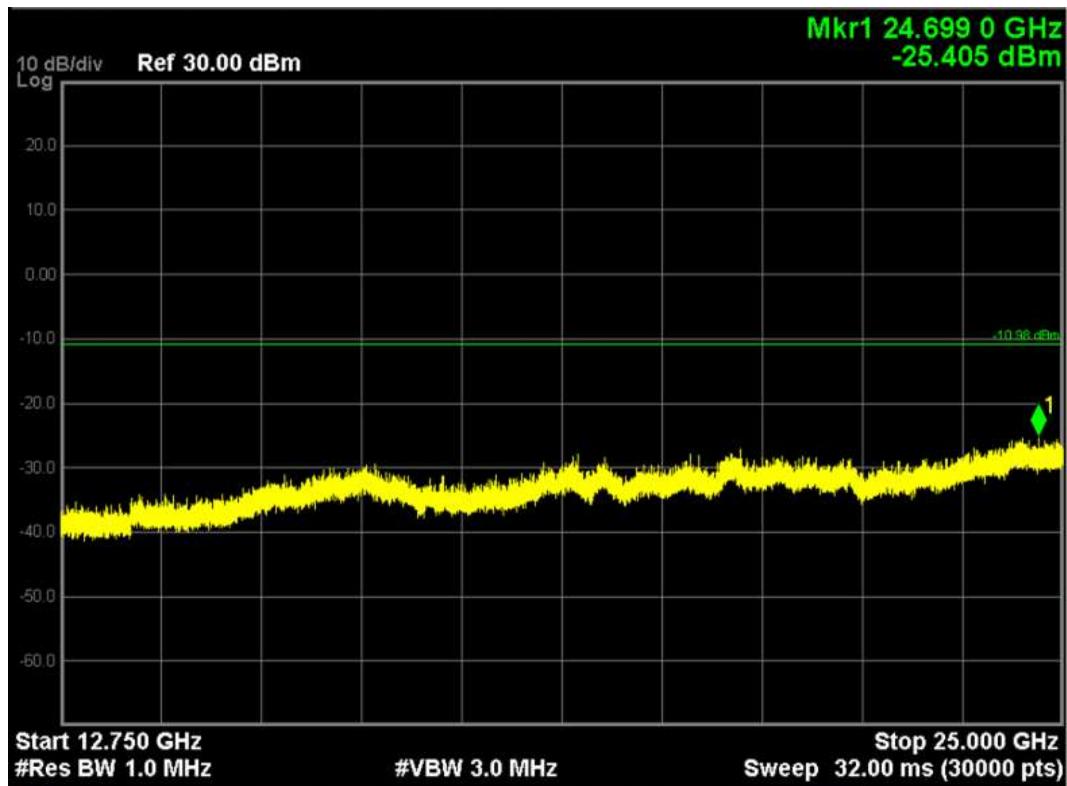
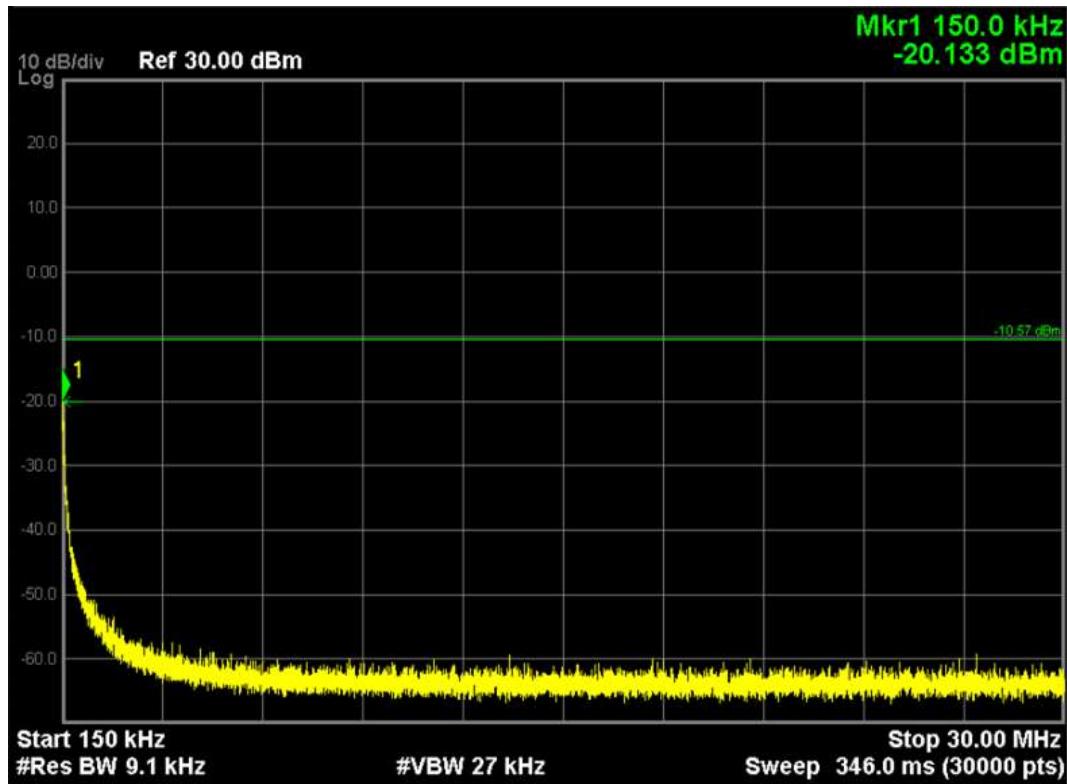
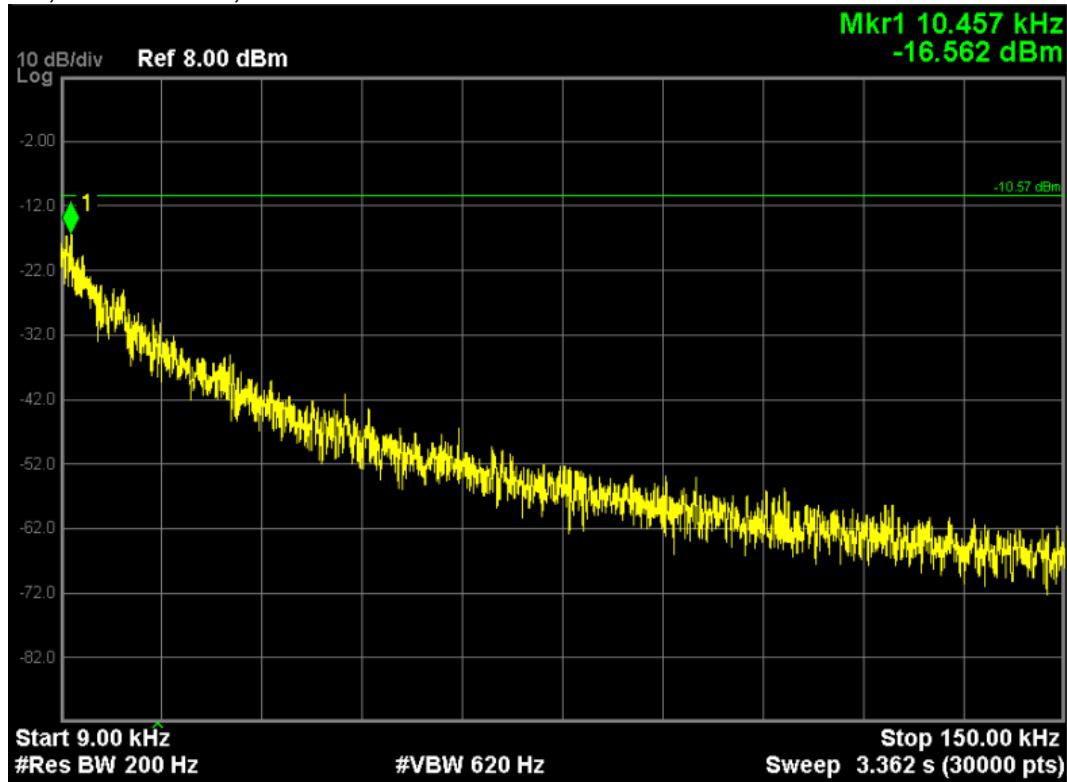
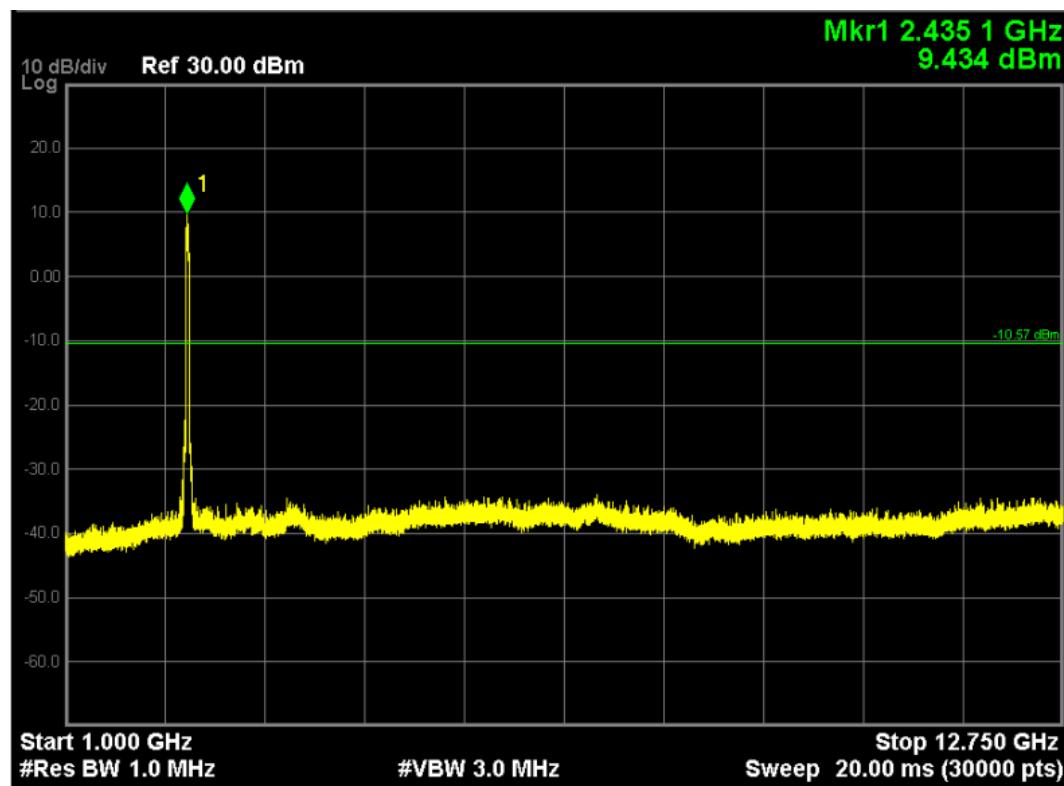
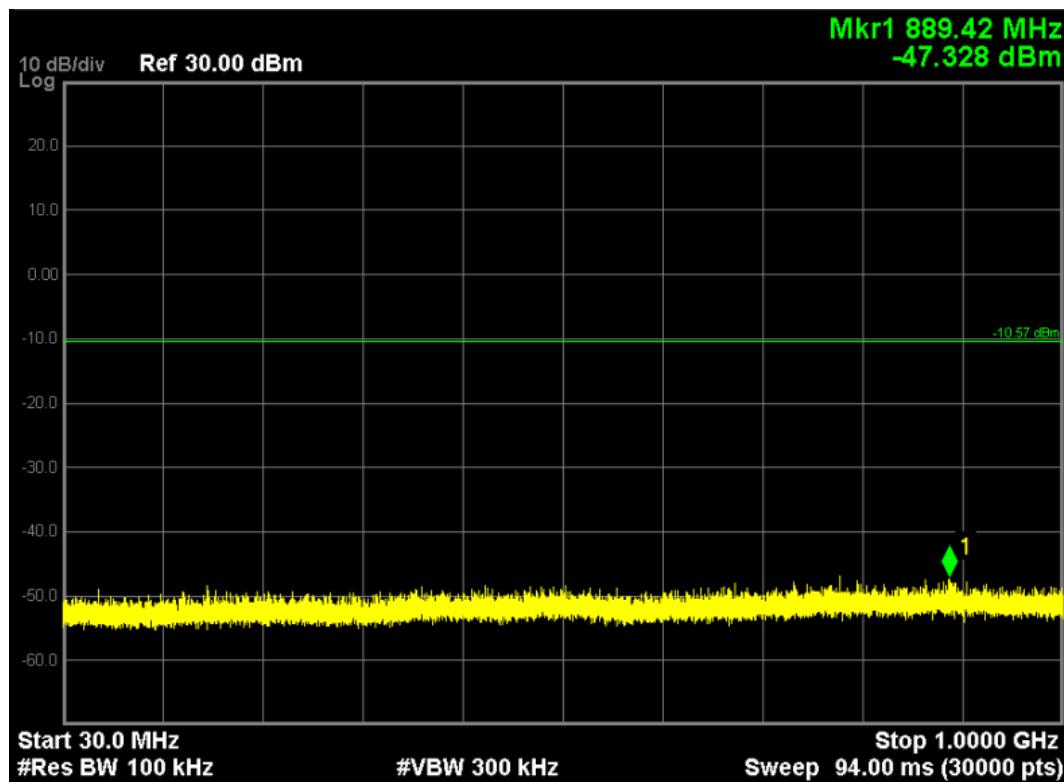


Note: The Mark1 point is carrier.

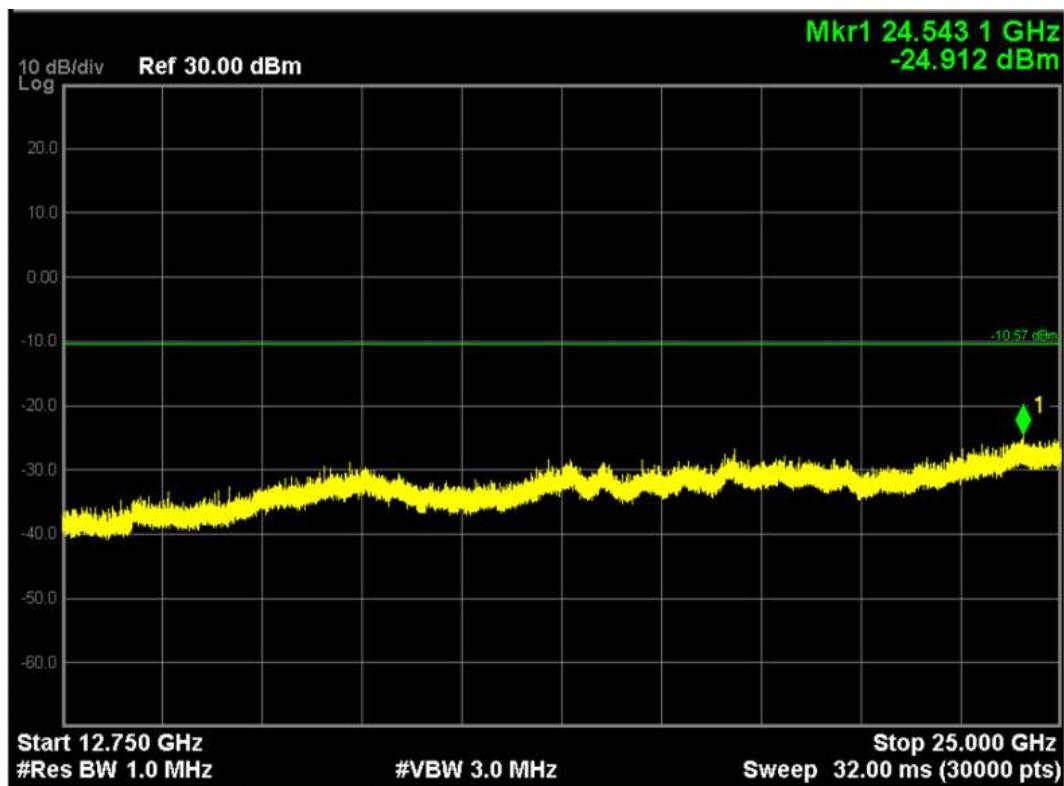


802.11n40, traffic mode; Channel 6

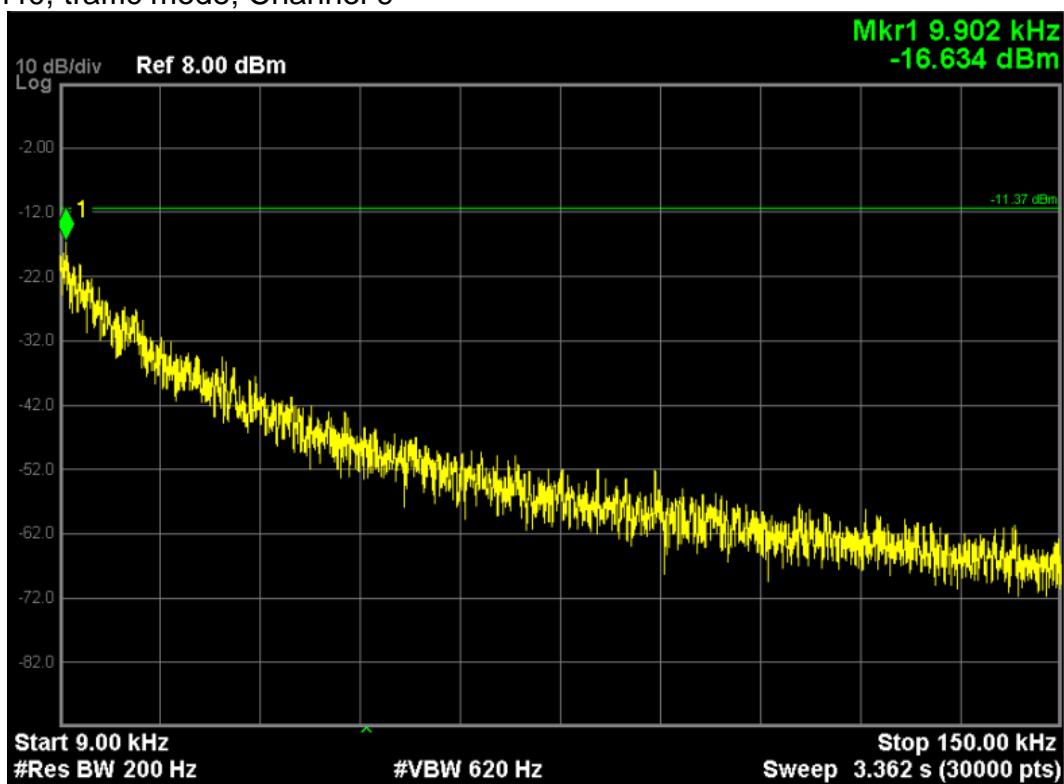


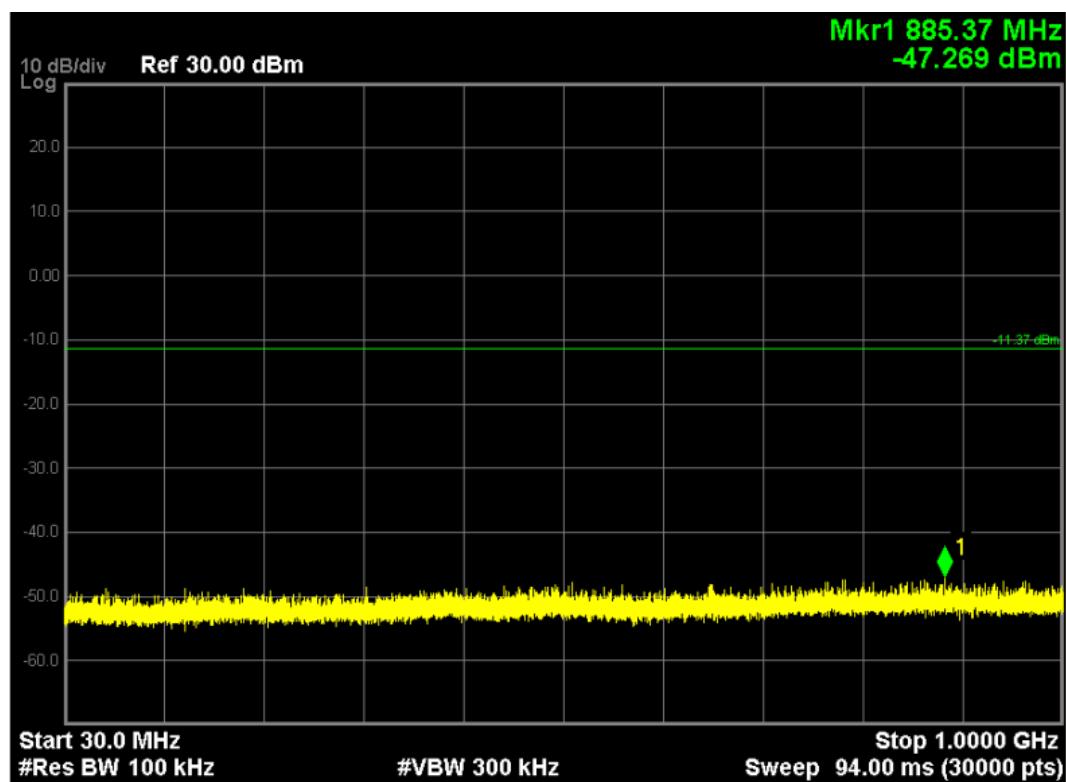
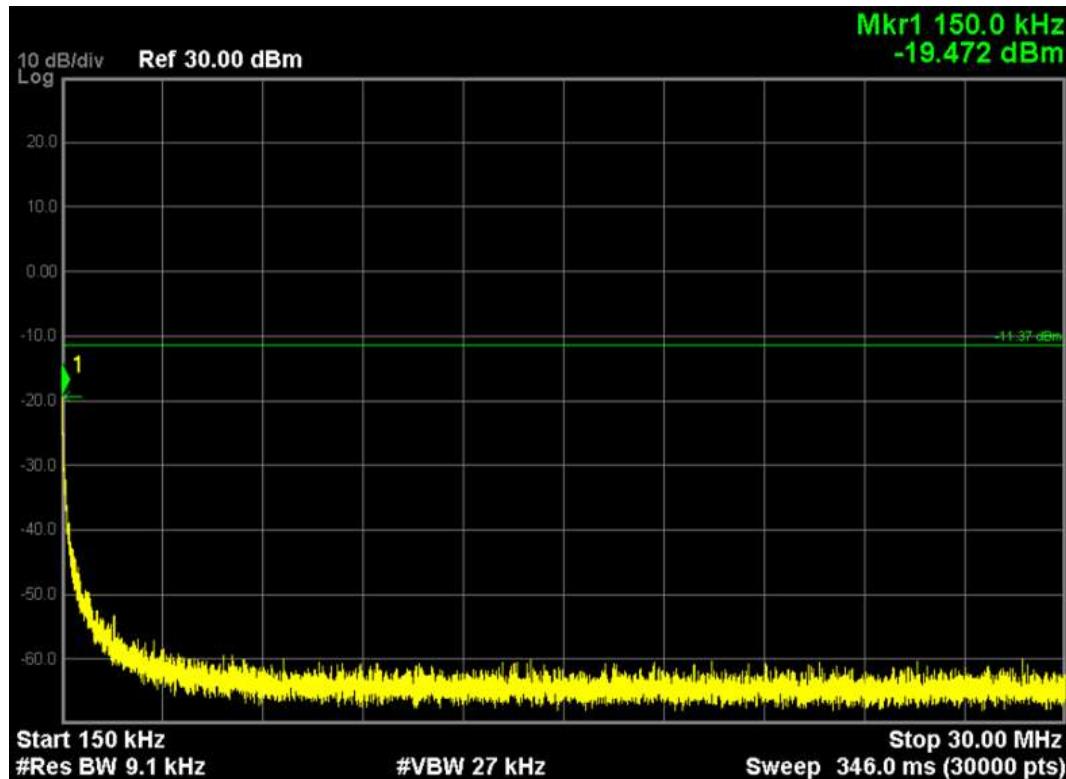


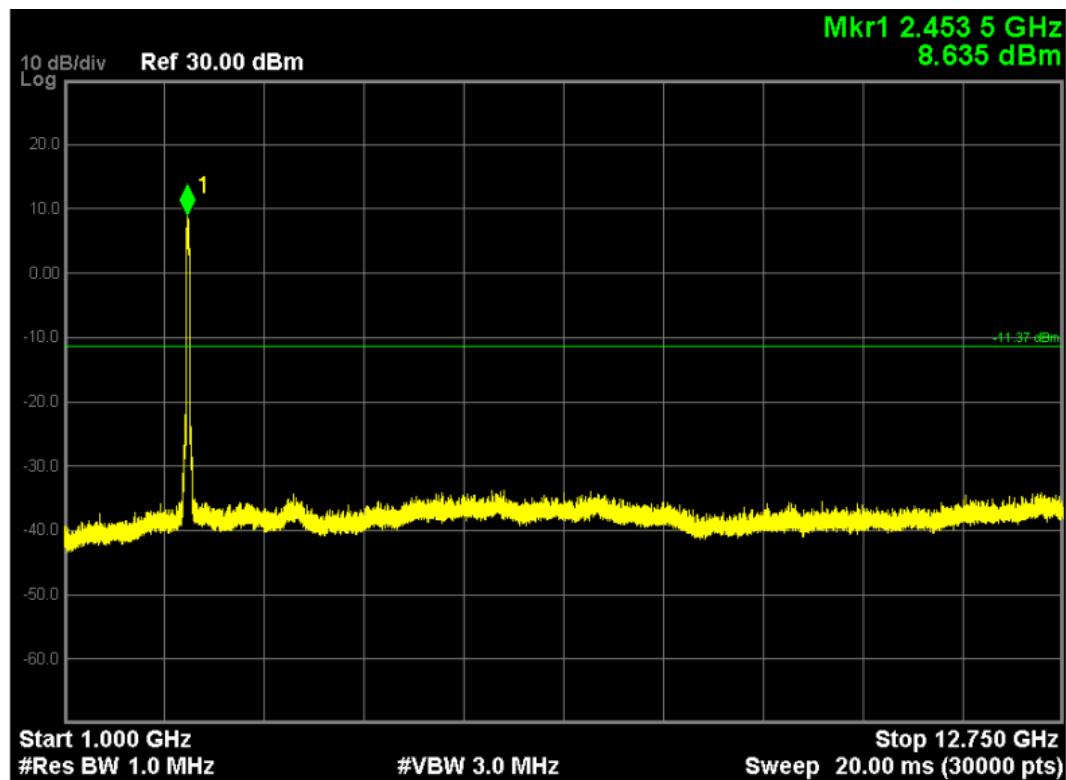
Note: The Mark1 point is carrier.



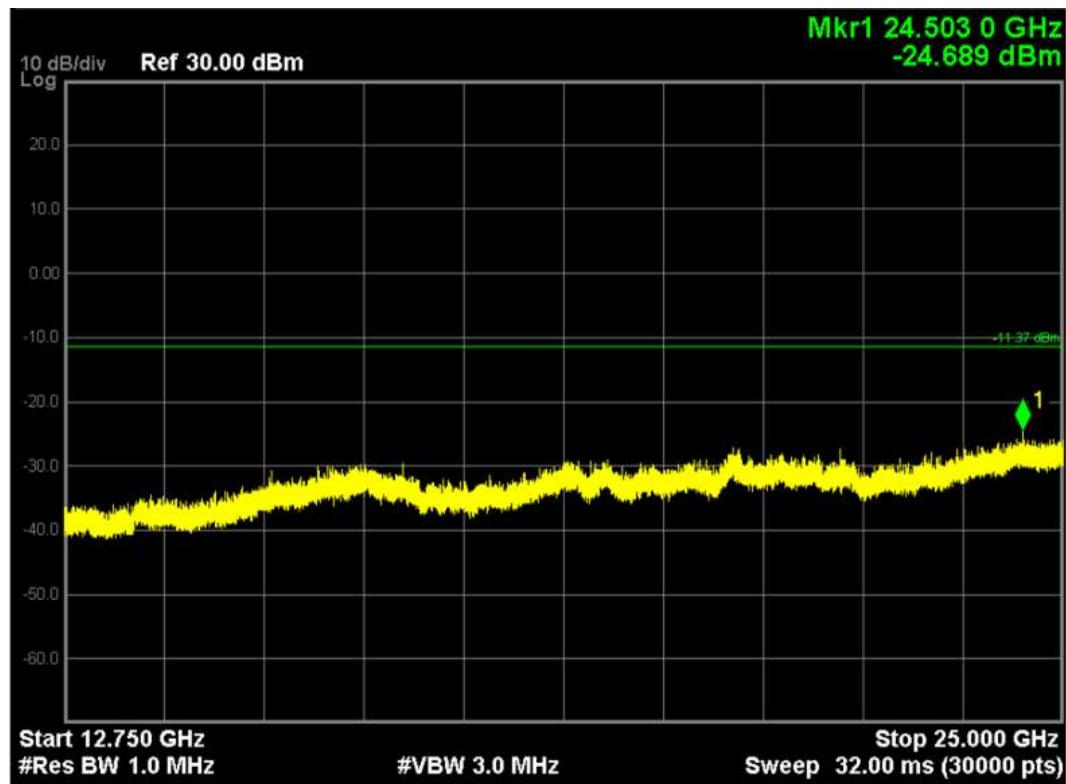
802.11n40, traffic mode; Channel 9





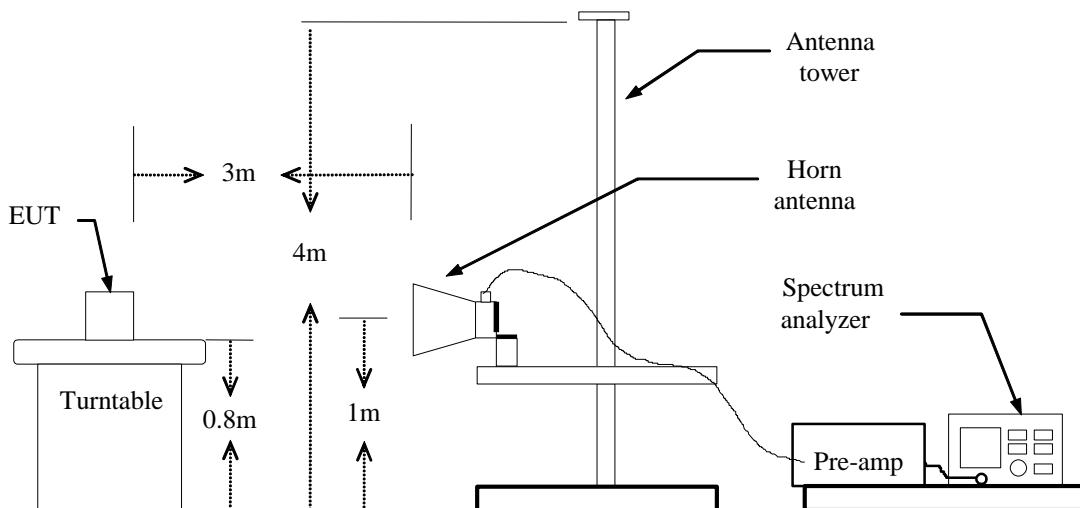


Note: The Mark1 point is carrier.



## 9. BAND EDGE MEASUREMENT

### 9.1 TEST SETUP



### 9.2 LIMITS

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

### 9.3 TEST PROCEDURE

The EUT is placed on a turntable, which is 0.8m above the ground plane.

The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.

EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

PEAK: RBW=VBW=1MHz / Sweep=AUTO

AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.

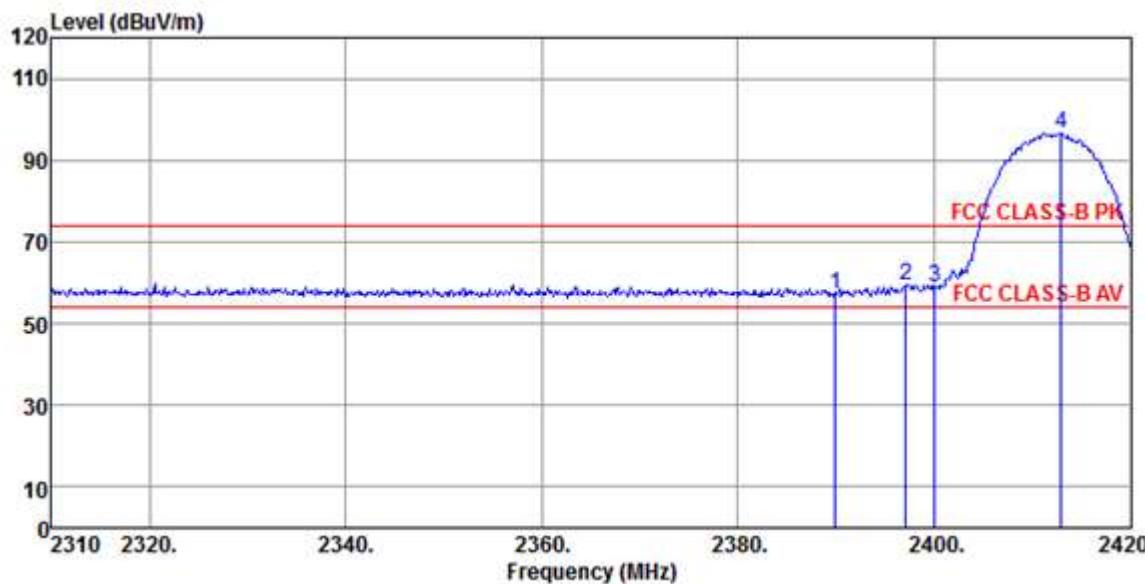
## 9.4 RESULTS & PERFORMANCE

### Radiated Band Edge:

802.11b (Ch1)

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

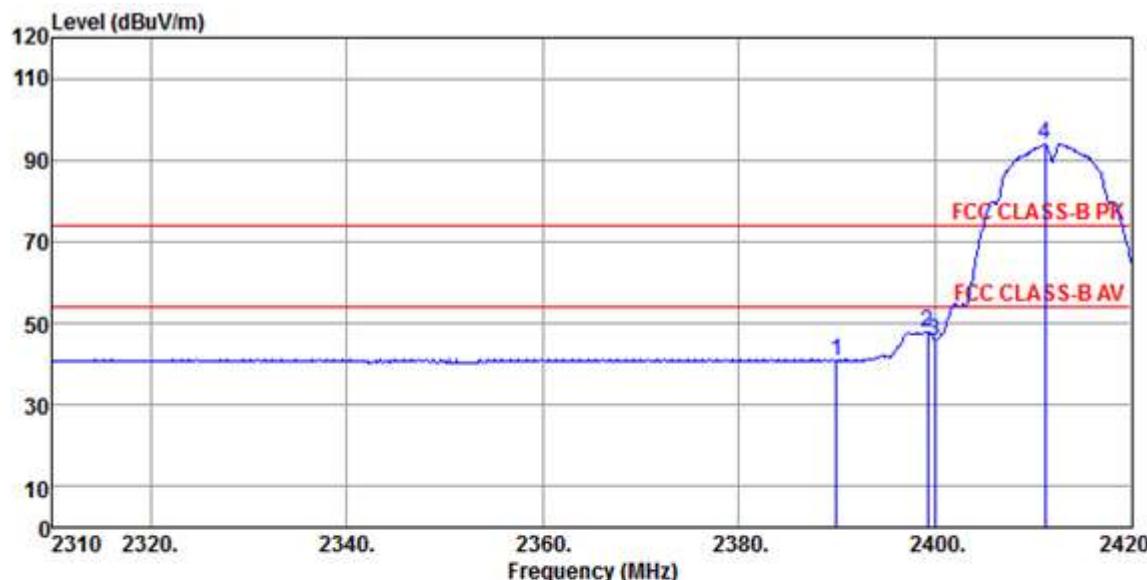
Mode : 11b CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB				
1	2389.97	60.85	27.58	7.13	38.34	57.22	74.00	-16.78 Peak
2	2397.12	63.04	27.58	7.13	38.34	59.41	74.00	-14.59 Peak
3	2400.09	62.32	27.58	7.13	38.34	58.69	74.00	-15.31 Peak
4 pp	2412.96	100.19	27.54	7.21	38.34	96.60	74.00	22.60 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

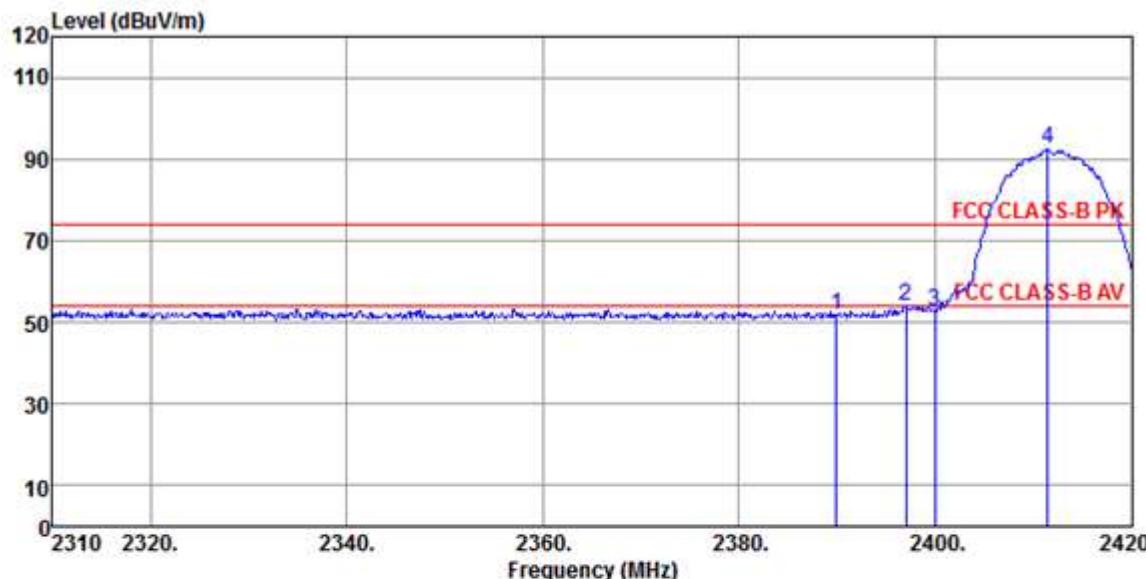
Mode : 11b CH1

Memo :

Freq	ReadAntenna MHz	Antenna Level Factor	Cable Loss Factor	Preamp Level dB	dBuV/m	Limit Line dBuV/m	Over Line dB	Over Limit Remark	
								dB	dBuV/m
1	2389.97	44.52	27.58	7.13	38.34	40.89	54.00	-13.11	Average
2	2399.21	51.56	27.58	7.13	38.34	47.93	54.00	-6.07	Average
3	2399.98	49.25	27.58	7.13	38.34	45.62	54.00	-8.38	Average
4 pp	2411.20	97.55	27.54	7.21	38.34	93.96	54.00	39.96	Average

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

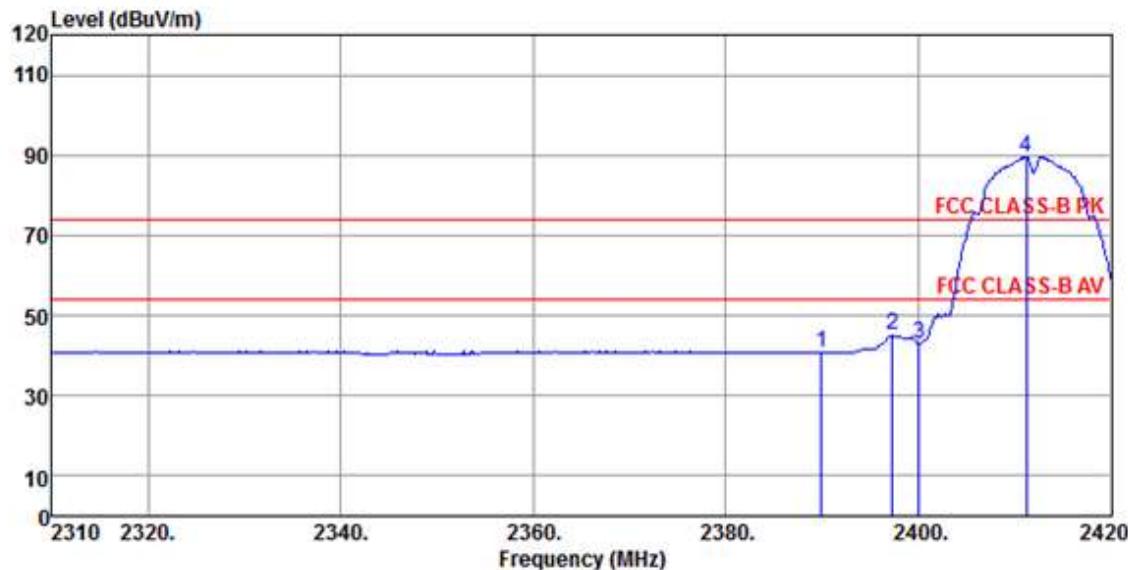
Mode : 11b CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over Line Limit	Over Remark	
	Level	Factor	Loss	Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2389.97	55.46	27.58	7.13	38.34	51.83	74.00	-22.17 Peak
2	2397.01	57.62	27.58	7.13	38.34	53.99	74.00	-20.01 Peak
3	2399.98	56.54	27.58	7.13	38.34	52.91	74.00	-21.09 Peak
4 pp	2411.53	95.95	27.54	7.21	38.34	92.36	74.00	18.36 Peak

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 : 11b CH1

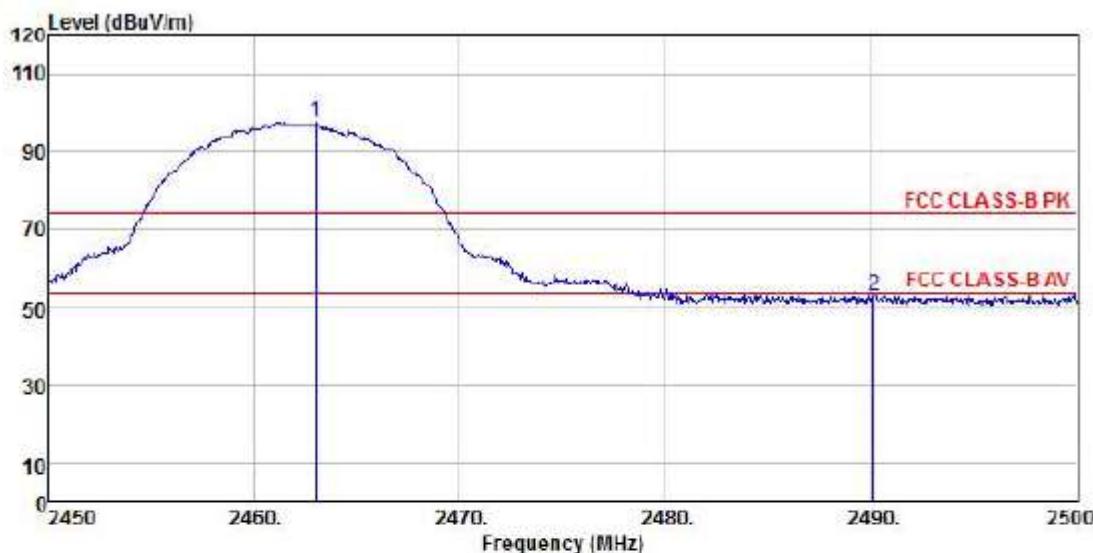
Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2389.97	44.39	27.58	7.13	38.34	40.76	54.00	-13.24 Average
2	2397.34	48.66	27.58	7.13	38.34	45.03	54.00	-8.97 Average
3	2400.09	46.50	27.58	7.13	38.34	42.87	54.00	-11.13 Average
4 pp	2411.20	93.25	27.54	7.21	38.34	89.66	54.00	35.66 Average

## 802.11b (Ch11)

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

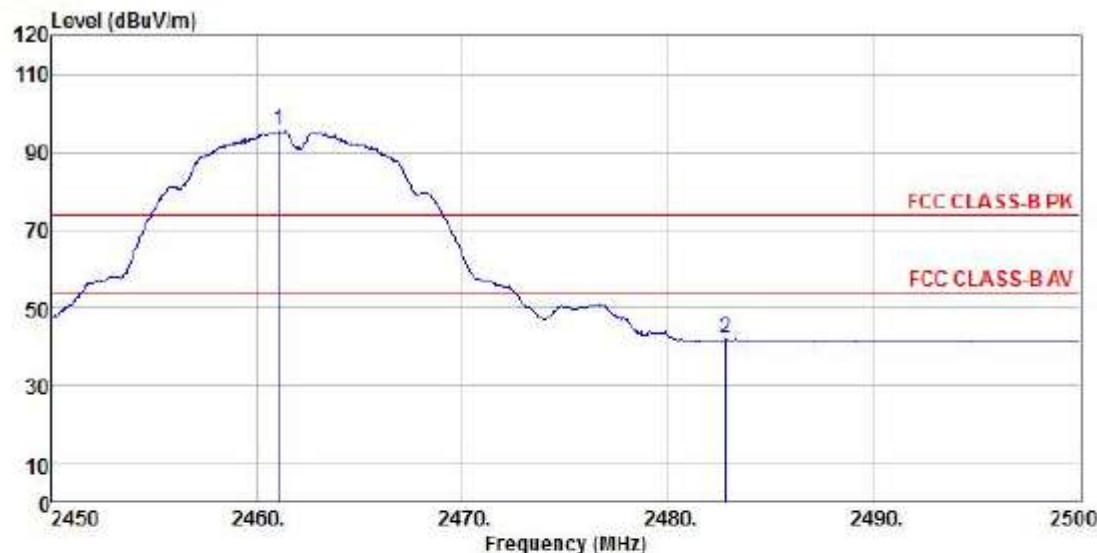
Mode : 11b CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2463.00	100.84	27.49	7.39	38.32	97.40	74.00	23.40 Peak
2	2490.20	56.66	27.52	7.43	38.30	53.31	74.00	-20.69 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

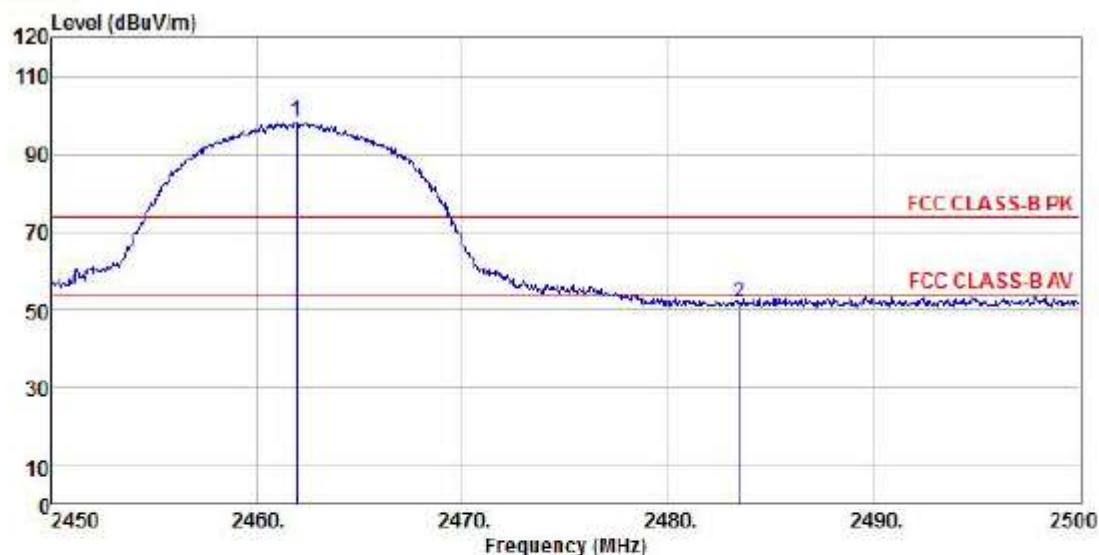
Mode : 11b CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Freq	Level Factor	Loss Factor	Level	Line	Line	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2461.05	99.09	27.49	7.39	38.32	95.65	54.00 41.65 Average
2	2482.80	45.62	27.52	7.41	38.31	42.24	54.00 -11.76 Average

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

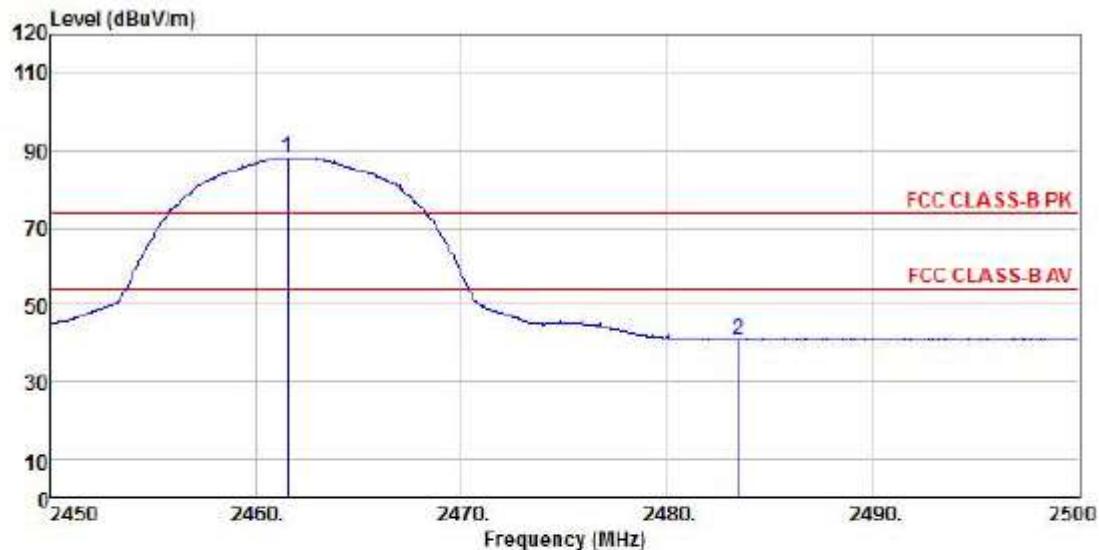
Mode : 11b CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	2461.90	101.88	27.49	7.39	38.32	98.44	74.00	24.44 Peak
2	2483.50	55.26	27.52	7.41	38.31	51.88	74.00	-22.12 Peak

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 : 11b CH11

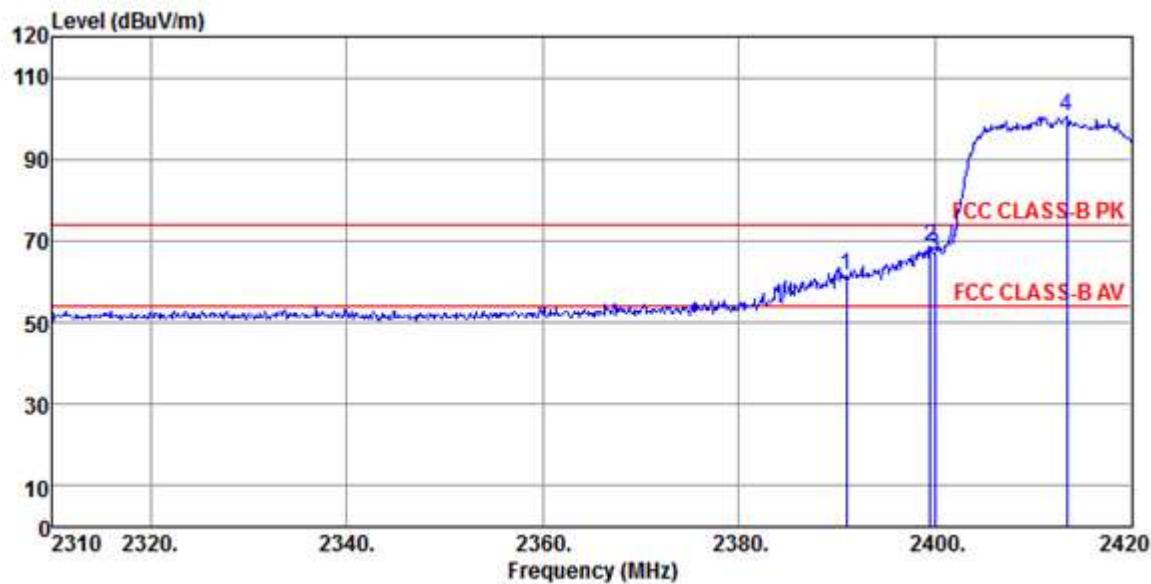
Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line Limit	Over Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2461.50	91.76	27.49	7.39	38.32	88.32	54.00	34.32 Average
2	2483.50	44.33	27.52	7.41	38.31	40.95	54.00	-13.05 Average

## 802.11g (Ch1)

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

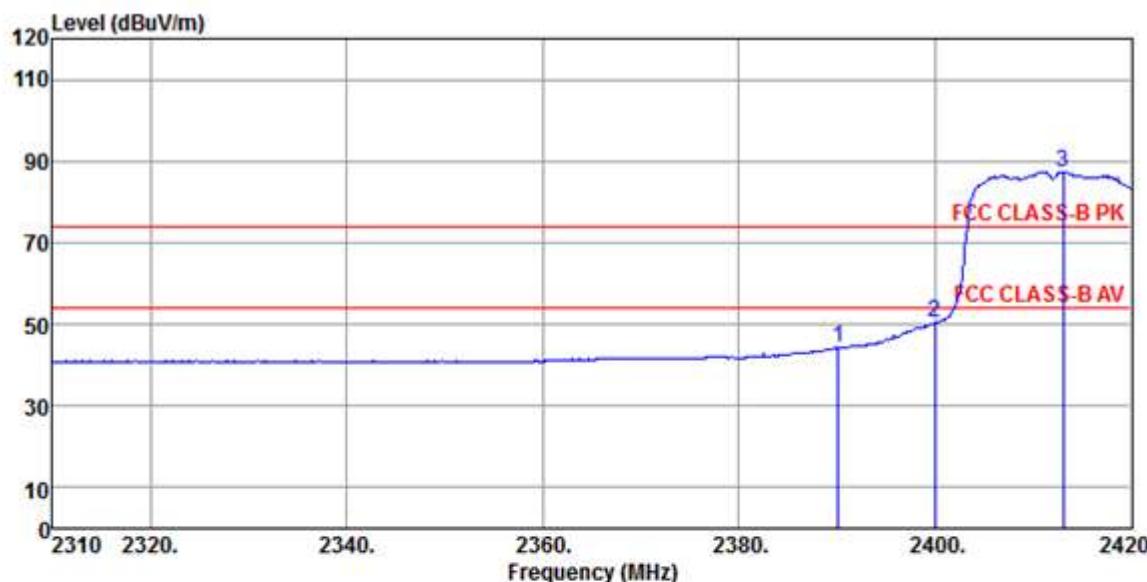
Mode : 11g CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.96	65.23	27.58	7.13	38.34	61.60	74.00	-12.40 Peak
2	2399.54	72.43	27.58	7.13	38.34	68.80	74.00	-5.20 Peak
3	2399.98	70.20	27.58	7.13	38.34	66.57	74.00	-7.43 Peak
4 pp	2413.40	104.13	27.54	7.21	38.34	100.54	74.00	26.54 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

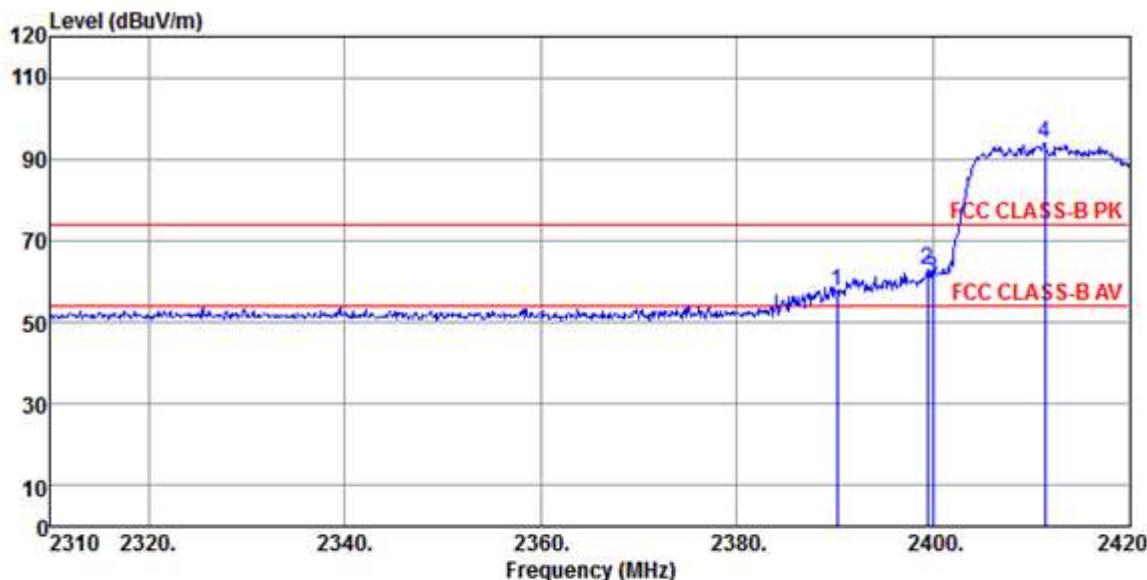
Mode : 11g CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line Limit	Over Remark
	Level	Factor	Loss	Factor			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2390.08	47.79	27.58	7.13	38.34	44.16	54.00 -9.84 Average
2	2399.98	53.91	27.58	7.13	38.34	50.28	54.00 -3.72 Average
3 pp	2413.07	91.00	27.54	7.21	38.34	87.41	54.00 33.41 Average

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

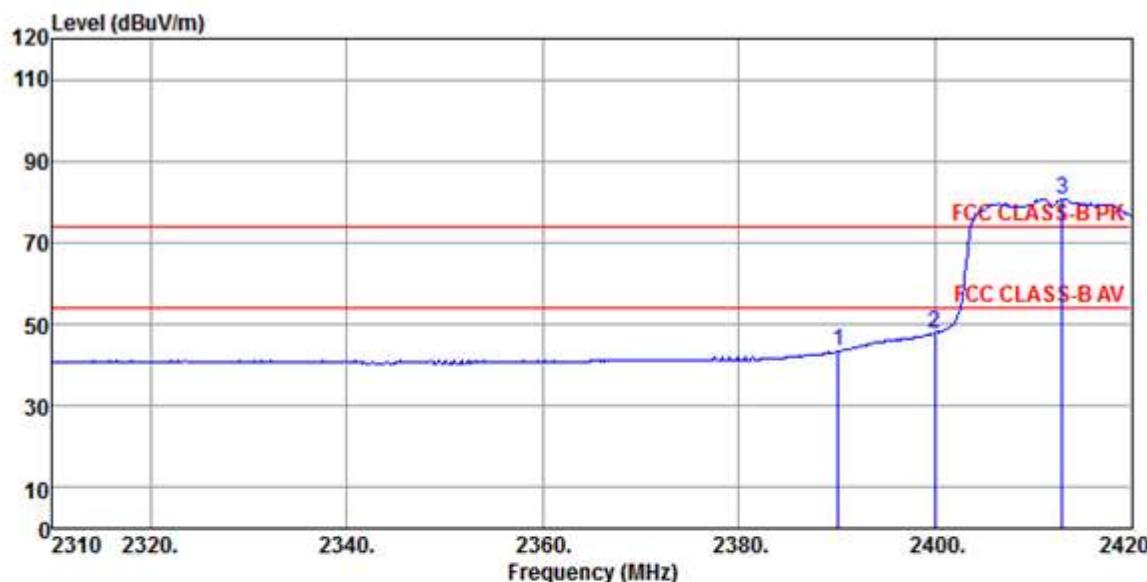
Mode : 11g CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.19	61.40	27.58	7.13	38.34	57.77	74.00	-16.23 Peak
2	2399.43	66.54	27.58	7.13	38.34	62.91	74.00	-11.09 Peak
3	2399.98	64.29	27.58	7.13	38.34	60.66	74.00	-13.34 Peak
4 pp	2411.42	97.39	27.54	7.21	38.34	93.80	74.00	19.80 Peak

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 : 11g CH1

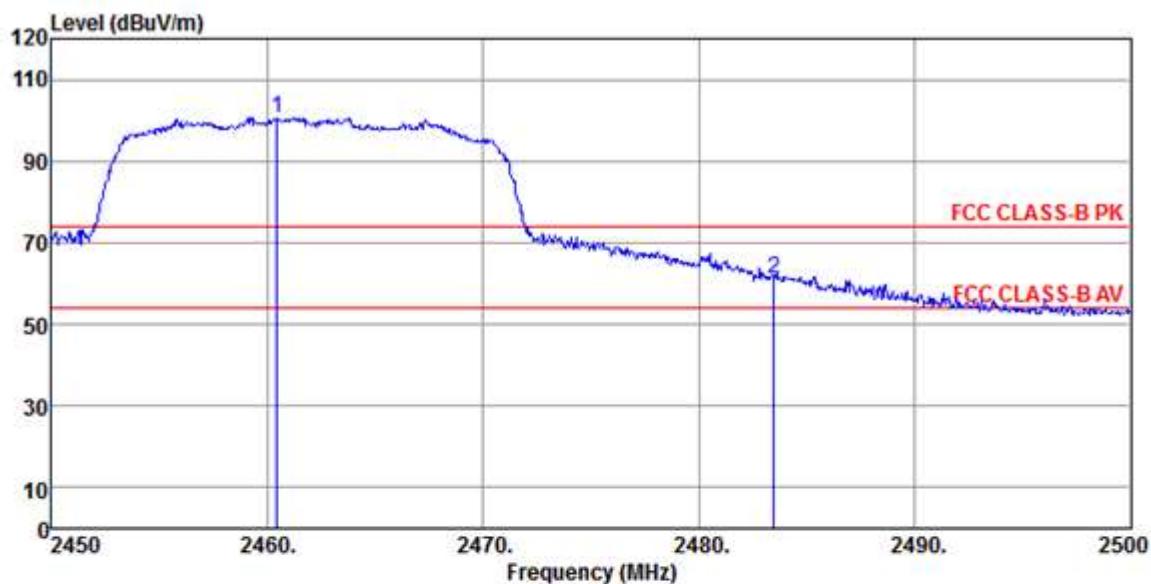
Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line Limit	Over Remark
	Level	Factor	Loss	Factor			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2390.08	46.95	27.58	7.13	38.34	43.32	54.00 -10.68 Average
2	2399.98	51.37	27.58	7.13	38.34	47.74	54.00 -6.26 Average
3 pp	2412.96	84.22	27.54	7.21	38.34	80.63	54.00 26.63 Average

## 802.11g (Ch11)

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

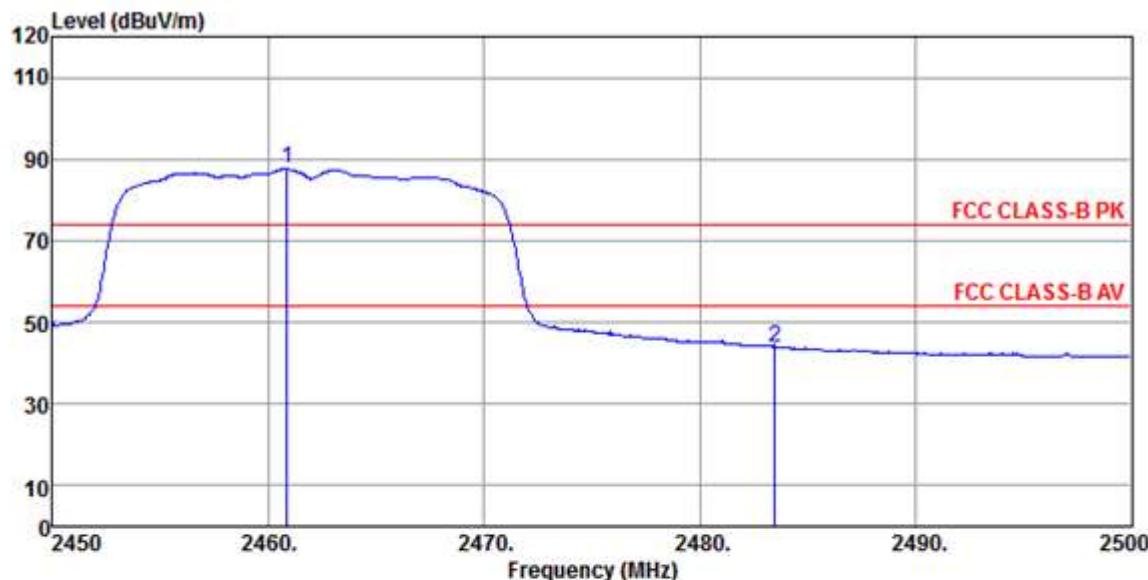
Mode : 11g CH11

Memo :

Freq	ReadAntenna		Cable		Preamp Loss Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB					
1 pp	2460.45	104.09	27.49	7.39	38.32	100.65	74.00	26.65	Peak
2	2483.50	64.63	27.52	7.41	38.31	61.25	74.00	-12.75	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

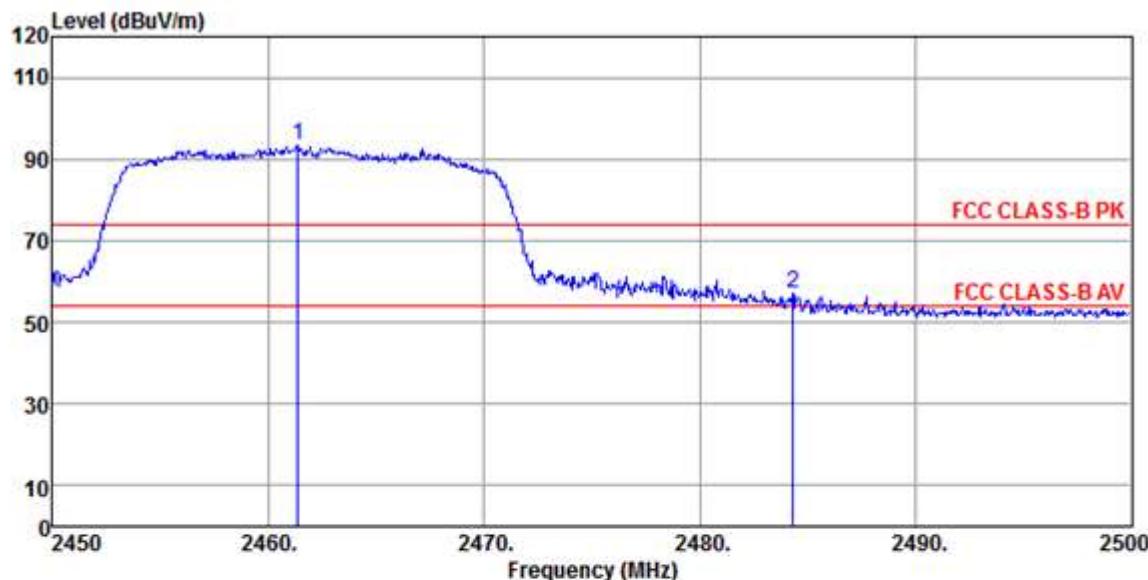
Mode : 11g CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Level	Factor	Loss	Factor			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2460.85	91.00	27.49	7.39	38.32	87.56	54.00 33.56 Average
2	2483.50	47.34	27.52	7.41	38.31	43.96	54.00 -10.04 Average

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

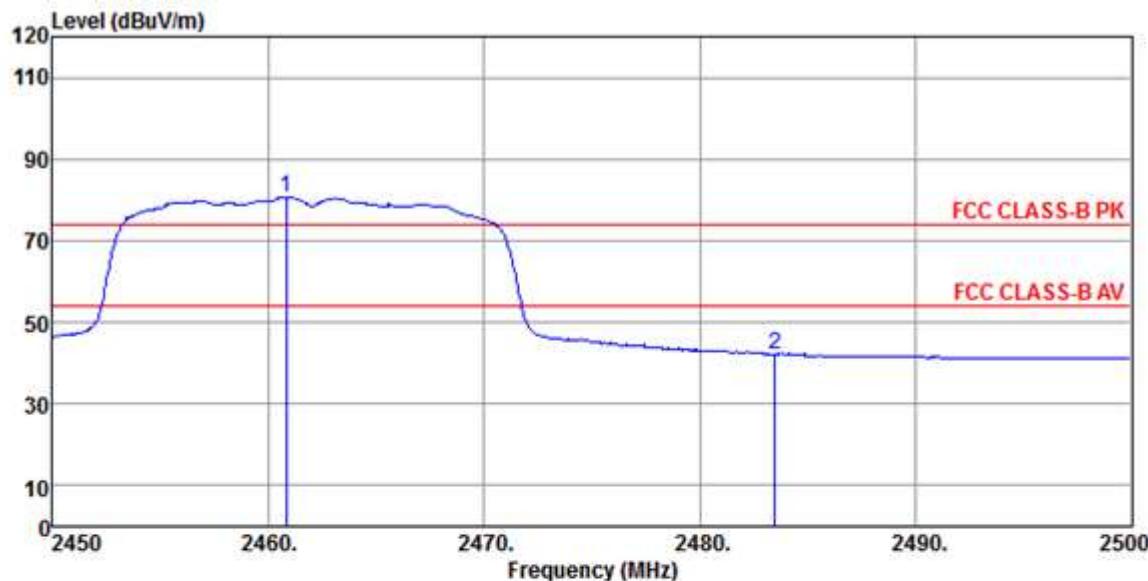
Mode : 11g CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Level	Factor	Loss	Factor			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2461.35	96.65	27.49	7.39	38.32	93.21	74.00 19.21 Peak
2	2484.30	60.31	27.52	7.41	38.31	56.93	74.00 -17.07 Peak

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 : 11g CH11

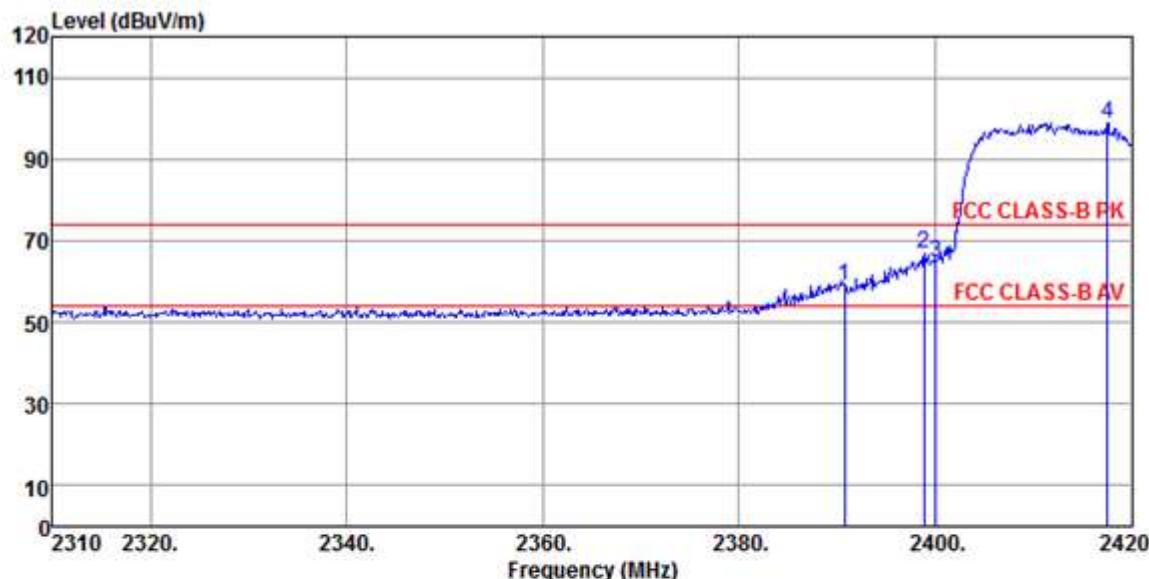
Memo :

	ReadAntenna Freq	Antenna Level	Cable Factor	Preamp Loss Factor	Line Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2460.80	84.20	27.49	7.39	38.32	80.76	54.00	26.76 Average
2	2483.50	45.56	27.52	7.41	38.31	42.18	54.00	-11.82 Average

## 802.11n20 (Ch1)

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

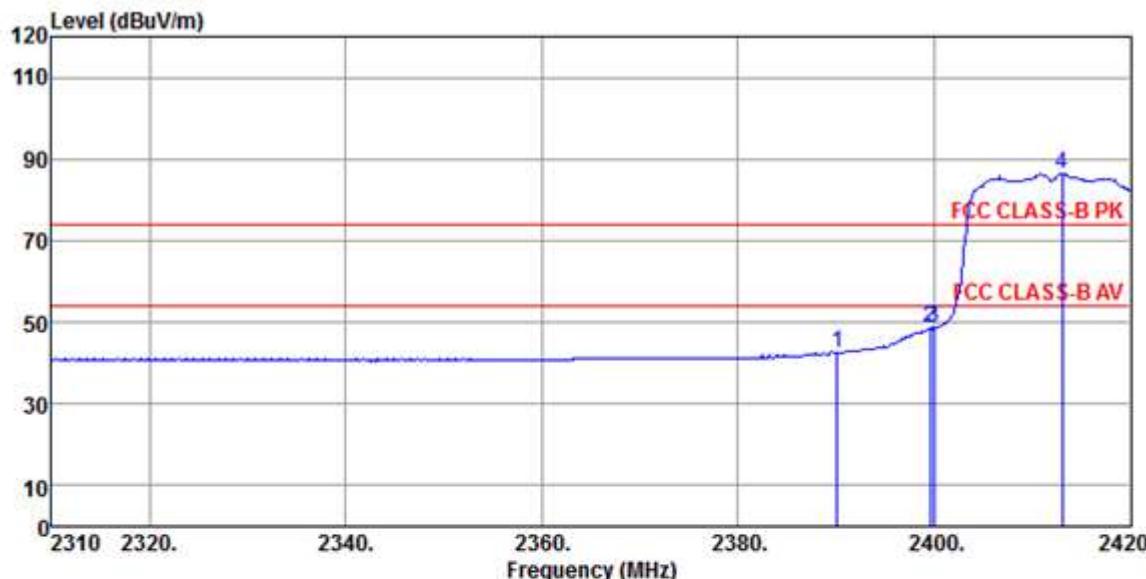
Mode : 11n20 CH1

Memo :

Freq	ReadAntenna		Cable		Preamp		Limit Line	Over Limit	Remark
	MHz	dBuV	Level Factor	Loss Factor	dB	dB	dBuV/m	dBuV/m	
1	2390.74	62.38	27.58	7.13	38.34	58.75	74.00	-15.25	Peak
2	2398.88	70.37	27.58	7.13	38.34	66.74	74.00	-7.26	Peak
3	2400.09	68.32	27.58	7.13	38.34	64.69	74.00	-9.31	Peak
4 pp	2417.58	102.45	27.54	7.21	38.34	98.86	74.00	24.86	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

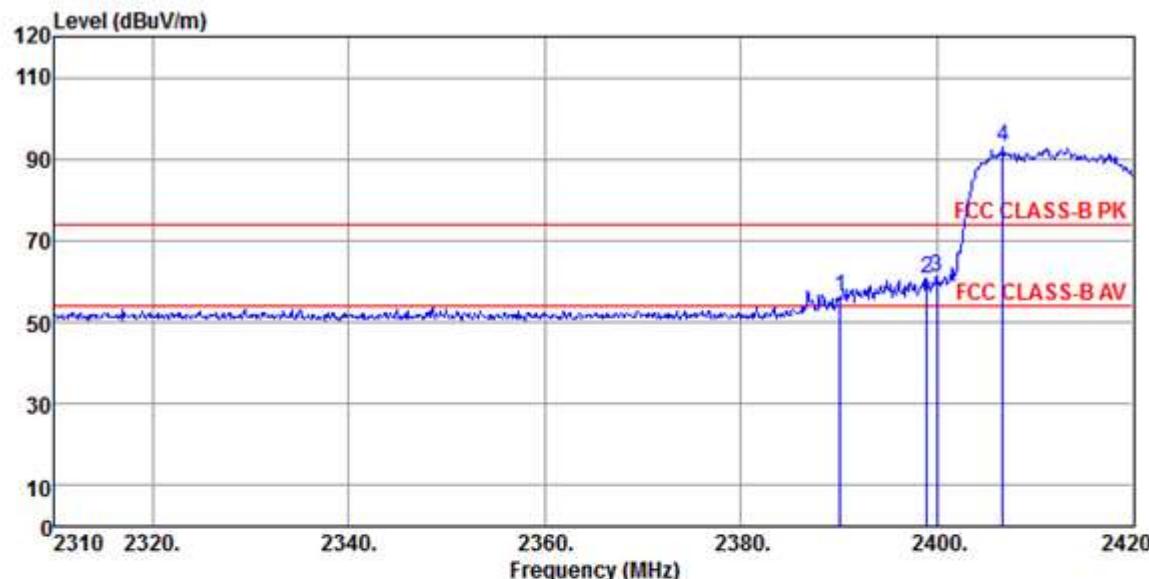
Mode : 11n20 CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Freq	Level Factor	Loss Factor	Level	Line	Line	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2390.08	46.05	27.58	7.13	38.34	42.42	54.00 -11.58 Average
2	2399.65	52.36	27.58	7.13	38.34	48.73	54.00 -5.27 Average
3	2399.98	52.21	27.58	7.13	38.34	48.58	54.00 -5.42 Average
4 pp	2413.07	89.96	27.54	7.21	38.34	86.37	54.00 32.37 Average

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

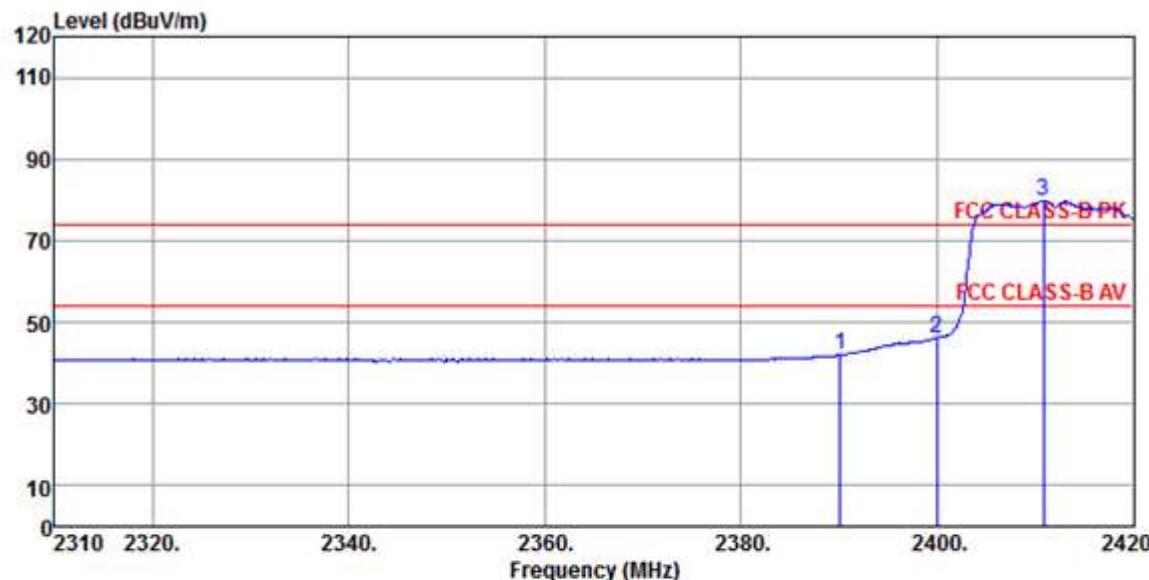
Mode : 11n20 CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Freq	Level Factor	Loss Factor	Level	Line		
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2390.08	59.98	27.58	7.13	38.34	56.35	74.00 -17.65 Peak
2	2398.99	64.38	27.58	7.13	38.34	60.75	74.00 -13.25 Peak
3	2399.98	64.59	27.58	7.13	38.34	60.96	74.00 -13.04 Peak
4 pp	2406.69	96.39	27.54	7.21	38.34	92.80	74.00 18.80 Peak

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 : 11n20 CH1

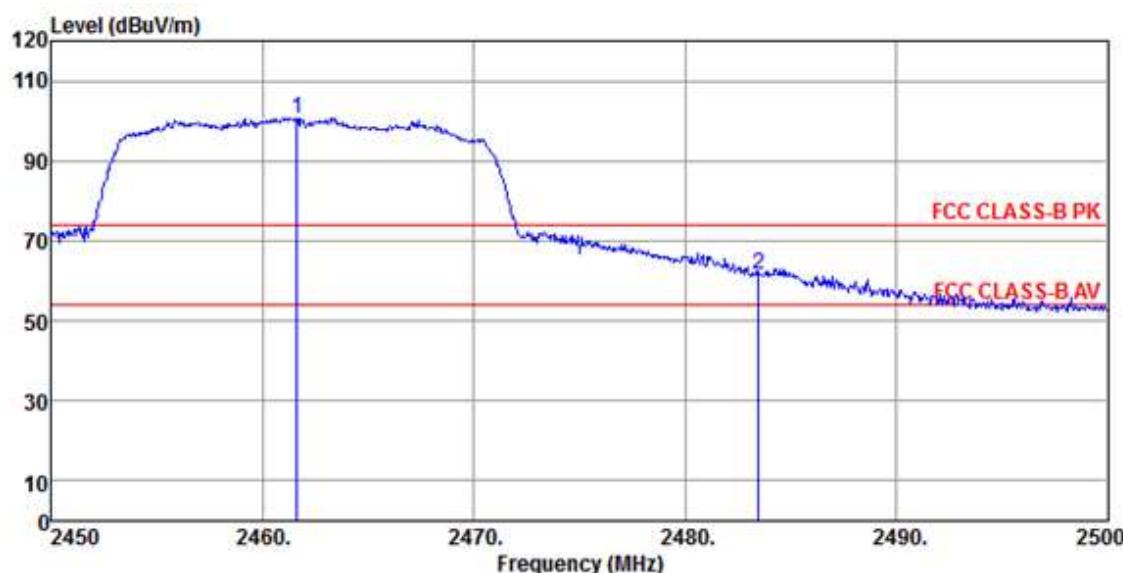
Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Freq	Level Factor	Loss Factor	Level	Line	Line	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2390.08	45.58	27.58	7.13	38.34	41.95	54.00 -12.05 Average
2	2399.98	49.76	27.58	7.13	38.34	46.13	54.00 -7.87 Average
3 pp	2410.87	83.32	27.54	7.21	38.34	79.73	54.00 25.73 Average

## 802.11n20 (Ch11)

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

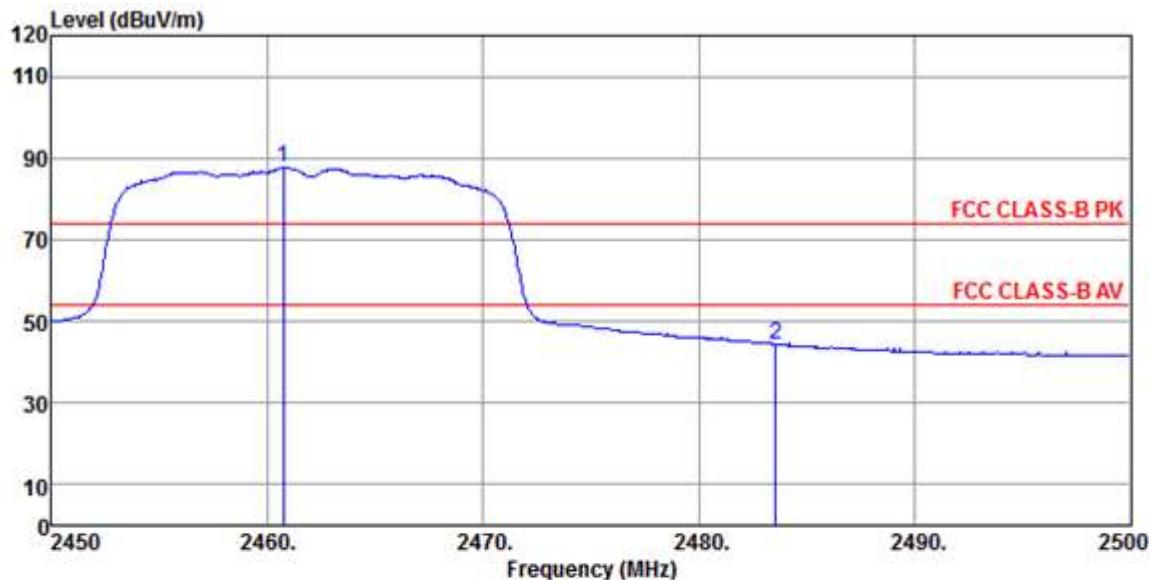
Mode : 11n20 CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	MHz	dBuV	Level Factor	Loss Factor				
1 pp	2461.60	104.14	27.49	7.39	38.32	100.70	74.00	26.70 Peak
2	2483.50	64.75	27.52	7.41	38.31	61.37	74.00	-12.63 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

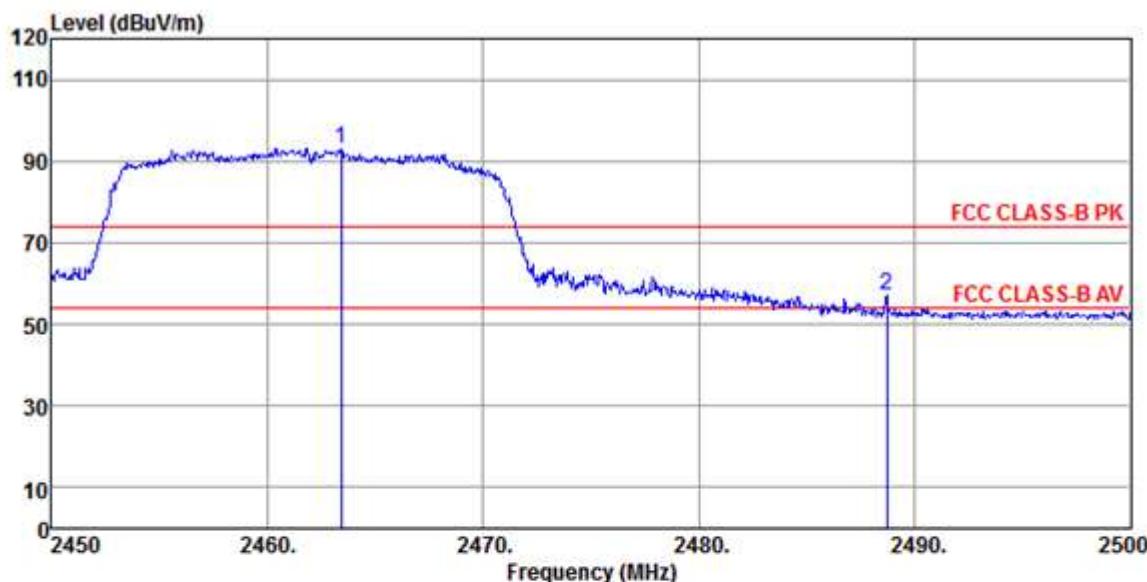
Mode : 11n20 CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB				
1 pp	2460.75	91.09	27.49	7.39	38.32	87.65	54.00	33.65 Average
2	2483.55	47.78	27.52	7.41	38.31	44.40	54.00	-9.60 Average

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

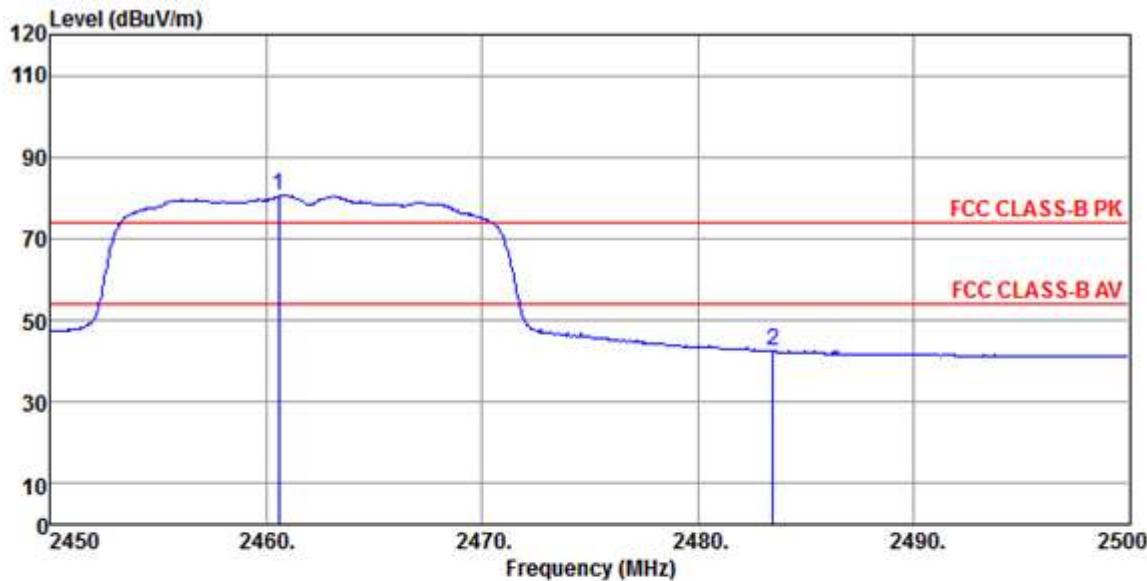
Mode : 11n20 CH11

Memo :

	Read	Antenna	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	2463.40	96.55	27.49	7.39	38.32	93.11	74.00 19.11 Peak
2	2488.70	60.60	27.52	7.43	38.30	57.25	74.00 -16.75 Peak

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 : 11n20 CH11

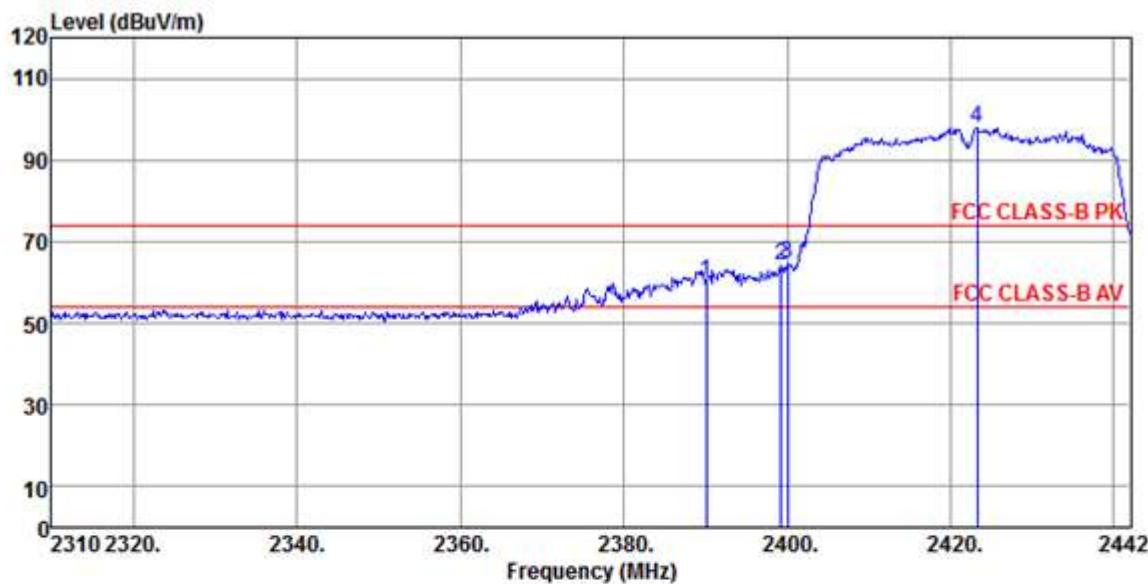
Memo :

Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Limit Level	Line Limit	Over Remark		
								MHz	dBuV
1 pp	2460.55	84.07	27.49	7.39	38.32	80.63	54.00	26.63	Average
2	2483.50	45.75	27.52	7.41	38.31	42.37	54.00	-11.63	Average

### 802.11n40 (Ch3)

Detector mode: Peak

Polarity: Horizontal

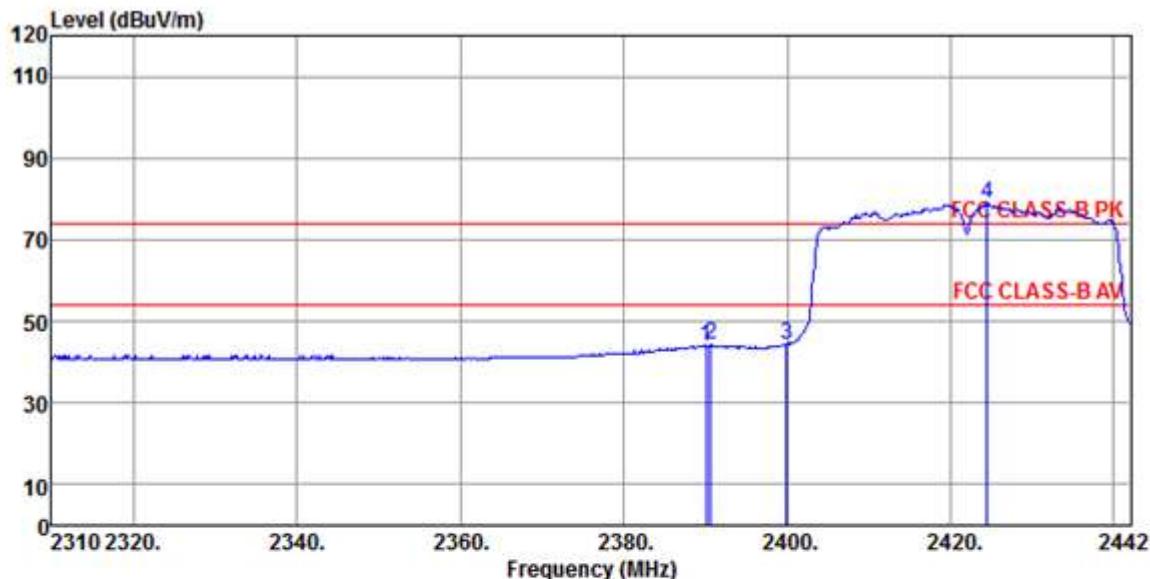


Site : chamber  
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL  
EUT :  
Model Name :  
Temp/Humi : 23 °C / 54 %  
Power Rating: AC 120V/60Hz  
Mode : 11n40 CH3  
Memo :

Freq	ReadAntenna		Cable		Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor	Level			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.12	63.73	27.58	7.13	38.34	60.10	74.00	-13.90 Peak
2	2399.23	67.84	27.58	7.13	38.34	64.21	74.00	-9.79 Peak
3	2400.02	68.41	27.58	7.13	38.34	64.78	74.00	-9.22 Peak
4 pp	2423.26	101.50	27.50	7.29	38.33	97.96	74.00	23.96 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

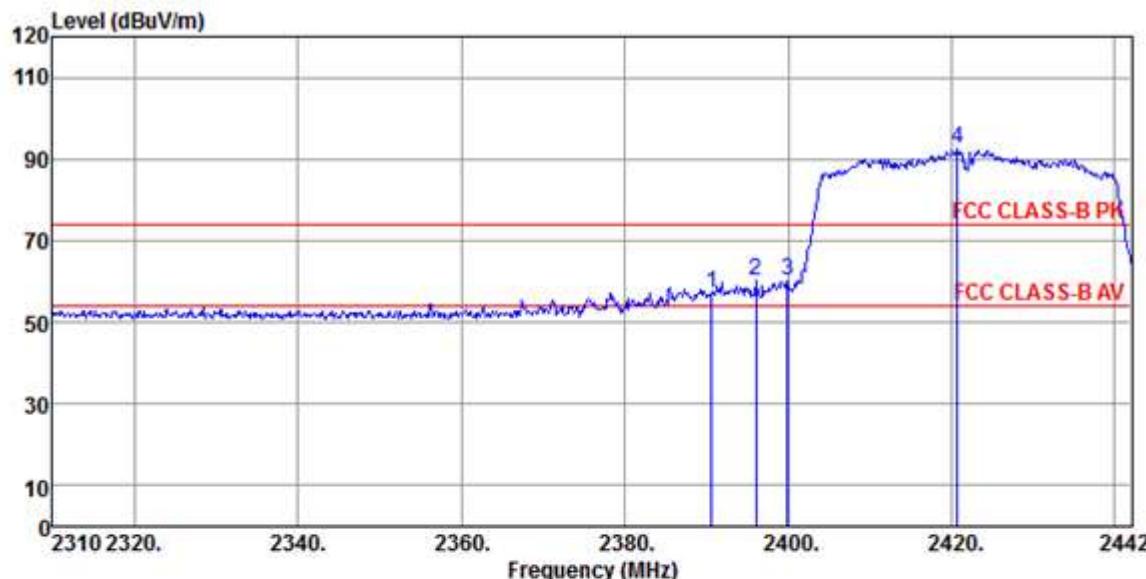
Mode : 11n40 CH3

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.12	47.28	27.58	7.13	38.34	43.65	54.00	-10.35 Average
2	2390.65	47.99	27.58	7.13	38.34	44.36	54.00	-9.64 Average
3	2399.89	47.94	27.58	7.13	38.34	44.31	54.00	-9.69 Average
4 pp	2424.44	82.27	27.50	7.29	38.33	78.73	54.00	24.73 Average

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

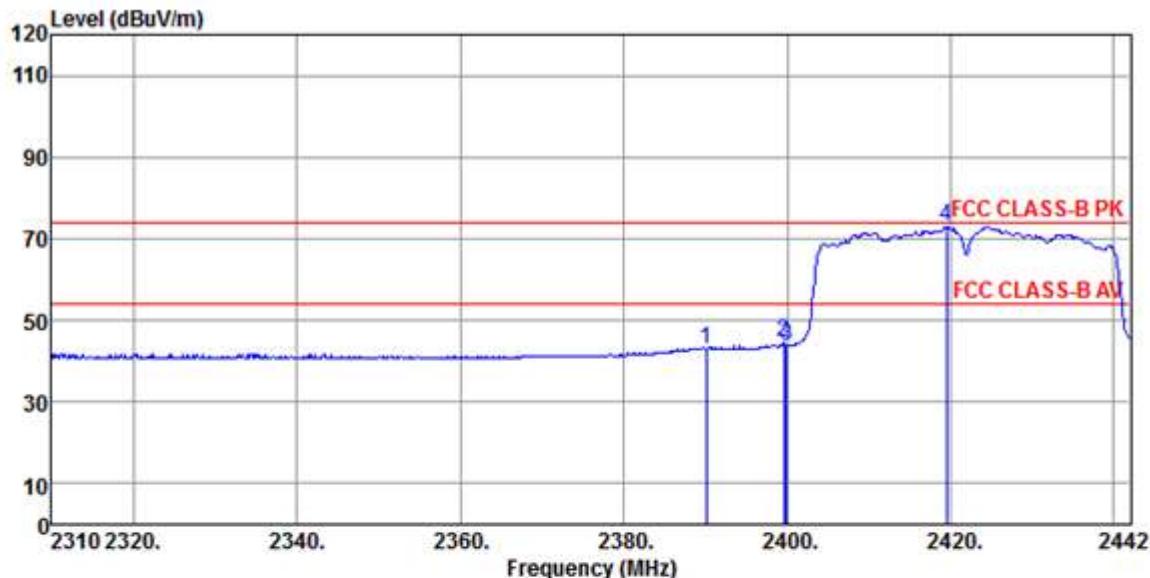
Mode : 11n40 CH3

Memo :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Line	Limit	Remark
	MHz	Level	Factor	Loss	Factor				
1	2390.65	60.56	27.58	7.13	38.34	56.93	74.00	-17.07	Peak
2	2396.06	63.78	27.58	7.13	38.34	60.15	74.00	-13.85	Peak
3	2399.89	63.67	27.58	7.13	38.34	60.04	74.00	-13.96	Peak
4 pp	2420.75	95.93	27.50	7.29	38.33	92.39	74.00	18.39	Peak

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 : 11n40 CH3

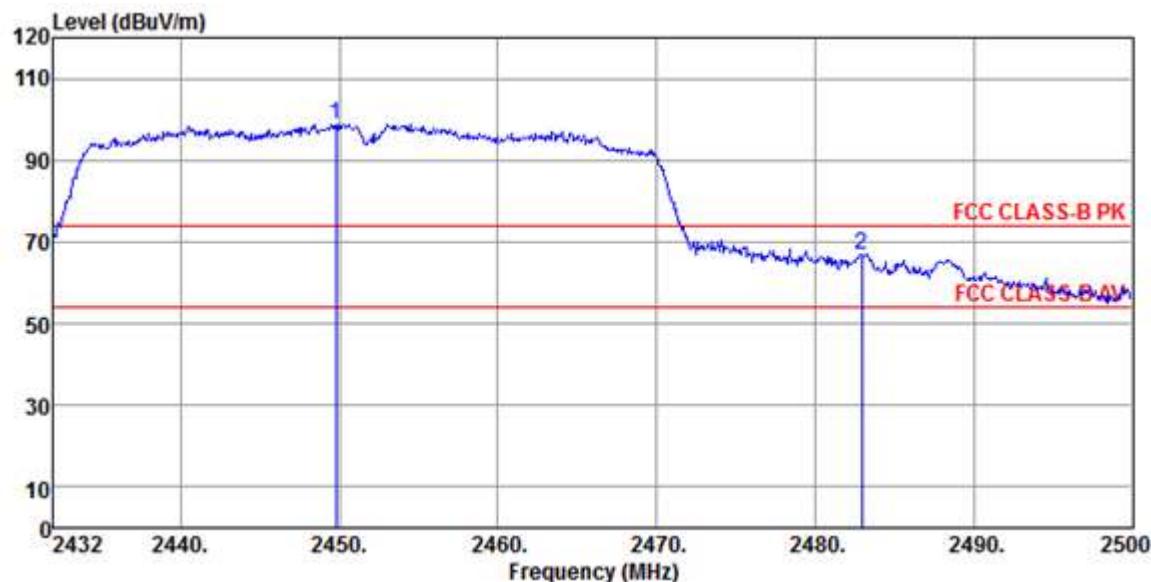
Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	MHz	dBuV	Level Factor	Loss Factor	dB	dBuV/m	dBuV/m	dB
1	2390.12	46.54	27.58	7.13	38.34	42.91	54.00	-11.09 Average
2	2399.63	48.15	27.58	7.13	38.34	44.52	54.00	-9.48 Average
3	2399.89	47.47	27.58	7.13	38.34	43.84	54.00	-10.16 Average
4 pp	2419.56	76.39	27.50	7.29	38.33	72.85	54.00	18.85 Average

## 802.11n40 (Ch9)

Detector mode: Peak

Polarity: Horizontal

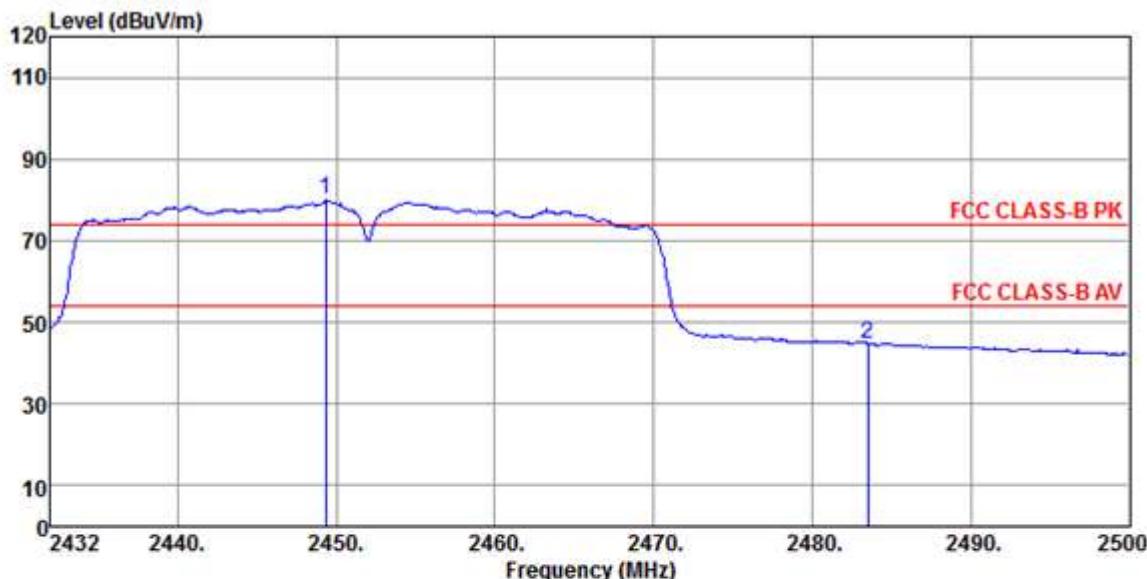


Site : chamber  
Condition : FCC CLASS-B PK 3m BBHA9120D(942) HORIZONTAL  
EUT :  
Model Name :  
Temp/Humi : 23 °C / 54 %  
Power Rating: AC 120V/60Hz  
Mode : 11n40 CH9  
Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line Limit	Over Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2449.82	102.45	27.46	7.37	38.32	98.96	74.00	24.96 Peak
2	2482.93	70.34	27.52	7.41	38.31	66.96	74.00	-7.04 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

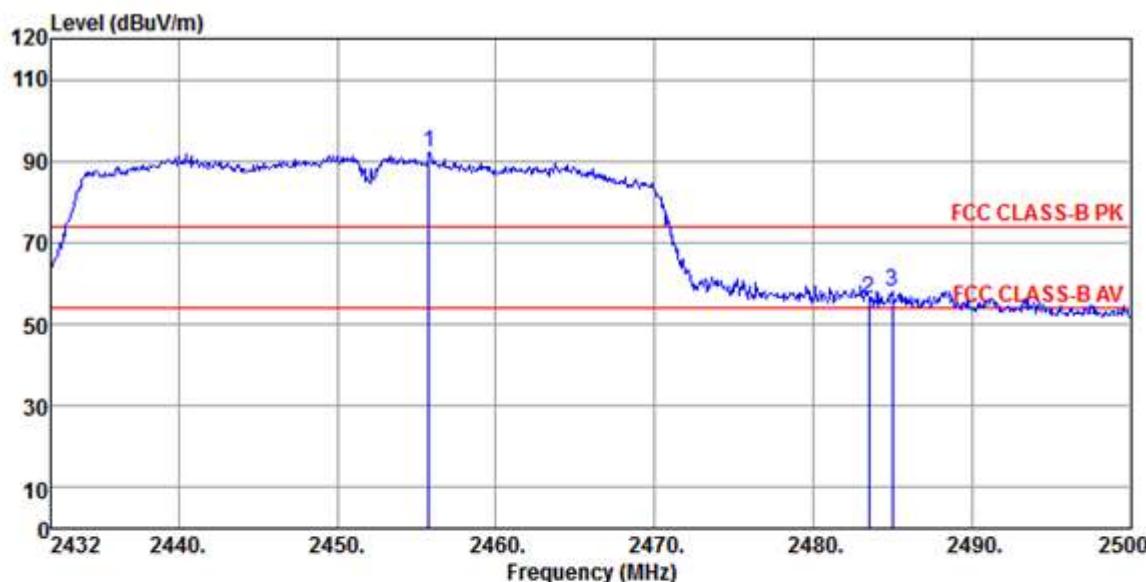
Mode : 11n40 CH9

Memo :

	Read	Antenna	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	2449.34	83.45	27.46	7.37	38.32	79.96	54.00 25.96 Average
2	2483.54	48.29	27.52	7.41	38.31	44.91	54.00 -9.09 Average

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

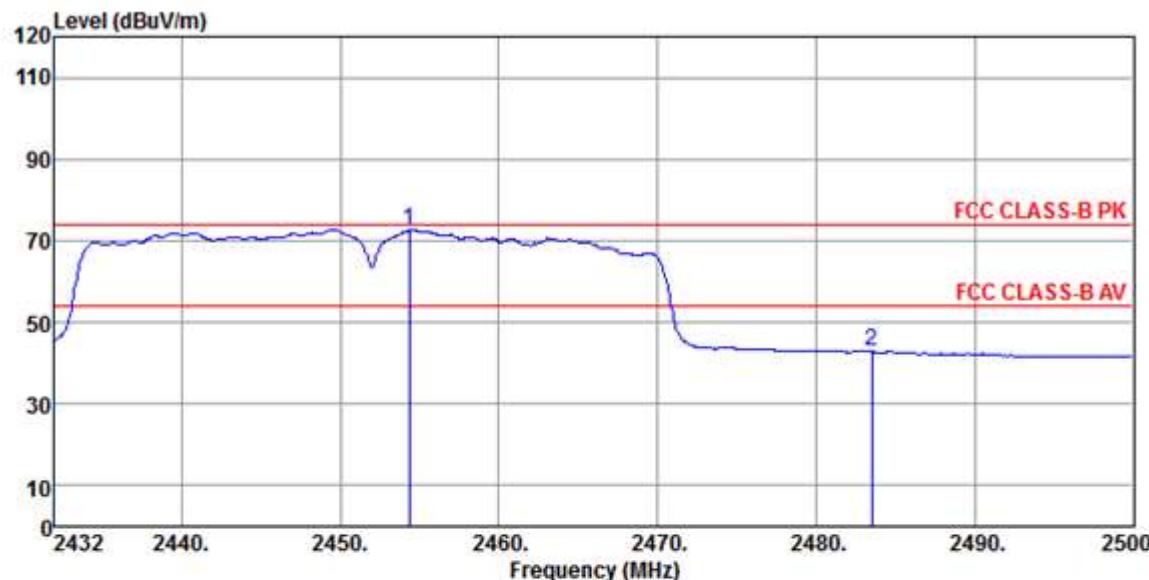
Mode : 11n40 CH9

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	2455.80	95.59	27.49	7.39	38.32	92.15	74.00	18.15 Peak
2	2483.54	59.77	27.52	7.41	38.31	56.39	74.00	-17.61 Peak
3	2484.97	61.51	27.52	7.41	38.31	58.13	74.00	-15.87 Peak

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 : 11n40 CH9

Memo :

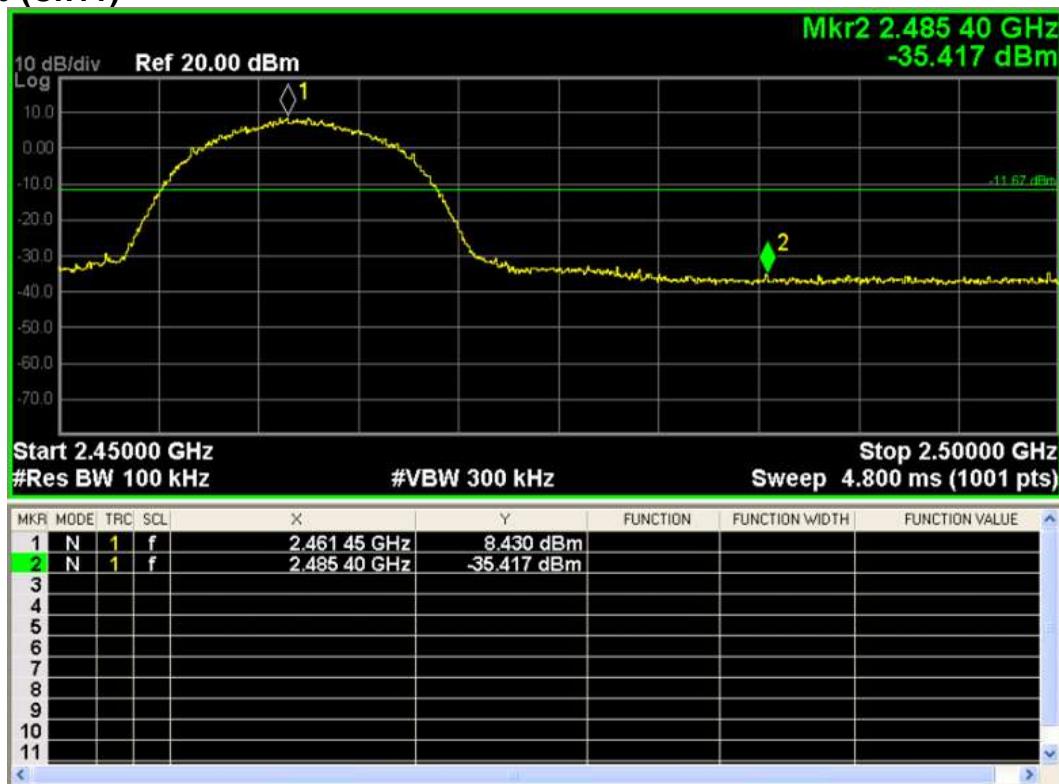
	ReadAntenna	Cable	Preamp	Limit	Over	
Freq	Level	Factor	Loss	Level	Line	Limit

	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	2454.37	76.25	27.46	7.39	38.32	72.78	54.00	18.78	Average
2	2483.54	46.18	27.52	7.41	38.31	42.80	54.00	-11.20	Average

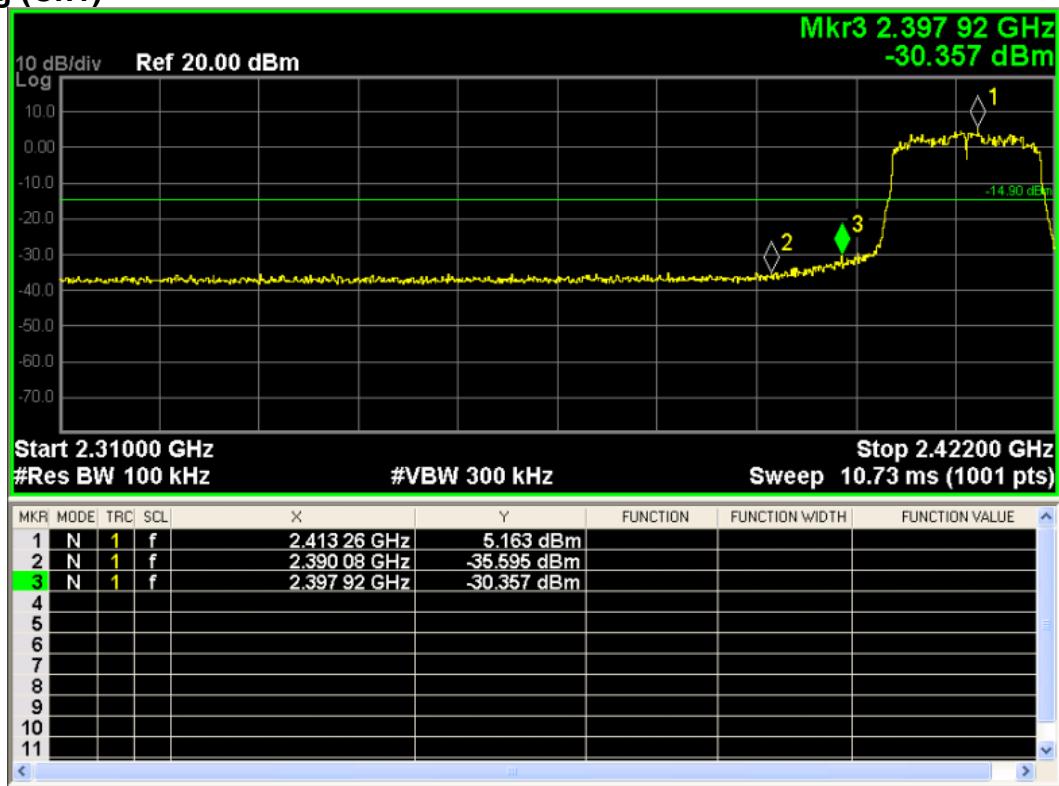
## Conducted Band Edge: 802.11b (Ch1)



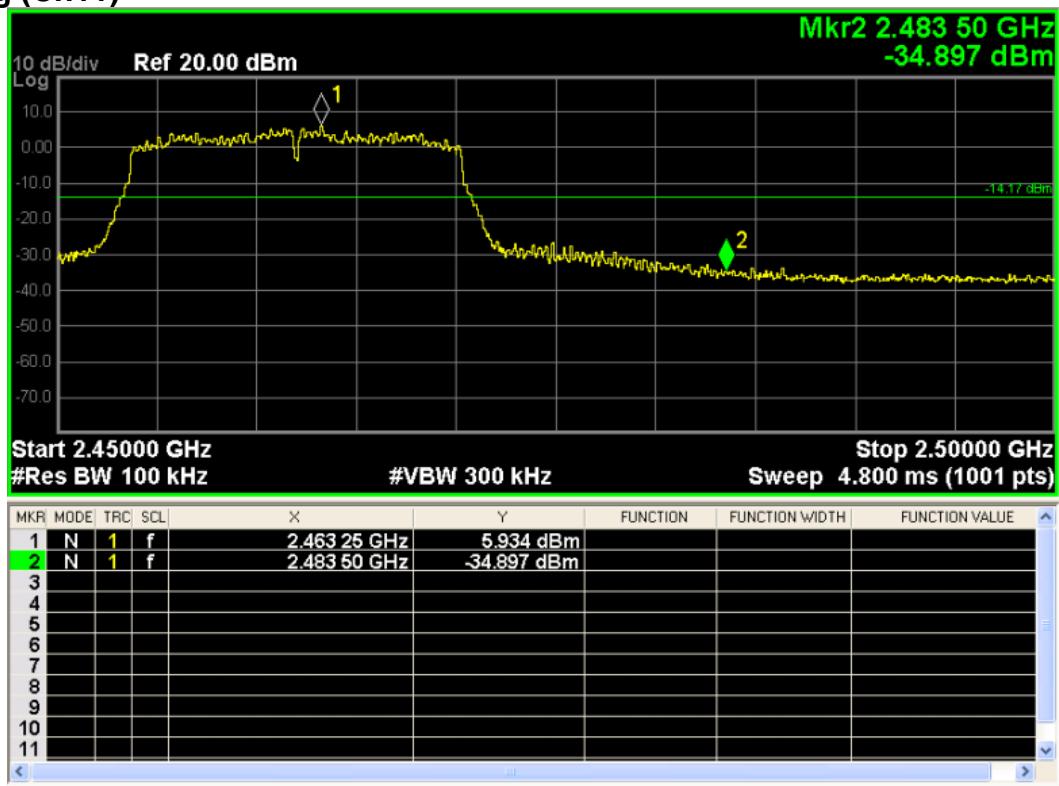
## 802.11b (Ch11)



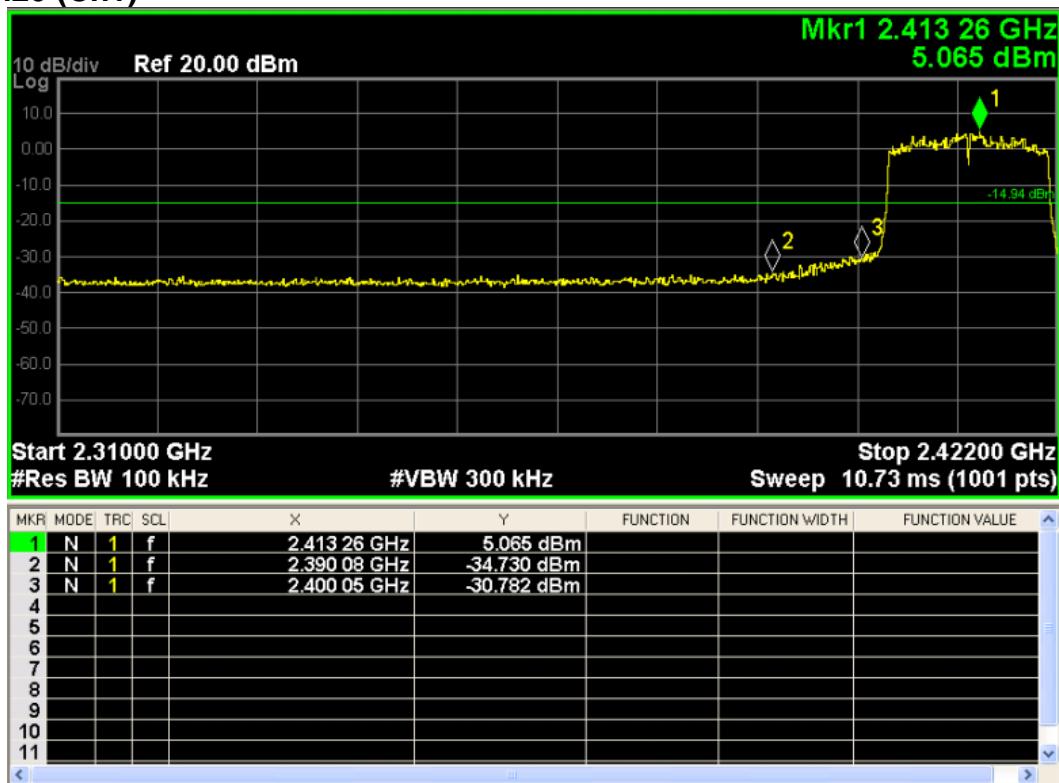
## 802.11g (Ch1)



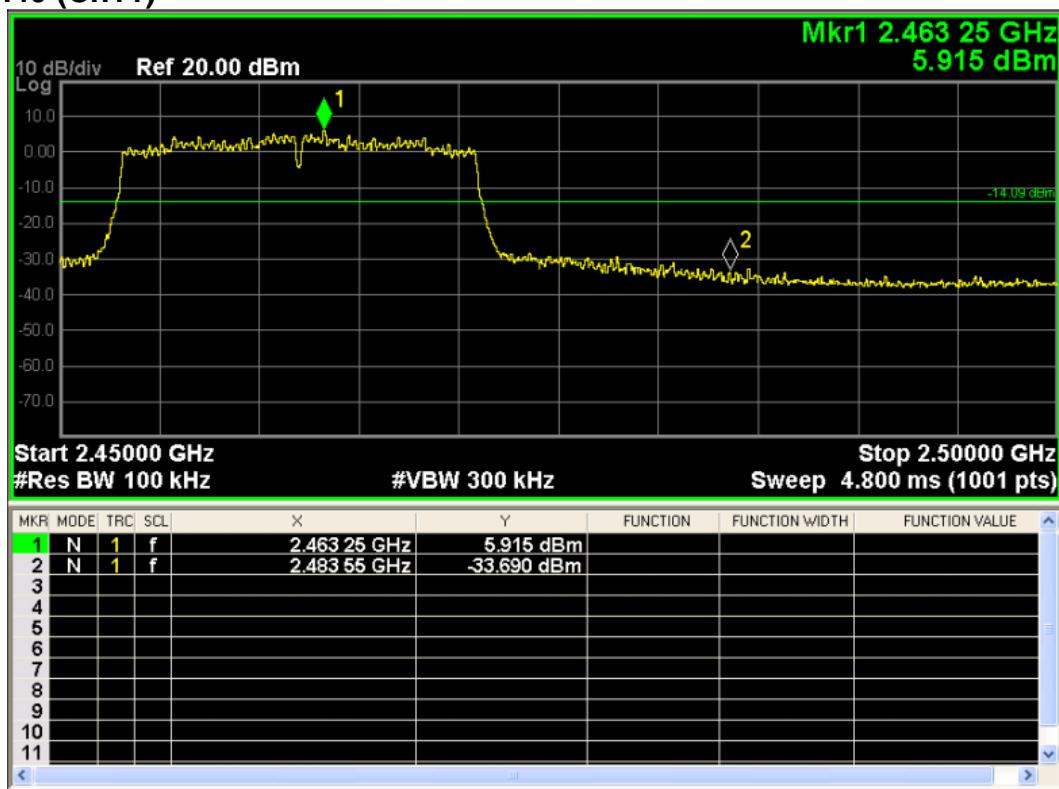
## 802.11g (Ch11)



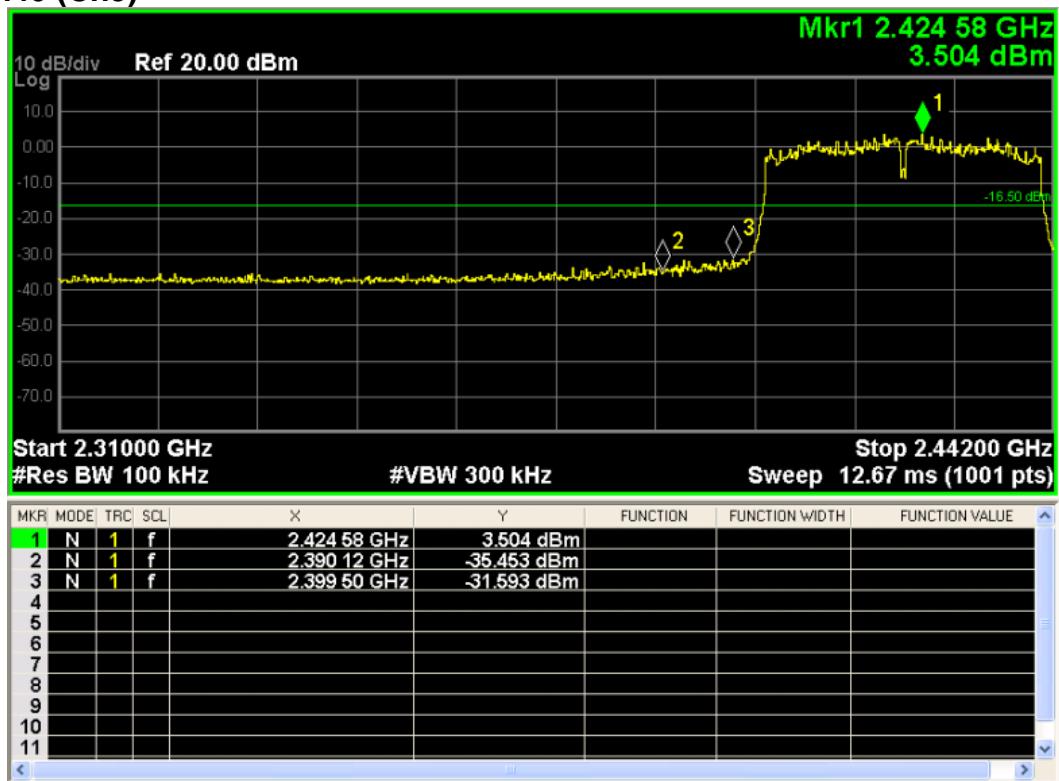
## 802.11n20 (Ch1)



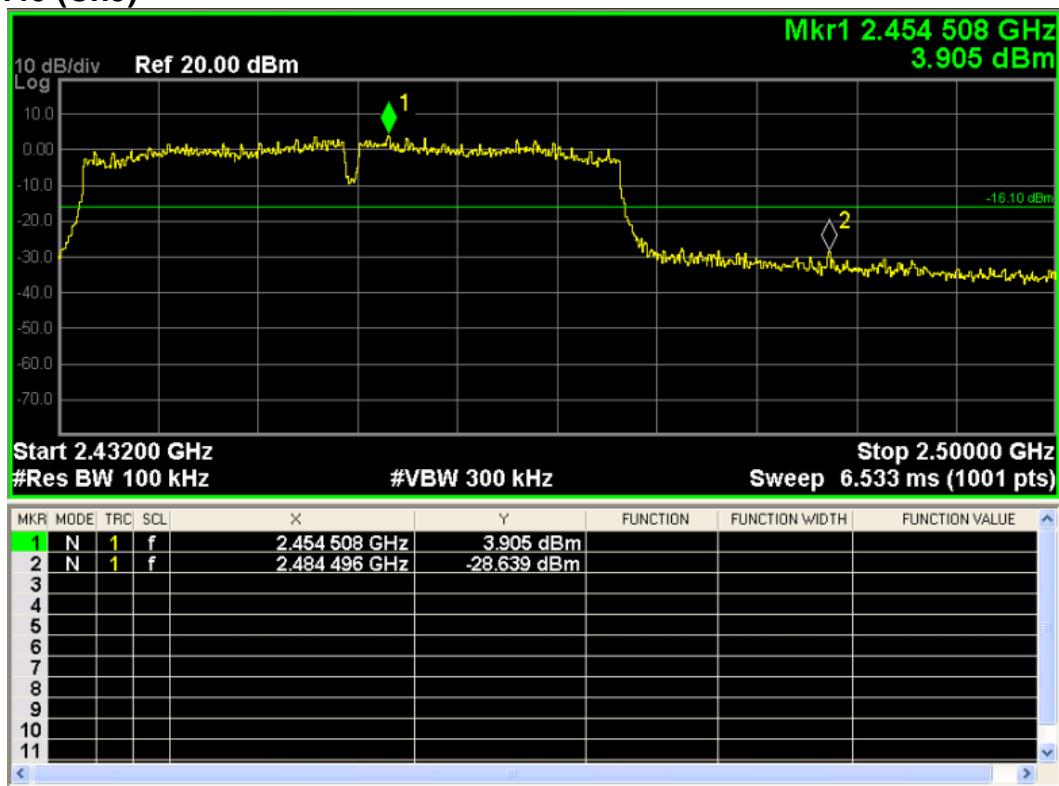
## **802.11n40 (Ch11)**



## **802.11n40 (Ch3)**



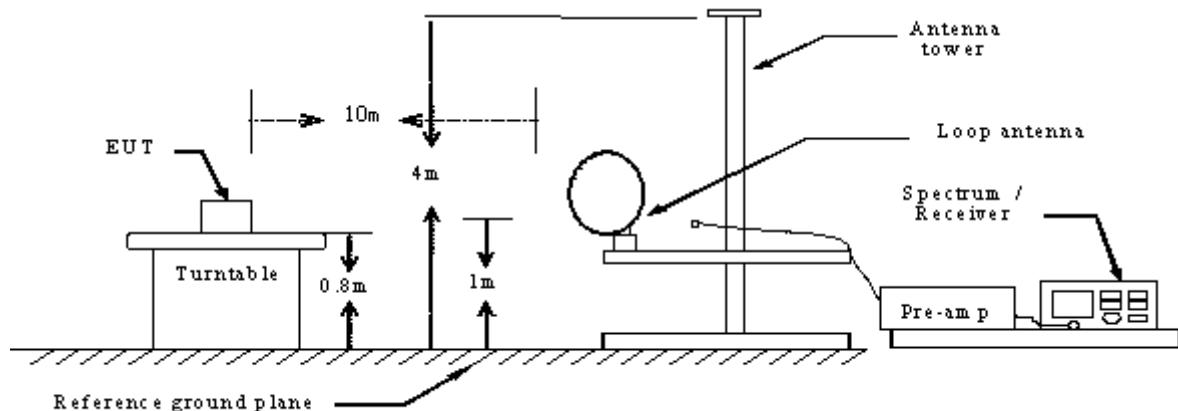
## 802.11n40 (Ch9)



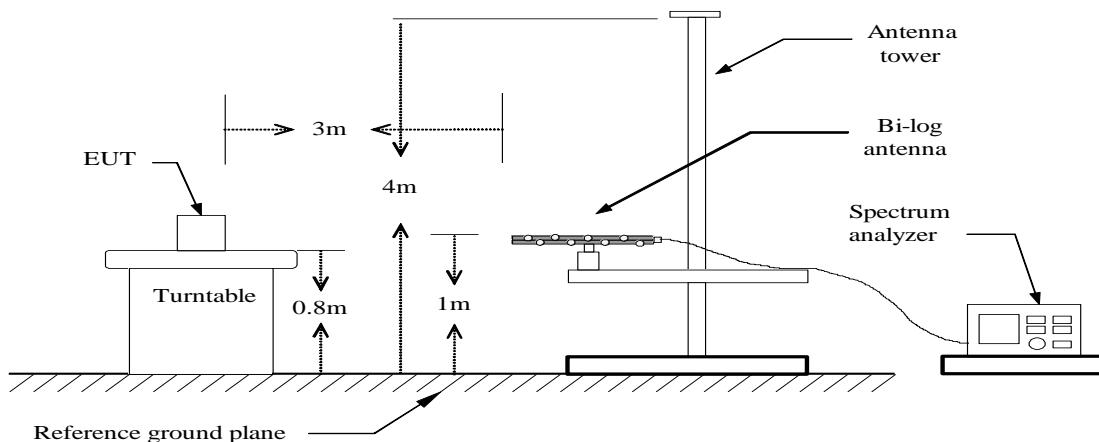
## 10. SPURIOUS EMISSIONS (RADIATION)

### 10.1 TEST SETUP

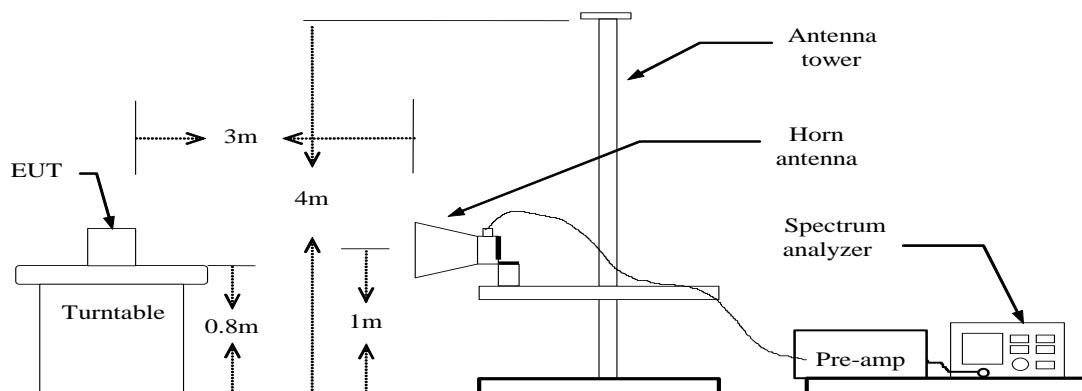
Radiated Spurious Measurement: below 30MHz



Radiated Spurious Measurement: below 1GHz



Radiated Spurious Measurement: above 1GHz



## 10.2 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

$$L_2 = 20\lg(L_1) + 40\lg(d_1/d_2)$$

$L_2$ : is the specified limit in dB microvolts per metre at distance  $d_2$ .

$L_1$ : is the specified limit in microvolts per metre at distance  $d_1$ .

For example:

$L_1 = 2400/9 \text{ } (\mu\text{V}/\text{m})$ ,  $d_1 = 300 \text{ (m)}$ ,  $d_2 = 3 \text{ (m)}$ , so  $L_2$  as follows:

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

## 10.3 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 10<sup>th</sup> 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 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.

## 10.4 RESULTS & PERFORMANCE

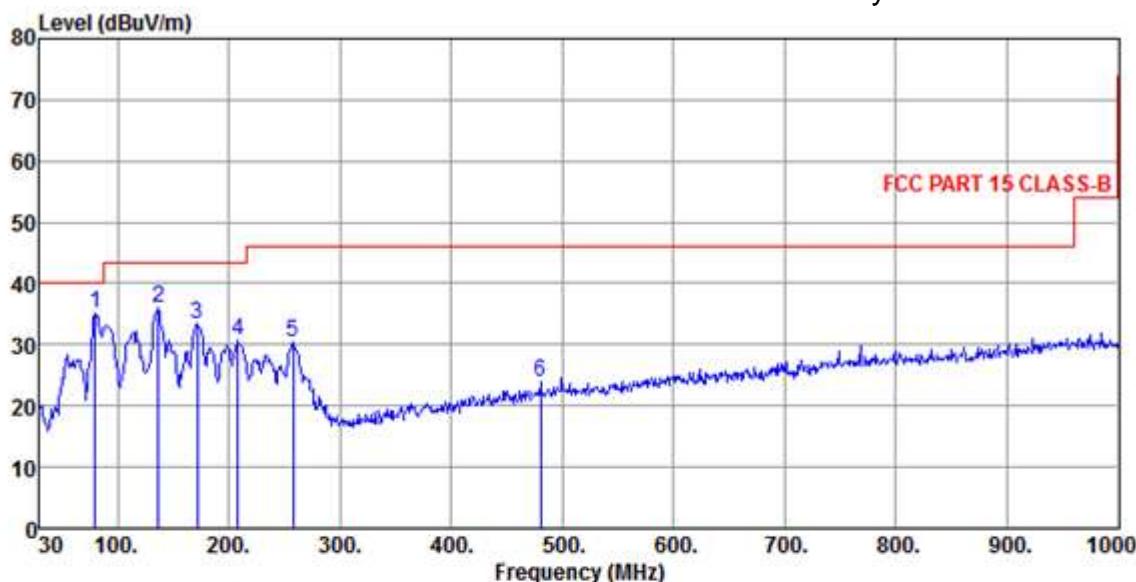
### From 9KHz to 30MHz:

The test data was 20dB lower than the permissible limit was not recorded in the report.  
802.11b, traffic mode; Channel 1

### From 30MHz to 1GHz:

802.11b Ch1

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

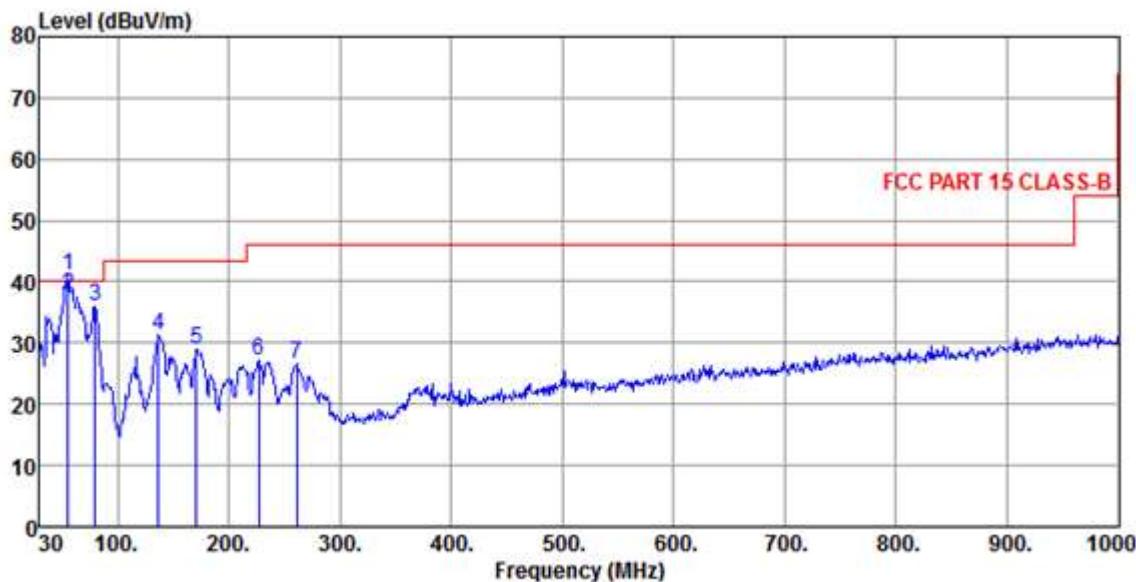
Mode : 802.11b CH1

Memo :

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Line	Over
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	79.47	25.19	8.77	1.09	0.00	35.05	40.00	-4.95 Peak
2	136.70	21.24	13.21	1.62	0.00	36.07	43.50	-7.43 Peak
3	171.62	18.39	13.15	1.86	0.00	33.40	43.50	-10.10 Peak
4	208.48	18.14	10.53	1.93	0.00	30.60	43.50	-12.90 Peak
5	257.95	16.08	12.09	2.18	0.00	30.35	46.00	-15.65 Peak
6	480.08	4.00	16.89	3.00	0.00	23.89	46.00	-22.11 Peak

802.11b Ch1

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

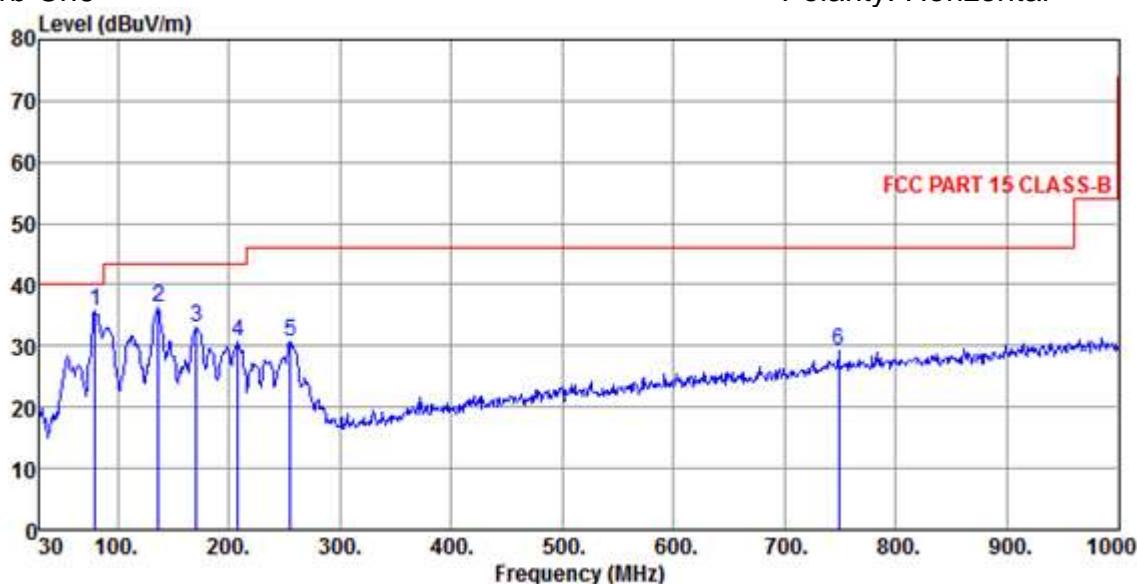
Mode : 802.11b CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	MHz	Level	Factor	Loss				
1 pp	55.22	27.58	12.40	1.00	0.00	40.98	40.00	0.98 Peak
2 qp	55.73	24.36	12.49	1.00	0.00	37.85	40.00	-2.15 QP
3	79.47	26.17	8.77	1.09	0.00	36.03	40.00	-3.97 Peak
4	136.70	16.55	13.21	1.62	0.00	31.38	43.50	-12.12 Peak
5	170.65	13.97	13.15	1.86	0.00	28.98	43.50	-14.52 Peak
6	226.91	14.18	11.05	2.07	0.00	27.30	46.00	-18.70 Peak
7	260.86	12.31	12.13	2.19	0.00	26.63	46.00	-19.37 Peak

802.11b Ch6

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

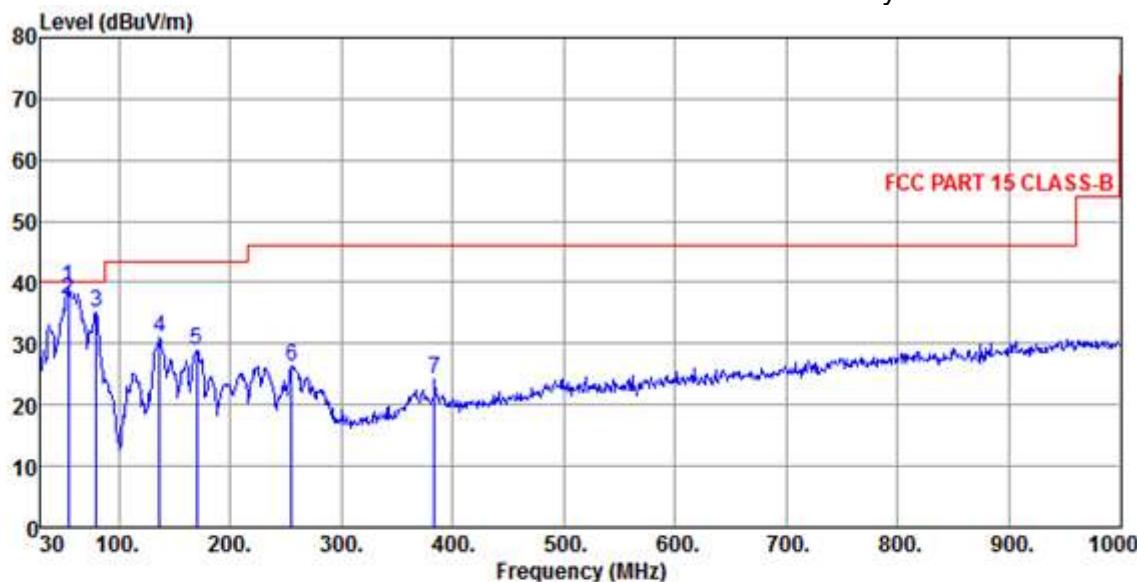
Mode : 802.11b CH6

Memo :

Freq	ReadAntenna	Cable		Preamp	Limit	Over	Line	Limit	Remark
		Level	Factor						
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	dB	
1 pp	79.47	25.74	8.77	1.09	0.00	35.60	40.00	-4.40	Peak
2	136.70	21.41	13.21	1.62	0.00	36.24	43.50	-7.26	Peak
3	170.65	18.05	13.15	1.86	0.00	33.06	43.50	-10.44	Peak
4	208.48	18.22	10.53	1.93	0.00	30.68	43.50	-12.82	Peak
5	255.04	16.62	12.00	2.17	0.00	30.79	46.00	-15.21	Peak
6	748.77	4.25	21.29	3.80	0.00	29.34	46.00	-16.66	Peak

802.11b Ch6

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

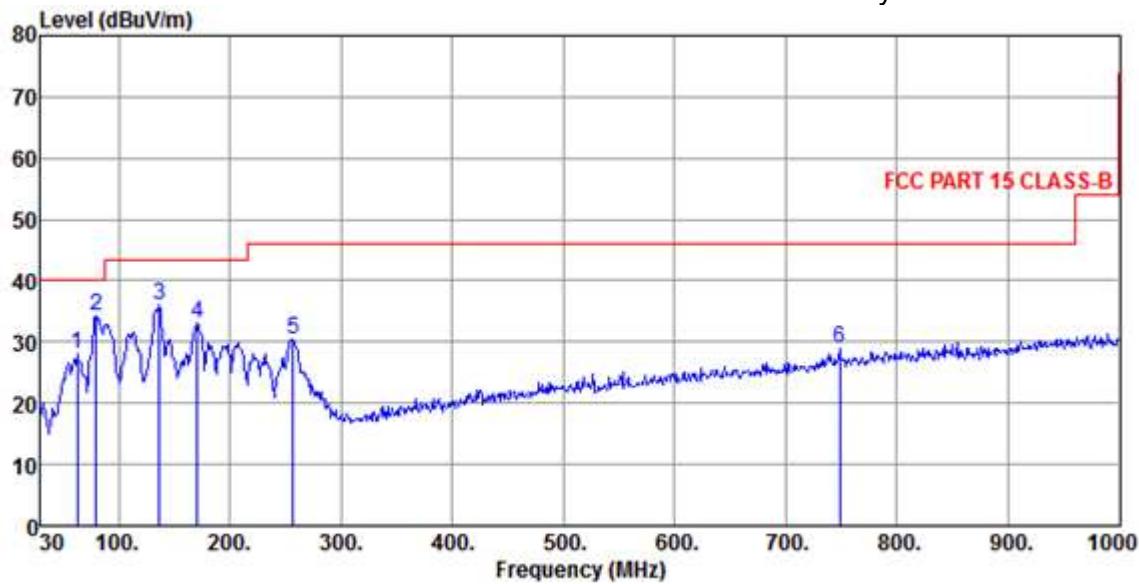
Mode : 802.11b CH6

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	54.25	25.84	12.40	0.99	0.00	39.23	40.00	-0.77 Peak
2 qp	54.86	23.84	12.40	0.99	0.00	37.23	40.00	-2.77 QP
3	79.47	25.36	8.77	1.09	0.00	35.22	40.00	-4.78 Peak
4	136.70	16.27	13.21	1.62	0.00	31.10	43.50	-12.40 Peak
5	169.68	13.64	13.33	1.84	0.00	28.81	43.50	-14.69 Peak
6	255.04	12.20	12.00	2.17	0.00	26.37	46.00	-19.63 Peak
7	384.05	6.61	14.97	2.74	0.00	24.32	46.00	-21.68 Peak

802.11b Ch11

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

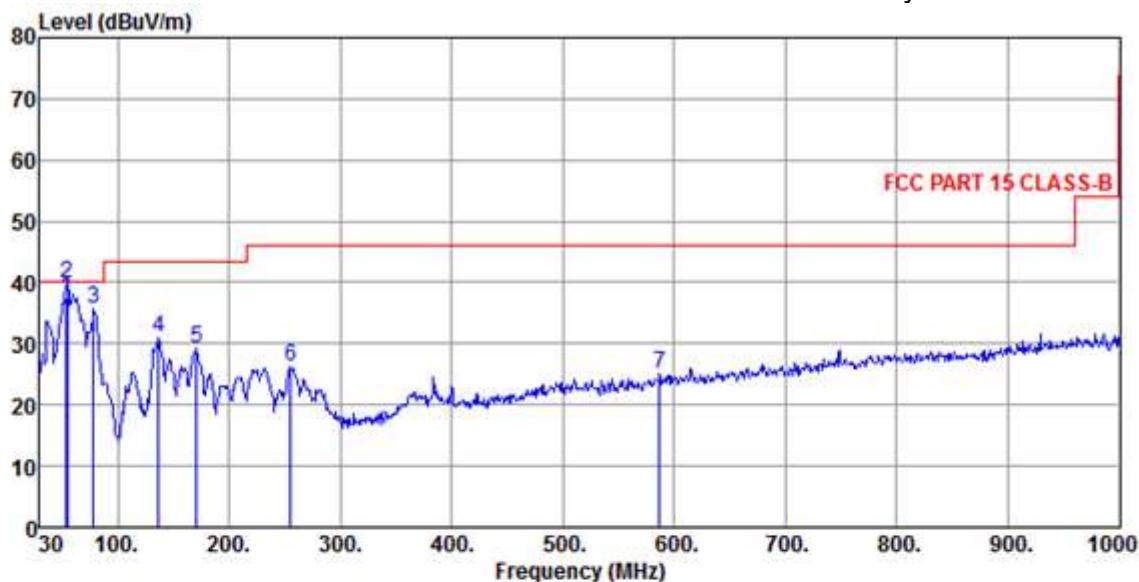
Mode : 802.11b CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Freq	Level	Factor	Loss				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	62.98	14.46	12.51	1.07	0.00	28.04	40.00	-11.96 Peak
2 pp	79.47	24.24	8.77	1.09	0.00	34.10	40.00	-5.90 Peak
3	136.70	21.32	13.21	1.62	0.00	36.15	43.50	-7.35 Peak
4	170.65	18.15	13.15	1.86	0.00	33.16	43.50	-10.34 Peak
5	256.98	16.22	12.05	2.17	0.00	30.44	46.00	-15.56 Peak
6	748.77	3.98	21.29	3.80	0.00	29.07	46.00	-16.93 Peak

802.11b Ch11

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

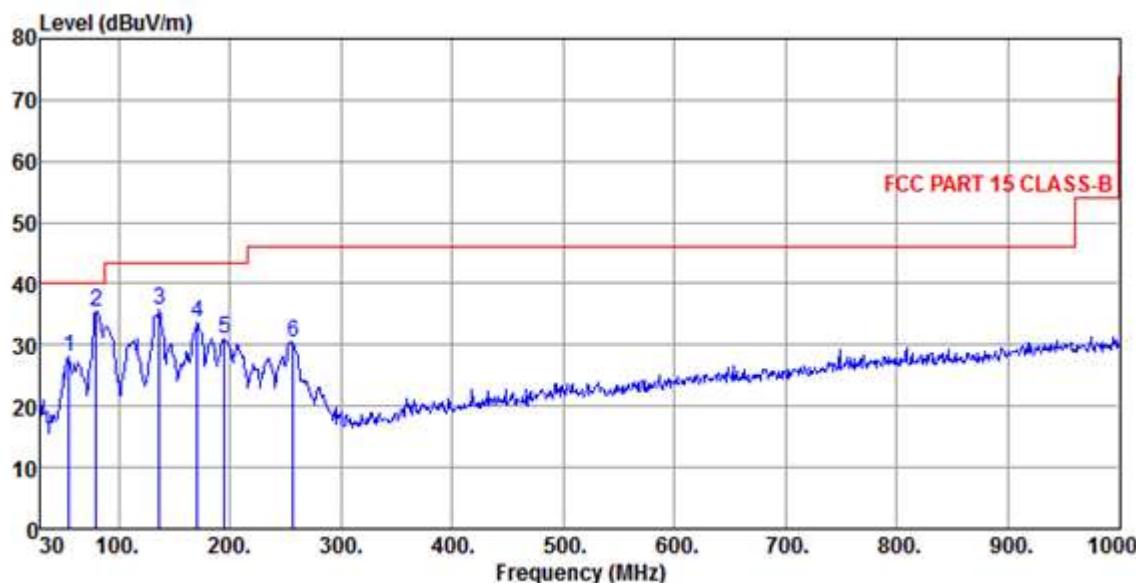
Mode : 802.11b CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 qp	54.11	24.09	12.40	0.99	0.00	37.48	40.00	-2.52 QP
2 pp	54.25	26.55	12.40	0.99	0.00	39.94	40.00	-0.06 Peak
3	78.50	25.37	9.14	1.09	0.00	35.60	40.00	-4.40 Peak
4	136.70	16.21	13.21	1.62	0.00	31.04	43.50	-12.46 Peak
5	170.65	14.12	13.15	1.86	0.00	29.13	43.50	-14.37 Peak
6	255.04	12.22	12.00	2.17	0.00	26.39	46.00	-19.61 Peak
7	586.78	2.91	18.78	3.30	0.00	24.99	46.00	-21.01 Peak

802.11g Ch1

Polarity: Horizontal



Site : chamber

Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

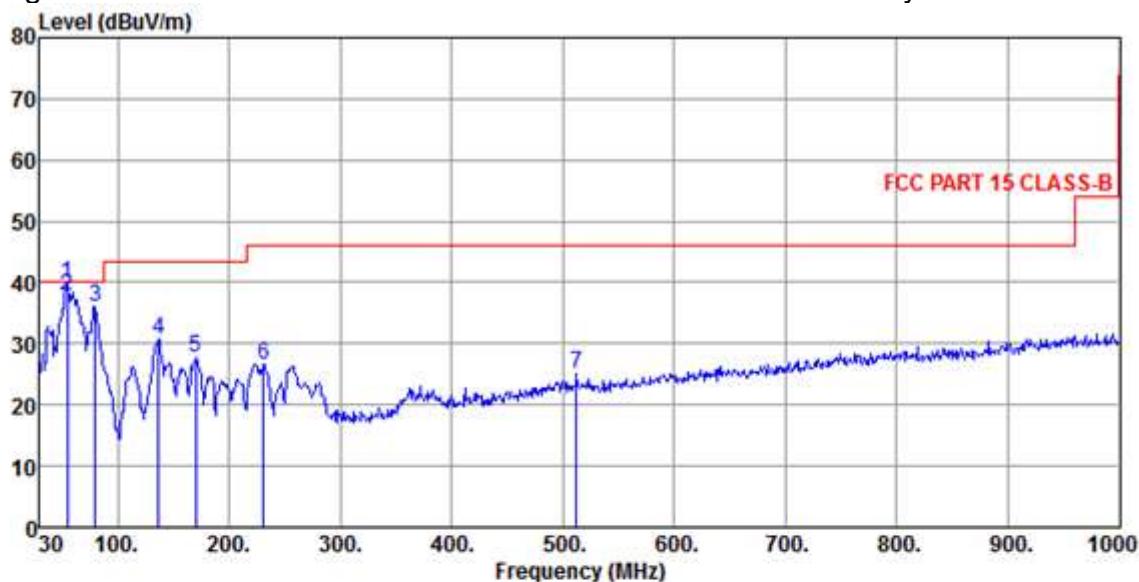
Mode : 802.11g CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV	Factor	Loss Factor				
1	55.22	14.75	12.40	1.00	0.00	28.15	40.00	-11.85 Peak
2 PP	79.47	25.50	8.77	1.09	0.00	35.36	40.00	-4.64 Peak
3	136.70	20.99	13.21	1.62	0.00	35.82	43.50	-7.68 Peak
4	170.65	18.51	13.15	1.86	0.00	33.52	43.50	-9.98 Peak
5	194.90	18.31	10.81	1.89	0.00	31.01	43.50	-12.49 Peak
6	256.98	16.22	12.05	2.17	0.00	30.44	46.00	-15.56 Peak

802.11g Ch1

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

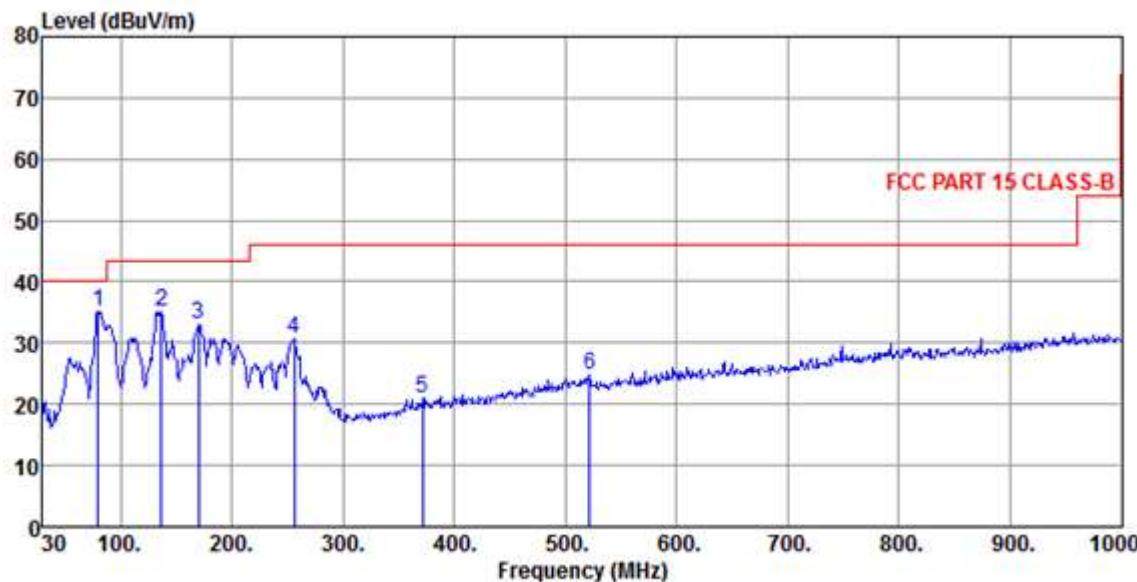
Mode : 802.11g CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	54.25	26.39	12.40	0.99	0.00	39.78	40.00	-0.22 Peak
2 qp	54.39	24.32	12.40	0.99	0.00	37.71	40.00	-2.29 QP
3	79.47	26.24	8.77	1.09	0.00	36.10	40.00	-3.90 Peak
4	136.70	16.00	13.21	1.62	0.00	30.83	43.50	-12.67 Peak
5	169.68	12.49	13.33	1.84	0.00	27.66	43.50	-15.84 Peak
6	230.79	13.33	11.24	2.05	0.00	26.62	46.00	-19.38 Peak
7	512.09	4.79	17.22	3.10	0.00	25.11	46.00	-20.89 Peak

802.11g Ch6

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

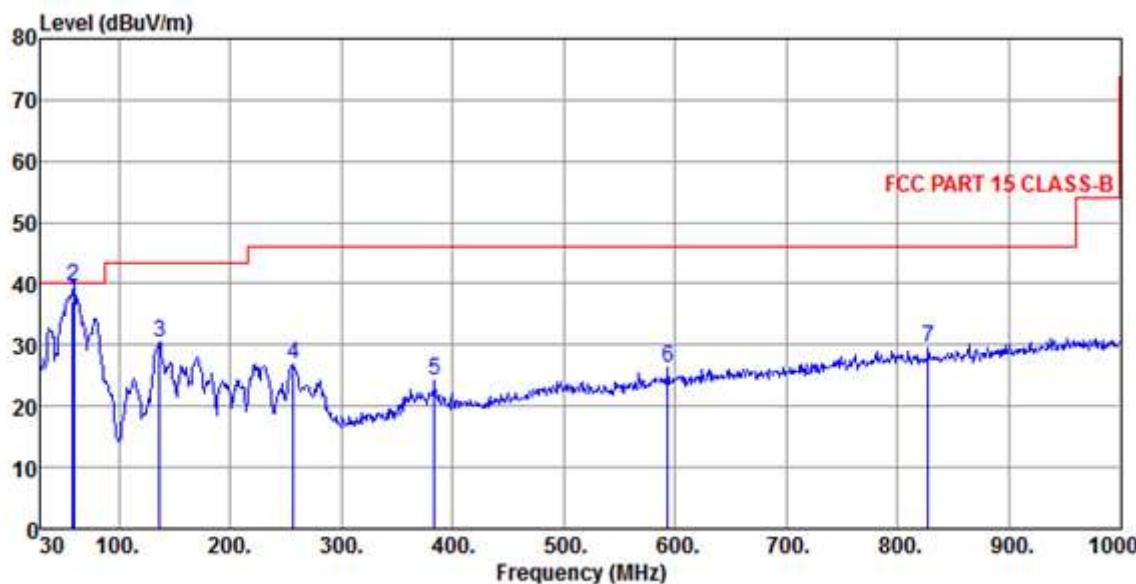
Mode : 802.11g CH6

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	79.47	25.21	8.77	1.09	0.00	35.07	40.00	-4.93 Peak
2	136.70	20.38	13.21	1.62	0.00	35.21	43.50	-8.29 Peak
3	169.68	17.95	13.33	1.84	0.00	33.12	43.50	-10.38 Peak
4	256.01	16.50	12.05	2.17	0.00	30.72	46.00	-15.28 Peak
5	371.44	3.54	14.64	2.72	0.00	20.90	46.00	-25.10 Peak
6	521.79	4.20	17.36	3.11	0.00	24.67	46.00	-21.33 Peak

802.11g Ch6

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

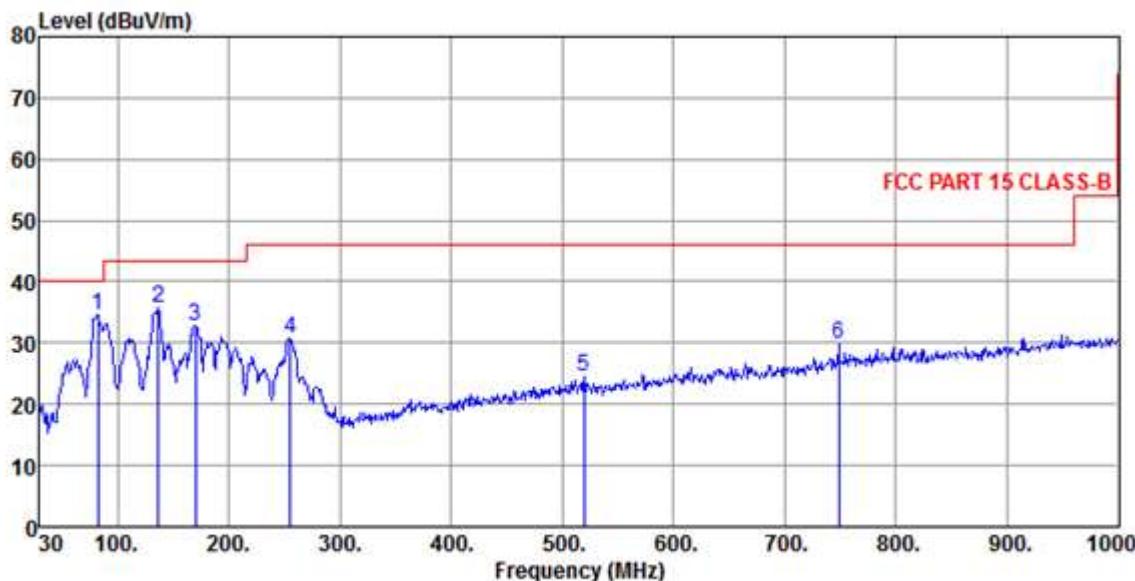
Mode : 802.11g CH6

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Freq	Level Factor	Cable Loss	Preamp Factor				
1 qp	58.75	23.69	12.58	1.03	0.00	37.30	40.00	-2.70 QP
2 pp	59.10	25.94	12.58	1.04	0.00	39.56	40.00	-0.44 Peak
3	136.70	15.71	13.21	1.62	0.00	30.54	43.50	-12.96 Peak
4	256.98	12.76	12.05	2.17	0.00	26.98	46.00	-19.02 Peak
5	384.05	6.44	14.97	2.74	0.00	24.15	46.00	-21.85 Peak
6	593.57	3.92	19.00	3.33	0.00	26.25	46.00	-19.75 Peak
7	827.34	3.68	21.94	3.90	0.00	29.52	46.00	-16.48 Peak

802.11g Ch11

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

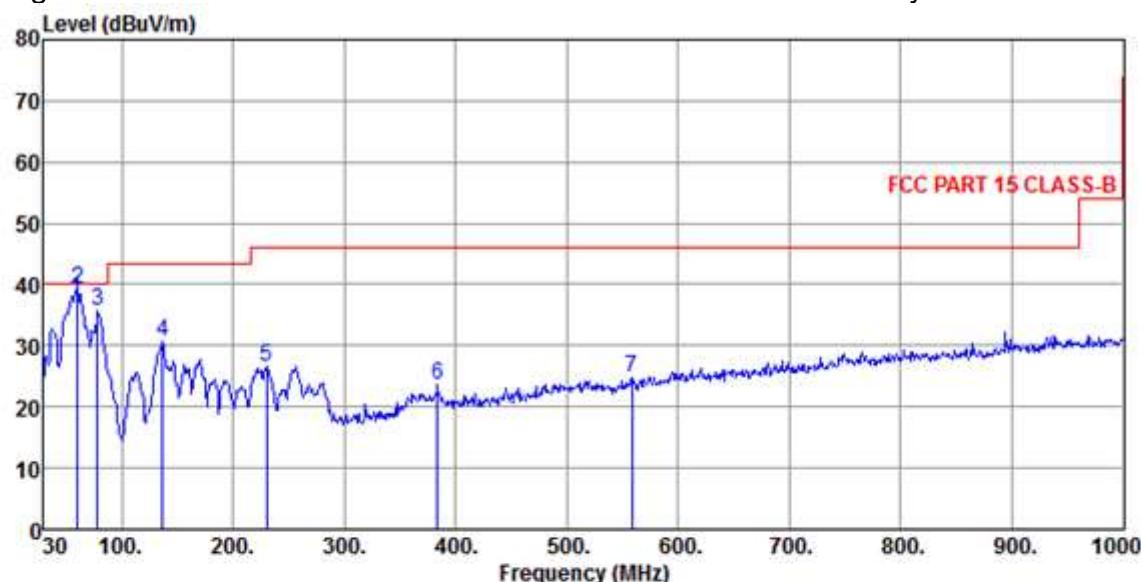
Mode : 802.11g CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	82.38	24.68	8.73	1.09	0.00	34.50	40.00	-5.50 Peak
2	136.70	20.80	13.21	1.62	0.00	35.63	43.50	-7.87 Peak
3	169.68	17.74	13.33	1.84	0.00	32.91	43.50	-10.59 Peak
4	255.04	16.51	12.00	2.17	0.00	30.68	46.00	-15.32 Peak
5	519.85	4.19	17.33	3.10	0.00	24.62	46.00	-21.38 Peak
6	748.77	4.83	21.29	3.80	0.00	29.92	46.00	-16.08 Peak

802.11g Ch11

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

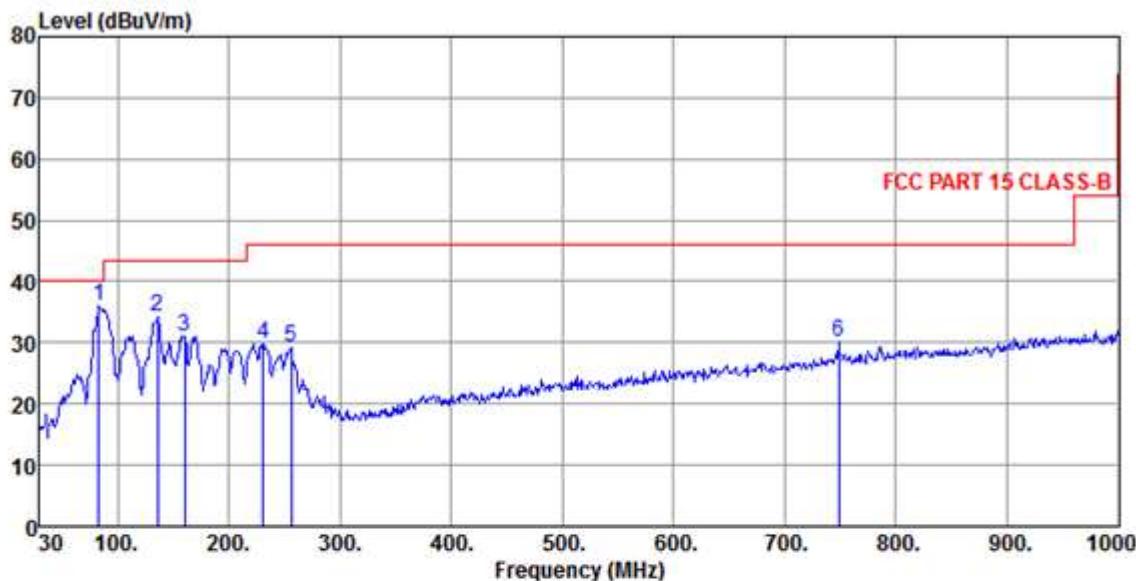
Mode : 802.11g CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	MHz	dBuV	dB/m	Loss Factor				
1 qp	59.87	23.68	12.67	1.04	0.00	37.39	40.00	-2.61 QP
2 pp	60.07	25.62	12.67	1.05	0.00	39.34	40.00	-0.66 Peak
3	78.50	25.38	9.14	1.09	0.00	35.61	40.00	-4.39 Peak
4	136.70	15.92	13.21	1.62	0.00	30.75	43.50	-12.75 Peak
5	229.82	13.39	11.24	2.04	0.00	26.67	46.00	-19.33 Peak
6	384.05	6.01	14.97	2.74	0.00	23.72	46.00	-22.28 Peak
7	558.65	3.32	18.12	3.23	0.00	24.67	46.00	-21.33 Peak

802.11n20 Ch1

Polarity: Horizontal



Site : chamber

Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

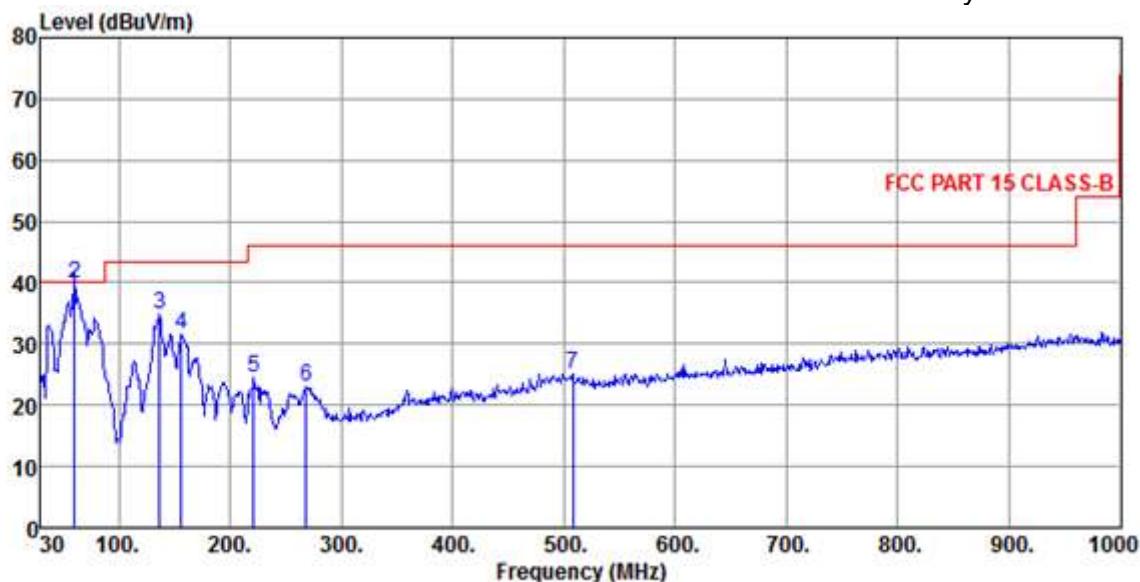
Mode : 802.11n20 CH1

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	83.35	26.15	8.68	1.09	0.00	35.92	40.00	-4.08 Peak
2	135.73	19.41	13.07	1.62	0.00	34.10	43.50	-9.40 Peak
3	159.98	15.51	13.88	1.68	0.00	31.07	43.50	-12.43 Peak
4	230.79	16.63	11.24	2.05	0.00	29.92	46.00	-16.08 Peak
5	256.01	15.05	12.05	2.17	0.00	29.27	46.00	-16.73 Peak
6	748.77	4.92	21.29	3.80	0.00	30.01	46.00	-15.99 Peak

802.11n20 Ch1

Polarity: Vertical

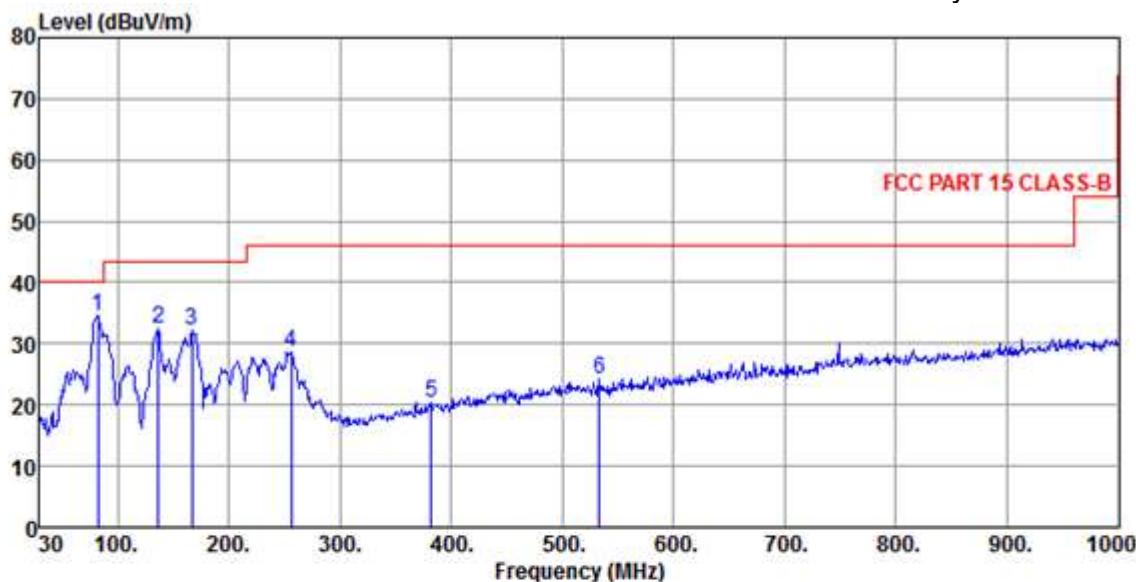


Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL  
EUT :  
Model Name :  
Temp/Humi : 23 °C / 54 %  
Power Rating: AC 120V/60HZ  
Mode : 802.11n20 CH1  
Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 qp	59.64	24.39	12.67	1.04	0.00	38.10	40.00	-1.90 QP
2 pp	60.07	26.11	12.67	1.05	0.00	39.83	40.00	-0.17 Peak
3	136.70	19.93	13.21	1.62	0.00	34.76	43.50	-8.74 Peak
4	156.10	15.91	13.89	1.67	0.00	31.47	43.50	-12.03 Peak
5	221.09	11.57	10.76	2.11	0.00	24.44	46.00	-21.56 Peak
6	268.62	8.31	12.40	2.21	0.00	22.92	46.00	-23.08 Peak
7	508.21	4.96	17.17	3.09	0.00	25.22	46.00	-20.78 Peak

802.11n20 Ch6

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

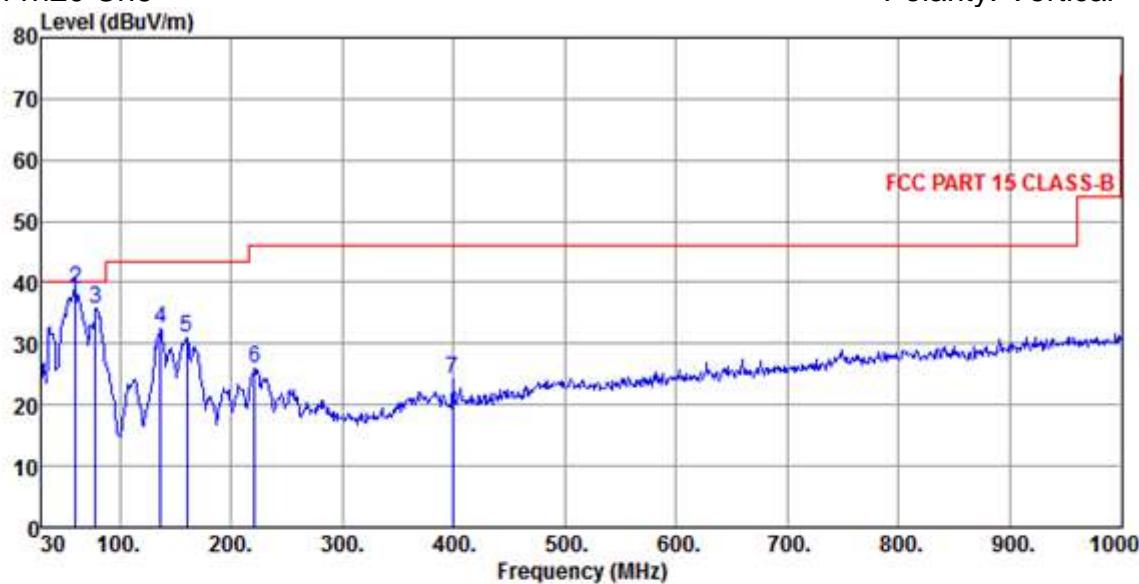
Mode : 802.11n20 CH6

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	82.38	24.77	8.73	1.09	0.00	34.59	40.00	-5.41 Peak
2	136.70	17.71	13.21	1.62	0.00	32.54	43.50	-10.96 Peak
3	166.77	16.98	13.44	1.79	0.00	32.21	43.50	-11.29 Peak
4	256.01	14.49	12.05	2.17	0.00	28.71	46.00	-17.29 Peak
5	382.11	2.63	14.92	2.75	0.00	20.30	46.00	-25.70 Peak
6	533.43	3.66	17.54	3.13	0.00	24.33	46.00	-21.67 Peak

802.11n20 Ch6

Polarity: Vertical

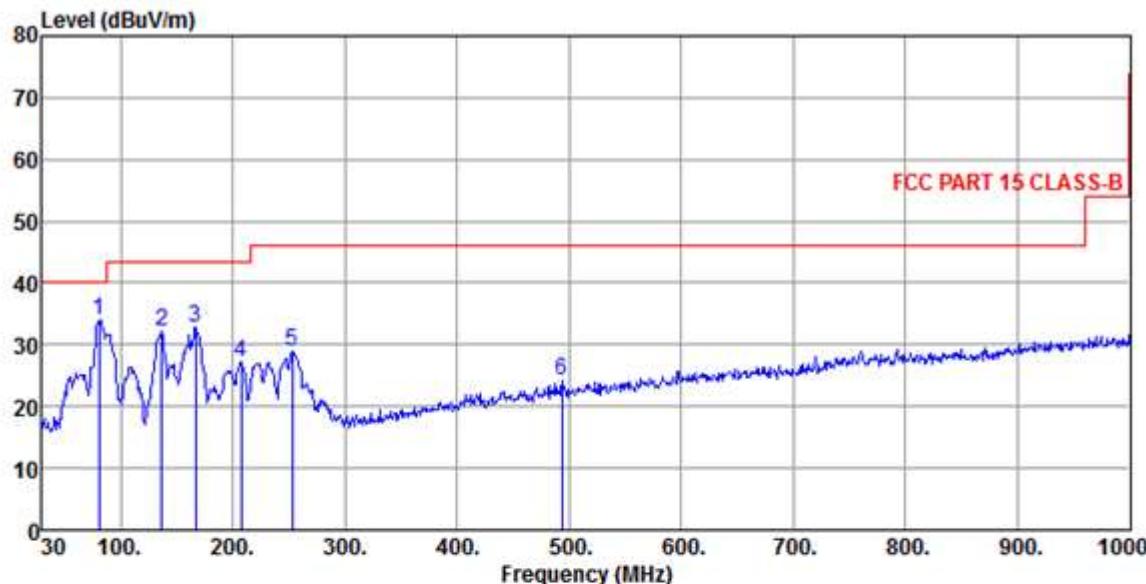


Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL  
EUT :  
Model Name :  
Temp/Humi : 23 °C / 54 %  
Power Rating: AC 120V/60HZ  
Mode : 802.11n20 CH6  
Memo :

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Over	
	Freq	Level	Factor	Loss				Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 qp	59.82	23.54	12.67	1.04	0.00	37.25	40.00	-2.75 QP
2 pp	60.07	25.36	12.67	1.05	0.00	39.08	40.00	-0.92 Peak
3	78.50	25.58	9.14	1.09	0.00	35.81	40.00	-4.19 Peak
4	136.70	17.60	13.21	1.62	0.00	32.43	43.50	-11.07 Peak
5	159.98	15.36	13.88	1.68	0.00	30.92	43.50	-12.58 Peak
6	221.09	13.25	10.76	2.11	0.00	26.12	46.00	-19.88 Peak
7	399.57	6.28	15.32	2.65	0.00	24.25	46.00	-21.75 Peak

802.11n20 Ch11

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

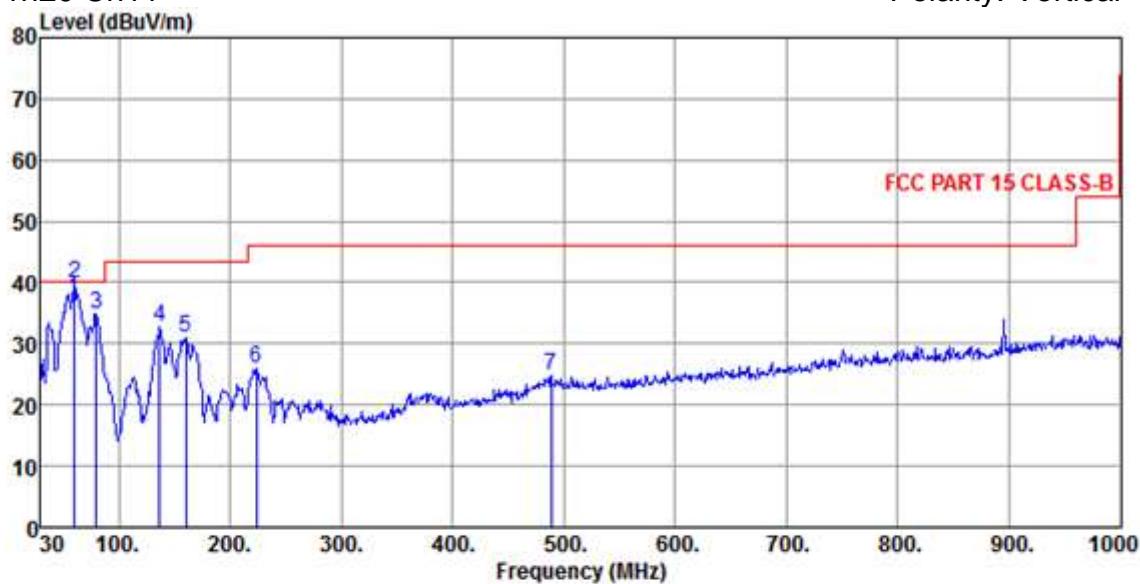
Mode : 802.11n20 CH11

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	80.44	24.20	8.77	1.08	0.00	34.05	40.00	-5.95 Peak
2	136.70	17.45	13.21	1.62	0.00	32.28	43.50	-11.22 Peak
3	166.77	17.43	13.44	1.79	0.00	32.66	43.50	-10.84 Peak
4	207.51	14.85	10.49	1.93	0.00	27.27	43.50	-16.23 Peak
5	253.10	14.92	11.96	2.16	0.00	29.04	46.00	-16.96 Peak
6	493.66	4.06	17.00	3.04	0.00	24.10	46.00	-21.90 Peak

802.11n20 Ch11

Polarity: Vertical

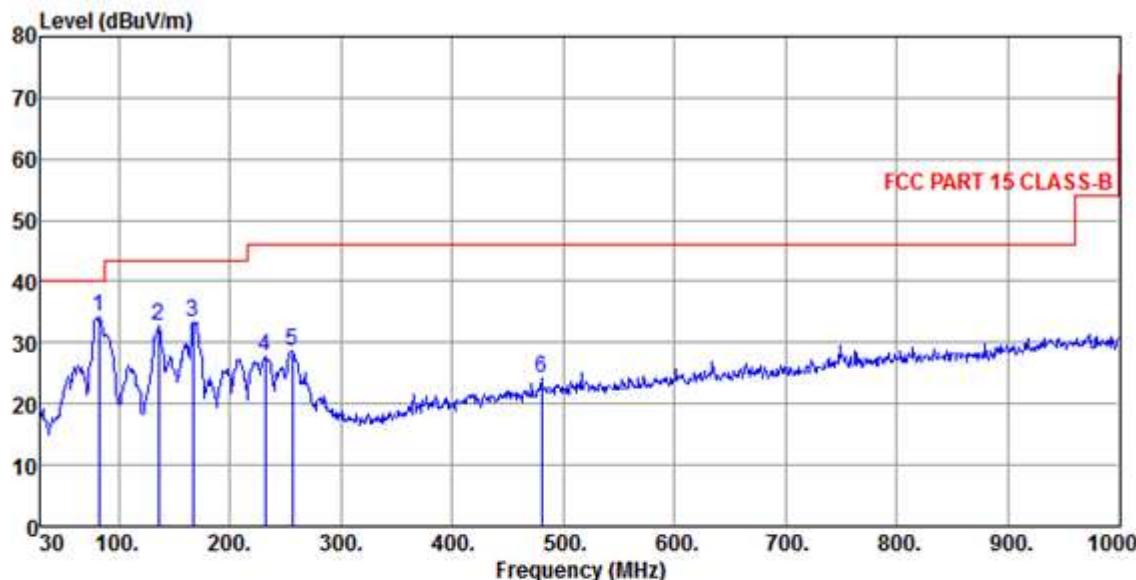


Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL  
EUT :  
Model Name :  
Temp/Humi : 23 °C / 54 %  
Power Rating: AC 120V/60HZ  
Mode : 802.11n20 CH11  
Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Freq	Level Factor	Cable Loss	Preamp Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 qp	59.76	23.59	12.67	1.04	0.00	37.30	40.00	-2.70 QP
2 pp	60.07	26.03	12.67	1.05	0.00	39.75	40.00	-0.25 Peak
3	79.47	24.95	8.77	1.09	0.00	34.81	40.00	-5.19 Peak
4	136.70	17.83	13.21	1.62	0.00	32.66	43.50	-10.84 Peak
5	159.98	15.54	13.88	1.68	0.00	31.10	43.50	-12.40 Peak
6	224.00	13.08	10.95	2.09	0.00	26.12	46.00	-19.88 Peak
7	488.81	4.80	16.97	3.05	0.00	24.82	46.00	-21.18 Peak

802.11n40 Ch3

Polarity: Horizontal



Site : chamber

Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

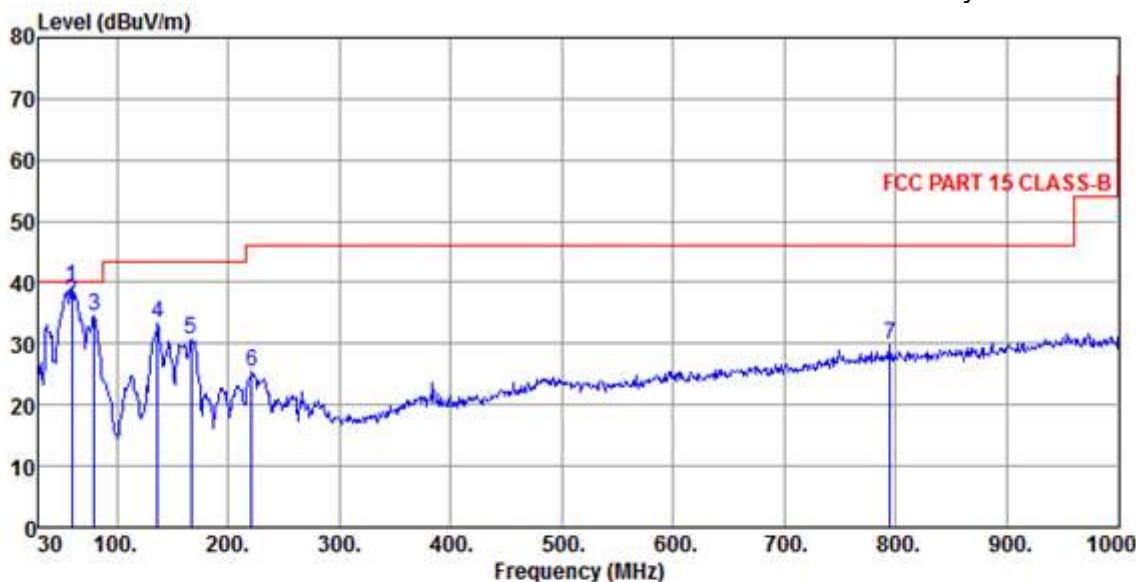
Mode : 802.11n40 CH3

Memo :

Freq	ReadAntenna MHz	Level dBuV	Antenna Factor	Cable Preamp		Limit Level	Line dBuV/m	Over Limit	Remark
				Loss Factor	dB				
1 pp	82.38	24.51	8.73	1.09	0.00	34.33	40.00	-5.67	Peak
2	135.73	17.98	13.07	1.62	0.00	32.67	43.50	-10.83	Peak
3	166.77	18.11	13.44	1.79	0.00	33.34	43.50	-10.16	Peak
4	231.76	14.27	11.33	2.06	0.00	27.66	46.00	-18.34	Peak
5	256.01	14.53	12.05	2.17	0.00	28.75	46.00	-17.25	Peak
6	480.08	4.42	16.89	3.00	0.00	24.31	46.00	-21.69	Peak

802.11n40 Ch3

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

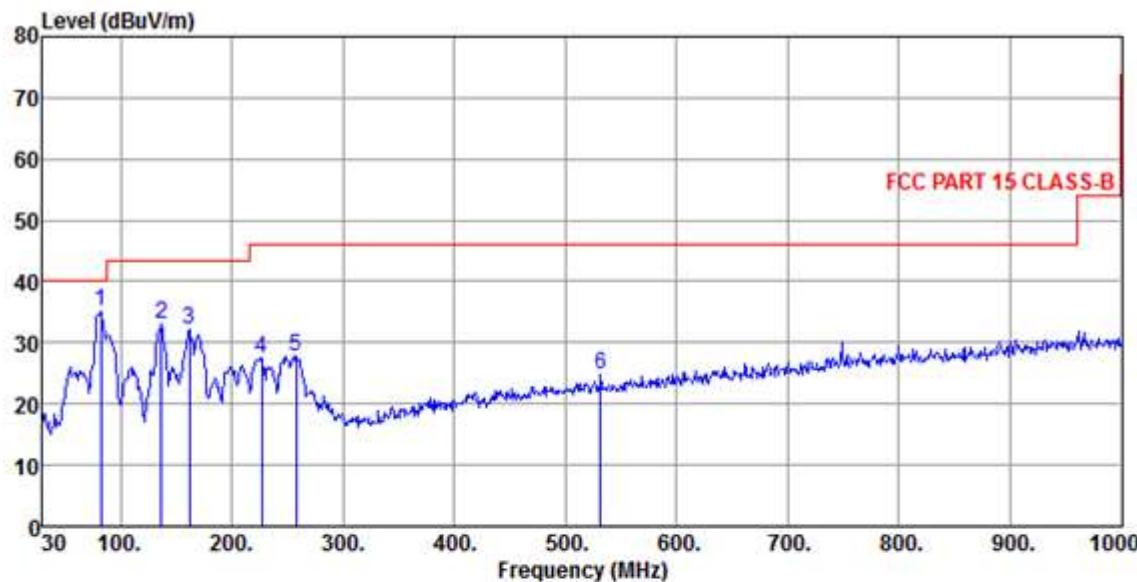
Mode : 802.11n40 CH3

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
	MHz	dB <sub>BuV</sub>	dB/m	dB	dB	dB <sub>BuV/m</sub>	dB <sub>BuV/m</sub>	dB
1 pp	59.10	25.69	12.58	1.04	0.00	39.31	40.00	-0.69 Peak
2 qp	59.28	23.22	12.58	1.04	0.00	36.84	40.00	-3.16 QP
3	79.47	24.71	8.77	1.09	0.00	34.57	40.00	-5.43 Peak
4	136.70	18.41	13.21	1.62	0.00	33.24	43.50	-10.26 Peak
5	166.77	15.55	13.44	1.79	0.00	30.78	43.50	-12.72 Peak
6	221.09	12.46	10.76	2.11	0.00	25.33	46.00	-20.67 Peak
7	795.33	4.26	21.70	3.82	0.00	29.78	46.00	-16.22 Peak

802.11n40 Ch6

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

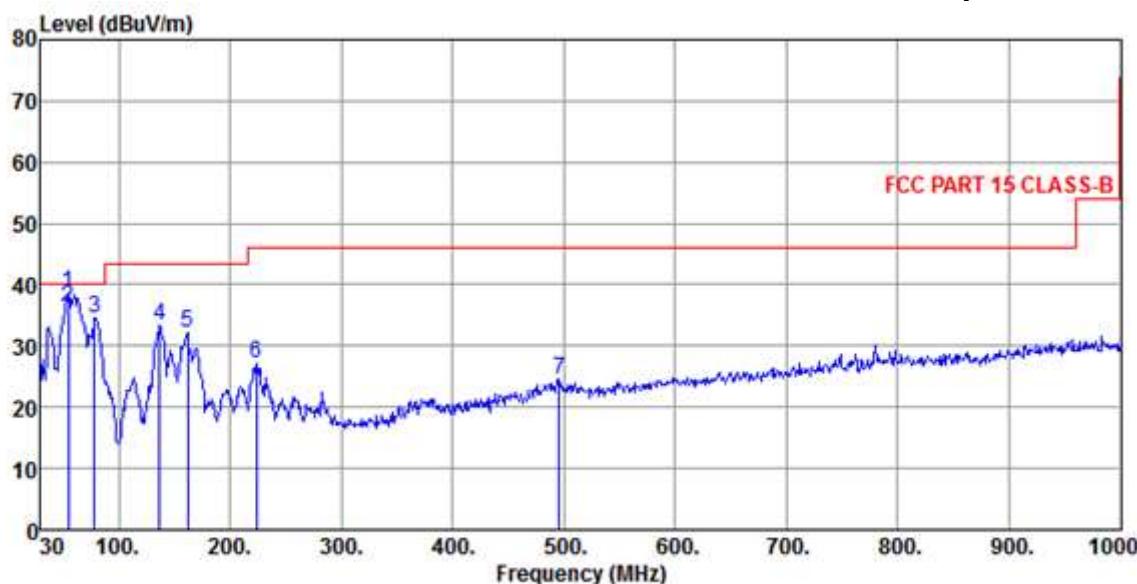
Mode : 802.11n40 CH6

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Freq	Level Factor	Cable Loss	Preamp Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	82.38	25.27	8.73	1.09	0.00	35.09	40.00	-4.91 Peak
2	136.70	18.12	13.21	1.62	0.00	32.95	43.50	-10.55 Peak
3	161.92	16.63	13.77	1.70	0.00	32.10	43.50	-11.40 Peak
4	226.91	14.39	11.05	2.07	0.00	27.51	46.00	-18.49 Peak
5	257.95	13.47	12.09	2.18	0.00	27.74	46.00	-18.26 Peak
6	531.49	4.17	17.51	3.14	0.00	24.82	46.00	-21.18 Peak

802.11n40 Ch6

Polarity: Vertical



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 VERTICAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

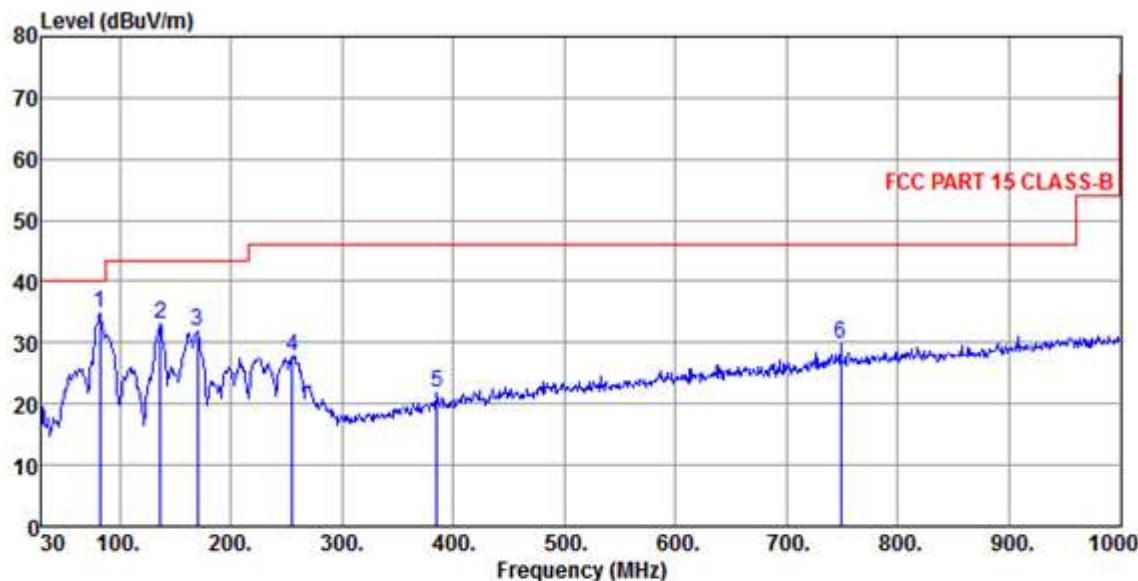
Mode : 802.11n40 CH6

Memo :

Freq	ReadAntenna		Cable Preamp		Limit Level	Line	Over Limit	Remark
	Freq	Level Factor	Cable Loss	Preamp Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	54.25	25.21	12.40	0.99	0.00	38.60	40.00	-1.40 Peak
2 qp	54.37	22.84	12.40	0.99	0.00	36.23	40.00	-3.77 QP
3	78.50	24.42	9.14	1.09	0.00	34.65	40.00	-5.35 Peak
4	136.70	18.57	13.21	1.62	0.00	33.40	43.50	-10.10 Peak
5	161.92	16.80	13.77	1.70	0.00	32.27	43.50	-11.23 Peak
6	224.00	14.08	10.95	2.09	0.00	27.12	46.00	-18.88 Peak
7	495.60	4.44	17.01	3.04	0.00	24.49	46.00	-21.51 Peak

802.11n40 Ch9

Polarity: Horizontal



Site : chamber  
Condition : FCC PART 15 CLASS-B 3m VULB9160 HORIZONTAL

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

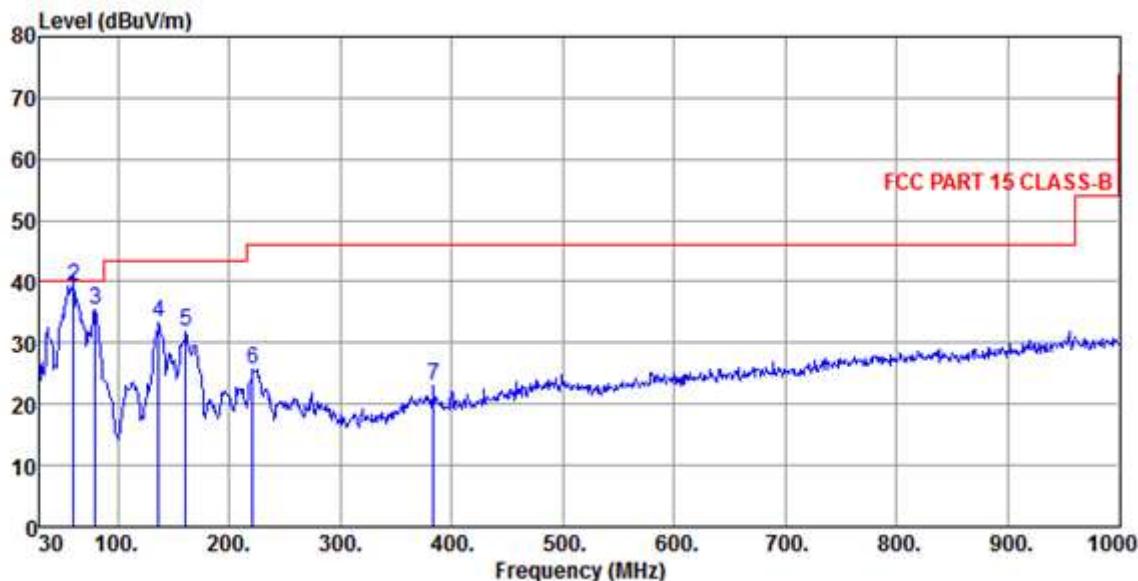
Mode : 802.11n40 CH9

Memo :

Freq	ReadAntenna		Cable		Preamp	Limit	Over	Limit	Remark
	Level	Factor	Loss	Factor					
	MHz	dB <sub>BuV</sub>	dB/m	dB	dB	dB <sub>BuV/m</sub>	dB <sub>BuV/m</sub>	dB	
1 pp	82.38	24.94	8.73	1.09	0.00	34.76	40.00	-5.24	Peak
2	136.70	18.20	13.21	1.62	0.00	33.03	43.50	-10.47	Peak
3	169.68	16.66	13.33	1.84	0.00	31.83	43.50	-11.67	Peak
4	255.04	13.64	12.00	2.17	0.00	27.81	46.00	-18.19	Peak
5	385.02	4.12	14.97	2.73	0.00	21.82	46.00	-24.18	Peak
6	748.77	4.79	21.29	3.80	0.00	29.88	46.00	-16.12	Peak

802.11n40 Ch9

Polarity: Vertical



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 : 802.11n40 CH9

Memo :

Freq	ReadAntenna		Cable		Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor				
MHz	dB <sub>UV</sub>	dB/m	dB	dB	dB <sub>UV</sub> /m	dB <sub>UV</sub> /m	dB	
1 qp	59.32	23.85	12.58	1.04	0.00	37.47	40.00	-2.53 QP
2 pp	60.07	25.53	12.67	1.05	0.00	39.25	40.00	-0.75 Peak
3	79.47	25.43	8.77	1.09	0.00	35.29	40.00	-4.71 Peak
4	136.70	18.43	13.21	1.62	0.00	33.26	43.50	-10.24 Peak
5	160.95	16.35	13.77	1.69	0.00	31.81	43.50	-11.69 Peak
6	221.09	12.69	10.76	2.11	0.00	25.56	46.00	-20.44 Peak
7	384.05	5.21	14.97	2.74	0.00	22.92	46.00	-23.08 Peak

**From 1GHz to 25GHz:**

802.11b, traffic mode; Channel 1

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2412	111.34	-3.54	Horizontal	107.8	/	/	Peak
2412	/	-3.54	H	/	/	/	Average
4824	43.17	4.76	H	47.93	74	26.07	Peak
4824	/	4.76	H	/	54	/	Average
7236	44.60	11.24	H	55.84	74	18.16	Peak
7236	29.14	11.24	H	40.38	54	13.62	Average
2412	105.98	-3.54	Vertical	102.44	/	/	Peak
2412	/	-3.54	V	/	/	/	Average
4824	42.38	4.76	V	47.14	74	26.86	Peak
4824	/	4.76	V	/	54	/	Average
7236	43.43	11.24	V	54.67	74	19.33	Peak
7236	28.61	11.24	V	39.85	54	14.15	Average

Note: 1, Total=Reading+Correct factor

2, 2412 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11b, traffic mode; Channel 6

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2437	111.47	-3.54	Horizontal	107.93	/	/	Peak
2437	/	-3.54	H	/	/	/	Average
4874	43.26	4.76	H	48.02	74	25.98	Peak
4874	/	4.76	H	/	54	/	Average
7311	43.98	11.24	H	55.22	74	18.78	Peak
7311	30.32	11.24	H	41.56	54	12.44	Average
2437	106.56	-3.54	Vertical	103.02	/	/	Peak
2437	/	-3.54	V	/	/	/	Average
4874	42.90	4.76	V	47.66	74	26.34	Peak
4874	/	4.76	V	/	54	/	Average
7311	43.49	11.24	V	54.73	74	19.27	Peak
7311	29.50	11.24	V	40.74	54	13.26	Average

Note: 1, Total=Reading+Correct factor

2, 2437 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise

802.11b, traffic mode; Channel 11

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2462	110.76	-3.13	Horizontal	107.63	/	/	Peak
2462	/	-3.13	H	/	/	/	Average
4924	42.53	5.15	H	47.68	74	26.32	Peak
4924	/	5.15	H	/	54	/	Average
7386	44.02	12.01	H	56.03	74	17.97	Peak
7386	28.81	12.01	H	40.82	54	13.18	Average
2462	106.39	-3.13	Vertical	103.26	/	/	Peak
2462	/	-3.13	V	/	/	/	Average
4924	40.18	5.15	V	45.33	74	28.67	Peak
4924	/	5.15	V	/	54	/	Average
7386	42.45	12.01	V	54.46	74	19.54	Peak
7386	27.34	12.01	V	39.35	54	14.65	Average

Note: 1, Total=Reading+Correct factor

2, 2462 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise

802.11g, traffic mode; Channel 1

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2412	112.89	-3.54	Horizontal	109.35	/	/	Peak
2412	/	-3.54	H	/	/	/	Average
4824	43.76	4.76	H	48.52	74	25.48	Peak
4824	/	4.76	H	/	54	/	Average
7236	45.25	11.24	H	56.49	74	17.51	Peak
7236	30.04	11.24	H	41.28	54	12.72	Average
2412	108.86	-3.54	Vertical	105.32	/	/	Peak
2412	/	-3.54	V	/	/	/	Average
4824	42.62	4.76	V	47.38	74	26.62	Peak
4824	/	4.76	V	/	54	/	Average
7236	44.45	11.24	V	55.69	74	18.31	Peak
7236	29.15	11.24	V	40.39	54	13.61	Average

Note: 1, Total=Reading+Correct factor

2, 2412 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11g, traffic mode; Channel 6

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2437	113.88	-3.49	Horizontal	110.39	/	/	Peak
2437	/	-3.49	H	/	/	/	Average
4874	43.14	4.81	H	47.95	74	26.05	Peak
4874	/	4.81	H	/	54	/	Average
7311	43.31	11.56	H	55.87	74	18.13	Peak
7311	29.36	11.56	H	40.92	54	13.08	Average
2437	110.01	-3.49	Vertical	106.52	/	/	Peak
2437	/	-3.49	V	/	/	/	Average
4874	40.55	4.81	V	45.36	74	28.64	Peak
4874	/	4.81	V	/	54	/	Average
7311	42.70	11.56	V	54.26	74	19.74	Peak
7311	28.28	11.56	V	39.84	54	14.16	Average

Note: 1, Total=Reading+Correct factor

2, 2437 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11g, traffic mode; Channel 11

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2462	112.97	-3.13	Horizontal	109.84	/	/	Peak
2462	/	-3.13	H	/	/	/	Average
4924	42.51	5.15	H	47.66	74	26.34	Peak
4924	/	5.15	H	/	54	/	Average
7386	43.41	12.01	H	55.42	74	18.58	Peak
7386	29.13	12.01	H	41.14	54	12.86	Average
2462	108.51	-3.13	Vertical	105.38	/	/	Peak
2462	/	-3.13	V	/	/	/	Average
4924	41.17	5.15	V	46.32	74	27.68	Peak
4924	/	5.15	V	/	54	/	Average
7386	42.17	12.01	V	54.18	74	19.82	Peak
7386	27.64	12.01	V	39.65	54	14.35	Average

Note: 1, Total=Reading+Correct factor

2, 2462 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11n20, traffic mode; Channel 1

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2412	113.49	-3.54	Horizontal	109.95	/	/	Peak
2412	/	-3.54	H	/	/	/	Average
4824	42.74	4.76	H	47.50	74	26.50	Peak
4824	/	4.76	H	/	54	/	Average
7236	45.07	11.24	H	56.31	74	17.69	Peak
7236	31.21	11.24	H	42.45	54	11.55	Average
2412	108.78	-3.54	Vertical	105.24	/	/	Peak
2412	/	-3.54	V	/	/	/	Average
4824	41.45	4.76	V	46.21	74	27.79	Peak
4824	/	4.76	V	/	54	/	Average
7236	43.63	11.24	V	54.87	74	19.13	Peak
7236	29.13	11.24	V	40.37	54	13.63	Average

Note: 1, Total=Reading+Correct factor

2, 2412 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11n20, traffic mode; Channel 6

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2437	112.16	-3.49	Horizontal	108.67	/	/	Peak
2437	/	-3.49	H	/	/	/	Average
4874	42.27	4.81	H	47.08	74	26.92	Peak
4874	/	4.81	H	/	54	/	Average
7311	44.83	11.56	H	56.39	74	17.61	Peak
7311	30.03	11.56	H	41.59	54	12.41	Average
2437	108.06	-3.49	Vertical	104.57	/	/	Peak
2437	/	-3.49	V	/	/	/	Average
4874	41.51	4.81	V	46.32	74	27.68	Peak
4874	/	4.81	V	/	54	/	Average
7311	43.53	11.56	V	55.09	74	18.91	Peak
7311	29.17	11.56	V	40.73	54	13.27	Average

Note: 1, Total=Reading+Correct factor

2, 2437 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11n20, traffic mode; Channel 11

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2462	112.67	-3.13	Horizontal	109.54	/	/	Peak
2462	/	-3.13	H	/	/	/	Average
4924	42.04	5.15	H	47.19	74	26.81	Peak
4924	/	5.15	H	/	54	/	Average
7386	44.83	12.01	H	56.84	74	17.16	Peak
7386	29.51	12.01	H	41.52	54	12.48	Average
2462	108.48	-3.13	Vertical	105.35	/	/	Peak
2462	/	-3.13	V	/	/	/	Average
4924	41.17	5.15	V	46.32	74	27.68	Peak
4924	/	5.15	V	/	54	/	Average
7386	43.17	12.01	V	55.18	74	18.82	Peak
7386	28.29	12.01	V	40.30	54	13.70	Average

Note: 1, Total=Reading+Correct factor

2, 2462 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11n40, traffic mode; Channel 3

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2422	111.83	-3.52	Horizontal	108.31	/	/	Peak
2422	/	-3.52	H	/	/	/	Average
4844	42.11	4.77	H	46.88	74	27.12	Peak
4844	/	4.77	H	/	54	/	Average
7266	44.53	11.31	H	55.84	74	18.16	Peak
7266	30.31	11.31	H	41.62	54	12.38	Average
2422	108.49	-3.54	Vertical	104.95	/	/	Peak
2422	/	-3.54	V	/	/	/	Average
4844	40.46	4.77	V	45.23	74	26.77	Peak
4844	/	4.77	V	/	54	/	Average
7266	43.41	11.31	V	54.72	74	19.28	Peak
7266	29.48	11.31	V	40.79	54	13.21	Average

Note: 1, Total=Reading+Correct factor

2, 2422 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11n40, traffic mode; Channel 6

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2437	111.69	-3.49	Horizontal	108.20	/	/	Peak
2437	/	-3.49	H	/	/	/	Average
4874	42.71	4.81	H	47.52	74	26.48	Peak
4874	/	4.81	H	/	54	/	Average
7311	43.83	11.56	H	55.39	74	18.61	Peak
7311	30.07	11.56	H	41.63	54	12.37	Average
2437	108.42	-3.49	Vertical	104.93	/	/	Peak
2437	/	-3.49	V	/	/	/	Average
4874	41.44	4.81	V	46.25	74	27.75	Peak
4874	/	4.81	V	/	54	/	Average
7311	43.31	11.56	V	54.87	74	19.13	Peak
7311	29.02	11.56	V	40.58	54	13.42	Average

Note: 1, Total=Reading+Correct factor

2, 2437 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

802.11n40, traffic mode; Channel 9

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Antenna Polarity	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
2452	112.21	-3.20	Horizontal	109.01	/	/	Peak
2452	/	-3.20	H	/	/	/	Average
4904	42.72	4.93	H	47.65	74	26.35	Peak
4904	/	4.93	H	/	54	/	Average
7356	44.51	11.83	H	56.34	74	17.66	Peak
7356	30.51	11.83	H	42.34	54	11.66	Average
2462	107.42	-3.20	Vertical	104.22	/	/	Peak
2462	/	-3.20	V	/	/	/	Average
4904	41.30	4.93	V	46.23	74	27.77	Peak
4904	/	4.93	V	/	54	/	Average
7356	43.04	11.83	V	54.87	74	19.13	Peak
7356	28.69	11.83	V	40.52	54	13.48	Average

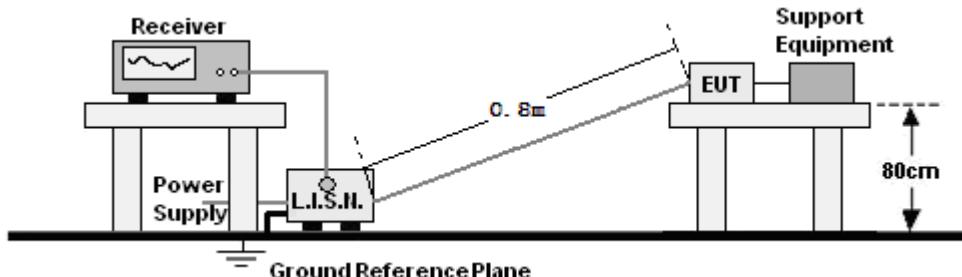
Note: 1, Total=Reading+Correct factor

2, 2452 MHz was fundamental signal which can be ignored.

3, Other harmonics are lower than background noise.

## 11. AC POWER LINE CONDUCTED EMISSIONS

### 11.1 TEST SETUP



### 11.2 LIMITS

Frequency range (MHz)	Limits dB( $\mu$ V)	
	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.

### 11.3 TEST PROCEDURE

According to description of ANSI C63.4: 2009 sec.13.1.3, 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.

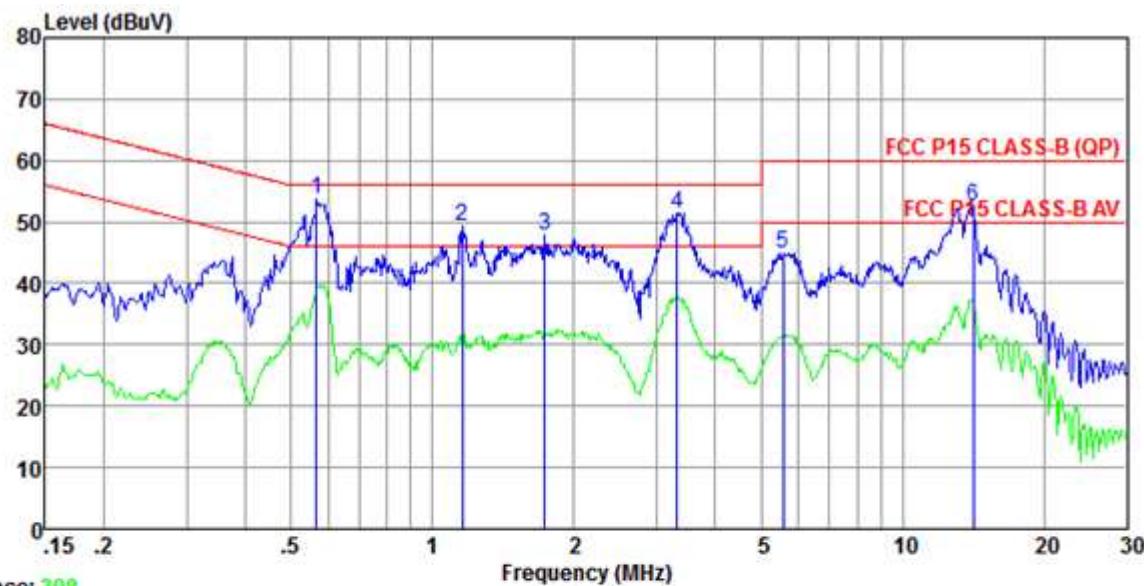
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

## 11.4 RESULTS & PERFORMANCE

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

EUT operation mode: 11b(Ch1/Ch6/Ch11); 11g(Ch1/Ch6/Ch11); 11n20(Ch1/Ch6/Ch11); 11n40(Ch3/Ch6/Ch9).

### 802.11b Ch1



Trace: 308  
Site : chamber  
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE

EUT :

Model Name :

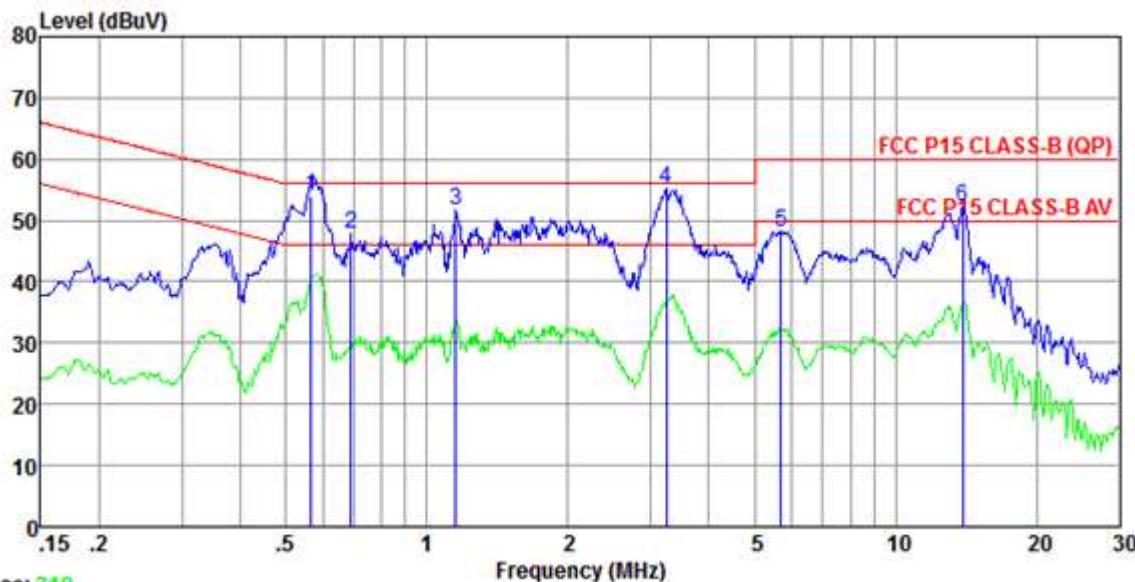
Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

Mode : 802.11b CH1

Memo :

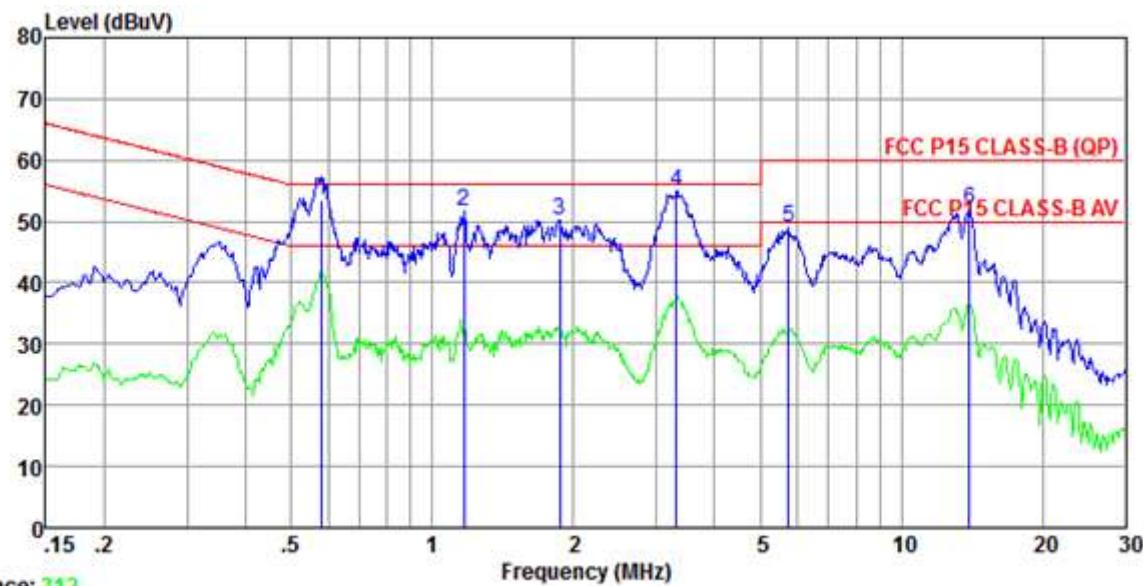
Freq	Read	LISN	Cable	Preamp	Limit	Over	Over	Over
	Level	Factor	Loss	Factor				
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.57	43.20	10.50	0.11	0.00	53.81	56.00	-2.19 Peak
2	1.16	38.51	10.52	0.14	0.00	49.17	56.00	-6.83 Peak
3	1.73	37.25	10.52	0.15	0.00	47.92	56.00	-8.08 Peak
4	3.31	40.73	10.52	0.15	0.00	51.40	56.00	-4.60 Peak
5	5.56	34.24	10.50	0.19	0.00	44.93	60.00	-15.07 Peak
6	14.14	41.94	10.50	0.18	0.00	52.62	60.00	-7.38 Peak



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 : 802.11b CH1  
Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Line	Over	Remark
	MHz	dBuV	Factor	Loss				
1 qp	0.57	43.60	10.38	0.11	0.00	54.09	56.00	-1.91 QP
2	0.69	37.52	10.31	0.12	0.00	47.95	56.00	-8.05 Peak
3	1.15	41.17	10.31	0.14	0.00	51.62	56.00	-4.38 Peak
4 pp	3.24	44.75	10.32	0.15	0.00	55.22	56.00	-0.78 Peak
5	5.68	37.73	10.33	0.20	0.00	48.26	60.00	-11.74 Peak
6	13.91	41.49	10.53	0.20	0.00	52.22	60.00	-7.78 Peak

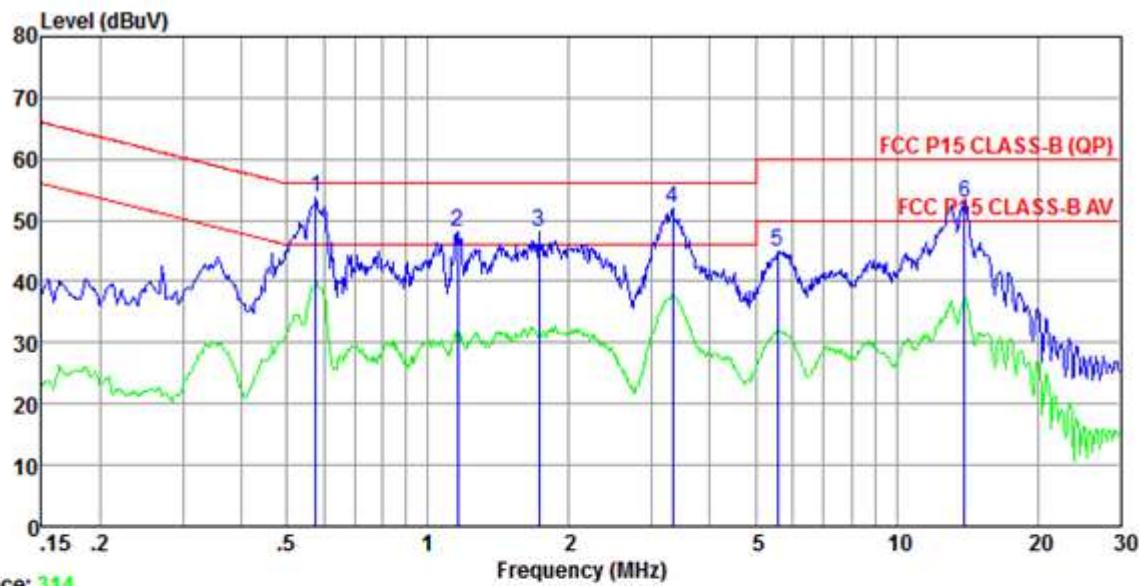
### 802.11b Ch6



Trace: 312

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 : 802.11b CH6  
Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark
	MHz	Level	Factor	Loss			
1 qp	0.58	42.86	10.37	0.11	0.00	53.34	56.00 -2.66 QP
2	1.17	41.23	10.31	0.14	0.00	51.68	56.00 -4.32 Peak
3	1.87	39.70	10.31	0.15	0.00	50.16	56.00 -5.84 Peak
4 pp	3.31	44.50	10.32	0.15	0.00	54.97	56.00 -1.03 Peak
5	5.74	38.36	10.33	0.21	0.00	48.90	60.00 -11.10 Peak
6	13.99	41.36	10.53	0.20	0.00	52.09	60.00 -7.91 Peak



Trace: 314

Site : chamber  
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

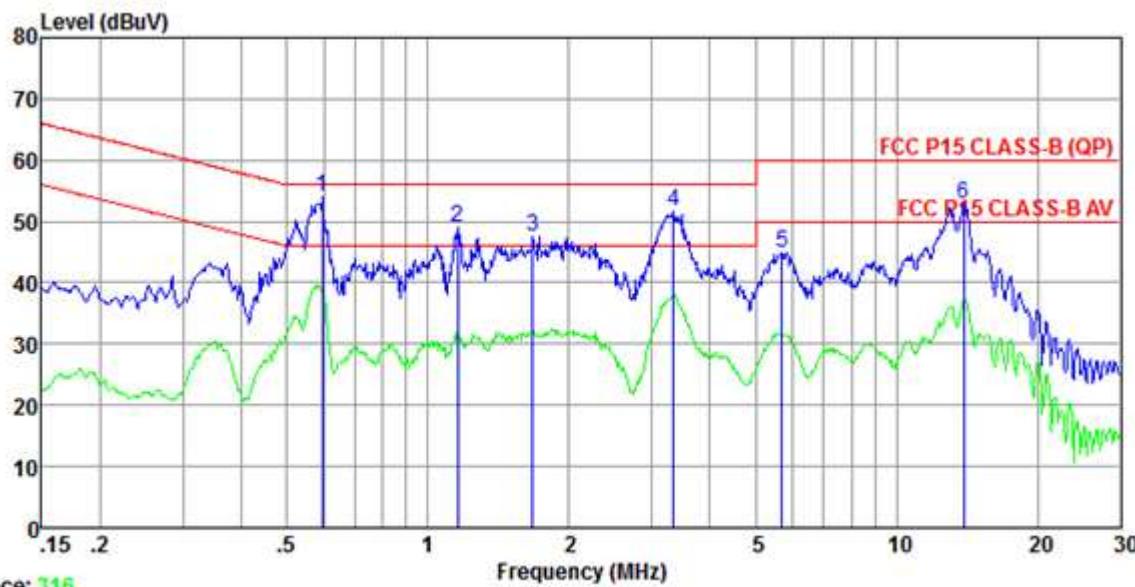
Power Rating: AC 120V/60HZ

Mode : 802.11b CH6

Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	Freq	Level	Factor	Loss				
1 pp	0.58	43.16	10.49	0.11	0.00	53.76	56.00	-2.24 Peak
2	1.16	37.49	10.52	0.14	0.00	48.15	56.00	-7.85 Peak
3	1.73	37.42	10.52	0.15	0.00	48.09	56.00	-7.91 Peak
4	3.33	41.20	10.52	0.15	0.00	51.87	56.00	-4.13 Peak
5	5.56	34.20	10.50	0.19	0.00	44.89	60.00	-15.11 Peak
6	13.99	42.07	10.50	0.20	0.00	52.77	60.00	-7.23 Peak

## 802.11b Ch11



Site : chamber

Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE

EUT :

Model Name :

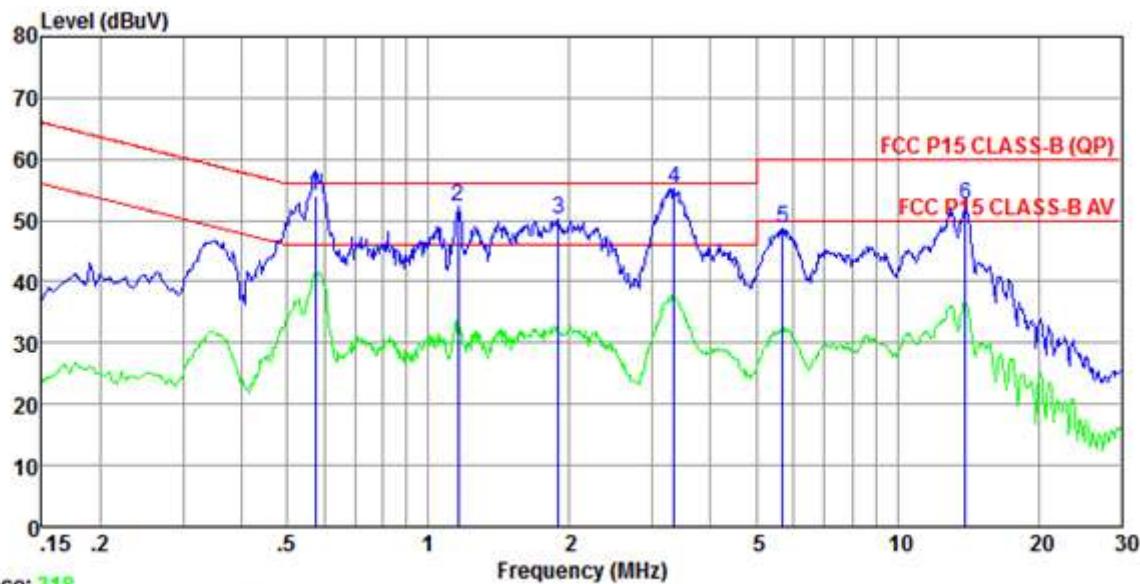
Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

Mode : 802.11b CH11

Memo :

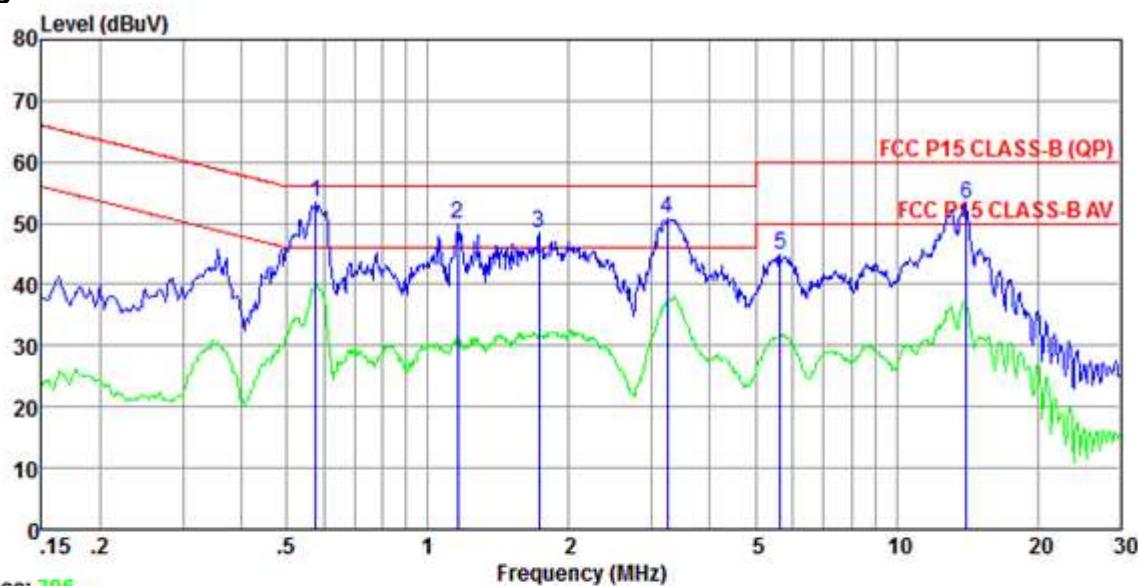
Freq	Read MHz	Read LISN	Cable	Preamp	Limit Level	Limit Line	Over Limit	Remark
		Level	Factor	Loss				
1 pp	0.59	43.49	10.47	0.11	0.00	54.07	56.00	-1.93 Peak
2	1.16	38.24	10.52	0.14	0.00	48.90	56.00	-7.10 Peak
3	1.67	36.86	10.52	0.15	0.00	47.53	56.00	-8.47 Peak
4	3.35	41.01	10.52	0.15	0.00	51.68	56.00	-4.32 Peak
5	5.68	34.15	10.50	0.20	0.00	44.85	60.00	-15.15 Peak
6	13.91	42.21	10.50	0.20	0.00	52.91	60.00	-7.09 Peak



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 : 802.11b CH11  
Memo :

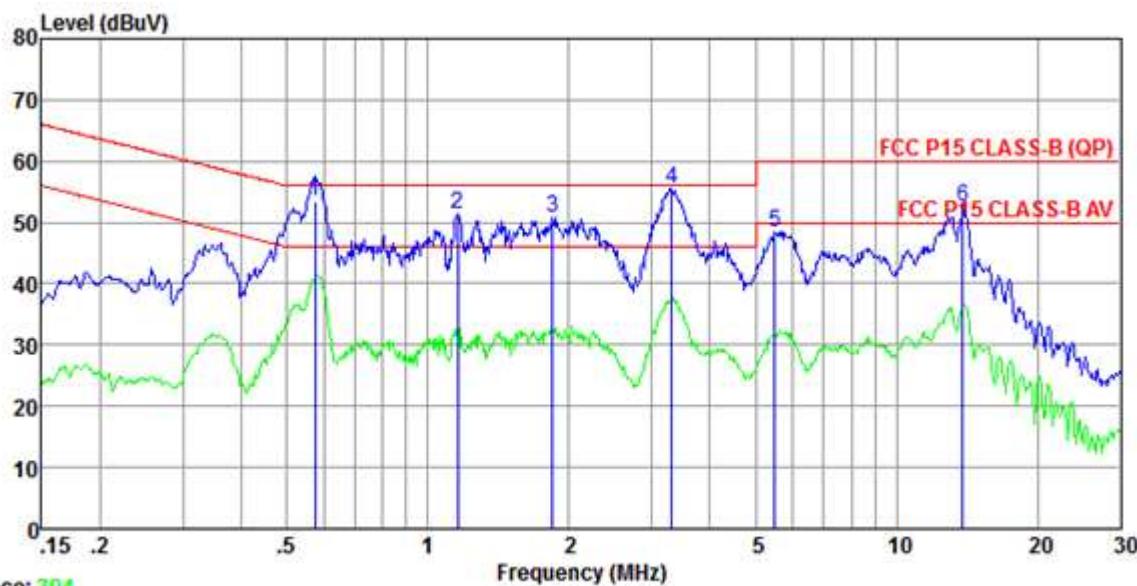
Freq	Read MHz	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
		dBuV	dB	dB	dBuV	dBuV	dB		
1 qp	0.57	43.65	10.37	0.11	0.00	54.13	56.00	-1.87	QP
2	1.16	41.68	10.31	0.14	0.00	52.13	56.00	-3.87	Peak
3	1.90	39.66	10.31	0.15	0.00	50.12	56.00	-5.88	Peak
4 pp	3.35	44.67	10.32	0.15	0.00	55.14	56.00	-0.86	Peak
5	5.68	38.25	10.33	0.20	0.00	48.78	60.00	-11.22	Peak
6	13.99	41.77	10.53	0.20	0.00	52.50	60.00	-7.50	Peak

**802.11g Ch1**



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 : 802.11g CH1  
Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	Freq	Level	Factor	Loss	Factor	Level	Line	
1 pp	0.58	42.94	10.49	0.11	0.00	53.54	56.00	-2.46 Peak
2	1.16	39.31	10.52	0.14	0.00	49.97	56.00	-6.03 Peak
3	1.73	37.60	10.52	0.15	0.00	48.27	56.00	-7.73 Peak
4	3.24	40.21	10.52	0.15	0.00	50.88	56.00	-5.12 Peak
5	5.65	34.28	10.50	0.20	0.00	44.98	60.00	-15.02 Peak
6	14.06	42.45	10.50	0.19	0.00	53.14	60.00	-6.86 Peak

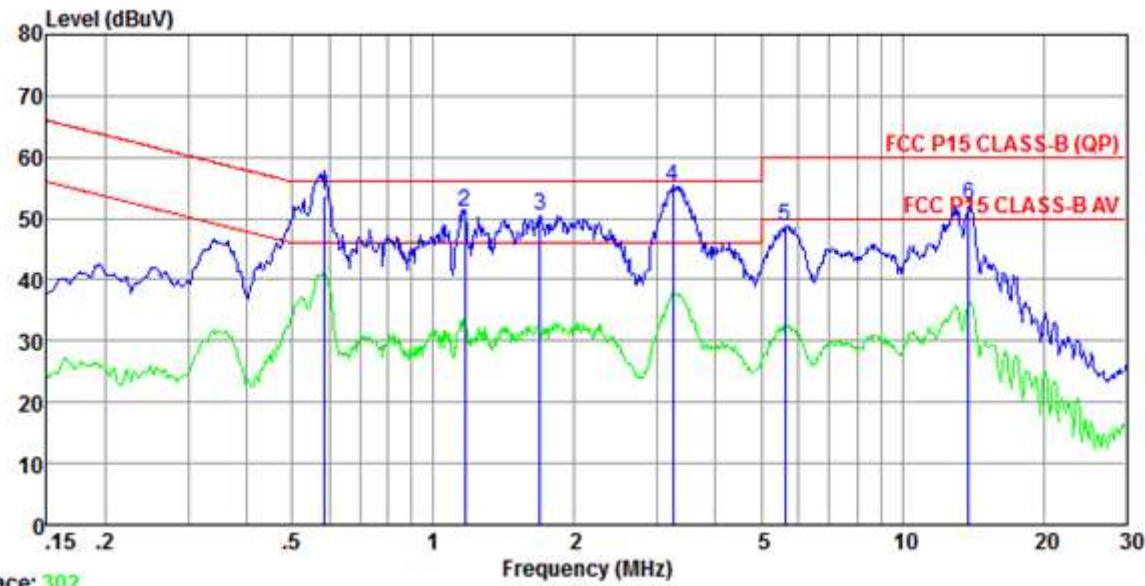


Trace: 304

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 : 802.11g CH1  
Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Line	Over	Limit	Remark
	MHz	dBuV	Factor	Loss					
1 qp	0.57	42.97	10.37	0.11	0.00	53.45	56.00	-2.55	QP
2	1.16	40.94	10.31	0.14	0.00	51.39	56.00	-4.61	Peak
3	1.85	40.30	10.31	0.15	0.00	50.76	56.00	-5.24	Peak
4 pp	3.31	45.02	10.32	0.15	0.00	55.49	56.00	-0.51	Peak
5	5.51	37.95	10.32	0.19	0.00	48.46	60.00	-11.54	Peak
6	13.84	41.74	10.53	0.21	0.00	52.48	60.00	-7.52	Peak

## 802.11g Ch6



Site : chamber

Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL

EUT :

Model Name :

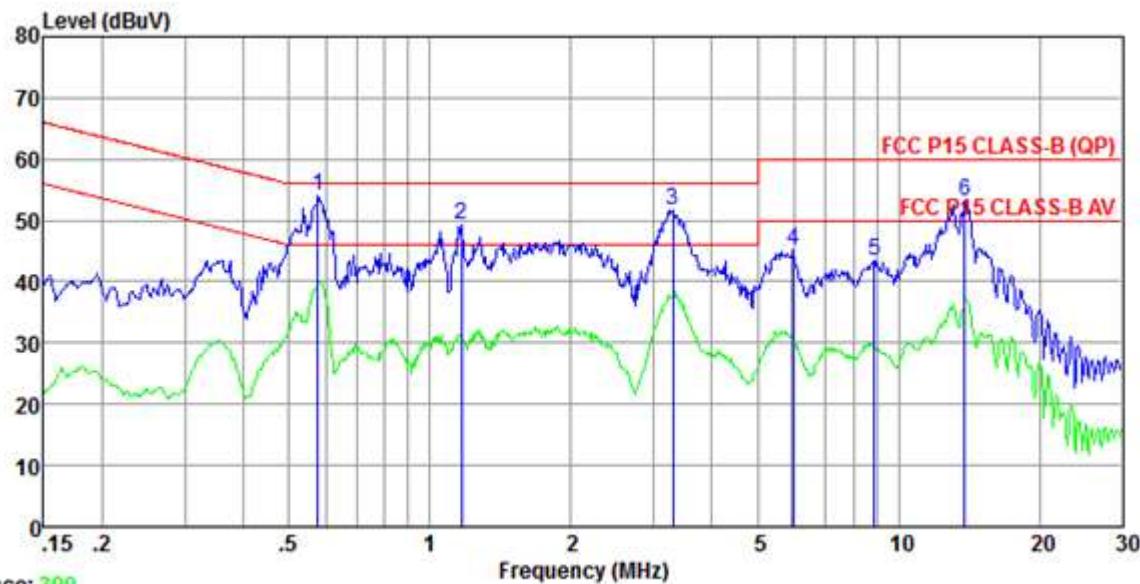
Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

Mode : 802.11g CH6

Memo :

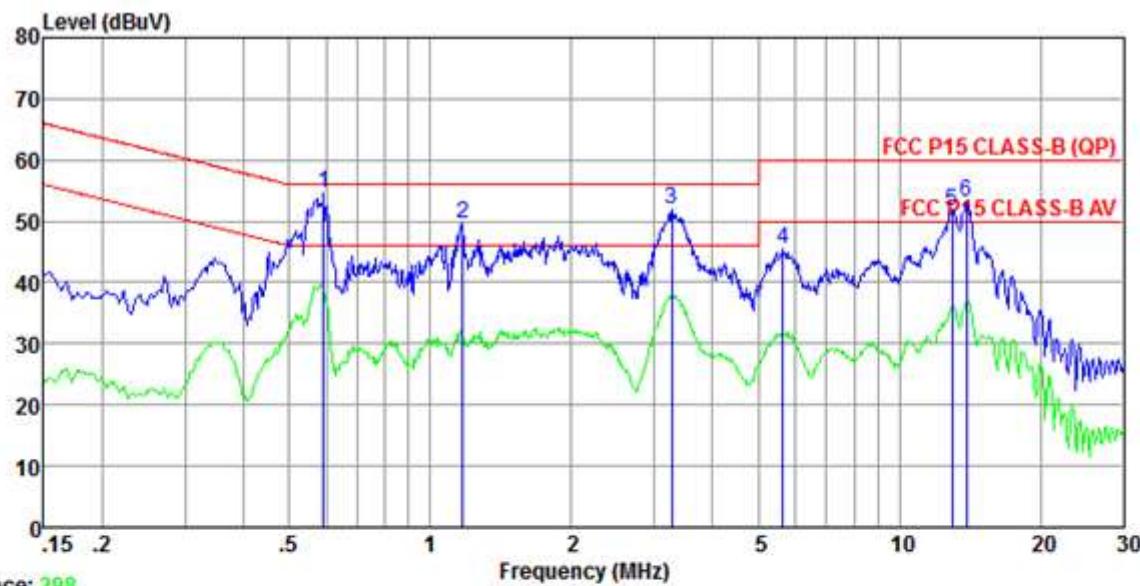
Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark
	MHz	Level	Factor	Loss			
1 qp	0.59	43.17	10.36	0.11	0.00	53.64	56.00 -2.36 QP
2	1.17	40.70	10.31	0.14	0.00	51.15	56.00 -4.85 Peak
3	1.69	39.87	10.31	0.15	0.00	50.33	56.00 -5.67 Peak
4 pp	3.24	44.81	10.32	0.15	0.00	55.28	56.00 -0.72 Peak
5	5.62	38.14	10.33	0.20	0.00	48.67	60.00 -11.33 Peak
6	13.84	41.37	10.53	0.21	0.00	52.11	60.00 -7.89 Peak



Trace: 300  
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 : 802.11g CH6  
Memo :

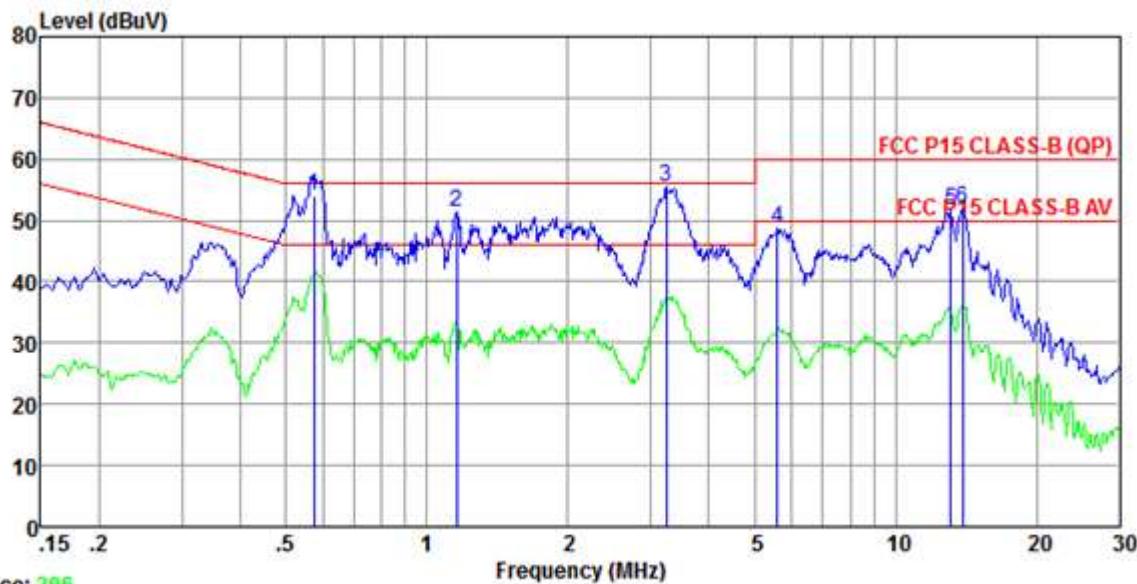
Freq	Read	LISN	Cable	Preamp	Limit	Over	Limit	Remark
	MHz	dBuV	dB	dB				
1 pp	0.58	43.29	10.49	0.11	0.00	53.89	56.00	-2.11 Peak
2	1.17	38.58	10.52	0.14	0.00	49.24	56.00	-6.76 Peak
3	3.29	41.11	10.52	0.15	0.00	51.78	56.00	-4.22 Peak
4	5.96	34.57	10.49	0.23	0.00	45.29	60.00	-14.71 Peak
5	8.87	32.82	10.42	0.26	0.00	43.50	60.00	-16.50 Peak
6	13.84	42.30	10.50	0.21	0.00	53.01	60.00	-6.99 Peak

## 802.11g Ch11



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 : 802.11g CH11  
Memo :

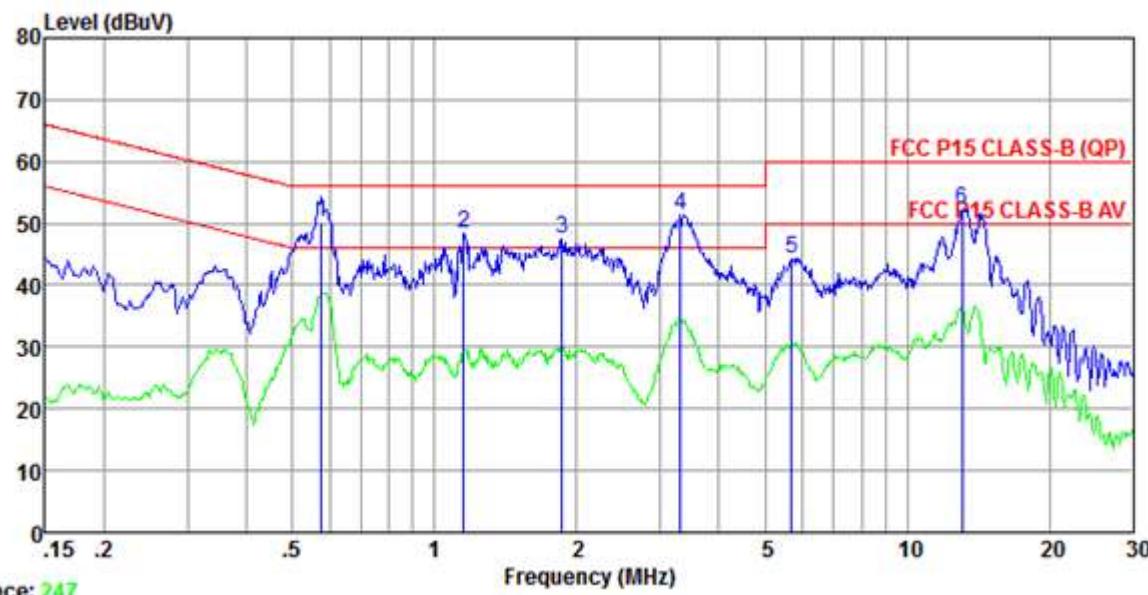
Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark
	MHz	dBuV	Factor	Loss Factor			
1 pp	0.59	43.89	10.47	0.11	0.00	54.47	-1.53 Peak
2	1.17	38.81	10.52	0.14	0.00	49.47	56.00 -6.53 Peak
3	3.28	41.25	10.52	0.15	0.00	51.92	56.00 -4.08 Peak
4	5.65	34.70	10.50	0.20	0.00	45.40	60.00 -14.60 Peak
5	12.92	40.95	10.48	0.30	0.00	51.73	60.00 -8.27 Peak
6	13.91	42.36	10.50	0.20	0.00	53.06	60.00 -6.94 Peak



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 : 802.11g CH11  
Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	MHz	dBuV	Factor	Loss				
1 qp	0.57	43.59	10.37	0.11	0.00	54.07	56.00	-1.93 QP
2	1.16	40.77	10.31	0.14	0.00	51.22	56.00	-4.78 Peak
3 pp	3.24	44.95	10.32	0.15	0.00	55.42	56.00	-0.58 Peak
4	5.59	38.12	10.32	0.19	0.00	48.63	60.00	-11.37 Peak
5	13.13	40.92	10.50	0.28	0.00	51.70	60.00	-8.30 Peak
6	13.91	41.17	10.53	0.20	0.00	51.90	60.00	-8.10 Peak

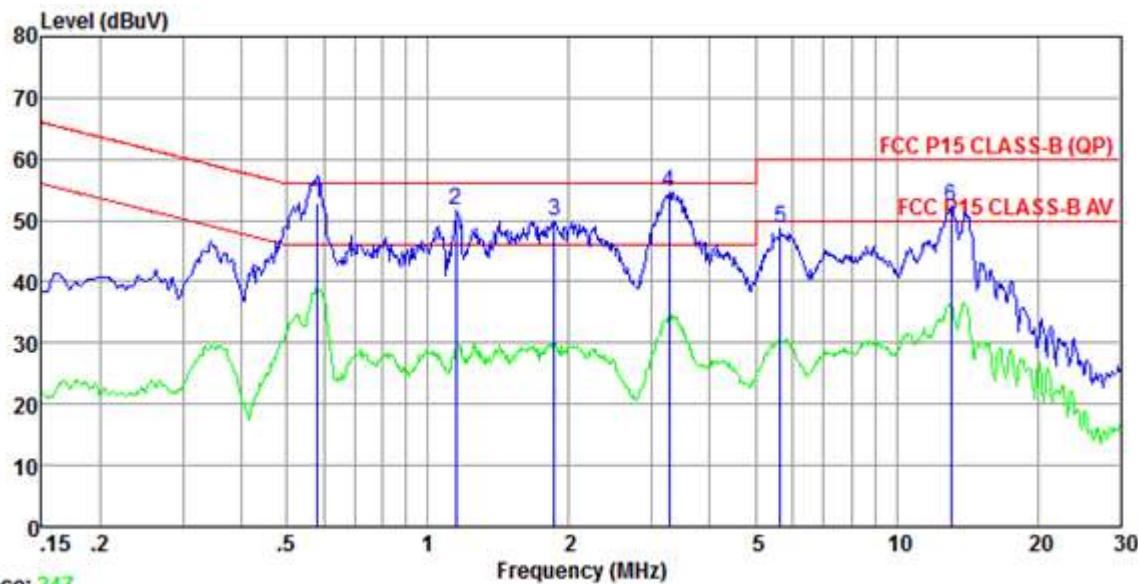
**802.11n20 Ch1**



Trace: 247

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 : 802.11n20 CH1  
Memo :

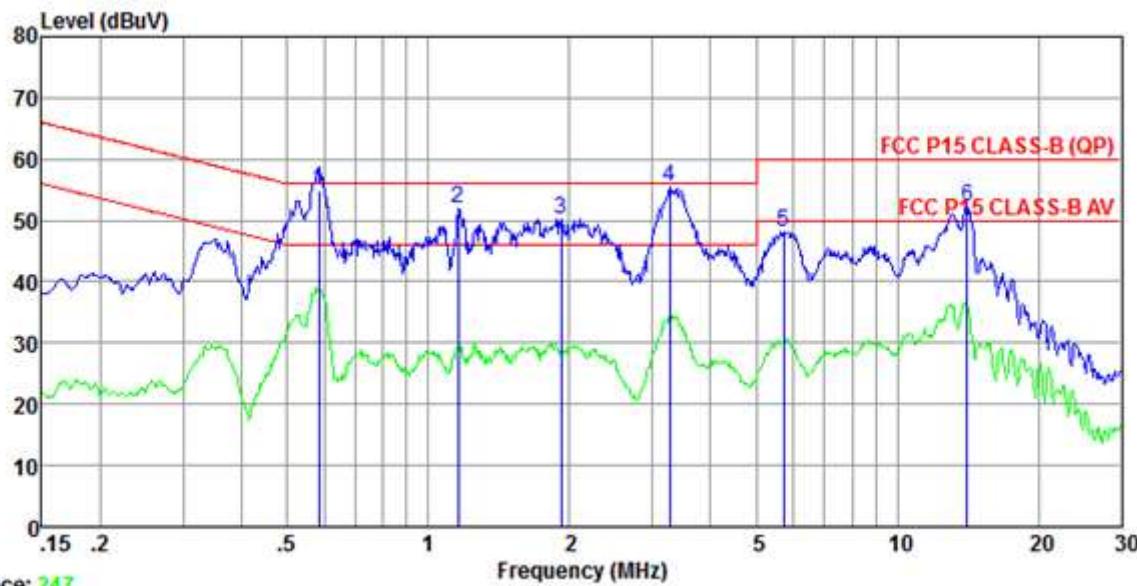
Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1 qp	0.58	39.58	10.49	0.11	0.00	50.18	56.00	-5.82 QP
2	1.15	37.85	10.52	0.14	0.00	48.51	56.00	-7.49 Peak
3	1.86	36.72	10.52	0.15	0.00	47.39	56.00	-8.61 Peak
4 pp	3.31	40.74	10.52	0.15	0.00	51.41	56.00	-4.59 Peak
5	5.68	33.71	10.50	0.20	0.00	44.41	60.00	-15.59 Peak
6	13.06	41.51	10.48	0.29	0.00	52.28	60.00	-7.72 Peak



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 : 802.11n20 CH1  
Memo :

	Freq	Read	LISN	Cable	Preamp	Limit	Over	Limit	Remark
		MHz	dBuV	dB	dB				
1 qp	0.58	42.32	10.37	0.11	0.00	52.80	56.00	-3.20	QP
2	1.15	41.32	10.31	0.14	0.00	51.77	56.00	-4.23	Peak
3	1.86	39.43	10.31	0.15	0.00	49.89	56.00	-6.11	Peak
4 pp	3.28	44.08	10.32	0.15	0.00	54.55	56.00	-1.45	Peak
5	5.65	38.21	10.33	0.20	0.00	48.74	60.00	-11.26	Peak
6	13.06	41.43	10.49	0.29	0.00	52.21	60.00	-7.79	Peak

## 802.11n20 Ch6



Site : chamber  
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL

EUT :

Model Name :

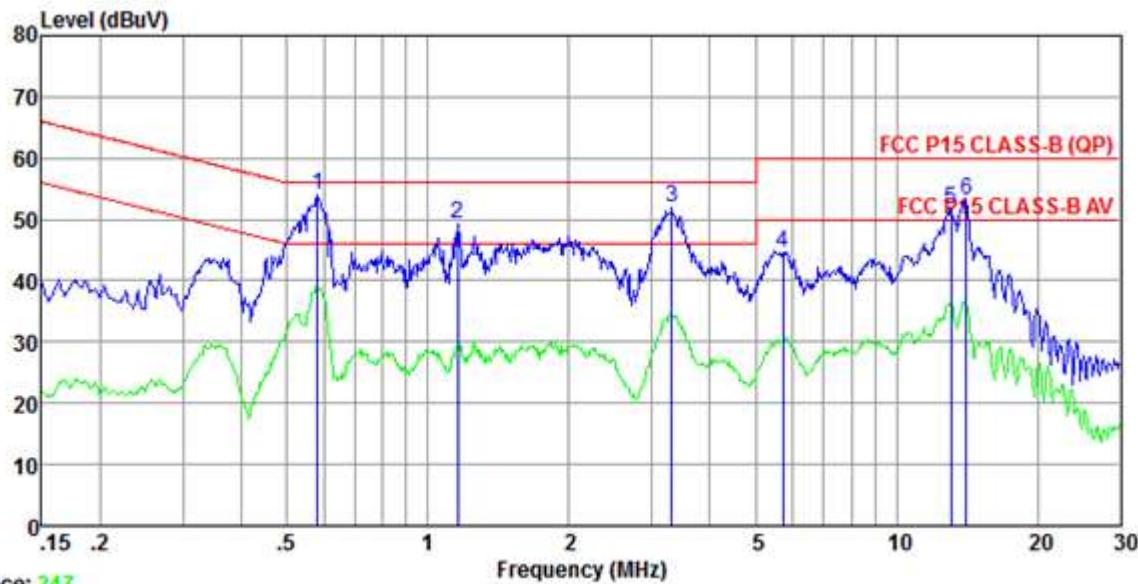
Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

Mode : 802.11n20 CH6

Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark
	Freq	Level	Factor	Loss			
	MHz	dBuV	dB	dB	dBuV	dBuV	dB
1 qp	0.59	44.29	10.36	0.11	0.00	54.76	-1.24 QP
2	1.16	41.57	10.31	0.14	0.00	52.02	-3.98 Peak
3	1.92	39.85	10.31	0.15	0.00	50.31	-5.69 Peak
4 pp	3.28	44.91	10.32	0.15	0.00	55.38	-0.62 Peak
5	5.71	37.68	10.33	0.20	0.00	48.21	-11.79 Peak
6	14.06	41.54	10.53	0.19	0.00	52.26	-7.74 Peak

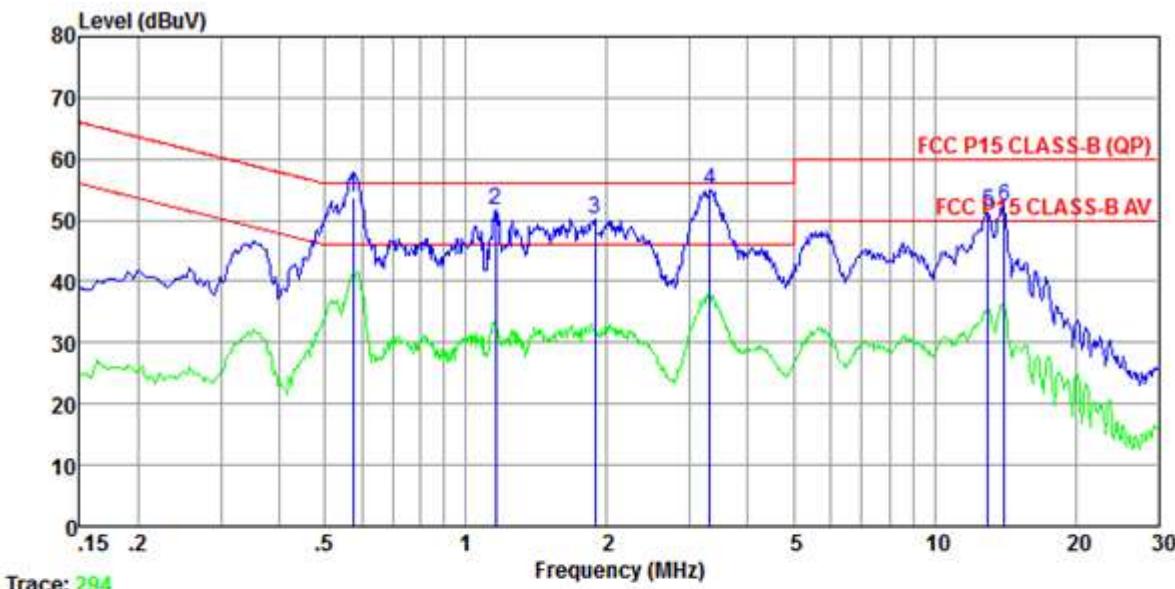


Trace: 247

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 : 802.11n20 CH6  
Memo :

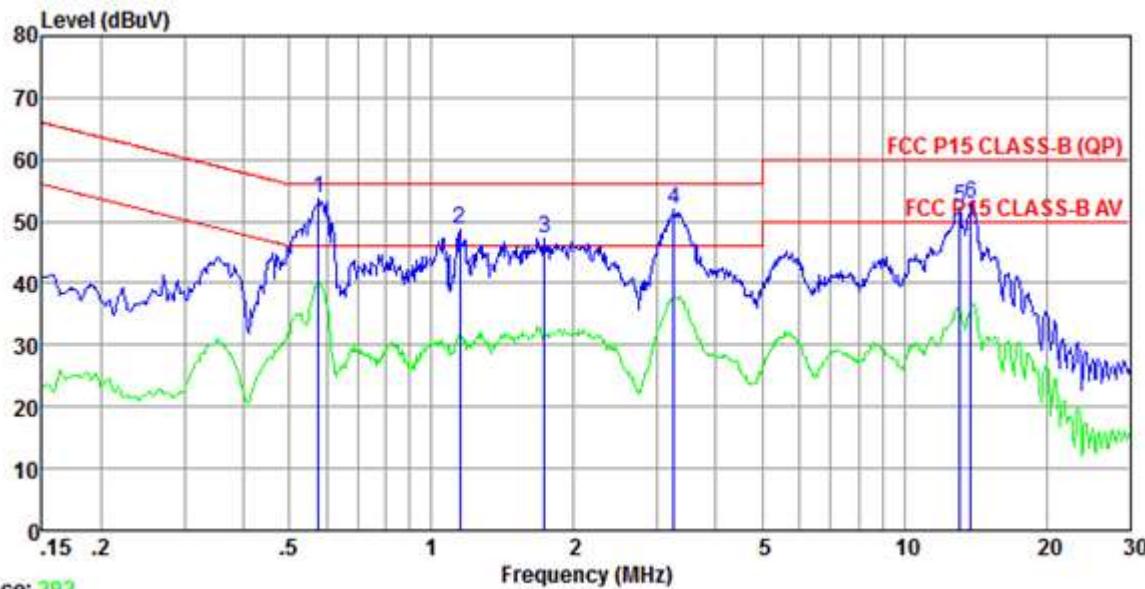
Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit
1 pp	0.58	43.44	10.48	0.11	0.00	54.03	56.00	-1.97 Peak
2	1.16	38.74	10.52	0.14	0.00	49.40	56.00	-6.60 Peak
3	3.31	41.28	10.52	0.15	0.00	51.95	56.00	-4.05 Peak
4	5.71	33.90	10.50	0.20	0.00	44.60	60.00	-15.40 Peak
5	13.06	40.95	10.48	0.29	0.00	51.72	60.00	-8.28 Peak
6	14.06	42.46	10.50	0.19	0.00	53.15	60.00	-6.85 Peak

## 802.11n20 Ch11



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 : 802.11n20 CH11  
Memo :

Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Limit Level	Limit Line	Over Limit Remark	
							dBuV	dB
1 qp	0.57	43.19	10.37	0.11	0.00	53.67	56.00	-2.33 QP
2	1.16	41.21	10.31	0.14	0.00	51.66	56.00	-4.34 Peak
3	1.89	39.70	10.31	0.15	0.00	50.16	56.00	-5.84 Peak
4 pp	3.31	44.46	10.32	0.15	0.00	54.93	56.00	-1.07 Peak
5	12.99	40.49	10.49	0.29	0.00	51.27	60.00	-8.73 Peak
6	14.06	41.67	10.53	0.19	0.00	52.39	60.00	-7.61 Peak



Site : chamber

Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

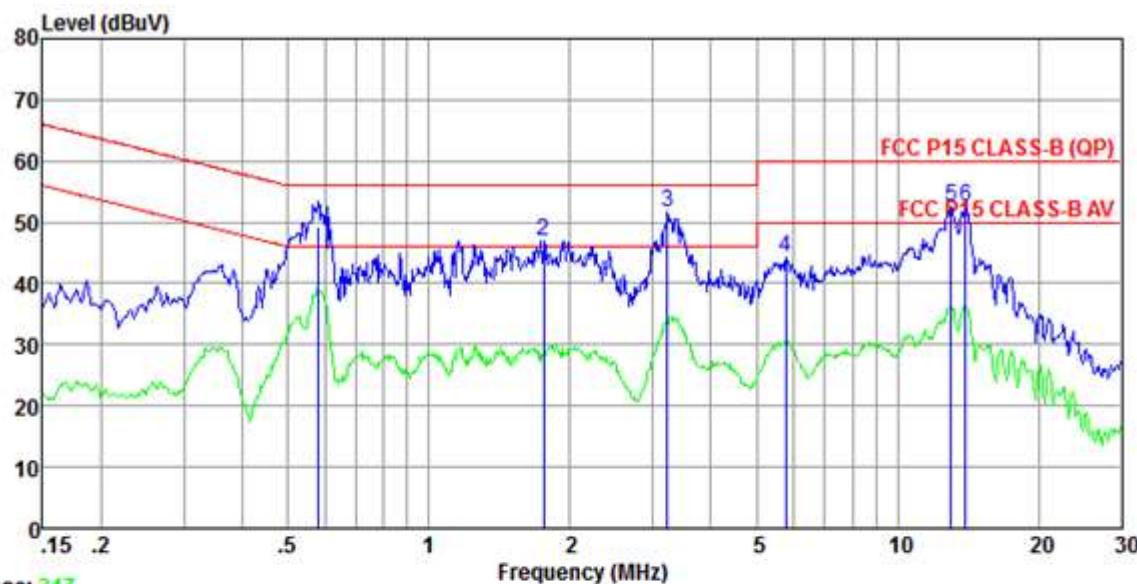
Power Rating: AC 120V/60HZ

Mode : 802.11n20 CH11

Memo :

Freq	Read MHz	LISN Level	Cable Factor	Preamp Loss Factor	Level	Limit	Over	Remark
						Line	dBuV	
1 pp	0.58	43.10	10.49	0.11	0.00	53.70	56.00	-2.30 Peak
2	1.15	38.12	10.52	0.14	0.00	48.78	56.00	-7.22 Peak
3	1.73	36.56	10.52	0.15	0.00	47.23	56.00	-8.77 Peak
4	3.26	41.32	10.52	0.15	0.00	51.99	56.00	-4.01 Peak
5	13.13	41.41	10.48	0.28	0.00	52.17	60.00	-7.83 Peak
6	13.84	42.13	10.50	0.21	0.00	52.84	60.00	-7.16 Peak

**802.11n40 Ch3**



Site : chamber

Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE

EUT :

Model Name :

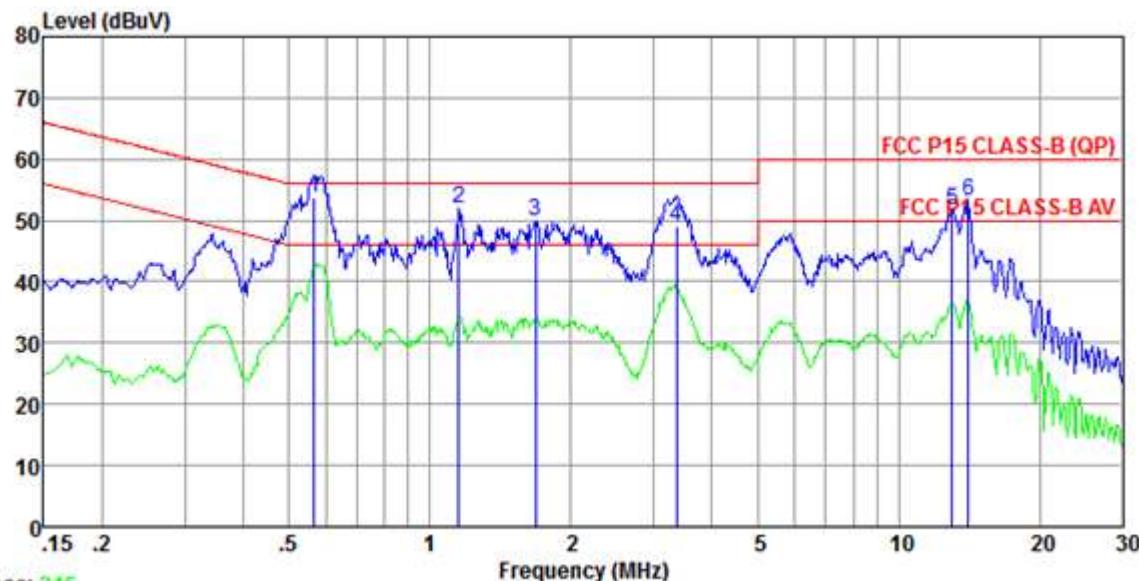
Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

Mode : 802.11n40 CH3

Memo :

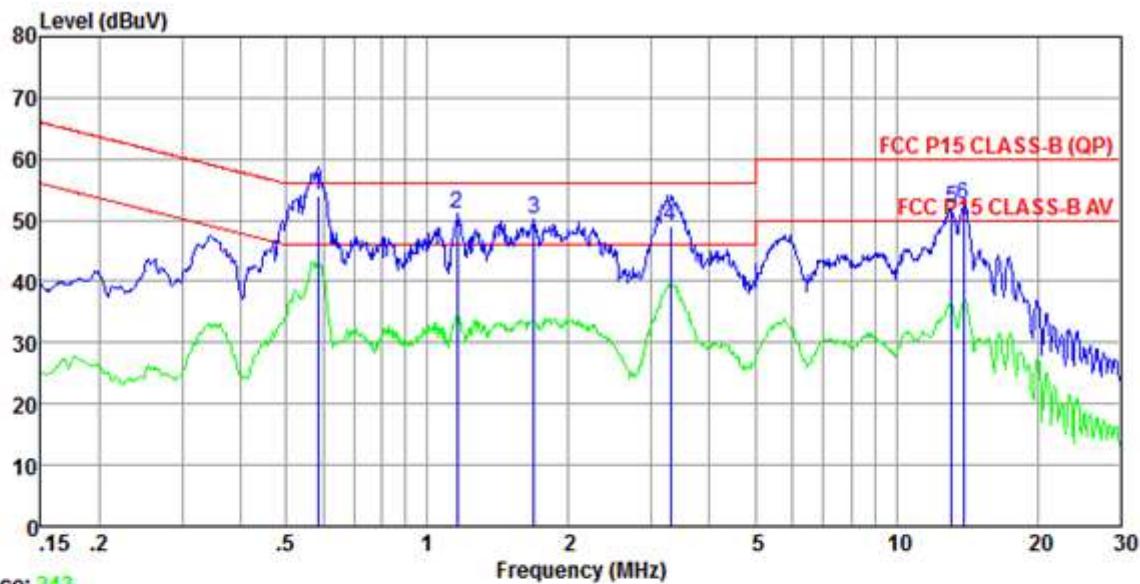
	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Limit Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 qp	0.58	38.59	10.48	0.11	0.00	49.18	56.00	-6.82	QP
2	1.75	36.39	10.52	0.15	0.00	47.06	56.00	-8.94	Peak
3 pp	3.22	40.98	10.52	0.15	0.00	51.65	56.00	-4.35	Peak
4	5.77	33.71	10.50	0.21	0.00	44.42	60.00	-15.58	Peak
5	12.99	41.71	10.48	0.29	0.00	52.48	60.00	-7.52	Peak
6	13.99	41.76	10.50	0.20	0.00	52.46	60.00	-7.54	Peak



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 : 802.11n40 CH3  
Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	MHz	Level	Factor	Loss	Factor	Level	Line	
1 pp	0.57	43.24	10.38	0.11	0.00	53.73	56.00	-2.27 QP
2 pk	1.15	41.38	10.31	0.14	0.00	51.83	56.00	-4.17 Peak
3	1.68	39.37	10.31	0.15	0.00	49.83	56.00	-6.17 Peak
4	3.36	38.51	10.32	0.15	0.00	48.98	56.00	-7.02 QP
5	12.99	40.90	10.49	0.29	0.00	51.68	60.00	-8.32 Peak
6	14.06	42.31	10.53	0.19	0.00	53.03	60.00	-6.97 Peak

### 802.11n40 Ch6



Trace: 243

Site : chamber  
Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL

EUT :

Model Name :

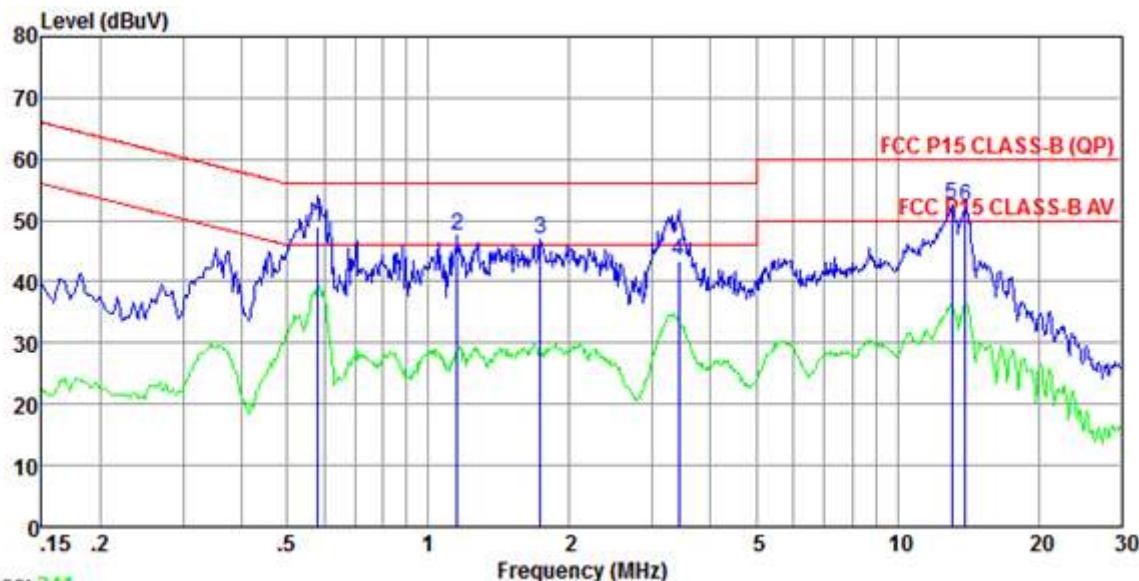
Temp/Humi : 23 °C / 54 %

Power Rating: AC 120V/60HZ

Mode : 802.11n40 CH6

Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	MHz	Level	Factor	Loss				
1 pp	0.59	43.58	10.36	0.11	0.00	54.05	56.00	-1.95 QP
2 pk	1.16	40.52	10.31	0.14	0.00	50.97	56.00	-5.03 Peak
3	1.69	39.61	10.31	0.15	0.00	50.07	56.00	-5.93 Peak
4	3.29	38.60	10.32	0.15	0.00	49.07	56.00	-6.93 QP
5	13.13	41.18	10.50	0.28	0.00	51.96	60.00	-8.04 Peak
6	13.91	41.68	10.53	0.20	0.00	52.41	60.00	-7.59 Peak



Site : chamber  
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE

EUT :

Model Name :

Temp/Humi : 23 °C / 54 %

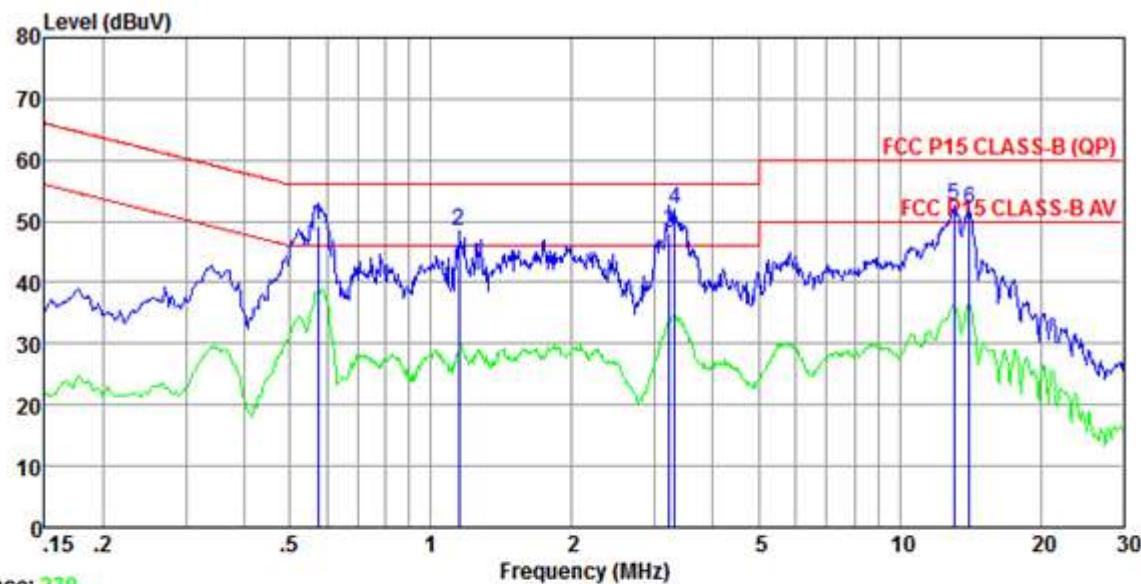
Power Rating: AC 120V/60HZ

Mode : 802.11n40 CH6

Memo :

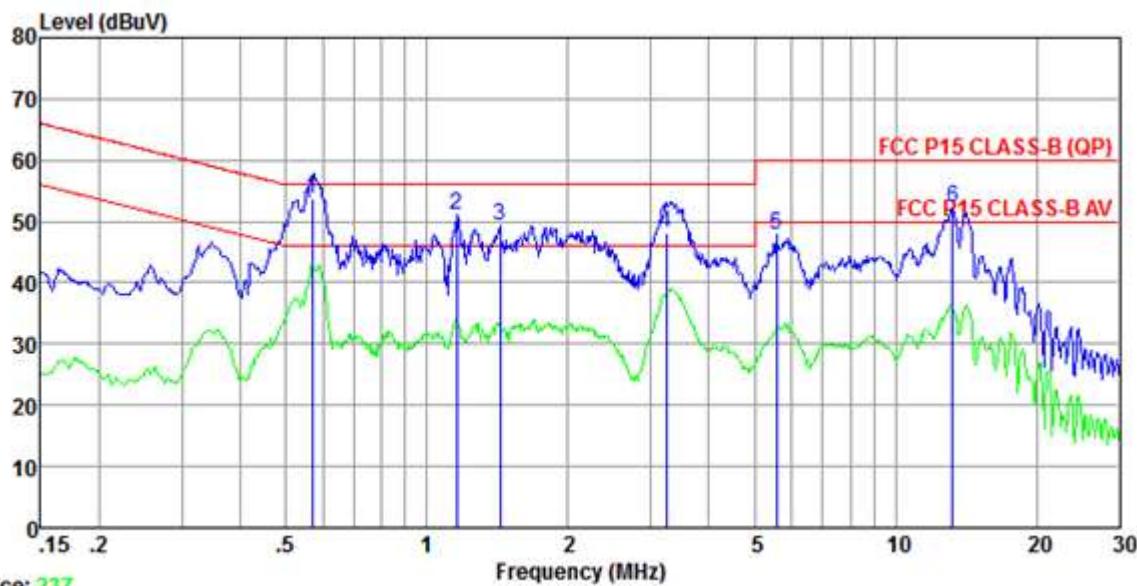
	Read Freq	LISN Level	Cable Factor	Preamp Loss	Preamp Factor	Limit Level	Line dBuV	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 pp	0.58	38.50	10.48	0.11	0.00	49.09	56.00	-6.91	QP
2	1.15	36.85	10.52	0.14	0.00	47.51	56.00	-8.49	Peak
3	1.73	36.31	10.52	0.15	0.00	46.98	56.00	-9.02	Peak
4	3.42	32.83	10.52	0.15	0.00	43.50	56.00	-12.50	QP
5 pk	13.06	41.66	10.48	0.29	0.00	52.43	60.00	-7.57	Peak
6	13.99	41.45	10.50	0.20	0.00	52.15	60.00	-7.85	Peak

## 802.11n40 Ch9



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 : 802.11n40 CH9  
Memo :

	Read Freq	LISN Level	Cable Factor	Preamp Loss Factor	Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1 qp	0.57	38.58	10.49	0.11	0.00	49.18	56.00	-6.82 QP
2	1.15	37.77	10.52	0.14	0.00	48.43	56.00	-7.57 Peak
3	3.22	37.56	10.52	0.15	0.00	48.23	56.00	-7.77 QP
4 pp	3.31	41.38	10.52	0.15	0.00	52.05	56.00	-3.95 Peak
5	13.06	41.69	10.48	0.29	0.00	52.46	60.00	-7.54 Peak
6	14.06	41.29	10.50	0.19	0.00	51.98	60.00	-8.02 Peak



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 : 802.11n40 CH9  
Memo :

Freq	Read	LISN	Cable	Preamp	Limit	Over	Remark	
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1 pp	0.57	43.12	10.37	0.11	0.00	53.60	56.00	-2.40 QP
2 pk	1.16	40.59	10.31	0.14	0.00	51.04	56.00	-4.96 Peak
3	1.43	38.97	10.31	0.14	0.00	49.42	56.00	-6.58 Peak
4	3.24	37.68	10.32	0.15	0.00	48.15	56.00	-7.85 QP
5	5.56	37.41	10.32	0.19	0.00	47.92	60.00	-12.08 Peak
6	13.27	41.50	10.50	0.27	0.00	52.27	60.00	-7.73 Peak

## **APPENDIX 1 PHOTOGRAHPS OF TEST SETUP**

Please refer to the file named “Part22&24 15C Setup Photos”.

## **APPENDIX 2 PHOTOGRAHPS OF EUT**

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

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