

12.1.6. CONDUCTED SPURIOUS EMISSION

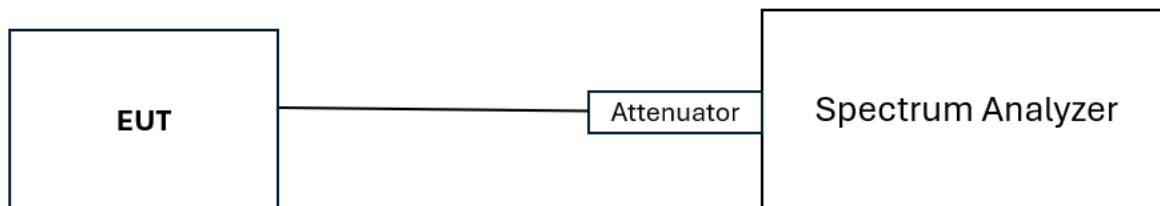
LIMITS

FCC §15.247 (d)
RSS-247 6.6

PROCEDURE

Output power was measured based on the use of a peak measurement; therefore, the required attenuation is -20 dBc.

TEST SETUP

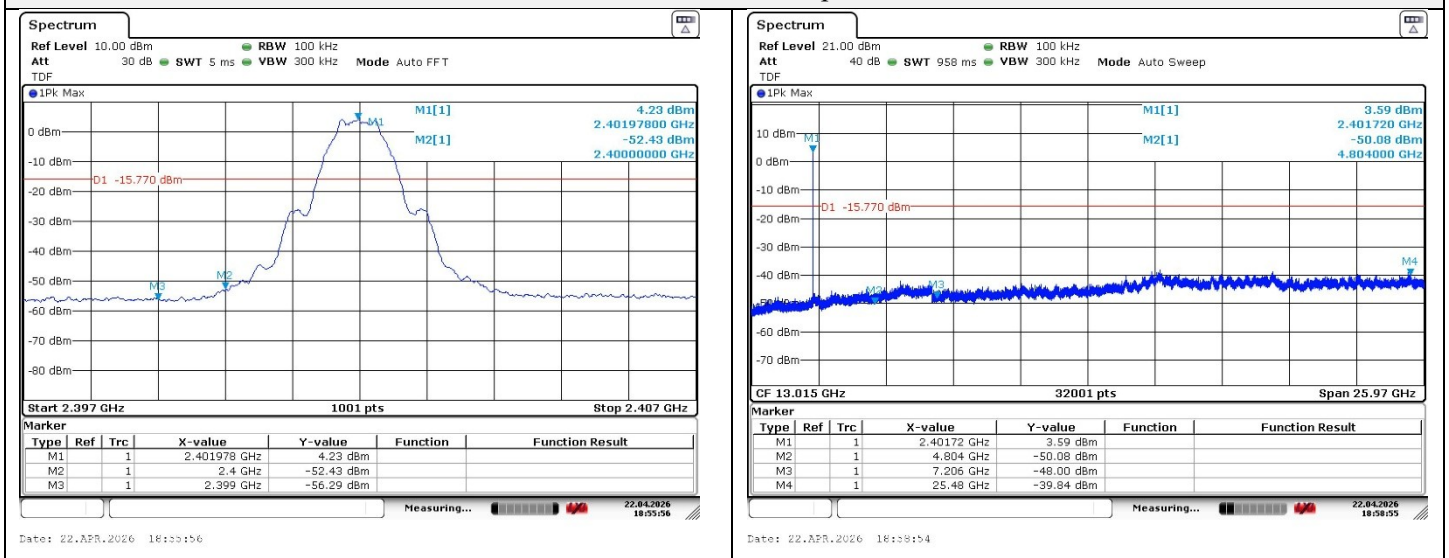


The loss between RF output port of the EUT and the input port of the spectrum analyzer has been taken into consideration.

TEST PLOTS

LEFT CUP

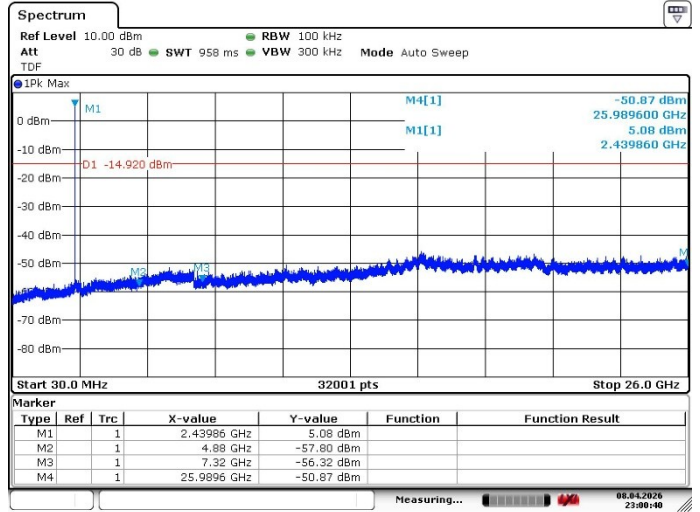
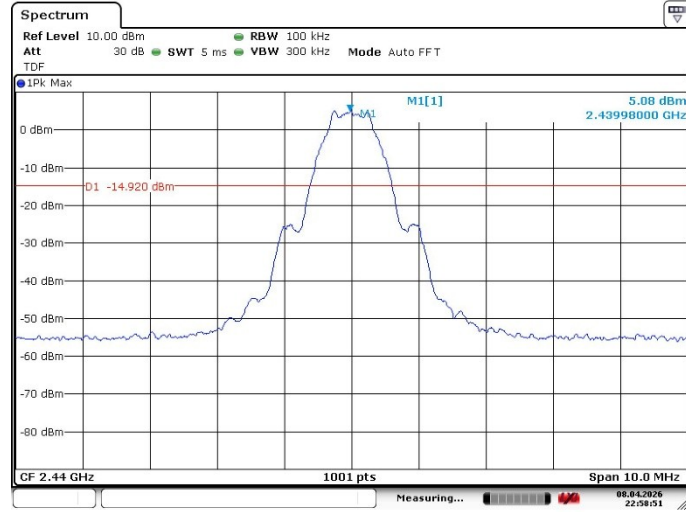
Low – 2402 :1 Mbps



LOW CHANNEL BANDEDGE

OUT-OF-BAND LOW CHANNEL

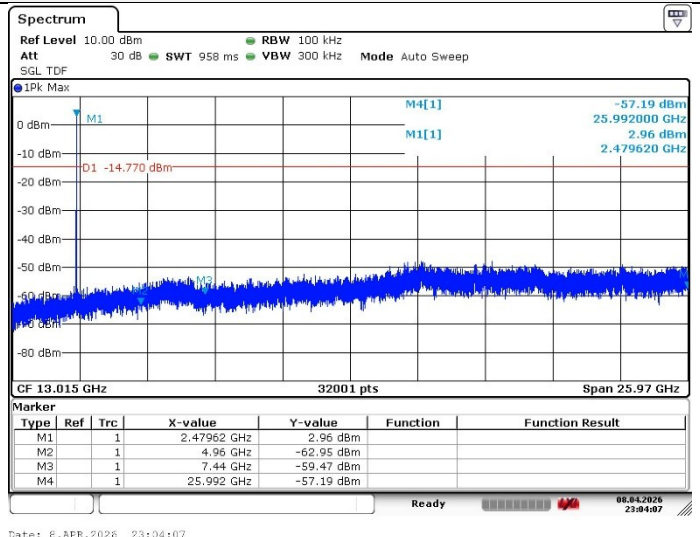
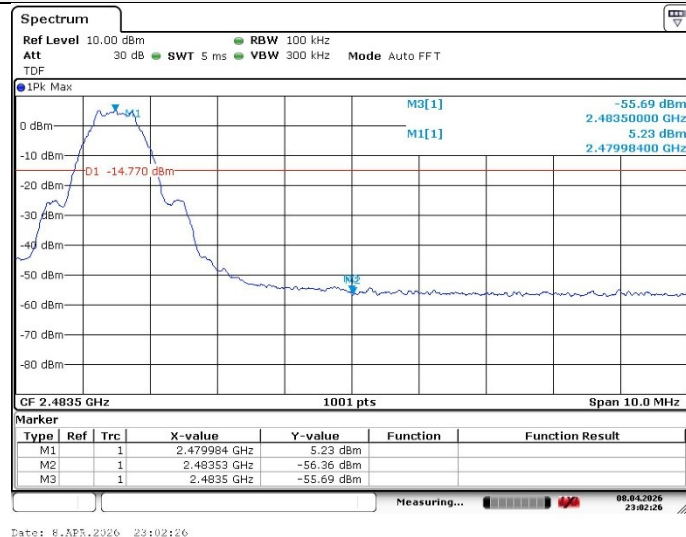
Mid – 2440 :1 Mbps



IN-BAND REFERENCE LEVEL

OUT-OF-BAND MID CHANNEL

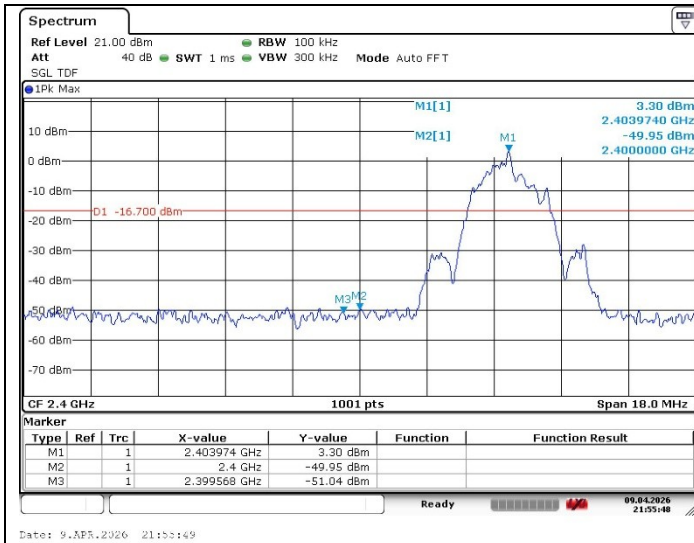
High – 2480 :1 Mbps



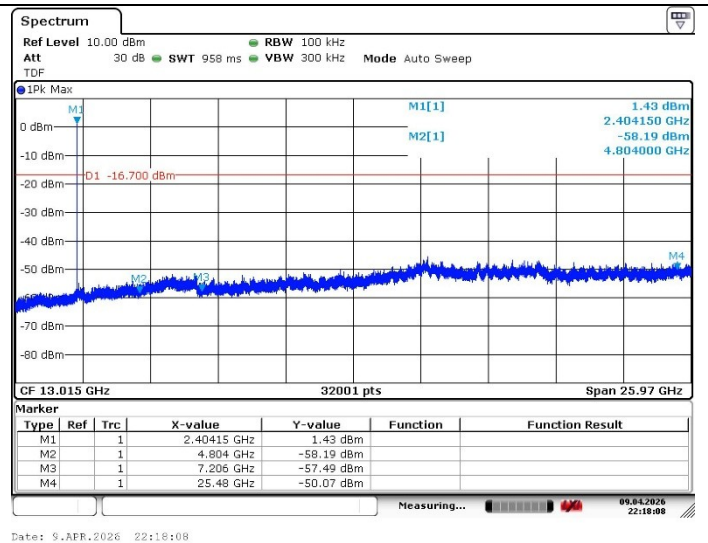
HIGH CHANNEL BANDEDGE

OUT-OF-BAND HIGH CHANNEL

Low – 2404 : 2 Mbps

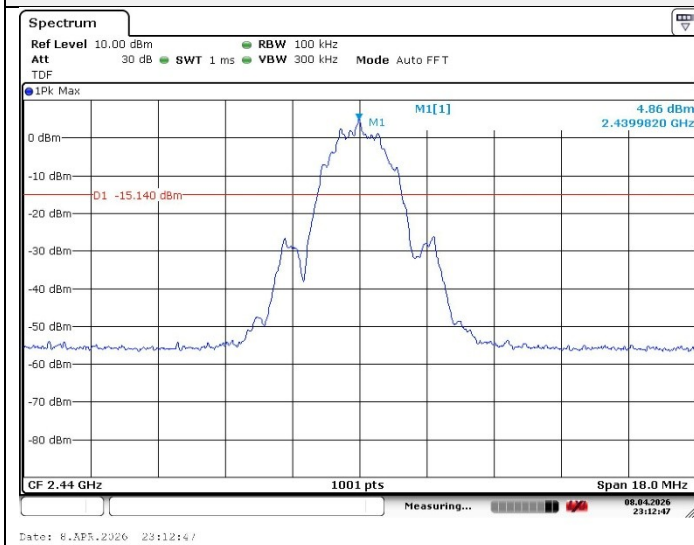


LOW CHANNEL BANDEDGE

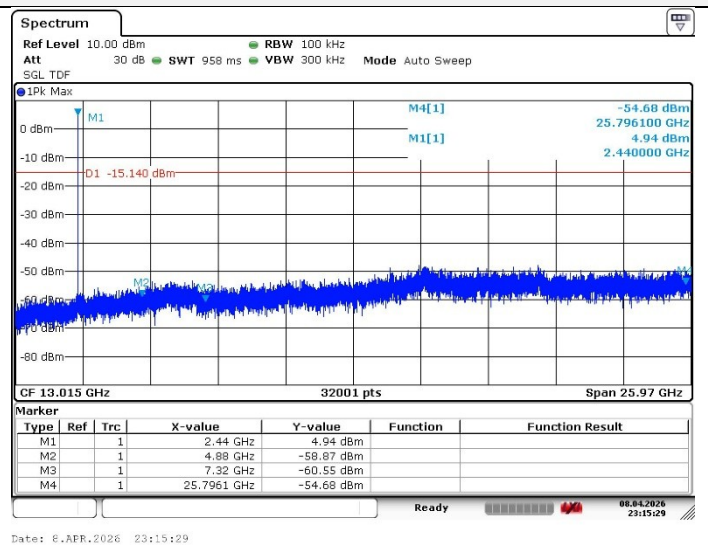


OUT-OF_BAND LOW CHANNEL

Mid – 2440 : 2 Mbps

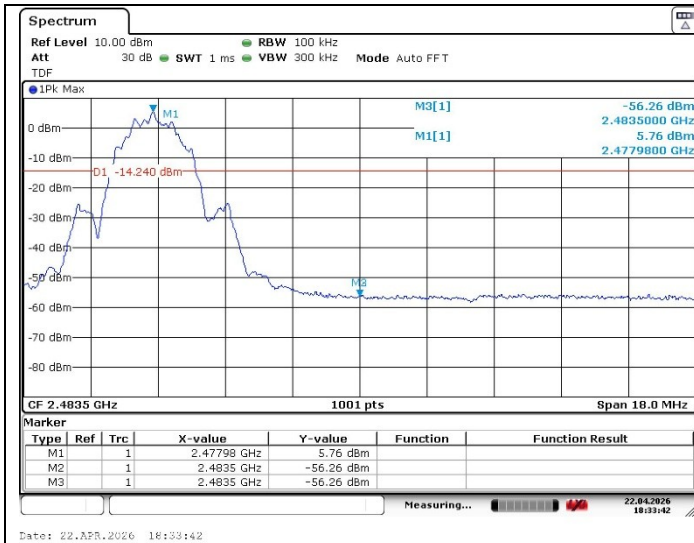


IN-BAND REFERENCE LEVEL

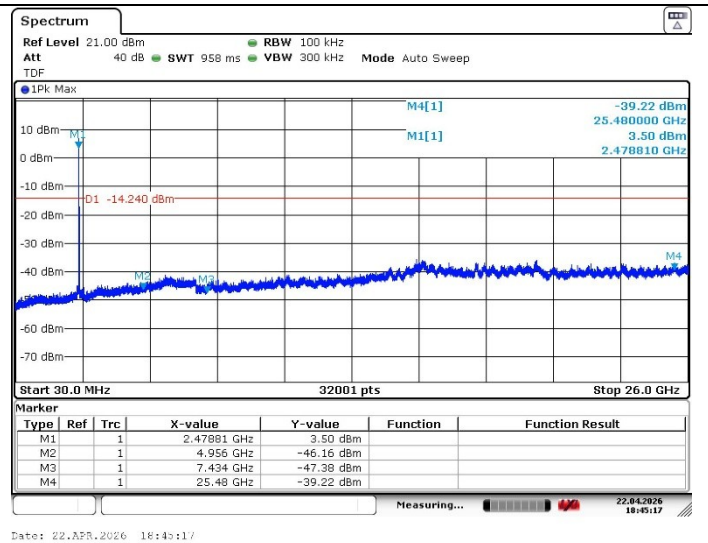


OUT-OF_BAND MID CHANNEL

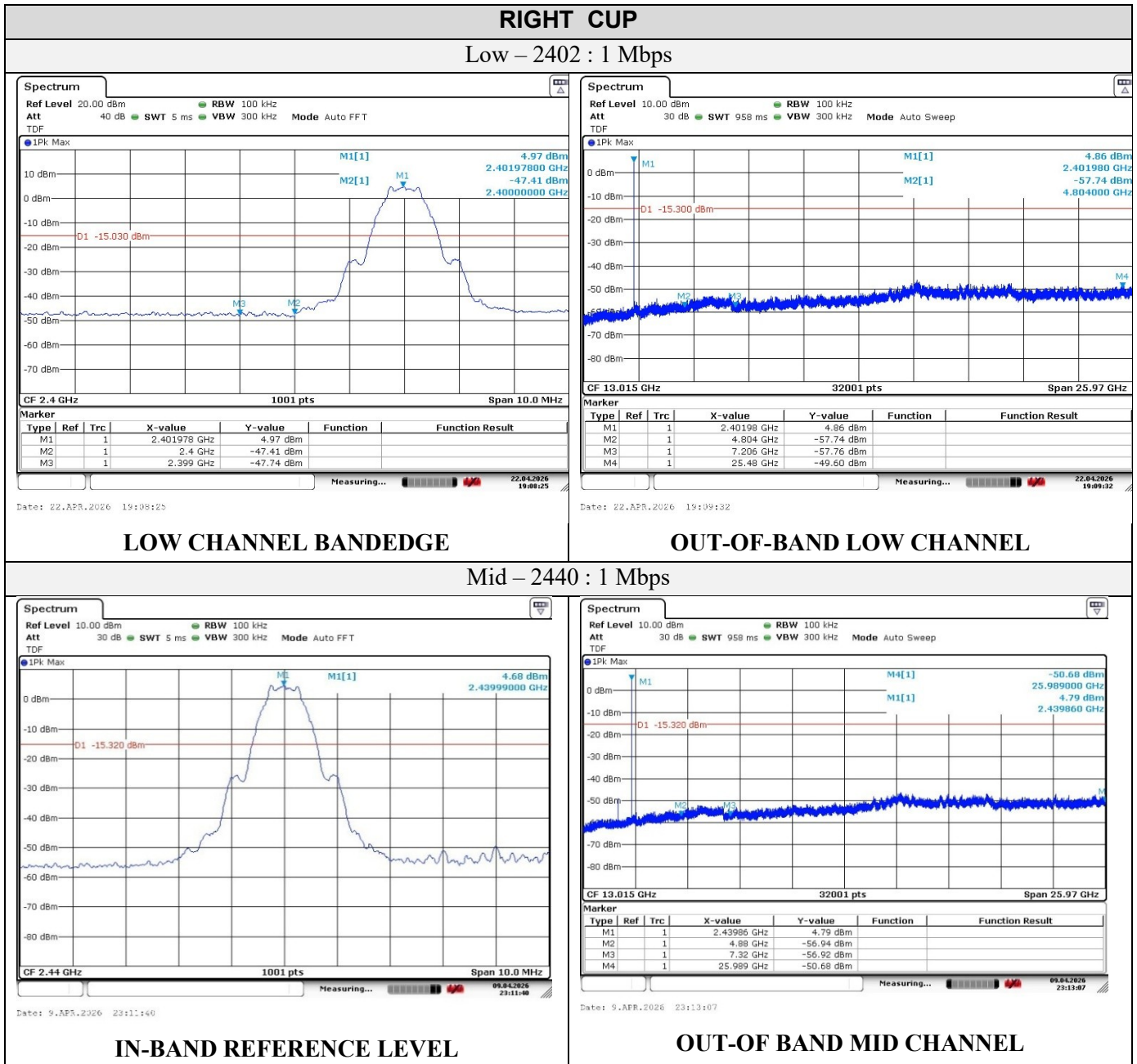
High – 2478 : 2 Mbps



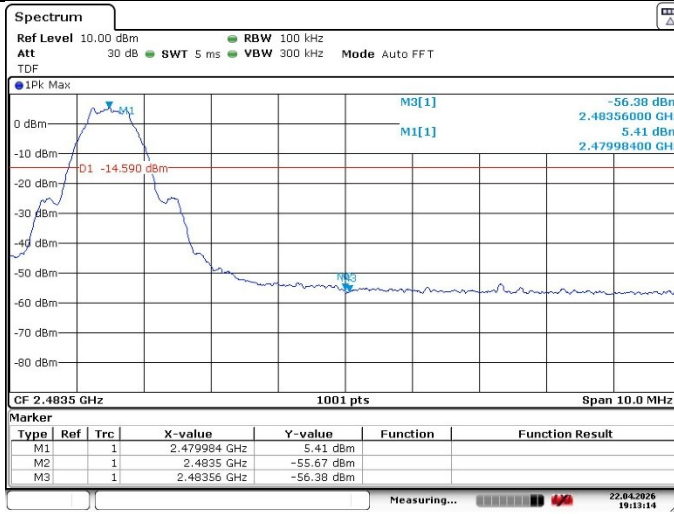
HIGH CHANNEL BANDEDGE



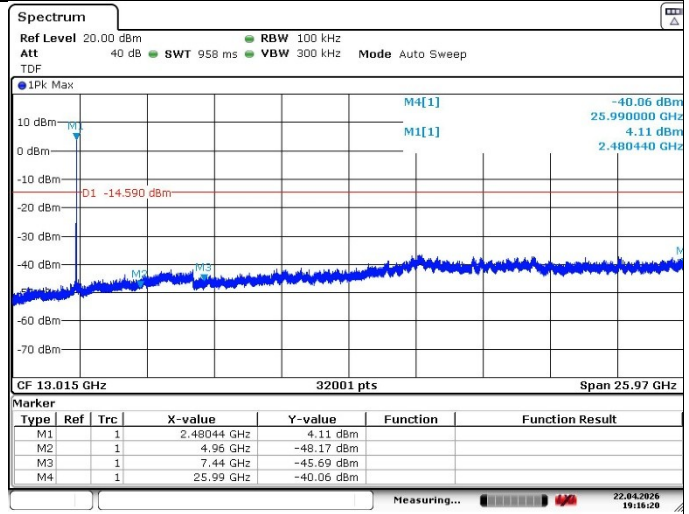
OUT-OF-BAND HIGH CHANNEL



High – 2480 : 1 Mbps

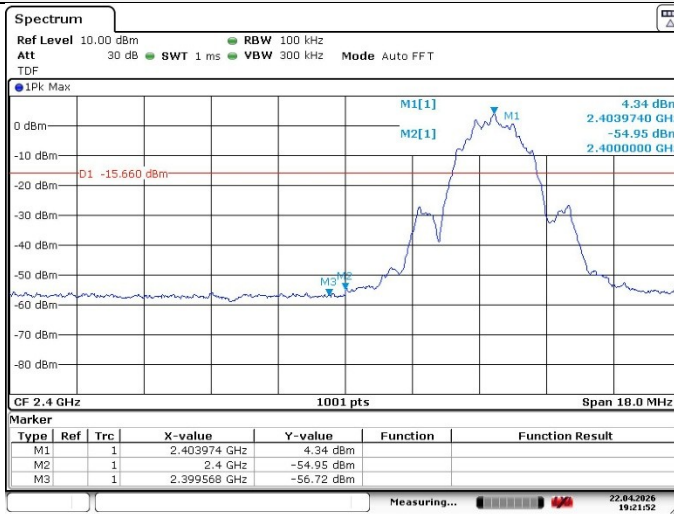


HIGH CHANNEL BANDEDGE

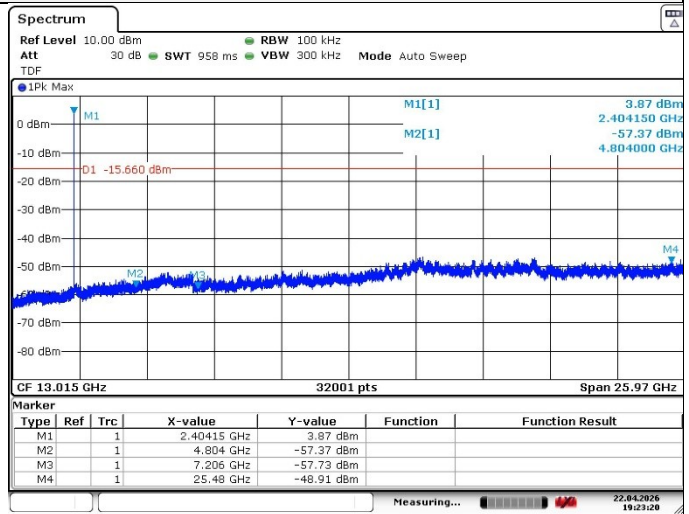


OUT-OF-BAND HIGH CHANNEL

Low – 2404 : 2 Mbps

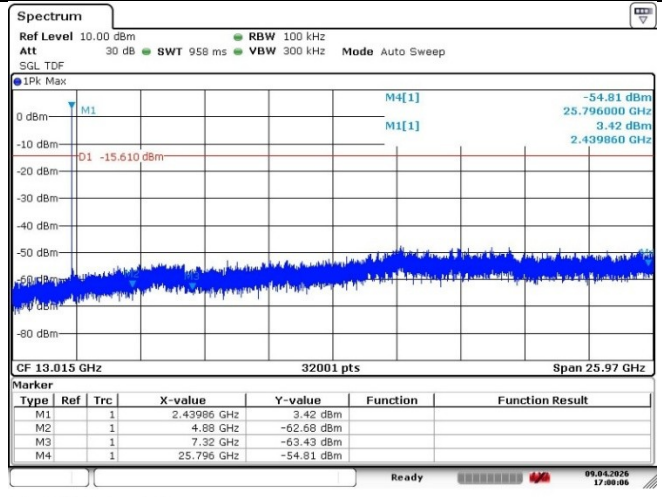
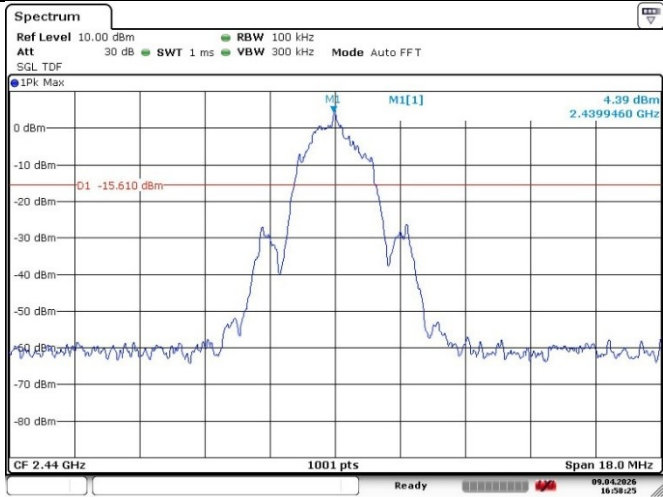


LOW CHANNEL BANDEDGE

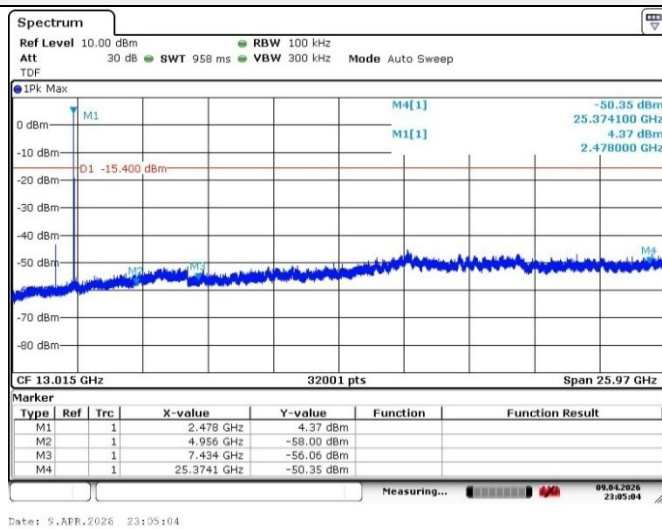
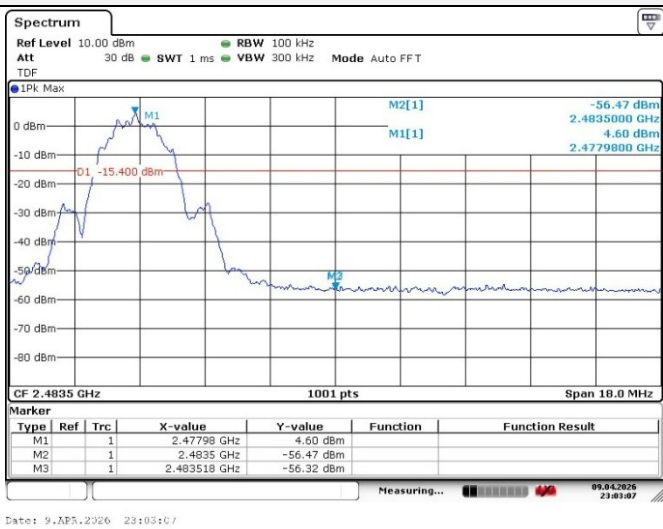


OUT-OF-BAND LOW CHANNEL

Mid – 2440 : 2 Mbps



High – 2478 : 2 Mbps



12.1.7. RADIATED EMISSION

LIMITS

FCC §15.205 and §15.209

RSS-247, Section 8.9 and 8.10

Frequency range (MHz)	Field strength limit ($\mu\text{V/m}$)	Field strength limit (dB $\mu\text{V/m}$) at 3m
0.009-0.490	2400/F(kHz) @ 300 m	128.52 to 93.80 **
0.490-1.705	24000/F(kHz) @ 30 m	73.80 to 62.98 **
1.705 – 30	30 @ 30m	69.54
30 – 88	100	40
88 – 216	150	43.5
216 – 960	200	46
Above 960	500	54

** Logarithmically decreasing.

IC RSS-GEN Clause 8.9 and 8.10.

Frequency range (MHz)	Field strength limit ($\mu\text{A/m}$)	Field strength limit (dB $\mu\text{A/m}$) at 3m
0.009-0.490	6.37/F(kHz) @ 300 m	76.99 to 42.27 ***
0.490-1.705	63.7/F(kHz) @ 30 m	22.27 to 11.44 ***
1.705 – 30	30 @ 30m	18.062
Frequency range (MHz)	Field strength limit ($\mu\text{V/m}$)	Field strength limit (dB $\mu\text{V/m}$) at 3m
30 – 88	100	40
88 – 216	150	43.5
216 – 960	200	46
Above 960	500	54

*** Logarithmically decreasing.

PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 kHz for average measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak and average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and Reference to ground).

Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

Prescan

Frequency	RBW	VBW	Sweep time	Sweep points for pre-scan
9 kHz to 150 kHz	200 Hz	3 kHz	Auto \ 700ms	2001
150 kHz to 30 MHz	9 kHz	100 kHz	Auto \ 70ms	2001
30 MHz to 1 GHz	120 kHz	1 MHz	Auto \ 20ms	10001
1 GHz to 18 GHz – Peak	1 MHz	3 MHz	1G to 3G – Auto 4.01ms 3G to 18G – Auto 21ms	1G to 3G - 4001 3G to 18G - 10001
1 GHz to 18 GHz – Average	1 MHz	30 kHz	1G to 3G – Auto 4.01ms 3G to 18G – Auto 21ms	1G to 3G - 4001 3G to 18G - 10001
18 GHz to 26.5 GHz - Peak	1 MHz	3 MHz	Auto \ 50ms	10001
18 GHz to 26.5 GHz – Average	1 MHz	30 kHz	Auto \ 50ms	10001
Band edge	1 MHz	3 MHz	1G to 3G – 4.01ms	2001

Final measurement

Frequency	RBW	VBW	Sweep time
9 kHz to 150 kHz	200 Hz	3 kHz	--
150 kHz to 30 MHz	9 kHz	100 kHz	--
30 MHz to 1 GHz	120 kHz	1 MHz	1sec.
1 GHz to 18 GHz – Peak & Average	1 MHz	3 MHz	1sec.
18 GHz to 26.5 GHz – Peak & Average	1 MHz	3 MHz	1sec.
Band edge	1 MHz	3 MHz	1sec.

Test Setup Diagram

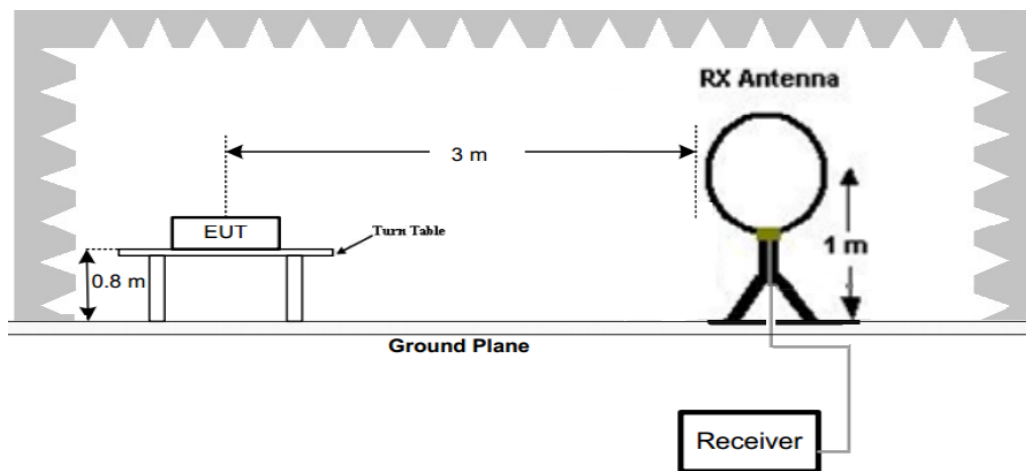


Figure 1 : Radiated_Test Setup_9kHz – 30 MHz.

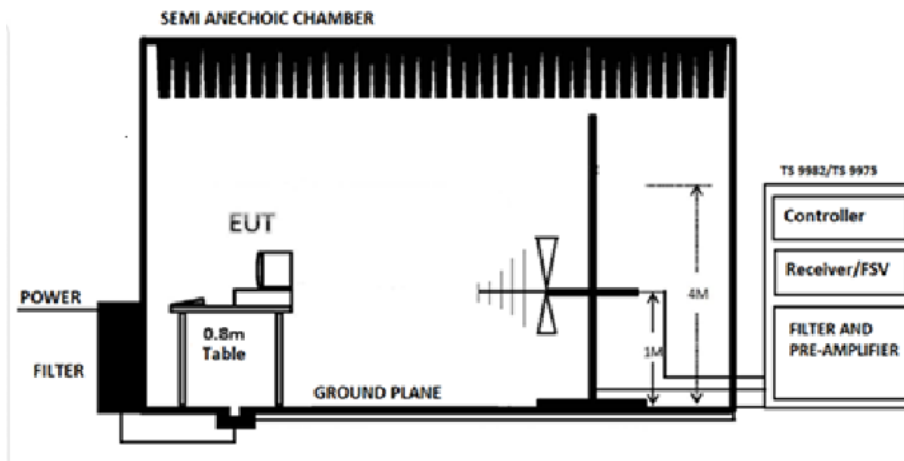


Figure 2 : Radiated_Test Setup_30 MHz to 1 GHz .

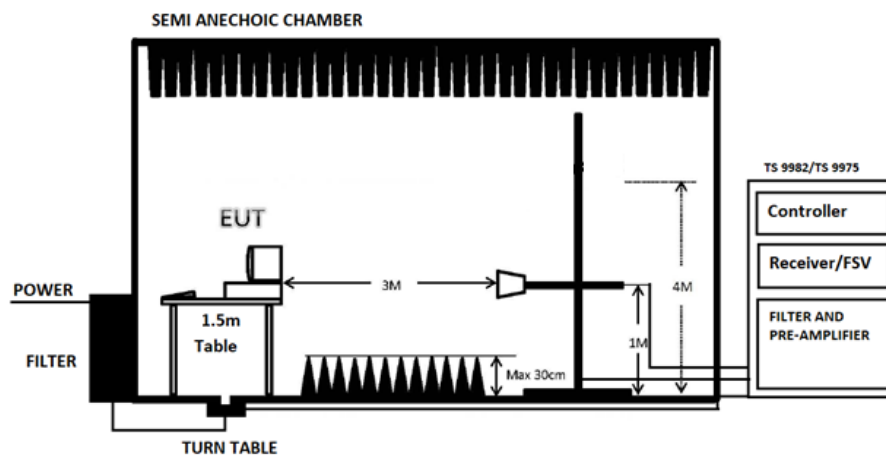


Figure 3 : Radiated_Test Setup_1GHz to 26.5 GHz.

12.1.7.1. Radiated band-edge above 1 GHz.

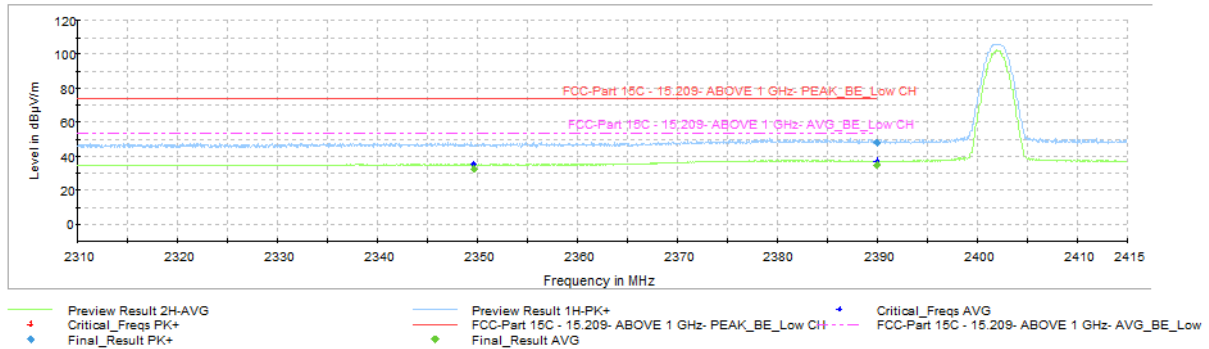


Figure 4 : RBE_Left Cup_1Mbps_Low channel_2402_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2389.958	48.12	---	0.00	---	74	25.88	104.00	H	262	-1.4
2349.638	---	32.94	2.23	35.17	54	18.84	104.00	H	262	-3.2
2389.958	---	35.01	2.23	37.24	54	16.77	104.00	H	262	-1.4

Table 1: RBE_Left Cup_1Mbps_Low channel_2402_Final table in Horizontal Polarization

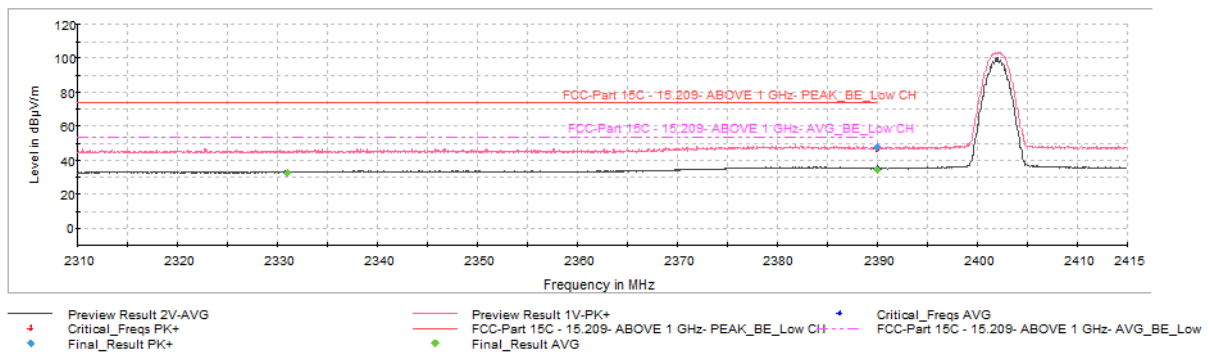


Figure 5 : RBE_Left Cup_1Mbps_Low channel_2402_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2389.958	47.92	---	0.00	---	74	26.08	104.00	V	303	-1.4
2330.948	---	32.60	2.23	34.83	54	19.18	104.00	V	303	-3.4
2389.958	---	34.72	2.23	36.95	54	17.06	104.00	V	303	-1.4

Table 2: RBE_Left Cup_1Mbps_Low channel_2402_Final table in Vertical Polarization

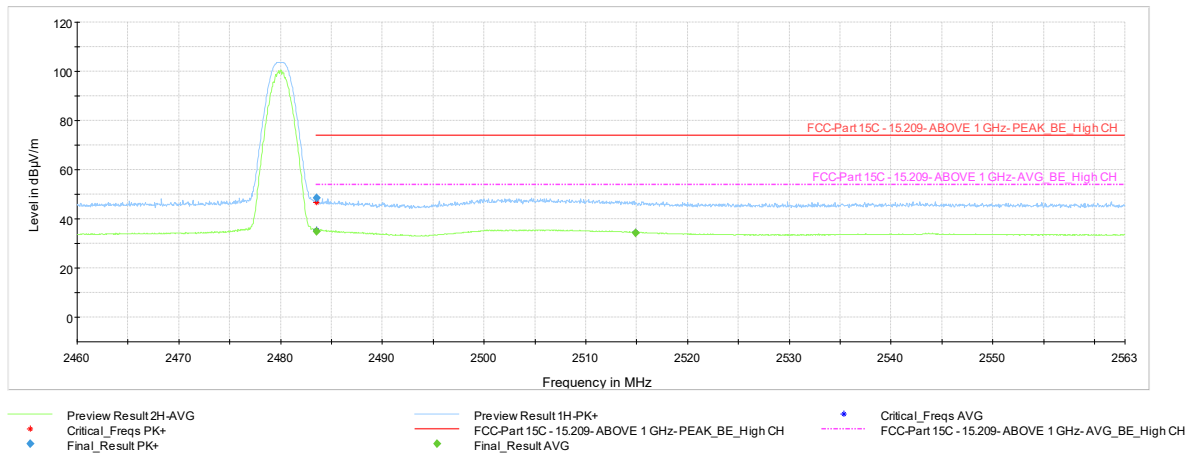


Figure 6 : RBE_Left Cup_1Mbps_High channel_2480_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	48.46	---	0.00	---	74	25.54	115.00	H	242	-2.5
2483.536	---	34.90	2.23	37.13	54	16.88	115.00	H	242	-2.5
2514.899	---	34.20	2.23	36.43	54	17.58	115.00	H	242	-2

Table 3: RBE_Left Cup_1Mbps_High channel_2480_ Final table in Horizontal Polarization

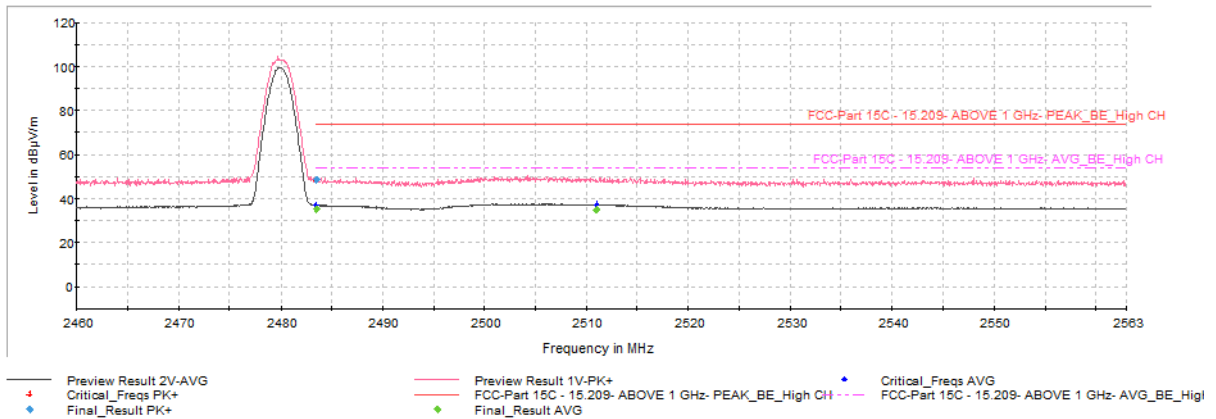


Figure 7 : RBE_Left Cup_1Mbps_High channel_2480_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	48.52	---	0.00	---	74	25.48	100.00	V	239	-2.5
2483.536	---	35.24	2.23	37.47	54	16.54	100.00	V	239	-2.5
2511.037	---	34.76	2.23	36.99	54	17.02	100.00	V	239	-1.5

Table 4: RBE_Left Cup_1Mbps_High channel_2480_Final table in Vertical Polarization

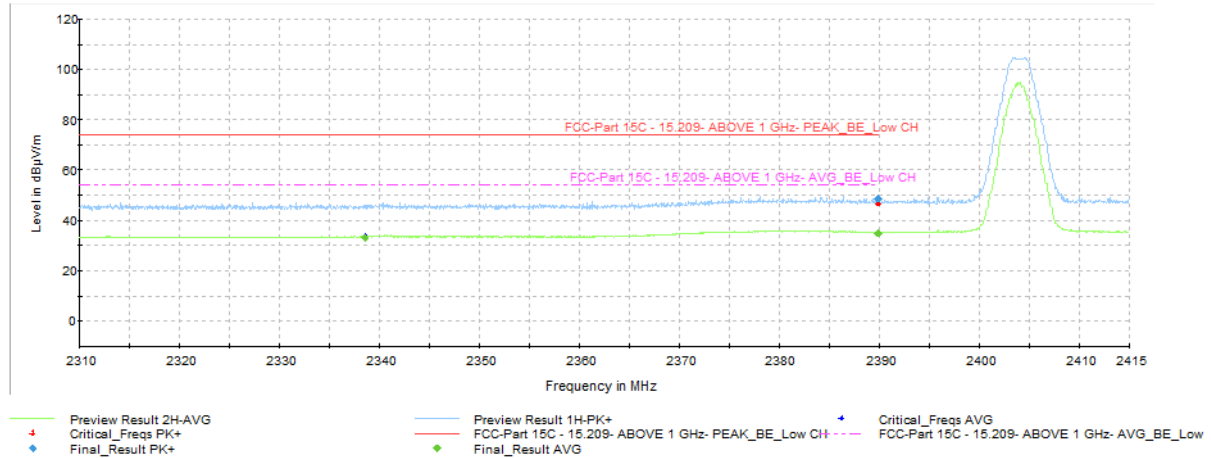


Figure 8 : RBE_Left Cup_2Mbps_Low channel_2404_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2389.905	48.35	---	0.00	---	74	25.65	185.00	H	217	-1.4
2338.508	---	33.17	5.12	38.29	54	15.71	185.00	H	217	-3.2
2389.905	---	34.96	5.12	40.08	54	13.92	185.00	H	217	-1.4

Table 5: RBE_Left Cup_2Mbps_Low channel_2404_Final table in Horizontal Polarization

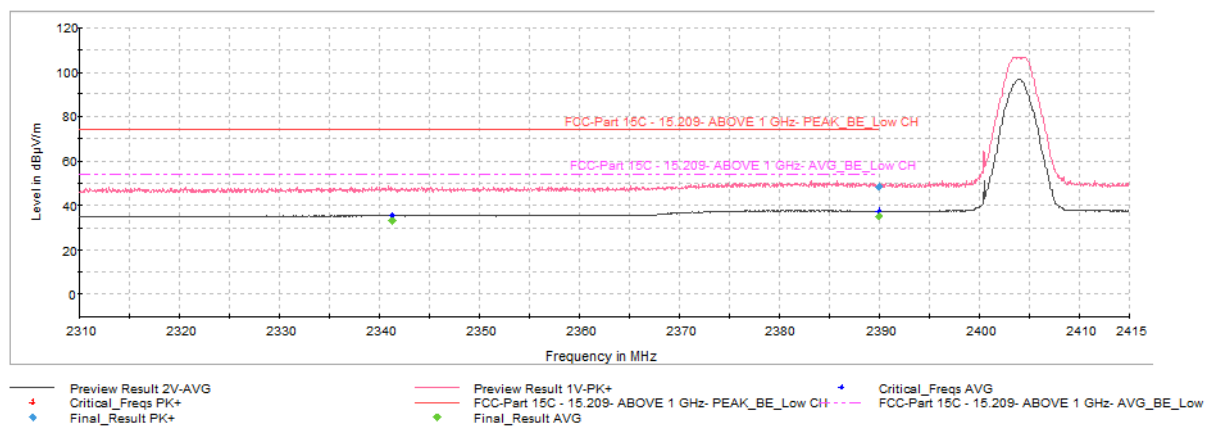


Figure 9 : RBE_Left Cup_2Mbps_Low channel_2404_Pre-scan in Vertical Polarization

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Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2389.958	48.29	---	0.00	---	74	25.71	100.00	V	341	-1.4
2341.29	---	33.11	5.12	38.23	54	15.77	100.00	V	341	-3.3
2389.958	---	34.94	5.12	40.06	54	13.94	100.00	V	341	-1.4

Table 6: RBE_Left Cup_2Mbps_Low channel_2404_Final table in Vertical Polarization

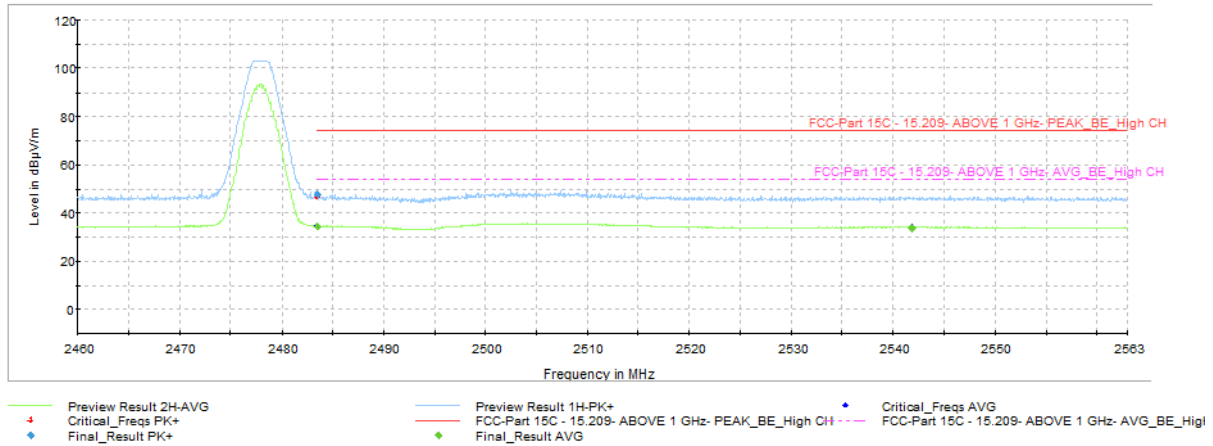


Figure 10 : RBE_Left Cup_2Mbps_High channel_2478_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	47.72	---	0.00	---	74	26.28	165.00	H	81	-2.5
2483.536	---	34.27	5.12	39.39	54	14.61	165.00	H	81	-2.5
2541.885	---	33.89	5.12	39.01	54	14.99	165.00	H	81	-2.8

Table 7: RBE_Left Cup_2Mbps_High channel_2478_Final table in Horizontal Polarization

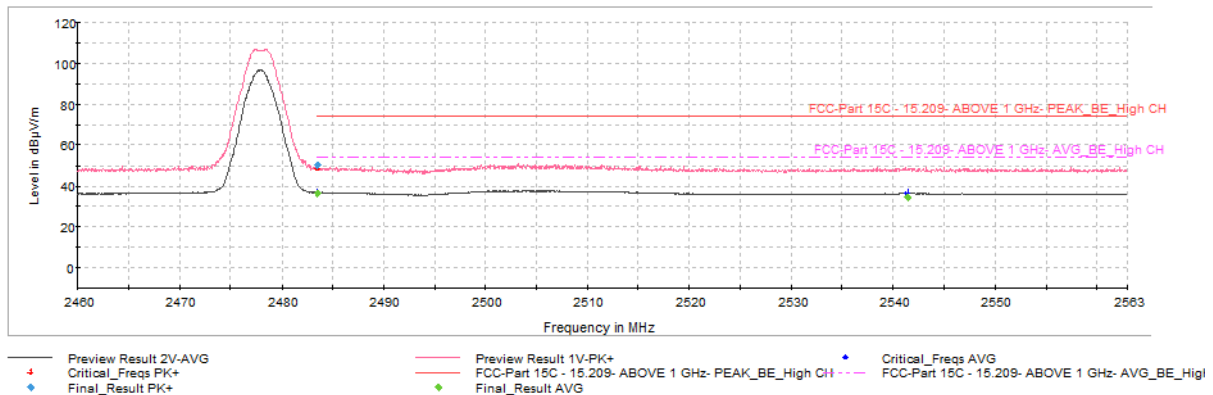


Figure 11 : RBE_Left Cup_2Mbps_High channel_2478_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	50.08	---	0.00	---	74	23.92	100.00	V	200	-2.5
2483.536	---	36.41	5.12	41.53	54	12.47	100.00	V	200	-2.5
2541.422	---	34.60	5.12	39.72	54	14.28	100.00	V	200	-2.8

Table 8: RBE_Left Cup_2Mbps_High channel_2478_Final table in Vertical Polarization

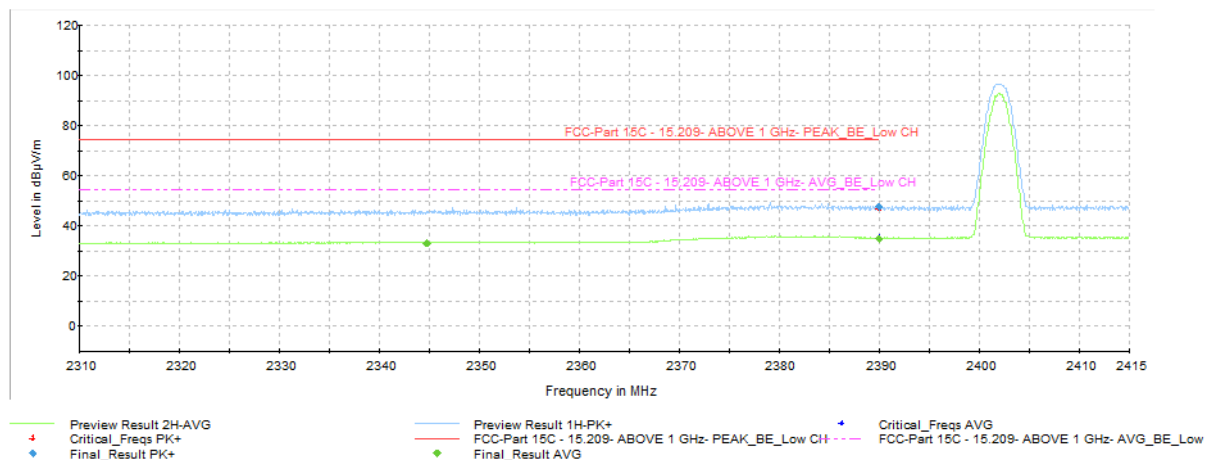


Figure 12 : RBE_Right Cup_1Mbps_Low channel_2402_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2389.958	47.4	---	0.00	---	74	26.6	135.00	H	221	-1.4
2344.755	---	32.93	2.21	35.14	54	18.86	135.00	H	221	-3.2
2389.958	---	34.74	2.21	36.95	54	17.05	135.00	H	221	-1.4

Table 9: RBE_Right Cup_1Mbps_Low channel_2402_Final table in Horizontal Polarization

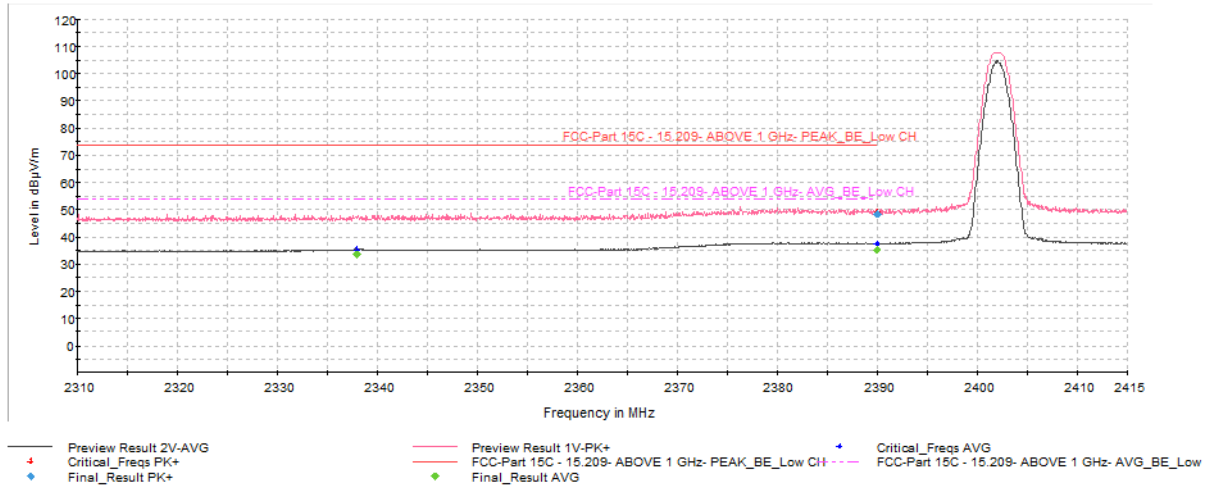


Figure 13 : RBE_Right Cup_1Mbps_Low channel_2402_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2390	48.44	---	0.00	---	74	25.56	215.00	V	176	-1.4
2337.93	---	33.50	2.21	35.71	54	18.29	215.00	V	176	-3.3
2389.958	---	35.36	2.21	37.57	54	16.43	215.00	V	176	-1.4

Table 10: RBE_Right Cup_1Mbps_Low channel_2402_Final table in Vertical Polarization

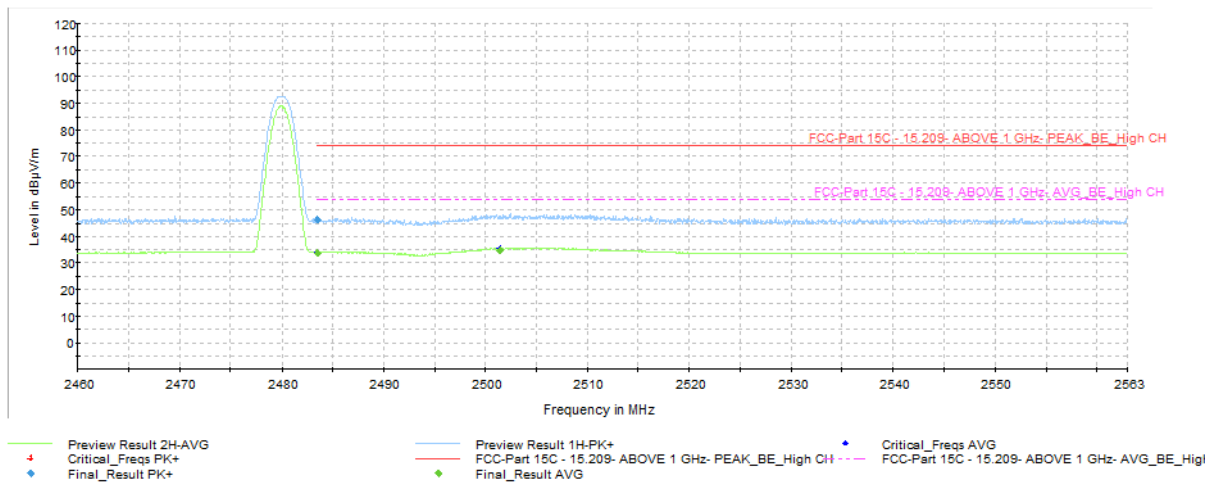


Figure 14 : RBE_Right Cup_1Mbps_High channel_2480_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	46.23	---	0.00	---	74	27.77	189.00	H	24	-2.5
2483.536	---	33.62	2.21	35.83	54	18.17	189.00	H	24	-2.5
2501.458	---	34.96	2.21	37.17	54	16.83	189.00	H	24	-1.2

Table 11: RBE_Right Cup _1Mbps_High channel_2480_ Final table in Horizontal Polarization

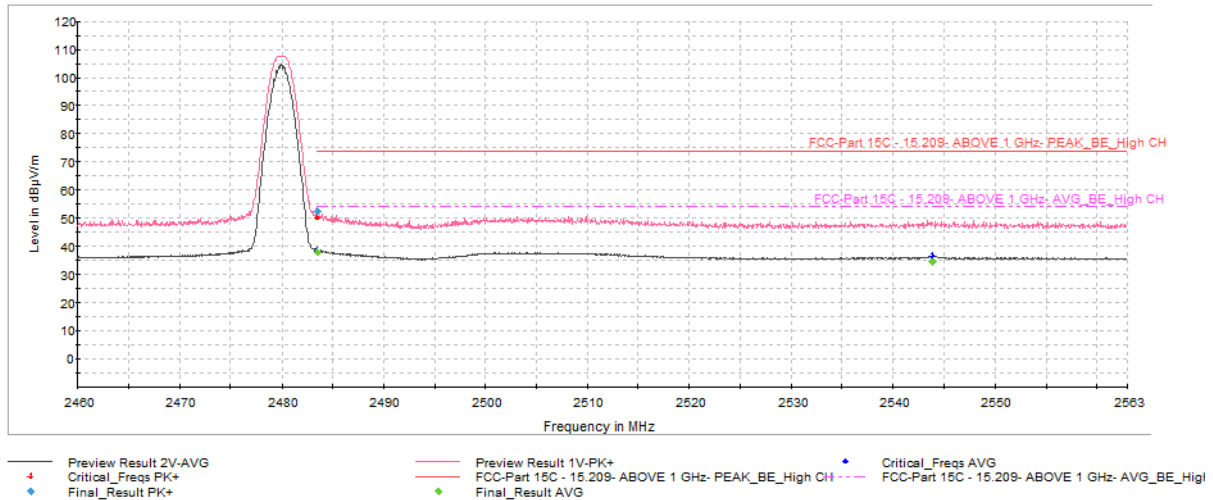


Figure 15 : RBE_Right Cup _1Mbps_High channel_2480_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	52.37	---	0.00	---	74	21.63	100.00	V	221	-2.5
2483.536	---	38.04	2.21	40.25	54	13.75	100.00	V	221	-2.5
2543.894	---	34.42	2.21	36.63	54	17.37	100.00	V	221	-2.8

Table 12: RBE_Right Cup _1Mbps_High channel_2480_ Final table in Vertical Polarization

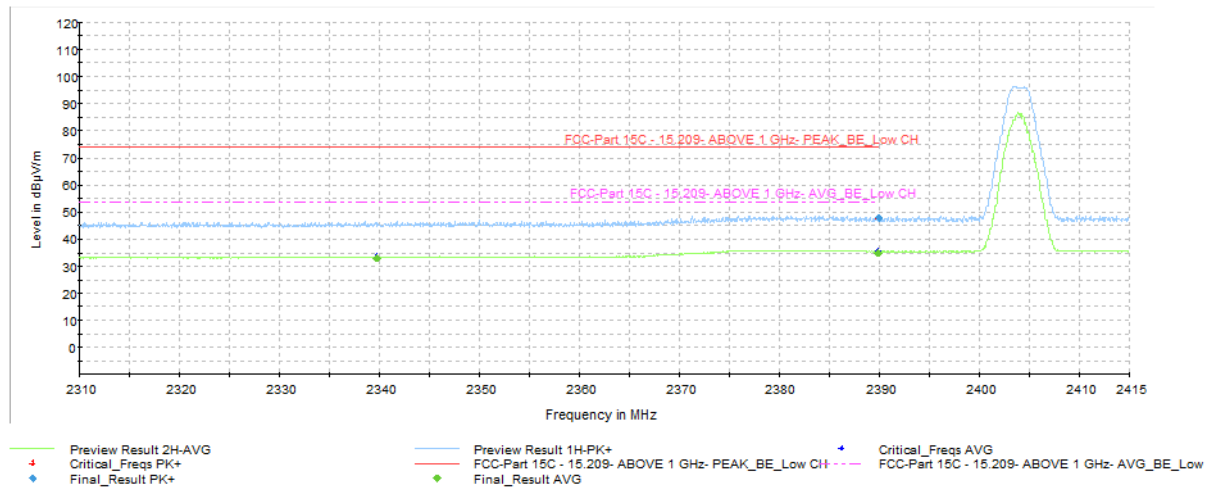


Figure 16 : RBE_Right Cup_2Mbps_Low channel_2404_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2389.958	47.77	---	0.00	---	74	26.23	115.00	H	182	-1.4
2339.768	---	33.09	5.14	38.23	54	15.77	115.00	H	182	-3.2
2389.905	---	34.95	5.14	40.09	54	13.91	115.00	H	182	-1.4

Table 13: RBE_Right Cup_2Mbps_Low channel_2404_Final table in Horizontal Polarization

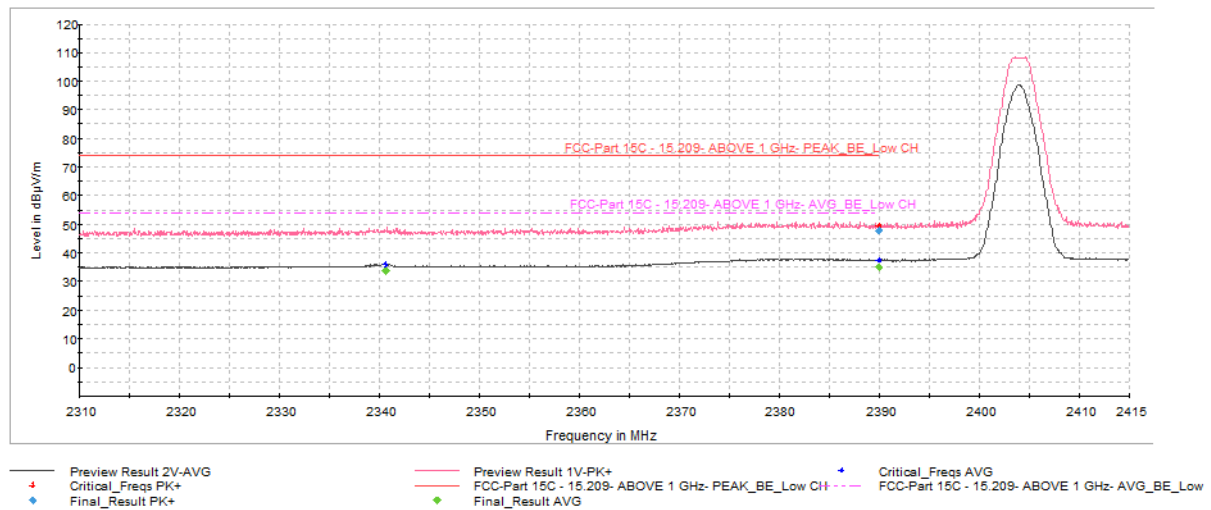


Figure 17 : RBE_Right Cup_2Mbps_Low channel_2404_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2389.958	47.9	---	0.00	---	74	26.1	115.00	V	13	-1.4
2340.608	---	33.70	5.14	38.84	54	15.16	115.00	V	13	-3.3
2389.958	---	35.20	5.14	40.34	54	13.66	115.00	V	13	-1.4

Table 14: RBE_Right Cup _2Mbps_Low channel_2404_Final table in Vertical Polarization

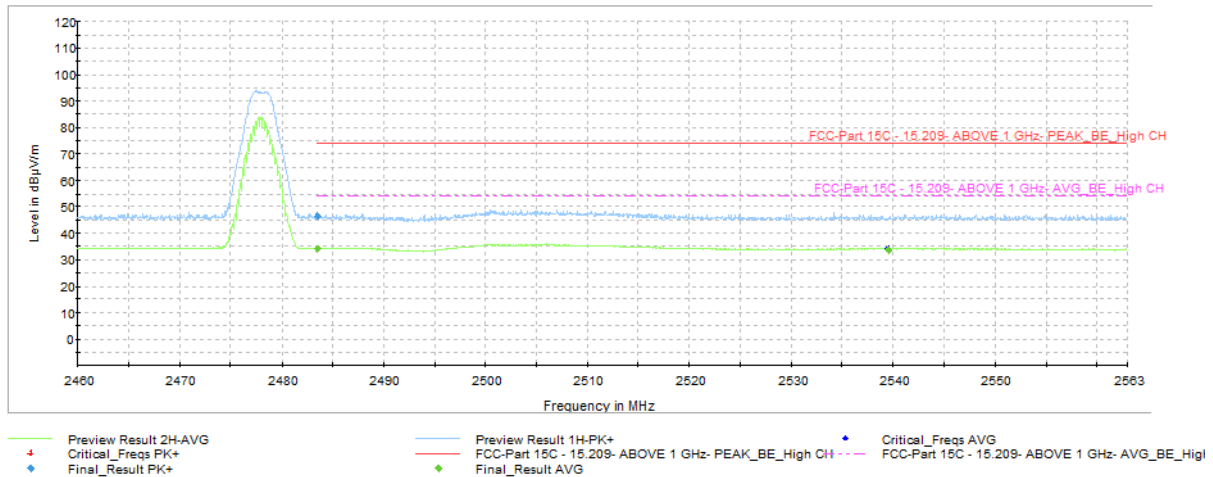


Figure 18 : RBE_Right Cup _2Mbps_High channel_2478_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	46.51	---	0.00	---	74	27.49	115	H	128	-2.5
2483.536	---	33.86	5.14	39.00	54	15.00	115	H	128	-2.5
2539.568	---	33.62	5.14	38.76	54	15.24	115	H	128	-2.8

Table 15: RBE_Right Cup _2Mbps_High channel_2478_Final table in Horizontal Polarization

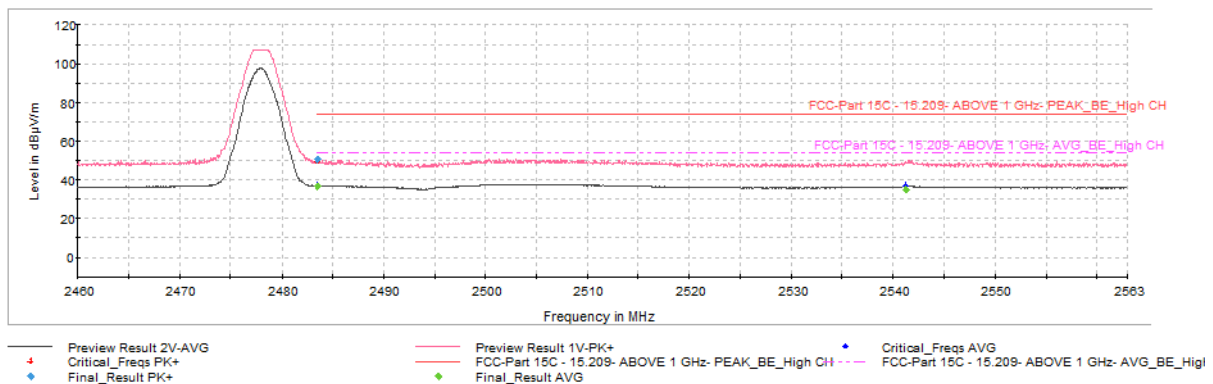


Figure 19 : RBE_Right Cup _2Mbps_High channel_2478_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
2483.536	50.52	---	0.00	---	74	23.48	185.00	V	38	-2.5
2483.536	---	36.60	5.14	41.74	54	12.26	185.00	V	38	-2.5
2541.319	---	35.01	5.14	40.15	54	13.85	185.00	V	38	-2.8

Table 16: RBE_Right Cup_2Mbps_High channel_2478_Final table in Vertical Polarization

Calculation:

Avg Final(dBμV/m) = Average (dBμV/m) + DCCF., Where DCCF is duty cycle correction factor.

Margin = Avg Final(dBμV/m) – Limit (dBμV/m)., For average limit is 54dBμV/m.

Margin = MaxPeak(dBμV/m) – Limit (dBμV/m)., For Peak limit is 74dBμV/m.

Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Factor (dB).

Result value (dBμV/m) = Reading Value (dBμV) + Correction Factor (dB/m).

12.1.7.2. Radiated Spurious emission 1 GHz to 18 GHz.

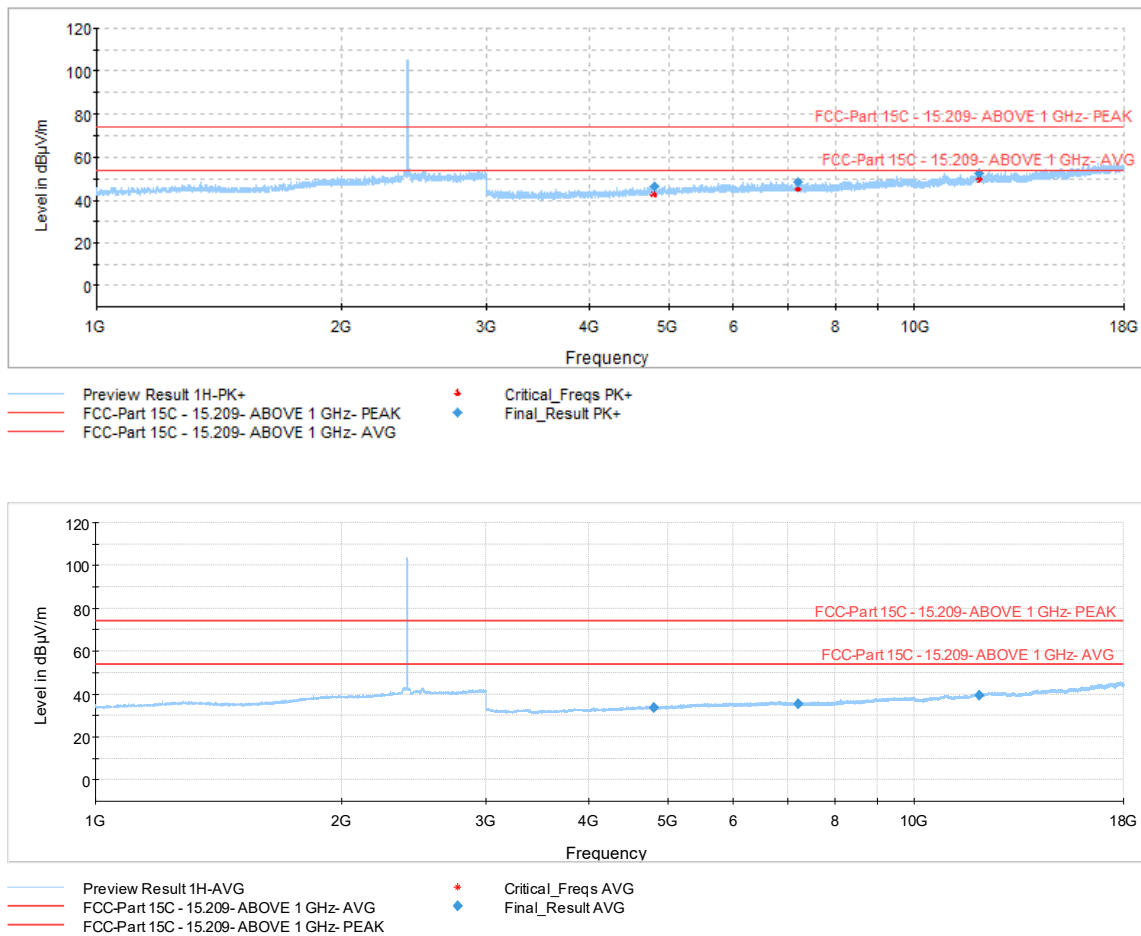


Figure 20 : RSE_1GHz to 18 GHz_Left Cup_1Mbps_Low channel_2402_Pre-scan in Horizontal Polarization

UL INDIA PRIVATE LIMITED
30/A, I Stage Vishveshwarya Industrial Estate,
Doddanekkundi Industrial Area, Bangalore – 560048
Tel: +91.080.41384400

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4803.9	46.48	---	0.00	---	74	27.52	190	H	274	-0.6
7206.3	47.95	---	0.00	---	74	26.05	155	H	343	0.9
12010.4	52.41	---	0.00	---	74	21.59	220	H	72	5.4
4803.9	---	33.44	2.23	35.67	54	18.34	190	H	346	-0.6
7206.3	---	35.41	2.23	37.64	54	16.37	220	H	307	0.9
12010.4	---	39.47	2.23	41.70	54	12.31	170	H	117	5.4

Table 17: RSE_1GHz to 18 GHz_Left Cup_1Mbps_Low channel_2402_Final table in Horizontal Polarization

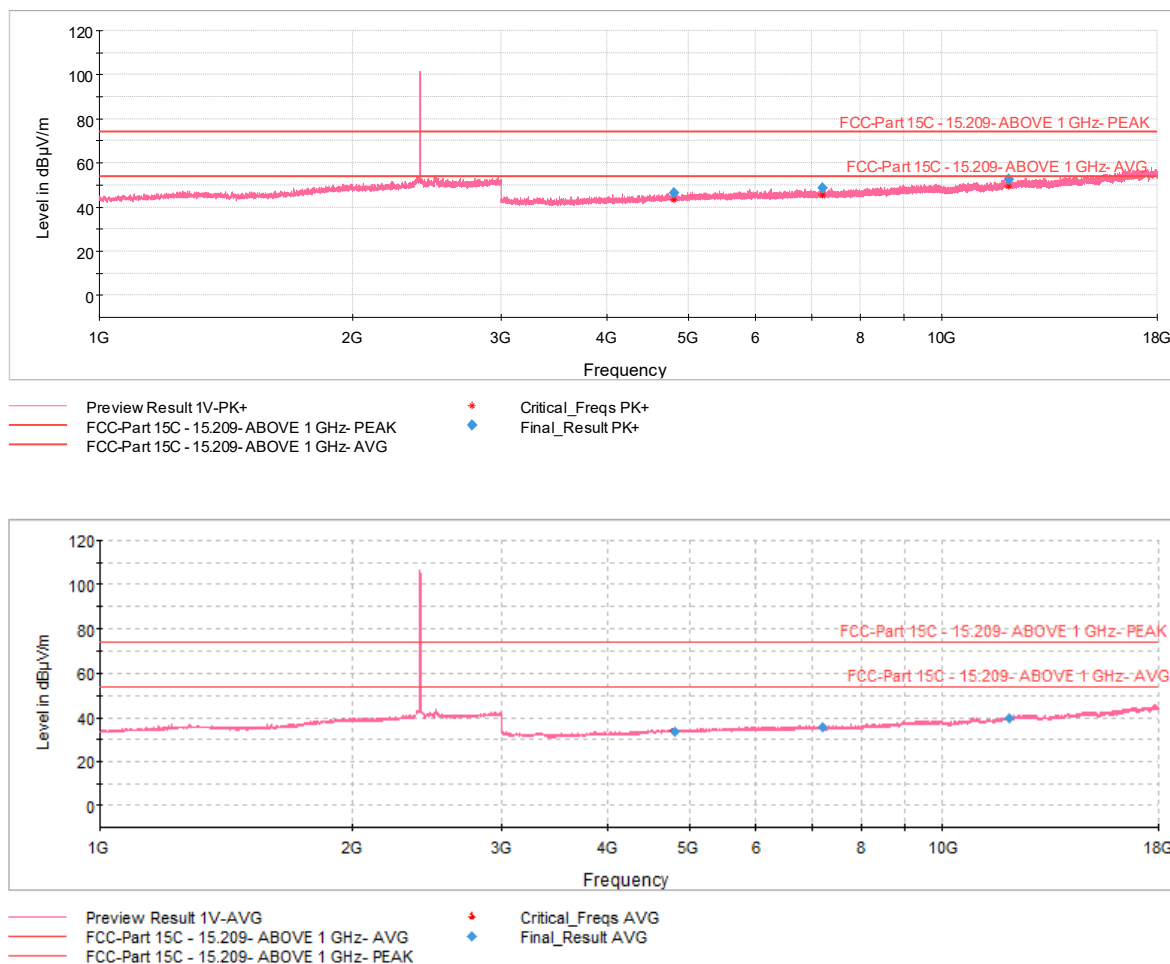


Figure 21 : RSE_1GHz to 18 GHz_Left Cup_1Mbps_Low channel_2402_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4803.9	46.6	---	0.00	---	74	27.4	170	V	340	-0.6
7206.3	48.74	---	0.00	---	74	25.26	220	V	318	0.9
12010.4	52.78	---	0.00	---	74	21.22	170	V	229	5.5
4804.1	---	33.5	2.23	35.73	54	18.28	144	V	207	-0.6
7205.6	---	35.33	2.23	37.56	54	16.45	170	V	196	0.9
12009.6	---	39.56	2.23	41.79	54	12.22	144	V	161	5.5

Table 18: RSE_1GHz to 18 GHz_Left Cup_1Mbps_Low channel_2402_Final table in Vertical Polarization

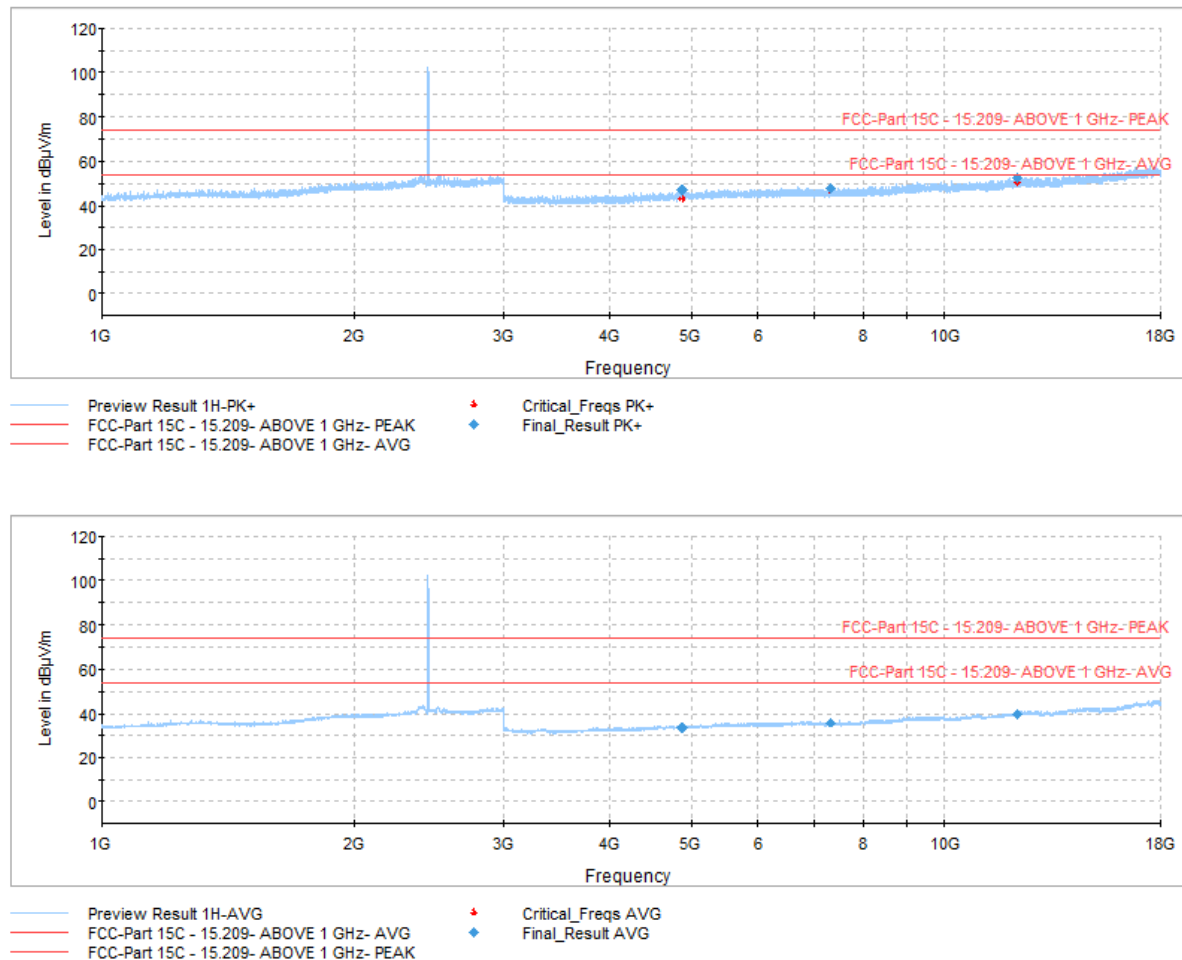
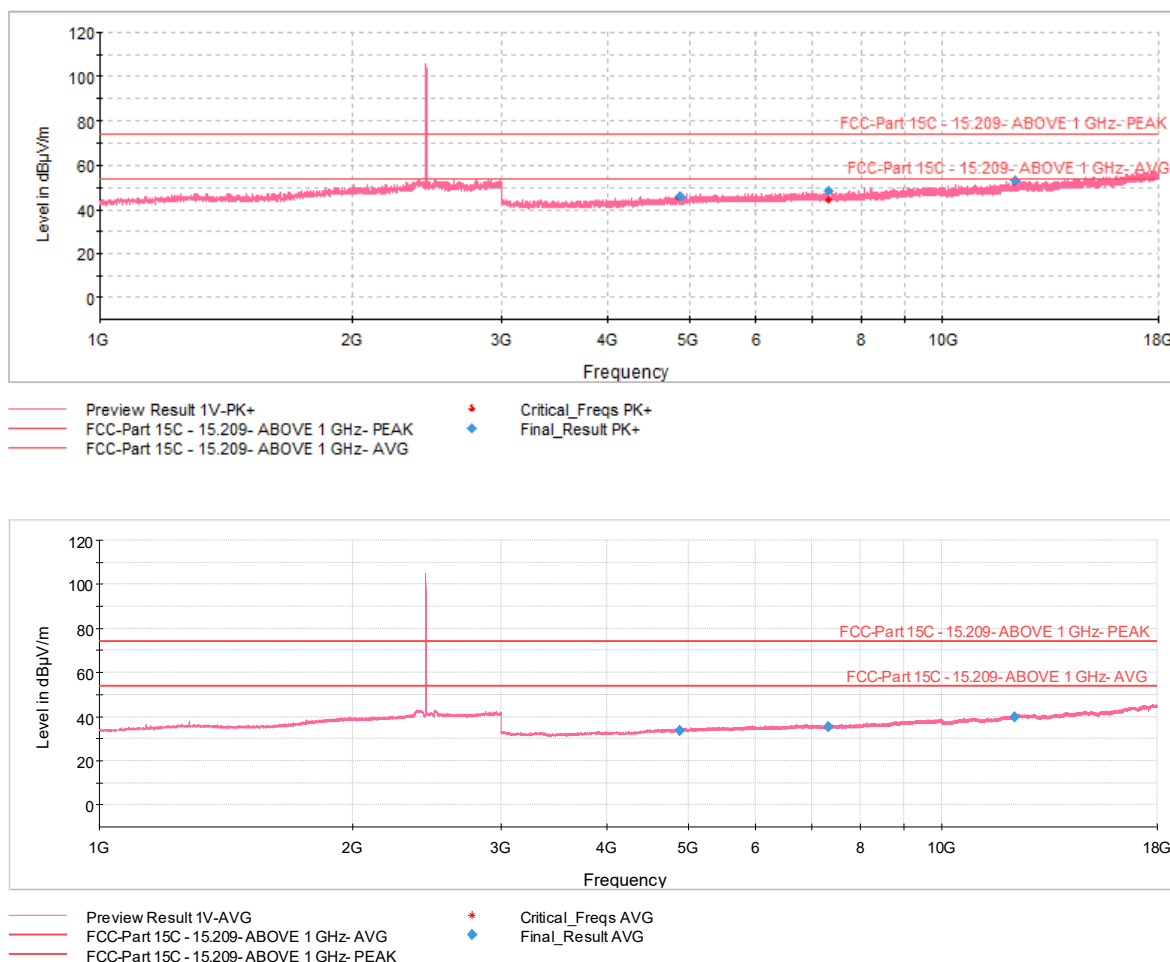


Figure 22 : RSE_1GHz to 18 GHz_Left Cup_1Mbps_Mid channel_2440_Pre-scan in Horizontal Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4880.2	46.83	---	0.00	---	74	27.17	140	H	291	-0.8
7319.7	47.93	---	0.00	---	74	26.07	220	H	117	0.8
12200	52.75	---	0.00	---	74	21.25	170	H	340	5.8
4879.5	---	33.47	2.23	35.70	54	18.31	140	H	353	-0.8
7319.7	---	35.63	2.23	37.86	54	16.15	194	H	227	0.8
12200	---	39.78	2.23	42.01	54	12.00	155	H	213	5.8

Table 19: RSE_1GHz to 18 GHz_Left Cup_1Mbps_Mid channel_2440_Final table in Horizontal Polarization



Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4879.5	46.13	---	0.00	---	74	27.87	140	V	160	-0.7
7320.4	48.45	---	0.00	---	74	25.55	170	V	258	0.9
12199.2	53.01	---	0.00	---	74	20.99	170	V	82	5.9
4879.5	---	33.51	2.23	35.74	54	18.27	194	V	258	-0.7
7322.5	---	35.3	2.23	37.53	54	16.48	144	V	229	0.9
12200	---	39.8	2.23	42.03	54	11.98	170	V	287	6

Table 20: RSE_1GHz to 18 GHz_Left Cup_1Mbps_Mid channel_2440_Final table in Vertical Polarization

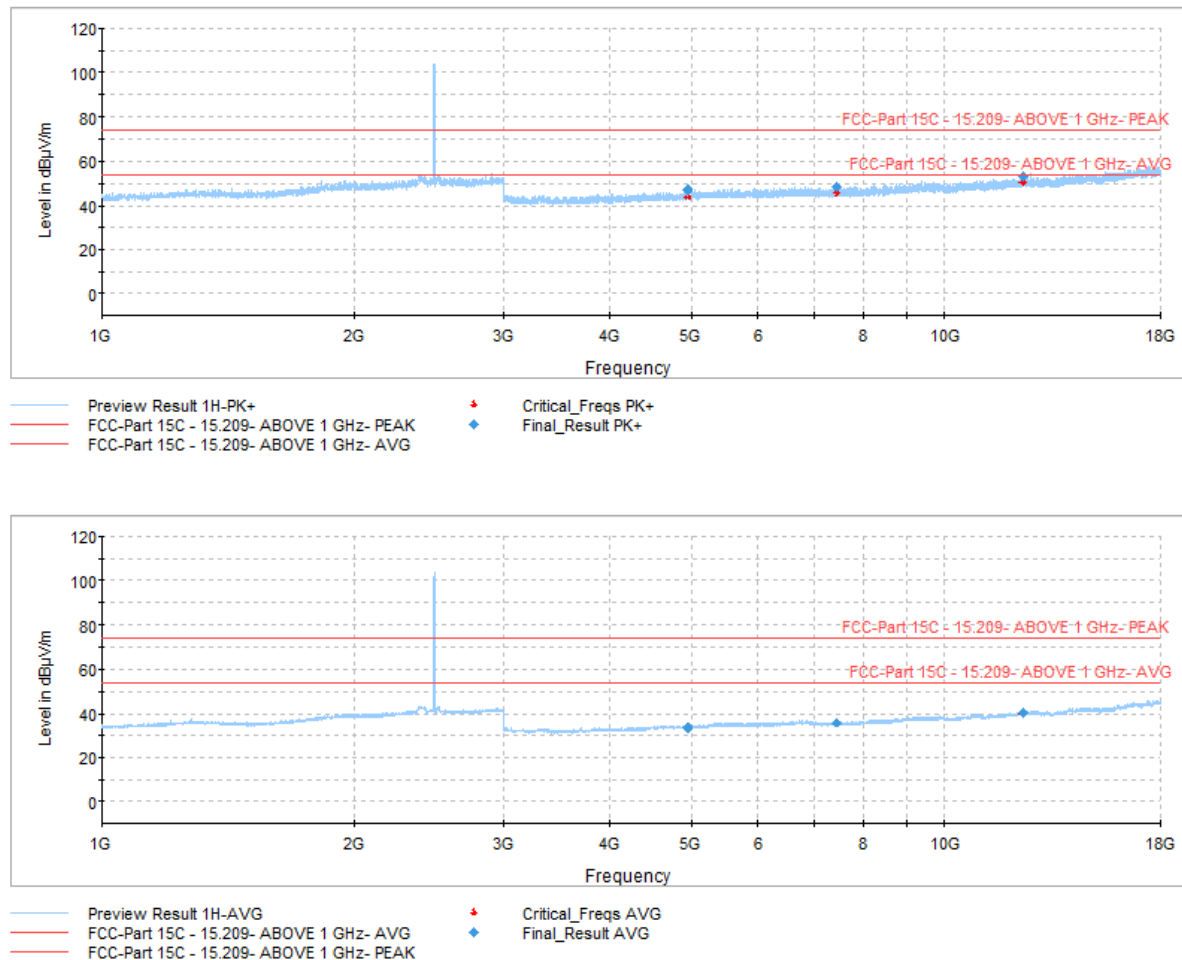


Figure 24 : RSE_1GHz to 18 GHz_Left Cup_1Mbps_High channel_2480_Preview in Horizontal Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4960	47.22	---	0.00	---	74	26.78	194	H	281	-0.5
7440.1	48.26	---	0.00	---	74	25.74	220	H	333	1
12400	53.15	---	0.00	---	74	20.85	155	H	71	5.8
4960	---	33.79	2.23	36.02	54	17.99	194	H	221	-0.5
7439.4	---	35.73	2.23	37.96	54	16.05	170	H	203	1
12400	---	40.03	2.23	42.26	54	11.75	144	H	335	5.8

Table 21: RSE_1GHz to 18 GHz_Left Cup_1Mbps_High channel_2480_Final table in Horizontal Polarization

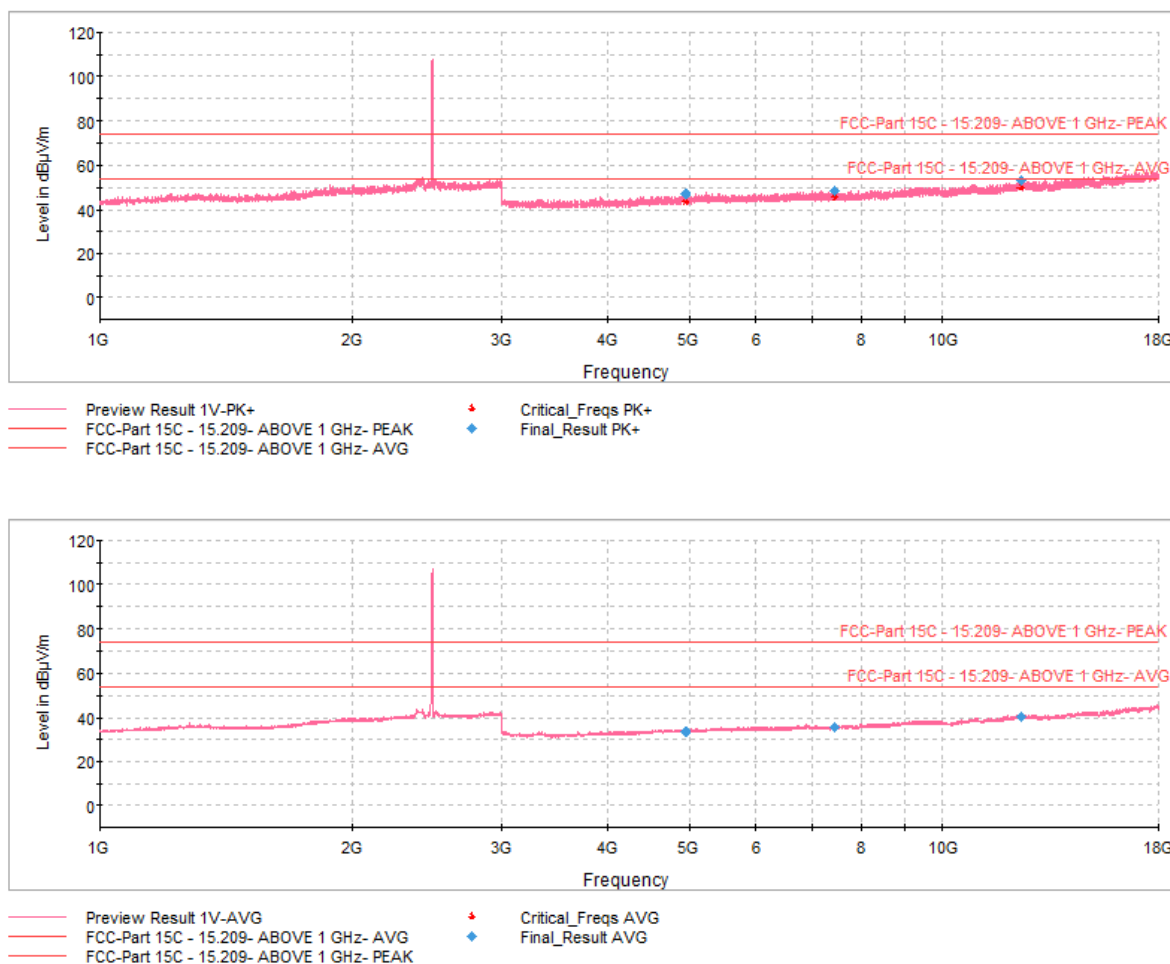


Figure 25 : RSE_1GHz to 18 GHz_Left Cup_1Mbps_High channel_2480_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4960	47.17	---	0.00	---	74	26.83	170	V	301	-0.4
7440.1	48.1	---	0.00	---	74	25.9	205	V	308	1
12400	53.15	---	0.00	---	74	20.85	170	V	120	6
4960	---	33.81	2.23	36.04	54	17.97	155	V	2	-0.4
7440.1	---	35.48	2.23	37.71	54	16.30	170	V	327	1
12400	---	40.19	2.23	42.42	54	11.59	170	V	37	6

Table 22: RSE_1GHz to 18 GHz_Left Cup_1Mbps_High channel_2480_Final table in Vertical Polarization

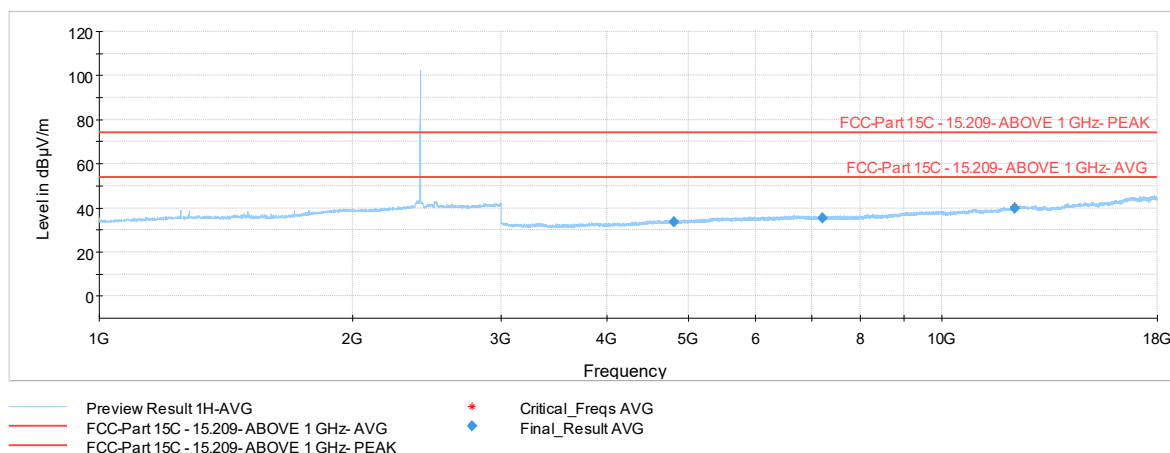
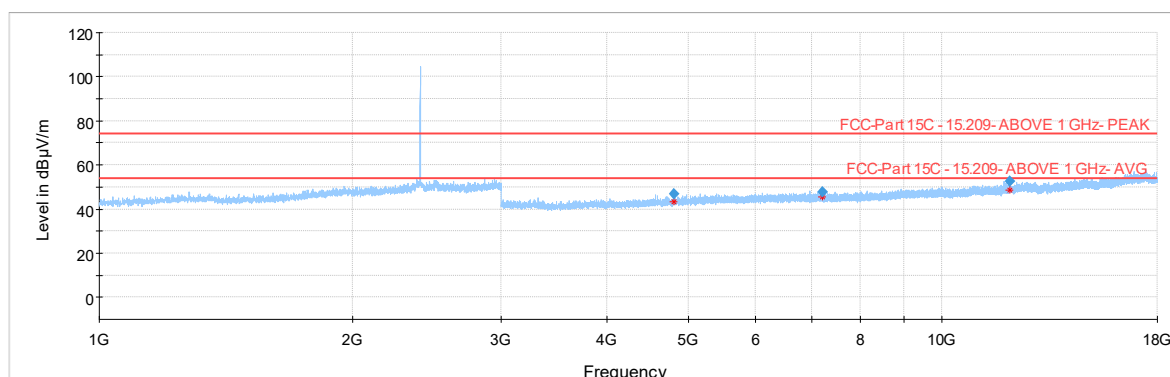


Figure 26 : RSE_1GHz to 18 GHz_Left Cup_2Mbps_Low channel_2404_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
4808.1	46.76	---	0.00	---	74	27.24	155	H	73	-0.6
7211.9	47.92	---	0.00	---	74	26.08	168	H	331	0.9
12020	52.45	---	0.00	---	74	21.55	155	H	18	5.4
4808.1	---	33.53	5.12	38.65	54	15.35	220	H	341	-0.6
7211.9	---	35.18	5.12	40.30	54	13.70	140	H	129	0.9
12020	---	39.73	5.12	44.85	54	9.15	194	H	99	5.4

Table 23: RSE_1GHz to 18 GHz_Left Cup_2Mbps_Low channel_2404_Final table in Horizontal Polarization

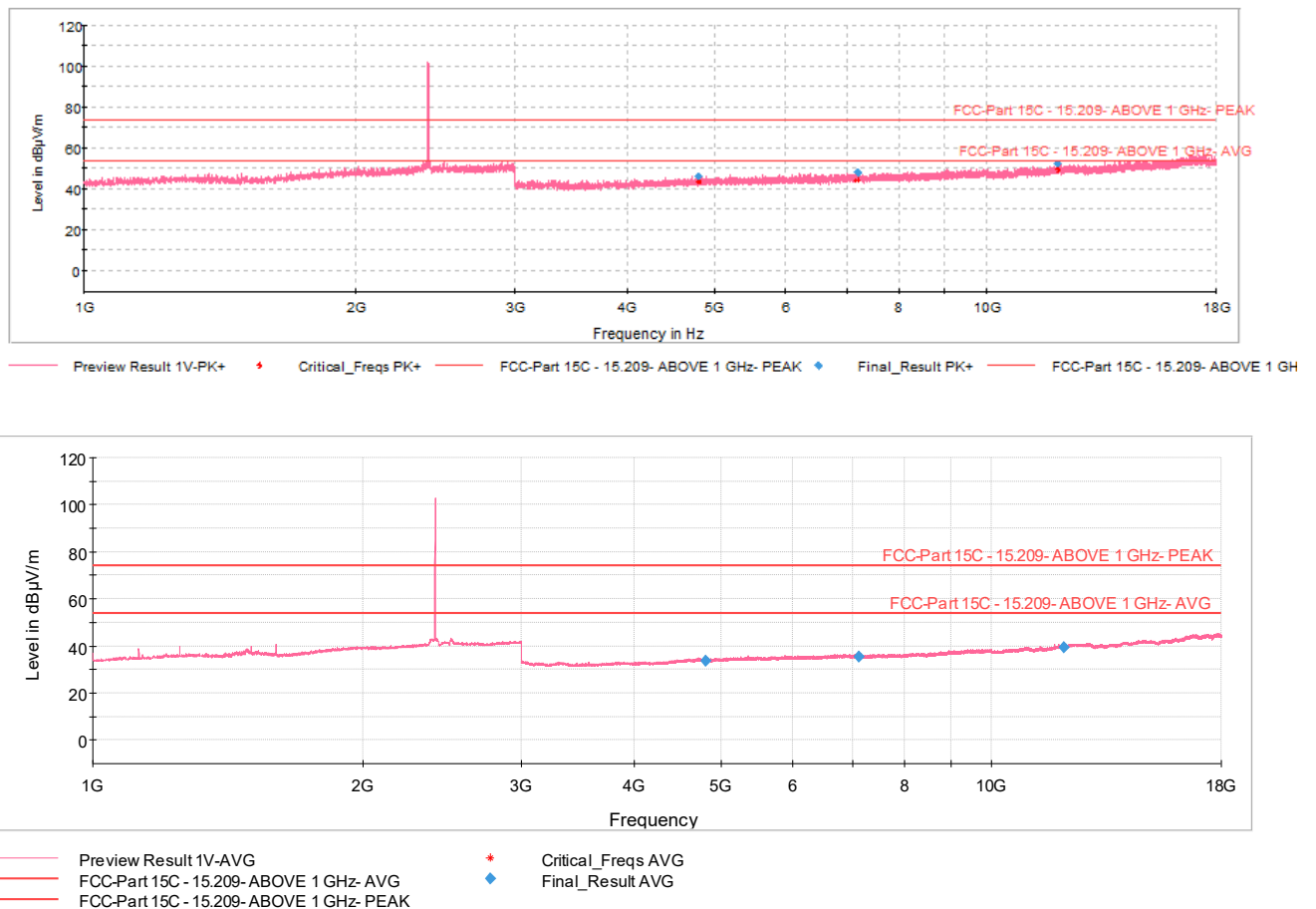


Figure 27 : RSE_1GHz to 18 GHz_Left Cup_2Mbps_Low channel_2404_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4808.1	46.33	---	0.00	---	74	27.67	143	V	34	-0.6
7212.6	48.15	---	0.00	---	74	25.85	155	V	204	0.9
12020	52.36	---	0.00	---	74	21.64	167	V	273	5.5
4808.1	---	33.54	5.12	38.66	54	15.34	215	V	147	-0.6
7212.6	---	35.33	5.12	40.45	54	13.55	215	V	60	1
12019.2	---	39.51	5.12	44.63	54	9.37	139	V	180	5.5

Table 24: RSE_1GHz to 18 GHz_Left Cup_2Mbps_Low channel_2404_Final table in Vertical Polarization

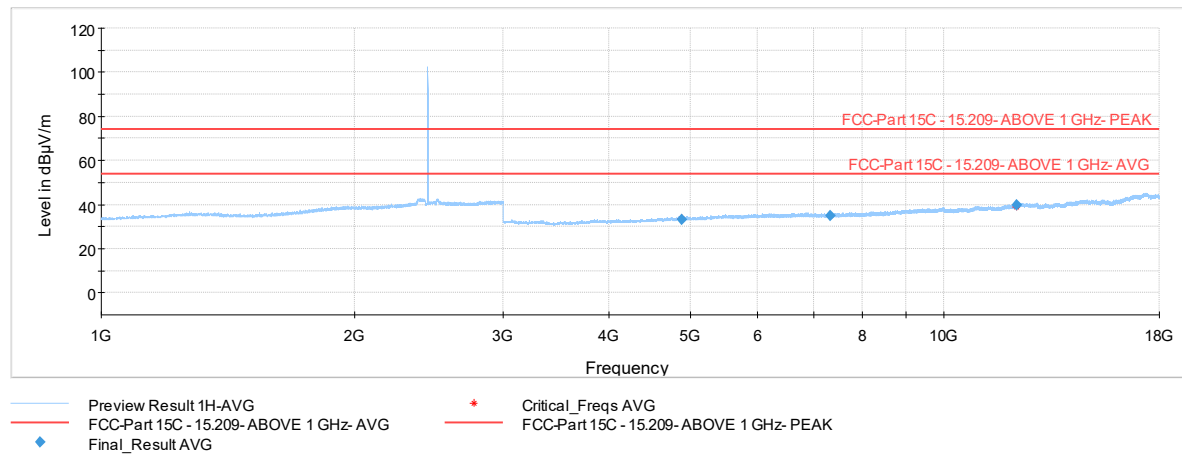
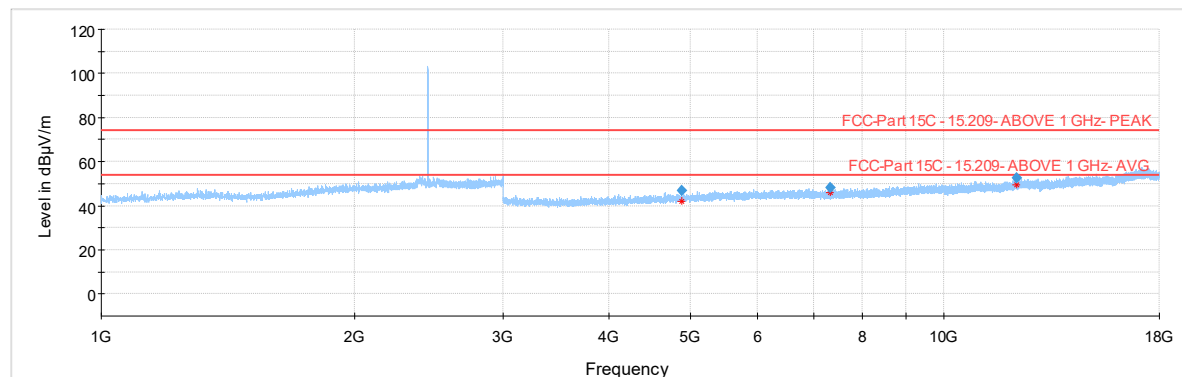
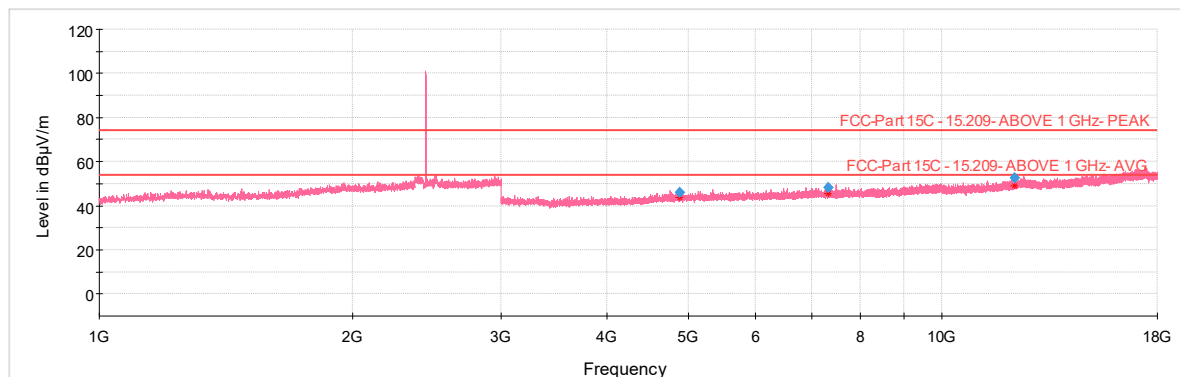


Figure 28 : RSE_1GHz to 18 GHz_Left Cup_2Mbps_Mid channel_2440_Pre-scan in Horizontal Polarization

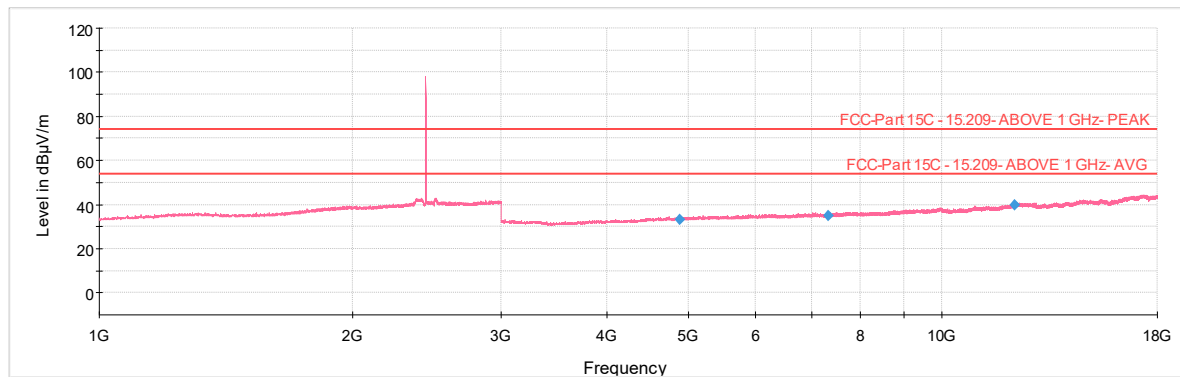
Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4879.5	47	---	0.00	---	74	27	167	H	357	-0.8
7319.7	48.18	---	0.00	---	74	25.82	128	H	43	0.8
12200	52.61	---	0.00	---	74	21.39	167	H	314	5.8
4880.2	---	33.35	5.12	38.47	54	15.53	168	H	38	-0.8
7320.4	---	35.16	5.12	40.28	54	13.72	109	H	159	0.8
12200	---	39.68	5.12	44.80	54	9.20	205	H	343	5.8

Table 25: RSE_1GHz to 18 GHz_Left Cup_2Mbps_Mid channel_2440_Final table in Horizontal Polarization



Preview Result 1V-PK+
 FCC-Part 15C - 15.209- ABOVE 1 GHz- PEAK
 Final_Result PK+

Critical_Freqs PK+
 FCC-Part 15C - 15.209- ABOVE 1 GHz- AVG



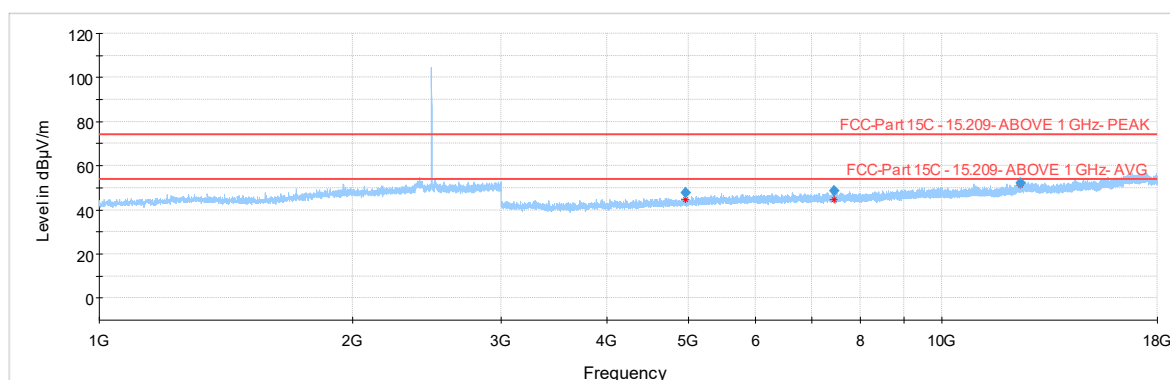
Preview Result 1V-AVG
 FCC-Part 15C - 15.209- ABOVE 1 GHz- AVG
 Final_Result AVG

Critical_Freqs AVG
 FCC-Part 15C - 15.209- ABOVE 1 GHz- PEAK

Figure 29 : RSE_1GHz to 18 GHz_Left Cup_2Mbps_Mid channel_2440_Pre-scan in Vertical Polarization

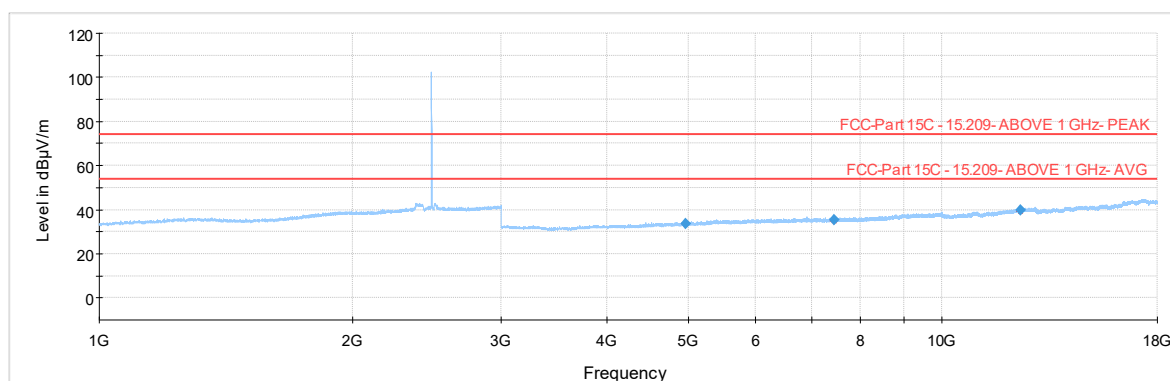
Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4880.2	46.13	---	0.00	---	74	27.87	167	V	320	-0.7
7320.4	48.08	---	0.00	---	74	25.92	168	V	309	0.9
12199.2	52.56	---	0.00	---	74	21.44	182	V	232	5.9
4880.2	---	33.4	5.12	38.52	54	15.48	193	V	287	-0.7
7319.7	---	34.96	5.12	40.08	54	13.92	156	V	304	0.9
12200	---	39.77	5.12	44.89	54	9.11	145	V	48	6

Table 26: RSE_1GHz to 18 GHz_Left Cup_2Mbps_Mid channel__2440_Final table in Vertical Polarization



Preview Result 1H-PK+
FCC-Part 15C - 15.209- ABOVE 1 GHz- PEAK
Final_Result PK+

Critical_Freqs PK+
FCC-Part 15C - 15.209- ABOVE 1 GHz- AVG



Preview Result 1H-AVG
FCC-Part 15C - 15.209- ABOVE 1 GHz- AVG
Final_Result AVG

Critical_Freqs AVG
FCC-Part 15C - 15.209- ABOVE 1 GHz- PEAK

Figure 30 : RSE_1GHz to 18 GHz_Left Cup_2Mbps_High channel_2478_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
4956.5	47.65	---	0.00	---	74	26.35	120	H	144	-0.4
7434.5	48.45	---	0.00	---	74	25.55	205	H	42	1
12389.6	52.34	---	0.00	---	74	21.66	172	H	120	5.8
4956.5	---	33.61	5.12	38.73	54	15.27	193	H	252	-0.4
7434.5	---	35.53	5.12	40.65	54	13.35	109	H	90	1
12390.4	---	39.95	5.12	45.07	54	8.93	144	H	25	5.8

Table 27: RSE_1GHz to 18 GHz_Left Cup_2Mbps_High channel_2478_Final table in Horizontal Polarization

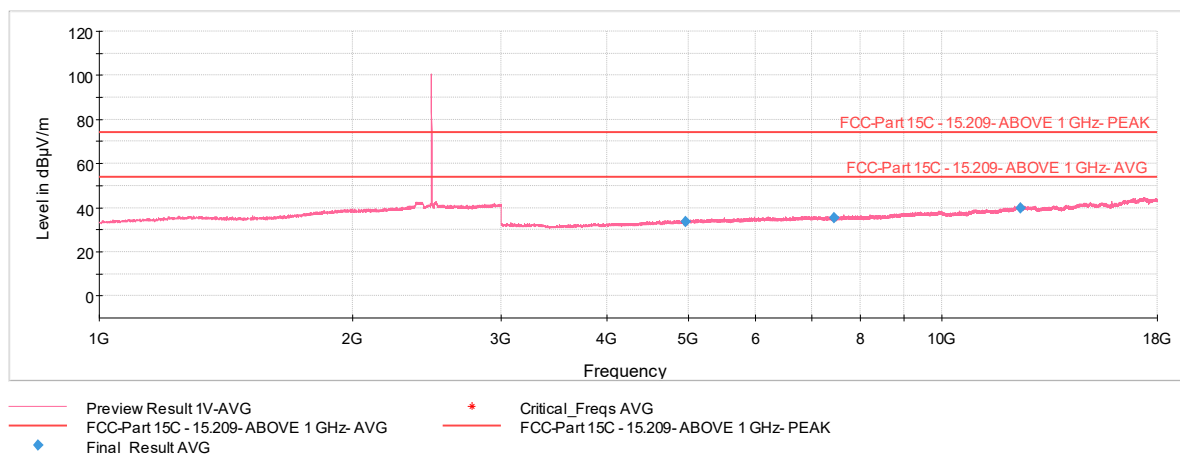
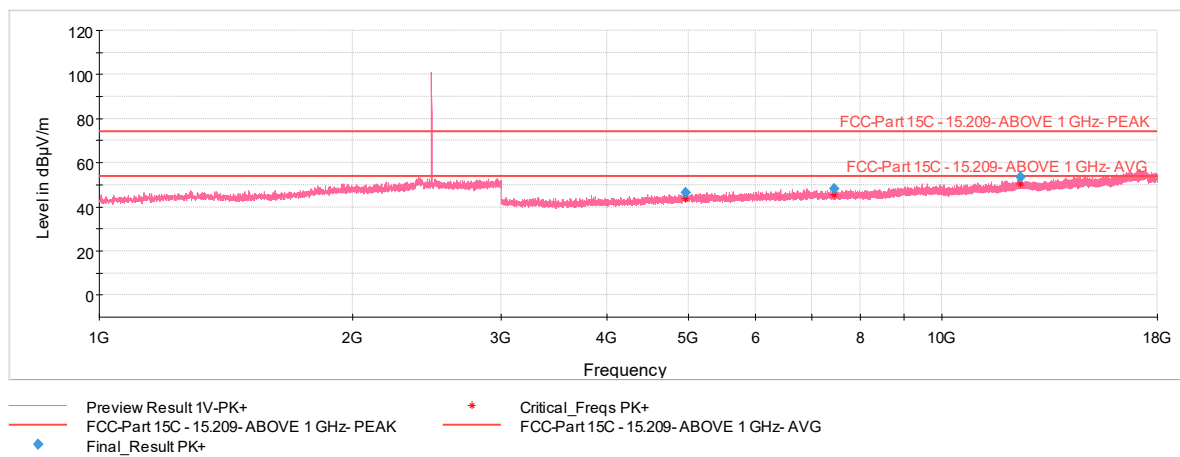


Figure 31 : RSE_1GHz to 18 GHz_Left Cup_2Mbps_High channel_2478_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4956.5	46.48	---	0.00	---	74	27.52	157	V	127	-0.4
7434.5	48.36	---	0.00	---	74	25.64	109	V	121	1
12390.4	53.52	---	0.00	---	74	20.48	132	V	58	6
4956.5	---	33.72	5.12	38.84	54	15.16	205	V	274	-0.4
7433.8	---	35.52	5.12	40.64	54	13.36	192	V	158	1
12390.4	---	39.88	5.12	45.00	54	9.00	205	V	145	6

Table 28: RSE_1GHz to 18 GHz_Left Cup_2Mbps_High channel_2478_Final table in Vertical Polarization

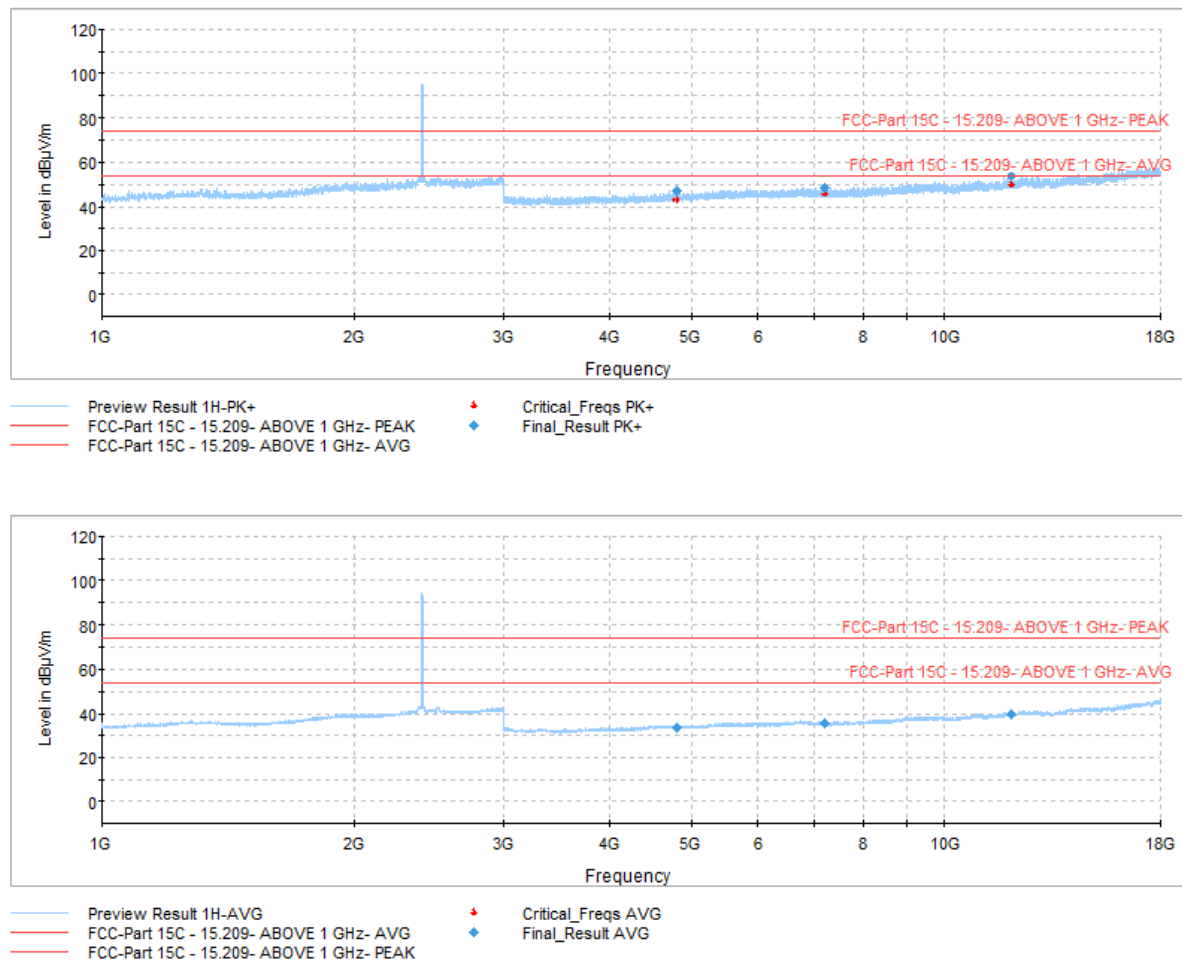


Figure 32 : RSE_1GHz to 18 GHz_Right Cup_1Mbps_Low channel_2402_Pre-scan in Horizontal Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4803.9	46.65	---	0.00	---	74	27.35	190	H	349	-0.6
7205.6	48.45	---	0.00	---	74	25.55	170	H	287	0.9
12010.4	53.32	---	0.00	---	74	20.68	144	H	53	5.4
4804.6	---	33.64	2.21	35.85	54	18.15	194	H	182	-0.6
7205.6	---	35.41	2.21	37.62	54	16.38	194	H	308	0.9
12009.6	---	39.49	2.21	41.70	54	12.30	170	H	303	5.4

Table 29: RSE_1GHz to 18 GHz_Right Cup_1Mbps_Low channel_2402_Final table in Horizontal Polarization

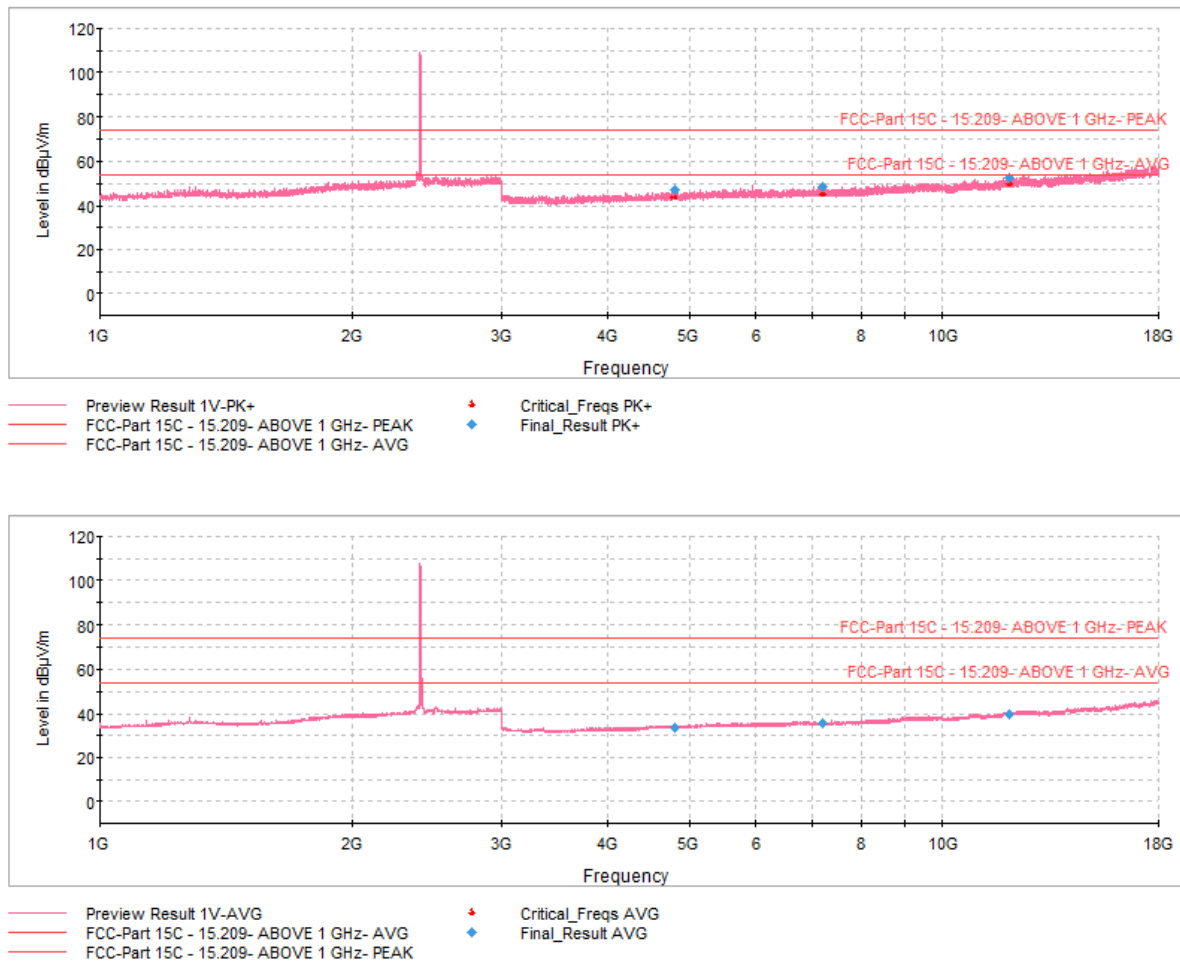


Figure 33 : RSE_1GHz to 18 GHz_Right Cup_1Mbps_Low channel_2402_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4803.9	46.64	---	0.00	---	74	27.36	144	V	198	-0.6
7206.3	48.45	---	0.00	---	74	25.55	144	V	7	0.9
12009.6	52.6	---	0.00	---	74	21.4	144	V	192	5.5
4803.9	---	33.5	2.21	35.71	54	18.29	140	V	70	-0.6
7206.3	---	35.45	2.21	37.66	54	16.34	205	V	256	0.9
12010.4	---	39.68	2.21	41.89	54	12.11	220	V	326	5.5

Table 30: RSE_1GHz to 18 GHz_Right Cup_1Mbps_Low channel_2402_Final table in Vertical Polarization

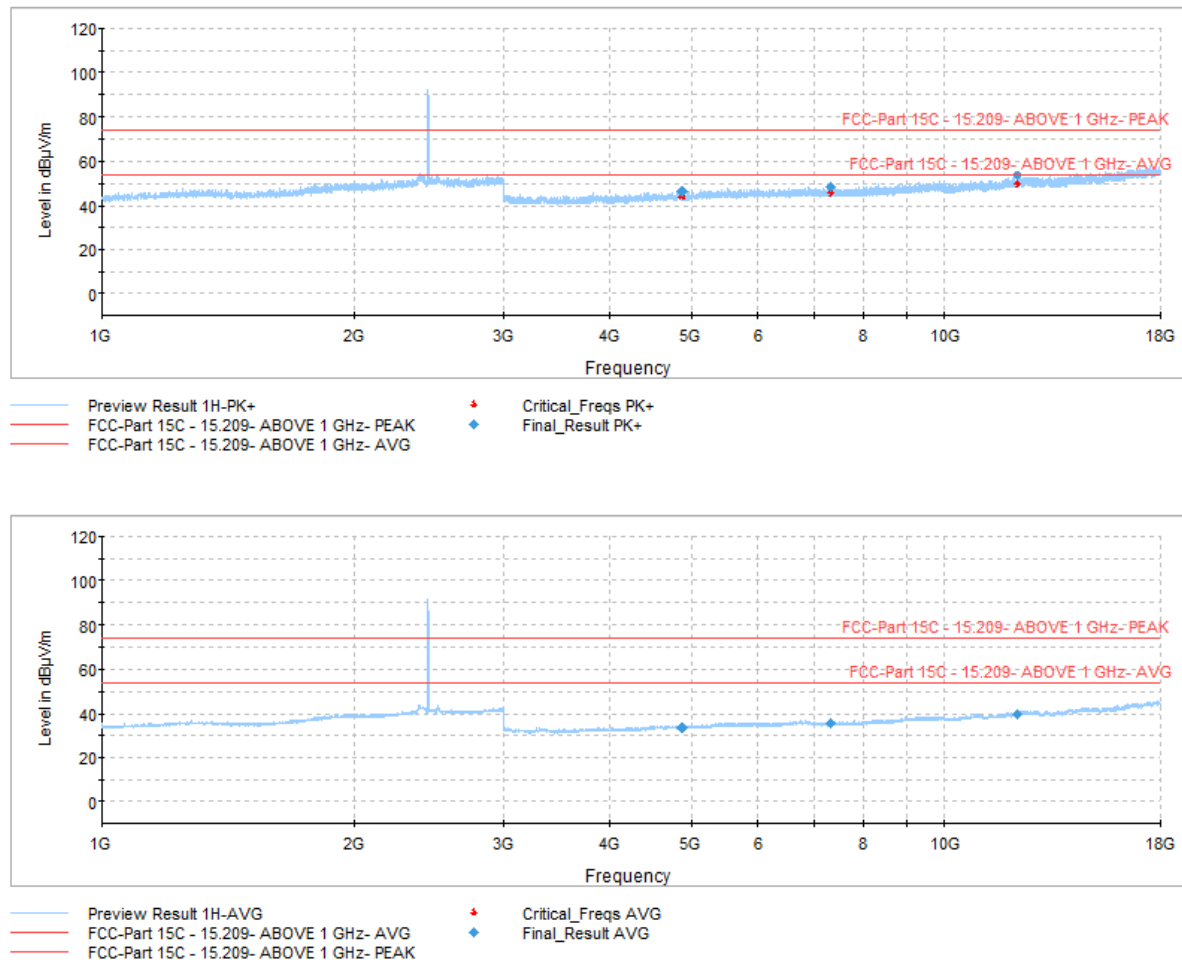


Figure 34 : RSE_1GHz to 18 GHz_Right Cup_1Mbps_Mid channel_2440_Pre-scan in Horizontal Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4880.2	46.51	---	0.00	---	74	27.49	206	H	220	-0.8
7319.7	48.41	---	0.00	---	74	25.59	190	H	140	0.8
12200	53.64	---	0.00	---	74	20.36	194	H	41	5.8
4880.2	---	33.44	2.21	35.65	54	18.35	144	H	114	-0.8
7320.4	---	35.49	2.21	37.70	54	16.30	144	H	252	0.8
12200	---	39.75	2.21	41.96	54	12.04	170	H	49	5.8

Table 31: RSE_1GHz to 18 GHz_Right Cup_1Mbps_Mid channel_2440_Final table in Horizontal Polarization

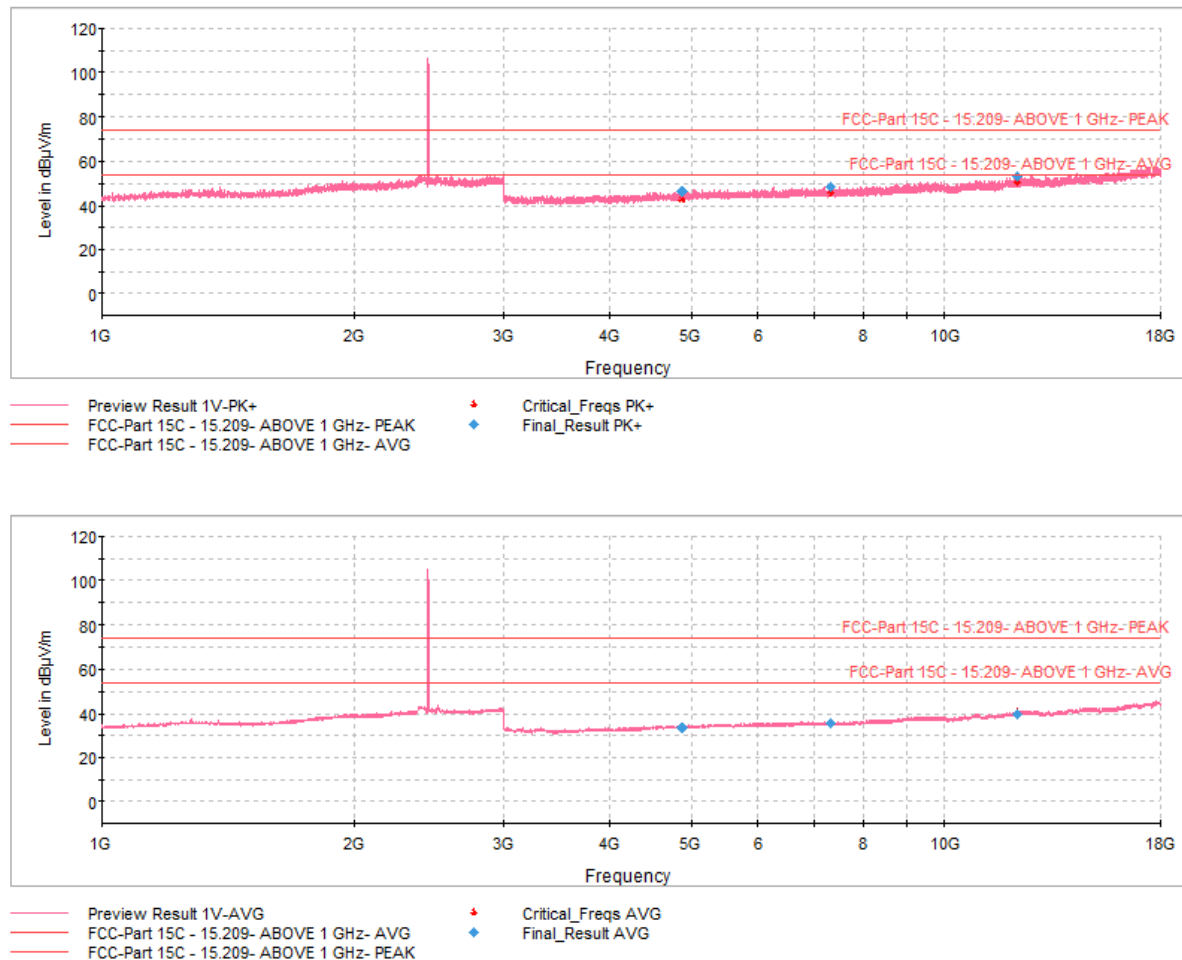


Figure 35 : RSE_1GHz to 18 GHz_Right Cup_1Mbps_Mid channel_2440_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4880.2	46.41	---	0.00	---	74	27.59	220	V	6	-0.7
7319.7	48.1	---	0.00	---	74	25.9	205	V	97	0.9
12200	52.96	---	0.00	---	74	21.04	220	V	308	6
4880.2	---	33.44	2.21	35.65	54	18.35	170	V	279	-0.7
7320.4	---	35.28	2.21	37.49	54	16.51	220	V	184	0.9
12200	---	39.91	2.21	42.12	54	11.88	205	V	275	6

Table 32: RSE_1GHz to 18 GHz_Right Cup_1Mbps_Mid channel_2440_Final table in Vertical Polarization

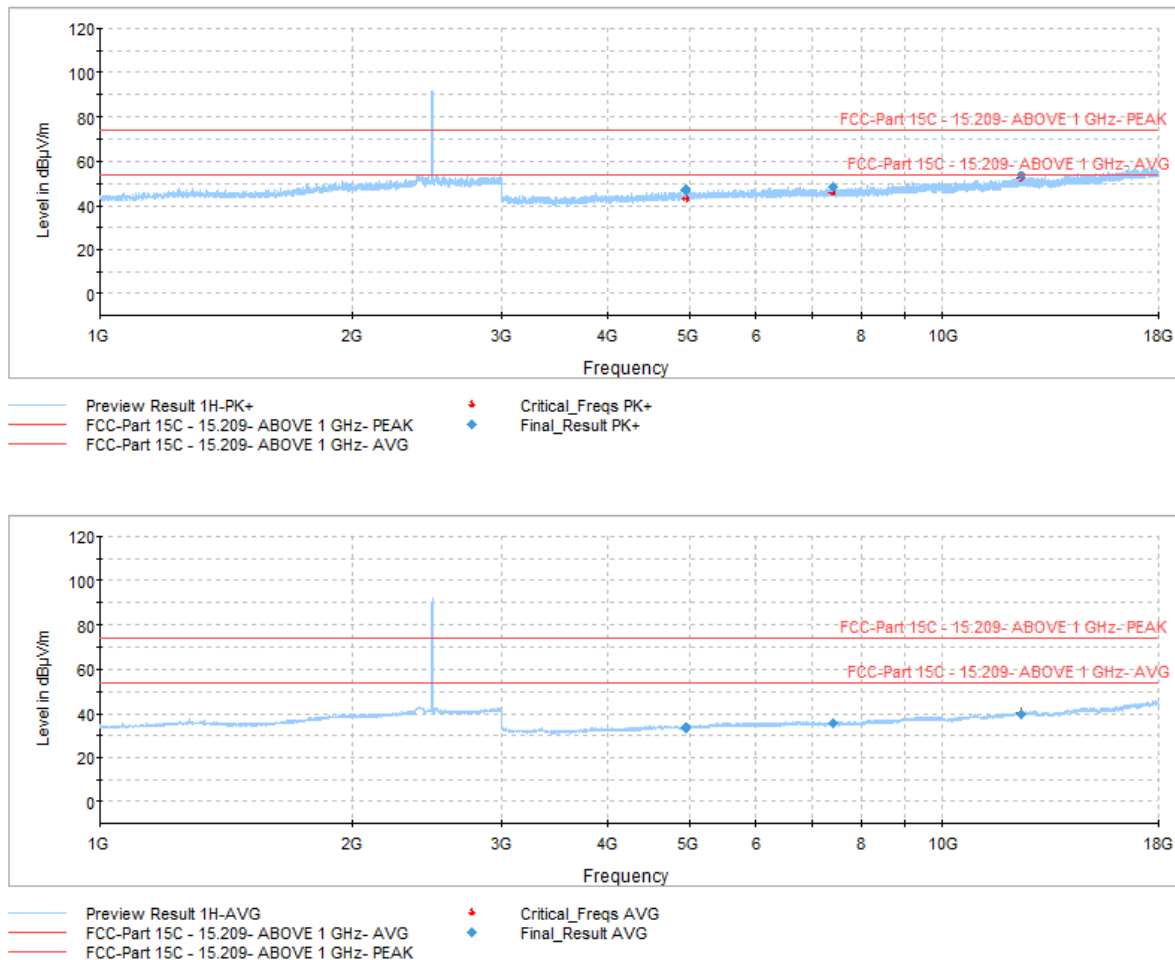


Figure 36 : RSE_1GHz to 18 GHz_Right Cup_1Mbps_High channel_2480_Pre-scan in Horizontal Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4960	46.91	---	0.00	---	74	27.09	194	H	355	-0.5
7400.9	48.16	---	0.00	---	74	25.84	205	H	262	0.9
12399.2	53.56	---	0.00	---	74	20.44	220	H	250	5.8
4960	---	33.61	2.21	35.82	54	18.18	220	H	343	-0.5
7400.9	---	35.42	2.21	37.63	54	16.37	170	H	111	0.9
12400	---	39.92	2.21	42.13	54	11.87	156	H	341	5.8

Table 33: RSE_1GHz to 18 GHz_Right Cup_1Mbps_High channel_2480_Final table in Horizontal Polarization

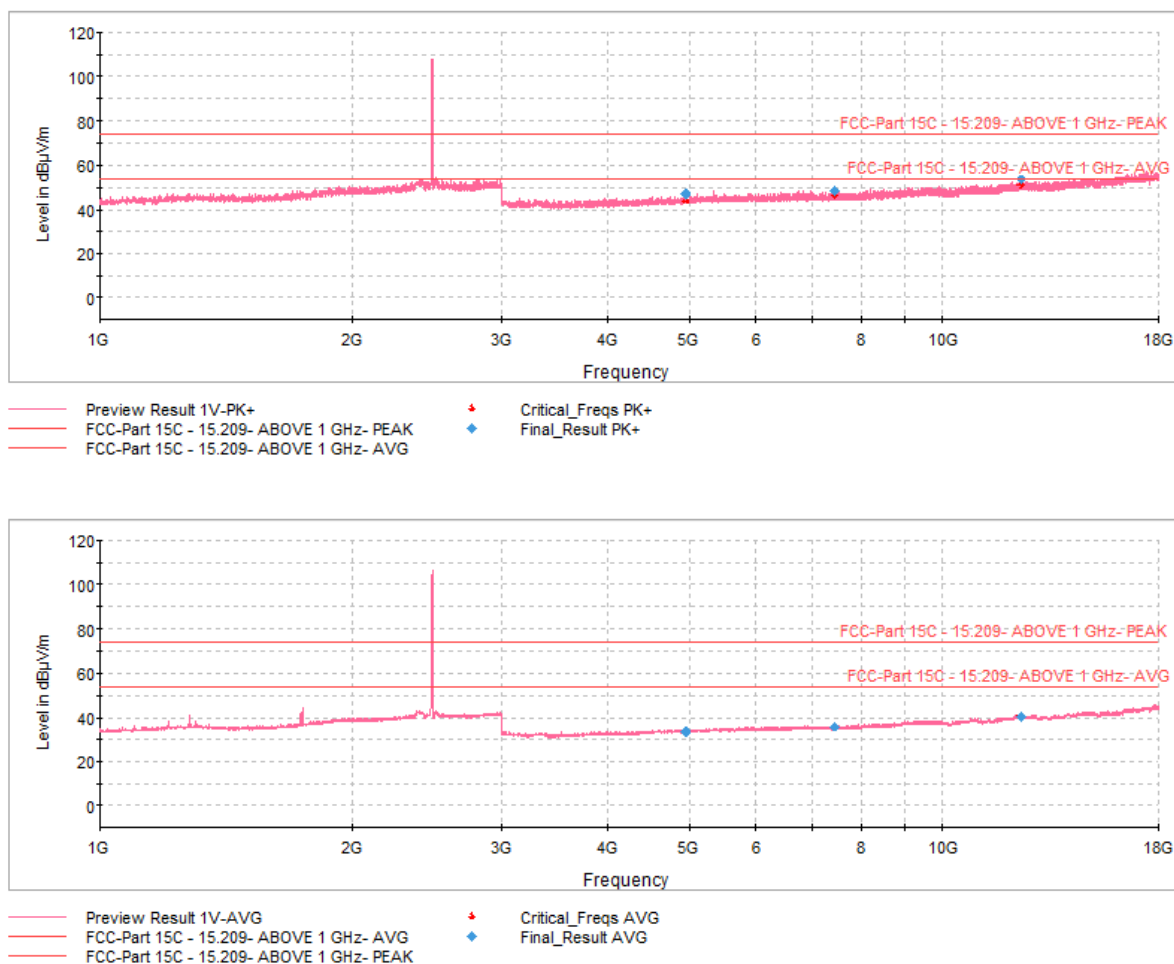
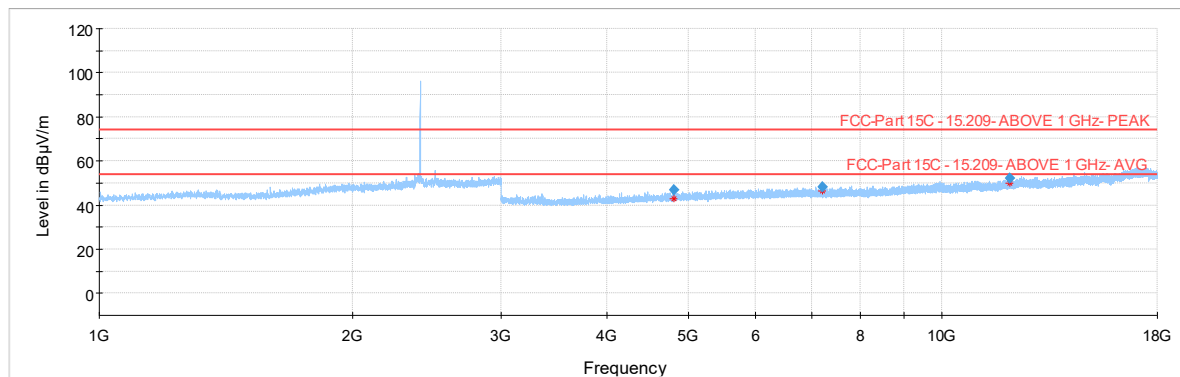


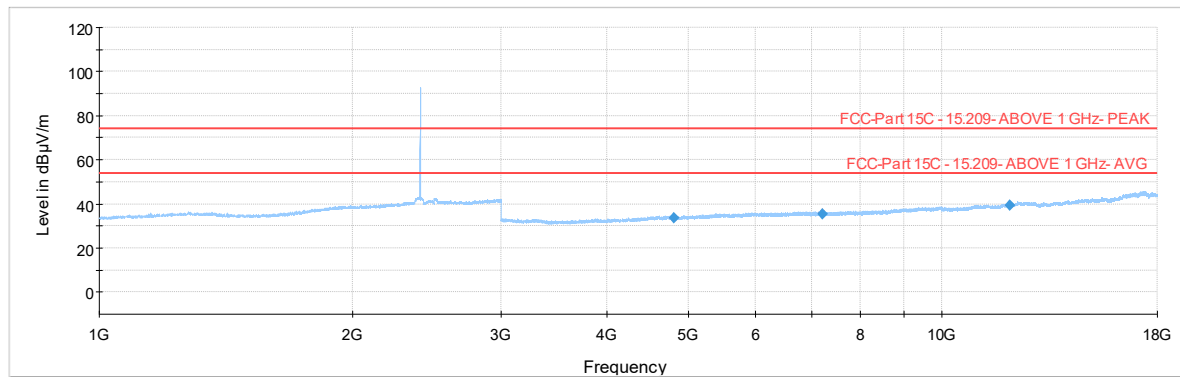
Figure 37 : RSE_1GHz to 18 GHz_Right Cup_1Mbps_High channel_2480_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4960	46.63	---	0.00	---	74	27.37	155	V	86	-0.4
7440.1	48.4	---	0.00	---	74	25.6	155	V	61	1
12400	53.33	---	0.00	---	74	20.67	220	V	203	6
4960	---	33.74	2.21	35.95	54	18.05	170	V	155	-0.4
7440.1	---	35.67	2.21	37.88	54	16.12	220	V	99	1
12400	---	40.09	2.21	42.30	54	11.70	170	V	342	6

Table 34: RSE_1GHz to 18 GHz_Right Cup_1Mbps_High channel_2480_Final table in Vertical Polarization



Preview Result 1H-PK+ Critical_Freqs PK+
 FCC-Part 15C - 15.209- ABOVE 1 GHz- PEAK FCC-Part 15C - 15.209- ABOVE 1 GHz- AVG
 Final_Result PK+



Preview Result 1H-AVG Critical_Freqs AVG
 FCC-Part 15C - 15.209- ABOVE 1 GHz- AVG FCC-Part 15C - 15.209- ABOVE 1 GHz- PEAK
 Final_Result AVG

Figure 38 : RSE_1GHz to 18 GHz_Right Cup_2Mbps_Low channel_2404_Pre-scan in Horizontal Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4808.6	46.67	---	0.00	---	74	27.33	109	H	356	-0.6
7211.9	48.07	---	0.00	---	74	25.93	169	H	56	0.9
12020.8	52.15	---	0.00	---	74	21.85	109	H	304	5.4
4808.1	---	33.68	5.14	38.82	54	15.18	145	H	28	-0.6
7212.6	---	35.4	5.14	40.54	54	13.46	109	H	327	0.9
12020	---	39.42	5.14	44.56	54	9.44	205	H	193	5.4

Table 35: RSE_1GHz to 18 GHz_Right Cup_2Mbps_Low channel_2404_Final table in Horizontal Polarization

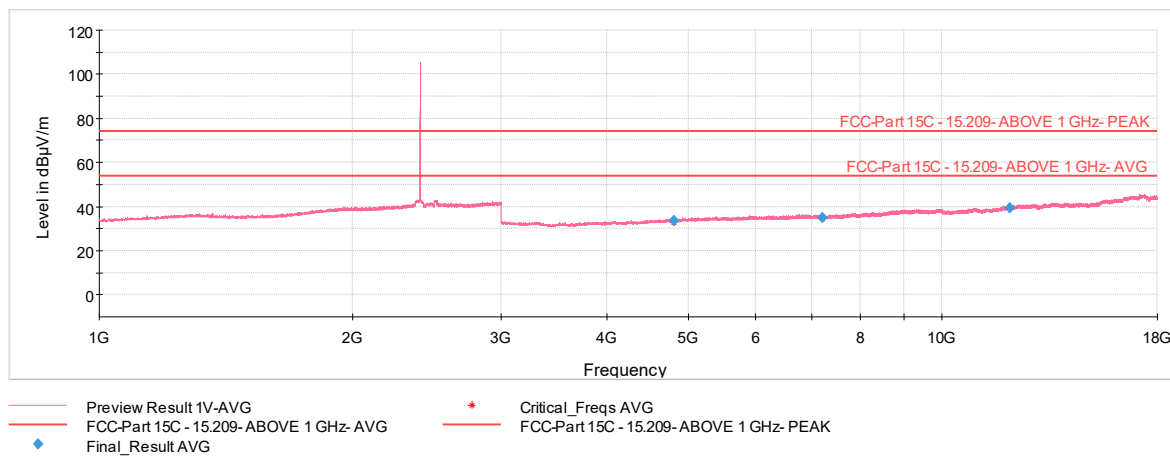
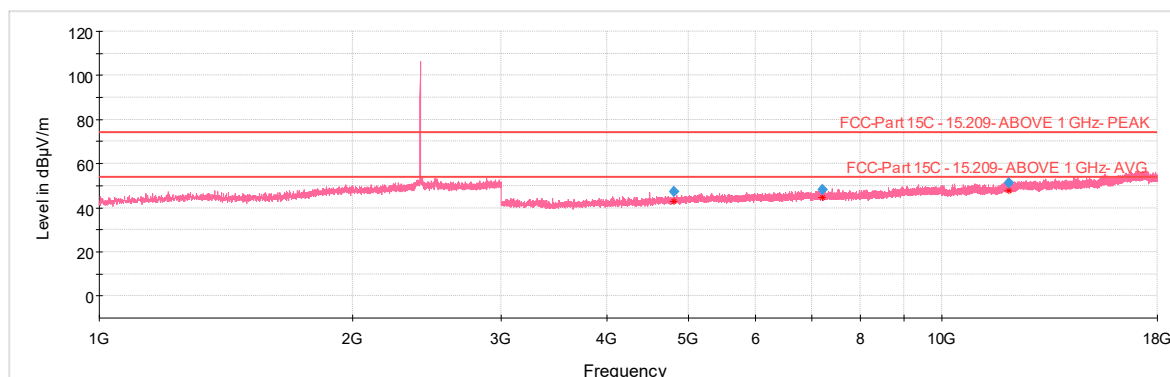
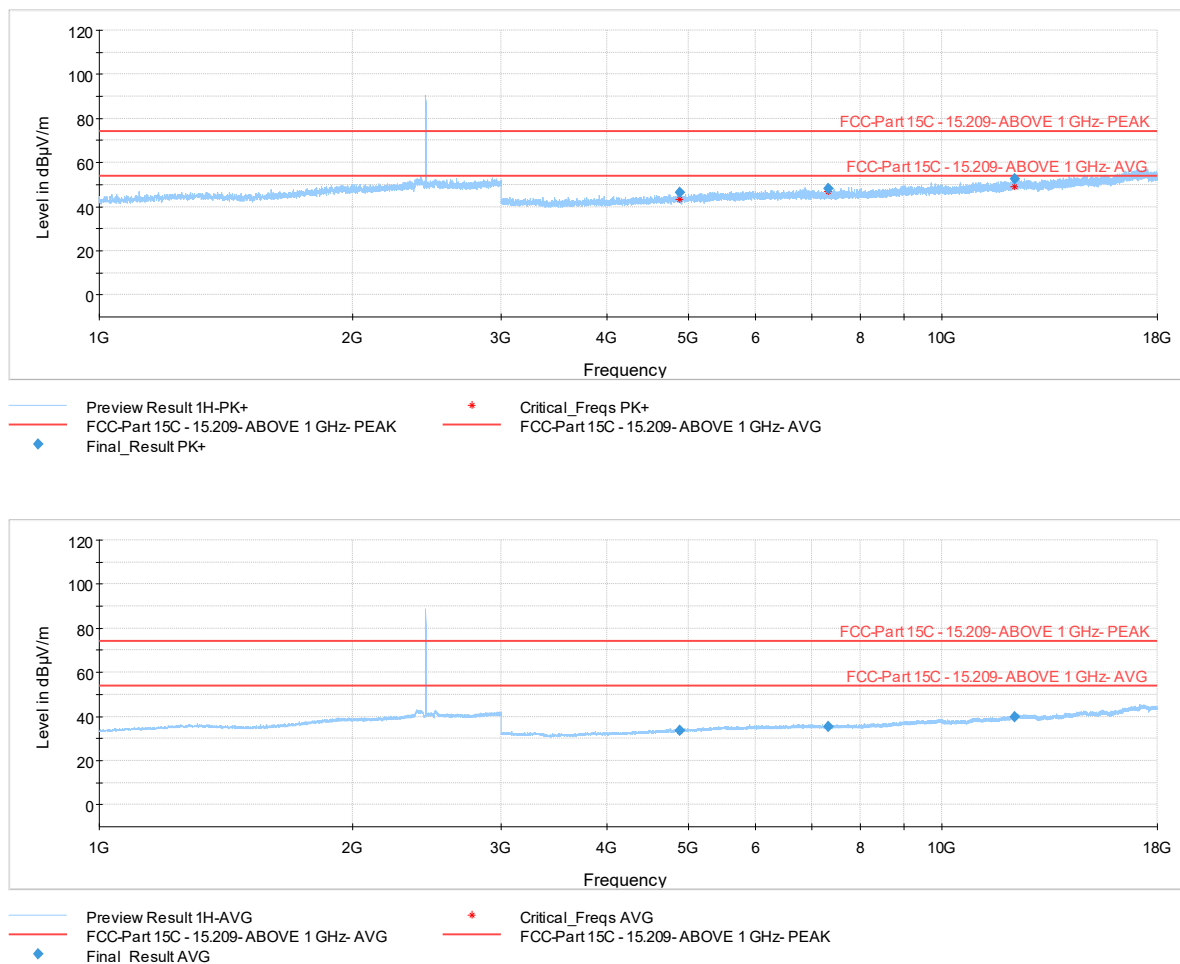


Figure 39 : RSE_1GHz to 18 GHz_Right Cup_2Mbps_Low channel_2404_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
4808.1	47.32	---	0.00	---	74	26.68	192	V	194	-0.6
7212.6	47.98	---	0.00	---	74	26.02	109	V	117	0.9
12020.4	51.47	---	0.00	---	74	22.53	109	V	140	5.4
4808.1	---	33.61	5.14	38.75	54	15.25	205	V	129	-0.6
7211.9	---	35.12	5.14	40.26	54	13.74	168	V	333	0.9
12020	---	39.31	5.14	44.45	54	9.55	205	V	32	5.5

Table 36: RSE_1GHz to 18 GHz_Right Cup_2Mbps_Low channel_2404_Final table in Vertical Polarization



Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4880.2	46.43	---	0.00	---	74	27.57	181	H	118	-0.8
7320.4	48.02	---	0.00	---	74	25.98	132	H	32	0.8
12200	52.63	---	0.00	---	74	21.37	192	H	315	5.8
4880.2	---	33.51	5.14	38.65	54	15.35	192	H	315	-0.8
7320.4	---	35.36	5.14	40.50	54	13.50	161	H	340	0.8
12200	---	39.8	5.14	44.94	54	9.06	120	H	297	5.8

Table 37: RSE_1GHz to 18 GHz_Right Cup_2Mbps_Mid channel_2440_Final table in Horizontal Polarization

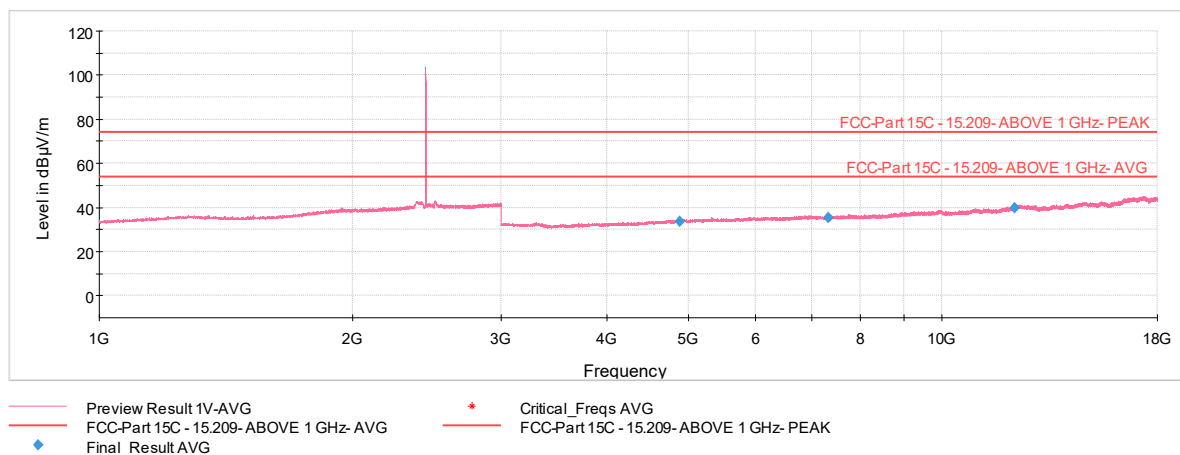
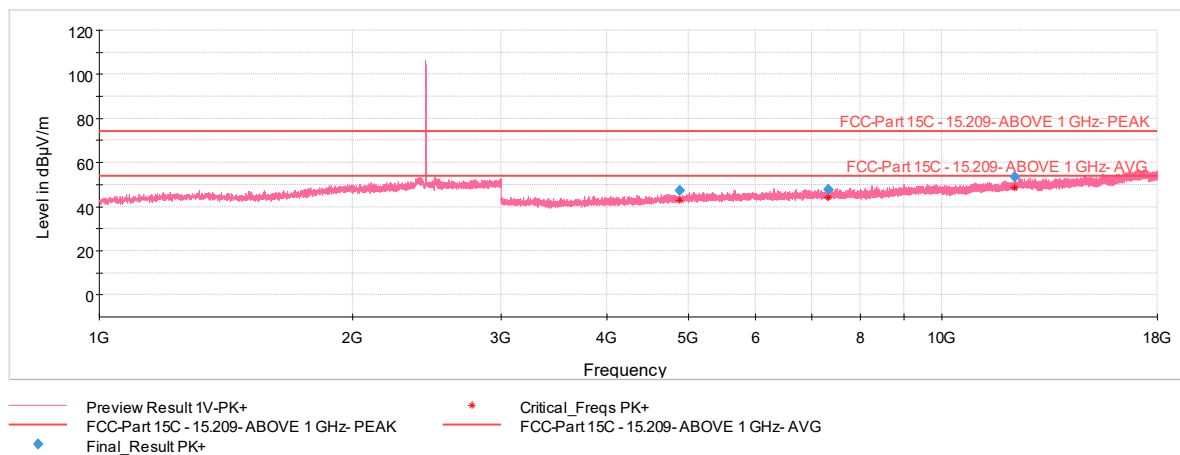


Figure 41 : RSE_1GHz to 18 GHz_Right Cup_2Mbps_Mid channel_2440_Pre-scan in Vertical Polarization

Frequency	MaxPeak	Average	DCCF	AVG Final	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(cm)	V/H	(deg)	(dB/m)
4880.2	47.13	---	0.00	---	74	26.87	105	V	251	-0.7
7319.7	47.69	---	0.00	---	74	26.31	205	V	293	0.9
12200	53.26	---	0.00	---	74	20.74	109	V	260	6
4880.2	---	33.47	5.14	38.61	54	15.39	132	V	217	-0.7
7319.7	---	35.23	5.14	40.37	54	13.63	194	V	309	0.9
12200	---	39.87	5.14	45.01	54	8.99	120	V	314	6

Table 38: RSE_1GHz to 18 GHz_Right Cup_2Mbps_Mid channel_2440_Final table in Vertical Polarization

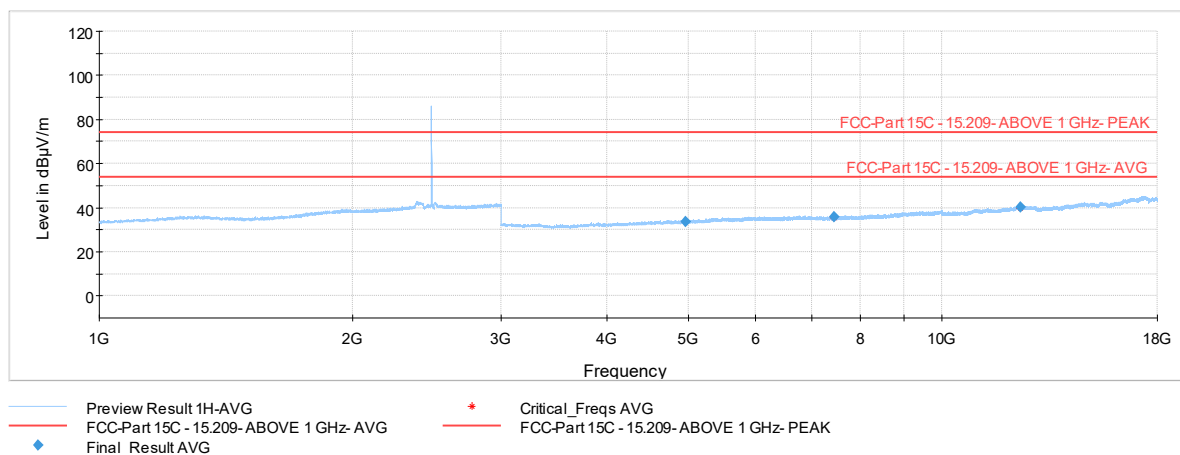
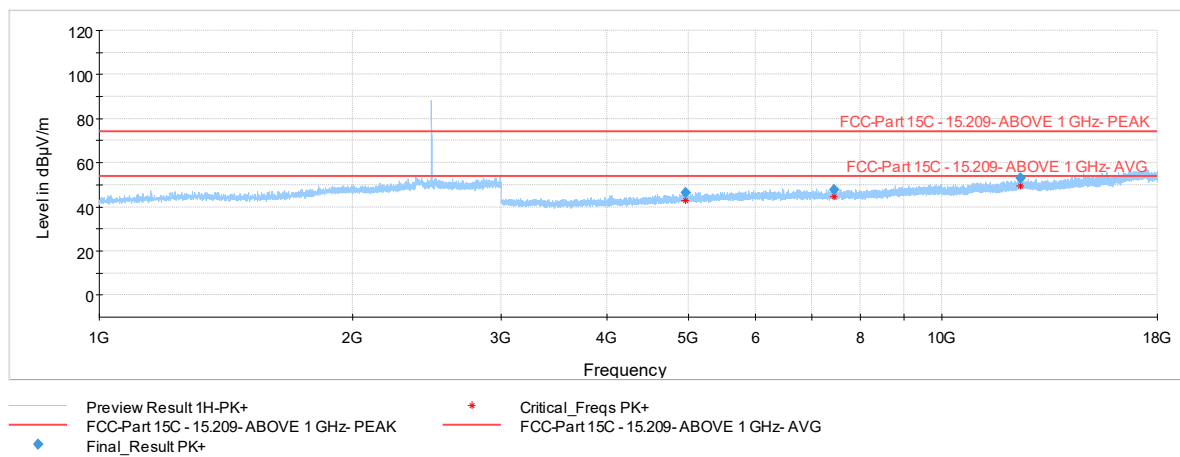


Figure 42 : RSE_1GHz to 18 GHz_Right Cup_2Mbps_High channel_2478_Pre-scan in Horizontal Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
4956.5	46.52	---	0.00	---	74	27.48	205	H	113	-0.4
7434.5	47.93	---	0.00	---	74	26.07	192	H	147	1
12390.4	52.84	---	0.00	---	74	21.16	169	H	283	5.8
4956.5	---	33.71	5.14	38.85	54	15.15	197	H	28	-0.4
7434.5	---	35.7	5.14	40.84	54	13.16	156	H	322	1
12389.6	---	40.13	5.14	45.27	54	8.73	205	H	78	5.8

Table 39: RSE_1GHz to 18 GHz_Right Cup_2Mbps_High channel_2478_Final table in Horizontal Polarization

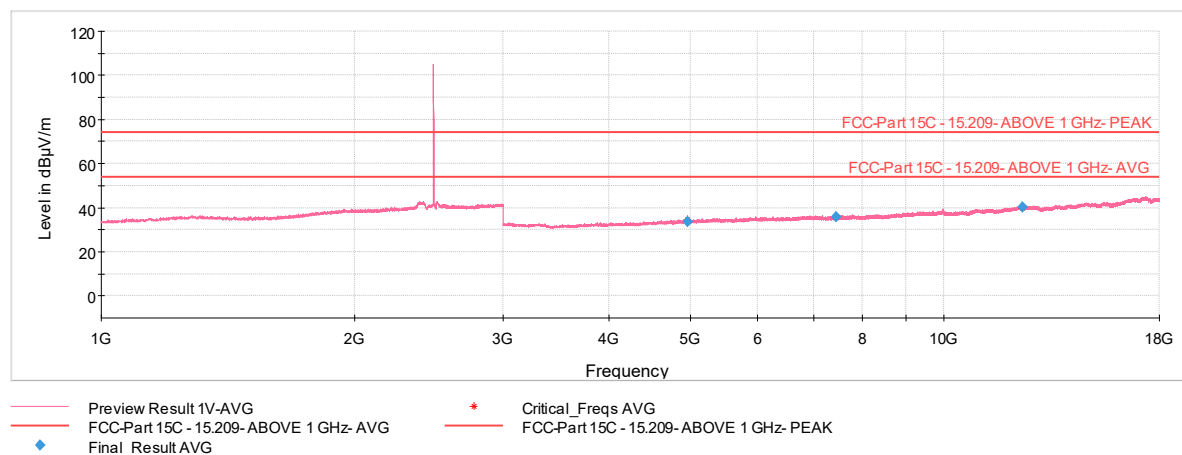
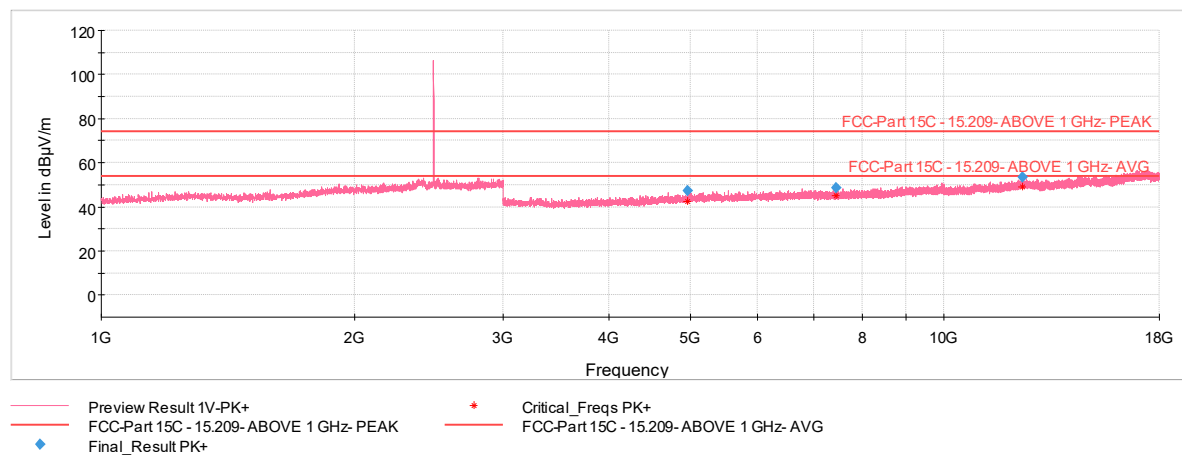


Figure 43 : RSE_1GHz to 18 GHz_Right Cup_2Mbps_High channel_2478_Pre-scan in Vertical Polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
4955.8	47.5	---	0.00	---	74	26.5	109	V	329	-0.4
7434.5	48.83	---	0.00	---	74	25.17	132	V	41	1
12390.4	53.44	---	0.00	---	74	20.56	105	V	272	6
4956.5	---	33.8	5.14	38.94	54	15.06	205	V	341	-0.4
7434.5	---	35.72	5.14	40.86	54	13.14	205	V	218	1
12390.4	---	40.22	5.14	45.36	54	8.64	157	V	276	6

Table 40: RSE_1GHz to 18 GHz_Right Cup_2Mbps_High channel_2478_Final table in Vertical Polarization

Calculation:

$\text{Avg Final(dB}\mu\text{V/m)} = \text{Average (dB}\mu\text{V/m)} + \text{DCCF.}$, Where DCCF is duty cycle correction factor.

$\text{Margin} = \text{Avg Final(dB}\mu\text{V/m)} - \text{Limit (dB}\mu\text{V/m).}$, For average limit is 54dBμV/m.

$\text{Margin} = \text{MaxPeak(dB}\mu\text{V/m)} - \text{Limit (dB}\mu\text{V/m).}$, For Peak limit is 74dBμV/m.

$\text{Correction Factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Factor (dB)}.$

$\text{Result value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)}.$

12.1.7.3. Radiated Spurious emission 18 GHz – 26.5 GHz.

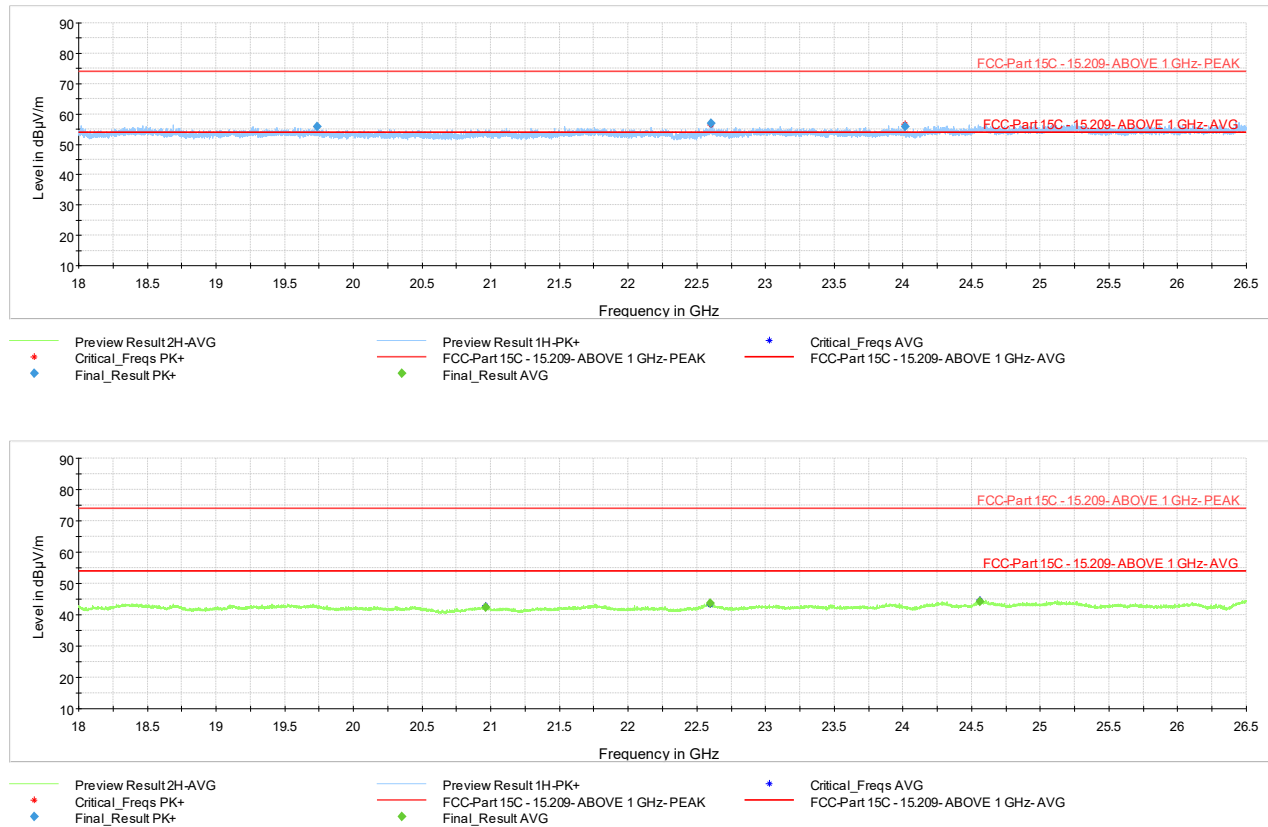


Figure 44 : RSE_18 GHz to 26.5 GHz_ Left Cup_1Mbps_ Mid channel_2440_Pre-scan_ Horizontal polarization

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	DCCF (dB)	AVG Final (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
19734	55.95	---	0.00	---	74	18.05	125.00	H	200.00	-2.4
22602.75	56.94	---	0.00	---	74	17.06	216.00	H	48.00	-0.1
24015.45	55.82	---	0.00	---	74	18.18	104.00	H	280.00	-0.1
20961.4	---	42.28	2.23	44.51	54	9.50	214.00	H	64.00	-1.8
22595.95	---	43.56	2.23	45.79	54	8.22	202.00	H	147.00	-0.1
24562	---	44.29	2.23	46.52	54	7.49	225.00	H	269.00	1.3

Table 41: RSE_18 GHz to 26.5 GHz_ Left Cup_1Mbps_ Mid channel_2440_ Final table_Horizontal polarization

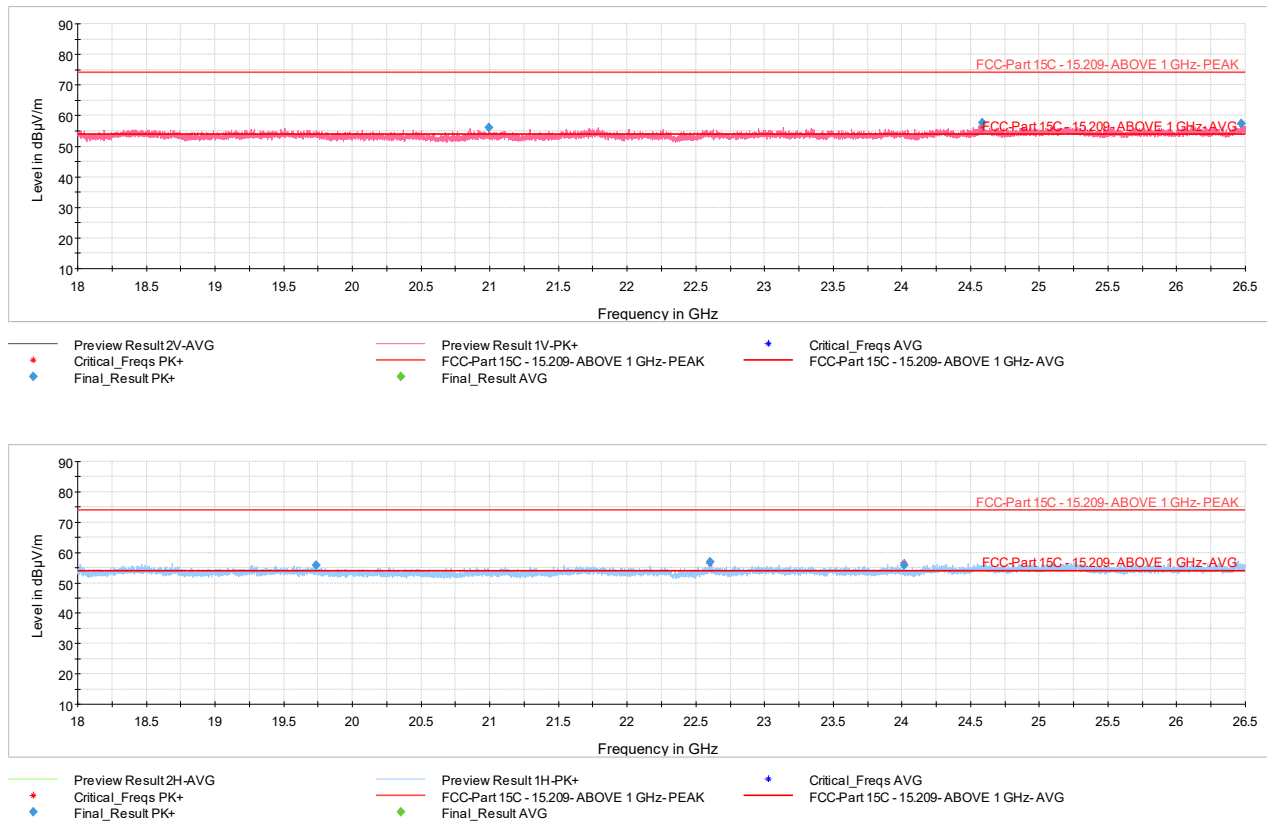
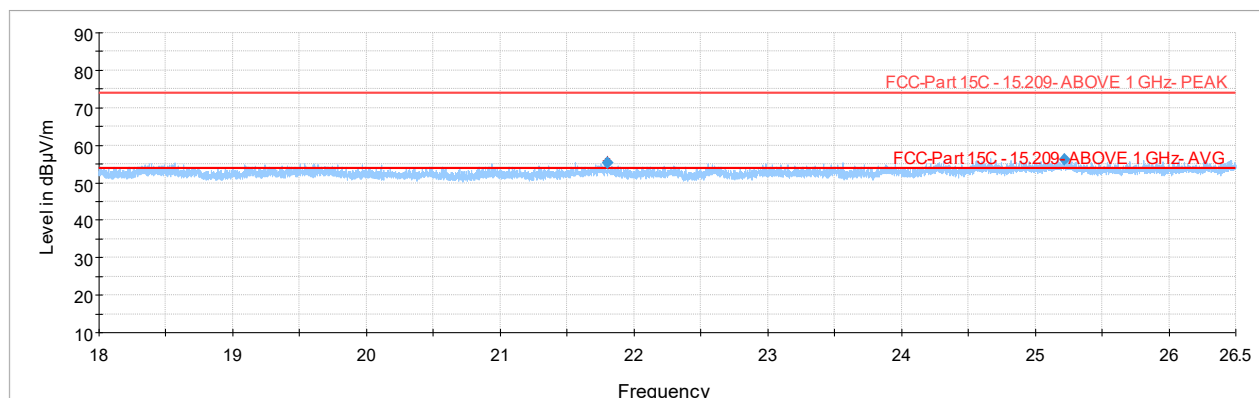


Figure 45 : RSE_18 GHz to 26.5 GHz_Left Cup_1Mbps_Mid channel_2440_Pre-scan_Vertical polarization

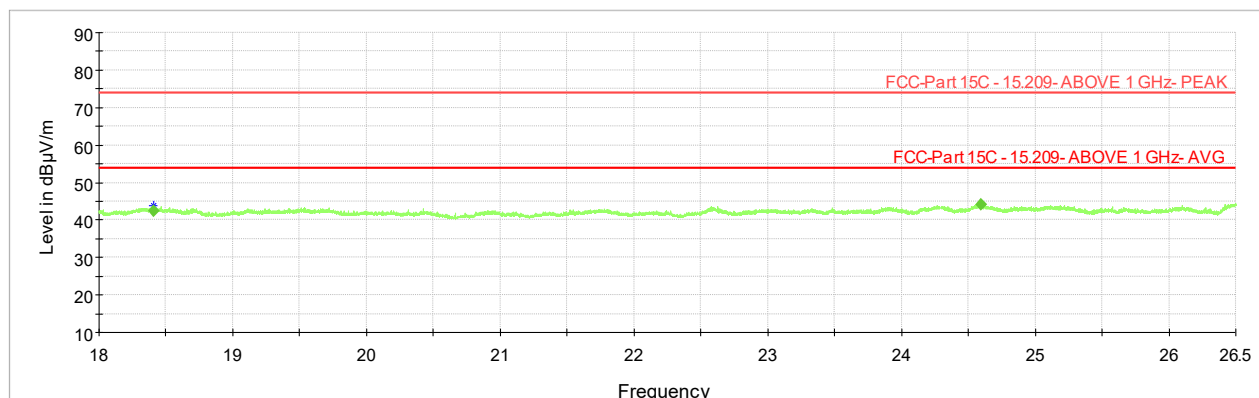
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
20993.7	55.98	---	0.00	---	74	18.02	125.00	V	240.00	-1.9
24584.95	57.72	---	0.00	---	74	16.28	202.00	V	203.00	1.4
26467.7	57.34	---	0.00	---	74	16.66	203.00	V	78.00	1
20963.1	---	42.17	2.23	44.40	54	9.61	225.00	V	65	-1.8
22607.85	---	43.45	2.23	45.68	54	8.33	116.00	V	159	-0.1
25110.25	---	43.69	2.23	45.92	54	8.09	225.00	V	182	0.8

Table 42: RSE_18 GHz to 26.5 GHz_Left Cup_1Mbps_Mid channel_2440_Final table_Vertical polarization



Preview Result 2H-AVG
 Critical_Freqs AVG
 FCC-Part 15C - 15.209-ABOVE 1 GHz- PEAK
 Final_Result PK+

Preview Result 1H-PK+
 Critical_Freqs PK+
 FCC-Part 15C - 15.209-ABOVE 1 GHz- AVG
 Final_Result AVG



Preview Result 2H-AVG
 Critical_Freqs AVG
 FCC-Part 15C - 15.209-ABOVE 1 GHz- PEAK
 Final_Result PK+

Preview Result 1H-PK+
 Critical_Freqs PK+
 FCC-Part 15C - 15.209-ABOVE 1 GHz- AVG
 Final_Result AVG

Figure 46 : RSE_18 GHz to 26.5 GHz_ Left Cup_2Mbps_ Mid channel_2440_Pre-scan_ Horizontal polarization

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	DCCF (dB)	AVG Final (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
21800.35	55.2	---	0.00	---	74	18.8	155.00	H	253	-0.7
25216.5	56.05	---	0.00	---	74	17.95	200.00	H	324	0.9
18409.7	---	42.37	5.12	47.49	54	6.51	170.00	H	307	-2.3
24591.75	---	44.09	5.12	49.21	54	4.79	200.00	H	139	1.4

Table 43: RSE_18 GHz to 26.5 GHz_ Left Cup_2Mbps_ Mid channel_2440_ Final table_ Horizontal polarization

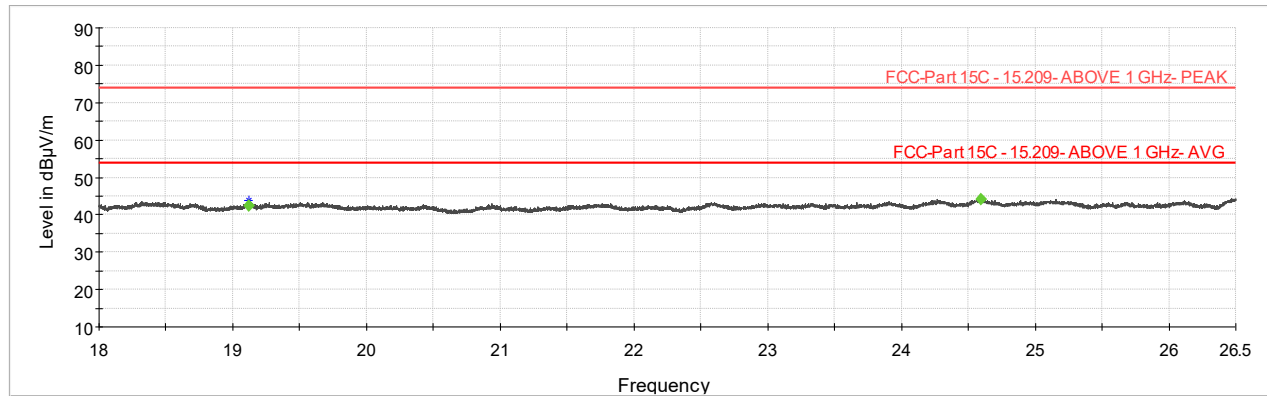
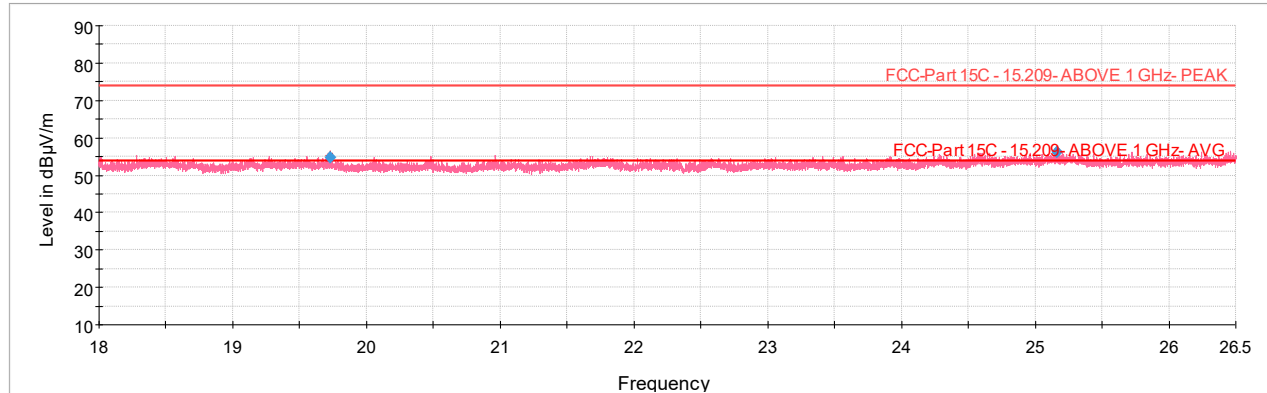
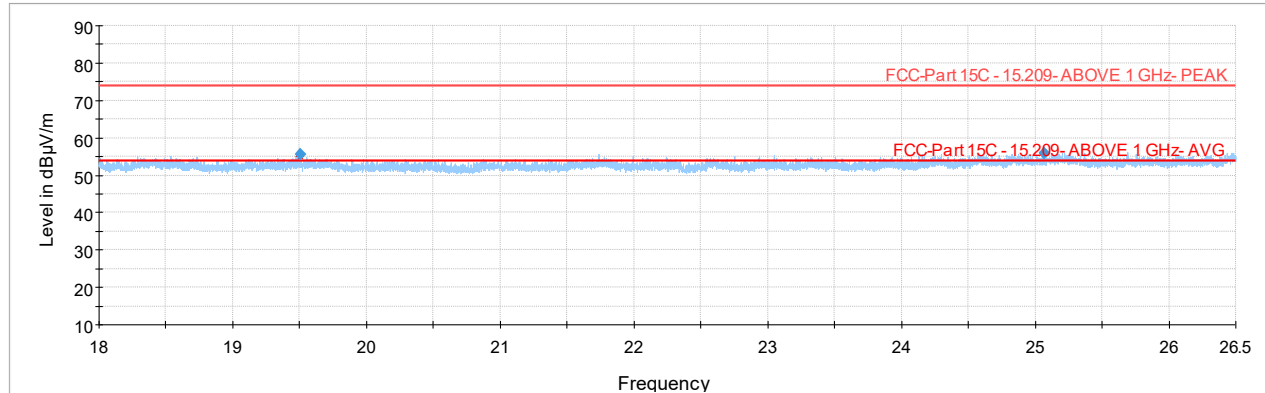


Figure 47 : RSE_18 GHz to 26.5 GHz_Left Cup_2Mbps_Mid channel_2440_Pre-scan_Vertical polarization

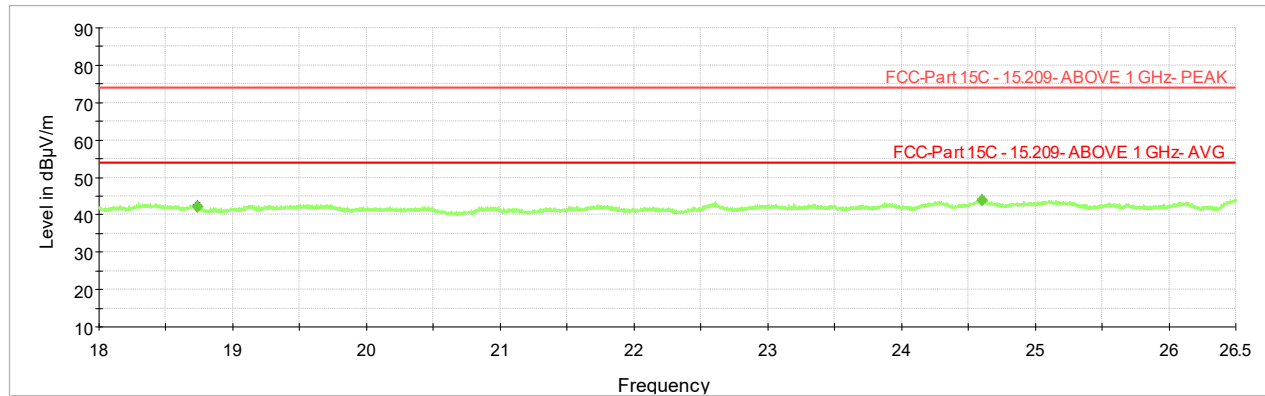
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
19731.45	54.8	---	0.00	---	74	19.2	155.00	V	54	-2.4
25161.25	56.09	---	0.00	---	74	17.91	155.00	V	230	0.8
19116.9	---	42.36	5.12	47.48	54	6.52	170.00	V	61	-2.5
24594.3	---	44.18	5.12	49.30	54	4.70	155.00	V	126	1.5

Table 44: RSE_18 GHz to 26.5 GHz_Left Cup_2Mbps_Mid channel_2440_Final table_Vertical polarization



Preview Result 2H-AVG
 Critical_Freqs AVG
 FCC-Part 15C - 15.209-ABOVE 1 GHz- PEAK
 Final_Result PK+

Preview Result 1H-PK+
 Critical_Freqs PK+
 FCC-Part 15C - 15.209-ABOVE 1 GHz- AVG
 Final_Result AVG



Preview Result 2H-AVG
 Critical_Freqs AVG
 FCC-Part 15C - 15.209-ABOVE 1 GHz- PEAK
 Final_Result PK+

Preview Result 1H-PK+
 Critical_Freqs PK+
 FCC-Part 15C - 15.209-ABOVE 1 GHz- AVG
 Final_Result AVG

Figure 48 : RSE_18 GHz to 26.5 GHz_Right Cup_1Mbps_High channel_2480_Pre-scan_Horizontal polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
19502.8	55.69	---	0.00	---	74	18.31	155.00	H	299	-1.8
25069.45	55.76	---	0.00	---	74	18.24	200.00	H	89	0.8
18734.4	---	41.98	2.21	44.19	54	9.81	155.00	H	35	-2.3
24602.8	---	43.96	2.21	46.17	54	7.83	155.00	H	358	1.5

Table 45: RSE_18 GHz to 26.5 GHz_Right Cup_1Mbps_High channel_2480_Final table_Horizontal polarization

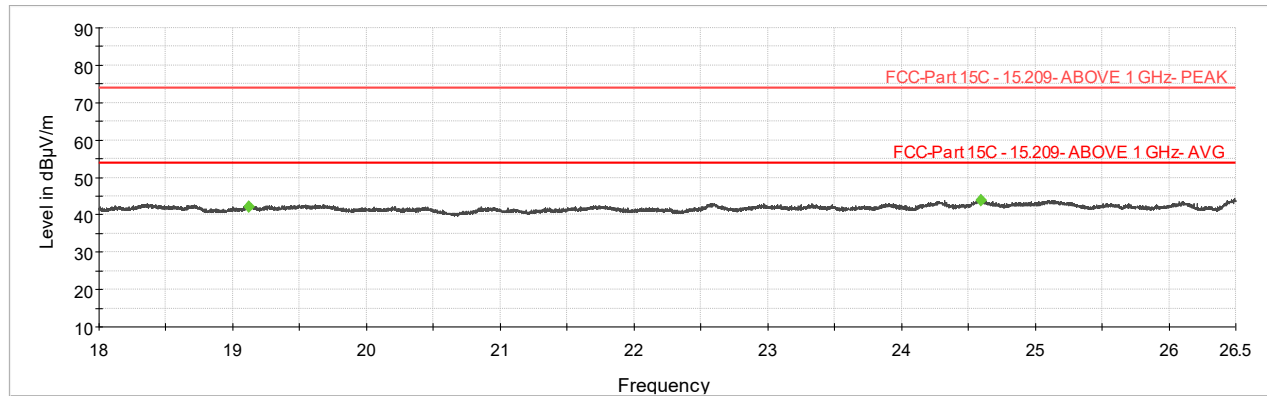
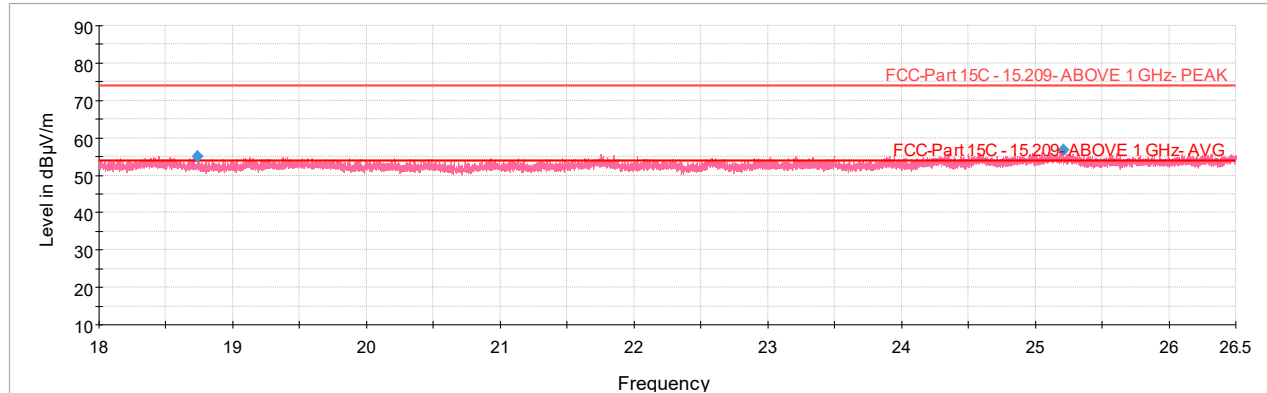


Figure 49 : RSE_18 GHz to 26.5 GHz_Right Cup_1Mbps_High channel_2480_Pre-scan_Vertical polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
18738.65	55.08	---	0.00	---	74	18.92	155.00	V	216	-2.3
25213.95	56.82	---	0.00	---	74	17.18	155.00	V	0	0.9
19122	---	42.07	2.21	44.28	54	9.72	155.00	V	270	-2.5
24591.75	---	43.72	2.21	45.93	54	8.07	155.00	V	161	1.4

Table 46: RSE_18 GHz to 26.5 GHz_Right Cup_1Mbps_High channel_2480_Final table_Vertical polarization

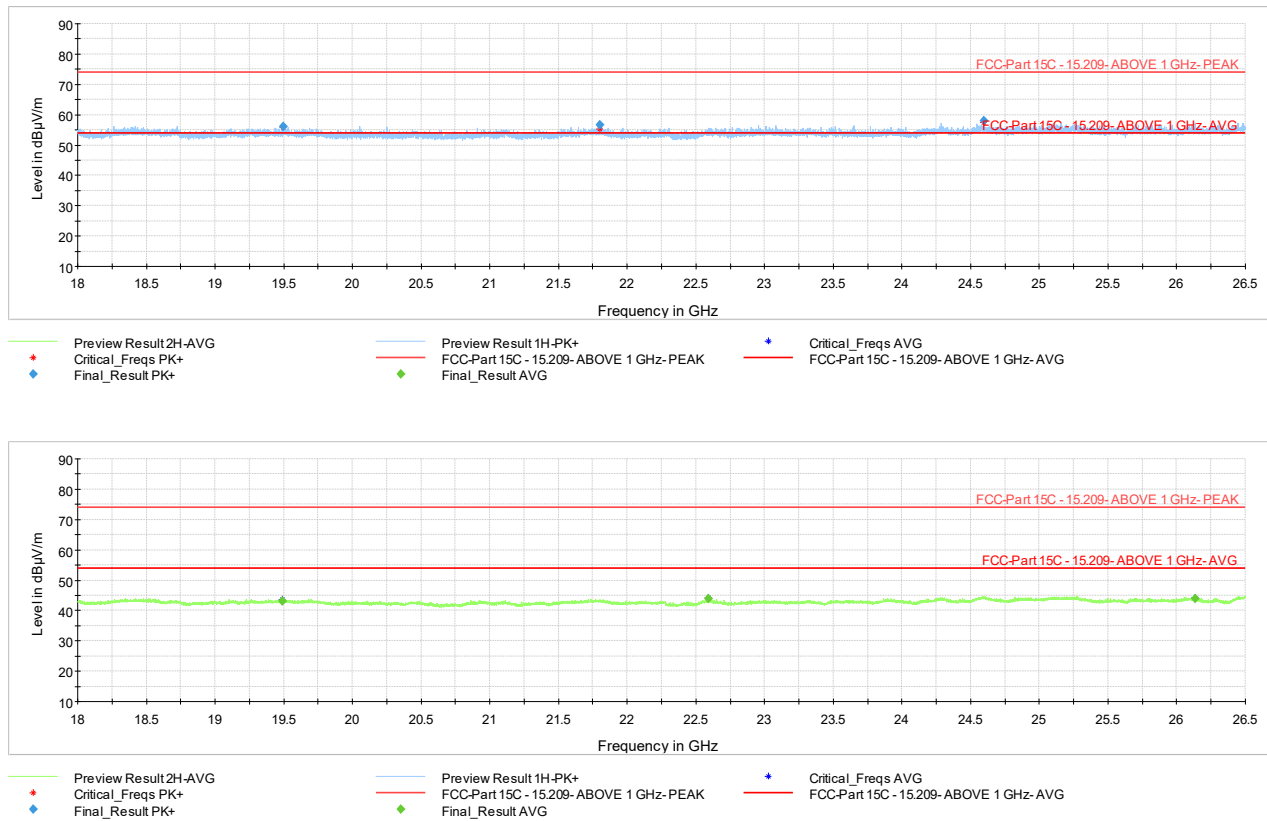
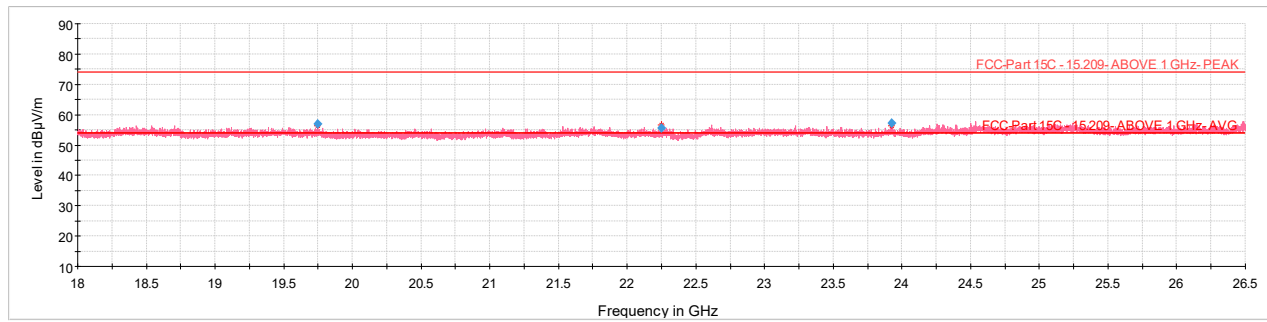


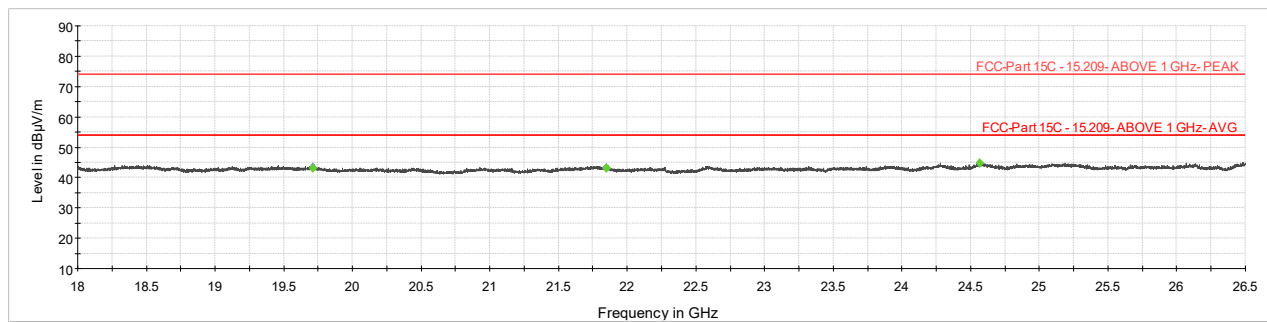
Figure 50 : RSE_18 GHz to 26.5 GHz_ Right Cup_2Mbps_ High channel_2478_Pre-scan_ Horizontal polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
19499.4	56	---	0.00	---	74	18	116.00	H	310	-1.8
21802.9	56.66	---	0.00	---	74	17.34	202.00	H	146	-0.8
24594.3	57.91	---	0.00	---	74	16.09	100.00	H	307	1.5
19493.45	---	43.22	5.14	48.36	54	5.64	202.00	H	-10	-1.8
22590	---	43.78	5.14	48.92	54	5.08	116.00	H	324	-0.1
26134.5	---	44.01	5.14	49.15	54	4.85	100.00	H	30	0.1

Table 47: RSE_18 GHz to 26.5 GHz_ Right Cup_2Mbps_ High channel_2478_ Final table _Horizontal polarization



Preview Result 2V-AVG
 Critical_Freqs PK+
 Final_Result PK+
 Preview Result 1V-PK+
 FCC-Part 15C - 15.209-ABOVE 1 GHz-PEAK
 Final_Result AVG
 Critical_Freqs AVG
 FCC-Part 15C - 15.209-ABOVE 1 GHz-AVG



Preview Result 2V-AVG
 Critical_Freqs PK+
 Final_Result PK+
 Preview Result 1V-PK+
 FCC-Part 15C - 15.209-ABOVE 1 GHz-PEAK
 Final_Result AVG
 Critical_Freqs AVG
 FCC-Part 15C - 15.209-ABOVE 1 GHz-AVG

Figure 51 : RSE_18 GHz to 26.5 GHz_Right Cup_2Mbps_High channel_2478_Pre-scan_Vertical polarization

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	DCCF (dB)	AVG Final (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
19745.05	56.79	---	0.00	---	74	17.21	125	V	279	-2.4
22249.15	55.46	---	0.00	---	74	18.54	202	V	279	-1.3
23924.5	57.11	---	0.00	---	74	16.89	225	V	15	0.3
19710.2	---	43.02	5.14	48.16	54	5.84	225	V	290	-2.4
21849.65	---	43.12	5.14	48.26	54	5.74	118	V	50	-0.9
24567.1	---	44.72	5.14	49.86	54	4.14	175	V	323	1.3

Table 48: RSE_18 GHz to 26.5 GHz_Right Cup_2Mbps_High channel_2478_Final table_Vertical polarization

Note: No major emissions observed in the range of 18 GHz to 26.5 GHz.

12.1.7.4. Radiated Spurious emission 30 MHz to 1 GHz.

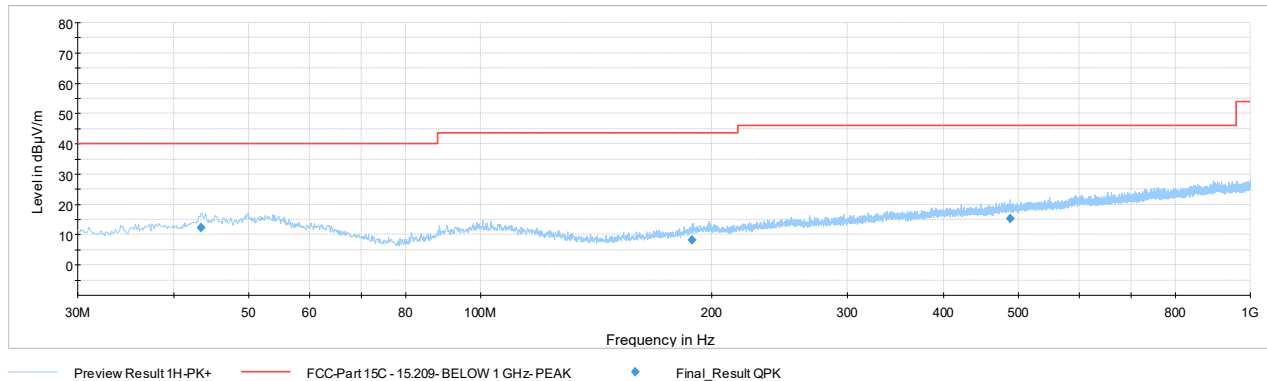


Figure 52 : RSE_30 MHz to 1 GHz_ Left Cup_1Mbps_ Mid channel_2440_Pre-scan_ Horizontal polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
43.386	12.22	40	27.78	185.00	H	326	-30.60
188.498	8.26	43.52	35.26	189.00	H	64	-33.00
488.034	15.21	46.02	30.81	285.00	H	302	-25.40

Table 49: RSE_30 MHz to 1 GHz _ Left Cup_1Mbps_ Mid channel_2440_Final table_ Horizontal polarization

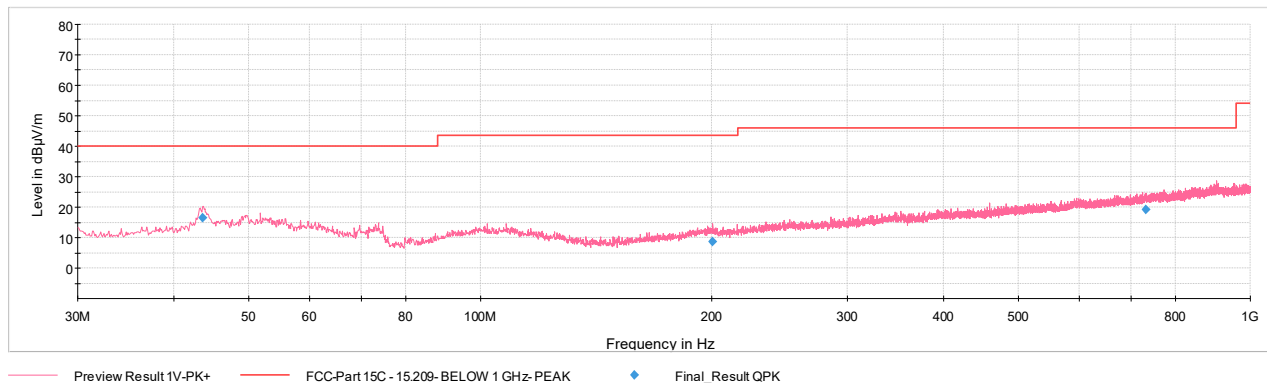


Figure 53 : RSE_30 MHz to 1 GHz_ Left Cup_1Mbps_ Mid channel_2440_Pre-scan_ Vertical polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
43.58	16.38	40	23.62	279	V	284.00	-30.6
200.429	8.63	43.52	34.89	175	V	304.00	-32.3
732.183	19.28	46.02	26.74	125	V	329.00	-21.5

Table 50: RSE_30 MHz to 1 GHz _ Left Cup_1Mbps_ Mid channel_2440_Final table_Verical polarization

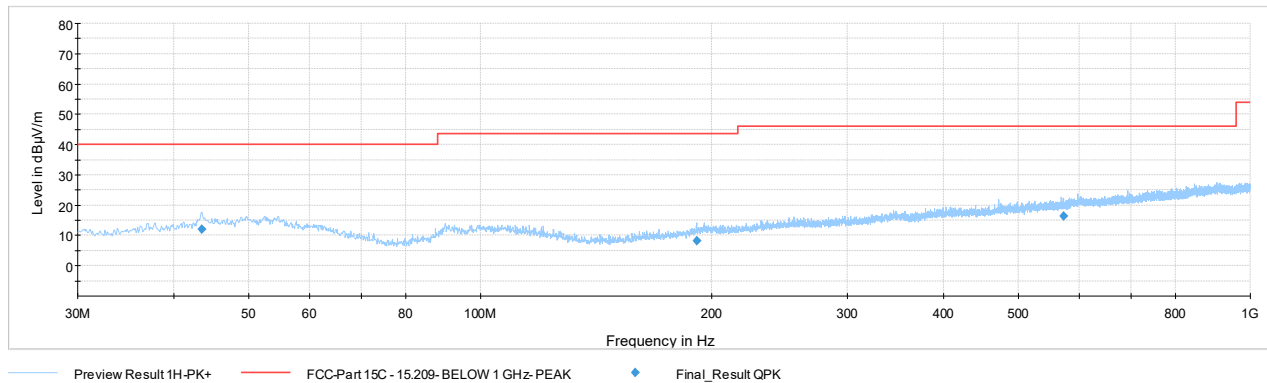


Figure 54 : RSE_30 MHz to 1 GHz_ Right Cup_2Mbps_ High channel_2478_Pre-scan_ Horizontal polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
43.483	11.98	40	28.02	309.00	H	48	-30.60
190.923	8.35	43.52	35.17	389.00	H	96	-32.70
571.551	16.36	46.02	29.66	104.00	H	228	-24.20

Table 51: RSE_30 MHz to 1 GHz _ Right Cup_2Mbps_ High channel_2478_Final table_ Horizontal polarization

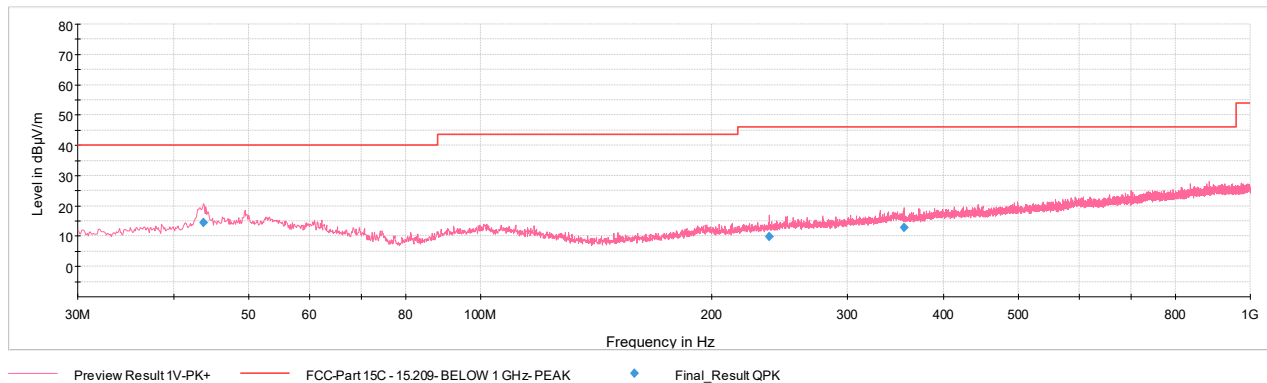
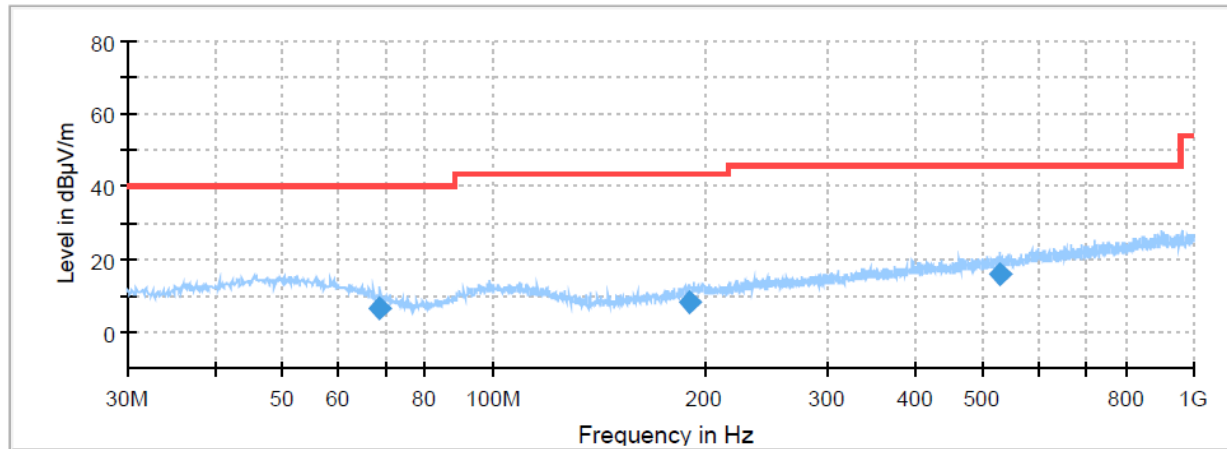


Figure 55 : RSE_30 MHz to 1 GHz_ Right Cup_2Mbps_ High channel_2478_Pre-scan_ Vertical polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
43.677	14.56	40	25.44	315.00	V	32	-30.60
237.386	9.85	46.02	36.17	389.00	V	130	-31.10
354.853	12.72	46.02	33.3	389.00	V	176	-28.10

Table 52: RSE_30 MHz to 1 GHz _ Right Cup_2Mbps_ High channel_2478_Final table_Vertical polarization



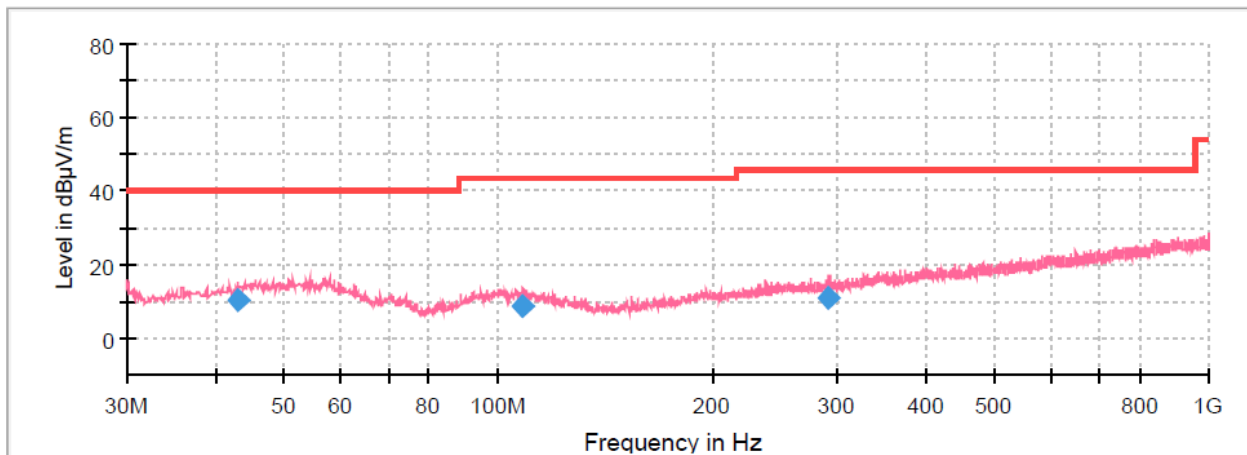
Preview Result 1H-PK+
Final_Result QPK

FCC-Part 15C - 15.209- BELOW 1 GHz- PEAK

Figure 56 : RSE_30 MHz to 1 GHz_ Left Cup_2Mbps_ Mid channel_2440_Pre-scan_ Horizontal polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
68.8	6.41	40	33.59	195.00	H	224	-34.50
191.02	8.33	43.52	35.19	105.00	H	167	-32.70
527.998	15.77	46.02	30.25	390.00	H	280	-24.70

Table 53: RSE_30 MHz to 1 GHz _ Left Cup_2Mbps_ Mid channel_2440_Final table_ Horizontal polarization



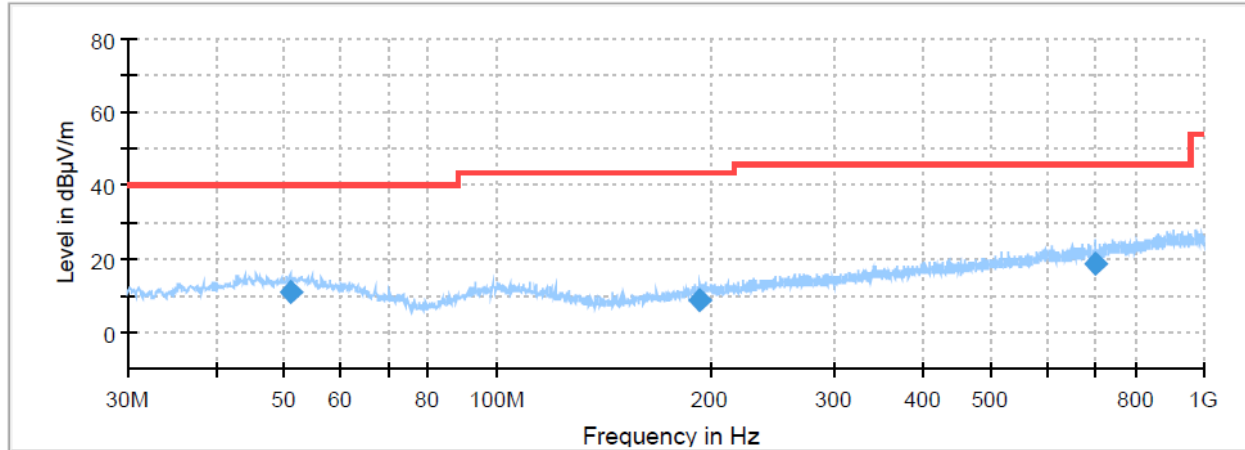
Preview Result 1V-PK+
Final_Result QPK

FCC-Part 15C - 15.209- BELOW 1 GHz- PEAK

Figure 57 : RSE_30 MHz to 1 GHz_ Left Cup_2Mbps_ Mid channel_2440_Pre-scan_ Vertical polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
43.095	10.46	40	29.54	195.00	V	26	-30.70
108.085	8.87	43.52	34.65	190.00	V	274	-32.40
292.482	10.92	46.02	35.1	294.00	V	312	-29.90

Table 54: RSE_30 MHz to 1 GHz _ Left Cup_2Mbps_ Mid channel_2440_Final table_Vertical polarization



Preview Result 1H-PK+
Final_Result QPK

FCC-Part 15C - 15.209- BELOW 1 GHz- PEAK

Figure 58 : RSE_30 MHz to 1 GHz_ Right Cup_1Mbps_ High channel_2480_Pre-scan_ Horizontal polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
50.855	10.99	40	29.01	105.00	H	210	-30.00
193.251	8.53	43.52	34.99	295.00	H	225	-32.30
701.725	18.47	46.02	27.55	105.00	H	123	-22.30

Table 55: RSE_30 MHz to 1 GHz _ Right Cup_1Mbps_ High channel_2480_Final table_ Horizontal polarization

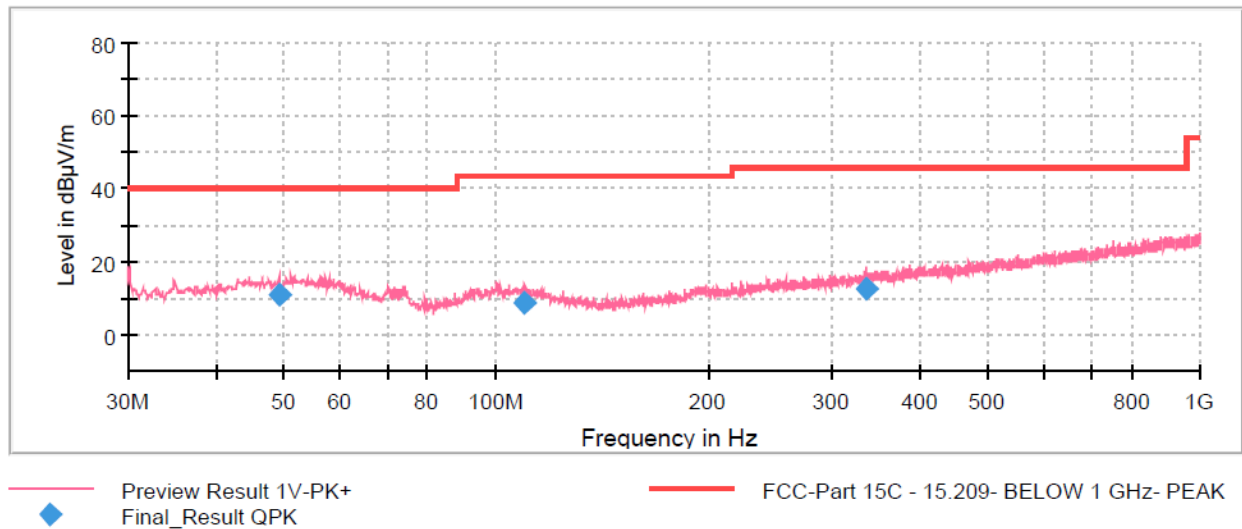


Figure 59 : RSE_30 MHz to 1 GHz_Right Cup_1Mbps_High channel_2480_Pre-scan_Vertical polarization

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol V/H	Azimuth (deg)	Corr. (dB/m)
49.109	10.75	40	29.25	220.00	V	86	-30.00
110.025	8.72	43.52	34.8	175.00	V	142	-32.50
335.647	12.5	46.02	33.52	179.00	V	330	-28.30

Table 56: RSE_30 MHz to 1 GHz _Right Cup_1Mbps_High channel_2480_Final table_Vertical polarization

12.1.7.5. Radiated Spurious emission 9kHz to 30 MHz – FCC.

Frequency (MHz)	Meter Reading (dBuV)	Detector	ANT (dB/m)	Cable Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dBμV/m	QP/AV Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Loop Antenna Orientation
0.018	50.510	Peak	14.40	0.09	-80	-15.00	42.52	-57.52	0-360	Parallel
0.854	31.460	Peak	11.60	0.31	-40	3.37	28.98	-25.61	0-360	Parallel
21.007	24.810	Peak	8.80	0.60	-40	-5.79	29.54	-35.33	0-360	Parallel
0.028	46.850	Peak	12.10	0.09	-80	-20.96	38.75	-59.71	0-360	Perpendicular
0.056	41.890	Peak	11.80	0.09	-80	-26.22	32.79	-59.01	0-360	Perpendicular
21.007	23.580	Peak	8.80	0.60	-40	-7.02	29.54	-36.56	0-360	Perpendicular
0.018	48.660	Peak	14.40	0.09	-80	-16.85	42.55	-59.40	0-360	Ref to ground
8.060	19.330	Peak	10.80	0.54	-40	-9.33	29.54	-38.87	0-360	Ref to ground
20.640	27.180	Peak	8.80	0.60	-40	-3.42	29.54	-32.96	0-360	Ref to ground

Table 57: RSE_FCC_9kHz to 30 MHz_Worst case_loop antenna results

Note: For 9kHz to 30MHz radiated emission have performed for the maximum operating channel power. The amplitude of spurious emission attenuated more than 20dB below the permissible value is not required to be reported.

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12.1.7.6. Radiated Spurious emission 9kHz to 30 MHz – ISED.

Frequency (MHz)	Meter Reading (dBuV)	Detector	ANT (dB/m)	Cable Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dBμA/m	QP/AV Limit (dBuA/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
0.018	49.040	Peak	-37.10	0.09	-80	-67.97	-9.00	-58.97	0-360	Parallel
1.510	26.800	Peak	-39.70	0.40	-40	-52.50	-27.50	-25.00	0-360	Parallel
19.484	20.890	Peak	-41.30	0.52	-40	-59.89	-21.93	-37.96	0-360	Parallel
0.028	46.190	Peak	-39.50	0.09	-80	-73.22	-12.78	-60.44	0-360	Perpendicular
0.055	43.570	Peak	-39.80	0.09	-80	-76.14	-18.78	-57.36	0-360	Perpendicular
19.604	16.850	Peak	-41.30	0.52	-40	-63.93	-21.93	-42.00	0-360	Perpendicular
0.018	49.370	Peak	-37.10	0.09	-80	-67.64	-8.94	-58.70	0-360	Ref to ground
8.069	19.290	Peak	-40.70	0.47	-40	-60.94	-21.93	-39.01	0-360	Ref to ground
19.710	28.460	Peak	-41.30	0.52	-40	-52.32	-21.93	-30.39	0-360	Ref to ground

Table 58: RSE_ISED_9kHz to 30 MHz_Worst case_loop antenna results

Note: For 9kHz to 30MHz radiated emission have performed for the maximum operating channel power. The amplitude of spurious emission attenuated more than 20dB below the permissible value is not required to be reported.

12.1.8. AC POWER LINE CONDUCTED EMISSION.

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency (MHz)	Conducted emission (dBμV)	
	Quasi-Peak	Average
0.15 – 0.5	66-56	56-46
0.5 - 5.0	56	46
5.0 – 30	60	50

Note:

1. The Lower limit applies at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequencies in the range 0.15 to 0.50 MHz

Test Procedure

- a. The EUT was located 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). The LISN's provide 50 ohms/ 50μH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency ranges from 150kHz to 30 MHz was searched. Emission levels under (Limit -20dB) were not recorded.

NOTE:

1. The RBW and VBW are set as below for Quasi-peak detector and Average detector.

Frequency	Resolution bandwidth	Video bandwidth	Sweep time (Prescan)	Sweep Time (Final measurement)
150 kHz to 30 MHz	9 kHz	30 kHz	20ms	1 second

RESULTS

12.1.8.1. AC Power line on Adaptor.

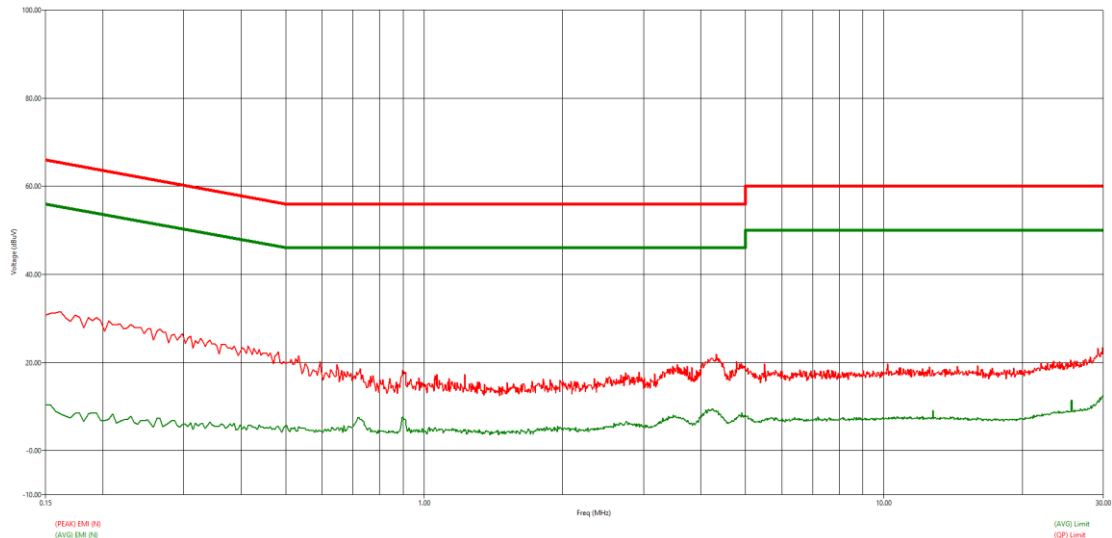


Figure 60 : CE_150kHz to 30MHz_Left Cup_Ch19_1Mbps_Prescan_Neutral

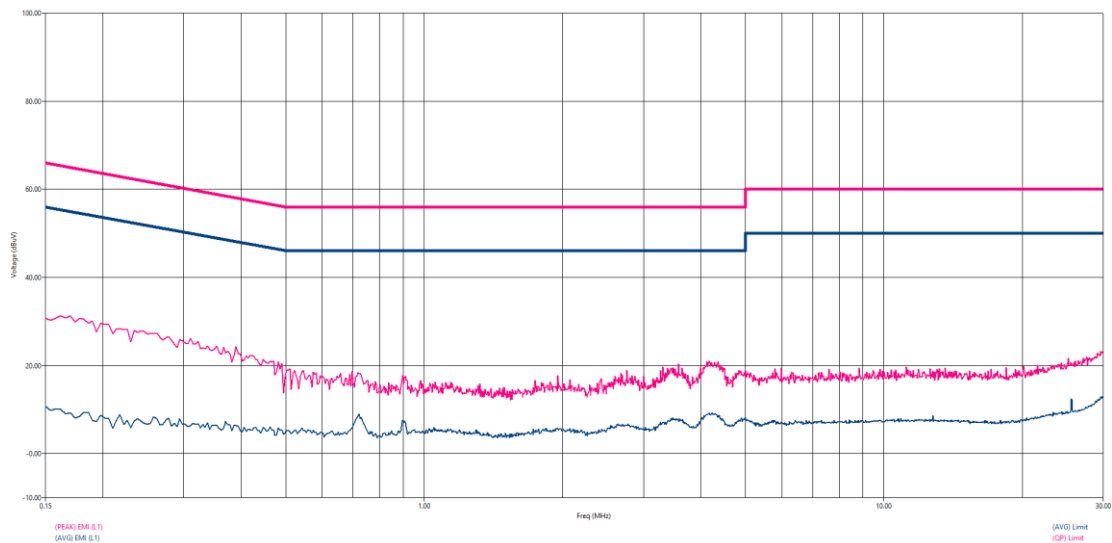


Figure 61 : CE_150kHz to 30MHz_Left Cup_Ch19_1Mbps_Prescan_Line

Freq (MHz)	Freq (Max) (MHz)	Line	(AVG) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(AVG) EMI (dBuV)	(AVG) Limit (dBuV)	(AVG) Margin (dB)
0.230	0.224	L	11.44	0.04	9.96	0.00	0.03	21.46	52.45	-30.99
4.120	4.108	L	2.28	0.14	9.80	0.00	0.25	12.48	46	-33.52
18.240	18.244	L	-4.16	0.31	9.76	0.00	1.77	7.7	50	-42.3
0.240	0.230	N	11.19	0.04	9.96	0.09	0.00	21.27	50	-28.73
4.320	4.310	N	2.92	0.15	9.78	0.31	0.00	13.16	50	-36.84
10.100	10.091	N	-3.02	0.22	9.98	0.88	0.00	8.06	50	-41.94

Freq (MHz)	Freq (Max) (MHz)	Line	(QP) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(QP) EMI (dBuV)	(QP) Limit (dBuV)	(QP) Margin (dB)
0.230	0.224	L	16.85	0.04	9.96	0.00	0.03	26.88	62.45	-35.57
4.120	4.108	L	8.89	0.14	9.80	0.00	0.25	19.08	56	-36.92
18.240	18.244	L	4.63	0.31	9.76	0.00	1.77	16.49	60	-43.51
0.240	0.230	N	16.45	0.04	9.96	0.09	0.00	26.54	60	-33.46
4.320	4.310	N	8.91	0.15	9.78	0.31	0.00	19.14	60	-40.86
10.100	10.091	N	5.99	0.22	9.98	0.88	0.00	17.07	60	-42.93

Table 59: CE_150kHz to 30MHz_Left Cup_Ch19_1Mbps_Final table_Line and Neutral

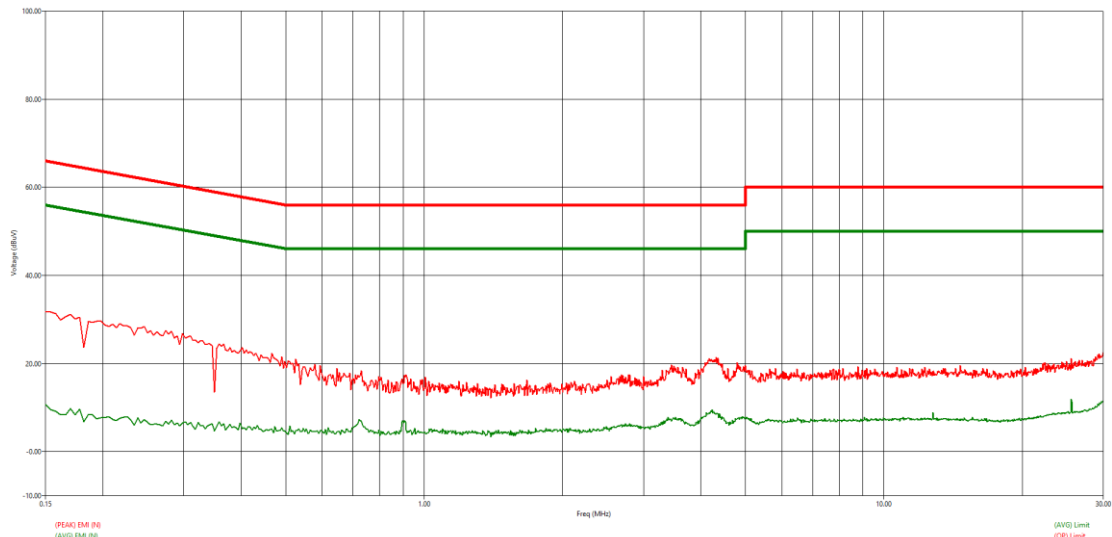


Figure 62 : CE_150kHz to 30MHz_Right Cup_Ch39_2Mbps_Prescan_Neutral

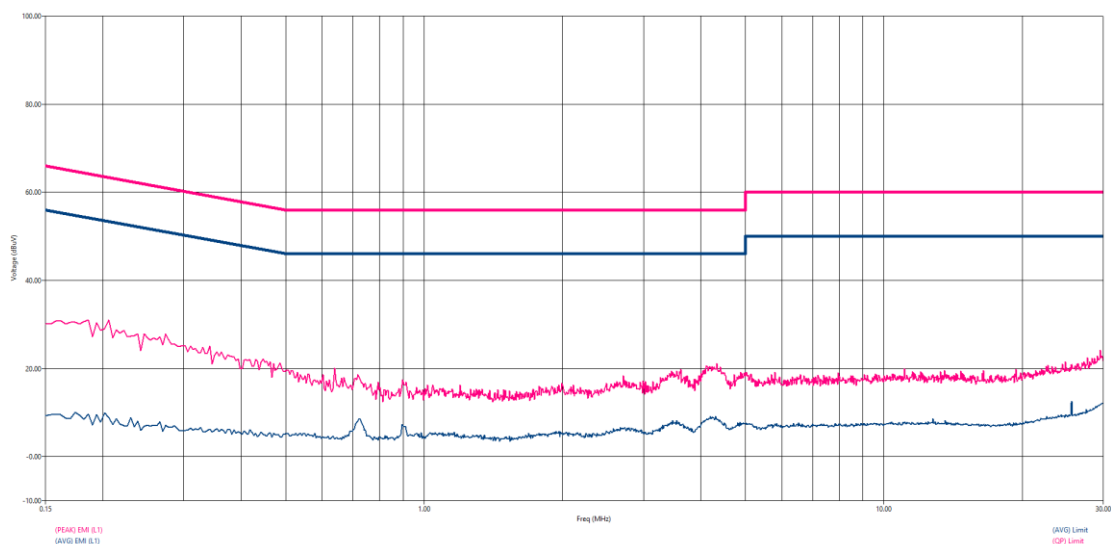


Figure 63 : CE_150kHz to 30MHz_Right Cup_Ch39_2Mbps_Prescan_Line

Freq (MHz)	Freq (Max) (MHz)	Line	(AVG) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(AVG) EMI (dBuV)	(AVG) Limit (dBuV)	(AVG) Margin (dB)
0.210	0.197	L	12.03	0.04	9.96	0	0.02	22.05	53.21	-31.16
0.630	0.6405	L	-2.97	0.06	9.96	0	0.05	7.11	46	-38.89
4.330	4.3443	L	2.18	0.15	9.77	0	0.27	12.37	46	-33.63
0.250	0.2367	N	10.16	0.04	9.96	0.09	0	20.24	52.21	-31.97
4.320	4.3203	N	2.79	0.15	9.77	0.31	0	13.02	46	-32.98
14.710	14.7098	N	-3.73	0.28	9.99	1.24	0	7.78	50	-42.22

Freq (MHz)	Freq (Max) (MHz)	Line	(QP) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(QP) EMI (dBuV)	(QP) Limit (dBuV)	(QP) Margin (dB)
0.210	0.197	L	18.24	0.04	9.96	0	0.02	28.25	63.21	-34.96
0.630	0.6405	L	6.12	0.06	9.96	0	0.05	16.2	56	-39.8
4.330	4.3443	L	8.85	0.15	9.77	0	0.27	19.04	56	-36.96
0.250	0.2367	N	18.18	0.04	9.96	0.09	0	28.27	62.21	-33.94
4.320	4.3203	N	8.86	0.15	9.77	0.31	0	19.09	56	-36.91
14.710	14.7098	N	5.37	0.28	9.99	1.24	0	16.87	60	-43.13

Table 60: CE_150kHz to 30MHz_Right Cup_Ch39_2Mbps_Final table_Line and Neutral

12.1.8.2. AC Power line on Laptop – EUT powered through USB

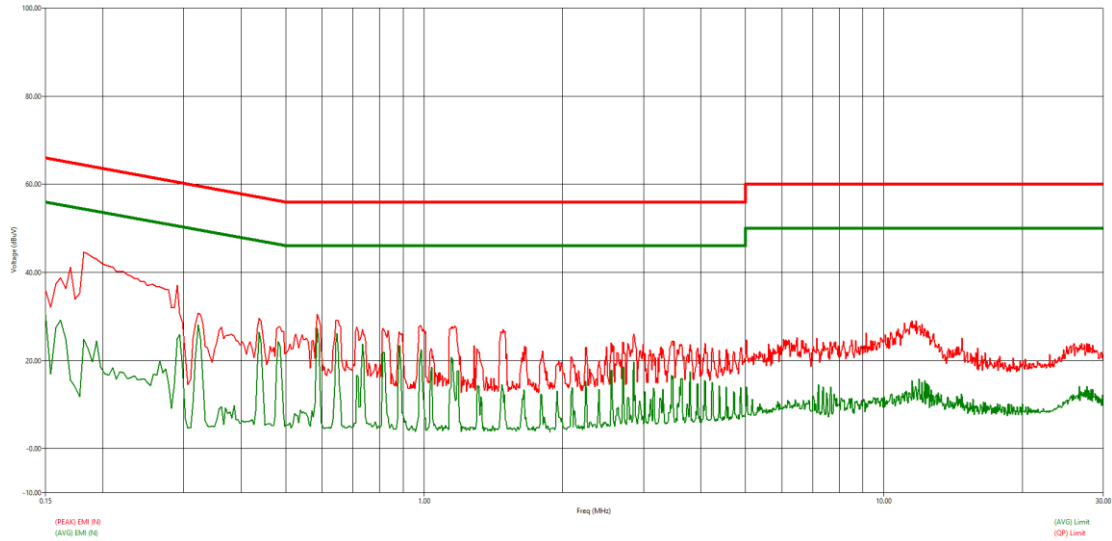


Figure 64 : CE_150kHz to 30MHz_Left Cup_Ch19_1Mbps_Prescan_Neutral

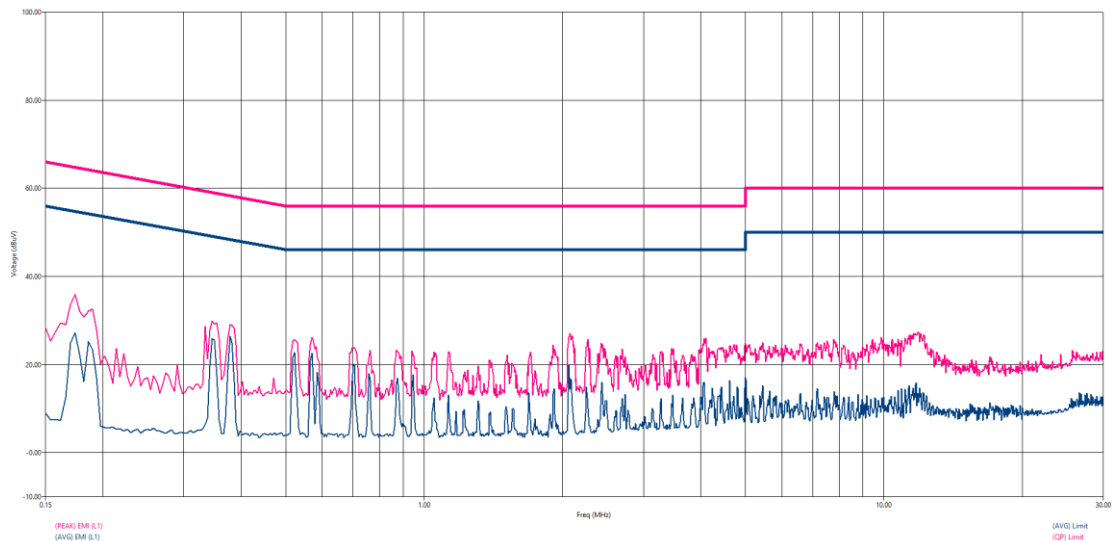


Figure 65 : CE_150kHz to 30MHz_Left Cup_Ch19_1Mbps_Prescan_Line

Freq (MHz)	Freq (Max) (MHz)	Line	(AVG) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(AVG) EMI (dBuV)	(AVG) Limit (dBuV)	(AVG) Margin (dB)
0.174	0.1695	L	4.22	0.04	9.95	0	0.02	14.24	54.99	-40.75
0.340	0.3448	L	-3.37	0.04	9.96	0	0.04	6.67	49.09	-42.42
2.080	2.0747	L	5.51	0.1	9.96	0	0.11	15.68	46	-30.32
11.930	11.926	L	1.62	0.25	9.98	0	1.12	12.96	50	-37.04
0.180	0.1852	N	7.25	0.04	9.96	0.08	0	17.32	54.25	-36.93
0.290	0.2781	N	-3.18	0.04	9.96	0.09	0	6.91	50.87	-43.96
0.590	0.5927	N	8.51	0.06	9.96	0.11	0	18.64	46	-27.36
1.160	1.1799	N	4.97	0.08	9.96	0.14	0	15.15	46	-30.85
11.550	11.5373	N	2.94	0.24	9.98	1.01	0	14.17	50	-35.83

Freq (MHz)	Freq (Max) (MHz)	Line	(QP) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(QP) EMI (dBuV)	(QP) Limit (dBuV)	(QP) Margin (dB)
0.174	0.1695	L	23.83	0.04	9.95	0	0.02	33.85	64.99	-31.14
0.340	0.3448	L	11.31	0.04	9.96	0	0.04	21.36	59.09	-37.73
2.080	2.0747	L	10.65	0.1	9.96	0	0.11	20.83	56	-35.17
11.930	11.926	L	8.52	0.25	9.98	0	1.12	19.86	60	-40.14
0.180	0.1852	N	22.63	0.04	9.96	0.08	0	32.71	64.25	-31.54
0.290	0.2781	N	13.46	0.04	9.96	0.09	0	23.55	60.87	-37.32
0.590	0.5927	N	11.73	0.06	9.96	0.11	0	21.86	56	-34.14
1.160	1.1799	N	9.51	0.08	9.96	0.14	0	19.69	56	-36.31
11.550	11.5373	N	9.45	0.24	9.98	1.01	0	20.68	60	-39.32

Table 61: CE_150kHz to 30MHz_Left Cup_Ch19_1Mbps_Final table_Line and Neutral

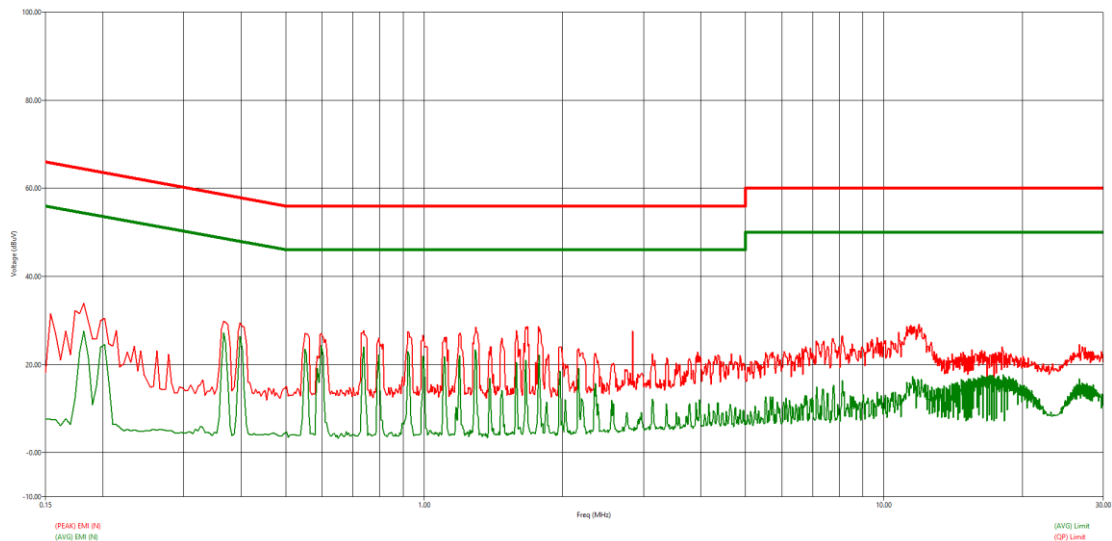


Figure 66 : CE_150kHz to 30MHz_Right Cup_Ch38_2Mbps_Prescan_Neutral

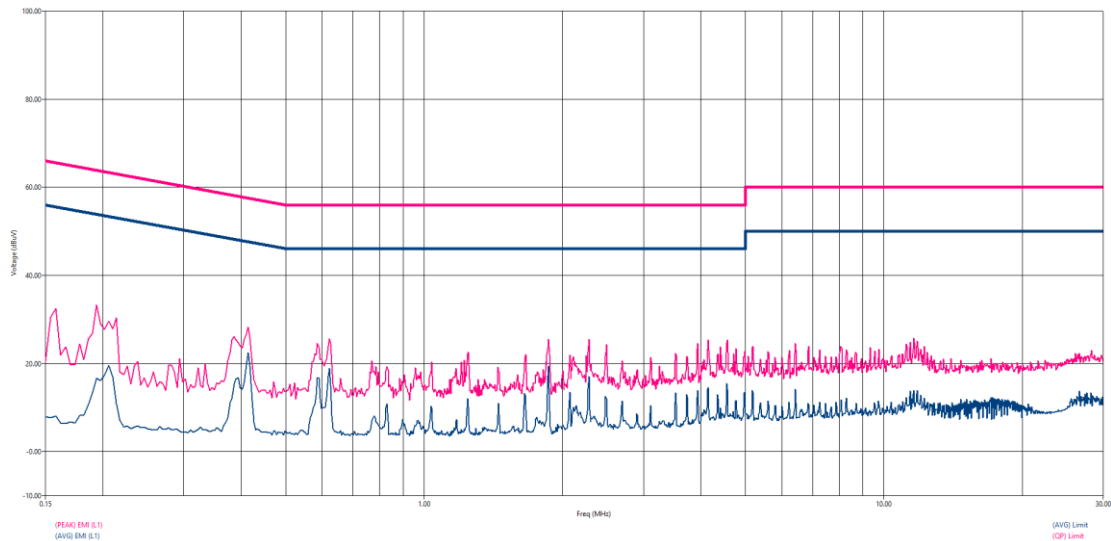


Figure 67 : CE_150kHz to 30MHz_Right Cup_C38_2Mbps_Prescan_Line

Freq (MHz)	Freq (Max) (MHz)	Line	(AVG) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(AVG) EMI (dBuV)	(AVG) Limit (dBuV)	(AVG) Margin (dB)
0.190	0.1666	L	8.48	0.04	9.95	0	0.02	18.49	55.13	-36.64
0.420	0.4123	L	11.02	0.05	9.96	0	0.04	21.06	47.6	-26.54
2.290	2.2774	L	4.35	0.11	9.96	0	0.13	14.54	46	-31.46
11.620	11.6191	L	3.33	0.24	9.98	0	1.09	14.63	50	-35.37
0.180	0.1748	N	4.56	0.04	9.96	0.08	0	14.63	54.73	-40.1
0.370	0.3848	N	0.96	0.04	9.96	0.1	0	11.06	48.17	-37.11
1.300	1.2983	N	-4.53	0.08	9.96	0.15	0	5.66	46	-40.34
11.930	11.9248	N	3.01	0.25	9.98	1.04	0	14.28	50	-35.72

Freq (MHz)	Freq (Max) (MHz)	Line	(QP) Trace (dBuV)	Cable loss (dB)	Pulse Limiter Loss (dB)	LISN N Loss (dB)	LISN L Loss (dB)	(QP) EMI (dBuV)	(QP) Limit (dBuV)	(QP) Margin (dB)
0.190	0.1666	L	27.47	0.04	9.95	0	0.02	37.48	65.13	-27.65
0.420	0.4123	L	13.42	0.05	9.96	0	0.04	23.46	57.6	-34.14
2.290	2.2774	L	8.74	0.11	9.96	0	0.13	18.93	56	-37.07
11.620	11.6191	L	8.71	0.24	9.98	0	1.09	20.01	60	-39.99
0.180	0.1748	N	21.99	0.04	9.96	0.08	0	32.06	64.73	-32.67
0.370	0.3848	N	7.84	0.04	9.96	0.1	0	17.95	58.17	-40.22
1.300	1.2983	N	3.58	0.08	9.96	0.15	0	13.77	56	-42.23
11.930	11.9248	N	8.67	0.25	9.98	1.04	0	19.93	60	-40.07

Table 62: CE_150kHz to 30MHz_Right Cup_Ch38_2Mbps_Final table_Line and Neutral

Calculation:

Avg EMI (dBuV) = Avg Trace (dBuV) + Cable Loss (dB) + Pulse limiter Loss (dB) + LISN Loss (dB).

Avg Margin (dB) = Avg EMI (dBuV) – Limit (dBuV).

QP EMI (dBuV) = QP Trace (dBuV) + Cable Loss (dB) + Pulse limiter Loss (dB) + LISN Loss (dB).

QP Margin (dB) = QP EMI (dBuV) – Limit (dBuV).

*** END OF THE REPORT ***

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