FCC Test Report

Report No.: AGC12060230401FE05

FCC ID	:	2BAWU-MPC43
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	Mini PC
BRAND NAME	:	N/A
MODEL NAME	:	MPC43
APPLICANT	:	Shenzhen MADIGI Electronic Technology Co., Ltd
DATE OF ISSUE	:	Jun. 27, 2023
STANDARD(S) **TEST PROCEDURE(S)**	:	FCC Part 15.247
REPORT VERSION	:	V1.0

Attestation of ***G***lobal ***C***ompliance (Shenzhen) Co., Ltd

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jun. 27, 2023	Valid	Initial Release

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1. VERIFICATION OF CONFORMITY

Applicant	Shenzhen MADIGI Electronic Technology Co., Ltd
Address	Room 111, 1A Floor, Kanghesheng Blgg, No.1.Chuangsheng Rd. Nanshan District, Shenzhen, P.R. China
manufacturer	Shenzhen MADIGI Electronic Technology Co., Ltd
Address	Room 111, 1A Floor, Kanghesheng Blgg, No.1.Chuangsheng Rd. Nanshan District, Shenzhen, P.R. China
Factory	SHENZHEN 3NOD ELECTRONICS CO., LTD
Address	2F, No. 74, Yangchong Road, Tangxiachong Community, Yanluo Street , Bao'an District, Shenzhen, GUANGDONG P.R. CHINA
Product Designation	Mini PC
Brand Name	N/A
Test Model	MPC43
Date of receipt of test item	Apr. 12, 2023
Date of Test	Apr. 12, 2023 to Jun. 27, 2023
Deviation	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-BGN/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

Prepared By	Jack Gui (Project Engineer)	Jun. 27, 2023
Reviewed By	Calvin Liu (Reviewer)	Jun. 27, 2023
Approved By	Max Zhang Authorized Officer	Jun. 27, 2023

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as “Mini PC”. It is designed by way of utilizing the DSSS and OFDM technology to achieve the system operation.

A major technical description of EUT is described as following

Equipment Type	WLAN 2.4G
Frequency Band	2400MHz ~ 2483.5MHz
Operation Frequency	2412MHz ~ 2462MHz
Output Power (Average)	IEEE 802.11b:21.11dBm; IEEE 802.11g:21.80dBm; IEEE 802.11n(HT20):21.69dBm; IEEE 802.11n(HT40):17.79dBm IEEE 802.11ax (HE20):21.03dBm; IEEE 802.11ax(HE40):18.43dBm
Output Power (Peak)	IEEE 802.11b:24.35dBm; IEEE 802.11g:29.55dBm; IEEE 802.11n(HT20):29.41dBm; IEEE 802.11n(HT40):26.07dBm IEEE 802.11ax (HE20):29.88dBm; IEEE 802.11ax(HE40):27.51dBm
Output Power (MIMO-Average)	IEEE 802.11n(HT20):23.54dBm; IEEE 802.11n(HT40):18.72dBm IEEE 802.11ax (HE20):23.66dBm; IEEE 802.11ax(HE40):19.87dBm
Output Power (MIMO-Peak)	IEEE 802.11n(HT20):29.91dBm; IEEE 802.11n(HT40):27.24dBm IEEE 802.11ax (HE20):29.88dBm; IEEE 802.11ax(HE40):29.04dBm
Modulation	802.11b:DSSS(DQPSK, DBPSK, CCK) 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK) 802.11ax:OFDMA(1024-QAM,256-QAM,64-QAM, 16-QAM, QPSK, BPSK)
Data Rate	802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps 802.11ax: up to 574Mbps
Number of channels	11
Hardware Version	MPC43_MB_V20
Software Version	Window 11
Antenna Designation	PIFA Antenna (Comply with requirements of the FCC part 15.203)
Antenna Gain	Refer to Chapter 2.10 of the report.
Number of transmit chain	2(802.11b/g/n/ax all used two antennas,802.11n/ax support MIMO)
Power Supply	DC 19V by adapter

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
2400~2483.5MHZ	1	2412 MHZ
	2	2417 MHZ
	3	2422 MHZ
	4	2427 MHZ
	5	2432 MHZ
	6	2437 MHZ
	7	2442 MHZ
	8	2447 MHZ
	9	2452 MHZ
	10	2457 MHZ
	11	2462 MHZ

Note: For 20MHZ bandwidth system use Channel 1 to Channel 11. For 40MHZ bandwidth system use Channel 3 to Channel 9

2.3. IEEE 802.11N MODULATION SCHEME

MCS Index	Nss	Modulation	R	NBPSC	NCBPS		NDBPS		Data rate(Mbps)	
									800nsGI	
					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0
6	1	64-QAM	3/4	6	312	648	234	489	58.5	121.5
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	Guard interval

2.4. IEEE 802.11AX MODULATION SCHEME

Table 27-79—HE-MCSs for 242-tone RU, N_{SS} = 1

HE-MCS Index	DCM	Modulation	R	N_{BPSCS}	N_{SD}	N_{CBPS}	N_{DBPS}	Data rate (Mb/s)		
								0.8 µs GI	1.6 µs GI	3.2 µs GI
0	1	BPSK	1/2	1	117	117	58	4.3	4.0	3.6
	0		1/2		234	234	117	8.6	8.1	7.3
1	1	QPSK	1/2	2	117	234	117	8.6	8.1	7.3
	0		1/2		234	468	234	17.2	16.3	14.6
2	N/A		3/4		234	468	351	25.8	24.4	21.9
3	1	16-QAM	1/2	4	117	468	234	17.2	16.3	14.6
	0		1/2		234	936	468	34.4	32.5	29.3
4	1		3/4		117	468	351	25.8	24.4	21.9
	0		3/4		234	936	702	51.6	48.8	43.9
5	N/A	64-QAM	2/3	6	234	1 404	936	68.8	65.0	58.5
6			3/4				1 053	77.4	73.1	65.8
7			5/6				1 170	86.0	81.3	73.1
8		256-QAM	3/4	8		1 872	1 404	103.2	97.5	87.8
9			5/6				1 560	114.7	108.3	97.5
10		1024-QAM	3/4	10		2 340	1 755	129.0	121.9	109.7
11			5/6				1 950	143.4	135.4	121.9

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	Guard interval

Table 27-87—HE-MCSs for 484-tone RU, N_{SS} = 1

HE-MCS Index	DCM	Modulation	R	N_{BPSCS}	N_{SD}	N_{CBPS}	N_{DBPS}	Data rate (Mb/s)		
								0.8 µs GI	1.6 µs GI	3.2 µs GI
0	1	BPSK	1/2	1	234	234	117	8.6	8.1	7.3
	0		1/2		468	468	234	17.2	16.3	14.6
1	1	QPSK	1/2	2	234	468	234	17.2	16.3	14.6
	0		1/2		468	936	468	34.4	32.5	29.3
2	N/A		3/4		468	936	702	51.6	48.8	43.9
3	1	16-QAM	1/2	4	234	936	468	34.4	32.5	29.3
	0		1/2		468	1 872	936	68.8	65.0	58.5
4	1		3/4		234	936	702	51.6	48.8	43.9
	0		3/4		468	1 872	1 404	103.2	97.5	87.8
5	N/A	64-QAM	2/3	6	468	2 808	1 872	137.6	130.0	117.0
6			3/4				2 106	154.9	146.3	131.6
7			5/6				2 340	172.1	162.5	146.3
8		256-QAM	3/4	8		3 744	2 808	206.5	195.0	175.5
9			5/6				3 120	229.4	216.7	195.0
10		1024-QAM	3/4	10		4 680	3 510	258.1	243.8	219.4
11			5/6				3 900	286.8	270.8	243.8

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	Guard interval

2.5. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: 2BAWU-MPC43** filing to comply with the FCC Part 15 requirements.

2.6. TEST METHODOLOGY

KDB 558074 D01 15.247 Meas Guidance v05: Guidance for compliance measurements on Digital transmissio n system, frequency hopping spread spectrum system, and hybrid system devices operating under section 15.247 of the FCC rules
ANSI C63.10:2013: American National Standard for Testing Unlicensed Wireless Devices

2.7. SPECIAL ACCESSORIES

Refer to section 5.2.

2.8. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.9. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

2.10. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna Type	Frequency Band (MHz)	TX Paths	Bandwidth (MHz)	Max Peak Gain (dBi)		Max Directional Gain (dBi)
				Ant 1	Ant 2	
2.4GWIFI PCB Antenna List (2.4GHz 2*2 MIMO)						
PIFA Antenna	2400~2483.5	2	20, 40	2.63	1.39	5.64

Note 1: The EUT supports Cyclic Delay Diversity (CDD) technology for 802.11n/ax mode.

Note 2: The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

If all antennas have the same gain, G_{ANT}, Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

- For power spectral density (PSD) measurements on devices:

  Array Gain = 10 log (N_{ANT}/ N_{SS}) dB = 3.01;

- For power measurements on IEEE 802.1devices:

  Array Gain = 0 dB for $N_{ANT} \leq 4$;

  Array Gain = 0 dB (i.e., no array gain) for channel widths ≥40 MHz for any N_{ANT};

  Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20 MHz channel widths with $N_{ANT} \geq 5$.

If antenna gains are not equal, Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain..

3. 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%.

Item	Measurement Uncertainty
Uncertainty of Conducted Emission for AC Port	U_c = ±3.1 dB
Uncertainty of Radiated Emission below 1GHz	U_c = ±4.0 dB
Uncertainty of Radiated Emission above 1GHz	U_c = ±4.8 dB
Uncertainty of total RF power, conducted	U_c = ±0.8 dB
Uncertainty of RF power density, conducted	U_c = ±2.6 dB
Uncertainty of spurious emissions, conducted	U_c = ±2 %
Uncertainty of Occupied Channel Bandwidth	U_c = ±2 %

4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel transmitting (TX)
2	Middle channel transmitting (TX)
3	High channel transmitting (TX)

Note:
Transmit by 802.11b with Date rate (1/2/5.5/11)
Transmit by 802.11g with Date rate (6/9/12/18/24/36/48/54)
Transmit by 802.11n (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65)
Transmit by 802.11n (40MHz) with Date rate (13.5/27/40.5/54/81/108/121.5/135)
Transmit by 802.11ax(20MHz) with Date rate MCS0-MCS11
Transmit by 802.11ax(40MHz) with Date rate MCS0-MCS11
The test channel for 20MHZ bandwidth system is channel 1, 6 and 11.
The test channel for 40MHZ bandwidth system is channel 3, 6 and 9.

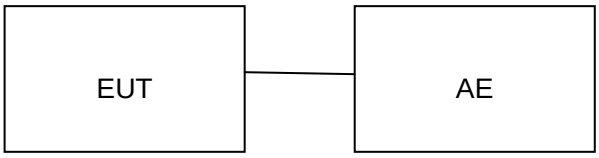
Note:

1. The EUT has been set to operate continuously on the lowest, middle and highest operation frequency Individually, and the EUT is operating at its maximum duty cycle>or equal 98%
2. All modes under which configure applicable have been tested and the worst mode test data recording in the test report, if no other mode data.
3. All radiated spurious emission and conducted interference modes have been pre scanned, and the report only records that antenna 1+antenna 2 work in the worst mode.

5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure:



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Mini PC	MPC43	2BAWU-MPC43	EUT
2	Mouse	EMS-538A	1.7m,unshielded	AE
3	Keyboard	KB4021	1.8m,unshielded	AE
4	U Disc	DT100G3	N/A	AE
5	Monitor	U27N3	1.5m,unshielded	AE

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.247	RF Output Power	Compliant
§15.247	6 dB Bandwidth	Compliant
§15.247	Conducted Spurious Emission	Compliant
§15.247	Maximum Conducted Output Power Spectral Density	Compliant
§15.209	Radiated Emission	Compliant
§15.247	Band Edges	Compliant
§15.207	Line Conduction Emission	Compliant

Note: This product contains WIFI& Bluetooth module (Model: **AX211D2W**), FCC ID: **PD9AX211D2**. RF component data can be obtained by reference to report number: **201120-03.TR04**. The test report only reevaluates Radiated Spurious Emissions.

6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	Aug. 04, 2022	Aug. 03, 2023
LISN	R&S	ESH2-Z5	100086	Jun. 08, 2022	Jun. 07, 2023
LISN	R&S	ESH2-Z5	100086	Jun. 03, 2023	Jun. 02, 2024
Test software	R&S	ES-K1	Ver.V1.71	N/A	N/A

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Feb. 18, 2023	Feb. 17, 2024
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Aug. 04, 2022	Aug. 03, 2023
2.4GHz Filter	EM Electronics	N/A	N/A	Mar. 18, 2022	Mar. 19, 2024
Attenuator	ZHINAN	E-002	N/A	Aug. 04, 2022	Aug. 03, 2024
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 31, 2021	Oct. 30, 2023
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Mar. 12, 2022	Mar. 11, 2024
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Apr. 23, 2023	Apr. 22, 2024
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 01, 2022	Sep. 02, 2024
ANTENNA	SCHWARZBECK	VULB9168	VULB9168-494	Jan. 05, 2023	Jan. 04, 2025
Test software	Tonscend	JS32-RE (Ver.2.5)	N/A	N/A	N/A
Test software	FARA	EZ-EMC (Ver RA-03A)	N/A	N/A	N/A

7. RF OUTPUT POWER MEASUREMENT

7.1 MEASUREMENT LIMITS

According to Section (b)(3) of the FCC PART15.247 standard:

For DTSs employing digital modulation techniques operating in the bands 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W.

7.2 MEASUREMENT PROCEDURE

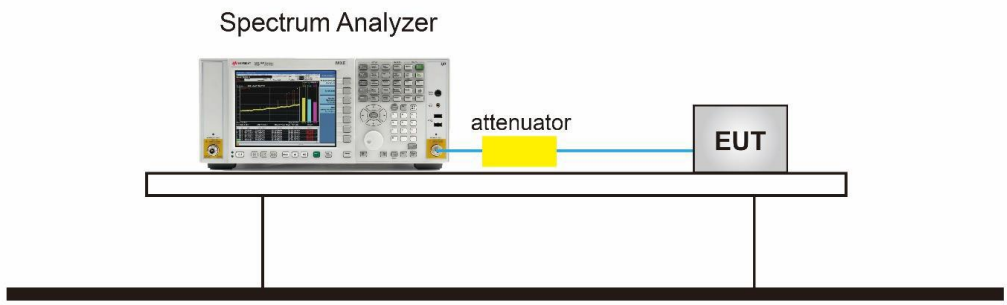
☒For peak power test:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the RBW = 1 MHz.
3. Set the VBW ≥ [3 × RBW].
4. Set the Span ≥ [1.5 × DTS bandwidth].
5. Sweep time=Auto couple.
6. Detector function=Peak.
7. Trace Mode=Max hold.
8. Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission.
9. The indicated level is the peak output power, after any corrections for external attenuators and cables.

☒For Average power test:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set Span to at least 1.5 times the OBW.
3. Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.
4. Set VBW≥[3×RBW].
5. Sweep Time=Auto couple.
6. Detector function=RMS (i.e., power averaging).
7. Trace average at least 100 traces in power averaging (rms) mode;
8. Determine according to the duty cycle of the equipment: when it is less than 98%, follow the steps below.
9. Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.
10. Record the test results in the report.

7.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)



7.4. LIMITS AND MEASUREMENT RESULT

Note: Please refer to the module RF report No.: (**201120-03.TR04**)

8. 6DB BANDWIDTH MEASUREMENT

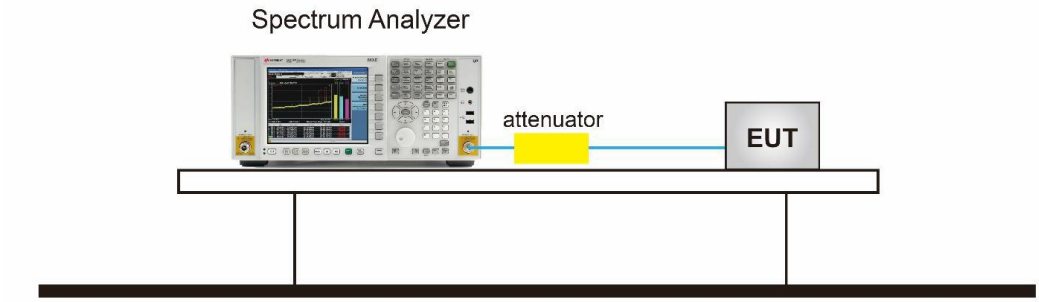
8.1 MEASUREMENT LIMITS

The minimum 6dB bandwidth shall be at least 500 kHz.

8.2 MEASUREMENT PROCEDURE

1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. For 6dB Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
6. Detector = peak
7. Trace mode = max hold.
8. Sweep = auto couple.
9. Allow the trace to stabilize.
10. Measure and record the results in the test report.

8.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)



8.4. MEASUREMENT RESULTS

Note: Please refer to the module RF report No.: (**201120-03.TR04**)

9. CONDUCTED SPURIOUS EMISSION

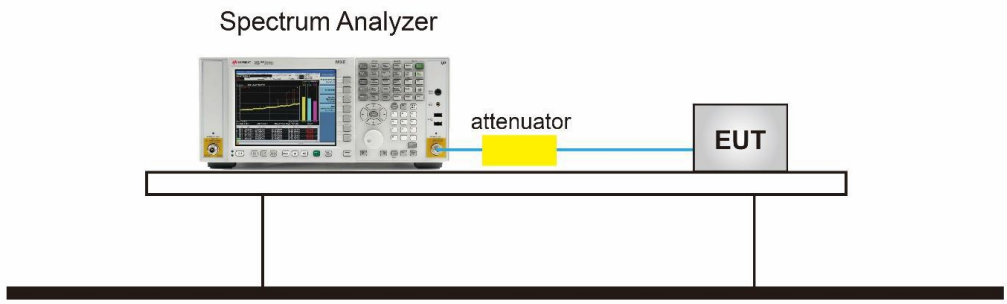
9.1 MEASUREMENT LIMIT

LIMITS AND MEASUREMENT RESULT		
Applicable Limits	**Measurement Result**	
	Test Data	**Criteria**
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. In addition, radiation 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))	At least -20dBc than the limit Specified on the BOTTOM Channel	PASS
	At least -20dBc than the limit Specified on the TOP Channel	PASS

9.2 MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the Middle and the bottom operation frequency individually.
3. Set the Span = wide enough to capture the peak level of the in-band emission and all spurious emissions from the lowest frequency generated in the EUT up through the 10th harmonic.
4. RBW = 100 kHz; VBW= 300 kHz; Sweep = auto; Detector function = peak.(Test frequency below 1GHz)
5. RBW = 1 MHz; VBW= 3 MHz; Sweep = auto; Detector function = peak.(Test frequency Above 1GHz)
6. Set SPA Trace 1 Max hold, then View.
7. Mark the maximum useless stray point and compare it with the limit value to record the result.

9.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)



9.4 MEASUREMENT RESULTS

Note: Please refer to the module RF report No.: (**201120-03.TR04**)

10. POWER SPECTRAL DENSITY MEASUREMENT

10.1 MEASUREMENT LIMITS

According to Section 5.2(b) of the RSS-247 standard:

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

10.2 MEASUREMENT PROCEDURE

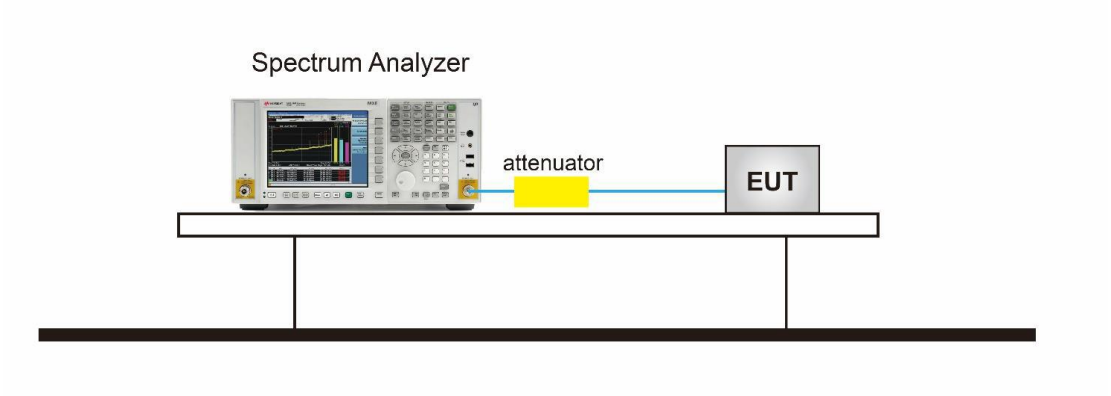
☒For Peak power spectral density test:

1. The testing follows the ANSI C63.10 Section 11.10.2 Method PKPSD.
2. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
3. Set the RBW = 20 kHz.
4. Set the VBW ≥ [3 × RBW].
5. Set the Span ≥ [1.5 × DTS bandwidth].
6. Sweep time=Auto couple.
7. Detector function=Peak.
8. Trace Mode=Max hold.
9. When the measurement bandwidth of Maximum PSD is specified in 3 kHz, add a constant factor 10*log(3kHz/20kHz) = -8.23 dB to the measured result.
10. Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission.
11. The indicated level is the peak output power, after any corrections for external attenuators and cables.

☐For Average power spectral density test:

1. The testing follows the ANSI C63.10 Section 11.10.5 Method AVPSD.
2. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator.
3. Set Span to at least 1.5 times the OBW.
4. Set RBW to:3 kHz ≤ RBW ≤ 100 kHz.
5. Set VBW≥[3×RBW].
6. Sweep Time=Auto couple.
7. Detector function=RMS (i.e., power averaging).
8. Trace average at least 100 traces in power averaging (rms) mode.
9. When the measurement bandwidth of Maximum PSD is specified in 3 kHz, add a constant factor 10*log(3kHz/20kHz) = -8.23 dB to the measured result.
10. Determine according to the duty cycle of the equipment: when it is less than 98%, follow the steps below.
11. Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.
12. Record the test results in the report.

10.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)



10.4 MEASUREMENT RESULT

Note: Please refer to the module RF report No.: (**201120-03.TR04**)

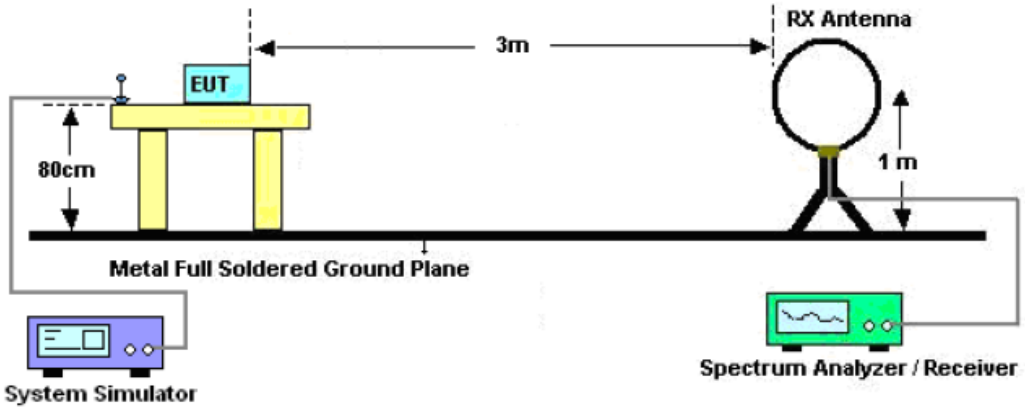
11. RADIATED EMISSION

11.1. MEASUREMENT PROCEDURE

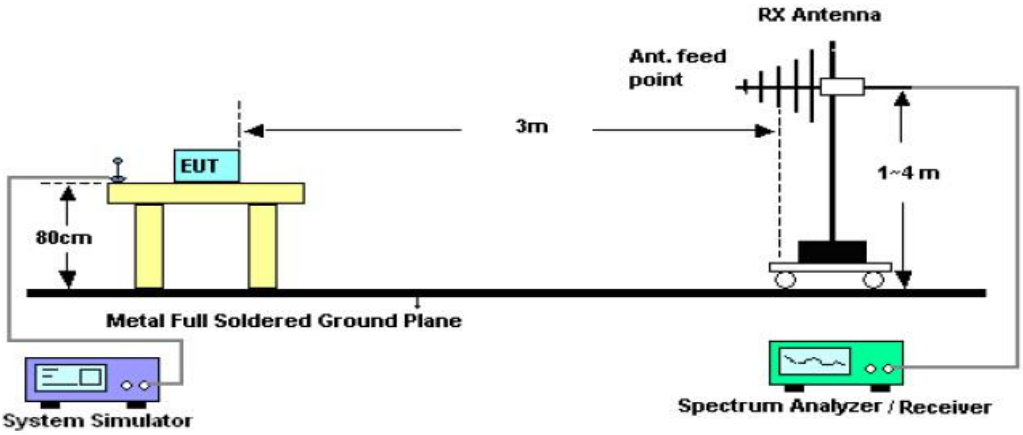
1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

11.2. TEST SETUP

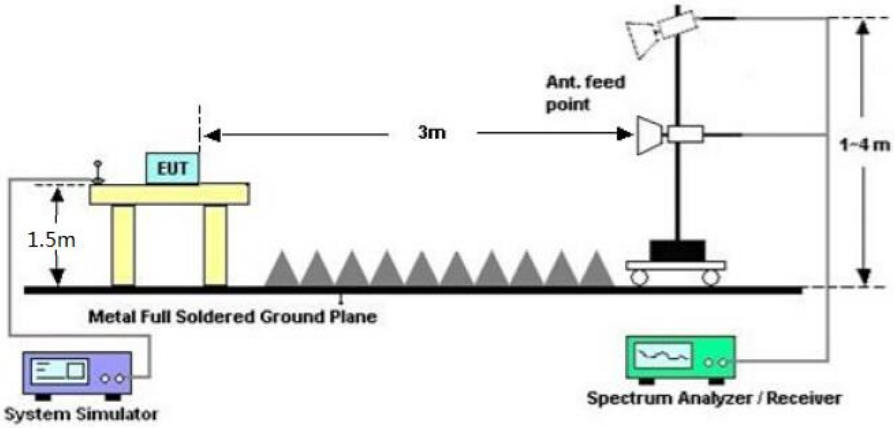
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



11.3. LIMITS AND MEASUREMENT RESULT

15.209(a) Limit in the below table has to be followed

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

Note: All modes were tested for restricted band radiated emission,
the test records reported below are the worst result compared to other modes.

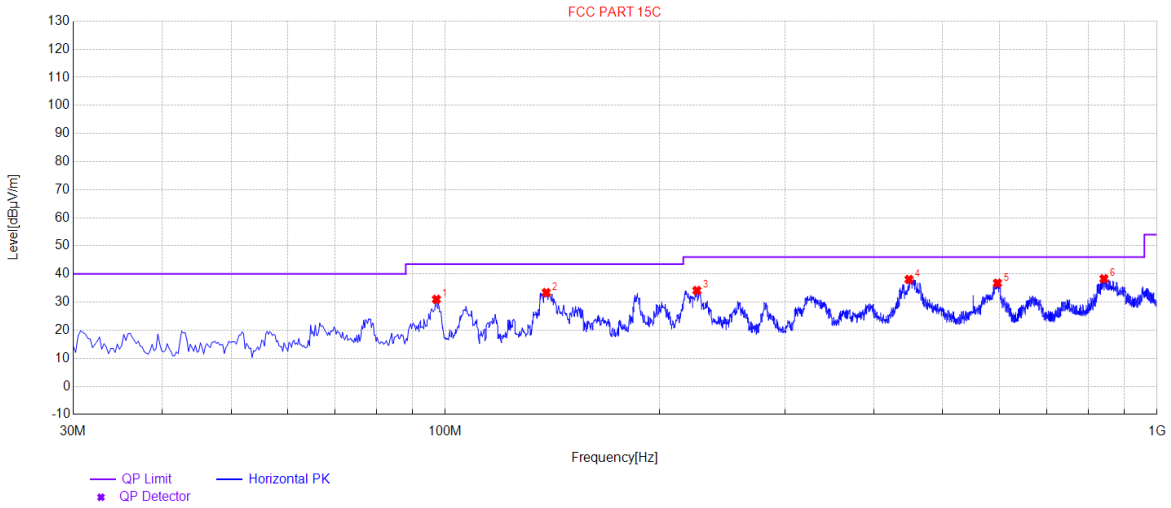
11.4. TEST RESULT

Radiated emission below 30MHz

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

Radiated emission from 30MHz to 1000MHz

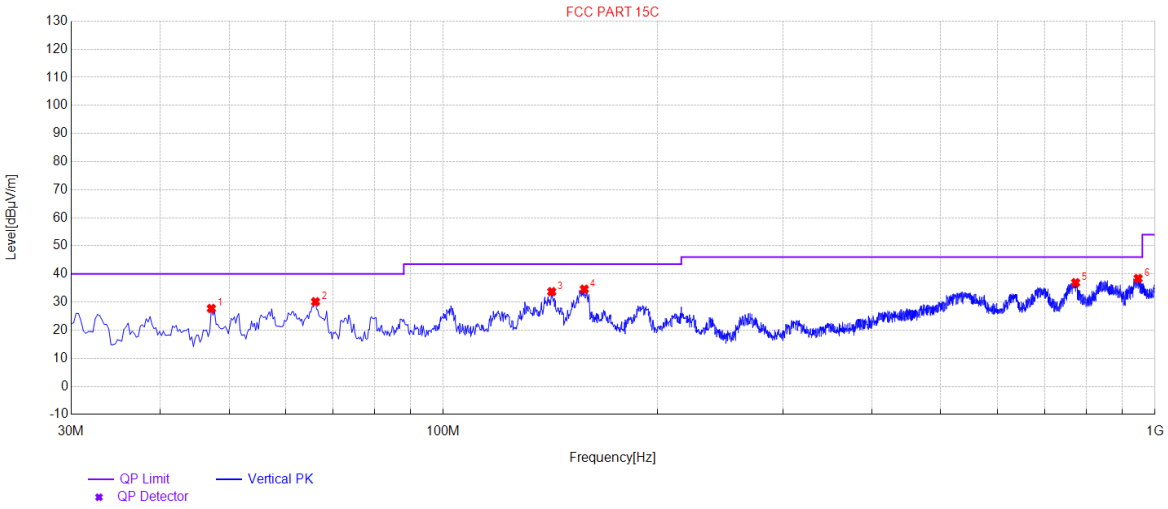
EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHz	Antenna	Horizontal



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	97.1725	30.96	19.82	43.50	12.54	100	354	Horizontal
2	138.64	33.38	14.66	43.50	10.12	100	200	Horizontal
3	225.6975	34.11	15.12	46.00	11.89	100	4	Horizontal
4	448.3125	38.05	25.83	46.00	7.95	100	359	Horizontal
5	596.7225	36.74	27.65	46.00	9.26	100	14	Horizontal
6	842.1325	38.28	30.84	46.00	7.72	100	93	Horizontal

RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHz	Antenna	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	47.2175	27.71	12.88	40.00	12.29	100	181	Vertical
2	66.1325	30.13	14.07	40.00	9.87	100	265	Vertical
3	142.035	33.69	20.09	43.50	9.81	100	200	Vertical
4	157.7975	34.58	21.71	43.50	8.92	100	359	Vertical
5	773.505	36.90	30.80	46.00	9.10	100	223	Vertical
6	946.8925	38.39	27.29	46.00	7.61	100	223	Vertical

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

3. All test modes had been pre-tested. The 802.11b at low channel is the worst case and recorded in the report.

Radiated emission above 1GHz

EUT	Mini PC	**Model Name**	MPC43
Temperature	25°C	**Relative Humidity**	58%
Pressure	960hPa	**Test Voltage**	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHz	**Antenna**	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.000	56.34	0.08	56.42	74	-17.58	peak
4824.000	46.28	0.08	46.36	54	-7.64	AVG
7236.000	50.26	2.21	52.47	74	-21.53	peak
7236.000	41.05	2.21	43.26	54	-10.74	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Mini PC	**Model Name**	MPC43
Temperature	25°C	**Relative Humidity**	58%
Pressure	960hPa	**Test Voltage**	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHz	**Antenna**	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.000	56.29	0.08	56.37	74	-17.63	peak
4824.000	47.51	0.08	47.59	54	-6.41	AVG
7236.000	51.05	2.21	53.26	74	-20.74	peak
7236.000	42.16	2.21	44.37	54	-9.63	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHz	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.000	57.16	0.14	57.3	74	-16.7	peak
4874.000	46.35	0.14	46.49	54	-7.51	AVG
7311.000	52.18	2.36	54.54	74	-19.46	peak
7311.000	42.15	2.36	44.51	54	-9.49	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHz	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.000	56.34	0.14	56.48	74	-17.52	peak
4874.000	46.25	0.14	46.39	54	-7.61	AVG
7311.000	50.13	2.36	52.49	74	-21.51	peak
7311.000	41.26	2.36	43.62	54	-10.38	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHz	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.000	55.36	0.22	55.58	74	-18.42	peak
4924.000	43.15	0.22	43.37	54	-10.63	AVG
7386.000	49.64	2.64	52.28	74	-21.72	peak
7386.000	41.05	2.64	43.69	54	-10.31	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHz	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.000	56.25	0.22	56.47	74	-17.53	peak
4924.000	46.34	0.22	46.56	54	-7.44	AVG
7386.000	50.25	2.64	52.89	74	-21.11	peak
7386.000	42.16	2.64	44.8	54	-9.2	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

RESULT: PASS

Note:

The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.

Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

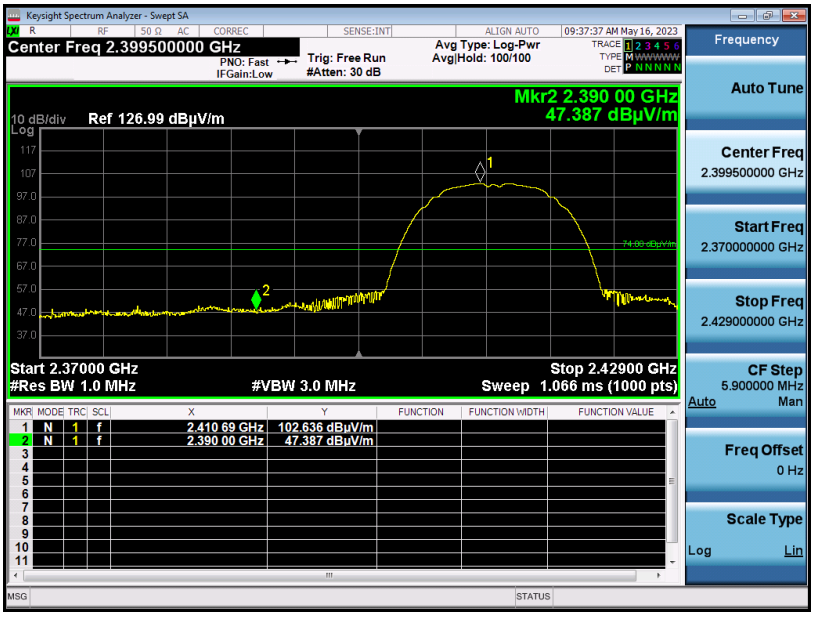
The “Factor” value can be calculated automatically by software of measurement system.

All test modes had been pre-tested. The 802.11b mode is the worst case and recorded in the report.

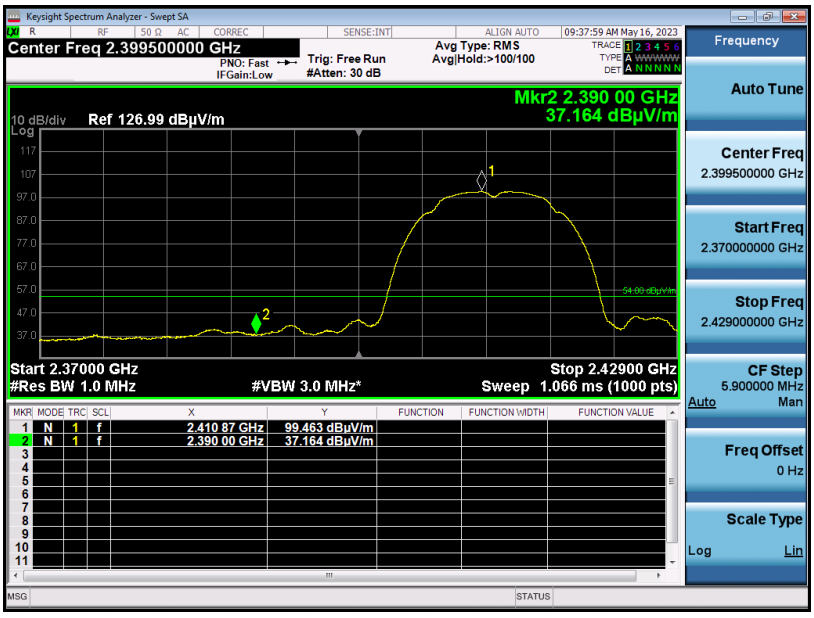
Test result for band edge emission at restricted bands-ANT1

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



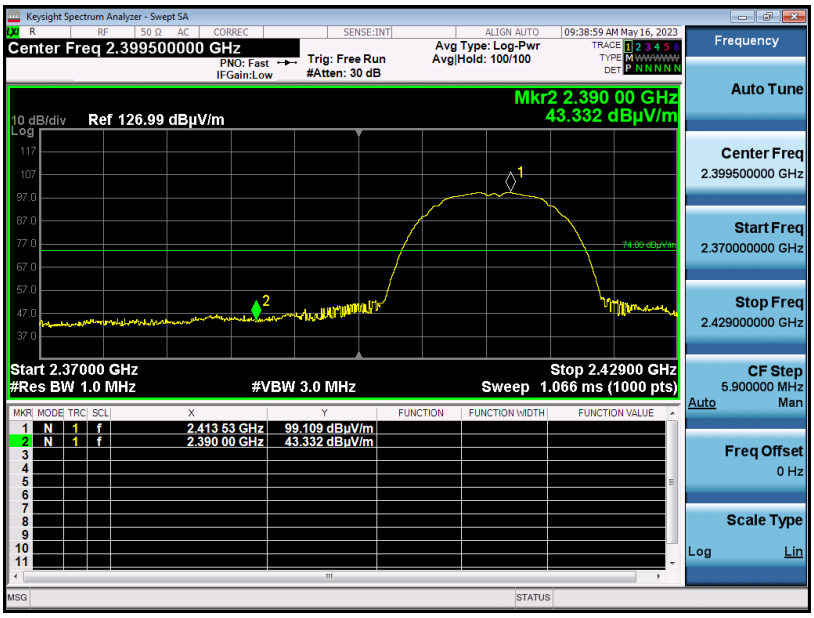
Test Graph for Average Measurement



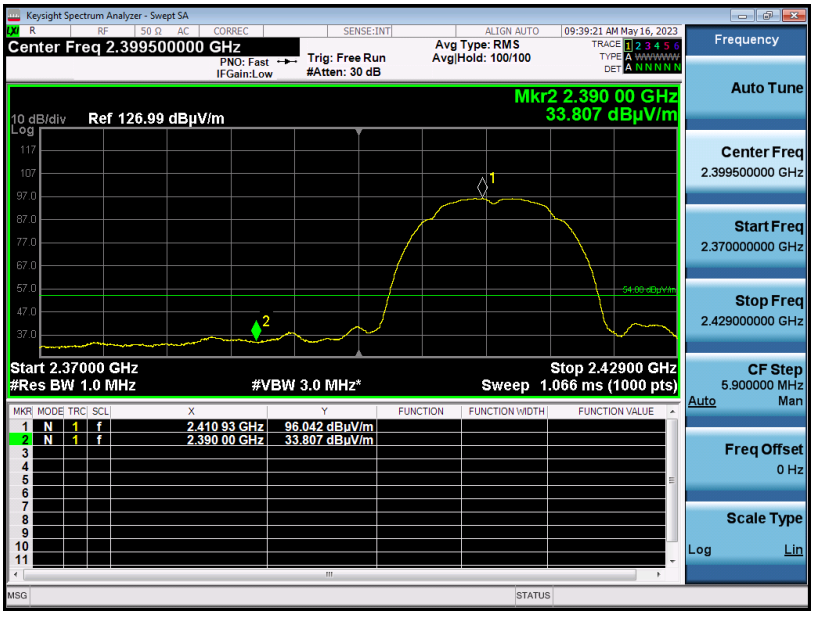
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



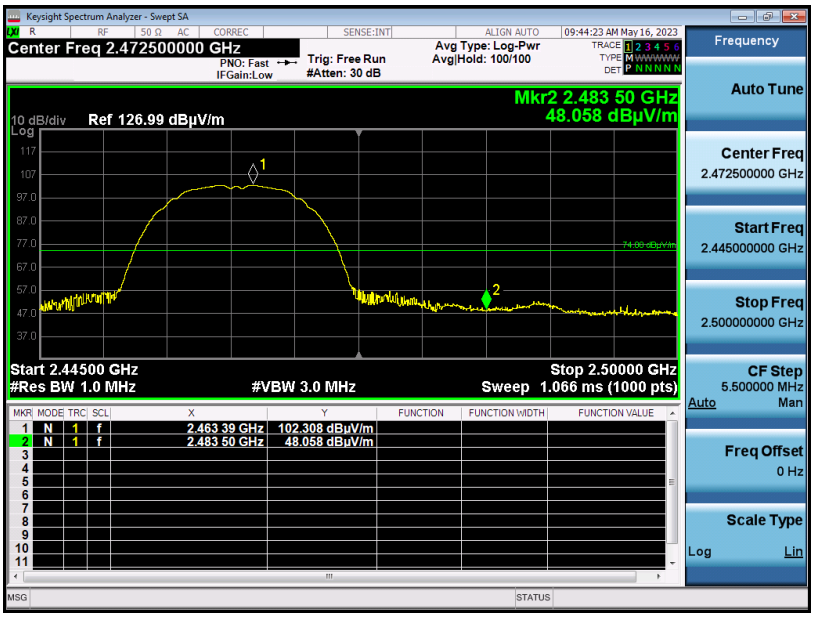
Test Graph for Average Measurement



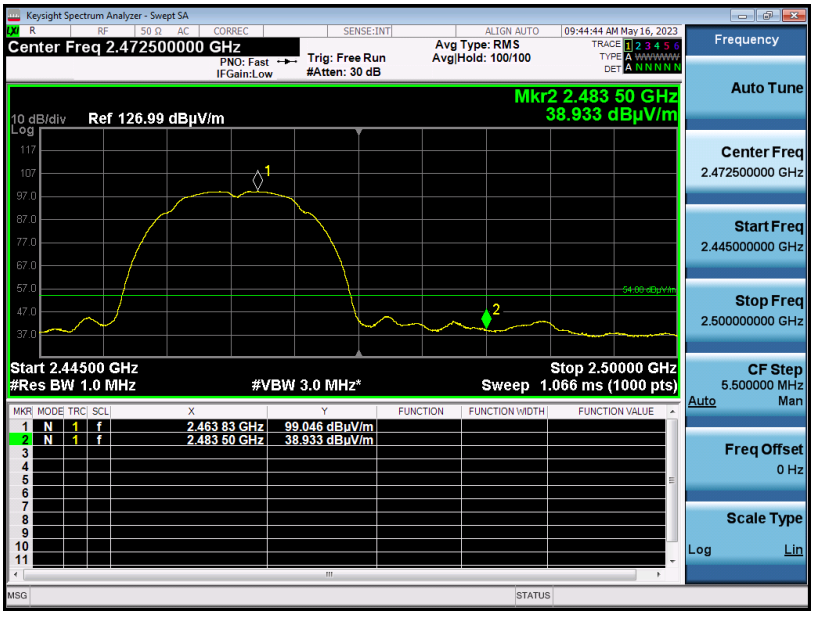
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



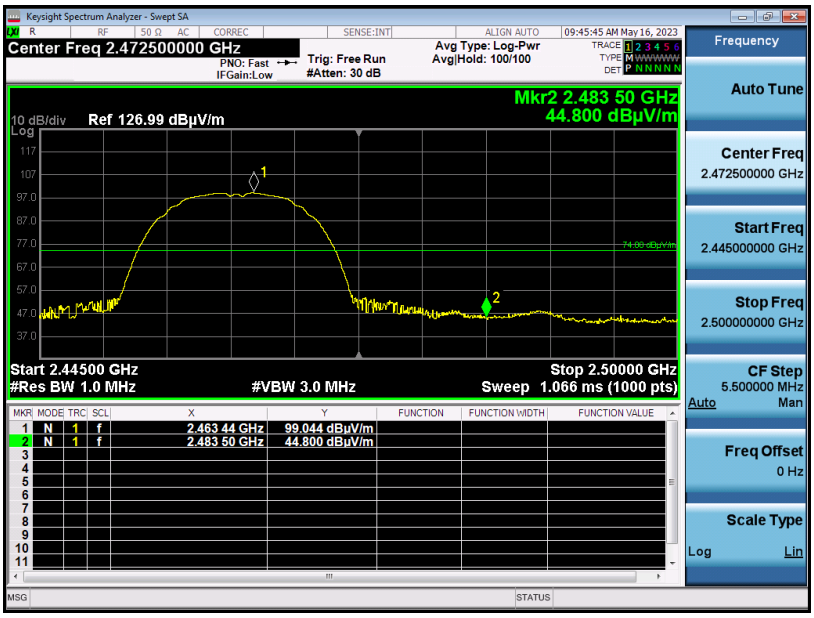
Test Graph for Average Measurement



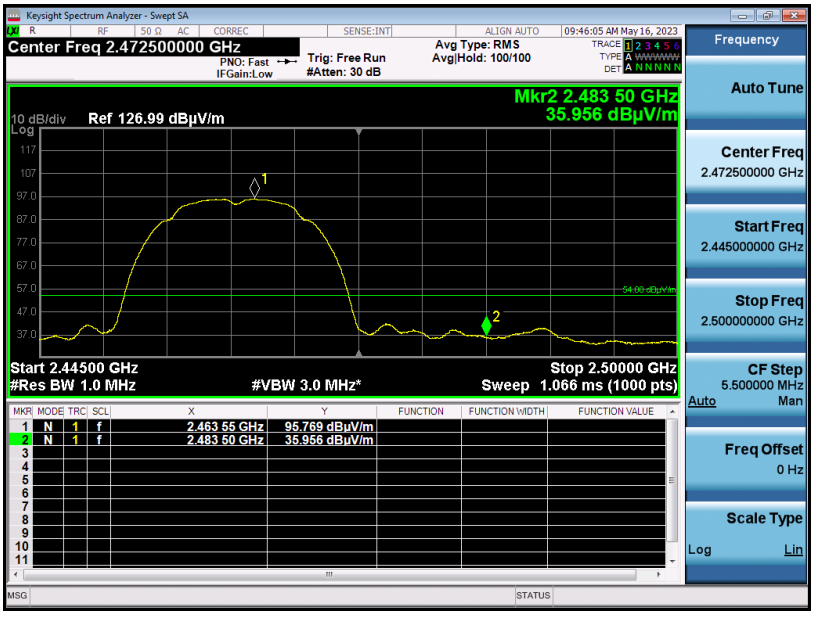
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement



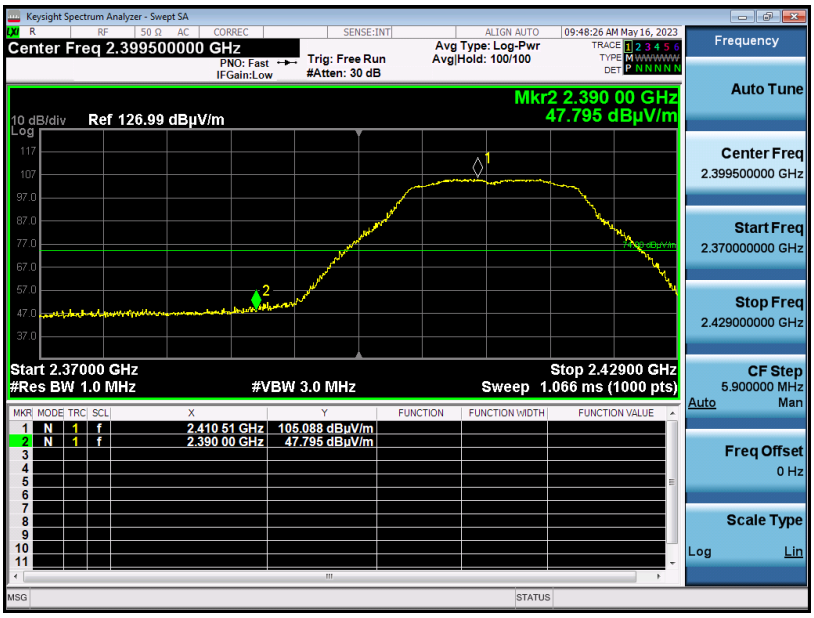
Test Graph for Average Measurement



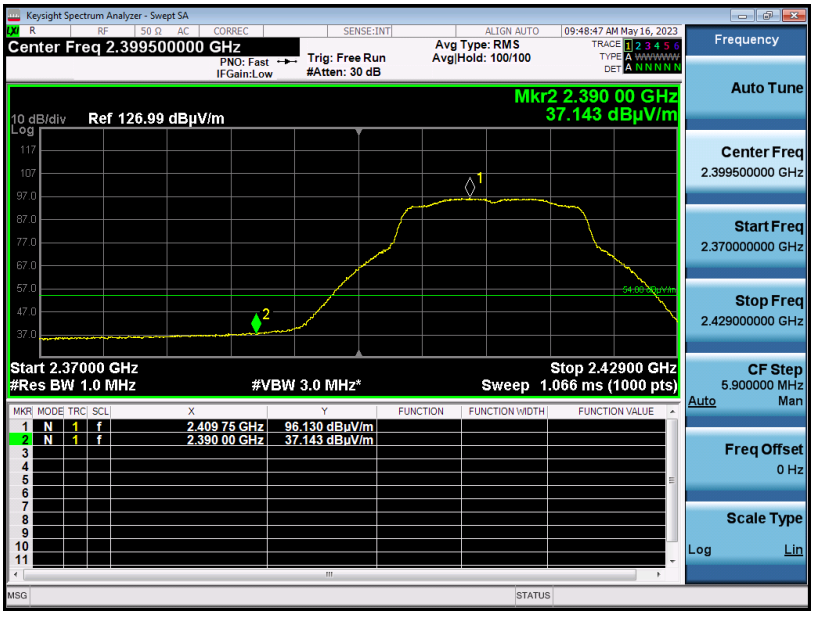
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



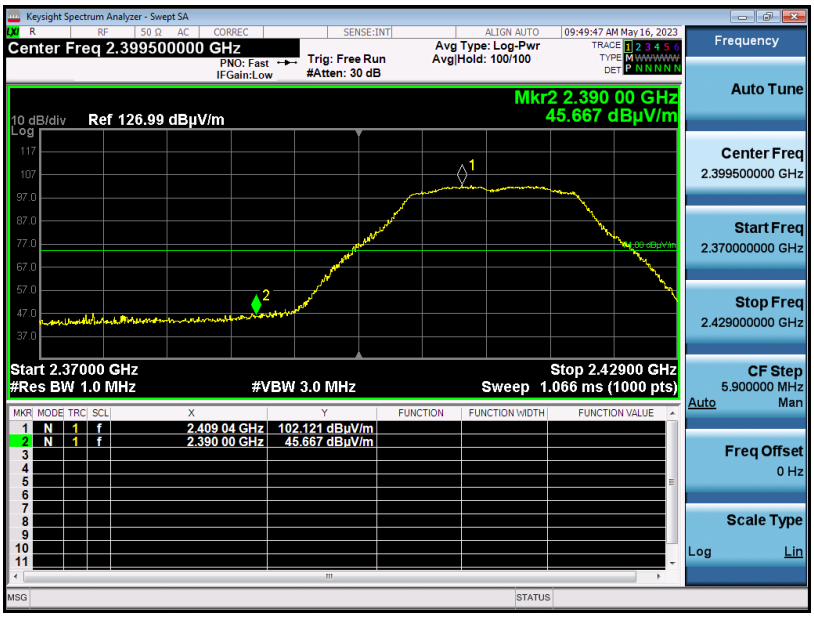
Test Graph for Average Measurement



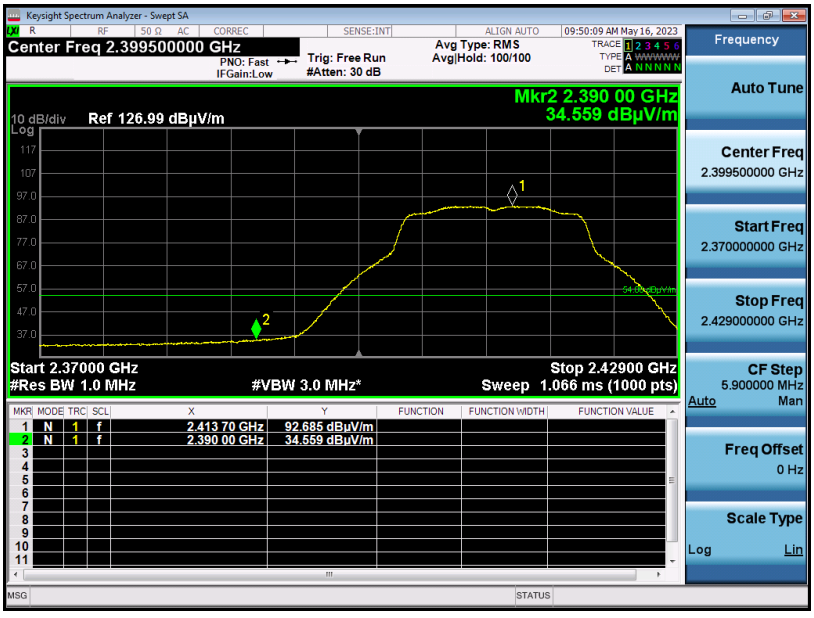
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



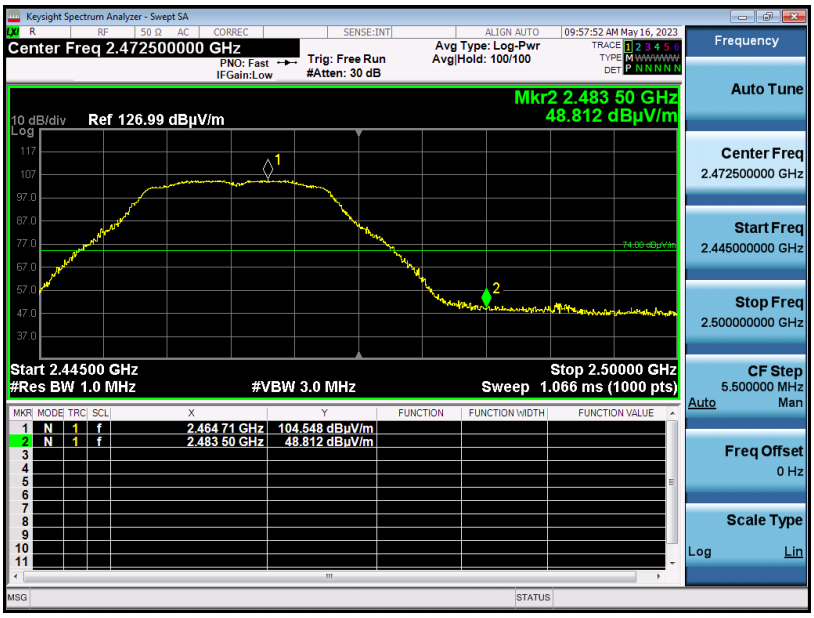
Test Graph for Average Measurement



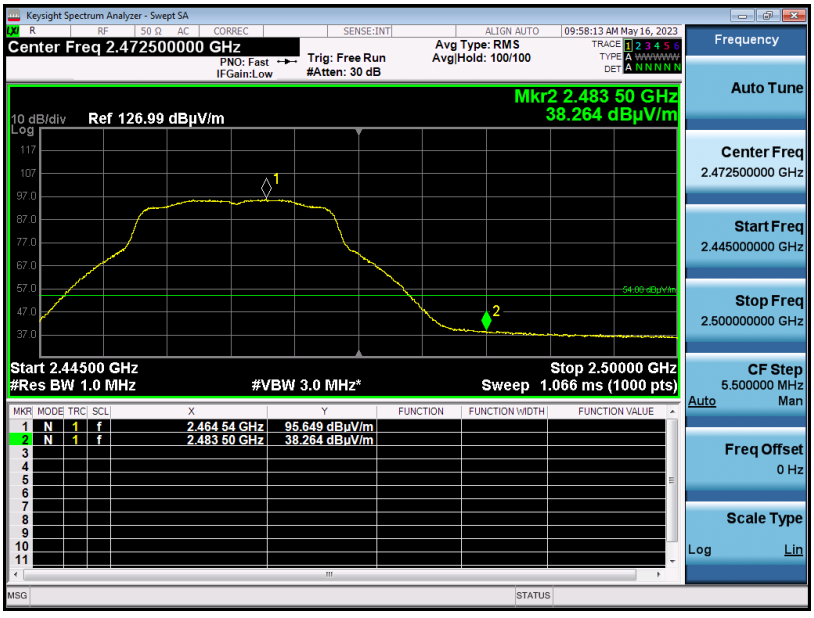
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement



RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHz	Antenna	Vertical

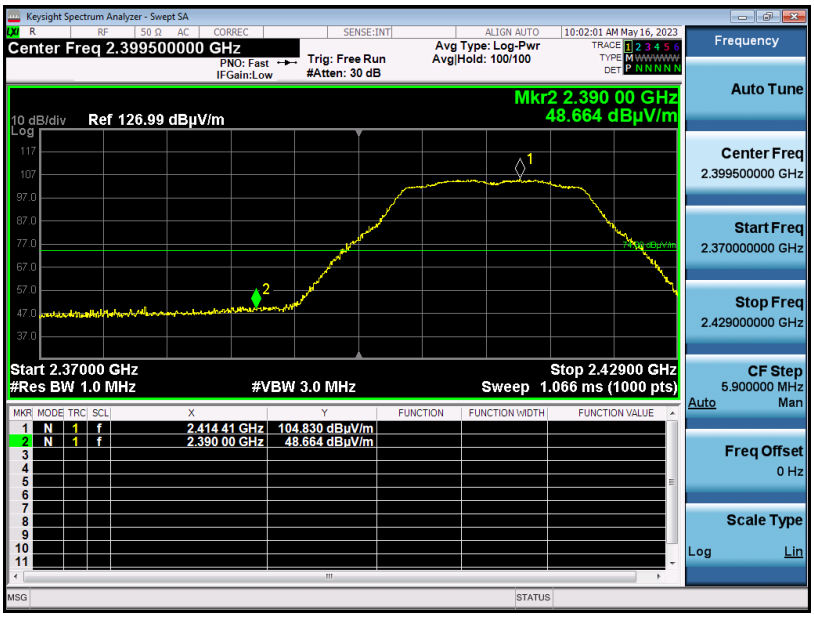
Test Graph for Peak Measurement

Test Graph for Average Measurement

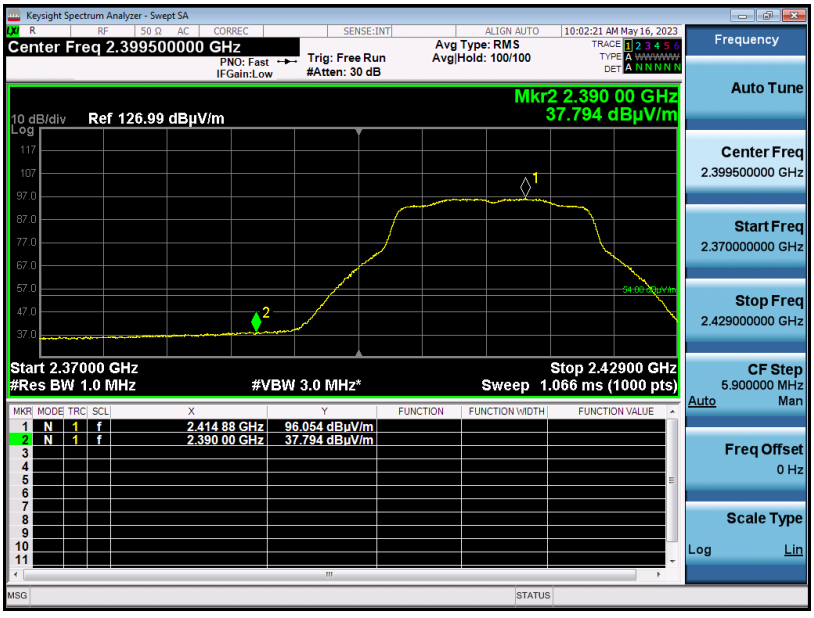
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



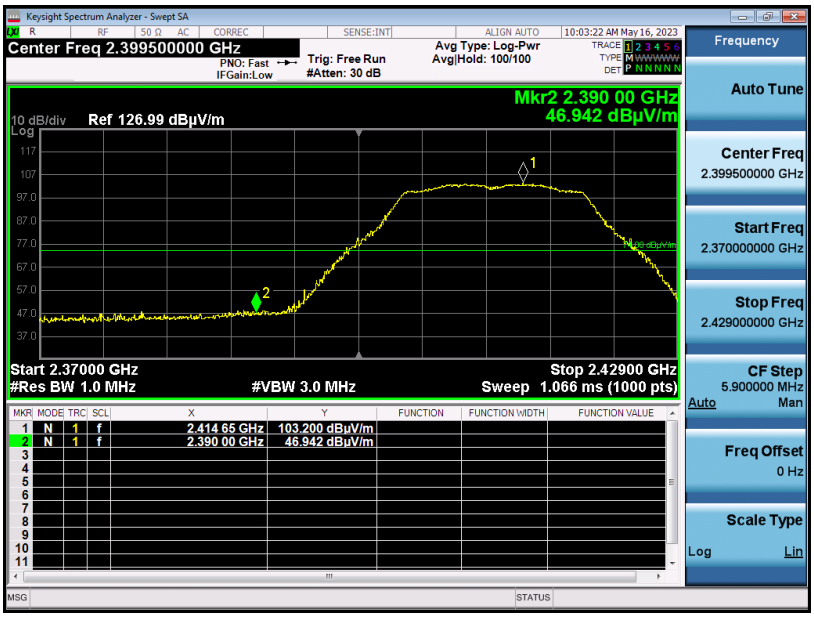
Test Graph for Average Measurement



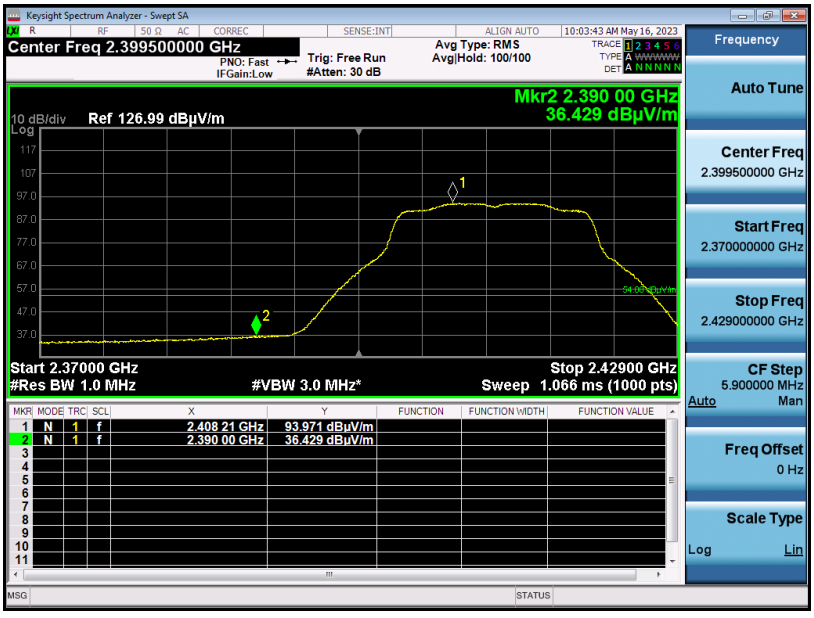
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



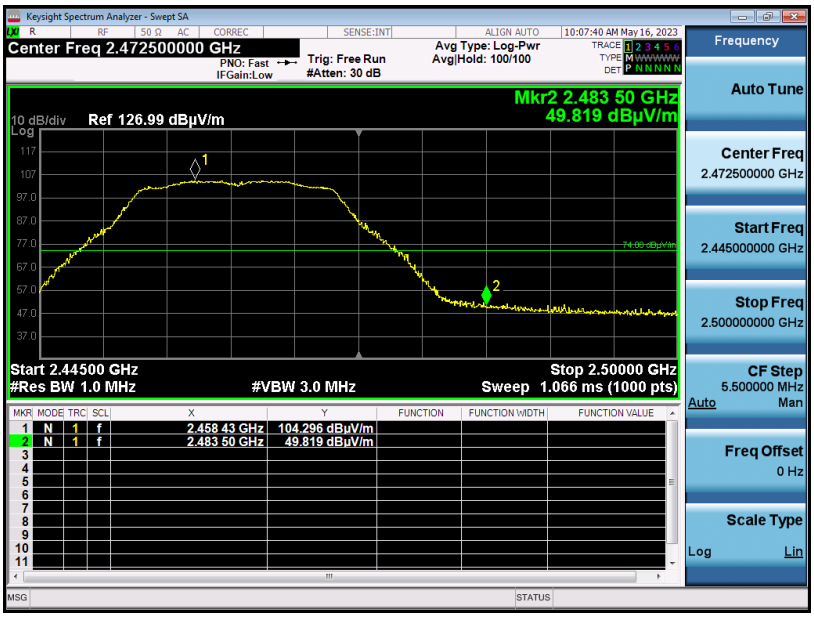
Test Graph for Average Measurement



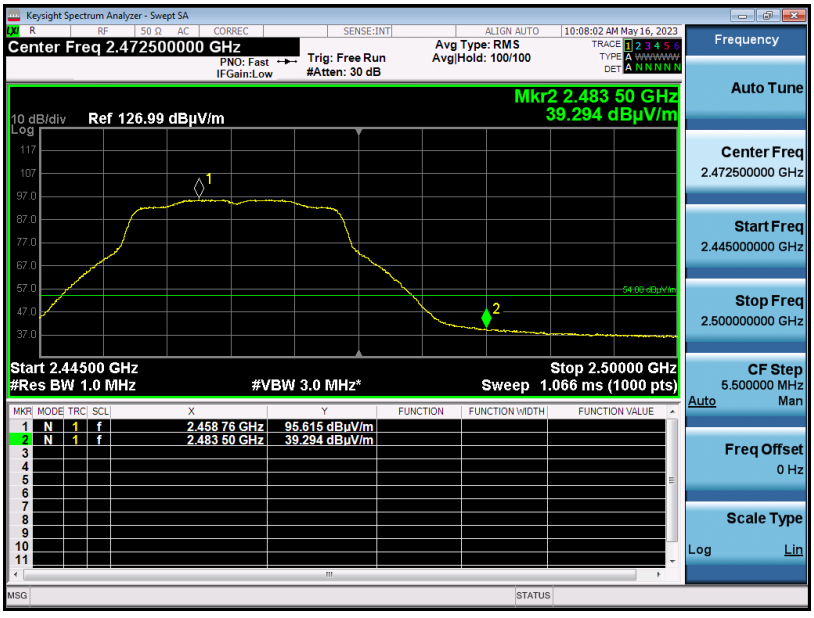
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

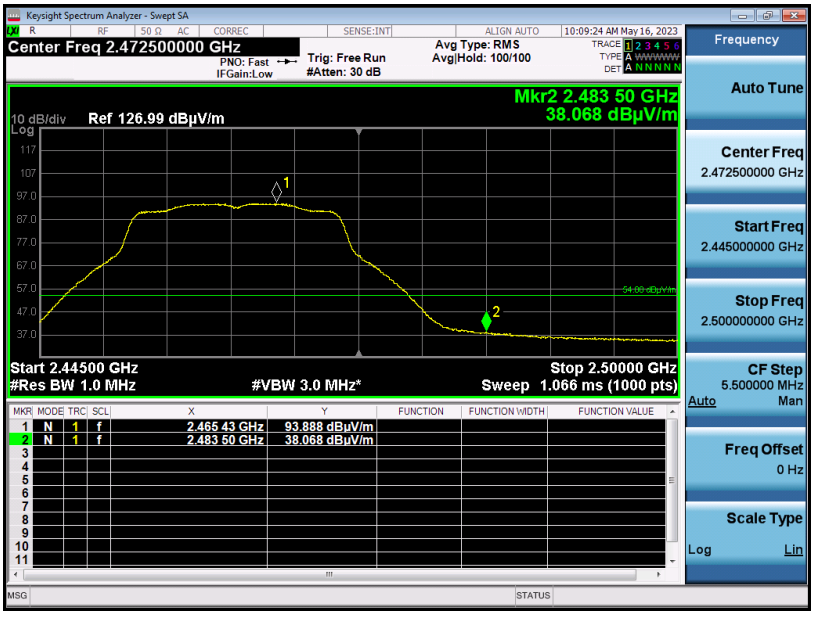


RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement

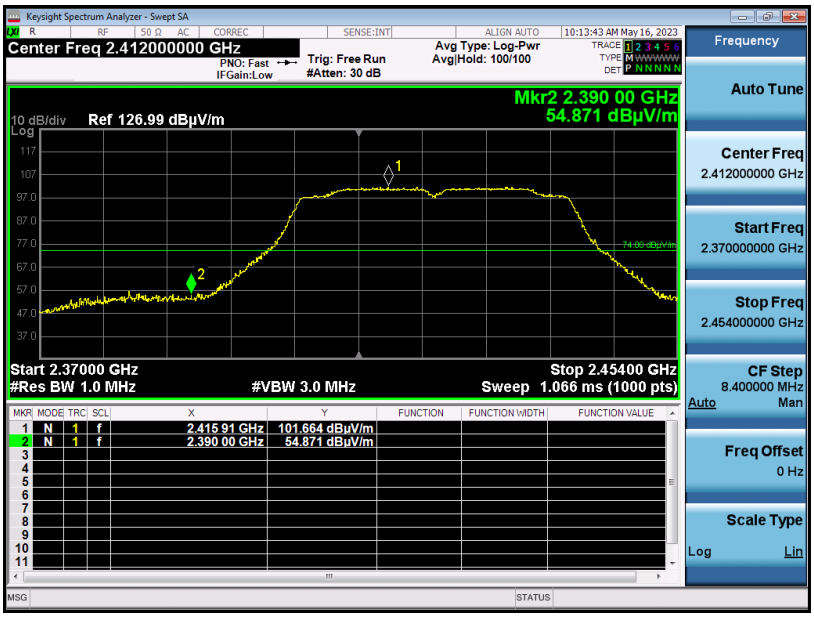
Test Graph for Average Measurement



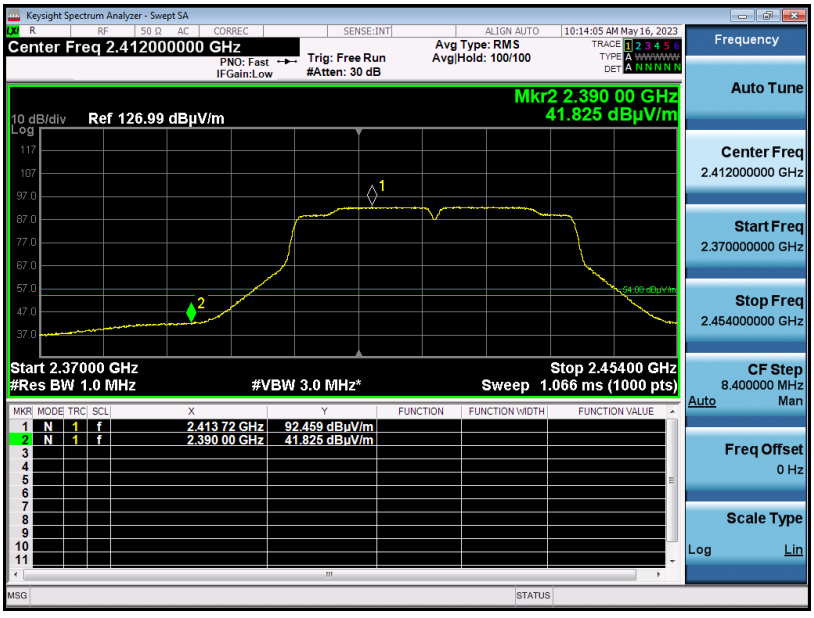
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 with data rate 13.5 2422MHz	Antenna	Horizontal

Test Graph for Peak Measurement



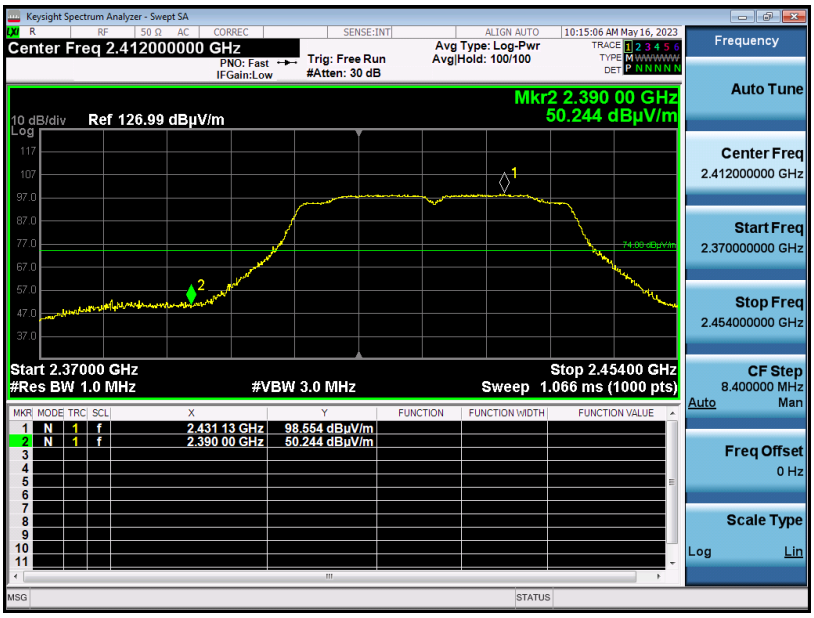
Test Graph for Average Measurement



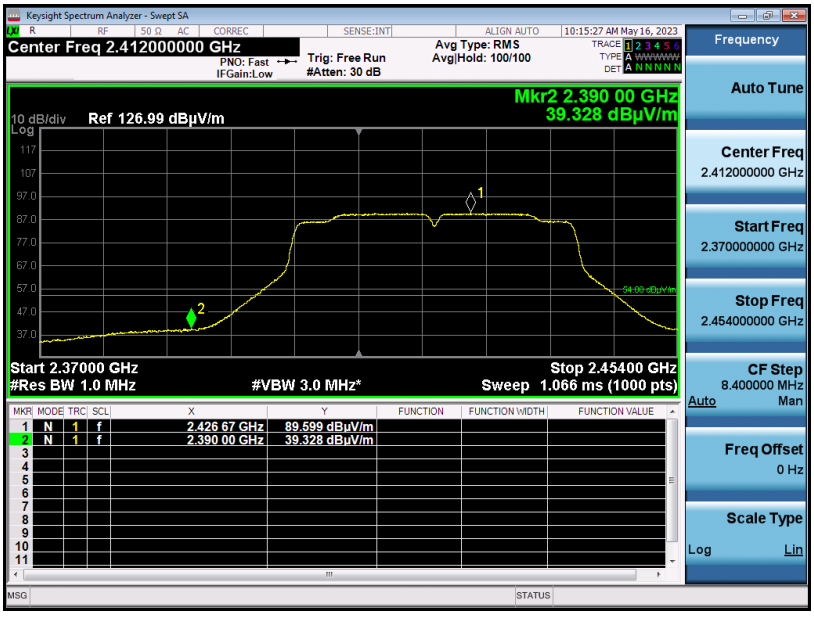
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 with data rate 13.5 2422MHz	Antenna	Vertical

Test Graph for Peak Measurement



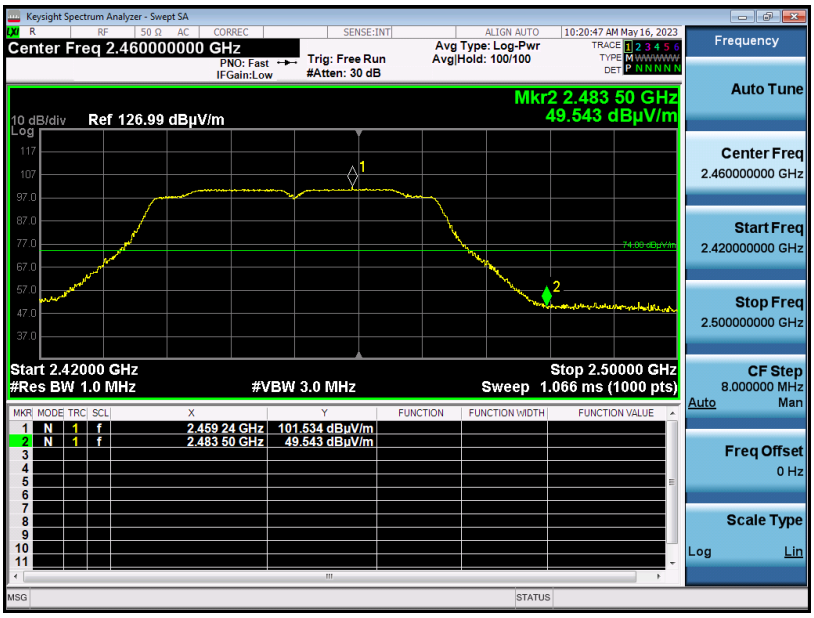
Test Graph for Average Measurement



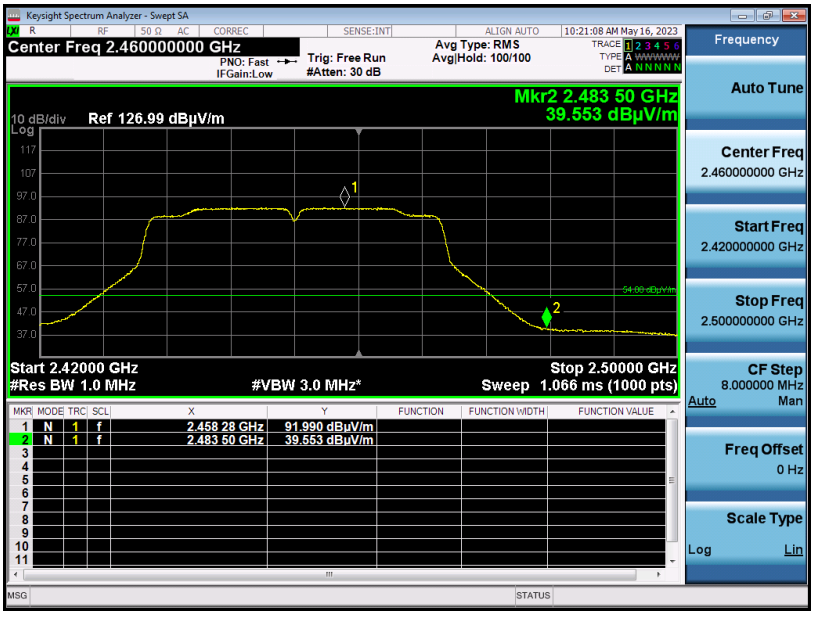
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 with data rate 13.5 2452MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

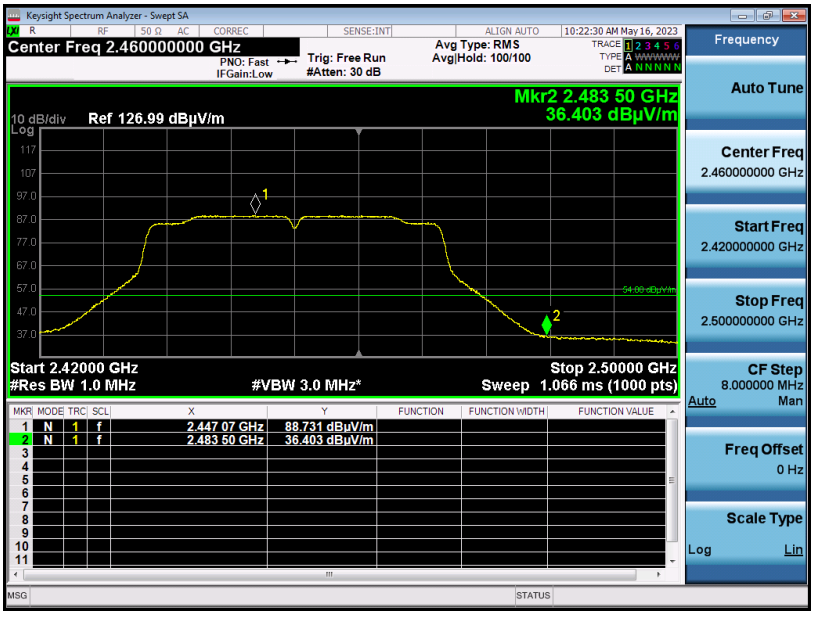


RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 with data rate 13.5 2452MHz	Antenna	Vertical

Test Graph for Peak Measurement

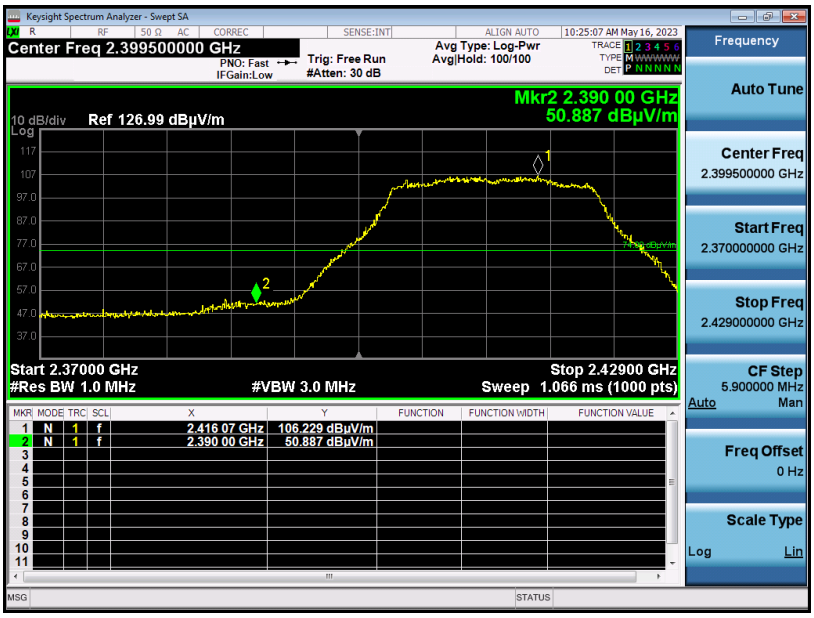
Test Graph for Average Measurement



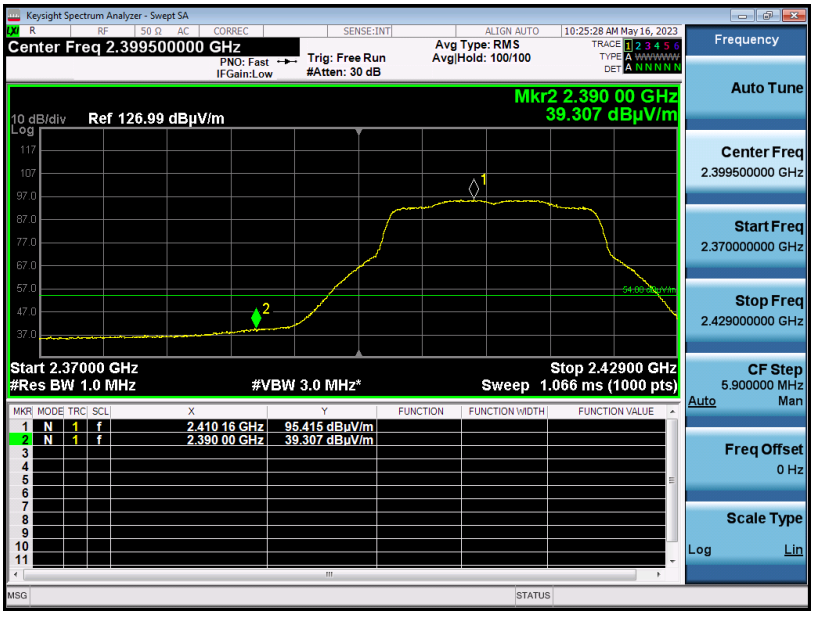
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 with data rate 3.6 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



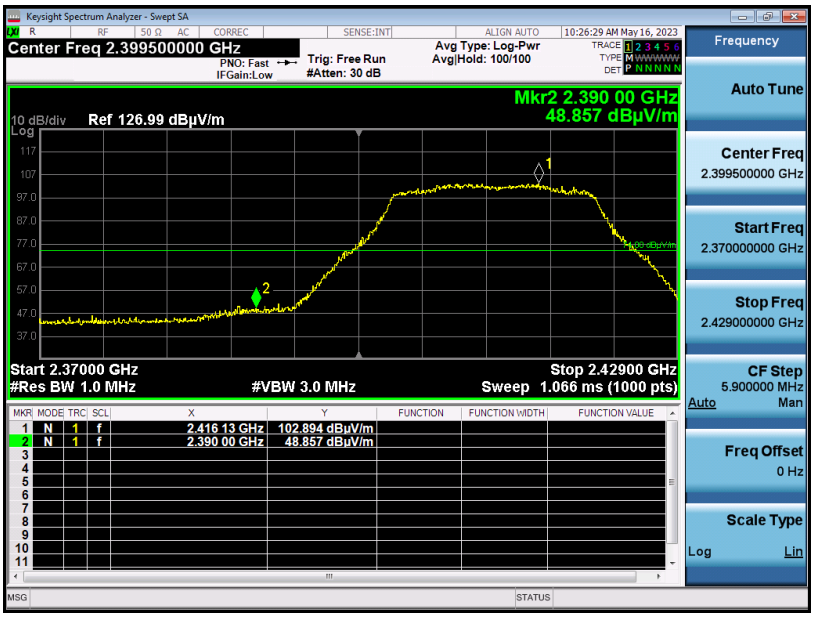
Test Graph for Average Measurement



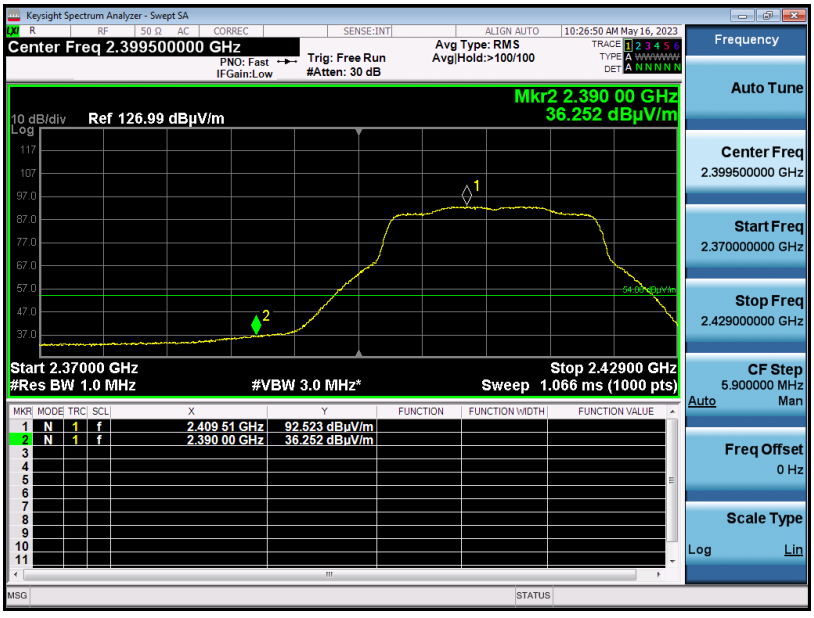
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 with data rate 3.6 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

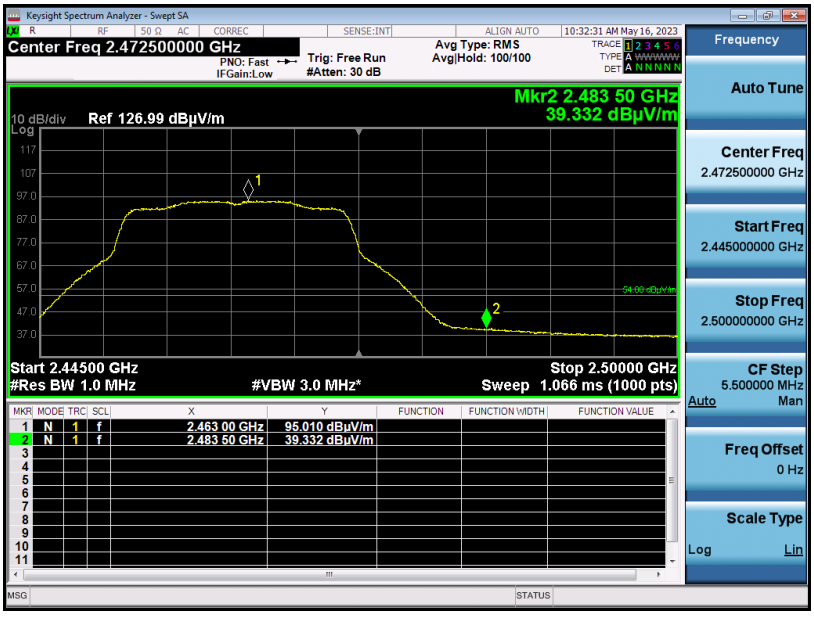


RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 with data rate 3.6 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement

Test Graph for Average Measurement

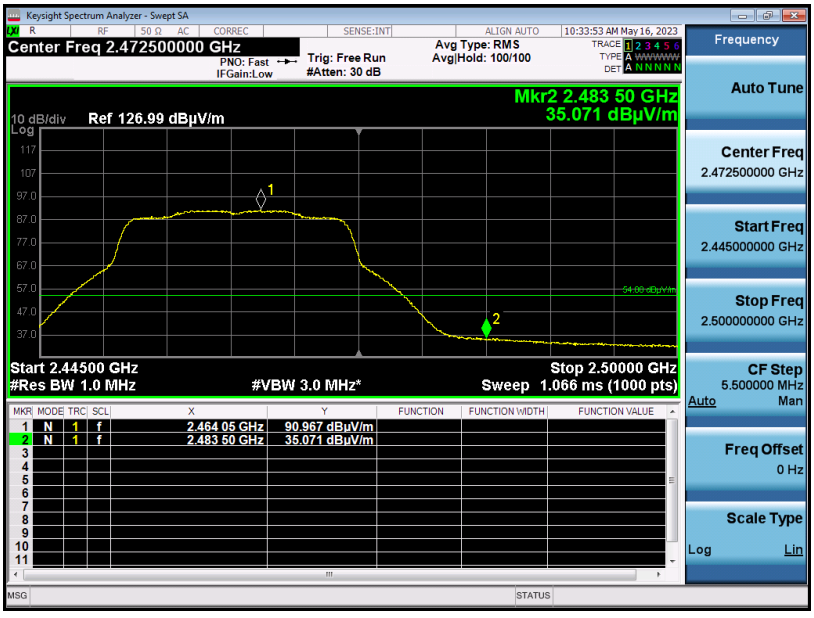


RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 with data rate 3.6 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement

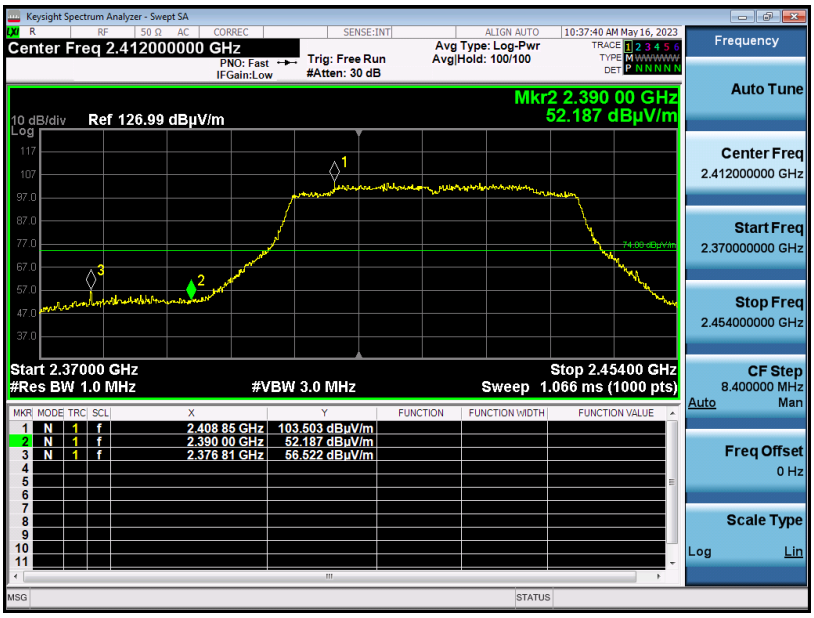
Test Graph for Average Measurement



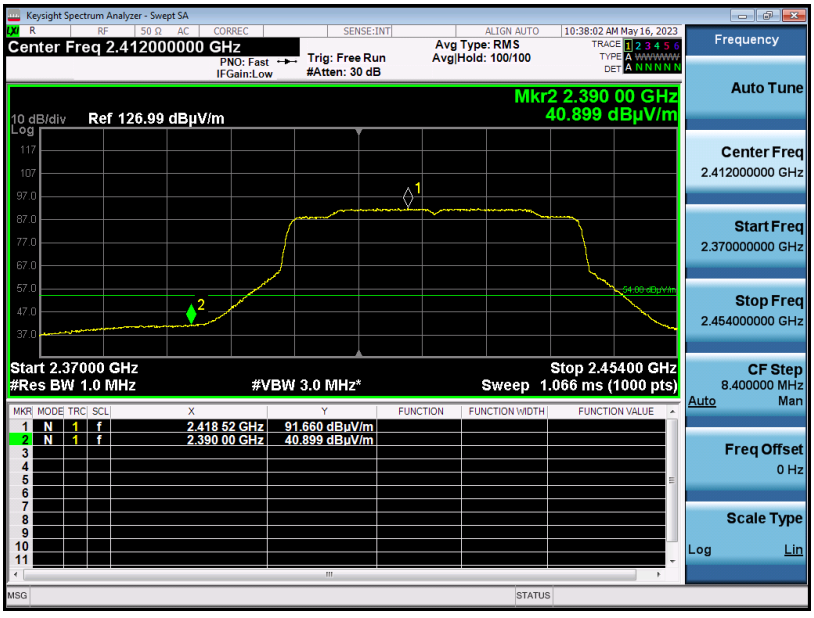
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax40 with data rate 7.3 2422MHz	Antenna	Horizontal

Test Graph for Peak Measurement



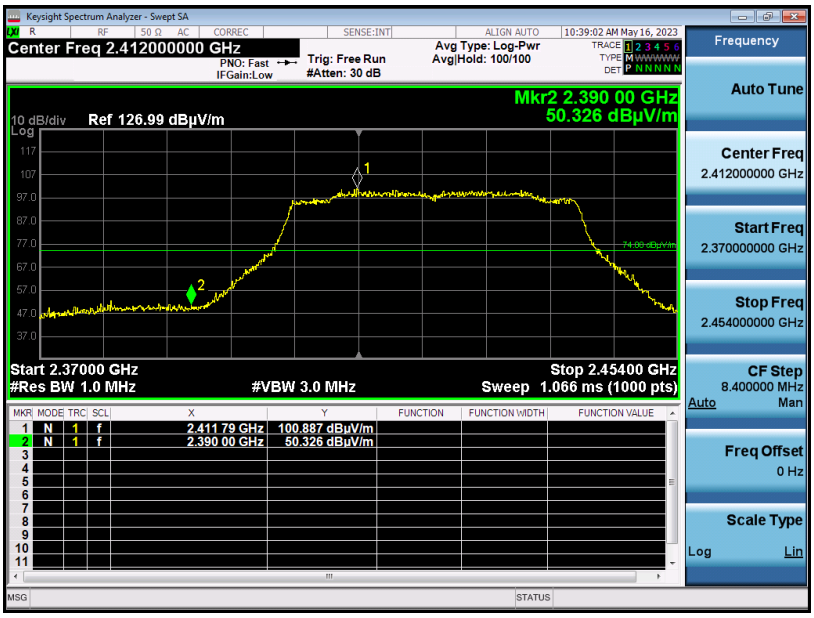
Test Graph for Average Measurement



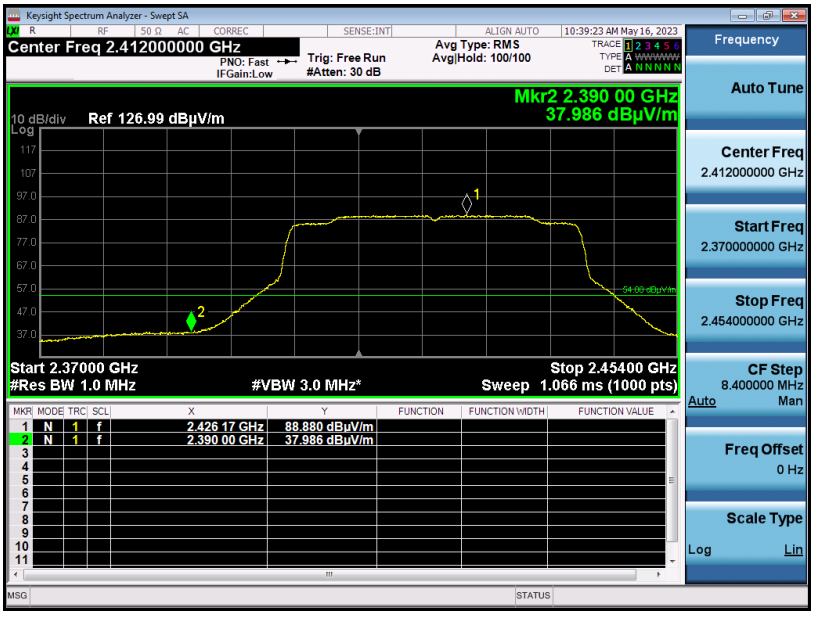
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax40 with data rate 7.3 2422MHz	Antenna	Vertical

Test Graph for Peak Measurement



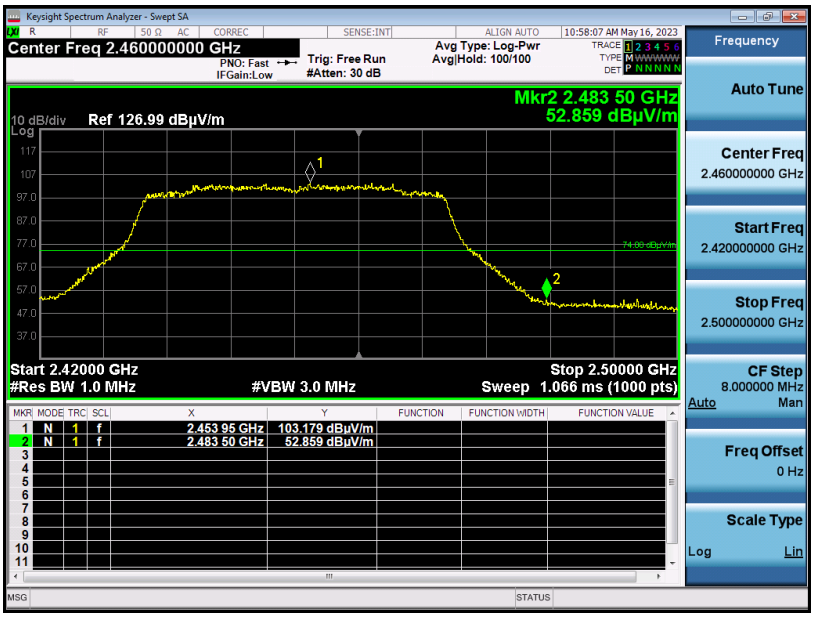
Test Graph for Average Measurement



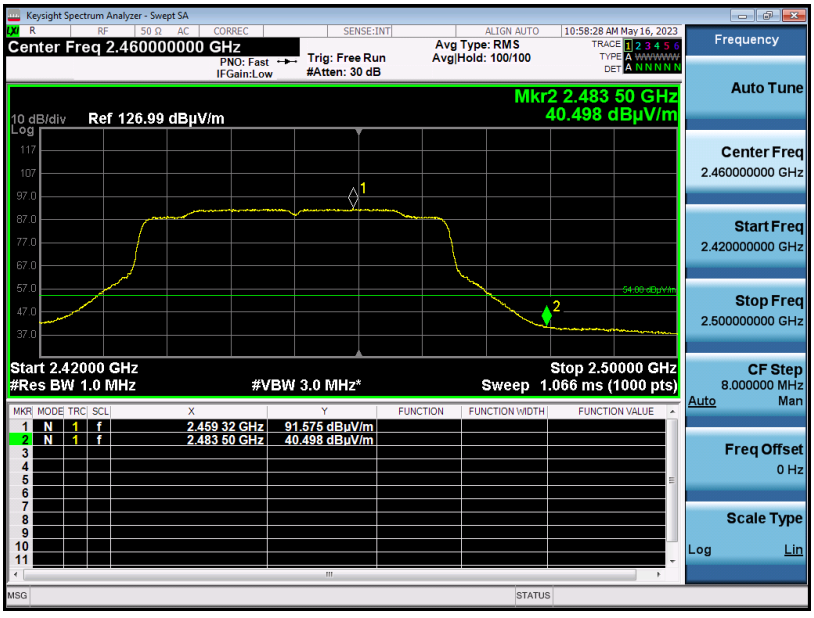
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax40 with data rate 7.3 2452MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

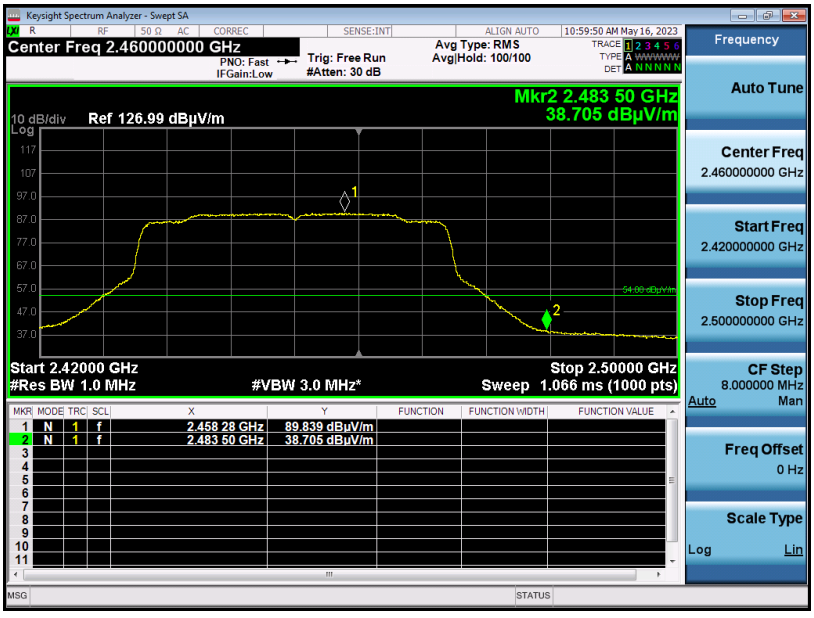


RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax40 with data rate 7.3 2452MHz	Antenna	Vertical

Test Graph for Peak Measurement

Test Graph for Average Measurement



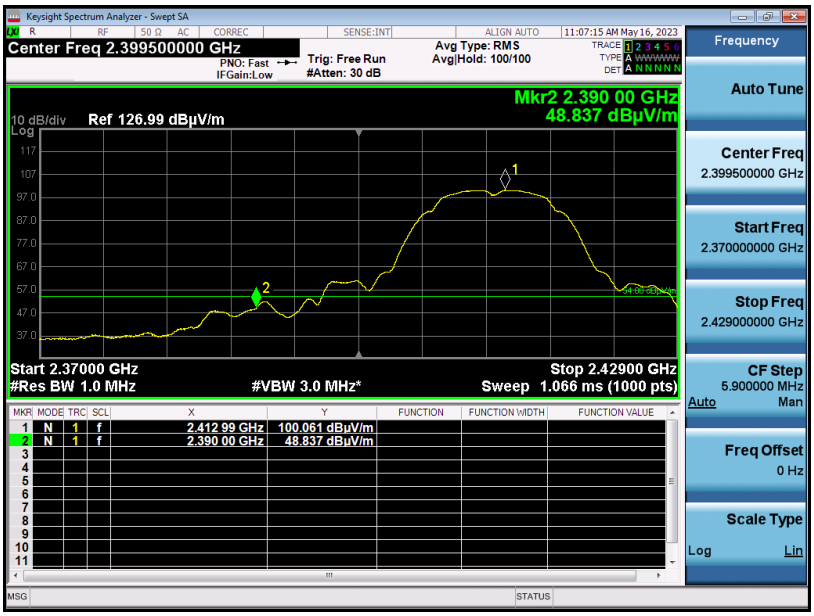
RESULT: PASS

Test result for band edge emission at restricted bands-ANT 2

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement

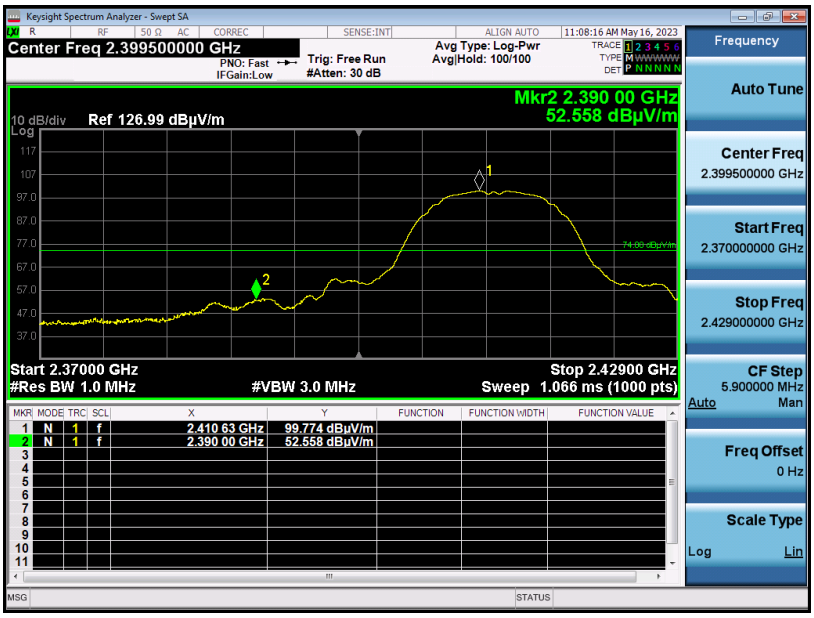
Test Graph for Average Measurement



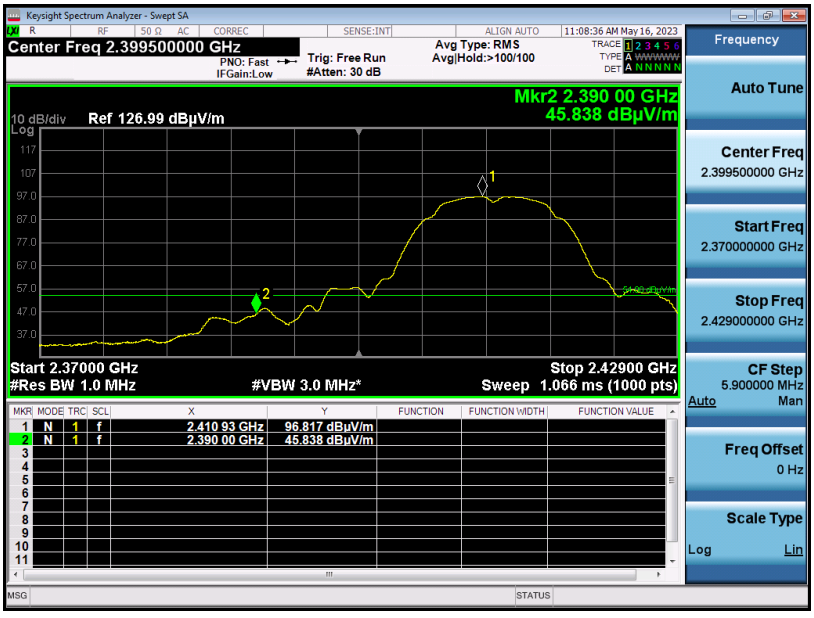
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



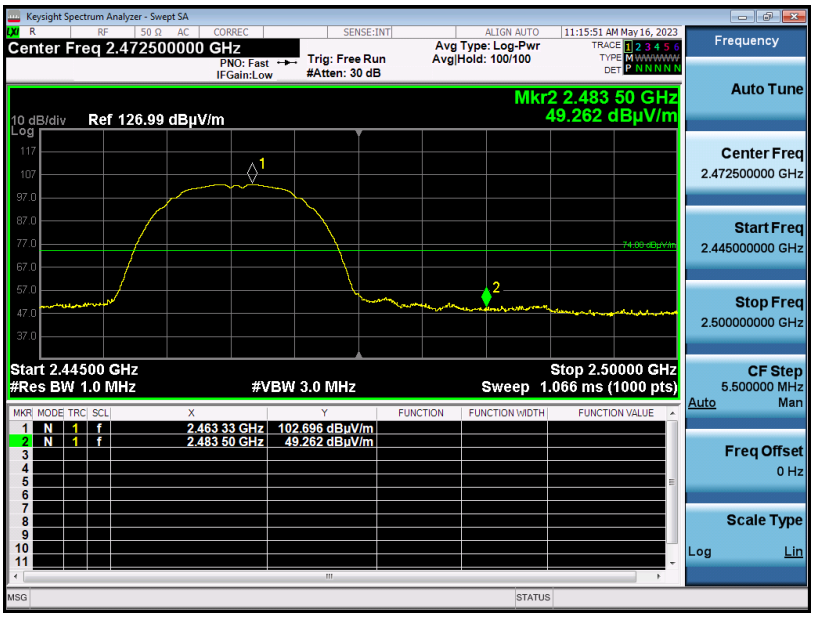
Test Graph for Average Measurement



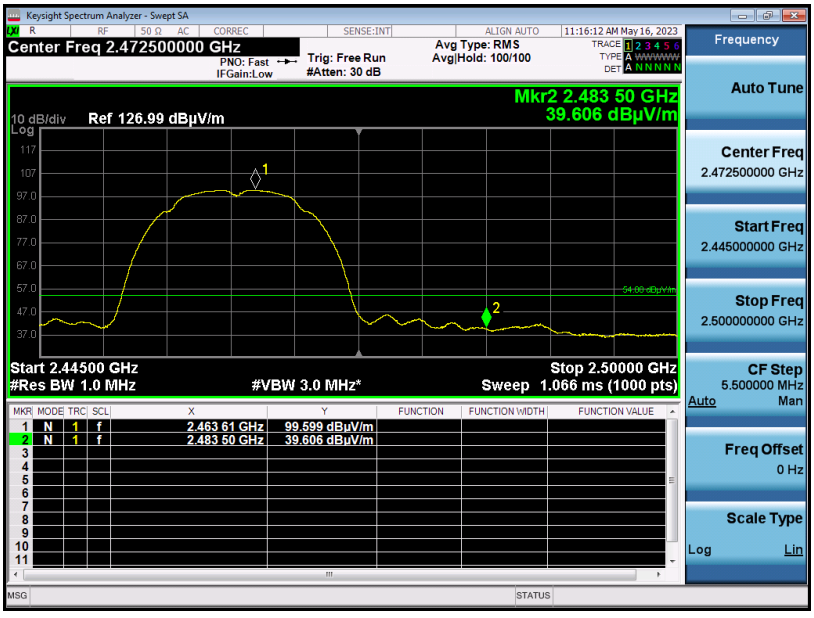
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



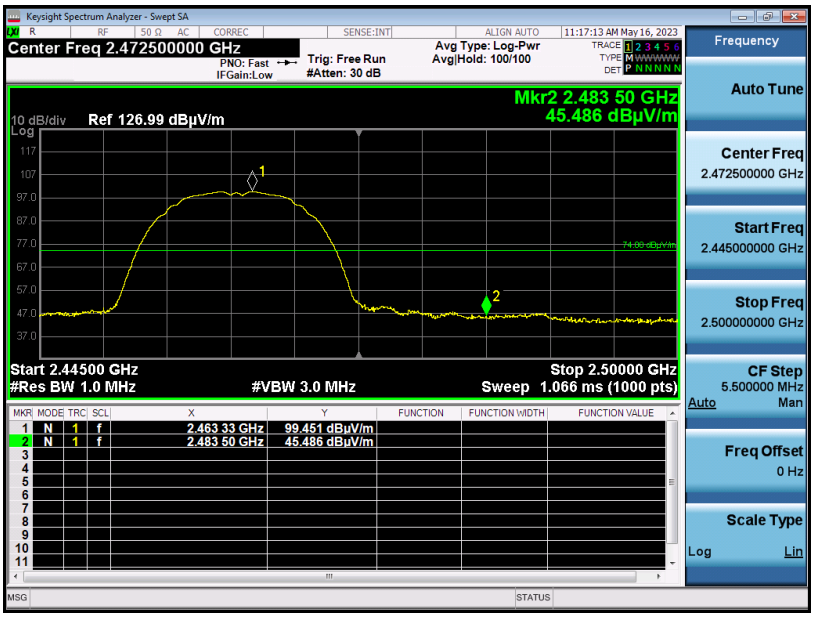
Test Graph for Average Measurement



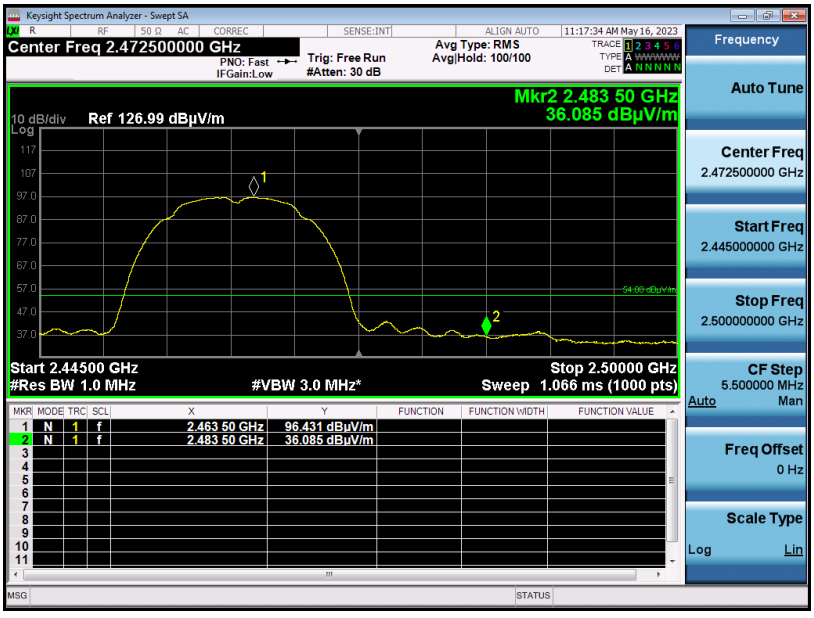
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement



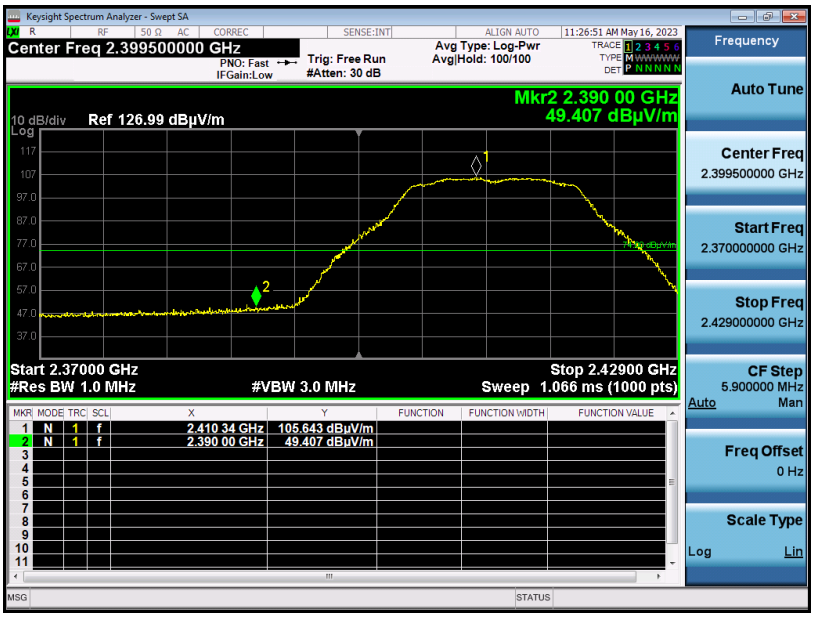
Test Graph for Average Measurement



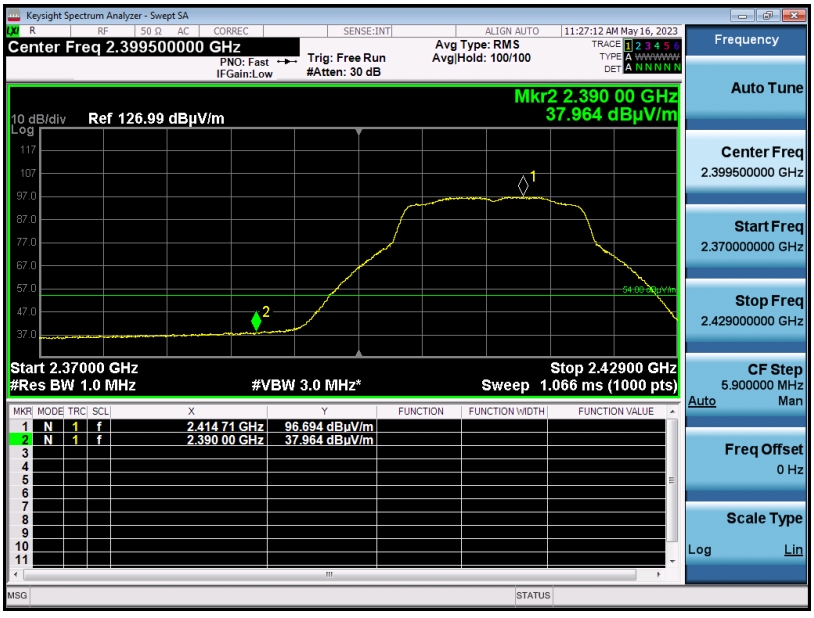
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



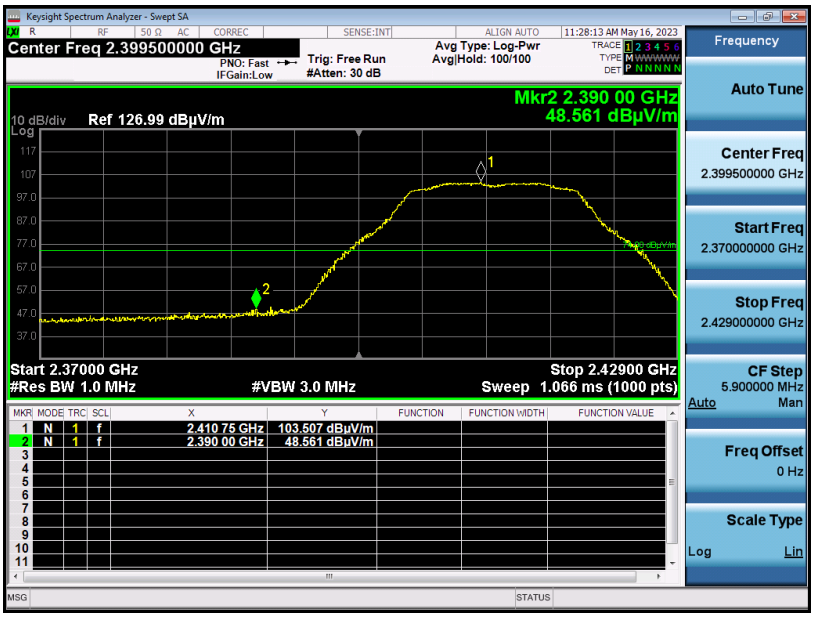
Test Graph for Average Measurement



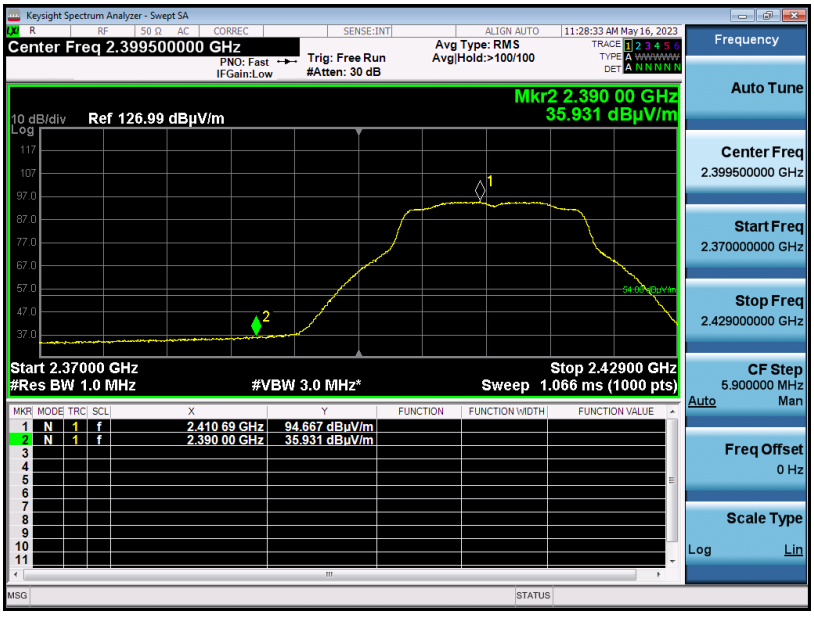
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



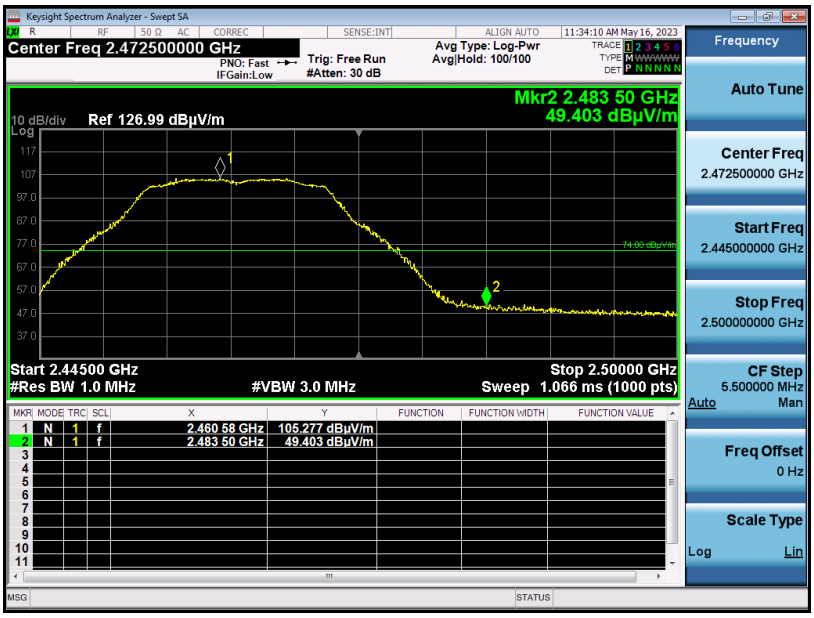
Test Graph for Average Measurement



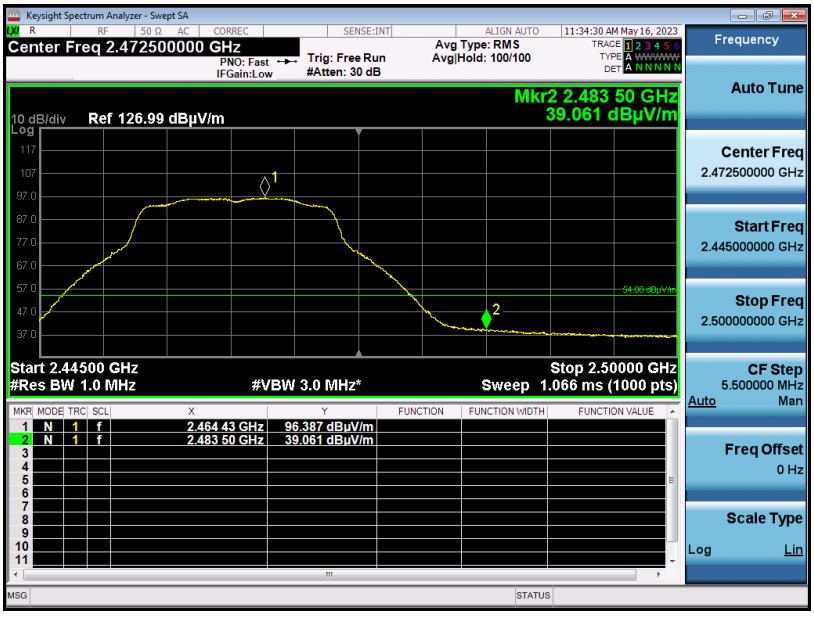
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

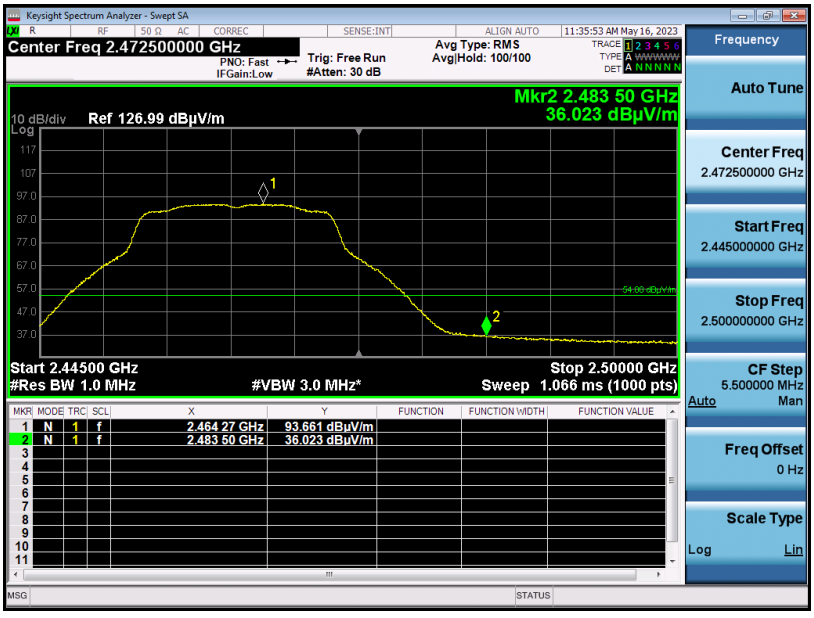


RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement

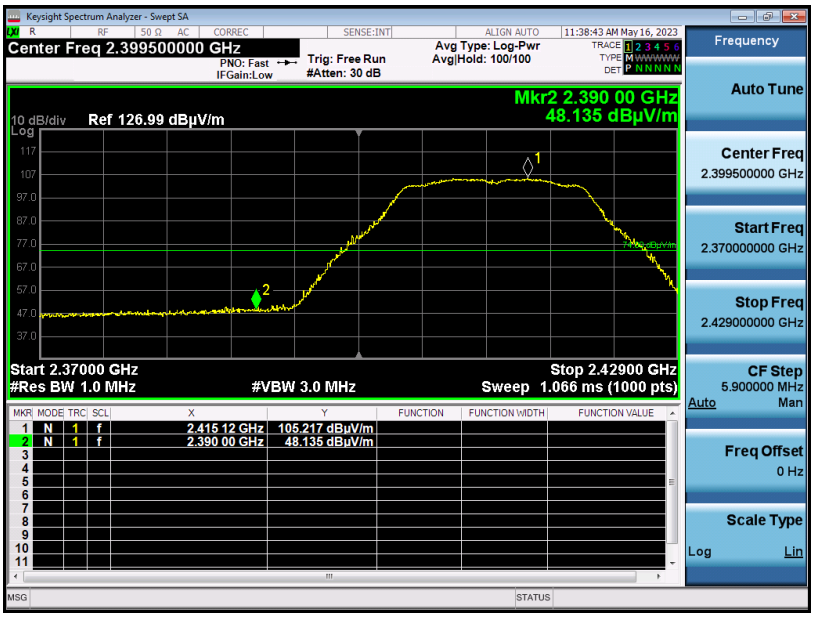
Test Graph for Average Measurement



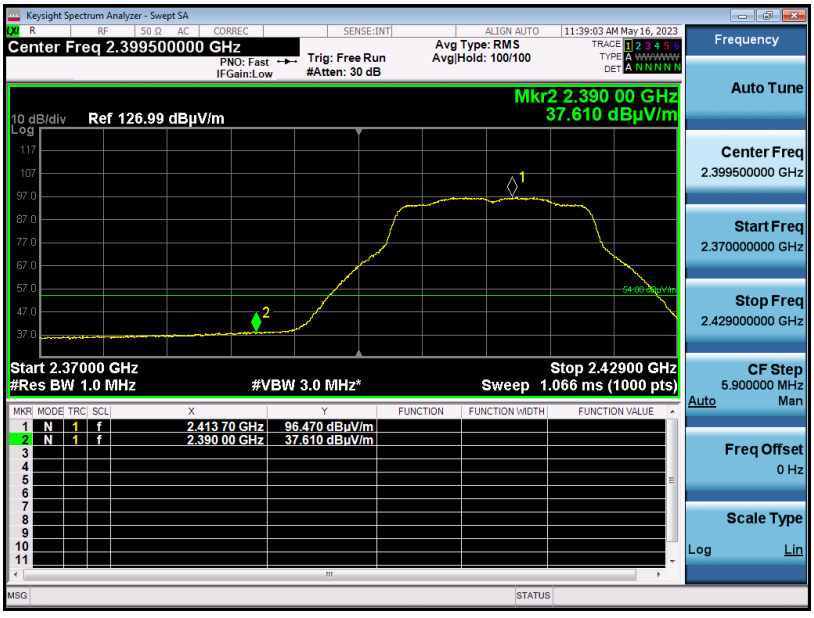
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



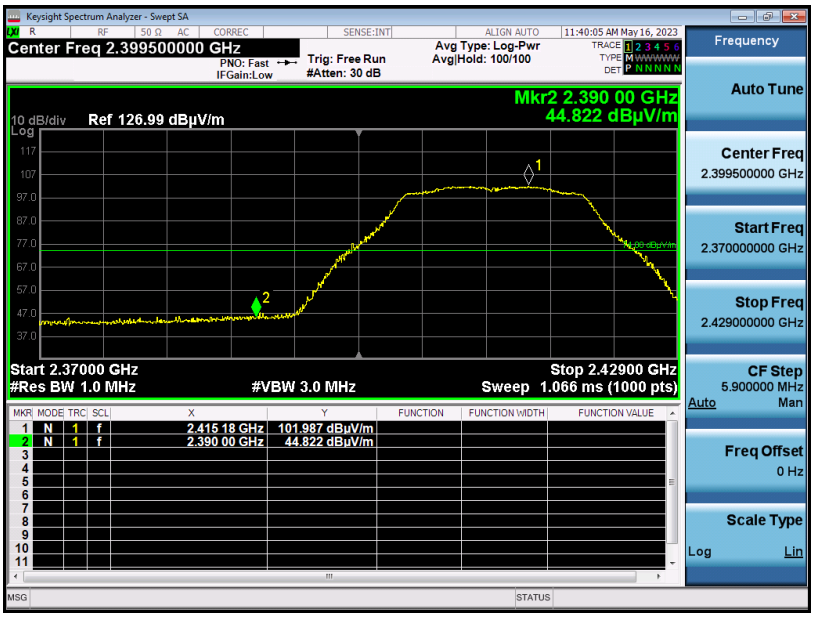
Test Graph for Average Measurement



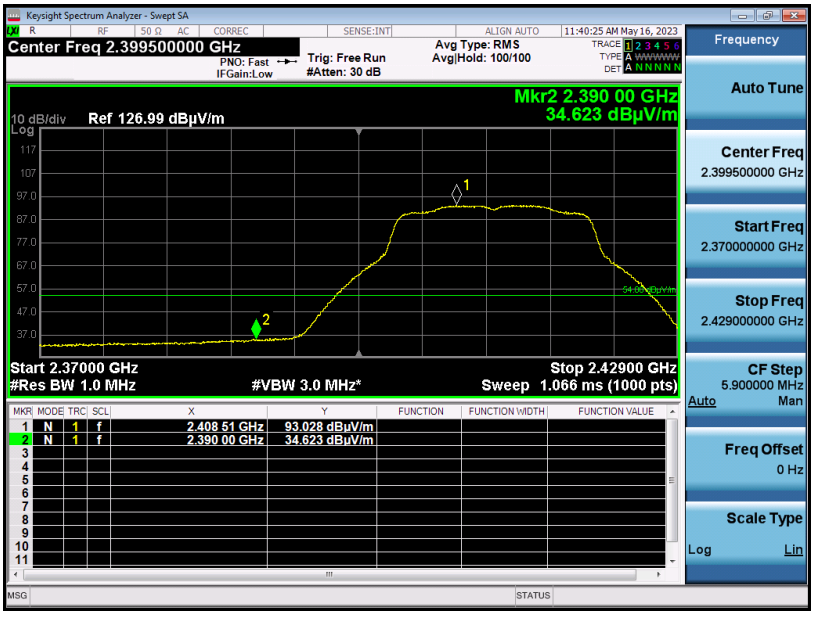
RESULT: PASS

EUT	Mini PC	Model Name	MPC43
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement



RESULT: PASS