

## **APPENDIX B – TEST DATA OF RADIATED EMISSION**

Note: The worst channel results are reflected in the report.

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

### **Radiated Emission Band Edge**

After comparison, the worst case attitude is EUT lay down.

Carrier frequency (MHz): 5260

Channel No.:52

Modulation Type: 802.11a

<b>Dectector: Peak</b>							
<b>Frequency</b> (MHz)	<b>Reading</b> <b>MaxPeak</b> (dBuV)	<b>MaxPeak</b> (dBuV/m)	<b>Over</b> <b>Limt</b> (dB)	<b>Limit</b> (dBuV/m)	<b>Cable</b> <b>Loss</b> (dB)	<b>Antenna</b> <b>Factor</b> (dB)	<b>Polarity</b>
5260.0	29.40	76.30	N/A	N/A	12.40	34.50	Vertical
5240.0	-2.10	44.80	-29.20	74.00	12.40	34.50	Vertical

<b>Dectector: Average</b>							
<b>Frequency</b> (MHz)	<b>Reading</b> <b>Average</b> (dBuV)	<b>Average</b> (dBuV/m)	<b>Over</b> <b>Limt</b> (dB)	<b>Limit</b> (dBuV/m)	<b>Cable</b> <b>Loss</b> (dB)	<b>Antenna</b> <b>Factor</b> (dB)	<b>Polarity</b>
5260.0	17.90	64.80	N/A	N/A	12.40	34.50	Vertical
5240.0	-15.50	31.40	-22.60	54.00	12.40	34.50	Vertical

Carrier frequency (MHz):5320

Channel No.:64

Modulation Type: 802.11a

<b>Dectector: Peak</b>							
<b>Frequency</b> (MHz)	<b>Reading</b> <b>MaxPeak</b> (dBuV)	<b>MaxPeak</b> (dBuV/m)	<b>Over</b> <b>Limt</b> (dB)	<b>Limit</b> (dBuV/m)	<b>Cable</b> <b>Loss</b> (dB)	<b>Antenna</b> <b>Factor</b> (dB)	<b>Polarity</b>
5320.0	22.80	69.70	N/A	N/A	12.40	34.50	Vertical
5340.0	-9.20	37.70	-36.30	74.00	12.40	34.50	Vertical

<b>Dectector: Average</b>							
<b>Frequency</b> (MHz)	<b>Reading</b> <b>Average</b> (dBuV)	<b>Average</b> (dBuV/m)	<b>Over</b> <b>Limt</b> (dB)	<b>Limit</b> (dBuV/m)	<b>Cable</b> <b>Loss</b> (dB)	<b>Antenna</b> <b>Factor</b> (dB)	<b>Polarity</b>
5320.0	11.30	58.20	N/A	N/A	12.40	34.50	Vertical
5340.0	-22.10	24.80	-29.20	54.00	12.40	34.50	Vertical

Carrier frequency (MHz): 5500

Channel No.:100  
Modulation Type: 802.11a

Dectector: Peak							
Frequency (MHz)	Reading MaxPeak (dBuV)	MaxPeak (dBuV/m)	Over Limt (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5500.0	27.60	74.50	N/A	N/A	12.40	34.50	Vertical
5480.0	-7.60	39.30	-34.70	74.00	12.40	34.50	Vertical

Dectector: Average							
Frequency (MHz)	Reading Average (dBuV)	Average (dBuV/m)	Over Limt (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5500.0	16.30	63.20	N/A	N/A	12.40	34.50	Vertical
5480.0	-20.70	26.20	-27.80	54.00	12.40	34.50	Vertical

Carrier frequency (MHz):5700  
Channel No.:140  
Modulation Type: 802.11a

Dectector: Peak							
Frequency (MHz)	Reading MaxPeak (dBuV)	MaxPeak (dBuV/m)	Over Limt (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5700.0	23.40	70.30	N/A	N/A	12.40	34.50	Vertical
5720.0	-7.40	39.50	-34.50	74.00	12.40	34.50	Vertical

Dectector: Average							
Frequency (MHz)	Reading Average (dBuV)	Average (dBuV/m)	Over Limt (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5700.0	11.80	58.70	N/A	N/A	12.40	34.50	Vertical
5720.0	-20.80	26.10	-27.90	54.00	12.40	34.50	Vertical

Carrier frequency (MHz): 5745  
Channel No.:149  
Modulation Type: 802.11a

Dectector: Peak							
Frequency (MHz)	Reading MaxPeak (dBuV)	MaxPeak (dBuV/m)	Over Limt (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5745.0	25.10	72.00	N/A	N/A	12.40	34.50	Vertical
5725.0	-7.20	39.70	-34.30	74.00	12.40	34.50	Vertical

Dectector: Average							
Frequency	Reading	Average	Over	Limit	Cable	Antenna	Polarity

(MHz)	Average (dBuV)	(dBuV/m)	Limit (dB)	(dBuV/m)	Loss (dB)	Factor (dB)	
5745.0	13.60	60.50	N/A	N/A	12.40	34.50	Vertical
5725.0	-20.70	26.20	-27.80	54.00	12.40	34.50	Vertical

Carrier frequency (MHz):5825  
Channel No.:165  
Modulation Type: 802.11a

Dectector: Peak							
Frequency (MHz)	Reading MaxPeak (dBuV)	MaxPeak (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5825.0	20.80	67.70	N/A	N/A	12.40	34.50	Vertical
5845.0	-7.50	39.40	-34.60	74.00	12.40	34.50	Vertical

Dectector: Average							
Frequency (MHz)	Reading Average (dBuV)	Average (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5825.0	9.10	56.00	N/A	N/A	12.40	34.50	Vertical
5845.0	-20.70	26.20	-27.80	54.00	12.40	34.50	Vertical

Carrier frequency (MHz):5720  
Channel No.:144  
Modulation Type: 802.11a

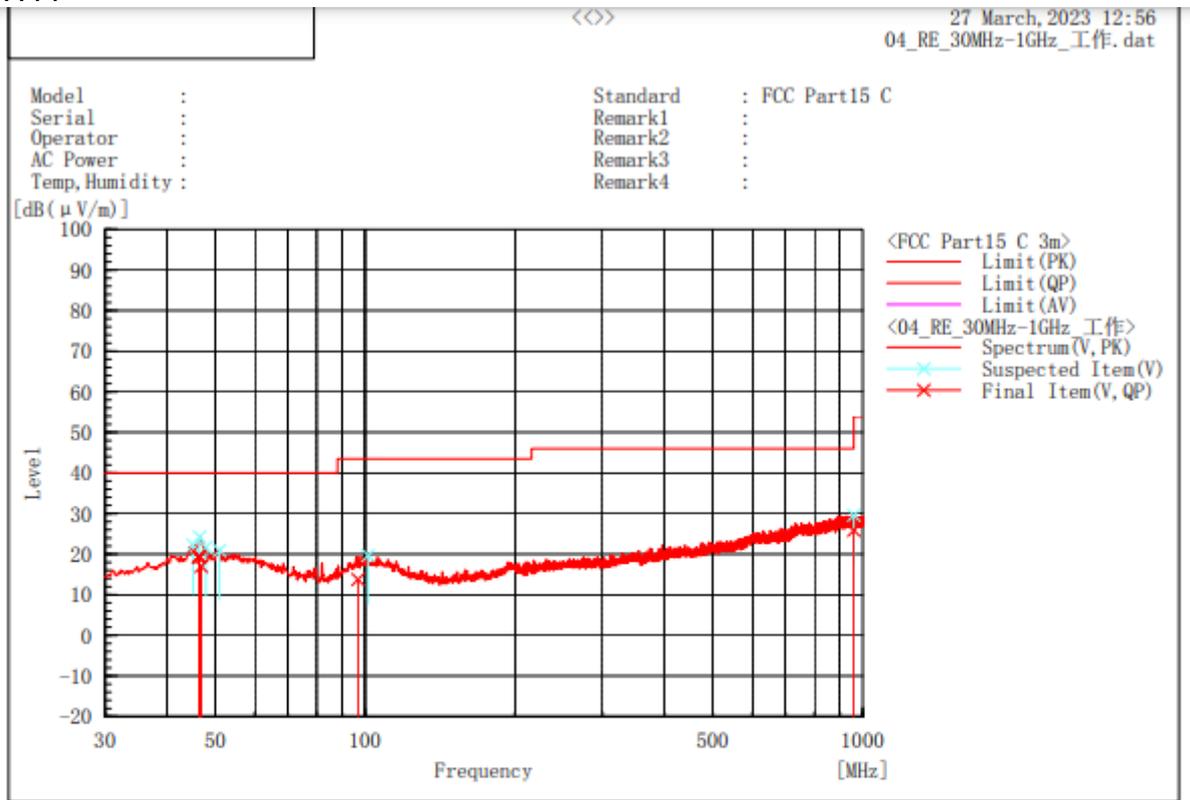
Dectector: Peak							
Frequency (MHz)	Reading MaxPeak (dBuV)	MaxPeak (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5700.0	23.40	70.30	N/A	N/A	12.40	34.50	Vertical
5720.0	-8.10	38.80	-35.20	74.00	12.40	34.50	Vertical

Dectector: Average							
Frequency (MHz)	Reading Average (dBuV)	Average (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)	Polarity
5700.0	11.90	58.80	N/A	N/A	12.40	34.50	Vertical
5720.0	-18.90	28.00	-26.00	54.00	12.40	34.50	Vertical

**RE Sample Calculations**

After comparison, the worst case attitude is EUT lay down.

CH44

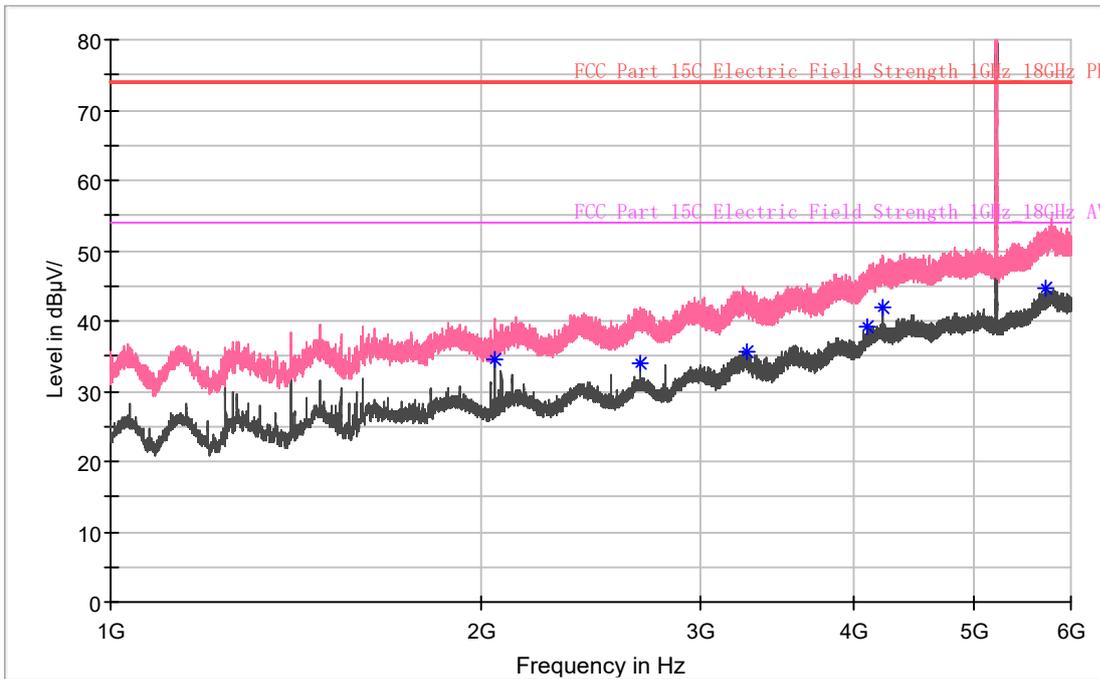


Final Result

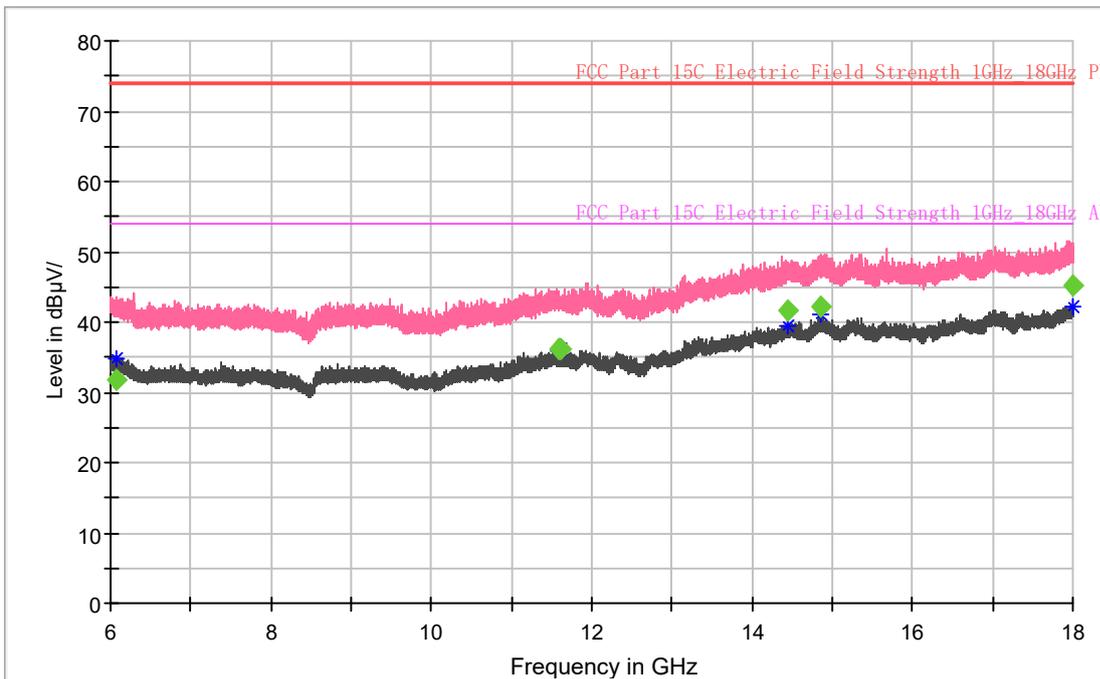
No.	Frequency [MHz]	(P)	Reading QP [dB (μV)]	c. f [dB(1/m)]	Result QP [dB(μV/m)]	Limit QP [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]	Remark
1	46.385	V	55.8	-36.3	19.5	40.0	20.5	101.0	359.1	
2	46.236	V	55.6	-36.3	19.3	40.0	20.7	399.0	359.1	
3	46.465	V	55.6	-36.3	19.3	40.0	20.7	101.0	356.6	
4	46.852	V	53.2	-36.2	17.0	40.0	23.0	201.0	162.9	
5	96.689	V	51.8	-38.0	13.8	43.5	29.7	399.0	244.4	
6	959.781	V	50.3	-24.4	25.9	46.0	20.1	142.0	27.8	

Frequency Range: 30MHz -1GHz

Full Spectrum



Full Spectrum



Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Arpl (dB)	Polarity
2048.10	53.96	34.56	54.00	19.44	-19.40	Vertical
2688.00	51.20	34.00	54.00	20.00	-17.20	Vertical
3284.00	49.80	35.60	54.00	18.40	-14.20	Vertical
4096.10	50.27	39.27	54.00	14.73	-11.00	Vertical

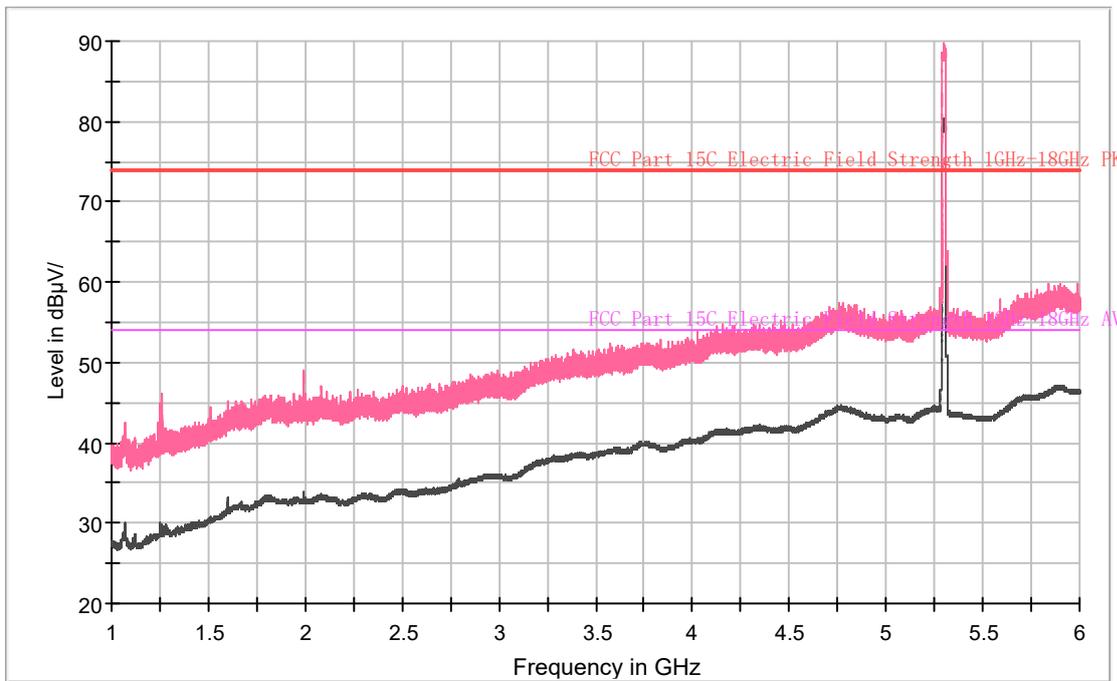
4224.00	52.09	41.99	54.00	12.01	-10.10	Vertical
5720.10	50.16	44.66	54.00	9.34	-5.50	Vertical

Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Arpl (dB)	Polarity
6061.60	52.64	31.74	54.00	22.26	-20.90	Vertical
11588.40	53.47	36.27	54.00	17.73	-17.20	Vertical
11604.80	53.47	36.27	54.00	17.73	-17.20	Vertical
14440.80	55.73	41.53	54.00	12.47	-14.20	Vertical
14852.40	56.41	42.31	54.00	11.69	-14.10	Vertical
17992.00	55.41	45.21	54.00	8.79	-10.20	Vertical

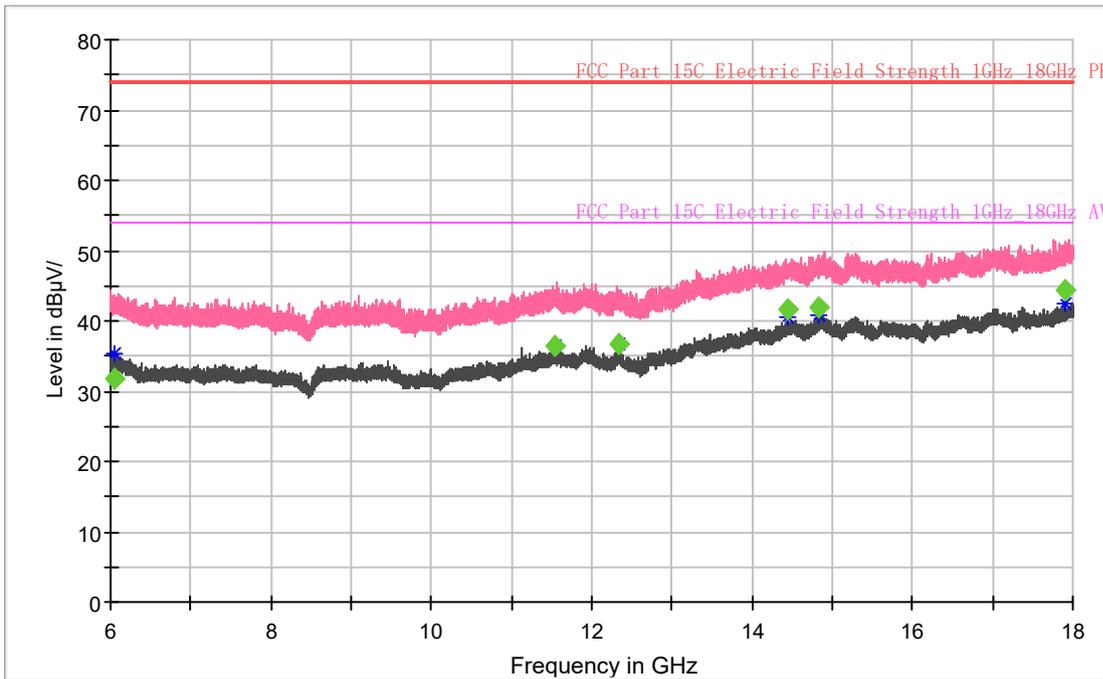
Frequency Range: 1GHz -18GHz

CH60

Full Spectrum



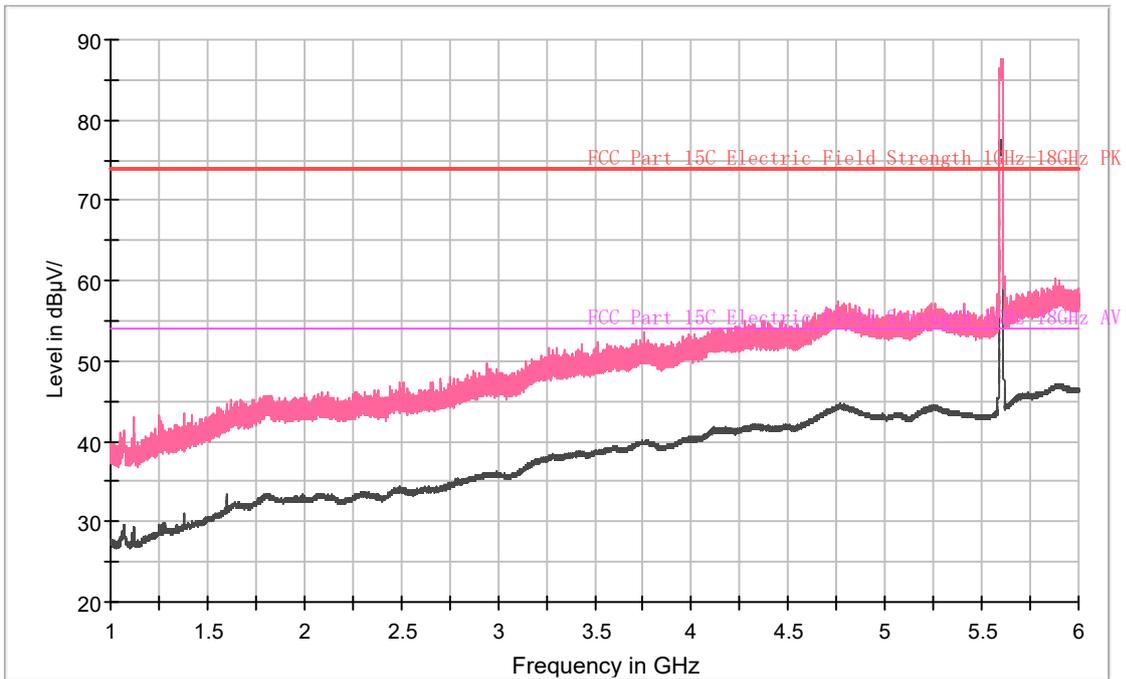
Full Spectrum



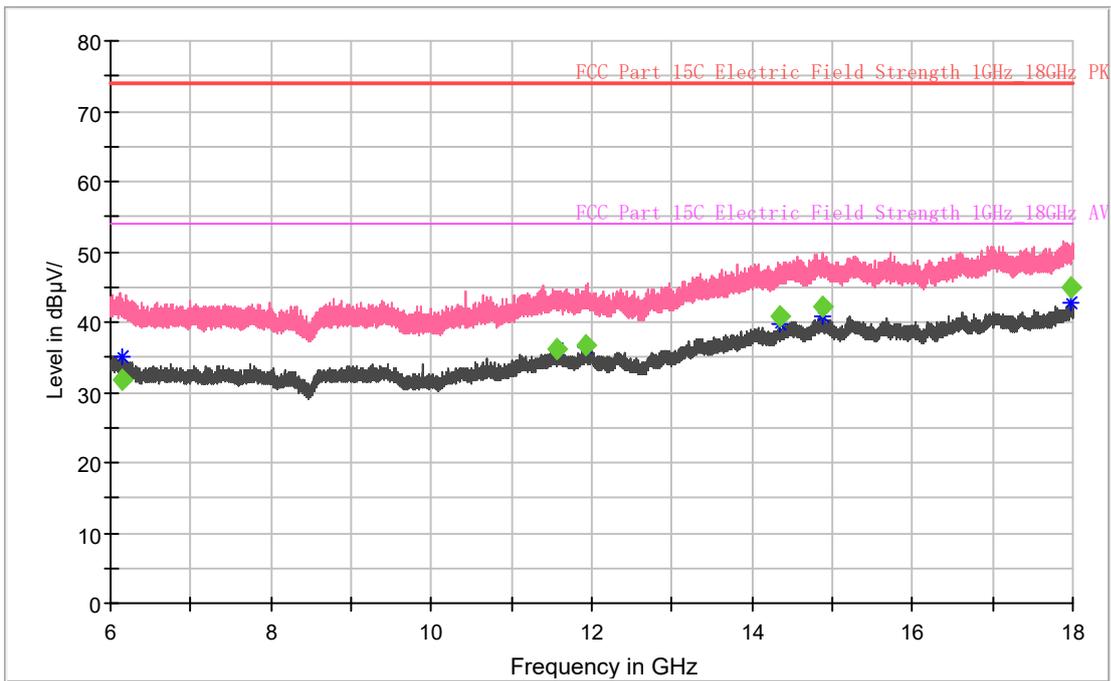
Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Arpl (dB)	Polarity
6042.00	52.70	31.80	54.00	22.20	-20.90	Vertical
11539.20	53.53	36.33	54.00	17.67	-17.20	Vertical
12342.80	54.53	36.73	54.00	17.27	-17.80	Vertical
14440.00	55.77	41.57	54.00	12.43	-14.20	Vertical
14819.20	56.02	42.02	54.00	11.98	-14.00	Vertical
17915.20	55.18	44.48	54.00	9.52	-10.70	Vertical

CH120

Full Spectrum



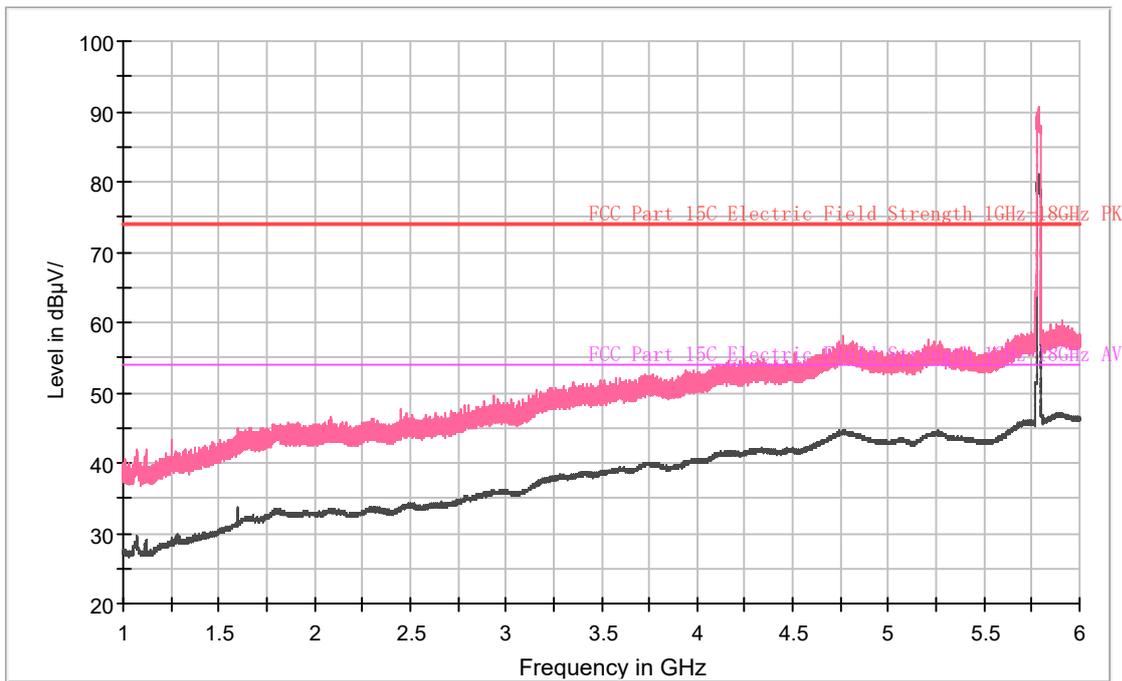
Full Spectrum



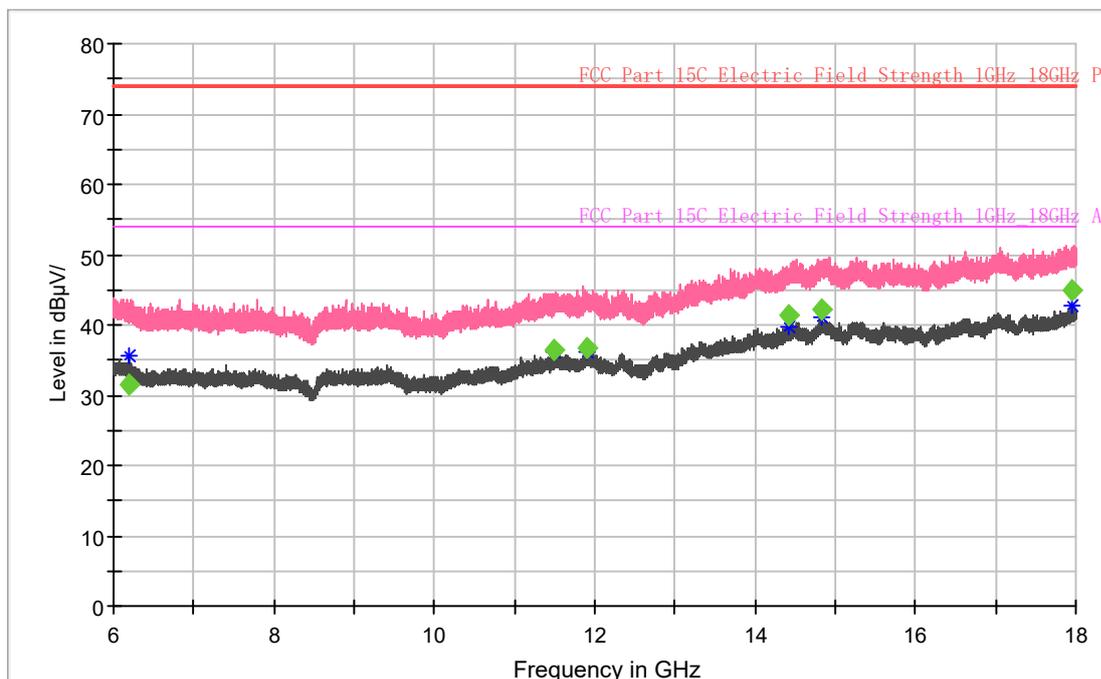
Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Arpl (dB)	Polarity
6152.00	53.17	31.87	54.00	22.13	-21.30	Vertical
11575.20	53.48	36.28	54.00	17.72	-17.20	Vertical
11918.80	54.02	36.82	54.00	17.18	-17.20	Vertical
14334.80	55.14	40.84	54.00	13.16	-14.30	Vertical
14880.40	56.38	42.28	54.00	11.72	-14.10	Vertical
17967.60	55.43	45.03	54.00	8.97	-10.40	Vertical

CH157

Full Spectrum



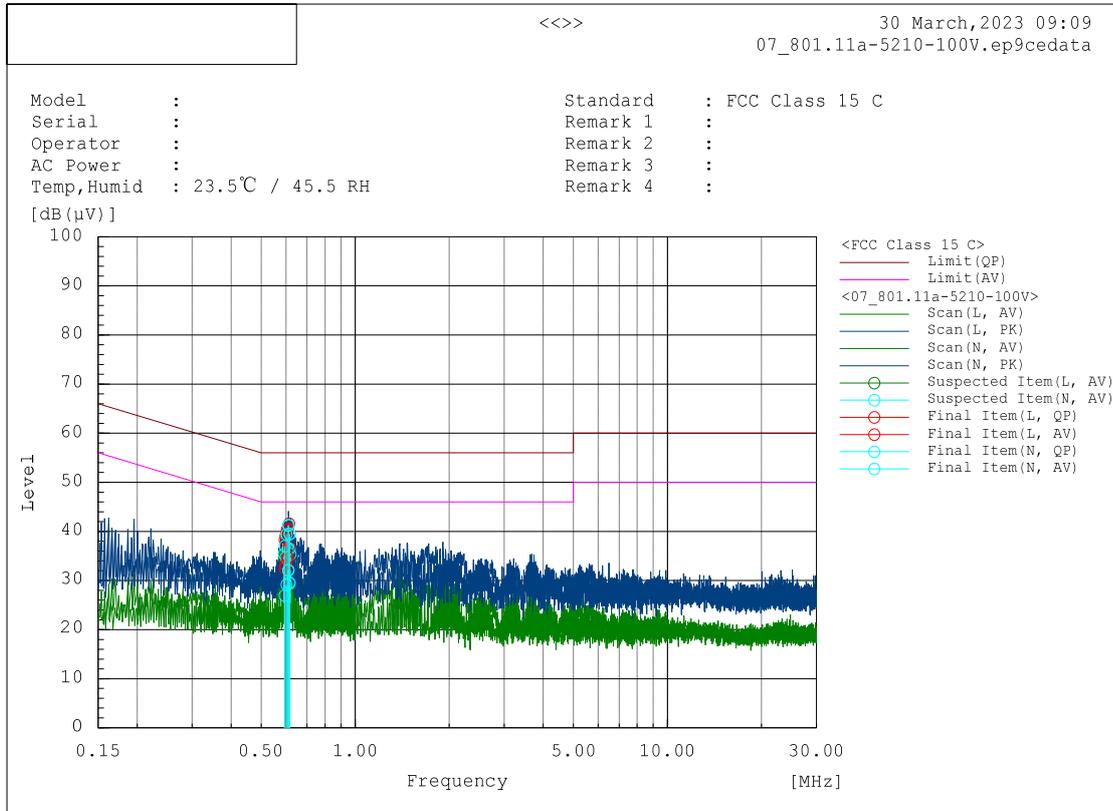
Full Spectrum



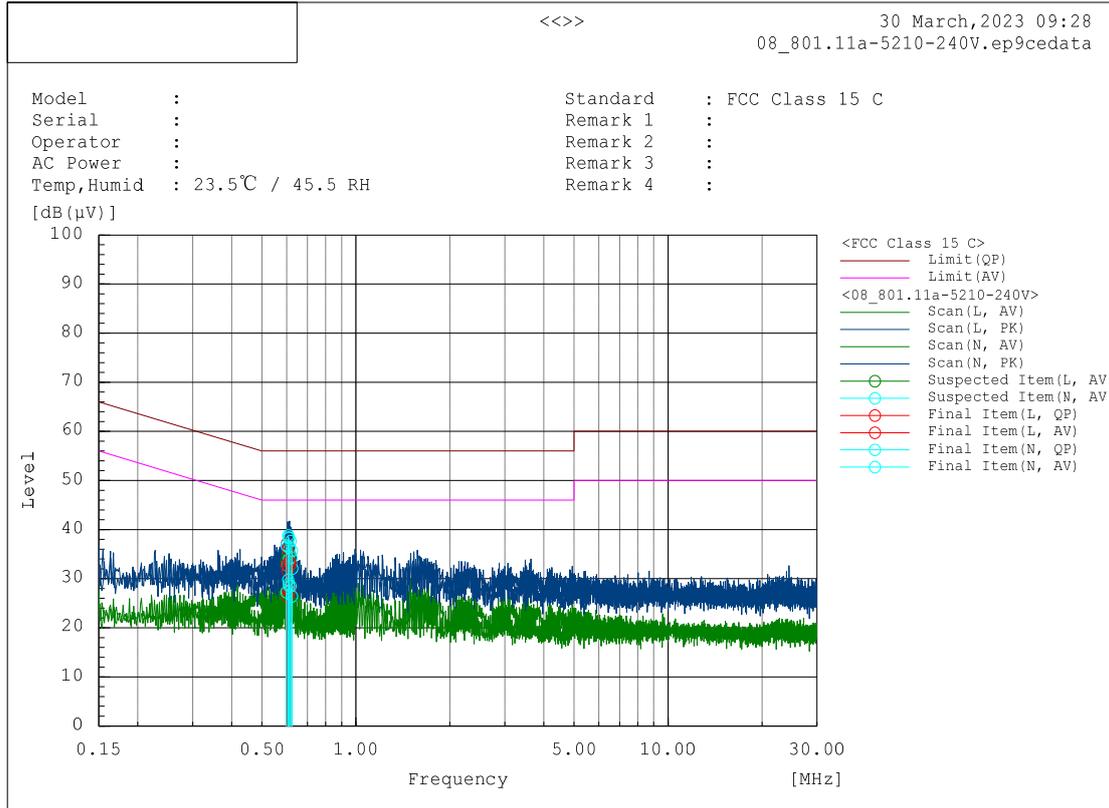
Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Arpl (dB)	Polarity
6197.60	52.94	31.44	54.00	22.56	-21.50	Vertical
11488.80	53.61	36.41	54.00	17.59	-17.20	Vertical
11900.40	54.03	36.83	54.00	17.17	-17.20	Vertical
14426.80	55.70	41.50	54.00	12.50	-14.20	Vertical
14831.60	56.26	42.16	54.00	11.84	-14.10	Vertical
17946.40	55.31	44.81	54.00	9.19	-10.50	Vertical

## AC Power line Conducted Emission

### MEASUREMENT RESULT:



Range	Frequency MHz	Line	Reading			Factor	Level			Limit	Limit			Margin			Pass/Fail
			dB(µV)				dB	dB(µV)			dB(µV)	dB(µV)			dB		
			QP	AV	PK			QP	AV			PK	QP	AV		PK	
Band1	0.594	L	18.4	12.5		19.9	38.3	32.4		56	46		17.7	13.6		Pass	
Band1	0.598	L	19.2	13.2		19.9	39.1	33.1		56	46		16.9	12.9		Pass	
Band1	0.603	L	20.3	14.2		19.9	40.2	34.1		56	46		15.8	11.9		Pass	
Band1	0.607	L	20.7	14.8		19.9	40.6	34.7		56	46		15.4	11.3		Pass	
Band1	0.607	L	20.6	14.7		19.9	40.5	34.6		56	46		15.5	11.4		Pass	
Band1	0.613	L	21.7	17		19.9	41.6	36.9		56	46		14.4	9.1		Pass	
Band1	0.593	N	17.1	7		19.9	37	26.9		56	46		19	19.1		Pass	
Band1	0.602	N	19.5	9.2		19.9	39.4	29.1		56	46		16.6	16.9		Pass	
Band1	0.611	N	21.3	12.2		19.9	41.2	32.1		56	46		14.8	13.9		Pass	
Band1	0.609	N	21.4	12.2		19.9	41.3	32.1		56	46		14.7	13.9		Pass	
Band1	0.616	N	19.5	9.5		19.9	39.4	29.4		56	46		16.6	16.6		Pass	
Band1	0.615	N	19.6	9.7		19.9	39.5	29.6		56	46		16.5	16.4		Pass	



Range	Frequency MHz	Line	Reading			Factor	Level			Limit			Margin			Pass/Fail	Remark	
			dB(μV)				dB	dB(μV)			dB(μV)			dB				
			QP	AV	PK			QP	AV	PK	QP	AV	PK	QP	AV			PK
Band1	0.599	N	16.9	7.4		19.9	36.8	27.3		56	46		19.2	18.7		Pass		
Band1	0.607	N	18.9	9.9		19.9	38.8	29.8		56	46		17.2	16.2		Pass		
Band1	0.609	N	18.5	9.1		19.9	38.4	29		56	46		17.6	17		Pass		
Band1	0.61	N	18.4	8.6		19.9	38.3	28.5		56	46		17.7	17.5		Pass		
Band1	0.618	N	17.7	8.6		19.9	37.6	28.5		56	46		18.4	17.5		Pass		
Band1	0.624	N	15.8	6.5		19.9	35.7	26.4		56	46		20.3	19.6		Pass		
Band1	0.6	L	17.2	13		19.9	37.1	32.9		56	46		18.9	13.1		Pass		
Band1	0.604	L	11.7	6.4		19.9	31.6	26.3		56	46		24.4	19.7		Pass		
Band1	0.605	L	16.1	7.7		19.9	36	27.6		56	46		20	18.4		Pass		
Band1	0.613	L	13.5	8.3		19.9	33.4	28.2		56	46		22.6	17.8		Pass		
Band1	0.611	L	13.5	8.4		19.9	33.4	28.3		56	46		22.6	17.7		Pass		
Band1	0.617	L	13.1	7.4		19.9	33	27.3		56	46		23	18.7		Pass		

---End of Test Report---