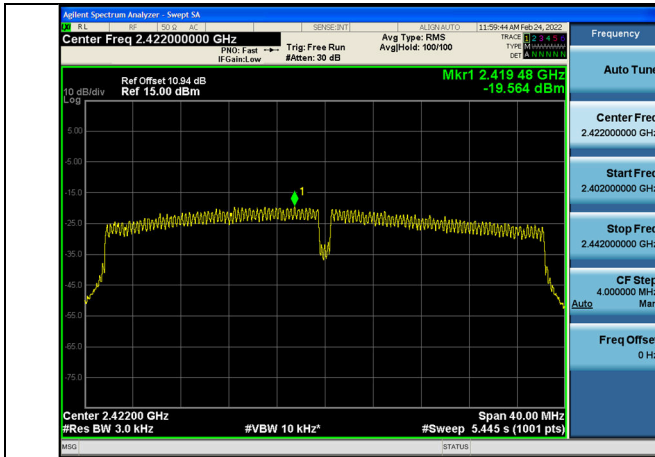
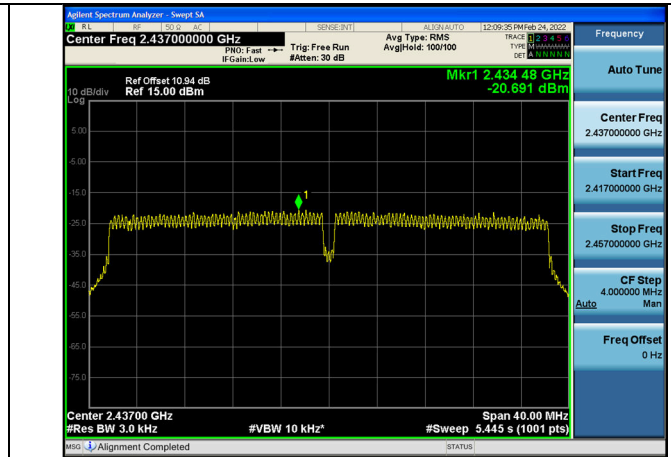


Test Mode:802.11n HT20 2462MHz Chain0

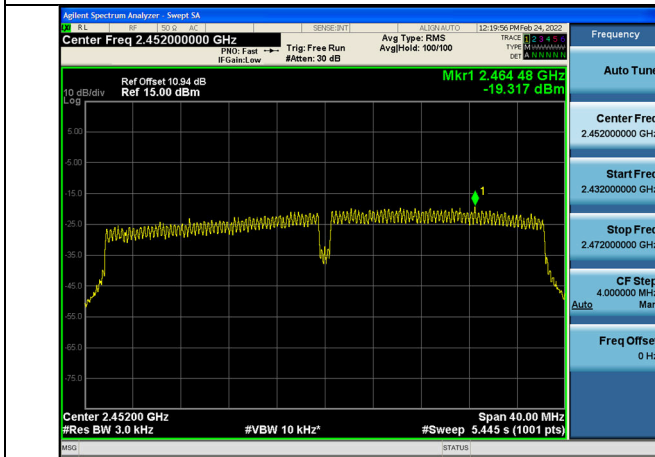
Test Mode: 802.11n HT40



Test Mode:802.11n HT40 2422MHz Chain0



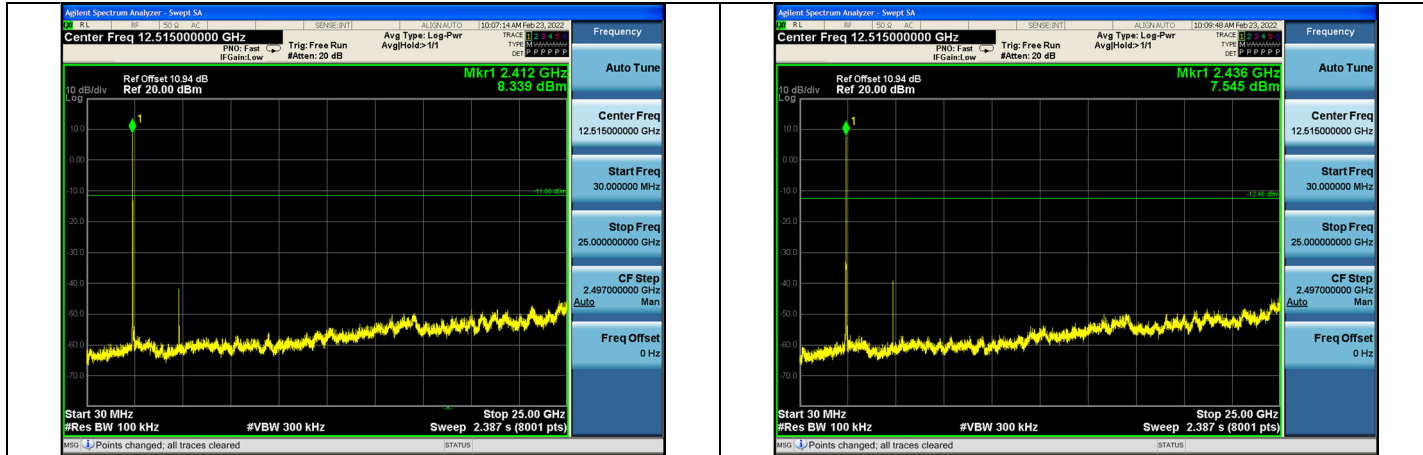
Test Mode:802.11n HT40 2437MHz Chain0



Test Mode:802.11n HT40 2452MHz Chain0

Conducted Out of band emission measurement

Test Mode: 802.11b



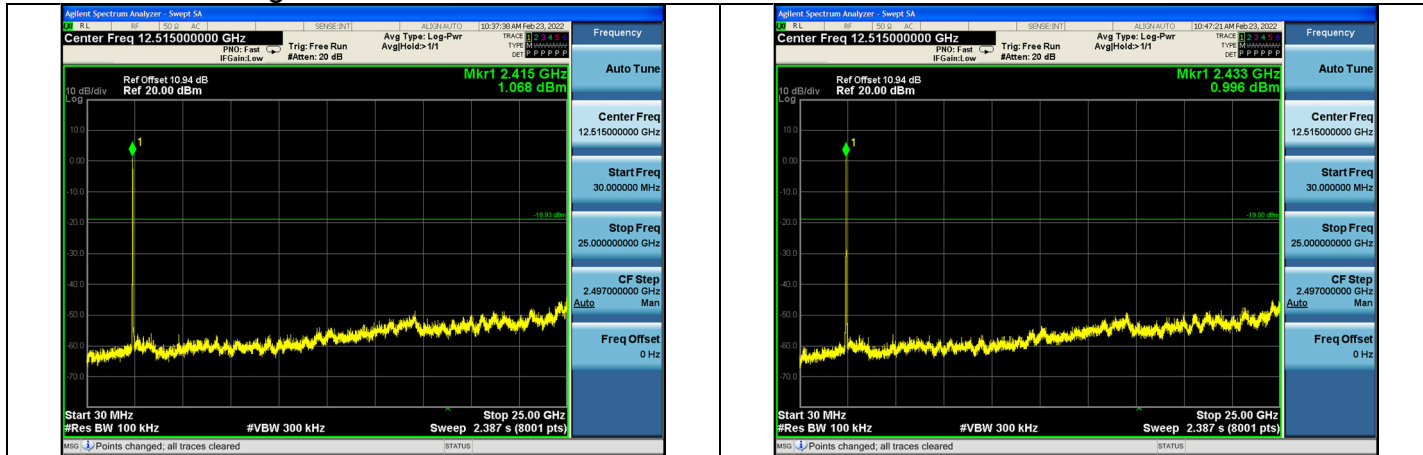
Test Mode:802.11b 2412MHz Chain0

Test Mode:802.11b 2437MHz Chain0



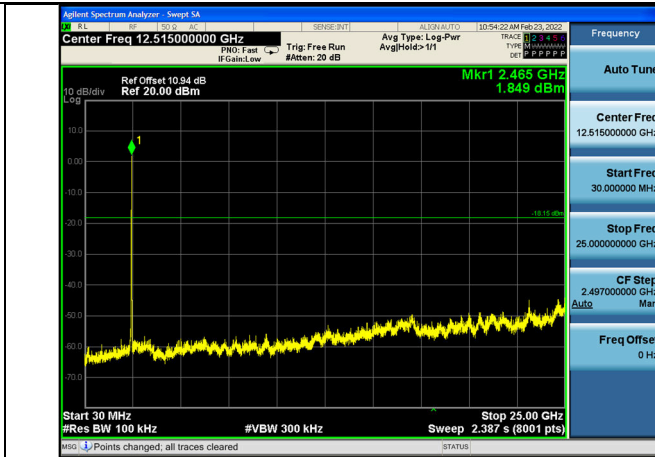
Test Mode:802.11b 2462MHz Chain0

Test Mode: 802.11g



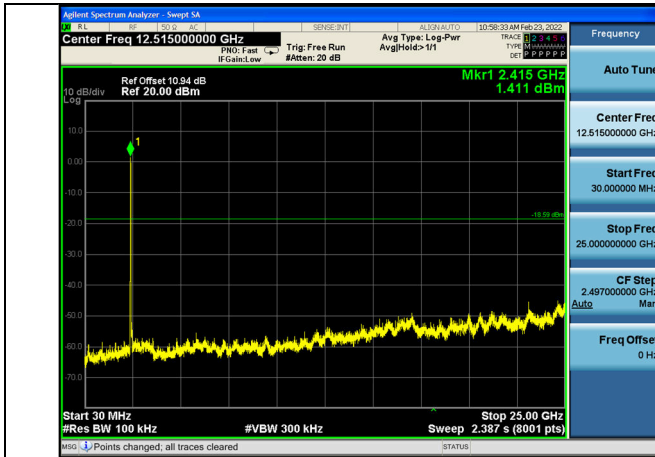
Test Mode:802.11g 2412MHz Chain0

Test Mode:802.11g 2437MHz Chain0

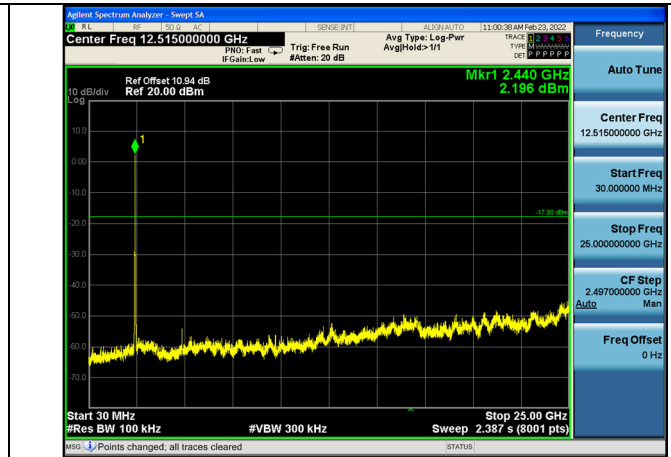


Test Mode:802.11g 2462MHz Chain0

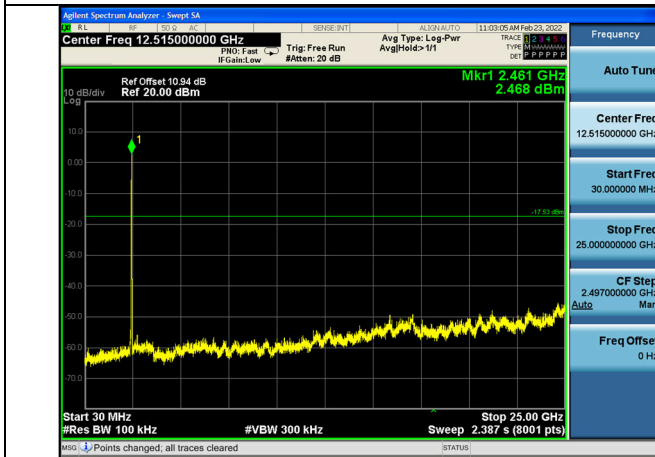
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 2412MHz Chain0

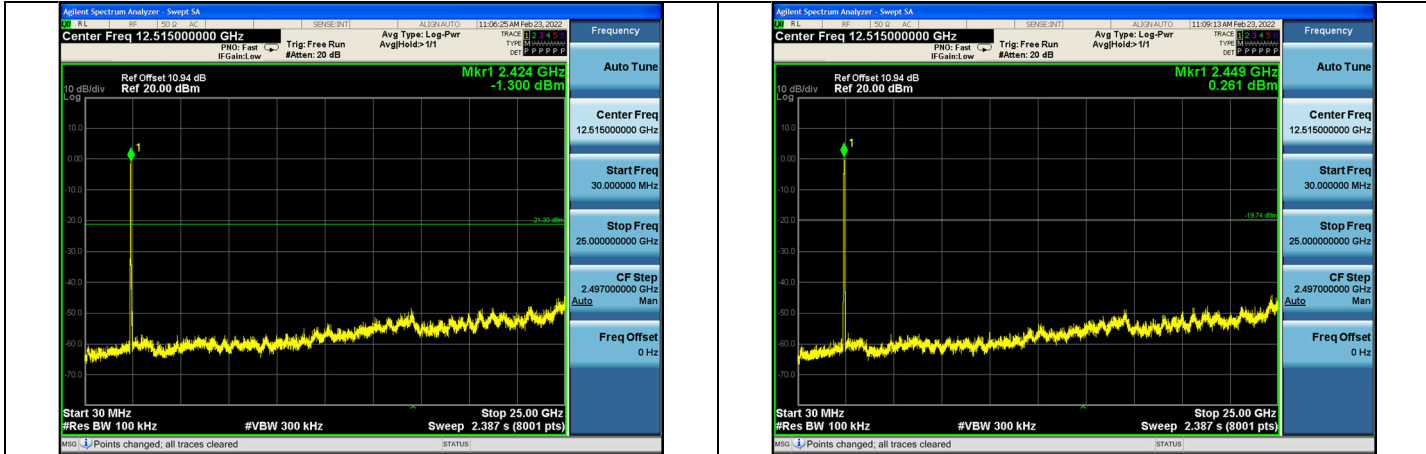


Test Mode:802.11n HT20 2437MHz Chain0



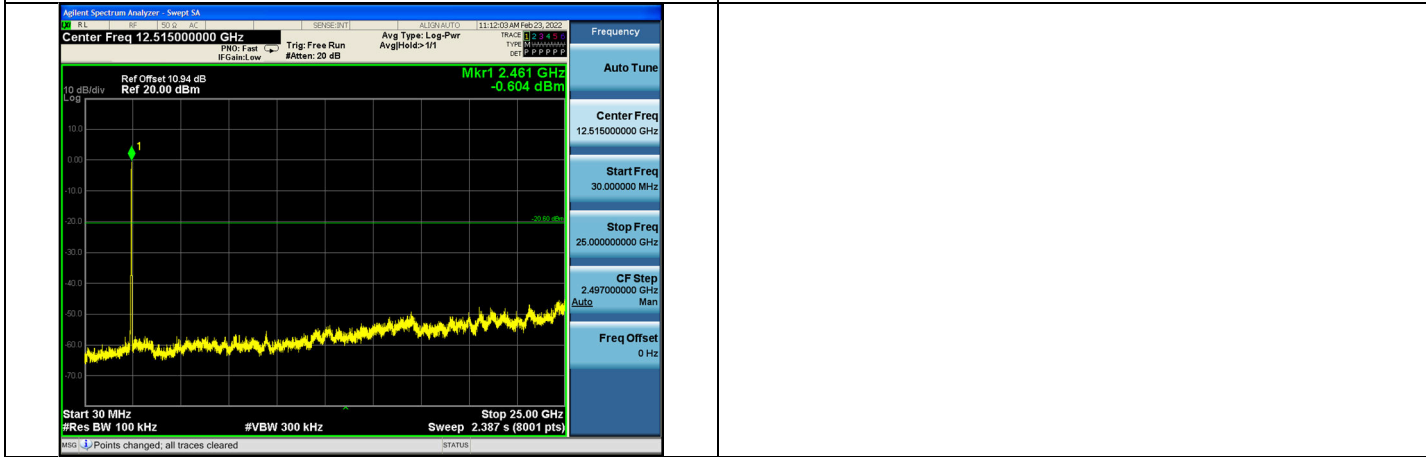
Test Mode:802.11n HT20 2462MHz Chain0

Test Mode: 802.11n HT40



Test Mode:802.11n HT40 2422MHz Chain0

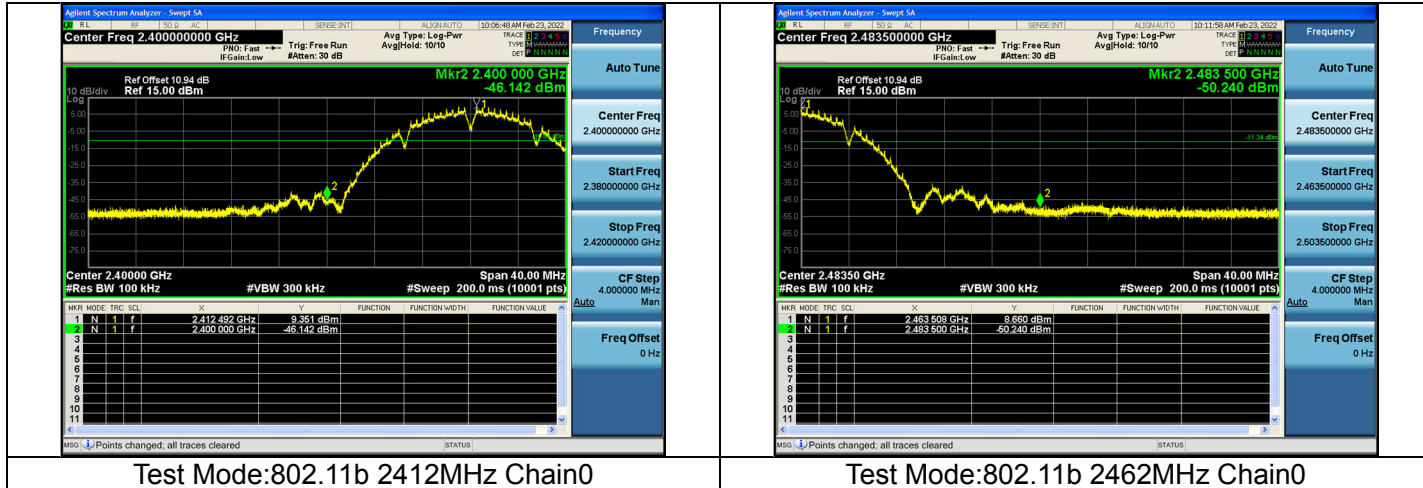
Test Mode:802.11n HT40 2437MHz Chain0



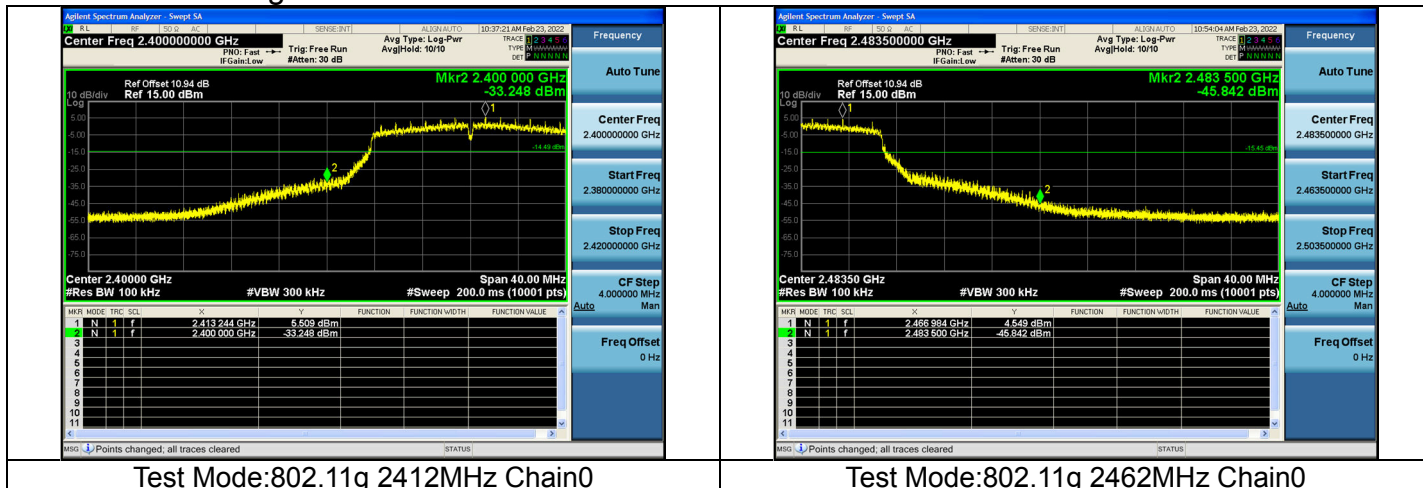
Test Mode:802.11n HT40 2452MHz Chain0

Band edge measurement

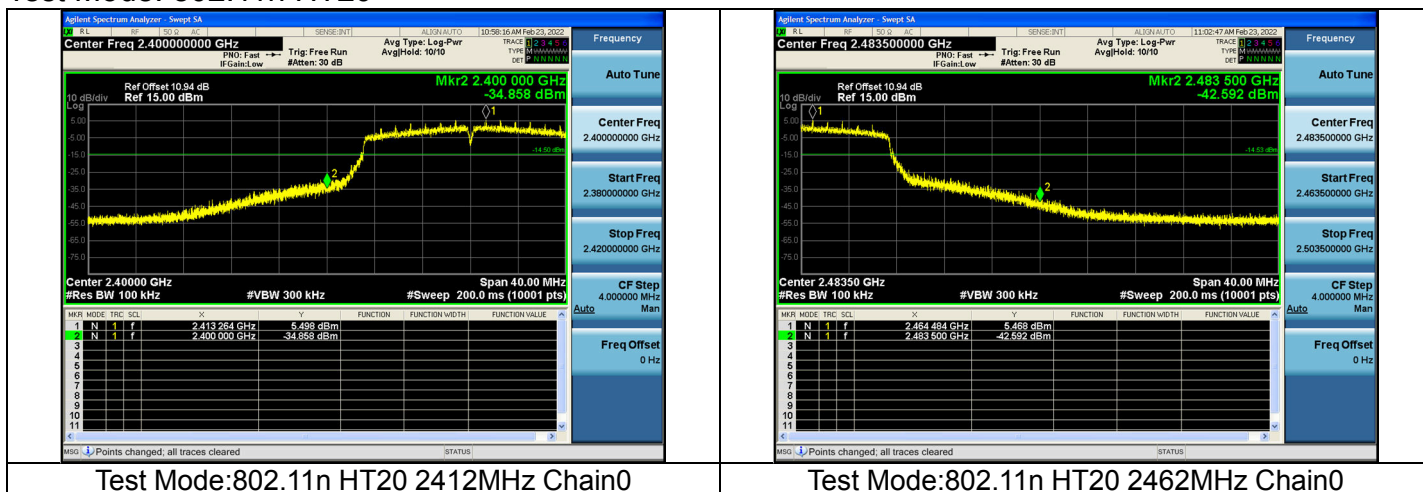
Test Mode: 802.11b



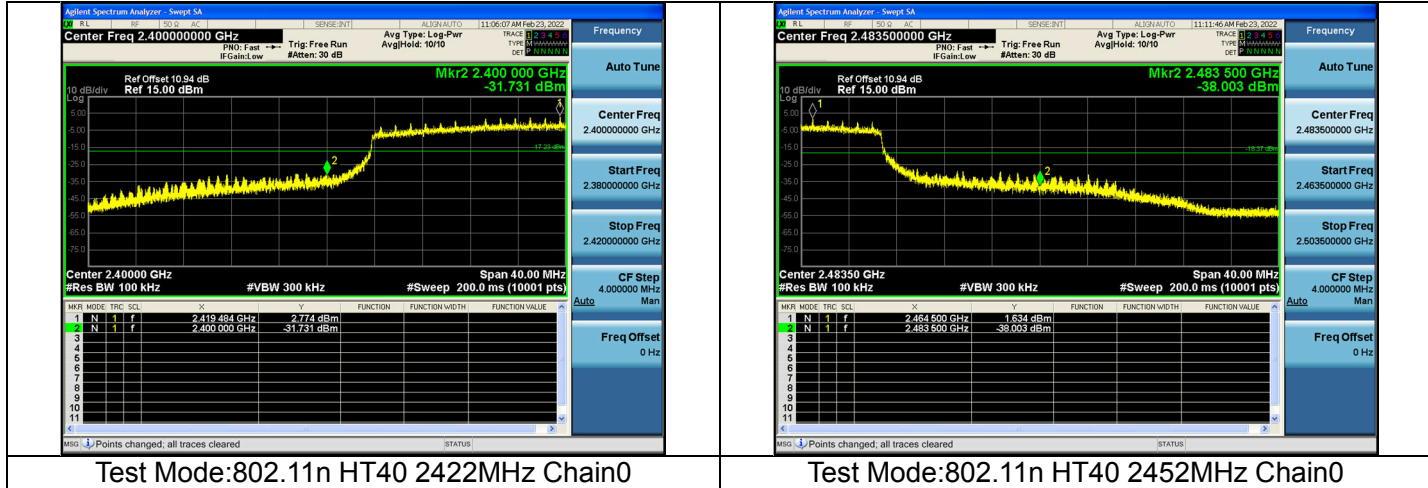
Test Mode: 802.11g



Test Mode: 802.11n HT20



Test Mode: 802.11n HT40



APPENDIX B – TEST DATA OF RADIATED EMISSION

Radiated Emission Band Edge

The measurement results are obtained as described below:

Measure Level = Reading Level + Cable loss + Antenna factor
Sample calculation: (90.30 dBuV/m) = (56.30 dBμV) + (8.90 dB) + (25.10 dB), the corresponding frequency is 2412MHz.

Note: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan.

Note : There were no emissions above 18GHz found within 20dB of the limit. Thus the test result was not reported according to §15.31 (o)

- 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	56.30	90.30	N/A	N/A	8.90	25.10
2390.0	24.60	58.60	-15.40	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	34.70	68.70	N/A	N/A	8.90	25.10
2390.0	8.80	42.80	-11.20	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	54.70	88.70	N/A	N/A	8.90	25.10
2483.5	13.60	47.60	-26.40	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)
2462.0	41.50	75.50	N/A	N/A	8.90	25.10
2483.5	-8.90	25.10	-28.90	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	56.60	90.60	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	39.60	73.60	N/A	N/A	8.90	25.10
2390.0	-7.30	26.70	-27.30	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	55.50	89.50	N/A	N/A	8.90	25.10
2483.5	11.20	45.20	-28.80	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	38.60	72.60	N/A	N/A	8.90	25.10
2483.5	-3.20	30.80	-23.20	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	51.60	85.60	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	39.20	73.20	N/A	N/A	8.90	25.10
2390.0	7.70	41.70	-12.30	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	51.90	85.90	N/A	N/A	8.90	25.10
2483.5	9.80	43.80	-30.20	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)
2462.0	41.90	75.90	N/A	N/A	8.90	25.10
2483.5	2.80	36.80	-17.20	54.00	8.90	25.10

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: $(13.04 \text{ dB}\mu\text{V/m}) = (35.84 \text{ dB}\mu\text{V}) + (-22.80 \text{ dB/m})$, the corresponding frequency is 167.934MHz.

The worst case attitude: The mobile lay down.

Spurious Radiated Emissions below 30MHz:

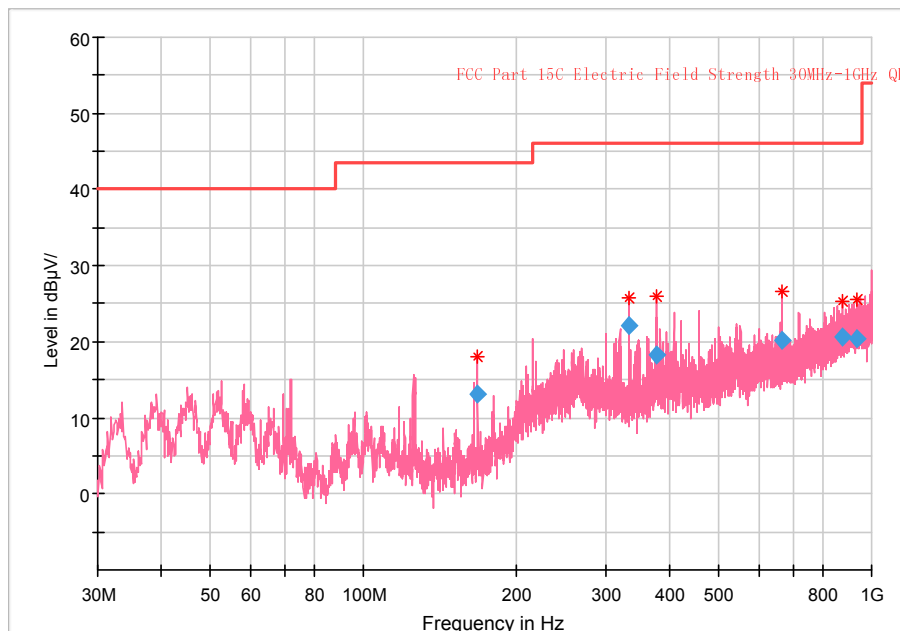
There were no emissions from 9kHz to 30MHz found within 20dB of the limit. Thus, the test result was not reported according to §15.31 (o).

- 802.11b

Spurious Radiated Emissions from 30MHz to 1GHz:

CH Middle (No.6)

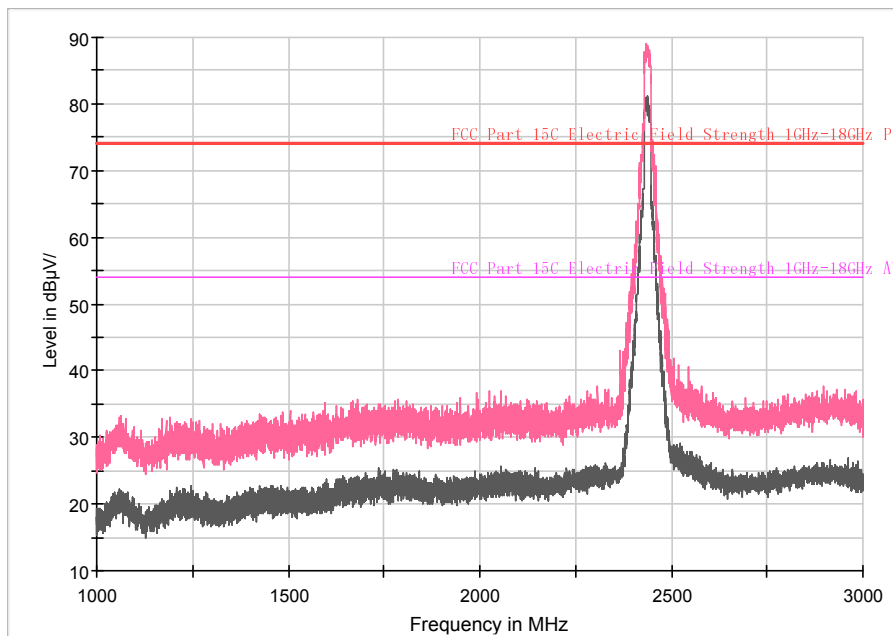
Full Spectrum



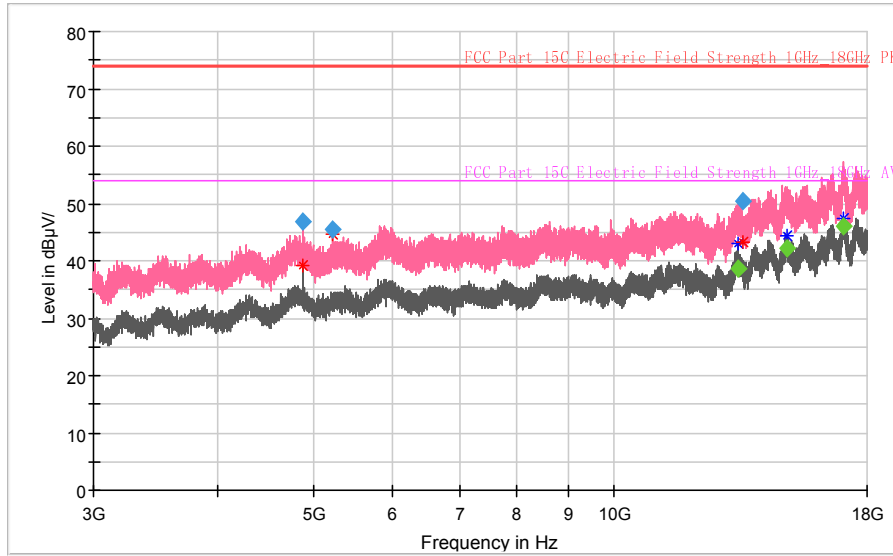
Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
167.934	35.84	13.04	43.50	30.46	-22.80	Vertical
332.446	37.73	22.03	46.00	23.97	-15.70	Vertical
377.745	32.70	18.30	46.00	27.70	-14.40	Vertical
664.671	27.52	20.12	46.00	25.88	-7.40	Vertical
874.191	24.25	20.65	46.00	25.35	-3.60	Vertical
933.555	22.93	20.33	46.00	25.67	-2.60	Vertical

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

Full Spectrum



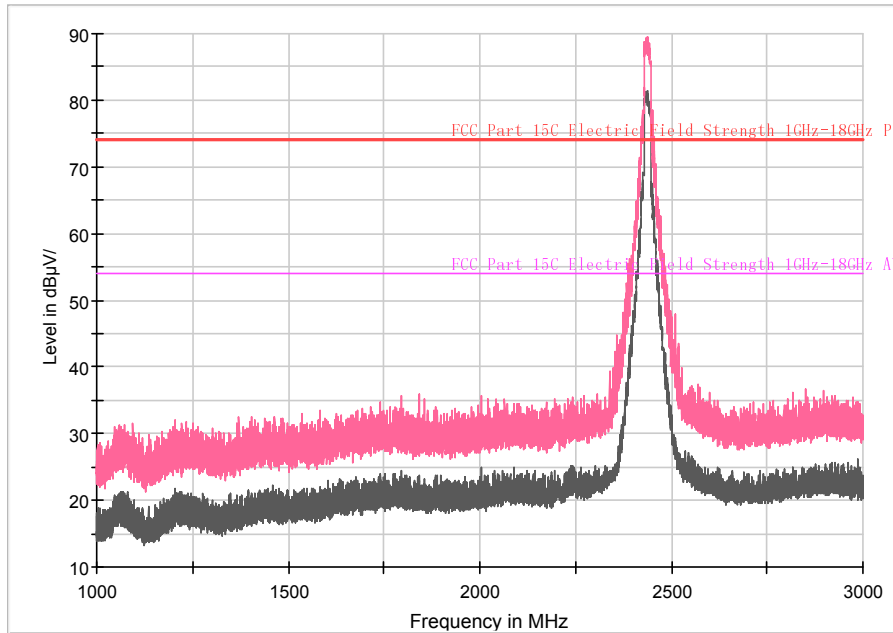
Full Spectrum



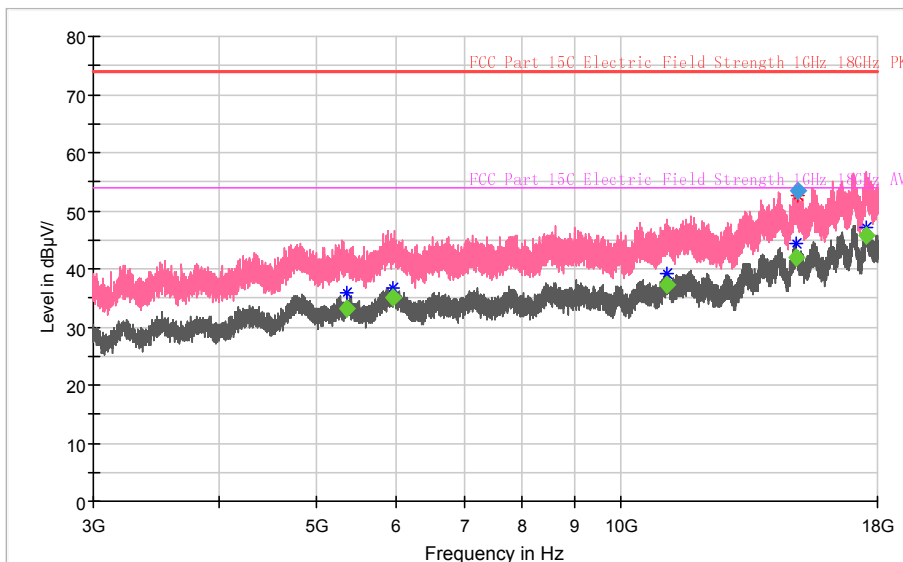
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
4871.500	68.41	---	46.81	---	74.00	27.19	-21.60	Vertical
5223.500	66.79	---	45.59	---	74.00	28.41	-21.20	Vertical
13337.000	---	53.43	---	38.73	54.00	15.27	-14.70	Vertical
13510.000	65.03	---	50.53	---	74.00	23.47	-14.50	Vertical
14942.500	---	55.61	---	42.21	54.00	11.79	-13.40	Vertical
17056.500	---	57.80	---	45.90	54.00	8.10	-11.90	Vertical

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

Full Spectrum



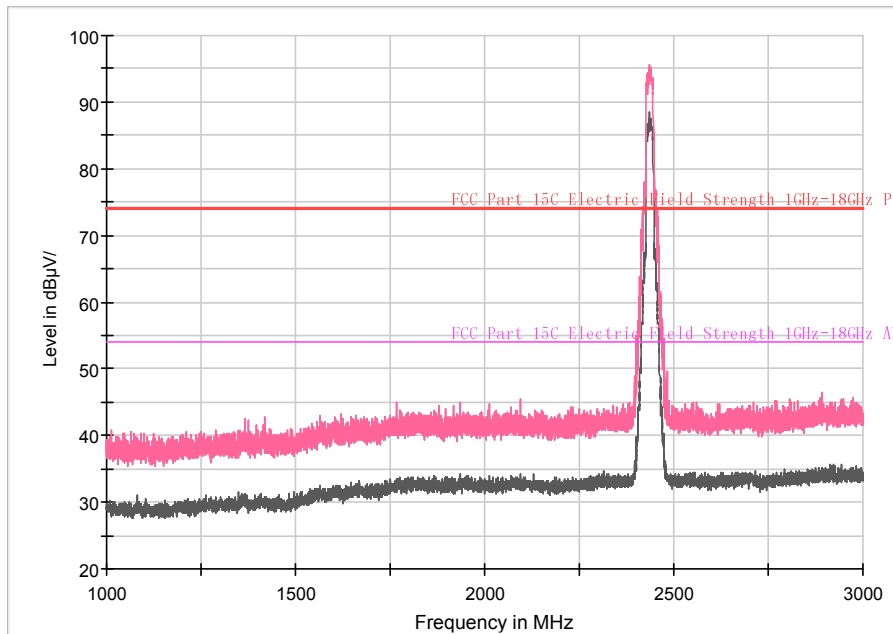
Full Spectrum



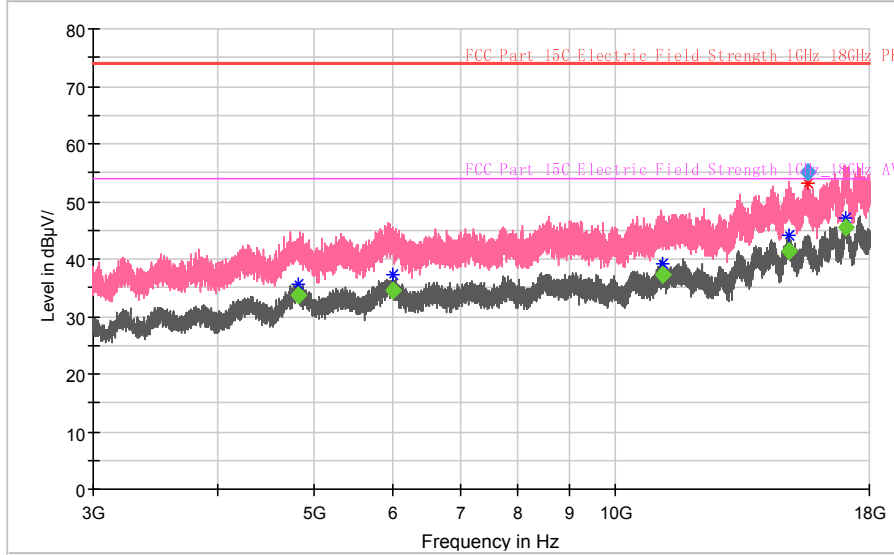
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
5359.000	---	54.83	---	33.23	54.00	20.77	-21.60	Vertical
5957.000	---	55.09	---	34.99	54.00	19.01	-20.10	Vertical
11120.500	---	54.95	---	37.35	54.00	16.65	-17.60	Vertical
14934.500	---	55.40	---	42.00	54.00	12.00	-13.40	Vertical
14983.500	66.76	---	53.46	---	74.00	20.54	-13.30	Vertical
17547.500	---	56.94	---	45.64	54.00	8.36	-11.30	Vertical

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

Full Spectrum

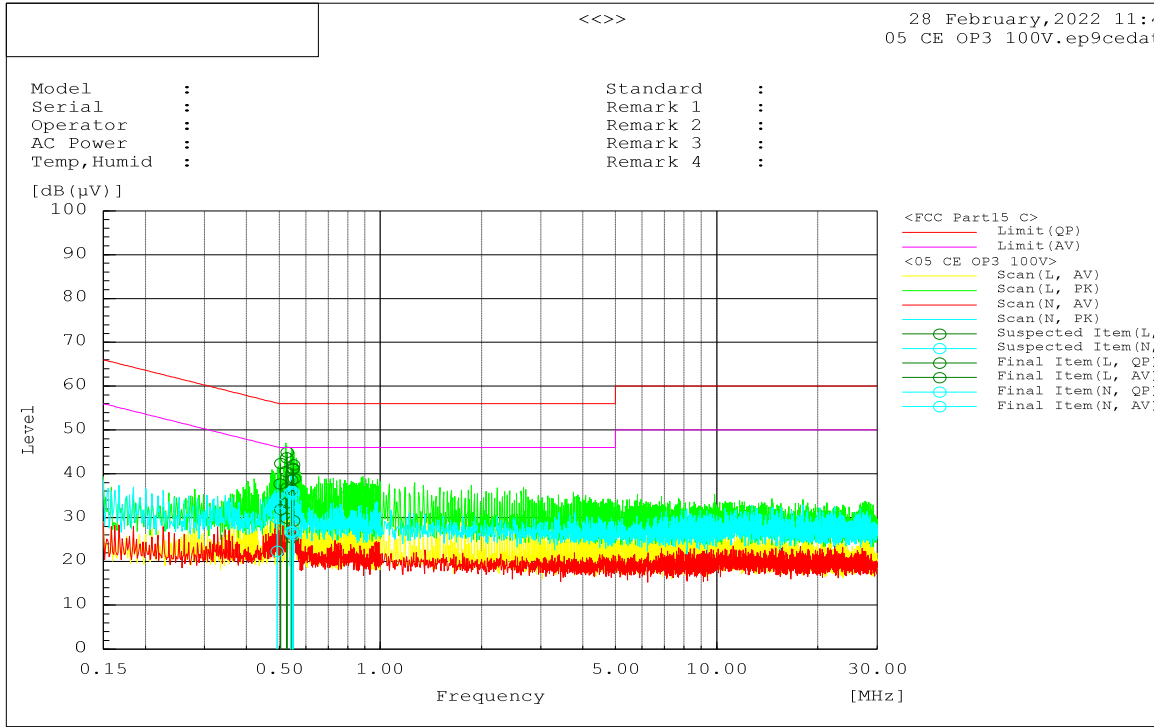


Full Spectrum



Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
4817.000	---	54.77	---	33.67	54.00	20.33	-21.10	Vertical
5996.500	---	54.94	---	34.64	54.00	19.36	-20.30	Vertical
11158.500	---	54.63	---	37.13	54.00	16.87	-17.50	Vertical
14968.000	---	54.73	---	41.43	54.00	12.57	-13.30	Vertical
15591.000	68.67	---	55.07	---	74.00	18.93	-13.60	Vertical
17074.000	---	57.17	---	45.37	54.00	8.63	-11.80	Vertical

AC Power line Conducted Emission 100V

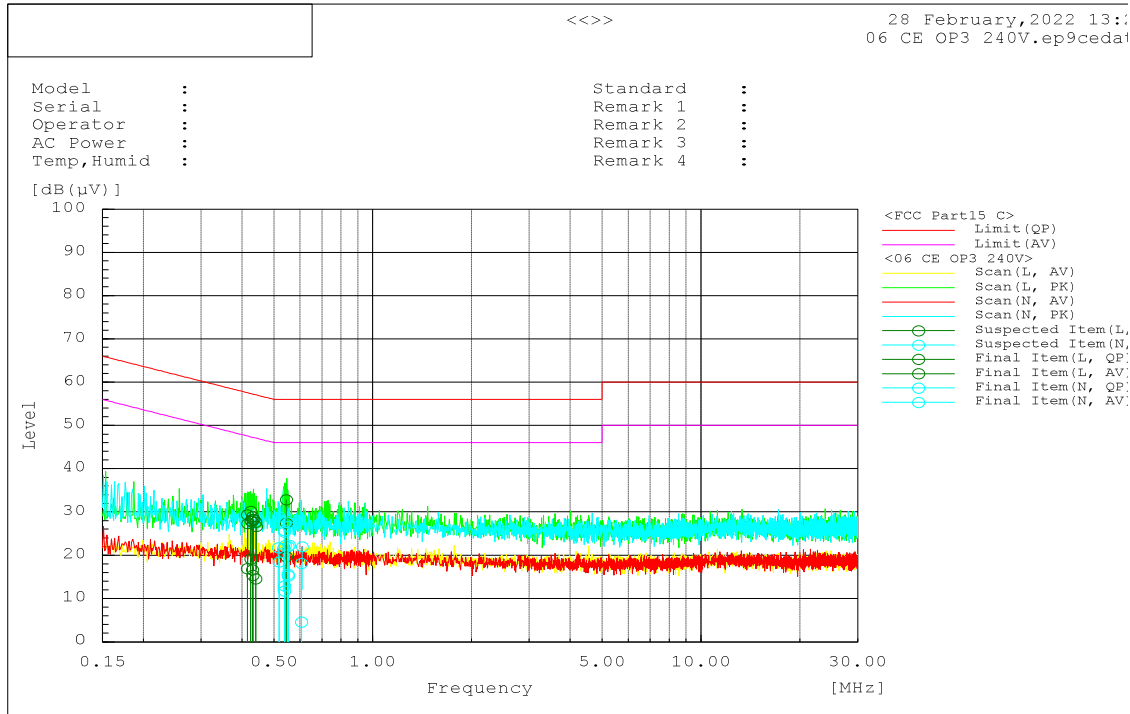


L+N Line

MEASUREMENT RESULT:

Range	Frequency MHz	Line	Reading			Factor	Level			Limit			Margin			Pass/Fail	
			dB(µV)				dB	dB(µV)			dB(µV)			dB			
			QP	AV	PK			QP	AV	PK	QP	AV	PK	QP	AV		PK
Band1	0.505	L	22.5	12		19.9	42.4	31.9		56	46		13.6	14.1		Pass	
Band1	0.527	L	25	13.5		19.9	44.9	33.4		56	46		11.1	12.6		Pass	
Band1	0.526	L	23.7	10		19.9	43.6	29.9		56	46		12.4	16.1		Pass	
Band1	0.545	L	18.7	5.5		19.9	38.6	25.4		56	46		17.4	20.6		Pass	
Band1	0.548	L	21.1	6.8		19.9	41	26.7		56	46		15	19.3		Pass	
Band1	0.551	L	22.2	9.3		19.9	42.1	29.2		56	46		13.9	16.8		Pass	
Band1	0.493	N	13.3	2.4		19.9	33.2	22.3		56.1	46.1		22.9	23.8		Pass	
Band1	0.541	N	15.9	6.9		19.9	35.8	26.8		56	46		20.2	19.2		Pass	
Band1	0.541	N	15.6	6.7		19.9	35.5	26.6		56	46		20.5	19.4		Pass	
Band1	0.547	N	16	7		19.9	35.9	26.9		56	46		20.1	19.1		Pass	
Band1	0.549	N	16.1	6.7		19.9	36	26.6		56	46		20	19.4		Pass	
Band1	0.55	N	15.5	6.3		19.9	35.4	26.2		56	46		20.6	19.8		Pass	

240V



L+N Line

MEASUREMENT RESULT:

Range	Frequency MHz	Line	Reading			Factor dB	Level			Limit			Margin			Pass/Fail
			dB(μV)				dB(μV)			dB(μV)			dB			
			QP	AV	PK		QP	AV	PK	QP	AV	PK	QP	AV	PK	
Band1	0.519	N	9	-1.4		19.9	28.9	18.5		56	46		27.1	27.5		Pass
Band1	0.539	N	5.5	-7		19.9	25.4	12.9		56	46		30.6	33.1		Pass
Band1	0.538	N	5.8	-8.2		19.9	25.7	11.7		56	46		30.3	34.3		Pass
Band1	0.551	N	7.6	-4.3		19.9	27.5	15.6		56	46		28.5	30.4		Pass
Band1	0.553	N	6.8	-4.7		19.9	26.7	15.2		56	46		29.3	30.8		Pass
Band1	0.606	N	-1.7	-15		19.9	18.2	4.6		56	46		37.8	41.4		Pass
Band1	0.414	L	9.3	-3.1		20	29.3	16.9		57.6	47.6		28.3	30.7		Pass
Band1	0.425	L	10.1	-0.9		20	30.1	19.1		57.3	47.3		27.2	28.2		Pass
Band1	0.43	L	9	-3.4		20	29	16.6		57.3	47.3		28.3	30.7		Pass
Band1	0.431	L	8.3	-4.7		20	28.3	15.3		57.2	47.2		28.9	31.9		Pass
Band1	0.44	L	7.7	-5.4		19.9	27.6	14.5		57.1	47.1		29.5	32.6		Pass
Band1	0.545	L	13	-0.2		19.9	32.9	19.7		56	46		23.1	26.3		Pass

---End of the test report---