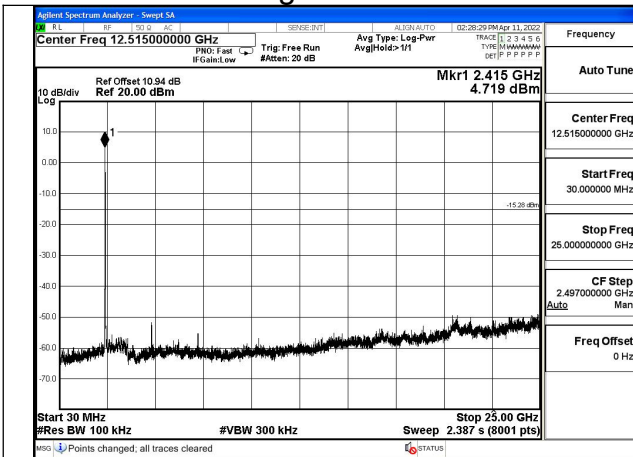
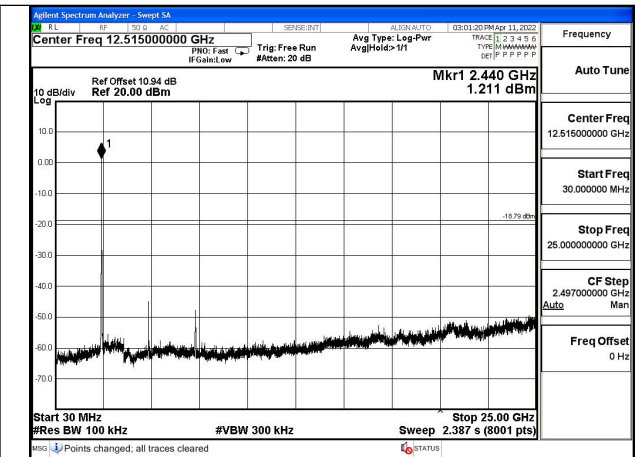


Test Mode:802.11b 2462MHz Chain0

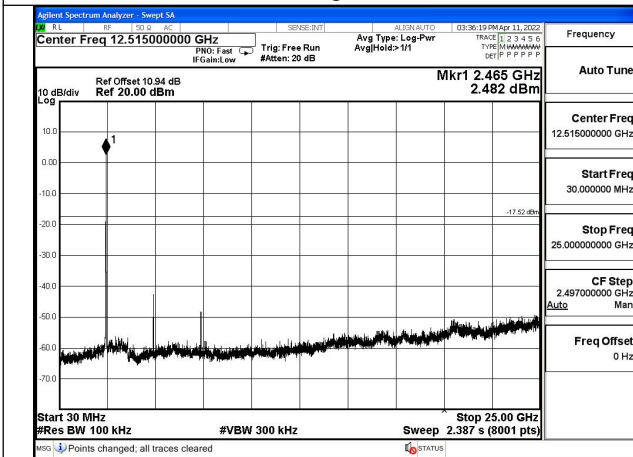
Test Mode: 802.11g



Test Mode:802.11g 2412MHz Chain0

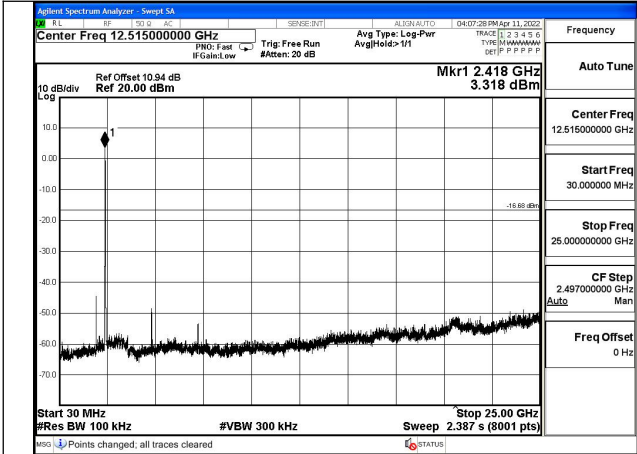


Test Mode:802.11g 2437MHz Chain0

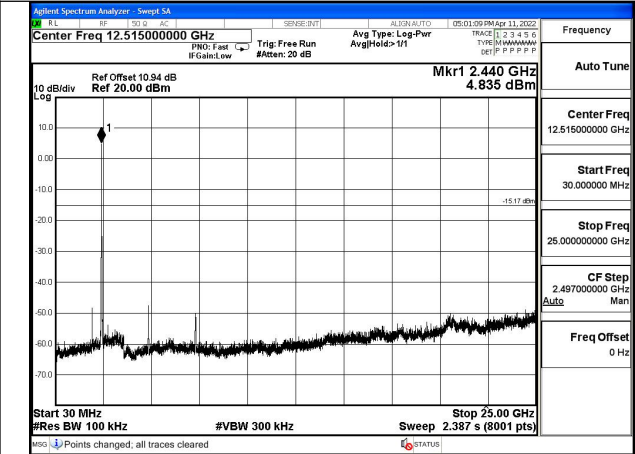


Test Mode:802.11g 2462MHz Chain0

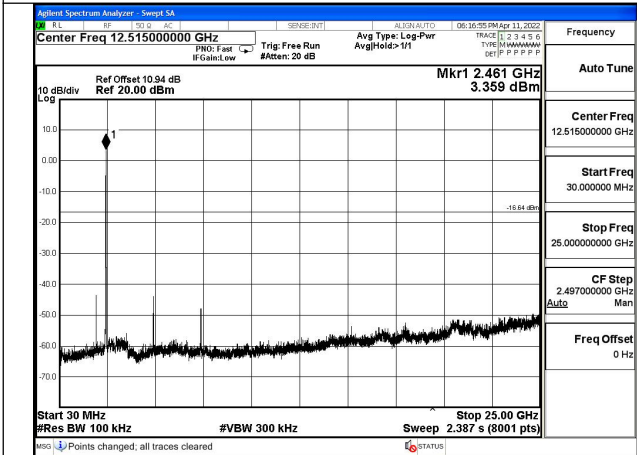
Test Mode: 802.11n HT20



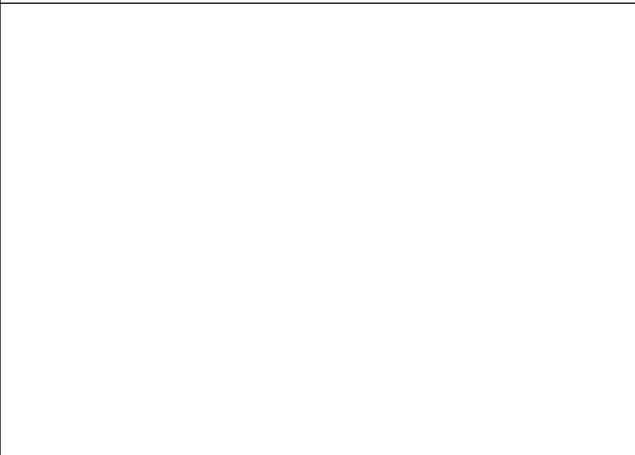
Test Mode:802.11n HT20 2412MHz Chain0



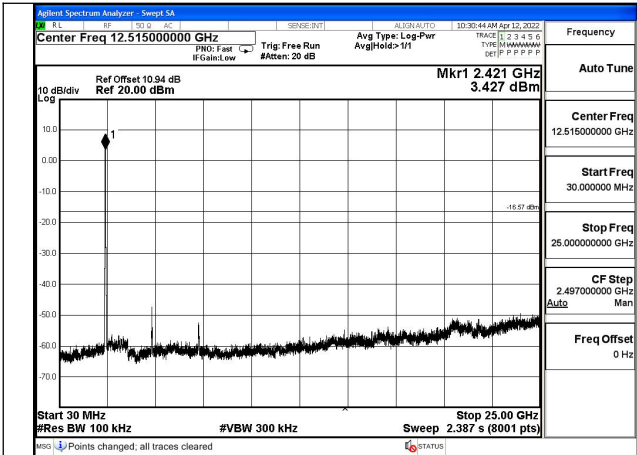
Test Mode:802.11n HT20 2437MHz Chain0



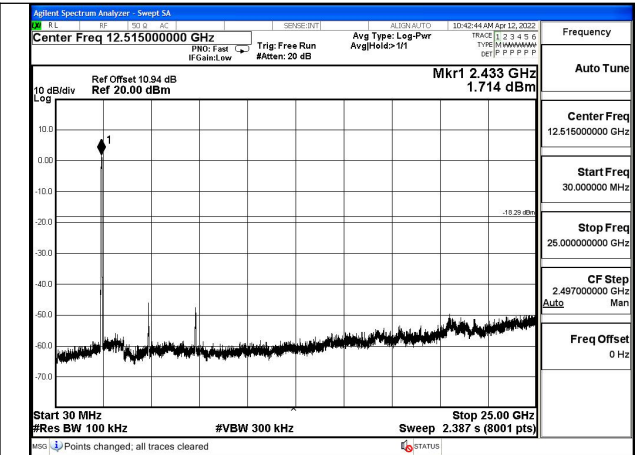
Test Mode:802.11n HT20 2462MHz Chain0



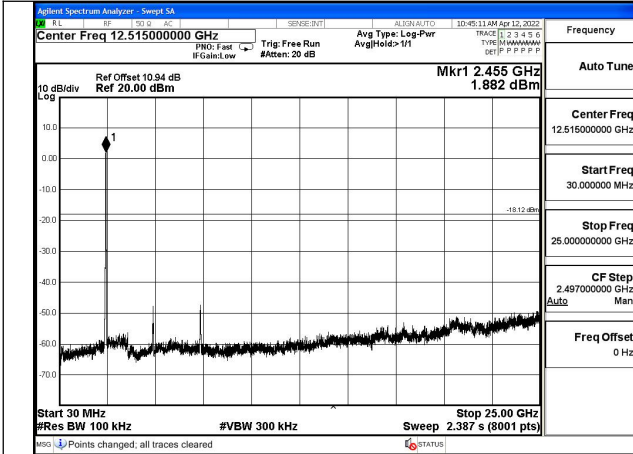
Test Mode: 802.11n HT40



Test Mode:802.11n HT40 2422MHz Chain0



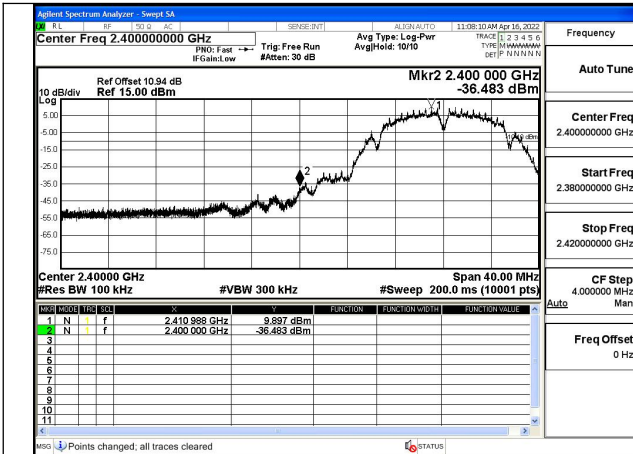
Test Mode:802.11n HT40 2437MHz Chain0



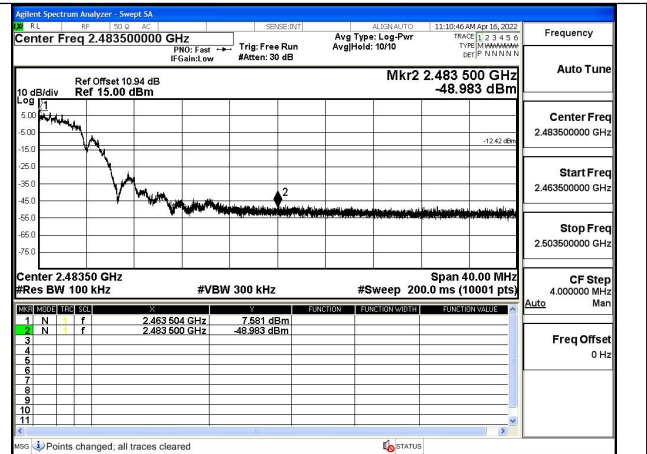
Test Mode:802.11n HT40 2452MHz Chain0

Band edge measurement

Test Mode: 802.11b

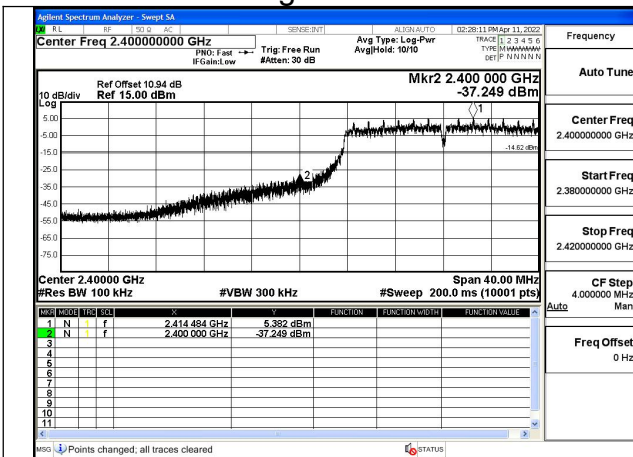


Test Mode:802.11b 2412MHz Chain0

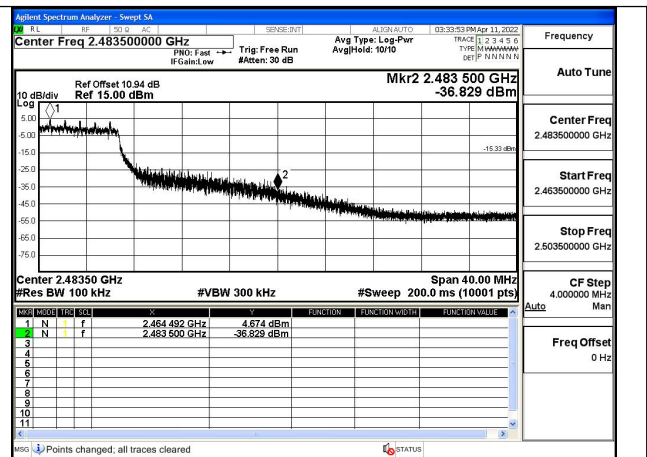


Test Mode:802.11b 2462MHz Chain0

Test Mode: 802.11g

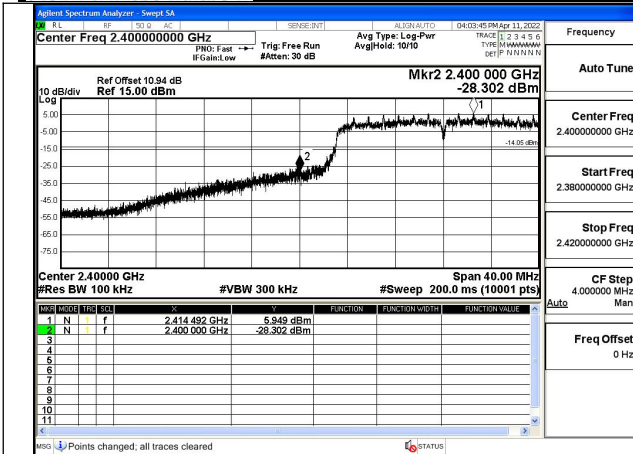


Test Mode:802.11g 2412MHz Chain0

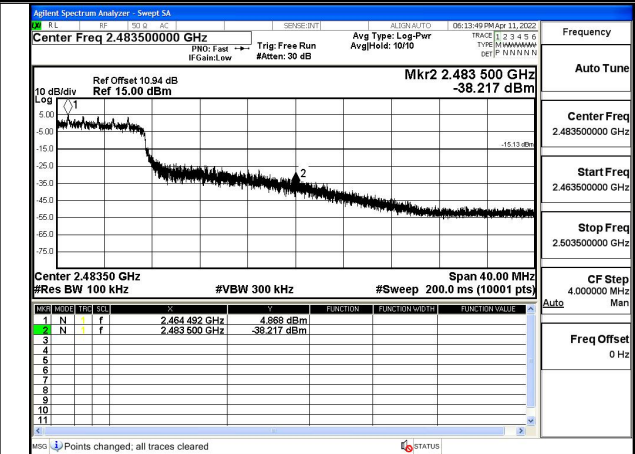


Test Mode:802.11g 2462MHz Chain0

Test Mode: 802.11n HT20

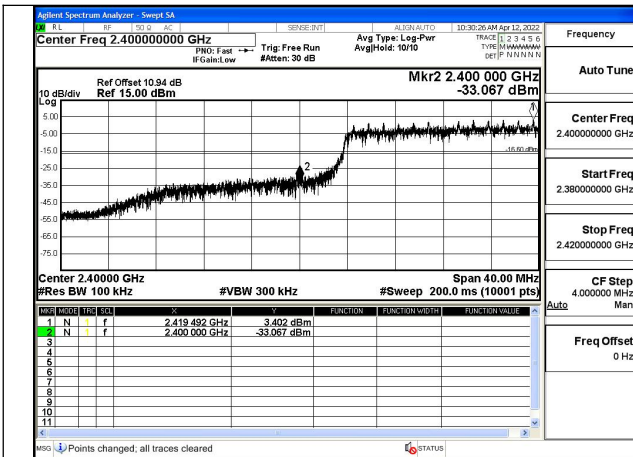


Test Mode:802.11n HT20 2412MHz Chain0

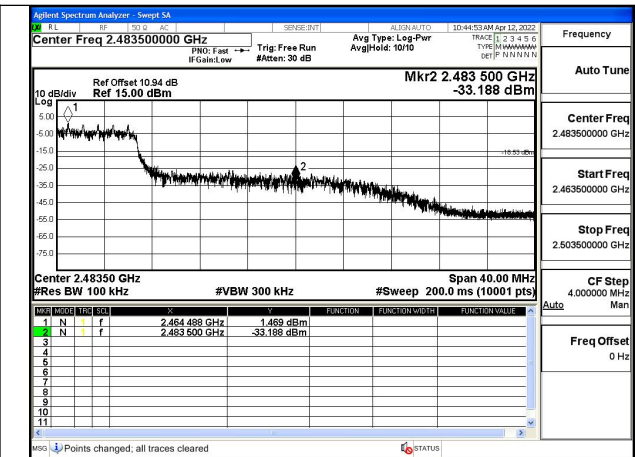


Test Mode:802.11n HT20 2462MHz Chain0

Test Mode: 802.11n HT40



Test Mode:802.11n HT40 2422MHz Chain0



Test Mode:802.11n HT40 2452MHz Chain0

APPENDIX B – TEST DATA OF RADIATED EMISSION

Radiated Emissions Band Edge-WLAN 2.4G

The measurement results are obtained as described below:

Measure Level = Reading Level + Cable loss + Antenna factor Sample calculation:
(91.50 dBuV/m) = (57.50 dBμV) + (8.90 dB) + (25.10 dB), the corresponding frequency is 2412MHz.

- 802.11b

Carrier Frequency (MHz): 2412

Channel No.: 1

Test Mode: 802.11b

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2412.0	57.50	91.50	N/A	N/A	8.90	25.10
2390.0	10.50	44.50	-29.50	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2412.0	33.20	67.20	N/A	N/A	8.90	25.10
2390.0	-4.40	29.60	-24.40	54.00	8.90	25.10

Carrier Frequency (MHz): 2462

Channel No.: 11

Test Mode: 802.11b

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2462.0	64.60	98.60	N/A	N/A	8.90	25.10
2483.5	9.70	43.70	-30.30	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2462.0	34.30	68.30	N/A	N/A	8.90	25.10
2483.5	1.70	35.70	-18.30	54.00	8.90	25.10

● **802.11g**

Carrier Frequency (MHz): 2412

Channel No.: 1

Test Mode: 802.11g

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2412.0	60.50	94.50	N/A	N/A	8.90	25.10
2390.0	14.60	48.60	-25.40	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2412.0	35.20	69.20	N/A	N/A	8.90	25.10
2390.0	-2.80	31.20	-22.80	54.00	8.90	25.10

Carrier Frequency (MHz): 2462

Channel No.: 11

Test Mode: 802.11g

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2462.0	65.50	99.50	N/A	N/A	8.90	25.10
2483.5	13.30	47.30	-26.70	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2462.0	35.30	69.30	N/A	N/A	8.90	25.10
2483.5	-1.50	32.50	-21.50	54.00	8.90	25.10

● **802.11n (HT20)**

Carrier Frequency (MHz): 2412

Channel No.: 1

Test Mode: 802.11n (HT20)

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2412.0	57.50	91.50	N/A	N/A	8.90	25.10
2390.0	11.50	45.50	-28.50	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2412.0	37.20	71.20	N/A	N/A	8.90	25.10
2390.0	-2.30	31.70	-22.30	54.00	8.90	25.10

Carrier Frequency (MHz): 2462

Channel No.: 11

Test Mode: 802.11n (HT20)

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2462.0	56.70	90.70	N/A	N/A	8.90	25.10
2483.5	12.30	46.30	-27.70	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2462.0	34.90	68.90	N/A	N/A	8.90	25.10
2483.5	2.80	36.80	-17.20	54.00	8.90	25.10

● **802.11n (HT40)**

Carrier Frequency (MHz): 2422

Channel No.: 3

Test Mode: 802.11n (HT40)

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2422.0	55.30	89.30	N/A	N/A	8.90	25.10
2390.0	24.30	58.30	-15.70	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2422.0	42.60	76.60	N/A	N/A	8.90	25.10
2390.0	1.10	35.10	-18.90	54.00	8.90	25.10

Carrier Frequency (MHz): 2452

Channel No.: 9

Test Mode: 802.11n (HT40)

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2452.0	65.30	99.30	N/A	N/A	8.90	25.10
2483.5	12.80	46.80	-27.20	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2452.0	37.60	71.60	N/A	N/A	8.90	25.10
2483.5	3.50	37.50	-16.50	54.00	8.90	25.10

Radiated Emissions Data-WLAN 2.4G

Sample Calculations:

Determining Spurious Emissions Levels

A “reference path loss” is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss. The measurement results are obtained as described below:

Below 1GHz:

QuasiPeak=Reading Value + A_{Rpl}

Above 1GHz:

MaxPeak=Reading MaxPeak + A_{Rpl}

OR

Average=Reading Average + A_{Rpl}

Sample calculation: (9.18 dB μ V/m) = (24.18 dB μ V) + (-15.00 dB/m), the corresponding frequency is 343.89MHz.

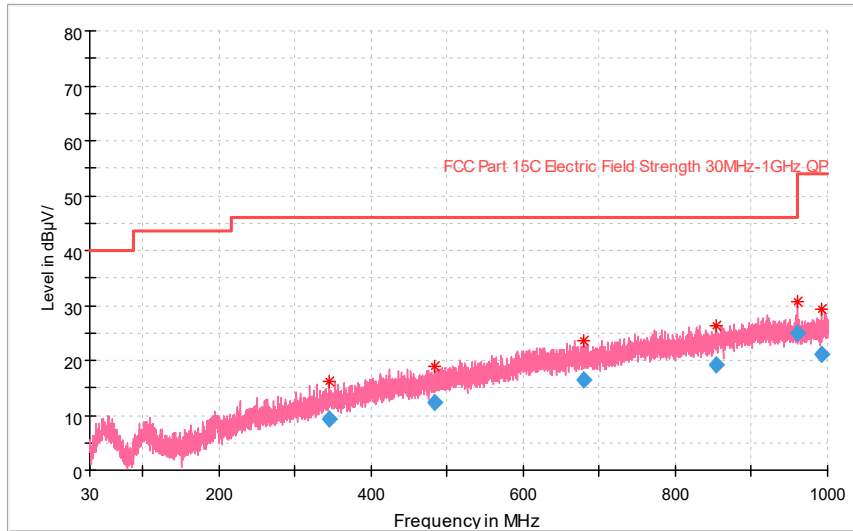
The worst case attitude: The mobile lay down.

Spurious Radiated Emissions below 30MHz:

There were no emissions from 9kHz to 30MHz found within 20dB of the limit. Thus, the test result was not reported according to §15.31 (o).

● 802.11b
Spurious Radiated Emissions from 30MHz to 1GHz:
CH Middle (No.6)

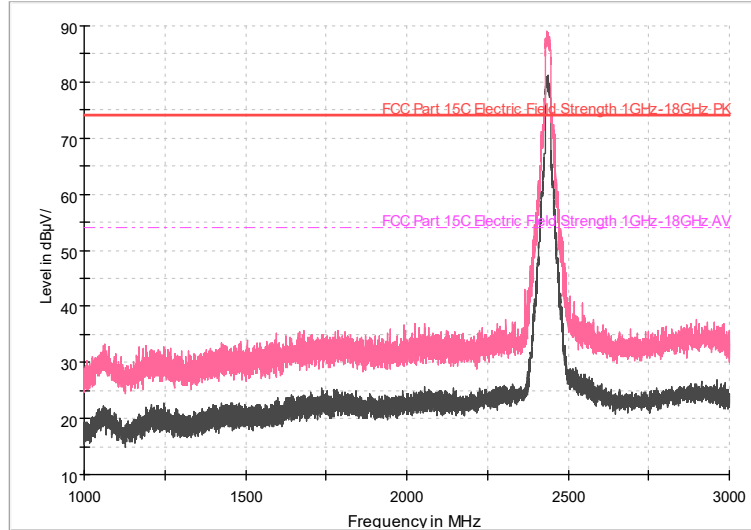
Full Spectrum



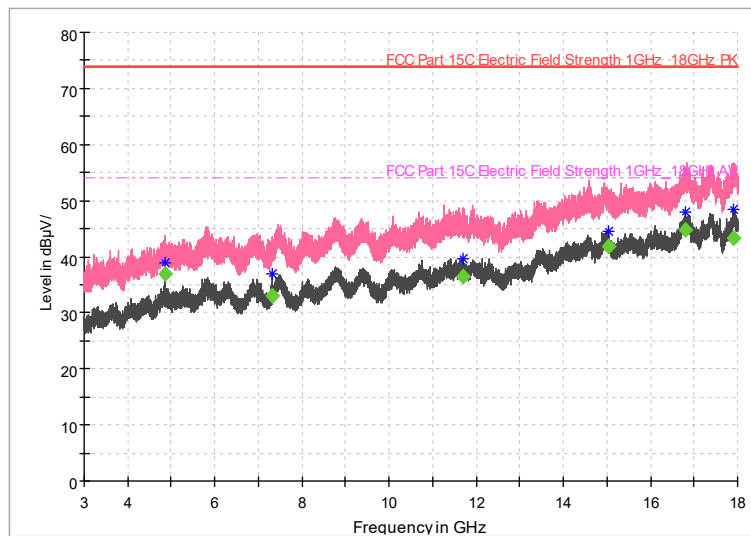
Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
343.89	24.18	9.18	46.00	36.82	-15.00	Vertical
483.77	23.99	12.39	46.00	33.61	-11.60	Vertical
680.19	23.61	16.31	46.00	29.69	-7.30	Vertical
852.95	23.18	19.08	46.00	26.92	-4.10	Vertical
959.84	27.37	24.87	46.00	21.13	-2.50	Vertical
992.73	22.97	21.27	54.00	32.73	-1.70	Vertical

Spurious Radiated Emissions from 1GHz to 18GHz: CH Middle (No.6)

Full Spectrum

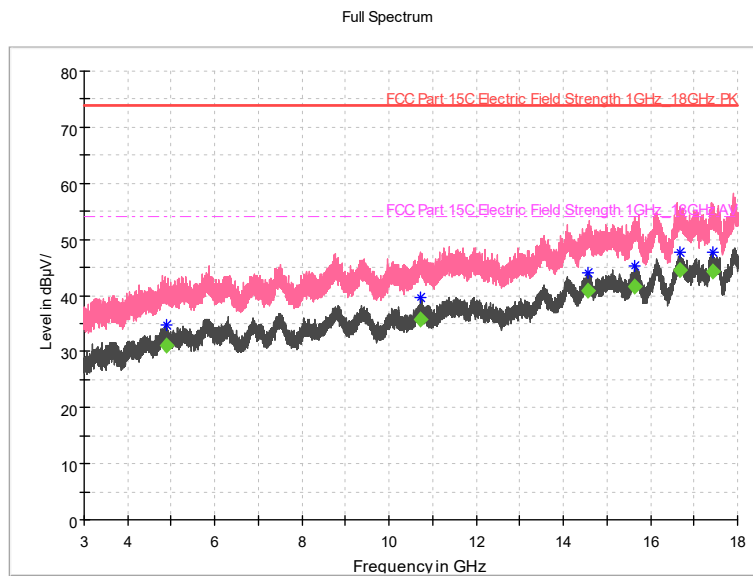
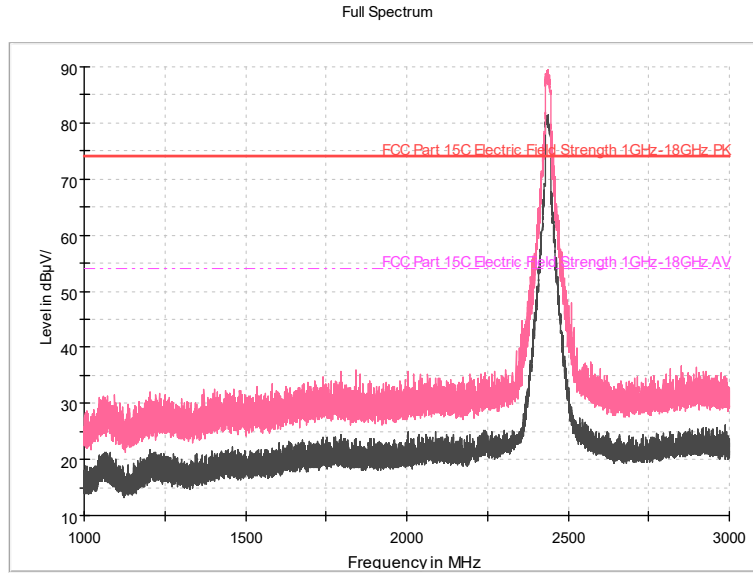


Full Spectrum



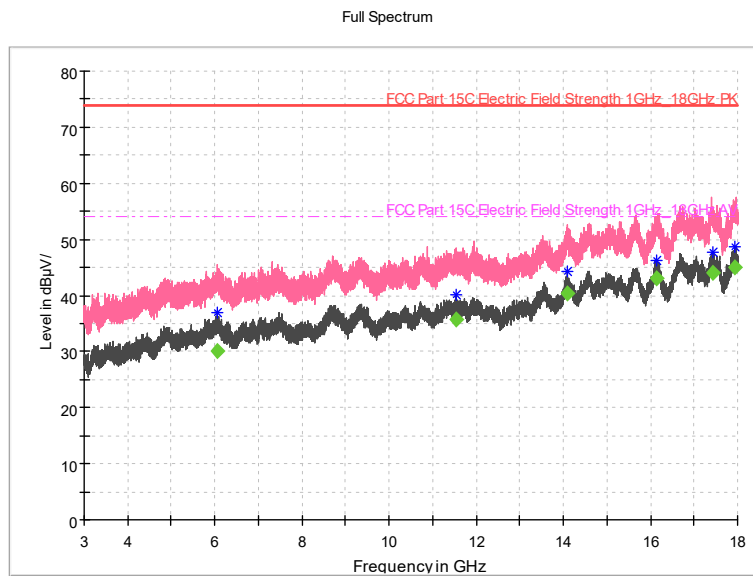
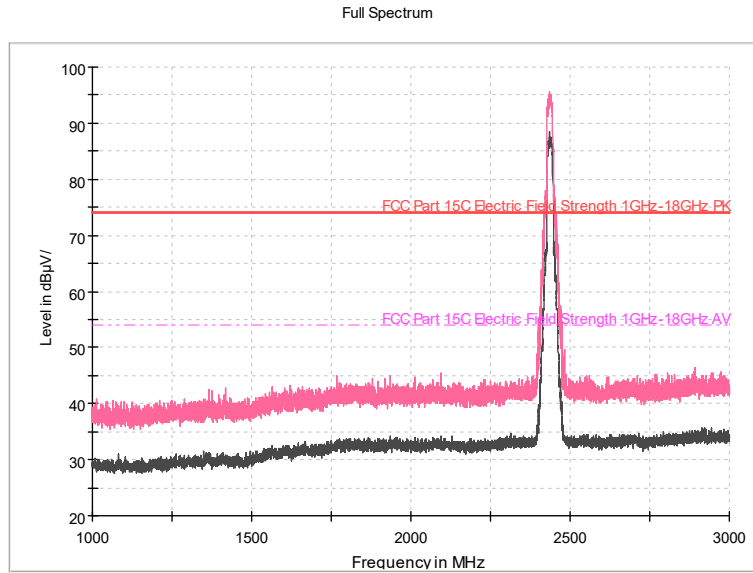
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
4874.00	---	58.47	---	36.87	54.00	17.13	-21.60	Vertical
7313.00	---	54.39	---	33.09	54.00	20.91	-21.30	Vertical
11692.50	---	52.99	---	36.39	54.00	17.61	-16.60	Vertical
15031.50	---	55.16	---	41.86	54.00	12.14	-13.30	Vertical
16788.50	---	57.23	---	44.73	54.00	9.27	-12.50	Vertical
17914.50	---	53.22	---	43.42	54.00	10.58	-9.80	Vertical

● 802.11g
Spurious Radiated Emissions from 1GHz to 18GHz:
CH Middle (No.6)



Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{RPI} (dB)	Polarity
4892.500	---	52.77	---	31.07	54.00	22.93	-21.70	Vertical
10719.000	---	54.02	---	35.62	54.00	18.38	-18.40	Vertical
14568.000	---	54.14	---	40.74	54.00	13.26	-13.40	Vertical
15637.500	---	55.12	---	41.52	54.00	12.48	-13.60	Vertical
16690.500	---	57.23	---	44.43	54.00	9.57	-12.80	Vertical
17430.000	---	55.71	---	44.31	54.00	9.69	-11.40	Vertical

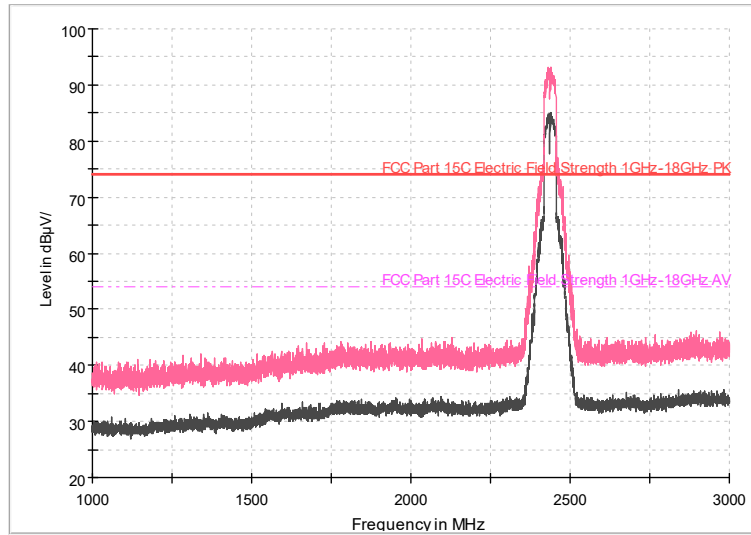
● 802.11n (HT20)
Spurious Radiated Emissions from 1GHz to 18GHz:
CH Middle (No.6)



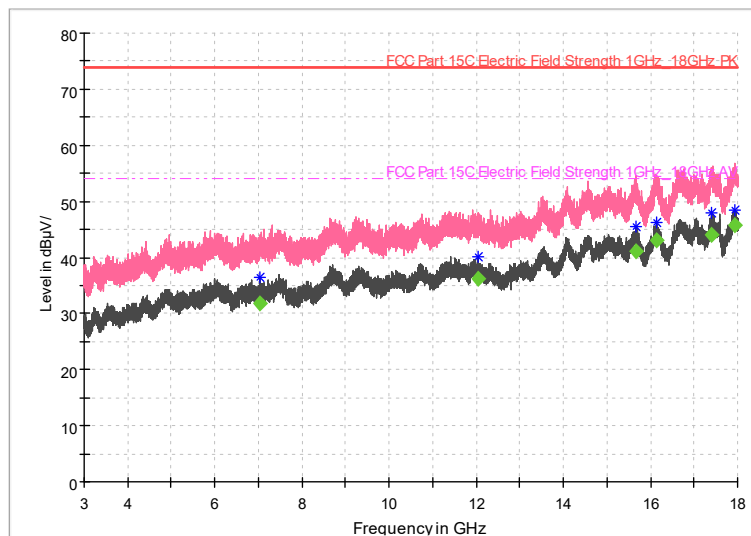
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{RPI} (dB)	Polarity
6057.000	---	50.51	---	30.11	54.00	23.89	-20.40	Vertical
11529.500	---	52.21	---	35.71	54.00	18.29	-16.50	Vertical
14095.000	---	54.19	---	40.49	54.00	13.51	-13.70	Vertical
16132.000	---	57.25	---	43.05	54.00	10.95	-14.20	Vertical
17438.000	---	55.45	---	44.05	54.00	9.95	-11.40	Vertical
17936.000	---	54.81	---	45.11	54.00	8.89	-9.70	Vertical

● 802.11n (HT40)
Spurious Radiated Emissions from 1GHz to 18GHz:
CH Middle (No.6)

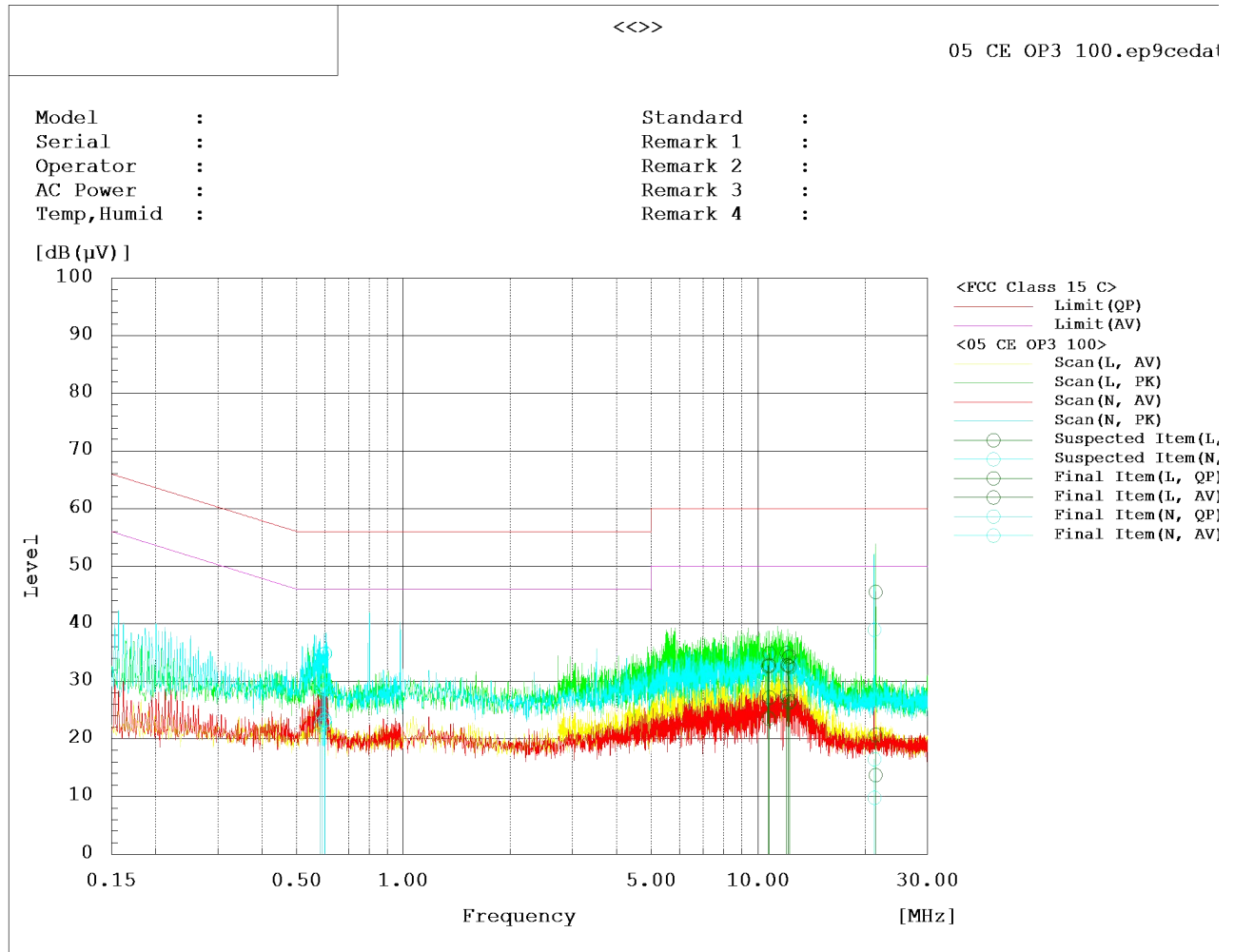
Full Spectrum



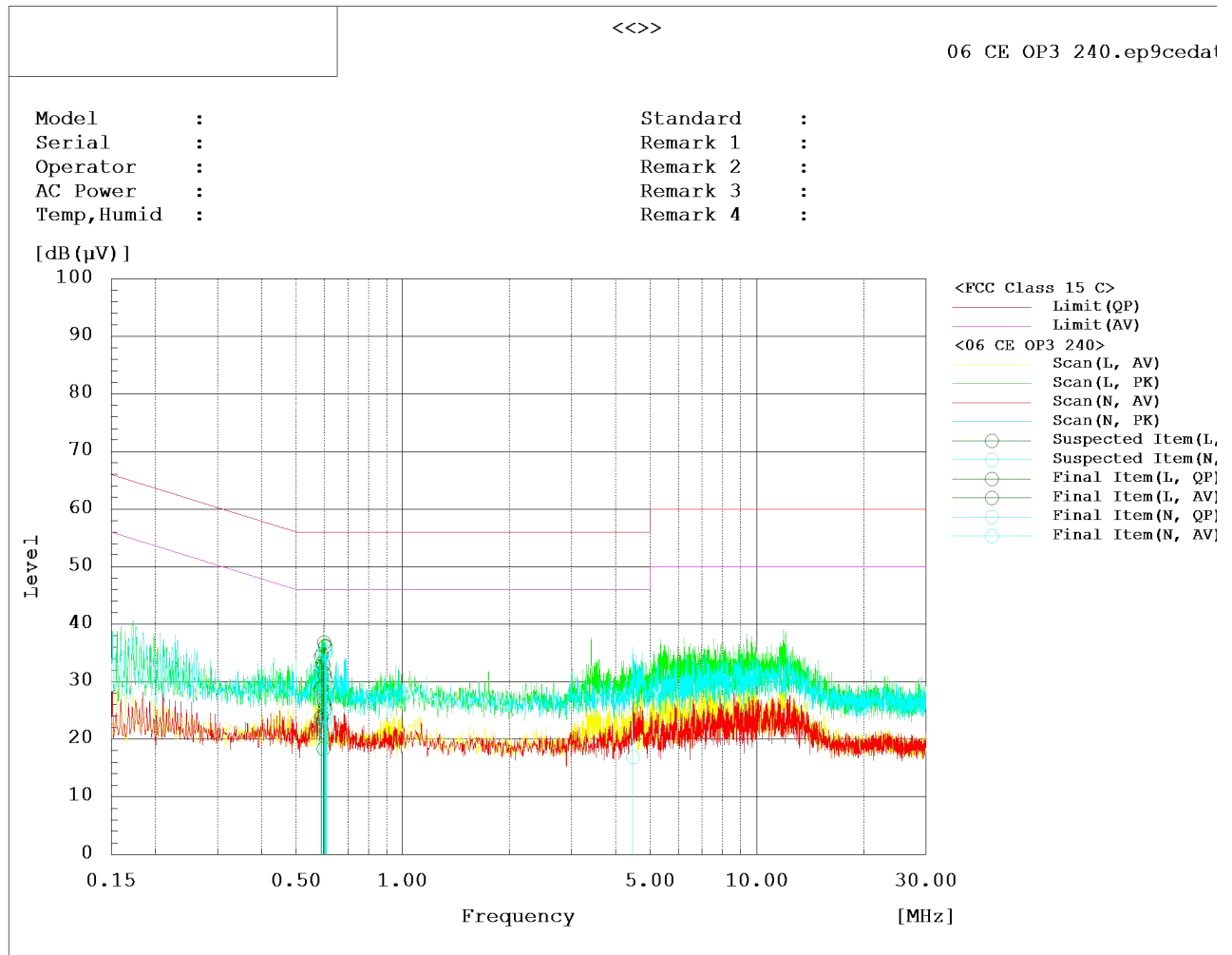
Full Spectrum



Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{RPI} (dB)	Polarity
7048.500	---	52.95	---	31.75	54.00	22.25	-21.20	Vertical
12039.000	---	52.69	---	36.09	54.00	17.91	-16.60	Vertical
15660.000	---	54.81	---	41.21	54.00	12.79	-13.60	Vertical
16125.500	---	57.20	---	43.00	54.00	11.00	-14.20	Vertical
17411.500	---	55.64	---	44.14	54.00	9.86	-11.50	Vertical
17924.500	---	55.52	---	45.72	54.00	8.28	-9.80	Vertical



Range	Frequency MHz	Line	Reading			Factor	Level			Limit			Margin			Pass /Fail	Remark
			QP	AV	PK		dB	QP	AV	PK	dB(μV)	QP	AV	PK	QP		
Band1	10.7	L	12.9	3.6		20	32.9	23.6		60	50		27.1	26.4		Pass	
Band1	10.8	L	14.9	7.3		20	34.9	27.3		60	50		25.1	22.7		Pass	
Band1	12	L	14.9	7.4		20	34.9	27.4		60	50		25.1	22.6		Pass	
Band1	12.2	L	14.3	6.5		19.9	34.2	26.4		60	50		25.8	23.6		Pass	
Band1	12.3	L	14.5	6.7		19.9	34.4	26.6		60	50		25.6	23.4		Pass	
Band1	21.4	L	0.8	-6.3		20	20.8	13.7		60	50		39.2	36.3		Pass	
Band1	0.58	N	13.1	2.6		19.9	33	22.5		56	46		23	23.5		Pass	
Band1	0.59	N	14.8	4.5		19.9	34.7	24.4		56	46		21.3	21.6		Pass	
Band1	0.6	N	14.9	3.5		19.9	34.8	23.4		56	46		21.2	22.6		Pass	
Band1	0.6	N	14.9	3.3		19.9	34.8	23.2		56	46		21.2	22.8		Pass	
Band1	0.6	N	15	2.8		19.9	34.9	22.7		56	46		21.1	23.3		Pass	
Band1	21.2	N	-3.5	-10		20	16.5	9.8		60	50		43.5	40.2		Pass	



Range	Frequency MHz	Line	Reading			Factor dB	Level			Limit			Margin			Pass /Fail	Remark
			dB(μV)				dB(μV)			dB(μV)			dB				
			QP	AV	PK		QP	AV	PK	QP	AV	PK	QP	AV	PK		
Band1	0.58	N	13.2	2.1		19.9	33.1	22			56	46		22.9	24	Pass	
Band1	0.6	N	14.9	3.1		19.9	34.8	23			56	46		21.2	23	Pass	
Band1	0.6	N	15.3	1.6		19.9	35.2	21.5			56	46		20.8	24.5	Pass	
Band1	0.61	N	15.7	4.5		19.9	35.6	24.4			56	46		20.4	21.6	Pass	
Band1	0.61	N	15.2	4		19.9	35.1	23.9			56	46		20.9	22.1	Pass	
Band1	4.46	N	6.6	-3		19.9	26.5	16.9			56	46		29.5	29.1	Pass	
Band1	0.59	L	14.5	3.9		19.9	34.4	23.8			56	46		21.6	22.2	Pass	
Band1	0.59	L	14.9	4.1		19.9	34.8	24			56	46		21.2	22	Pass	
Band1	0.6	L	13	-1.5		19.9	32.9	18.4			56	46		23.1	27.6	Pass	
Band1	0.6	L	16.9	6.5		19.9	36.8	26.4			56	46		19.2	19.6	Pass	
Band1	0.6	L	16.3	5.9		19.9	36.2	25.8			56	46		19.8	20.2	Pass	
Band1	0.6	L	16.4	5.3		19.9	36.3	25.2			56	46		19.7	20.8	Pass	

---End of the test report---