

RF TEST REPORT

FCC ID: 2BCGS-P1411

According to

47 CFR FCC Part 15, Subpart E(Section 15.407)

Product description : PrismXR Puppis S1
Model No. : P1411
Trade Mark : --
Product No. : POC230711014-S001; POC230711014-S002
Applicant : PRISM XR PTE LTD
Address : 60 PAYA LEBAR ROAD #12-03 PAYA LEBAR SQUARE
SINGAPORE, 409051
Receipt date : 2023.07.15
Test date : 2023.07.15~2023.09.23
Issued Date : 2023.10.08

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History of this test report

Original Report Issue Date: 2023.10.08

- No additional attachment
- Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. General Information

1.1 Applicant

PRISMXR PTE LTD

60 PAYA LEBAR ROAD #12-03 PAYA LEBAR SQUARE SINGAPORE, 409051

1.2 Manufacturer

PRISMXR PTE LTD

60 PAYA LEBAR ROAD #12-03 PAYA LEBAR SQUARE SINGAPORE, 409051

1.3 Basic Description of Equipment Under Test

Equipment Name	PrismXR Puppis S1	
Test Model No.	P1411	
Series Models.	N/A	
Spec. Difference	N/A	
Trademark	N/A	
Power Supply	DC 5V From USB	
Hardware Version	--	
Software Version	--	
Operating Temperature	0°C-40°C	
EUT Stage	○ Product Unit	● Final-Sample
Operating Band	5150MHz ~5250MHz 5250MHz ~5350MHz 5470MHz ~5725MHz 5725MHz ~5850MHz	
Product Type	IEEE 802.11a: WLAN (2TX, 2RX) IEEE 802.11n: WLAN (2TX, 2RX) IEEE 802.11ac: WLAN (2TX, 2RX) IEEE 802.11ax: WLAN (2TX, 2RX)	
Nominal Bandwidth	20MHz / 40MHz / 80MHz/ 160MHz	
Modulation	IEEE 802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) IEEE 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM) IEEE 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) IEEE 802.11ax: OFDMA (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)	
Maximum Output Power	UNII-1_ IEEE 802.11ax(HE20):25.14dBm (0.32659 W) UNII-2A_ IEEE 802.11ax(HE80):22.75dBm (0.18836 W) UNII-2C_ IEEE 802.11ac(VHT80):23.05dBm (0.20184 W) UNII-3_ IEEE 802.11ax(HE20):26.78dBm (0.47643 W)	
Data Rate (Mbps)	IEEE 802.11a: 54/48/36/24/18/12/9/6 Mbps	

	IEEE 802.11n: up to 300 Mbps IEEE 802.11ac: up to 1732 Mbps IEEE 802.11ax: up to 2402 Mbps			
Type of Device	Master device ☐ With Bridge ☐ With MESH			
Antenna gain(dBi)	Frequency (MHz)	5150~5350	5470~5725	5725~5850
	ANT1	2.33	3.72	3.71
	ANT2	2.94	3.90	3.01

TPC Function	☒	With TPC	☐	Without TPC
	☒ EUT employ a TPC mechanism and TPC have the capability to operate at least 6 dB below highest RF output power.			
Beamforming Function	☒	With Beamforming	☐	Without Beamforming
DFS Function (Master devices)	☒	5250MHz ~5350MHz		
	☒	5470MHz ~5725MHz		

15.407:U-NIL devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NIL device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm A TPC mechanism is not required for systems with an e.i.r.p of less than 500 mw.

Transmit Operating Mode	
802.11a	2TX With Beamforming
802.11n(HT20MHz)	2TX With Beamforming
802.11n(HT40MHz)	2TX With Beamforming
802.11ac(VHT20MHz)	2TX With Beamforming
802.11ac(VHT40MHz)	2TX With Beamforming
802.11ac(VHT80MHz)	2TX With Beamforming
802.11ac(VHT160MHz)	2TX With Beamforming
802.11ax(HE20MHz)	2TX With Beamforming
802.11ax(HE40MHz)	2TX With Beamforming
802.11ax(HE80MHz)	2TX With Beamforming
802.11ax(HE160MHz)	2TX With Beamforming

Transmit Operating Mode	Frequency (MHz)	Directional Gain (dBi)	
		Power spectral density	Power
802.11a_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11n(HT20MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11n(HT40MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ac(VHT20MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ac(VHT40MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ac(VHT80MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ac(VHT160MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ax(HE20MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ax(HE40MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ax(HE80MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71
802.11ax(HE160MHz)_2TX With Beamforming	5150~5350	5.94	5.94
	5470~5725	6.90	6.90
	5725~5850	6.71	6.71

Note:

If antenna gains are not equal and each transmit antenna can be driven by more than one spatial stream, directional gain may be calculated by either of the following formulas:

☒ Directional gain = $G_{ANT\ MAX} + 10 \log(N_{ANT}/N_{SS})$ dBi, where N_{SS} = the number of independent spatial streams of data and $G_{ANT\ MAX}$ is the gain of the antenna having the highest gain (in dBi).

☐ Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

If all antennas have the same gain, G_{ANT} :

☐ Directional gain = $G_{ANT} + 10 \log(N_{ANT}/N_{SS})$ dBi, where N_{SS} = the number of independent spatial streams of data and G_{ANT} is the antenna gain in dBi. (This formula can also be applied when antennas have different gains if the highest antenna gain is substituted for G_{ANT} .)

Ant gain provided by the manufacturer.

Channel Information			
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	802.11a /n /ac /ax (20MHz)	5180-5240	36-48
5250-5350		5260-5320	52-64
5470-5725		5500-5700	100-140
5725-5850		5745-5825	149-165
5150-5250	802.11n /ac /ax (40MHz)	5190-5230	38-46
5250-5350		5270-5310	54-62
5470-5725		5510-5670	102-134
5725-5850		5755-5795	151-159
5150-5250	802.11ac /ax (80MHz)	5210	42
5250-5350		5290	58
5470-5725		5530-5610	106-122
5725-5850		5775	155
5150-5350	802.11ac /ax (160MHz)	5250	50
5470-5725			

Note: For 802.11ax mode only support full RU mode.

2. Summary of Test Results

2.1 Summary of Test Items

47 CFR FCC Part 15, Subpart E			
Test item	FCC Clause	Results	Remarks
AC Power Conducted Emission	15.207 15.407(b)	Pass	Meet the requirement of the limit
Radiated Emission	15.205(a) 15.209(a) 15.407(b)	Pass	Meet the requirement of the limit
Antenna Requirements	15.203	Compliance	Note2
Transmission in the Absence of Data	15.407 (c)	Pass	NA
Spectrum Bandwidth	15.407(a) 15.407(e)	Pass	Meet the requirement of the limit
Conducted Power	15.407(a)	Pass	Meet the requirement of the limit
Power Spectral Density	15.407(a)	Pass	Meet the requirement of the limit
Dynamic Frequency Selection	15.407(h)	Pass	Meet the requirement of the limit
Note: 1. NA denotes Not Applicable in this part. 2. The EUT have 2 internal antennas arrangement which was permanently attached.			

2.2 Application of Standard

47 CFR FCC Part 15, Subpart E

KDB 662911 D01 Multiple Transmitter Output v02r01

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

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	FMZB1519 B	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-1 GHz	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)18GHz -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	MY60080 169	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	MY61270 787	2023/4/23	2024/4/22
5	EXG Analog Signal Generator	Keysight	N5173B	MY59101 282	2023/4/23	2024/4/22
6	Test software	dsusoft	JS1120-3	/	/	/

2.4 Operation Mode

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. The worst case test result was showed in the report.

UNII-1			
Test Software Version	QATool		
Frequency (MHz)	5180	5200	5240
IEEE 802.11a	17.5	17.5	17.5
IEEE 802.11n(HT20)	19	19	19
IEEE 802.11ac(VHT20)	18.5	18.5	18.5
IEEE 802.11ax(HE20)	19	19	19
Frequency (MHz)	5190	5230	
IEEE 802.11n(HT40)	17.5	18.5	
IEEE 802.11ac(VHT40)	17.5	17.5	
IEEE 802.11ax(HE40)	17.5	17.5	
Frequency (MHz)	5210		
IEEE 802.11ac(VHT80)	16.5		
IEEE 802.11ax(HE80)	16.5		

UNII-2A			
Test Software Version	QATool		
Frequency (MHz)	5260	5280	5320
IEEE 802.11a	14.5	14.5	14.5
IEEE 802.11n(HT20)	13.5	13.5	13.5
IEEE 802.11ac(VHT20)	13	13.5	13.5
IEEE 802.11ax(HE20)	16	16	16
Frequency (MHz)	5270	5310	
IEEE 802.11n(HT40)	16	16	
IEEE 802.11ac(VHT40)	16	16	
IEEE 802.11ax(HE40)	16	16	
Frequency (MHz)	5290		
IEEE 802.11ac(VHT80)	16		
IEEE 802.11ax(HE80)	15.5		

UNII-1+UNII-2A	
Test Software Version	QATool
Frequency (MHz)	5250
IEEE 802.11ac(VHT160)	16.5
IEEE 802.11ax(HE160)	16.5

UNII-2C				
Test Software Version	QATool			
Frequency (MHz)	5500	5580	5700	
IEEE 802.11a	14	14	14	
IEEE 802.11n(HT20)	13.5	14.5	13.5	
IEEE802.11ac(VHT20)	76	81	79	
IEEE 802.11ax(HE20)	16	16	16	
Frequency (MHz)	5510	5550	5670	
IEEE 802.11n(HT40)	16	16	16	
IEEE802.11ac(VHT40)	16	16	16	
IEEE 802.11ax(HE40)	16	16	16	
Frequency (MHz)	5530	5690		
IEEE802.11ac(VHT80)	14	17		
IEEE 802.11ax(HE80)	15.5	15.5		

UNII-2C	
Test Software Version	QATool
Frequency (MHz)	5570
IEEE 802.11ac(VHT160)	16
IEEE 802.11ax(HE160)	17

UNII-3			
Test Software Version	QATool		
Frequency (MHz)	5745	5785	5825
IEEE 802.11a	20.5	20	20.5
IEEE 802.11n(HT20)	21	21	22
IEEE 802.11ac(VHT20)	20	21	22
IEEE 802.11ax(HE20)	22	21.5	21
Frequency (MHz)	5755	5795	
IEEE 802.11n(HT40)	20.5	20	
IEEE 802.11ac(VHT40)	19	19	
IEEE 802.11ax(HE40)	20	20.5	
Frequency (MHz)	5775		
IEEE 802.11ac(VHT80)	18		
IEEE 802.11ax(HE80)	17.5		

11n(HT20) and 11ac(VHT20) mode have the same modulation, and the 11ac(VHT20) mode power setting is not greater than 11n(HT20), so the test of 11ac(VHT20) mode is covered by 11n(HT20). 11n(HT40) and 11ac(VHT40) mode have the same modulation, and 11ac(VHT40) mode power setting is not greater than 11n(HT40), so the test of 11ac(VHT40) mode is covered by 11n(HT40).

The EUT supports non-beamforming and beamforming modes, both modes have the same power setting, after evaluating, the beamforming mode has been evaluated to be the worst case, so it was selected to test.

2.5 Test Condition

Applicable to	Environmental conditions	Input Power	Tested by
AC Power Conducted Emission	24.3°C, 51% RH	120V AC	Albert Fan
Radiated Emission	24.2°C, 55% RH	120V AC	Albert Fan
Spectrum Bandwidth	24.2°C, 52% RH	120V AC	Jason Huang
Conducted Power	24.2°C, 52% RH	120V AC	Jason Huang
Power Spectral Density	24.2°C, 52% RH	120V AC	Jason Huang
Dynamic Frequency Selection (DFS)	24.3°C, 54% RH	120V AC	Jason Huang

The applicant declare the operating environment of EUT as below:

Normal conditions: 120V AC, 15~35°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.

TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Correction Factor	1/T Minimum VBW(kHz)	Final VBW(kHz)
11A-CDD	Ant1	5180	8.41	8.47	99.29	0.03	0.12	1
	Ant2	5180	8.41	8.47	99.29	0.03	0.12	1
11N20MIMO	Ant1	5180	1.4	1.45	96.55	0.15	0.71	1
	Ant2	5180	1.39	1.45	95.86	0.18	0.72	1
11N40MIMO	Ant1	5190	1.4	1.45	96.55	0.15	0.71	1
	Ant2	5190	1.4	1.46	95.89	0.18	0.71	1
11AC80MIMO	Ant1	5210	0.26	0.31	83.87	0.76	3.85	4
	Ant2	5210	0.26	0.31	83.87	0.76	3.85	4
11AC160MIMO	Ant1	5250	0.19	0.24	79.17	1.01	5.26	6
	Ant2	5250	0.19	0.24	79.17	1.01	5.26	6
11AX20MIMO	Ant1	5180	0.42	0.48	87.5	0.58	2.38	3
	Ant2	5180	0.43	0.49	87.76	0.57	2.33	3
11AX40MIMO	Ant1	5190	0.75	0.81	92.59	0.33	1.33	2
	Ant2	5190	0.75	0.8	93.75	0.28	1.33	2
11AX80MIMO	Ant1	5210	0.41	0.47	87.23	0.59	2.44	3
	Ant2	5210	0.41	0.46	89.13	0.50	2.44	3
11AX160MIMO	Ant1	5250	0.29	0.35	82.86	0.82	3.45	4
	Ant2	5250	0.3	0.36	83.33	0.79	3.33	4

Note: The DUTY CYCLE of different channels in the same mode is the same, and the above test channels are represented in the report.

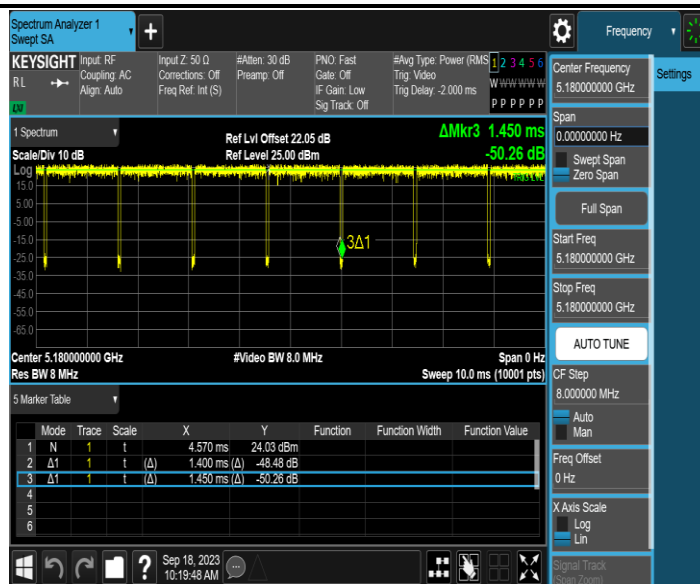
11A-CDD_Ant1_5180



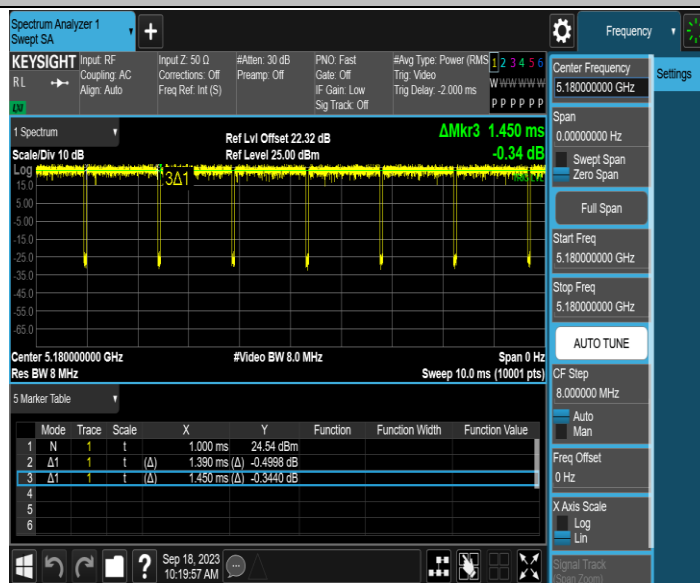
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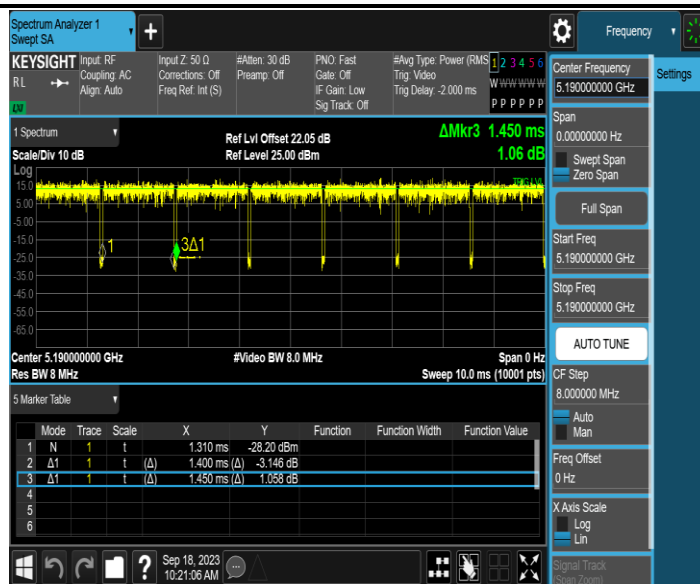
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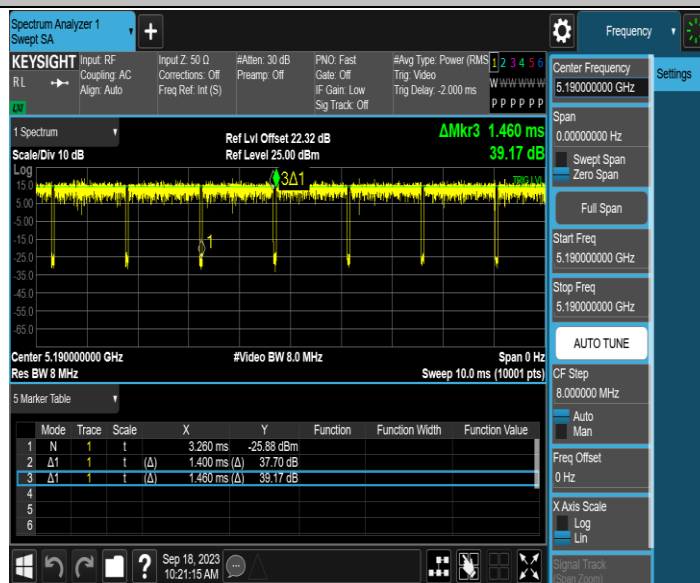
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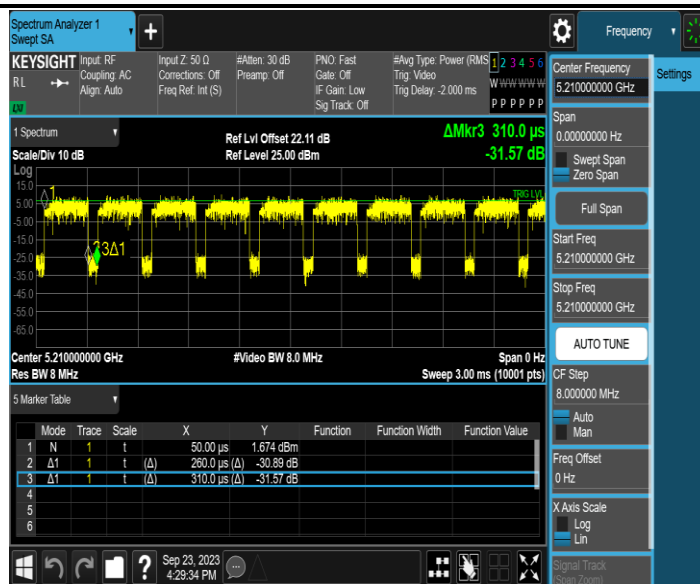
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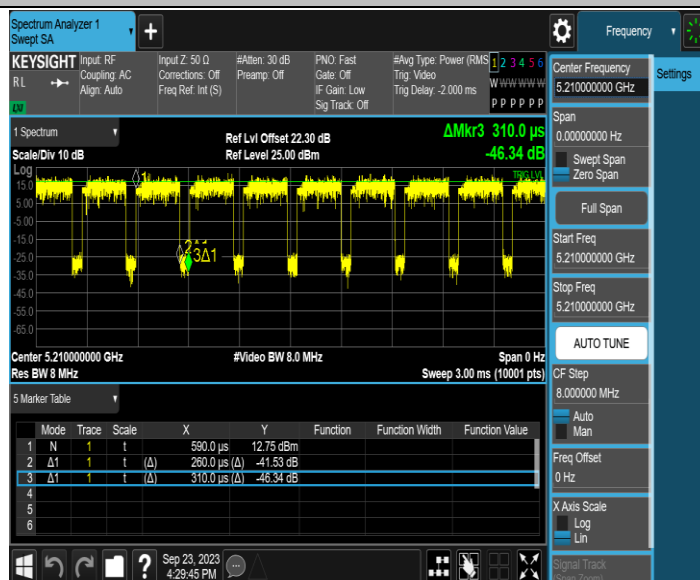
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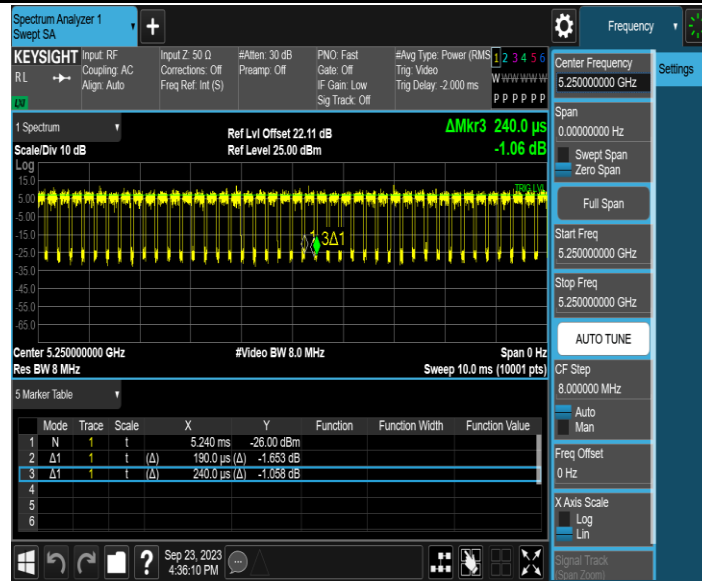
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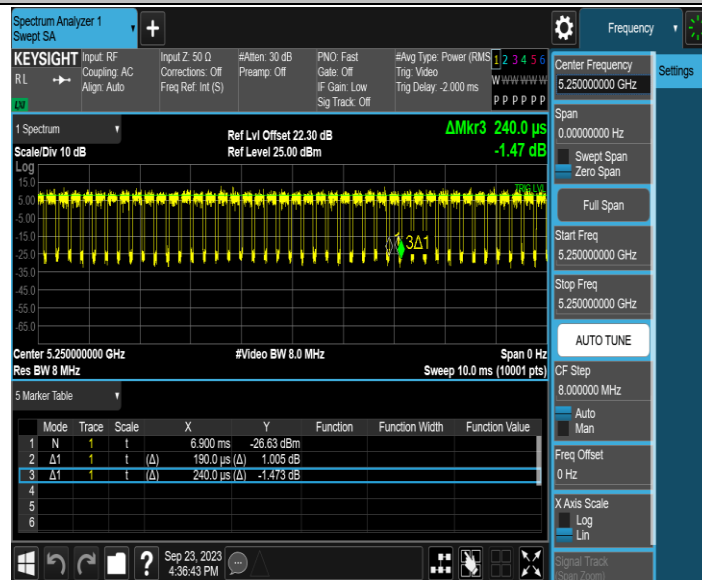
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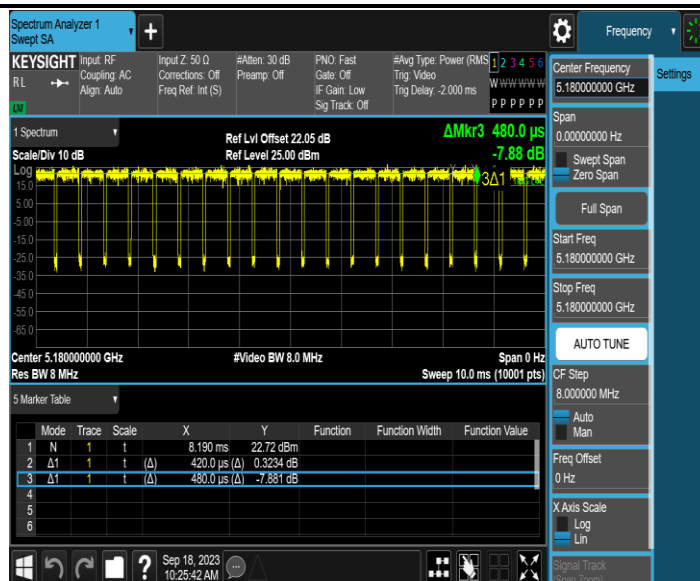
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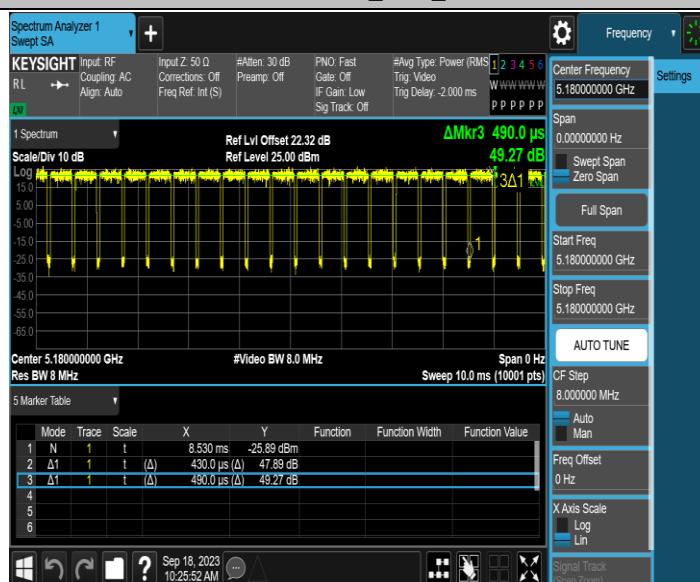
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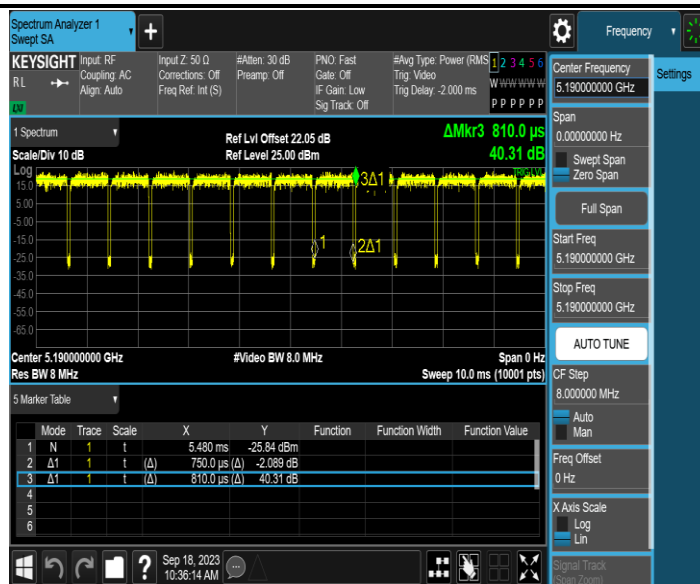
11AX20MIMO_Ant1_5180



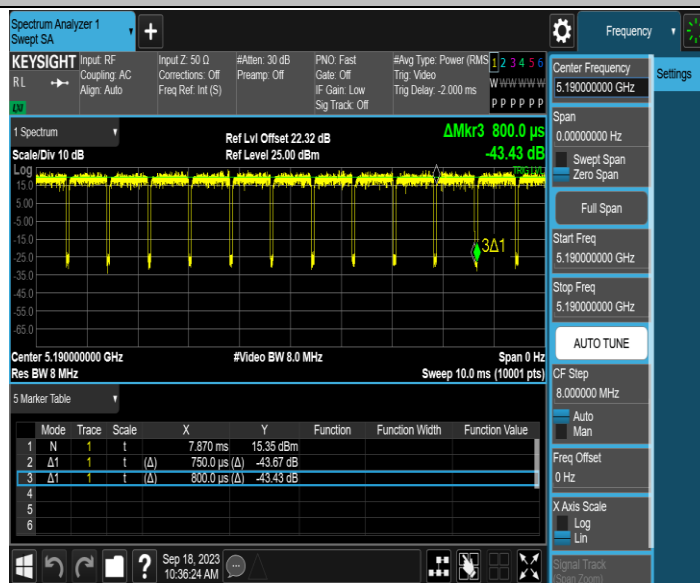
11AX20MIMO_Ant2_5180



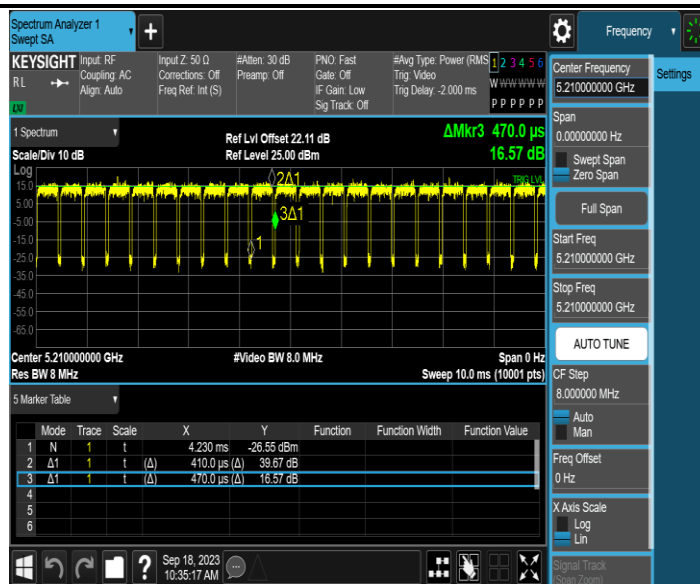
11AX40MIMO_Ant1_5190



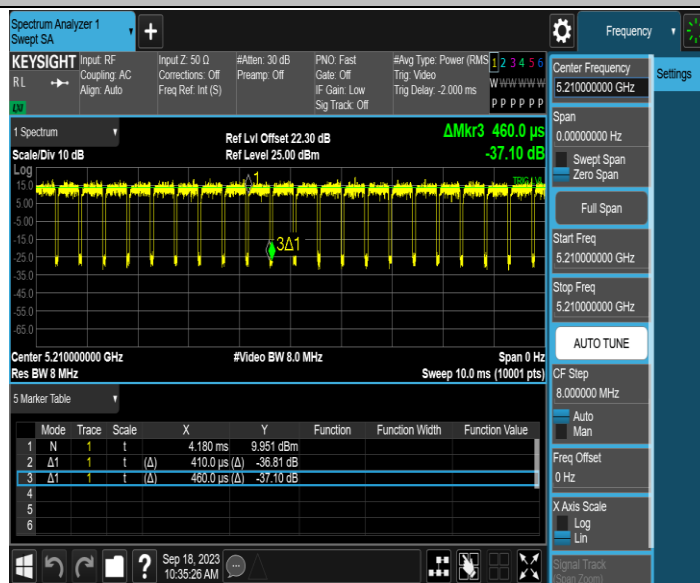
11AX40MIMO_Ant2_5190



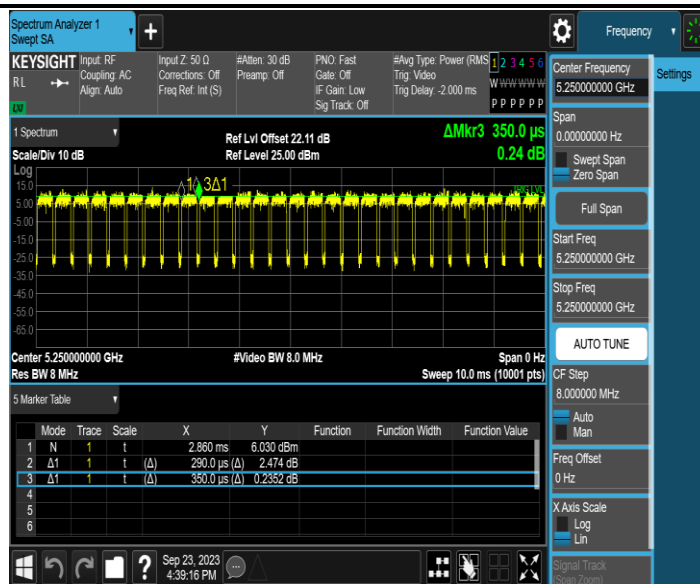
11AX80MIMO_Ant1_5210



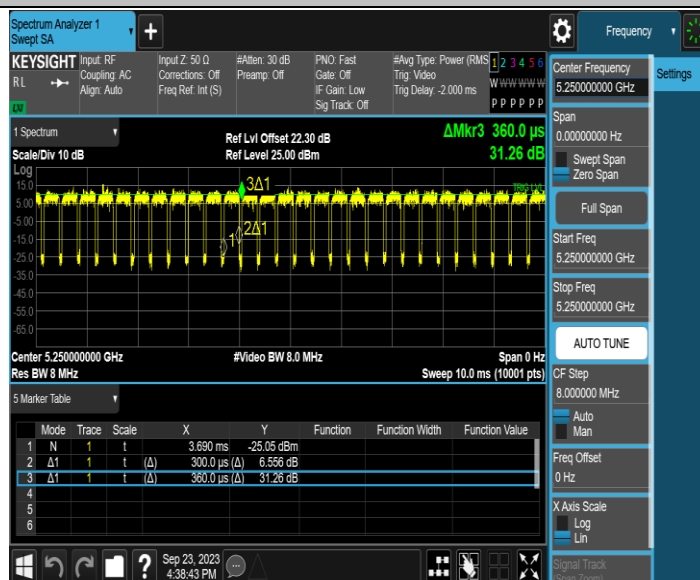
11AX80MIMO_Ant2_5210



11AX160MIMO_Ant1_5250



11AX160MIMO_Ant2_5250



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:	No. 110-113, 115, 116, Block B, Jinyuan Business Building, Bao'an District, Shenzhen, China
CNAS Registration Number:	CNAS L18252
CAB identifier	CN0145
A2LA Certificate Number	6823.01
Telephone:	0755-26024411

2.9 Description of Support Units

Test associated equipment

No.	Equipment	Manufacturer	Model	Series No
1	PC1	Lenovo	M4500T	/
2	Notebook	L450	Think	/

Cable and Interconnection

Item	Interface	Shielded Type	Ferrite Core	Length
1	USB	Yes	No	1.5m

2.10 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.

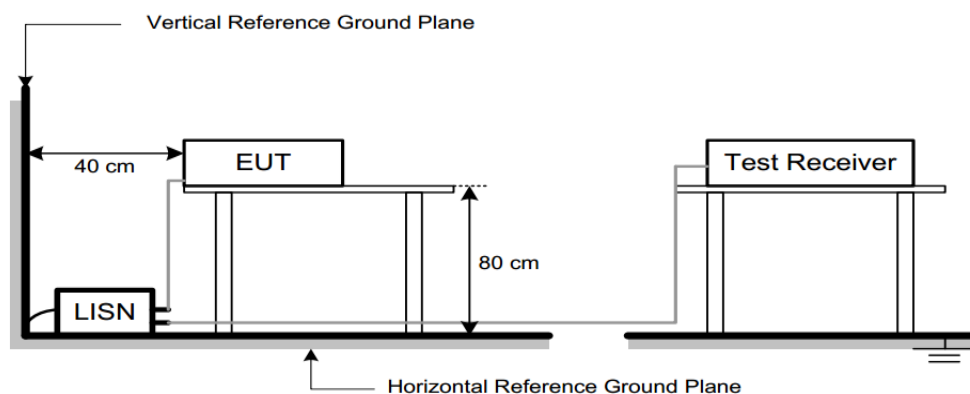
2. The lower limit shall apply at the transition frequencies.

3.1.2 Test Procedure

Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
○ Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○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:

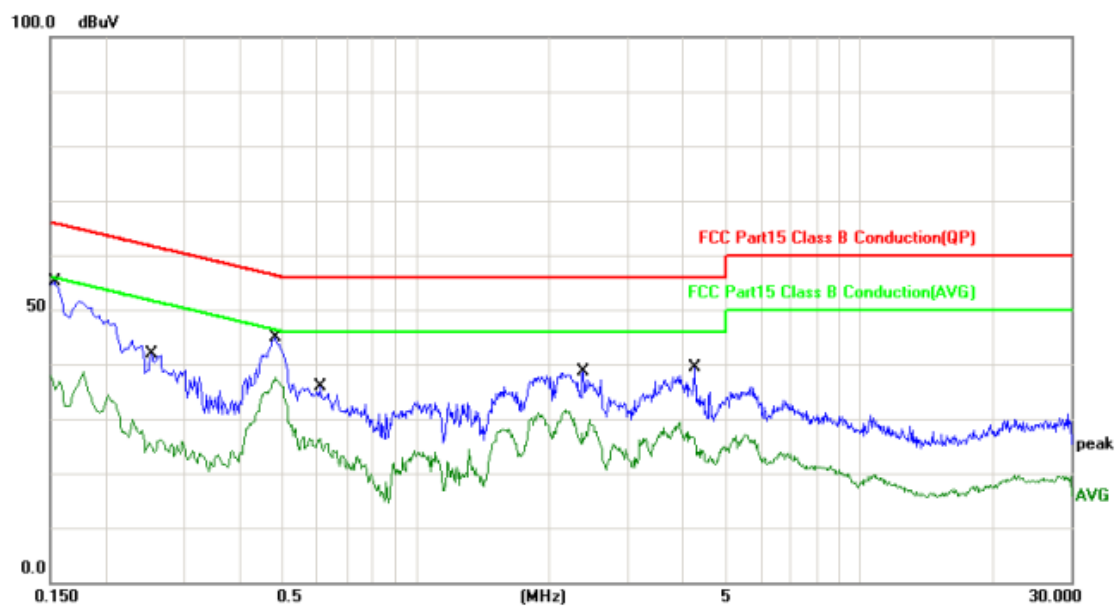
1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Measurement = Reading + Correct Factor.
3. Over = Measurement – Limit

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

150kHz~30MHz

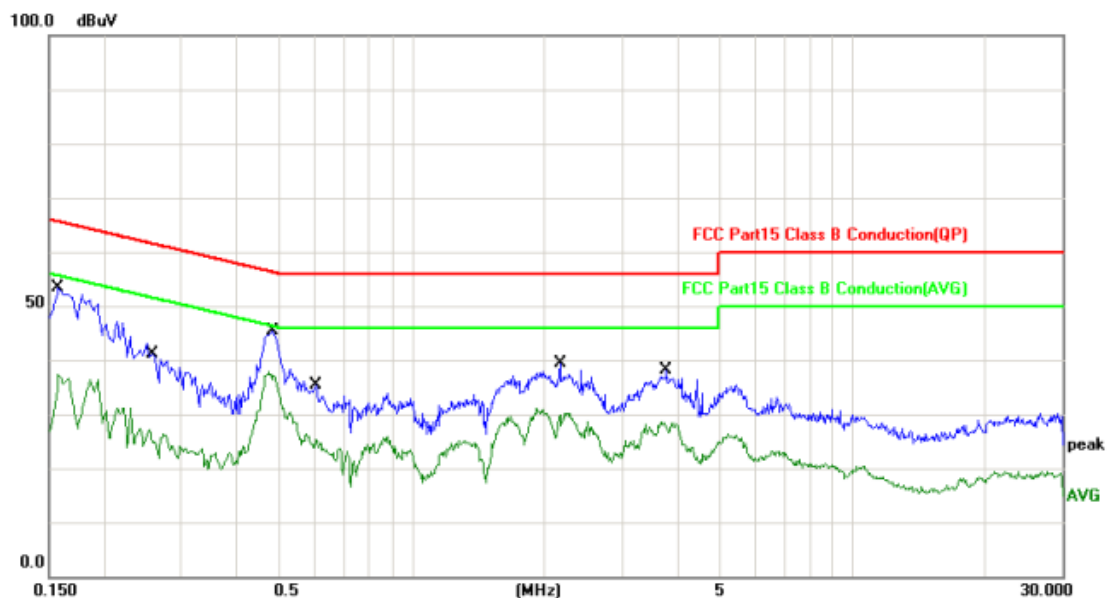
Worst Case Operating Mode: 11A-MIMO_ Channel:157

Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	33.77	19.50	53.27	65.78	-12.51	QP	
2		0.1540	20.13	19.50	39.63	55.78	-16.15	AVG	
3		0.2540	18.40	19.53	37.93	61.63	-23.70	QP	
4		0.2540	5.54	19.53	25.07	51.63	-26.56	AVG	
5		0.4820	20.12	19.53	39.65	56.30	-16.65	QP	
6 *		0.4820	15.43	19.53	34.96	46.30	-11.34	AVG	
7		0.6100	8.02	19.53	27.55	56.00	-28.45	QP	
8		0.6100	3.79	19.53	23.32	46.00	-22.68	AVG	
9		2.3860	10.83	20.31	31.14	56.00	-24.86	QP	
10		2.3860	5.60	20.31	25.91	46.00	-20.09	AVG	
11		4.2540	9.29	20.36	29.65	56.00	-26.35	QP	
12		4.2540	4.64	20.36	25.00	46.00	-21.00	AVG	

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	32.53	19.70	52.23	65.57	-13.34	QP	
2		0.1580	13.58	19.70	33.28	55.57	-22.29	AVG	
3		0.2580	19.63	19.69	39.32	61.50	-22.18	QP	
4		0.2580	6.43	19.69	26.12	51.50	-25.38	AVG	
5		0.4820	20.22	19.74	39.96	56.30	-16.34	QP	
6	*	0.4820	15.19	19.74	34.93	46.30	-11.37	AVG	
7		0.6060	8.23	19.76	27.99	56.00	-28.01	QP	
8		0.6060	3.83	19.76	23.59	46.00	-22.41	AVG	
9		2.1780	14.61	20.41	35.02	56.00	-20.98	QP	
10		2.1780	9.96	20.41	30.37	46.00	-15.63	AVG	
11		3.7820	11.12	20.28	31.40	56.00	-24.60	QP	
12		3.7820	5.80	20.28	26.08	46.00	-19.92	AVG	

3.2 Radiated Emission

3.2.1 Limit

1) Limit of radiated emission measurement:

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	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
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 $\mu\text{V/m}$

(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.

2) Limit of unwanted emission out of the restricted bands:

Frequency(MHz)	EIRP Limit(dBm/MHz)	Equivalent Field Strength at 3m($\text{dB}\mu\text{V/m}$)
5150-5250	-27	68.2
5250-5350	-27	68.2
5470-5725	-27	68.2
5725-5850	-27 NOTE (2)	68.2
	10 NOTE (2)	105.2
	15.6 NOTE (2)	110.8
	27 NOTE (2)	122.2

Note: (1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength: $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d=3\text{m}$

(2) According to 15.407(b)(4)(i), all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the

band edge.

3.2.2 Test Procedure

Test Method	
○Conducted Measurement	●Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

- a) 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)
- b) 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)
- c) 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.

The following table is the setting of the receiver:

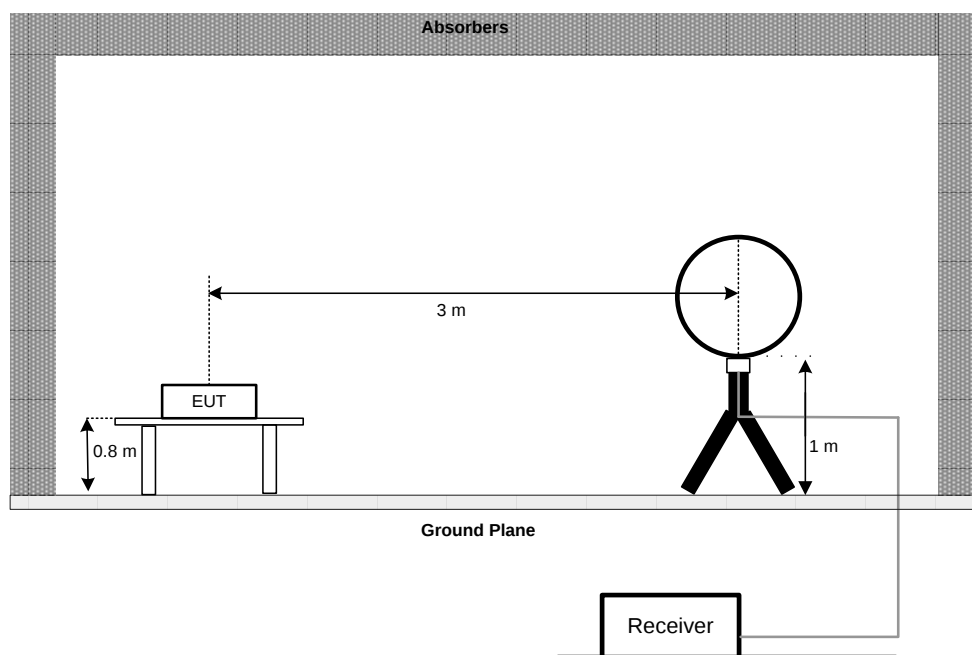
Spectrum Parameters	Setting
Start ~ Stop Frequency	9 kHz~150 kHz for RBW 200 Hz
Start ~ Stop Frequency	0.15 MHz~30 MHz for RBW 9 kHz
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz

Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for PK value 1 MHz / 1/T (Refer to Final VBW in Section 2.6)for AVG value

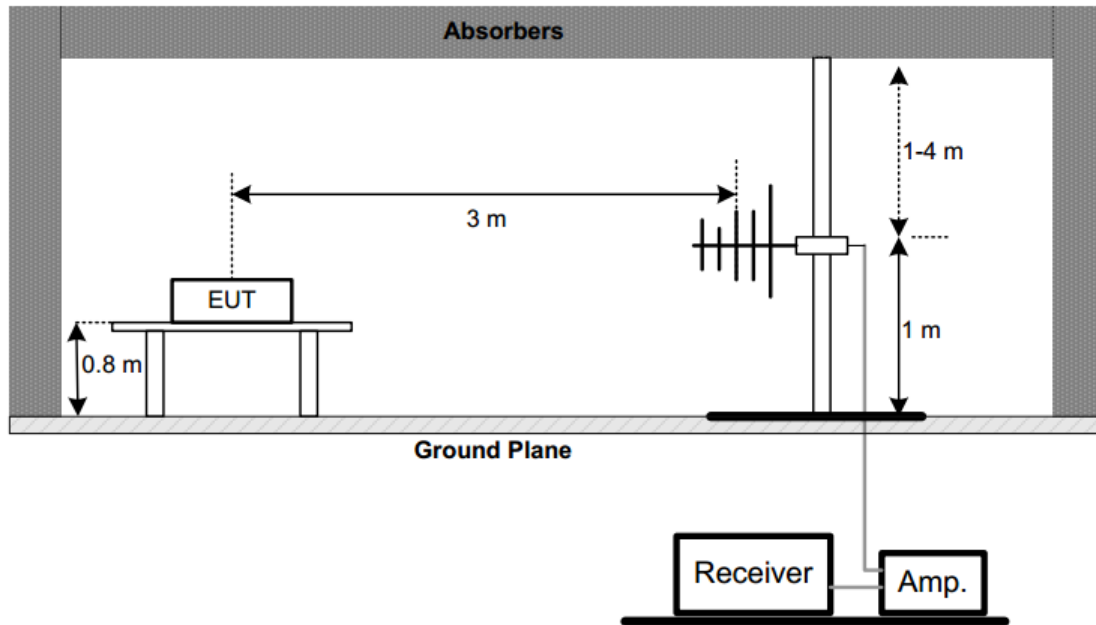
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector
Start ~ Stop Frequency	1 GHz~40 GHz for PK/AVG detector

3.2.3 Test Setup

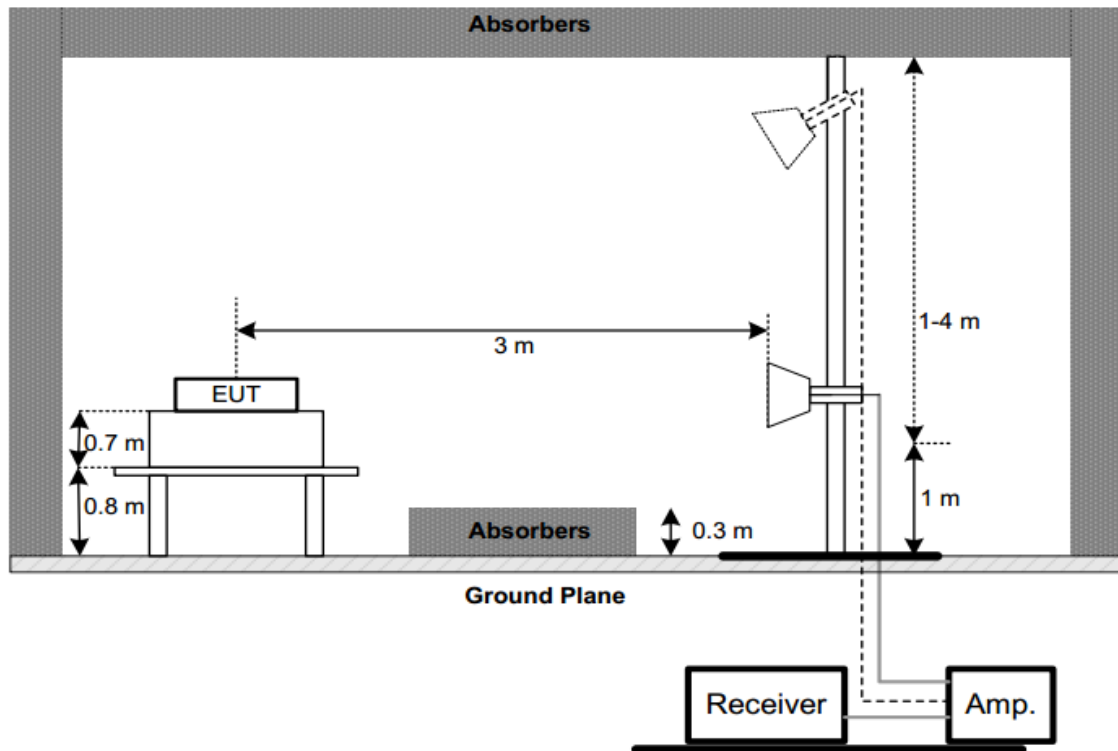
(A) Radiated Emission Test Set-Up Frequency Below 30 MHz



(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

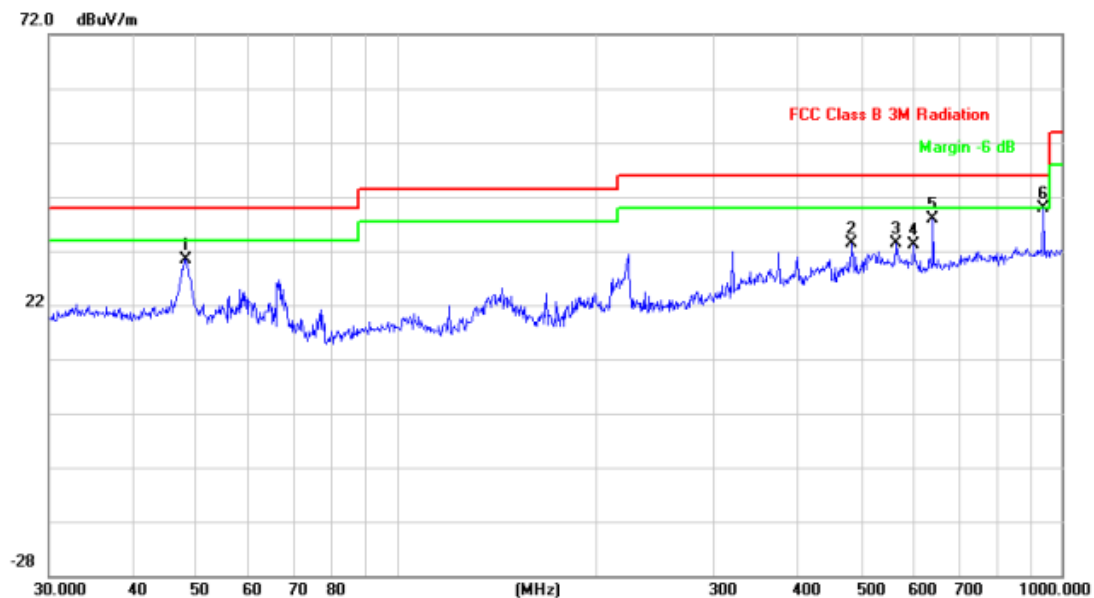
Note:

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

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

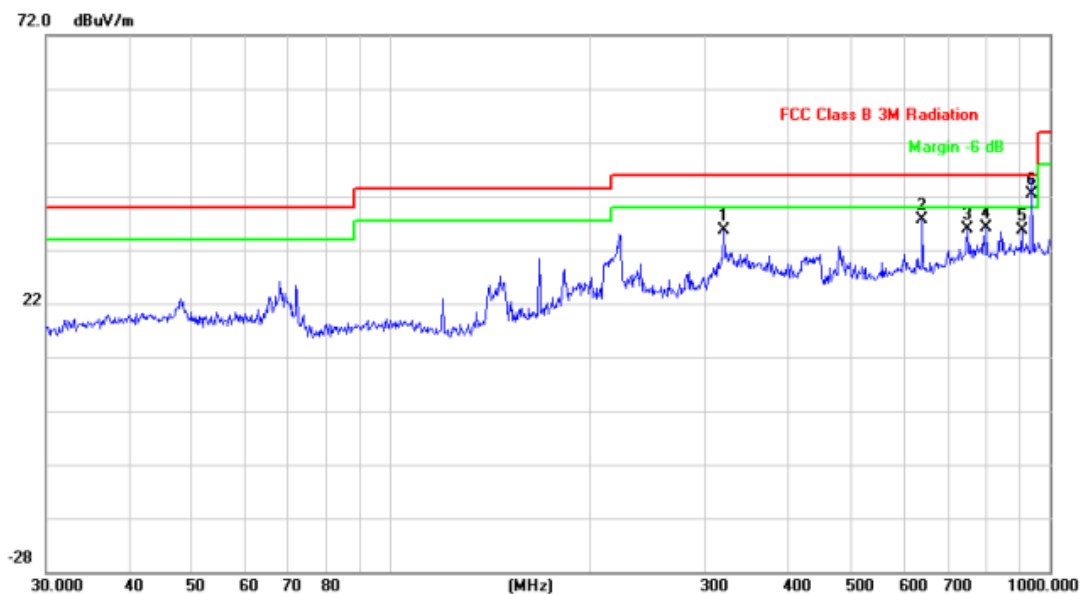
Below 1G (30MHz~1GHz) Worst Case Operating Mode: 11A-MIMO_ Channel:157

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		48.1626	9.48	20.97	30.45	40.00	-9.55	QP	100	133
2		483.9094	7.68	25.62	33.30	46.00	-12.70	QP	100	14
3		562.6624	6.58	26.81	33.39	46.00	-12.61	QP	136	0
4		599.3212	4.87	28.16	33.03	46.00	-12.97	QP	200	91
5		640.6110	9.31	28.53	37.84	46.00	-8.16	QP	100	214
6	*	938.8326	7.98	31.80	39.78	46.00	-6.22	QP	100	199

HORIZONTAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		319.9370	13.27	22.40	35.67	46.00	-10.33	QP	100	196
2		640.6110	9.05	28.53	37.58	46.00	-8.42	QP	200	127
3		750.1083	5.07	30.76	35.83	46.00	-10.17	QP	100	148
4		801.7863	6.08	29.94	36.02	46.00	-9.98	QP	100	139
5		906.4824	3.93	31.77	35.70	46.00	-10.30	QP	100	232
6 *		938.8326	10.49	31.80	42.29	46.00	-3.71	QP	100	211

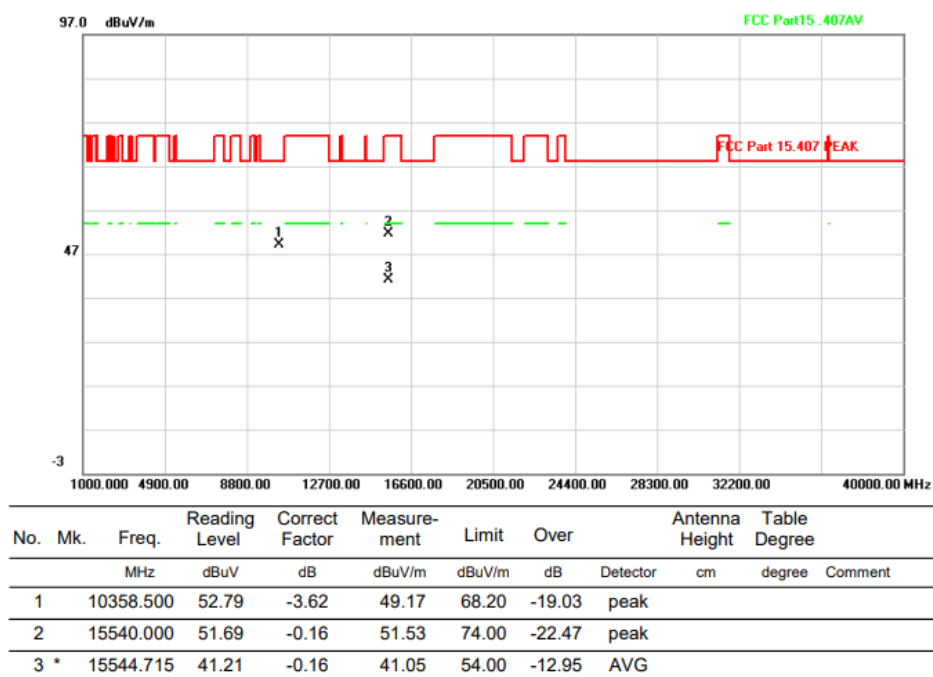
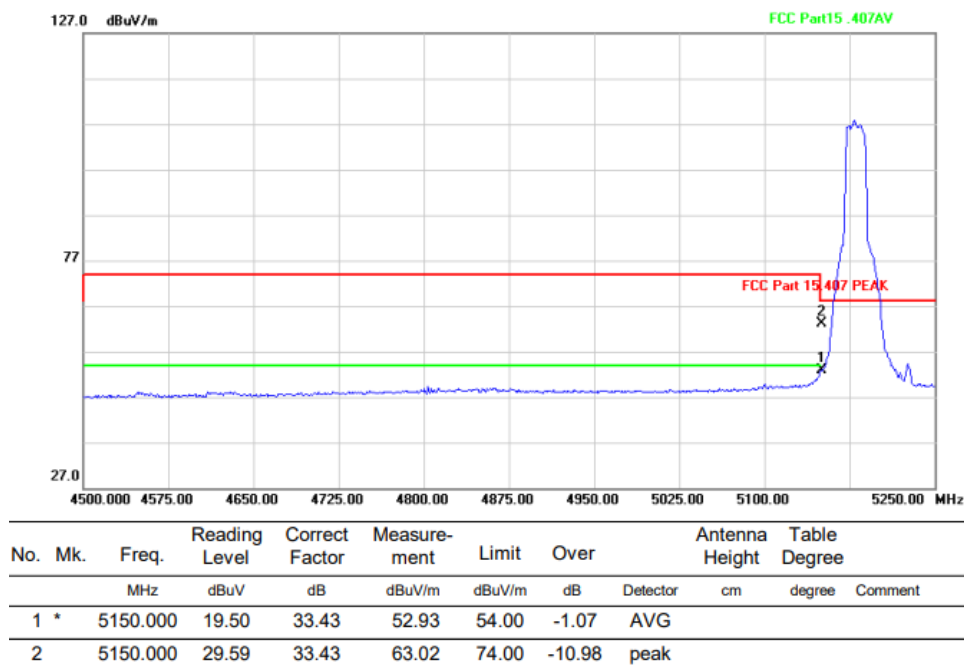
3) Radiated emission: Above 1G

Note:

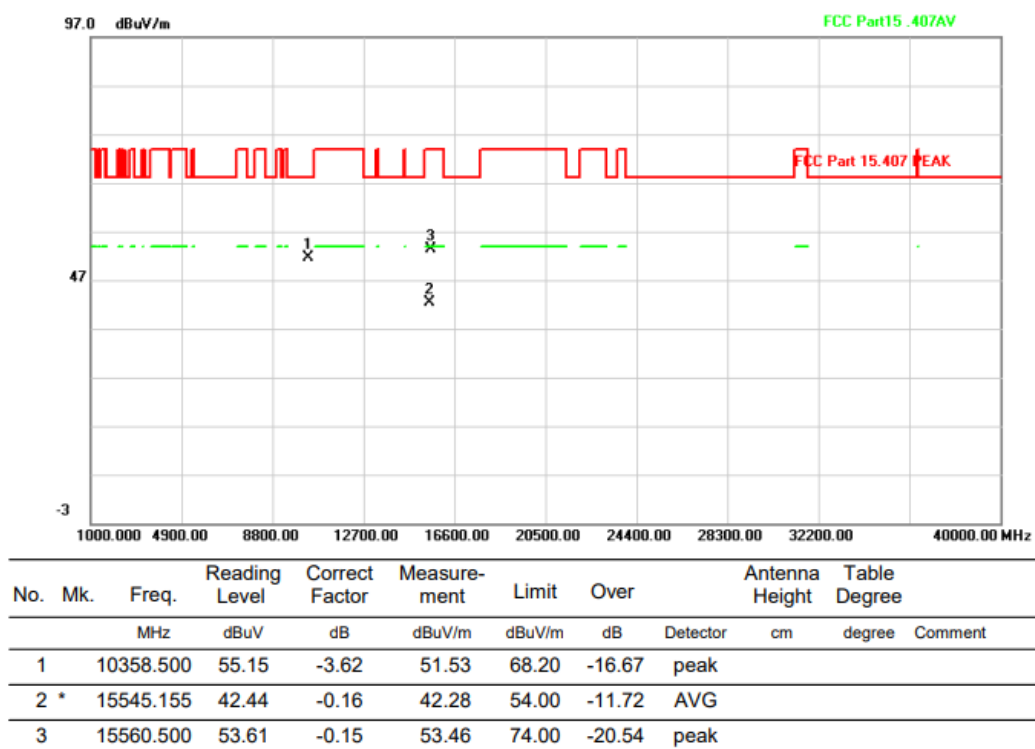
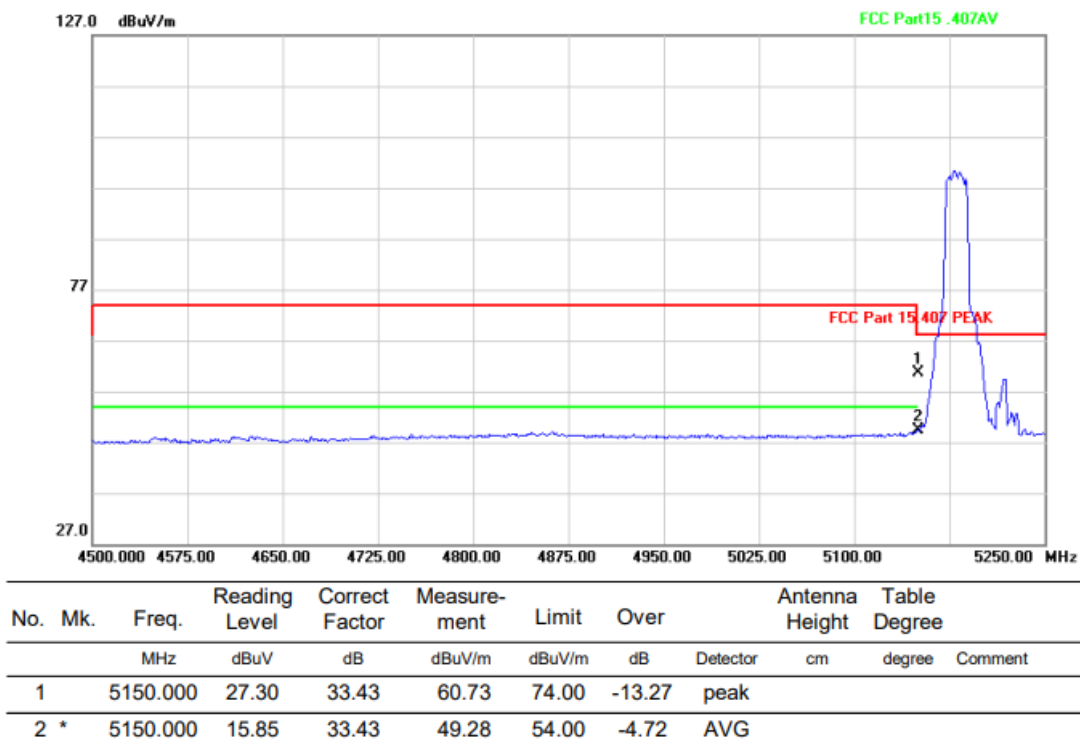
1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

Above 1G (1GHz~40GHz)	Test mode: 11A-MIMO	Test Channel:36
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VERTICAL



HORIZONTAL

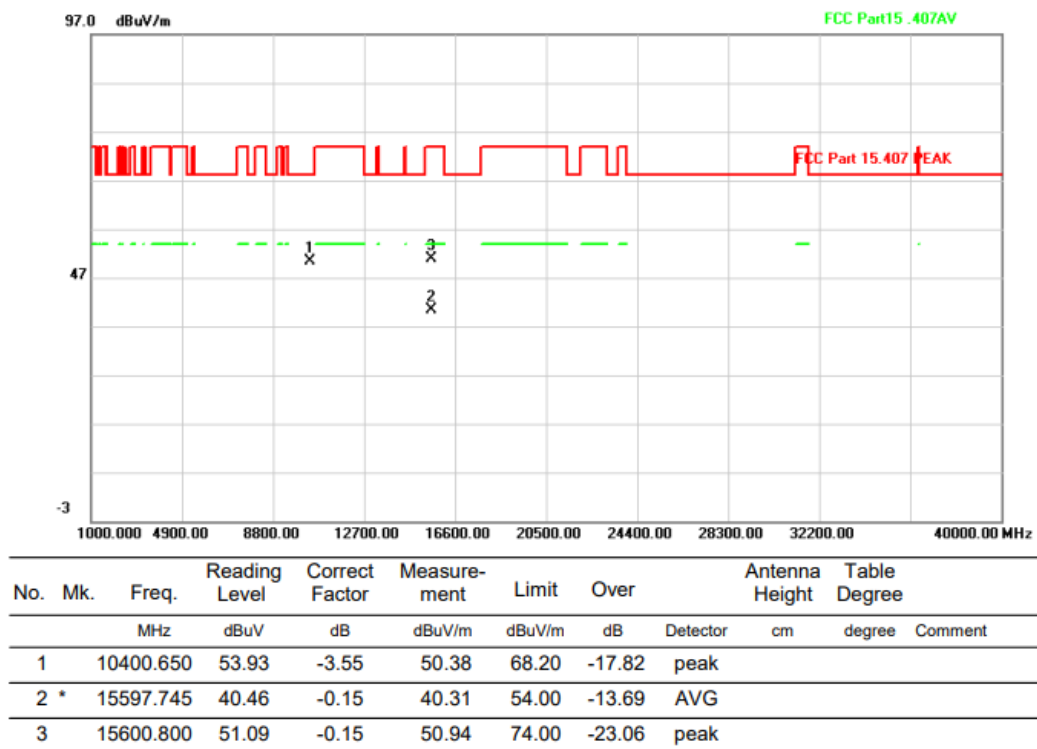


Above 1G (1GHz~40GHz)

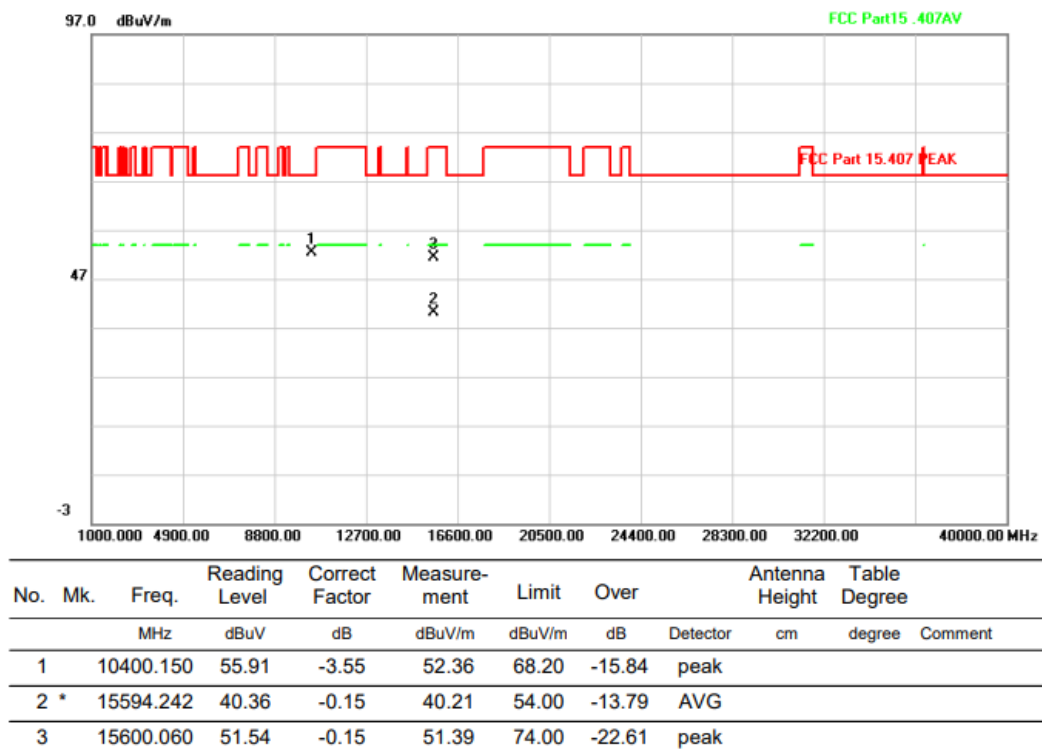
Test mode: 11A-MIMO

Test Channel:40

VERTICAL



HORIZONTAL

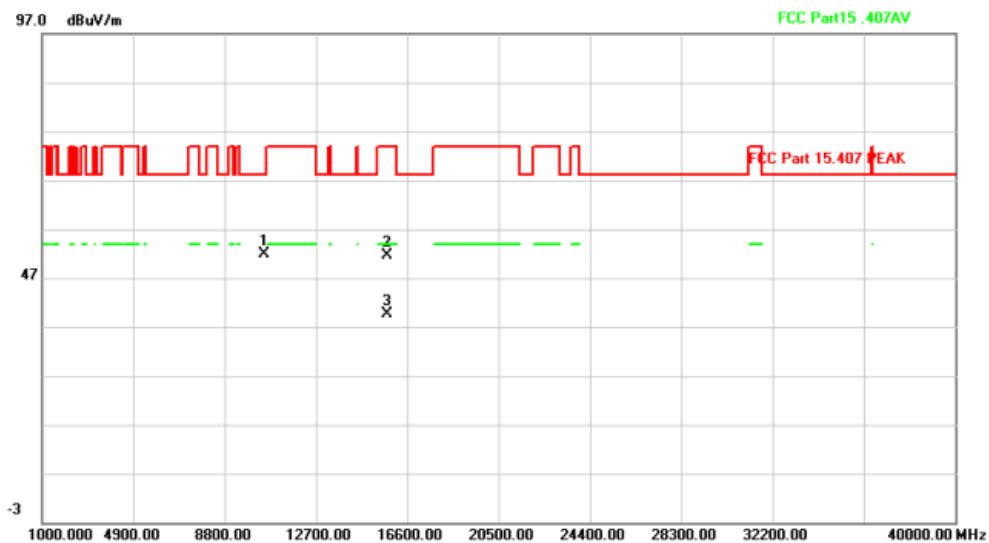


Above 1G (1GHz~40GHz)

Test mode: 11A-MIMO

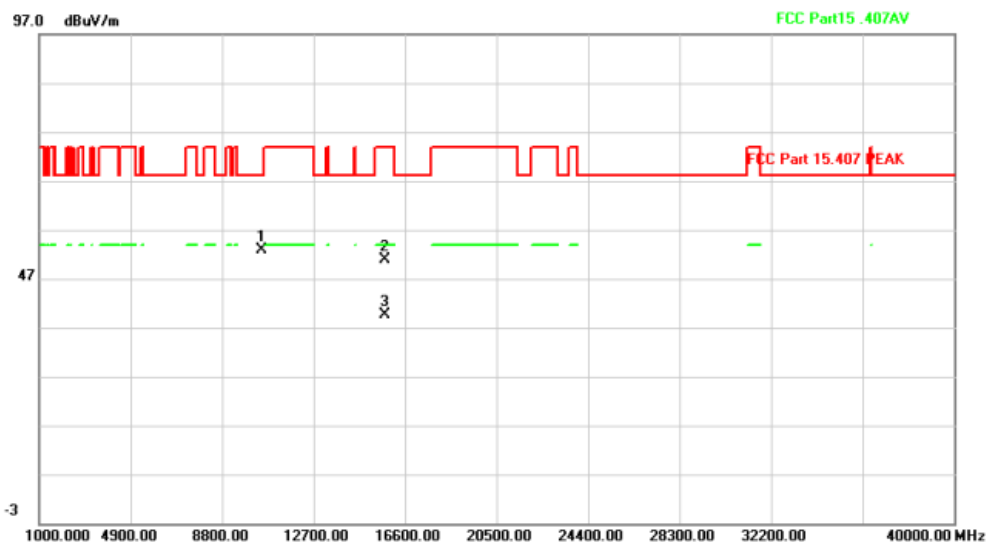
Test Channel:48

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10478.350	55.35	-3.42	51.93	68.20	-16.27	peak		
2		15717.750	51.69	-0.14	51.55	74.00	-22.45	peak		
3 *		15726.570	39.67	-0.14	39.53	54.00	-14.47	AVG		

HORIZONTAL



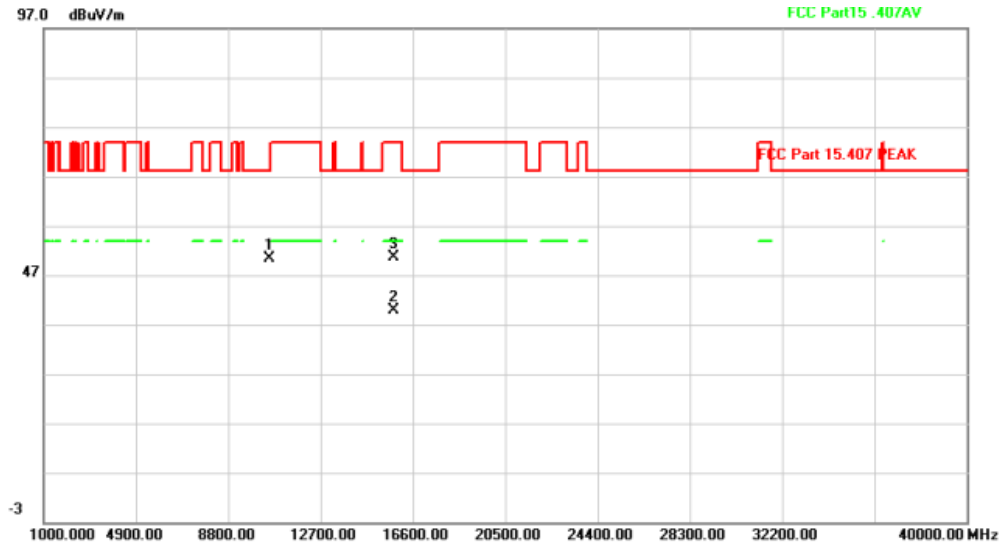
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10479.200	56.19	-3.42	52.77	68.20	-15.43	peak		
2		15721.150	50.92	-0.14	50.78	74.00	-23.22	peak		
3 *		15722.061	39.72	-0.14	39.58	54.00	-14.42	AVG		

Above 1G (1GHz~40GHz)

Test mode: 11A-MIMO

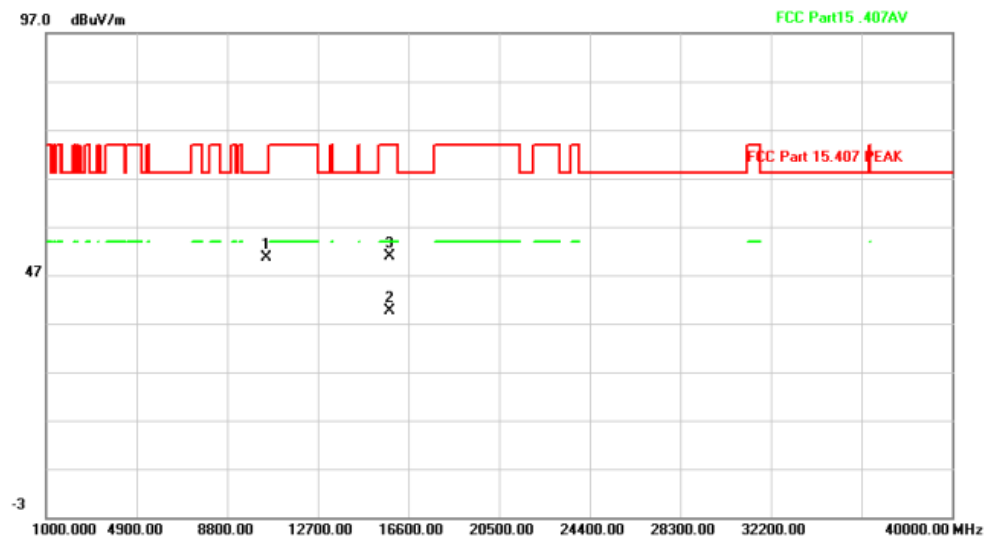
Test Channel:52

VERTICAL



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10518.300	53.74	-3.36	50.38	68.20	-17.82	peak		
2 *		15770.889	40.02	-0.13	39.89	54.00	-14.11	AVG		
3		15773.000	50.67	-0.13	50.54	74.00	-23.46	peak		

HORIZONTAL



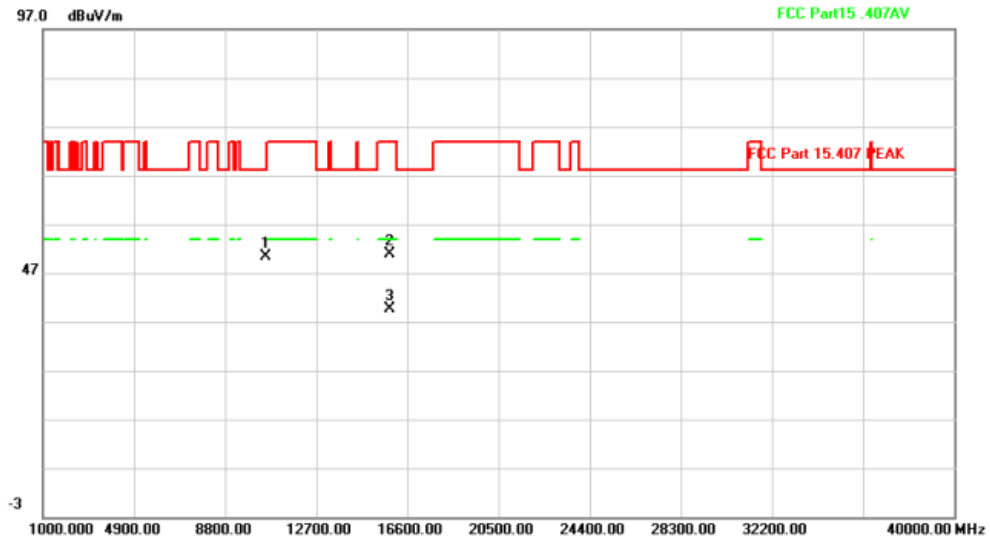
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10515.750	53.88	-3.36	50.52	68.20	-17.68	peak		
2 *		15774.684	39.88	-0.13	39.75	54.00	-14.25	AVG		
3		15780.200	50.96	-0.13	50.83	74.00	-23.17	peak		

Above 1G (1GHz~40GHz)

Test mode: 11A-MIMO

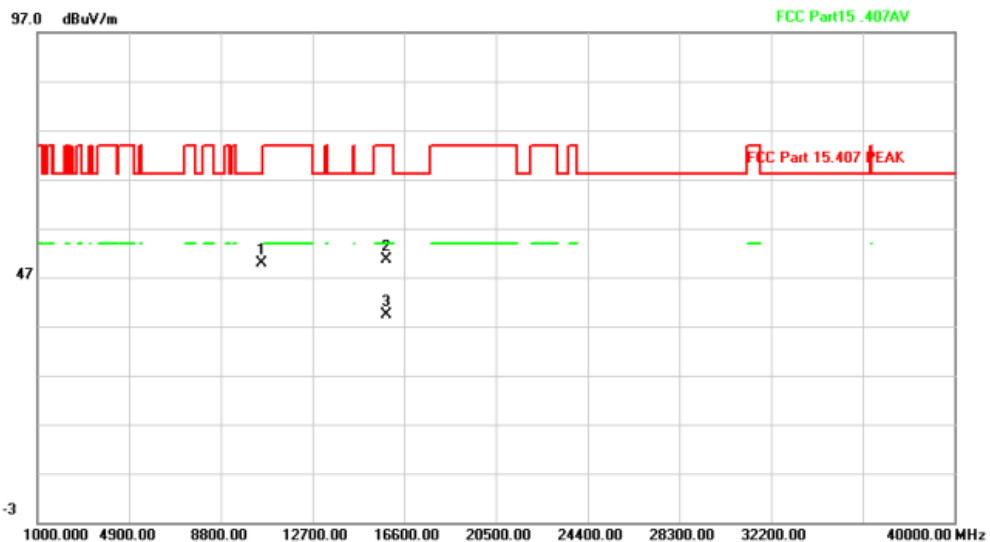
Test Channel:56

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10560.650	53.80	-3.31	50.49	68.20	-17.71	peak		
2		15846.950	50.98	-0.13	50.85	74.00	-23.15	peak		
3 *		15855.566	39.73	-0.12	39.61	54.00	-14.39	AVG		

HORIZONTAL



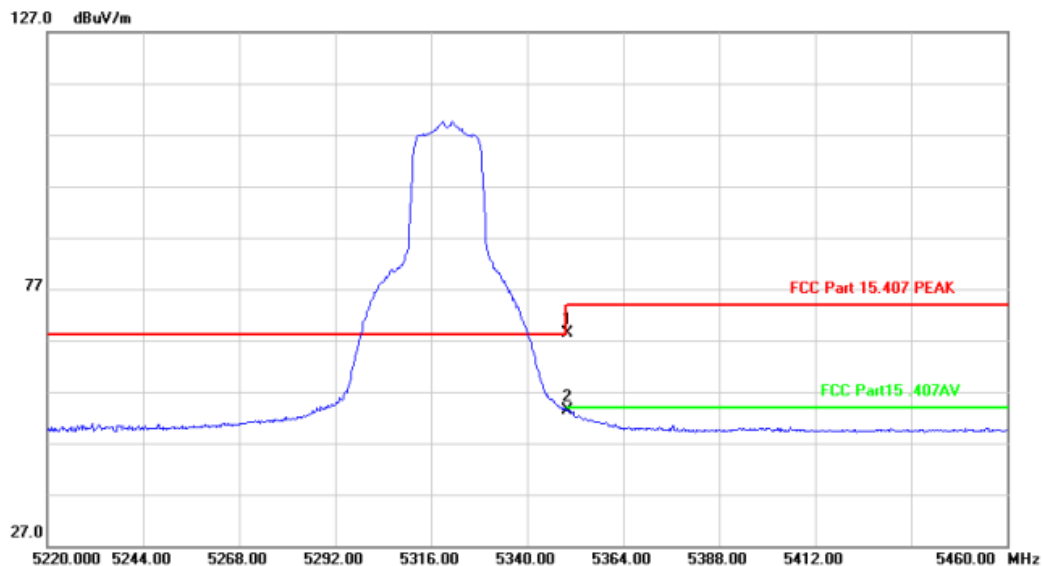
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10560.800	53.23	-3.31	49.92	68.20	-18.28	peak		
2		15838.450	50.83	-0.13	50.70	74.00	-23.30	peak		
3 *		15846.746	39.60	-0.13	39.47	54.00	-14.53	AVG		

Above 1G (1GHz~40GHz)

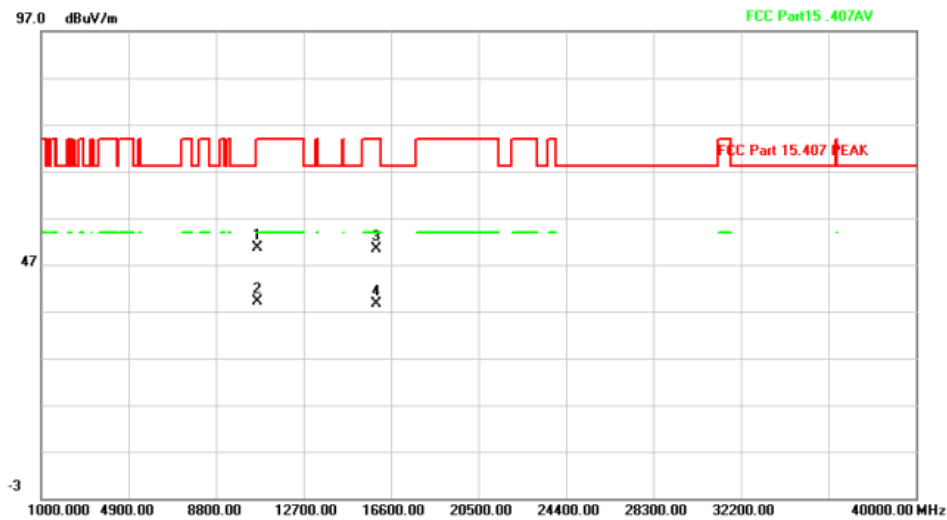
Test mode: 11A-MIMO

Test Channel:64

VERTICAL

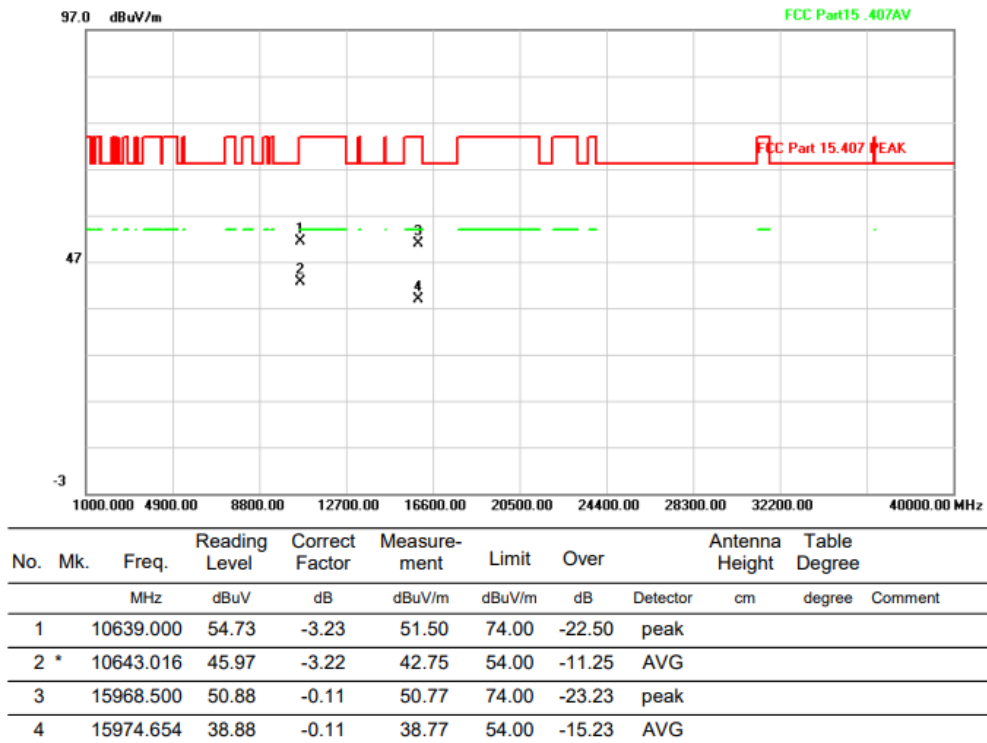
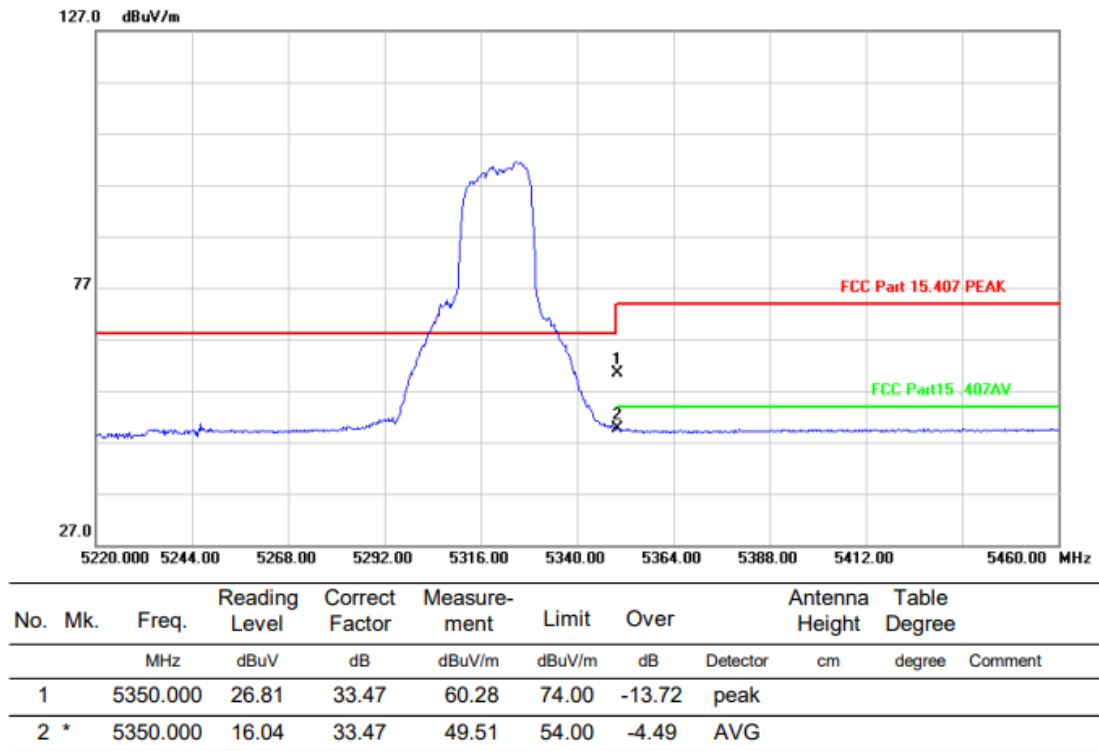


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		5350.000	34.93	33.47	68.40	74.00	-5.60	peak		
2	*	5350.000	19.89	33.47	53.36	54.00	-0.64	AVG		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		10639.000	53.81	-3.23	50.58	74.00	-23.42	peak		
2	*	10641.178	42.46	-3.22	39.24	54.00	-14.76	AVG		
3		15968.500	50.55	-0.11	50.44	74.00	-23.56	peak		
4		15971.037	38.86	-0.11	38.75	54.00	-15.25	AVG		

HORIZONTAL

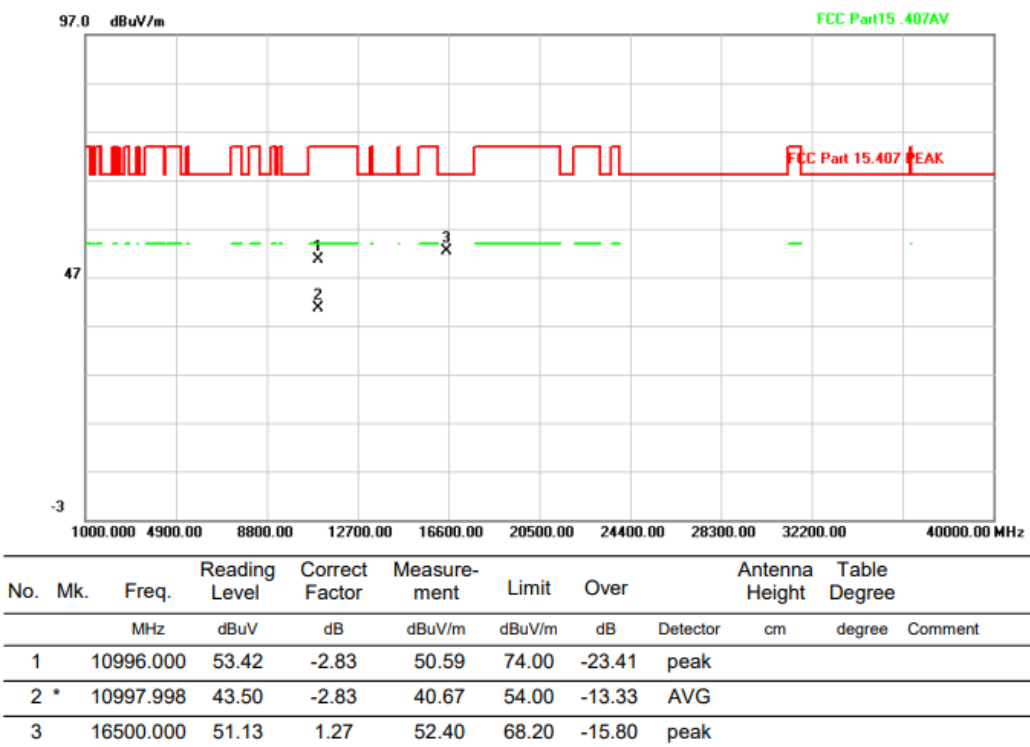
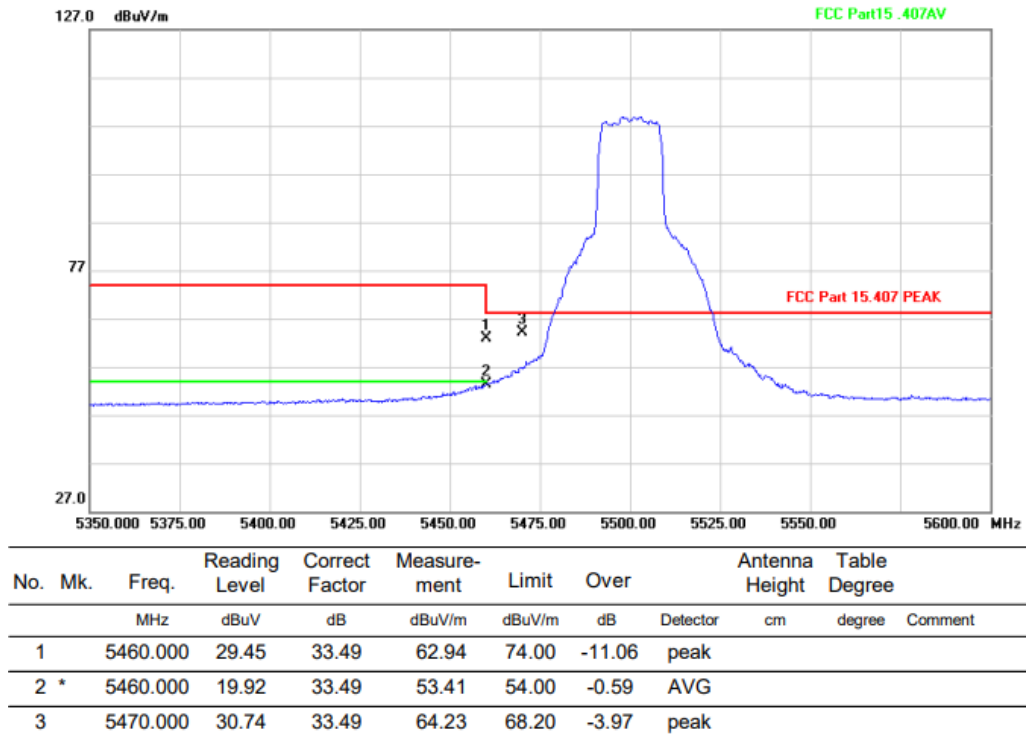


Above 1G (1GHz~40GHz)

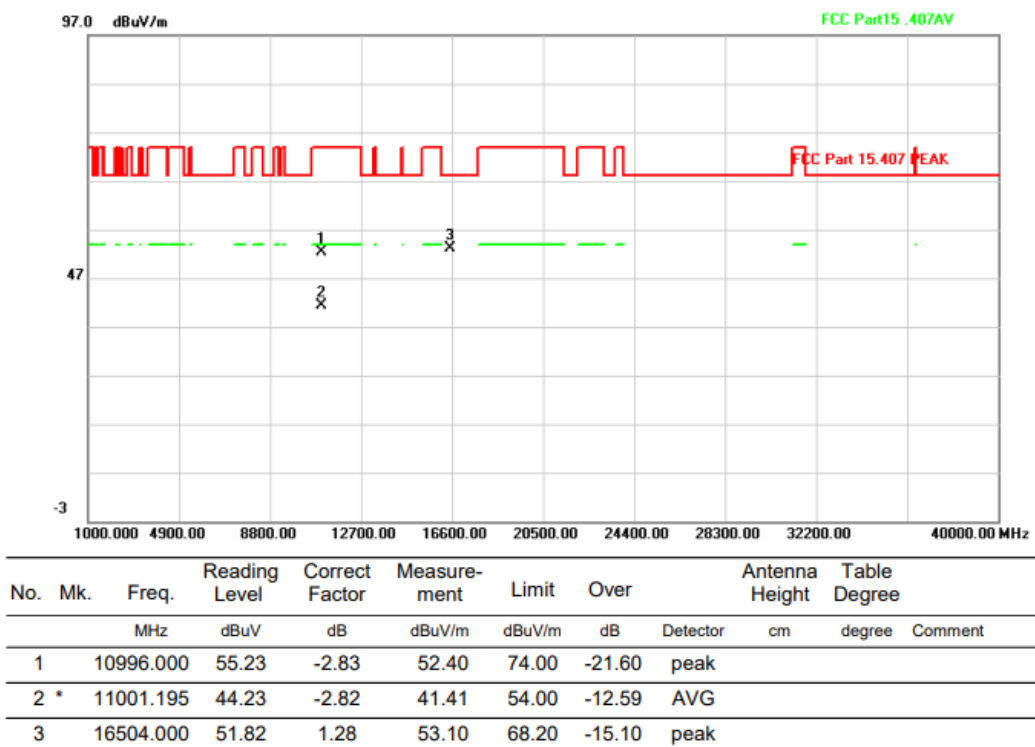
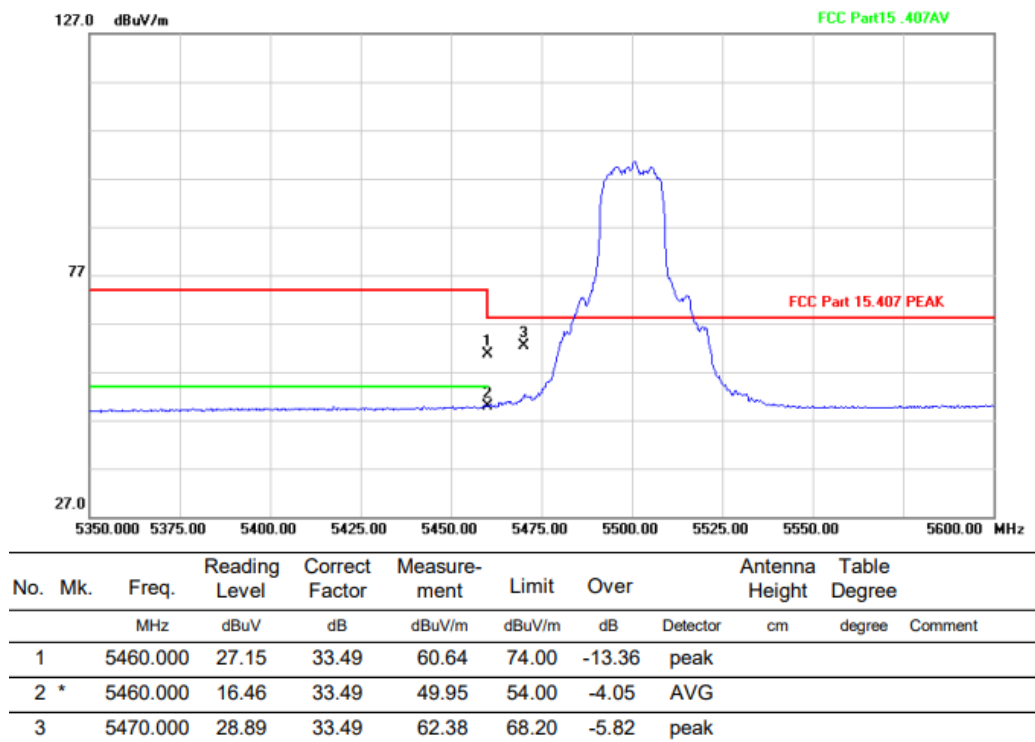
Test mode: 11A-MIMO

Test Channel:100

VERTICAL



HORIZONTAL

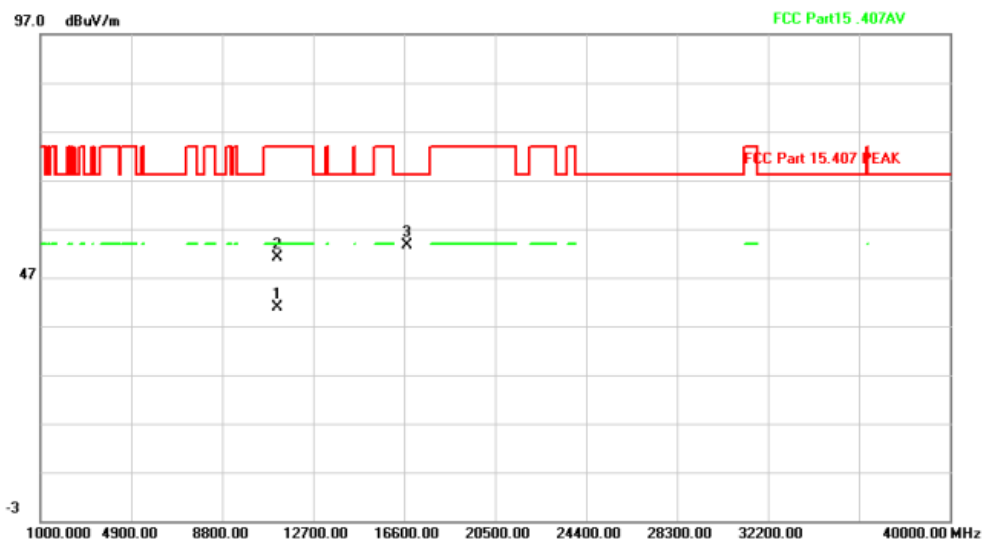


Above 1G (1GHz~40GHz)

Test mode: 11A-MIMO

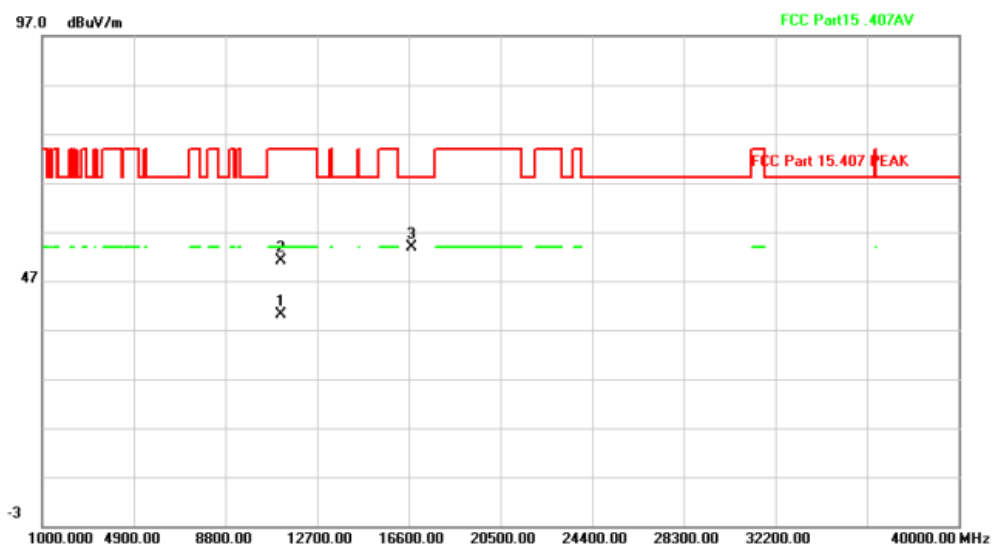
Test Channel:116

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	11160.901	42.95	-2.02	40.93	54.00	-13.07	AVG		
2		11169.400	53.06	-1.98	51.08	74.00	-22.92	peak		
3		16744.550	51.84	1.84	53.68	68.20	-14.52	peak		

HORIZONTAL



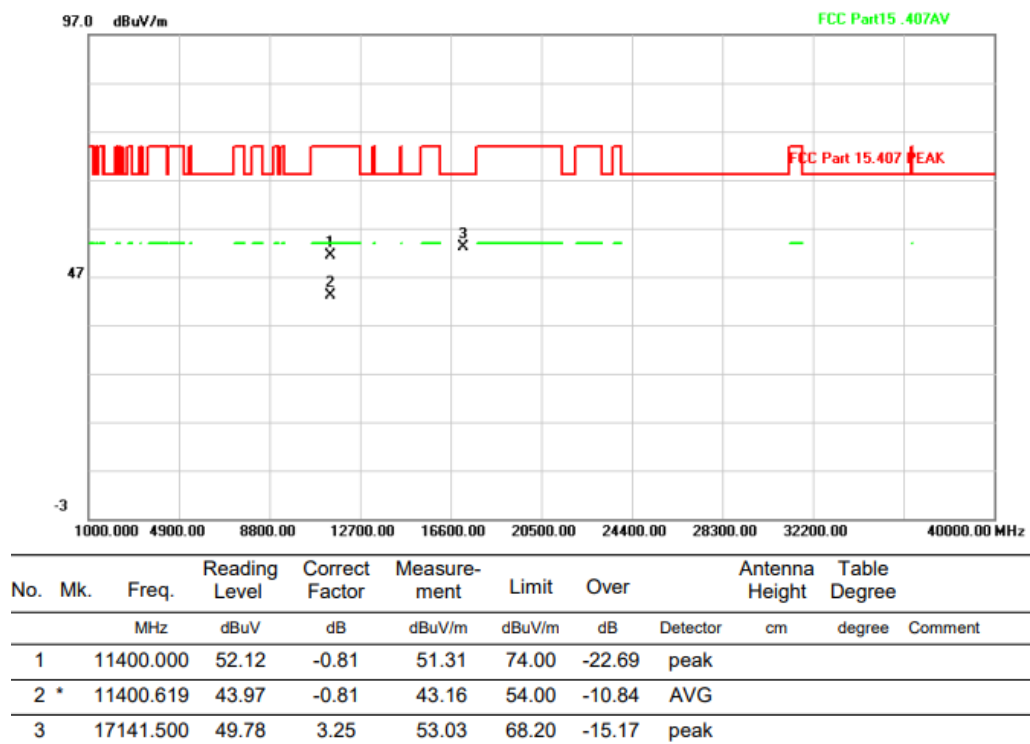
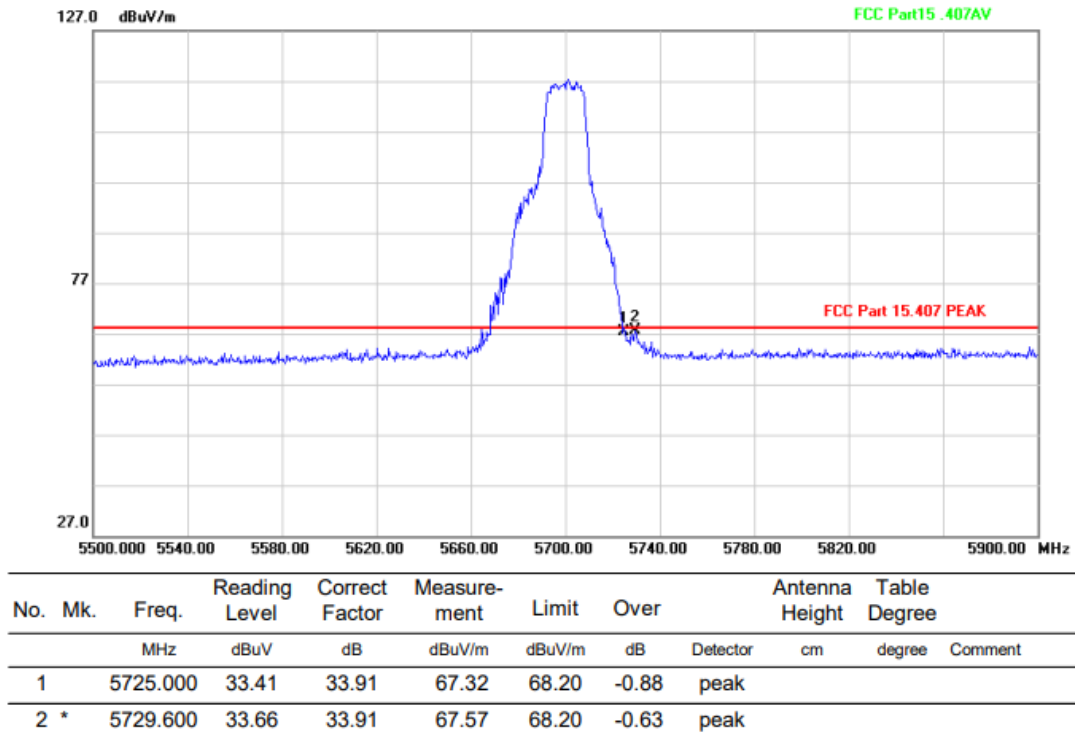
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	11160.684	42.17	-2.02	40.15	54.00	-13.85	AVG		
2		11163.650	53.18	-2.01	51.17	74.00	-22.83	peak		
3		16739.450	52.16	1.83	53.99	68.20	-14.21	peak		

Above 1G (1GHz~40GHz)

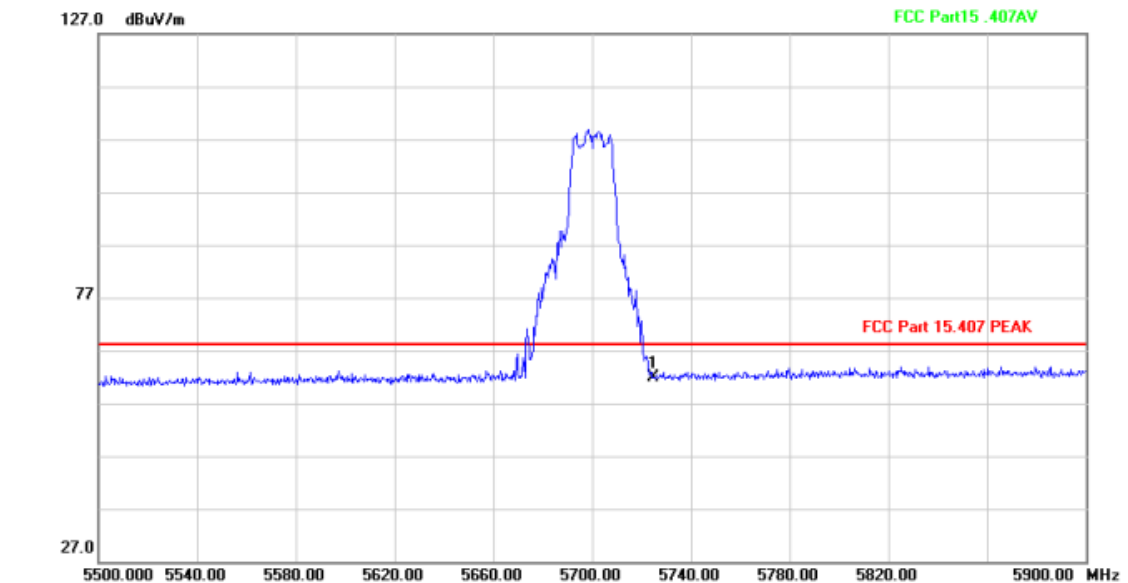
Test mode: 11A-MIMO

Test Channel:140

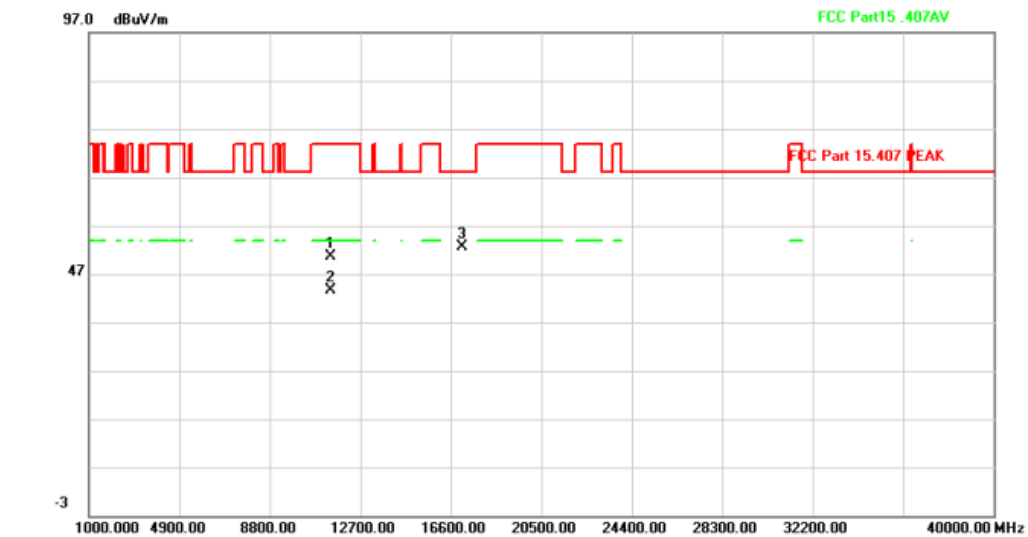
VERTICAL



HORIZONTAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	5725.000	27.88	33.91	61.79	68.20	-6.41	peak		



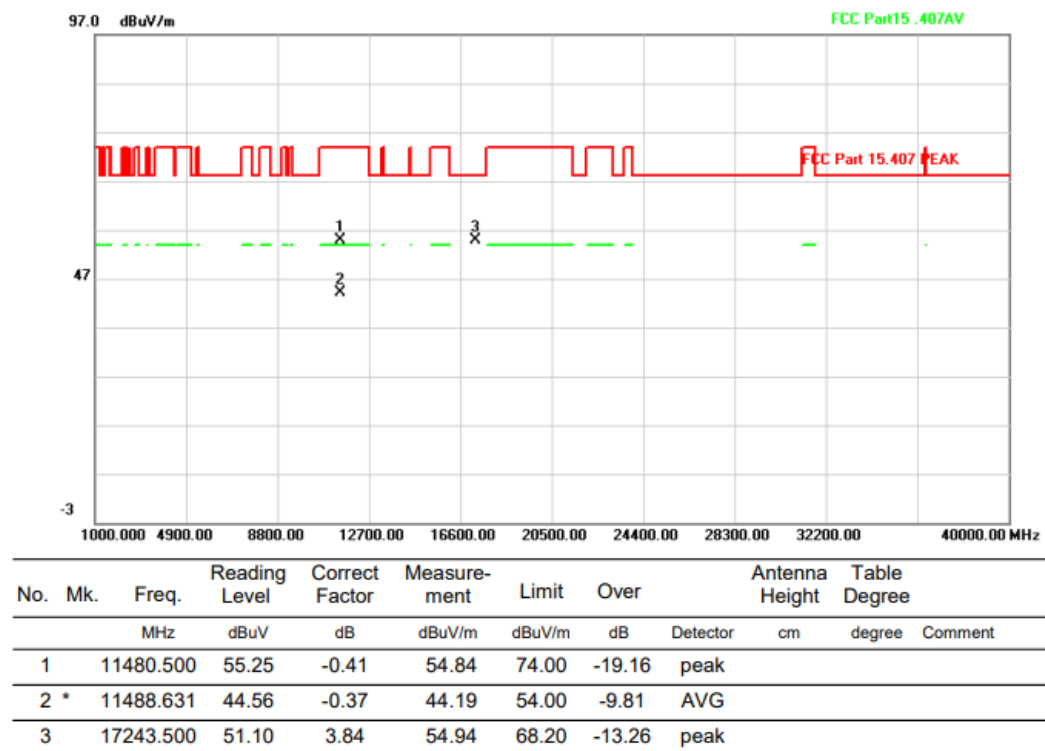
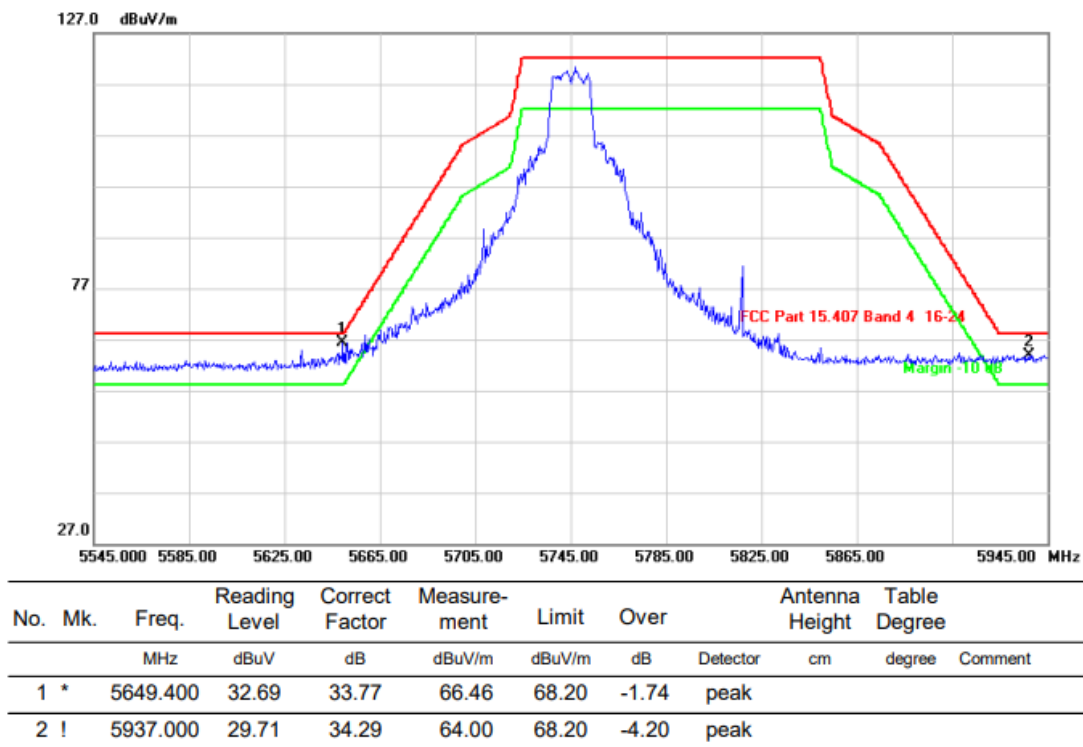
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		11400.000	51.50	-0.81	50.69	74.00	-23.31	peak		
2	*	11400.380	44.40	-0.81	43.59	54.00	-10.41	AVG		
3		17099.500	49.55	3.01	52.56	68.20	-15.64	peak		

Above 1G (1GHz~40GHz)

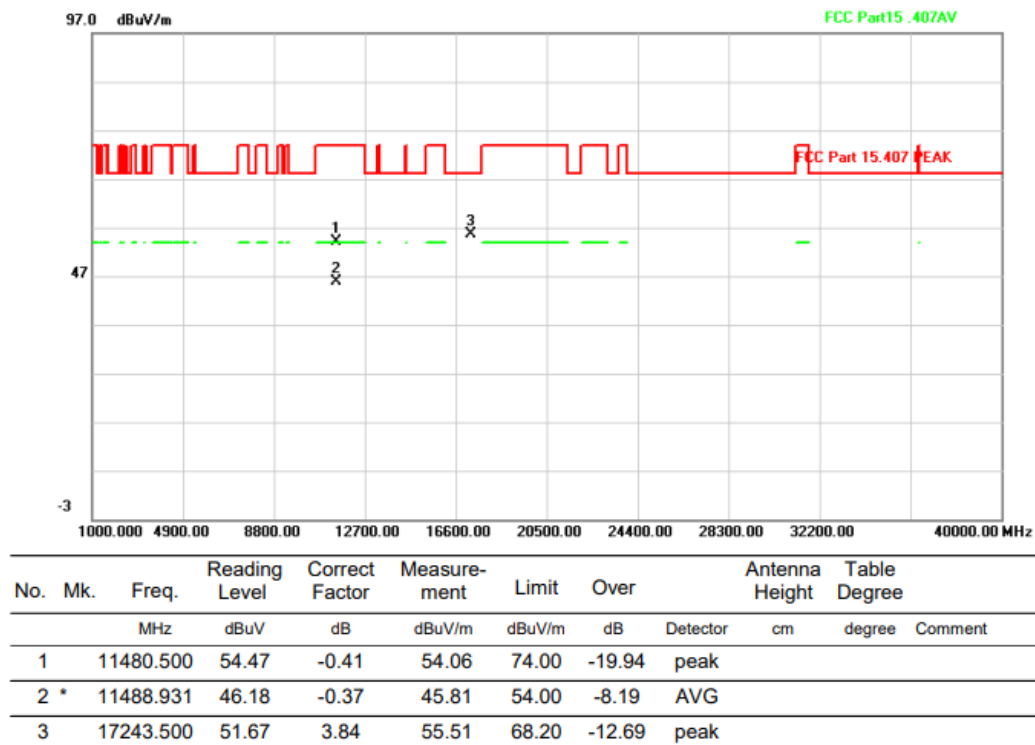
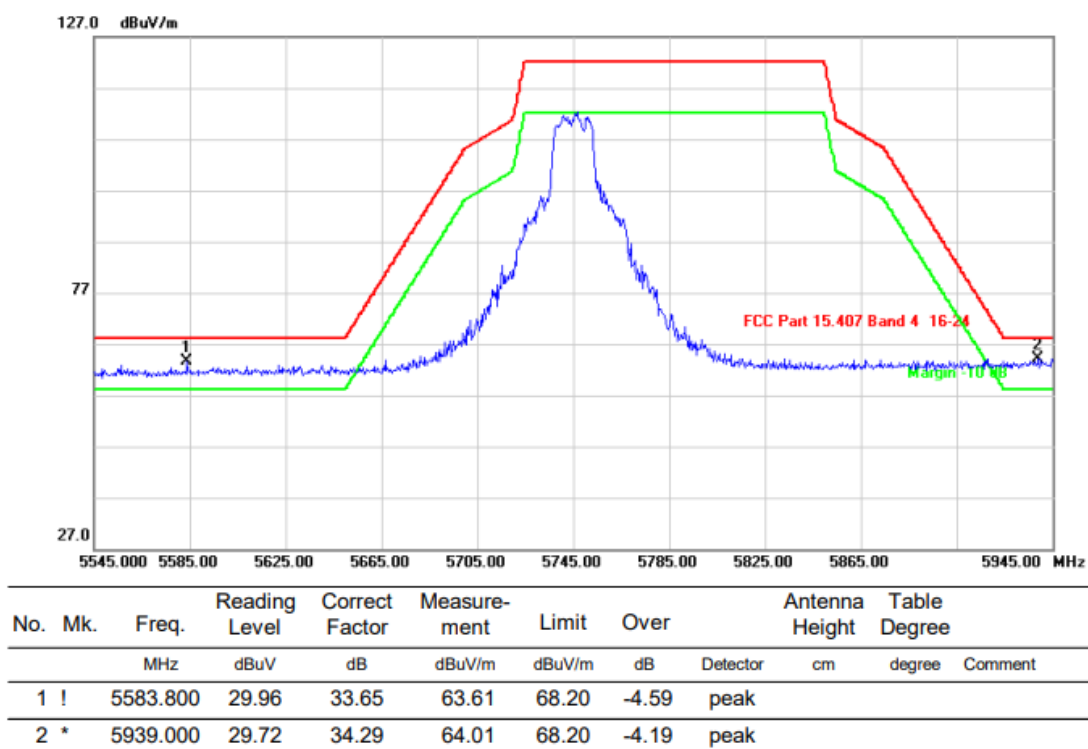
Test mode: 11A-MIMO

Test Channel:149

VERTICAL



HORIZONTAL

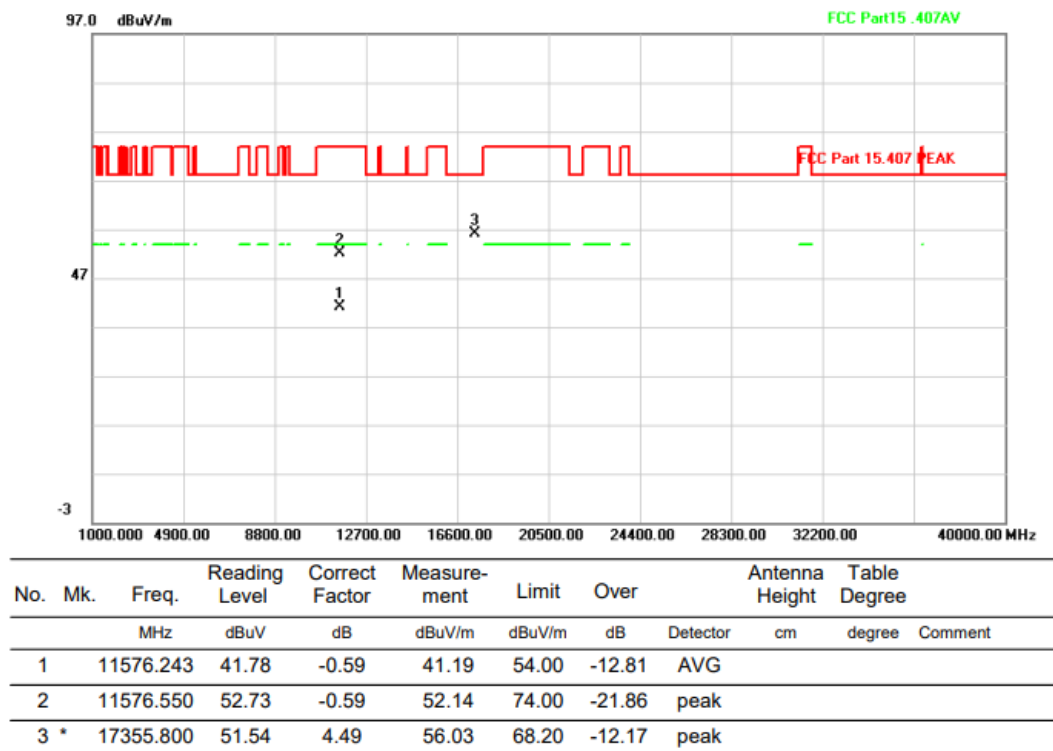


Above 1G (1GHz~40GHz)

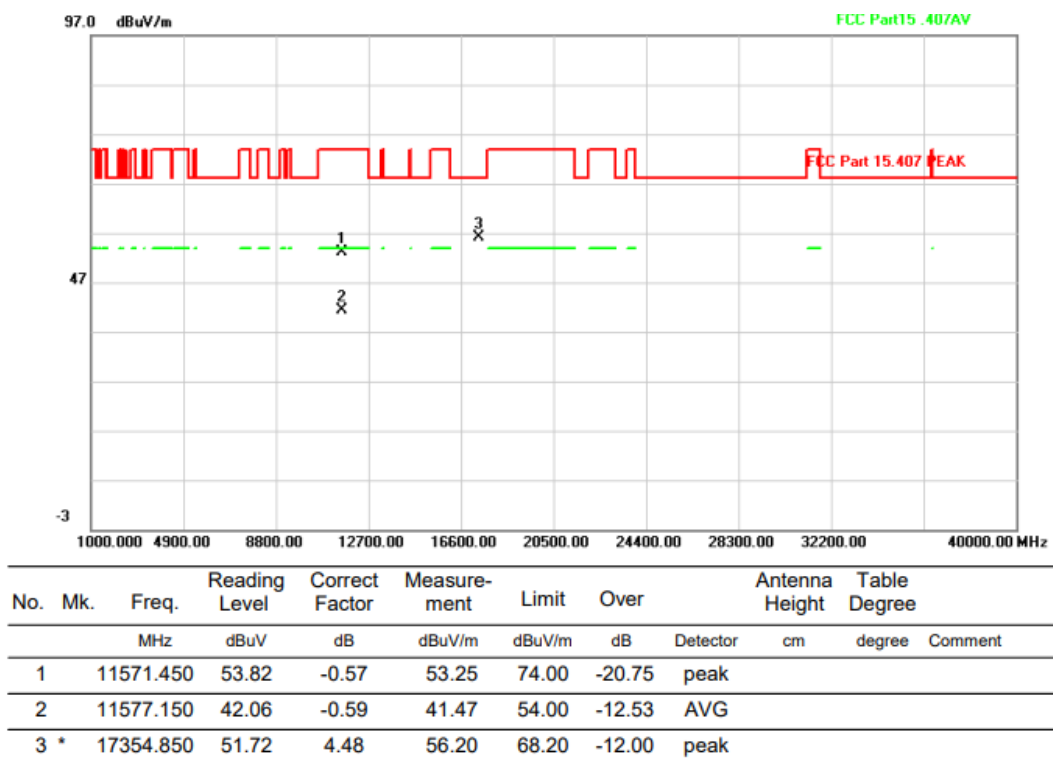
Test mode: 11A-MIMO

Test Channel:157

VERTICAL



HORIZONTAL

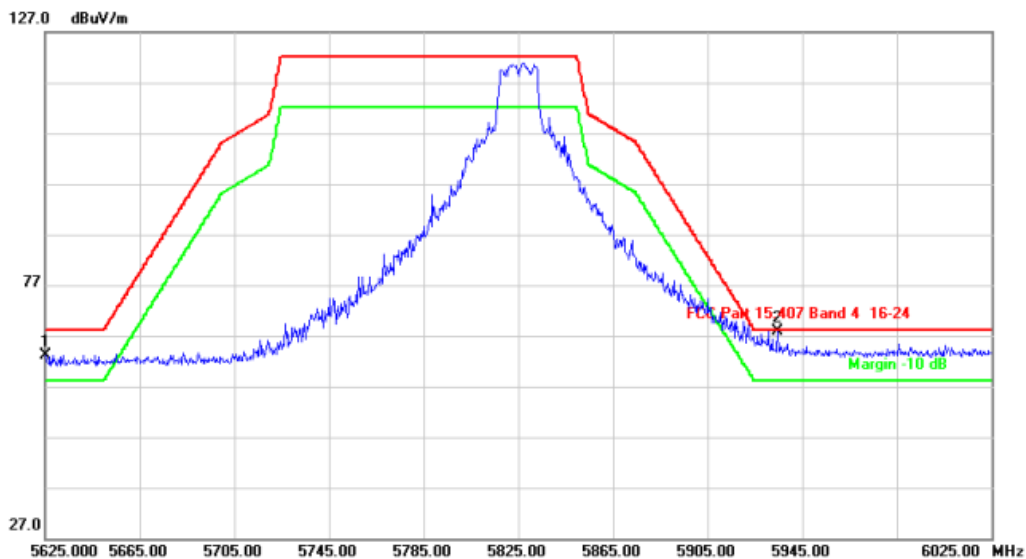


Above 1G (1GHz~40GHz)

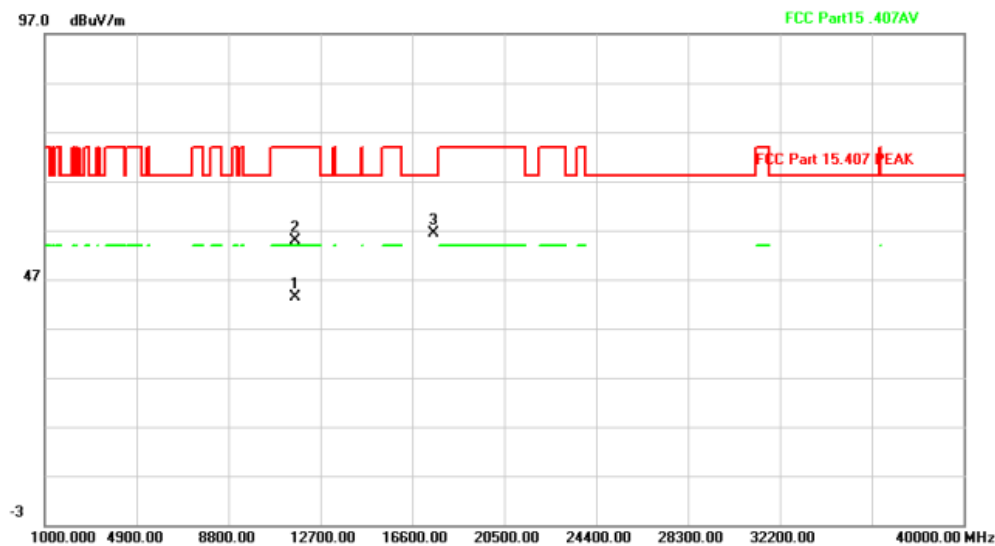
Test mode: 11A-MIMO

Test Channel:165

VERTICAL

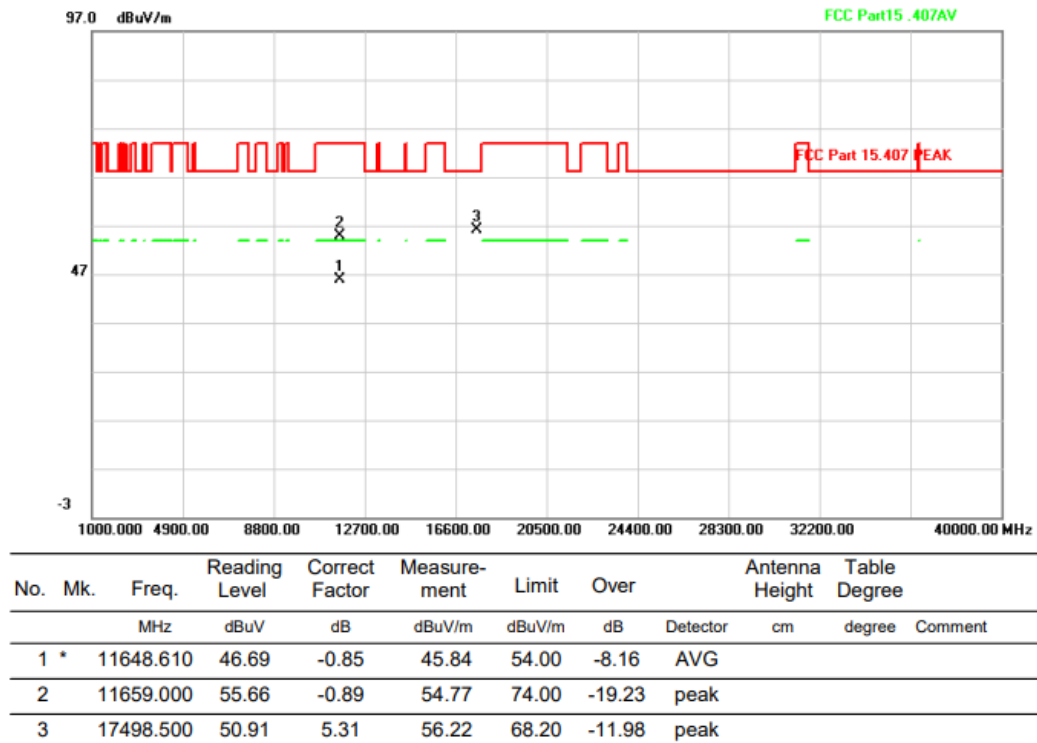
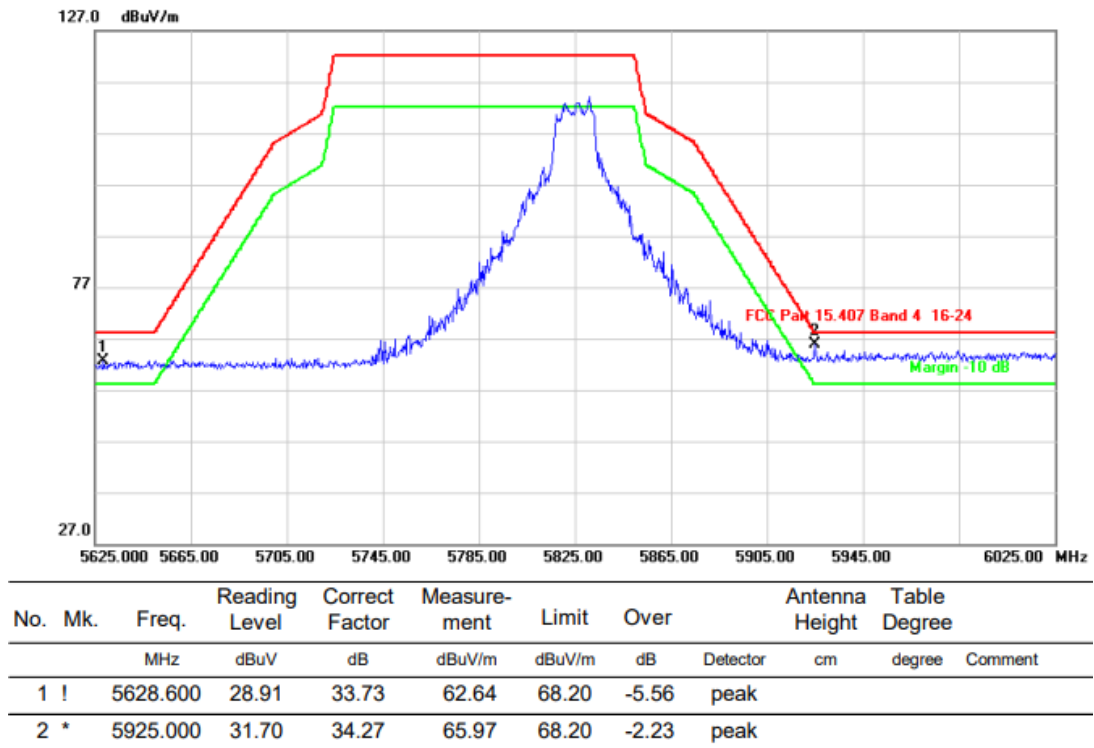


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	!	5625.400	29.52	33.73	63.25	68.20	-4.95	peak			
2	*	5934.600	33.68	34.28	67.96	68.20	-0.24	peak			



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	11646.992	44.19	-0.85	43.34	54.00	-10.66	AVG			
2		11659.000	55.72	-0.89	54.83	74.00	-19.17	peak			
3		17498.500	50.95	5.31	56.26	68.20	-11.94	peak			

HORIZONTAL

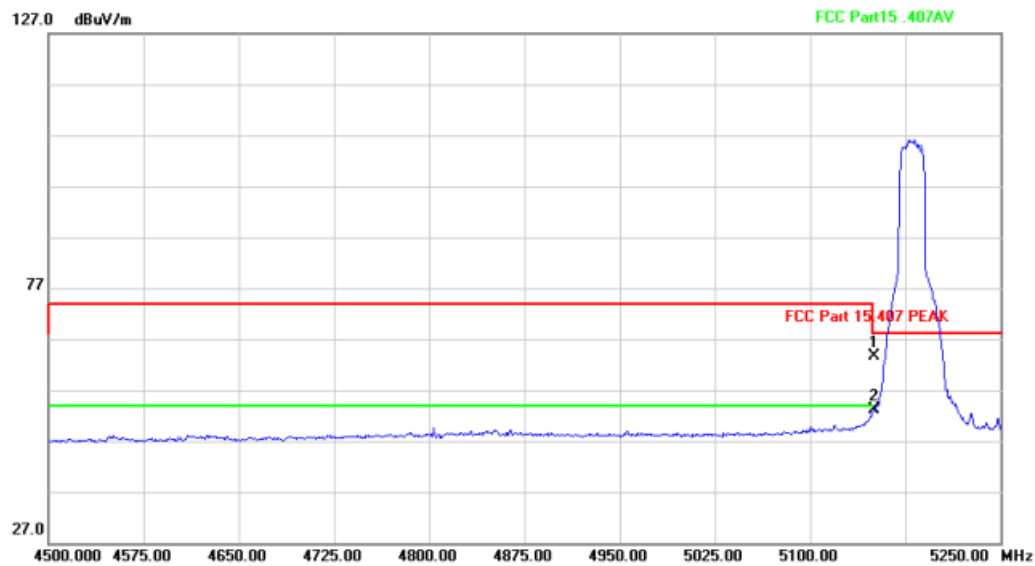


Above 1G (1GHz~40GHz)

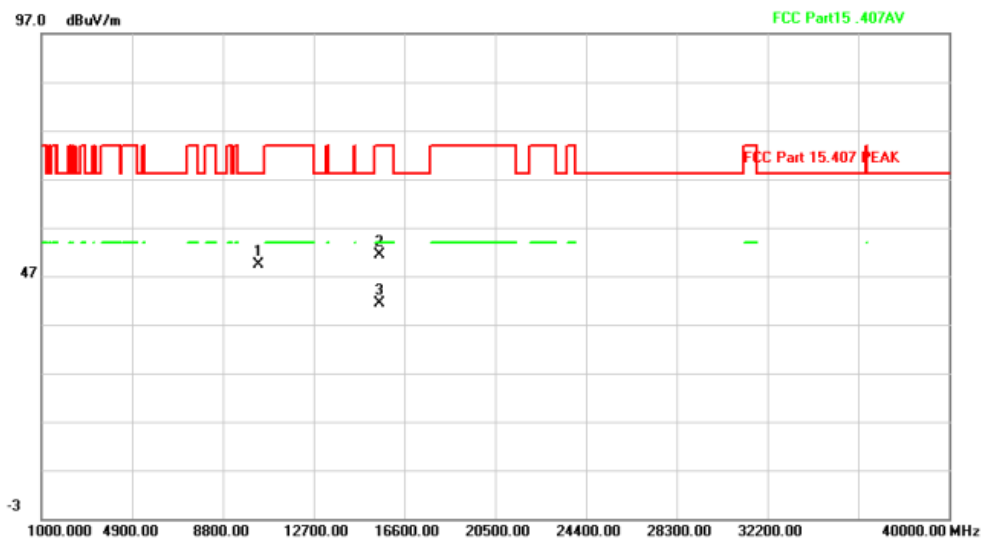
Test mode: 11N20

Test Channel:36

VERTICAL

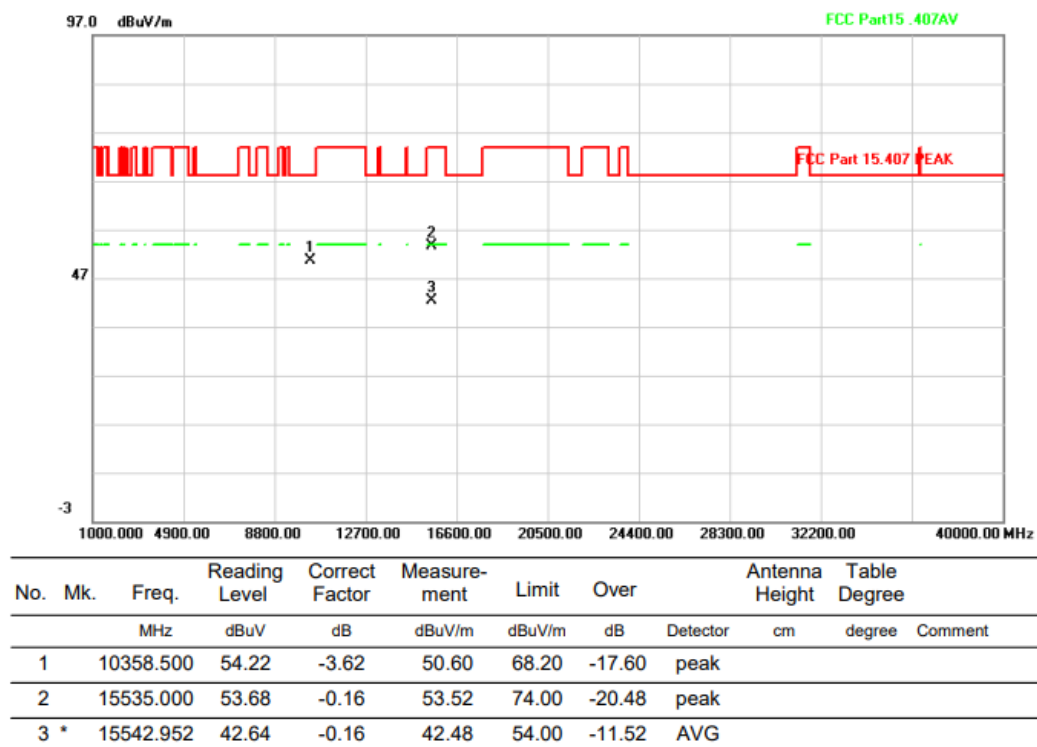
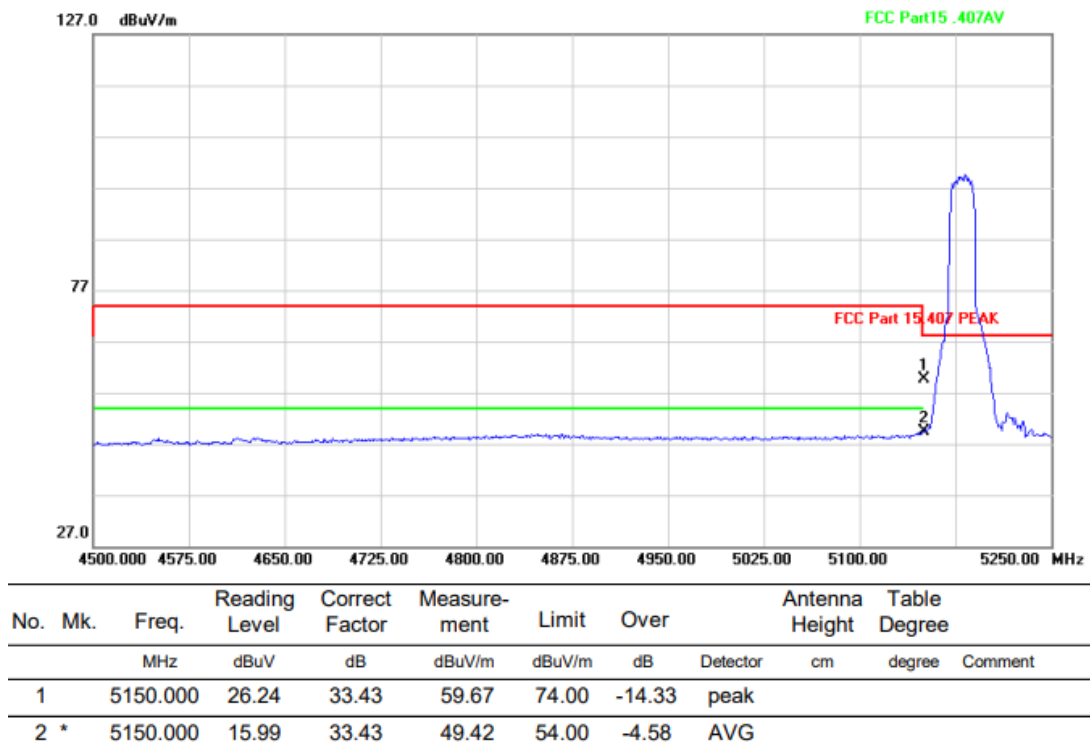


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5150.000	30.27	33.43	63.70	74.00	-10.30	peak		
2	*	5150.000	19.60	33.43	53.03	54.00	-0.97	AVG		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10358.500	52.97	-3.62	49.35	68.20	-18.85	peak		
2		15535.000	51.54	-0.16	51.38	74.00	-22.62	peak		
3	*	15542.632	41.44	-0.16	41.28	54.00	-12.72	AVG		

HORIZONTAL

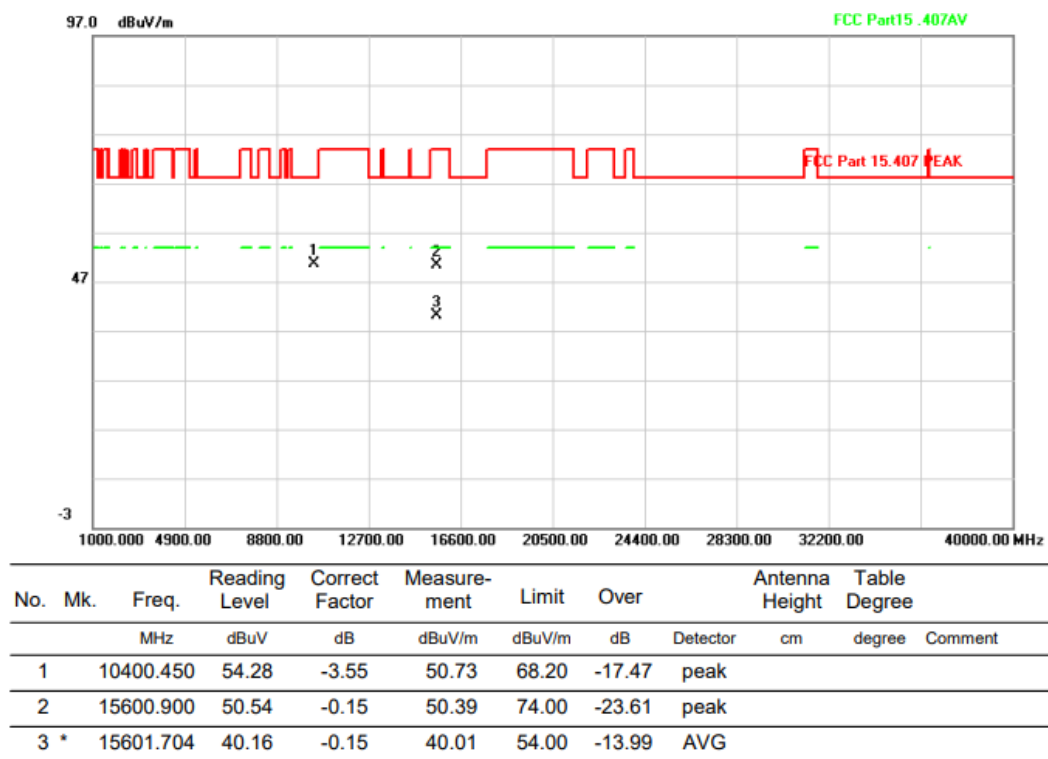


Above 1G (1GHz~40GHz)

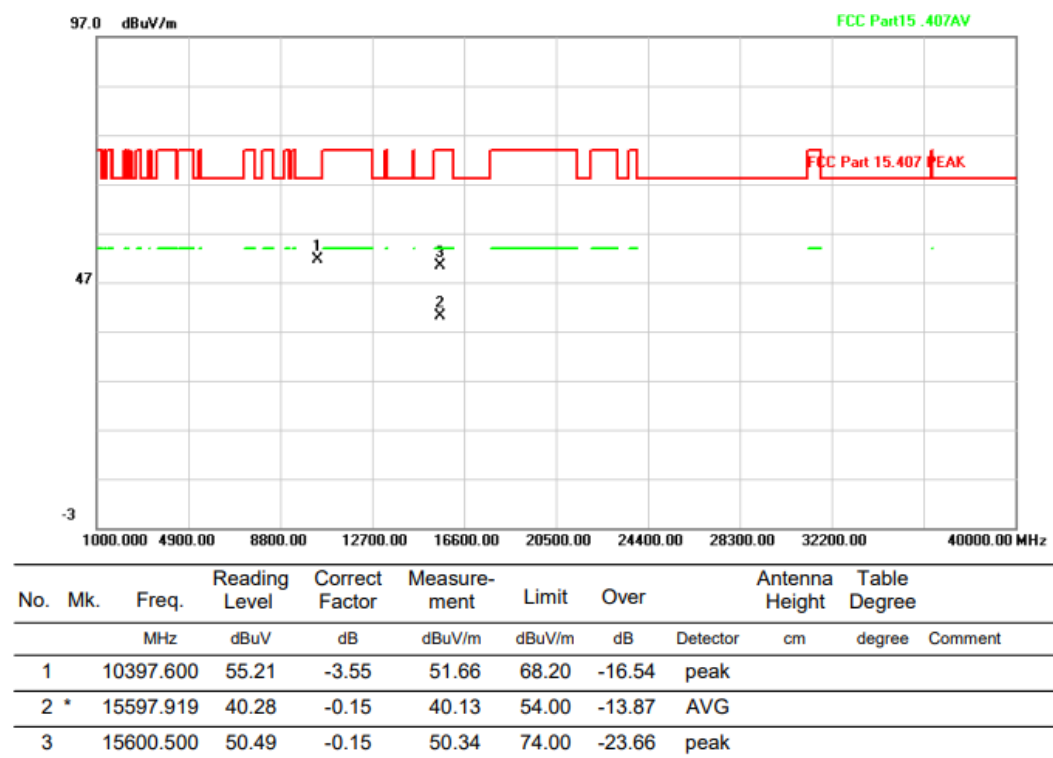
Test mode: 11N20

Test Channel:40

VERTICAL



HORIZONTAL

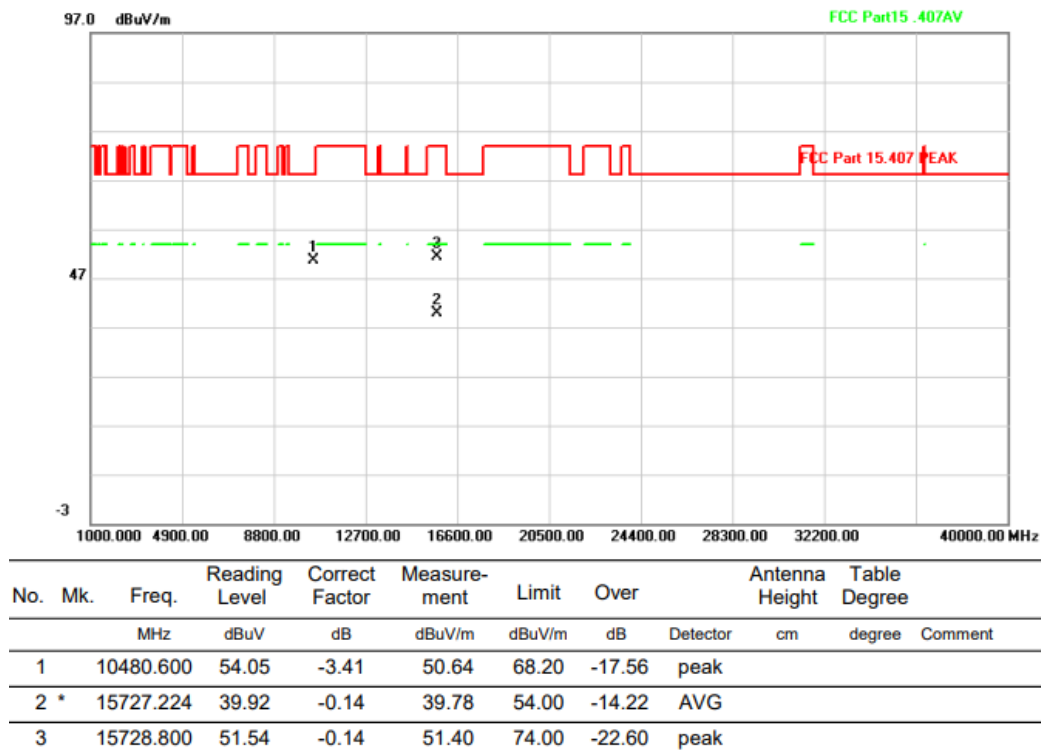


Above 1G (1GHz~40GHz)

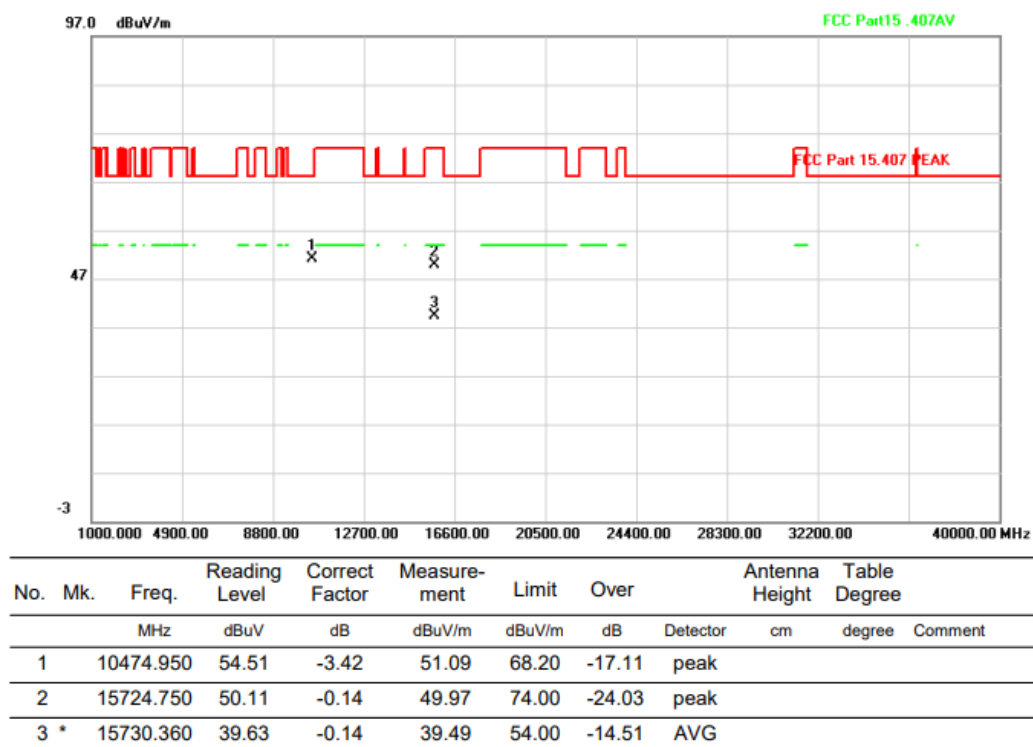
Test mode: 11N20

Test Channel:48

VERTICAL



HORIZONTAL

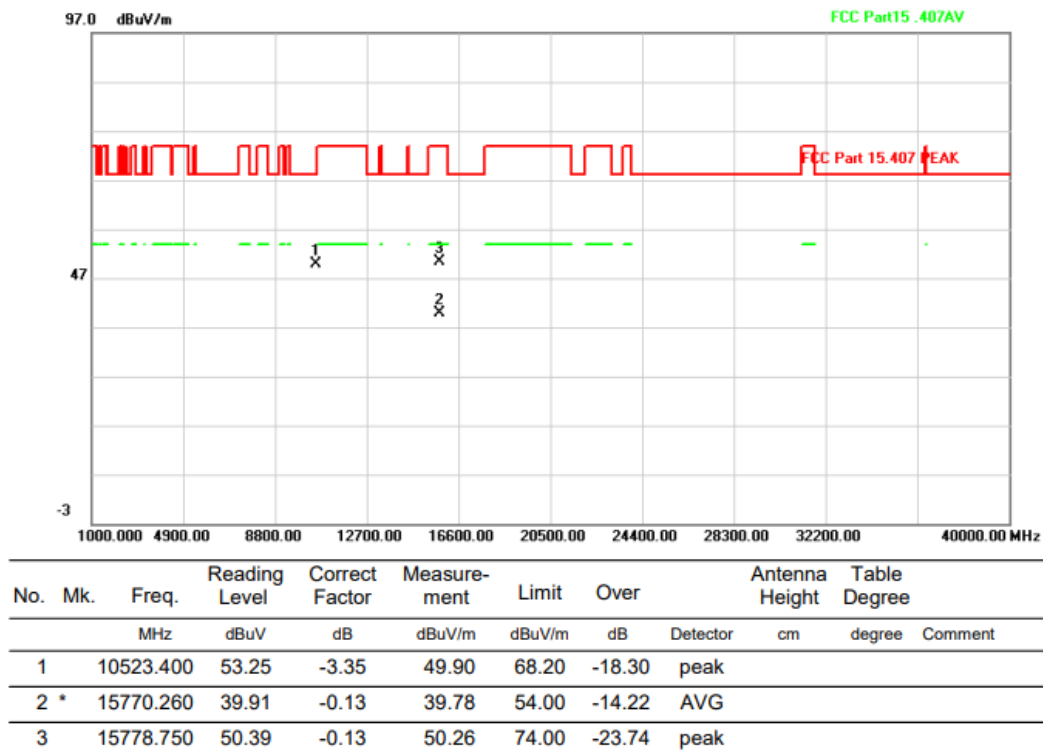


Above 1G (1GHz~40GHz)

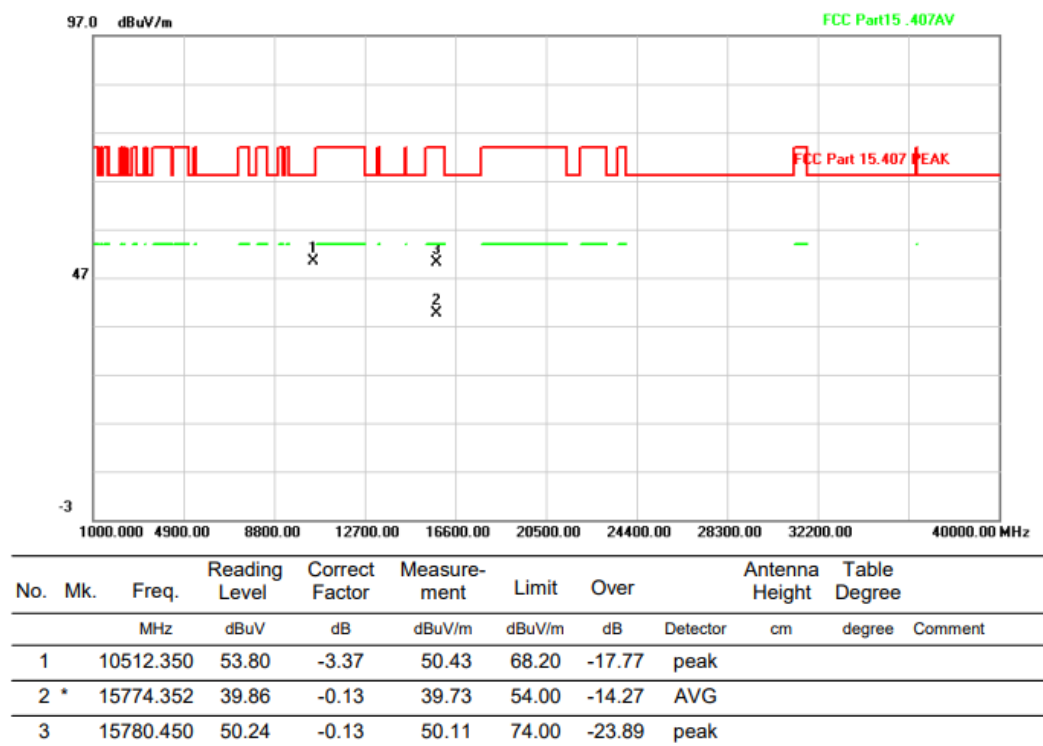
Test mode: 11N20

Test Channel:52

VERTICAL



HORIZONTAL

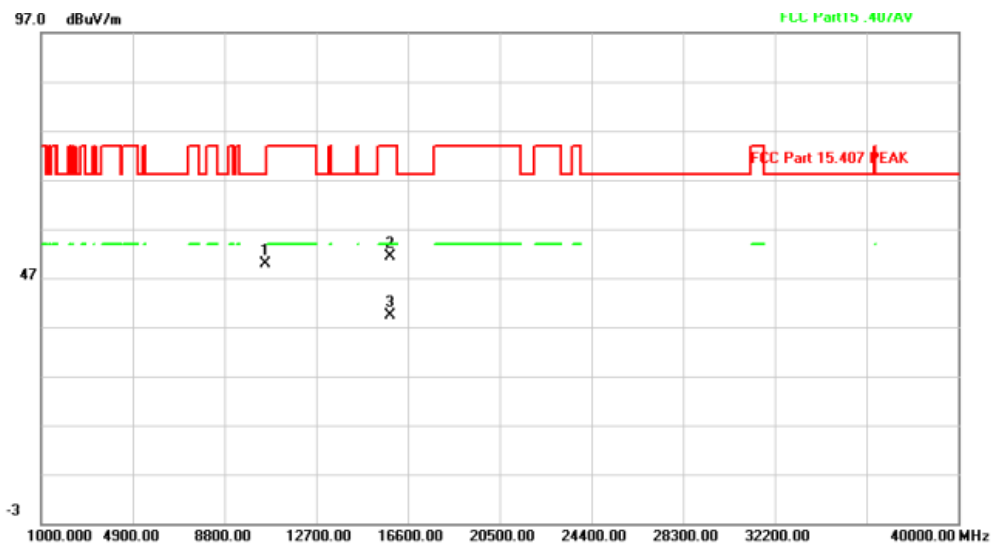


Above 1G (1GHz~40GHz)

Test mode: 11N20

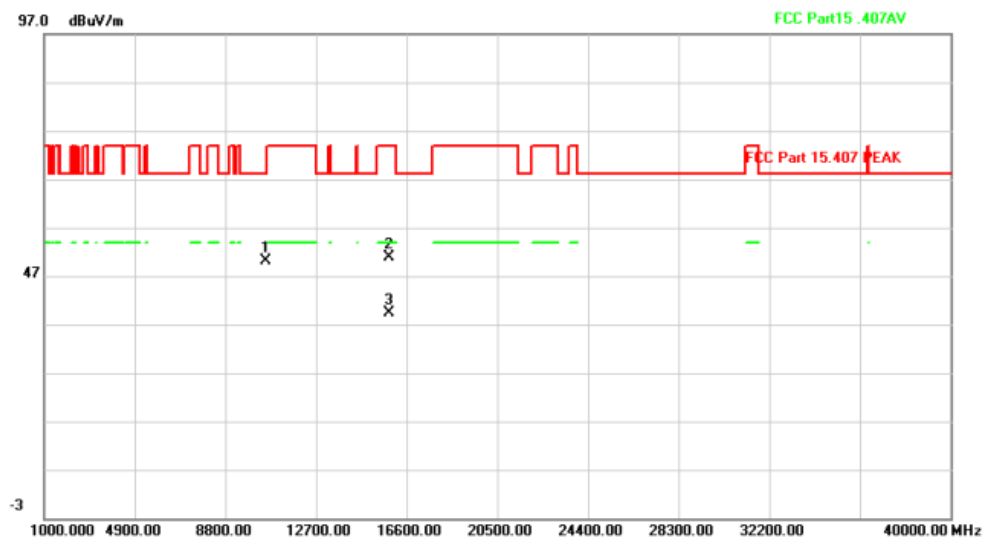
Test Channel:56

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10565.900	53.24	-3.31	49.93	68.20	-18.27	peak		
2		15840.250	51.48	-0.13	51.35	74.00	-22.65	peak		
3 *		15840.439	39.60	-0.13	39.47	54.00	-14.53	AVG		

HORIZONTAL



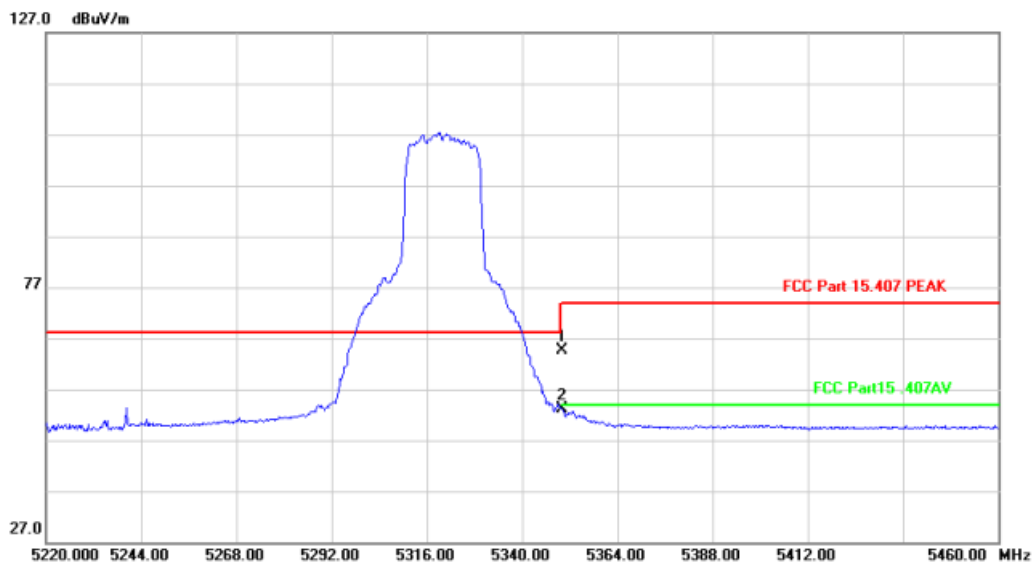
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10561.850	53.39	-3.31	50.08	68.20	-18.12	peak		
2		15838.450	50.97	-0.13	50.84	74.00	-23.16	peak		
3 *		15846.680	39.45	-0.13	39.32	54.00	-14.68	AVG		

Above 1G (1GHz~40GHz)

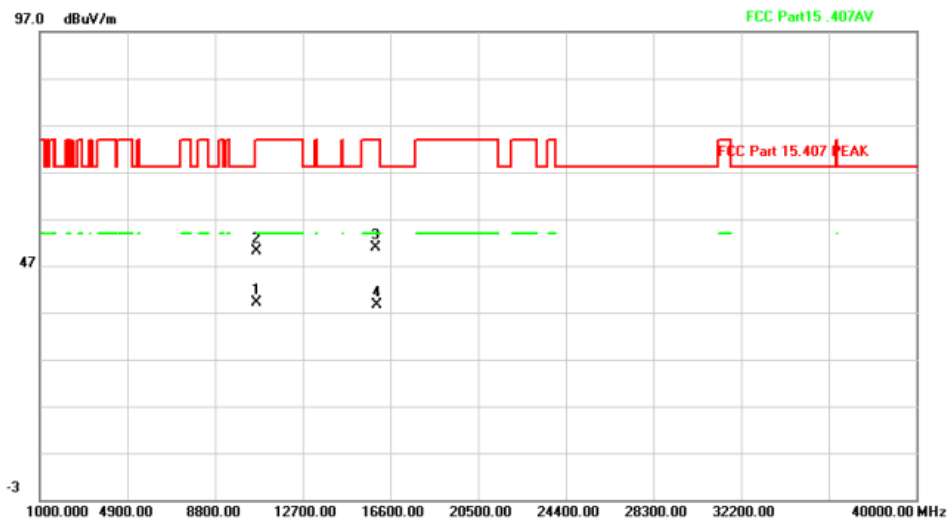
Test mode: 11N20

Test Channel:64

VERTICAL

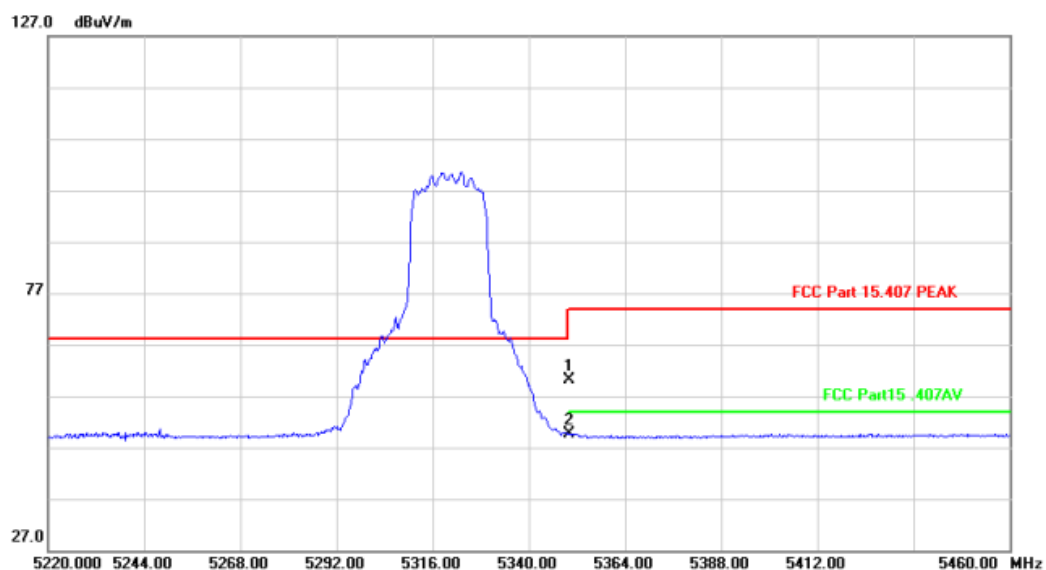


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5350.000	31.13	33.47	64.60	74.00	-9.40	peak		
2	*	5350.000	19.67	33.47	53.14	54.00	-0.86	AVG		

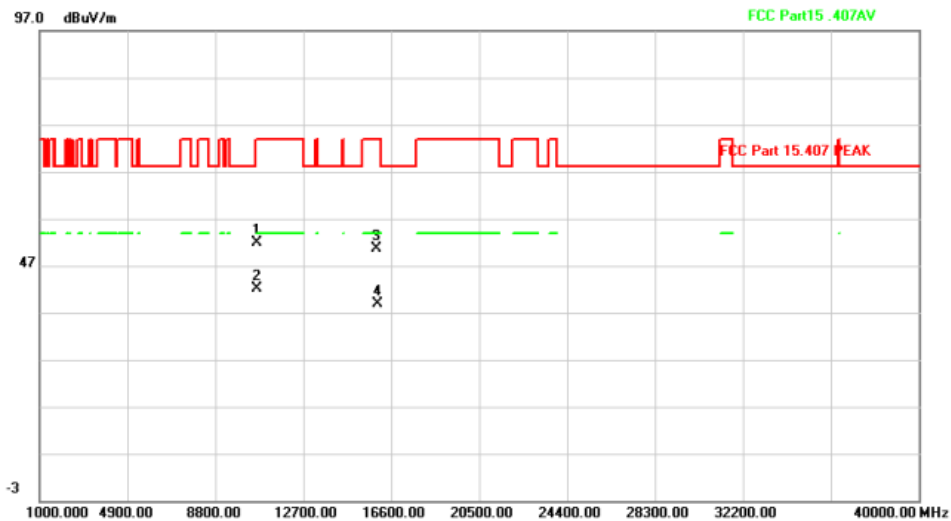


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10638.740	42.32	-3.23	39.09	54.00	-14.91	AVG		
2		10639.000	53.45	-3.23	50.22	74.00	-23.78	peak		
3		15968.500	51.05	-0.11	50.94	74.00	-23.06	peak		
4		15977.471	38.85	-0.11	38.74	54.00	-15.26	AVG		

HORIZONTAL



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5350.000	26.75	33.47	60.22	74.00	-13.78			peak
2 *		5350.000	16.13	33.47	49.60	54.00	-4.40			AVG



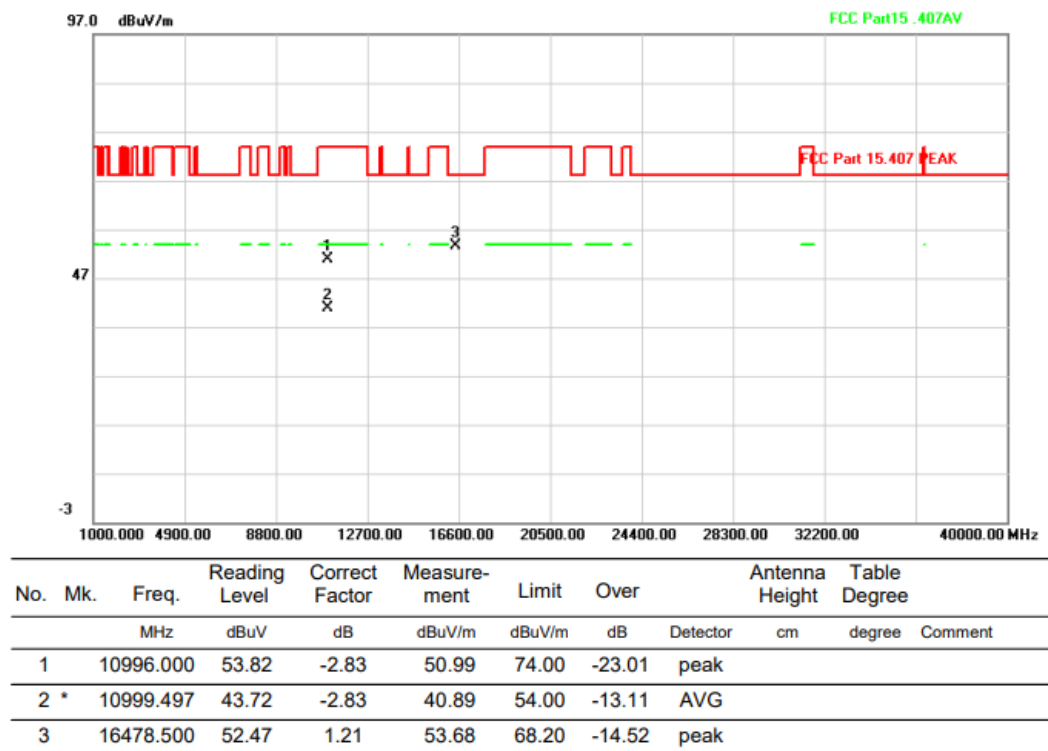
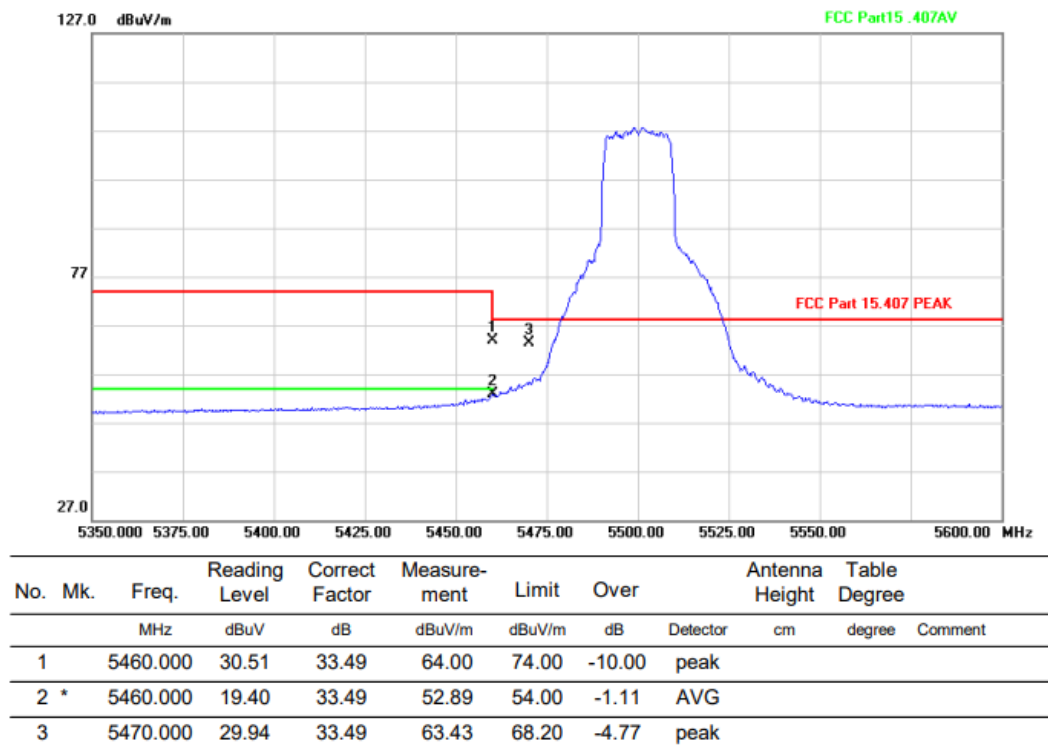
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10639.000	55.23	-3.23	52.00	74.00	-22.00			peak
2 *		10639.519	45.45	-3.23	42.22	54.00	-11.78			AVG
3		15968.500	50.77	-0.11	50.66	74.00	-23.34			peak
4		15977.671	38.89	-0.11	38.78	54.00	-15.22			AVG

Above 1G (1GHz~40GHz)

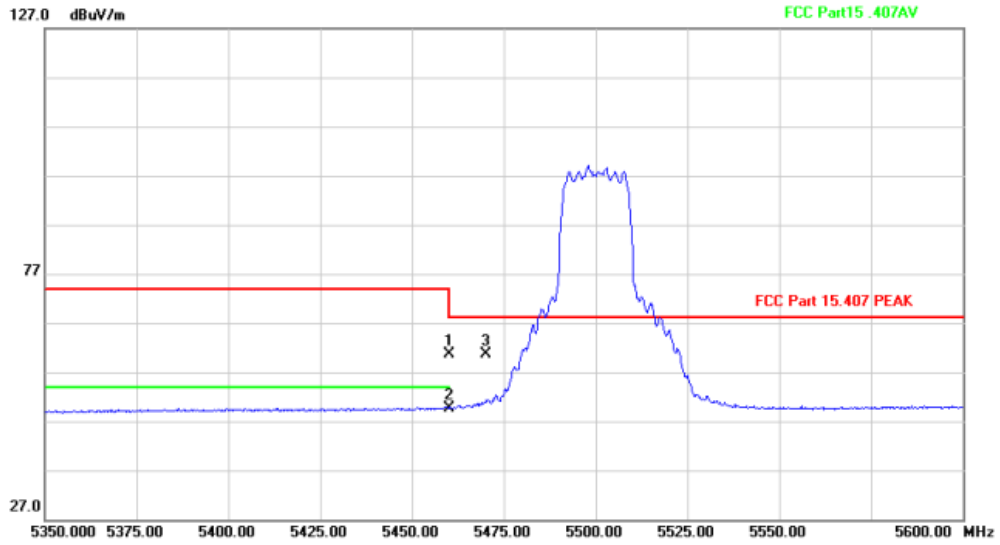
Test mode: 11N20

Test Channel:100

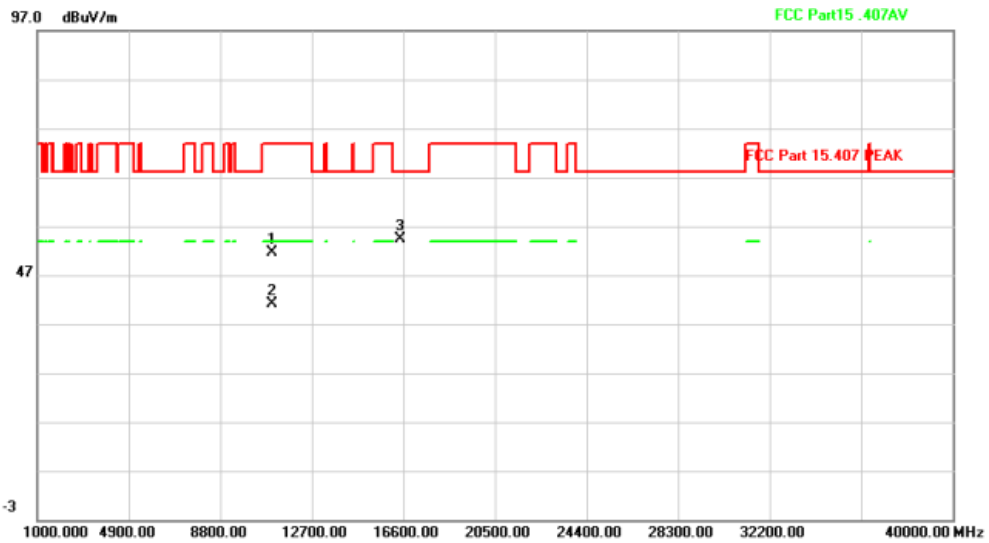
VERTICAL



HORIZONTAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5460.000	27.03	33.49	60.52	74.00	-13.48	peak		
2 *		5460.000	16.17	33.49	49.66	54.00	-4.34	AVG		
3		5470.000	27.04	33.49	60.53	68.20	-7.67	peak		



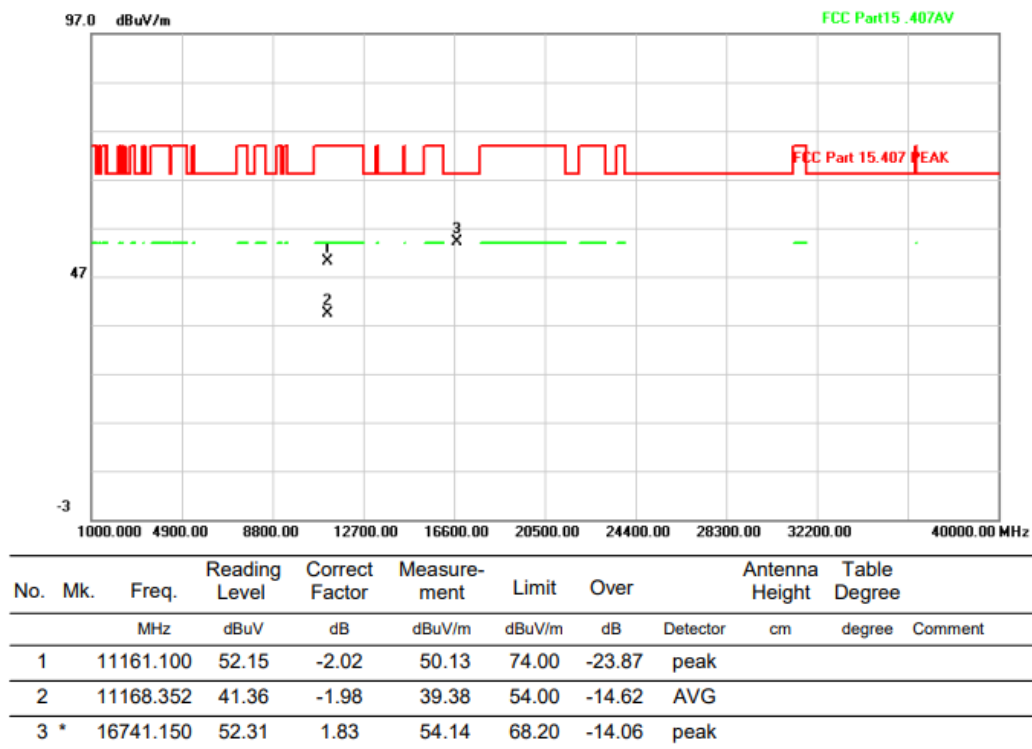
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10996.000	54.48	-2.83	51.65	74.00	-22.35	peak		
2 *		10998.178	43.91	-2.83	41.08	54.00	-12.92	AVG		
3		16478.500	53.15	1.21	54.36	68.20	-13.84	peak		

Above 1G (1GHz~40GHz)

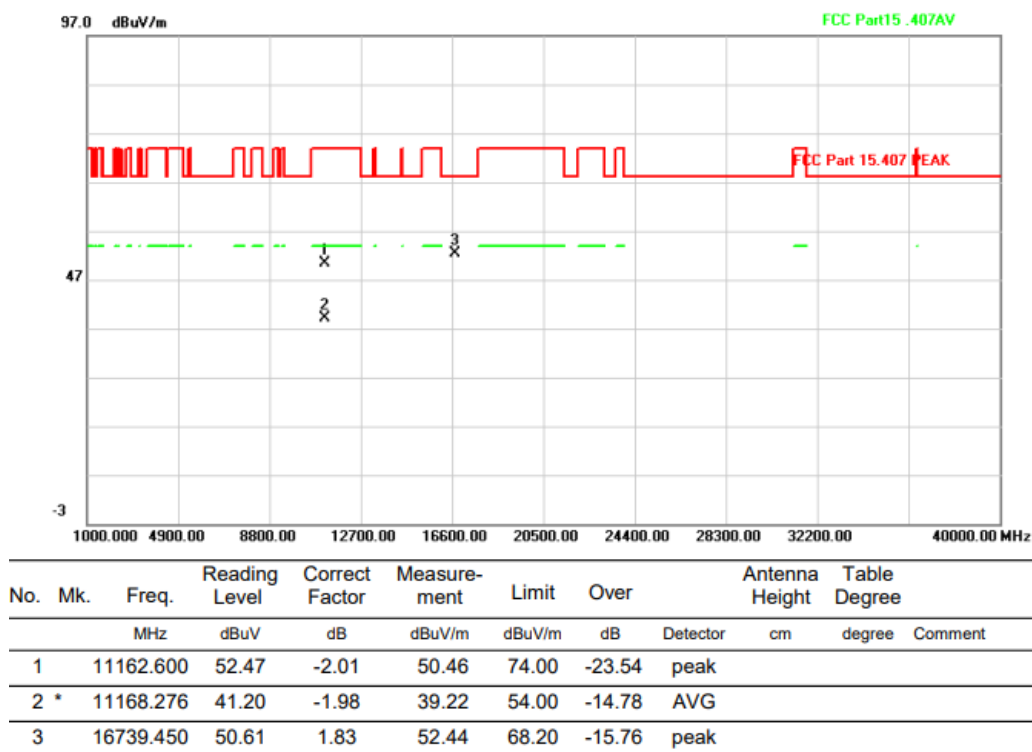
Test mode: 11N20

Test Channel:116

VERTICAL



HORIZONTAL

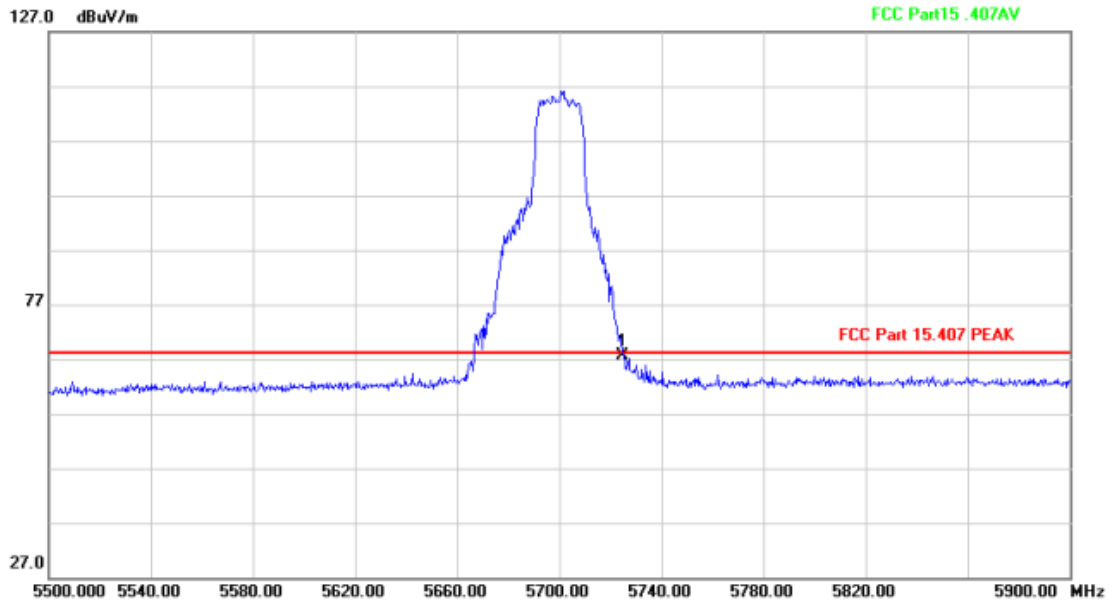


Above 1G (1GHz~40GHz)

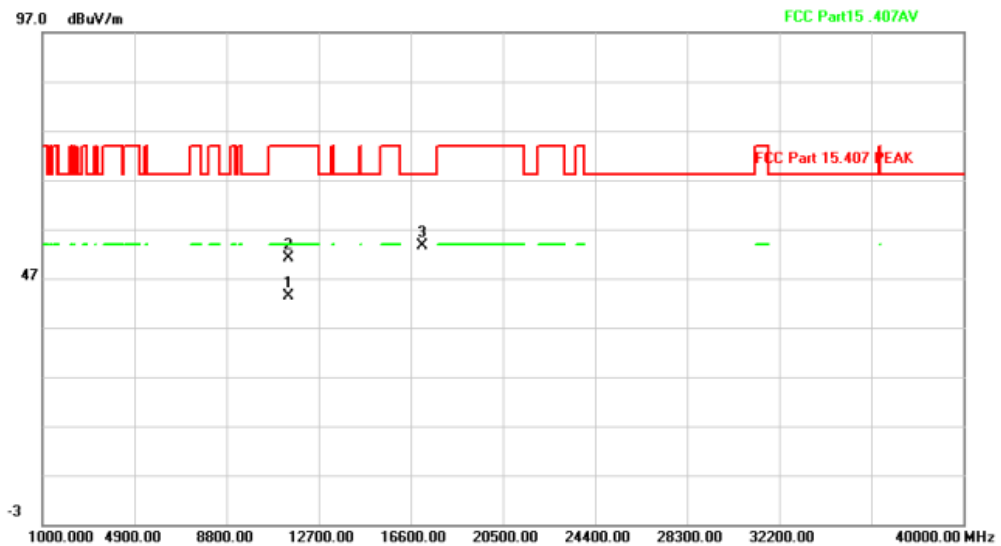
Test mode: 11N20

Test Channel:140

VERTICAL

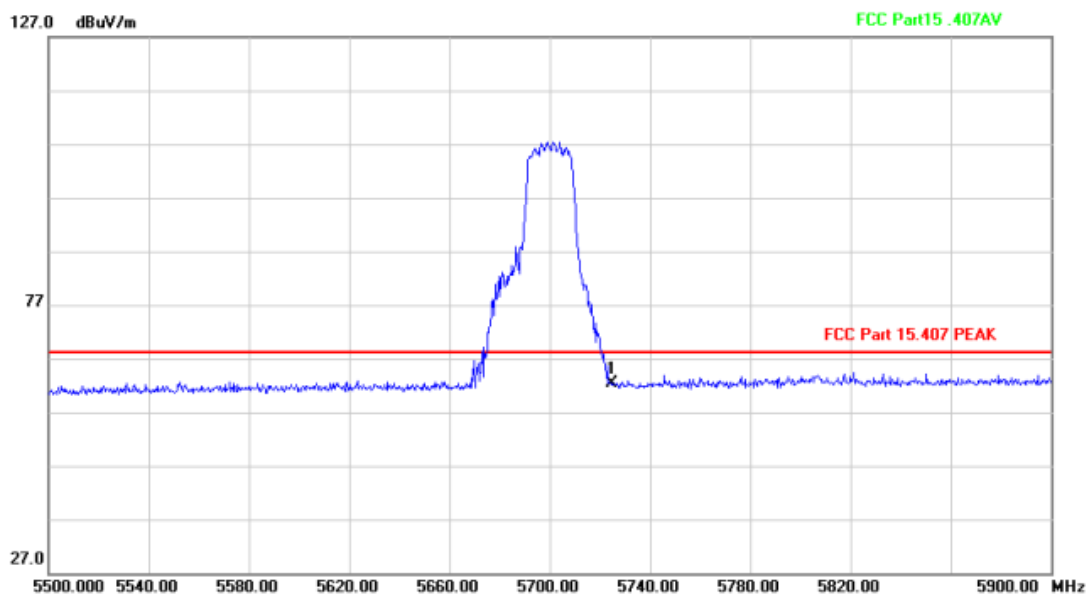


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	5725.000	33.76	33.91	67.67	68.20	-0.53	peak		

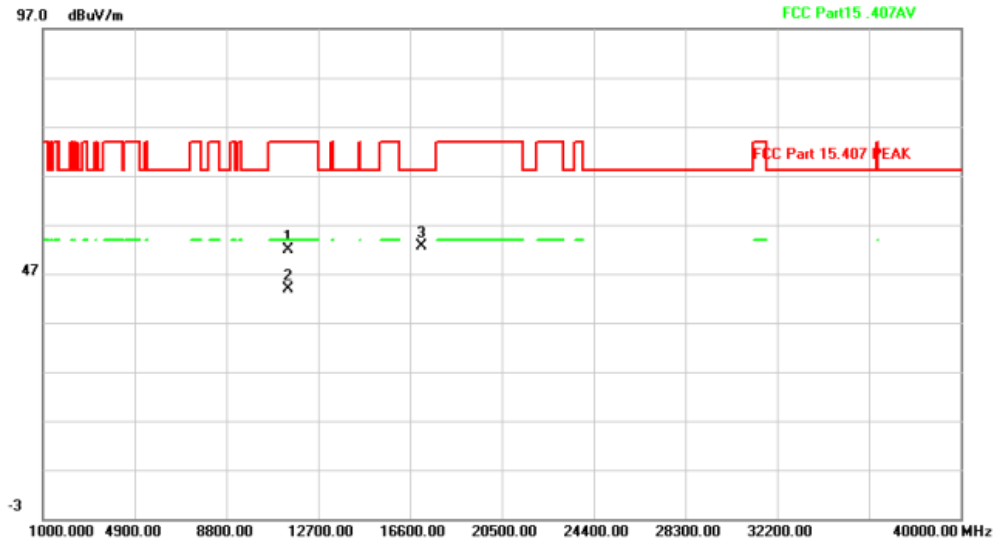


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	11400.180	44.26	-0.81	43.45	54.00	-10.55	AVG		
2		11400.500	51.94	-0.81	51.13	74.00	-22.87	peak		
3		17090.500	50.57	2.95	53.52	68.20	-14.68	peak		

HORIZONTAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	5725.000	28.58	33.91	62.49	68.20	-5.71	peak		



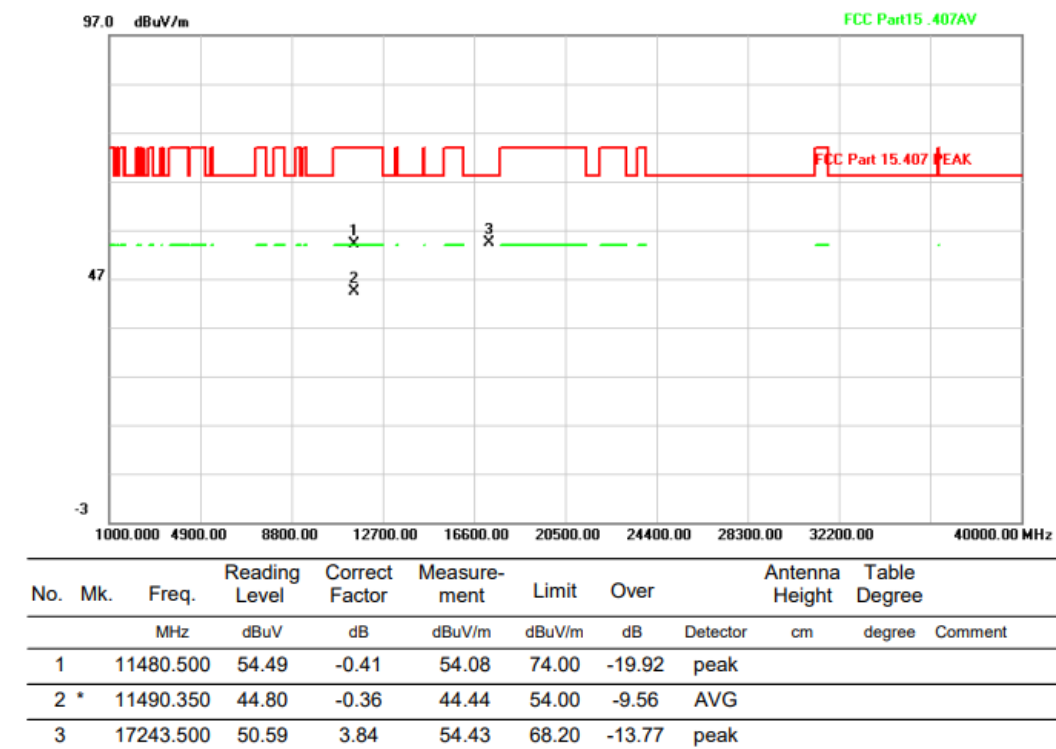
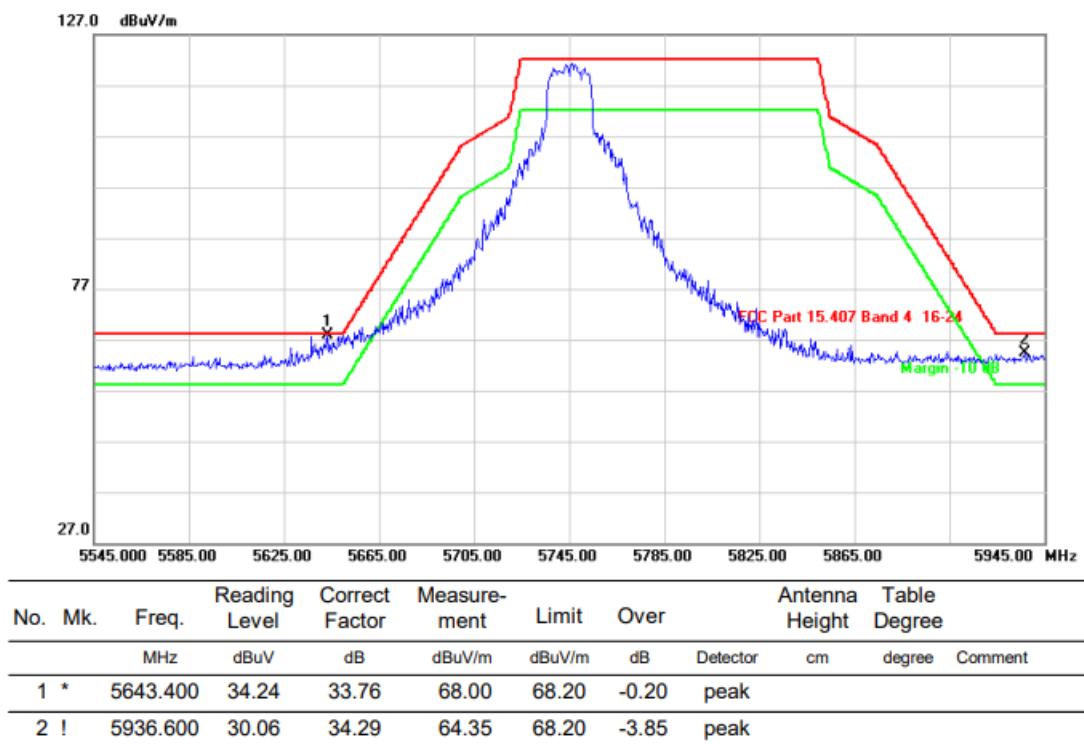
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		11400.500	52.81	-0.81	52.00	74.00	-22.00	peak		
2	*	11401.399	44.62	-0.81	43.81	54.00	-10.19	AVG		
3		17090.500	49.73	2.95	52.68	68.20	-15.52	peak		

Above 1G (1GHz~40GHz)

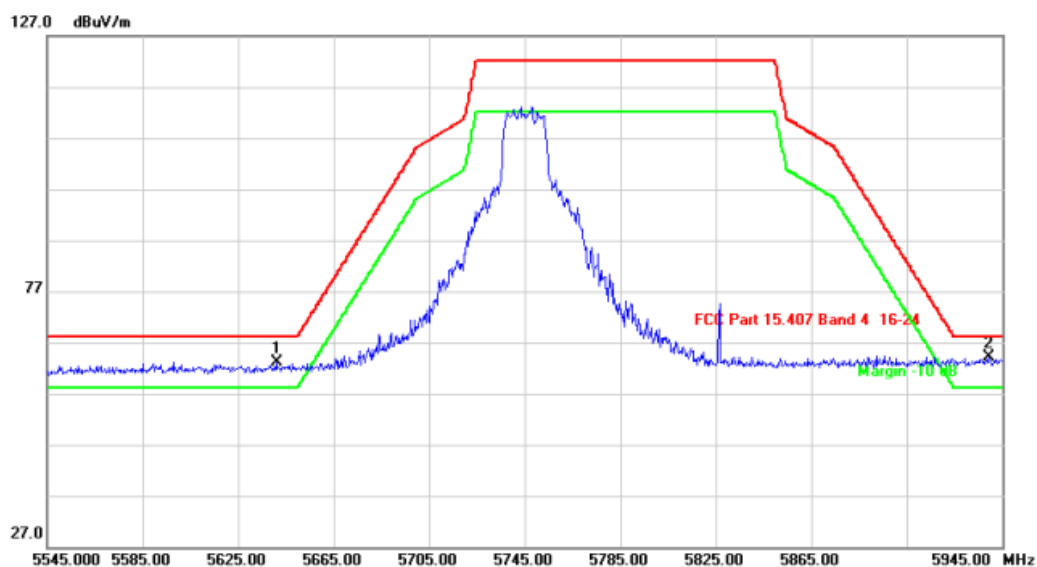
Test mode: 11N20

Test Channel:149

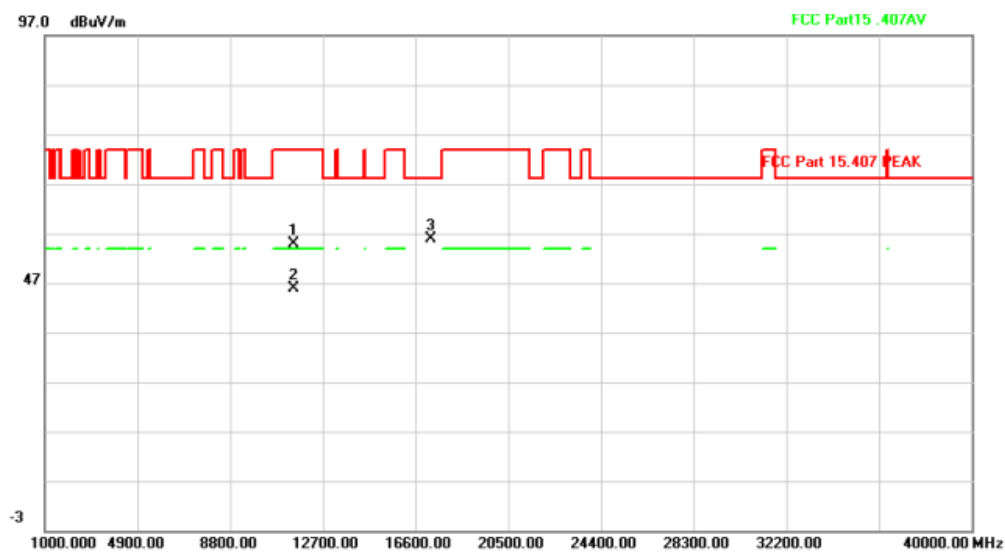
VERTICAL



HORIZONTAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	!	5641.000	29.30	33.75	63.05	68.20	-5.15	peak		
2	*	5939.400	29.89	34.29	64.18	68.20	-4.02	peak		



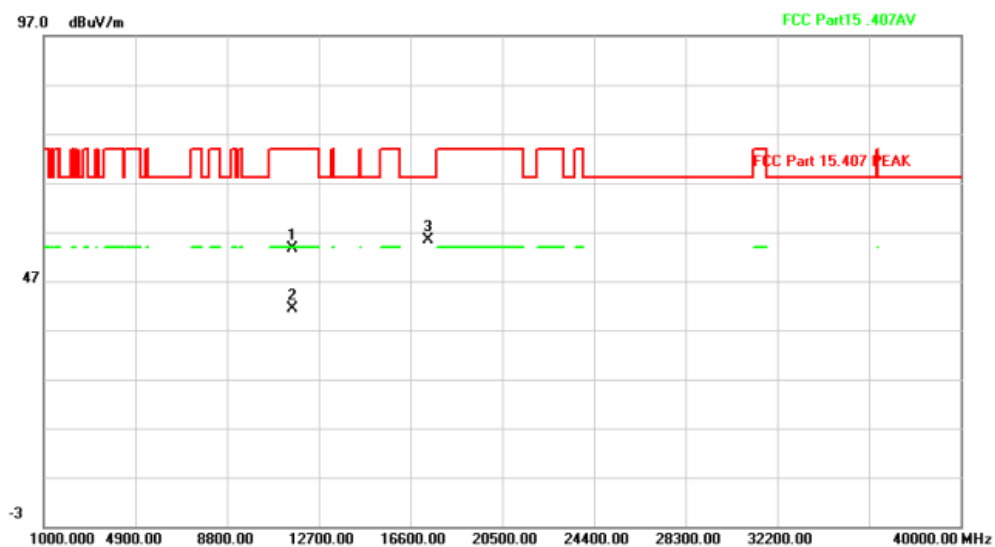
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		11480.500	55.18	-0.41	54.77	74.00	-19.23	peak		
2	*	11489.391	46.28	-0.36	45.92	54.00	-8.08	AVG		
3		17243.500	52.06	3.84	55.90	68.20	-12.30	peak		

Above 1G (1GHz~40GHz)

Test mode: 11N20

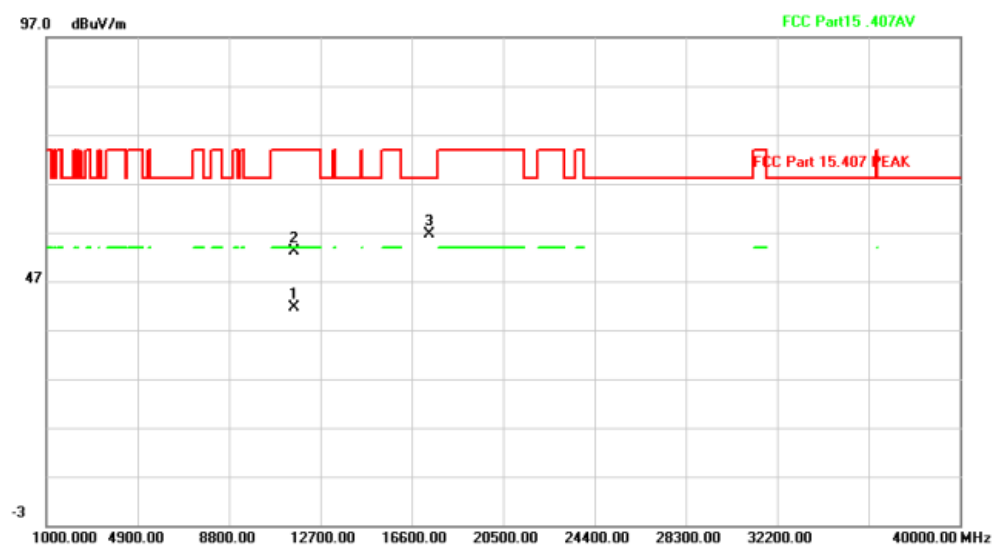
Test Channel:157

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		11574.850	54.31	-0.58	53.73	74.00	-20.27	peak		
2 *		11579.712	42.00	-0.60	41.40	54.00	-12.60	AVG		
3		17353.350	50.85	4.47	55.32	68.20	-12.88	peak		

HORIZONTAL



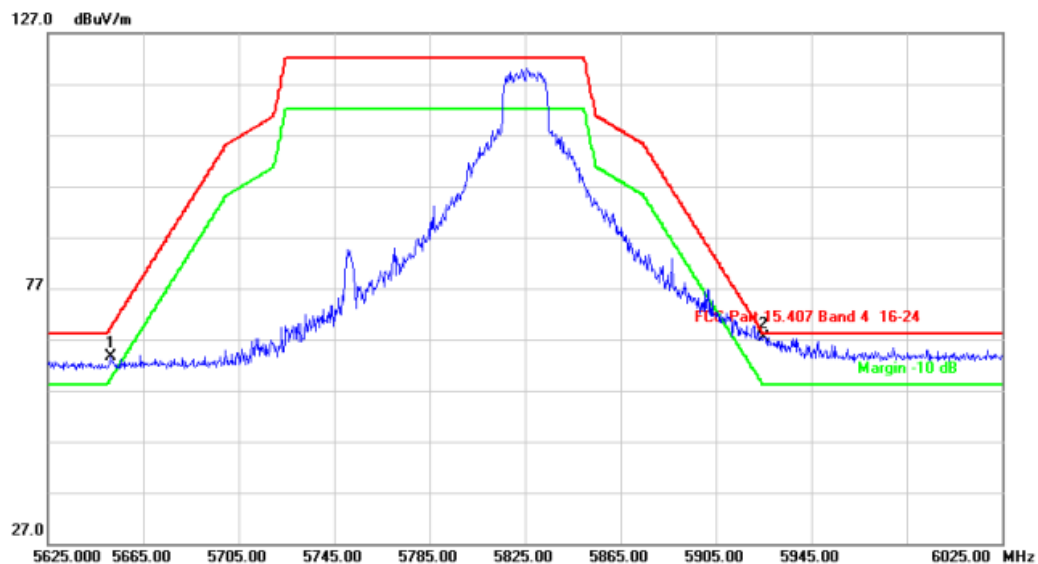
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		11578.771	42.22	-0.60	41.62	54.00	-12.38	AVG		
2		11579.100	53.61	-0.60	53.01	74.00	-20.99	peak		
3 *		17350.600	52.11	4.46	56.57	68.20	-11.63	peak		

Above 1G (1GHz~40GHz)

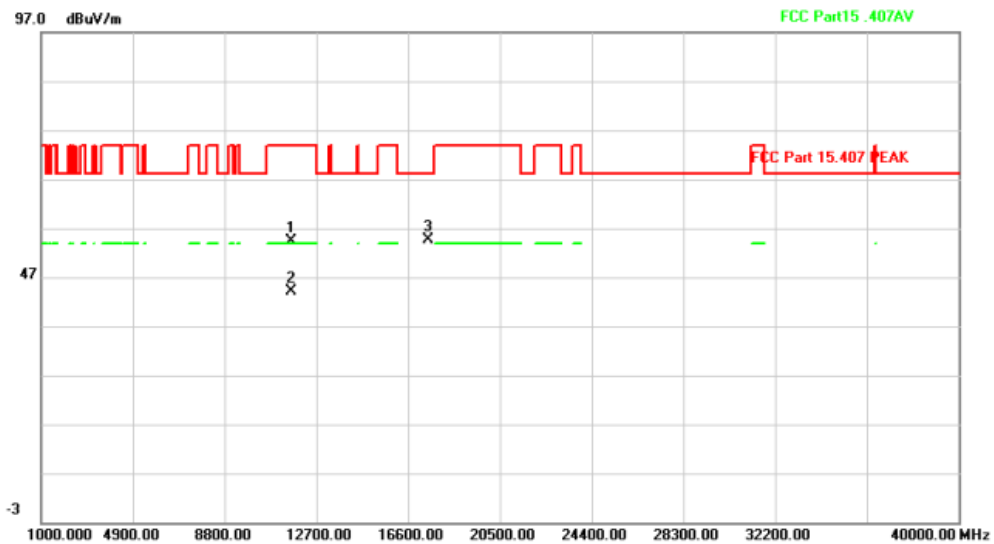
Test mode: 11N20

Test Channel:165

VERTICAL

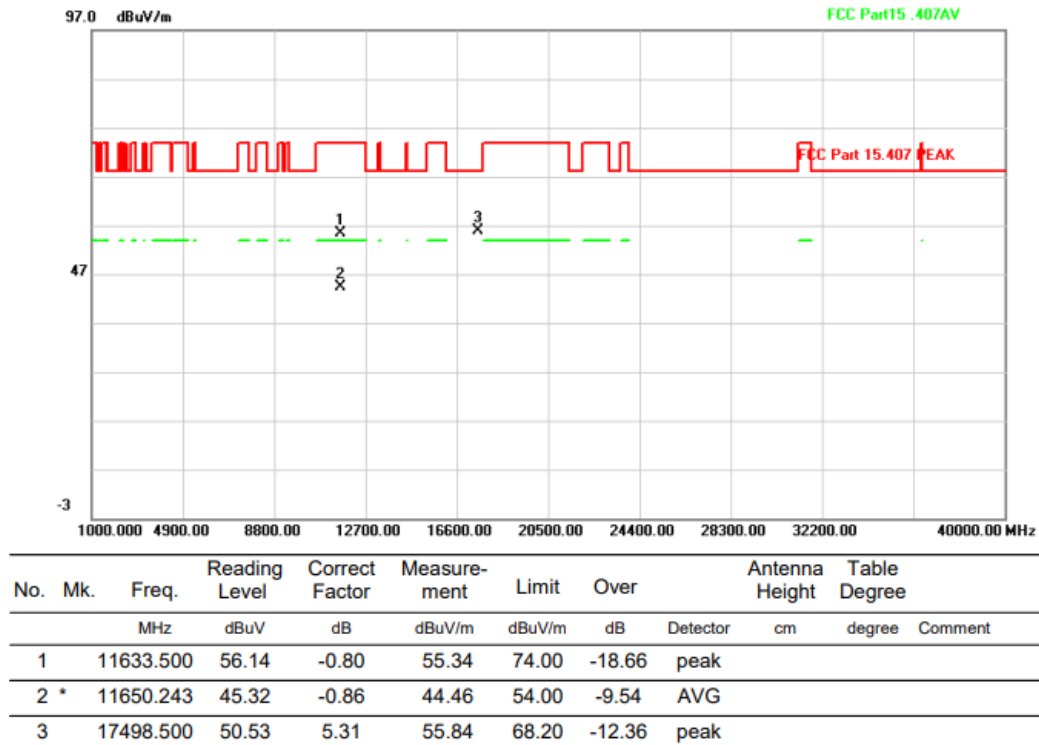
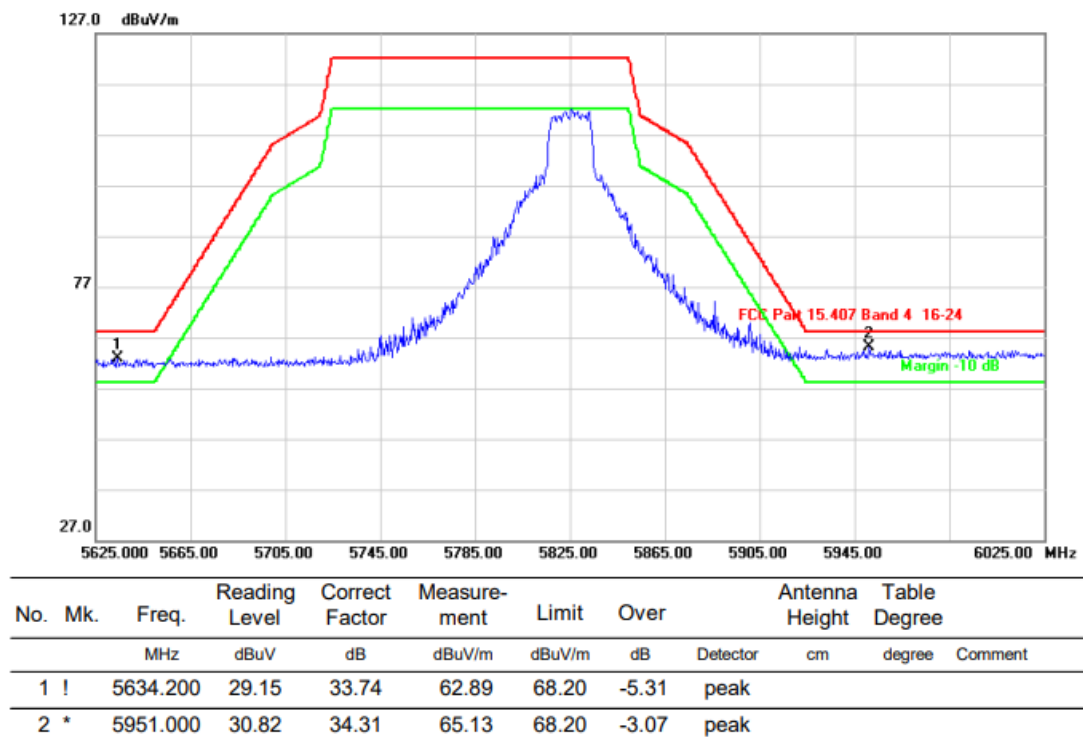


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	!	5651.400	29.82	33.77	63.59	69.24	-5.65	peak		
2	*	5925.000	33.17	34.27	67.44	68.20	-0.76	peak		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		11633.500	55.06	-0.80	54.26	74.00	-19.74	peak		
2	*	11650.443	45.09	-0.86	44.23	54.00	-9.77	AVG		
3		17473.000	49.41	5.16	54.57	68.20	-13.63	peak		

HORIZONTAL

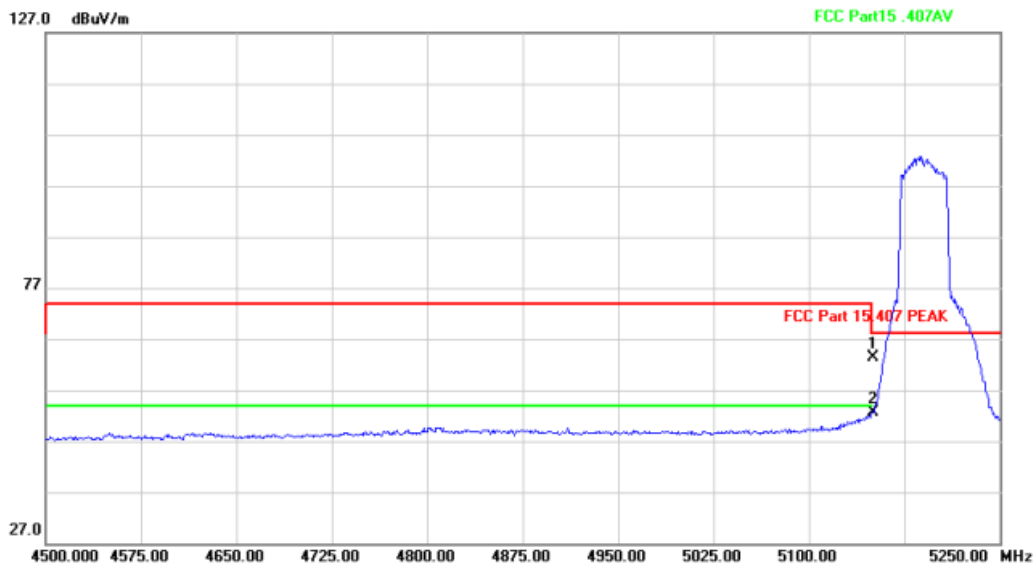


Above 1G (1GHz~40GHz)

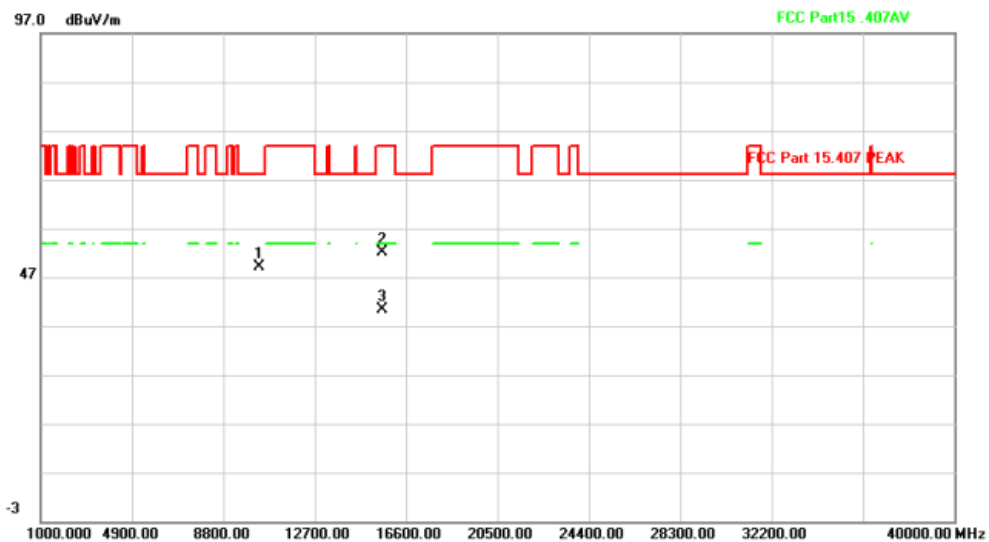
Test mode: 11N40MIMO

Test Channel:38

VERTICAL

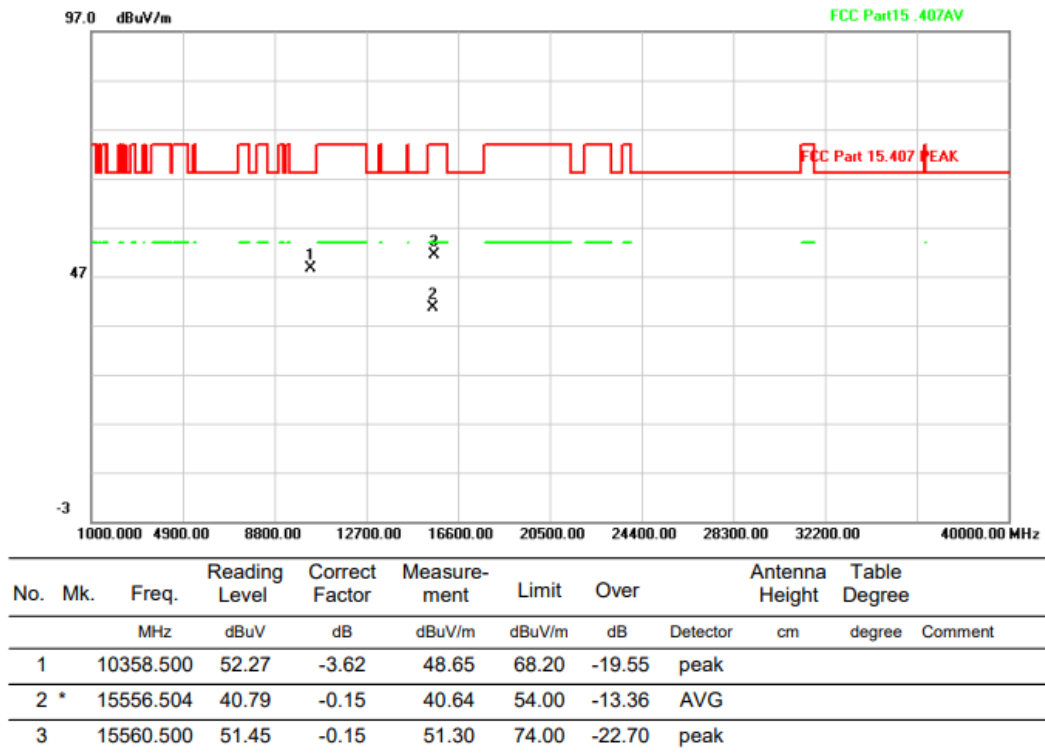
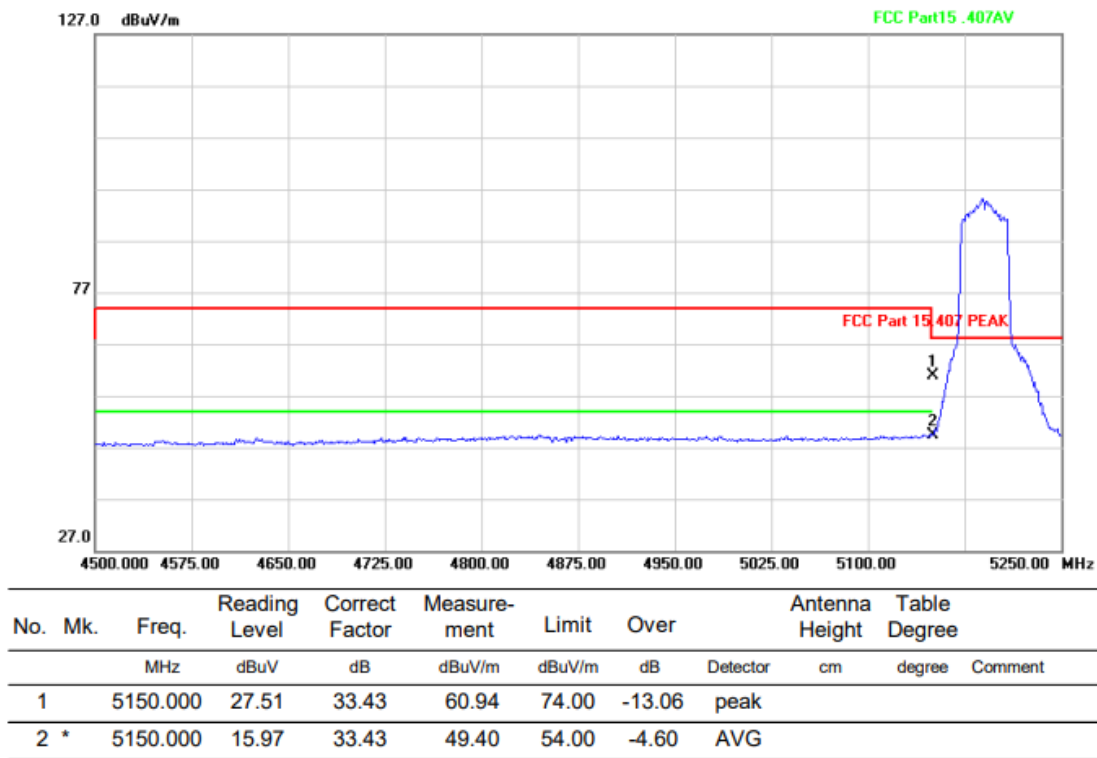


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5150.000	30.07	33.43	63.50	74.00	-10.50	peak		
2	*	5150.000	19.13	33.43	52.56	54.00	-1.44	AVG		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10358.500	52.72	-3.62	49.10	68.20	-19.10	peak		
2		15560.500	52.26	-0.15	52.11	74.00	-21.89	peak		
3	*	15560.540	40.47	-0.15	40.32	54.00	-13.68	AVG		

HORIZONTAL

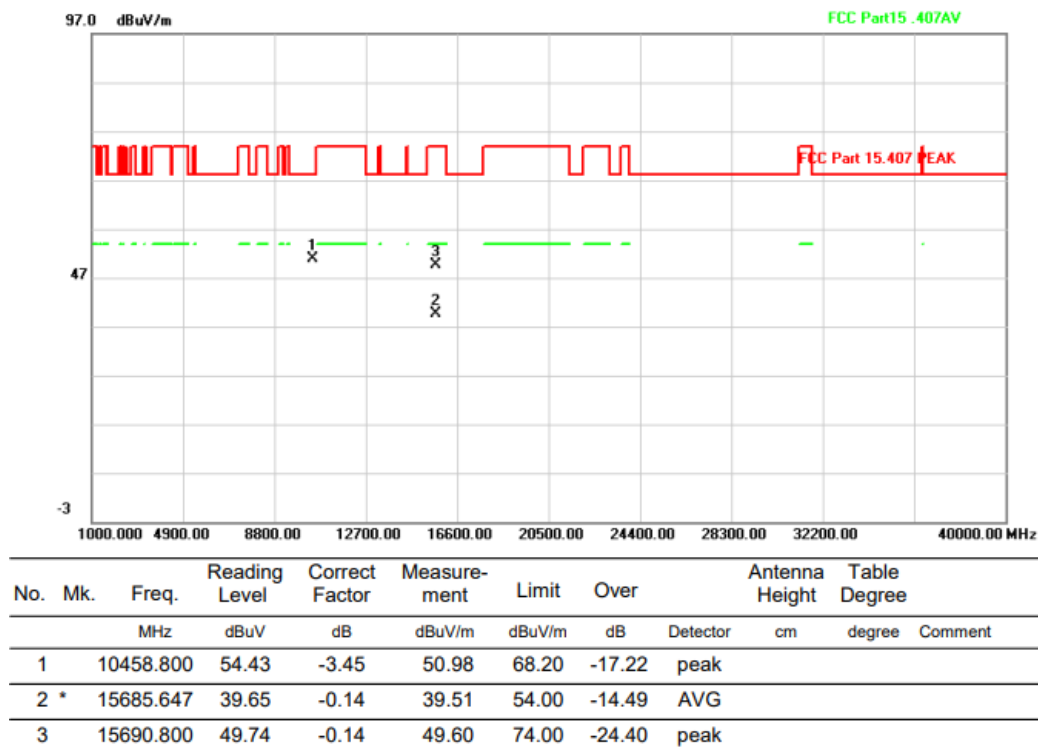


Above 1G (1GHz~40GHz)

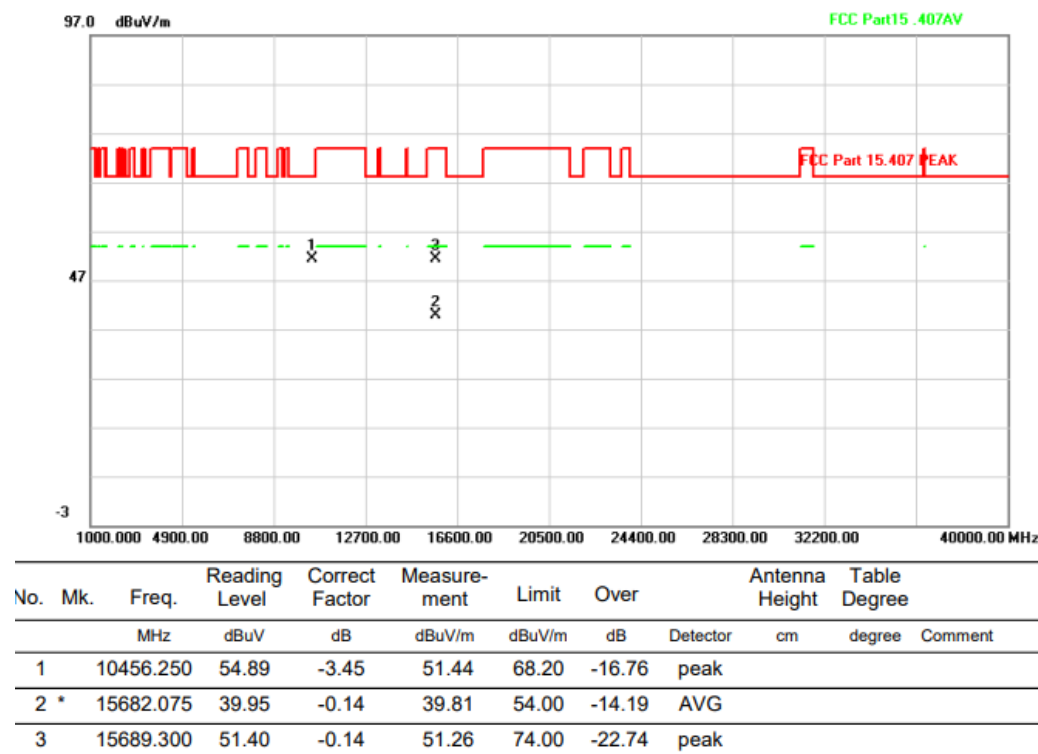
Test mode: 11N40MIMO

Test Channel:46

VERTICAL



HORIZONTAL

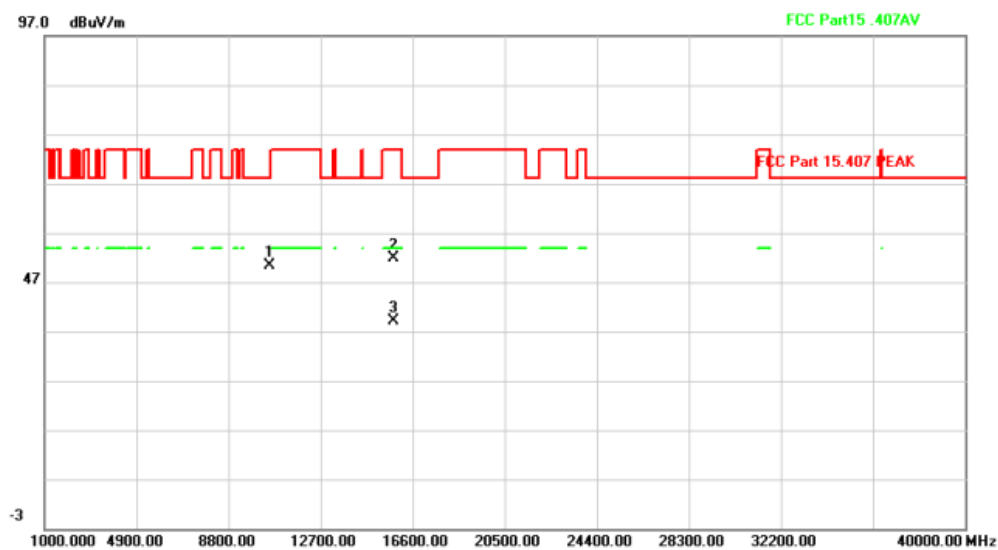


Above 1G (1GHz~40GHz)

Test mode: 11N40MIMO

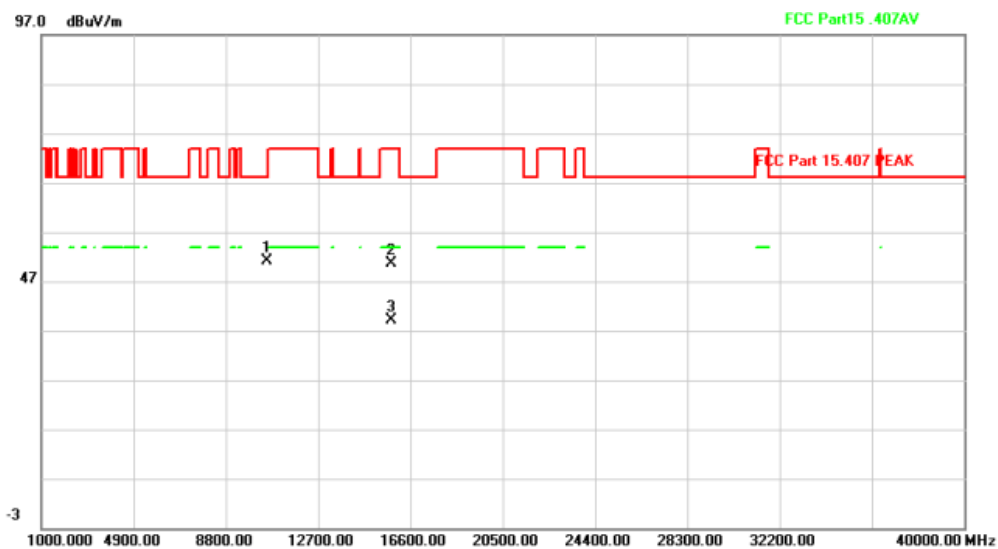
Test Channel:54

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10539.550	53.69	-3.34	50.35	68.20	-17.85	peak		
2		15810.200	51.94	-0.13	51.81	74.00	-22.19	peak		
3 *		15815.746	39.15	-0.13	39.02	54.00	-14.98	AVG		

HORIZONTAL



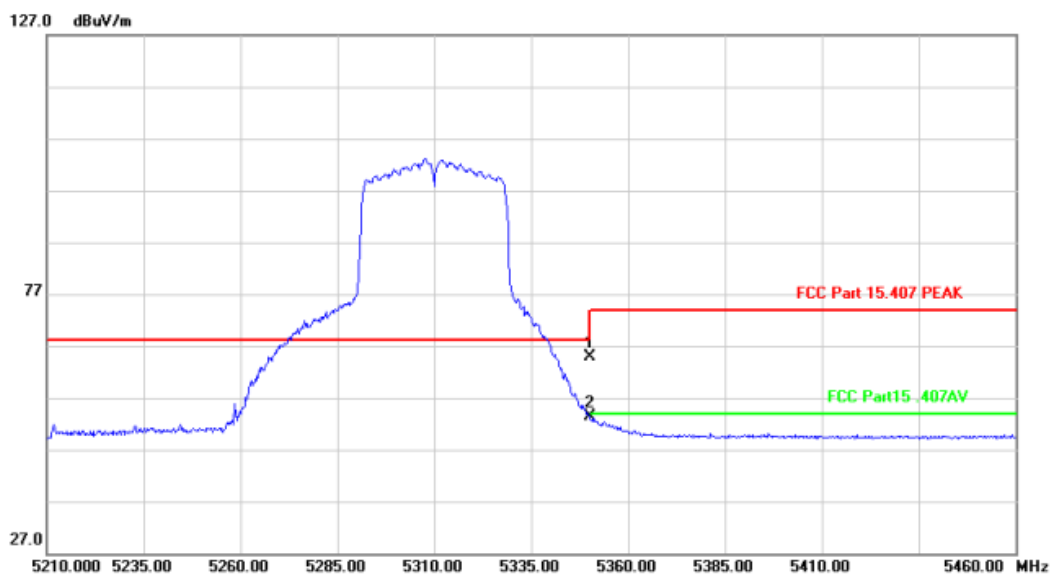
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10540.350	54.50	-3.34	51.16	68.20	-17.04	peak		
2		15810.550	50.77	-0.13	50.64	74.00	-23.36	peak		
3 *		15818.454	39.26	-0.13	39.13	54.00	-14.87	AVG		

Above 1G (1GHz~40GHz)

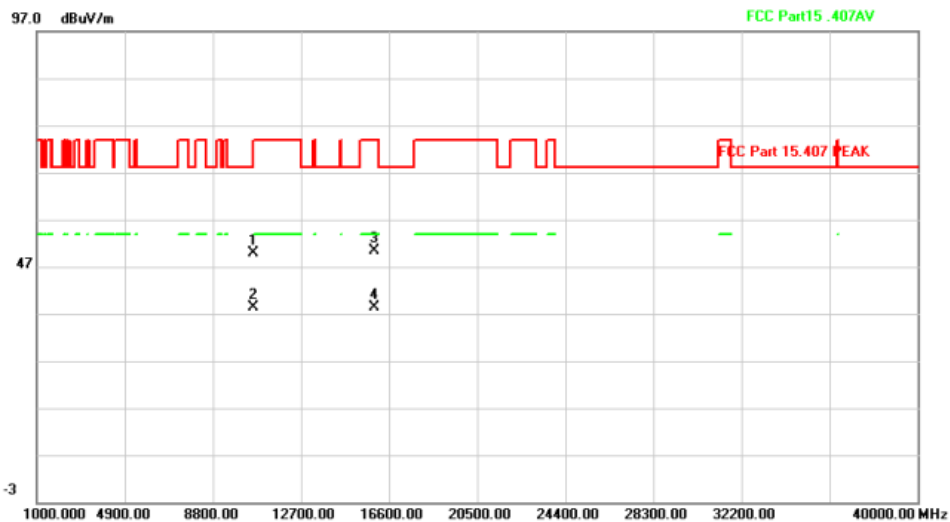
Test mode: 11N40MIMO

Test Channel:62

VERTICAL

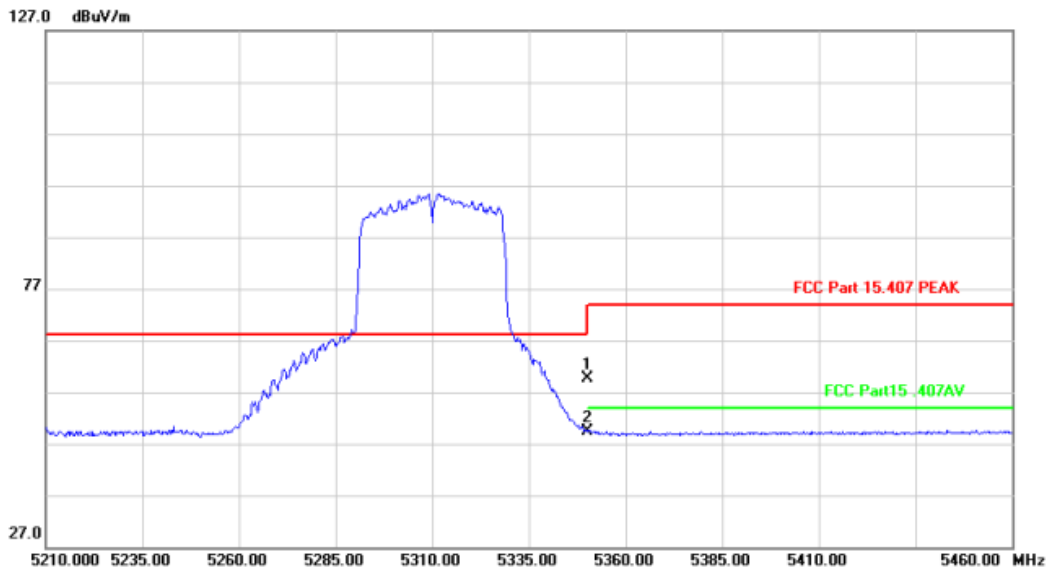


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5350.000	31.45	33.47	64.92	74.00	-9.08	peak		
2	*	5350.000	19.80	33.47	53.27	54.00	-0.73	AVG		

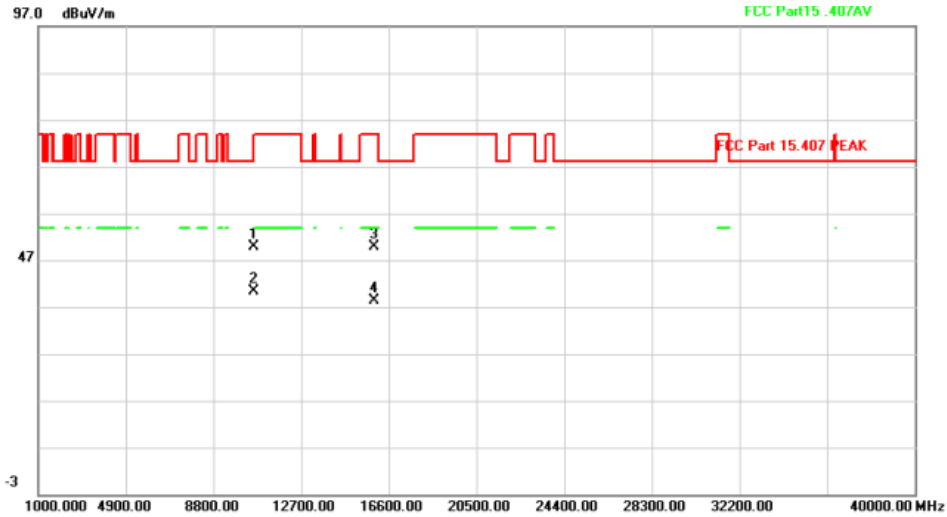


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10613.500	53.04	-3.26	49.78	74.00	-24.22	peak		
2		10617.916	41.51	-3.25	38.26	54.00	-15.74	AVG		
3		15943.000	50.62	-0.12	50.50	74.00	-23.50	peak		
4	*	15948.894	38.43	-0.12	38.31	54.00	-15.69	AVG		

HORIZONTAL



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		5350.000	26.08	33.47	59.55	74.00	-14.45	peak		
2 *		5350.000	15.93	33.47	49.40	54.00	-4.60	AVG		



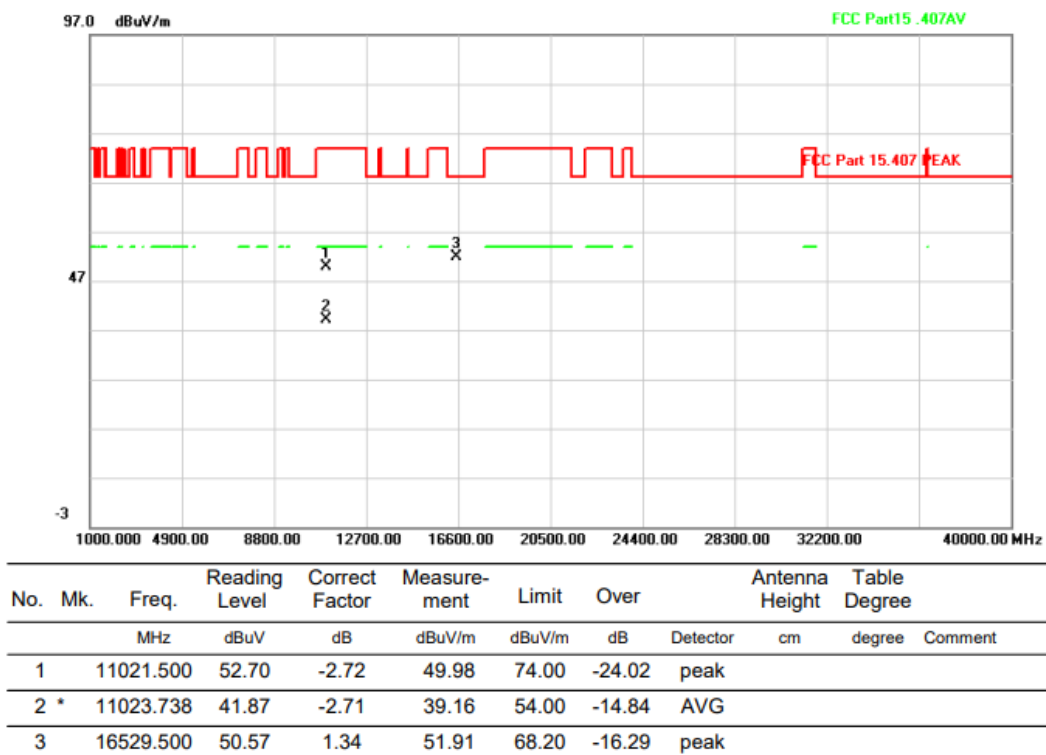
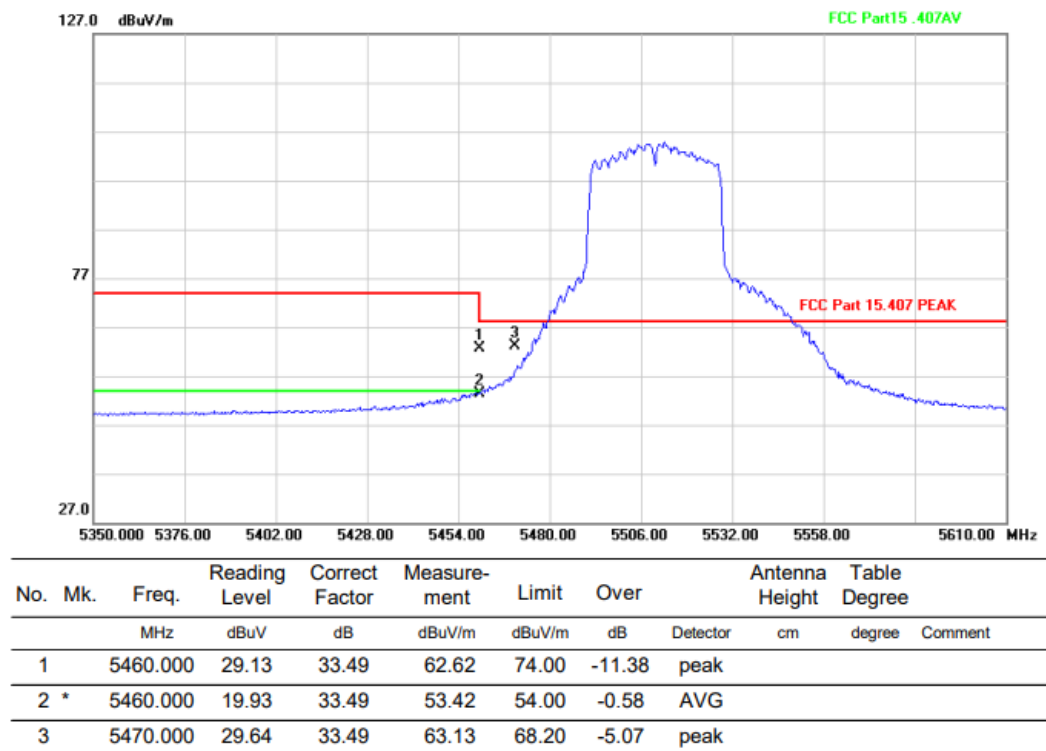
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		10613.500	53.19	-3.26	49.93	74.00	-24.07	peak		
2 *		10618.995	43.53	-3.25	40.28	54.00	-13.72	AVG		
3		15943.000	50.07	-0.12	49.95	74.00	-24.05	peak		
4		15950.313	38.42	-0.11	38.31	54.00	-15.69	AVG		

Above 1G (1GHz~40GHz)

Test mode: 11N40MIMO

Test Channel:102

VERTICAL



HORIZONTAL

