

RF TEST REPORT

FCC ID: 2A49R-MS-01

Test Report No.....: RF231116004-03-005

Product(s) Name.....: MINI PC

Model(s).....: MS-01-S1245, MS-01-S1250, MS-01-S1260, MS-01-S1270, MS-01-S1290, MS-01-S129K, MS-01-S1342, MS-01-S1350, MS-01-S1360, MS-01-S1370, MS-01-S1380, MS-01-S1390, MS-01-S139K

Trade Mark.....: N/A

Applicant.....: MICRO COMPUTER (HK) TECH LIMITED

Address.....: RM 18, 28/F, Shui On Centre, 6-8 Harbour Road, Waterfront, Wan Chai, HK, China

Receipt Date.....: 2024.01.04

Test Date.....: 2024.01.11~2024.04.15

Issued Date.....: 2024.04.17

Standards.....: 47 CFR FCC Part 15, Subpart E(Section 15.407);
ANSI C63.10:2013

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

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History of this test report

Original Report Issue Date: 2024.04.17

☒ No additional attachment

☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description
RFBARR-WTW-P21030485A-6	2021.06.10	Module report Module ID: RAS-MT7922A22M
RF231116004-03-005	2024.04.17	Compared to the original report of this module, it was used for MINI PC, with antenna replacement and reduced gain. Therefore, the maximum conducted power and radiated emission, band edge and AC power conducted emission were tested with reference to the original report, while the rest remained unchanged.

1. General Information

1.1 Applicant

MICRO COMPUTER (HK) TECH LIMITED

RM 18, 28/F, Shui On Centre, 6-8 Harbour Road, Waterfront, Wan Chai, HK, China

1.2 Manufacturer

MICRO COMPUTER (HK) TECH LIMITED

RM 18, 28/F, Shui On Centre, 6-8 Harbour Road, Waterfront, Wan Chai, HK, China

1.3 Factory

MICRO COMPUTER (HK) TECH LIMITED

RM 18, 28/F, Shui On Centre, 6-8 Harbour Road, Waterfront, Wan Chai, HK, China

1.4 Basic Description of Equipment Under Test

Product No.	POC231116004-S003	
Equipment Name	MINI PC	
Model Number	MS-01-S1245, MS-01-S1250, MS-01-S1260, MS-01-S1270, MS-01-S1290, MS-01-S129K, MS-01-S1342, MS-01-S1350, MS-01-S1360, MS-01-S1370, MS-01-S1380, MS-01-S1390, MS-01-S139K	
Test Model	MS-01-S1390	
Model Difference	The model difference is named according to the market demand, only the model and the appearance color are different.	
Trademark	N/A	
Power Supply	DC 19V from adapter	
Adapter Information	Model: SOY-1900947-454 Input: 100-240V~, 50/60Hz 2.5A Max Output: 19V---4.47A, 179.93W	
Operating Temperature	0°C-45°C	
EUT Stage	☐ Product Unit	☒ Final-Sample
Frequency Range	For 802.11a: 5955 ~ 7115MHz For 802.11ax-HE20: 5955 ~ 7115MHz For 802.11ax-HE40: 5965 ~ 7085MHz For 802.11ax-HE80: 5985 ~ 7025MHz For 802.11ax-HE160: 6025 ~ 6985MHz	
Modulation	OFDMA	
Data Rate (Mbps)	up to 2401.9	
Type of Device	Client device	
Antenna gain	Ant1: 3.55dBi, Ant2: 3.58dBi	
Antenna type	PIFA Antenna	

1.5 Working Frequencies

802.11a

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	5955 MHz	05	5975 MHz	09	5995 MHz
13	6015 MHz	17	6035 MHz	21	6055 MHz
25	6075 MHz	29	6095 MHz	33	6115 MHz
37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz
61	6255 MHz	65	6275 MHz	69	6295 MHz
73	6315 MHz	77	6335 MHz	81	6355 MHz
85	6375 MHz	89	6395 MHz	93	6415 MHz
97	6435 MHz	101	6455 MHz	105	6475 MHz
109	5495 MHz	113	6515 MHz	117	6535 MHz
121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz
145	6675 MHz	149	6695 MHz	153	6715 MHz
157	6735 MHz	161	6755 MHz	165	6775 MHz
169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz	185	6875 MHz	189	6895 MHz
193	6915 MHz	197	6935 MHz	201	6955 MHz
205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz
229	7095 MHz	233	7115	--	--

802.11ax-HE20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	5955 MHz	05	5975 MHz	09	5995 MHz
13	6015 MHz	17	6035 MHz	21	6055 MHz
25	6075 MHz	29	6095 MHz	33	6115 MHz
37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz
61	6255 MHz	65	6275 MHz	69	6295 MHz
73	6315 MHz	77	6335 MHz	81	6355 MHz
85	6375 MHz	89	6395 MHz	93	6415 MHz
97	6435 MHz	101	6455 MHz	105	6475 MHz
109	5495 MHz	113	6515 MHz	117	6535 MHz

121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz
145	6675 MHz	149	6695 MHz	153	6715 MHz
157	6735 MHz	161	6755 MHz	165	6775 MHz
169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz	185	6875 MHz	189	6895 MHz
193	6915 MHz	197	6935 MHz	201	6955 MHz
205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz
229	7095 MHz	233	7115	--	--

802.11ax-HE40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	5965 MHz	11	6005 MHz	19	6045 MHz
27	6085 MHz	35	6125 MHz	43	6165 MHz
51	6205 MHz	59	6245 MHz	67	6285 MHz
75	6325 MHz	83	6365 MHz	91	6405 MHz
99	6445 MHz	107	6485 MHz	115	6525 MHz
123	6565 MHz	131	6605 MHz	139	6645 MHz
147	6685 MHz	155	6725 MHz	163	6765 MHz
171	6805 MHz	179	6845 MHz	187	6885 MHz
195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz	--	--

802.11ax-HE80

Channel	Frequency	Channel	Frequency	Channel	Frequency
07	5985 MHz	23	6065 MHz	39	6145 MHz
55	6225 MHz	71	6305 MHz	87	6385 MHz
103	6465 MHz	119	6545 MHz	135	6625 MHz
151	6705 MHz	167	6785 MHz	183	6865 MHz
199	6945 MHz	215	7025 MHz	--	--

802.11ax-HE160

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz
111	6505 MHz	143	6665 MHz	175	6825 MHz
207	6985 MHz	--	--	--	--

2. Summary of Test Results

2.1 Summary of Test Items

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)	26dB & 99% Bandwidth	Conducted	Note6
15.407(b)(7)	In-Band Emission		Note6
15.407(a)(5), (a)(6)	Transmitter power		Note6
15.407(a)(5), (a)(6)	Peak Power Spectral Density (E.I.R.P)		Note6
15.407(d)(6)	Contention-Based Protocol		Note6
15.407(g)	Frequency Stability		Note6
15.407(b)(6)	Unwanted Emissions	Radiated	Pass
15.207	AC Conducted Emissions	Line Conducted	Pass
15.203	Antenna Requirements	/	Note4

Remark:

- The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer.
The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- Output power test was verified over all data rates of each mode, and then choose the maximum power output (low data rate) for final test of each channel.
- For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
- The EUT have 2 PIFA antennas arrangement which was permanently attached.
- EUT supports one configuration only in 802.11ax full RU mode.
- For test data, please refer to the report RFBARR-WTW-P21030485A-6.

2.2 Standards or specification

47 CFR FCC Part 15, Subpart E

KDB 662911 D01 Multiple Transmitter Output v02r01

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB987594 D01 U-NII 6GHz General Requirements v01r03

KDB 414788 D01 Radiated Test Site v01r01

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- 1273	2023/5/4	2024/5/3
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	2023/7/16	2024/7/15
6	Log periodic antenna	Schwarzbeck	VULB 9168	1151	2023/5/4	2024/5/3
7	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D- 1273	2023/5/4	2024/5/3
8	Horn Antenna	Schwarzbeck	BBHA 9170	9170#685	2023/7/16	2024/7/15
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)18GHz -40GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
13	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2			
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 Ver.TW-03A2			
RF Conducted Emission						
1	MXA Signal Analyzer	Keysight	N9021B	MY600801 69	2023/4/23	2024/4/22
2	RF Control Unit	dsusoft	JS0806-2	21G806044 9	2023/4/23	2024/4/22
3	power supply unit	dsusoft	JS0806- 4ADC	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 Ver.3.2.22.0			

2.4 Test Mode

The EUT was supplied by and it was run in TX mode that was controlled by Master provided RF testing program. The worst case test result was showed in the report.

Mode 1: Transmit by 802.11a (MCS0)
Mode 2: Transmit by 802.11ax-HE20 (MCS0)
Mode 3: Transmit by 802.11ax-HE40 (MCS0)
Mode 4: Transmit by 802.11ax-HE80 (MCS0)
Mode 5: Transmit by 802.11ax-HE160 (MCS0)

2.5 Test Condition

Applicable to	Environmental conditions	Input Power	Tested by
26dB & 99% Bandwidth	24.3°C, 51% RH	DC 19V	Henry Huang
In-Band Emission	24.2°C, 55% RH	DC 19V	Henry Huang
Contention-Based Protocol	24.2°C, 52% RH	DC 19V	Henry Huang
Frequency Stability	24.2°C, 52% RH	DC 19V	Henry Huang
Transmitter power	24.2°C, 52% RH	DC 19V	Henry Huang
Peak Power Spectral Density	24.2°C, 52% RH	DC 19V	Henry Huang
Unwanted Emissions	24.3°C, 54% RH	AC 120V/60Hz	Albert Fan
AC Conducted Emissions	24.3°C, 54% RH	AC 120V/60Hz	Albert Fan

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

The applicant declare the operating environment of EUT as below:

Normal conditions: DC 19V, 0~60°C

Extreme conditions: NV: 19V

NT: 20°C

LV: 17.1V

HV: 20.9V

2.6 Duty Cycle of Test Signal

Test result: PASS

Note: For test data, please refer to the report RFBARR-WTW-P21030485A-6.

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

3. Test Procedure And Results

3.1 26dB & 99% Bandwidth Measurement

3.1.1 Limit

The upper and lower frequency limits of the transmitter 99 % emission power bandwidth shall at all times remain within the operating frequency limits.

Some transmitter categories require a specific limit for emission bandwidth. In such cases, the emission bandwidth shall be established by testing in accordance with the relevant specified Standard.

3.1.2 Test Procedure

KDB 789033 D02v02r01- Section II)C)1) (26dB Bandwidth)

KDB 789033 D02v02r01- Section II)D) (99% Bandwidth)

3.1.3 Test Setup

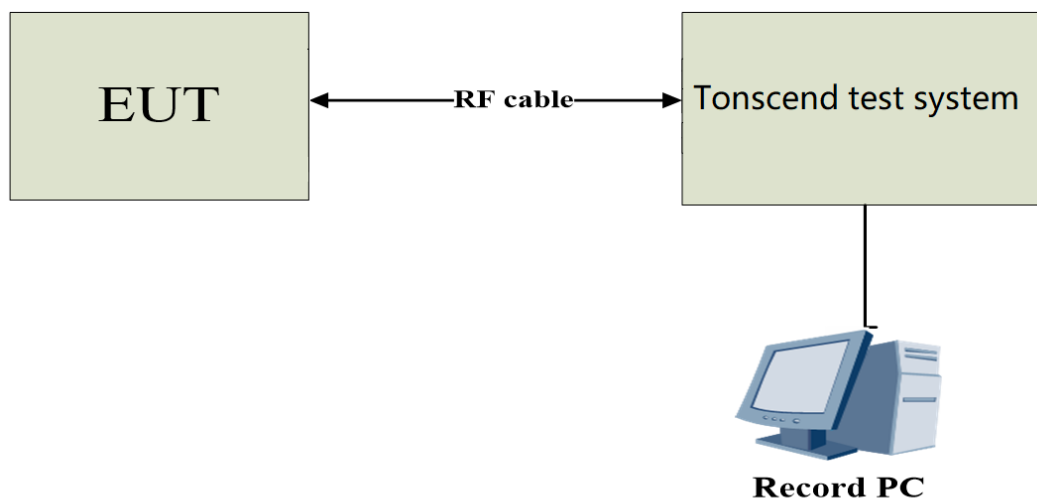
26dB Bandwidth

1. The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth
2. RBW = approximately 1% of the emission bandwidth.
3. VBW > RBW
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

99% Bandwidth

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 1% to 5% of the OBW
3. VBW $\geq$ 3 RBW
4. Span = 1.5 times to 5 times the OBW
5. Detector = peak
6. Trace mode = max hold
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument.

3.1.4 Test Setup



3.1.5 Test Result

3.1.5.1 Emission Bandwidth

Test result: PASS

Note: For test data, please refer to the report RFBARR-WTW-P21030485A-6.

3.1.5.2 Occupied channel bandwidth

Test result: PASS

Note: For test data, please refer to the report RFBARR-WTW-P21030485A-6.

3.2 Transmitter power

3.2.1 Limit

The following limits shall apply to indoor access points devices:

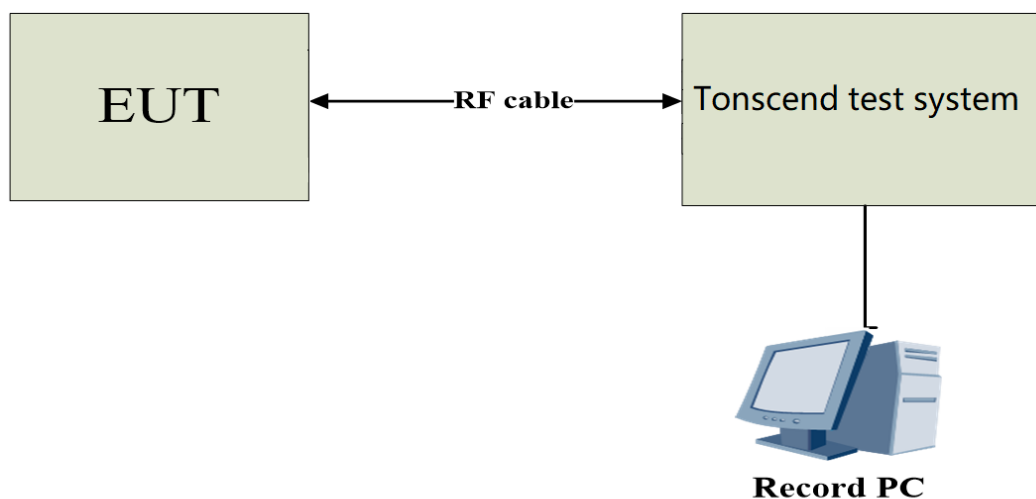
- the maximum e.i.r.p. spectral density shall not exceed 5dBm/MHz and
- the maximum e.i.r.p. over the 5925-7125 MHz frequency band shall not exceed 30dBm.

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	

- The EUT was directly connected to the Tonscent test system.
- Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

3.2.3 Test Setup



3.2.4 Test Result

Test result: PASS

Test Mode	Antenna	Frequency [MHz]	Max. Conducted Output Power [dBm]	Gain [dBi]	EIRP [dBm]	EIRPLimit [dBm]	Verdict
11A-CDD	Ant1	5955	-1.47	3.55	2.08	≤30	PASS
	Ant2	5955	-2.00	3.58	1.58	≤30	PASS
	total	5955	1.28	6.58	7.86	≤30	PASS
	Ant1	6175	-1.58	3.55	1.97	≤30	PASS
	Ant2	6175	-2.15	3.58	1.43	≤30	PASS
	total	6175	1.16	6.58	7.74	≤30	PASS
	Ant1	6415	-1.55	3.55	2.00	≤30	PASS
	Ant2	6415	-2.07	3.58	1.51	≤30	PASS
	total	6415	1.21	6.58	7.79	≤30	PASS
	Ant1	6435	-1.40	3.55	2.15	≤30	PASS
	Ant2	6435	-1.97	3.58	1.61	≤30	PASS
	total	6435	1.33	6.58	7.91	≤30	PASS
	Ant1	6475	-1.47	3.55	2.08	≤30	PASS
	Ant2	6475	-1.81	3.58	1.77	≤30	PASS
	total	6475	1.37	6.58	7.95	≤30	PASS
	Ant1	6515	-1.49	3.55	2.06	≤30	PASS
	Ant2	6515	-2.05	3.58	1.53	≤30	PASS
	total	6515	1.25	6.58	7.83	≤30	PASS
	Ant1	6535	-1.47	3.55	2.08	≤30	PASS
	Ant2	6535	-2.11	3.58	1.47	≤30	PASS
	total	6535	1.23	6.58	7.81	≤30	PASS
	Ant1	6695	-1.59	3.55	1.96	≤30	PASS
	Ant2	6695	-1.87	3.58	1.71	≤30	PASS
	total	6695	1.29	6.58	7.87	≤30	PASS
	Ant1	6855	-1.47	3.55	2.08	≤30	PASS
	Ant2	6855	-1.98	3.58	1.60	≤30	PASS
	total	6855	1.29	6.58	7.87	≤30	PASS
	Ant1	6895	-1.49	3.55	2.06	≤30	PASS
	Ant2	6895	-1.87	3.58	1.71	≤30	PASS
	total	6895	1.33	6.58	7.91	≤30	PASS
	Ant1	6995	-1.62	3.55	1.93	≤30	PASS
	Ant2	6995	-2.08	3.58	1.50	≤30	PASS
	total	6995	1.16	6.58	7.74	≤30	PASS
	Ant1	7095	-1.72	3.55	1.83	≤30	PASS
	Ant2	7095	-2.14	3.58	1.44	≤30	PASS
	total	7095	1.09	6.58	7.67	≤30	PASS
	Ant1	7115	-1.68	3.55	1.87	≤30	PASS

	Ant2	7115	-2.02	3.58	1.56	≤30	PASS
	total	7115	1.16	6.58	7.74	≤30	PASS
11AX20MIMO	Ant1	5955	-1.63	3.55	1.92	≤30	PASS
	Ant2	5955	-2.03	3.58	1.55	≤30	PASS
	total	5955	1.19	6.58	7.77	≤30	PASS
	Ant1	6175	-1.67	3.55	1.88	≤30	PASS
	Ant2	6175	-2.08	3.58	1.50	≤30	PASS
	total	6175	1.14	6.58	7.72	≤30	PASS
	Ant1	6415	-1.43	3.55	2.12	≤30	PASS
	Ant2	6415	-1.93	3.58	1.65	≤30	PASS
	total	6415	1.34	6.58	7.92	≤30	PASS
	Ant1	6435	-1.60	3.55	1.95	≤30	PASS
	Ant2	6435	-2.23	3.58	1.35	≤30	PASS
	total	6435	1.11	6.58	7.69	≤30	PASS
	Ant1	6475	-1.43	3.55	2.12	≤30	PASS
	Ant2	6475	-1.98	3.58	1.60	≤30	PASS
	total	6475	1.31	6.58	7.89	≤30	PASS
	Ant1	6515	-1.55	3.55	2.00	≤30	PASS
	Ant2	6515	-2.11	3.58	1.47	≤30	PASS
	total	6515	1.19	6.58	7.77	≤30	PASS
	Ant1	6535	-1.51	3.55	2.04	≤30	PASS
	Ant2	6535	-1.94	3.58	1.64	≤30	PASS
	total	6535	1.29	6.58	7.87	≤30	PASS
	Ant1	6695	-1.59	3.55	1.96	≤30	PASS
	Ant2	6695	-1.98	3.58	1.60	≤30	PASS
	total	6695	1.23	6.58	7.81	≤30	PASS
	Ant1	6855	-1.58	3.55	1.97	≤30	PASS
	Ant2	6855	-2.06	3.58	1.52	≤30	PASS
	total	6855	1.20	6.58	7.78	≤30	PASS
	Ant1	6895	-1.39	3.55	2.16	≤30	PASS
	Ant2	6895	-1.98	3.58	1.60	≤30	PASS
	total	6895	1.34	6.58	7.92	≤30	PASS
	Ant1	6995	-1.52	3.55	2.03	≤30	PASS
	Ant2	6995	-1.93	3.58	1.65	≤30	PASS
	total	6995	1.29	6.58	7.87	≤30	PASS
	Ant1	7095	-1.55	3.55	2.00	≤30	PASS
	Ant2	7095	-1.87	3.58	1.71	≤30	PASS
	total	7095	1.30	6.58	7.88	≤30	PASS
	Ant1	7115	-1.54	3.55	2.01	≤30	PASS
	Ant2	7115	-2.09	3.58	1.49	≤30	PASS
	total	7115	1.20	6.58	7.78	≤30	PASS
11AX40MIMO	Ant1	5965	-1.66	3.55	1.89	≤30	PASS
	Ant2	5965	-2.01	3.58	1.57	≤30	PASS

	total	5965	1.18	6.58	7.76	≤30	PASS
	Ant1	6165	-1.44	3.55	2.11	≤30	PASS
	Ant2	6165	-2.00	3.58	1.58	≤30	PASS
	total	6165	1.30	6.58	7.88	≤30	PASS
	Ant1	6405	-1.45	3.55	2.10	≤30	PASS
	Ant2	6405	-2.00	3.58	1.58	≤30	PASS
	total	6405	1.29	6.58	7.87	≤30	PASS
	Ant1	6445	-1.72	3.55	1.83	≤30	PASS
	Ant2	6445	-2.17	3.58	1.41	≤30	PASS
	total	6445	1.07	6.58	7.65	≤30	PASS
	Ant1	6485	-1.55	3.55	2.00	≤30	PASS
	Ant2	6485	-2.15	3.58	1.43	≤30	PASS
	total	6485	1.18	6.58	7.76	≤30	PASS
	Ant1	6525	-1.61	3.55	1.94	≤30	PASS
	Ant2	6525	-2.04	3.58	1.54	≤30	PASS
	total	6525	1.19	6.58	7.77	≤30	PASS
	Ant1	6565	-1.53	3.55	2.02	≤30	PASS
	Ant2	6565	-1.81	3.58	1.77	≤30	PASS
	total	6565	1.34	6.58	7.92	≤30	PASS
	Ant1	6685	-1.58	3.55	1.97	≤30	PASS
	Ant2	6685	-1.98	3.58	1.60	≤30	PASS
	total	6685	1.24	6.58	7.82	≤30	PASS
	Ant1	6845	-1.57	3.55	1.98	≤30	PASS
	Ant2	6845	-2.19	3.58	1.39	≤30	PASS
	total	6845	1.14	6.58	7.72	≤30	PASS
	Ant1	6885	-1.48	3.55	2.07	≤30	PASS
	Ant2	6885	-2.14	3.58	1.44	≤30	PASS
	total	6885	1.22	6.58	7.80	≤30	PASS
	Ant1	6925	-1.76	3.55	1.79	≤30	PASS
	Ant2	6925	-2.15	3.58	1.43	≤30	PASS
	total	6925	1.06	6.58	7.64	≤30	PASS
	Ant1	6965	-1.73	3.55	1.82	≤30	PASS
	Ant2	6965	-2.22	3.58	1.36	≤30	PASS
	total	6965	1.04	6.58	7.62	≤30	PASS
	Ant1	7085	-1.46	3.55	2.09	≤30	PASS
	Ant2	7085	-1.88	3.58	1.70	≤30	PASS
	total	7085	1.34	6.58	7.92	≤30	PASS
11AX80MIMO	Ant1	5985	-1.53	3.55	2.02	≤30	PASS
	Ant2	5985	-2.01	3.58	1.57	≤30	PASS
	total	5985	1.25	6.58	7.83	≤30	PASS
	Ant1	6145	-1.57	3.55	1.98	≤30	PASS
	Ant2	6145	-1.95	3.58	1.63	≤30	PASS
	total	6145	1.25	6.58	7.83	≤30	PASS

	Ant1	6385	-1.52	3.55	2.03	≤30	PASS
	Ant2	6385	-1.96	3.58	1.62	≤30	PASS
	total	6385	1.28	6.58	7.86	≤30	PASS
	Ant1	6465	-1.54	3.55	2.01	≤30	PASS
	Ant2	6465	-1.94	3.58	1.64	≤30	PASS
	total	6465	1.28	6.58	7.86	≤30	PASS
	Ant1	6545	-1.57	3.55	1.98	≤30	PASS
	Ant2	6545	-2.03	3.58	1.55	≤30	PASS
	total	6545	1.22	6.58	7.80	≤30	PASS
	Ant1	6625	-1.54	3.55	2.01	≤30	PASS
	Ant2	6625	-1.98	3.58	1.60	≤30	PASS
	total	6625	1.26	6.58	7.84	≤30	PASS
	Ant1	6705	-1.63	3.55	1.92	≤30	PASS
	Ant2	6705	-2.12	3.58	1.46	≤30	PASS
	total	6705	1.14	6.58	7.72	≤30	PASS
	Ant1	6785	-1.40	3.55	2.15	≤30	PASS
	Ant2	6785	-1.99	3.58	1.59	≤30	PASS
	total	6785	1.32	6.58	7.90	≤30	PASS
	Ant1	6865	-1.51	3.55	2.04	≤30	PASS
	Ant2	6865	-2.14	3.58	1.44	≤30	PASS
	total	6865	1.20	6.58	7.78	≤30	PASS
	Ant1	6945	-1.79	3.55	1.76	≤30	PASS
	Ant2	6945	-2.10	3.58	1.48	≤30	PASS
	total	6945	1.07	6.58	7.65	≤30	PASS
	Ant1	7025	-1.66	3.55	1.89	≤30	PASS
	Ant2	7025	-2.04	3.58	1.54	≤30	PASS
	total	7025	1.16	6.58	7.74	≤30	PASS
11AX160MIMO	Ant1	6025	-1.52	3.55	2.03	≤30	PASS
	Ant2	6025	-1.92	3.58	1.66	≤30	PASS
	total	6025	1.29	6.58	7.87	≤30	PASS
	Ant1	6185	-1.70	3.55	1.85	≤30	PASS
	Ant2	6185	-2.03	3.58	1.55	≤30	PASS
	total	6185	1.15	6.58	7.73	≤30	PASS
	Ant1	6345	-1.52	3.55	2.03	≤30	PASS
	Ant2	6345	-1.85	3.58	1.73	≤30	PASS
	total	6345	1.33	6.58	7.91	≤30	PASS
	Ant1	6505	-1.71	3.55	1.84	≤30	PASS
	Ant2	6505	-2.16	3.58	1.42	≤30	PASS
	total	6505	1.08	6.58	7.66	≤30	PASS
	Ant1	6665	-1.43	3.55	2.12	≤30	PASS
	Ant2	6665	-2.01	3.58	1.57	≤30	PASS
	total	6665	1.30	6.58	7.88	≤30	PASS
	Ant1	6825	-1.49	3.55	2.06	≤30	PASS

	Ant2	6825	-2.01	3.58	1.57	≤30	PASS
	total	6825	1.27	6.58	7.85	≤30	PASS
	Ant1	6985	-1.56	3.55	1.99	≤30	PASS
	Ant2	6985	-1.95	3.58	1.63	≤30	PASS
	total	6985	1.26	6.58	7.84	≤30	PASS

Note: The duty cycle factor is compensated in the average conducted output power.

Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_N$ dBi
 If transmit signals are completely uncorrelated, then Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})/N_{ANT}]$ dBi
 Directional gain = $10 \log[(10^{3.55/20} + 10^{3.58/20})^2/N_{ANT}]$ dBi=6.58

3.3 Power Spectral Density Measurement

3.3.1 Limit

The following limits shall apply to standard client devices:

- a. the maximum e.i.r.p. spectral density shall not exceed 5dBm/MHz.

3.3.2 Test Procedure

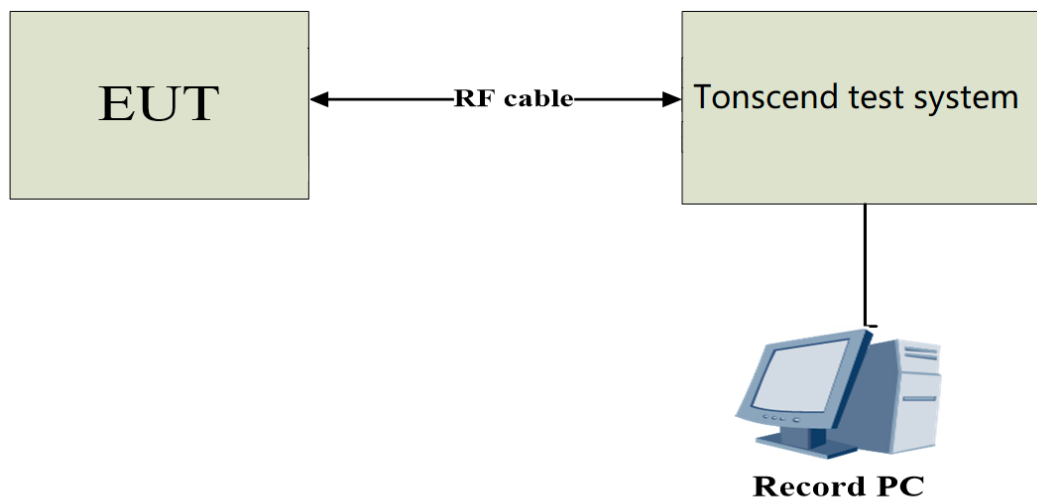
Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

The EUT was directly connected to the tonscend test system

3.3.3 Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. Add $10 \cdot \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \cdot \log(1/0.25) = 6$ dB if the duty cycle is 25 percent

3.3.4 Test Setup



3.3.5 Result

Test result: PASS

Note: For test data, please refer to the report RFBARR-WTW-P21030485A-6.

3.4 In-Band Emission Measurement

3.4.1 Test Limit

Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)

Suppressed by 28 dB at one channel bandwidth from the channel center.

Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.

3.4.2 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 directly connected to the tonscond test system

3.4.3 Test Setting

Emissions Mask Reference Level Measurement

1. Set the span to encompass the entire 26 dB EBW of the signal.
2. Set RBW = same RBW used for 26 dB EBW measurement.
3. Set VBW $\geq 3 \times$ RBW.
4. Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Use the peak search function on the instrument to find the peak of the spectrum.

In-Band Emission

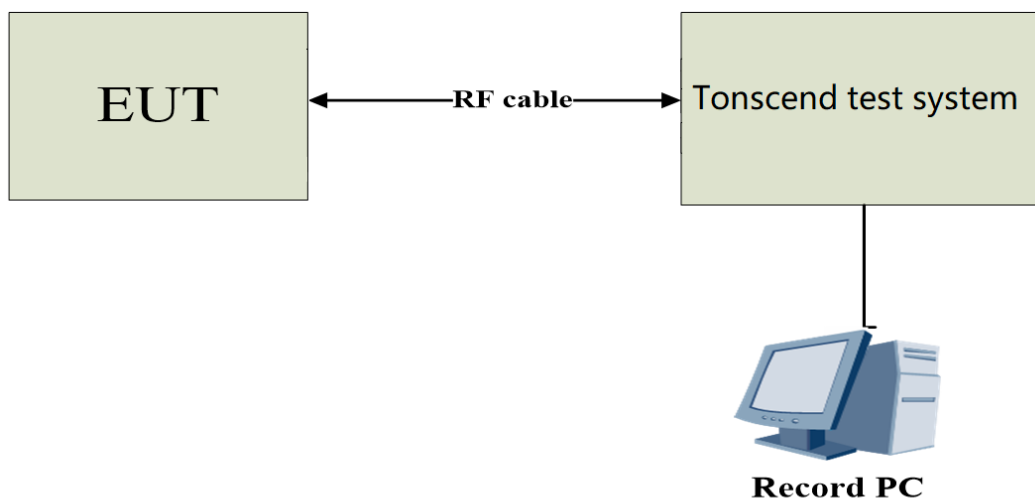
1. Using the measuring equipment limit line function, develop the emissions mask based on rule.
2. Adjust the span to encompass the entire mask as necessary.

3. Clear trace.

4. Trace average at least 100 traces in power averaging (rms) mode.

3.4.4 Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask

3.4.5 Test Setup



3.4.6 The Result

Test result: PASS

Note: For test data, please refer to the report RFBARR-WTW-P21030485A-6.

3.5 Frequency Stability Measurement

3.5.1 Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.5.2 Test Procedure

Frequency Stability Under Temperature Variations:

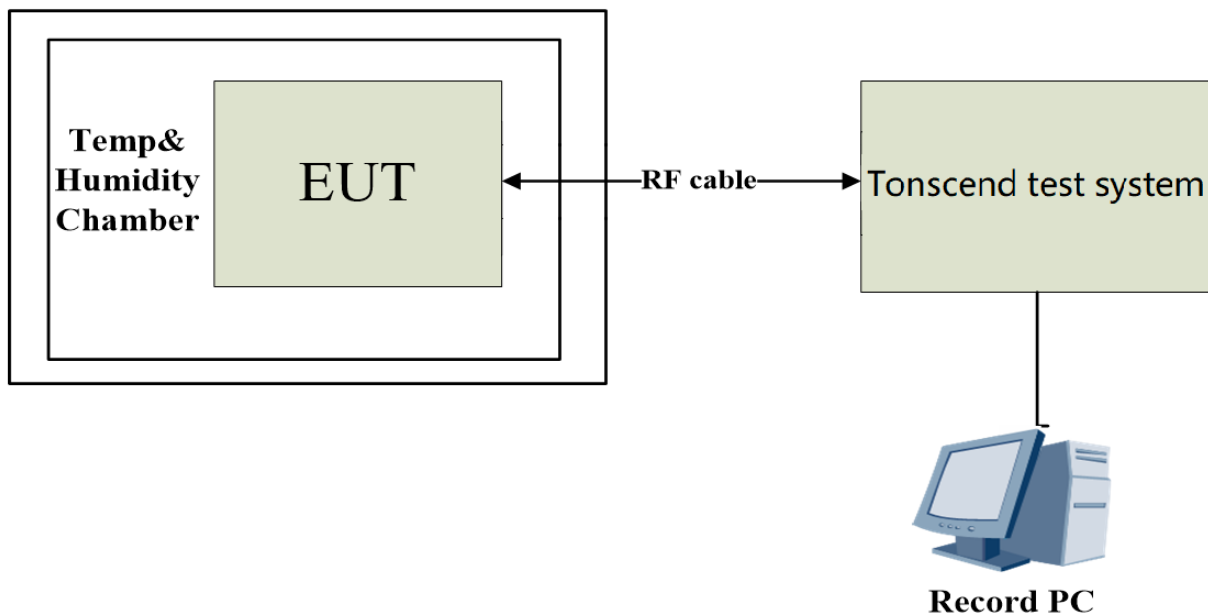
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

3.5.3 Test Setup





3.5.4 The Result

Test result: PASS

Note: For test data, please refer to the report RFBARR-WTW-P21030485A-6.

3.6 Contention Based Protocol Measurement

3.6.1 Test Limit

Unlicensed indoor low power device must detect co-channel radio frequency power that is at least -62dBm (The threshold is referenced to a 0dBi antenna gain.) or low.

Indoor low power device must detect an AWGN signal with 90% (or better) level of certainty.

3.6.2 Test Procedure

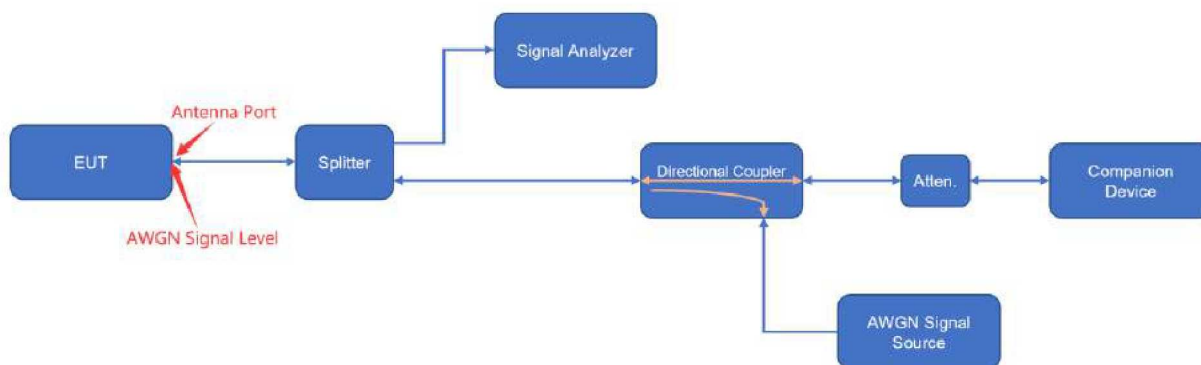
Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

Test was performed in accordance with method of KDB 987594 D02v01- Section I

3.6.3 Test Setting

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT.
Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
5. Using an AWGN signal source, generate a 10 MHz-wide AWGN signal. Use Table 1 of KDB 987594 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to an extremely low level. Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in below figure.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
9. Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
10. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

3.6.4 Test Setup



3.6.5 Test Result

Test result: PASS

Note: For test data, please refer to the report RFBARR-WTW-P21030485A-6.

3.7 Radiated Spurious Emission Measurement

3.7.1 Test Limit

For 15.407(b)(6) requirement

For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

Refer to 987594 D02 U-NII 6GHz EMC Measurement v01 clause G

Use guidance in KDB 789033 for measurements below 1000 MHz and above 1000 MHz. Unwanted emissions outside of restricted bands are measured with a RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

3.7.2 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	

3.7.3 Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000MHz	1MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

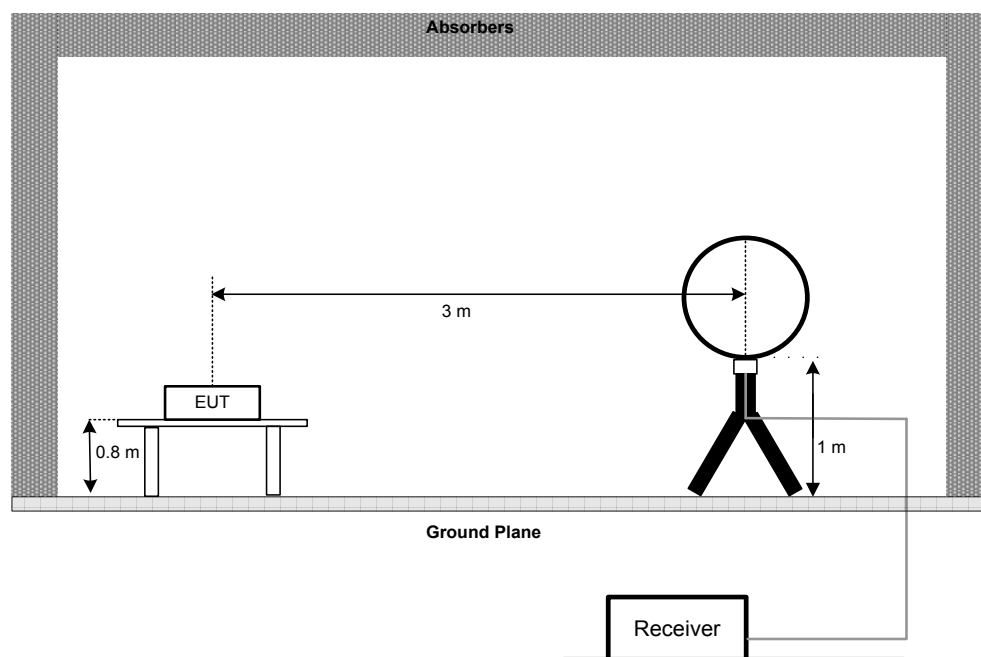
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

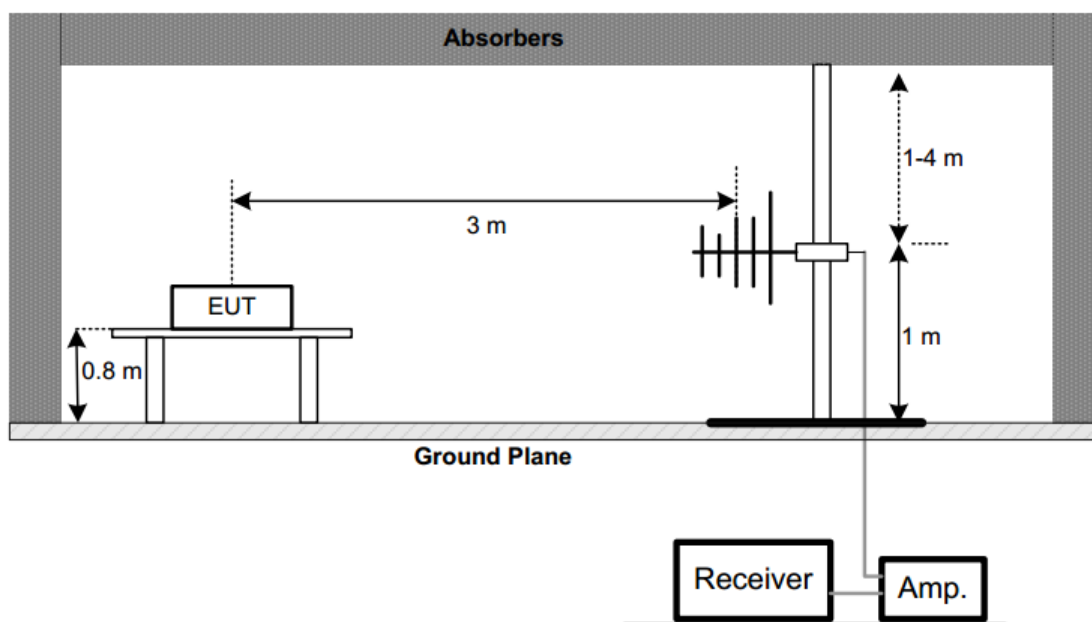
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

3.7.4 Test Setup

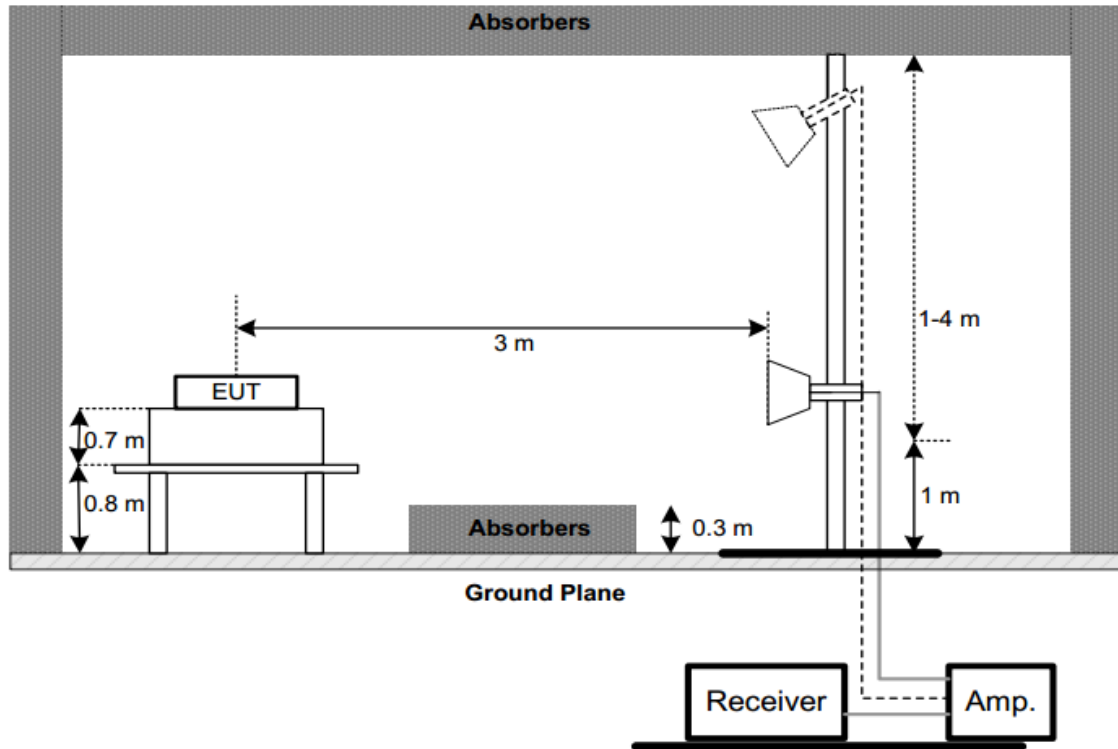
(A) Radiated Emission Test Set-Up Frequency Below 30 MHz



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



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



3.7.5 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:

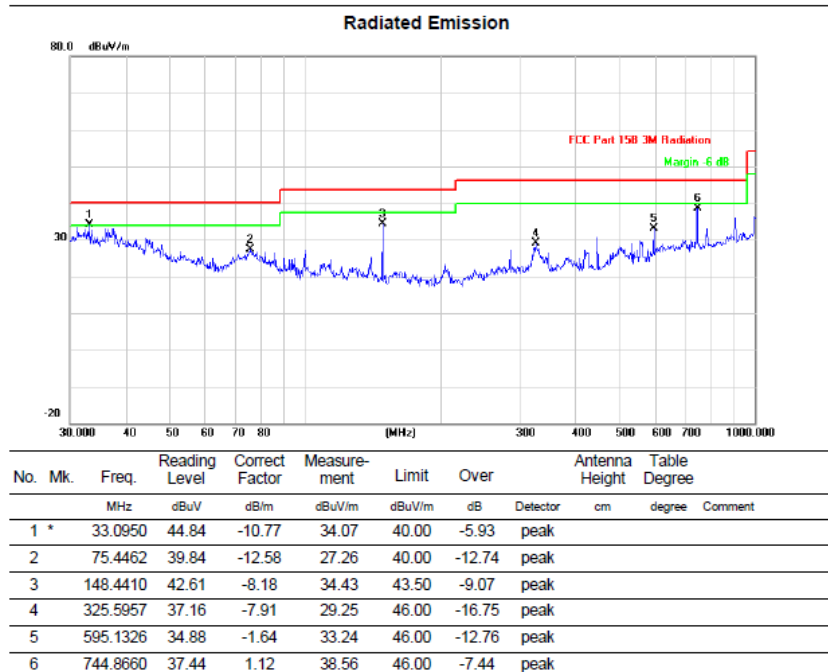
1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

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

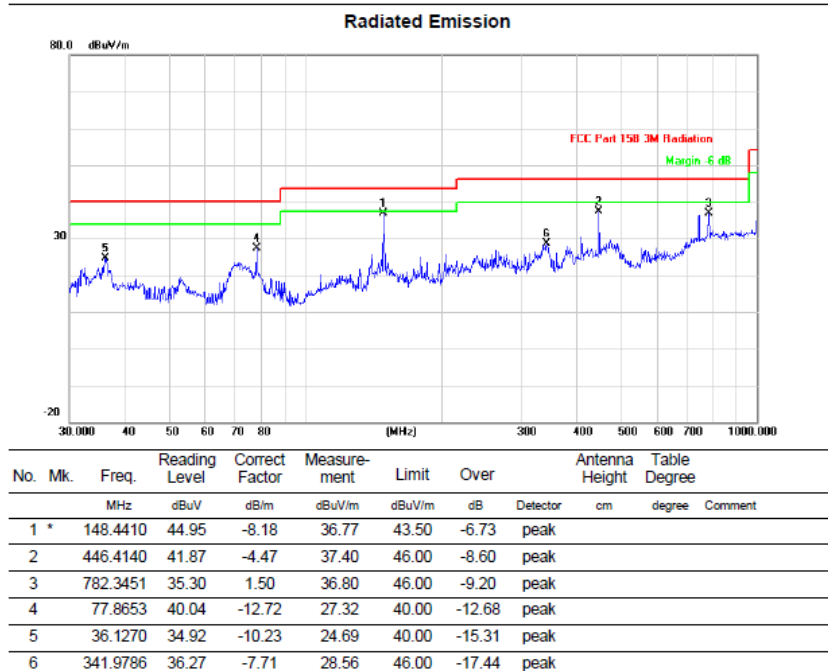
Below 1G (30MHz~1GHz)

Worst Case Operating Mode: A-CDD Channel 105

VERTICAL



HORIZONTAL



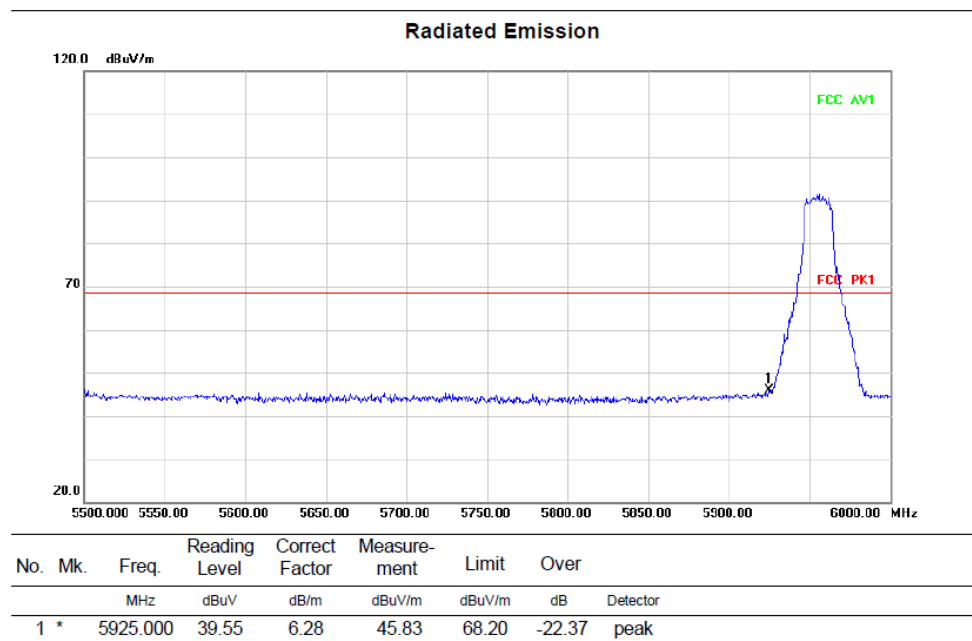
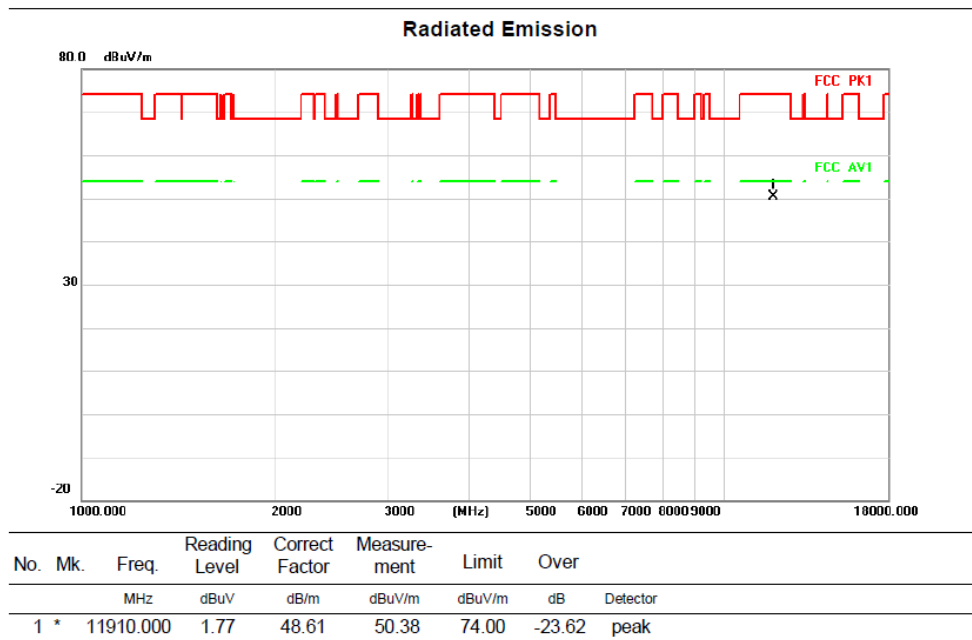
3) Radiated emission: Above 1G

Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit
3. For 802.11AX mode, only worst case was recorded.

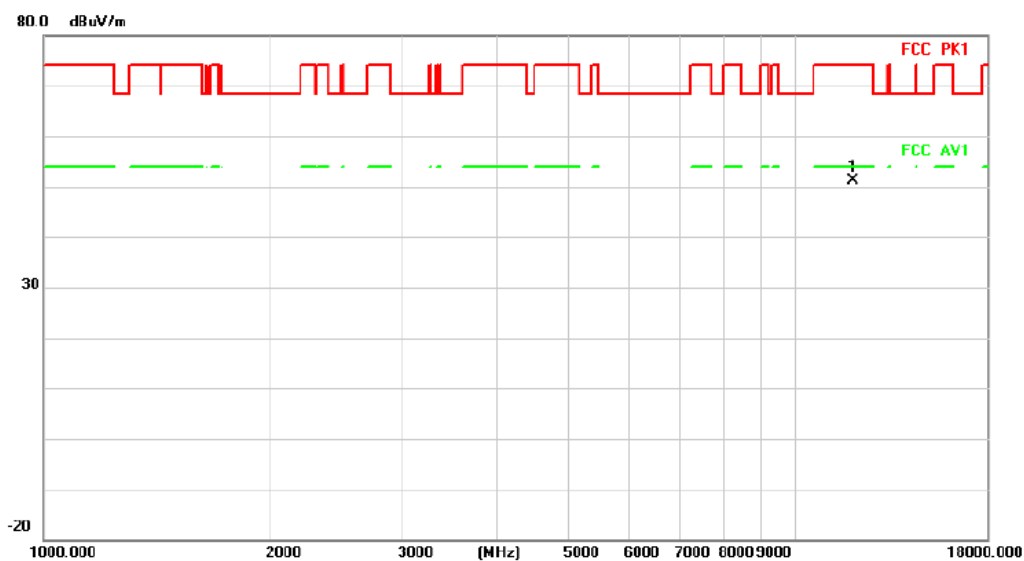
Above 1G (1GHz~18GHz)	Test mode:11A-CDD	Test Channel:1
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VERTICAL



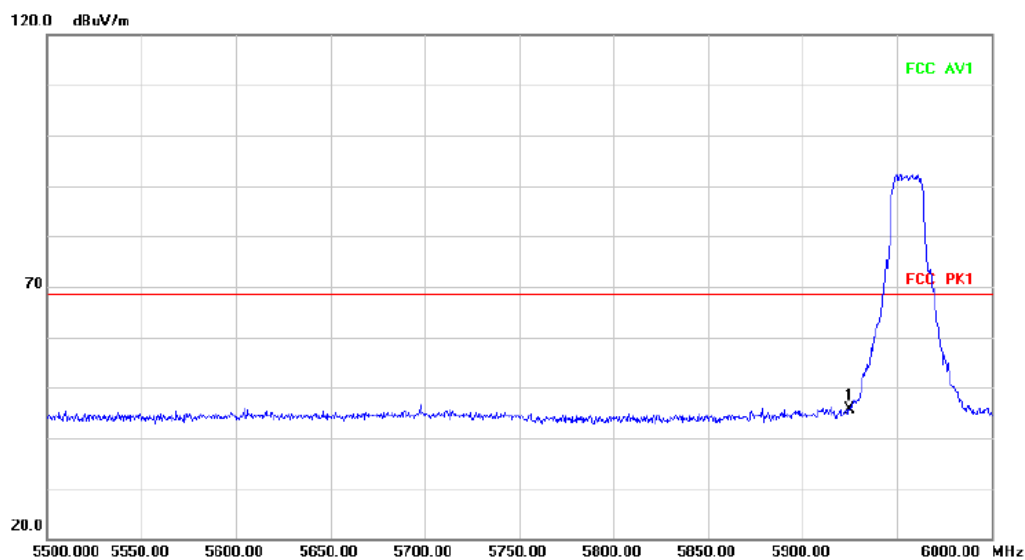
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11910.000	2.53	48.61	51.14	74.00	-22.86	peak

Radiated Emission



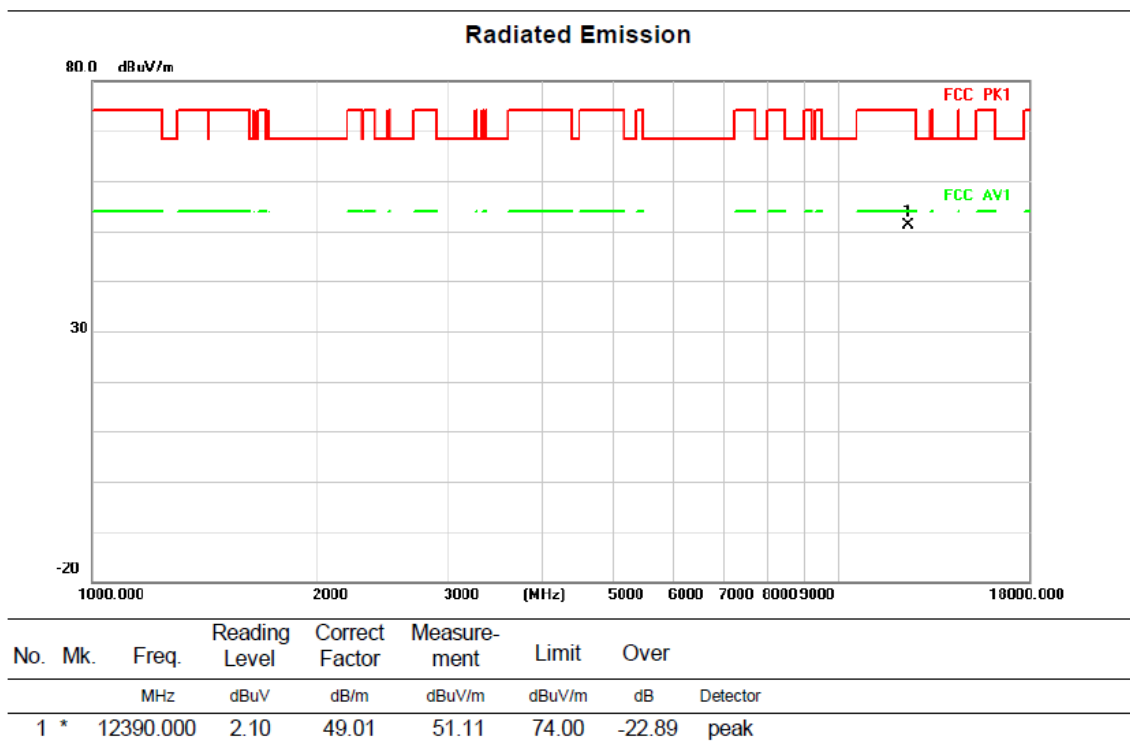
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	5925.000	39.27	6.28	45.55	68.20	-22.65	peak

Above 1G (1GHz~18GHz)

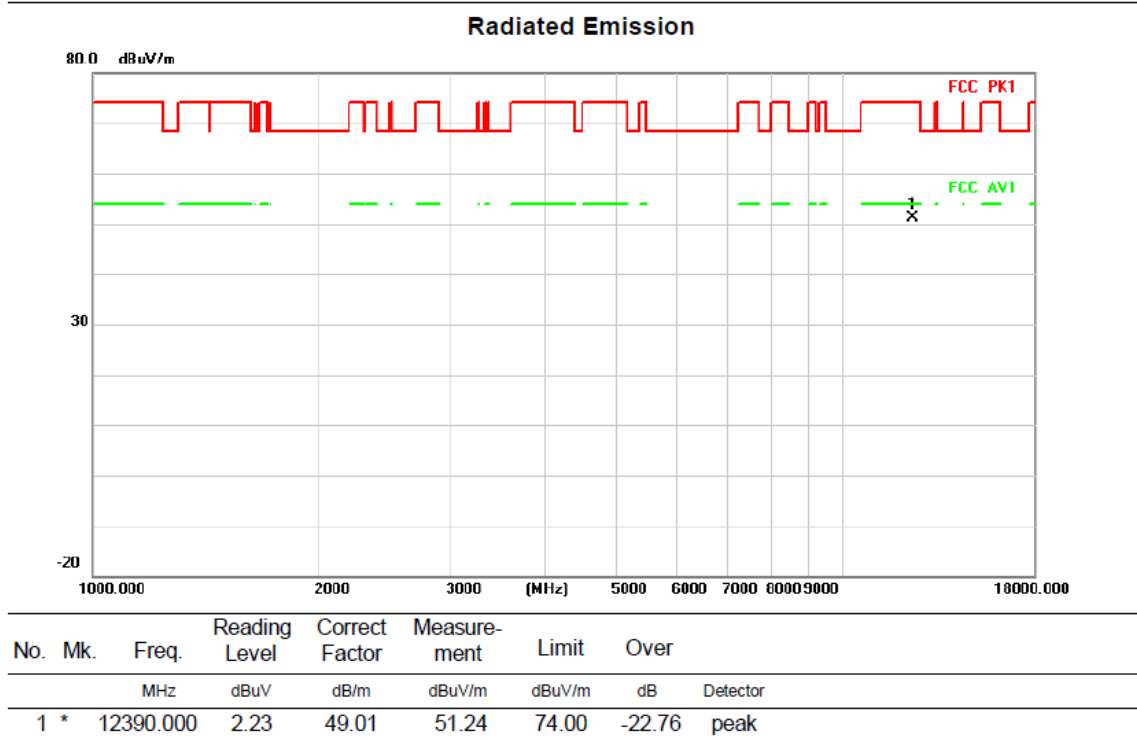
Test mode: 11A-CDD

Test Channel:49

VERTICAL



HORIZONTAL

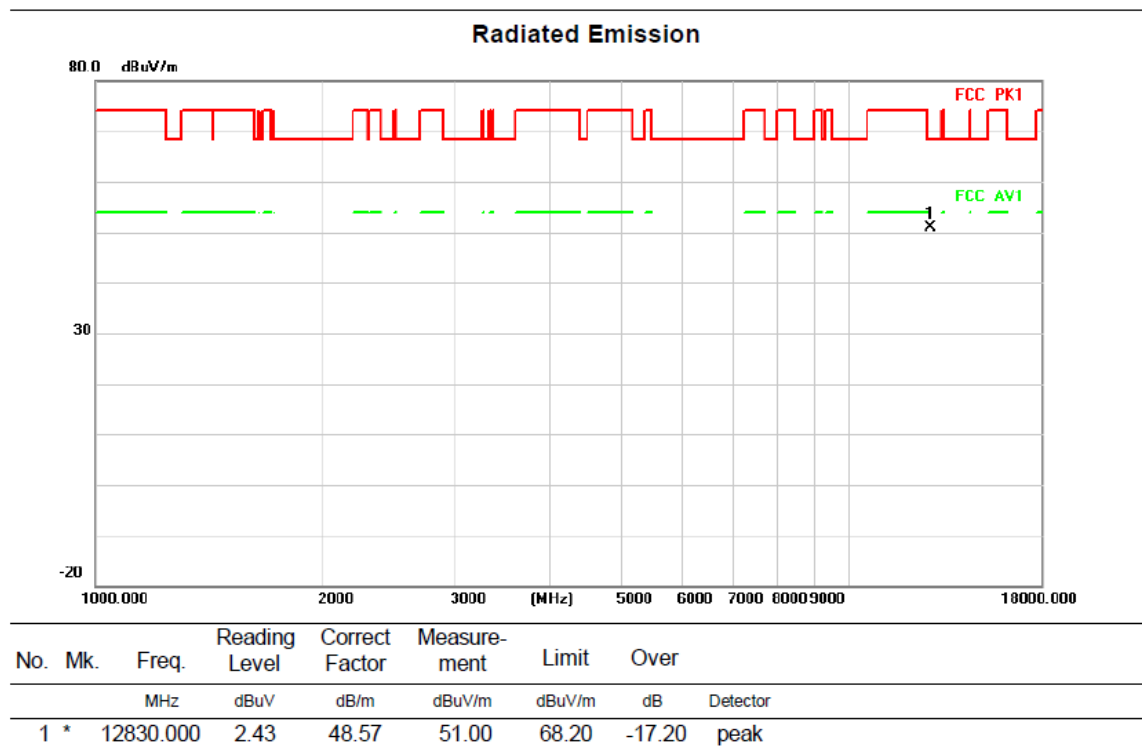


Above 1G (1GHz~18GHz)

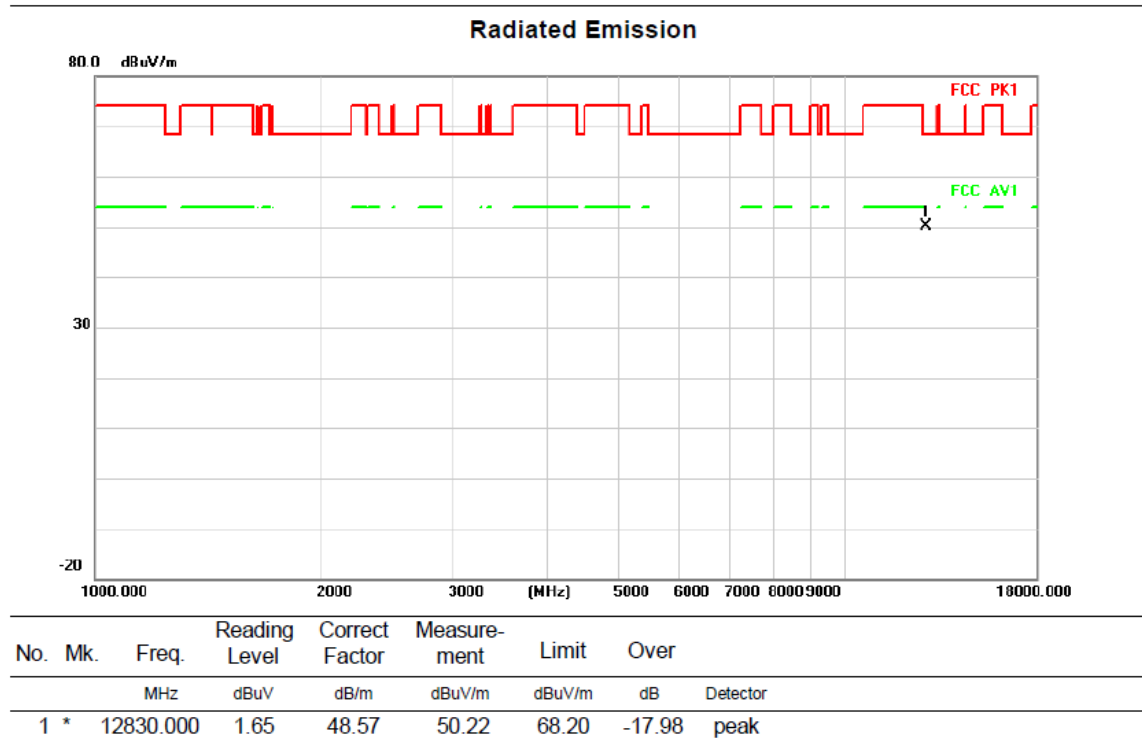
Test mode: 11A-CDD

Test Channel:93

VERTICAL



HORIZONTAL

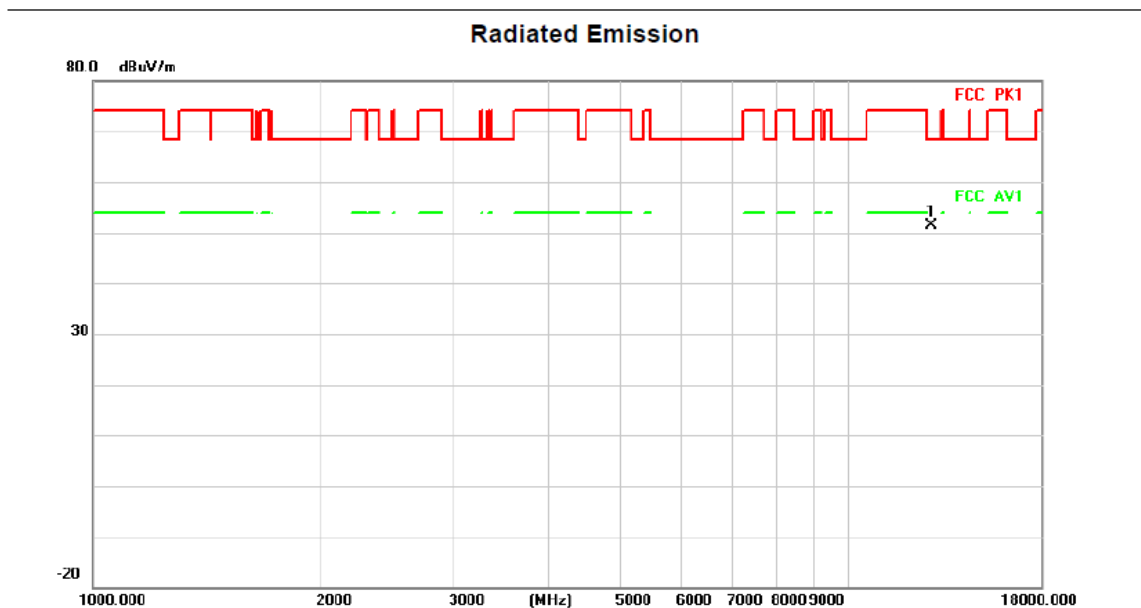


Above 1G (1GHz~18GHz)

Test mode: 11A-CDD

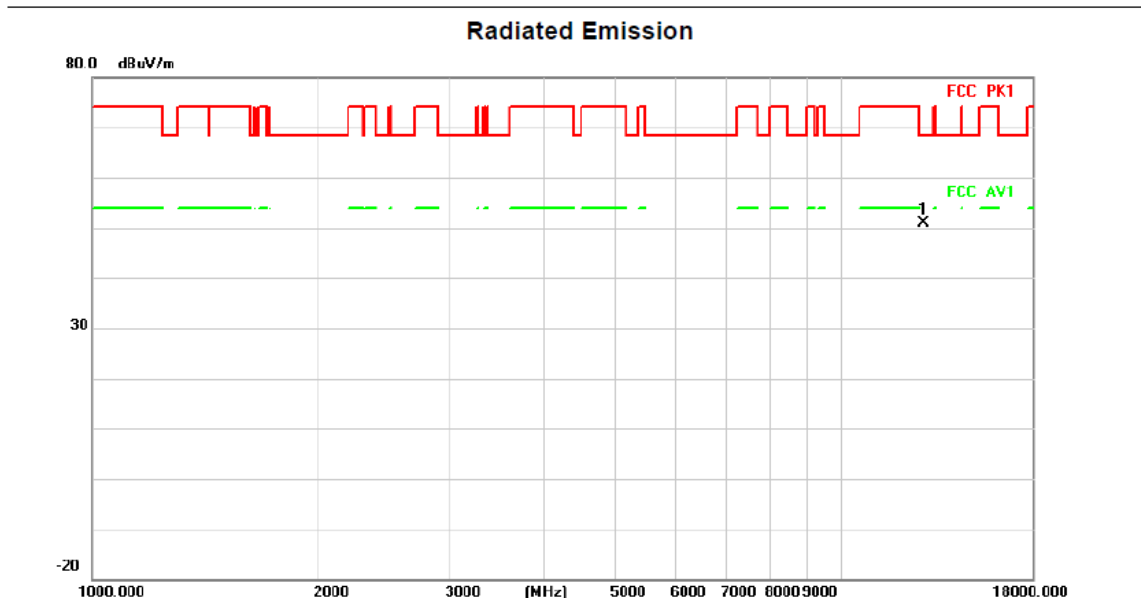
Test Channel:97

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	12870.000	2.86	48.49	51.35	68.20	-16.85 peak

HORIZONTAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	12870.000	2.27	48.49	50.76	68.20	-17.44 peak

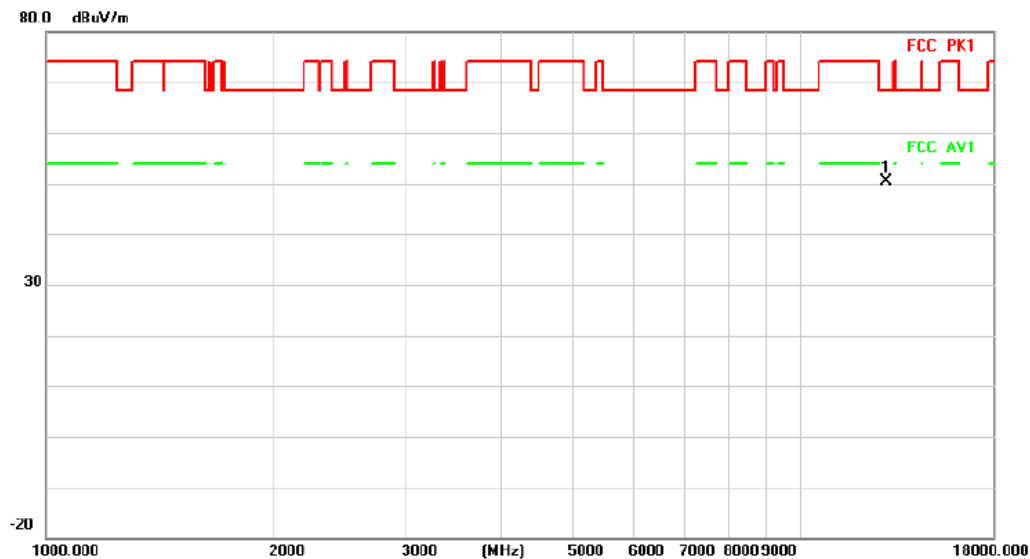
Above 1G (1GHz~18GHz)

Test mode: 11A-CDD

Test Channel:105

VERTICAL

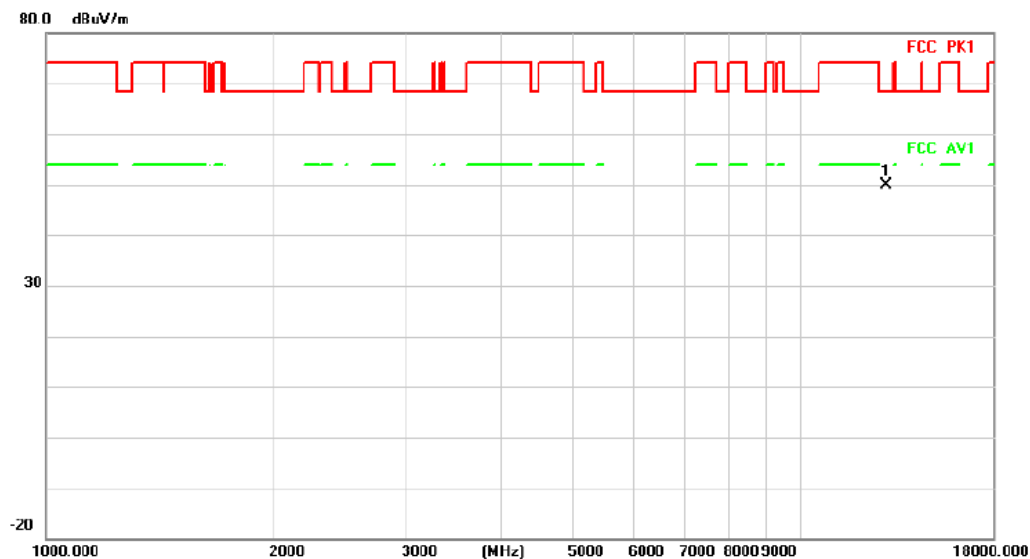
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	12950.000	1.65	48.81	50.46	68.20	-17.74	peak

HORIZONTAL

Radiated Emission



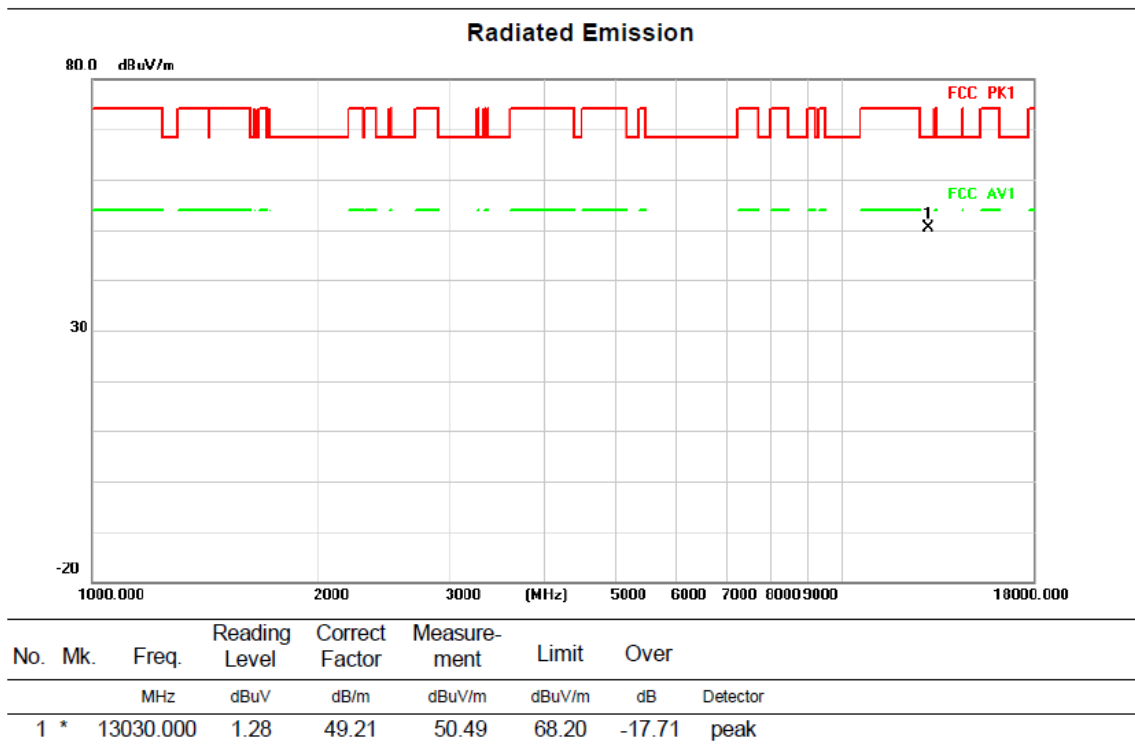
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	12950.000	1.08	48.81	49.89	68.20	-18.31	peak

Above 1G (1GHz~18GHz)

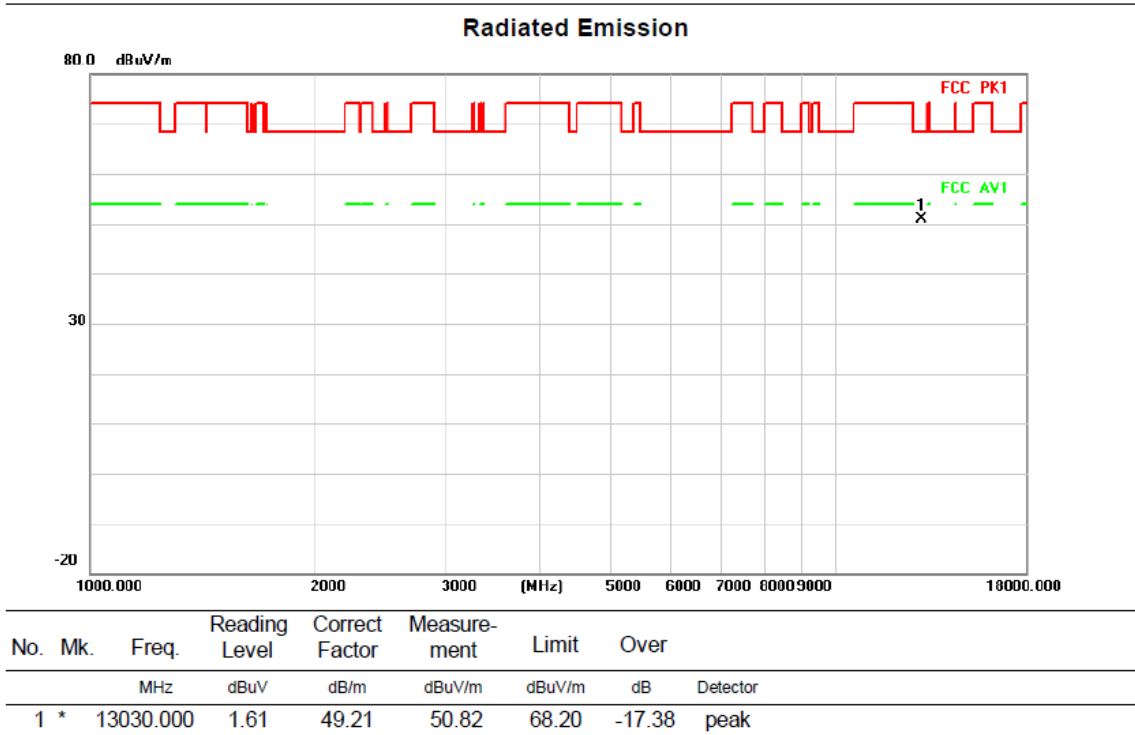
Test mode: 11A-CDD

Test Channel:113

VERTICAL



HORIZONTAL

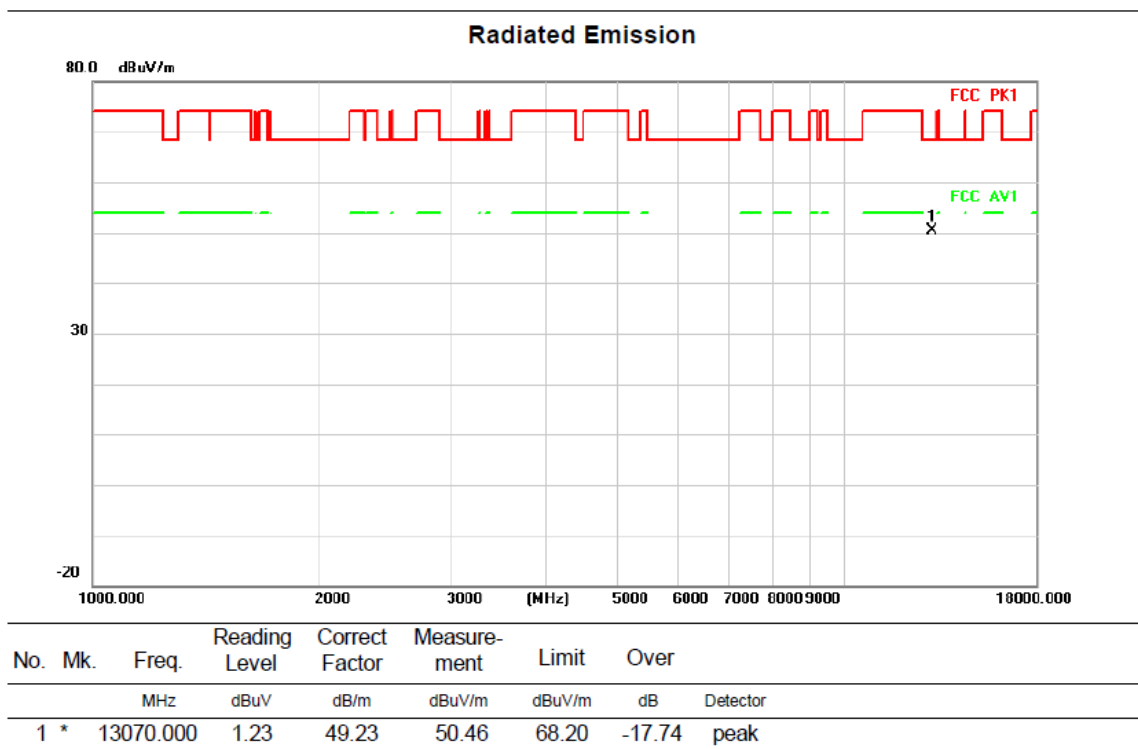


Above 1G (1GHz~18GHz)

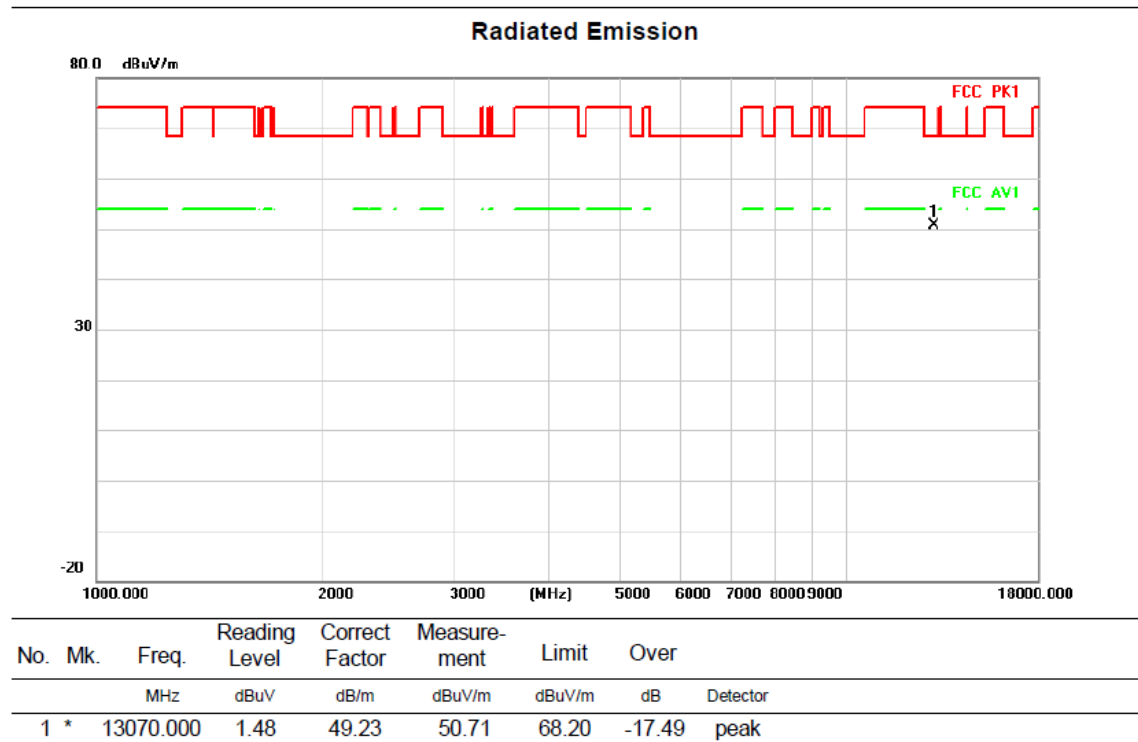
Test mode: 11A-CDD

Test Channel:117

VERTICAL



HORIZONTAL

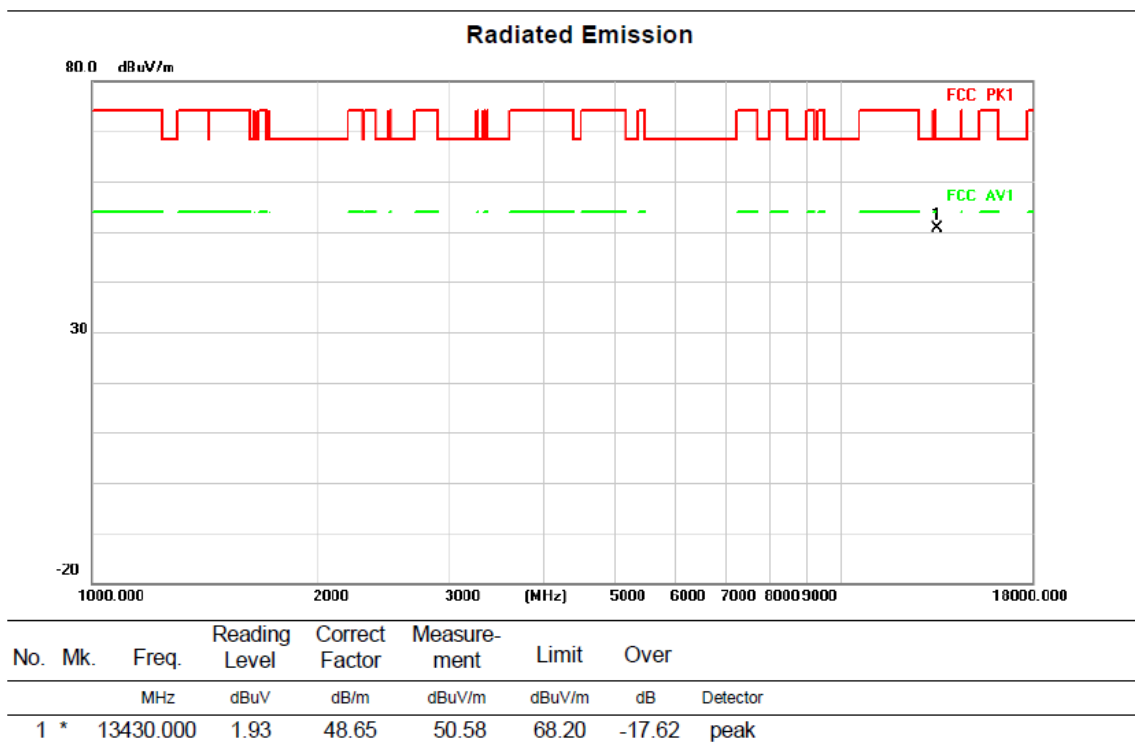


Above 1G (1GHz~18GHz)

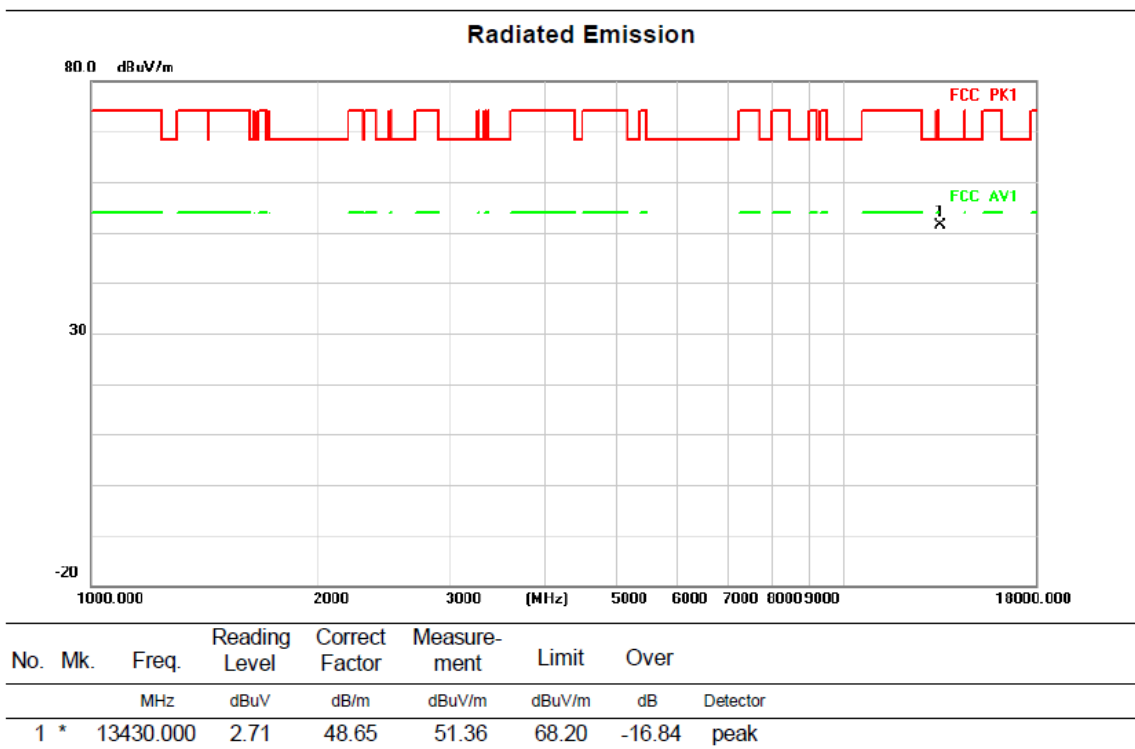
Test mode: 11A-CDD

Test Channel:153

VERTICAL



HORIZONTAL

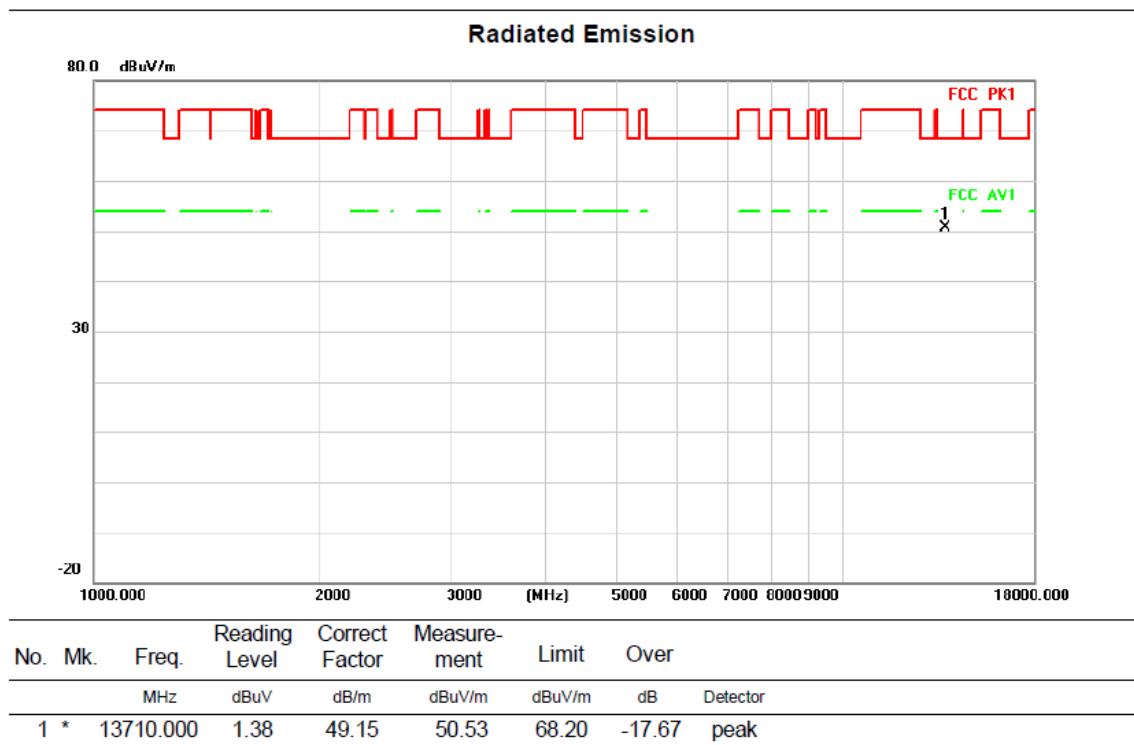


Above 1G (1GHz~18GHz)

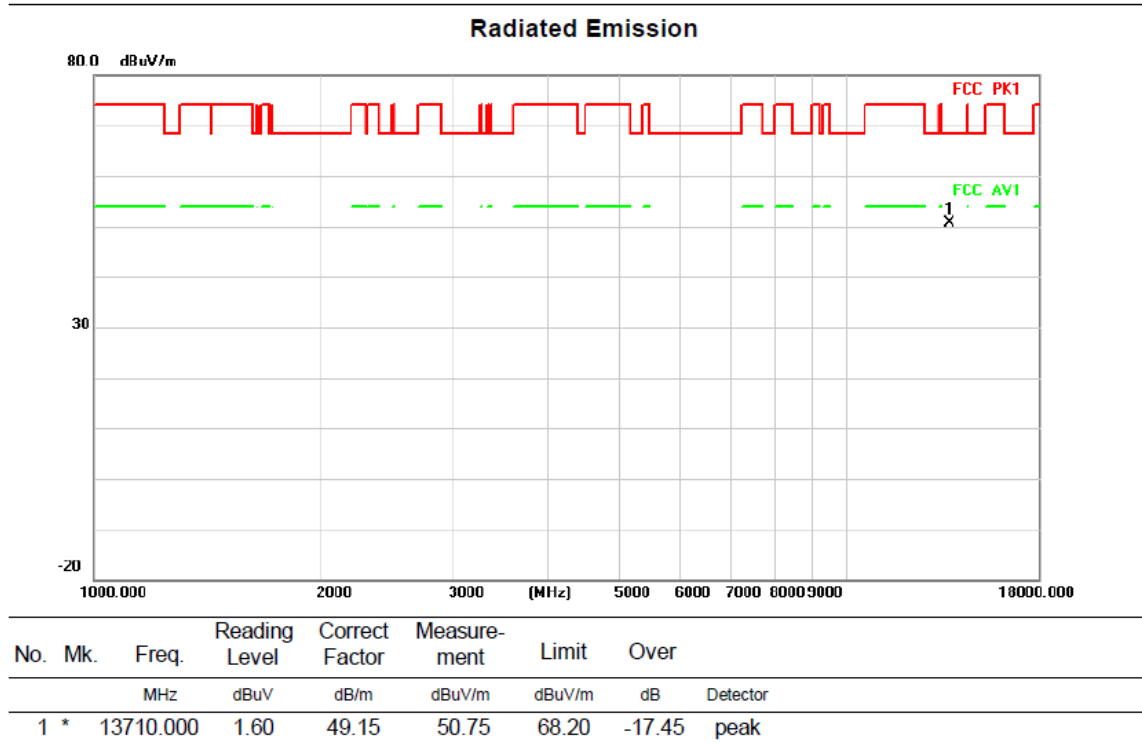
Test mode: 11A-CDD

Test Channel:181

VERTICAL



HORIZONTAL

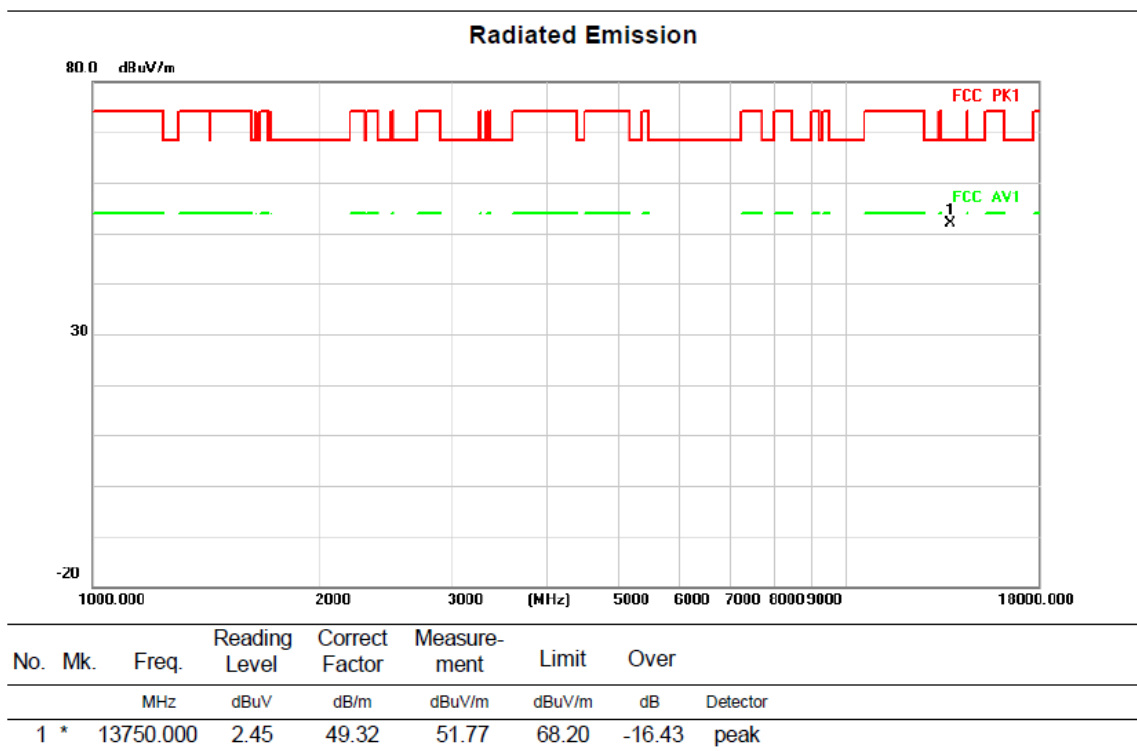


Above 1G (1GHz~18GHz)

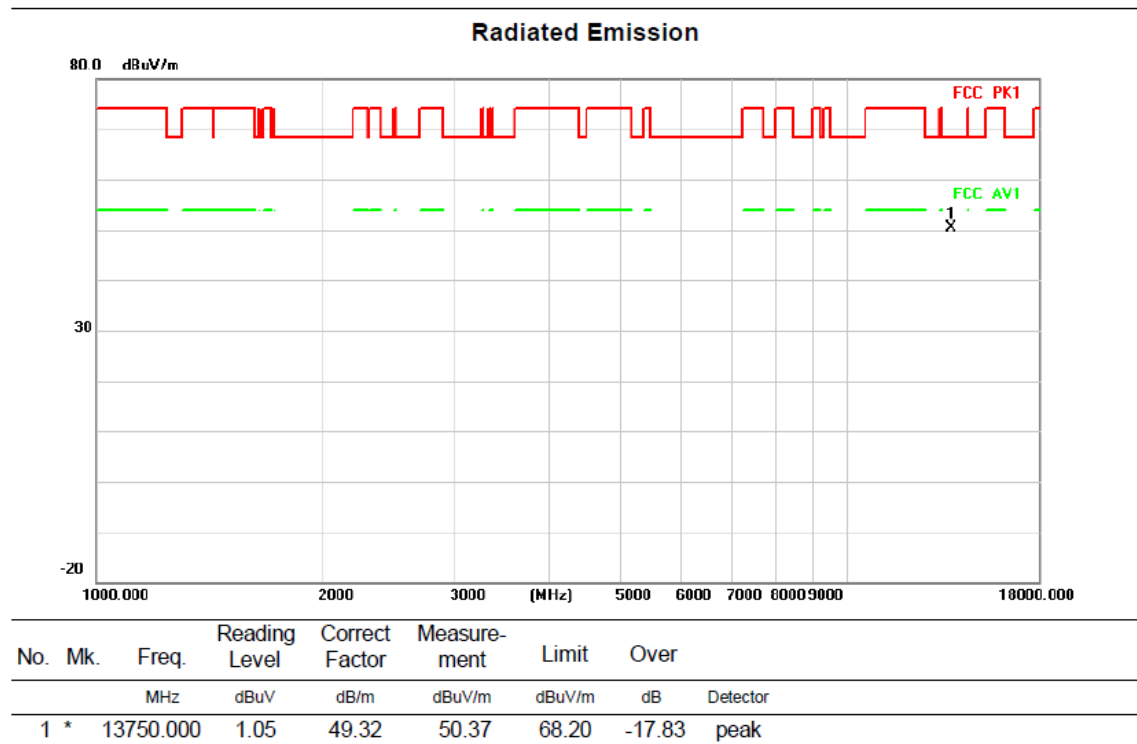
Test mode: 11A-CDD

Test Channel:185

VERTICAL



HORIZONTAL

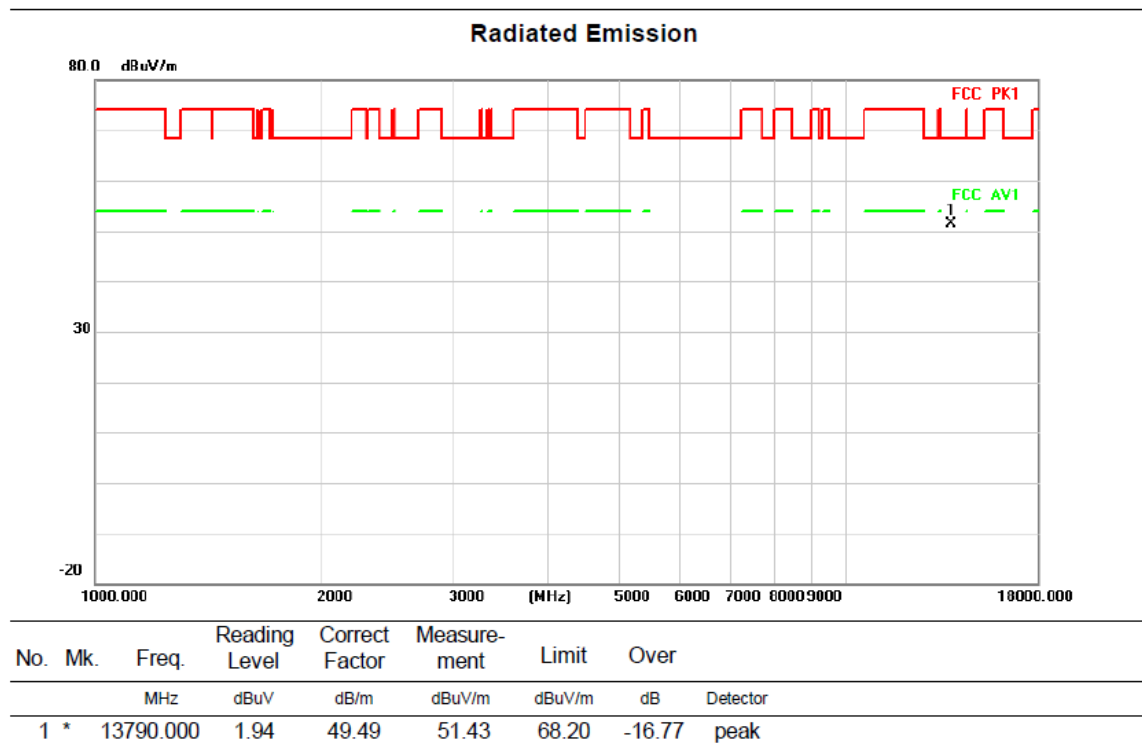


Above 1G (1GHz~18GHz)

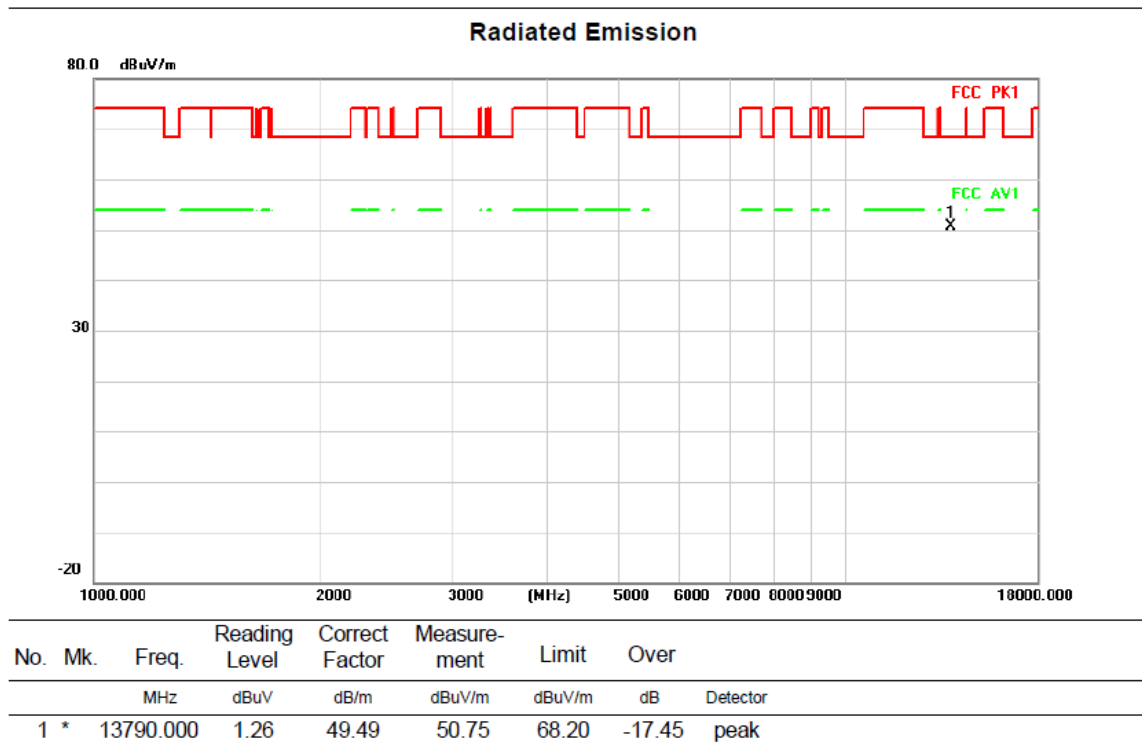
Test mode: 11A-CDD

Test Channel:189

VERTICAL



HORIZONTAL

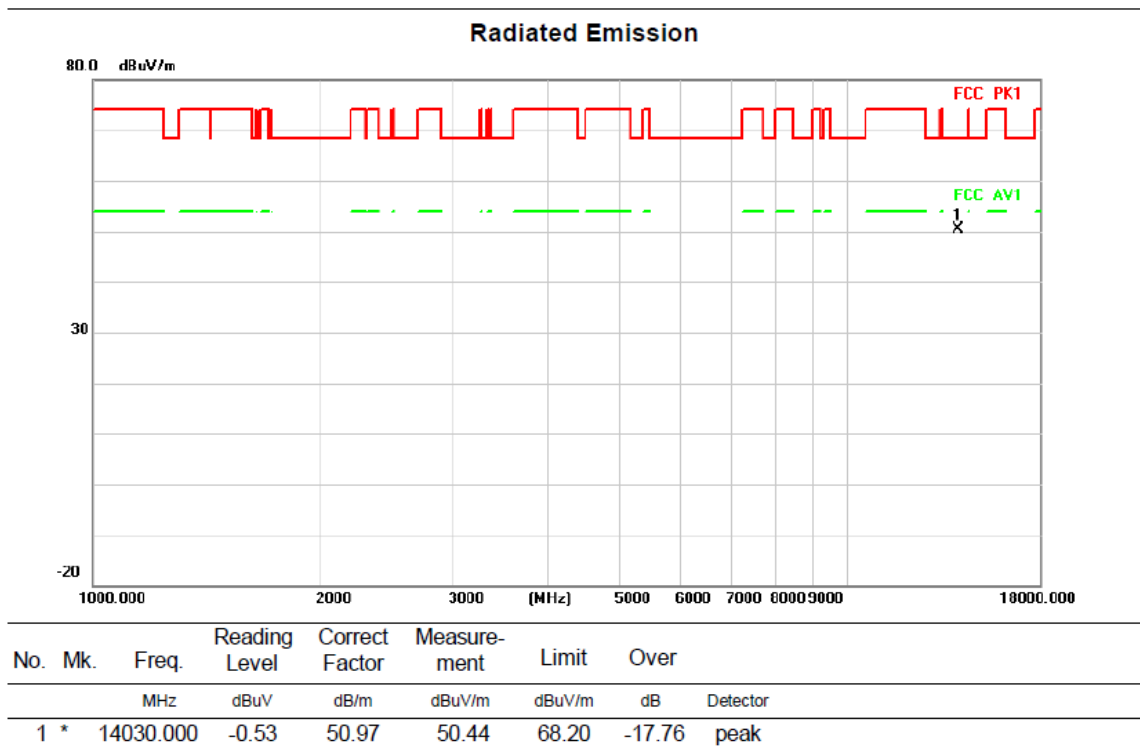


Above 1G (1GHz~18GHz)

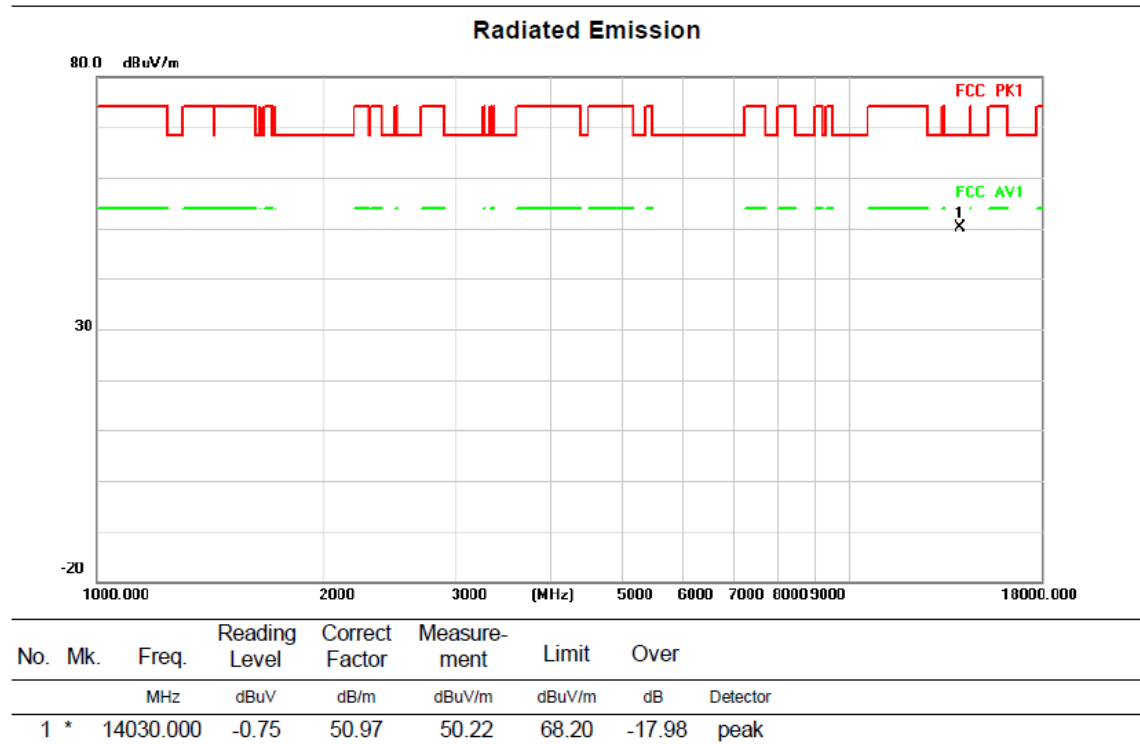
Test mode: 11A-CDD

Test Channel:213

VERTICAL



HORIZONTAL



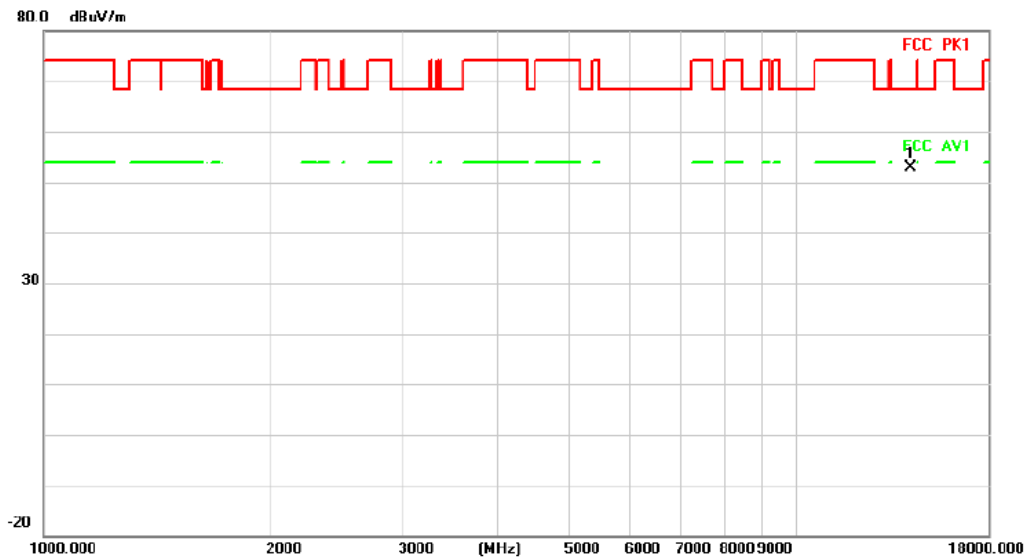
Above 1G (1GHz~18GHz)

Test mode: 11A-CDD

Test Channel:229

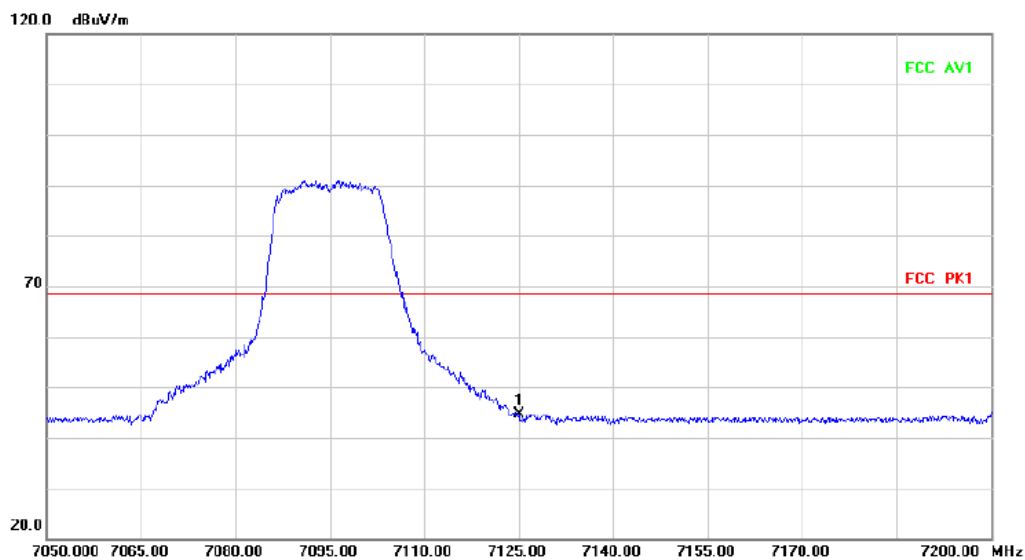
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14190.000	1.17	51.62	52.79	68.20	-15.41	peak

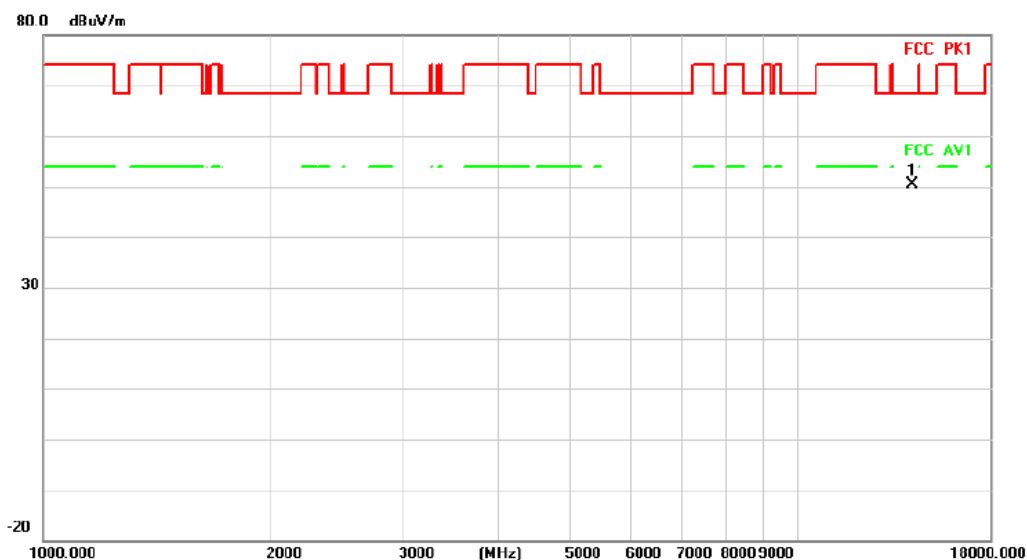
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	7125.000	33.55	11.19	44.74	68.20	-23.46	peak

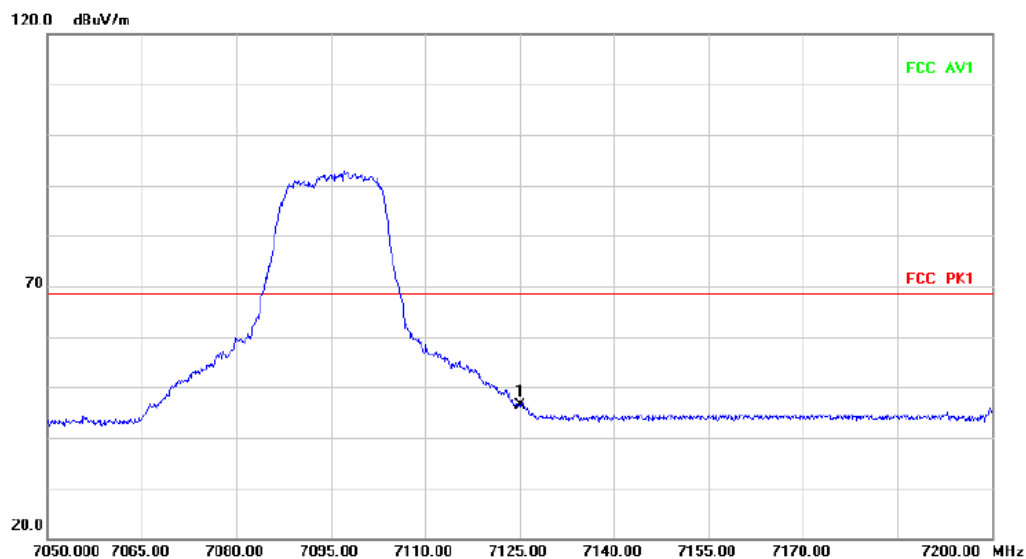
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	14190.000	-1.34	51.62	50.28	68.20	-17.92
							peak

Radiated Emission



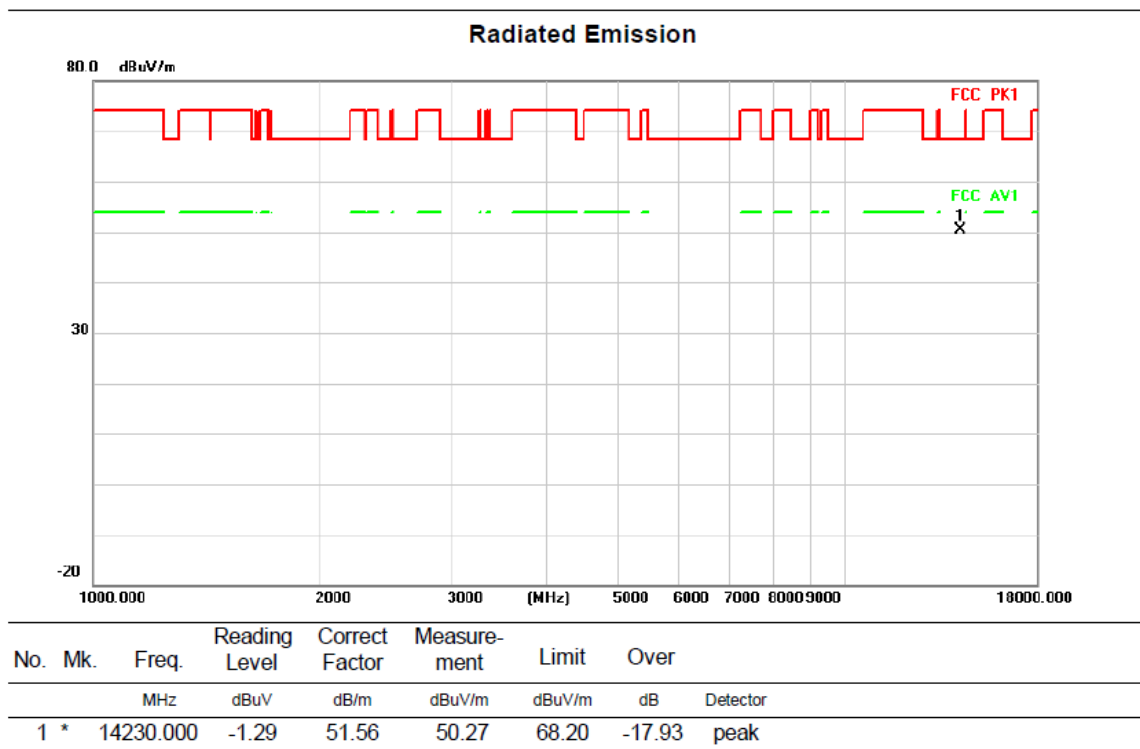
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	7125.000	35.14	11.19	46.33	68.20	-21.87
							peak

Above 1G (1GHz~18GHz)

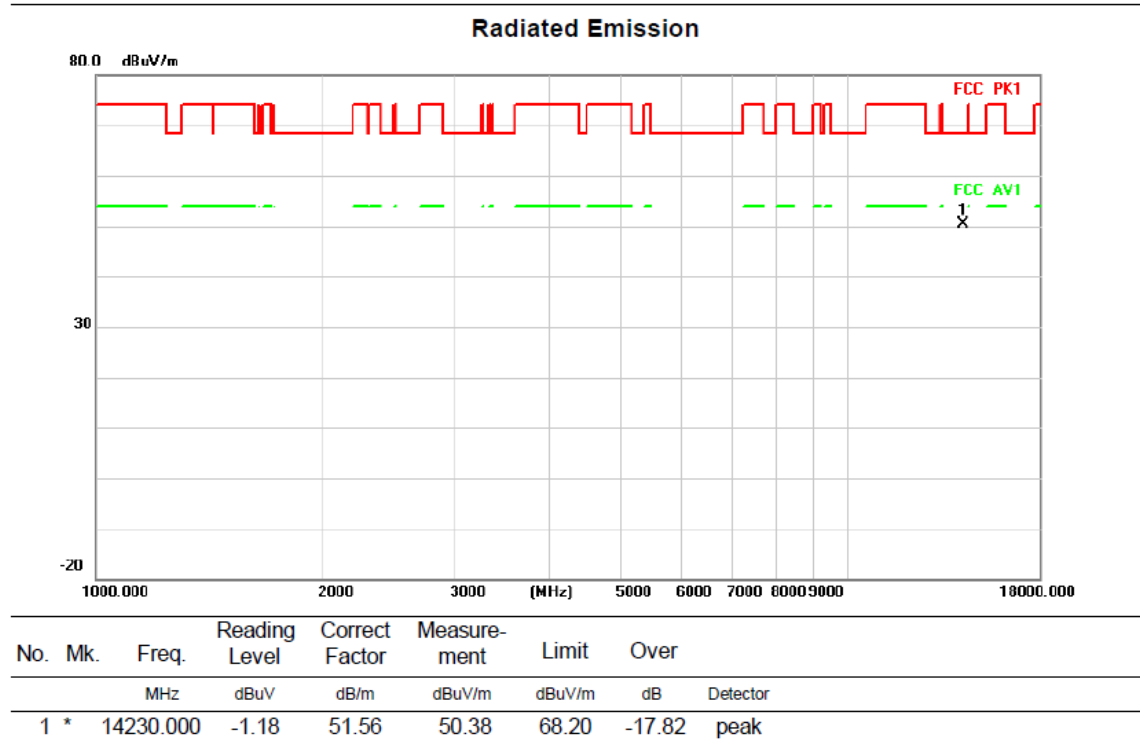
Test mode: 11A-CDD

Test Channel:233

VERTICAL



HORIZONTAL



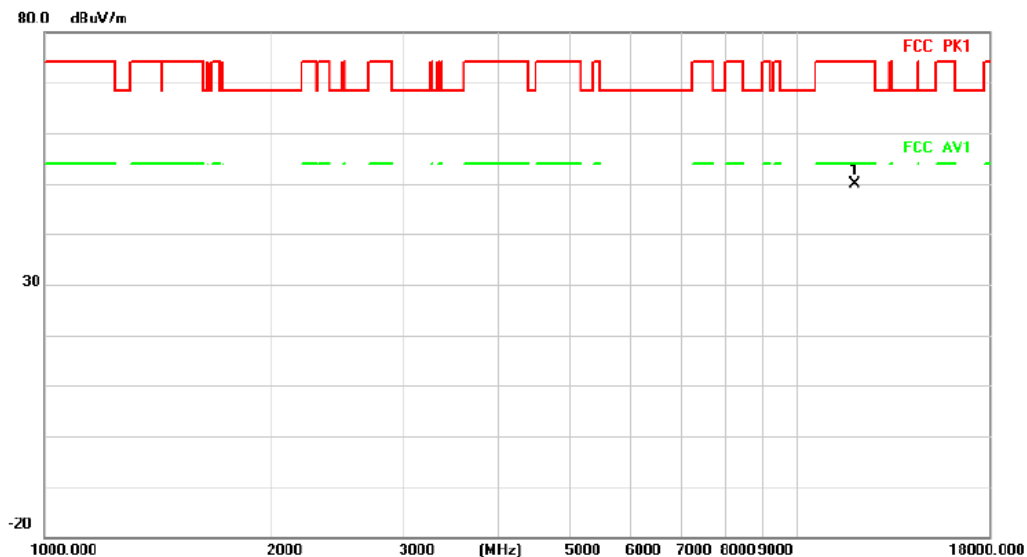
Above 1G (1GHz~18GHz)

Test mode:11AX20MIMO

Test Channel:1

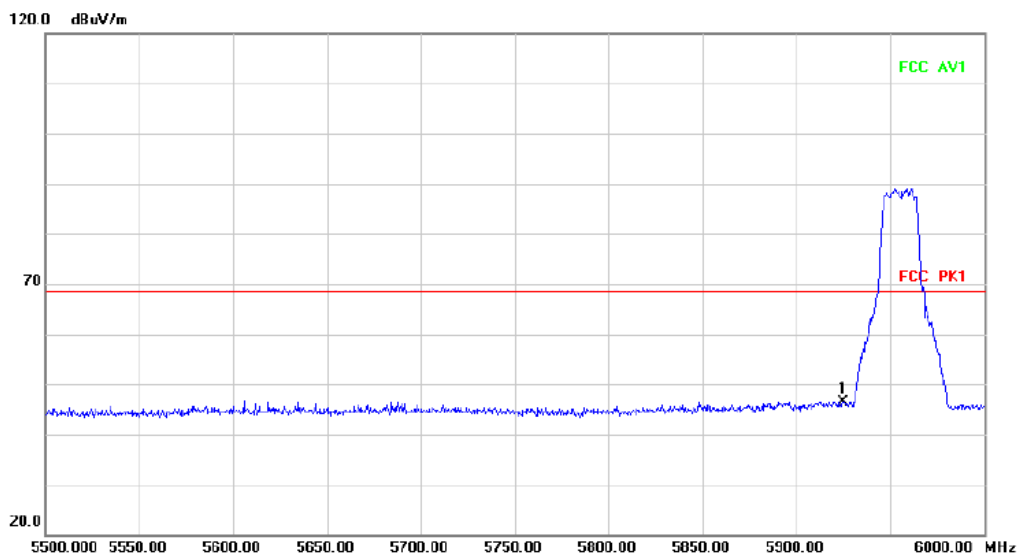
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	11910.000	1.39	48.61	50.00	74.00	-24.00 peak

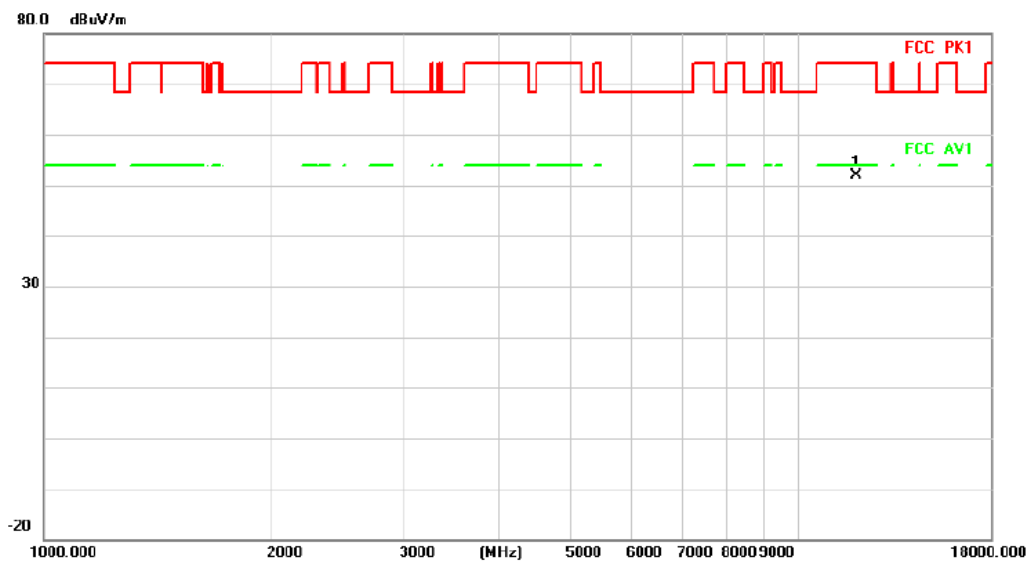
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	5925.000	40.02	6.28	46.30	68.20	-21.90 peak

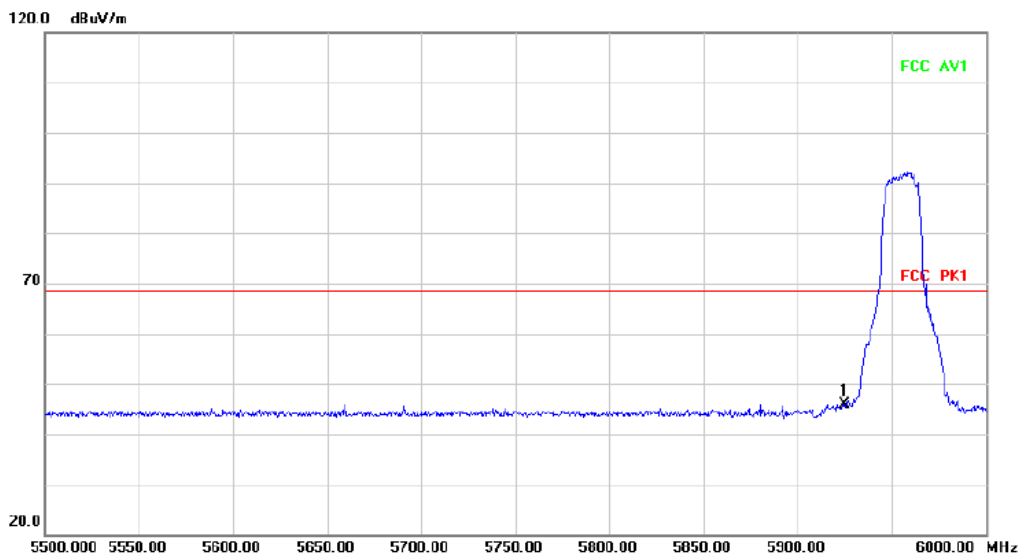
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	11910.000	3.21	48.61	51.82	74.00	-22.18 peak

Radiated Emission



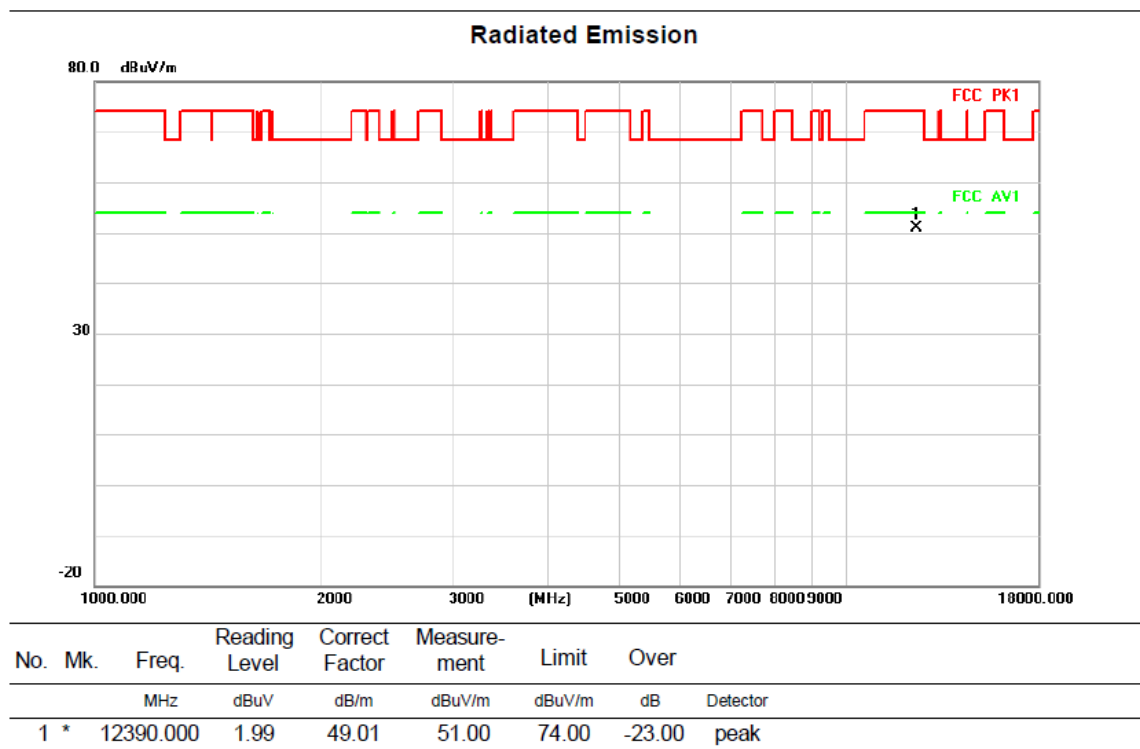
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	5925.000	39.63	6.28	45.91	68.20	-22.29 peak

Above 1G (1GHz~18GHz)

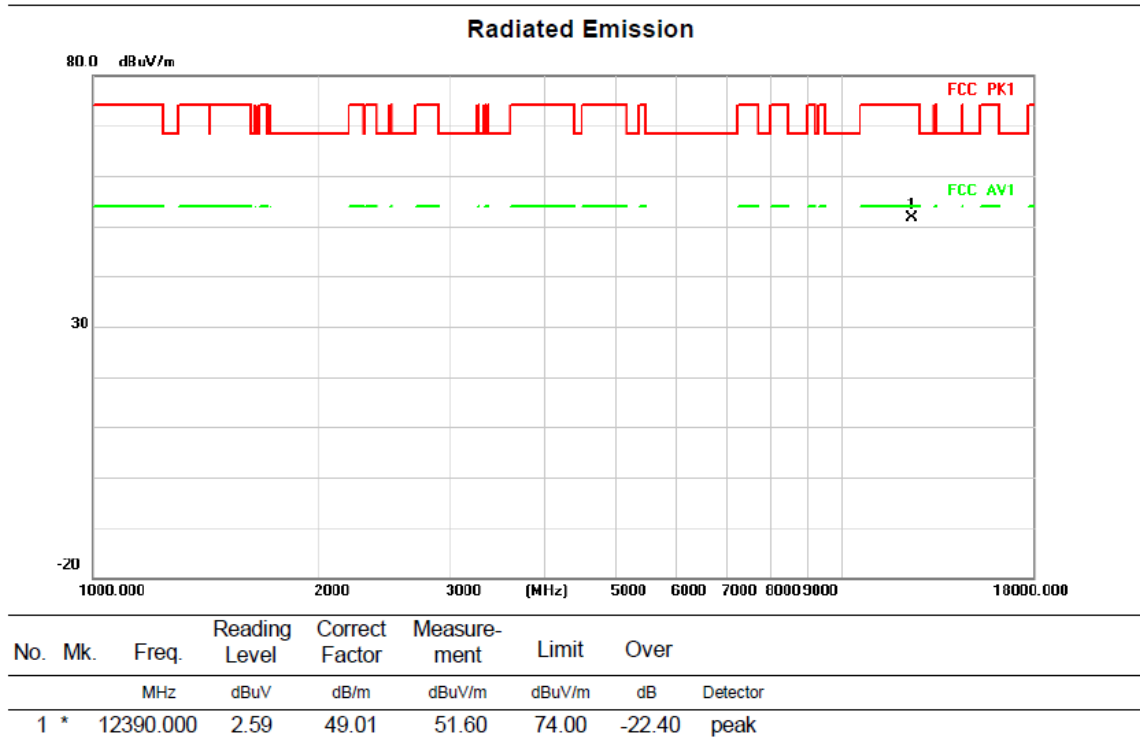
Test mode:11AX20MIMO

Test Channel:49

VERTICAL



HORIZONTAL

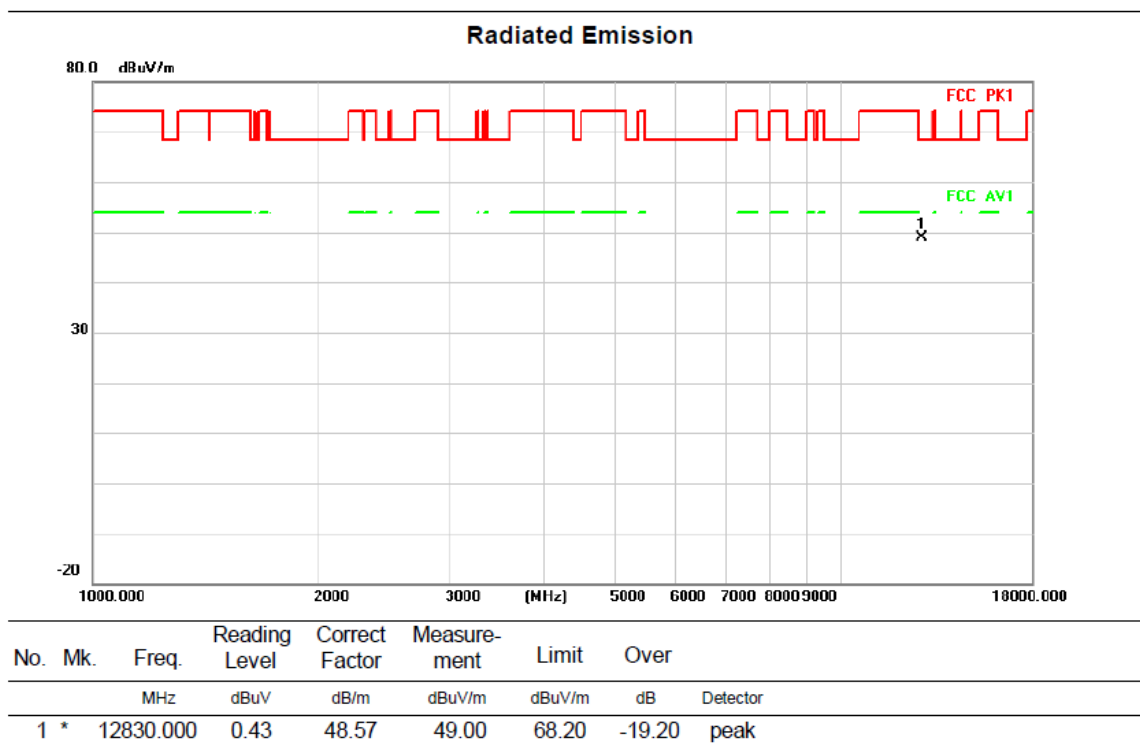


Above 1G (1GHz~18GHz)

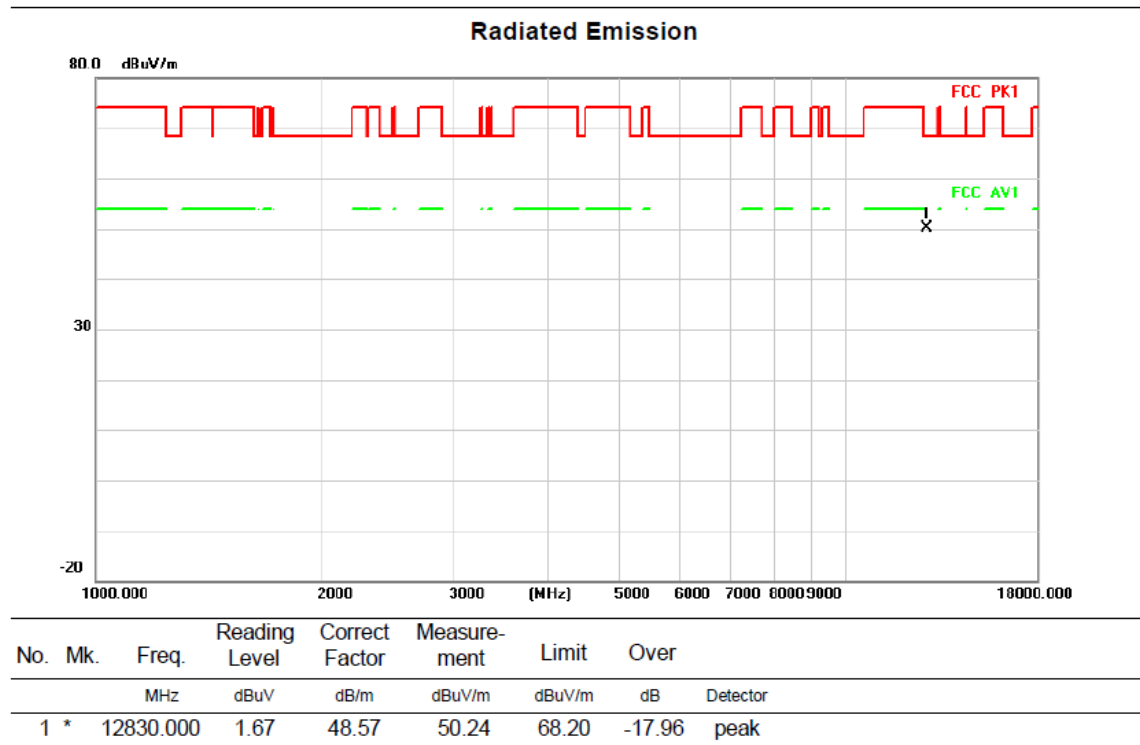
Test mode:11AX20MIMO

Test Channel:93

VERTICAL



HORIZONTAL

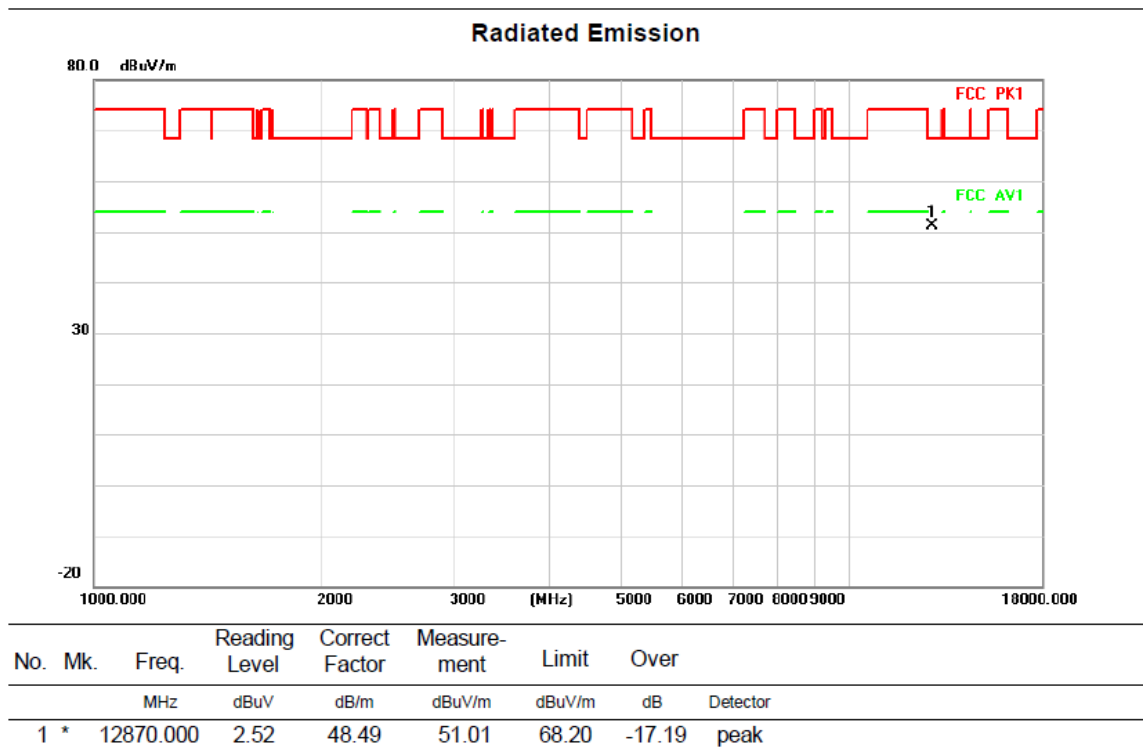


Above 1G (1GHz~18GHz)

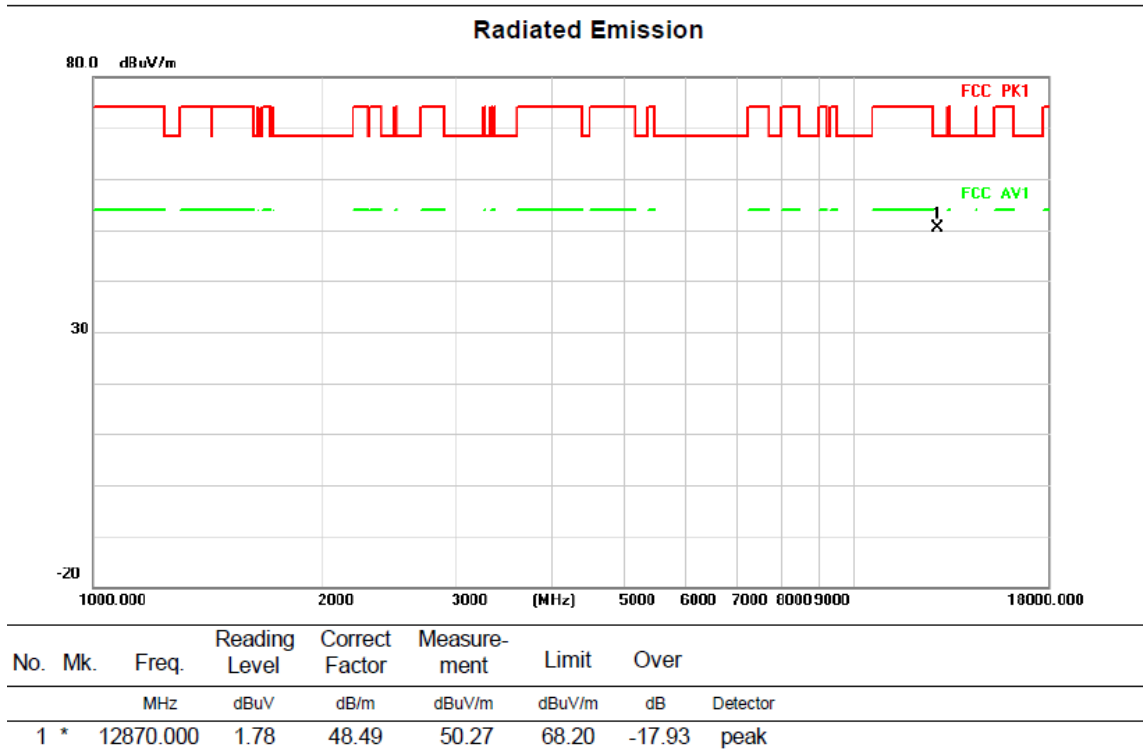
Test mode:11AX20MIMO

Test Channel:97

VERTICAL



HORIZONTAL

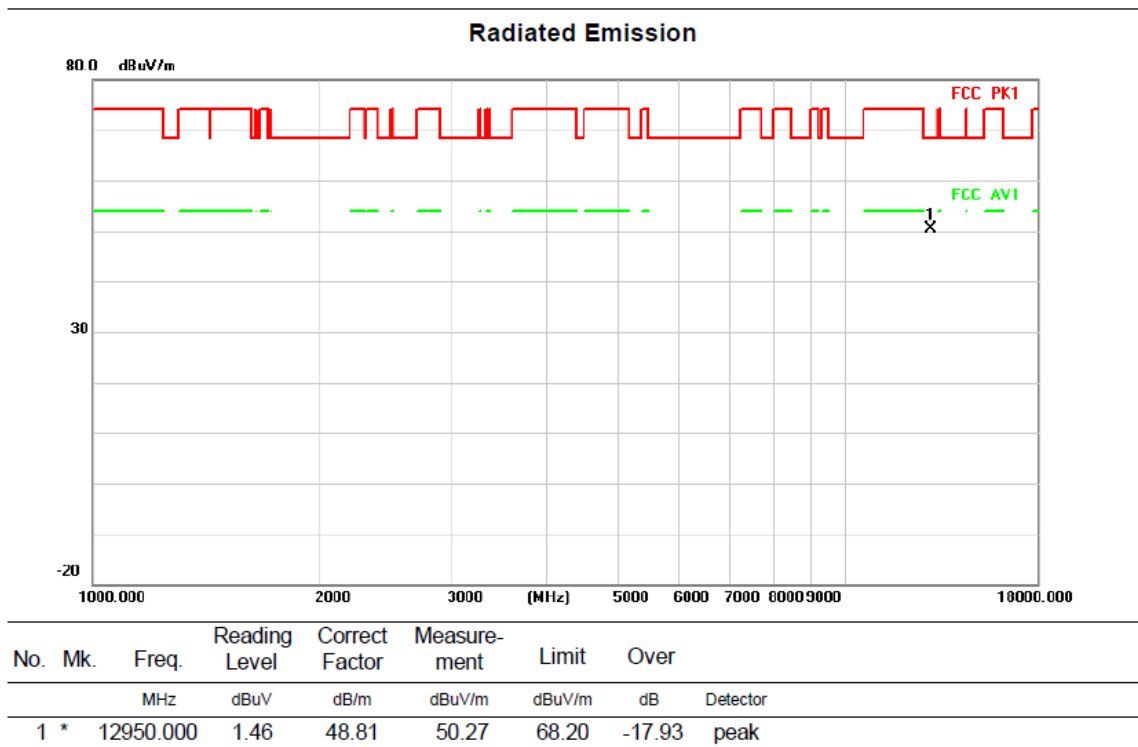


Above 1G (1GHz~18GHz)

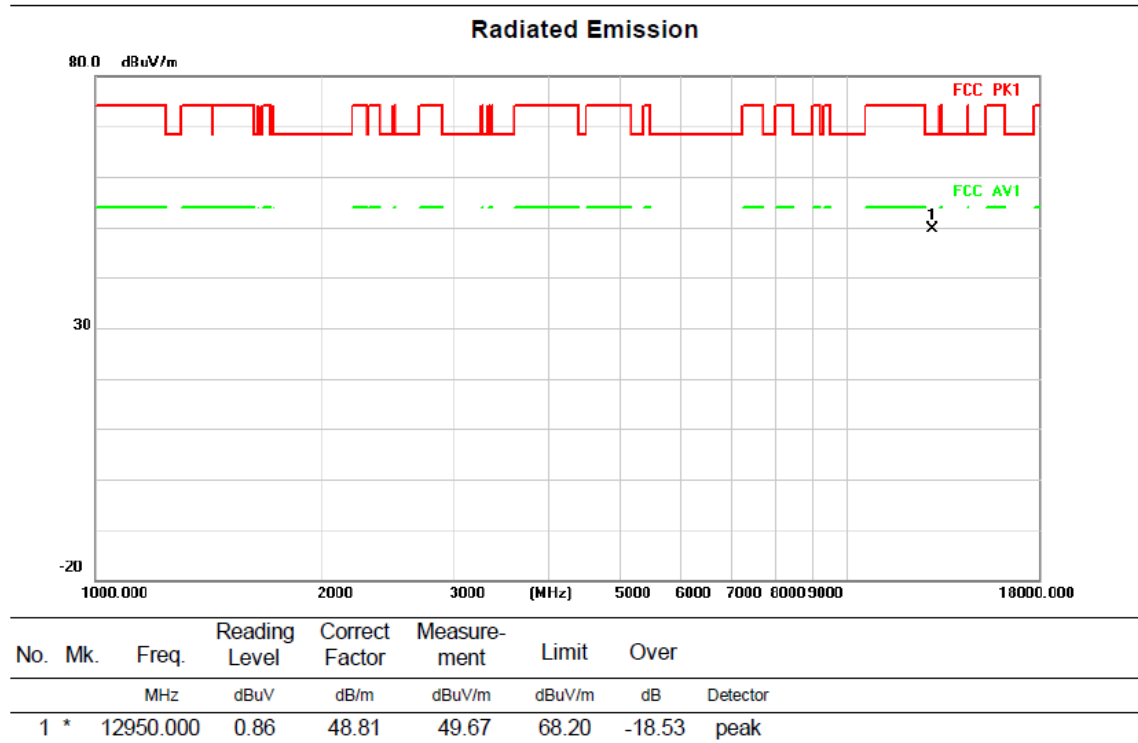
Test mode:11AX20MIMO

Test Channel:105

VERTICAL



HORIZONTAL

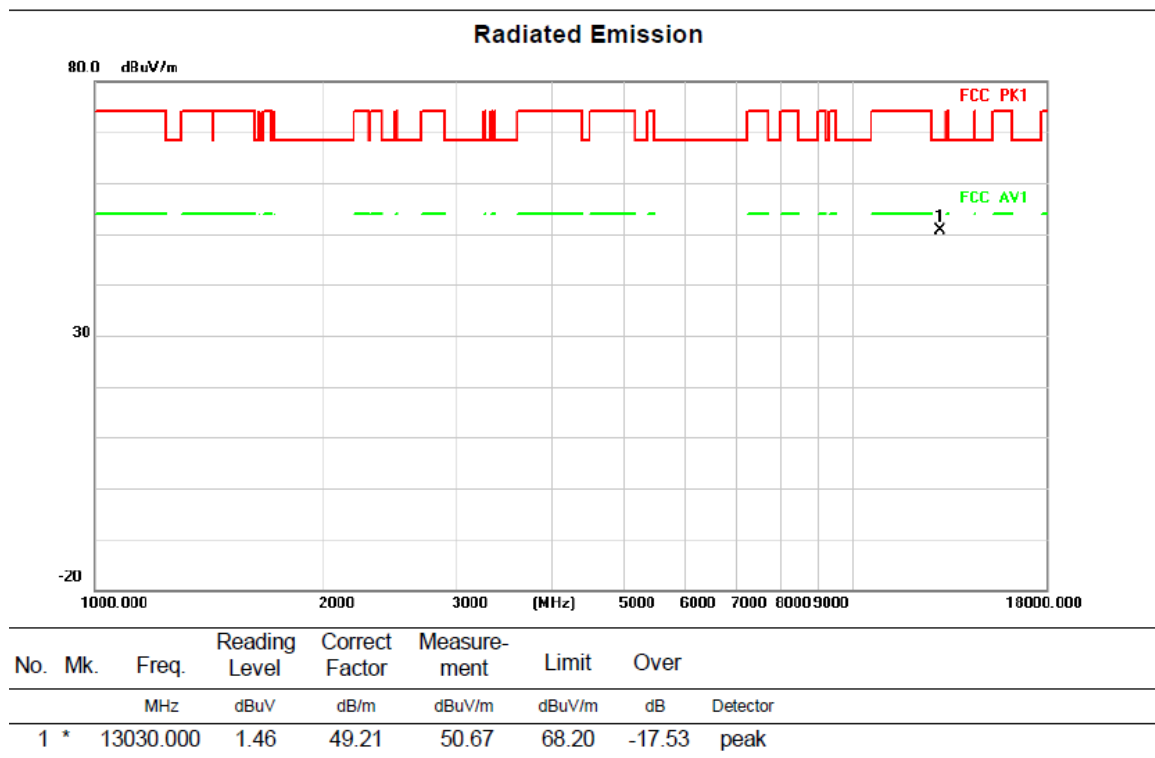


Above 1G (1GHz~18GHz)

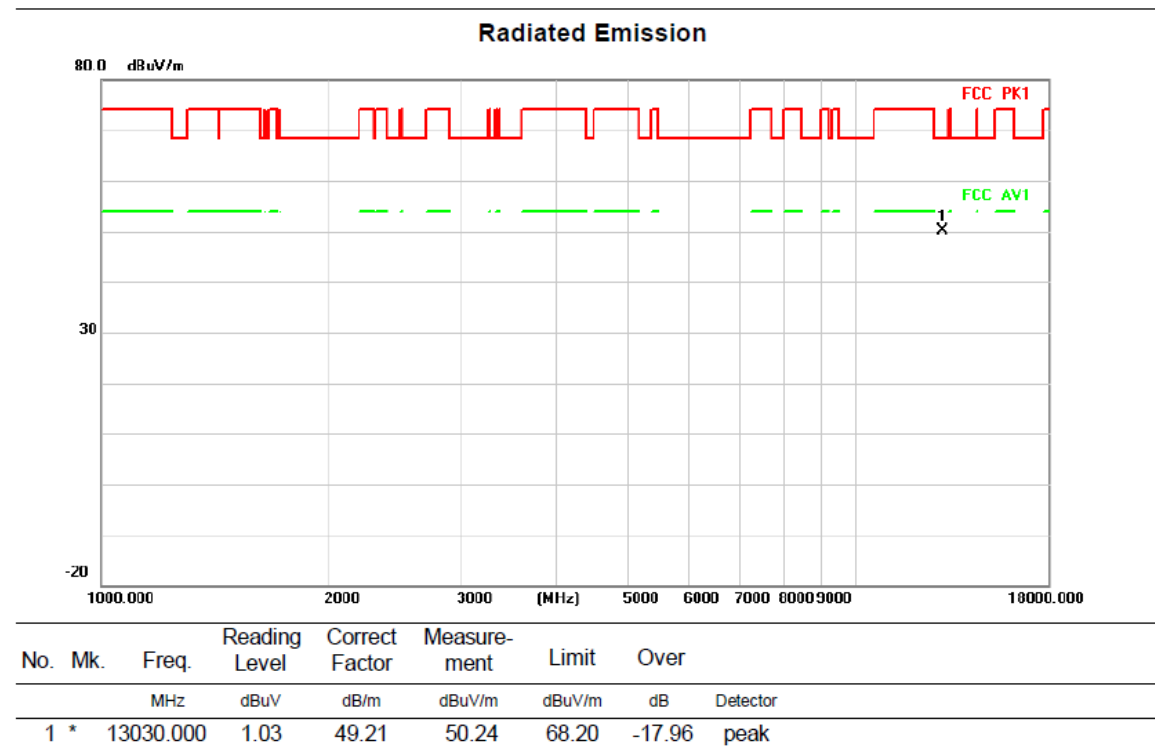
Test mode:11AX20MIMO

Test Channel:113

VERTICAL



HORIZONTAL

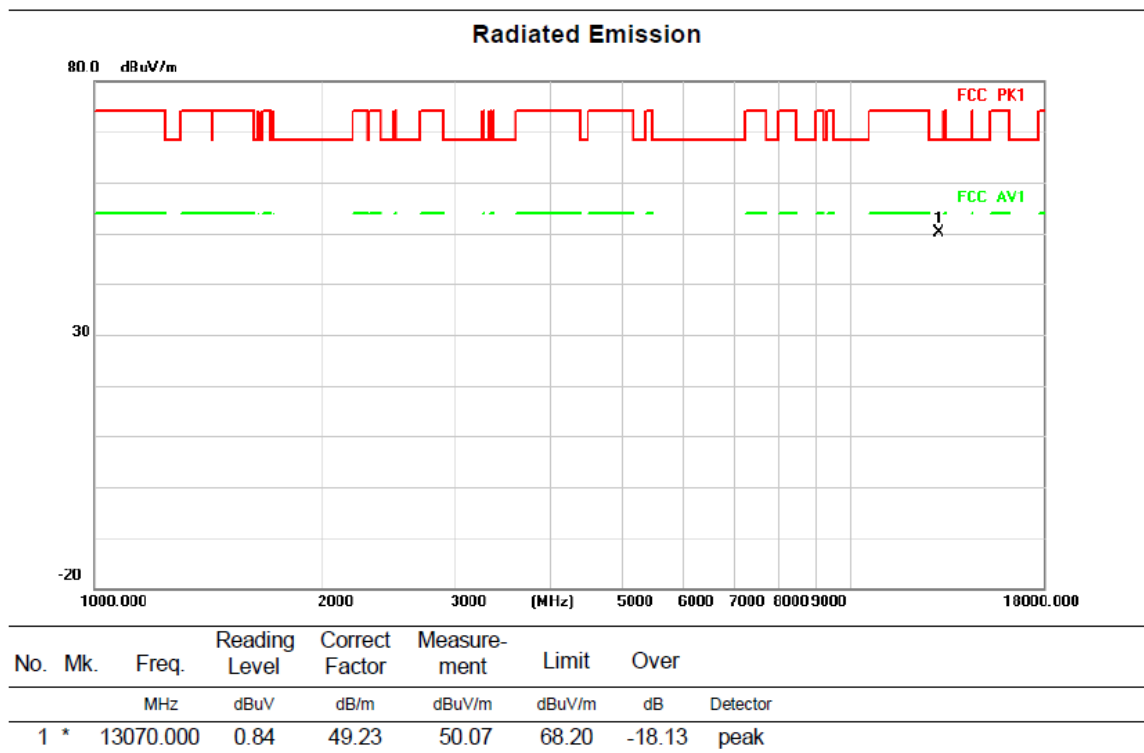


Above 1G (1GHz~18GHz)

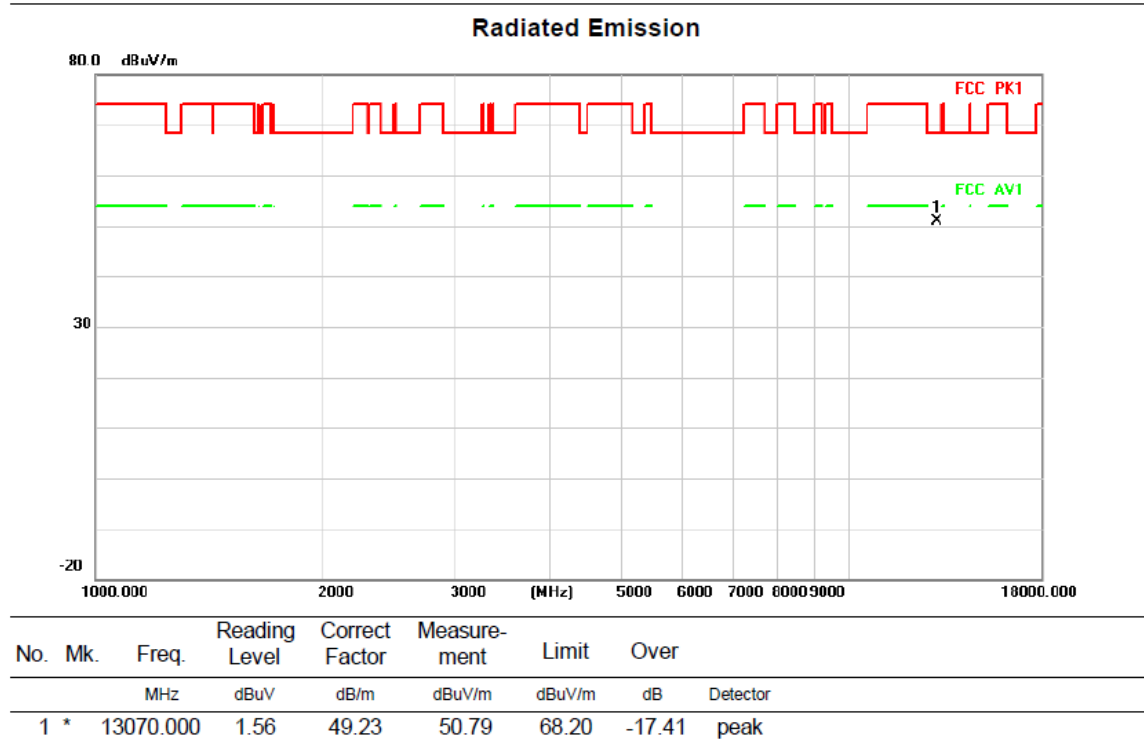
Test mode:11AX20MIMO

Test Channel:117

VERTICAL



HORIZONTAL

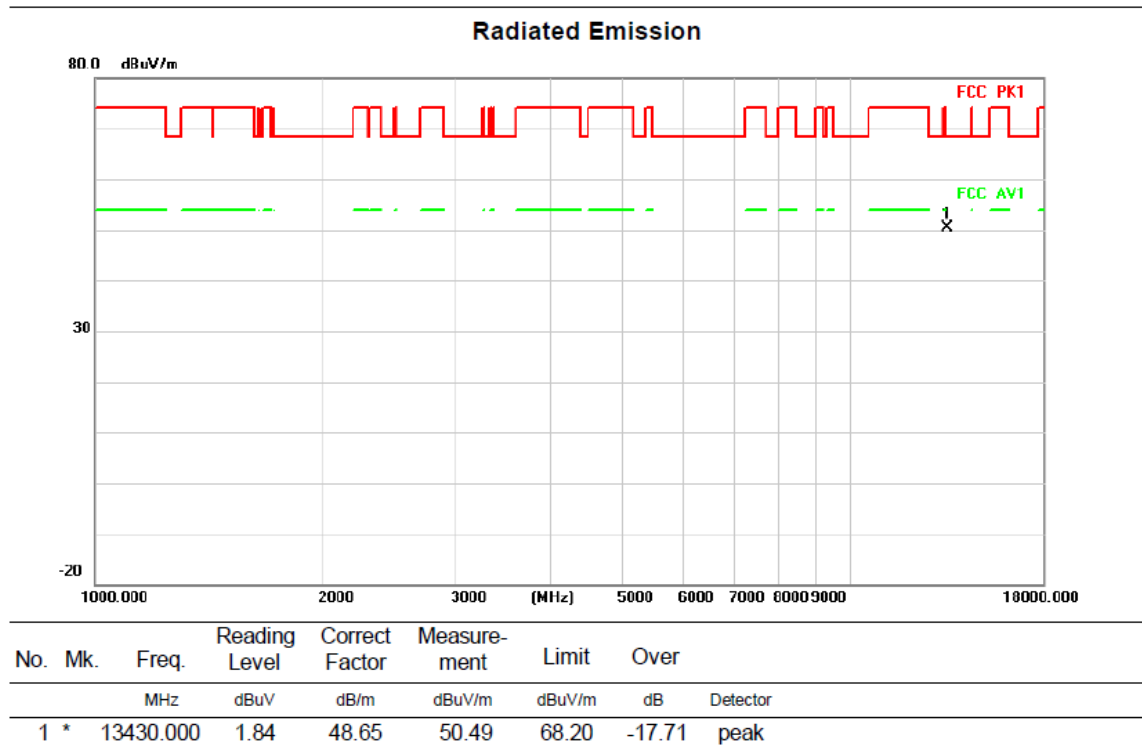


Above 1G (1GHz~18GHz)

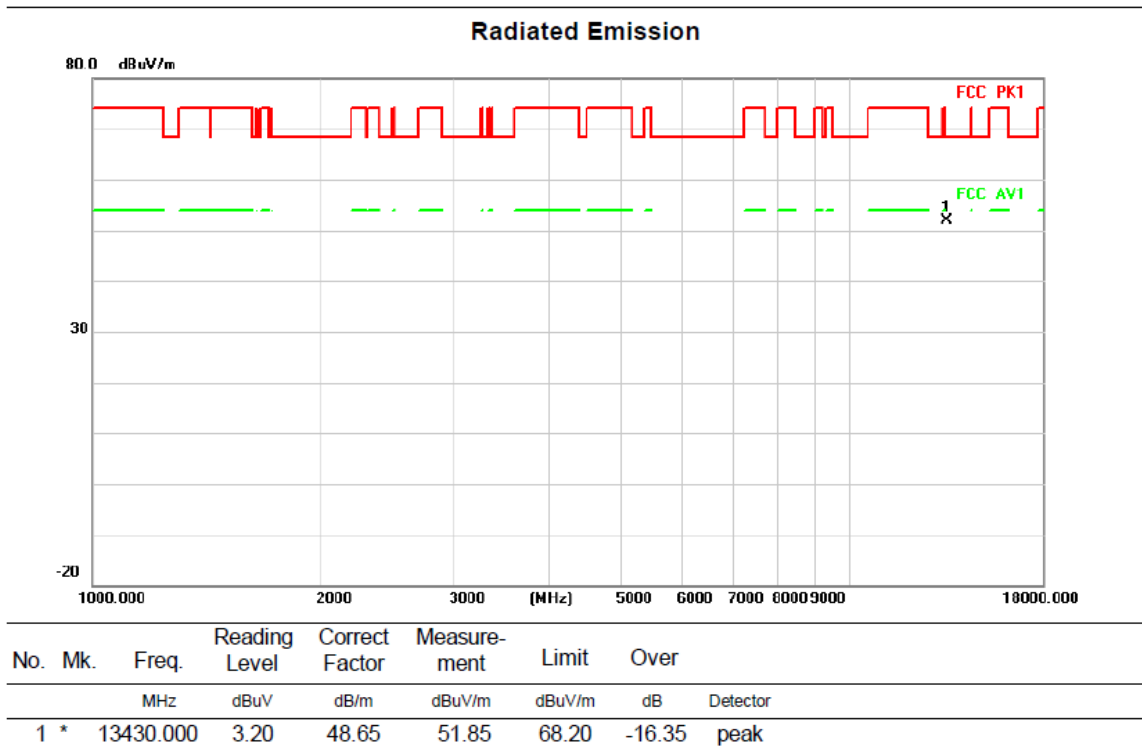
Test mode:11AX20MIMO

Test Channel:153

VERTICAL



HORIZONTAL

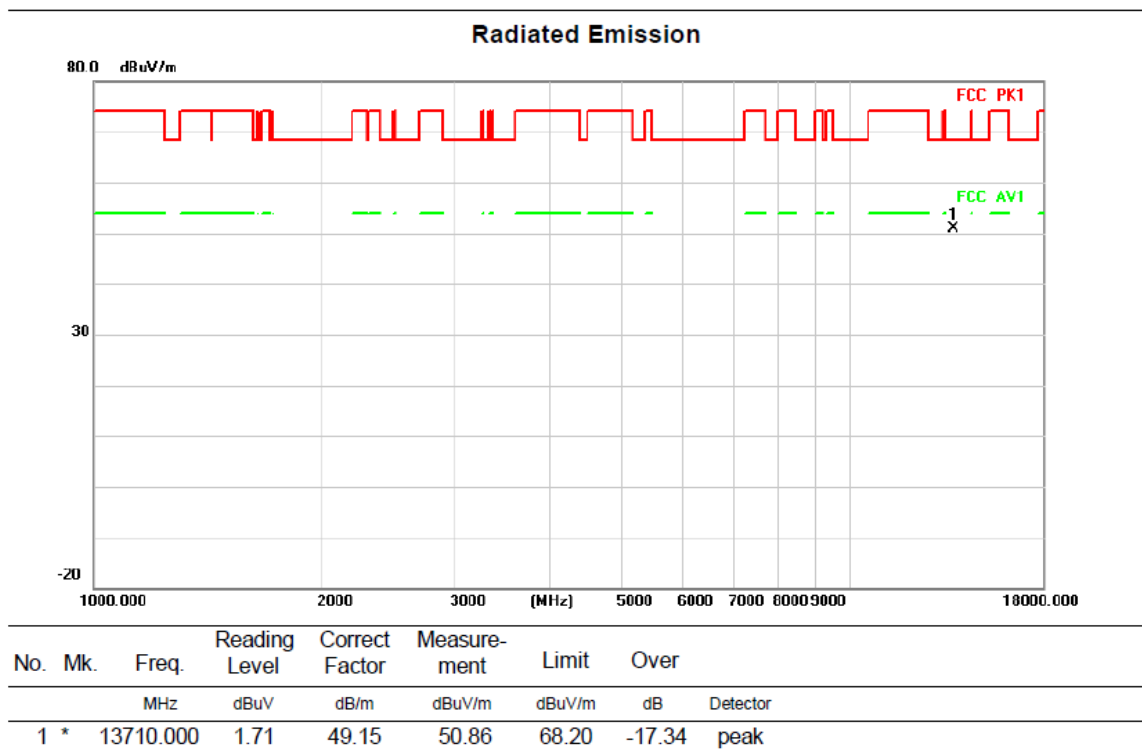


Above 1G (1GHz~18GHz)

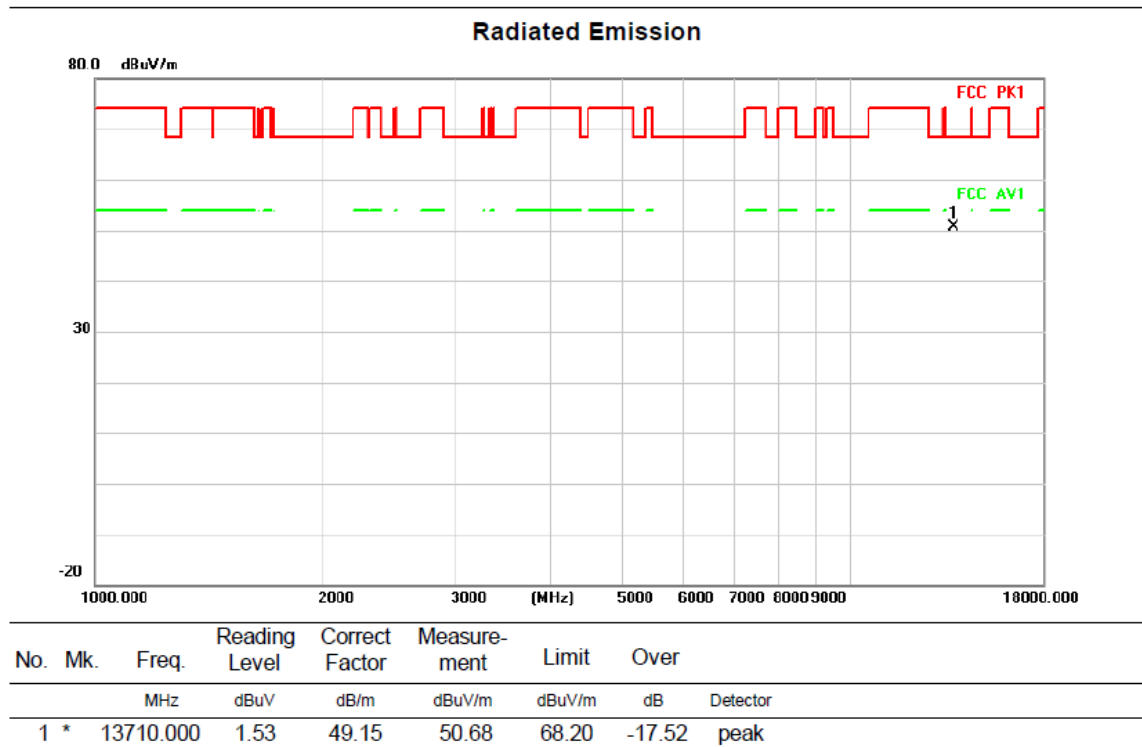
Test mode:11AX20MIMO

Test Channel:181

VERTICAL



HORIZONTAL

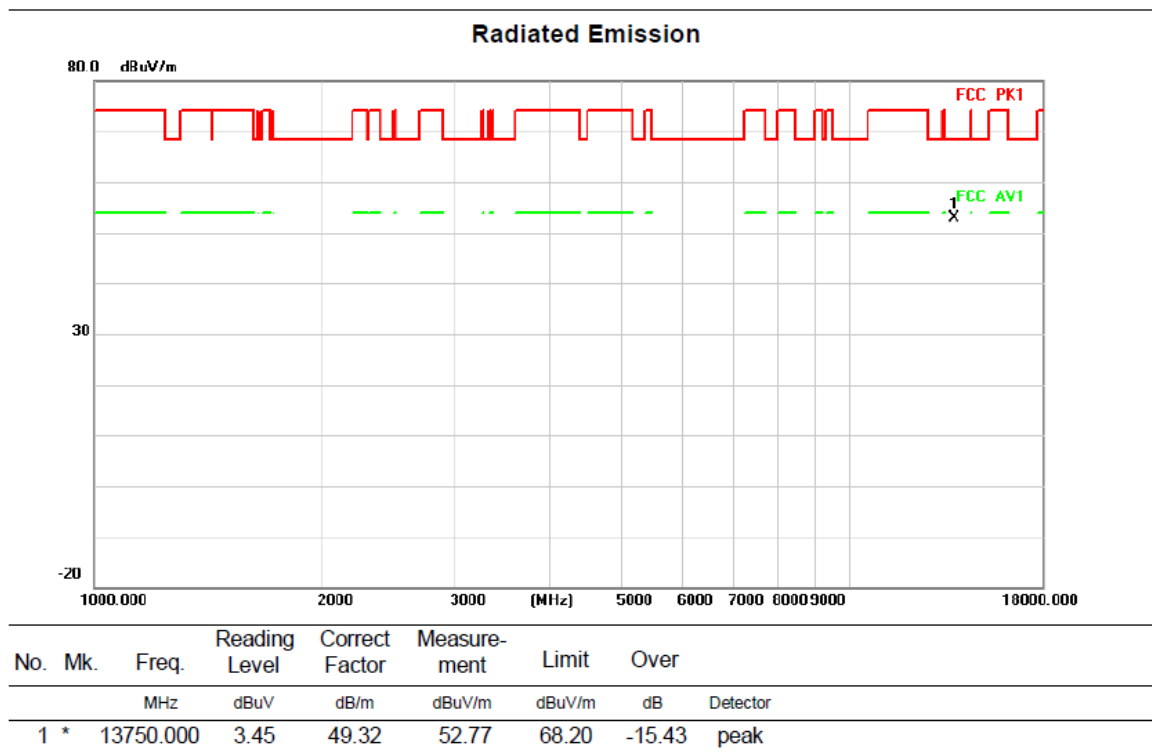


Above 1G (1GHz~18GHz)

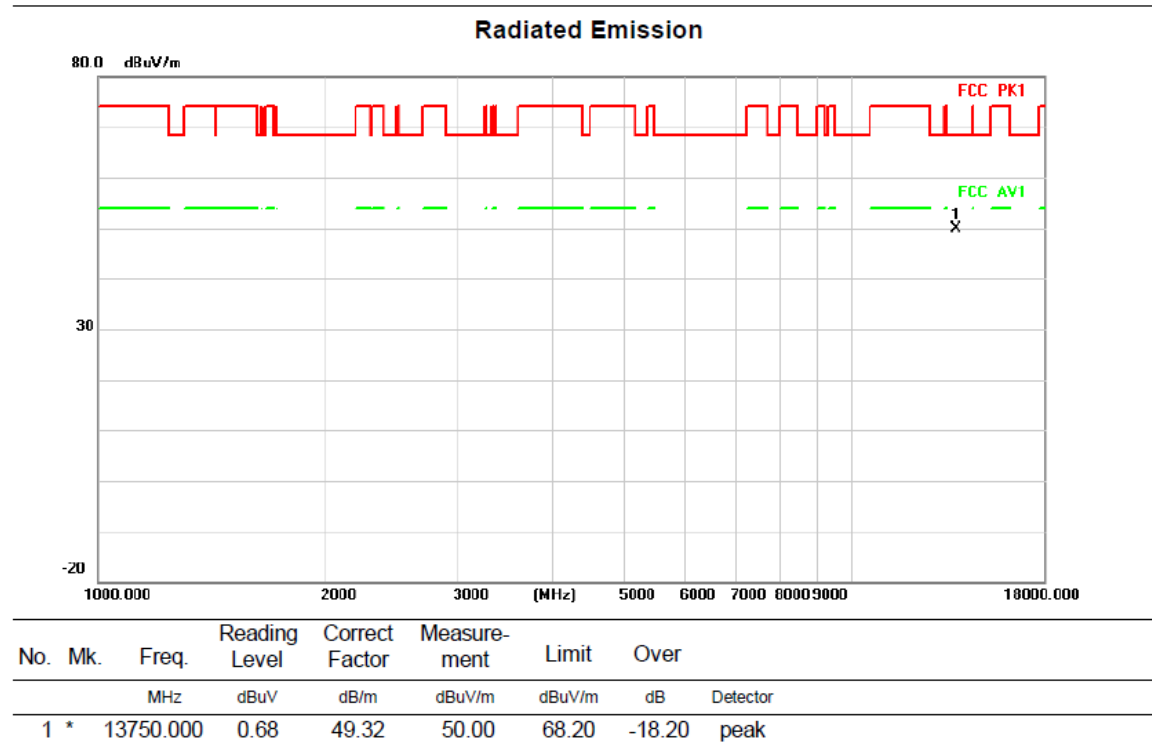
Test mode:11AX20MIMO

Test Channel:185

VERTICAL



HORIZONTAL

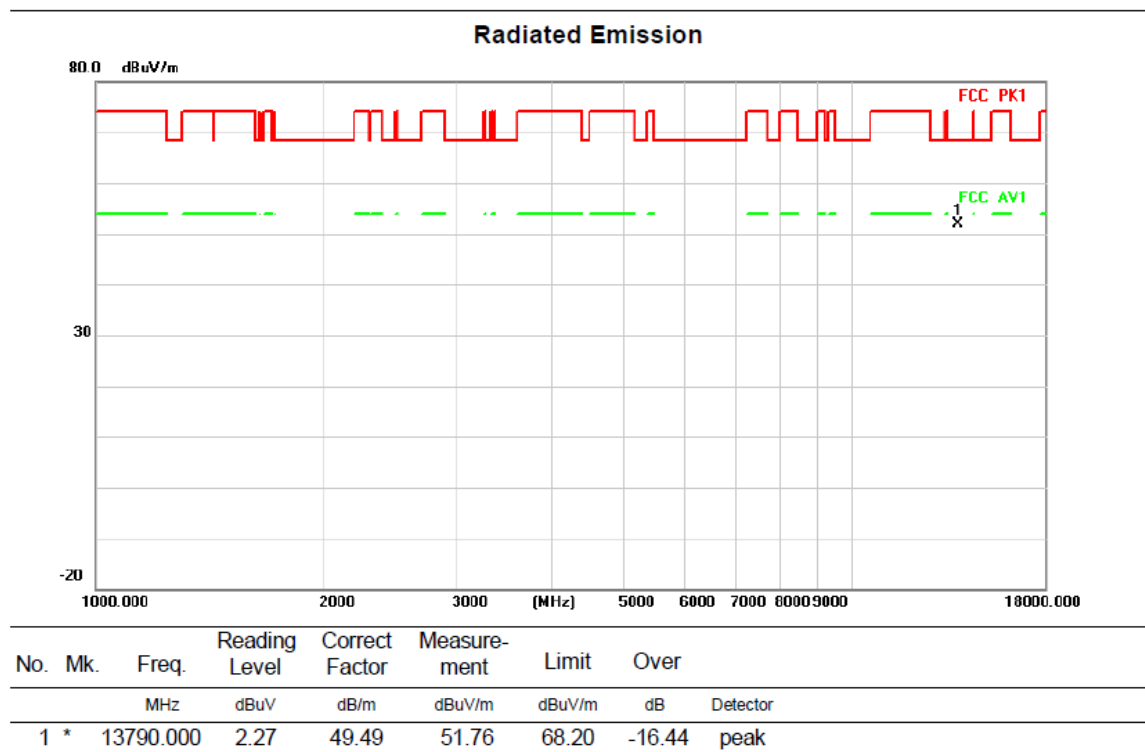


Above 1G (1GHz~18GHz)

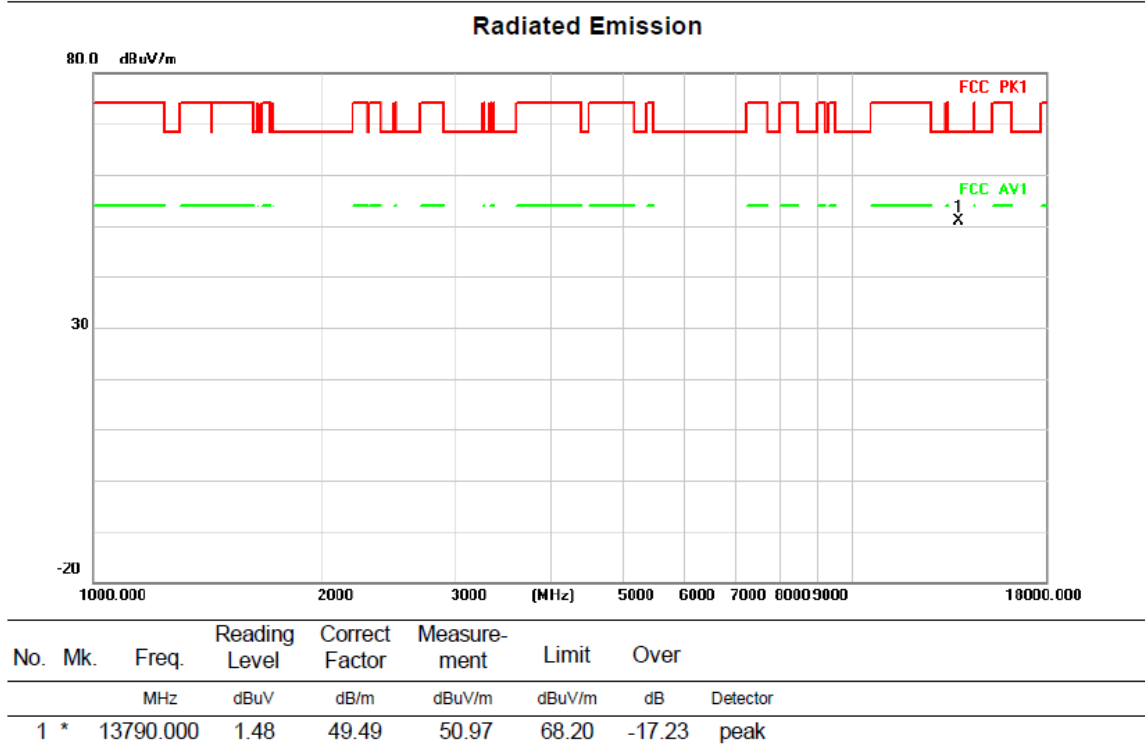
Test mode:11AX20MIMO

Test Channel:189

VERTICAL



HORIZONTAL

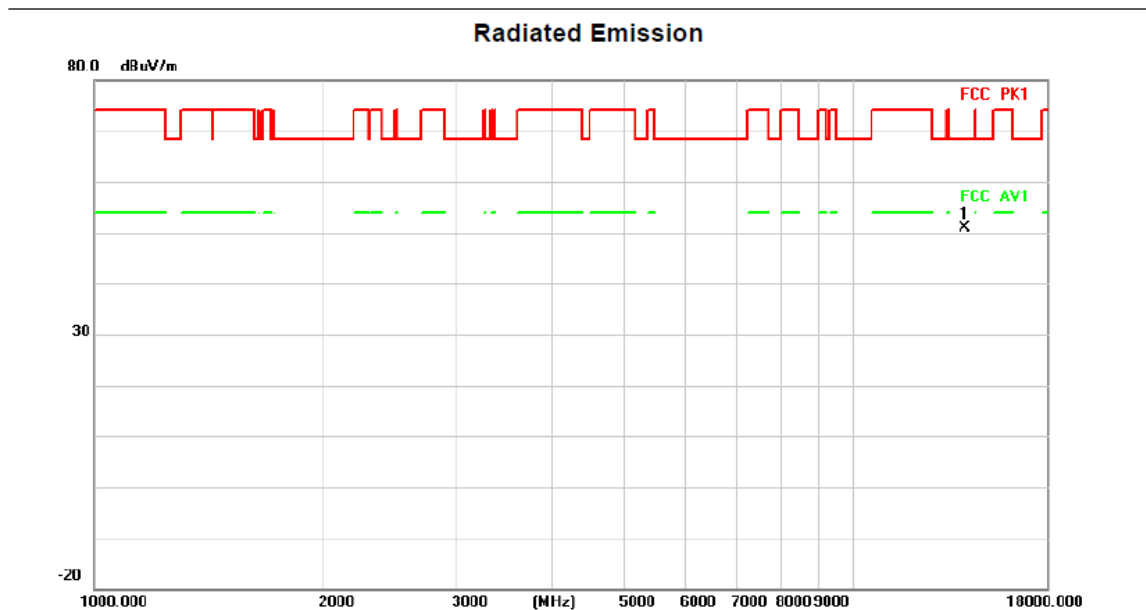


Above 1G (1GHz~18GHz)

Test mode:11AX20MIMO

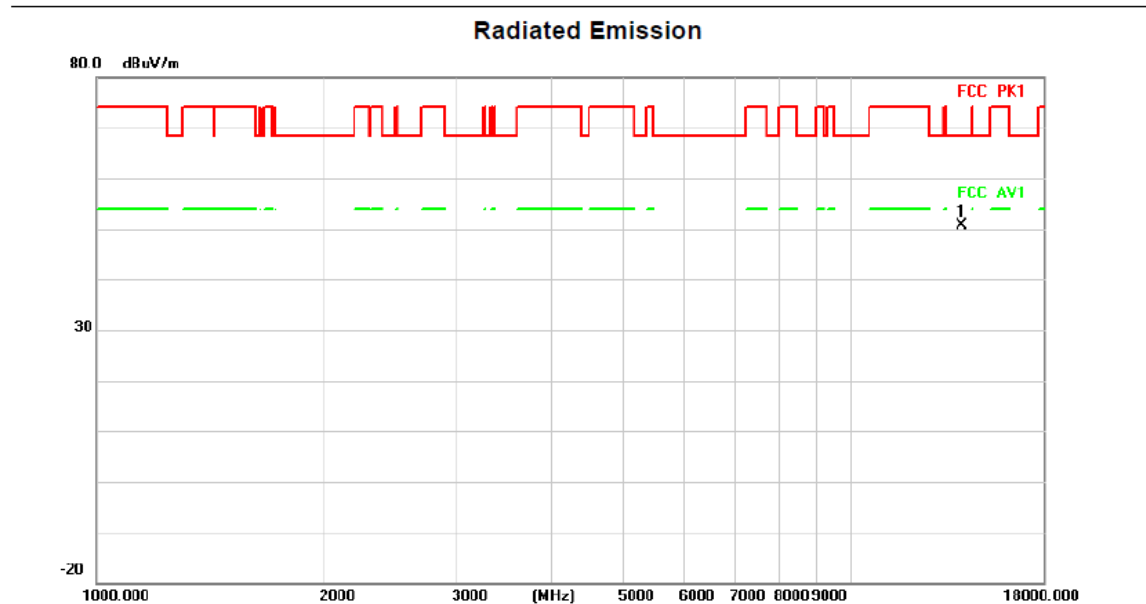
Test Channel:213

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14030.000	-0.20	50.97	50.77	68.20	-17.43	peak

HORIZONTAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14030.000	-0.40	50.97	50.57	68.20	-17.63	peak

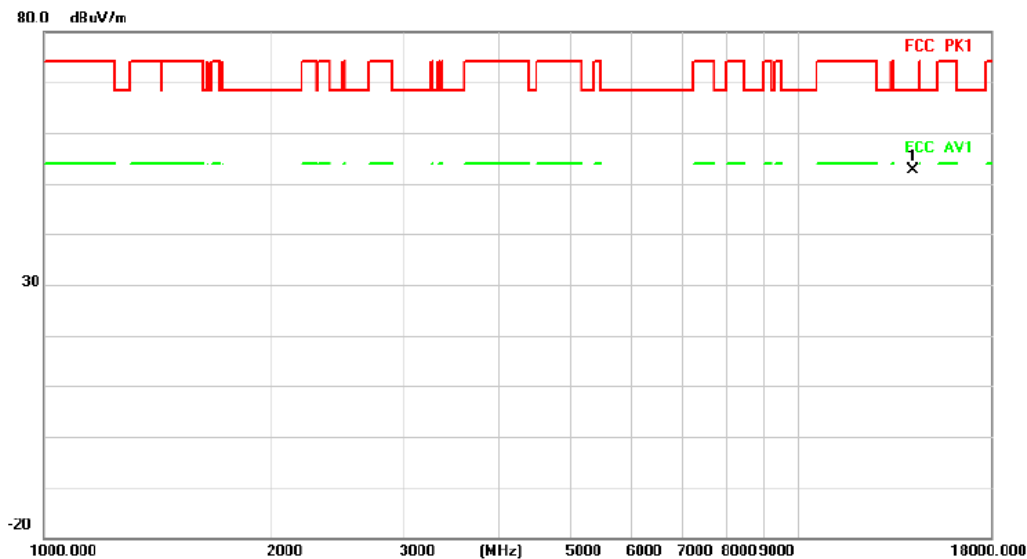
Above 1G (1GHz~18GHz)

Test mode:11AX20MIMO

Test Channel:229

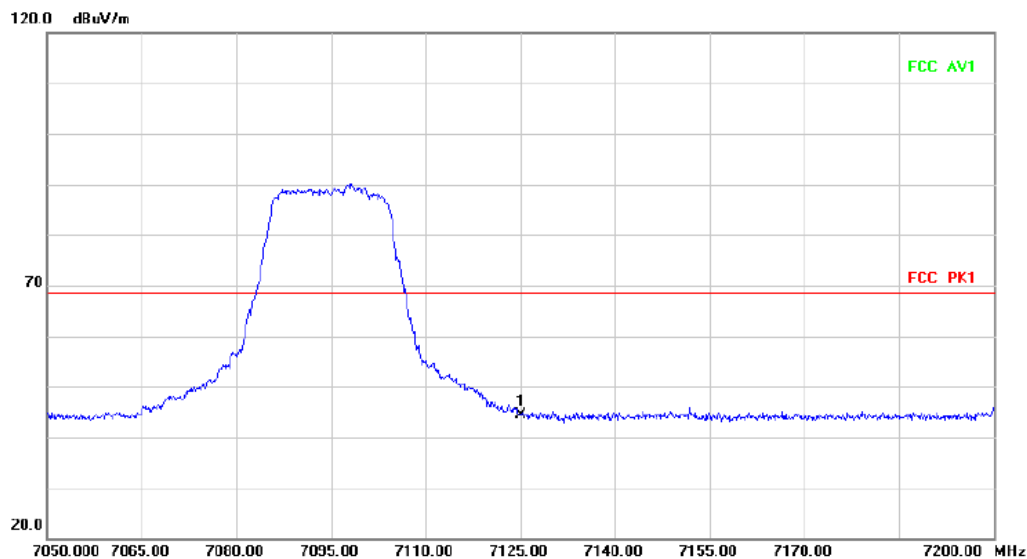
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	14190.000	0.97	51.62	52.59	68.20	-15.61 peak

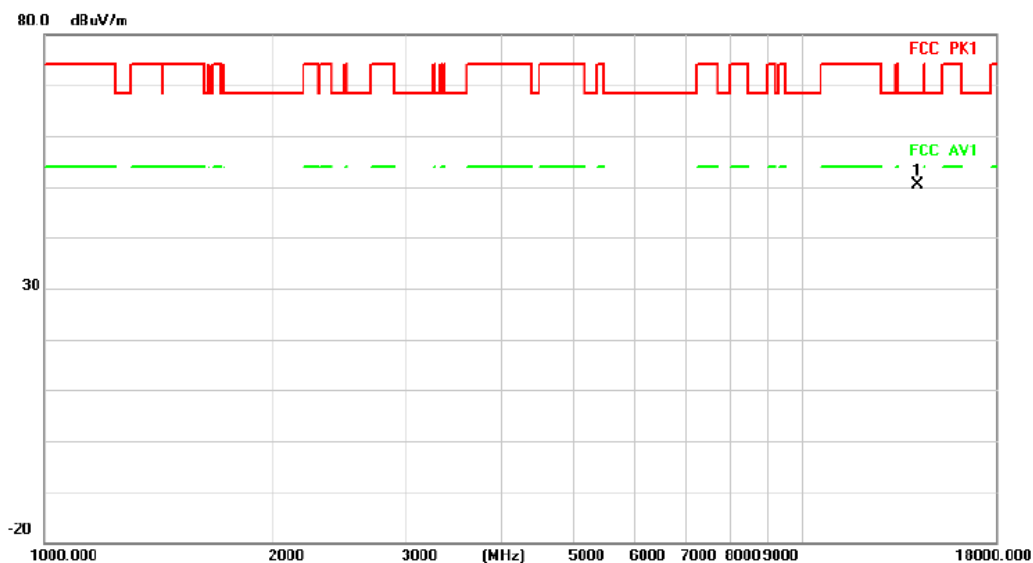
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	7125.000	33.26	11.19	44.45	68.20	-23.75 peak

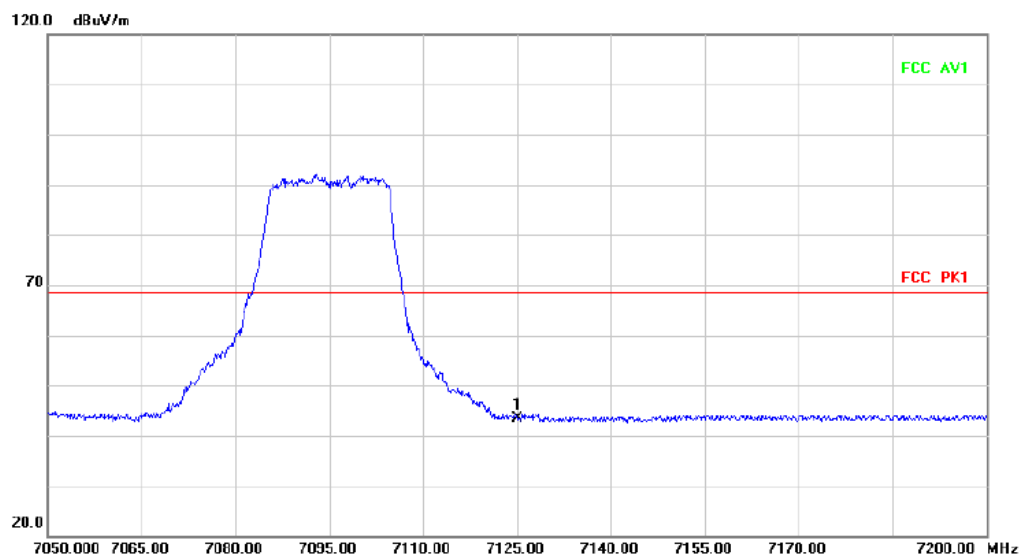
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14190.000	-1.21	51.62	50.41	68.20	-17.79	peak

Radiated Emission



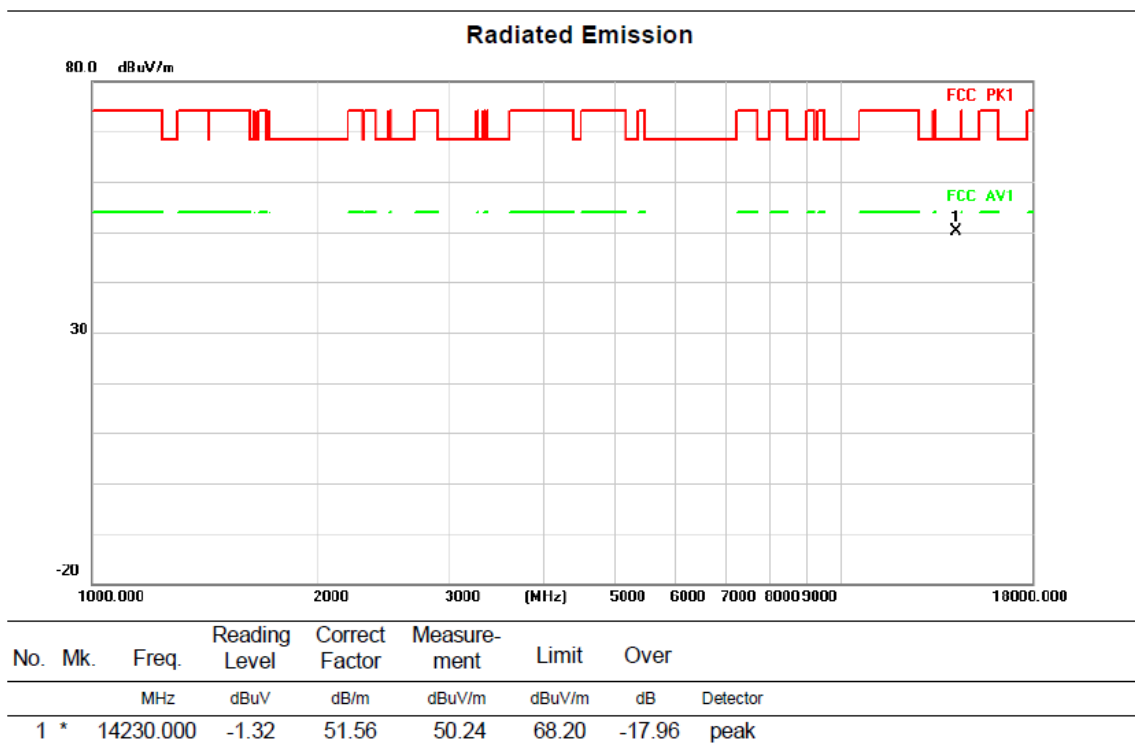
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	7125.000	32.29	11.19	43.48	68.20	-24.72	peak

Above 1G (1GHz~18GHz)

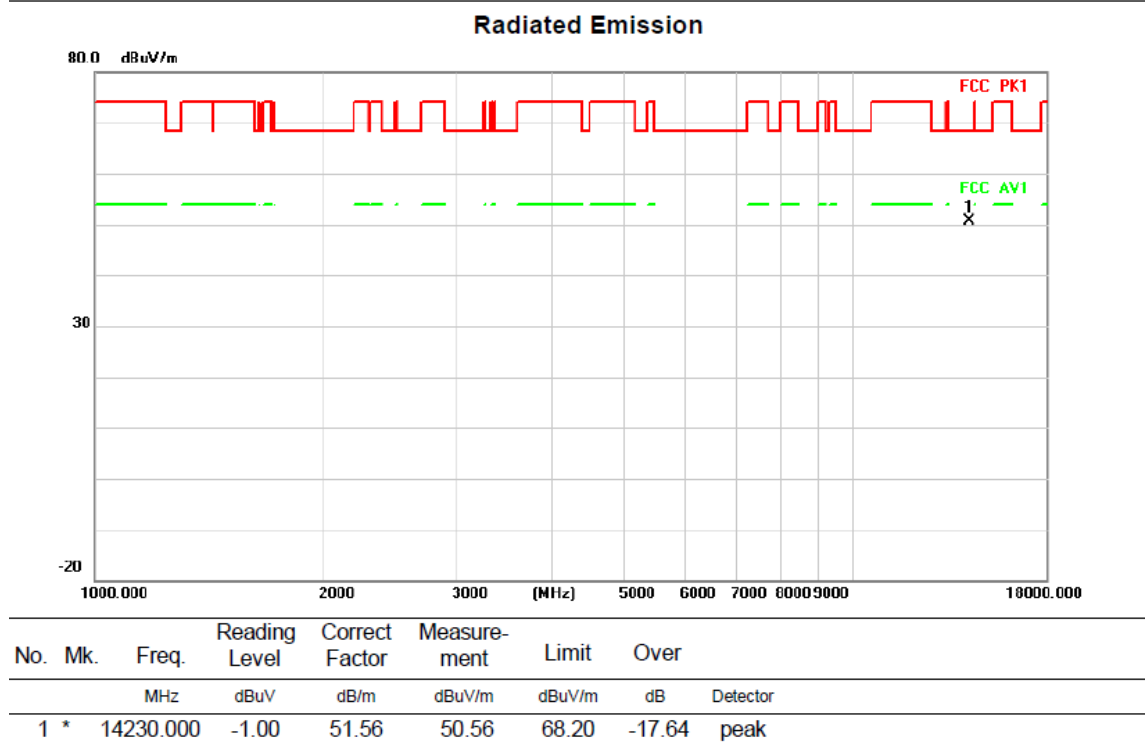
Test mode:11AX20MIMO

Test Channel:233

VERTICAL



HORIZONTAL



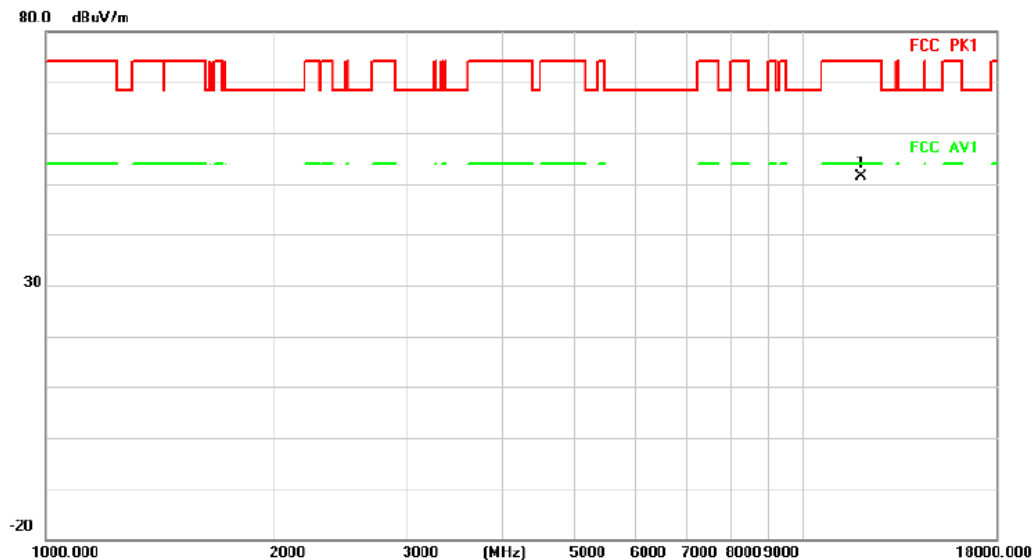
Above 1G (1GHz~18GHz)

Test mode:11AX40MIMO

Test Channel:3

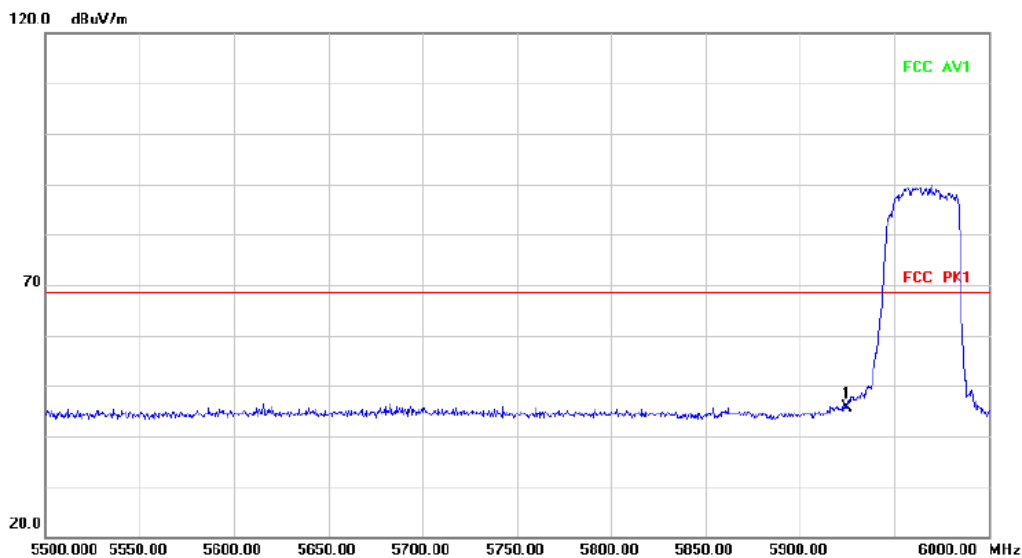
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11930.000	2.68	48.65	51.33	74.00	-22.67	peak

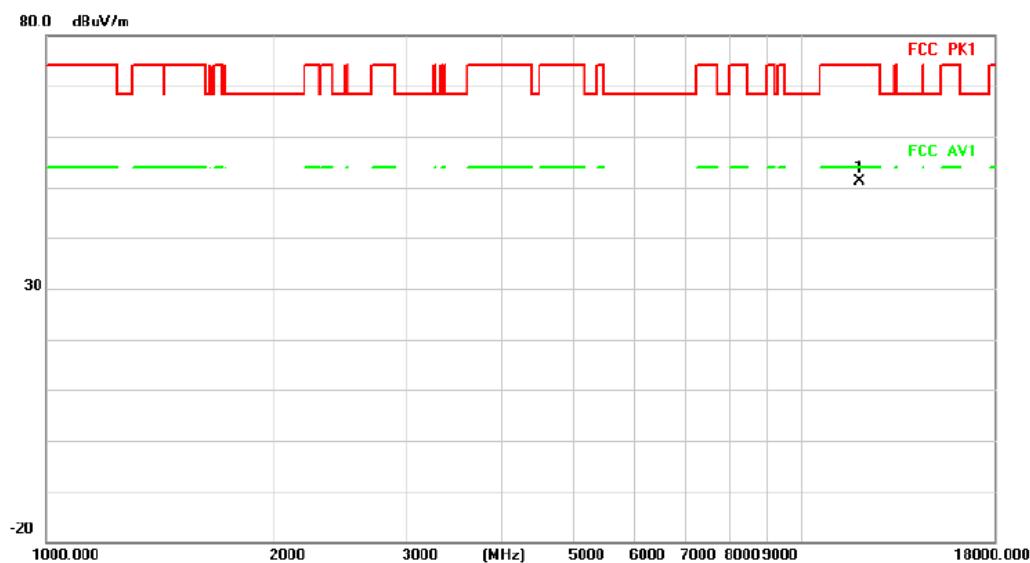
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	5925.000	39.38	6.28	45.66	68.20	-22.54	peak

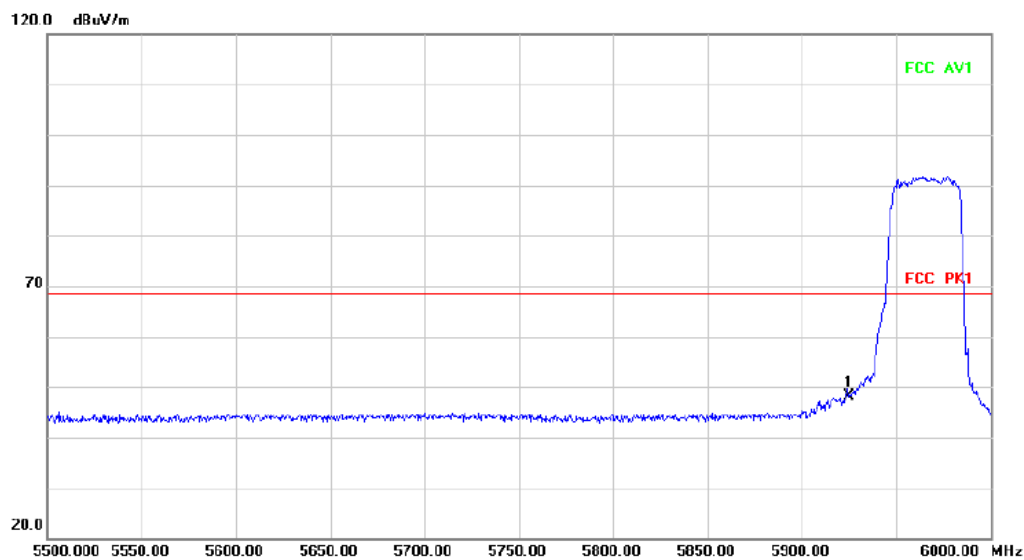
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11930.000	2.40	48.65	51.05	74.00	-22.95	peak

Radiated Emission



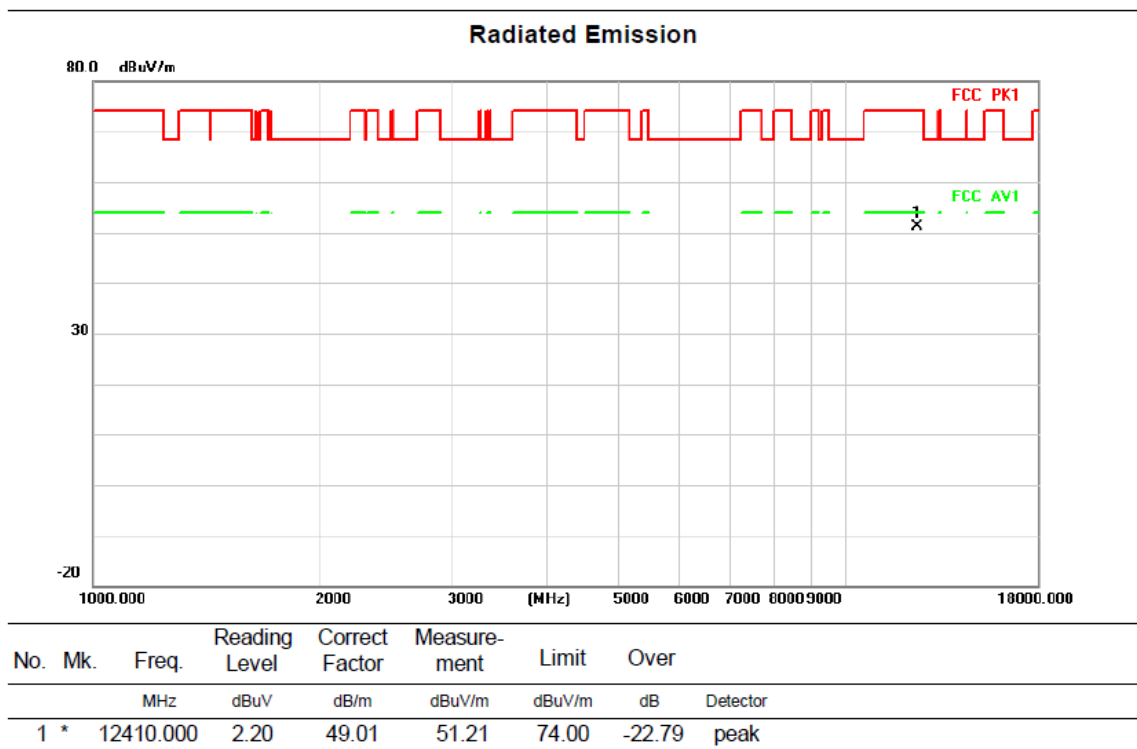
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	5925.000	41.80	6.28	48.08	68.20	-20.12	peak

Above 1G (1GHz~18GHz)

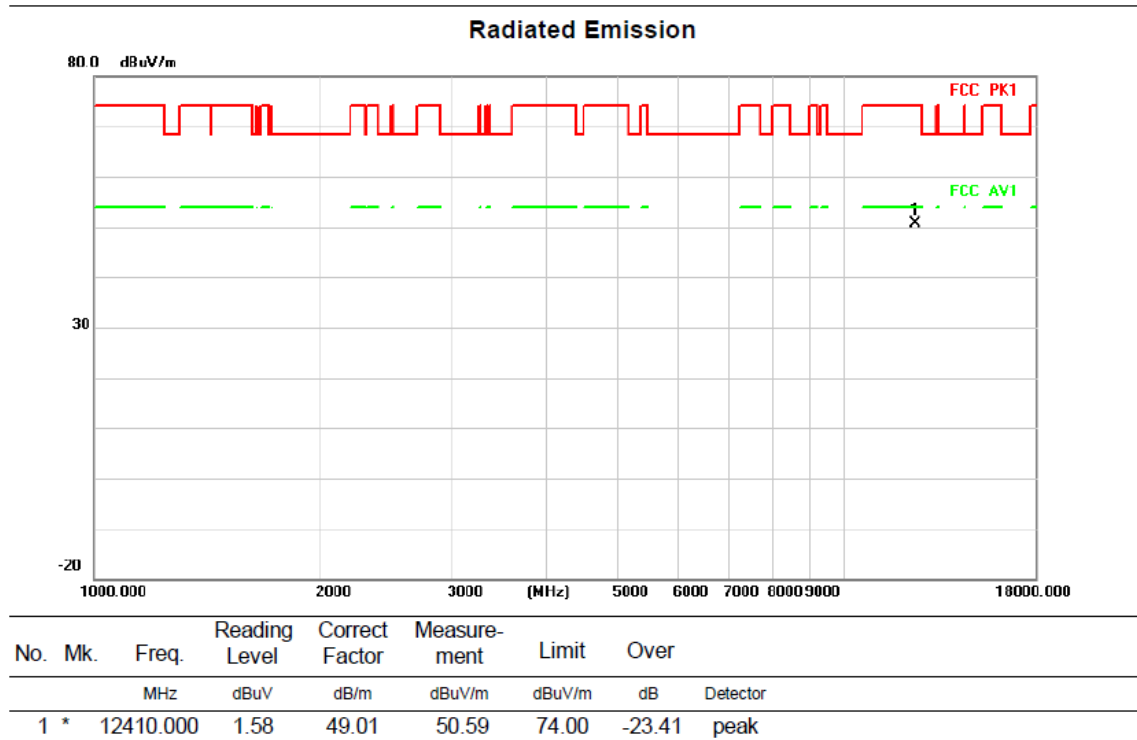
Test mode:11AX40MIMO

Test Channel:51

VERTICAL



HORIZONTAL

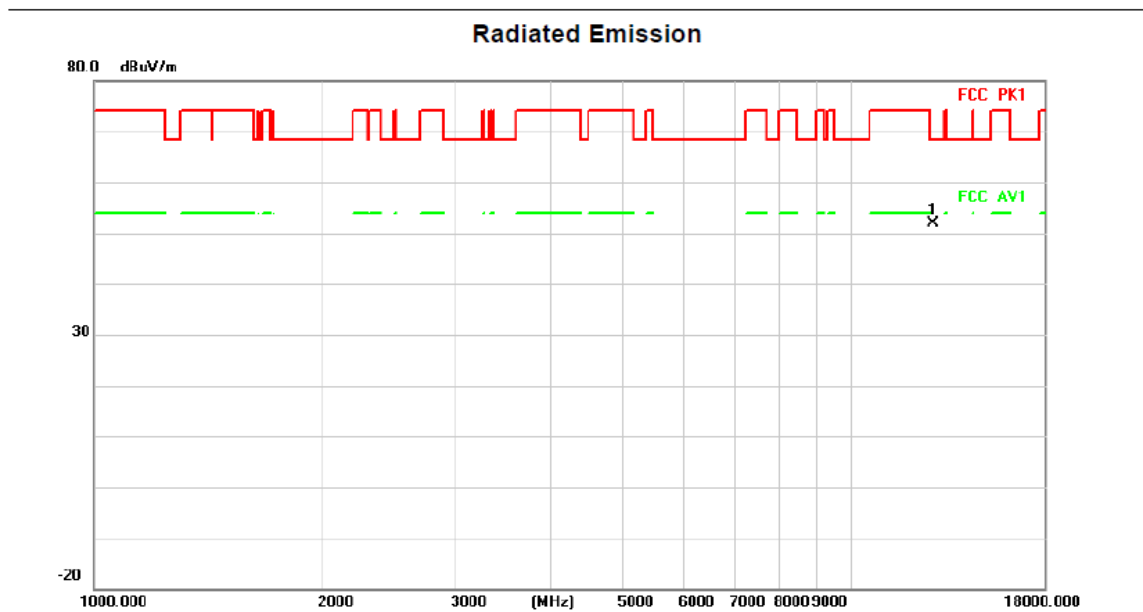


Above 1G (1GHz~18GHz)

Test mode:11AX40MIMO

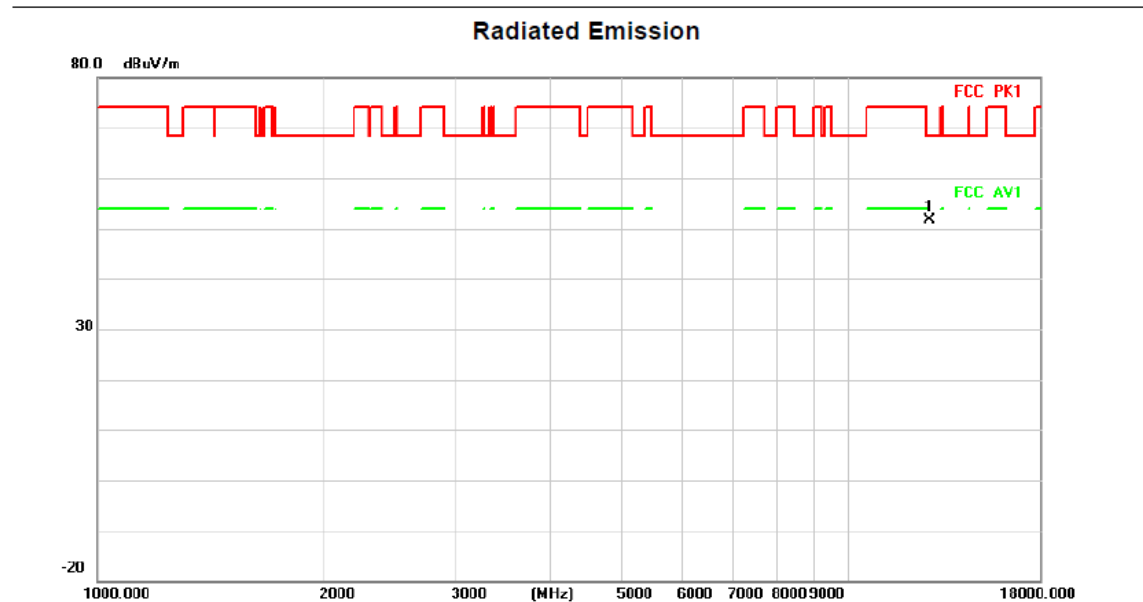
Test Channel:91

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	12810.000	3.17	48.62	51.79	68.20	-16.41	peak

HORIZONTAL



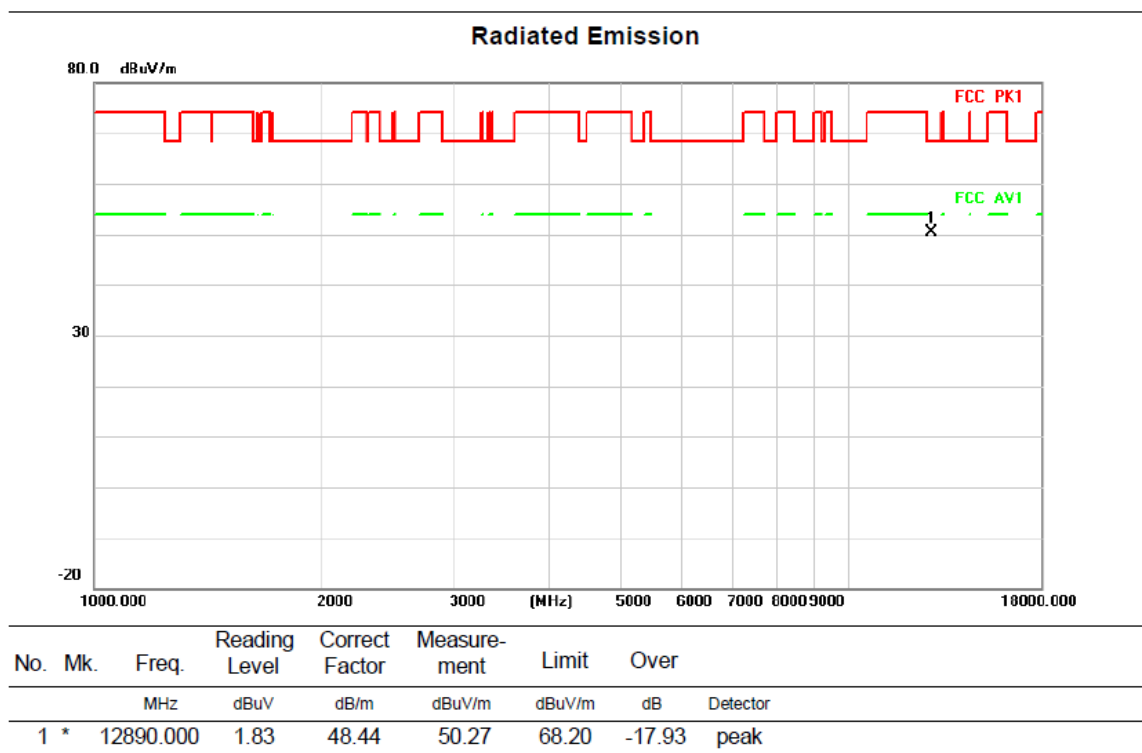
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	12810.000	3.09	48.62	51.71	68.20	-16.49	peak

Above 1G (1GHz~18GHz)

Test mode:11AX40MIMO

Test Channel:99

VERTICAL



HORIZONTAL

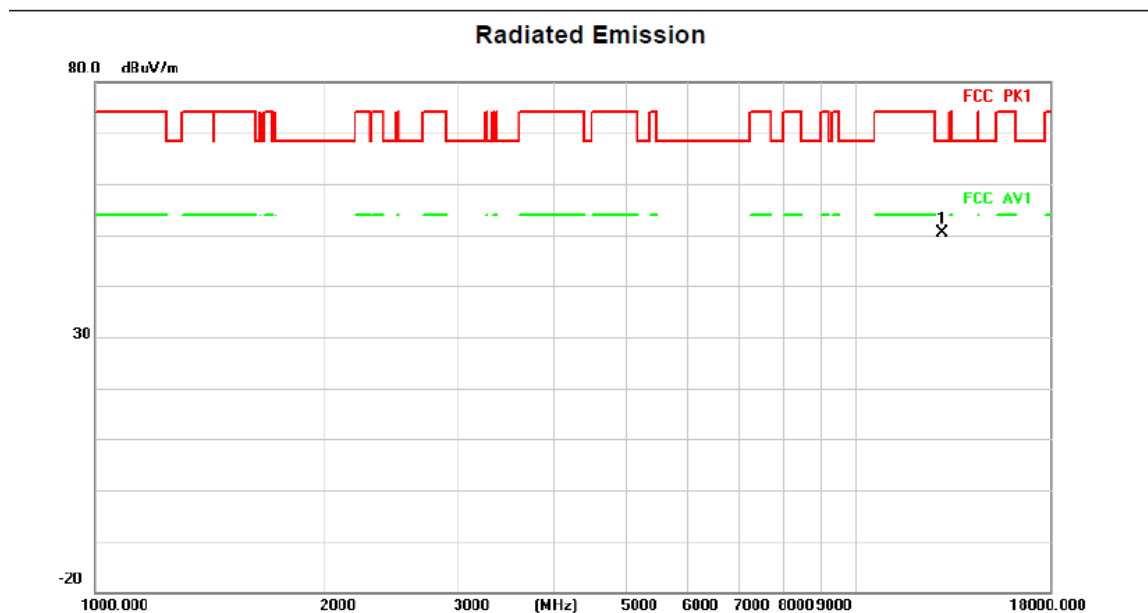


Above 1G (1GHz~18GHz)

Test mode:11AX40MIMO

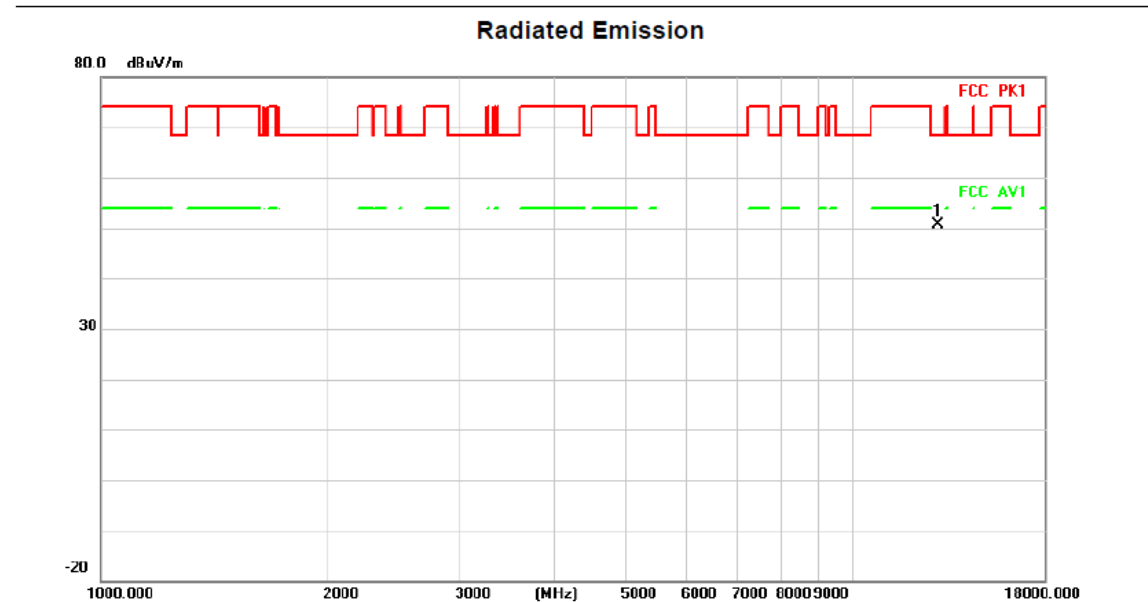
Test Channel:107

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	12970.000	1.39	48.97	50.36	68.20	-17.84	peak

HORIZONTAL



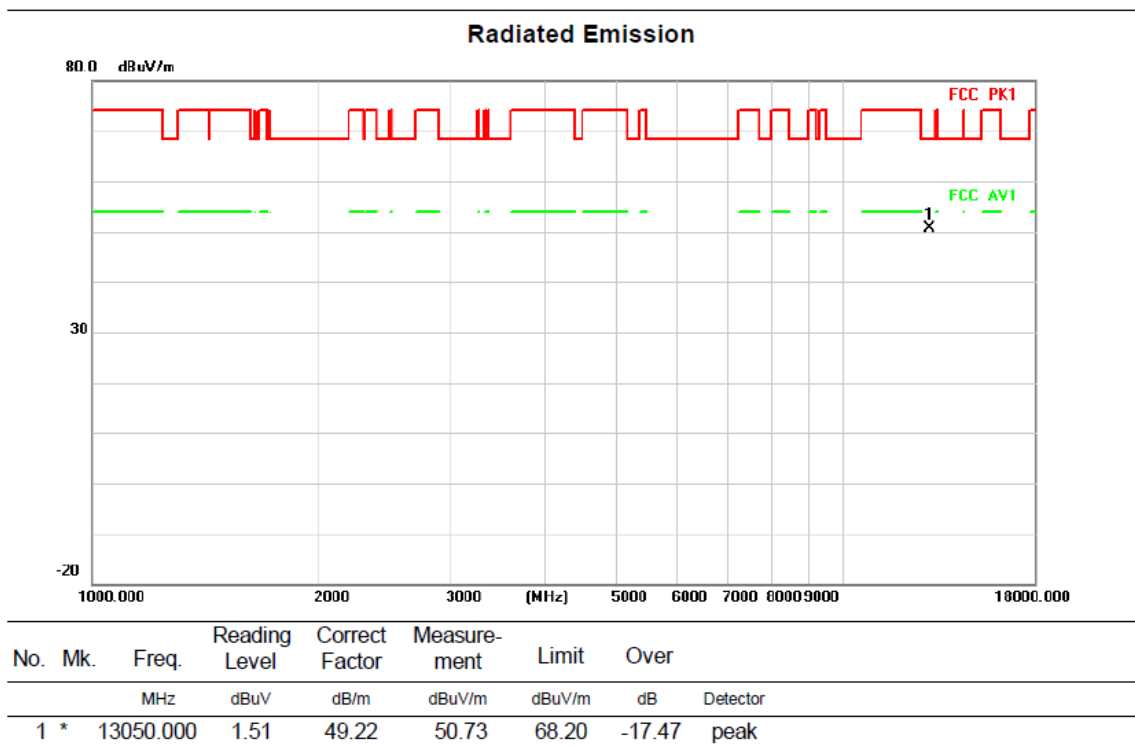
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	12970.000	1.68	48.97	50.65	68.20	-17.55	peak

Above 1G (1GHz~18GHz)

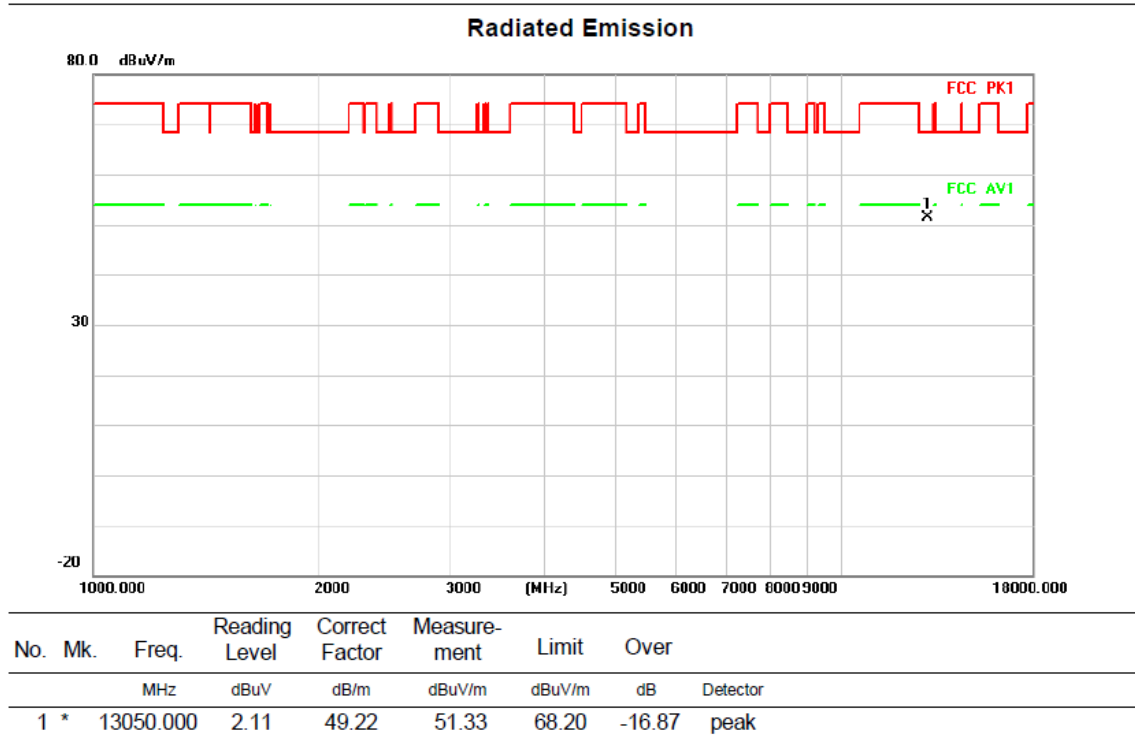
Test mode:11AX40MIMO

Test Channel:115

VERTICAL



HORIZONTAL

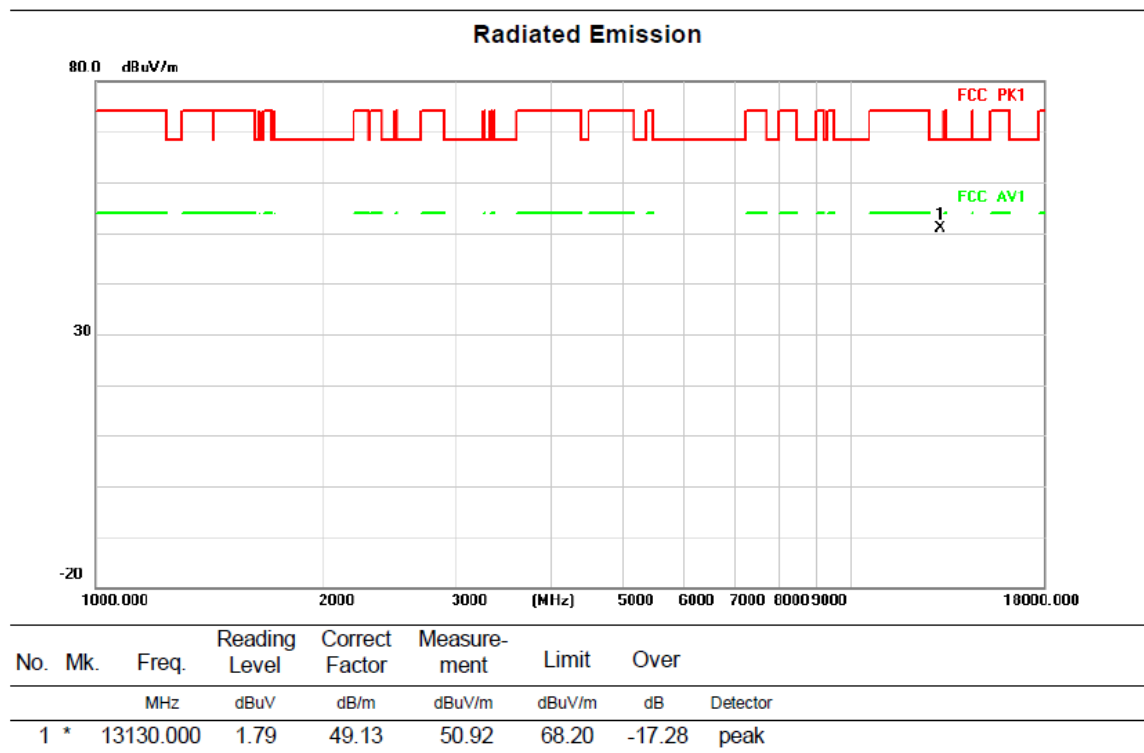


Above 1G (1GHz~18GHz)

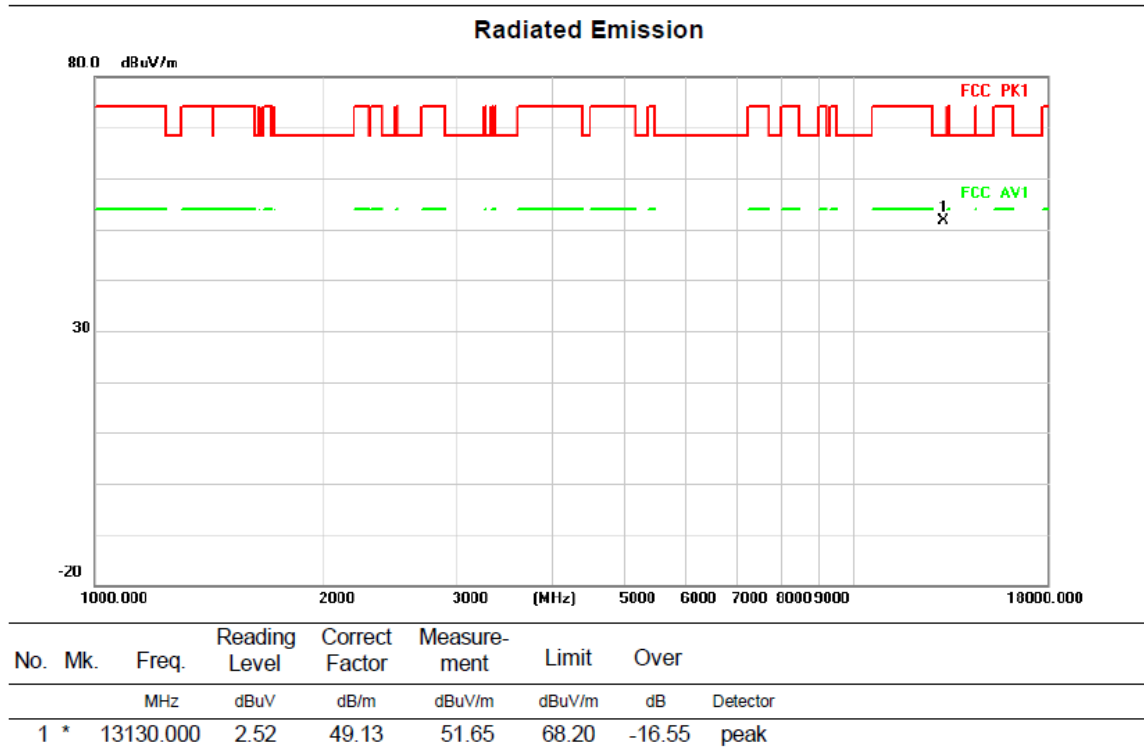
Test mode:11AX40MIMO

Test Channel:123

VERTICAL



HORIZONTAL

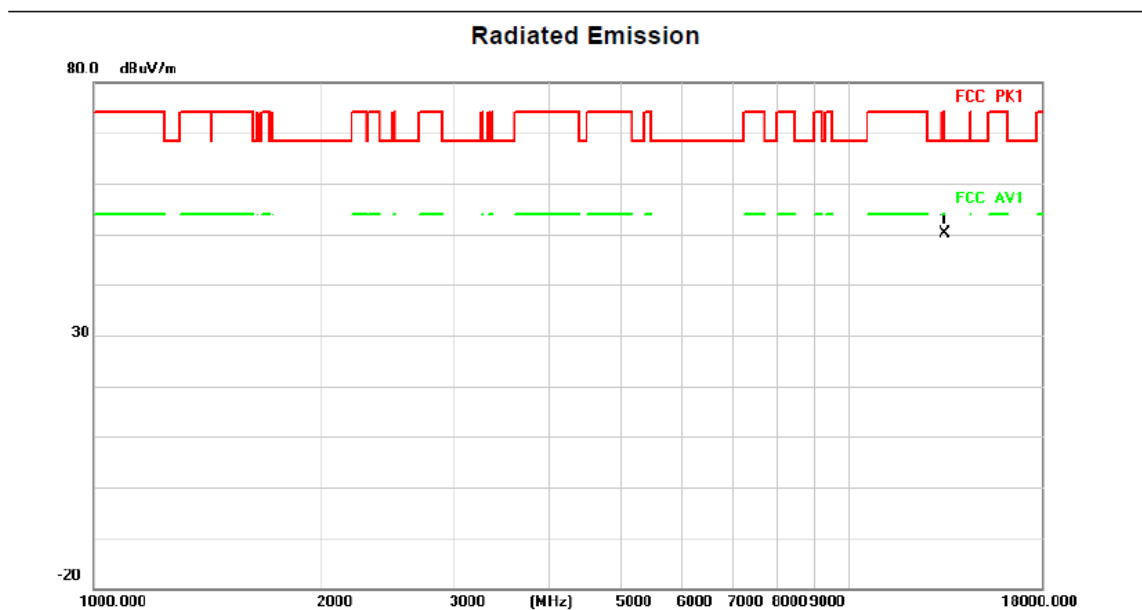


Above 1G (1GHz~18GHz)

Test mode:11AX40MIMO

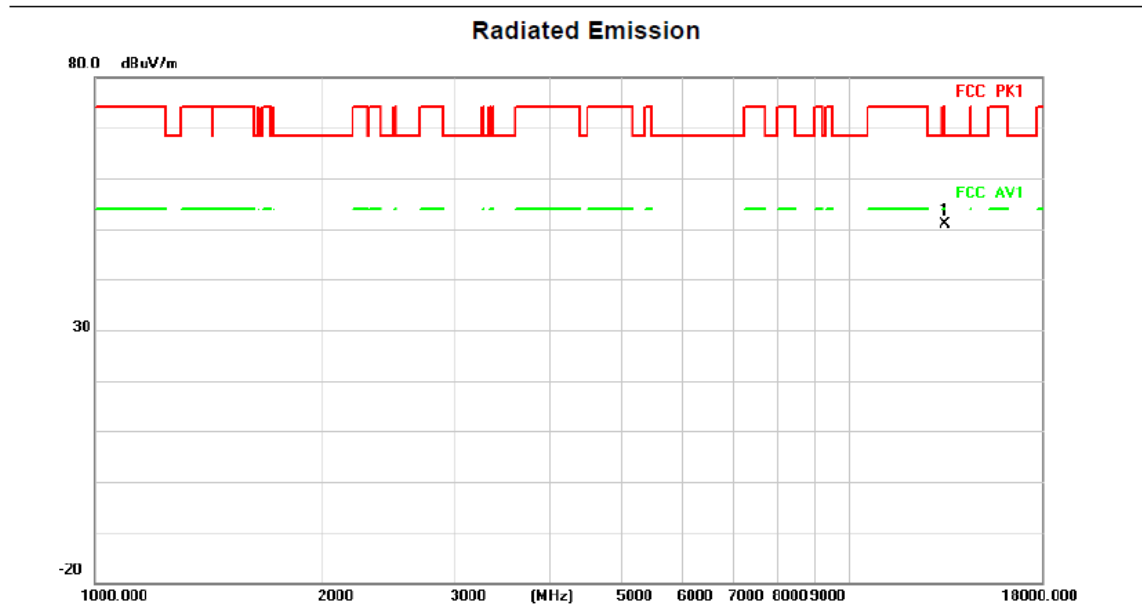
Test Channel:147

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	13370.000	1.59	48.66	50.25	74.00	-23.75	peak

HORIZONTAL



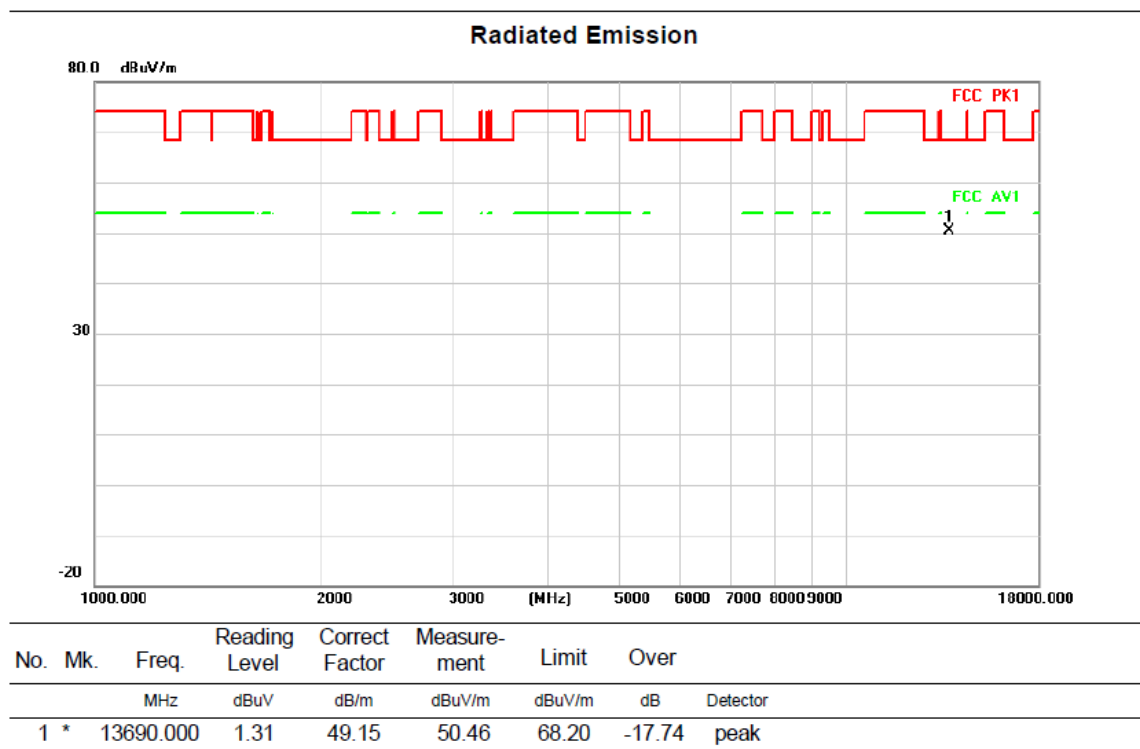
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	13370.000	2.33	48.66	50.99	74.00	-23.01	peak

Above 1G (1GHz~18GHz)

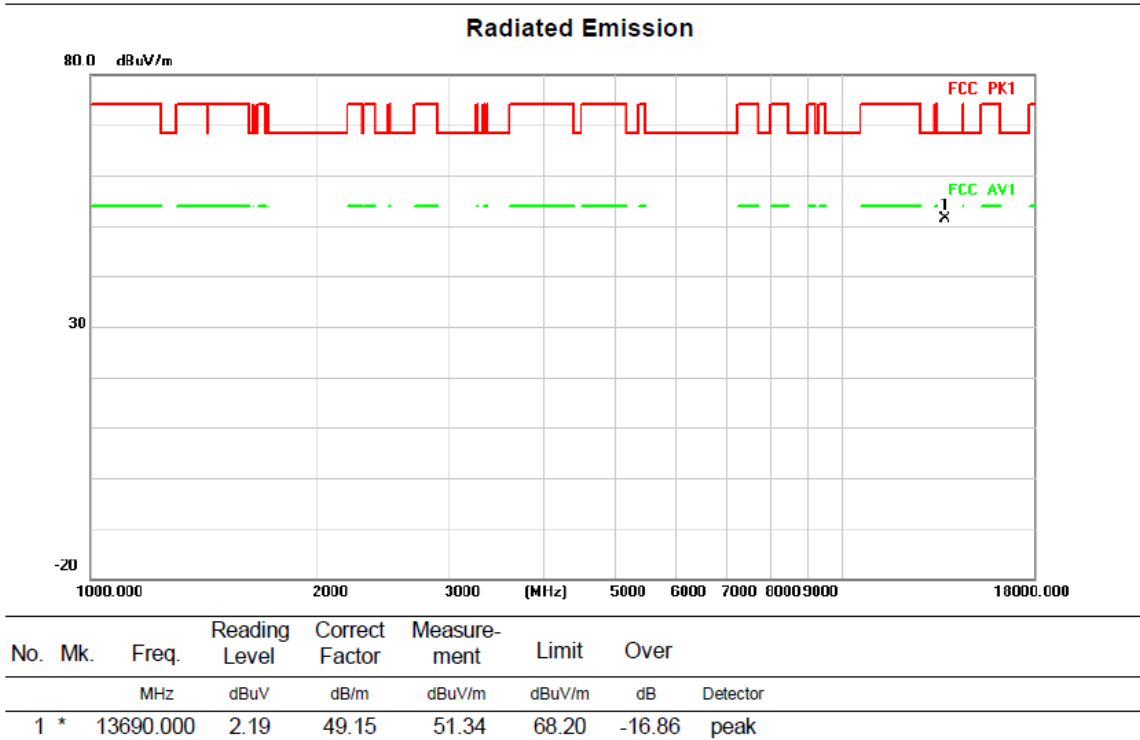
Test mode:11AX40MIMO

Test Channel:179

VERTICAL



HORIZONTAL

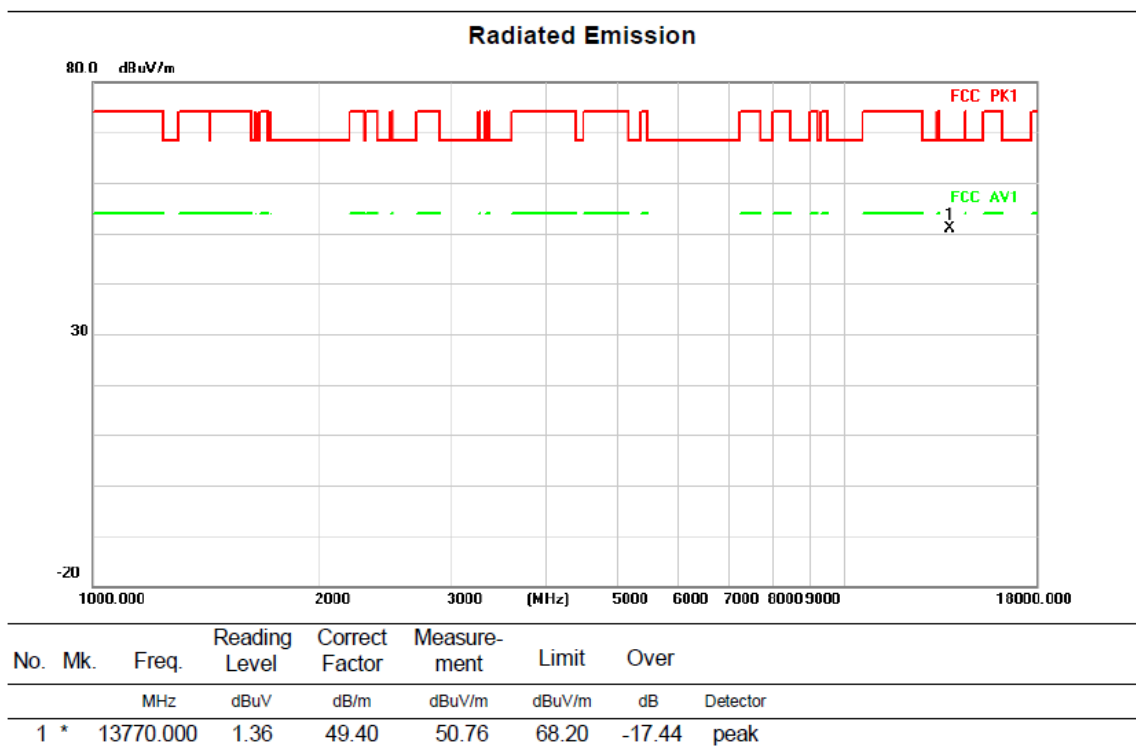


Above 1G (1GHz~18GHz)

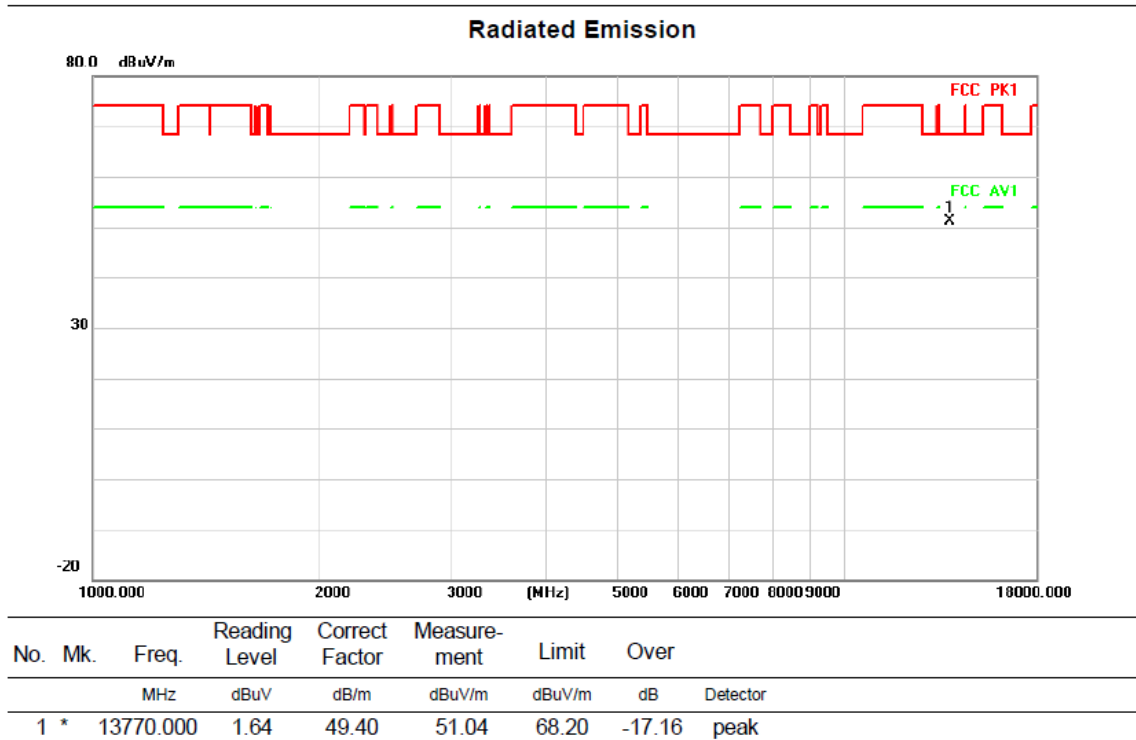
Test mode:11AX40MIMO

Test Channel:187

VERTICAL



HORIZONTAL

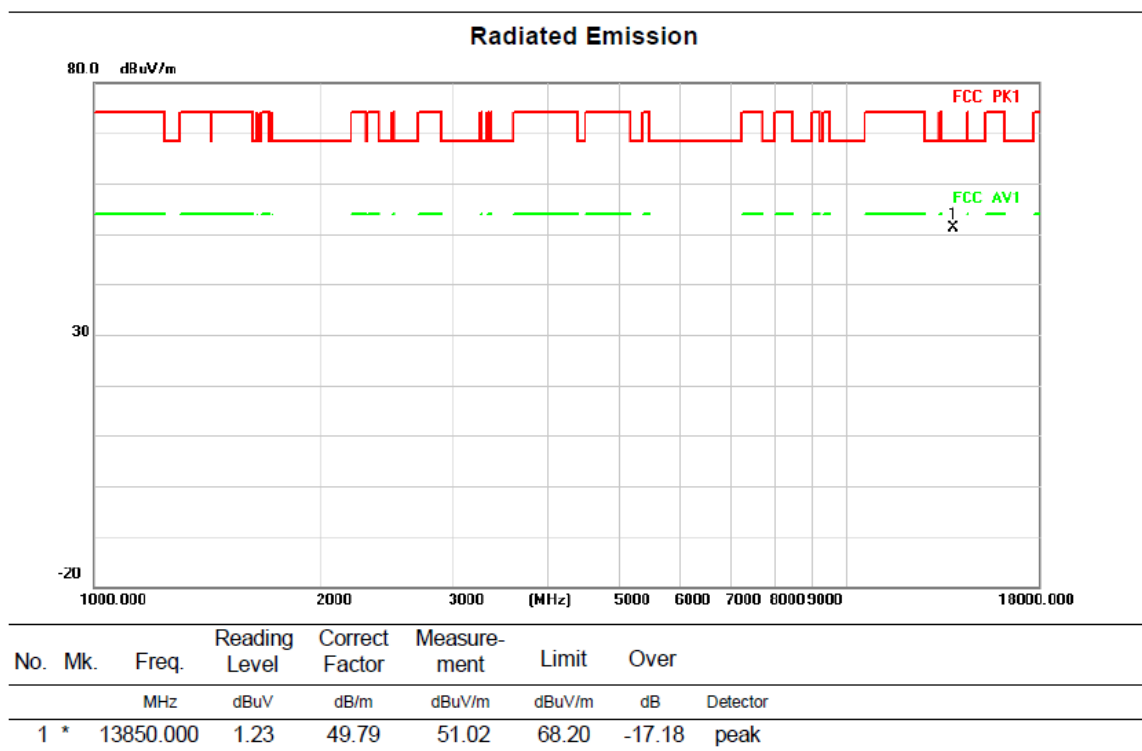


Above 1G (1GHz~18GHz)

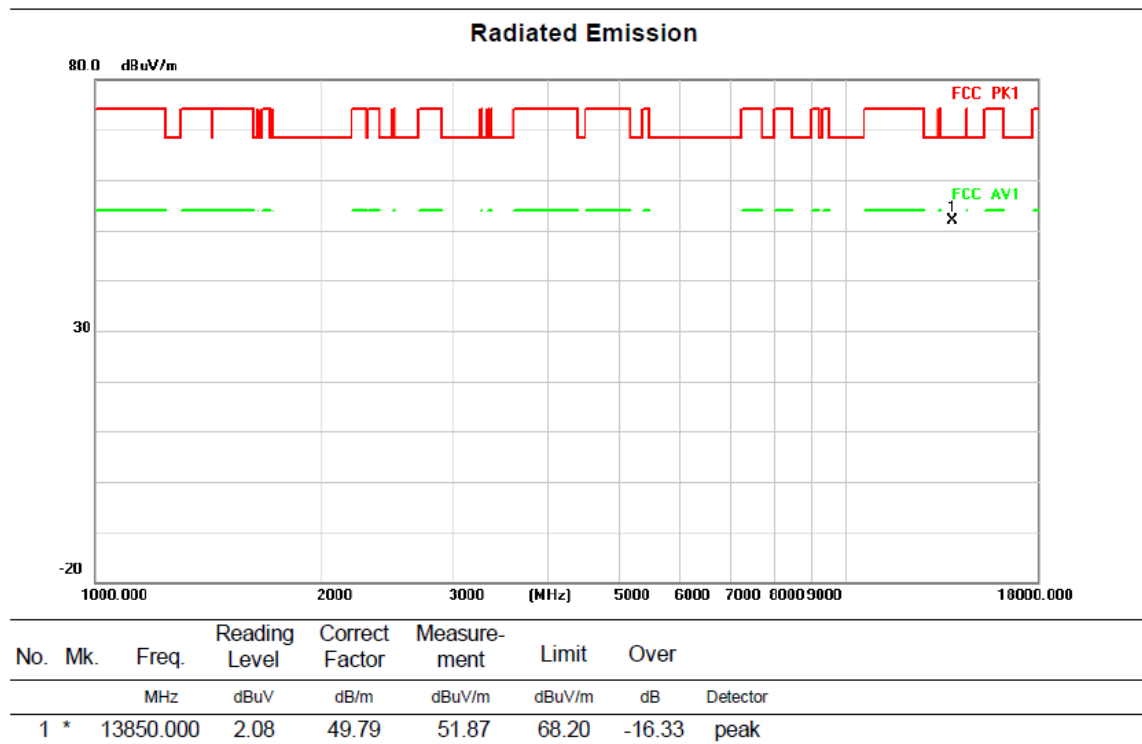
Test mode:11AX40MIMO

Test Channel:195

VERTICAL



HORIZONTAL

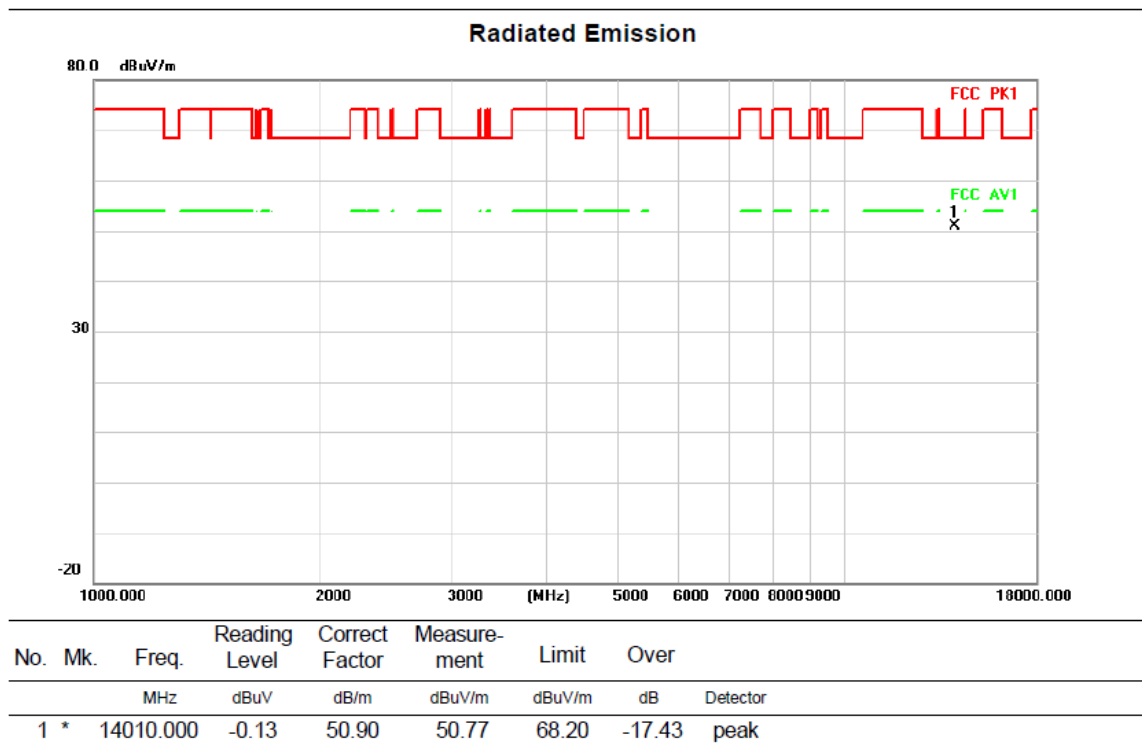


Above 1G (1GHz~18GHz)

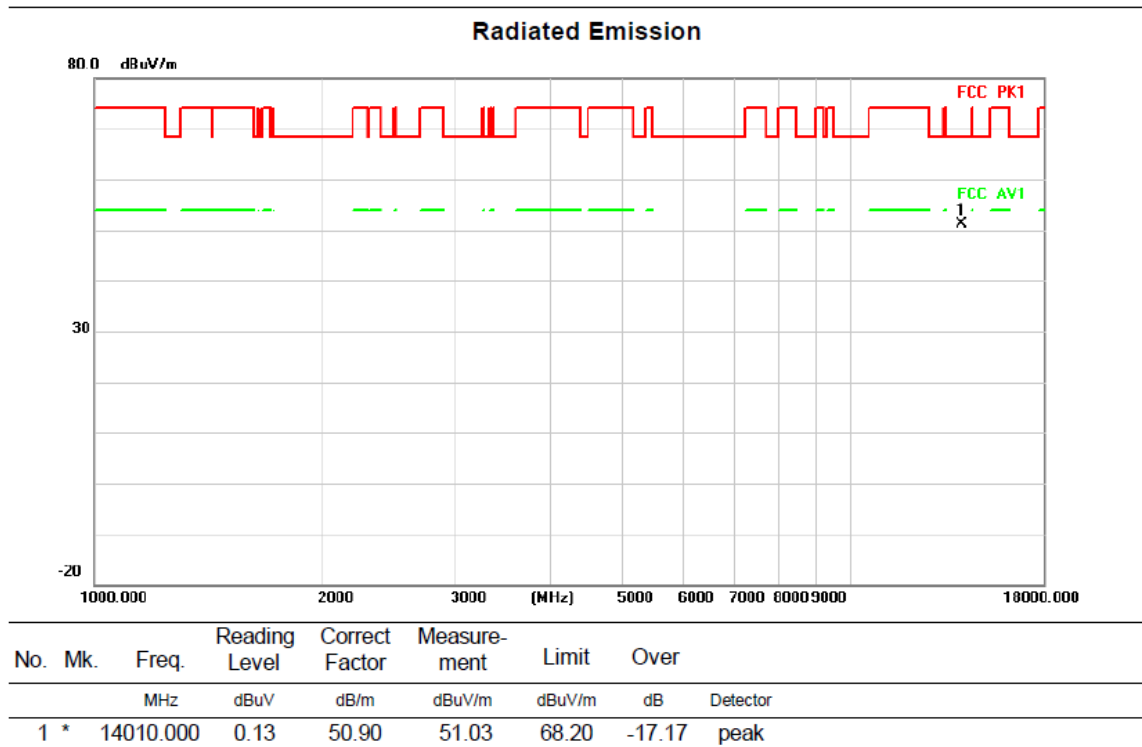
Test mode:11AX40MIMO

Test Channel:211

VERTICAL



HORIZONTAL



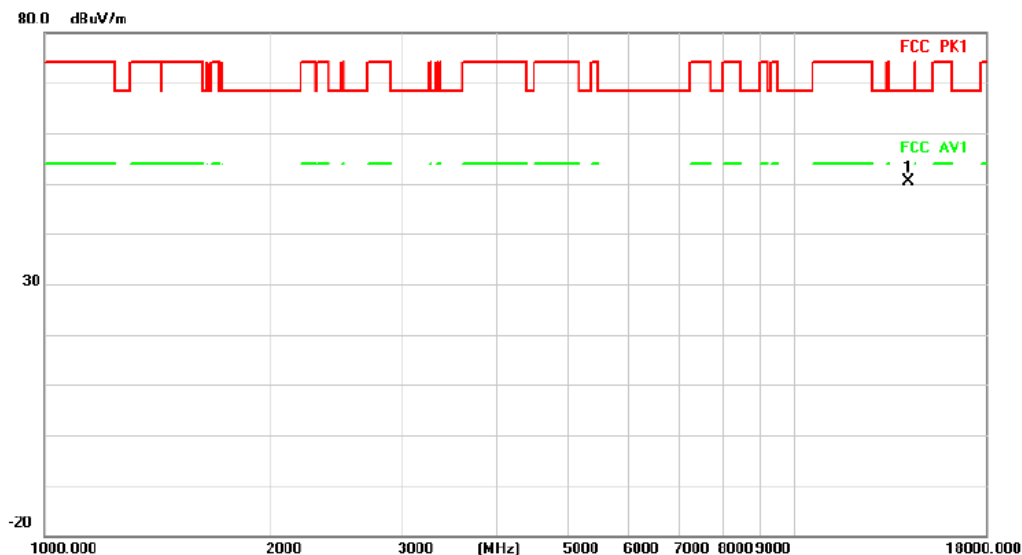
Above 1G (1GHz~18GHz)

Test mode:11AX40MIMO

Test Channel:227

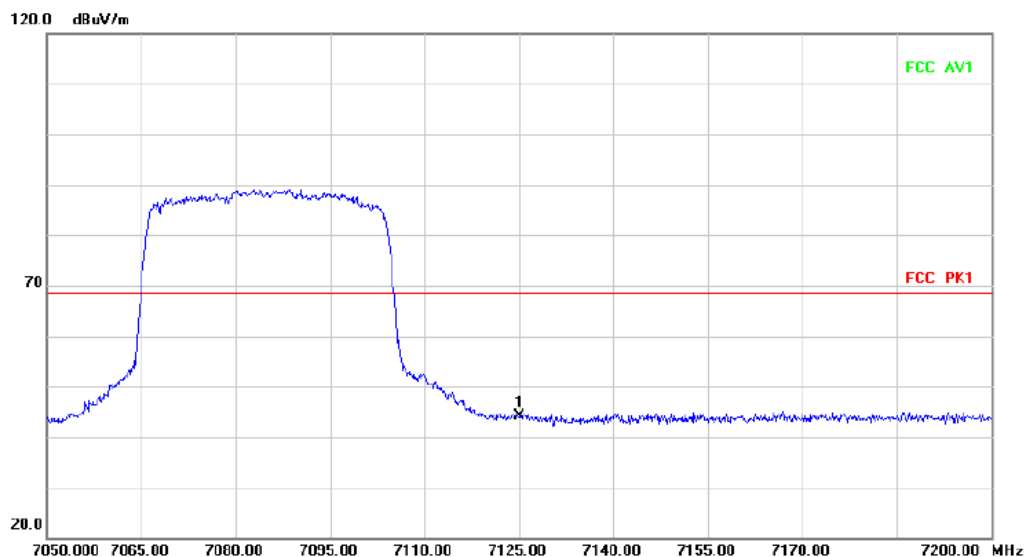
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	14170.000	-1.26	51.53	50.27	68.20	-17.93
							peak

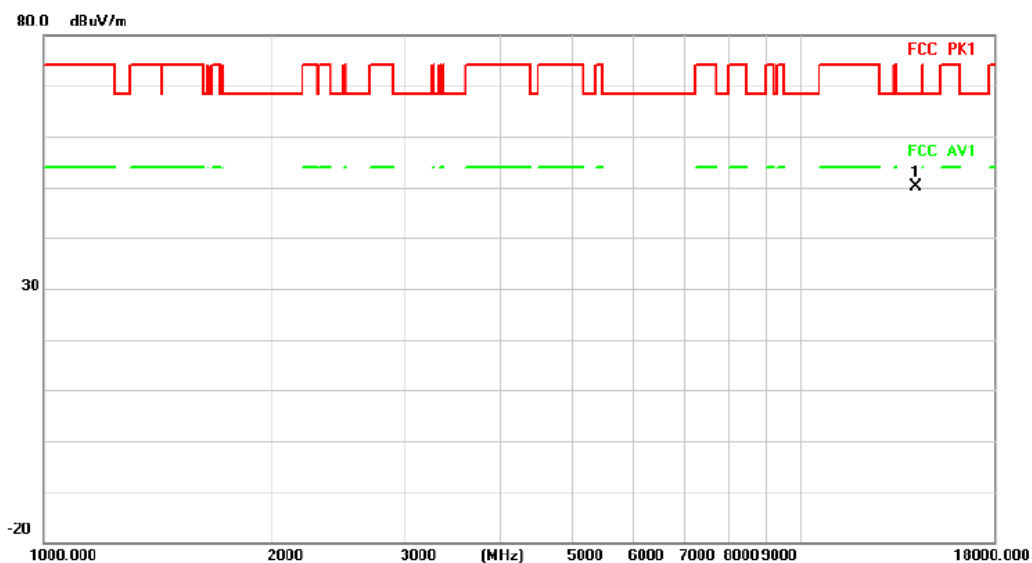
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	7125.000	32.85	11.19	44.04	68.20	-24.16
							peak

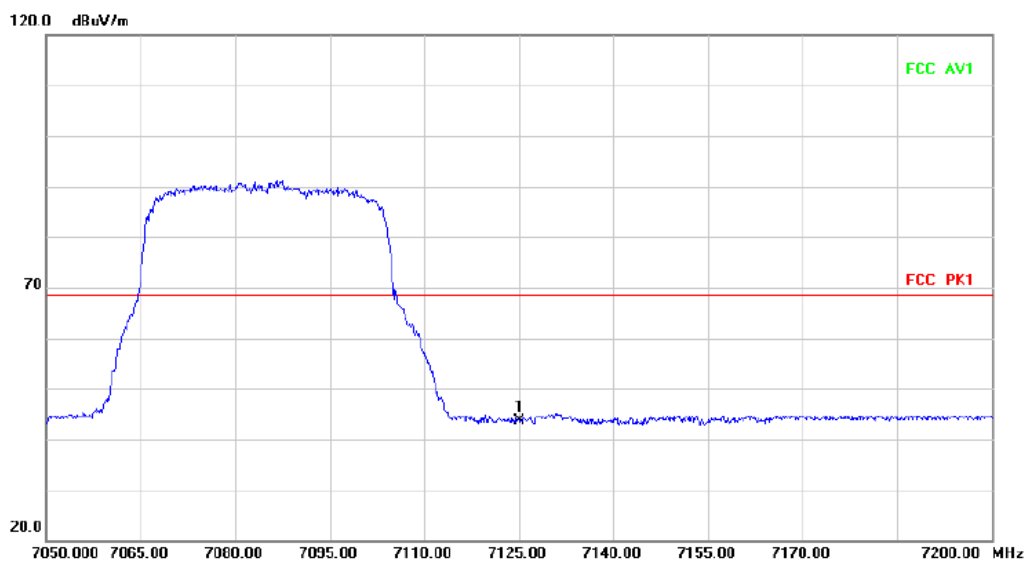
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14170.000	-1.47	51.53	50.06	68.20	-18.14	peak

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	7125.000	32.47	11.19	43.66	68.20	-24.54	peak

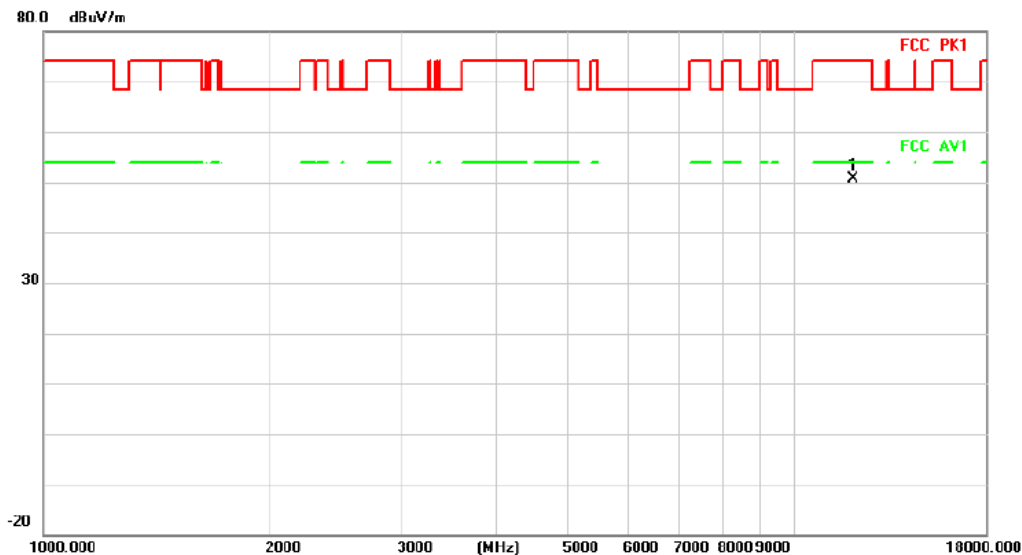
Above 1G (1GHz~18GHz)

Test mode:11AX80MIMO

Test Channel:7

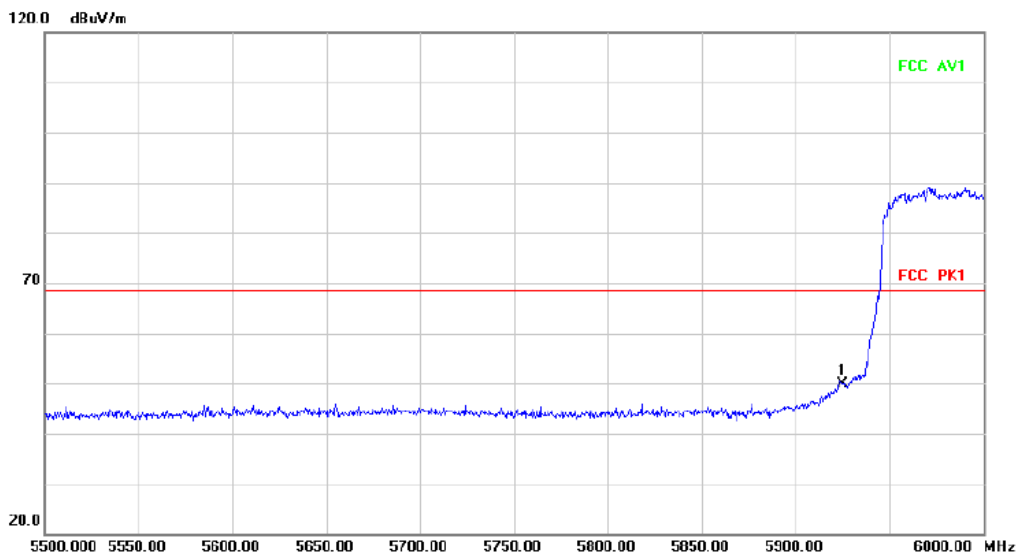
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	11970.000	1.92	48.74	50.66	74.00	-23.34 peak

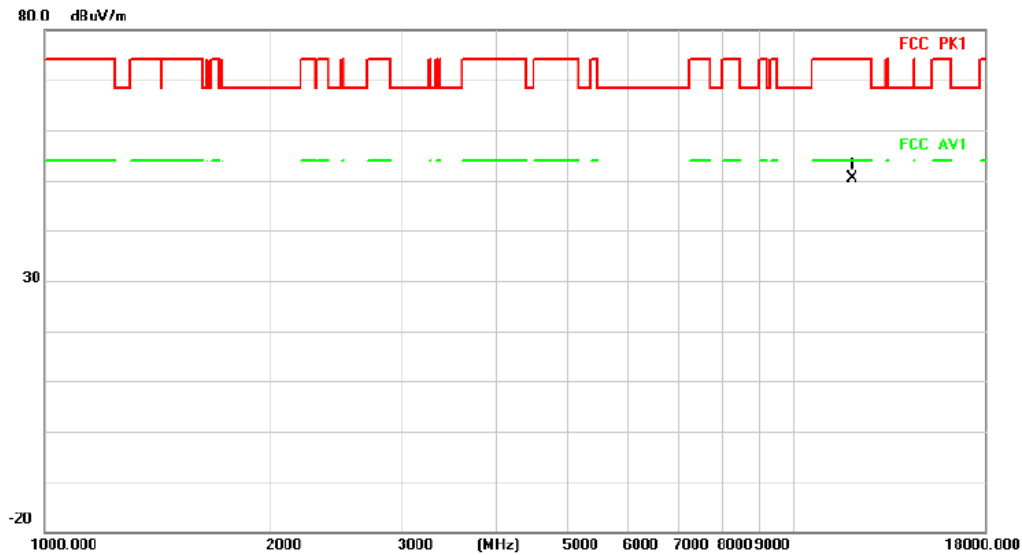
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	5925.000	43.55	6.28	49.83	68.20	-18.37 peak

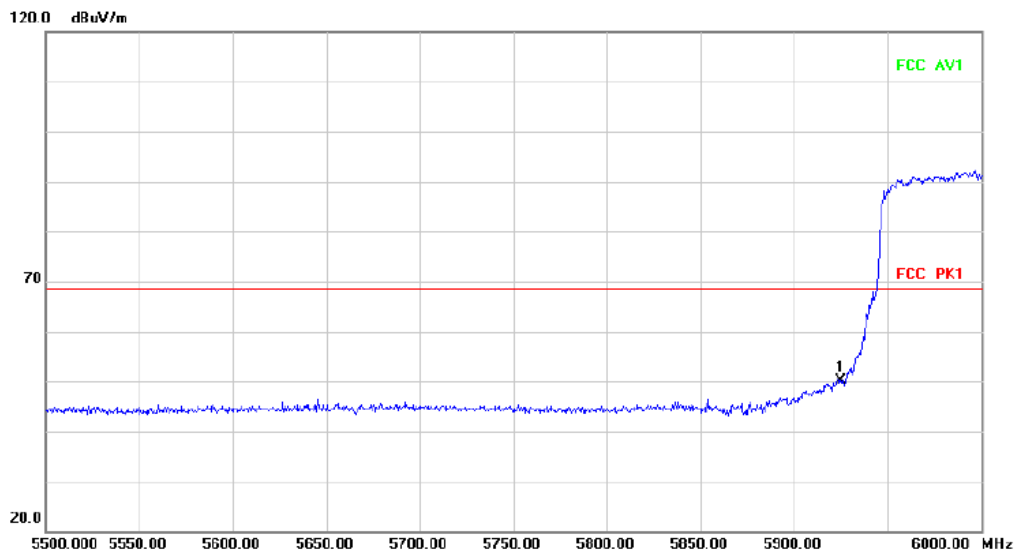
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	11970.000	1.63	48.74	50.37	74.00	-23.63	peak

Radiated Emission



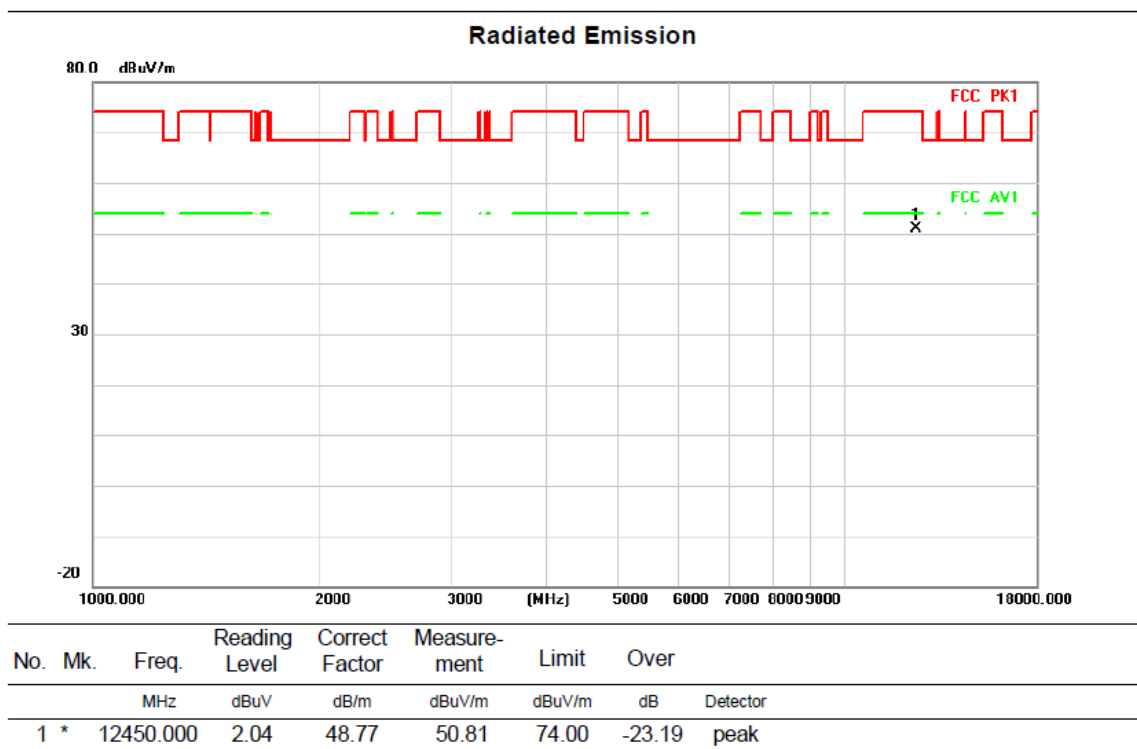
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	5925.000	43.92	6.28	50.20	68.20	-18.00	peak

Above 1G (1GHz~18GHz)

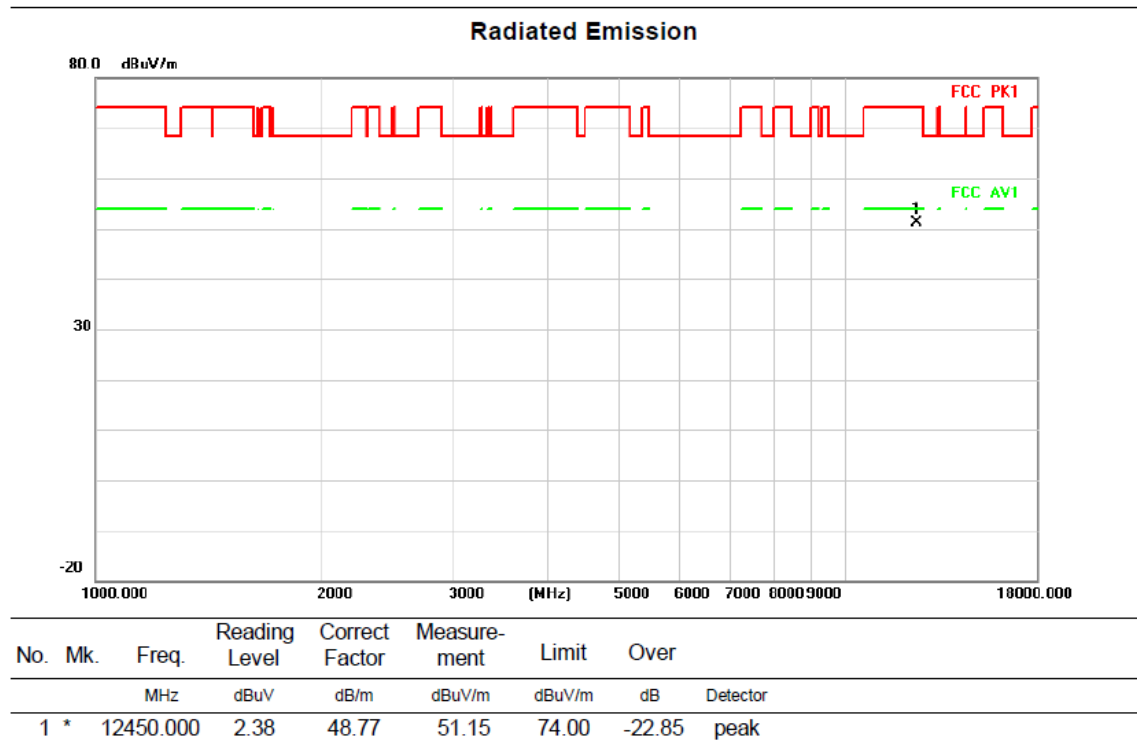
Test mode:11AX80MIMO

Test Channel:55

VERTICAL



HORIZONTAL

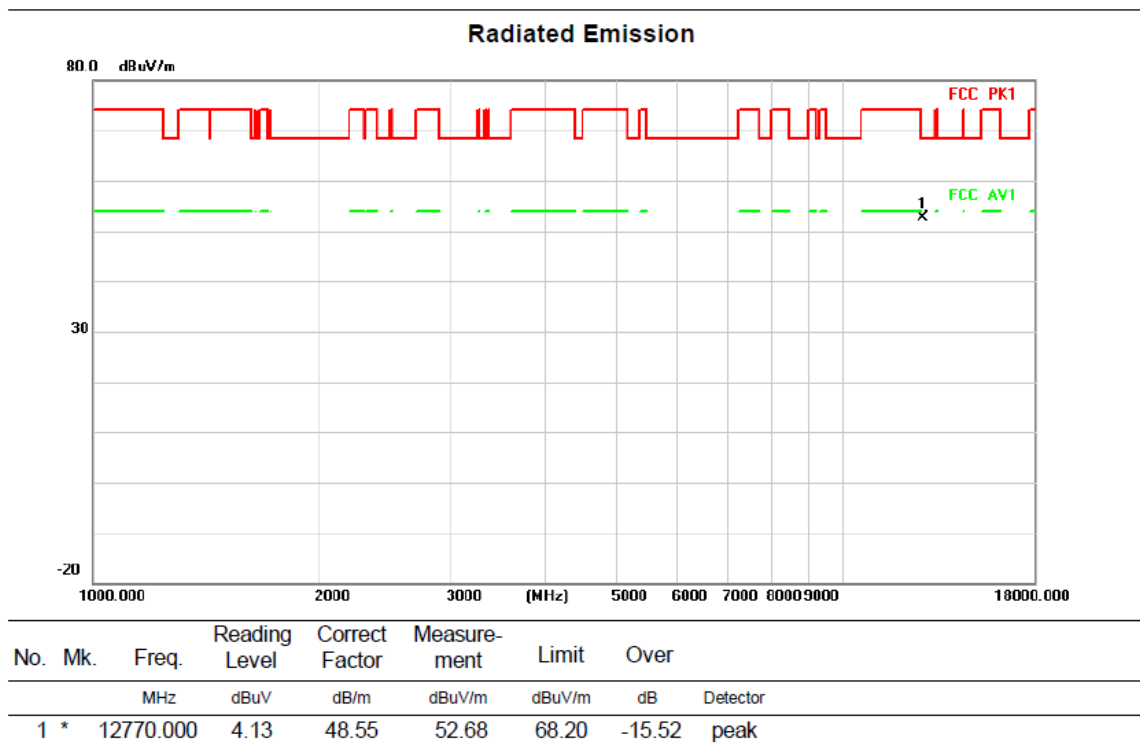


Above 1G (1GHz~18GHz)

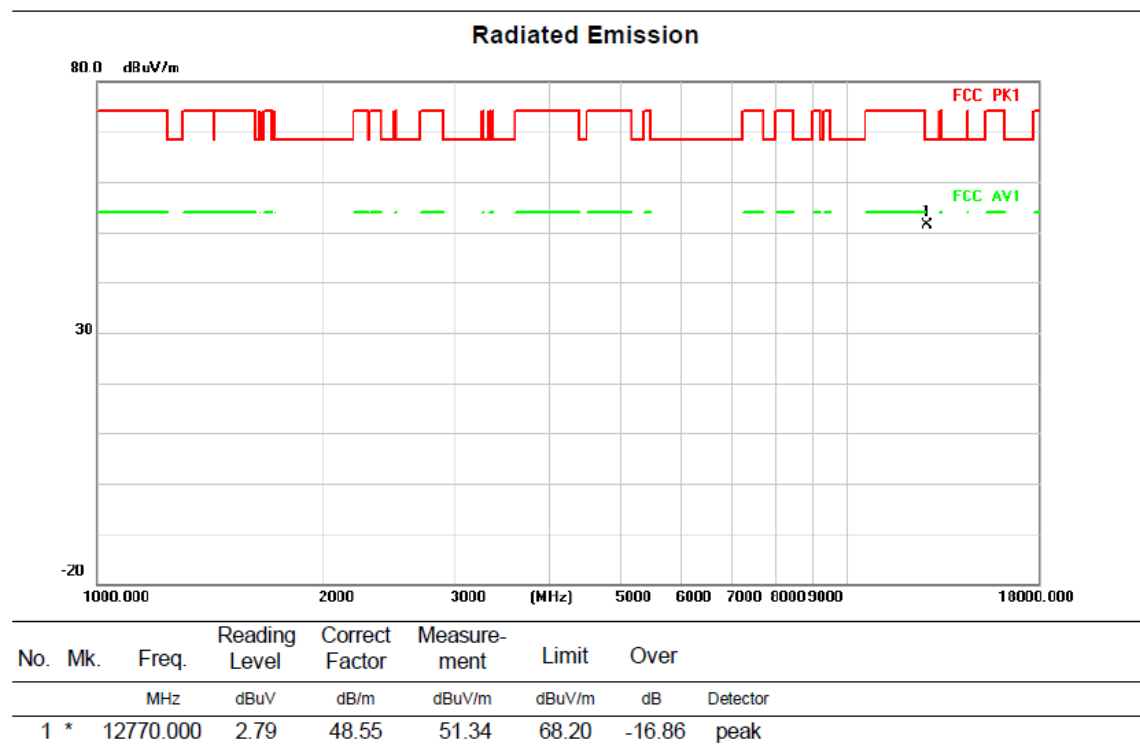
Test mode:11AX80MIMO

Test Channel:87

VERTICAL



HORIZONTAL

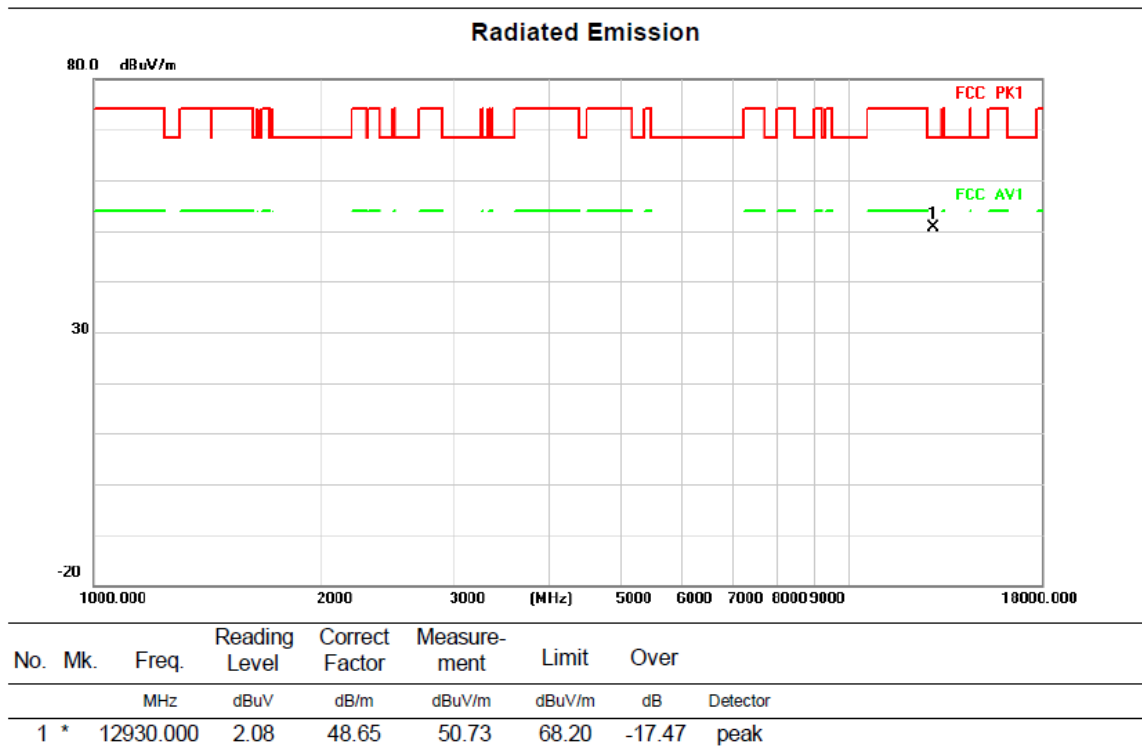


Above 1G (1GHz~18GHz)

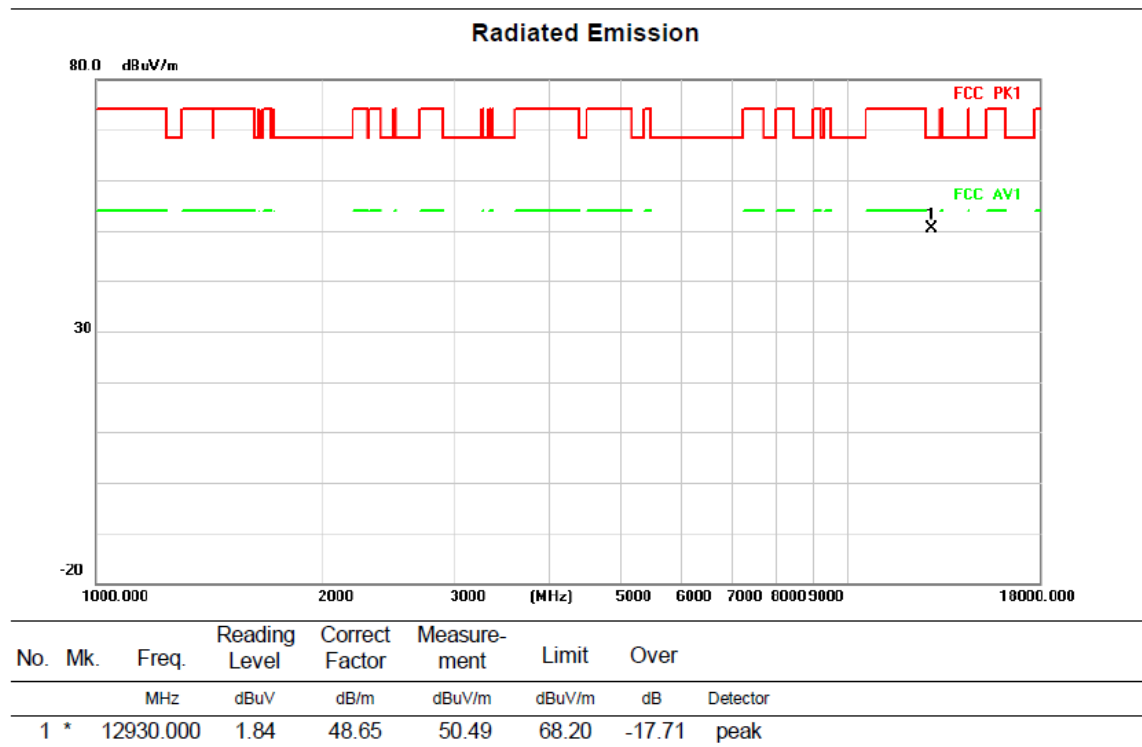
Test mode:11AX80MIMO

Test Channel:103

VERTICAL



HORIZONTAL

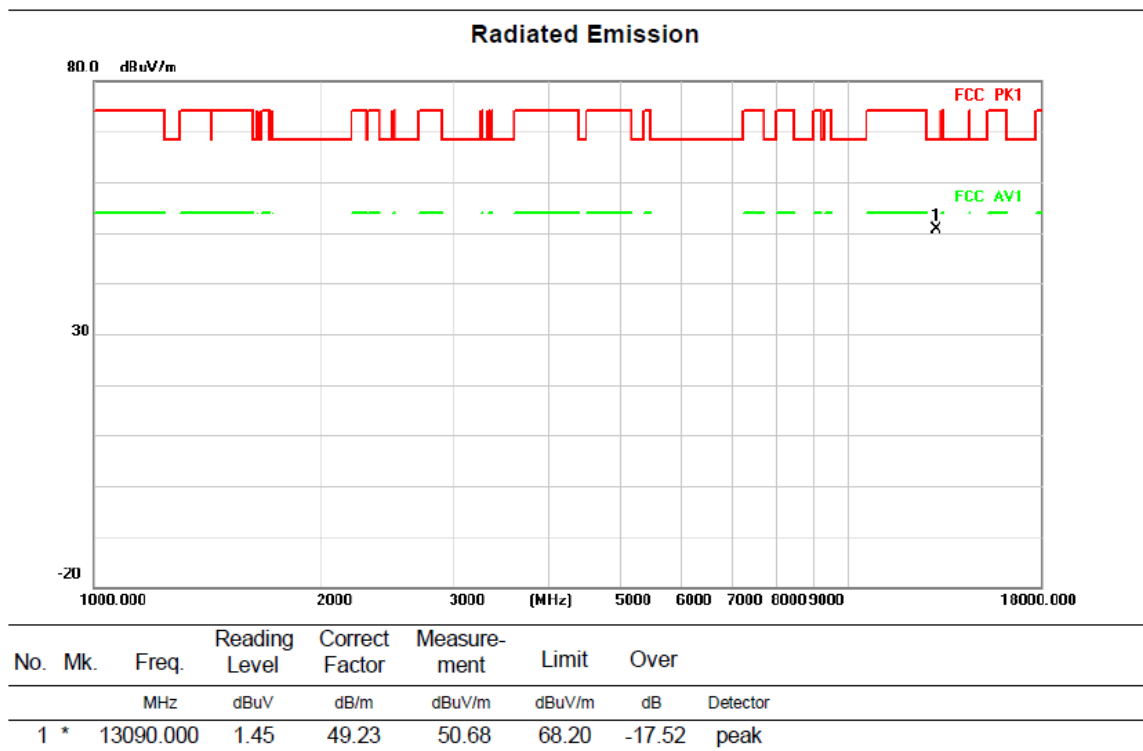


Above 1G (1GHz~18GHz)

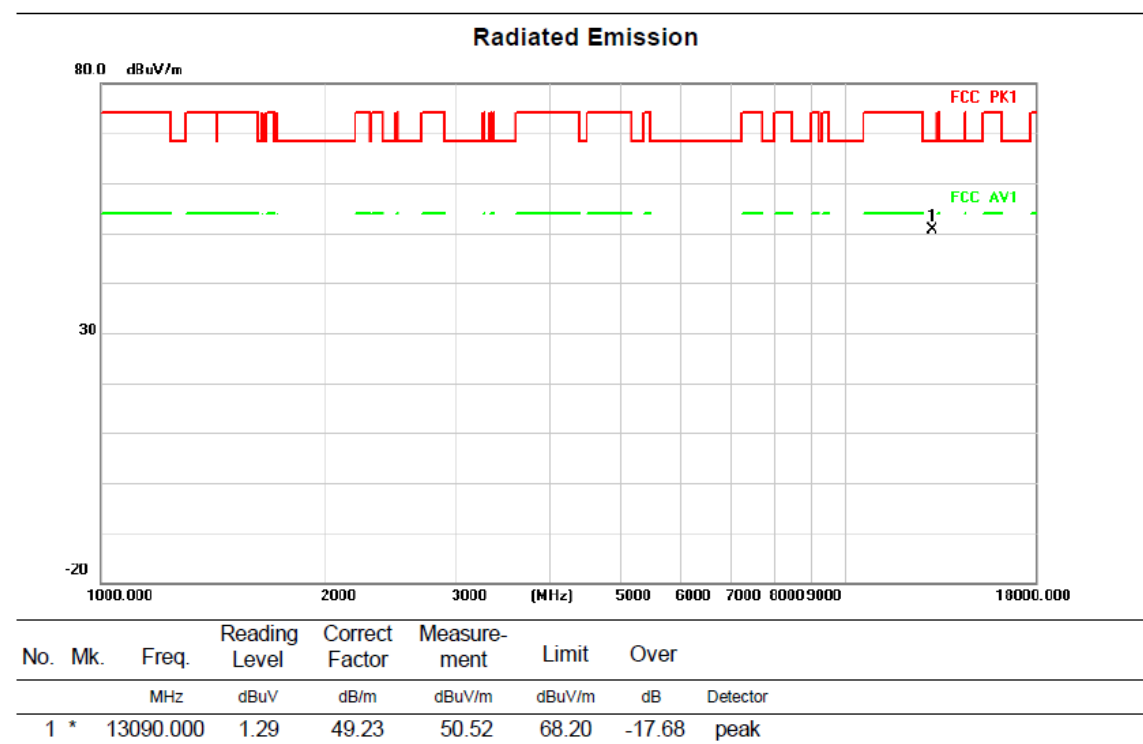
Test mode:11AX80MIMO

Test Channel:119

VERTICAL



HORIZONTAL

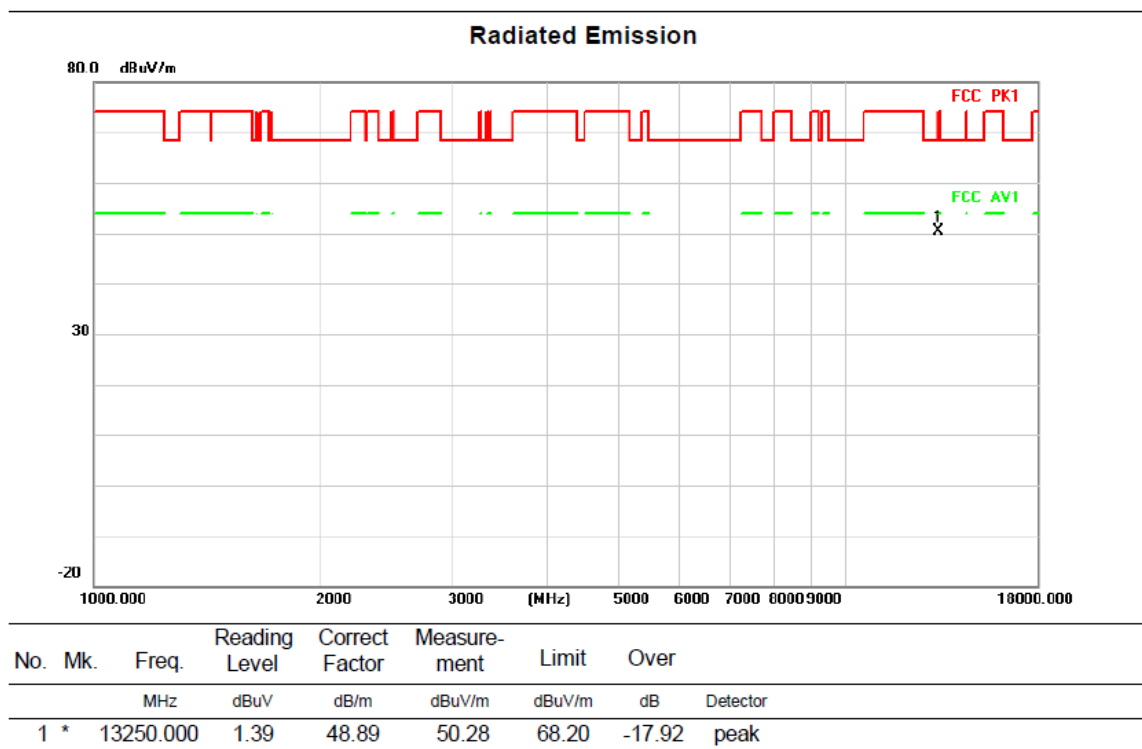


Above 1G (1GHz~18GHz)

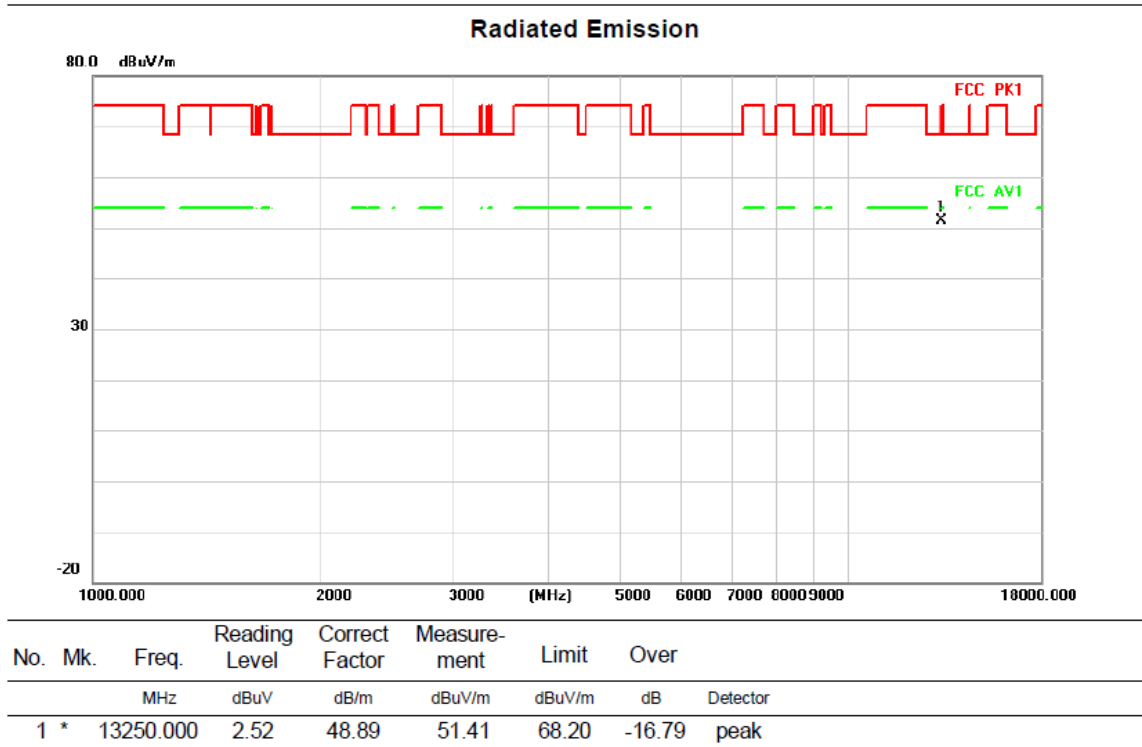
Test mode:11AX80MIMO

Test Channel:135

VERTICAL



HORIZONTAL

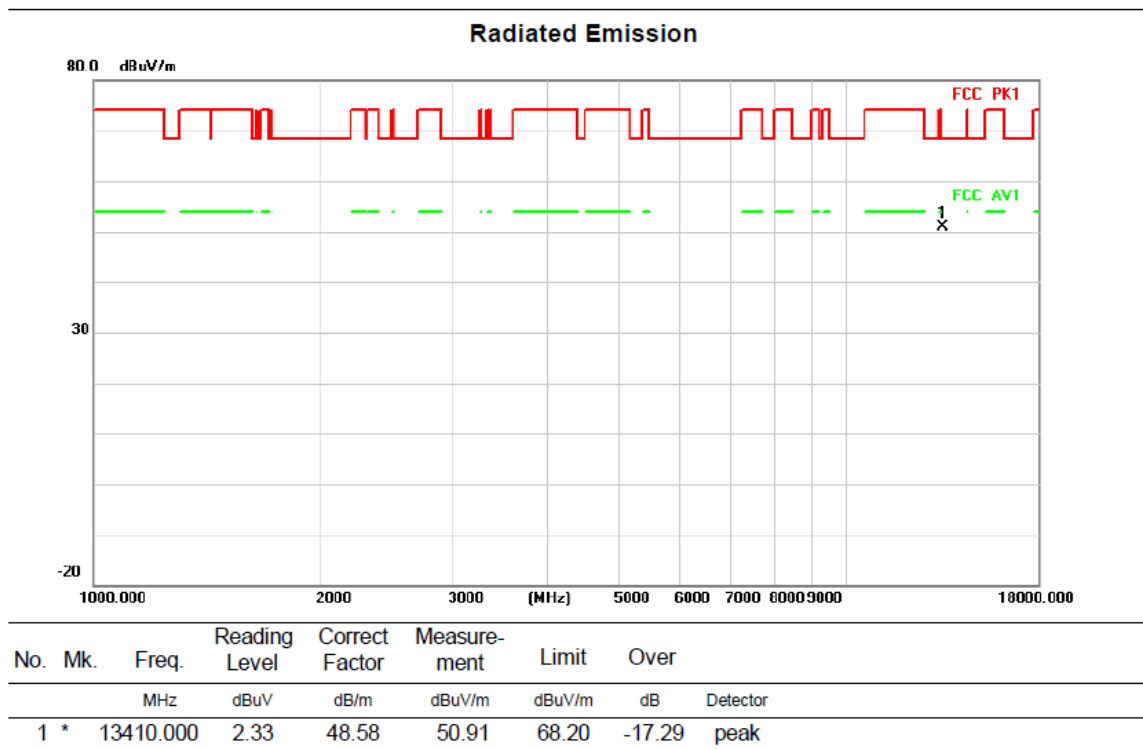


Above 1G (1GHz~18GHz)

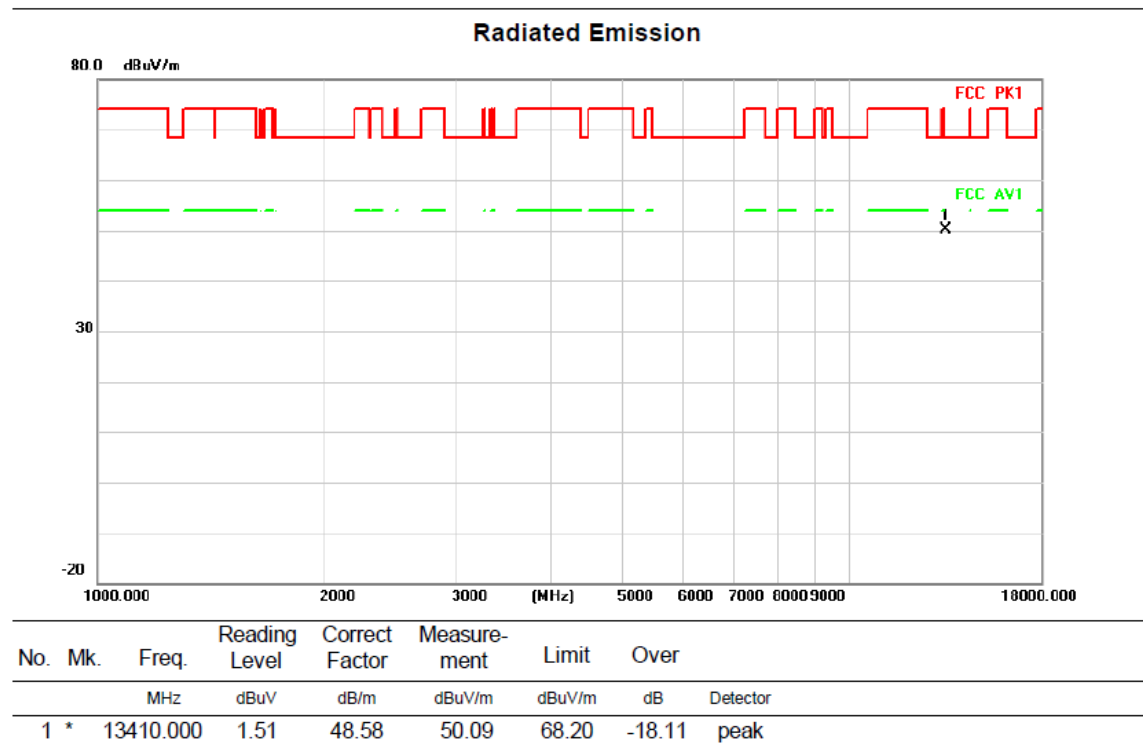
Test mode:11AX80MIMO

Test Channel:151

VERTICAL



HORIZONTAL

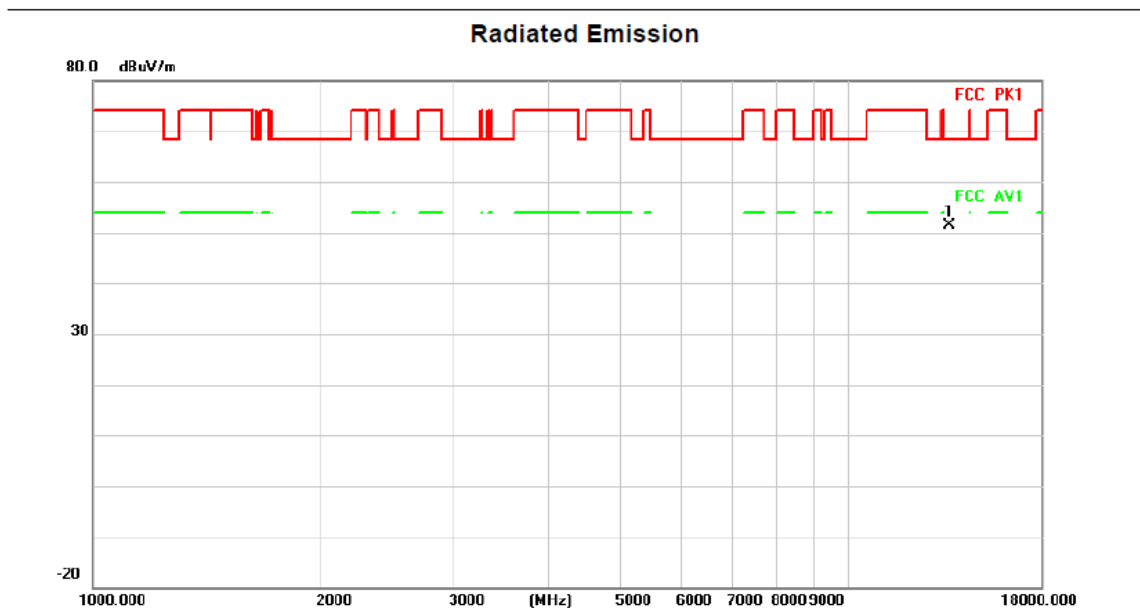


Above 1G (1GHz~18GHz)

Test mode:11AX80MIMO

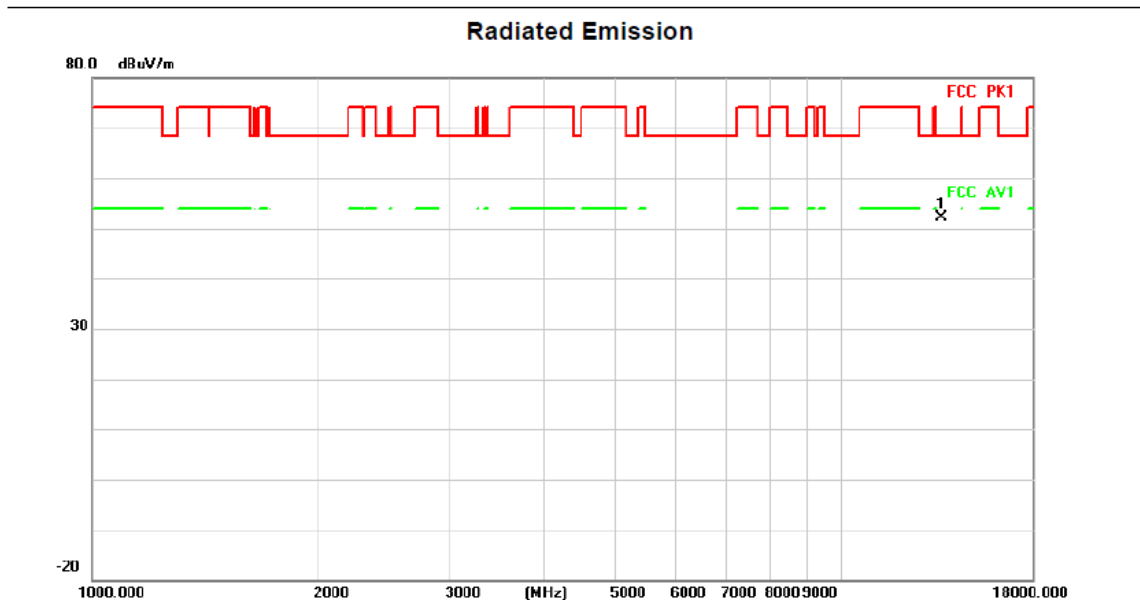
Test Channel:167

VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	13570.000	1.97	49.30	51.27	68.20	-16.93	peak

HORIZONTAL



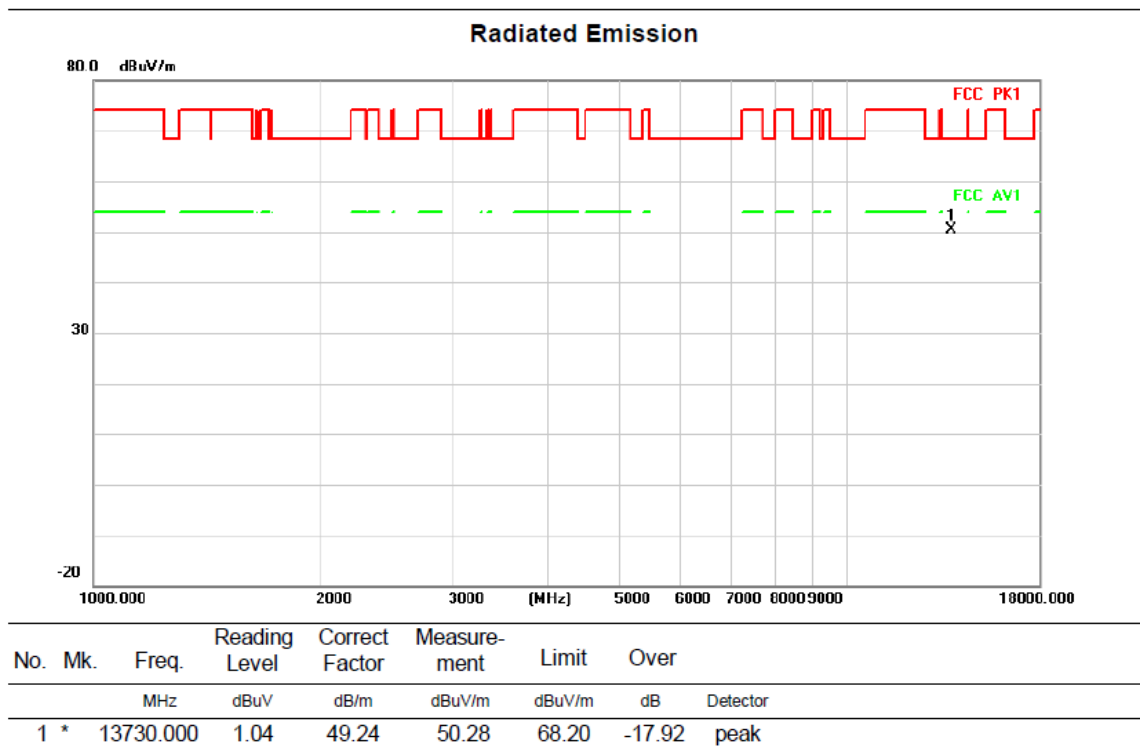
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	13570.000	2.80	49.30	52.10	68.20	-16.10	peak

Above 1G (1GHz~18GHz)

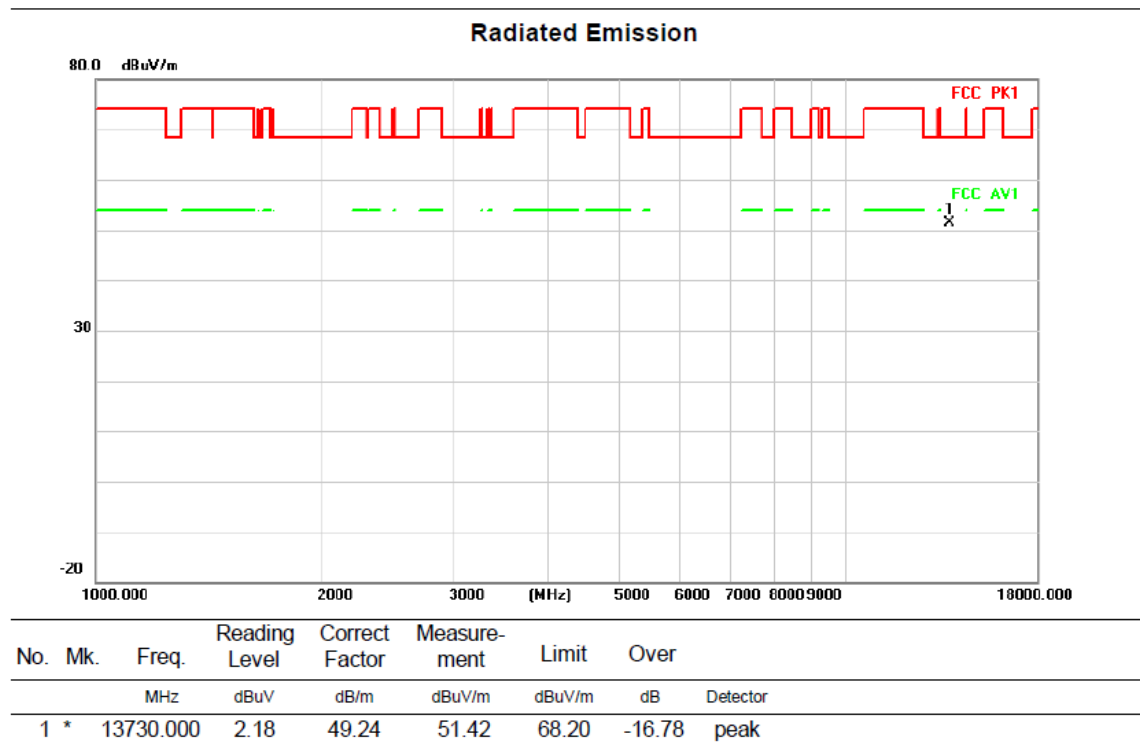
Test mode:11AX80MIMO

Test Channel:183

VERTICAL



HORIZONTAL

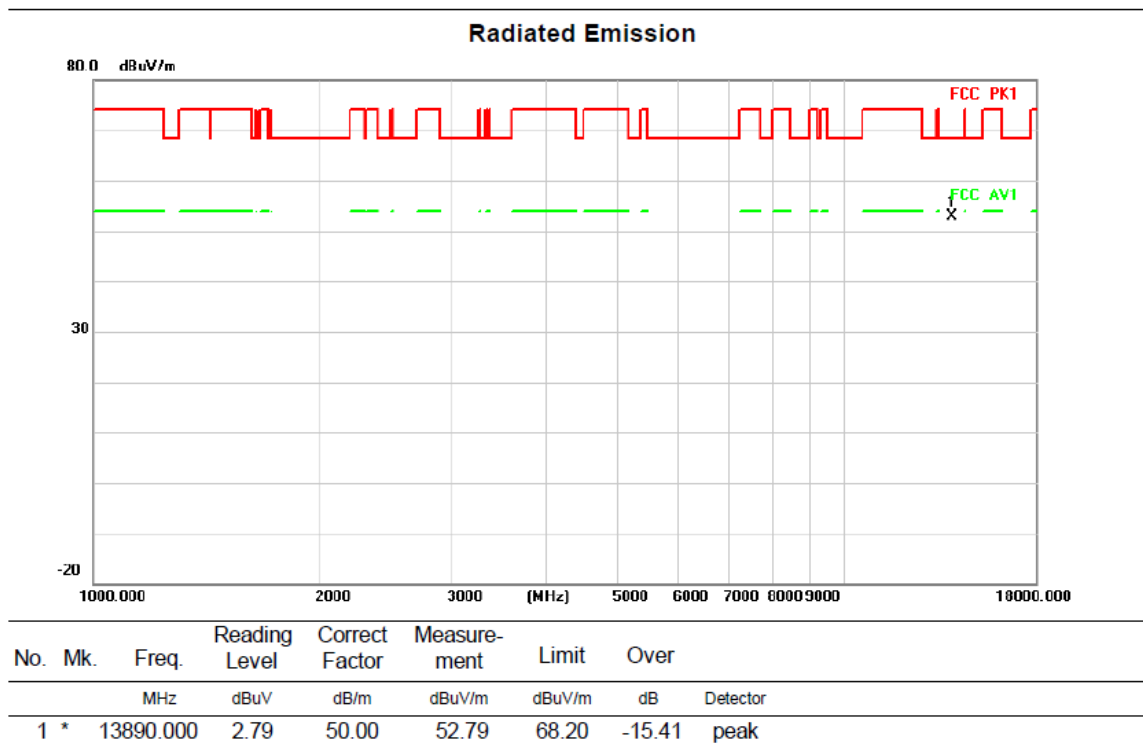


Above 1G (1GHz~18GHz)

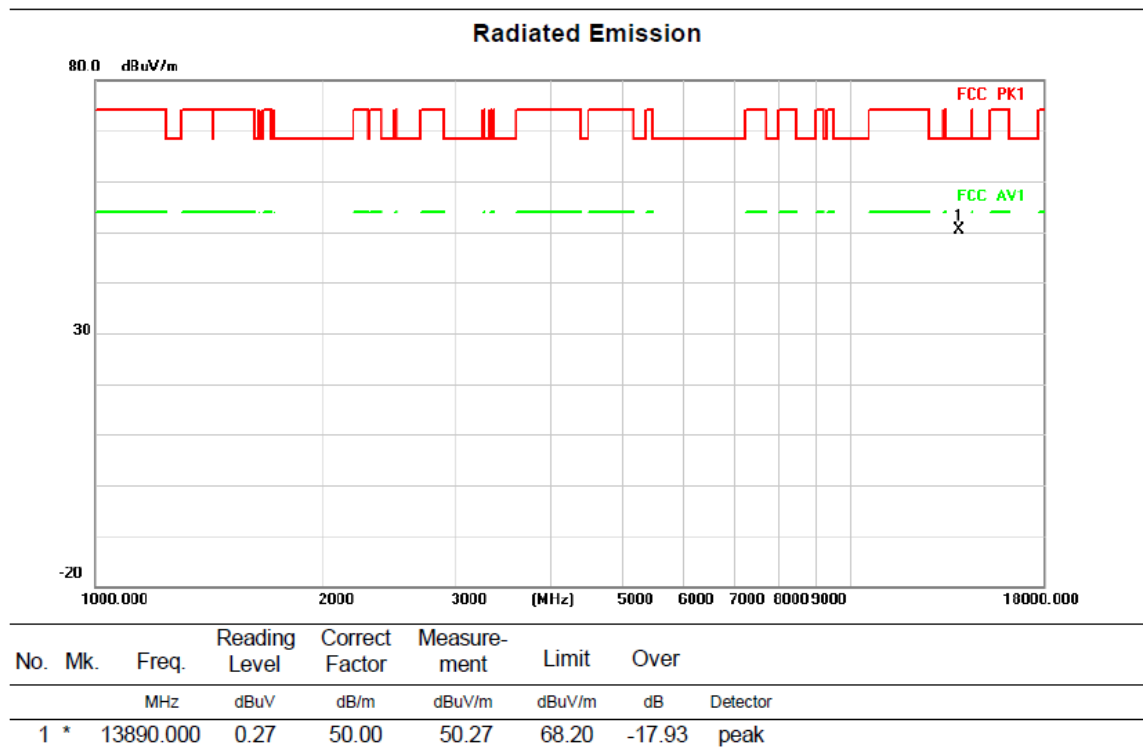
Test mode:11AX80MIMO

Test Channel:199

VERTICAL



HORIZONTAL



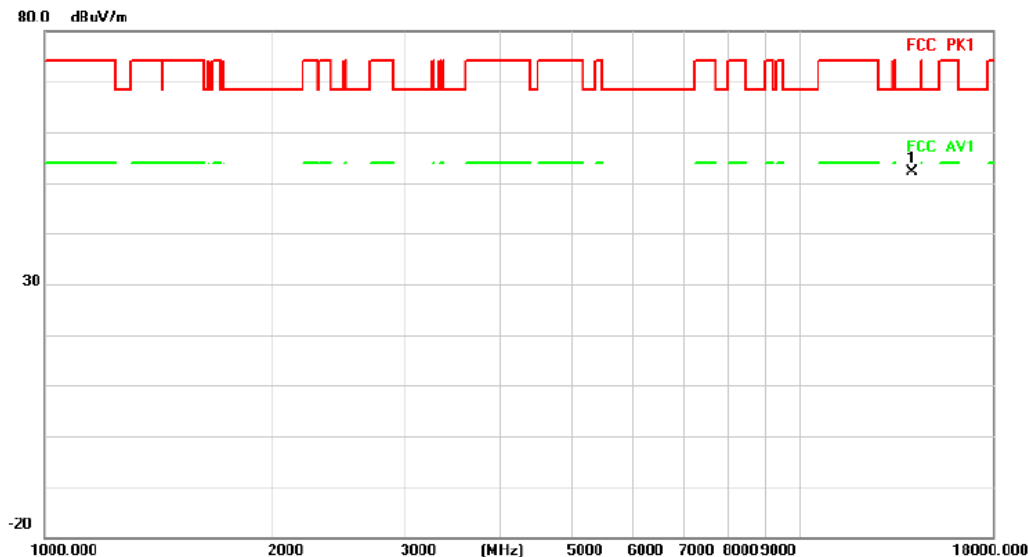
Above 1G (1GHz~18GHz)

Test mode:11AX80MIMO

Test Channel:215

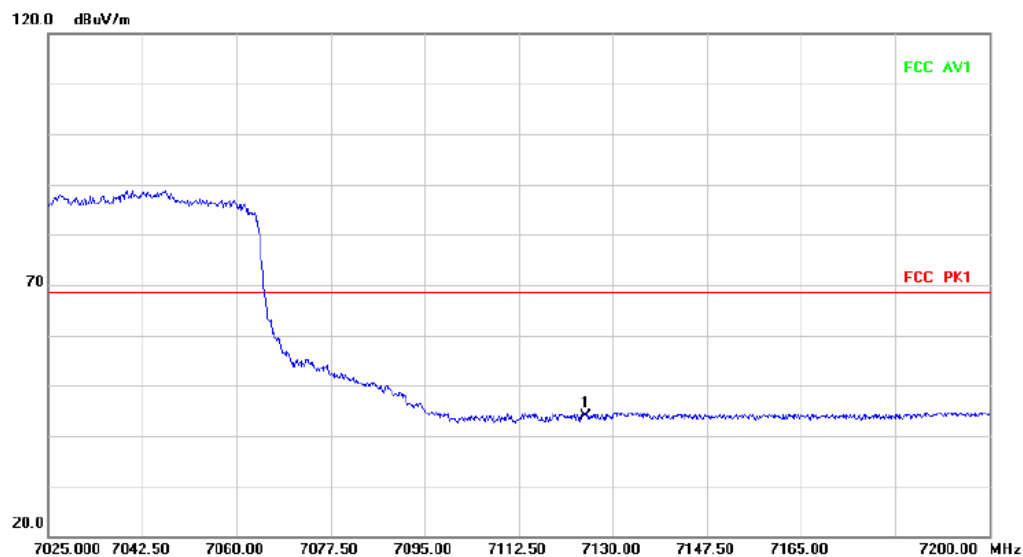
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	14050.000	1.04	51.04	52.08	68.20	-16.12 peak

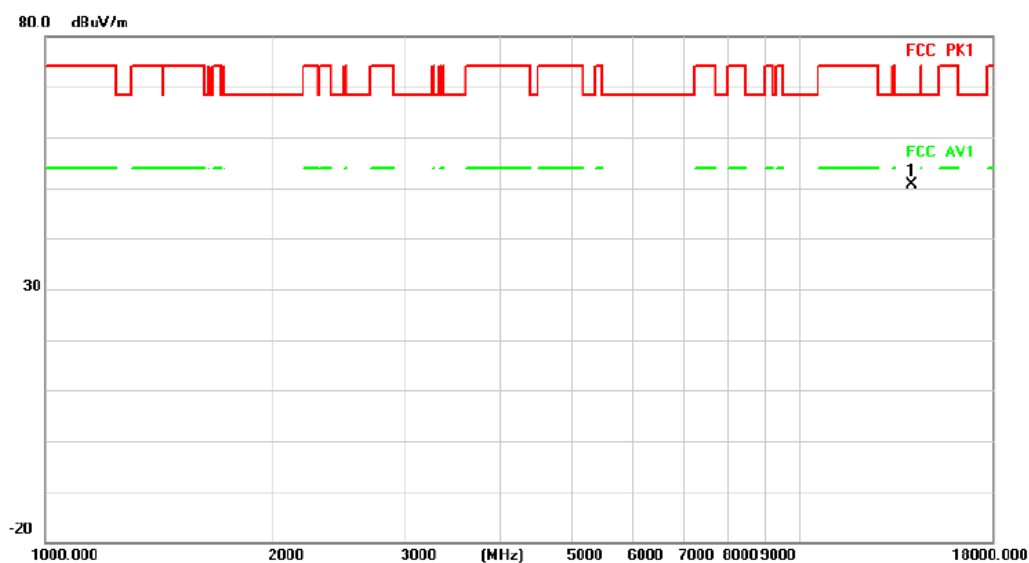
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	7125.000	32.61	11.19	43.80	68.20	-24.40 peak

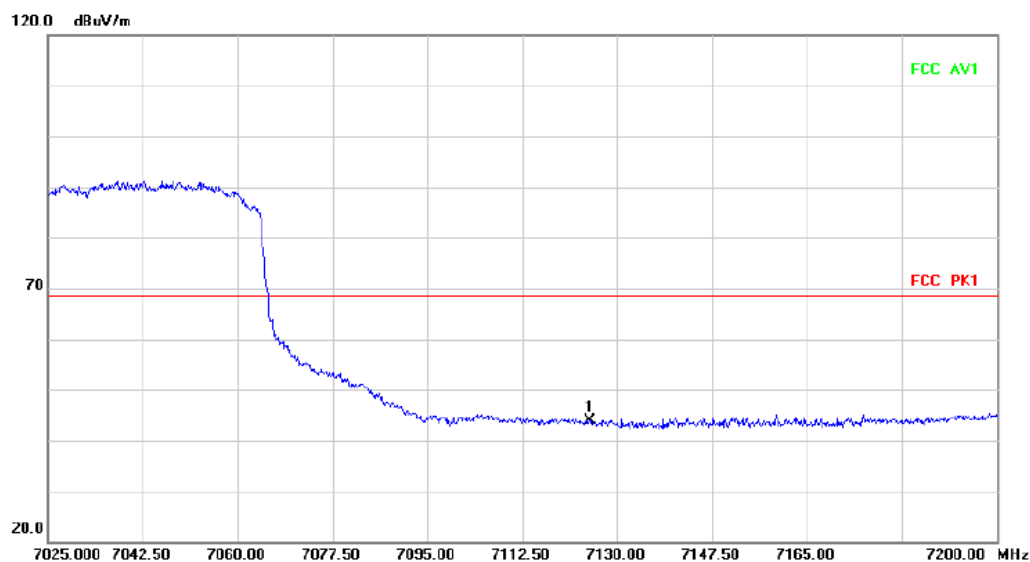
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14050.000	-0.40	51.04	50.64	68.20	-17.56	peak

Radiated Emission



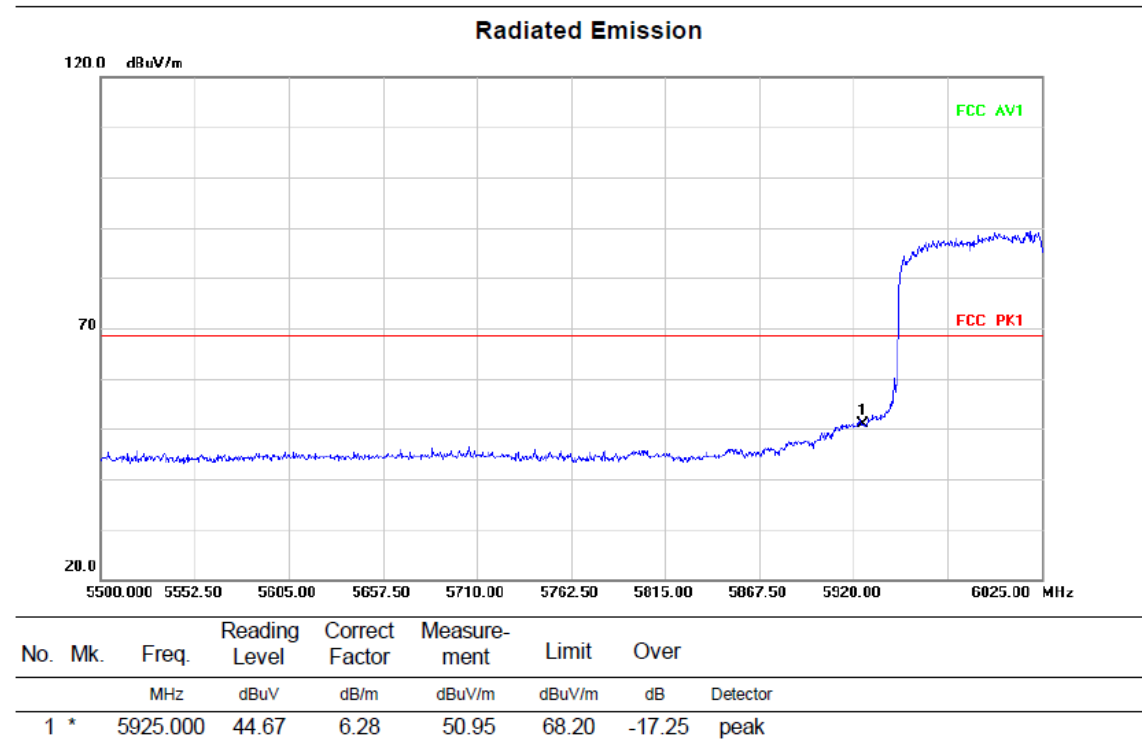
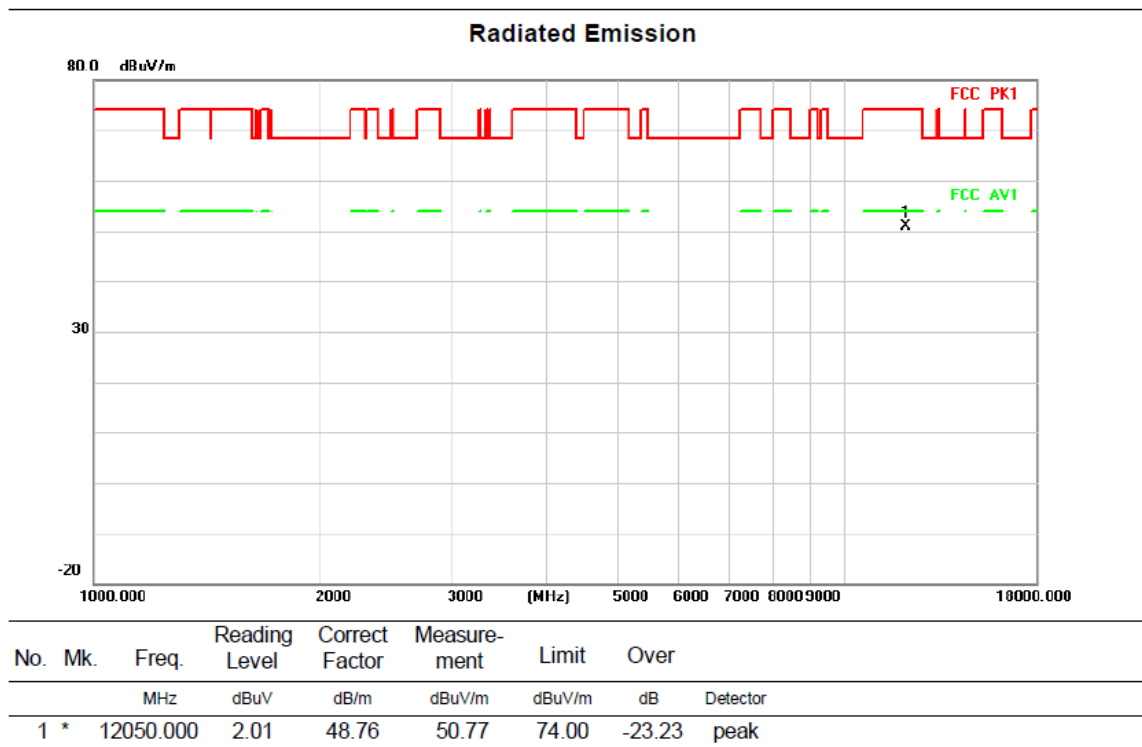
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	7125.000	32.67	11.19	43.86	68.20	-24.34	peak

Above 1G (1GHz~18GHz)

Test mode:11AX160MIMO

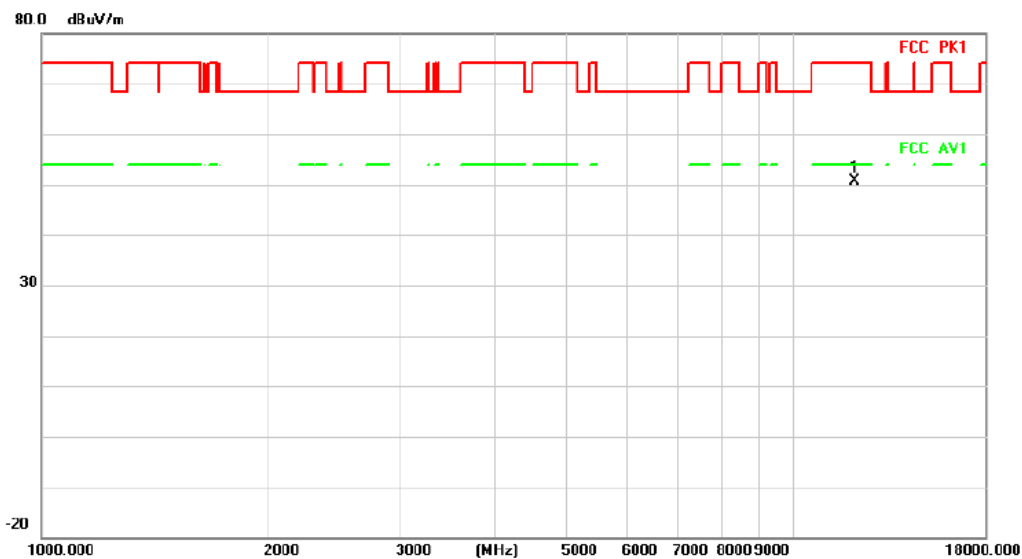
Test Channel:15

VERTICAL



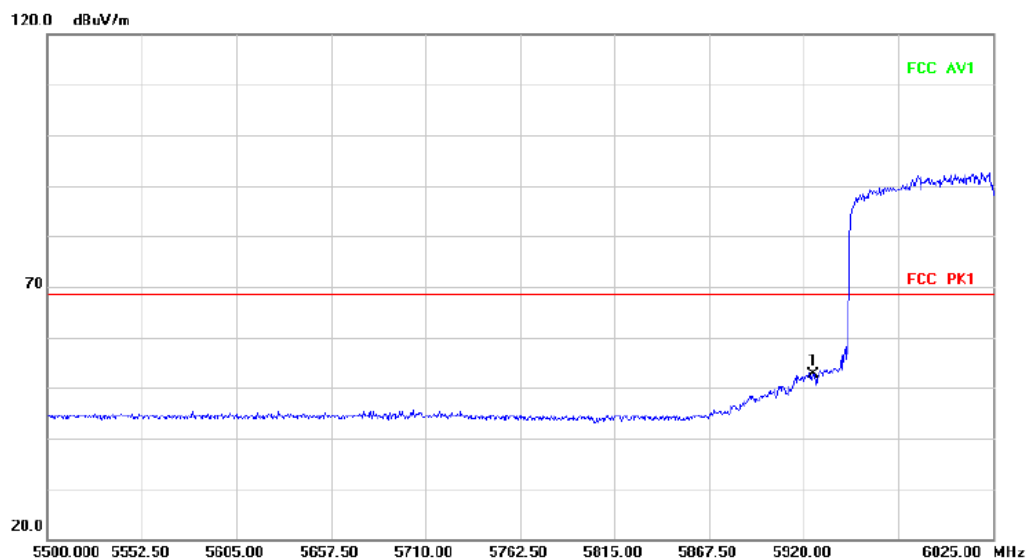
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	12050.000	1.82	48.76	50.58	74.00	-23.42	peak

Radiated Emission



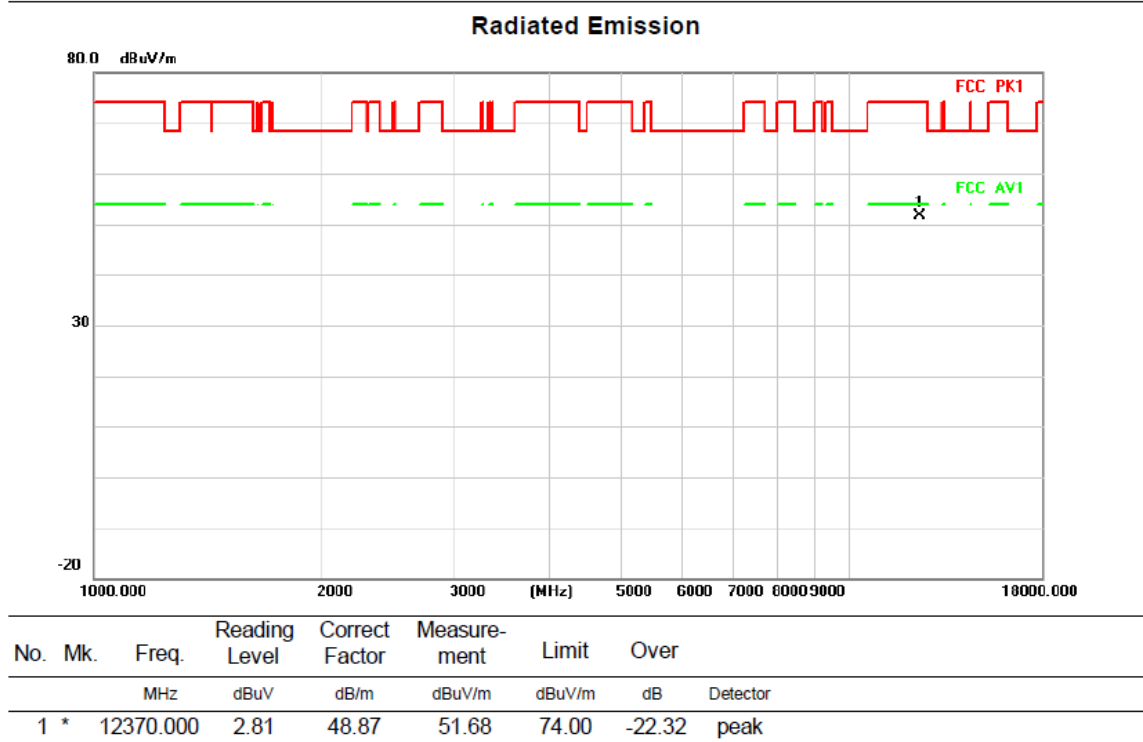
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	5925.000	46.27	6.28	52.55	68.20	-15.65	peak

Above 1G (1GHz~18GHz)

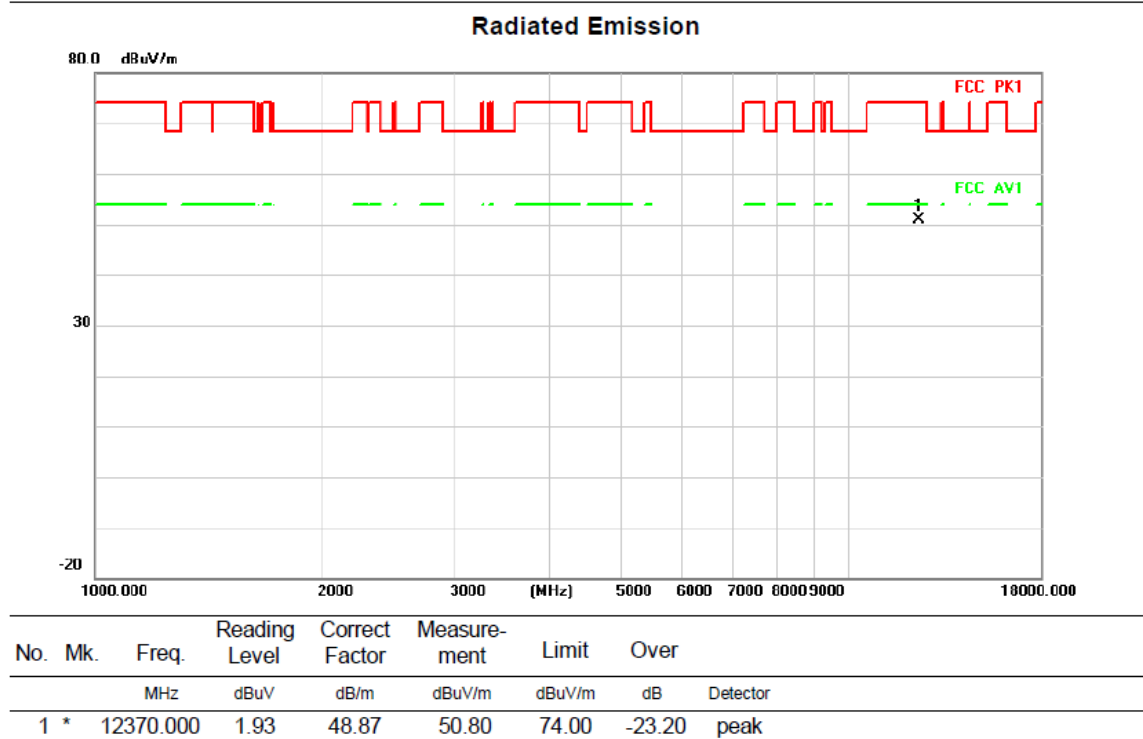
Test mode:11AX160MIMO

Test Channel:47

VERTICAL



HORIZONTAL

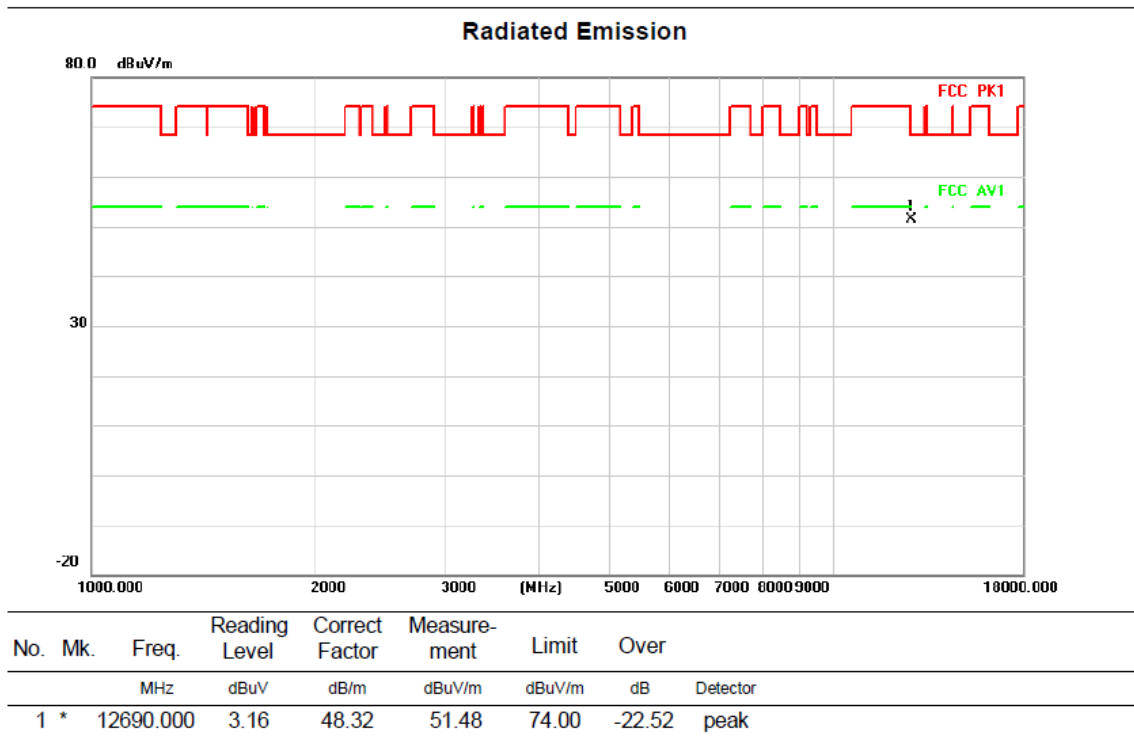


Above 1G (1GHz~18GHz)

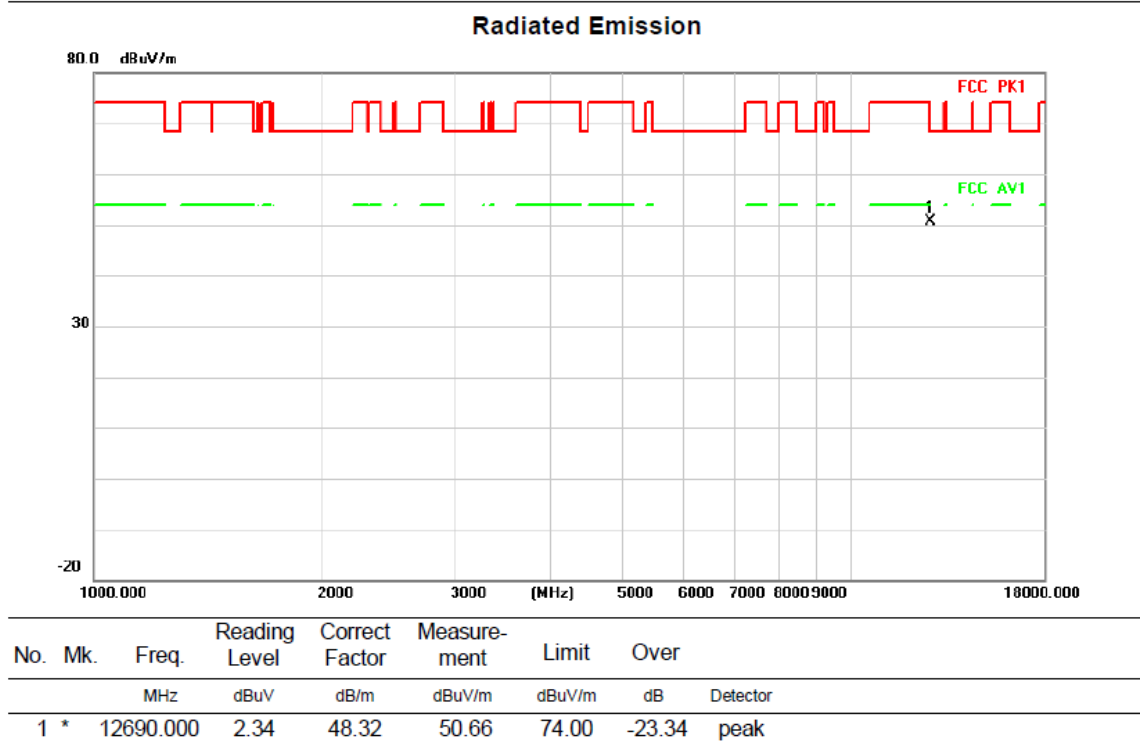
Test mode:11AX160MIMO

Test Channel:79

VERTICAL



HORIZONTAL

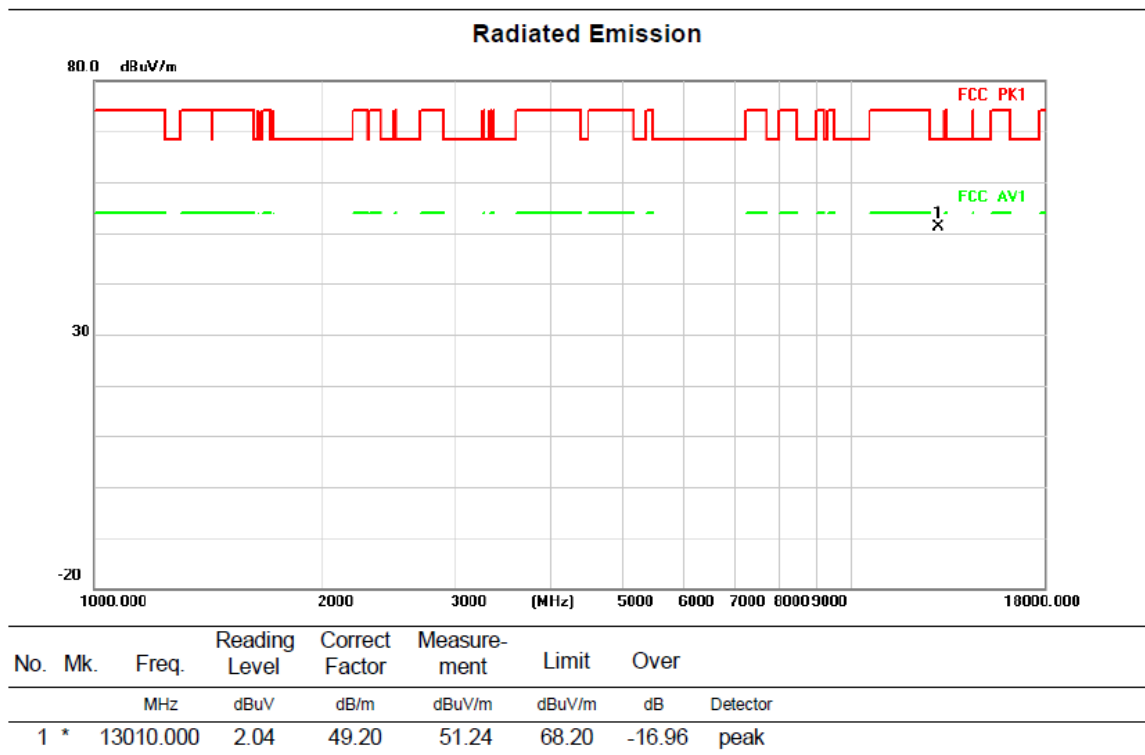


Above 1G (1GHz~18GHz)

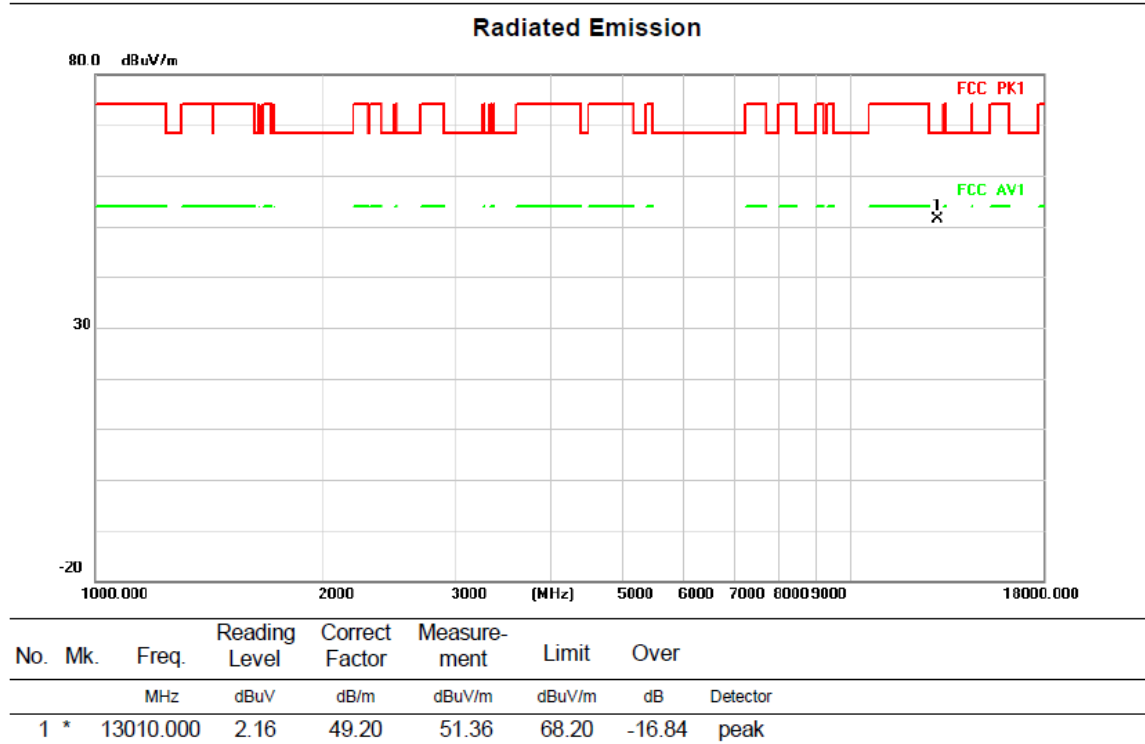
Test mode:11AX160MIMO

Test Channel:111

VERTICAL



HORIZONTAL

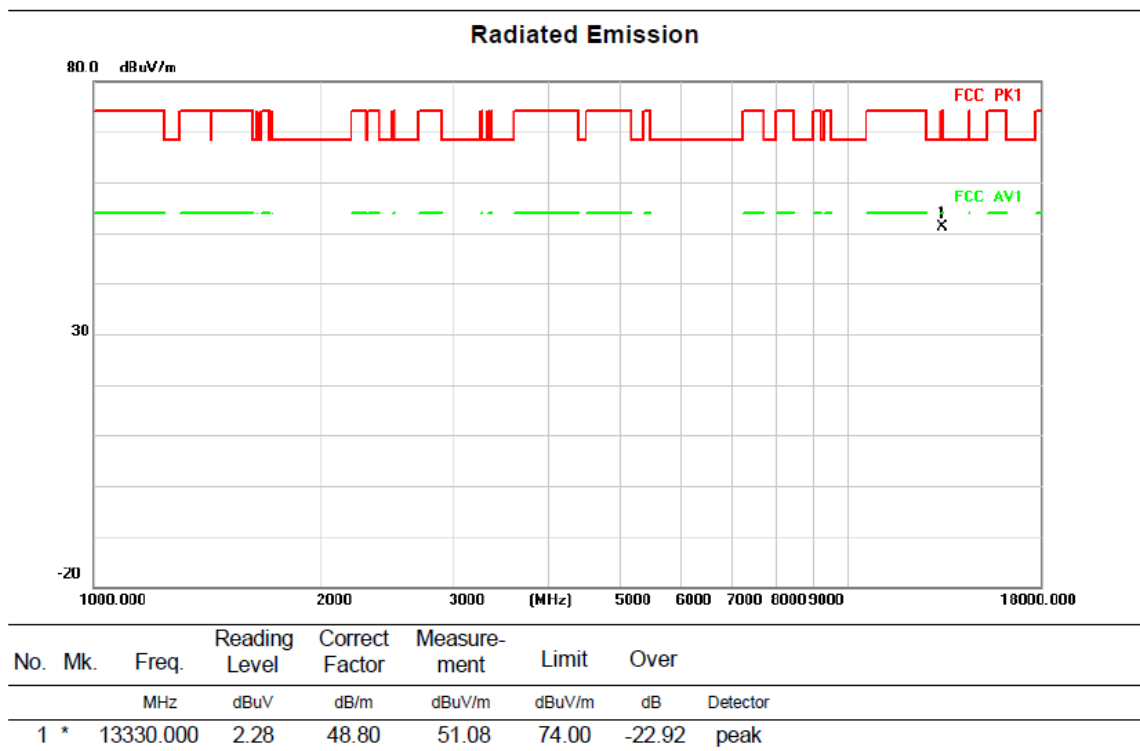


Above 1G (1GHz~18GHz)

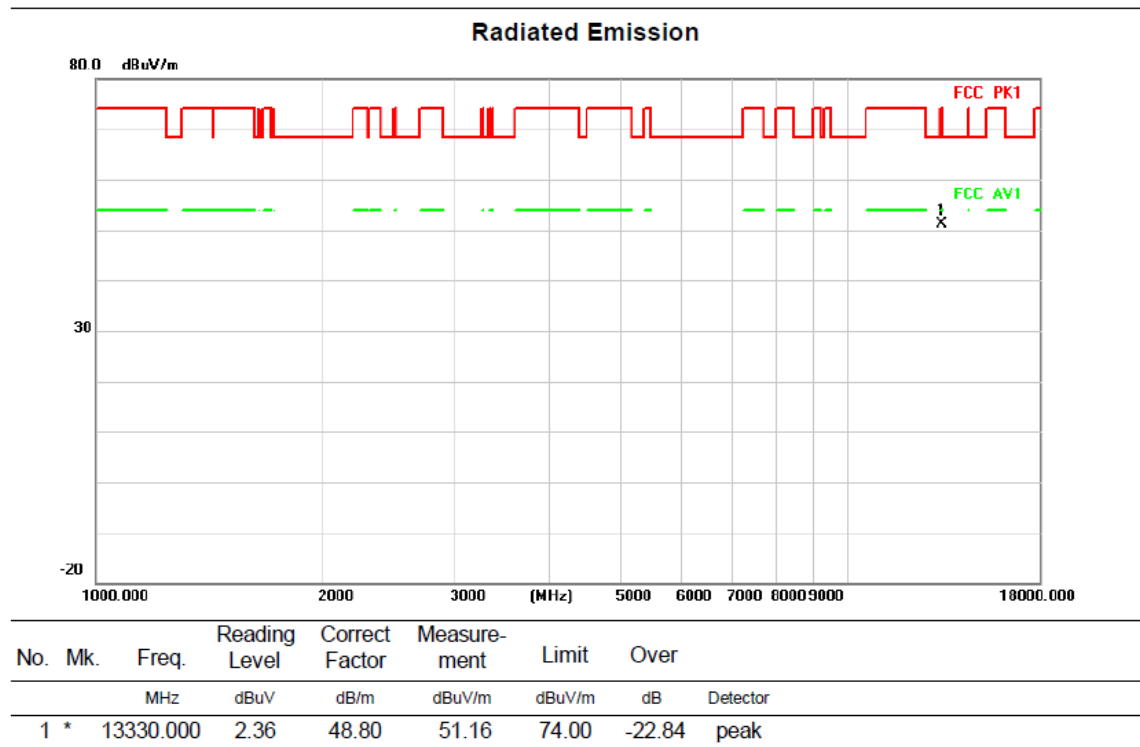
Test mode:11AX160MIMO

Test Channel:143

VERTICAL



HORIZONTAL

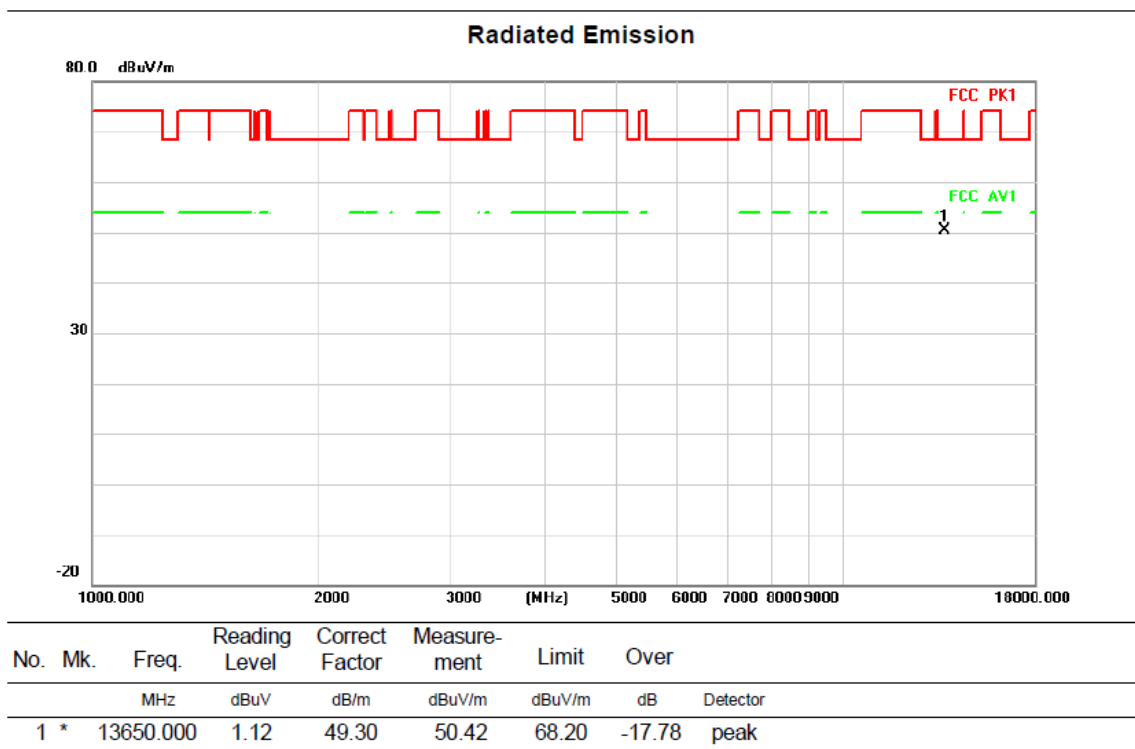


Above 1G (1GHz~18GHz)

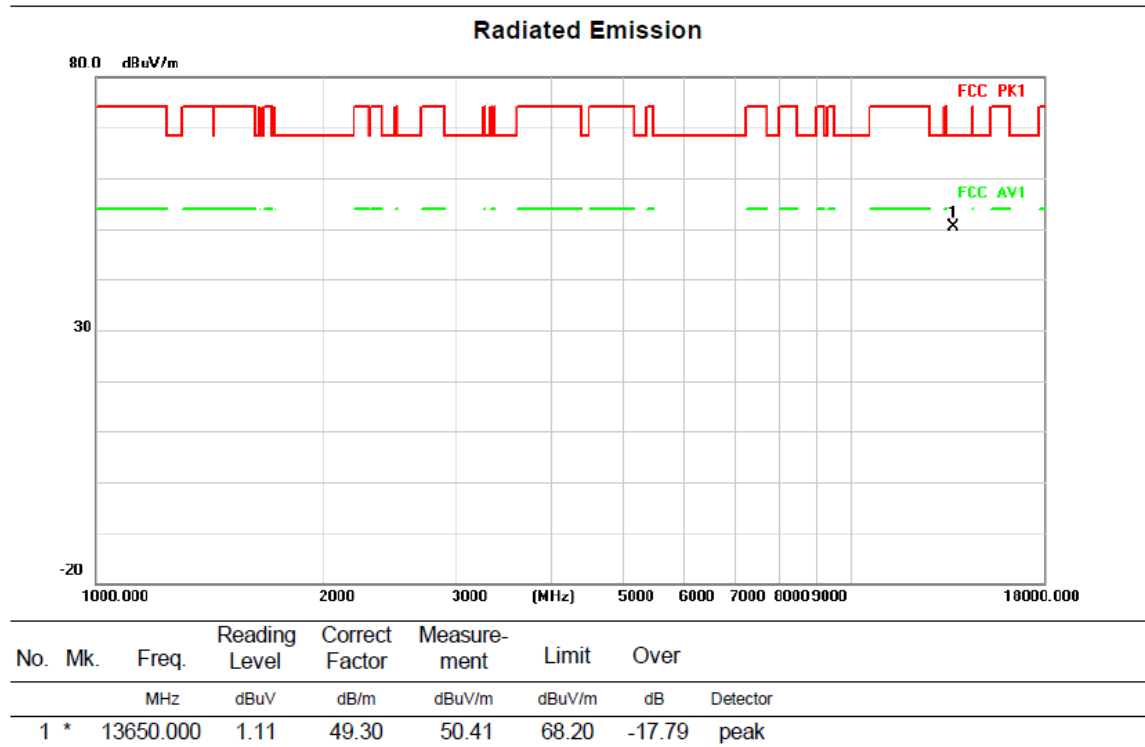
Test mode:11AX160MIMO

Test Channel:175

VERTICAL



HORIZONTAL



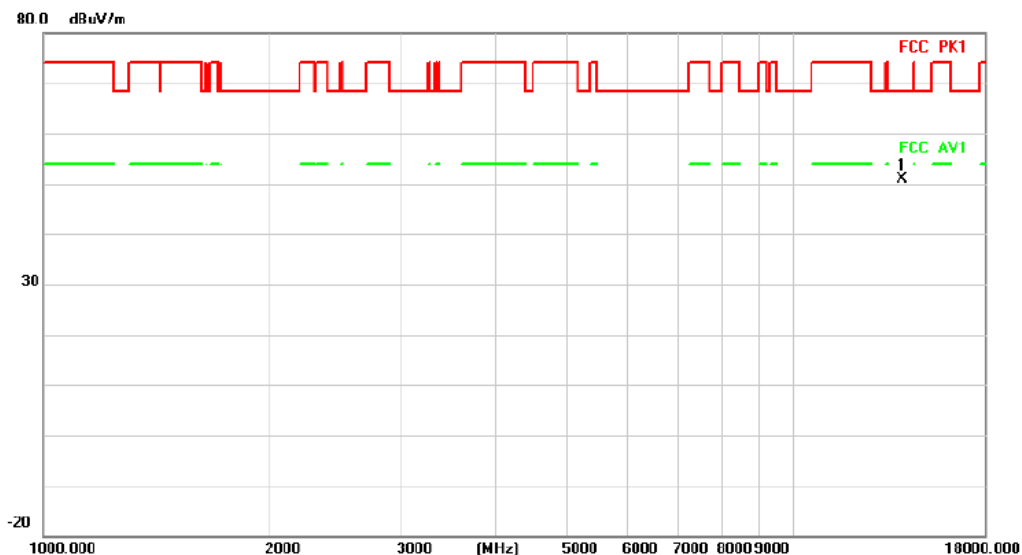
Above 1G (1GHz~18GHz)

Test mode:11AX160MIMO

Test Channel:207

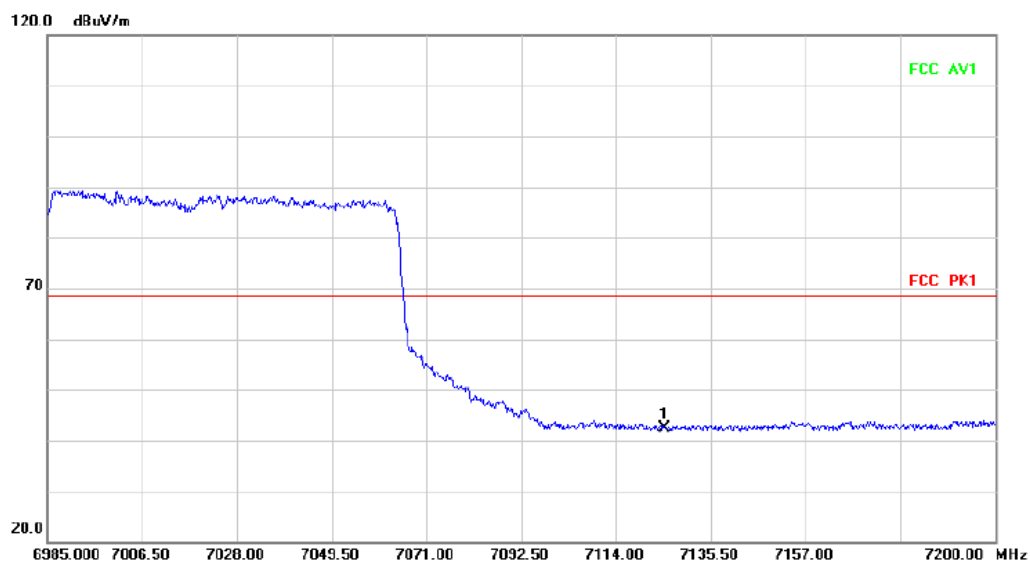
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	13970.000	0.15	50.62	50.77	68.20	-17.43	peak

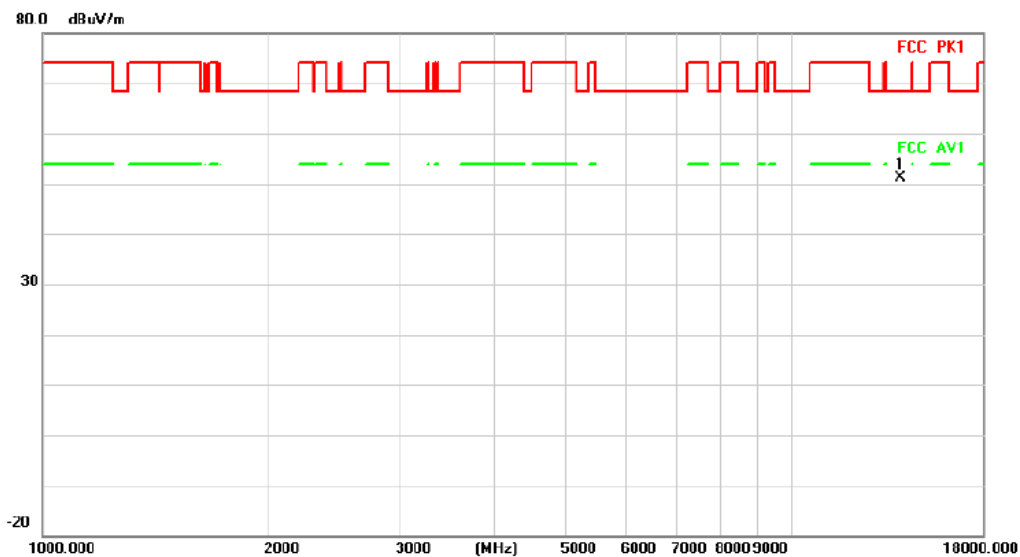
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	7125.000	31.11	11.19	42.30	68.20	-25.90	peak

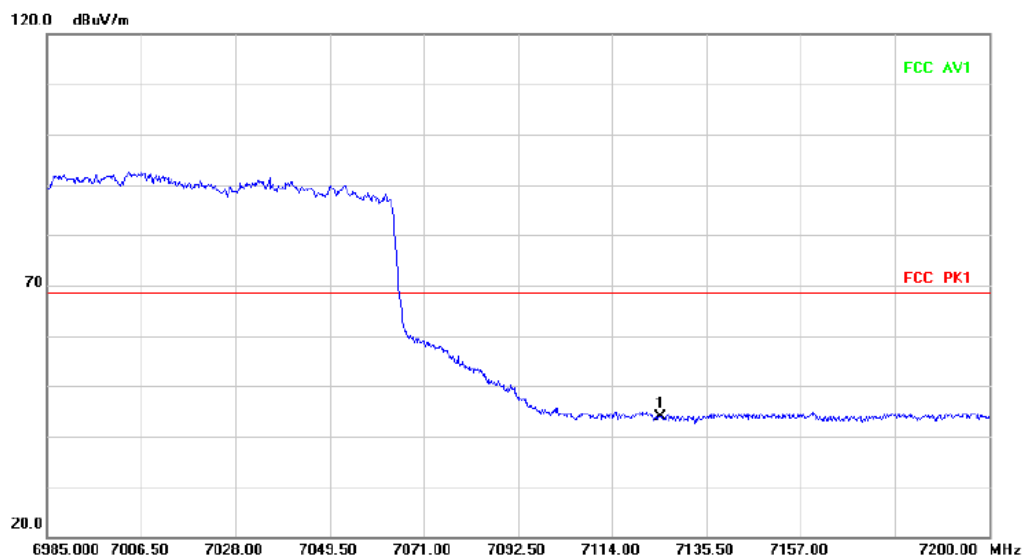
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	13970.000	0.52	50.62	51.14	68.20	-17.06	peak

Radiated Emission



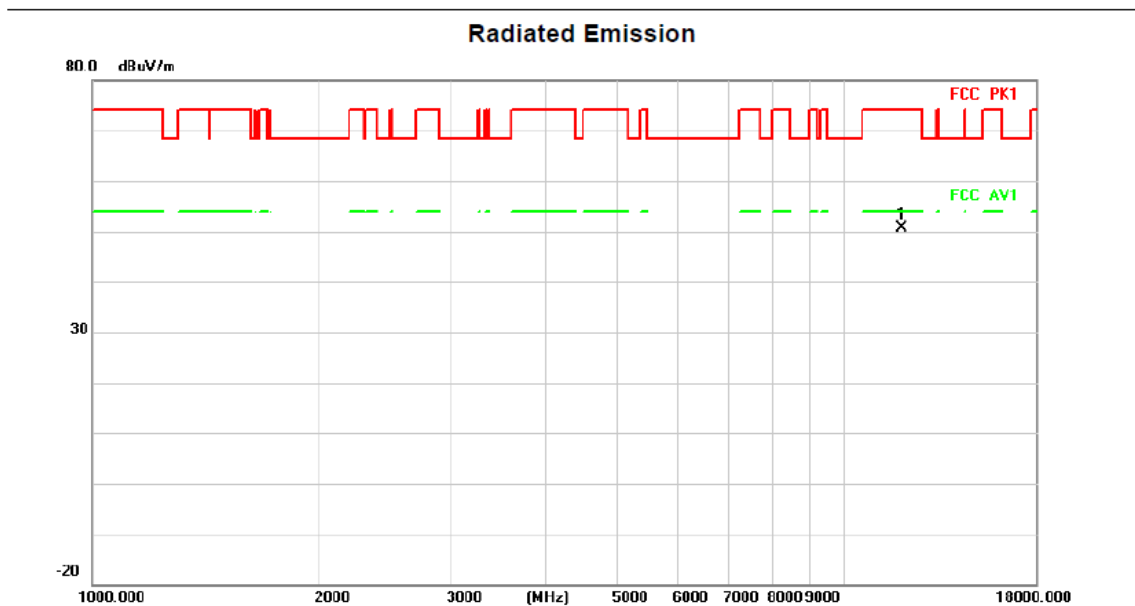
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	7125.000	32.66	11.19	43.85	68.20	-24.35	peak

Above 1G (1GHz~18GHz)

Test mode:11AX20(RU26)

Test Channel:1

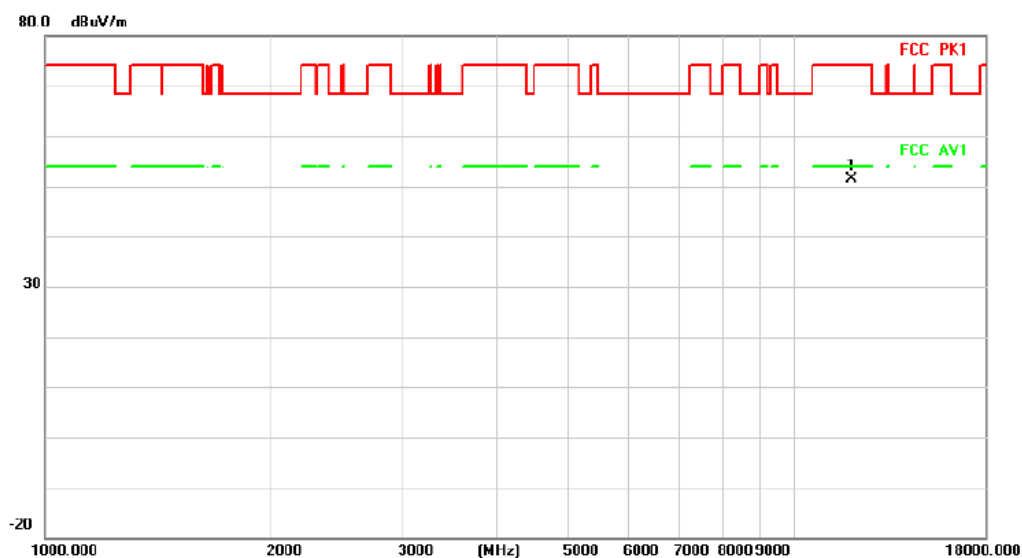
VERTICAL



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	11910.000	2.14	48.61	50.75	74.00	-23.25 peak

HORIZONTALA

Radiated Emission



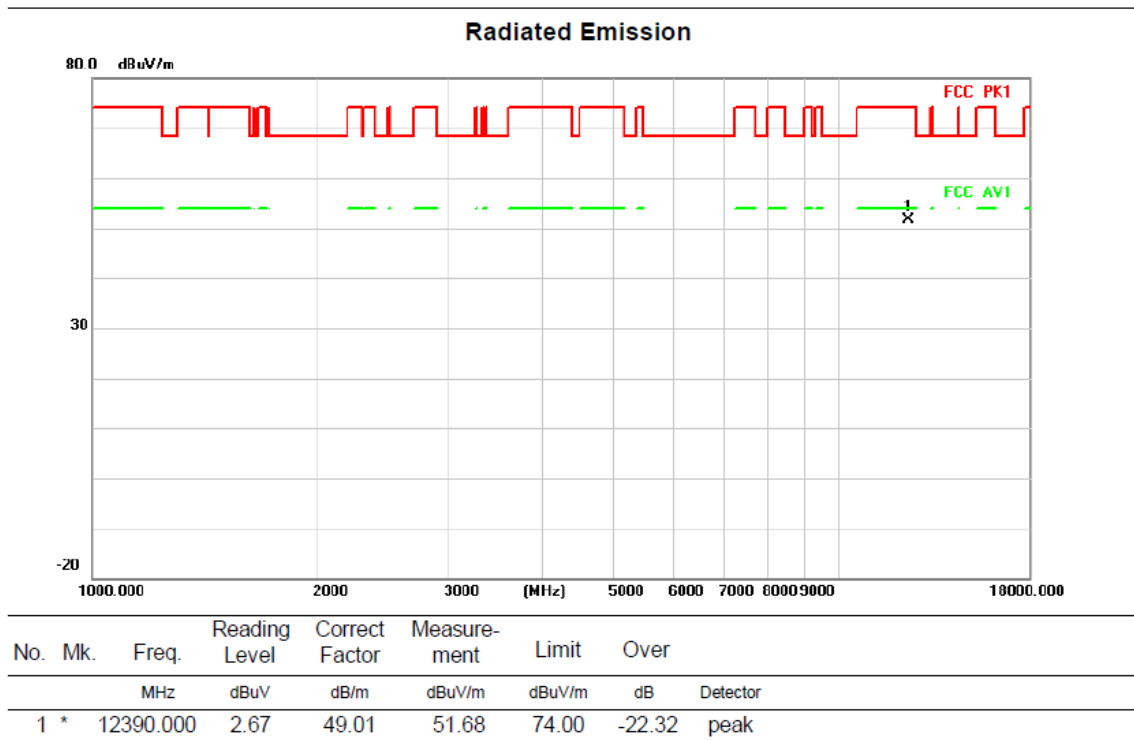
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB Detector
1	*	11910.000	2.67	48.61	51.28	74.00	-22.72 peak

Above 1G (1GHz~18GHz)

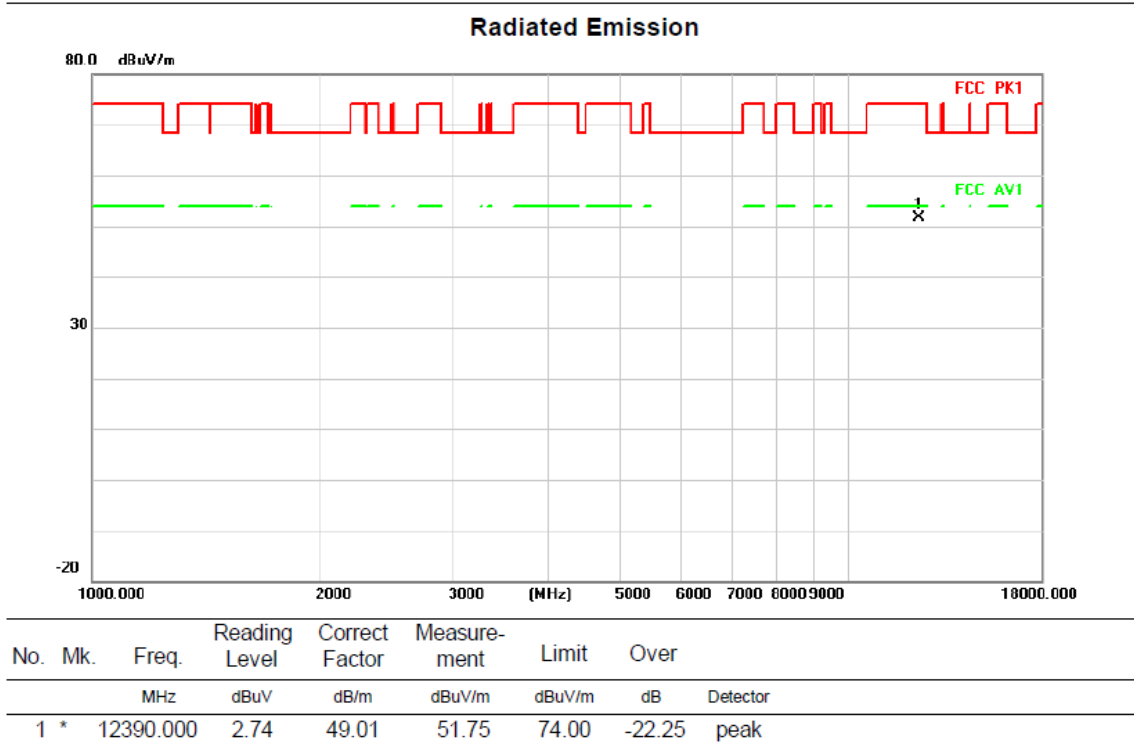
Test mode:11AX20(RU26)

Test Channel:49

VERTICAL



HORIZONTAL

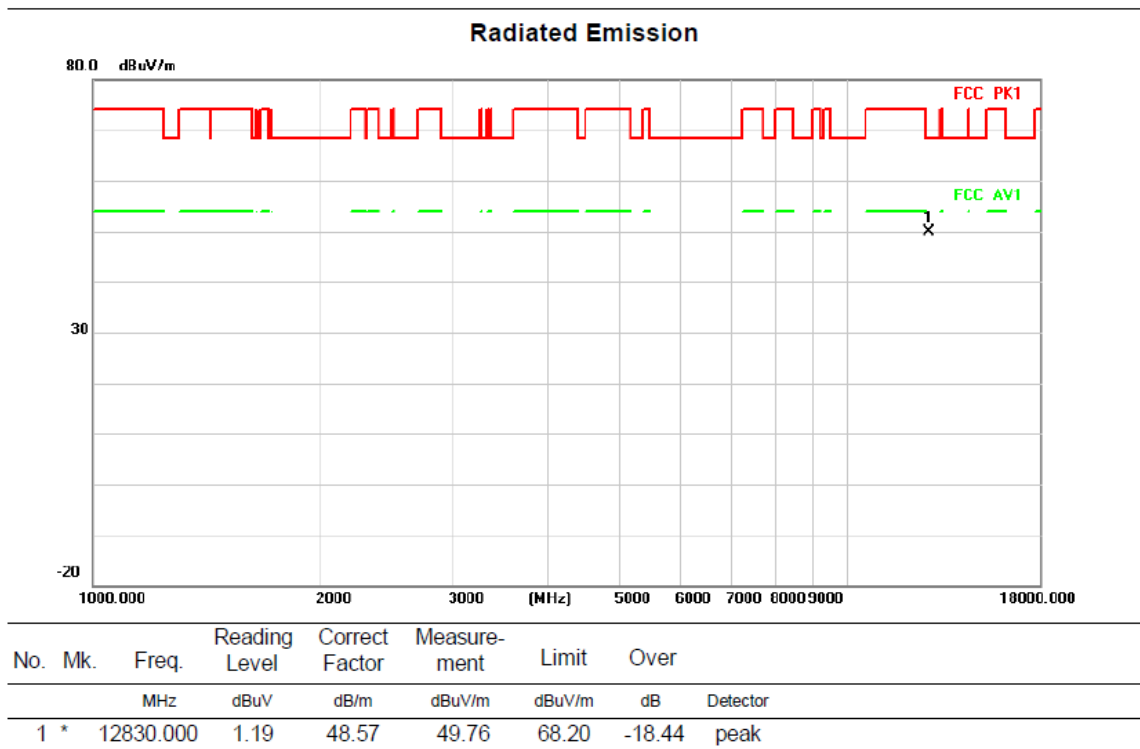


Above 1G (1GHz~18GHz)

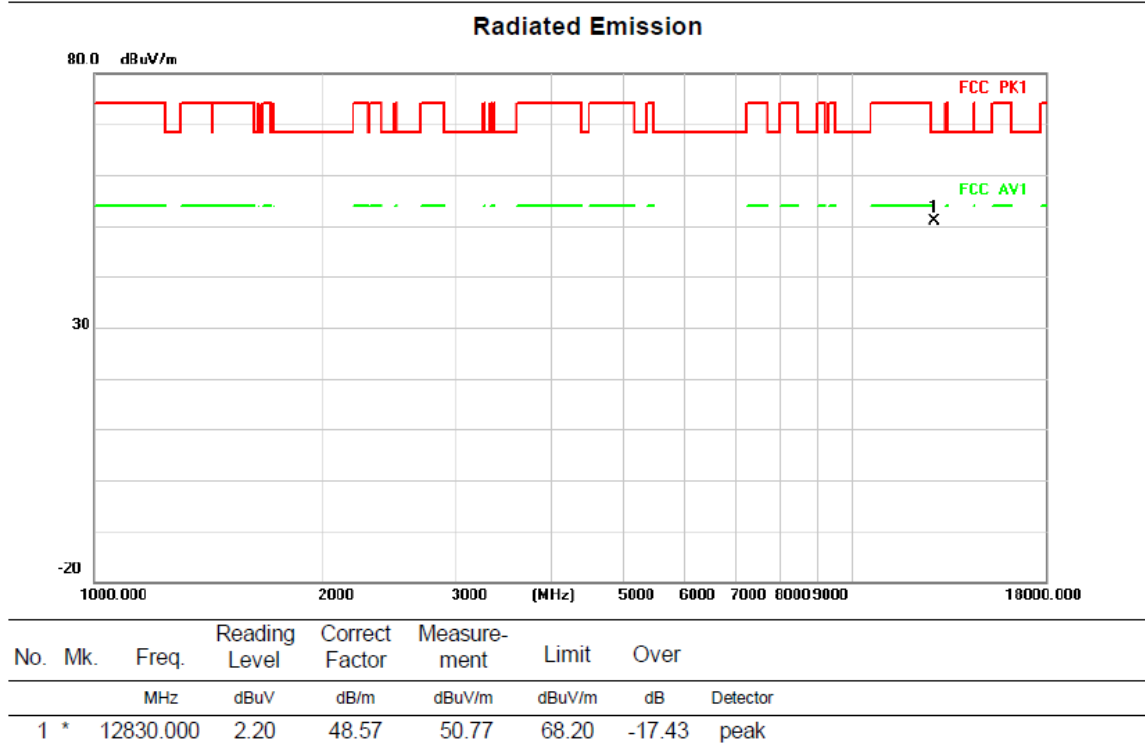
Test mode:11AX20(RU26)

Test Channel:93

VERTICAL



HORIZONTAL

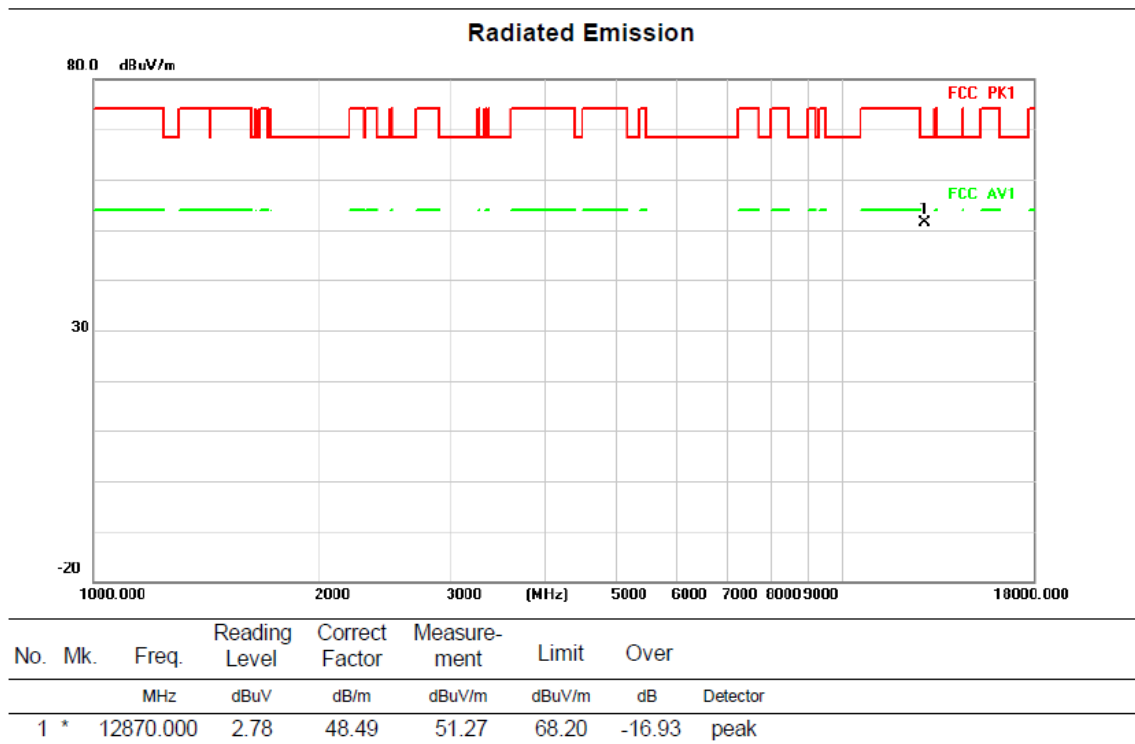


Above 1G (1GHz~18GHz)

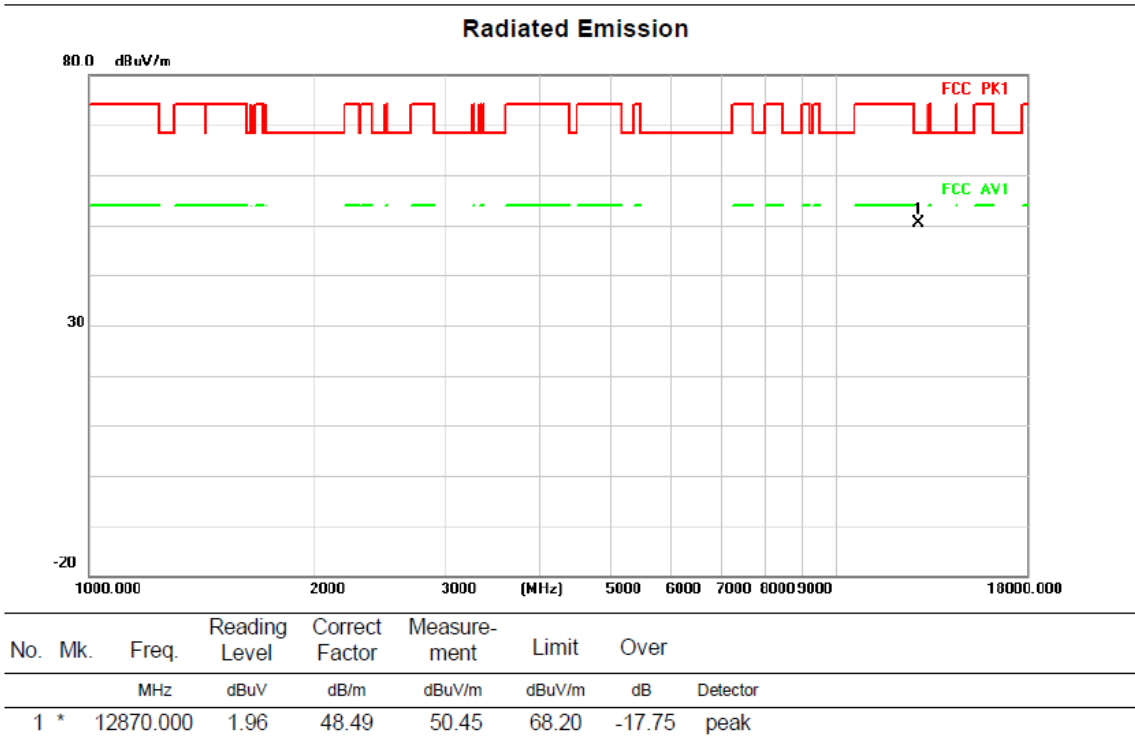
Test mode:11AX20(RU26)

Test Channel:97

VERTICAL



HORIZONTAL

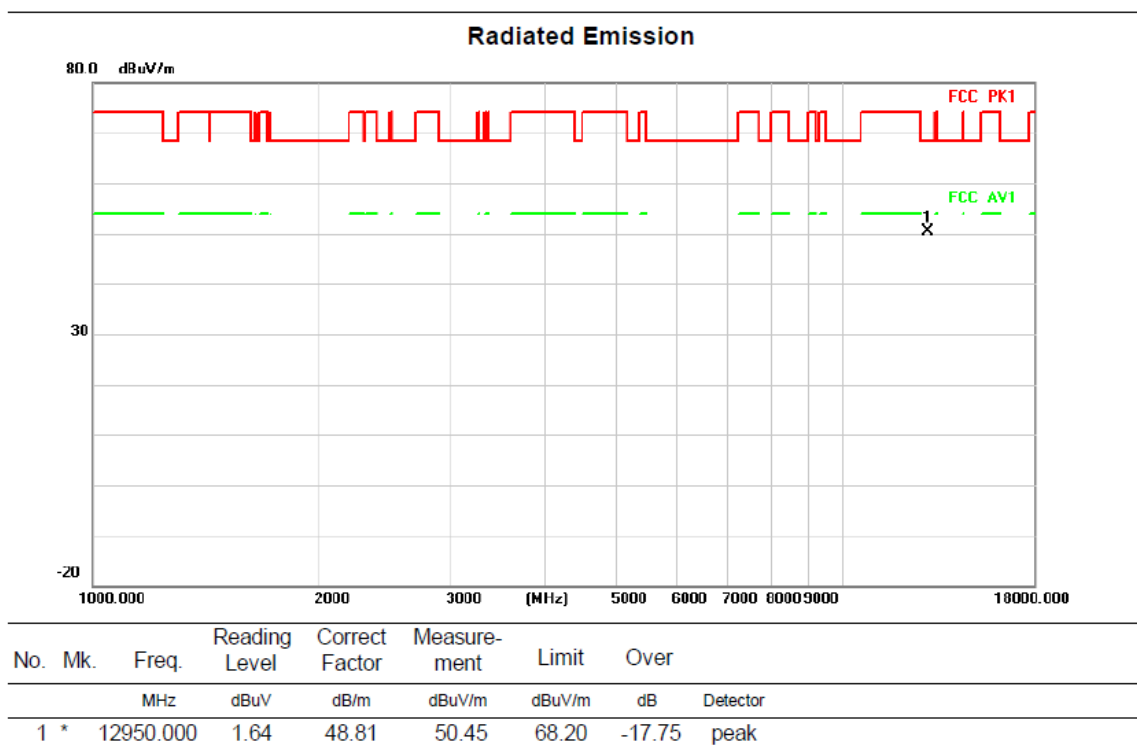


Above 1G (1GHz~18GHz)

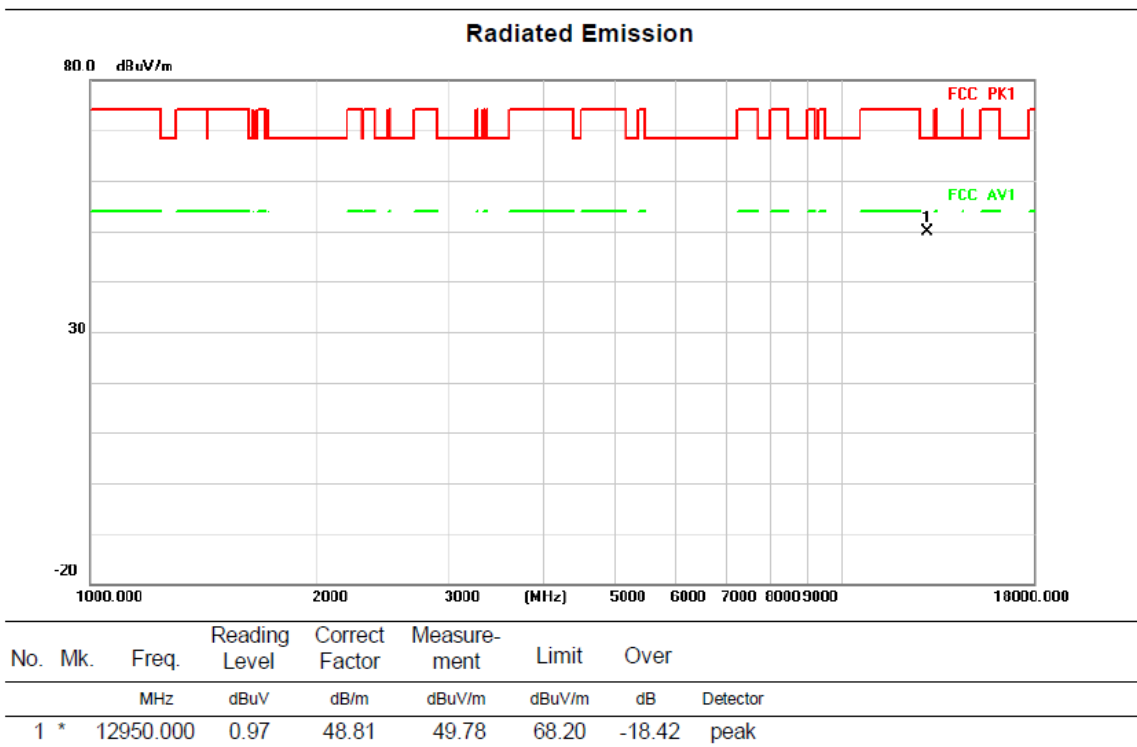
Test mode:11AX20(RU26)

Test Channel:105

VERTICAL



HORIZONTAL

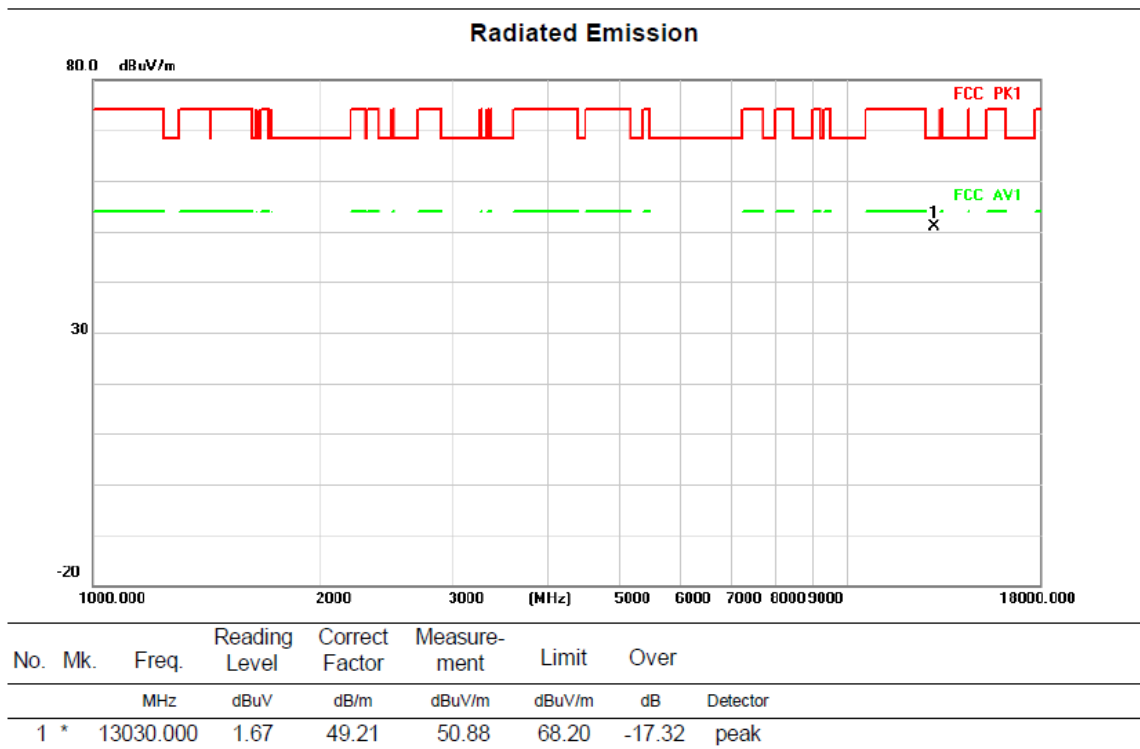


Above 1G (1GHz~18GHz)

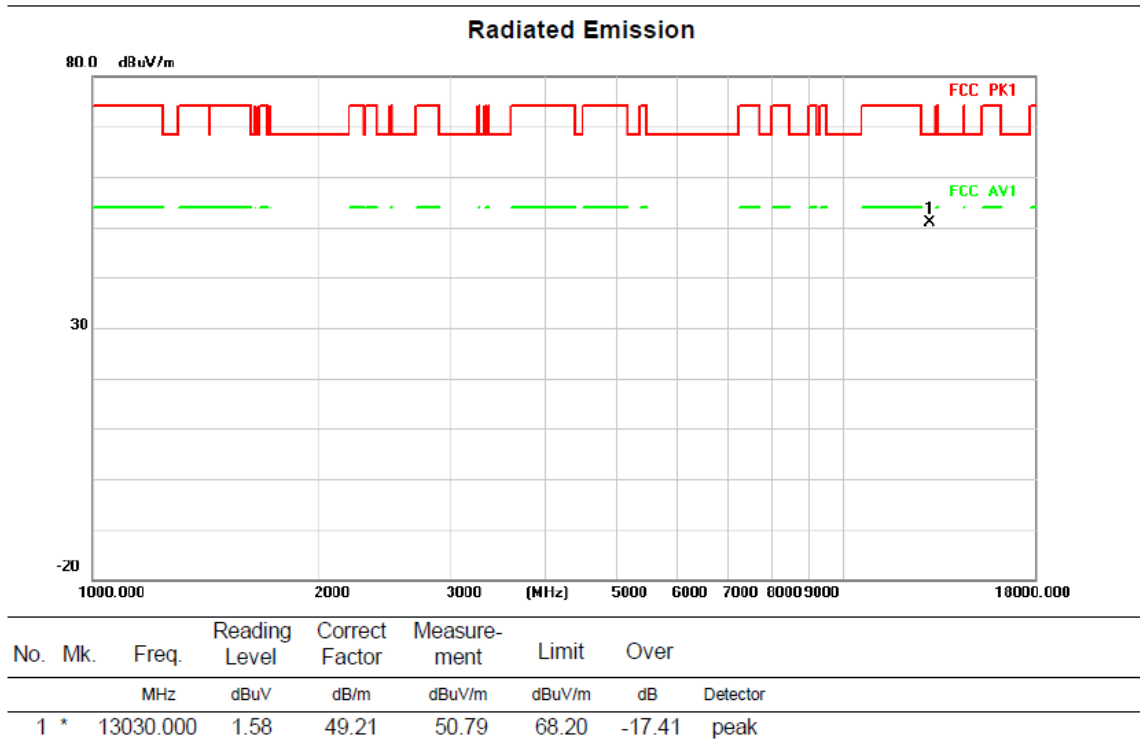
Test mode:11AX20(RU26)

Test Channel:113

VERTICAL



HORIZONTAL

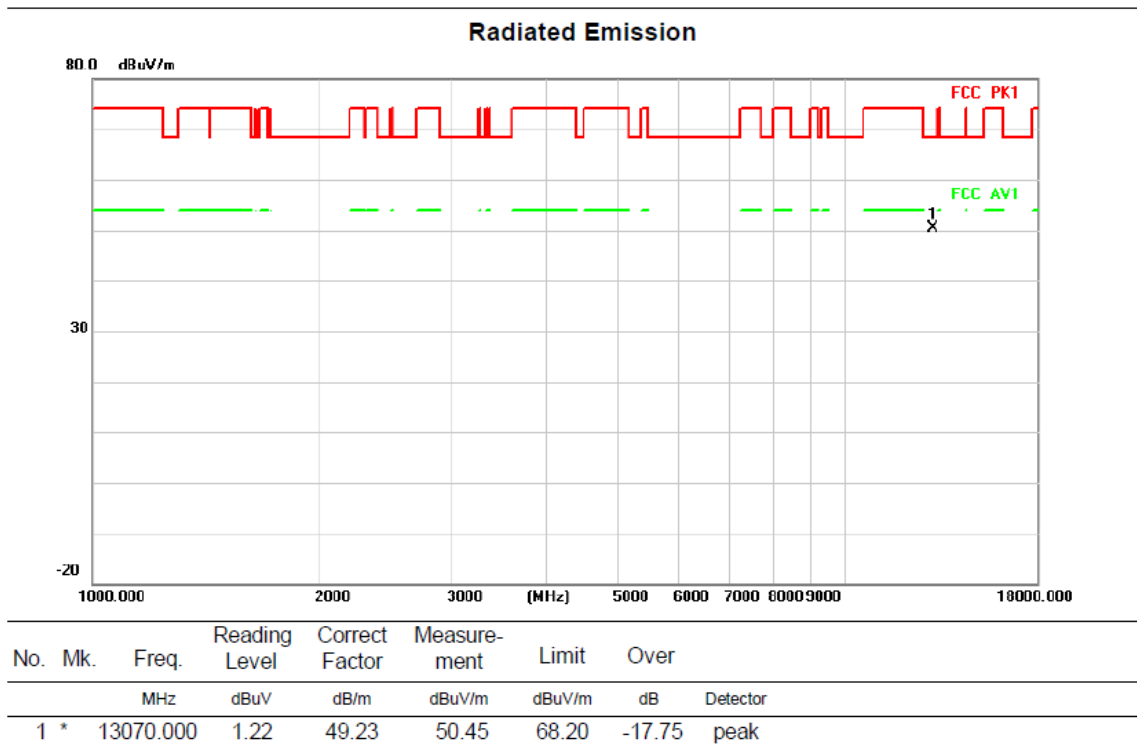


Above 1G (1GHz~18GHz)

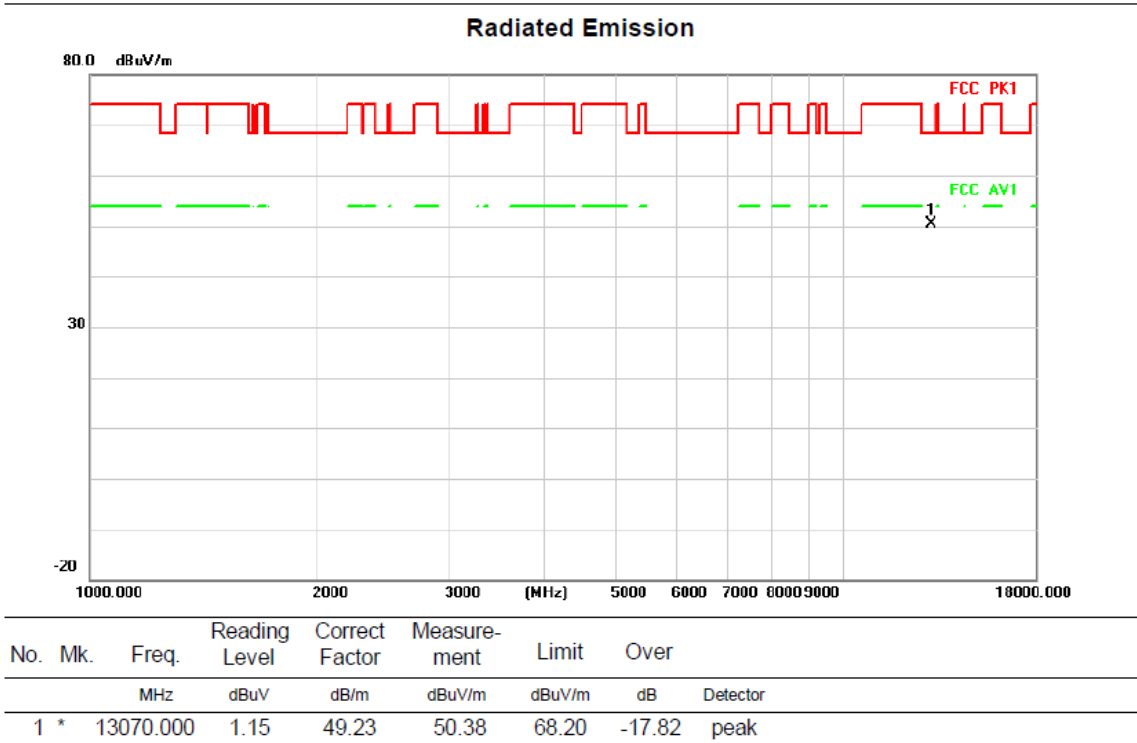
Test mode:11AX20(RU26)

Test Channel:117

VERTICAL



HORIZONTAL

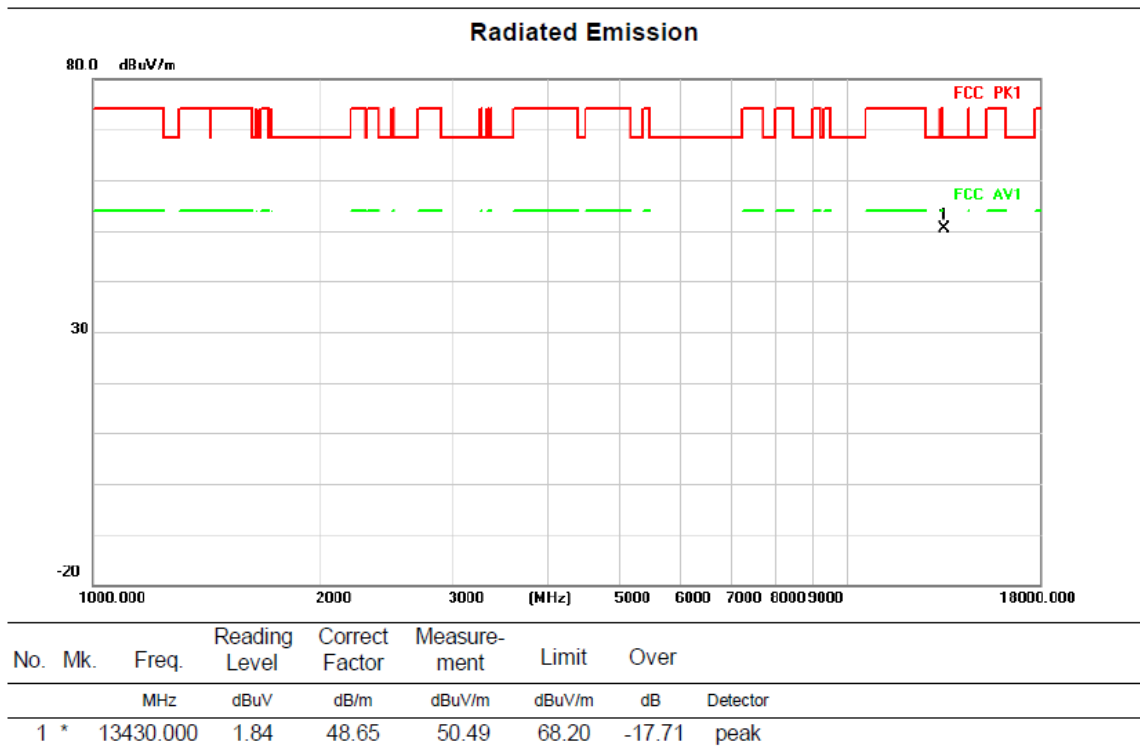


Above 1G (1GHz~18GHz)

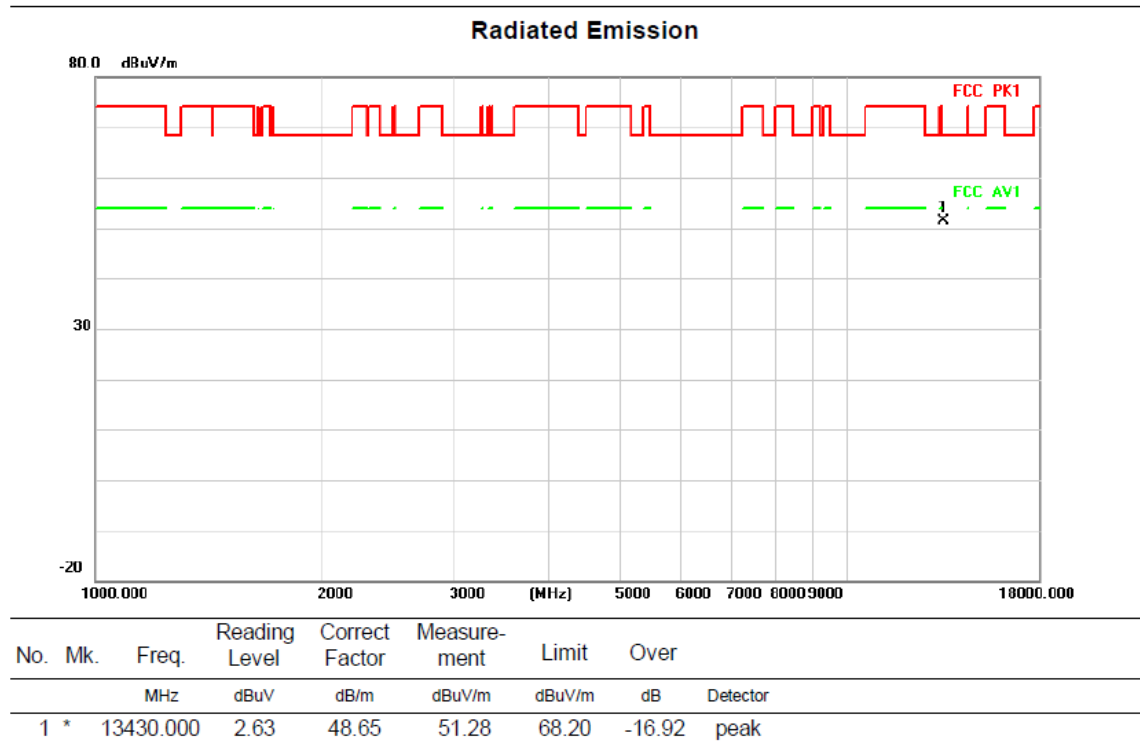
Test mode:11AX20(RU26)

Test Channel:153

VERTICAL



HORIZONTAL

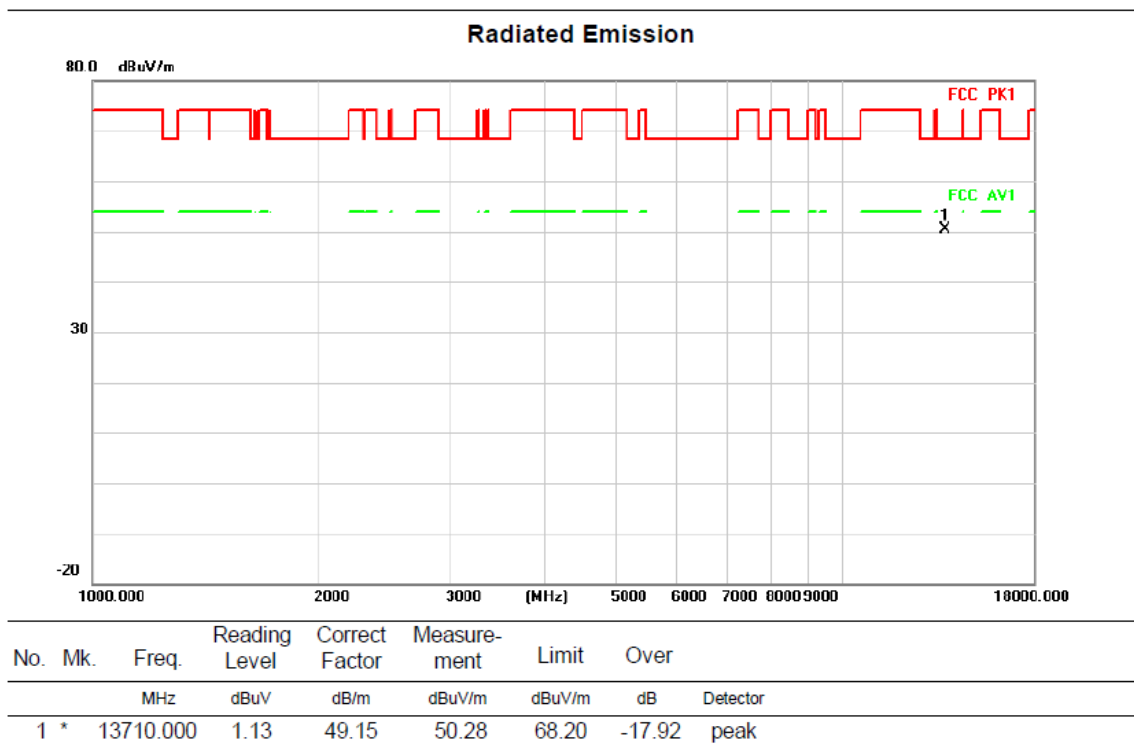


Above 1G (1GHz~18GHz)

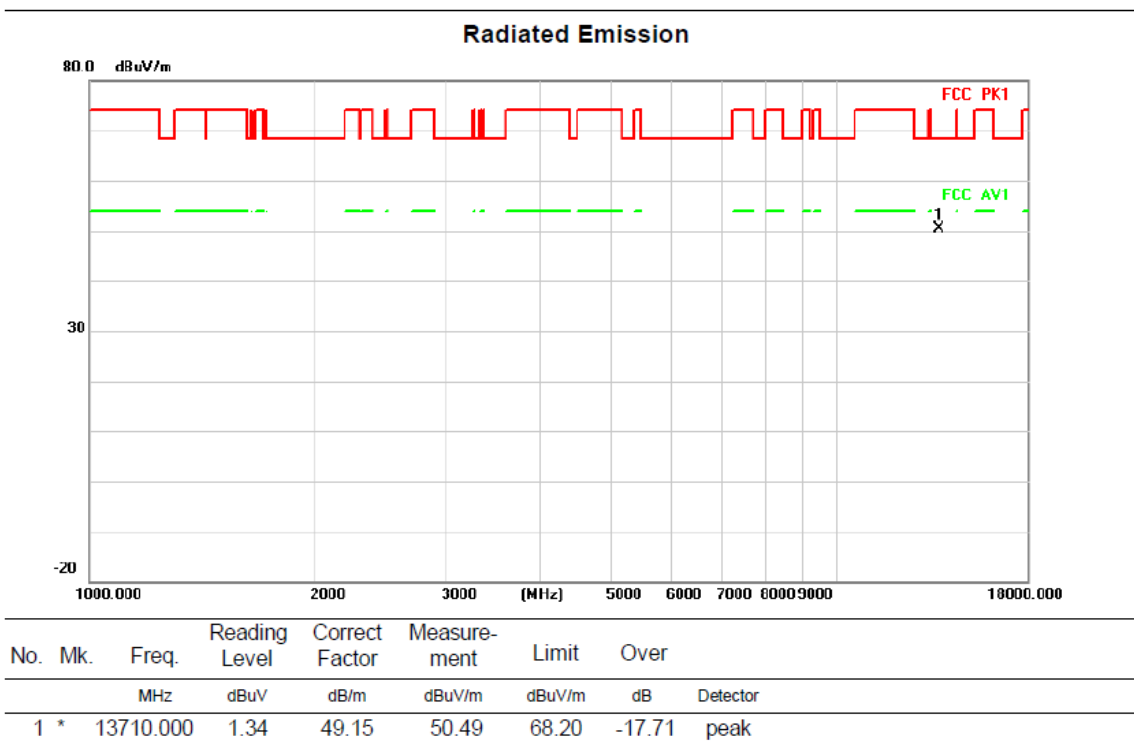
Test mode:11AX20(RU26)

Test Channel:181

VERTICAL



HORIZONTAL

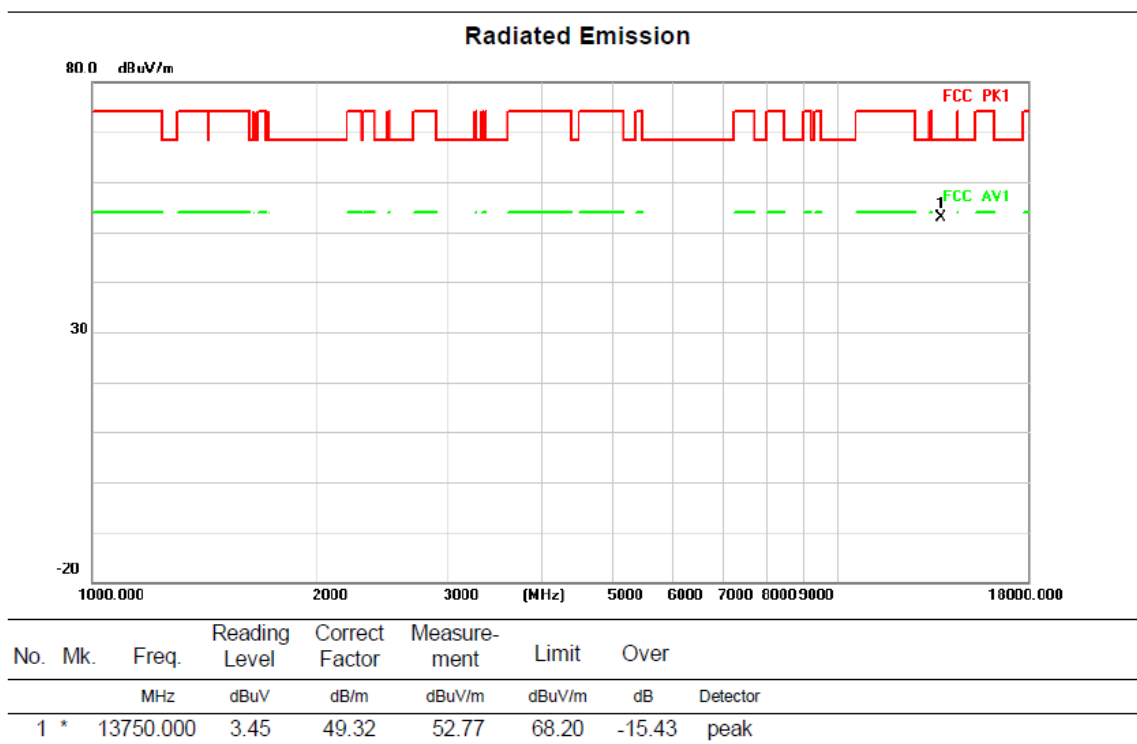


Above 1G (1GHz~18GHz)

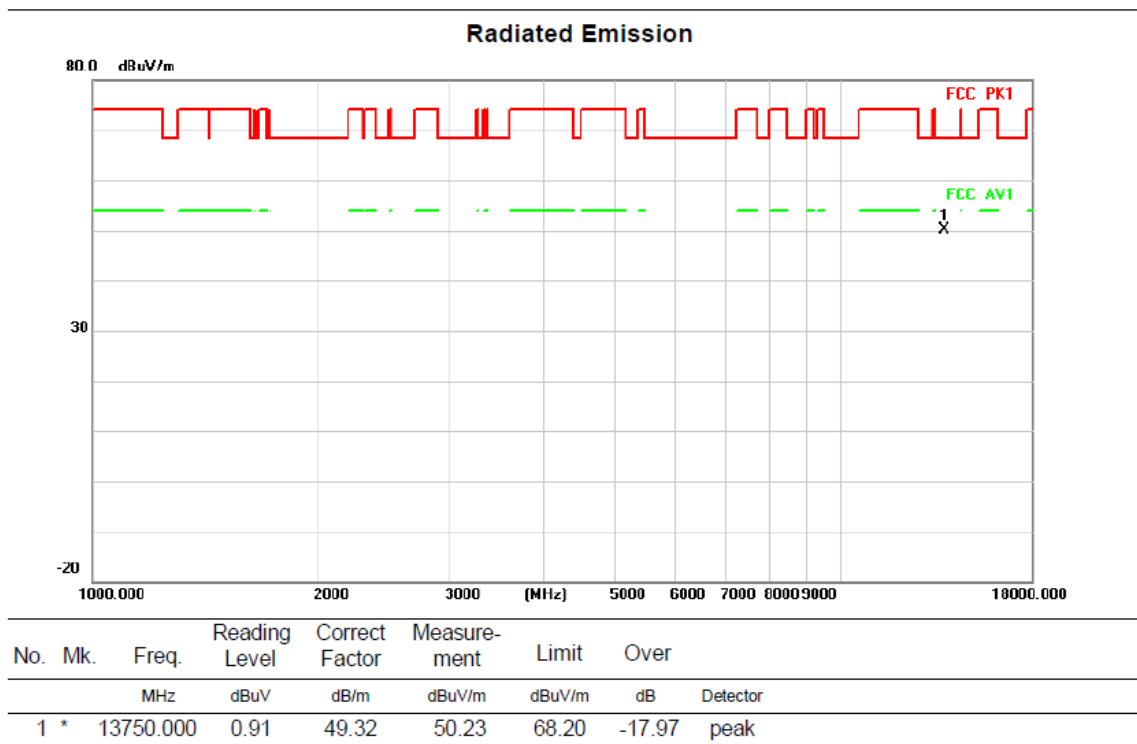
Test mode:11AX20(RU26)

Test Channel:185

VERTICAL



HORIZONTAL

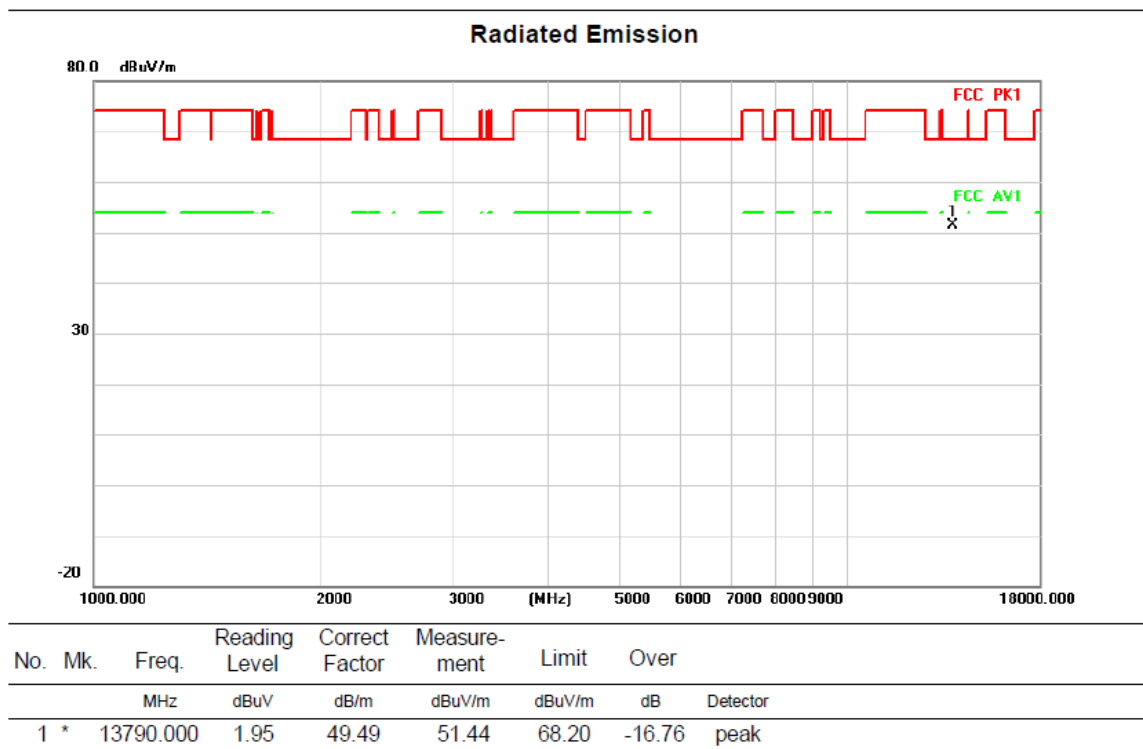


Above 1G (1GHz~18GHz)

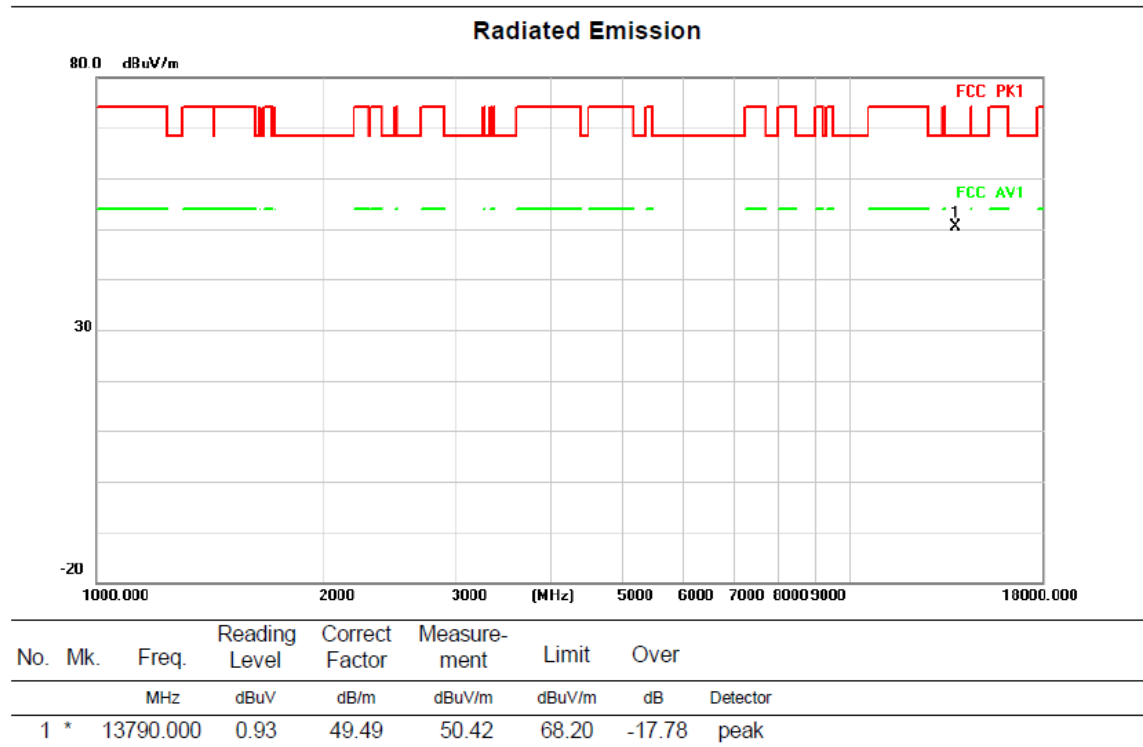
Test mode:11AX20(RU26)

Test Channel:189

VERTICAL



HORIZONTAL

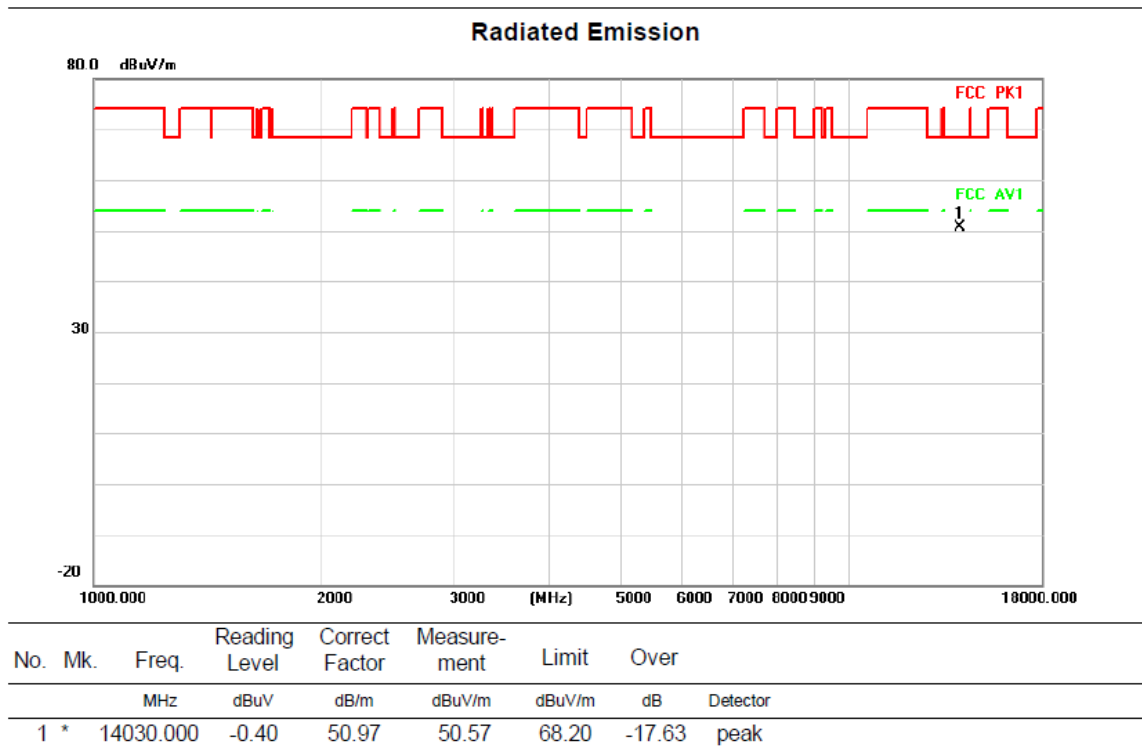


Above 1G (1GHz~18GHz)

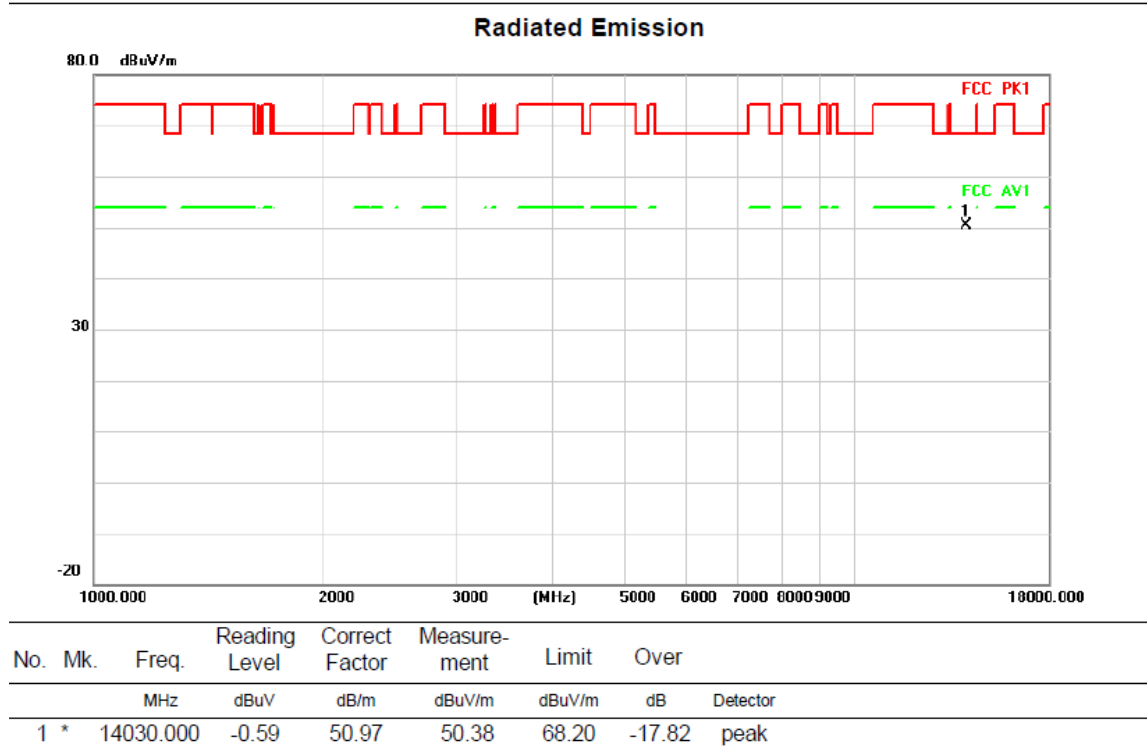
Test mode:11AX20(RU26)

Test Channel:213

VERTICAL



HORIZONTAL

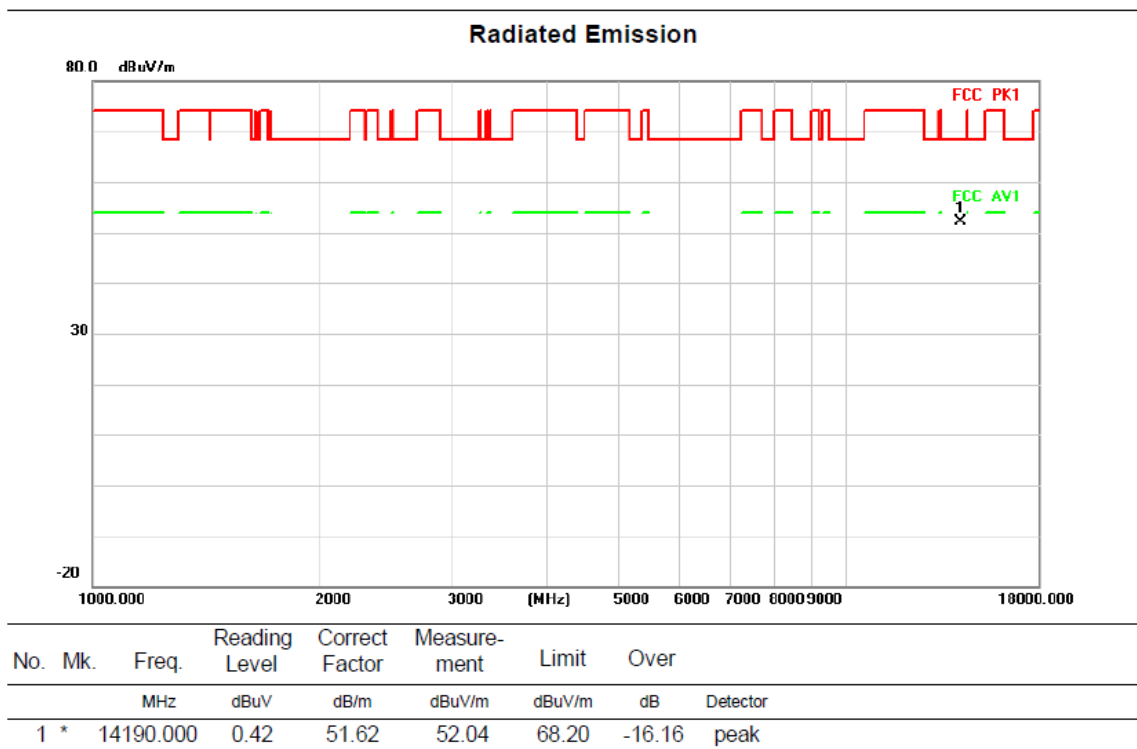


Above 1G (1GHz~18GHz)

Test mode:11AX20(RU26)

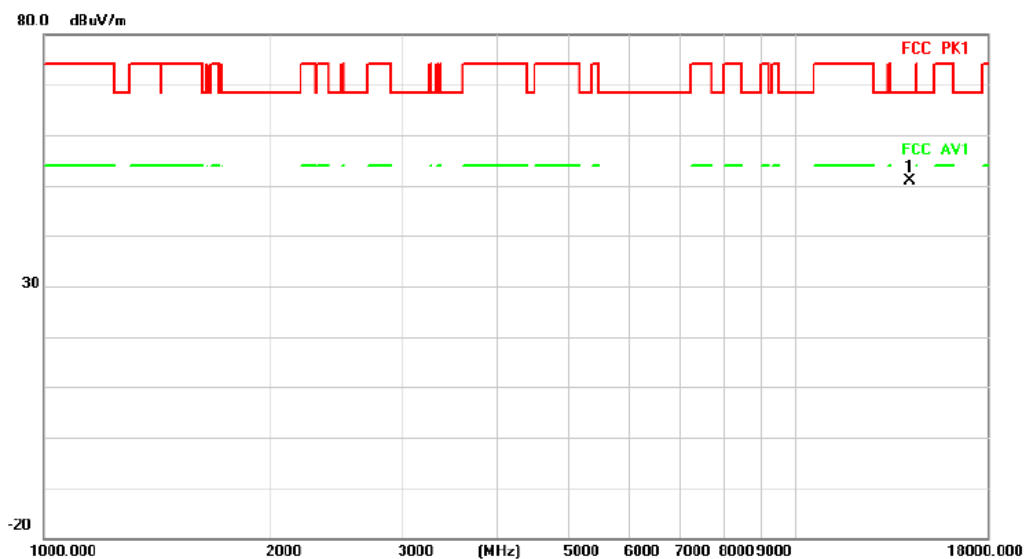
Test Channel:229

VERTICAL



HORIZONTALA

Radiated Emission



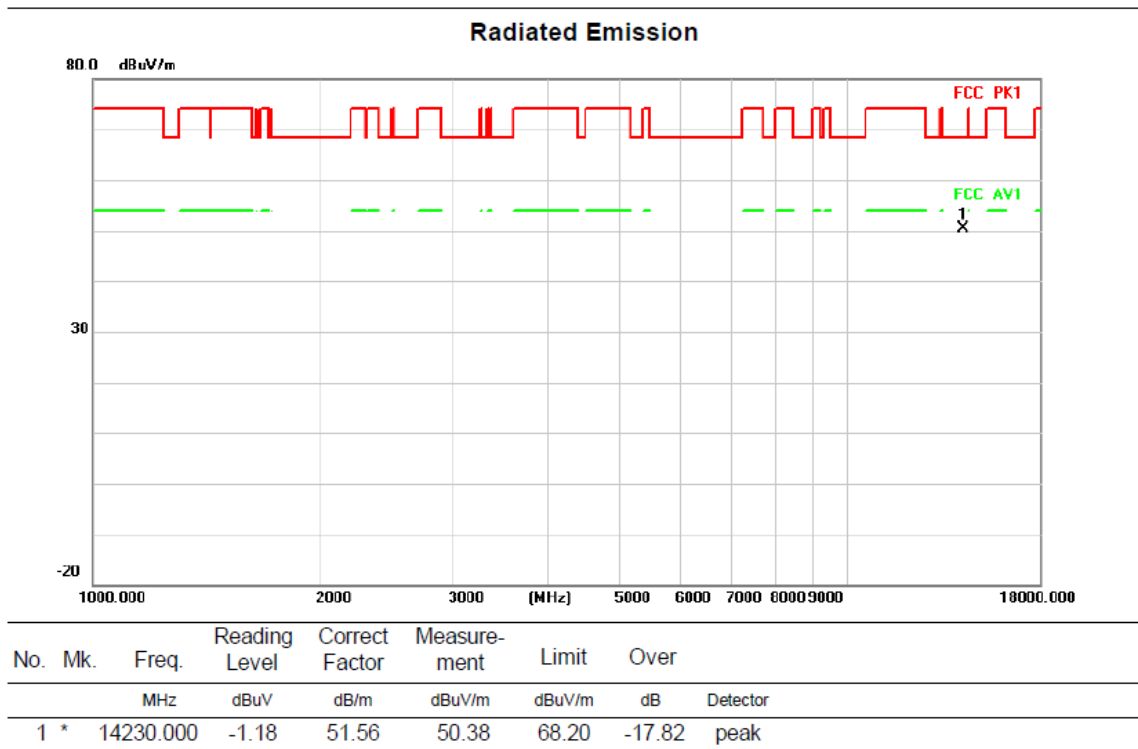
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14190.000	-0.64	51.62	50.98	68.20	-17.22	peak

Above 1G (1GHz~18GHz)

Test mode:11AX20(RU26)

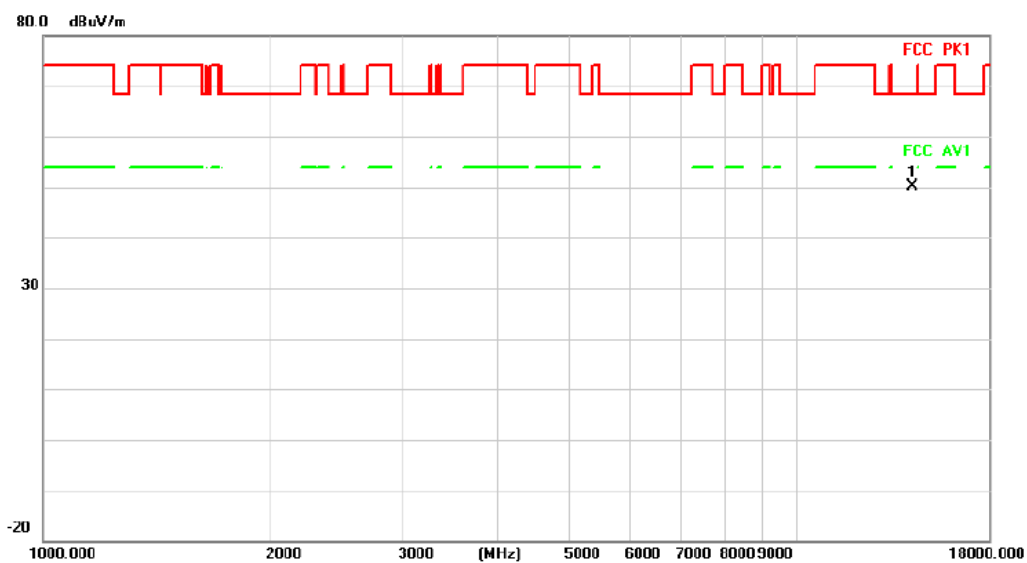
Test Channel:233

VERTICAL



HORIZONTALA

Radiated Emission



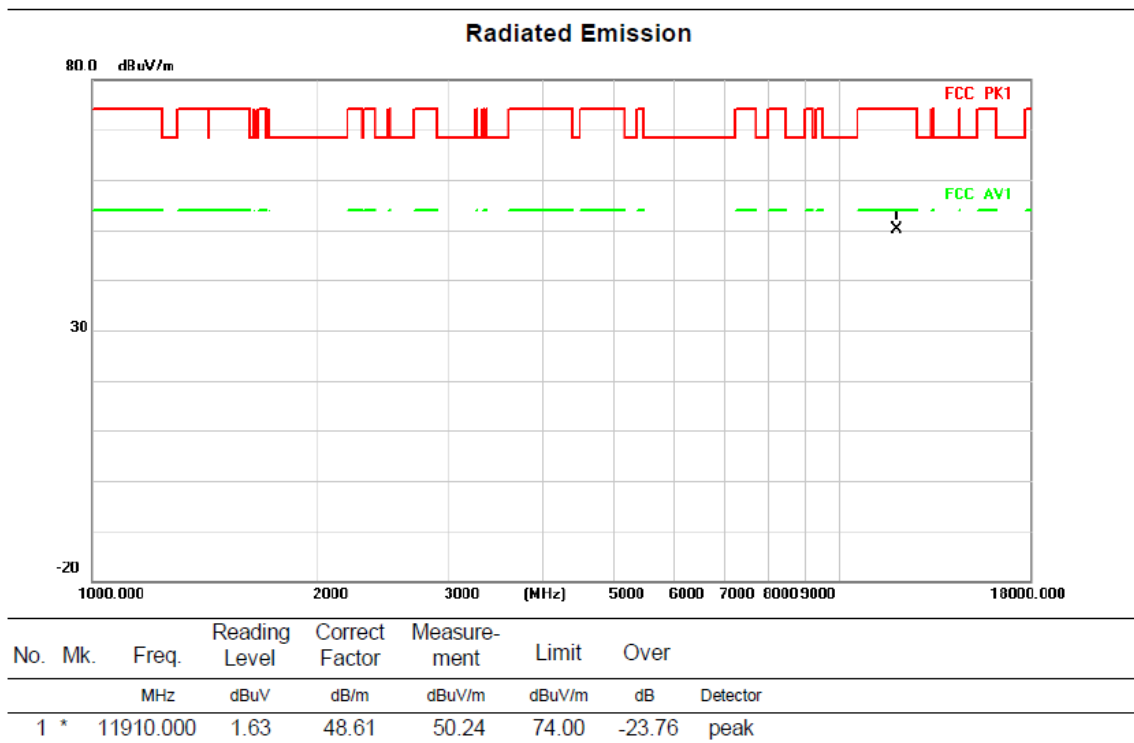
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB Detector
1	*	14230.000	-1.31	51.56	50.25	68.20	-17.95 peak

Above 1G (1GHz~18GHz)

Test mode:11AX20(RU52)

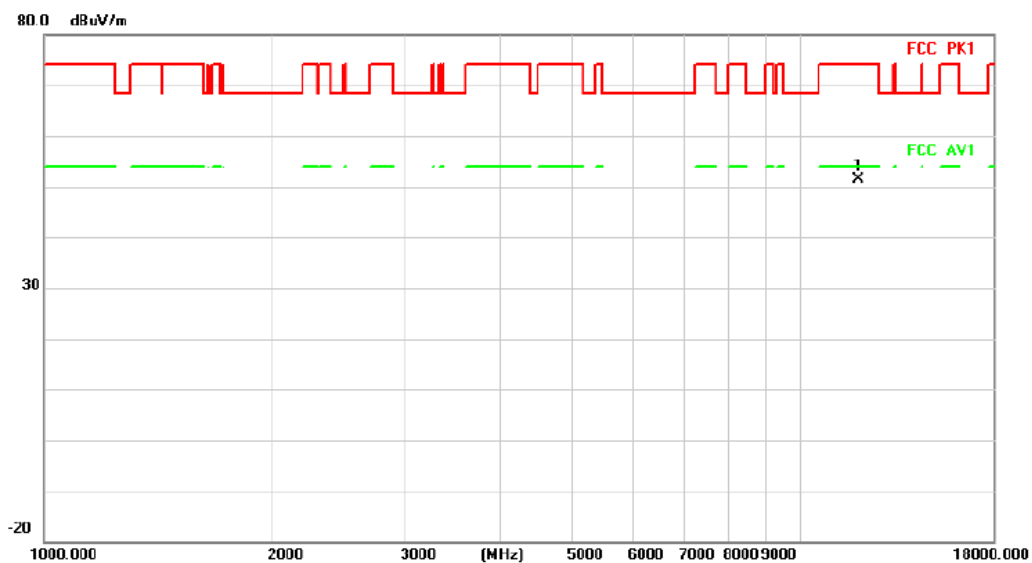
Test Channel:1

VERTICAL



HORIZONTALA

Radiated Emission



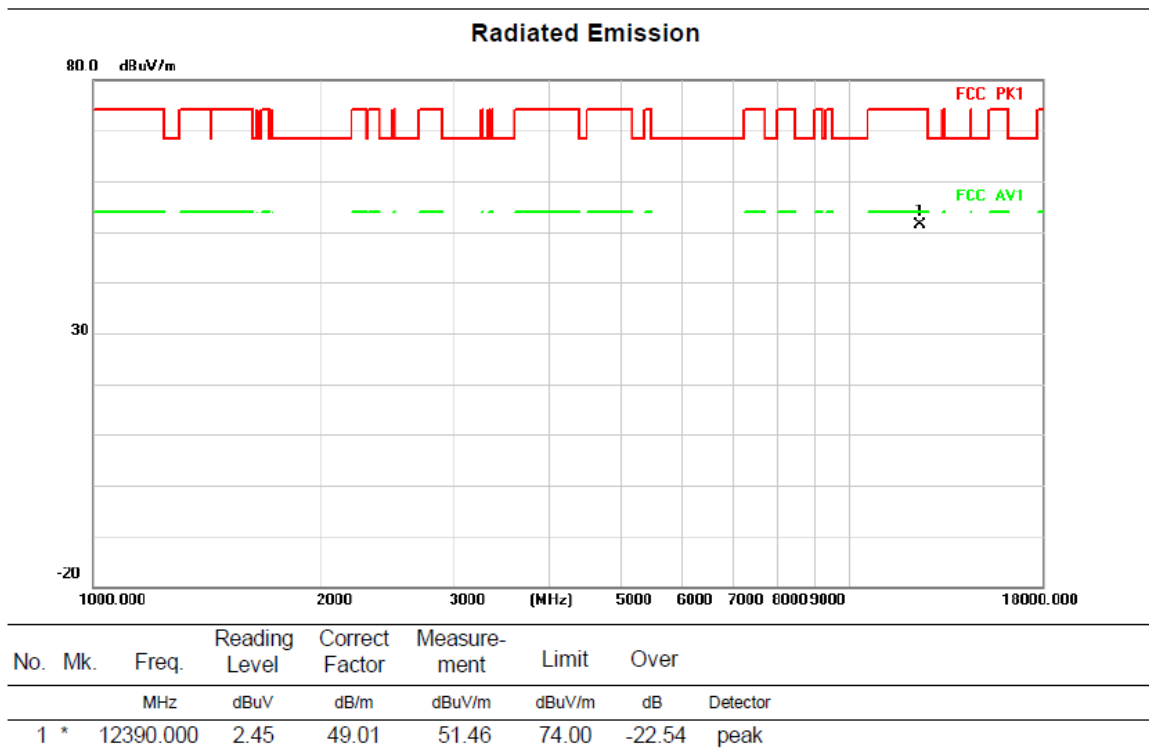
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	11910.000	2.73	48.61	51.34	74.00	-22.66	peak

Above 1G (1GHz~18GHz)

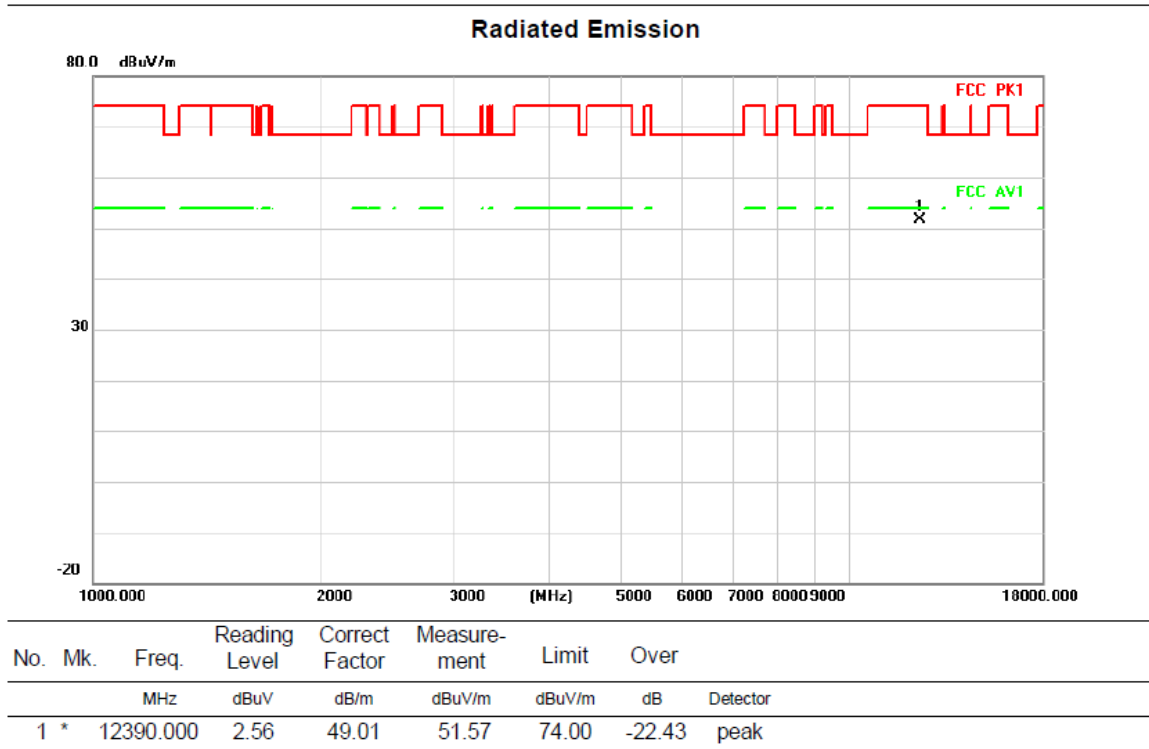
Test mode:11AX20(RU52)

Test Channel:49

VERTICAL



HORIZONTAL

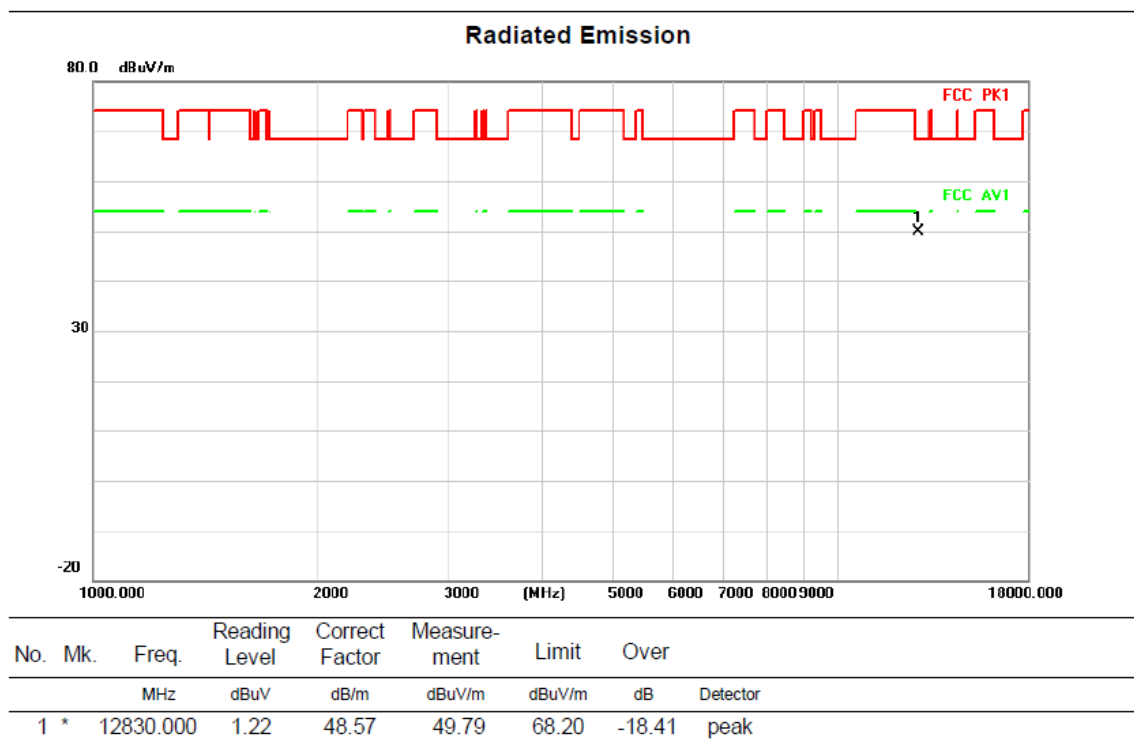


Above 1G (1GHz~18GHz)

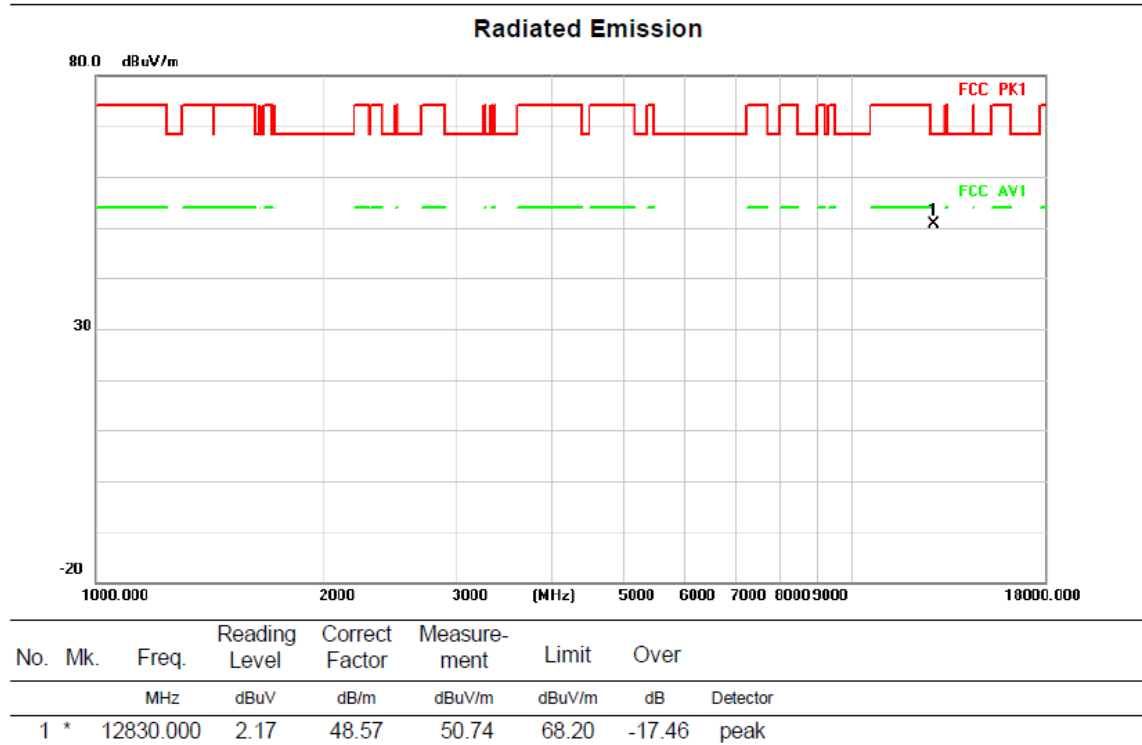
Test mode:11AX20(RU52)

Test Channel:93

VERTICAL



HORIZONTAL

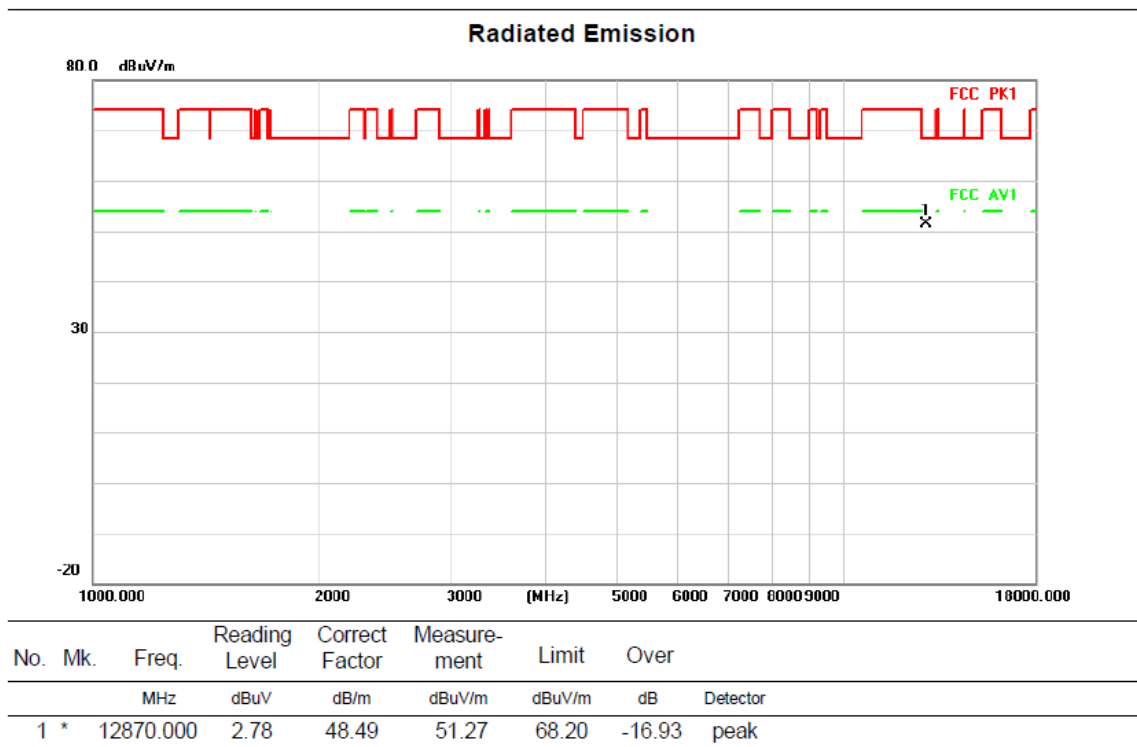


Above 1G (1GHz~18GHz)

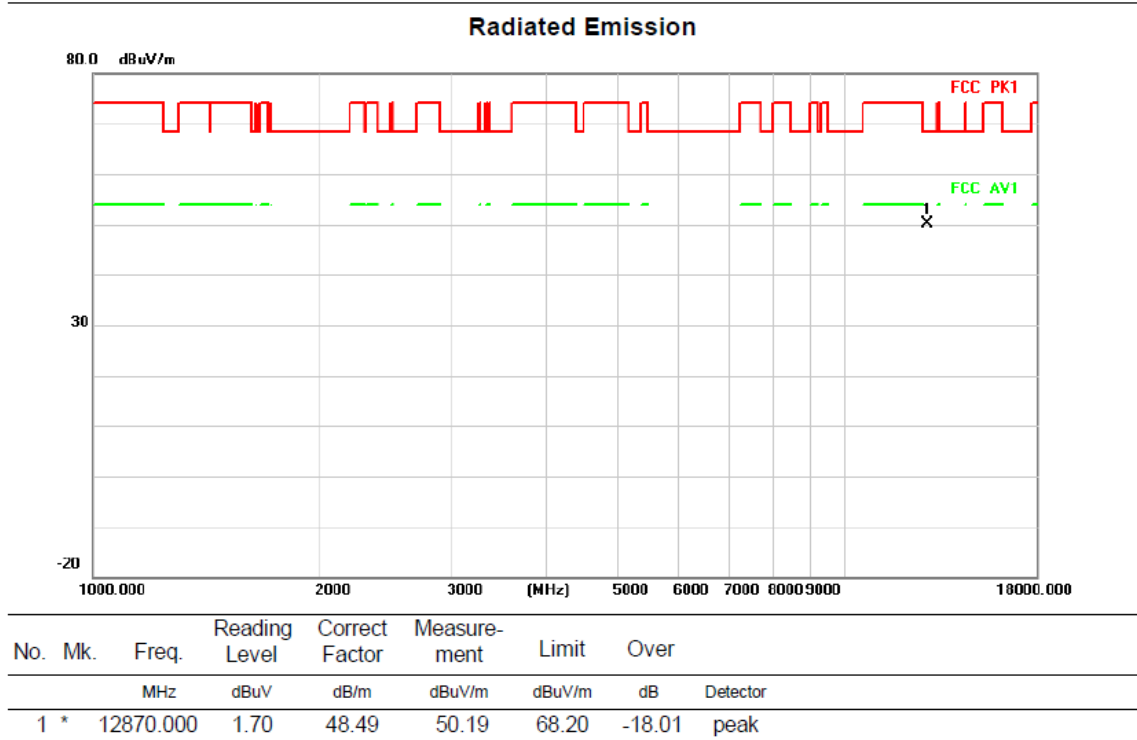
Test mode:11AX20(RU52)

Test Channel:97

VERTICAL



HORIZONTAL

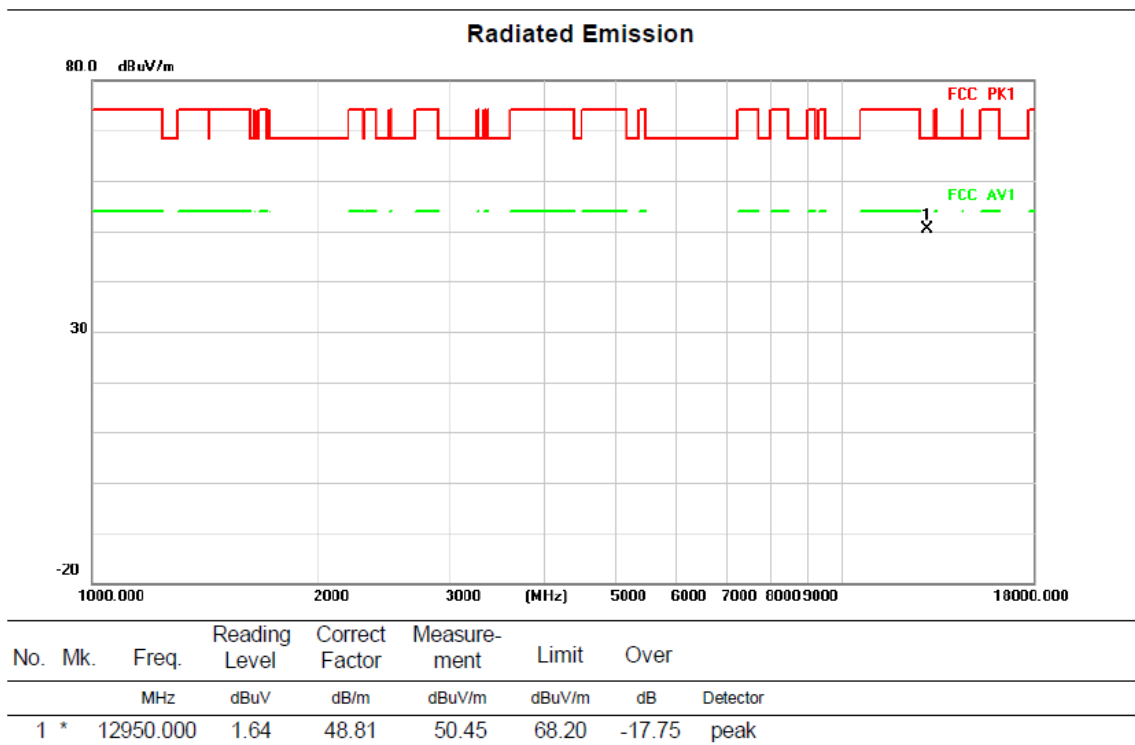


Above 1G (1GHz~18GHz)

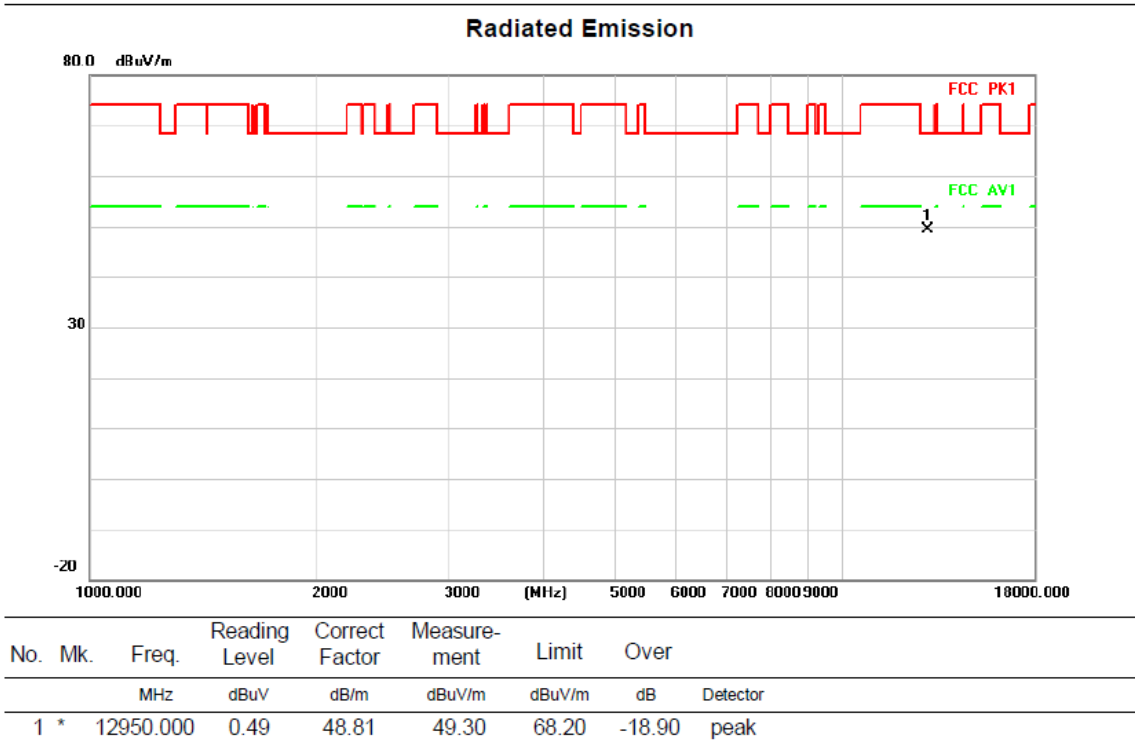
Test mode:11AX20(RU52)

Test Channel:105

VERTICAL



HORIZONTAL

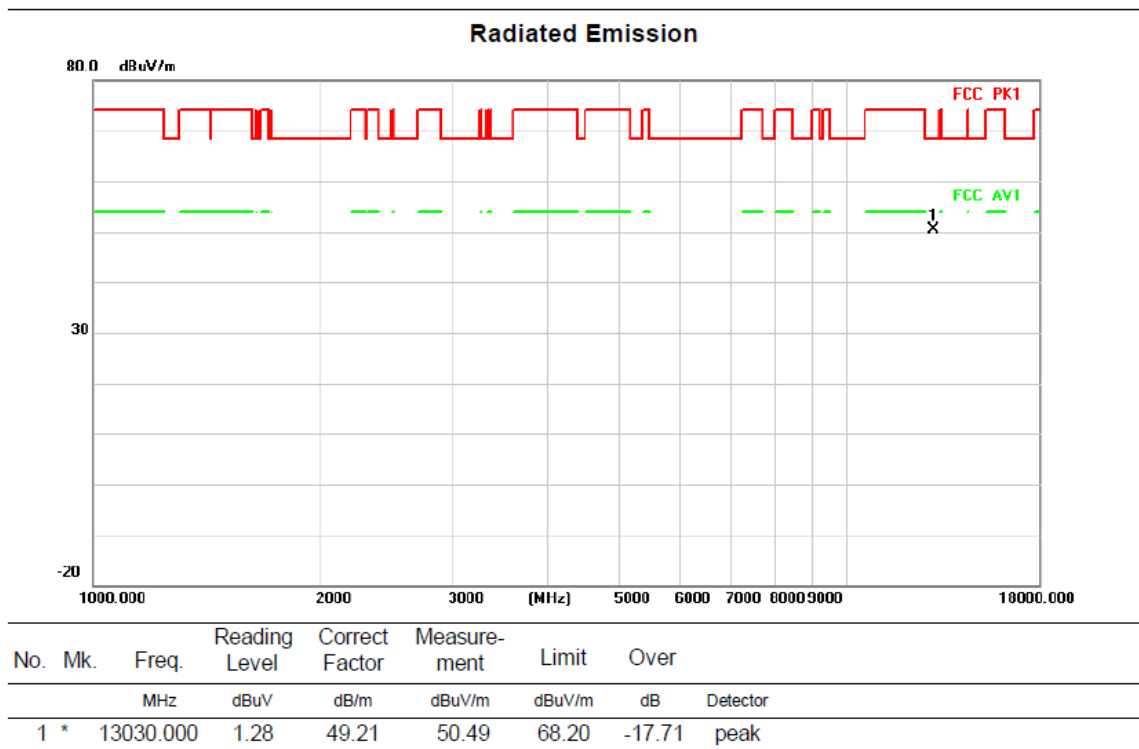


Above 1G (1GHz~18GHz)

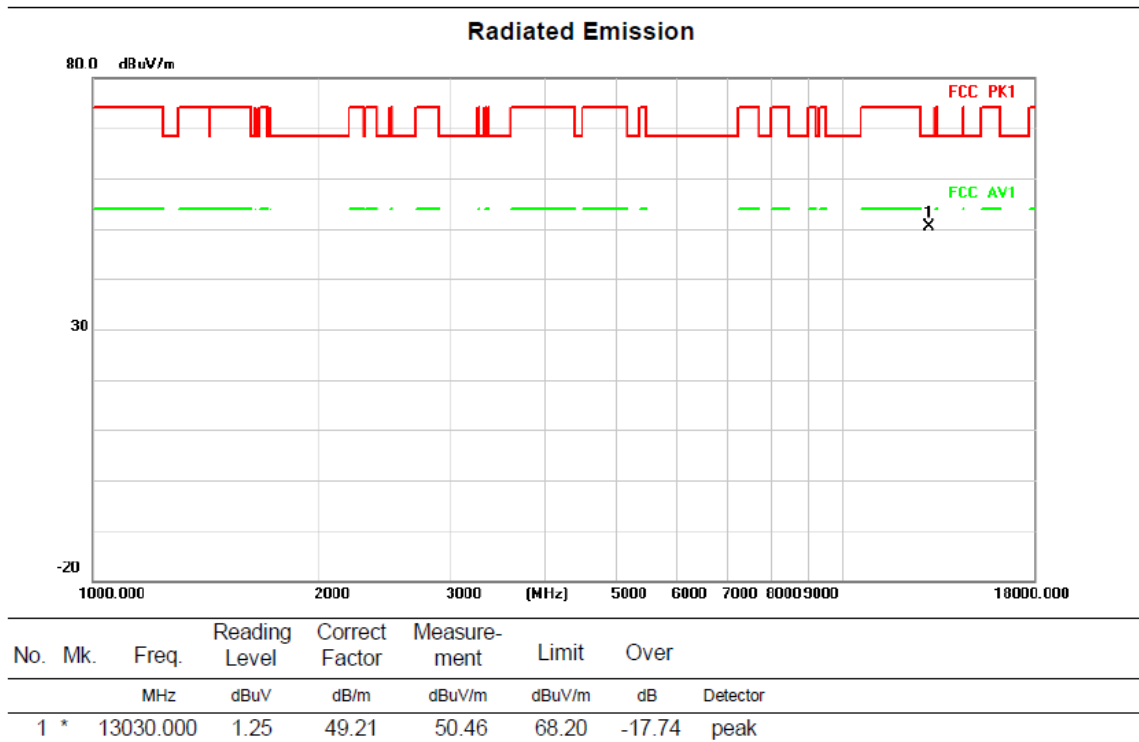
Test mode:11AX20(RU52)

Test Channel:113

VERTICAL



HORIZONTAL

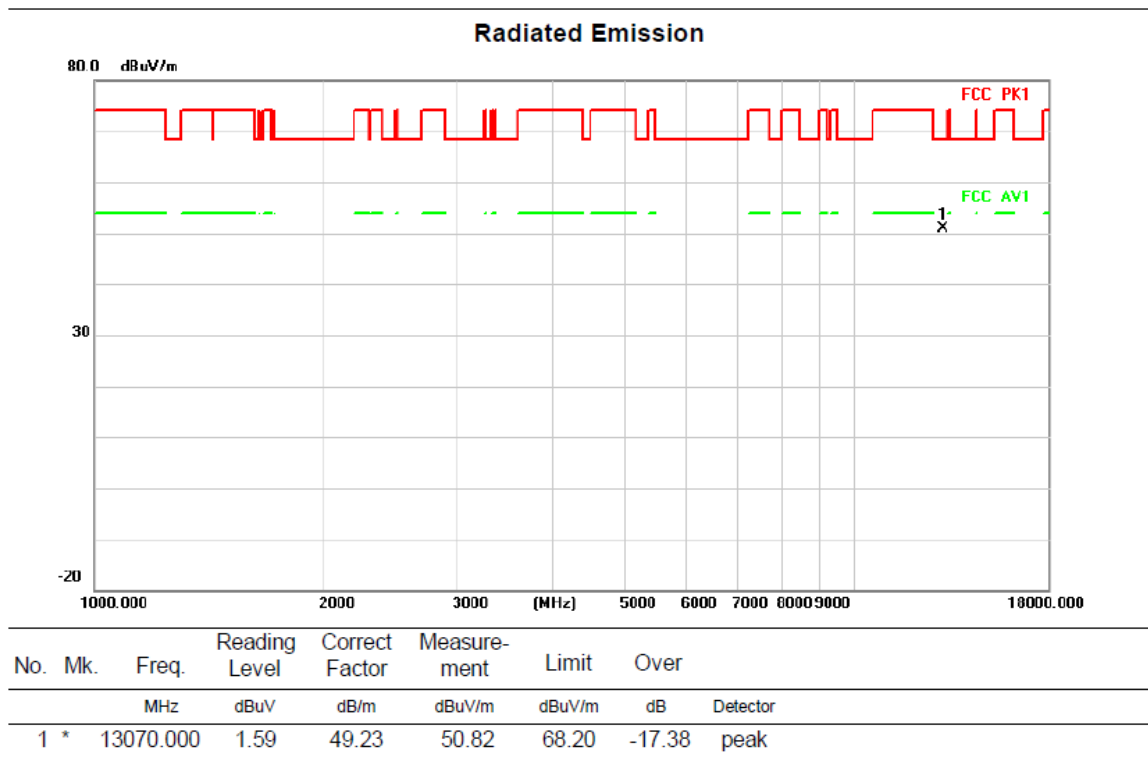


Above 1G (1GHz~18GHz)

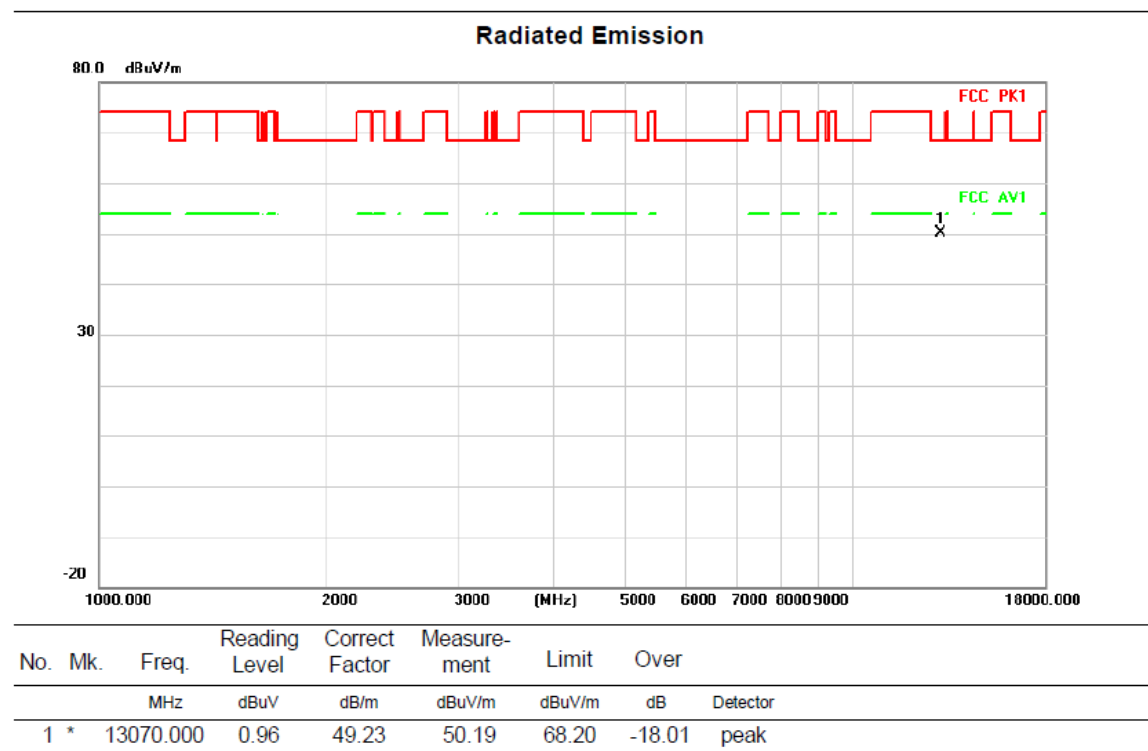
Test mode:11AX20(RU52)

Test Channel:117

VERTICAL



HORIZONTAL

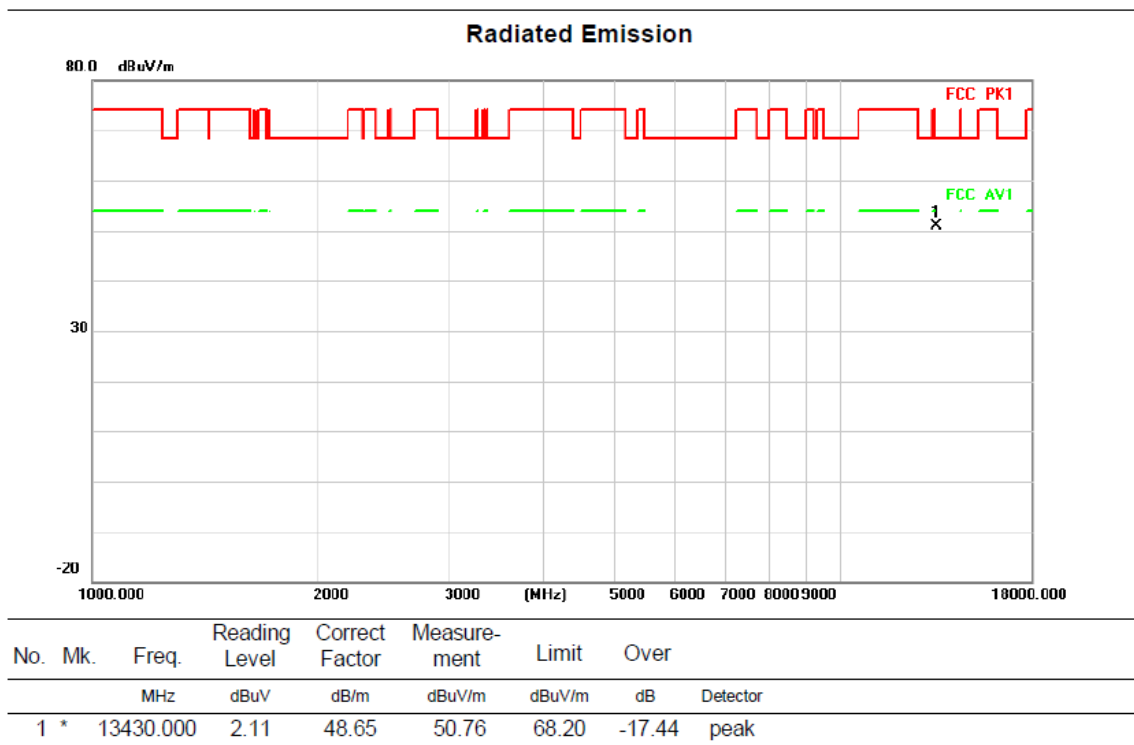


Above 1G (1GHz~18GHz)

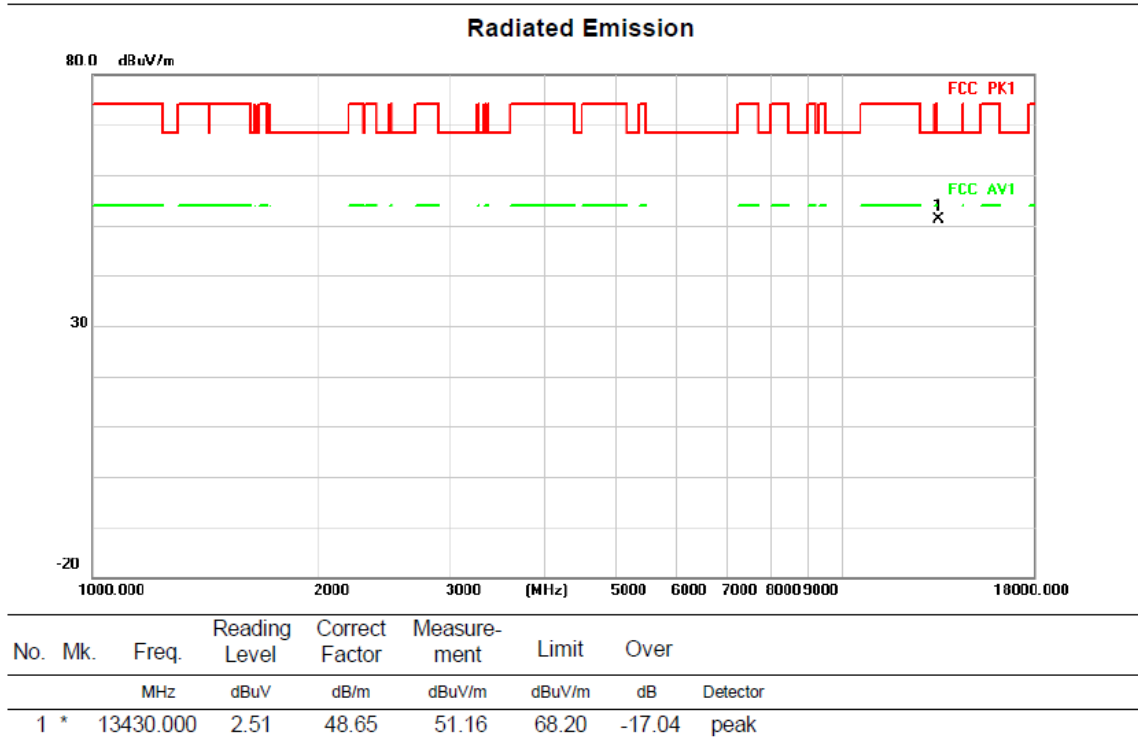
Test mode:11AX20(RU52)

Test Channel:153

VERTICAL



HORIZONTAL

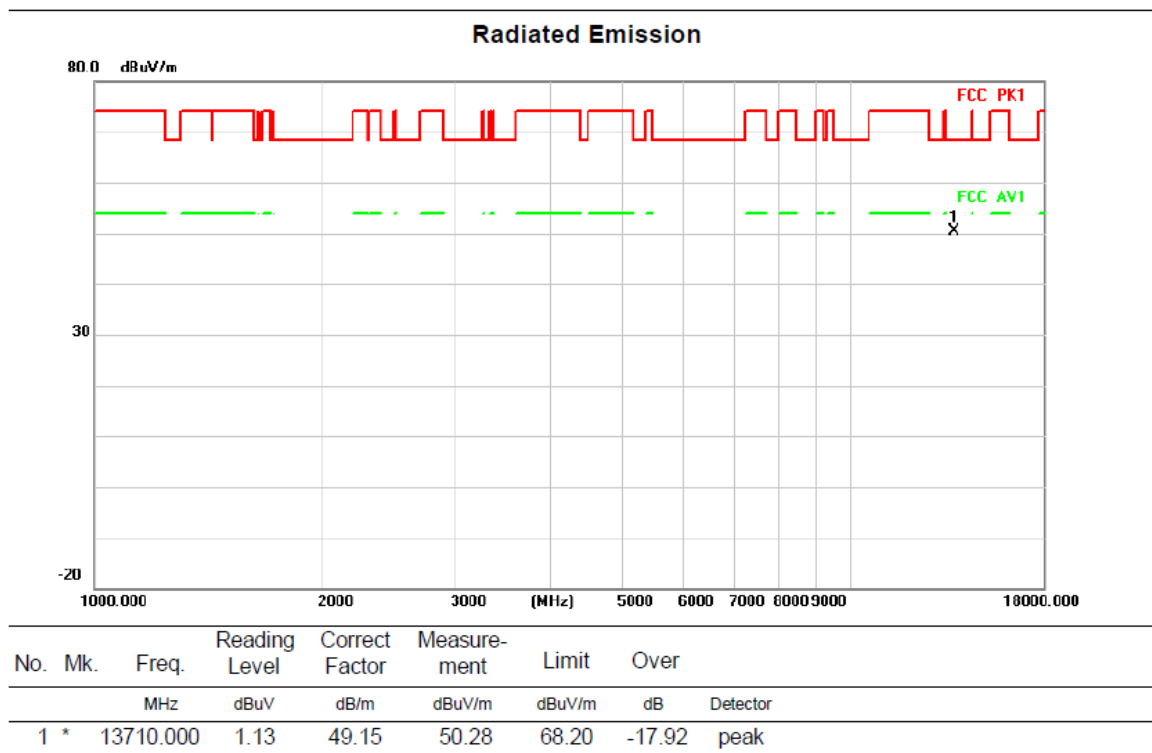


Above 1G (1GHz~18GHz)

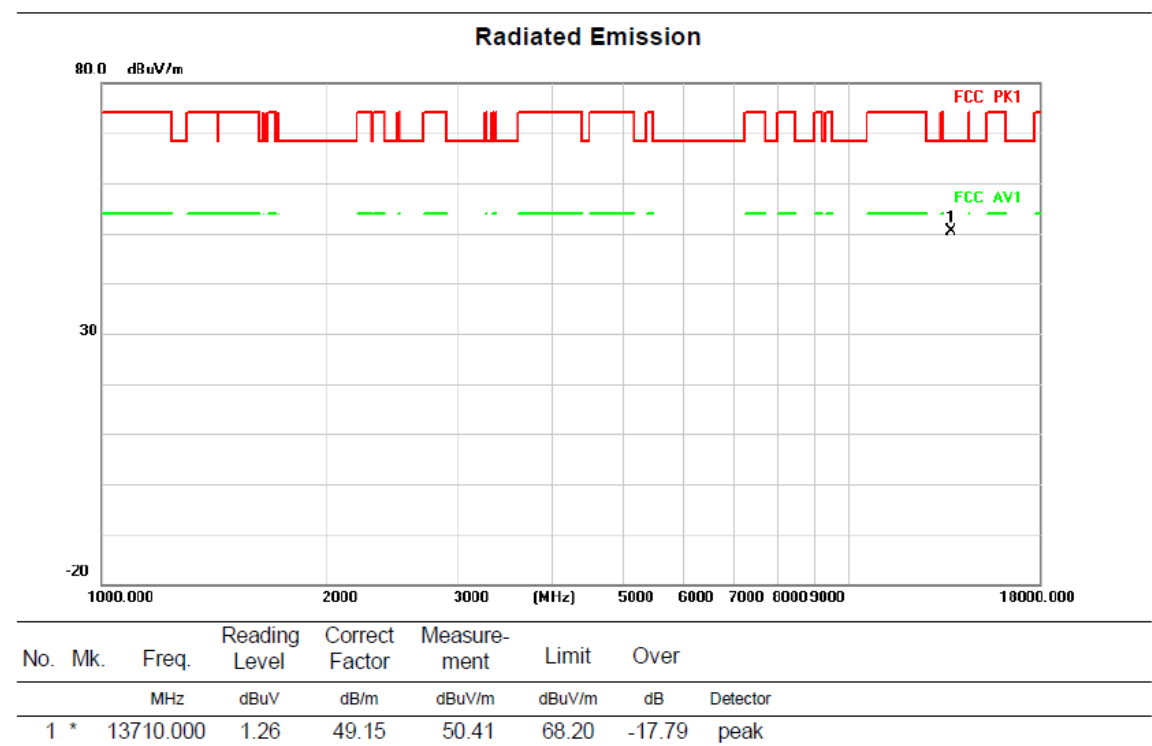
Test mode:11AX20(RU52)

Test Channel:181

VERTICAL



HORIZONTAL

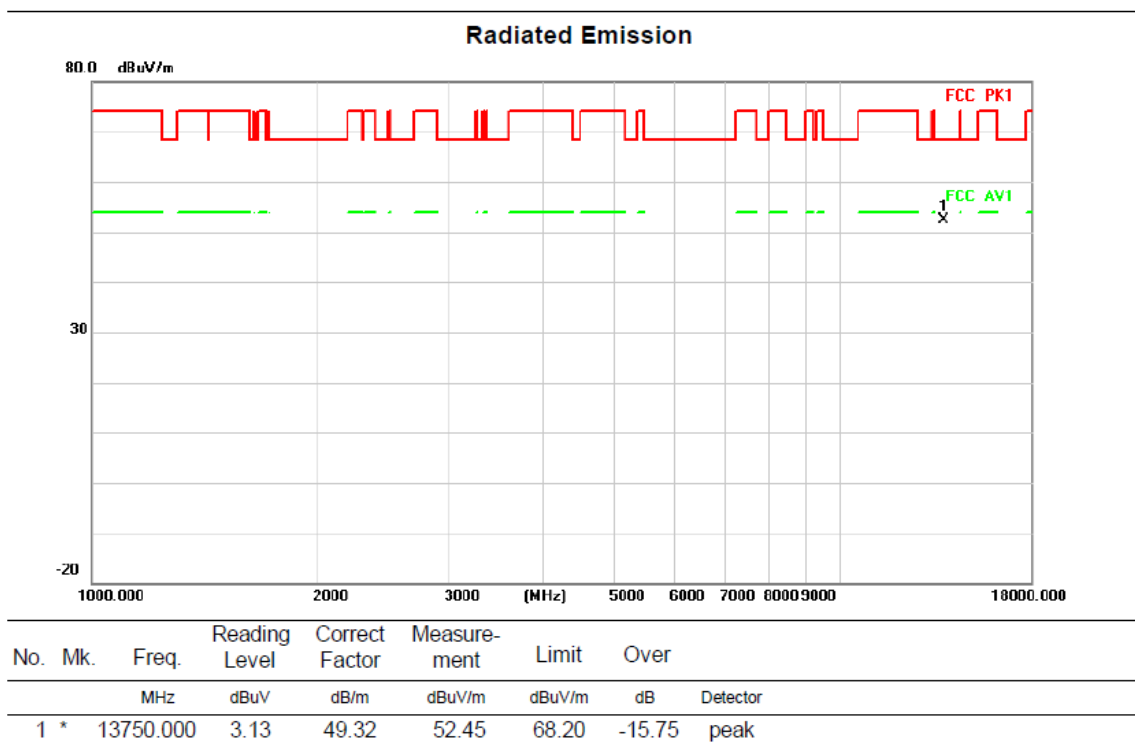


Above 1G (1GHz~18GHz)

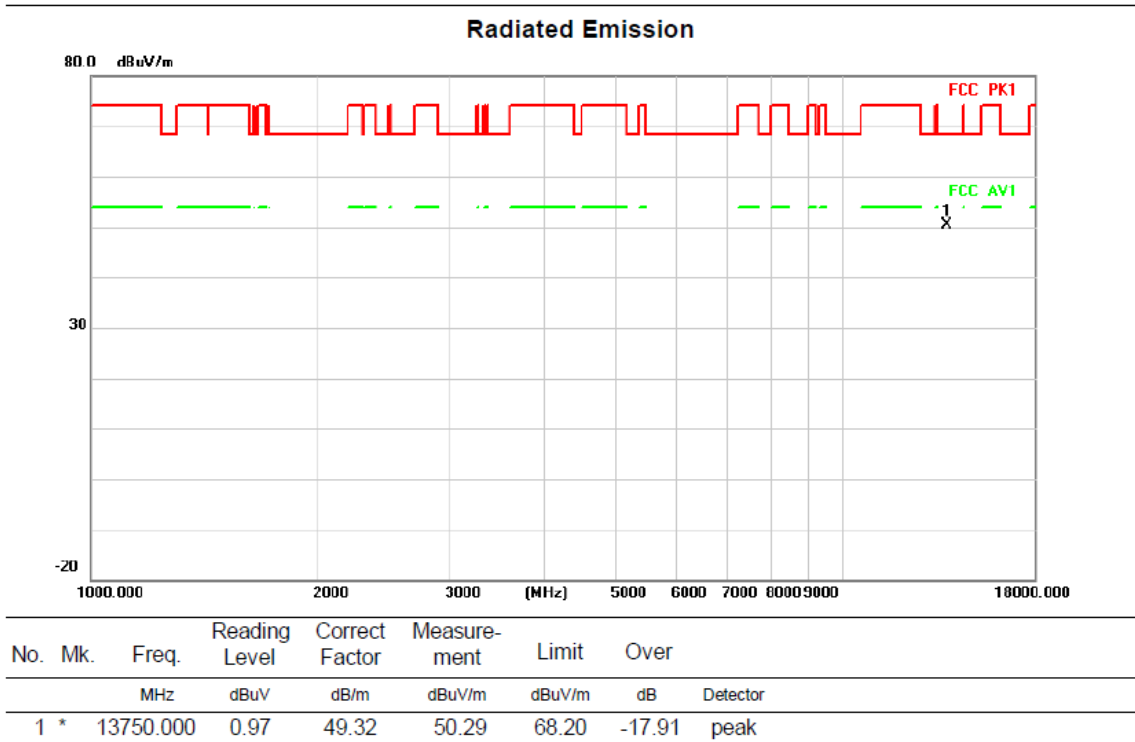
Test mode:11AX20(RU52)

Test Channel:185

VERTICAL



HORIZONTAL

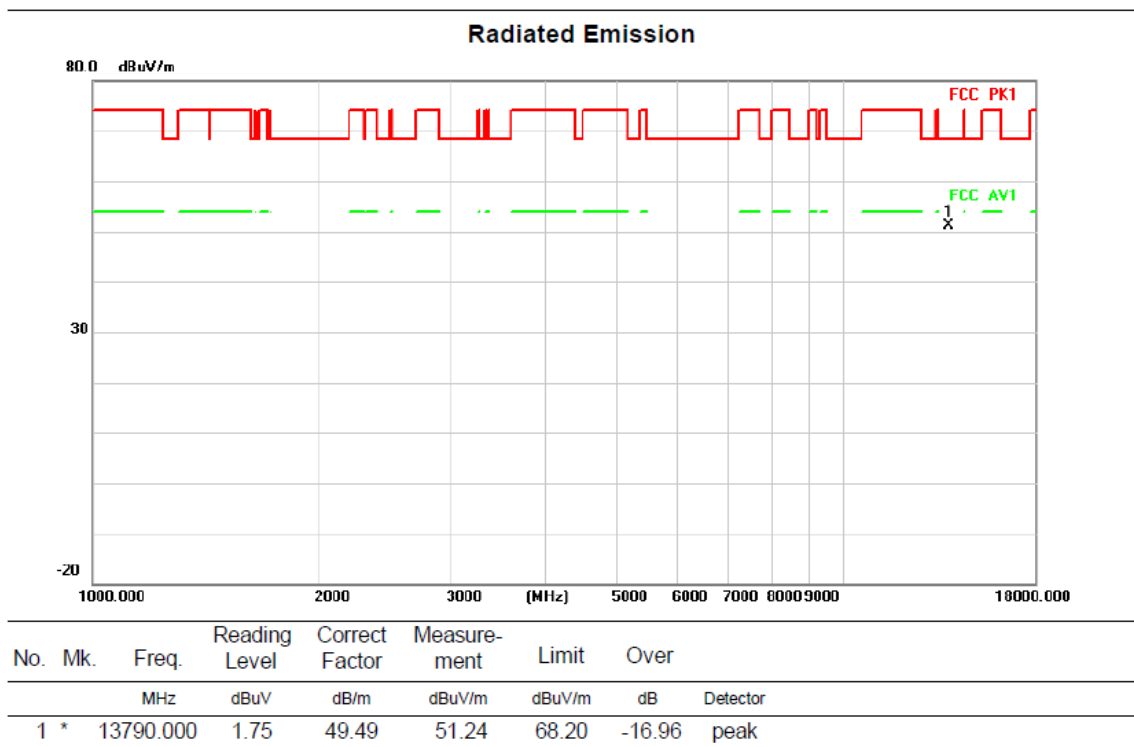


Above 1G (1GHz~18GHz)

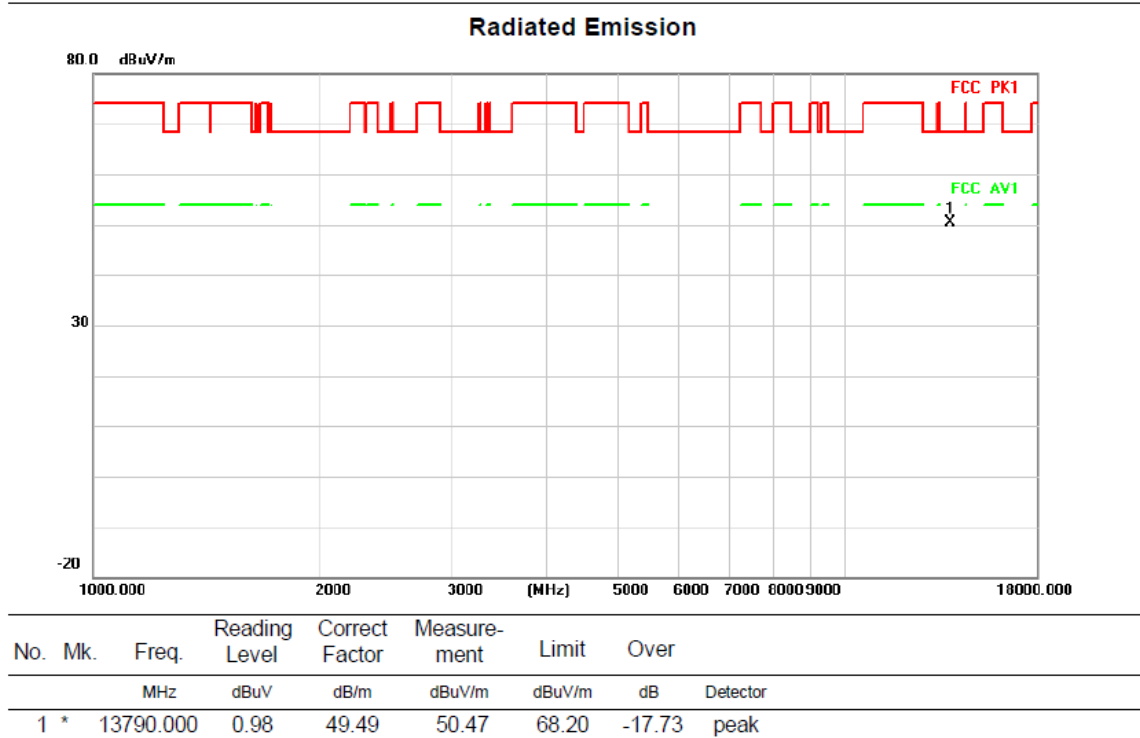
Test mode:11AX20(RU52)

Test Channel:189

VERTICAL



HORIZONTAL

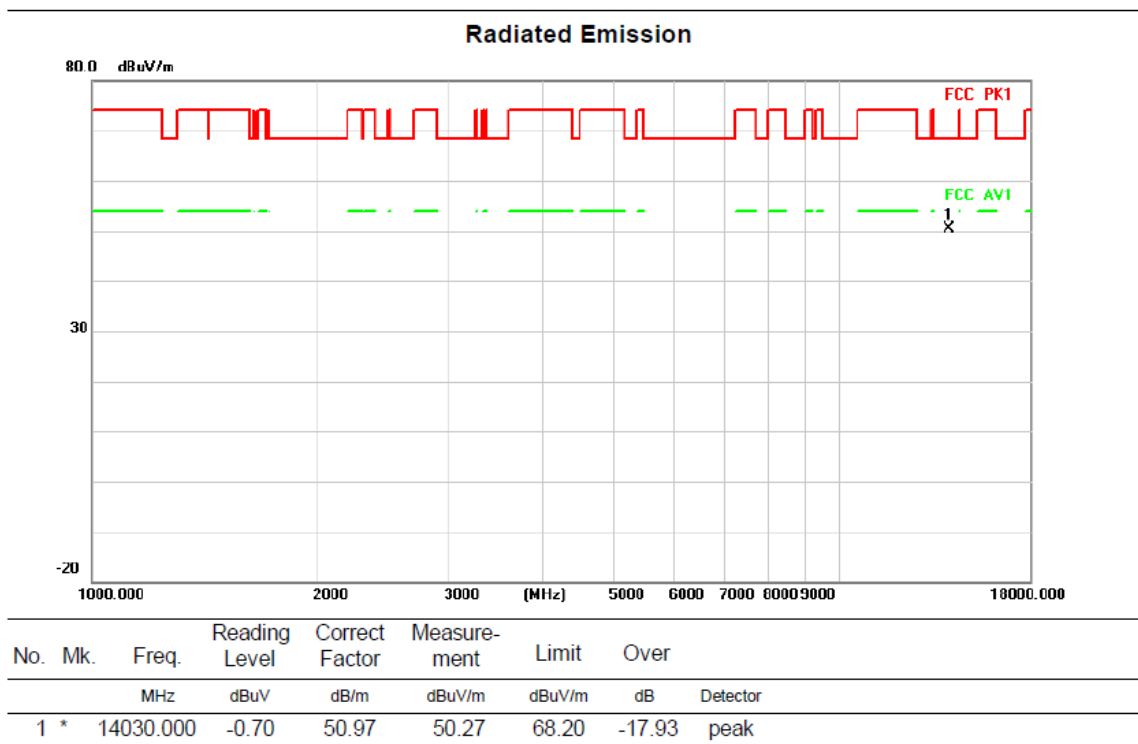


Above 1G (1GHz~18GHz)

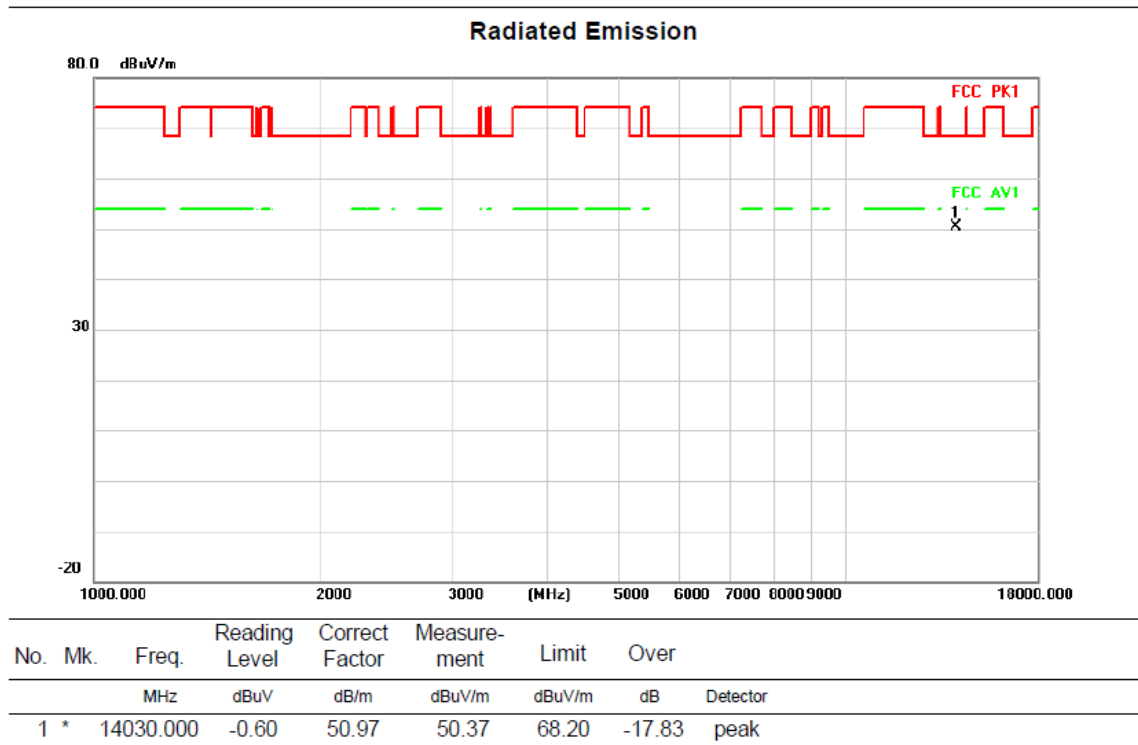
Test mode:11AX20(RU52)

Test Channel:213

VERTICAL



HORIZONTAL

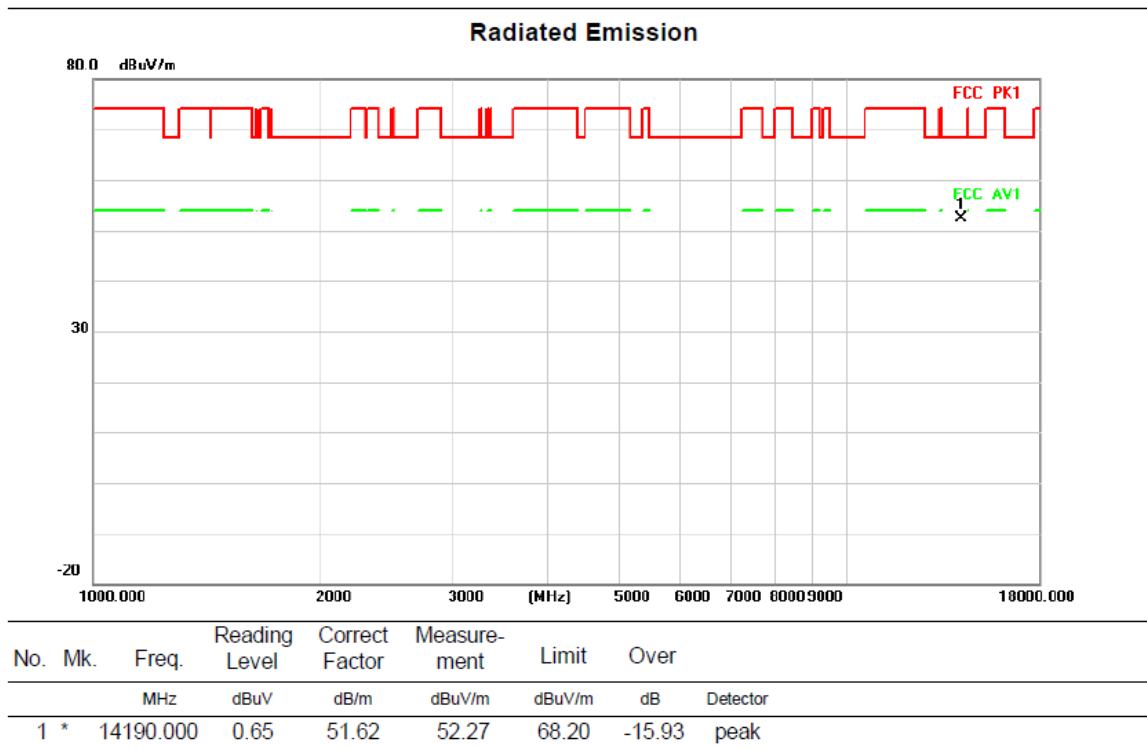


Above 1G (1GHz~18GHz)

Test mode:11AX20(RU52)

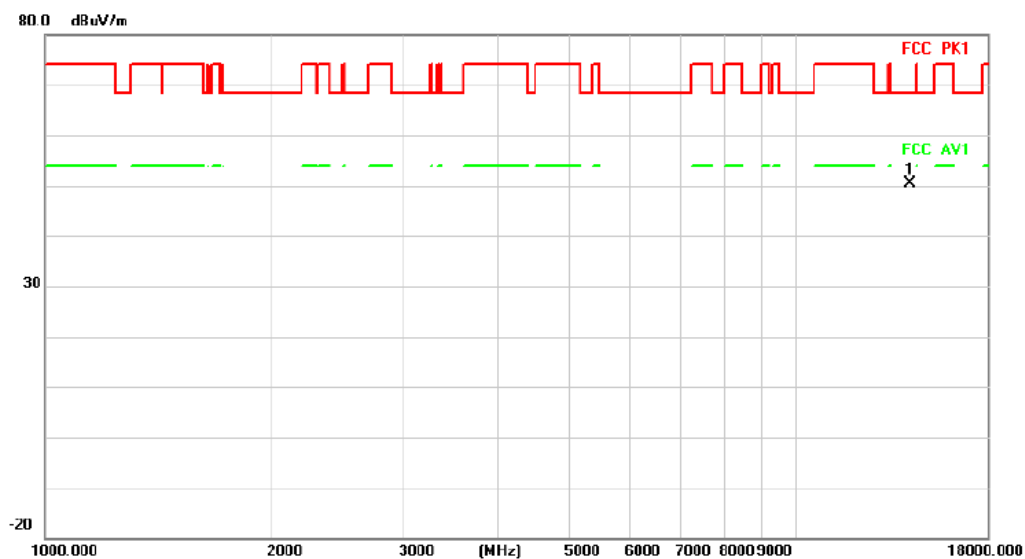
Test Channel:229

VERTICAL



HORIZONTALA

Radiated Emission



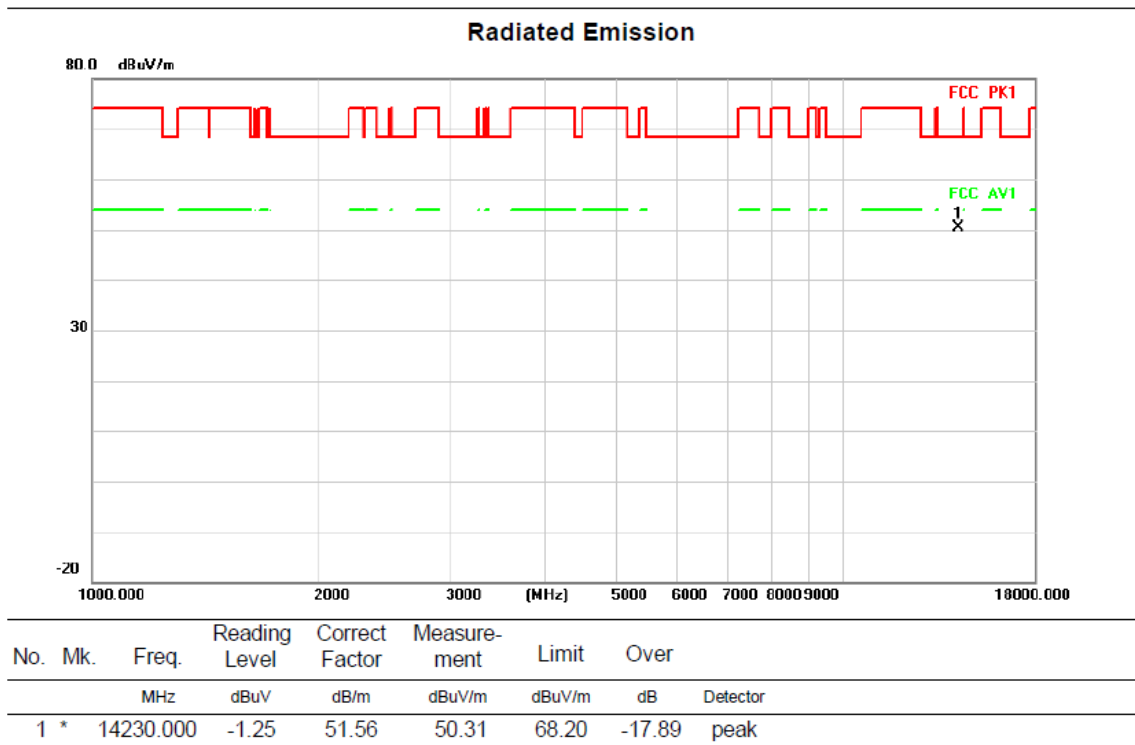
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	14190.000	-1.34	51.62	50.28	68.20	-17.92	peak

Above 1G (1GHz~18GHz)

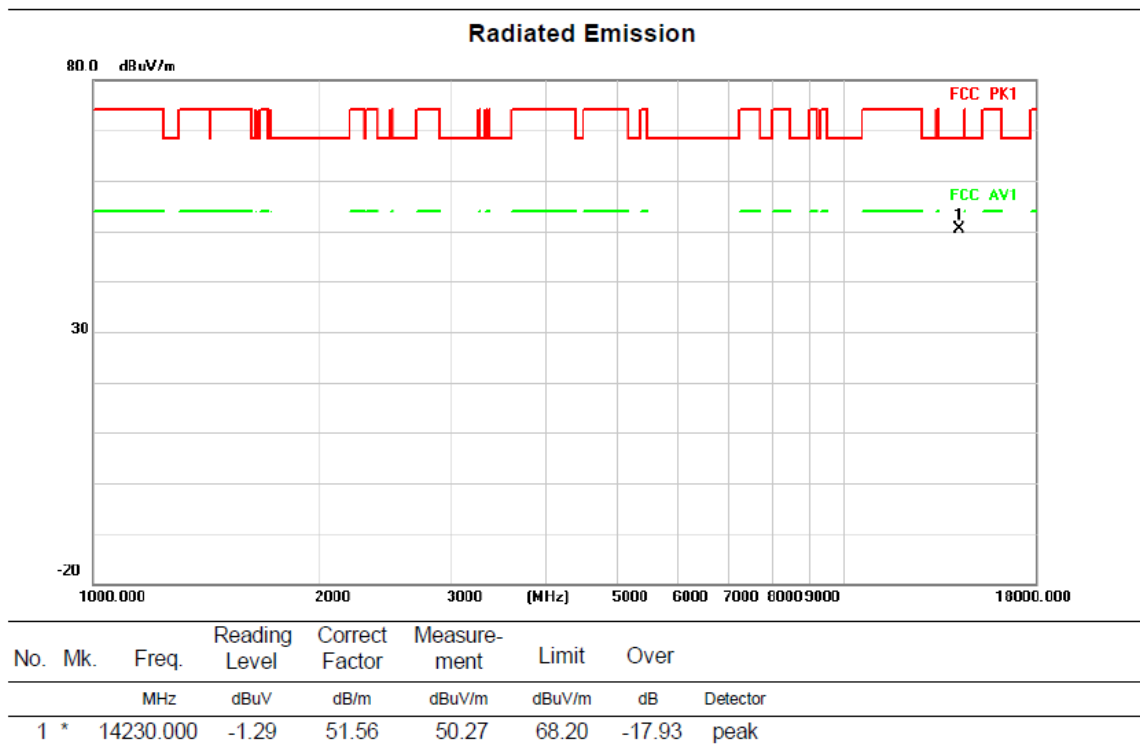
Test mode:11AX20(RU52)

Test Channel:233

VERTICAL



HORIZONTAL

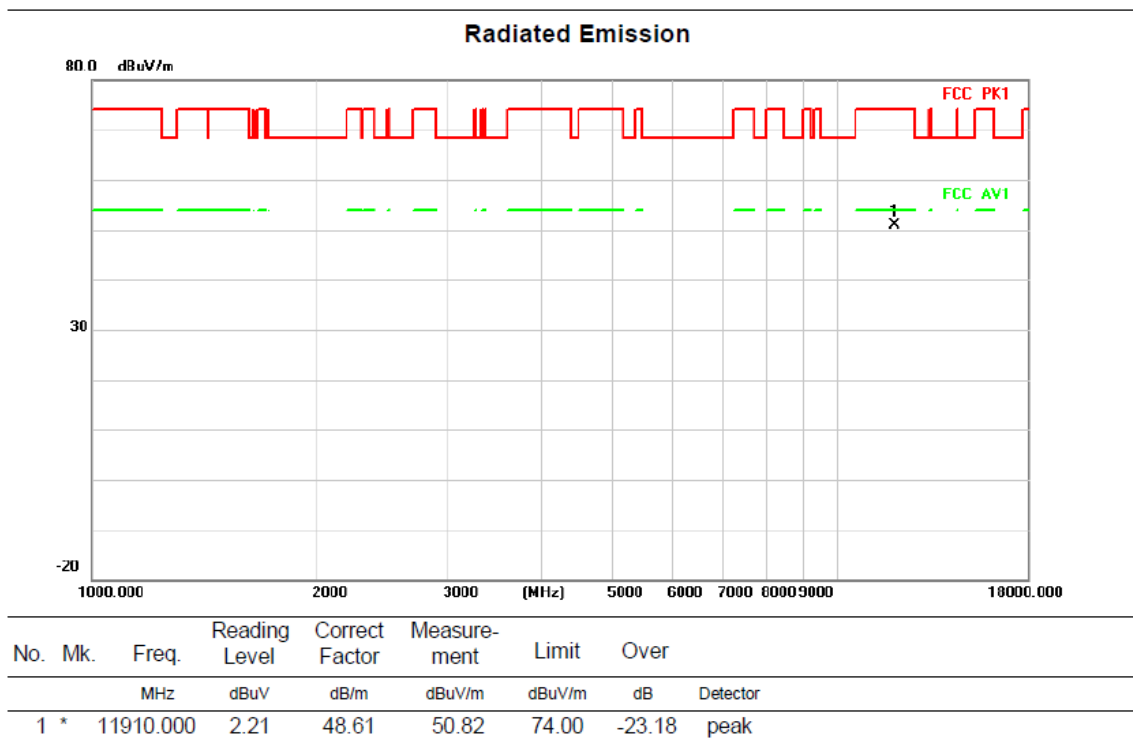


Above 1G (1GHz~18GHz)

Test mode:11AX20(RU106)

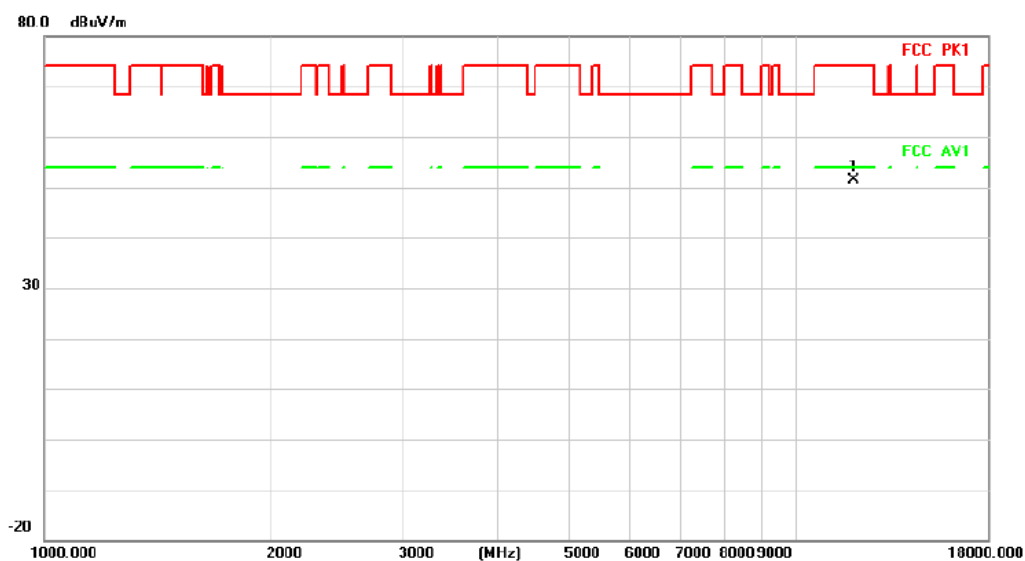
Test Channel:1

VERTICAL



HORIZONTAL

Radiated Emission



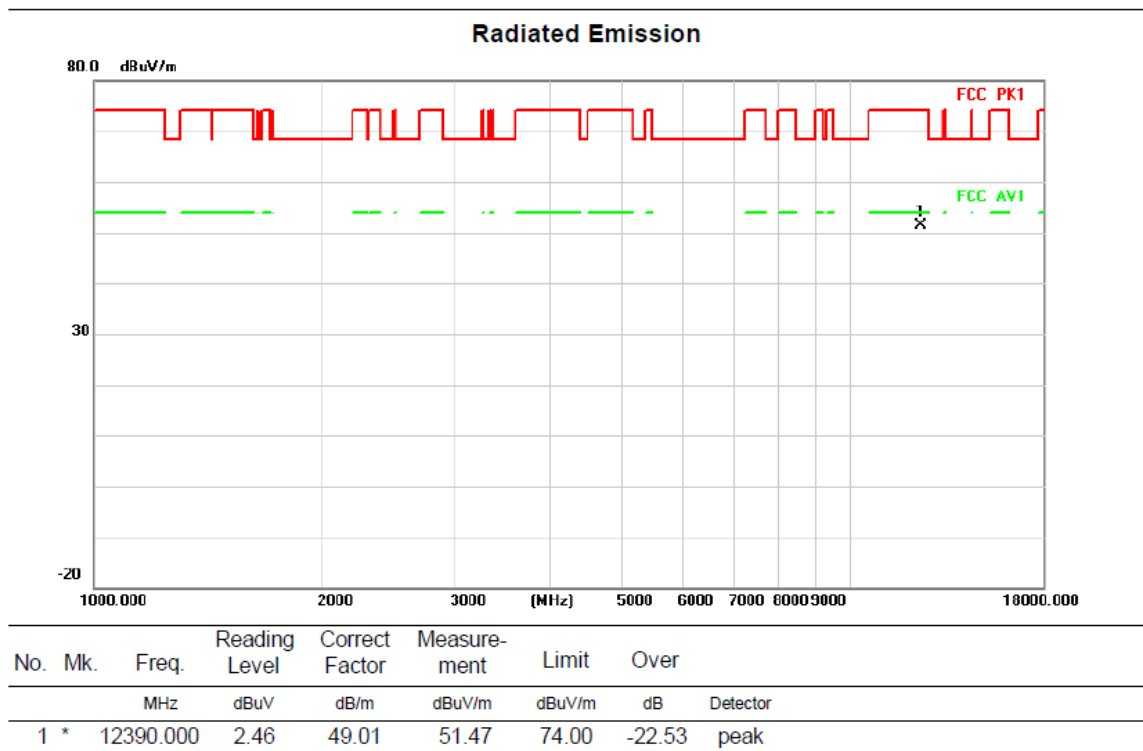
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	11910.000	2.67	48.61	51.28	74.00	-22.72	peak

Above 1G (1GHz~18GHz)

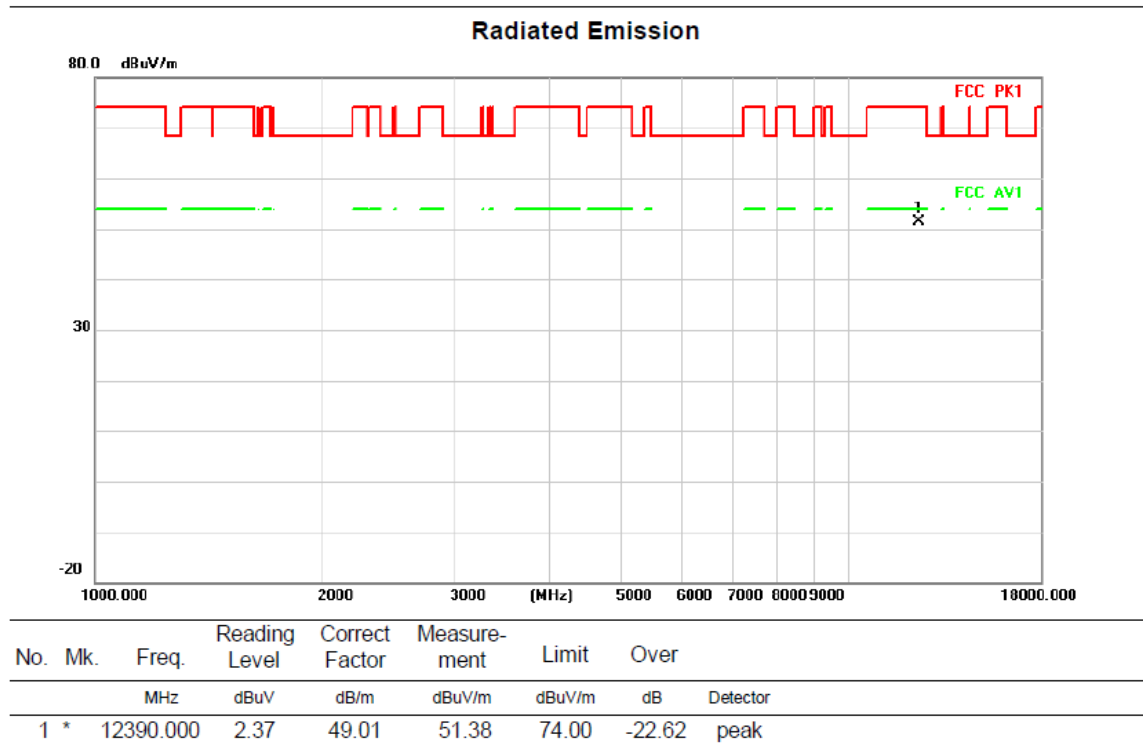
Test mode:11AX20(RU106)

Test Channel:49

VERTICAL



HORIZONTAL

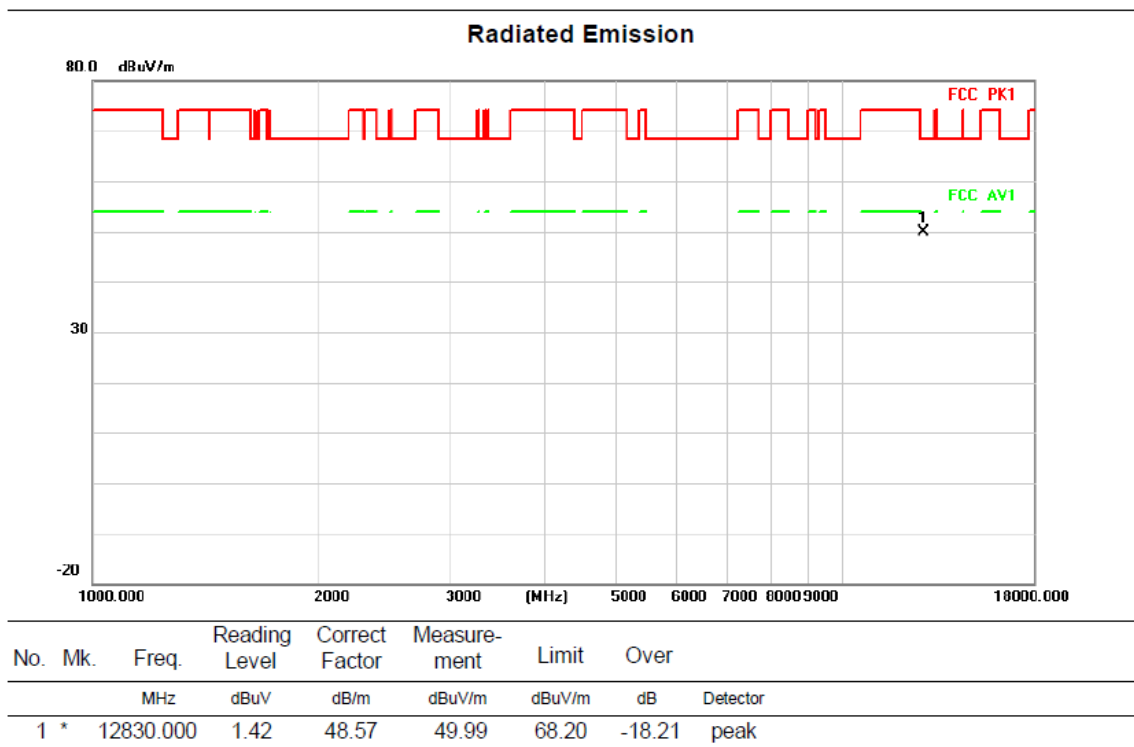


Above 1G (1GHz~18GHz)

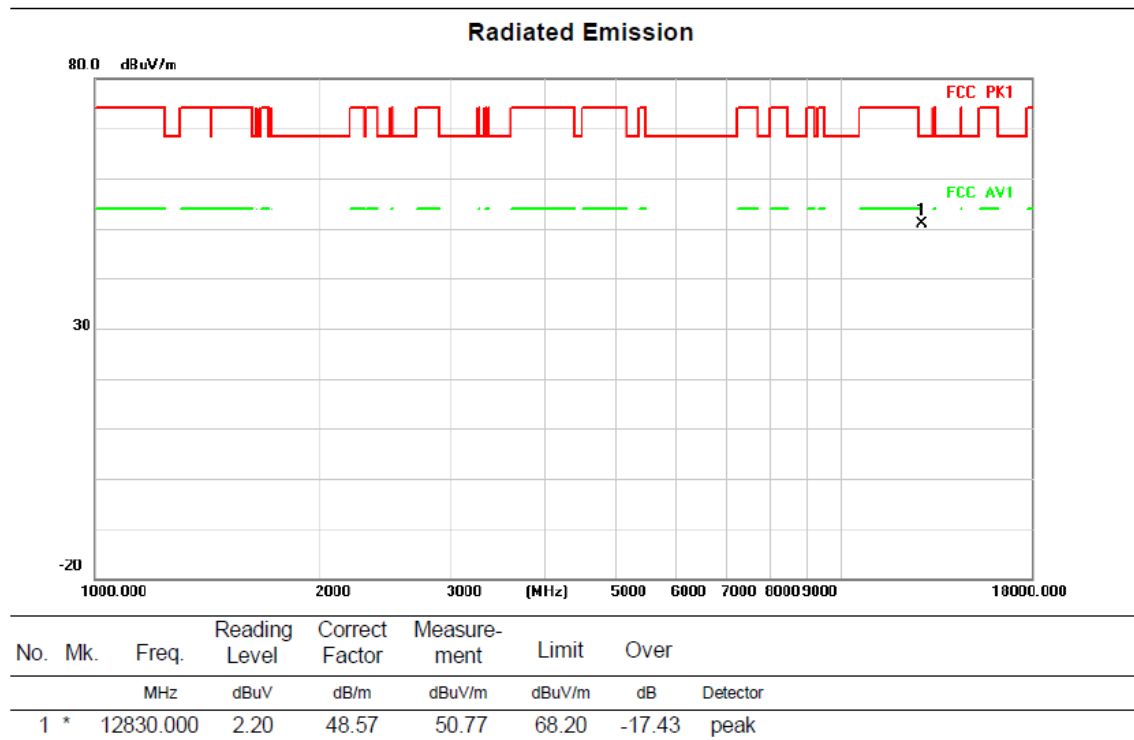
Test mode:11AX20(RU106)

Test Channel:93

VERTICAL



HORIZONTAL

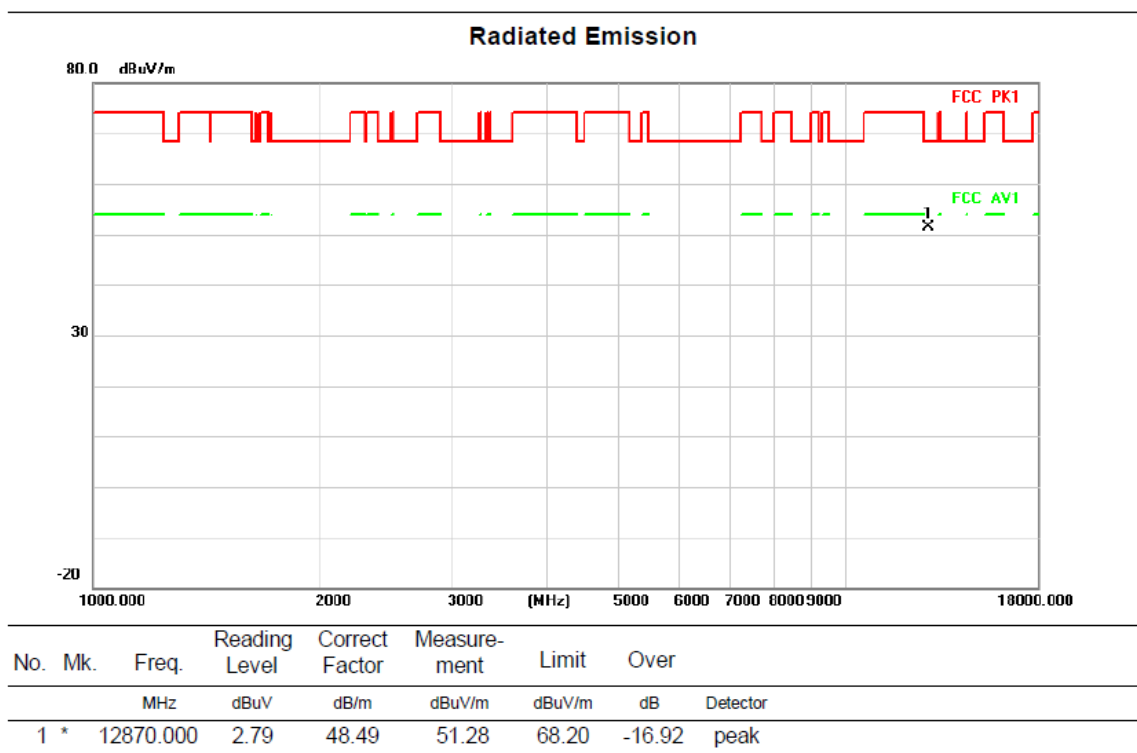


Above 1G (1GHz~18GHz)

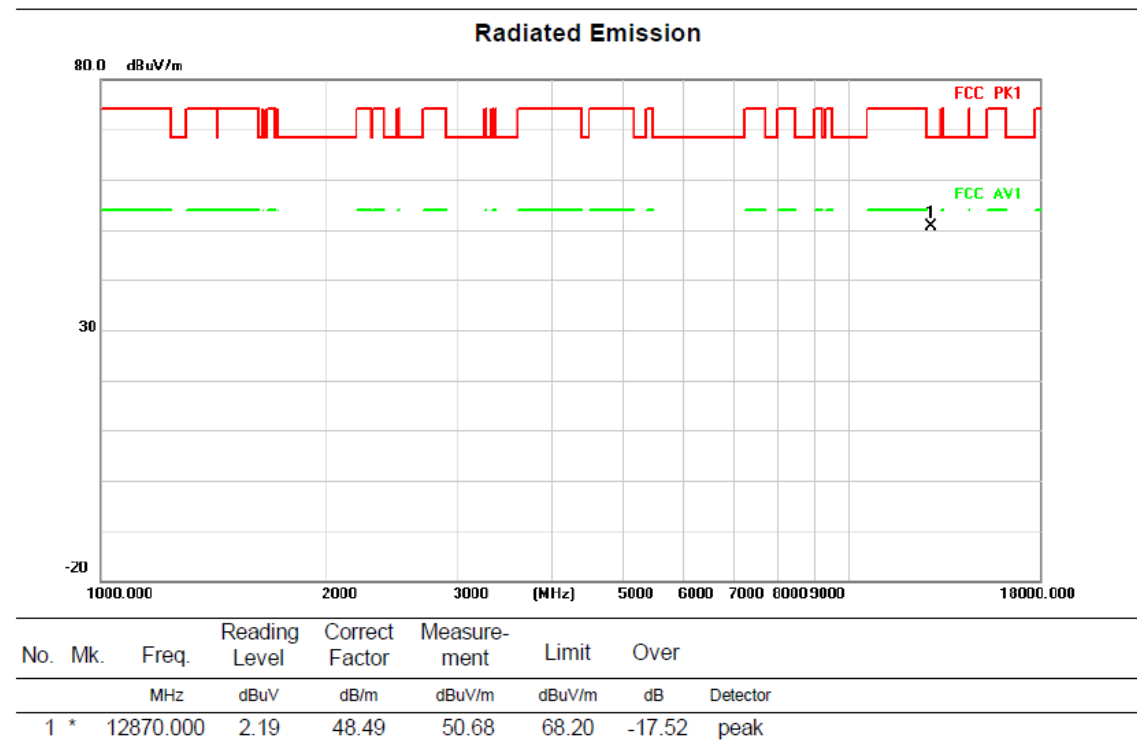
Test mode:11AX20(RU106)

Test Channel:97

VERTICAL



HORIZONTAL

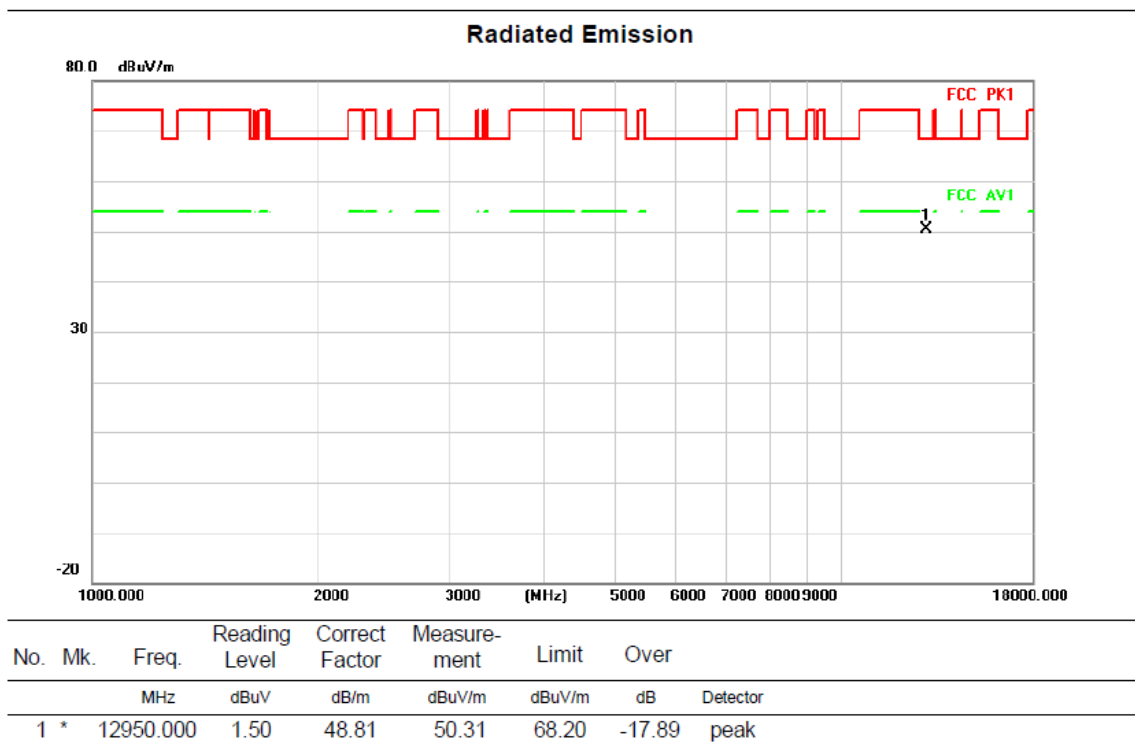


Above 1G (1GHz~18GHz)

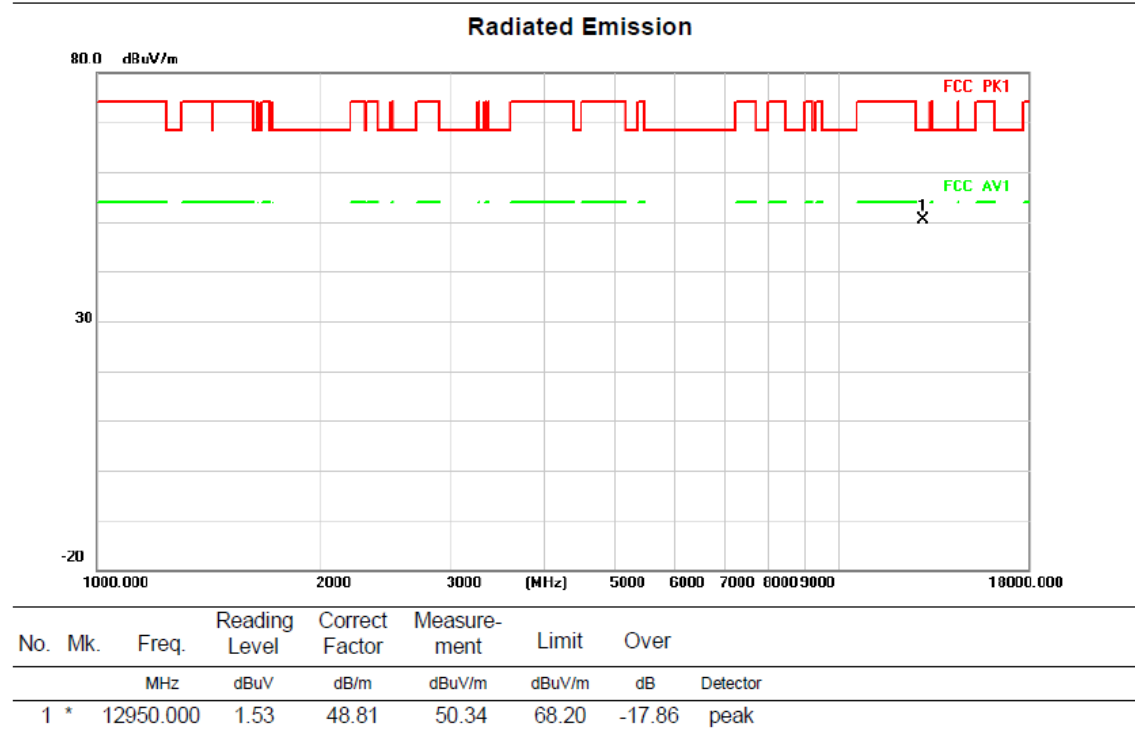
Test mode:11AX20(RU106)

Test Channel:105

VERTICAL



HORIZONTAL

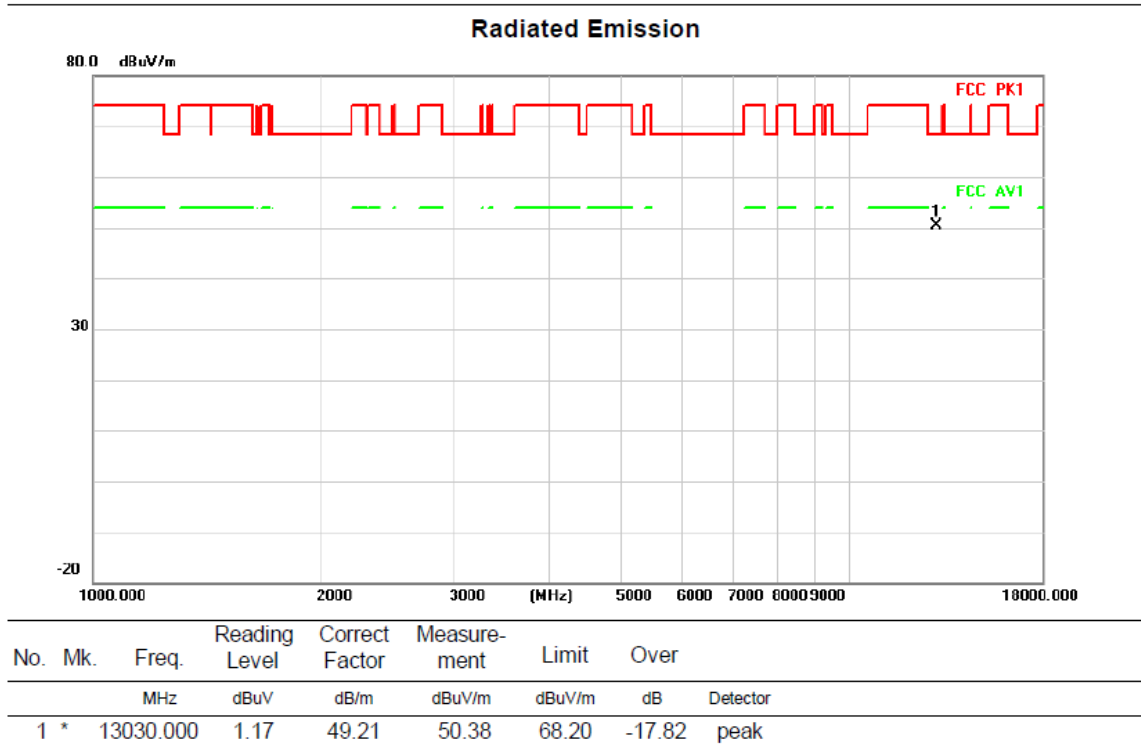


Above 1G (1GHz~18GHz)

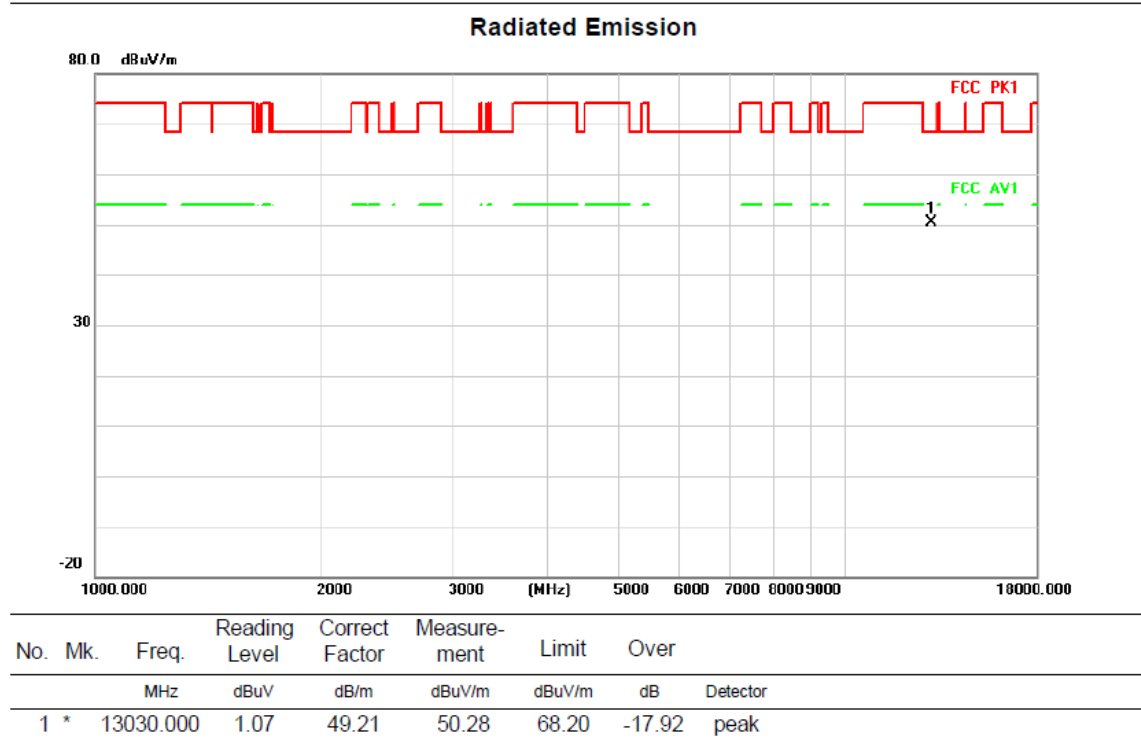
Test mode:11AX20(RU106)

Test Channel:113

VERTICAL



HORIZONTAL

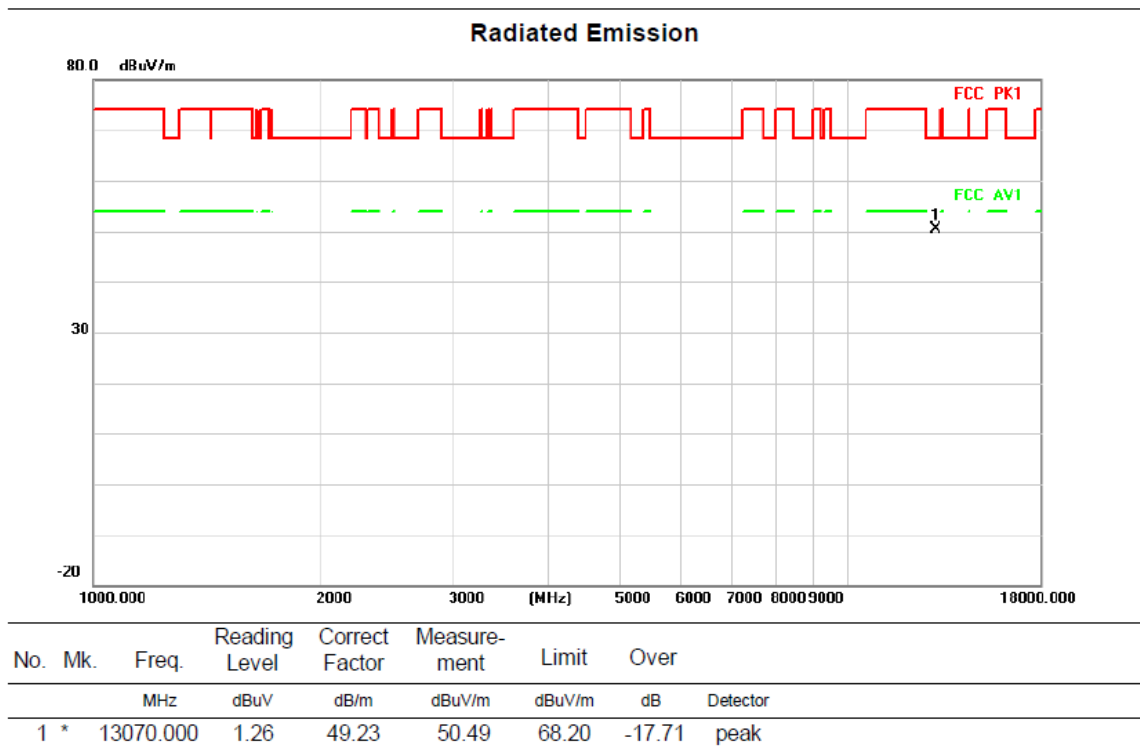


Above 1G (1GHz~18GHz)

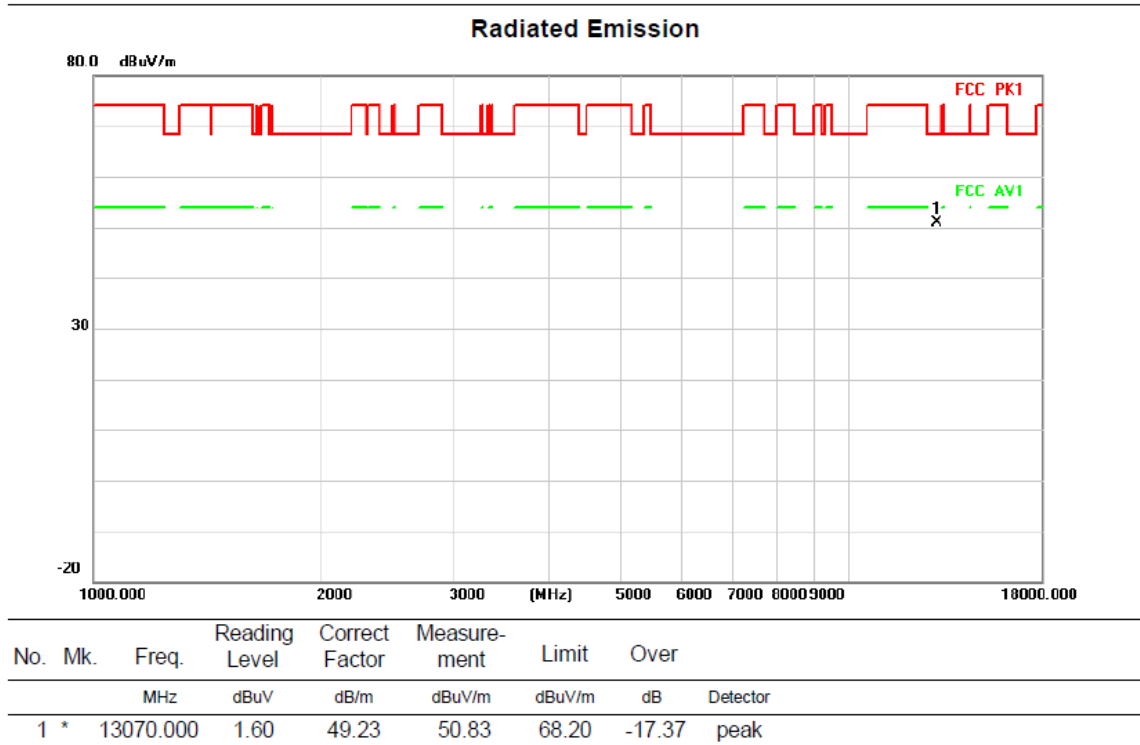
Test mode:11AX20(RU106)

Test Channel:117

VERTICAL



HORIZONTAL

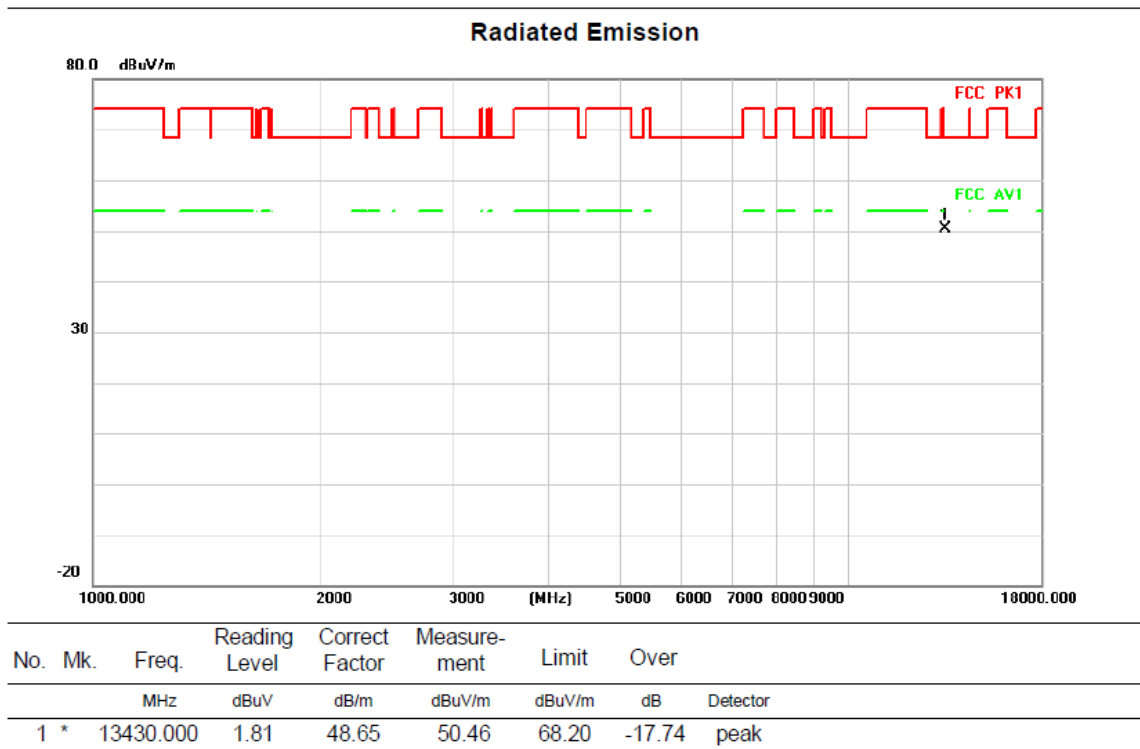


Above 1G (1GHz~18GHz)

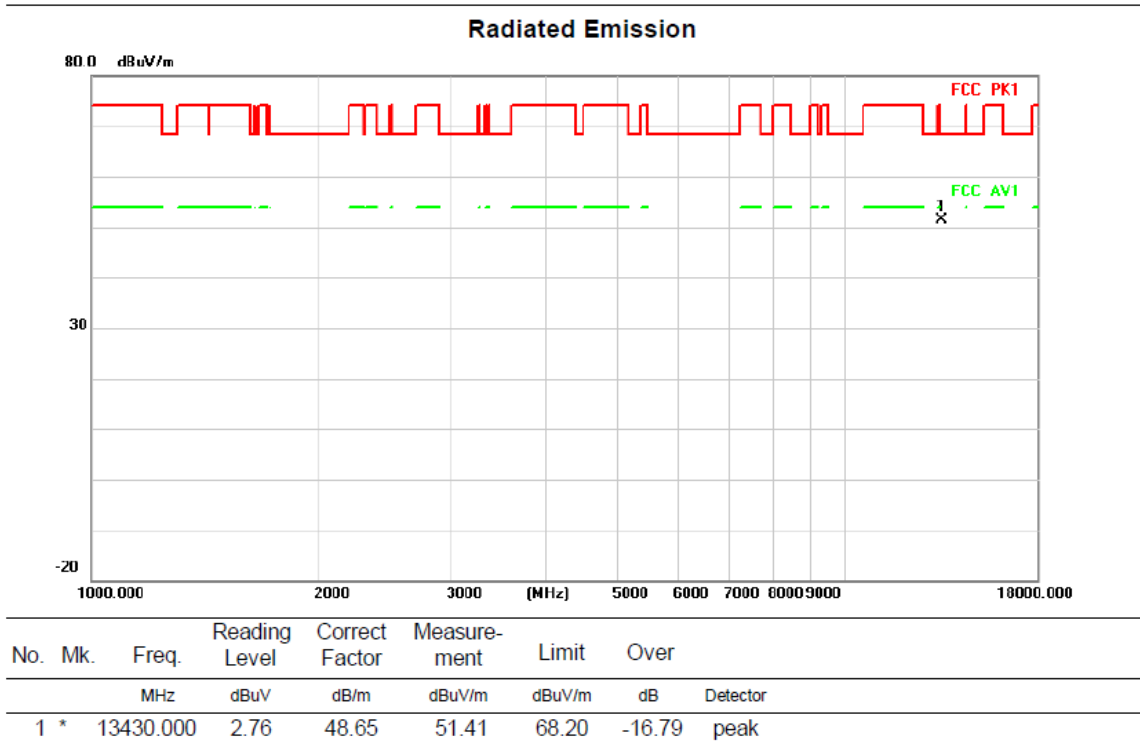
Test mode:11AX20(RU106)

Test Channel:153

VERTICAL



HORIZONTAL

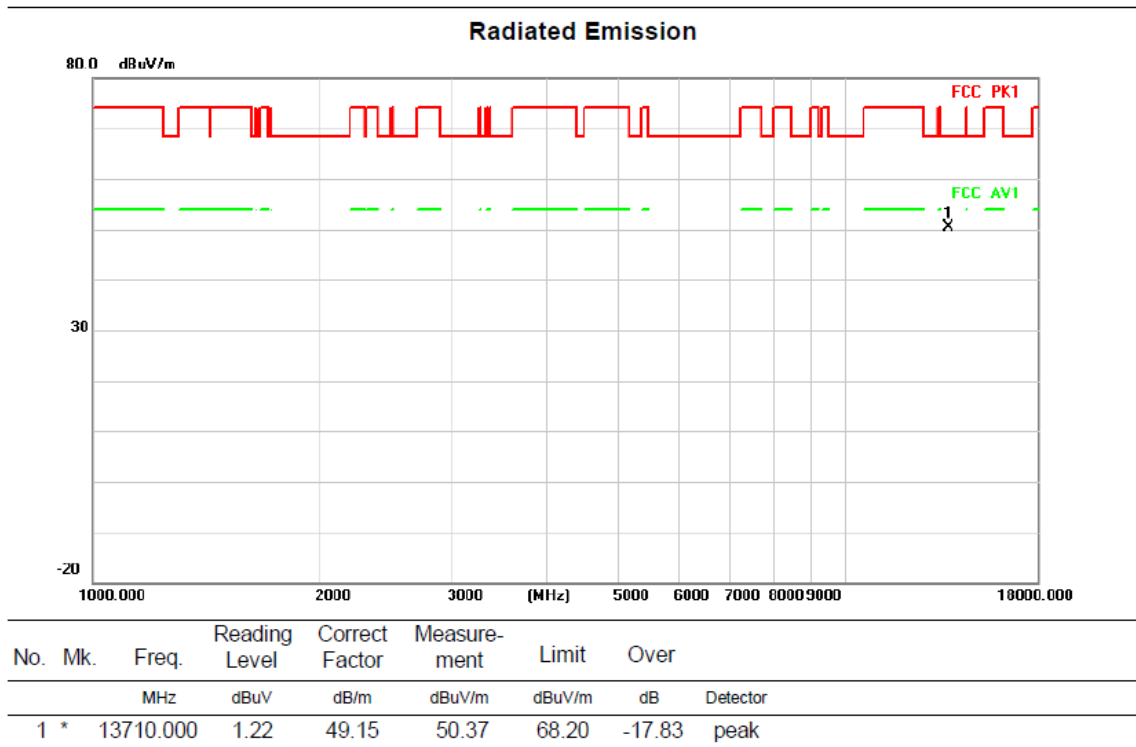


Above 1G (1GHz~18GHz)

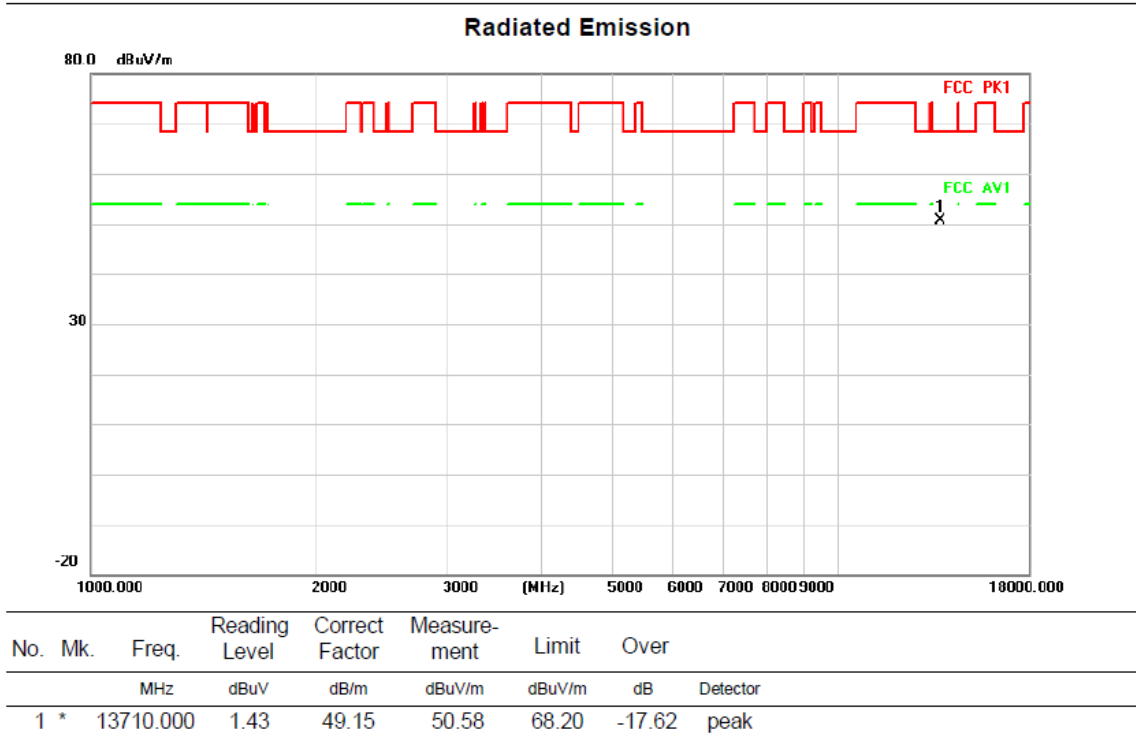
Test mode:11AX20(RU106)

Test Channel:181

VERTICAL



HORIZONTAL

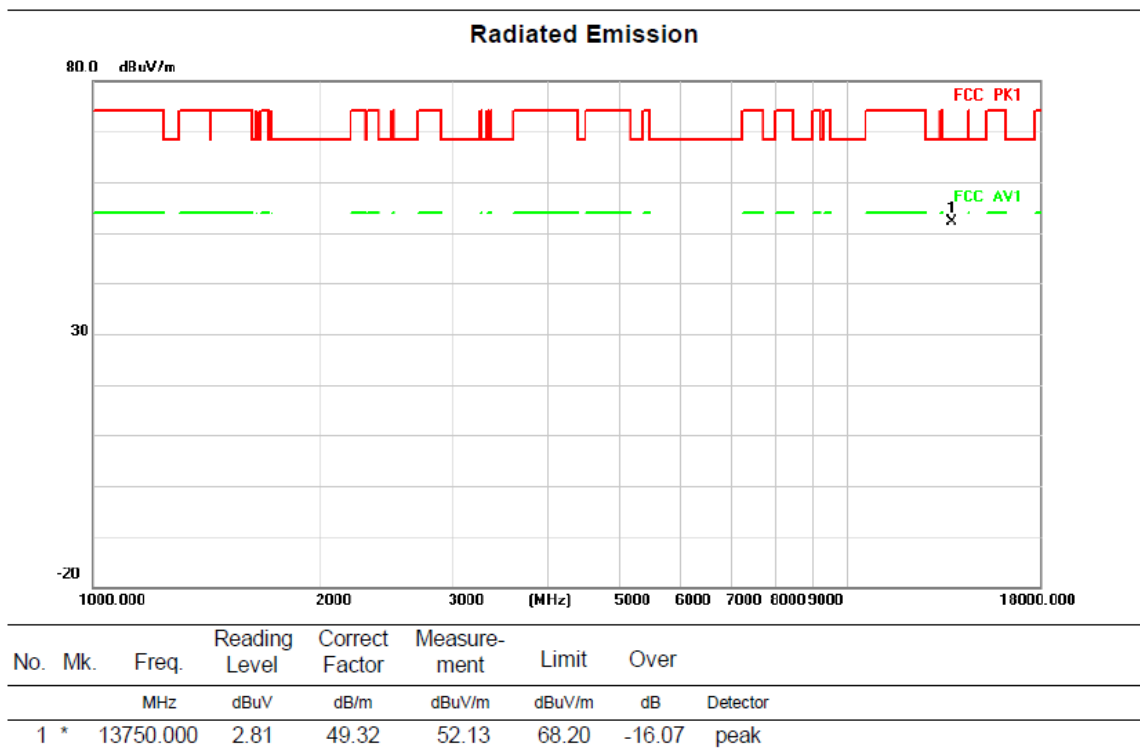


Above 1G (1GHz~18GHz)

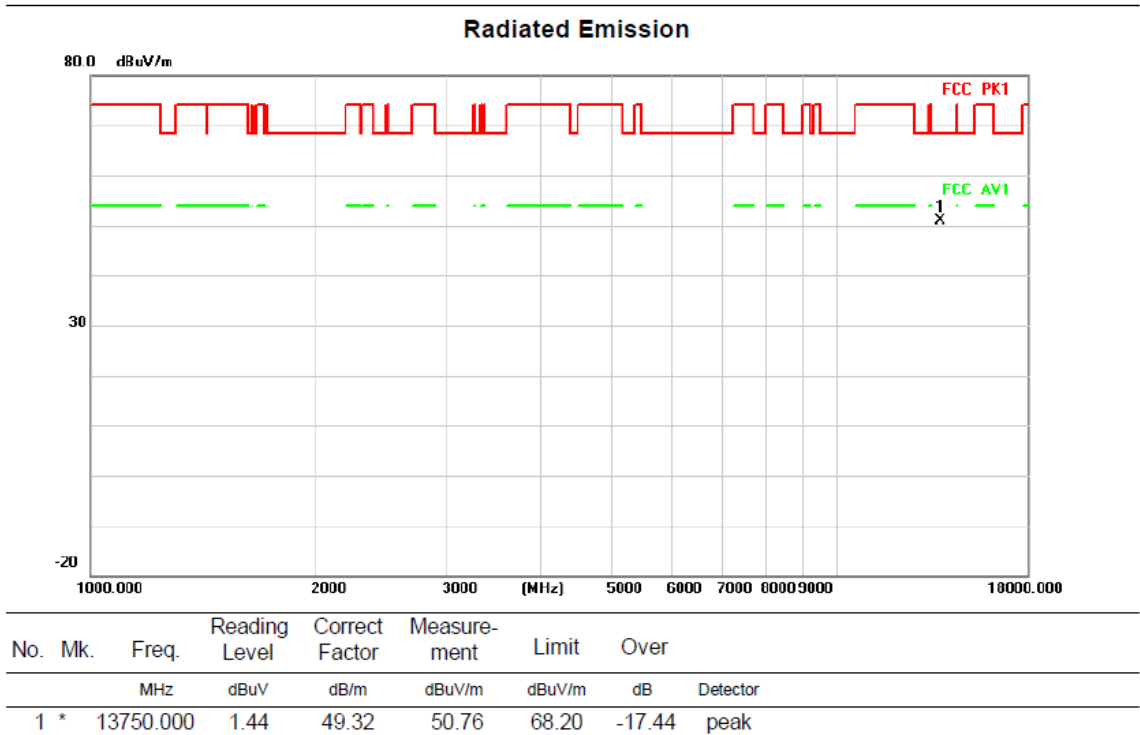
Test mode:11AX20(RU106)

Test Channel:185

VERTICAL



HORIZONTAL

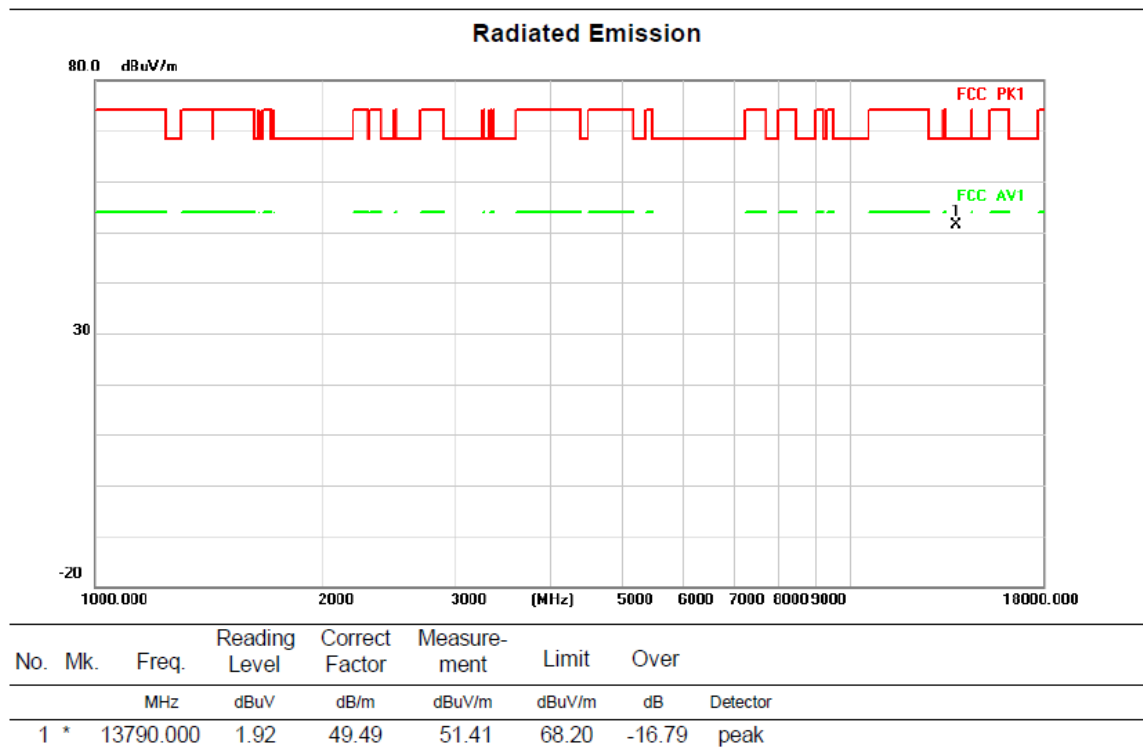


Above 1G (1GHz~18GHz)

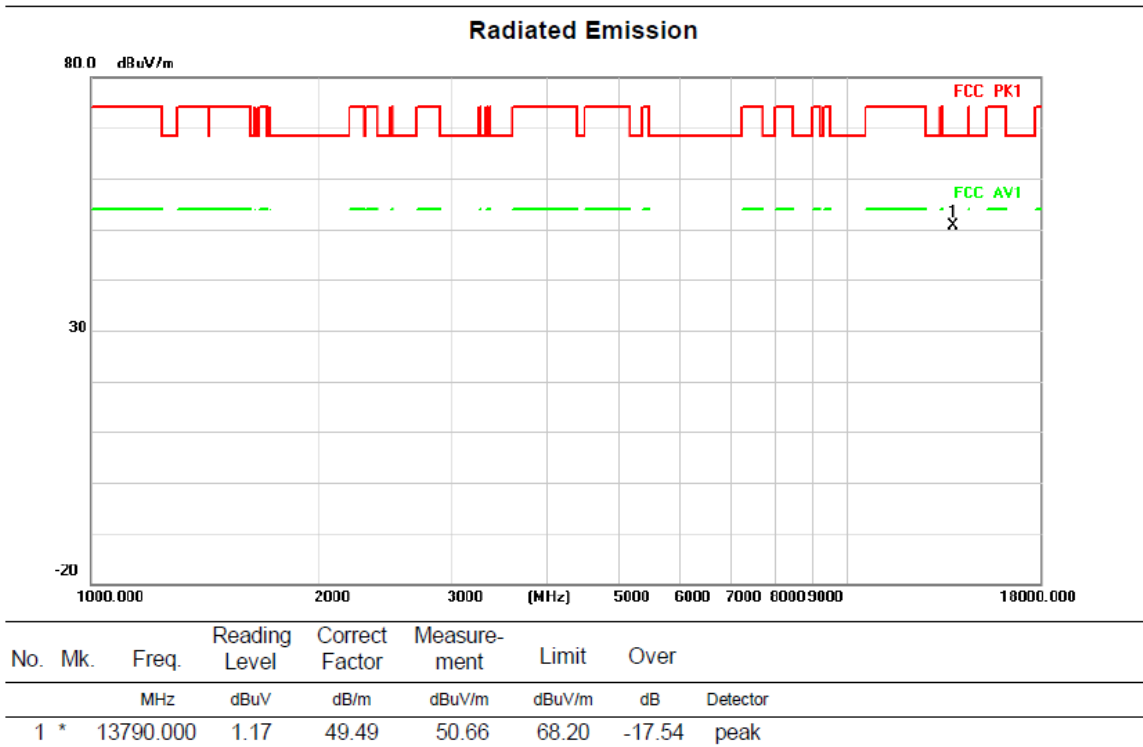
Test mode:11AX20(RU106)

Test Channel:189

VERTICAL



HORIZONTAL

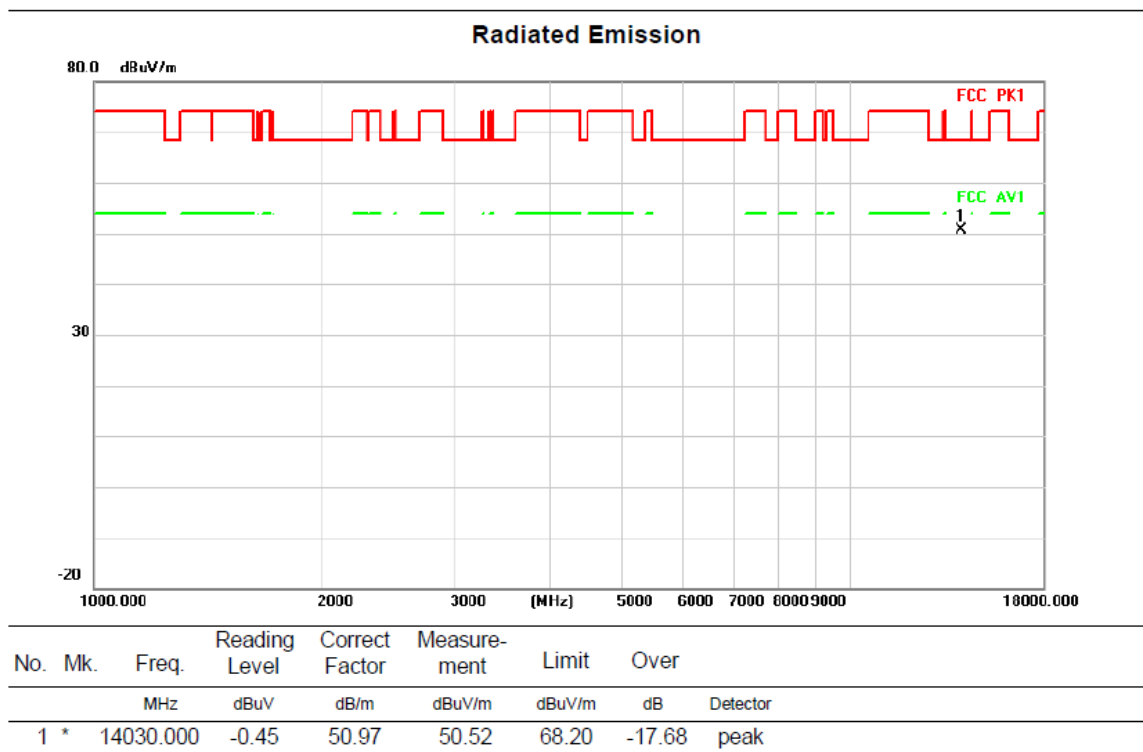


Above 1G (1GHz~18GHz)

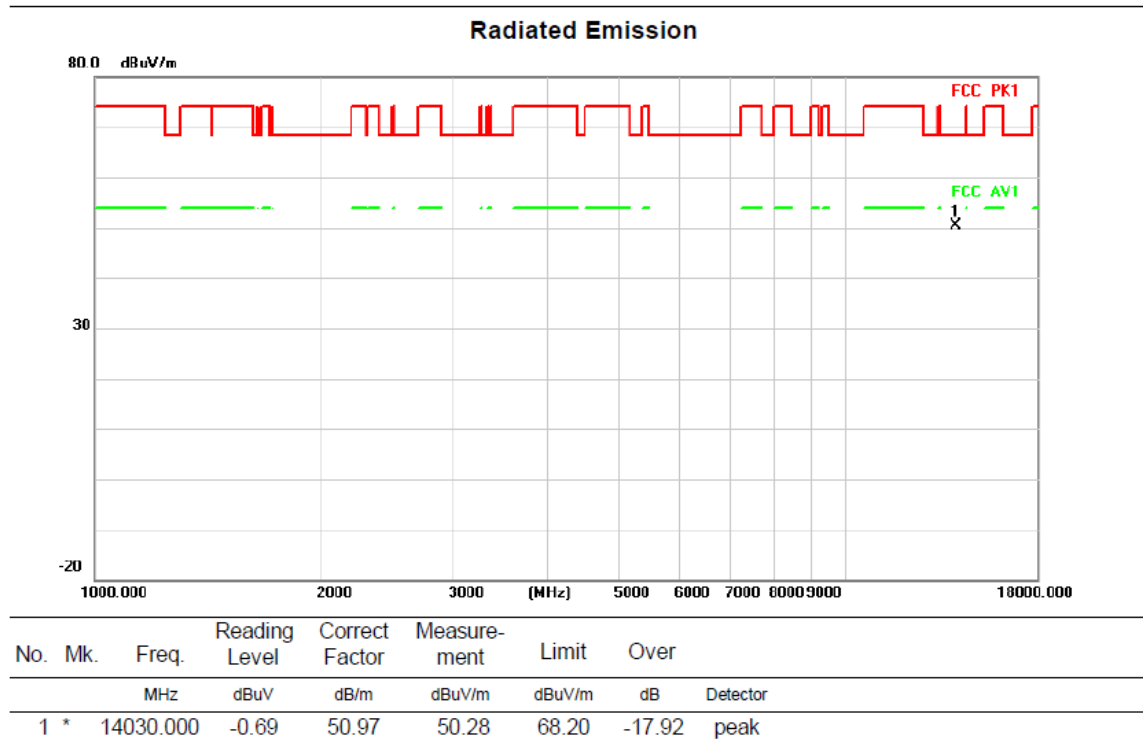
Test mode:11AX20(RU106)

Test Channel:213

VERTICAL



HORIZONTAL

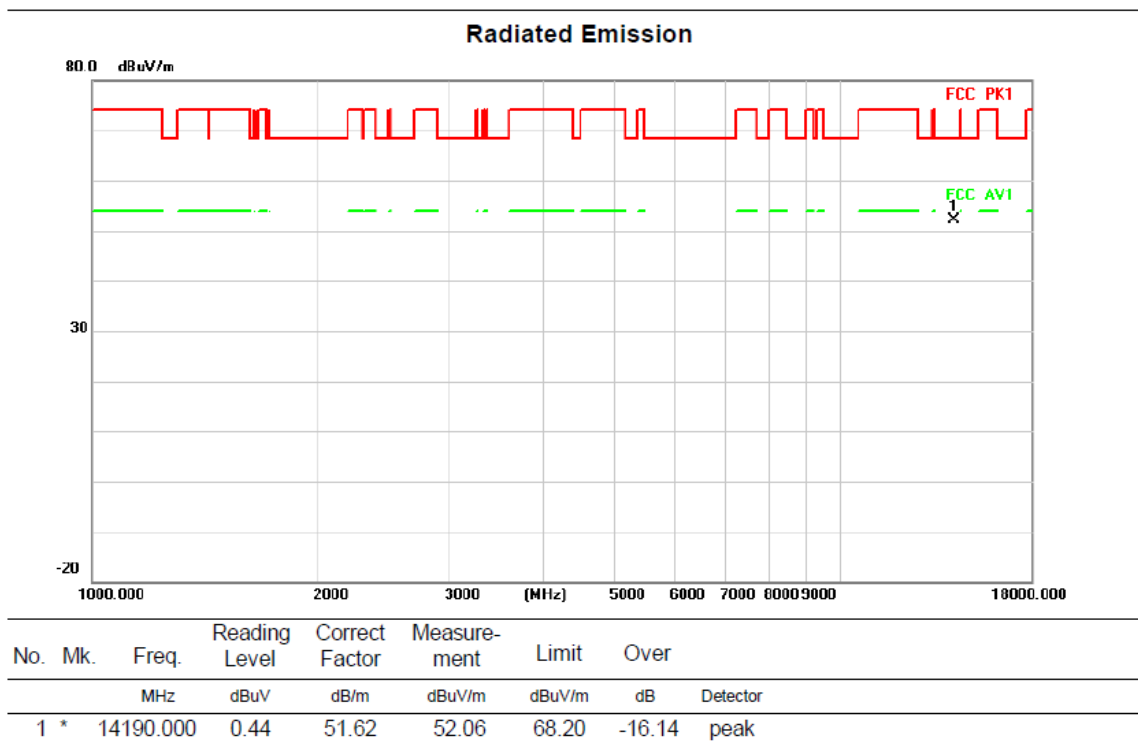


Above 1G (1GHz~18GHz)

Test mode:11AX20(RU106)

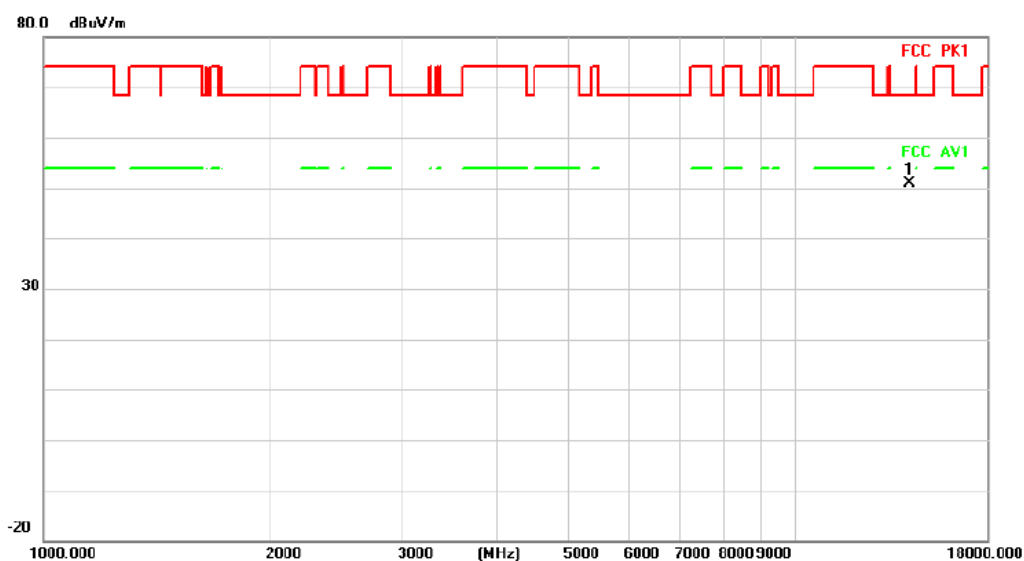
Test Channel:229

VERTICAL



HORIZONTAL

Radiated Emission



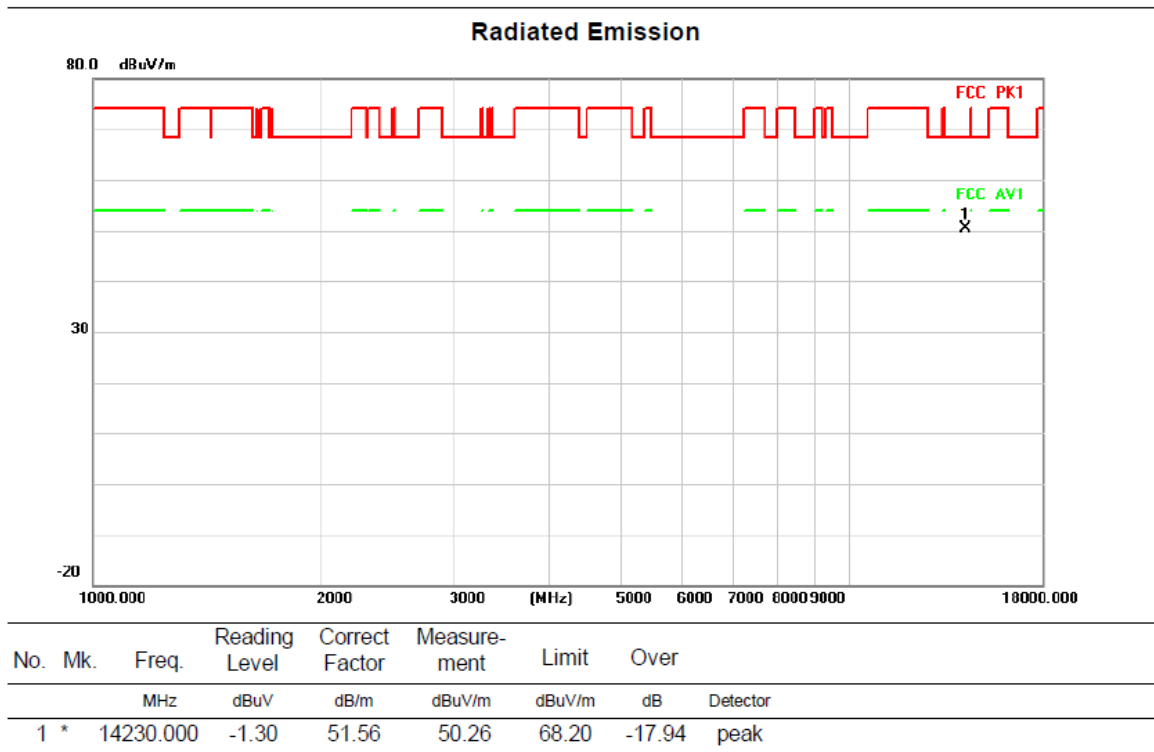
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	*	14190.000	-0.84	51.62	50.78	68.20	-17.42
							peak

Above 1G (1GHz~18GHz)

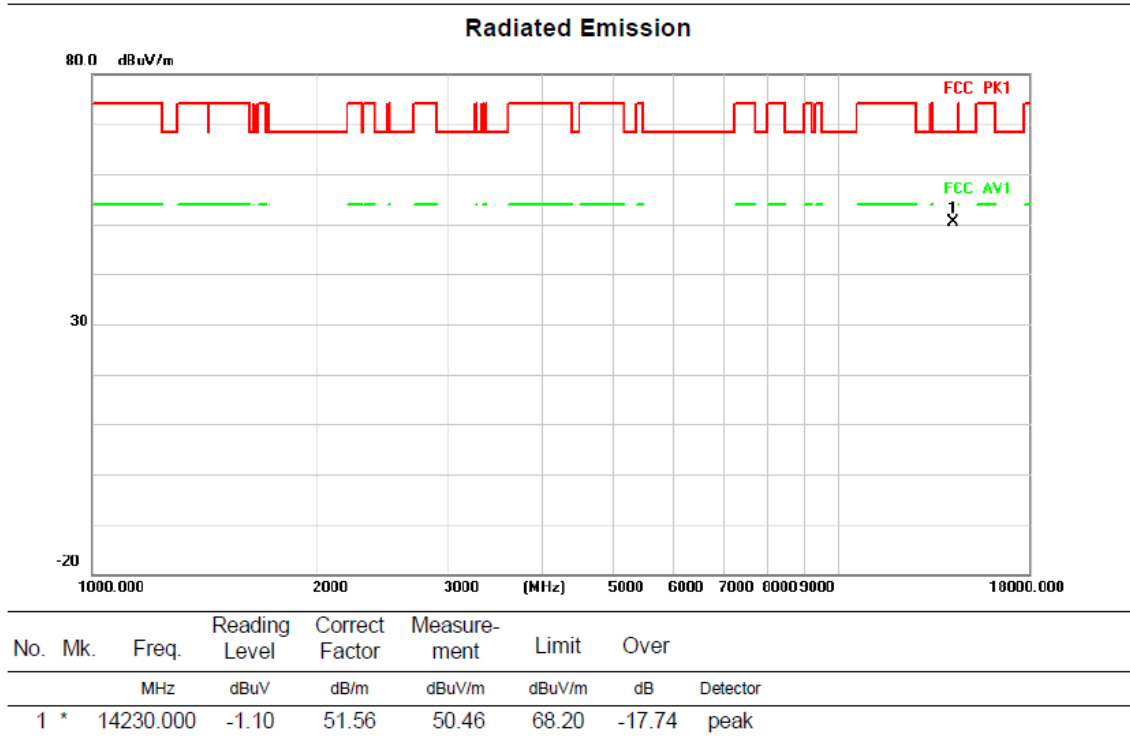
Test mode:11AX20(RU106)

Test Channel:233

VERTICAL



HORIZONTAL



The high frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

3.8 AC Conducted Emissions Measurement

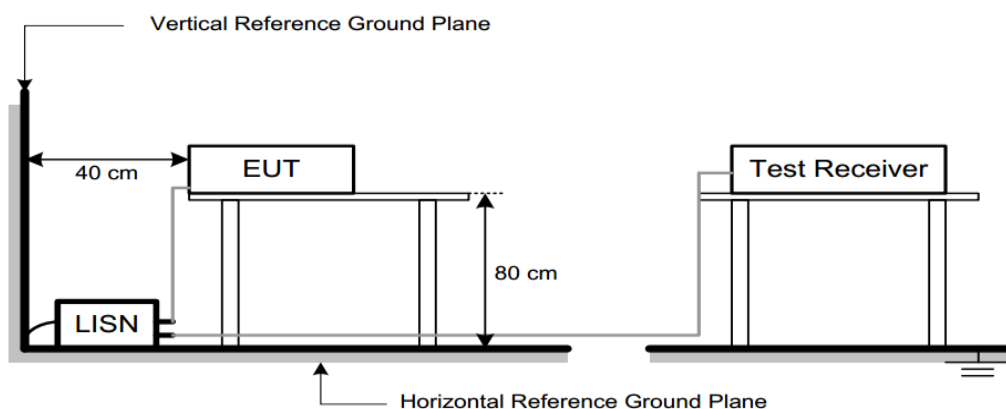
2.8.1 Test Limit

Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

2.8.2 Test Setup



2.8.3 Test Result

Note:

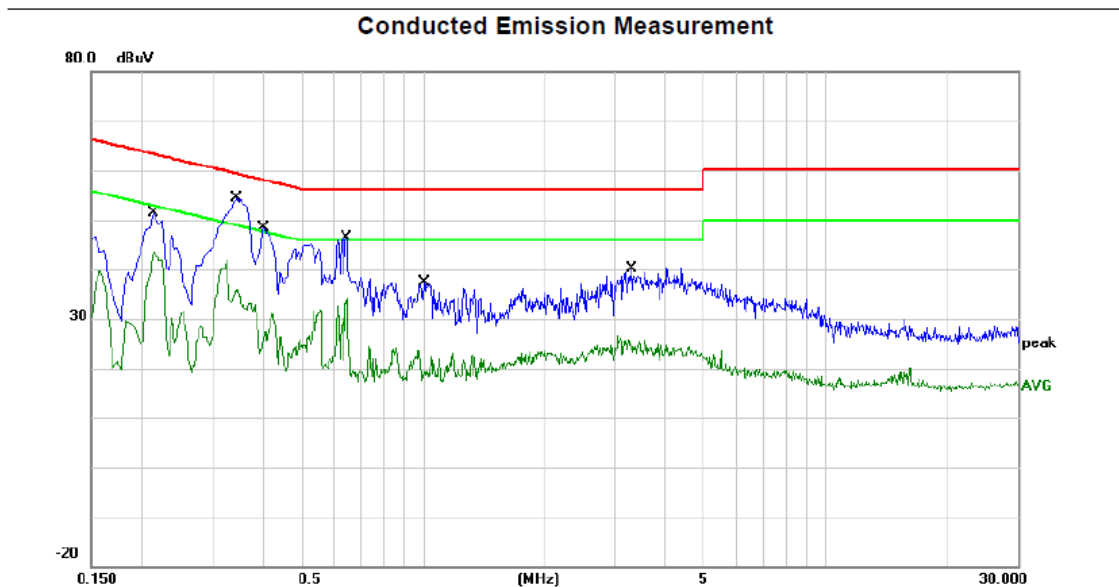
1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Measurement = Reading + Correct Factor.
3. Over = Measurement – Limit

Note: This adapter has been tested the conducted emission with the EUT separately. We only recorded the data of the worst mode. Please see the following:

150kHz~30MHz

Worst Case Operating Mode: A-CDD Channel 105

Line



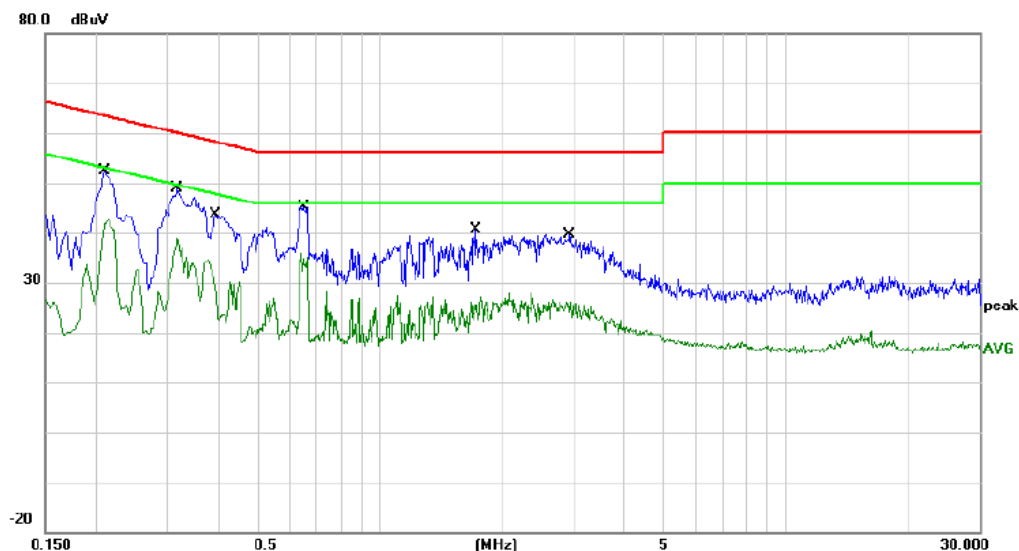
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2140	28.95	19.99	48.94	63.05	-14.11	QP	
2		0.2140	20.19	19.99	40.18	53.05	-12.87	AVG	
3	*	0.3460	30.38	20.01	50.39	59.06	-8.67	QP	
4		0.3460	15.96	20.01	35.97	49.06	-13.09	AVG	
5		0.4020	24.76	20.37	45.13	57.81	-12.68	QP	
6		0.4020	5.55	20.37	25.92	47.81	-21.89	AVG	
7		0.6460	23.73	20.02	43.75	56.00	-12.25	QP	
8		0.6460	10.54	20.02	30.56	46.00	-15.44	AVG	
9		1.0100	9.91	19.99	29.90	56.00	-26.10	QP	
10		1.0100	-1.01	19.99	18.98	46.00	-27.02	AVG	
11		3.3020	12.99	20.16	33.15	56.00	-22.85	QP	
12		3.3020	2.39	20.16	22.55	46.00	-23.45	AVG	

150kHz~30MHz

Worst Case Operating Mode: A-CDD Channel 105

Neutral

Conducted Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2100	27.94	20.29	48.23	63.21	-14.98	QP	
2		0.2100	15.14	20.29	35.43	53.21	-17.78	AVG	
3		0.3180	24.65	20.01	44.66	59.76	-15.10	QP	
4	*	0.3180	17.40	20.01	37.41	49.76	-12.35	AVG	
5		0.3940	17.20	20.20	37.40	57.98	-20.58	QP	
6		0.3940	4.08	20.20	24.28	47.98	-23.70	AVG	
7		0.6500	21.73	20.19	41.92	56.00	-14.08	QP	
8		0.6500	8.20	20.19	28.39	46.00	-17.61	AVG	
9		1.7180	13.78	20.32	34.10	56.00	-21.90	QP	
10		1.7180	3.48	20.32	23.80	46.00	-22.20	AVG	
11		2.9460	14.65	20.20	34.85	56.00	-21.15	QP	
12		2.9460	3.45	20.20	23.65	46.00	-22.35	AVG	

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

Shenzhen Haiyun Standard Technology Co., Ltd.

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Email: service@hy-lab.cn

(END OF REPORT)