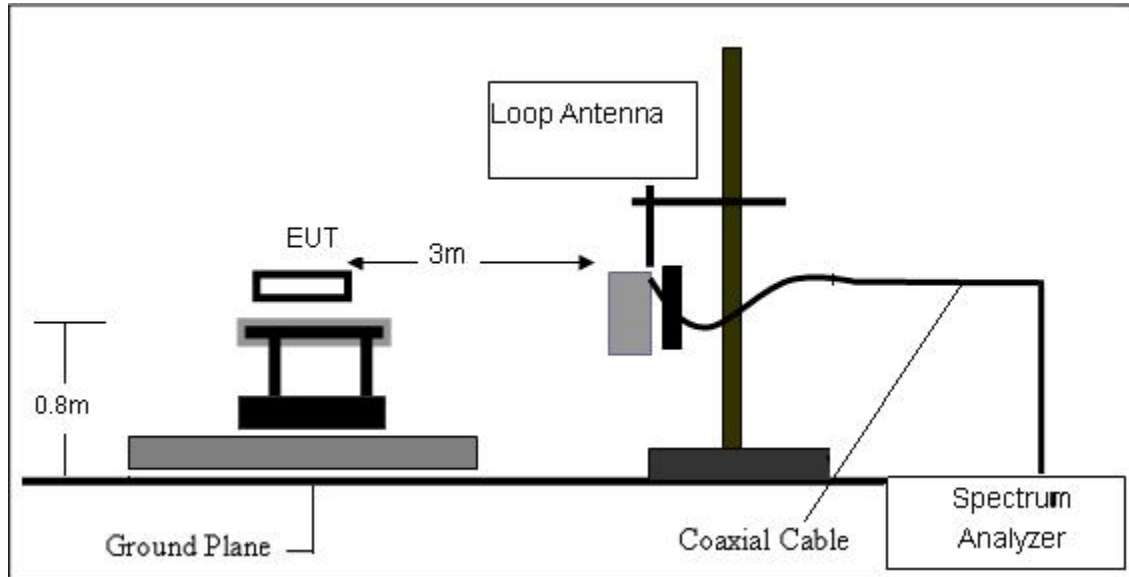
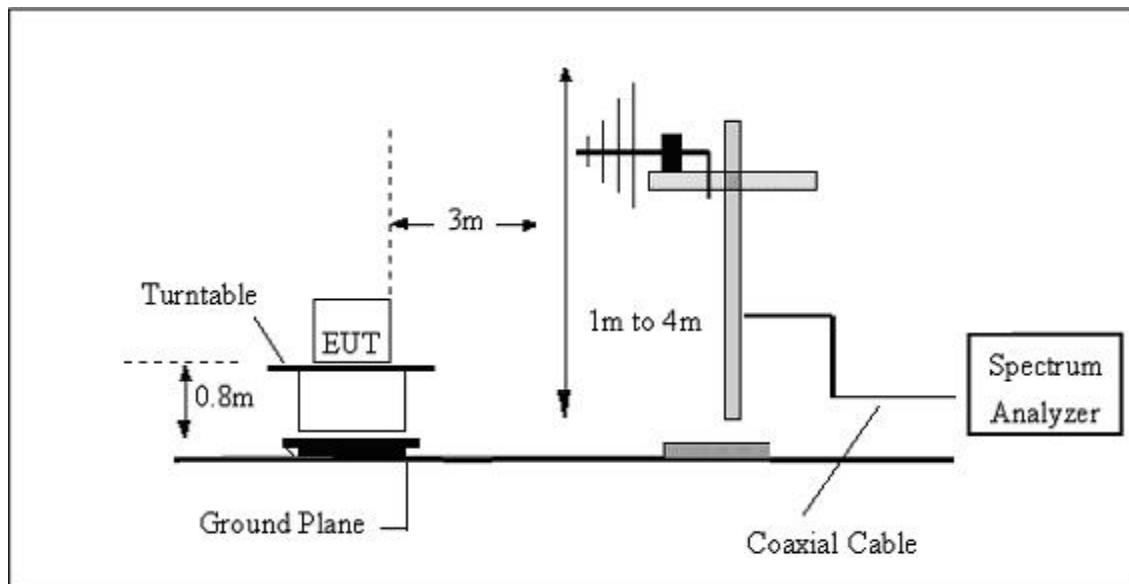


9.3 TESTSETUP

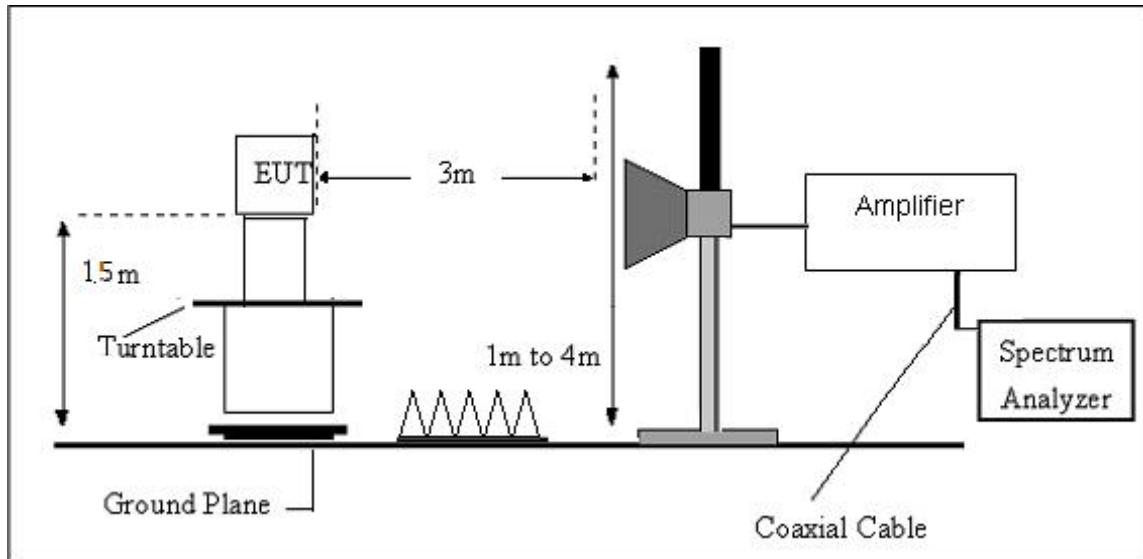
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



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





9.4. TEST RESULTS

(9KHz-30MHz)

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

(1GHz~40GHz) Restricted band and Spurious emission Requirements

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 Low Channel 5180MHz									
10360.00	41.87	PK	359	1.3	H	5.33	47.20	68.20	-26.80
10360.00	36.00	Ave	359	1.3	H	5.33	41.33	54.00	-12.67
802.11a U-NII-1 Middle channel 5200MHz									
10400.00	42.05	PK	110	1.6	H	5.21	47.26	68.20	-26.74
10400.00	36.17	Ave	110	1.6	H	5.21	41.38	54.00	-12.62
802.11a U-NII-1 High channel 5240MHz									
10480.00	42.03	PK	118	1.4	H	5.14	47.17	68.20	-26.83
10480.00	35.42	Ave	118	1.4	H	5.14	40.56	54.00	-13.44



Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBµV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
802.11a U-NII-3 Low Channel 5745MHz									
11490.00	43.05	PK	327	1.5	H	5.93	48.98	74.00	-25.02
11490.00	37.22	Ave	327	1.5	H	5.93	43.15	54.00	-10.85
802.11a U-NII-3 Middle channel 5785MHz									
11570.00	42.39	PK	67	1.2	H	5.81	48.20	74.00	-25.80
11570.00	37.03	Ave	67	1.2	H	5.81	42.84	54.00	-11.16
802.11a U-NII-3 High channel 5825MHz									
11650.00	40.65	PK	188	1.5	H	5.84	46.49	74.00	-27.51
11650.00	36.39	Ave	188	1.5	H	5.84	42.23	54.00	-11.77

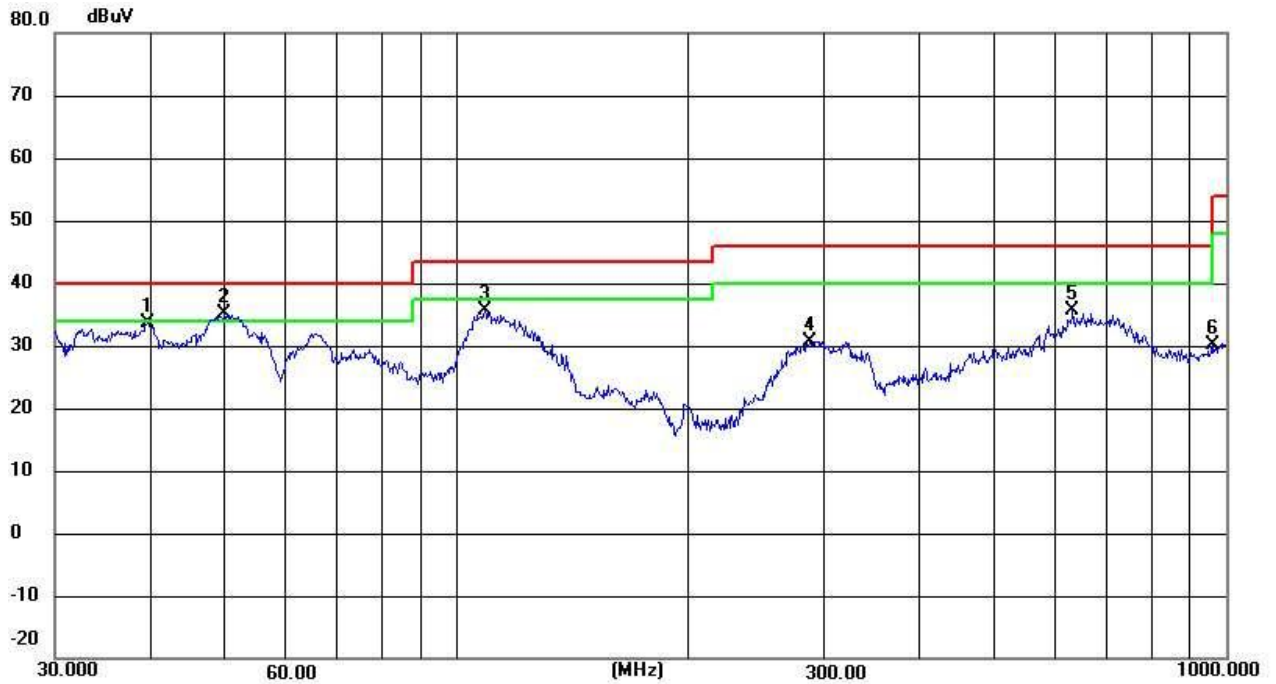
Note:

1.all other emissions are attenuated 20dB below the limits, so it does not reported in the report

2.802.11a mode is the worst mode

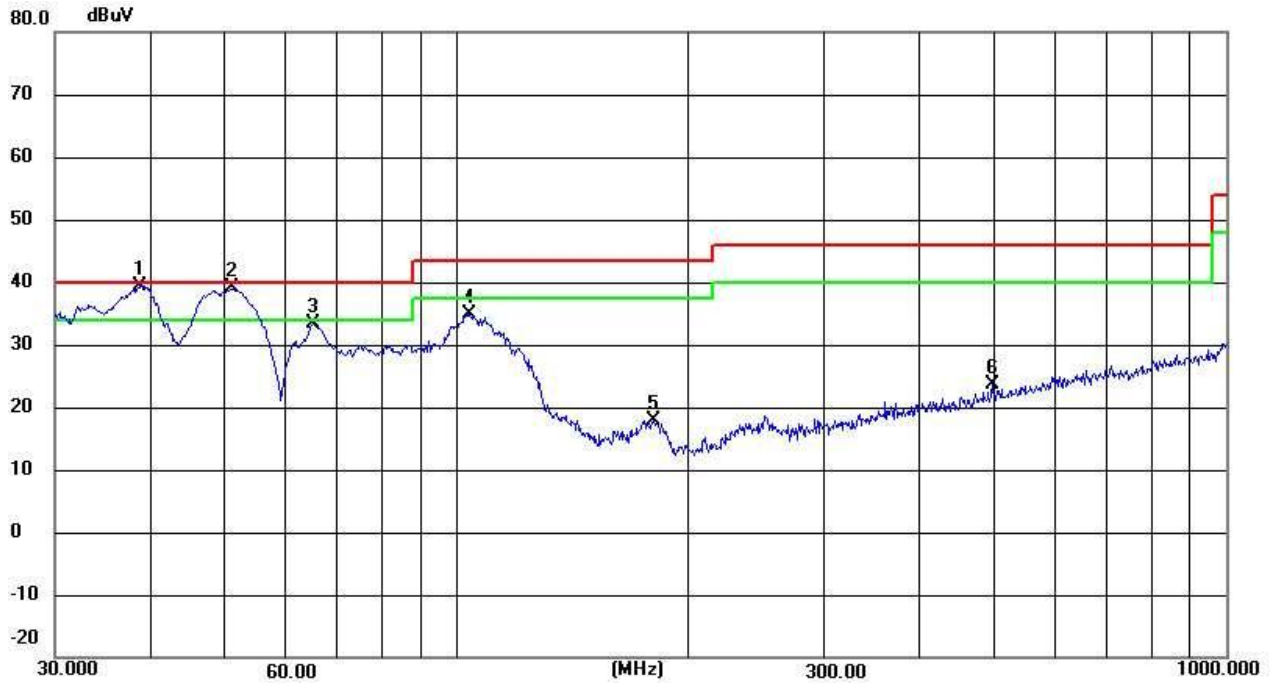
(30MHz-1000MHz)

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	39.5756	47.08	-13.45	33.63	40.00	-6.37	QP
2	49.8813	52.91	-17.75	35.16	40.00	-4.84	QP
3	108.6470	67.88	-32.19	35.69	43.50	-7.81	QP
4	287.9904	62.62	-31.92	30.70	46.00	-15.30	QP
5	631.6883	66.72	-31.08	35.64	46.00	-10.36	QP
6	958.7943	60.72	-30.64	30.08	46.00	-15.92	QP

Vertical



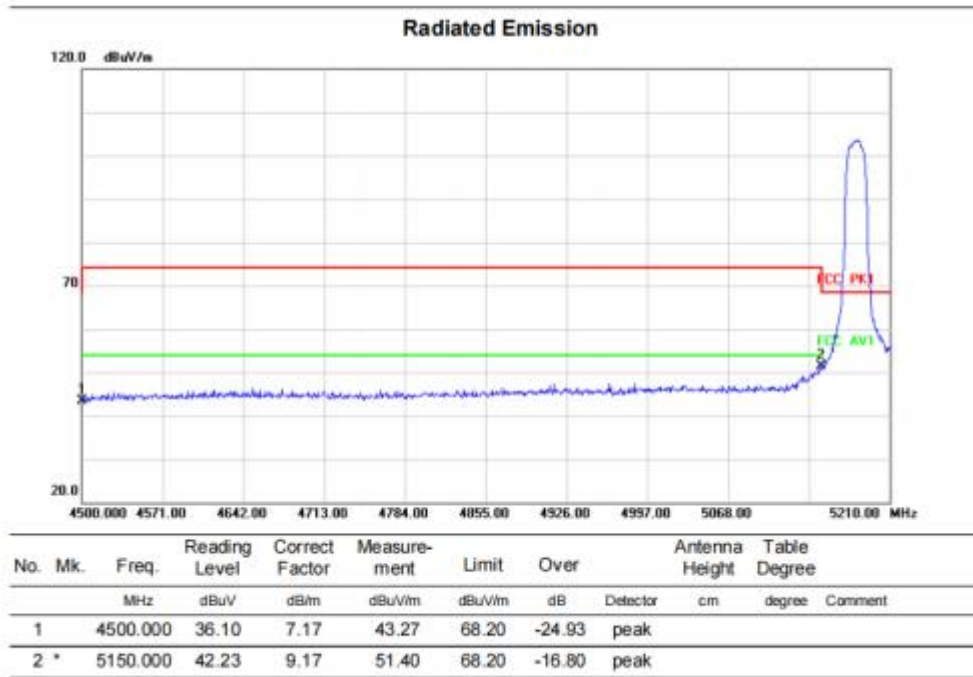
No.	Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	38.7518	52.30	-12.91	39.39	40.00	-0.61	QP
2	51.1209	57.17	-18.15	39.02	40.00	-0.98	QP
3	65.1145	53.74	-20.27	33.47	40.00	-6.53	QP
4	103.8055	67.15	-32.19	34.96	43.50	-8.54	QP
5	180.0165	50.04	-32.08	17.96	43.50	-25.54	QP
6	495.9344	54.95	-31.31	23.64	46.00	-22.36	QP

Remarks:

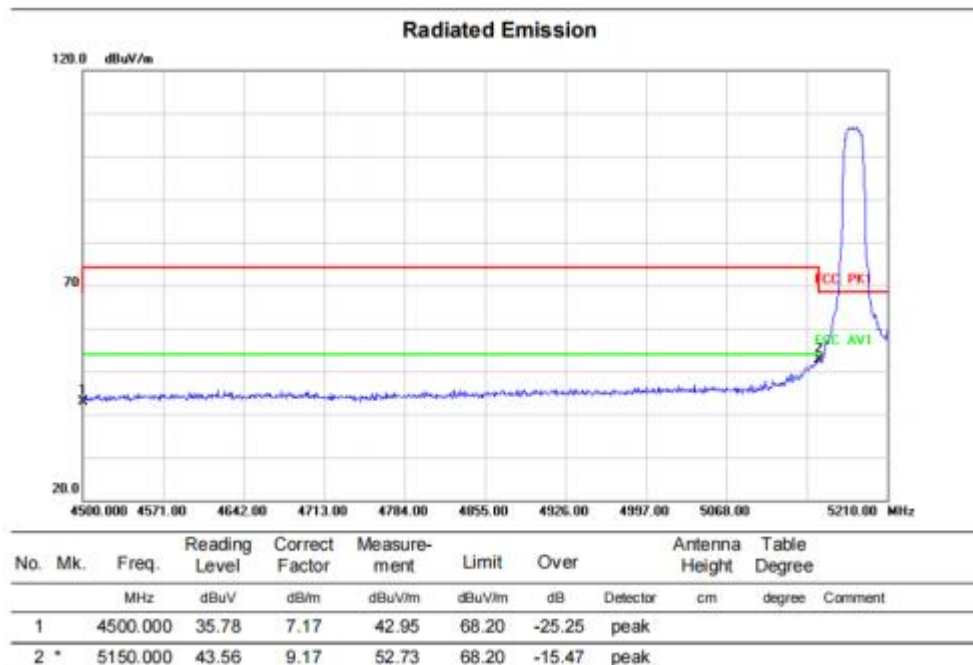
1. Margin = Result (Result =Reading + Factor) - Limit
- 2.

Radiated Band Edge data

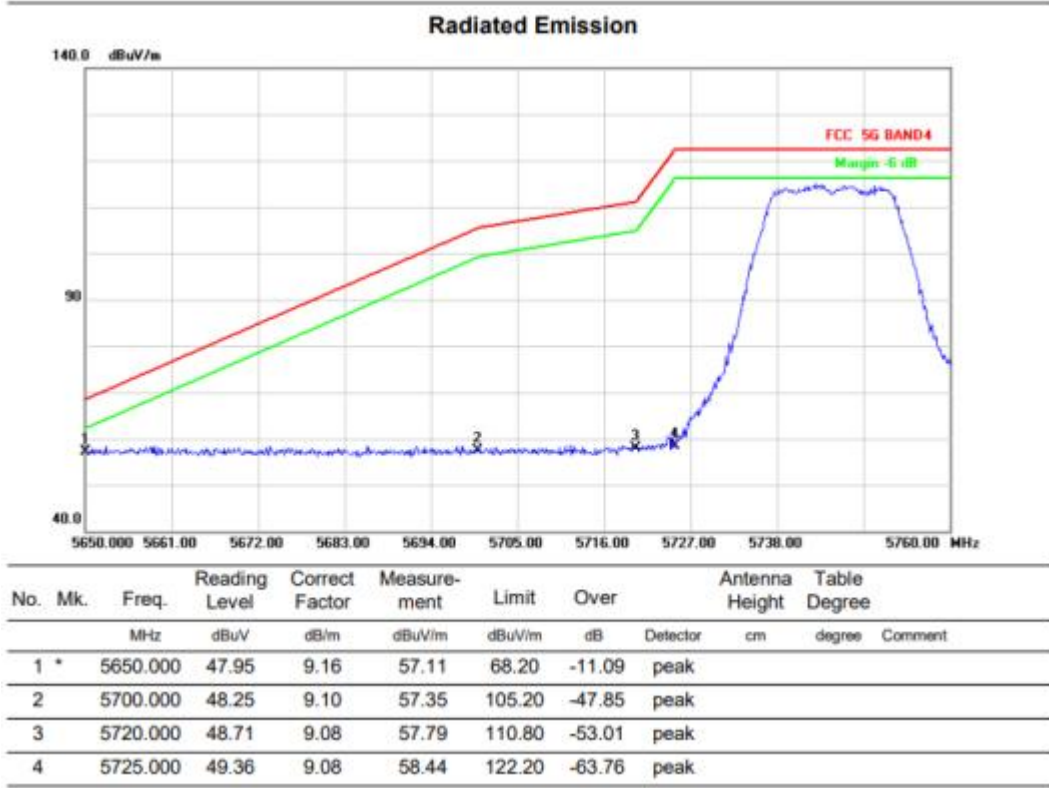
11a Channel 36: Horizontal



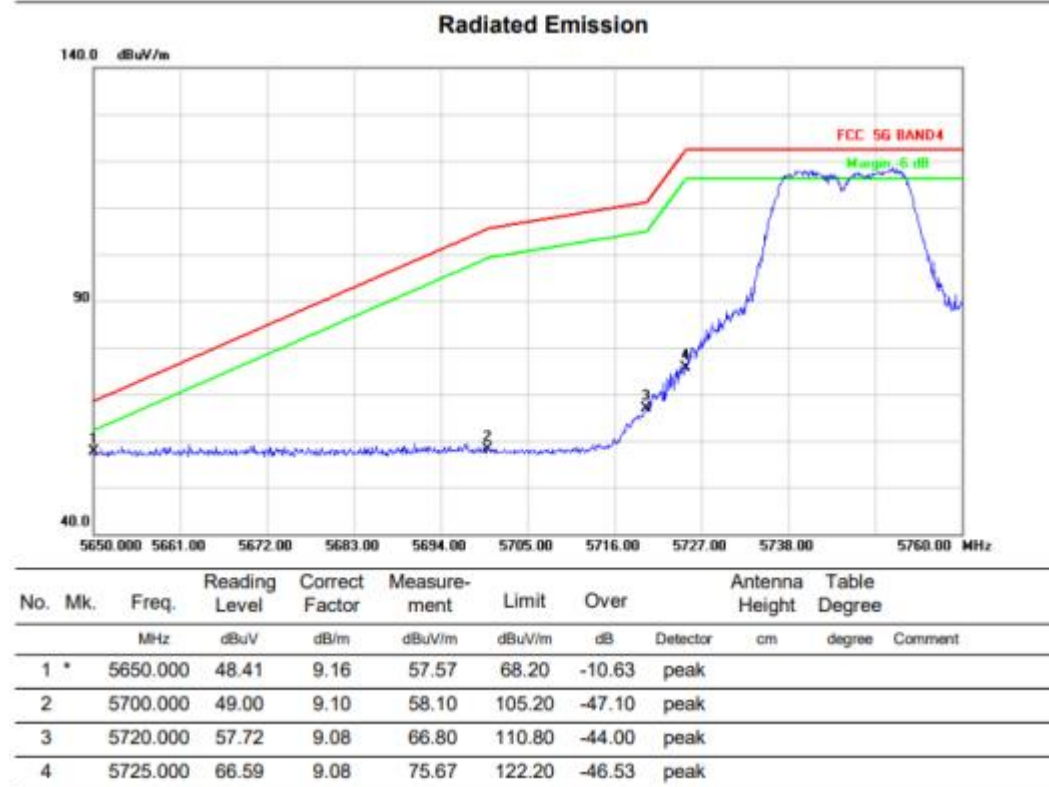
11a Channel 36: Vertical



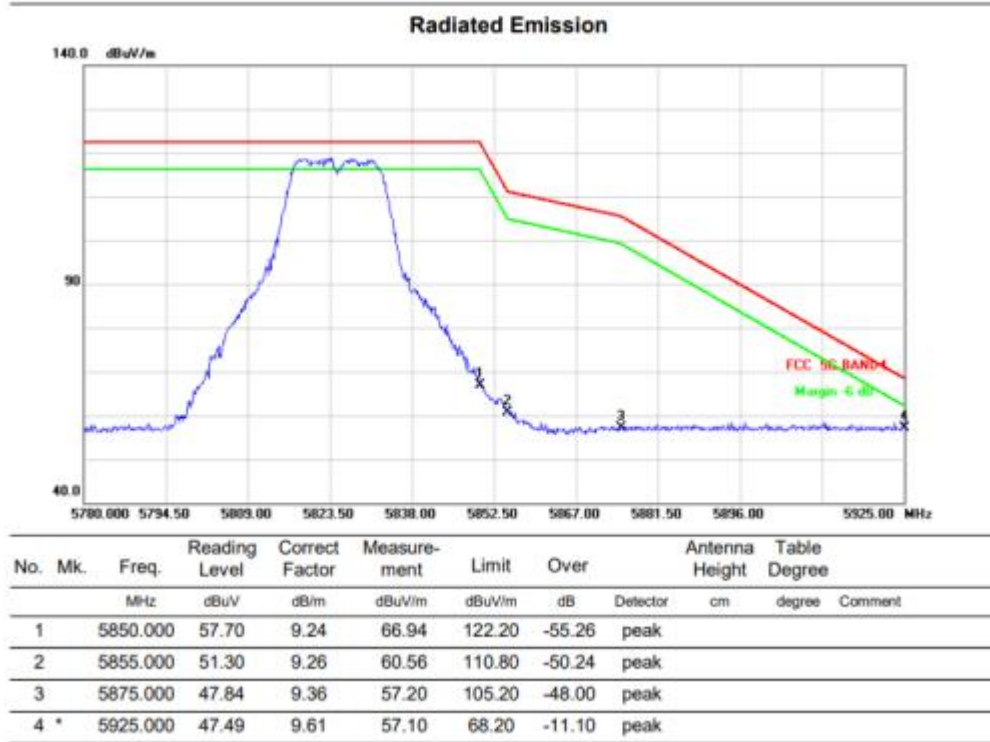
11a Channel 149: Horizontal



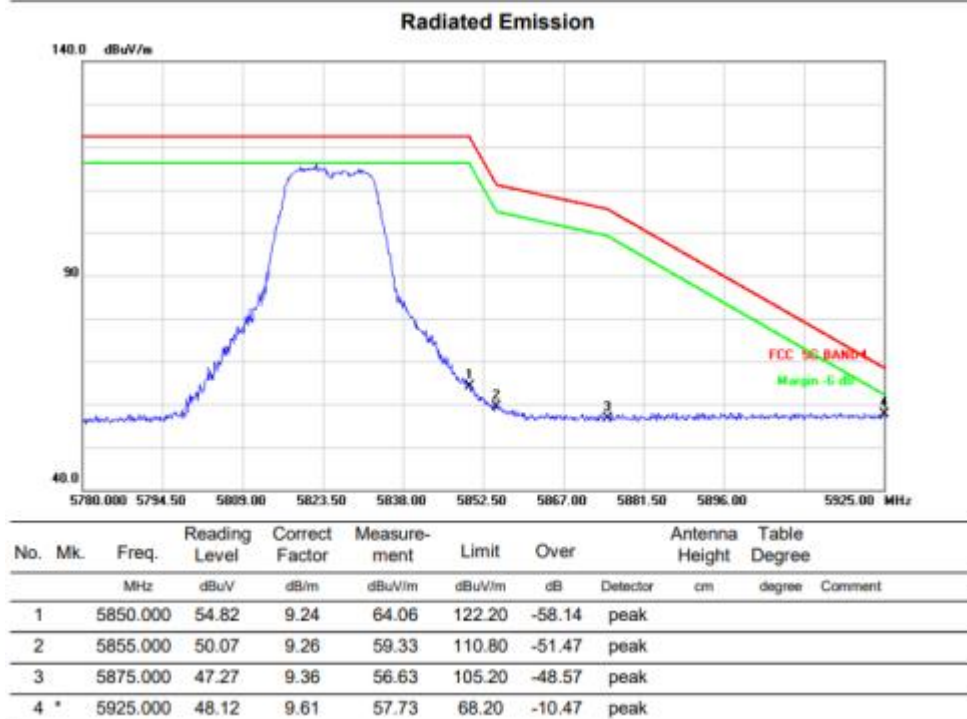
11a Channel 149: Vertical



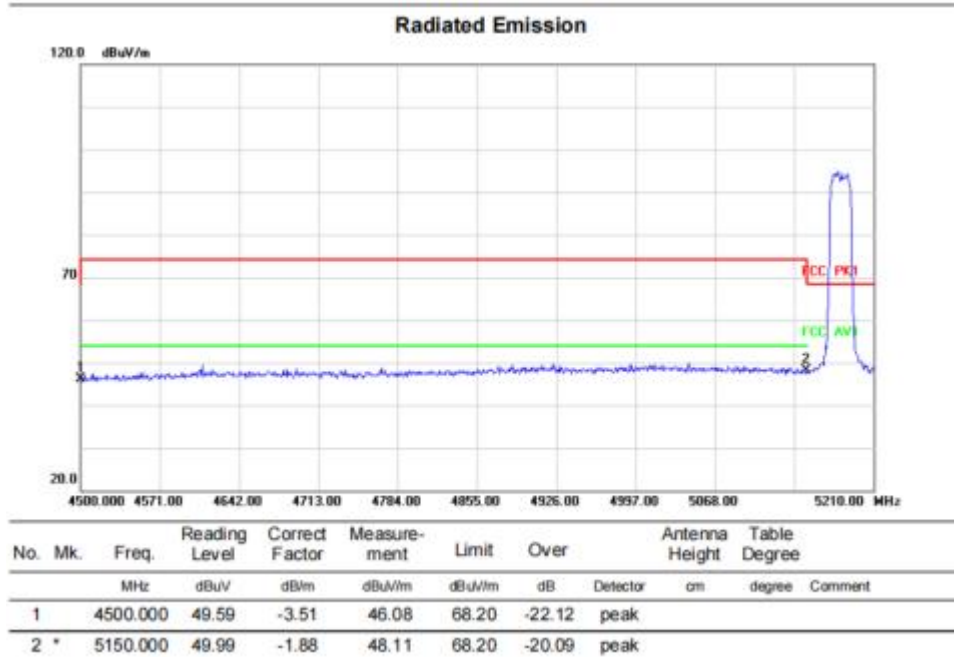
11a Channel 161: Horizontal



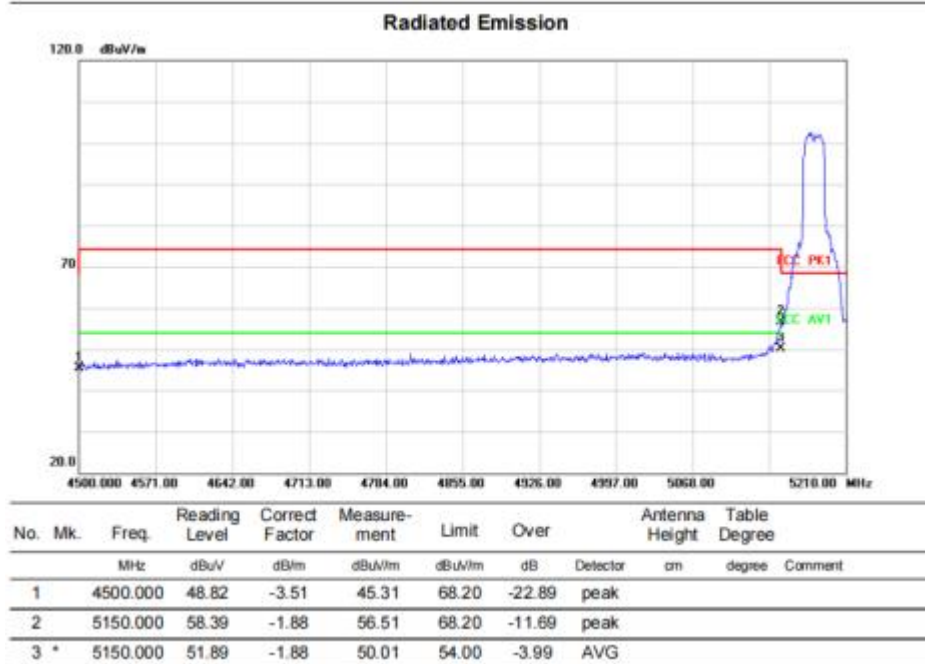
11a Channel 161: Vertical



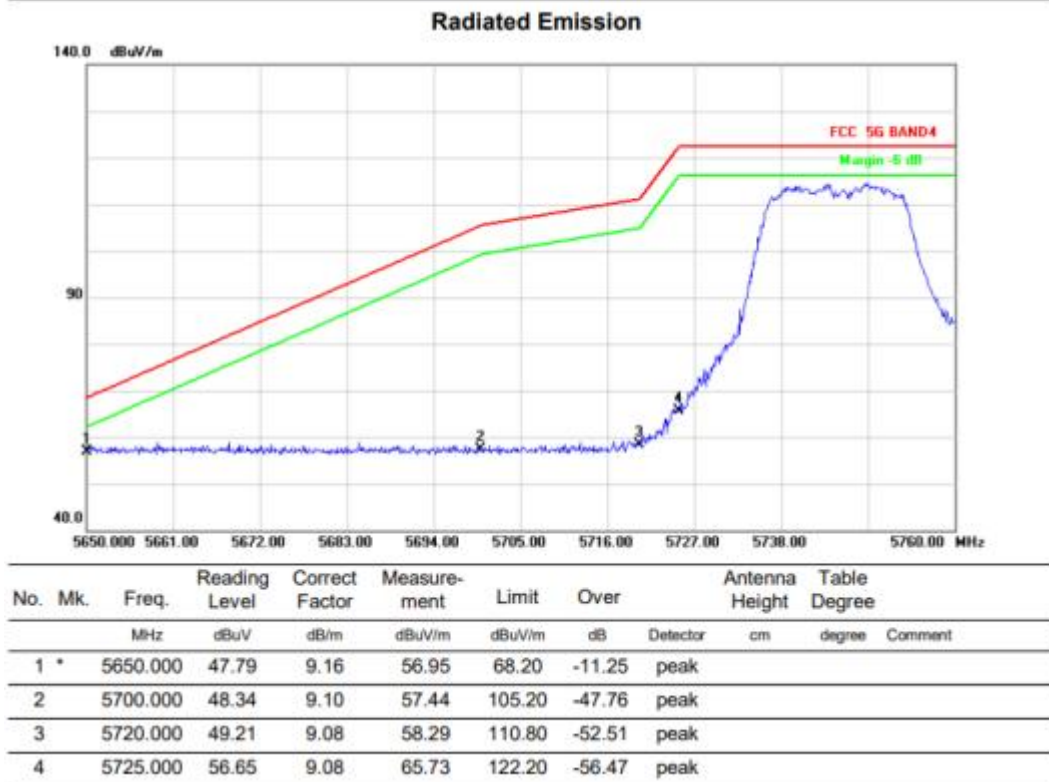
11n20 Channel 36: Horizontal



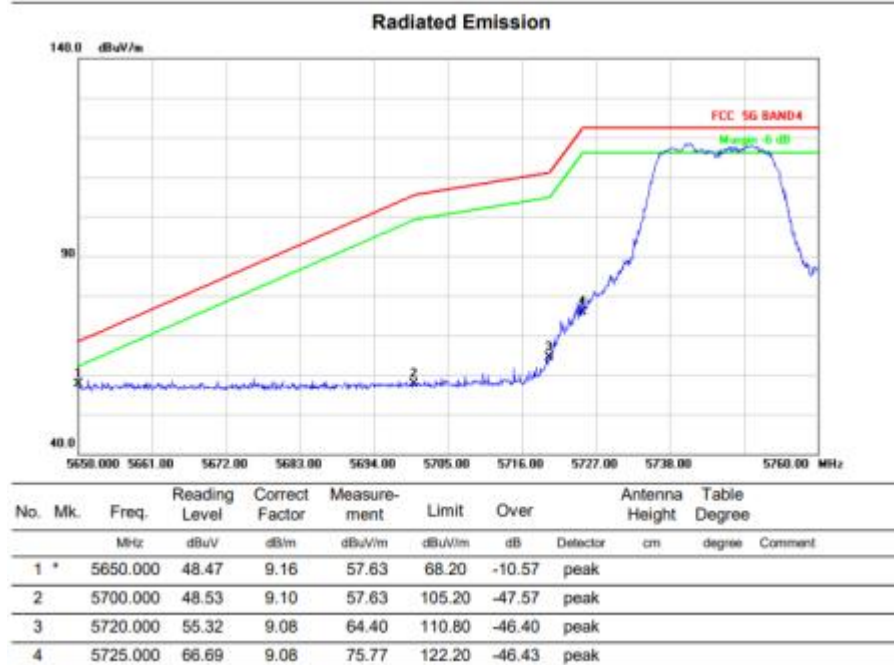
11n20 Channel 36: Vertical



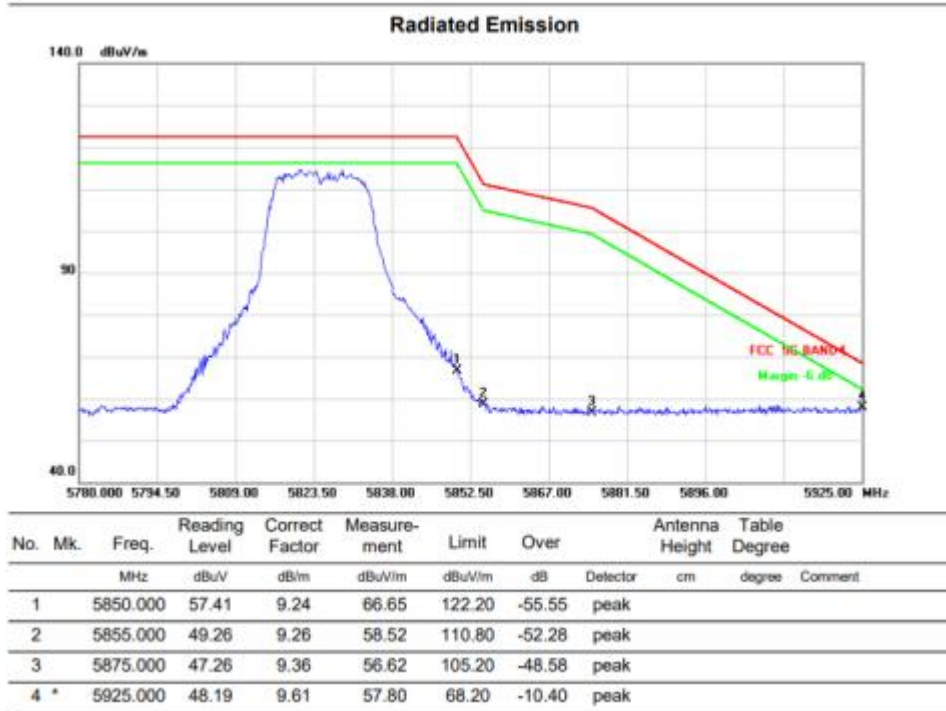
11n20 Channel 149: Horizontal



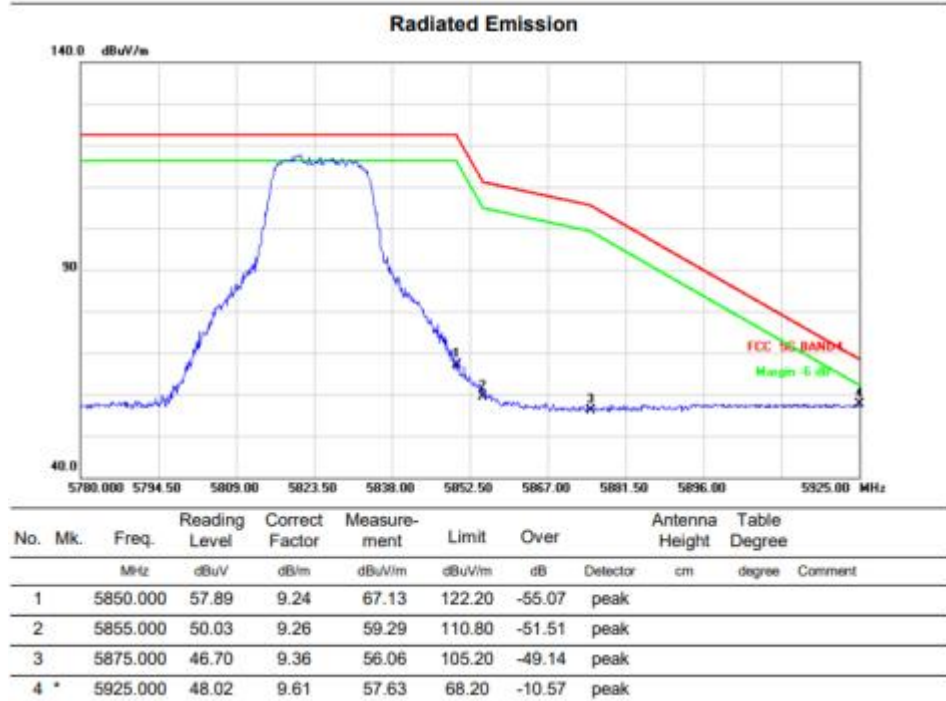
11n20 Channel 36: Vertical



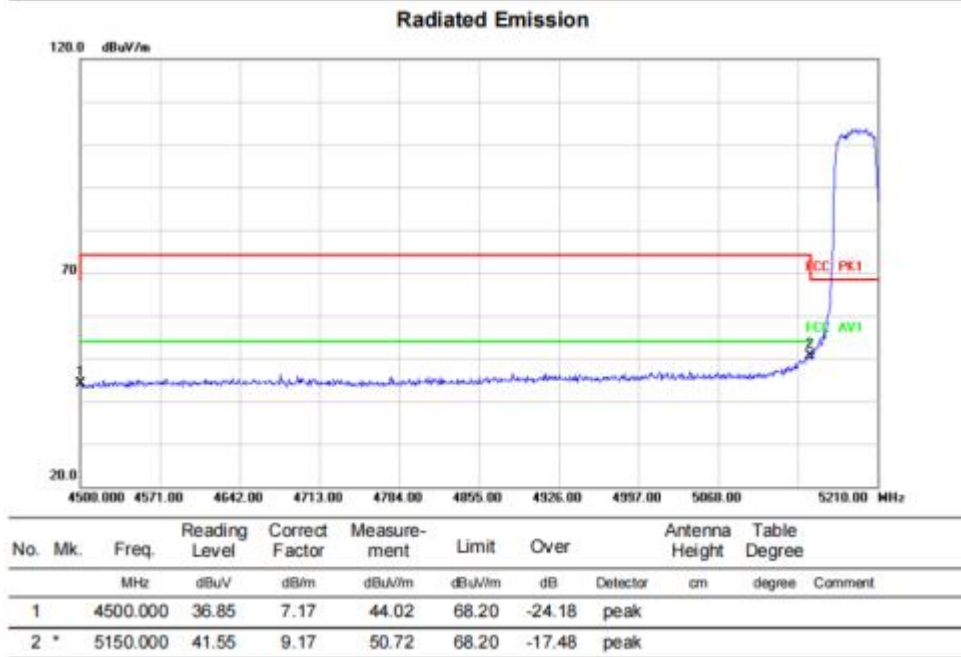
11n20 Channel 165: Horizontal



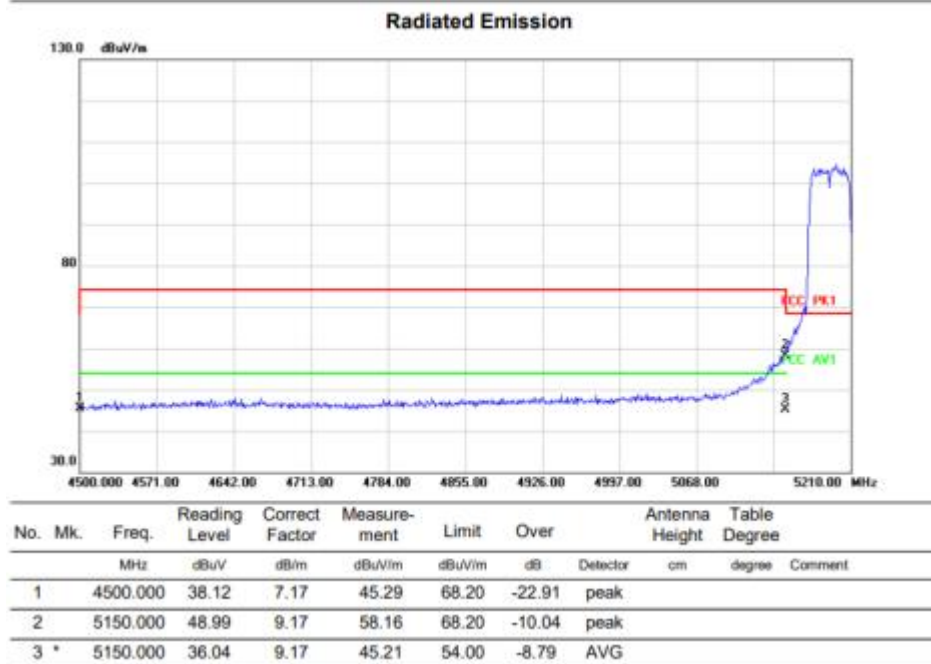
11n20 Channel 165: Vertical



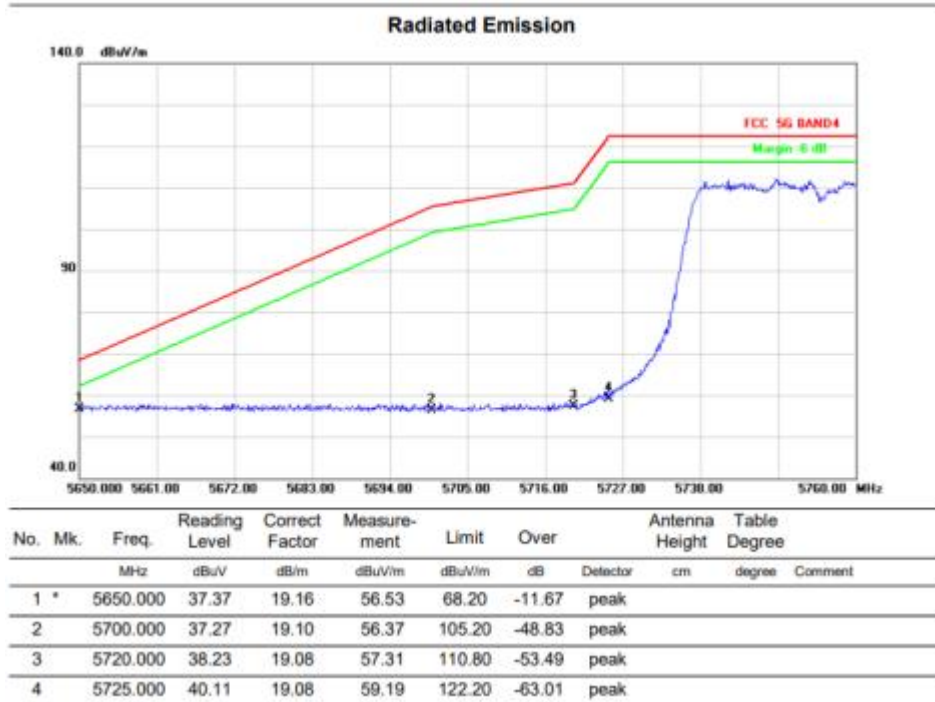
11n40 Channel 38: Horizontal



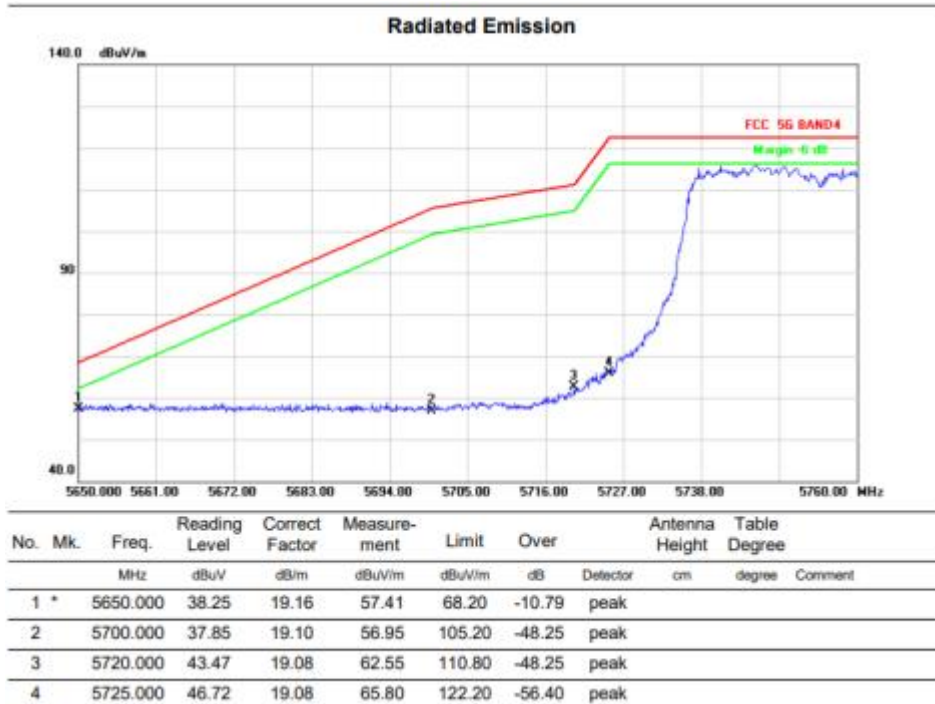
11n40 Channel 38: Vertical



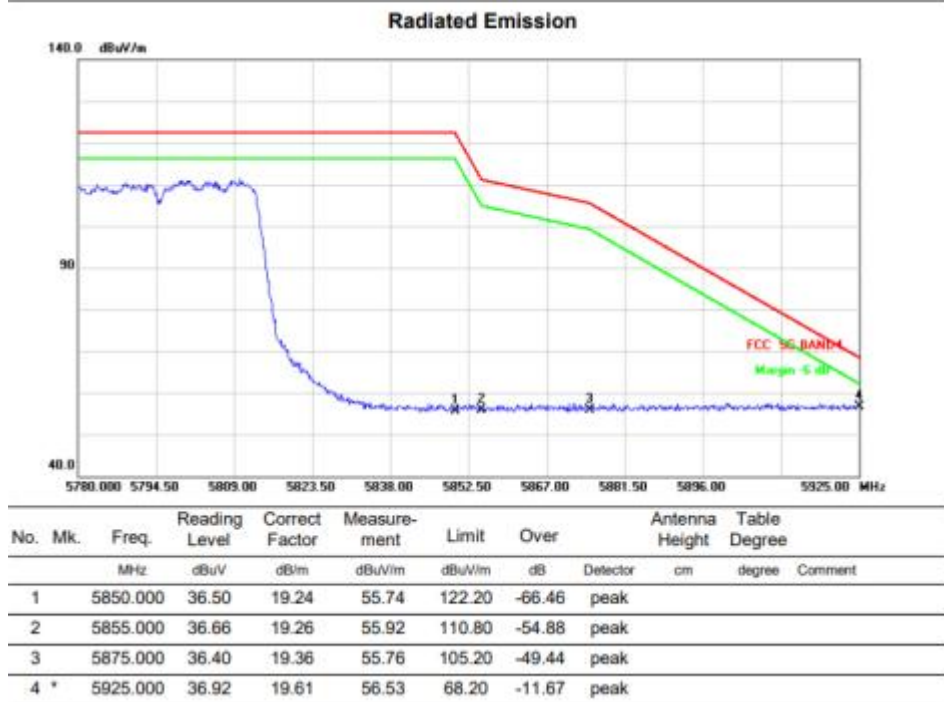
11n40 Channel 151: Horizontal



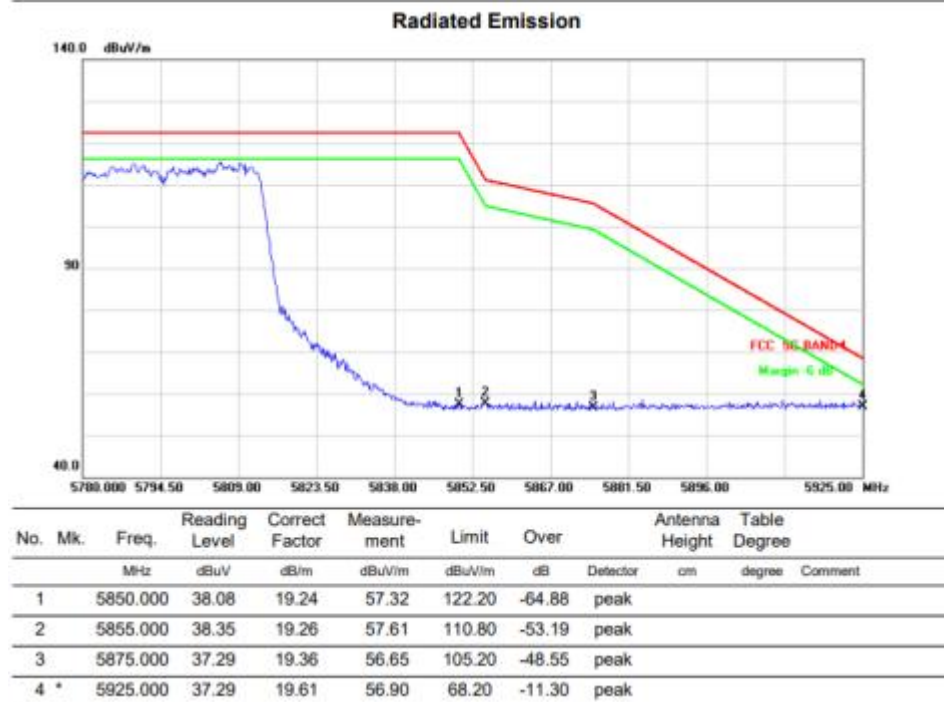
11n40 Channel 151: Vertical



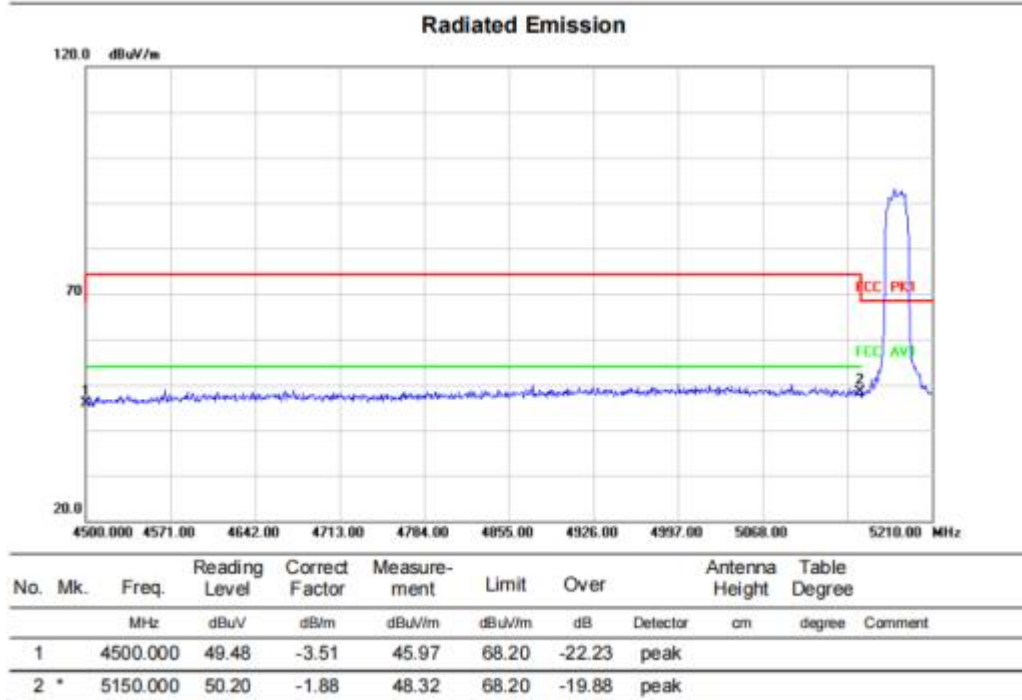
11n40 Channel 159: Horizontal



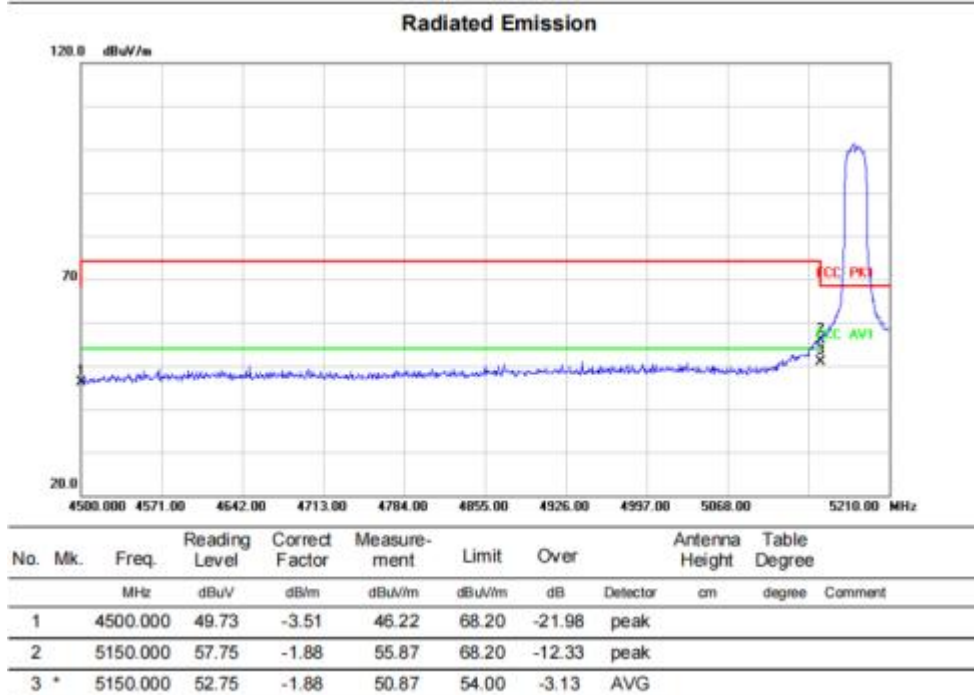
11n40 Channel 159: Vertical



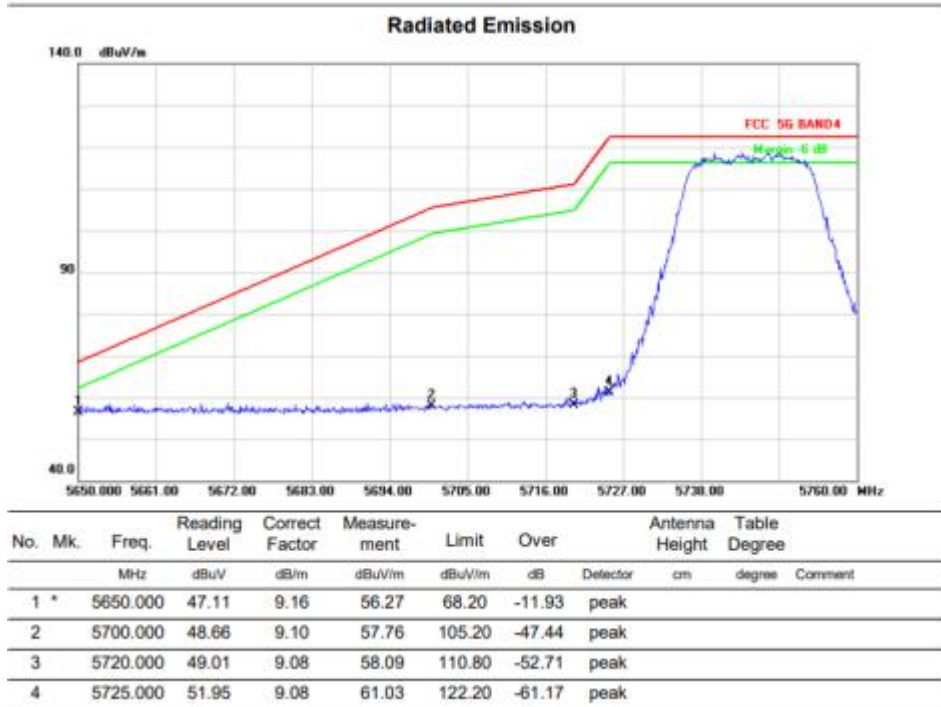
11ac20 Channel 36: Horizontal



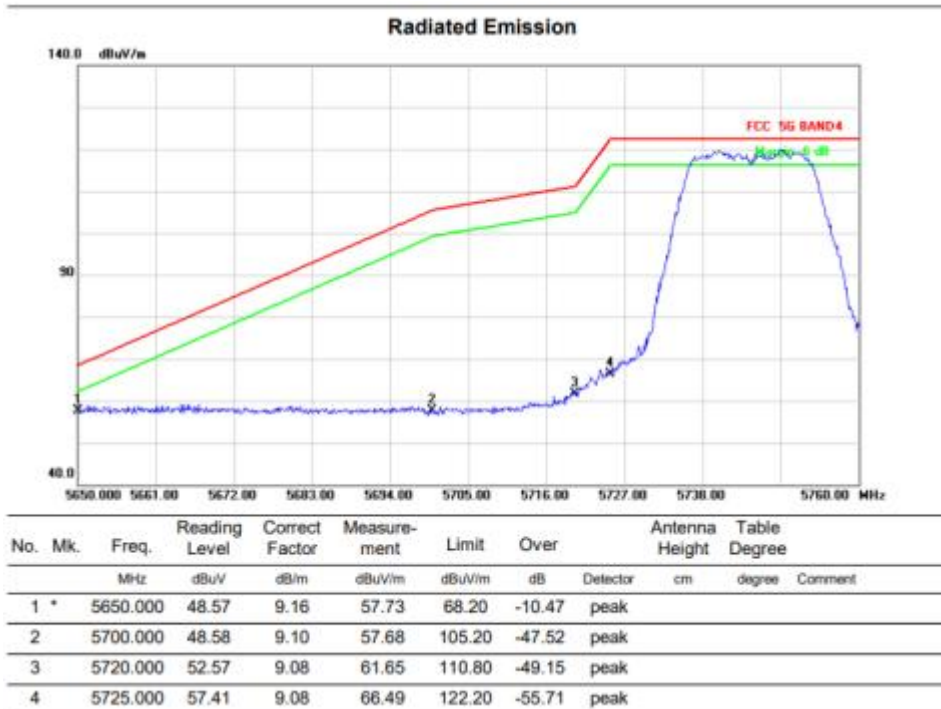
11ac20 Channel 36: Vertical



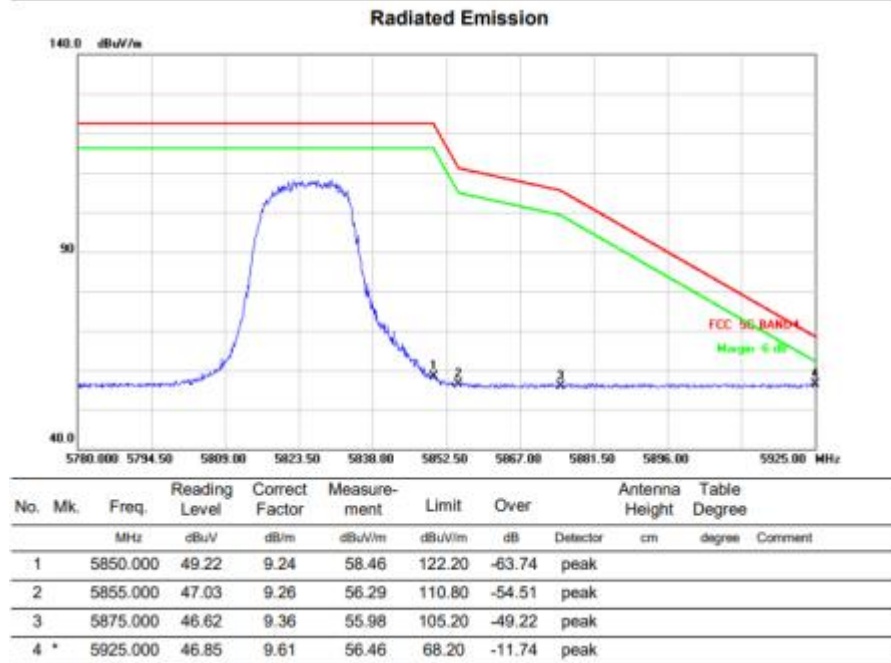
11ac20 Channel 149: Horizontal



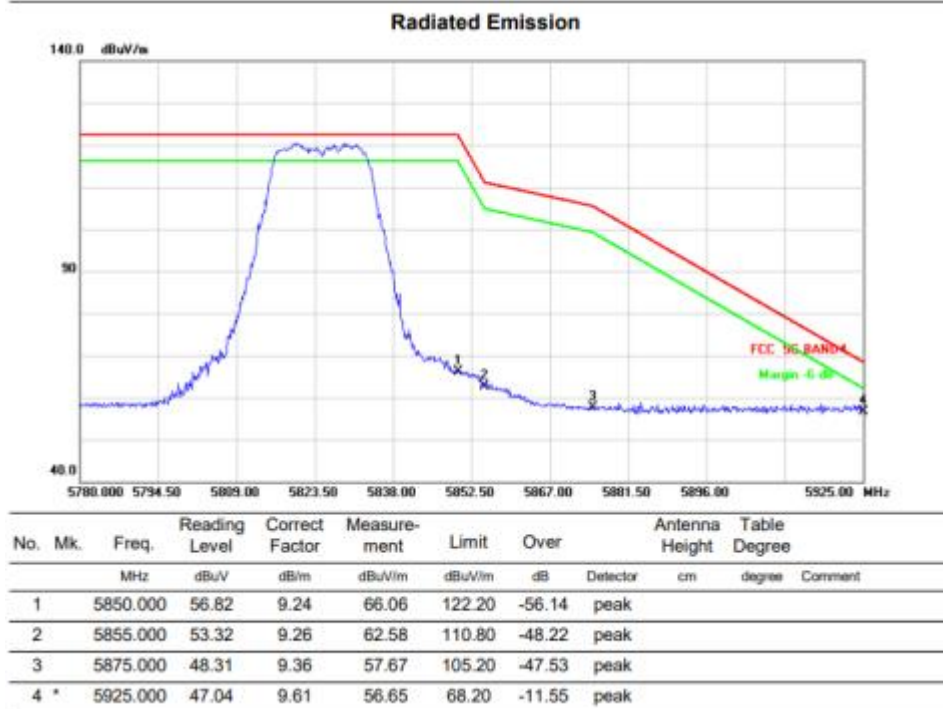
11ac20 Channel 149: Vertical



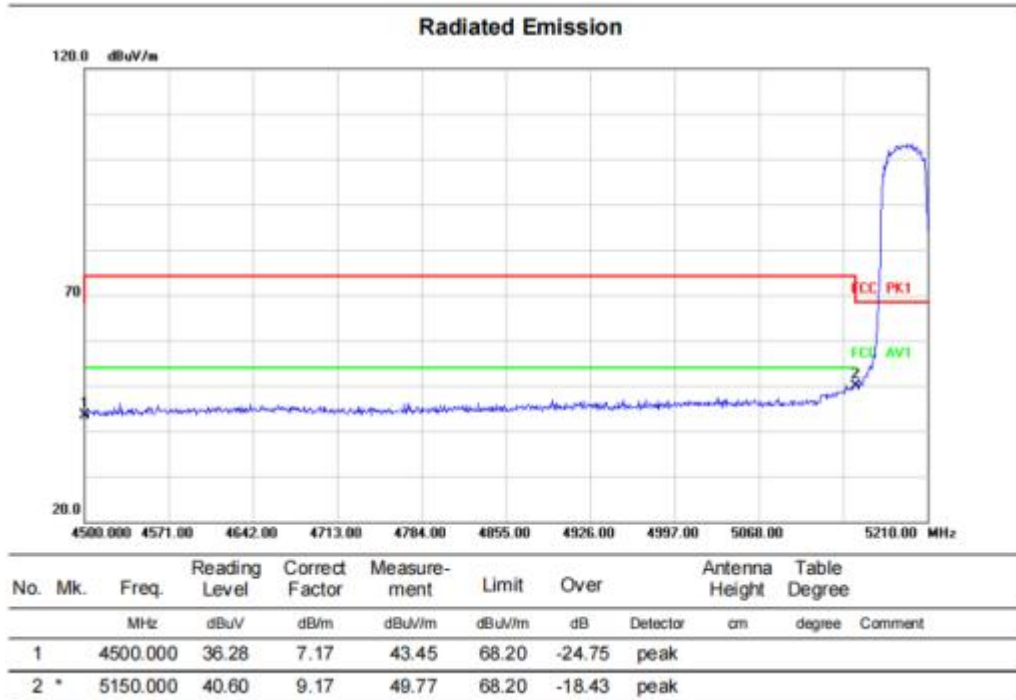
11ac20 Channel 165: Horizontal



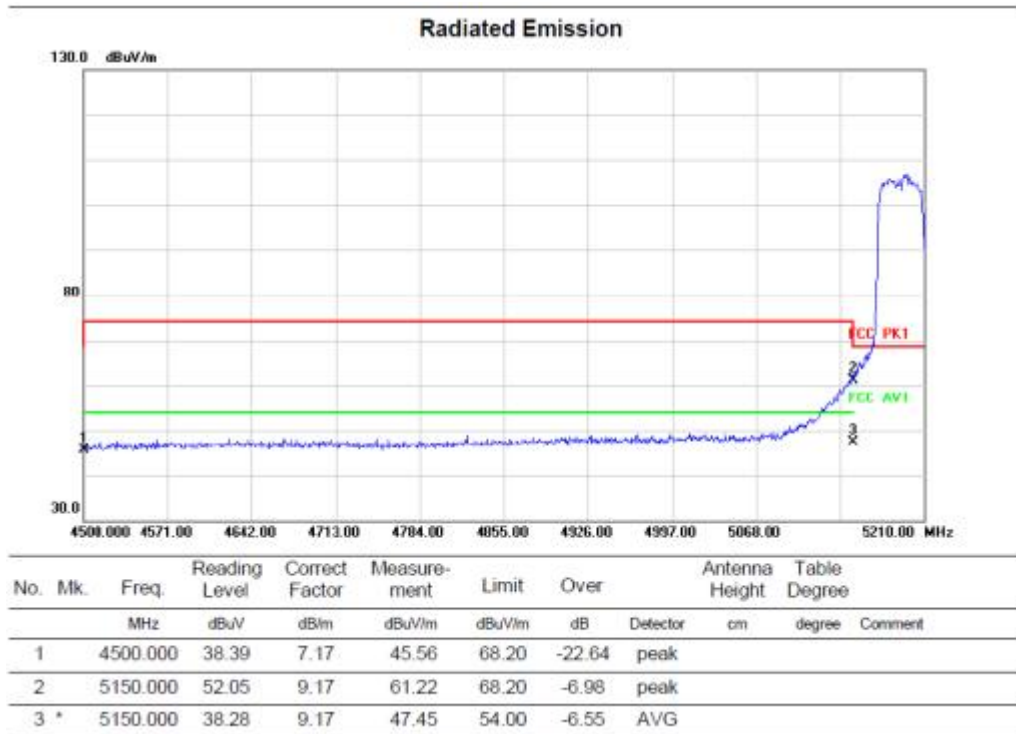
11ac20 Channel 165: Vertical



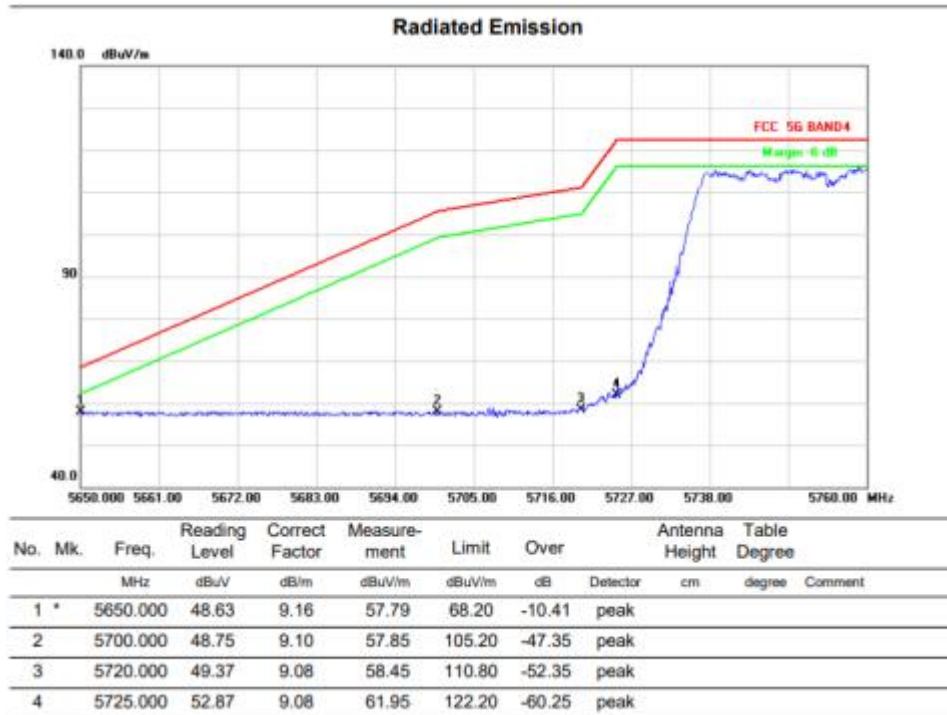
11ac40 Channel 38: Horizontal



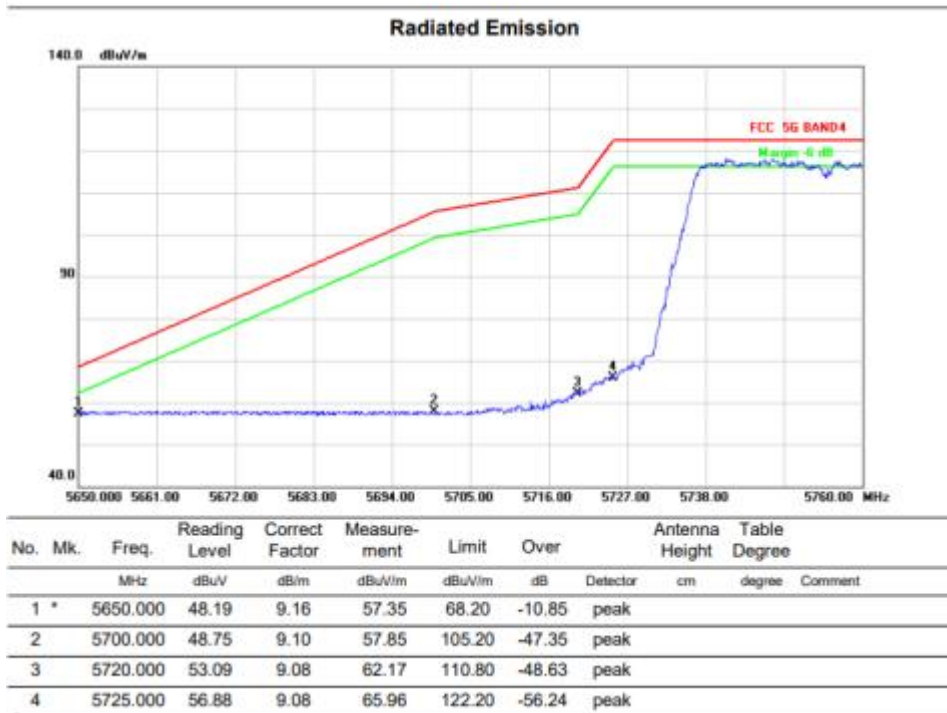
11ac40 Channel 38: Vertical



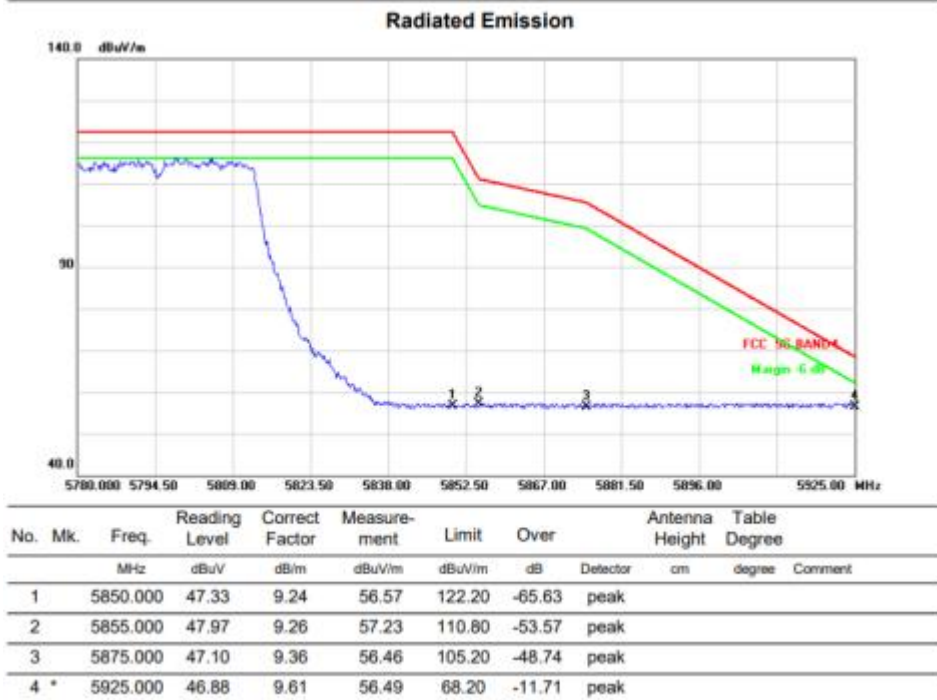
11ac40 Channel 151: Horizontal



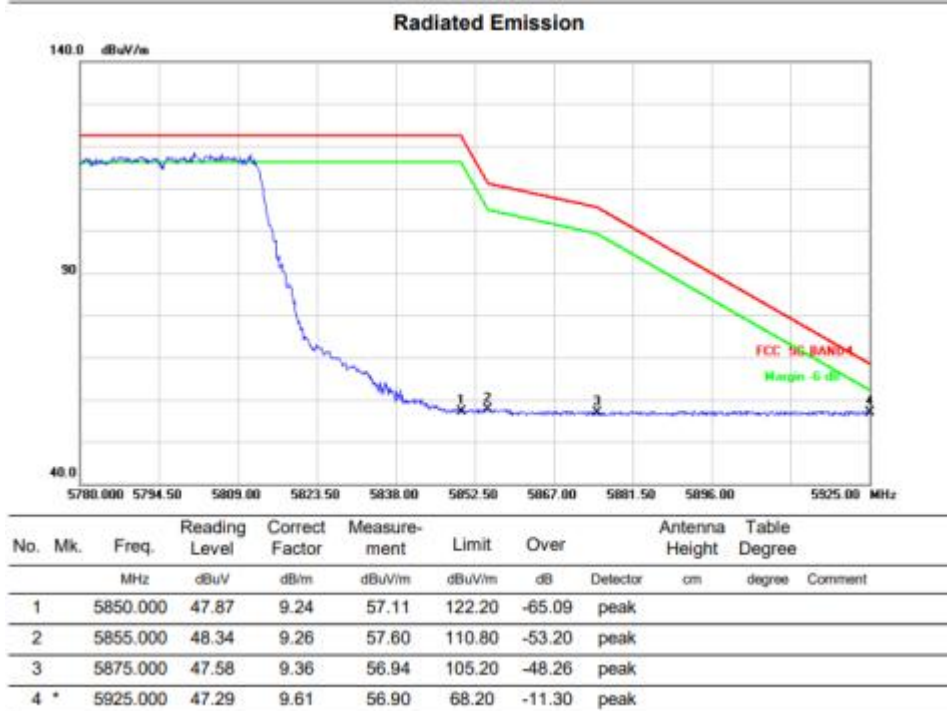
11ac40 Channel 151: Vertical



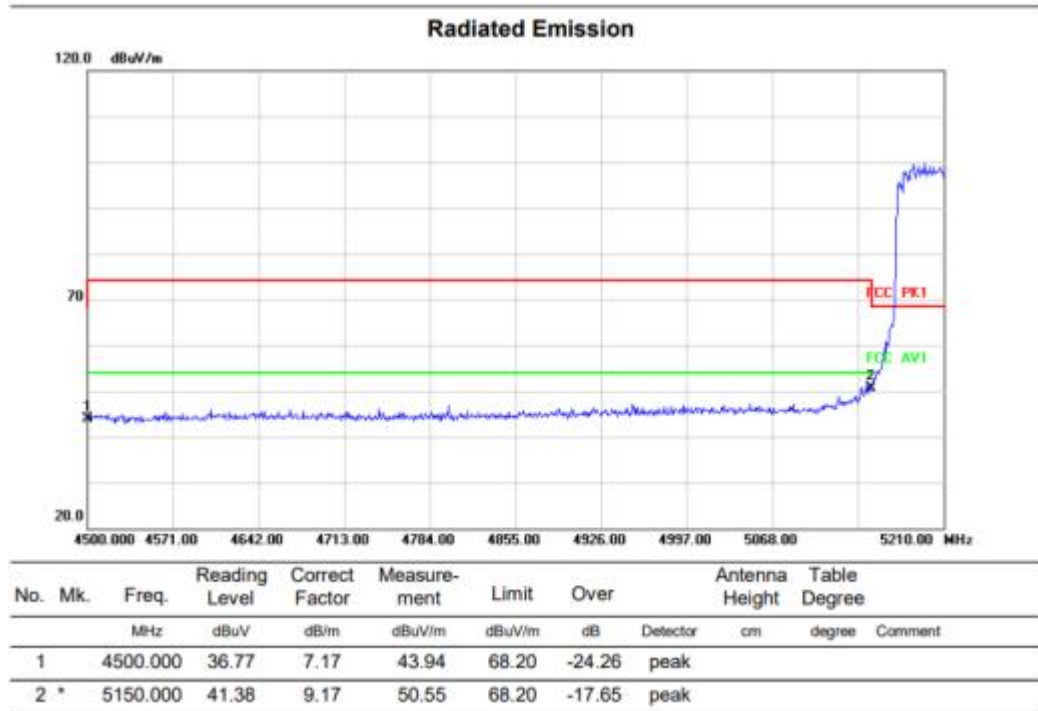
11ac40 Channel 159: Horizontal



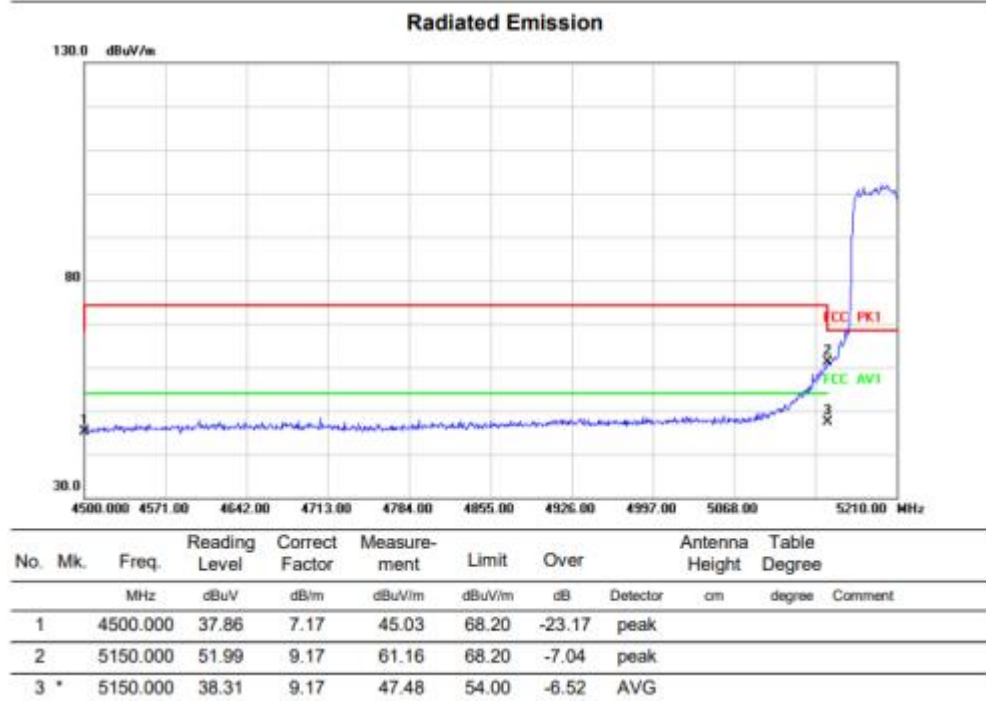
11ac40 Channel 159: Vertical



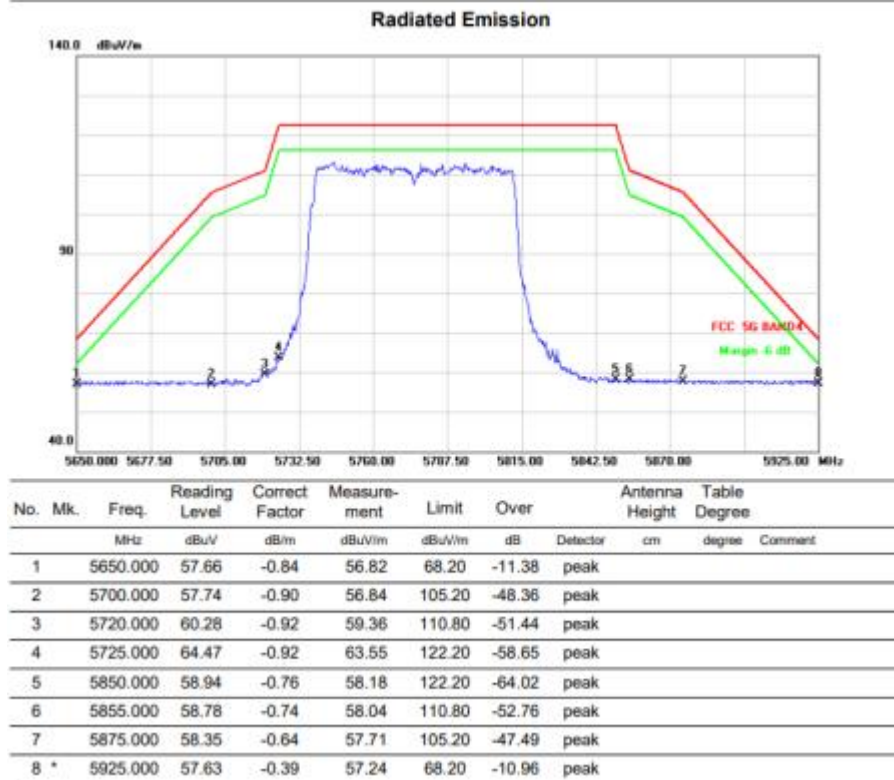
11ac80 Channel 42: Horizontal



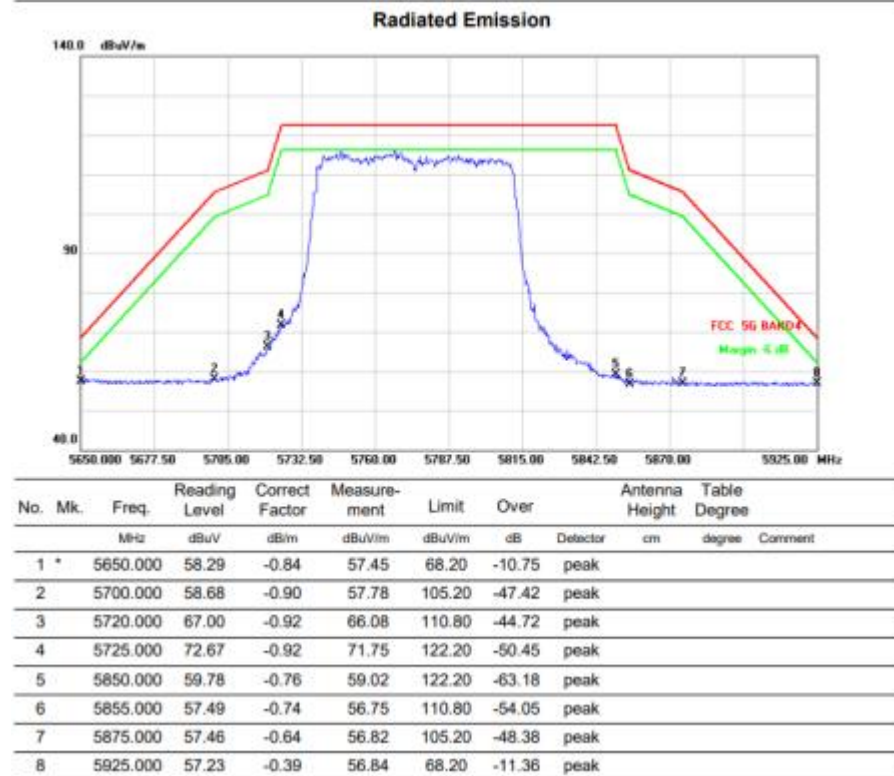
11ac80 Channel 42: Vertical



11ac80 Channel 155: Horizontal



11ac80 Channel 155: Vertical



10 CONDUCTED EMISSION Test

10.1.POWER LINE CONDUCTED EMISSION LIMITS

Operating frequency band. In case the emission fall within the restricted band specified on Part 207(a) limit in the table below has to be followed.

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

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

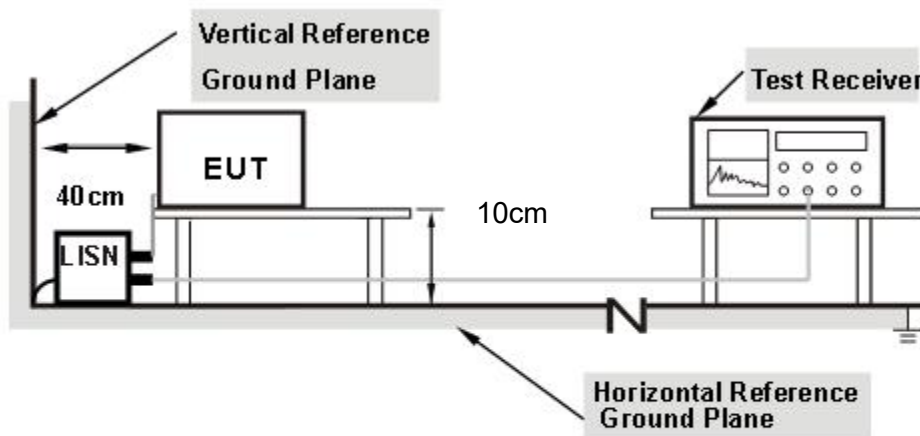
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

10.2 TEST PROCEDURE

- a. The EUT was 0.1 meters from the horizontal ground plane and 0.4 meters from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

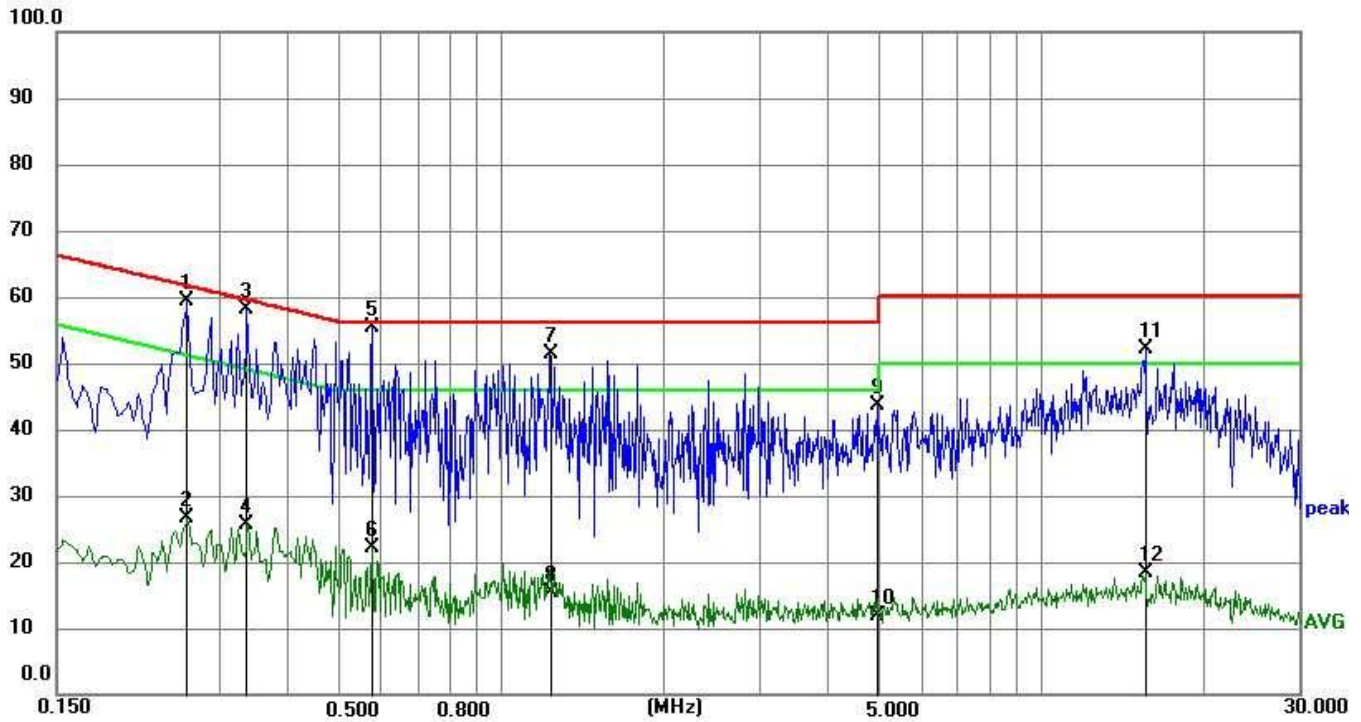
10.3 TEST SETUP



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

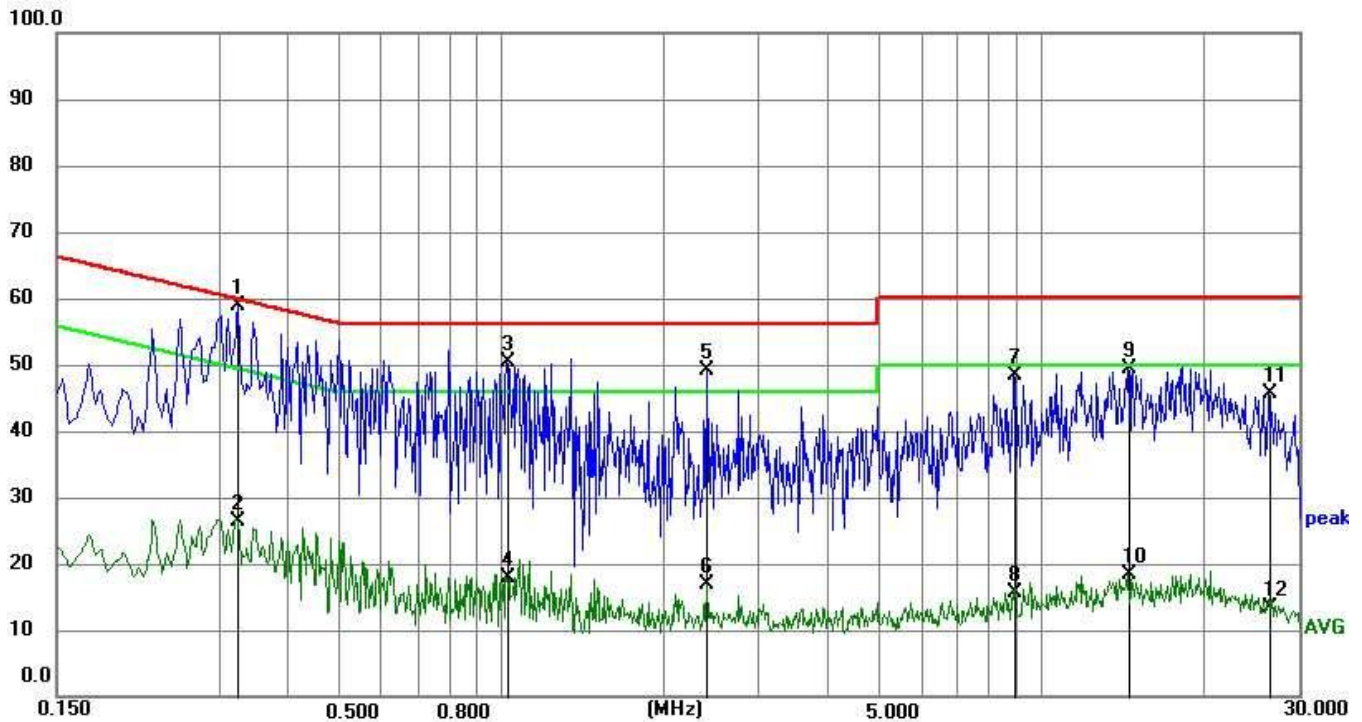
10.4 TEST RESULT

Temperature:	22.1 °C	Relative Humidity:	56%
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	802.11a(worst)		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.2625	49.43	10.04	59.47	61.35	1.88	QP
2	0.2625	16.57	10.04	26.61	51.35	24.74	AVG
3	0.3390	48.14	10.02	58.16	59.23	1.07	QP
4	0.3390	15.72	10.02	25.74	49.23	23.49	AVG
5	0.5774	45.47	10.00	55.47	56.00	0.53	QP
6	0.5774	12.25	10.00	22.25	46.00	23.75	AVG
7	1.2345	41.45	9.99	51.44	56.00	4.56	QP
8	1.2345	5.38	9.99	15.37	46.00	30.63	AVG
9	4.9650	33.63	9.88	43.51	56.00	12.49	QP
10	4.9650	2.06	9.88	11.94	46.00	34.06	AVG
11	15.5760	42.19	9.83	52.02	60.00	7.98	QP
12	15.5760	8.47	9.83	18.30	50.00	31.70	AVG

Temperature:	22.1 °C	Relative Humidity:	56%
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode:	802.11a(worst)		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3255	48.86	10.03	58.89	59.57	0.68	QP
2	0.3255	16.40	10.03	26.43	49.57	23.14	AVG
3	1.0227	40.31	9.99	50.30	56.00	5.70	QP
4	1.0227	7.80	9.99	17.79	46.00	28.21	AVG
5	2.4000	39.27	9.95	49.22	56.00	6.78	QP
6	2.4000	7.01	9.95	16.96	46.00	29.04	AVG
7	8.8979	38.47	9.82	48.29	60.00	11.71	QP
8	8.8979	5.89	9.82	15.71	50.00	34.29	AVG
9	14.4734	39.55	9.82	49.37	60.00	10.63	QP
10	14.4734	8.44	9.82	18.26	50.00	31.74	AVG
11	26.3130	35.53	9.98	45.51	60.00	14.49	QP
12	26.3130	3.40	9.98	13.38	50.00	36.62	AVG



11. ANTENNA REQUIREMENT

11.1 STANDARD REQUIREMENT

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2 RESULT

The antennas used for this product are FPC antenna and other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 4.41 dBi.

*****END OF THE REPORT*****