

RF TEST REPORT


FCC ID: 2AOHHTURBOXC7230C

According to

47 CFR FCC Part 15, Subpart C(Section 15.247)

ANSI C63.10:2013

Product description : Smart Module
 Model No. : C7230C
 Trade Mark : TurboX
 Product No. : POC230731014-S001
 Applicant : Thundercomm Technology Co., Ltd
 No. 107, Middle Datagu Road, Xiantao Street, Yubei District,
 Chongqing, China, 401122
 Receipt date : 2023.08.02
 Test date : 2023.08.03~2023.08.16
 Issued Date : 2023.08.31

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REPORT ISSUED HISTORY

Report No.	Issue Date	Description
RF230731014-01-001	2023.08.31	Replaced the antenna, CPU, model, and IC of the product compared to the original report (SZ22110114W03).. See below for details. After the evaluation, we retested the AC power line for conduction and radiation emission, 6dB bandwidth, power, PSD. Other test data is subject to the original report.

Content of change:

1. The new antenna is changed, and the antenna gain is different. 2.4G and Bluetooth are the gain becomes larger, and 5G is the gain becomes smaller
2. QCS8250 replaced by QCS7230, both CPUs have the same PIN, which is pin-for-pin with the original CPU, and the RF performance is basically the same.
3. Modify the product name, model and FCC ID, original FCC ID: 2AOHHTURBOXC865C Change to 2AOHHTURBOXC7230C

1. General Information

1.1 Applicant

Thundercomm Technology Co., Ltd

No. 107, Middle Datagu Road, Xiantao Street, Yubei District, Chongqing, China, 401122

1.2 Manufacturer

Thundercomm Technology Co., Ltd

No. 107, Middle Datagu Road, Xiantao Street, Yubei District, Chongqing, China, 401122

1.3 Basic Description of Equipment Under Test

Items	Description	
Equipment Name	Smart Module	
Model No.	C7230C	
Trade Mark	TurboX	
EUT Stage	○ Product Unit	● Final-Sample
Operating Band and Conducted Output Power (Max power)	2400MHz ~ 2483.5MHz	●IEEE 802.11ax20RU52: 24.69dBm
Product Type	IEEE 802.11b: WLAN IEEE 802.11g: WLAN IEEE 802.11n: WLAN (2TX) IEEE 802.11ax: WLAN (2TX)	
Nominal Bandwidth	20MHz / 40MHz	
Modulation	IEEE 802.11b: DSSS (DBPSK / DQPSK / CCK) IEEE 802.11g: OFDM (BPSK / QPSK / 16QAM / 64QAM) IEEE 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM) IEEE 802.11ax: OFDMA (BPSK / QPSK / 16QAM / 64QAM)	
Data Rate (Mbps)	IEEE 802.11b mode: DSSS (1M/2M/5.5M/11M) IEEE 802.11g mode: OFDM (6M/9M/12M/18M/24M/36M/48M/54M) IEEE 802.11n mode: MCS0~MCS7 IEEE 802.11ax mode: MCS0~MCS11	
Antenna gain	Ant1: 3.35dBi, Ant2: 3.35dBi	
Antenna type	PIFA antenna	

Eleven channels are provided for 802.11b, 802.11g, 802.11n (20MHz), 802.11ax (20MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400MHz ~ 2483.5 MHz	01	2412MHz	07	2442MHz
	02	2417MHz	08	2447MHz
	03	2422MHz	09	2452MHz
	04	2427MHz	10	2457MHz
	05	2432MHz	11	2462MHz
	06	2437MHz	/	/

Seven channels are provided for 802.11n (40MHz), 802.11ax (40MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400MHz ~ 2483.5 MHz	03	2422MHz	07	2442MHz
	04	2427MHz	08	2447MHz
	05	2432MHz	09	2452MHz
	06	2437MHz	/	/

1.4 Transmit Operating Mode

Transmit Operating Mode				Transmit Multiple Antennas			
<input checked="" type="radio"/>	Operating mode 1 (single antenna)			<input checked="" type="radio"/>	1TX		
<input checked="" type="radio"/>	Operating mode 2 (multiple antenna, no beam forming)			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	Operating mode 3 (multiple antenna, with beam forming)			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="radio"/>	802.11b	Operating mode	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<input checked="" type="radio"/>	802.11g	Operating mode	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<input checked="" type="radio"/>	802.11n(20MHz)	Operating mode	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<input checked="" type="radio"/>	802.11n(40MHz)	Operating mode	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<input checked="" type="radio"/>	802.11ax(20MHz)	Operating mode	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<input checked="" type="radio"/>	802.11ax(40MHz)	Operating mode	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	

2. Summary of Test Results

2.1 Summary of Test Items

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Test item	FCC Clause	Results	Remarks
AC Power Conducted Emission	15.207	Pass	Meet the requirement of the limit
Radiated Emission and Band Edge Measurement	15.205/15.209 /15.247(d)	Pass	Meet the requirement of the limit
Spurious Emission at Antenna Port	15.247(d)	Pass	Note:3
6dB Bandwidth	15.247(a)(2)	Pass	Meet the requirement of the limit
Maximum Conducted Power	15.247(b)	Pass	Meet the requirement of the limit
Power Spectral Density	15.247(e)	Pass	Meet the requirement of the limit
Antenna Requirements	15.203	Compliance	Note:1
<p>Note:</p> <p>1.The EUT has 2 internal antennas arrangement which was permanently attached.</p> <p>2.“N/A”denotes test is not applicable in this test report.</p> <p>3. For test item: Spurious Emission at Antenna Port (SZ22110114W03)</p>			

2.2 Application of Standard

47 CFR FCC Part 15, Subpart C (Section 15.247)

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10:2013

2.3 Test Instruments

Radiated Emissions						
No.	Equipment	Manufacturer	Type No.	Serial No.	Cal. date (yyyy/mm/dd)	Cal. Due date (yyyy/mm/dd)
1	Test receiver	Rohde&Schwarz	ESU	100184	2023/5/3	2024/5/2
2	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-127 3	2023/4/23	2024/4/22
3	Low frequency amplifier	Unknown	LNA 0920N	2014	2023/5/3	2024/5/2
4	High frequency amplifier	Schwarzbeck	BBV 9718	284	2023/5/3	2024/5/2
5	Loop Antenna	Schwarzbeck	FMZB151 9B	00029	2022/7/4	2025/7/3
6	Log periodic antenna	Schwarzbeck	VULB 9168	1151	2023/4/23	2024/4/22
7	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-127 3	2022/5/5	2025/5/4
8	Horn Antenna	Schwarzbeck	BBHA 9170	9170#685	2022/7/4	2025/7/3
9	Temp&Humidity Recorder	Meideshi	JR900	/	2023/5/3	2024/5/2
10	RF cable(966 chamber)9kHz- 1GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
11	RF cable(966 chamber)1GHz -18GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
12	RF cable(966 chamber)18GH z-40GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
13	Test software	Farad Technology Co., Ltd	EZ-EMC	/	/	/
Conducted Emission						
1	Test receiver	Rohde&Schwarz	ESCI	100718	2023/5/3	2024/5/2
2	LISN	Rohde&Schwarz	ENV216	100075	2023/5/3	2024/5/2
3	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	2023/5/3	2024/5/2
4	RF cable (9kHz-30MHz)	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
5	Test software	Farad Technology Co., Ltd	EZ-EMC	/	/	/
RF Conducted Emission						
1	MXA Signal Analyzer	Keysight	N9021B	MY600801 69	2023/4/23	2024/4/22
2	RF Control Unit	dsusoft	JS0806-2	21G80604 49	2023/4/23	2024/4/22
3	power supply unit	dsusoft	JS0806-4 ADC	N/A	2023/4/23	2024/4/22
4	VXG Signal Generator	Keysight	M9384B	MY612707 87	2023/4/23	2024/4/22
5	EXG Analog Signal Generator	Keysight	N5173B	MY591012 82	2023/4/23	2024/4/22
6	Test software	dsusoft	JS1120-3	/	/	/

2.4 Test Mode

Frequency Range : 2400~2483.5 MHz				
Test Items	Mode	Data Rate	Channel	Antenna
AC Power Conducted Emission	Simultaneous transmitting	-	-	-
Radiated Emission and Band Edge Measurement	802.11b	1Mbps	01/06/11	1&2
	802.11g	6Mbps	01/06/11	1&2
	802.11n(20MHz)	MCS0	01/06/11	1&2
	802.11n(40MHz)	MCS0	03/06/09	1&2
	802.11ax(20MHz)	MCS0	01/06/11	1&2
	802.11ax RU26 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 52 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 106 (20MHz)	MCS0	01/06/11	1&2
	802.11ax(40MHz)	MCS0	03/06/09	1&2
6dB Bandwidth	802.11b	1Mbps	01/06/11	1&2
	802.11g	6Mbps	01/06/11	1&2
	802.11n(20MHz)	MCS0	01/06/11	1&2
	802.11n(40MHz)	MCS0	03/06/09	1&2
	802.11ax(20MHz)	MCS0	01/06/11	1&2
	802.11ax RU26 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 52 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 106 (20MHz)	MCS0	01/06/11	1&2
	802.11ax(40MHz)	MCS0	03/06/09	1&2
Maximum Conducted Power	802.11b	1Mbps	01/06/11	1&2
	802.11g	6Mbps	01/06/11	1&2
	802.11n(20MHz)	MCS0	01/06/11	1&2
	802.11n(40MHz)	MCS0	03/06/09	1&2
	802.11ax(20MHz)	MCS0	01/06/11	1&2
	802.11ax RU26 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 52 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 106 (20MHz)	MCS0	01/06/11	1&2
	802.11ax(40MHz)	MCS0	03/06/09	1&2
Power Spectral Density	802.11b	1Mbps	01/06/11	1&2
	802.11g	6Mbps	01/06/11	1&2
	802.11n(20MHz)	MCS0	01/06/11	1&2
	802.11n(40MHz)	MCS0	03/06/09	1&2

	802.11ax(20MHz)	MCS0	01/06/11	1&2
	802.11ax RU26 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 52 (20MHz)	MCS0	01/06/11	1&2
	802.11ax RU 106 (20MHz)	MCS0	01/06/11	1&2
	802.11ax(40MHz)	MCS0	03/06/09	1&2

2.5 Test Condition

Applicable to	Environmental conditions	Input Power	Tested by
AC Power Conducted Emission	24.3°C, 51% RH	AC 120V/60Hz	Albert Fan
Radiated Emission and Band Edge Measurement	24.2°C, 55% RH	AC 120V/60Hz	Albert Fan
6dB Bandwidth	24.2°C, 52% RH	AC 120V/60Hz	Jason Huang
Maximum Conducted Power	24.2°C, 52% RH	AC 120V/60Hz	Jason Huang
Power Spectral Density	24.2°C, 52% RH	AC 120V/60Hz	Jason Huang

Note: Adapter supply voltage AC 120V/60Hz.

The applicant declare the operating environment of EUT as below:

Normal conditions: AC 120V/60Hz, 0~60°C

2.6 Duty Cycle of Test Signal

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

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

All the duty factor of other test mode have been considered.

Test Result: Please refer to the SZ22110114W03.

2.7 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Uncertainty	
Parameter	Uncertainty
Occupied Channel Bandwidth	± 143.88 kHz
Power Spectral Density	± 0.743 dB
Conducted Spurious Emission	± 1.328 dB
RF power conducted	± 0.384 dB
Conducted emission(9kHz~30MHz) AC main	± 2.72 dB
Radiated emission(9kHz~30MHz)	± 2.66 dB
Radiated emission (30MHz~1GHz)	± 4.62 dB
Radiated emission (1GHz~18GHz)	± 4.86 dB
Radiated emission (18GHz~40GHz)	± 3.80 dB

2.8 Test Location

Company:	Shenzhen Haiyun Standard Technical CO., Ltd.
Address:	Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China
CNAS Registration Number:	CNAS L18252
CAB identifier	CN0145
A2LA Certificate Number	6823.01
Telephone:	0755-26024411

2.9 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.10 Description of Support Units

Support Equipment				
No.	Equipment	Brand Name	Model Name	Remarks
1	mini PC	/	S10	DC:12V/4A
2	Adapter	CHANNEL WELL TECHNOLOGY	S1C045DC	INPUT: 100-240V~ 50/60Hz 1.5A OUTPUT:5.0V \Rightarrow 3.0A15.0W; 9.0V \Rightarrow 3.0A27W; 15.0V \Rightarrow 3.0A45.0W; 20V \Rightarrow 2.25A 45.0W

2.11 Deviation from Standards

None

3. Test Procedure And Results

3.1 AC Power Line Conducted Emission

3.1.1 Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

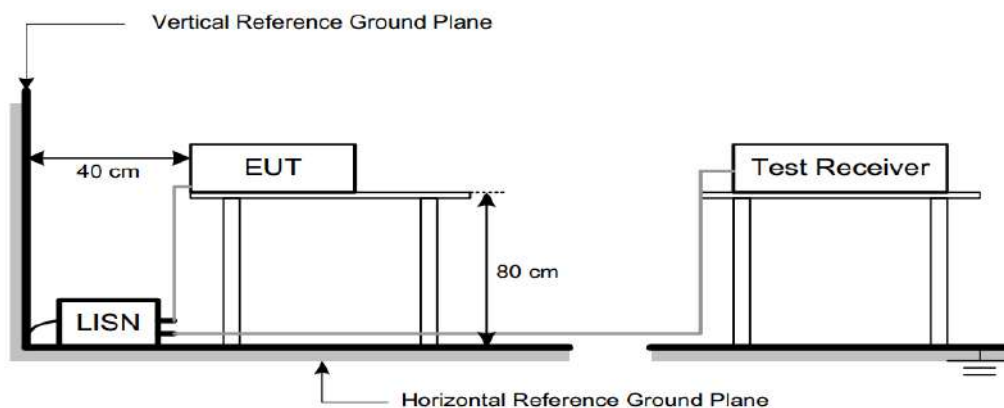
2. The lower limit shall apply at the transition frequencies.

3.1.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ● : Test ○ : No Test	

- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

3.1.3 Test Setup



3.1.4 Test Result

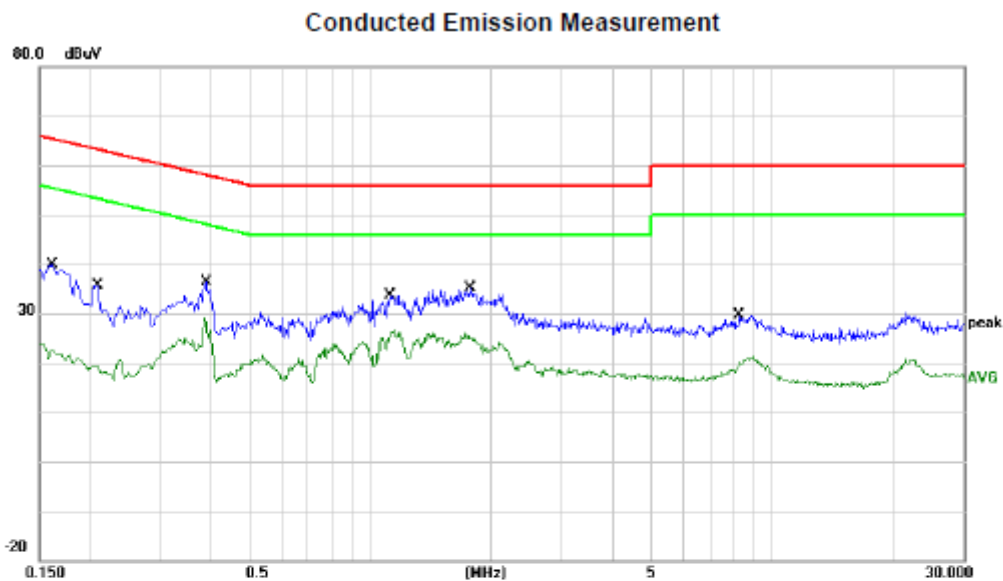
Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Measurement = Reading + Correct Factor.
3. Over = Measurement – Limit

We only recorded the data of the worst mode. Please see the following:

150kHz~30MHz	Worst Case Operating Mode: AX20 RU52 MIMO Channel 11
--------------	--

Line



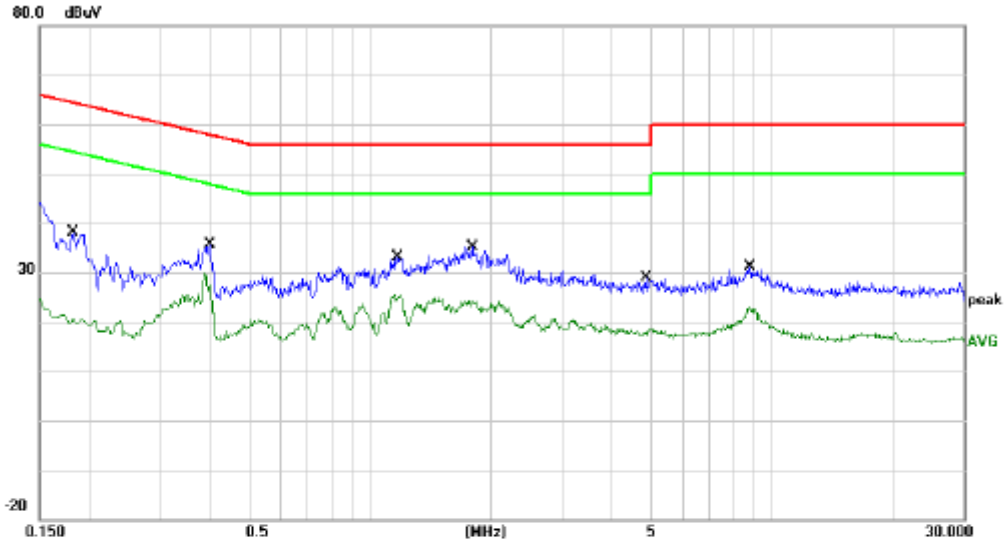
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1620	13.35	19.88	33.23	65.36	-32.13	QP	
2		0.1620	1.11	19.88	20.99	55.36	-34.37	AVG	
3		0.2100	5.94	19.88	25.82	63.21	-37.39	QP	
4		0.2100	-1.57	19.88	18.31	53.21	-34.90	AVG	
5		0.3900	12.18	19.88	32.06	58.06	-26.00	QP	
6	*	0.3900	7.81	19.88	27.49	48.06	-20.57	AVG	
7		1.1220	8.10	19.89	27.99	56.00	-28.01	QP	
8		1.1220	3.99	19.89	23.88	46.00	-22.12	AVG	
9		1.7740	9.27	19.90	29.17	56.00	-26.83	QP	
10		1.7740	4.72	19.90	24.62	46.00	-21.38	AVG	
11		8.2940	3.00	19.94	22.94	60.00	-37.06	QP	
12		8.2940	-1.47	19.94	18.47	50.00	-31.53	AVG	

150kHz~30MHz

Worst Case Operating Mode: AX20 RU52 MIMO Channel 11

Neutral

Conducted Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1820	9.76	19.88	29.64	64.39	-34.75	QP	
2		0.1820	0.10	19.88	19.98	54.39	-34.41	AVG	
3		0.3980	12.43	19.88	32.31	57.90	-25.59	QP	
4	*	0.3980	8.83	19.88	28.71	47.90	-19.19	AVG	
5		1.1700	7.87	19.89	27.76	56.00	-28.24	QP	
6		1.1700	4.85	19.89	24.74	46.00	-21.26	AVG	
7		1.7940	8.72	19.90	28.62	56.00	-27.38	QP	
8		1.7940	3.48	19.90	23.38	46.00	-22.62	AVG	
9		4.8500	2.02	19.92	21.94	56.00	-34.06	QP	
10		4.8500	-2.82	19.92	17.10	46.00	-28.90	AVG	
11		8.8300	5.81	19.95	25.76	60.00	-34.24	QP	
12		8.8300	1.61	19.95	21.56	50.00	-28.44	AVG	

3.2 Radiated Emission and Band Edge

3.2.1 Limit

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency (MHz)	Distance Meters(m)	Field Strength Limit	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 – 0.49	300	2400/F(kHz)	-
0.490 – 1.705	30	24000/F(kHz)	-
1.705 – 30	30	30	-
30~88	3	100	40.0
88~216	3	150	43.5
216~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Note: (1) Emission level $\text{dB}\mu\text{V} = 20 \log$ Emission level $\mu\text{V}/\text{m}$

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

3.2.2 Test Procedure

Test Method	
<input type="radio"/> Conducted Measurement	<input checked="" type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ● : Test ○ : No Test	

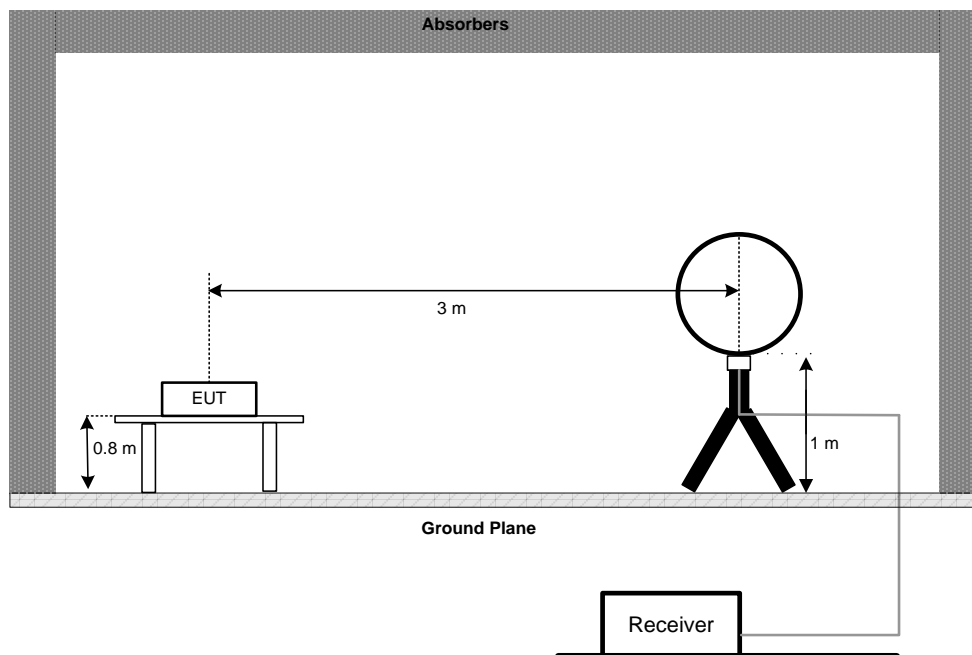
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance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

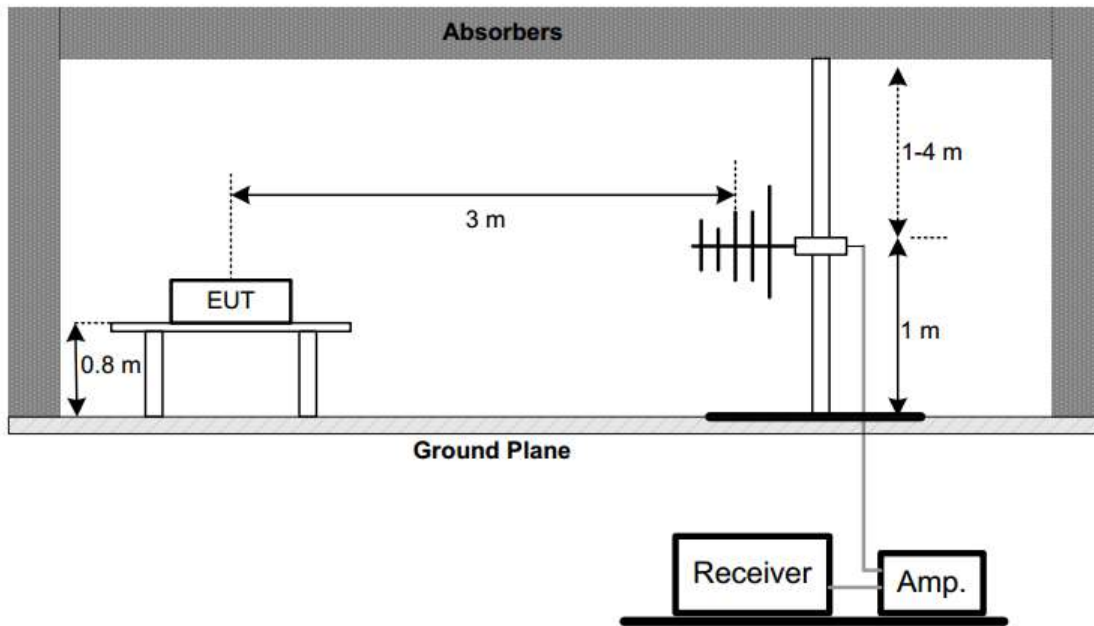
- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e) The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency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

3.2.3 Test Setup

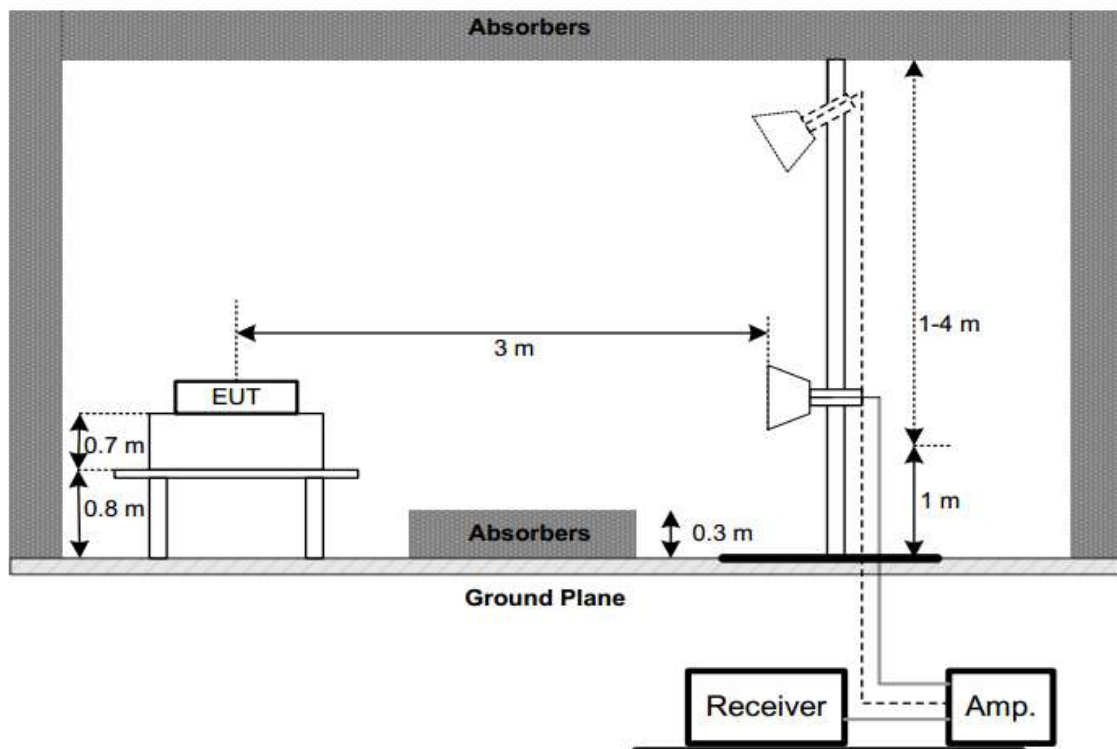
(A) Radiated Emission Test Set-Up Frequency Below 30 MHz



(B) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



(C) Radiated Emission Test Set-Up Frequency Above 1 GHz



3.2.4 Test Result

1) Radiated emission: 9kHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

2) Radiated emission: 30MHz-1G

Note:

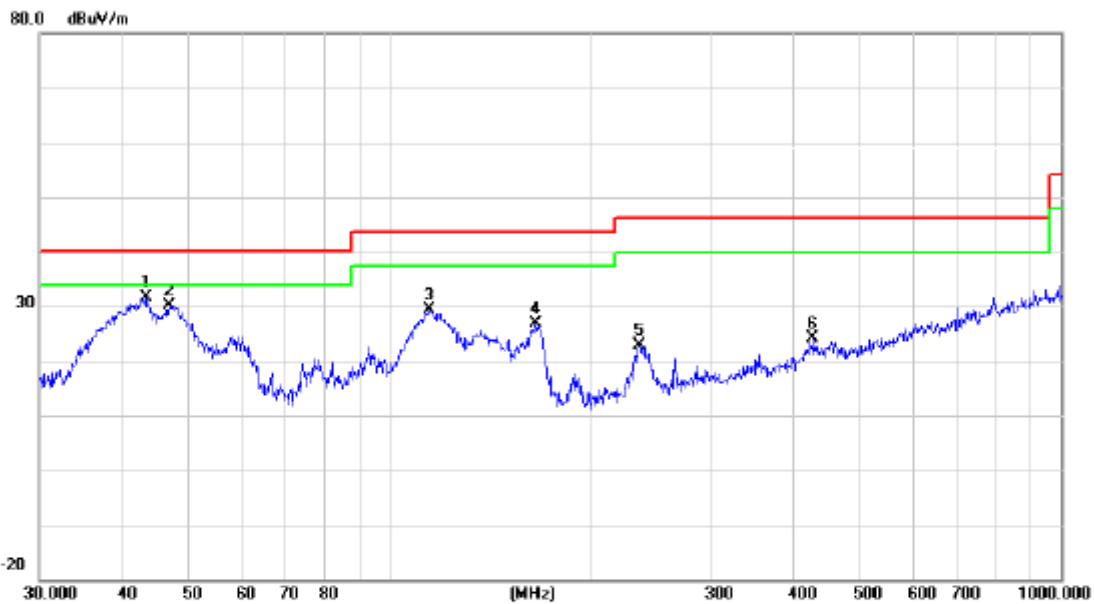
1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

We only recorded the data of the worst mode. Please see the following:

Below 1G (30MHz~1GHz)	Worst Case Operating Mode: AX20 RU52 MIMO Channel 11
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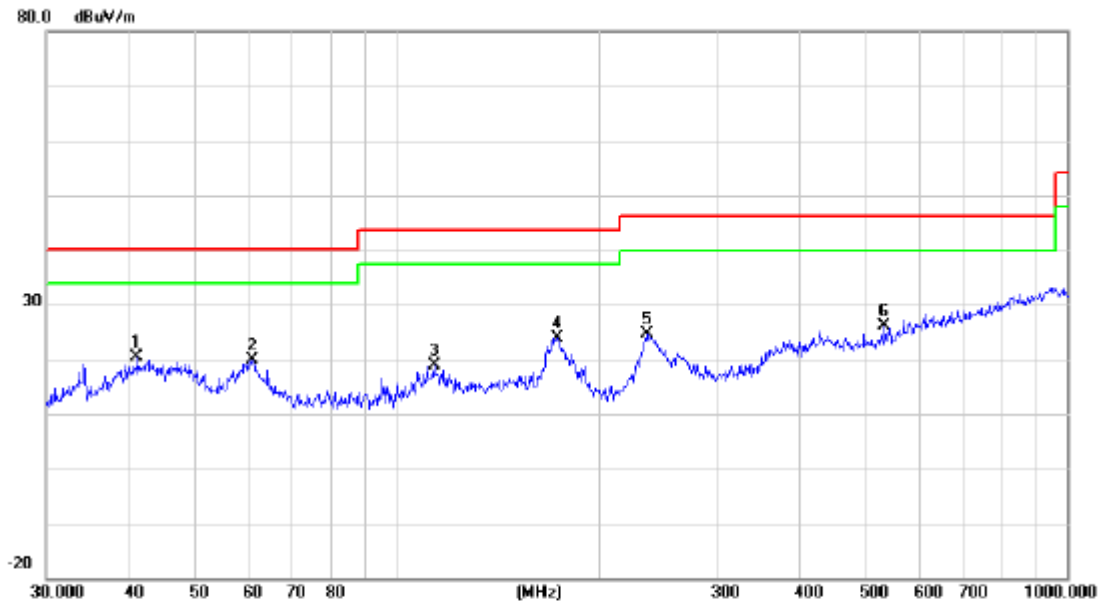
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	43.2016	42.36	-10.72	31.64	40.00	-8.36	peak		
2		46.8302	41.01	-10.87	30.14	40.00	-9.86	peak		
3		114.5146	40.94	-11.61	29.33	43.50	-14.17	peak		
4		164.9074	36.42	-9.65	26.77	43.50	-16.73	peak		
5		234.9910	32.92	-10.06	22.86	46.00	-23.14	peak		
6		426.5210	29.39	-5.16	24.23	46.00	-21.77	peak		

HORIZONTAL
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		40.9880	30.93	-10.63	20.30	40.00	-19.70			peak
2		60.9174	31.98	-12.21	19.77	40.00	-20.23			peak
3		113.7142	30.58	-11.72	18.86	43.50	-24.64			peak
4	*	173.2050	34.17	-10.29	23.88	43.50	-19.62			peak
5		236.6447	34.53	-9.98	24.55	46.00	-21.45			peak
6		533.8320	28.75	-2.50	26.25	46.00	-19.75			peak

3) Radiated emission: Above 1G

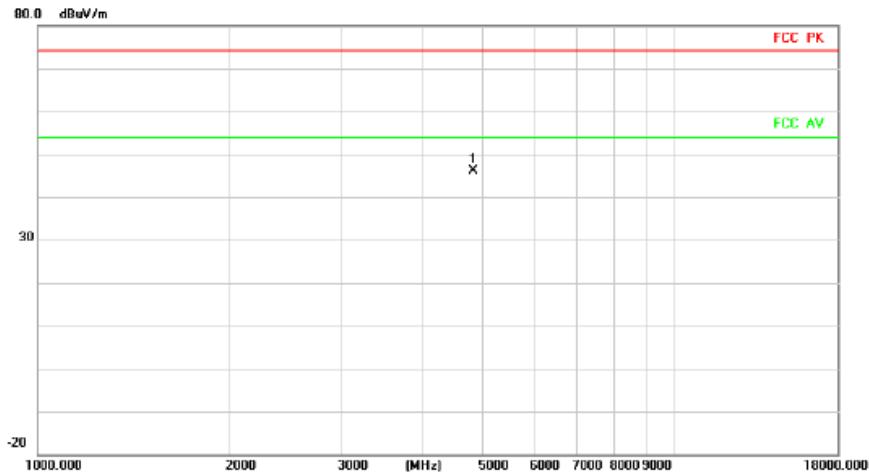
Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

Above 1G (1GHz~18GHz)	Test mode:11B	Test Channel:1	ANT 1
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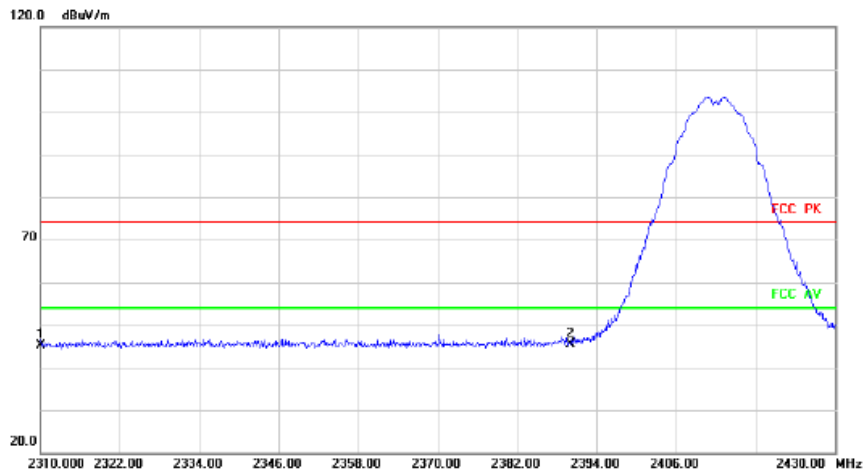
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	48.01	-1.88	46.13	74.00	-27.87	peak	

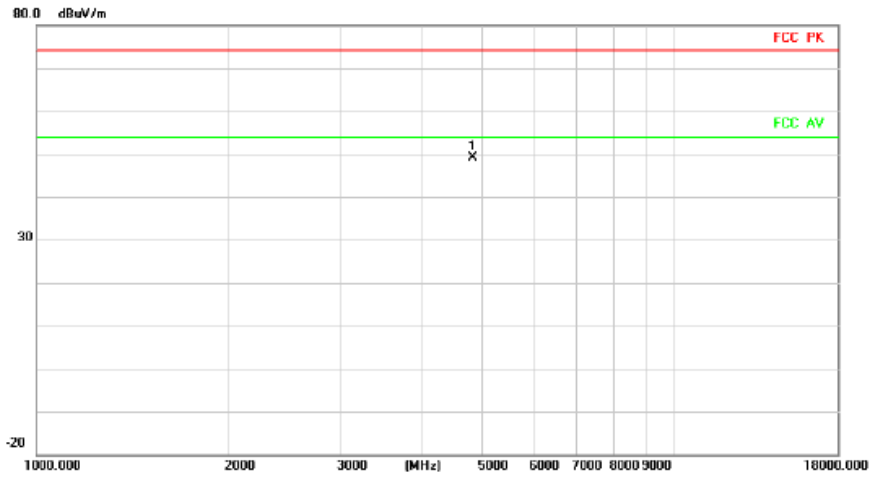
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	44.91	0.19	45.10	74.00	-28.90	peak	
2	*	2390.000	44.94	0.41	45.35	74.00	-28.65	peak	

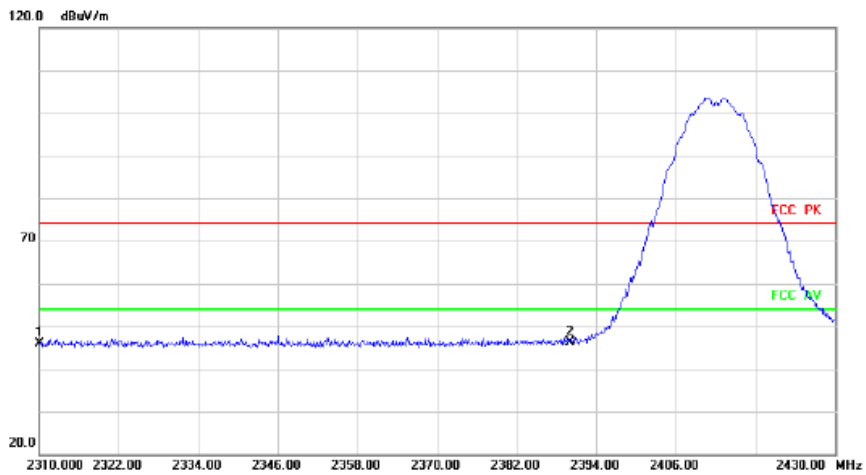
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	51.12	-1.88	49.24	74.00	-24.76	peak		

Radiated Emission

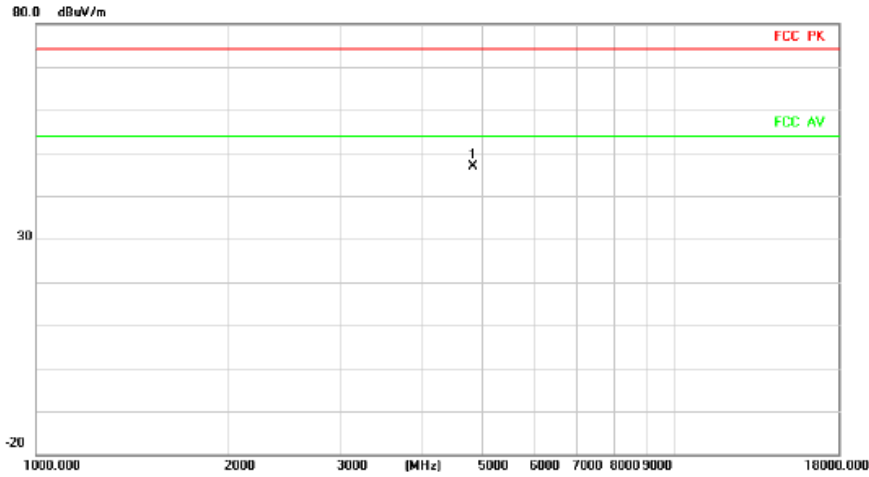


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	45.71	0.19	45.90	74.00	-28.10	peak		
2	*	2390.000	45.77	0.41	46.18	74.00	-27.82	peak		

Above 1G (1GHz~18GHz)	Test mode:11B	Test Channel:1	ANT 2
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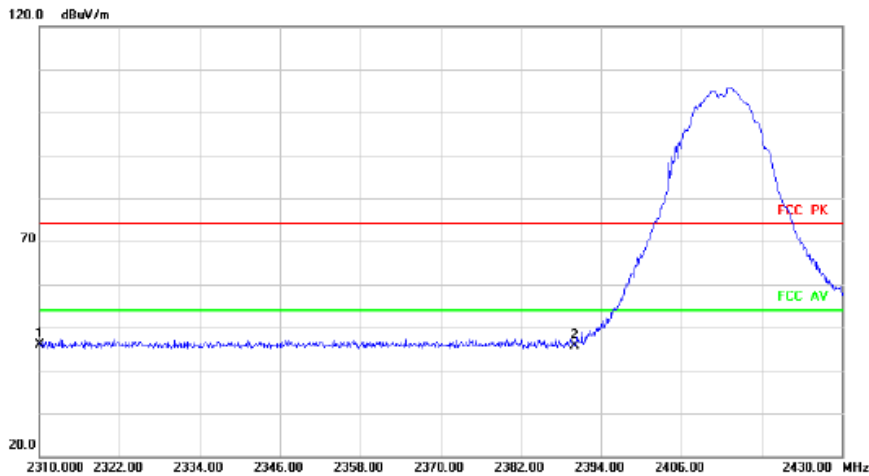
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	48.68	-1.88	46.80	74.00	-27.20	peak		

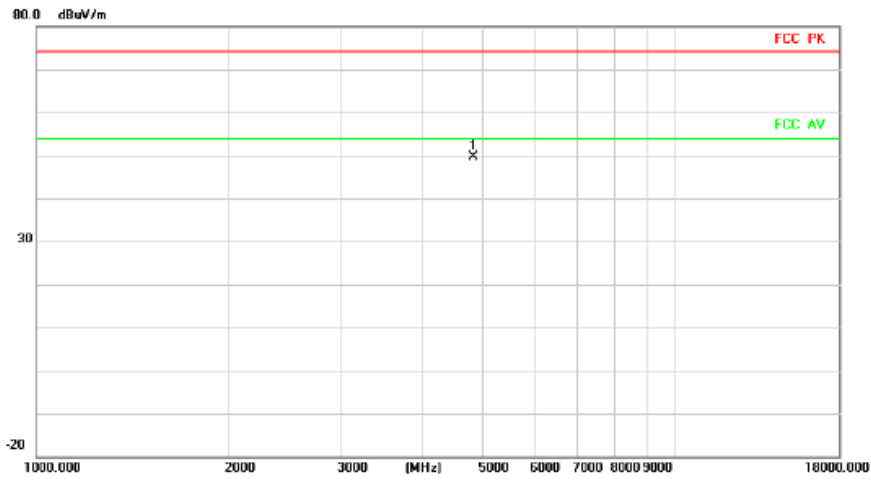
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2310.000	35.69	10.19	45.88	74.00	-28.12	peak		
2		2390.000	35.34	10.41	45.75	74.00	-28.25	peak		

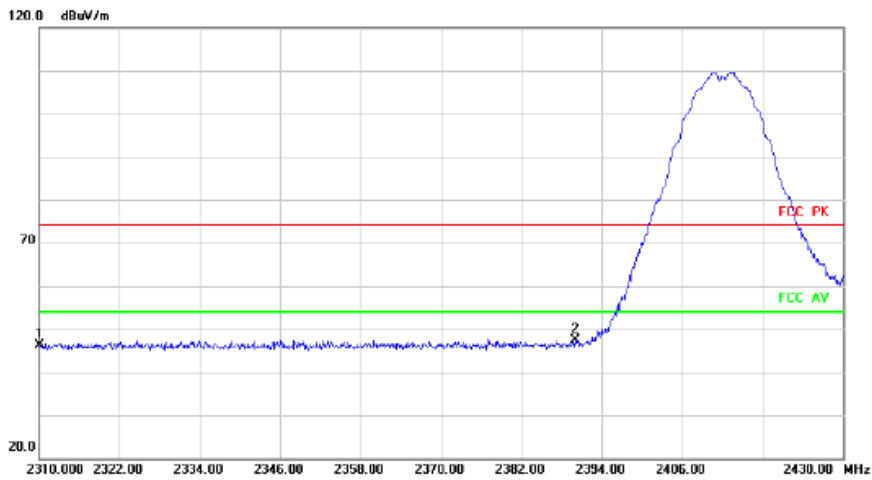
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	51.44	-1.88	49.56	74.00	-24.44	peak		

Radiated Emission

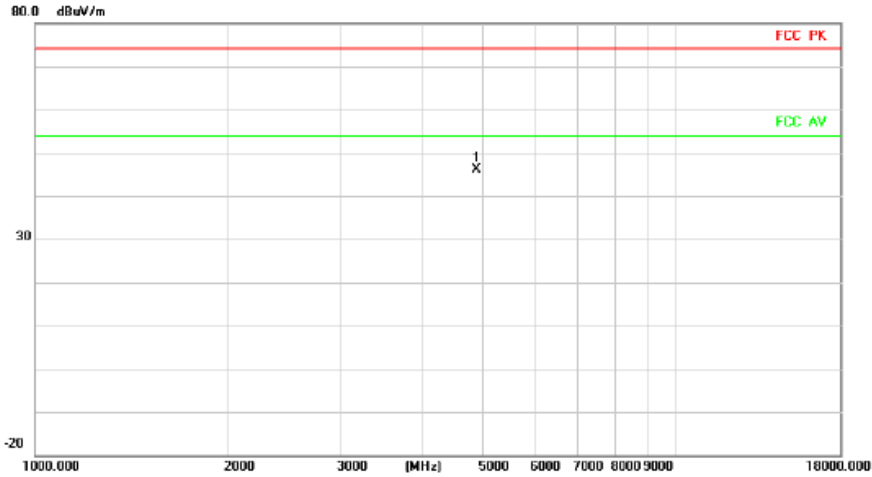


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	35.97	10.19	46.16	74.00	-27.84	peak		
2	*	2390.000	36.92	10.41	47.33	74.00	-26.67	peak		

Above 1G (1GHz~18GHz)	Test mode: 11B	Test Channel: 6	ANT 1
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VERTICAL

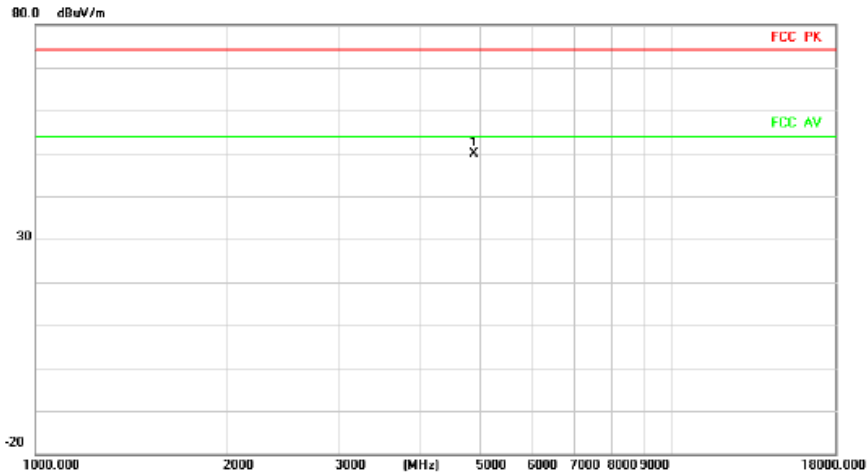
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	47.70	-1.59	46.11	74.00	-27.89	peak	

HORIZONTAL

Radiated Emission

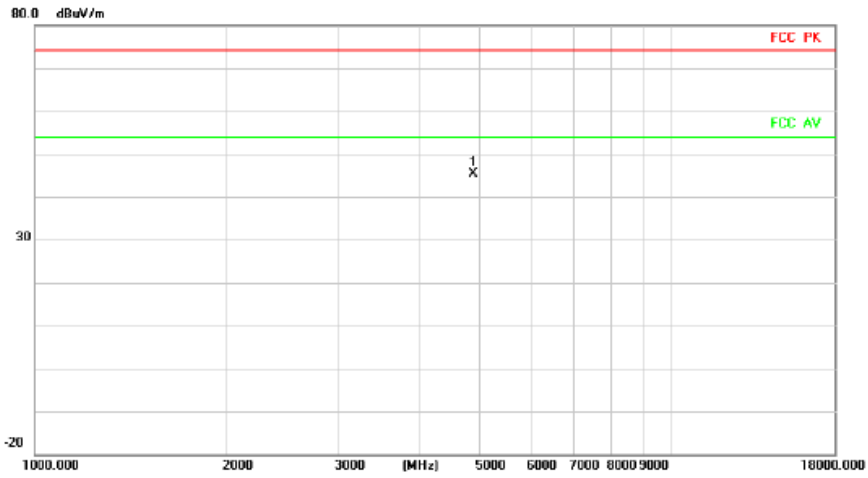


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	51.58	-1.59	49.99	74.00	-24.01	peak	

Above 1G (1GHz~18GHz)	Test mode: 11B	Test Channel: 6	ANT 2
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VERTICAL

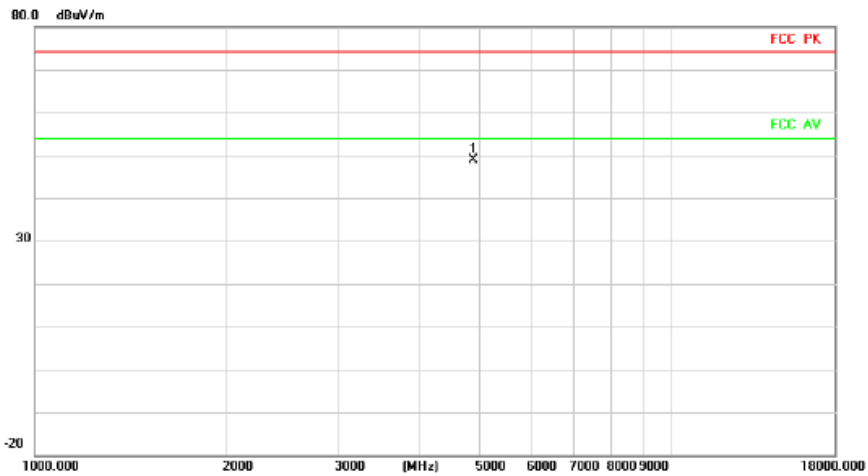
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	47.00	-1.59	45.41	74.00	-28.59	peak	

HORIZONTAL

Radiated Emission

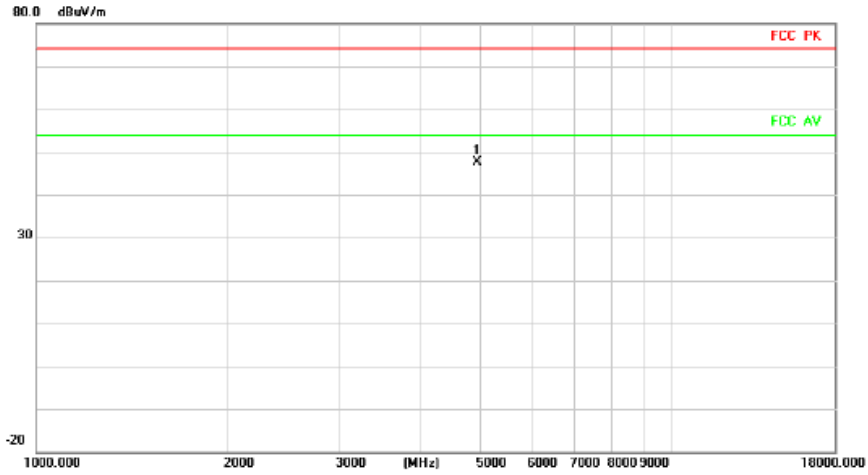


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	50.38	-1.59	48.79	74.00	-25.21	peak	

Above 1G (1GHz~18GHz)	Test mode: 11B	Test Channel:11	ANT 1
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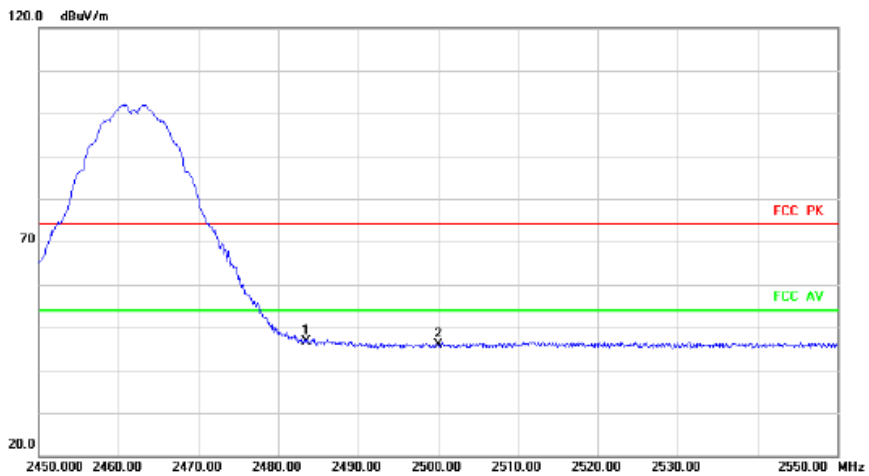
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	49.00	-1.29	47.71	74.00	-26.29	peak		

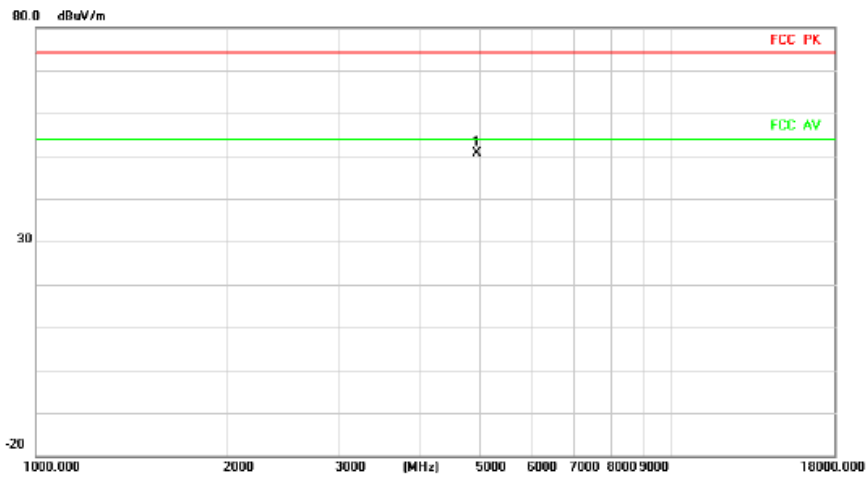
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	45.48	1.09	46.57	74.00	-27.43	peak		
2		2500.000	44.73	1.22	45.95	74.00	-28.05	peak		

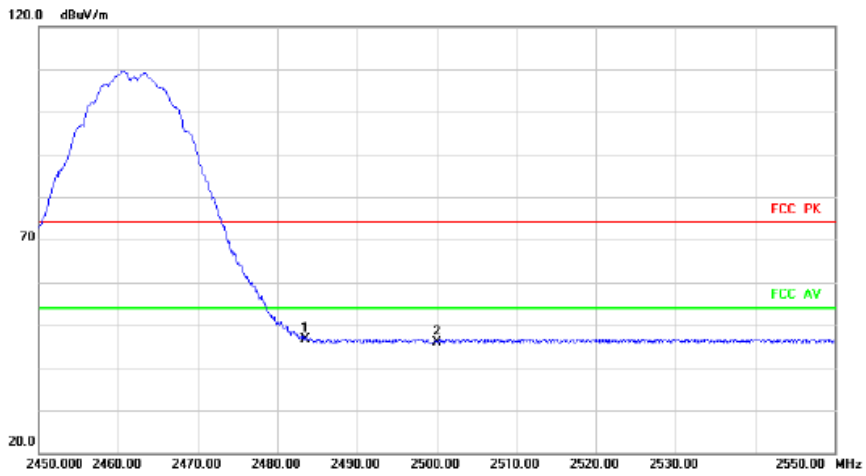
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	52.02	-1.29	50.73	74.00	-23.27	peak	

Radiated Emission

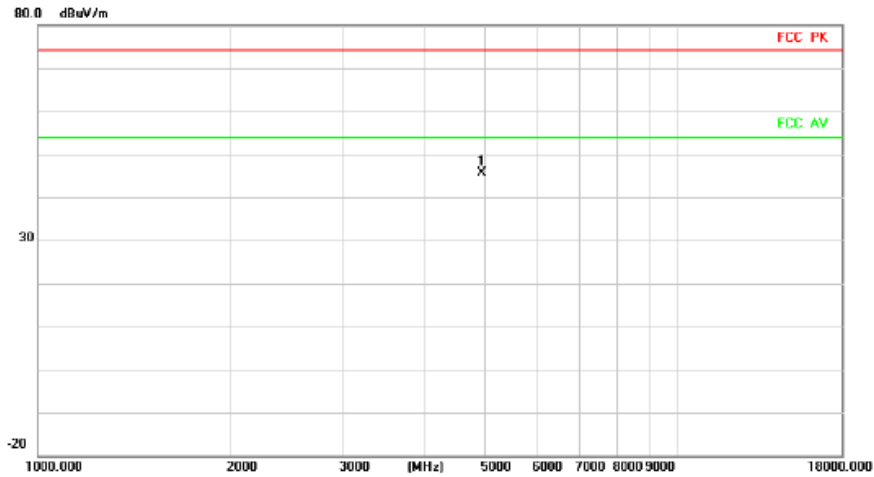


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	45.62	1.09	46.71	74.00	-27.29	peak	
2		2500.000	44.71	1.22	45.93	74.00	-28.07	peak	

Above 1G (1GHz~18GHz)	Test mode: 11B	Test Channel:11	ANT 2
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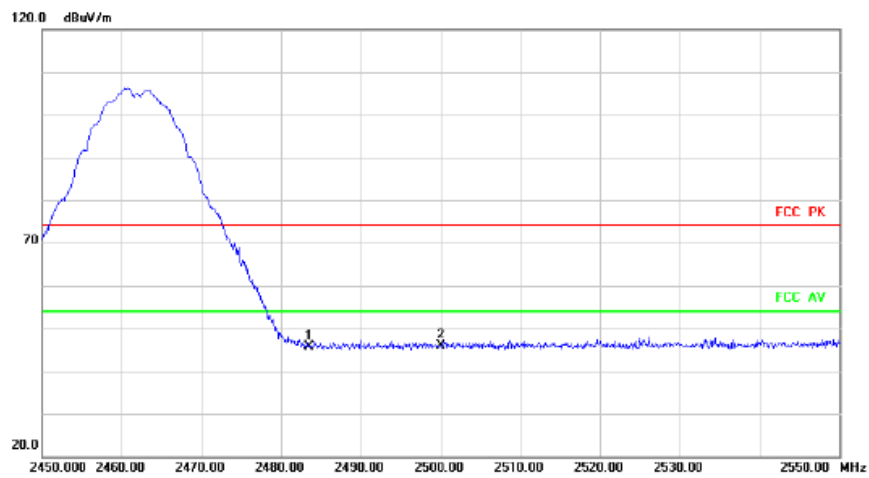
VERTICAL

Radiated Emission



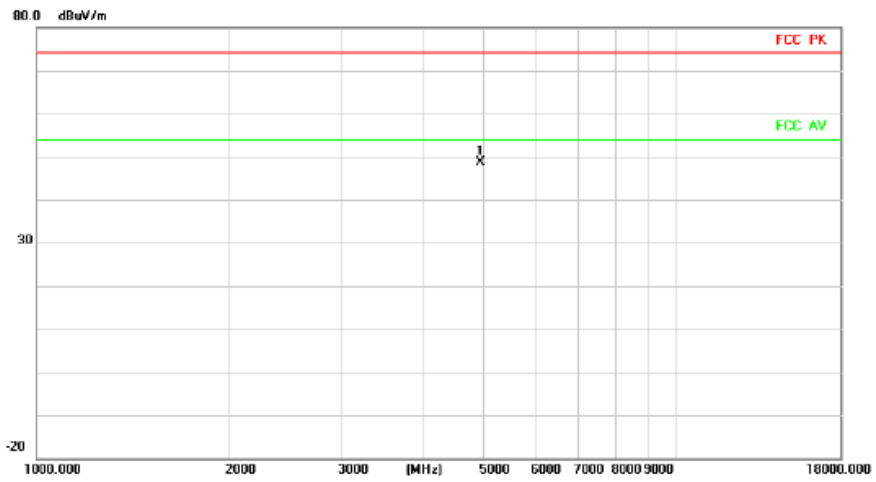
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	46.83	-1.29	45.54	74.00	-28.46	peak		

Radiated Emission



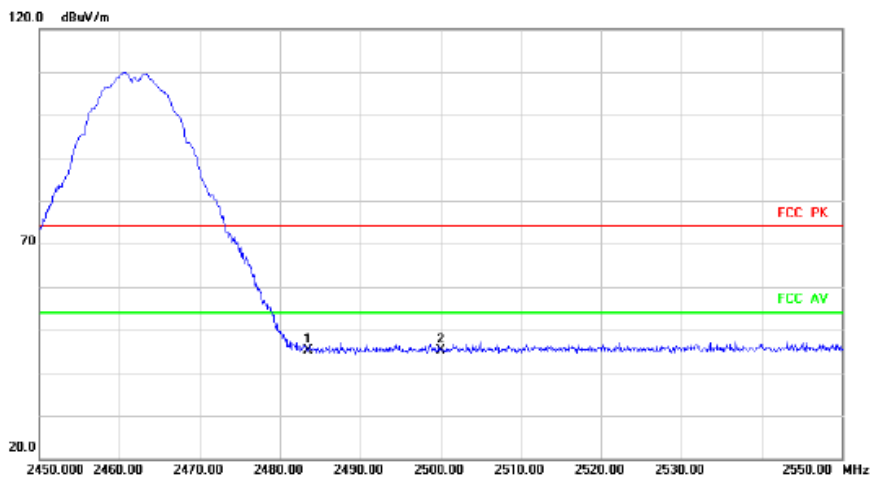
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2483.500	34.54	11.09	45.63	74.00	-28.37	peak		
2	*	2500.000	34.58	11.22	45.80	74.00	-28.20	peak		

HORIZONTALA Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	49.98	-1.29	48.69	74.00	-25.31	peak		

Radiated Emission

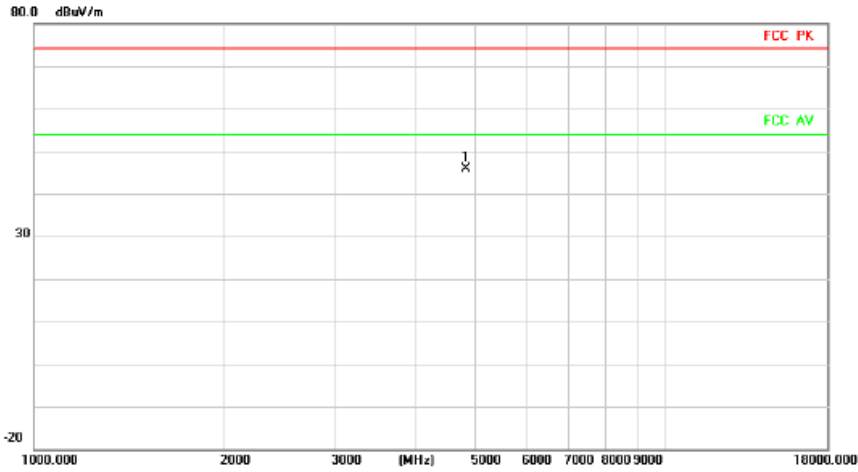


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	34.11	11.09	45.20	74.00	-28.80	peak		
2		2500.000	33.95	11.22	45.17	74.00	-28.83	peak		

Above 1G (1GHz~18GHz)	Test mode:11G	Test Channel:1	ANTO
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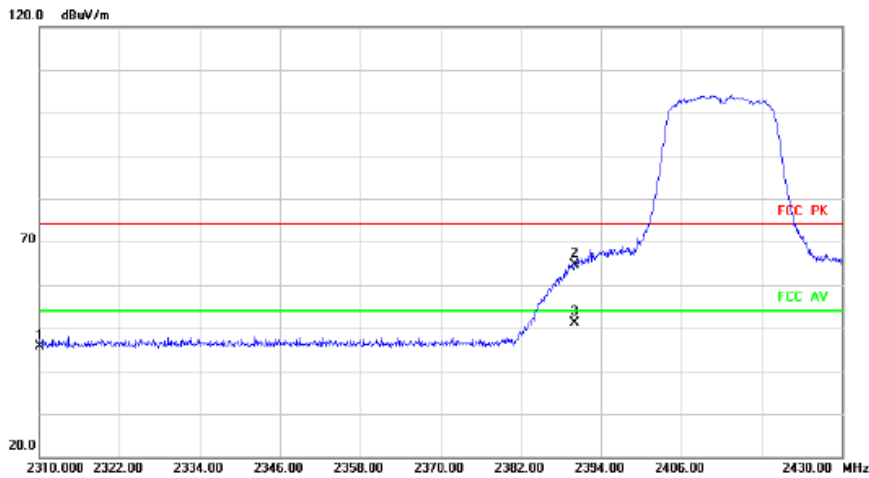
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	47.71	-1.88	45.83	74.00	-28.17	peak	

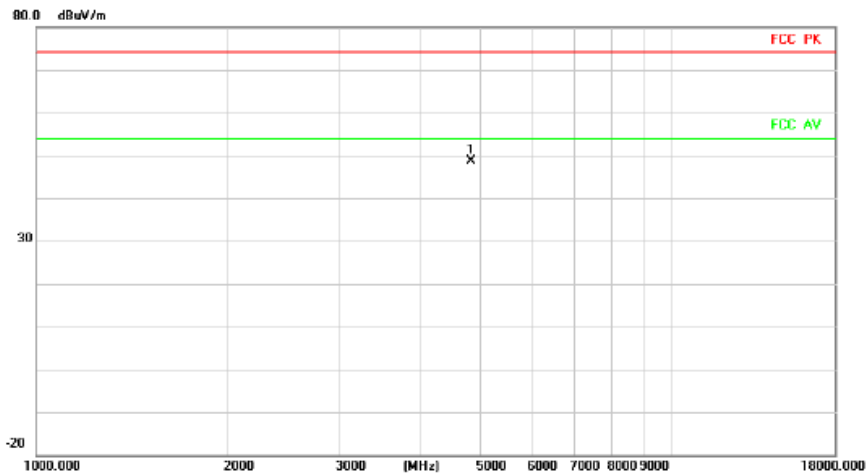
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	35.47	10.19	45.66	74.00	-28.34	peak	
2		2390.000	54.30	10.41	64.71	74.00	-9.29	peak	
3	*	2390.000	40.73	10.41	51.14	54.00	-2.86	AVG	

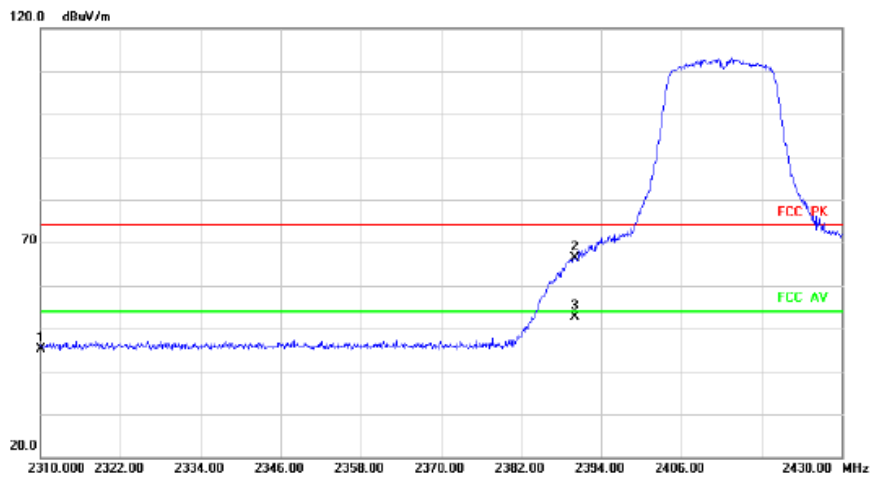
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	50.62	-1.88	48.74	74.00	-25.26	peak	

Radiated Emission

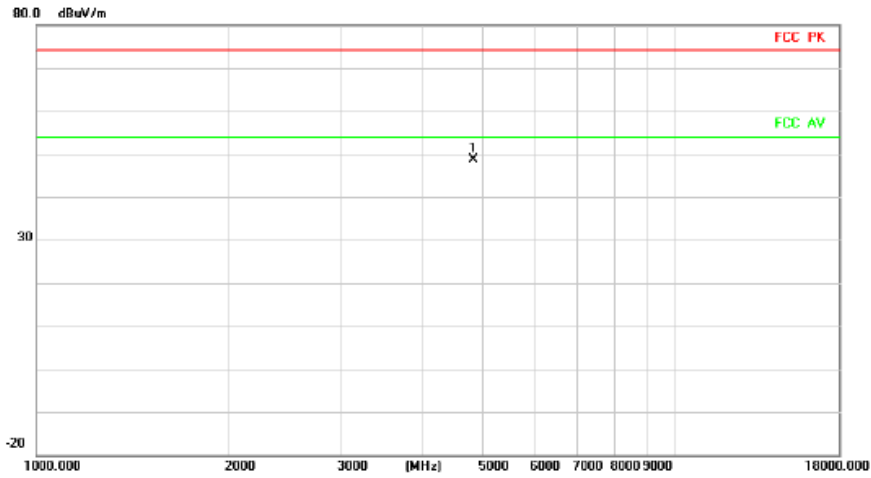


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	34.97	10.19	45.16	74.00	-28.84	peak	
2		2390.000	55.86	10.41	66.27	74.00	-7.73	peak	
3	*	2390.000	42.27	10.41	52.68	54.00	-1.32	AVG	

Above 1G (1GHz~18GHz)	Test mode:11G	Test Channel:1	ANT1
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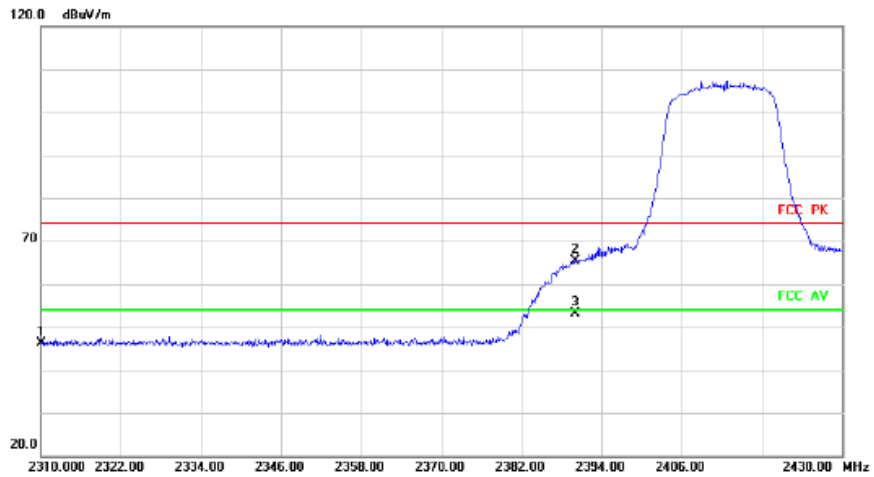
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	50.62	-1.88	48.74	74.00	-25.26	peak	

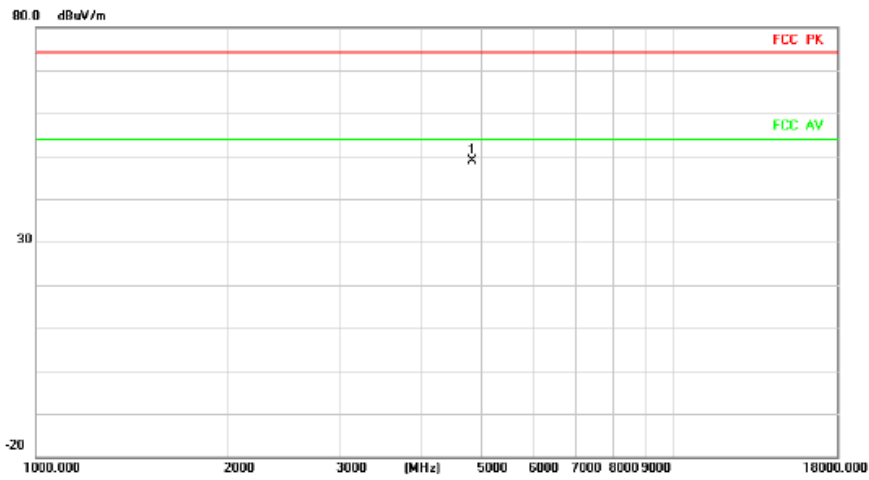
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	35.90	10.19	46.09	74.00	-27.91	peak	
2		2390.000	55.01	10.41	65.42	74.00	-8.58	peak	
3	*	2390.000	42.63	10.41	53.04	54.00	-0.96	AVG	

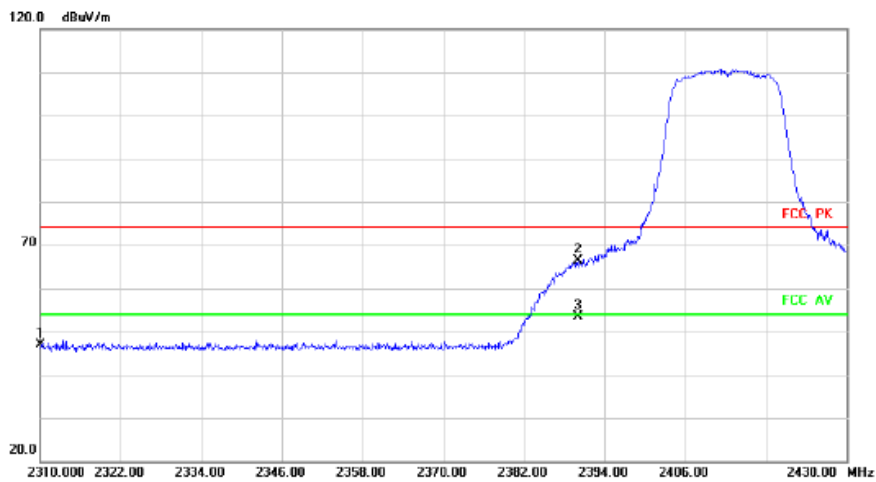
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	50.86	-1.88	48.98	74.00	-25.02	peak		

Radiated Emission

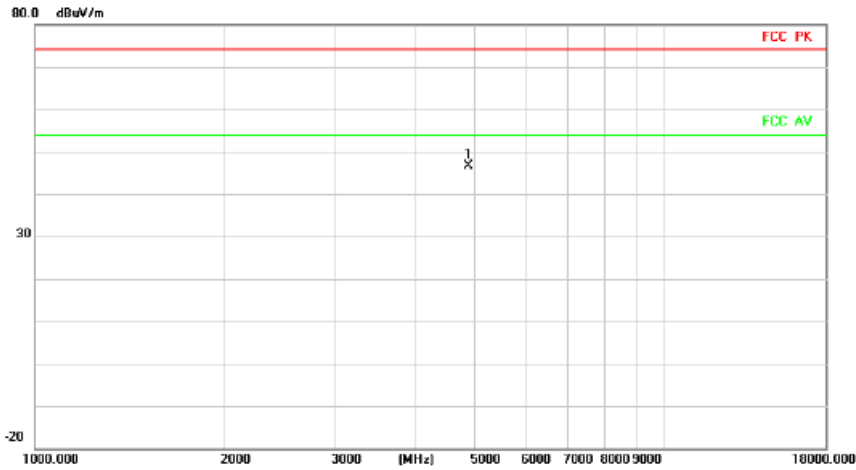


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	36.72	10.19	46.91	74.00	-27.09	peak		
2		2390.000	56.02	10.41	66.43	74.00	-7.57	peak		
3	*	2390.000	42.87	10.41	53.28	54.00	-0.72	AVG		

Above 1G (1GHz~18GHz)	Test mode: 11G	Test Channel: 6	ANT 1
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VERTICAL

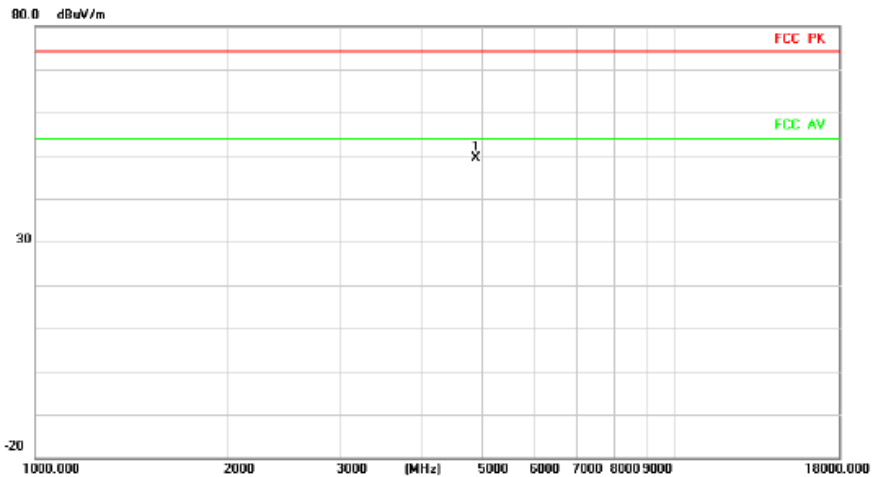
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	48.20	-1.59	46.61	74.00	-27.39	peak	

HORIZONTAL

Radiated Emission

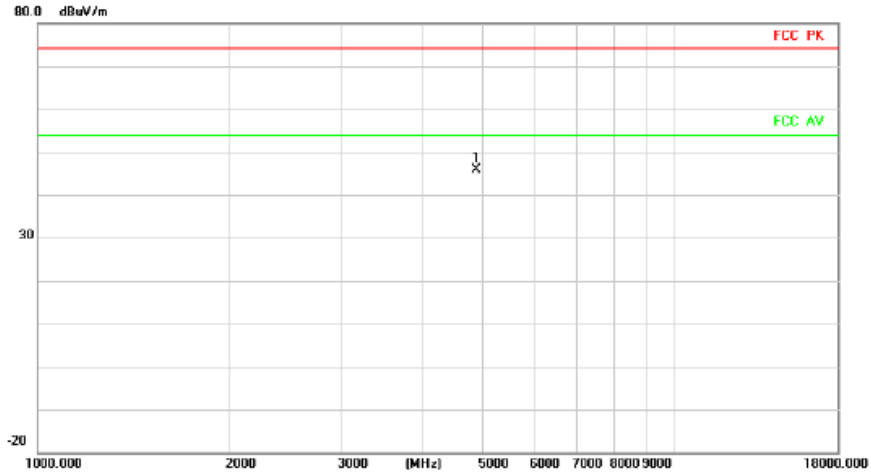


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	50.91	-1.59	49.32	74.00	-24.68	peak	

Above 1G (1GHz~18GHz)	Test mode: 11G	Test Channel: 6	ANT 2
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VERTICAL

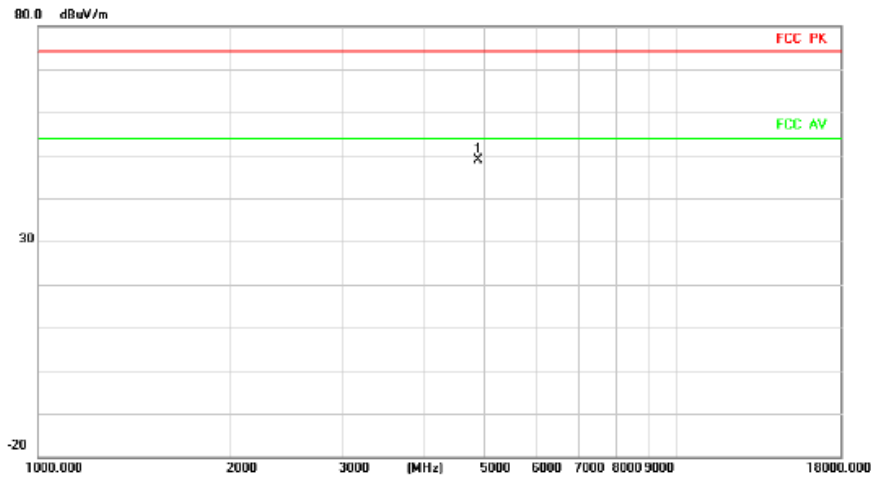
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4874.000	47.42	-1.59	45.83	74.00	-28.17	peak		

HORIZONTAL

Radiated Emission

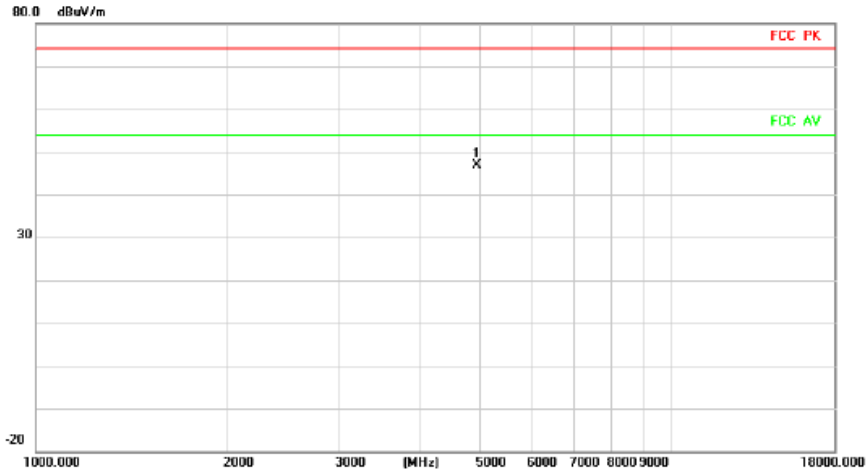


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4874.000	50.54	-1.59	48.95	74.00	-25.05	peak		

Above 1G (1GHz~18GHz)	Test mode: 11G	Test Channel:11	ANT 1
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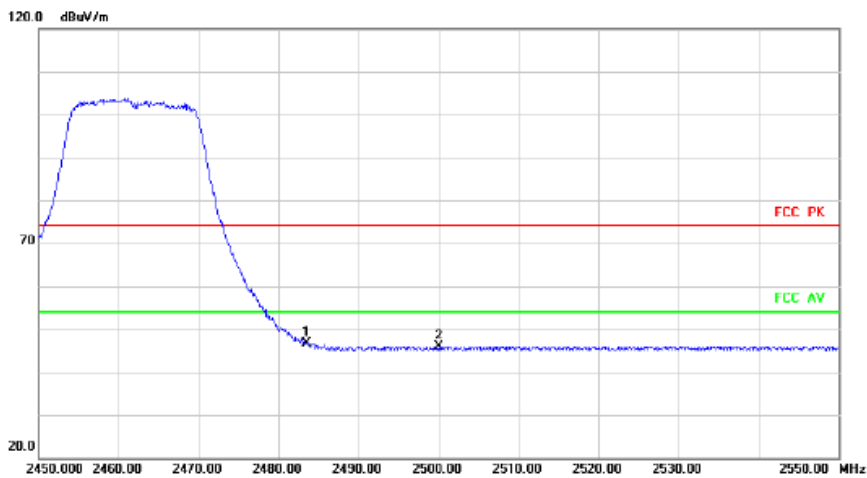
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	48.09	-1.29	46.80	74.00	-27.20	peak	

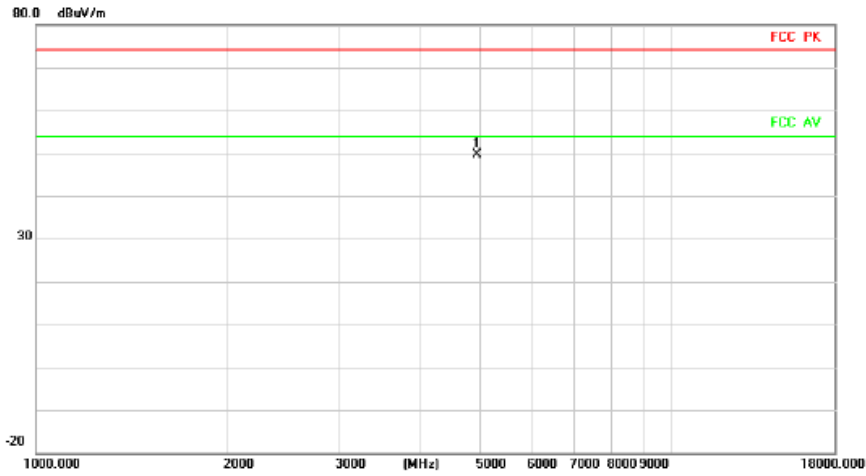
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	45.43	1.09	46.52	74.00	-27.48	peak	
2		2500.000	44.75	1.22	45.97	74.00	-28.03	peak	

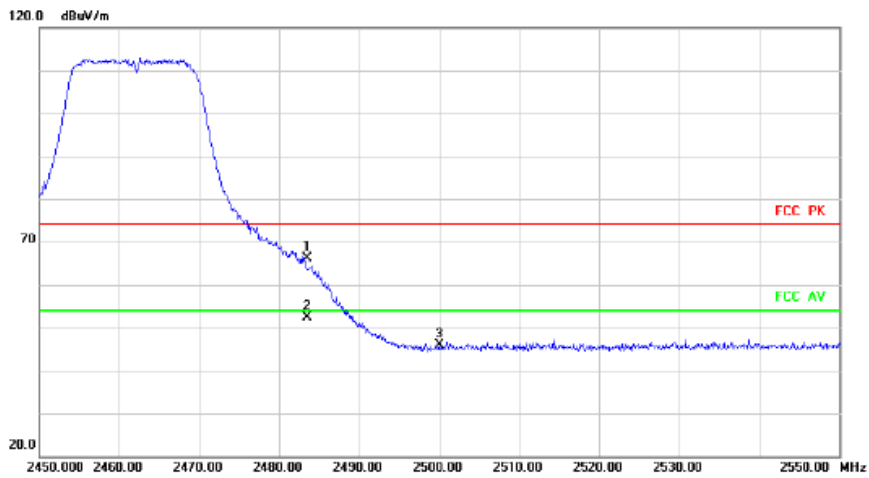
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	50.82	-1.29	49.53	74.00	-24.47	peak	

Radiated Emission

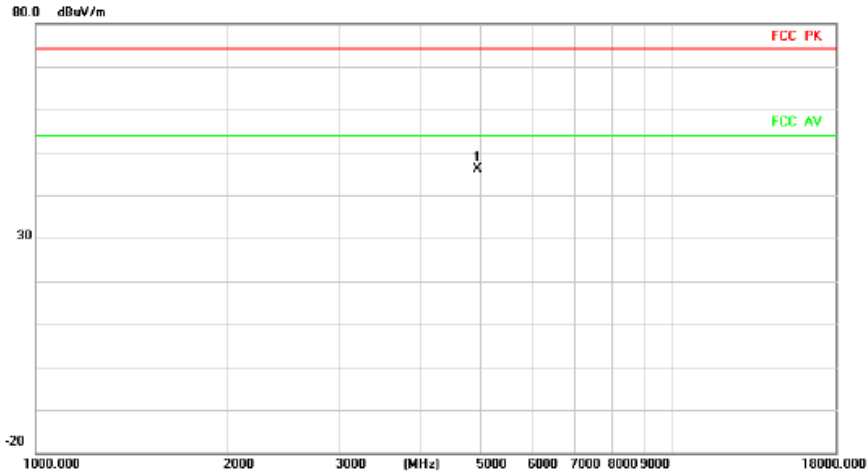


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	55.13	11.09	66.22	74.00	-7.78	peak	
2	*	2483.500	41.35	11.09	52.44	54.00	-1.56	AVG	
3		2500.000	34.62	11.22	45.84	74.00	-28.16	peak	

Above 1G (1GHz~18GHz)	Test mode: 11G	Test Channel:11	ANT 2
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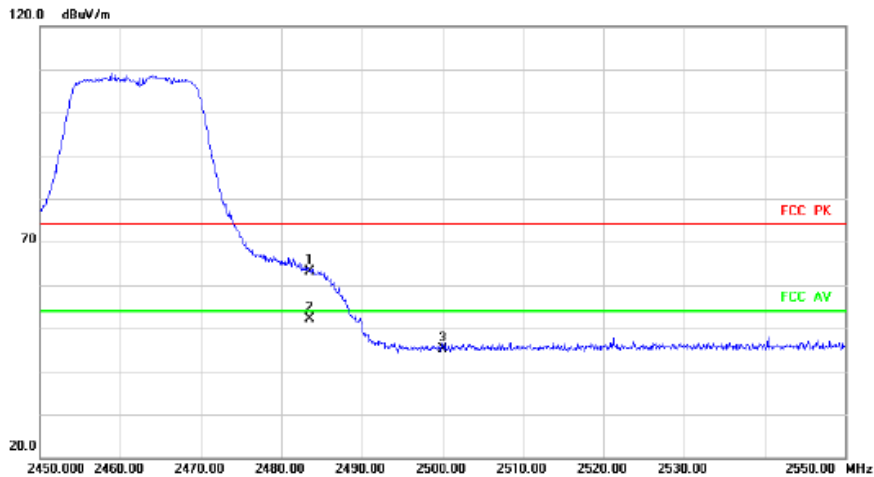
VERTICAL

Radiated Emission



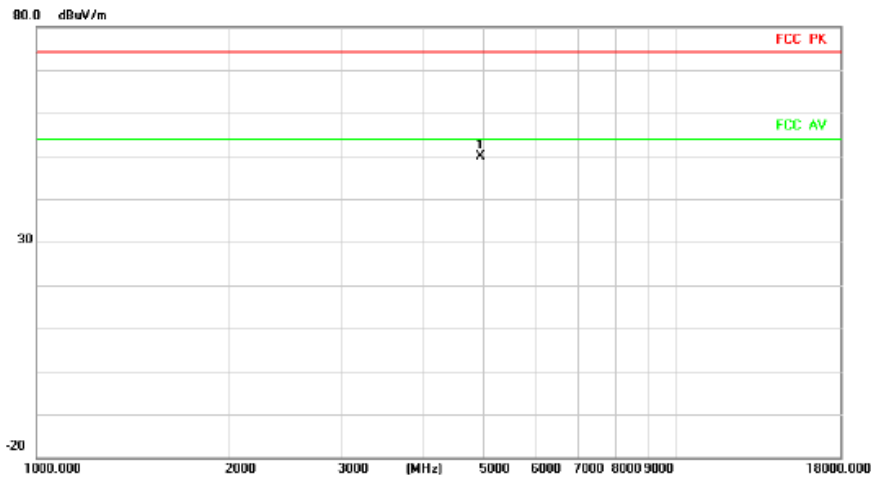
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	47.44	-1.29	46.15	74.00	-27.85	peak		

Radiated Emission



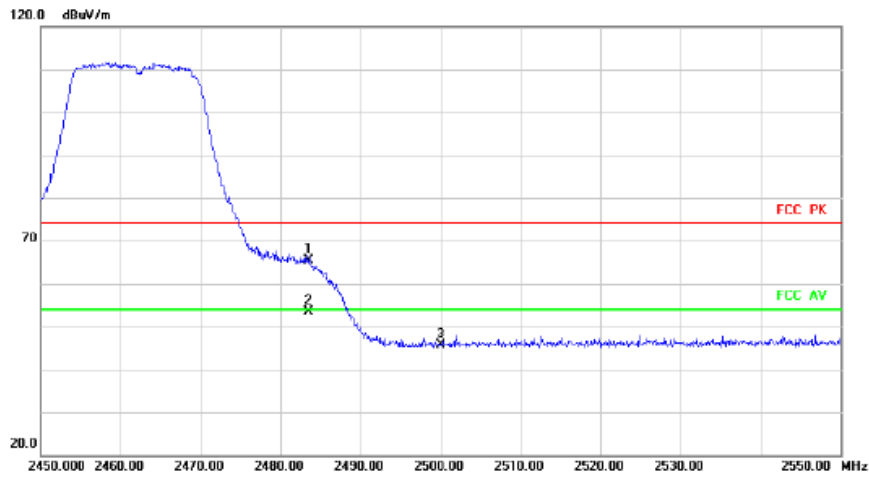
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2483.500	52.16	11.09	63.25	74.00	-10.75	peak		
2	*	2483.500	41.04	11.09	52.13	54.00	-1.87	AVG		
3		2500.000	33.98	11.22	45.20	74.00	-28.80	peak		

HORIZONTALA Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	51.09	-1.29	49.80	74.00	-24.20	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	54.35	11.09	65.44	74.00	-8.56	peak	
2	*	2483.500	42.33	11.09	53.42	54.00	-0.58	AVG	
3		2500.000	34.49	11.22	45.71	74.00	-28.29	peak	

Above 1G (1GHz~18GHz)

Test mode: 11N20MIMO

Test Channel:1

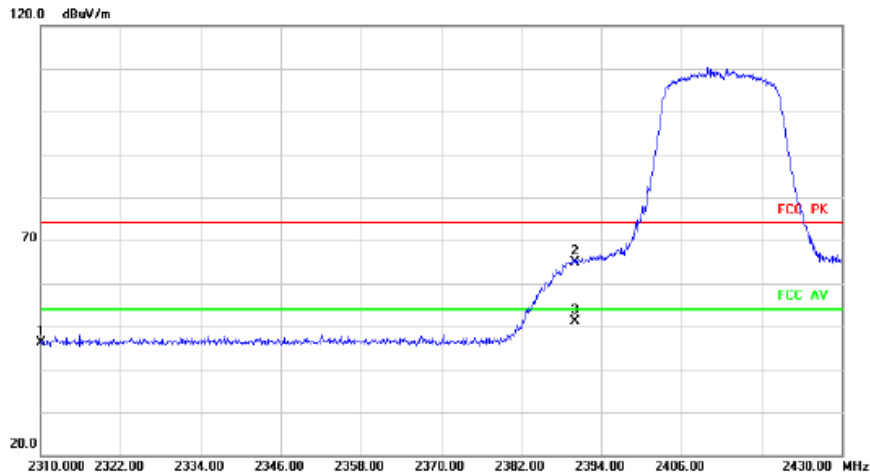
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	48.62	-1.88	46.74	74.00	-27.26			peak

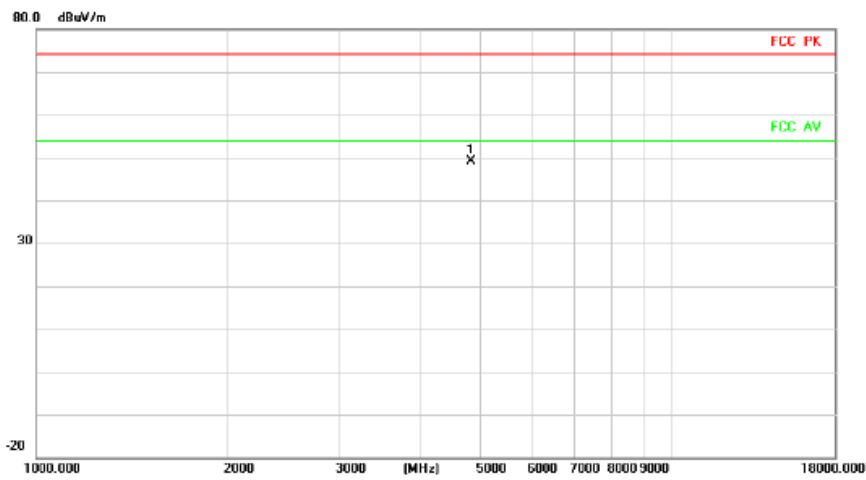
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	35.92	10.19	46.11	74.00	-27.89			peak
2		2390.000	54.36	10.41	64.77	74.00	-9.23			peak
3	*	2390.000	40.82	10.41	51.23	54.00	-2.77			AVG

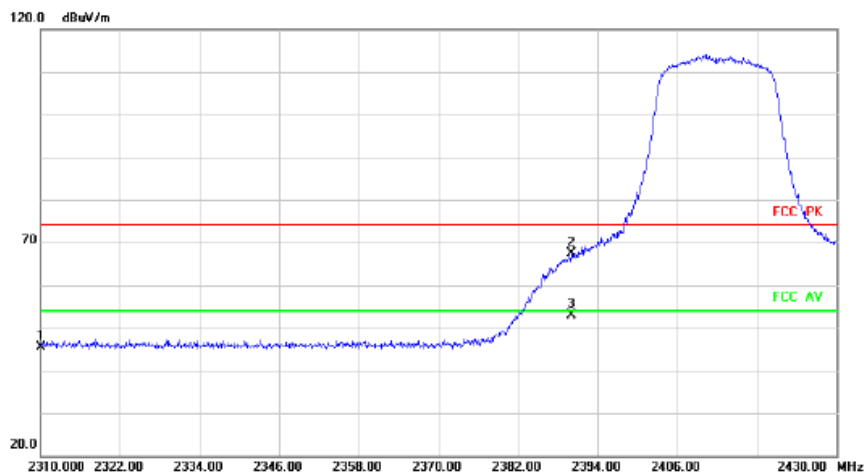
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	51.02	-1.88	49.14	74.00	-24.86	peak		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	35.21	10.19	45.40	74.00	-28.60	peak		
2		2390.000	56.88	10.41	67.29	74.00	-6.71	peak		
3	*	2390.000	42.56	10.41	52.97	54.00	-1.03	AVG		

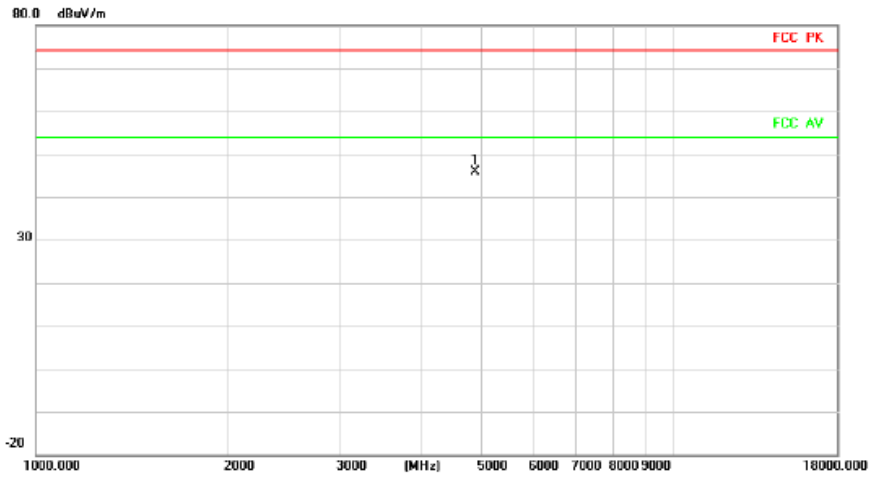
Above 1G (1GHz~18GHz)

Test mode: 11N20MIMO

Test Channel: 6

VERTICAL

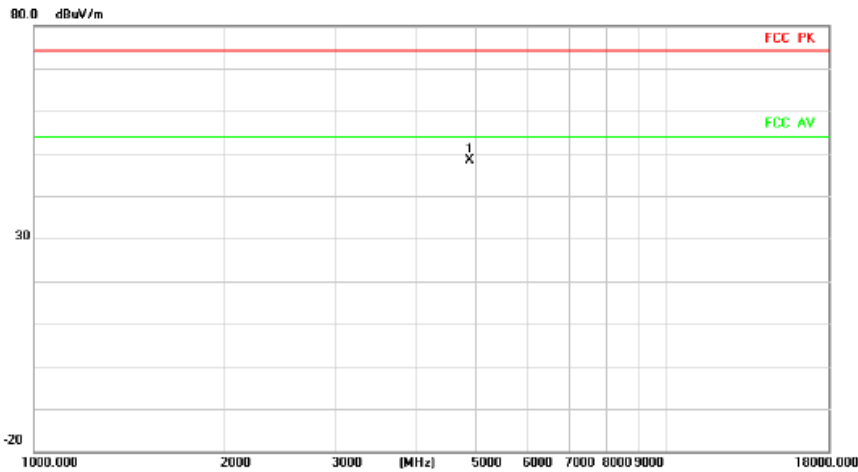
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	
1	*	4874.000	47.48	-1.59	45.89	74.00	-28.11	peak		

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	
1	*	4874.000	49.88	-1.59	48.29	74.00	-25.71	peak		

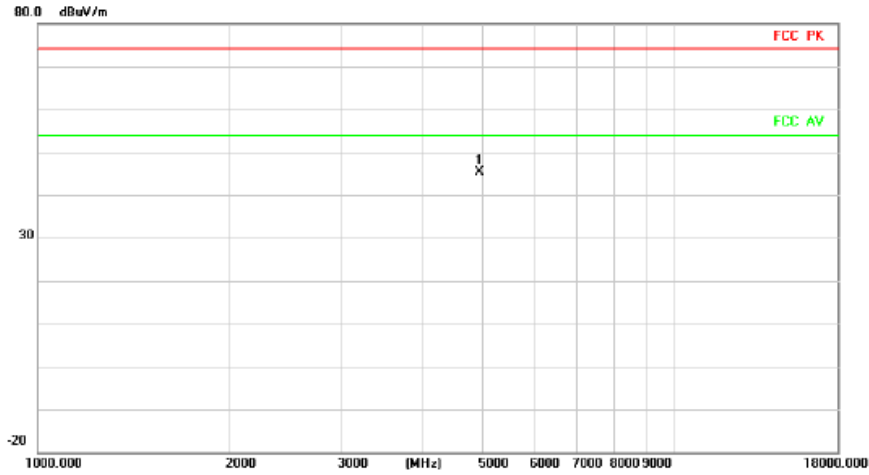
Above 1G (1GHz~18GHz)

Test mode: 11N20MIMO

Test Channel:11

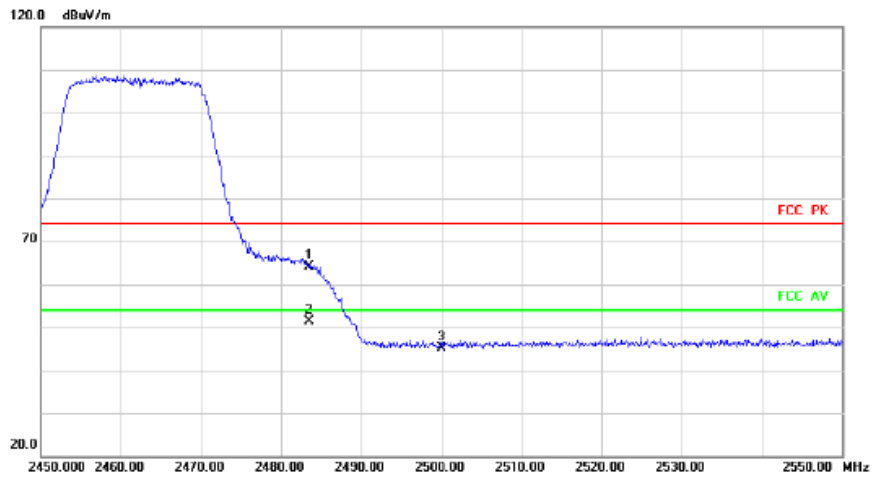
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	46.56	-1.29	45.27	74.00	-28.73	peak		

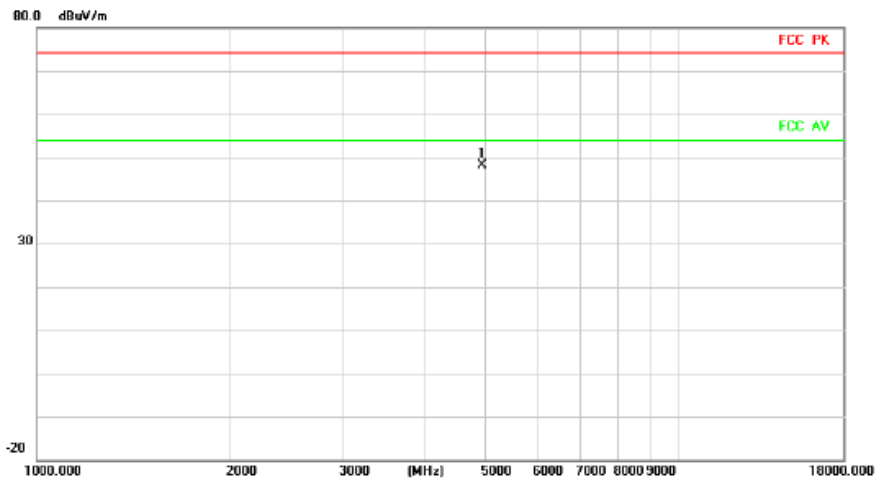
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2483.500	53.15	11.09	64.24	74.00	-9.76	peak		
2	*	2483.500	40.34	11.09	51.43	54.00	-2.57	AVG		
3		2500.000	33.96	11.22	45.18	74.00	-28.82	peak		

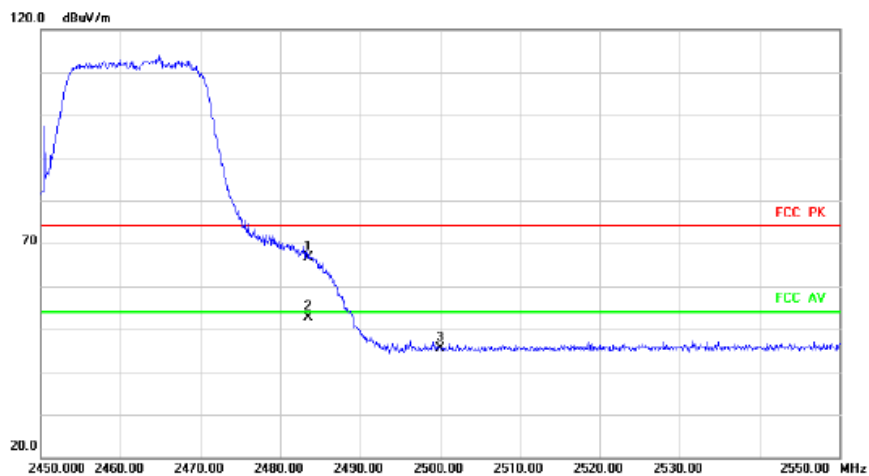
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	49.49	-1.29	48.20	74.00	-25.80	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	55.51	11.09	66.60	74.00	-7.40	peak	
2	*	2483.500	41.59	11.09	52.68	54.00	-1.32	AVG	
3		2500.000	34.07	11.22	45.29	74.00	-28.71	peak	

Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel:3

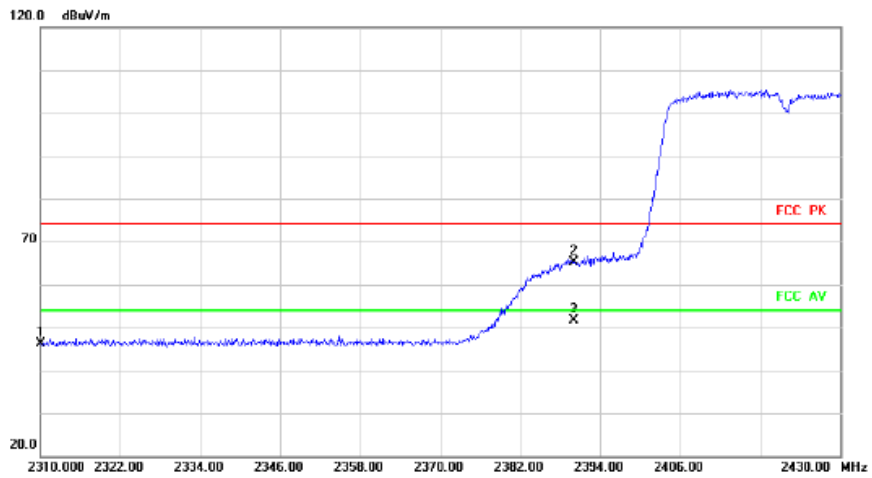
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4844.000	47.49	-1.77	45.72	74.00	-28.28	peak	

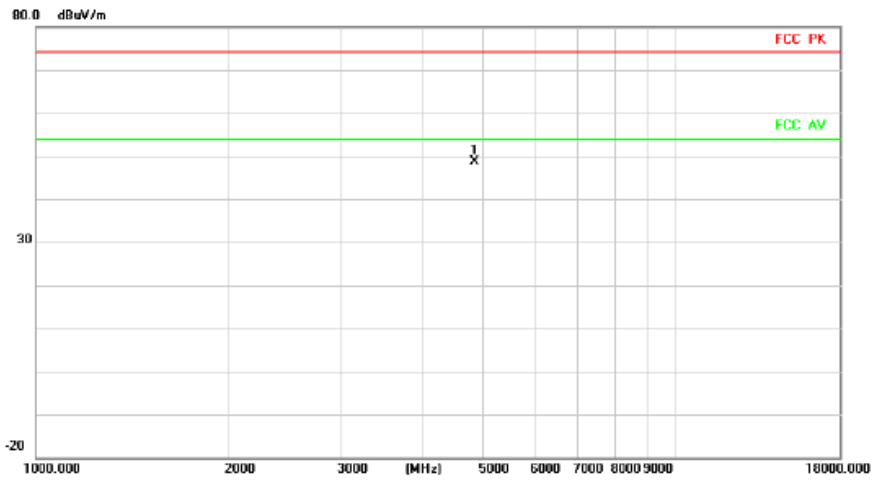
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	35.99	10.19	46.18	74.00	-27.82	peak	
2		2390.000	54.67	10.41	65.08	74.00	-8.92	peak	
3	*	2390.000	41.34	10.41	51.75	54.00	-2.25	AVG	

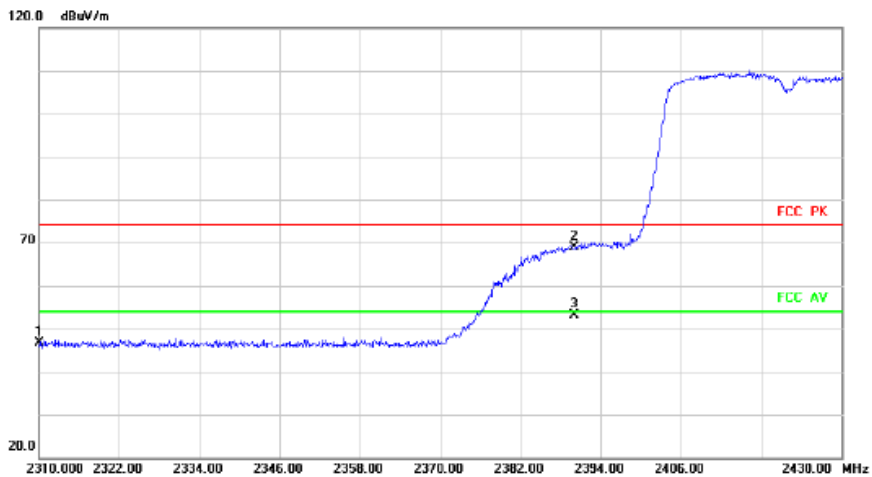
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4844.000	50.39	-1.77	48.62	74.00	-25.38	peak		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	36.47	10.19	46.66	74.00	-27.34	peak		
2		2390.000	58.59	10.41	69.00	74.00	-5.00	peak		
3	*	2390.000	42.74	10.41	53.15	54.00	-0.85	AVG		

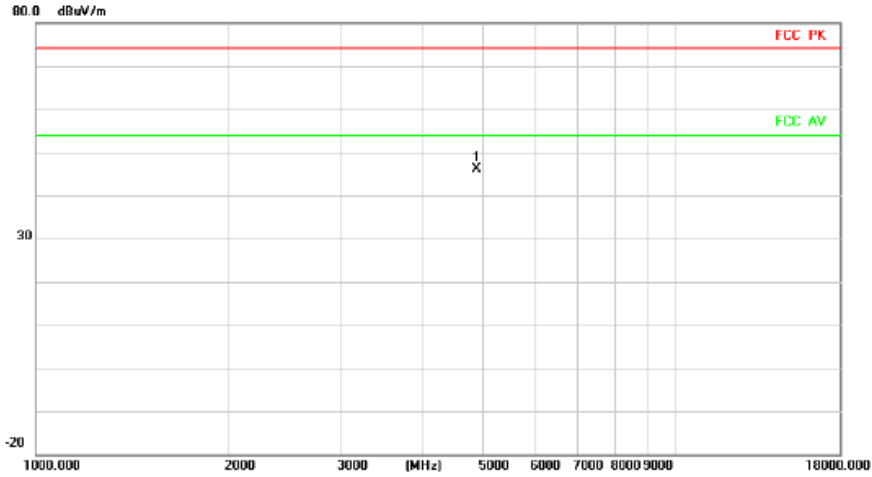
Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel: 6

VERTICAL

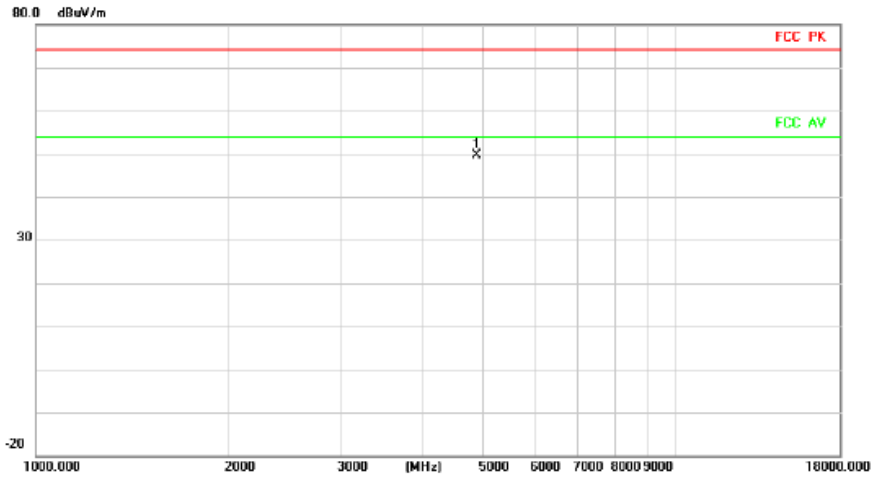
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	47.72	-1.59	46.13	74.00	-27.87	peak	

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	51.29	-1.59	49.70	74.00	-24.30	peak	

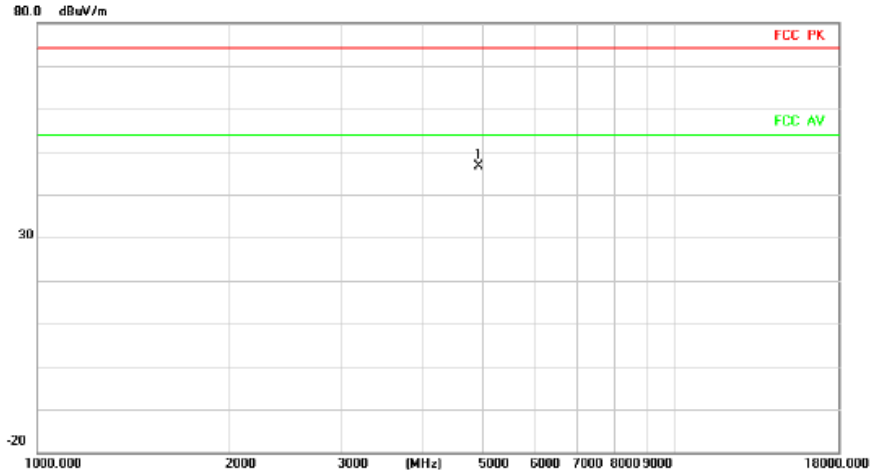
Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel:9

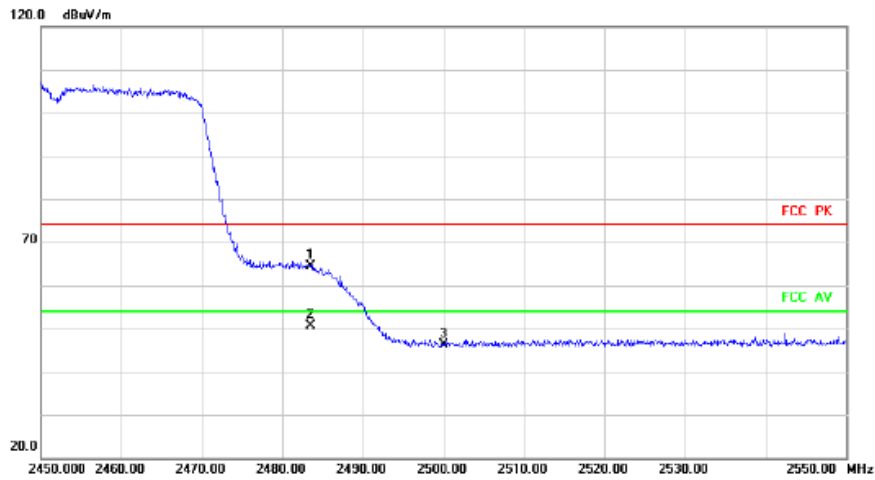
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4904.000	48.06	-1.41	46.65	74.00	-27.35	peak		Comment

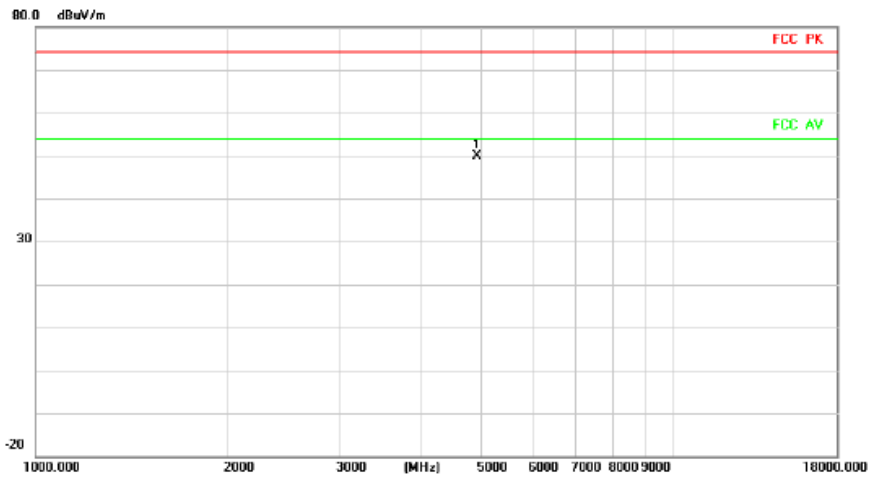
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		2483.500	53.38	11.09	64.47	74.00	-9.53	peak		
2	*	2483.500	39.64	11.09	50.73	54.00	-3.27	AVG		
3		2500.000	35.03	11.22	46.25	74.00	-27.75	peak		

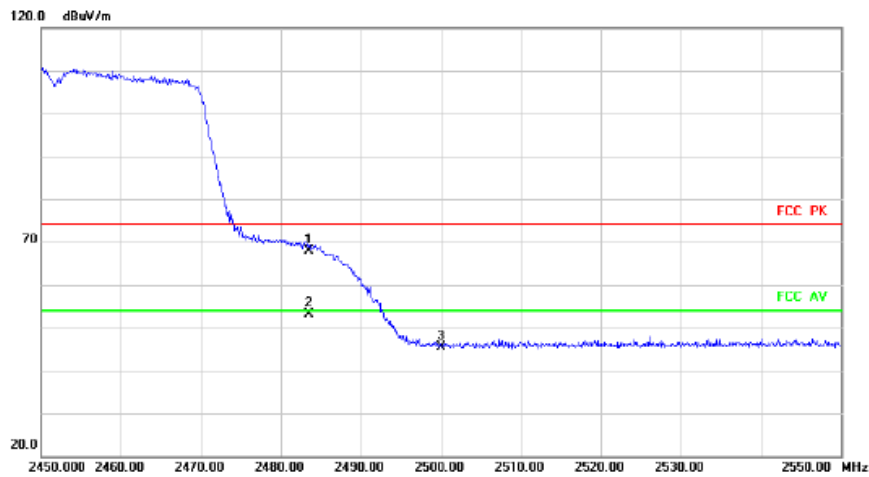
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4904.000	51.36	-1.41	49.95	74.00	-24.05	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	56.88	11.09	67.97	74.00	-6.03	peak	
2	*	2483.500	42.15	11.09	53.24	54.00	-0.76	AVG	
3		2500.000	34.23	11.22	45.45	74.00	-28.55	peak	

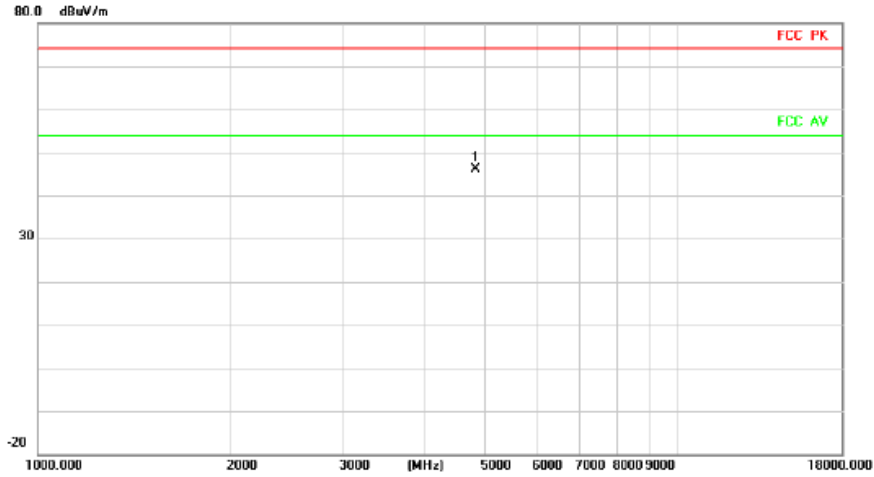
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO

Test Channel:1

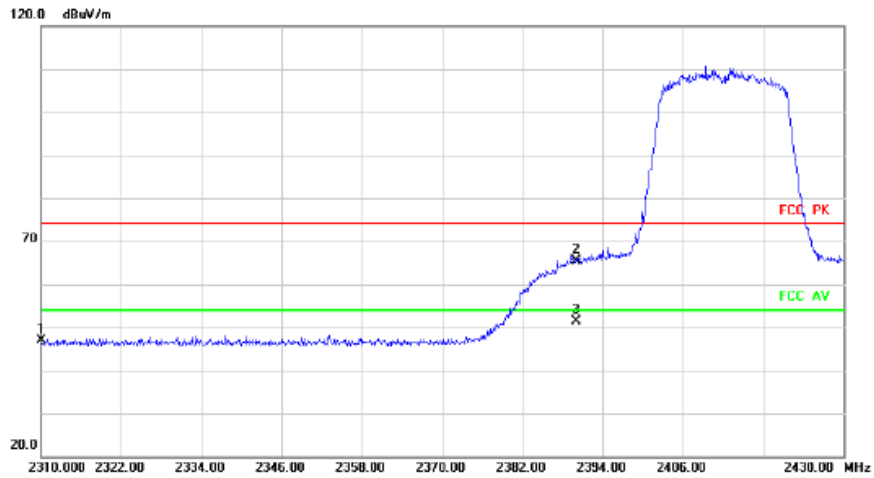
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	47.89	-1.88	46.01	74.00	-27.99	peak	

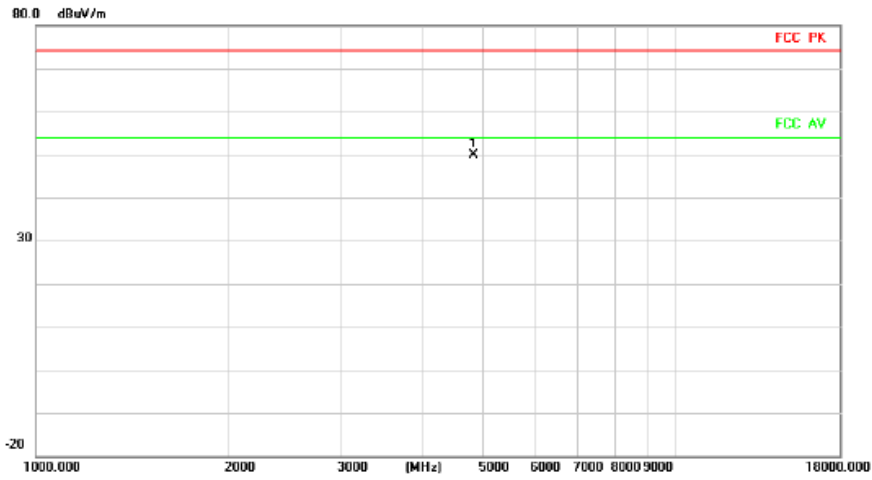
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	36.68	10.19	46.87	74.00	-27.13	peak	
2		2390.000	54.85	10.41	65.26	74.00	-8.74	peak	
3	*	2390.000	40.86	10.41	51.27	54.00	-2.73	AVG	

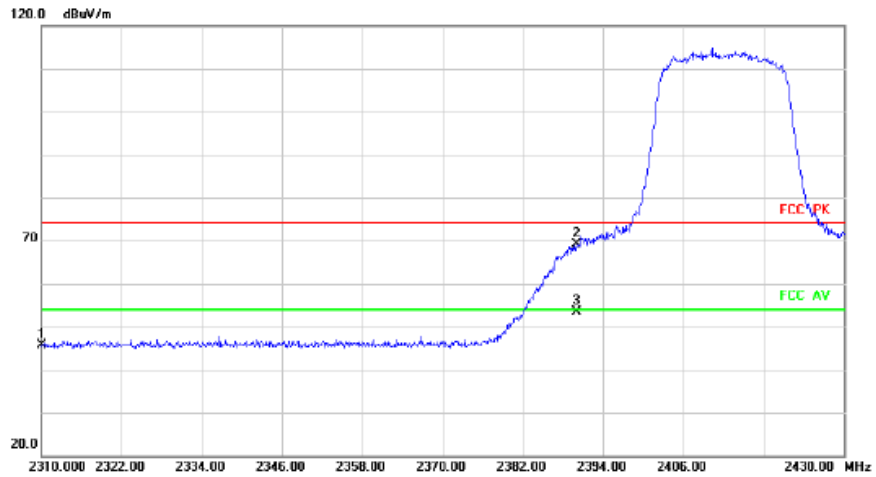
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	51.82	-1.88	49.94	74.00	-24.06	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	35.55	10.19	45.74	74.00	-28.26	peak	
2		2390.000	58.70	10.41	69.11	74.00	-4.89	peak	
3	*	2390.000	42.93	10.41	53.34	54.00	-0.66	AVG	

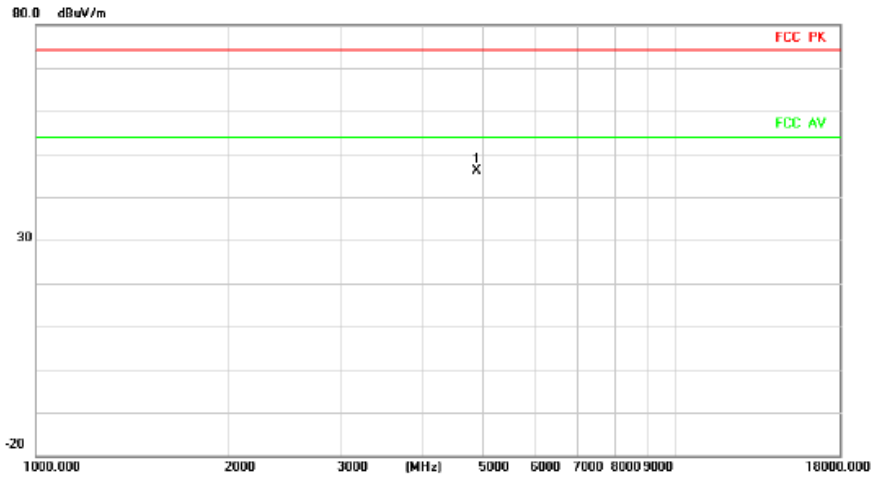
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO

Test Channel: 6

VERTICAL

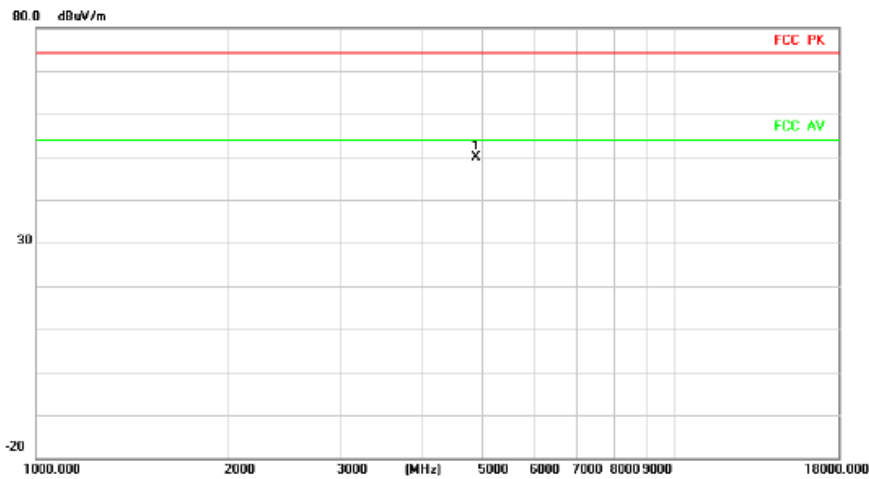
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	47.70	-1.59	46.11	74.00	-27.89	peak	

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	51.52	-1.59	49.93	74.00	-24.07	peak	

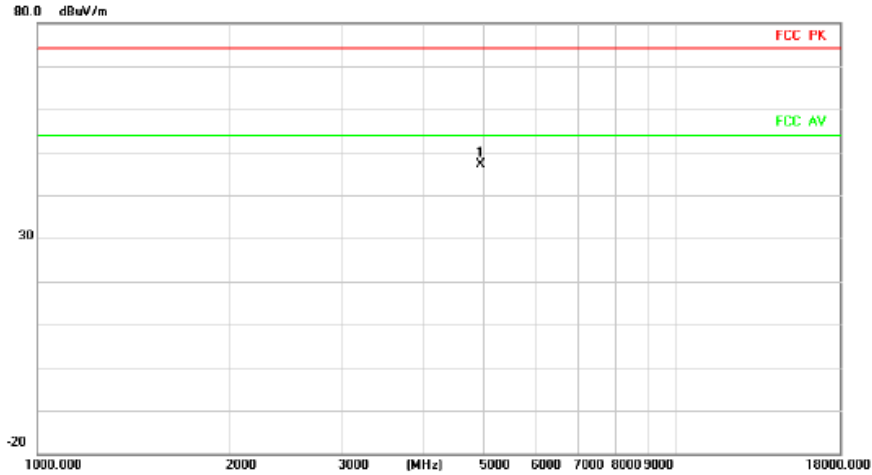
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO

Test Channel:11

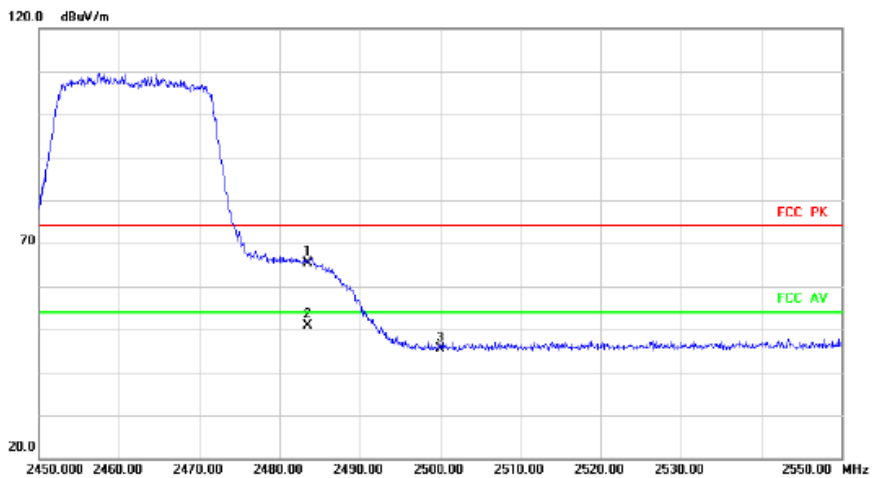
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	48.34	-1.29	47.05	74.00	-26.95	peak		

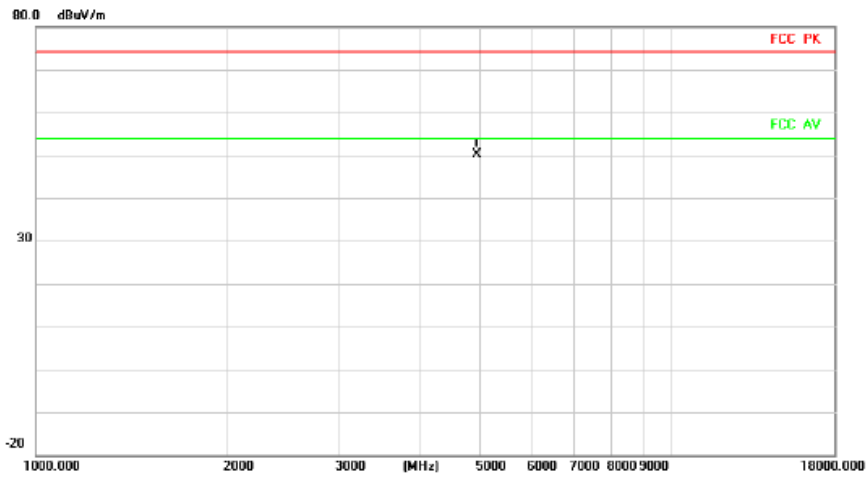
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2483.500	54.18	11.09	65.27	74.00	-8.73	peak		
2	*	2483.500	39.84	11.09	50.93	54.00	-3.07	AVG		
3		2500.000	34.20	11.22	45.42	74.00	-28.58	peak		

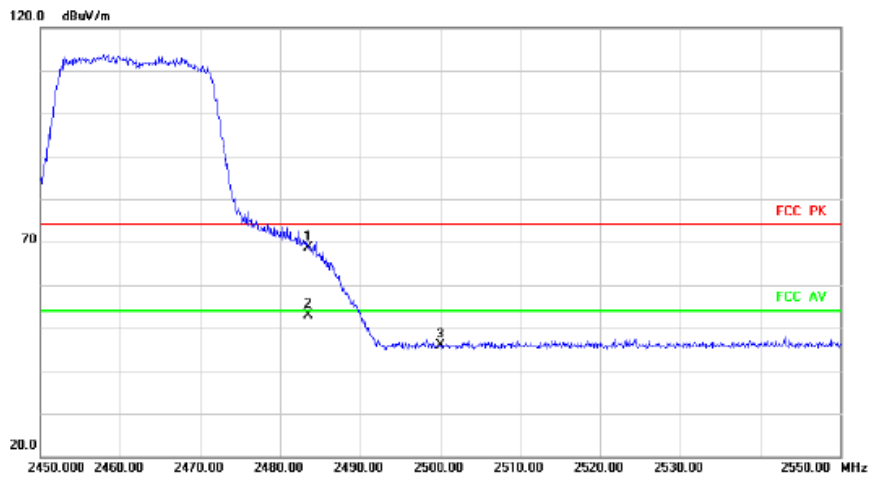
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	51.30	-1.29	50.01	74.00	-23.99	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	57.63	11.09	68.72	74.00	-5.28	peak	
2	*	2483.500	41.77	11.09	52.86	54.00	-1.14	AVG	
3		2500.000	34.67	11.22	45.89	74.00	-28.11	peak	

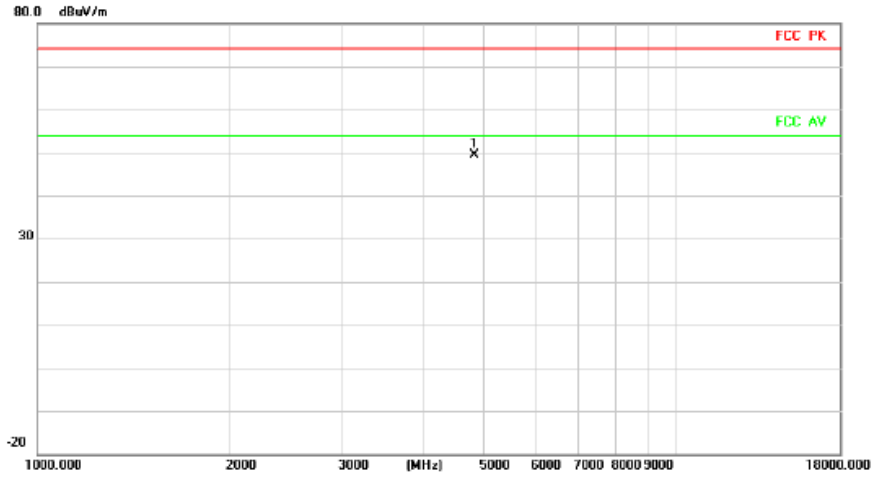
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU26

Test Channel:1

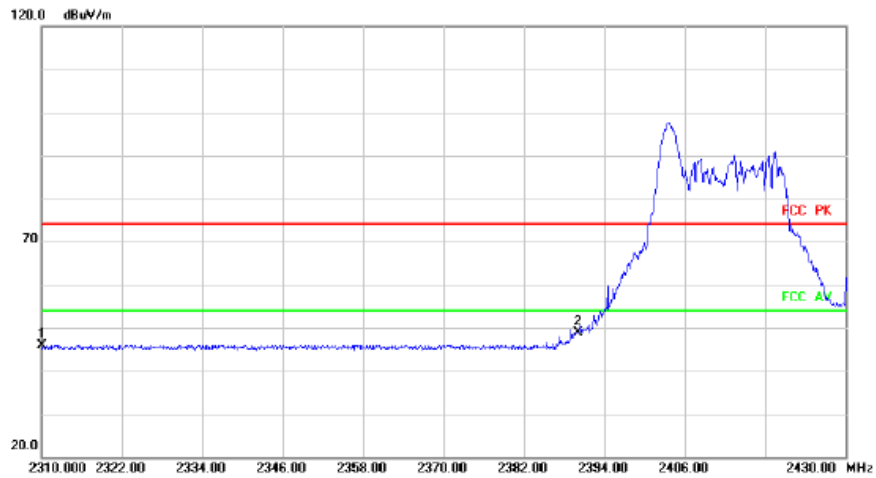
VERTICAL

Radiated Emission



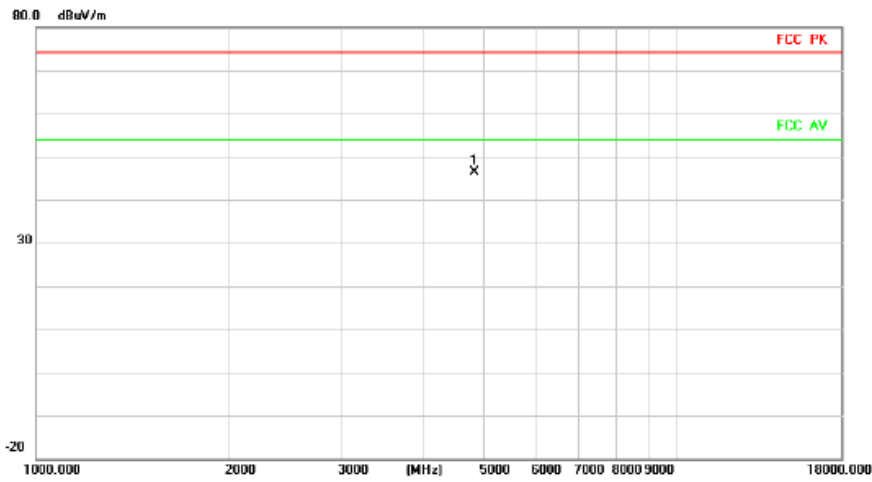
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	51.26	-1.88	49.38	74.00	-24.62	peak		

Radiated Emission



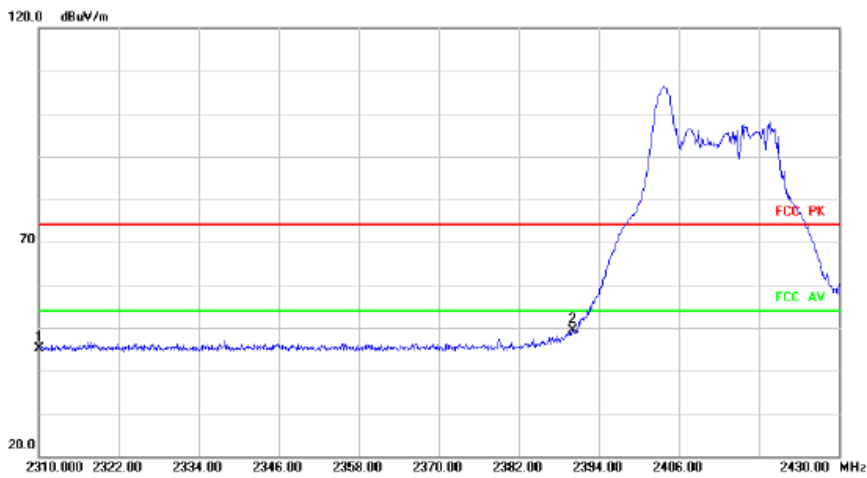
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	45.70	0.19	45.89	74.00	-28.11	peak		
2	*	2390.000	48.59	0.41	49.00	74.00	-25.00	peak		

HORIZONTALA Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	48.31	-1.88	46.43	74.00	-27.57	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	44.94	0.19	45.13	74.00	-28.87	peak	
2	*	2390.000	49.05	0.41	49.46	74.00	-24.54	peak	

Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU26

Test Channel:6

VERTICAL

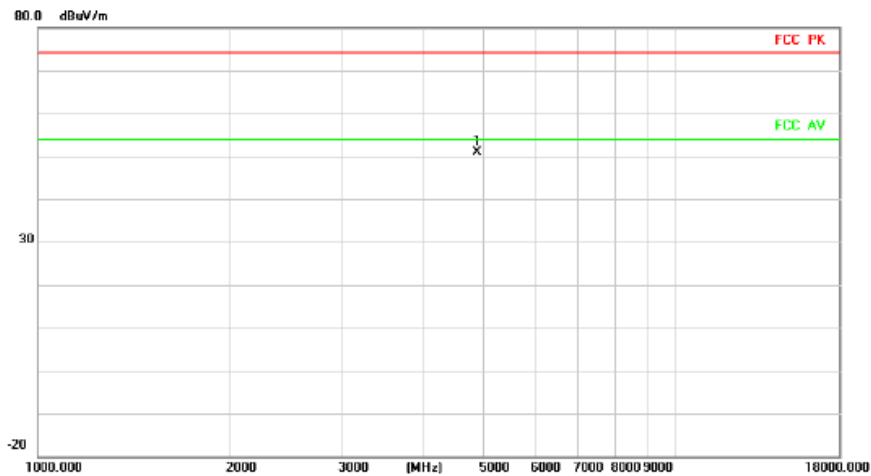
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	48.80	-1.59	47.21	74.00	-26.79	peak	

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	52.51	-1.59	50.92	74.00	-23.08	peak	

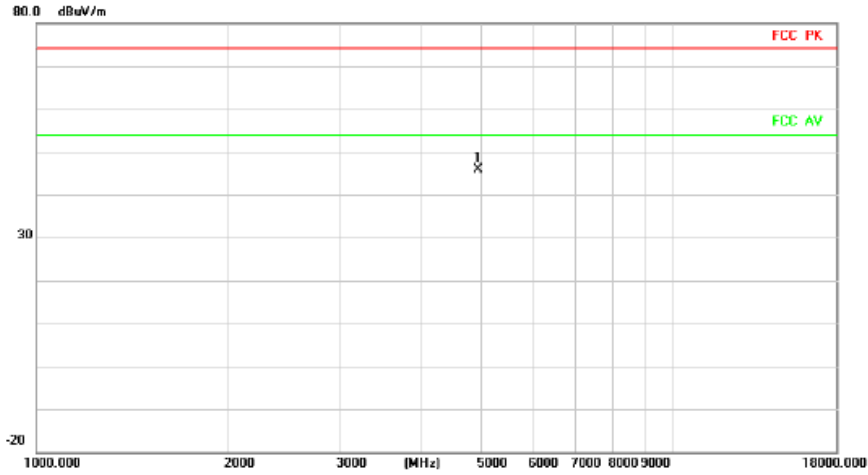
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU26

Test Channel:11

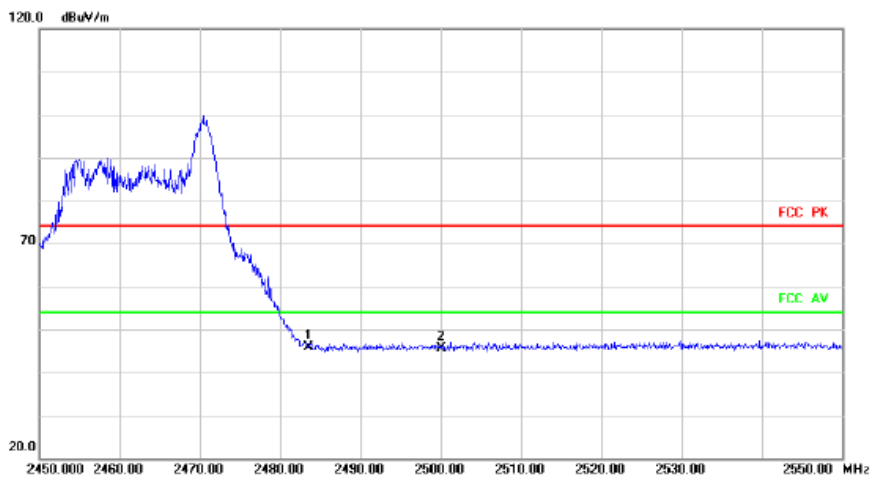
VERTICAL

Radiated Emission



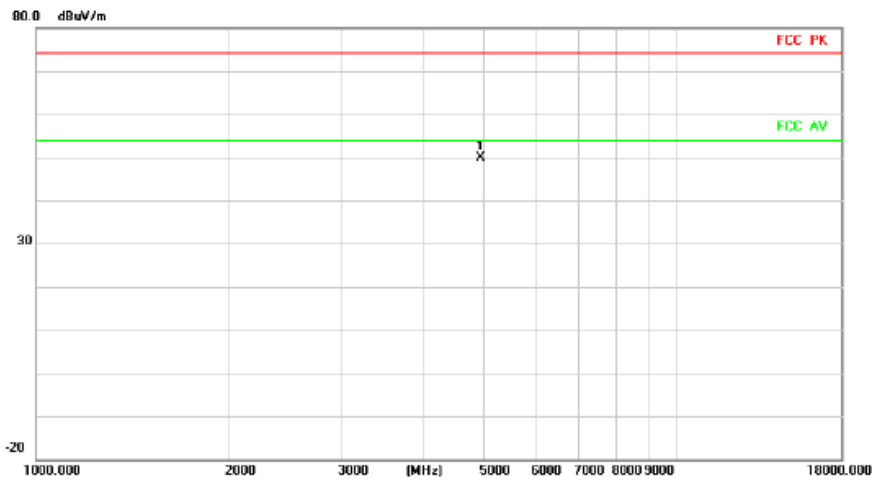
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	47.29	-1.29	46.00	74.00	-28.00	peak	

Radiated Emission



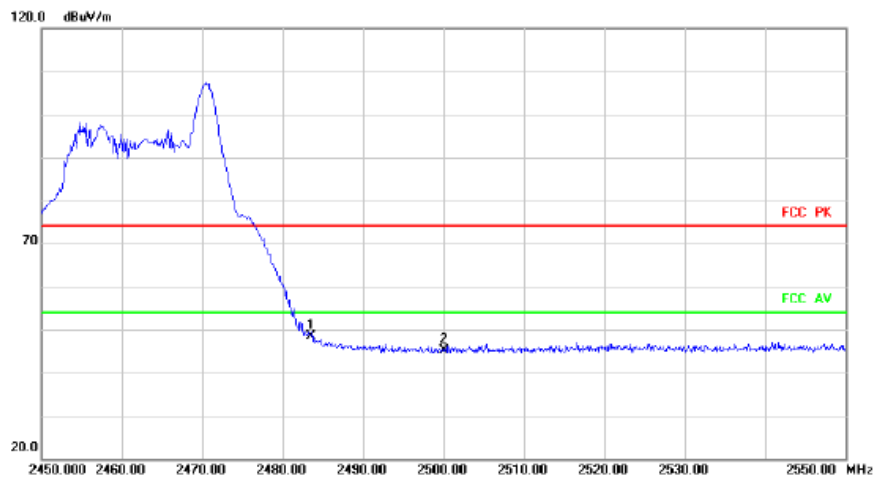
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	44.88	1.09	45.97	74.00	-28.03	peak	
2		2500.000	44.31	1.22	45.53	74.00	-28.47	peak	

HORIZONTALA Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	51.15	-1.29	49.86	74.00	-24.14	peak		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	47.22	1.09	48.31	74.00	-25.69	peak		
2		2500.000	43.96	1.22	45.18	74.00	-28.82	peak		

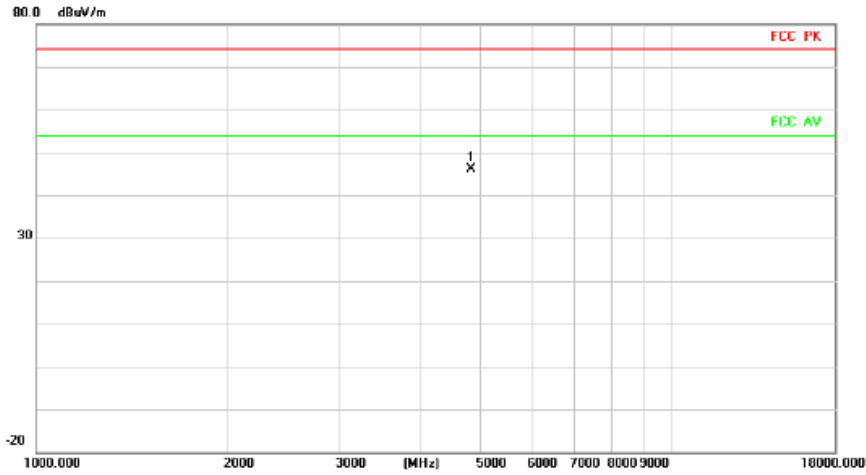
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU52

Test Channel:1

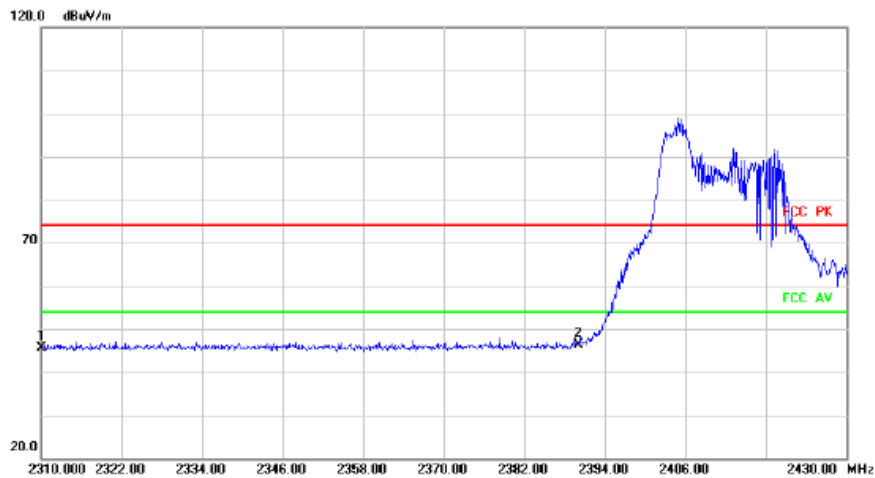
VERTICAL

Radiated Emission



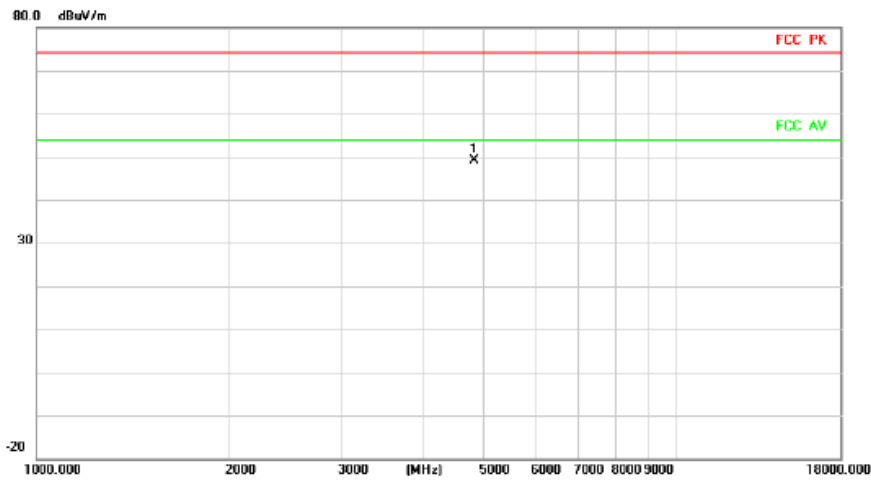
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	47.97	-1.88	46.09	74.00	-27.91	peak	

Radiated Emission



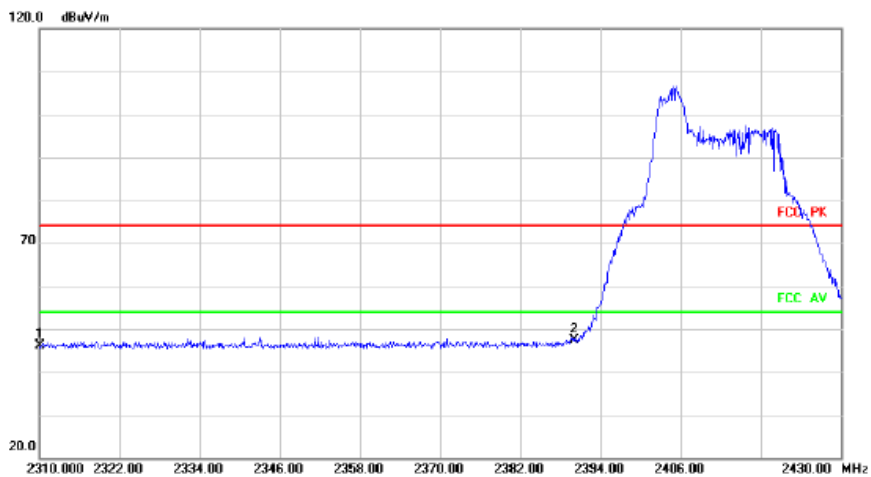
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	45.55	0.19	45.74	74.00	-28.26	peak	
2	*	2390.000	45.99	0.41	46.40	74.00	-27.60	peak	

HORIZONTALA Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	50.98	-1.88	49.10	74.00	-24.90	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	45.93	0.19	46.12	74.00	-27.88	peak	
2	*	2390.000	46.99	0.41	47.40	74.00	-26.60	peak	

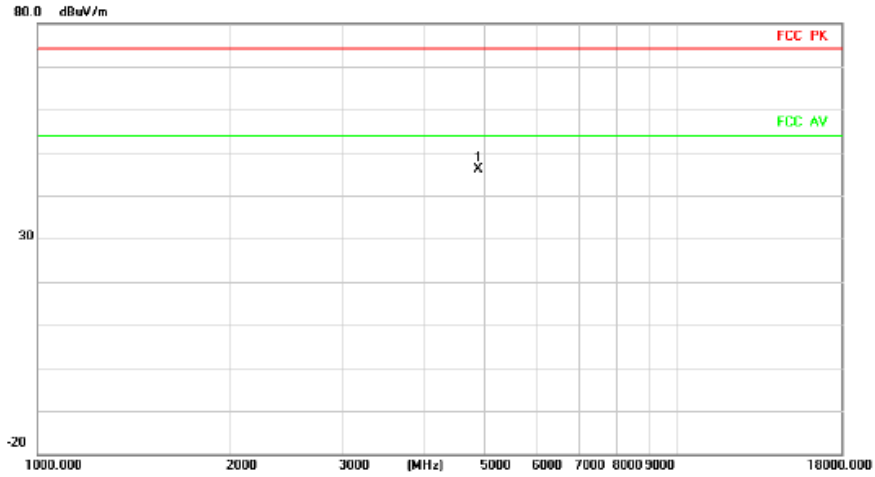
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU52

Test Channel:6

VERTICAL

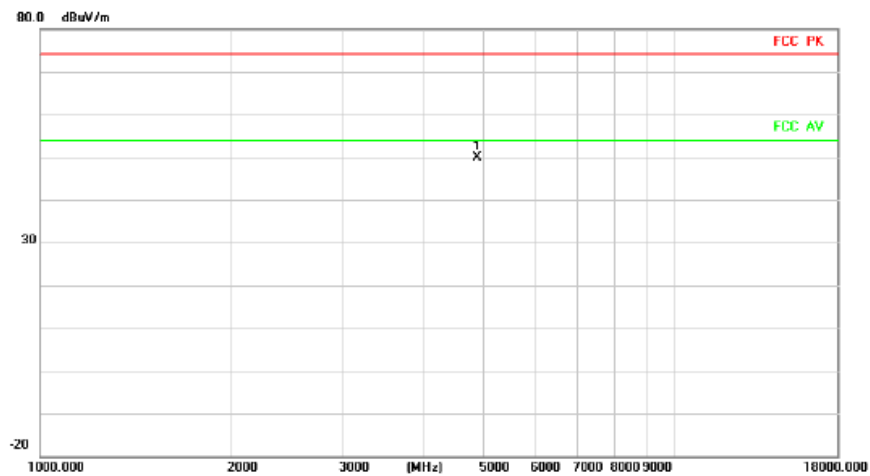
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	
1	*	4874.000	47.83	-1.59	46.24	74.00	-27.76	peak		

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	
1	*	4874.000	51.49	-1.59	49.90	74.00	-24.10	peak		

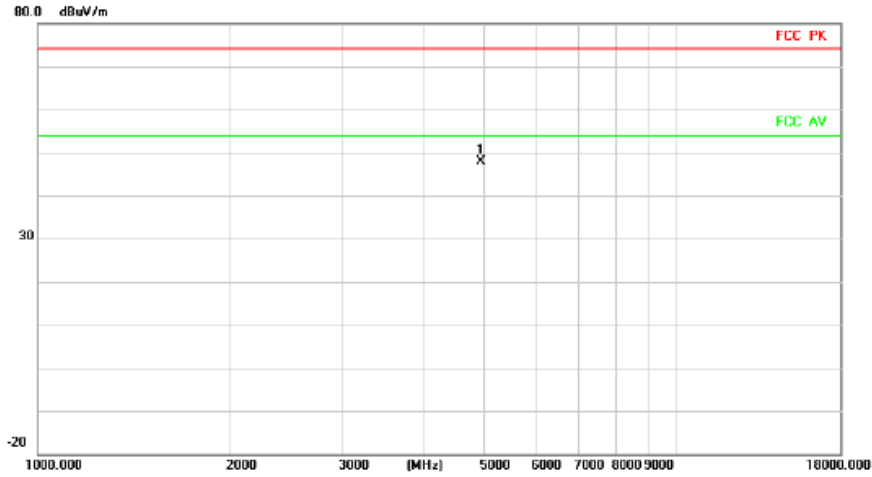
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU52

Test Channel:11

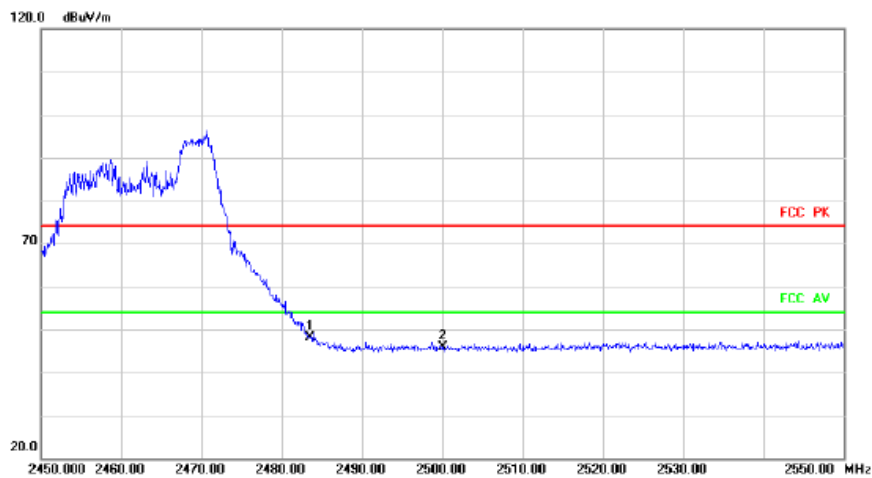
VERTICAL

Radiated Emission



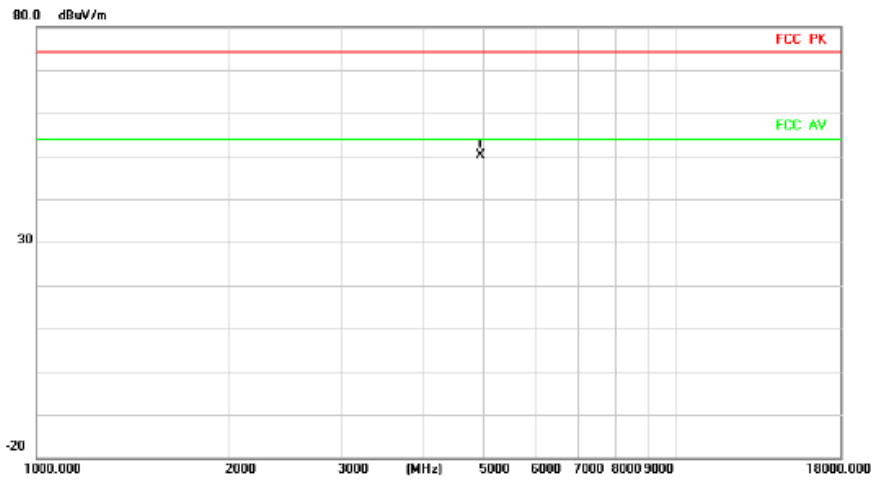
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	49.15	-1.29	47.86	74.00	-26.14	peak		

Radiated Emission



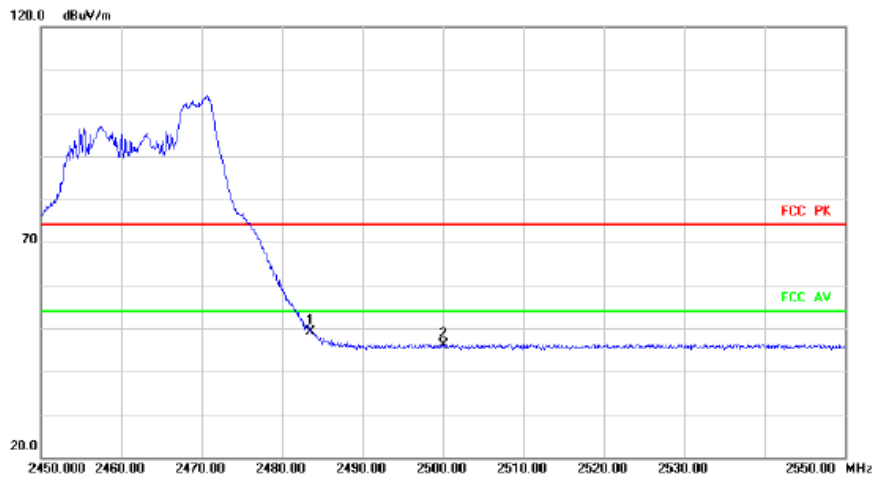
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	46.96	1.09	48.05	74.00	-25.95	peak		
2		2500.000	44.60	1.22	45.82	74.00	-28.18	peak		

HORIZONTALA Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	51.45	-1.29	50.16	74.00	-23.84	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	47.94	1.09	49.03	74.00	-24.97	peak	
2		2500.000	44.82	1.22	46.04	74.00	-27.96	peak	

Above 1G (1GHz~18GHz)

Test mode: 11AX40MIMO

Test Channel:3

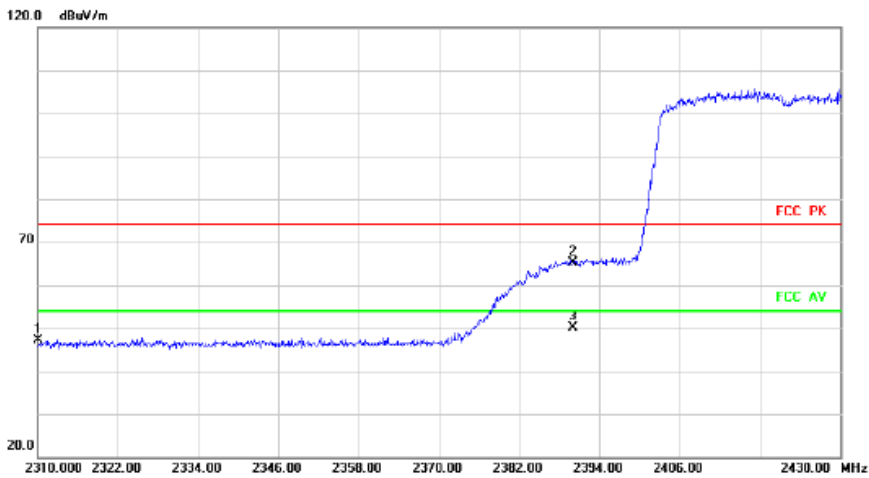
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dBm	dBuV/m	dBuV/m	dB	cm	degree
1	*	4844.000	48.44	-1.77	46.67	74.00	-27.33	peak	

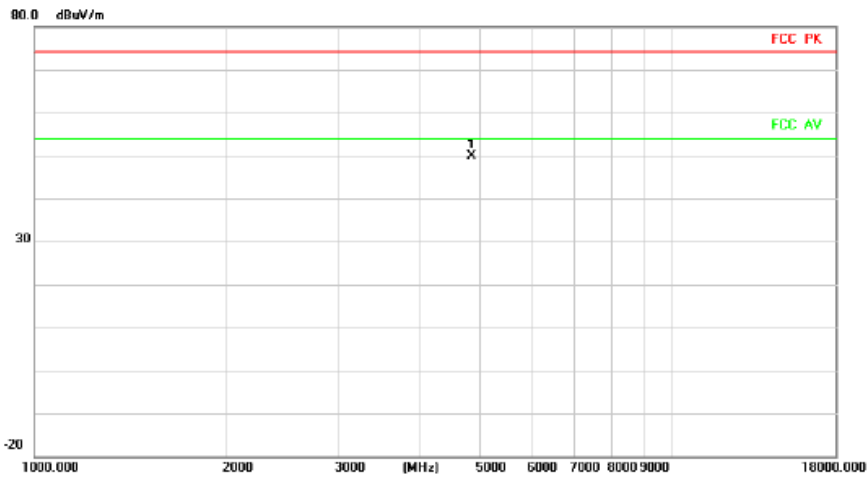
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dBm	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	36.89	10.19	47.08	74.00	-26.92	peak	
2		2390.000	54.75	10.41	65.16	74.00	-8.84	peak	
3	*	2390.000	39.80	10.41	50.21	54.00	-3.79	AVG	

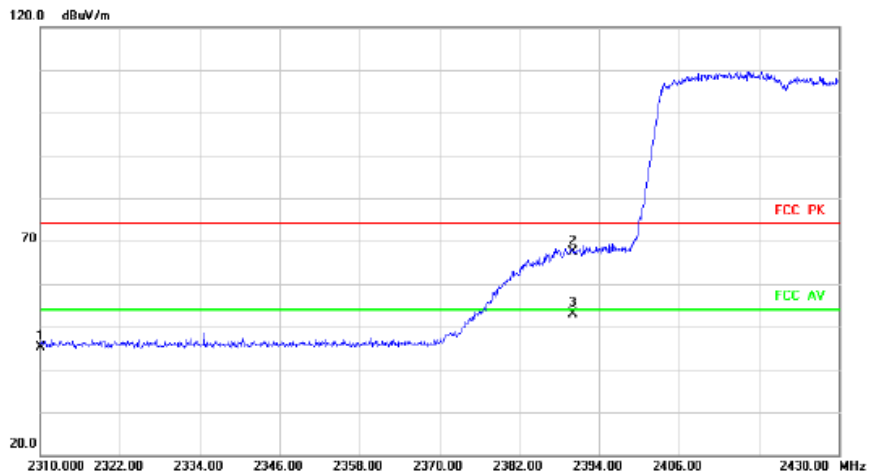
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4844.000	51.70	-1.77	49.93	74.00	-24.07	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	35.06	10.19	45.25	74.00	-28.75	peak	
2		2390.000	57.01	10.41	67.42	74.00	-6.58	peak	
3	*	2390.000	42.39	10.41	52.80	54.00	-1.20	AVG	

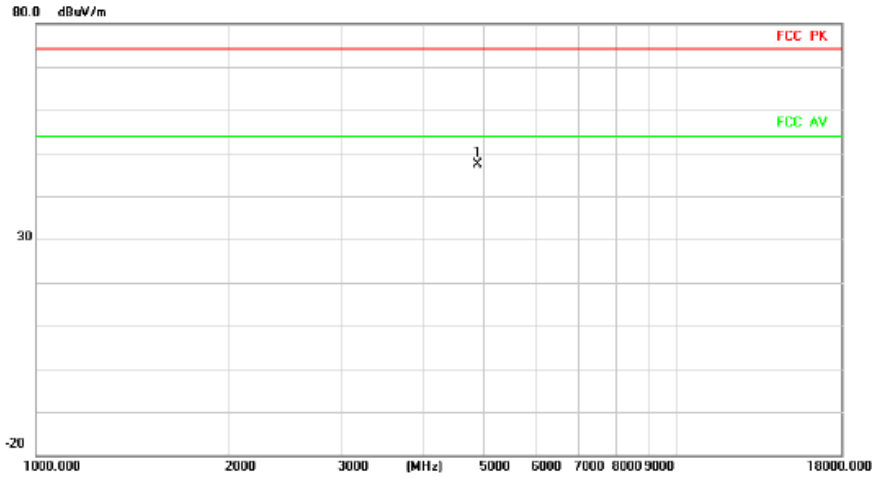
Above 1G (1GHz~18GHz)

Test mode: 11AX40MIMO

Test Channel: 6

VERTICAL

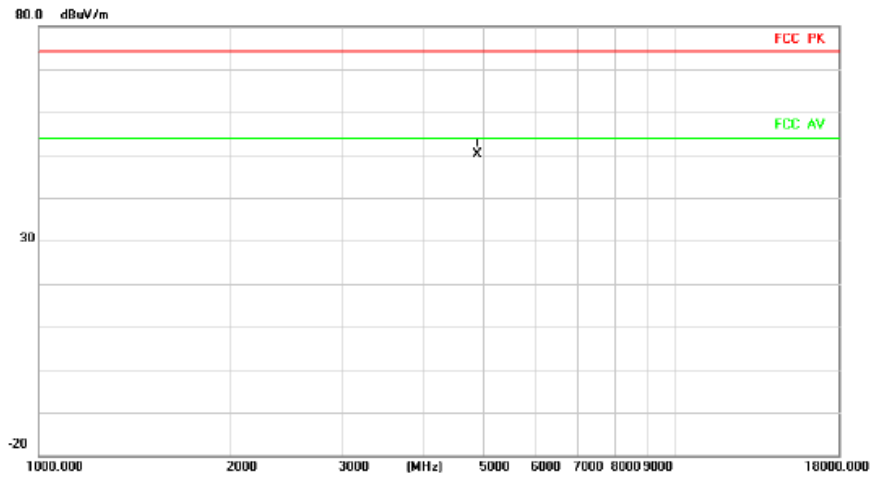
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	4874.000	48.90	-1.59	47.31	74.00	-26.69	peak			

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	4874.000	51.61	-1.59	50.02	74.00	-23.98	peak			

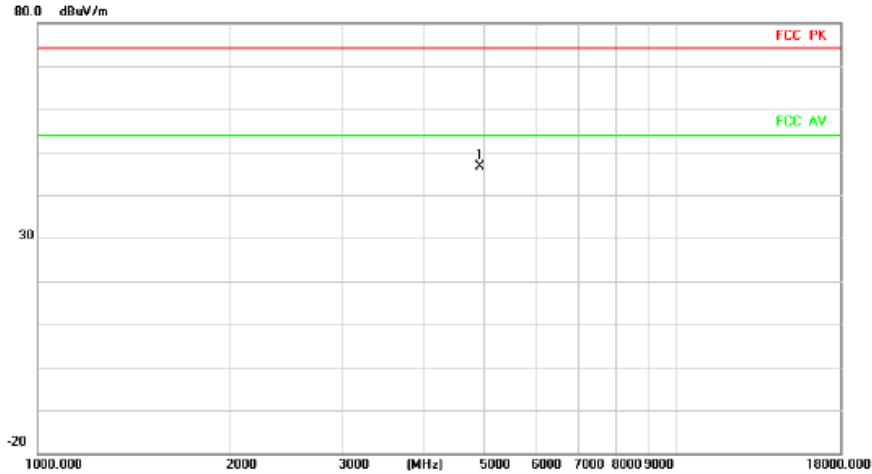
Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel:9

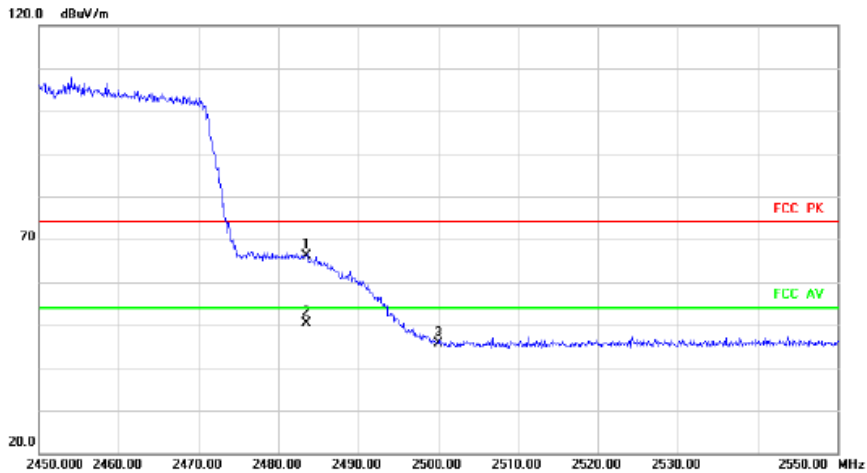
VERTICAL

Radiated Emission



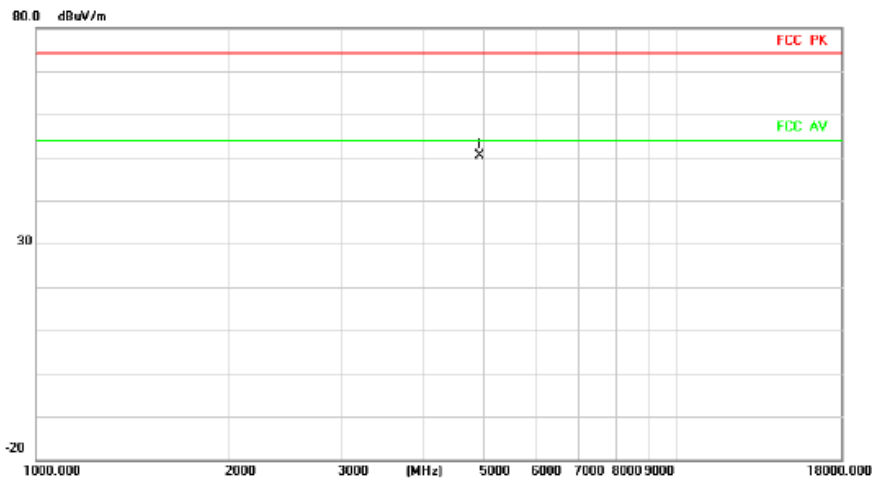
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4904.000	48.07	-1.41	46.66	74.00	-27.34	peak	

Radiated Emission



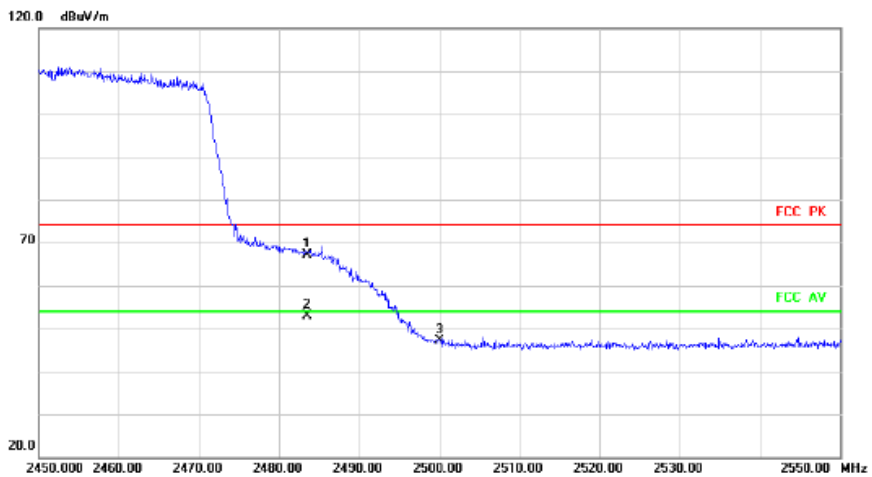
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	55.02	11.09	66.11	74.00	-7.89	peak	
2	*	2483.500	39.24	11.09	50.33	54.00	-3.67	AVG	
3		2500.000	34.45	11.22	45.67	74.00	-28.33	peak	

HORIZONTALA Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4904.000	51.68	-1.41	50.27	74.00	-23.73	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	55.97	11.09	67.06	74.00	-6.94	peak	
2	*	2483.500	41.69	11.09	52.78	54.00	-1.22	AVG	
3		2500.000	35.85	11.22	47.07	74.00	-26.93	peak	

The high frequency, which started from 18GHz to 25GHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

3.3 6dB Bandwidth

3.4.1 Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

3.4.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ● : Test ○ : No Test	

a) The EUT was connected to the tonscend test system, and the spectrum analyser is set as follow:

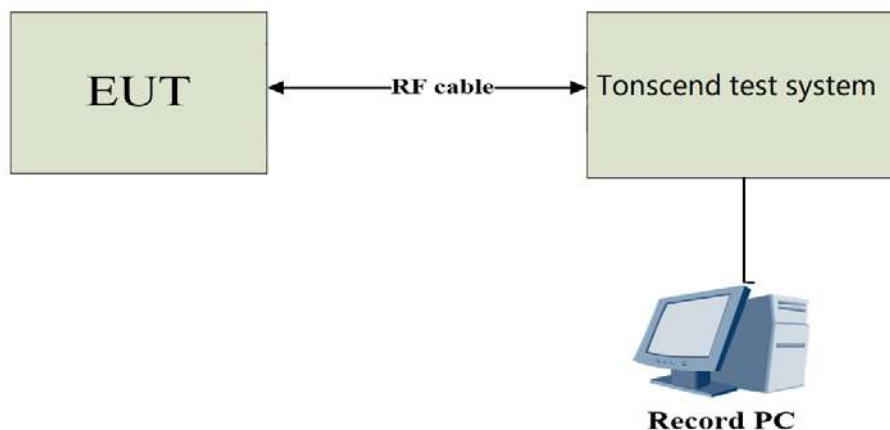
Centre Frequency	The centre frequency of the channel under test
RBW	100kHz
VBW	300kHz
Frequency span	2x Nominal Channel Bandwidth
Detector Mode	Peak
Trace Mode	Max Hold
Sweep Time	Auto Couple

b) Wait for the trace to stabilize then find the peak value of the trace and place the analyser marker on this peak.

c) Use the -6dB bandwidth function of the spectrum analyser to measure the 6dB Bandwidth of the EUT. This value shall be recorded.

d) Make sure that the power envelope is sufficiently above the noise floor of the analyser to avoid the noise signals left and right from the power envelope being taken into account by this measurement.

3.4.3 Test Setup



3.4.4 Test Result

DTS Bandwidth

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.600	2408.440	2416.040	0.5	PASS
	Ant2	2412	8.080	2407.960	2416.040	0.5	PASS
	Ant1	2437	7.080	2433.480	2440.560	0.5	PASS
	Ant2	2437	7.080	2433.480	2440.560	0.5	PASS
	Ant1	2462	8.040	2458.000	2466.040	0.5	PASS
	Ant2	2462	8.560	2457.480	2466.040	0.5	PASS
11G	Ant1	2412	16.280	2403.880	2420.160	0.5	PASS
	Ant2	2412	16.320	2403.840	2420.160	0.5	PASS
	Ant1	2437	16.360	2428.840	2445.200	0.5	PASS
	Ant2	2437	16.320	2428.840	2445.160	0.5	PASS
	Ant1	2462	15.720	2453.880	2469.600	0.5	PASS
	Ant2	2462	15.680	2453.840	2469.520	0.5	PASS
11N20MIMO	Ant1	2412	17.280	2403.480	2420.760	0.5	PASS
	Ant2	2412	17.200	2403.600	2420.800	0.5	PASS
	Ant1	2437	17.560	2428.240	2445.800	0.5	PASS
	Ant2	2437	16.960	2428.840	2445.800	0.5	PASS
	Ant1	2462	17.600	2453.200	2470.800	0.5	PASS
	Ant2	2462	17.160	2453.240	2470.400	0.5	PASS
11N40MIMO	Ant1	2422	35.680	2404.240	2439.920	0.5	PASS
	Ant2	2422	35.040	2404.480	2439.520	0.5	PASS
	Ant1	2437	36.080	2418.840	2454.920	0.5	PASS
	Ant2	2437	36.320	2418.840	2455.160	0.5	PASS
	Ant1	2452	36.080	2433.840	2469.920	0.5	PASS
	Ant2	2452	33.200	2434.480	2467.680	0.5	PASS
11AX20MIMO	Ant1	2412	18.840	2402.640	2421.480	0.5	PASS
	Ant2	2412	18.240	2402.680	2420.920	0.5	PASS
	Ant1	2437	17.400	2428.160	2445.560	0.5	PASS
	Ant2	2437	19.040	2427.520	2446.560	0.5	PASS
	Ant1	2462	18.240	2453.040	2471.280	0.5	PASS
	Ant2	2462	17.040	2452.920	2469.960	0.5	PASS
11AX20 RU26MIMO	Ant1	2412	2.080	2402.520	2404.600	0.5	PASS
	Ant2	2412	2.120	2402.480	2404.600	0.5	PASS
	Ant1	2437	2.120	2427.480	2429.600	0.5	PASS
	Ant2	2437	2.080	2427.520	2429.600	0.5	PASS
	Ant1	2462	2.080	2452.480	2454.560	0.5	PASS
	Ant2	2462	2.120	2452.480	2454.600	0.5	PASS

11AX20 RU52MIMO	Ant1	2412	17.080	2402.480	2419.560	0.5	PASS
	Ant2	2412	17.040	2402.520	2419.560	0.5	PASS
	Ant1	2437	17.080	2427.480	2444.560	0.5	PASS
	Ant2	2437	17.680	2427.480	2445.160	0.5	PASS
	Ant1	2462	17.040	2452.520	2469.560	0.5	PASS
	Ant2	2462	17.040	2452.480	2469.520	0.5	PASS
11AX20 RU106MIMO	Ant1	2412	18.080	2402.480	2420.560	0.5	PASS
	Ant2	2412	17.680	2402.480	2420.160	0.5	PASS
	Ant1	2437	18.040	2427.480	2445.520	0.5	PASS
	Ant2	2437	18.040	2427.480	2445.520	0.5	PASS
	Ant1	2462	17.080	2452.480	2469.560	0.5	PASS
	Ant2	2462	17.080	2452.480	2469.560	0.5	PASS
11AX40MIMO	Ant1	2422	38.000	2403.040	2441.040	0.5	PASS
	Ant2	2422	37.040	2403.680	2440.720	0.5	PASS
	Ant1	2437	37.040	2418.280	2455.320	0.5	PASS
	Ant2	2437	37.840	2418.040	2455.880	0.5	PASS
	Ant1	2452	37.280	2433.200	2470.480	0.5	PASS
	Ant2	2452	35.680	2433.920	2469.600	0.5	PASS

Occupied Channel Bandwidth

Please refer to the SZ22110114W03.

11B_Ant1_2412



11B_Ant2_2412



11B_Ant1_2437



11B_Ant2_2437



11B_Ant1_2462



11B_Ant2_2462



11G_Ant1_2412



11G_Ant2_2412



11G_Ant1_2437



11G_Ant2_2437



11G_Ant1_2462



11G_Ant2_2462



11N20MIMO_Ant1_2412



11N20MIMO_Ant2_2412



11N20MIMO_Ant1_2437



11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462



11N40MIMO_Ant1_2422



11N40MIMO_Ant2_2422



11N40MIMO_Ant1_2437



11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



11AX20MIMO_Ant1_2412



11AX20MIMO_Ant2_2412



11AX20MIMO_Ant1_2437



11AX20MIMO_Ant2_2437



11AX20MIMO_Ant1_2462



11AX20MIMO_Ant2_2462



11AX20MIMO_Ant1_2412_26Tone_RU0



11AX20MIMO_Ant2_2412_26Tone_RU0



11AX20MIMO_Ant1_2437_26Tone_RU0



11AX20MIMO_Ant2_2437_26Tone_RU0



11AX20MIMO_Ant1_2462_26Tone_RU0



11AX20MIMO_Ant2_2462_26Tone_RU0



11AX20MIMO_Ant1_2412_52Tone_RU37



11AX20MIMO_Ant2_2412_52Tone_RU37



11AX20MIMO_Ant1_2437_52Tone_RU37



11AX20MIMO_Ant2_2437_52Tone_RU37



11AX20MIMO_Ant1_2462_52Tone_RU37



11AX20MIMO_Ant2_2462_52Tone_RU37



11AX20MIMO_Ant1_2412_106Tone_RU53



11AX20MIMO_Ant2_2412_106Tone_RU53



11AX20MIMO_Ant1_2437_106Tone_RU53



11AX20MIMO_Ant2_2437_106Tone_RU53



11AX20MIMO_Ant1_2462_106Tone_RU53



11AX20MIMO_Ant2_2462_106Tone_RU53



11AX40MIMO_Ant1_2422



11AX40MIMO_Ant2_2422



11AX40MIMO_Ant1_2437



11AX40MIMO_Ant2_2437



11AX40MIMO_Ant1_2452



11AX40MIMO_Ant2_2452



3.4 Maximum conducted output power

3.5.1 Limit

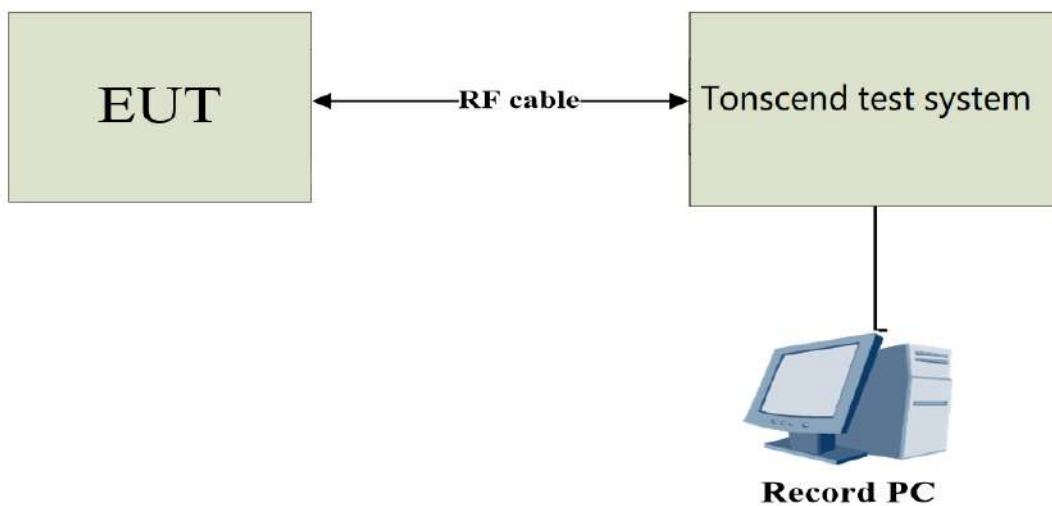
For systems using digital modulation in the 2400~2483.5MHz, The Maximum output Power shall not exceed 1W(30dBm)

3.5.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ● : Test ○ : No Test	

- a) The EUT was directly connected to the tonscend test system and antenna output port as show in the block diagram below.
- b) The maximum conducted output power was performed in accordance with method 11.9.1.3 (for peak power) of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

3.5.3 Test Setup



3.5.4 Table of Parameters of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Test Software Version	QRCT-V4.0		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	16	16	16
IEEE 802.11g	16	16	16
IEEE 802.11n(20)	13	13	13
IEEE 802.11ax(20)	12	12	12
IEEE 802.11ax RU26(20)	12	12	12
IEEE 802.11ax RU52(20)	12	12	12
IEEE 802.11ax RU106(20)	12	12	12
Frequency (MHz)	2422	2437	2452
IEEE 802.11n(40)	12	12	12
IEEE 802.11ax(40)	12	12	12

3.5.5 The Result

Test Mode	Antenna	Frequency[MHz]	Maximum conducted output Power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	19.13	≤30	PASS
	Ant2	2412	17.71	≤30	PASS
	Ant1	2437	18.62	≤30	PASS
	Ant2	2437	16.87	≤30	PASS
	Ant1	2462	18.29	≤30	PASS
	Ant2	2462	17.26	≤30	PASS
11G	Ant1	2412	23.44	≤30	PASS
	Ant2	2412	21.94	≤30	PASS
	Ant1	2437	23.09	≤30	PASS
	Ant2	2437	21.37	≤30	PASS
	Ant1	2462	23.02	≤30	PASS
	Ant2	2462	21.55	≤30	PASS
11N20MIMO	Ant1	2412	20.31	≤29.64	PASS
	Ant2	2412	19.21	≤29.64	PASS
	total	2412	22.81	≤29.64	PASS
	Ant1	2437	20.15	≤29.64	PASS
	Ant2	2437	18.37	≤29.64	PASS
	total	2437	22.36	≤29.64	PASS
	Ant1	2462	20.01	≤29.64	PASS
	Ant2	2462	18.94	≤29.64	PASS
	total	2462	22.52	≤29.64	PASS
11N40MIMO	Ant1	2422	19.44	≤29.64	PASS
	Ant2	2422	17.96	≤29.64	PASS
	total	2422	21.77	≤29.64	PASS
	Ant1	2437	19.53	≤29.64	PASS
	Ant2	2437	18.35	≤29.64	PASS
	total	2437	21.99	≤29.64	PASS
	Ant1	2452	19.88	≤29.64	PASS
	Ant2	2452	17.93	≤29.64	PASS
	total	2452	22.02	≤29.64	PASS
11AX20MIMO	Ant1	2412	19.97	≤29.64	PASS
	Ant2	2412	18.42	≤29.64	PASS
	total	2412	22.27	≤29.64	PASS
	Ant1	2437	19.61	≤29.64	PASS

	Ant2	2437	17.89	≤29.64	PASS
	total	2437	21.84	≤29.64	PASS
	Ant1	2462	19.68	≤29.64	PASS
	Ant2	2462	18.15	≤29.64	PASS
	total	2462	21.99	≤29.64	PASS
11AX20 RU26 MIMO	Ant1	2412	19.61	≤29.64	PASS
	Ant2	2412	18.67	≤29.64	PASS
	total	2412	22.40	≤29.64	PASS
	Ant1	2437	19.62	≤29.64	PASS
	Ant2	2437	18.78	≤29.64	PASS
	total	2437	22.69	≤29.64	PASS
	Ant1	2462	19.96	≤29.64	PASS
	Ant2	2462	19.68	≤29.64	PASS
	total	2462	22.83	≤29.64	PASS
11AX20 RU52 MIMO	Ant1	2412	21.17	≤29.64	PASS
	Ant2	2412	20.48	≤29.64	PASS
	total	2412	24.43	≤29.64	PASS
	Ant1	2437	21.69	≤29.64	PASS
	Ant2	2437	20.73	≤29.64	PASS
	total	2437	24.25	≤29.64	PASS
	Ant1	2462	21.69	≤29.64	PASS
	Ant2	2462	21.67	≤29.64	PASS
	total	2462	24.69	≤29.64	PASS
11AX20 RU106 MIMO	Ant1	2412	21.48	≤29.64	PASS
	Ant2	2412	20.62	≤29.64	PASS
	total	2412	24.08	≤29.64	PASS
	Ant1	2437	22.26	≤29.64	PASS
	Ant2	2437	20.60	≤29.64	PASS
	total	2437	24.52	≤29.64	PASS
	Ant1	2462	21.36	≤29.64	PASS
	Ant2	2462	21.03	≤29.64	PASS
	total	2462	24.21	≤29.64	PASS
11AX40MIMO	Ant1	2422	19.95	≤29.64	PASS
	Ant2	2422	18.22	≤29.64	PASS
	total	2422	22.18	≤29.64	PASS
	Ant1	2437	19.83	≤29.64	PASS
	Ant2	2437	18.73	≤29.64	PASS
	total	2437	22.33	≤29.64	PASS

	Ant1	2452	20.46	≤29.64	PASS
	Ant2	2452	18.25	≤29.64	PASS
	total	2452	22.50	≤29.64	PASS

For MIMO mode

Frequency[MHz]	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Correlated chains directional gain (dBi)	Conducted Power Limit (dBm)
2412-2462	3.35	3.35	6.36	29.64

Basic methodology with N_{ANT} transmit antennas, each with the same directional gain G_{ANT} dBi, being driven by N_{ANT} transmitter outputs of equal power. Directional gain is to be computed as follows:

If *any* transmit signals are *correlated* with each other,

Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi = 6.36

3.5 Power Spectral Density

3.6.1 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmitting.

3.6.2 Test Procedure

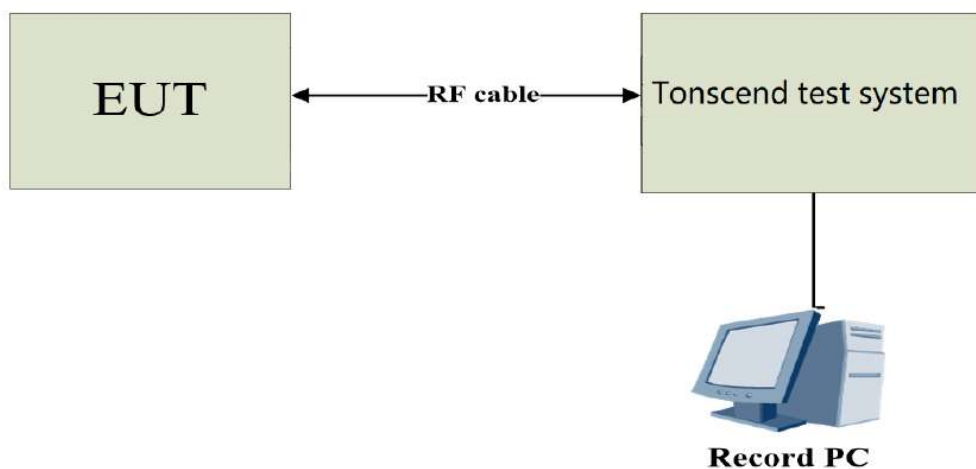
Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ● : Test ○ : No Test	

a) The EUT was directly connected to the tonscend test system and antenna output port as show in the block diagram below.

b) Spectrum analyser settings as following:

Spectrum Parameters	Setting
Span Frequency	1.5 times the DTS bandwidth
RBW	3 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.6.3 Test Setup



3.6.4 The Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-6.39	≤8	PASS
	Ant2	2412	-7.9	≤8	PASS
	Ant1	2437	-7.26	≤8	PASS
	Ant2	2437	-9.06	≤8	PASS
	Ant1	2462	-7.56	≤8	PASS
	Ant2	2462	-8.64	≤8	PASS
11G	Ant1	2412	-8.98	≤8	PASS
	Ant2	2412	-10.07	≤8	PASS
	Ant1	2437	-7.92	≤8	PASS
	Ant2	2437	-11.55	≤8	PASS
	Ant1	2462	-9.45	≤8	PASS
	Ant2	2462	-10.48	≤8	PASS
11N20MIMO	Ant1	2412	-11.97	≤7.64	PASS
	Ant2	2412	-12.51	≤7.64	PASS
	total	2412	-9.22	≤7.64	PASS
	Ant1	2437	-12.1	≤7.64	PASS
	Ant2	2437	-13.38	≤7.64	PASS
	total	2437	-9.68	≤7.64	PASS
	Ant1	2462	-12.32	≤7.64	PASS
	Ant2	2462	-13.73	≤7.64	PASS
	total	2462	-9.96	≤7.64	PASS
11N40MIMO	Ant1	2422	-15.14	≤7.64	PASS
	Ant2	2422	-16.99	≤7.64	PASS
	total	2422	-12.96	≤7.64	PASS
	Ant1	2437	-14.91	≤7.64	PASS
	Ant2	2437	-17.39	≤7.64	PASS
	total	2437	-12.97	≤7.64	PASS
	Ant1	2452	-14.77	≤7.64	PASS
	Ant2	2452	-16.1	≤7.64	PASS
	total	2452	-12.37	≤7.64	PASS
11AX20MIMO	Ant1	2412	-12.92	≤7.64	PASS
	Ant2	2412	-14.81	≤7.64	PASS
	total	2412	-10.75	≤7.64	PASS
	Ant1	2437	-12.9	≤7.64	PASS
	Ant2	2437	-15.32	≤7.64	PASS
	total	2437	-10.93	≤7.64	PASS
	Ant1	2462	-13.14	≤7.64	PASS
	Ant2	2462	-15.19	≤7.64	PASS

	total	2462	-11.03	≤7.64	PASS
11AX20 RU26MIMO	Ant1	2412	-4.73	≤7.64	PASS
	Ant2	2412	-6.96	≤7.64	PASS
	total	2412	-2.80	≤7.64	PASS
	Ant1	2437	-5.53	≤7.64	PASS
	Ant2	2437	-7.59	≤7.64	PASS
	total	2437	-3.41	≤7.64	PASS
	Ant1	2462	-4.64	≤7.64	PASS
	Ant2	2462	-5.43	≤7.64	PASS
	total	2462	-2.01	≤7.64	PASS
	11AX20 RU52MIMO	Ant1	2412	-7.35	≤7.64
Ant2		2412	-9.44	≤7.64	PASS
total		2412	-5.25	≤7.64	PASS
Ant1		2437	-7.29	≤7.64	PASS
Ant2		2437	-9.58	≤7.64	PASS
total		2437	-5.28	≤7.64	PASS
Ant1		2462	-6.96	≤7.64	PASS
Ant2		2462	-7.75	≤7.64	PASS
total		2462	-4.33	≤7.64	PASS
11AX20 RU106MIMO	Ant1	2412	-9.66	≤7.64	PASS
	Ant2	2412	-11.76	≤7.64	PASS
	total	2412	-7.57	≤7.64	PASS
	Ant1	2437	-10.32	≤7.64	PASS
	Ant2	2437	-12.72	≤7.64	PASS
	total	2437	-8.35	≤7.64	PASS
	Ant1	2462	-10.01	≤7.64	PASS
	Ant2	2462	-10.51	≤7.64	PASS
	total	2462	-7.24	≤7.64	PASS
11AX40MIMO	Ant1	2422	-15.22	≤7.64	PASS
	Ant2	2422	-17.33	≤7.64	PASS
	total	2422	-13.14	≤7.64	PASS
	Ant1	2437	-15.78	≤7.64	PASS
	Ant2	2437	-17.06	≤7.64	PASS
	total	2437	-13.36	≤7.64	PASS
	Ant1	2452	-14.7	≤7.64	PASS
	Ant2	2452	-16.25	≤7.64	PASS
	total	2452	-12.40	≤7.64	PASS

For MIMO mode

Frequency[MHz]	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Correlated chains directional gain (dBi)	Max. PSD Limit (dBm)
2412-2462	3.35	3.35	6.36	7.64
<p>Basic methodology with N_{ANT} transmit antennas, each with the same directional gain G_{ANT} dBi, being driven by N_{ANT} transmitter outputs of equal power. Directional gain is to be computed as follows: If <i>any</i> transmit signals are <i>correlated</i> with each other, Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi = 6.36</p>				

11B_Ant1_2412



11B_Ant2_2412



11B_Ant1_2437



11B_Ant2_2437



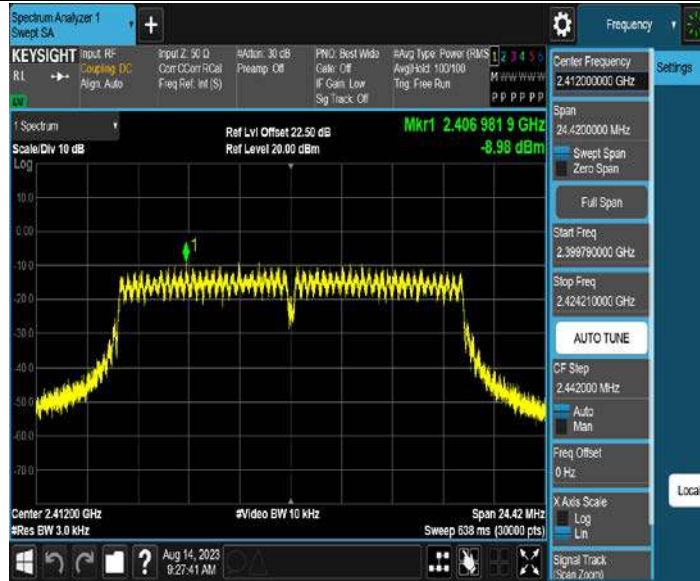
11B_Ant1_2462



11B_Ant2_2462



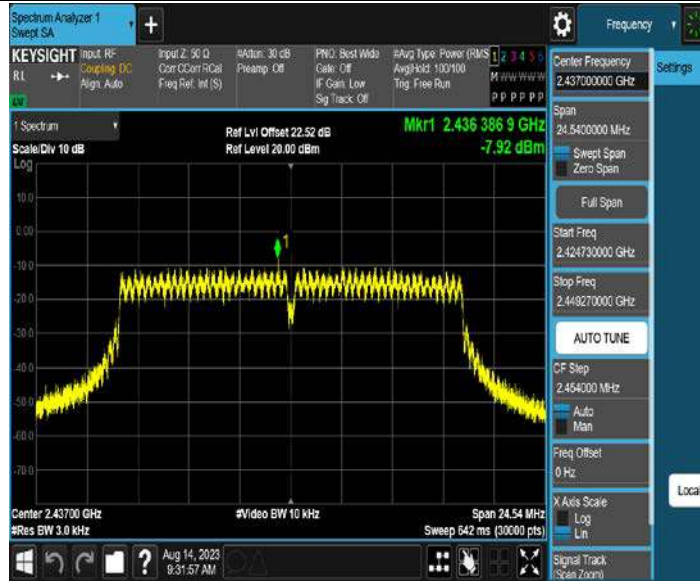
11G_Ant1_2412



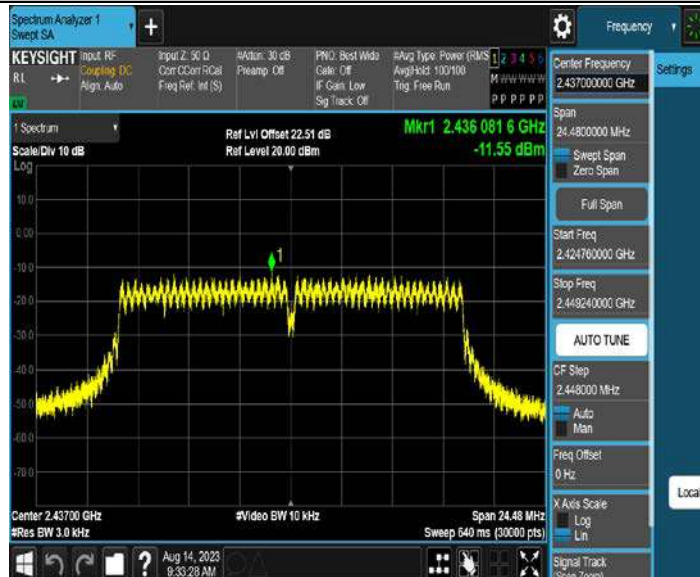
11G_Ant2_2412



11G_Ant1_2437



11G_Ant2_2437



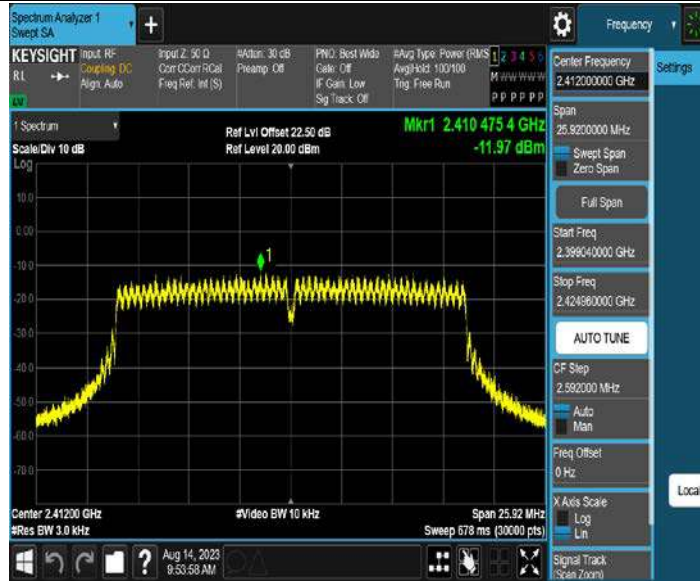
11G_Ant1_2462



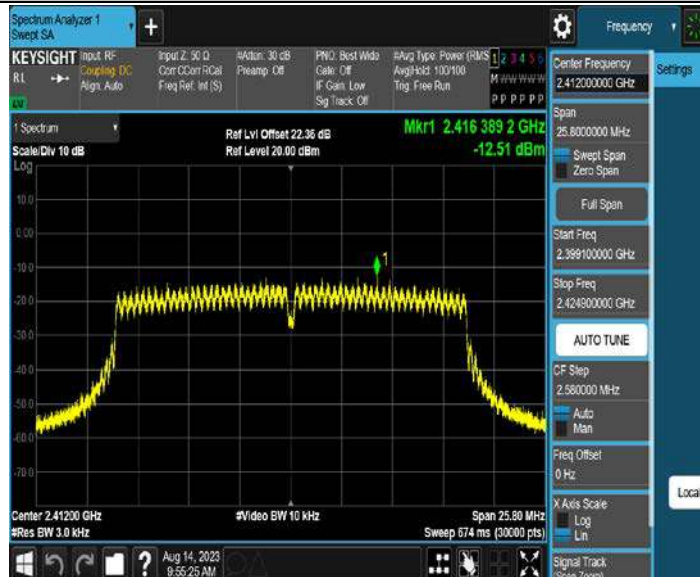
11G_Ant2_2462



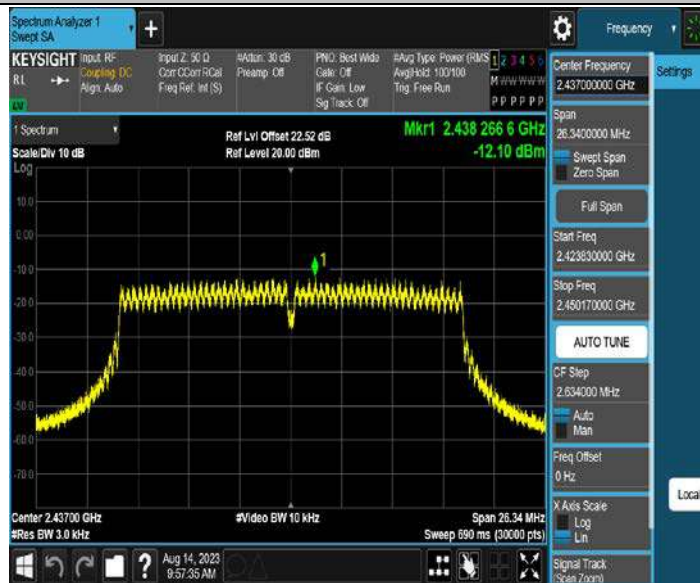
11N20MIMO_Ant1_2412



11N20MIMO_Ant2_2412



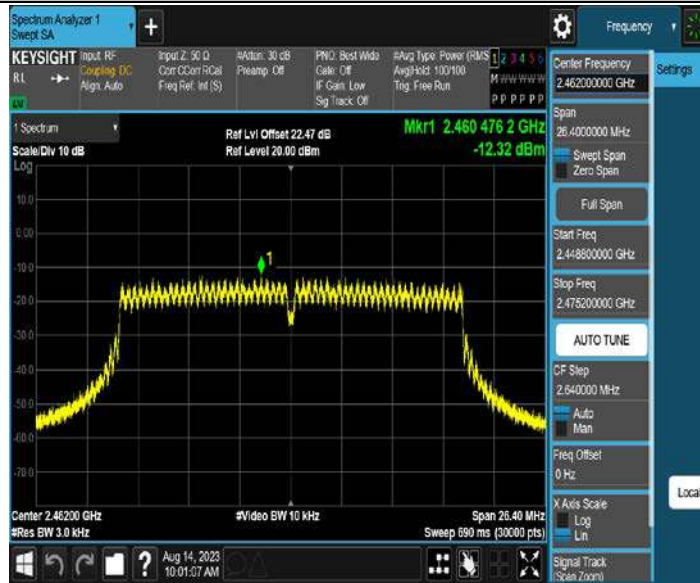
11N20MIMO_Ant1_2437



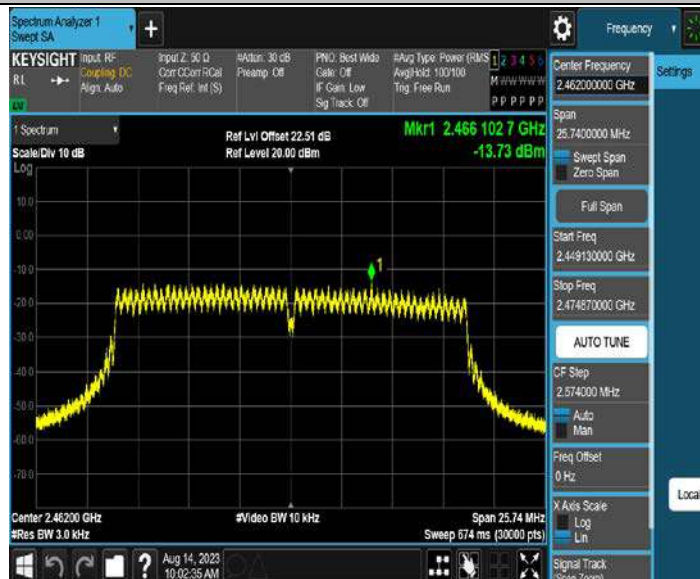
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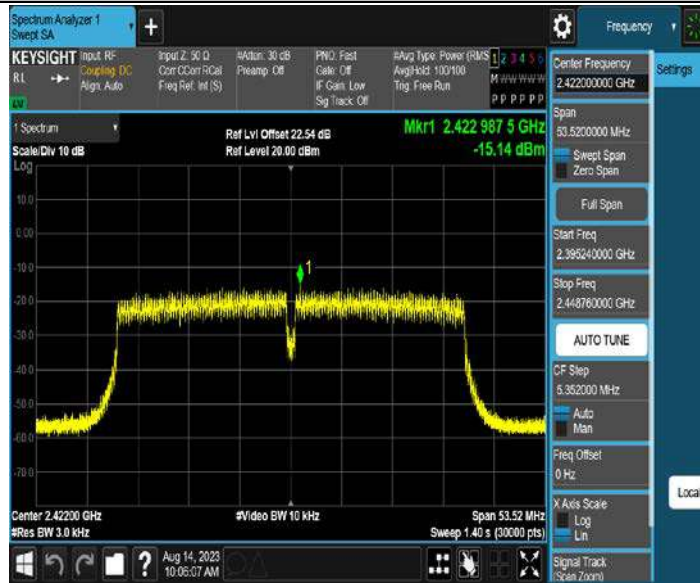
11N20MIMO_Ant1_2462



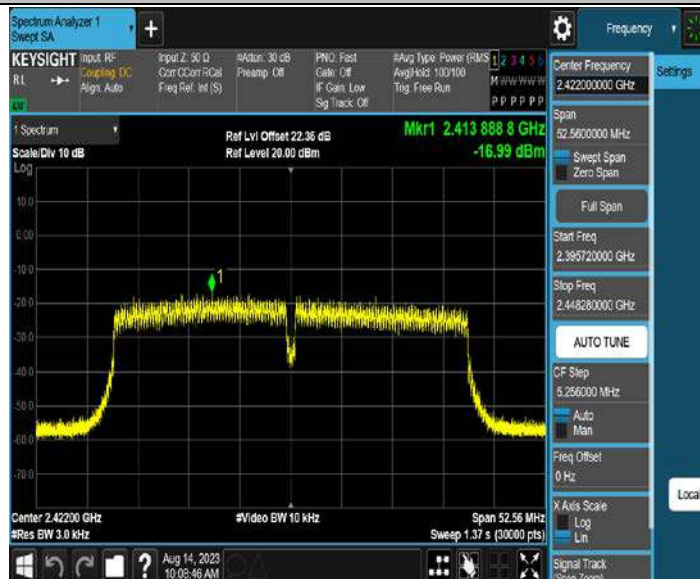
11N20MIMO_Ant2_2462



11N40MIMO_Ant1_2422



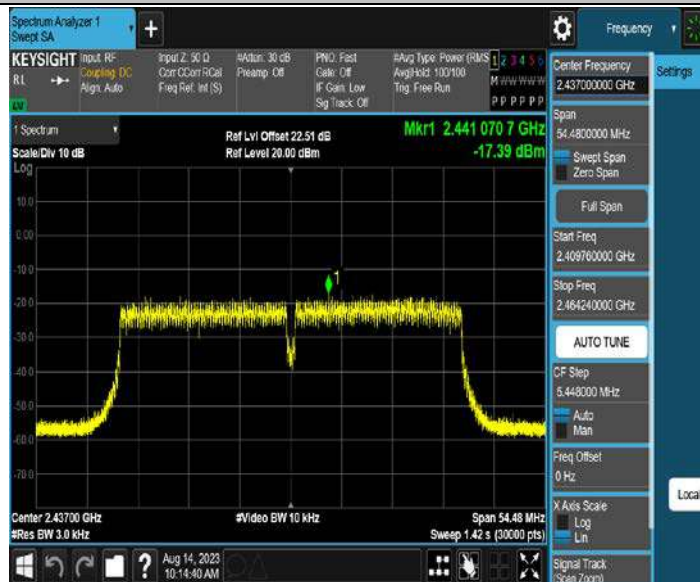
11N40MIMO_Ant2_2422



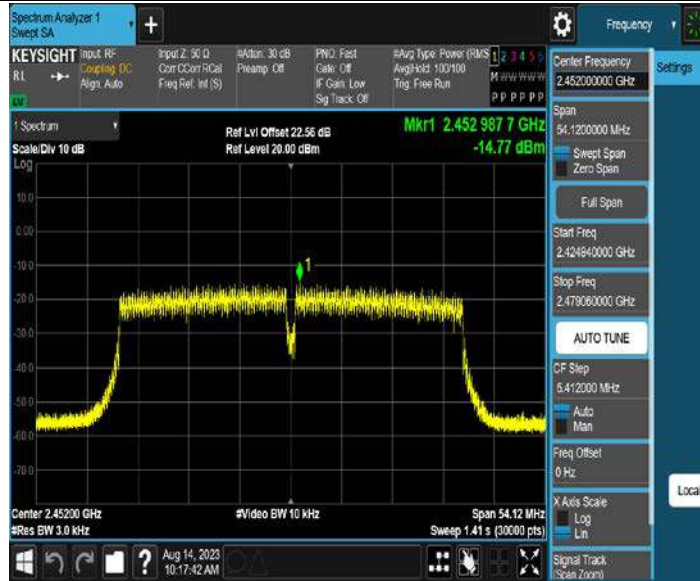
11N40MIMO_Ant1_2437



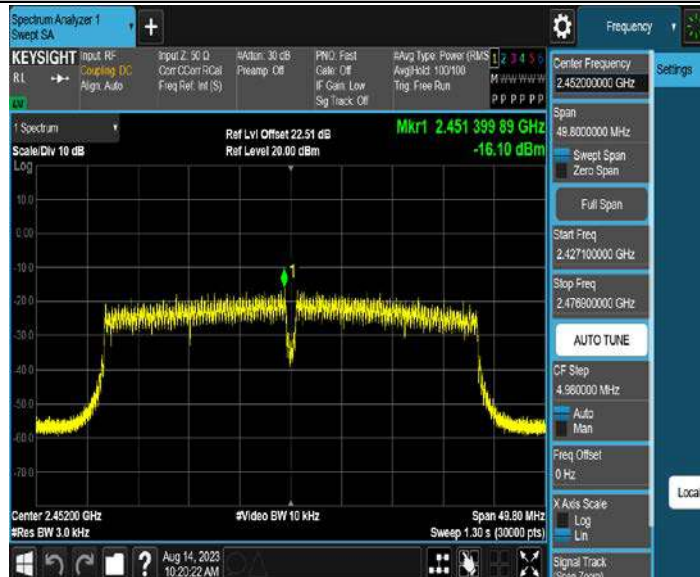
11N40MIMO_Ant2_2437



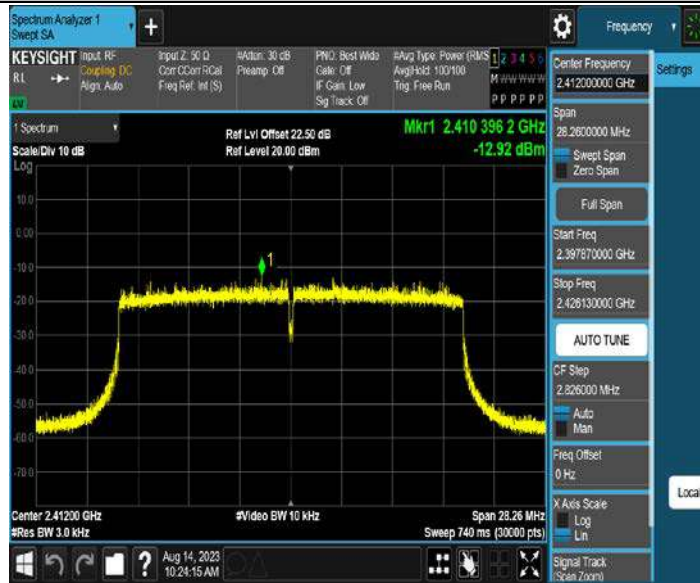
11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



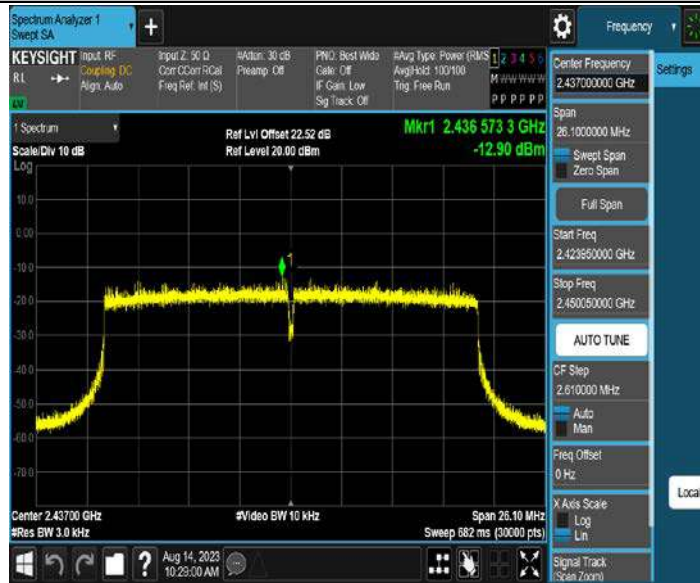
11AX20MIMO_Ant1_2412



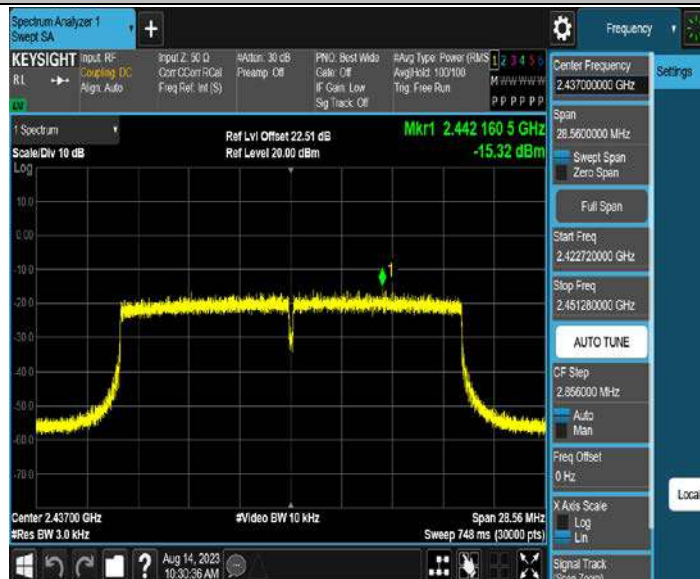
11AX20MIMO_Ant2_2412



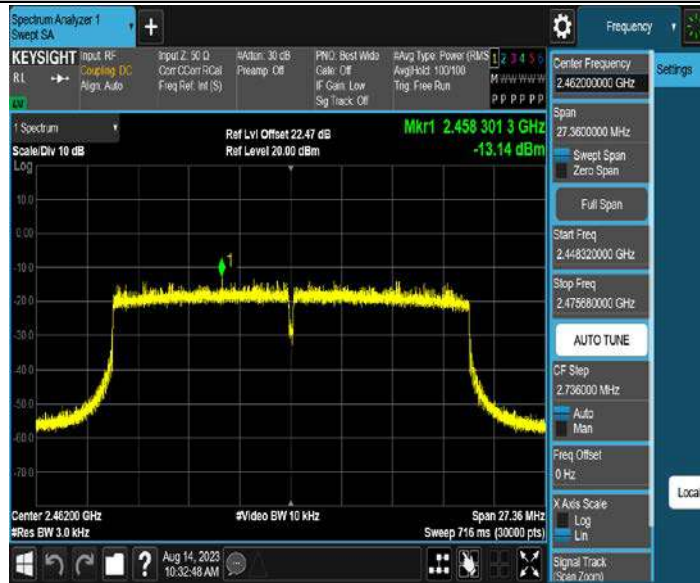
11AX20MIMO_Ant1_2437



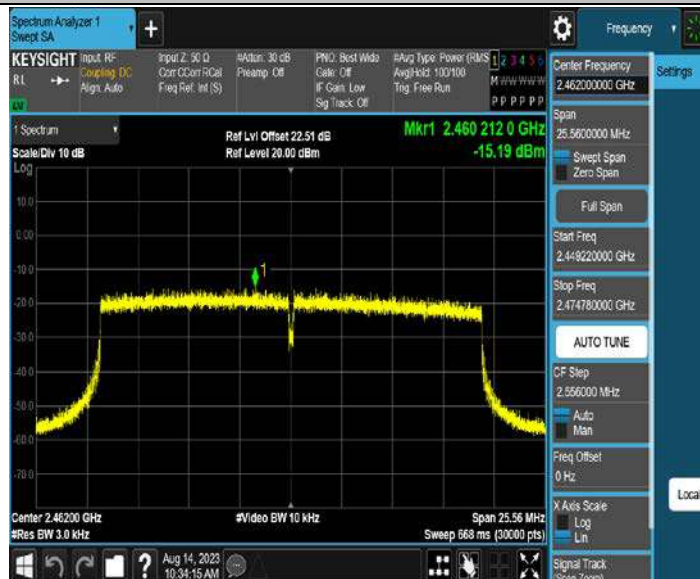
11AX20MIMO_Ant2_2437



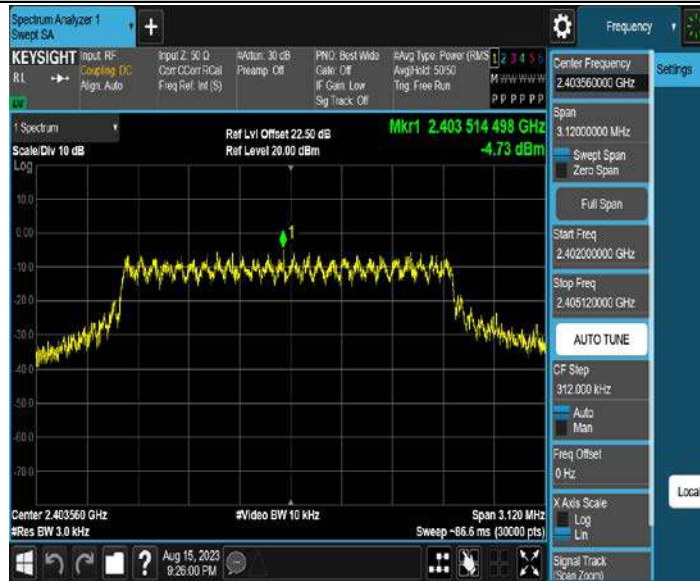
11AX20MIMO_Ant1_2462



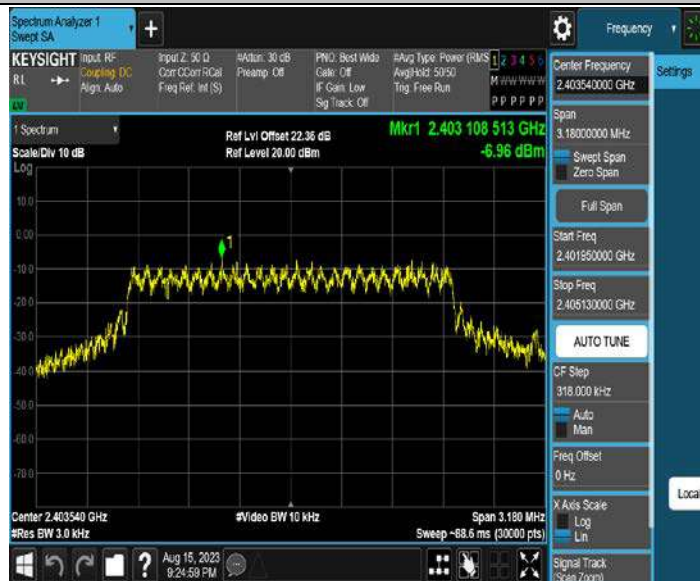
11AX20MIMO_Ant2_2462



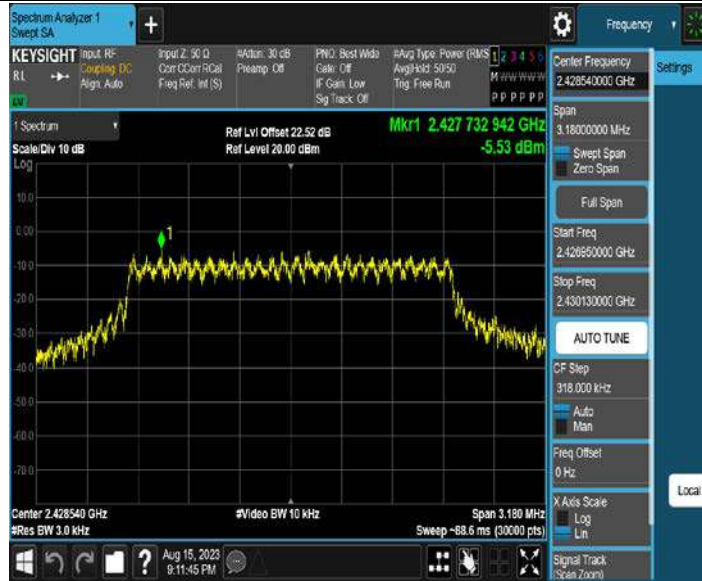
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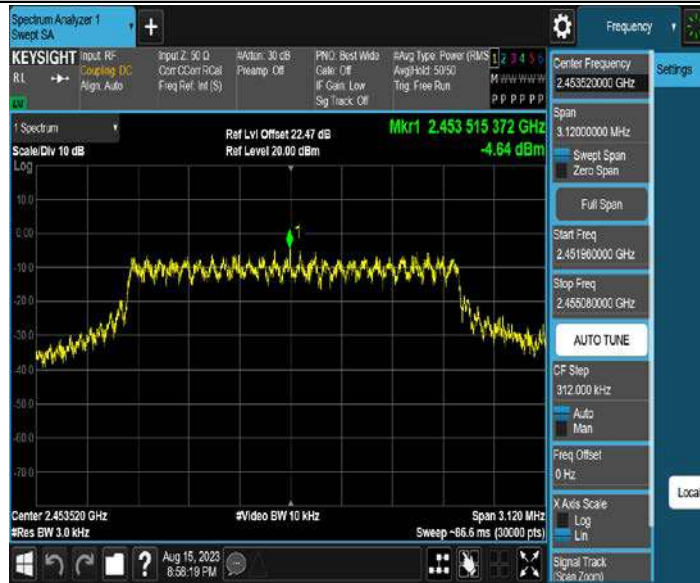
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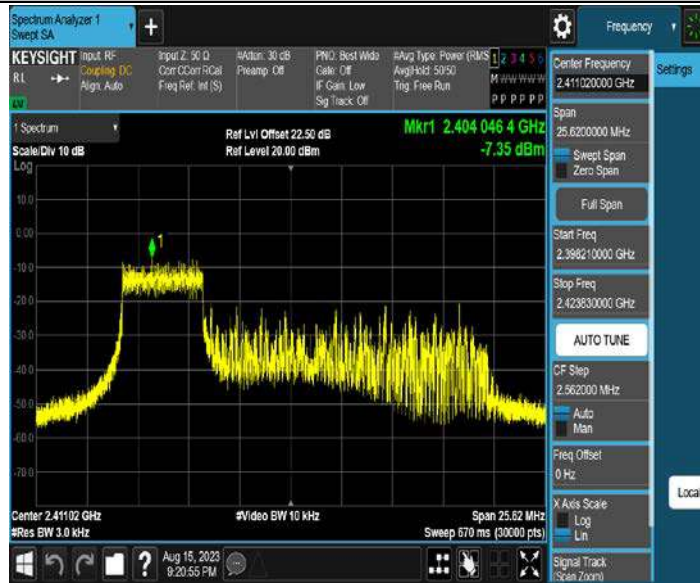
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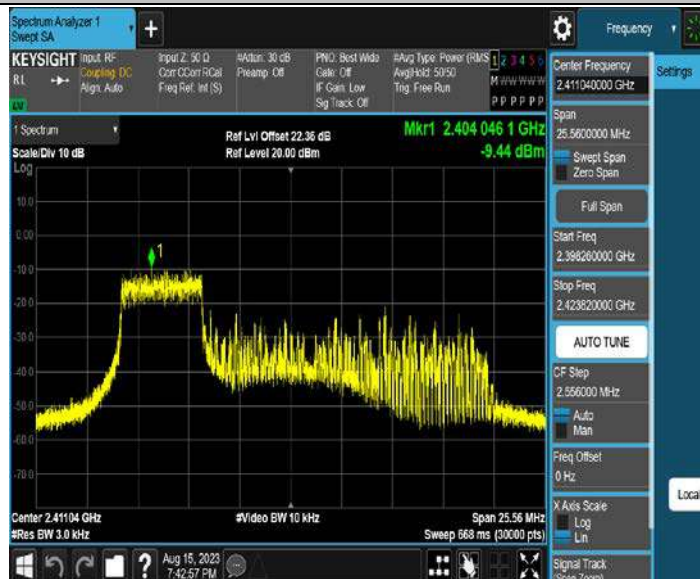
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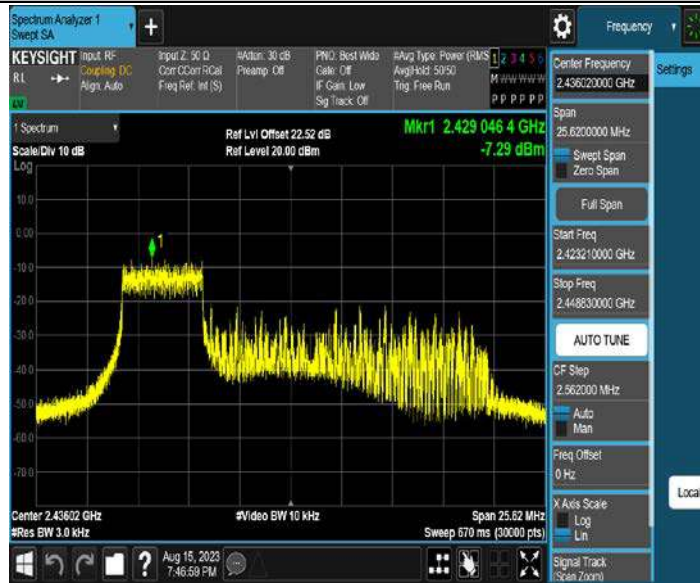
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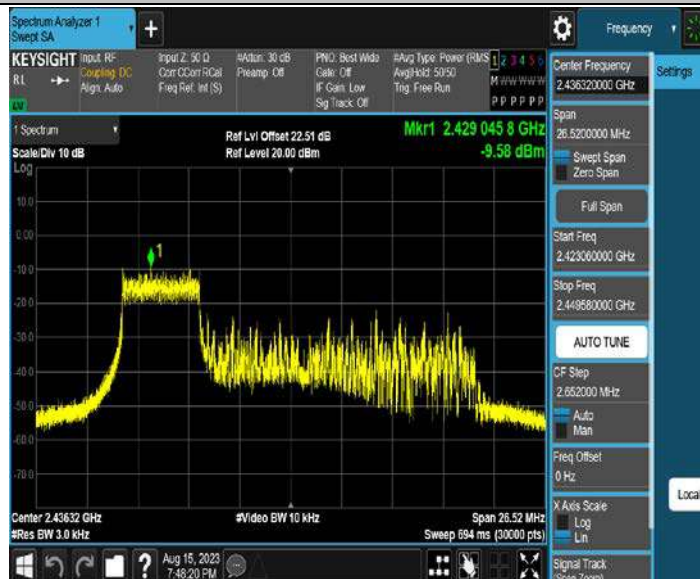
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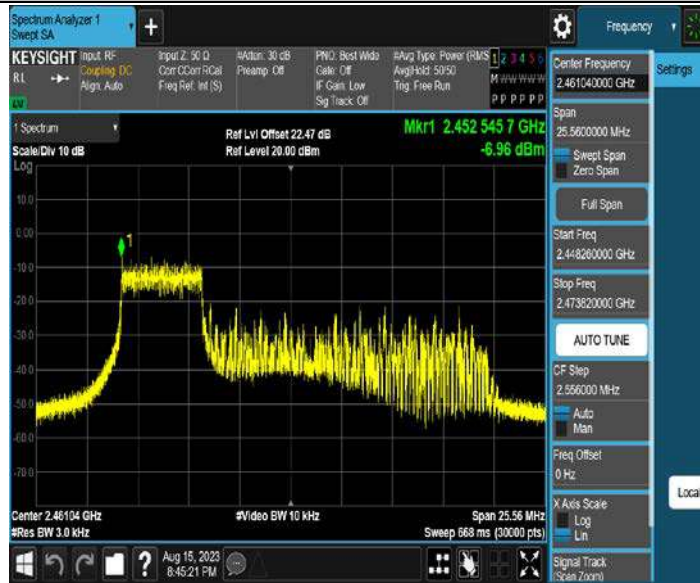
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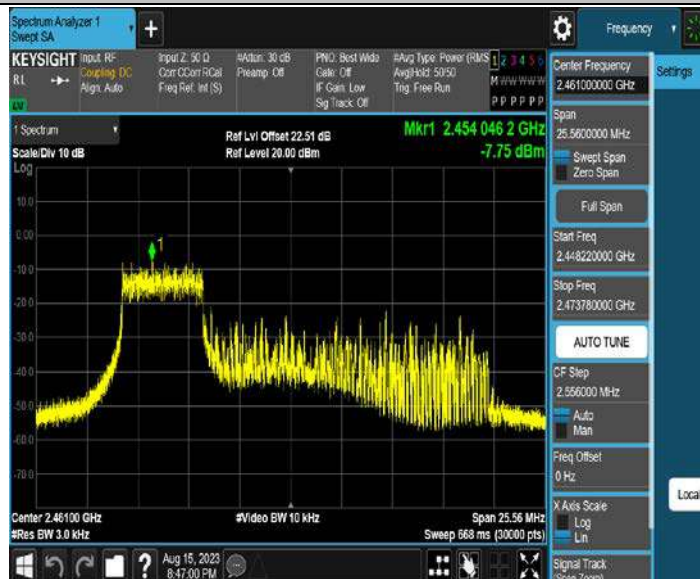
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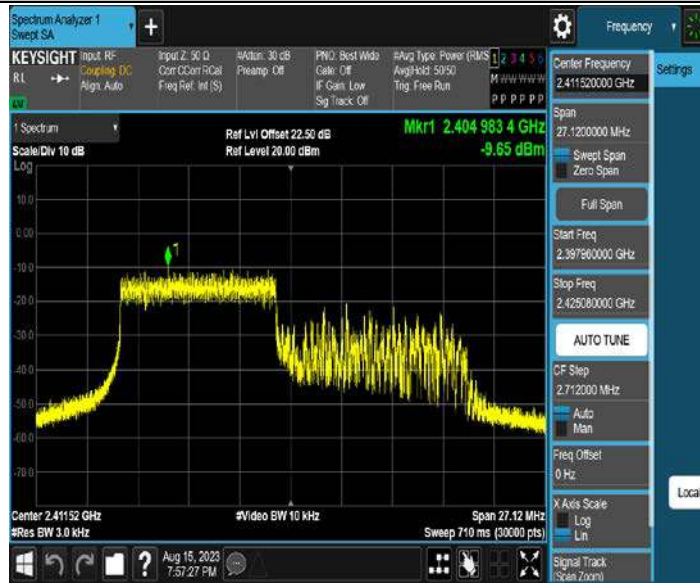
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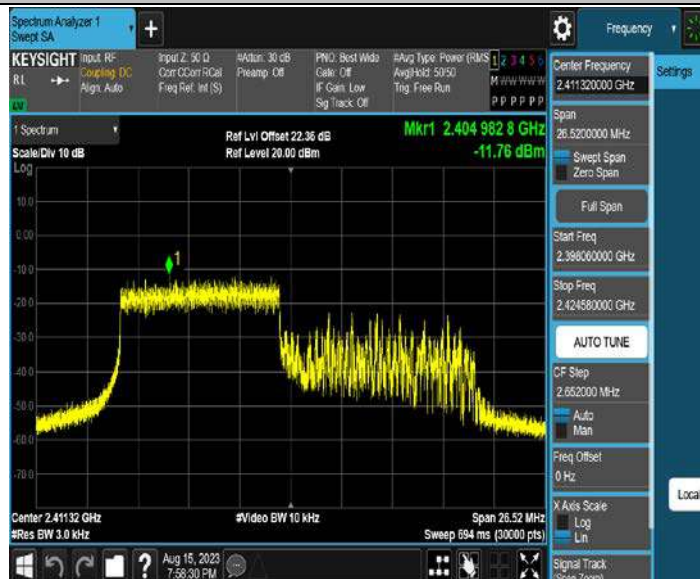
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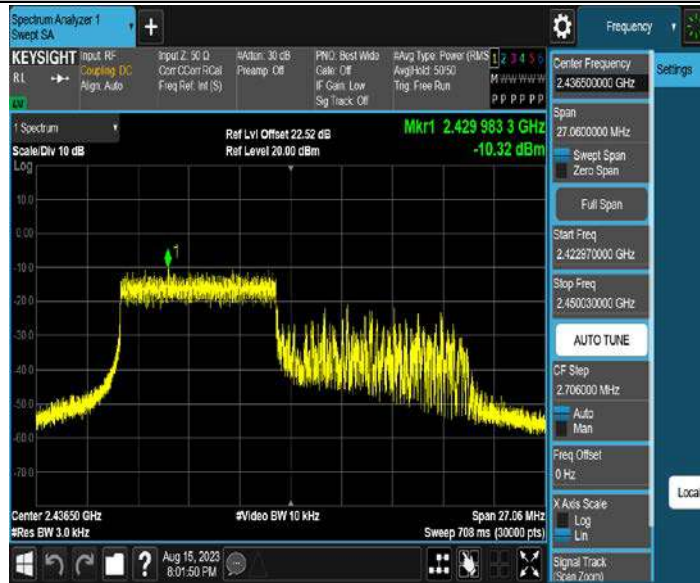
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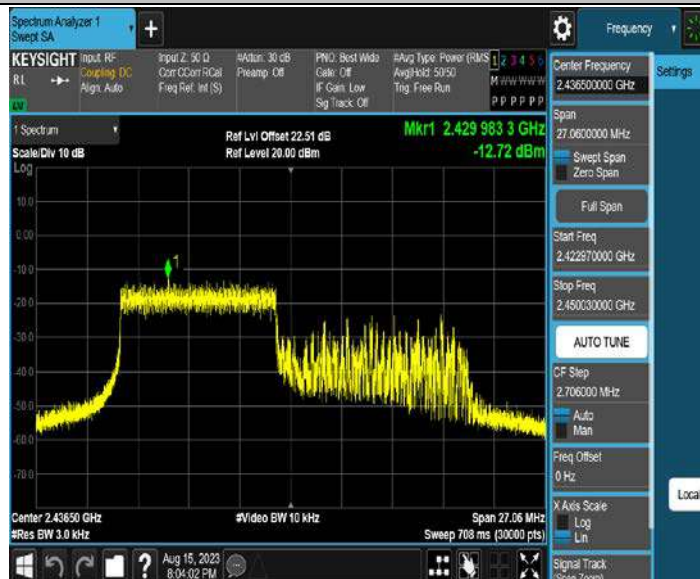
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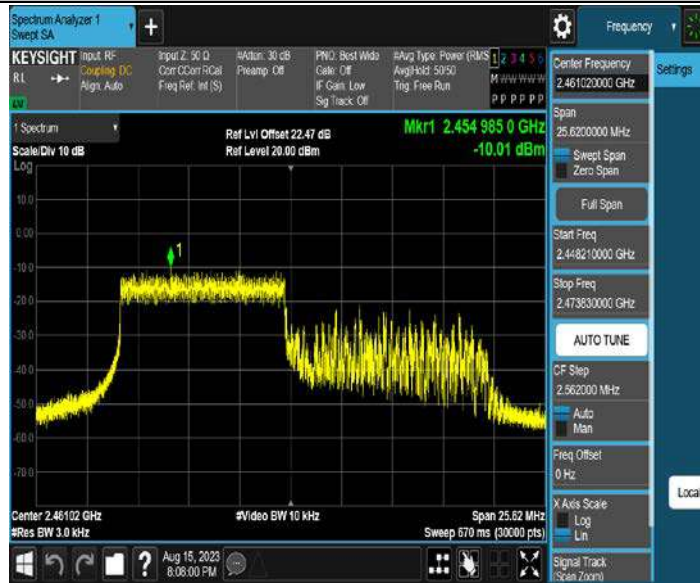
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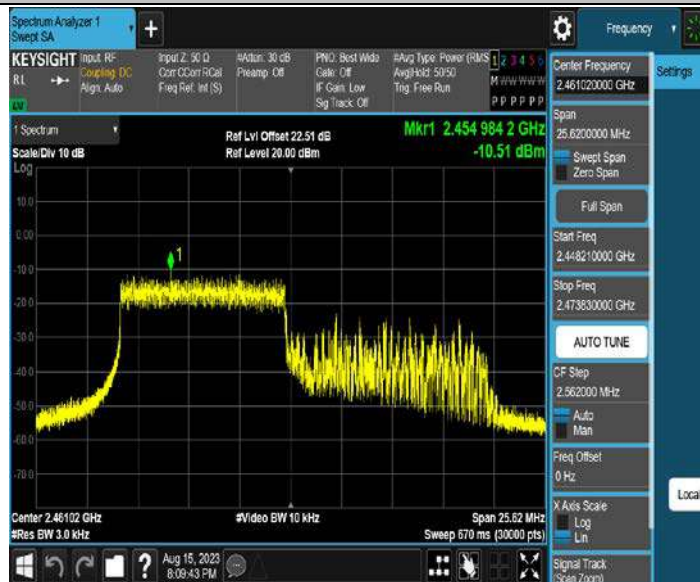
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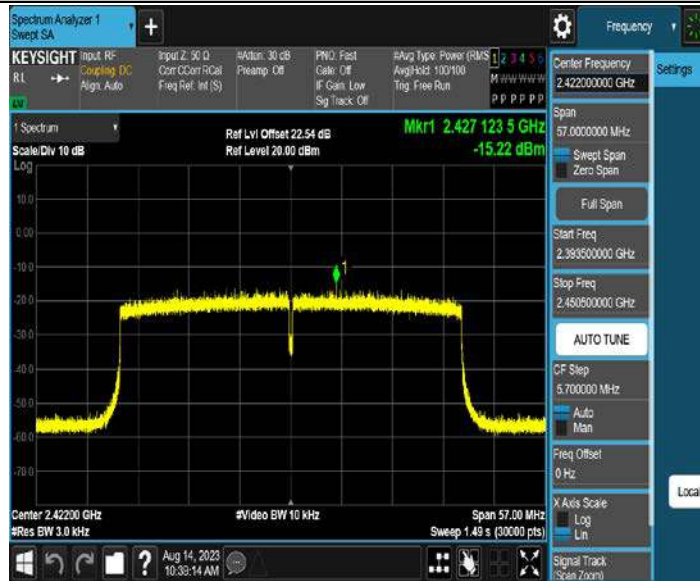
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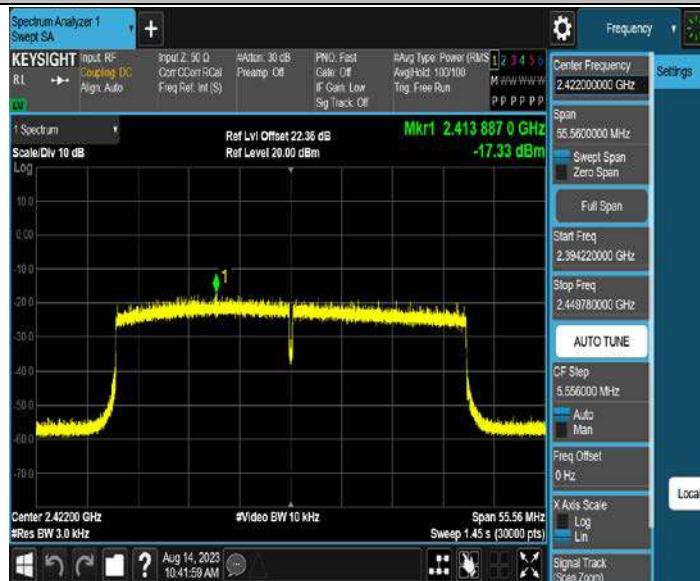
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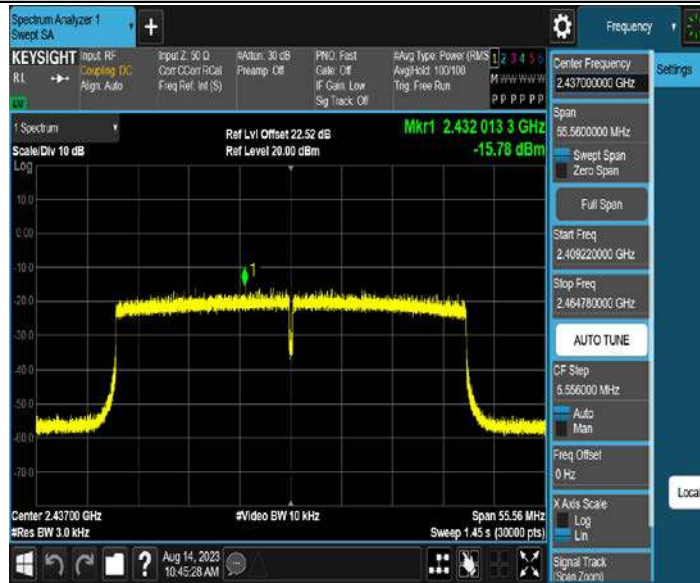
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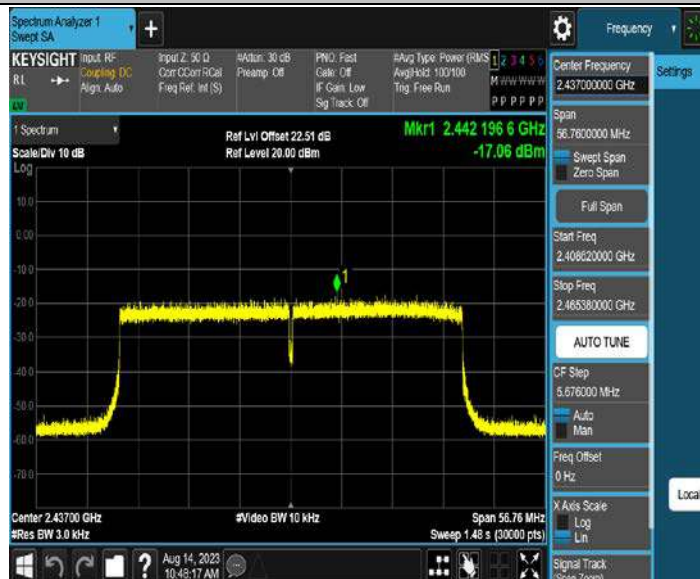
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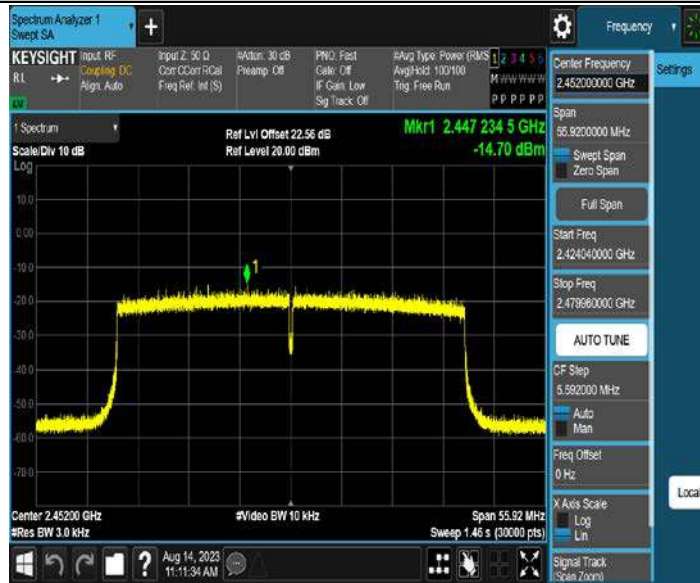
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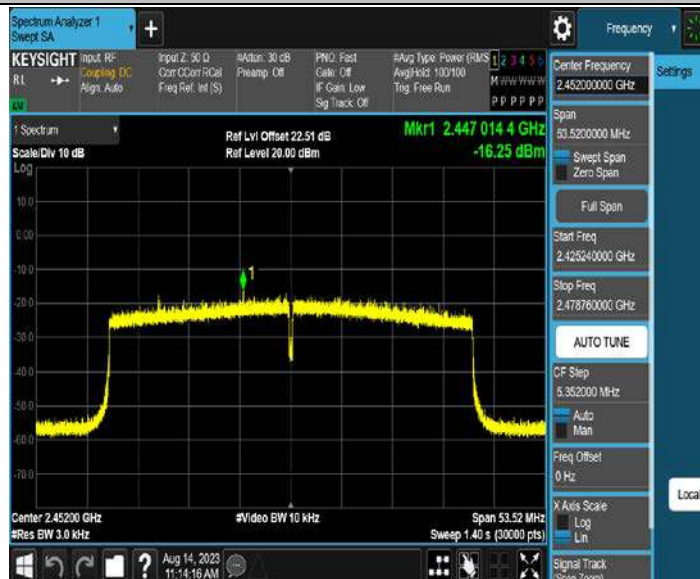
11AX40MIMO_Ant2_2437



11AX40MIMO_Ant1_2452



11AX40MIMO_Ant2_2452



End of Test Report