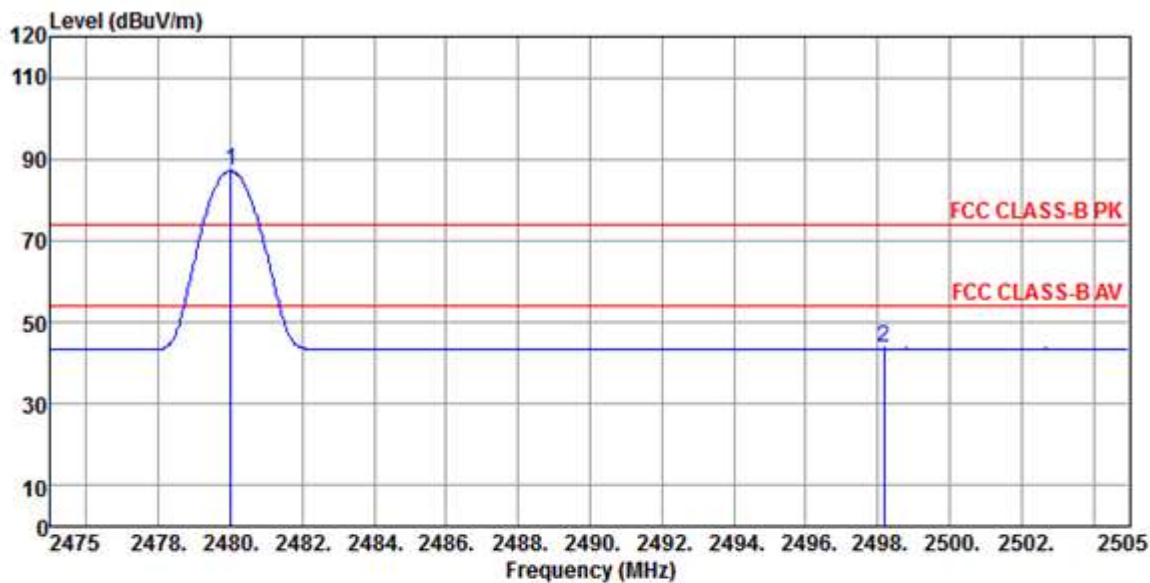


Detector mode: Average

Polarity: Horizontal

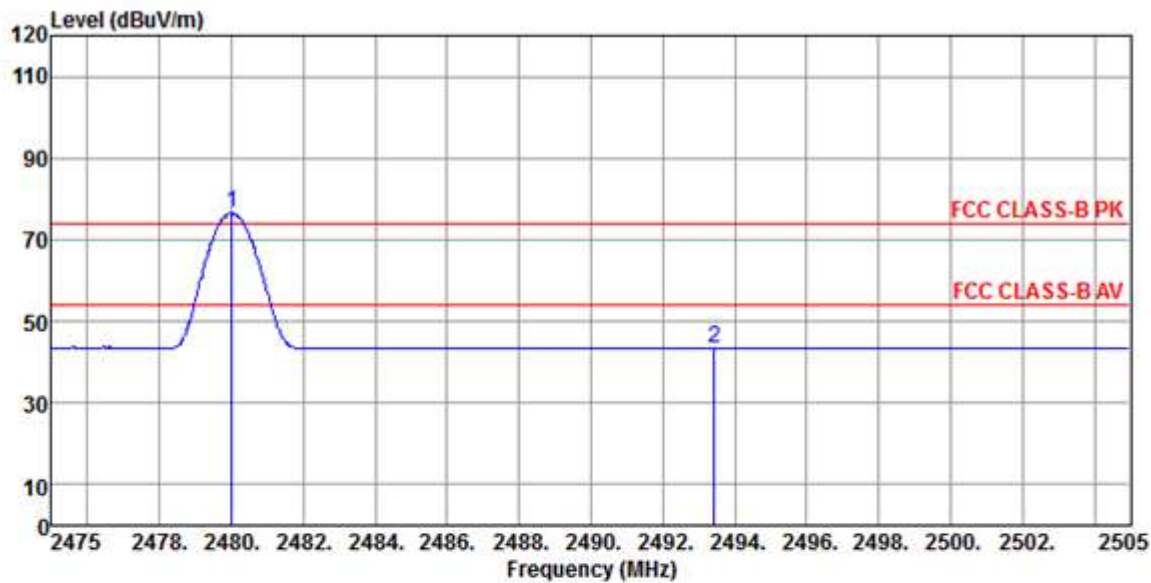


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT GFSK CH78
Memo :

		ReadAntenna		Cable	Preamp	Limit		Over	Remark
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	2480.01	90.45	27.52	7.41	38.31	87.07	54.00	33.07	Average
2	2498.19	47.03	27.55	7.43	38.30	43.71	54.00	-10.29	Average

Detector mode: Average

Polarity: Vertical



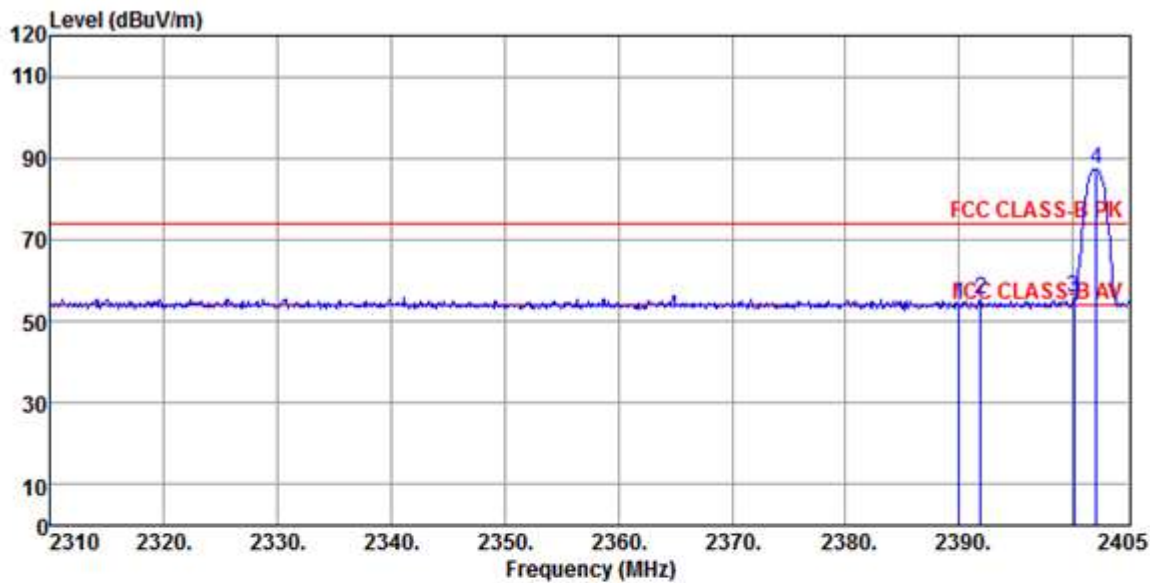
Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT GFSK CH78
Memo :

	Freq	ReadAntenna		Cable Preamp		Level	Limit	Over	Remark
		Level	Factor	Loss	Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	2480.01	79.93	27.52	7.41	38.31	76.55	54.00	22.55	Average
2	2493.42	46.70	27.55	7.43	38.30	43.38	54.00	-10.62	Average

BT $\pi/4$ -DQPSK (Low Channel)

Detector mode: Peak

Polarity: Horizontal

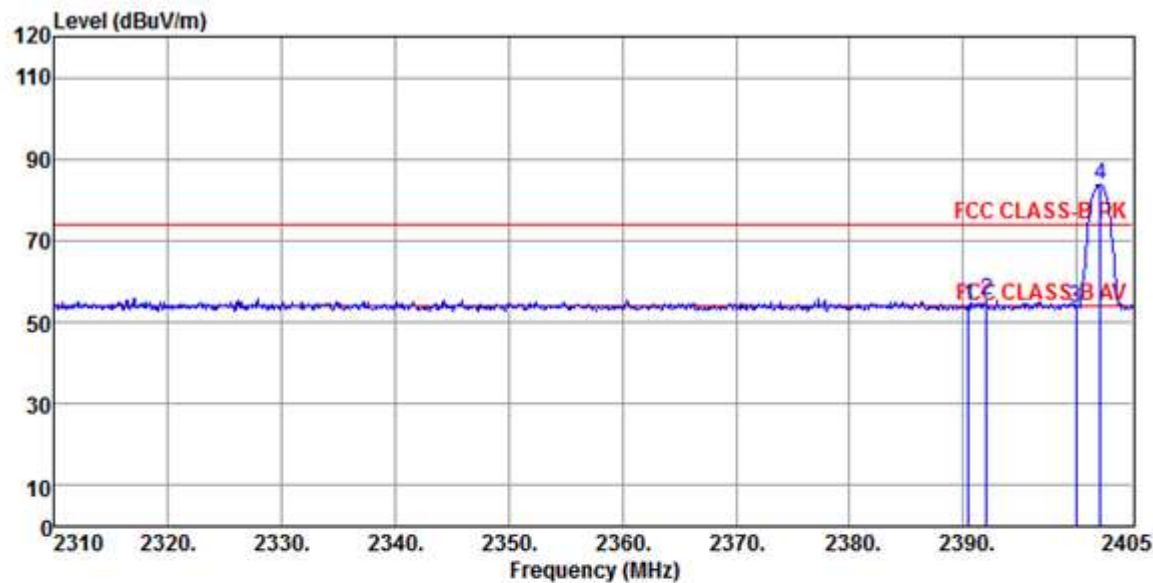


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT $\pi/4$ -DQPSK CH0
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2389.99	57.69	27.58	7.13	38.34	54.06	74.00	-19.94 Peak
2	2391.89	58.78	27.58	7.13	38.34	55.15	74.00	-18.85 Peak
3	2400.16	59.34	27.58	7.13	38.34	55.71	74.00	-18.29 Peak
4 pp	2402.15	90.90	27.54	7.13	38.34	87.23	74.00	13.23 Peak

Detector mode: Peak

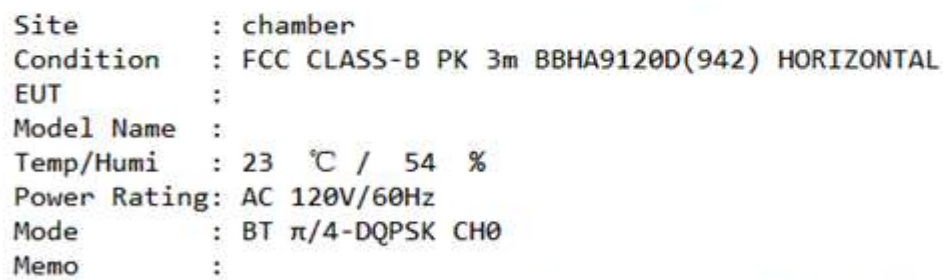
Polarity: Vertical



Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT $\pi/4$ -DQPSK CH0
Memo :

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.47	57.52	27.58	7.13	38.34	53.89	74.00	-20.11	Peak
2	2392.08	58.84	27.58	7.13	38.34	55.21	74.00	-18.79	Peak
3	2399.97	57.27	27.58	7.13	38.34	53.64	74.00	-20.36	Peak
4 pp	2402.15	87.51	27.54	7.13	38.34	83.84	74.00	9.84	Peak

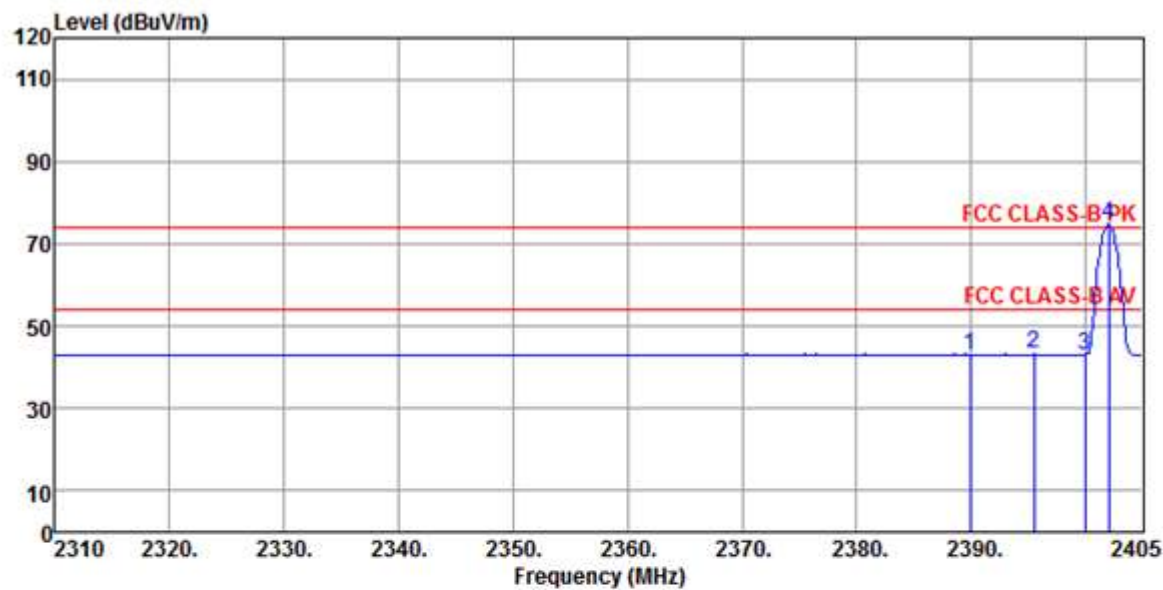
Polarity: Horizontal



	Freq	ReadAntenna	Cable Preamp	Limit	Over				
		Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2389.99	46.55	27.58	7.13	38.34	42.92	54.00	-11.08	Average
2	2396.83	46.66	27.58	7.13	38.34	43.03	54.00	-10.97	Average
3	2399.97	46.83	27.58	7.13	38.34	43.20	54.00	-10.80	Average
4 pp	2401.96	81.88	27.54	7.13	38.34	78.21	54.00	24.21	Average

Detector mode: Average

Polarity: Vertical



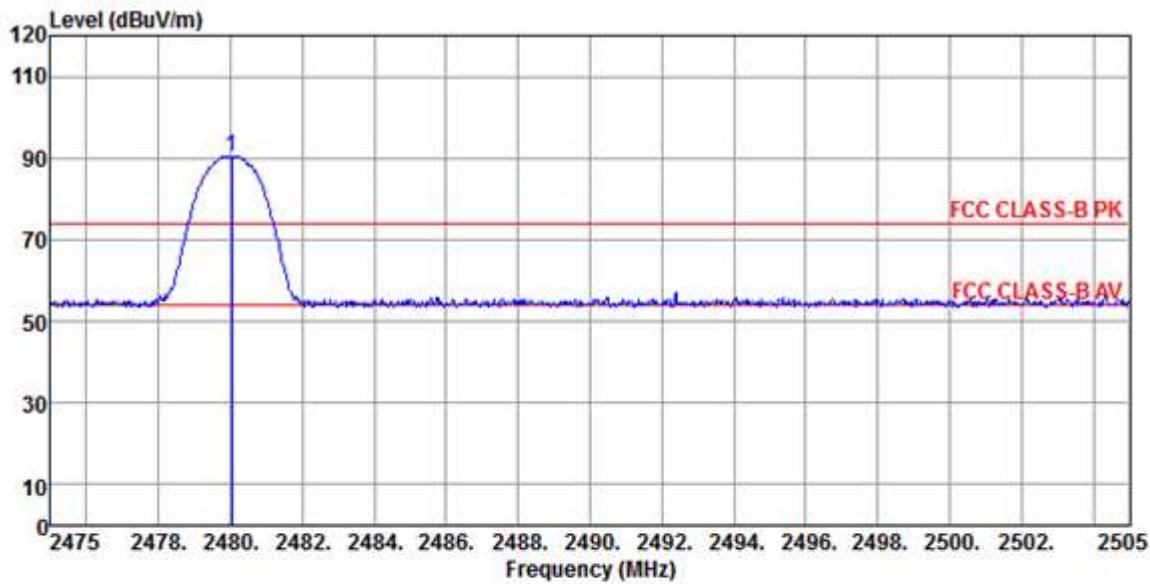
Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT $\pi/4$ -DQPSK CH0
Memo :

		ReadAntenna		Cable Preamp			Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2389.90	46.53	27.58	7.13	38.34	42.90	54.00	-11.10	Average
2	2395.50	46.93	27.58	7.13	38.34	43.30	54.00	-10.70	Average
3	2399.97	46.71	27.58	7.13	38.34	43.08	54.00	-10.92	Average
4 pp	2402.06	78.30	27.54	7.13	38.34	74.63	54.00	20.63	Average

BT $\pi/4$ -DQPSK (High Channel)

Detector mode: Peak

Polarity: Horizontal

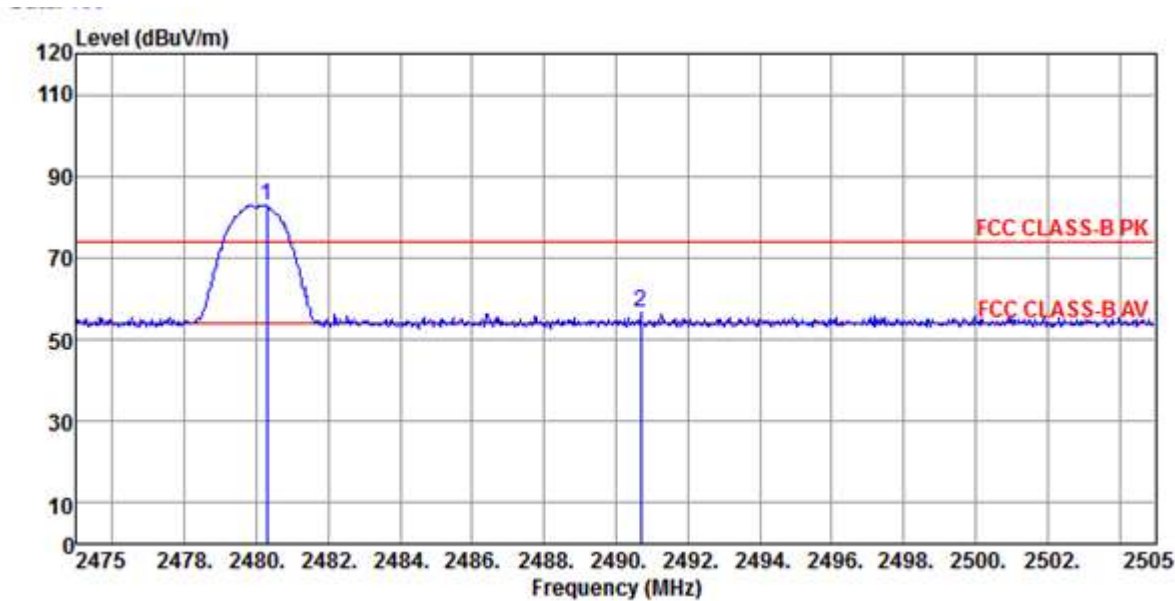


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT $\pi/4$ -DQPSK CH78
Memo :

	Freq	ReadAntenna		Cable	Preamp	Level	Limit	Over	Remark
		Level	Factor	Loss	Factor		Line	Limit	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	2480.04	93.76	27.52	7.41	38.31	90.38	74.00	16.38	Peak

Detector mode: Peak

Polarity: Vertical

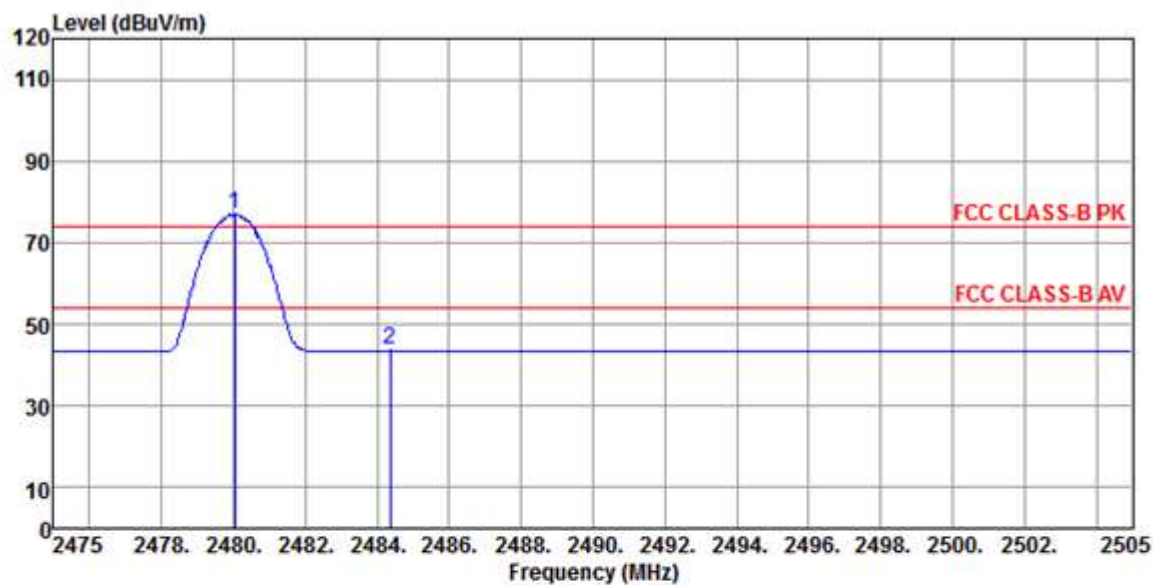


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT $\pi/4$ -DQPSK CH78
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2480.28	86.35	27.52	7.41	38.31	82.97	74.00	8.97 Peak
2	2490.69	59.97	27.55	7.43	38.30	56.65	74.00	-17.35 Peak

Detector mode: Average

Polarity: Horizontal

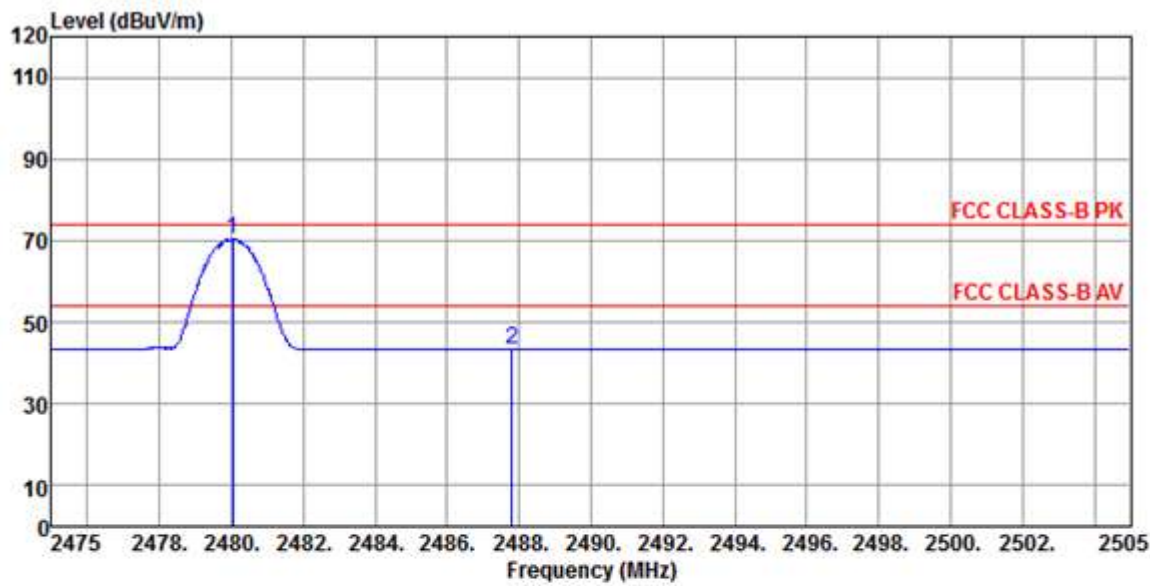


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT $\pi/4$ -DQPSK CH78
Memo :

		ReadAntenna	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2480.04	80.29	27.52	7.41	38.31	76.91	54.00	22.91
2	2484.36	47.02	27.52	7.41	38.31	43.64	54.00	-10.36

Detector mode: Average

Polarity: Vertical



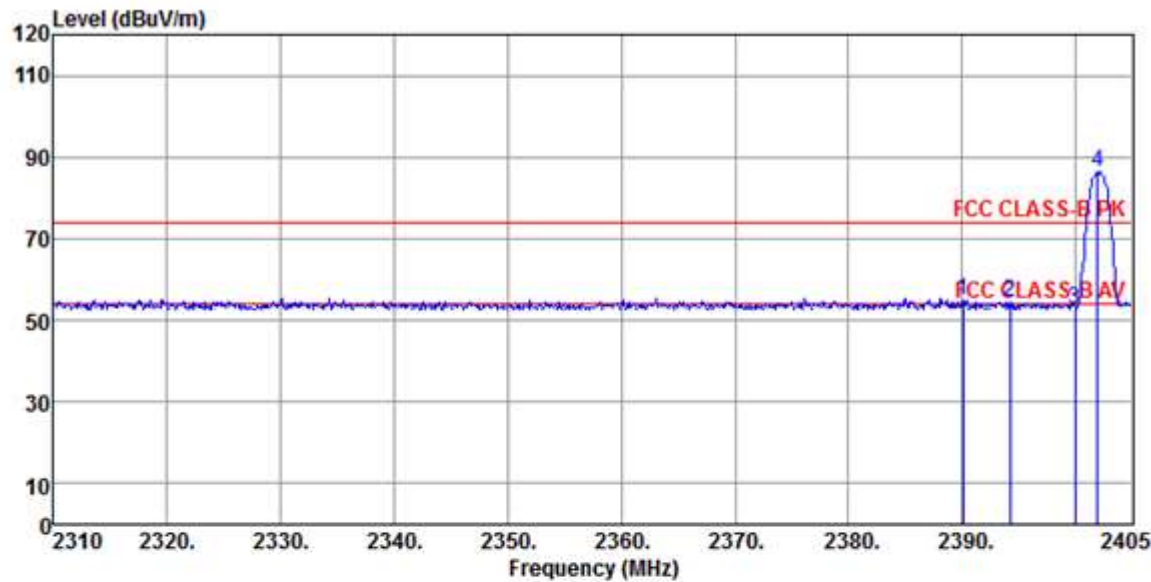
Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT $\pi/4$ -DQPSK CH78
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2480.04	73.83	27.52	7.41	38.31	70.45	54.00	16.45 Average
2	2487.81	46.69	27.52	7.43	38.30	43.34	54.00	-10.66 Average

BT 8-DPSK (Low Channel)

Detector mode: Peak

Polarity: Horizontal

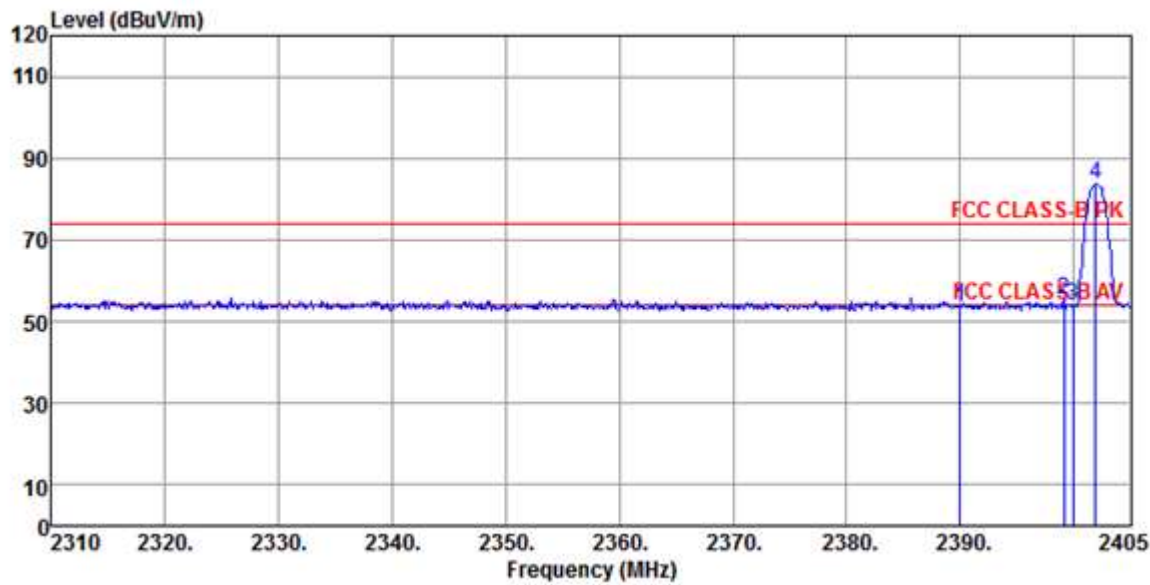


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT 8DPSK CH0
Memo :

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.09	58.32	27.58	7.13	38.34	54.69	74.00	-19.31	Peak
2	2394.27	57.93	27.58	7.13	38.34	54.30	74.00	-19.70	Peak
3	2399.97	56.38	27.58	7.13	38.34	52.75	74.00	-21.25	Peak
4 pp	2401.96	90.04	27.54	7.13	38.34	86.37	74.00	12.37	Peak

Detector mode: Peak

Polarity: Vertical

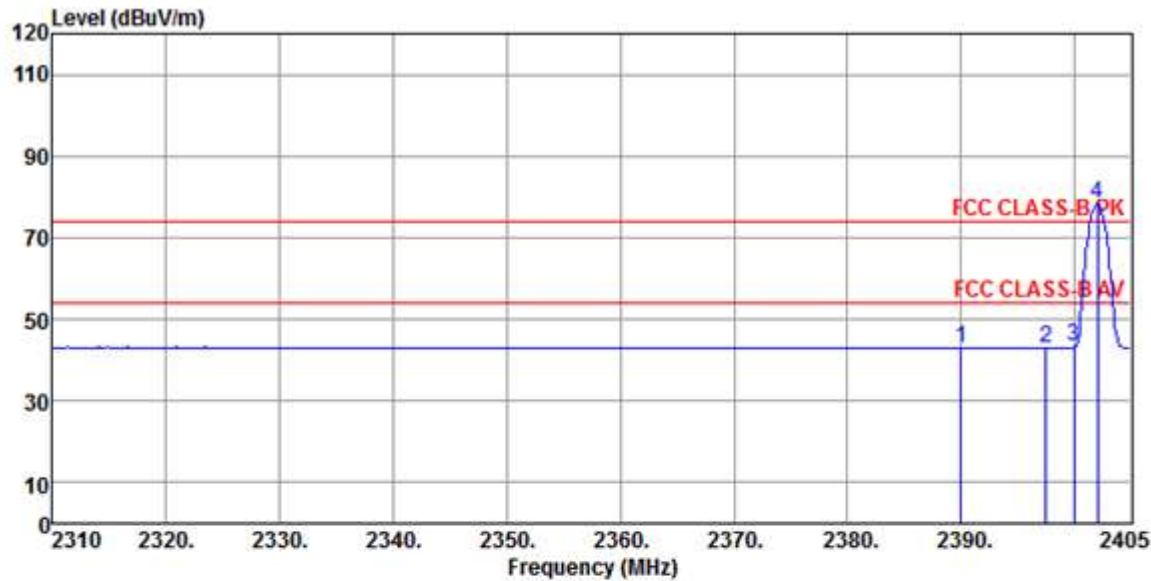


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 ℃ / 54 %
Power Rating: AC 120V/60Hz
Mode : BT 8DPSK CH0
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2389.99	57.11	27.58	7.13	38.34	53.48	74.00	-20.52
2	2399.21	58.76	27.58	7.13	38.34	55.13	74.00	-18.87
3	2399.97	57.64	27.58	7.13	38.34	54.01	74.00	-19.99
4 pp	2401.96	87.46	27.54	7.13	38.34	83.79	74.00	9.79

Detector mode: Average

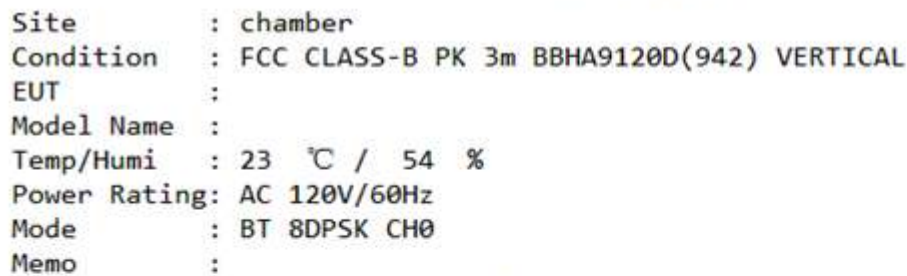
Polarity: Horizontal



Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT 8DPSK CH0
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2389.99	46.54	27.58	7.13	38.34	42.91	54.00	-11.09 Average
2	2397.50	46.64	27.58	7.13	38.34	43.01	54.00	-10.99 Average
3	2399.97	46.86	27.58	7.13	38.34	43.23	54.00	-10.77 Average
4 pp	2402.06	81.85	27.54	7.13	38.34	78.18	54.00	24.18 Average

Polarity: Vertical

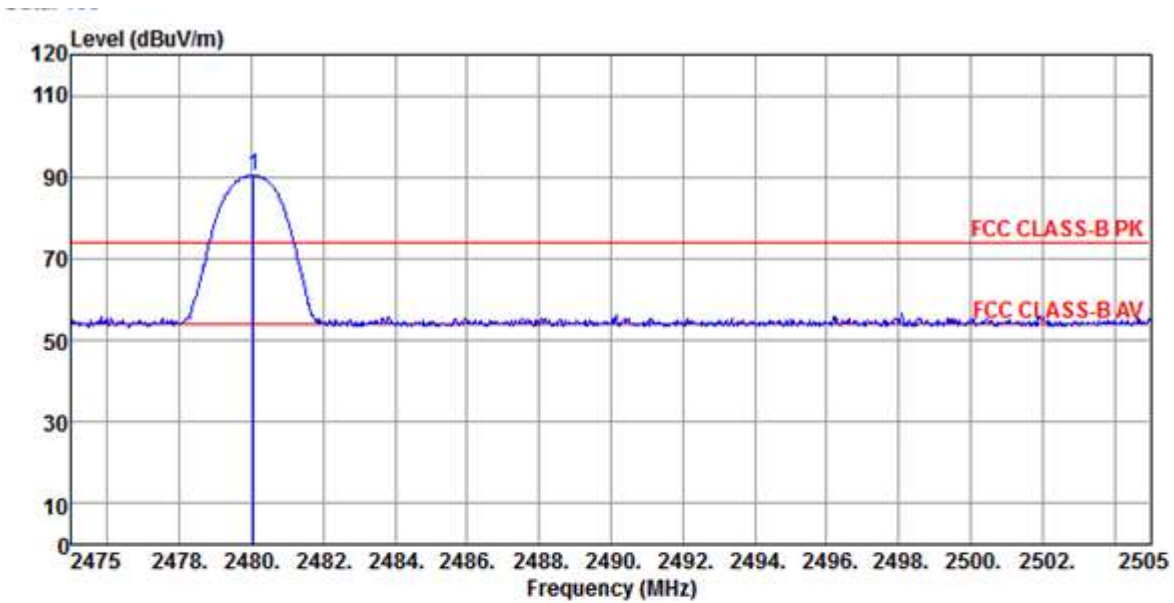


	Freq	ReadAntenna	Cable Preamp	Limit	Over				
		Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2389.99	46.58	27.58	7.13	38.34	42.95	54.00	-11.05	Average
2	2398.16	46.65	27.58	7.13	38.34	43.02	54.00	-10.98	Average
3	2399.97	46.64	27.58	7.13	38.34	43.01	54.00	-10.99	Average
4 pp	2402.06	73.53	27.54	7.13	38.34	69.86	54.00	15.86	Average

BT 8-DPSK (High Channel)

Detector mode: Peak

Polarity: Horizontal

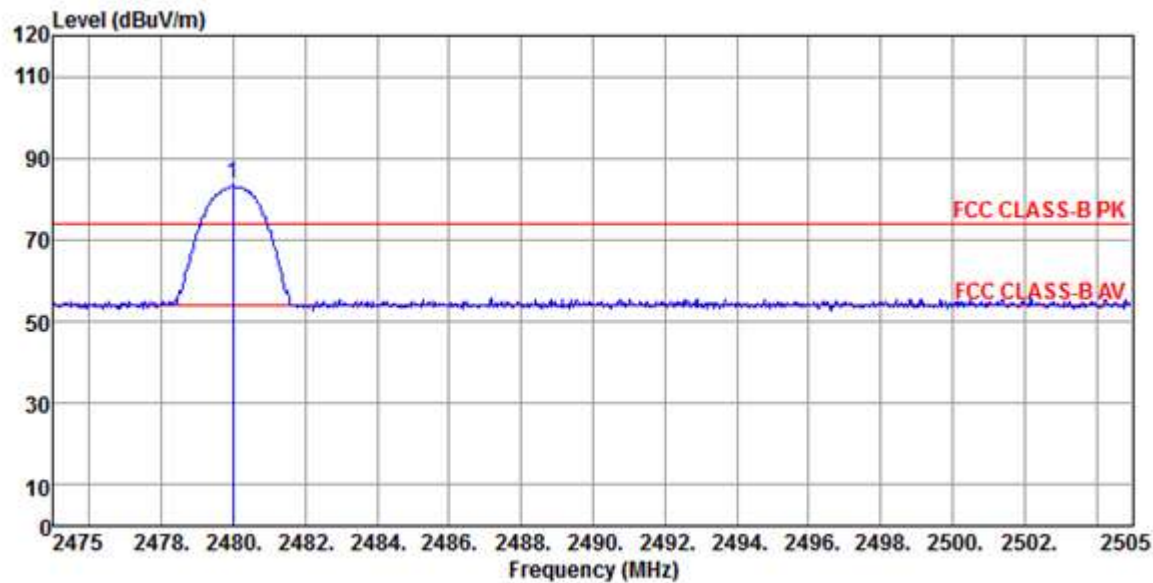


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT 8DPSK CH78
Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Level	Factor	Loss	Factor	Line	Limit	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp 2480.07	93.90	27.52	7.41	38.31	90.52	74.00	16.52 Peak

Detector mode: Peak

Polarity: Vertical

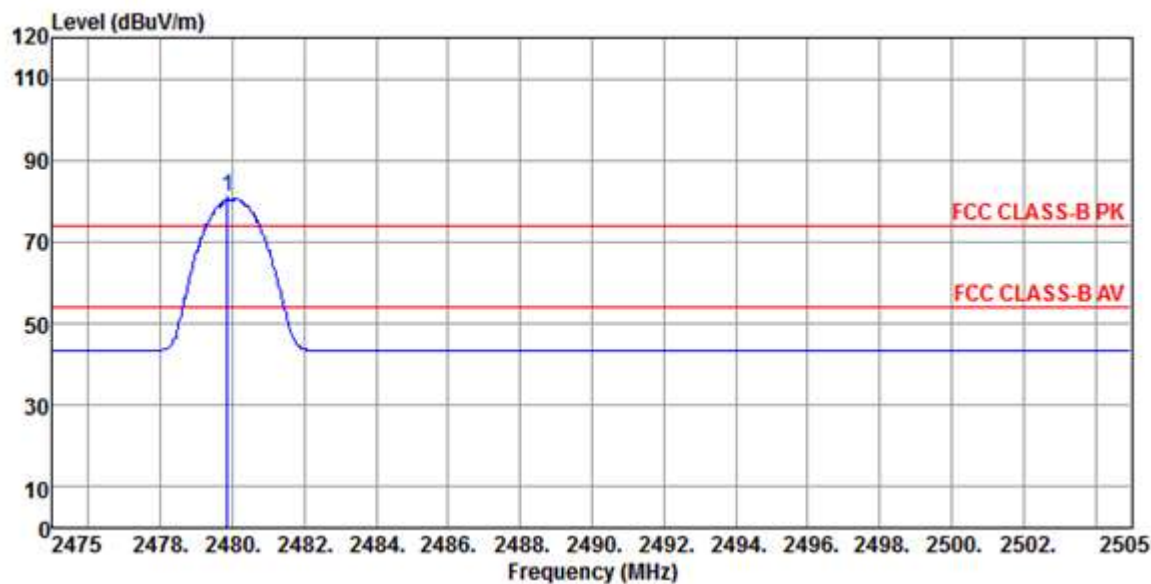


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT 8DPSK CH78
Memo :

1 pp	Freq	ReadAntenna	Cable	Preamp	Level	Limit	Over	Remark
		Level	Loss	Factor		Line	Limit	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2479.98	87.03	27.52	7.41	38.31	83.65	74.00	9.65 Peak

Detector mode: Average

Polarity: Horizontal

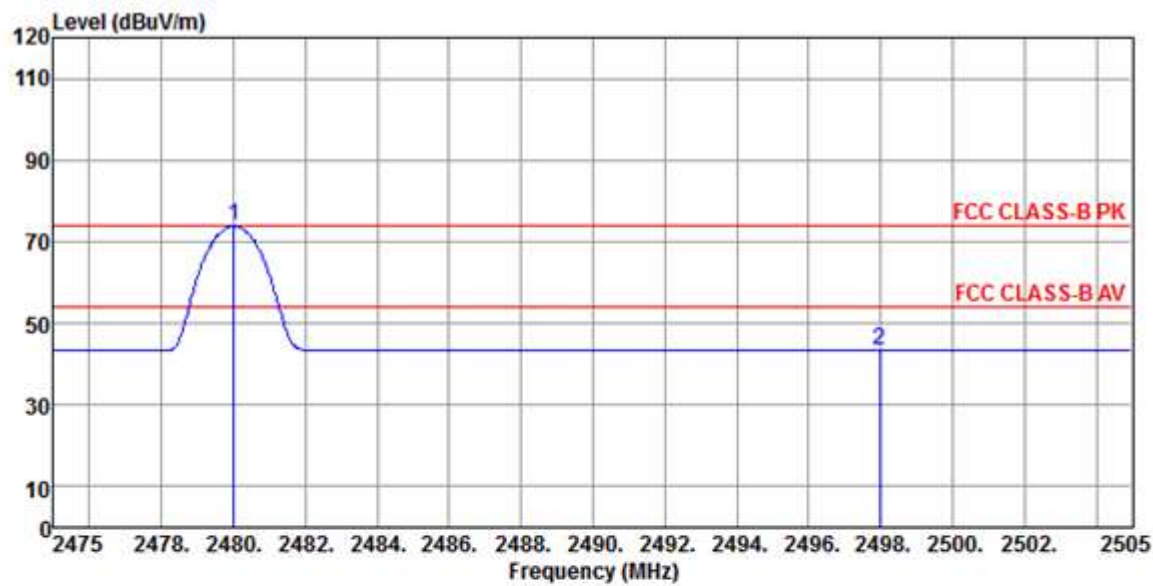


Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT 8DPSK CH78
Memo :

Freq	ReadAntenna		Cable Preamp		Level	Limit	Over	Remark
	Level	Factor	Loss	Factor		Line	Limit	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp 2479.86	84.19	27.52	7.41	38.31	80.81	54.00	26.81	Average

Detector mode: Average

Polarity: Vertical



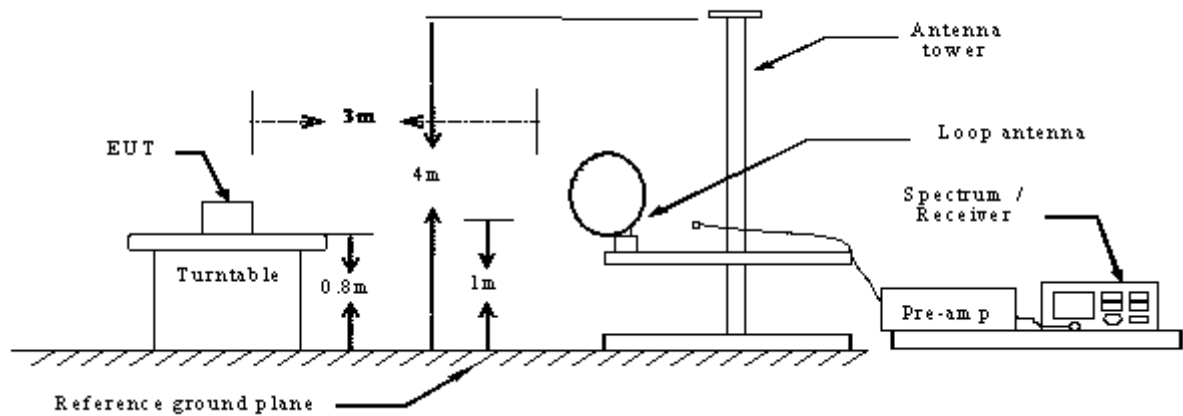
Site : chamber
Condition : FCC CLASS-B PK 3m BBHA9120D(942) VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60Hz
Mode : BT 8DPSK CH78
Memo :

		ReadAntenna		Cable Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2480.01	77.26	27.52	7.41	38.31	73.88	54.00	19.88 Average
2	2497.98	46.74	27.55	7.43	38.30	43.42	54.00	-10.58 Average

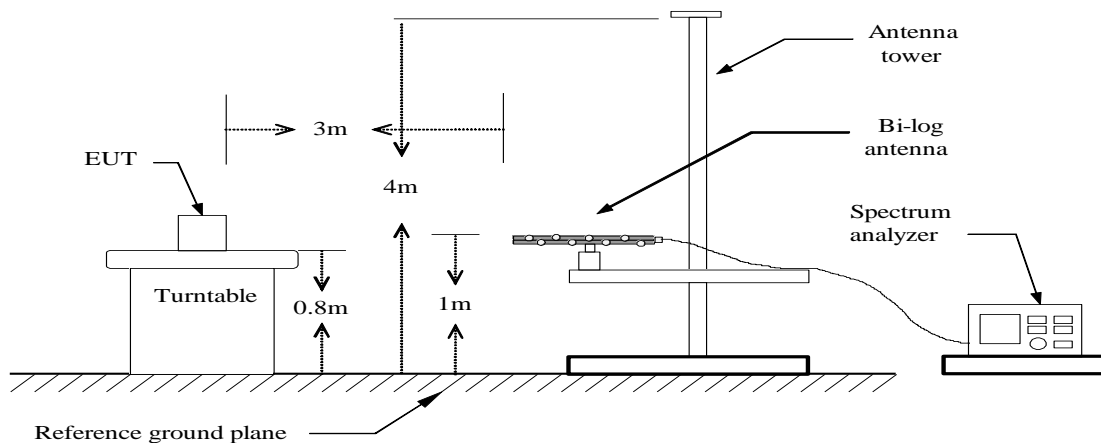
11. SPURIOUS EMISSIONS (RADIATION)

11.1 TEST SETUP

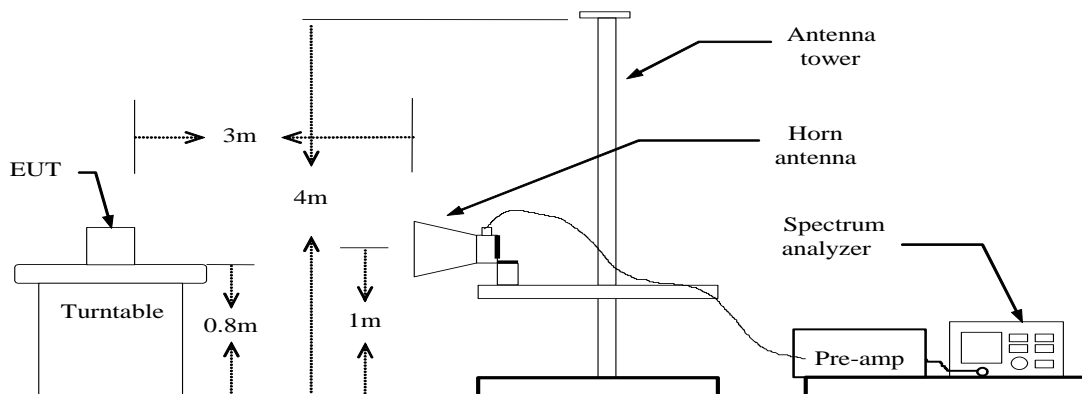
Radiated Spurious Measurement: below 30MHz



Radiated Spurious Measurement: below 1GHz



Radiated Spurious Measurement: above 1GHz



11.2 LIMITS

Frequency (MHz)	Limits (uV/m)	Limits(dBuV/m) At 3m	Measured Distance (m)
0.009-0.490	2400/F(KHz)	128.5-93.80	300
0.490-1.705	24000/F(KHz)	73.80-63.00	30
1.705-30.0	30	69.5	30
30~88	100	40	3
88~216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Notes: the calculate formula for below 30MHz

$$L2 = 20\lg(L1) + 40\lg(d1/d2)$$

L2: is the specified limit in dB microvolts per metre at distance d2.

L1: is the specified limit in microvolts per metre at distance d1.

For example:

L1 = 2400/9 (uV/m), d1 = 300 (m), d2 = 3 (m), so L2 as follows:

$$20\lg(2400/9) + 40\lg(300/3) = 128.5(\text{dB}\mu\text{V/m})$$

11.3 TEST PROCEDURE

Radiated Emission (9 kHz – 30 MHz) :

Spurious emissions from the EUT are measured in the frequency range of 9 kHz to 30 MHz using a tuned receiver and a shielded loop antenna. The antenna was positioned 3 meters horizontally from the EUT. The RBW of the spectrum analyzer is set to 200Hz(measured frequency range was 9KHz~150KHz) or 9KHz(measured frequency range was 150KHz~30MHz). Measurements have been made in all three orthogonal axes and the shielded loop antenna was rotated to locate the maximum of the emissions. The emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz(these two bands employing a average detector)

Radiated Emission (30 MHz – 1000 MHz) :

According to description of ANSI C63.4: 2009 sec.13.4, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT. The EUT configuration (in X, Y and Z axis), cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements. The measurement is carried out using a spectrum analyzer or receiver. The Quasi-peak detector is used and RBW is set to 120kHz.The antenna height and turn table rotation is adjusted until the maximum power value is founded on spectrum analyzer or receiver.

Radiated Emission (Above 1 GHz):

According to description of ANSI C63.4: 2009 sec.13.4, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT. The EUT configuration (in X, Y and Z axis), cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements. The measurement is carried out using a spectrum analyzer or receiver. The spectrum analyzer scans from 1GHz to 25GHz (higher than the 10th harmonic of the carrier). The peak detector is used for Peak limit and RBW is set to 1MHz ,VBW \geq 3RBW. The peak detector is used for Average limit and RBW is set to 1MHz ,VBW=1kHz is not smaller than 1/T, T = to the shortest pulse width. The antenna height and turn table rotation is adjusted until the maximum power value is founded on spectrum analyzer or receiver.

11.4 RESULTS & PERFORMANCE

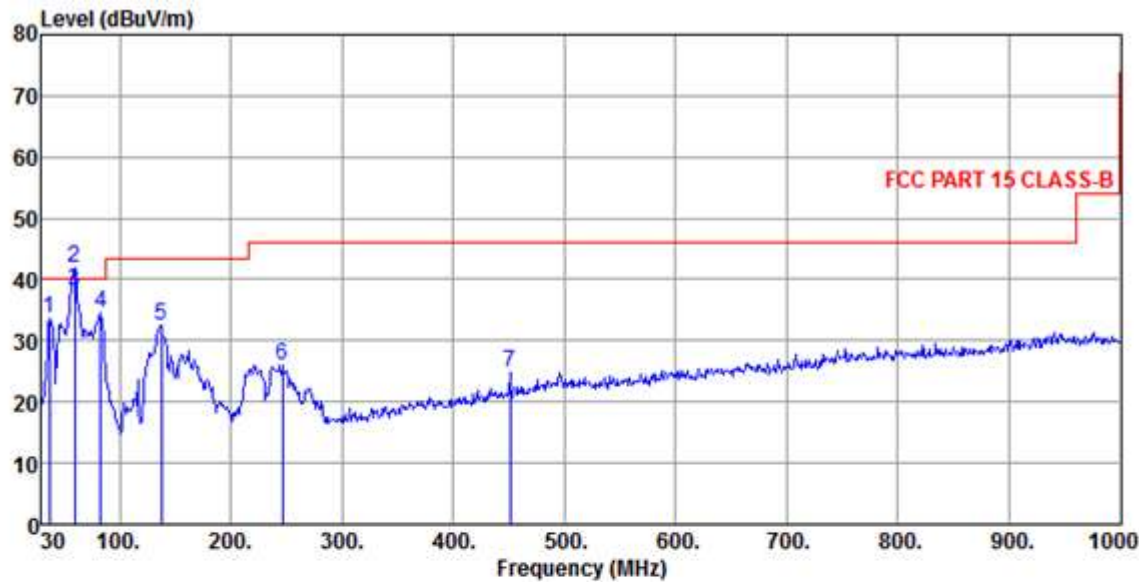
From 9kHz to 30MHz:

The test data was 20dB lower than the permissible limit was not recorded in the report.

From 30MHz to 1GHz:

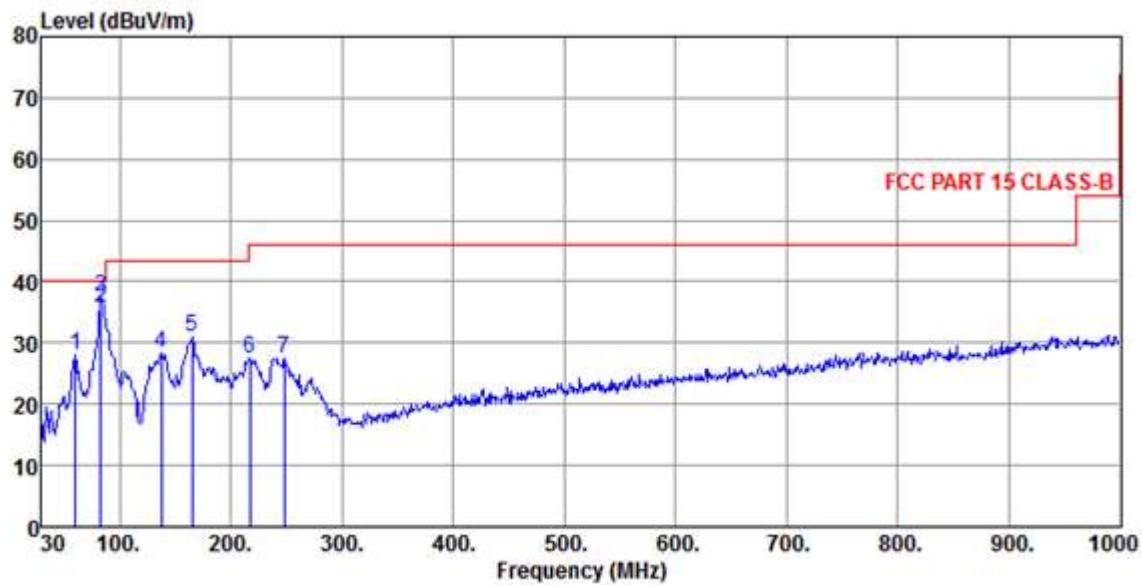
Only show the worst test data when EUT was operated on different mode.

BT GFSK (traffic mode Channel 0)



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH0
Memo :

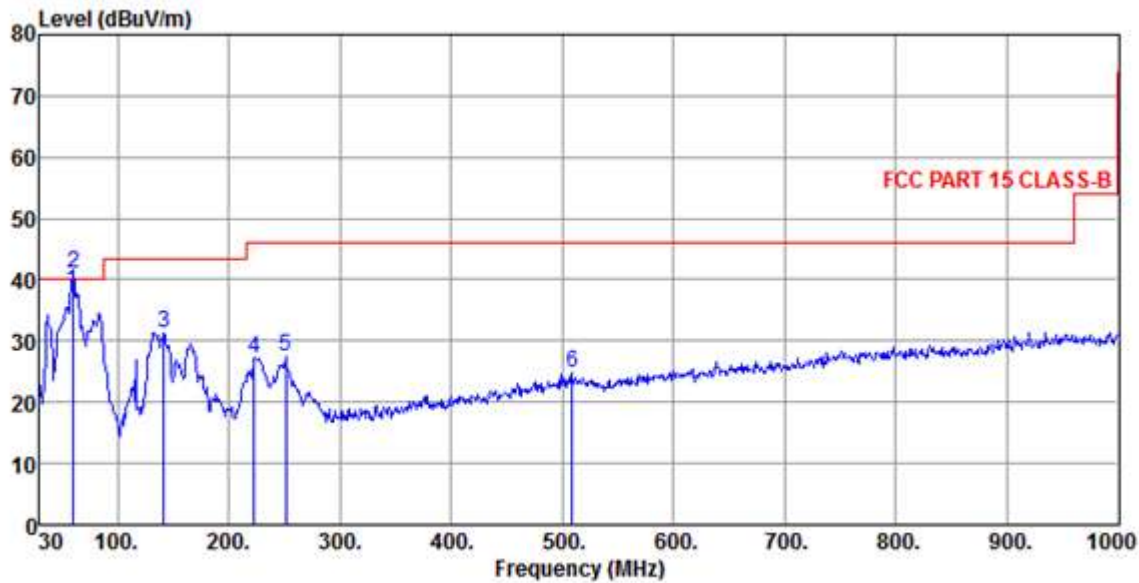
	Freq	ReadAntenna	Cable	Preamp	Limit	Over	
	MHz	Level	Factor	Loss	Factor	Line	Limit
		dBuV	dB/m	dB	dB	dBuV/m	dBuV/m
							dB
1	36.79	20.35	12.51	0.77	0.00	33.63	40.00
2	59.10	28.16	12.58	1.04	0.00	41.78	40.00
3	59.22	24.40	12.58	1.04	0.00	38.02	40.00
4	83.35	24.70	8.68	1.09	0.00	34.47	40.00
5	137.67	17.70	13.21	1.62	0.00	32.53	43.50
6	246.31	12.14	11.84	2.14	0.00	26.12	46.00
7	450.98	5.60	16.39	2.88	0.00	24.87	46.00



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH0
Memo :

		ReadAntenna		Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	60.07	14.25	12.67	1.05	0.00	27.97	40.00	-12.03	Peak
2	qp 83.24	26.01	8.73	1.09	0.00	35.83	40.00	-4.17	QP
3	pp 83.35	27.67	8.68	1.09	0.00	37.44	40.00	-2.56	Peak
4	137.67	13.44	13.21	1.62	0.00	28.27	43.50	-15.23	Peak
5	164.83	15.68	13.55	1.76	0.00	30.99	43.50	-12.51	Peak
6	217.21	14.82	10.68	2.06	0.00	27.56	46.00	-18.44	Peak
7	248.25	13.31	11.88	2.15	0.00	27.34	46.00	-18.66	Peak

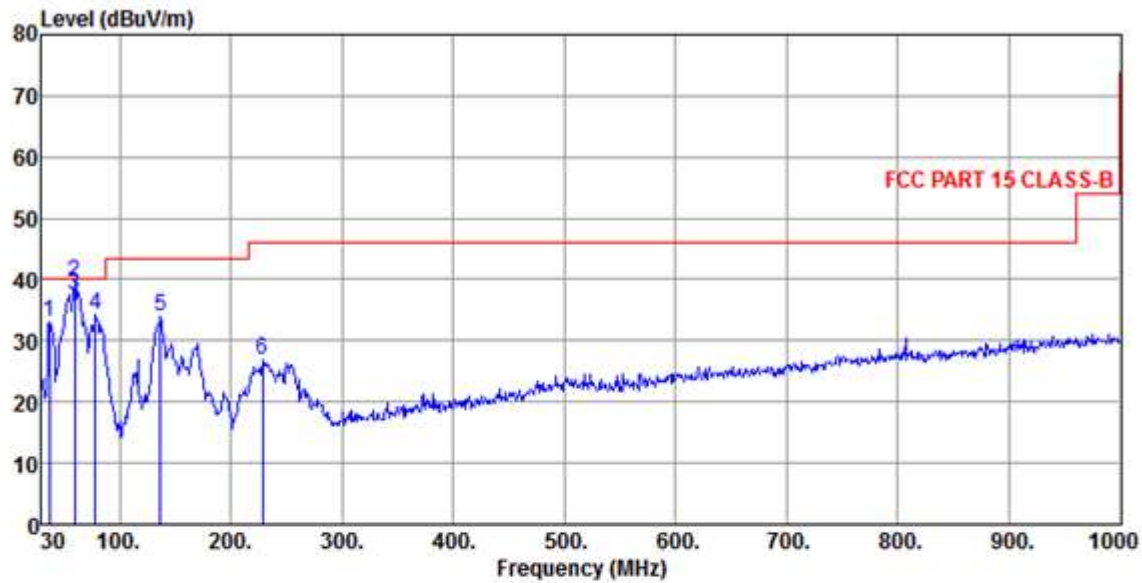
		ReadAntenna		Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	59.10	13.95	12.58	1.04	0.00	27.57	40.00	-12.43	Peak
2	pp 83.35	27.52	8.68	1.09	0.00	37.29	40.00	-2.71	Peak
3	qp 83.87	25.16	8.68	1.09	0.00	34.93	40.00	-5.07	QP
4	136.70	13.02	13.21	1.62	0.00	27.85	43.50	-15.65	Peak
5	164.83	15.85	13.55	1.76	0.00	31.16	43.50	-12.34	Peak
6	243.40	18.75	11.79	2.13	0.00	32.67	46.00	-13.33	Peak
7	367.56	6.92	14.54	2.70	0.00	24.16	46.00	-21.84	Peak



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH39
Memo :

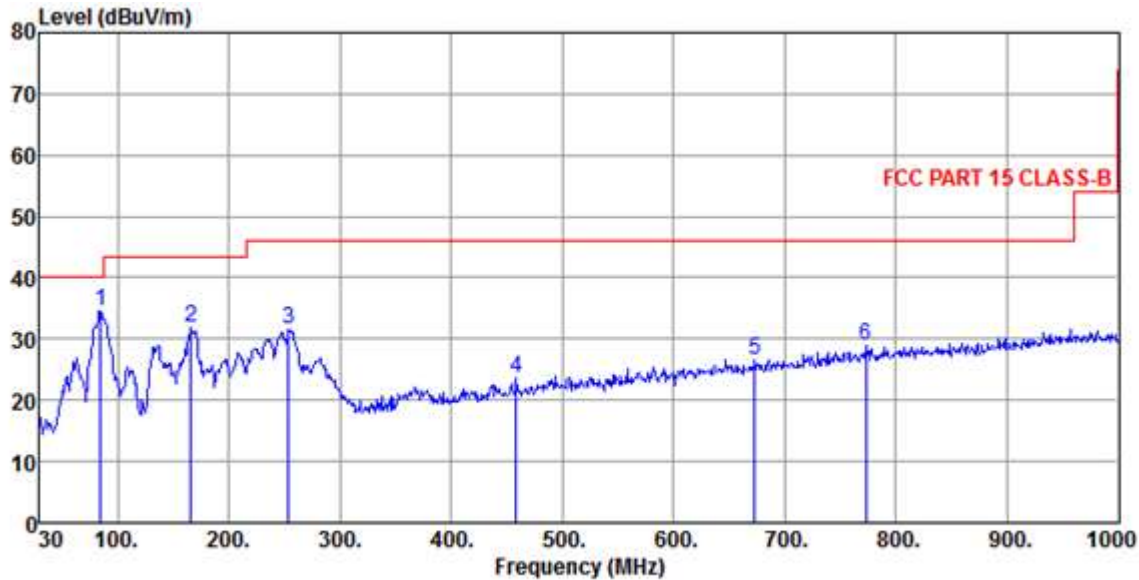
	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 qp	59.14	24.46	12.58	1.04	0.00	38.08	40.00	-1.92	QP
2 pp	60.07	27.27	12.67	1.05	0.00	40.99	40.00	0.99	Peak
3	141.55	16.26	13.47	1.62	0.00	31.35	43.50	-12.15	Peak
4	223.03	14.31	10.86	2.10	0.00	27.27	46.00	-18.73	Peak
5	251.16	13.37	11.96	2.16	0.00	27.49	46.00	-18.51	Peak
6	509.18	4.41	17.17	3.09	0.00	24.67	46.00	-21.33	Peak

BT GFSK (traffic mode Channel 78)



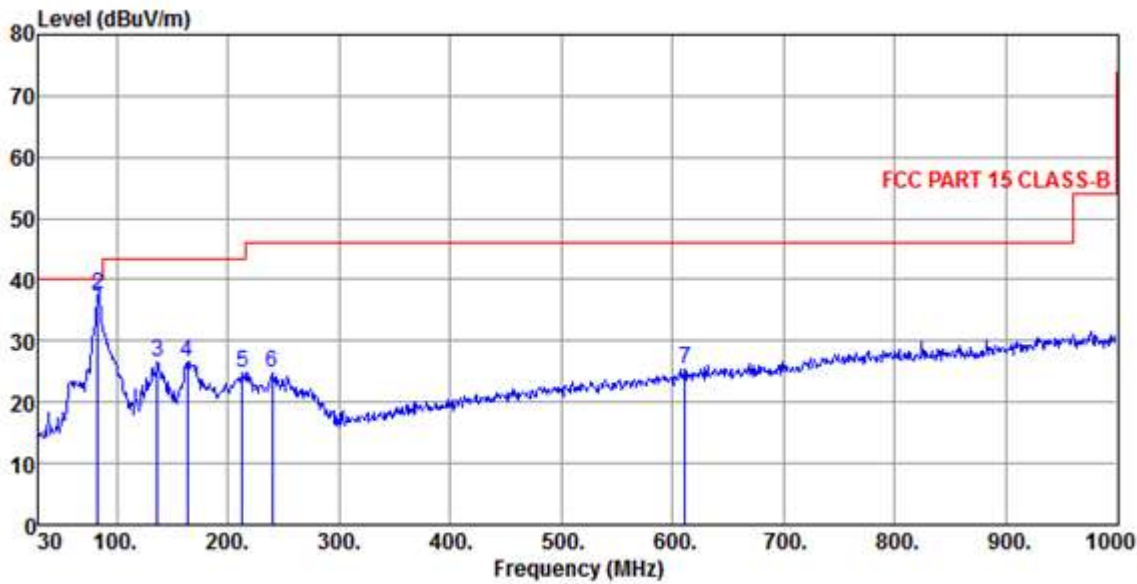
Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH78
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	36.79	19.71	12.51	0.77	0.00	32.99	40.00	-7.01 Peak
2	pp 59.10	25.95	12.58	1.04	0.00	39.57	40.00	-0.43 Peak
3	qp 59.62	23.69	12.67	1.04	0.00	37.40	40.00	-2.60 QP
4	78.50	23.92	9.14	1.09	0.00	34.15	40.00	-5.85 Peak
5	136.70	19.04	13.21	1.62	0.00	33.87	43.50	-9.63 Peak
6	228.85	13.62	11.14	2.05	0.00	26.81	46.00	-19.19 Peak



Site	: chamber							
Condition	: FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL							
EUT	:							
Model Name	:							
Temp/Humi	: 23 °C / 54 %							
Power Rating	: AC 120V/60HZ							
Mode	: GFSK CH78							
Memo	:							
	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	84.32	24.74	8.68	1.09	0.00	34.51	40.00	-5.49 Peak
2	165.80	16.55	13.55	1.77	0.00	31.87	43.50	-11.63 Peak
3	254.07	17.28	12.00	2.17	0.00	31.45	46.00	-14.55 Peak
4	458.74	4.36	16.51	2.86	0.00	23.73	46.00	-22.27 Peak
5	673.11	3.21	19.80	3.56	0.00	26.57	46.00	-19.43 Peak
6	773.02	3.67	21.41	3.75	0.00	28.83	46.00	-17.17 Peak

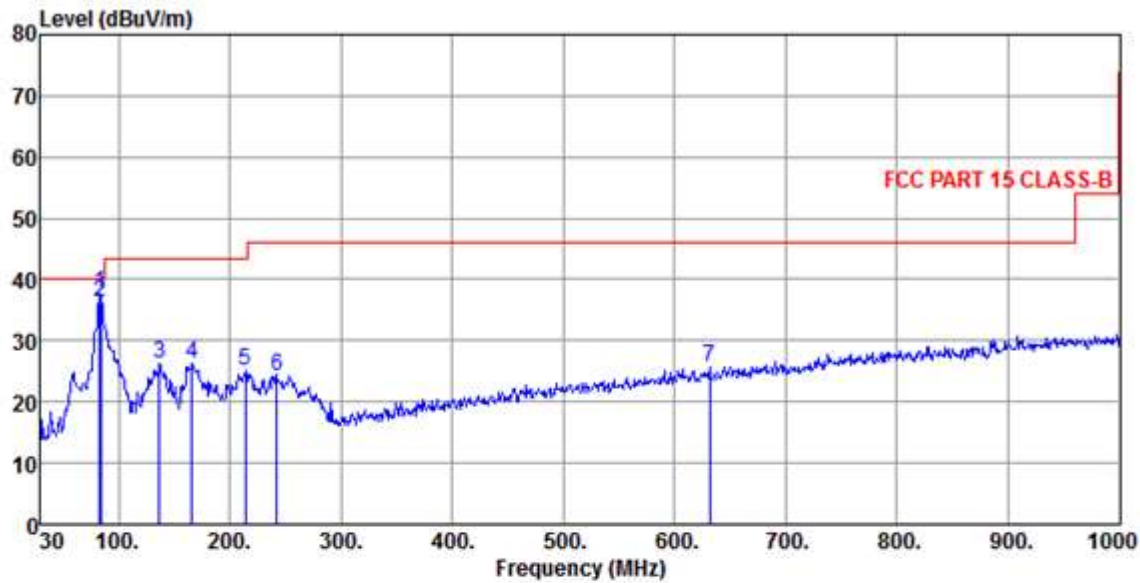
	Freq	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	59.10	26.58	12.58	1.04	0.00	40.20	40.00	0.20 Peak
2 qp	59.24	24.33	12.58	1.04	0.00	37.95	40.00	-2.05 QP
3	83.35	25.99	8.68	1.09	0.00	35.76	40.00	-4.24 Peak
4	136.70	15.75	13.21	1.62	0.00	30.58	43.50	-12.92 Peak
5	165.80	9.06	13.55	1.77	0.00	24.38	43.50	-19.12 Peak
6	239.52	9.50	11.71	2.12	0.00	23.33	46.00	-22.67 Peak
7	712.88	2.97	20.37	3.63	0.00	26.97	46.00	-19.03 Peak



Site	: chamber							
Condition	: FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL							
EUT	:							
Model Name	:							
Temp/Humi	: 23 °C / 54 %							
Power Rating	: AC 120V/60HZ							
Mode	: π/4DQPSK CH0							
Memo	:							
	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 qp	83.29	25.64	8.68	1.09	0.00	35.41	40.00	-4.59 QP
2 pp	83.35	27.65	8.68	1.09	0.00	37.42	40.00	-2.58 Peak
3	136.70	11.75	13.21	1.62	0.00	26.58	43.50	-16.92 Peak
4	163.86	11.13	13.66	1.74	0.00	26.53	43.50	-16.97 Peak
5	213.33	12.10	10.61	1.99	0.00	24.70	43.50	-18.80 Peak
6	239.52	10.88	11.71	2.12	0.00	24.71	46.00	-21.29 Peak
7	611.03	2.90	19.19	3.37	0.00	25.46	46.00	-20.54 Peak

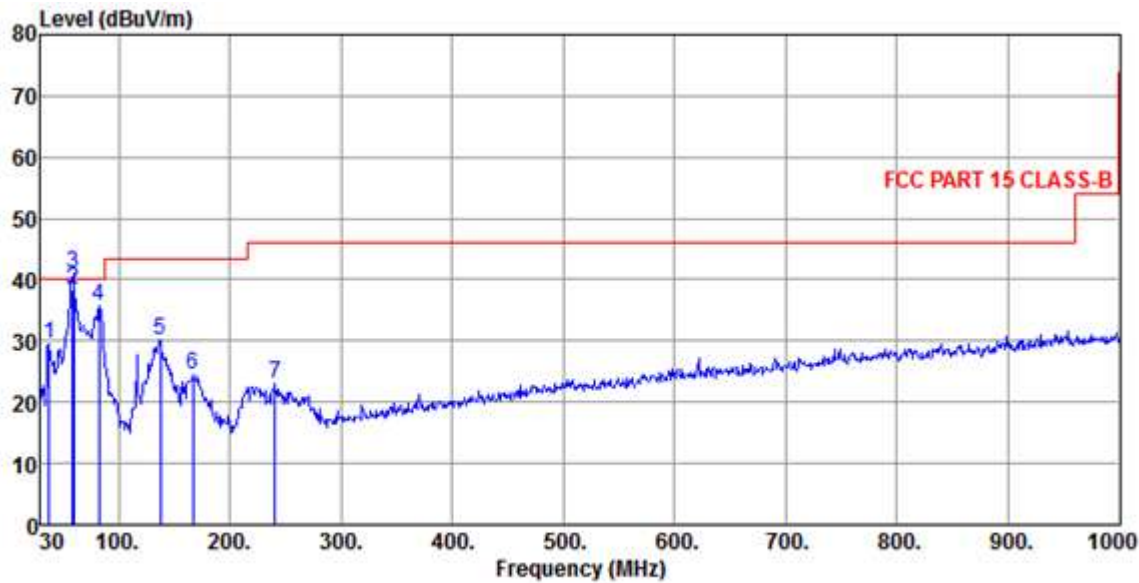
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BT $\pi/4$ -DQPSK(traffic mode Channel 39)



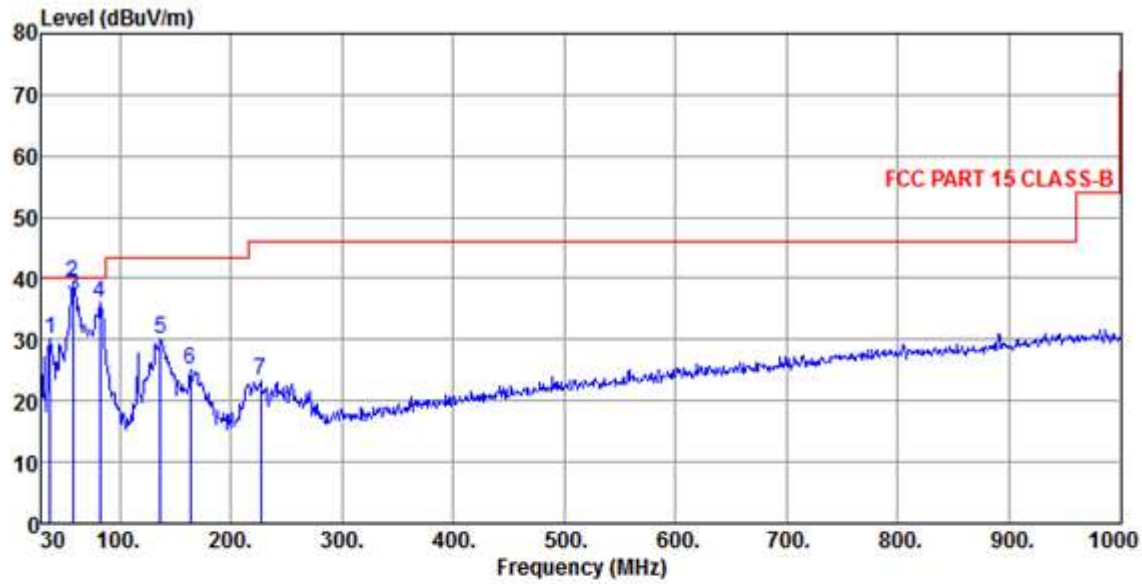
Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ DQPSK CH39
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	pp	83.35	28.15	8.68	1.09	0.00	37.92	40.00 -2.08 Peak
2	qp	83.78	26.59	8.68	1.09	0.00	36.36	40.00 -3.64 QP
3		136.70	11.53	13.21	1.62	0.00	26.36	43.50 -17.14 Peak
4		165.80	10.99	13.55	1.77	0.00	26.31	43.50 -17.19 Peak
5		214.30	12.46	10.65	2.01	0.00	25.12	43.50 -18.38 Peak
6		242.43	10.31	11.75	2.13	0.00	24.19	46.00 -21.81 Peak
7		631.40	2.88	19.31	3.48	0.00	25.67	46.00 -20.33 Peak



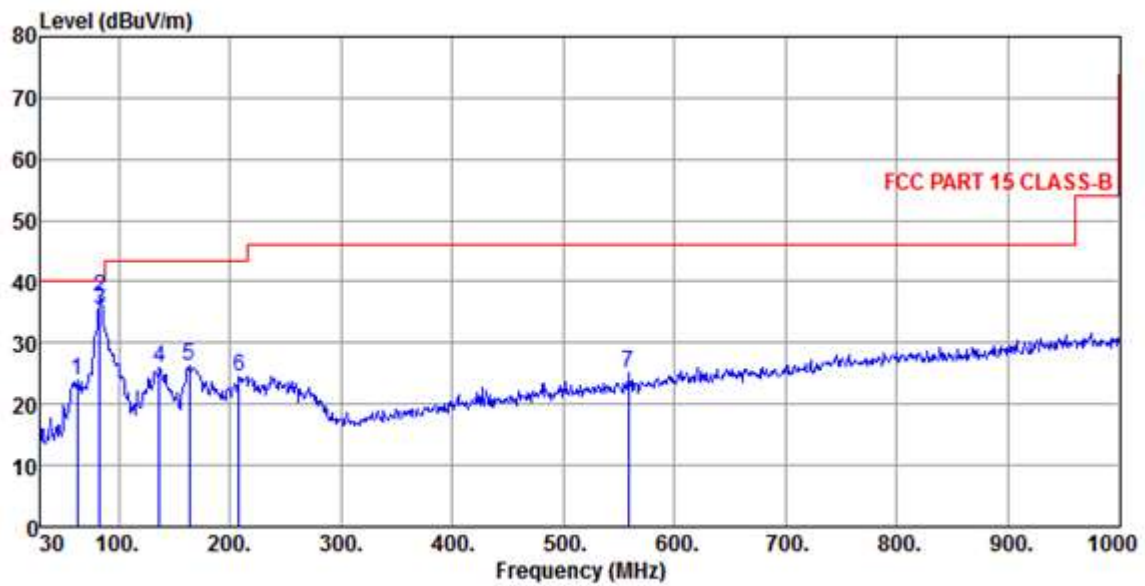
Site	: chamber							
Condition	: FCC PART 15 CLASS-B 3m VULB9160 VERTICAL							
EUT	:							
Model Name	:							
Temp/Humi	: 23 ℃ / 54 %							
Power Rating	: AC 120V/60HZ							
Mode	: π/4DQPSK CH39							
Memo	:							
	ReadAntenna	Cable	Preamp			Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	37.76	16.33	12.51	0.79	0.00	29.63	40.00	-10.37 Peak
2 qp	58.69	24.87	12.58	1.03	0.00	38.48	40.00	-1.52 QP
3 pp	59.10	27.53	12.58	1.04	0.00	41.15	40.00	1.15 Peak
4	82.38	25.99	8.73	1.09	0.00	35.81	40.00	-4.19 Peak
5	137.67	15.39	13.21	1.62	0.00	30.22	43.50	-13.28 Peak
6	166.77	9.38	13.44	1.79	0.00	24.61	43.50	-18.89 Peak
7	240.49	9.11	11.71	2.12	0.00	22.94	46.00	-23.06 Peak

BT $\pi/4$ -DQPSK(traffic mode Channel 78)



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ DQPSK CH78
Memo :

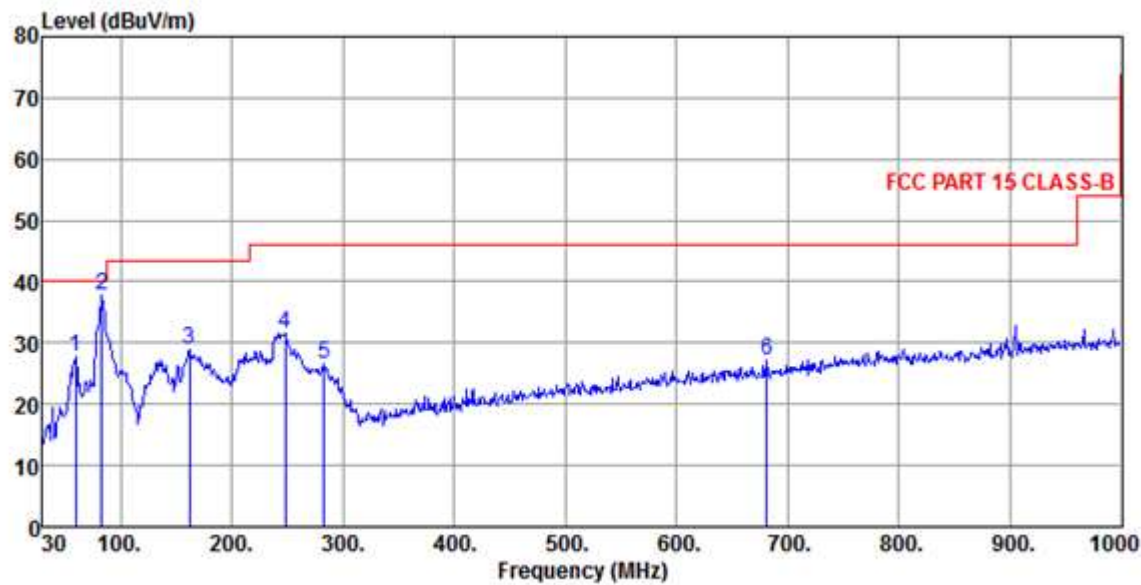
	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	37.76	16.85	12.51	0.79	0.00	30.15	40.00	-9.85 Peak
2 pp	58.13	25.68	12.58	1.03	0.00	39.29	40.00	-0.71 Peak
3 qp	58.29	23.46	12.58	1.03	0.00	37.07	40.00	-2.93 QP
4	82.38	26.05	8.73	1.09	0.00	35.87	40.00	-4.13 Peak
5	136.70	15.19	13.21	1.62	0.00	30.02	43.50	-13.48 Peak
6	163.86	9.76	13.66	1.74	0.00	25.16	43.50	-18.34 Peak
7	226.91	10.27	11.05	2.07	0.00	23.39	46.00	-22.61 Peak



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ DQPSK CH78
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	62.98	10.33	12.51	1.07	0.00	23.91	40.00	-16.09 Peak
2 pp	83.35	27.69	8.68	1.09	0.00	37.46	40.00	-2.54 Peak
3 qp	83.42	25.69	8.68	1.09	0.00	35.46	40.00	-4.54 QP
4	136.70	11.25	13.21	1.62	0.00	26.08	43.50	-17.42 Peak
5	163.86	10.90	13.66	1.74	0.00	26.30	43.50	-17.20 Peak
6	208.48	12.14	10.53	1.93	0.00	24.60	43.50	-18.90 Peak
7	558.65	3.67	18.12	3.23	0.00	25.02	46.00	-20.98 Peak

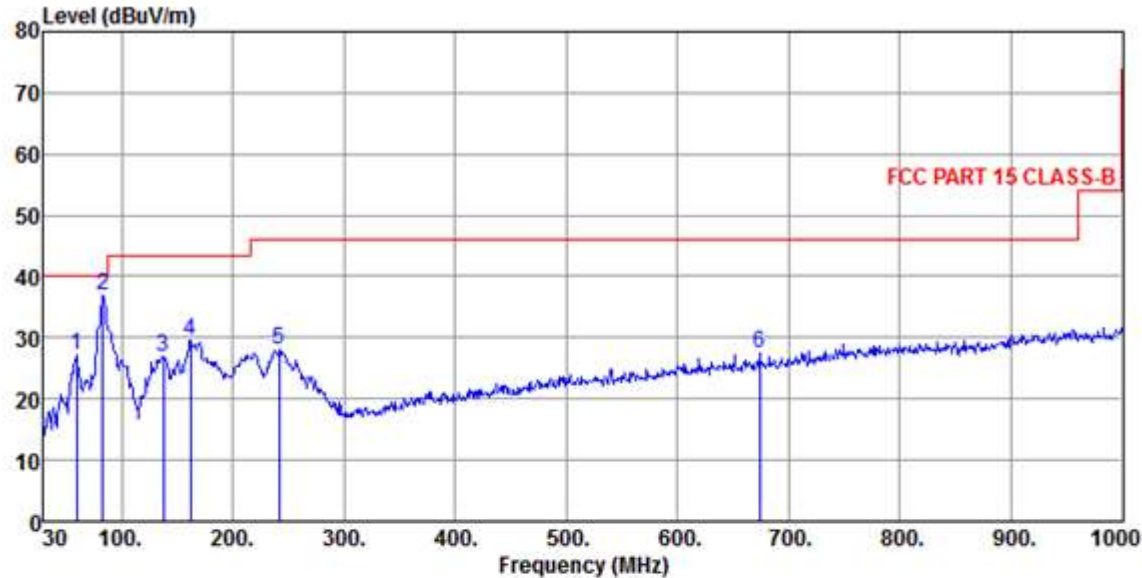
	Freq	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	36.79	19.95	12.51	0.77	0.00	33.23	40.00	-6.77 Peak
2	59.10	27.72	12.58	1.04	0.00	41.34	40.00	1.34 Peak
3	59.38	23.60	12.58	1.04	0.00	37.22	40.00	-2.78 QP
4	82.38	24.59	8.73	1.09	0.00	34.41	40.00	-5.59 Peak
5	136.70	17.34	13.21	1.62	0.00	32.17	43.50	-11.33 Peak
6	240.49	12.69	11.71	2.12	0.00	26.52	46.00	-19.48 Peak
7	497.54	4.45	17.03	3.04	0.00	24.52	46.00	-21.48 Peak



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8DPSK CH0
Memo :

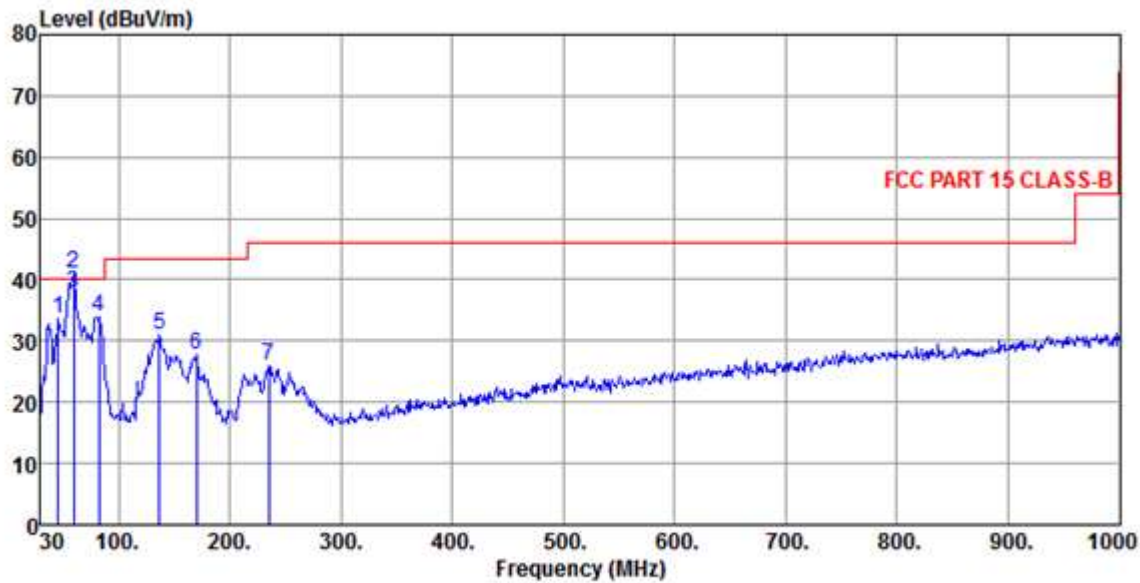
	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	59.10	14.15	12.58	1.04	0.00	27.77	40.00	-12.23 Peak
2	pp 83.35	27.89	8.68	1.09	0.00	37.66	40.00	-2.34 Peak
3	161.92	13.41	13.77	1.70	0.00	28.88	43.50	-14.62 Peak
4	248.25	17.60	11.88	2.15	0.00	31.63	46.00	-14.37 Peak
5	283.17	11.35	12.89	2.22	0.00	26.46	46.00	-19.54 Peak
6	680.87	3.64	19.89	3.58	0.00	27.11	46.00	-18.89 Peak

BT 8-DPSK(traffic mode Channel 39)



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL
EUT :
Model Name :
Temp/Humi : 23 ℃ / 54 %
Power Rating: AC 120V/60HZ
Mode : 8DPSK CH39
Memo :

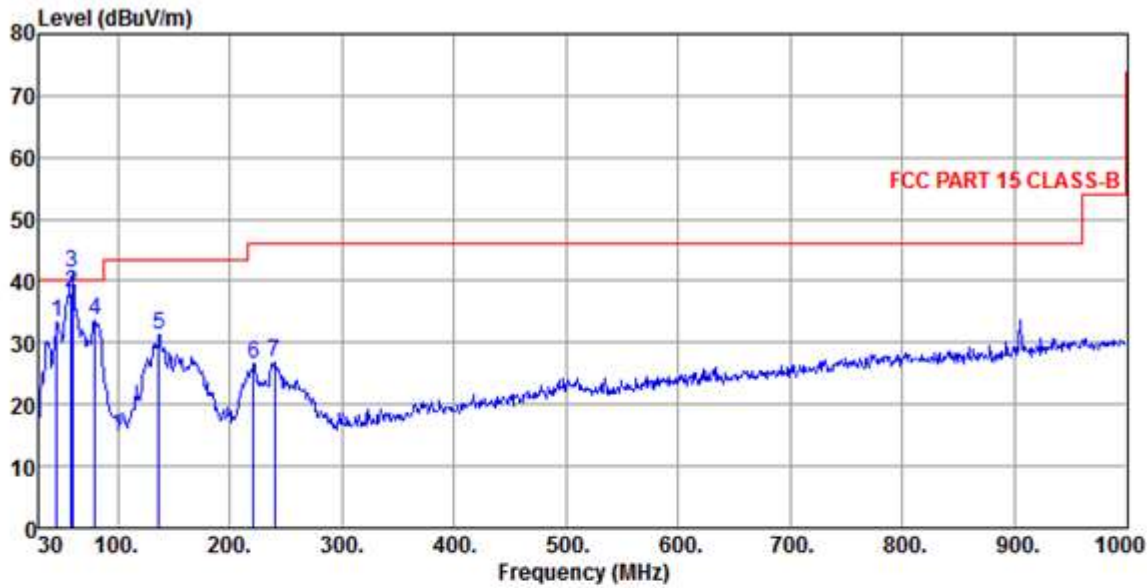
	Freq	ReadLevel	AntennaFactor	CableLoss	PreamplifierFactor	Level	Limit	OverLimit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	59.10	13.56	12.58	1.04	0.00	27.18	40.00	-12.82	Peak
2	pp 83.35	27.27	8.68	1.09	0.00	37.04	40.00	-2.96	Peak
3	137.67	12.11	13.21	1.62	0.00	26.94	43.50	-16.56	Peak
4	161.92	14.01	13.77	1.70	0.00	29.48	43.50	-14.02	Peak
5	241.46	14.28	11.75	2.13	0.00	28.16	46.00	-17.84	Peak
6	674.08	4.16	19.82	3.56	0.00	27.54	46.00	-18.46	Peak



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8DPSK CH39
Memo :

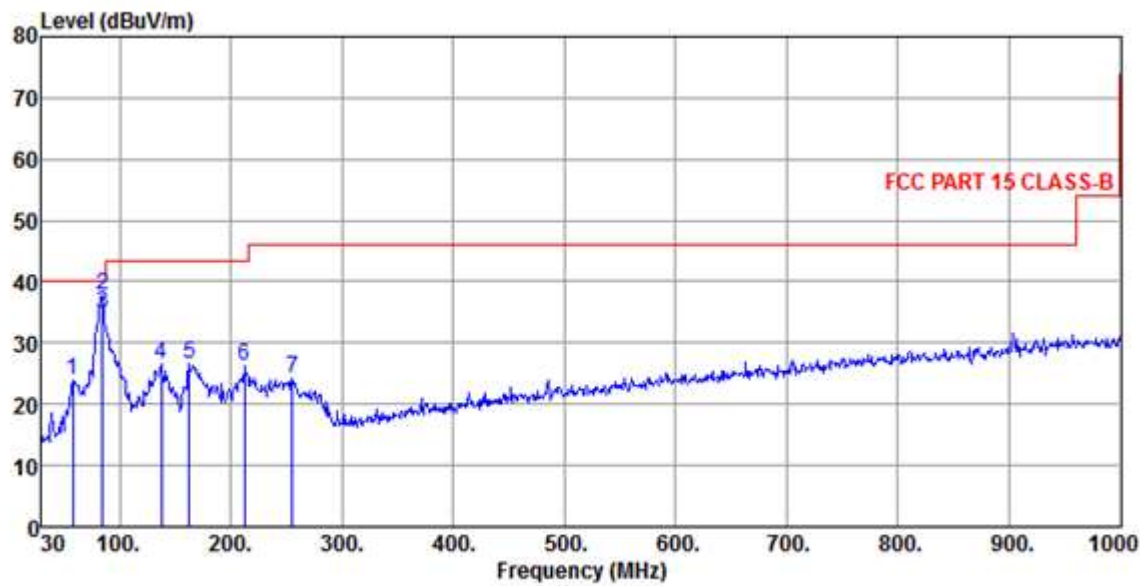
		ReadAntenna	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	45.52	20.10	12.75	0.90	0.00	33.75	40.00	-6.25
2	pp 59.10	27.31	12.58	1.04	0.00	40.93	40.00	0.93
3	qp 59.10	24.12	12.58	1.04	0.00	37.74	40.00	-2.26
4	82.38	24.04	8.73	1.09	0.00	33.86	40.00	-6.14
5	136.70	16.29	13.21	1.62	0.00	31.12	43.50	-12.38
6	169.68	12.47	13.33	1.84	0.00	27.64	43.50	-15.86
7	234.67	12.53	11.43	2.08	0.00	26.04	46.00	-19.96

BT 8-DPSK(traffic mode Channel 78)



Site : chamber
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8DPSK CH78
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	45.52	19.64	12.75	0.90	0.00	33.29	40.00	-6.71 Peak
2 qp	58.34	24.38	12.58	1.03	0.00	37.99	40.00	-2.01 QP
3 pp	59.10	27.65	12.58	1.04	0.00	41.27	40.00	1.27 Peak
4	79.47	23.68	8.77	1.09	0.00	33.54	40.00	-6.46 Peak
5	136.70	16.49	13.21	1.62	0.00	31.32	43.50	-12.18 Peak
6	221.09	13.83	10.76	2.11	0.00	26.70	46.00	-19.30 Peak
7	239.52	12.90	11.71	2.12	0.00	26.73	46.00	-19.27 Peak



Site	: chamber
Condition	: FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL
EUT	:
Model Name	:
Temp/Humi	: 23 °C / 54 %
Power Rating	: AC 120V/60HZ
Mode	: 8DPSK CH78
Memo	:

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
	MHz	Level	Factor	Loss	Factor	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	58.13	10.36	12.58	1.03	0.00	23.97	40.00	-16.03 Peak
2	pp	84.32	27.96	8.68	1.09	0.00	37.73	40.00 -2.27 Peak
3	qp	84.58	25.14	8.68	1.09	0.00	34.91	40.00 -5.09 QP
4	137.67	11.71	13.21	1.62	0.00	26.54	43.50	-16.96 Peak
5	162.89	11.33	13.66	1.72	0.00	26.71	43.50	-16.79 Peak
6	212.36	13.74	10.61	1.97	0.00	26.32	43.50	-17.18 Peak
7	255.04	9.97	12.00	2.17	0.00	24.14	46.00	-21.86 Peak

From 1GHz to 25GHz:

Only show the worst test data when EUT was operated on different mode.

EUT operation mode : BT GFSK(Ch0/Ch39/Ch78); BT Π /4-DQPSK(Ch0/Ch39/Ch78);
BT 8-DPSK(Ch0/Ch39/Ch78)

BT GFSK traffic mode Ch78

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2480	97.11	-2.88	Horizontal	94.23	/	/	Peak
4960	38.03	5.23	H	43.26	74	30.74	Peak
7440	37.14	13.15	H	50.29	74	23.71	Peak
2480	90.25	-2.88	Vertical	87.37	/	/	Peak
4960	36.87	5.23	V	42.10	74	31.90	Peak
7440	37.00	12.85	V	49.85	74	24.15	Peak

Note: 1, Total=Reading+Correct factor

2, 2480 MHz was fundamental signal which can be ignored.

3, Average measurement was not performed if peak level were lower than the average limit.

4, Other harmonics are lower than background noise.

BT Π/4-DQPSK traffic mode Ch39

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2441	96.46	-3.29	Horizontal	93.17	/	/	Peak
4882	37.54	5.02	H	42.56	74	31.44	Peak
7322	38.02	11.86	H	49.88	74	24.12	Peak
2441	90.14	-3.29	Vertical	86.85	/	/	Peak
4882	36.65	5.02	V	41.67	74	32.33	Peak
7322	36.67	12.36	V	49.03	74	24.97	Peak

Note: 1, Total=Reading+Correct factor

2, 2441MHz was fundamental signal which can be ignored.

3, Average measurement was not performed if peak level were lower than the average limit.

4, Other harmonics are lower than background noise.

BT 8-DPSK traffic mode Ch39

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2441	97.32	-3.29	Horizontal	94.03	/	/	Peak
4882	37.52	5.02	H	42.54	74	31.46	Peak
7322	39.61	11.86	H	51.47	74	22.53	Peak
2441	90.40	-3.29	Vertical	87.11	/	/	Peak
4882	36.27	5.02	V	41.29	74	32.71	Peak
7322	37.94	12.36	V	50.30	74	23.70	Peak

Note: 1, Total=Reading+Correct factor

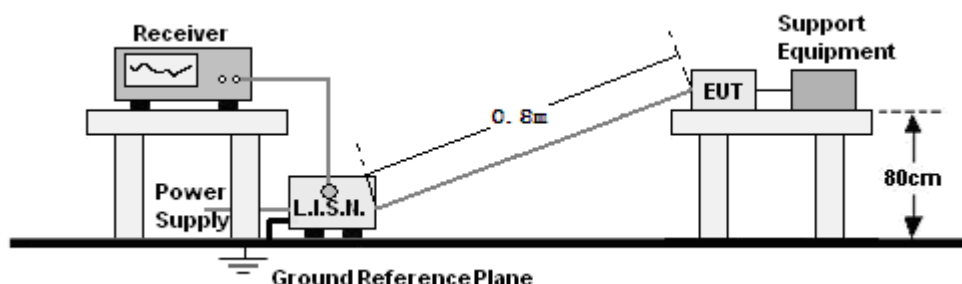
2, 2441MHz was fundamental signal which can be ignored.

3, Average measurement was not performed if peak level were lower than the average limit.

4, Other harmonics are lower than background noise.

12. AC POWER LINE CONDUCTED EMISSIONS

12.1 TEST SETUP



12.2 LIMITS

Frequency range (MHz)	Limits dB(μV)	
	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

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

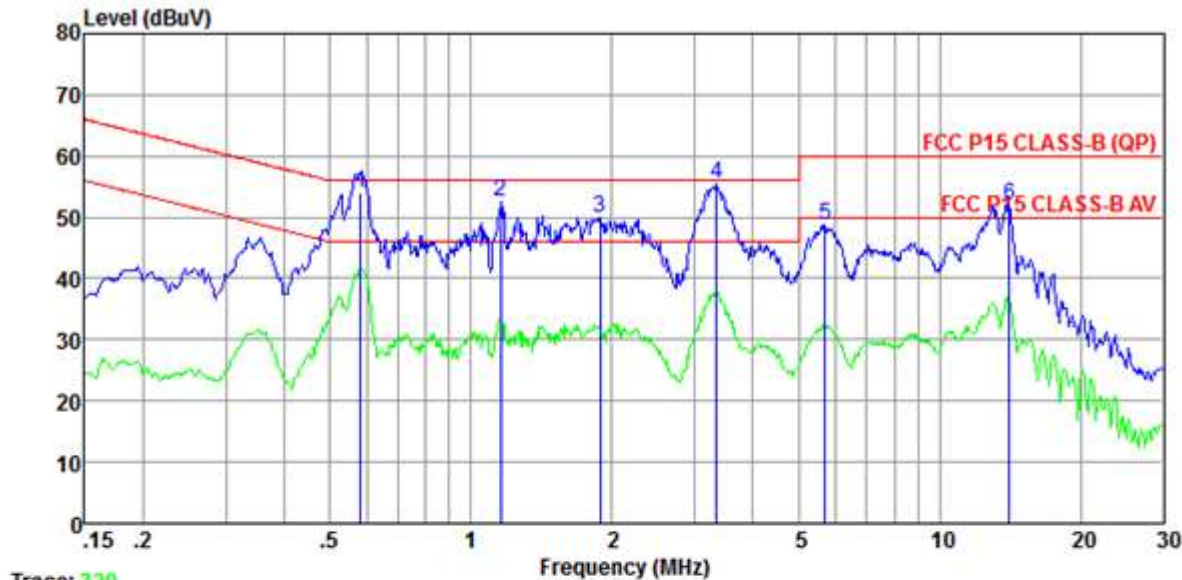
12.3 TEST PROCEDURE

According to description of ANSI C63.4: 2009 sec.13.3, the AC power line preliminary conducted emissions measurements were carried out. The preliminary conducted measurements were performed using the spectrum analyzer to observe the emission characteristics of the EUT. The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for final AC power line conducted emissions measurements. The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The EUT is connected to LISN and LISN is connected to the reference ground. All other supplemental devices are connected with EUT through other LISN. The distance between EUT and LISN is 80cm. A radio link is established between EUT and the tester. The output power of the EUT is controlled by the tester and driven to maximum value. An initial pre-scan was performed on the live L line and neutral line with peak detector (9kHz RBW). Both average detector and quasi-peak detector are performed at the frequencies with maximized peak emission. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

12.4 RESULTS & PERFORMANCE

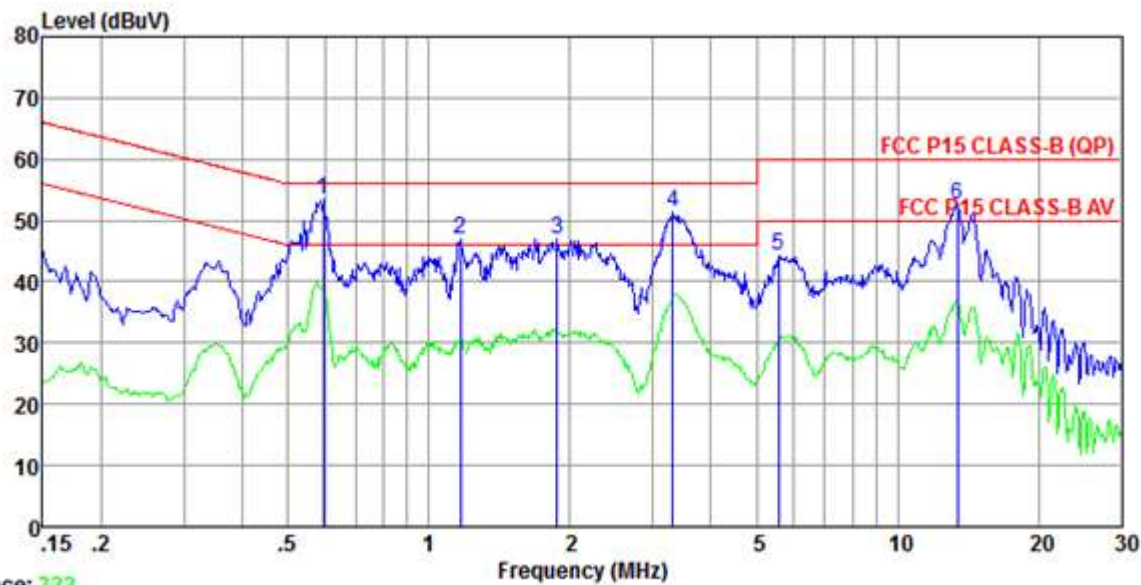
EUT was operated on different mode.EUT work mode: BT GFSK(CH0/39/78); BT Π /4-DQPSK(CH0/39/78); BT 8-DPSK(CH0/39/78)

GFSK traffic mode Ch0



Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH 0
Memo :

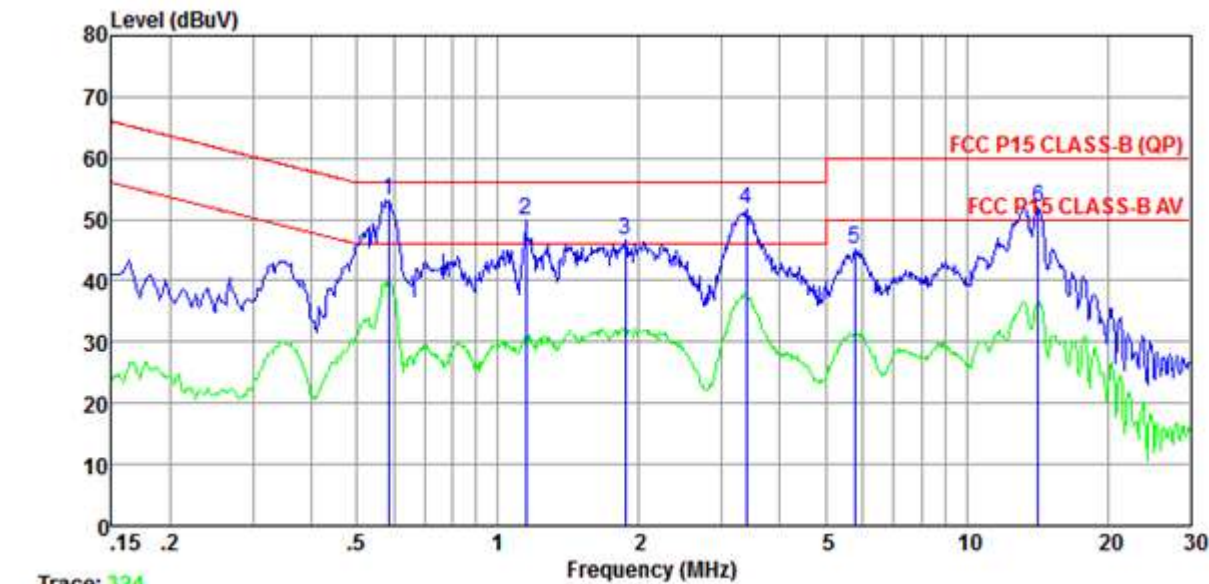
		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	qp	0.58	43.49	10.37	0.11	0.00	53.97	56.00	-2.03 QP
2		1.16	42.04	10.31	0.14	0.00	52.49	56.00	-3.51 Peak
3		1.89	39.45	10.31	0.15	0.00	49.91	56.00	-6.09 Peak
4	pp	3.35	44.93	10.32	0.15	0.00	55.40	56.00	-0.60 Peak
5		5.68	38.24	10.33	0.20	0.00	48.77	60.00	-11.23 Peak
6		14.06	41.36	10.53	0.19	0.00	52.08	60.00	-7.92 Peak



Trace: 322
Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH 0
Memo :

		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.59	42.75	10.47	0.11	0.00	53.33	56.00	-2.67 Peak
2		1.17	36.37	10.52	0.14	0.00	47.03	56.00	-8.97 Peak
3		1.88	36.29	10.52	0.15	0.00	46.96	56.00	-9.04 Peak
4		3.31	40.68	10.52	0.15	0.00	51.35	56.00	-4.65 Peak
5		5.56	33.45	10.50	0.19	0.00	44.14	60.00	-15.86 Peak
6		13.41	41.93	10.49	0.25	0.00	52.67	60.00	-7.33 Peak

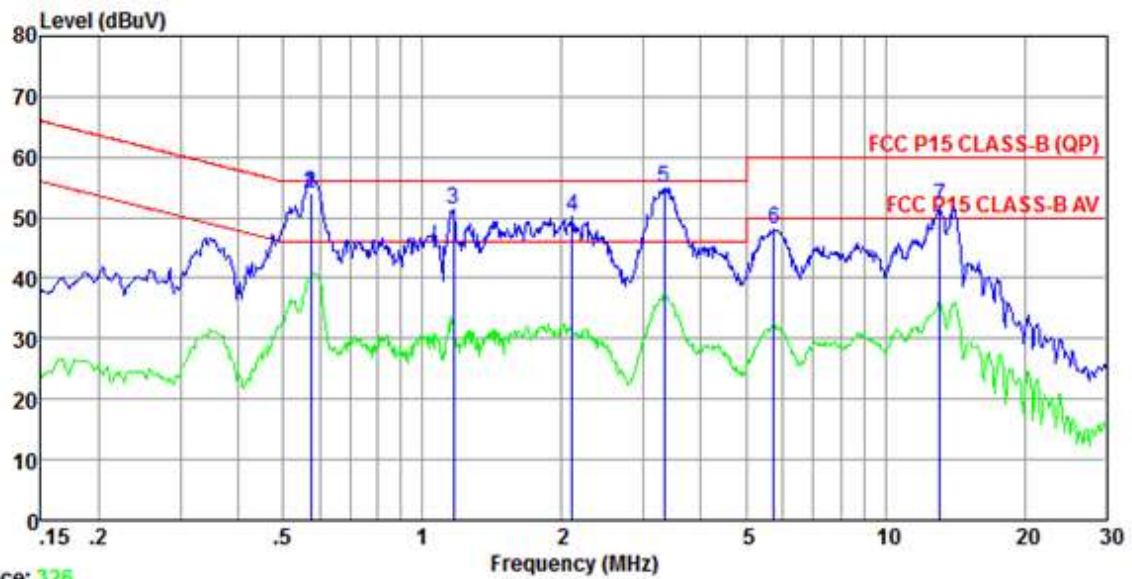
GFSK traffic mode Ch39



Trace: 324

Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH 39
Memo :

		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.59	42.58	10.48	0.11	0.00	53.17	56.00	-2.83 Peak
2		1.15	39.15	10.52	0.14	0.00	49.81	56.00	-6.19 Peak
3		1.87	35.91	10.52	0.15	0.00	46.58	56.00	-9.42 Peak
4		3.38	40.93	10.52	0.15	0.00	51.60	56.00	-4.40 Peak
5		5.77	34.40	10.50	0.21	0.00	45.11	60.00	-14.89 Peak
6		14.21	41.32	10.50	0.18	0.00	52.00	60.00	-8.00 Peak

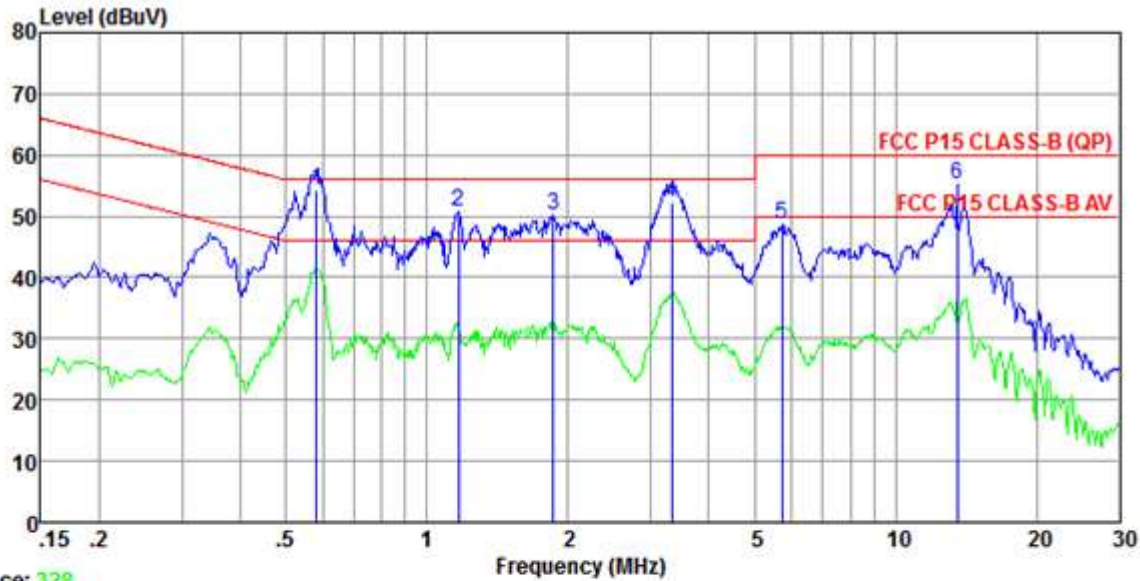


Trace: 326

Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH 39
Memo :

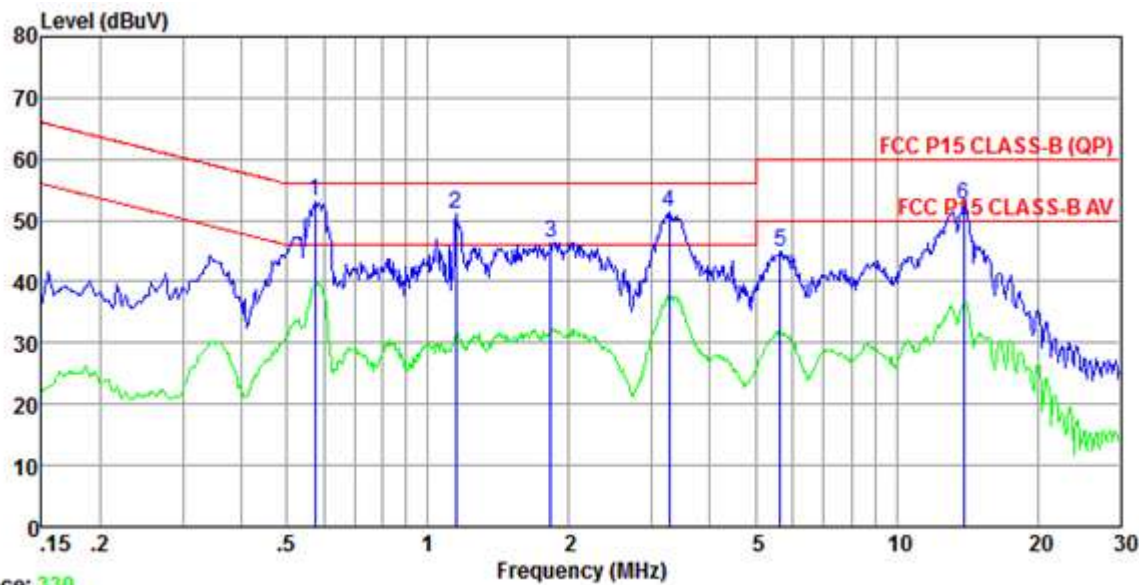
	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.57	43.57	10.37	0.11	0.00	54.05	56.00	-1.95	Peak
2 qp	0.57	43.57	10.37	0.11	0.00	54.05	56.00	-1.95	QP
3	1.17	40.87	10.31	0.14	0.00	51.32	56.00	-4.68	Peak
4	2.11	39.64	10.31	0.15	0.00	50.10	56.00	-5.90	Peak
5 pp	3.33	44.57	10.32	0.15	0.00	55.04	56.00	-0.96	Peak
6	5.74	37.45	10.33	0.21	0.00	47.99	60.00	-12.01	Peak
7	13.13	41.22	10.50	0.28	0.00	52.00	60.00	-8.00	Peak

GFSK traffic mode Ch78



Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH 78
Memo :

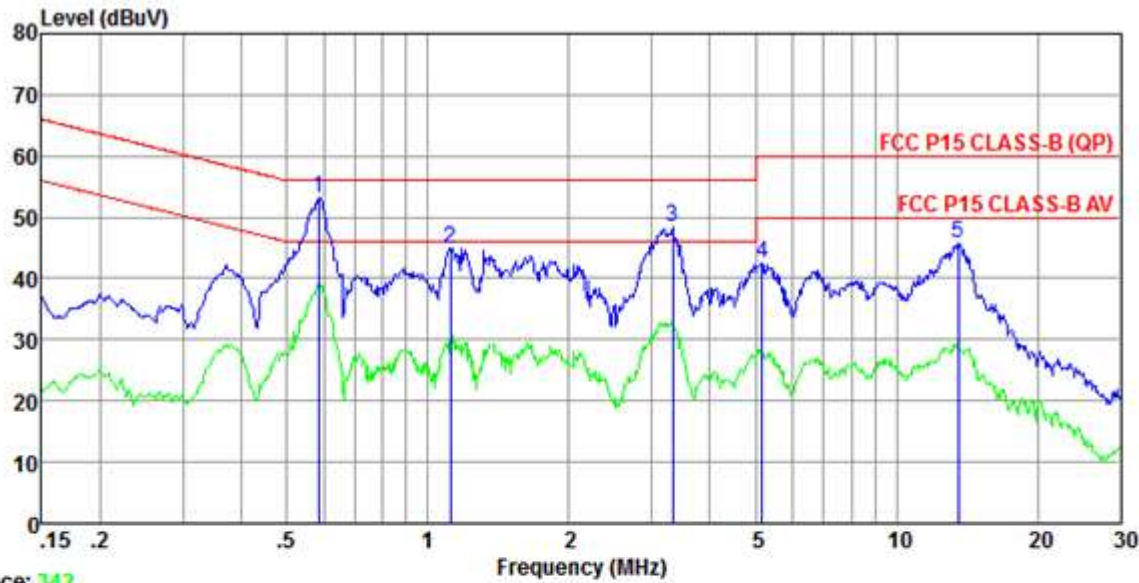
		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.58	43.74	10.37	0.11	0.00	54.22	56.00	-1.78	QP
2	1.17	40.38	10.31	0.14	0.00	50.83	56.00	-5.17	Peak
3	1.86	39.68	10.31	0.15	0.00	50.14	56.00	-5.86	Peak
4	3.33	41.75	10.32	0.15	0.00	52.22	56.00	-3.78	QP
5	5.71	38.10	10.33	0.20	0.00	48.63	60.00	-11.37	Peak
6 pk	13.55	44.38	10.51	0.24	0.00	55.13	60.00	-4.87	Peak



Trace: 330
Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : GFSK CH 78
Memo :

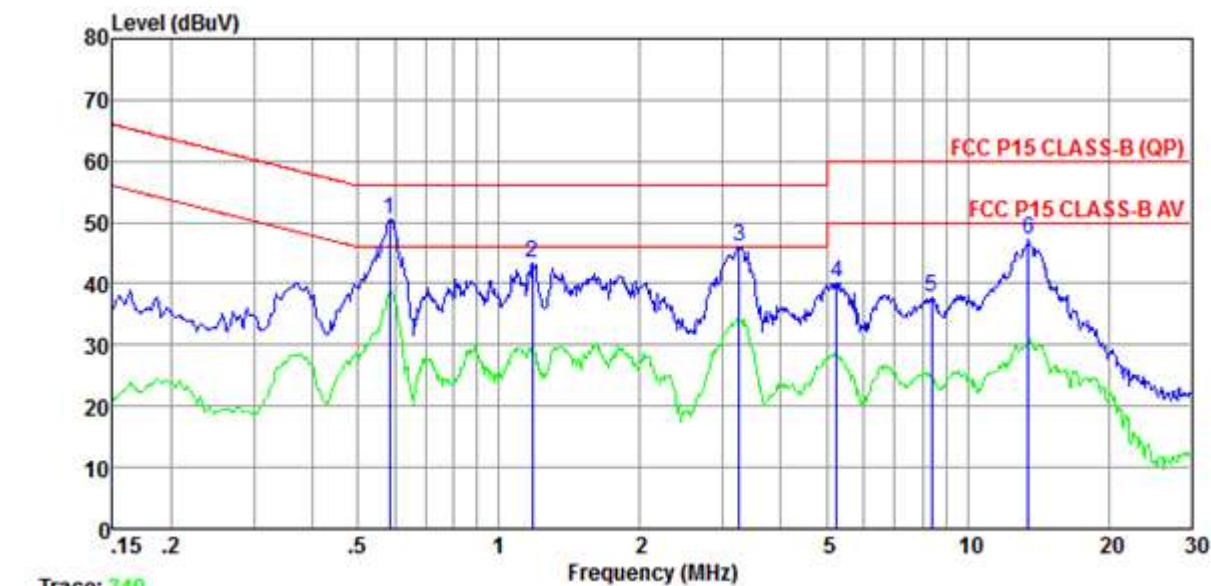
		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.57	42.56	10.49	0.11	0.00	53.16	56.00	-2.84 Peak
2		1.15	40.48	10.52	0.14	0.00	51.14	56.00	-4.86 Peak
3		1.83	35.81	10.52	0.15	0.00	46.48	56.00	-9.52 Peak
4		3.28	40.57	10.52	0.15	0.00	51.24	56.00	-4.76 Peak
5		5.65	34.09	10.50	0.20	0.00	44.79	60.00	-15.21 Peak
6		13.91	41.96	10.50	0.20	0.00	52.66	60.00	-7.34 Peak

$\pi/4$ -DQPSK traffic mode Ch0



Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ -DQPSK CH 0
Memo :

	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.59	42.72	10.36	0.11	0.00	53.19	56.00	-2.81	Peak
2	1.12	34.54	10.31	0.14	0.00	44.99	56.00	-11.01	Peak
3	3.33	37.86	10.32	0.15	0.00	48.33	56.00	-7.67	Peak
4	5.17	32.04	10.32	0.16	0.00	42.52	60.00	-17.48	Peak
5	13.55	34.89	10.51	0.24	0.00	45.64	60.00	-14.36	Peak

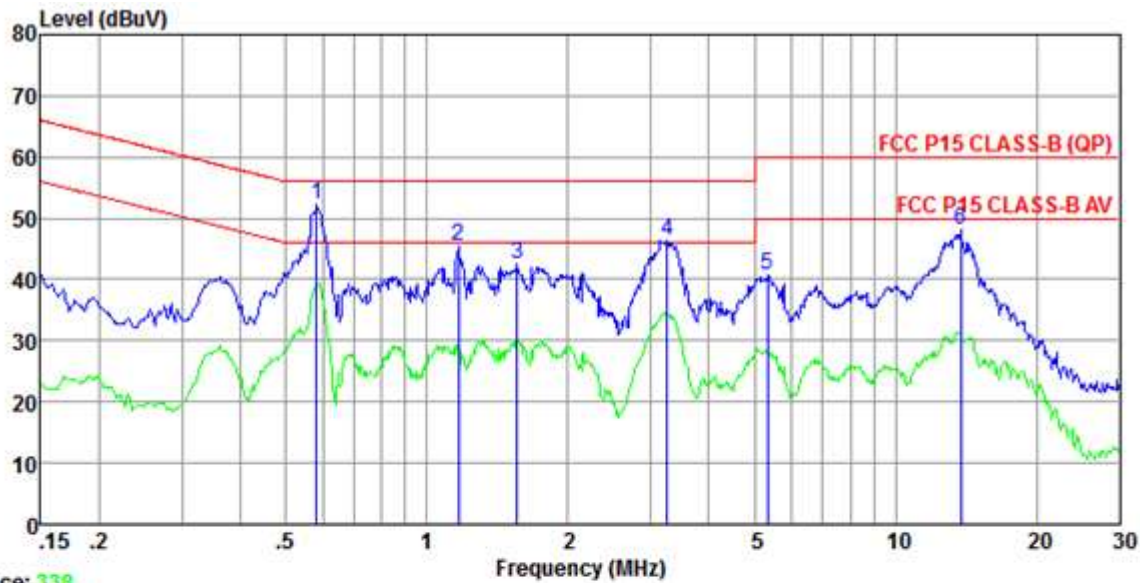


Trace: 340

Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ -DQPSK CH 0
Memo :

	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.59	39.95	10.48	0.11	0.00	50.54	56.00	-5.46 Peak
2		1.18	32.82	10.52	0.14	0.00	43.48	56.00	-12.52 Peak
3		3.26	35.45	10.52	0.15	0.00	46.12	56.00	-9.88 Peak
4		5.25	29.62	10.51	0.16	0.00	40.29	60.00	-19.71 Peak
5		8.37	27.18	10.43	0.28	0.00	37.89	60.00	-22.11 Peak
6		13.48	36.53	10.49	0.25	0.00	47.27	60.00	-12.73 Peak

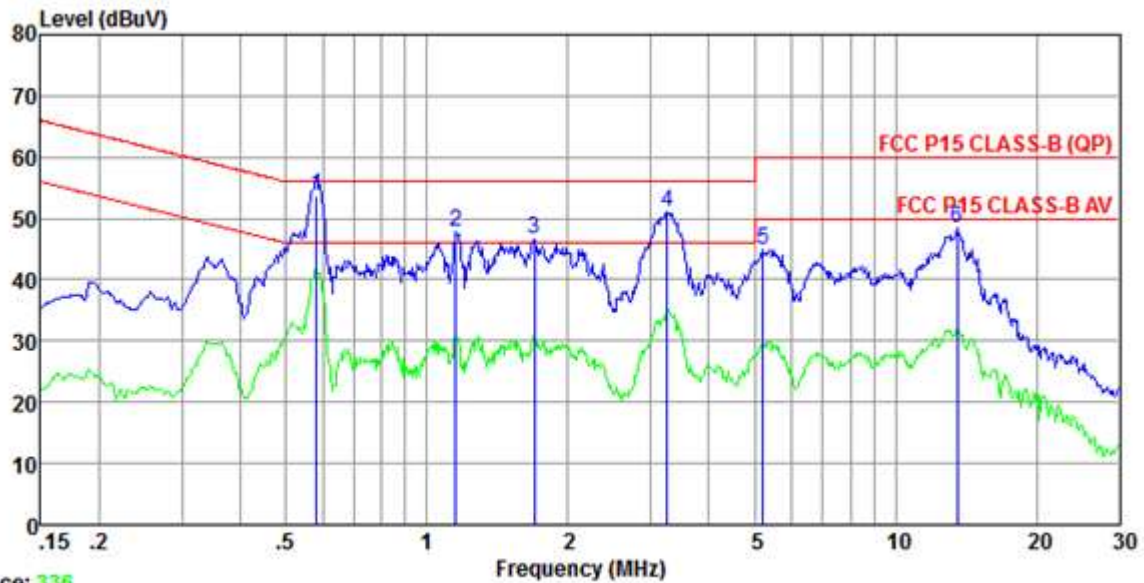
$\pi/4$ -DQPSK traffic mode Ch39



Trace: 338

Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ -DQPSK CH39
Memo :

		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.58	41.66	10.48	0.11	0.00	52.25	56.00	-3.75	Peak
2	1.17	34.81	10.52	0.14	0.00	45.47	56.00	-10.53	Peak
3	1.56	31.84	10.52	0.15	0.00	42.51	56.00	-13.49	Peak
4	3.26	35.78	10.52	0.15	0.00	46.45	56.00	-9.55	Peak
5	5.33	30.03	10.51	0.17	0.00	40.71	60.00	-19.29	Peak
6	13.77	37.37	10.49	0.22	0.00	48.08	60.00	-11.92	Peak

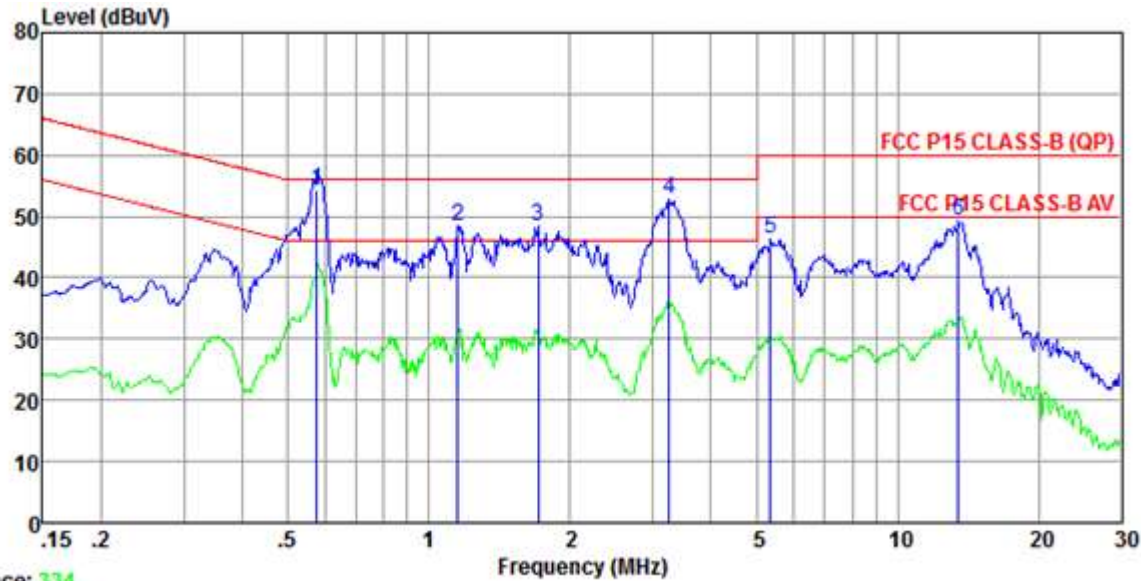


Trace: 336

Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ -DQPSK CH39
Memo :

	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.58	43.13	10.37	0.11	0.00	53.61	56.00	-2.39	QP
2	1.15	37.37	10.31	0.14	0.00	47.82	56.00	-8.18	Peak
3	1.70	36.18	10.31	0.15	0.00	46.64	56.00	-9.36	Peak
4 pk	3.26	40.65	10.32	0.15	0.00	51.12	56.00	-4.88	Peak
5	5.22	34.29	10.32	0.16	0.00	44.77	60.00	-15.23	Peak
6	13.55	37.53	10.51	0.24	0.00	48.28	60.00	-11.72	Peak

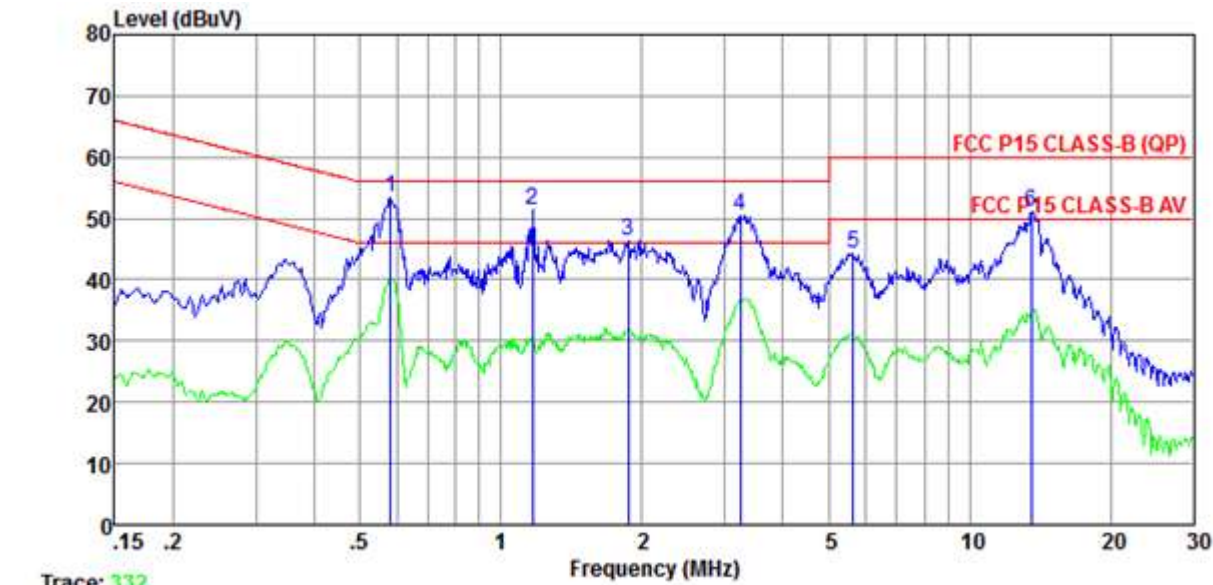
$\pi/4$ -DQPSK traffic mode Ch78



Trace: 334

Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ -DQPSK CH78
Memo :

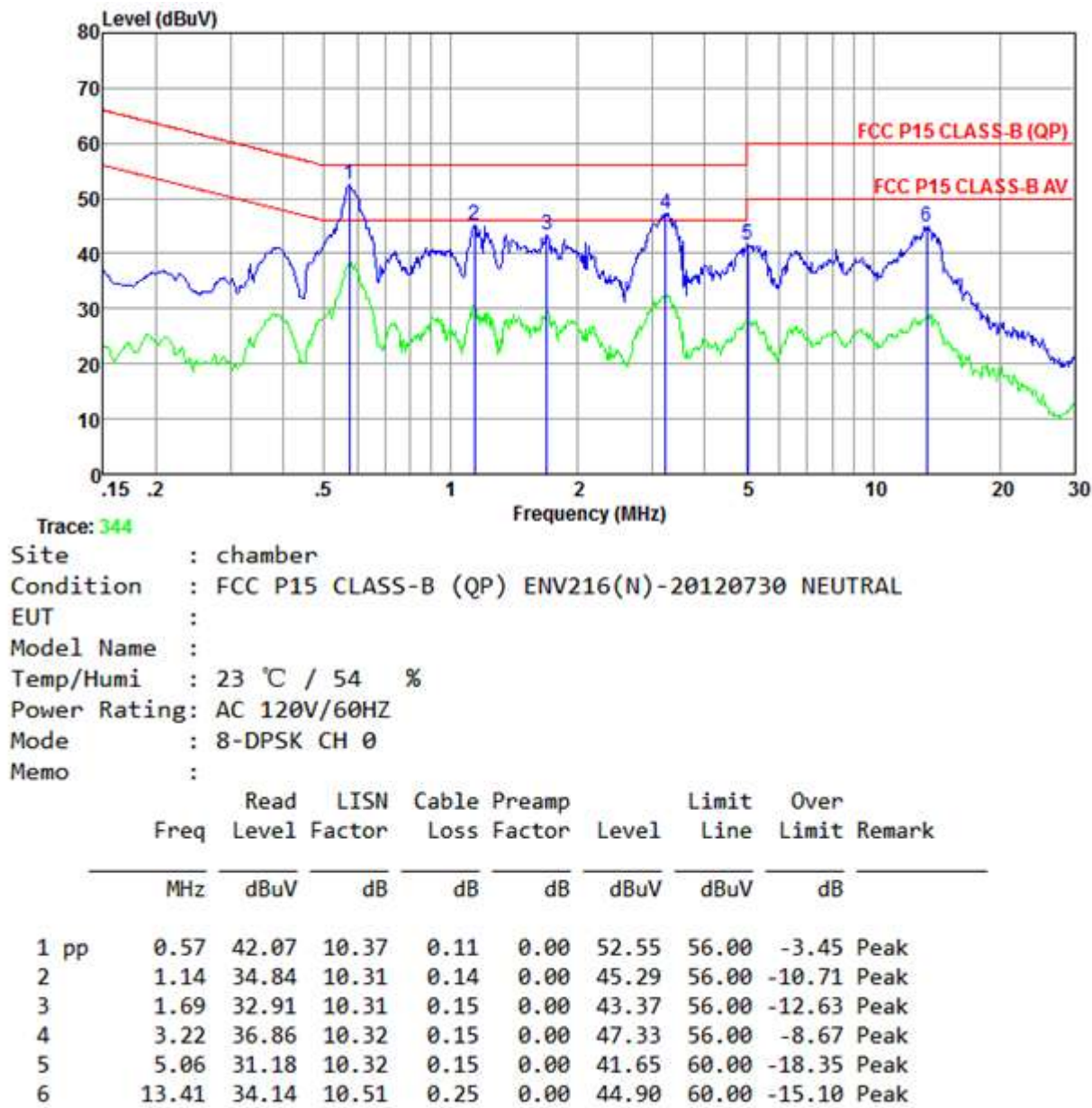
		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.58	43.78	10.37	0.11	0.00	54.26	56.00	-1.74 QP
2		1.15	38.07	10.31	0.14	0.00	48.52	56.00	-7.48 Peak
3		1.71	37.86	10.31	0.15	0.00	48.32	56.00	-7.68 Peak
4	pk	3.26	42.30	10.32	0.15	0.00	52.77	56.00	-3.23 Peak
5		5.36	35.88	10.32	0.17	0.00	46.37	60.00	-13.63 Peak
6		13.48	38.42	10.51	0.25	0.00	49.18	60.00	-10.82 Peak

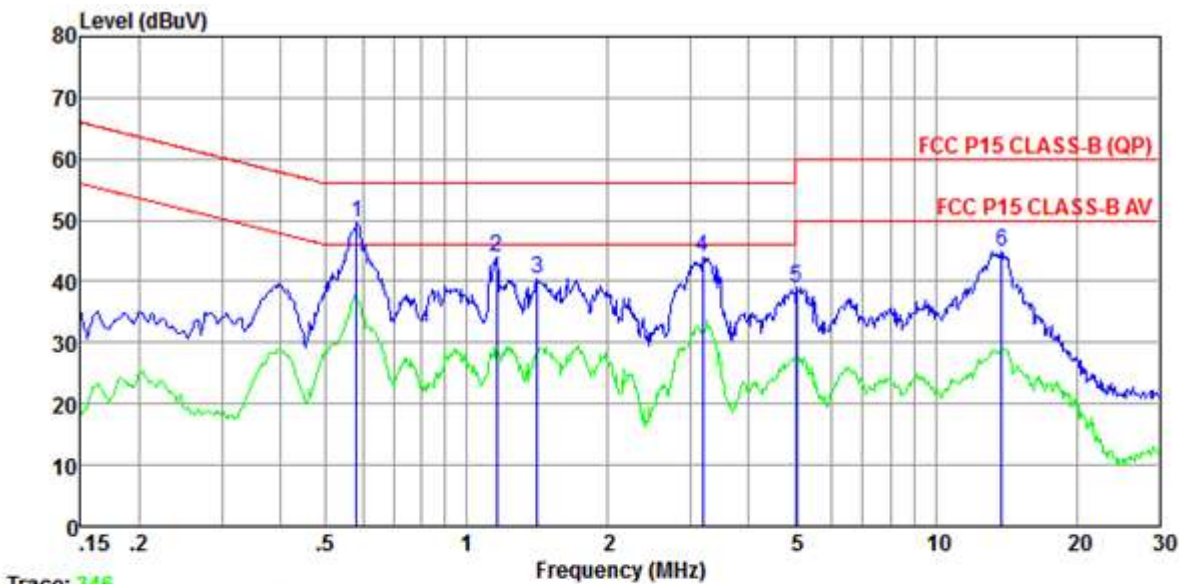


Trace: 332
Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : $\pi/4$ -DQPSK CH78
Memo :

		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.58	42.89	10.48	0.11	0.00	53.48	56.00	-2.52 Peak
2		1.17	40.60	10.52	0.14	0.00	51.26	56.00	-4.74 Peak
3		1.87	35.71	10.52	0.15	0.00	46.38	56.00	-9.62 Peak
4		3.24	39.92	10.52	0.15	0.00	50.59	56.00	-5.41 Peak
5		5.65	33.63	10.50	0.20	0.00	44.33	60.00	-15.67 Peak
6		13.55	40.44	10.49	0.24	0.00	51.17	60.00	-8.83 Peak

8-DPSK traffic mode Ch0

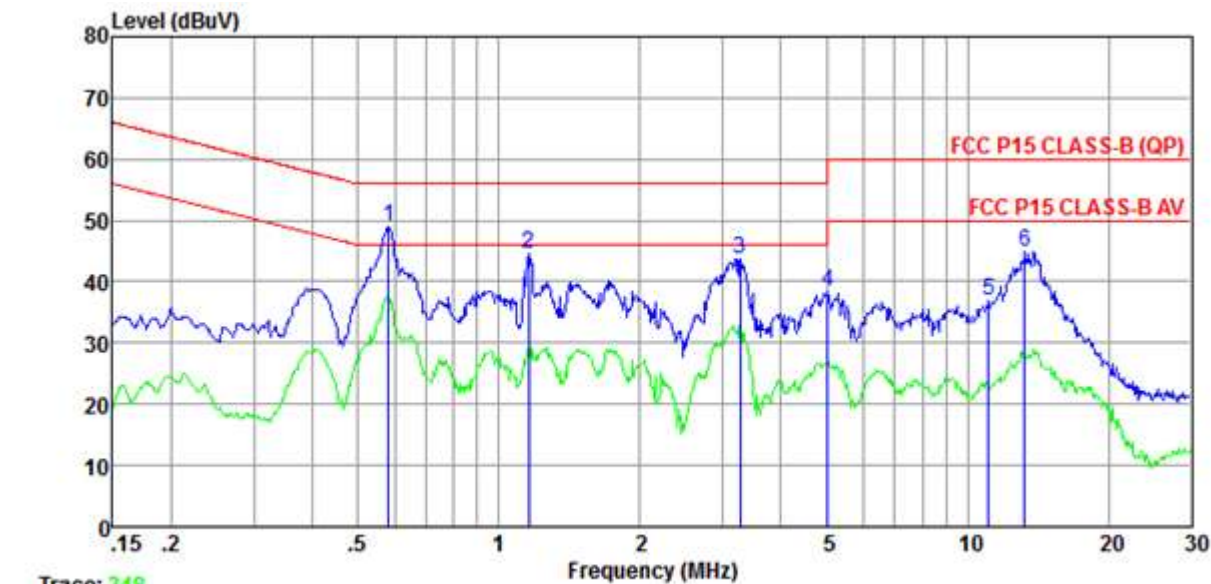




Trace: 346
Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8-DPSK CH 0
Memo :

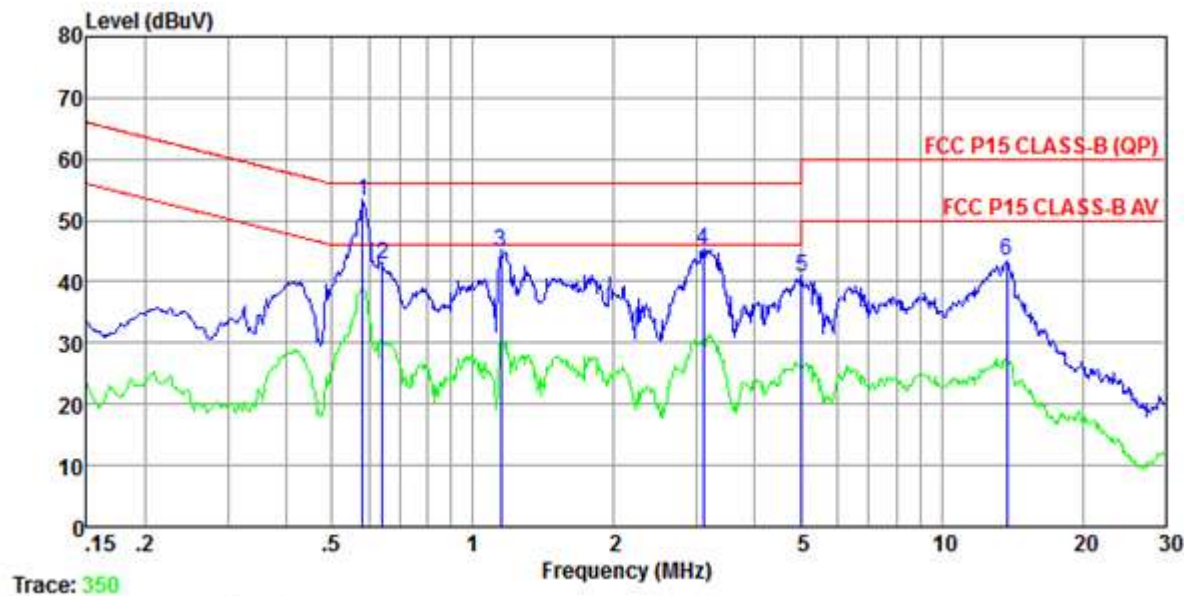
	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.58	38.96	10.48	0.11	0.00	49.55	56.00	-6.45	Peak
2	1.16	33.40	10.52	0.14	0.00	44.06	56.00	-11.94	Peak
3	1.41	29.83	10.52	0.14	0.00	40.49	56.00	-15.51	Peak
4	3.19	33.44	10.52	0.15	0.00	44.11	56.00	-11.89	Peak
5	5.06	28.35	10.52	0.15	0.00	39.02	60.00	-20.98	Peak
6	13.84	34.09	10.50	0.21	0.00	44.80	60.00	-15.20	Peak

8-DPSK traffic mode Ch39



Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8-DPSK CH 39
Memo :

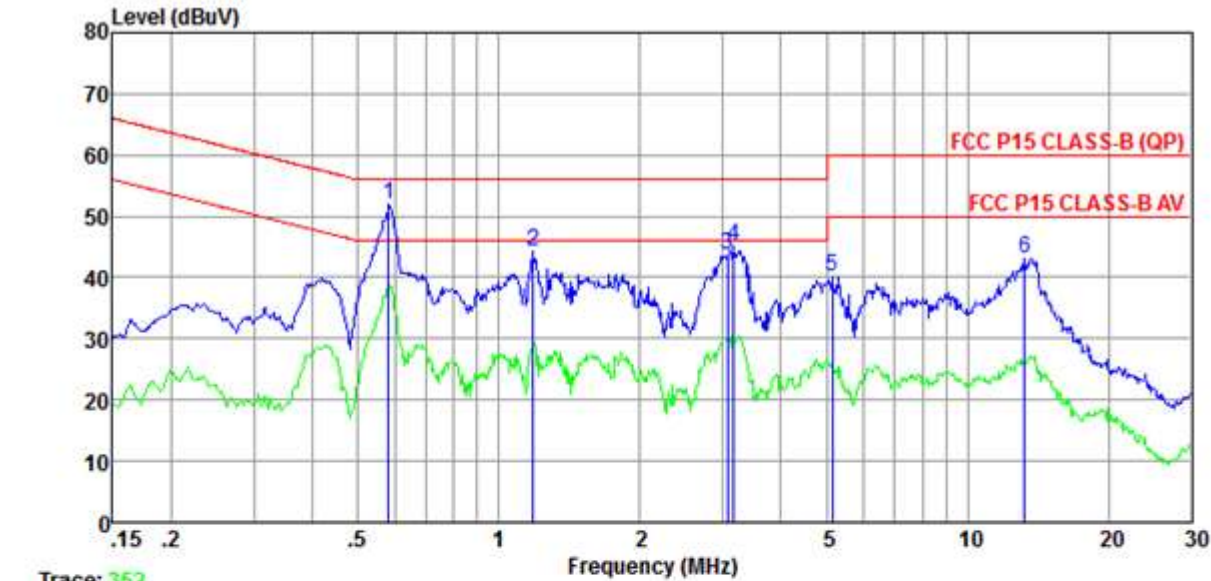
	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.58	38.48	10.48	0.11	0.00	49.07	56.00	-6.93	Peak
2	1.16	33.98	10.52	0.14	0.00	44.64	56.00	-11.36	Peak
3	3.28	33.14	10.52	0.15	0.00	43.81	56.00	-12.19	Peak
4	5.03	27.85	10.52	0.14	0.00	38.51	60.00	-21.49	Peak
5	11.08	26.26	10.43	0.32	0.00	37.01	60.00	-22.99	Peak
6	13.27	34.14	10.48	0.27	0.00	44.89	60.00	-15.11	Peak



Trace: 350
Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8-DPSK CH 39
Memo :

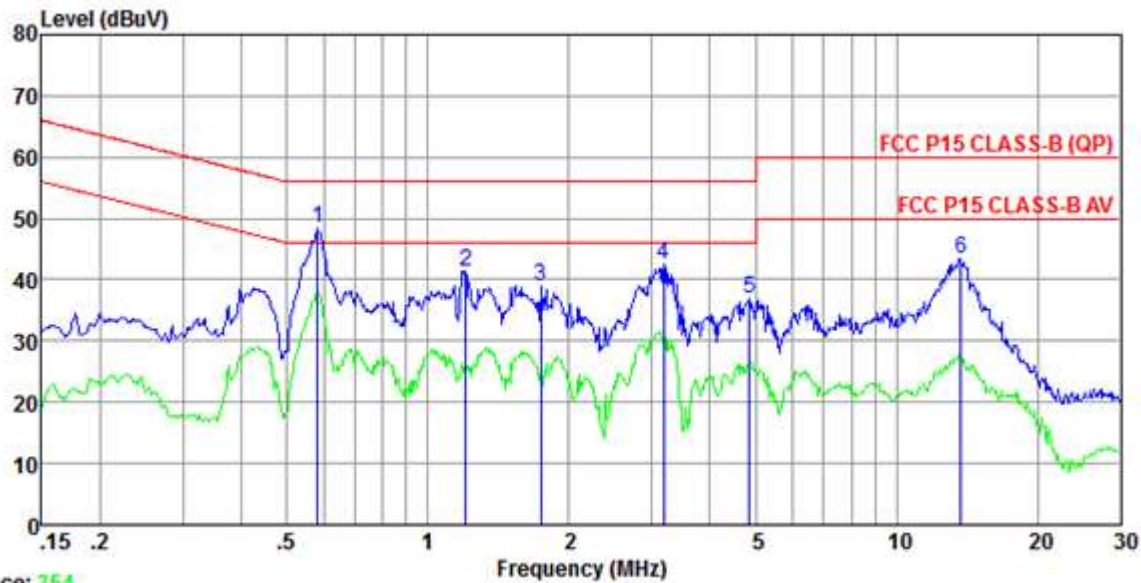
	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.58	42.72	10.37	0.11	0.00	53.20	56.00	-2.80 Peak
2		0.64	32.42	10.33	0.11	0.00	42.86	56.00	-13.14 Peak
3		1.15	34.39	10.31	0.14	0.00	44.84	56.00	-11.16 Peak
4		3.11	34.77	10.32	0.15	0.00	45.24	56.00	-10.76 Peak
5		5.03	30.34	10.32	0.14	0.00	40.80	60.00	-19.20 Peak
6		13.77	32.57	10.52	0.22	0.00	43.31	60.00	-16.69 Peak

8-DPSK traffic mode Ch78



Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8-DPSK CH 78
Memo :

	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.58	41.34	10.37	0.11	0.00	51.82	56.00	-4.18	Peak
2	1.18	33.71	10.31	0.14	0.00	44.16	56.00	-11.84	Peak
3	3.07	33.32	10.32	0.15	0.00	43.79	56.00	-12.21	Peak
4	3.17	34.69	10.32	0.15	0.00	45.16	56.00	-10.84	Peak
5	5.14	29.62	10.32	0.15	0.00	40.09	60.00	-19.91	Peak
6	13.27	32.45	10.50	0.27	0.00	43.22	60.00	-16.78	Peak



Trace: 354

Site : chamber
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE
EUT :
Model Name :
Temp/Humi : 23 °C / 54 %
Power Rating: AC 120V/60HZ
Mode : 8-DPSK CH 78
Memo :

	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	pp	0.58	37.74	10.48	0.11	0.00	48.33	56.00	-7.67 Peak
2		1.20	30.75	10.52	0.14	0.00	41.41	56.00	-14.59 Peak
3		1.74	28.35	10.52	0.15	0.00	39.02	56.00	-16.98 Peak
4		3.19	31.85	10.52	0.15	0.00	42.52	56.00	-13.48 Peak
5		4.85	26.15	10.52	0.14	0.00	36.81	56.00	-19.19 Peak
6		13.70	32.76	10.49	0.23	0.00	43.48	60.00	-16.52 Peak

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

Please refer to the file named “Part 15C Setup Photos”.

APPENDIX 2 PHOTOGRAPHS OF EUT

Please refer to the files named “EUT External Photos” and “EUT Internal Photos”.

----End of the report----