CERTIFICATION TEST REPORT

Report Number. : 4789867826-E1V1

Applicant : SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA

Model : SM-T738U

FCC ID : A3LSMT738U

EUT Description : WCDMA/LTE/5G NR Tablet + BT/BLE, DTS/UNII a/b/g/n/ac

Test Standard(s) : FCC 47 CFR PART 15 SUBPART B

Date Of Issue:
2021-05-25

Prepared by:
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Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
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IAS ACCREDITED
Testing Laboratory
TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2021-05-25	Initial issue	Hyunsik Yun

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.

EUT DESCRIPTION: WCDMA/LTE/5G NR Tablet + BT/BLE, DTS/UNII a/b/g/n/ac

MODEL NUMBER: SM-T738U

SERIAL NUMBER: 5135f055491d7ece (RADIATED)

DATE TESTED: 2021-04-16 ~ 2021-05-25;

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

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:

Hyunsik Yun
Suwon Lab Engineer
UL Korea, Ltd.

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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.

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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:

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 1, Clause 4.4.2 in IEC Guide 115:2007.

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

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

5.2. TEST MODE

Mode	Description
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)
5G NR BAND n5	Communicating with Call simulator(E7515B)
5G NR BAND n71	Communicating with Call simulator(E7515B)

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5.3. WORST-CASE ORIENTATION AND MODE

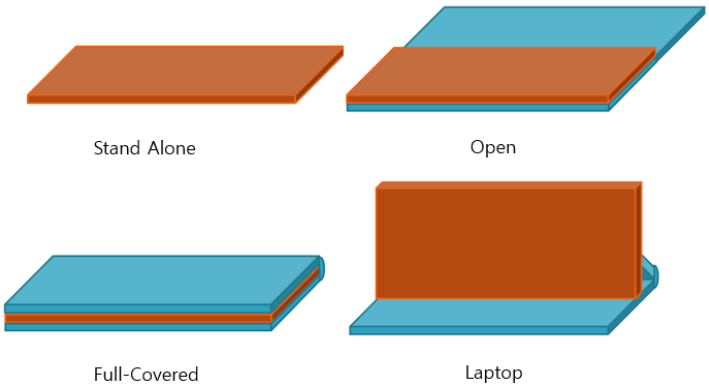
i. Worst Axis Condition

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	RSE			
	X	Y	Z	Laptop
WCDMA B5	-	Stand Alone	-	-
LTE B12	Stand Alone	-	-	-
LTE B13	Stand Alone	-	-	-
LTE B14	Stand Alone	-	-	-
LTE B26	Stand Alone	-	-	-
LTE B71	-	Stand Alone	-	-
NR B5	-	Stand Alone	-	-
NR B71	Stand Alone	-	-	-

ii. Foldable Condition

The Fundamental of the EUT was investigated in three foldable conditions(Open, Laptop, Full-Covered).



LTE Band 5

LTE Band 5 (Rx Frequency range: 869-894 MHz) is covered by LTE Band 26 (Rx Frequency range: 859-894 MHz) due to overlapping frequency range.

LTE Band 17

LTE Band 17 (Rx Frequency range: 734-746 MHz) is covered by LTE Band 12 (Rx Frequency range: 729-746 MHz) due to overlapping 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	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Charger	SAMSUNG	EP-TA200	R37R1XS0P35DK3	N/A
Data Cable	SAMSUNG	EP-DT725BBE	N/A	N/A

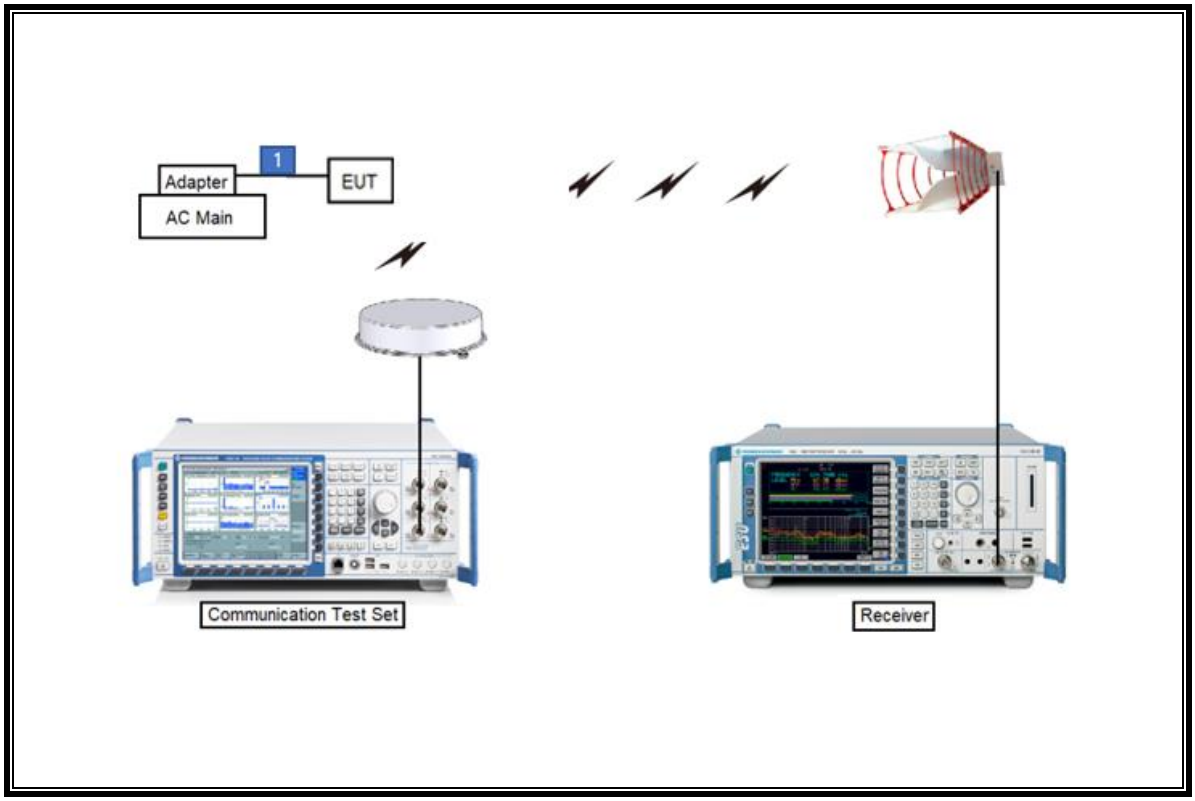
I/O CABLE

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)



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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, Horn, 40 GHz	ETS	3116C	00166155	08-04-22
Preamplifier	ETS	3116C-PA	00168841	08-06-21
Antenna, Horn, 40 GHz	ETS	3116C	00168645	08-04-22
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	08-19-22
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	08-13-22
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	08-13-22
Antenna, Horn, 18 GHz	ETS	3115	00167211	07-27-22
Antenna, Horn, 18 GHz	ETS	3115	00161451	08-15-22
Antenna, Horn, 18 GHz	ETS	3117	00168724	07-27-22
Antenna, Horn, 18 GHz	ETS	3117	00168717	08-15-22
Communications Test Set	R&S	CMW500	115331	08-03-21
Preamplifier, 1000 MHz	Sonoma	310N	341282	08-03-21
Preamplifier, 1000 MHz	Sonoma	310N	370599	08-06-21
Preamplifier, 1000 MHz	Sonoma	310N	351741	08-03-21
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	08-03-21
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	08-04-21
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	08-03-21
EMI Test Receive, 40 GHz	R&S	ESU40	100439	08-03-21
EMI Test Receive, 40 GHz	R&S	ESU40	100457	08-03-21
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	08-05-21
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G006	08-05-21
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	010	08-05-21
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	011	08-05-21
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G001	08-05-21
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G002	08-05-21
Attenuator	PASTERNACK	PE7087-10	A009	08-05-21
Attenuator	PASTERNACK	PE7087-10	A001	08-03-21
Attenuator	PASTERNACK	PE7087-10	A008	08-03-21
Attenuator	PASTERNACK	PE7004-10	2	08-04-21
Attenuator	PASTERNACK	PE7395-10	A011	08-05-21
UL Software				
Description	**Manufacturer**	**Model**	**Version**	
Radiated software	UL	UL EMC	Ver 9.5	
AC Line Conducted software	UL	UL EMC	Ver 9.5	

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7. APPLICABLE LIMIYS AND TEST RESULTS

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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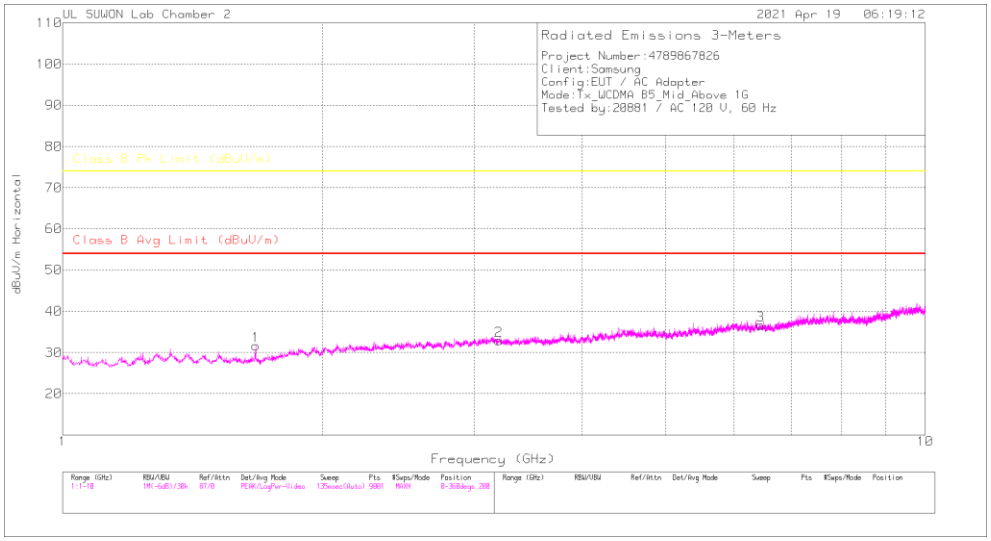
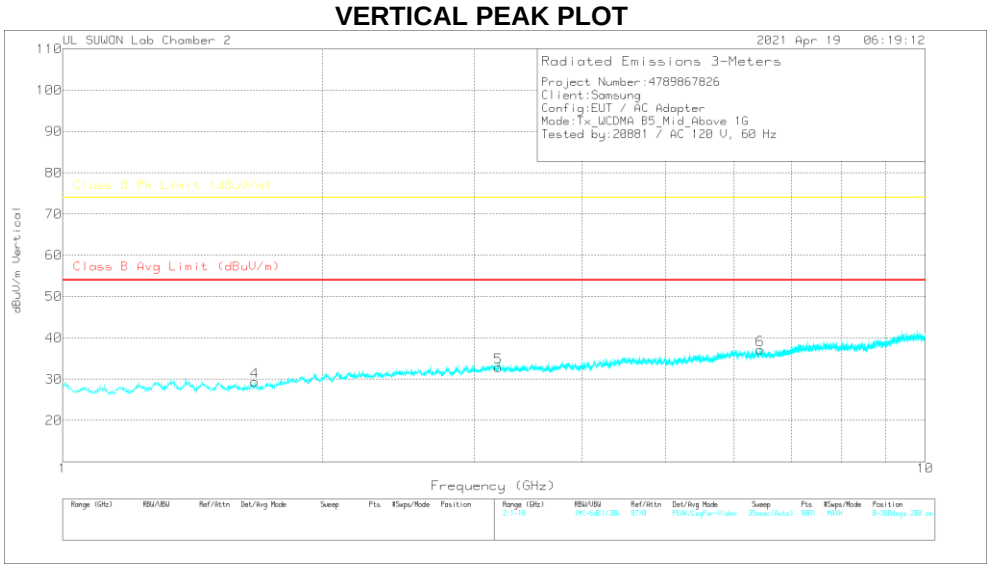
7.1. Above 1 GHz in the WCDMA Band 5

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	1.674	33.64	PK	28.6	-31.3	.7	31.64	-	-	74	-42.36	0-360	100	H
2	3.203	28.9	PK	33	-29.7	.7	32.9	-	-	74	-41.1	0-360	200	H
3	6.446	26.95	PK	35.4	-26.2	.5	36.65	-	-	74	-37.35	0-360	200	H
4	1.671	31.34	PK	28.6	-31.3	.7	29.34	-	-	74	-44.66	0-360	200	V
5	3.197	28.77	PK	33	-29.6	.7	32.87	-	-	74	-41.13	0-360	200	V
6	6.438	27.38	PK	35.4	-26.2	.5	37.08	-	-	74	-36.92	0-360	200	V

Pk - Peak detector

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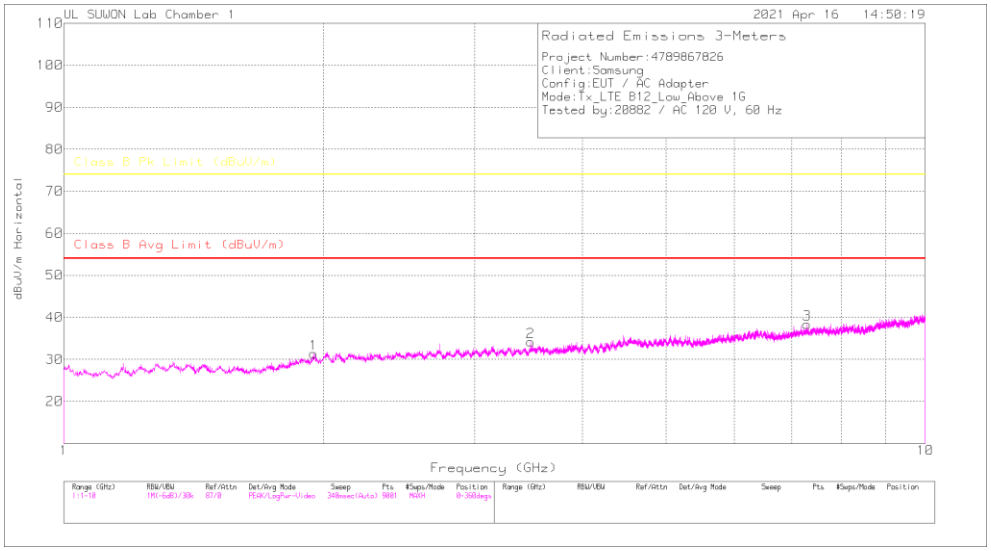
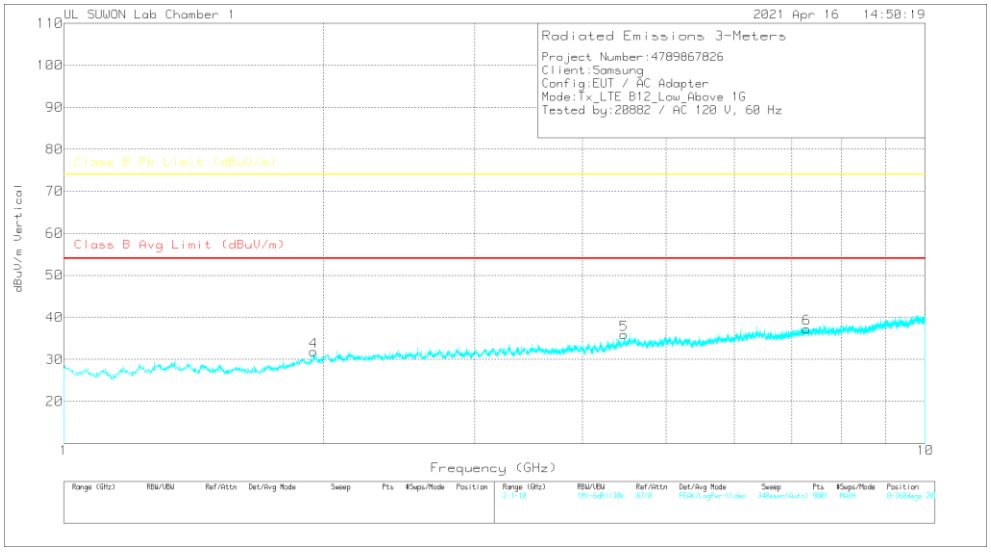
7.2. Above 1 GHz in the LTE Band 12

LOW CHANNEL(730.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.949	35.77	PK	31.1	-36	.5	31.37	-	-	74	-42.63	0-360	100	H
2	3.483	34.18	PK	32.8	-33.3	.5	34.18	-	-	74	-39.82	0-360	200	H
3	7.29	30.09	PK	35.8	-28	.5	38.39	-	-	74	-35.61	0-360	100	H
4	1.95	36.24	PK	31.1	-36	.5	31.84	-	-	74	-42.16	0-360	200	V
5	4.472	33.47	PK	34.2	-32.2	.4	35.87	-	-	74	-38.13	0-360	200	V
6	7.282	28.89	PK	35.8	-27.9	.5	37.29	-	-	74	-36.71	0-360	200	V

Pk - Peak detector

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MID CHANNEL(737.5 MHz)

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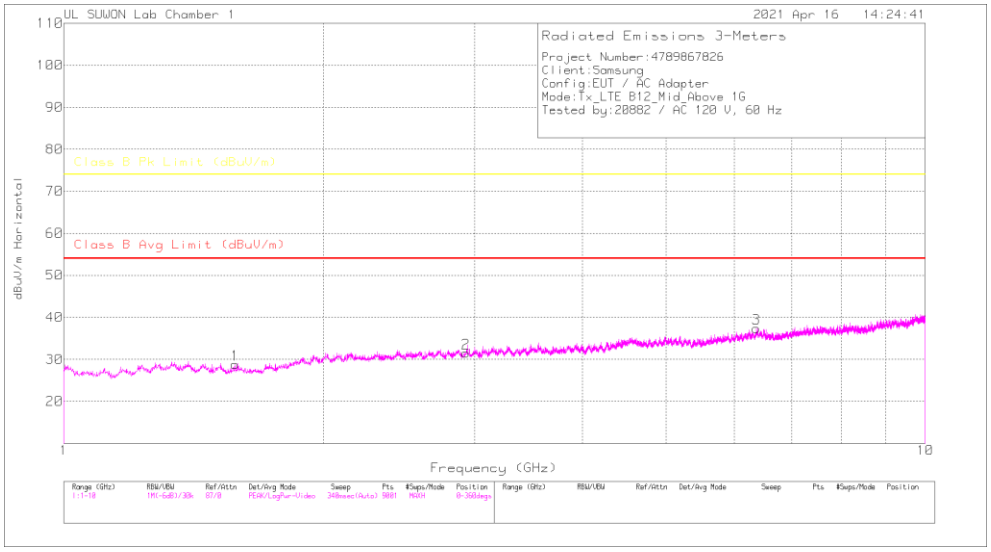
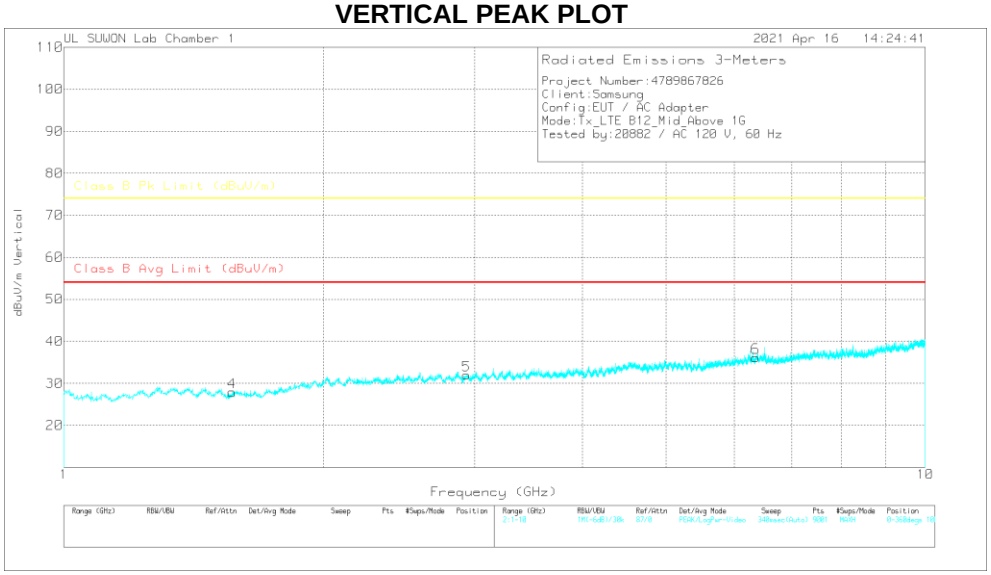


VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.58	36.25	PK	28.5	-36.6	.7	28.85	-	-	74	-45.15	0-360	200	H
2	2.929	32.84	PK	32.3	-34.2	.6	31.54	-	-	74	-42.46	0-360	200	H
3	6.368	31.21	PK	35.5	-29.8	.5	37.41	-	-	74	-36.59	0-360	200	H
4	1.568	35.61	PK	28.5	-36.8	.6	27.91	-	-	74	-46.09	0-360	200	V
5	2.935	33.26	PK	32.3	-34.2	.6	31.96	-	-	74	-42.04	0-360	100	V
6	6.355	30.05	PK	35.5	-29.8	.4	36.15	-	-	74	-37.85	0-360	200	V

Pk - Peak detector

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HIGH CHANNEL(744.5 MHz)

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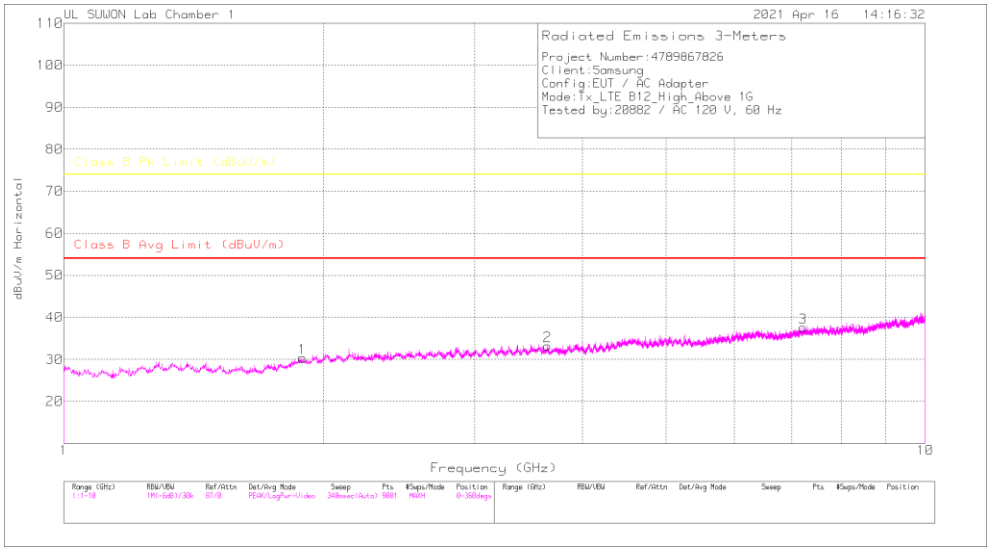
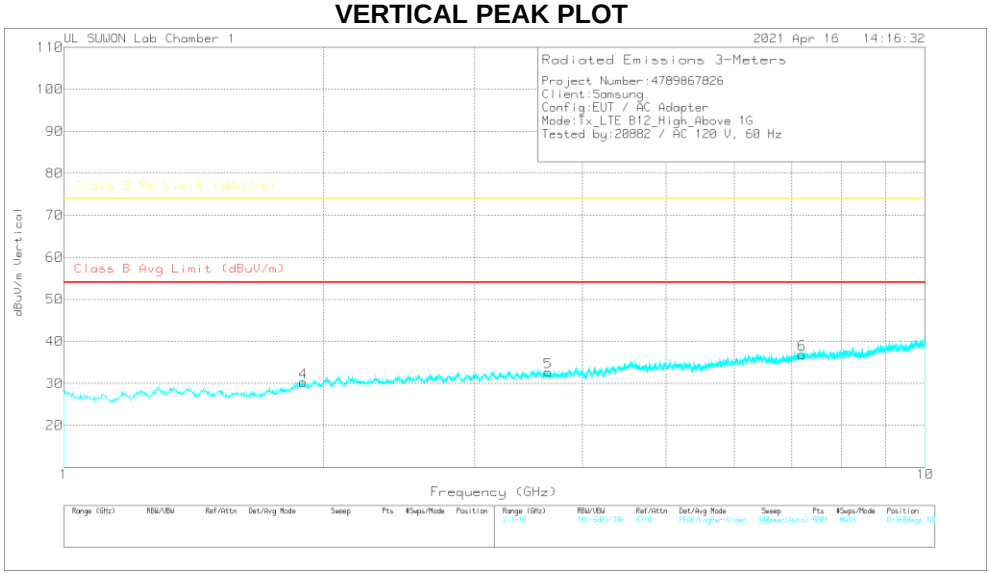


VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.893	35.24	PK	30.6	-36.2	.7	30.34	-	-	74	-43.66	0-360	200	H
2	3.645	33.13	PK	33.1	-33.6	.6	33.23	-	-	74	-40.77	0-360	200	H
3	7.212	29.35	PK	35.9	-28.1	.4	37.55	-	-	74	-36.45	0-360	100	H
4	1.897	35.25	PK	30.6	-36.3	.7	30.25	-	-	74	-43.75	0-360	200	V
5	3.65	32.61	PK	33.1	-33.6	.6	32.71	-	-	74	-41.29	0-360	200	V
6	7.193	28.81	PK	35.9	-28.2	.4	36.91	-	-	74	-37.09	0-360	100	V

Pk - Peak detector

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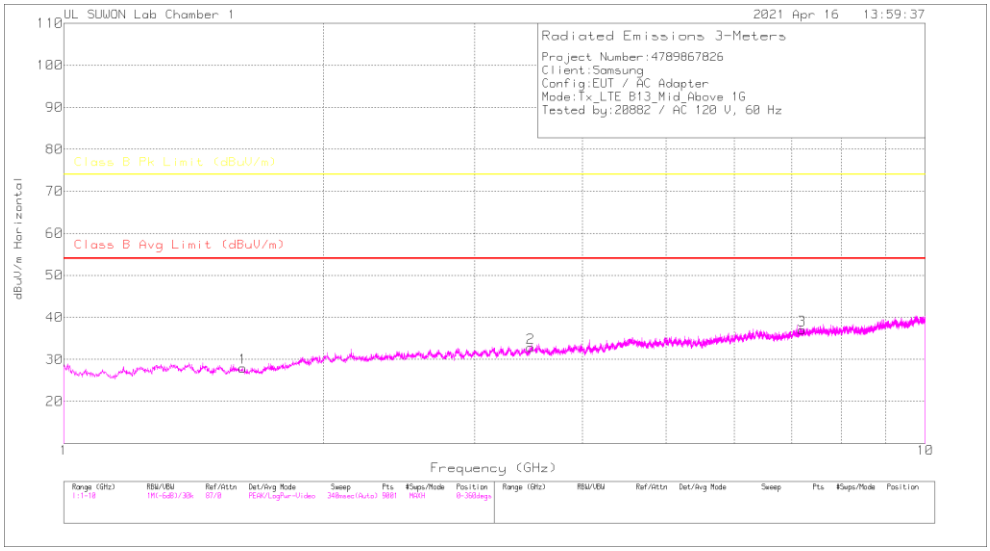
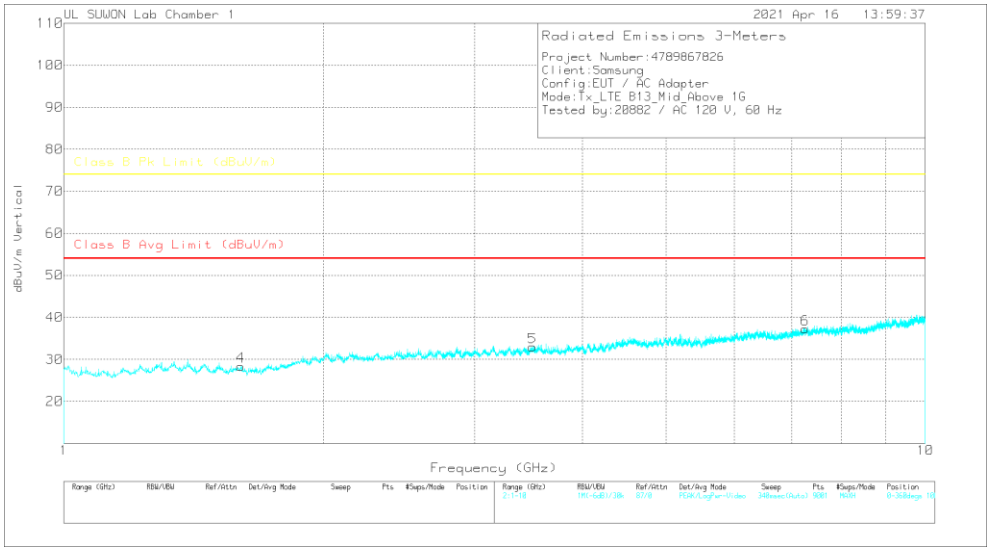
7.3. Above 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.613	35.5	PK	28.4	-36.7	.8	28	-	-	74	-46	0-360	200	H
2	3.482	32.93	PK	32.8	-33.4	.5	32.83	-	-	74	-41.17	0-360	100	H
3	7.197	28.92	PK	35.9	-28.2	.4	37.02	-	-	74	-36.98	0-360	100	H
4	1.605	35.75	PK	28.4	-36.7	.9	28.35	-	-	74	-45.65	0-360	200	V
5	3.499	33.04	PK	32.8	-33.5	.6	32.94	-	-	74	-41.06	0-360	100	V
6	7.254	29.13	PK	35.8	-28.1	.4	37.23	-	-	74	-36.77	0-360	100	V

Pk - Peak detector

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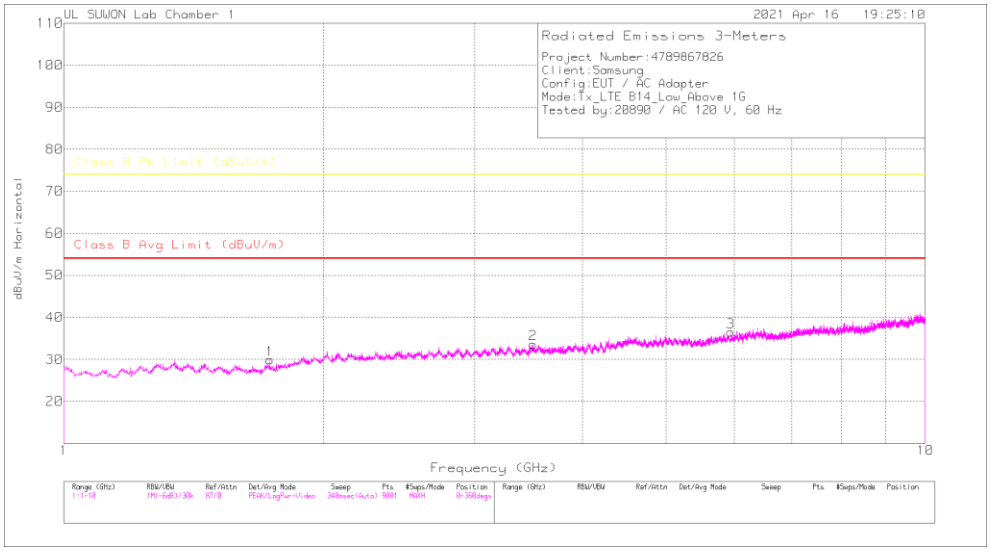
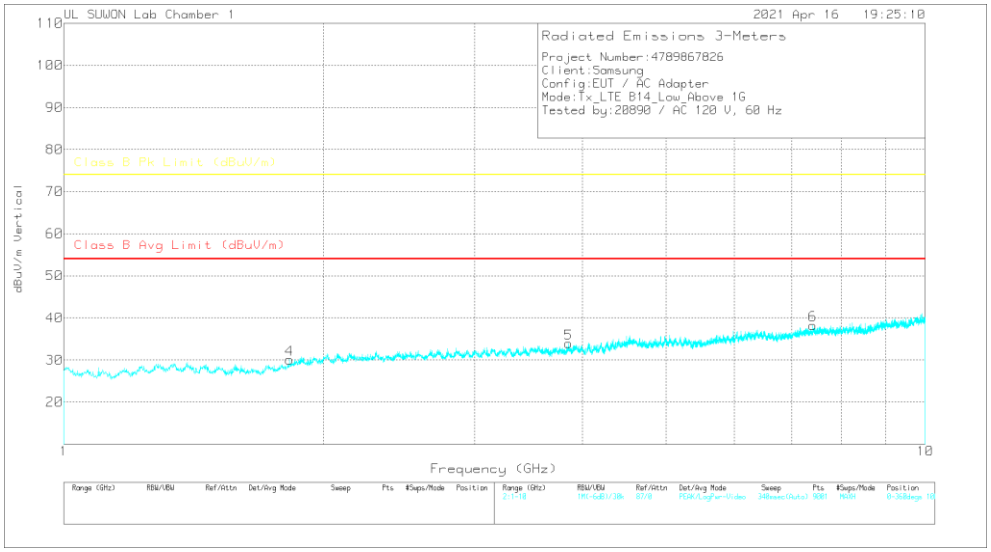
7.4. Above 1 GHz in the LTE Band 14

LOW CHANNEL(759.8 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.735	36.69	PK	28.9	-36.5	.8	29.89	-	-	74	-44.11	0-360	100	H
2	3.508	33.63	PK	32.8	-33.4	.6	33.63	-	-	74	-40.37	0-360	100	H
3	5.945	31.59	PK	35.2	-30.7	.4	36.49	-	-	74	-37.51	0-360	200	H
4	1.828	36.11	PK	29.9	-36.4	.5	30.11	-	-	74	-43.89	0-360	200	V
5	3.854	33.34	PK	33.3	-33.1	.4	33.94	-	-	74	-40.06	0-360	200	V
6	7.405	29.88	PK	35.8	-28	.6	38.28	-	-	74	-35.72	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.

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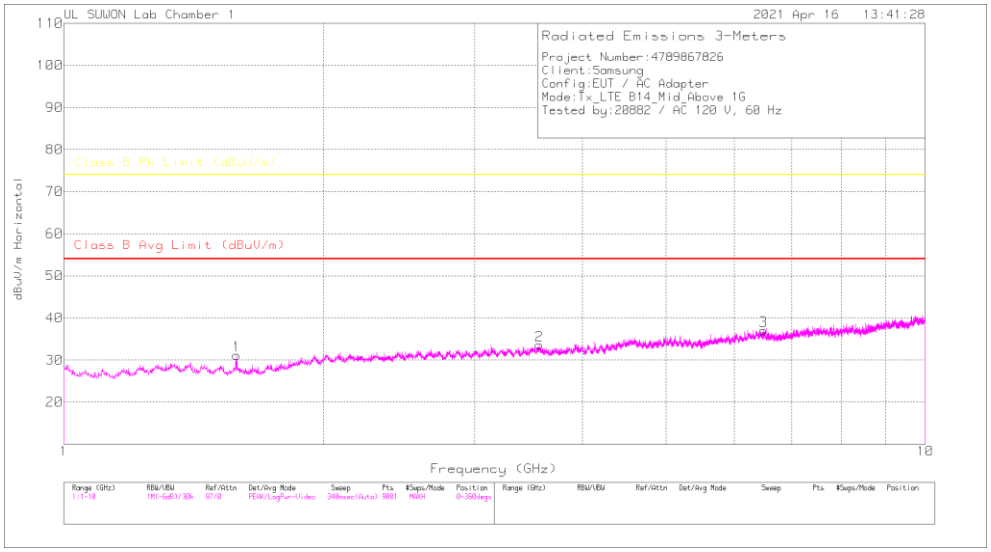
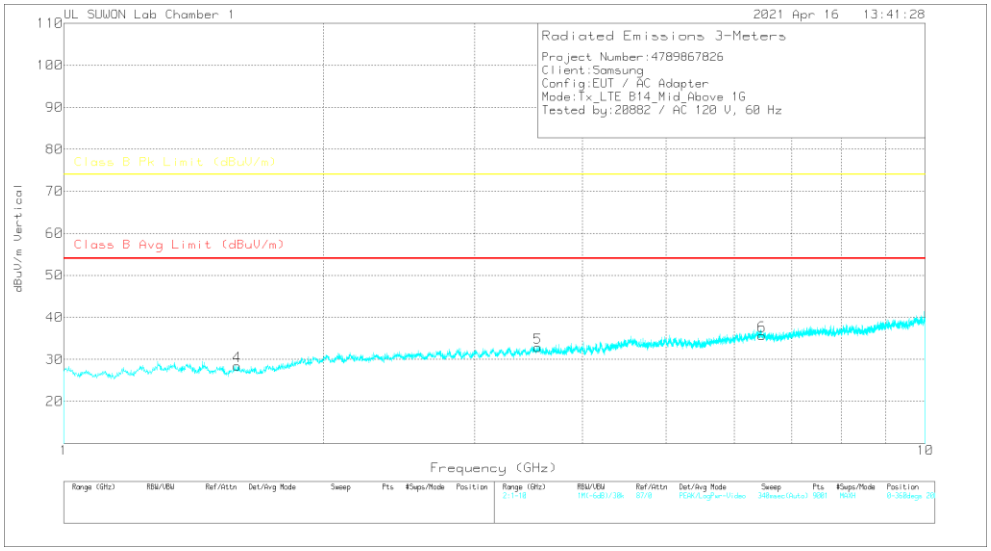
MID CHANNEL(763 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.587	38.44	PK	28.5	-36.6	.8	31.14	-	-	74	-42.86	0-360	100	H
2	3.564	33.56	PK	33	-33.5	.5	33.56	-	-	74	-40.44	0-360	200	H
3	6.491	30.81	PK	35.4	-29.6	.4	37.01	-	-	74	-36.99	0-360	100	H
4	1.59	35.76	PK	28.5	-36.6	.8	28.46	-	-	74	-45.54	0-360	200	V
5	3.549	32.64	PK	33	-33.4	.6	32.84	-	-	74	-41.16	0-360	200	V
6	6.464	29.48	PK	35.5	-29.7	.4	35.68	-	-	74	-38.32	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.

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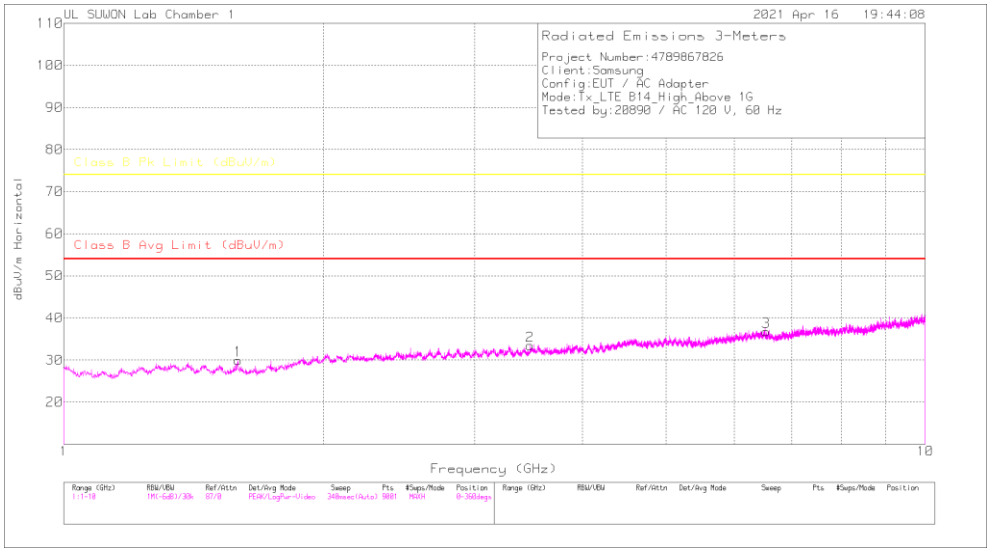
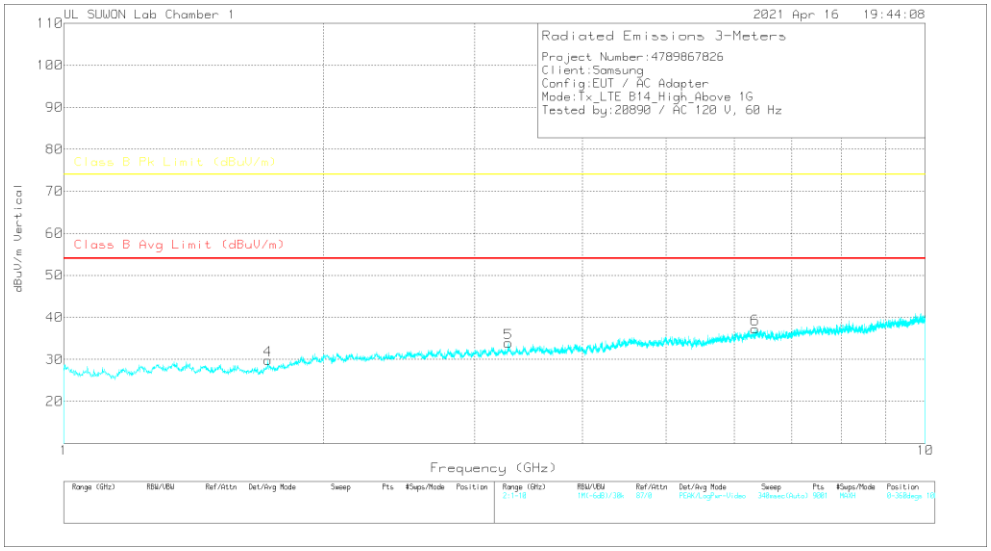
HIGH CHANNEL(766.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.593	37.32	PK	28.5	-36.7	.8	29.92	-	-	74	-44.08	0-360	200	H
2	3.478	33.43	PK	32.8	-33.3	.5	33.43	-	-	74	-40.57	0-360	200	H
3	6.538	30.46	PK	35.4	-29.5	.4	36.76	-	-	74	-37.24	0-360	200	H
4	1.725	36.52	PK	28.8	-36.3	.8	29.82	-	-	74	-44.18	0-360	100	V
5	3.281	34.6	PK	32.6	-34	.7	33.9	-	-	74	-40.1	0-360	200	V
6	6.346	31.27	PK	35.5	-29.9	.4	37.27	-	-	74	-36.73	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.

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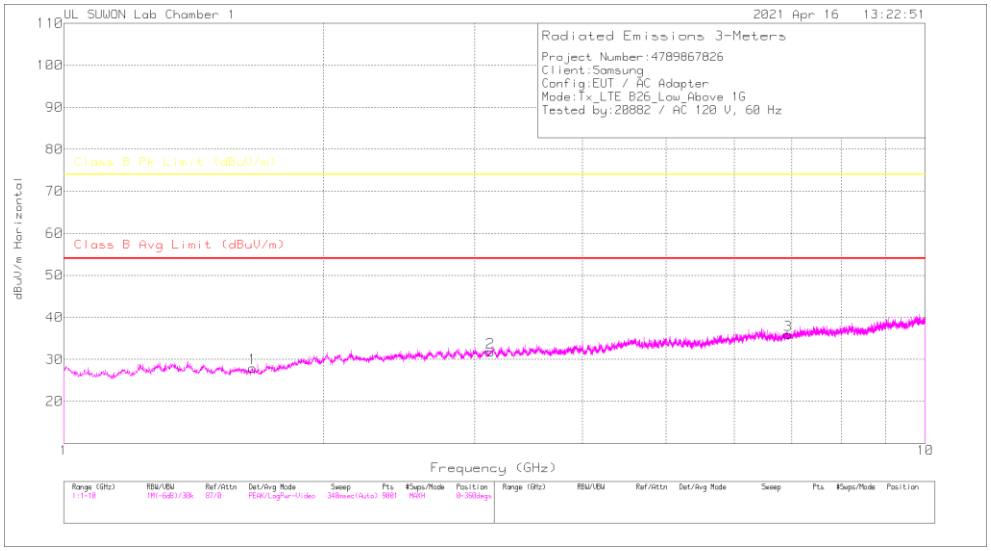
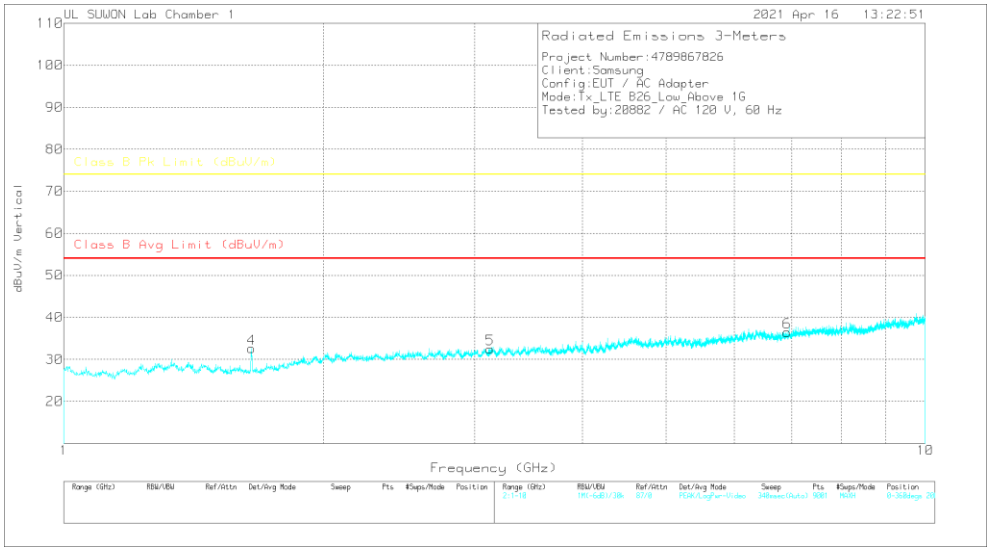
7.5. Above 1 GHz in the LTE Band 26

LOW CHANNEL(860.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.656	35.57	PK	28.4	-36.5	.5	27.97	-	-	74	-46.03	0-360	200	H
2	3.127	32.32	PK	32.6	-33.9	.7	31.72	-	-	74	-42.28	0-360	100	H
3	6.934	28.47	PK	35.7	-28.7	.4	35.87	-	-	74	-38.13	0-360	200	H
4	1.651	40.18	PK	28.4	-36.6	.6	32.58	-	-	74	-41.42	0-360	100	V
5	3.124	33.11	PK	32.6	-33.9	.7	32.51	-	-	74	-41.49	0-360	100	V
6	6.913	29.15	PK	35.6	-28.8	.5	36.45	-	-	74	-37.55	0-360	100	V

Pk - Peak detector

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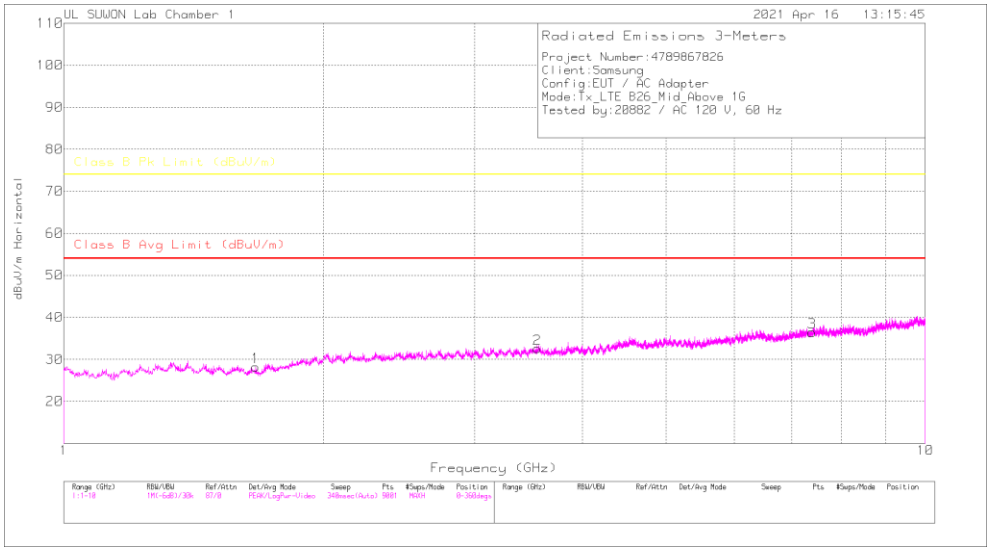
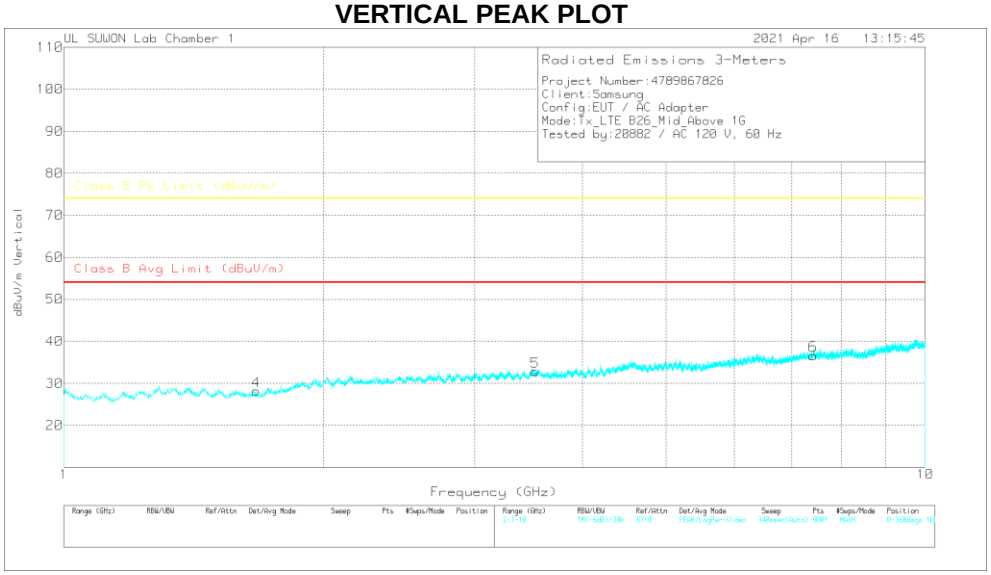
MID CHANNEL(876.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.67	35.82	PK	28.5	-36.6	.5	28.22	-	-	74	-45.78	0-360	100	H
2	3.547	32.39	PK	33	-33.4	.6	32.59	-	-	74	-41.41	0-360	100	H
3	7.389	27.95	PK	35.8	-27.9	.6	36.45	-	-	74	-37.55	0-360	100	H
4	1.672	35.77	PK	28.5	-36.6	.5	28.17	-	-	74	-45.83	0-360	200	V
5	3.524	32.74	PK	32.9	-33.4	.6	32.84	-	-	74	-41.16	0-360	200	V
6	7.409	28.07	PK	35.8	-27.8	.6	36.67	-	-	74	-37.33	0-360	200	V

Pk - Peak detector

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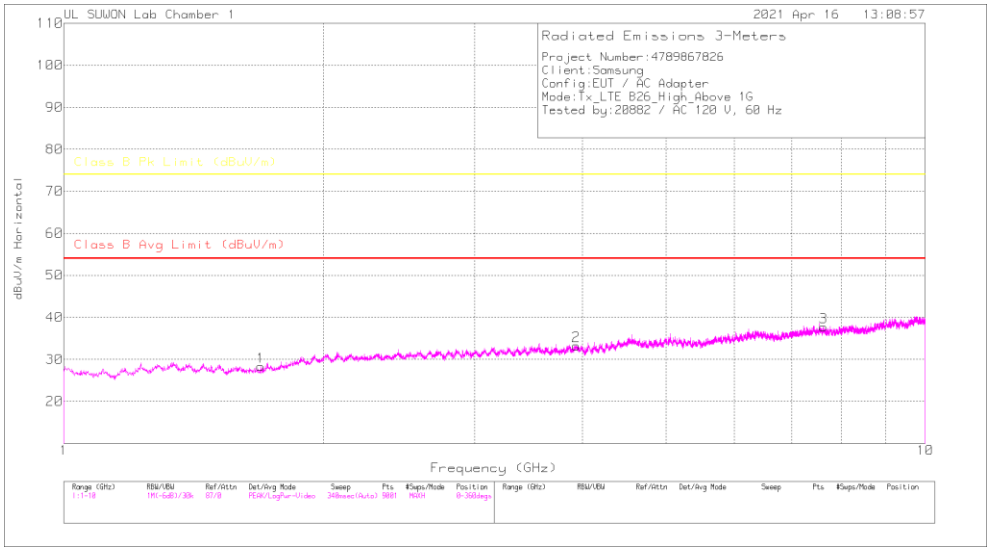
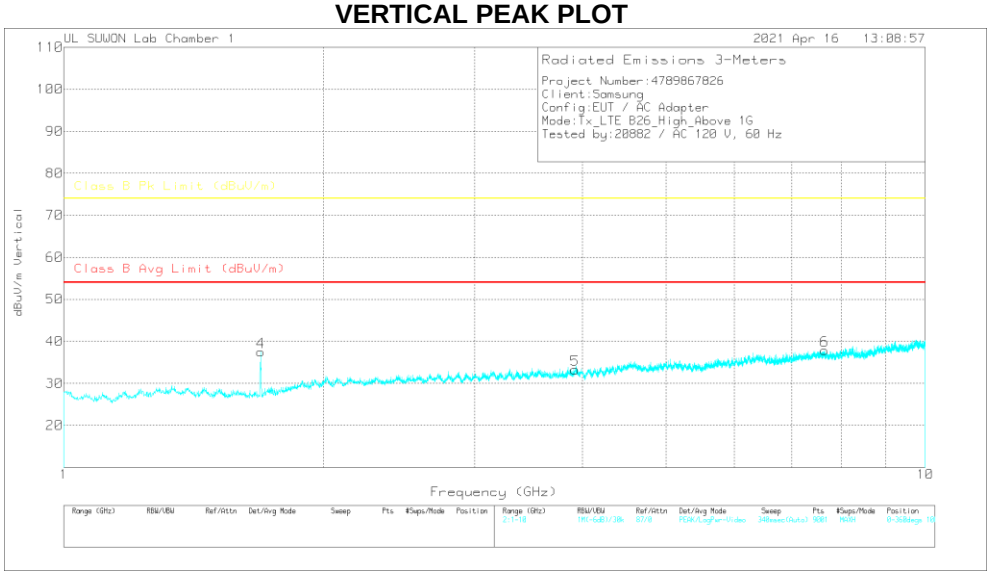
HIGH CHANNEL(892.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.693	35.7	PK	28.6	-36.6	.6	28.3	-	-	74	-45.7	0-360	200	H
2	3.936	32.35	PK	33.4	-33	.5	33.25	-	-	74	-40.75	0-360	200	H
3	7.624	29.1	PK	35.8	-27.5	.3	37.7	-	-	74	-36.3	0-360	200	H
4	1.693	44.91	PK	28.6	-36.6	.6	37.51	-	-	74	-36.49	0-360	100	V
5	3.922	32.39	PK	33.4	-33	.5	33.29	-	-	74	-40.71	0-360	200	V
6	7.642	29.18	PK	35.8	-27.5	.4	37.88	-	-	74	-36.12	0-360	200	V

Pk - Peak detector

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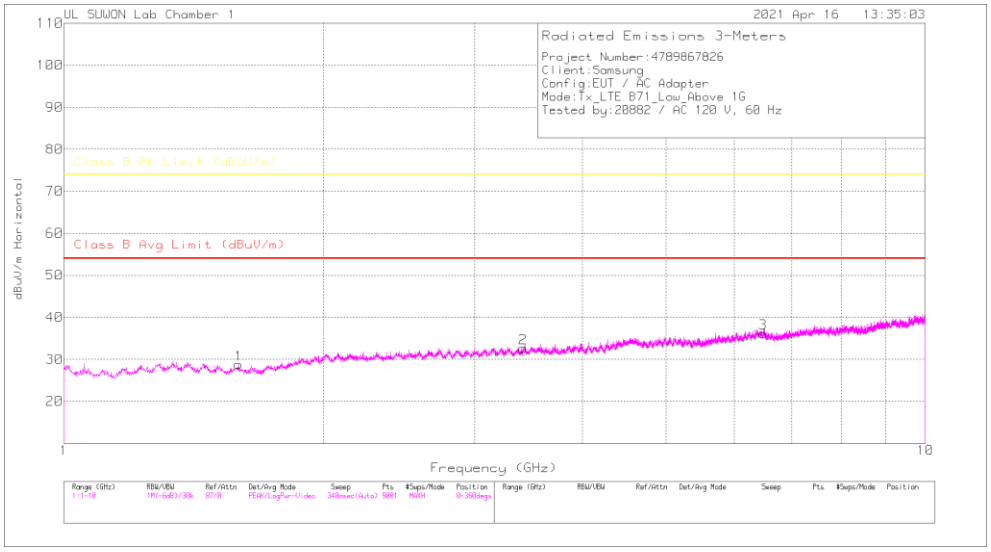
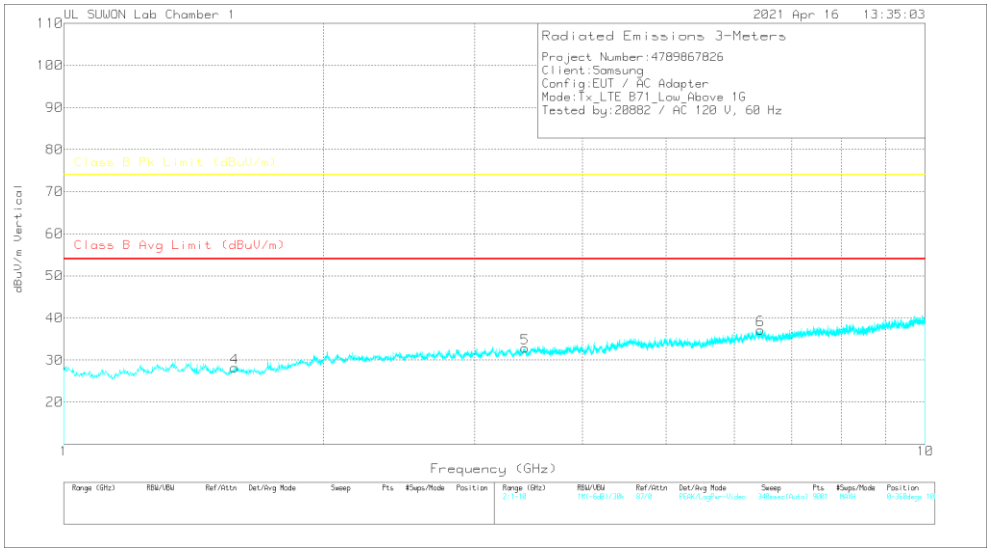
7.6. Above 1 GHz in the LTE Band 71

LOW CHANNEL(618.8 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.595	36.1	PK	28.5	-36.6	.8	28.8	-	-	74	-45.2	0-360	100	H
2	3.414	32.99	PK	32.6	-33.6	.7	32.69	-	-	74	-41.31	0-360	100	H
3	6.48	29.99	PK	35.5	-29.7	.4	36.19	-	-	74	-37.81	0-360	200	H
4	1.578	35.59	PK	28.5	-36.6	.7	28.19	-	-	74	-45.81	0-360	200	V
5	3.432	33.11	PK	32.7	-33.6	.6	32.81	-	-	74	-41.19	0-360	100	V
6	6.436	30.93	PK	35.5	-29.7	.4	37.13	-	-	74	-36.87	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.

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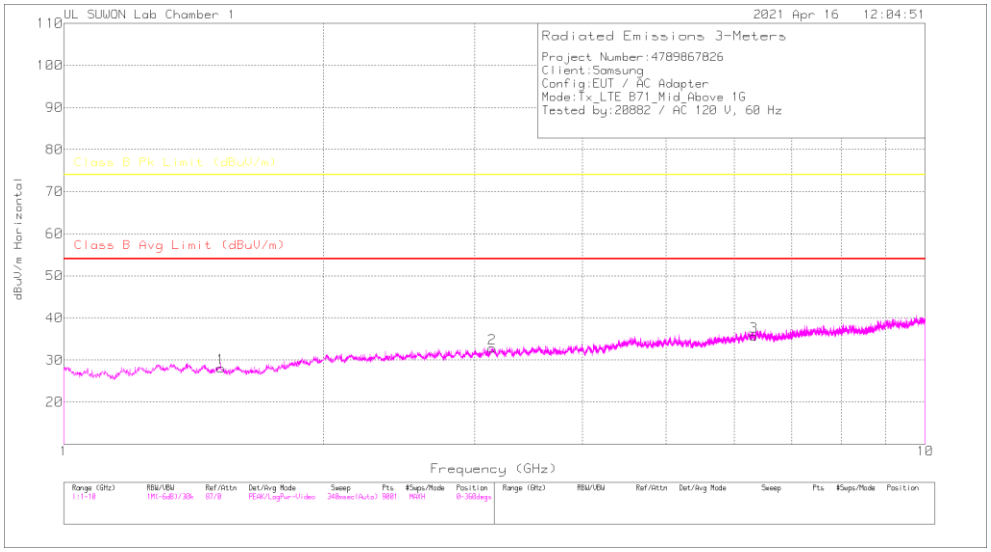
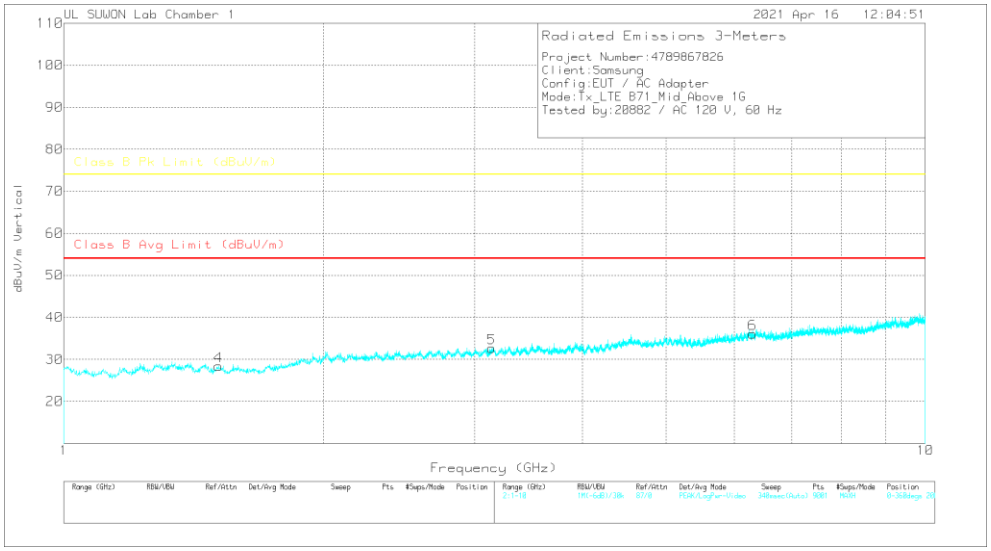
MID CHANNEL(634.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.522	35.52	PK	28.7	-36.7	.6	28.12	-	-	74	-45.88	0-360	200	H
2	3.142	33.54	PK	32.7	-34.1	.7	32.84	-	-	74	-41.16	0-360	200	H
3	6.325	29.75	PK	35.5	-29.9	.3	35.65	-	-	74	-38.35	0-360	100	H
4	1.512	35.6	PK	28.8	-36.7	.7	28.4	-	-	74	-45.6	0-360	100	V
5	3.138	33.26	PK	32.7	-34	.7	32.66	-	-	74	-41.34	0-360	200	V
6	6.302	30.19	PK	35.5	-29.9	.3	36.09	-	-	74	-37.91	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.

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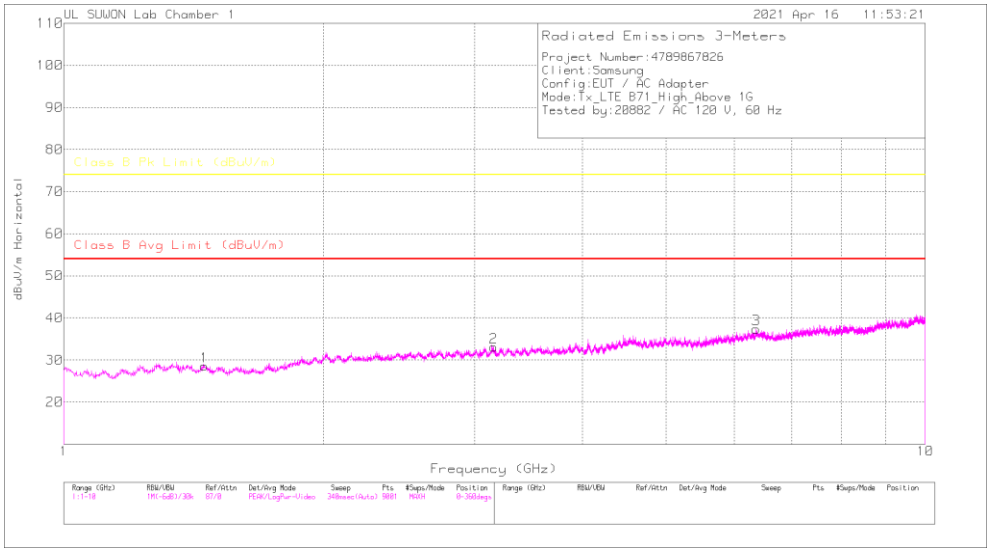
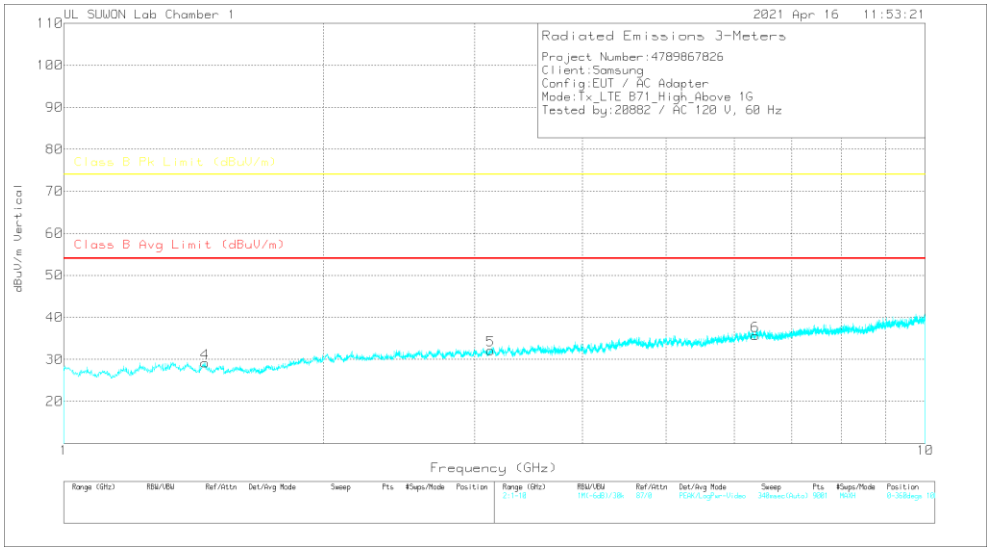
HIGH CHANNEL(650.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	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	1.456	35.64	PK	29.1	-36.9	.7	28.54	-	-	74	-45.46	0-360	200	H
2	3.154	33.87	PK	32.7	-34.1	.6	33.07	-	-	74	-40.93	0-360	200	H
3	6.363	31.18	PK	35.5	-29.8	.5	37.38	-	-	74	-36.62	0-360	200	H
4	1.459	36.16	PK	29.1	-36.9	.8	29.16	-	-	74	-44.84	0-360	200	V
5	3.129	32.77	PK	32.6	-33.9	.7	32.17	-	-	74	-41.83	0-360	100	V
6	6.3525	29.52	PK	35.5	-29.8	.4	35.62	-	-	74	-38.38	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.

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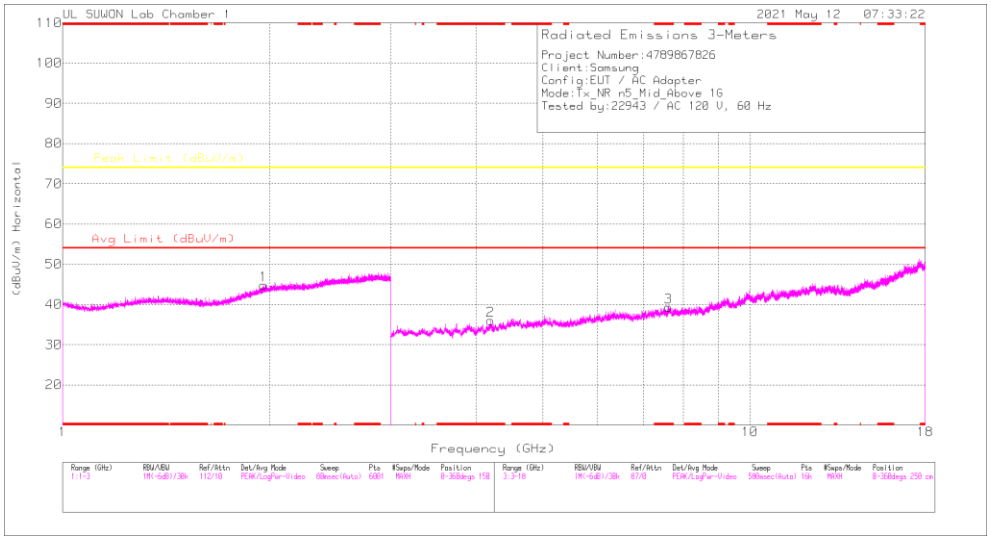
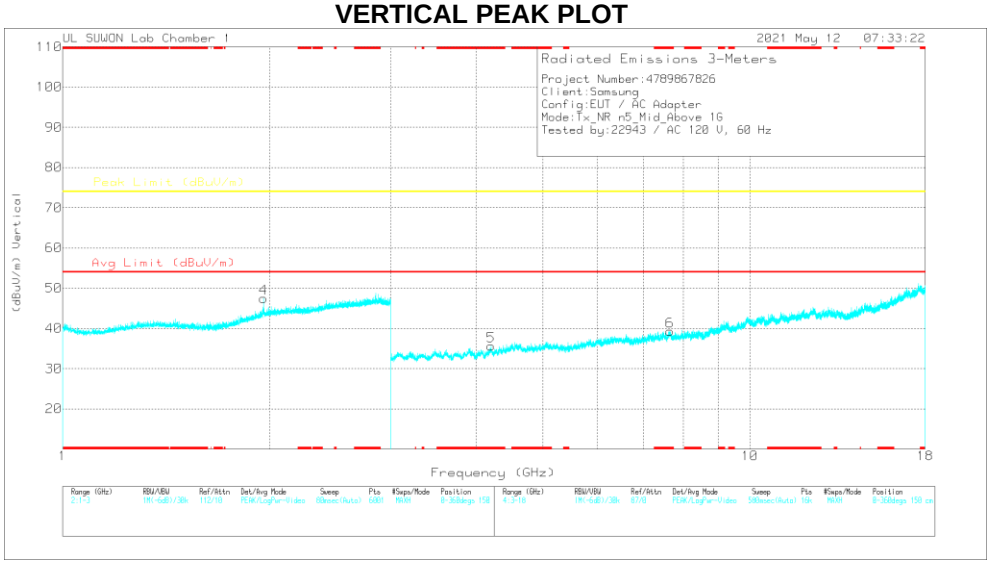
7.7. Above 1 GHz in the 5G NR Band 5

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	39.18	PK	31.2	-26.2	.6	44.78	-	-	74	-29.22	0-360	150	H
4	1.96	41.84	PK	31.2	-26.2	.6	47.44	-	-	74	-26.56	0-360	150	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	* 4.19617	33.12	PK	33.6	-31.2	.5	36.02	-	-	74	-37.98	0-360	250	H
3	* 7.61315	29.69	PK	35.8	-26.8	.6	39.29	-	-	74	-34.71	0-360	250	H
5	* 4.19992	32.75	PK	33.6	-31.2	.5	35.65	-	-	74	-38.35	0-360	150	V
6	* 7.65346	29.54	PK	35.8	-26.6	.6	39.34	-	-	74	-34.66	0-360	150	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.

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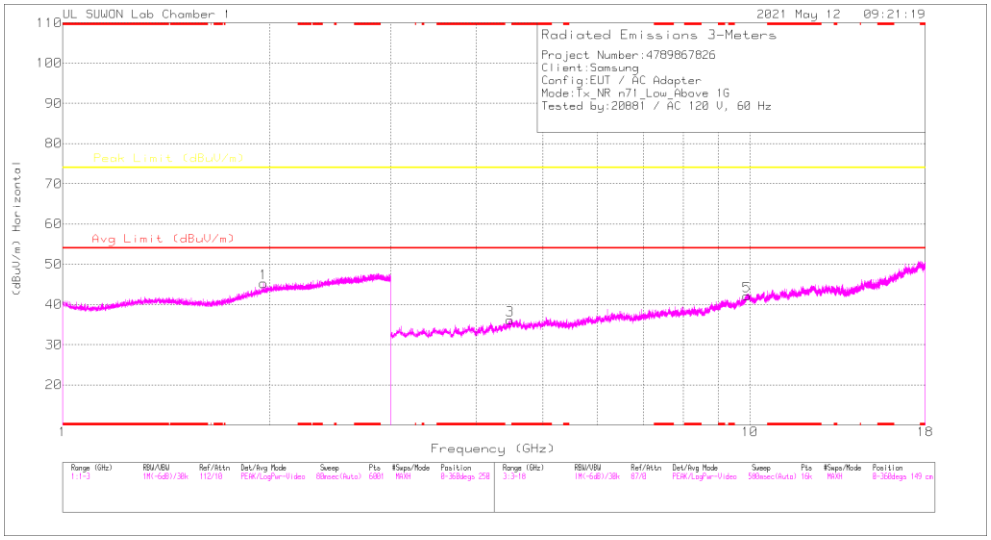
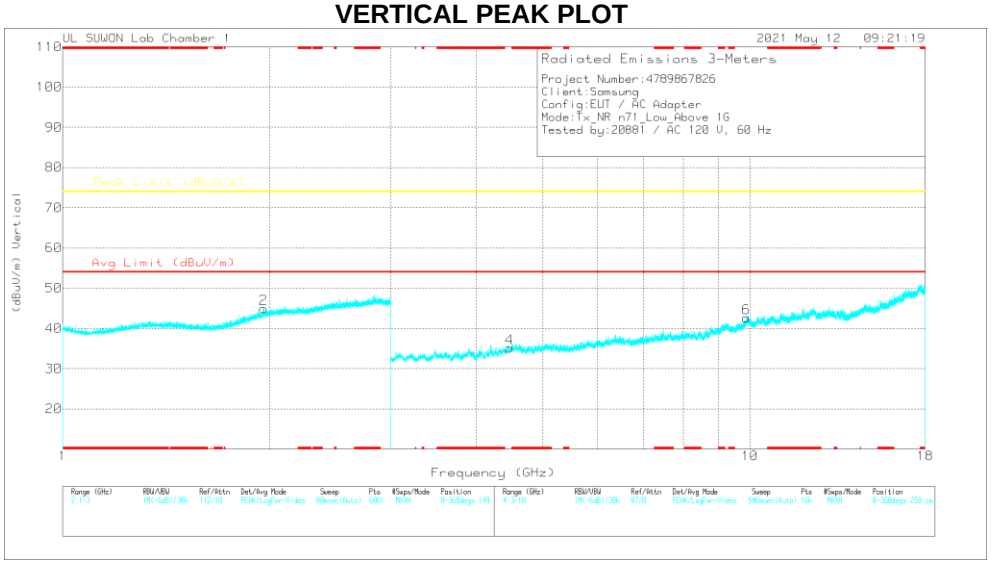
7.8. Above 1 GHz in the 5G NR Band 71

LOW CHANNEL(618.8 MHz)

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	1.95967	39.64	PK	31.2	-26.2	.6	45.24	-	-	74	-28.76	0-360	150	H
2	1.95967	39.3	PK	31.2	-26.2	.6	44.9	-	-	74	-29.1	0-360	149	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
3	4.48022	33.12	PK	34.2	-31.7	.5	36.12	-	-	74	-37.88	0-360	250	H
5	9.90332	25.63	PK	37.7	-21.9	.7	42.13	-	-	74	-31.87	0-360	250	H
4	4.46803	32.19	PK	34.2	-31.8	.5	35.09	-	-	74	-38.91	0-360	150	V
6	9.88082	26.7	PK	37.6	-22.4	.7	42.6	-	-	74	-31.4	0-360	150	V

PK – Peak Detector

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

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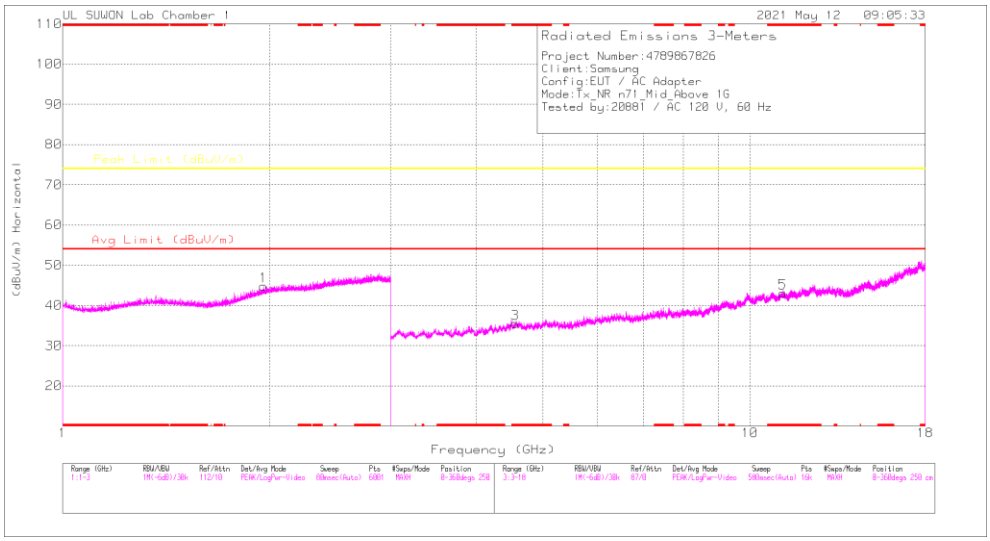
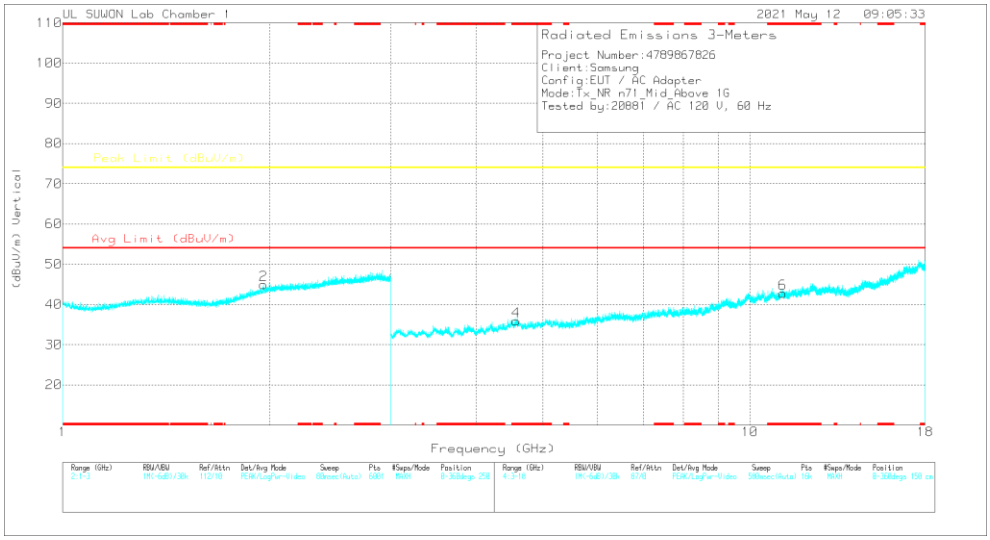
MID CHANNEL(634.5 MHz)

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	39.24	PK	31.2	-26.2	.6	44.84	-	-	74	-29.16	0-360	150	H
2	1.96	39.36	PK	31.2	-26.2	.6	44.96	-	-	74	-29.04	0-360	150	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
3	* 4.55334	32.2	PK	34.2	-31.4	.5	35.5	-	-	74	-38.5	0-360	150	H
5	* 11.16324	25.47	PK	38.4	-21.5	.7	43.07	-	-	74	-30.93	0-360	150	H
4	* 4.57303	32.45	PK	34.2	-31.3	.5	35.85	-	-	74	-38.15	0-360	150	V
6	* 11.16417	25.21	PK	38.4	-21.5	.7	42.81	-	-	74	-31.19	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.

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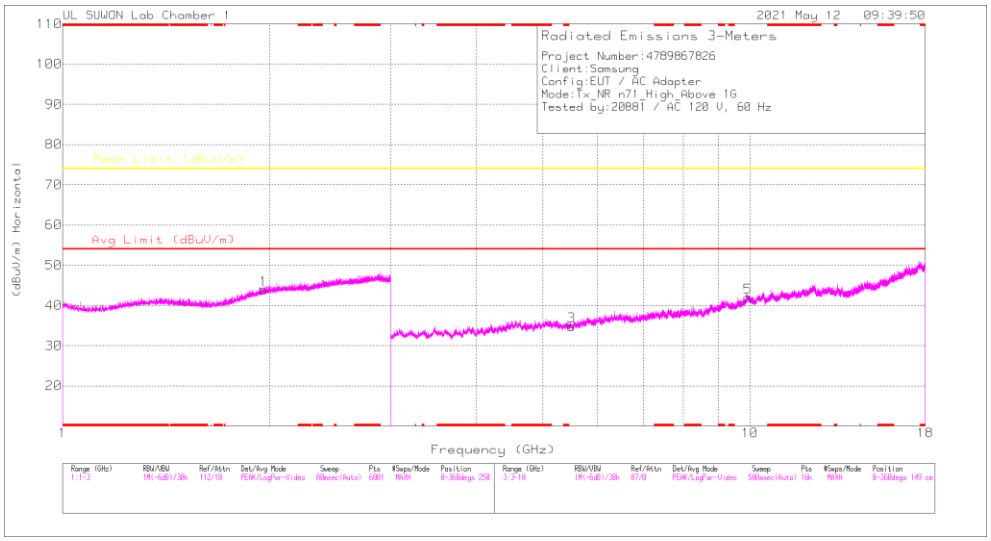
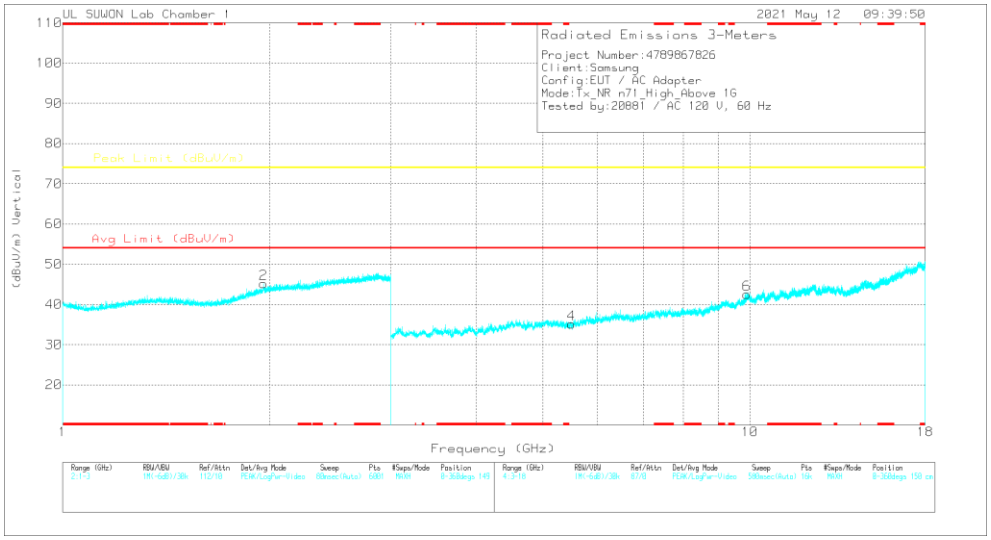
HIGH CHANNEL(650.2 MHz)

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	1.95967	38.33	PK	31.2	-26.2	.6	43.93	-	-	74	-30.07	0-360	150	H
2	1.95967	39.52	PK	31.2	-26.2	.6	45.12	-	-	74	-28.88	0-360	149	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
3	5.50672	29.69	PK	34.6	-30	.5	34.79	-	-	74	-39.21	0-360	250	H
5	9.93706	25.01	PK	37.7	-21.4	.7	42.01	-	-	74	-31.99	0-360	250	H
4	5.50109	30.05	PK	34.6	-30.1	.5	35.05	-	-	74	-38.95	0-360	150	V
6	9.90332	25.96	PK	37.7	-21.9	.7	42.46	-	-	74	-31.54	0-360	150	V

PK – Peak Detector

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

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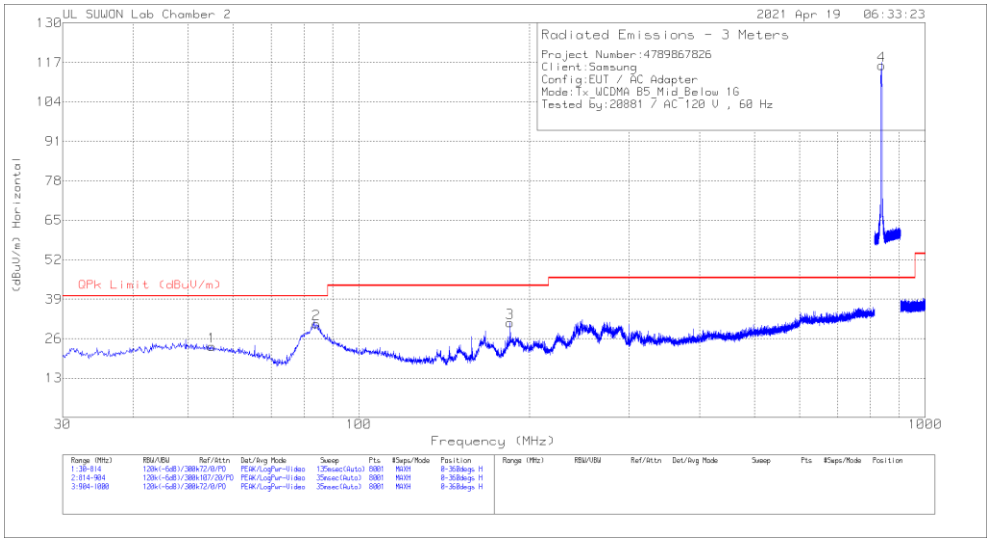
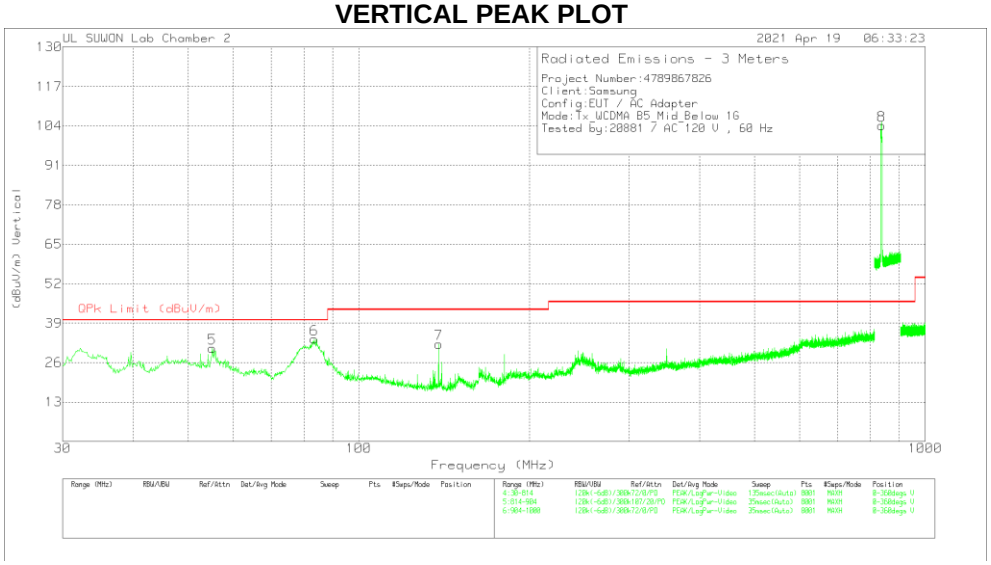
7.9. Below 1 GHz in the WCDMA Band 5

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	54.99	3.38	Pk	19.3	.8	23.48	40	-16.52	0-360	100	H
2	84.096	16.46	Pk	13.6	.9	30.96	40	-9.04	0-360	300	H
3	185.036	13.88	Pk	15.8	1.5	31.18	43.52	-12.34	0-360	200	H
4	837.5013	85.74	Pk	27	3.2	115.94	**46.02**	**69.92**	0-360	100	H
5	55.088	10.52	Pk	19.3	1	30.82	40	-9.18	0-360	200	V
6	83.41	19.33	Pk	13.4	1	33.73	40	-6.27	0-360	100	V
7	138.29	16.98	Pk	13.8	1.4	32.18	43.52	-11.34	0-360	100	V
8	837.76	73.9	Pk	27	3.3	104.2	**46.02**	**58.18**	0-360	200	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.

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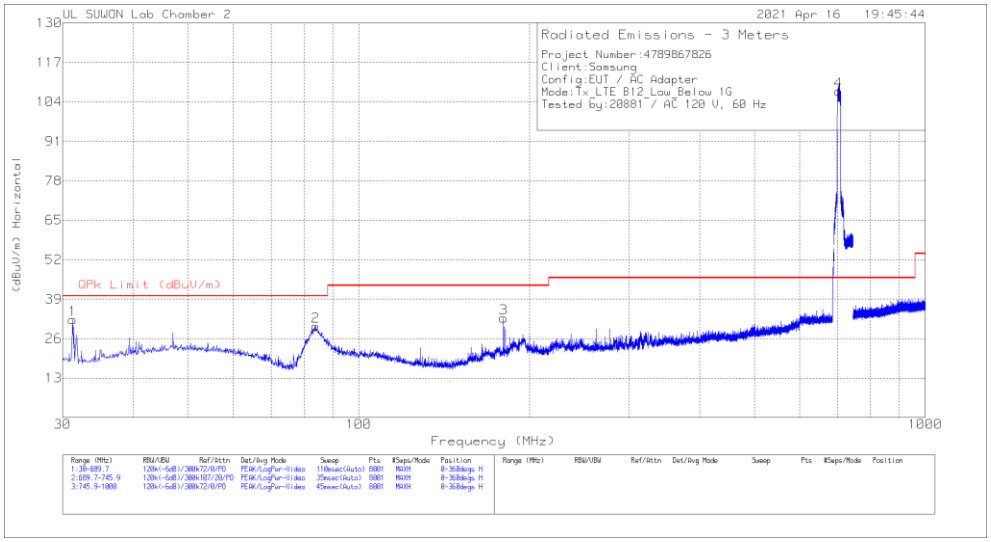
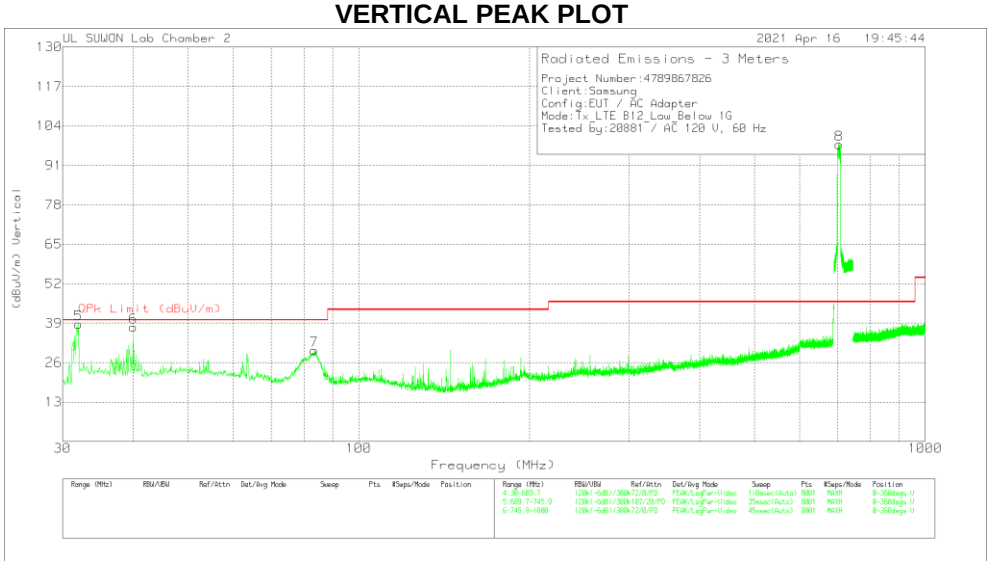
7.10. Below 1 GHz in the LTE Band 12

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	31.2369	16.32	Pk	15.4	.5	32.22	40	-7.78	0-360	300	H
2	83.9308	15.5	Pk	13.6	1	30.1	40	-9.9	0-360	200	H
3	180.1651	15.9	Pk	15.3	1.6	32.8	43.52	-10.72	0-360	400	H
4	703.2372	78.98	Pk	25.5	3	107.48	**46.02**	**61.46**	0-360	100	H
5	31.9791	22.77	Pk	15.4	.6	38.77	40	-1.23	0-360	100	V
6	39.978	18.4	Pk	18.6	.7	37.7	40	-2.3	0-360	100	V
7	83.3536	15.67	Pk	13.3	1.1	30.07	40	-9.93	0-360	100	V
8	704.3542	69.28	Pk	25.5	3	97.78	**46.02**	**51.76**	0-360	200	V

Pk - Peak detector

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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
31.9791	7.37	Qp	15.4	.6	23.37	40	-16.63	281	105	V
39.978	.15	Qp	18.6	.7	19.45	40	-20.55	163	101	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.

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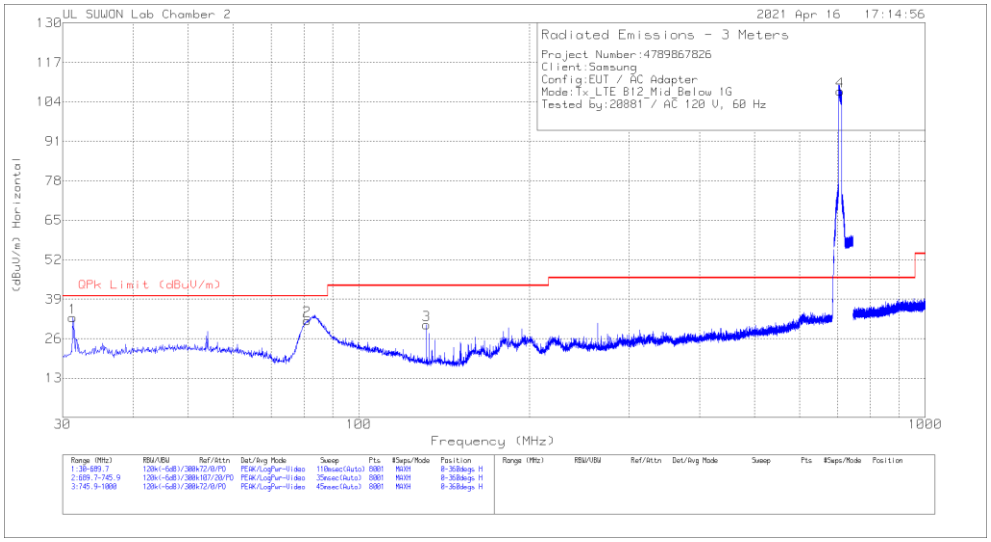
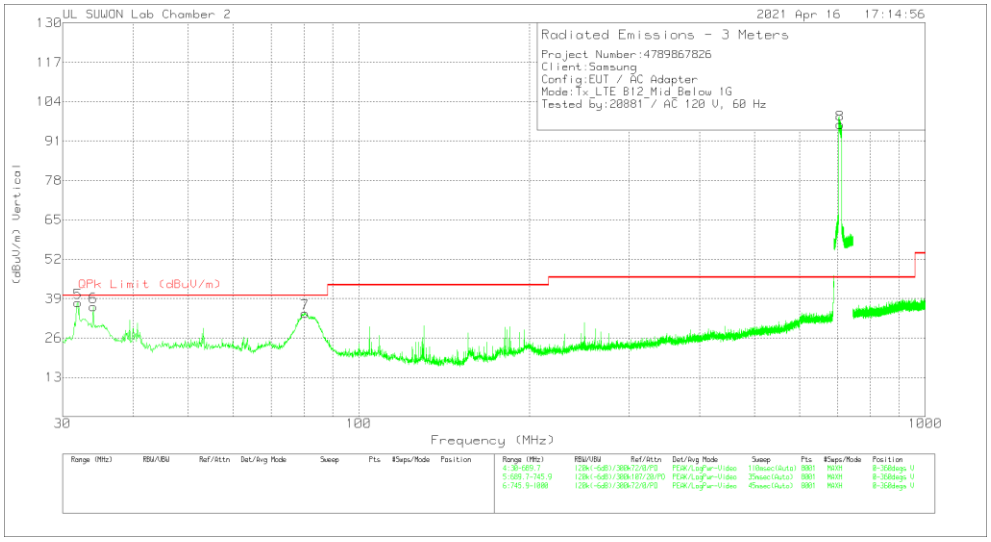
MID CHANNEL(737.5 MHz)

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	31.2369	17.06	Pk	15.4	.5	32.96	40	-7.04	0-360	200	H
2	81.0446	18.41	Pk	12.6	1	32.01	40	-7.99	0-360	200	H
3	131.6769	15.27	Pk	14.1	1.2	30.57	43.52	-12.95	0-360	200	H
4	707.6278	78.86	Pk	25.6	3	107.46	**46.02**	**61.44**	0-360	100	H
5	31.8966	21.57	Pk	15.4	.7	37.67	40	-2.33	0-360	200	V
6	33.9582	19.71	Pk	16	.7	36.41	40	-3.59	0-360	100	V
7	80.3849	20.68	Pk	12.5	1	34.18	40	-5.82	0-360	100	V
8	707.6419	67.95	Pk	25.6	3	96.55	**46.02**	**50.53**	0-360	200	V

Pk - Peak detector

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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
31.8966	13.69	Qp	15.4	.7	29.79	40	-10.21	259	125	V
33.9582	2.21	Qp	16	.7	18.91	40	-21.09	42	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.

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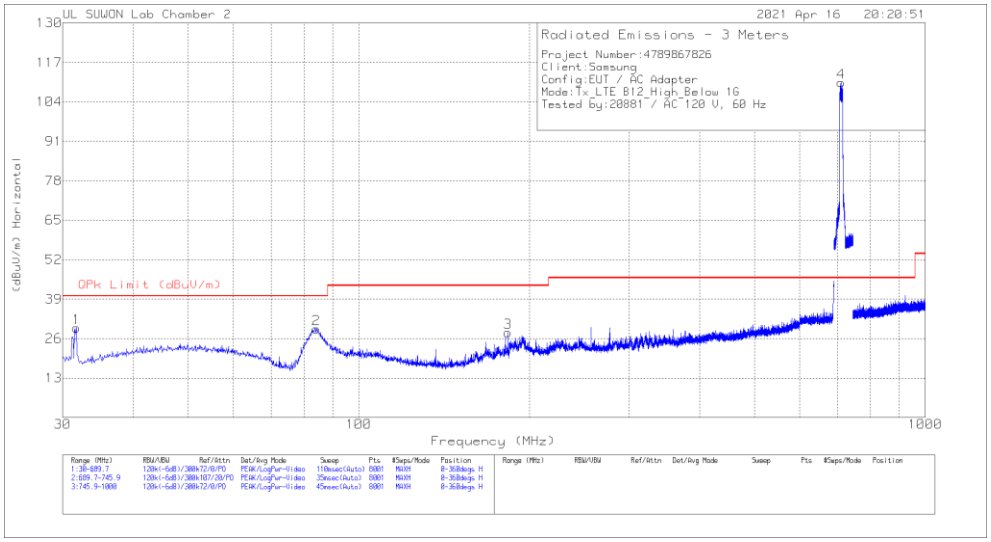
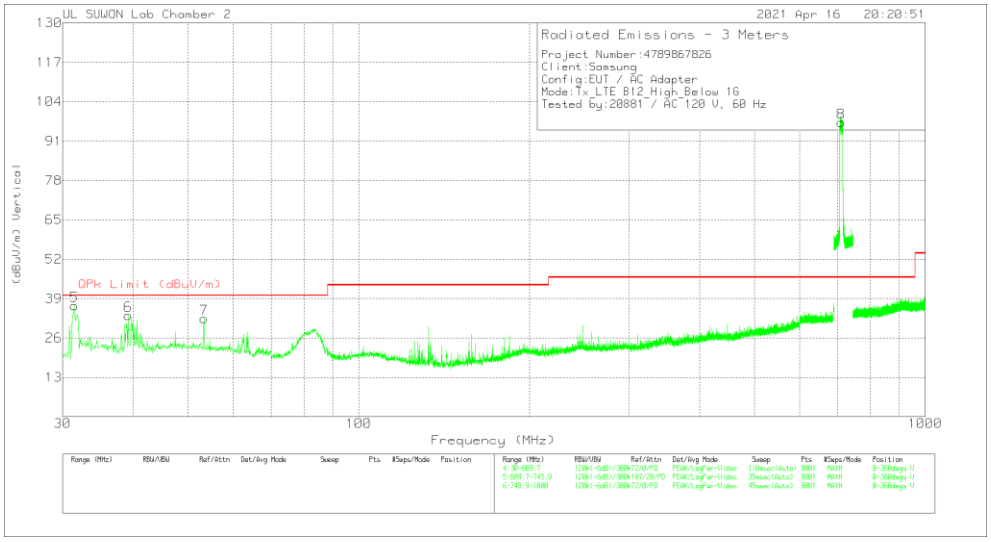
HIGH CHANNEL(744.5 MHz)

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	31.7317	13.61	Pk	15.4	.6	29.61	40	-10.39	0-360	200	H
2	84.1782	14.39	Pk	13.7	1.1	29.19	40	-10.81	0-360	200	H
3	183.4636	10.88	Pk	15.6	1.5	27.98	43.52	-15.54	0-360	200	H
4	710.9998	81.76	Pk	25.6	3	110.36	**46.02**	**64.34**	0-360	100	H
5	31.4843	20.48	Pk	15.4	.8	36.68	40	-3.32	0-360	100	V
6	39.1534	14.43	Pk	18.3	.8	33.53	40	-6.47	0-360	100	V
7	53.2546	12.05	Pk	19.5	.9	32.45	40	-7.55	0-360	100	V
8	710.8523	68.58	Pk	25.6	3	97.18	**46.02**	**51.16**	0-360	100	V

Pk - Peak detector

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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
31.4843	4.86	Qp	15.4	.8	21.06	40	-18.94	228	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.

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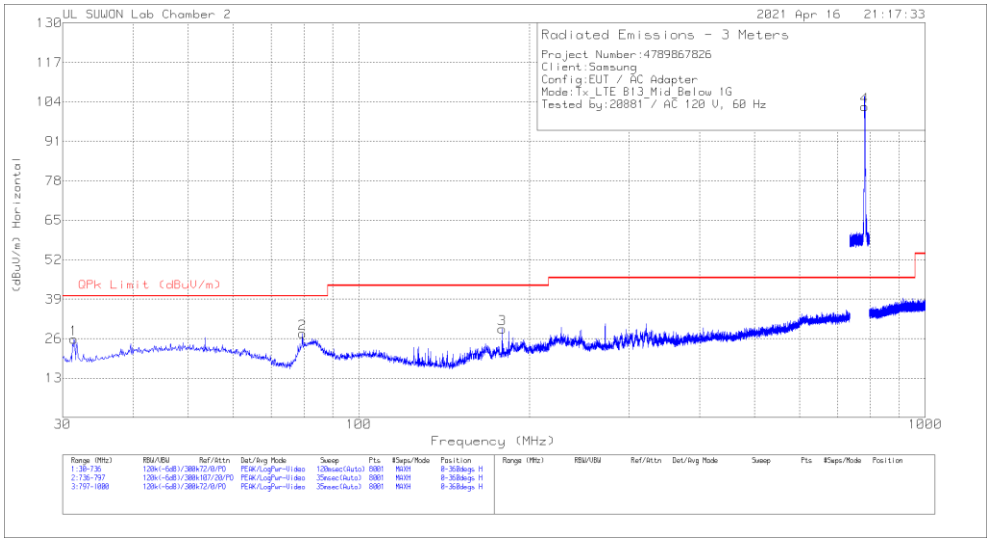
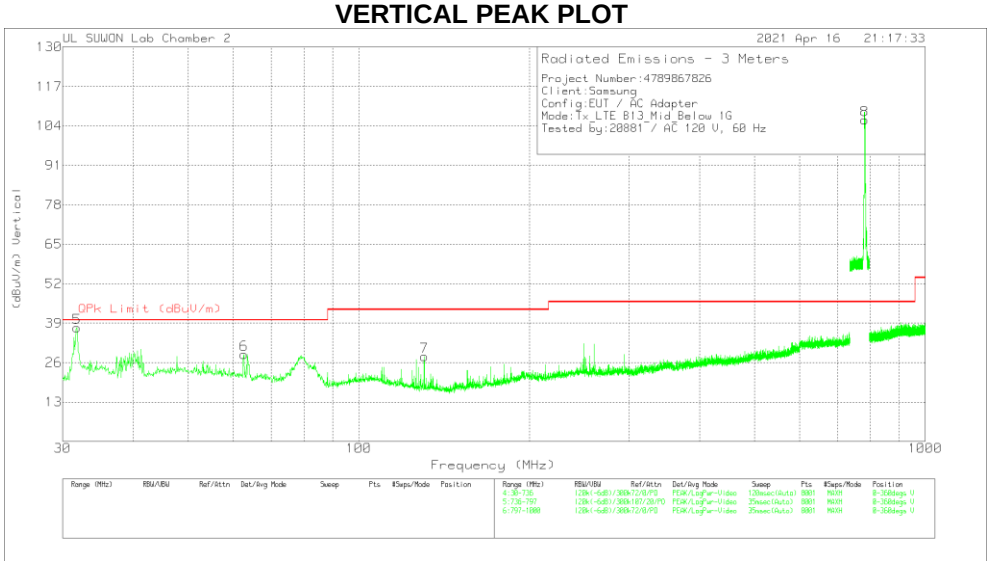
7.11. Below 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	31.412	9.67	Pk	15.4	.7	25.77	40	-14.23	0-360	100	H
2	79.5083	14.24	Pk	12.5	.9	27.64	40	-12.36	0-360	400	H
3	179.0543	12.49	Pk	15.2	1.5	29.19	43.52	-14.33	0-360	100	H
4	782.3981	72.81	Pk	26.5	3.1	102.41	**46.02**	**56.39**	0-360	100	H
5	31.765	21.49	Pk	15.4	.6	37.49	40	-2.51	0-360	100	V
6	62.6525	10.06	Pk	17.8	.8	28.66	40	-11.34	0-360	100	V
7	130.605	12.72	Pk	14.1	1.2	28.02	43.52	-15.5	0-360	200	V
8	782.4896	76.29	Pk	26.5	3.2	105.99	**46.02**	**59.97**	0-360	200	V

Pk - Peak detector

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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
31.765	13.83	Qp	15.4	.6	29.83	40	-10.17	234	100	V

Qp - Quasi-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.

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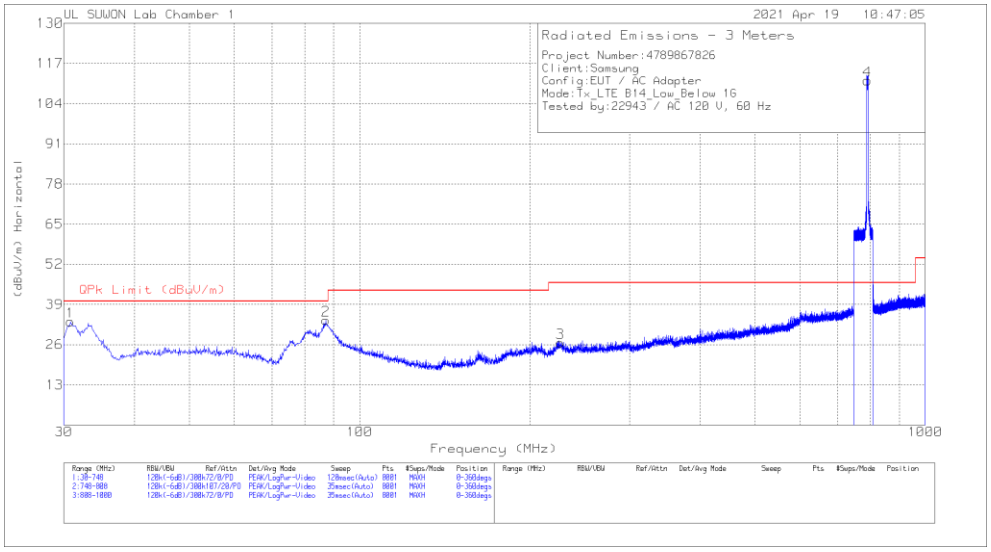
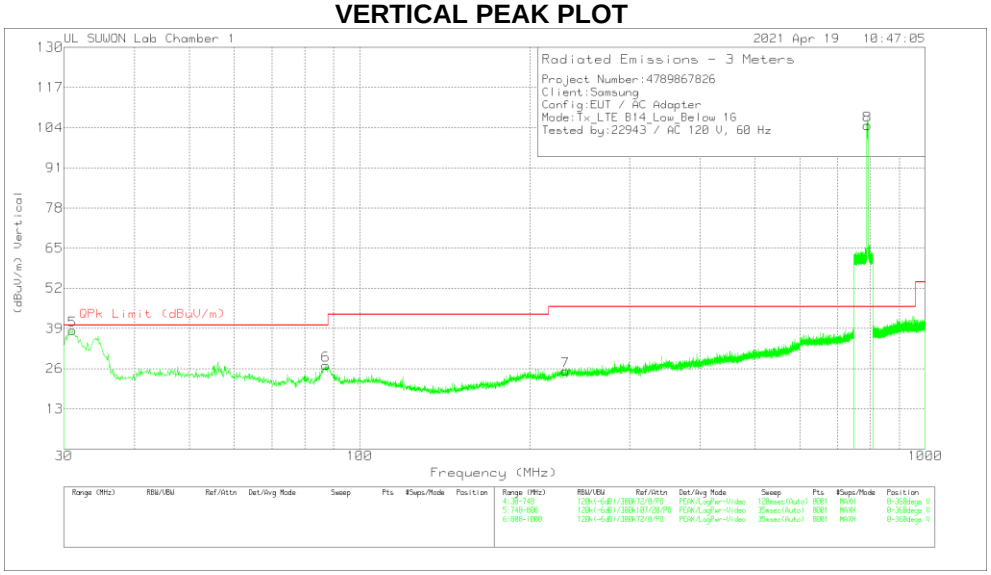
7.12. Below 1 GHz in the LTE Band 14

LOW CHANNEL(759.8 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.8078	16.49	Pk	15.8	1.2	33.49	40	-6.51	0-360	200	H
2	87.1708	17.03	Pk	14.9	2	33.93	40	-6.07	0-360	200	H
3	226.5525	5.92	Pk	17.5	3.2	26.62	46.02	-19.4	0-360	100	H
4	790.4875	78.88	Pk	26.7	5.9	111.48	**46.02**	**65.46**	0-360	100	H
5	31.077	21.48	Pk	15.7	1.2	38.38	40	-1.62	0-360	100	V
6	87.1708	10.17	Pk	14.9	2	27.07	40	-12.93	0-360	200	V
7	231.1298	4.35	Pk	17.7	3.2	25.25	46.02	-20.77	0-360	200	V
8	790.51	72.1	Pk	26.7	5.9	104.7	**46.02**	**58.68**	0-360	100	V

Pk - Peak detector

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Radiated Emissions

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
31.077	14.38	Qp	15.7	1.2	31.28	40	-8.72	2	102	V

Qp - Quasi-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.

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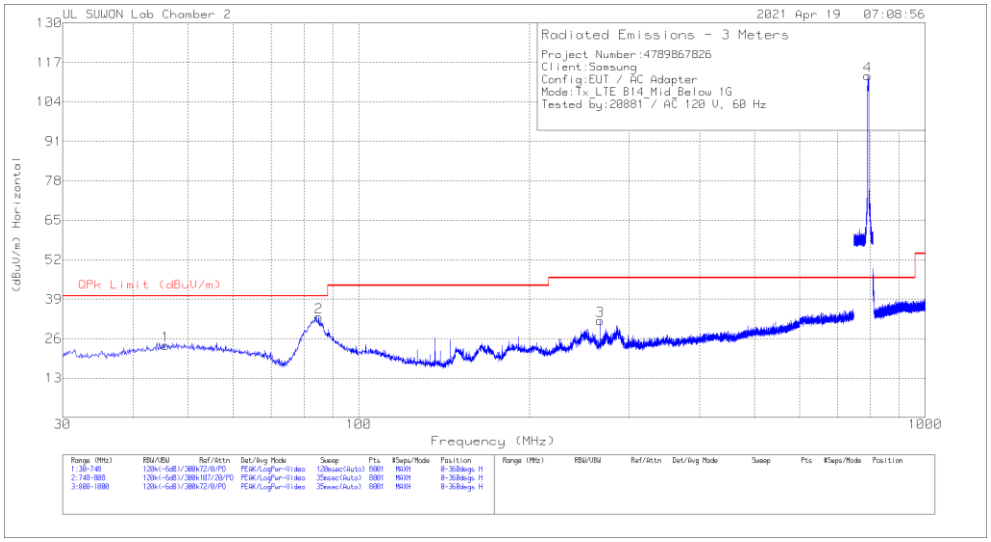
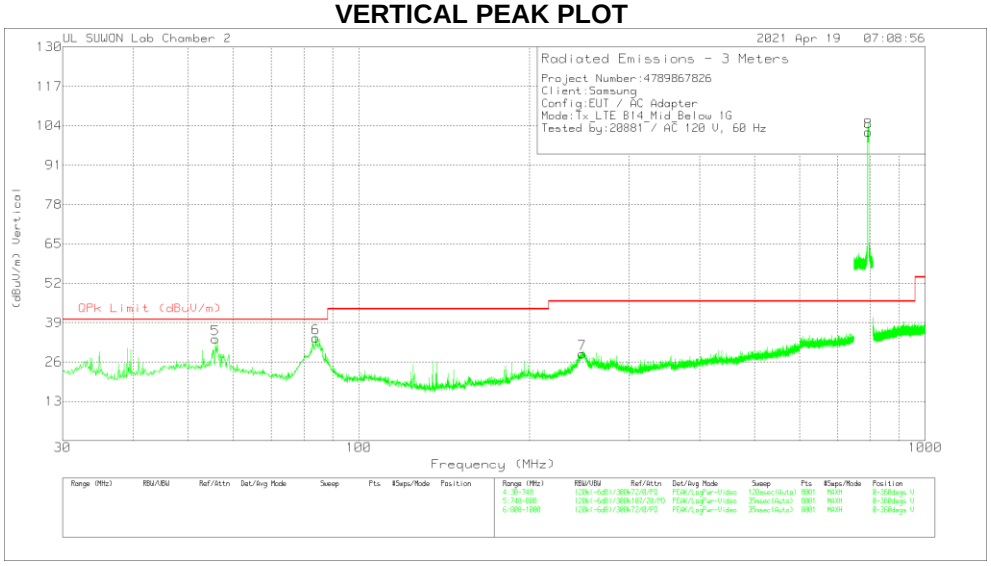
MID CHANNEL(763 MHz)

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	45.6165	3.26	Pk	19.7	.8	23.76	40	-16.24	0-360	300	H
2	84.927	18.1	Pk	13.9	1.1	33.1	40	-6.9	0-360	200	H
3	266.8503	11.56	Pk	18.5	1.8	31.86	46.02	-14.16	0-360	100	H
4	791.8375	82.91	Pk	26.6	3.1	112.61	**46.02**	**66.59**	0-360	100	H
5	55.848	13.55	Pk	19.2	.8	33.55	40	-6.45	0-360	100	V
6	84.0295	19.45	Pk	13.6	.9	33.95	40	-6.05	0-360	100	V
7	248.0028	8.62	Pk	18.4	1.7	28.72	46.02	-17.3	0-360	100	V
8	793.495	72.04	Pk	26.6	3.2	101.84	**46.02**	**55.82**	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.

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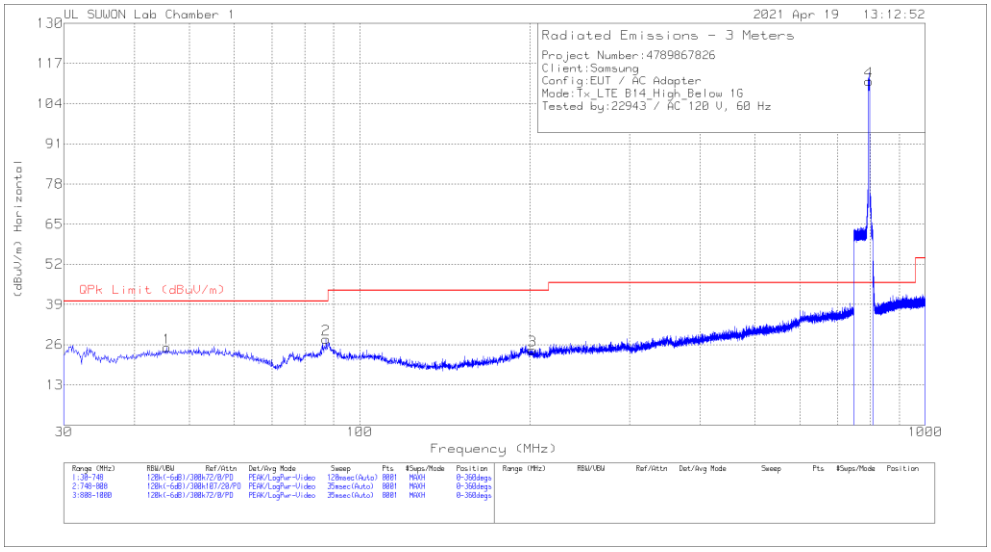
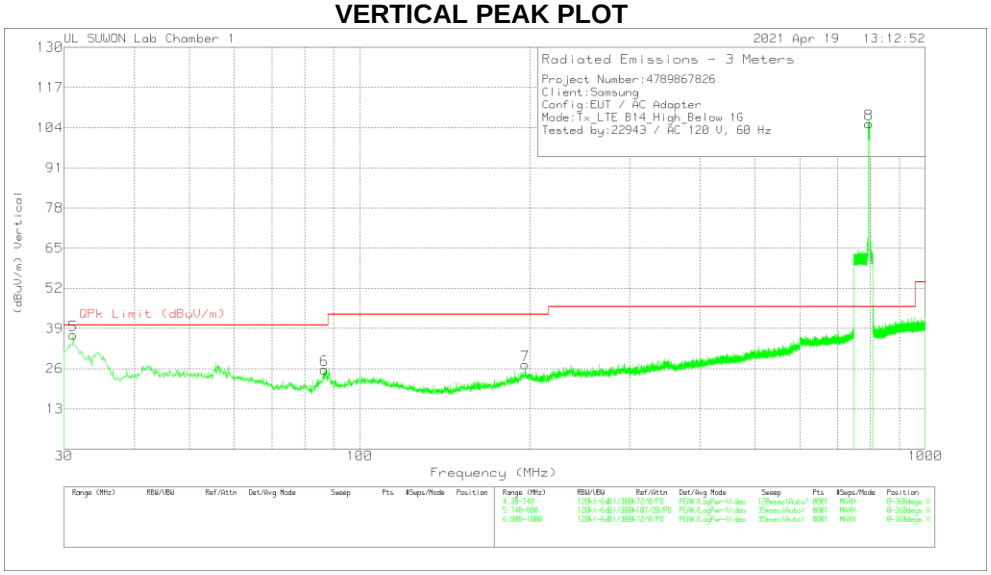
HIGH CHANNEL(766.2 MHz)

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	45.6165	3.78	Pk	19.8	1.5	25.08	40	-14.92	0-360	100	H
2	87.2605	10.9	Pk	14.9	2	27.8	40	-12.2	0-360	300	H
3	202.0508	4.26	Pk	17	3	24.26	43.52	-19.26	0-360	100	H
4	795.46	78.57	Pk	26.8	5.9	111.27	**46.02**	**65.25**	0-360	100	H
5	31.1668	20.01	Pk	15.7	1.2	36.91	40	-3.09	0-360	100	V
6	86.6323	8.98	Pk	14.7	2	25.68	40	-14.32	0-360	100	V
7	196.3068	6.77	Pk	17.5	3	27.27	43.52	-16.25	0-360	200	V
8	795.4675	72.57	Pk	26.8	5.9	105.27	**46.02**	**59.25**	0-360	100	V

Pk - Peak detector

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Radiated Emissions

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
31.1668	14.15	Qp	15.7	1.2	31.05	40	-8.95	345	100	V

Qp - Quasi-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.

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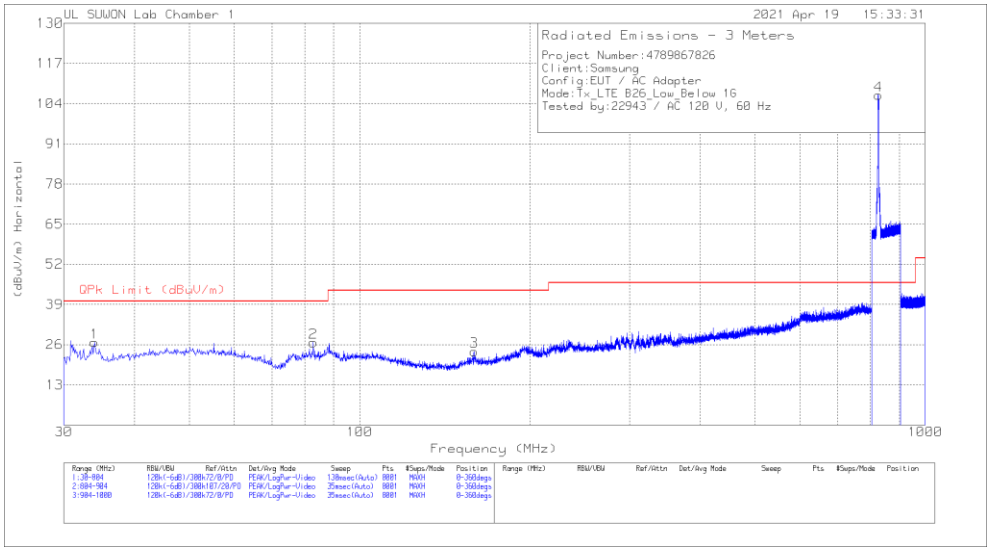
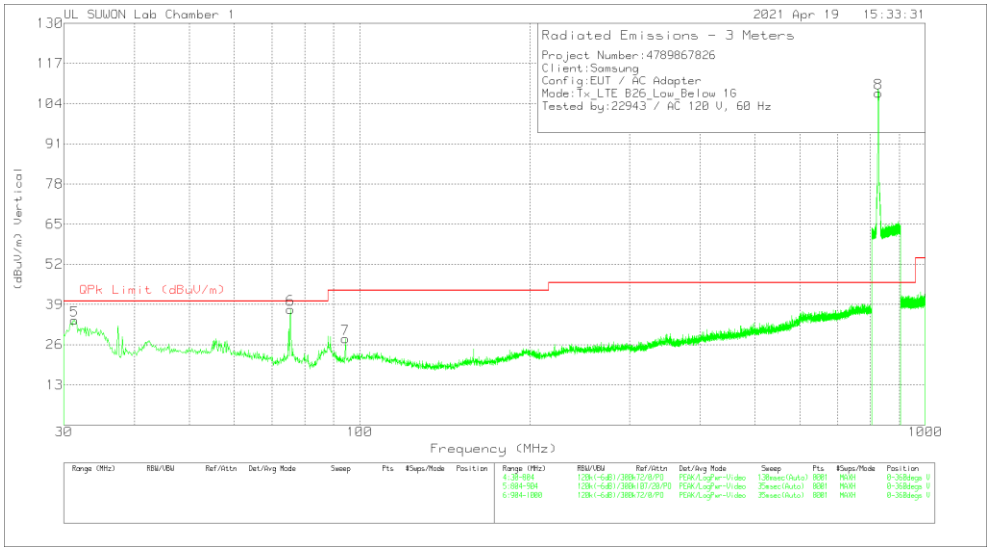
7.13. Below 1 GHz in the LTE Band 26

LOW CHANNEL(860.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.9668	9.34	Pk	16.2	1.2	26.74	40	-13.26	0-360	300	H
2	82.8255	11.5	Pk	13.2	2	26.7	40	-13.3	0-360	200	H
3	159.3548	6.89	Pk	14.2	2.7	23.79	43.52	-19.73	0-360	200	H
4	826.525	73.6	Pk	27.1	6	106.7	**46.02**	**60.68**	0-360	100	H
5	31.3545	16.98	Pk	15.7	1.2	33.88	40	-6.12	0-360	100	V
6	75.4725	22.23	Pk	13.3	1.9	37.43	40	-2.57	0-360	100	V
7	94.4355	9.31	Pk	16.5	2.1	27.91	43.52	-15.61	0-360	100	V
8	826.6375	74.31	Pk	27.1	6	107.41	**46.02**	**61.39**	0-360	100	V

Pk - Peak detector

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Radiated Emissions

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
75.4725	5.03	Qp	13.3	1.9	20.23	40	-19.77	204	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.

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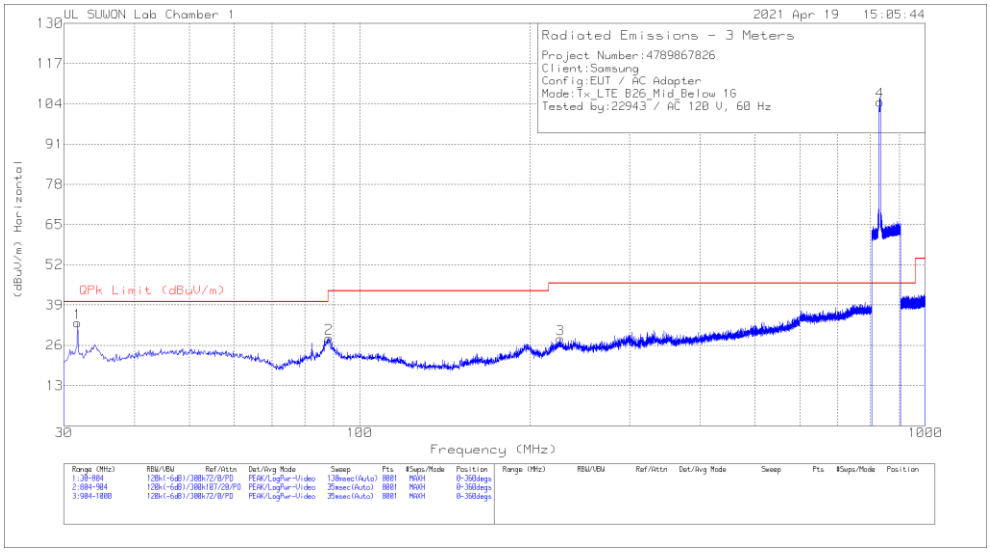
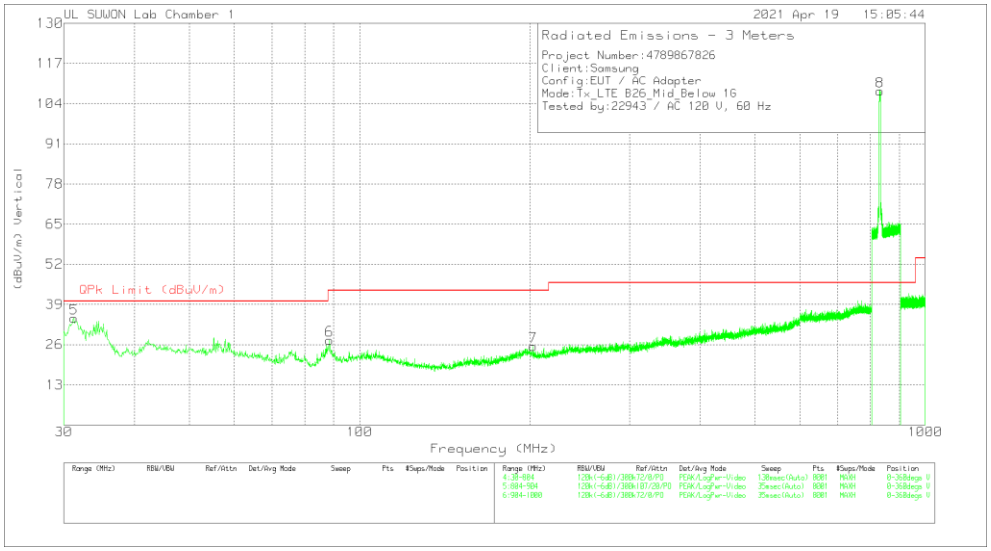
MID CHANNEL(876.5 MHz)

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	31.7415	16.43	Pk	15.6	1.2	33.23	40	-6.77	0-360	200	H
2	88.2435	10.99	Pk	15.3	2	28.29	43.52	-15.23	0-360	300	H
3	226.3058	7.35	Pk	17.5	3.2	28.05	46.02	-17.97	0-360	100	H
4	831.575	71.63	Pk	27	6	104.63	**46.02**	**58.61**	0-360	100	H
5	31.2578	17.66	Pk	15.7	1.2	34.56	40	-5.44	0-360	100	V
6	88.437	10.12	Pk	15.3	2	27.42	43.52	-16.1	0-360	100	V
7	202.6988	5.58	Pk	16.9	3	25.48	43.52	-18.04	0-360	300	V
8	831.4	75.03	Pk	27	6	108.03	**46.02**	**62.01**	0-360	200	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.

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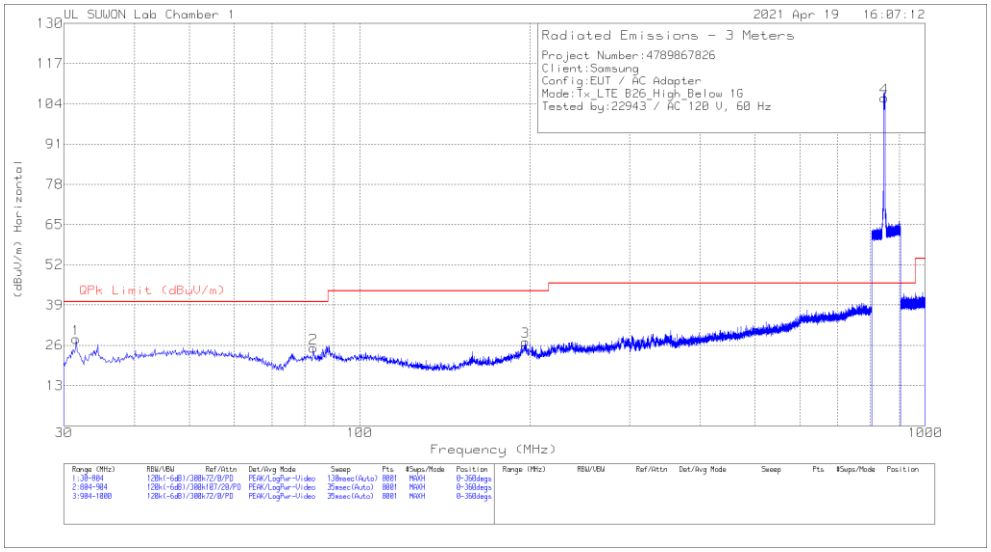
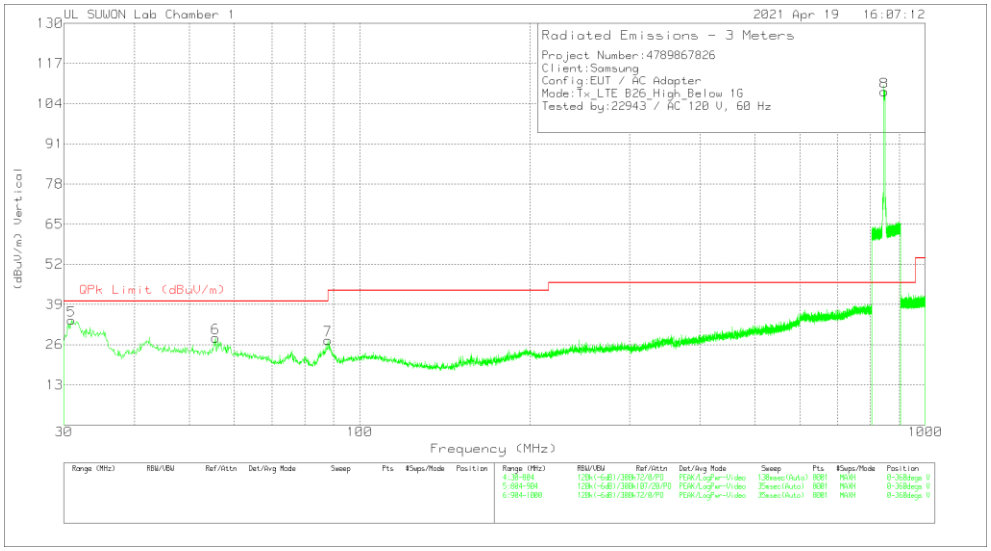
HIGH CHANNEL(892.5 MHz)

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	31.548	11.22	Pk	15.6	1.2	28.02	40	-11.98	0-360	100	H
2	82.8255	9.9	Pk	13.2	2	25.1	40	-14.9	0-360	200	H
3	196.41	6.65	Pk	17.5	3	27.15	43.52	-16.37	0-360	100	H
4	847.0625	72.61	Pk	27.3	6	105.91	**46.02**	**59.89**	0-360	100	H
5	30.9675	16.99	Pk	15.7	1.2	33.89	40	-6.11	0-360	100	V
6	55.6388	7.3	Pk	19.3	1.6	28.2	40	-11.8	0-360	100	V
7	87.8565	10.37	Pk	15.1	2	27.47	40	-12.53	0-360	100	V
8	846.675	74.57	Pk	27.3	6	107.87	**46.02**	**61.85**	0-360	200	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.

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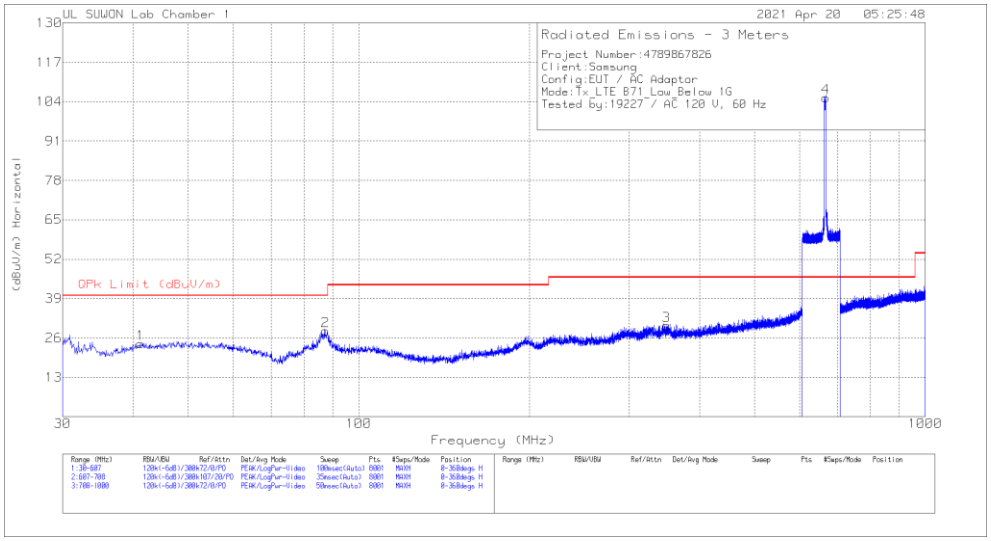
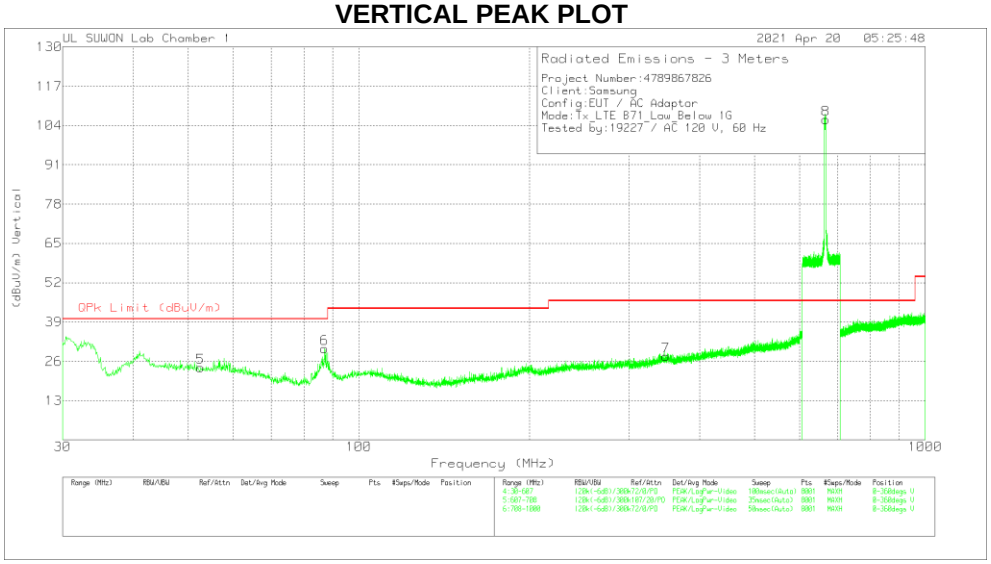
7.14. Below 1 GHz in the LTE Band 71

LOW CHANNEL(618.8 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	41.1794	3.89	Pk	18.9	1.4	24.19	40	-15.81	0-360	300	H
2	87.3394	11.42	Pk	14.9	2	28.32	40	-11.68	0-360	300	H
3	348.8646	5.12	Pk	21	3.9	30.02	46.02	-16	0-360	100	H
4	666.8425	74.54	Pk	25.4	5.4	105.34	**46.02**	**59.32**	0-360	100	H
5	52.5751	2.71	Pk	19.6	1.6	23.91	40	-16.09	0-360	300	V
6	87.0509	13.46	Pk	14.8	2	30.26	40	-9.74	0-360	100	V
7	348.7204	2.86	Pk	20.9	3.9	27.66	46.02	-18.36	0-360	100	V
8	667.499	75.23	Pk	25.4	5.4	106.03	**46.02**	**60.01**	0-360	100	V

Pk - Peak detector

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

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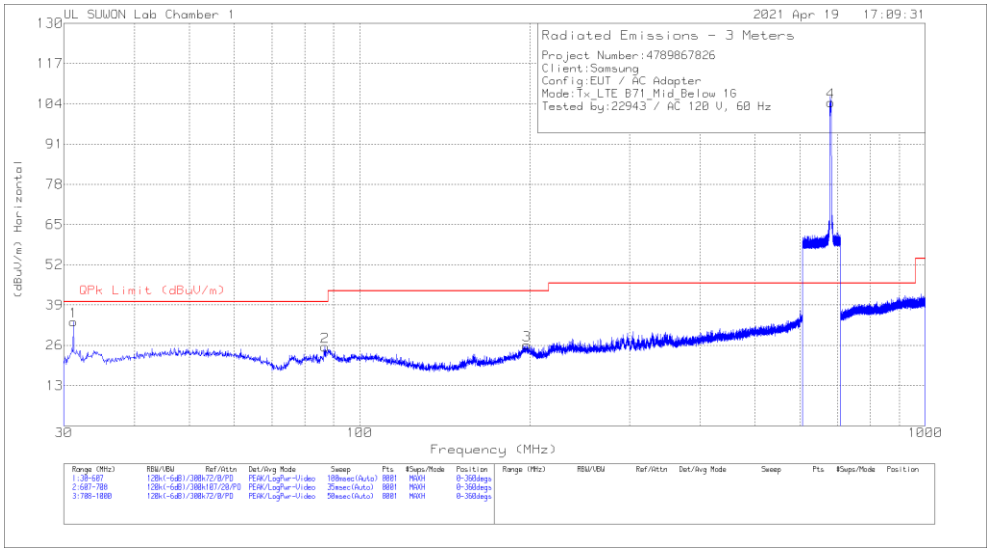
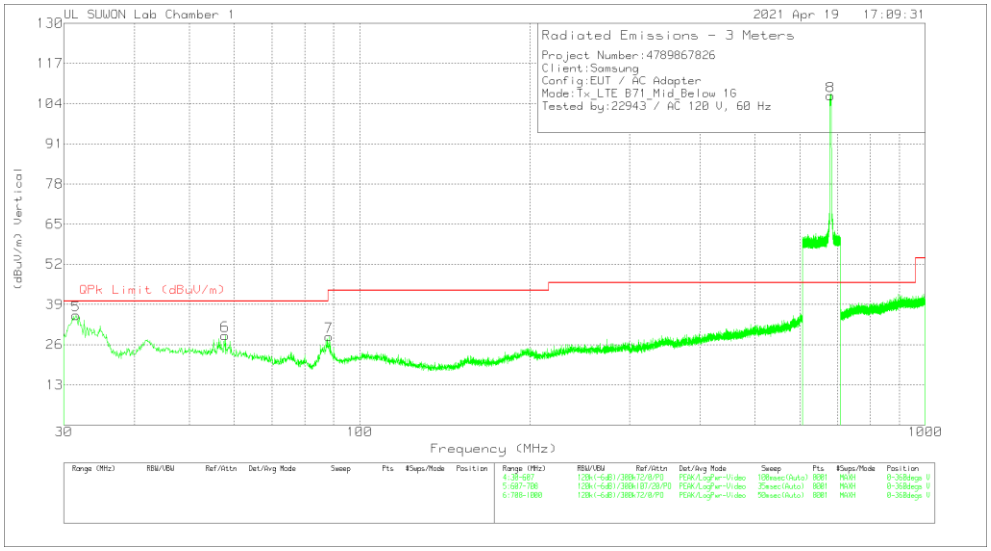
MID CHANNEL(634.5 MHz)

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	31.2261	16.75	Pk	15.7	1.2	33.65	40	-6.35	0-360	200	H
2	86.9066	8.72	Pk	14.8	2	25.52	40	-14.48	0-360	400	H
3	197.5464	5.64	Pk	17.4	3	26.04	43.52	-17.48	0-360	100	H
4	680.6795	73.55	Pk	25.5	5.4	104.45	**46.02**	**58.43**	0-360	100	H
5	31.5146	18.7	Pk	15.6	1.2	35.5	40	-4.5	0-360	100	V
6	57.8403	8.35	Pk	19	1.6	28.95	40	-11.05	0-360	100	V
7	88.3491	11.32	Pk	15.3	2	28.62	43.52	-14.9	0-360	100	V
8	680.1745	75.61	Pk	25.5	5.4	106.51	**46.02**	**60.49**	0-360	200	V

Pk - Peak detector

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Radiated Emissions

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
31.5146	13.37	Qp	15.6	1.2	30.17	40	-9.83	352	101	V

Qp - Quasi-Peak detector

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

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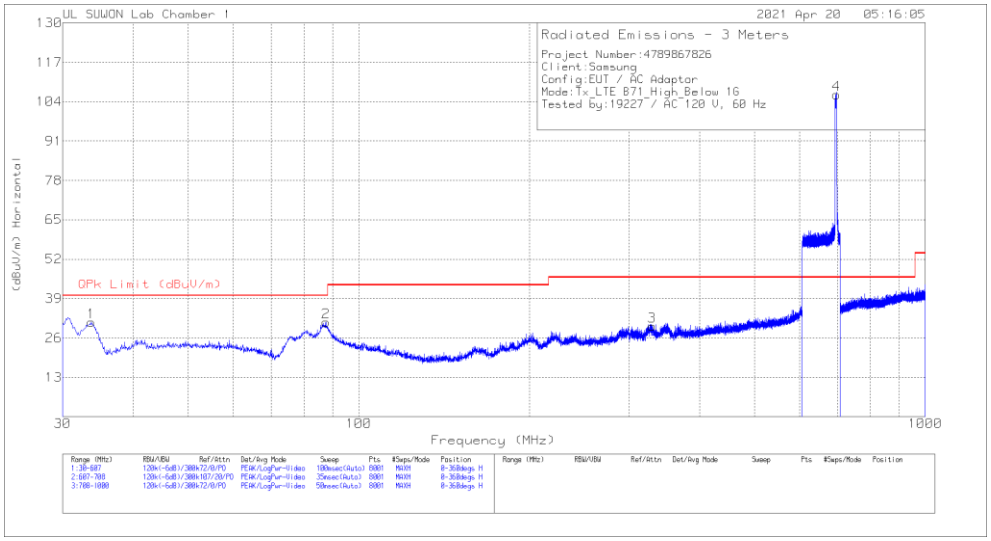
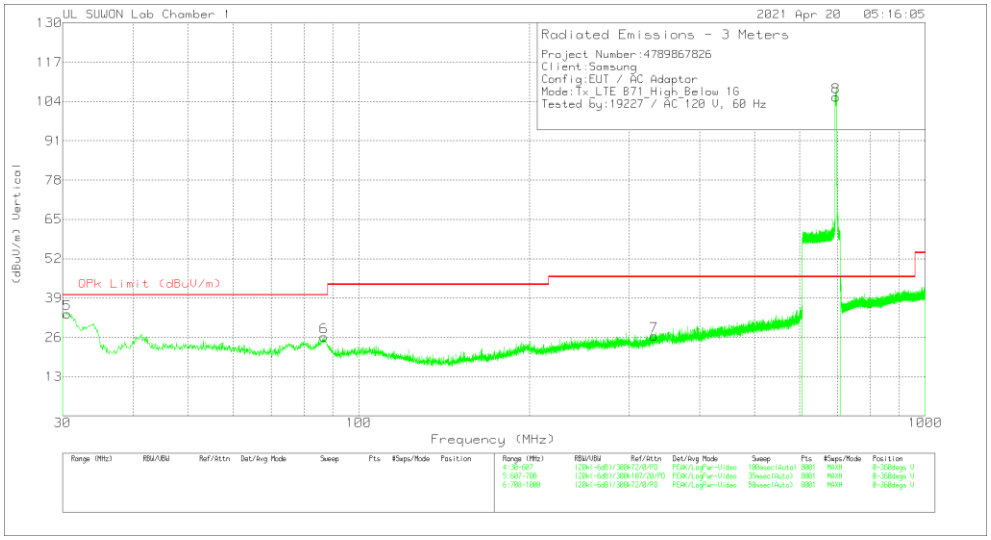
HIGH CHANNEL(650.2 MHz)

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	33.6784	13.97	Pk	16.1	1.2	31.27	40	-8.73	0-360	200	H
2	87.4836	14.23	Pk	15	2	31.23	40	-8.77	0-360	300	H
3	329.3909	6.16	Pk	20	3.8	29.96	46.02	-16.06	0-360	100	H
4	697.3319	75.16	Pk	25.6	5.5	106.26	**46.02**	**60.24**	0-360	100	H
5	30.577	16.86	Pk	15.8	1.2	33.86	40	-6.14	0-360	400	V
6	86.7624	9.46	Pk	14.7	2	26.16	40	-13.84	0-360	400	V
7	331.8431	2.63	Pk	20.1	3.8	26.53	46.02	-19.49	0-360	400	V
8	695.7159	74.3	Pk	25.6	5.5	105.4	**46.02**	**59.38**	0-360	100	V

Pk - Peak detector

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

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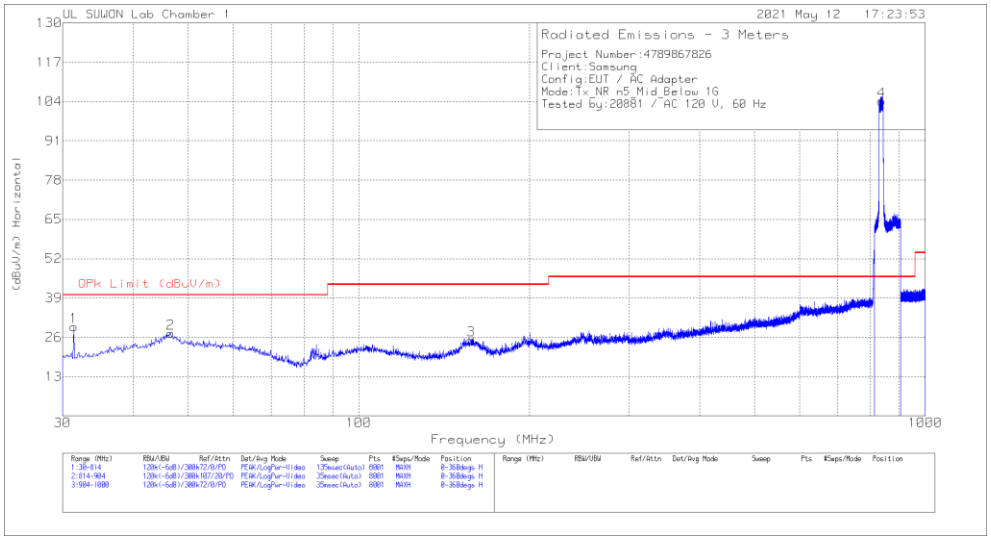
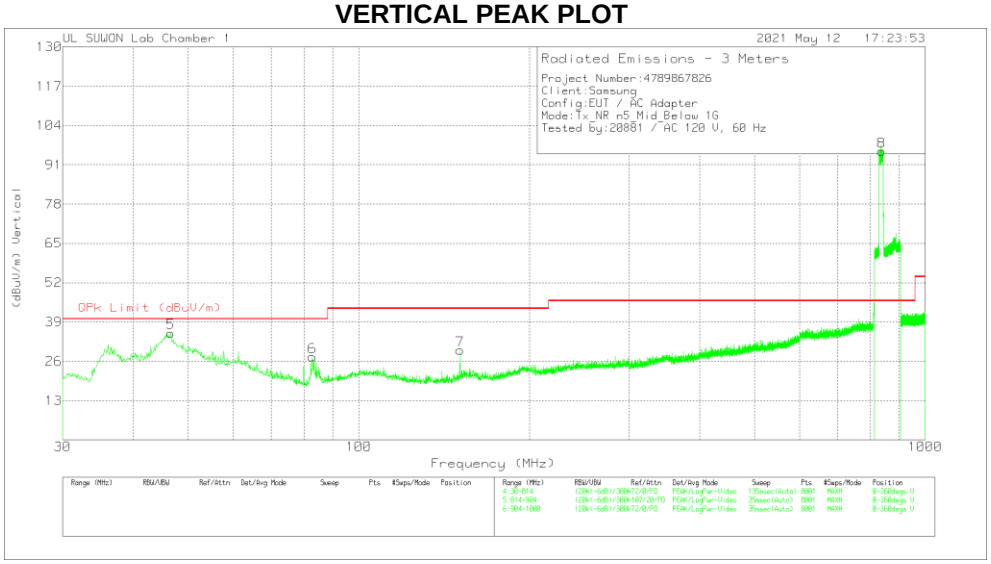
7.15. Below 1 GHz in the 5G NR Band 5

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	31.372	12.64	Pk	15.7	1.2	29.54	40	-10.46	0-360	400	H
2	46.562	5.91	Pk	19.9	1.5	27.31	40	-12.69	0-360	300	H
3	157.694	8.22	Pk	14.2	2.7	25.12	43.52	-18.4	0-360	200	H
4	837.6138	71.08	Pk	27.1	6	104.18	**46.02**	**58.16**	0-360	100	H
5	46.562	14	Pk	19.9	1.5	35.4	40	-4.6	0-360	100	V
6	82.822	12.38	Pk	13.2	2	27.58	40	-12.42	0-360	100	V
7	150.932	13.05	Pk	14	2.6	29.65	43.52	-13.87	0-360	200	V
8	837.625	62.38	Pk	27.1	6	95.48	**46.02**	**49.46**	0-360	200	V

Pk - Peak detector

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Radiated Emissions

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
46.562	9.26	Qp	19.9	1.5	30.66	40	-9.34	108	100	V

Qp - Quasi-Peak detector

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

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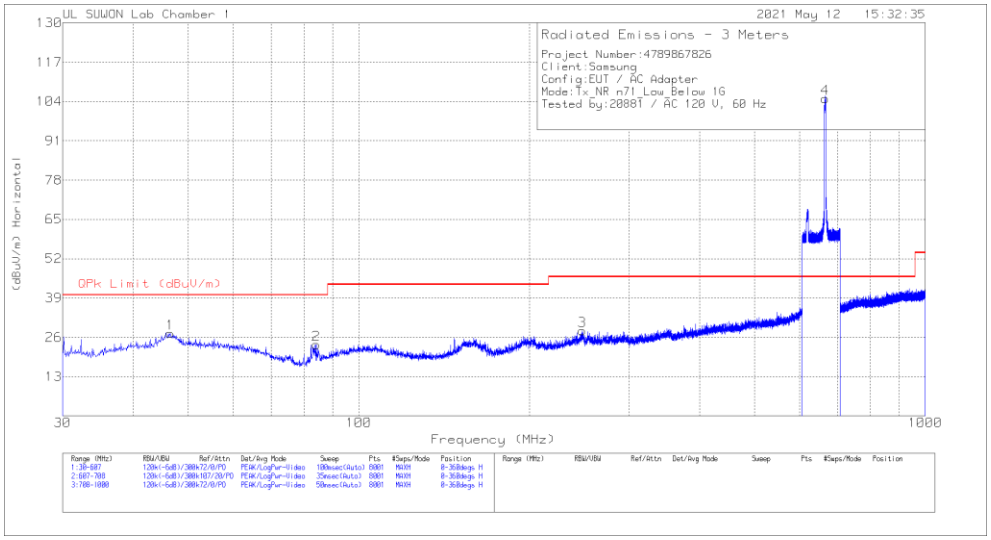
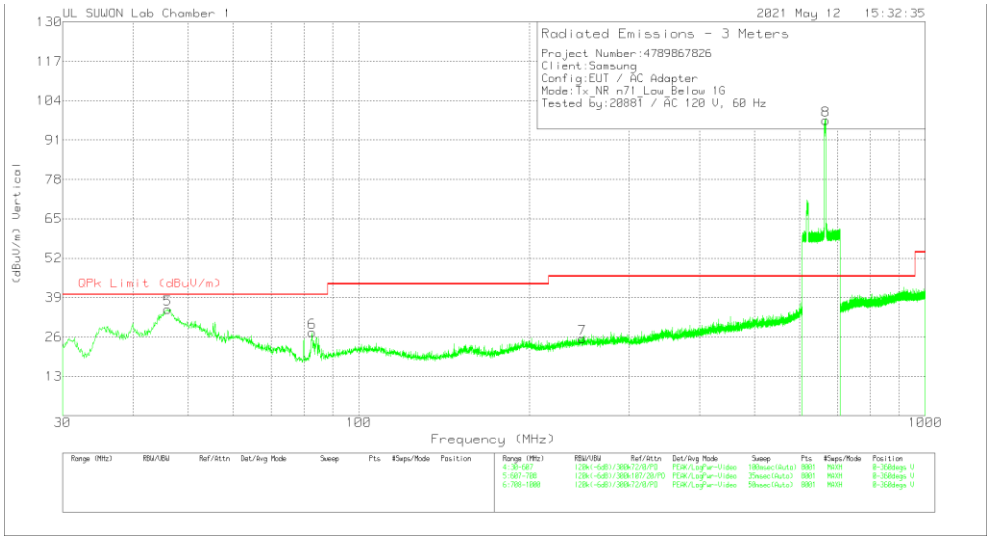
7.16. Below 1 GHz in the 5G NR Band 71

LOW CHANNEL(618.8 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	46.4445	5.98	Pk	19.9	1.5	27.38	40	-12.62	0-360	400	H
2	84.1659	7.98	Pk	13.7	2	23.68	40	-16.32	0-360	400	H
3	248.2503	6.39	Pk	18.5	3.3	28.19	46.02	-17.83	0-360	100	H
4	666.1103	74.11	Pk	25.4	5.4	104.91	**46.02**	**58.89**	0-360	100	H
5	45.9396	13.77	Pk	19.9	1.5	35.17	40	-4.83	0-360	100	V
6	82.7955	12.35	Pk	13.2	2	27.55	40	-12.45	0-360	100	V
7	248.106	3.76	Pk	18.5	3.3	25.56	46.02	-20.46	0-360	200	V
8	667.4233	66.78	Pk	25.4	5.4	97.58	**46.02**	**51.56**	0-360	300	V

Pk - Peak detector

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Radiated Emissions

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
45.9396	10.11	Qp	19.9	1.5	31.51	40	-8.49	128	100	V

Qp - Quasi-Peak detector

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

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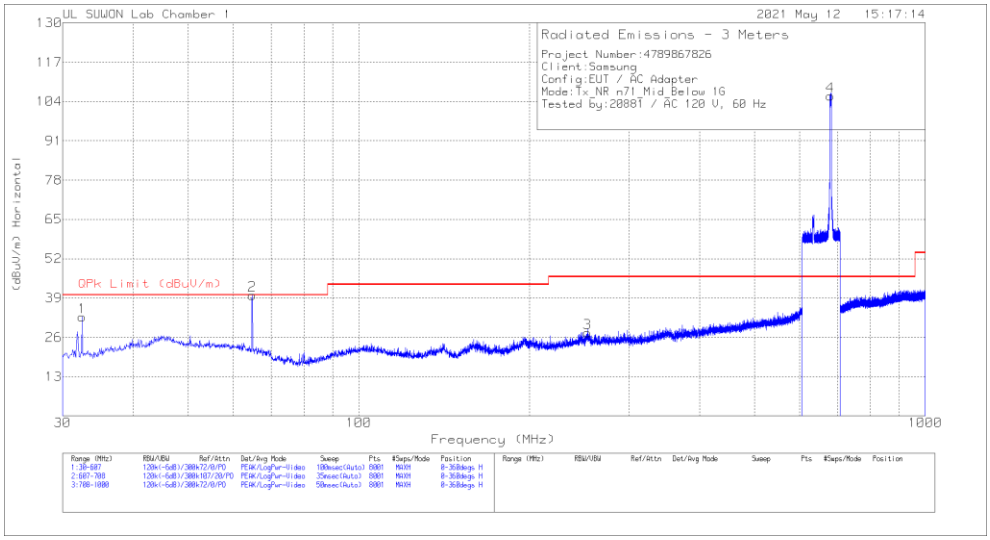
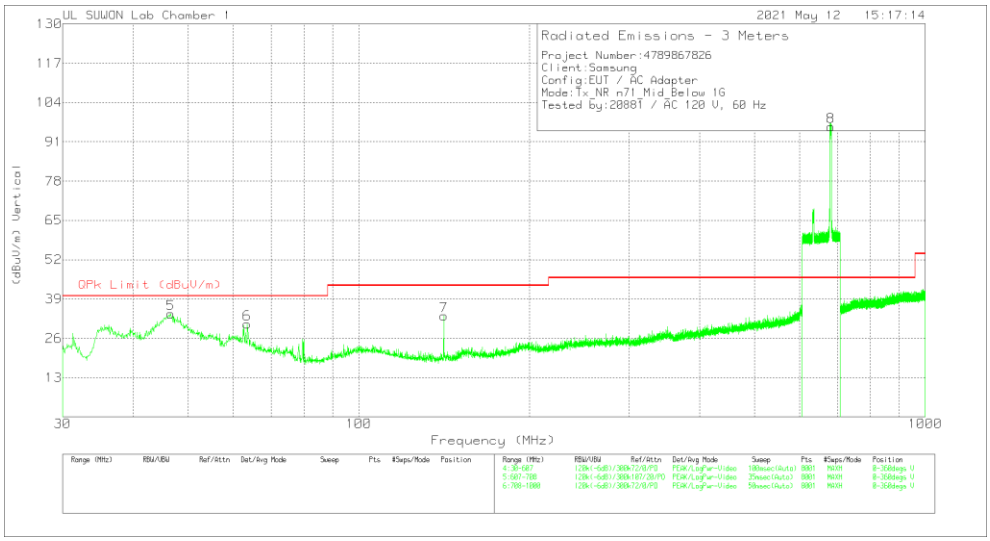
MID CHANNEL(634.5 MHz)

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	32.4523	15.86	Pk	15.7	1.2	32.76	40	-7.24	0-360	400	H
2	64.8364	21.07	Pk	17.2	1.7	39.97	40	-.03	0-360	400	H
3	253.0826	5.66	Pk	18.5	3.3	27.46	46.02	-18.56	0-360	100	H
4	680.0988	74.99	Pk	25.5	5.4	105.89	**46.02**	**59.87**	0-360	100	H
5	46.5166	12.66	Pk	19.9	1.5	34.06	40	-5.94	0-360	100	V
6	63.5381	11.46	Pk	17.6	1.7	30.76	40	-9.24	0-360	100	V
7	141.2168	17.22	Pk	13.8	2.5	33.52	43.52	-10	0-360	200	V
8	681.5633	65.09	Pk	25.5	5.4	95.99	**46.02**	**49.97**	0-360	300	V

Pk - Peak detector

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Radiated Emissions

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
64.8364	-1.72	Qp	17.2	1.7	17.18	40	-22.82	258	343	H

Qp - Quasi-Peak detector

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

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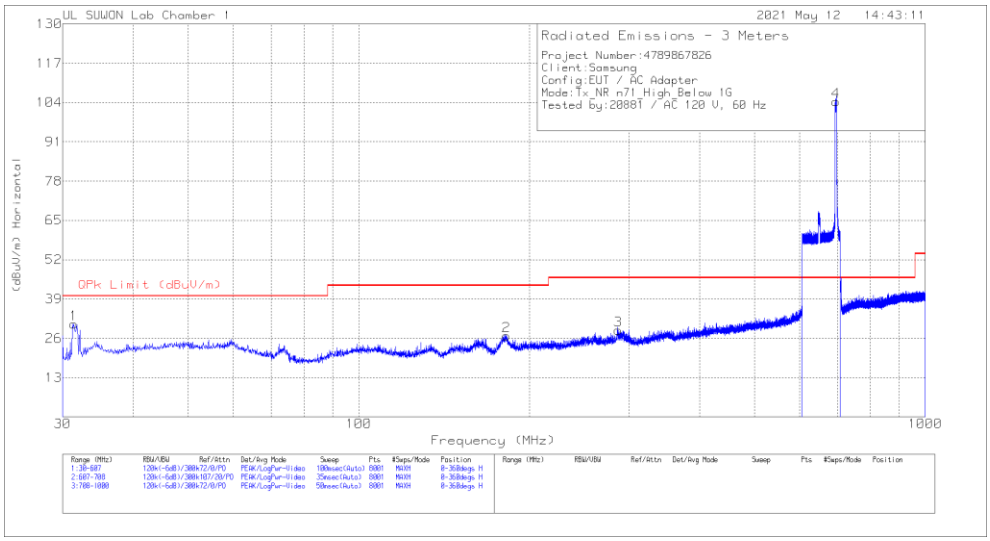
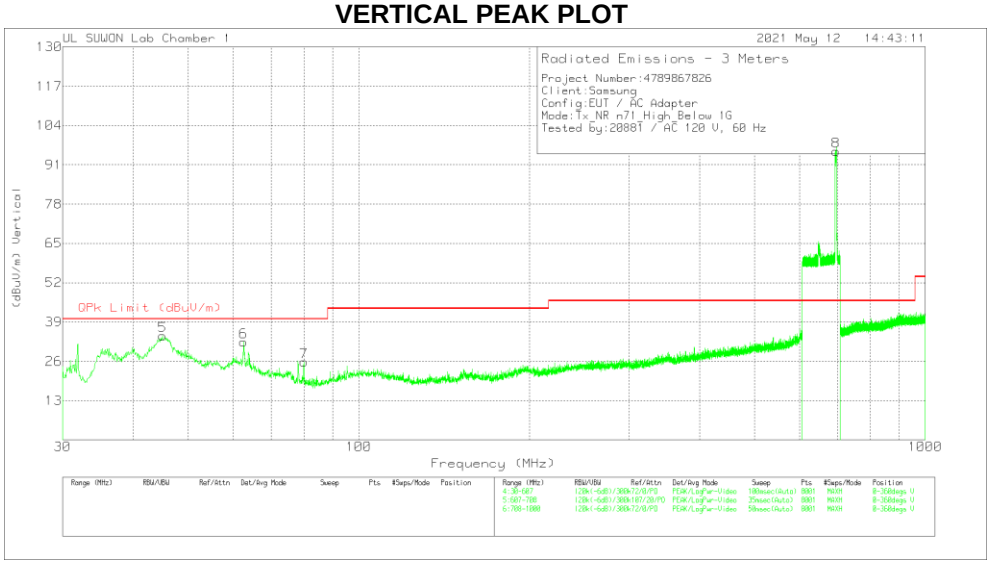
HIGH CHANNEL(650.2 MHz)

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	31.3704	13.78	Pk	15.7	1.2	30.68	40	-9.32	0-360	400	H
2	182.4001	8.37	Pk	15.6	2.9	26.87	43.52	-16.65	0-360	100	H
3	286.765	6.05	Pk	19	3.6	28.65	46.02	-17.37	0-360	100	H
4	695.4508	73.21	Pk	25.6	5.5	104.31	**46.02**	**58.29**	0-360	100	H
5	45.002	13.3	Pk	19.7	1.5	34.5	40	-5.5	0-360	100	V
6	62.6005	12.79	Pk	17.9	1.7	32.39	40	-7.61	0-360	100	V
7	79.9826	11.35	Pk	12.6	1.9	25.85	40	-14.15	0-360	100	V
8	695.6401	64.44	Pk	25.6	5.5	95.54	**46.02**	**49.52**	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.

END OF TEST REPORT

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