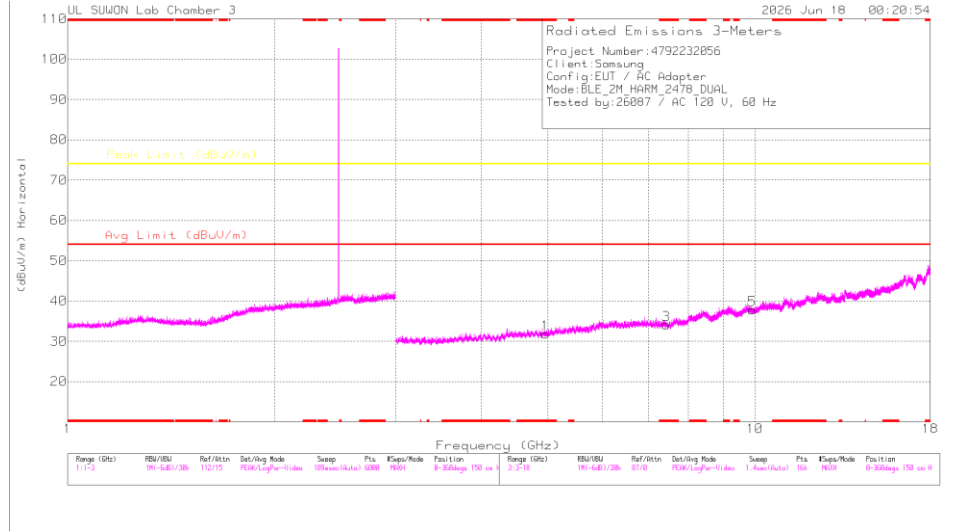
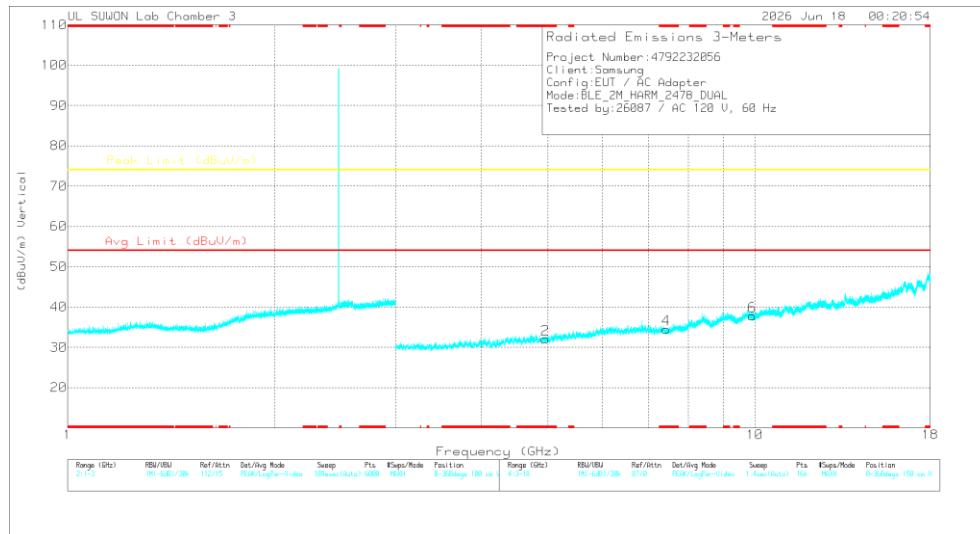


HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 2478 MHz, DUAL)

2478 MHz RESULTS



HORIZONTAL



VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Factor (dB/m)	3GHz HP Path Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.95278	38.45	PK2	34.3	-30.6	0	42.15	-	-	74	-31.85	295	161	H
* 4.9553	27.34	MAV1	34.3	-30.5	2.46	33.6	54	-20.4	-	-	295	161	H
* 4.9516	38.6	PK2	34.3	-30.6	0	42.3	-	-	74	-31.7	206	133	V
* 4.95484	26.98	MAV1	34.3	-30.5	2.46	33.24	54	-20.76	-	-	206	133	V
* 7.43274	34.34	PK2	35.7	-24.9	0	45.14	-	-	74	-28.86	47	104	H
* 7.4328	22.96	MAV1	35.7	-24.9	2.46	36.22	54	-17.78	-	-	47	104	H
* 7.43872	34.07	PK2	35.7	-24.9	0	44.87	-	-	74	-29.13	24	278	V
* 7.43545	23.18	MAV1	35.7	-24.9	2.46	36.44	54	-17.56	-	-	24	278	V
9.91636	32.2	PK2	37.1	-21.4	0	47.9	-	-	74	-26.1	0	100	H
9.91498	32.2	PK2	37.1	-21.4	0	47.9	-	-	74	-26.1	0	100	V

* - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

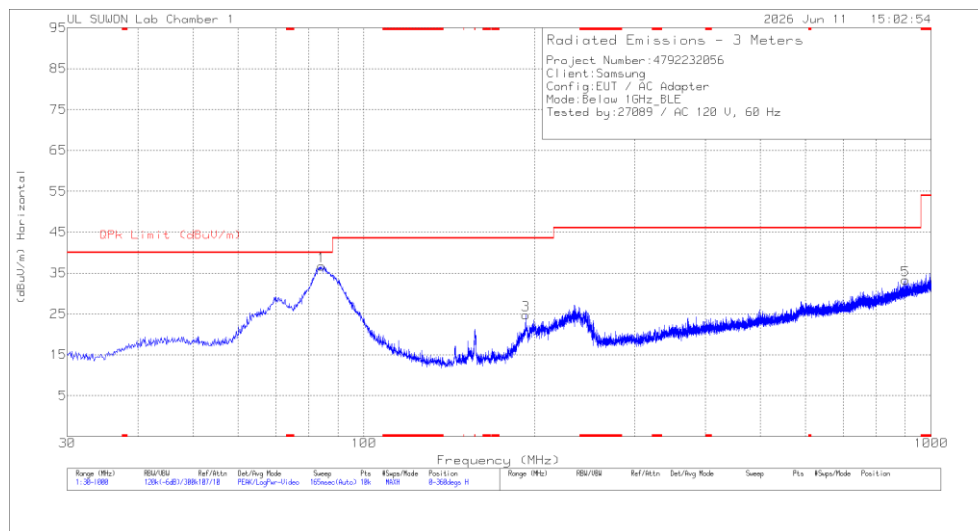
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2404	ANT1	* 4.8091	39.80	PK2	34.30	-30.10	0.00	44.00	-	-	74.00	-30.00	63	135	H
		* 4.80713	28.99	MAV1	34.30	-30.10	2.46	35.65	54.00	-18.35	-	-	63	135	H
		* 4.80843	38.47	PK2	34.30	-30.10	0.00	42.67	-	-	74.00	-31.33	333	100	V
		* 4.80856	27.14	MAV1	34.30	-30.10	2.46	33.80	54.00	-20.20	-	-	333	100	V
		7.214	34.67	PK2	35.80	-25.70	0.00	44.77	-	-	74.00	-29.23	350	100	H
		7.207	33.88	PK2	35.80	-25.70	0.00	43.98	-	-	74.00	-30.02	0	100	V
		9.613	31.79	PK2	36.70	-21.70	0.00	46.79	-	-	74.00	-27.21	0	100	H
		9.621	32.64	PK2	36.70	-21.60	0.00	47.74	-	-	74.00	-26.26	0	100	V
		* 4.88101	38.96	PK2	34.20	-30.80	0.00	42.36	-	-	74.00	-31.64	66	155	H
		* 4.88095	27.62	MAV1	34.20	-30.80	2.46	33.48	54.00	-20.52	-	-	66	155	H
2440	ANT1	* 4.88361	38.57	PK2	34.20	-30.80	0.00	41.97	-	-	74.00	-32.03	0	162	V
		* 4.8791	27.49	MAV1	34.20	-30.80	2.46	33.35	54.00	-20.65	-	-	0	162	V
		* 7.31929	34.56	PK2	35.80	-25.30	0.00	45.06	-	-	74.00	-28.94	0	100	H
		* 7.31506	34.10	PK2	35.80	-25.30	0.00	44.60	-	-	74.00	-29.40	0	100	V
		9.757	32.47	PK2	36.90	-21.30	0.00	48.07	-	-	74.00	-25.93	0	100	H
		9.763	32.48	PK2	36.90	-21.30	0.00	48.08	-	-	74.00	-25.92	0	100	V
		* 4.95504	39.58	PK2	34.30	-30.50	0.00	43.38	-	-	74.00	-30.62	66	140	H
		* 4.95522	27.42	MAV1	34.30	-30.50	2.46	33.68	54.00	-20.32	-	-	66	140	H
		* 4.9551	39.28	PK2	34.30	-30.50	0.00	43.08	-	-	74.00	-30.92	0	159	V
		* 4.95525	26.87	MAV1	34.30	-30.50	2.46	33.13	54.00	-20.87	-	-	0	159	V
2478	ANT1	* 7.43666	33.61	PK2	35.70	-24.90	0.00	44.41	-	-	74.00	-29.59	0	100	H
		* 7.43891	33.58	PK2	35.70	-24.90	0.00	44.38	-	-	74.00	-29.62	0	100	V
		9.907	31.98	PK2	37.10	-21.50	0.00	47.58	-	-	74.00	-26.42	0	100	H
		9.909	32.07	PK2	37.10	-21.40	0.00	47.77	-	-	74.00	-26.23	0	100	V
		* 4.80641	38.63	PK2	34.30	-30.10	0.00	42.83	-	-	74.00	-31.17	55	100	H
		* 4.80873	27.36	MAV1	34.30	-30.10	2.46	34.02	54.00	-19.98	-	-	55	100	H
		* 4.80932	39.02	PK2	34.30	-30.10	0.00	43.22	-	-	74.00	-30.78	205	105	V
		* 4.80731	27.75	MAV1	34.30	-30.10	2.46	34.41	54.00	-19.59	-	-	205	105	V
		7.210	34.35	PK2	35.80	-25.80	0.00	44.35	-	-	74.00	-29.65	0	100	H
		7.210	34.32	PK2	35.80	-25.80	0.00	44.32	-	-	74.00	-29.68	0	100	V
2404	ANT2	9.612	32.35	PK2	36.70	-21.70	0.00	47.35	-	-	74.00	-26.65	0	100	H
		9.614	32.38	PK2	36.70	-21.70	0.00	47.38	-	-	74.00	-26.62	0	100	V
		* 4.88013	38.82	PK2	34.20	-30.80	0.00	42.22	-	-	74.00	-31.78	10	100	H
		* 4.87887	27.95	MAV1	34.20	-30.80	2.46	33.81	54.00	-20.19	-	-	10	100	H
		* 4.88018	39.33	PK2	34.20	-30.80	0.00	42.73	-	-	74.00	-31.27	217	176	V
		* 4.87932	28.10	MAV1	34.20	-30.80	2.46	33.96	54.00	-20.04	-	-	217	176	V
		* 7.31888	34.75	PK2	35.80	-25.30	0.00	45.25	-	-	74.00	-28.75	0	100	H
		* 7.3221	34.57	PK2	35.80	-25.20	0.00	45.17	-	-	74.00	-28.83	0	100	V
		9.759	32.98	PK2	36.90	-21.30	0.00	48.58	-	-	74.00	-25.42	0	100	H
		9.759	32.54	PK2	36.90	-21.30	0.00	48.14	-	-	74.00	-25.86	0	100	V
2478	ANT2	* 4.95309	38.35	PK2	34.30	-30.60	0.00	42.05	-	-	74.00	-31.95	9	105	H
		* 4.95614	27.13	MAV1	34.30	-30.50	2.46	33.39	54.00	-20.61	-	-	9	105	H
		* 4.95212	38.74	PK2	34.30	-30.60	0.00	42.44	-	-	74.00	-31.56	6	280	V
		* 4.95496	27.17	MAV1	34.30	-30.50	2.46	33.43	54.00	-20.57	-	-	6	280	V
		* 7.43771	34.11	PK2	35.70	-24.90	0.00	44.91	-	-	74.00	-29.09	0	100	H
		* 7.43266	34.32	PK2	35.70	-24.90	0.00	45.12	-	-	74.00	-28.88	0	100	V
		9.910	32.45	PK2	37.10	-21.40	0.00	48.15	-	-	74.00	-25.85	0	100	H
		9.910	32.41	PK2	37.10	-21.40	0.00	48.11	-	-	74.00	-25.89	0	100	V
		* 4.80938	38.74	PK2	34.30	-30.10	0.00	42.94	-	-	74.00	-31.06	160	111	H
		* 4.80818	27.41	MAV1	34.30	-30.10	2.46	34.07	54.00	-19.93	-	-	160	111	H
2404	DUAL	* 4.80706	38.57	PK2	34.30	-30.10	0.00	42.77	-	-	74.00	-31.23	1	165	V
		* 4.80897	27.25	MAV1	34.30	-30.10	2.46	33.91	54.00	-20.09	-	-	1	165	V
		7.209	34.72	PK2	35.80	-25.70	0.00	44.82	-	-	74.00	-29.18	46	100	H
		7.214	34.38	PK2	35.80	-25.70	0.00	44.48	-	-	74.00	-29.52	44	100	V
		9.614	32.84	PK2	36.70	-21.70	0.00	47.84	-	-	74.00	-26.16	0	100	H
		9.618	32.67	PK2	36.70	-21.70	0.00	47.67	-	-	74.00	-26.33	0	100	V
		* 4.88078	39.03	PK2	34.20	-30.80	0.00	42.43	-	-	74.00	-31.57	62	143	H
		* 4.88061	27.89	MAV1	34.20	-30.80	2.46	33.75	54.00	-20.25	-	-	62	143	H
		* 4.88342	38.55	PK2	34.20	-30.80	0.00	41.95	-	-	74.00	-32.05	202	141	V
		* 4.87792	27.40	MAV1	34.20	-30.70	2.46	33.36	54.00	-20.64	-	-	202	141	V
2440	DUAL	* 7.31827	34.80	PK2	35.80	-25.30	0.00	45.30	-	-	74.00	-28.70	48	100	H
		* 7.31888	23.06	MAV1	35.80	-25.30	2.46	36.02	54.00	-17.98	-	-	48	100	H
		* 7.31939	34.41	PK2	35.80	-25.30	0.00	44.91	-	-	74.00	-29.09	42	103	V
		* 7.3179	22.77	MAV1	35.80	-25.30	2.46	35.73	54.00	-18.27	-	-	42	103	V
		9.758	31.91	PK2	36.90	-21.30	0.00	47.51	-	-	74.00	-26.49	0	100	H
		9.756	31.92	PK2	36.90	-21.30	0.00	47.52	-	-	74.00	-26.48	0	100	V
		* 4.95278	38.45	PK2	34.30	-30.60	0.00	42.15	-	-	74.00	-31.85	295	161	H
		* 4.9553	27.34	MAV1	34.30	-30.50	2.46	33.60	54.00	-20.40	-	-	295	161	H
		* 4.9516	38.60	PK2	34.30	-30.60	0.00	42.30	-	-	74.00	-31.70	206	133	V
		* 4.95484	26.98	MAV1	34.30	-30.50	2.46	33.24	54.00	-20.76	-	-	206	133	V
2478	DUAL	* 7.43274	34.34	PK2	35.70	-24.90	0.00	45.14	-	-	74.00	-28.86	47	104	H
		* 7.4328	22.96	MAV1	35.70	-24.90	2.46	36.22	54.00	-17.78	-	-	47	104	H
		* 7.43872	34.07	PK2	35.70	-24.90	0.00	44.87	-	-	74.00	-29.13	24	278	V
		* 7.43545	23.18	MAV1	35.70	-24.90	2.46	36.44	54.00	-17.56	-	-	24	278	V
		9.916	32.20	PK2	37.10	-21.40	0.00	47.90	-	-	74.00	-26.10	0	100	H
		9.915	32.20	PK2	37.10	-21.40	0.00	47.90	-	-	74.00	-26.10	0	100	V

Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average

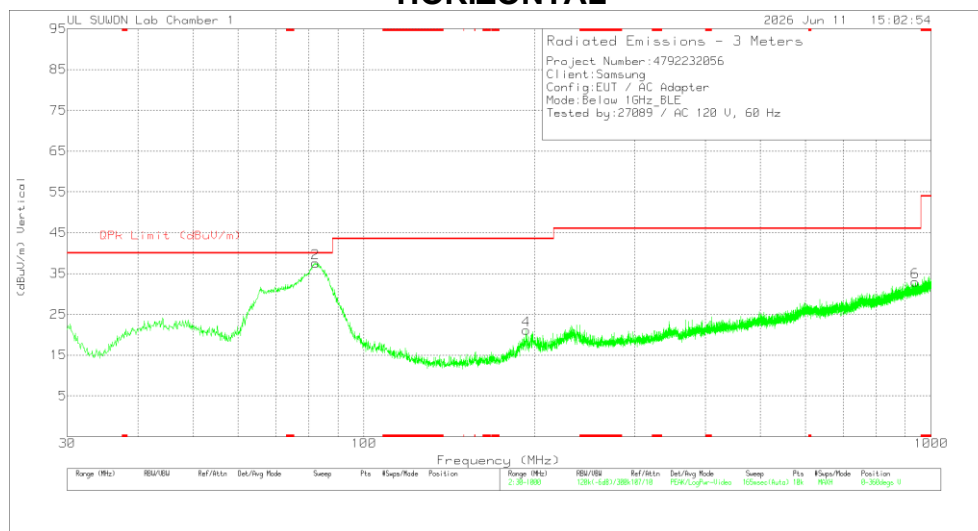
Note2. * - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

10.3. WORST CASE BELOW 1 GHz

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



HORIZONTAL



VERTICAL

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	Below_1G_Path Loss(dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	84.223	53.47	Pk	13.6	-30.4	36.67	40	-3.33	0-360	100	H
3	192.766	37.48	Pk	16.7	-29.4	24.78	43.52	-18.74	0-360	100	H
5	900.769	31	Pk	27.9	-25.6	33.3	46.02	-12.72	0-360	200	H
2	82.186	55.05	Pk	13	-30.5	37.55	40	-2.45	0-360	200	V
4	193.348	33.64	Pk	16.8	-29.3	21.14	43.52	-22.38	0-360	200	V
6	937.047	30.07	Pk	28.1	-25.2	32.97	46.02	-13.05	0-360	400	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	Below_1G_Path Loss(dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
84.223	51.27	Qp	13.6	-30.4	34.47	40	-5.53	154	221	H
82.186	53.16	Qp	13	-30.5	35.66	40	-4.34	157	146	V

Qp - Quasi-Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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 C63.10.

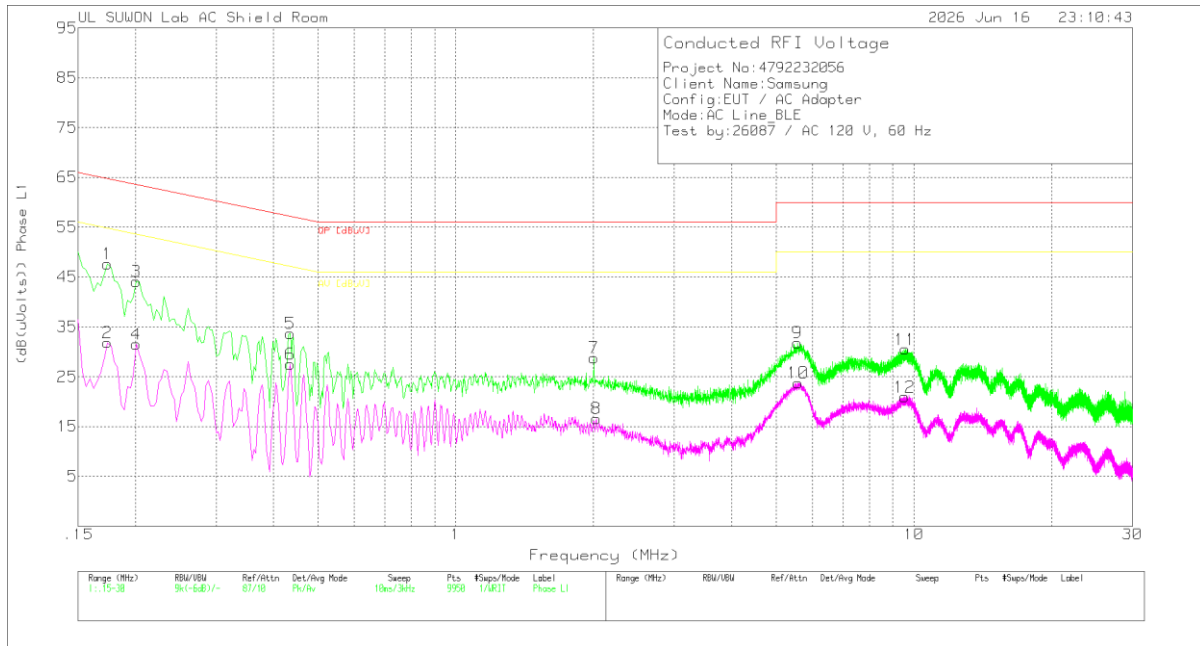
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1. AC Power Line

LINE 1 RESULTS



Trace Markers

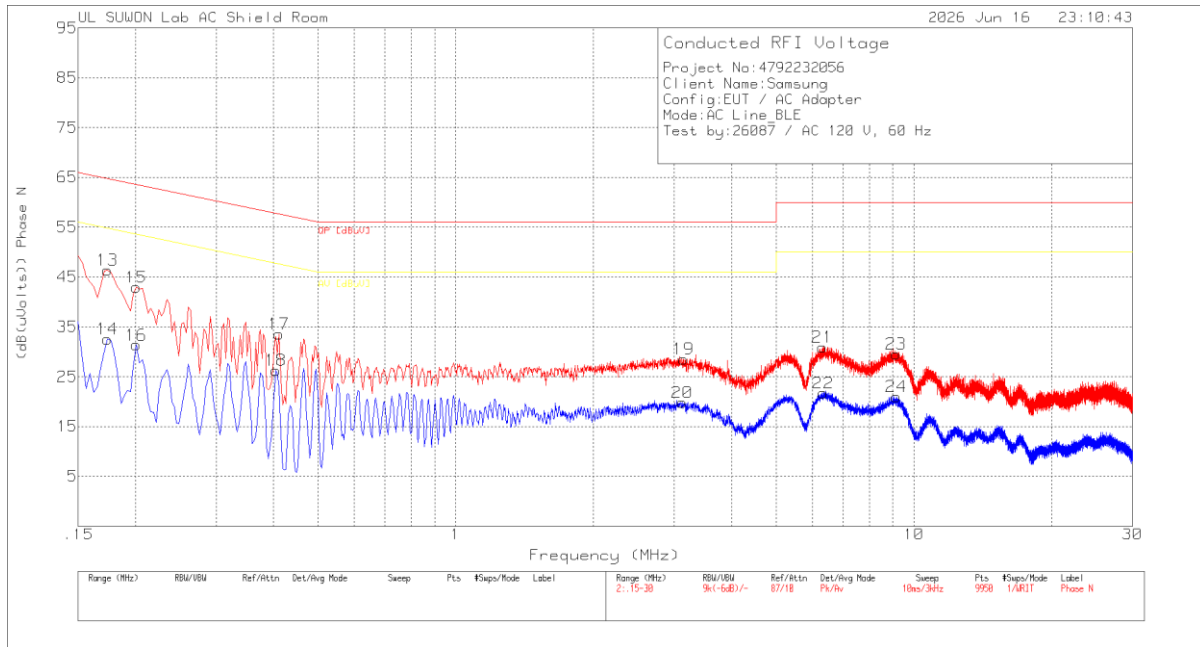
Range 1: Phase L1 .15 - 30MHz

Marker	Frequency [MHz]	Meter Reading [dBuV]	Det	101836_Wit h EX_N [dB]	Cable Loss [dB]	Corrected Reading [dBuV]	FCC 15 Class B QP [dBuV]	Margin [dB]	FCC 15 Class B AV [dBuV]	Margin [dB]
1	.174	37.53	Pk	10	.1	47.63	64.77	-17.14	-	-
2	.174	21.76	Av	10	.1	31.86	-	-	54.77	-22.91
3	.201	34.12	Pk	9.9	.1	44.12	63.57	-19.45	-	-
4	.201	21.5	Av	9.9	.1	31.5	-	-	53.57	-22.07
5	.435	23.74	Pk	9.8	.1	33.64	57.16	-23.52	-	-
6	.435	17.64	Av	9.8	.1	27.54	-	-	47.16	-19.62
7	2.001	18.95	Pk	9.7	.1	28.75	56	-27.25	-	-
8	2.028	6.84	Av	9.7	.1	16.64	-	-	46	-29.36
9	5.571	21.8	Pk	9.8	.2	31.8	60	-28.2	-	-
10	5.586	13.81	Av	9.8	.2	23.81	-	-	50	-26.19
11	9.558	20.38	Pk	9.9	.2	30.48	60	-29.52	-	-
12	9.546	10.83	Av	9.9	.2	20.93	-	-	50	-29.07

Pk - Peak detector

Av - Average detection

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency [MHz]	Meter Reading [dBuV]	Det	101836_Wit h EX_N [dB]	Cable Loss [dB]	Corrected Reading [dBuV]	FCC 15 Class B QP [dBuV]	Margin [dB]	FCC 15 Class B AV [dBuV]	Margin [dB]
13	.174	36.24	Pk	10	.1	46.34	64.77	-18.43	-	-
14	.174	22.46	Av	10	.1	32.56	-	-	54.77	-22.21
15	.201	32.93	Pk	9.9	.1	42.93	63.57	-20.64	-	-
16	.201	21.36	Av	9.9	.1	31.36	-	-	53.57	-22.21
17	.411	23.62	Pk	9.8	.1	33.52	57.63	-24.11	-	-
18	.405	16.39	Av	9.8	.1	26.29	-	-	47.75	-21.46
19	3.144	18.75	Pk	9.7	.1	28.55	56	-27.45	-	-
20	3.123	10.01	Av	9.7	.1	19.81	-	-	46	-26.19
21	6.324	20.97	Pk	9.8	.2	30.97	60	-29.03	-	-
22	6.339	11.69	Av	9.8	.2	21.69	-	-	50	-28.31
23	9.144	19.46	Pk	9.9	.2	29.56	60	-30.44	-	-
24	9.162	10.88	Av	9.9	.2	20.98	-	-	50	-29.02

Pk - Peak detector

Av - Average detection

END OF TEST REPORT