Appendix H): AC Power Line Conducted Emission

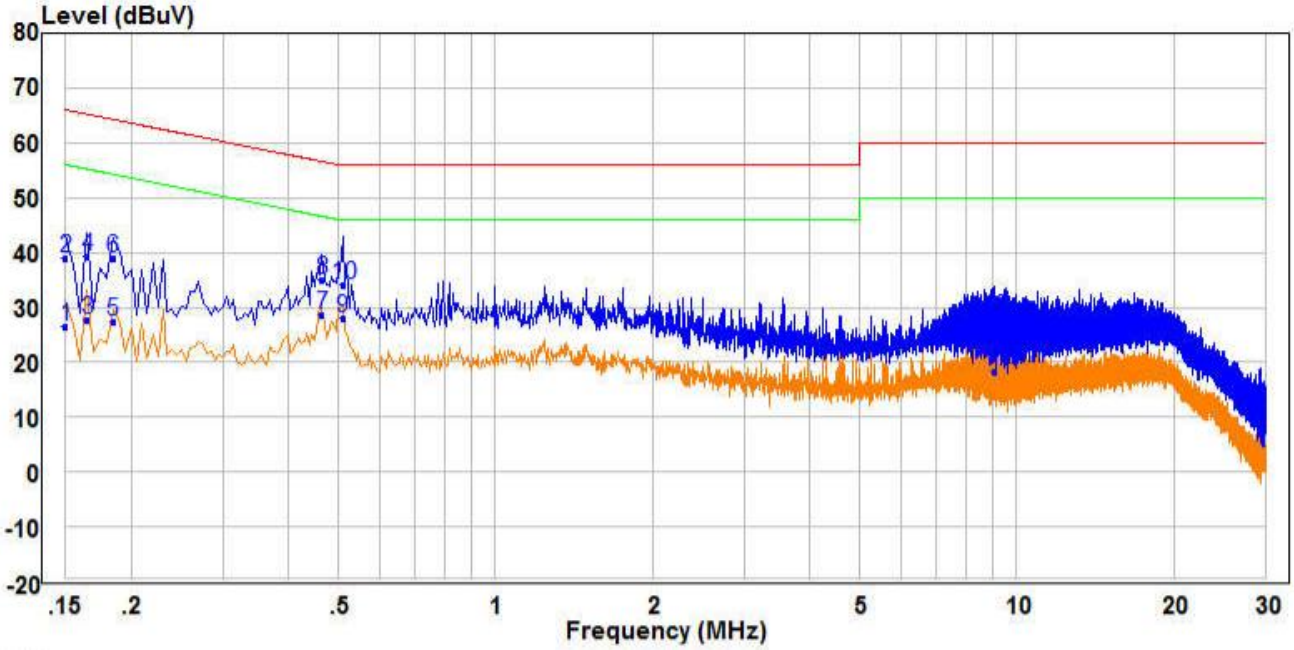
<table>
<tr><td>Test Procedure:</td><td>Test frequency range :150KHz-30MHz
1)The mains terminal disturbance voltage test was conducted in a shielded room.
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBμV)</th></tr>
<tr><th>Quasi-peak</th><th>Average</th></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.
NOTE : The lower limit is applicable at the transition frequency</td></tr>
</table>

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

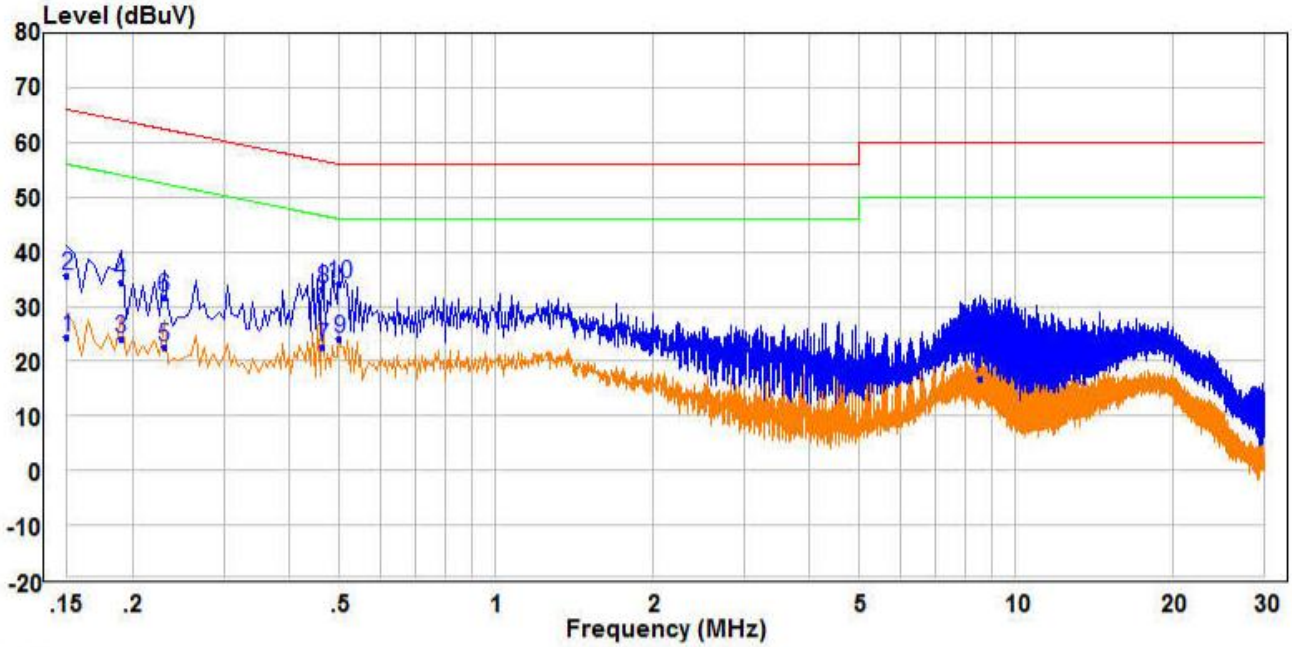
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

D156(XSE-1202000NUS):
Live Line:



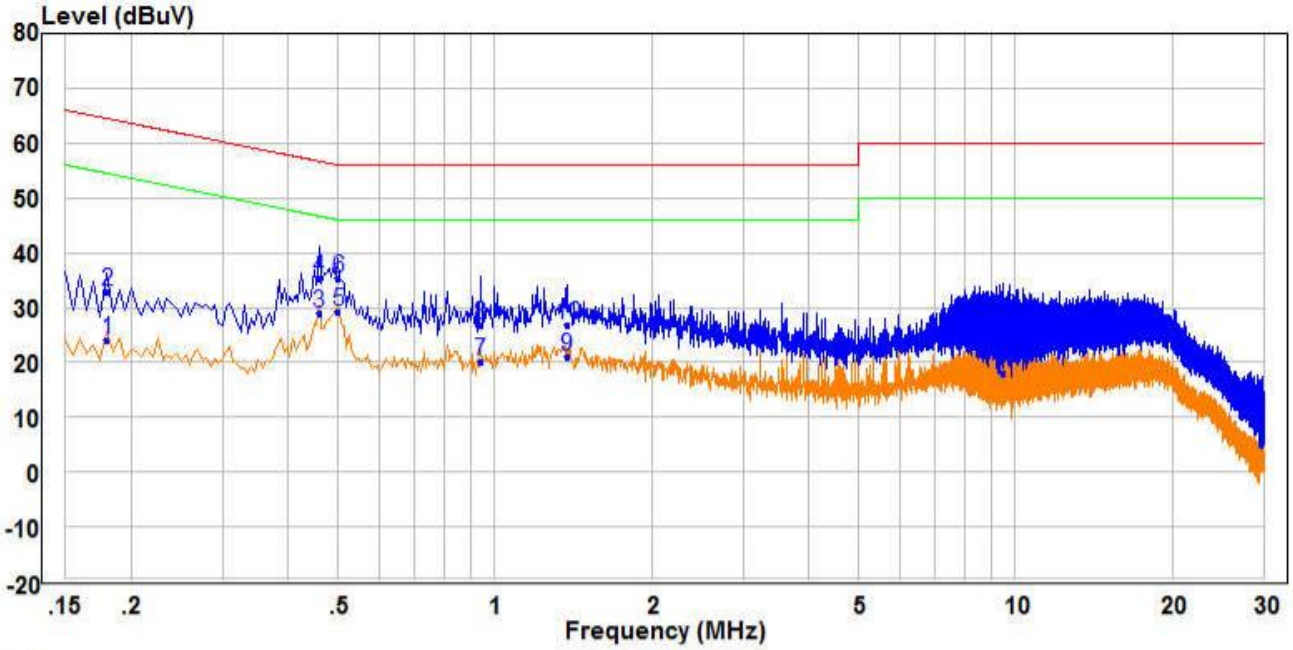
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.150	16.86	9.70	26.56	56.00	-29.44	Average	Line
2		0.150	29.22	9.70	38.92	66.00	-27.08	QP	Line
3		0.165	18.01	9.67	27.68	55.21	-27.53	Average	Line
4		0.165	29.69	9.67	39.36	65.21	-25.85	QP	Line
5		0.185	17.92	9.64	27.56	54.26	-26.70	Average	Line
6		0.185	29.44	9.64	39.08	64.26	-25.18	QP	Line
7	PP	0.465	19.03	9.67	28.70	46.60	-17.90	Average	Line
8	QP	0.465	25.42	9.67	35.09	56.60	-21.51	QP	Line
9		0.510	18.32	9.71	28.03	46.00	-17.97	Average	Line
10		0.510	24.51	9.71	34.22	56.00	-21.78	QP	Line
11		9.050	8.55	9.87	18.42	50.00	-31.58	Average	Line
12		9.050	18.17	9.87	28.04	60.00	-31.96	QP	Line

Neutral Line:



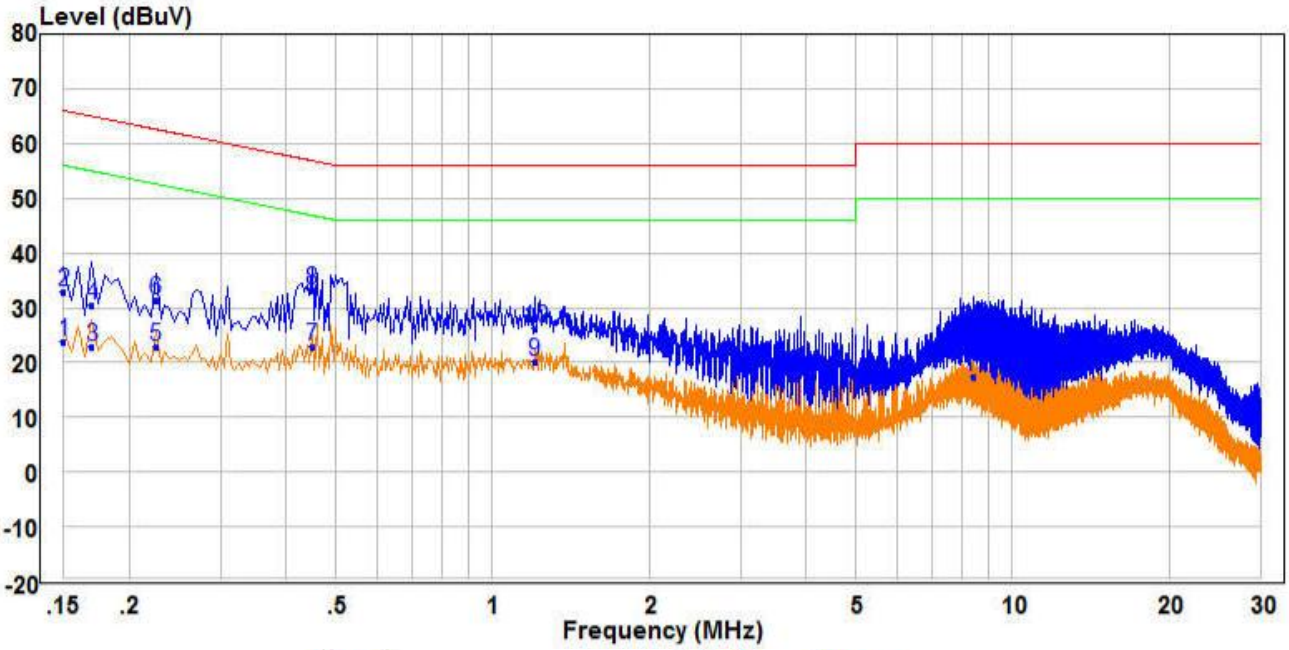
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.150	14.68	9.70	24.38	56.00	-31.62	Average	Neutral
2		0.150	25.90	9.70	35.60	66.00	-30.40	QP	Neutral
3		0.190	14.48	9.62	24.10	54.04	-29.94	Average	Neutral
4		0.190	24.84	9.62	34.46	64.04	-29.58	QP	Neutral
5		0.230	12.96	9.56	22.52	52.45	-29.93	Average	Neutral
6		0.230	22.17	9.56	31.73	62.45	-30.72	QP	Neutral
7		0.465	12.89	9.67	22.56	46.60	-24.04	Average	Neutral
8		0.465	23.66	9.67	33.33	56.60	-23.27	QP	Neutral
9	AV	0.500	14.34	9.70	24.04	46.00	-21.96	Average	Neutral
10	PP	0.500	24.38	9.70	34.08	56.00	-21.92	QP	Neutral
11		8.575	6.88	9.85	16.73	50.00	-33.27	Average	Neutral
12		8.575	15.64	9.85	25.49	60.00	-34.51	QP	Neutral

D185(XSE-1202000NUS):
Live Line:



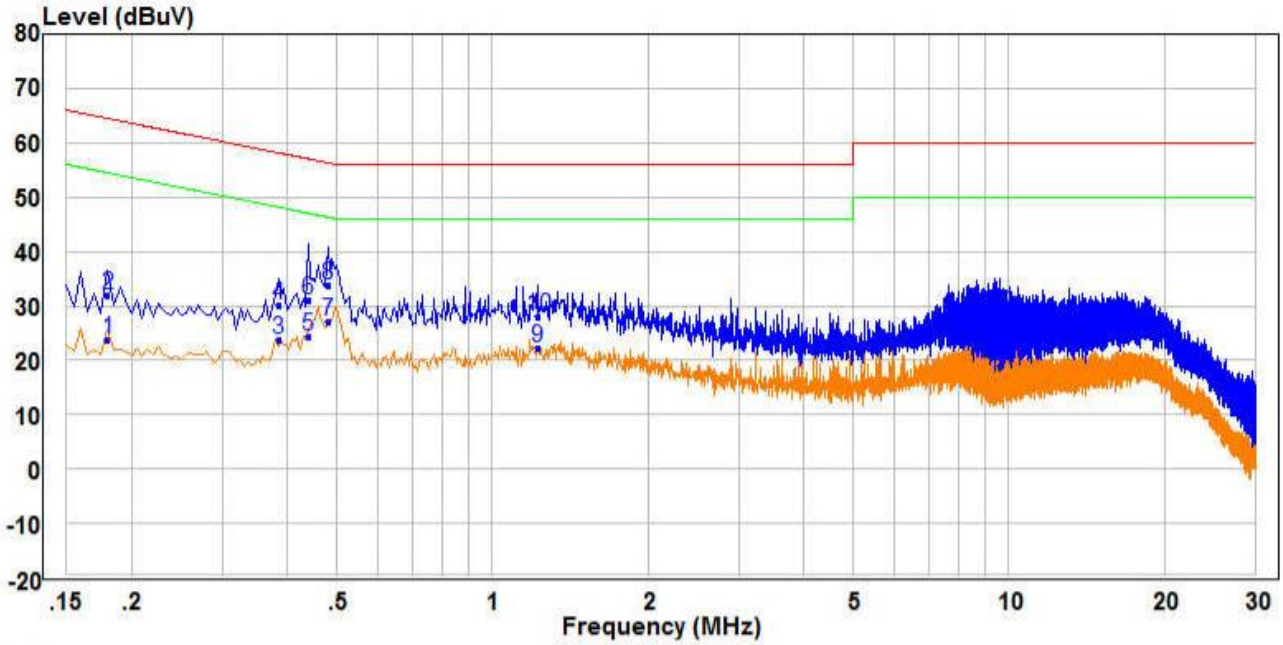
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.180	14.31	9.64	23.95	54.49	-30.54	Average	Line
2		0.180	23.21	9.64	32.85	64.49	-31.64	QP	Line
3		0.460	19.23	9.67	28.90	46.69	-17.79	Average	Line
4		0.460	25.51	9.67	35.18	56.69	-21.51	QP	Line
5	PP	0.500	19.62	9.70	29.32	46.00	-16.68	Average	Line
6	QP	0.500	25.62	9.70	35.32	56.00	-20.68	QP	Line
7		0.940	10.52	9.74	20.26	46.00	-25.74	Average	Line
8		0.940	17.05	9.74	26.79	56.00	-29.21	QP	Line
9		1.375	10.52	10.59	21.11	46.00	-24.89	Average	Line
10		1.375	16.31	10.59	26.90	56.00	-29.10	QP	Line
11		9.455	8.15	9.88	18.03	50.00	-31.97	Average	Line
12		9.455	18.21	9.88	28.09	60.00	-31.91	QP	Line

Neutral Line:



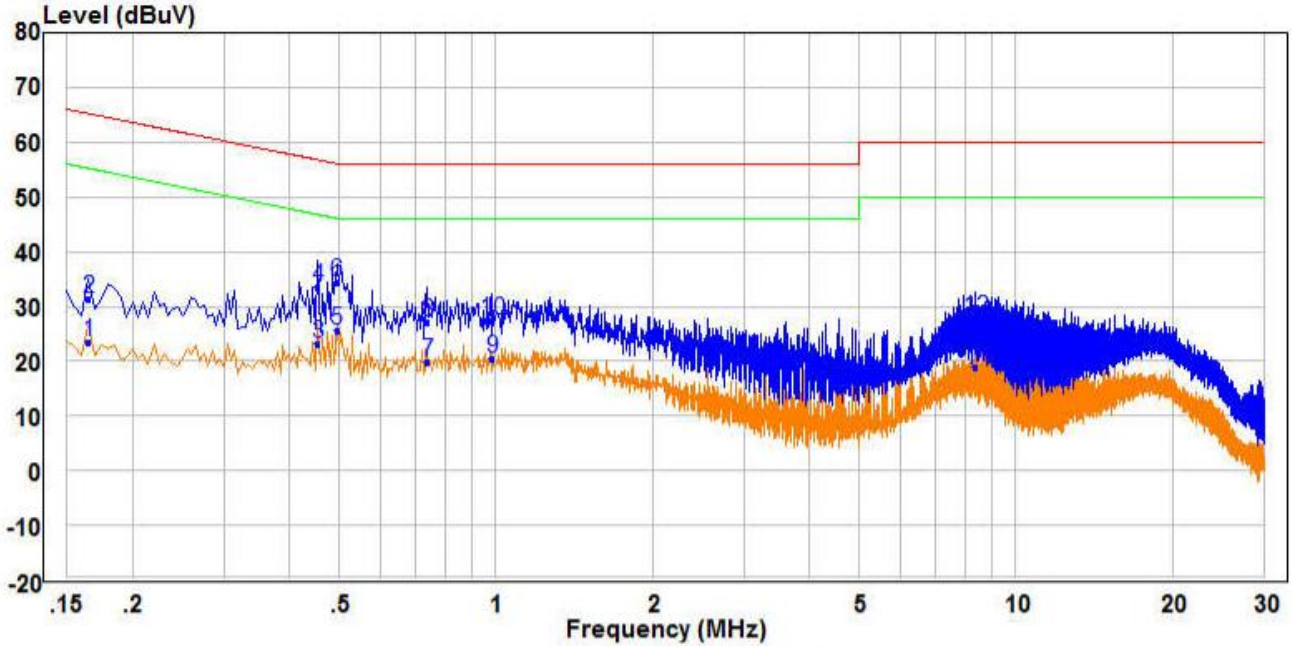
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.150	14.14	9.70	23.84	56.00	-32.16	Average	Neutral
2		0.150	23.30	9.70	33.00	66.00	-33.00	QP	Neutral
3		0.170	13.14	9.66	22.80	54.96	-32.16	Average	Neutral
4		0.170	20.89	9.66	30.55	64.96	-34.41	QP	Neutral
5		0.225	13.40	9.57	22.97	52.63	-29.66	Average	Neutral
6		0.225	21.80	9.57	31.37	62.63	-31.26	QP	Neutral
7	AV	0.450	13.31	9.65	22.96	46.88	-23.92	Average	Neutral
8	PP	0.450	23.45	9.65	33.10	56.88	-23.78	QP	Neutral
9		1.205	10.42	9.71	20.13	46.00	-25.87	Average	Neutral
10		1.205	16.59	9.71	26.30	56.00	-29.70	QP	Neutral
11		8.440	7.68	9.85	17.53	50.00	-32.47	Average	Neutral
12		8.440	16.63	9.85	26.48	60.00	-33.52	QP	Neutral

D210(XSE-1202000NUS):
Live Line:



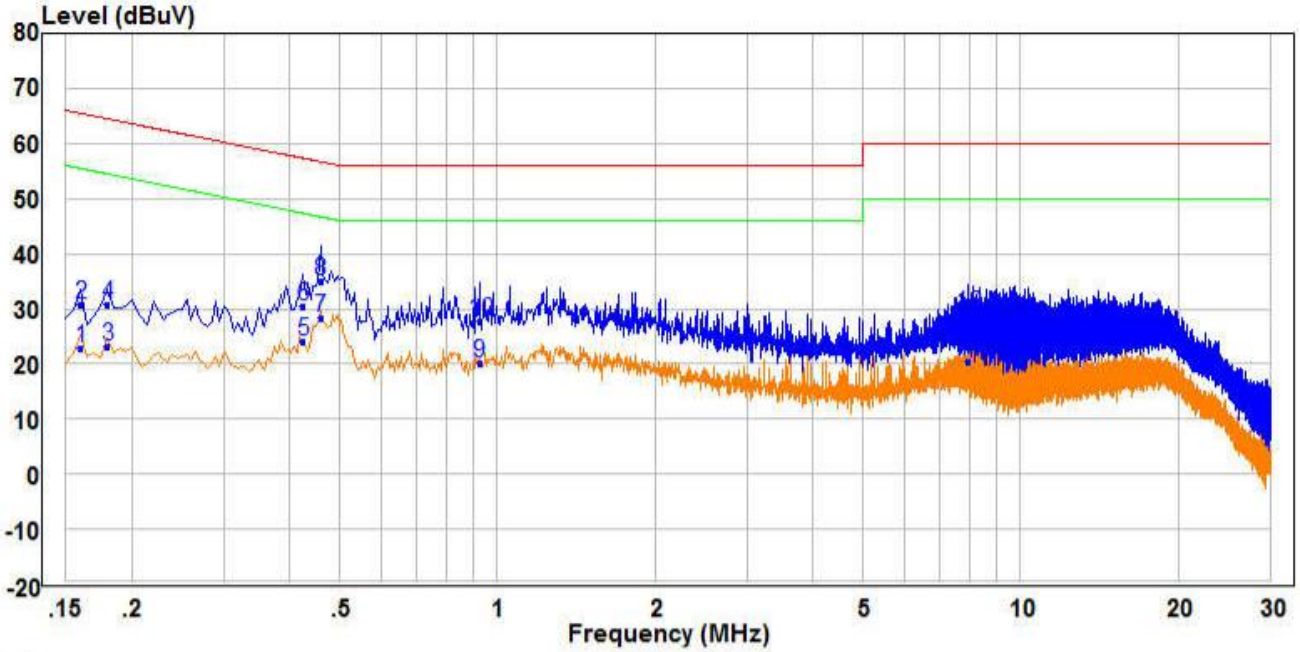
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.180	14.06	9.64	23.70	54.49	-30.79	Average	Line
2		0.180	22.49	9.64	32.13	64.49	-32.36	QP	Line
3		0.385	14.31	9.59	23.90	48.17	-24.27	Average	Line
4		0.385	20.47	9.59	30.06	58.17	-28.11	QP	Line
5		0.440	14.79	9.65	24.44	47.06	-22.62	Average	Line
6		0.440	21.29	9.65	30.94	57.06	-26.12	QP	Line
7	PP	0.480	17.37	9.68	27.05	46.34	-19.29	Average	Line
8	QP	0.480	24.00	9.68	33.68	56.34	-22.66	QP	Line
9		1.225	12.07	10.27	22.34	46.00	-23.66	Average	Line
10		1.225	17.78	10.27	28.05	56.00	-27.95	QP	Line
11		9.585	8.95	9.89	18.84	50.00	-31.16	Average	Line
12		9.585	18.56	9.89	28.45	60.00	-31.55	QP	Line

Neutral Line:



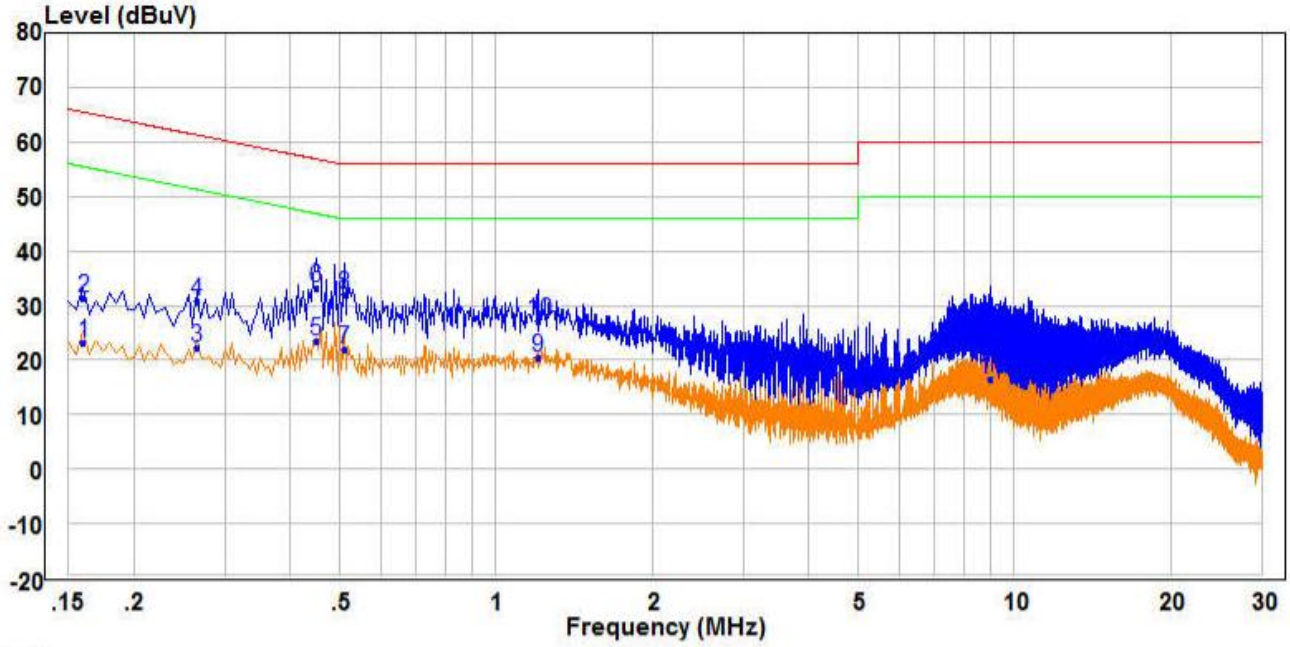
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.165	13.76	9.67	23.43	55.21	-31.78	Average	Neutral
2		0.165	21.61	9.67	31.28	65.21	-33.93	QP	Neutral
3		0.455	13.41	9.66	23.07	46.78	-23.71	Average	Neutral
4		0.455	23.74	9.66	33.40	56.78	-23.38	QP	Neutral
5	PP	0.495	15.83	9.70	25.53	46.08	-20.55	Average	Neutral
6	QP	0.495	24.58	9.70	34.28	56.08	-21.80	QP	Neutral
7		0.740	9.84	9.87	19.71	46.00	-26.29	Average	Neutral
8		0.740	17.21	9.87	27.08	56.00	-28.92	QP	Neutral
9		0.985	10.65	9.71	20.36	46.00	-25.64	Average	Neutral
10		0.985	17.64	9.71	27.35	56.00	-28.65	QP	Neutral
11		8.370	9.04	9.85	18.89	50.00	-31.11	Average	Neutral
12		8.370	17.75	9.85	27.60	60.00	-32.40	QP	Neutral

D210(GQ24-120200-CU):
Live Line:



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.160	13.31	9.68	22.99	55.46	-32.47	Average	Line
2		0.160	21.06	9.68	30.74	65.46	-34.72	QP	Line
3		0.180	13.42	9.64	23.06	54.49	-31.43	Average	Line
4		0.180	21.19	9.64	30.83	64.49	-33.66	QP	Line
5		0.425	14.59	9.63	24.22	47.35	-23.13	Average	Line
6		0.425	20.81	9.63	30.44	57.35	-26.91	QP	Line
7	PP	0.460	18.72	9.67	28.39	46.69	-18.30	Average	Line
8	QP	0.460	25.46	9.67	35.13	56.69	-21.56	QP	Line
9		0.925	10.37	9.75	20.12	46.00	-25.88	Average	Line
10		0.925	18.00	9.75	27.75	56.00	-28.25	QP	Line
11		7.965	10.59	9.83	20.42	50.00	-29.58	Average	Line
12		7.965	19.21	9.83	29.04	60.00	-30.96	QP	Line

Neutral Line:



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.160	13.44	9.68	23.12	55.46	-32.34	Average	Neutral
2		0.160	21.72	9.68	31.40	65.46	-34.06	QP	Neutral
3		0.265	12.62	9.52	22.14	51.27	-29.13	Average	Neutral
4		0.265	21.14	9.52	30.66	61.27	-30.61	QP	Neutral
5	PP	0.450	13.72	9.65	23.37	46.88	-23.51	Average	Neutral
6	QP	0.450	23.60	9.65	33.25	56.88	-23.63	QP	Neutral
7		0.510	12.24	9.71	21.95	46.00	-24.05	Average	Neutral
8		0.510	22.19	9.71	31.90	56.00	-24.10	QP	Neutral
9		1.205	10.77	9.71	20.48	46.00	-25.52	Average	Neutral
10		1.205	17.26	9.71	26.97	56.00	-29.03	QP	Neutral
11		8.970	6.63	9.87	16.50	50.00	-33.50	Average	Neutral
12		8.970	16.18	9.87	26.05	60.00	-33.95	QP	Neutral

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. The 6Mbps of rate of 802.11A_5240 is the worst case, only the worst data recorded in the report.

Appendix I): Restricted bands around fundamental frequency (Radiated Emission)

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Test Procedure:

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
h. Test the EUT in the lowest channel , the Highest channel
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
j. Repeat above procedures until all frequencies measured was complete.

Limit:

Frequency	Limit (dBμV/m @3cm)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

Test plot as follows:

Worse case mode:		802.11a		Test channel:		36			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.68	-3.63	55.05	74	-18.95	peak	H	1.5	152
5150.00	44.62	-3.63	40.99	54	-13.01	AVG	H	1.5	187
5150.00	59.65	-3.63	56.02	74	-17.98	peak	V	1.5	311
5150.00	46.79	-3.63	43.16	54	-10.84	AVG	V	1.5	313

Worse case mode:		802.11a		Test channel:		64			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.55	-3.59	54.96	74	-19.04	peak	H	1.5	276
5350.00	44.03	-3.59	40.44	54	-13.56	AVG	H	1.5	285
5350.00	59.66	-3.59	56.07	74	-17.93	peak	V	1.5	38
5350.00	45.99	-3.59	42.40	54	-11.60	AVG	V	1.5	162

Worse case mode:		802.11a		Test channel:		100			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.43	-3.44	54.99	74	-19.01	peak	H	1.5	353
5470.00	43.74	-3.44	40.30	54	-13.70	AVG	H	1.5	86
5470.00	57.53	-3.44	54.09	74	-19.91	peak	V	1.5	136
5470.00	45.68	-3.44	42.24	54	-11.76	AVG	V	1.5	274

Worse case mode:		802.11a		Test channel:		165			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.29	-3.42	54.87	74	-19.13	peak	H	1.5	337
5850.00	44.51	-3.42	41.09	54	-12.91	AVG	H	1.5	339
5850.00	59.30	-3.42	55.88	74	-18.12	peak	V	1.5	29
5850.00	46.35	-3.42	42.93	54	-11.07	AVG	V	1.5	178

Worse case mode:		802.11n(HT20)		Test channel:		36			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.27	-3.63	54.64	74	-19.36	peak	H	1.5	17
5150.00	44.31	-3.63	40.68	54	-13.32	AVG	H	1.5	32
5150.00	59.64	-3.63	56.01	74	-17.99	peak	V	1.5	44
5150.00	46.77	-3.63	43.14	54	-10.86	AVG	V	1.5	258

Worse case mode:		802.11n(HT20)		Test channel:		64			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.98	-3.59	55.39	74	-18.61	peak	H	1.5	332
5350.00	44.49	-3.59	40.90	54	-13.10	AVG	H	1.5	226
5350.00	59.89	-3.59	56.30	74	-17.70	peak	V	1.5	0
5350.00	46.40	-3.59	42.81	54	-11.19	AVG	V	1.5	305

Worse case mode:		802.11n(HT20)		Test channel:		100			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.16	-3.44	54.72	74	-19.28	peak	H	1.5	112
5470.00	44.35	-3.44	40.91	54	-13.09	AVG	H	1.5	337
5470.00	58.10	-3.44	54.66	74	-19.34	peak	V	1.5	343
5470.00	46.27	-3.44	42.83	54	-11.17	AVG	V	1.5	212

Worse case mode:		802.11n(HT20)		Test channel:		165			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.43	-3.42	55.01	74	-18.99	peak	H	1.5	9
5850.00	44.92	-3.42	41.50	54	-12.50	AVG	H	1.5	347
5850.00	59.96	-3.42	56.54	74	-17.46	peak	V	1.5	159
5850.00	46.90	-3.42	43.48	54	-10.52	AVG	V	1.5	249

Worse case mode:		802.11n(HT40)		Test channel:		38			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5150.00	58.51	-3.63	54.88	74	-19.12	peak	H	1.5	332
5150.00	44.80	-3.63	41.17	54	-12.83	AVG	H	1.5	302
5150.00	60.00	-3.63	56.37	74	-17.63	peak	V	1.5	121
5150.00	46.81	-3.63	43.18	54	-10.82	AVG	V	1.5	195

Worse case mode:		802.11n(HT40)		Test channel:		62			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5350.00	58.64	-3.59	55.05	74	-18.95	peak	H	1.5	26
5350.00	44.30	-3.59	40.71	54	-13.29	AVG	H	1.5	181
5350.00	59.42	-3.59	55.83	74	-18.17	peak	V	1.5	222
5350.00	46.59	-3.59	43.00	54	-11.00	AVG	V	1.5	82

Worse case mode:		802.11n(HT40)		Test channel:		102			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5470.00	58.11	-3.44	54.67	74	-19.33	peak	H	1.5	51
5470.00	43.63	-3.44	40.19	54	-13.81	AVG	H	1.5	223
5470.00	57.98	-3.44	54.54	74	-19.46	peak	V	1.5	86
5470.00	46.43	-3.44	42.99	54	-11.01	AVG	V	1.5	191

Worse case mode:		802.11n(HT40)		Test channel:		159			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
5850.00	58.58	-3.42	55.16	74	-18.84	peak	H	1.5	102
5850.00	44.25	-3.42	40.83	54	-13.17	AVG	H	1.5	229
5850.00	59.97	-3.42	56.55	74	-17.45	peak	V	1.5	143
5850.00	46.13	-3.42	42.71	54	-11.29	AVG	V	1.5	281

Note:
1) Through Pre-scan transmitting mode with all kind of modulation and data rate, Only the worst case is recorded in the report.
2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level =Receiver Reading - Correct Factor
Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Appendix J): Radiated Spurious Emissions

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Test Procedure:

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre)
h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
j. Repeat above procedures until all frequencies measured was complete.

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBμV/cm)	Remark	Measurement distance (cm)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

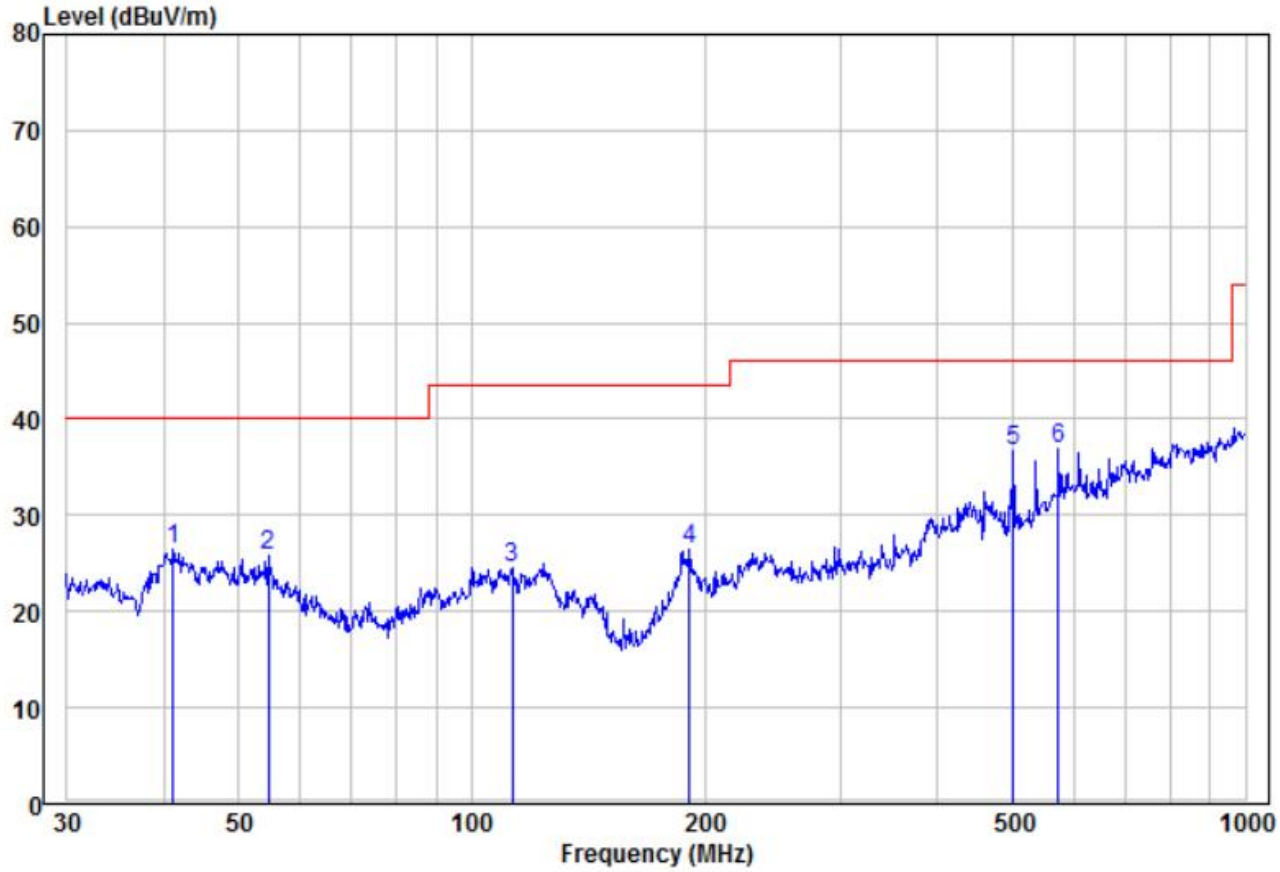
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Test result: PASS

Test Data:
Radiated Emission below 1GHz

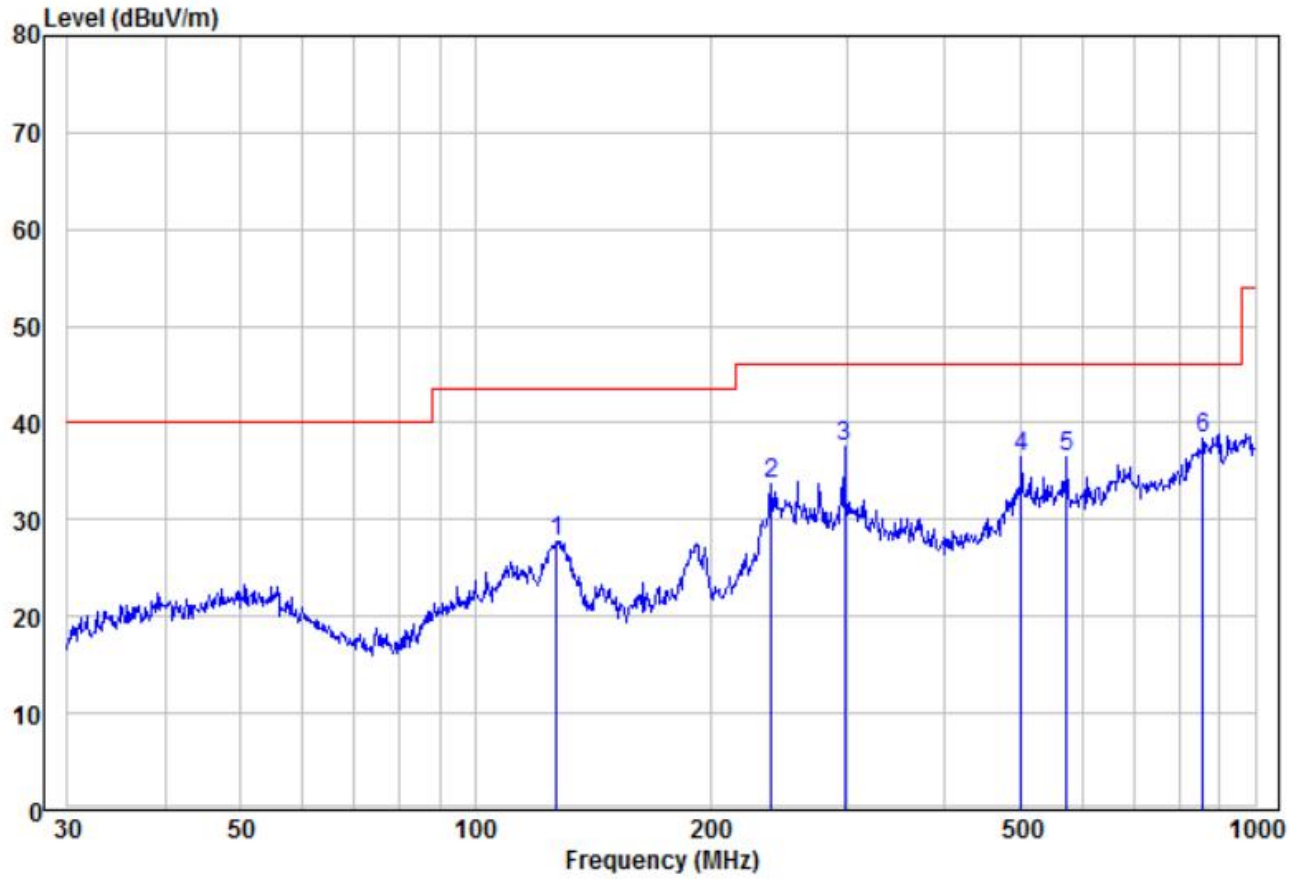
D156(XSE-1202000NUS):

30MHz~1GHz		
Test mode:	Transmitting (802.11a 36CH)	Vertical



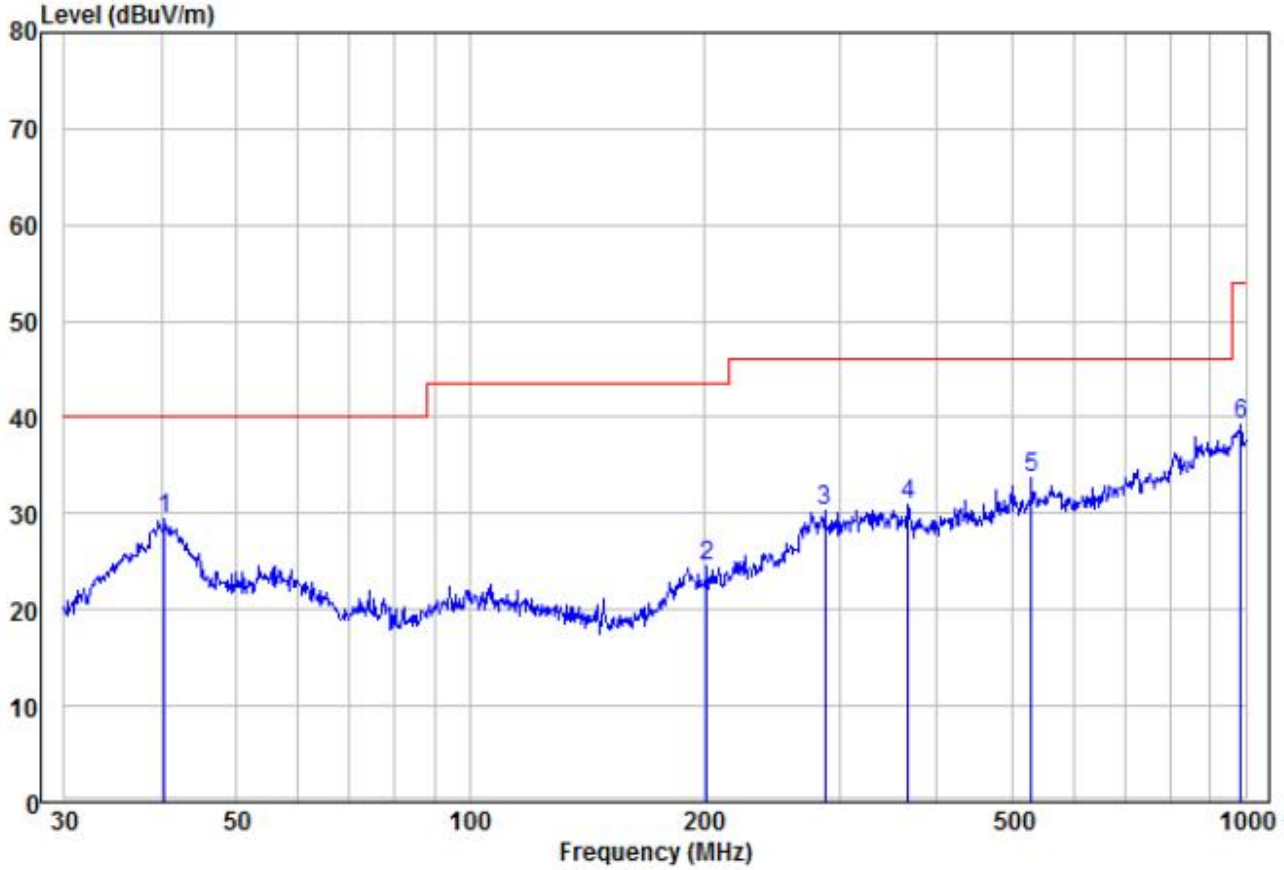
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	41.13	14.29	12.24	26.53	40.00	-13.47	Peak	VERTICAL	100	102
2	54.64	11.97	13.82	25.79	40.00	-14.21	Peak	VERTICAL	100	347
3	112.92	12.29	12.30	24.59	43.50	-18.91	Peak	VERTICAL	100	250
4	191.07	13.62	12.80	26.42	43.50	-17.08	Peak	VERTICAL	100	8
5	501.18	14.79	21.84	36.63	46.00	-9.37	Peak	VERTICAL	100	156
6 pp	572.61	14.12	22.76	36.88	46.00	-9.12	Peak	VERTICAL	100	39

Test mode:	Transmitting (802.11a 36CH)	Horizontal



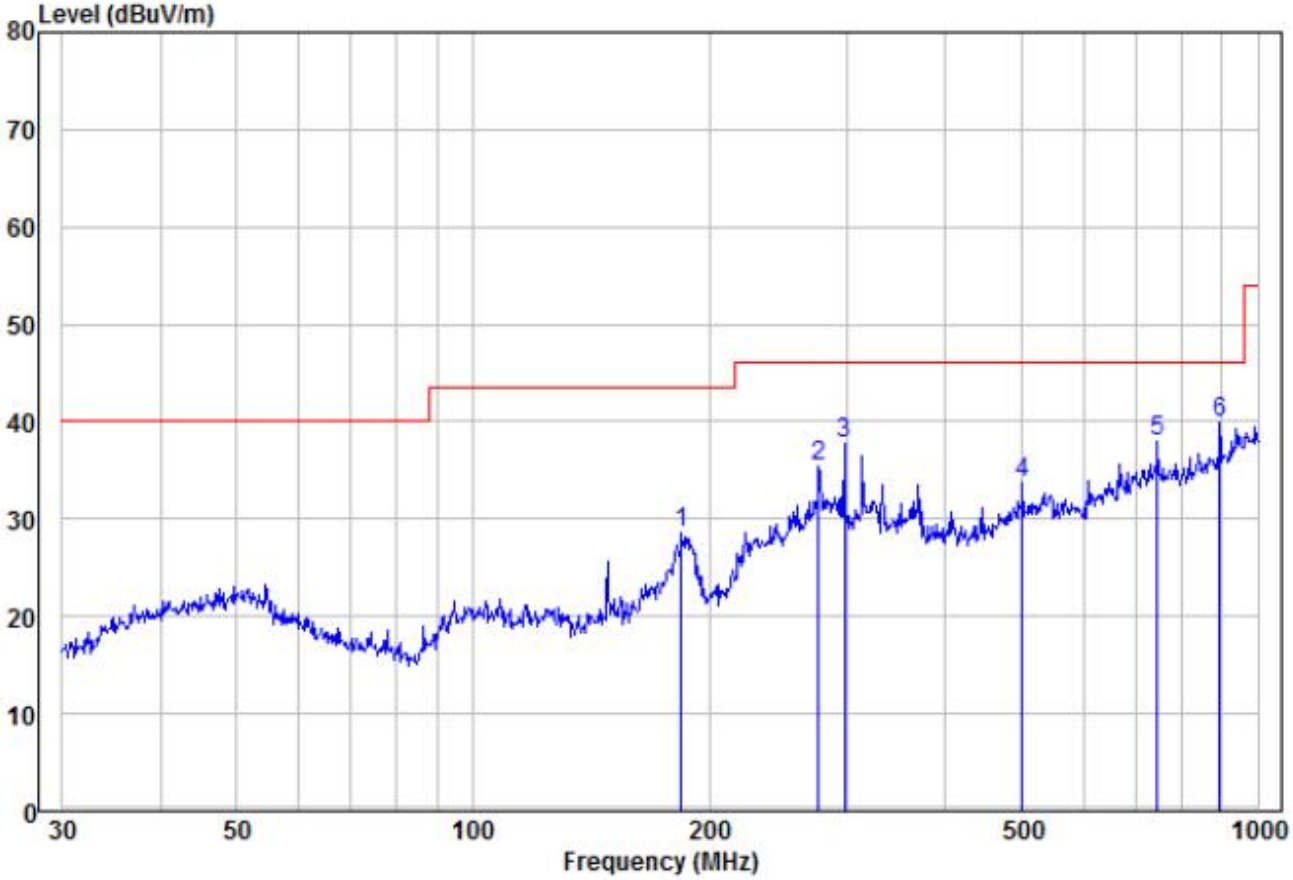
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	127.22	17.45	10.33	27.78	43.50	-15.72	Peak	HORIZONTAL	100	4
2	239.99	17.79	15.90	33.69	46.00	-12.31	Peak	HORIZONTAL	100	153
3	297.22	19.85	17.69	37.54	46.00	-8.46	Peak	HORIZONTAL	100	243
4	501.18	14.61	21.84	36.45	46.00	-9.55	Peak	HORIZONTAL	100	142
5	572.61	13.75	22.76	36.51	46.00	-9.49	Peak	HORIZONTAL	100	28
6 pp	857.02	9.29	29.16	38.45	46.00	-7.55	Peak	HORIZONTAL	100	89

30MHz~1GHz		
Test mode:	Transmitting (802.11a 52CH)	Vertical



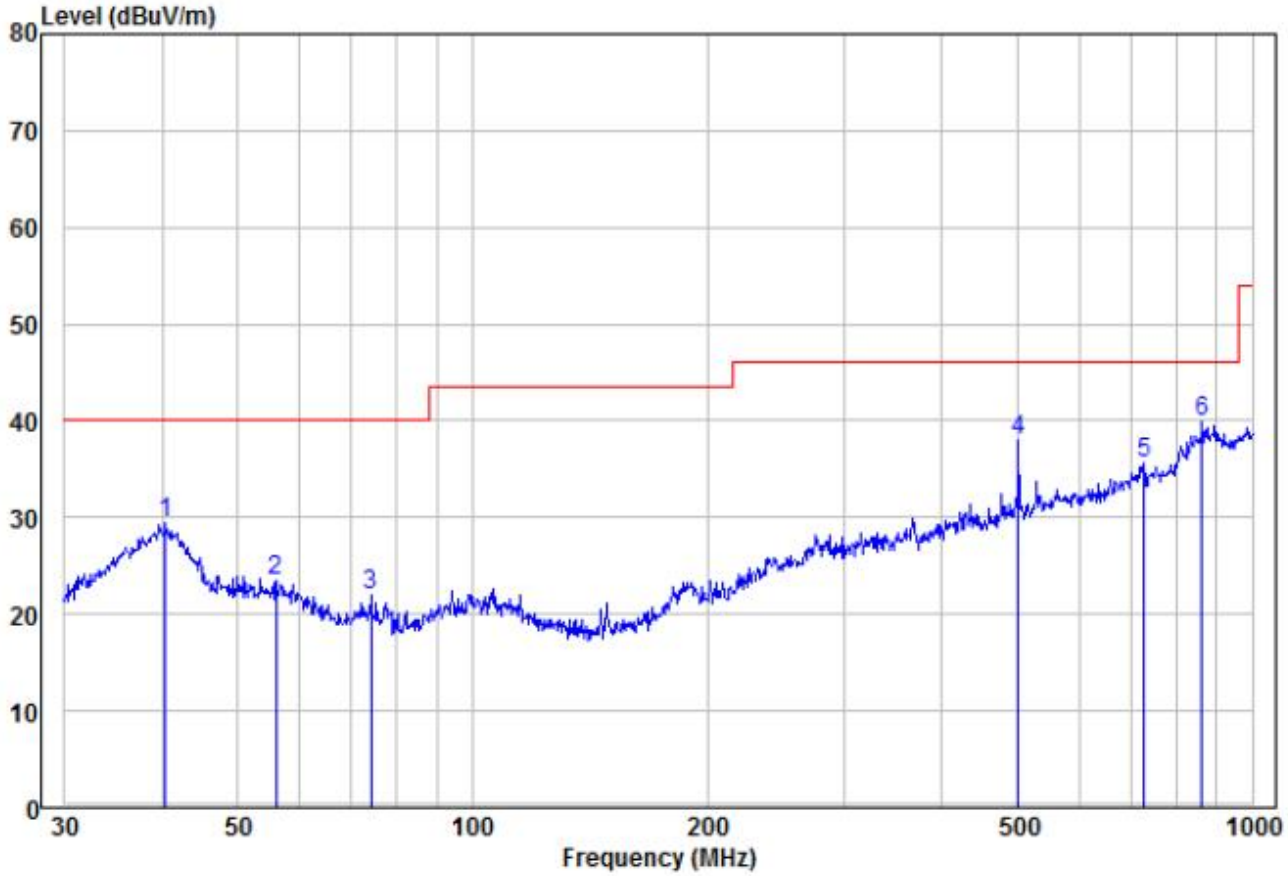
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1 pp	40.42	17.34	12.12	29.46	40.00	-10.54	Peak	VERTICAL	100	77
2	202.10	11.36	13.07	24.43	43.50	-19.07	Peak	VERTICAL	100	30
3	286.98	12.85	17.40	30.25	46.00	-15.75	Peak	VERTICAL	100	55
4	366.82	11.44	19.39	30.83	46.00	-15.17	Peak	VERTICAL	100	123
5	530.10	11.52	22.12	33.64	46.00	-12.36	Peak	VERTICAL	100	48
6	986.07	10.29	29.06	39.35	54.00	-14.65	Peak	VERTICAL	100	151

Test mode:	Transmitting (802.11a 52CH)	Horizontal



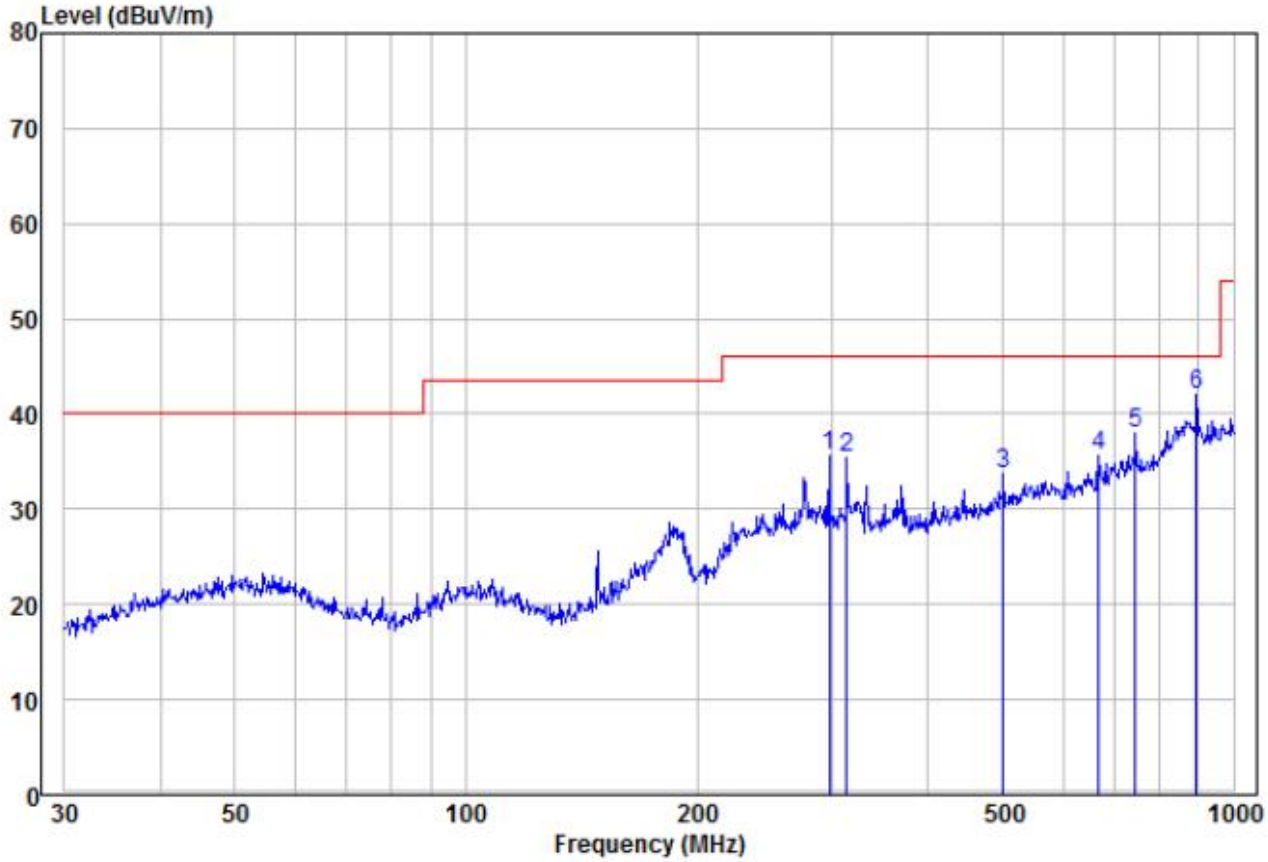
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	184.49	16.59	11.99	28.58	43.50	-14.92	Peak	HORIZONTAL	100	59
2	276.12	18.24	17.10	35.34	46.00	-10.66	Peak	HORIZONTAL	100	45
3	297.22	20.03	17.69	37.72	46.00	-8.28	Peak	HORIZONTAL	100	133
4	501.18	11.87	21.84	33.71	46.00	-12.29	Peak	HORIZONTAL	100	135
5	744.87	12.52	25.38	37.90	46.00	-8.10	Peak	HORIZONTAL	100	25
6 pp	893.86	10.25	29.71	39.96	46.00	-6.04	Peak	HORIZONTAL	100	102

30MHz~1GHz		
Test mode:	Transmitting (802.11a 100CH)	Vertical



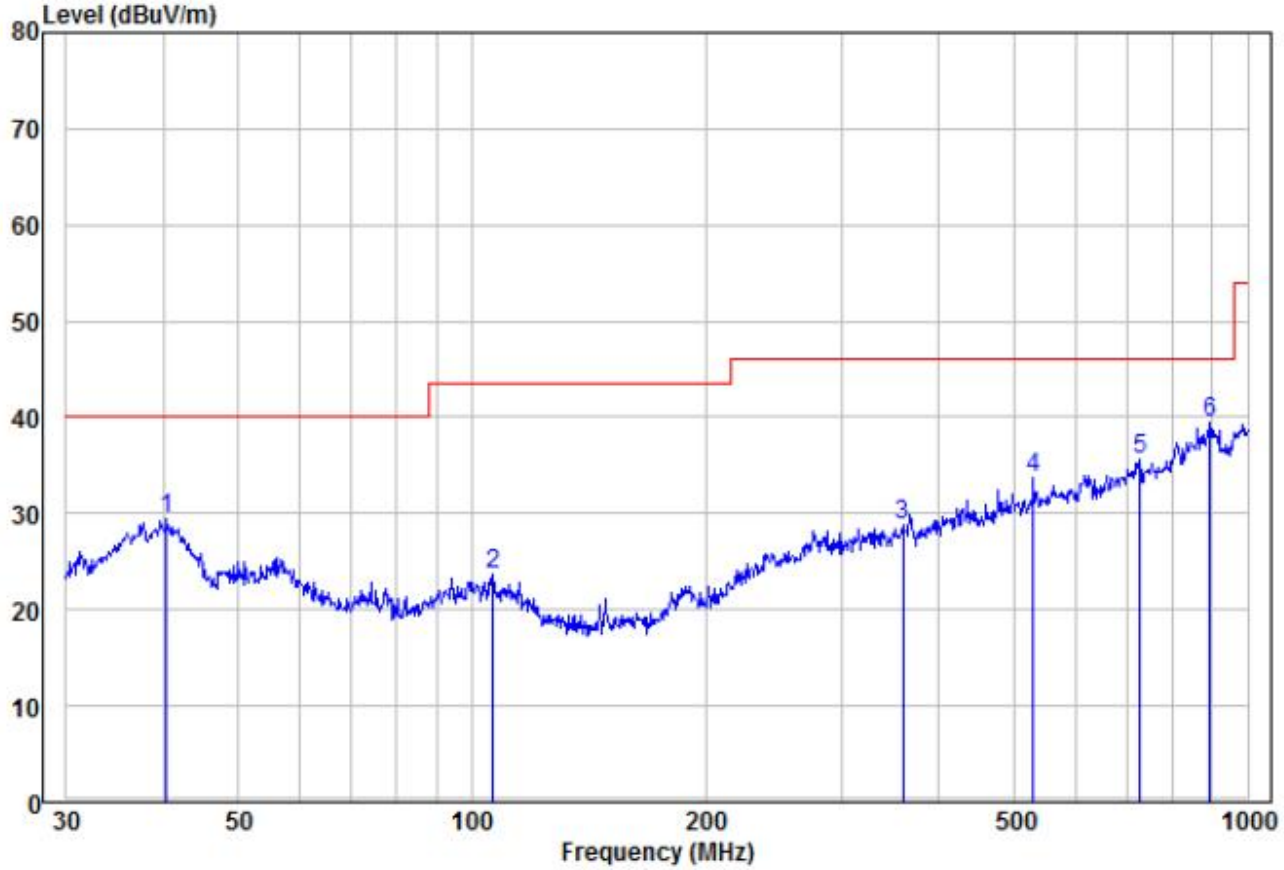
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	40.42	17.34	12.12	29.46	40.00	-10.54	Peak	VERTICAL	100	184
2	56.00	9.80	13.64	23.44	40.00	-16.56	Peak	VERTICAL	100	42
3	74.14	12.57	9.35	21.92	40.00	-18.08	Peak	VERTICAL	100	22
4	501.18	16.06	21.84	37.90	46.00	-8.10	Peak	VERTICAL	100	73
5	726.81	10.86	24.67	35.53	46.00	-10.47	Peak	VERTICAL	100	245
6 pp	863.06	10.64	29.25	39.89	46.00	-6.11	Peak	VERTICAL	100	320

Test mode:	Transmitting (802.11a 100CH)	Horizontal



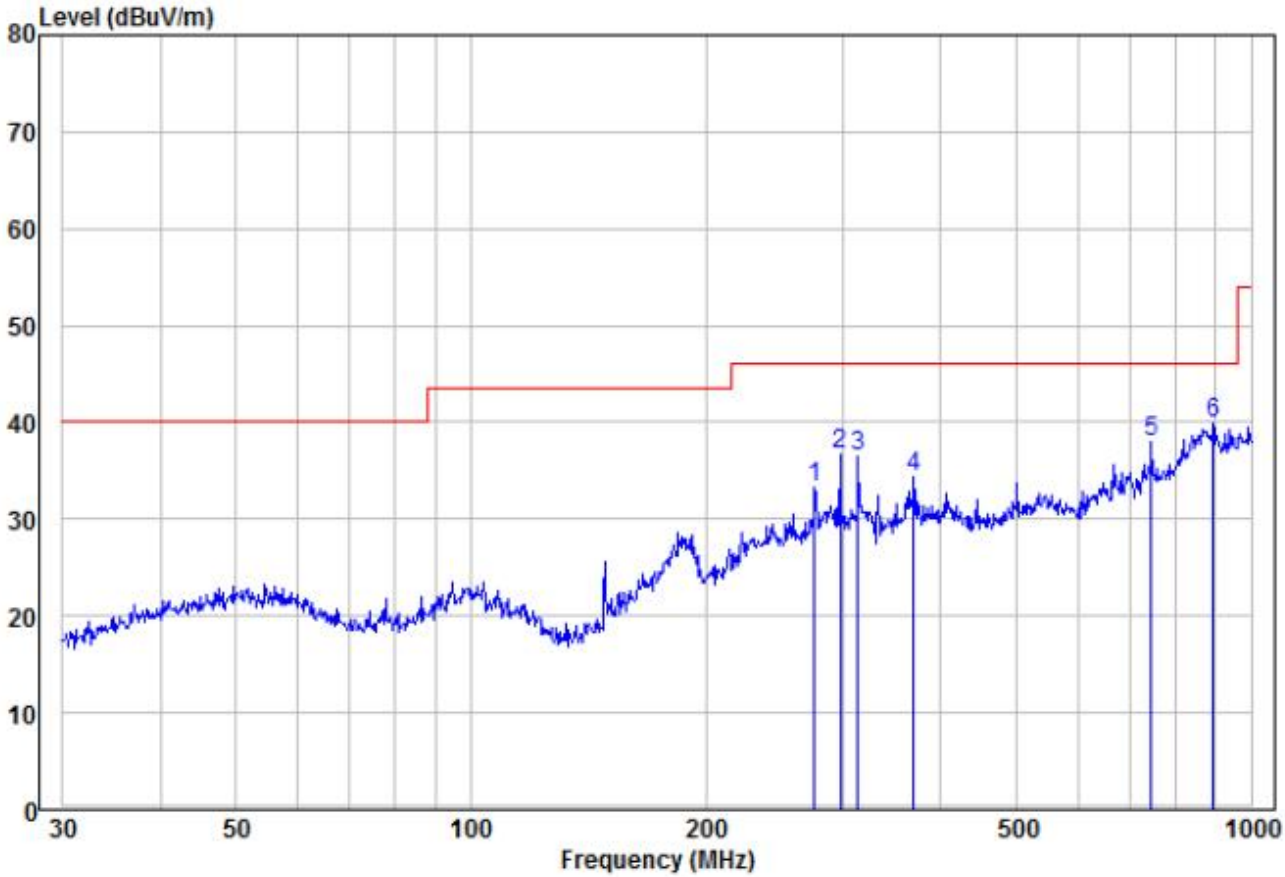
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	297.22	18.03	17.69	35.72	46.00	-10.28	Peak	HORIZONTAL	100	23
2	313.28	17.37	18.10	35.47	46.00	-10.53	Peak	HORIZONTAL	100	56
3	501.18	11.87	21.84	33.71	46.00	-12.29	Peak	HORIZONTAL	100	159
4	668.14	12.09	23.54	35.63	46.00	-10.37	Peak	HORIZONTAL	100	130
5	744.87	12.52	25.38	37.90	46.00	-8.10	Peak	HORIZONTAL	100	50
6 pp	893.86	12.25	29.71	41.96	46.00	-4.04	Peak	HORIZONTAL	100	248

30MHz~1GHz		
Test mode:	Transmitting (802.11a 149CH)	Vertical



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	40.42	17.34	12.12	29.46	40.00	-10.54	Peak	VERTICAL	100	148
2	106.39	10.81	12.83	23.64	43.50	-19.86	Peak	VERTICAL	100	50
3	359.19	9.51	19.21	28.72	46.00	-17.28	Peak	VERTICAL	100	48
4	530.10	11.52	22.12	33.64	46.00	-12.36	Peak	VERTICAL	100	30
5	726.81	10.86	24.67	35.53	46.00	-10.47	Peak	VERTICAL	100	14
6 pp	893.86	9.66	29.71	39.37	46.00	-6.63	Peak	VERTICAL	100	101

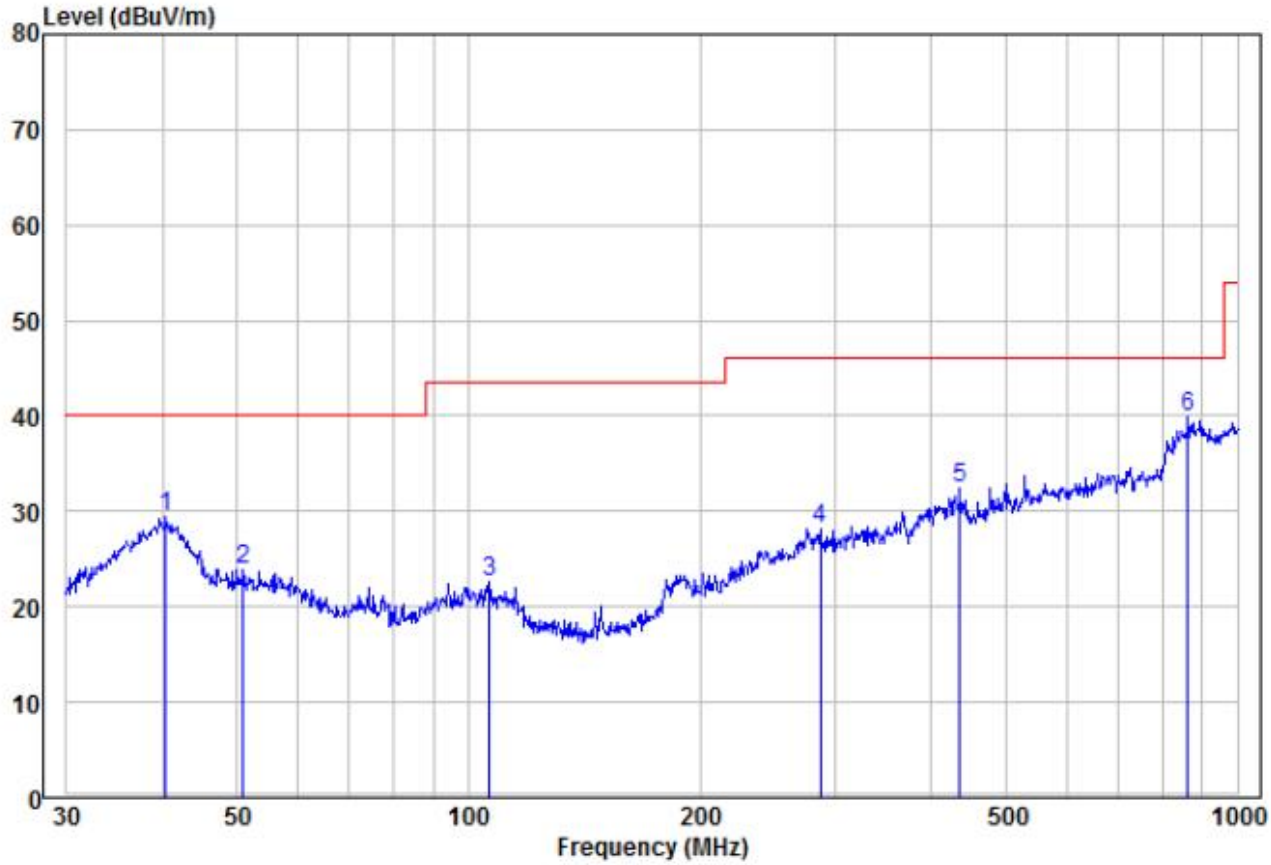
Test mode:	Transmitting (802.11a 149CH)	Horizontal



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	276.12	16.24	17.10	33.34	46.00	-12.66	Peak	HORIZONTAL	100	147
2	297.22	19.03	17.69	36.72	46.00	-9.28	Peak	HORIZONTAL	100	156
3	313.28	18.37	18.10	36.47	46.00	-9.53	Peak	HORIZONTAL	100	52
4	369.40	14.96	19.46	34.42	46.00	-11.58	Peak	HORIZONTAL	100	84
5	744.87	12.52	25.38	37.90	46.00	-8.10	Peak	HORIZONTAL	100	9
6 pp	893.86	10.25	29.71	39.96	46.00	-6.04	Peak	HORIZONTAL	100	221

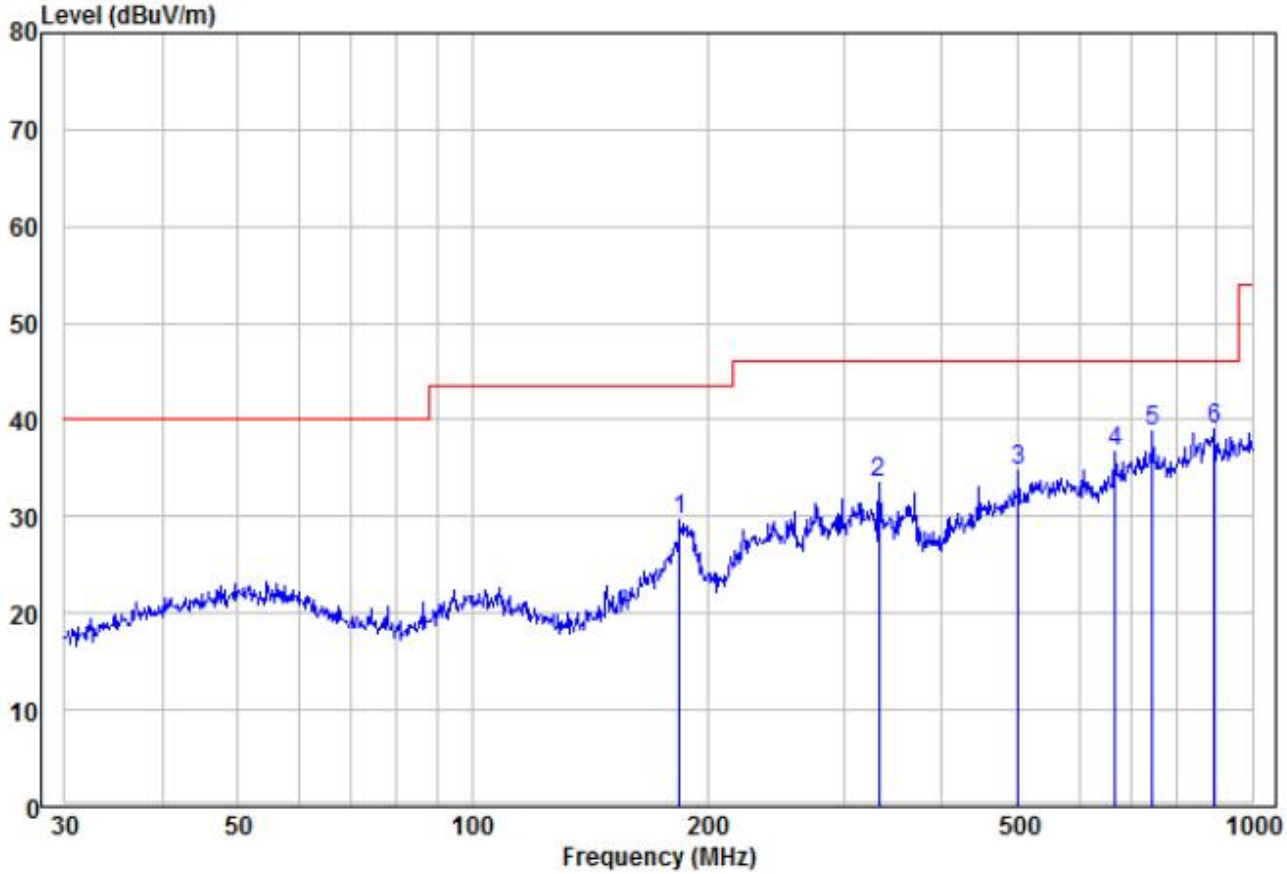
D185(XSE-1202000NUS):

30MHz~1GHz		
Test mode:	Transmitting (802.11a 36CH)	Vertical



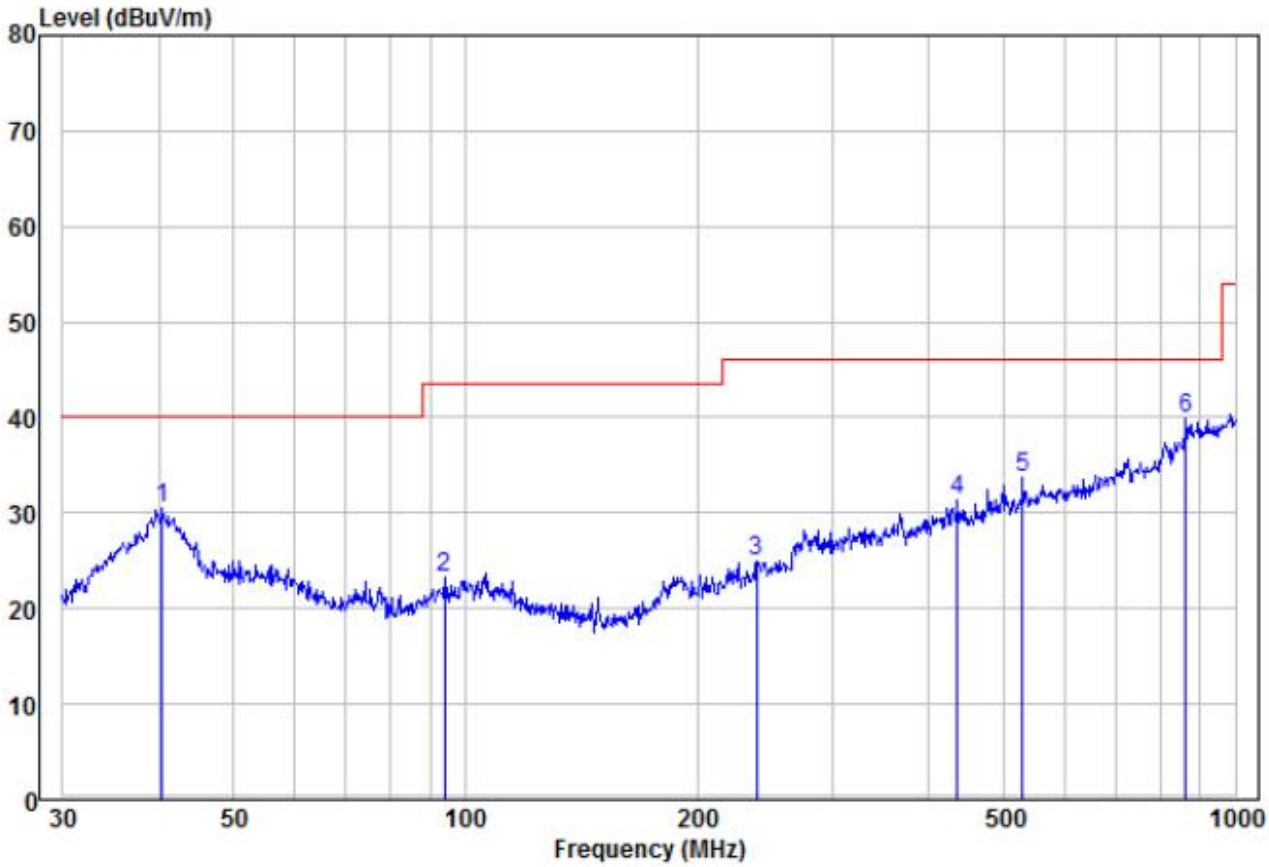
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	40.42	17.34	12.12	29.46	40.00	-10.54	Peak	VERTICAL	100	56
2	50.94	10.18	13.78	23.96	40.00	-16.04	Peak	VERTICAL	100	32
3	106.39	9.81	12.83	22.64	43.50	-20.86	Peak	VERTICAL	100	149
4	286.98	10.85	17.40	28.25	46.00	-17.75	Peak	VERTICAL	100	359
5	435.59	12.42	19.96	32.38	46.00	-13.62	Peak	VERTICAL	100	247
6 pp	863.06	10.64	29.25	39.89	46.00	-6.11	Peak	VERTICAL	100	25

Test mode:	Transmitting (802.11a 36CH)	Horizontal



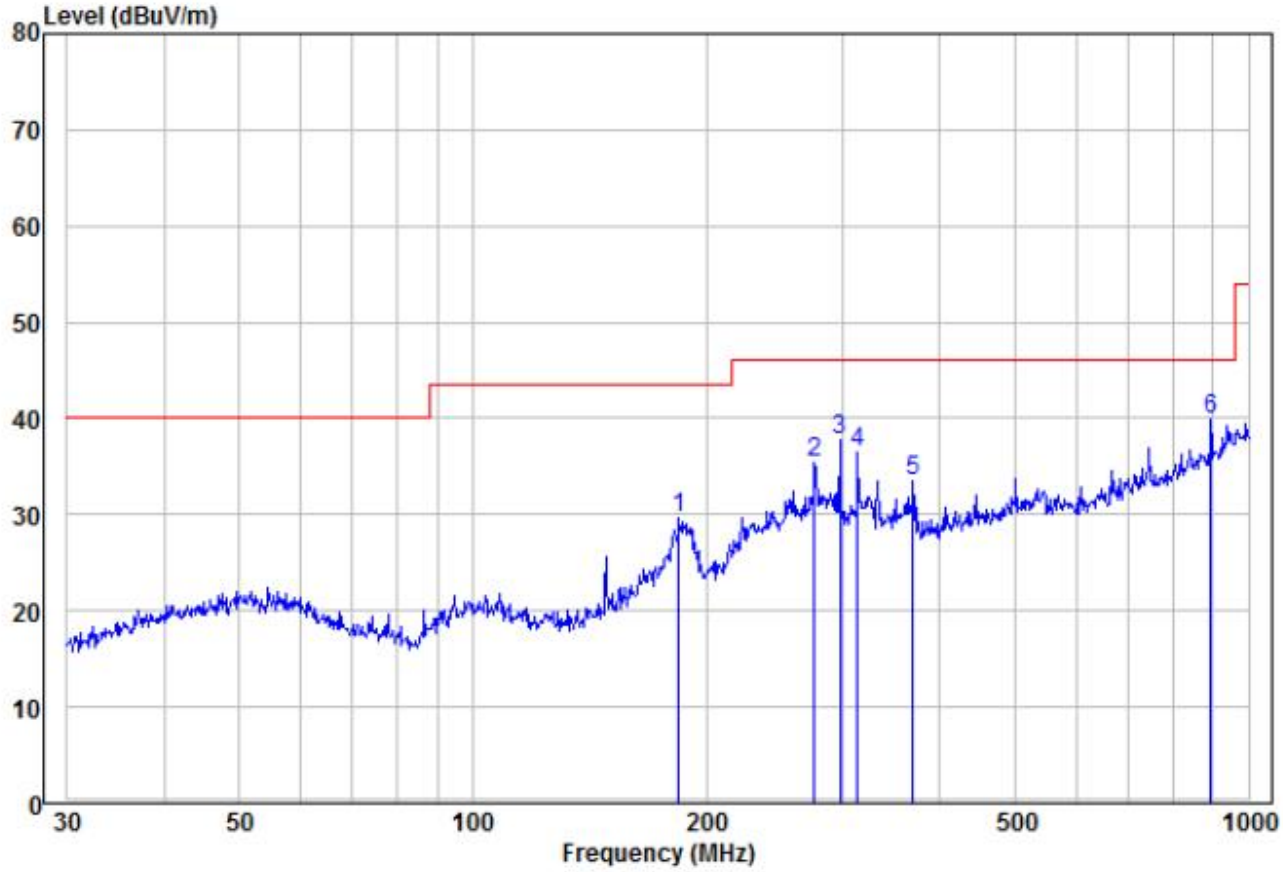
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	184.49	17.59	11.99	29.58	43.50	-13.92	Peak	HORIZONTAL	100	147
2	332.52	14.92	18.56	33.48	46.00	-12.52	Peak	HORIZONTAL	100	56
3	501.18	12.87	21.84	34.71	46.00	-11.29	Peak	HORIZONTAL	100	143
4	668.14	13.09	23.54	36.63	46.00	-9.37	Peak	HORIZONTAL	100	0
5	744.87	13.52	25.38	38.90	46.00	-7.10	Peak	HORIZONTAL	100	260
6 pp	893.86	9.25	29.71	38.96	46.00	-7.04	Peak	HORIZONTAL	100	3

30MHz~1GHz		
Test mode:	Transmitting (802.11a 52CH)	Vertical



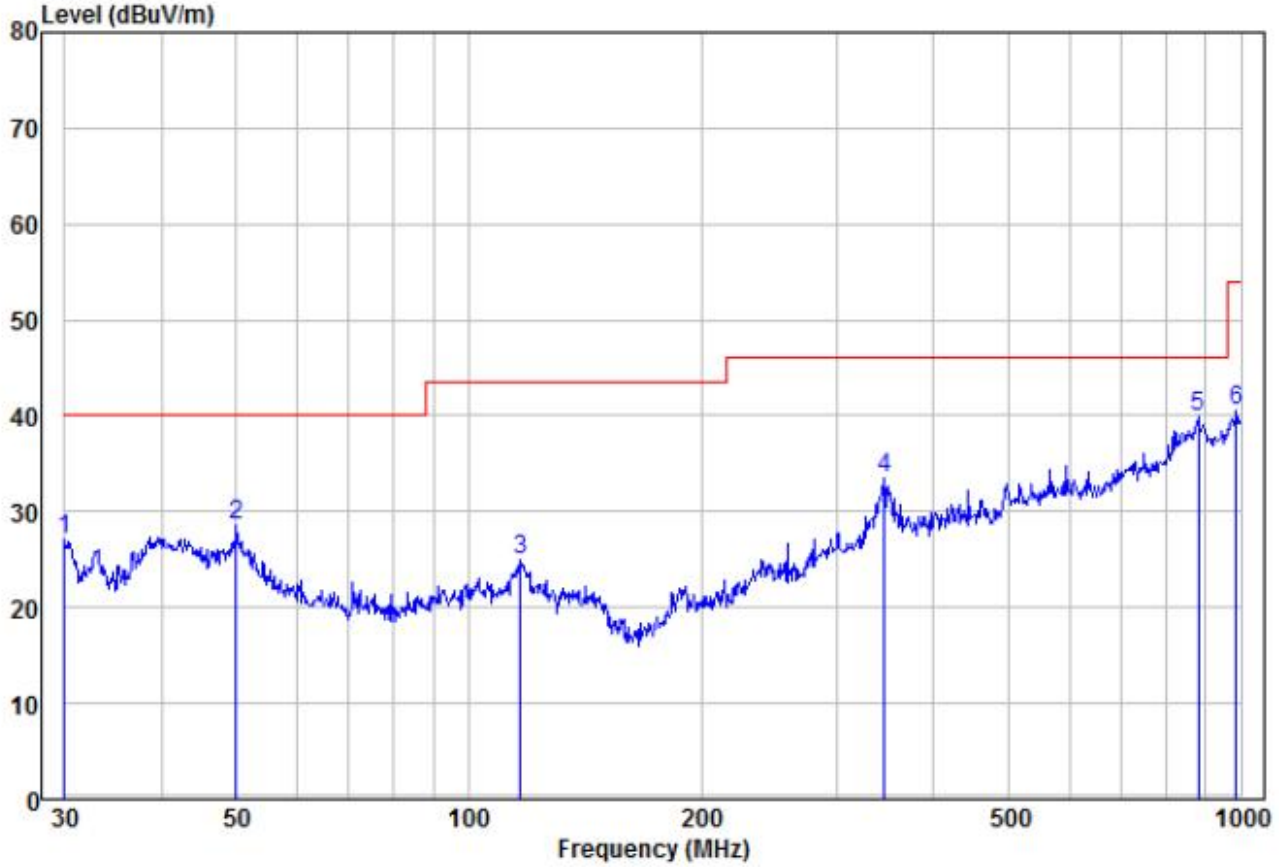
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	40.42	18.34	12.12	30.46	40.00	-9.54	Peak	VERTICAL	100	207
2	94.10	11.27	12.05	23.32	43.50	-20.18	Peak	VERTICAL	100	146
3	239.15	9.09	15.81	24.90	46.00	-21.10	Peak	VERTICAL	100	24
4	435.59	11.42	19.96	31.38	46.00	-14.62	Peak	VERTICAL	100	284
5	530.10	11.52	22.12	33.64	46.00	-12.36	Peak	VERTICAL	100	249
6 pp	863.06	10.64	29.25	39.89	46.00	-6.11	Peak	VERTICAL	100	328

Test mode:	Transmitting (802.11a 52CH)	Horizontal



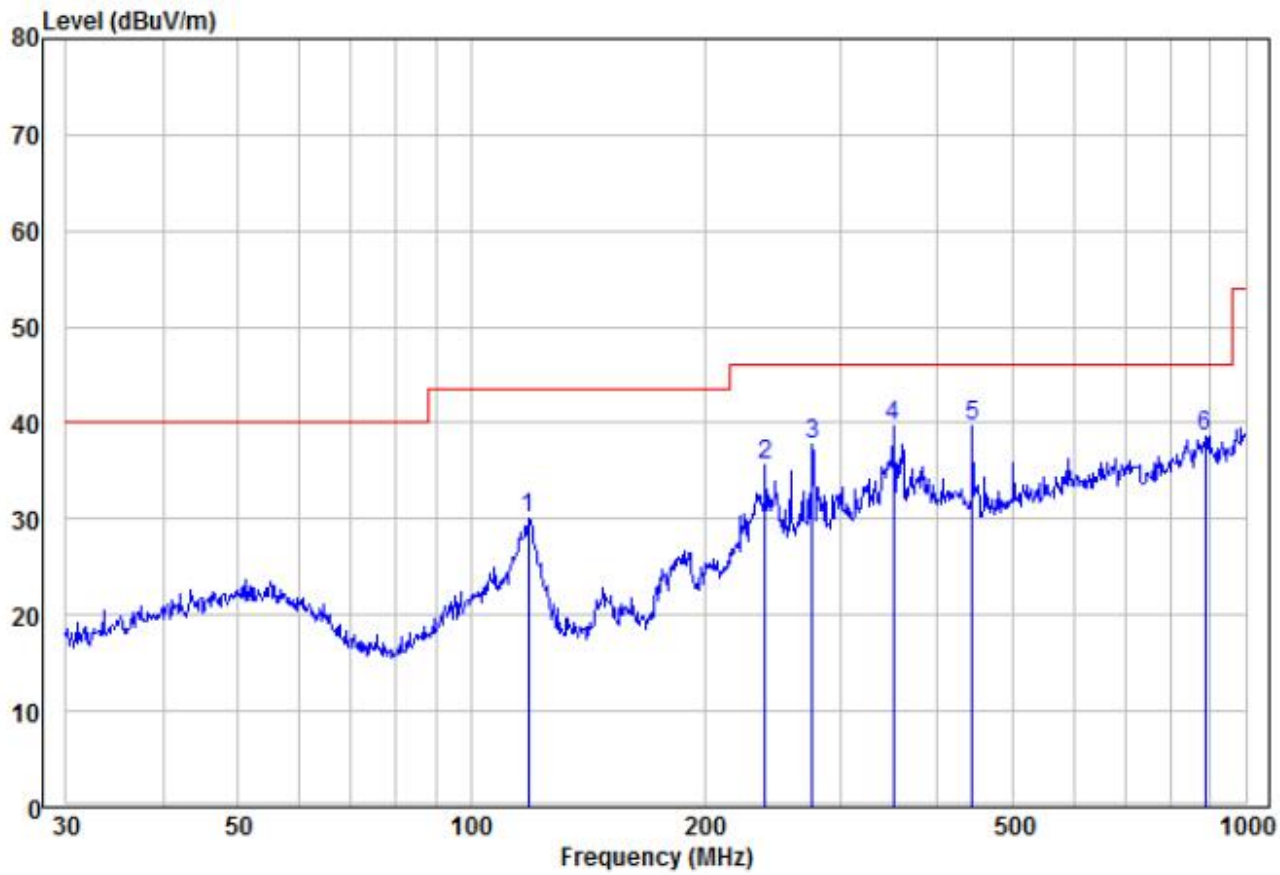
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	184.49	17.59	11.99	29.58	43.50	-13.92	Peak	HORIZONTAL	100	133
2	276.12	18.24	17.10	35.34	46.00	-10.66	Peak	HORIZONTAL	100	171
3	297.22	20.03	17.69	37.72	46.00	-8.28	Peak	HORIZONTAL	100	209
4	313.28	18.37	18.10	36.47	46.00	-9.53	Peak	HORIZONTAL	100	241
5	369.40	13.96	19.46	33.42	46.00	-12.58	Peak	HORIZONTAL	100	279
6 pp	893.86	10.25	29.71	39.96	46.00	-6.04	Peak	HORIZONTAL	100	316

30MHz~1GHz		
Test mode:	Transmitting (802.11a 100CH)	Vertical



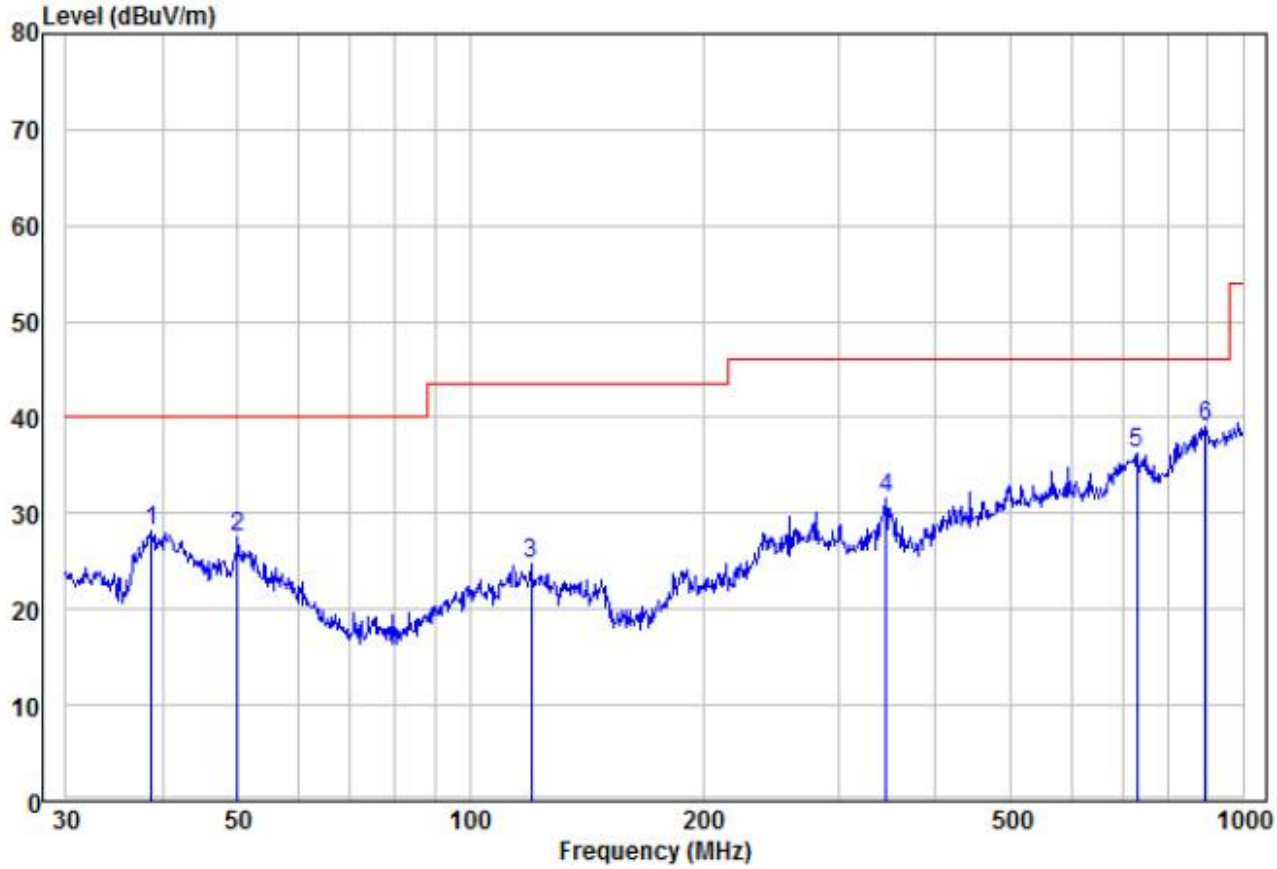
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	30.00	18.48	8.51	26.99	40.00	-13.01	Peak	VERTICAL	100	159
2	50.06	14.85	13.77	28.62	40.00	-11.38	Peak	VERTICAL	100	284
3	116.54	13.15	11.74	24.89	43.50	-18.61	Peak	VERTICAL	100	120
4	345.60	14.69	18.89	33.58	46.00	-12.42	Peak	VERTICAL	100	165
5 pp	881.41	10.37	29.52	39.89	46.00	-6.11	Peak	VERTICAL	100	163
6	986.07	11.39	29.06	40.45	54.00	-13.55	Peak	VERTICAL	100	135

Test mode:	Transmitting (802.11a 100CH)	Horizontal



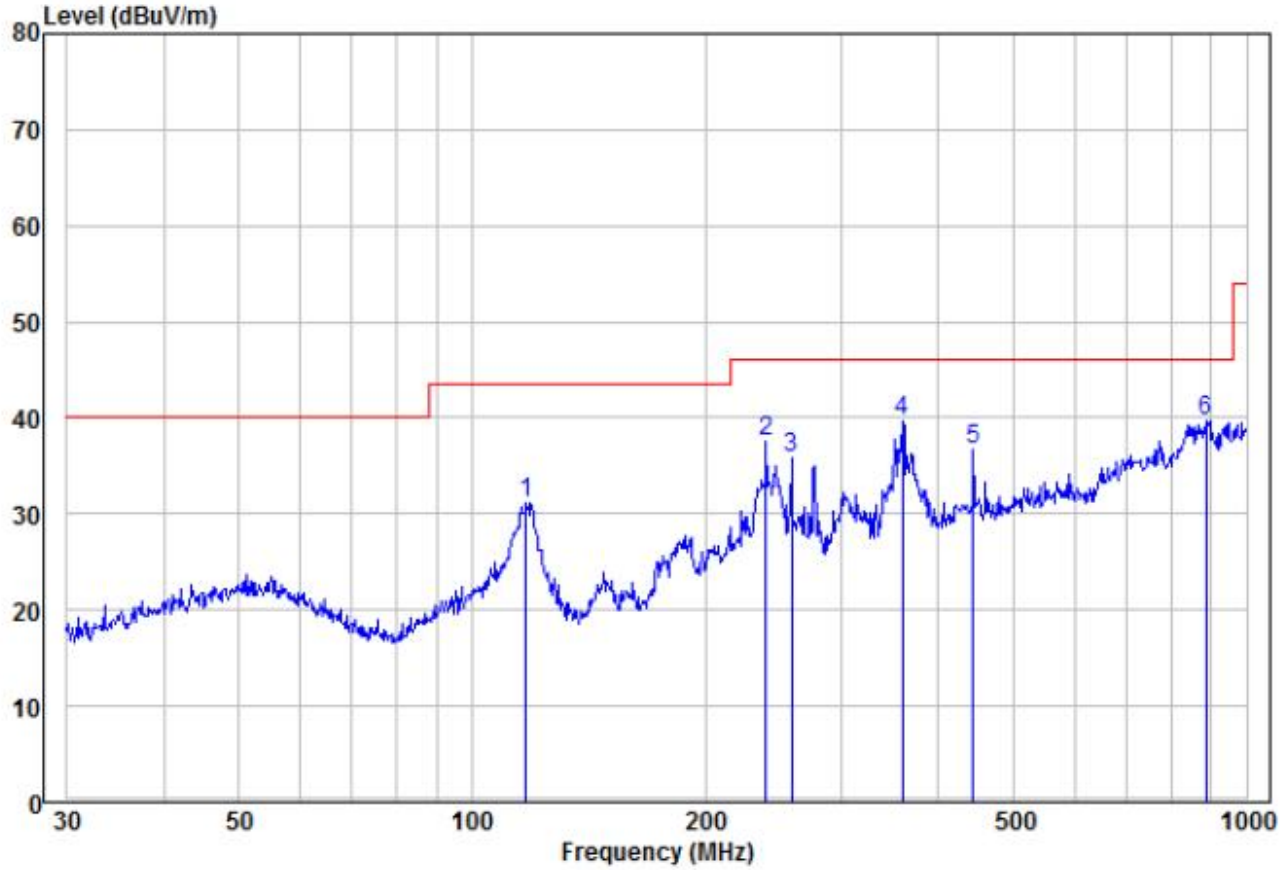
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	118.60	18.74	11.43	30.17	43.50	-13.33	Peak	HORIZONTAL	100	344
2	239.99	19.65	15.90	35.55	46.00	-10.45	Peak	HORIZONTAL	100	360
3	276.12	20.66	17.10	37.76	46.00	-8.24	Peak	HORIZONTAL	100	250
4 pp	350.48	20.67	19.00	39.67	46.00	-6.33	Peak	HORIZONTAL	100	263
5	443.29	19.48	20.13	39.61	46.00	-6.39	Peak	HORIZONTAL	100	144
6	887.61	9.04	29.62	38.66	46.00	-7.34	Peak	HORIZONTAL	100	88

30MHz~1GHz		
Test mode:	Transmitting (802.11a 149CH)	Vertical



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	38.75	16.59	11.67	28.26	40.00	-11.74	Peak	VERTICAL	100	35
2	50.06	13.85	13.77	27.62	40.00	-12.38	Peak	VERTICAL	100	124
3	119.86	13.40	11.24	24.64	43.50	-18.86	Peak	VERTICAL	100	142
4	345.60	12.69	18.89	31.58	46.00	-14.42	Peak	VERTICAL	100	318
5	729.36	11.55	24.70	36.25	46.00	-9.75	Peak	VERTICAL	100	202
6 pp	893.86	9.38	29.71	39.09	46.00	-6.91	Peak	VERTICAL	100	78

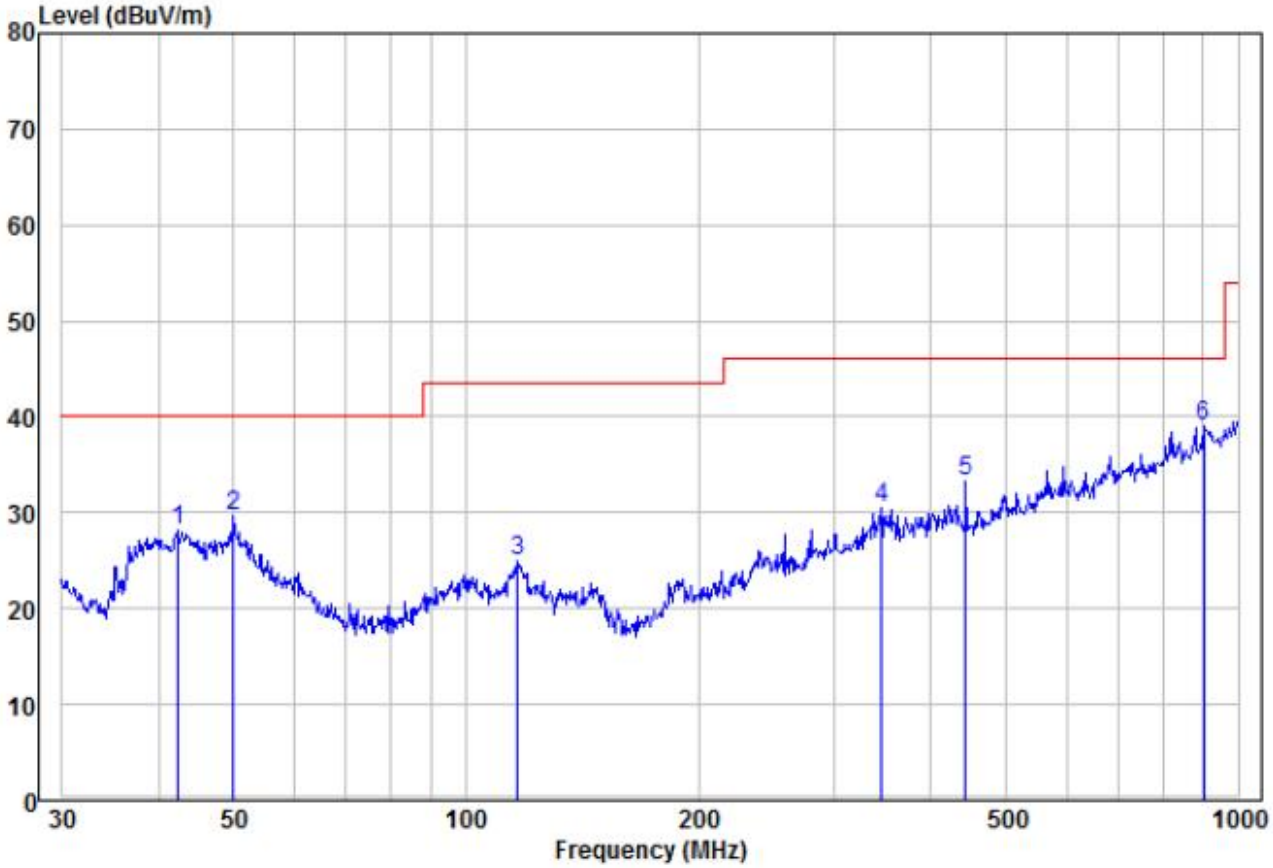
Test mode:	Transmitting (802.11a 149CH)	Horizontal



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1		117.36	19.63	11.62	31.25	43.50	-12.25	Peak	HORIZONTAL	100	33
2		239.99	21.65	15.90	37.55	46.00	-8.45	Peak	HORIZONTAL	100	245
3		258.33	19.28	16.60	35.88	46.00	-10.12	Peak	HORIZONTAL	100	200
4	pp	359.19	20.56	19.21	39.77	46.00	-6.23	Peak	HORIZONTAL	100	136
5		443.29	16.48	20.13	36.61	46.00	-9.39	Peak	HORIZONTAL	100	22
6		887.61	10.04	29.62	39.66	46.00	-6.34	Peak	HORIZONTAL	100	36

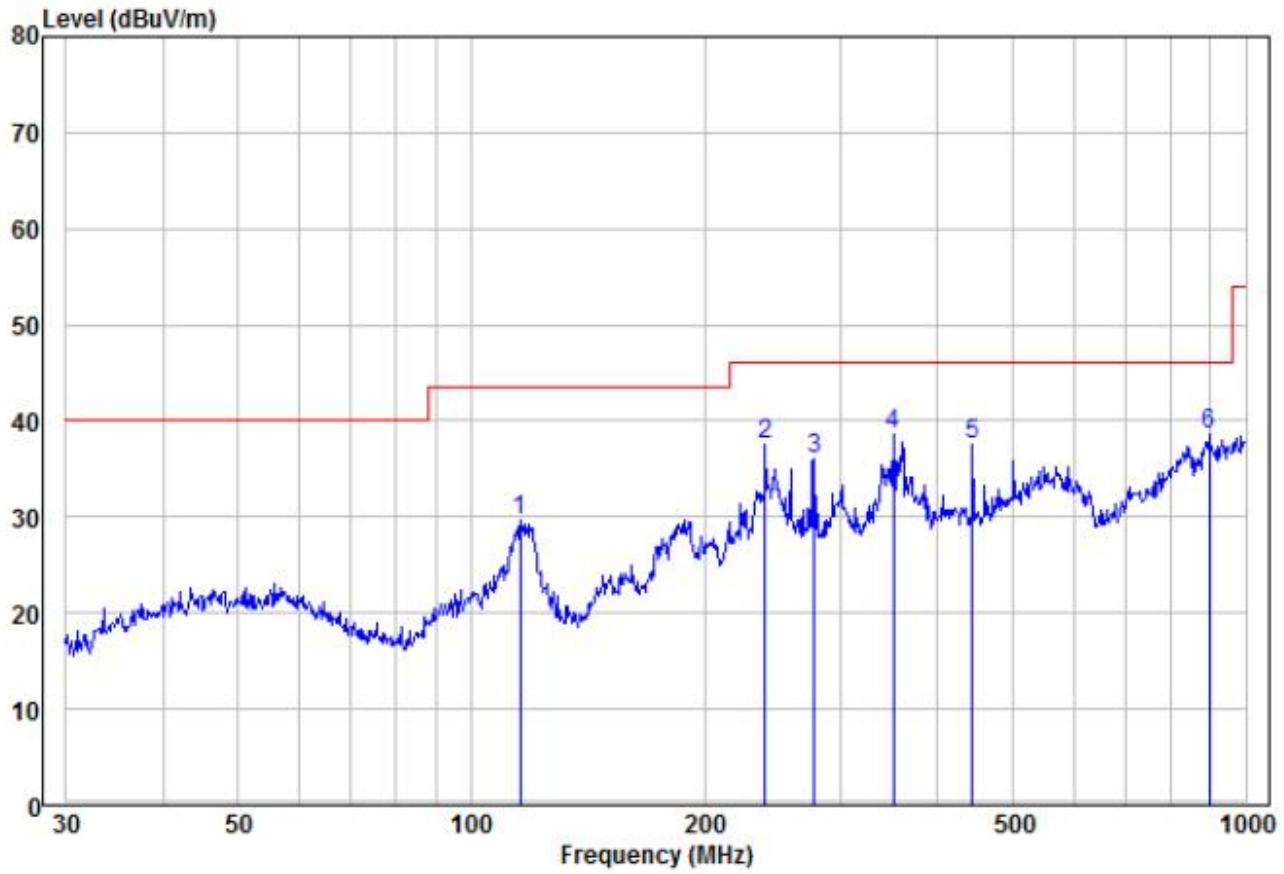
D210(XSE-1202000NUS):

30MHz~1GHz		
Test mode:	Transmitting (802.11a 36CH)	Vertical



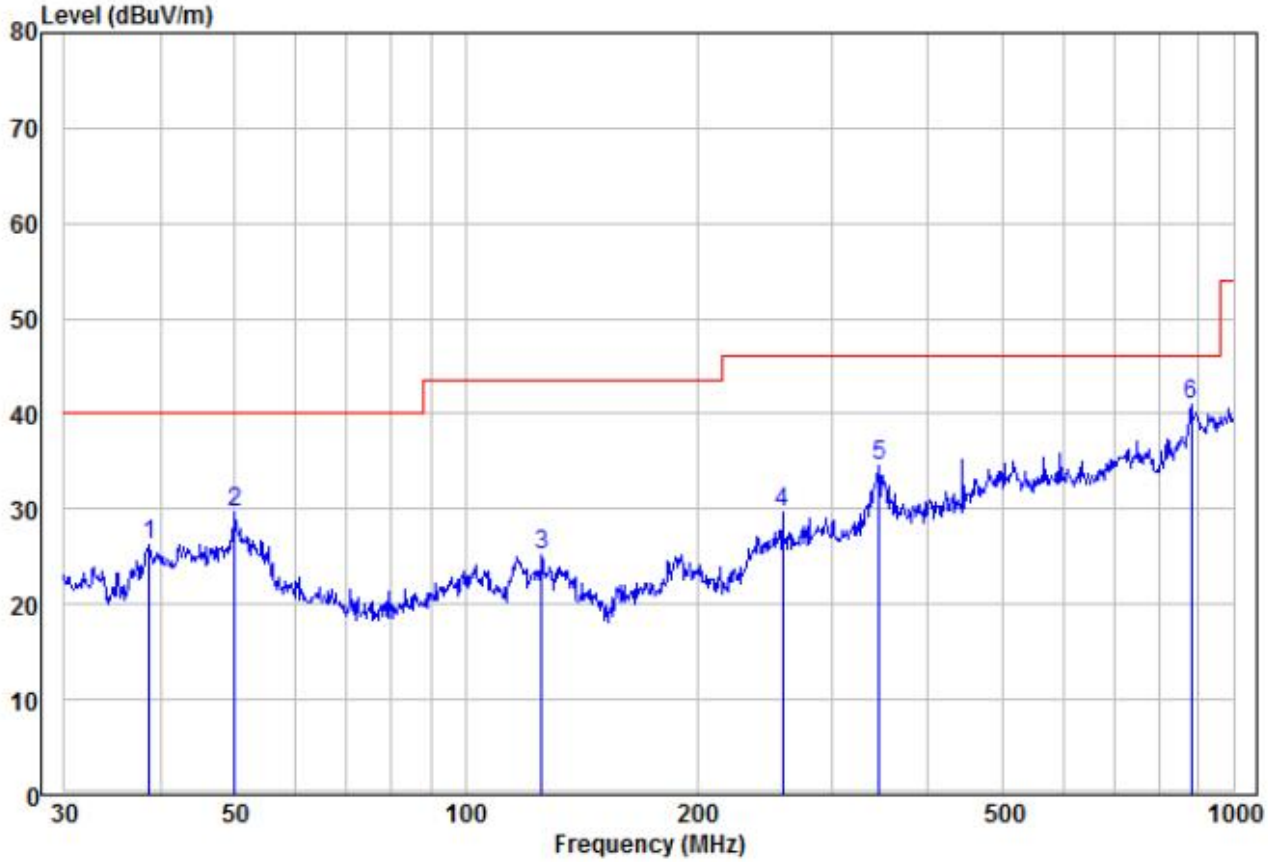
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	42.45	15.66	12.47	28.13	40.00	-11.87	Peak	VERTICAL	100	99
2	50.06	15.85	13.77	29.62	40.00	-10.38	Peak	VERTICAL	100	136
3	116.54	13.15	11.74	24.89	43.50	-18.61	Peak	VERTICAL	100	314
4	345.60	11.69	18.89	30.58	46.00	-15.42	Peak	VERTICAL	100	343
5	443.29	13.05	20.13	33.18	46.00	-12.82	Peak	VERTICAL	100	303
6 pp	903.31	10.08	28.99	39.07	46.00	-6.93	Peak	VERTICAL	100	125

Test mode:	Transmitting (802.11a 36CH)	Horizontal



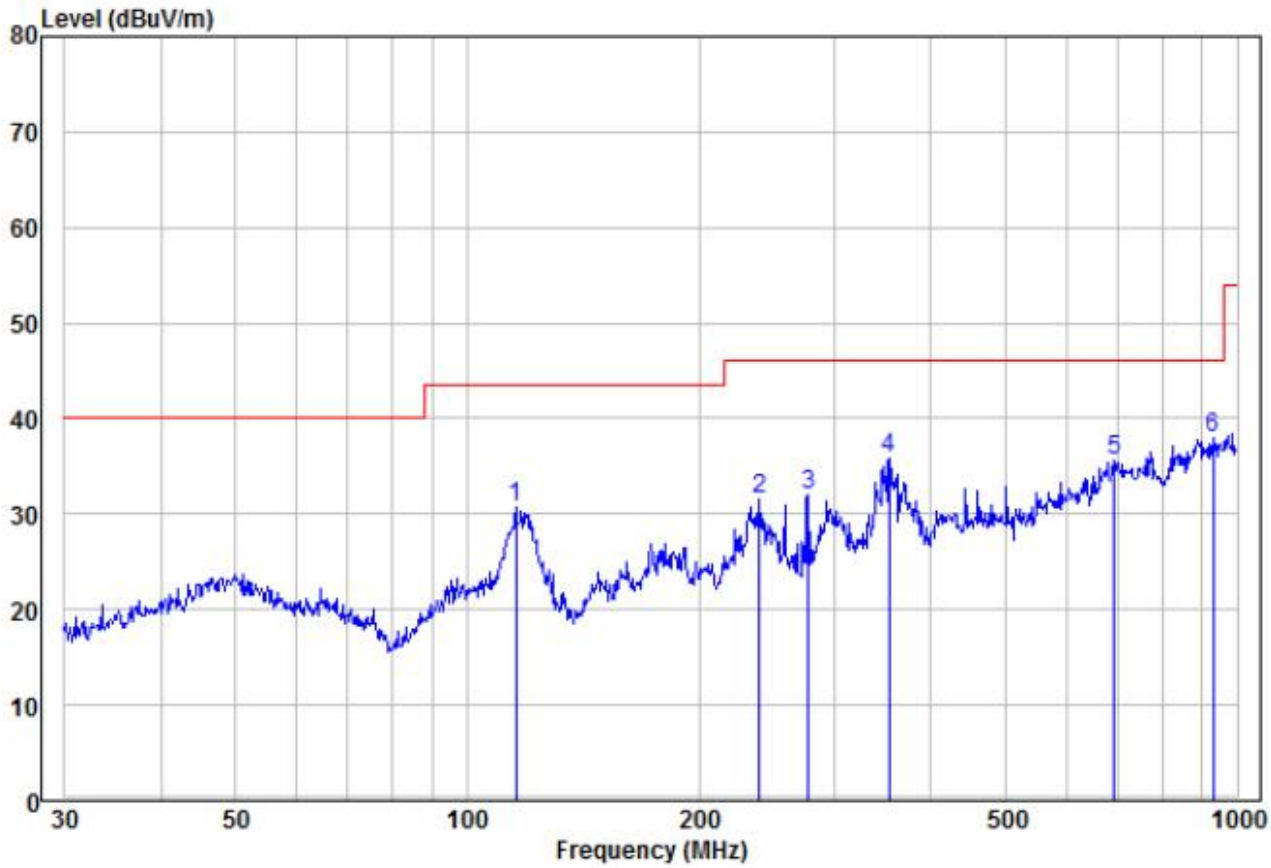
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1		115.73	17.76	11.87	29.63	43.50	-13.87	Peak	HORIZONTAL	100	203
2		239.99	21.65	15.90	37.55	46.00	-8.45	Peak	HORIZONTAL	100	209
3		277.09	18.83	17.13	35.96	46.00	-10.04	Peak	HORIZONTAL	100	91
4	pp	350.48	19.67	19.00	38.67	46.00	-7.33	Peak	HORIZONTAL	100	130
5		443.29	17.48	20.13	37.61	46.00	-8.39	Peak	HORIZONTAL	100	165
6		897.00	9.09	29.56	38.65	46.00	-7.35	Peak	HORIZONTAL	100	202

30MHz~1GHz		
Test mode:	Transmitting (802.11a 52CH)	Vertical



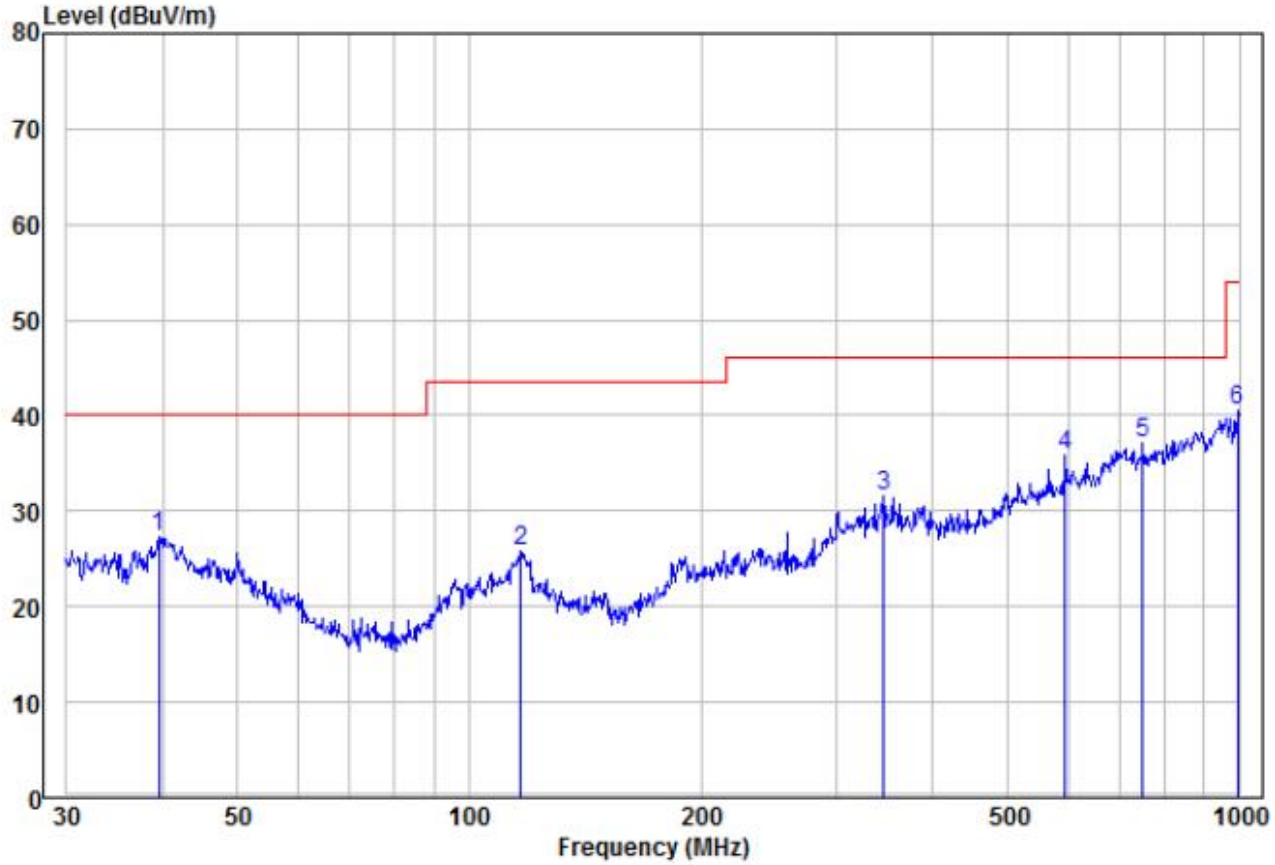
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	38.75	14.59	11.67	26.26	40.00	-13.74	Peak	VERTICAL	100	113
2	50.06	15.85	13.77	29.62	40.00	-10.38	Peak	VERTICAL	100	63
3	125.45	14.70	10.54	25.24	43.50	-18.26	Peak	VERTICAL	100	150
4	258.33	13.14	16.60	29.74	46.00	-16.26	Peak	VERTICAL	100	193
5	345.60	15.69	18.89	34.58	46.00	-11.42	Peak	VERTICAL	100	227
6 pp	881.41	11.37	29.52	40.89	46.00	-5.11	Peak	VERTICAL	100	262

Test mode:	Transmitting (802.11a 52CH)	Horizontal



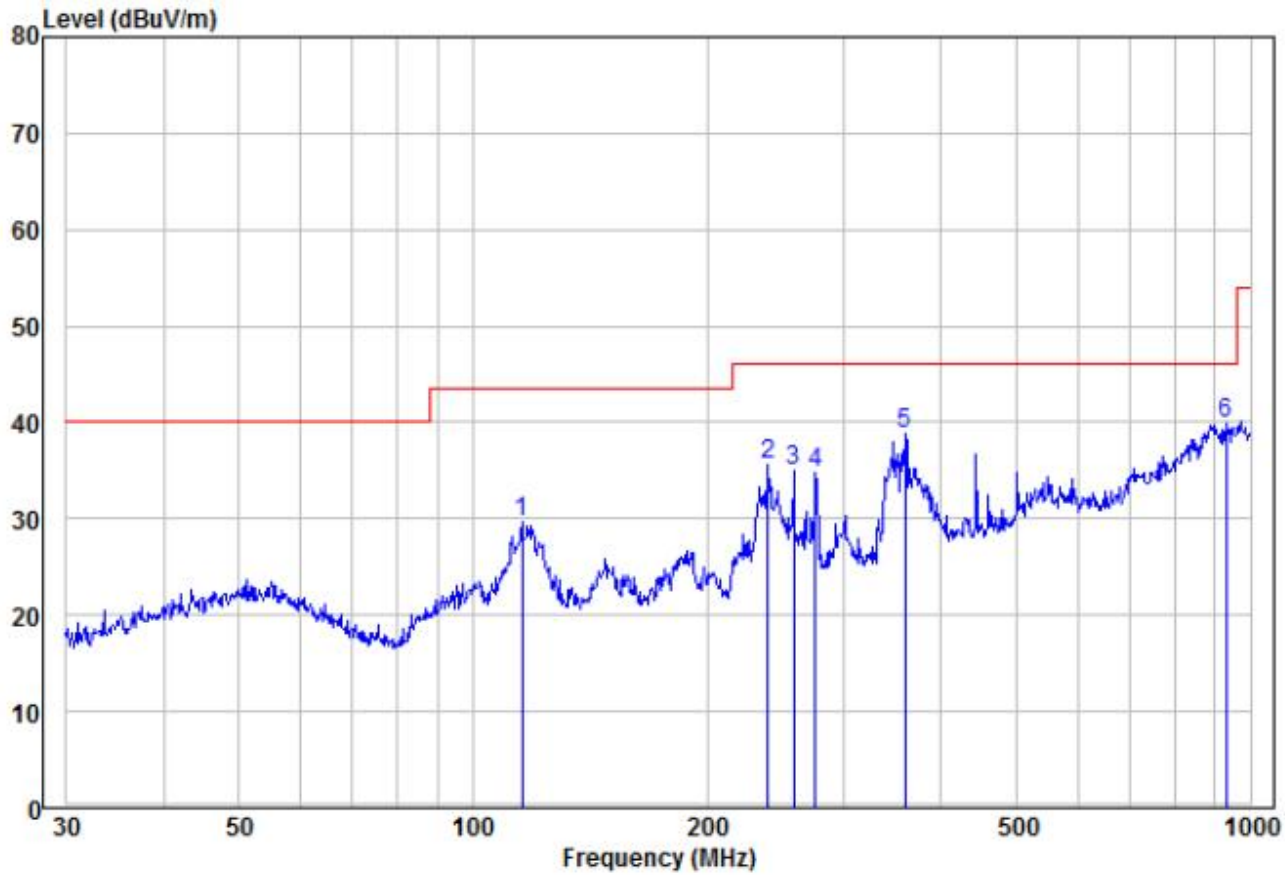
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	115.73	18.76	11.87	30.63	43.50	-12.87	Peak	HORIZONTAL	100	253
2	239.99	15.65	15.90	31.55	46.00	-14.45	Peak	HORIZONTAL	100	125
3	277.09	14.83	17.13	31.96	46.00	-14.04	Peak	HORIZONTAL	100	44
4	352.94	16.72	19.06	35.78	46.00	-10.22	Peak	HORIZONTAL	100	36
5	691.99	11.28	24.28	35.56	46.00	-10.44	Peak	HORIZONTAL	100	105
6 pp	932.27	9.33	28.55	37.88	46.00	-8.12	Peak	HORIZONTAL	100	230

30MHz~1GHz		
Test mode:	Transmitting (802.11a 100CH)	Vertical



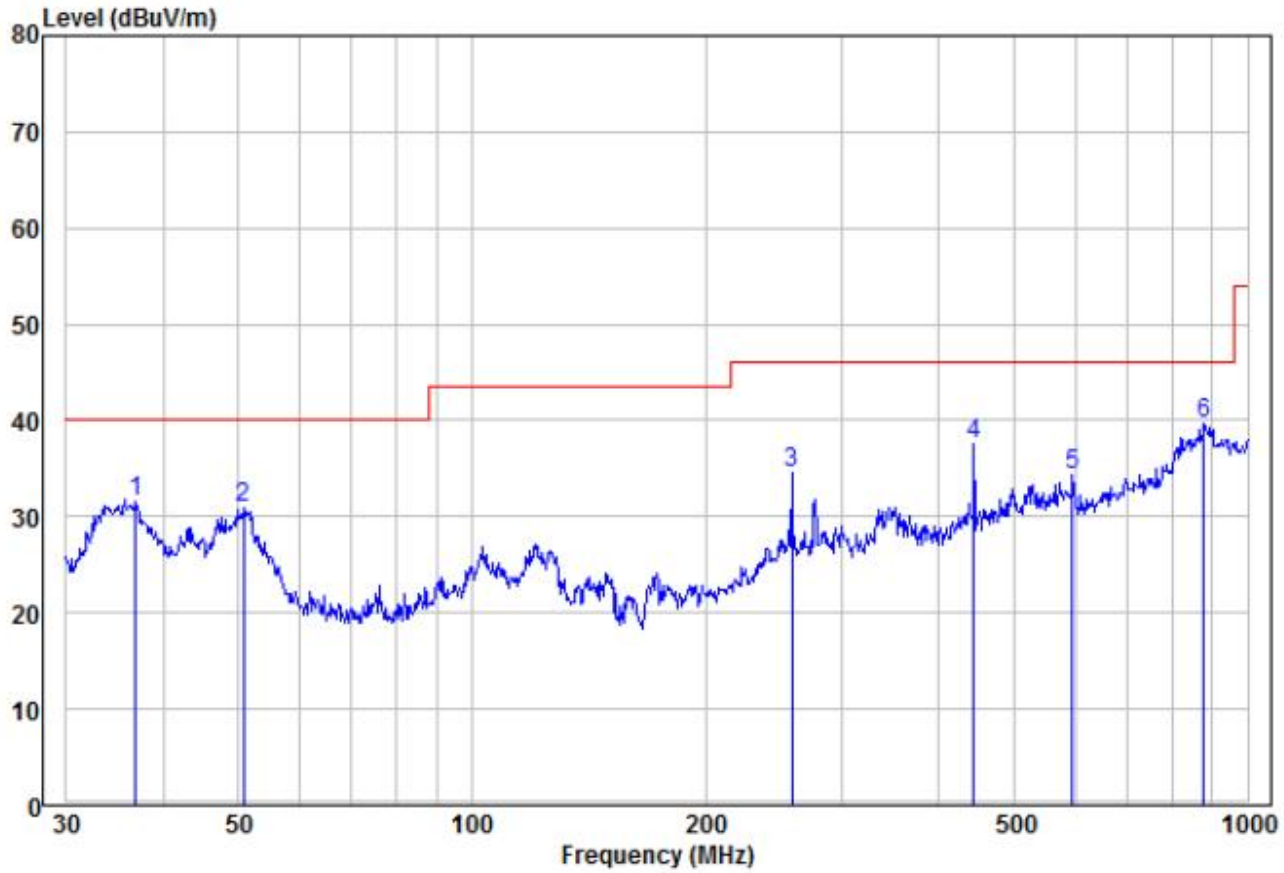
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	39.58	15.39	11.92	27.31	40.00	-12.69	Peak	VERTICAL	100	309
2	116.54	14.15	11.74	25.89	43.50	-17.61	Peak	VERTICAL	100	225
3	345.60	12.69	18.89	31.58	46.00	-14.42	Peak	VERTICAL	100	25
4	595.13	13.05	22.70	35.75	46.00	-10.25	Peak	VERTICAL	100	125
5 pp	750.11	11.69	25.45	37.14	46.00	-8.86	Peak	VERTICAL	100	205
6	996.50	11.28	29.16	40.44	54.00	-13.56	Peak	VERTICAL	100	2

Test mode:	Transmitting (802.11a 100CH)	Horizontal



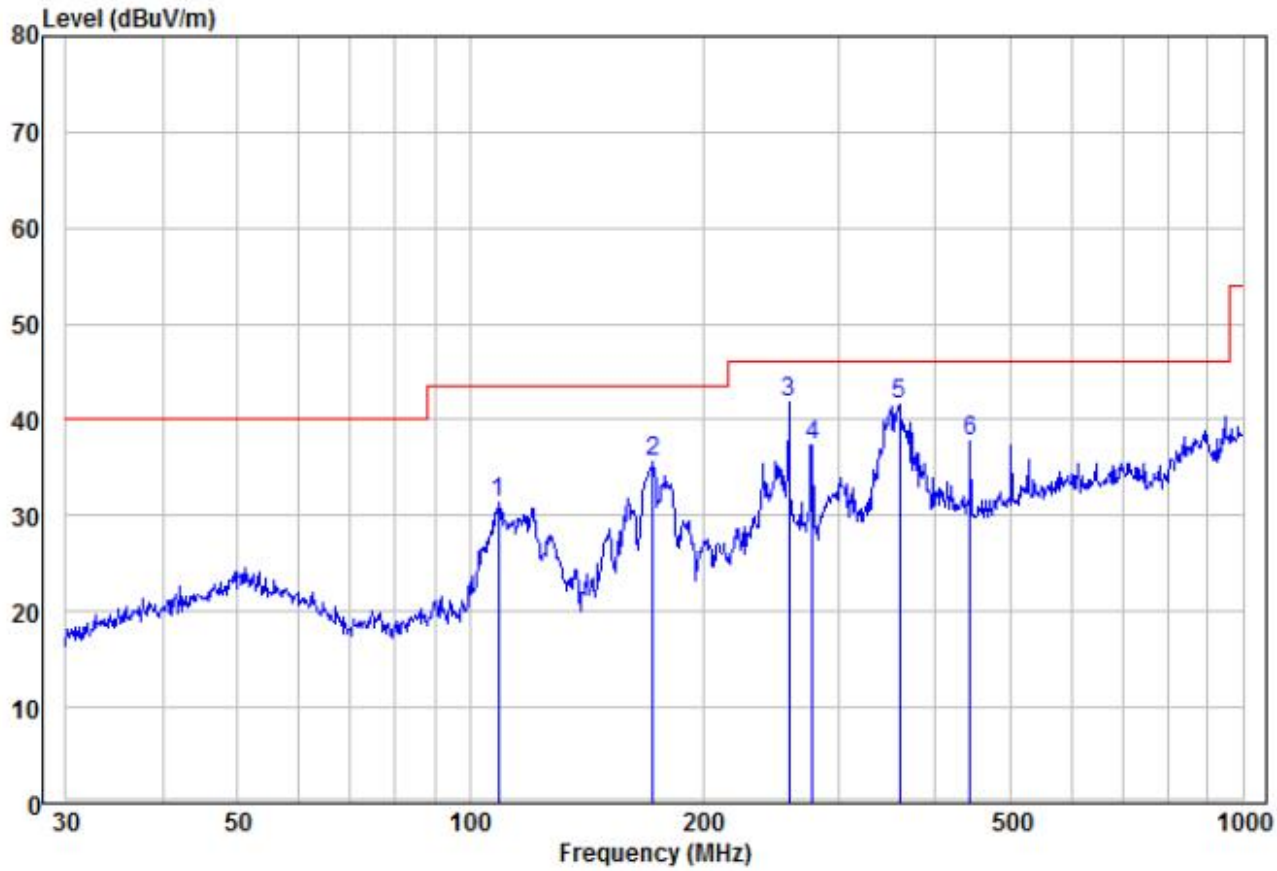
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	115.73	17.76	11.87	29.63	43.50	-13.87	Peak	HORIZONTAL	100	205
2	239.99	19.65	15.90	35.55	46.00	-10.45	Peak	HORIZONTAL	100	148
3	258.33	18.28	16.60	34.88	46.00	-11.12	Peak	HORIZONTAL	100	156
4	276.12	17.66	17.10	34.76	46.00	-11.24	Peak	HORIZONTAL	100	101
5	359.19	19.56	19.21	38.77	46.00	-7.23	Peak	HORIZONTAL	100	54
6 pp	932.27	11.33	28.55	39.88	46.00	-6.12	Peak	HORIZONTAL	100	29

30MHz~1GHz		
Test mode:	Transmitting (802.11a 149CH)	Vertical



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	36.90	20.43	11.11	31.54	40.00	-8.46	Peak	VERTICAL	100	219
2	50.76	17.06	13.78	30.84	40.00	-9.16	Peak	VERTICAL	100	250
3	258.33	17.99	16.60	34.59	46.00	-11.41	Peak	VERTICAL	100	163
4	443.29	17.36	20.13	37.49	46.00	-8.51	Peak	VERTICAL	100	39
5	595.13	11.58	22.70	34.28	46.00	-11.72	Peak	VERTICAL	100	208
6 pp	878.32	10.19	29.48	39.67	46.00	-6.33	Peak	VERTICAL	100	312

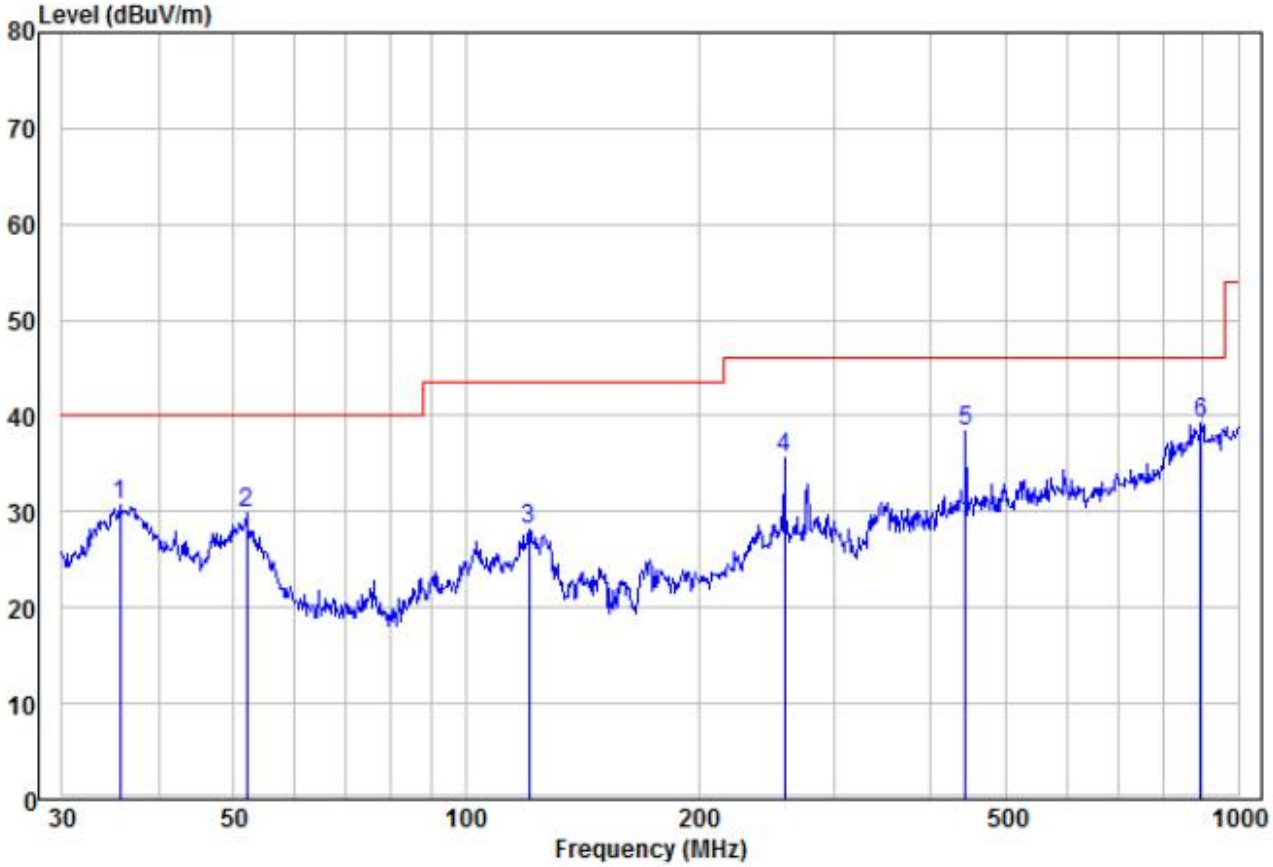
Test mode:	Transmitting (802.11a 149CH)	Horizontal



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1		108.65	18.54	12.78	31.32	43.50	-12.18	Peak	HORIZONTAL	100	55
2		172.60	24.70	10.87	35.57	43.50	-7.93	Peak	HORIZONTAL	100	20
3	pp	258.33	25.18	16.60	41.78	46.00	-4.22	Peak	HORIZONTAL	100	56
4		277.09	20.13	17.13	37.26	46.00	-8.74	Peak	HORIZONTAL	100	88
5		359.19	22.35	19.21	41.56	46.00	-4.44	Peak	HORIZONTAL	100	145
6		443.29	17.68	20.13	37.81	46.00	-8.19	Peak	HORIZONTAL	100	136

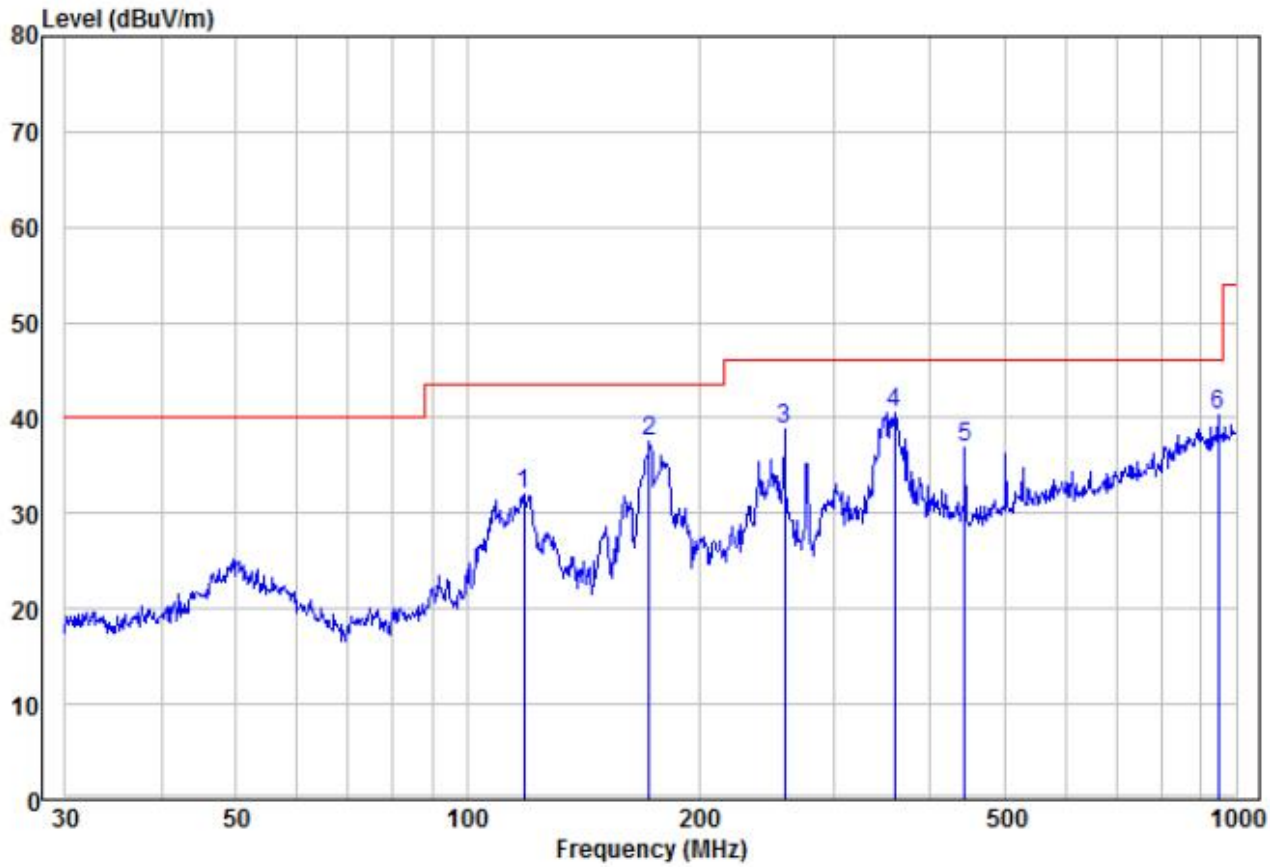
D210(GQ24-120200-CU):

30MHz~1GHz		
Test mode:	Transmitting (802.11a 36CH)	Vertical



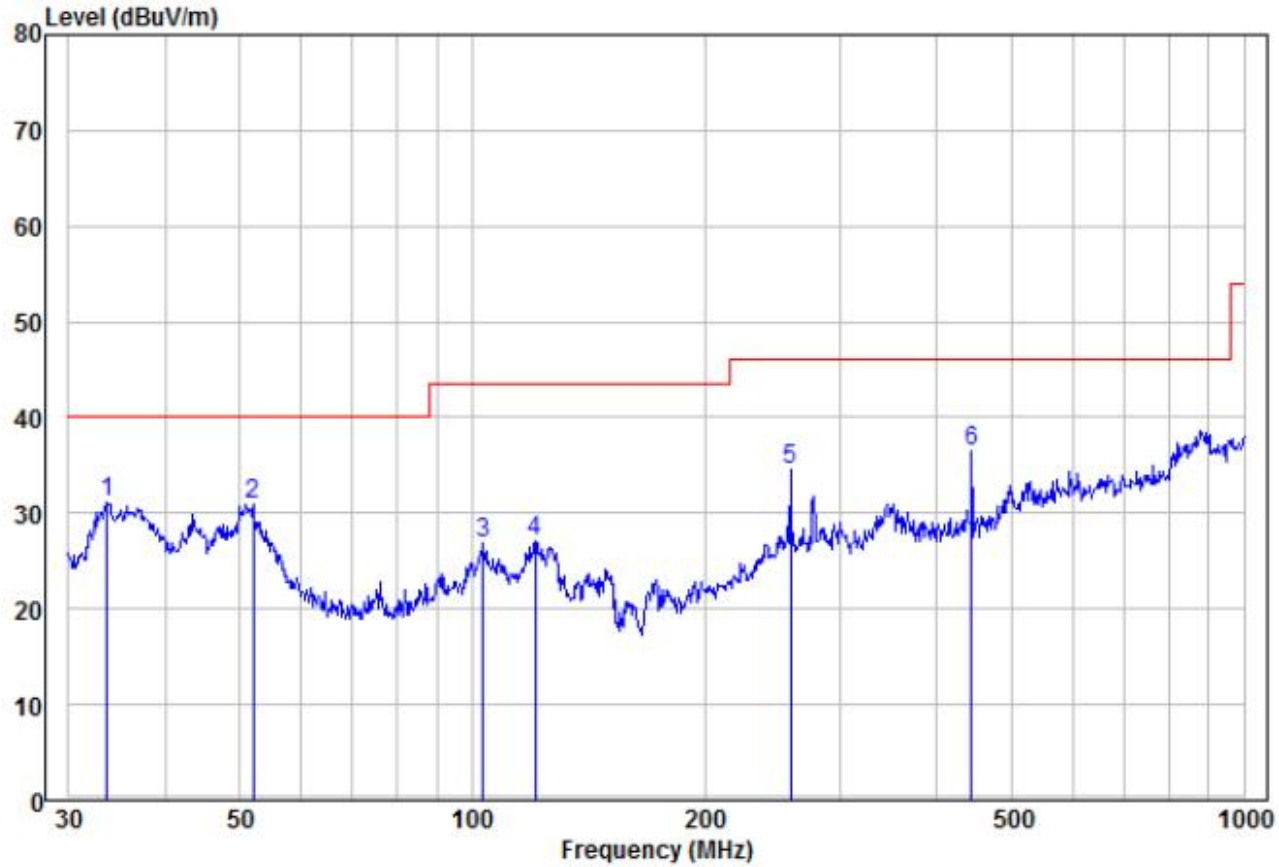
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	35.62	19.99	10.71	30.70	40.00	-9.30	Peak	VERTICAL	100	145
2	52.03	16.11	13.79	29.90	40.00	-10.10	Peak	VERTICAL	100	135
3	120.70	17.00	11.13	28.13	43.50	-15.37	Peak	VERTICAL	100	15
4	258.33	18.99	16.60	35.59	46.00	-10.41	Peak	VERTICAL	100	21
5	443.29	18.36	20.13	38.49	46.00	-7.51	Peak	VERTICAL	100	332
6 pp	893.86	9.60	29.71	39.31	46.00	-6.69	Peak	VERTICAL	100	360

Test mode:	Transmitting (802.11a 36CH)	Horizontal



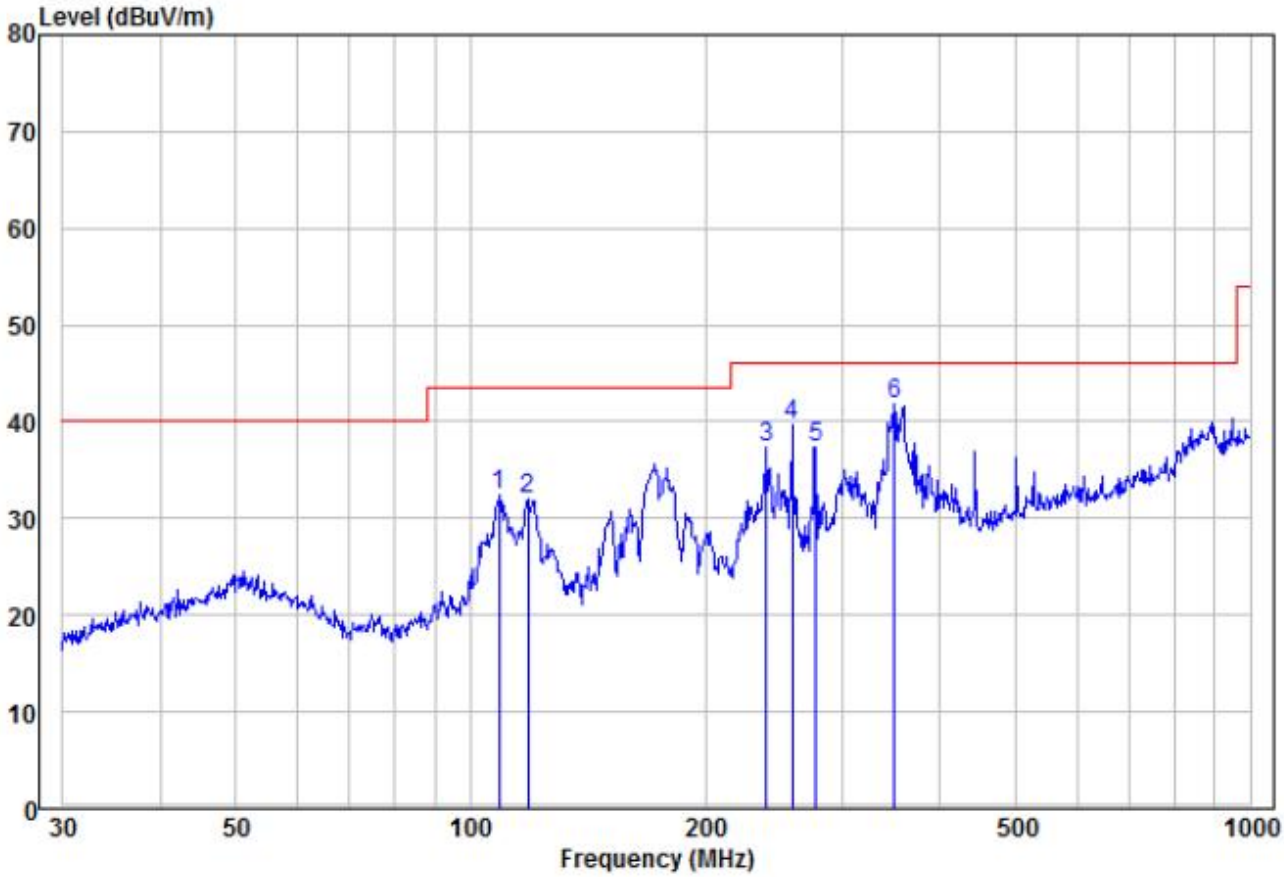
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	118.60	20.50	11.43	31.93	43.50	-11.57	Peak	HORIZONTAL	100	40
2	172.60	26.70	10.87	37.57	43.50	-5.93	Peak	HORIZONTAL	100	244
3	258.33	22.18	16.60	38.78	46.00	-7.22	Peak	HORIZONTAL	100	135
4 pp	359.19	21.35	19.21	40.56	46.00	-5.44	Peak	HORIZONTAL	100	185
5	443.29	16.68	20.13	36.81	46.00	-9.19	Peak	HORIZONTAL	100	18
6	948.76	11.56	28.68	40.24	46.00	-5.76	Peak	HORIZONTAL	100	0

30MHz~1GHz		
Test mode:	Transmitting (802.11a 52CH)	Vertical



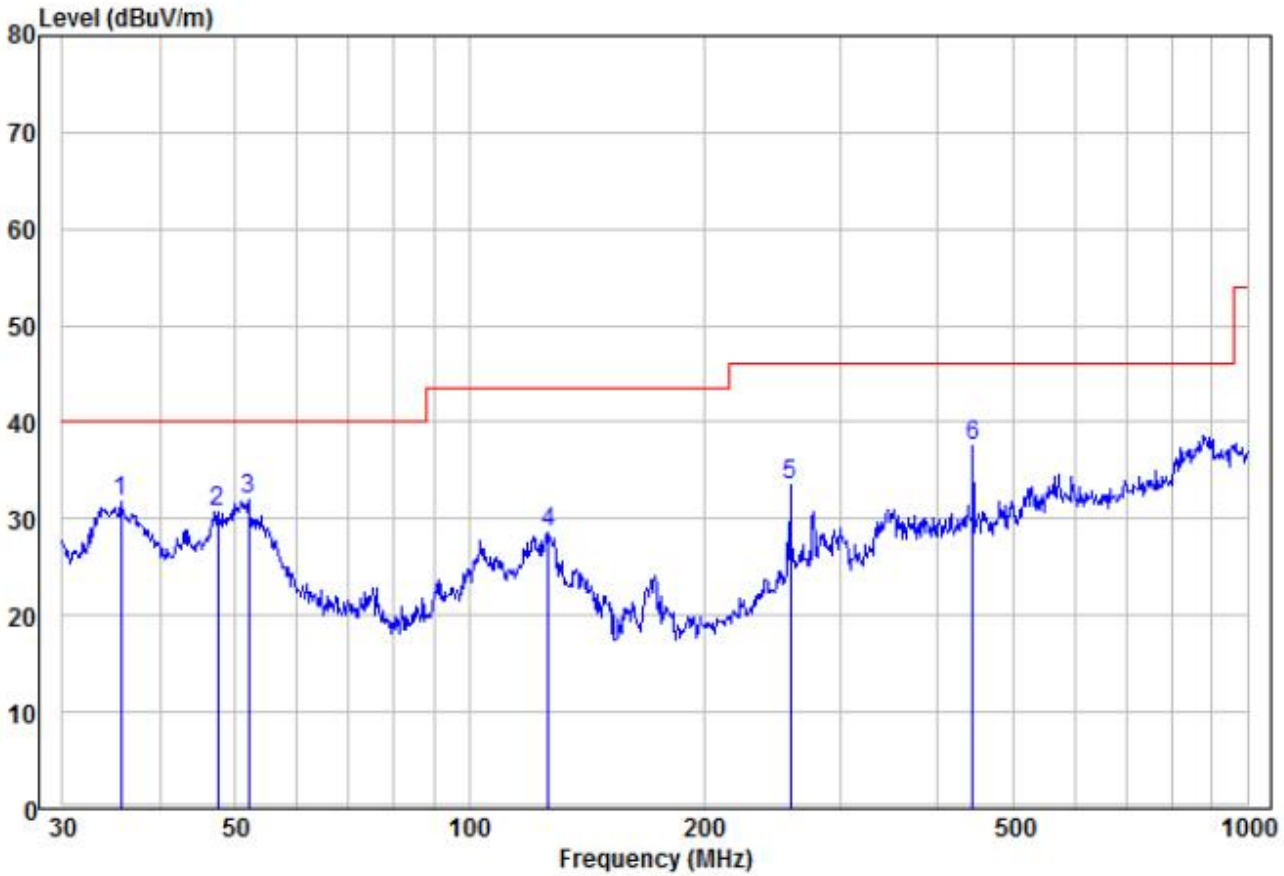
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1 pp	33.68	21.05	10.00	31.05	40.00	-8.95	Peak	VERTICAL	100	32
2	52.03	17.11	13.79	30.90	40.00	-9.10	Peak	VERTICAL	100	99
3	103.44	13.88	12.90	26.78	43.50	-16.72	Peak	VERTICAL	100	84
4	120.70	16.00	11.13	27.13	43.50	-16.37	Peak	VERTICAL	100	26
5	258.33	17.99	16.60	34.59	46.00	-11.41	Peak	VERTICAL	100	208
6	443.29	16.36	20.13	36.49	46.00	-9.51	Peak	VERTICAL	100	271

Test mode:	Transmitting (802.11a 52CH)	Horizontal



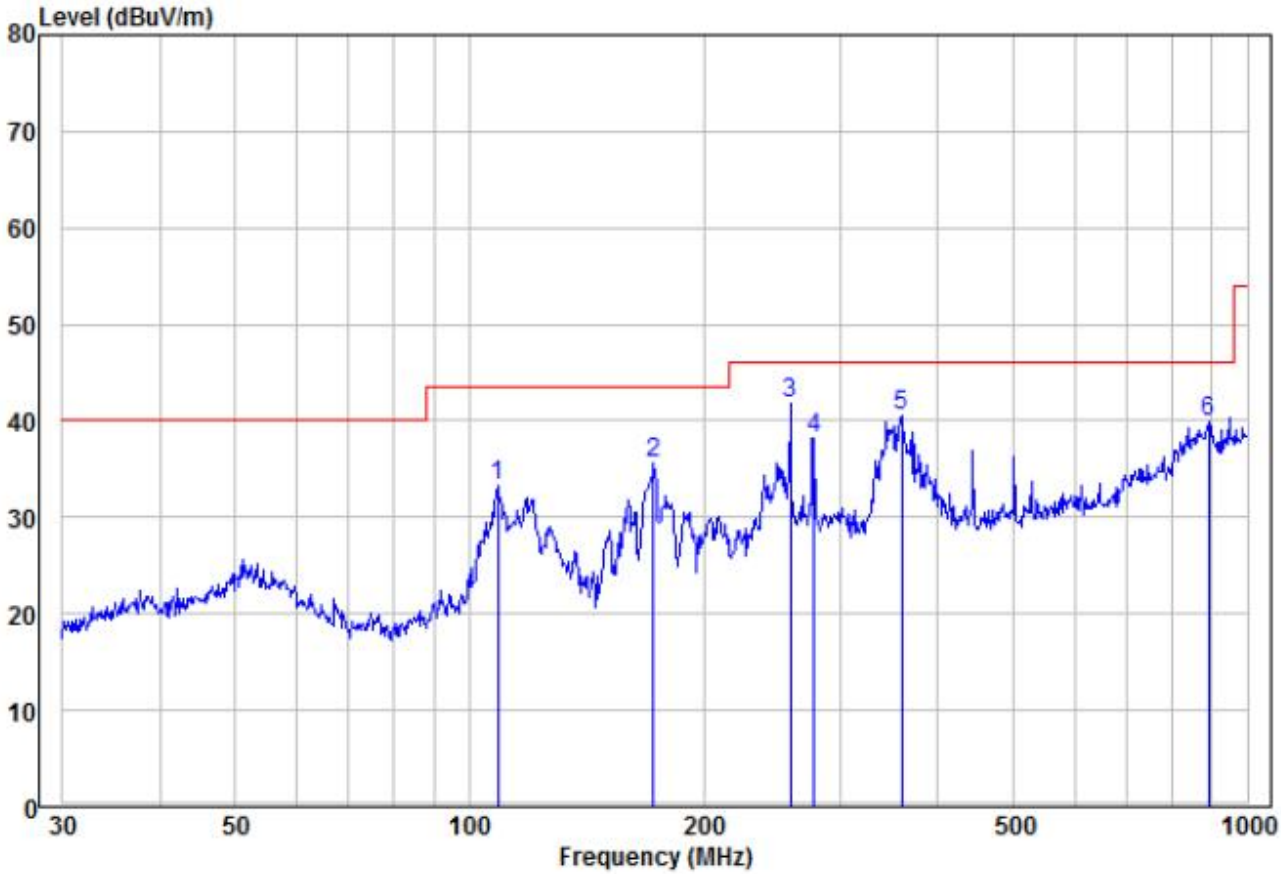
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	108.65	19.54	12.78	32.32	43.50	-11.18	Peak	HORIZONTAL	100	9
2	118.60	20.50	11.43	31.93	43.50	-11.57	Peak	HORIZONTAL	100	22
3	239.99	21.52	15.90	37.42	46.00	-8.58	Peak	HORIZONTAL	100	74
4	258.33	23.18	16.60	39.78	46.00	-6.22	Peak	HORIZONTAL	100	108
5	277.09	20.13	17.13	37.26	46.00	-8.74	Peak	HORIZONTAL	100	155
6 pp	349.25	22.83	18.97	41.80	46.00	-4.20	Peak	HORIZONTAL	100	219

30MHz~1GHz		
Test mode:	Transmitting (802.11a 100CH)	Vertical



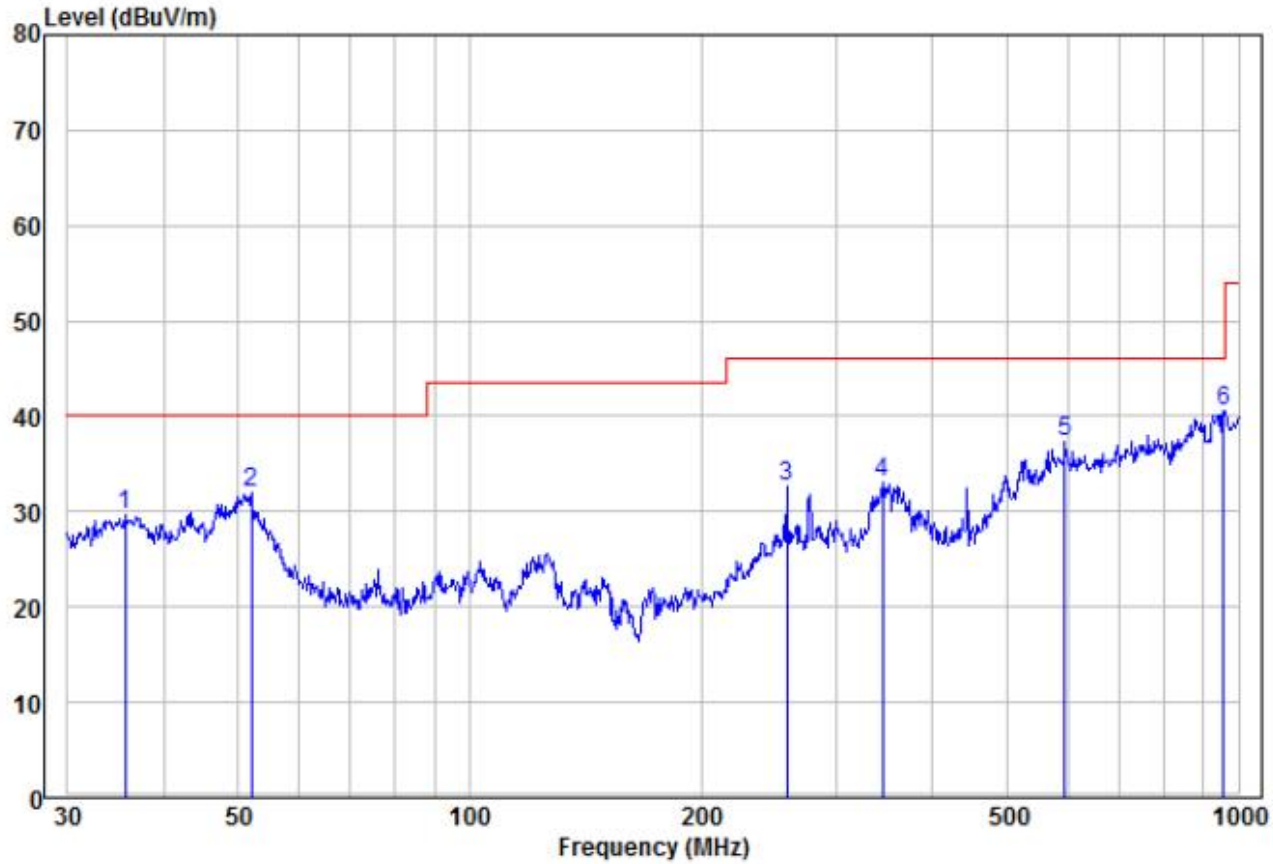
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	35.62	20.99	10.71	31.70	40.00	-8.30	Peak	VERTICAL	100	27
2	47.49	17.47	13.33	30.80	40.00	-9.20	Peak	VERTICAL	100	304
3 pp	52.03	18.11	13.79	31.90	40.00	-8.10	Peak	VERTICAL	100	10
4	126.33	18.06	10.44	28.50	43.50	-15.00	Peak	VERTICAL	100	16
5	258.33	16.99	16.60	33.59	46.00	-12.41	Peak	VERTICAL	100	56
6	443.29	17.36	20.13	37.49	46.00	-8.51	Peak	VERTICAL	100	15

Test mode:	Transmitting (802.11a 100CH)	Horizontal



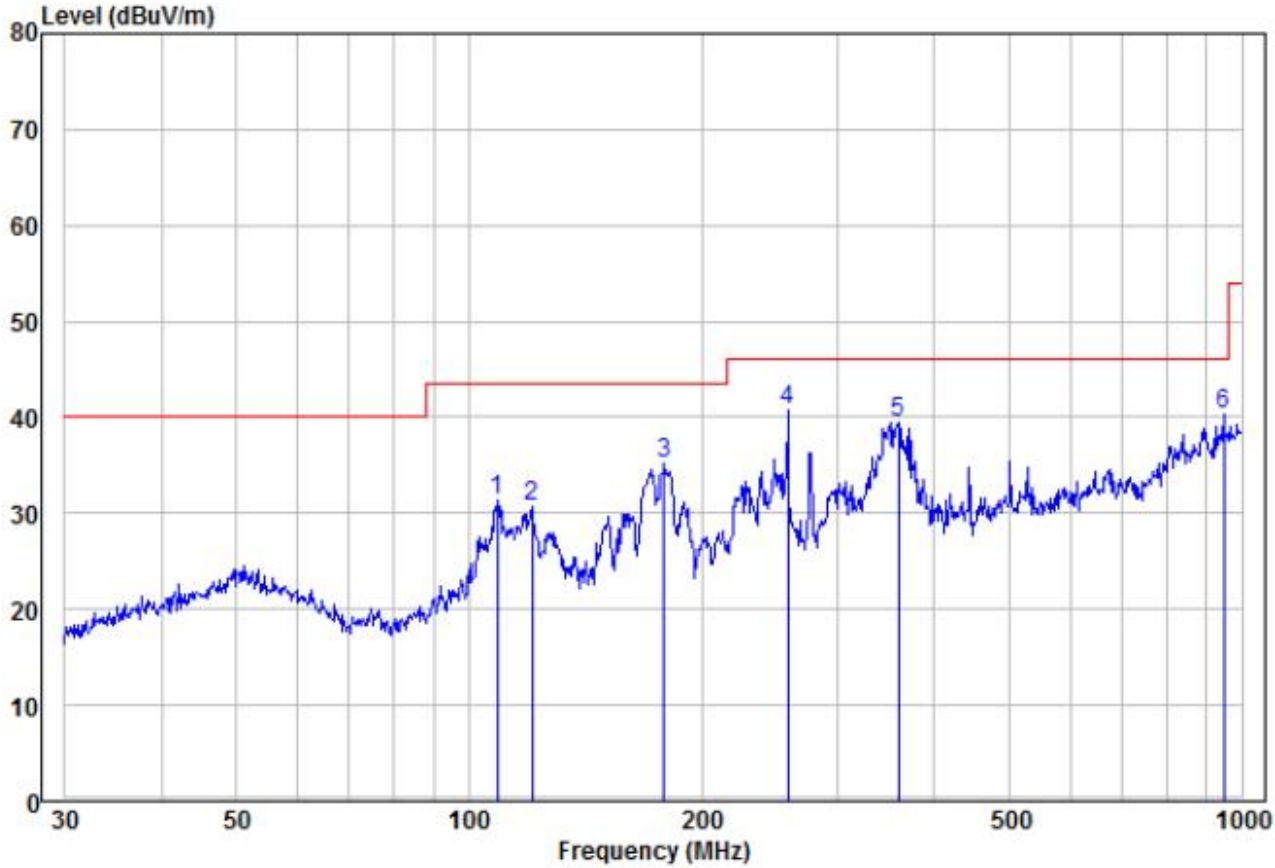
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	108.65	20.54	12.78	33.32	43.50	-10.18	Peak	HORIZONTAL	100	153
2	172.60	24.70	10.87	35.57	43.50	-7.93	Peak	HORIZONTAL	100	246
3 pp	258.33	25.18	16.60	41.78	46.00	-4.22	Peak	HORIZONTAL	100	52
4	277.09	21.13	17.13	38.26	46.00	-7.74	Peak	HORIZONTAL	100	77
5	359.19	21.35	19.21	40.56	46.00	-5.44	Peak	HORIZONTAL	100	195
6	890.73	10.26	29.67	39.93	46.00	-6.07	Peak	HORIZONTAL	100	0

30MHz~1GHz		
Test mode:	Transmitting (802.11a 149CH)	Vertical



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	35.62	18.99	10.71	29.70	40.00	-10.30	Peak	VERTICAL	100	122
2	52.03	18.11	13.79	31.90	40.00	-8.10	Peak	VERTICAL	100	305
3	258.33	15.99	16.60	32.59	46.00	-13.41	Peak	VERTICAL	100	48
4	344.39	14.16	18.85	33.01	46.00	-12.99	Peak	VERTICAL	100	14
5	595.13	14.58	22.70	37.28	46.00	-8.72	Peak	VERTICAL	100	32
6 pp	955.44	11.84	28.74	40.58	46.00	-5.42	Peak	VERTICAL	100	46

Test mode:	Transmitting (802.11a 149CH)	Horizontal



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase	APos	TPos
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			cm	deg
1	108.65	18.54	12.78	31.32	43.50	-12.18	Peak	HORIZONTAL	100	14
2	120.70	19.62	11.13	30.75	43.50	-12.75	Peak	HORIZONTAL	100	280
3	178.76	23.85	11.27	35.12	43.50	-8.38	Peak	HORIZONTAL	100	293
4 pp	258.33	24.18	16.60	40.78	46.00	-5.22	Peak	HORIZONTAL	100	191
5	359.19	20.35	19.21	39.56	46.00	-6.44	Peak	HORIZONTAL	100	85
6	948.76	11.56	28.68	40.24	46.00	-5.76	Peak	HORIZONTAL	100	20

Transmitter Emission above 1GHz

Test mode:	802.11a(6Mbps)			Test channel:		36 CH			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detect or Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
10360	53.26	2.26	55.52	74	-18.48	peak	H	1.5	244
10360	37.38	2.26	39.64	54	-14.36	AVG	H	1.5	172
15540	50.90	3.75	54.65	74	-19.35	peak	H	1.5	23
15540	38.94	3.75	42.69	54	-11.31	AVG	H	1.5	42
10360	54.59	2.26	56.85	74	-17.15	peak	V	1.5	20
10360	38.07	2.26	40.33	54	-13.67	AVG	V	1.5	59
15540	51.35	3.75	55.10	74	-18.90	peak	V	1.5	69
15540	36.79	3.75	40.54	54	-13.46	AVG	V	1.5	140

Test mode:	802.11a(6Mbps)			Test channel:		48 CH			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detect or Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
10480	52.92	2.31	55.23	74	-18.77	peak	H	1.5	90
10480	37.04	2.31	39.35	54	-14.65	AVG	H	1.5	316
15720	48.34	3.79	52.13	74	-21.87	peak	H	1.5	117
15720	35.88	3.79	39.67	54	-14.33	AVG	H	1.5	139
10480	53.28	2.31	55.59	74	-18.41	peak	V	1.5	302
10480	36.39	2.31	38.70	54	-15.30	AVG	V	1.5	42
15720	48.69	3.79	52.48	74	-21.52	peak	V	1.5	244
15720	35.85	3.79	39.64	54	-14.36	AVG	V	1.5	316

Test mode:	802.11a(6Mbps)			Test channel:		52 CH			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detect or Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
10520	53.61	2.26	55.87	74	-18.13	peak	H	1.5	221
10520	36.64	2.26	38.90	54	-15.10	AVG	H	1.5	327
15780	50.69	3.75	54.44	74	-19.56	peak	H	1.5	41
15780	38.12	3.75	41.87	54	-12.13	AVG	H	1.5	186
10520	55.41	2.26	57.67	74	-16.33	peak	V	1.5	50
10520	39.10	2.26	41.36	54	-12.64	AVG	V	1.5	72
15780	50.81	3.75	54.56	74	-19.44	peak	V	1.5	328
15780	35.99	3.75	39.74	54	-14.26	AVG	V	1.5	43

Test mode:	802.11a(6Mbps)			Test channel:		64 CH			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detect or Type	Ant. Pol.	Antenna Height	Table Angle
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V	(m)	(Degree)
10640	52.78	2.31	55.09	74	-18.91	peak	H	1.5	210
10640	37.18	2.31	39.49	54	-14.51	AVG	H	1.5	353
15960	48.25	3.79	52.04	74	-21.96	peak	H	1.5	29
15960	35.53	3.79	39.32	54	-14.68	AVG	H	1.5	41
10640	53.82	2.31	56.13	74	-17.87	peak	V	1.5	300
10640	36.96	2.31	39.27	54	-14.73	AVG	V	1.5	278
15960	49.48	3.79	53.27	74	-20.73	peak	V	1.5	204
15960	35.17	3.79	38.96	54	-15.04	AVG	V	1.5	75

Test mode:	802.11a(6Mbps)			Test channel:		100			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
11000	52.40	2.54	54.94	74	-19.06	peak	H	1.5	254
11000	38.79	2.54	41.33	54	-12.67	AVG	H	1.5	281
16500	49.85	3.94	53.79	74	-20.21	peak	H	1.5	21
16500	36.02	3.94	39.96	54	-14.04	AVG	H	1.5	282
11000	53.54	2.54	56.08	74	-17.92	peak	V	1.5	228
11000	37.80	2.54	40.34	54	-13.66	AVG	V	1.5	73
16500	50.94	3.94	54.88	74	-19.12	peak	V	1.5	307
16500	36.91	3.94	40.85	54	-13.15	AVG	V	1.5	325

Test mode:	802.11a(6Mbps)			Test channel:		140			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
11400	51.65	2.58	54.23	74	-19.77	peak	H	1.5	304
11400	37.54	2.58	40.12	54	-13.88	AVG	H	1.5	306
17100	51.06	4.02	55.08	74	-18.92	peak	H	1.5	56
17100	36.66	4.02	40.68	54	-13.32	AVG	H	1.5	176
11400	53.70	2.58	56.28	74	-17.72	peak	V	1.5	267
11400	38.08	2.58	40.66	54	-13.34	AVG	V	1.5	218
17100	50.77	4.02	54.79	74	-19.21	peak	V	1.5	318
17100	36.95	4.02	40.97	54	-13.03	AVG	V	1.5	300

Test mode:	802.11a(6Mbps)			Test channel:		149			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
11490	52.96	2.54	55.50	74	-18.50	peak	H	1.5	60
11490	38.84	2.54	41.38	54	-12.62	AVG	H	1.5	44
17235	51.18	3.94	55.12	74	-18.88	peak	H	1.5	250
17235	36.91	3.94	40.85	54	-13.15	AVG	H	1.5	329
11490	53.75	2.54	56.29	74	-17.71	peak	V	1.5	272
11490	37.81	2.54	40.35	54	-13.65	AVG	V	1.5	344
17235	49.62	3.94	53.56	74	-20.44	peak	V	1.5	172
17235	37.90	3.94	41.84	54	-12.16	AVG	V	1.5	294

Test mode:	802.11a(6Mbps)			Test channel:		165			
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V	Antenna Height (m)	Table Angle (Degree)
11650	52.52	2.58	55.10	74	-18.90	peak	H	1.5	146
11650	38.22	2.58	40.80	54	-13.20	AVG	H	1.5	21
17475	49.98	4.02	54.00	74	-20.00	peak	H	1.5	85
17475	37.53	4.02	41.55	54	-12.45	AVG	H	1.5	243
11650	54.16	2.58	56.74	74	-17.26	peak	V	1.5	167
11650	37.19	2.58	39.77	54	-14.23	AVG	V	1.5	123
17475	49.66	4.02	53.68	74	-20.32	peak	V	1.5	336
17475	36.24	4.02	40.26	54	-13.74	AVG	V	1.5	284

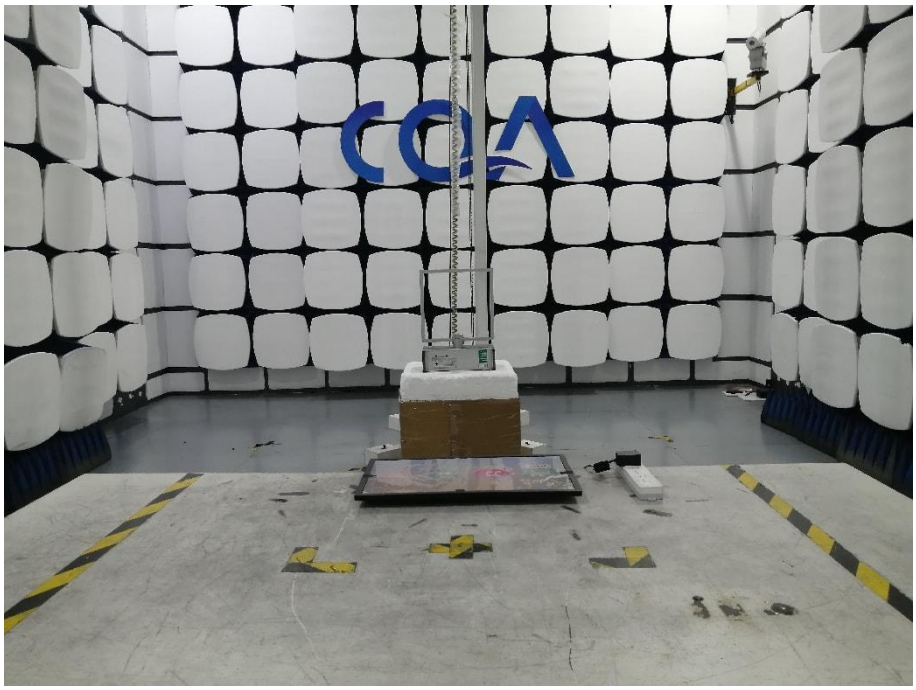
Remark:

1) The 802.11a 6Mbps of rate is the worst case, only the worst data recorded in the report.
2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
   Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
3) Scan from 9kHz to 40GHz,The disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

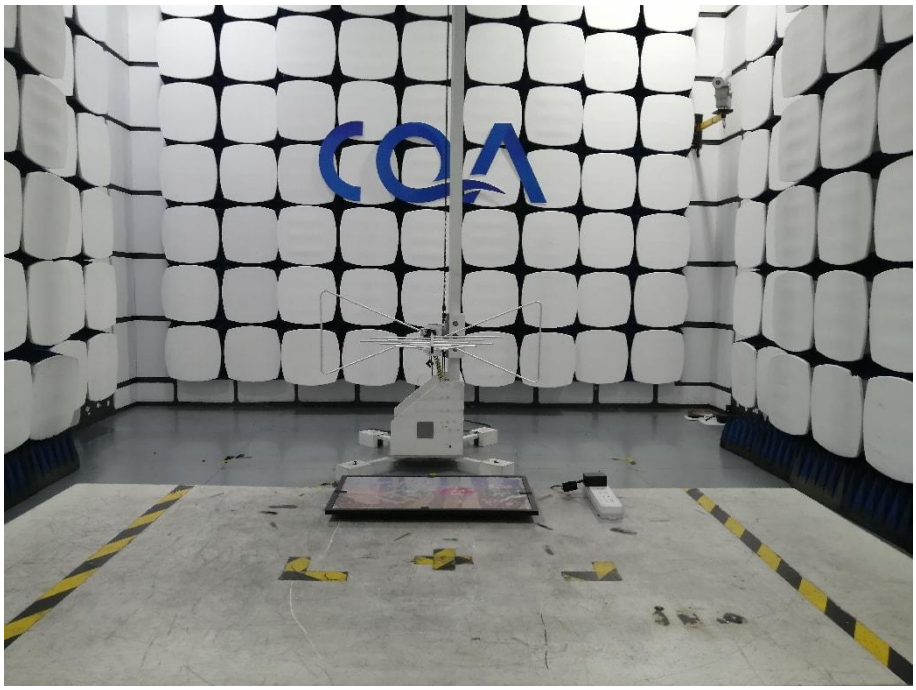
8 Photographs - EUT Test Setup

8.1 Radiated Spurious Emission

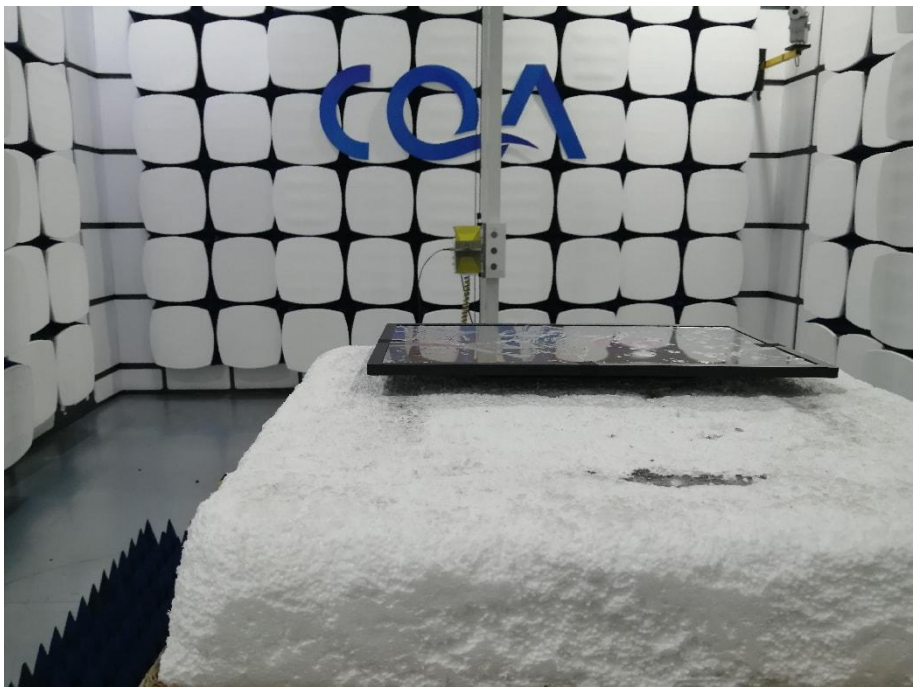
9kHz~30MHz:



30MHz~1GHz:



Above 1GHz:



8.2 Conducted Emission

9 Photographs - EUT Constructional Details

Refer to PHOTOGRAPHS OF EUT for CQASZ20250200348E-01.

*** END OF REPORT ***