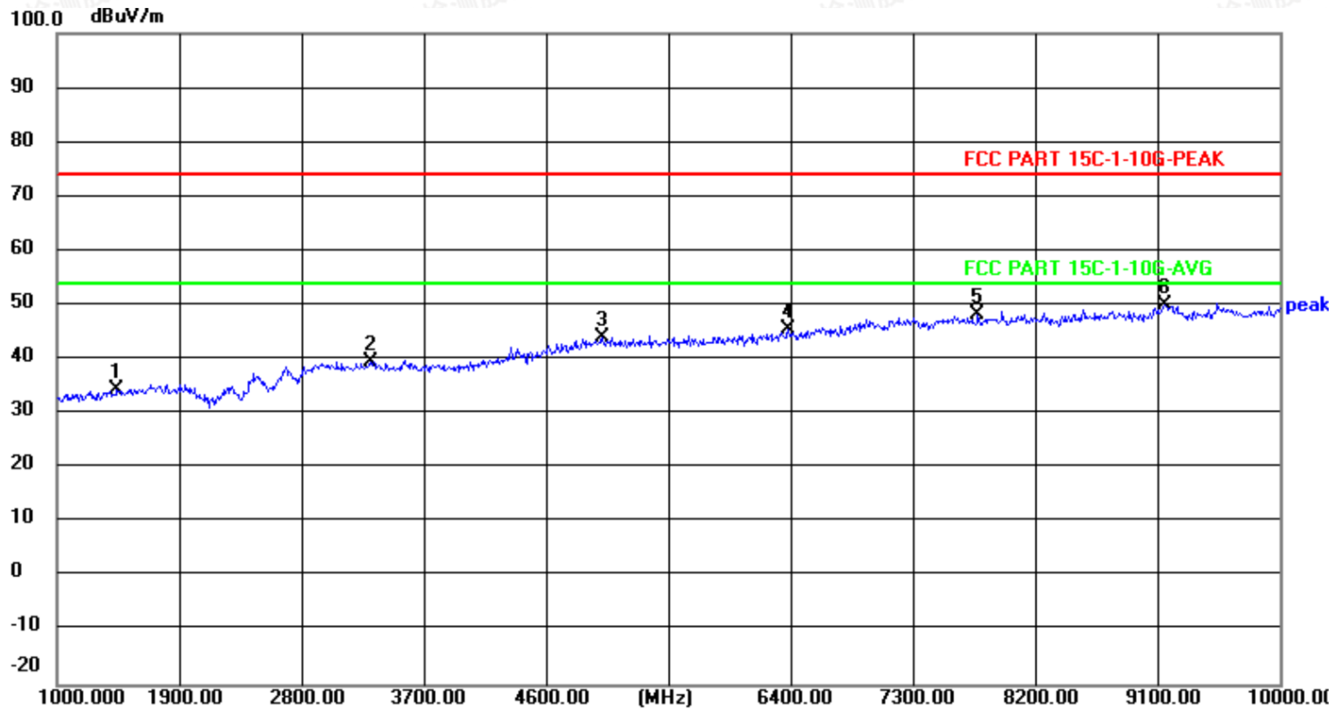
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1441.000	49.44	-15.12	34.32	74.00	-39.68	peak
2	3304.000	49.14	-9.49	39.65	74.00	-34.35	peak
3	5014.000	48.09	-4.10	43.99	74.00	-30.01	peak
4	6382.000	47.47	-1.98	45.49	74.00	-28.51	peak
5	7777.000	47.35	0.78	48.13	74.00	-25.87	peak
6	9154.000	47.81	2.14	49.95	74.00	-24.05	peak

5.3. Maximum Peak Conducted Output Power Measurement

5.3.1. Standard Applicable

According to §15.247(b): For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz band, the limit for maximum peak conducted output power is 30dBm. The limited has to be reduced by the amount in dB that the gain of the antenna exceeds 6dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter peak output power.

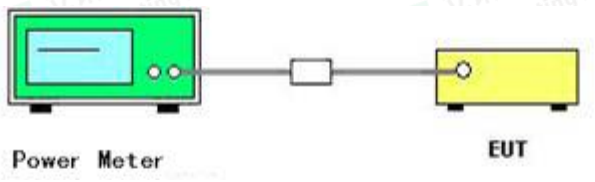
5.3.2. Measuring Instruments and Setting

Please refer to equipment's list in this report. The following table is the setting of the power meter.

5.3.3. Test Procedures

According to KDB558074 D01 15.247 Meas Guidance v05r02 Section 9.1 Maximum peak conducted output power, 9.1.3 the maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

5.3.4. Test Setup Layout



5.3.5. EUT Operation during Test

1) The EUT is configured to transmit continuously.
2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

5.3.6. Test Result of Maximum Peak Conducted Output Power

Limits

Mode	Antenna 0 Gain (dBi)	Antenna 1 Gain (dBi)	Directional Gain (dBi)	FCC Power Limit (dBm)
g	2.0	2.0	5.01	30
n	2.0	2.0	5.01	30

PASS

Please refer to Appendix B.3

Remark:

1). Measured output power at difference data rate for each mode and recorded worst case for each mode.

2). Test results including cable loss;

3). For power measurements on devices;

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;

Array Gain = 5 log (NANT/NSS) dB or 3 dB, whichever is less, for 20-MHz channel widths with NANT ≥ 5.

5.4. Power Spectral Density Measurement

5.4.1. Standard Applicable

According to §15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

5.4.2. Measuring Instruments and Setting

Please refer to equipment's list in this report. The following table is the setting of Spectrum Analyzer.

5.4.3. Test Procedures

1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.

2. The power was monitored at the coupler port with a Spectrum Analyzer. The power level was set to the maximum level.

3. Set the RBW = 3 kHz.

4. Set the VBW ≥ 3*RBW

5. Set the span to 1.5 times the DTS channel bandwidth.

6. Detector = peak.

7. Sweep time = auto couple.

8. Trace mode = max hold.

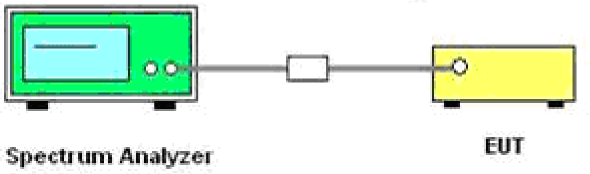
9. Allow trace to fully stabilize.

10. Use the peak marker function to determine the maximum power level.

11. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

12. The resulting peak PSD level shall not be greater than 8dBm in any 3 kHz.

5.4.4. Test Setup Layout



5.4.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.4.6. Test Result of Power Spectral Density

Limits

Mode	Antenna 0 Gain (dBi)	Antenna 1 Gain (dBi)	Directional Gain (dBi)	FCC PSD Limit (dBm/3KHz)
g	2.0	2.0	5.01	8
n	2.0	2.0	5.01	8

PASS

Please refer to Appendix B.4

Remark:

1). Measured power spectrum density at difference data rate for each mode and recorded worst case for each mode.

2). Test results including cable loss;

*3).The PSD limits of g mode and n mode for MIMO with CDD technology should be reduce (10*log(2) =3.01dBi according to KDB662911D01;*

4). For MIMO with CCD technology device, The Directional Gain= Gain of individual transmit antennas (dBi) + Array gain;

Array gain = 10 log (Nant), where Nant is the number of transmit antennas

5.5. Band Edge Measurements and Conducted Spurious Emissions Test

5.5.1. Standard Applicable

According to §15.247 (d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.5.2. Measuring Instruments and Setting

Please refer to equipment list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Detector	Peak
Attenuation	Auto
RB / VB (Emission in restricted band)	100KHz/300KHz
RB / VB (Emission in non-restricted band)	100KHz/300KHz

5.5.3. Test Procedures

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 KHz. The video bandwidth is set to 300 KHz

The spectrum from 9 KHz to 26.5 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

5.5.4. Test Setup Layout

This test setup layout is the same as that shown in section 5.4.4.

5.5.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.5.6. Test Results of Conducted Spurious Emissions

PASS

Please refer to Appendix B.5 for Band Edge Measurements;

Please refer to Appendix B.6 for Conducted Spurious Emissions.

Remark:

1). Measured RF conducted spurious emission at difference data rate for each mode and recorded worst case for each mode.

2). Test results including cable loss;

3). Worst case data at 6Mbps at g mode; MCS0 at n mode;

4). "---"means that the fundamental frequency not for 15.209 limits requirement.

5). Not recorded emission from 9 KHz to 30 MHz as emission level at least 20dBc lower than emission limit.

5.6. On Time and Duty Cycle

5.6.1. Standard Applicable

None: for reporting purpose only.

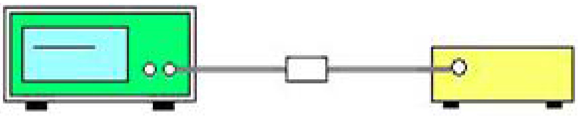
5.6.2. Measuring Instruments and Setting

Please refer to equipment’s list in this report. The following table is the setting of the spectrum analyzer.

5.6.3. Test Procedures

1. Set the centre frequency of the spectrum analyzer to the transmitting frequency;
2. Set the span=0MHz, RBW=8MHz, VBW=8.0MHz, Sweep time=20.00ms;
3. Detector = peak;
4. Trace mode = Single hold.

5.6.4. Test Setup Layout



5.6.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.6.6. Test result

For reporting purpose only.

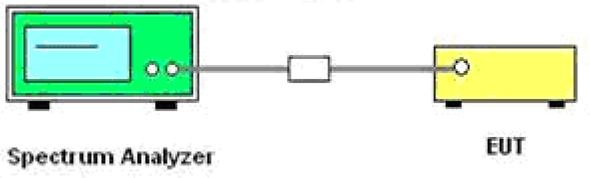
Please refer to Appendix B.7

5.7. Emissions in Restricted Band

5.7.1 Standard Applicable

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

5.7.2. Test Setup Layout



5.7.3. Measuring Instruments and Setting

Please refer to equipment list in this report. The following table is the setting of Spectrum Analyzer.

5.7.4. Test Procedures

According to KDB558074 D01 15.247 Meas Guidance v05r02 for Antenna-port conducted measurement. Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

1). Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.

2). Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to an EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.

3). Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge, for Radiated emissions restricted band RBW=1MHz, VBW=3MHz for peak detector and RBW=1MHz, VBW=1/B for AV detector.

4). Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.

5). Repeat above procedures until all measured frequencies were complete.

6). Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 12.2.2, 12.2.3, and 12.2.4 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).

7). Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see 12.2.5 for guidance on determining the applicable antenna gain)

8). Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).

9). For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).

10). Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

E = EIRP – 20log D + 104.77=EIRP+95.23

Where:
E = electric field strength in dBμV/m,
EIRP = equivalent isotropic radiated power in dBm
D = specified measurement distance in meters.
11). Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.
12). Compare the resultant electric field strength level to the applicable regulatory limit.
13). Perform radiated spurious emission test duress until all measured frequencies were complete.

5.7.5. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS (dBuV/m) = RA (dBuV) + AF (dB/m) + CL (dB) – AG (dB)

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

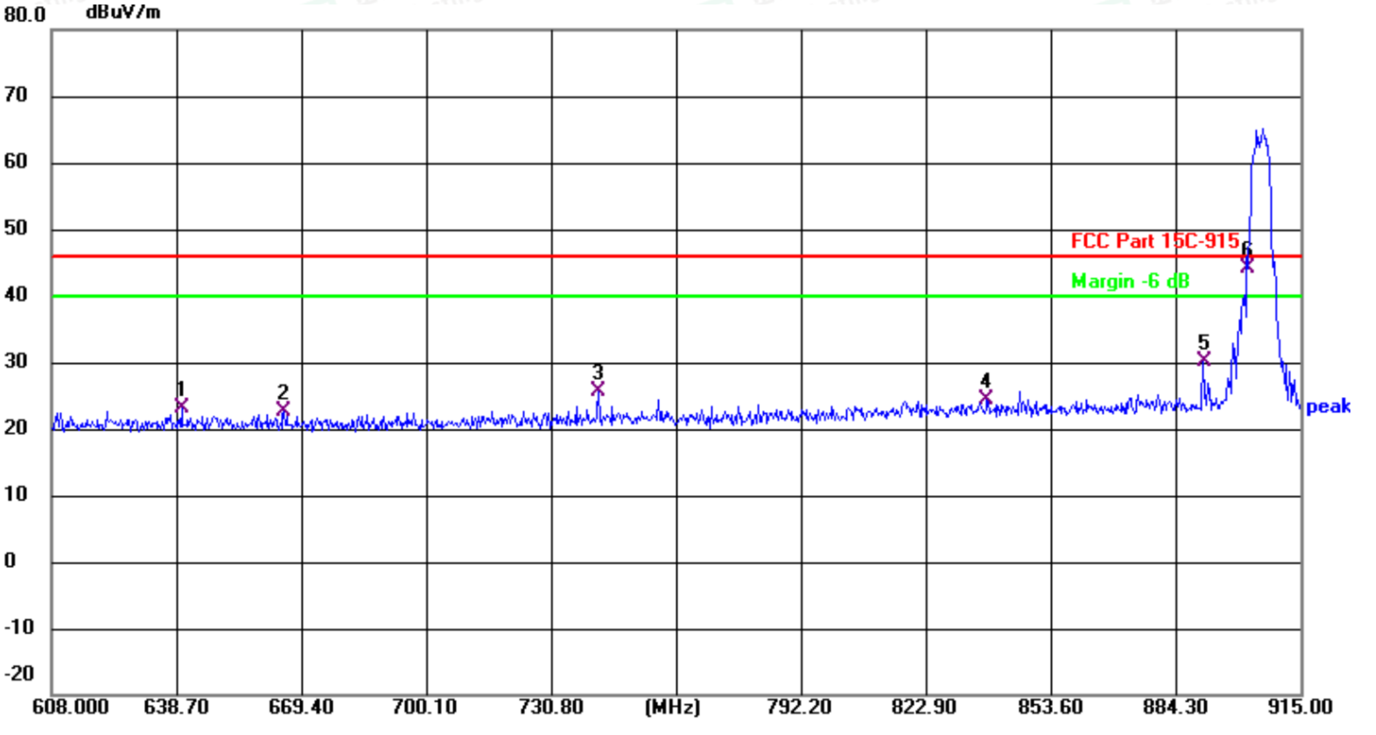
5.7.6 Test Results

Temperature	23.8℃	Humidity	52.5%
Test Engineer	Taylor Hu	Configurations	g/n

PASS.

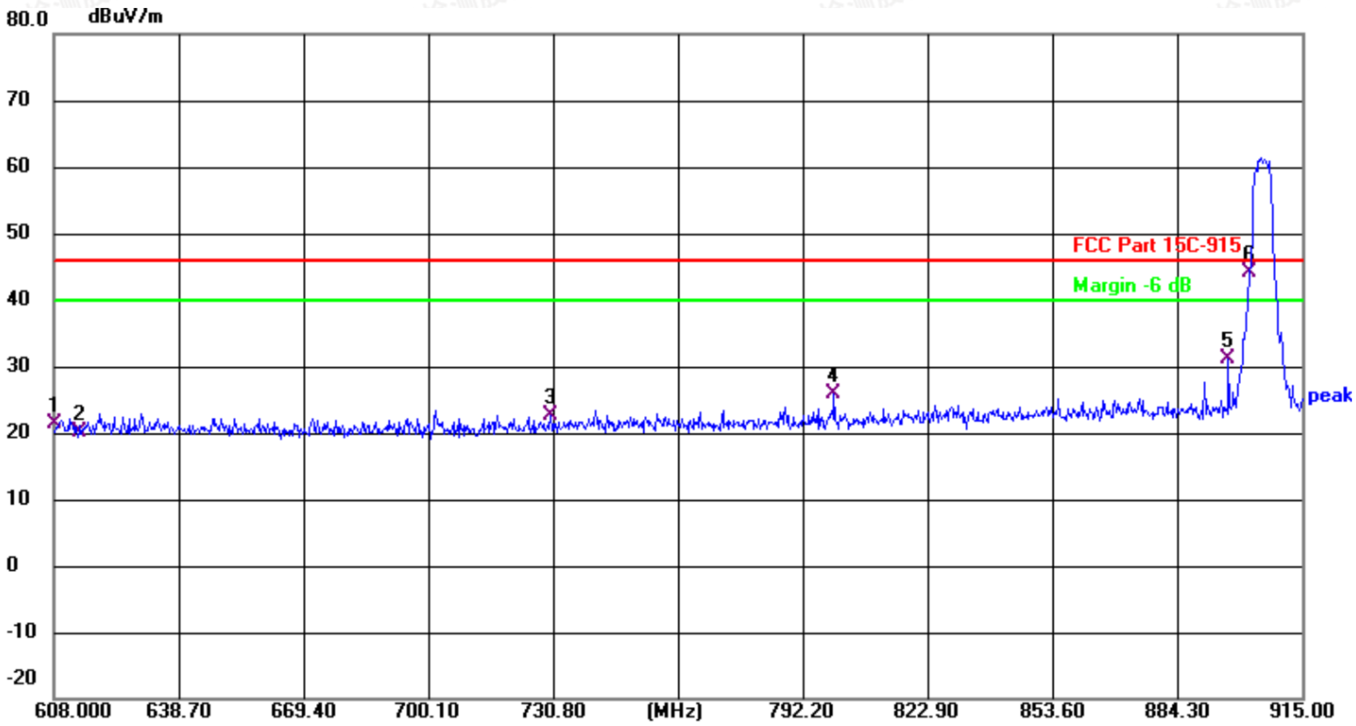
The test data please refer to following page.

g-5M 905 MHz
Vertical



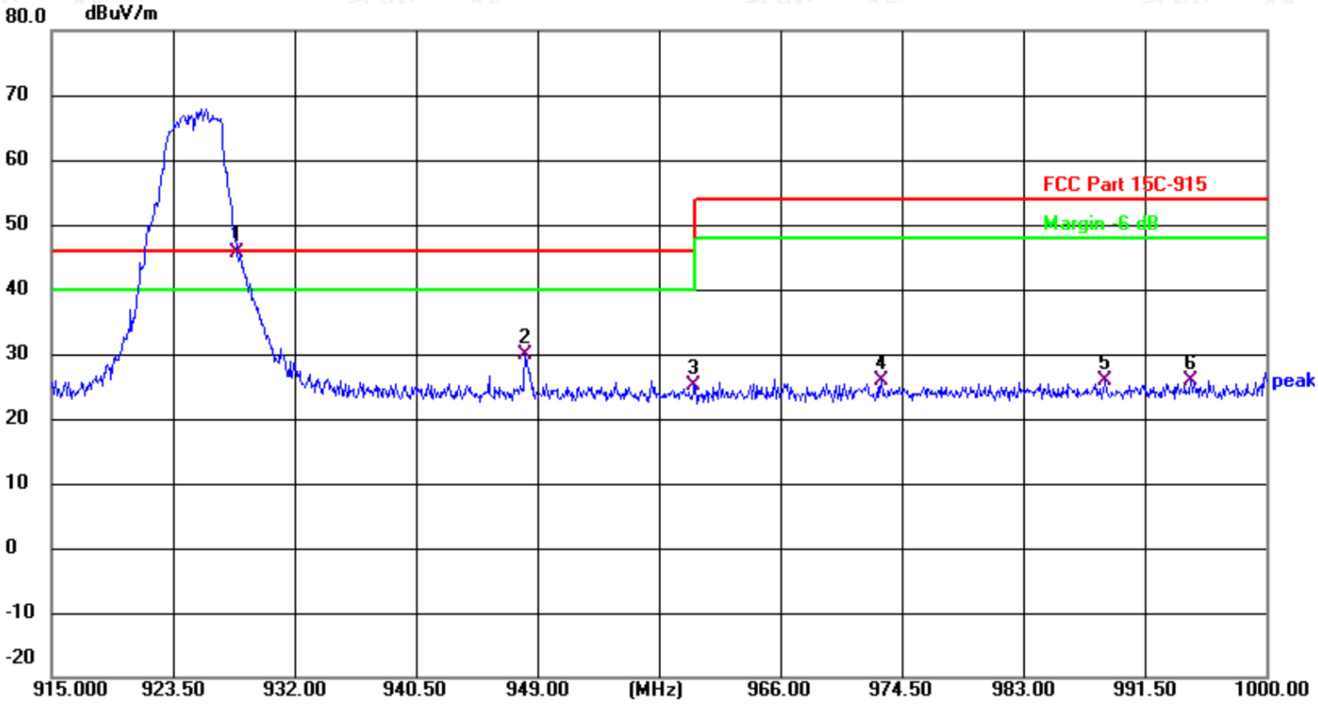
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	639.9279	34.25	-11.05	23.20	46.00	-22.80	QP
2	665.1019	33.79	-11.05	22.74	46.00	-23.26	QP
3	742.4660	35.98	-10.26	25.72	46.00	-20.28	QP
4	837.9429	33.38	-9.02	24.36	46.00	-21.64	QP
5	891.0539	38.69	-8.44	30.25	46.00	-15.75	QP
6	902.0000	52.50	-8.27	44.23	46.00	-1.77	QP

Horizontal



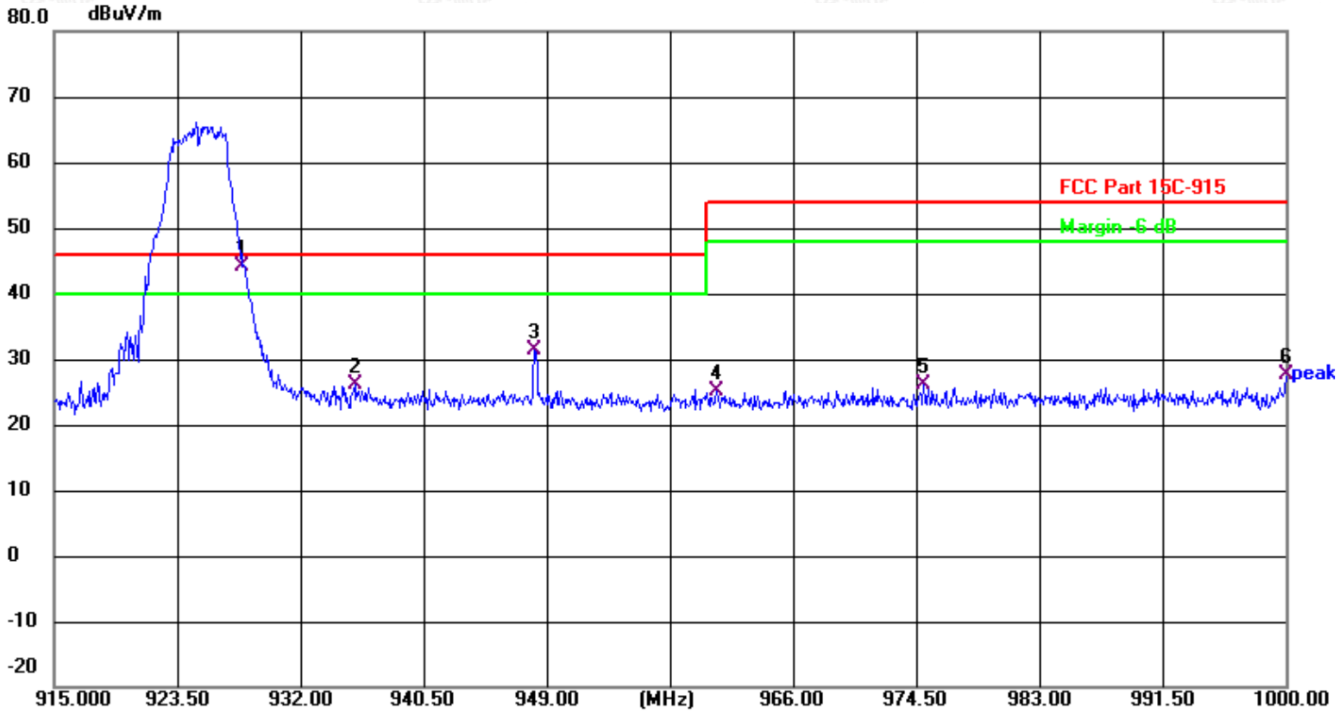
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	608.0000	31.99	-10.64	21.35	46.00	-24.65	QP
2	614.0000	30.87	-10.80	20.07	46.00	-25.93	QP
3	730.1860	33.03	-10.45	22.58	46.00	-23.42	QP
4	799.8750	35.76	-9.95	25.81	46.00	-20.19	QP
5	896.8870	39.44	-8.35	31.09	46.00	-14.91	QP
6	902.0000	52.49	-8.27	44.22	46.00	-1.78	QP

g-5M 925MHz
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	53.53	-7.92	45.61	46.00	-0.39	QP
2	948.1500	37.85	-7.86	29.99	46.00	-16.01	QP
3	959.9650	32.89	-7.73	25.16	46.00	-20.84	QP
4	973.0548	33.46	-7.57	25.89	54.00	-28.11	QP
5	988.6950	33.25	-7.36	25.89	54.00	-28.11	QP
6	994.7300	33.18	-7.29	25.89	54.00	-28.11	QP

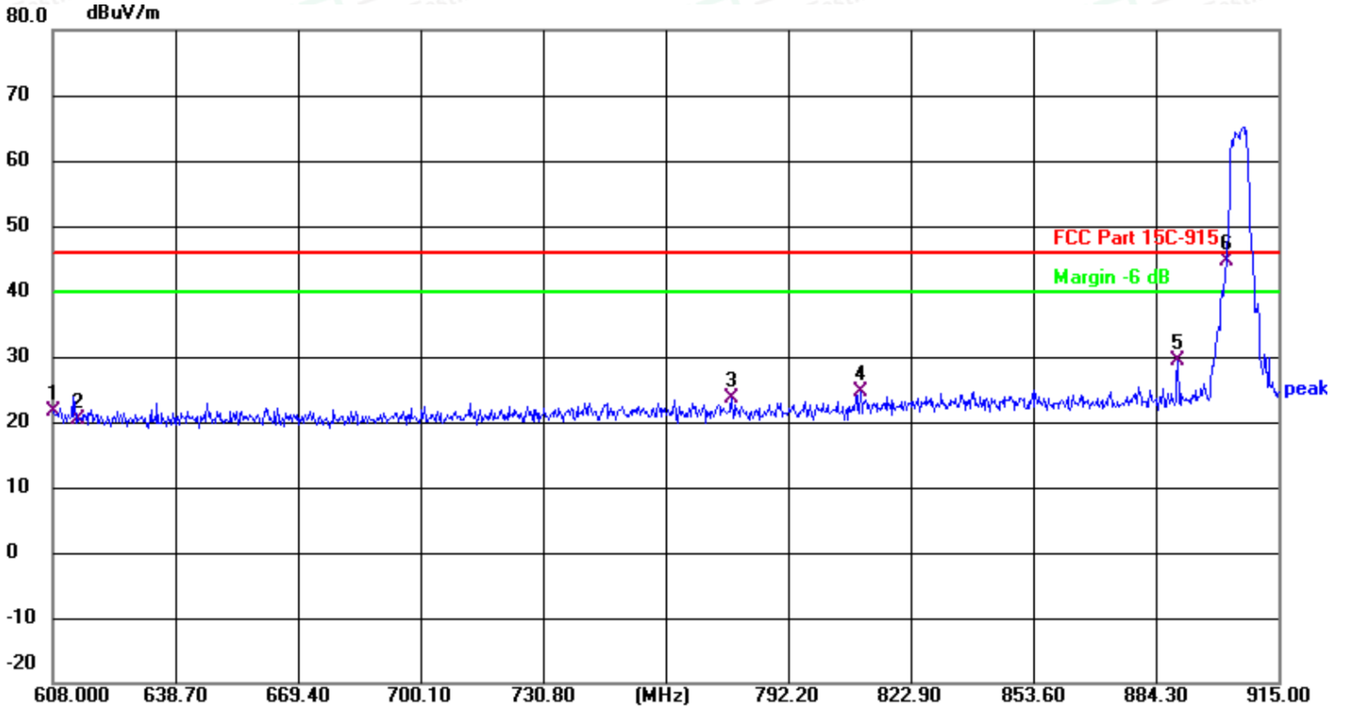
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	51.95	-7.92	44.03	46.00	-1.97	QP
2	935.7400	34.00	-7.90	26.10	46.00	-19.90	QP
3	948.1500	39.18	-7.86	31.32	46.00	-14.68	QP
4	960.7300	32.90	-7.72	25.18	54.00	-28.82	QP
5	975.0100	33.72	-7.54	26.18	54.00	-27.82	QP
6	1000.0000	34.89	-7.22	27.67	54.00	-26.33	QP

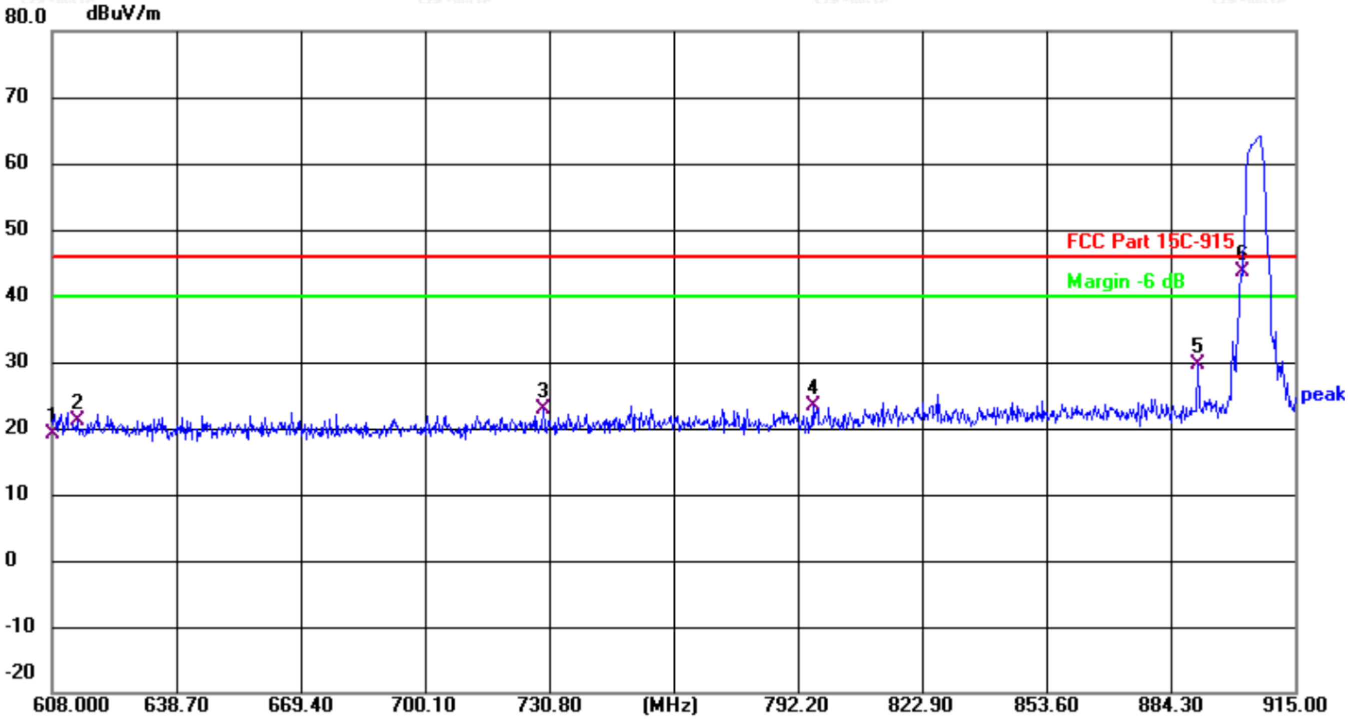
n-5M 905 MHz

Vertical



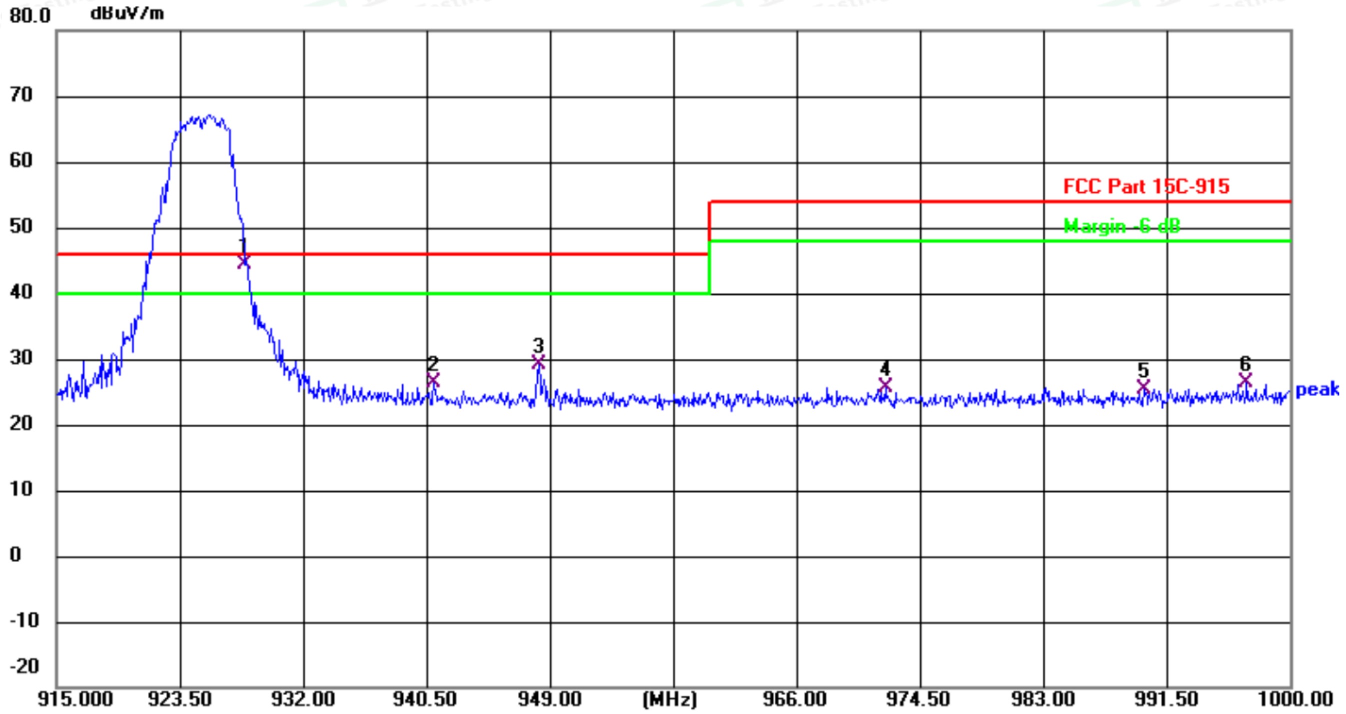
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	608.0000	32.19	-10.64	21.55	46.00	-24.45	QP
2	614.0000	31.24	-10.80	20.44	46.00	-25.56	QP
3	778.0780	33.63	-10.12	23.51	46.00	-22.49	QP
4	810.3130	34.30	-9.59	24.71	46.00	-21.29	QP
5	889.8260	37.83	-8.45	29.38	46.00	-16.62	QP
6	902.0000	52.80	-8.27	44.53	46.00	-1.47	QP

Horizontal



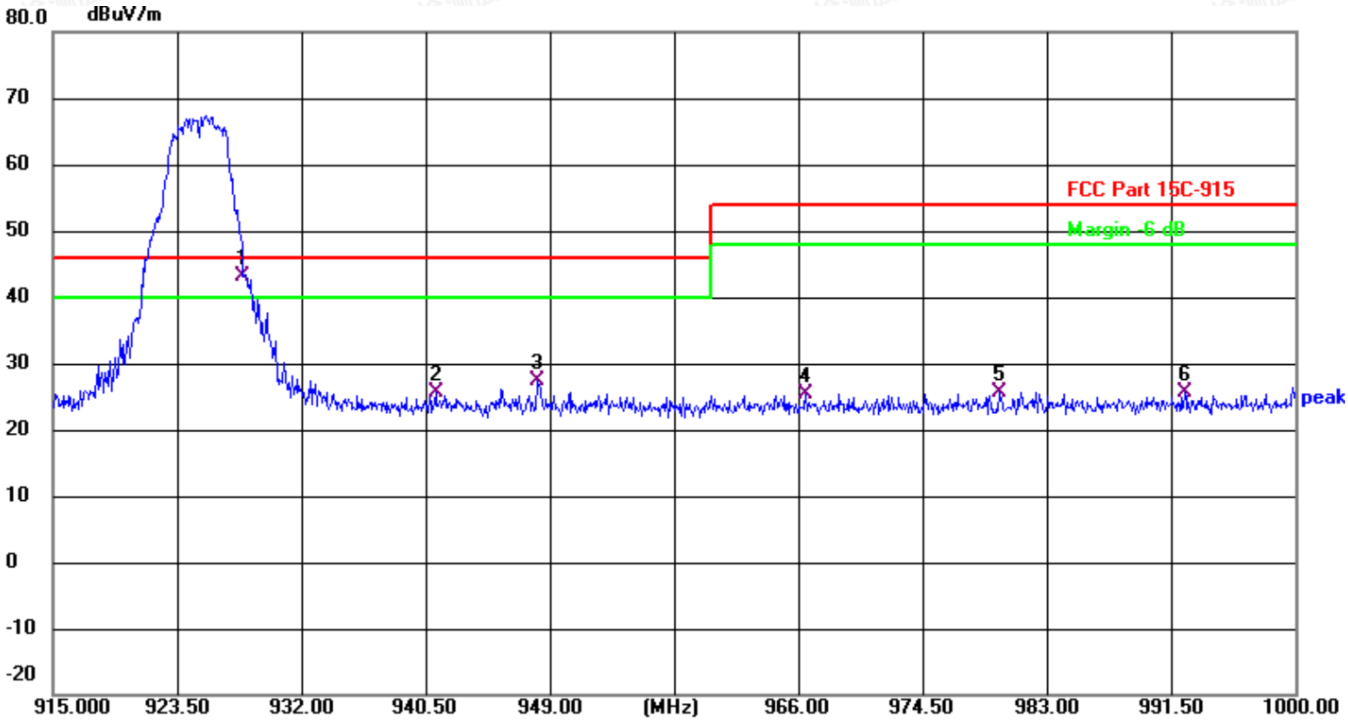
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	608.0000	29.86	-10.64	19.22	46.00	-26.78	QP
2	614.0000	31.88	-10.80	21.08	46.00	-24.92	QP
3	729.2650	33.36	-10.45	22.91	46.00	-23.09	QP
4	795.8840	33.27	-9.98	23.29	46.00	-22.71	QP
5	891.0540	38.02	-8.44	29.58	46.00	-16.42	QP
6	902.0000	51.82	-8.27	43.55	46.00	-2.45	QP

n-5M 925 MHz
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	52.42	-7.92	44.50	46.00	-1.50	QP
2	941.0100	34.27	-7.88	26.39	46.00	-19.61	QP
3	948.2350	37.06	-7.86	29.20	46.00	-16.80	QP
4	972.1200	33.21	-7.58	25.63	54.00	-28.37	QP
5	989.9700	32.82	-7.34	25.48	54.00	-28.52	QP
6	997.0250	33.74	-7.26	26.48	54.00	-27.52	QP

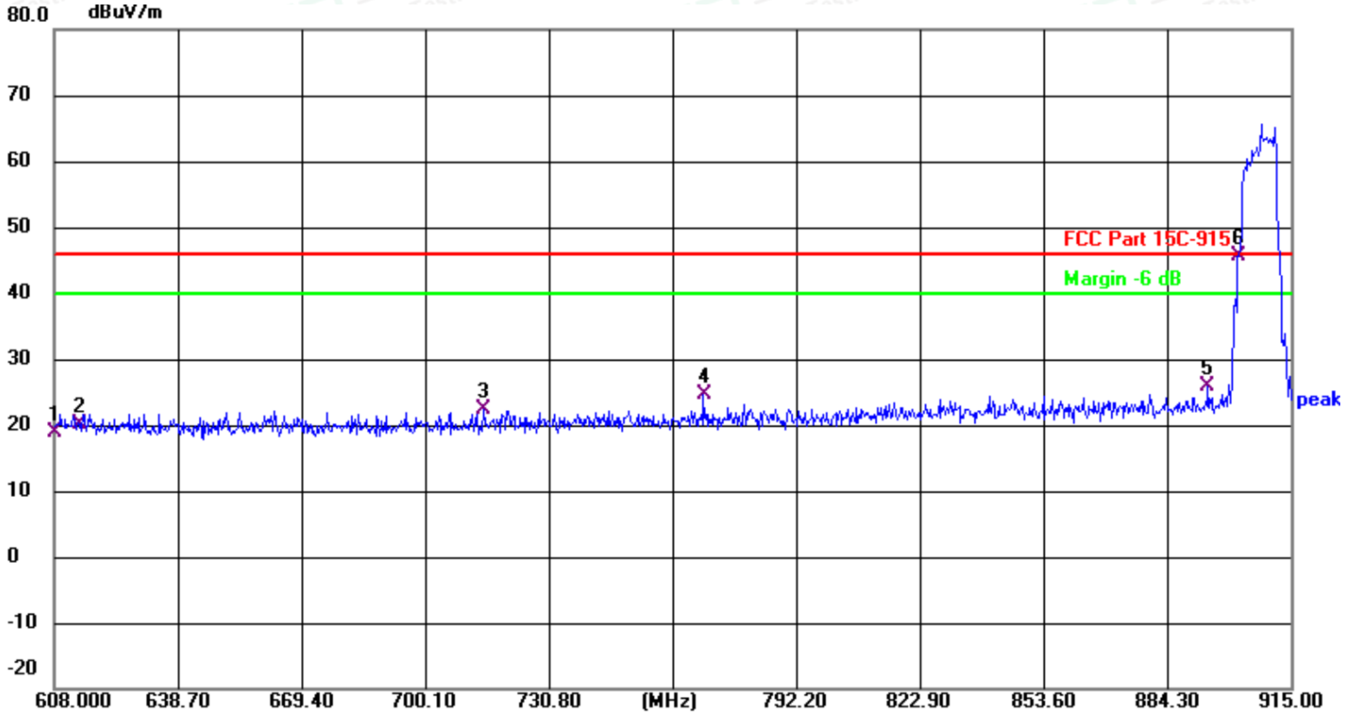
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	51.00	-7.92	43.08	46.00	-2.92	QP
2	941.1800	33.62	-7.88	25.74	46.00	-20.26	QP
3	948.1500	35.24	-7.86	27.38	46.00	-18.62	QP
4	966.5100	33.13	-7.64	25.49	54.00	-28.51	QP
5	979.7700	33.22	-7.48	25.74	54.00	-28.26	QP
6	992.4350	32.86	-7.32	25.54	54.00	-28.46	QP

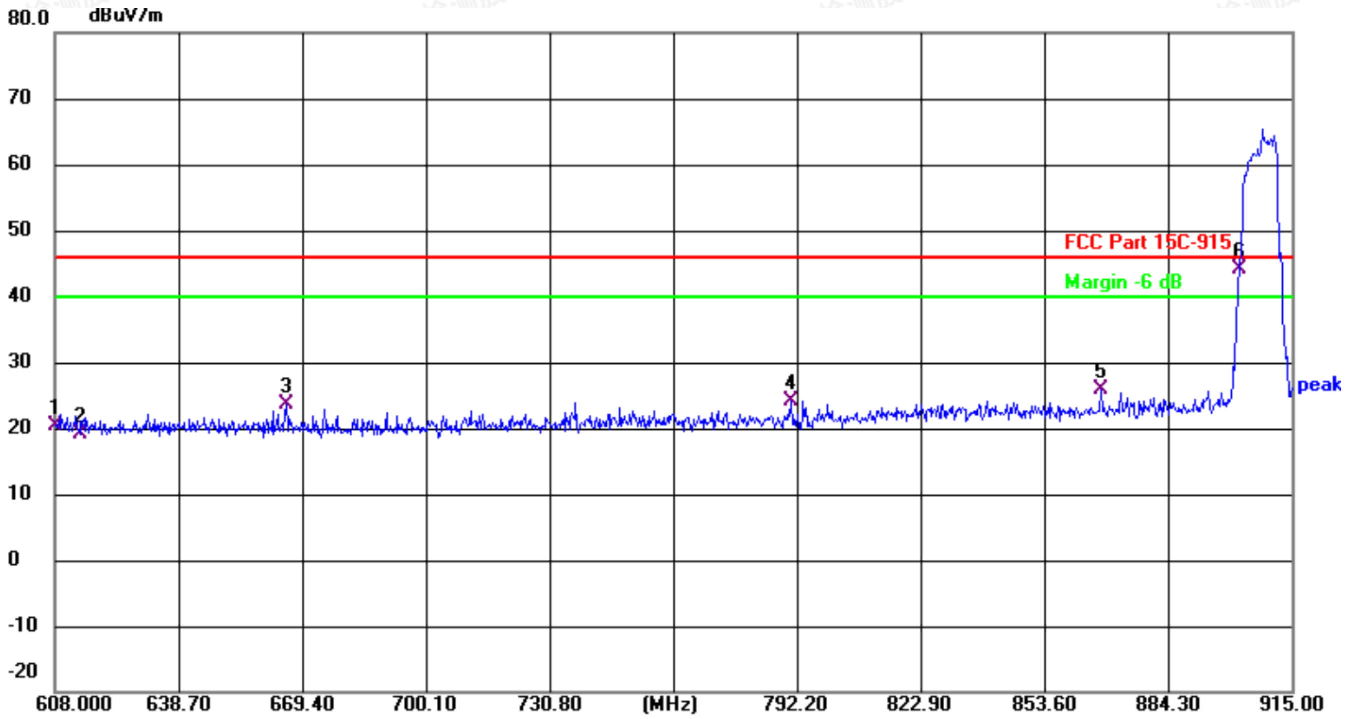
n-10M 907 MHz

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	608.0000	29.52	-10.64	18.88	46.00	-27.12	QP
2	614.0000	30.95	-10.80	20.15	46.00	-25.85	QP
3	714.5289	33.05	-10.69	22.36	46.00	-23.64	QP
4	769.1749	34.79	-10.14	24.65	46.00	-21.35	QP
5	894.4310	34.26	-8.39	25.87	46.00	-20.13	QP
6	902.0000	53.86	-8.27	45.59	46.00	-0.41	QP

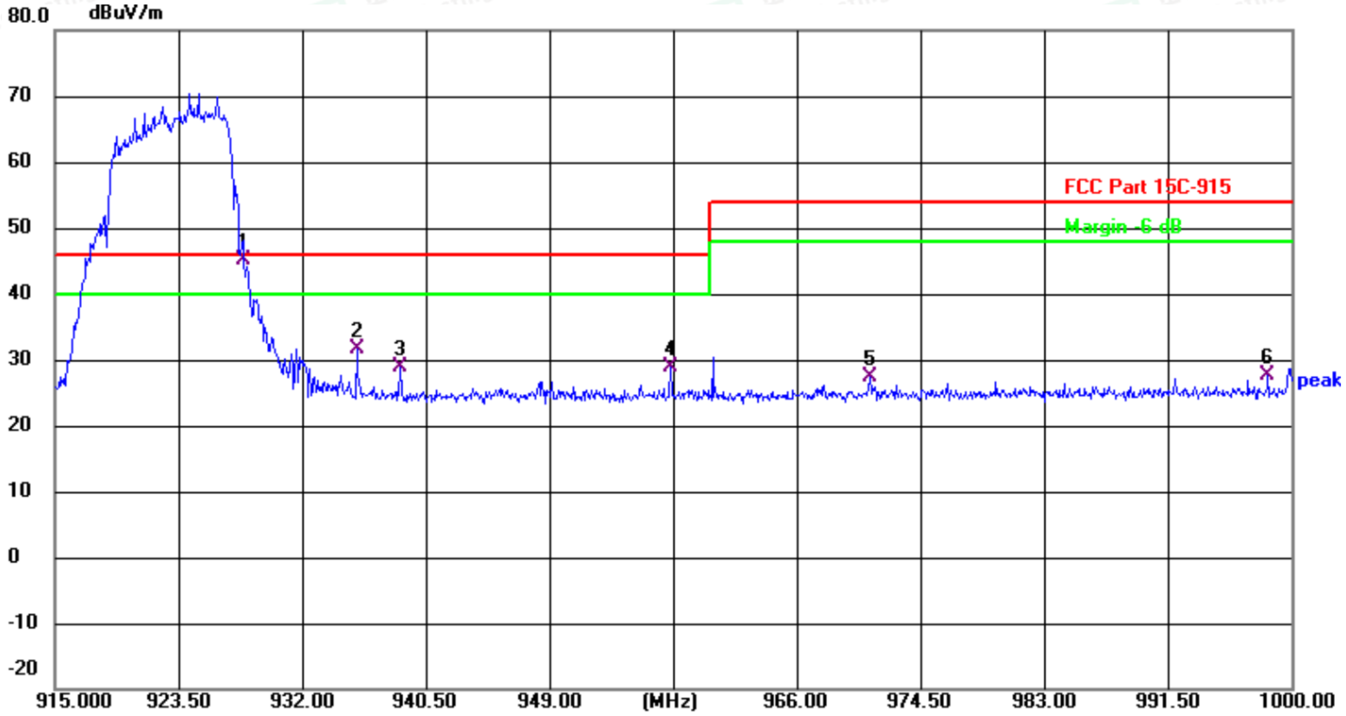
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	608.0000	31.07	-10.64	20.43	46.00	-25.57	QP
2	614.0000	29.81	-10.80	19.01	46.00	-26.99	QP
3	665.4089	34.57	-11.06	23.51	46.00	-22.49	QP
4	790.6650	34.26	-10.02	24.24	46.00	-21.76	QP
5	867.7220	34.59	-8.77	25.82	46.00	-20.18	QP
6	902.0000	52.43	-8.27	44.16	46.00	-1.84	QP

n-10M 923 MHz

Vertical

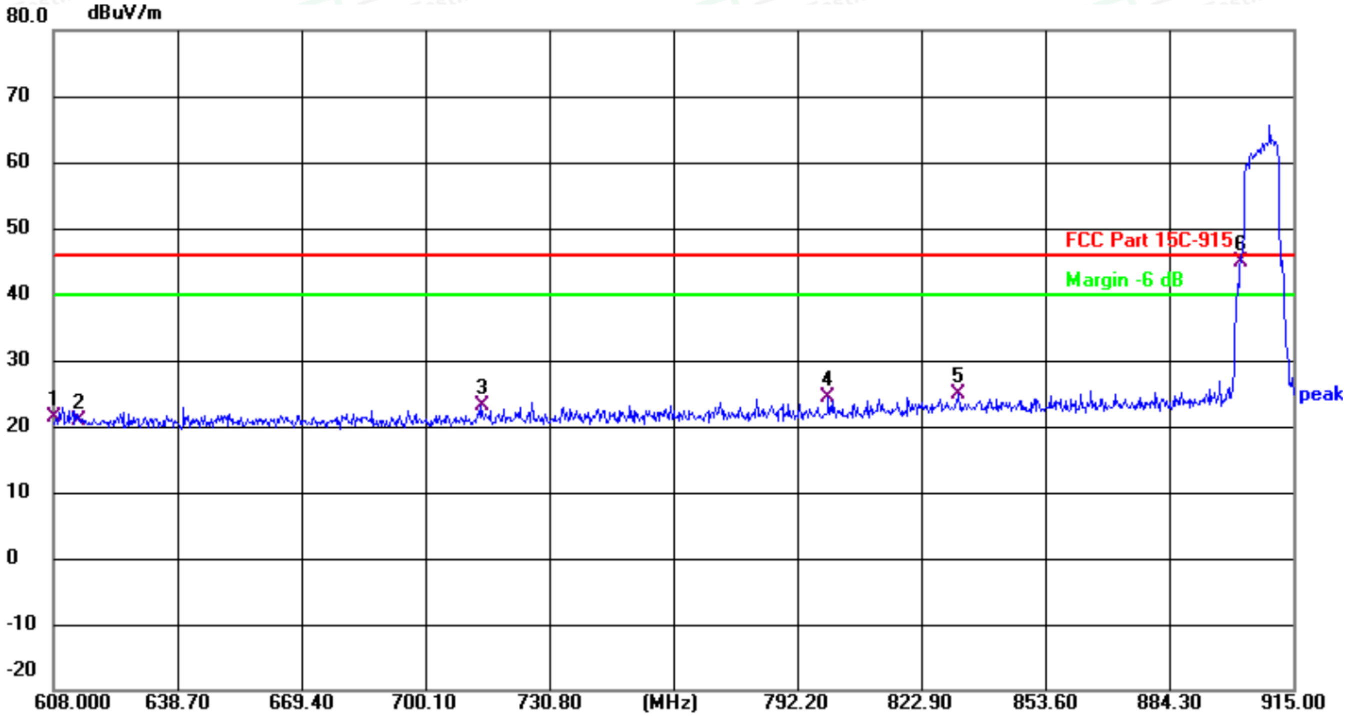


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	52.96	-7.92	45.04	46.00	-0.96	QP
2	935.7400	39.61	-7.90	31.71	46.00	-14.29	QP
3	938.7150	36.78	-7.89	28.89	46.00	-17.11	QP
4	957.3300	36.76	-7.77	28.99	46.00	-17.01	QP
5	971.0150	35.06	-7.60	27.46	54.00	-26.54	QP
6	998.3850	34.88	-7.25	27.63	54.00	-26.37	QP

Horizontal

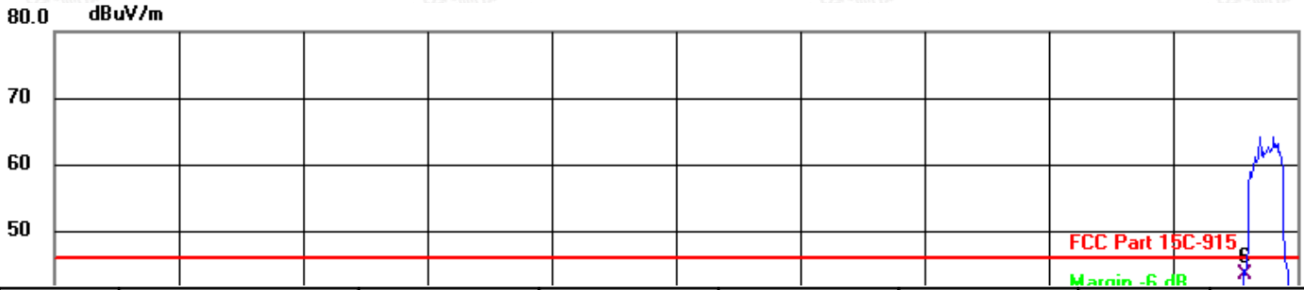
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	52.35	-7.92	44.43	46.00	-1.57	QP
2	938.2050	34.19	-7.89	26.30	46.00	-19.70	QP
3	958.4350	33.38	-7.76	25.62	46.00	-20.38	QP
4	968.6350	33.40	-7.61	25.79	54.00	-28.21	QP
5	983.6800	33.39	-7.42	25.97	54.00	-28.03	QP
6	993.8800	33.78	-7.30	26.48	54.00	-27.52	QP

g-10M 907 MHz
Vertical



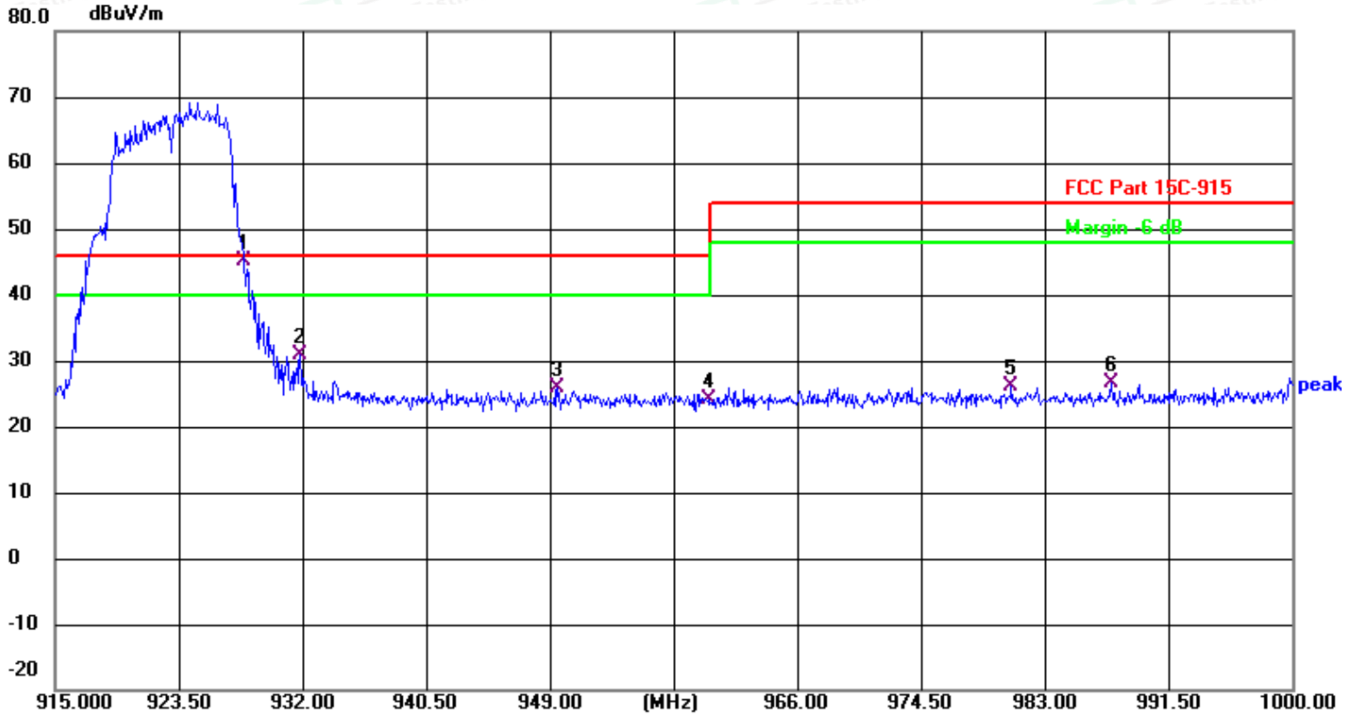
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	608.0000	31.96	-10.64	21.32	46.00	-24.68	QP
2	614.0000	31.72	-10.80	20.92	46.00	-25.08	QP
3	713.9149	33.80	-10.70	23.10	46.00	-22.90	QP
4	799.8750	34.22	-9.95	24.27	46.00	-21.73	QP
5	832.1100	33.93	-9.04	24.89	46.00	-21.11	QP
6	902.0000	53.21	-8.27	44.94	46.00	-1.06	QP

Horizontal



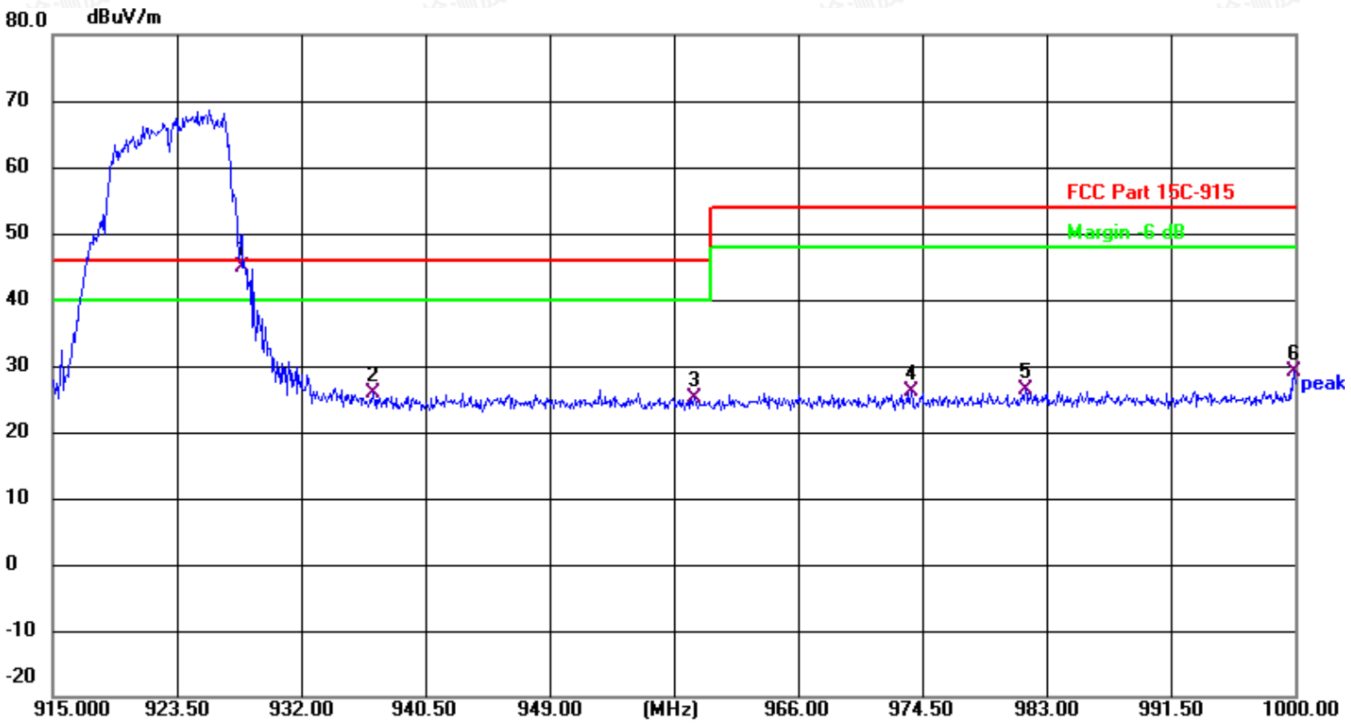
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	608.0000	31.76	-10.64	21.12	46.00	-24.88	QP
2	614.0000	32.37	-10.80	21.57	46.00	-24.43	QP
3	670.0140	33.99	-11.07	22.92	46.00	-23.08	QP
4	743.0800	34.18	-10.24	23.94	46.00	-22.06	QP
5	799.8750	35.13	-9.95	25.18	46.00	-20.82	QP
6	902.0000	51.57	-8.27	43.30	46.00	-2.70	QP

g-10M 923 MHz
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	52.99	-7.92	45.07	46.00	-0.93	QP
2	931.8300	38.80	-7.91	30.89	46.00	-15.11	QP
3	949.5100	33.77	-7.86	25.91	46.00	-20.09	QP
4	959.8800	31.75	-7.73	24.02	46.00	-21.98	QP
5	980.7050	33.59	-7.46	26.13	54.00	-27.87	QP
6	987.5900	34.00	-7.37	26.63	54.00	-27.37	QP

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	928.0000	52.92	-7.92	45.00	46.00	-1.00	QP
2	936.9300	33.90	-7.90	26.00	46.00	-20.00	QP
3	958.8600	33.00	-7.75	25.25	46.00	-20.75	QP
4	973.7350	33.75	-7.56	26.19	54.00	-27.81	QP
5	981.5550	33.72	-7.45	26.27	54.00	-27.73	QP
6	999.9150	36.25	-7.22	29.03	54.00	-24.97	QP

Remark:
1). Measured Band-edge measurements for radiated emissions at difference data rate for each mode and recorded worst case for each mode.
2). Worst case data at 6Mbps at g; MCS0 at n;
3) Testing done in MIMO mode

5.8. AC Power line conducted emissions

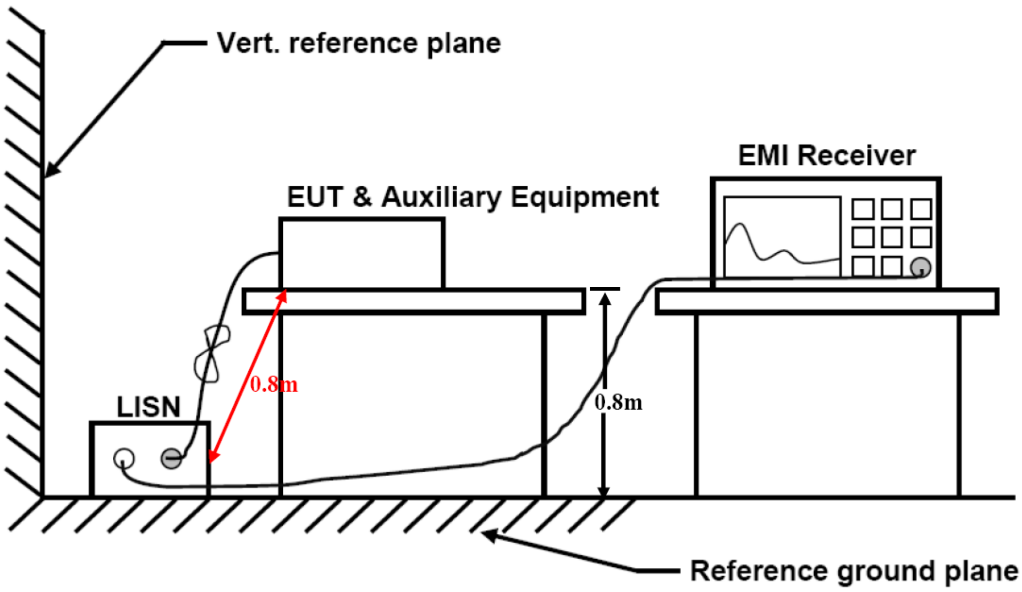
5.8.1 Standard Applicable

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range are listed as follows:

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

* Decreasing linearly with the logarithm of the frequency

5.8.2 Block Diagram of Test Setup



5.8.3. Disturbance Calculation

The AC mains conducted disturbance is calculated by adding the 10dB Pulse Limiter and Cable Factor and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

CD (dBuV) = RA (dBuV) + PL (dB) + CL (dB)

Where CD = Conducted Disturbance	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	PL = 10 dB Pulse Limiter Factor

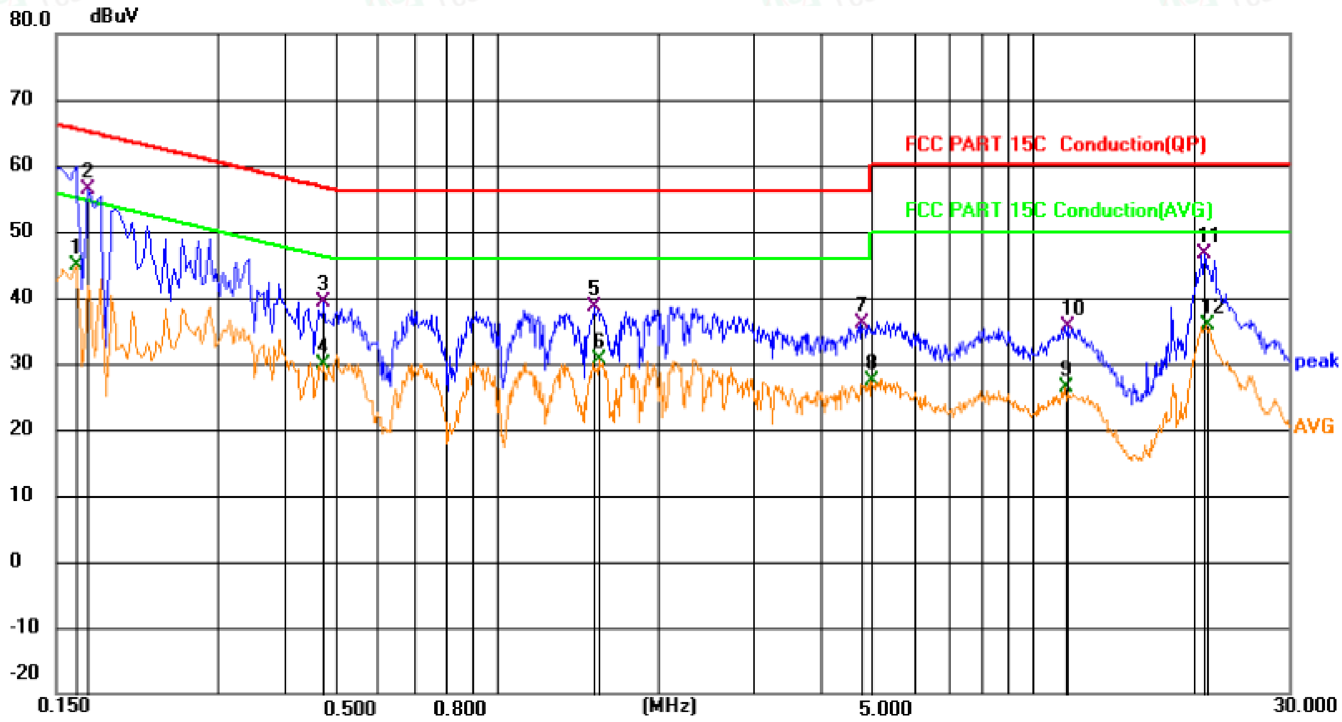
5.8.3 Test Results

The test data please refer to following page.

Temperature	23.8℃	Humidity	52.1%
Test Engineer	Taylor Hu	Configurations	IEEE 802.11g/n

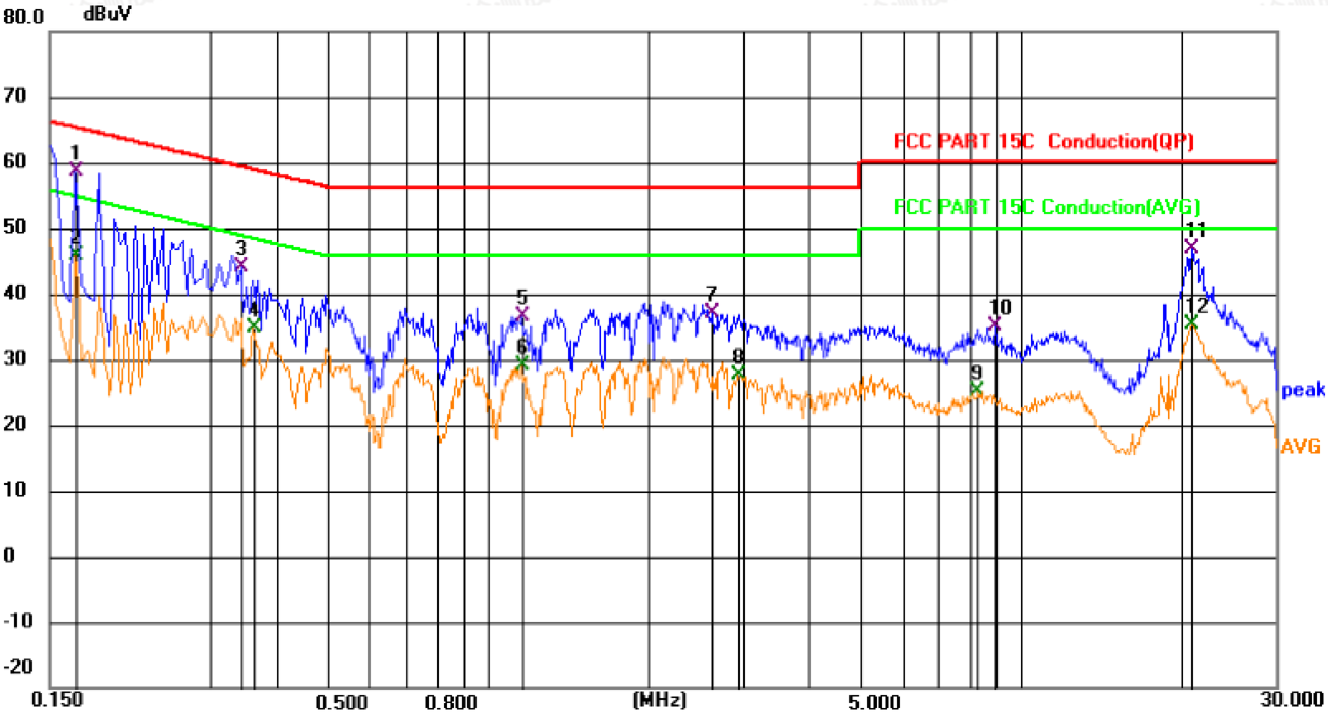
AC Power Line Conducted Emission (Power input to adapter @ AC 120V/60Hz (Worst Case))

Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1635	25.17	19.63	44.80	55.28	-10.48	AVG
2	*	0.1726	36.83	19.63	56.46	64.83	-8.37	QP
3		0.4741	19.75	19.64	39.39	56.44	-17.05	QP
4		0.4741	10.18	19.64	29.82	46.44	-16.62	AVG
5		1.5180	18.92	19.67	38.59	56.00	-17.41	QP
6		1.5494	11.03	19.67	30.70	46.00	-15.30	AVG
7		4.7806	16.39	19.80	36.19	56.00	-19.81	QP
8		4.9921	7.63	19.80	27.43	46.00	-18.57	AVG
9		11.4766	6.64	19.85	26.49	50.00	-23.51	AVG
10		11.6071	15.86	19.84	35.70	60.00	-24.30	QP
11		20.8321	26.43	20.16	46.59	60.00	-13.41	QP
12		21.0886	15.65	20.15	35.80	50.00	-14.20	AVG

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1681	39.03	19.63	58.66	65.05	-6.39	QP
2		0.1681	26.27	19.63	45.90	55.05	-9.15	AVG
3		0.3436	24.49	19.63	44.12	59.12	-15.00	QP
4		0.3616	15.31	19.63	34.94	48.69	-13.75	AVG
5		1.1581	16.87	19.65	36.52	56.00	-19.48	QP
6		1.1581	9.48	19.65	29.13	46.00	-16.87	AVG
7		2.6251	17.36	19.68	37.04	56.00	-18.96	QP
8		2.9446	8.05	19.68	27.73	46.00	-18.27	AVG
9		8.2815	5.40	19.78	25.18	50.00	-24.82	AVG
10		8.9611	15.24	19.82	35.06	60.00	-24.94	QP
11		20.8411	26.75	20.16	46.91	60.00	-13.09	QP
12		20.8411	15.21	20.16	35.37	50.00	-14.63	AVG

****Note: Pre-scan all modes and recorded the worst case results in this report.*

Margin=Reading level + Correct - Limit

5.9. Antenna Requirements

5.9.1 Standard Applicable

According to antenna requirement of §15.203.

According to antenna requirement of §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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be re-placed by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.

And according to §15.247(4)(1), (i) system operating in the 2400-2483.5MHz bands that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.
(ii) Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted output power.
(iii) Fixed, point-to-point operation, as used in paragraphs (c)(1)(i) and (c)(1)(ii) of this section, excludes the use of point-tomultipoint systems, omnidirectional applications, and multiple co-located intentional radiators transmitting the same information. The operator of the spread spectrum or digitally modulated intentional radiator or, if the equipment is professionally installed, the installer is responsible for ensuring that the system is used exclusively for fixed, point-to-point operations. The instruction manual furnished with the intentional radiator shall contain language in the installation instructions informing the operator and the installer of this responsibility.

5.9.2 Antenna Connected Construction

5.9.2.1. Standard Applicable

According to § 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.

5.9.2.2. Antenna Connector Construction

The gains of antenna used for transmitting is 2.0dBi (Max.), the antenna ANT 0 and ANT 1 is External and uses unique antenna connector(s) RP-SMA (Reverse Polarity SMA). Please see EUT photo for details.

5.9.2.3. Results: Compliance.

6. LIST OF MEASURING EQUIPMENTS

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Power Meter	R&S	NRVS	100444	2023-06-09	2024-06-08
2	Power Sensor	R&S	NRV-Z81	100458	2023-06-09	2024-06-08
3	Power Sensor	R&S	NRV-Z32	10057	2023-06-09	2024-06-08
4	Test Software	Tonscend	JS1120-2	/	N/A	N/A
5	RF Control Unit	Tonscend	JS0806-2	N/A	2023-10-28	2024-10-27
6	MXA Signal Analyzer	Agilent	N9020A	MY50510140	2023-10-28	2024-10-27
7	DC Power Supply	Agilent	E3642A	N/A	2023-10-28	2024-10-27
8	EMI Test Software	AUDIX	E3	/	N/A	N/A
9	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2023-06-09	2024-06-08
10	Positioning Controller	Max-Full	MF7802BS	MF780208586	N/A	N/A
11	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	2021-08-29	2024-08-28
12	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2021-09-12	2024-09-11
13	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
14	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	791	2021-08-29	2024-08-28
15	Broadband Preamplifier	SCHWARZBECK	BBV9719	9719-025	2023-06-09	2024-06-08
16	EMI Test Receiver	R&S	ESR 7	101181	2023-06-09	2024-06-08
17	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2023-07-17	2024-07-16
18	Broadband Preamplifier	/	BP-01M18G	P190501	2023-06-09	2024-06-08
19	6dB Attenuator	/	100W/6dB	1172040	2023-06-09	2024-06-08
20	3dB Attenuator	/	2N-3dB	/	2023-10-18 2023-10-28	2024-10-17 2024-10-27
21	EMI Test Receiver	R&S	ESPI	101940	2023-08-15	2024-08-14
22	Artificial Mains	R&S	ENV216	101288	2023-06-09	2024-06-08
23	10dB Attenuator	SCHWARZBECK	MTS-IMP-136	261115-001-0032	2023-06-09	2024-06-08
24	EMI Test Software	Farad	EZ	/	N/A	N/A
25	Antenna Mast	Max-Full	MFA-515BSN	1308572	N/A	N/A

7. TEST SETUP PHOTOGRAPHS OF EUT

Please refer to separated files for Test Setup Photos of the EUT.

8. EXTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for External Photos of the EUT.

9. INTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for Internal Photos of the EUT.

---------------THE END OF REPORT---------------