CERTIFICATION TEST REPORT

Report Number. : 4790632108-E1V2

Applicant	:	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, 16677, KOREA
Model	:	SM-A546U, SM-A546U1, SM-S546VL
FCC ID	:	A3LSMA546U
EUT Description	:	GSM/WCDMA/LTE 5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART B

Date Of Issue:
2023-01-27

Prepared by:
UL Korea, Ltd.
26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea

Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea
TEL: (031) 337-9902
FAX: (031) 213-5433

IAS ACCREDITED Testing Laboratory TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2023-01-20	Initial issue	Dexter(Hyunsik) Yun
V2	2023-01-27	Updated ro address TCB's question	Dexter(Hyunsik) Yun

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION:	GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC.
MODEL NUMBER:	SM-A546U, SM-A546U1, SM-S546VL
SERIAL NUMBER:	R3CTB0F5SJF (RADIATED)
DATE TESTED:	2022-12-16 ~ 2023-01-20;

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 15B	Complies

UL Korea, Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Korea, Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Korea, Ltd. By:

Seokhwan Hong
Suwon Lab Engineer
UL Korea, Ltd.

Tested By:

Dexter(Hyunsik) Yun
Suwon Lab Engineer
UL Korea, Ltd.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with following methods.

1. FCC CFR 47 Part 2.
2. FCC CFR 47 Part 15.
3. ANSI C63.4-2014

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do,16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro
☒ Chamber 1(3m semi-anechoic chamber)
☒ Chamber 2(3m semi-anechoic chamber)
☒ Chamber 3(3m semi-anechoic chamber)
☐ Chamber 4(3m Full-anechoic chamber)
☐ Chamber 5(3m Full-anechoic chamber)

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf.

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4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
28.9 dBuV/m = 36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB

Corrected Reading (dBuV) = Meter Reading (dBuV) + External Cable (dB) + Cableloss (dB)
46.62 dBuV + 9.8 dB + 0.1 dB = 56.52 dBuV

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	2.80 dB
Radiated Disturbance, 30 MHz to 1 GHz	3.92 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.06 dB

Uncertainty figures are valid to a confidence level of 95%.

4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedure 2, Clause 4.4.3 in IEC Guide 115:2021.

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC. This test report addresses the WWAN receiver mode.

Representative model	Difference	Derivative model	
		SM-A546U1	SM-S546VL
SM-A546U	Hardware	Same as SM-A546U	Same as SM-A546U
	Software	Same as SM-A546U	Different from SM-A546U (Exclude some of the main band)

Thus, SM-A546U was set for final test.

5.2. TEST MODE

Mode	Description
GSM850	Communicating with Call simulator(CMW500)
WCDMA BAND 5	Communicating with Call simulator(CMW500)
LTE BAND 12	Communicating with Call simulator(CMW500)
LTE BAND 13	Communicating with Call simulator(CMW500)
LTE BAND 14	Communicating with Call simulator(CMW500)
LTE BAND 26	Communicating with Call simulator(CMW500)
LTE BAND 71	Communicating with Call simulator(CMW500)
NR BAND 5	Communicating with Call simulator(CMW500)

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5.3. WORST-CASE ORIENTATION AND MODE

The fundamental and radiated spurious emission were investigated in three orthogonal orientations X,Y and Z, it was determined that below orientation was worst-case orientation for each band.

i. Worst Axis Condition

Band	Worst Case		
	X	**Y**	**Z**
GSM 850	-	-	O
WCDMA B5	-	-	O
LTE B12	-	-	O
LTE B13	-	-	O
LTE B14	-	-	O
LTE B26	-	-	O
LTE B71	O	-	-

WCDMA Band5
WCDMA Band 5(Rx Frequncy range: 871.4-891.6 MHz) is covered by GSM 850(Rx Frequency range: 869-894 MHz) due to same frequency range. Therefore, only Mid channel was checked.

LTE Band 5
LTE Band 5 (Frequency range: 824-849 MHz) is covered by LTE Band 26 (Frequency range: 814-849 MHz) due to overlapping frequency range.
.

5G NR Band n5
5G NR BAND n5 (Rx Frequncy range: 869-894 MHz) is covered by GSM 850(Rx Frequency range: 869-894 MHz) due to same frequency range.

Note : The EUT is continuously communicated with the call box during the tests. Also attached with travel adapter for the worst case condition.

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5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacture**	**Model**	**Serial Number**	**FCC ID**
Charger	SAMSUNG	EP-TA800	R37T7WW84Y9SEA	N/A
Data Cable	SAMSUNG	EP-DN980	GH39-02116A	N/A

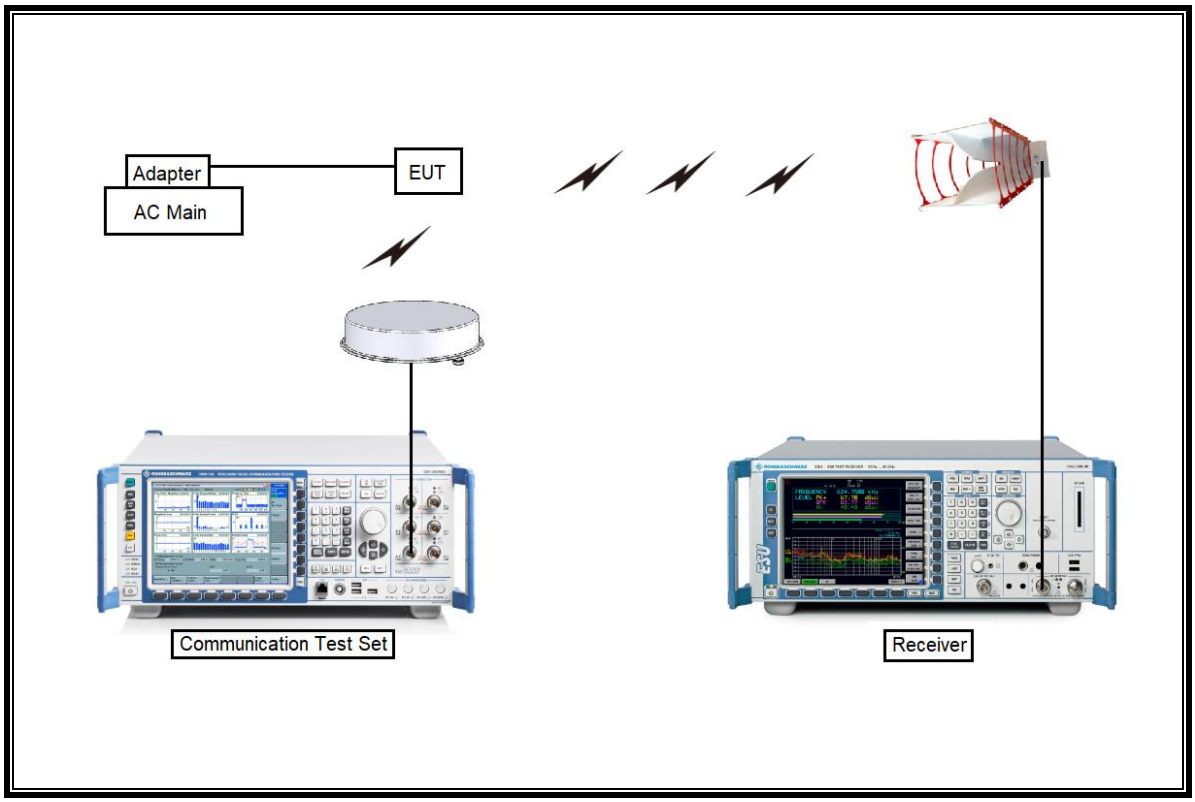
I/O CABLE

I/O Cable List						
Cable No.	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	DC Power	1	C Type	Shielded	1.0 m	N/A

TEST SETUP

The EUT is continuously communicated with the call box during the tests.

SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	**Manufacturer**	**Model**	**S/N**	**Cal Due**
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121D DB4	00164753	2023-02-08
Antenna, Horn, 40 GHz	ETS	3116C	00166155	2024-08-02
Antenna, Horn, 40 GHz	ETS	3116C	00168645	2023-10-13
Preamplifier	ETS	3116C-PA	00168841	2023-08-04
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	2024-08-15
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2024-08-15
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2024-08-15
Communications Test Set	R&S	CMW500	169797	2023-08-02
Preamplifier, 1000 MHz	Sonoma	310N	341282	2023-08-02
Preamplifier, 1000 MHz	Sonoma	310N	351741	2023-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	2023-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	2023-08-01
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2023-08-01
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2023-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2023-07-29
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	80108-0004	N/A
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	110367-0003	N/A
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G005	2023-08-01
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G006	2023-08-01
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	010	2023-08-01
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	011	2023-08-01
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G001	2023-08-01
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G002	2023-08-01
Attenuator	PASTERNACK	PE7087-10	A009	2023-08-03
Attenuator	PASTERNACK	PE7087-10	A001	2023-08-03
Attenuator	PASTERNACK	PE7087-10	A008	2023-08-03
Attenuator	PASTERNACK	PE7004-10	2	2023-08-01
Attenuator	PASTERNACK	PE7395-10	A011	2023-08-03
EMI Test Receive, 3 GHz	R&S	ESR3	101832	2023-08-01
LISN	R&S	ENV-216	101836	2023-08-04
LISN	R&S	ENV-216	101837	2023-08-04
UL Software				
Description	**Manufacturer**	**Model**	**Version**	
Radiated software	UL	UL EMC	Ver 9.5	
AC Line Conducted software	UL	UL EMC	Ver 9.5	

7. APPLICABLE LIMITS AND TEST RESULTS

7.1. RADIATED EMISSIONS

TEST PROCEDURE

ANSI C63.4-2014

LIMIT

§15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Limits for radiated disturbance of Class B ITE at measuring distance of 3 m	
Frequency range (MHz)	Quasi-peak limits (dBμV/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960 MHz	54
Note: The lower limit shall apply at the transition frequency.	

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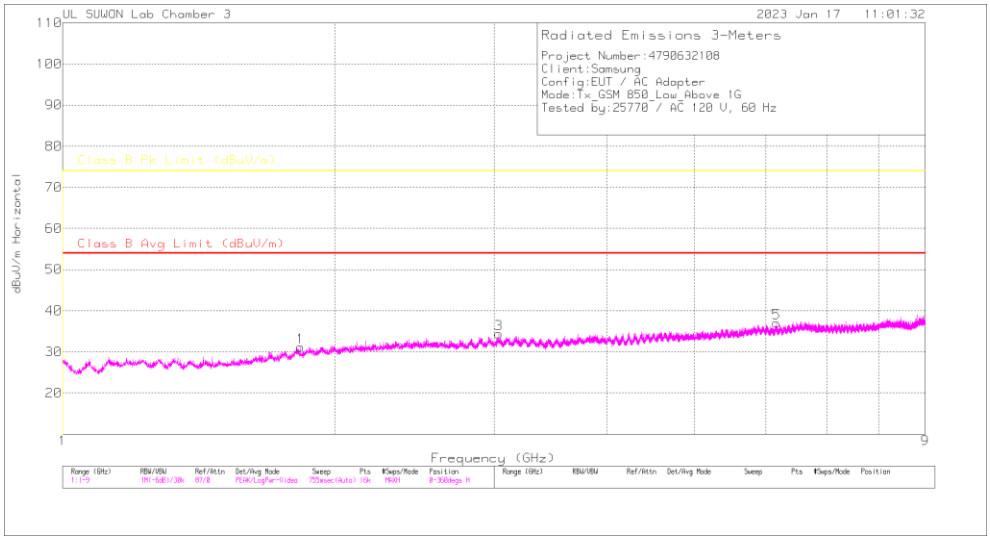
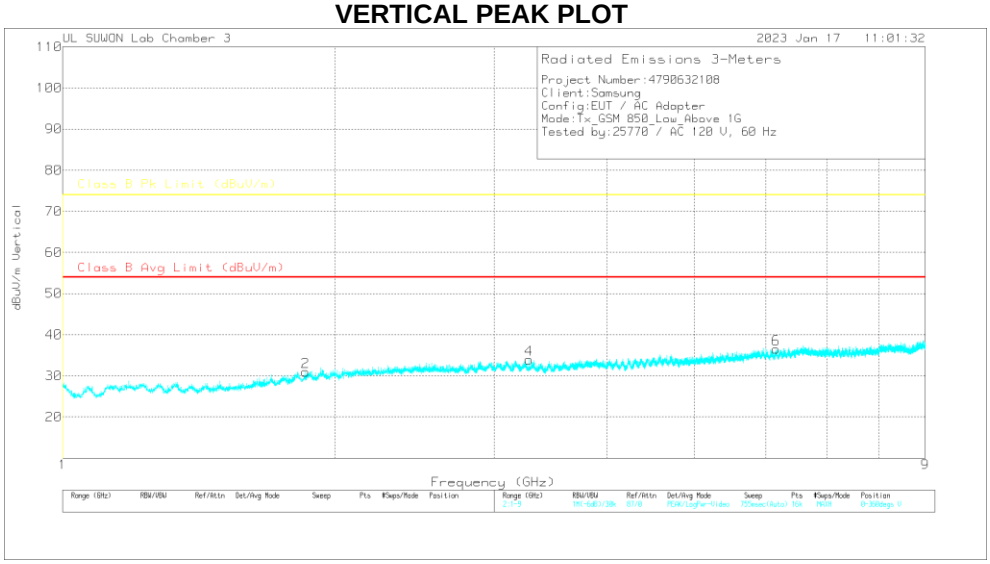
7.1.1. Above 1 GHz in the GSM850

LOW CHANNEL(869.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

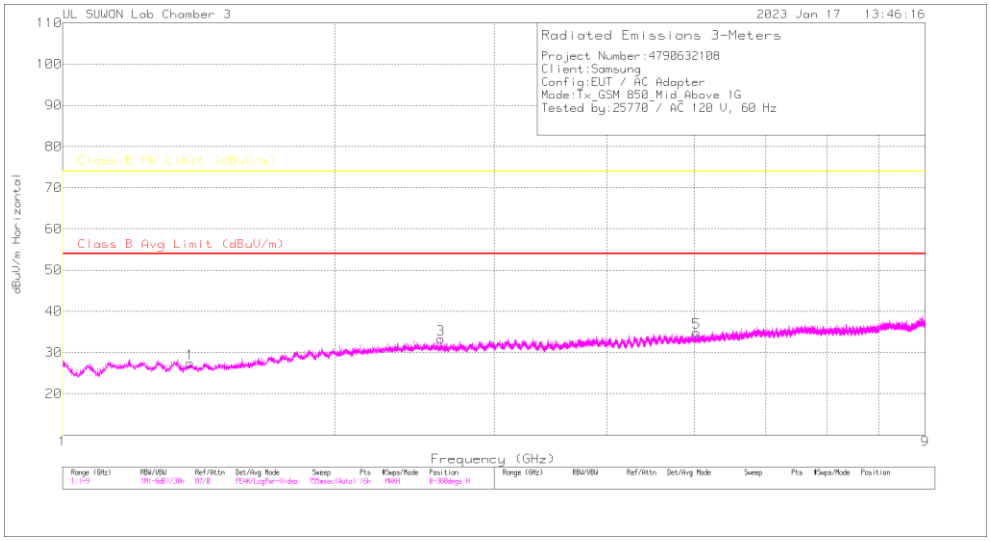
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.833	41.19	Pk	31.1	-35	.7	37.99	-	-	74	-36.01	0	100	H
1.833	29.12	Ca	31.1	-35	.7	25.92	54	-28.08	-	-	0	100	H
1.857	41.73	Pk	31.2	-35	.7	38.63	-	-	74	-35.37	0	100	V
1.857	29.11	Ca	31.2	-35	.7	26.01	54	-27.99	-	-	0	100	V
3.036	41.71	Pk	33.4	-33.6	.7	42.21	-	-	74	-31.79	0	100	H
3.036	28.71	Ca	33.4	-33.6	.7	29.21	54	-24.79	-	-	0	100	H
3.28	39.68	Pk	33.4	-33.2	.7	40.58	-	-	74	-33.42	0	100	V
3.28	27.25	Ca	33.4	-33.2	.7	28.15	54	-25.85	-	-	0	100	V
6.163	36.38	Pk	36.1	-28.6	.5	44.38	-	-	74	-29.62	0	100	H
6.163	23.94	Ca	36.1	-28.6	.5	31.94	54	-22.06	-	-	0	100	H
6.1555	36.5	Pk	36.1	-28.6	.5	44.5	-	-	74	-29.5	0	100	V
6.1555	24.14	Ca	36.1	-28.6	.5	32.14	54	-21.86	-	-	0	100	V

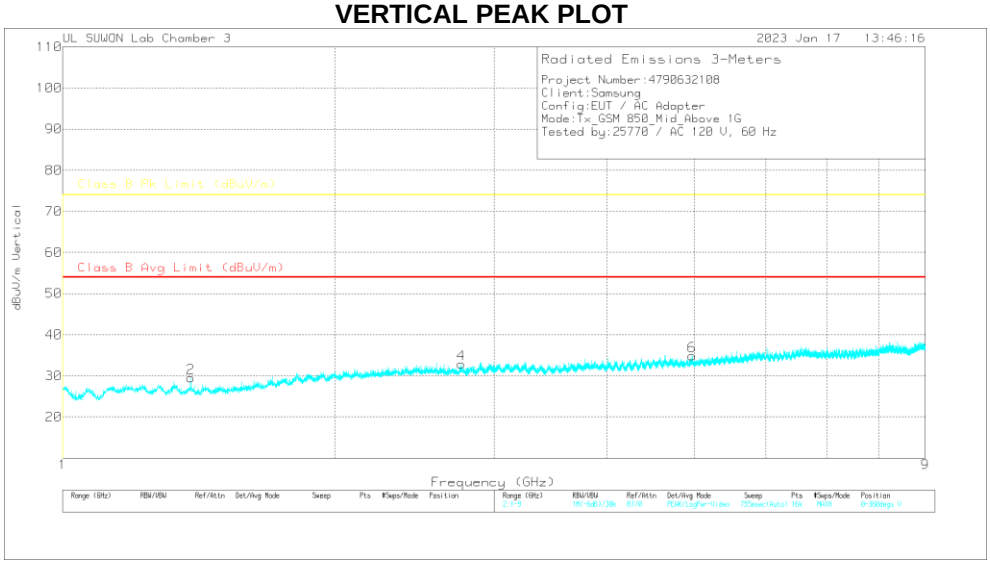
Pk - Peak detector
Ca - CISPR average detection

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.3845	32.57	Pk	28.5	-35.8	.7	25.97	-	-	74	-48.03	0	100	H
1.3845	21.1	Ca	28.5	-35.8	.7	14.5	54	-39.5	-	-	0	100	H
1.385	32.28	Pk	28.5	-35.8	.7	25.68	-	-	74	-48.32	0	100	V
1.385	21.15	Ca	28.5	-35.8	.7	14.55	54	-39.45	-	-	0	100	V
2.622	31.06	Pk	32.8	-34.2	.7	30.36	-	-	74	-43.64	0	100	H
2.622	19.55	Ca	32.8	-34.2	.7	18.85	54	-35.15	-	-	0	100	H
2.7625	31.02	Pk	32.8	-34.1	.7	30.42	-	-	74	-43.58	0	100	V
2.7625	19.64	Ca	32.8	-34.1	.7	19.04	54	-34.96	-	-	0	100	V
5.03	28.6	Pk	34.7	-30.4	.5	33.4	-	-	74	-40.6	0	100	H
5.03	16.19	Ca	34.7	-30.4	.5	20.99	54	-33.01	-	-	0	100	H
4.9715	28.8	Pk	34.7	-30.6	.5	33.4	-	-	74	-40.6	0	100	V
4.9715	16.28	Ca	34.7	-30.6	.5	20.88	54	-33.12	-	-	0	100	V

Pk - Peak detector
Ca - CISPR average detection

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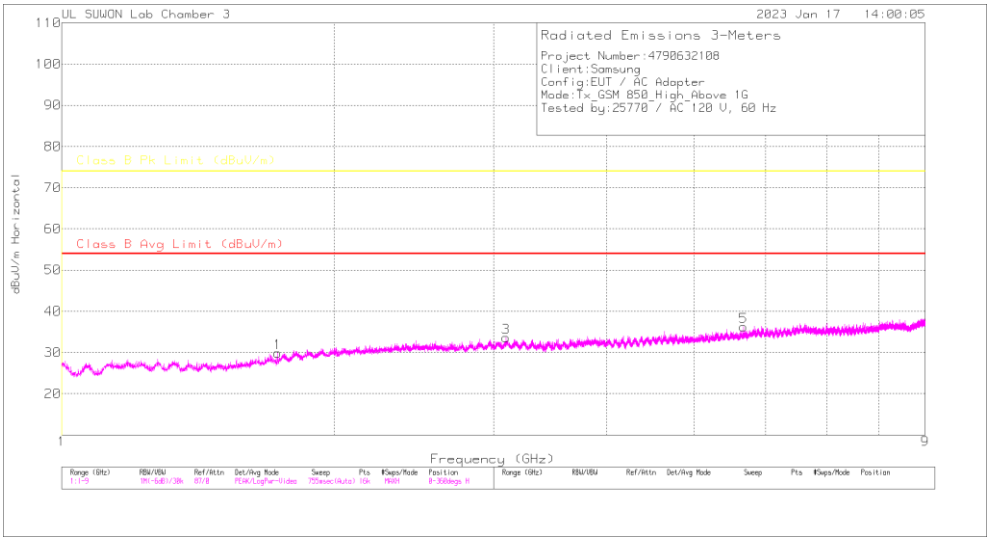
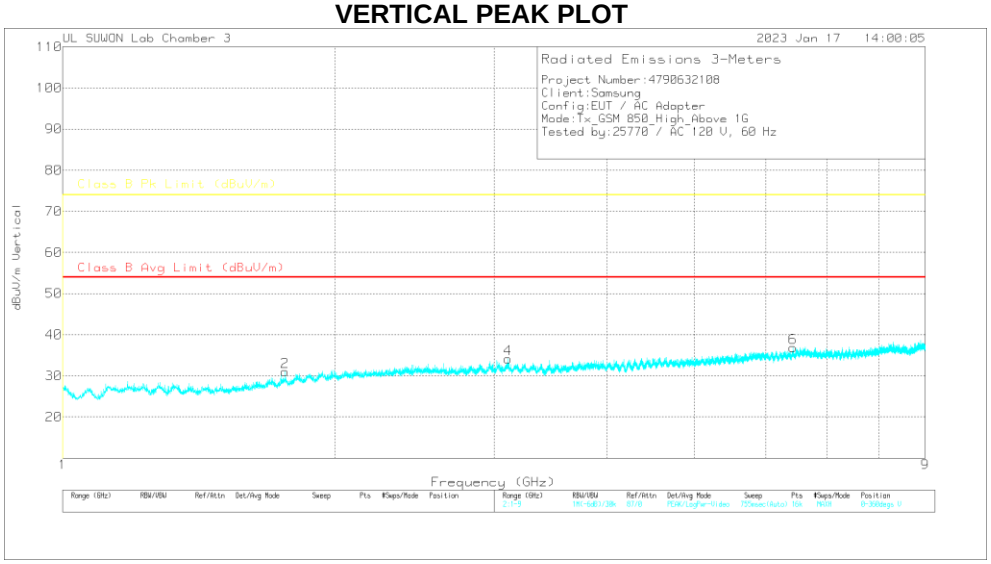
HIGH CHANNEL(893.8 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

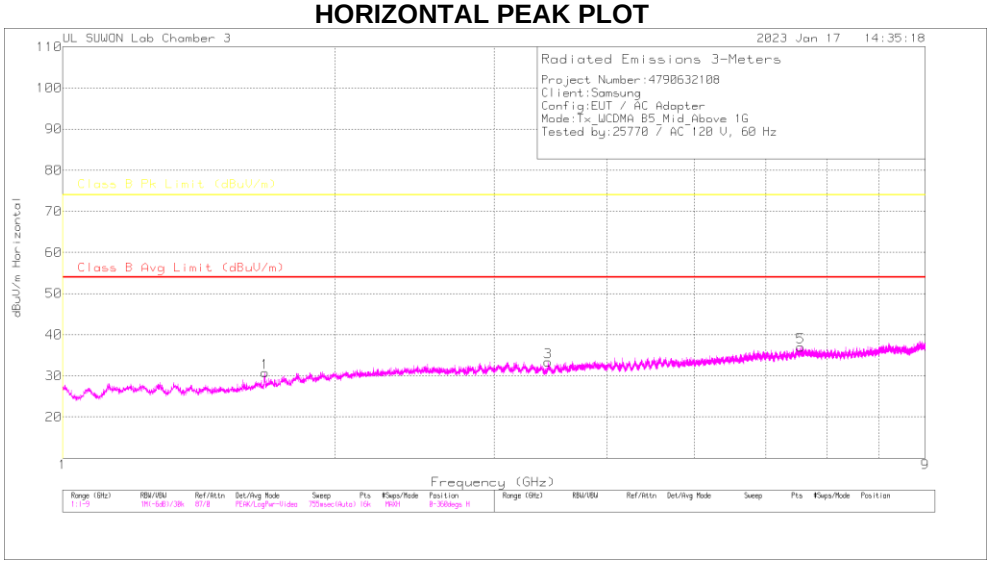
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.7315	31.17	Pk	30.3	-35.2	.7	26.97	-	-	74	-47.03	0	100	H
1.7315	19.78	Ca	30.3	-35.2	.7	15.58	54	-38.42	-	-	0	100	H
1.7625	31.67	Pk	30.5	-35.1	.7	27.77	-	-	74	-46.23	0	100	V
1.7625	20.46	Ca	30.5	-35.1	.7	16.56	54	-37.44	-	-	0	100	V
3.096	30.52	Pk	33.4	-33.5	.7	31.12	-	-	74	-42.88	0	100	H
3.096	19.21	Ca	33.4	-33.5	.7	19.81	54	-34.19	-	-	0	100	H
3.108	30.7	Pk	33.4	-33.5	.7	31.3	-	-	74	-42.7	0	100	V
3.108	19.43	Ca	33.4	-33.5	.7	20.03	54	-33.97	-	-	0	100	V
5.672	27.81	Pk	35.5	-29.6	.5	34.21	-	-	74	-39.79	0	100	H
5.672	15.28	Ca	35.5	-29.6	.5	21.68	54	-32.32	-	-	0	100	H
6.4295	25.5	Pk	36.4	-27.9	.5	34.5	-	-	74	-39.5	0	100	V
6.4295	14.19	Ca	36.4	-27.9	.5	23.19	54	-30.81	-	-	0	100	V

Pk - Peak detector
Ca - CISPR average detection

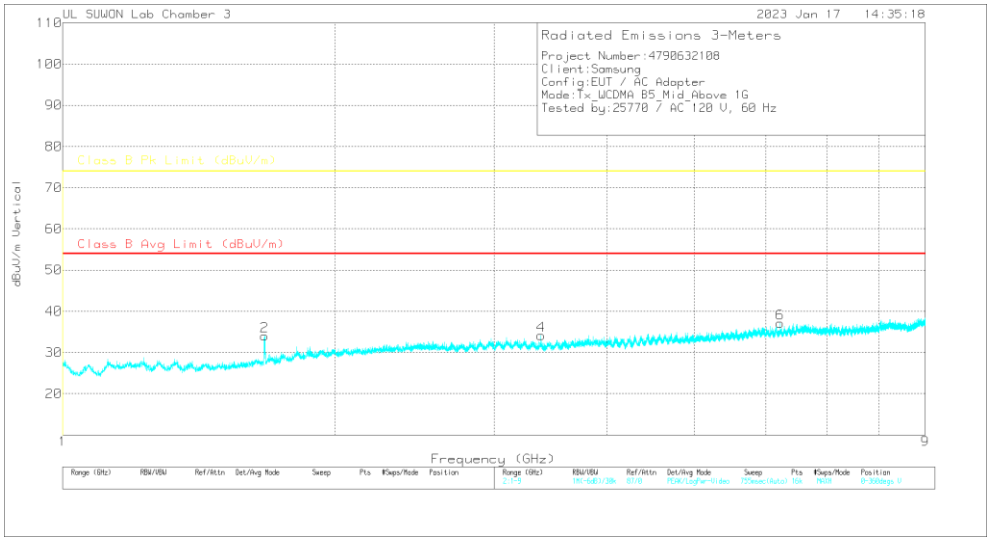
7.1.2. Above 1 GHz in the WCDMA Band 5

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

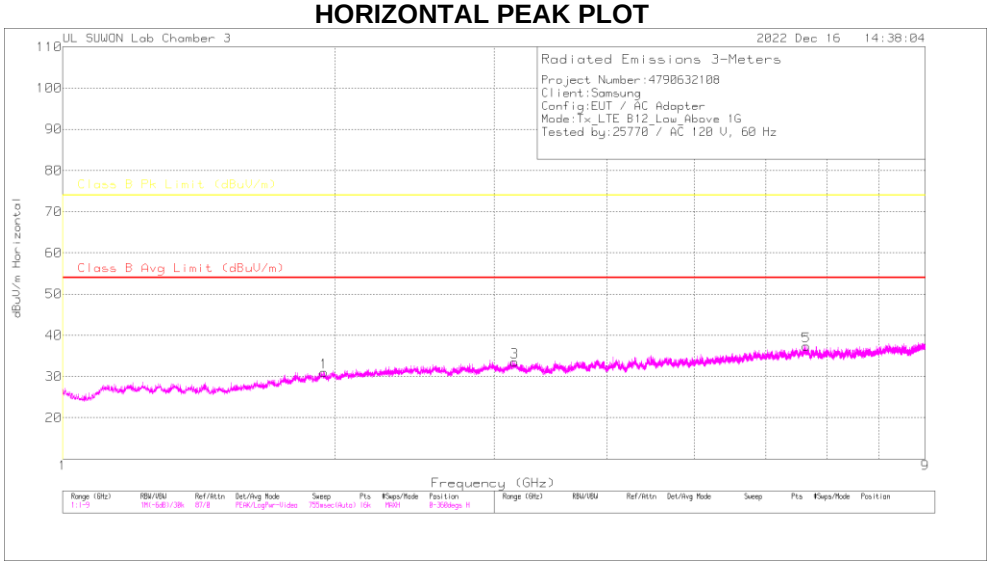
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.6745	32.59	Pk	29.7	-35.3	.7	27.69	-	-	74	-46.31	0	100	H
1.6745	21.13	Ca	29.7	-35.3	.7	16.23	54	-37.77	-	-	0	100	H
1.6715	32.05	Pk	29.7	-35.3	.7	27.15	-	-	74	-46.85	0	100	V
1.6715	20.75	Ca	29.7	-35.3	.7	15.85	54	-38.15	-	-	0	100	V
3.4445	29.2	Pk	33.3	-33.1	.6	30	-	-	74	-44	0	100	H
3.4445	18.79	Ca	33.3	-33.1	.6	19.59	54	-34.41	-	-	0	100	H
3.3825	30.56	Pk	33.1	-33.2	.7	31.16	-	-	74	-42.84	0	100	V
3.3825	18.99	Ca	33.1	-33.2	.7	19.59	54	-34.41	-	-	0	100	V
6.553	25.23	Pk	36.5	-27.3	.5	34.93	-	-	74	-39.07	0	100	H
6.553	13.76	Ca	36.5	-27.3	.5	23.46	54	-30.54	-	-	0	100	H
6.216	27.46	Pk	36.1	-28.4	.5	35.66	-	-	74	-38.34	0	100	V
6.216	14.69	Ca	36.1	-28.4	.5	22.89	54	-31.11	-	-	0	100	V

Pk - Peak detector
Ca - CISPR average detection

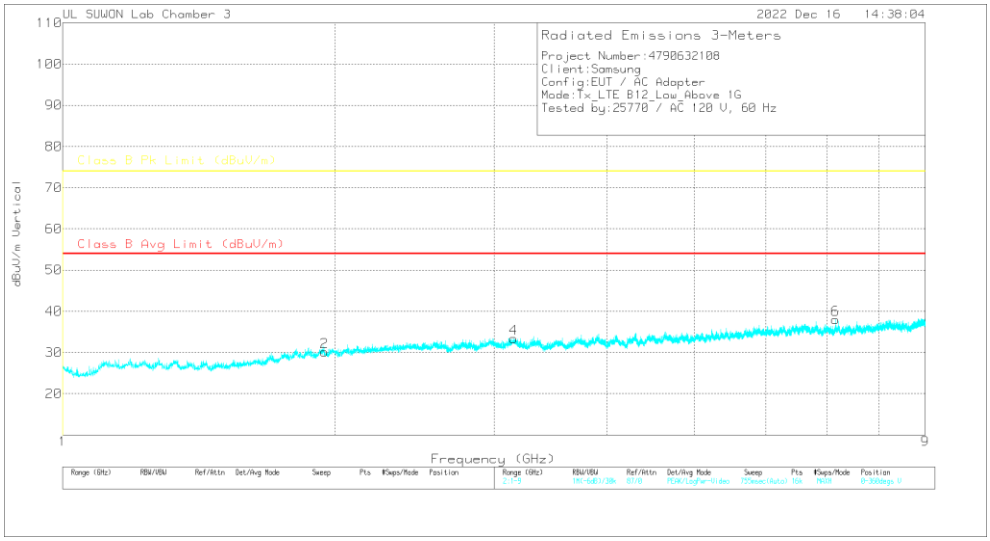
7.1.3. Above 1 GHz in the LTE Band 12

LOW CHANNEL(734 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

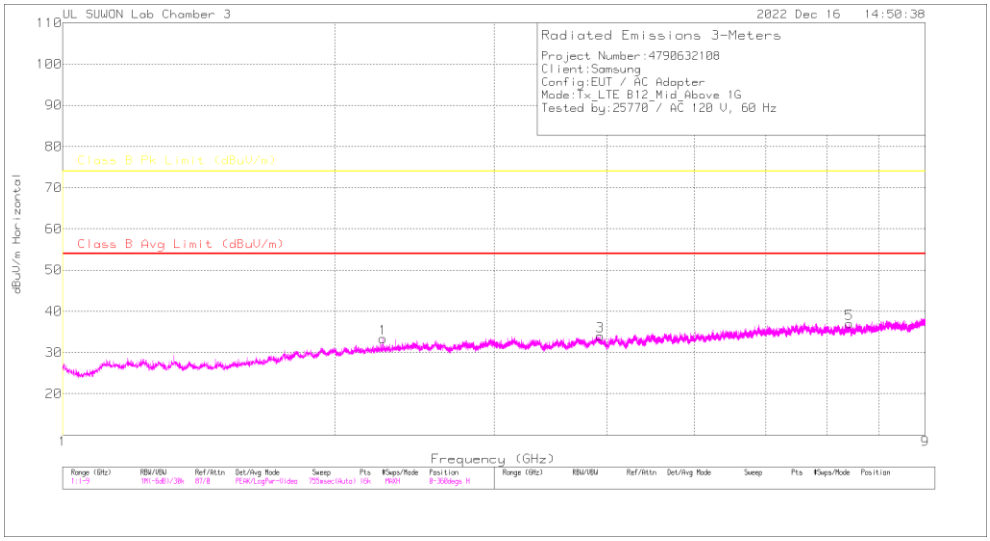
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.9465	42.14	Pk	31.6	-34.9	.6	39.44	-	-	74	-34.56	0	100	H
1.9465	29.34	Ca	31.6	-34.9	.6	26.64	54	-27.36	-	-	0	100	H
1.9475	41.8	Pk	31.6	-34.9	.6	39.1	-	-	74	-34.9	0	100	V
1.9475	29.27	Ca	31.6	-34.9	.6	26.57	54	-27.43	-	-	0	100	V
3.1645	40.8	Pk	33.4	-33.5	.7	41.4	-	-	74	-32.6	0	100	H
3.1645	28.53	Ca	33.4	-33.5	.7	29.13	54	-24.87	-	-	0	100	H
3.153	40.64	Pk	33.4	-33.4	.7	41.34	-	-	74	-32.66	0	100	V
3.153	28.47	Ca	33.4	-33.4	.7	29.17	54	-24.83	-	-	0	100	V
6.647	35.33	Pk	36.5	-27.3	.5	45.03	-	-	74	-28.97	0	100	H
6.647	22.57	Ca	36.5	-27.3	.5	32.27	54	-21.73	-	-	0	100	H
7.1655	34.46	Pk	36.1	-26.2	.5	44.86	-	-	74	-29.14	0	100	V
7.1655	21.85	Ca	36.1	-26.2	.5	32.25	54	-21.75	-	-	0	100	V

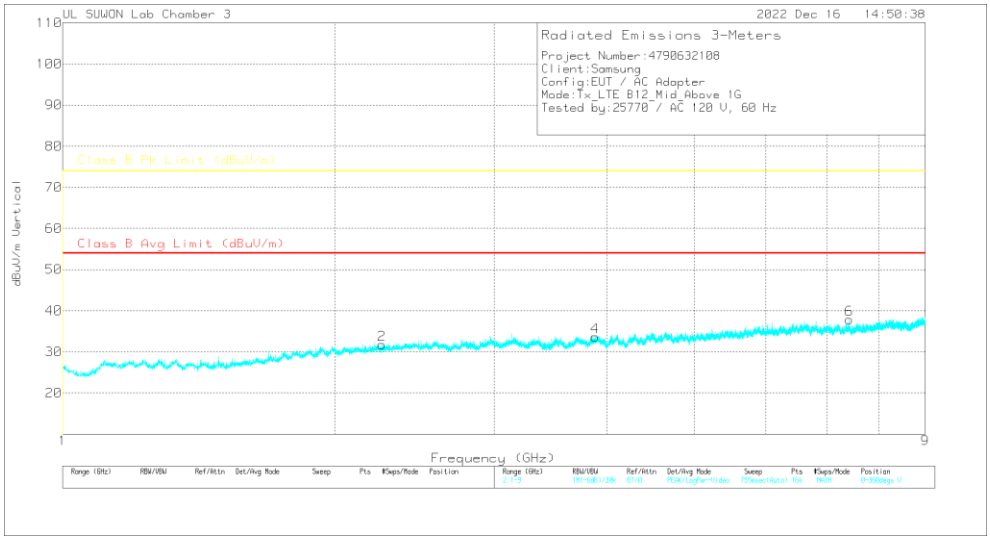
Pk - Peak detector
Ca - CISPR average detection

MID CHANNEL(737.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

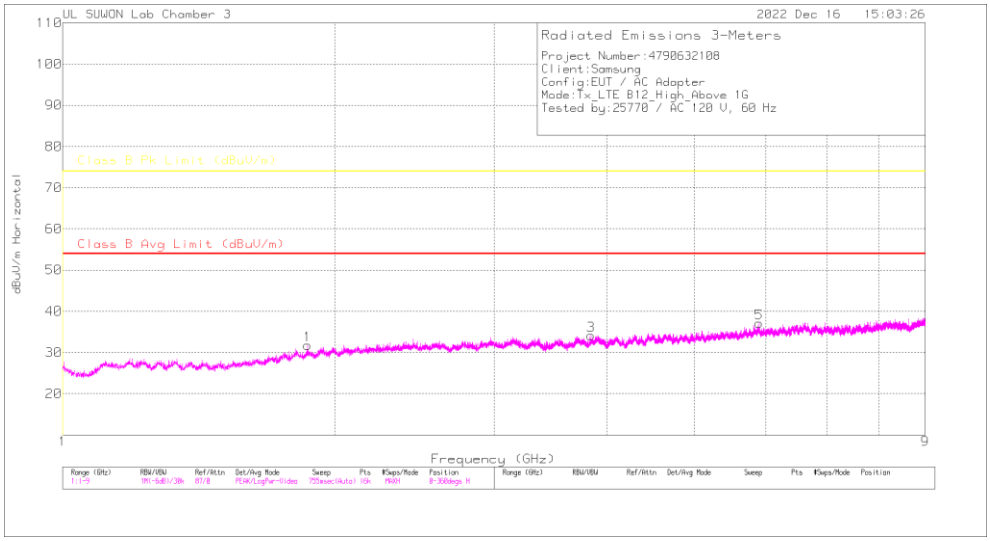
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.2625	41.62	Pk	32.3	-34.4	.7	40.22	-	-	74	-33.78	0	100	H
2.2625	28.86	Ca	32.3	-34.4	.7	27.46	54	-26.54	-	-	0	100	H
2.254	41.35	Pk	32.2	-34.4	.7	39.85	-	-	74	-34.15	0	100	V
2.254	28.88	Ca	32.2	-34.4	.7	27.38	54	-26.62	-	-	0	100	V
3.931	39.11	Pk	33.9	-32.1	.5	41.41	-	-	74	-32.59	0	100	H
3.931	26.77	Ca	33.9	-32.1	.5	29.07	54	-24.93	-	-	0	100	H
3.883	39.55	Pk	33.9	-32.2	.5	41.75	-	-	74	-32.25	0	100	V
3.883	27.05	Ca	33.9	-32.2	.5	29.25	54	-24.75	-	-	0	100	V
7.42	34.06	Pk	36	-25.5	.6	45.16	-	-	74	-28.84	0	100	H
7.42	21.38	Ca	36	-25.5	.6	32.48	54	-21.52	-	-	0	100	H
7.4165	33.57	Pk	36	-25.5	.6	44.67	-	-	74	-29.33	0	100	V
7.4165	21.43	Ca	36	-25.5	.6	32.53	54	-21.47	-	-	0	100	V

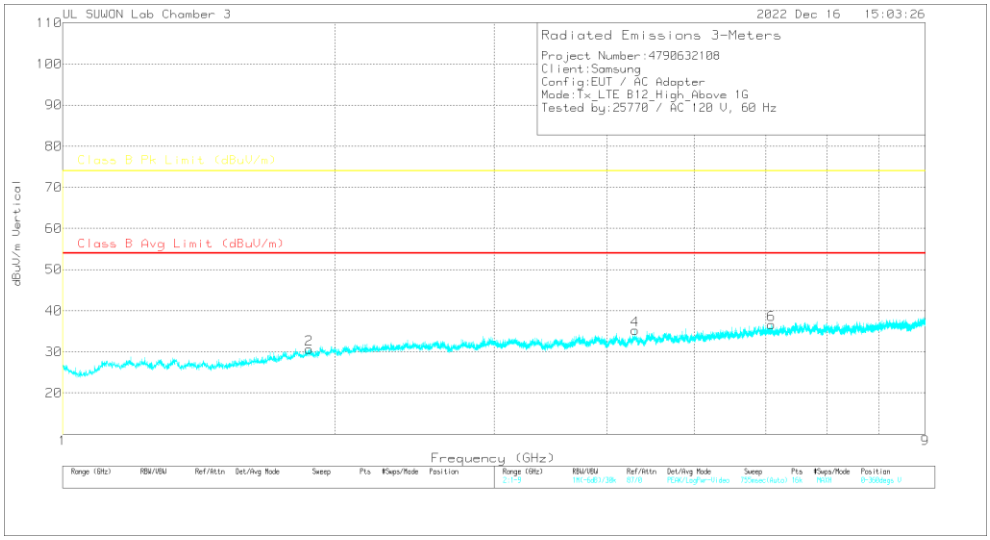
Pk - Peak detector
Ca - CISPR average detection

HIGH CHANNEL(741 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

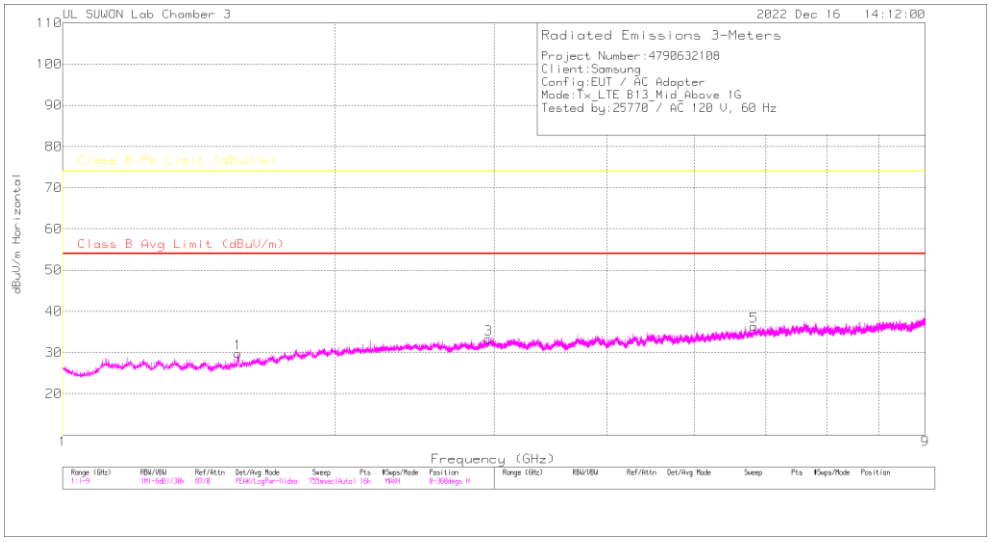
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.866	41.96	Pk	31.3	-34.9	.7	39.06	-	-	74	-34.94	0	100	H
1.866	29.38	Ca	31.3	-34.9	.7	26.48	54	-27.52	-	-	0	100	H
1.8735	42.74	Pk	31.3	-35	.7	39.74	-	-	74	-34.26	0	100	V
1.8735	29.51	Ca	31.3	-35	.7	26.51	54	-27.49	-	-	0	100	V
3.8425	39.22	Pk	33.9	-32.3	.5	41.32	-	-	74	-32.68	0	100	H
3.8425	27.03	Ca	33.9	-32.3	.5	29.13	54	-24.87	-	-	0	100	H
4.2975	38.8	Pk	34.1	-31.3	.5	42.1	-	-	74	-31.9	0	100	V
4.2975	26.78	Ca	34.1	-31.3	.5	30.08	54	-23.92	-	-	0	100	V
5.892	37.68	Pk	36	-29.1	.5	45.08	-	-	74	-28.92	0	100	H
5.892	24.52	Ca	36	-29.1	.5	31.92	54	-22.08	-	-	0	100	H
6.0865	36.34	Pk	36	-28.9	.5	43.94	-	-	74	-30.06	0	100	V
6.0865	24.09	Ca	36	-28.9	.5	31.69	54	-22.31	-	-	0	100	V

Pk - Peak detector
Ca - CISPR average detection

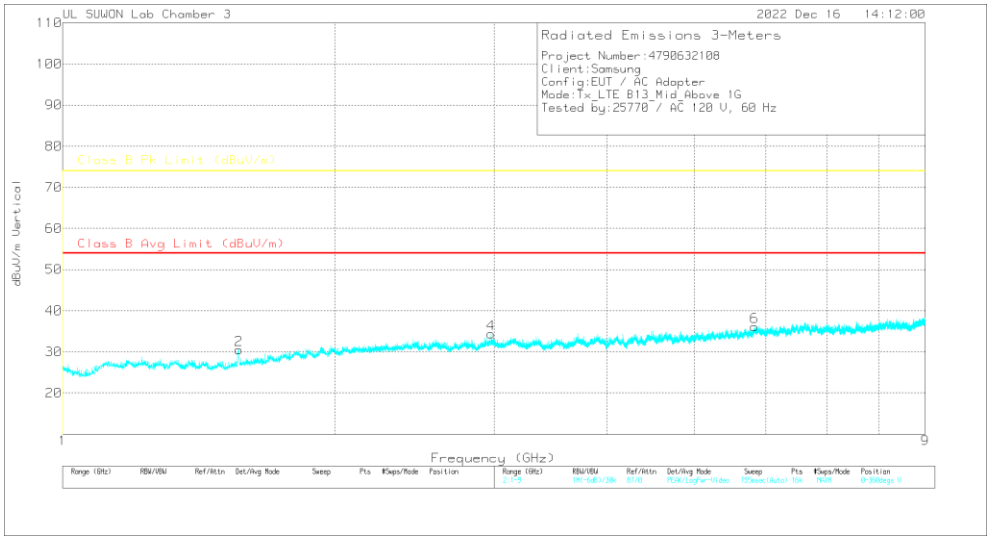
7.1.4. Above 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

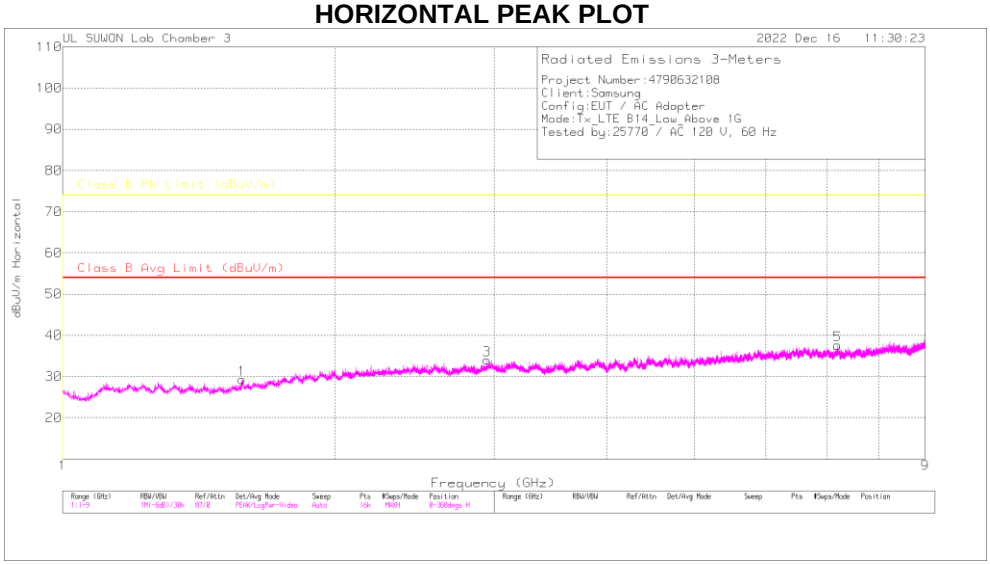
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.562	43.13	Pk	28.6	-35.4	.7	37.03	-	-	74	-36.97	0	100	H
1.562	29.65	Ca	28.6	-35.4	.7	23.55	54	-30.45	-	-	0	100	H
1.566	42.49	Pk	28.6	-35.4	.7	36.39	-	-	74	-37.61	0	100	V
1.566	30	Ca	28.6	-35.4	.7	23.9	54	-30.1	-	-	0	100	V
2.958	41.14	Pk	33.2	-33.8	.7	41.24	-	-	74	-32.76	0	100	H
2.958	28.62	Ca	33.2	-33.8	.7	28.72	54	-25.28	-	-	0	100	H
2.978	40.77	Pk	33.3	-33.6	.7	41.17	-	-	74	-32.83	0	100	V
2.978	28.66	Ca	33.3	-33.6	.7	29.06	54	-24.94	-	-	0	100	V
5.822	38.08	Pk	35.8	-29	.5	45.38	-	-	74	-28.62	0	100	H
5.822	24.41	Ca	35.8	-29	.5	31.71	54	-22.29	-	-	0	100	H
5.8285	36.43	Pk	35.9	-29	.5	43.83	-	-	74	-30.17	0	100	V
5.8285	24.38	Ca	35.9	-29	.5	31.78	54	-22.22	-	-	0	100	V

Pk - Peak detector
Ca - CISPR average detection

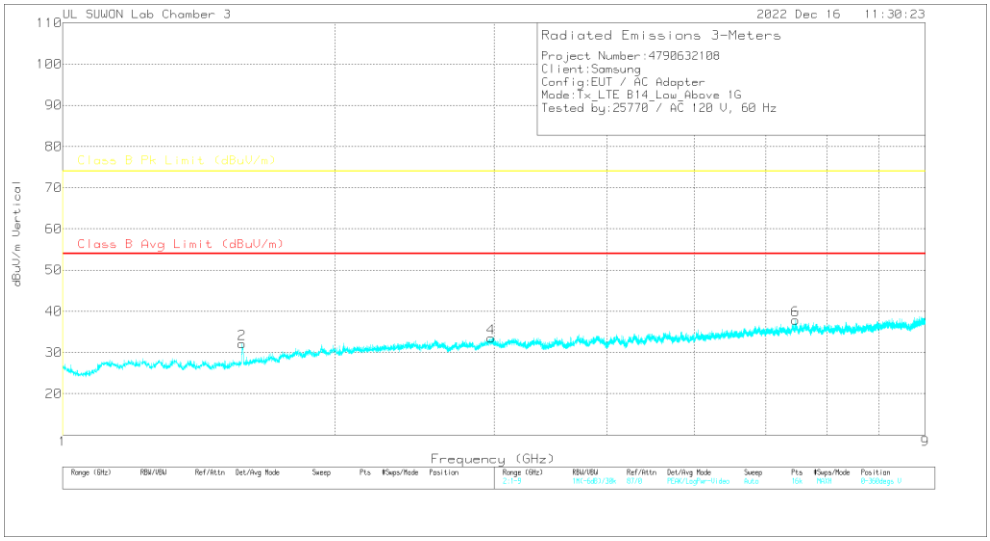
7.1.5. Above 1 GHz in the LTE Band 14

LOW CHANNEL(760.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

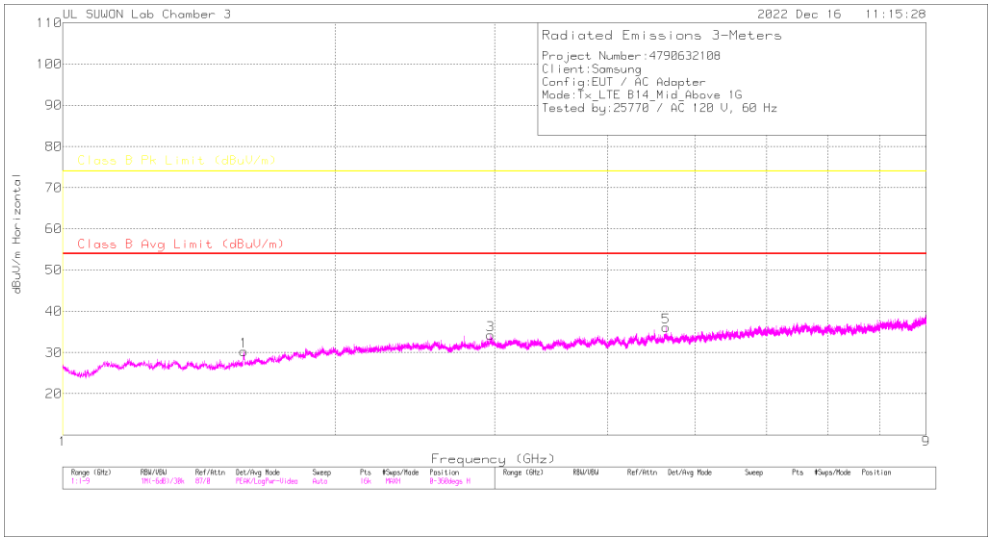
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.58	42.06	Pk	28.7	-35.4	.7	36.06	-	-	74	-37.94	0	100	H
1.58	29.85	Ca	28.7	-35.4	.7	23.85	54	-30.15	-	-	0	100	H
1.579	42.46	Pk	28.7	-35.4	.7	36.46	-	-	74	-37.54	0	100	V
1.579	30.02	Ca	28.7	-35.4	.7	24.02	54	-29.98	-	-	0	100	V
2.947	41.61	Pk	33.2	-33.7	.7	41.81	-	-	74	-32.19	0	100	H
2.947	28.42	Ca	33.2	-33.7	.7	28.62	54	-25.38	-	-	0	100	H
2.978	41.18	Pk	33.3	-33.6	.7	41.58	-	-	74	-32.42	0	100	V
2.978	28.74	Ca	33.3	-33.6	.7	29.14	54	-24.86	-	-	0	100	V
7.2015	33.6	Pk	36.1	-25.9	.5	44.3	-	-	74	-29.7	0	100	H
7.2015	21.69	Ca	36.1	-25.9	.5	32.39	54	-21.61	-	-	0	100	H
6.4715	35.55	Pk	36.4	-27.7	.5	44.75	-	-	74	-29.25	0	100	V
6.4715	23.15	Ca	36.4	-27.7	.5	32.35	54	-21.65	-	-	0	100	V

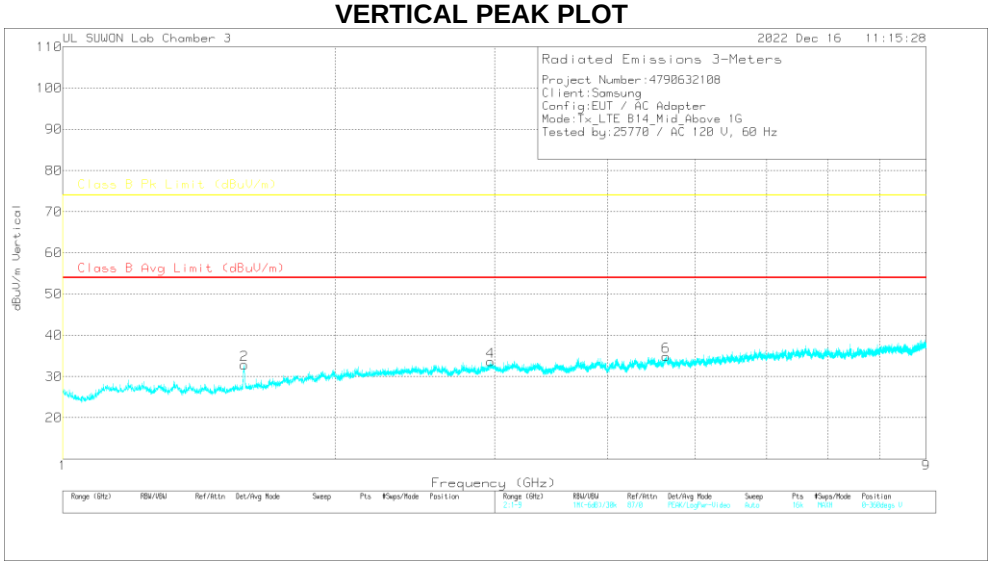
Pk - Peak detector
Ca - CISPR average detection

MID CHANNEL(763.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

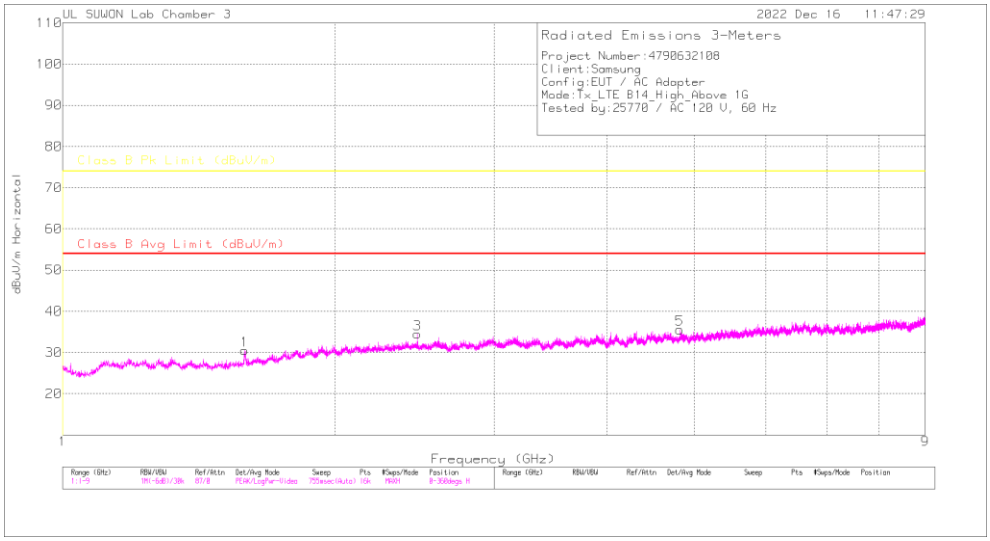
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.586	42.42	Pk	28.8	-35.5	.8	36.52	-	-	74	-37.48	0	100	H
1.586	29.94	Ca	28.8	-35.5	.8	24.04	54	-29.96	-	-	0	100	H
1.5865	42.51	Pk	28.8	-35.5	.8	36.61	-	-	74	-37.39	0	100	V
1.5865	30.1	Ca	28.8	-35.5	.8	24.2	54	-29.8	-	-	0	100	V
2.972	41.11	Pk	33.2	-33.7	.7	41.31	-	-	74	-32.69	0	100	H
2.972	28.79	Ca	33.2	-33.7	.7	28.99	54	-25.01	-	-	0	100	H
2.9705	41.51	Pk	33.2	-33.7	.7	41.71	-	-	74	-32.29	0	100	V
2.9705	28.79	Ca	33.2	-33.7	.7	28.99	54	-25.01	-	-	0	100	V
4.641	38.56	Pk	34.5	-30.9	.5	42.66	-	-	74	-31.34	0	100	H
4.641	26.45	Ca	34.5	-30.9	.5	30.55	54	-23.45	-	-	0	100	H
4.641	38.98	Pk	34.5	-30.9	.5	43.08	-	-	74	-30.92	0	100	V
4.641	26.44	Ca	34.5	-30.9	.5	30.54	54	-23.46	-	-	0	100	V

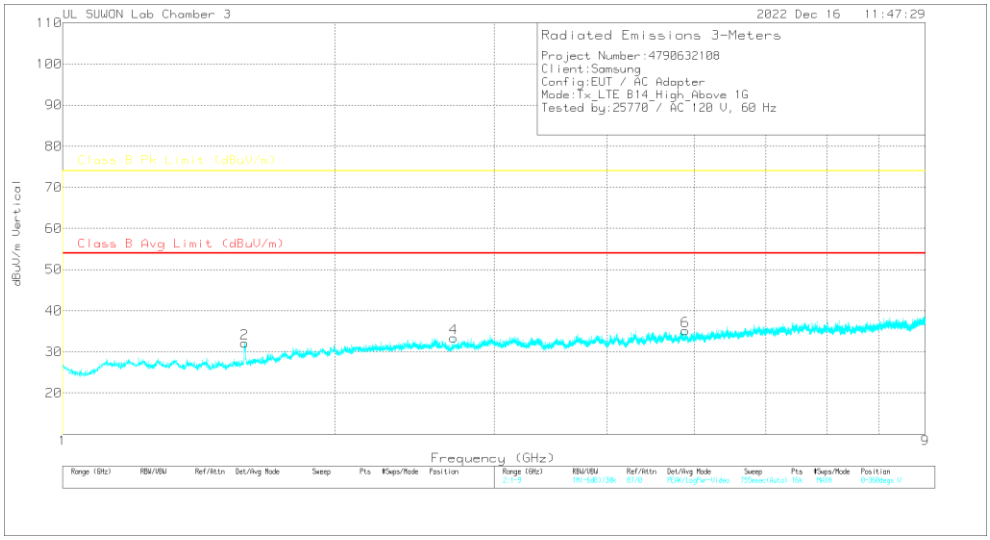
Pk - Peak detector
Ca - CISPR average detection

HIGH CHANNEL(765.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.5885	42.44	Pk	28.8	-35.5	.8	36.54	-	-	74	-37.46	0	100	H
1.5885	29.93	Ca	28.8	-35.5	.8	24.03	54	-29.97	-	-	0	100	H
1.5895	42.38	Pk	28.8	-35.5	.8	36.48	-	-	74	-37.52	0	100	V
1.5895	30.07	Ca	28.8	-35.5	.8	24.17	54	-29.83	-	-	0	100	V
2.468	40.9	Pk	32.9	-34.4	.7	40.1	-	-	74	-33.9	0	100	H
2.468	28.81	Ca	32.9	-34.4	.7	28.01	54	-25.99	-	-	0	100	H
2.708	40.96	Pk	32.7	-34	.7	40.36	-	-	74	-33.64	0	100	V
2.708	28.43	Ca	32.7	-34	.7	27.83	54	-26.17	-	-	0	100	V
4.817	38.53	Pk	34.6	-31	.5	42.63	-	-	74	-31.37	0	100	H
4.817	25.78	Ca	34.6	-31	.5	29.88	54	-24.12	-	-	0	100	H
4.885	38.77	Pk	34.7	-30.7	.5	43.27	-	-	74	-30.73	0	100	V
4.885	25.61	Ca	34.7	-30.7	.5	30.11	54	-23.89	-	-	0	100	V

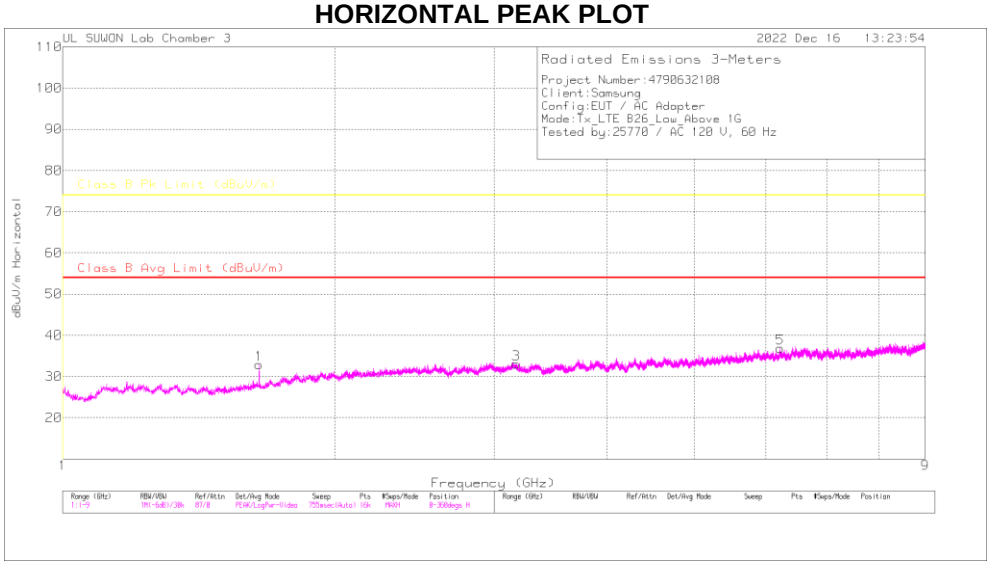
Pk - Peak detector
Ca - CISPR average detection

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_15B(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

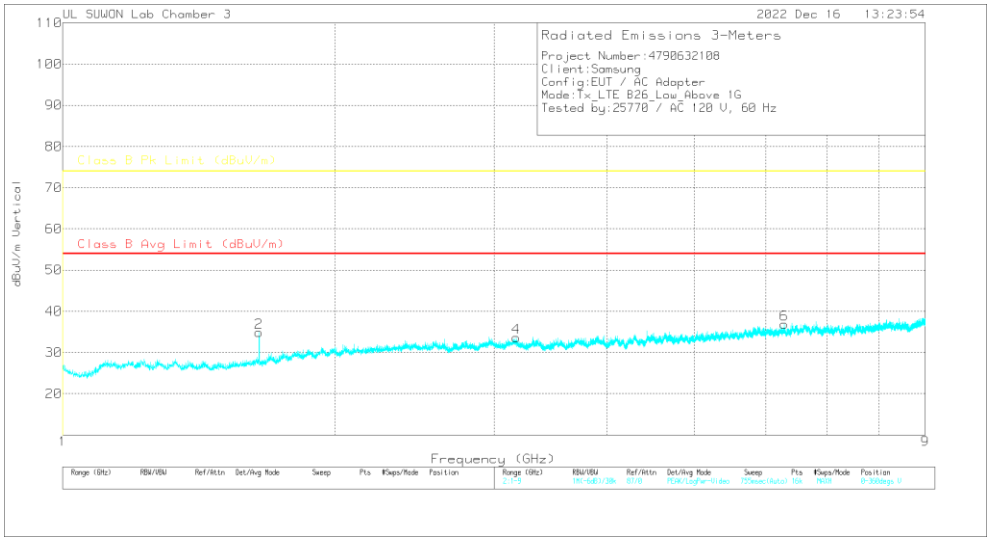
7.1.6. Above 1GHz in the LTE Band 26

LOW CHANNEL(866.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

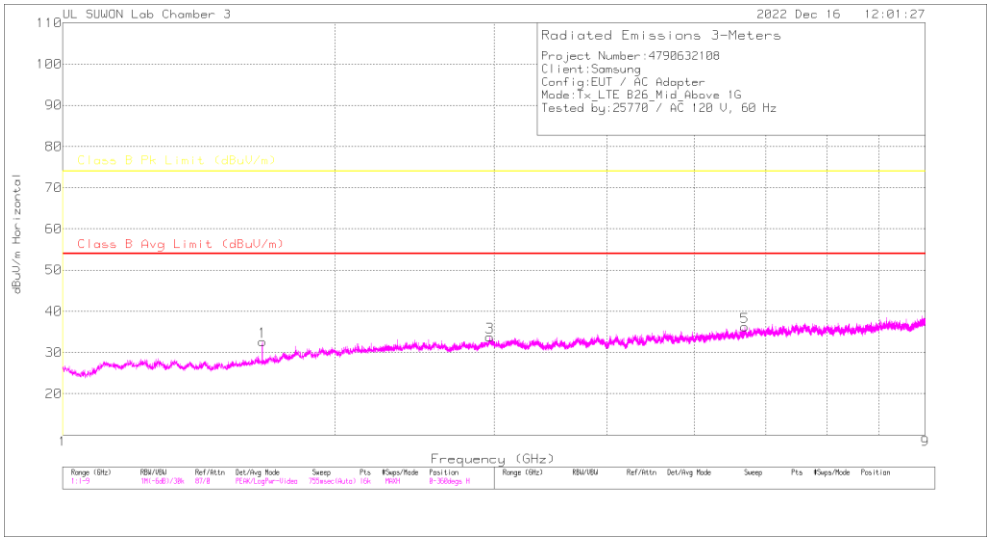
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.649	42.79	Pk	29.4	-35.3	.7	37.59	-	-	74	-36.41	0	100	H
1.649	29.8	Ca	29.4	-35.3	.7	24.6	54	-29.4	-	-	0	100	H
1.649	44.57	Pk	29.4	-35.3	.7	39.37	-	-	74	-34.63	0	100	V
1.649	31.72	Ca	29.4	-35.3	.7	26.52	54	-27.48	-	-	0	100	V
3.1735	40.84	Pk	33.4	-33.5	.7	41.44	-	-	74	-32.56	0	100	H
3.1735	28.4	Ca	33.4	-33.5	.7	29	54	-25	-	-	0	100	H
3.173	41.03	Pk	33.4	-33.5	.7	41.63	-	-	74	-32.37	0	100	V
3.173	28.43	Ca	33.4	-33.5	.7	29.03	54	-24.97	-	-	0	100	V
6.2195	36.76	Pk	36.1	-28.4	.5	44.96	-	-	74	-29.04	0	100	H
6.2195	23.82	Ca	36.1	-28.4	.5	32.02	54	-21.98	-	-	0	100	H
6.282	36.17	Pk	36.2	-28.5	.5	44.37	-	-	74	-29.63	0	100	V
6.282	23.88	Ca	36.2	-28.5	.5	32.08	54	-21.92	-	-	0	100	V

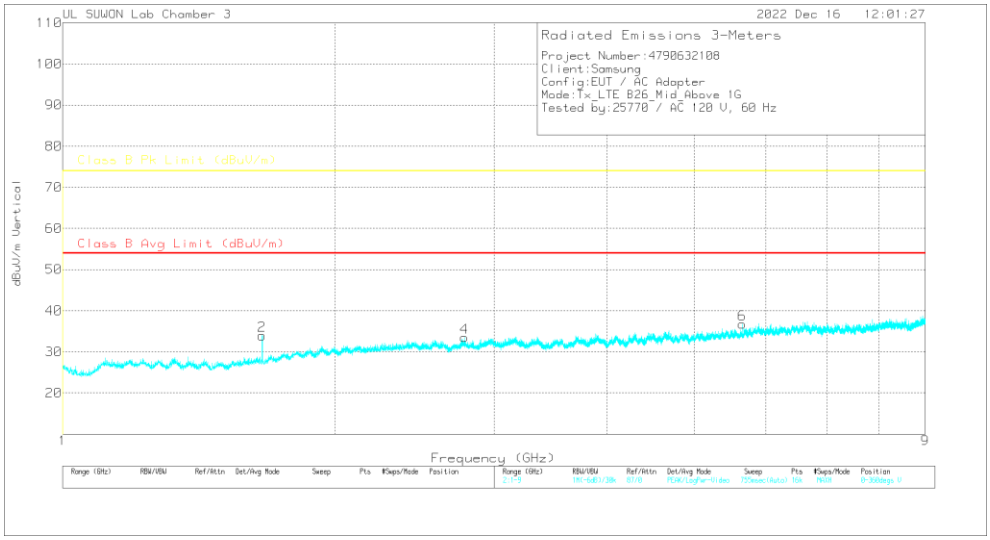
Pk - Peak detector
Ca - CISPR average detection

MID CHANNEL(876.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

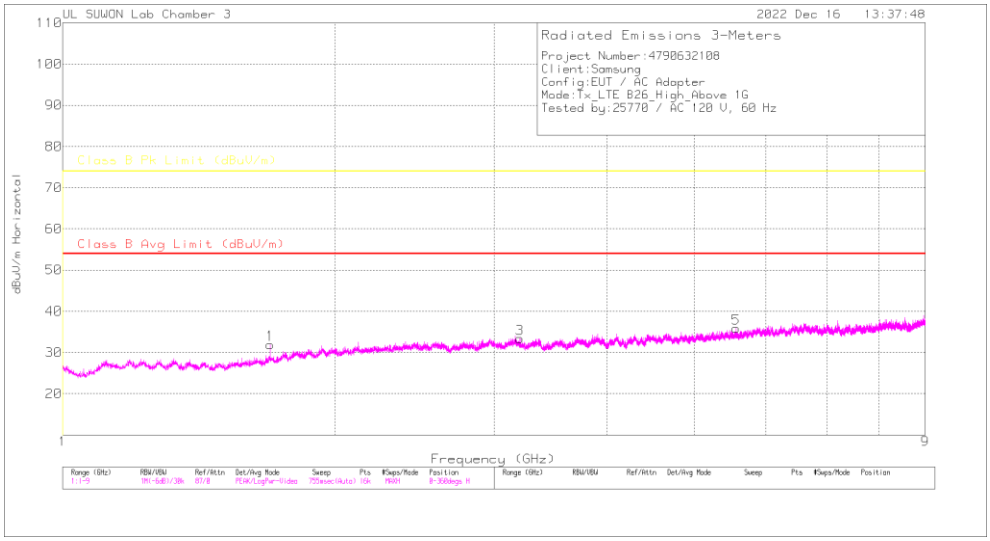
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.663	42.32	Pk	29.6	-35.3	.7	37.32	-	-	74	-36.68	0	100	H
1.663	29.42	Ca	29.6	-35.3	.7	24.42	54	-29.58	-	-	0	100	H
1.662	43.38	Pk	29.5	-35.3	.7	38.28	-	-	74	-35.72	0	100	V
1.662	30.06	Ca	29.5	-35.3	.7	24.96	54	-29.04	-	-	0	100	V
2.9685	41.66	Pk	33.2	-33.7	.7	41.86	-	-	74	-32.14	0	100	H
2.9685	28.73	Ca	33.2	-33.7	.7	28.93	54	-25.07	-	-	0	100	H
2.7815	41.52	Pk	32.9	-34.1	.7	41.02	-	-	74	-32.98	0	100	V
2.7815	28.84	Ca	32.9	-34.1	.7	28.34	54	-25.66	-	-	0	100	V
5.686	37.26	Pk	35.6	-29.5	.5	43.86	-	-	74	-30.14	0	100	H
5.686	24.87	Ca	35.6	-29.5	.5	31.47	54	-22.53	-	-	0	100	H
5.6475	37.6	Pk	35.5	-29.7	.5	43.9	-	-	74	-30.1	0	100	V
5.6475	24.28	Ca	35.5	-29.7	.5	30.58	54	-23.42	-	-	0	100	V

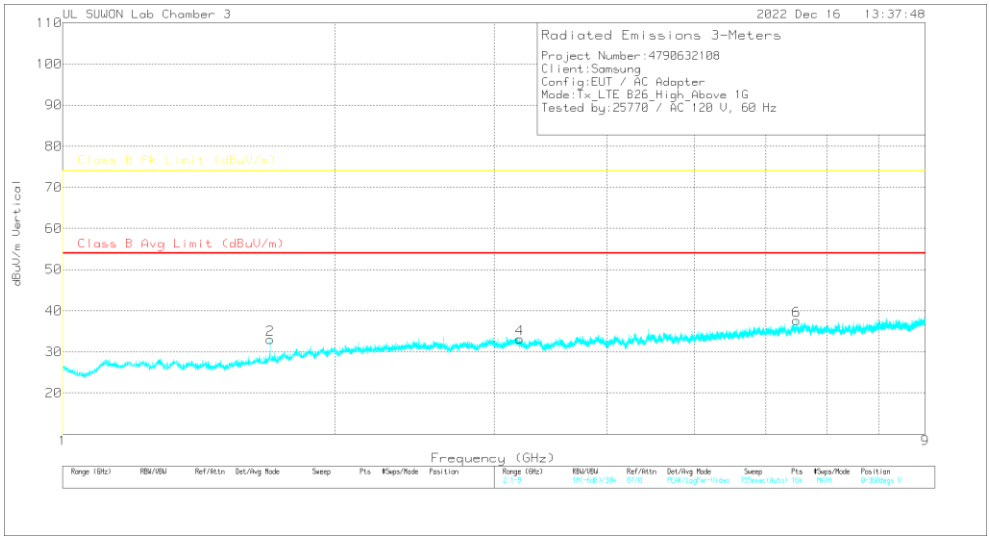
Pk - Peak detector
Ca - CISPR average detection

HIGH CHANNEL(886.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18G[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.6965	42.85	Pk	30	-35.1	.7	38.45	-	-	74	-35.55	0	100	H
1.6965	29.98	Ca	30	-35.1	.7	25.58	54	-28.42	-	-	0	100	H
1.697	43.78	Pk	30	-35.2	.7	39.28	-	-	74	-34.72	0	100	V
1.697	31.15	Ca	30	-35.2	.7	26.65	54	-27.35	-	-	0	100	V
3.2045	40.19	Pk	33.5	-33.5	.7	40.89	-	-	74	-33.11	0	100	H
3.2045	27.65	Ca	33.5	-33.5	.7	28.35	54	-25.65	-	-	0	100	H
3.205	39.95	Pk	33.5	-33.5	.7	40.65	-	-	74	-33.35	0	100	V
3.205	27.66	Ca	33.5	-33.5	.7	28.36	54	-25.64	-	-	0	100	V
5.558	37.77	Pk	35.4	-29.9	.5	43.77	-	-	74	-30.23	0	100	H
5.558	24.94	Ca	35.4	-29.9	.5	30.94	54	-23.06	-	-	0	100	H
6.488	35.39	Pk	36.5	-27.6	.5	44.79	-	-	74	-29.21	0	100	V
6.488	23.08	Ca	36.5	-27.6	.5	32.48	54	-21.52	-	-	0	100	V

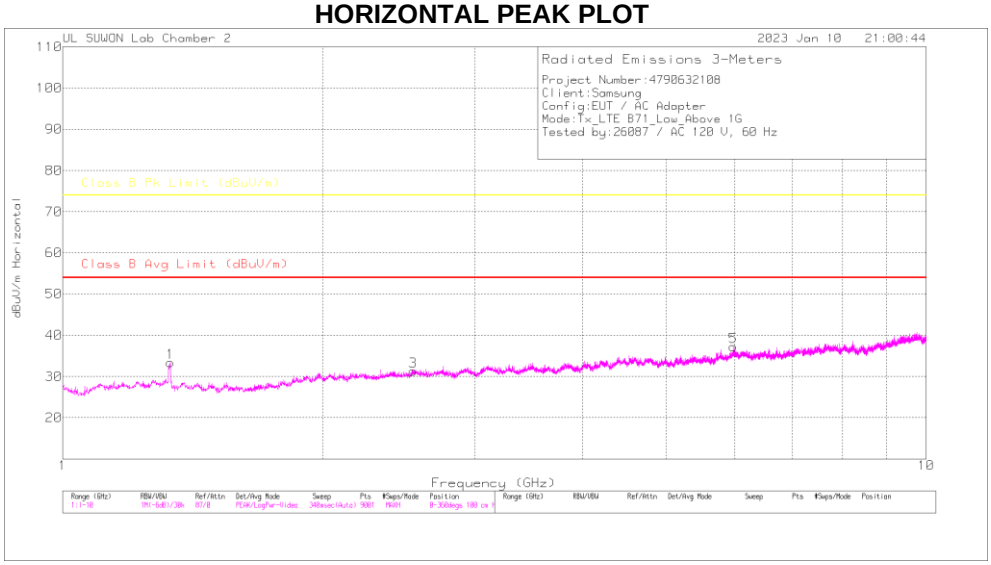
Pk - Peak detector
Ca - CISPR average detection

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_15B(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

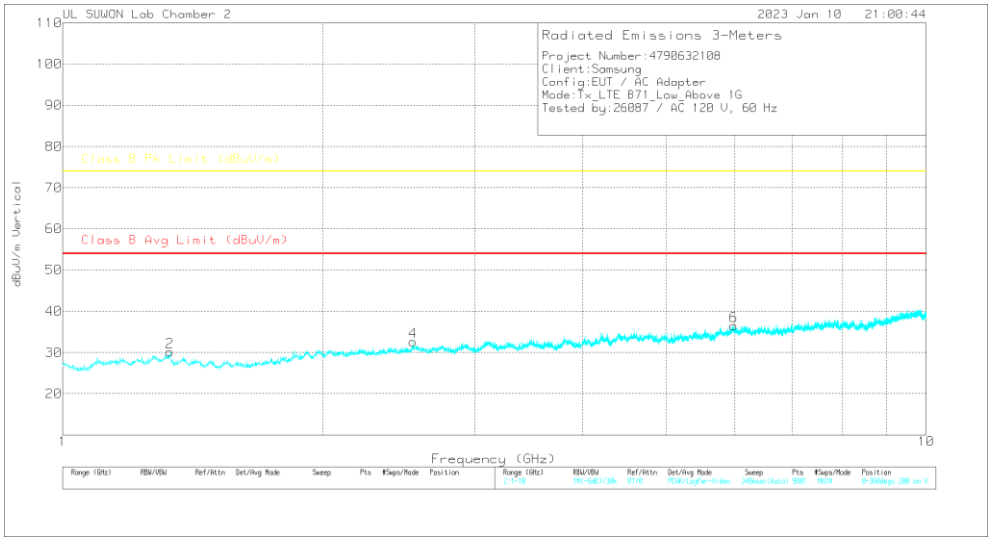
7.1.7. Above 1 GHz in the LTE Band 71

LOW CHANNEL(624.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

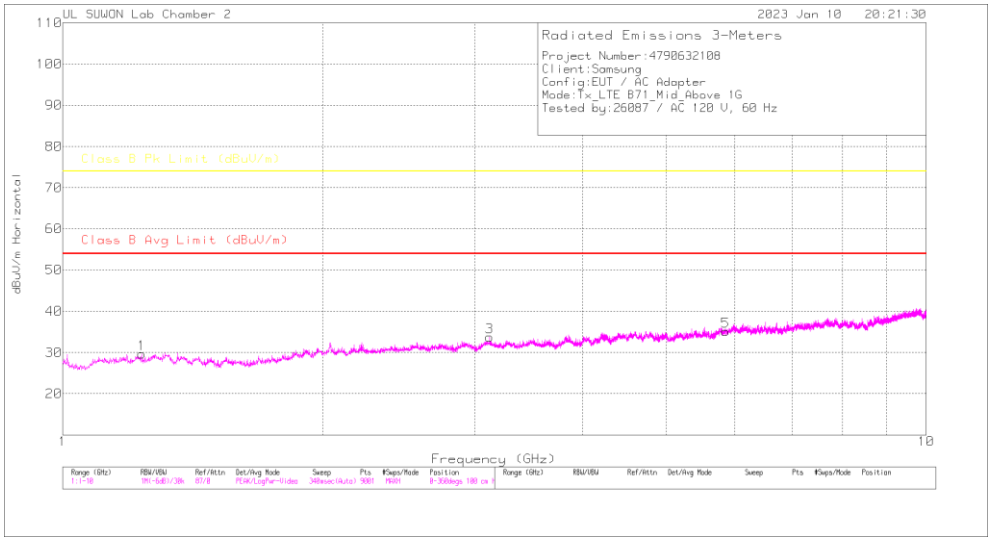
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016872 4	1-18GHz[dB]	1G HPF[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Mar gin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.332	39.18	Pk	29.5	-31.5	.9	38.08	-	-	74	-35.92	0	100	H
1.332	28.17	Ca	29.5	-31.5	.9	27.07	54	-26.93	-	-	0	100	H
1.331	37.89	Pk	29.5	-31.5	.9	36.79	-	-	74	-37.21	0	100	V
1.331	25.51	Ca	29.5	-31.5	.9	24.41	54	-29.59	-	-	0	100	V
2.545	36.15	Pk	32	-29.9	.6	38.85	-	-	74	-35.15	0	100	H
2.545	24.06	Ca	32	-29.9	.6	26.76	54	-27.24	-	-	0	100	H
2.545	36.24	Pk	32	-29.9	.6	38.94	-	-	74	-35.06	0	100	V
2.545	24.05	Ca	32	-29.9	.6	26.75	54	-27.25	-	-	0	100	V
5.979	37	Pk	35	-27.5	.6	45.1	-	-	74	-28.9	0	100	H
5.979	23.75	Ca	35	-27.5	.6	31.85	54	-22.15	-	-	0	100	H
5.983	36.32	Pk	35	-27.4	.6	44.52	-	-	74	-29.48	0	100	V
5.983	23.72	Ca	35	-27.4	.6	31.92	54	-22.08	-	-	0	100	V

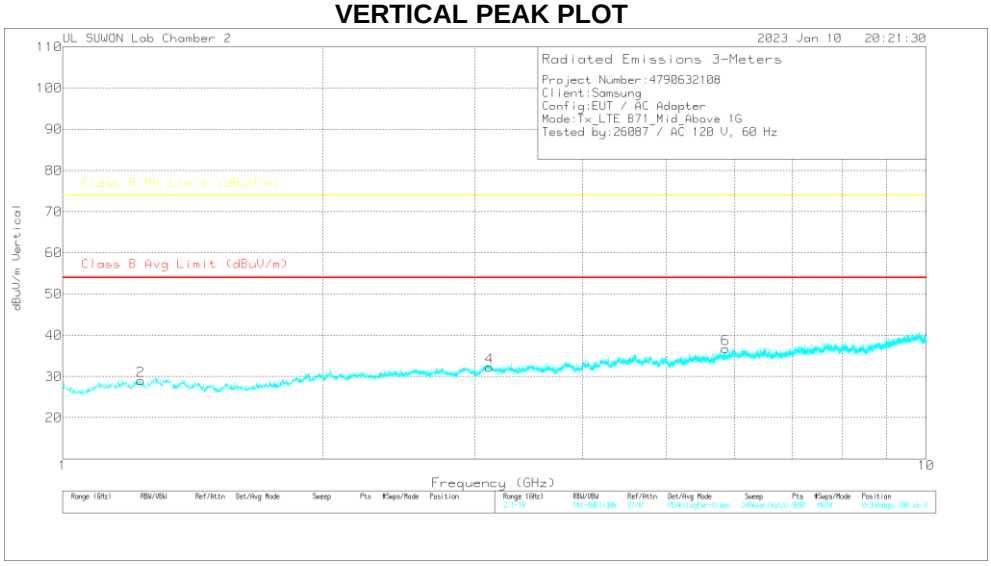
Pk - Peak detector
Ca - CISPR average detection

MID CHANNEL(634.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

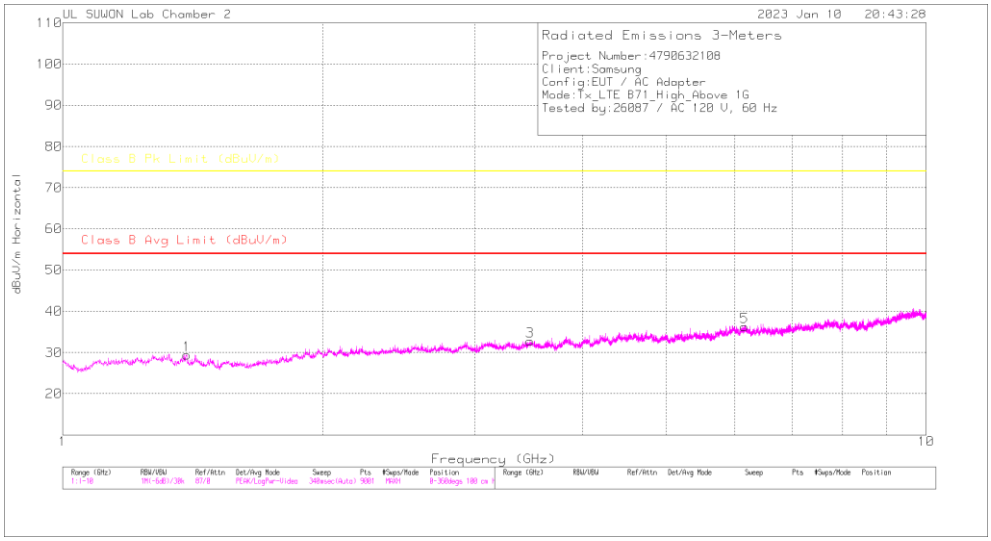
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1G HPF[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.234	38.48	Pk	29.3	-31.8	1	36.98	-	-	74	-37.02	0	100	H
1.234	25.24	Ca	29.3	-31.8	1	23.74	54	-30.26	-	-	0	100	H
1.231	37.76	Pk	29.3	-31.8	1	36.26	-	-	74	-37.74	0	100	V
1.231	25.45	Ca	29.3	-31.8	1	23.95	54	-30.05	-	-	0	100	V
3.12	36.75	Pk	32.7	-29.6	.6	40.45	-	-	74	-33.55	0	100	H
3.12	24.24	Ca	32.7	-29.6	.6	27.94	54	-26.06	-	-	0	100	H
3.12	36.46	Pk	32.7	-29.6	.6	40.16	-	-	74	-33.84	0	100	V
3.12	24.21	Ca	32.7	-29.6	.6	27.91	54	-26.09	-	-	0	100	V
5.854	35.14	Pk	34.8	-27.1	.5	43.34	-	-	74	-30.66	0	100	H
5.854	23.23	Ca	34.8	-27.1	.5	31.43	54	-22.57	-	-	0	100	H
5.854	35.36	Pk	34.8	-27.1	.5	43.56	-	-	74	-30.44	0	100	V
5.854	23.23	Ca	34.8	-27.1	.5	31.43	54	-22.57	-	-	0	100	V

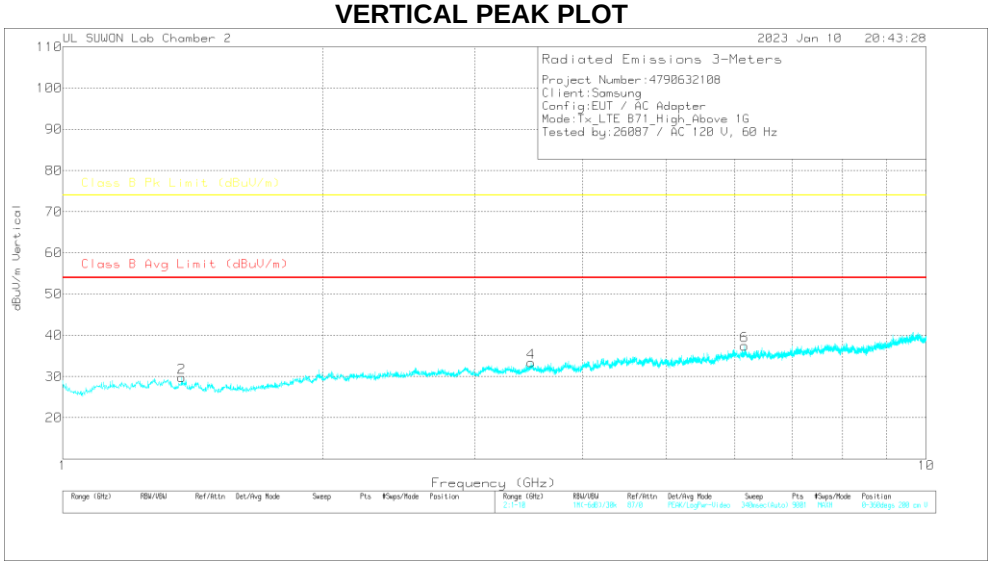
Pk - Peak detector
Ca - CISPR average detection

HIGH CHANNEL(644.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

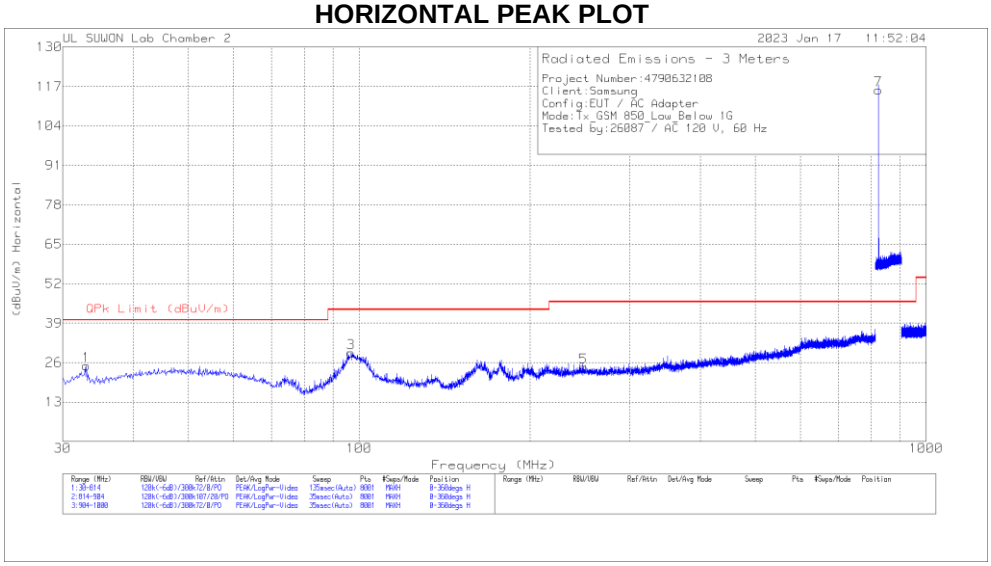
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1G HPF[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.392	37.6	Pk	29.2	-31.5	.8	36.1	-	-	74	-37.9	0	100	H
1.392	25.72	Ca	29.2	-31.5	.8	24.22	54	-29.78	-	-	0	100	H
1.374	38.26	Pk	29.3	-31.6	.8	36.76	-	-	74	-37.24	0	100	V
1.374	25.56	Ca	29.3	-31.6	.8	24.06	54	-29.94	-	-	0	100	V
3.477	35.75	Pk	32.7	-28.9	.4	39.95	-	-	74	-34.05	0	100	H
3.477	23.79	Ca	32.7	-28.9	.4	27.99	54	-26.01	-	-	0	100	H
3.485	35.41	Pk	32.7	-28.8	.5	39.81	-	-	74	-34.19	0	100	V
3.485	23.78	Ca	32.7	-28.8	.5	28.18	54	-25.82	-	-	0	100	V
6.161	35.81	Pk	35.2	-26.7	.6	44.91	-	-	74	-29.09	0	100	H
6.161	23.13	Ca	35.2	-26.7	.6	32.23	54	-21.77	-	-	0	100	H
6.158	35.81	Pk	35.2	-26.7	.6	44.91	-	-	74	-29.09	0	100	V
6.158	23.08	Ca	35.2	-26.7	.6	32.18	54	-21.82	-	-	0	100	V

Pk - Peak detector
Ca - CISPR average detection

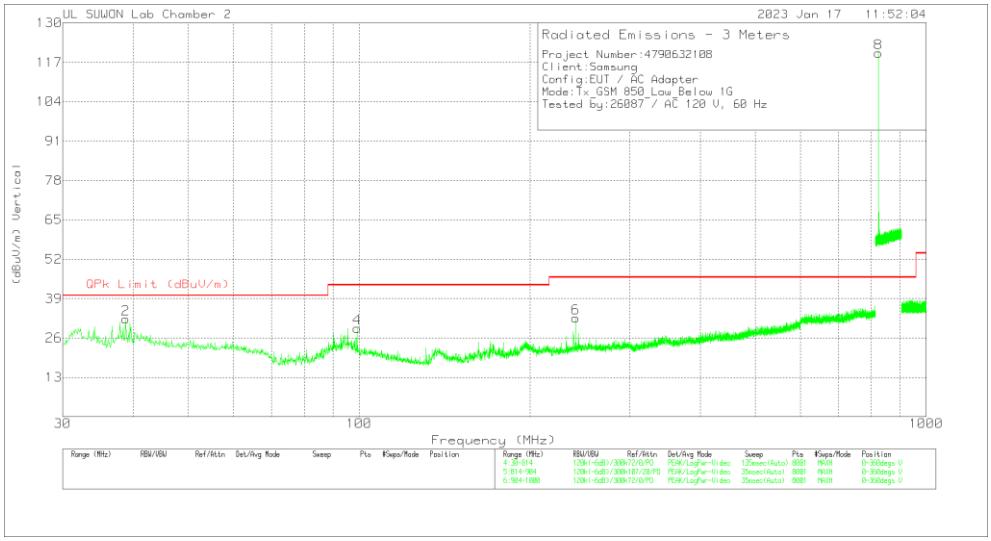
7.1.8. Below 1 GHz in the GSM850

LOW CHANNEL(869.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

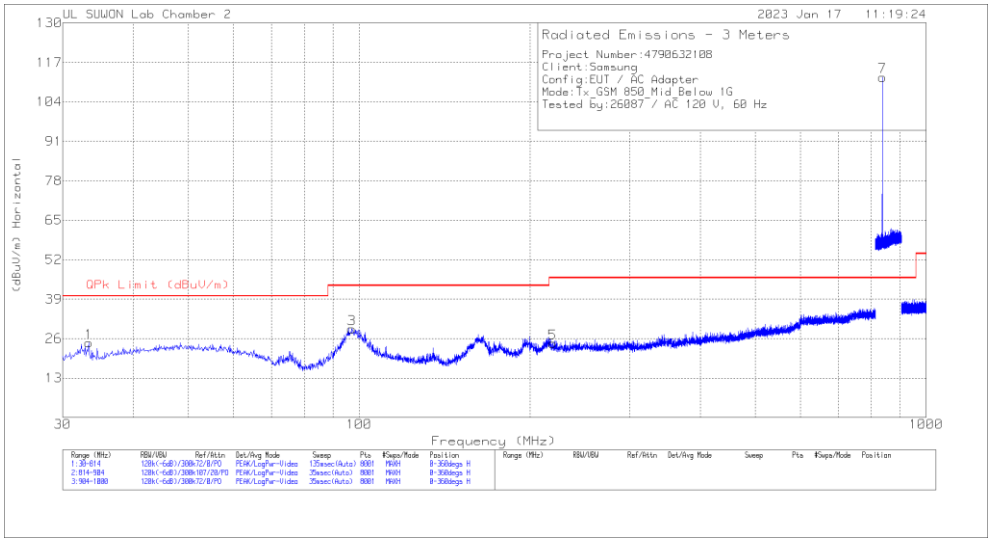
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.038	8.5	Pk	15.8	.7	25	40	-15	0-360	100	H
3	96.738	11.15	Pk	16.9	1.1	29.15	43.52	-14.37	0-360	200	H
5	248.834	4.1	Pk	18.6	1.8	24.5	46.02	-21.52	0-360	100	H
7	824.2038	86.06	Pk	26.5	3.3	115.86	**46.02**	**69.84**	0-360	200	H
2	38.722	13.33	Pk	18.3	.7	32.33	40	-7.67	0-360	200	V
4	99.09	10.74	Pk	17.3	1.1	29.14	43.52	-14.38	0-360	300	V
6	240.994	12.56	Pk	18.2	1.8	32.56	46.02	-13.46	0-360	400	V
8	824.2038	90.28	Pk	26.5	3.3	120.08	**46.02**	**74.06**	0-360	100	V

Pk - Peak detector

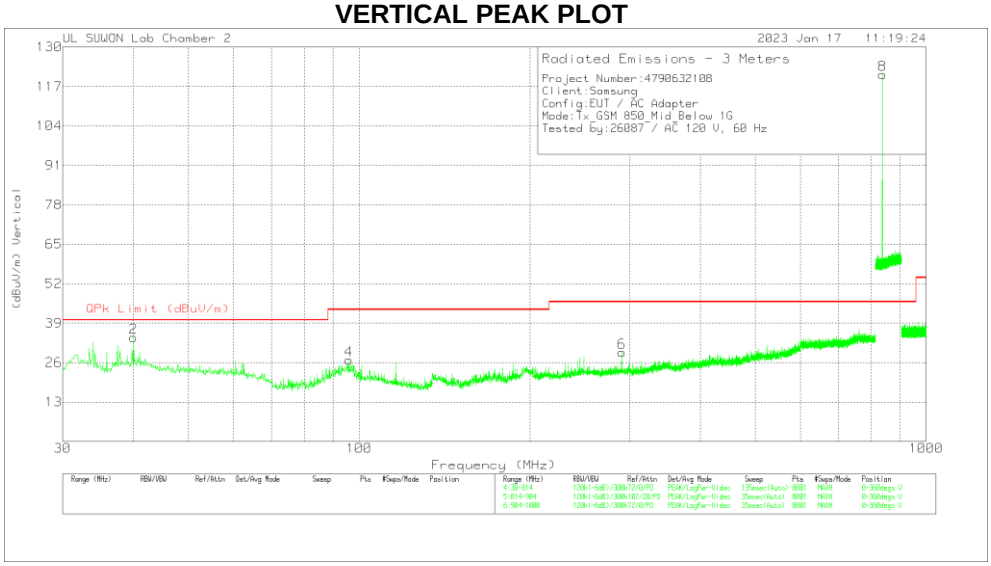
Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.332	7.99	Pk	15.9	.7	24.59	40	-15.41	0-360	300	H
3	97.032	11.21	Pk	16.9	1.1	29.21	43.52	-14.31	0-360	200	H
5	219.238	5.6	Pk	17.1	1.7	24.4	46.02	-21.62	0-360	100	H
7	837.0175	82.27	Pk	26.6	3.3	112.17	**46.02**	**66.15**	0-360	400	H
2	39.996	14.86	Pk	18.7	.7	34.26	40	-5.74	0-360	100	V
4	95.954	8.87	Pk	16.8	1.1	26.77	43.52	-16.75	0-360	100	V
6	290.386	8.41	Pk	19	1.9	29.31	46.02	-16.71	0-360	100	V
8	837.0175	90.96	Pk	26.6	3.3	120.86	**46.02**	**74.84**	0-360	300	V

Pk - Peak detector

Radiated Emissions

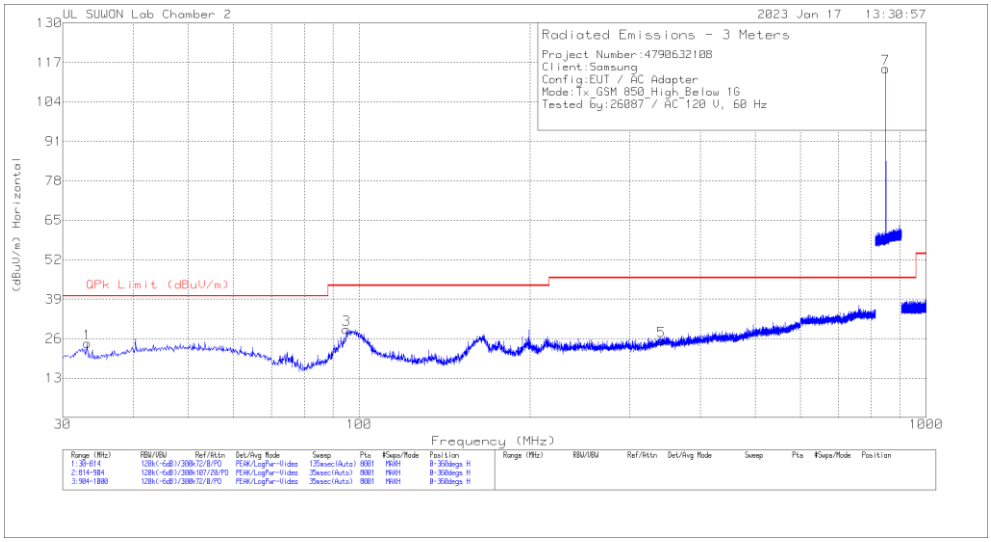
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
39.996	2.5	Qp	18.7	.7	21.9	40	-18.1	231	100	V

Qp - Quasi-Peak detector

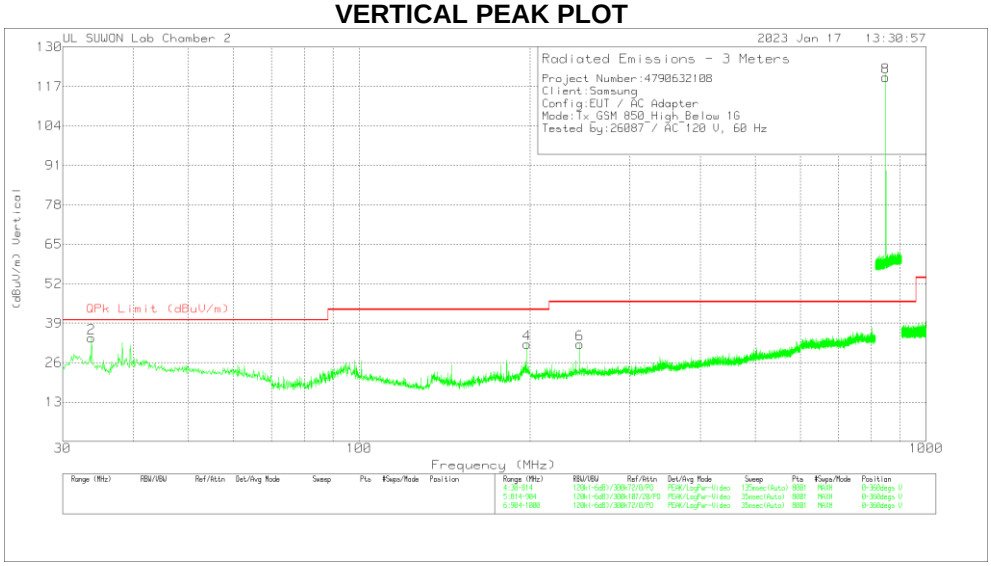
Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(893.8 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.136	7.9	Pk	15.8	.7	24.4	40	-15.6	0-360	200	H
3	94.974	11.35	Pk	16.6	1.1	29.05	43.52	-14.47	0-360	200	H
5	340.954	2.77	Pk	20.4	2.1	25.27	46.02	-20.75	0-360	100	H
7	848.8075	84.78	Pk	26.9	3.3	114.98	**46.02**	**68.96**	0-360	300	H
2	33.724	17.44	Pk	16	.7	34.14	40	-5.86	0-360	400	V
4	197.776	12.53	Pk	18	1.6	32.13	43.52	-11.39	0-360	200	V
6	245.012	11.87	Pk	18.4	1.8	32.07	46.02	-13.95	0-360	200	V
8	848.8075	89.77	Pk	26.9	3.3	119.97	**46.02**	**73.95**	0-360	100	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
33.724	5.14	Qp	16	.7	21.84	40	-18.16	261	100	V

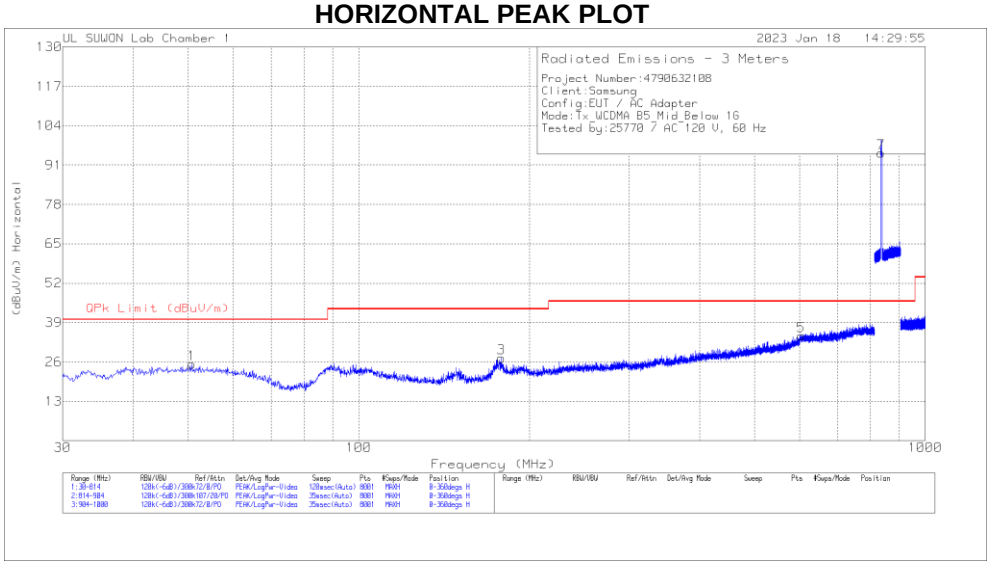
Qp - Quasi-Peak detector

Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

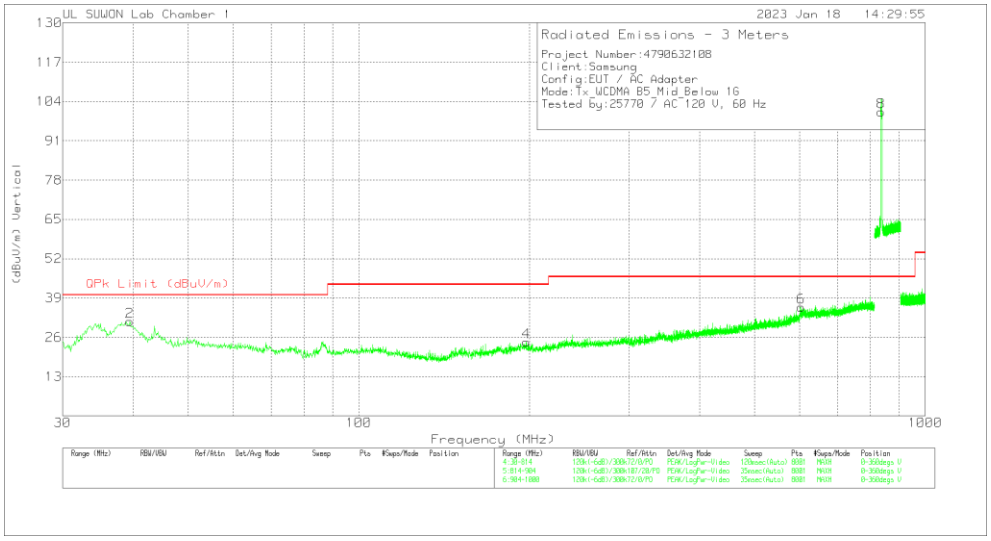
7.1.9. Below 1 GHz in the WCDMA Band 5

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	50.678	4.16	Pk	19.6	1.6	25.36	40	-14.64	0-360	100	H
3	178.372	9.47	Pk	15	2.8	27.27	43.52	-16.25	0-360	100	H
5	603.79	5.21	Pk	24.3	5.2	34.71	46.02	-11.31	0-360	100	H
7	836.6238	62.71	Pk	26.3	6	95.01	**46.02**	**48.99**	0-360	100	H
2	39.408	11.5	Pk	18.3	1.4	31.2	40	-8.8	0-360	100	V
4	197.58	4.92	Pk	16.7	2.8	24.42	43.52	-19.1	0-360	200	V
6	604.182	6.44	Pk	24.3	5.2	35.94	46.02	-10.08	0-360	300	V
8	836.6013	68.26	Pk	26.3	6	100.56	**46.02**	**54.54**	0-360	300	V

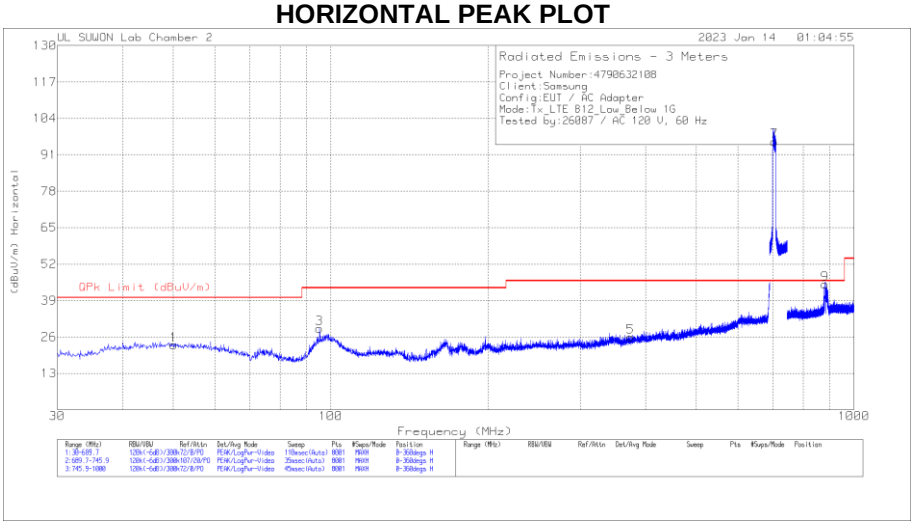
Pk - Peak detector

Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

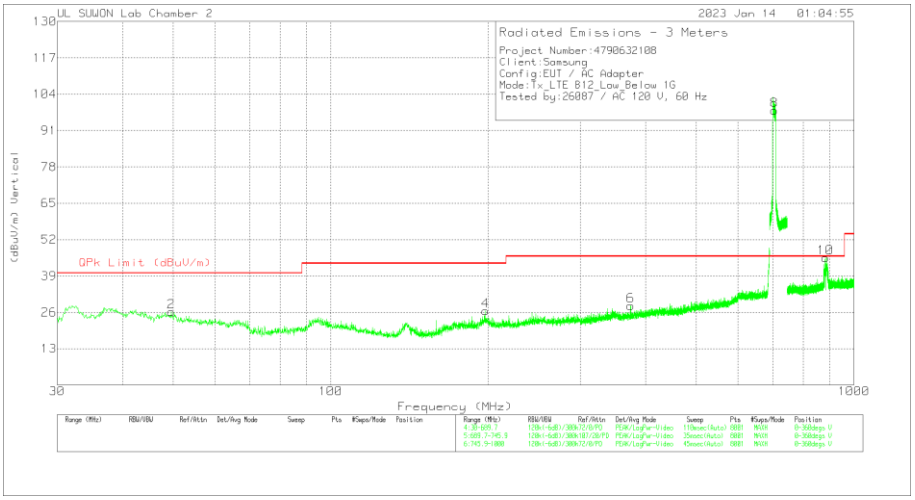
7.1.10.Below 1 GHz in the LTE Band 12

LOW CHANNEL(734 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	50.0385	2.25	Pk	20.1	.8	23.15	40	-16.85	0-360	200	H
3	95.2282	11.41	Pk	16.6	1.1	29.11	43.52	-14.41	0-360	200	H
5	373.7058	3.27	Pk	20.5	2.2	25.97	46.02	-20.05	0-360	300	H
7	704.1926	67.53	Pk	25.2	3	95.73	**46.02**	**49.71**	0-360	200	H
9	880.861	13.93	Pk	27.4	3.4	44.73	46.02	-1.29	0-360	200	H
2	49.5437	5.28	Pk	20.1	.8	26.18	40	-13.82	0-360	200	V
4	197.7297	6.93	Pk	18	1.6	26.53	43.52	-16.99	0-360	200	V
6	374.3655	5.51	Pk	20.6	2.2	28.31	46.02	-17.71	0-360	200	V
8	704.1856	69.98	Pk	25.2	3	98.18	**46.02**	**52.16**	0-360	100	V
10	881.6868	14.69	Pk	27.4	3.4	45.49	46.02	-.53	0-360	300	V

Pk - Peak detector

Radiated Emissions

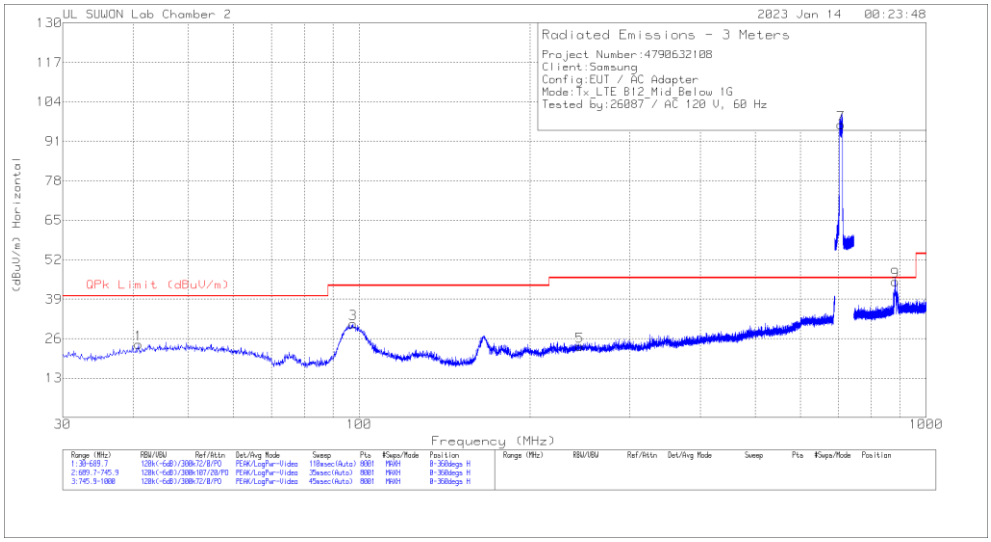
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
880.861	8.47	Qp	27.4	3.4	39.27	46.02	-6.75	308	104	H
881.4993	9.18	Qp	27.4	3.4	39.98	46.02	-6.04	234	103	H

Qp - Quasi-Peak detector

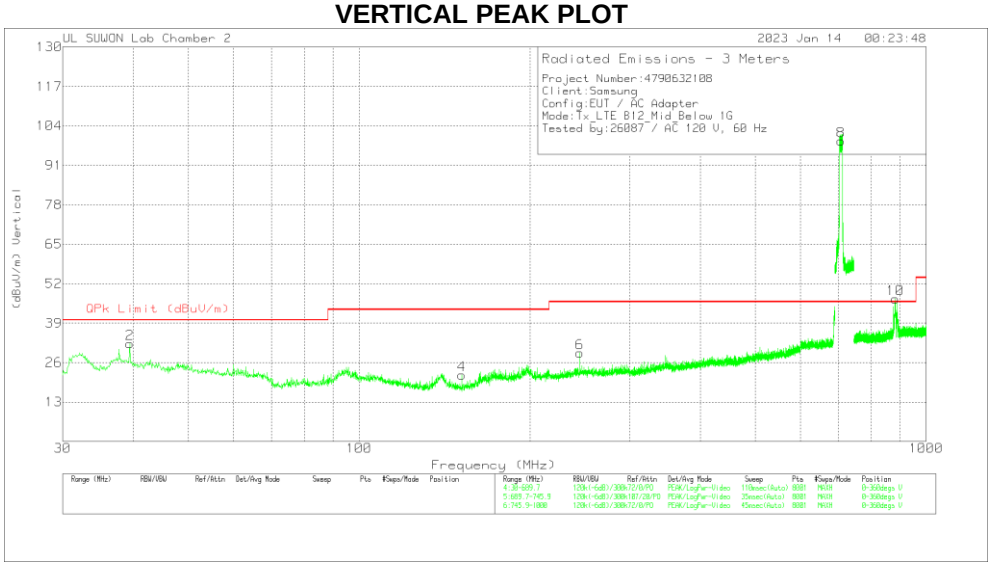
Note: Unwanted emissions captured from 699MHz to 716MHz and from 729MHz to 746MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(737.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	40.8027	4.49	Pk	18.9	.7	24.09	40	-15.91	0-360	300	H
3	97.4547	12.79	Pk	17	1.1	30.89	43.52	-12.63	0-360	200	H
5	245.2284	3.27	Pk	18.4	1.8	23.47	46.02	-22.55	0-360	100	H
7	707.5154	68.34	Pk	25.2	3	96.54	**46.02**	**50.52**	0-360	200	H
9	881.7821	14	Pk	27.4	3.4	44.8	46.02	-1.22	0-360	100	H
2	39.4008	13.08	Pk	18.5	.7	32.28	40	-7.72	0-360	200	V
4	151.7154	6.46	Pk	14.1	1.4	21.96	43.52	-21.56	0-360	400	V
6	245.146	9	Pk	18.4	1.8	29.2	46.02	-16.82	0-360	300	V
8	707.5154	70.78	Pk	25.2	3	98.98	**46.02**	**52.96**	0-360	100	V
10	881.5598	16.27	Pk	27.4	3.4	47.07	**46.02**	**1.05**	0-360	300	V

Pk - Peak detector

Radiated Emissions

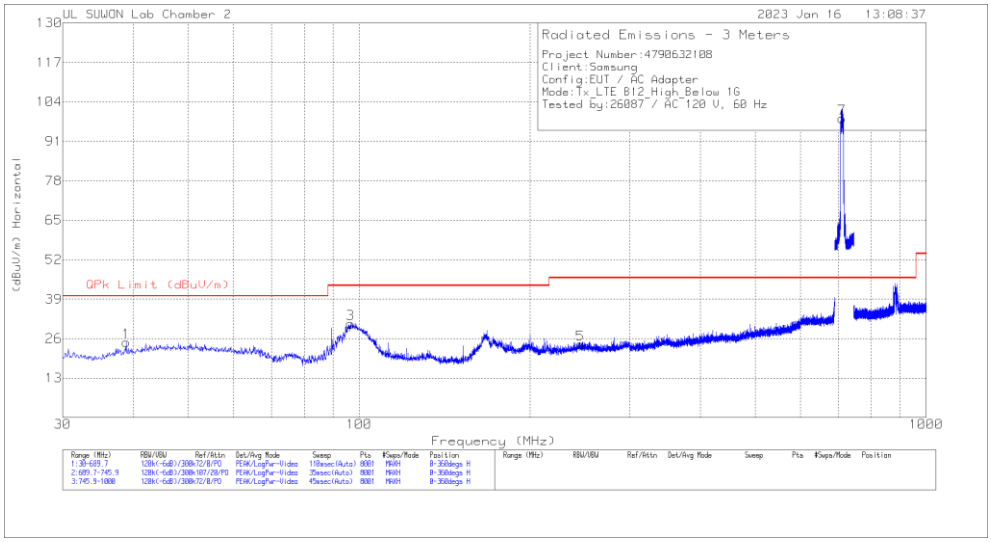
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
881.7821	6.65	Qp	27.4	3.4	37.45	46.02	-8.57	63	192	H
881.5598	9.4	Qp	27.4	3.4	40.2	46.02	-5.82	47	138	V

Qp - Quasi-Peak detector

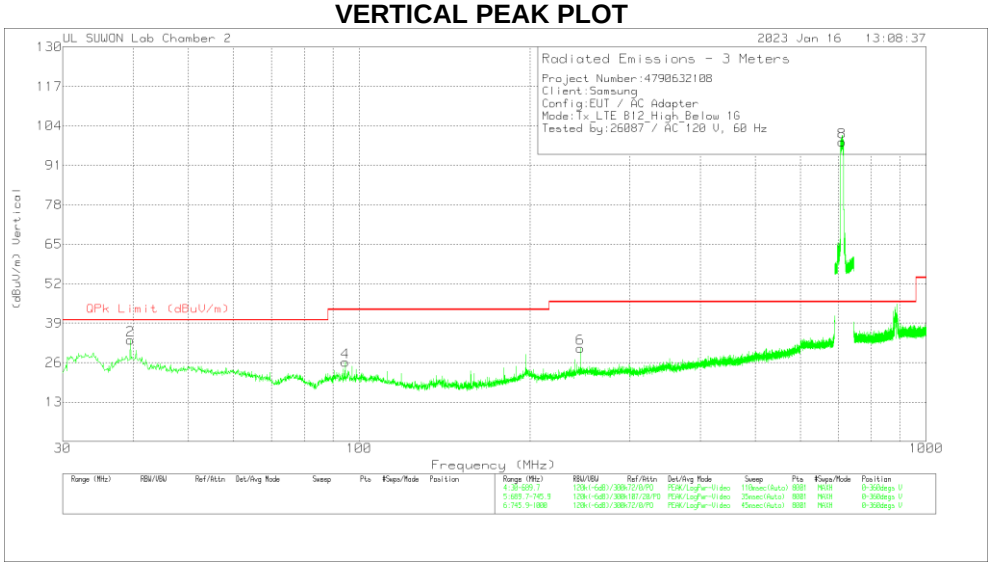
Note: Unwanted emissions captured from 699MHz to 716MHz and from 729MHz to 746MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(741 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	38.8235	5.88	Pk	18.3	.7	24.88	40	-15.12	0-360	200	H
3	96.4652	12.93	Pk	16.8	1.1	30.83	43.52	-12.69	0-360	100	H
5	245.6407	3.87	Pk	18.4	1.8	24.07	46.02	-21.95	0-360	100	H
7	711.0068	70.25	Pk	25.2	3	98.45	**46.02**	**52.43**	0-360	200	H
2	39.4832	14.3	Pk	18.5	.7	33.5	40	-6.5	0-360	100	V
4	94.4861	8.49	Pk	16.5	1.1	26.09	43.52	-17.43	0-360	100	V
6	245.5583	10.49	Pk	18.4	1.8	30.69	46.02	-15.33	0-360	100	V
8	711.0068	70.45	Pk	25.2	3	98.65	**46.02**	**52.63**	0-360	100	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
39.4832	5.04	Qp	18.5	.7	24.24	40	-15.76	233	100	V

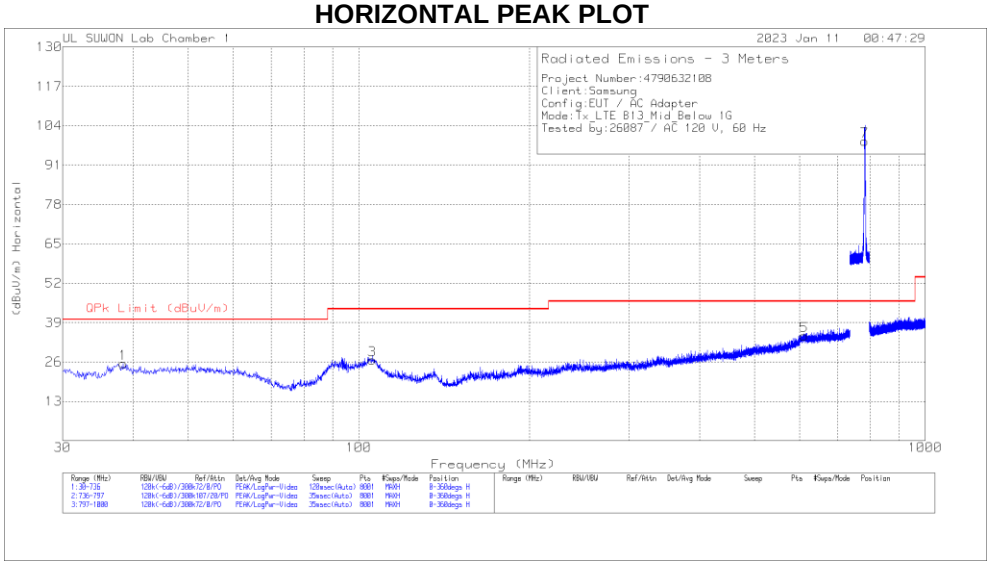
Qp - Quasi-Peak detector

Note: Unwanted emissions captured from 699MHz to 716MHz and from 729MHz to 746MHz were the TX and RX signals generated from the call-simulator.

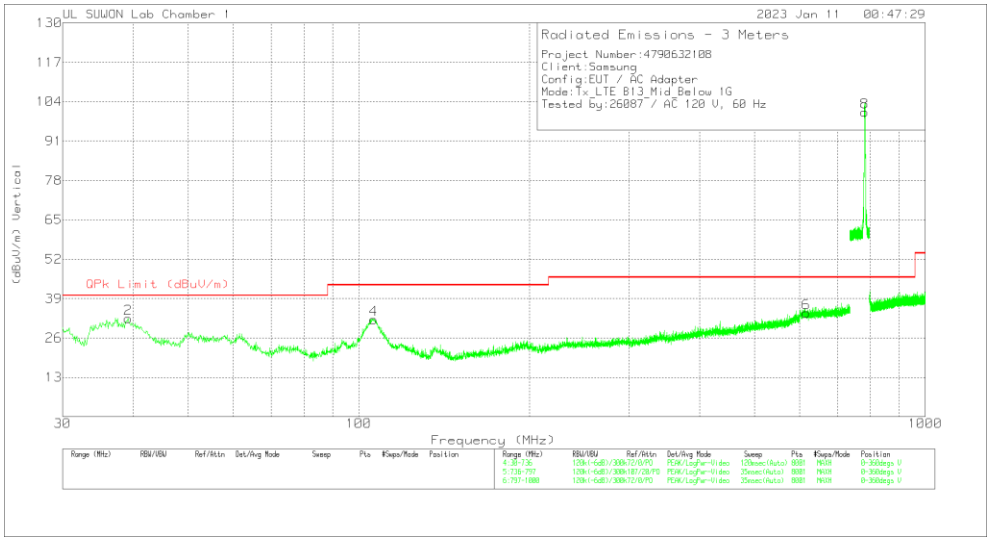
7.1.11.Below 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	38.3838	6.38	Pk	17.9	1.2	25.48	40	-14.52	0-360	200	H
3	105.542	7.18	Pk	17.4	2.1	26.68	43.52	-16.84	0-360	100	H
5	611.5675	4.98	Pk	24.4	5.2	34.58	46.02	-11.44	0-360	100	H
7	782.0093	67.36	Pk	25.7	5.8	98.86	**46.02**	**52.84**	0-360	200	H
2	39.178	12.97	Pk	18.2	1.3	32.47	40	-7.53	0-360	200	V
4	106.1598	12.54	Pk	17.4	2.1	32.04	43.52	-11.48	0-360	200	V
6	616.5978	4.72	Pk	24.3	5.2	34.22	46.02	-11.8	0-360	200	V
8	782.0093	69.13	Pk	25.7	5.8	100.63	**46.02**	**54.61**	0-360	100	V

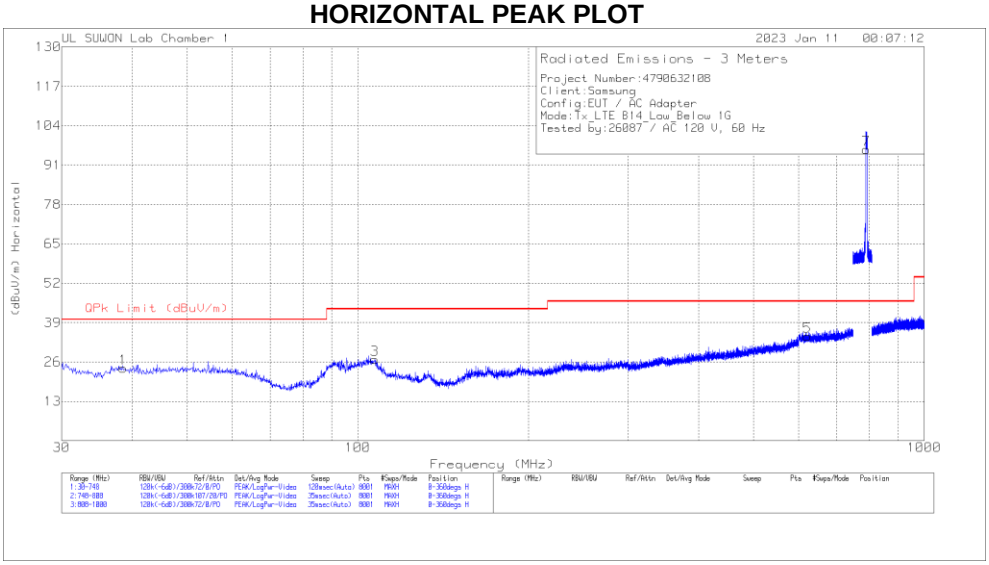
Pk - Peak detector

Note: Unwanted emissions captured from 777MHz to 787MHz and from 746MHz to 756MHz were the TX and RX signals generated from the call-simulator.

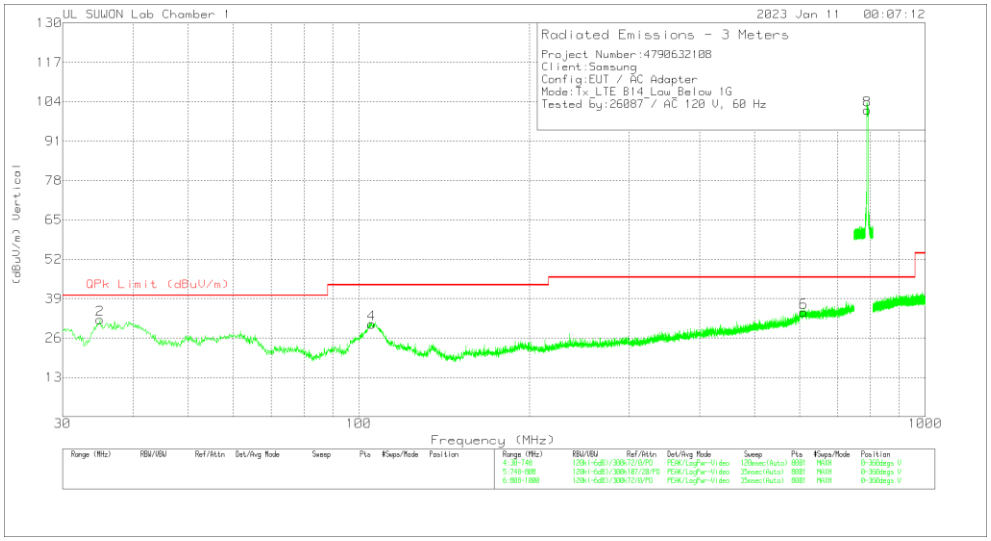
7.1.12.Below 1 GHz in the LTE Band 14

LOW CHANNEL(760.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

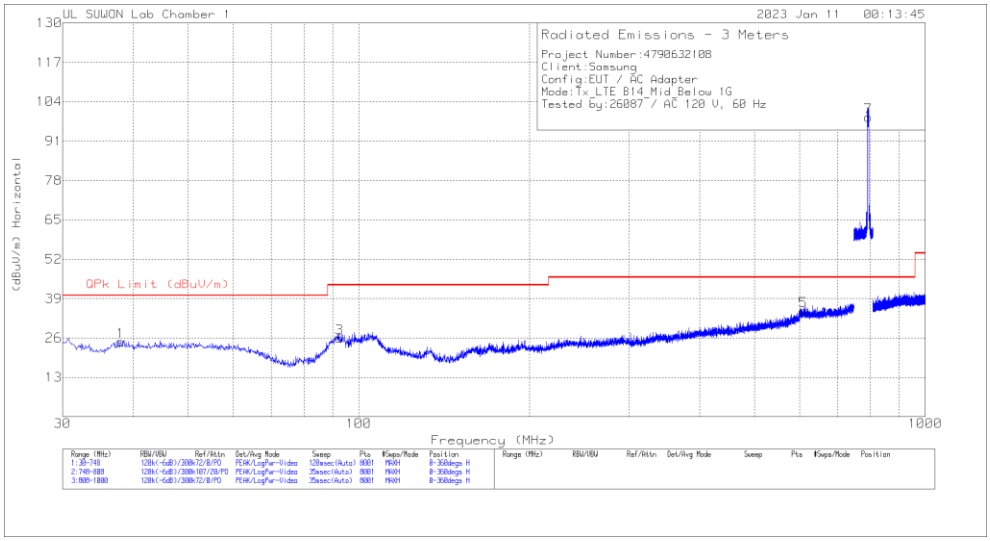
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	38.5263	4.73	Pk	18	1.3	24.03	40	-15.97	0-360	100	H
3	107.0953	7.31	Pk	17.4	2.1	26.81	43.52	-16.71	0-360	100	H
5	621.8115	5.07	Pk	24.2	5.2	34.47	46.02	-11.55	0-360	300	H
7	790.5025	64.53	Pk	25.8	5.8	96.13	**46.02**	**50.11**	0-360	200	H
2	34.9363	14.16	Pk	16.5	1.4	32.06	40	-7.94	0-360	200	V
4	105.39	11.03	Pk	17.4	2.1	30.53	43.52	-12.99	0-360	200	V
6	610.144	4.94	Pk	24.4	5.1	34.44	46.02	-11.58	0-360	200	V
8	790.5025	69.57	Pk	25.8	5.8	101.17	**46.02**	**55.15**	0-360	100	V

Pk - Peak detector

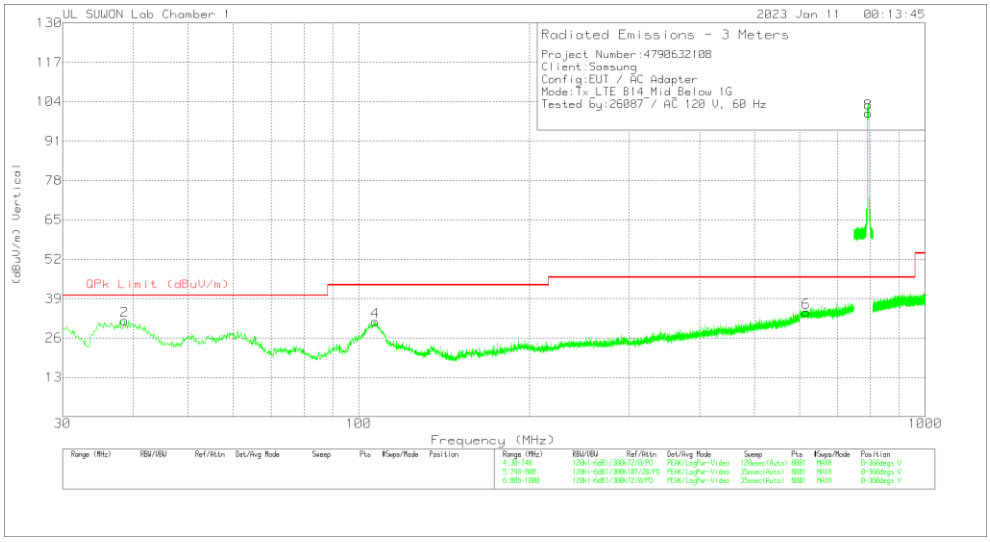
Note: Unwanted emissions captured from 788MHz to 798MHz and from 758MHz to 768MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(763.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

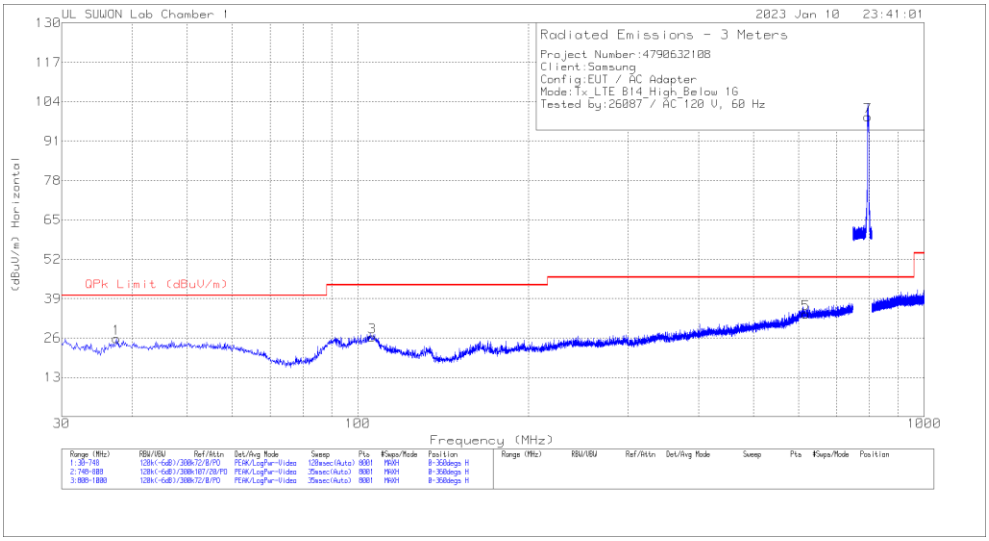
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	37.9878	5.83	Pk	17.7	1.2	24.73	40	-15.27	0-360	100	H
3	92.466	7.6	Pk	16.4	2	26	43.52	-17.52	0-360	200	H
5	608.9773	5.53	Pk	24.4	5.1	35.03	46.02	-10.99	0-360	200	H
7	793.03	67.28	Pk	25.8	5.8	98.88	**46.02**	**52.86**	0-360	200	H
2	38.616	12.45	Pk	18	1.3	31.75	40	-8.25	0-360	100	V
4	107.0055	11.66	Pk	17.4	2.3	31.36	43.52	-12.16	0-360	100	V
6	616.4265	5.04	Pk	24.3	5.2	34.54	46.02	-11.48	0-360	100	V
8	793.03	68.65	Pk	25.8	5.8	100.25	**46.02**	**54.23**	0-360	100	V

Pk - Peak detector

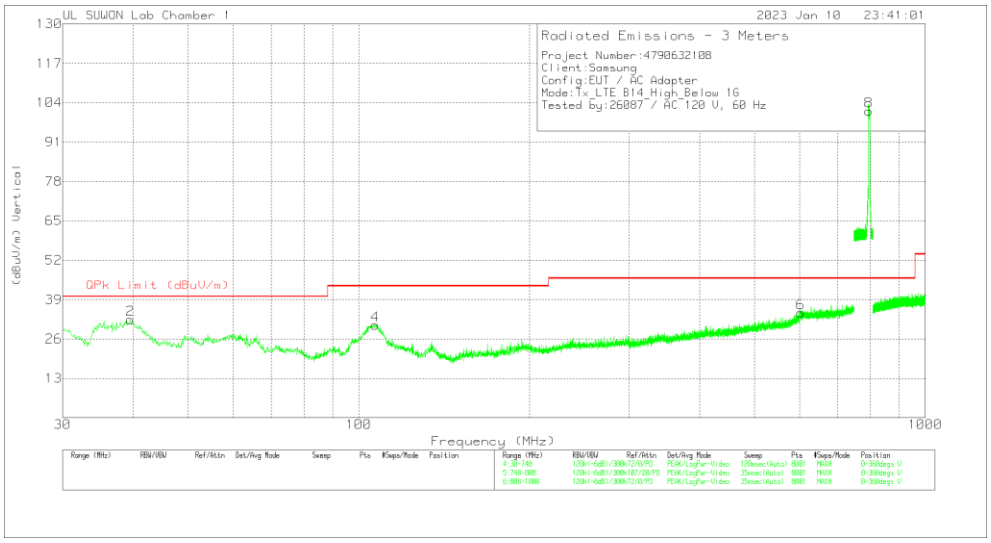
Note: Unwanted emissions captured from 788MHz to 798MHz and from 758MHz to 768MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(765.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	37.4493	7.08	Pk	17.5	1.3	25.88	40	-14.12	0-360	200	H
3	106.0183	6.88	Pk	17.4	2.1	26.38	43.52	-17.14	0-360	100	H
5	617.7728	4.59	Pk	24.2	5.2	33.99	46.02	-12.03	0-360	200	H
7	795.505	67.5	Pk	25.8	5.8	99.1	**46.02**	**53.08**	0-360	200	H
2	39.5135	12.77	Pk	18.3	1.3	32.37	40	-7.63	0-360	200	V
4	106.826	11.05	Pk	17.4	2.1	30.55	43.52	-12.97	0-360	200	V
6	602.8743	5.29	Pk	24.3	5.1	34.69	46.02	-11.33	0-360	200	V
8	795.505	69.57	Pk	25.8	5.8	101.17	**46.02**	**55.15**	0-360	100	V

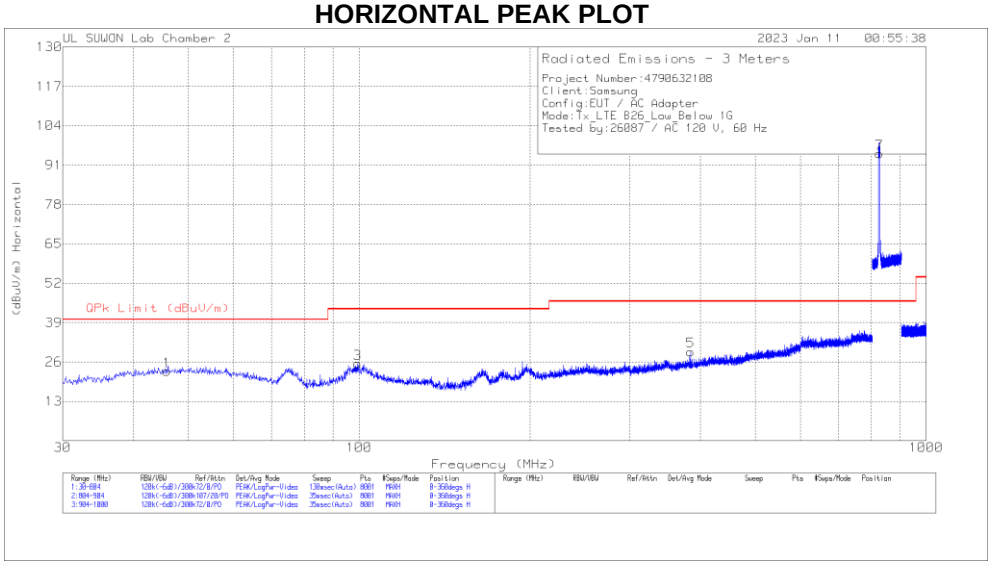
Pk - Peak detector

Note: Unwanted emissions captured from 788MHz to 798MHz and from 758MHz to 768MHz were the TX and RX signals generated from the call-simulator.

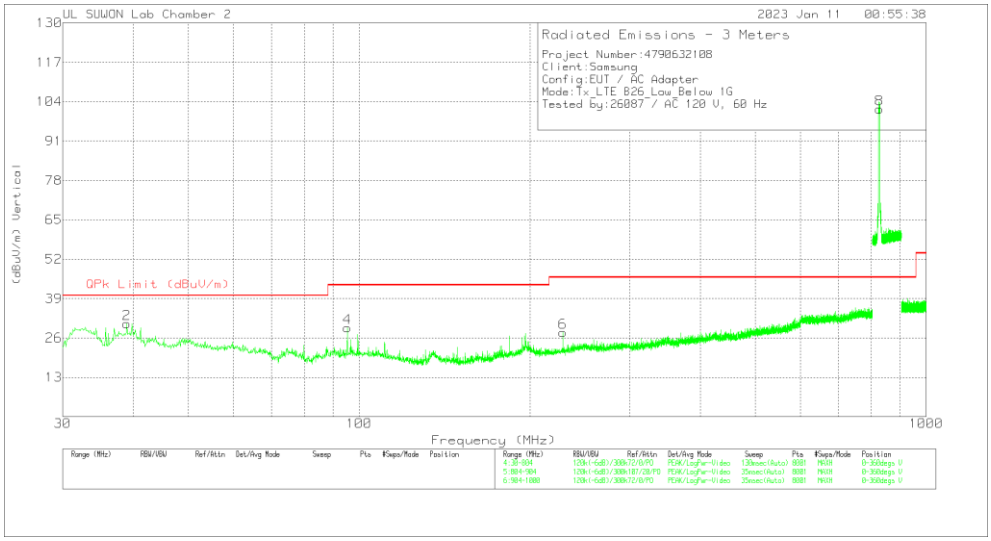
7.1.13. Below 1 GHz in the LTE Band 26

LOW CHANNEL(860.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

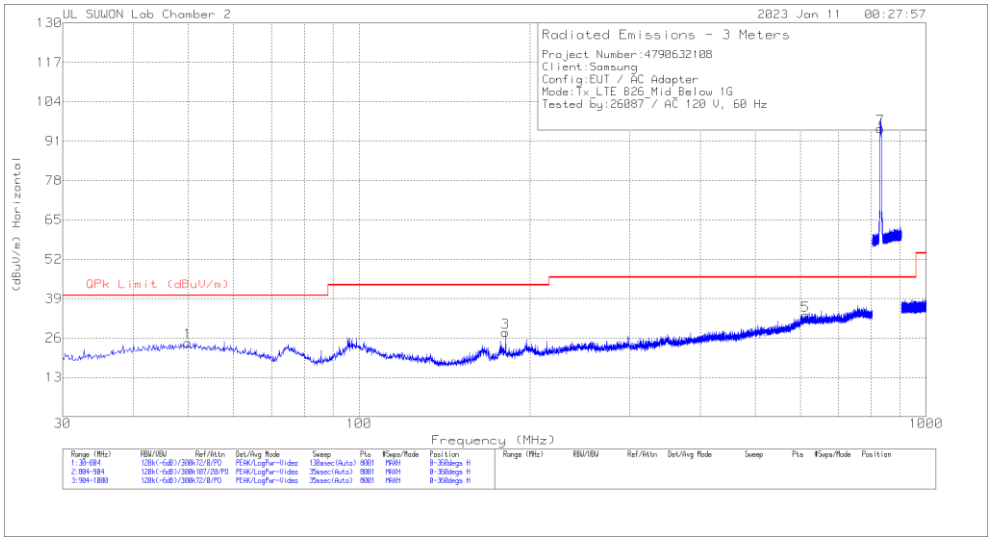
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	45.7703	2.29	Pk	19.9	.8	22.99	40	-17.01	0-360	100	H
3	99.3698	7.14	Pk	17.3	1.1	25.54	43.52	-17.98	0-360	200	H
5	383.9115	6.37	Pk	20.9	2.2	29.47	46.02	-16.55	0-360	200	H
7	826.5625	65	Pk	26.5	3.3	94.8	**46.02**	**48.78**	0-360	200	H
2	38.901	11.7	Pk	18.4	.7	30.8	40	-9.2	0-360	200	V
4	95.3063	11.61	Pk	16.7	1.1	29.41	43.52	-14.11	0-360	200	V
6	228.6278	8.53	Pk	17.6	1.7	27.83	46.02	-18.19	0-360	300	V
8	826.5625	71.78	Pk	26.5	3.3	101.58	**46.02**	**55.56**	0-360	100	V

Pk - Peak detector

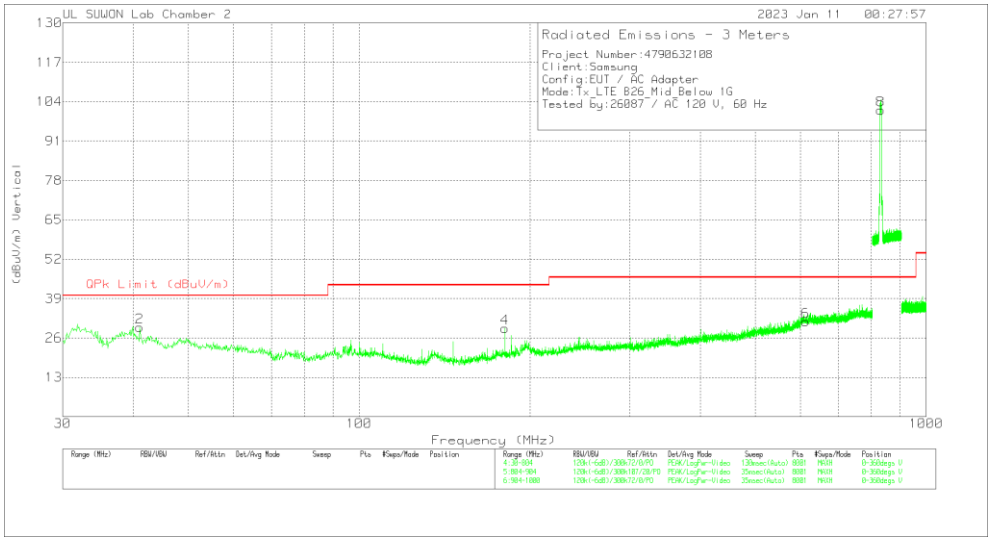
Note: Unwanted emissions captured from 814MHz to 849MHz and from 849MHz to 859MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(876.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

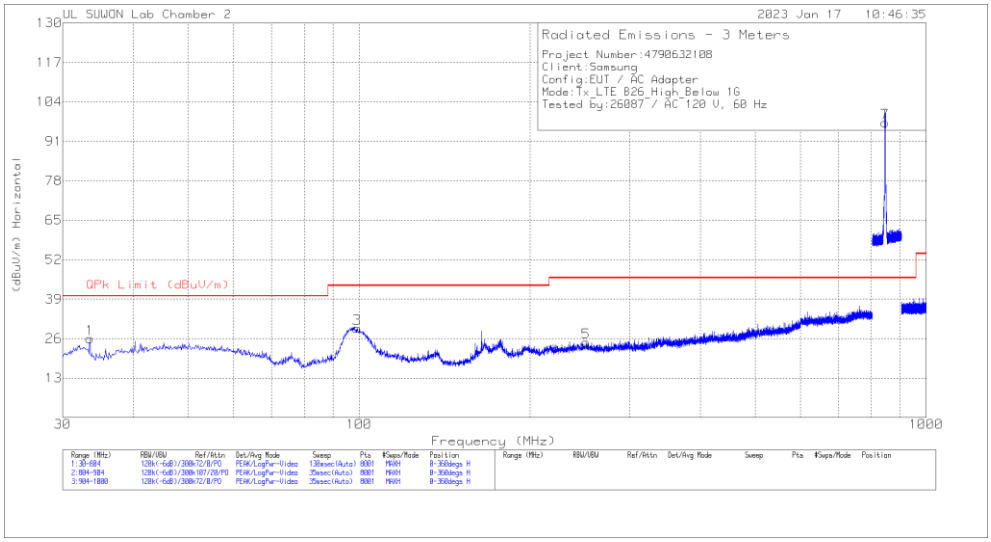
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	49.8338	3.65	Pk	20.1	.8	24.55	40	-15.45	0-360	300	H
3	181.2203	10.88	Pk	15.5	1.5	27.88	43.52	-15.64	0-360	100	H
5	613.0155	5.78	Pk	24.9	2.8	33.48	46.02	-12.54	0-360	100	H
7	831.5	65.21	Pk	26.6	3.3	95.11	**46.02**	**49.09**	0-360	200	H
2	41.0295	9.8	Pk	19	.7	29.5	40	-10.5	0-360	200	V
4	180.7365	12.25	Pk	15.5	1.5	29.25	43.52	-14.27	0-360	300	V
6	613.0155	3.76	Pk	24.9	2.8	31.46	46.02	-14.56	0-360	200	V
8	831.525	71.28	Pk	26.6	3.3	101.18	**46.02**	**55.16**	0-360	100	V

Pk - Peak detector

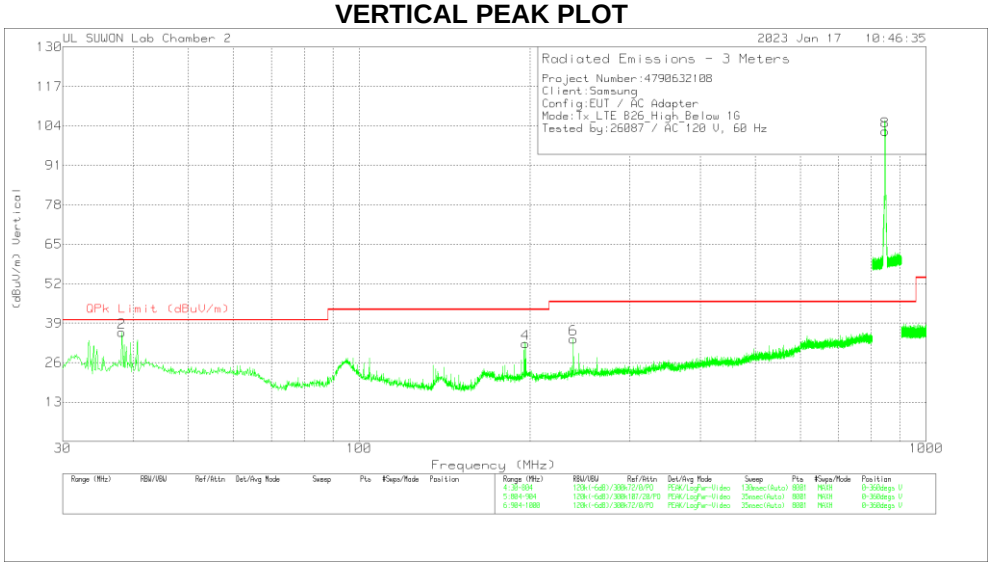
Note: Unwanted emissions captured from 814MHz to 849MHz and from 849MHz to 859MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(892.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.483	9.44	Pk	15.9	.7	26.04	40	-13.96	0-360	200	H
3	99.0795	10.91	Pk	17.3	1.1	29.31	43.52	-14.21	0-360	200	H
5	251.0738	4.36	Pk	18.6	1.8	24.76	46.02	-21.26	0-360	100	H
7	846.5	67.03	Pk	26.8	3.3	97.13	**46.02**	**51.11**	0-360	300	H
2	38.127	17.14	Pk	18.1	.7	35.94	40	-4.06	0-360	200	V
4	196.6035	12.83	Pk	17.9	1.6	32.33	43.52	-11.19	0-360	200	V
6	238.6898	13.84	Pk	18.1	1.8	33.74	46.02	-12.28	0-360	300	V
8	846.5	72.13	Pk	26.8	3.3	102.23	**46.02**	**56.21**	0-360	100	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
38.127	6.07	Qp	18.1	.7	24.87	40	-15.13	239	100	V

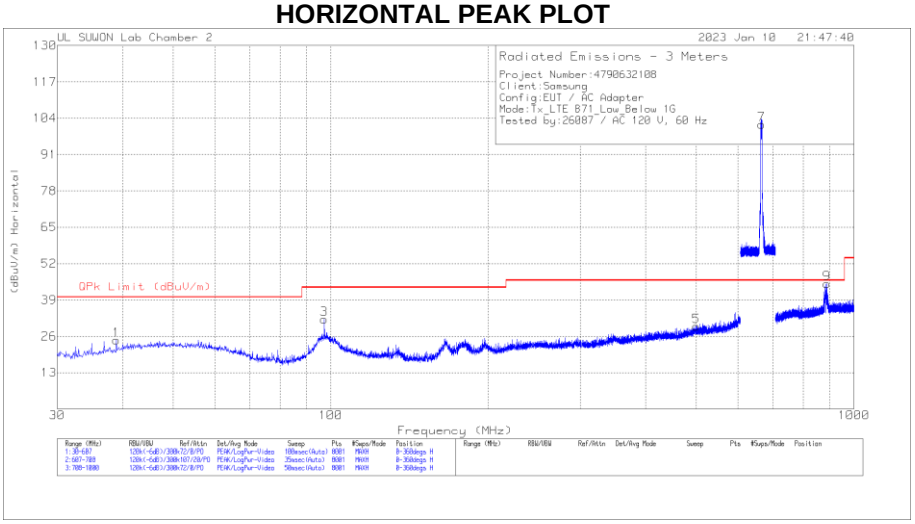
Qp - Quasi-Peak detector

Note: Unwanted emissions captured from 814MHz to 849MHz and from 849MHz to 859MHz were the TX and RX signals generated from the call-simulator.

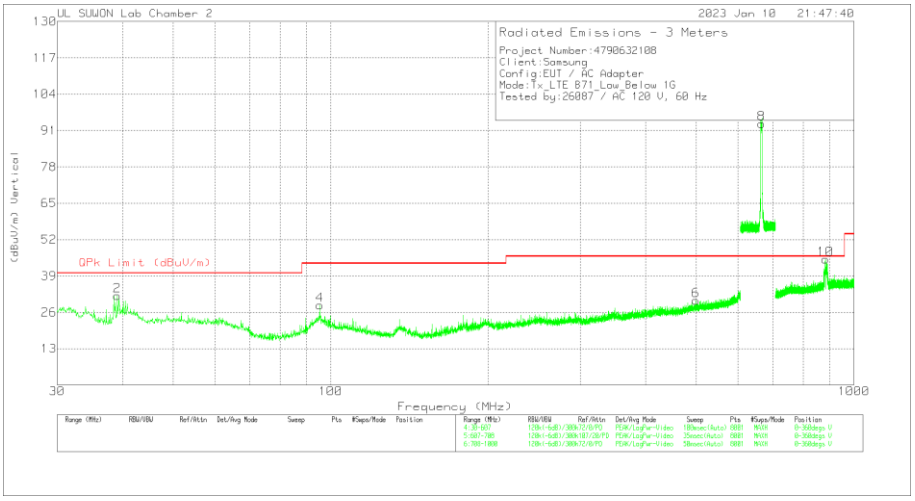
7.1.14. Below 1 GHz in the LTE Band 71

LOW CHANNEL(624.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	38.9435	5.48	Pk	18.4	.7	24.58	40	-15.42	0-360	300	H
3	97.2205	14.06	Pk	17	1.1	32.16	43.52	-11.36	0-360	200	H
5	499.2453	4.16	Pk	22.9	2.5	29.56	46.02	-16.46	0-360	100	H
7	665.5421	73.73	Pk	25.1	2.9	101.73	**46.02**	**55.71**	0-360	200	H
9	888.0545	13.9	Pk	27.5	3.4	44.8	46.02	-1.22	0-360	100	H
2	39.0878	12.78	Pk	18.4	.7	31.88	40	-8.12	0-360	100	V
4	95.2731	10.68	Pk	16.7	1.1	28.48	43.52	-15.04	0-360	100	V
6	498.9568	4.8	Pk	22.9	2.5	30.2	46.02	-15.82	0-360	100	V
8	665.5295	65.43	Pk	25.1	2.9	93.43	**46.02**	**47.41**	0-360	200	V
10	881.813	14.3	Pk	27.4	3.3	45	46.02	-1.02	0-360	100	V

Pk - Peak detector

Radiated Emissions

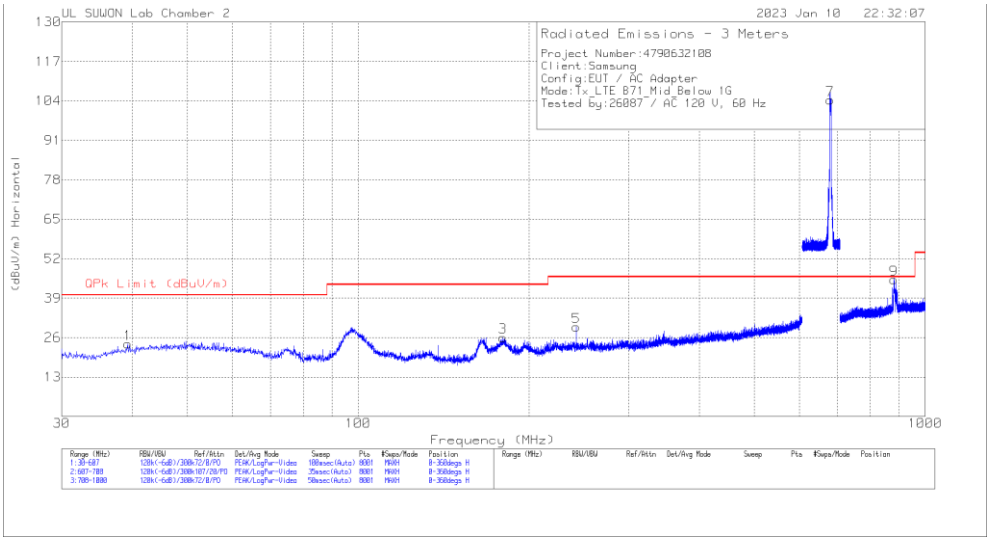
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
888.0545	10.02	Qp	27.5	3.4	40.92	46.02	-5.1	88	236	H
881.813	7.36	Qp	27.4	3.3	38.06	46.02	-7.96	313	190	V

Qp - Quasi-Peak detector

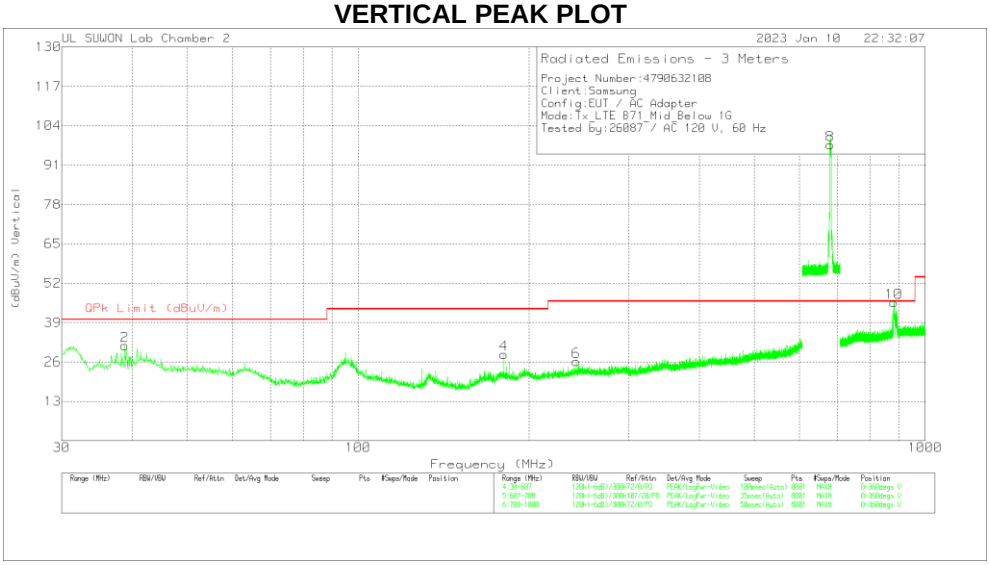
Note: Unwanted emissions captured from 663MHz to 698MHz and from 617MHz to 652MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(634.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	39.232	4.73	Pk	18.5	.7	23.93	40	-16.07	0-360	200	H
3	180.0921	9.18	Pk	15.4	1.5	26.08	43.52	-17.44	0-360	100	H
5	242.4803	9.4	Pk	18.3	1.8	29.5	46.02	-16.52	0-360	300	H
7	680.4901	76.16	Pk	25.2	2.9	104.26	**46.02**	**58.24**	0-360	200	H
9	881.375	14.41	Pk	27.4	3.3	45.11	46.02	-.91	0-360	100	H
2	38.7271	12.42	Pk	18.3	.7	31.42	40	-8.58	0-360	200	V
4	180.6691	11.55	Pk	15.5	1.5	28.55	43.52	-14.97	0-360	200	V
6	242.5524	6.09	Pk	18.3	1.8	26.19	46.02	-19.83	0-360	200	V
8	680.5533	69.54	Pk	25.2	2.9	97.64	**46.02**	**51.62**	0-360	100	V
10	881.4115	15.01	Pk	27.4	3.3	45.71	46.02	-.31	0-360	300	V

Pk - Peak detector

Radiated Emissions

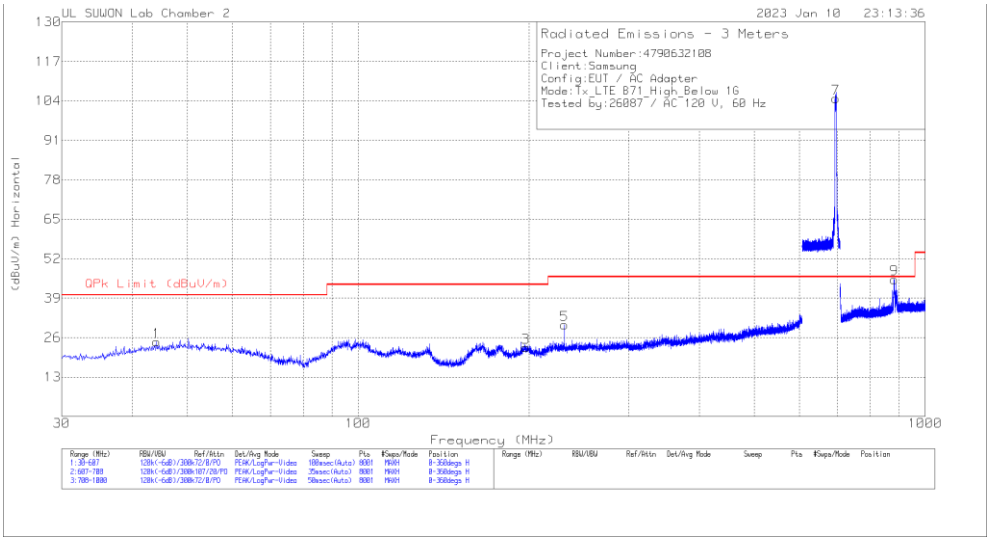
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
881.375	8.85	Qp	27.4	3.3	39.55	46.02	-6.47	333	213	H
881.4115	8.16	Qp	27.4	3.3	38.86	46.02	-7.16	359	275	V

Qp - Quasi-Peak detector

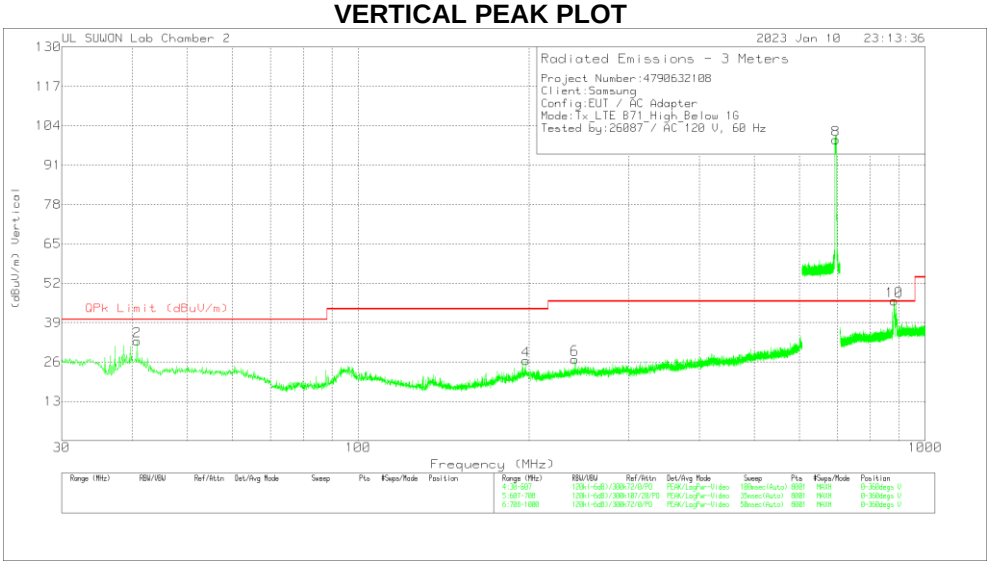
Note: Unwanted emissions captured from 663MHz to 698MHz and from 617MHz to 652MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(644.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	44.1365	4.08	Pk	19.7	.8	24.58	40	-15.42	0-360	300	H
3	197.4743	3.14	Pk	18	1.6	22.74	43.52	-20.78	0-360	100	H
5	231.2288	10.9	Pk	17.7	1.7	30.3	46.02	-15.72	0-360	100	H
7	695.5518	76.41	Pk	25.4	3	104.81	**46.02**	**58.79**	0-360	200	H
9	881.9225	14.53	Pk	27.4	3.3	45.23	46.02	-.79	0-360	200	H
2	40.7466	13.41	Pk	18.9	.7	33.01	40	-6.99	0-360	200	V
4	197.5464	6.86	Pk	18	1.6	26.46	43.52	-17.06	0-360	200	V
6	240.8935	6.92	Pk	18.2	1.8	26.92	46.02	-19.1	0-360	200	V
8	695.5139	70.99	Pk	25.4	3	99.39	**46.02**	**53.37**	0-360	100	V
10	882.0685	15.48	Pk	27.4	3.3	46.18	**46.02**	**.16**	0-360	400	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
881.9225	7.12	Qp	27.4	3.3	37.82	46.02	-8.2	177	230	H
882.0685	6.39	Qp	27.4	3.3	37.09	46.02	-8.93	46	285	V

Qp - Quasi-Peak detector

Note: Unwanted emissions captured from 663MHz to 698MHz and from 617MHz to 652MHz were the TX and RX signals generated from the call-simulator.

7.2. CONDUCTED EMISSIONS

TEST PROCEDURE

ANSI C63.4-2014

LIMIT

§15.107 (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

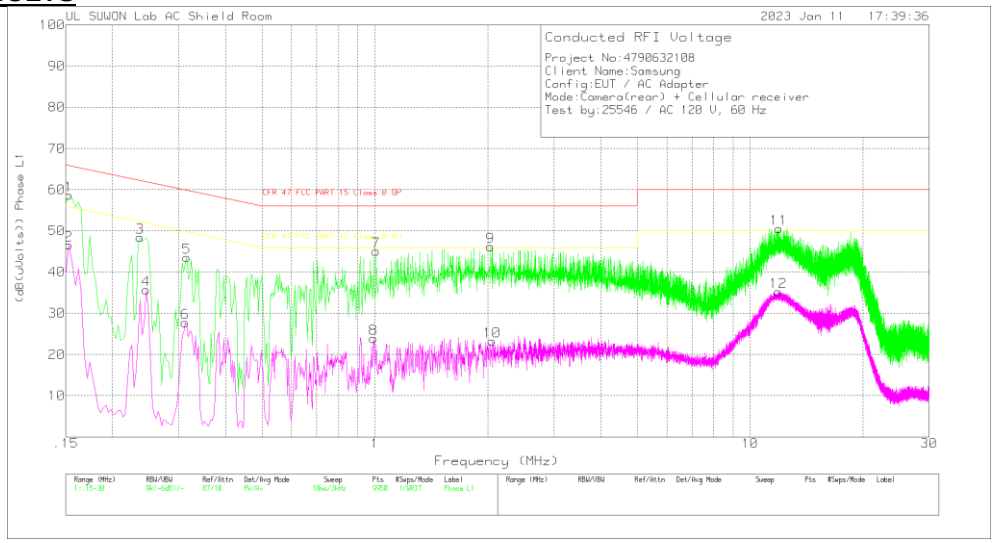
Frequency range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50
Notes: 1. The lower limit shall apply at the transition frequencies 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

7.2.1 CONDUCTED EMISSIONS

6 WORST EMISSIONS(GSM850 + Rear camera on)

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

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	.153	48.71	Pk	9.8	.1	58.61	65.84	-7.23	-	-
2	.153	36.63	Av	9.8	.1	46.53	-	-	55.84	-9.31
3	.237	38.57	Pk	9.7	.2	48.47	62.2	-13.73	-	-
4	.246	25.9	Av	9.6	.2	35.7	-	-	51.89	-16.19
5	.315	33.69	Pk	9.7	.2	43.59	59.84	-16.25	-	-
6	.312	17.88	Av	9.7	.2	27.78	-	-	49.92	-22.14
7	1.008	35.06	Pk	9.7	.3	45.06	56	-10.94	-	-
8	.993	13.88	Av	9.7	.3	23.88	-	-	46	-22.12
9	2.034	36.22	Pk	9.7	.3	46.22	56	-9.78	-	-
10	2.052	13.27	Av	9.7	.3	23.27	-	-	46	-22.73
11	11.925	40.37	Pk	9.9	.3	50.57	60	-9.43	-	-
12	11.904	25	Av	9.9	.3	35.2	-	-	50	-14.8

Pk - Peak detector
Av - Average detection

Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

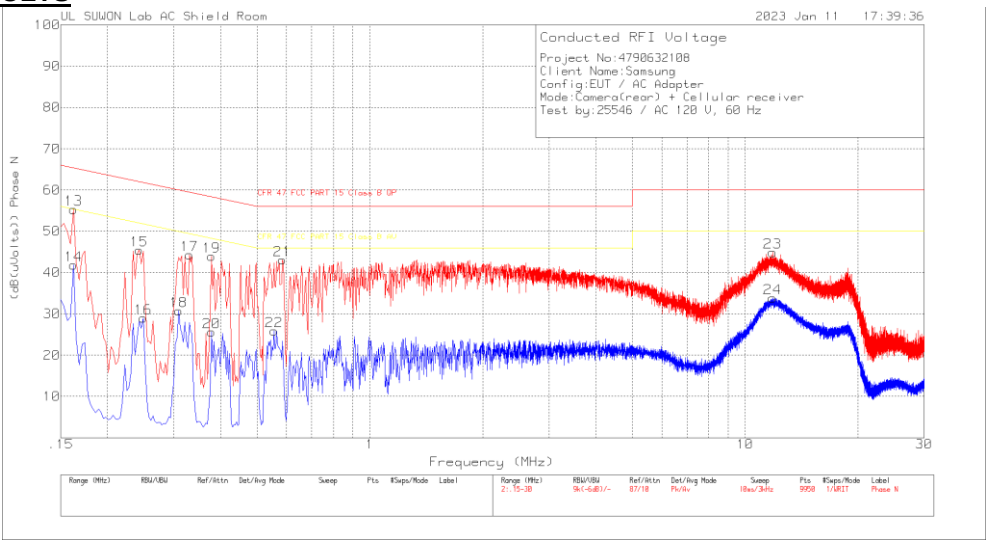
Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_L1[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15375	38.99	Qp	9.8	.1	48.89	65.79	-16.9	-	-
2.03475	27.95	Qp	9.7	.3	37.95	56	-18.05	-	-
11.9252	29.66	Qp	9.9	.3	39.86	60	-20.14	-	-

Qp - Quasi-Peak detector

6 WORST EMISSIONS(GSM850 + Rear camera on)

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

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	.162	45.35	Pk	9.9	.1	55.35	65.36	-10.01	-	-
14	.162	31.83	Av	9.9	.1	41.83	-	-	55.36	-13.53
15	.243	35.7	Pk	9.6	.2	45.5	61.99	-16.49	-	-
16	.249	19.22	Av	9.6	.2	29.02	-	-	51.79	-22.77
17	.33	34.32	Pk	9.8	.2	44.32	59.45	-15.13	-	-
18	.309	20.83	Av	9.7	.2	30.73	-	-	50	-19.27
19	.378	33.99	Pk	9.8	.2	43.99	58.32	-14.33	-	-
20	.378	15.61	Av	9.8	.2	25.61	-	-	48.32	-22.71
21	.585	33.01	Pk	9.9	.2	43.11	56	-12.89	-	-
22	.555	15.74	Av	9.9	.2	25.84	-	-	46	-20.16
23	11.832	34.69	Pk	9.9	.3	44.89	60	-15.11	-	-
24	11.832	23.68	Av	9.9	.3	33.88	-	-	50	-16.12

Pk - Peak detector
Av - Average detection

END OF TEST REPORT