

(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									
4500.37	49.00	PK	109	1.8	H	-2.03	46.97	74.00	-27.03
4500.37	45.66	Ave	109	1.8	H	-2.03	43.63	54.00	-10.37
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									
4531.52	50.05	PK	246	1.8	H	-1.94	48.11	74.00	-25.89
4531.52	44.98	Ave	246	1.8	H	-1.94	43.04	54.00	-10.96
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									
4502.74	49.98	PK	298	1.7	H	-2.24	47.74	74.00	-26.26
4502.74	43.84	Ave	298	1.7	H	-2.24	41.60	54.00	-12.40
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									
4504.10	49.22	PK	114	1.3	H	-2.06	47.16	74.00	-26.84
4504.10	44.02	Ave	114	1.3	H	-2.06	41.96	54.00	-12.04
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									
4505.68	49.64	PK	301	1.1	H	-2.03	47.61	74.00	-26.39
4505.68	44.19	Ave	301	1.1	H	-2.03	42.16	54.00	-11.84
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									
4506.47	49.90	PK	27	1.2	H	-1.84	48.06	74.00	-25.94
4506.47	45.26	Ave	27	1.2	H	-1.84	43.42	54.00	-10.58
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:**

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

(30MHz-1000MHz)

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	51.3005	68.52	-40.24	28.28	40.00	-11.72	QP
2	74.1351	59.79	-40.24	19.55	40.00	-20.45	QP
3	109.4116	58.68	-40.24	18.44	43.50	-25.06	QP
4	134.5592	60.70	-40.24	20.46	43.50	-23.04	QP
5	242.5252	66.08	-40.24	25.84	46.00	-20.16	QP
6	435.5898	82.33	-40.24	42.09	46.00	-3.91	QP

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	69.3568	36.91	-20.21	16.70	40.00	-23.30	QP
2	105.6414	31.99	-17.98	14.01	43.50	-29.49	QP
3	251.1802	43.20	-17.70	25.50	46.00	-20.50	QP
4	312.1792	42.33	-15.77	26.56	46.00	-19.44	QP
5	435.5898	54.31	-14.44	39.87	46.00	-6.13	QP
6	599.3211	34.68	-11.36	23.32	46.00	-22.68	QP

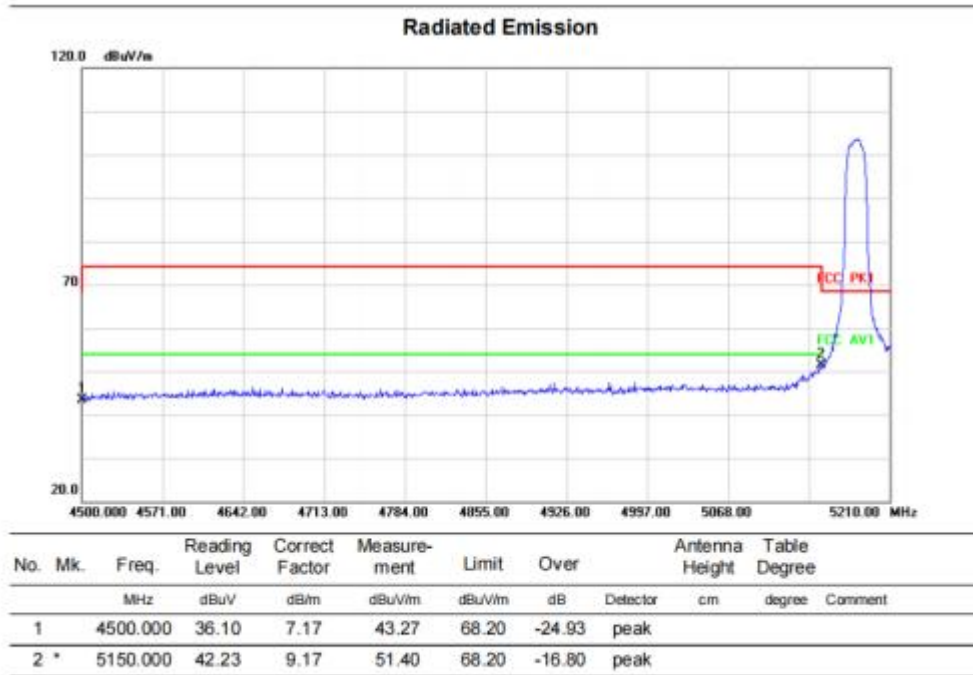
Remarks:

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

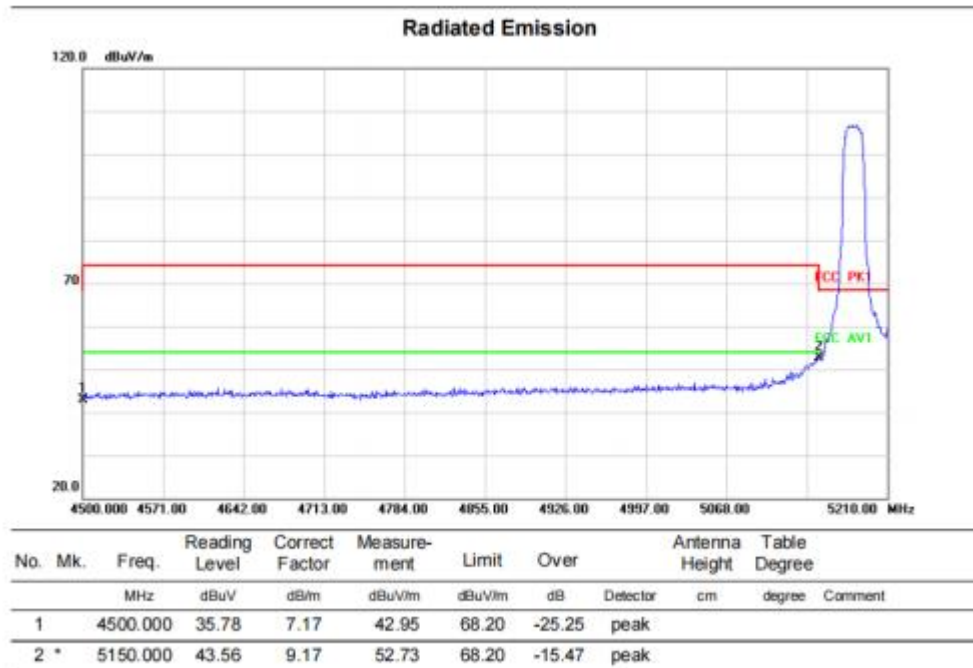
2.

Radiated Band Edge data

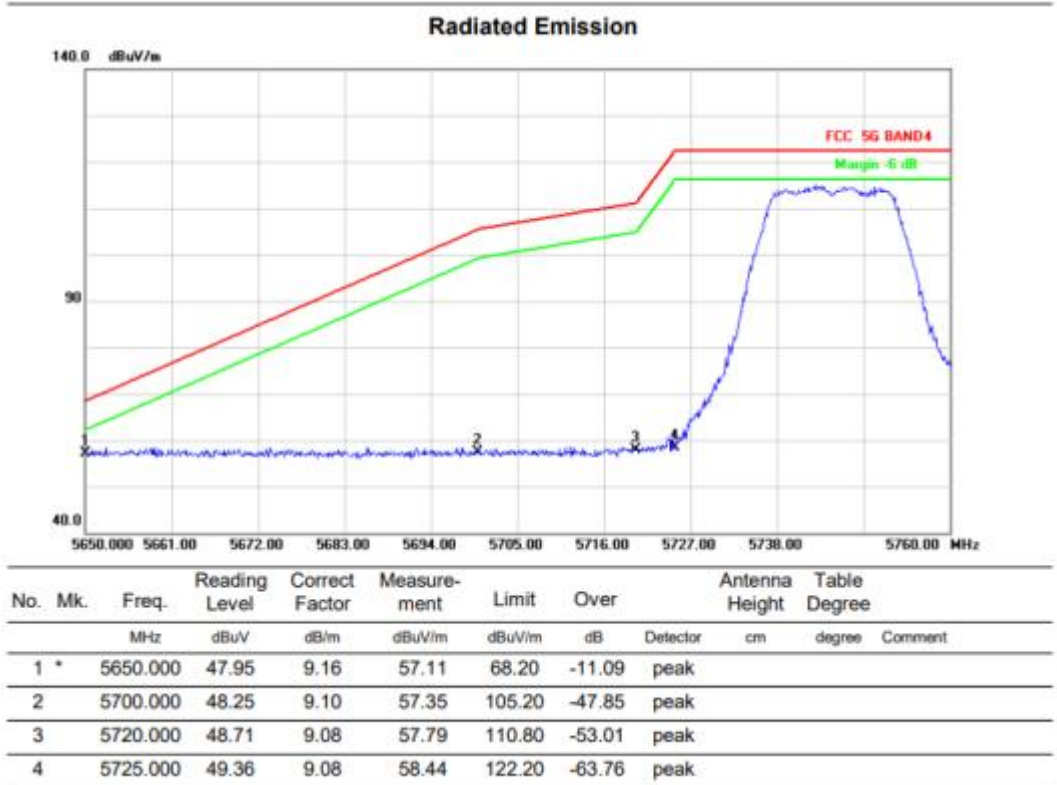
11a Channel 36: Horizontal



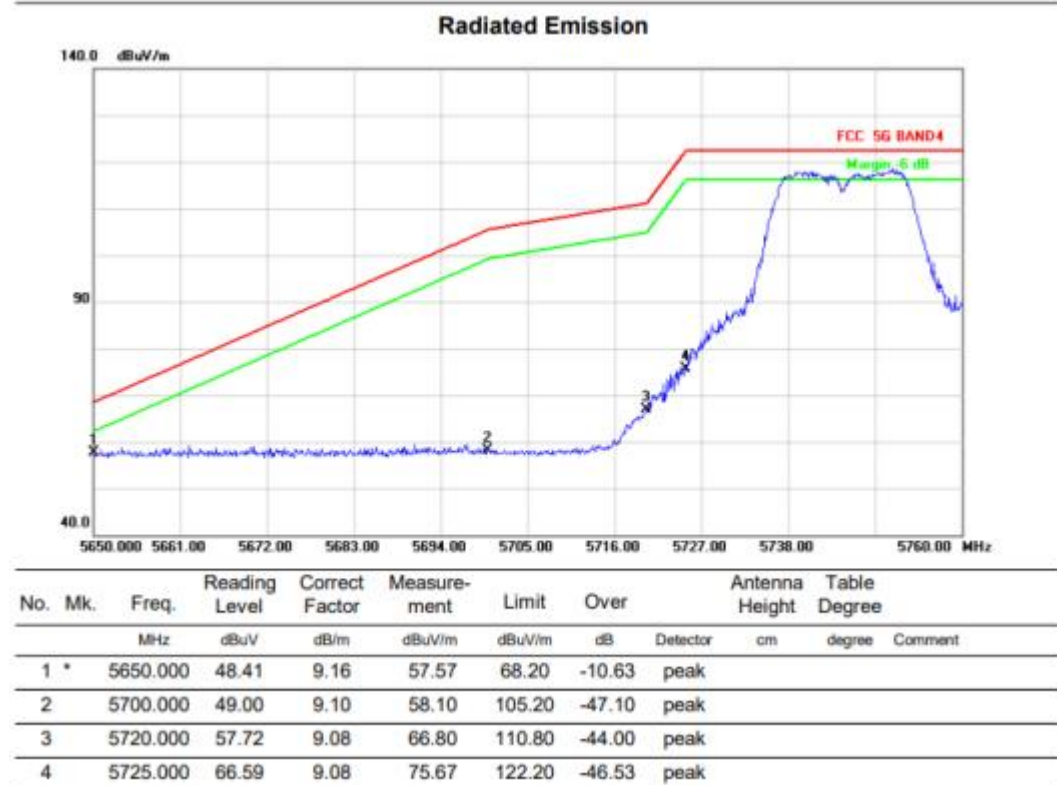
11a Channel 36: Vertical



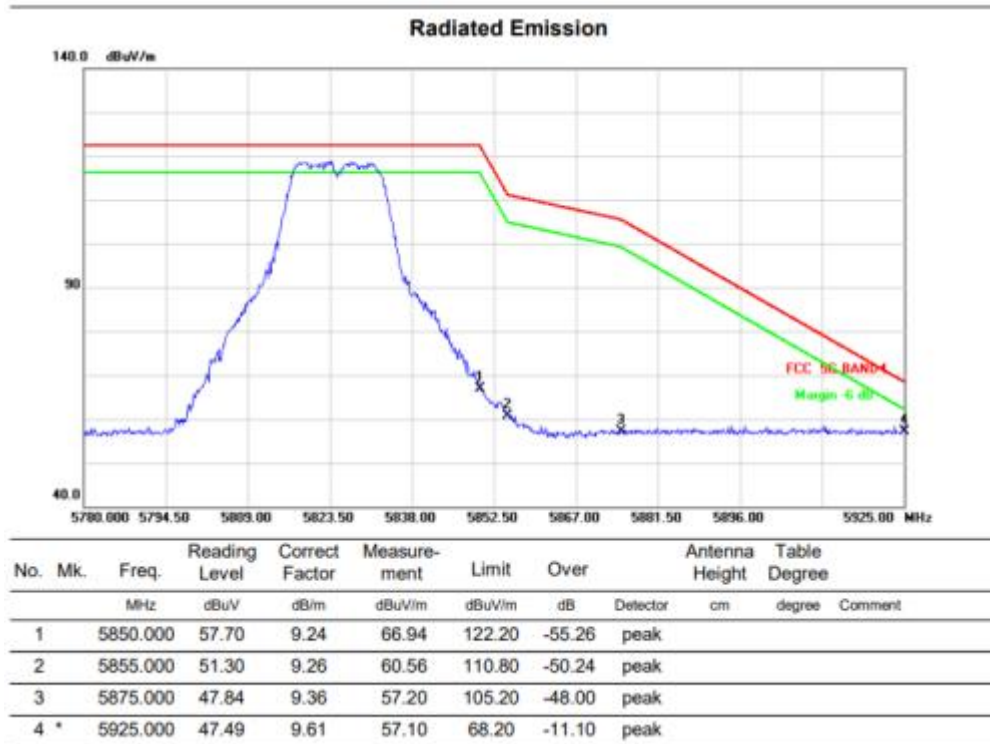
11a Channel 149: Horizontal



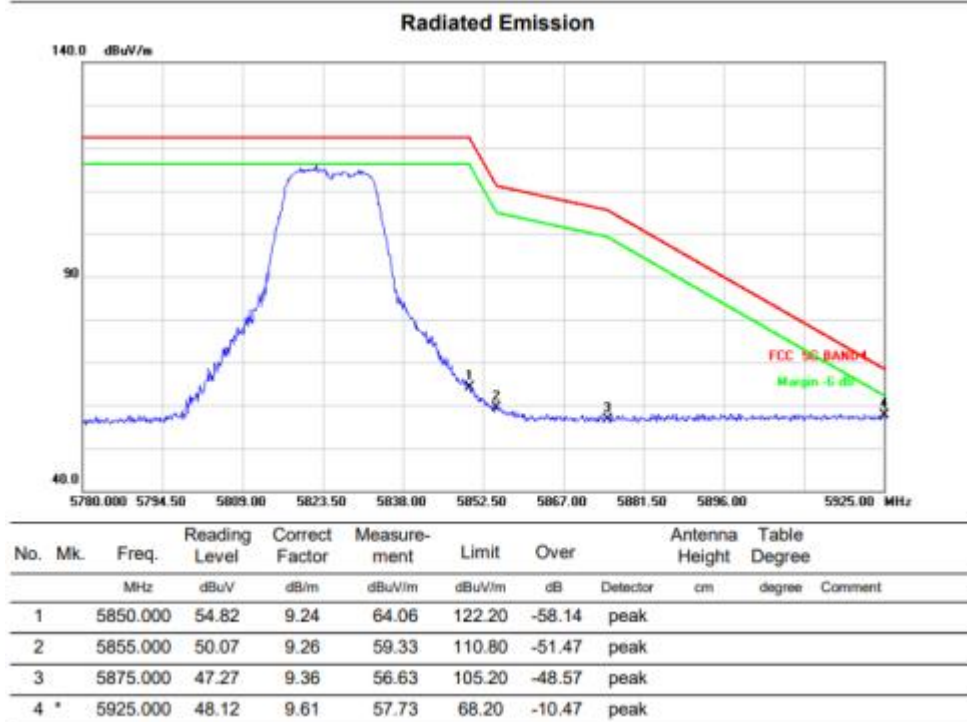
11a Channel 149: Vertical



11a Channel 161: Horizontal

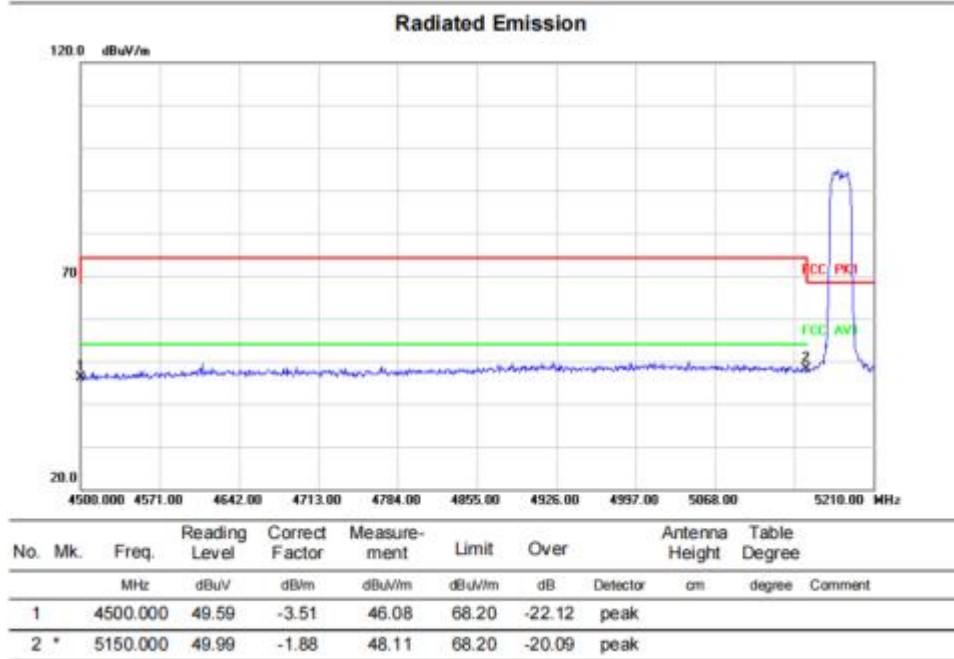


11a Channel 161: Vertical

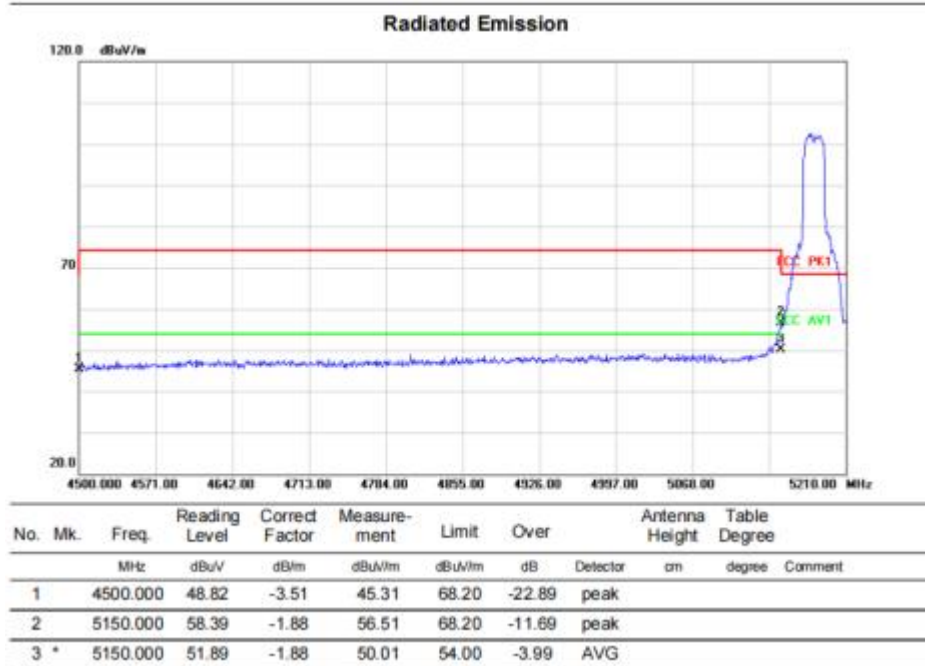




11n20 Channel 36: Horizontal

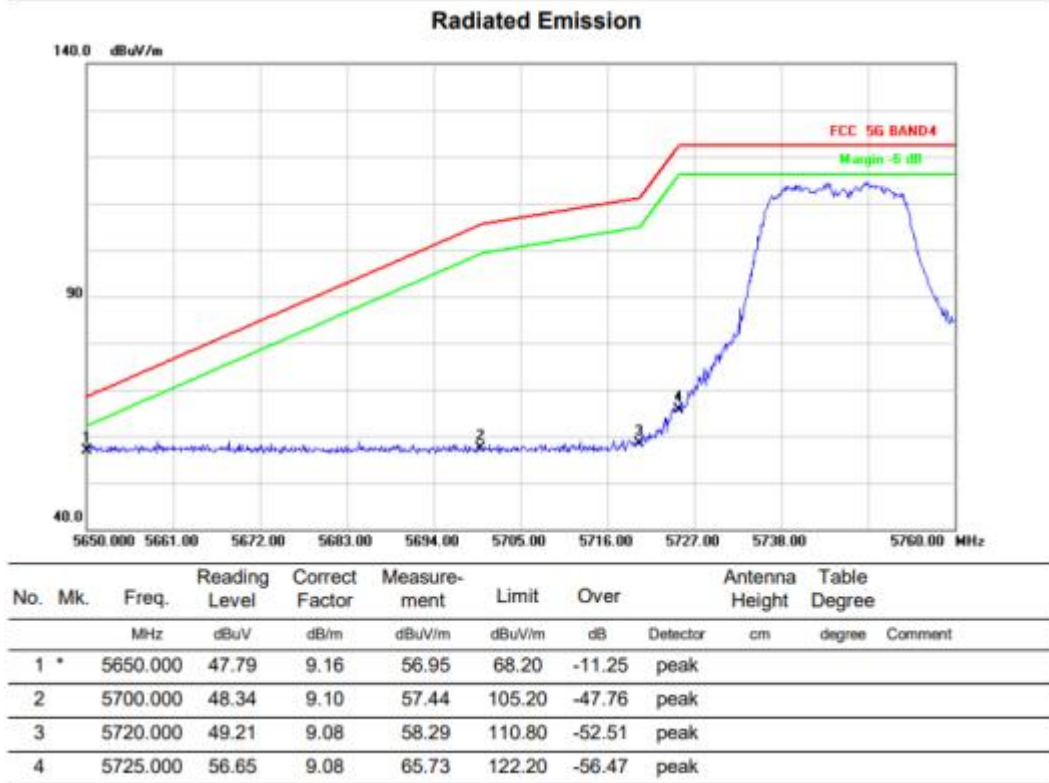


11n20 Channel 36: Vertical

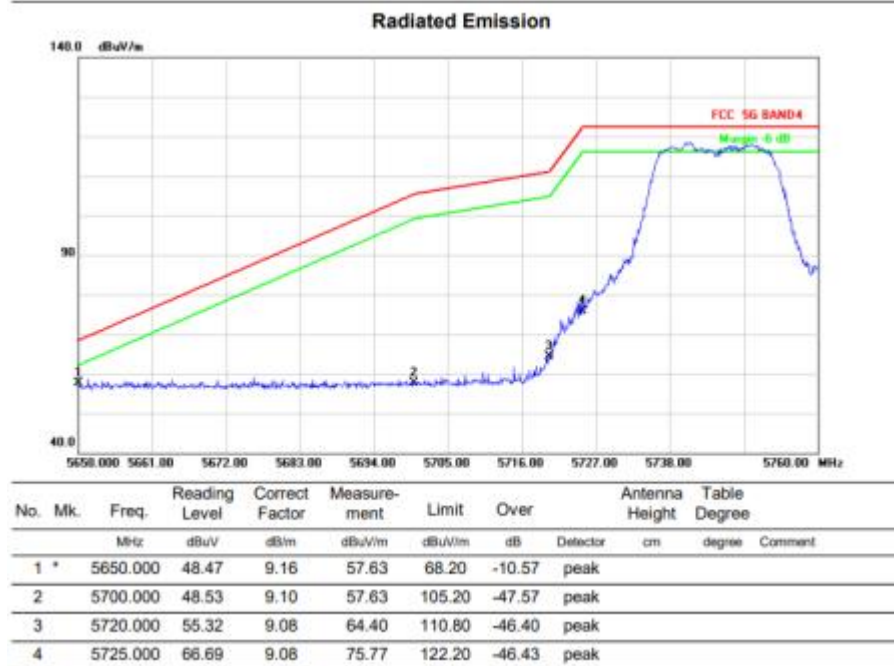




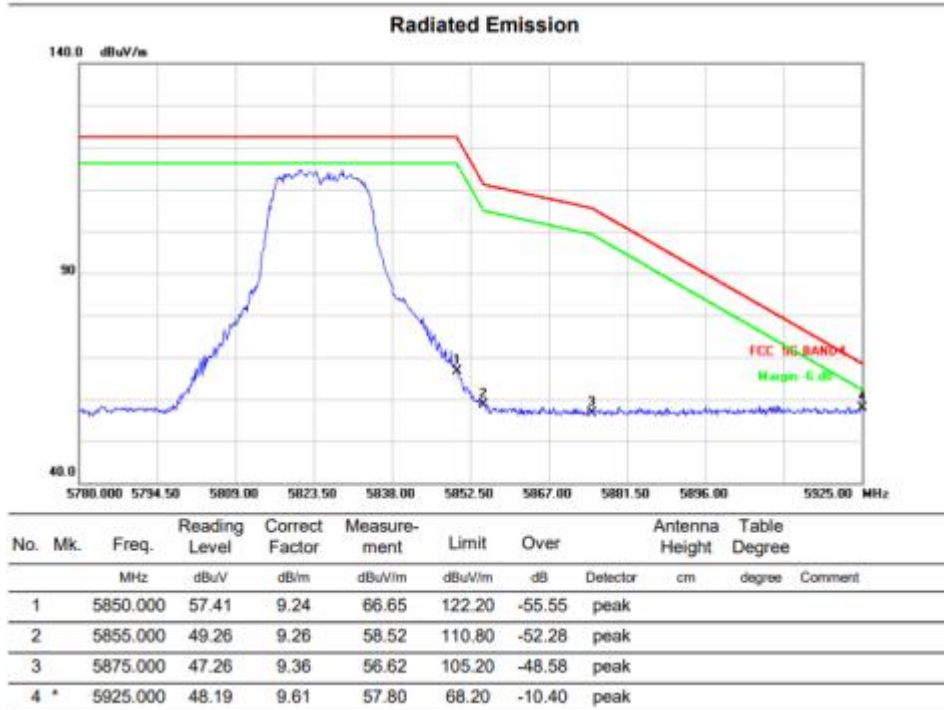
11n20 Channel 149: Horizontal



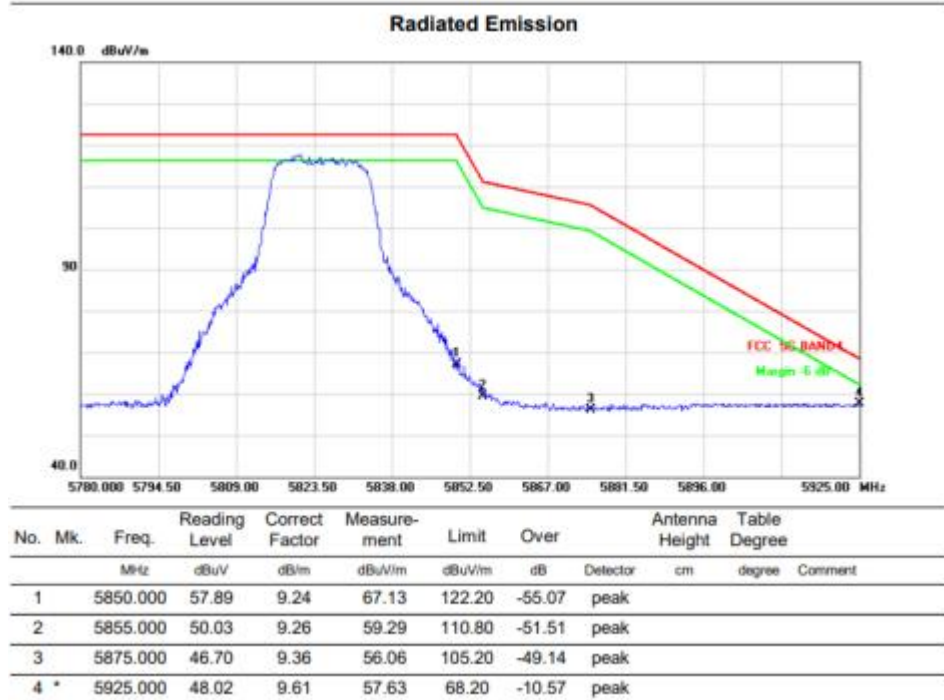
11n20 Channel 36: Vertical



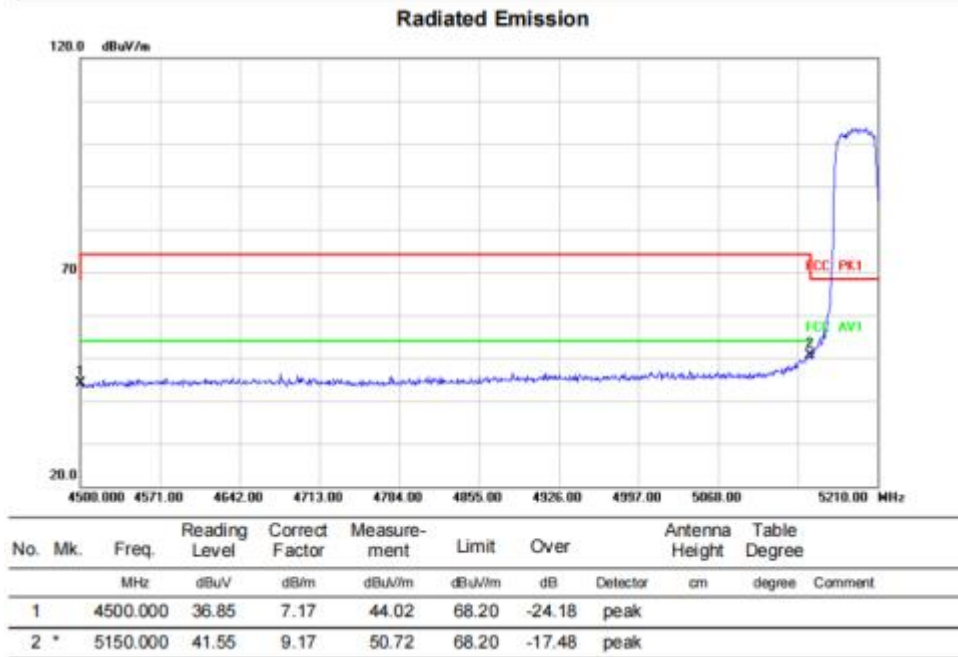
11n20 Channel 165: Horizontal



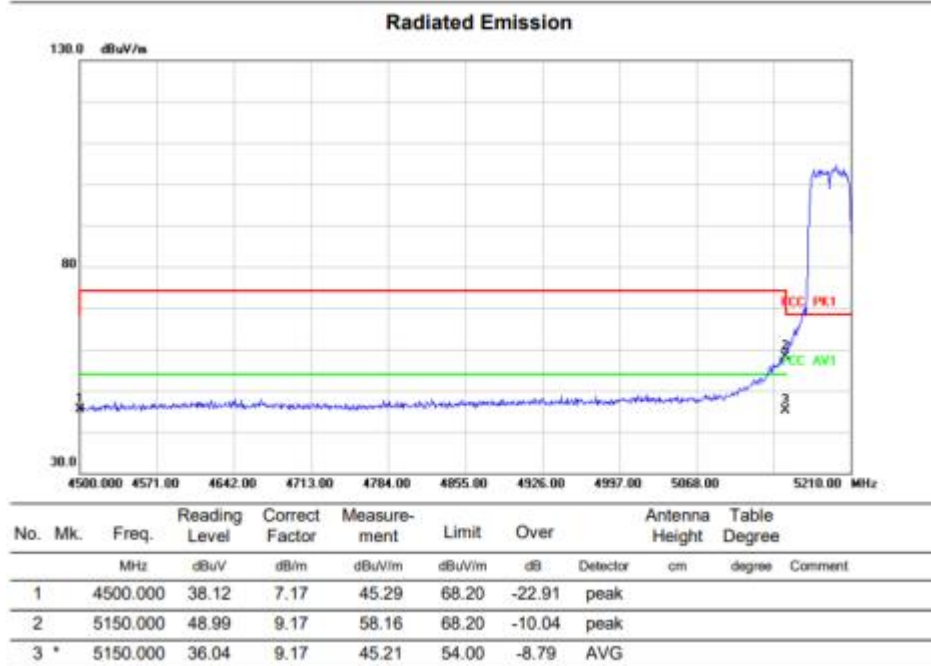
11n20 Channel 165: Vertical



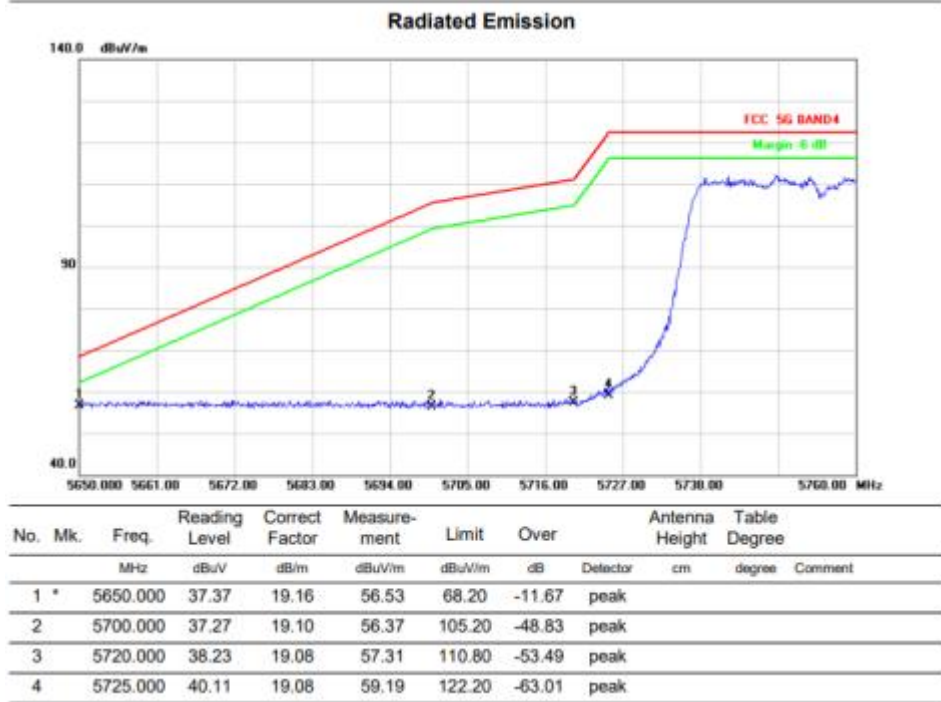
11n40 Channel 38: Horizontal



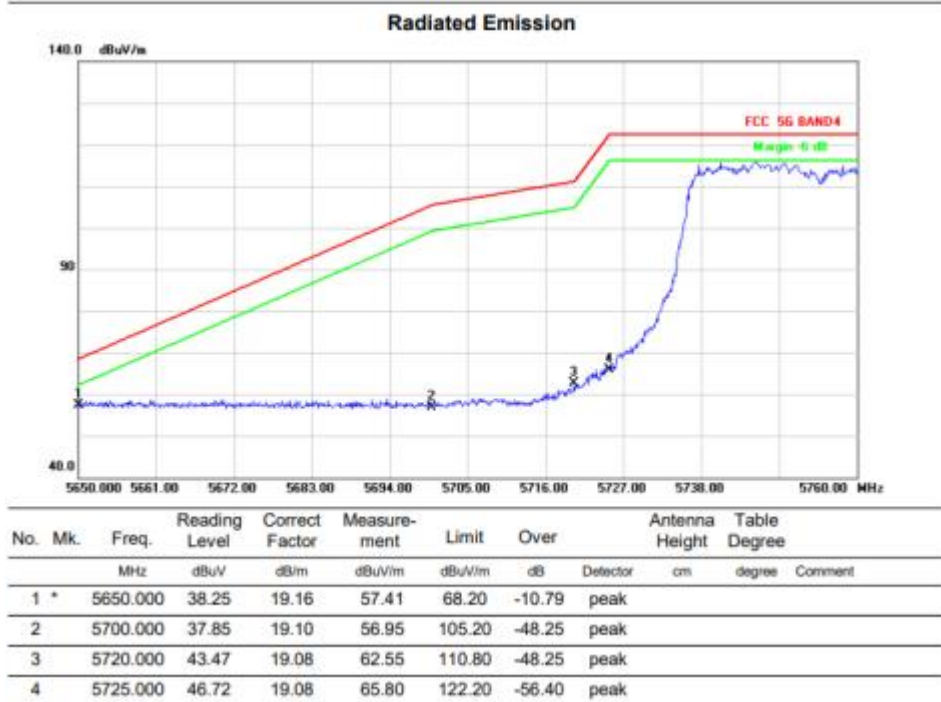
11n40 Channel 38: Vertical



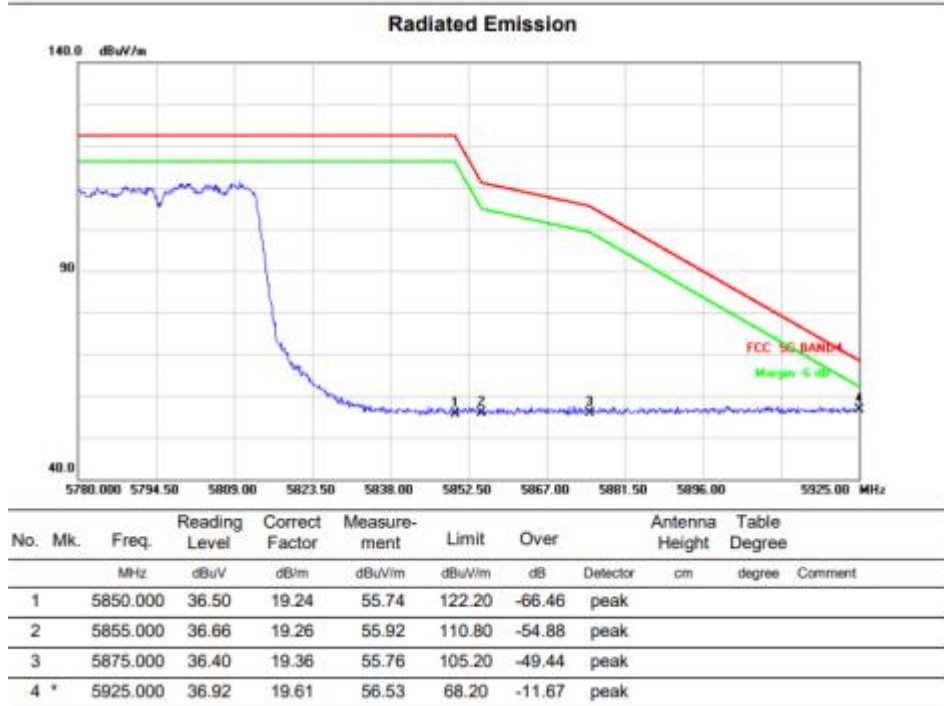
11n40 Channel 151: Horizontal



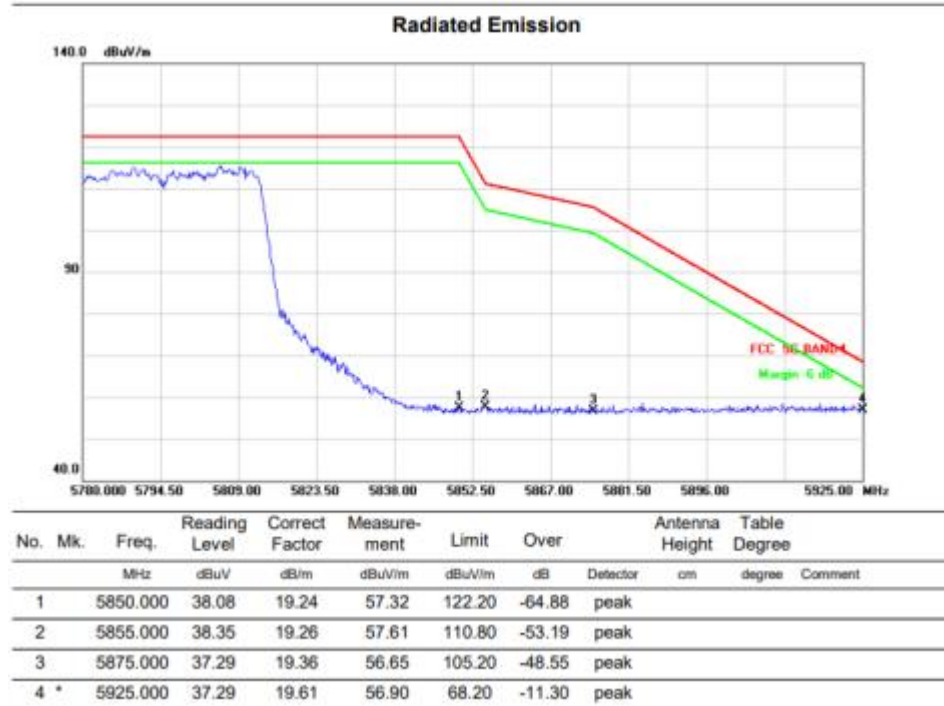
11n40 Channel 151: Vertical



11n40 Channel 159: Horizontal

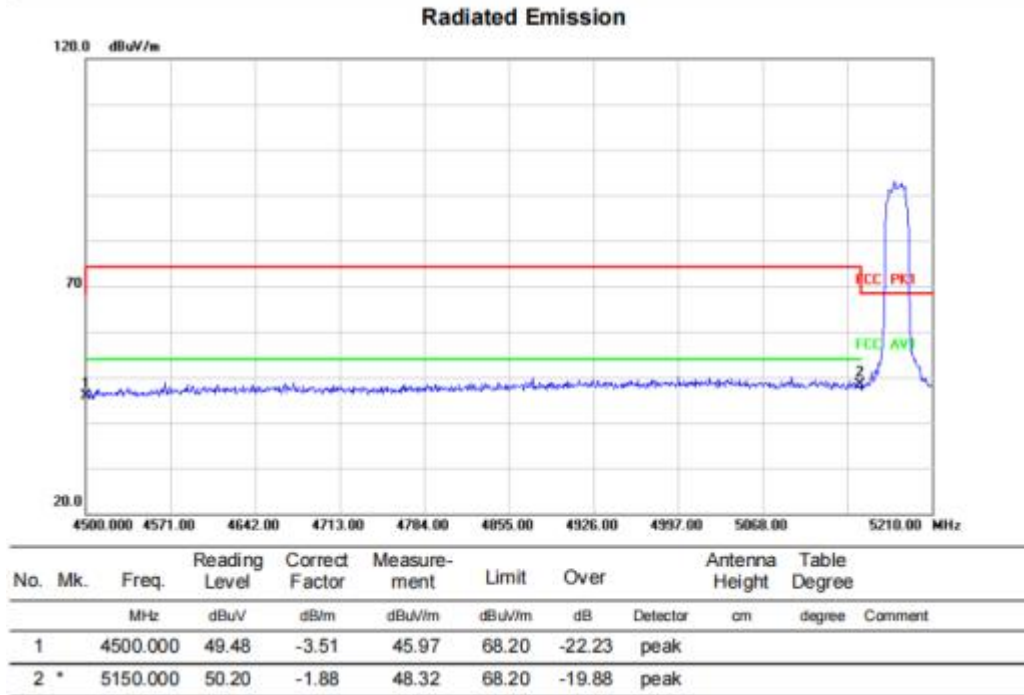


11n40 Channel 159: Vertical

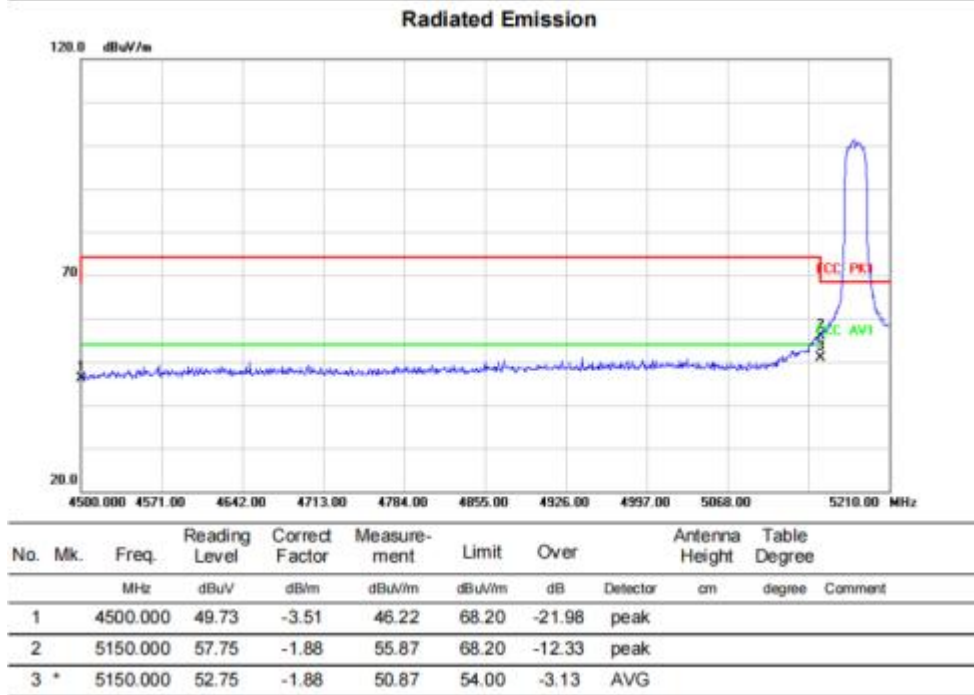




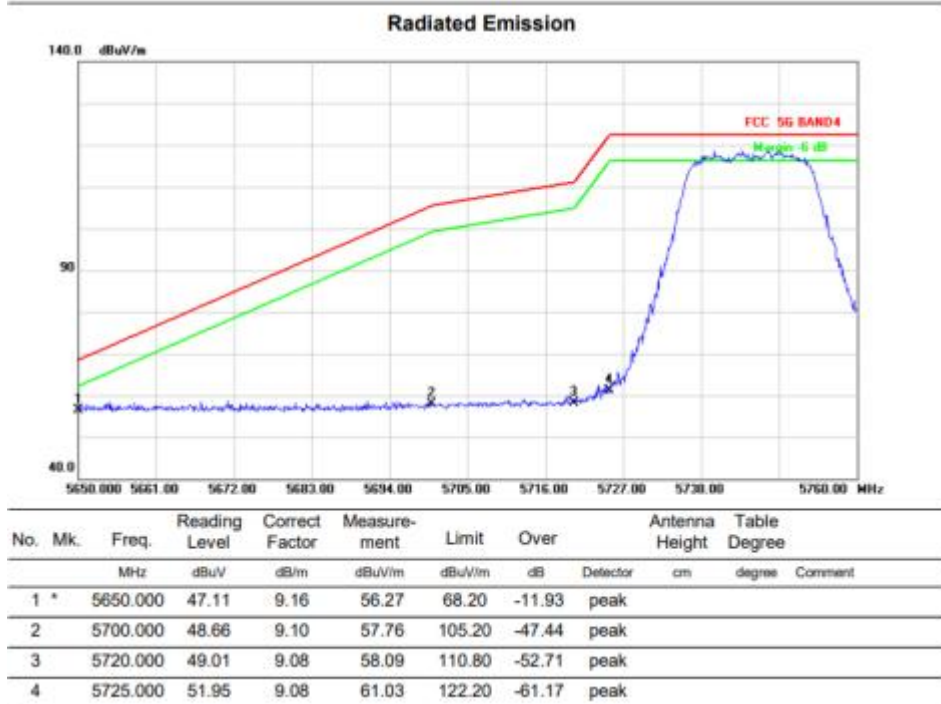
11ac20 Channel 36: Horizontal



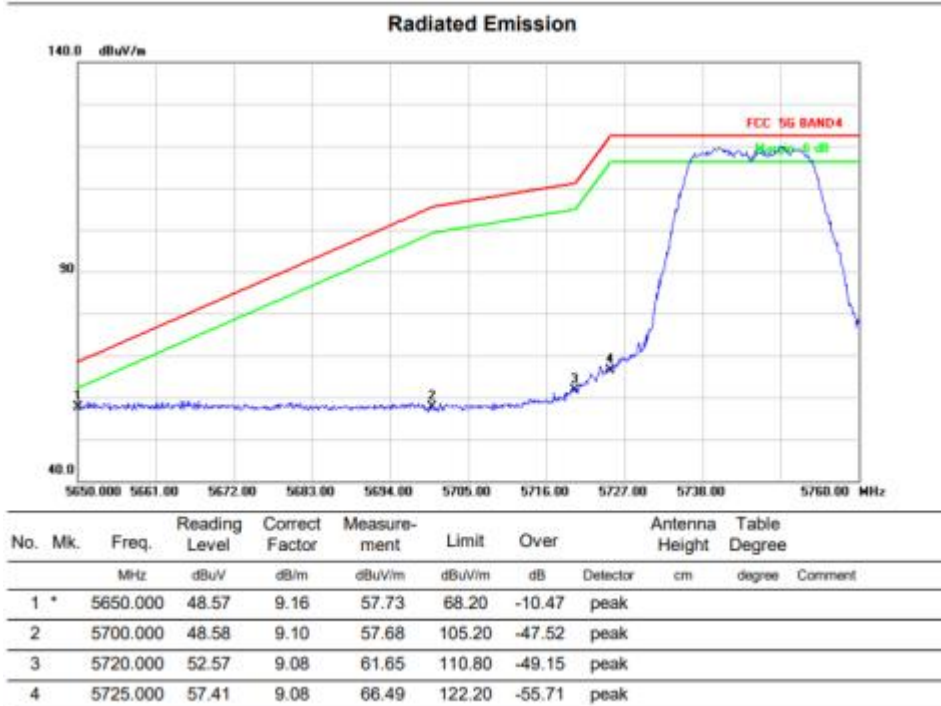
11ac20 Channel 36: Vertical



11ac20 Channel 149: Horizontal

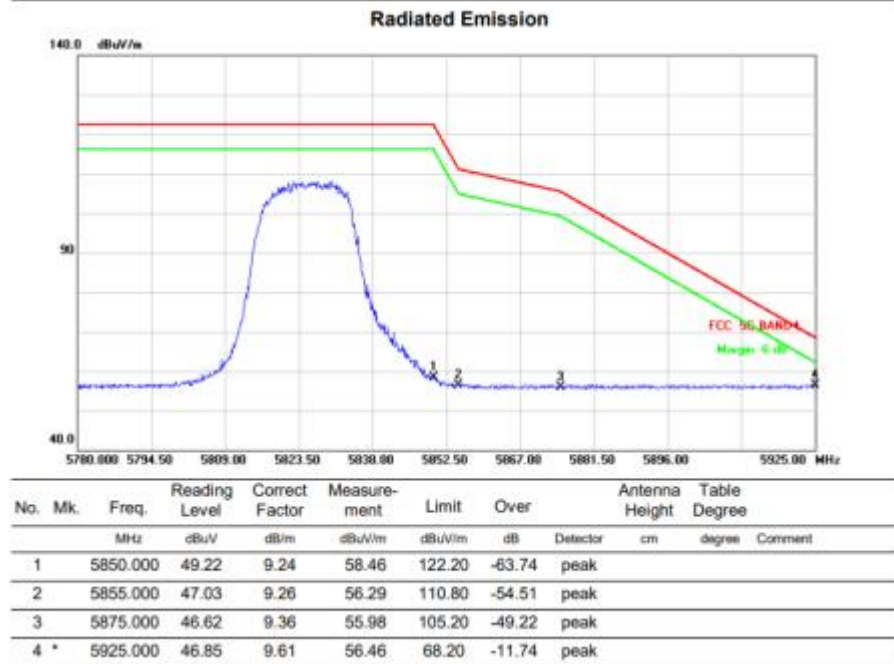


11ac20 Channel 149: Vertical

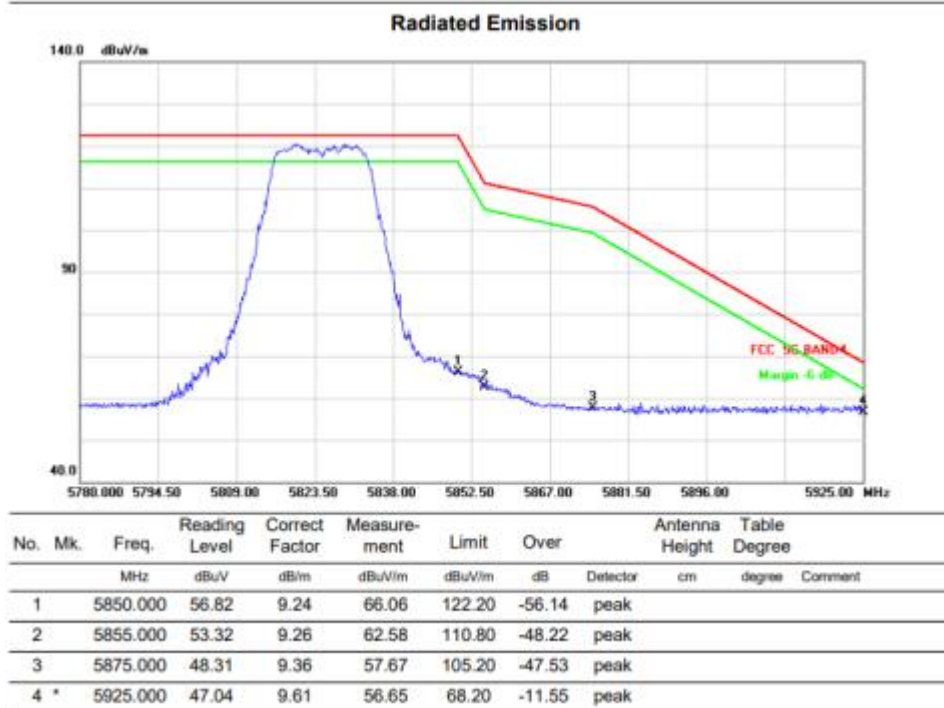




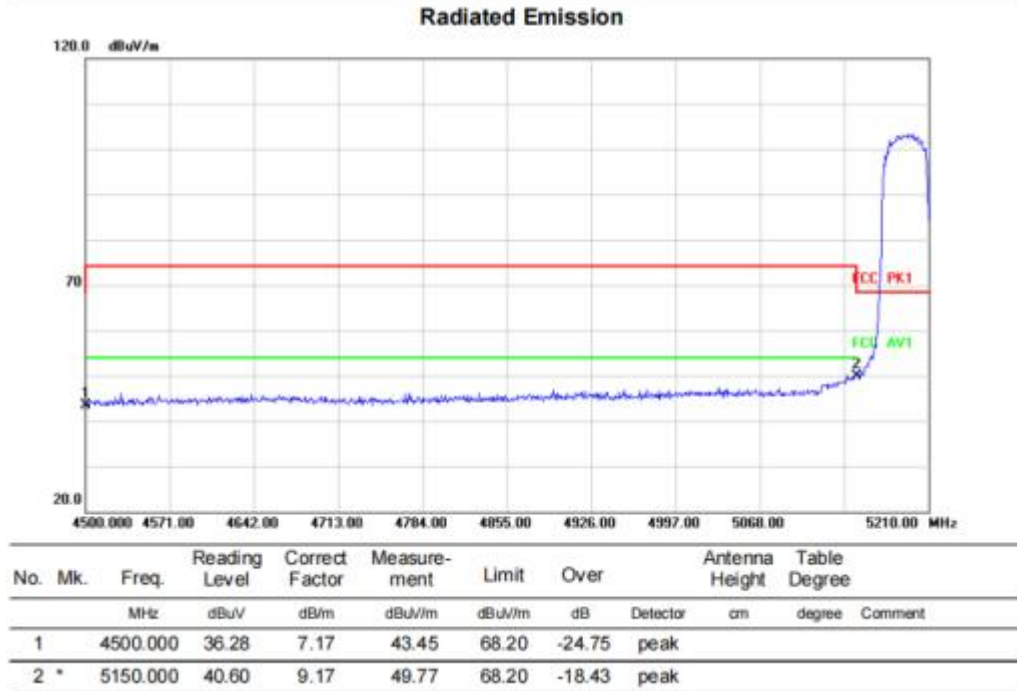
11ac20 Channel 165: Horizontal



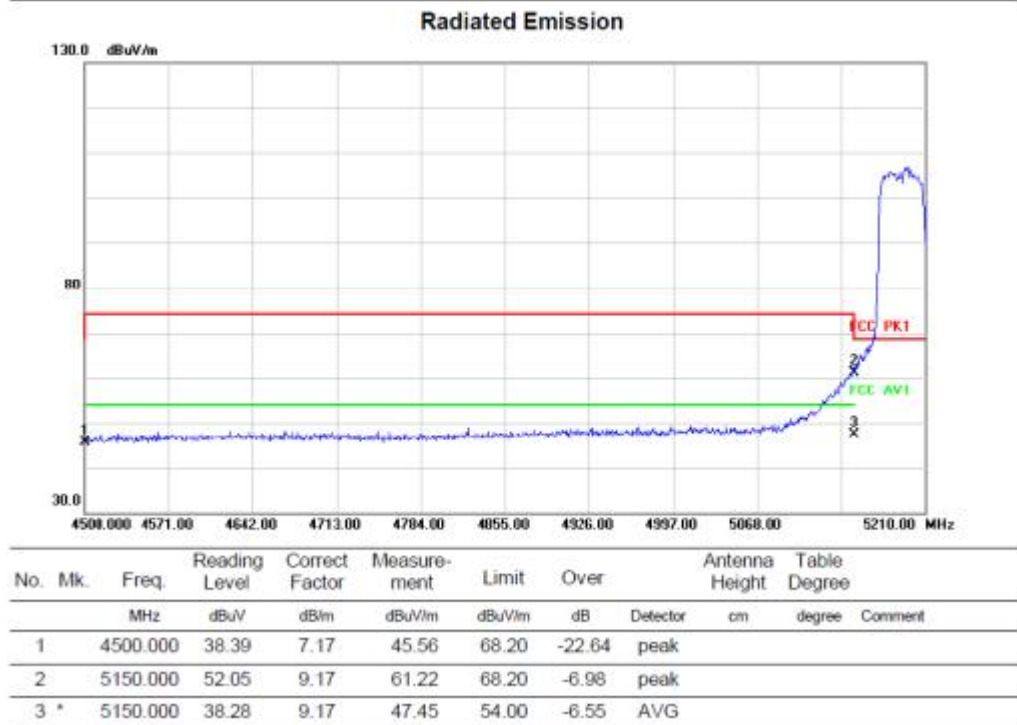
11ac20 Channel 165: Vertical



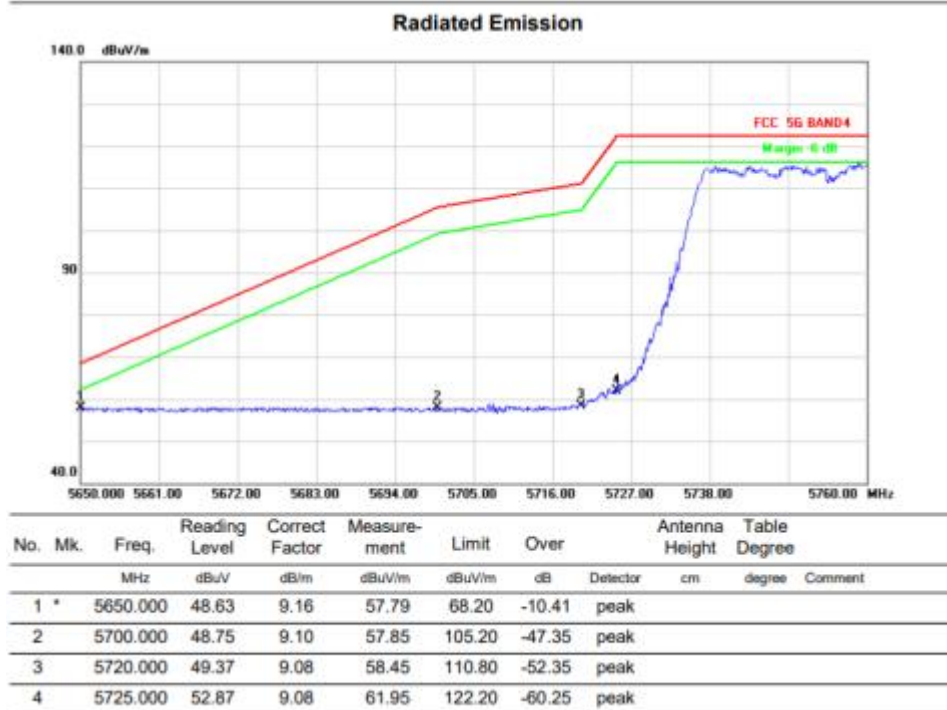
11ac40 Channel 38: Horizontal



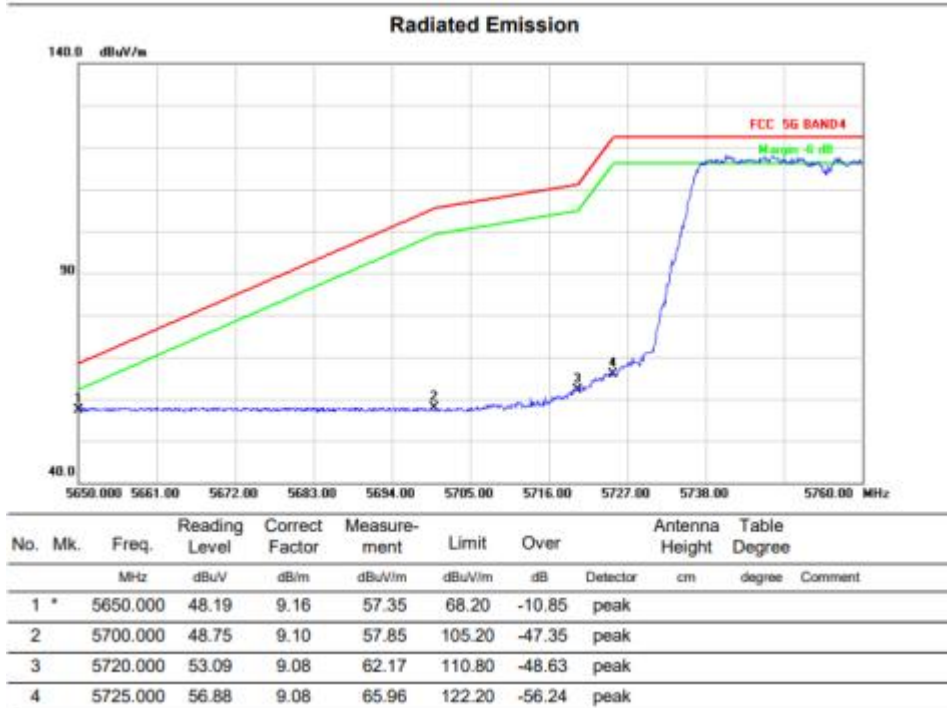
11ac40 Channel 38: Vertical



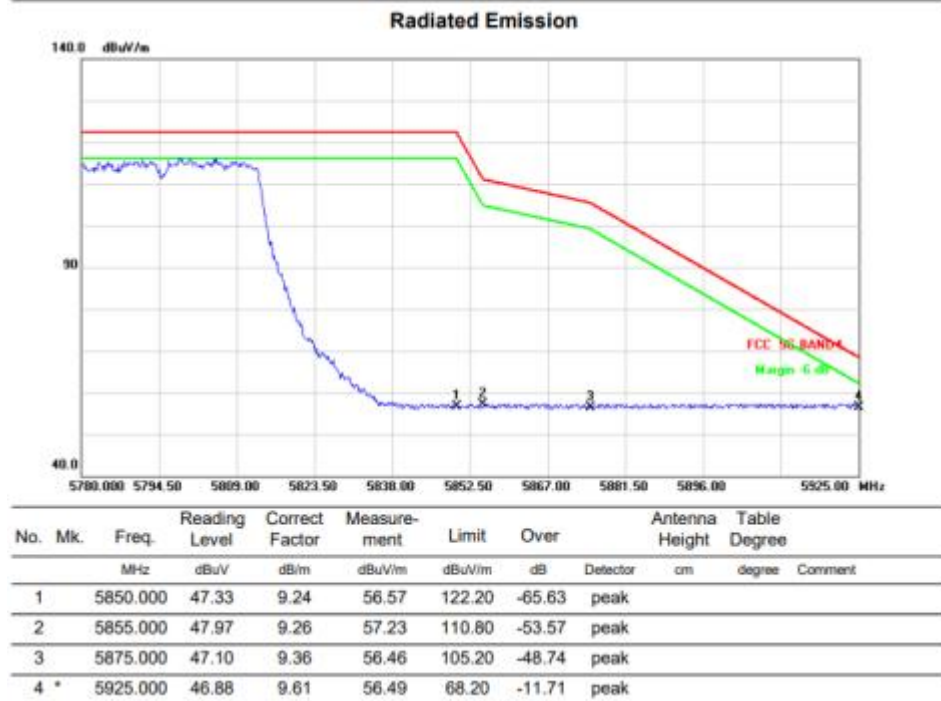
11ac40 Channel 151: Horizontal



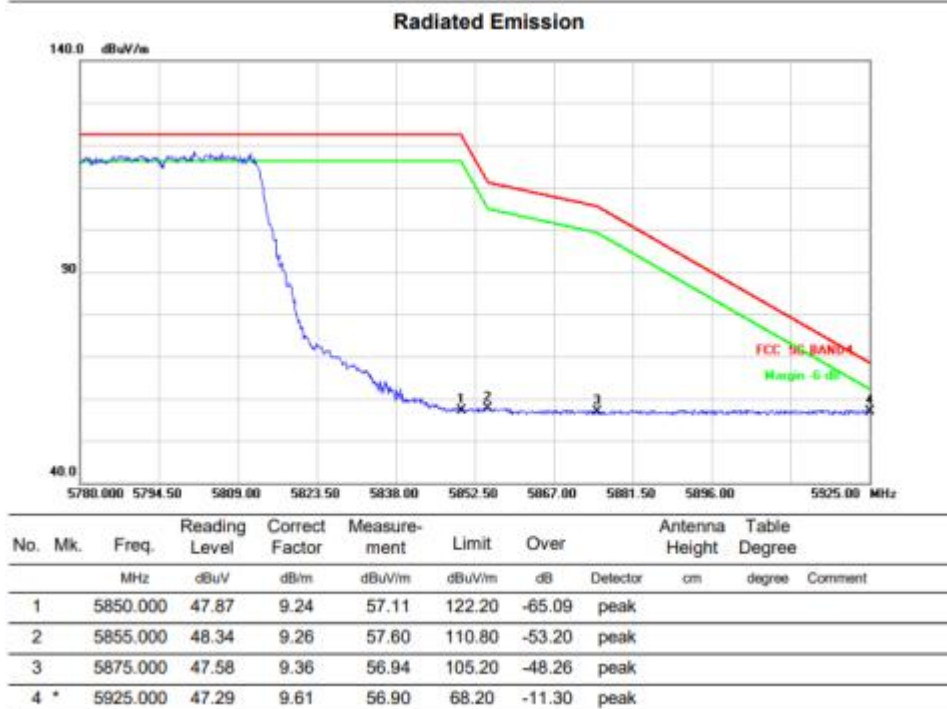
11ac40 Channel 151: Vertical



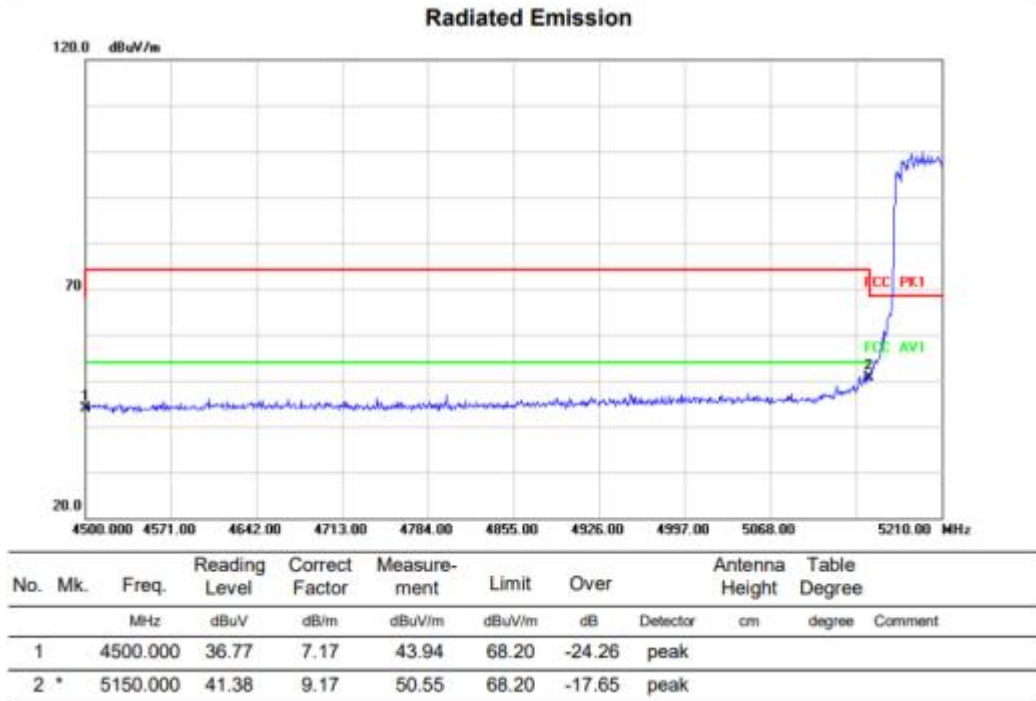
11ac40 Channel 159: Horizontal



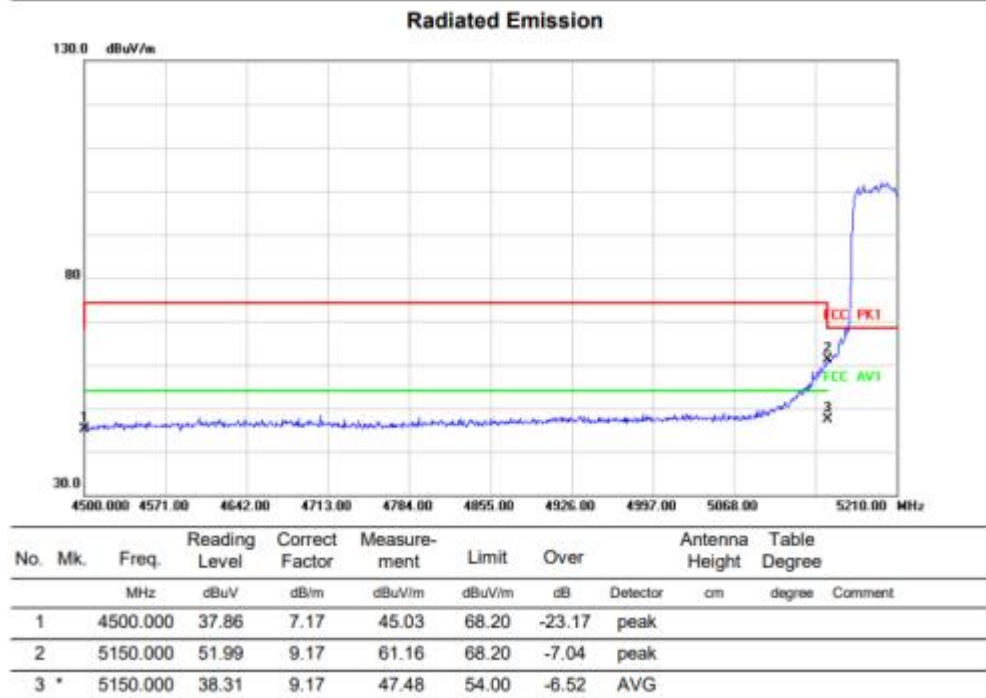
11ac40 Channel 159: Vertical



11ac80 Channel 42: Horizontal

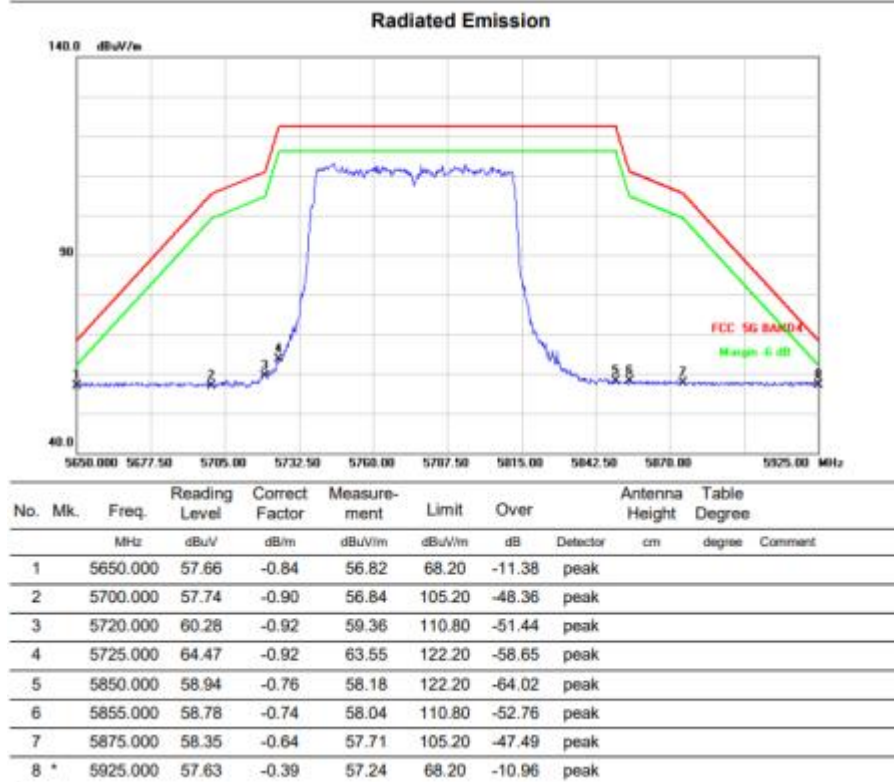


11ac80 Channel 42: Vertical

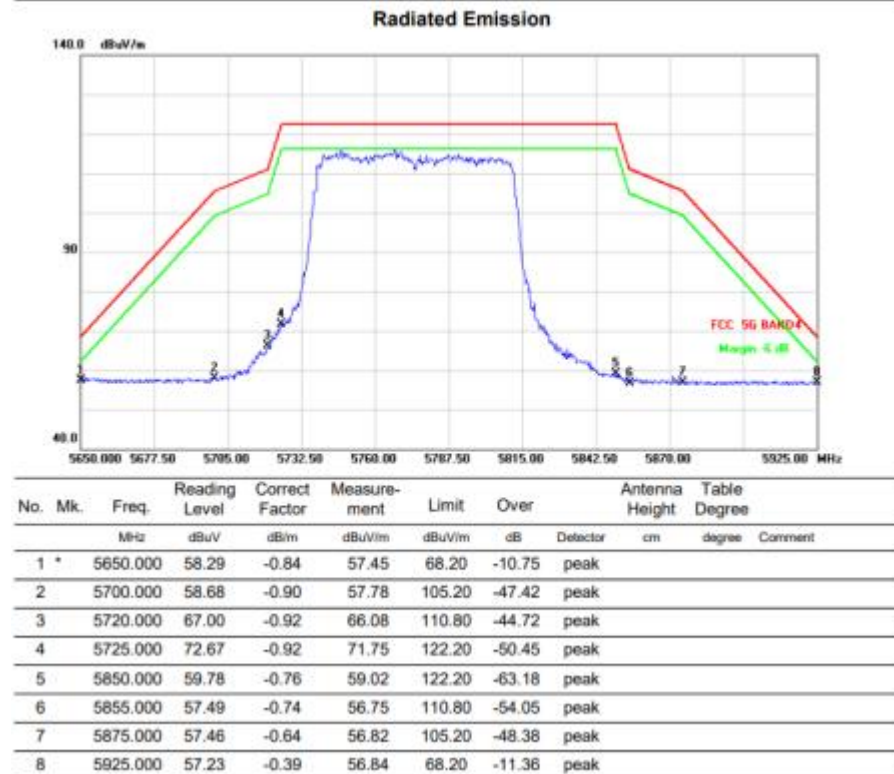




11ac80 Channel 155: Horizontal



11ac80 Channel 155: Vertical





## 10. ANTENNA REQUIREMENT

### 10.1 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.

### 10.2 RESULT

The antennas used for this product are PCB 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\*\*\*\*\*