CERTIFICATION TEST REPORT

Report Number. : 4789893923-E2V1

Applicant	:	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, 16677, KOREA
Model	:	NP545XLA, NP545XLA-KA1TT, NP545XLA-KA1VZ
FCC ID	:	A3LNP545XLA
EUT Description	:	WCDMA/LTE/5G NR Laptop + BT/BLE, DTS/UNII a/b/g/n/ac/ax
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART B

Date Of Issue:
2021-06-14

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	2021-06-14	Initial issue	Yeonhee Lim

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

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218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION:	WCDMA/LTE/5G NR Laptop + BT/BLE, DTS/UNII a/b/g/n/ac/ax
MODEL NUMBER:	NP545XLA, NP545XLA-KA1TT , NP545XLA-KA1VZ
SERIAL NUMBER:	FLKJ930R400156A (RADIATED)
DATE TESTED:	2021-05-03 ~ 2021-06-10;

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:

Junwhan Lee
Suwon Lab Engineer
UL Korea, Ltd.

Tested By:

Yeonhee Lim
Suwon Lab Technician
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
☒ Chamber 2
☐ Chamber 3

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.

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:

EIRP = PSA reading with EUT worst orientation (dBm) + Path loss (dB) – cable loss(between the SG and substitution antenna) + Substitution Antenna Factor (dBi)

ERP = PSA reading with EUT worst orientation (dBm) + Path loss (dB) – cable loss(between the SG and substitution antenna)

(Path loss = Signal generator output – PSA reading with substitution antenna)

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Radiated Disturbance, 30 MHz to 1 GHz	4.26 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.90 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 115:2007.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

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

This report covers the Samsung models NP545XLA, NP545XLA-KA1TT and NP545XLA-KA1VZ. These models are identical in hardware except below.

NP545XLA-KA1TT: eSIM IC unmounted on PCB.
NP545XLA-KA1VZ: There is no difference in hardware(Supported RF band is different).

With some pre-scan, model NP545XLA was set for final test.

5.2. TEST MODE

Mode	Description
WCDMA BAND 5	Communicating with Call simulator(CMW500)
LTE 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)
5G NR BAND n5	Communicating with Call simulator(E7515B)

Note : AC mains line conducted test was tested to high power licensed band(LTE B5).

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5.3. WORST-CASE ORIENTATION AND MODE

i. Worst Axis Condition

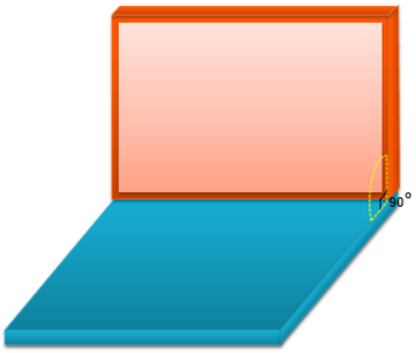
The fundamental and radiated spurious emission were investigated in three orthogonal orientations X, Y and Z, it was determined that below orientation was worst-case orientation for each band.

Band	Worst Case		
	X	Y	Z
WCDMA B5	Laptop	-	-
LTE B5	Laptop	-	-
LTE B12	Laptop	-	-
LTE B13	Laptop	-	-
LTE B14	-	Laptop	-
NR B5	Laptop	-	-

ii. Foldable Condition

The Fundamental of the EUT was investigated in two conditions(Fold and Laptop).

Fold



Laptop(90 degree)

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

5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Charger	SAMSUNG	EP-TA200	R37R32A00XADK3	N/A
Data Cable	SAMSUNG	EP-DW767JWE	N/A	N/A

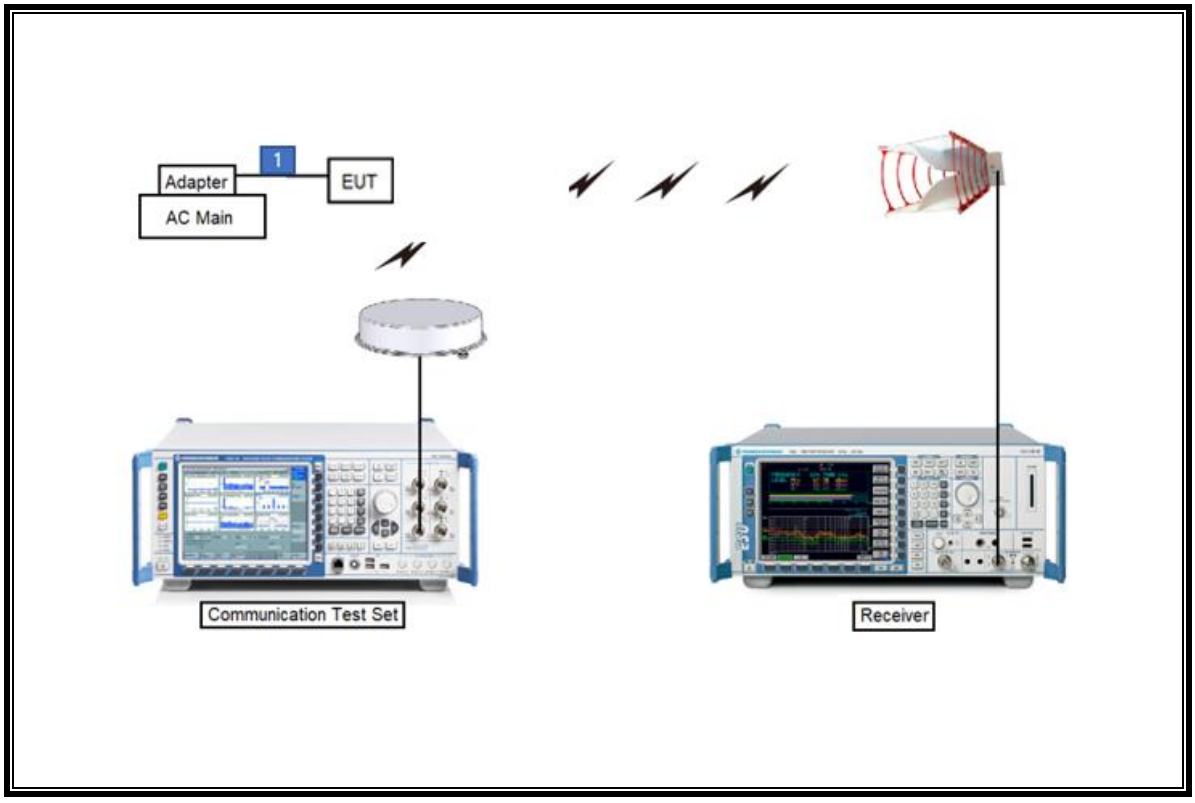
I/O CABLE

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	2022-08-04
Preamplifier	ETS	3116C-PA	00168841	2021-08-06
Antenna, Horn, 40 GHz	ETS	3116C	00168645	2022-08-04
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	2022-08-19
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2022-08-13
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2022-08-13
Antenna, Horn, 18 GHz	ETS	3115	00167211	2022-07-27
Antenna, Horn, 18 GHz	ETS	3115	00161451	2022-08-15
Antenna, Horn, 18 GHz	ETS	3117	00168724	2022-07-27
Antenna, Horn, 18 GHz	ETS	3117	00168717	2022-08-15
Communications Test Set	R&S	CMW500	150314	2021-08-03
Preamplifier, 1000 MHz	Sonoma	310N	341282	2021-08-03
Preamplifier, 1000 MHz	Sonoma	310N	370599	2021-08-06
Preamplifier, 1000 MHz	Sonoma	310N	351741	2021-08-03
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	2021-08-03
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	2021-08-04
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2021-08-03
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2021-08-03
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2021-08-03
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	2021-08-05
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G006	2021-08-05
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	010	2021-08-05
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	011	2021-08-05
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G001	2021-08-05
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G002	2021-08-05
Attenuator	PASTERNACK	PE7087-10	A009	2021-08-05
Attenuator	PASTERNACK	PE7087-10	A001	2021-08-03
Attenuator	PASTERNACK	PE7087-10	A008	2021-08-03
Attenuator	PASTERNACK	PE7004-10	2	2021-08-04
Attenuator	PASTERNACK	PE7395-10	A011	2021-08-05
EMI Test Receive, 3 GHz	R&S	ESR3	101832	2021-08-03
LISN	R&S	ENV-216	101836	2021-08-06
LISN	R&S	ENV-216	101837	2021-08-06
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

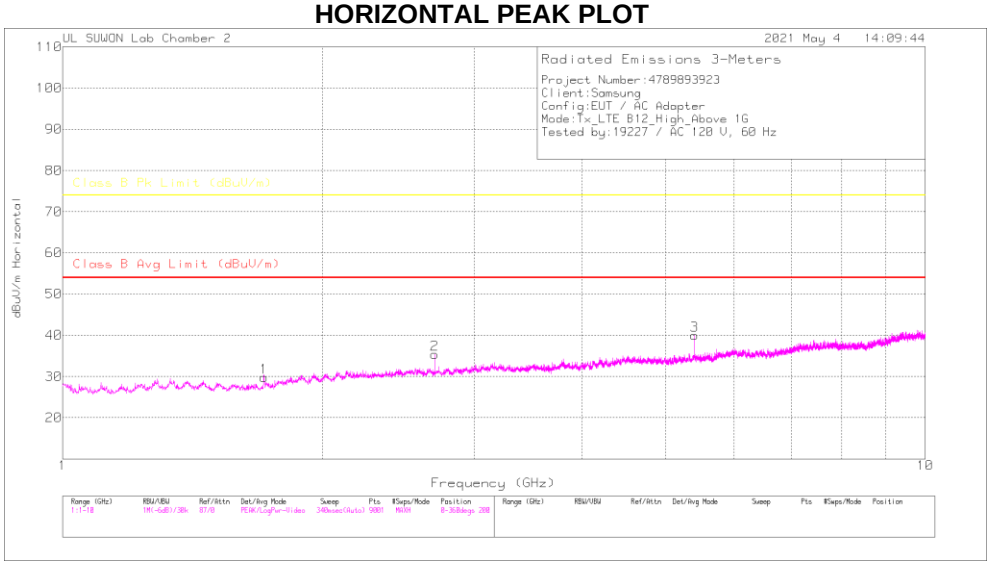
§15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

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.	

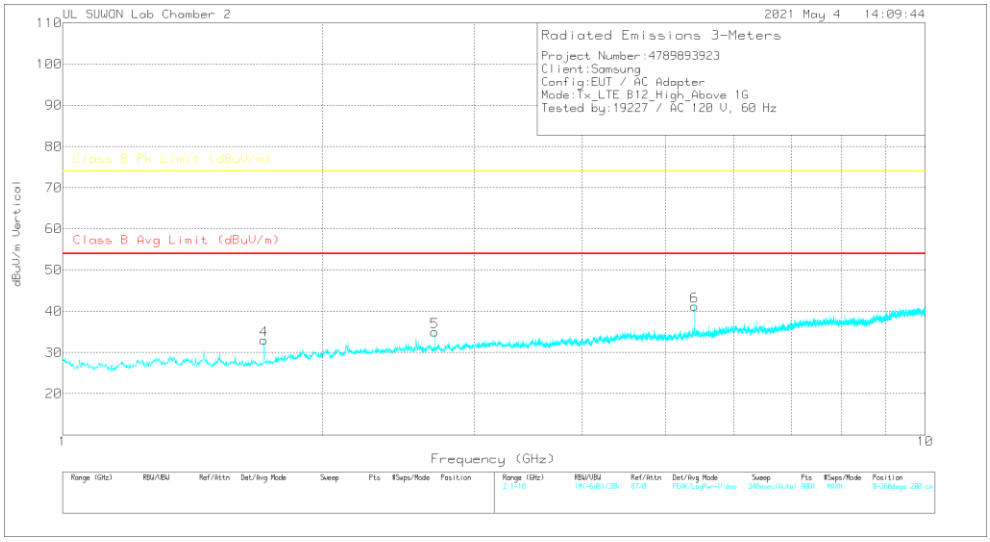
7.1.1. Above 1 GHz in the WCDMA Band 5

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[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	1.712	31.51	PK	28.8	-31.2	.7	29.81	-	-	74	-44.19	0-360	100	H
2	2.7	32.39	PK	32.2	-29.9	.7	35.39	-	-	74	-38.61	0-360	100	H
3	5.4	32.65	PK	34.6	-27.8	.5	39.95	-	-	74	-34.05	0-360	100	H
4	1.711	34.67	PK	28.8	-31.2	.7	32.97	-	-	74	-41.03	0-360	100	V
5	2.7	32.02	PK	32.2	-29.9	.7	35.02	-	-	74	-38.98	0-360	200	V
6	5.4	33.96	PK	34.6	-27.8	.5	41.26	-	-	74	-32.74	0-360	200	V

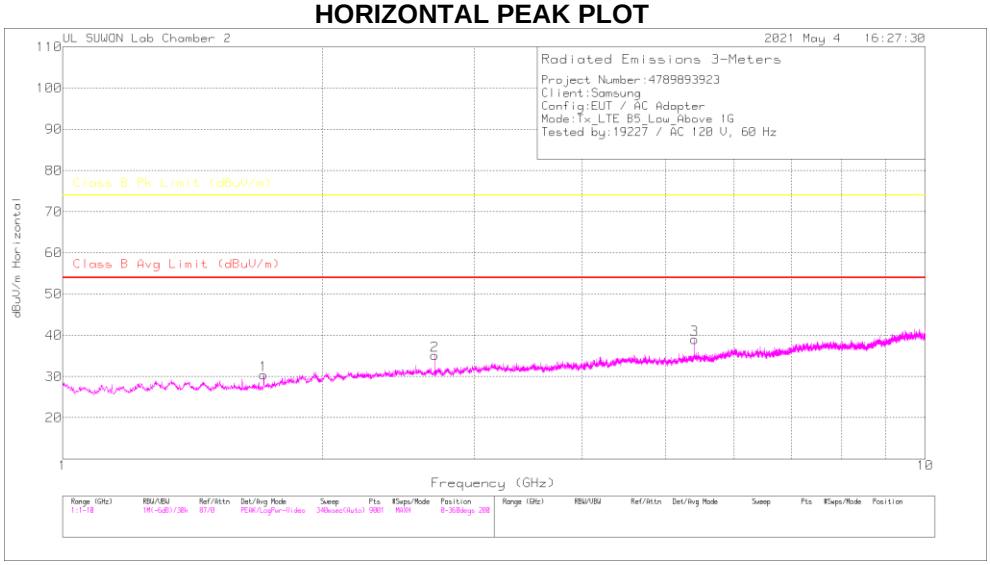
Pk - Peak detector

Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

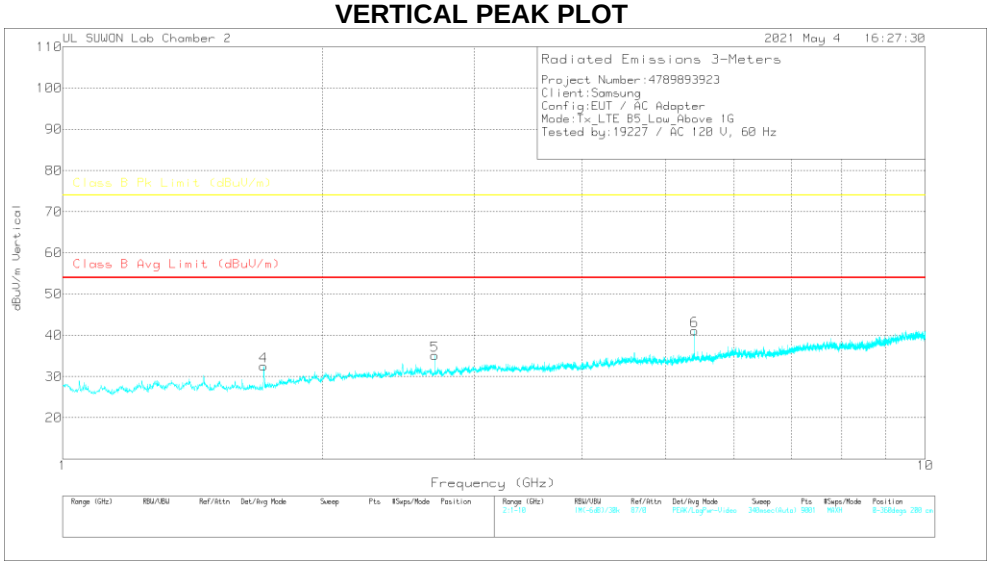
7.1.2. Above 1GHz in the LTE Band 5

LOW CHANNEL(870.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

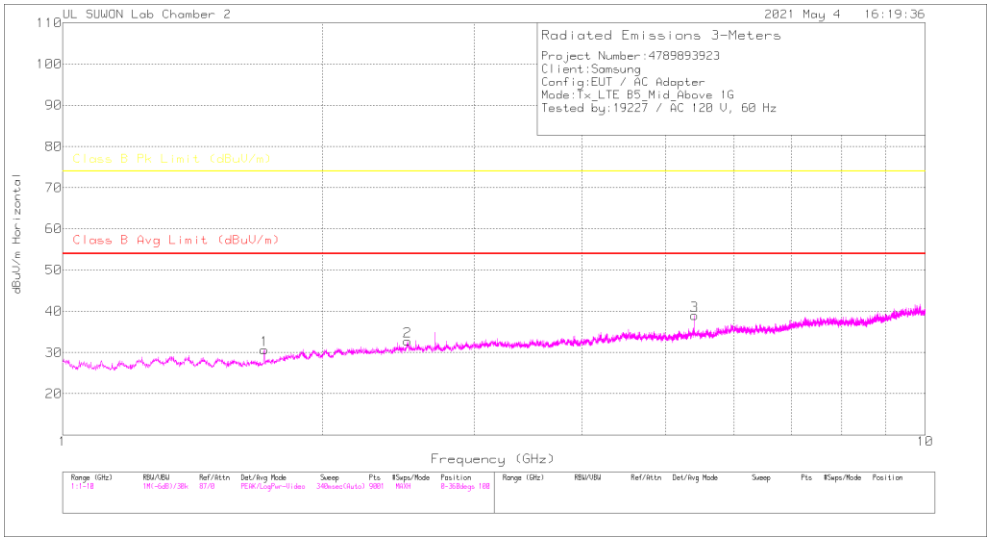
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.71	32.07	PK	28.8	-31.2	.7	30.37	-	-	74	-43.63	0-360	100	H
2	2.7	32.12	PK	32.2	-29.9	.7	35.12	-	-	74	-38.88	0-360	100	H
3	5.4	31.71	PK	34.6	-27.8	.5	39.01	-	-	74	-34.99	0-360	100	H
4	1.71	34.24	PK	28.8	-31.2	.7	32.54	-	-	74	-41.46	0-360	100	V
5	2.7	32.14	PK	32.2	-29.9	.7	35.14	-	-	74	-38.86	0-360	100	V
6	5.4	33.76	PK	34.6	-27.8	.5	41.06	-	-	74	-32.94	0-360	200	V

Pk - Peak detector

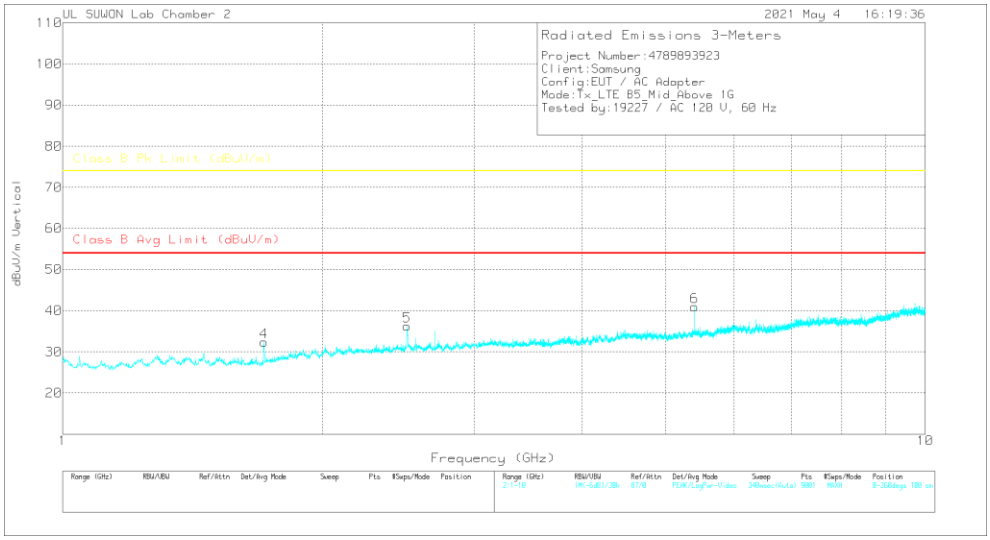
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(881.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

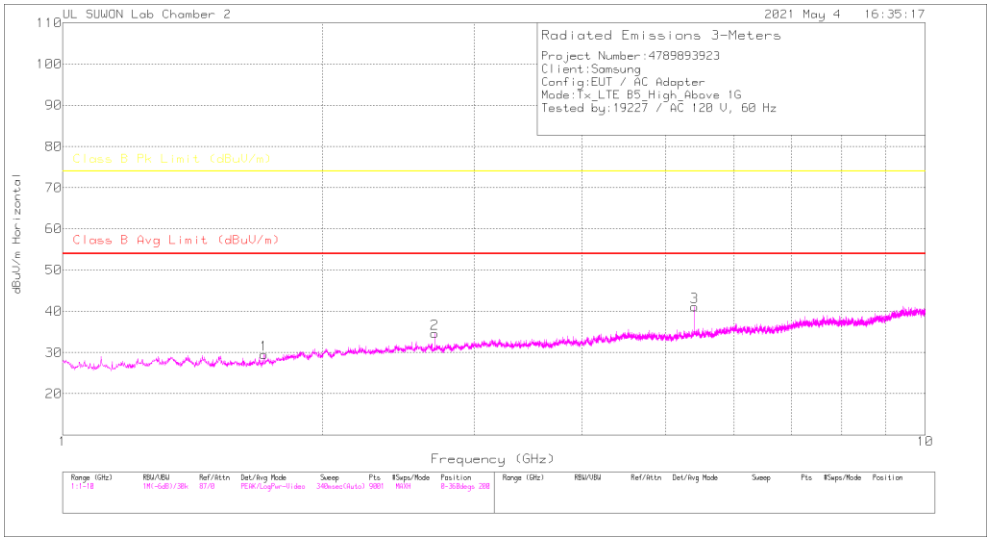
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.713	32.3	PK	28.8	-31.2	.7	30.6	-	-	74	-43.4	0-360	100	H
2	2.51	30.01	PK	32.1	-30.1	.7	32.71	-	-	74	-41.29	0-360	200	H
3	5.4	31.65	PK	34.6	-27.8	.5	38.95	-	-	74	-35.05	0-360	200	H
4	1.711	34.09	PK	28.8	-31.2	.7	32.39	-	-	74	-41.61	0-360	200	V
5	2.508	33.59	PK	32.1	-30.1	.7	36.29	-	-	74	-37.71	0-360	200	V
6	5.4	33.72	PK	34.6	-27.8	.5	41.02	-	-	74	-32.98	0-360	100	V

Pk - Peak detector

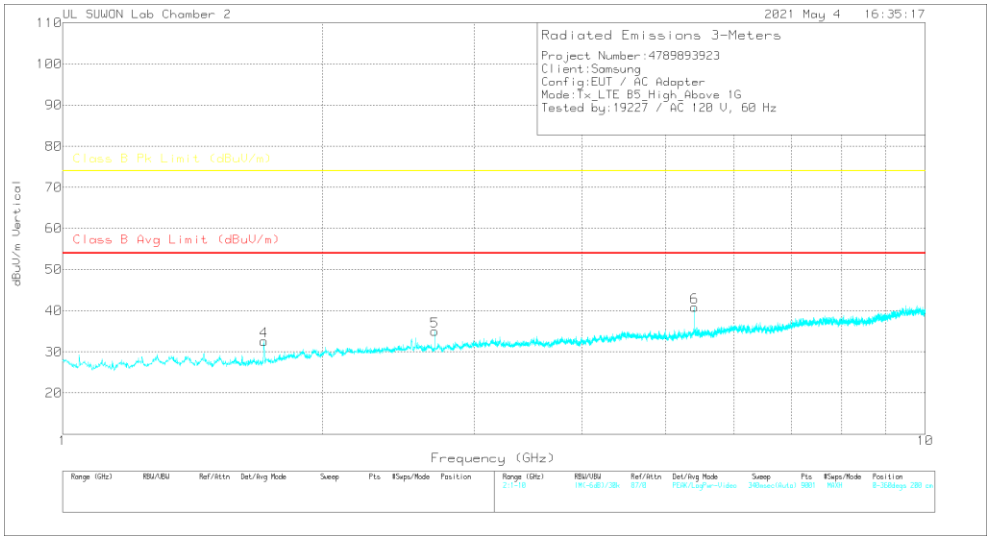
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

HIGH CHANNEL(892.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[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	1.711	31.19	PK	28.8	-31.2	.7	29.49	-	-	74	-44.51	0-360	100	H
2	2.7	31.65	PK	32.2	-29.9	.7	34.65	-	-	74	-39.35	0-360	100	H
3	5.4	33.87	PK	34.6	-27.8	.5	41.17	-	-	74	-32.83	0-360	200	H
4	1.711	34.28	PK	28.8	-31.2	.7	32.58	-	-	74	-41.42	0-360	100	V
5	2.7	31.95	PK	32.2	-29.9	.7	34.95	-	-	74	-39.05	0-360	200	V
6	5.4	33.58	PK	34.6	-27.8	.5	40.88	-	-	74	-33.12	0-360	100	V

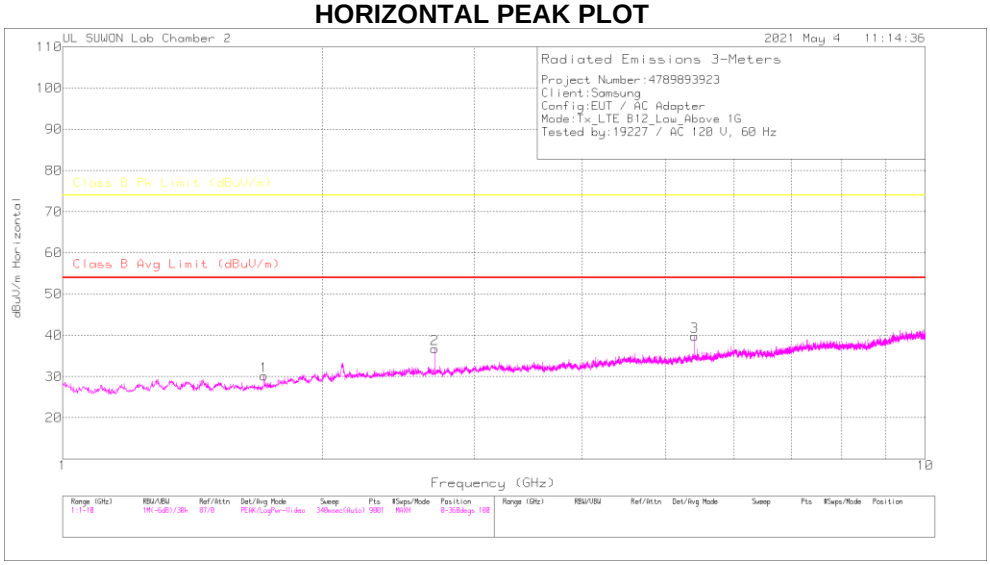
Pk - Peak detector

Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

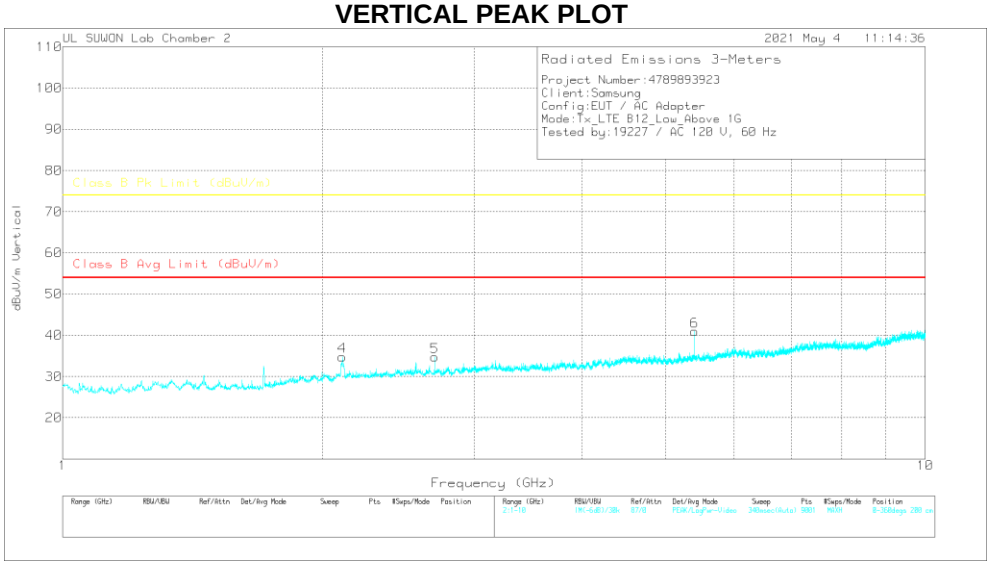
7.1.3. Above 1 GHz in the LTE Band 12

LOW CHANNEL(730.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

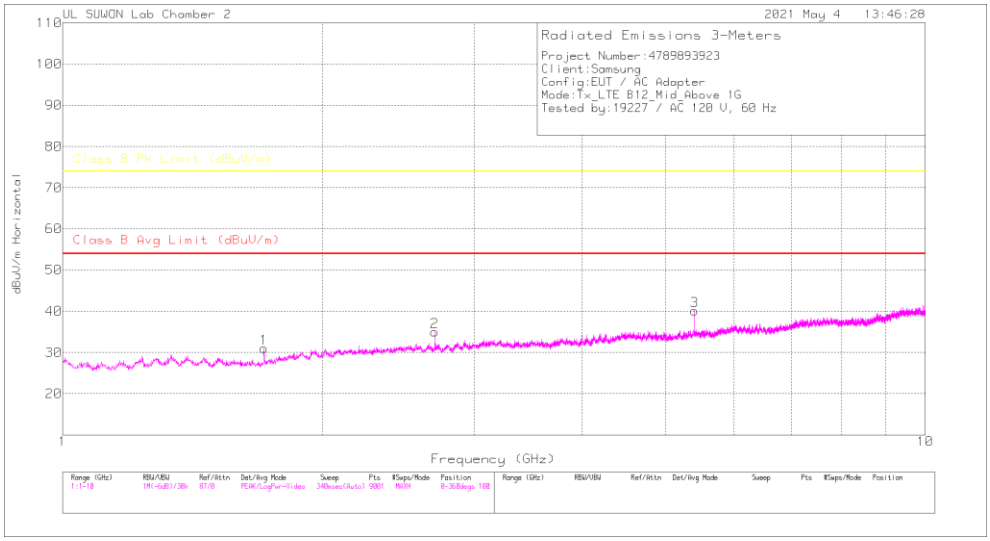
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.711	31.79	PK	28.8	-31.2	.7	30.09	-	-	74	-43.91	0-360	100	H
2	2.7	33.74	PK	32.2	-29.9	.7	36.74	-	-	74	-37.26	0-360	100	H
3	5.4	32.47	PK	34.6	-27.8	.5	39.77	-	-	74	-34.23	0-360	100	H
4	2.109	33.12	PK	31.6	-30.6	.7	34.82	-	-	74	-39.18	0-360	200	V
5	2.7	31.78	PK	32.2	-29.9	.7	34.78	-	-	74	-39.22	0-360	100	V
6	5.4	33.64	PK	34.6	-27.8	.5	40.94	-	-	74	-33.06	0-360	200	V

Pk - Peak detector

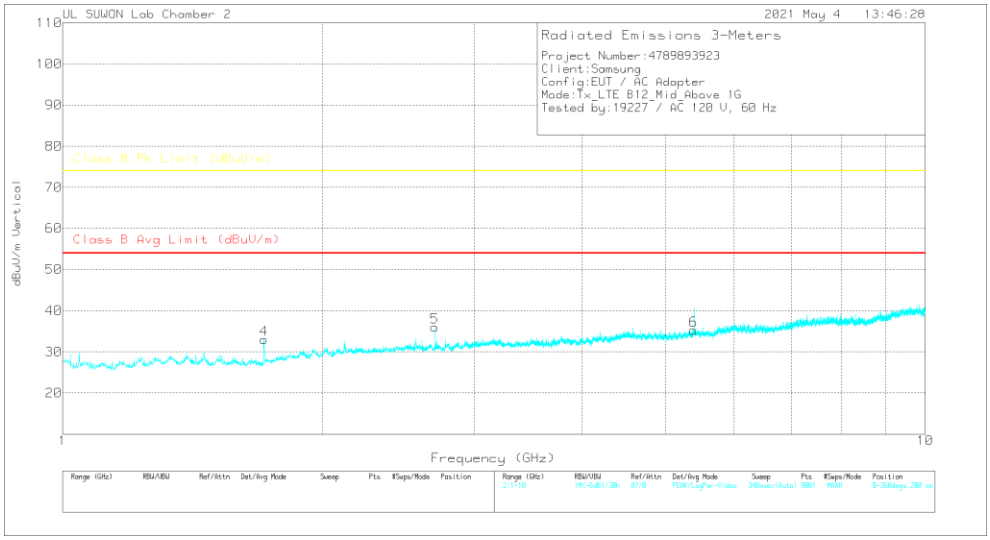
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(737.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

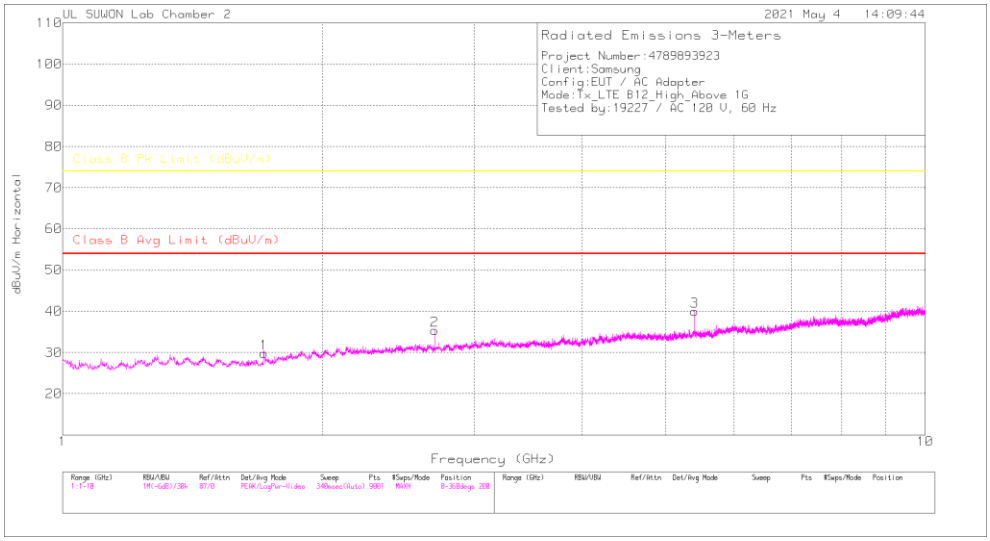
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.711	32.67	PK	28.8	-31.2	.7	30.97	-	-	74	-43.03	0-360	100	H
2	2.7	32.06	PK	32.2	-29.9	.7	35.06	-	-	74	-38.94	0-360	100	H
3	5.4	32.8	PK	34.6	-27.8	.5	40.1	-	-	74	-33.9	0-360	200	H
4	1.711	34.74	PK	28.8	-31.2	.7	33.04	-	-	74	-40.96	0-360	200	V
5	2.7	33.05	PK	32.2	-29.9	.7	36.05	-	-	74	-37.95	0-360	200	V
6	5.388	28.05	PK	34.5	-27.8	.5	35.25	-	-	74	-38.75	0-360	200	V

Pk - Peak detector

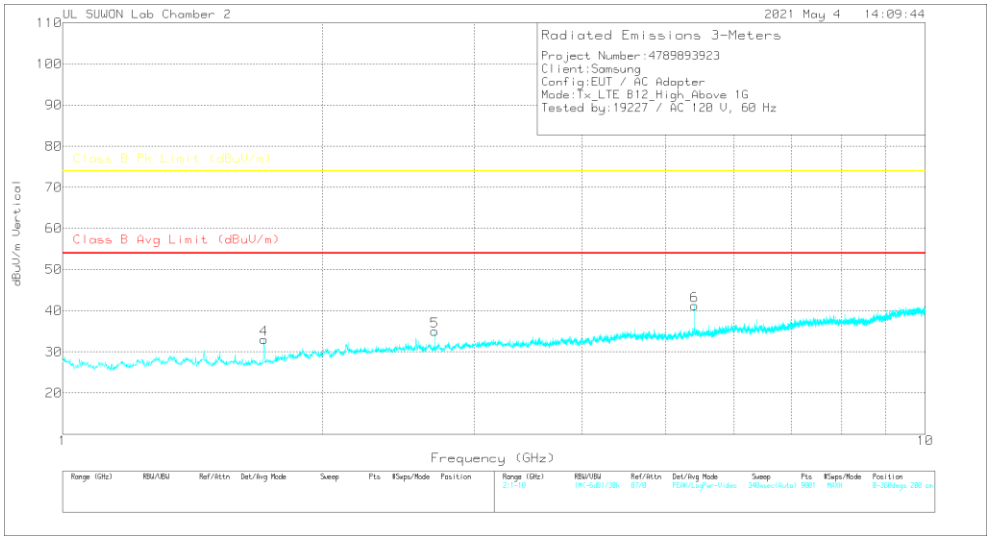
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

HIGH CHANNEL(744.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[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	1.712	31.51	PK	28.8	-31.2	.7	29.81	-	-	74	-44.19	0-360	100	H
2	2.7	32.39	PK	32.2	-29.9	.7	35.39	-	-	74	-38.61	0-360	100	H
3	5.4	32.65	PK	34.6	-27.8	.5	39.95	-	-	74	-34.05	0-360	100	H
4	1.711	34.67	PK	28.8	-31.2	.7	32.97	-	-	74	-41.03	0-360	100	V
5	2.7	32.02	PK	32.2	-29.9	.7	35.02	-	-	74	-38.98	0-360	200	V
6	5.4	33.96	PK	34.6	-27.8	.5	41.26	-	-	74	-32.74	0-360	200	V

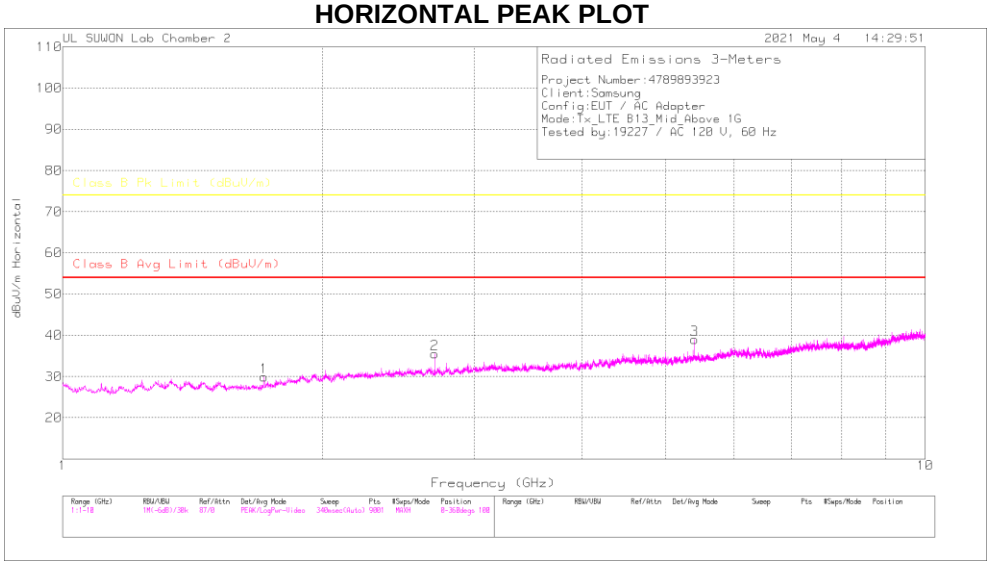
Pk - Peak detector

Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

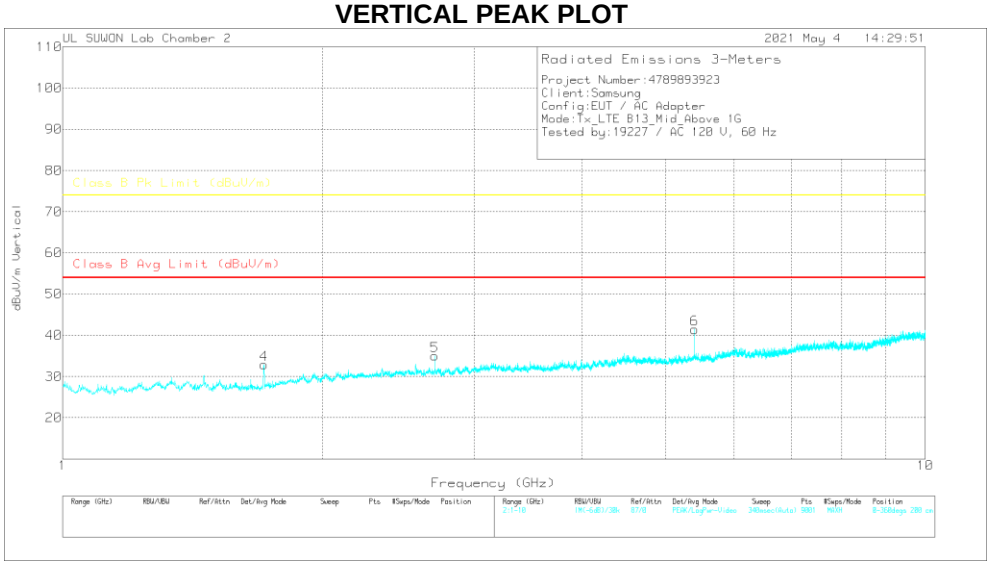
7.1.4. Above 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[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	1.712	31.6	PK	28.8	-31.2	.7	29.9	-	-	74	-44.1	0-360	100	H
2	2.7	32.5	PK	32.2	-29.9	.7	35.5	-	-	74	-38.5	0-360	100	H
3	5.4	31.65	PK	34.6	-27.8	.5	38.95	-	-	74	-35.05	0-360	100	H
4	1.711	34.56	PK	28.8	-31.2	.7	32.86	-	-	74	-41.14	0-360	200	V
5	2.7	32.05	PK	32.2	-29.9	.7	35.05	-	-	74	-38.95	0-360	100	V
6	5.4	34.13	PK	34.6	-27.8	.5	41.43	-	-	74	-32.57	0-360	200	V

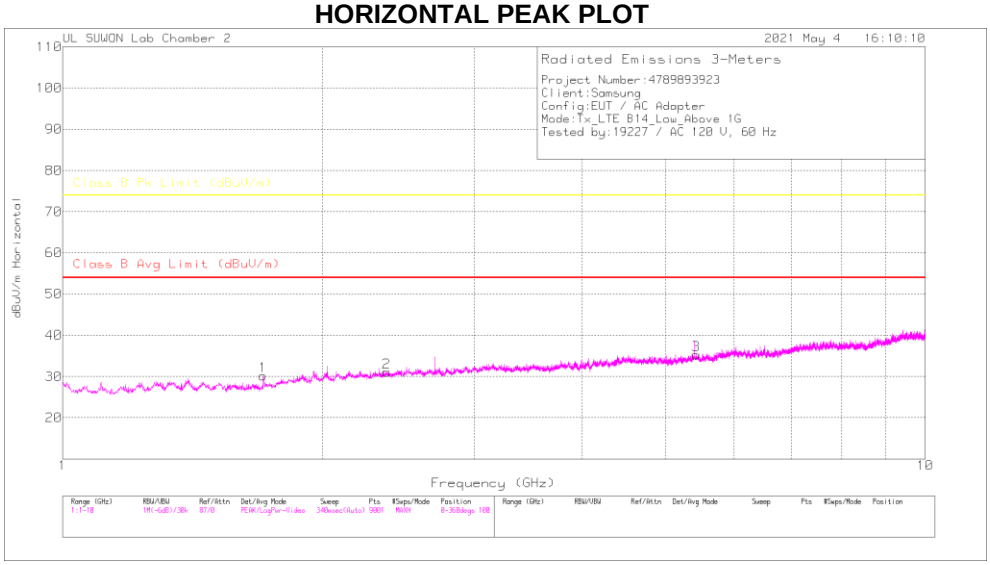
Pk - Peak detector

Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

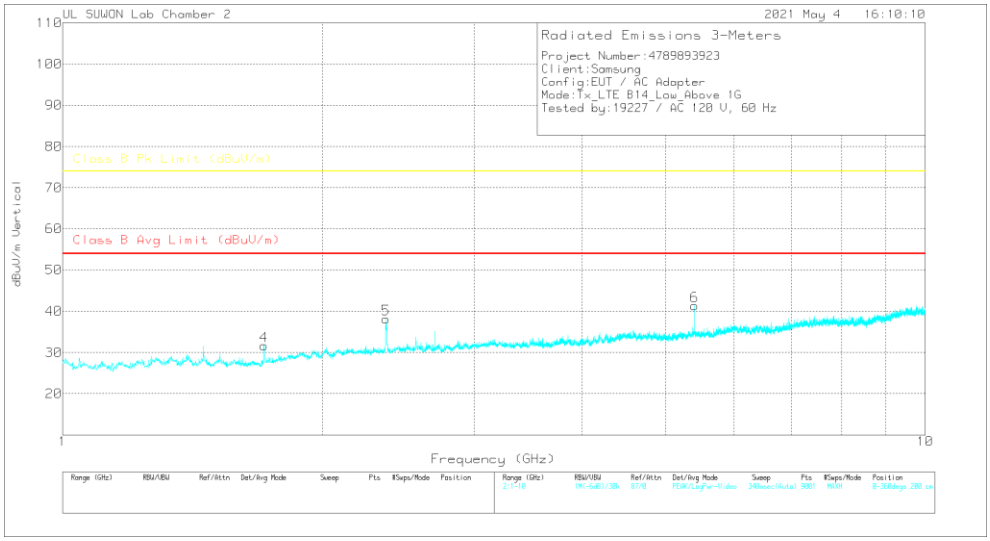
7.1.5. Above 1 GHz in the LTE Band 14

LOW CHANNEL(759.8 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

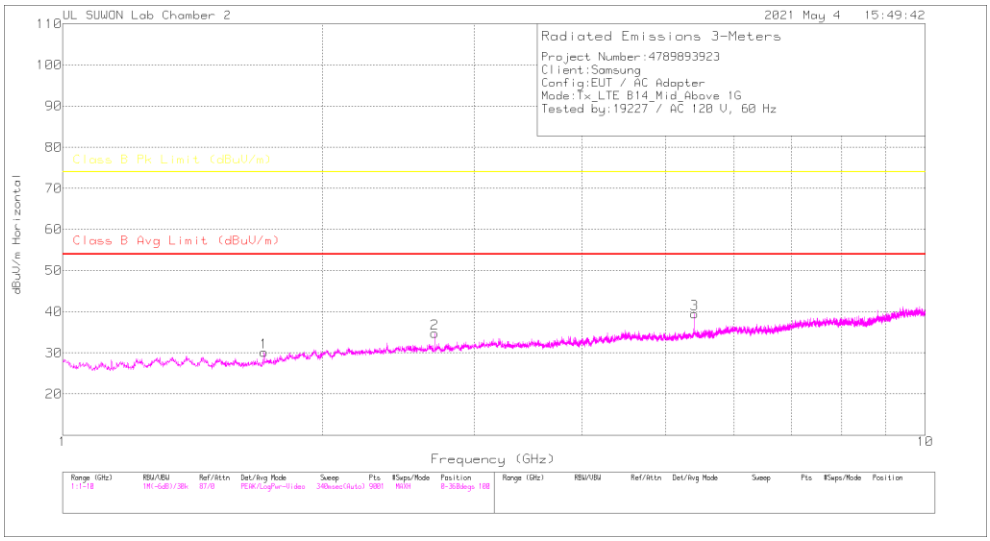
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.708	31.81	PK	28.8	-31.2	.7	30.11	-	-	74	-43.89	0-360	100	H
2	2.375	29.05	PK	31.9	-30.6	.7	31.05	-	-	74	-42.95	0-360	200	H
3	5.422	27.72	PK	34.6	-27.6	.5	35.22	-	-	74	-38.78	0-360	100	H
4	1.712	33.35	PK	28.8	-31.2	.7	31.65	-	-	74	-42.35	0-360	200	V
5	2.371	36.38	PK	31.8	-30.7	.7	38.18	-	-	74	-35.82	0-360	200	V
6	5.4	34.06	PK	34.6	-27.8	.5	41.36	-	-	74	-32.64	0-360	200	V

Pk - Peak detector

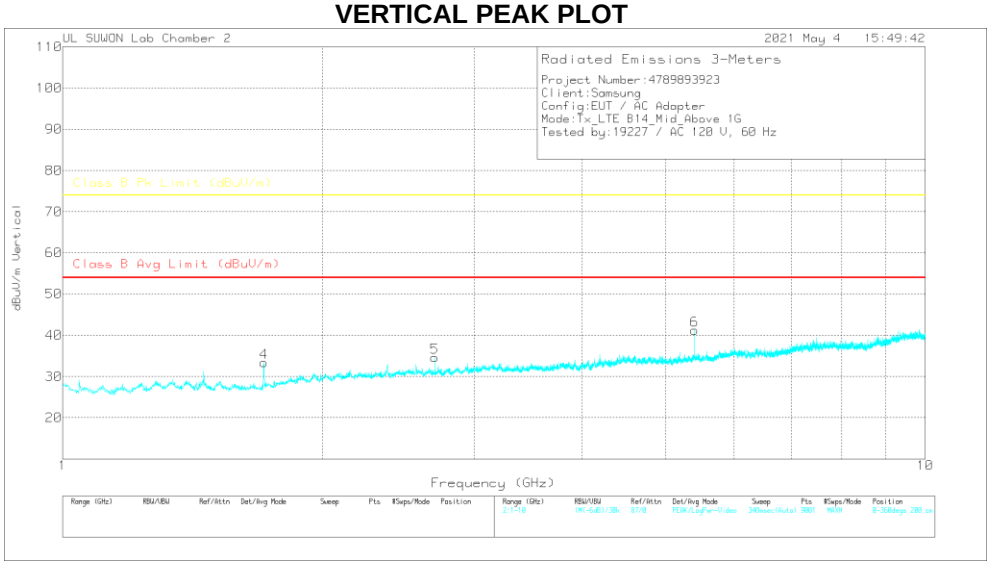
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(763 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

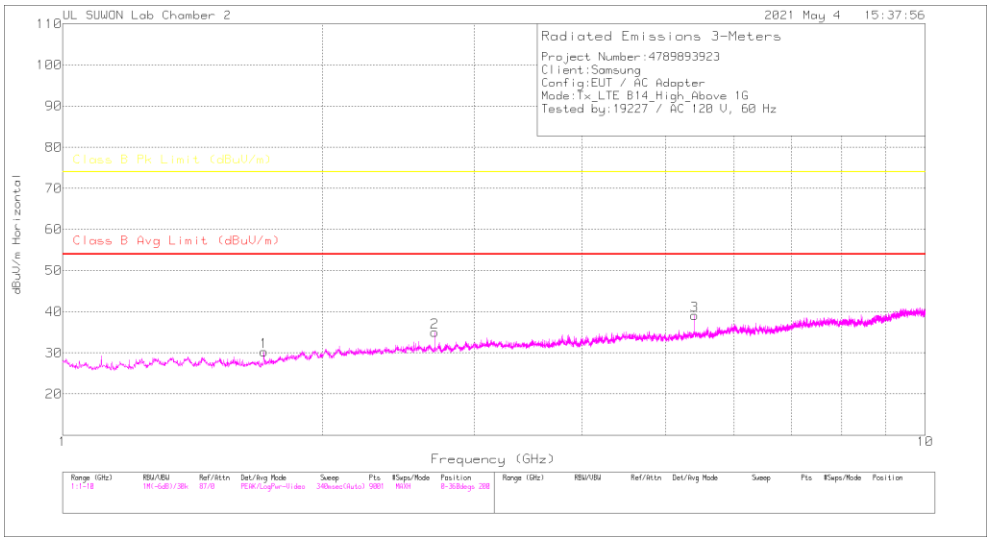
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.712	31.84	PK	28.8	-31.2	.7	30.14	-	-	74	-43.86	0-360	100	H
2	2.7	31.75	PK	32.2	-29.9	.7	34.75	-	-	74	-39.25	0-360	100	H
3	5.4	32.22	PK	34.6	-27.8	.5	39.52	-	-	74	-34.48	0-360	100	H
4	1.711	35.04	PK	28.8	-31.2	.7	33.34	-	-	74	-40.66	0-360	200	V
5	2.7	31.67	PK	32.2	-29.9	.7	34.67	-	-	74	-39.33	0-360	200	V
6	5.4	33.92	PK	34.6	-27.8	.5	41.22	-	-	74	-32.78	0-360	200	V

Pk - Peak detector

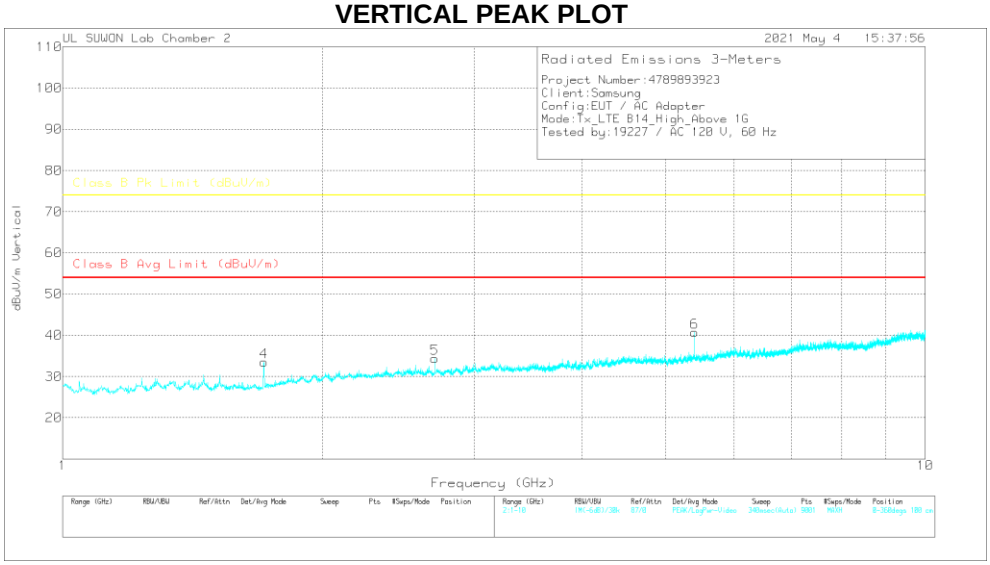
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

HIGH CHANNEL(766.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	1GHz_HP[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	1.711	31.93	PK	28.8	-31.2	.7	30.23	-	-	74	-43.77	0-360	100	H
2	2.7	32.05	PK	32.2	-29.9	.7	35.05	-	-	74	-38.95	0-360	100	H
3	5.4	31.86	PK	34.6	-27.8	.5	39.16	-	-	74	-34.84	0-360	200	H
4	1.711	35.23	PK	28.8	-31.2	.7	33.53	-	-	74	-40.47	0-360	200	V
5	2.7	31.41	PK	32.2	-29.9	.7	34.41	-	-	74	-39.59	0-360	200	V
6	5.4	33.48	PK	34.6	-27.8	.5	40.78	-	-	74	-33.22	0-360	200	V

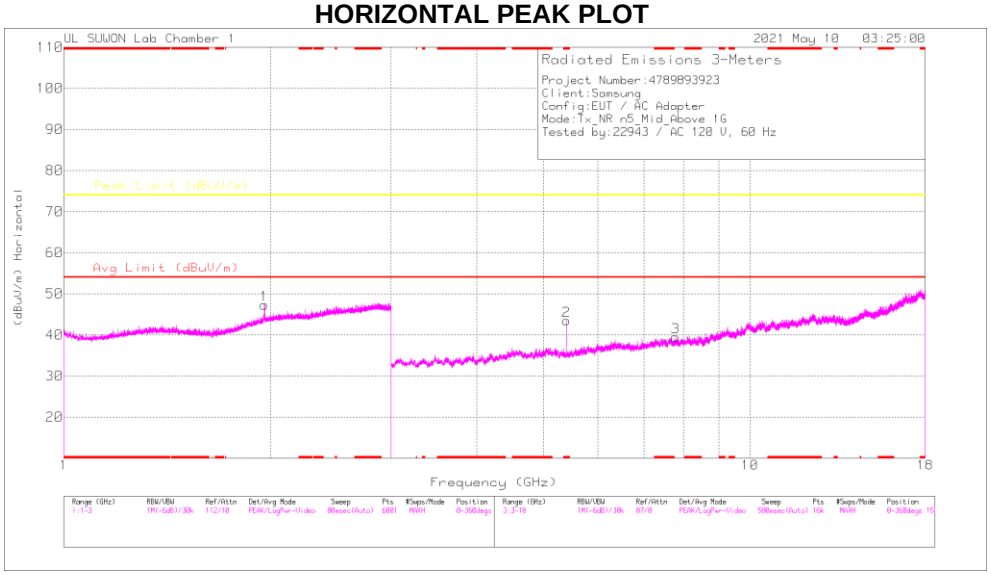
Pk - Peak detector

Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

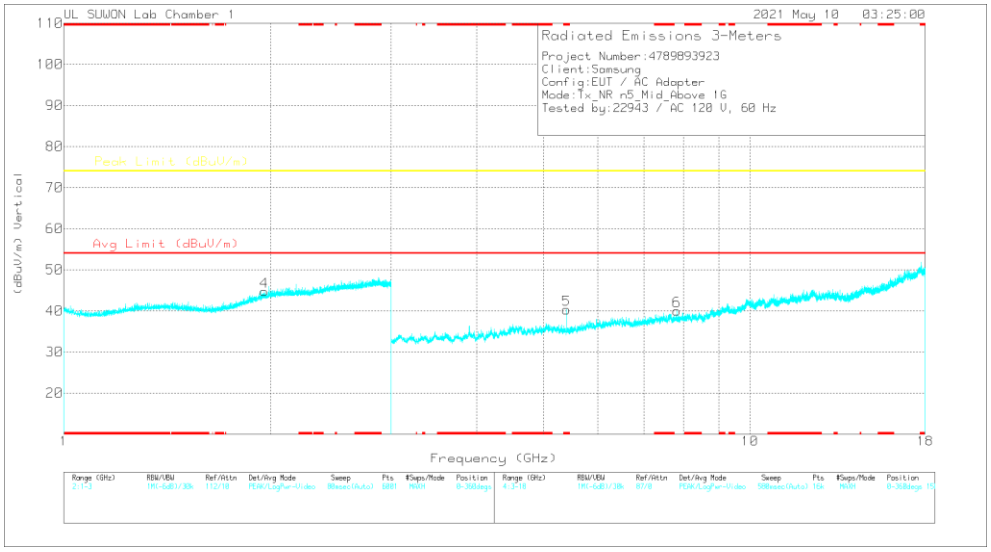
7.1.6. Above 1 GHz in the 5G NR Band 5

MID CHANNEL(881.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	1GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.96	41.71	PK	31.2	-26.2	.6	47.31	-	-	74	-26.69	0-360	150	H
4	1.96	39.12	PK	31.2	-26.2	.6	44.72	-	-	74	-29.28	0-360	250	V

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	3GHz_HP[dB]	1GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.39985	39.27	PK	34.5	-30.8	.5	43.47	-	-	74	-30.53	0-360	250	H
3	7.78939	29.36	PK	35.8	-26.3	.6	39.46	-	-	74	-34.54	0-360	250	H
5	* 5.39985	36.12	PK	34.5	-30.8	.5	40.32	-	-	74	-33.68	0-360	150	V
6	7.82688	30.11	PK	35.9	-26.6	.6	40.01	-	-	74	-33.99	0-360	250	V

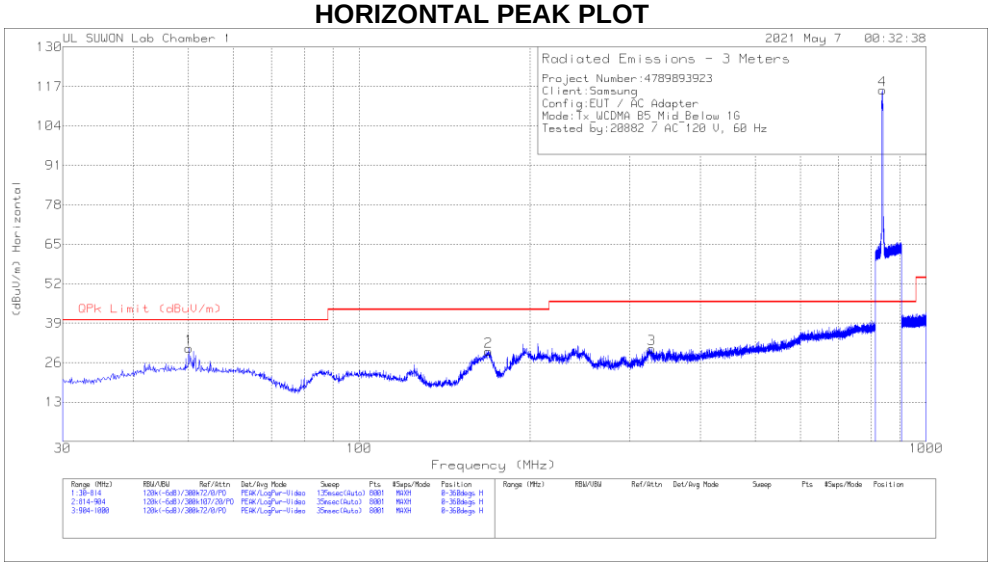
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

Note. Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

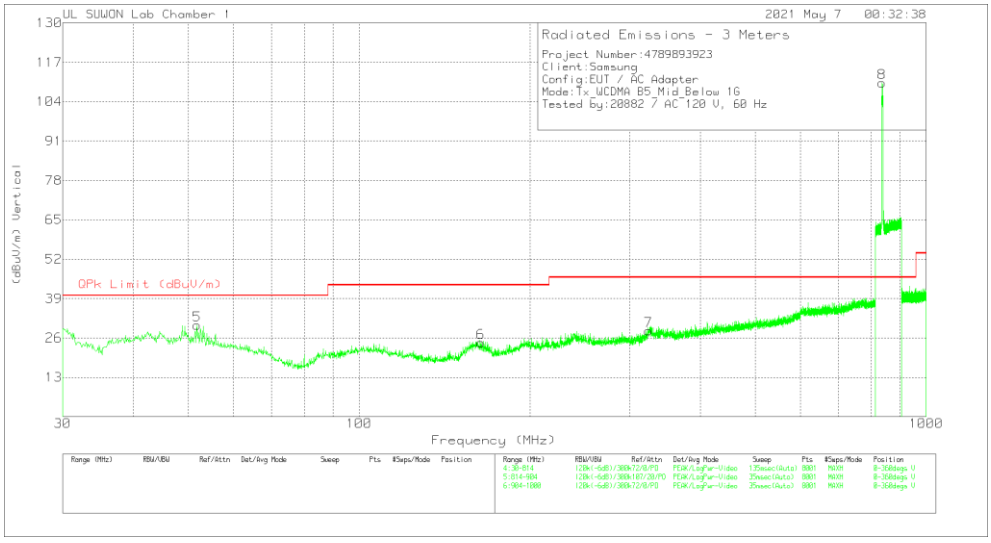
7.1.7. Below 1 GHz in the WCDMA Band 5

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	50.09	9.31	Pk	19.9	1.5	30.71	40	-9.29	0-360	400	H
2	169.062	12.32	Pk	14.6	2.8	29.72	43.52	-13.8	0-360	200	H
3	328.214	6.81	Pk	19.9	3.8	30.51	46.02	-15.51	0-360	100	H
4	836.95	82.73	Pk	27.1	6	115.83	**46.02**	**69.81**	0-360	100	H
5	51.756	8.87	Pk	19.7	1.6	30.17	40	-9.83	0-360	300	V
6	163.77	7.35	Pk	14.4	2.7	24.45	43.52	-19.07	0-360	100	V
7	323.902	4.77	Pk	19.8	3.8	28.37	46.02	-17.65	0-360	300	V
8	836.1625	77.21	Pk	27	6	110.21	**46.02**	**64.19**	0-360	100	V

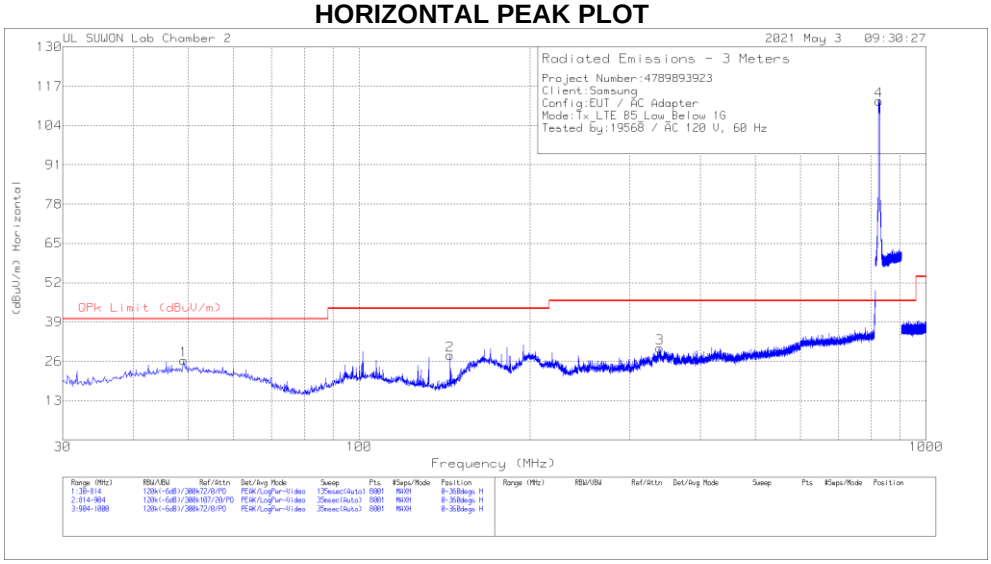
Pk - Peak detector

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

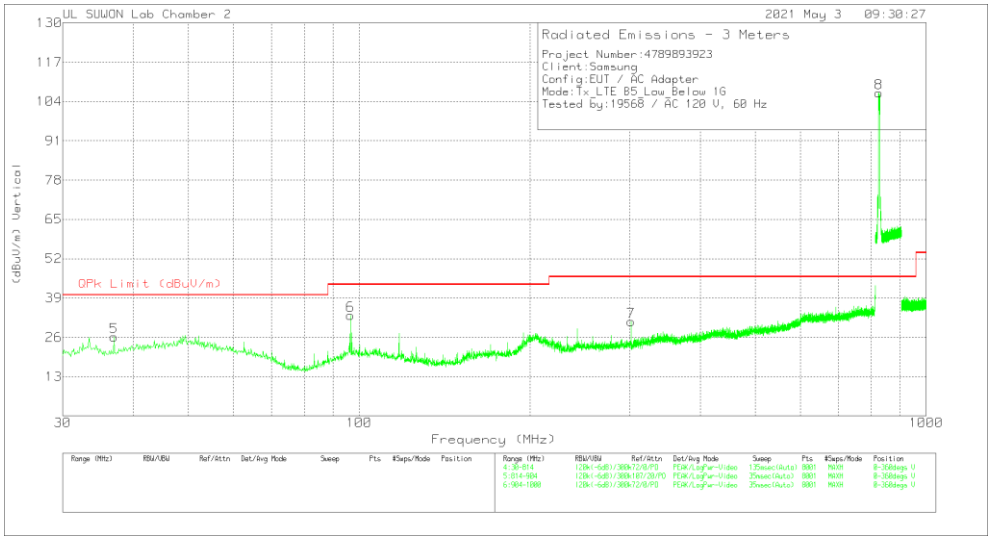
7.1.8. Below 1 GHz in the LTE Band 5

LOW CHANNEL(871.4 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

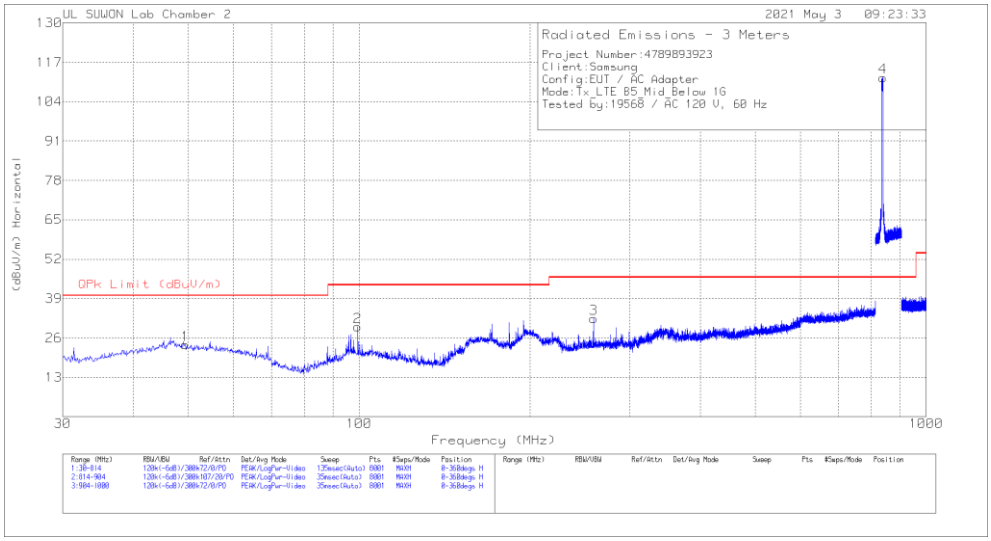
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	49.012	5.6	Pk	19.9	.8	26.3	40	-13.7	0-360	300	H
2	144.758	13.1	Pk	13.7	1.3	28.1	43.52	-15.42	0-360	300	H
3	339.288	7.93	Pk	20.4	2	30.33	46.02	-15.69	0-360	100	H
4	824.8225	82.15	Pk	26.7	3.3	112.15	**46.02**	**66.13**	0-360	100	H
5	36.958	7.99	Pk	17.4	.7	26.09	40	-13.91	0-360	100	V
6	96.444	15.56	Pk	16.9	.9	33.36	43.52	-10.16	0-360	200	V
7	301.95	10.24	Pk	19.1	1.9	31.24	46.02	-14.78	0-360	100	V
8	825.3175	76.96	Pk	26.7	3.2	106.86	**46.02**	**60.84**	0-360	100	V

Pk - Peak detector

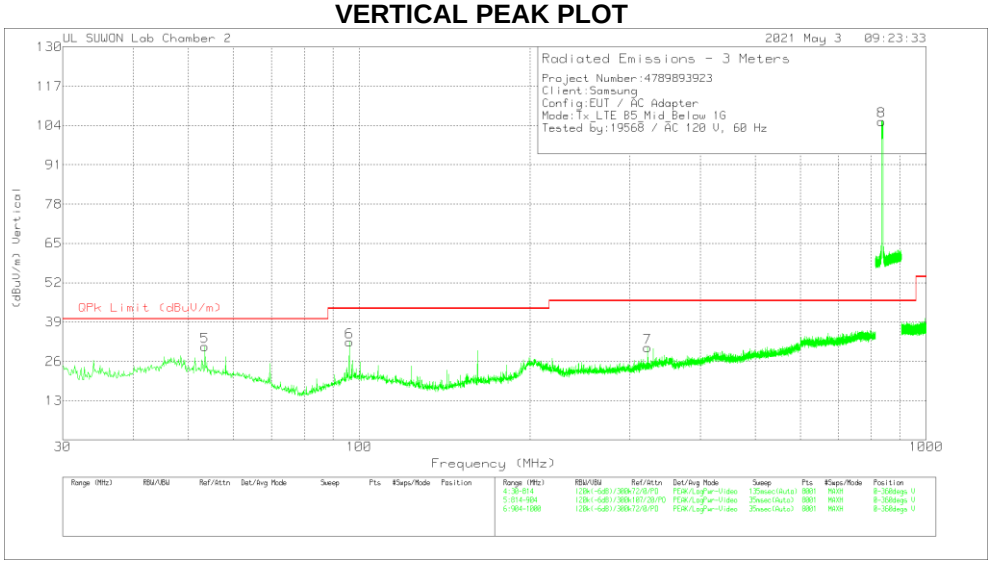
Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

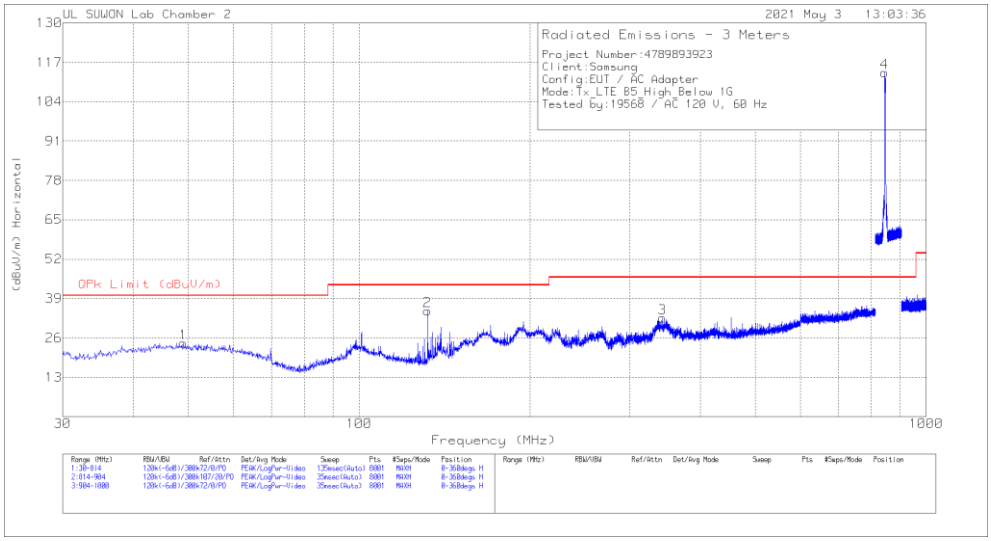
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	49.306	2.96	Pk	19.9	.9	23.76	40	-16.24	0-360	300	H
2	99.482	11.27	Pk	17.3	1.1	29.67	43.52	-13.85	0-360	300	H
3	258.928	11.96	Pk	18.5	1.9	32.36	46.02	-13.66	0-360	100	H
4	838.6488	81.8	Pk	27	3.2	112	**46.02**	**65.98**	0-360	100	H
5	53.422	10.61	Pk	19.5	.8	30.91	40	-9.09	0-360	400	V
6	96.052	14.61	Pk	16.8	1.1	32.51	43.52	-11.01	0-360	200	V
7	322.824	8.81	Pk	19.6	2.1	30.51	46.02	-15.51	0-360	100	V
8	834.5763	75.19	Pk	26.9	3.3	105.39	**46.02**	**59.37**	0-360	100	V

Pk - Peak detector

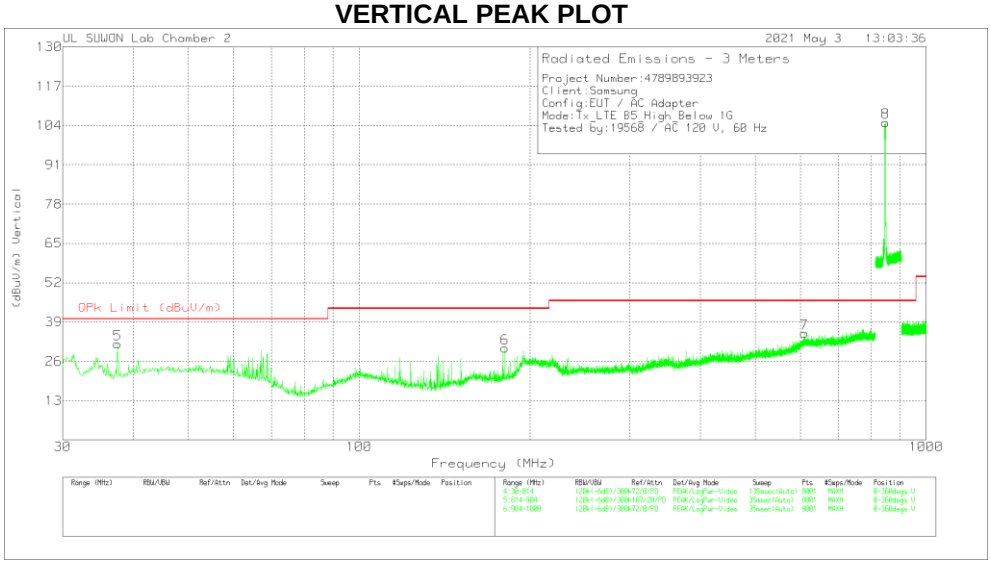
Note: Unwanted emissions captured from 814MHz to 849MHz and from 849MHz to 859MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(891.6 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	48.914	3.44	Pk	19.9	.9	24.24	40	-15.76	0-360	100	H
2	131.92	19.63	Pk	14.1	1.2	34.93	43.52	-8.59	0-360	300	H
3	342.62	10.04	Pk	20.6	2	32.64	46.02	-13.38	0-360	100	H
4	844.8363	83.16	Pk	27.2	3.3	113.66	**46.02**	**67.64**	0-360	100	H
5	37.448	13.46	Pk	17.6	.7	31.76	40	-8.24	0-360	100	V
6	180.724	13.61	Pk	15.4	1.4	30.41	43.52	-13.11	0-360	200	V
7	610.062	7.27	Pk	25.3	2.8	35.37	46.02	-10.65	0-360	200	V
8	848.2113	74.45	Pk	27.3	3.3	105.05	**46.02**	**59.03**	0-360	100	V

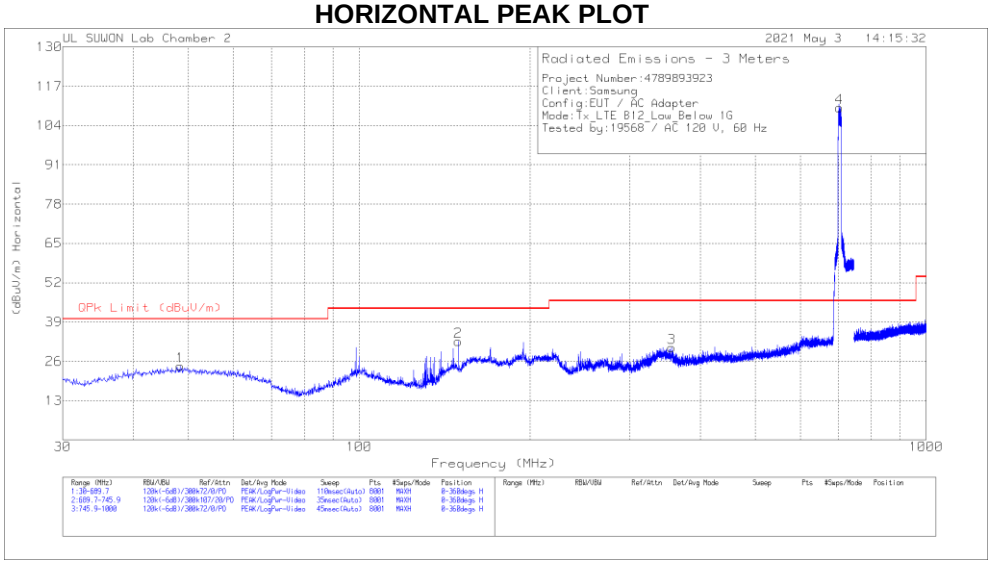
Pk - Peak detector

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

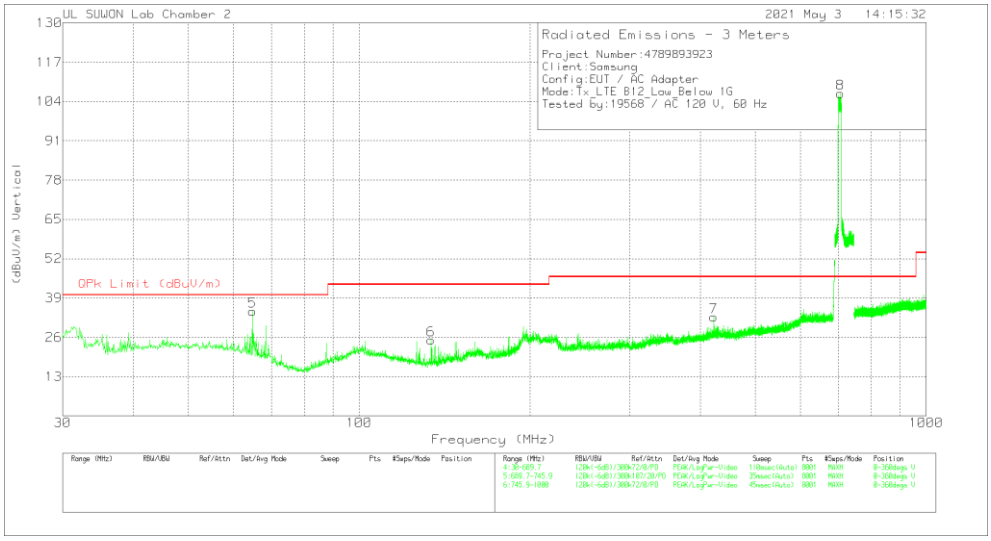
7.1.9. Below 1 GHz in the LTE Band 12

LOW CHANNEL(730.5 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	48.3068	3.84	Pk	19.9	.8	24.54	40	-15.46	0-360	400	H
2	149.5714	17.47	Pk	13.8	1.4	32.67	43.52	-10.85	0-360	300	H
3	355.8938	7.66	Pk	20.8	2.1	30.56	46.02	-15.46	0-360	100	H
4	702.619	81.45	Pk	25.5	3	109.95	**46.02**	**63.93**	0-360	100	H
5	64.7994	16.85	Pk	17.1	.7	34.65	40	-5.35	0-360	100	V
6	133.9034	9.88	Pk	13.9	1.3	25.08	43.52	-18.44	0-360	100	V
7	421.6993	8.54	Pk	22	2.3	32.84	46.02	-13.18	0-360	100	V
8	706.6865	78.21	Pk	25.5	3	106.71	**46.02**	**60.69**	0-360	100	V

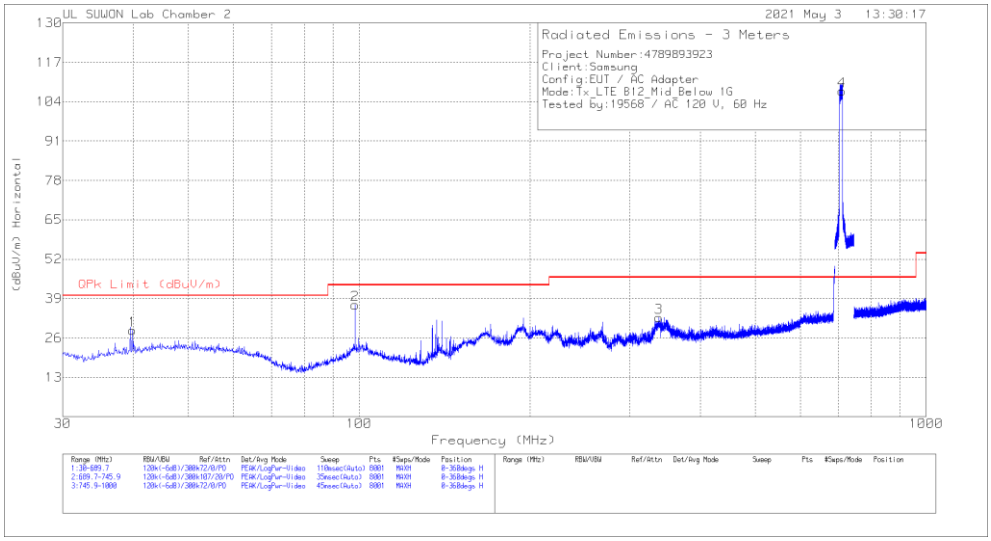
Pk - Peak detector

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

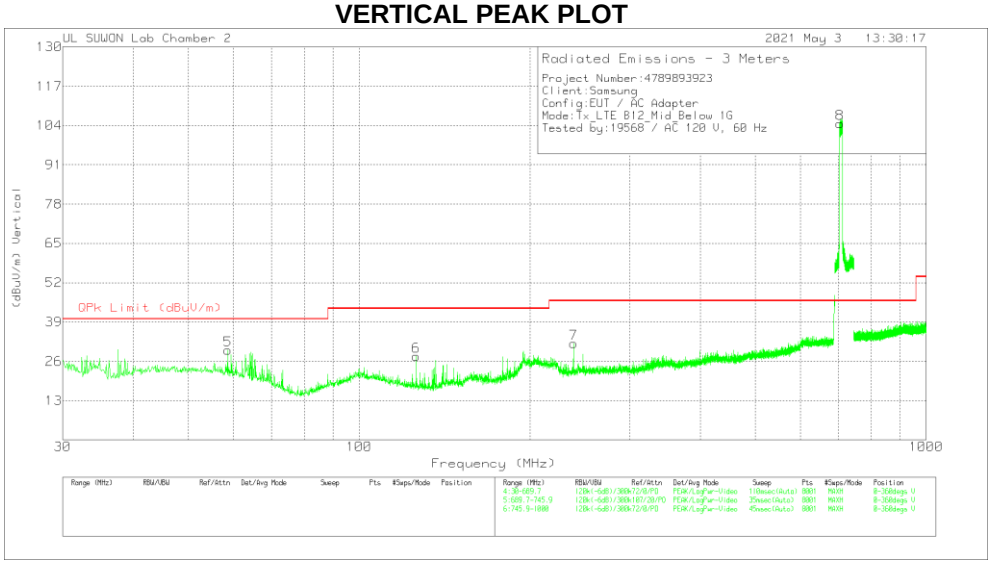
UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_15B(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

MID CHANNEL(737.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

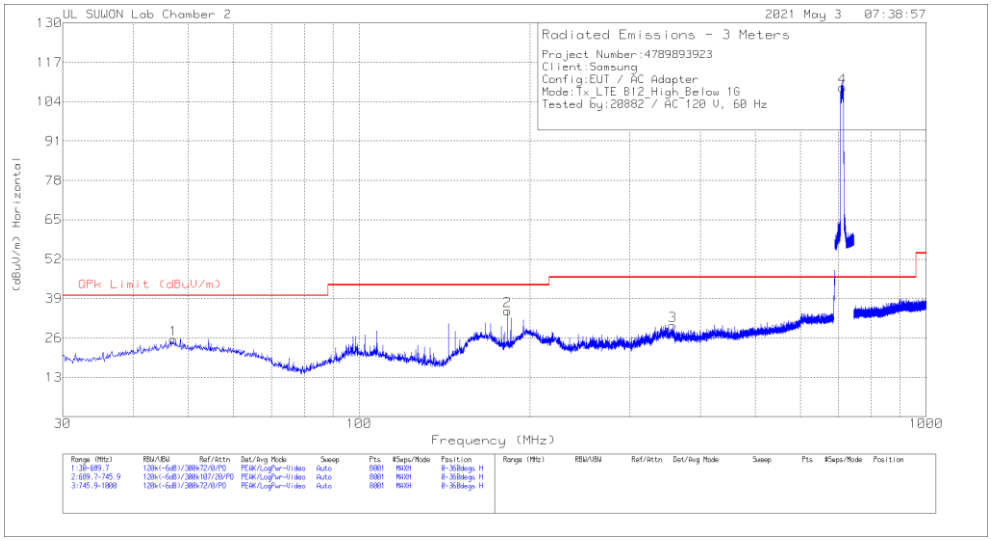
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	39.8131	9.43	Pk	18.5	.6	28.53	40	-11.47	0-360	300	H
2	98.3618	18.63	Pk	17.2	1.1	36.93	43.52	-6.59	0-360	300	H
3	337.587	10.5	Pk	20.3	2	32.8	46.02	-13.22	0-360	100	H
4	711.0982	78.88	Pk	25.6	3	107.48	**46.02**	**61.46**	0-360	100	H
5	58.6147	10.33	Pk	18.8	.6	29.73	40	-10.27	0-360	100	V
6	126.0694	11.82	Pk	14.6	1.3	27.72	43.52	-15.8	0-360	100	V
7	238.9612	12.15	Pk	18.1	1.7	31.95	46.02	-14.07	0-360	100	V
8	705.1972	76.17	Pk	25.5	3	104.67	**46.02**	**58.65**	0-360	100	V

Pk - Peak detector

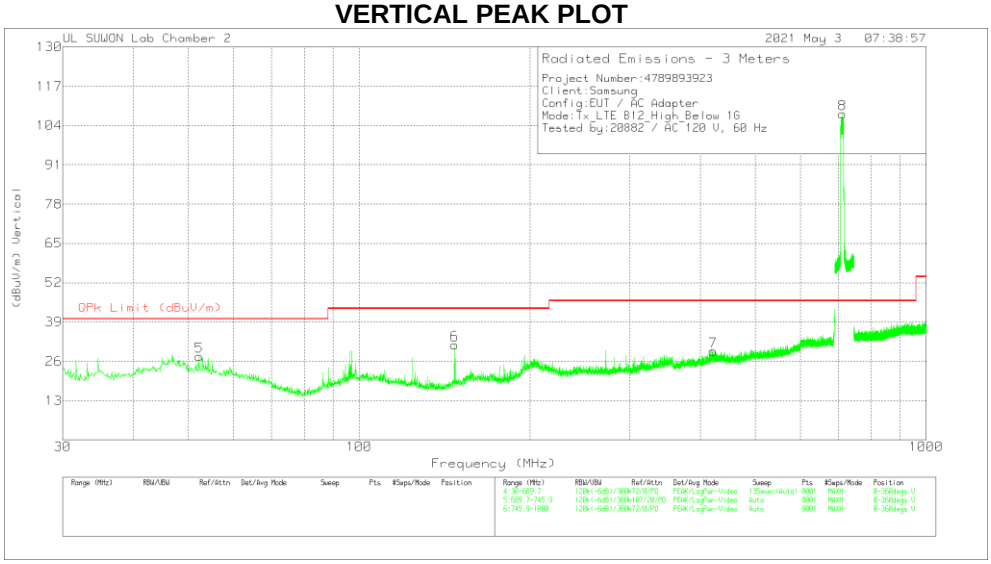
Note: Unwanted emissions captured from 699MHz to 716MHz and from 729MHz to 746MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(744.5 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	47.0698	4.73	Pk	19.8	.9	25.43	40	-14.57	0-360	100	H
2	182.7215	17.92	Pk	15.6	1.4	34.92	43.52	-8.6	0-360	100	H
3	357.543	7.3	Pk	20.5	2.2	30	46.02	-16.02	0-360	100	H
4	711.8288	80.17	Pk	25.6	3	108.77	**46.02**	**62.75**	0-360	100	H
5	52.1825	7.36	Pk	19.7	.6	27.66	40	-12.34	0-360	200	V
6	147.2624	16.4	Pk	13.7	1.4	31.5	43.52	-12.02	0-360	100	V
7	421.122	5.03	Pk	22	2.4	29.43	46.02	-16.59	0-360	100	V
8	711.9552	79.24	Pk	25.6	3	107.84	**46.02**	**61.82**	0-360	100	V

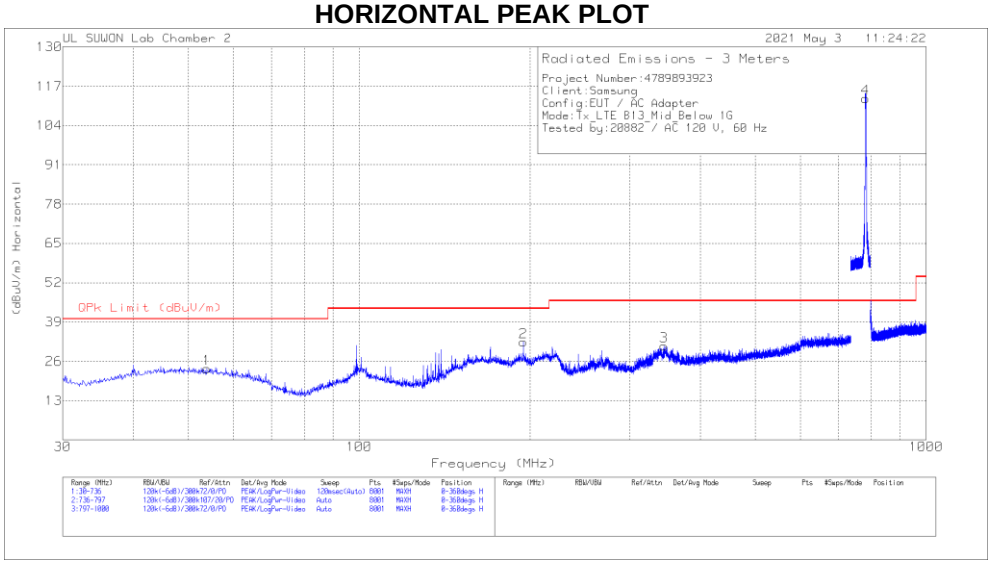
Pk - Peak detector

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

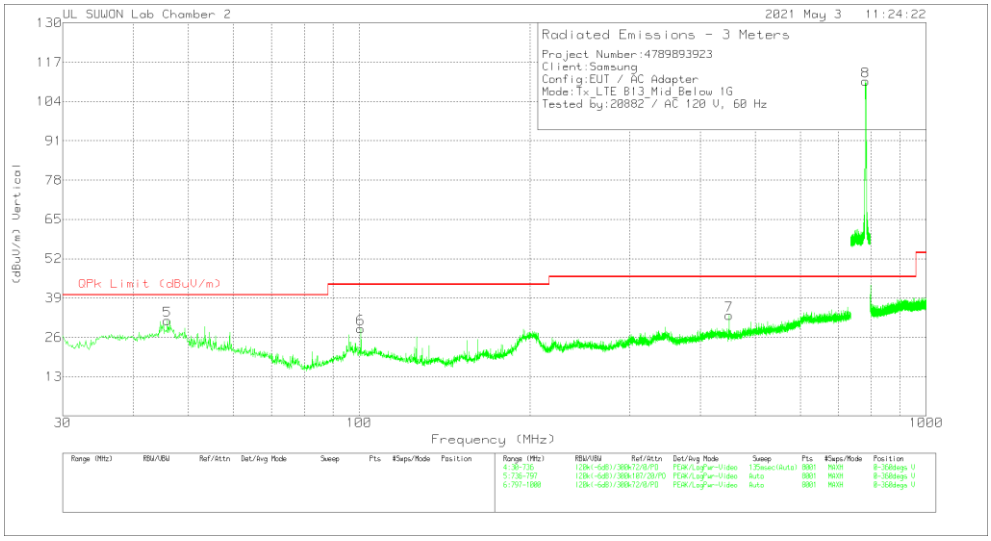
7.1.10.Below 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	53.8275	3.37	Pk	19.4	.8	23.57	40	-16.43	0-360	300	H
2	194.7628	13.66	Pk	17.3	1.5	32.46	43.52	-11.06	0-360	100	H
3	344.7878	8.11	Pk	20.7	2.2	31.01	46.02	-15.01	0-360	100	H
4	781.5365	83.18	Pk	26.5	3.2	112.88	**46.02**	**66.86**	0-360	100	H
5	45.885	10.93	Pk	19.7	.9	31.53	40	-8.47	0-360	100	V
6	100.6883	10.2	Pk	17.5	1.1	28.8	43.52	-14.72	0-360	100	V
7	448.9228	8.87	Pk	22	2.4	33.27	46.02	-12.75	0-360	200	V
8	781.7729	81.14	Pk	26.5	3.1	110.74	**46.02**	**64.72**	0-360	100	V

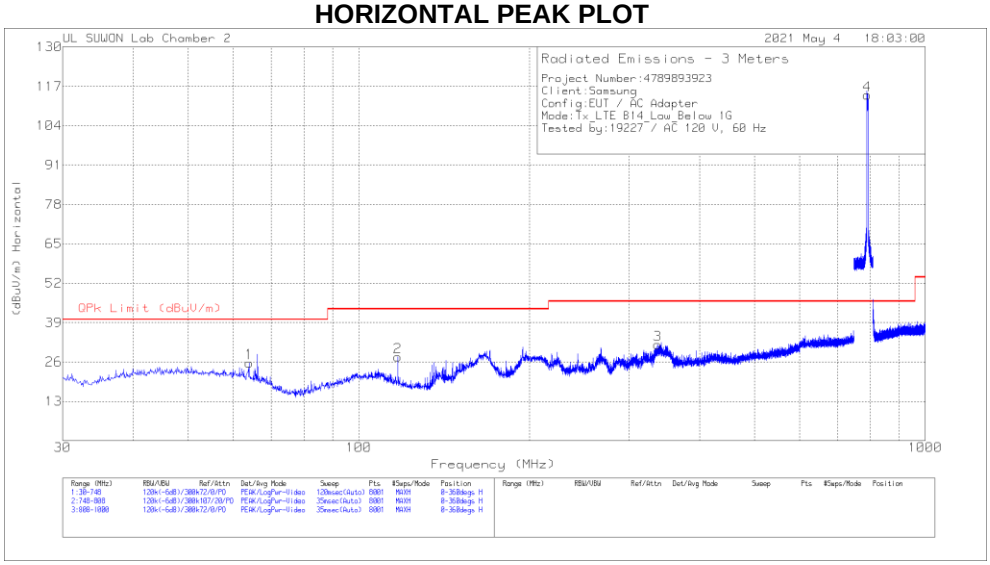
Pk - Peak detector

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

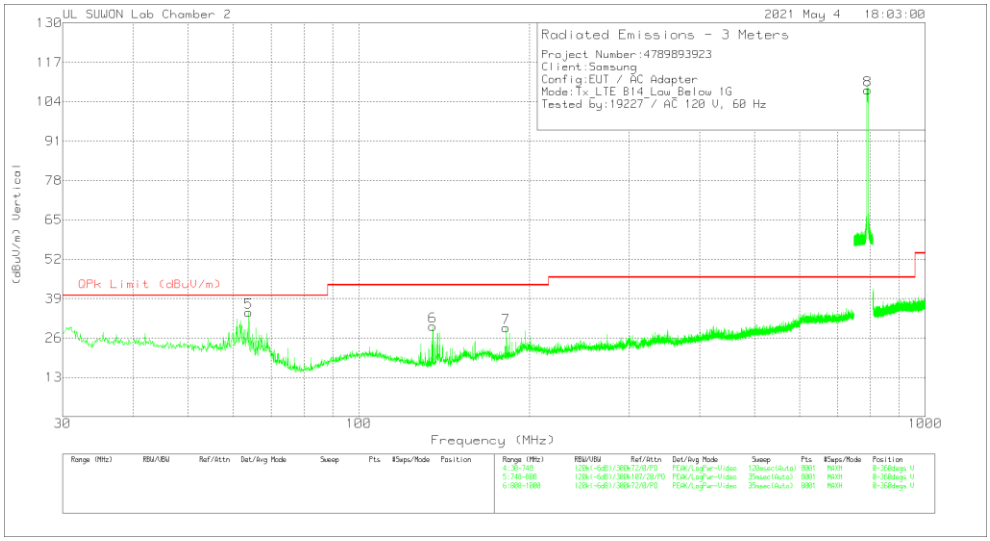
7.1.11.Below 1 GHz in the LTE Band 14

LOW CHANNEL(759.8 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

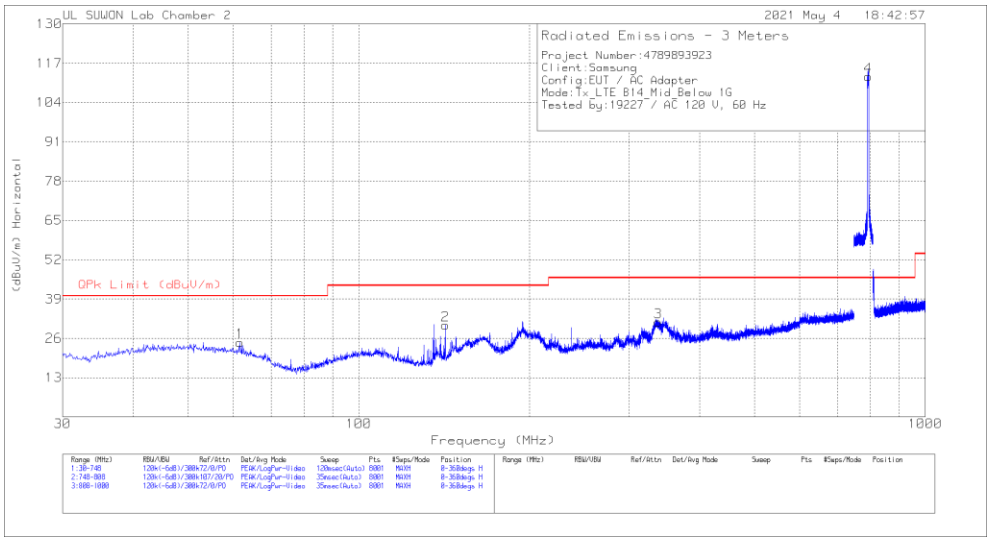
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	64.0153	7.54	Pk	17.4	.8	25.74	40	-14.26	0-360	200	H
2	117.1473	10.44	Pk	15.9	1.3	27.64	43.52	-15.88	0-360	300	H
3	337.2143	9.38	Pk	20.3	2	31.68	46.02	-14.34	0-360	100	H
4	790.0675	84.5	Pk	26.5	3.1	114.1	**46.02**	**68.08**	0-360	100	H
5	63.9255	16.3	Pk	17.4	.8	34.5	40	-5.5	0-360	100	V
6	134.9178	14.69	Pk	13.9	1.3	29.89	43.52	-13.63	0-360	100	V
7	181.7673	12.24	Pk	15.5	1.6	29.34	43.52	-14.18	0-360	200	V
8	791.5825	77.97	Pk	26.6	3.2	107.77	**46.02**	**61.75**	0-360	100	V

Pk - Peak detector

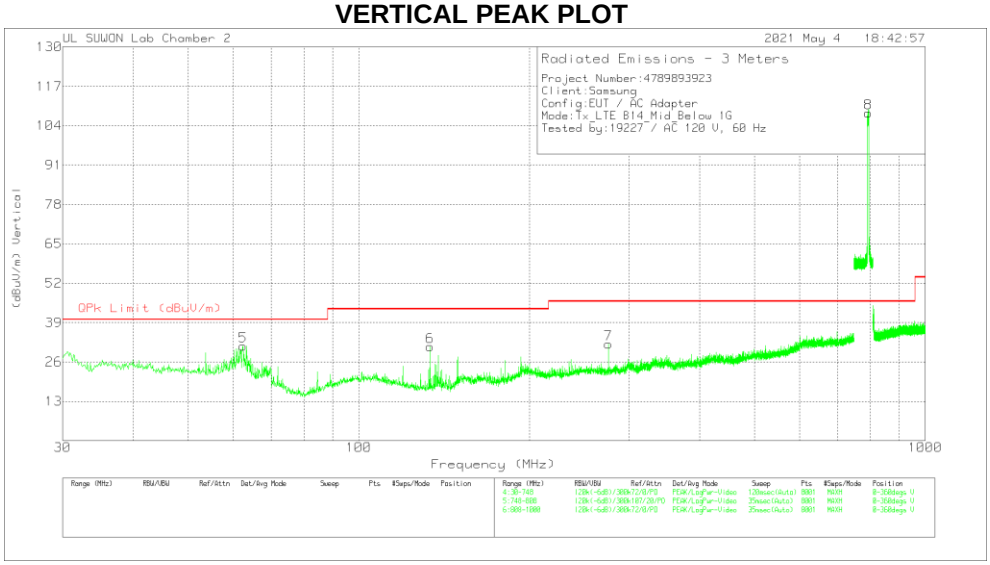
Note: Unwanted emissions captured from 758MHz to 768MHz and from 788MHz to 798MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(763 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

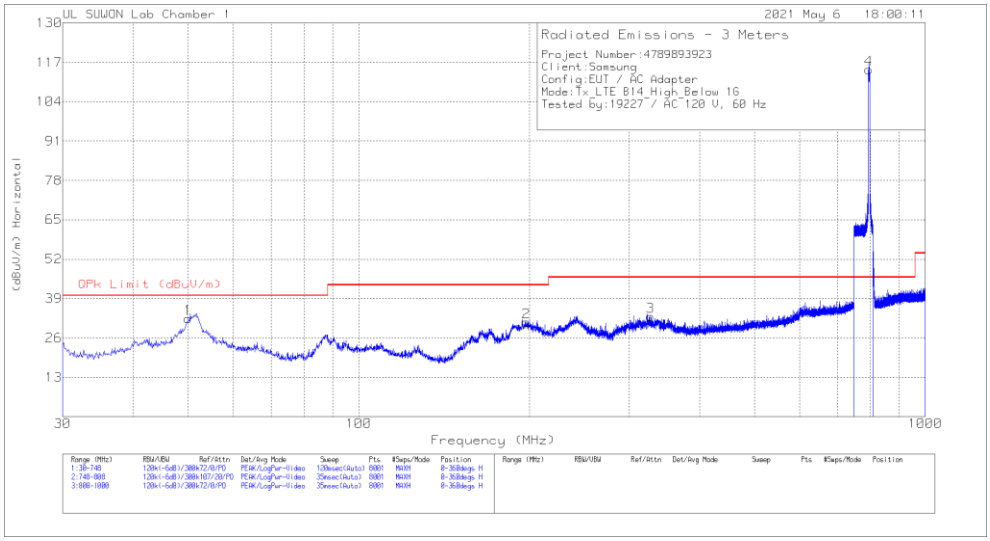
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	61.6818	5.92	Pk	18.1	.7	24.72	40	-15.28	0-360	100	H
2	142.1875	15.27	Pk	13.7	1.4	30.37	43.52	-13.15	0-360	100	H
3	337.5733	9.12	Pk	20.3	2	31.42	46.02	-14.6	0-360	100	H
4	793.885	82.85	Pk	26.7	3.1	112.65	**46.02**	**66.63**	0-360	100	H
5	62.3998	12.53	Pk	17.9	.8	31.23	40	-8.77	0-360	100	V
6	133.4818	15.81	Pk	14	1.3	31.11	43.52	-12.41	0-360	100	V
7	275.915	11.46	Pk	18.6	1.8	31.86	46.02	-14.16	0-360	100	V
8	793.42	78.47	Pk	26.6	3.1	108.17	**46.02**	**62.15**	0-360	100	V

Pk - Peak detector

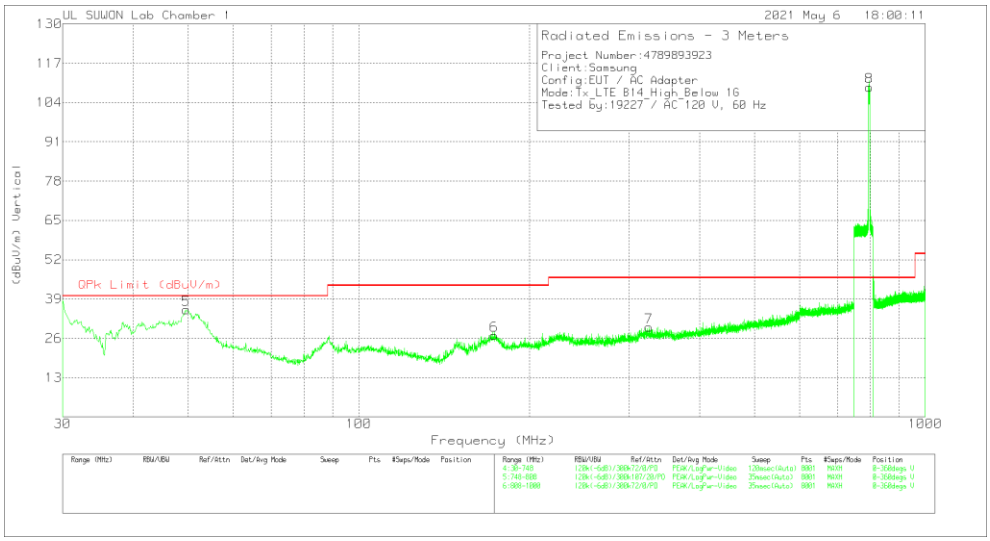
Note: Unwanted emissions captured from 758MHz to 768MHz and from 788MHz to 798MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(766.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	\elow_1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	50.0143	11.11	Pk	19.9	1.5	32.51	40	-7.49	0-360	400	H
2	197.653	10.91	Pk	17.4	3	31.31	43.52	-12.21	0-360	100	H
3	327.0725	9.43	Pk	19.9	3.8	33.13	46.02	-12.89	0-360	100	H
4	795.13	81.94	Pk	26.8	5.9	114.64	**46.02**	**68.62**	0-360	100	H
5	49.5655	14.07	Pk	19.9	1.5	35.47	40	-4.53	0-360	100	V
6	173.4205	9.52	Pk	14.7	2.8	27.02	43.52	-16.5	0-360	100	V
7	325.457	6.18	Pk	19.8	3.8	29.78	46.02	-16.24	0-360	200	V
8	796.0525	76.42	Pk	26.8	5.9	109.12	**46.02**	**63.1**	0-360	100	V

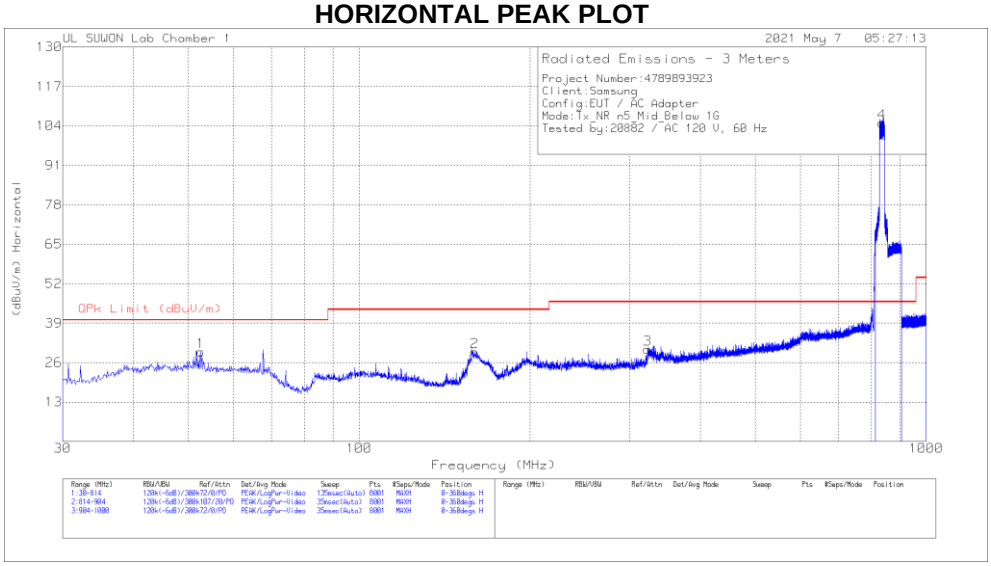
Pk - Peak detector

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

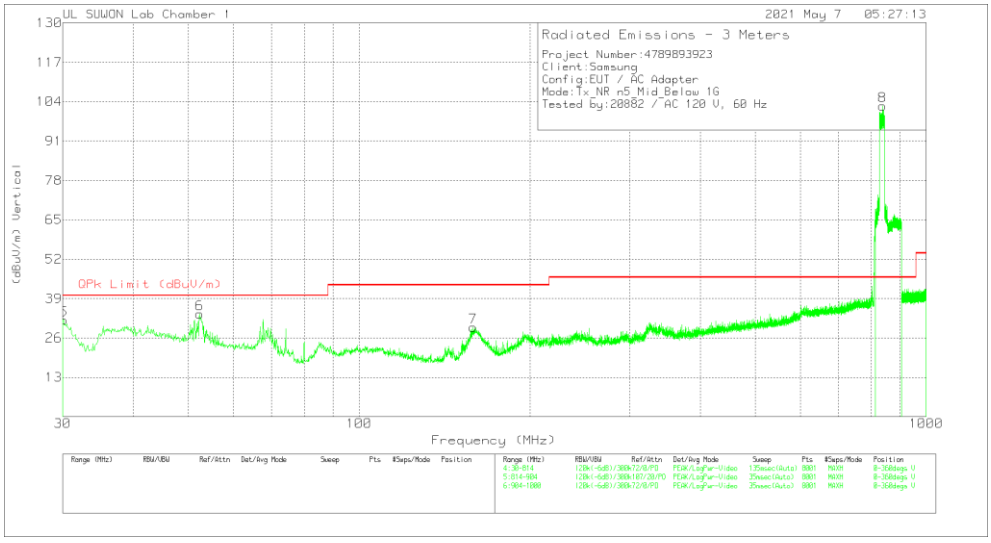
7.1.12.Below 1 GHz in the 5G NR Band 5

MID CHANNEL(881.6MHz)

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	52.54	8.31	Pk	19.6	1.6	29.51		40	-10.49	0-360	400	H
2	159.85	12.52	Pk	14.3	2.7	29.52		43.52	-14	0-360	200	H
3	322.334	6.87	Pk	19.7	3.8	30.37		46.02	-15.65	0-360	100	H
4	836.1963	71.95	Pk	27	6	104.95		**46.02**	**58.93**	0-360	100	H
5	30.098	14.75	Pk	16	1.2	31.95		40	-8.05	0-360	100	V
6	52.344	12.68	Pk	19.7	1.6	33.98		40	-6.02	0-360	100	V
7	158.87	12.68	Pk	14.2	2.7	29.58		43.52	-13.94	0-360	100	V
8	837.31	69.47	Pk	27.1	6	102.57		**46.02**	**56.55**	0-360	100	V

Pk - Peak detector

Note. Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

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	Limits (dBμV)	
(MHz)	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.		

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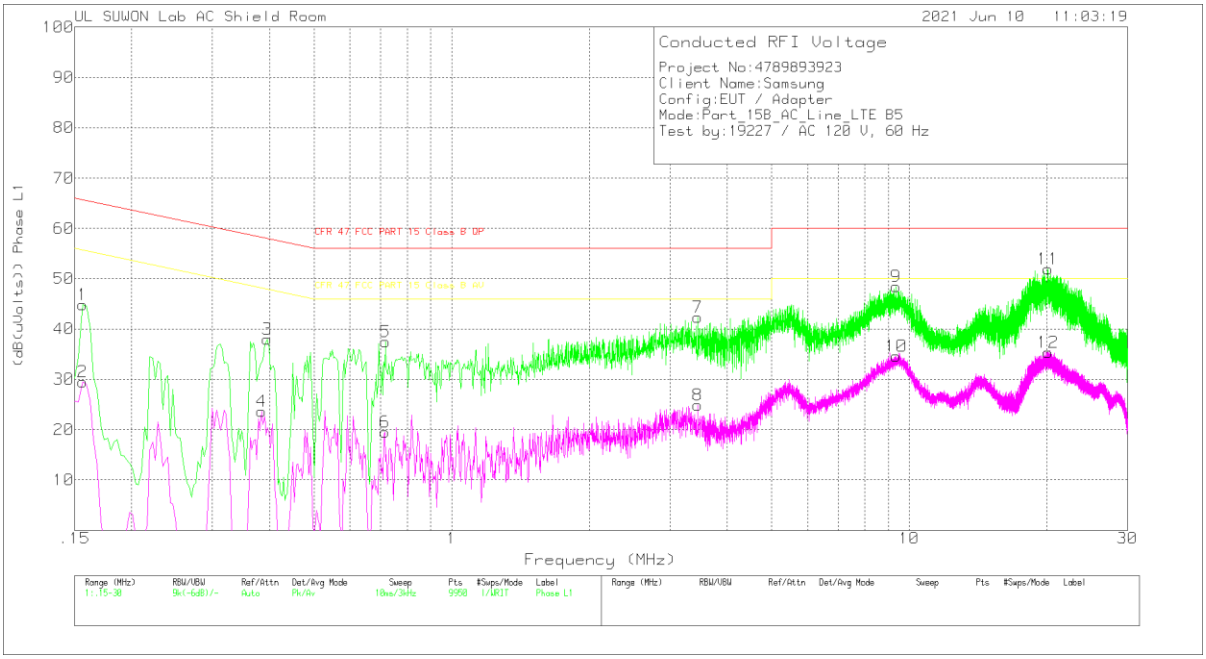
7.2.1. CONDUCTED EMISSIONS

6 WORST EMISSIONS

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	ENV216_10 1836_With ex-cord_L1	CABLELOS S(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	.156	34.84	Pk	9.9	.1	44.84	65.67	-20.83	-	-
2	.156	19.46	Av	9.9	.1	29.46	-	-	55.67	-26.21
3	.396	27.91	Pk	9.9	.2	38.01	57.94	-19.93	-	-
4	.384	13.55	Av	9.9	.2	23.65	-	-	48.19	-24.54
5	.717	27.42	Pk	9.9	.2	37.52	56	-18.48	-	-
6	.714	9.46	Av	9.9	.2	19.56	-	-	46	-26.44
7	3.447	32.09	Pk	9.9	.3	42.29	56	-13.71	-	-
8	3.447	14.67	Av	9.9	.3	24.87	-	-	46	-21.13
9	9.357	37.98	Pk	10	.4	48.38	60	-11.62	-	-
10	9.372	24.22	Av	10	.4	34.62	-	-	50	-15.38
11	20.124	41.08	Pk	10.5	.4	51.98	60	-8.02	-	-
12	20.115	24.44	Av	10.5	.4	35.34	-	-	50	-14.66

Pk - Peak detector
Av - Average detection

Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

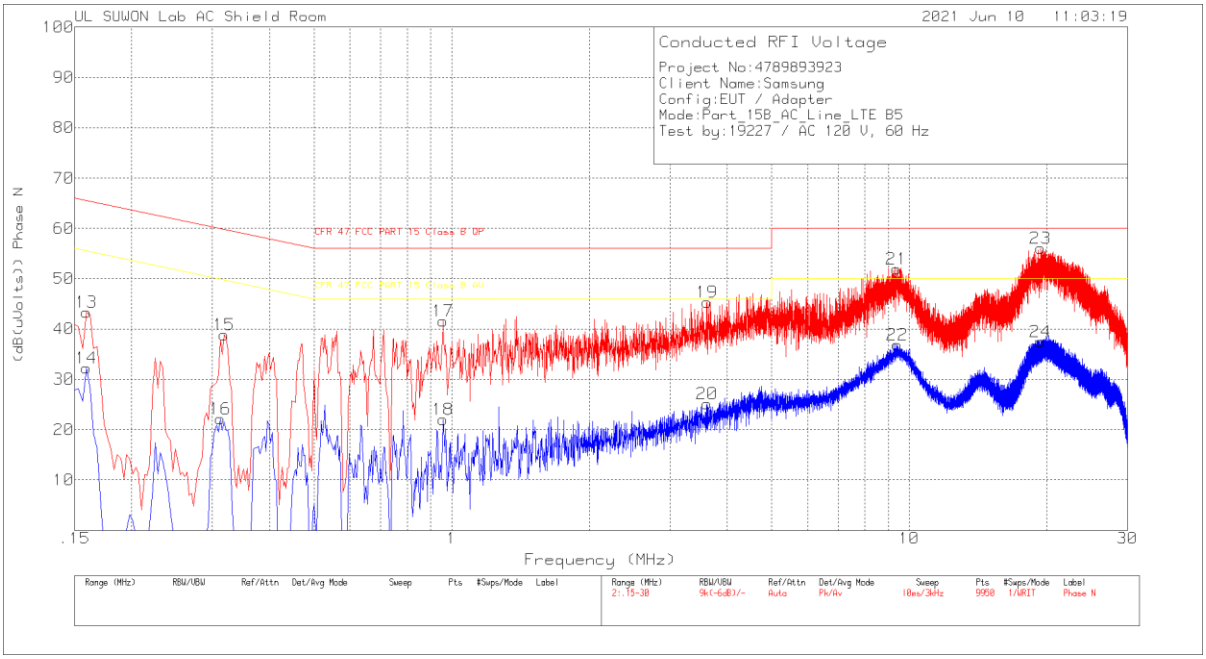
Frequency (MHz)	Meter Reading (dBuV)	Det	ENV216_10 1836_With ex-cord_L1	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
20.1233	37.63	Qp	10.5	.4	48.53	60	-11.47	-	-

Qp - Quasi-Peak detector

6 WORST EMISSIONS

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	ENV216_10 1836_With ex-cord_N	CABLELOS S(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	.159	33.32	Pk	9.9	.1	43.32	65.52	-22.2	-	-
14	.159	22.21	Av	9.9	.1	32.21	-	-	55.52	-23.31
15	.318	28.79	Pk	9.8	.2	38.79	59.76	-20.97	-	-
16	.312	12.12	Av	9.8	.2	22.12	-	-	49.92	-27.8
17	.957	31.44	Pk	9.8	.3	41.54	56	-14.46	-	-
18	.957	11.93	Av	9.8	.3	22.03	-	-	46	-23.97
19	3.612	35.22	Pk	9.8	.3	45.32	56	-10.68	-	-
20	3.612	14.98	Av	9.8	.3	25.08	-	-	46	-20.92
21	9.381	41.55	Pk	10	.4	51.95	60	-8.05	-	-
22	9.405	26.47	Av	10	.4	36.87	-	-	50	-13.13
23	19.341	45.15	Pk	10.5	.4	56.05	60	-3.95	-	-
24	19.356	26.62	Av	10.5	.4	37.52	-	-	50	-12.48

Pk - Peak detector
Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	ENV216_10 1836_With ex-cord_N	CABLELOS S(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)
9.38175	30.3	Qp	10	.4	40.7	60	-19.3	-	-
19.3412	31.96	Qp	10.5	.4	42.86	60	-17.14	-	-

Qp - Quasi-Peak detector

END OF TEST REPORT

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