FCC CFR47 PART 15 SUBPART B

WWAN

CELLULAR RECEIVER MODE TEST REPORT

FOR

GSM/WCDMA/LTE Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, ANT+, NFC and WPT

MODEL NUMBER : SM-N975F/DS, SM-N975F, SM-N975X

FCC ID: A3LSMN975F

REPORT NUMBER: 4789067225-E1V1

ISSUE DATE: JUN 27, 2019

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

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
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ACCREDITED
Testing Laboratory

TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	06/27/19	Initial issue	Junwhan Lee

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UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27
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:	GSM/WCDMA/LTE Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, ANT+, NFC and WPT
MODEL NUMBER:	SM-N975F/DS, SM-N975F, SM-N975X
SERIAL NUMBER:	R38M50ASH5W,
DATE TESTED:	JUN 23, 2019 – JUN 26, 2019;

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:

SungGil Park
Suwon Lab Engineer
UL Korea, Ltd.

Tested By:

Junwhan Lee
Suwon Lab Engineer
UL Korea, Ltd.

2. TEST METHODOLOGY

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

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

3. FACILITIES AND ACCREDITATION

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

218 Maeyeong-ro
☒ Chamber 1
☒ Chamber 2
☐ Chamber 3

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at http://www.iasonline.org/PDF/TL/TL-637.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
Conducted Disturbance, 0.15 to 30 MHz	2.32 dB
Radiated Disturbance, 30 MHz to 1 GHz	3.86 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.97 dB
Radiated Disturbance, 18 GHz to 40 GHz	5.57 dB

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

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

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

5.2. TEST MODE

Mode	Description
GSM850	Communicating with Call simulator(CMW500)
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 26	Communicating with Call simulator(CMW500)

5.3. WORST-CASE ORIENTATION AND MODE

For GSM850/LTE Band 13, EUT was investigated in three orthogonal orientations X, Y and Z it was determined that Z orientation was worst-case orientation.

For WCDMA B5 / LTE B5 / LTE B12 / LTE B26, EUT was investigated in three orthogonal orientations X, Y and Z it was determined that X orientation was worst-case orientation.

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

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, same maximum tune-up limit and same channel bandwidth.

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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-TA800	R37M4PW4FW1SE3	N/A
Data Cable	SAMSUNG	EP-DG977	N/A	N/A

I/O CABLE

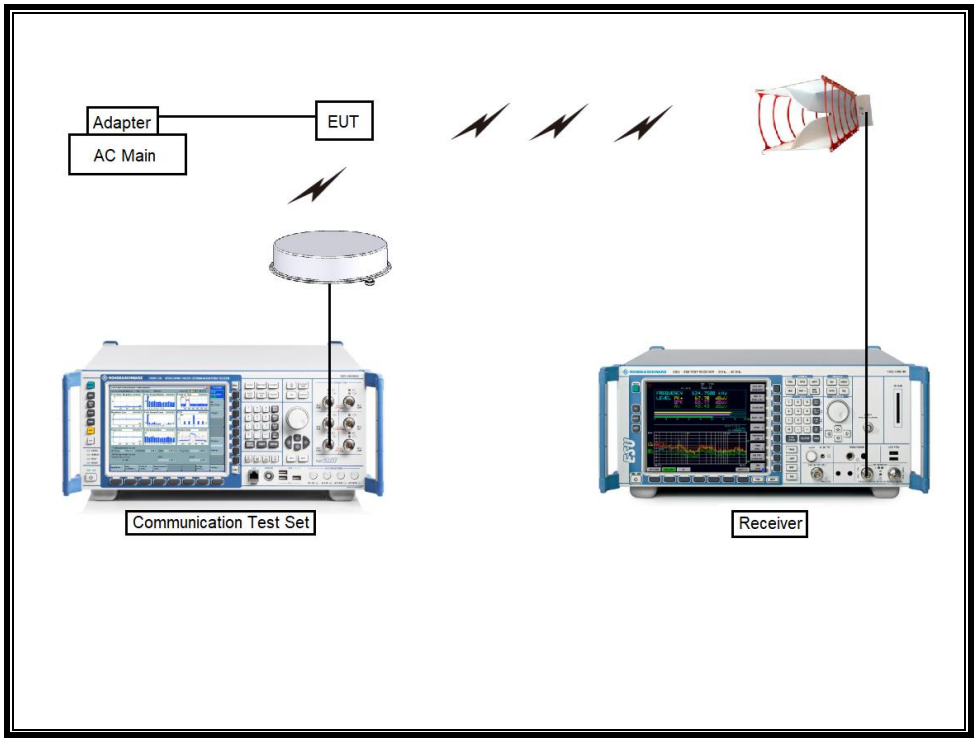
I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	C Type	Shielded	1.0m	N/A

TEST SETUP

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

This EUT is able to equipped with S-pen on the inside. Spot check were performed both inserted and removed condition. Because there is no deviation between the two data, all tests were performed under equipped with the S-pen.

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	06-30-19
Antenna, Horn, 40 GHz	ETS	3116C	00166155	08-14-20
Preamplifier	ETS	3116C-PA	00168841	08-09-19
Antenna, Horn, 40 GHz	ETS	3116C	00168645	12-04-19
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	08-04-20
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	08-04-20
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	08-04-20
Antenna, Horn, 18 GHz	ETS	3115	00167211	08-04-20
Antenna, Horn, 18 GHz	ETS	3115	00161451	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00168724	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00205959	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00168717	08-04-20
Communications Test Set	R&S	CMW500	115331	08-07-19
Preamplifier, 1000 MHz	Sonoma	310N	341282	08-07-19
Preamplifier, 1000 MHz	Sonoma	310N	370599	08-06-19
Preamplifier, 1000 MHz	Sonoma	310N	351741	08-07-19
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	08-07-19
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	08-07-19
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	08-07-19
EMI Test Receive, 40 GHz	R&S	ESU40	100439	08-06-19
EMI Test Receive, 40 GHz	R&S	ESU40	100457	08-06-19
EMI Test Receive, 44 GHz	R&S	ESW40	101590	08-06-19
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	80108-0004	N/A
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G005	08-08-19
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G006	08-08-19
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	010	08-08-19
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	011	08-08-19
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G001	08-08-19
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G002	08-08-19
Attenuator	PASTERNACK	PE7087-10	A009	08-08-19
Attenuator	PASTERNACK	PE7087-10	A001	08-08-19
Attenuator	PASTERNACK	PE7087-10	A008	08-08-19
Attenuator	PASTERNACK	PE7087-10	2	08-07-19
Attenuator	PASTERNACK	PE7395-10	A011	08-08-19
UL Software				
Description	**Manufacturer**	**Model**	**Version**	
Radiated software	UL	UL EMC	Ver 9.5	

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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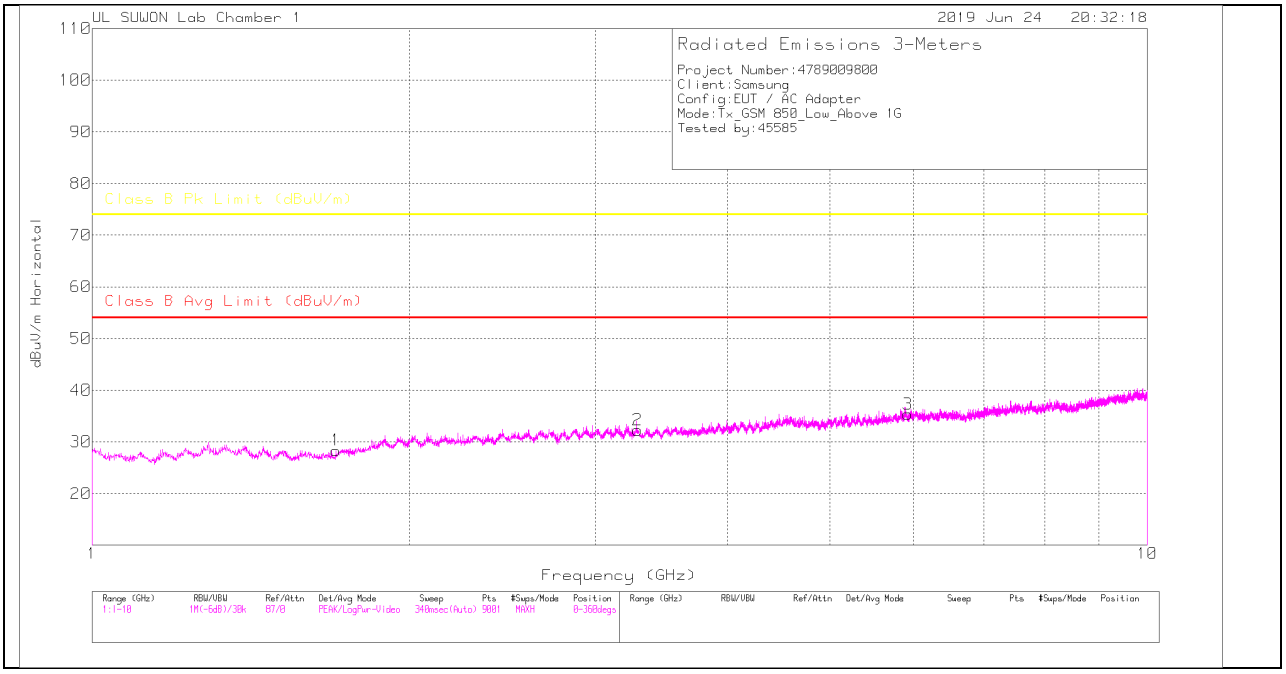
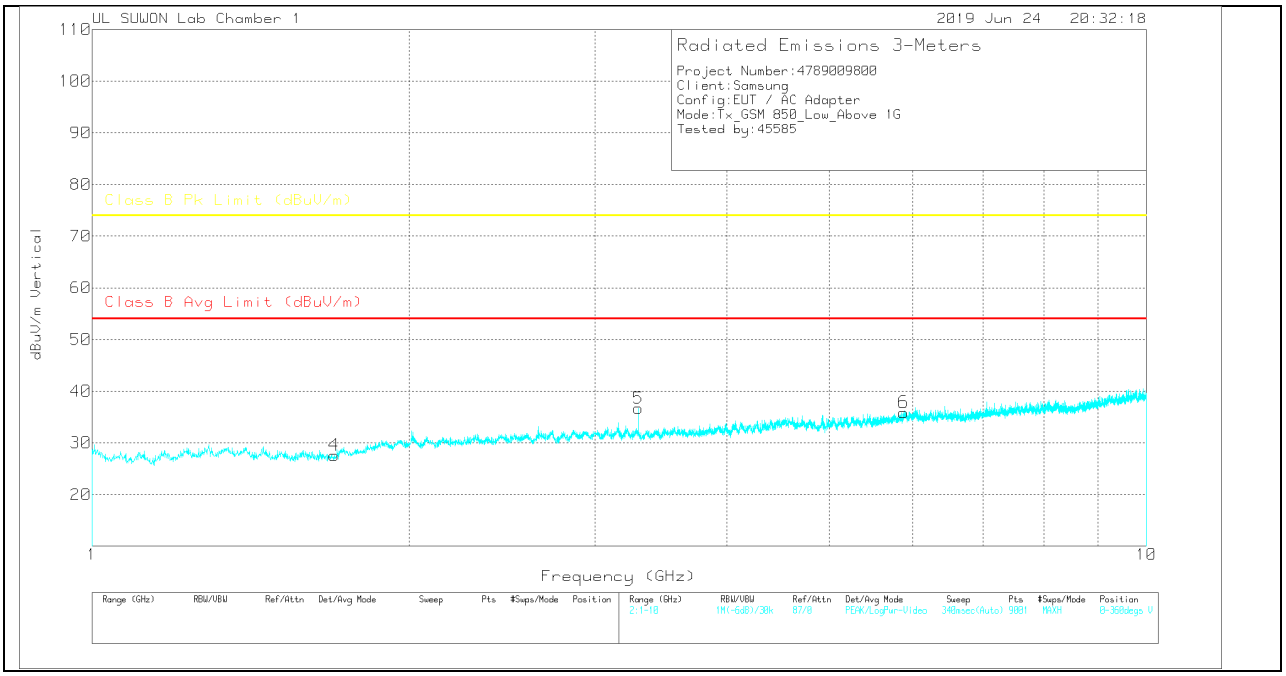
7.1. Above 1 GHz in the GSM850

LOW CHANNEL(869.2MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

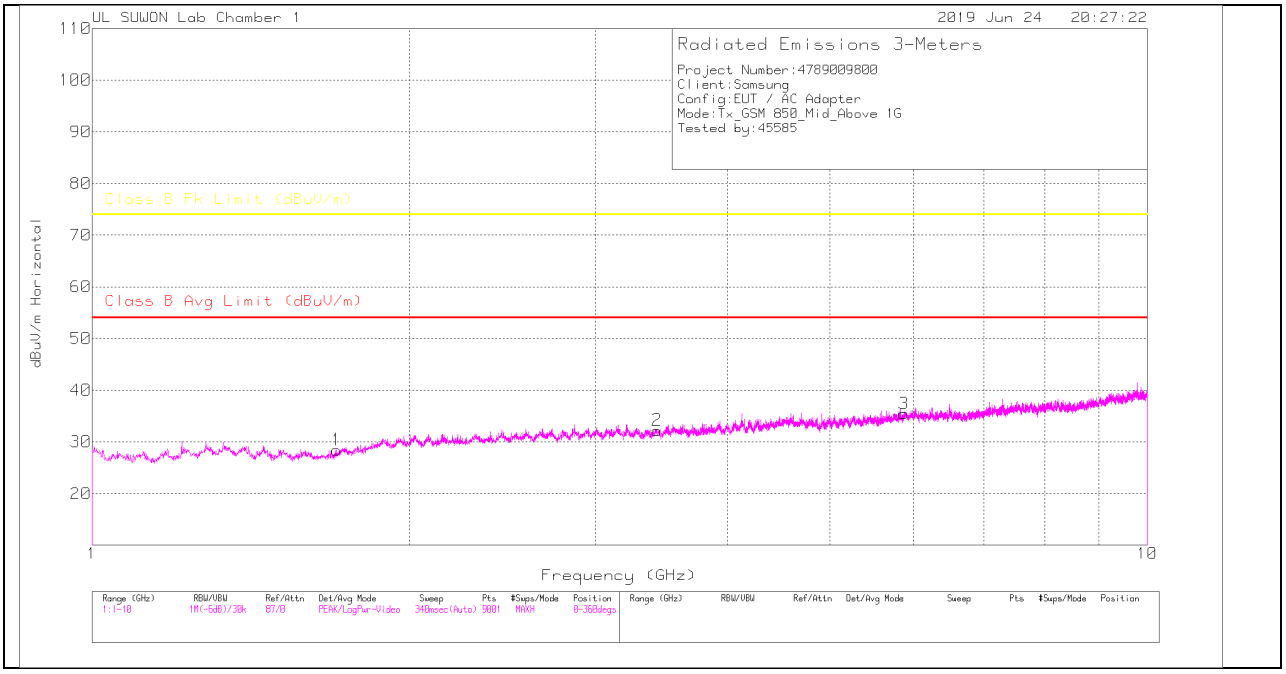
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.702	35.16	PK	28.6	-36.1	.7	28.36	-	-	74	-45.64	0-360	100	H
2	3.288	32.68	PK	32.7	-33.8	.7	32.28	-	-	74	-41.72	0-360	100	H
3	5.933	30.33	PK	35.1	-30.5	.4	35.33	-	-	74	-38.67	0-360	100	H
4	1.697	34.52	PK	28.6	-36.1	.6	27.62	-	-	74	-46.38	0-360	100	V
5	3.297	36.97	PK	32.7	-33.7	.7	36.67	-	-	74	-37.33	0-360	100	V
6	5.885	31	PK	35	-30.6	.5	35.9	-	-	74	-38.1	0-360	100	V

PK – Peak Detector

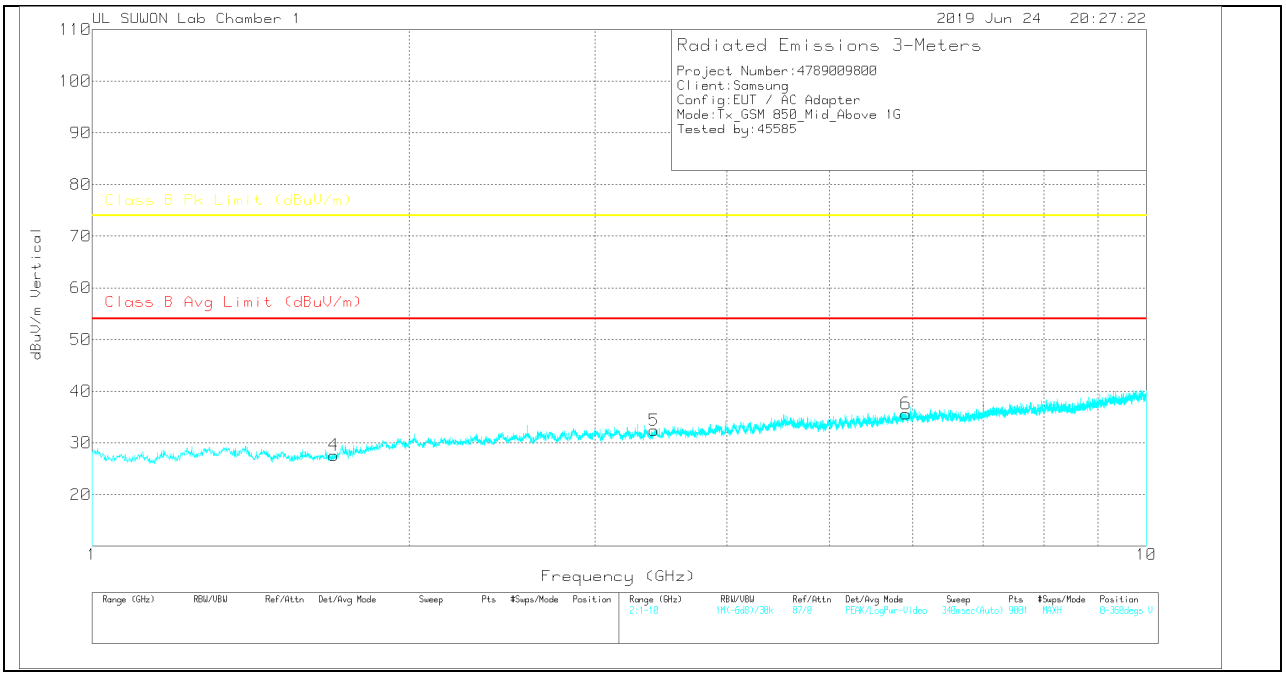
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(881.6MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

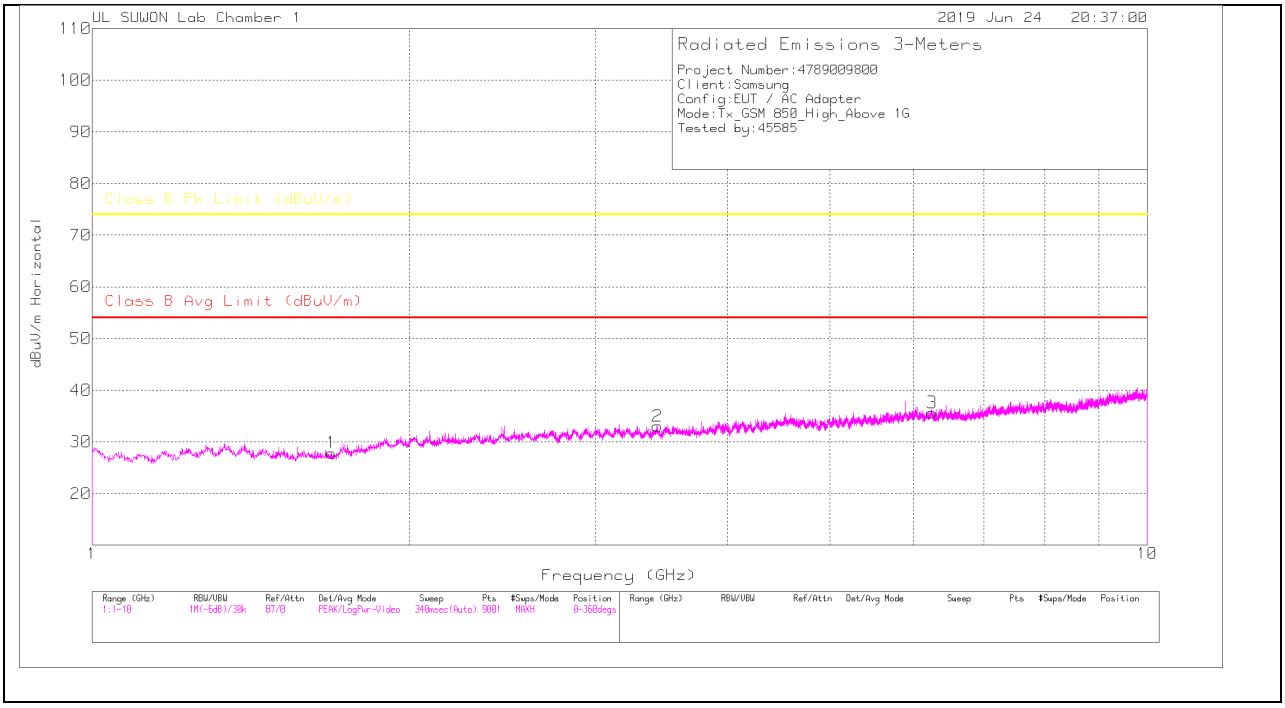
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.705	35.24	PK	28.6	-36.1	.7	28.44	-	-	74	-45.56	0-360	100	H
2	3.432	32.13	PK	32.7	-33.2	.6	32.23	-	-	74	-41.77	0-360	100	H
3	5.878	30.55	PK	35	-30.6	.5	35.45	-	-	74	-38.55	0-360	100	H
4	1.696	34.52	PK	28.6	-36.1	.6	27.62	-	-	74	-46.38	0-360	100	V
5	3.411	32.22	PK	32.7	-33.2	.7	32.42	-	-	74	-41.58	0-360	100	V
6	5.917	30.75	PK	35	-30.5	.4	35.65	-	-	74	-38.35	0-360	100	V

PK – Peak Detector

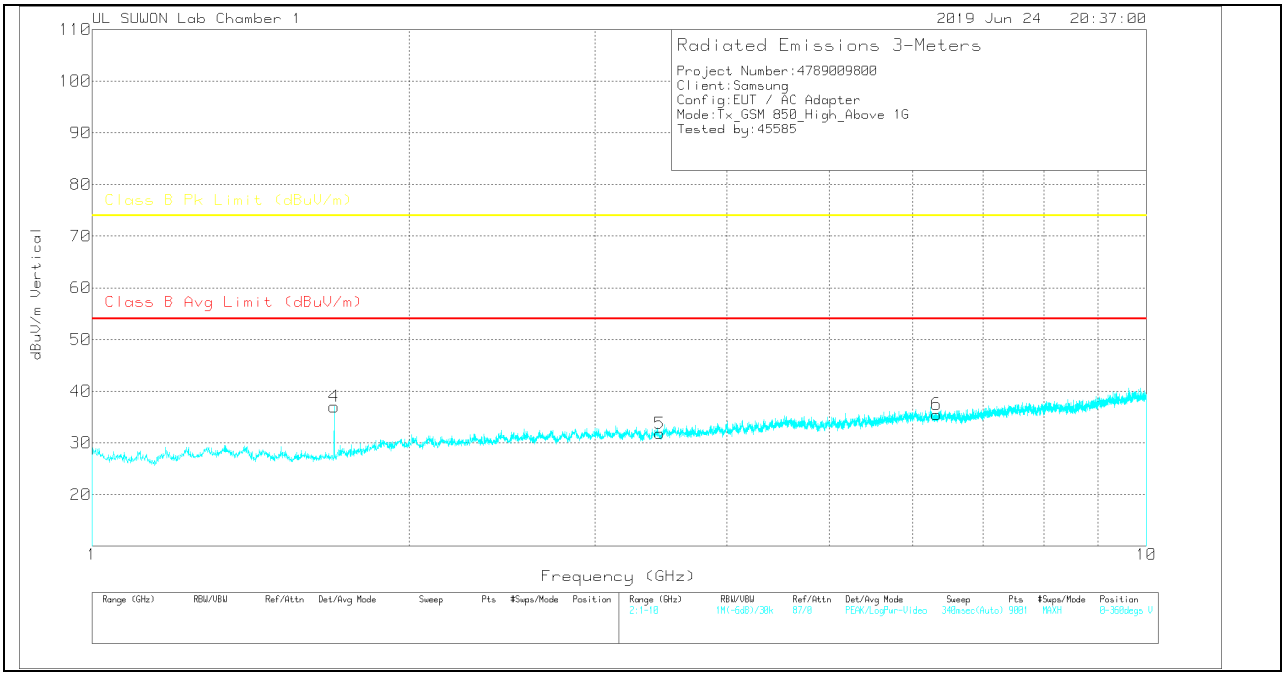
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

HIGH CHANNEL(893.8MHz)

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	1.687	34.98	PK	28.5	-36.1	.5	27.88	-	-	74	-46.12	0-360	100	H
2	3.434	32.94	PK	32.7	-33.2	.6	33.04	-	-	74	-40.96	0-360	100	H
3	6.252	29.72	PK	35.3	-29.9	.5	35.62	-	-	74	-38.38	0-360	100	H
4	1.697	43.92	PK	28.6	-36.1	.6	37.02	-	-	74	-36.98	0-360	100	V
5	3.456	31.7	PK	32.7	-33.1	.5	31.8	-	-	74	-42.2	0-360	100	V
6	6.324	29.93	PK	35.3	-30	.3	35.53	-	-	74	-38.47	0-360	100	V

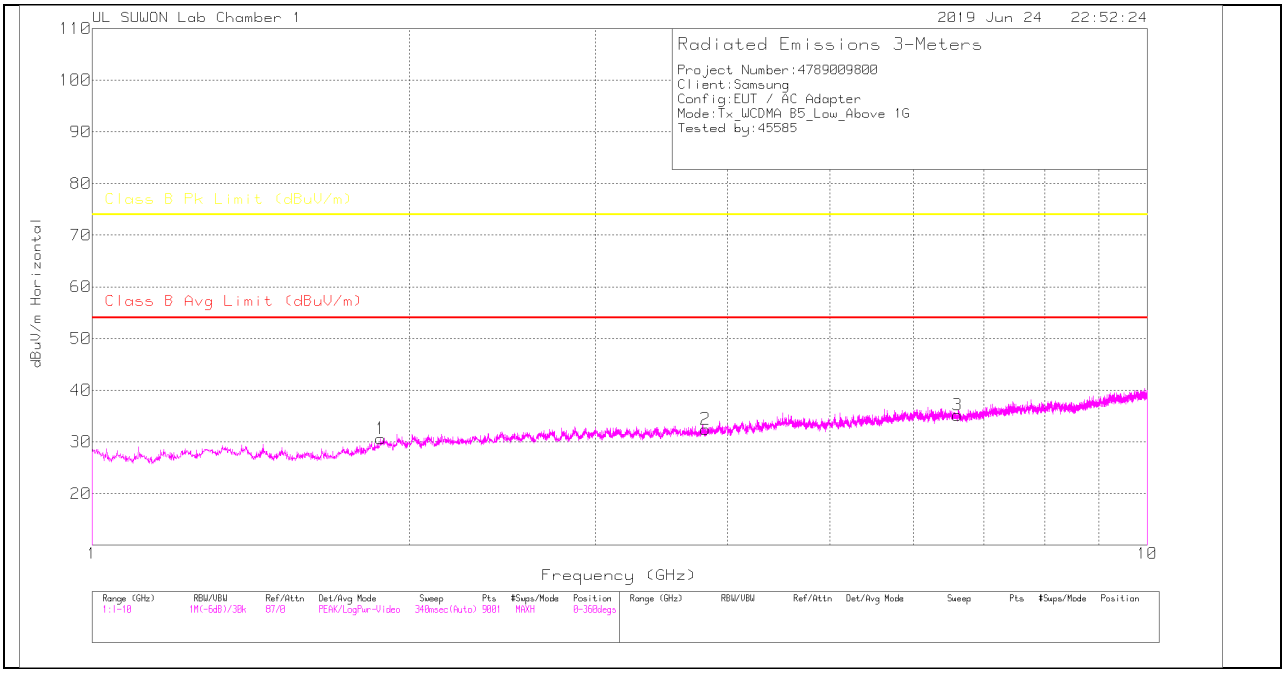
PK – Peak Detector

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

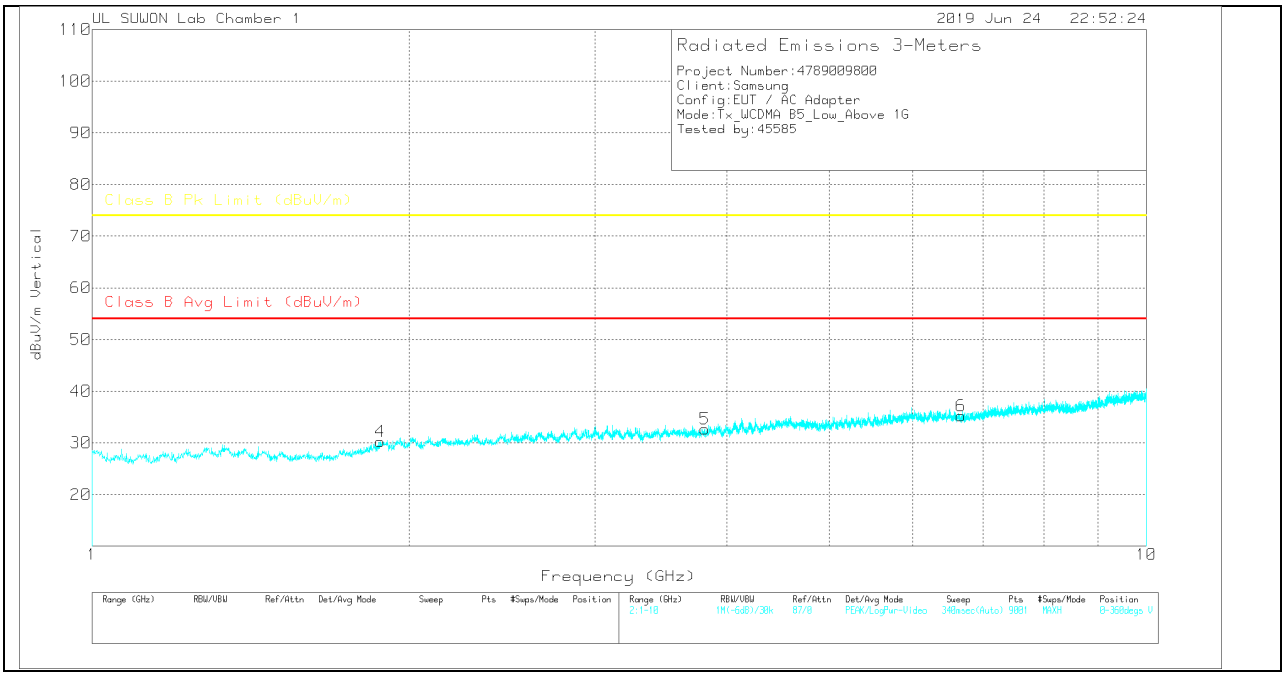
7.2. Above 1 GHz in the WCDMA Band 5

LOW CHANNEL(871.4MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

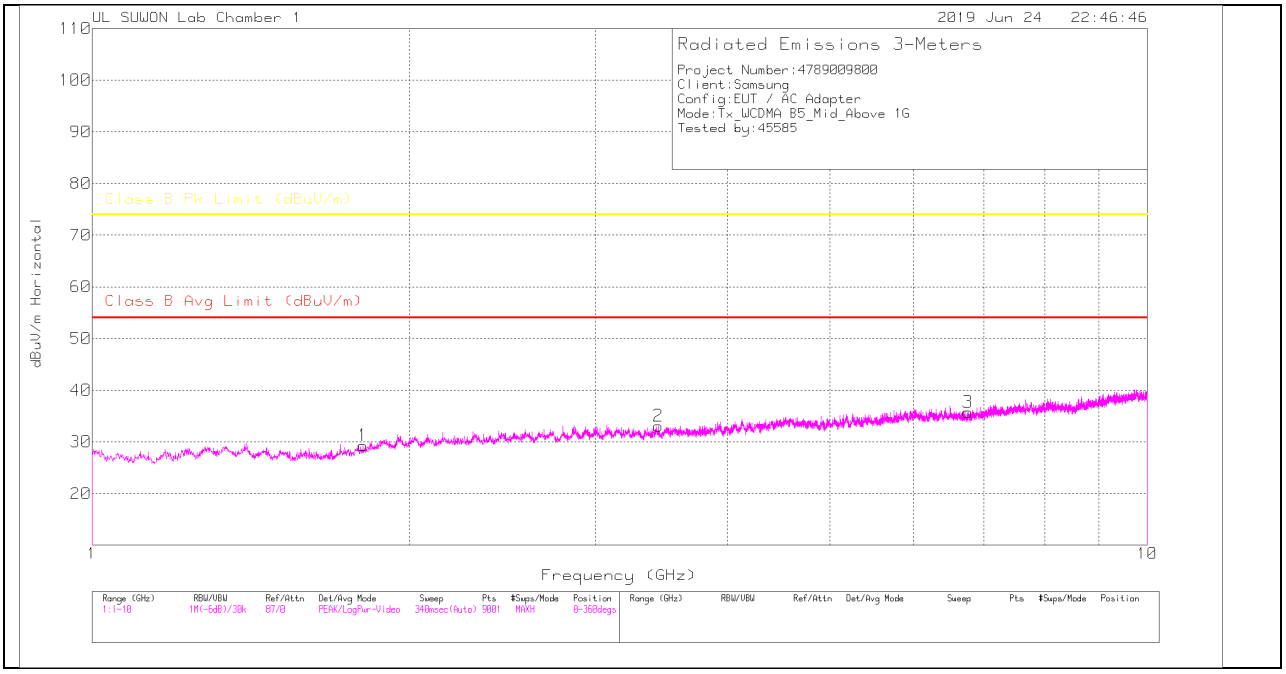
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.878	35.13	PK	30.5	-35.7	.7	30.63	-	-	74	-43.37	0-360	100	H
2	3.815	31.56	PK	33.3	-32.9	.5	32.46	-	-	74	-41.54	0-360	100	H
3	6.607	28.7	PK	35.4	-29.4	.5	35.2	-	-	74	-38.8	0-360	100	H
4	1.877	34.76	PK	30.5	-35.7	.7	30.26	-	-	74	-43.74	0-360	100	V
5	3.813	31.76	PK	33.3	-32.9	.5	32.66	-	-	74	-41.34	0-360	100	V
6	6.67	28.81	PK	35.4	-29.3	.3	35.21	-	-	74	-38.79	0-360	100	V

PK – Peak Detector

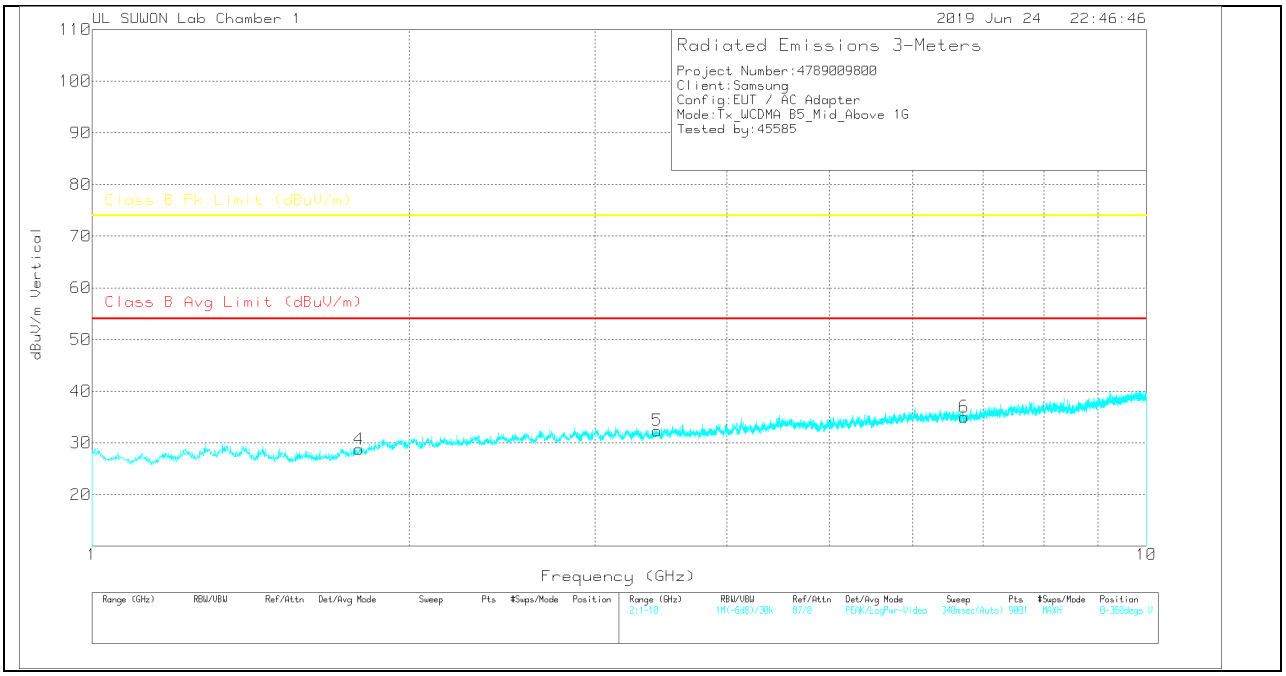
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(881.6MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

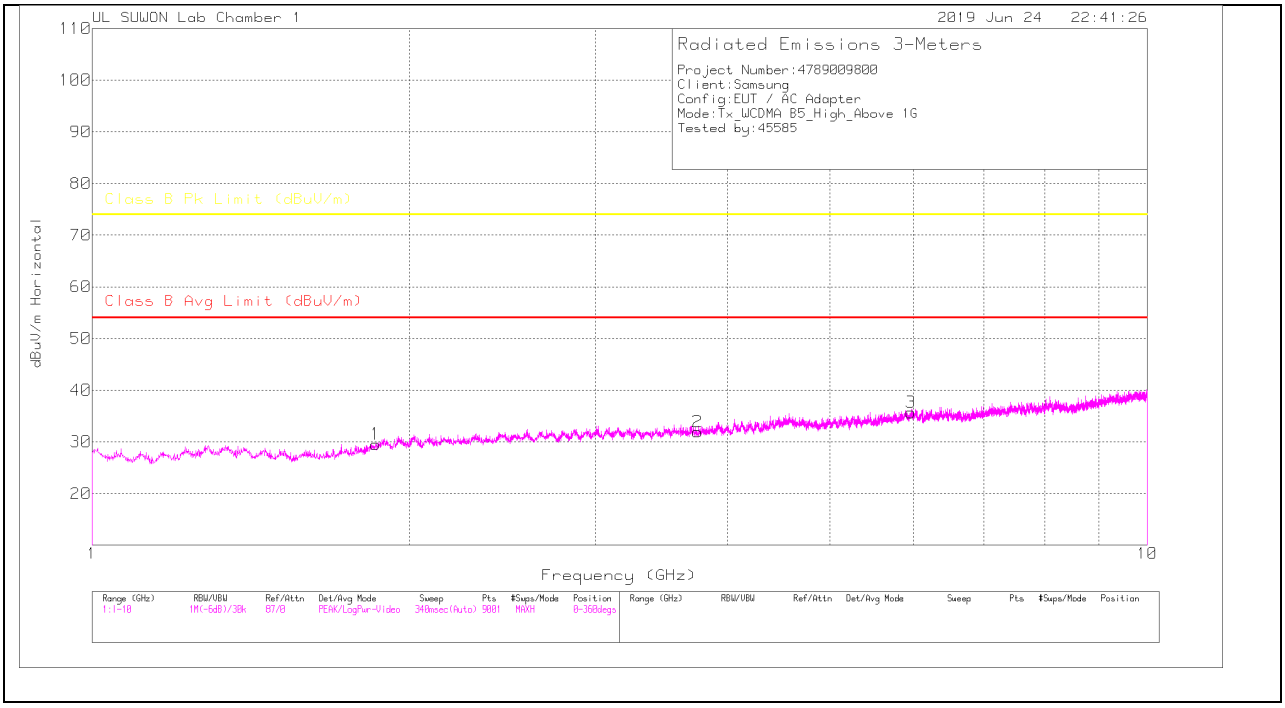
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.806	35.22	PK	29.7	-36	.4	29.32	-	-	74	-44.68	0-360	100	H
2	3.439	32.98	PK	32.7	-33.2	.6	33.08	-	-	74	-40.92	0-360	100	H
3	6.76	28.67	PK	35.5	-28.9	.5	35.77	-	-	74	-38.23	0-360	100	H
4	1.791	34.76	PK	29.5	-36	.5	28.76	-	-	74	-45.24	0-360	100	V
5	3.436	32.38	PK	32.7	-33.3	.6	32.38	-	-	74	-41.62	0-360	100	V
6	6.721	28.12	PK	35.5	-29	.4	35.02	-	-	74	-38.98	0-360	100	V

PK – Peak Detector

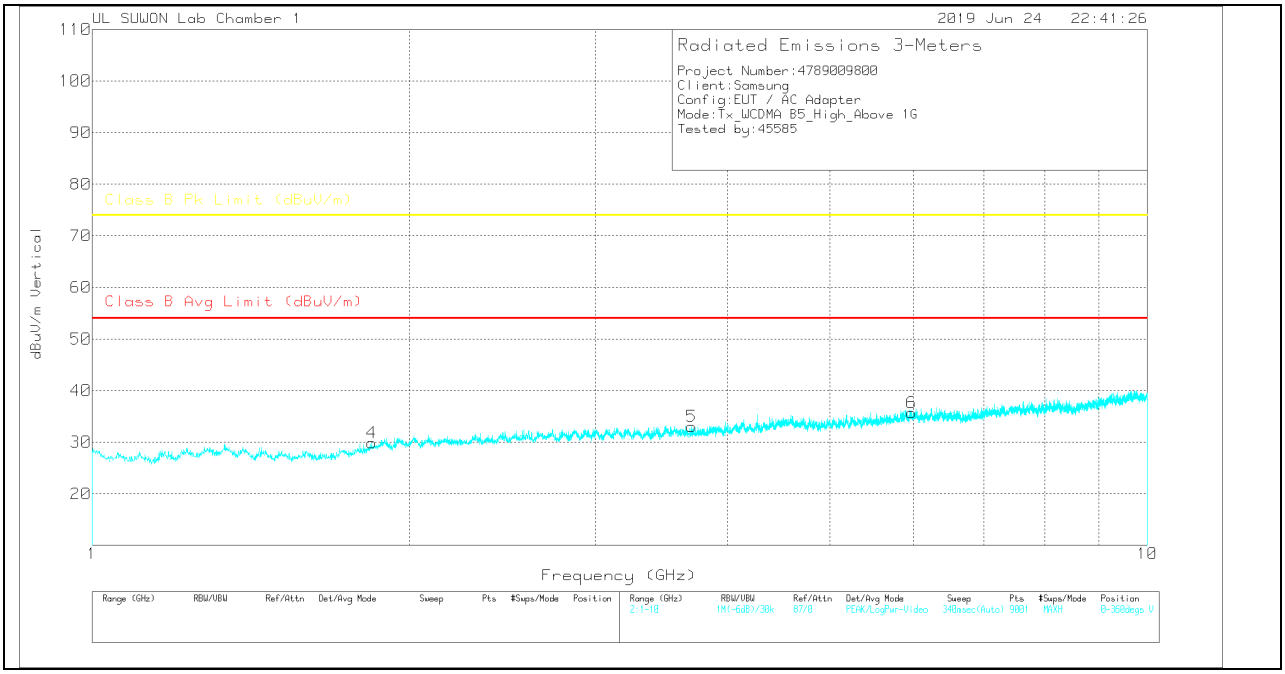
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

HIGH CHANNEL(891.6MHz)

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	1.857	34.37	PK	30.3	-35.8	.7	29.57	-	-	74	-44.43	0-360	100	H
2	3.748	31.36	PK	33.1	-33	.5	31.96	-	-	74	-42.04	0-360	100	H
3	5.968	30.79	PK	35.1	-30.6	.4	35.69	-	-	74	-38.31	0-360	100	H
4	1.841	35.06	PK	30.1	-35.9	.6	29.86	-	-	74	-44.14	0-360	100	V
5	3.699	32.42	PK	33.1	-33	.5	33.02	-	-	74	-40.98	0-360	100	V
6	5.979	30.82	PK	35.1	-30.6	.4	35.72	-	-	74	-38.28	0-360	100	V

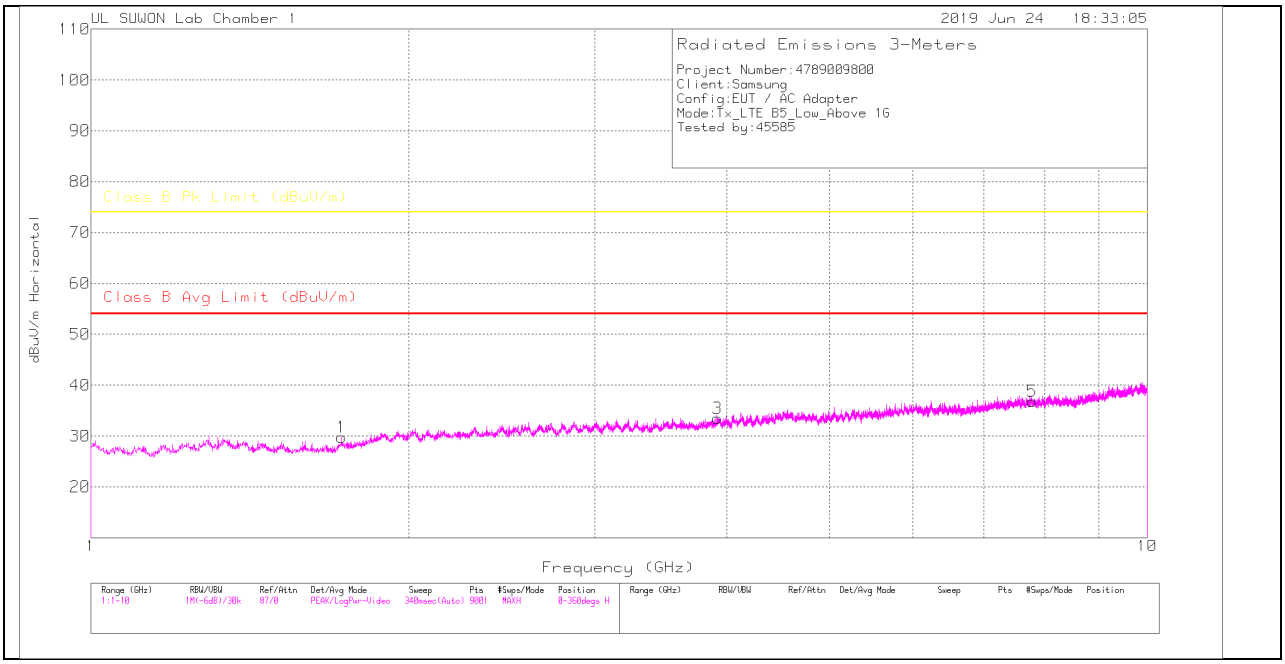
PK – Peak Detector

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

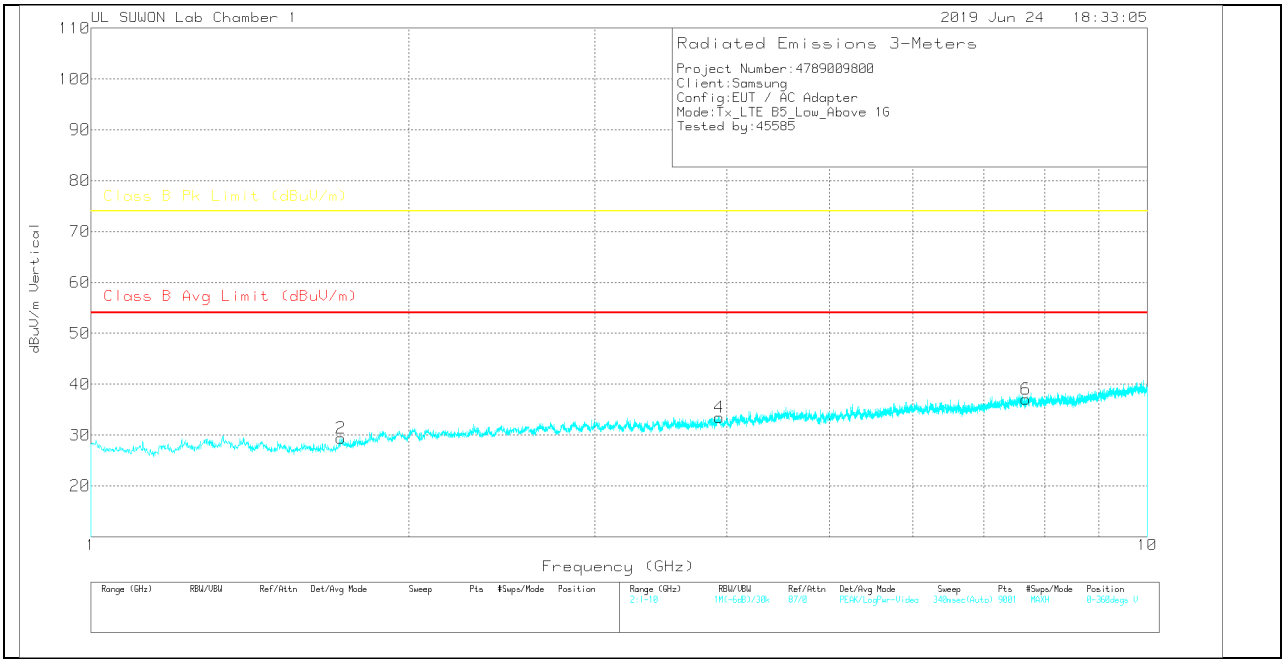
7.3. Above 1 GHz in the LTE Band 5

LOW CHANNEL(870.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

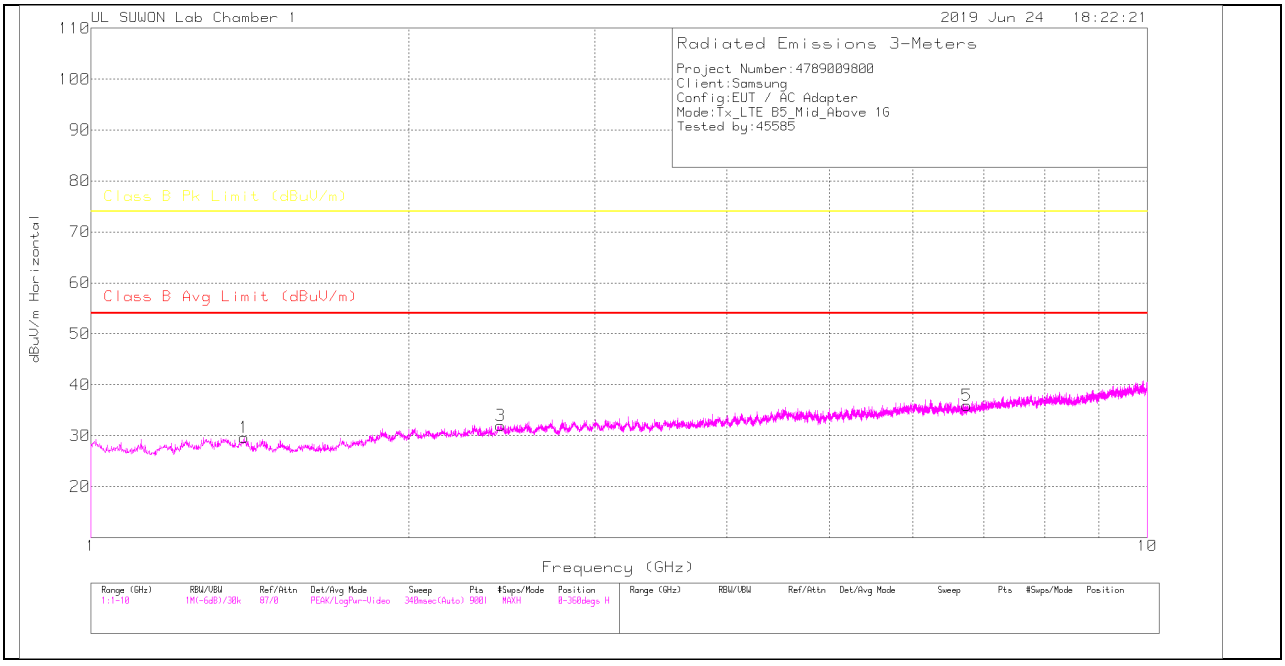
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.727	36.18	PK	28.8	-36	.8	29.78	-	-	74	-44.22	0-360	100	H
3	3.92	32.17	PK	33.5	-32.7	.5	33.47	-	-	74	-40.53	0-360	100	H
5	7.78	27.44	PK	35.9	-27.1	.6	36.84	-	-	74	-37.16	0-360	100	H
2	1.724	35.78	PK	28.8	-36	.8	29.38	-	-	74	-44.62	0-360	100	V
4	3.9355	32.13	PK	33.5	-32.7	.5	33.43	-	-	74	-40.57	0-360	100	V
6	7.672	27.94	PK	35.9	-27.3	.5	37.04	-	-	74	-36.96	0-360	100	V

PK – Peak Detector

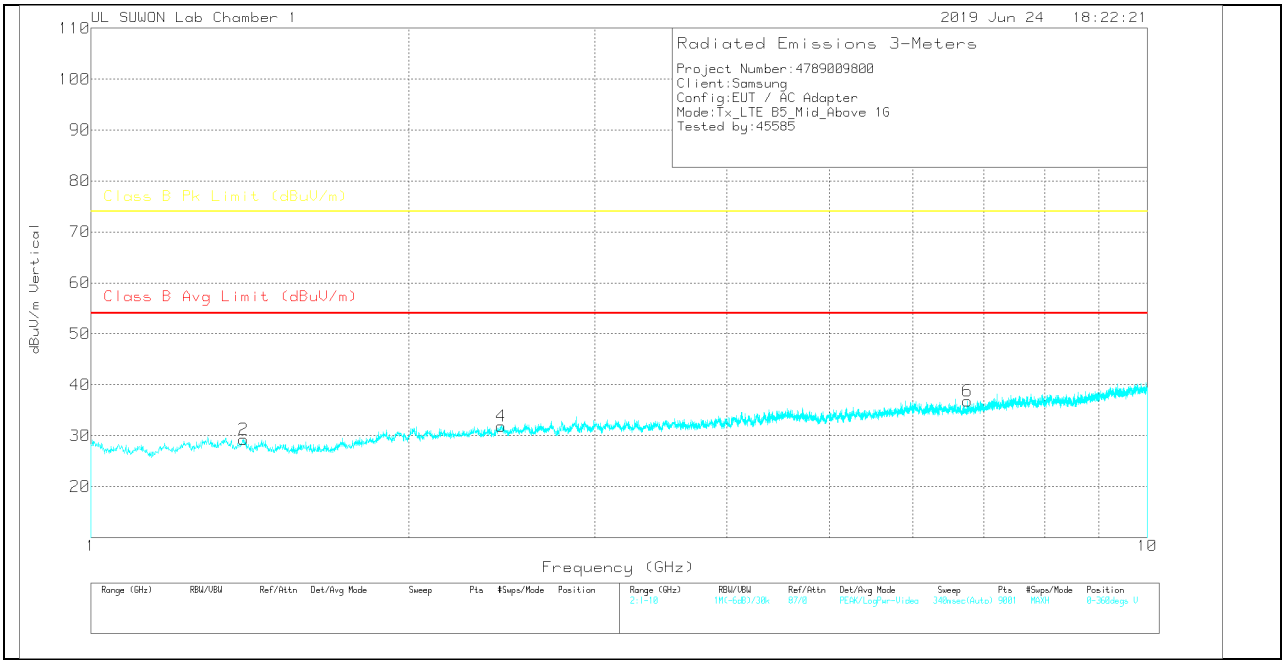
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(881.5MHz)

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	1.396	36.36	PK	29.4	-36.7	.6	29.66	-	-	74	-44.34	0-360	100	H
3	2.442	34.34	PK	31.8	-34.9	.8	32.04	-	-	74	-41.96	0-360	100	H
5	6.752	28.84	PK	35.5	-28.9	.5	35.94	-	-	74	-38.06	0-360	100	H
2	1.394	35.99	PK	29.4	-36.7	.6	29.29	-	-	74	-44.71	0-360	100	V
4	2.447	33.99	PK	31.9	-34.8	.8	31.89	-	-	74	-42.11	0-360	100	V
6	6.758	29.7	PK	35.5	-28.9	.5	36.8	-	-	74	-37.2	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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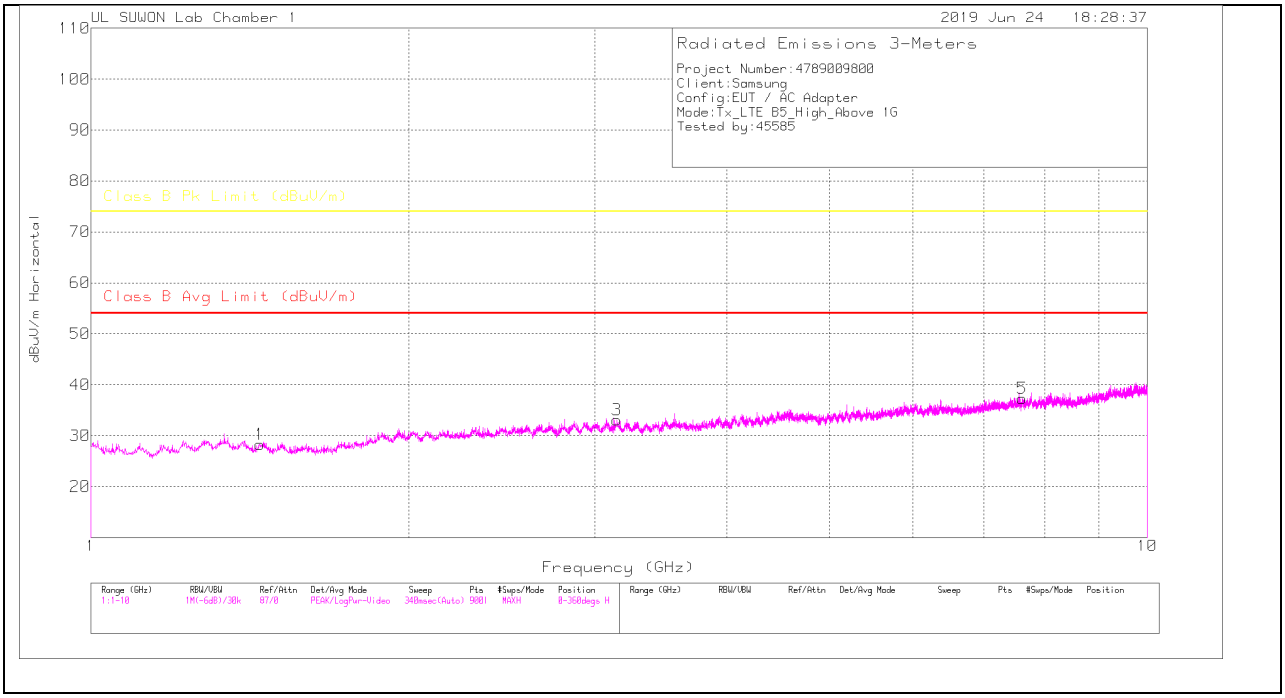
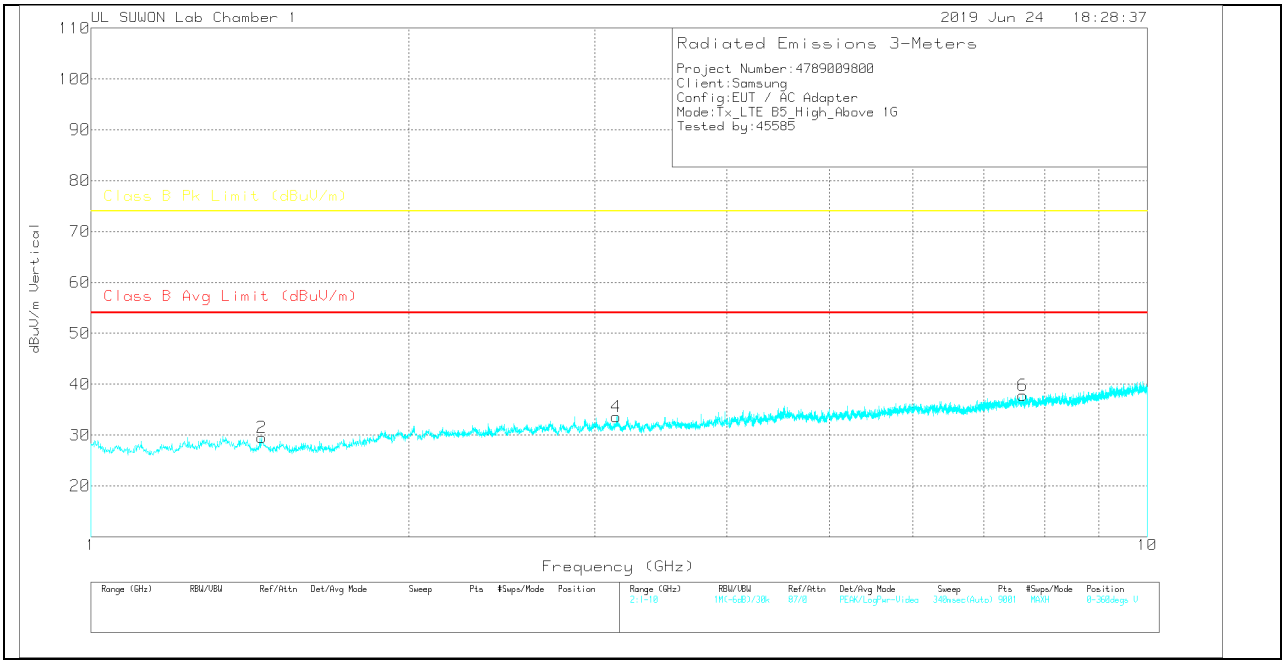
HIGH CHANNEL(892.5MHz)

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	1.446	35.2	PK	29	-36.6	.7	28.3	-	-	74	-45.7	0-360	100	H
3	3.148	33.45	PK	32.7	-33.7	.7	33.15	-	-	74	-40.85	0-360	100	H
5	7.615	28.56	PK	35.8	-27.5	.4	37.26	-	-	74	-36.74	0-360	100	H
2	1.451	36.42	PK	28.9	-36.5	.7	29.52	-	-	74	-44.48	0-360	100	V
4	3.143	33.83	PK	32.7	-33.6	.7	33.63	-	-	74	-40.37	0-360	100	V
6	7.621	29.19	PK	35.8	-27.5	.3	37.79	-	-	74	-36.21	0-360	100	V

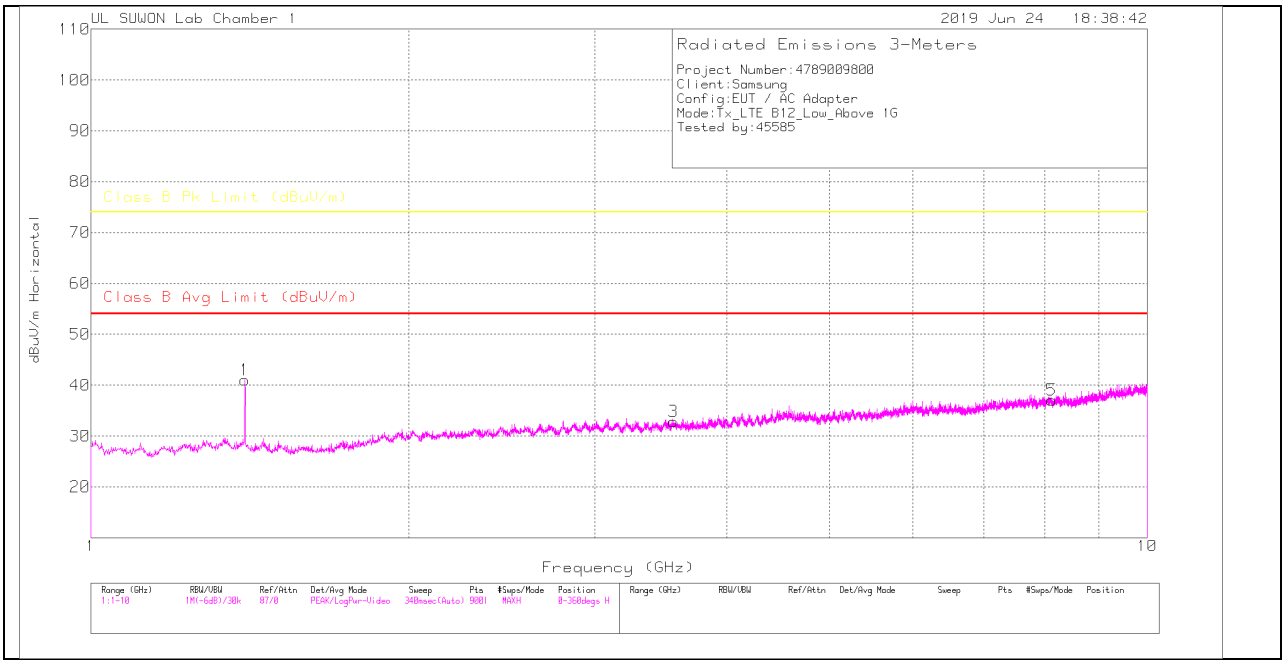
PK – Peak Detector

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

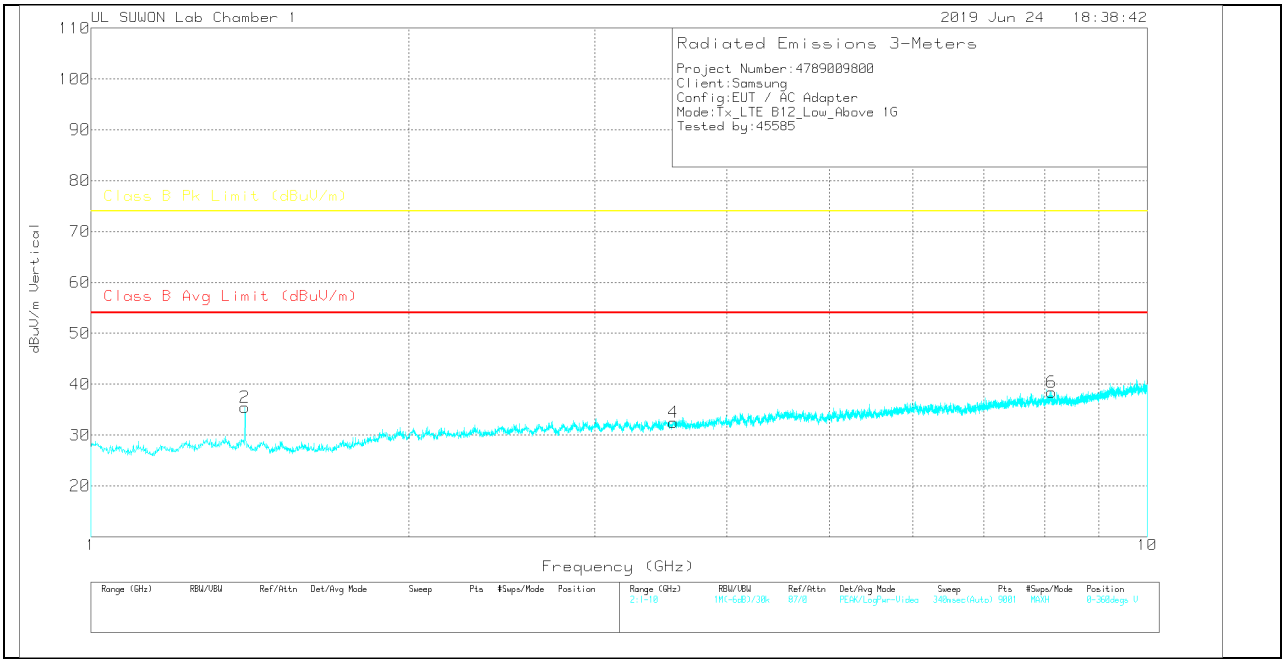
7.4. Above 1 GHz in the LTE Band 12

LOW CHANNEL(730.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

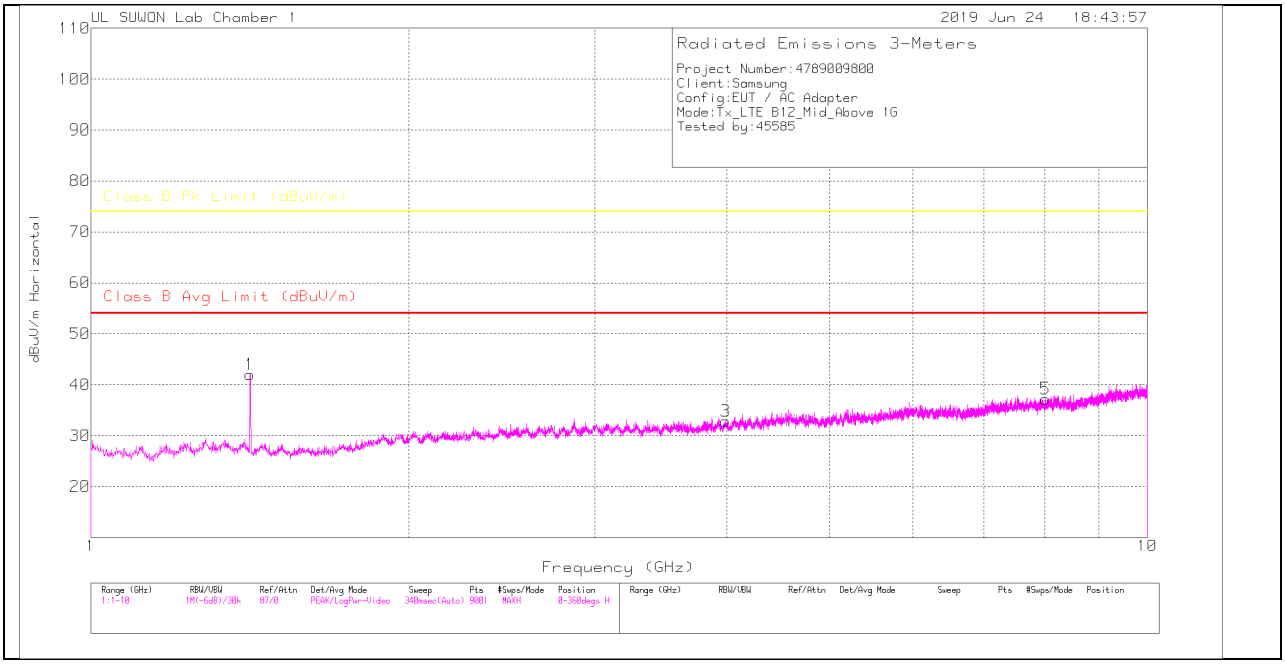
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.399	47.64	PK	29.4	-36.6	.6	41.04	-	-	74	-32.96	0-360	100	H
3	3.558	32.4	PK	33	-33.2	.6	32.8	-	-	74	-41.2	0-360	100	H
5	8.121	26.72	PK	36.3	-26.6	.6	37.02	-	-	74	-36.98	0-360	100	H
2	1.399	42.04	PK	29.4	-36.6	.6	35.44	-	-	74	-38.56	0-360	100	V
4	3.56	32.09	PK	33	-33.2	.6	32.49	-	-	74	-41.51	0-360	100	V
6	8.121	28.08	PK	36.3	-26.6	.6	38.38	-	-	74	-35.62	0-360	100	V

PK – Peak Detector

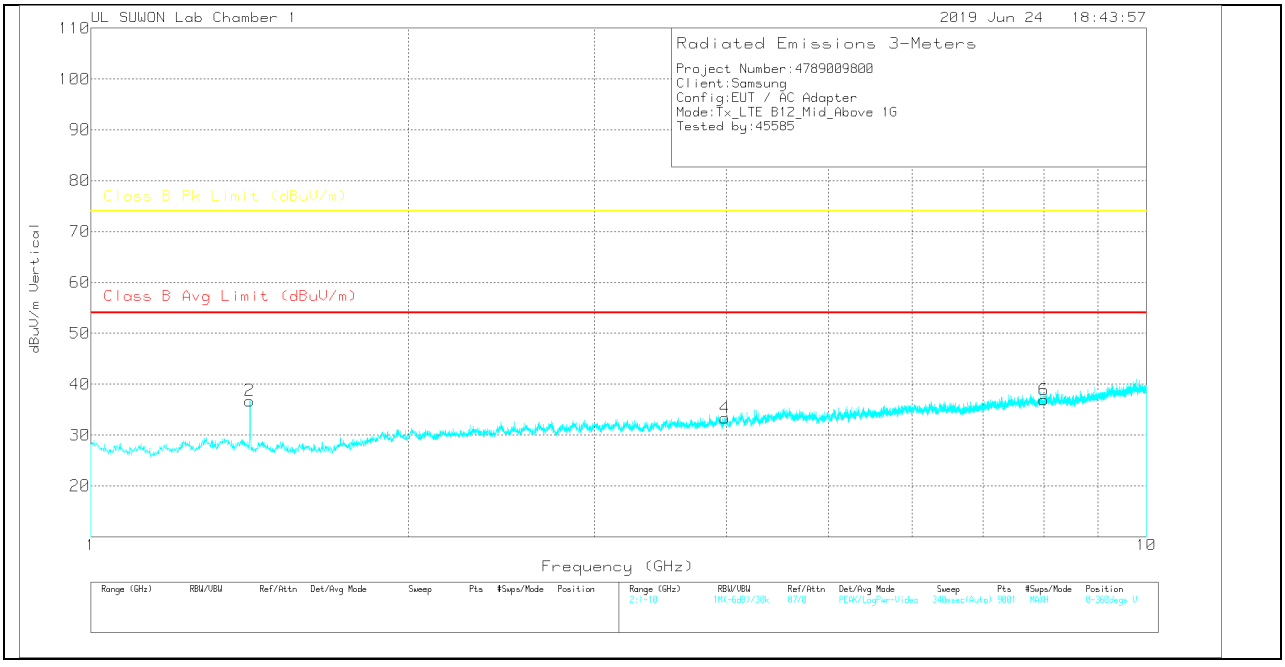
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(737.5MHz)

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	1.4145	48.78	PK	29.2	-36.6	.6	41.98	-	-	74	-32.02	0-360	100	H
3	3.99	31.48	PK	33.5	-32.5	.4	32.88	-	-	74	-41.12	0-360	100	H
5	8.013	27.44	PK	36.1	-26.7	.4	37.24	-	-	74	-36.76	0-360	100	H
2	1.414	43.55	PK	29.2	-36.6	.6	36.75	-	-	74	-37.25	0-360	100	V
4	3.989	31.86	PK	33.5	-32.4	.4	33.36	-	-	74	-40.64	0-360	100	V
6	8	27.19	PK	36.1	-26.7	.4	36.99	-	-	74	-37.01	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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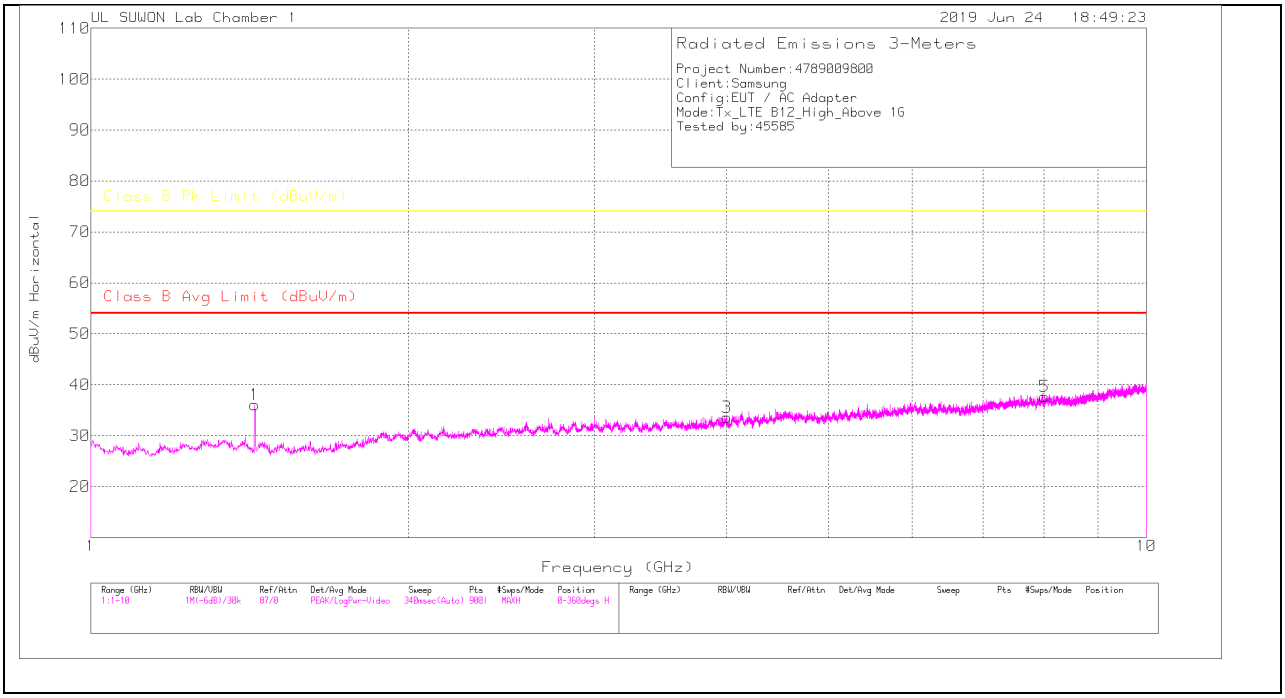
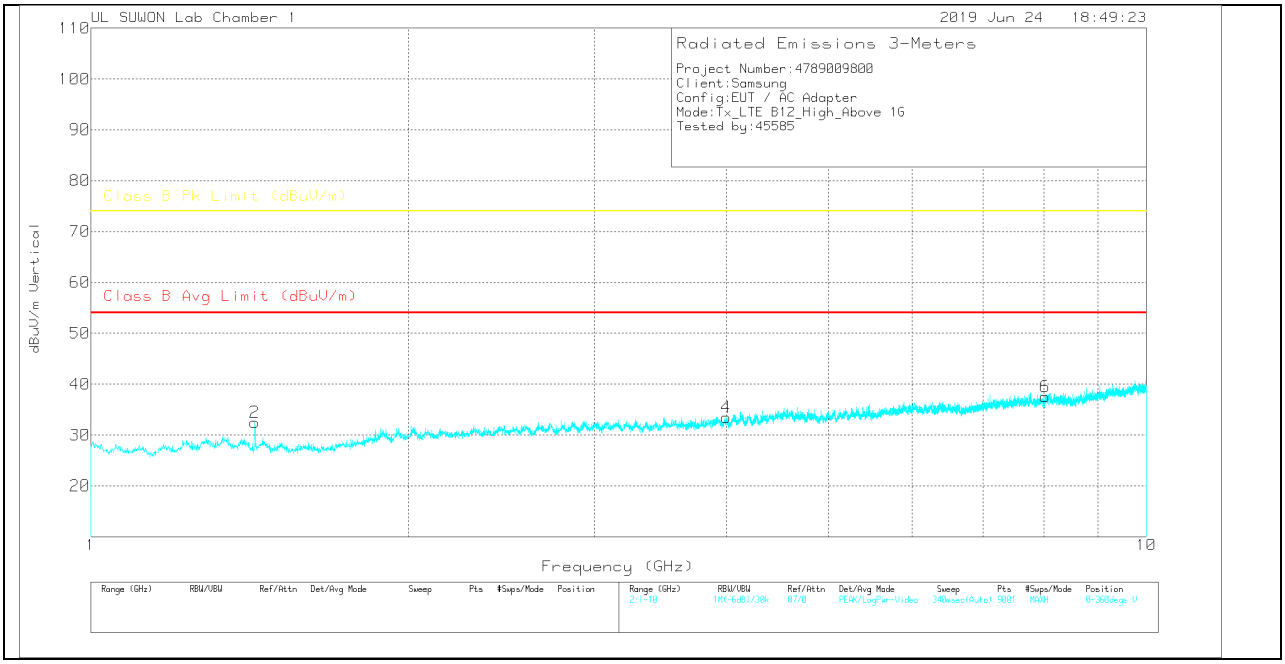
HIGH CHANNEL(744.5MHz)

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	1.43	42.99	PK	29.1	-36.6	.6	36.09	-	-	74	-37.91	0-360	100	H
3	4.004	31.9	PK	33.6	-32.3	.4	33.6	-	-	74	-40.4	0-360	100	H
5	8.013	27.87	PK	36.1	-26.7	.4	37.67	-	-	74	-36.33	0-360	100	H
2	1.43	39.41	PK	29.1	-36.6	.6	32.51	-	-	74	-41.49	0-360	100	V
4	3.998	31.92	PK	33.5	-32.4	.4	33.42	-	-	74	-40.58	0-360	100	V
6	8.014	27.74	PK	36.1	-26.7	.4	37.54	-	-	74	-36.46	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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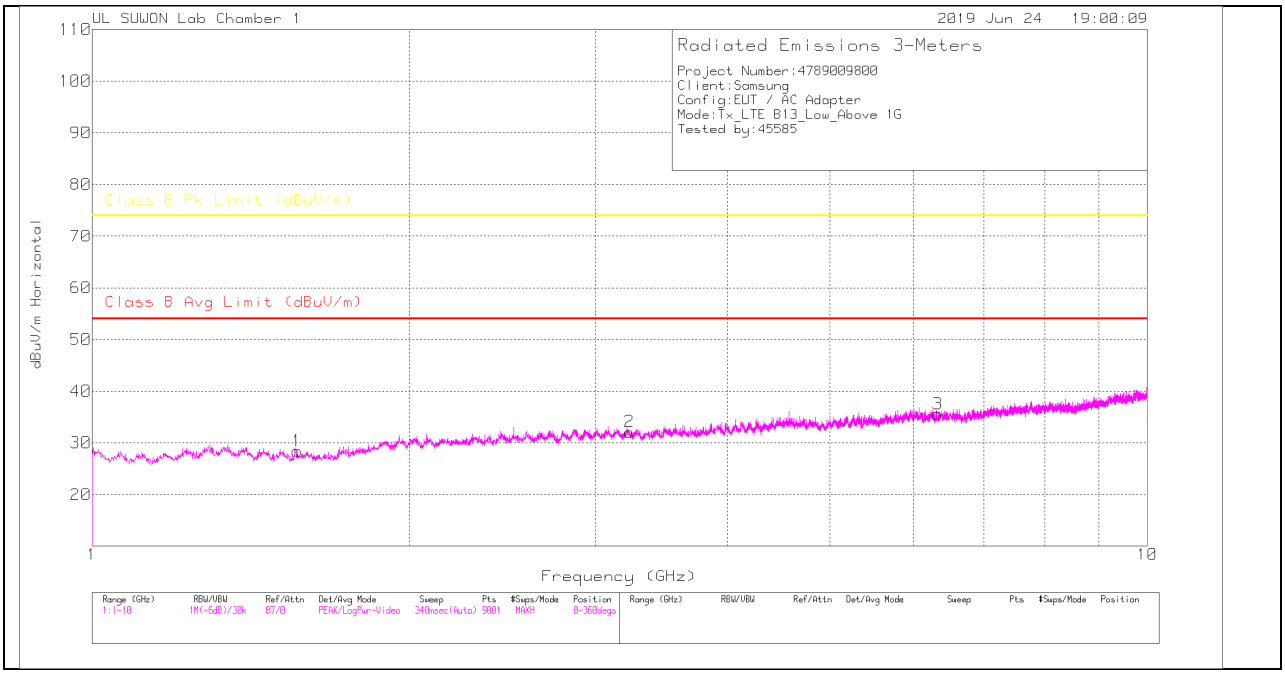
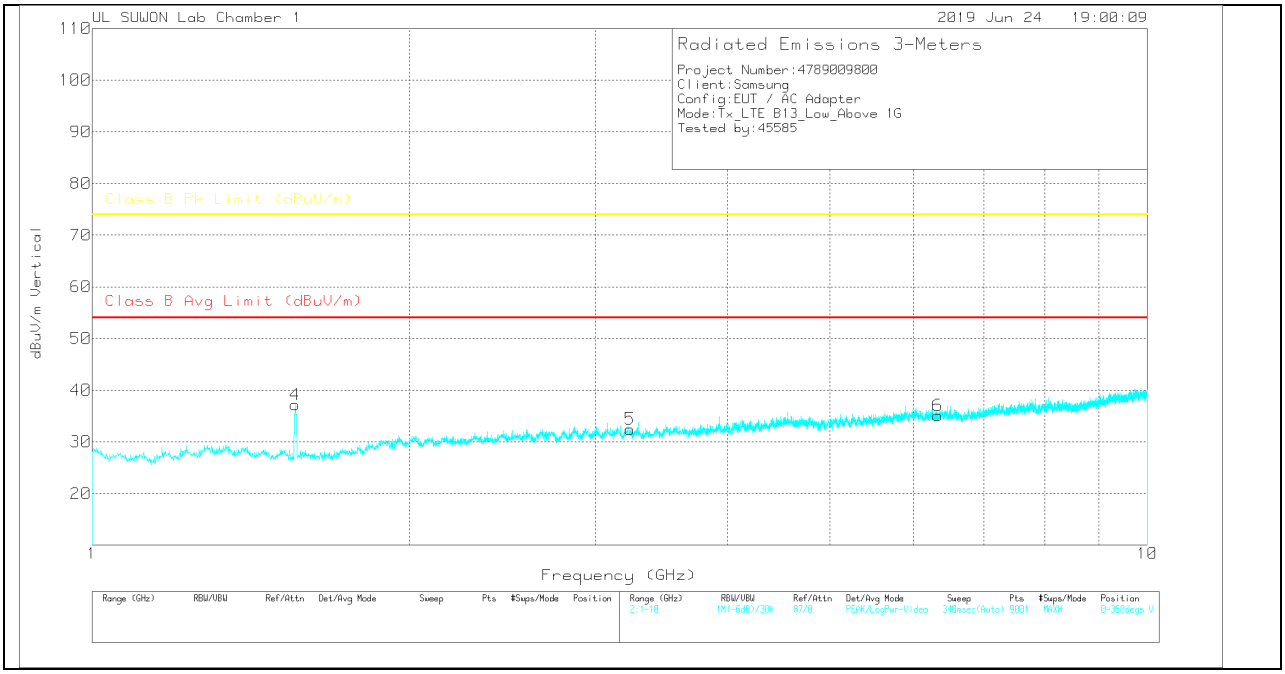
7.5. Above 1 GHz in the LTE Band 13

LOW CHANNEL(748.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

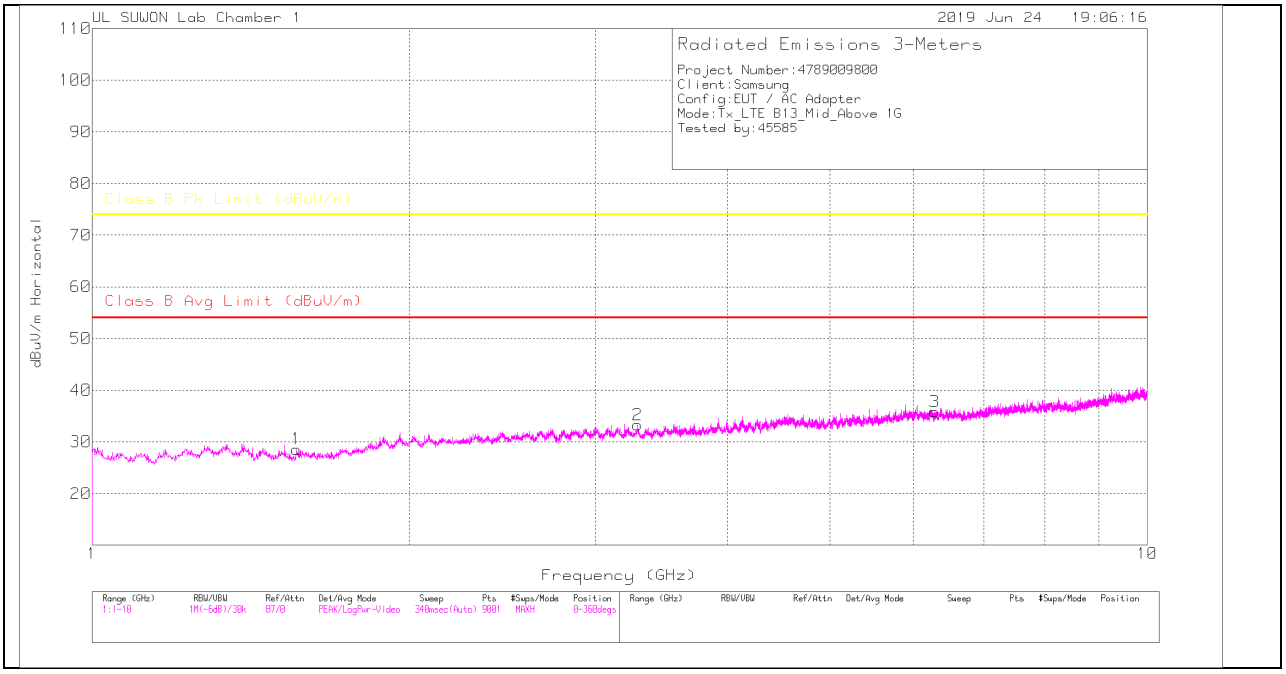
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.565	35.84	PK	28.3	-36.3	.6	28.44	-	-	74	-45.56	0-360	100	H
2	3.231	32.53	PK	32.7	-33.7	.6	32.13	-	-	74	-41.87	0-360	100	H
3	6.329	29.95	PK	35.3	-30	.3	35.55	-	-	74	-38.45	0-360	100	H
4	1.558	44.46	PK	28.3	-36.2	.6	37.16	-	-	74	-36.84	0-360	100	V
5	3.236	32.77	PK	32.7	-33.7	.7	32.47	-	-	74	-41.53	0-360	100	V
6	6.33	29.52	PK	35.3	-30	.3	35.12	-	-	74	-38.88	0-360	100	V

PK – Peak Detector

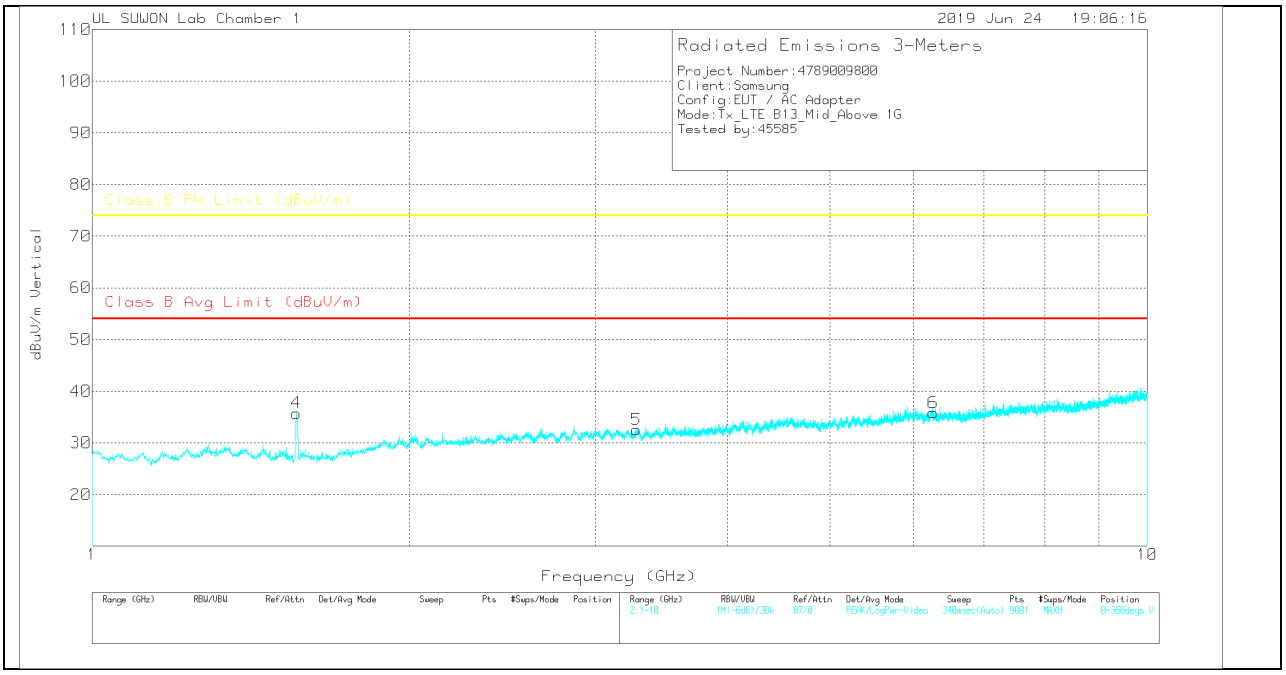
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(751.0MHz)

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	1.562	35.91	PK	28.3	-36.2	.6	28.61	-	-	74	-45.39	0-360	100	H
2	3.288	33.67	PK	32.7	-33.8	.7	33.27	-	-	74	-40.73	0-360	100	H
3	6.286	30.13	PK	35.3	-30	.4	35.83	-	-	74	-38.17	0-360	100	H
4	1.562	43.08	PK	28.3	-36.2	.6	35.78	-	-	74	-38.22	0-360	100	V
5	3.278	32.83	PK	32.7	-33.7	.7	32.53	-	-	74	-41.47	0-360	100	V
6	6.269	30.02	PK	35.3	-30	.5	35.82	-	-	74	-38.18	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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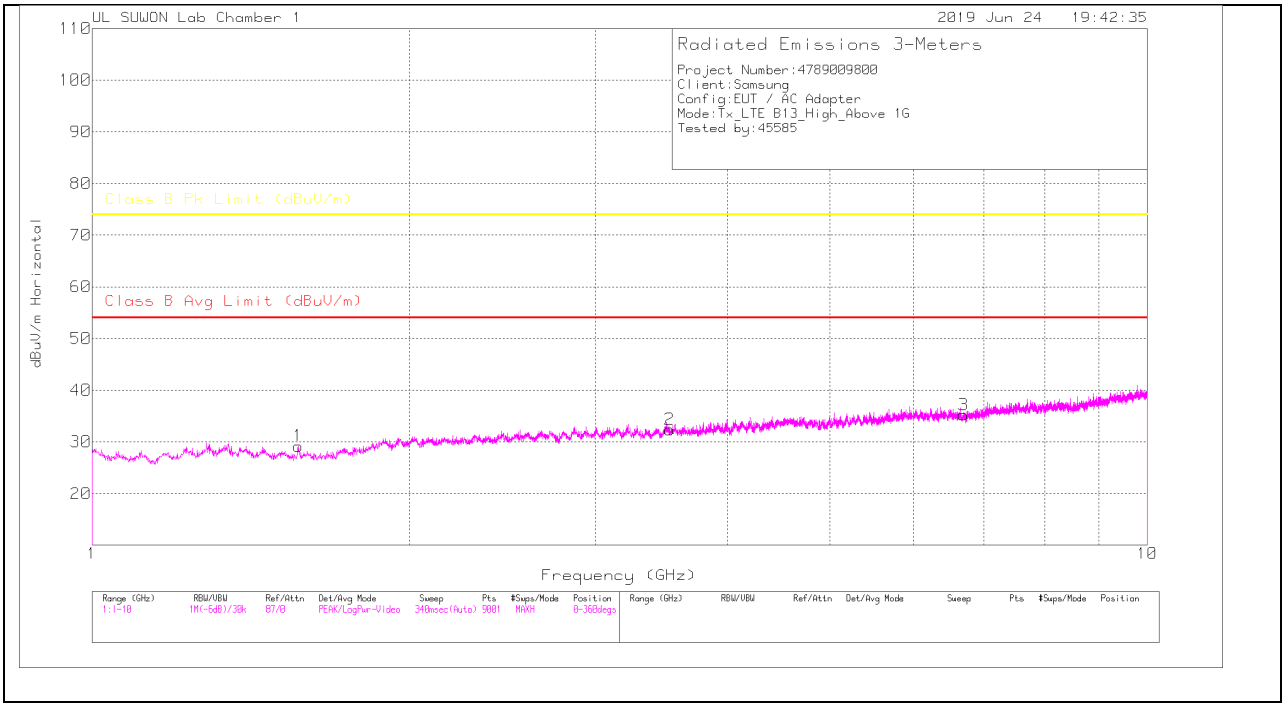
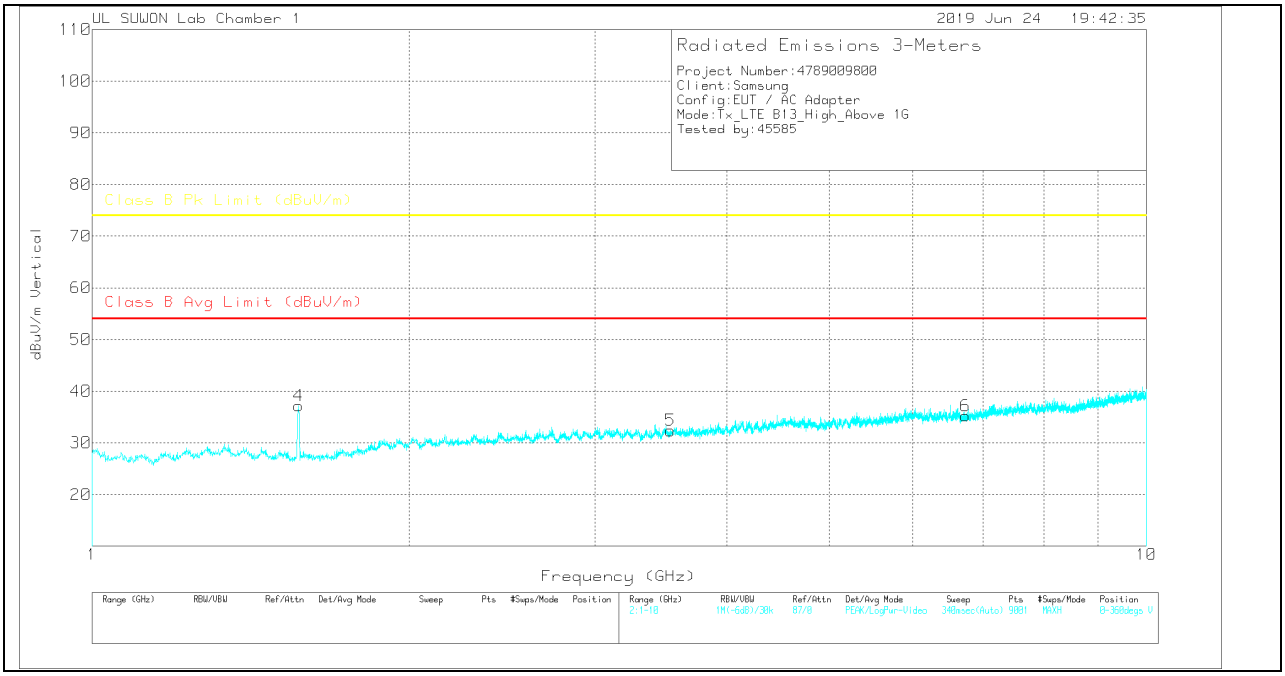
HIGH CHANNEL(753.5MHz)

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	1.568	36.51	PK	28.3	-36.2	.6	29.21	-	-	74	-44.79	0-360	100	H
2	3.527	31.99	PK	32.9	-33.1	.6	32.39	-	-	74	-41.61	0-360	100	H
3	6.695	28.55	PK	35.5	-29.2	.4	35.25	-	-	74	-38.75	0-360	100	H
4	1.571	44.59	PK	28.3	-36.3	.6	37.19	-	-	74	-36.81	0-360	100	V
5	3.536	31.9	PK	33	-33.1	.6	32.4	-	-	74	-41.6	0-360	100	V
6	6.74	28.23	PK	35.5	-29	.5	35.23	-	-	74	-38.77	0-360	100	V

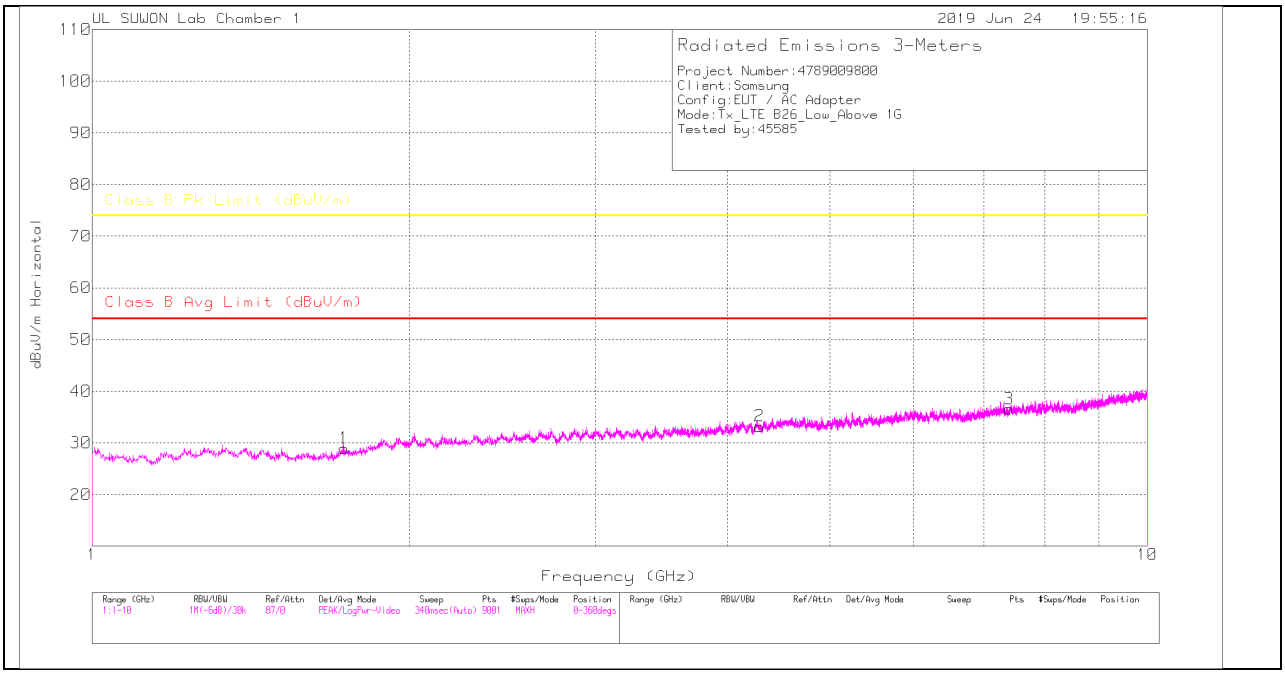
PK – Peak Detector

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

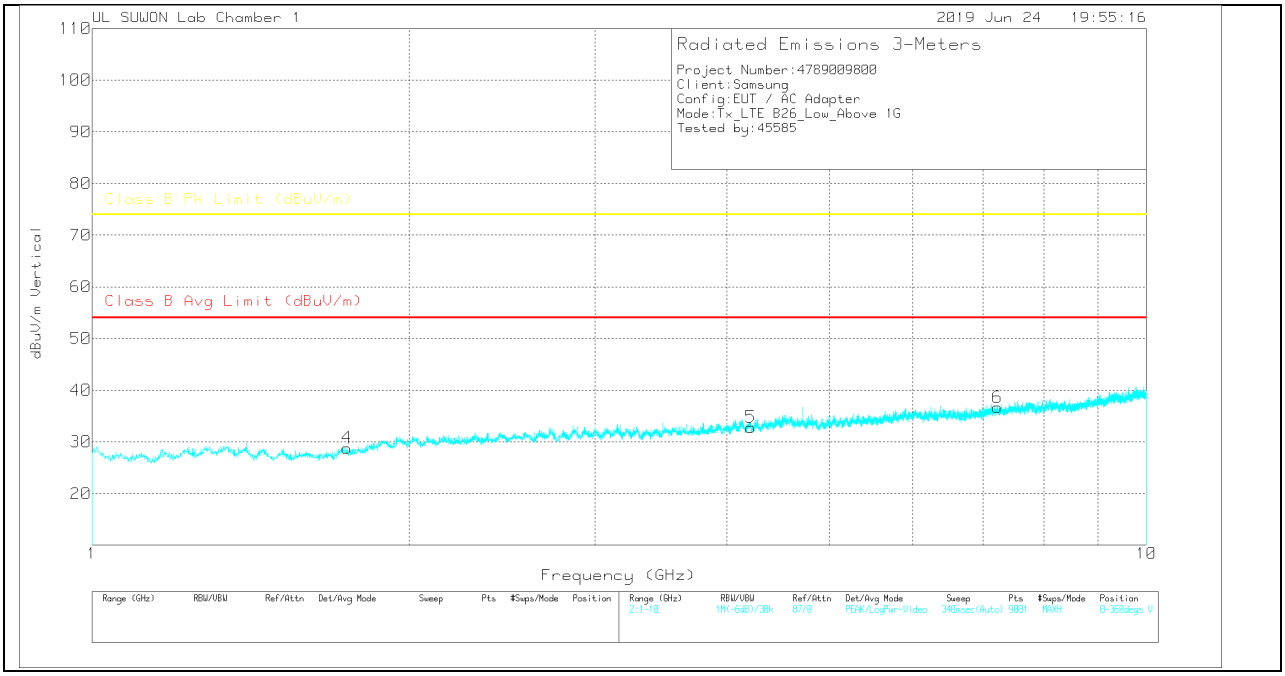
7.6. Above 1 GHz in the LTE Band 26

LOW CHANNEL(860.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

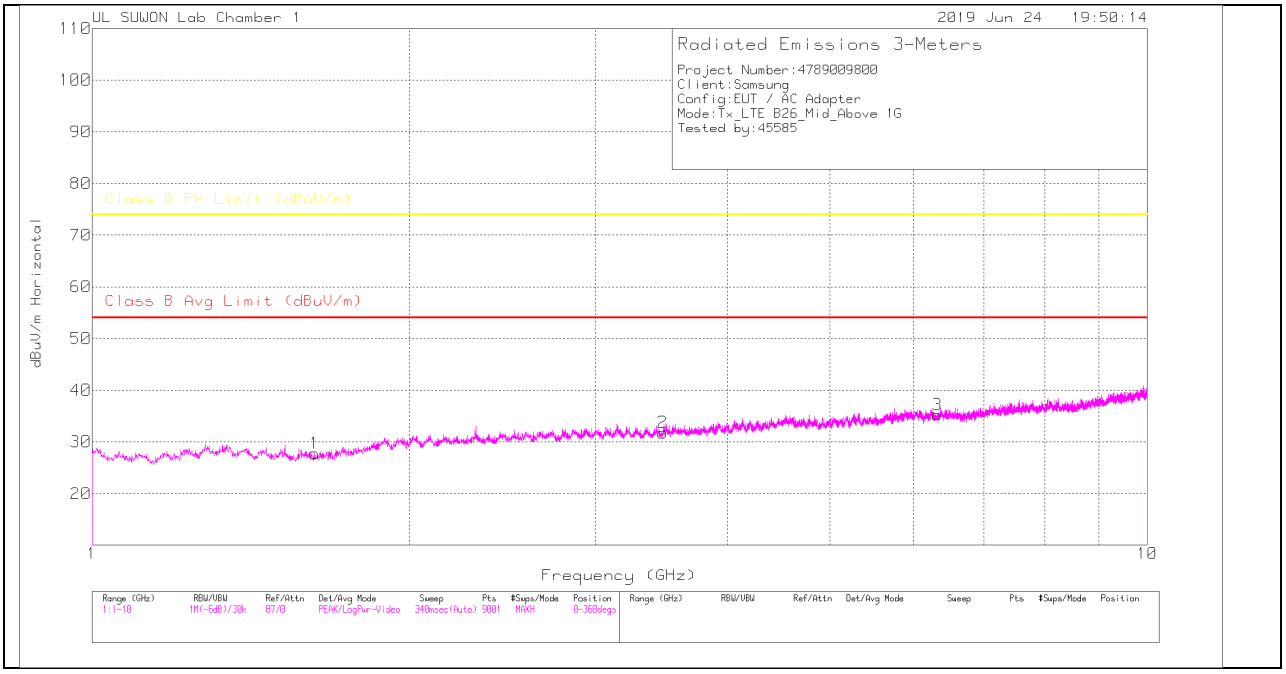
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[dB]	1GHz_HPF	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.733	35.24	PK	28.9	-36	.8	28.94	-	-	74	-45.06	0-360	100	H
2	4.29	31.33	PK	33.9	-32.4	.4	33.23	-	-	74	-40.77	0-360	100	H
3	7.391	27.96	PK	35.8	-27.8	.6	36.56	-	-	74	-37.44	0-360	100	H
4	1.745	34.94	PK	29	-35.9	.8	28.84	-	-	74	-45.16	0-360	100	V
5	4.216	31.14	PK	33.7	-32.4	.4	32.84	-	-	74	-41.16	0-360	100	V
6	7.222	28.6	PK	35.8	-28.1	.4	36.7	-	-	74	-37.3	0-360	100	V

PK – Peak Detector

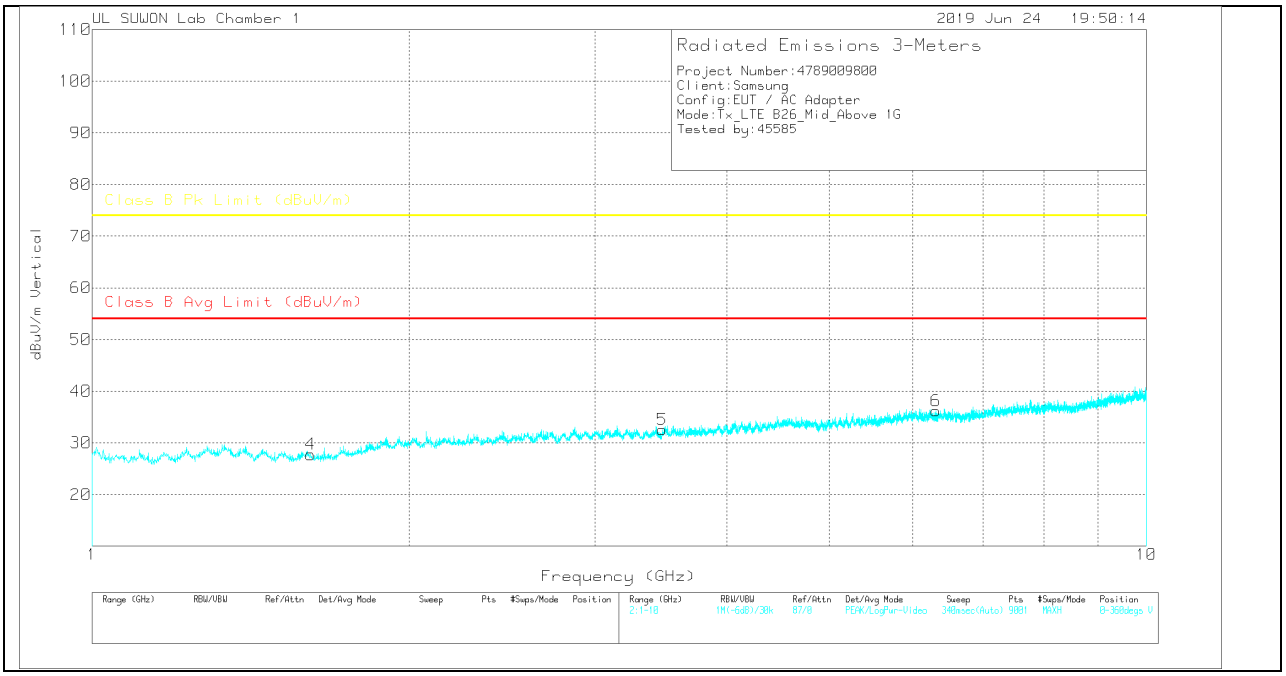
Note: Unwanted emissions on the harmonic frequency were generated from the call-simulator with the TX and RX signals.

MID CHANNEL(876.5MHz)

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	1.625	34.87	PK	28.3	-36.2	.8	27.77	-	-	74	-46.23	0-360	100	H
2	3.474	31.68	PK	32.8	-33.2	.5	31.78	-	-	74	-42.22	0-360	100	H
3	6.326	29.65	PK	35.3	-30	.3	35.25	-	-	74	-38.75	0-360	100	H
4	1.611	34.86	PK	28.3	-36.3	.9	27.76	-	-	74	-46.24	0-360	100	V
5	3.473	32.35	PK	32.8	-33.1	.5	32.55	-	-	74	-41.45	0-360	100	V
6	6.318	30.62	PK	35.3	-30	.3	36.22	-	-	74	-37.78	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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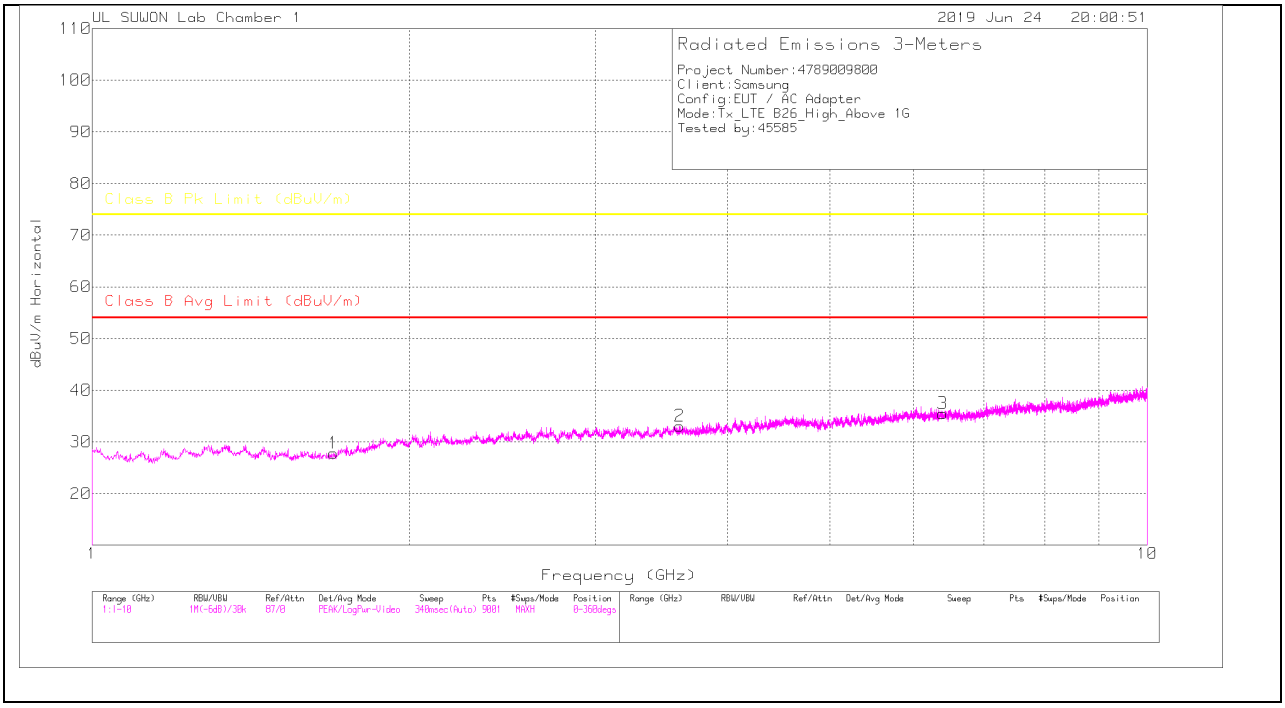
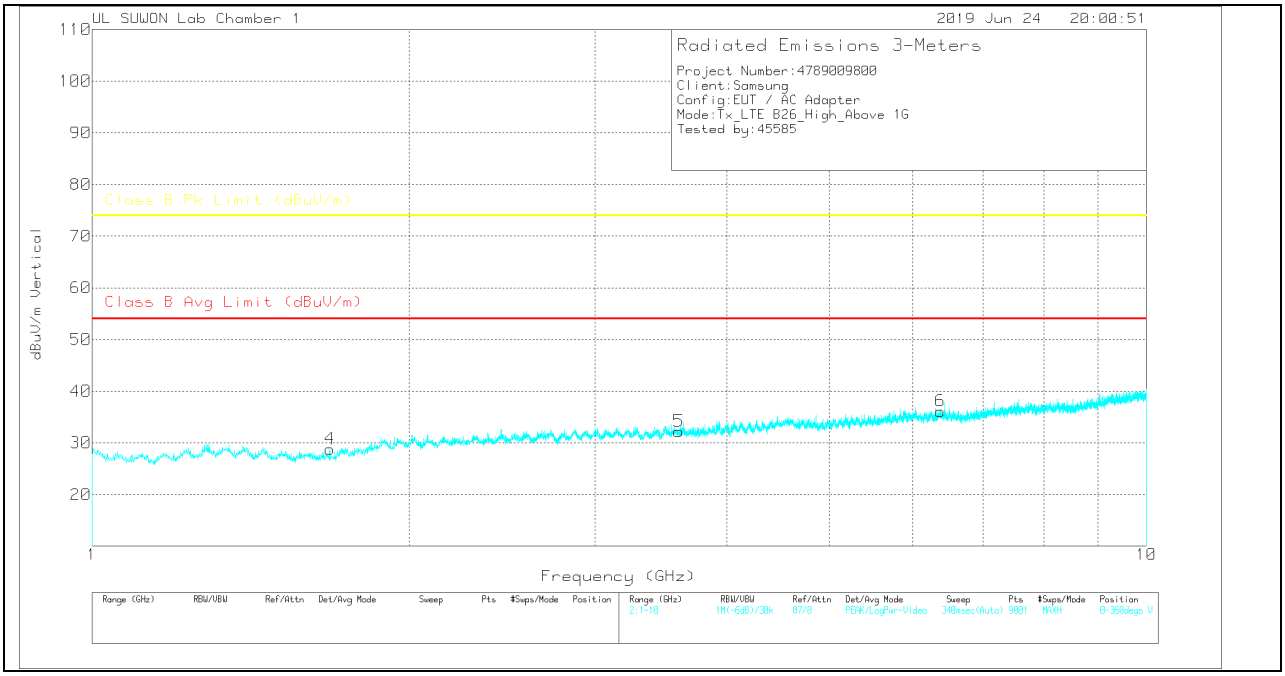
HIGH CHANNEL(892.5MHz)

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	1.694	34.83	PK	28.5	-36.1	.6	27.83	-	-	74	-46.17	0-360	100	H
2	3.605	32.78	PK	33.1	-33.2	.4	33.08	-	-	74	-40.92	0-360	100	H
3	6.399	29.4	PK	35.3	-29.7	.5	35.5	-	-	74	-38.5	0-360	100	H
4	1.681	35.93	PK	28.5	-36.1	.5	28.83	-	-	74	-45.17	0-360	100	V
5	3.602	32.04	PK	33.1	-33.3	.4	32.24	-	-	74	-41.76	0-360	100	V
6	6.38	30.15	PK	35.3	-29.8	.5	36.15	-	-	74	-37.85	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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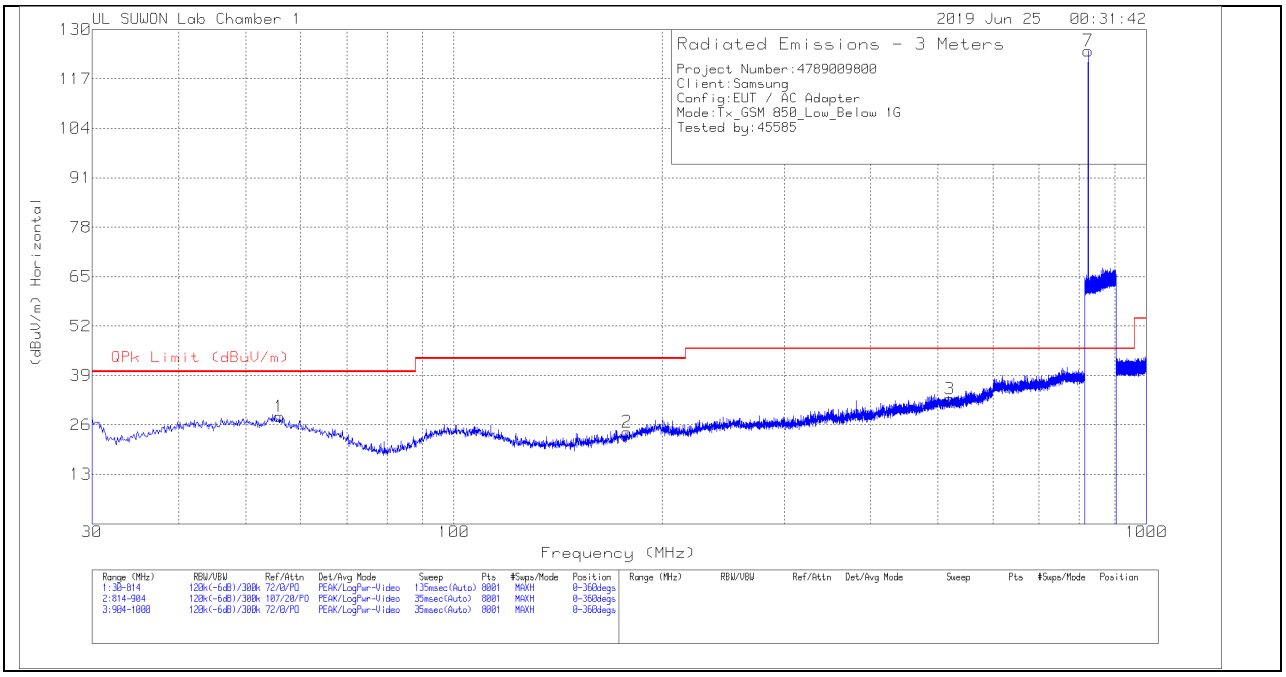
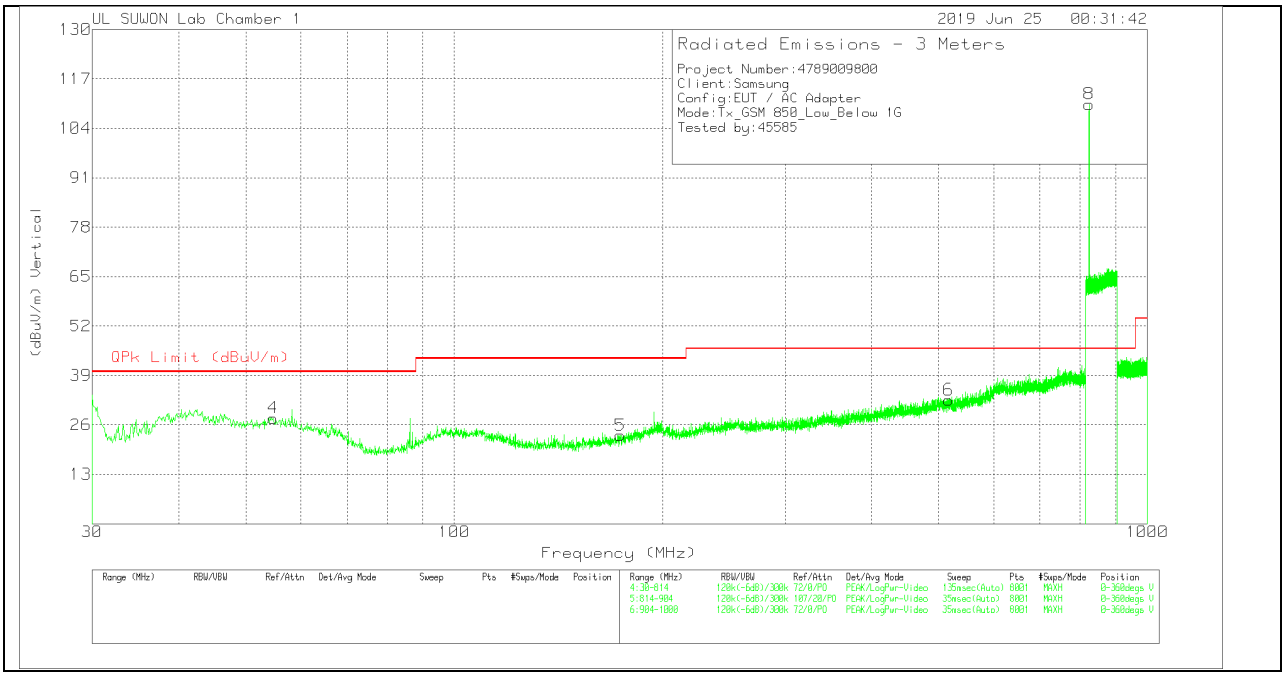
7.7. Below 1 GHz in the GSM850

LOW CHANNEL(869.2MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	55.97	4.2	Pk	19.2	4.8	28.2	40	-11.8	0-360	100	H
2	177.784	3.92	Pk	15.3	4.9	24.12	43.52	-19.4	0-360	200	H
3	520.294	3.3	Pk	23.3	6.2	32.8	46.02	-13.22	0-360	200	H
7	824.1475	89.7	Pk	27	7.7	124.4	**46.02**	**78.38**	0-360	100	H
4	54.794	4	Pk	19.4	4.4	27.8	40	-12.2	0-360	100	V
5	173.57	3.23	Pk	15	5	23.23	43.52	-20.29	0-360	100	V
6	516.668	3.05	Pk	23.3	6.2	32.55	46.02	-13.47	0-360	100	V
8	824.215	75.65	Pk	27	7.7	110.35	**46.02**	**64.33**	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.

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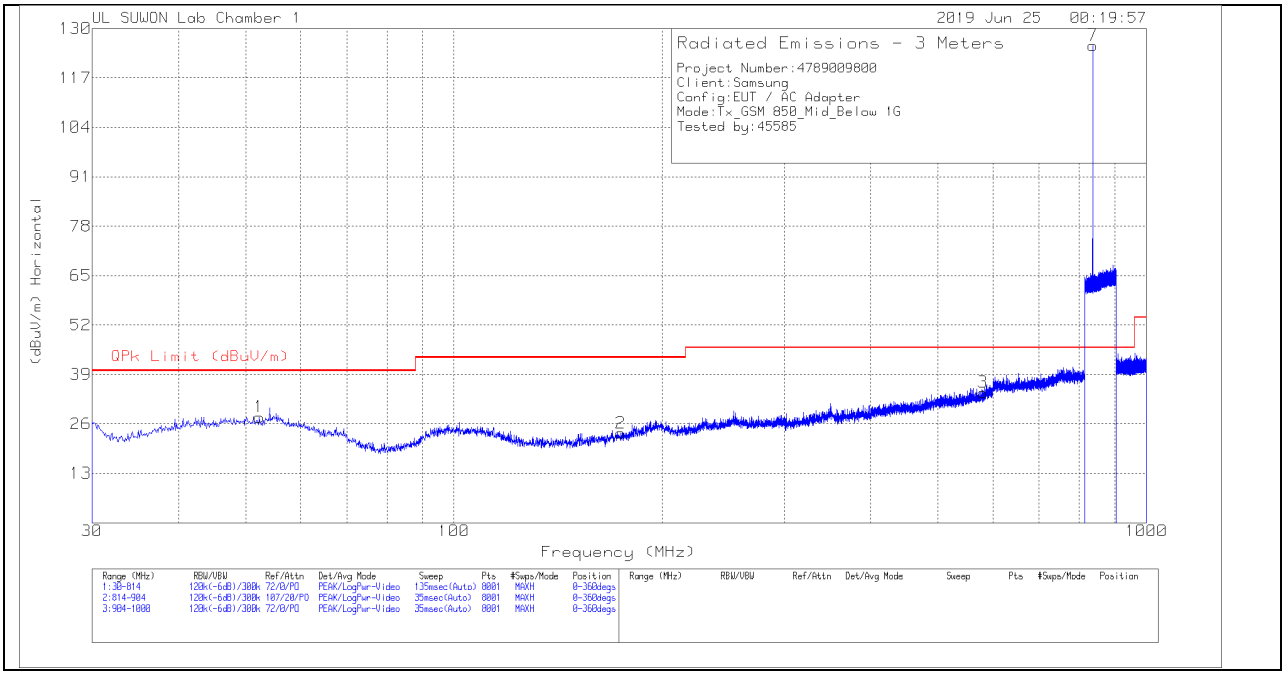
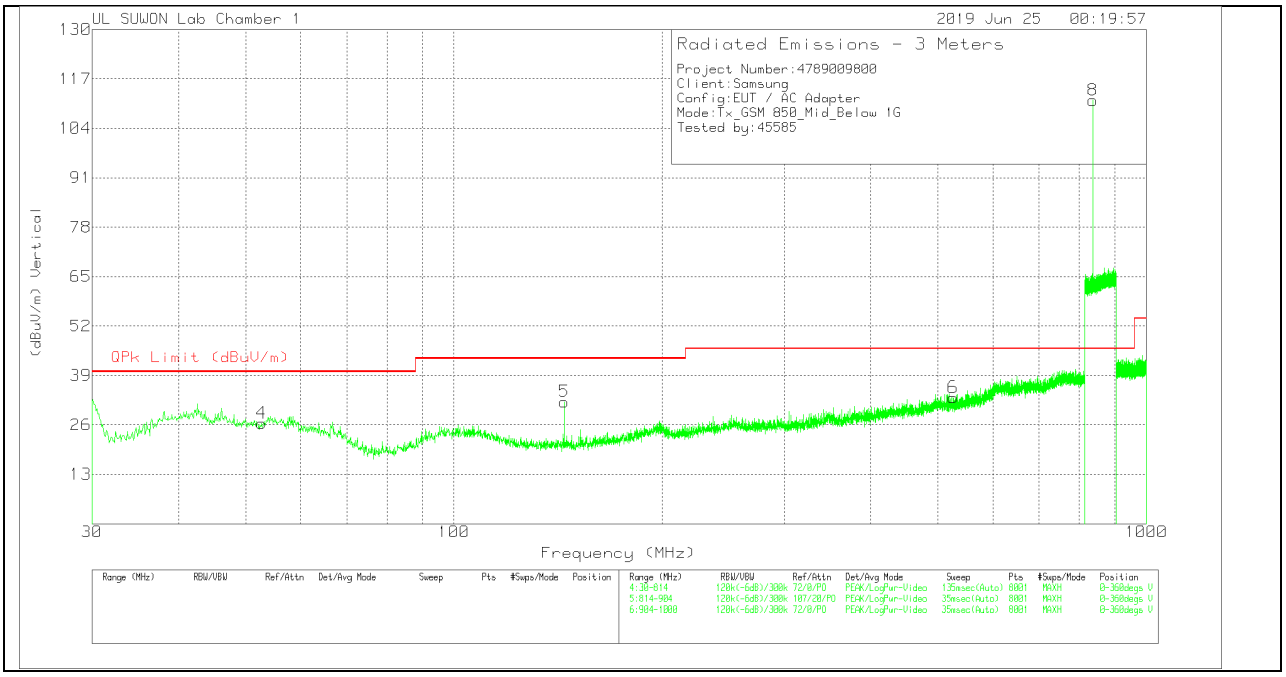
MID CHANNEL(881.6MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	52.344	3.91	Pk	19.6	4.3	27.81	40	-12.19	0-360	200	H
2	174.06	3.54	Pk	15	5	23.54	43.52	-19.98	0-360	100	H
3	580.662	3.35	Pk	24.4	6.5	34.25	46.02	-11.77	0-360	200	H
7	836.59	90.54	Pk	27.2	7.8	125.54	**46.02**	**79.52**	0-360	100	H
4	52.736	2.66	Pk	19.6	4.2	26.46	40	-13.54	0-360	100	V
5	144.268	13.21	Pk	14.1	4.8	32.11	43.52	-11.41	0-360	100	V
6	525.978	3.6	Pk	23.3	6.3	33.2	46.02	-12.82	0-360	100	V
8	836.6575	76.37	Pk	27.2	7.8	111.37	**46.02**	**65.35**	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.

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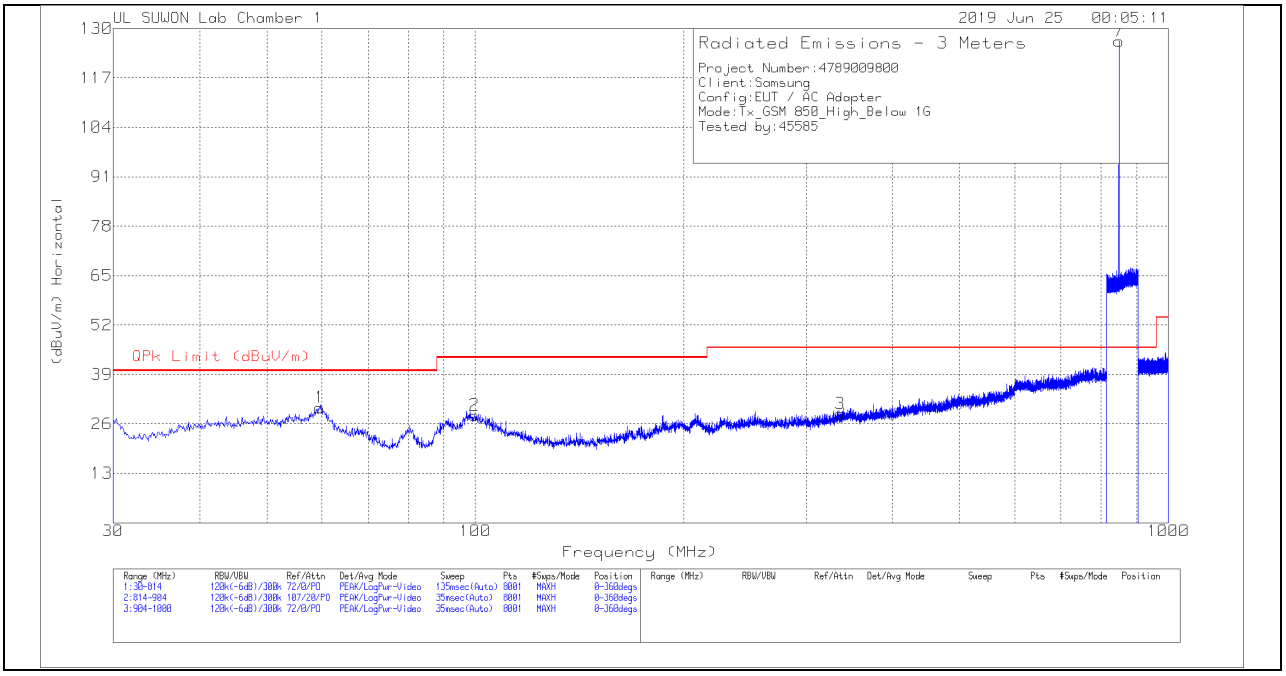
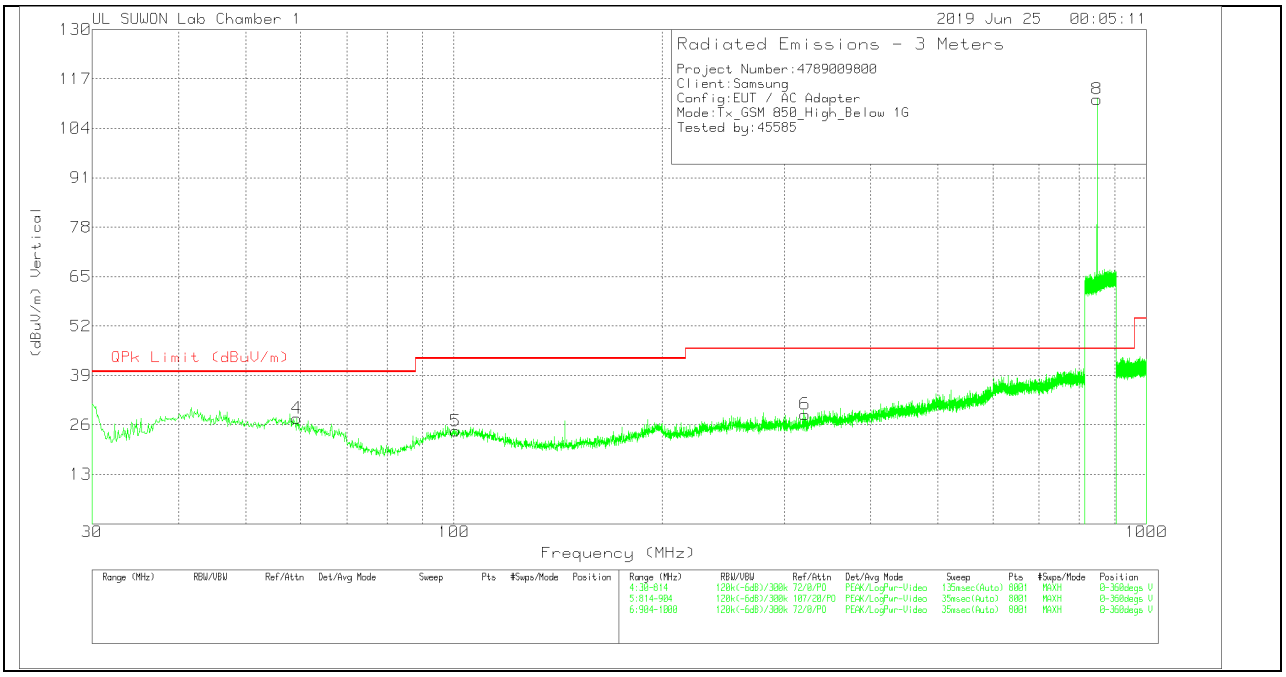
HIGH CHANNEL(893.8MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	59.596	7.08	Pk	18.6	4.6	30.28	40	-9.72	0-360	200	H
2	99.776	5.87	Pk	17.8	4.6	28.27	43.52	-15.25	0-360	200	H
3	335.956	2.85	Pk	20.4	5.4	28.65	46.02	-17.37	0-360	100	H
7	848.8075	91.33	Pk	27.5	7.8	126.63	**46.02**	**80.61**	0-360	100	H
4	59.302	4.36	Pk	18.7	4.7	27.76	40	-12.24	0-360	100	V
5	100.462	2.01	Pk	17.9	4.5	24.41	43.52	-19.11	0-360	100	V
6	321.354	3.59	Pk	19.9	5.3	28.79	46.02	-17.23	0-360	100	V
8	848.7513	76.38	Pk	27.5	7.8	111.68	**46.02**	**65.66**	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.

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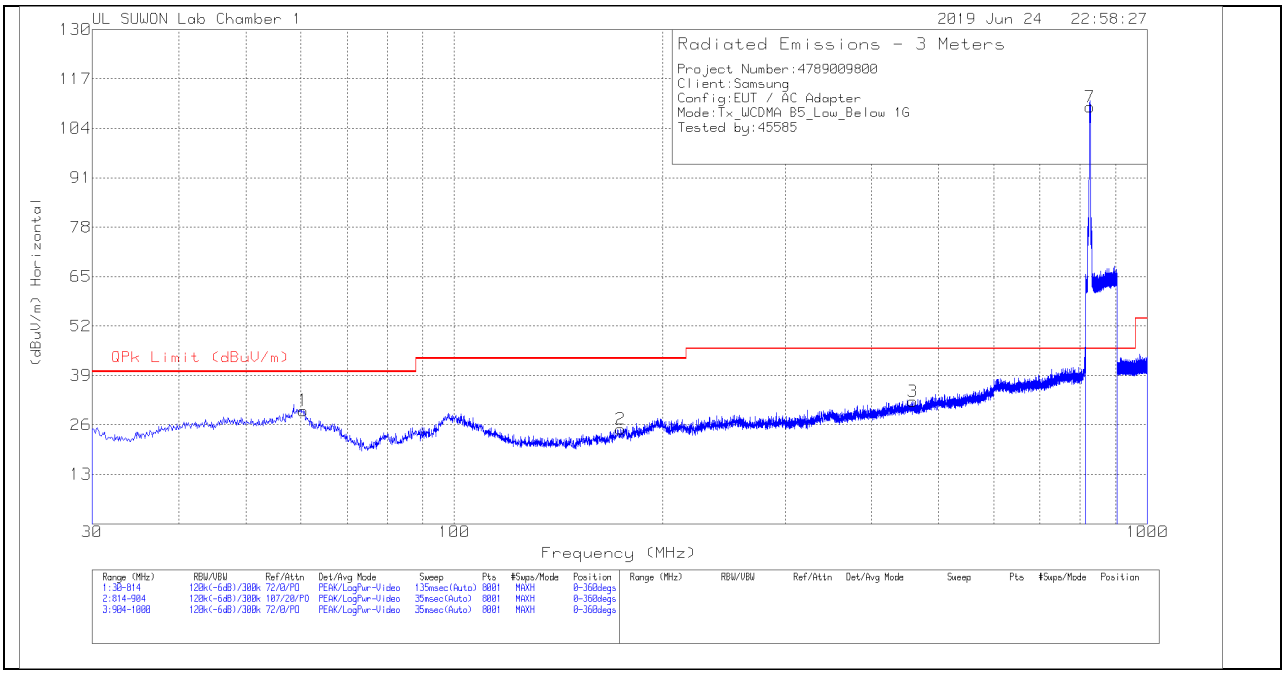
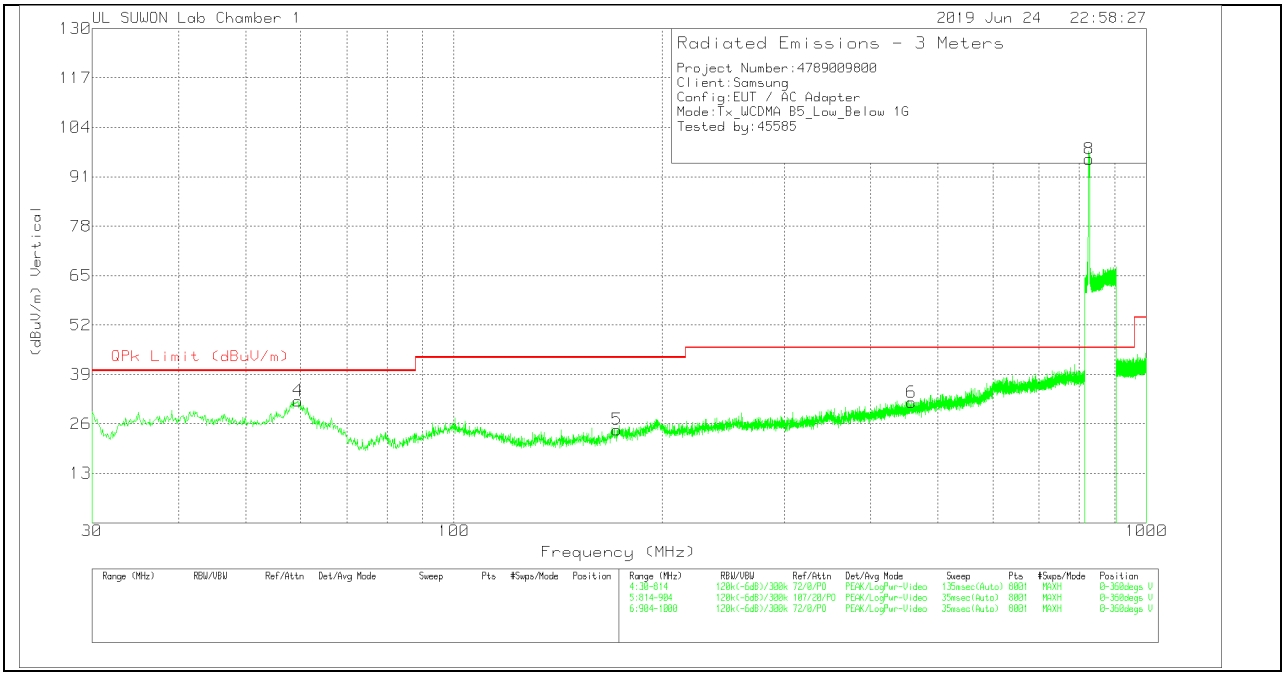
7.8. Below 1 GHz in the WCDMA Band 5

LOW CHANNEL(871.4MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	60.576	6.76	Pk	18.4	4.6	29.76	40	-10.24	0-360	100	H
2	173.766	4.91	Pk	15	5	24.91	43.52	-18.61	0-360	200	H
3	459.044	3.85	Pk	22.3	6	32.15	46.02	-13.87	0-360	100	H
7	826.4875	74.83	Pk	27.1	7.7	109.63	**46.02**	**63.61**	0-360	100	H
4	59.498	8.79	Pk	18.6	4.7	32.09	40	-7.91	0-360	100	V
5	171.904	4.6	Pk	14.9	5	24.5	43.52	-19.02	0-360	100	V
6	457.77	3.38	Pk	22.3	6	31.68	46.02	-14.34	0-360	100	V
8	826.4875	60.86	Pk	27.1	7.7	95.66	**46.02**	**49.64**	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.

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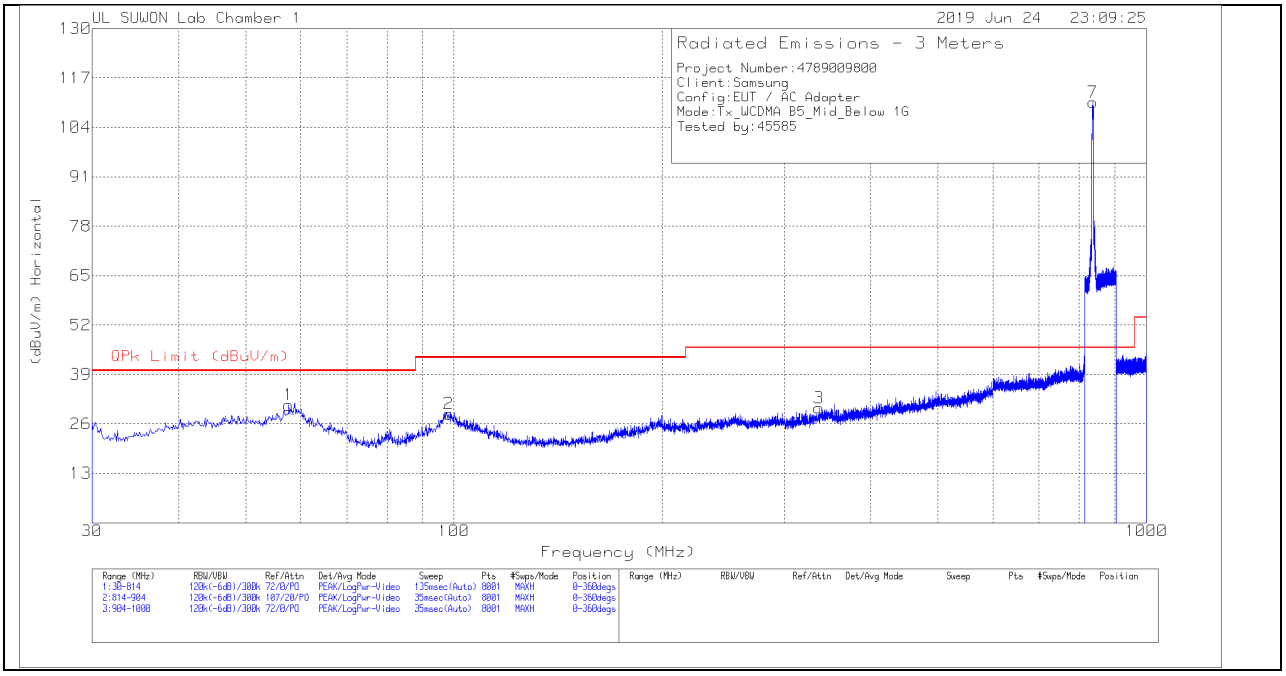
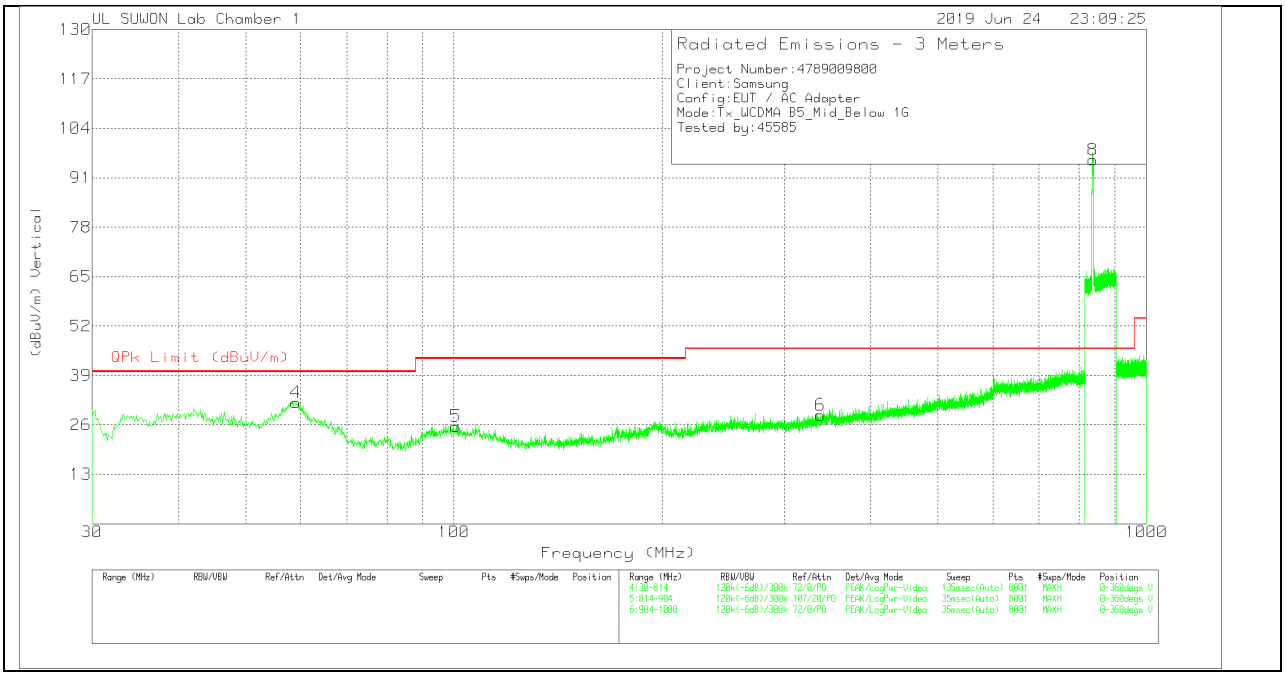
MID CHANNEL(881.6MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	57.734	7.27	Pk	18.9	4.8	30.97	40	-9.03	0-360	100	H
2	98.306	6.14	Pk	17.8	4.7	28.64	43.52	-14.88	0-360	200	H
3	336.544	4.29	Pk	20.5	5.4	30.19	46.02	-15.83	0-360	200	H
7	836.6238	75.6	Pk	27.2	7.8	110.6	**46.02**	**64.58**	0-360	100	H
4	59.106	8.49	Pk	18.7	4.7	31.89	40	-8.11	0-360	100	V
5	100.658	3.12	Pk	17.9	4.6	25.62	43.52	-17.9	0-360	100	V
6	338.504	2.58	Pk	20.6	5.4	28.58	46.02	-17.44	0-360	100	V
8	837.2088	60.68	Pk	27.2	7.8	95.68	**46.02**	**49.66**	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.

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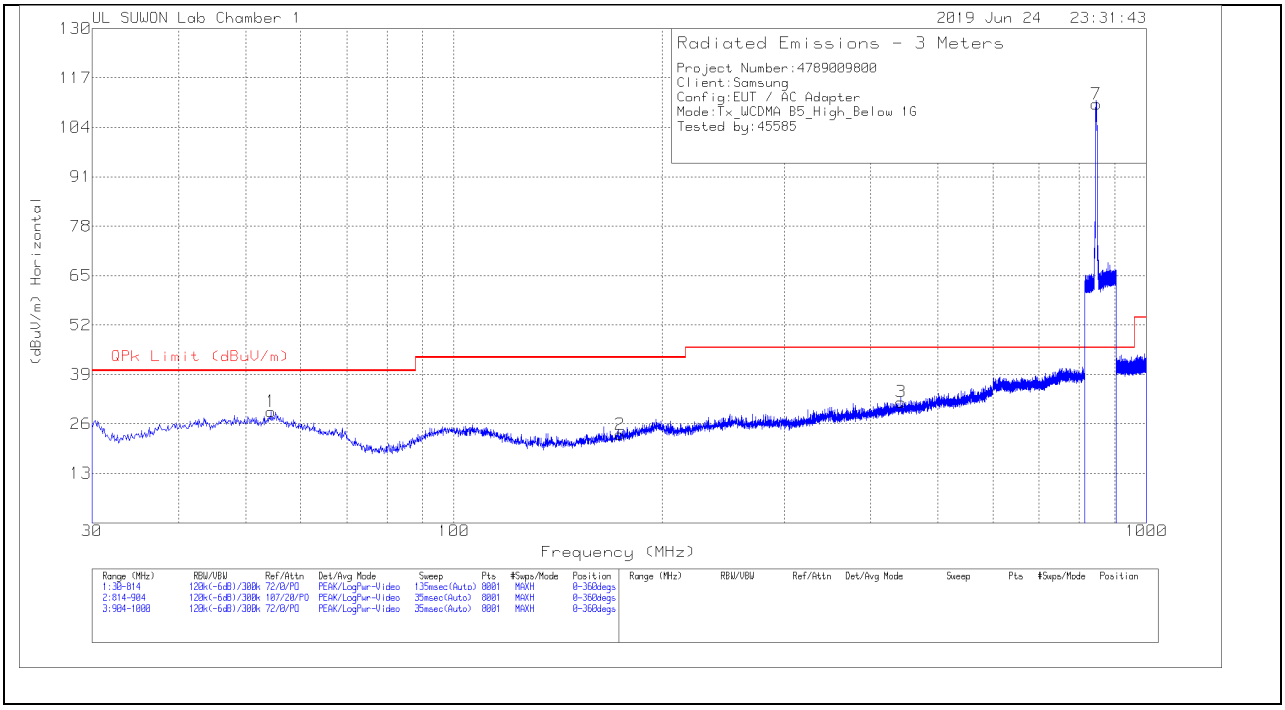
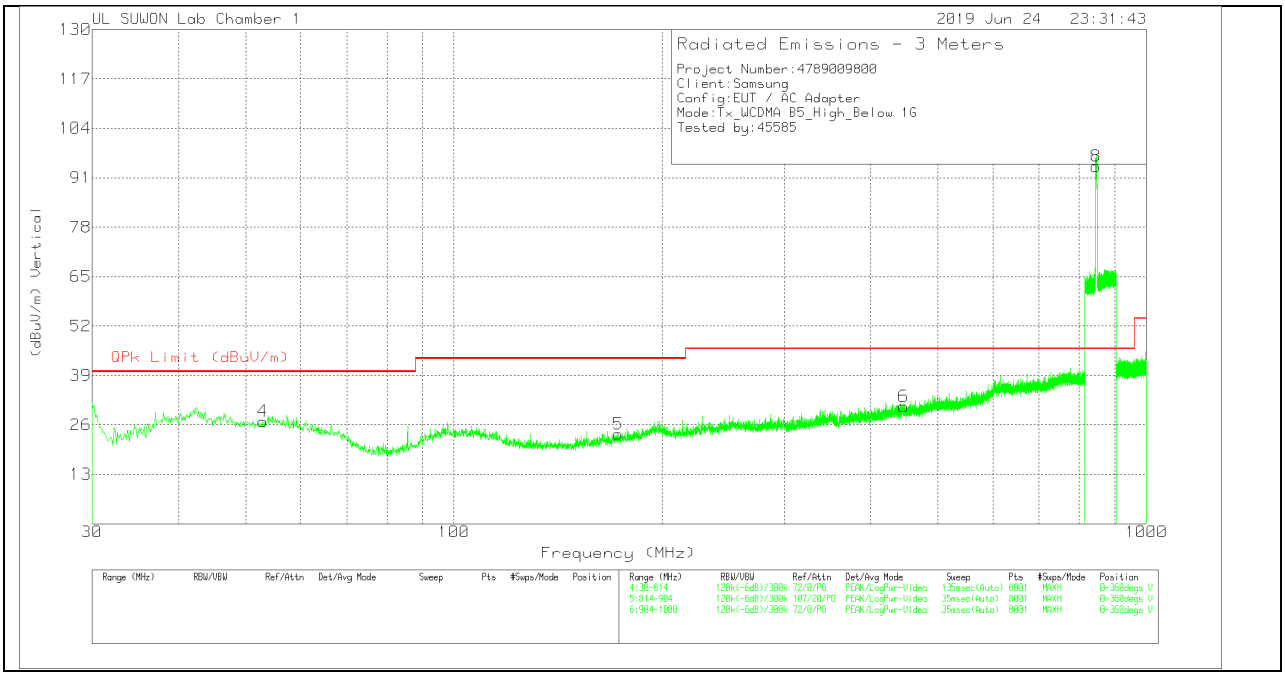
HIGH CHANNEL(891.6MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	54.402	5.58	Pk	19.4	4.3	29.28	40	-10.72	0-360	200	H
2	173.864	3.25	Pk	15	5	23.25	43.52	-20.27	0-360	200	H
3	442.286	3.77	Pk	22	6	31.77	46.02	-14.25	0-360	200	H
7	846.8613	74.89	Pk	27.4	7.8	110.09	**46.02**	**64.07**	0-360	100	H
4	52.932	3.14	Pk	19.6	4.2	26.94	40	-13.06	0-360	100	V
5	172.59	3.66	Pk	14.9	5	23.56	43.52	-19.96	0-360	100	V
6	446.01	2.72	Pk	22.1	6	30.82	46.02	-15.2	0-360	100	V
8	846.3663	58.79	Pk	27.4	7.8	93.99	**46.02**	**47.97**	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.

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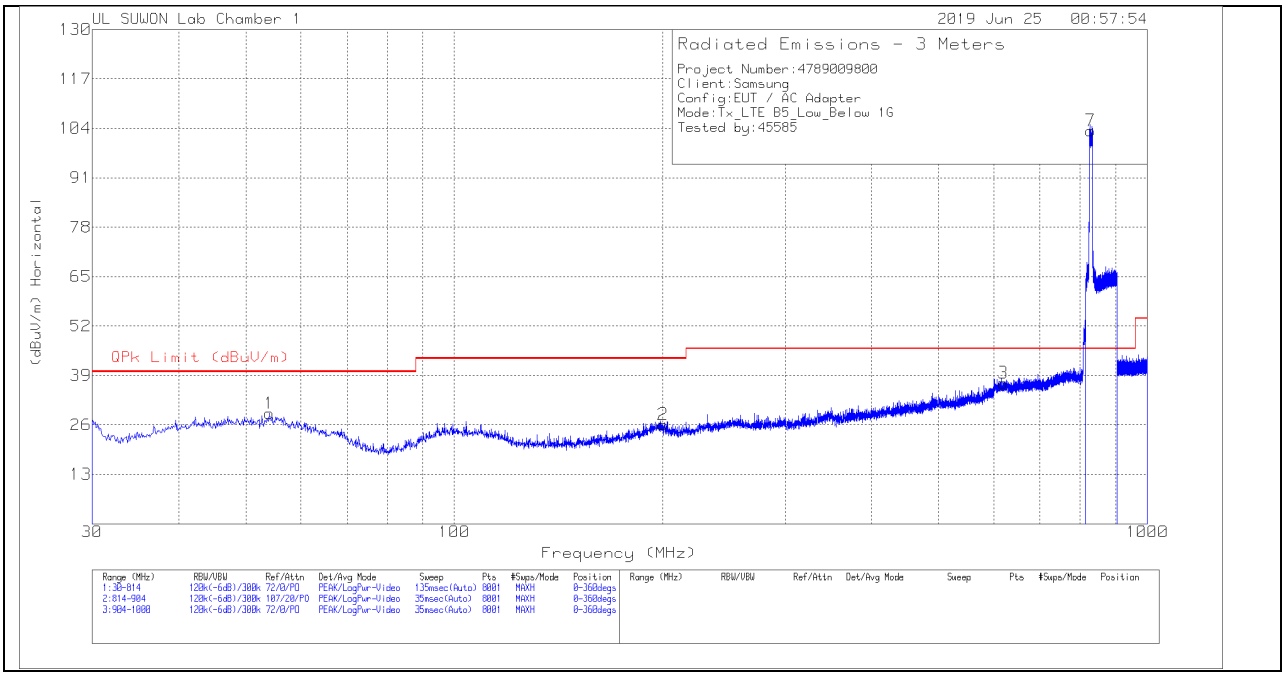
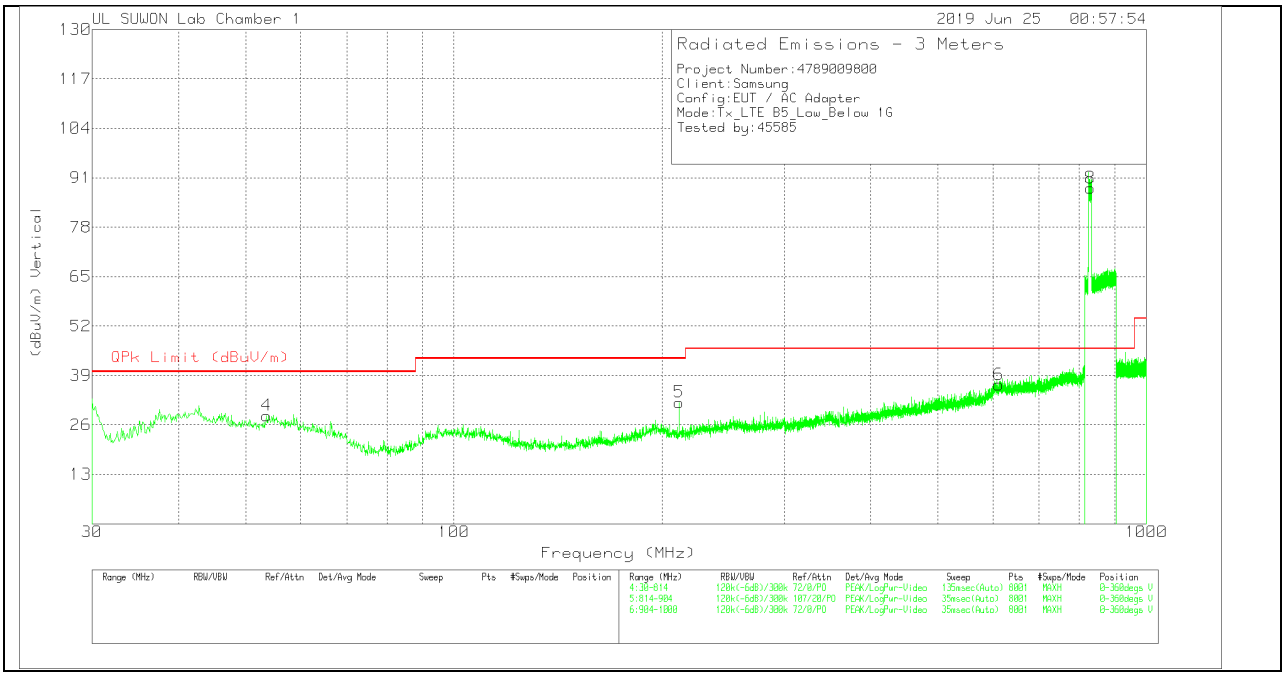
7.9. Below 1 GHz in the LTE Band 5

LOW CHANNEL(870.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	54.108	5.33	Pk	19.5	4.2	29.03	40	-10.97	0-360	200	H
2	200.03	3.69	Pk	17.6	4.8	26.09	43.52	-17.43	0-360	100	H
3	619.764	4.72	Pk	25.5	6.8	37.02	46.02	-9	0-360	100	H
7	829.03	68.46	Pk	27.2	7.7	103.36	**46.02**	**57.34**	0-360	100	H
4	53.618	4.87	Pk	19.5	4.1	28.47	40	-11.53	0-360	100	V
5	211.496	10.13	Pk	17	4.8	31.93	43.52	-11.59	0-360	100	V
6	611.728	4.49	Pk	25.4	6.7	36.59	46.02	-9.43	0-360	100	V
8	829.84	53.4	Pk	27.2	7.7	88.3	**46.02**	**42.28**	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.

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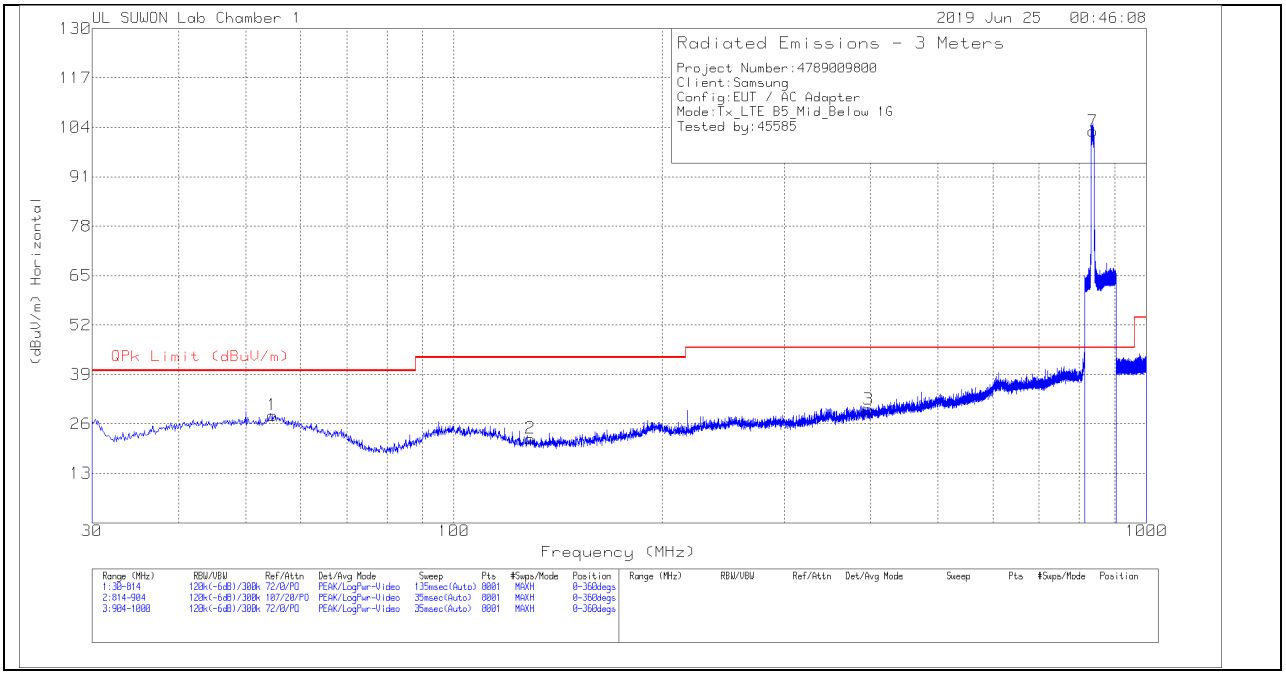
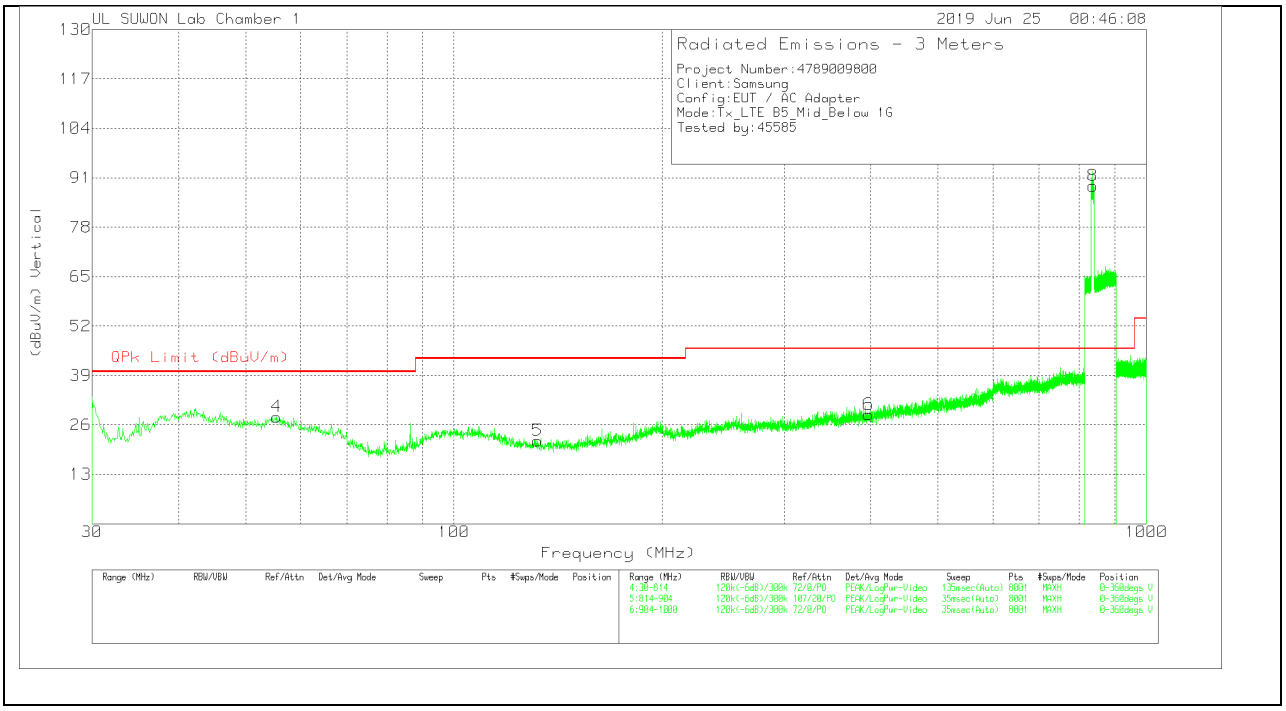
MID CHANNEL(881.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	54.696	4.49	Pk	19.4	4.4	28.29	40	-11.71	0-360	100	H
2	128.98	3.07	Pk	14.4	4.7	22.17	43.52	-21.35	0-360	100	H
3	396.814	2.94	Pk	21.3	5.6	29.84	46.02	-16.18	0-360	100	H
7	836.6125	67.97	Pk	27.2	7.8	102.97	**46.02**	**56.95**	0-360	100	H
4	55.48	4.24	Pk	19.3	4.6	28.14	40	-11.86	0-360	100	V
5	132.018	2.85	Pk	14.2	4.8	21.85	43.52	-21.67	0-360	100	V
6	396.912	1.87	Pk	21.3	5.6	28.77	46.02	-17.25	0-360	100	V
8	837.3888	53.87	Pk	27.2	7.8	88.87	**46.02**	**42.85**	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.

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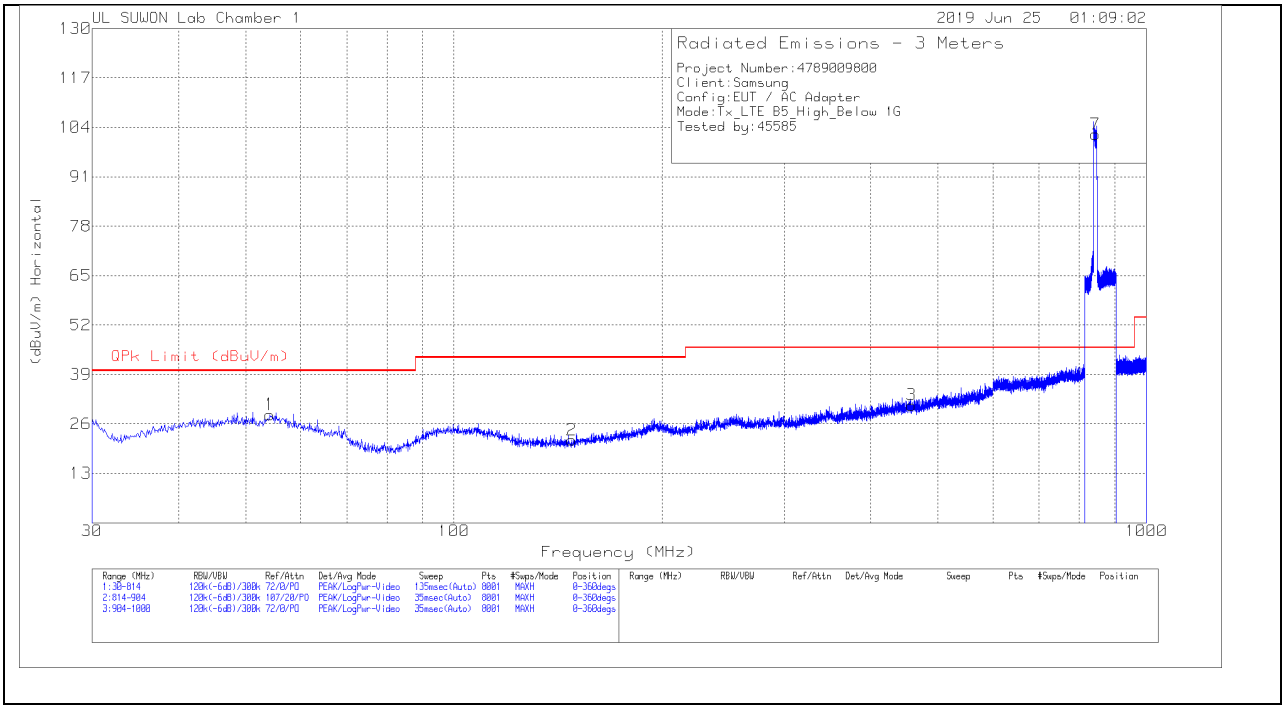
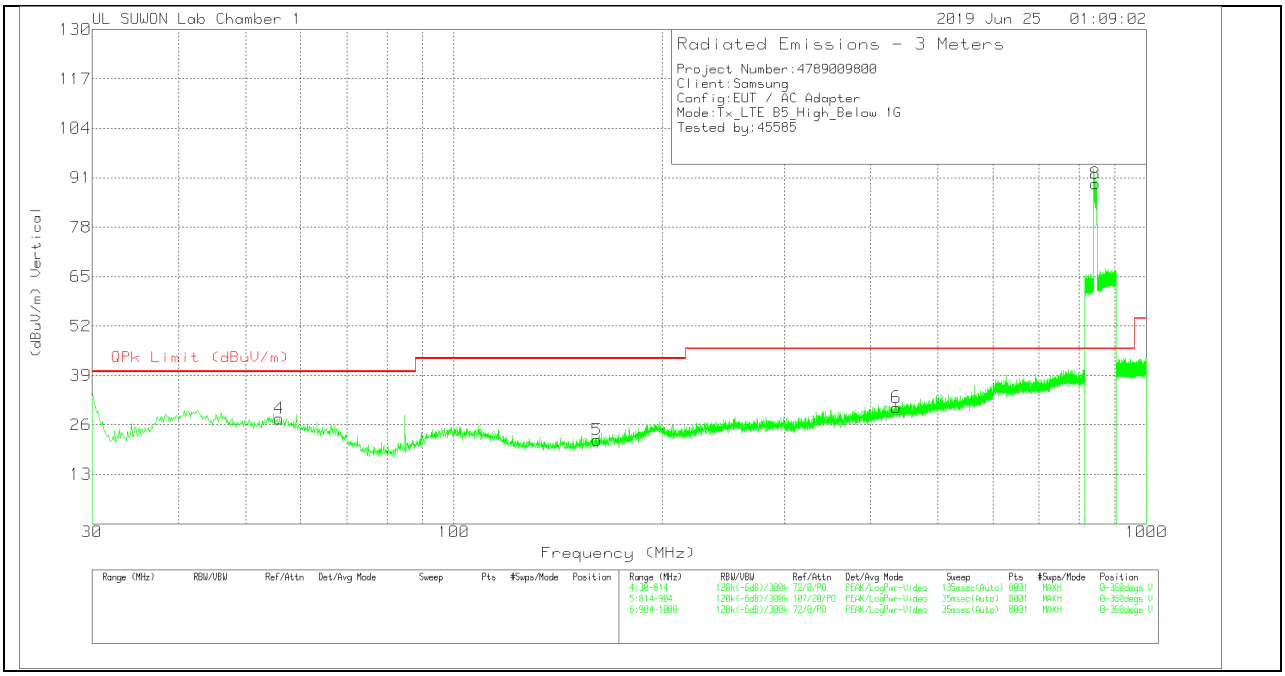
HIGH CHANNEL(892.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	54.206	4.82	Pk	19.4	4.2	28.42	40	-11.58	0-360	200	H
2	147.894	2.92	Pk	14.1	4.7	21.72	43.52	-21.8	0-360	100	H
3	457.966	2.65	Pk	22.3	6	30.95	46.02	-15.07	0-360	100	H
7	843.8125	67.03	Pk	27.3	7.8	102.13	**46.02**	**56.11**	0-360	100	H
4	55.872	3.66	Pk	19.2	4.8	27.66	40	-12.34	0-360	100	V
5	160.928	2.62	Pk	14.6	4.8	22.02	43.52	-21.5	0-360	100	V
6	435.622	2.47	Pk	22.1	6	30.57	46.02	-15.45	0-360	100	V
8	843.9363	54.35	Pk	27.3	7.8	89.45	**46.02**	**43.43**	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.

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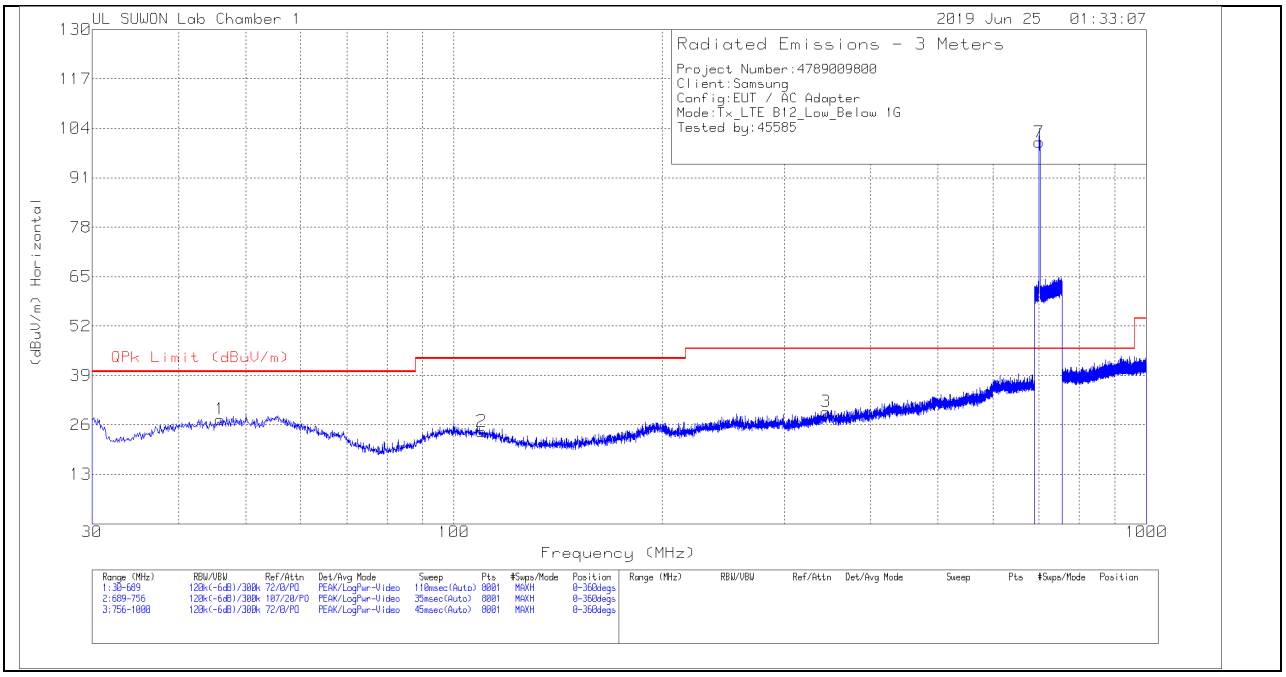
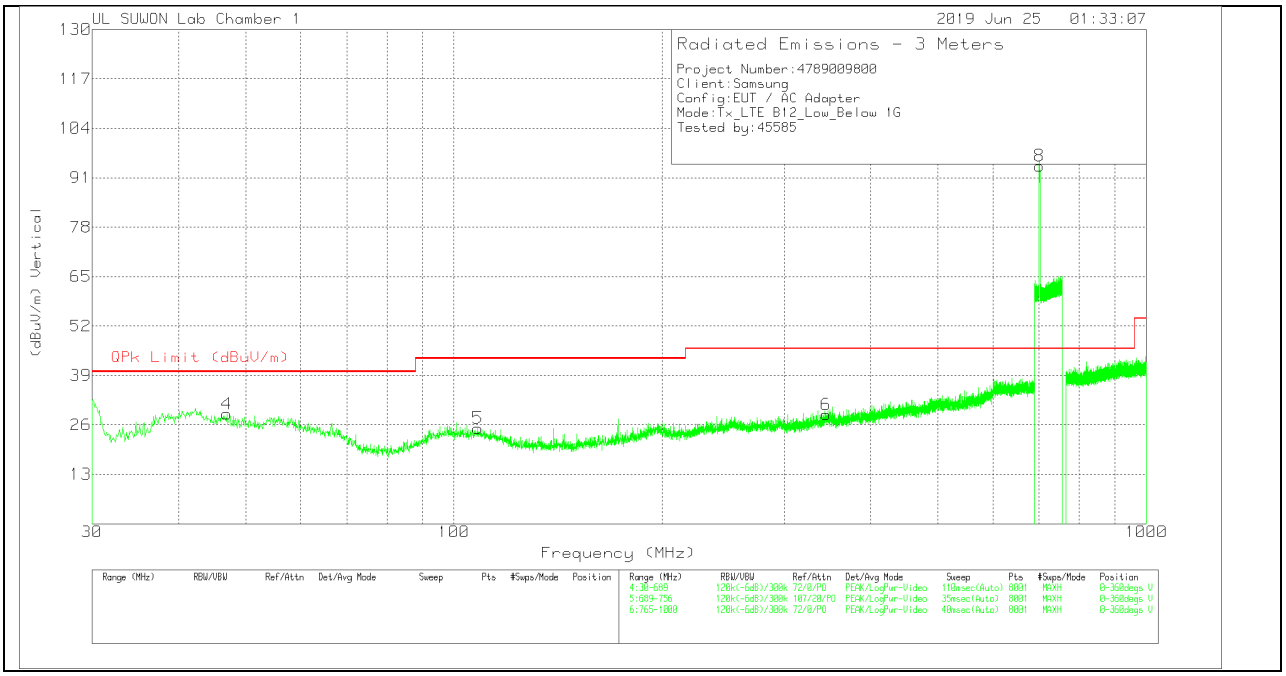
7.10. Below 1 GHz in the LTE Band 12

LOW CHANNEL(730.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	45.9808	3.37	Pk	19.7	4.4	27.47	40	-12.53	0-360	100	H
2	109.6566	2.29	Pk	17.3	4.7	24.29	43.52	-19.23	0-360	100	H
3	344.7549	3.15	Pk	20.9	5.4	29.45	46.02	-16.57	0-360	100	H
7	700.2393	67.61	Pk	25.6	7.1	100.31	**46.02**	**54.29**	0-360	100	H
4	46.9693	4.38	Pk	19.8	4.7	28.88	40	-11.12	0-360	100	V
5	108.2563	2.81	Pk	17.5	4.8	25.11	43.52	-18.41	0-360	100	V
6	344.9196	2.38	Pk	20.9	5.4	28.68	46.02	-17.34	0-360	100	V
8	700.4905	61.4	Pk	25.6	7.1	94.1	**46.02**	**48.08**	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.

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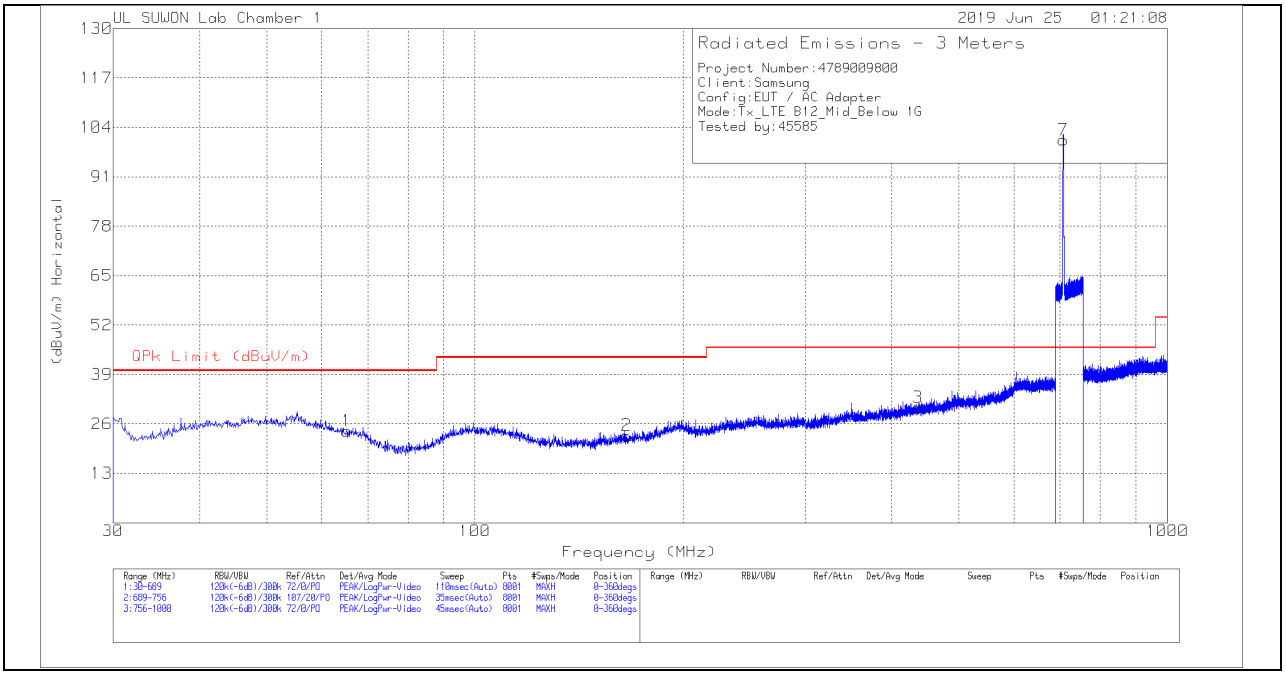
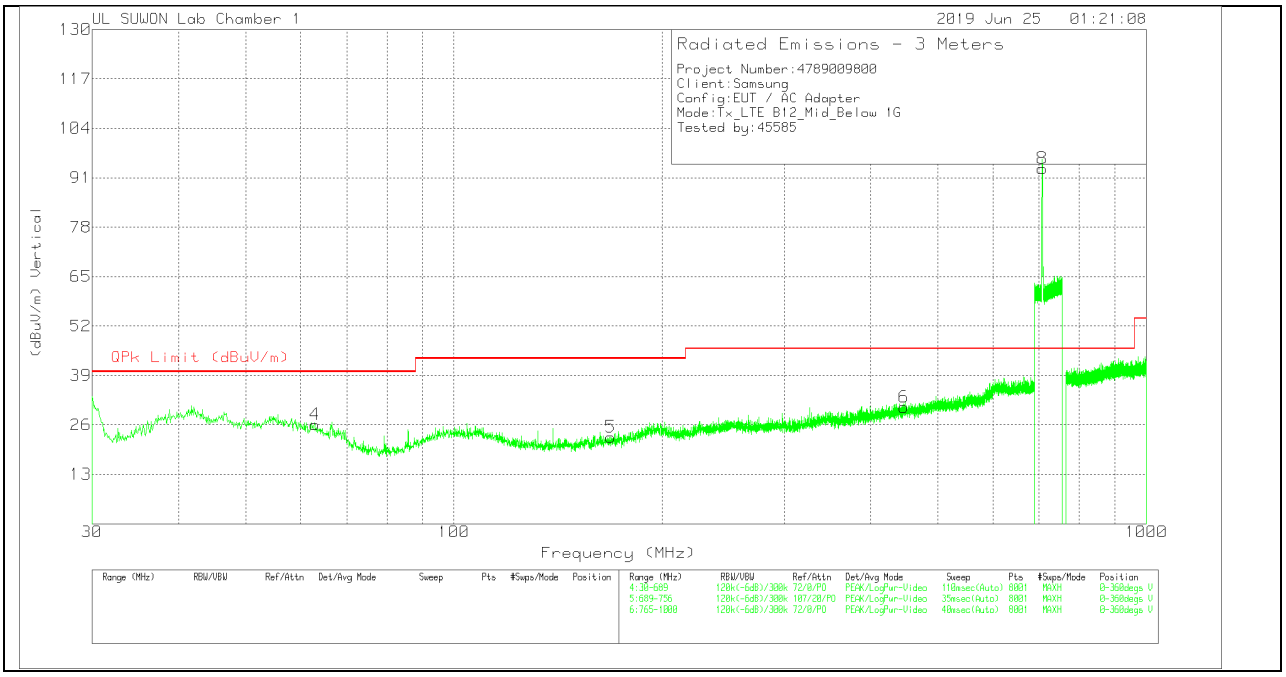
MID CHANNEL(737.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	65.2565	3.19	Pk	17.2	3.8	24.19	40	-15.81	0-360	100	H
2	165.5893	3.47	Pk	14.8	4.7	22.97	43.52	-20.55	0-360	100	H
3	436.5206	2.34	Pk	22	6	30.34	46.02	-15.68	0-360	200	H
7	707.492	67.96	Pk	25.6	7.1	100.66	**46.02**	**54.64**	0-360	100	H
4	62.95	4.01	Pk	17.9	4.2	26.11	40	-13.89	0-360	100	V
5	168.39	3.2	Pk	14.8	4.8	22.8	43.52	-20.72	0-360	100	V
6	446.8175	2.55	Pk	22.1	6	30.65	46.02	-15.37	0-360	100	V
8	707.7014	60.74	Pk	25.6	7.1	93.44	**46.02**	**47.42**	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.

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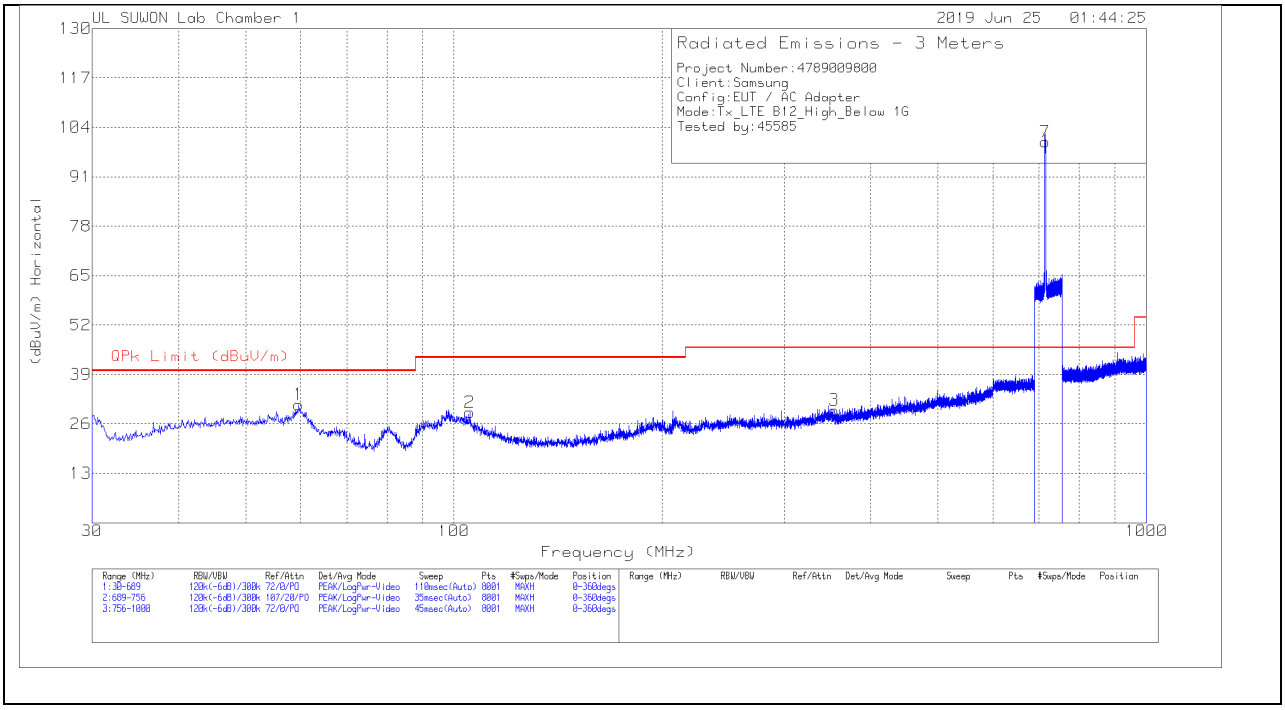
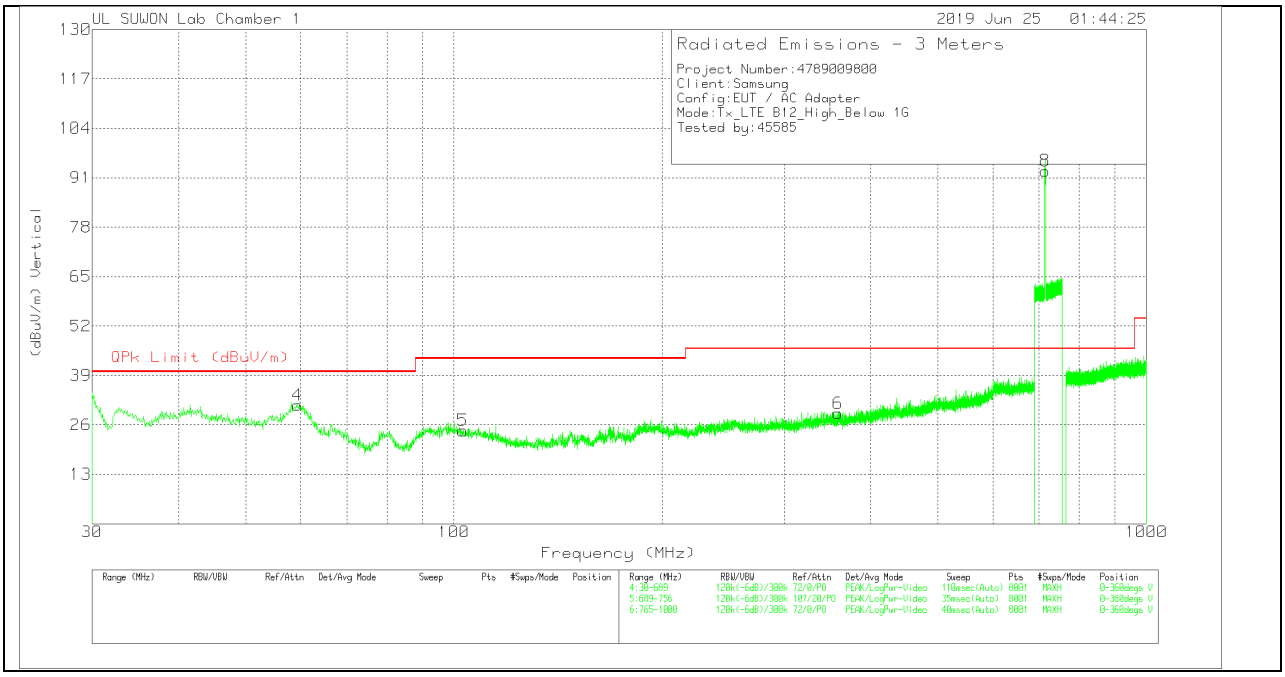
HIGH CHANNEL(744.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	59.655	7.87	Pk	18.6	4.6	31.07	40	-8.93	0-360	200	H
2	105.3731	6.81	Pk	17.8	4.4	29.01	43.52	-14.51	0-360	200	H
3	354.228	3.61	Pk	20.4	5.6	29.61	46.02	-16.41	0-360	200	H
7	714.7113	67.35	Pk	25.6	7.2	100.15	**46.02**	**54.13**	0-360	100	H
4	59.4079	7.79	Pk	18.7	4.7	31.19	40	-8.81	0-360	100	V
5	102.9843	2.31	Pk	17.9	4.3	24.51	43.52	-19.01	0-360	100	V
6	358.4291	3.25	Pk	20.3	5.5	29.05	46.02	-16.97	0-360	100	V
8	714.3511	60	Pk	25.6	7.2	92.8	**46.02**	**46.78**	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.

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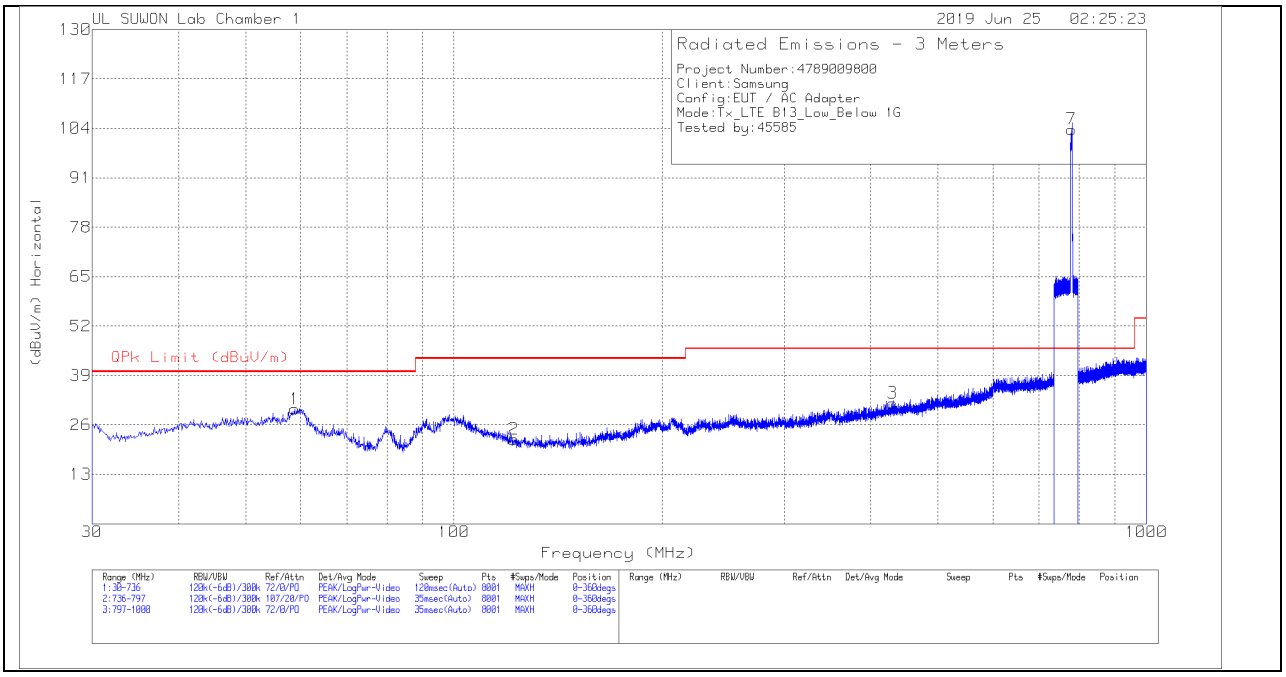
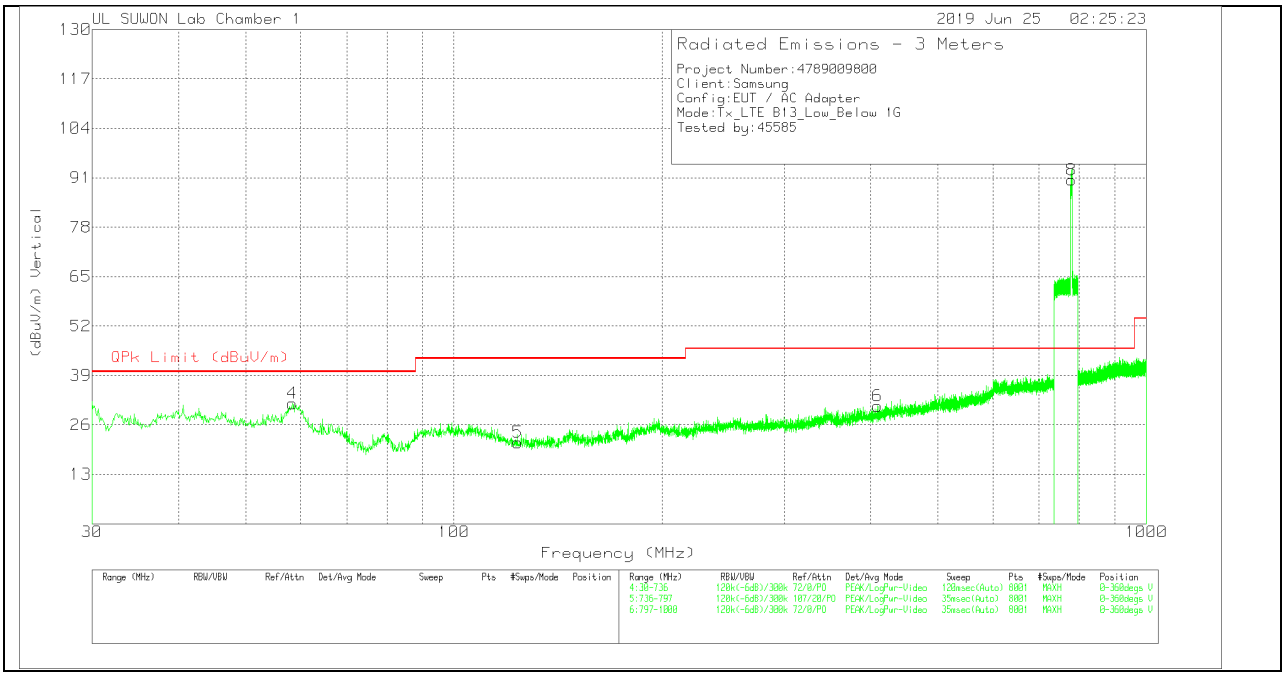
7.11. Below 1 GHz in the LTE Band 13

LOW CHANNEL(748.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	58.8578	6.67	Pk	18.8	4.7	30.17	40	-9.83	0-360	200	H
2	121.9565	2.49	Pk	15.1	4.6	22.19	43.52	-21.33	0-360	100	H
3	429.949	3.84	Pk	22	5.9	31.74	46.02	-14.28	0-360	200	H
7	779.6455	69.44	Pk	26.8	7.5	103.74	**46.02**	**57.72**	0-360	100	H
4	58.4165	8.13	Pk	18.8	4.7	31.63	40	-8.37	0-360	100	V
5	123.6333	1.97	Pk	14.8	4.6	21.37	43.52	-22.15	0-360	100	V
6	408.9455	3.58	Pk	21.7	5.7	30.98	46.02	-15.04	0-360	100	V
8	779.5921	56.14	Pk	26.8	7.5	90.44	**46.02**	**44.42**	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.

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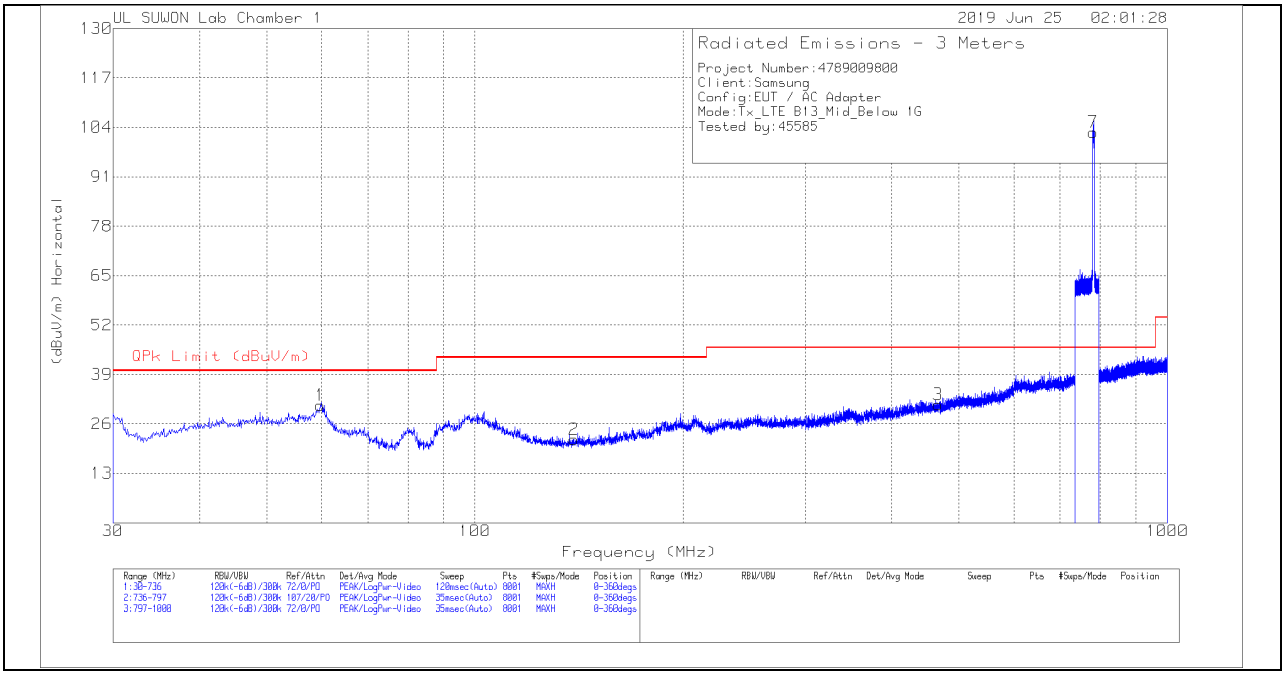
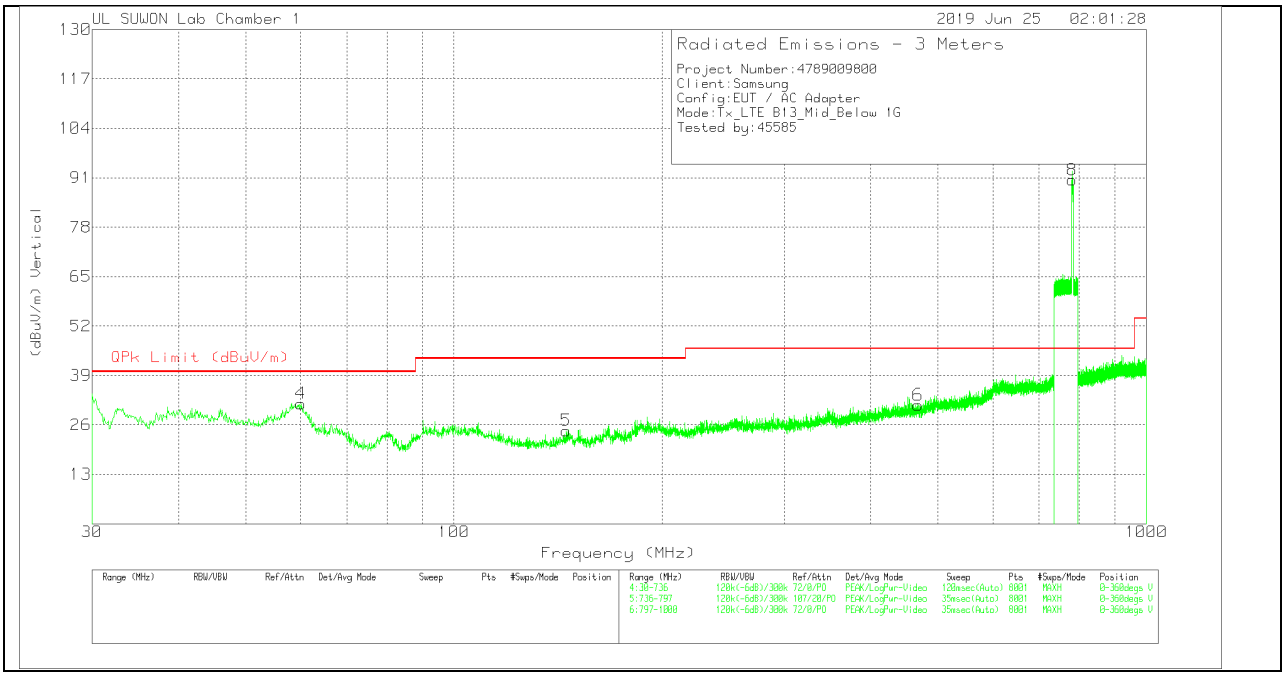
MID CHANNEL(751.0MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	59.7403	7.69	Pk	18.6	4.6	30.89	40	-9.11	0-360	200	H
2	138.9888	2.81	Pk	14.2	4.9	21.91	43.52	-21.61	0-360	100	H
3	466.2198	2.75	Pk	22.3	6	31.05	46.02	-14.97	0-360	100	H
7	781.9101	68.43	Pk	26.8	7.5	102.73	**46.02**	**56.71**	0-360	100	H
4	60.0933	8.51	Pk	18.5	4.6	31.61	40	-8.39	0-360	100	V
5	145.2545	5.6	Pk	14.1	4.8	24.5	43.52	-19.02	0-360	100	V
6	468.073	2.92	Pk	22.3	6	31.22	46.02	-14.8	0-360	100	V
8	781.8796	56.13	Pk	26.8	7.5	90.43	**46.02**	**44.41**	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.

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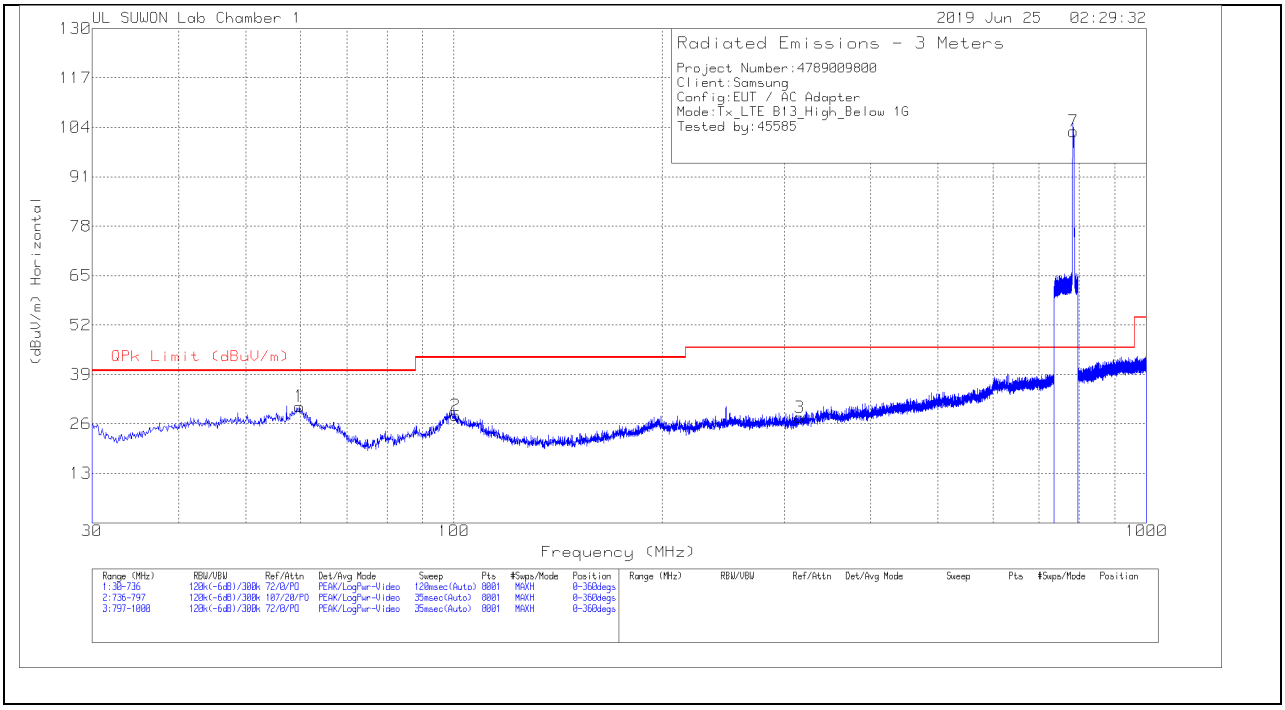
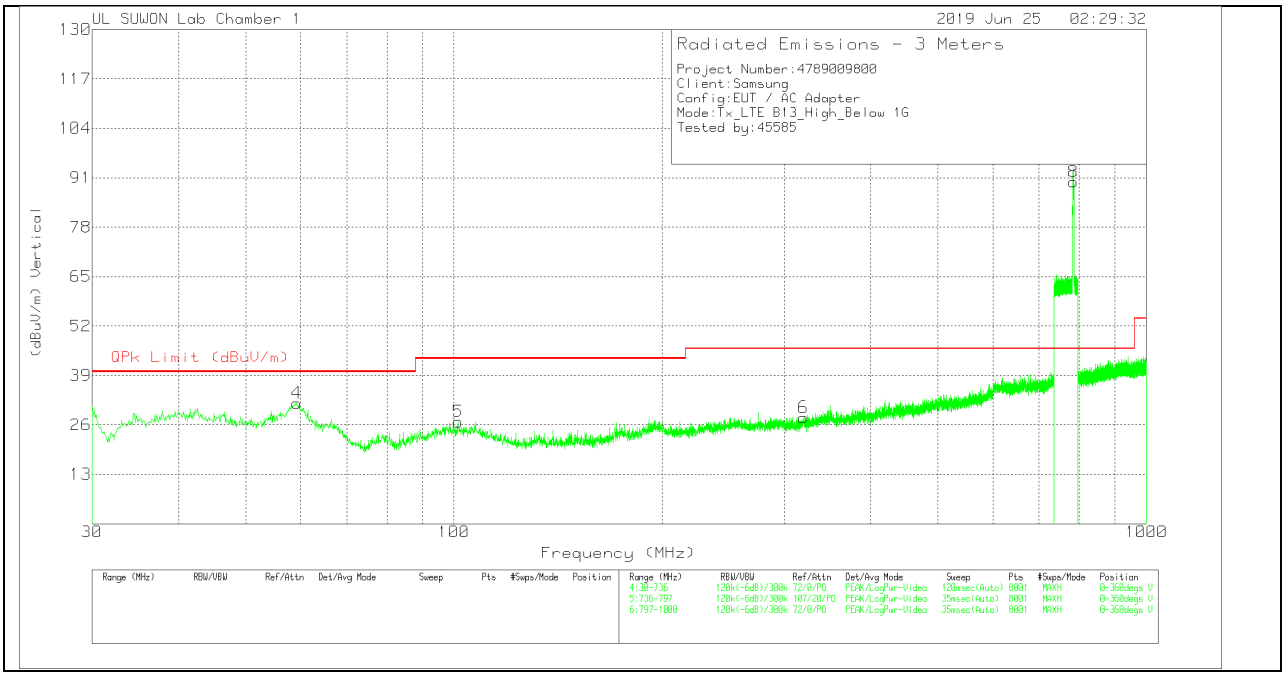
HIGH CHANNEL(753.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	59.8285	7.39	Pk	18.6	4.6	30.59	40	-9.41	0-360	100	H
2	100.5118	5.8	Pk	17.9	4.5	28.2	43.52	-15.32	0-360	200	H
3	315.6653	2.73	Pk	19.7	5.3	27.73	46.02	-18.29	0-360	200	H
7	784.678	68.64	Pk	26.8	7.5	102.94	**46.02**	**56.92**	0-360	100	H
4	59.299	8.34	Pk	18.7	4.7	31.74	40	-8.26	0-360	100	V
5	101.3943	4.42	Pk	17.9	4.5	26.82	43.52	-16.7	0-360	100	V
6	319.46	2.71	Pk	19.9	5.3	27.91	46.02	-18.11	0-360	100	V
8	784.5255	55.6	Pk	26.8	7.5	89.9	**46.02**	**43.88**	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.

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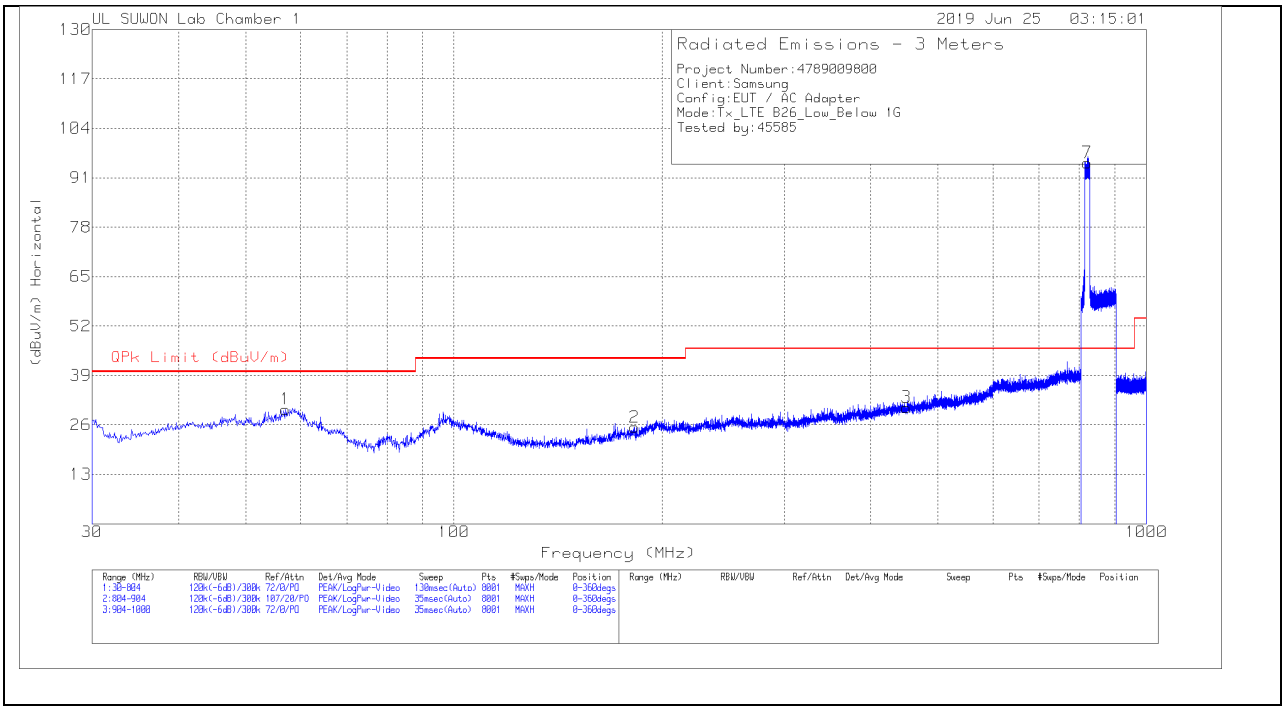
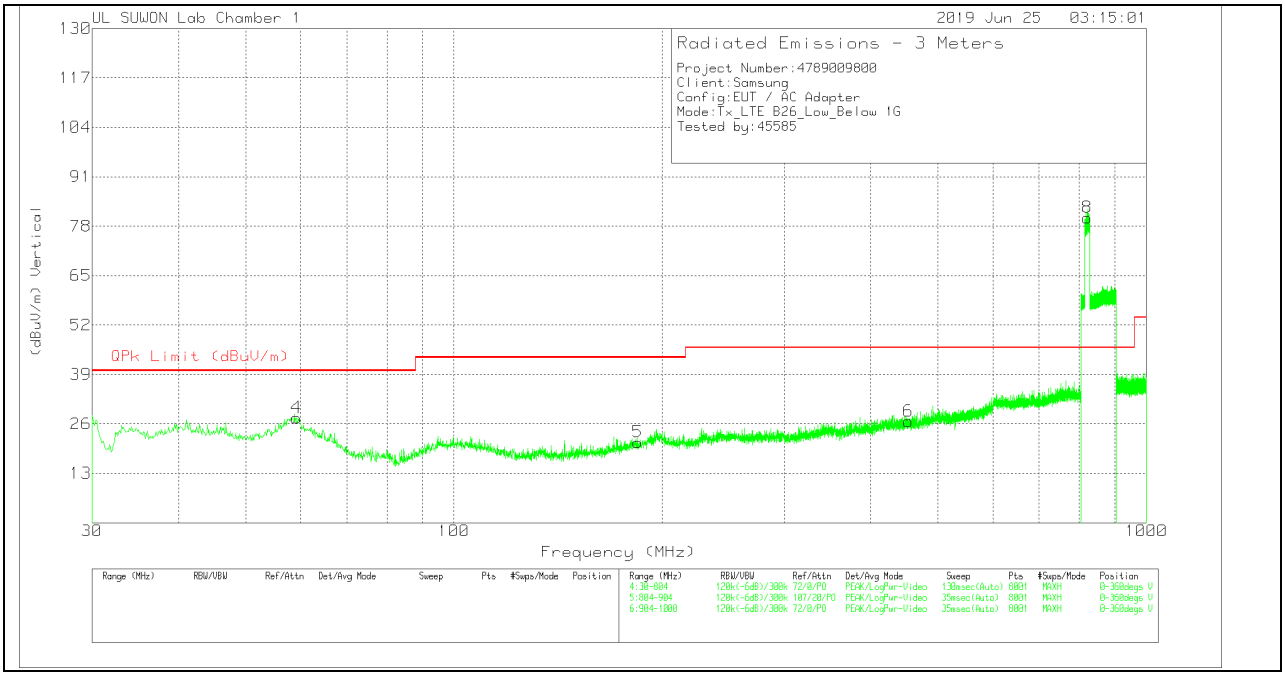
7.12. Below 1 GHz in the LTE Band 26

LOW CHANNEL(860.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	57.09	6.32	Pk	19	4.8	30.12	40	-9.88	0-360	200	H
2	182.1878	4.69	Pk	15.9	4.8	25.39	43.52	-18.13	0-360	100	H
3	450.4755	2.3	Pk	22.3	6	30.6	46.02	-15.42	0-360	100	H
7	821.8	64.85	Pk	27	3.1	94.95	46.02	48.93	0-360	100	H
4	59.2185	8.11	Pk	18.7	.8	27.61	40	-12.39	0-360	100	V
5	184.1228	3.38	Pk	16.3	1.5	21.18	43.52	-22.34	0-360	100	V
6	453.0878	2.18	Pk	22.2	2.3	26.68	46.02	-19.34	0-360	100	V
8	822.1	50.15	Pk	27	3.1	80.25	46.02	34.23	0-360	100	V

Pk - Peak detector

Note: Unwanted emissions captured from 814MHz to 849MHz and from 859MHz to 894MHz were the TX and RX signals generated from the call-simulator.

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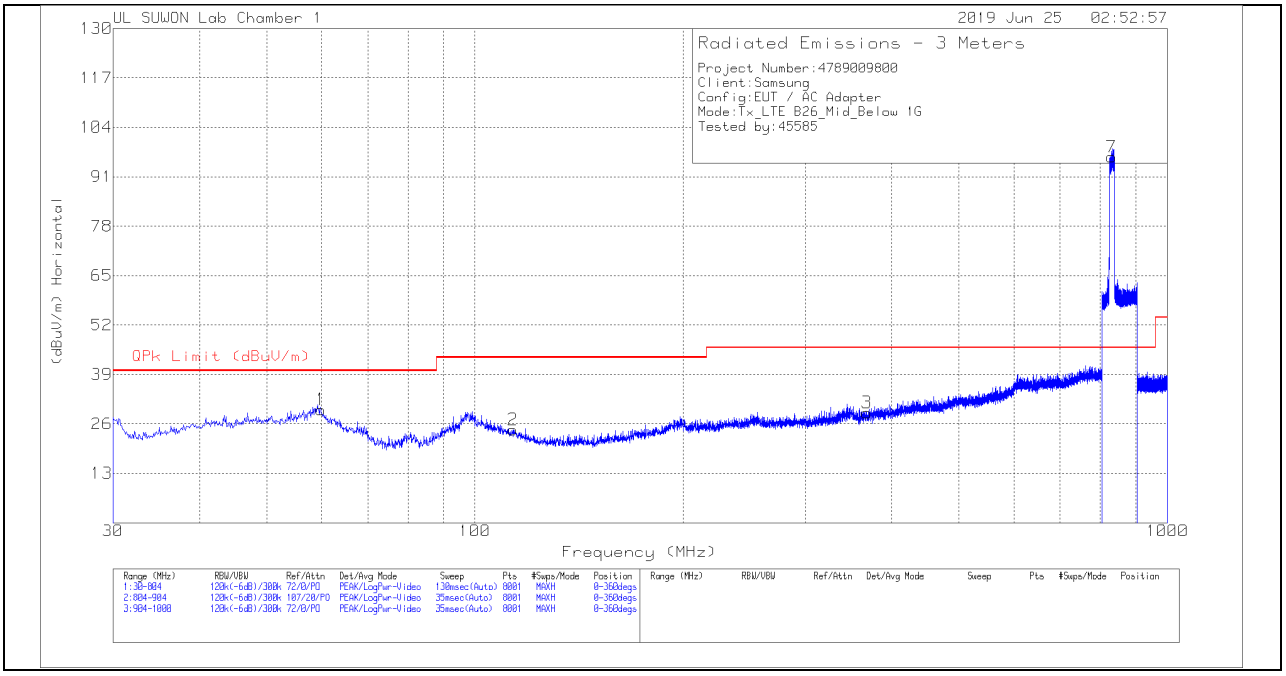
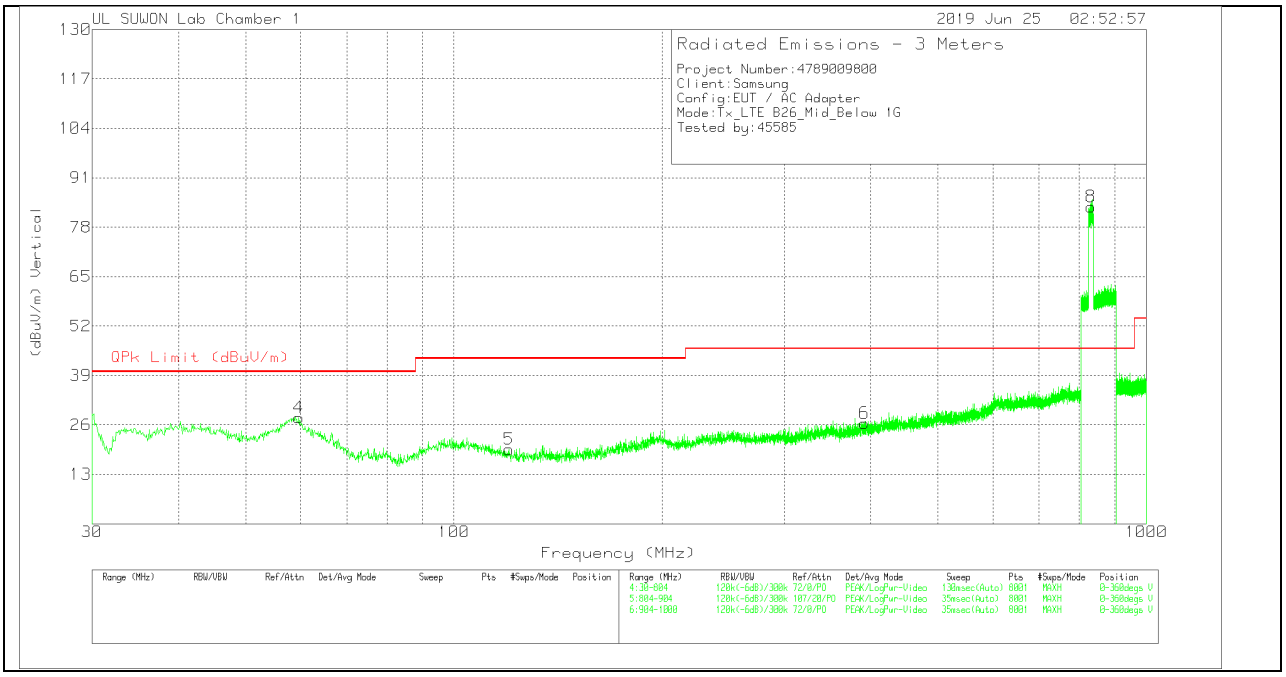
MID CHANNEL(876.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	59.8958	6.57	Pk	18.6	4.6	29.77	40	-10.23	0-360	200	H
2	113.3985	3.04	Pk	16.6	4.8	24.44	43.52	-19.08	0-360	100	H
3	368.0445	2.75	Pk	20.7	5.5	28.95	46.02	-17.07	0-360	100	H
7	831.0625	65.99	Pk	27.1	3.1	96.19	46.02	50.17	0-360	100	H
4	59.7023	8.53	Pk	18.6	.8	27.93	40	-12.07	0-360	100	V
5	119.9775	3.06	Pk	15.3	1.2	19.56	43.52	-23.96	0-360	100	V
6	391.3613	3.16	Pk	21.2	2.1	26.46	46.02	-19.56	0-360	100	V
8	832.075	53.16	Pk	27.1	3.1	83.36	46.02	37.34	0-360	100	V

Pk - Peak detector

Note: Unwanted emissions captured from 814MHz to 849MHz and from 859MHz to 894MHz were the TX and RX signals generated from the call-simulator.

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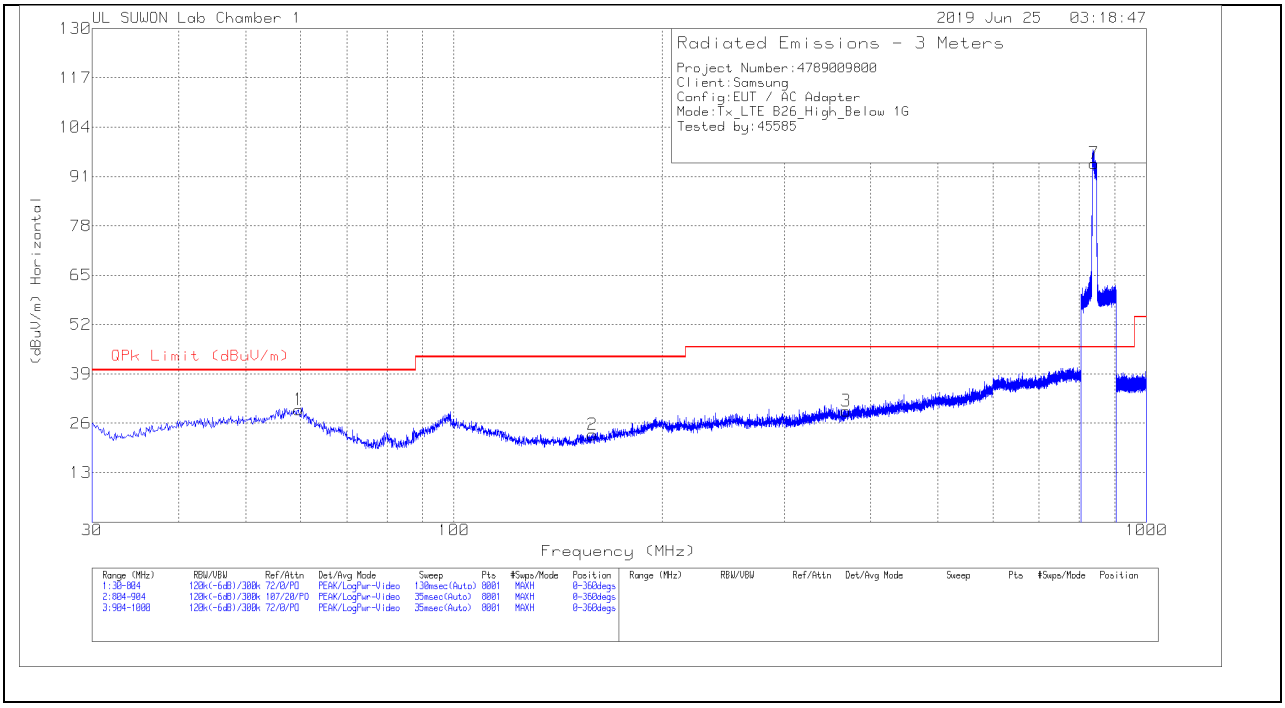
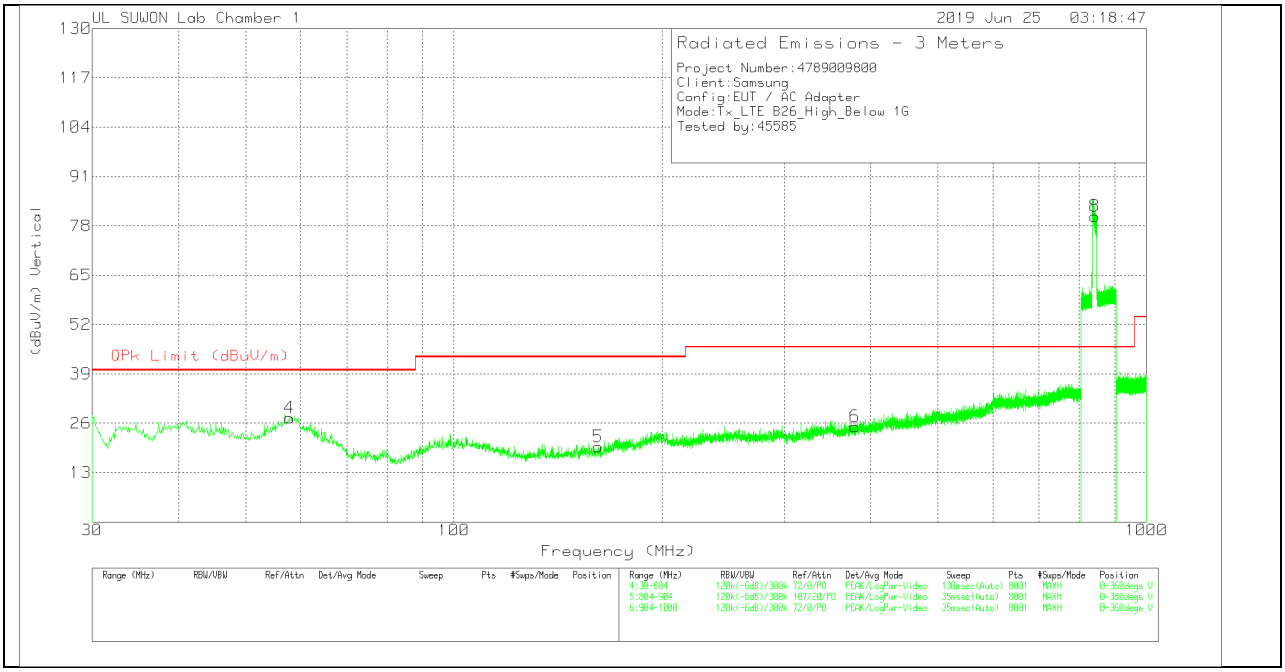
HIGH CHANNEL(892.5MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Bypass_Below_1 G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	59.6055	6.41	Pk	18.6	4.6	29.61	40	-10.39	0-360	200	H
2	158.5808	3.82	Pk	14.4	4.8	23.02	43.52	-20.5	0-360	200	H
3	368.7218	2.95	Pk	20.8	5.5	29.25	46.02	-16.77	0-360	200	H
7	840.9125	64.23	Pk	27.1	3.1	94.43	46.02	48.41	0-360	100	H
4	57.864	7.72	Pk	18.9	.8	27.42	40	-12.58	0-360	100	V
5	161.3865	3.71	Pk	14.7	1.4	19.81	43.52	-23.71	0-360	100	V
6	379.5578	1.93	Pk	21.1	2.1	25.13	46.02	-20.89	0-360	100	V
8	841.7625	50.26	Pk	27.1	3.2	80.56	46.02	34.54	0-360	100	V

Pk - Peak detector

Note: Unwanted emissions captured from 814MHz to 849MHz and from 859MHz to 894MHz were the TX and RX signals generated from the call-simulator.