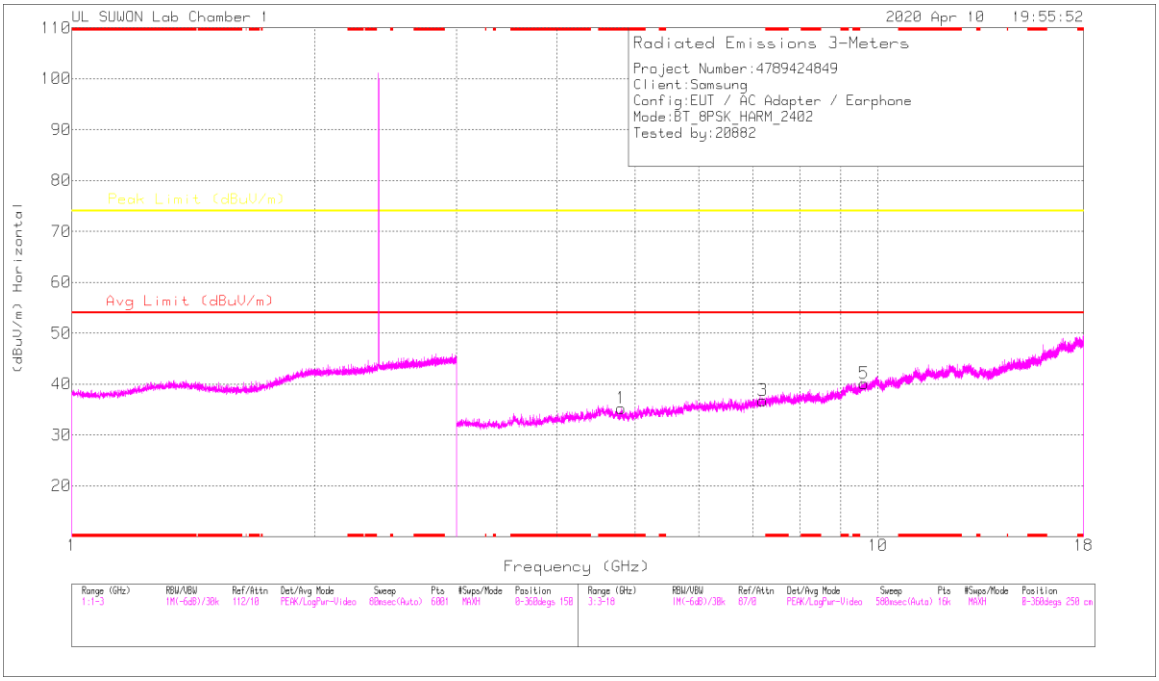
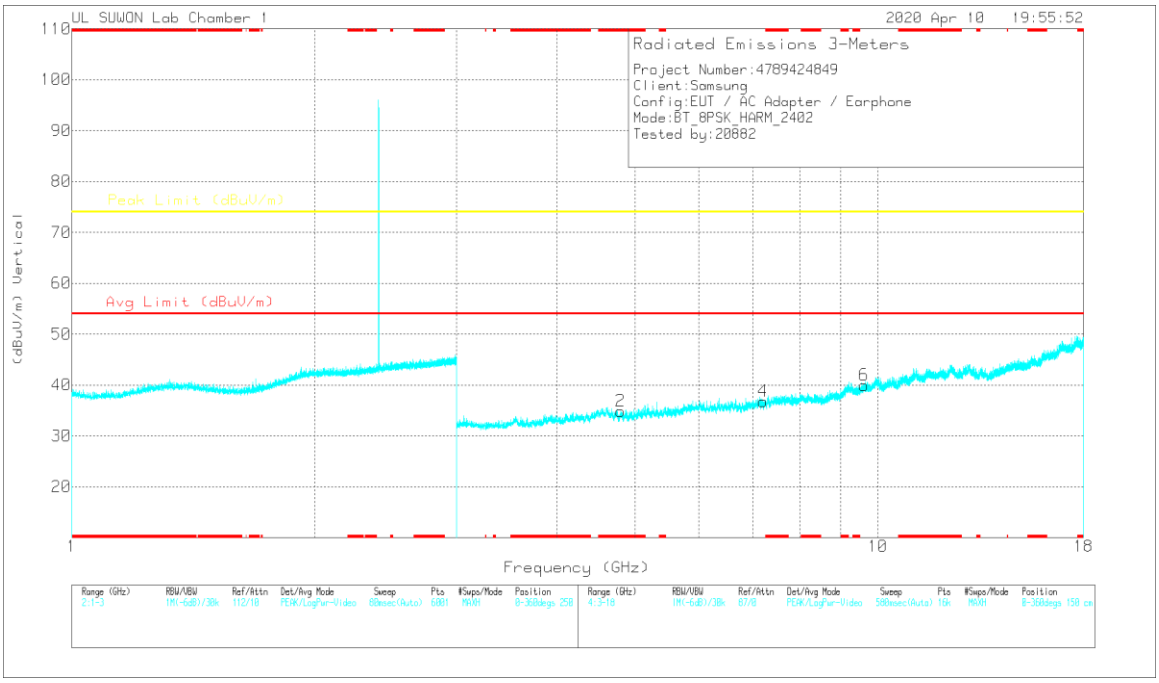
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.80297	39.35	PKFH	34.2	-31.5	42.05	-	-	74	-31.95	0	100	H
* 4.80469	39.5	PKFH	34.2	-31.5	42.2	-	-	74	-31.8	0	100	V
7.20121	35.45	PKFH	35.8	-27.8	43.45	-	-	74	-30.55	0	100	H
7.19859	35.91	PKFH	35.8	-27.7	44.01	-	-	74	-29.99	0	100	V
9.6118	32.55	PKFH	37	-23.2	46.35	-	-	74	-27.65	0	100	H
9.61247	33.34	PKFH	37	-23.2	47.14	-	-	74	-26.86	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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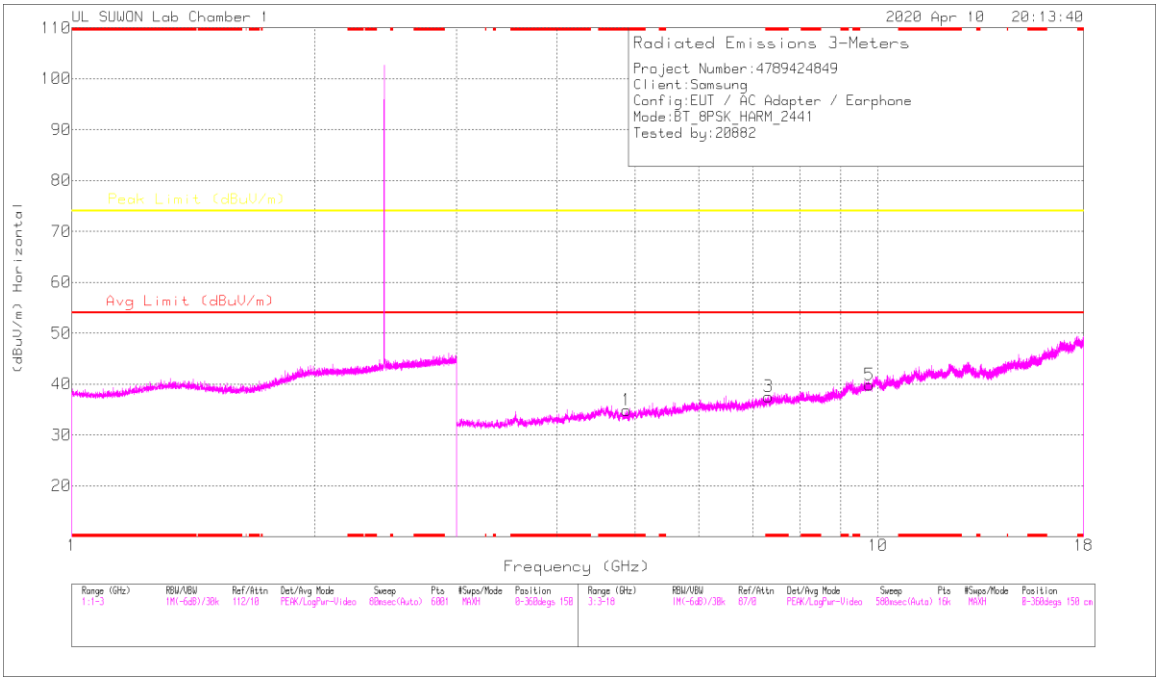
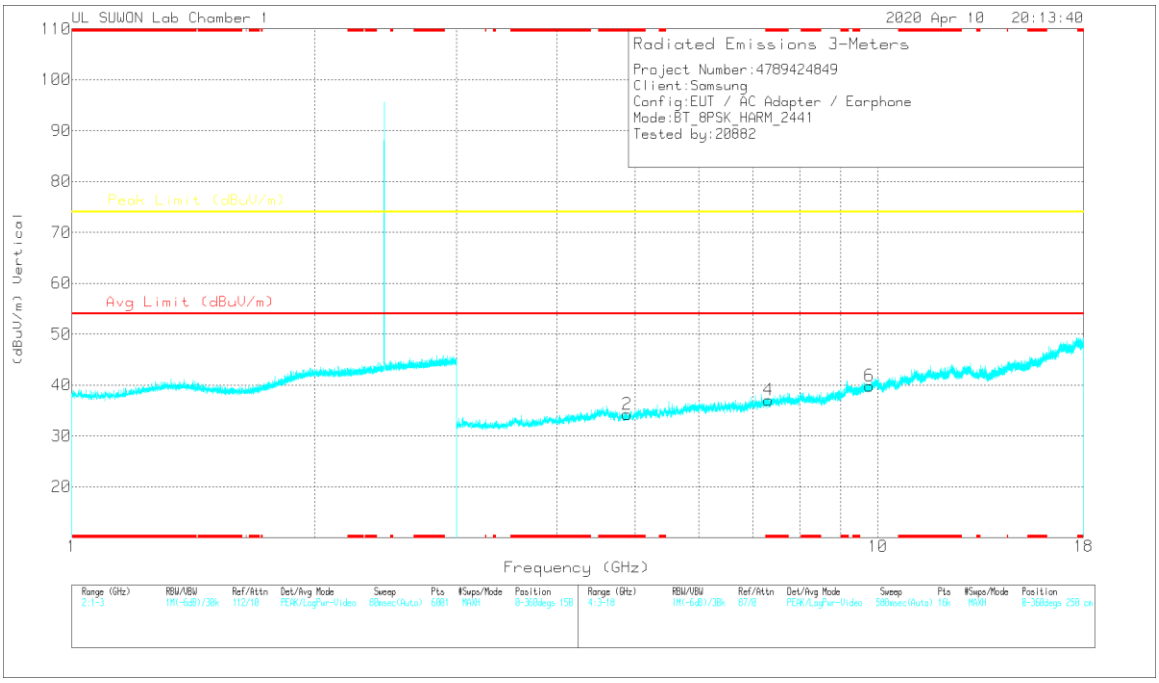
MID CHANNEL RESULTS



HORIZONTAL



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RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.8761	39.13	PKFH	34.2	-31.5	41.83	-	-	74	-32.17	0	100	H
* 4.87564	40.76	PKFH	34.2	-31.6	43.36	-	-	74	-30.64	0	100	V
* 7.32519	35.67	PKFH	35.8	-27.3	44.17	-	-	74	-29.83	0	100	H
* 7.32312	36.33	PKFH	35.8	-27.2	44.93	-	-	74	-29.07	0	100	V
9.76917	33.27	PKFH	37.3	-23.9	46.67	-	-	74	-27.33	0	100	H
9.76881	32.92	PKFH	37.3	-23.9	46.32	-	-	74	-27.68	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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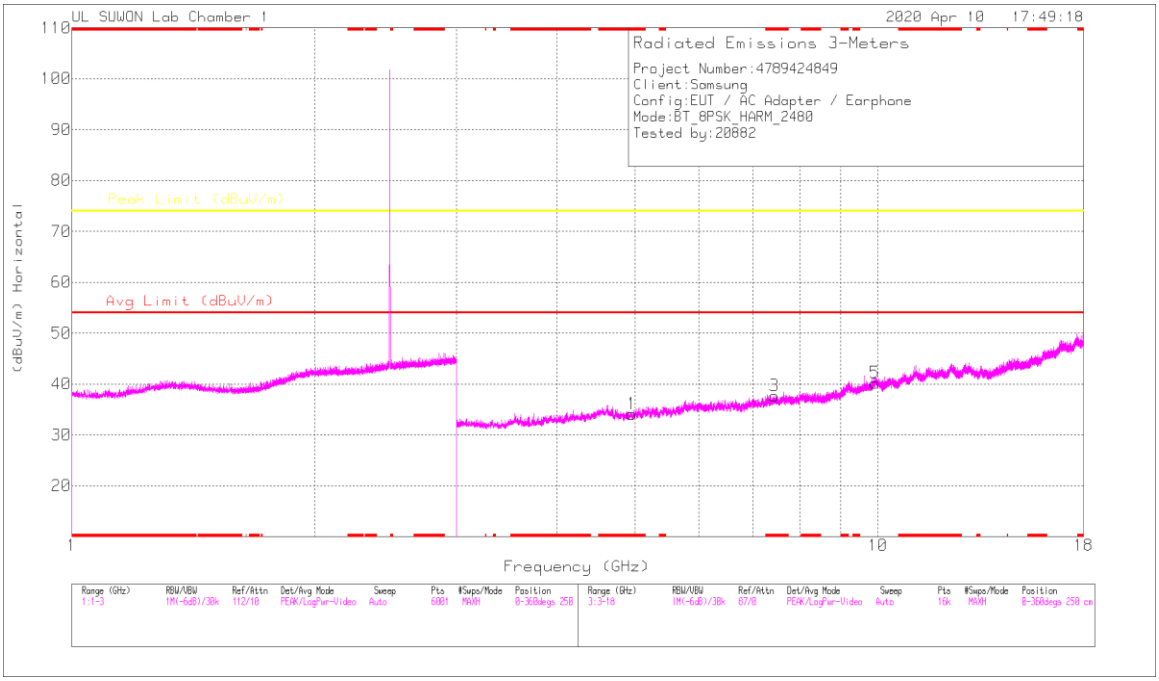
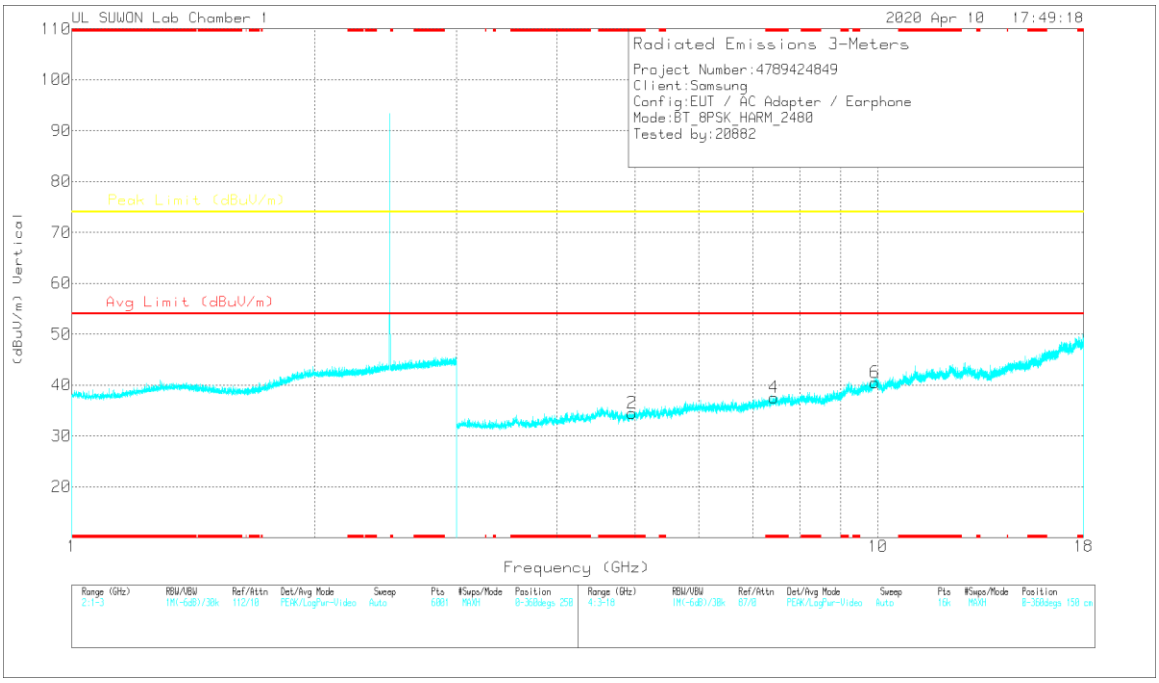
HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.95196	38.94	PKFH	34.2	-31.7	41.44	-	-	74	-32.56	360	100	H
* 4.95251	38.95	PKFH	34.2	-31.7	41.45	-	-	74	-32.55	360	100	V
* 7.45224	35.38	PKFH	35.8	-26.9	44.28	-	-	74	-29.72	360	100	H
* 7.45087	35.27	PKFH	35.8	-27	44.07	-	-	74	-29.93	360	100	V
9.92091	31.77	PKFH	37.5	-22	47.27	-	-	74	-26.73	360	100	H
9.91935	32.62	PKFH	37.5	-22	48.12	-	-	74	-25.88	360	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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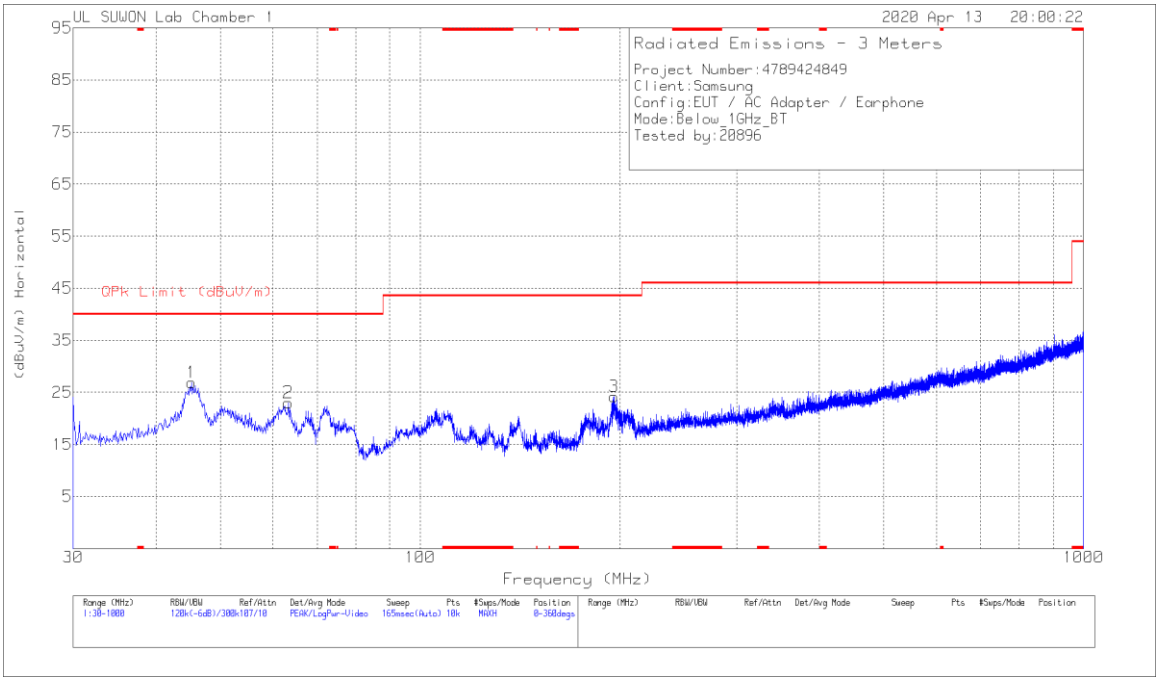
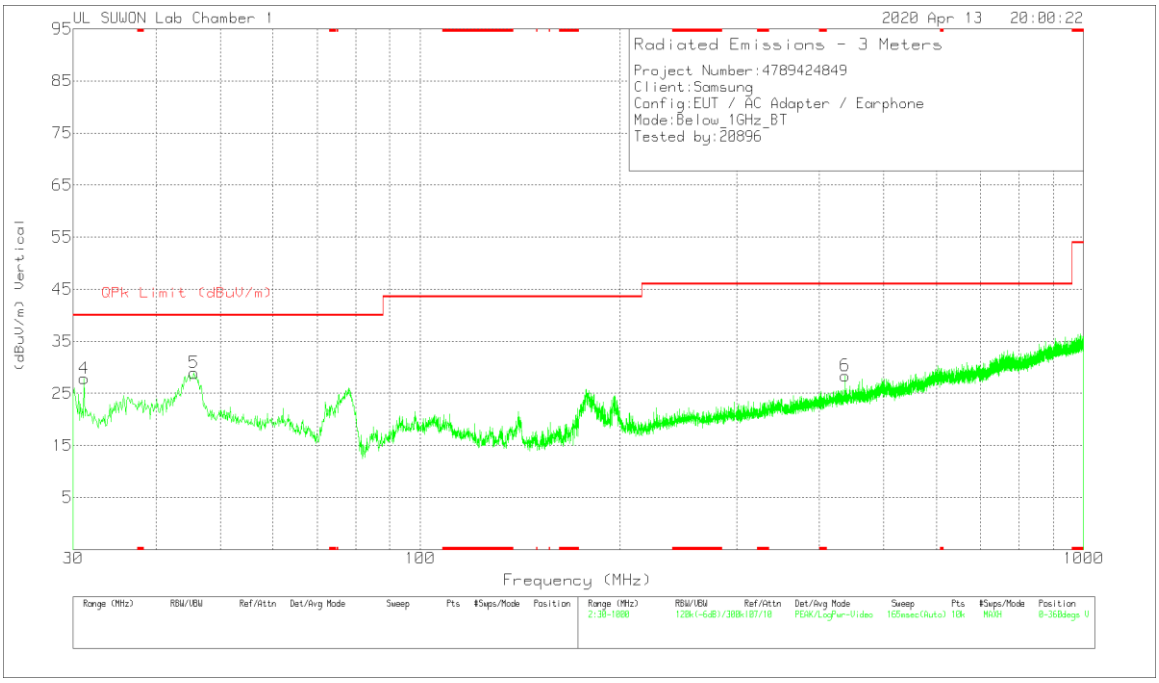
10.2. WORST CASE BELOW 1 GHZ

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



HORIZONTAL



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Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	45.229	37.86	Pk	19.6	-30.6	26.86	40	-13.14	0-360	400	H
2	63.271	35.39	Pk	17.8	-30.2	22.99	40	-17.01	0-360	400	H
3	196.064	34.49	Pk	18.2	-28.5	24.19	43.52	-19.33	0-360	200	H
4	31.164	42.06	Pk	15.7	-29.9	27.86	40	-12.14	0-360	200	V
5	45.617	39.12	Pk	19.6	-29.8	28.92	40	-11.08	0-360	100	V
6	437.497	32.3	Pk	22	-25.9	28.4	46.02	-17.62	0-360	200	V

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11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

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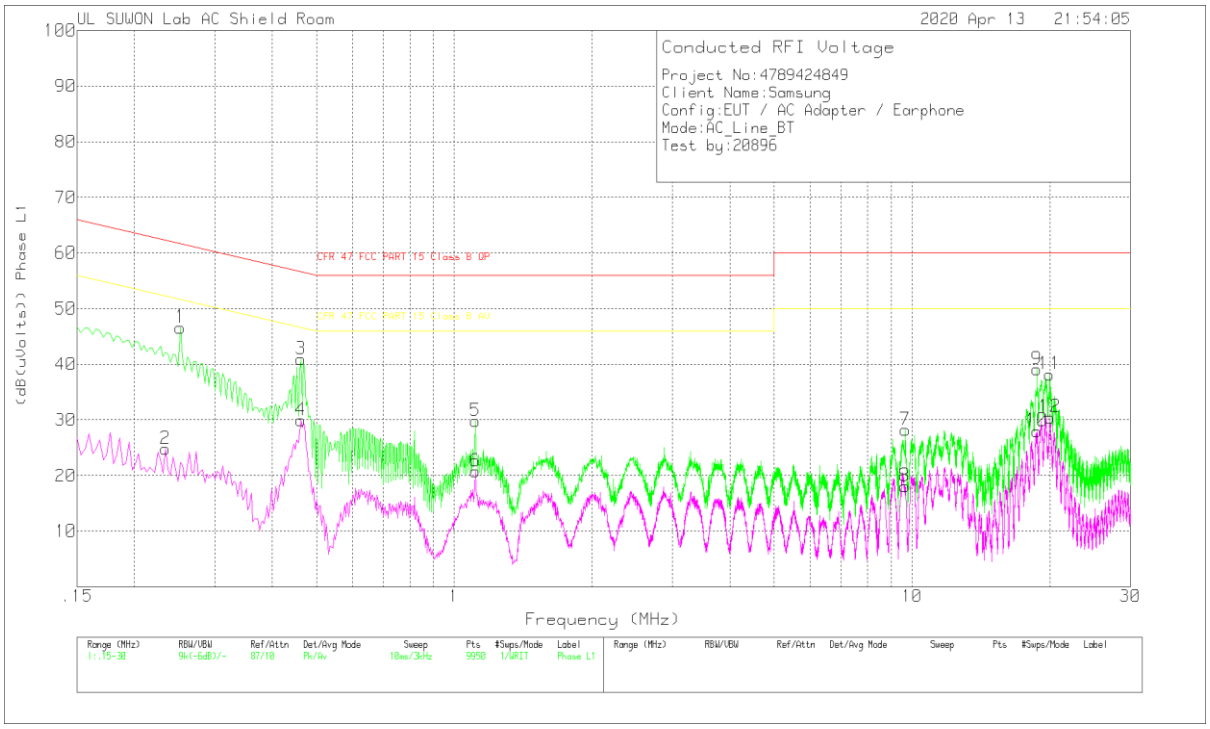
11.1.1. AC Power Line Host

LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With Ex_L1[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.252	36.69	Pk	9.7	.2	46.59	61.69	-15.1	-	-
2	.234	14.79	Av	9.8	.2	24.79	-	-	52.31	-27.52
3	.462	30.82	Pk	9.9	.2	40.92	56.66	-15.74	-	-
4	.462	19.82	Av	9.9	.2	29.92	-	-	46.66	-16.74
5	1.113	19.7	Pk	9.8	.3	29.8	56	-26.2	-	-
6	1.113	10.66	Av	9.8	.3	20.76	-	-	46	-25.24
7	9.672	17.89	Pk	9.9	.4	28.19	60	-31.81	-	-
8	9.648	7.78	Av	9.9	.4	18.08	-	-	50	-31.92
9	18.756	28.48	Pk	10.2	.4	39.08	60	-20.92	-	-
10	18.75	17.4	Av	10.2	.4	28	-	-	50	-22
11	19.983	27.48	Pk	10.3	.4	38.18	60	-21.82	-	-
12	20.004	19.77	Av	10.3	.4	30.47	-	-	50	-19.53

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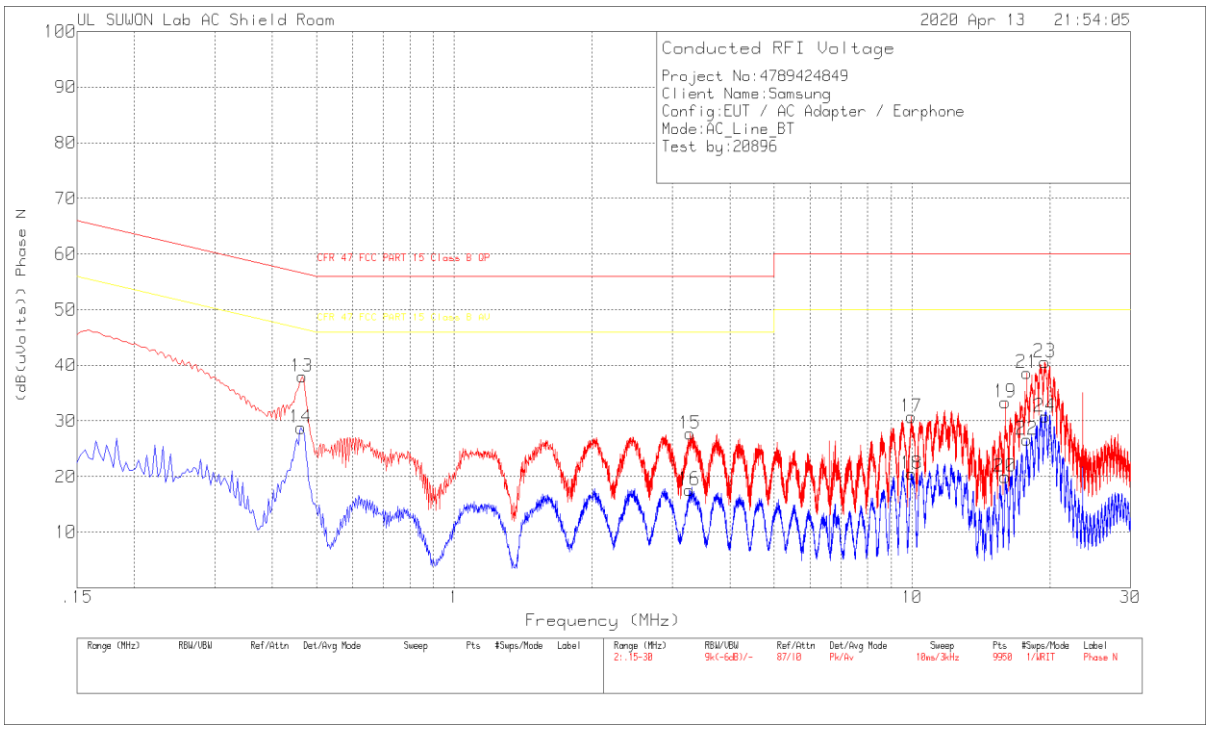
LINE 2 RESULTS



Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_N[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.465	27.89	Pk	9.9	.2	37.99	56.6	-18.61	-	-
14	.462	18.68	Av	9.9	.2	28.78	-	-	46.66	-17.88
15	3.273	17.63	Pk	9.8	.3	27.73	56	-28.27	-	-
16	3.264	7.51	Av	9.8	.3	17.61	-	-	46	-28.39
17	9.966	20.35	Pk	10	.4	30.75	60	-29.25	-	-
18	9.978	10.09	Av	10	.4	20.49	-	-	50	-29.51
19	15.984	22.76	Pk	10.2	.4	33.36	60	-26.64	-	-
20	15.981	9.38	Av	10.2	.4	19.98	-	-	50	-30.02
21	17.823	28.05	Pk	10.2	.4	38.65	60	-21.35	-	-
22	17.814	16.07	Av	10.2	.4	26.67	-	-	50	-23.33
23	19.494	29.88	Pk	10.3	.4	40.58	60	-19.42	-	-
24	19.512	20.09	Av	10.3	.4	30.79	-	-	50	-19.21

END OF TEST REPORT

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