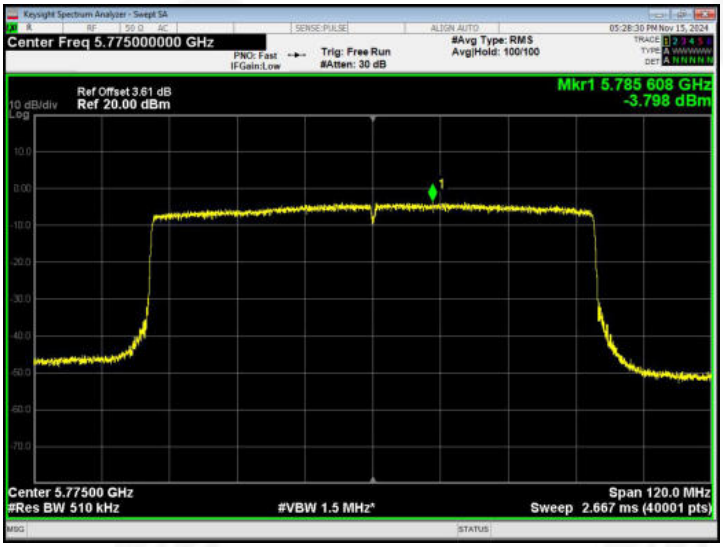
SISO ANT A - 802.11ax80

CH 155



SISO ANT B - 802.11ax80

CH 155



6. 26DB EMISSION BANDWIDTH & 6DB OCCUPIED BANDWIDTH

6.1 APPLIED PROCEDURES / LIMIT

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band, the minimum bandwidth 6 dB bandwidth of U-NII devices shall be at least 500KHz. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

6.2 TEST PROCEDURE

The following procedure shall be used for measuring 6dB Occupied Bandwidth:

The procedure for this method is as follows:

a) Set RBW = 100KHz.

b) Set the VBW > RBW.

c) Detector = Peak.

d) Trace mode = max hold.

e) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

The following procedure shall be used for measuring 26dB Emission bandwidth:

The procedure for this method is as follows:

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 peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.4 TEST RESULTS

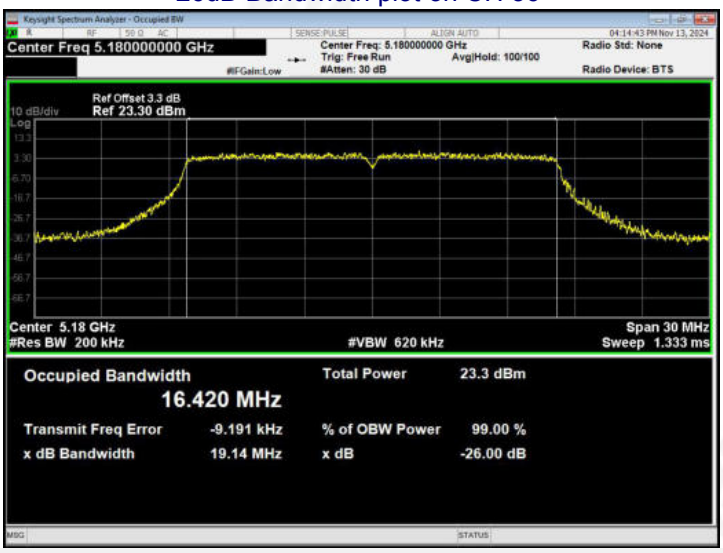
Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	DC 3.85V
Test Band :	5.2G		

Test Mode	Antenna	Frequency (MHz)	26dB Emission Bandwidth (MHz)	Limit (MHz)	Result
802.11a	SISO ANT A	5180	19.14	N/A	Pass
		5200	19.03		
		5240	19.02		
	SISO ANT B	5180	18.97	N/A	Pass
		5200	19.05		
		5240	19.02		
802.11n20	SISO ANT A	5180	21.81	N/A	Pass
		5200	21.49		
		5240	21.27		
	SISO ANT B	5180	21.49	N/A	Pass
		5200	22.88		
		5240	21.99		
802.11n40	SISO ANT A	5190	39.22	N/A	Pass
		5230	39.49		
	SISO ANT B	5190	39.82	N/A	Pass
		5230	39.69		
802.11ac20	SISO ANT A	5180	21.68	N/A	Pass
		5200	22.38		
		5240	21.74		
	SISO ANT B	5180	20.81	N/A	Pass
		5200	21.59		
		5240	21.79		
802.11ac40	SISO ANT A	5190	39.57	N/A	Pass
		5230	39.61		
	SISO ANT B	5190	39.65	N/A	Pass
		5230	39.58		
802.11ac80	SISO ANT A	5210	81.63	N/A	Pass
	SISO ANT B	5210	81.52	N/A	Pass
802.11ax20	SISO ANT A	5180	21.35	N/A	Pass
		5200	20.38		
		5240	21.14		
	SISO ANT B	5180	20.81	N/A	Pass
		5200	21.56		
		5240	20.52		

802.11ax40	SISO ANT A	5190	40.23	N/A	Pass
		5230	40.42		
	SISO ANT B	5190	40.52	N/A	Pass
		5230	40.25		
802.11ax80	SISO ANT A	5210	81.85	N/A	Pass
	SISO ANT B	5210	81.59	N/A	Pass

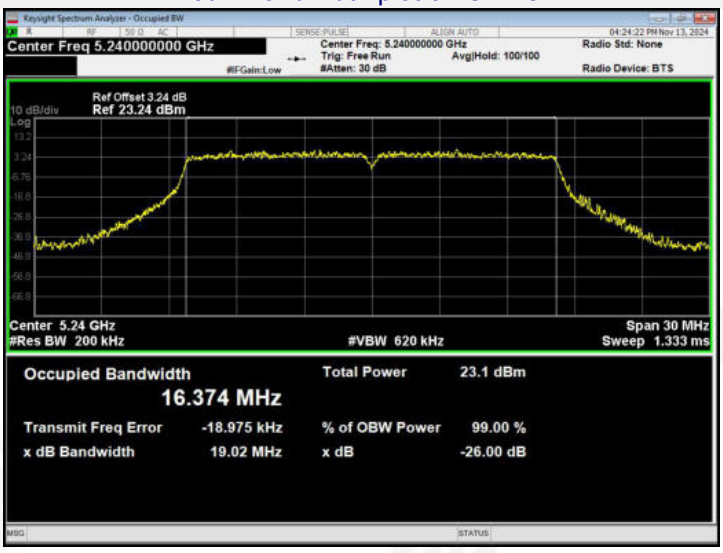
SISO ANT A - 802.11a

26dB Bandwidth plot on CH 36



26dB Bandwidth plot on CH 40

26dB Bandwidth plot on CH 48



SISO ANT B - 802.11a

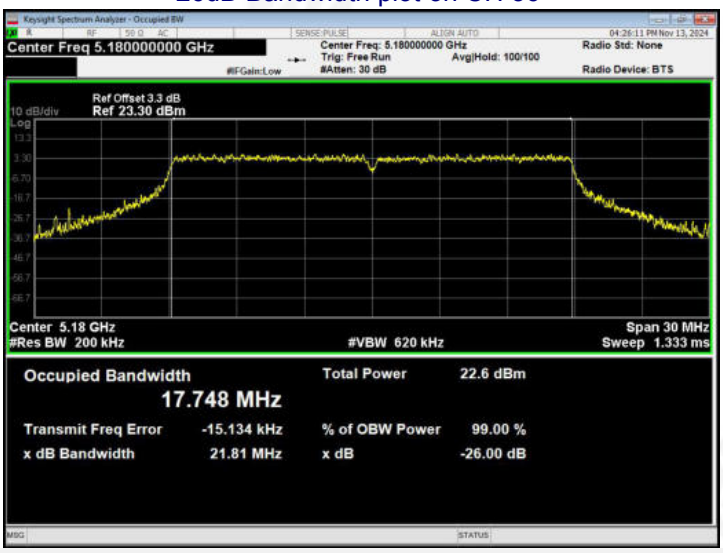
26dB Bandwidth plot on CH 36

26dB Bandwidth plot on CH 40

26dB Bandwidth plot on CH 48

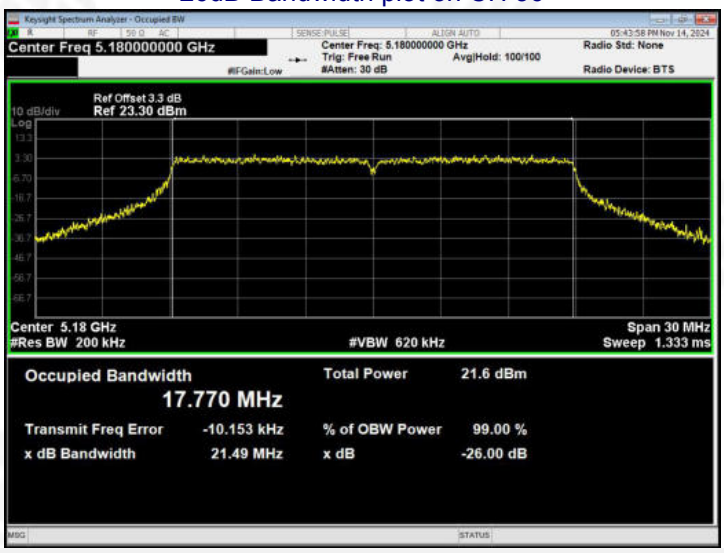
SISO ANT A - 802.11n20

26dB Bandwidth plot on CH 36

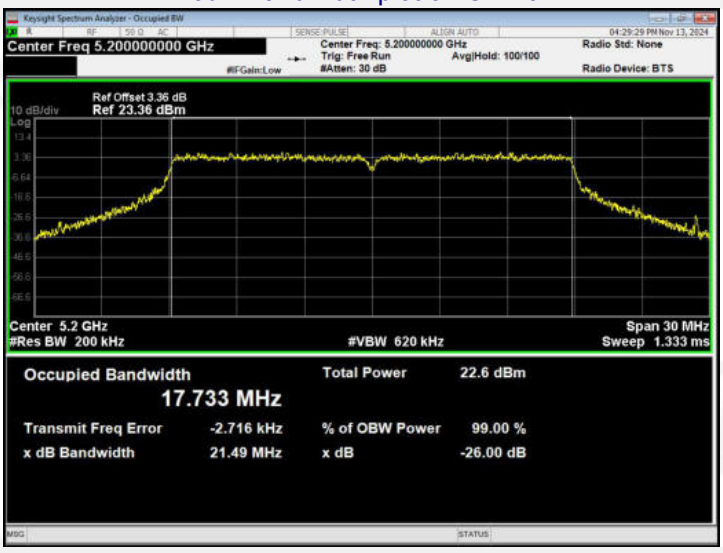


SISO ANT B - 802.11n20

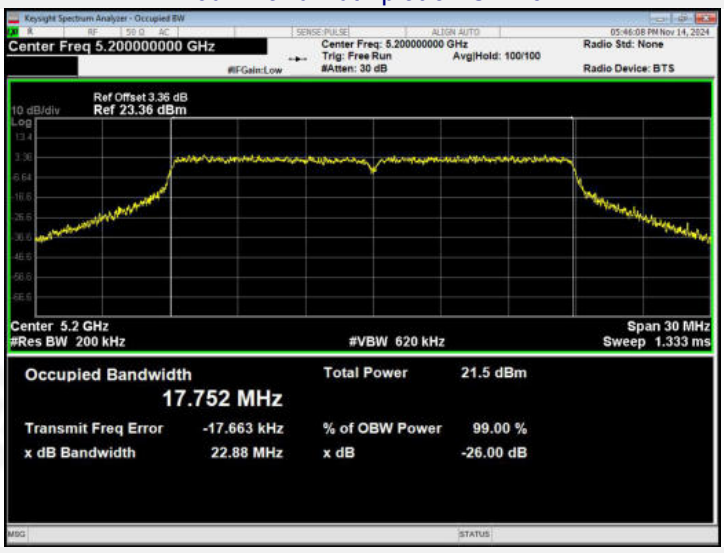
26dB Bandwidth plot on CH 36



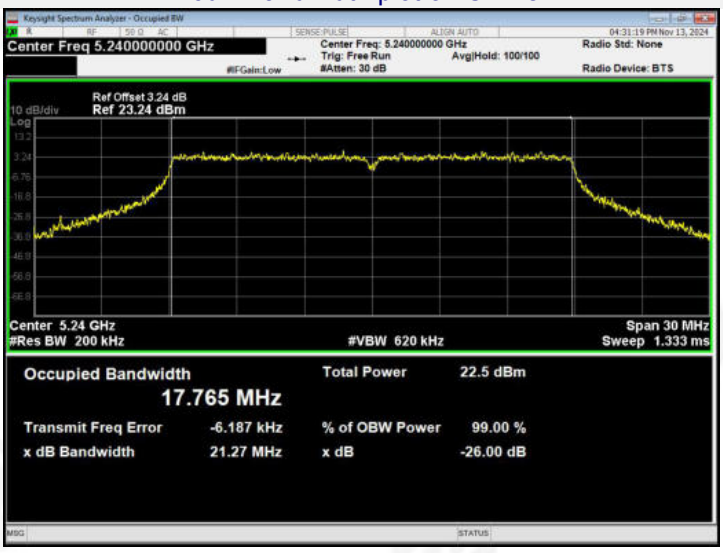
26dB Bandwidth plot on CH 40



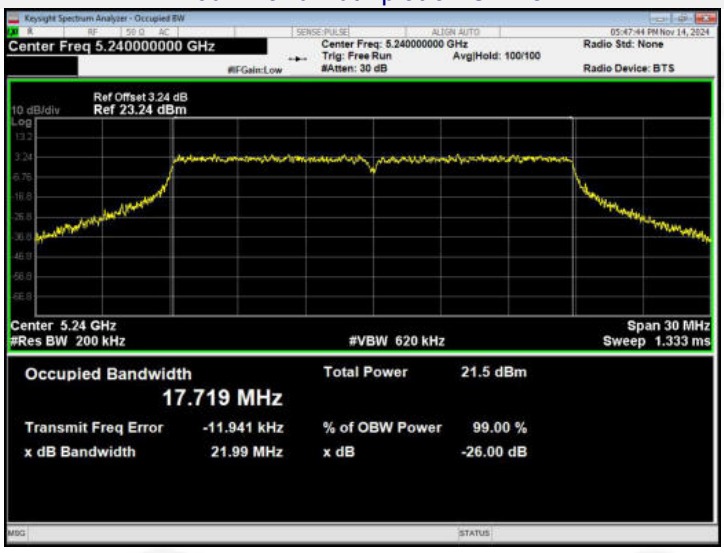
26dB Bandwidth plot on CH 40



26dB Bandwidth plot on CH 48

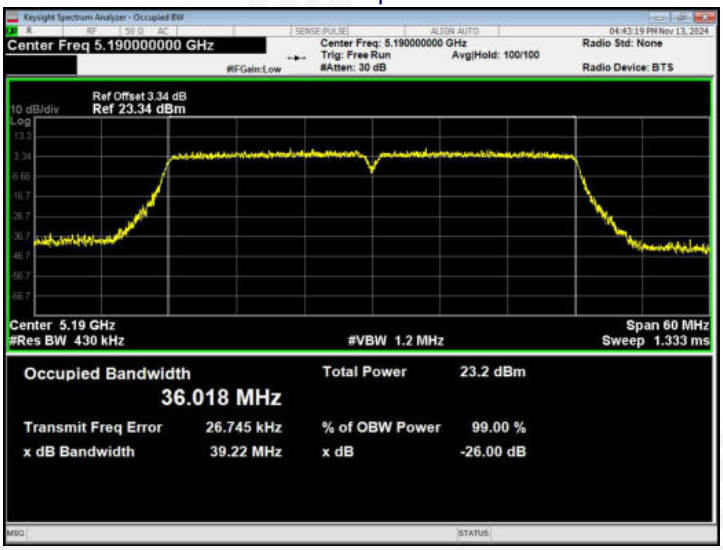


26dB Bandwidth plot on CH 48



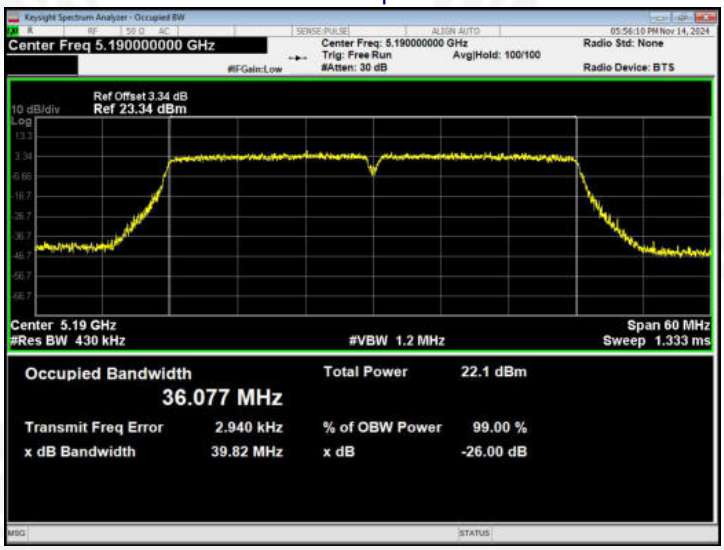
SISO ANT A - 802.11n40

26dB Bandwidth plot on CH 38

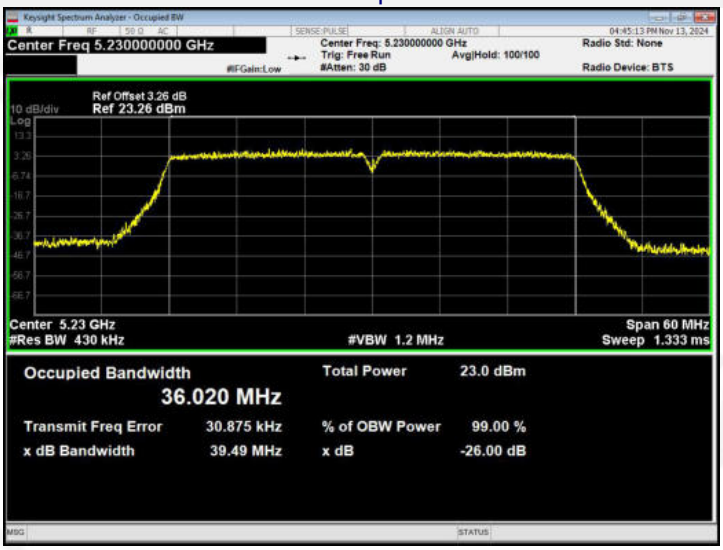


SISO ANT B - 802.11n40

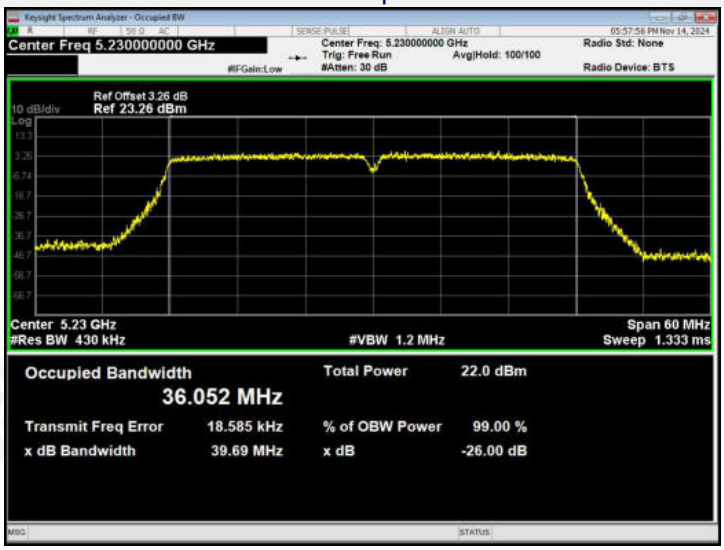
26dB Bandwidth plot on CH 38



26dB Bandwidth plot on CH 46

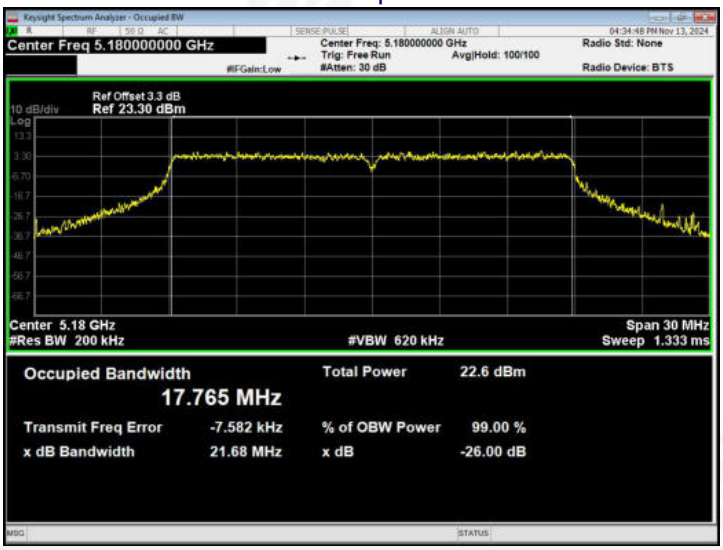


26dB Bandwidth plot on CH 46



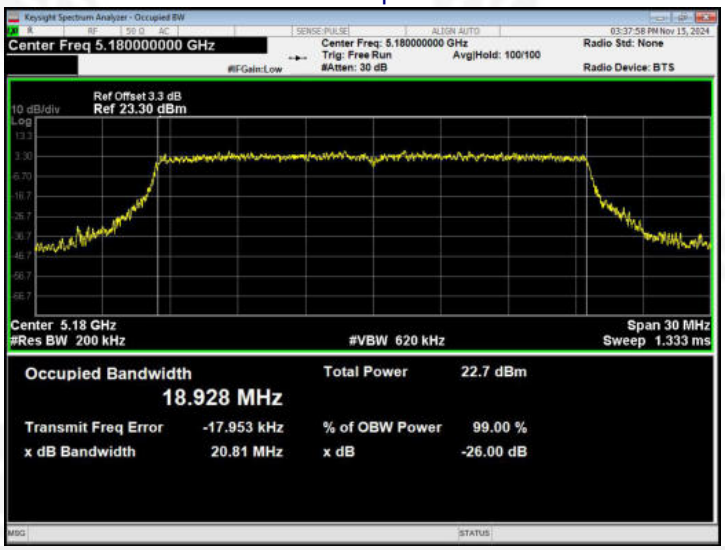
SISO ANT A - 802.11ac20

26dB Bandwidth plot on CH 36

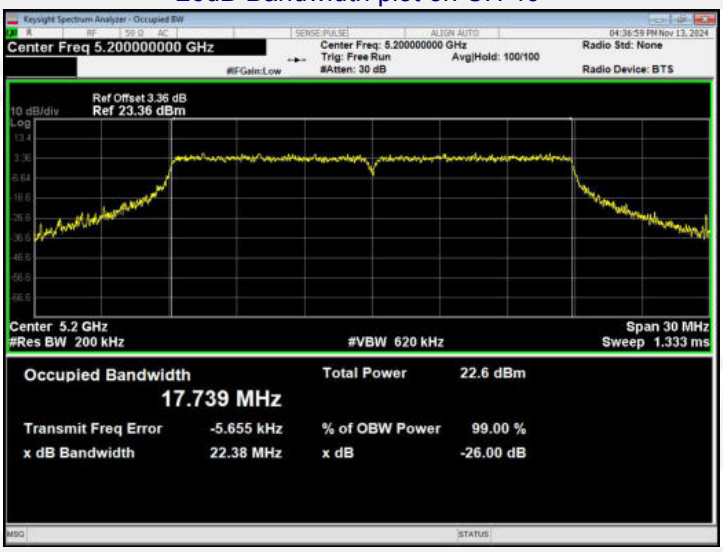


SISO ANT B - 802.11ac20

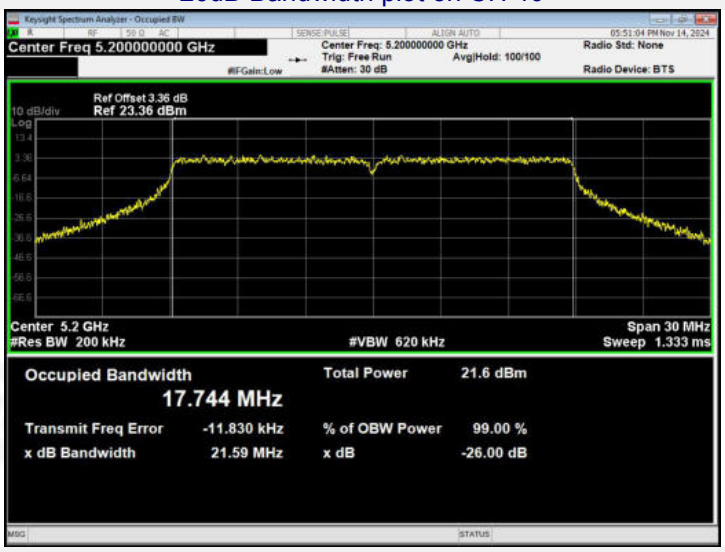
26dB Bandwidth plot on CH 36



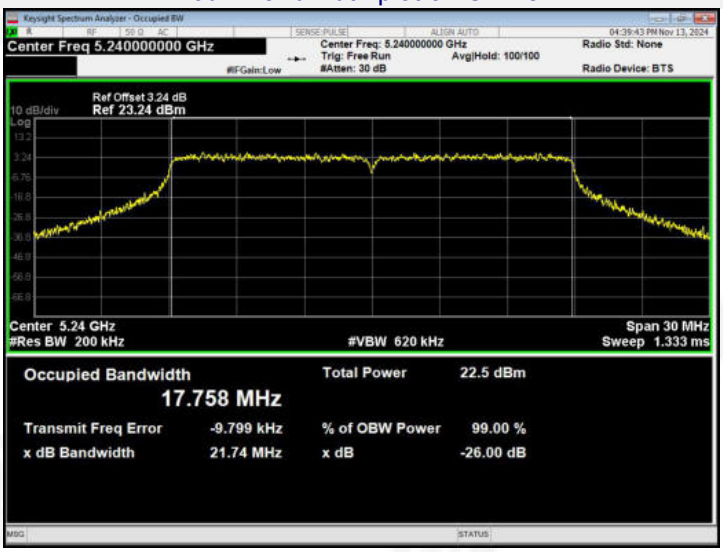
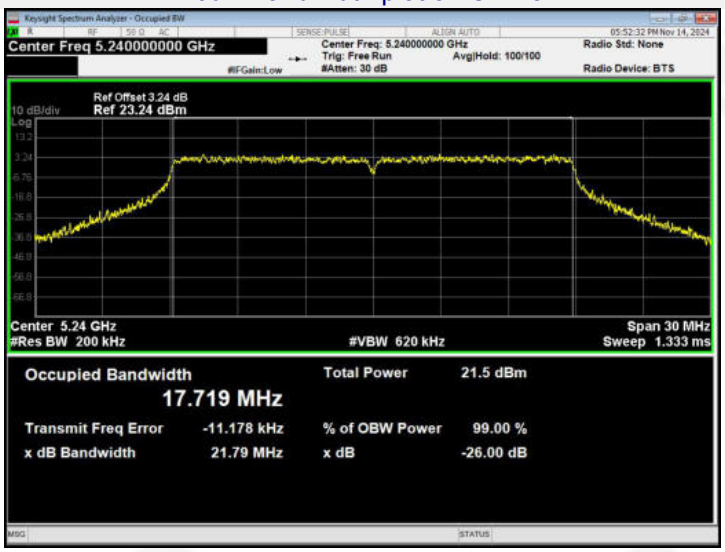
26dB Bandwidth plot on CH 40



26dB Bandwidth plot on CH 40



26dB Bandwidth plot on CH 48



26dB Bandwidth plot on CH 48