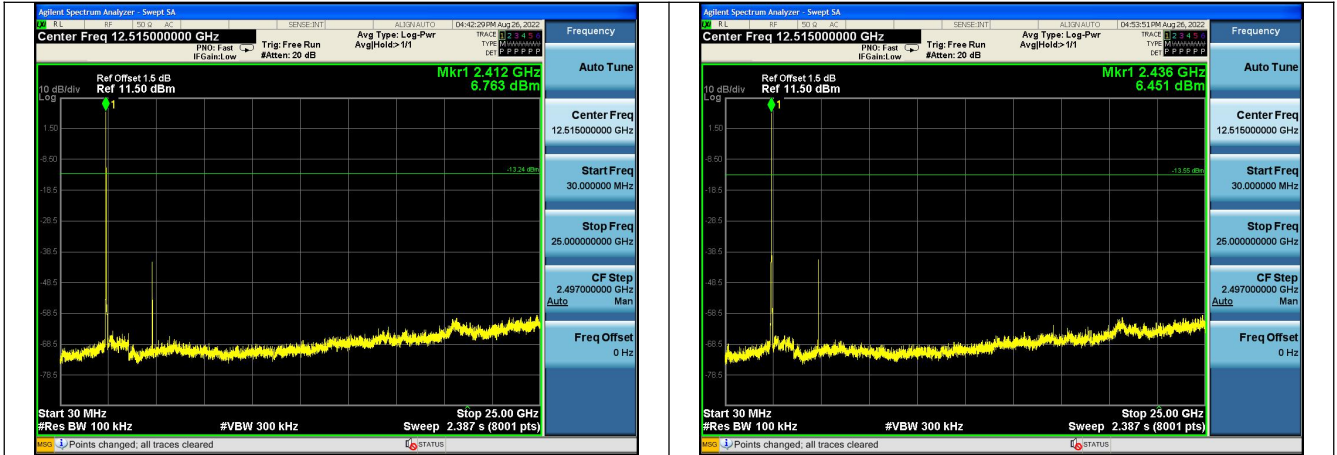


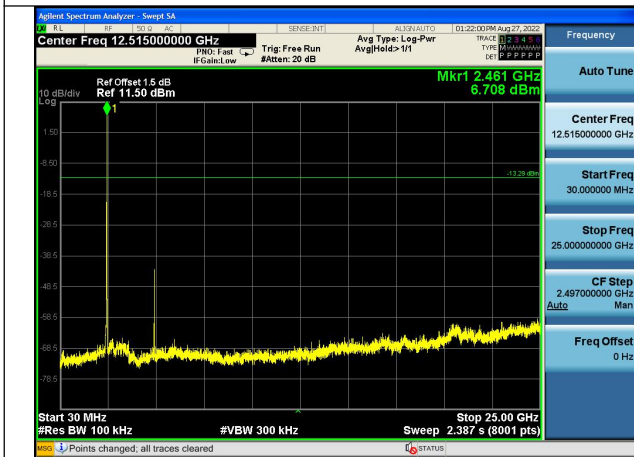
## Conducted Out of band emission measurement

Test Mode: 802.11b

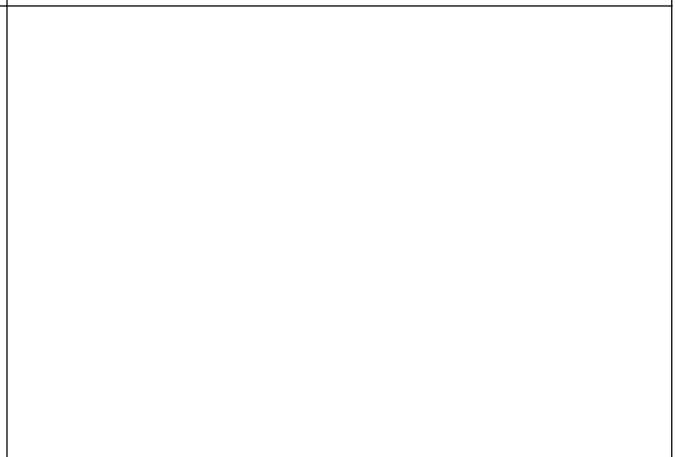


Test Mode:802.11b 2412MHz Chain0

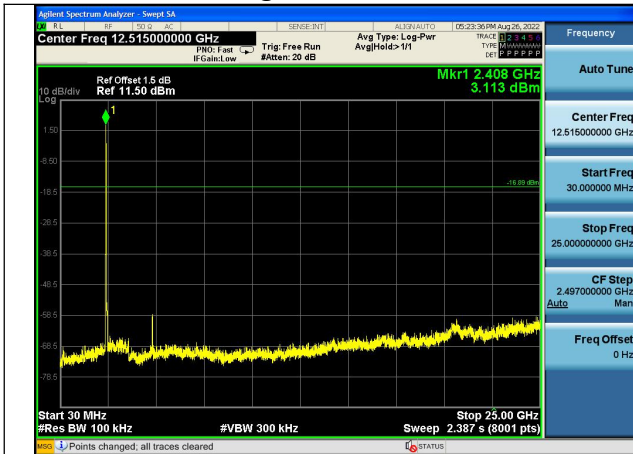
Test Mode:802.11b 2437MHz Chain0



Test Mode:802.11b 2462MHz Chain0



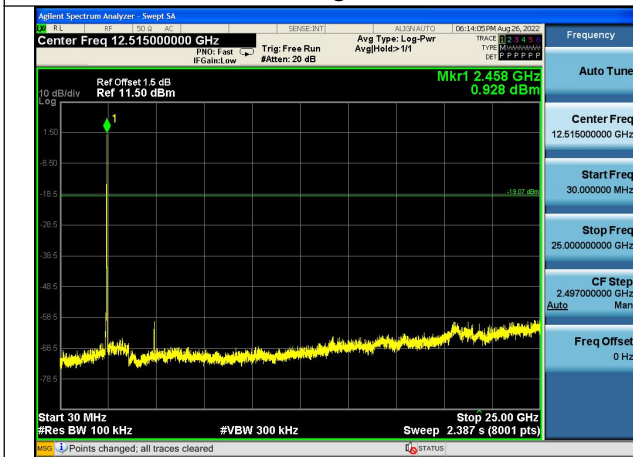
Test Mode: 802.11g



Test Mode:802.11g 2412MHz Chain0

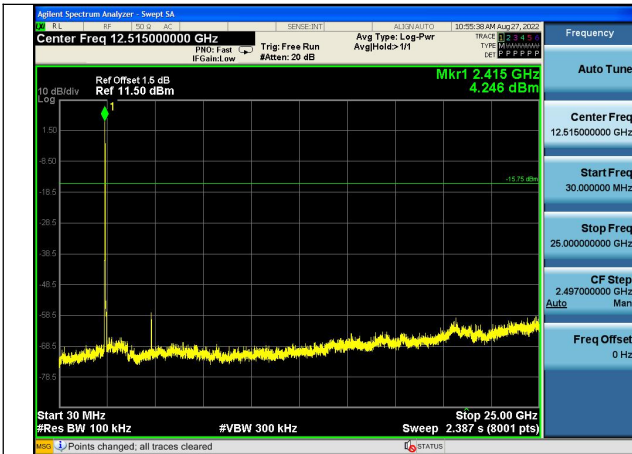


Test Mode:802.11g 2437MHz Chain0



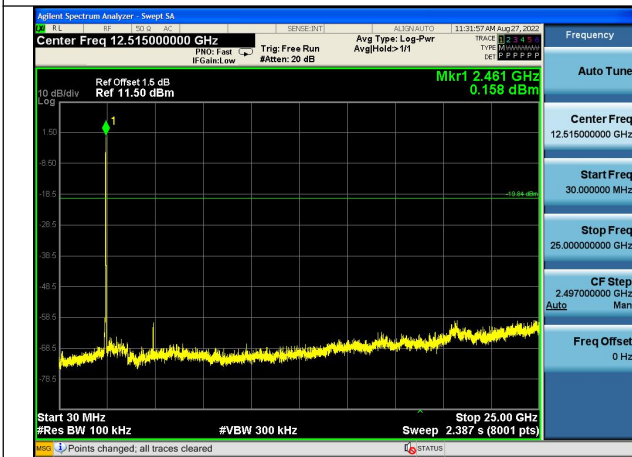
Test Mode:802.11g 2462MHz Chain0

Test Mode: 802.11n HT20



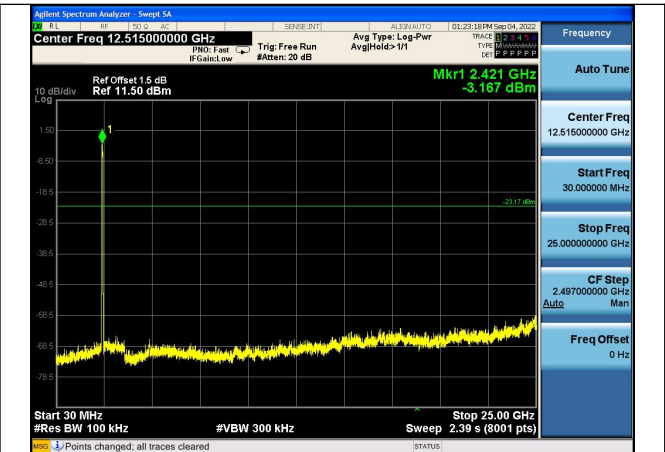
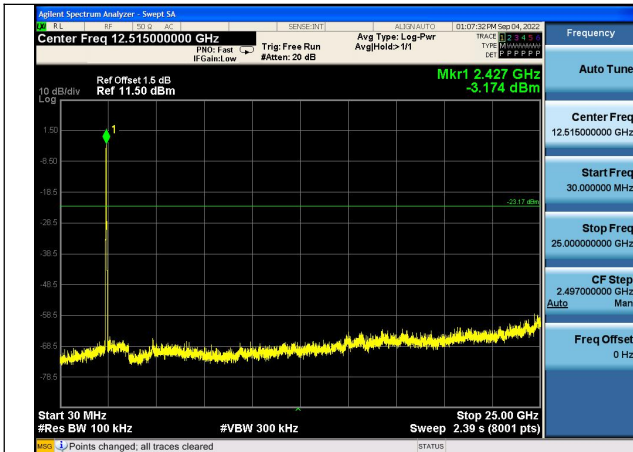
Test Mode:802.11n HT20 2412MHz Chain0

Test Mode:802.11n HT20 2437MHz Chain0



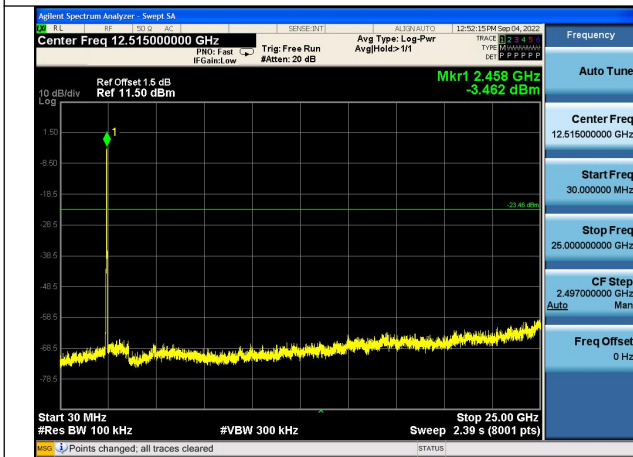
Test Mode:802.11n HT20 2462MHz Chain0

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

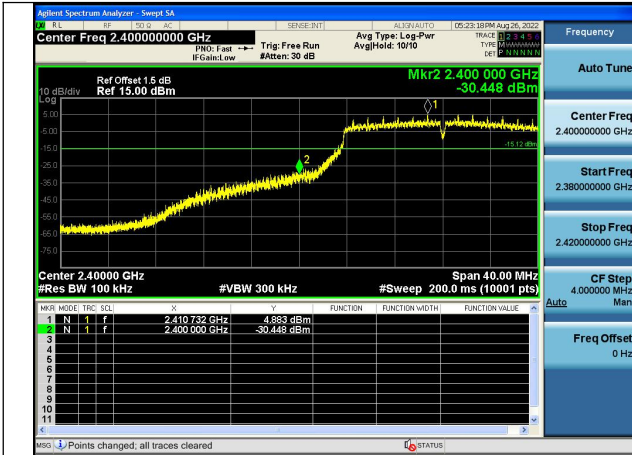


Test Mode:802.11b 2412MHz Chain0



Test Mode:802.11b 2462MHz Chain0

Test Mode: 802.11g

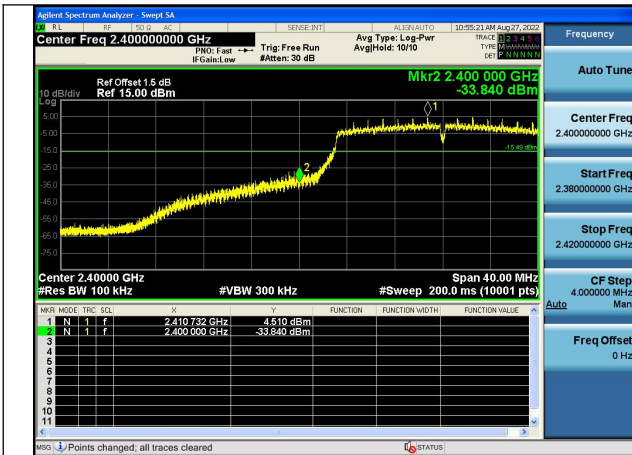


Test Mode:802.11g 2412MHz Chain0



Test Mode:802.11g 2462MHz Chain0

Test Mode: 802.11n HT20

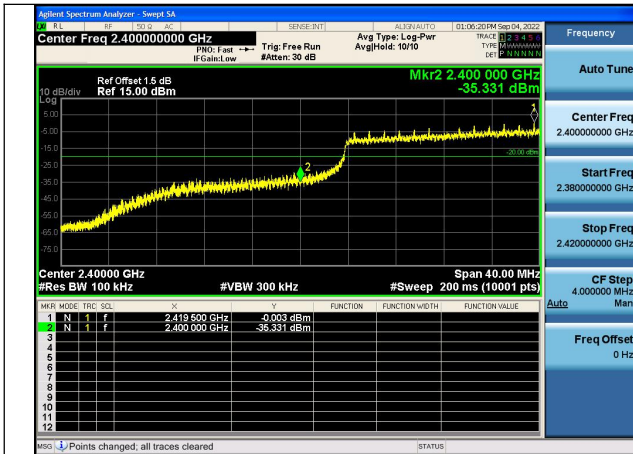


Test Mode:802.11n HT20 2412MHz Chain0

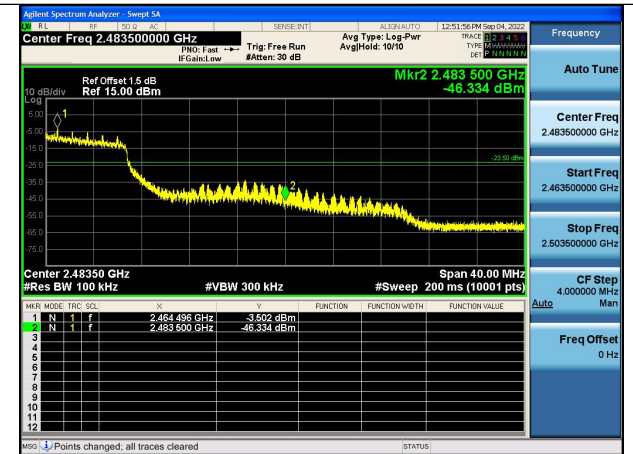


Test Mode:802.11n HT20 2462MHz Chain0

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

### Worst case(11b)

#### Radiated Emission Band Edge

The measurement results are obtained as described below:

Measure Level = Reading Level + Cable loss + Antenna factor Sample calculation: (87.70 dBuV/m) = (53.70 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)

The measurement results contain the correction factor of the duty cycle.

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	54.91	88.91	N/A	N/A	8.90	25.10
2390.0	30.66	64.66	-9.34	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	45.30	79.30	N/A	N/A	8.90	25.10
2390.0	0.60	34.60	-19.40	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	54.67	88.67	N/A	N/A	8.90	25.10
2483.5	32.96	66.96	-7.04	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	44.24	78.24	N/A	N/A	8.90	25.10
2483.5	11.21	45.21	-8.79	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:

$$\text{QuasiPeak} = \text{Reading Value} + A_{Rpl}$$

Above 1GHz:

$$\text{MaxPeak} = \text{Reading MaxPeak} + A_{Rpl}$$

OR

$$\text{Average} = \text{Reading Average} + A_{Rpl}$$

Sample calculation:  $(17.45 \text{ dB}\mu\text{V/m}) = (41.25 \text{ dB}\mu\text{V}) + (-23.80 \text{ dB/m})$ , the corresponding frequency is 148.437MHz.

The worst case attitude: The mobile lay down.

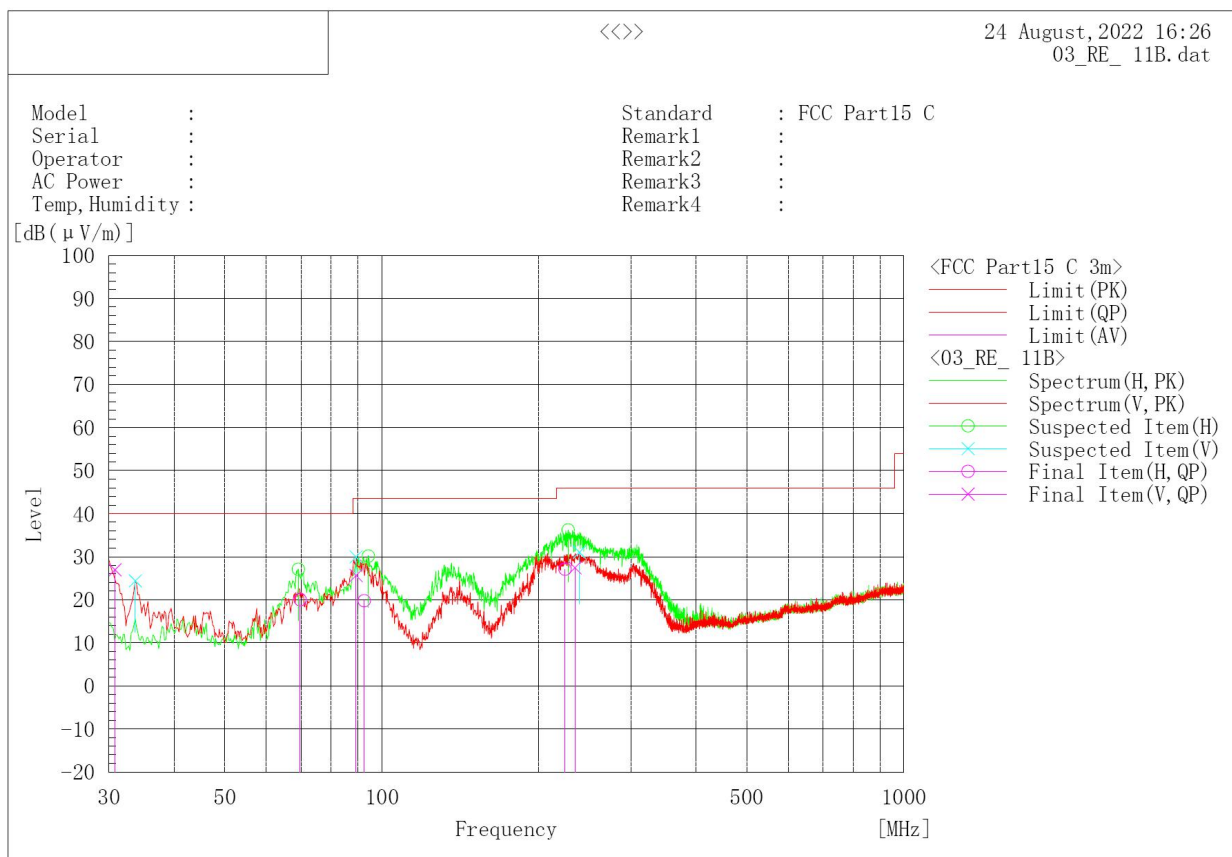
### Spurious Radiated Emissions below 30MHz:

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)

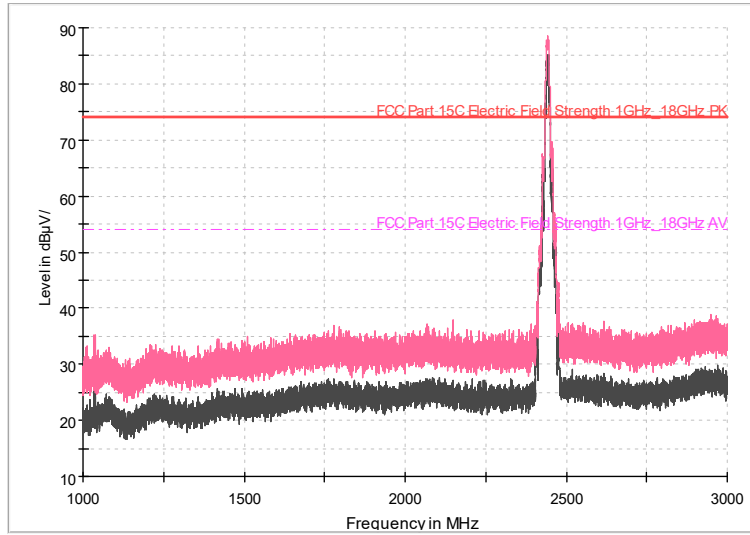




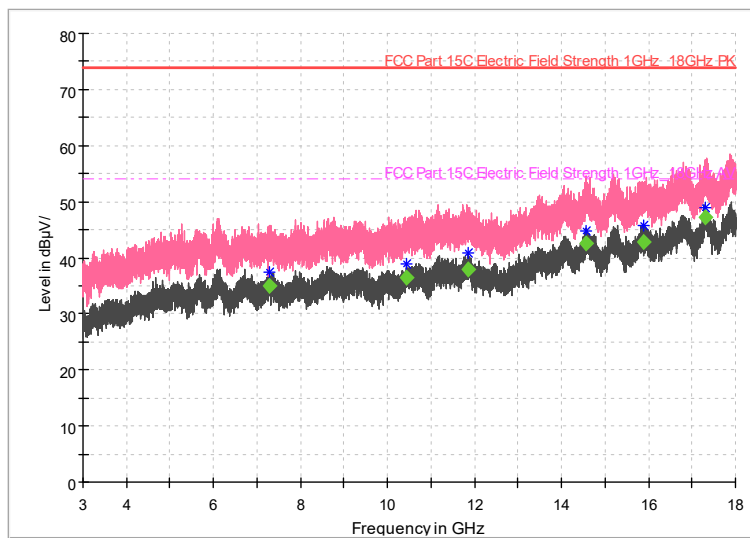
Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A <sub>Rpl</sub> (dB)	Polarity
30.80	51.00	27.00	40.00	13.00	-24.00	Vertical
69.78	44.80	20.00	40.00	20.00	-24.80	Vertical
89.16	50.70	25.70	43.50	17.80	-25.00	Vertical
92.57	43.70	19.80	43.50	23.70	-23.90	Vertical
224.35	49.20	27.10	46.00	18.90	-22.10	Vertical
234.33	49.00	27.50	46.00	18.50	-21.50	Vertical

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

Full Spectrum

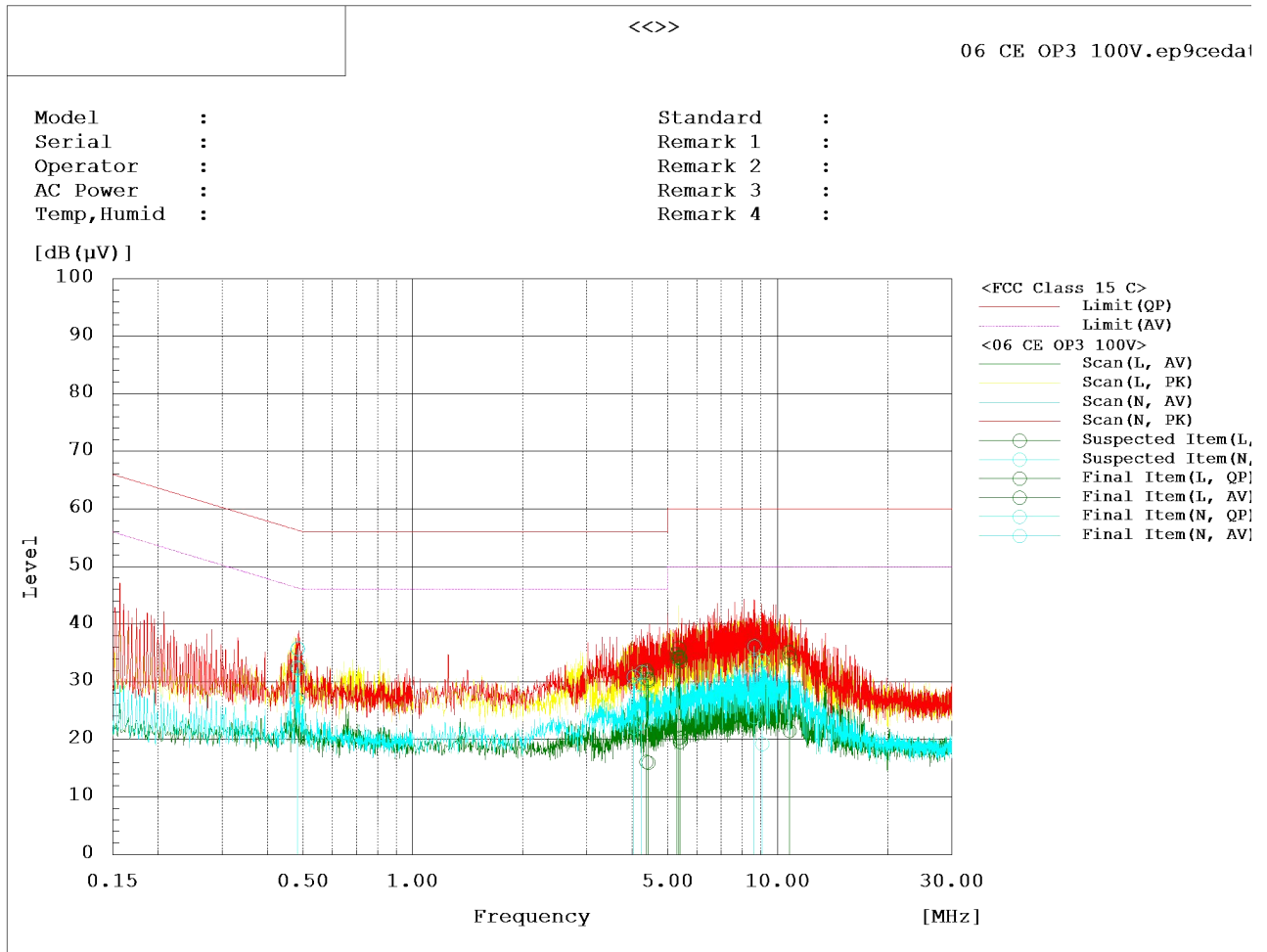


Full Spectrum



Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A <sub>Rpl</sub> (dB)	Polarity
7282.50	---	56.24	---	34.94	54.00	19.06	-21.30	Vertical
10437.50	---	55.37	---	36.57	54.00	17.43	-18.80	Vertical
11864.00	---	54.74	---	38.04	54.00	15.96	-16.70	Vertical
14577.00	---	55.99	---	42.49	54.00	11.51	-13.50	Vertical
15897.00	---	56.83	---	42.93	54.00	11.07	-13.90	Vertical
17305.50	---	58.75	---	47.25	54.00	6.75	-11.50	Vertical

### AC Power line Conducted Emission 100V

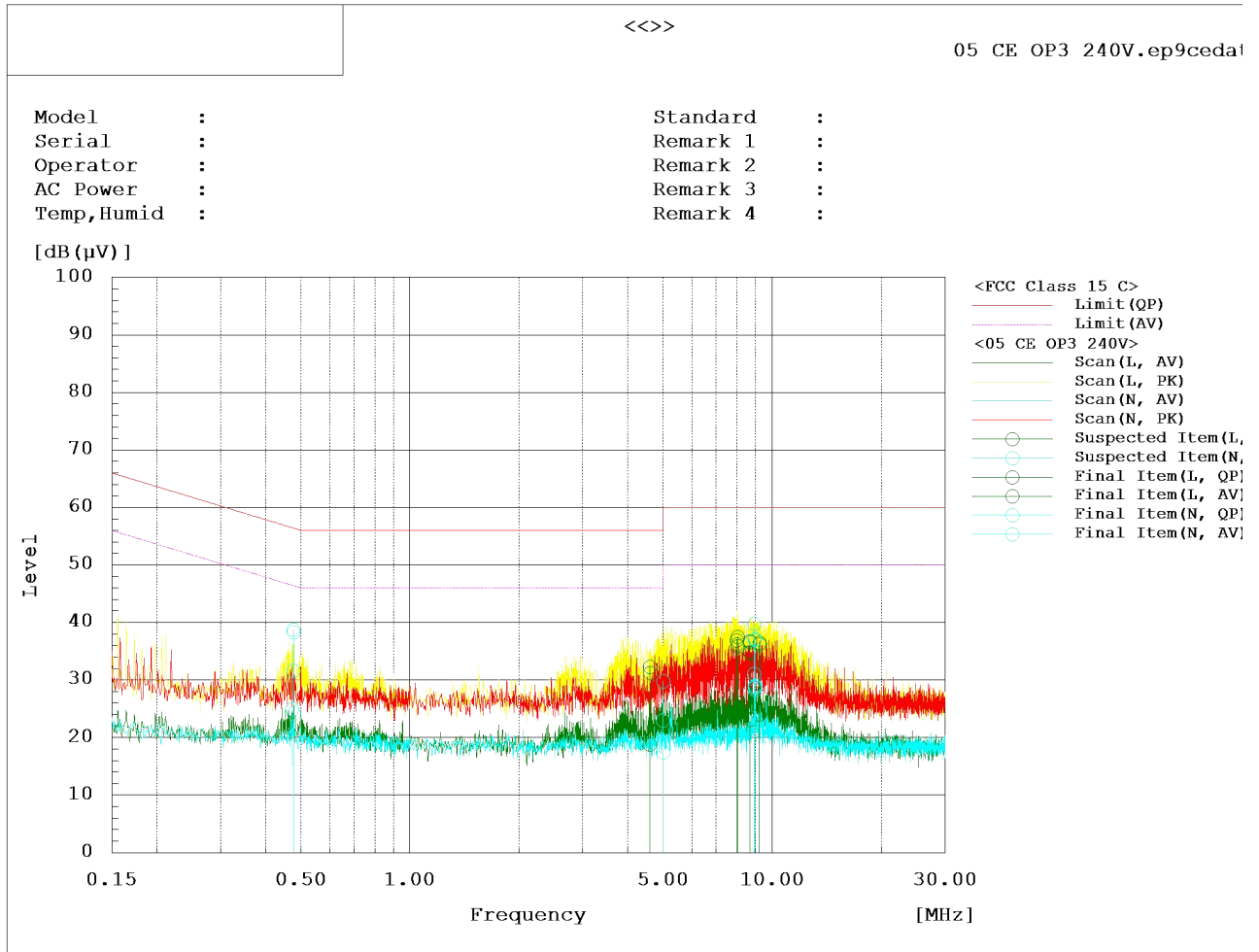


### L+N Line

#### 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	0.48	N	16.2	7.1		19.6	35.8	26.7		56.3	46.3		20.5	19.6		Pass
Band1	0.48	N	16.2	7.3		19.6	35.8	26.9		56.3	46.3		20.5	19.4		Pass
Band1	4.02	N	11.3	2.5		19.6	30.9	22.1		56	46		25.1	23.9		Pass
Band1	4.24	N	12.1	3.3		19.6	31.7	22.9		56	46		24.3	23.1		Pass
Band1	8.64	N	16.5	4.3		19.6	36.1	23.9		60	50		23.9	26.1		Pass
Band1	9.07	N	10.3	-0.4		19.6	29.9	19.2		60	50		30.1	30.8		Pass
Band1	4.36	L	12.3	-3.5		19.6	31.9	16.1		56	46		24.1	29.9		Pass
Band1	4.41	L	10.6	-3.6		19.6	30.2	16		56	46		25.8	30		Pass
Band1	5.29	L	15.2	2.8		19.6	34.8	22.4		60	50		25.2	27.6		Pass
Band1	5.36	L	14.7	0.7		19.6	34.3	20.3		60	50		25.7	29.7		Pass
Band1	5.4	L	14.5	0		19.6	34.1	19.6		60	50		25.9	30.4		Pass
Band1	10.8	L	14.6	1.9		19.6	34.2	21.5		60	50		25.8	28.5		Pass

**240V**



**MEASUREMENT RESULT:**

Range	Frequency MHz	Line	Reading			Factor dB	Level			Limit dB(μV)	Limit			Margin			Pass/Fail
			dB(μV)				dB(μV)				dB(μV)			dB			
			QP	AV	PK		QP	AV	PK		QP	AV	PK	QP	AV	PK	
Band1	4.6	L	12.7	-0.8		19.6	32.3	18.8		56	46		23.7	27.2		Pass	
Band1	7.99	L	17.3	4.6		19.6	36.9	24.2		60	50		23.1	25.8		Pass	
Band1	8.03	L	17.9	6.5		19.6	37.5	26.1		60	50		22.5	23.9		Pass	
Band1	8.68	L	17.1	3.6		19.6	36.7	23.2		60	50		23.3	26.8		Pass	
Band1	8.7	L	16.9	5.9		19.6	36.5	25.5		60	50		23.5	24.5		Pass	
Band1	9.22	L	16.9	4.4		19.6	36.5	24		60	50		23.5	26		Pass	
Band1	0.48	N	19.2	12		19.6	38.8	31.6		56.4	46.4		17.6	14.8		Pass	
Band1	0.48	N	18.7	12		19.6	38.3	31.6		56.4	46.4		18.1	14.8		Pass	
Band1	5	N	10.2	-2.1		19.6	29.8	17.5		56	46		26.2	28.5		Pass	
Band1	8.92	N	20.2	12		19.6	39.8	31.1		60	50		20.2	18.9		Pass	
Band1	8.96	N	17.4	9.2		19.6	37	28.8		60	50		23	21.2		Pass	
Band1	8.98	N	17.5	9.3		19.6	37.1	28.9		60	50		22.9	21.1		Pass	

---End of the test report---