



CERTIFICATION TEST REPORT

Report Number. : 4790089626-E12V1

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

Model : SM-S906B/DS

FCC ID : A3LSMS906B

EUT Description : GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax,
NFC, WPT and UWB

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

Date Of Issue:
2021-12-20

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

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



ACCREDITED

Testing Laboratory

TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2021-12-20	Initial issue	Steven(Sangyun) Kim

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. CALIBRATION AND UNCERTAINTY	6
4.1. MEASURING INSTRUMENT CALIBRATION.....	6
4.2. SAMPLE CALCULATION.....	6
4.3. MEASUREMENT UNCERTAINTY	6
4.4. DECISION RULE	6
5. EQUIPMENT UNDER TEST	7
5.1. DESCRIPTION OF EUT.....	7
5.2. TEST MODE	7
5.3. WORST-CASE ORIENTATION AND MODE.....	7
5.4. MODIFICATIONS.....	8
5.5. DETAILS OF TESTED SYSTEM.....	8
6. TEST AND MEASUREMENT EQUIPMENT	12
7. TEST RESULTS.....	13
7.1. RADIATED EMISSIONS	13
7.1.1. RADIATED EMISSIONS 30 TO 1000 MHz	14
7.1.1.1. Version 2	14
7.1.1.2. Version 3	24
7.1.2. RADIATED EMISSIONS 1 TO 18 GHz	34
7.1.2.1. Version 2	34
7.1.2.2. Version 3	44
7.2. CONDUCTED EMISSIONS.....	54
7.2.1. CONDUCTED EMISSIONS	55
7.2.1.1. Version 2	55
7.2.1.1. Version 3	67

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.

EUT DESCRIPTION: GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT and UWB

MODEL NUMBER: SM-S906B/DS

SERIAL NUMBER: R3CRB0P2NSV / Version 2(RADIATED)
R3CRB0P335E / Version 3(RADIATED);

DATE TESTED: 2021-12-09 ~ 2021-12-20;

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:



Steven(Sangyun) Kim
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 <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\text{EIRP} = \text{PSA reading with EUT worst orientation (dBm)} + \text{Path loss (dB)} - \text{cable loss (between the SG and substitution antenna)} + \text{Substitution Antenna Factor (dBi)}$$

$$\text{ERP} = \text{PSA reading with EUT worst orientation (dBm)} + \text{Path loss (dB)} - \text{cable loss (between the SG and substitution antenna)}$$

(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	4.05 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.78 dB
Radiated Disturbance, Above 18 GHz	5.58 dB

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

4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedure 2, Clause 4.4.3 in IEC Guide 115:2007.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT and UWB.

This test report is 15B JBP test report for chipset version 2 and 3 .
Chipset version 1 15B JBP test report is refer to report number LBE20210638.

GENERAL INFORMATION

Type of device	Class B personal computers and peripherals Other Class B digital devices & peripherals
Personal Computer power requirements	100-240 VAC / 50-60 Hz, 1.8 A
Travel Adapter power requirements	100-240 VAC / 50-60 Hz, 0.7 A
List of frequencies generated or used by the EUT	8.250 GHz from UWB

5.2. TEST MODE

Mode	Description
Test Case 1	Camera(Front) + Charging
Test Case 2	Camera(Rear) + Charging + GSM850
Test Case 3	Video and Audio Play + Earphone
Test Case 4	Video and Audio Play + Display Out
Test Case 5	USB Data Communication with PC

Note: All descriptions were tested under simultaneous operation.

5.3. WORST-CASE ORIENTATION AND MODE

The EUT was investigated in three orthogonal orientations X, Y, Z it was determined that X orientation with data transfer was worst-case; therefore, all final radiated testing was performed with the EUT in X orientation with data transfer.

5.4. MODIFICATIONS

No modifications were made during testing.

5.5. DETAILS OF TESTED SYSTEM

SUPPORT EQUIPMENT & PERIPHERALS

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID/DoC
Laptop PC	Lenovo	P15S	PF1ARJSC	DoC
AC/DC Adapter	Lenovo	ADLX65YDC3D	8SSA10R16870D1SG09E04YX	N/A
Mouse	LENOVO	MSU1175	4G084D5273B	DoC
LCD Monitor	DELL	U2417H	CN-0767T7-WS2000-83F-BCRL-A07	DoC
Data Cable	SAMSUNG	EP-DN980BBE	N/A	N/A
Charger	SAMSUNG	EP-TA800	R37N9BV0372HM3	N/A
Earphone	SAMSUNG	GH59-15448AYB	N/A	N/A

I/O CABLES

[DIAGRAM 1]

I/O Cable List						
Cable No	Port	# of identical ports	Connect or Type	Cable Type	Cable Length(m)	Remarks
1	AC Power	1	Power	-	Direct	From AC/DC Adapter to AC Main
2	Type C	1	Power	Unshielded	0.7m	From AD/DC Adapter to EUT

[DIAGRAM 2]

I/O Cable List						
Cable No	Port	# of identical ports	Connect or Type	Cable Type	Cable Length(m)	Remarks
1	Earphone	1	Type C	Shielded	0.7m	From Earphone to EUT

* Radiated Test Only

[DIAGRAM 3]

I/O Cable List						
Cable No	Port	# of identical ports	Connect or Type	Cable Type	Cable Length(m)	Remarks
1	AC Power	1	Power	Unshielded	1.5m	From LCD Monitor to AC Main
2	Type C	1	DP	Shielded	1.0m	From LCD Monitor to EUT

* Radiated Test Only

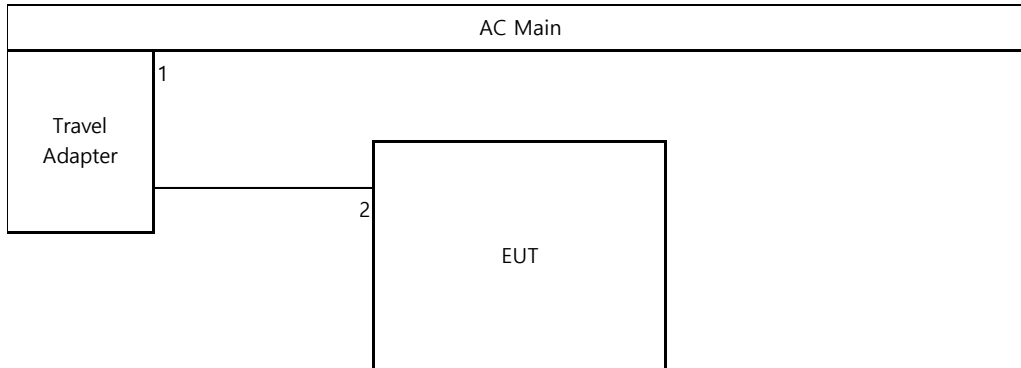
[DIAGRAM 4]

I/O Cable List						
Cable No	Port	# of identical ports	Connect or Type	Cable Type	Cable Length(m)	Remarks
1	AC Power	1	Power	Unshielded	1.5m	From AD/DC Adapter to AC Main
2	DC Power	1	Type C	Shielded	0.7m	From Laptop to AC/DC Adapter
3	USB	1	USB	Shielded	1.5m	From Laptop to EUT
4	AC Power	1	Type C	Unshielded	1.0m	From Mouse to Laptop
5	Ethernet	1	RJ45	Unshielded	1.5m	From Laptop to Router in out of test site

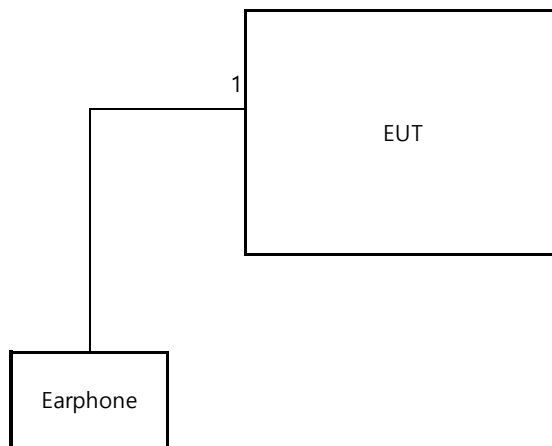
TEST SETUP

The EUT is installed in a typical configuration. Copy files from PC to EUT internal storage.
Video and sound on EUT send to the LCD Monitor from DP cable.

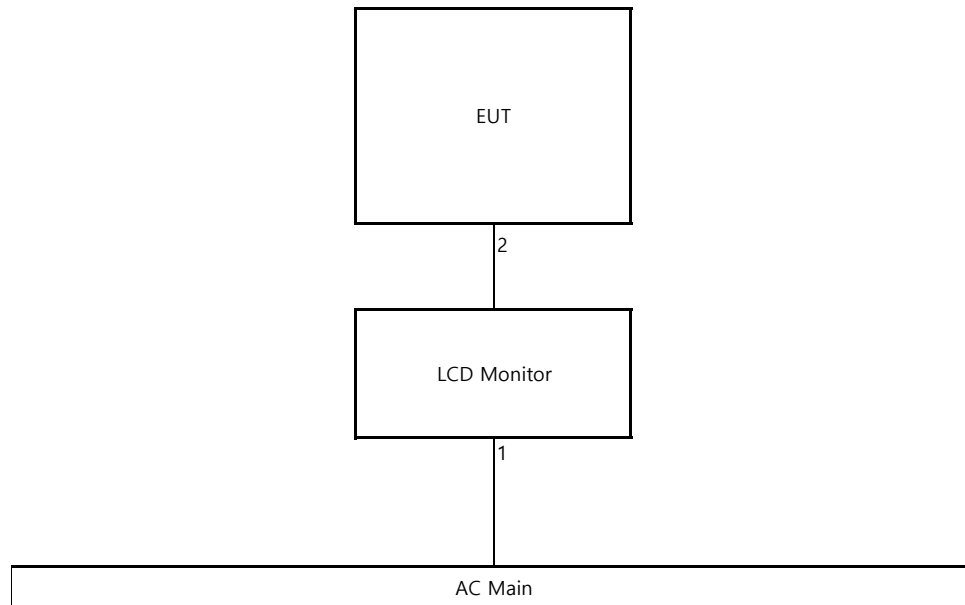
TEST SETUP DIAGRAM 1 for Test Case 1 and 2



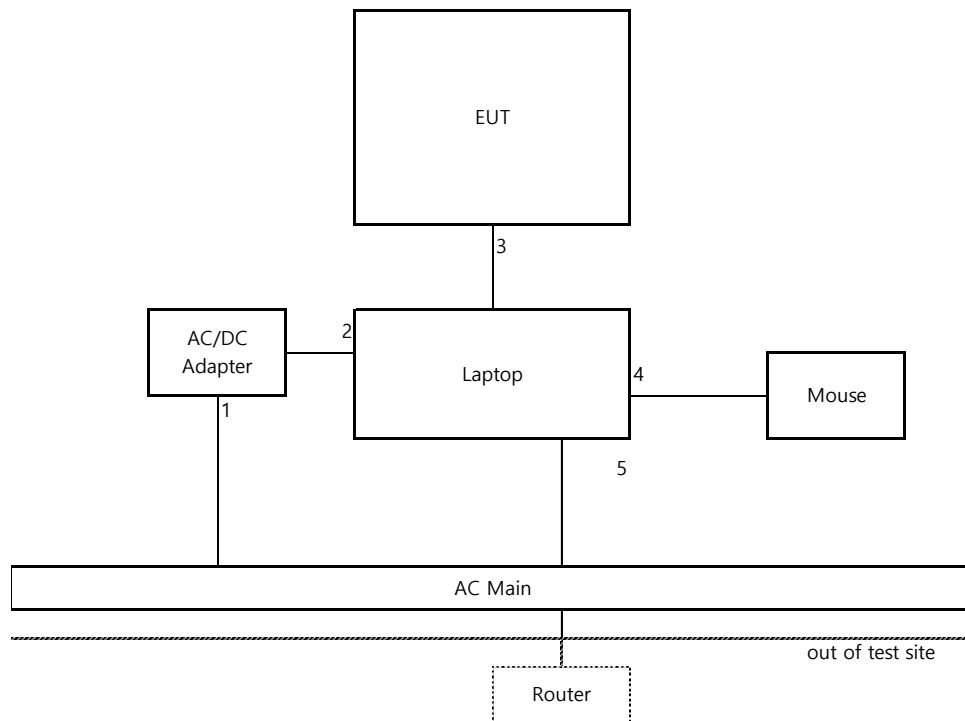
TEST SETUP DIAGRAM 2 for Test Case 3



TEST SETUP DIAGRAM 3 for Test case 4



TEST SETUP DIAGRAM 4 for Test case 5



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	2022-08-04
Antenna, Horn, 40 GHz	ETS	3116C	00168645	2023-10-13
Preamplifier	ETS	3116C-PA	00168841	2022-08-04
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	2022-08-19
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2022-08-13
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2022-08-13
Antenna, Horn, 18 GHz	ETS	3115	00167211	2022-07-27
Antenna, Horn, 18 GHz	ETS	3115	00161451	2022-08-15
Antenna, Horn, 18 GHz	ETS	3117	00168724	2022-07-27
Antenna, Horn, 18 GHz	ETS	3117	00168717	2022-08-15
Antenna, Horn, 18 GHz	ETS	3117	00218597	2023-01-15
Preamplifier, 1000 MHz	Sonoma	310N	341282	2022-08-02
Preamplifier, 1000 MHz	Sonoma	310N	370599	2022-08-02
Preamplifier, 1000 MHz	Sonoma	310N	351741	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029168	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2022-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2022-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2022-08-02
EMI Test Receive, 44 GHz	R&S	ESW44	101590	2022-08-02
EMI Test Receive, 3 GHz	R&S	ESR3	101832	2022-08-02
LISN	R&S	ENV-216	101836	2022-08-05
LISN	R&S	ENV-216	101837	2022-08-05
Communications Test Set	R&S	CMW500	169796	2022-01-27
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	80108-0004	N/A
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G005	2022-08-03
UL Software				
Description	Manufacturer	Model	Version	
Radiated software	UL	UL EMC	Ver 9.5	
AC Line Conducted software	UL	UL EMC	Ver 9.5	

7. TEST RESULTS

7.1. RADIATED EMISSIONS

TEST PROCEDURE

ANSI C63.4-2014

The highest clock frequency generated or used in the EUT is 40 GHz therefore the frequency range was investigated from 30 MHz to 40 GHz.

LIMIT

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

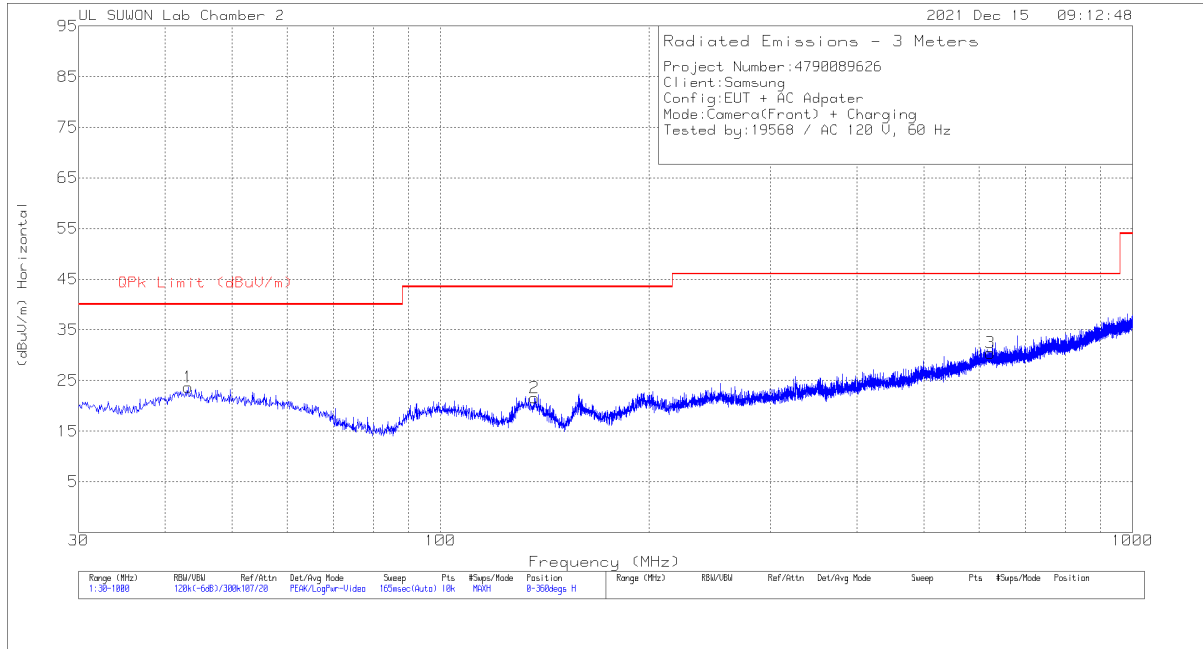
Limits for radiated disturbance of Class B ITE at measuring distance of 3 m	
Frequency range (MHz)	Quasi-peak limits (dBμV/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960 MHz	54
Note: The lower limit shall apply at the transition frequency.	

7.1.1. RADIATED EMISSIONS 30 TO 1000 MHz

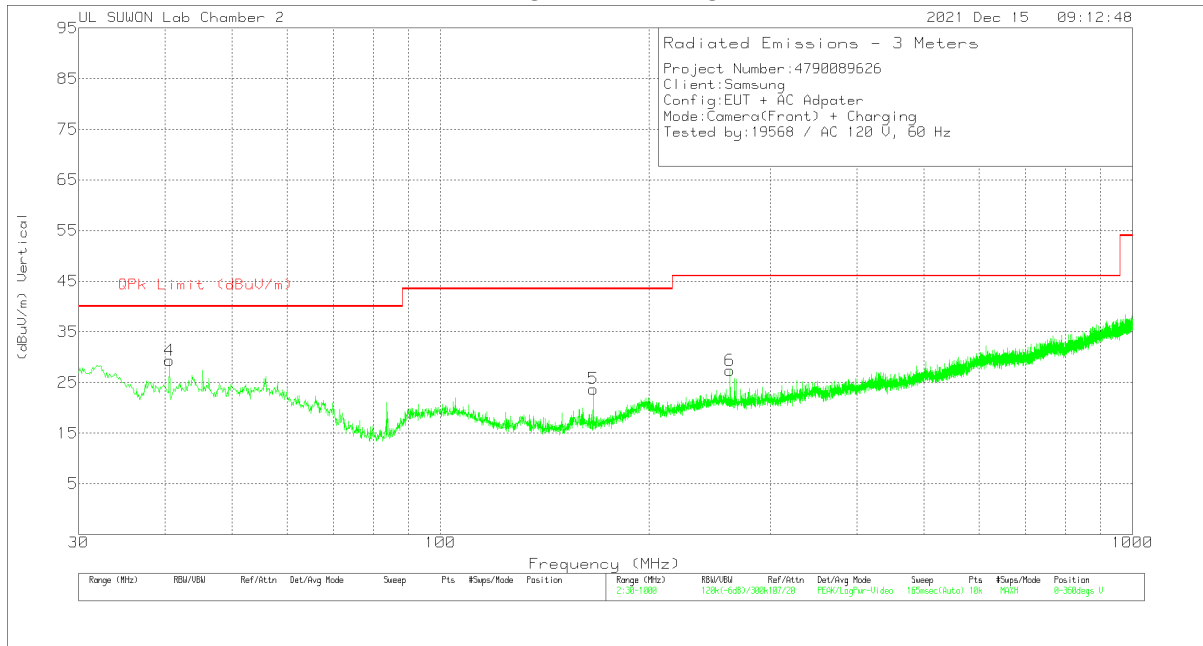
7.1.1.1. Version 2

[Test case 1]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	43.192	35.91	Pk	19.5	-31.8	23.61	40	-16.39	0-360	100	H
2	136.7	38.57	Pk	14.1	-31.1	21.57	43.52	-21.95	0-360	100	H
3	623.446	34.51	Pk	25.4	-29.5	30.41	46.02	-15.61	0-360	100	H
4	40.573	42.22	Pk	18.9	-31.8	29.32	40	-10.68	0-360	100	V
5	166.188	39.73	Pk	14.9	-30.9	23.73	43.52	-19.79	0-360	100	V
6	262.121	39.21	Pk	18.7	-30.5	27.41	46.02	-18.61	0-360	100	V

Pk - Peak detector

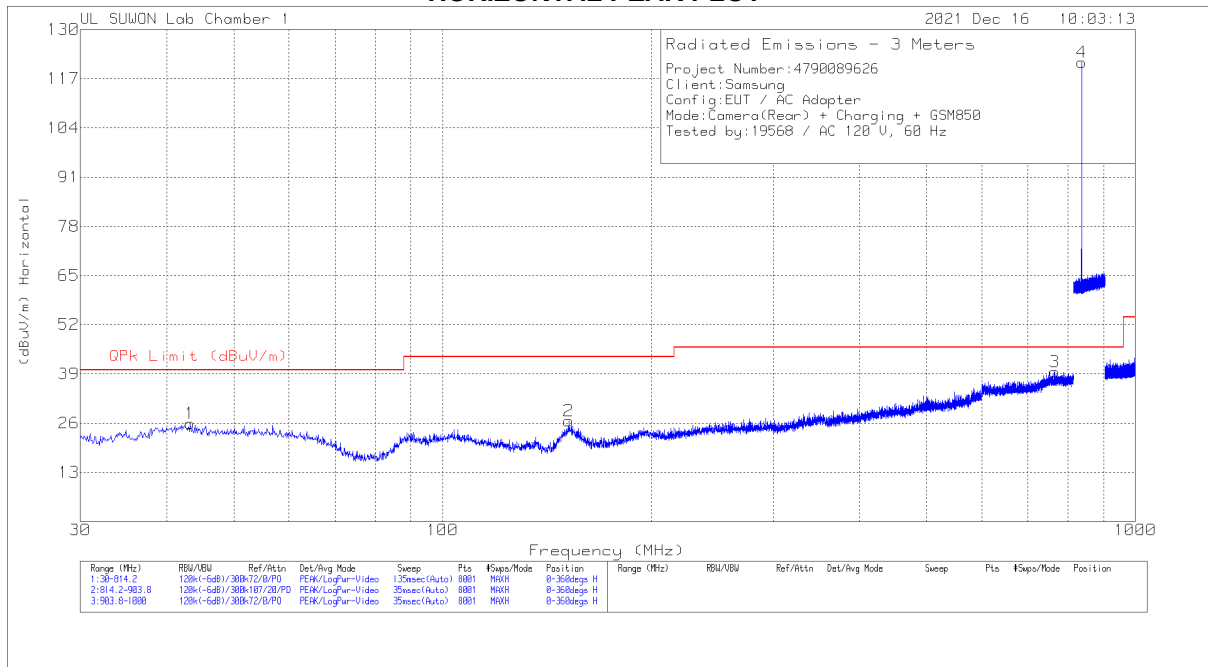
Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
40.573	30.53	Qp	18.9	-31.8	17.63	40	-22.37	145	101	V

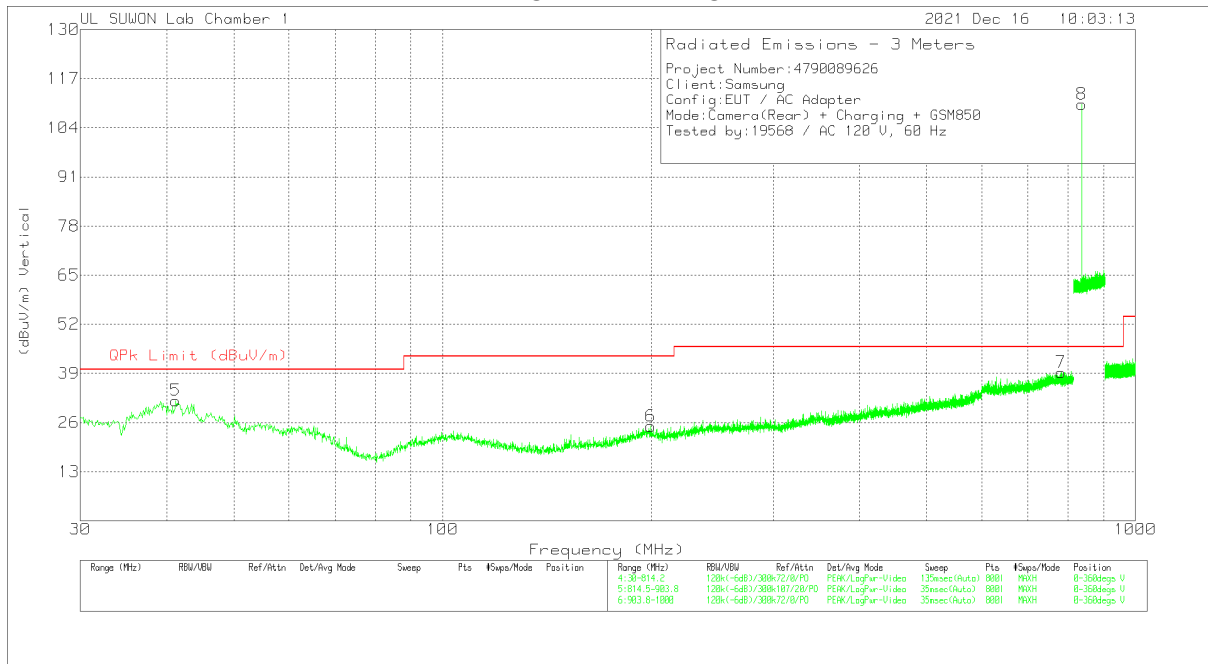
Qp - Quasi-Peak detector

[Test case 2]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

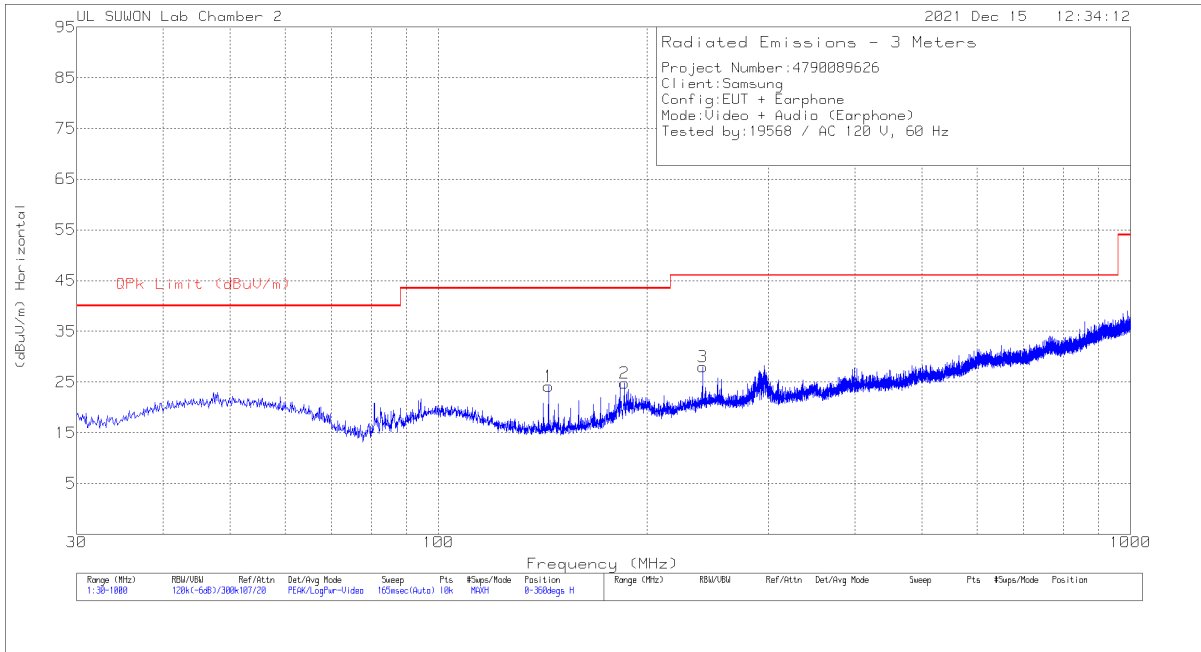
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	43.2334	5.22	Pk	19.3	1.4	25.92	40	-14.08	0-360	300	H
2	152.1392	9.96	Pk	14	2.6	26.56	43.52	-16.96	0-360	100	H
3	765.6776	6.92	Pk	26.9	5.7	39.52	46.02	-6.5	0-360	200	H
*4	836.6448	88.23	Pk	27.1	6	121.33	46.02	75.31	0-360	200	H
5	41.1749	11.62	Pk	18.9	1.3	31.82	40	-8.18	0-360	200	V
6	199.7793	4.92	Pk	17.2	2.9	25.02	43.52	-18.5	0-360	200	V
7	781.2636	6.78	Pk	26.7	5.8	39.28	46.02	-6.74	0-360	200	V
*8	836.5693	77.13	Pk	27.1	6	110.23	46.02	64.21	0-360	100	V

Pk - Peak detector

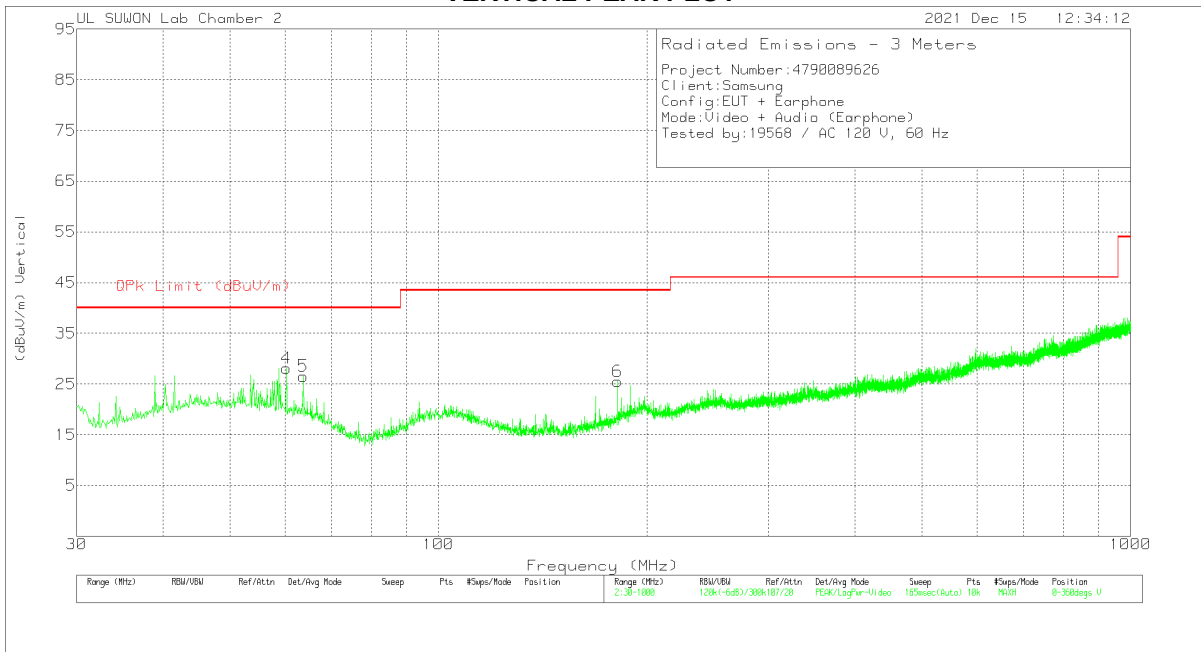
* GSM850 Fundamental

[Test case 3]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	144.169	41.1	Pk	14.1	-31	24.2	43.52	-19.32	0-360	100	H
2	185.685	39.05	Pk	16.5	-30.8	24.75	43.52	-18.77	0-360	101	H
3	240.781	39.95	Pk	18.6	-30.6	27.95	46.02	-18.07	0-360	101	H
4	60.264	41.19	Pk	18.5	-31.6	28.09	40	-11.91	0-360	100	V
5	63.756	40.57	Pk	17.6	-31.6	26.57	40	-13.43	0-360	200	V
6	181.514	40.43	Pk	15.9	-30.8	25.53	43.52	-17.99	0-360	100	V

Pk - Peak detector

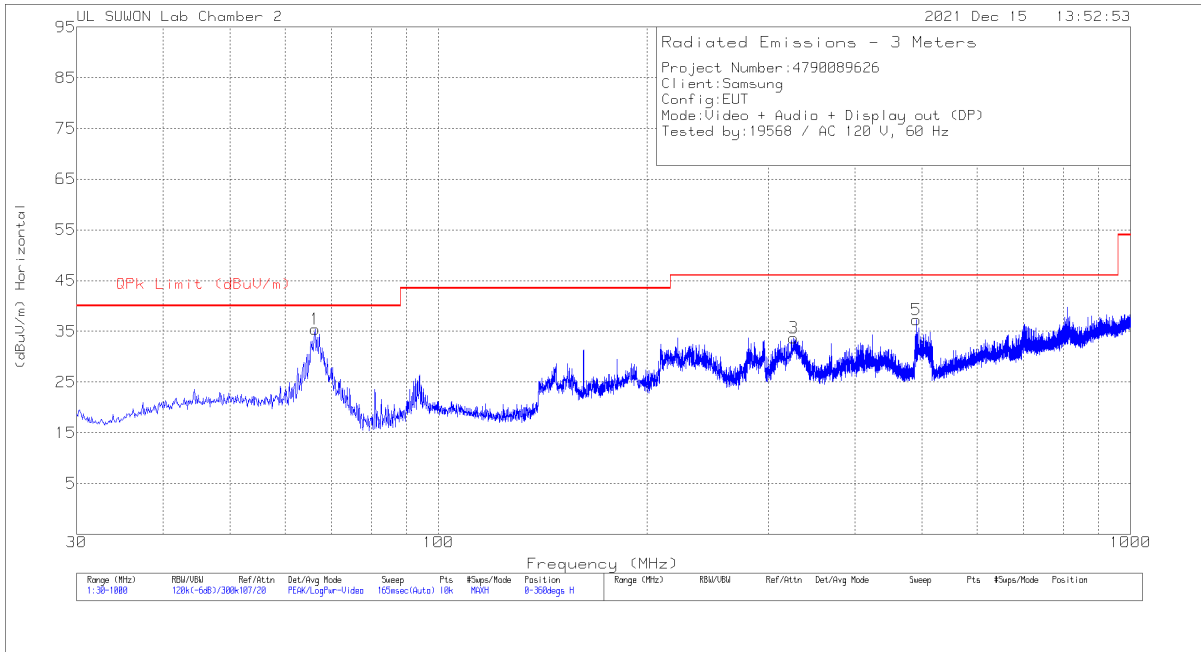
Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
240.781	24.46	Qp	18.6	-30.6	12.46	46.02	-33.56	1	116	H
60.264	23.64	Qp	18.5	-31.6	10.54	40	-29.46	274	107	V

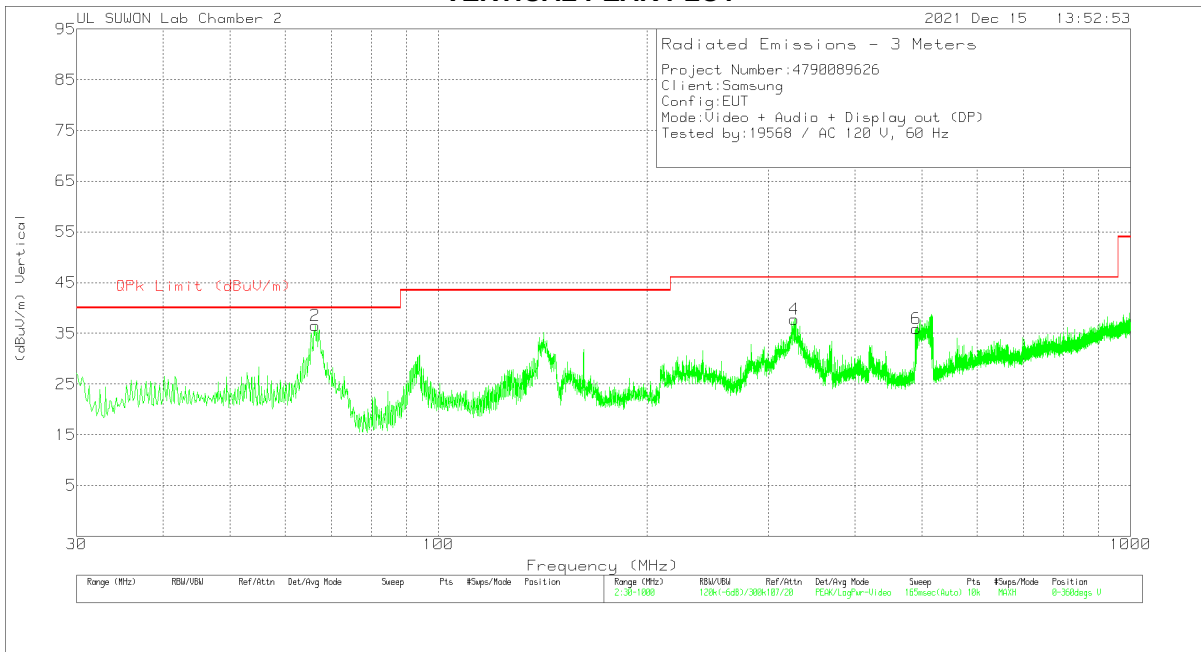
Qp - Quasi-Peak detector

[Test case 4]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	66.375	50.12	Pk	16.8	-31.5	35.42	40	-4.58	0-360	300	H
3	326.238	44.03	Pk	19.9	-30.3	33.63	46.02	-12.39	0-360	100	H
5	490.556	44.06	Pk	23	-29.8	37.26	46.02	-8.76	0-360	100	H
2	66.278	51.3	Pk	16.8	-31.6	36.5	40	-3.5	0-360	100	V
4	326.626	48.21	Pk	19.9	-30.3	37.81	46.02	-8.21	0-360	100	V
6	490.071	42.64	Pk	23	-29.7	35.94	46.02	-10.08	0-360	100	V

Pk - Peak detector

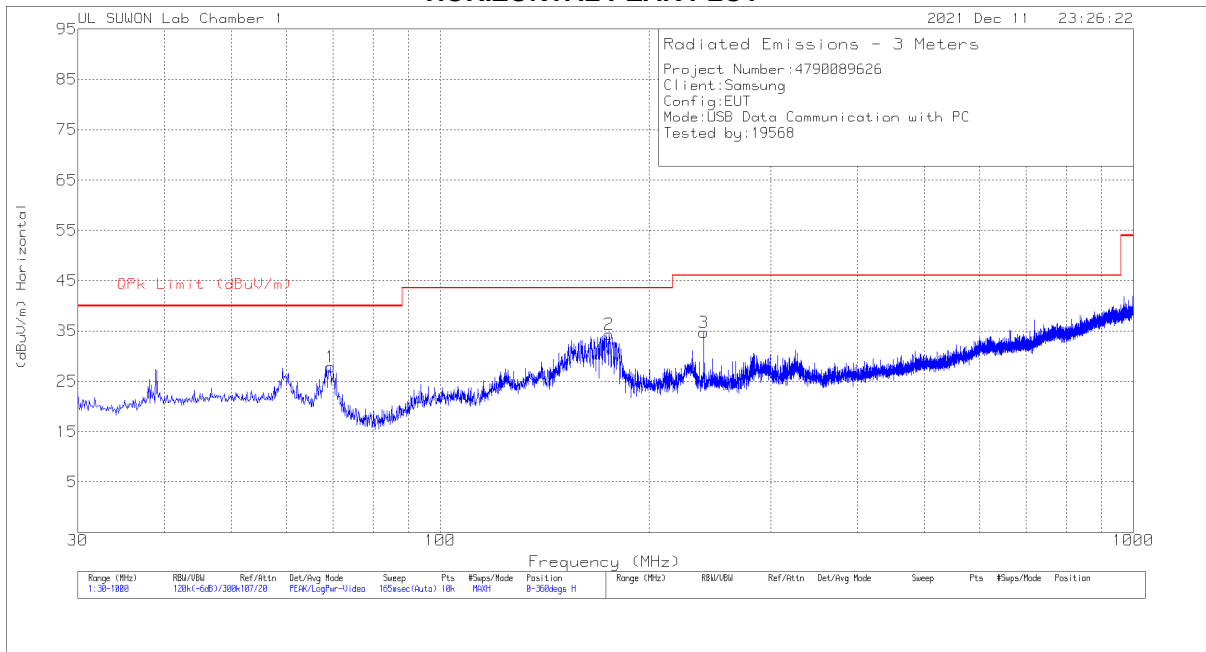
Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
66.375	47.35	Qp	16.8	-31.5	32.65	40	-7.35	5	337	H
66.375	49.15	Qp	16.8	-31.5	34.45	40	-5.55	76	100	V
326.238	41.59	Qp	19.9	-30.3	31.19	46.02	-14.83	25	100	H
326.238	46.28	Qp	19.9	-30.3	35.88	46.02	-10.14	8	121	V
490.556	41.82	Qp	23	-29.8	35.02	46.02	-11	141	155	H
490.556	42	Qp	23	-29.8	35.2	46.02	-10.82	90	100	V

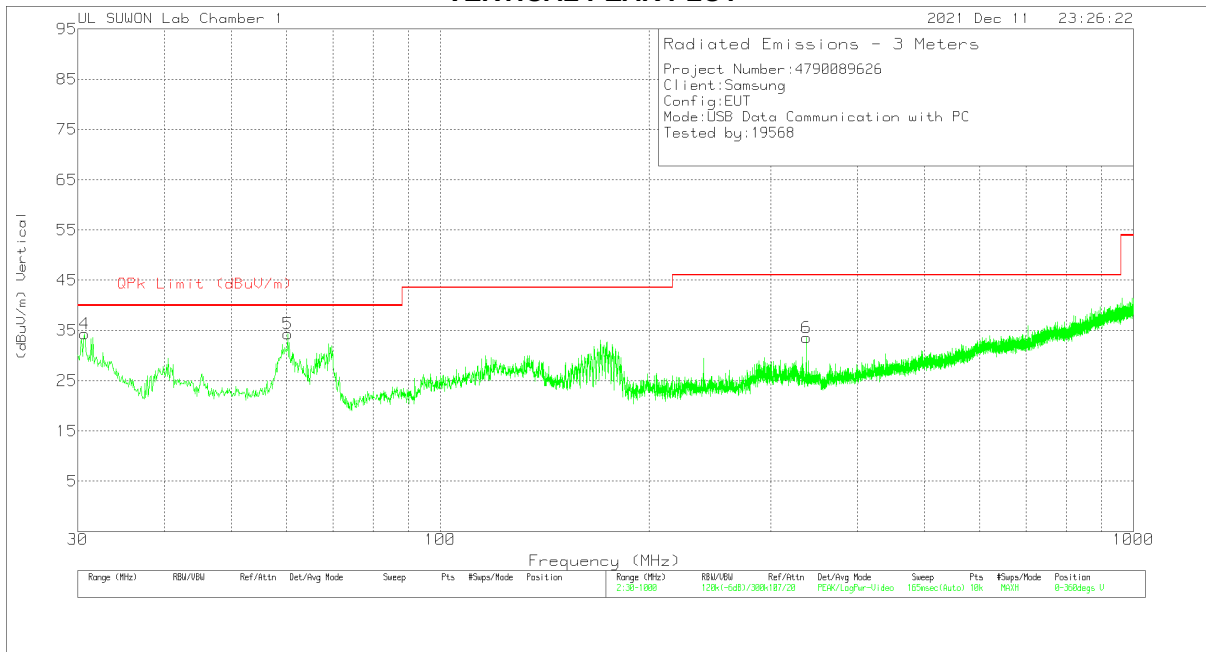
Qp - Quasi-Peak detector

[Test case 5]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	69.479	42.74	Pk	15.7	-30.6	27.84	40	-12.16	0-360	100	H
2	175.015	48.69	Pk	15.1	-29.4	34.39	43.52	-9.13	0-360	100	H
3	240.005	45.06	Pk	18.6	-28.9	34.76	46.02	-11.26	0-360	100	H
4	30.679	49.65	Pk	15.9	-31.2	34.35	40	-5.65	0-360	200	V
5	60.264	46.4	Pk	18.5	-30.6	34.3	40	-5.7	0-360	200	V
6	337.49	41.62	Pk	20.5	-28.5	33.62	46.02	-12.4	0-360	300	V

Pk - Peak detector

Radiated Emissions

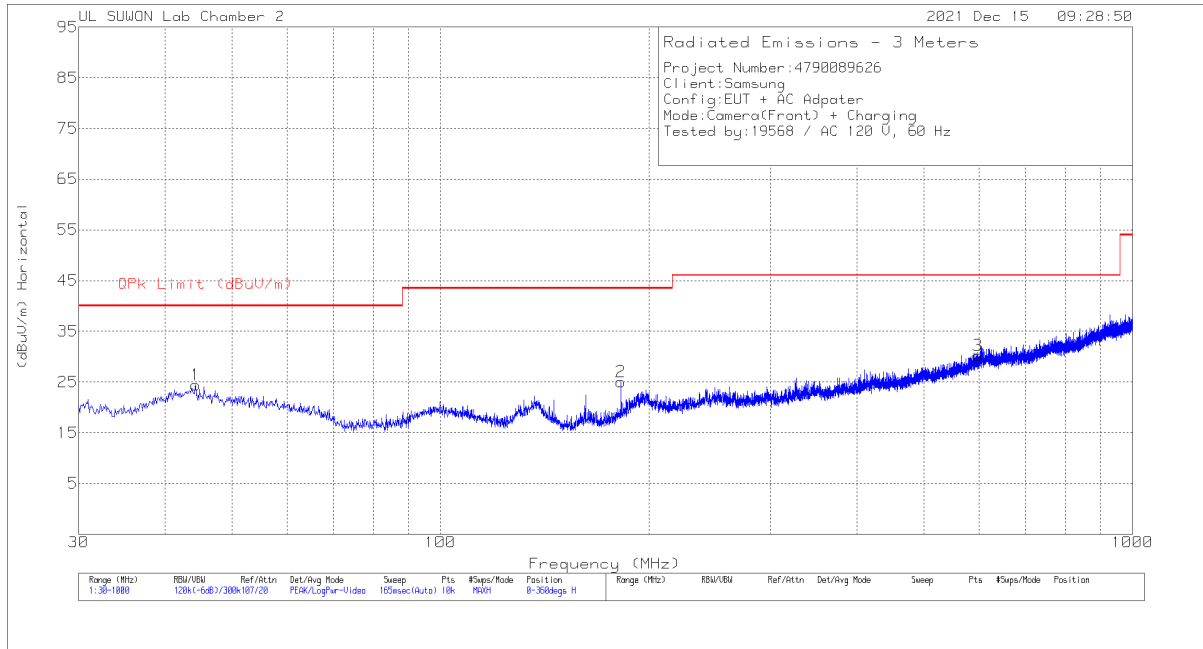
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
69.479	36.97	Qp	15.7	-30.6	22.07	40	-17.93	321	300	H
175.5808	45.14	Qp	15.1	-29.6	30.64	43.52	-12.88	330	195	H
240.005	46.41	Qp	18.6	-28.9	36.11	46.02	-9.91	235	125	H
30.679	38.7	Qp	15.9	-31.2	23.4	40	-16.6	185	101	V
60.264	40.05	Qp	18.5	-30.6	27.95	40	-12.05	320	165	V
337.49	40.41	Qp	20.5	-28.5	32.41	46.02	-13.61	156	191	V

Qp - Quasi-Peak detector

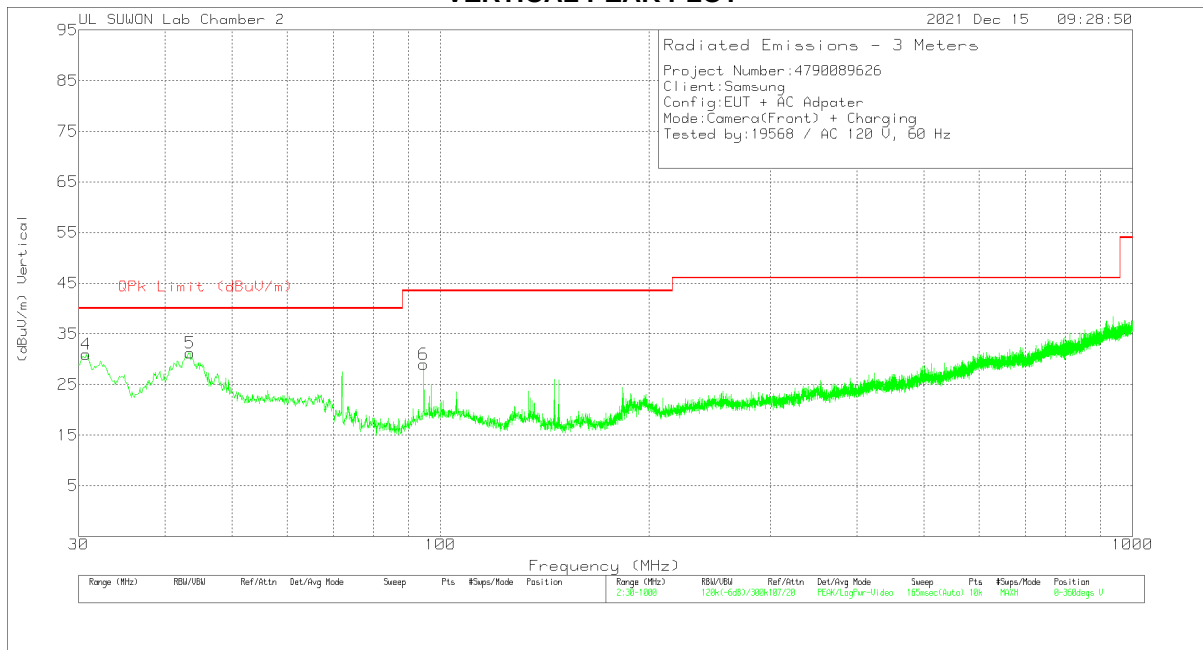
7.1.1.2. Version 3

[Test case 1]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	44.259	36.45	Pk	19.7	-31.7	24.45	40	-15.55	0-360	200	H
2	182.29	39.77	Pk	16.1	-30.8	25.07	43.52	-18.45	0-360	200	H
3	597.935	34.48	Pk	25.3	-29.6	30.18	46.02	-15.84	0-360	200	H
4	30.776	47.31	Pk	15.6	-31.9	31.01	40	-8.99	0-360	100	V
5	43.483	43.44	Pk	19.6	-31.8	31.24	40	-8.76	0-360	100	V
6	94.602	43.21	Pk	17.1	-31.3	29.01	43.52	-14.51	0-360	100	V

Pk - Peak detector

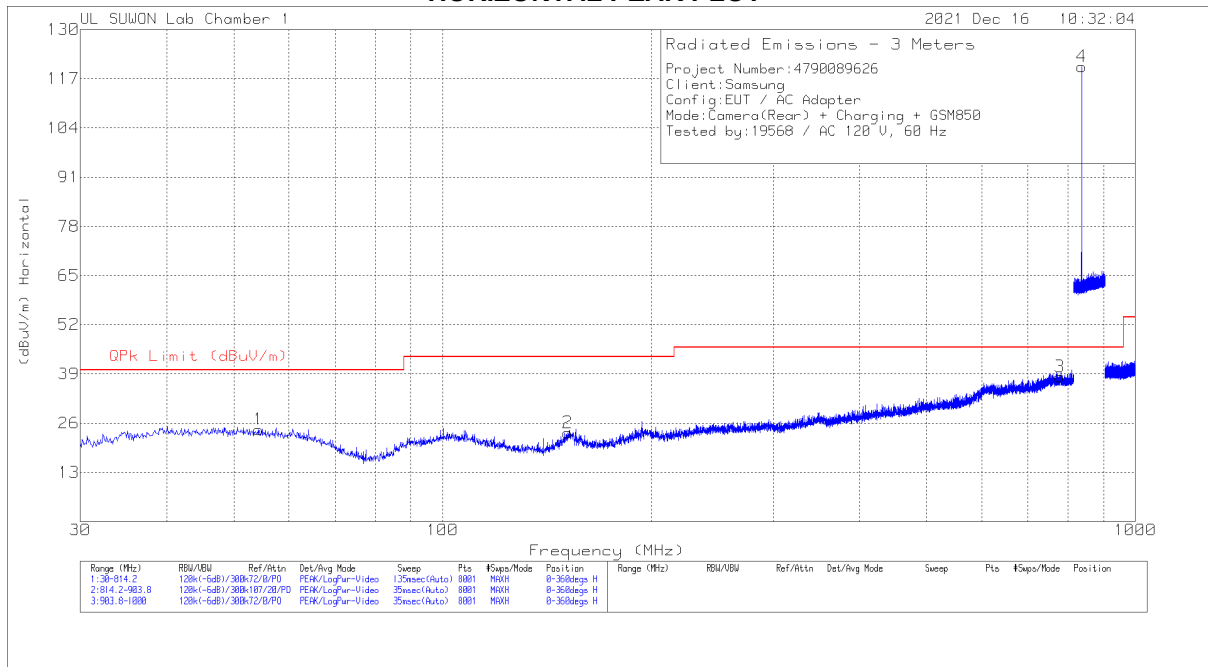
Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
30.776	40.03	Qp	15.6	-31.9	23.73	40	-16.27	126	100	V
43.483	32.87	Qp	19.6	-31.8	20.67	40	-19.33	332	100	V
94.602	24.74	Qp	17.1	-31.3	10.54	43.52	-32.98	293	100	V

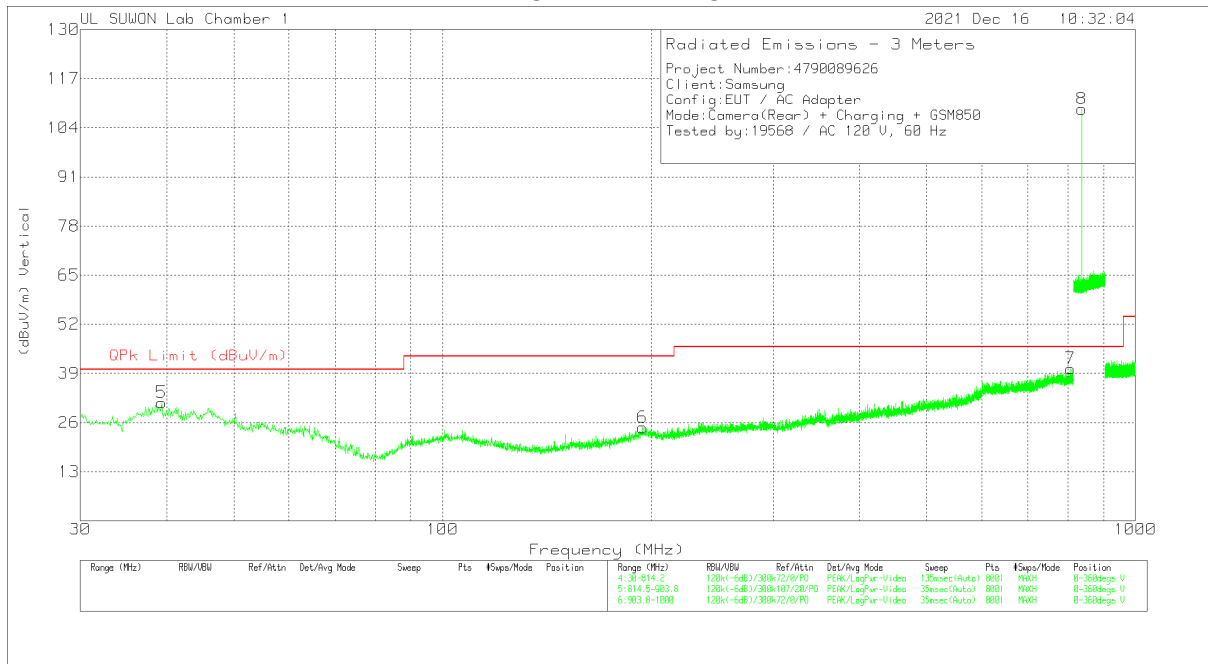
Qp - Quasi-Peak detector

[Test case 2]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

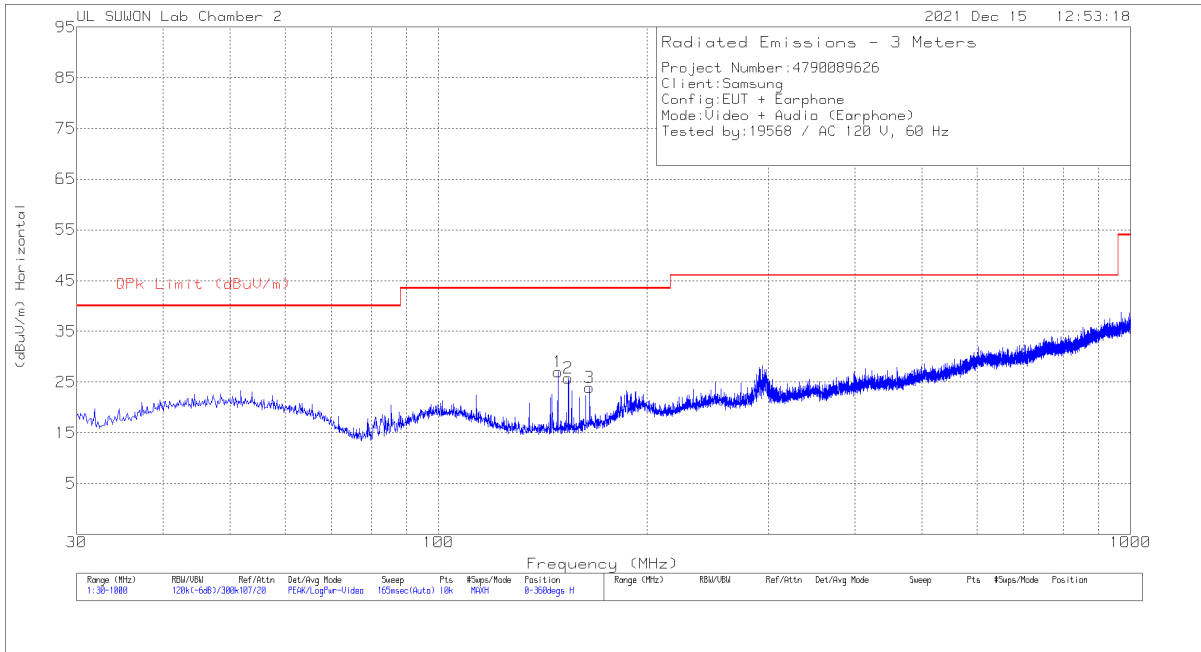
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	54.3102	3.23	Pk	19.5	1.6	24.33	40	-15.67	0-360	200	H
2	151.551	6.99	Pk	14	2.5	23.49	43.52	-20.03	0-360	100	H
3	777.9308	5.73	Pk	26.7	5.8	38.23	46.02	-7.79	0-360	100	H
*4	836.6112	87.11	Pk	27.1	6	120.21	46.02	74.19	0-360	200	H
5	39.3124	11.35	Pk	18.5	1.4	31.25	40	-8.75	0-360	200	V
6	194.3879	4.5	Pk	17.3	2.9	24.7	43.52	-18.82	0-360	300	V
7	806.7501	7.36	Pk	27	5.9	40.26	46.02	-5.76	0-360	400	V
*8	836.5358	75.87	Pk	27.1	6	108.97	46.02	62.95	0-360	200	V

Pk - Peak detector

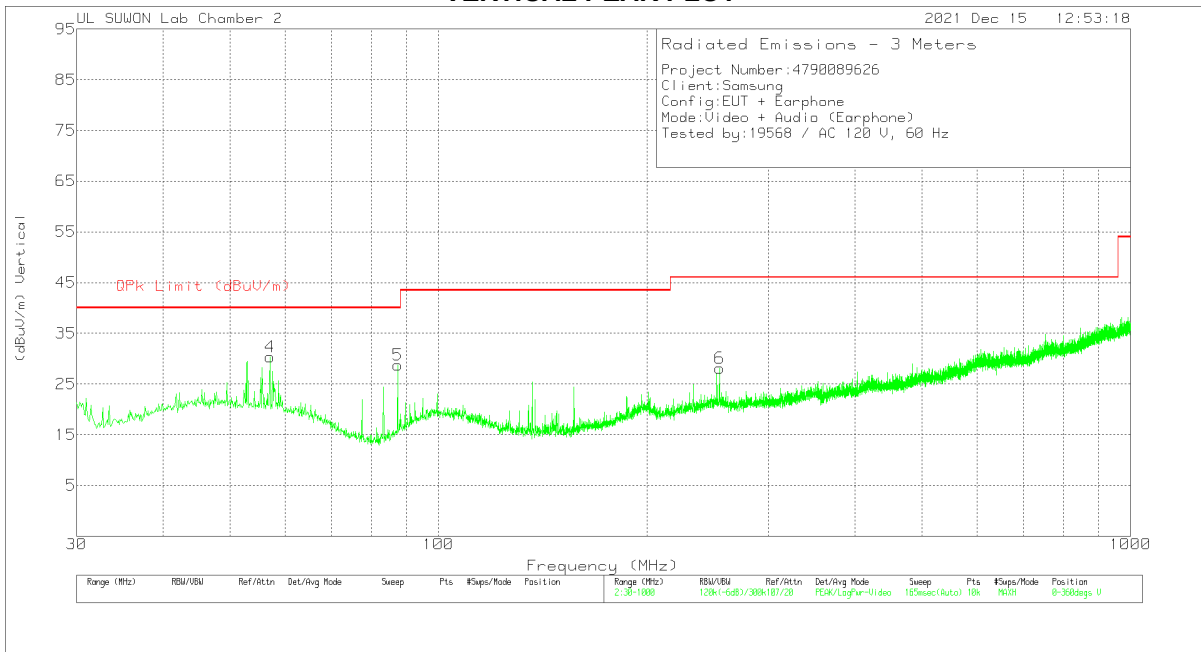
*GSM850 Fundamental

[Test case 3]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	148.825	44.04	Pk	14	-31	27.04	43.52	-16.48	0-360	100	H
2	154.063	42.57	Pk	14.2	-31	25.77	43.52	-17.75	0-360	300	H
3	165.412	40.16	Pk	14.8	-31	23.96	43.52	-19.56	0-360	200	H
4	57.063	42.93	Pk	19	-31.6	30.33	40	-9.67	0-360	100	V
5	87.327	45.6	Pk	14.5	-31.4	28.7	40	-11.3	0-360	100	V
6	254.749	39.41	Pk	19.2	-30.5	28.11	46.02	-17.91	0-360	100	V

Pk - Peak detector

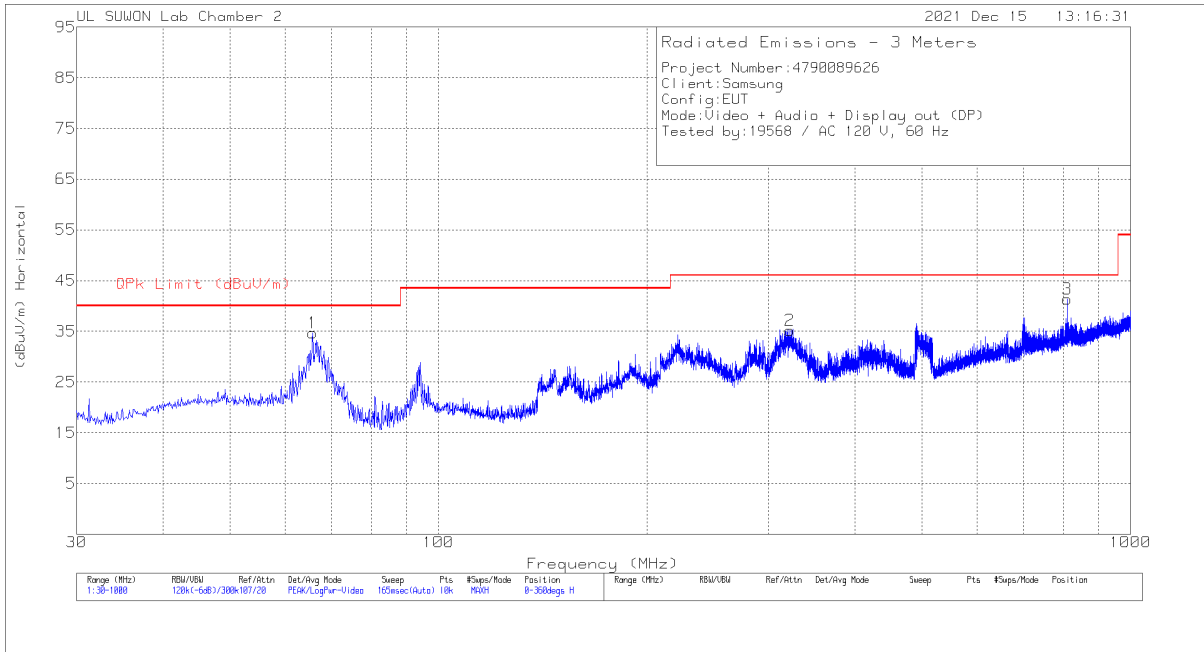
Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
57.063	23.59	Qp	19	-31.6	10.99	40	-29.01	350	109	V
87.327	23.27	Qp	14.5	-31.4	6.37	40	-33.63	348	372	V

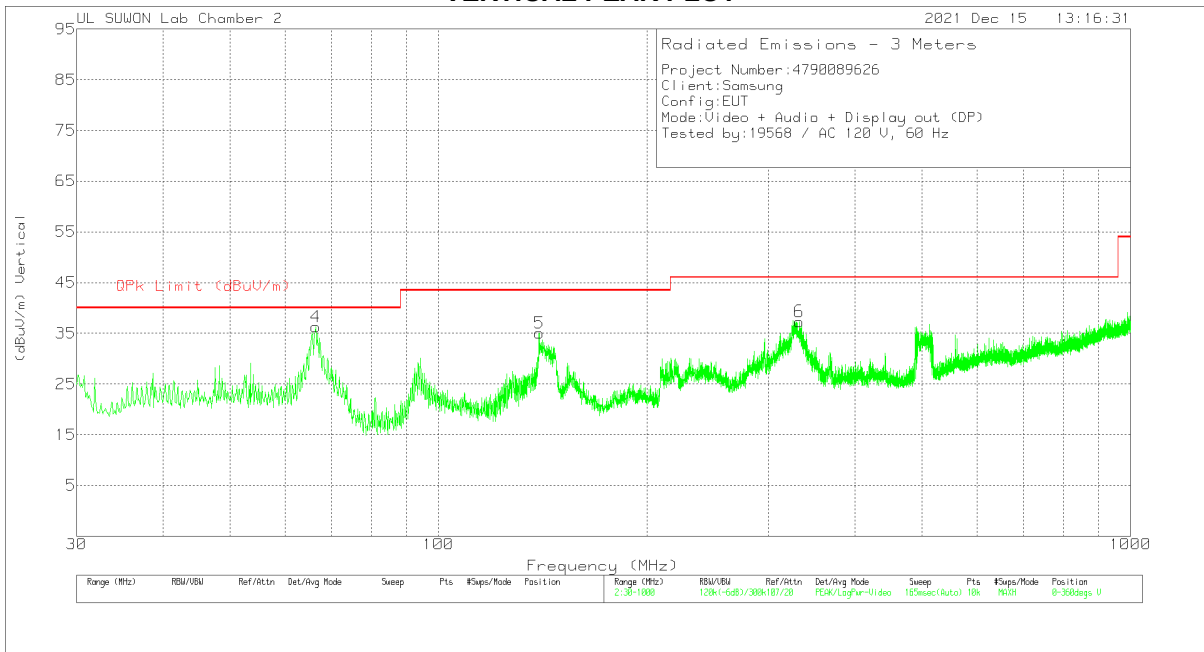
Qp - Quasi-Peak detector

[Test case 4]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	65.793	49.23	Pk	17	-31.6	34.63	40	-5.37	0-360	400	H
2	321.97	45.33	Pk	19.9	-30.1	35.13	46.02	-10.89	0-360	200	H
3	810.074	43.15	Pk	27	-28.8	41.35	46.02	-4.67	0-360	200	H
4	66.472	51.02	Pk	16.8	-31.5	36.32	40	-3.68	0-360	100	V
5	139.804	52.03	Pk	14	-31	35.03	43.52	-8.49	0-360	100	V
6	331.864	47.43	Pk	20.1	-30.2	37.33	46.02	-8.69	0-360	100	V

Pk - Peak detector

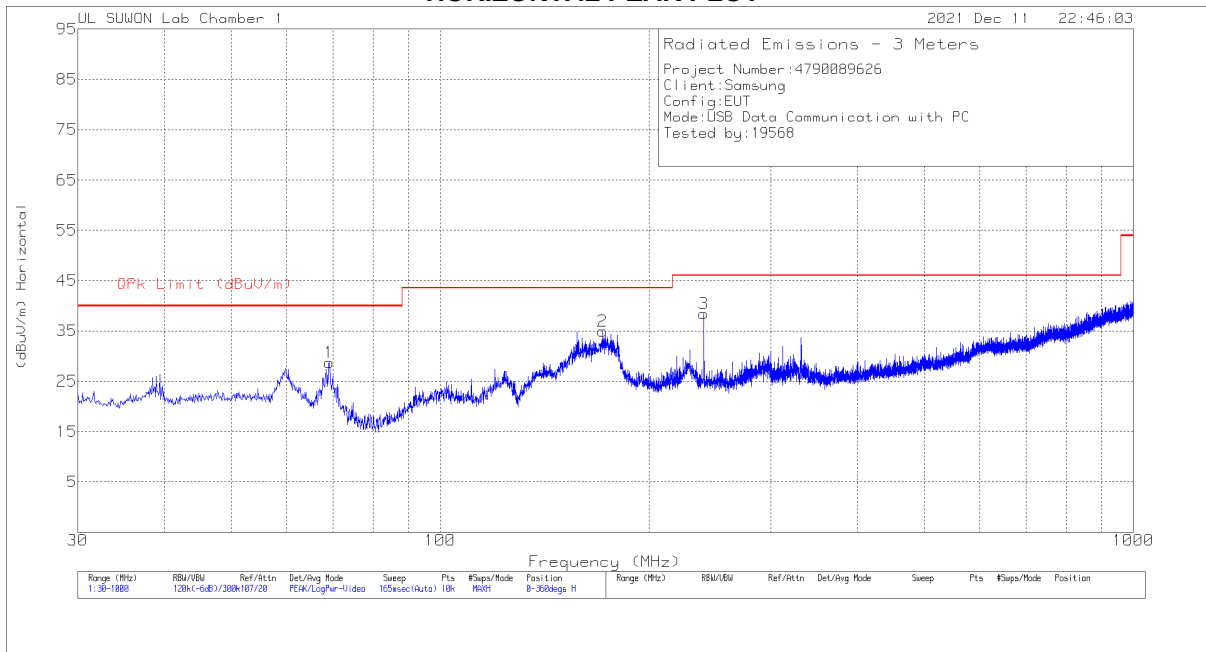
Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
65.793	43.22	Qp	17	-31.6	28.62	40	-11.38	342	382	H
321.97	34.64	Qp	19.9	-30.1	24.44	46.02	-21.58	330	242	H
810.074	35.91	Qp	27	-28.8	34.11	46.02	-11.91	212	106	H
66.3668	49.67	Qp	16.8	-31.5	34.97	40	-5.03	77	100	V
139.804	44.74	Qp	14	-31	27.74	43.52	-15.78	336	100	V
331.864	44.97	Qp	20.1	-30.2	34.87	46.02	-11.15	0	128	V

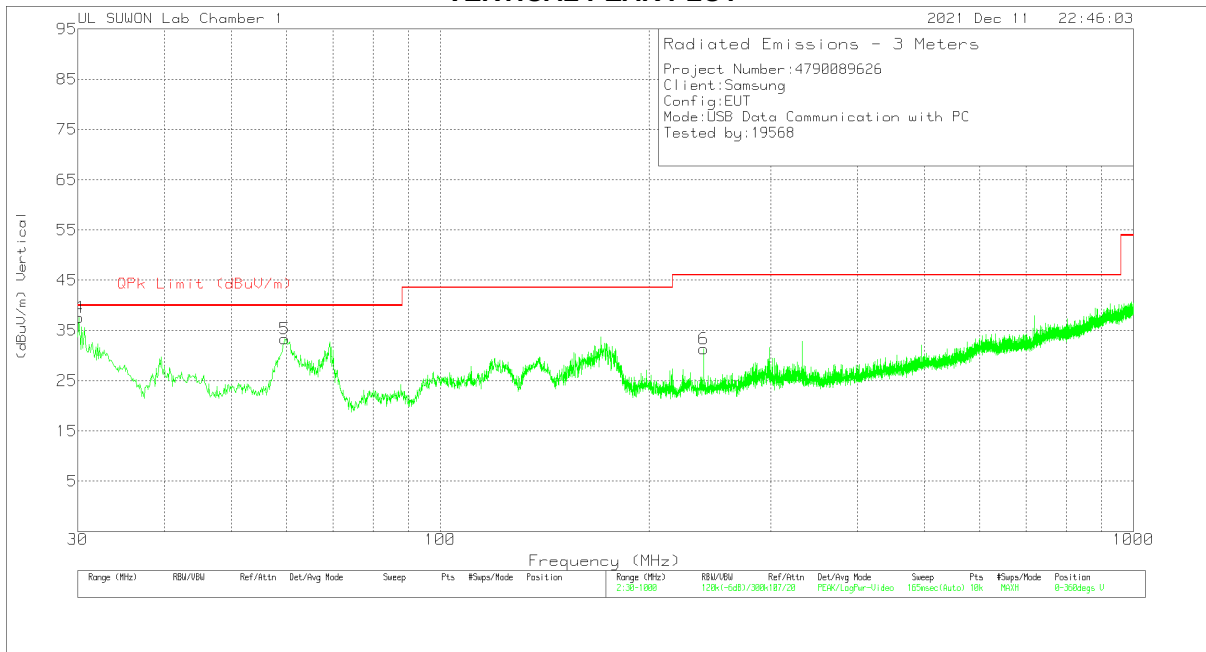
Qp - Quasi-Peak detector

[Test case 5]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	69.188	43.55	Pk	15.8	-30.6	28.75	40	-11.25	0-360	300	H
2	171.717	49.58	Pk	14.9	-29.5	34.98	43.52	-8.54	0-360	100	H
3	240.005	48.78	Pk	18.6	-28.9	38.48	46.02	-7.54	0-360	100	H
4	30.097	52.79	Pk	16.1	-31.3	37.59	40	-2.41	0-360	200	V
5	59.682	45.56	Pk	18.6	-30.8	33.36	40	-6.64	0-360	200	V
6	240.005	41.66	Pk	18.6	-28.9	31.36	46.02	-14.66	0-360	200	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
69.188	38.7	Qp	15.8	-30.6	23.9	40	-16.1	320	313	H
171.717	43.71	Qp	14.9	-29.5	29.11	43.52	-14.41	328	194	H
240.005	48.31	Qp	18.6	-28.9	38.01	46.02	-8.01	234	126	H
30.097	40.58	Qp	16.1	-31.3	25.38	40	-14.62	189	100	V
59.682	39.82	Qp	18.6	-30.8	27.62	40	-12.38	317	161	V
240.005	42.38	Qp	18.6	-28.9	32.08	46.02	-13.94	324	167	V

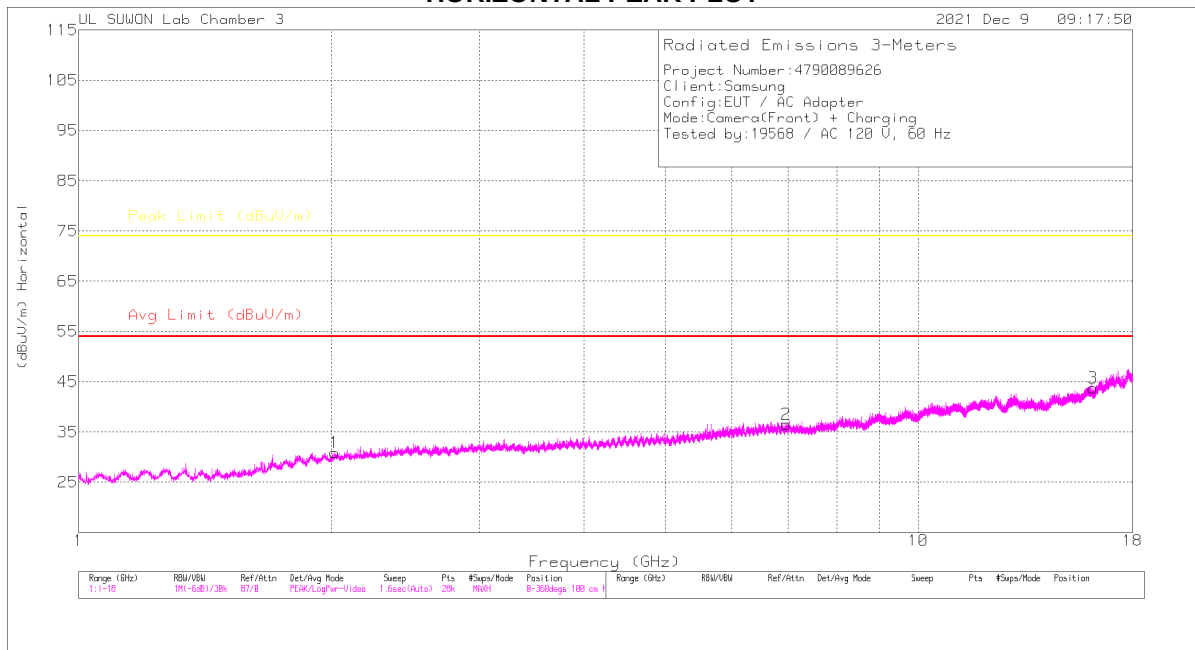
Qp - Quasi-Peak detector

7.1.2. RADIATED EMISSIONS 1 TO 18 GHz

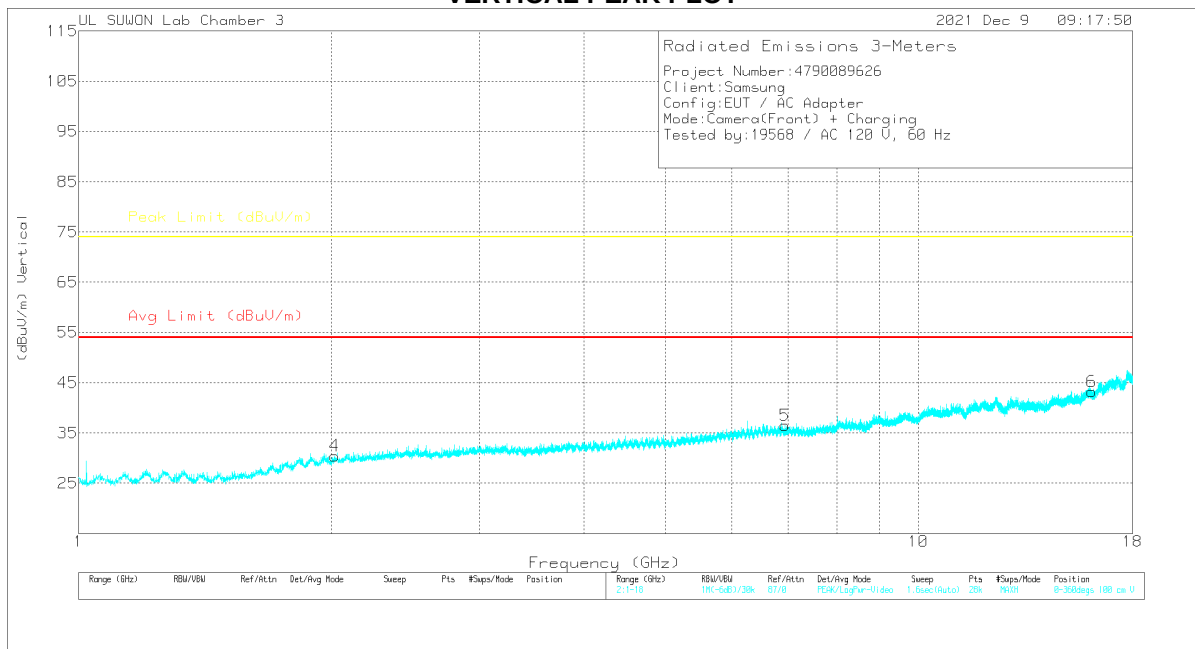
7.1.2.1. Version 2

[Test case 1]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.01868	34.65	PK	31.8	-35.5	30.95	54	-23.05	-	-	0-360	100	H
2	6.9609	27.66	PK	36.2	-27.3	36.56	54	-17.44	-	-	0-360	100	H
3	16.16299	23.58	PK	41.3	-21.1	43.78	54	-10.22	-	-	0-360	100	H
4	2.01686	34.17	PK	31.8	-35.5	30.47	54	-23.53	-	-	0-360	100	V
5	6.94329	27.77	PK	36.2	-27.4	36.57	54	-17.43	-	-	0-360	100	V
6	16.11078	23.28	PK	41.2	-21.2	43.28	54	-10.72	-	-	0-360	100	V

Pk - Peak detector

Radiated Emissions

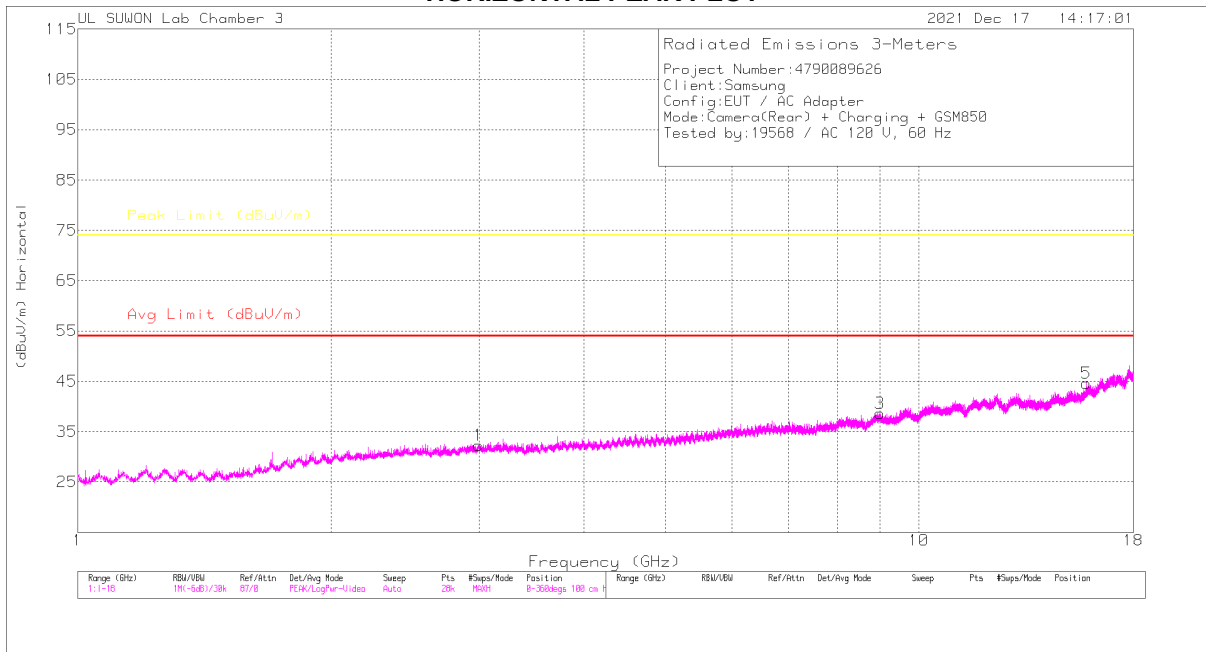
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.01868	31.94	Pk	31.8	-35.5	28.24	-	-	74	-45.76	0	100	H
2.01868	20.74	Ca	31.8	-35.5	17.04	54	-36.96	-	-	0	100	H
2.01868	31.77	Pk	31.8	-35.5	28.07	-	-	74	-45.93	0	100	V
2.01868	20.67	Ca	31.8	-35.5	16.97	54	-37.03	-	-	0	100	V
6.9609	25.15	PK	36.2	-27.3	34.05	-	-	74	-39.95	0	100	H
6.9609	13.68	Ca	36.2	-27.3	22.58	54	-31.42	-	-	0	100	H
6.9609	25.21	Pk	36.2	-27.3	34.11	-	-	74	-39.89	0	100	V
6.9609	13.65	Ca	36.2	-27.3	22.55	54	-31.45	-	-	0	100	V
16.16299	21.47	Pk	41.3	-21.1	41.67	-	-	74	-32.33	0	100	H
16.16299	9.79	Ca	41.3	-21.1	29.99	54	-24.01	-	-	0	100	H
16.16299	20.67	Pk	41.3	-21.1	40.87	-	-	74	-33.13	0	100	V
16.16299	9.78	Ca	41.3	-21.1	29.98	54	-24.02	-	-	0	100	V

Pk - Peak detector

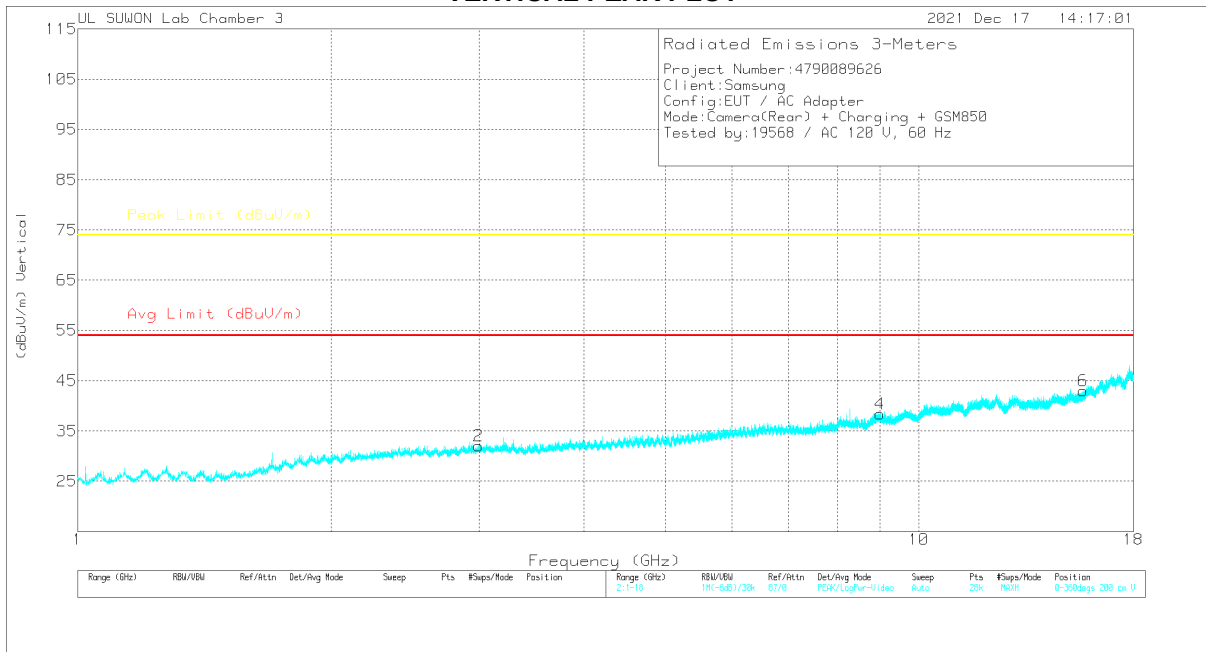
Ca - CISPR average detection

[Test case 2]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.99668	33.23	PK	33.3	-34.2	32.33	54	-21.67	-	-	0-360	100	H
3	8.994	25.14	PK	36.8	-23.3	38.64	54	-15.36	-	-	0-360	100	H
5	15.83517	25.82	PK	40.7	-21.9	44.62	54	-9.38	-	-	0-360	100	H
2	2.99729	32.88	PK	33.3	-34.1	32.08	54	-21.92	-	-	0-360	100	V
4	8.98672	24.95	PK	36.8	-23.4	38.35	54	-15.65	-	-	0-360	100	V
6	15.69614	24.85	PK	40.5	-22.3	43.05	54	-10.95	-	-	0-360	200	V

PK – Peak detector

Radiated Emissions

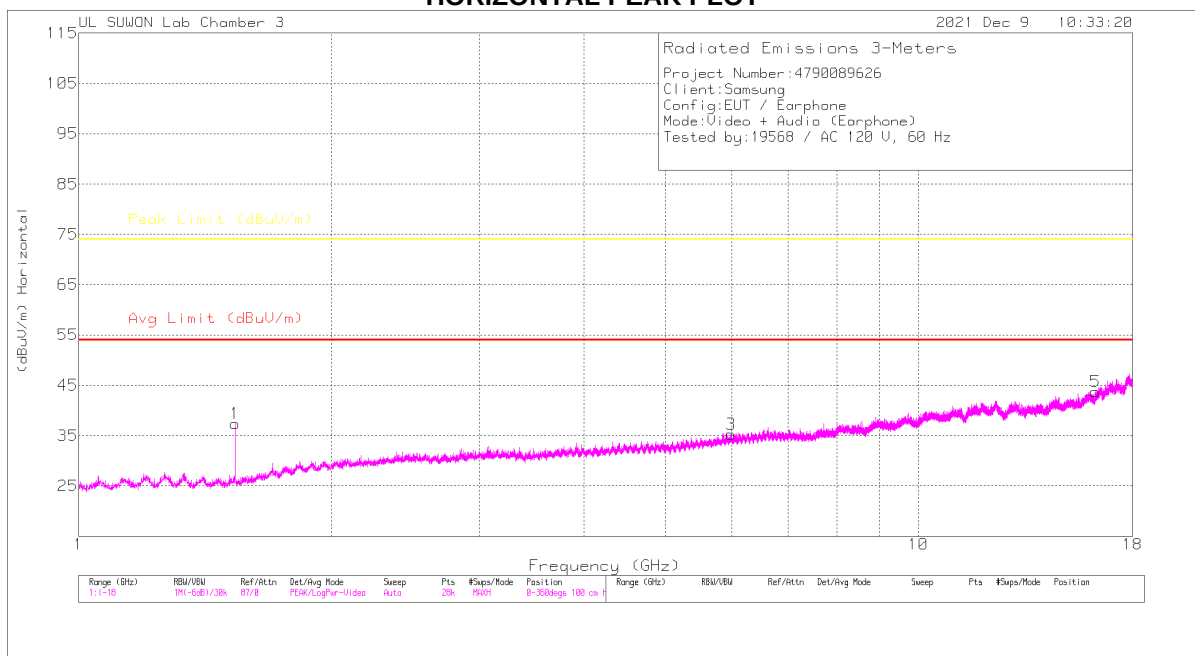
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.99668	41.31	PK	33.3	-34.2	40.41	-	-	74	-33.59	0	100	H
2.99668	28.58	Ca	33.3	-34.2	27.68	54	-26.32	-	-	0	100	H
8.994	34.11	PK	36.8	-23.3	47.61	-	-	74	-26.39	0	100	H
8.994	20.75	Ca	36.8	-23.3	34.25	54	-19.75	-	-	0	100	H
15.83517	34.04	PK	40.7	-21.9	52.84	-	-	74	-21.16	0	100	H
15.83517	20.44	Ca	40.7	-21.9	39.24	54	-14.76	-	-	0	100	H
2.99729	41.04	PK	33.3	-34.1	40.24	-	-	74	-33.76	0	100	V
2.99729	28.56	Ca	33.3	-34.1	27.76	54	-26.24	-	-	0	100	V
8.98672	34.1	PK	36.8	-23.4	47.5	-	-	74	-26.5	0	100	V
8.98672	20.82	Ca	36.8	-23.4	34.22	54	-19.78	-	-	0	100	V
15.69614	33.63	PK	40.5	-22.3	51.83	-	-	74	-22.17	0	200	V
15.69614	20.22	Ca	40.5	-22.3	38.42	54	-15.58	-	-	0	200	V

PK - Peak detector

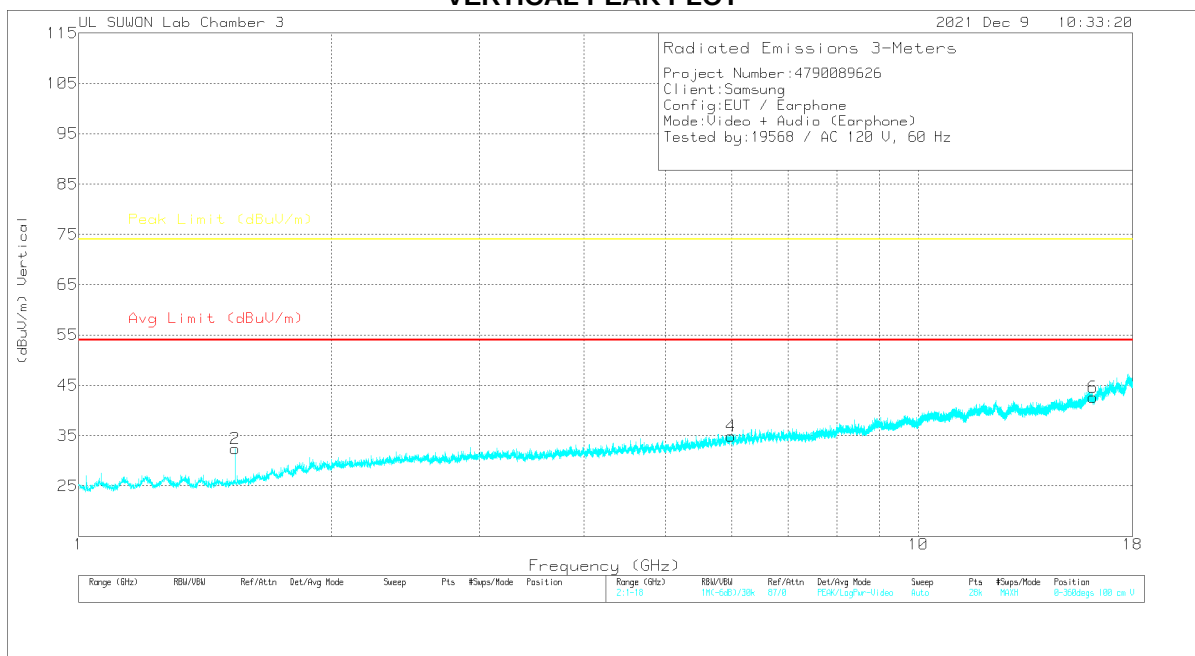
Ca - CISPR average detection

[Test case 3]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.53544	45.03	PK	28.4	-36	37.43	54	-16.57	-	-	0-360	100	H
3	5.98108	28.93	PK	36	-29.7	35.23	54	-18.77	-	-	0-360	100	H
5	16.26073	23.61	PK	41.4	-21.3	43.71	54	-10.29	-	-	0-360	100	H
2	1.53605	40.03	PK	28.4	-36	32.43	54	-21.57	-	-	0-360	100	V
4	5.98775	28.74	PK	36	-29.8	34.94	54	-19.06	-	-	0-360	400	V
6	16.15024	22.54	PK	41.3	-21.2	42.64	54	-11.36	-	-	0-360	400	V

Pk - Peak detector

Radiated Emissions

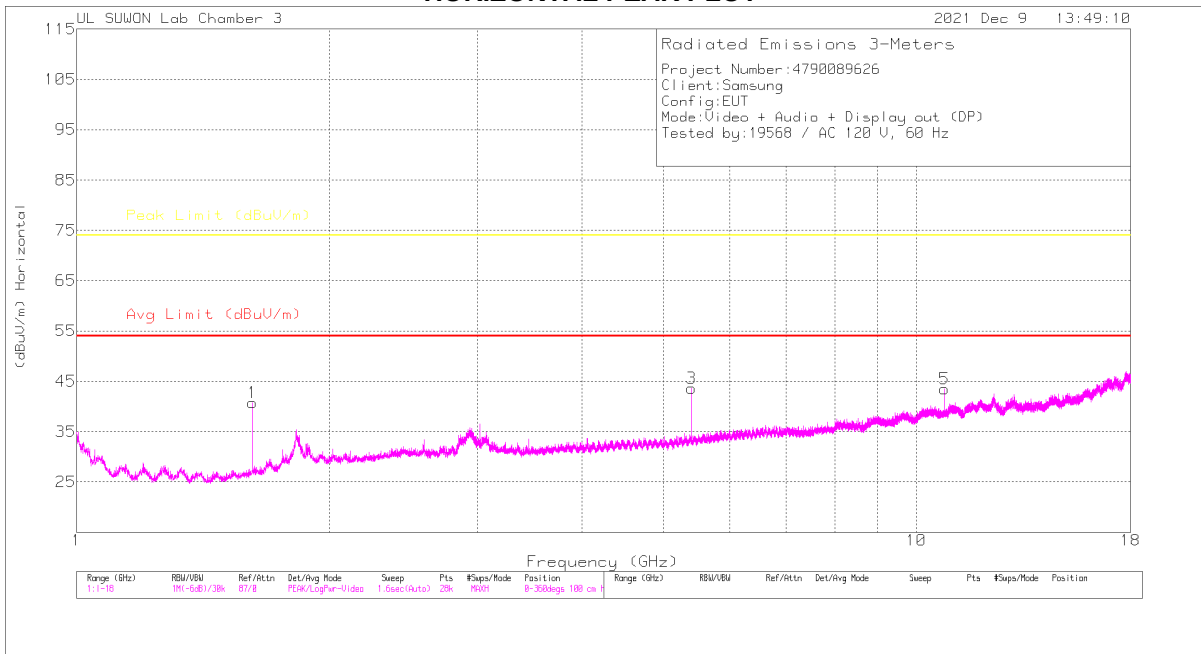
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.53599	48.76	Pk	28.4	-36	41.16	-	-	74	-32.84	51	203	H
1.53599	43.99	Ca	28.4	-36	36.39	54	-17.61	-	-	51	203	H
5.98108	36.89	Pk	36	-29.7	43.19	-	-	74	-30.81	0	100	H
5.98108	24.46	Ca	36	-29.7	30.76	54	-23.24	-	-	0	100	H
16.26073	31.04	PK	41.4	-21.3	51.14	-	-	74	-22.86	0	100	H
16.26073	19.04	Ca	41.4	-21.3	39.14	54	-14.86	-	-	0	100	H
1.536	47.17	Pk	28.4	-36	39.57	-	-	74	-34.43	40	186	V
1.536	39.33	Ca	28.4	-36	31.73	54	-22.27	-	-	40	186	V
5.98775	36.87	Pk	36	-29.8	43.07	-	-	74	-30.93	0	100	V
5.98775	24.44	Ca	36	-29.8	30.64	54	-23.36	-	-	0	100	V
16.15024	30.64	PK	41.3	-21.2	50.74	-	-	74	-23.26	0	100	V
16.15024	18.33	Ca	41.3	-21.2	38.43	54	-15.57	-	-	0	100	V

Pk - Peak detector

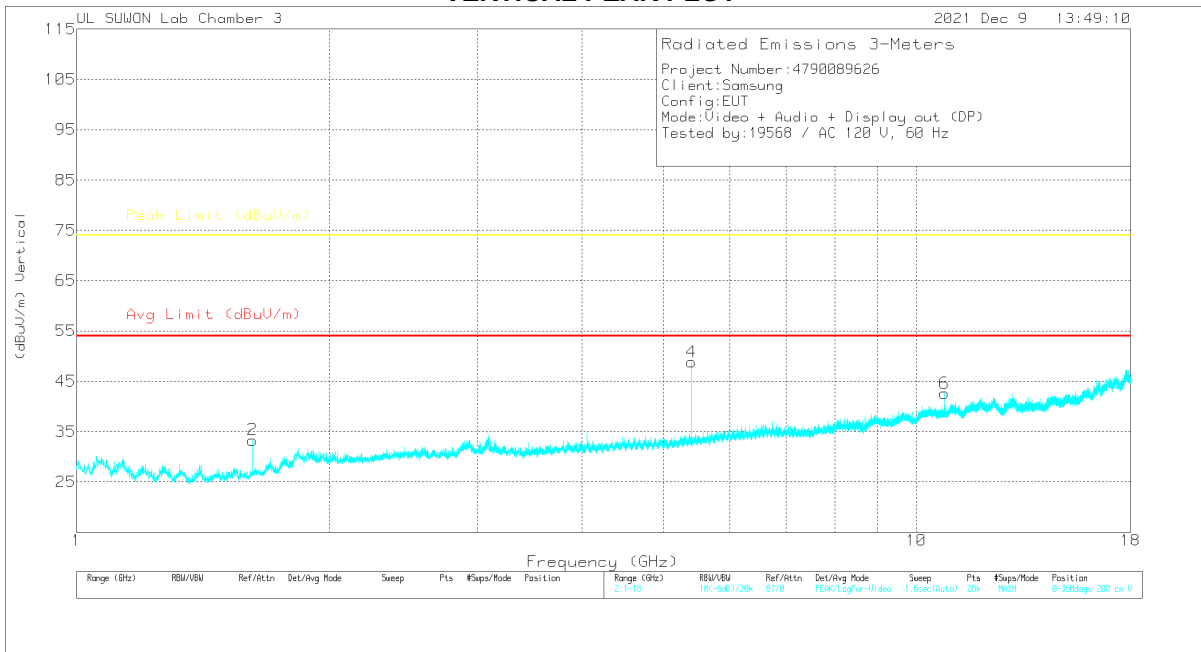
Ca - CISPR average detection

[Test case 4]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.61983	47.58	PK	29.1	-35.9	40.78	54	-13.22	-	-	0-360	100	H
3	5.40071	38.94	PK	35.2	-30.5	43.64	54	-10.36	-	-	0-360	100	H
5	10.80188	27.25	PK	38.4	-22.1	43.55	54	-10.45	-	-	0-360	100	H
2	1.61983	40.14	PK	29.1	-35.9	33.34	54	-20.66	-	-	0-360	100	V
4	5.40071	44.21	PK	35.2	-30.5	48.91	54	-5.09	-	-	0-360	100	V
6	10.80127	26.37	PK	38.4	-22.1	42.67	54	-11.33	-	-	0-360	100	V

Pk - Peak detector

Radiated Emissions

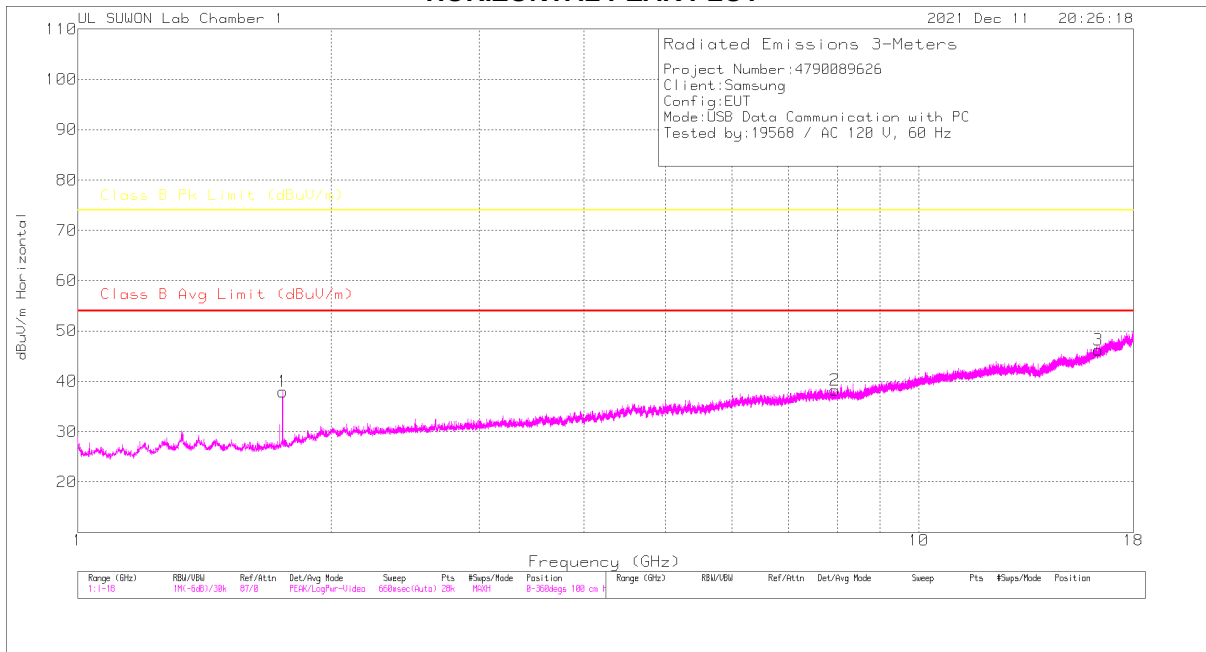
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.62001	50.61	Pk	29.1	-35.9	43.81	-	-	74	-30.19	232	128	H
1.62001	46.04	Ca	29.1	-35.9	39.24	54	-14.76	-	-	232	128	H
1.62001	47.71	Pk	29.1	-35.9	40.91	-	-	74	-33.09	158	341	V
1.62001	41.68	Ca	29.1	-35.9	34.88	54	-19.12	-	-	158	341	V
5.4008	43.66	Pk	35.2	-30.5	48.36	-	-	74	-25.64	83	100	H
5.4008	38.32	Ca	35.2	-30.5	43.02	54	-10.98	-	-	83	100	H
5.4008	46.06	Pk	35.2	-30.5	50.76	-	-	74	-23.24	163	100	V
5.4008	42.22	Ca	35.2	-30.5	46.92	54	-7.08	-	-	163	100	V
10.80156	35.86	Pk	38.4	-22.1	52.16	-	-	74	-21.84	118	100	H
10.80156	27.73	Ca	38.4	-22.1	44.03	54	-9.97	-	-	118	100	H
10.80156	35.48	Pk	38.4	-22.1	51.78	-	-	74	-22.22	118	230	V
10.80156	25.95	Ca	38.4	-22.1	42.25	54	-11.75	-	-	118	230	V

Pk - Peak detector

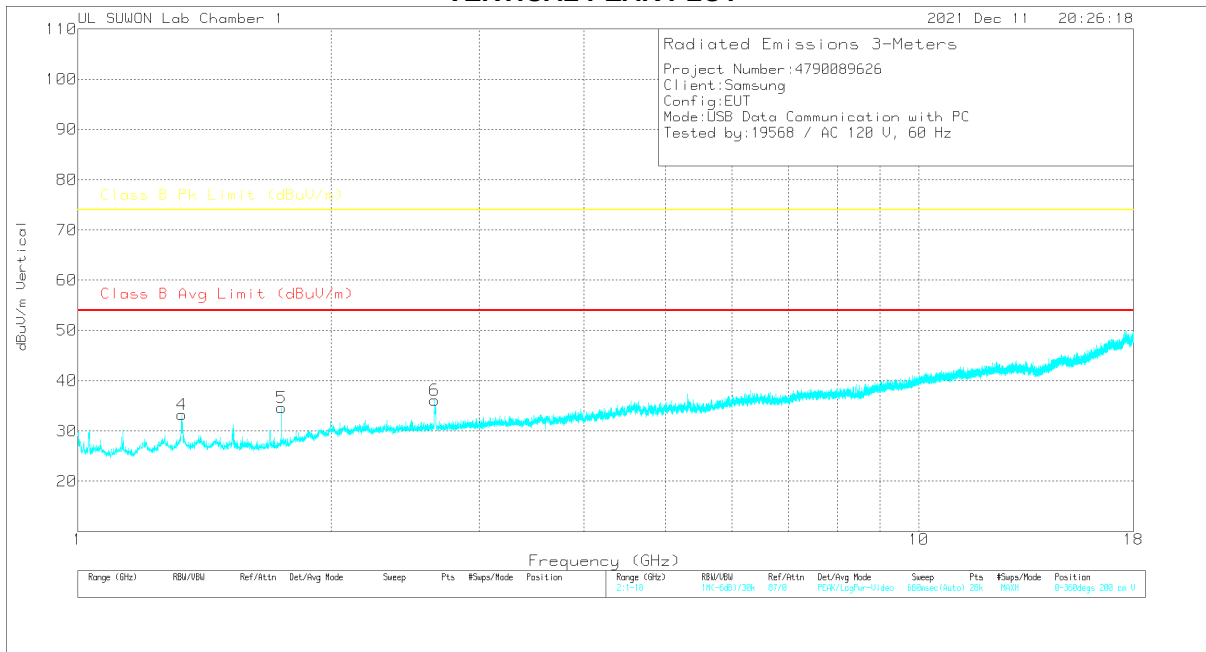
Ca - CISPR average detection

[Test case 5]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[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	1.75217	45.14	PK	29	-36.2	37.94	-	-	74	-36.06	0-360	216	H
2	7.95044	28.91	PK	36	-26.7	38.21	-	-	74	-35.79	0-360	100	H
3	16.3354	25.53	PK	40.8	-20.1	46.23	-	-	74	-27.77	0-360	216	H
4	1.32964	40.89	PK	29.5	-37.1	33.29	-	-	74	-40.71	0-360	200	V
5	1.74731	41.91	PK	29	-36.3	34.61	-	-	74	-39.39	0-360	200	V
6	2.65854	38.62	PK	32.1	-34.6	36.12	-	-	74	-37.88	0-360	200	V

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[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
1.75217	42.73	Pk	29	-36.2	35.53	-	-	74	-38.47	344	196	H
1.75217	30.71	Ca	29	-36.2	23.51	54	-30.49	-	-	344	196	H
7.95044	36.59	Pk	36	-26.7	45.89	-	-	74	-28.11	344	100	H
7.95044	24.19	Ca	36	-26.7	33.49	54	-20.51	-	-	344	100	H
16.3354	33.44	Pk	40.8	-20.1	54.14	-	-	74	-19.86	344	200	H
16.3354	21.4	Ca	40.8	-20.1	42.1	54	-11.9	-	-	344	200	H
1.32964	44.2	Pk	29.5	-37.1	36.6	-	-	74	-37.4	211	251	V
1.32964	31.74	Ca	29.5	-37.1	24.14	54	-29.86	-	-	211	251	V
1.74731	42.68	Pk	29	-36.3	35.38	-	-	74	-38.62	160	105	V
1.74731	30.77	Ca	29	-36.3	23.47	54	-30.53	-	-	160	105	V
2.65854	40.95	Pk	32.1	-34.6	38.45	-	-	74	-35.55	31	197	V
2.65854	28.97	Ca	32.1	-34.6	26.47	54	-27.53	-	-	31	197	V

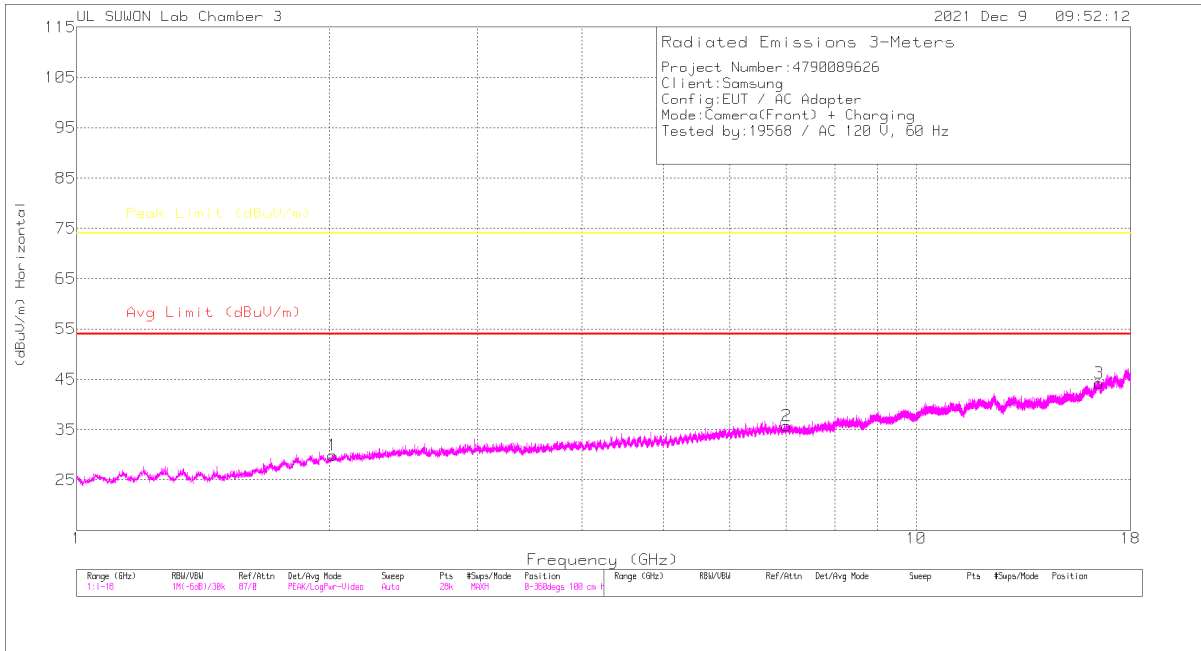
Pk - Peak detector

Ca - CISPR average detection

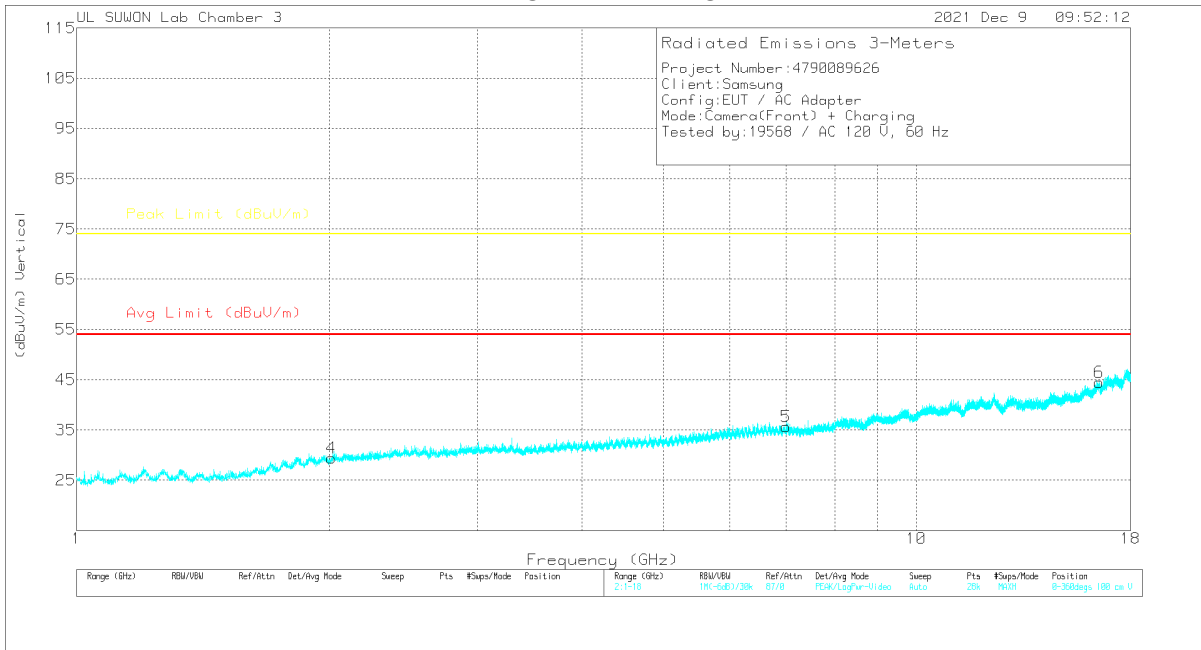
7.1.2.2. Version 3

[Test case 1]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.01868	33.56	PK	31.8	-35.5	29.86	54	-24.14	-	-	0-360	100	H
2	7.01311	26.87	PK	36.2	-27.3	35.77	54	-18.23	-	-	0-360	100	H
3	16.51995	22.62	PK	42	-20.4	44.22	54	-9.78	-	-	0-360	100	H
4	2.012	33.11	PK	31.7	-35.4	29.41	54	-24.59	-	-	0-360	100	V
5	6.99854	26.63	PK	36.2	-27.2	35.63	54	-18.37	-	-	0-360	100	V
6	16.51509	22.93	PK	42	-20.4	44.53	54	-9.47	-	-	0-360	200	V

Pk - Peak detector

Radiated Emissions

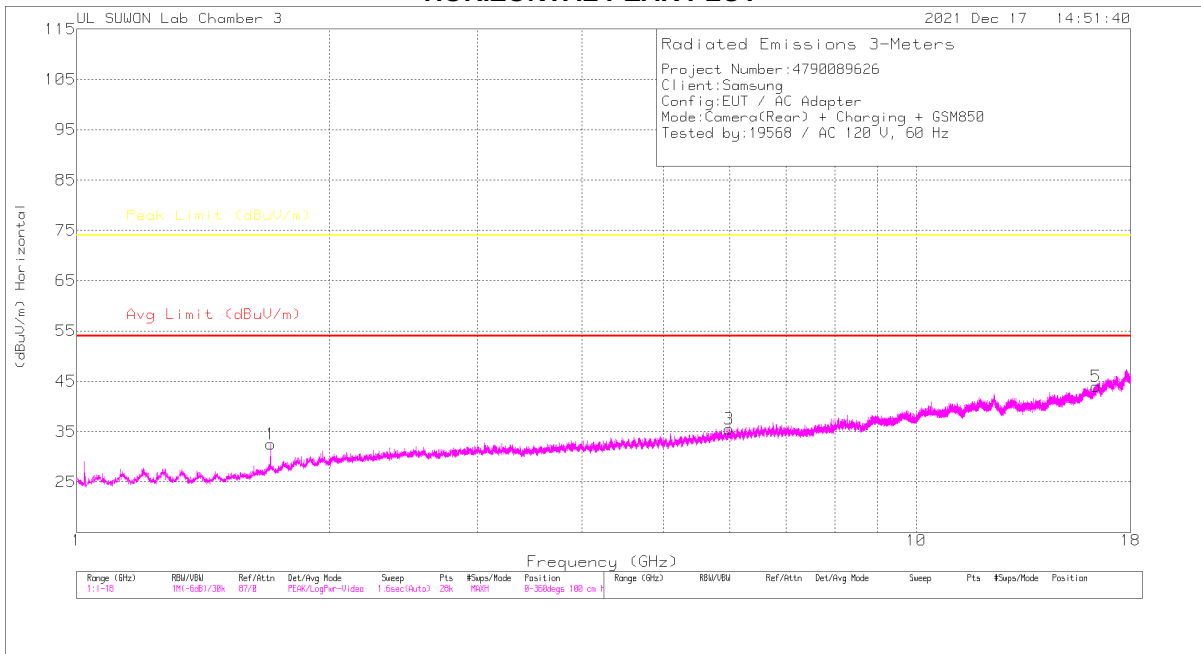
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.01868	31.3	Pk	31.8	-35.5	27.6	-	-	74	-46.4	360	100	H
2.01868	20.39	Ca	31.8	-35.5	16.69	54	-37.31	-	-	360	100	H
2.01868	32.05	Pk	31.8	-35.5	28.35	-	-	74	-45.65	360	100	V
2.01868	20.44	Ca	31.8	-35.5	16.74	54	-37.26	-	-	360	100	V
7.01311	34.18	Pk	36.2	-27.3	43.08	-	-	74	-30.92	360	100	H
7.01311	22.04	Ca	36.2	-27.3	30.94	54	-23.06	-	-	360	100	H
6.99854	34.85	Pk	36.2	-27.2	43.85	-	-	74	-30.15	360	100	V
6.99854	21.73	Ca	36.2	-27.2	30.73	54	-23.27	-	-	360	100	V
16.51995	31.46	Pk	42	-20.4	53.06	-	-	74	-20.94	360	100	H
16.51995	18.88	Ca	42	-20.4	40.48	54	-13.52	-	-	360	100	H
16.51509	31.36	Pk	42	-20.4	52.96	-	-	74	-21.04	360	100	V
16.51509	18.79	Ca	42	-20.4	40.39	54	-13.61	-	-	360	100	V

Pk - Peak detector

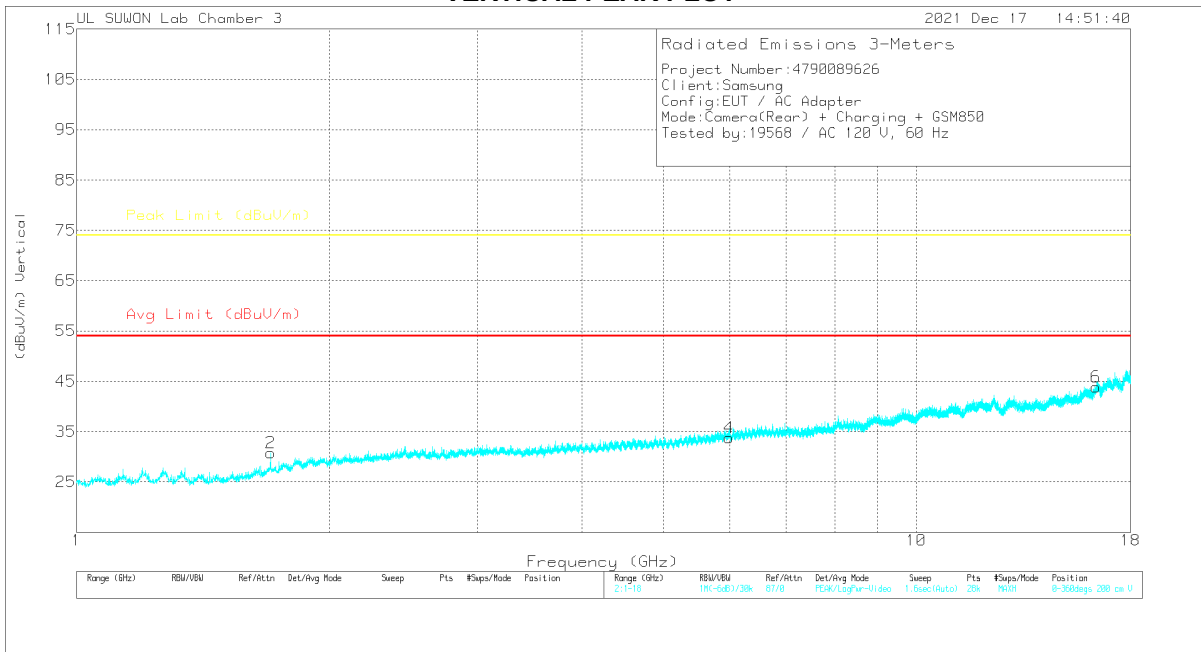
Ca - CISPR average detection

[Test case 2]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.70239	38.26	PK	30	-35.7	32.56	54	-21.44	-	-	0-360	100	H
3	5.98897	29.19	PK	36	-29.7	35.49	54	-18.51	-	-	0-360	100	H
5	16.38336	23.39	PK	41.7	-21.1	43.99	54	-10.01	-	-	0-360	100	H
2	1.70239	36.46	PK	30	-35.7	30.76	54	-23.24	-	-	0-360	200	V
4	5.98897	27.51	PK	36	-29.7	33.81	54	-20.19	-	-	0-360	100	V
6	16.38336	23.22	PK	41.7	-21.1	43.82	54	-10.18	-	-	0-360	100	V

PK – Peak detector

Radiated Emissions

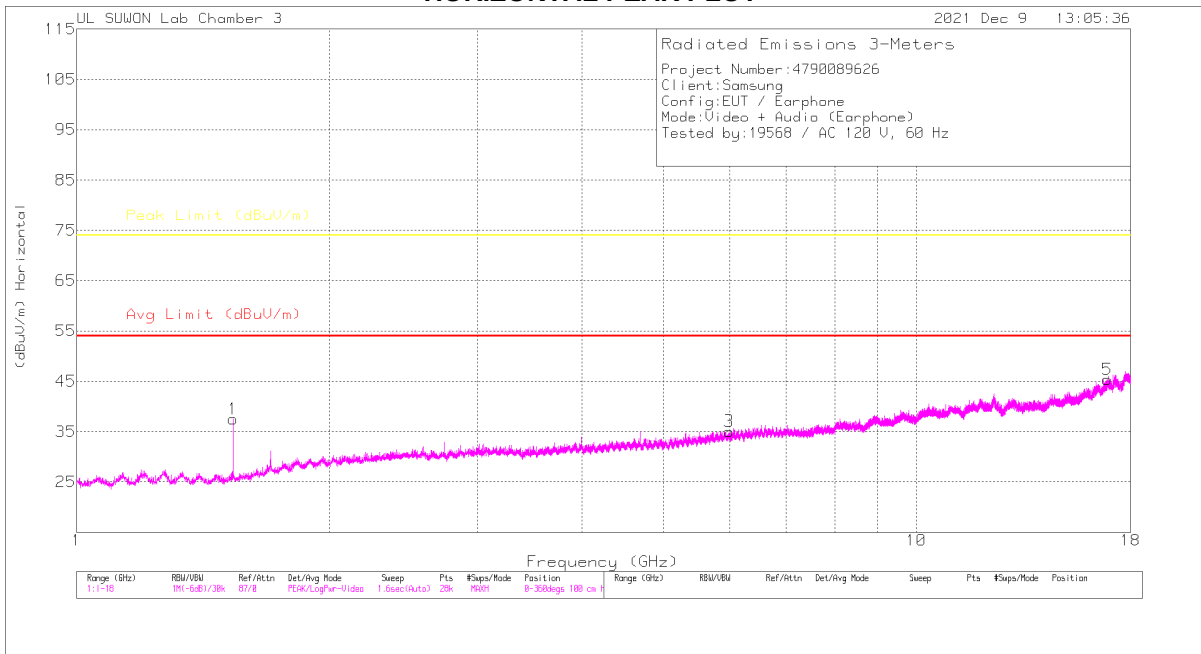
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.70239	43.57	Pk	30	-35.7	37.87	-	-	74	-36.13	0	100	H
1.70239	29.5	Ca	30	-35.7	23.8	54	-30.2	-	-	0	100	H
1.70239	44.04	Pk	30	-35.7	38.34	-	-	74	-35.66	0	100	V
1.70239	29.63	Ca	30	-35.7	23.93	54	-30.07	-	-	0	100	V
5.98897	39.94	Pk	36	-29.7	46.24	-	-	74	-27.76	0	100	H
5.98897	24.31	Ca	36	-29.7	30.61	54	-23.39	-	-	0	100	H
5.98897	39.94	Pk	36	-29.7	46.24	-	-	74	-27.76	0	100	V
5.98897	24.32	Ca	36	-29.7	30.62	54	-23.38	-	-	0	100	V
16.38336	32.25	Pk	41.7	-21.1	52.85	-	-	74	-21.15	0	100	H
16.38336	19.17	Ca	41.7	-21.1	39.77	54	-14.23	-	-	0	100	H
16.38336	32.68	Pk	41.7	-21.1	53.28	-	-	74	-20.72	0	100	V
16.38336	19.2	Ca	41.7	-21.1	39.8	54	-14.2	-	-	0	100	V

Pk - Peak detector

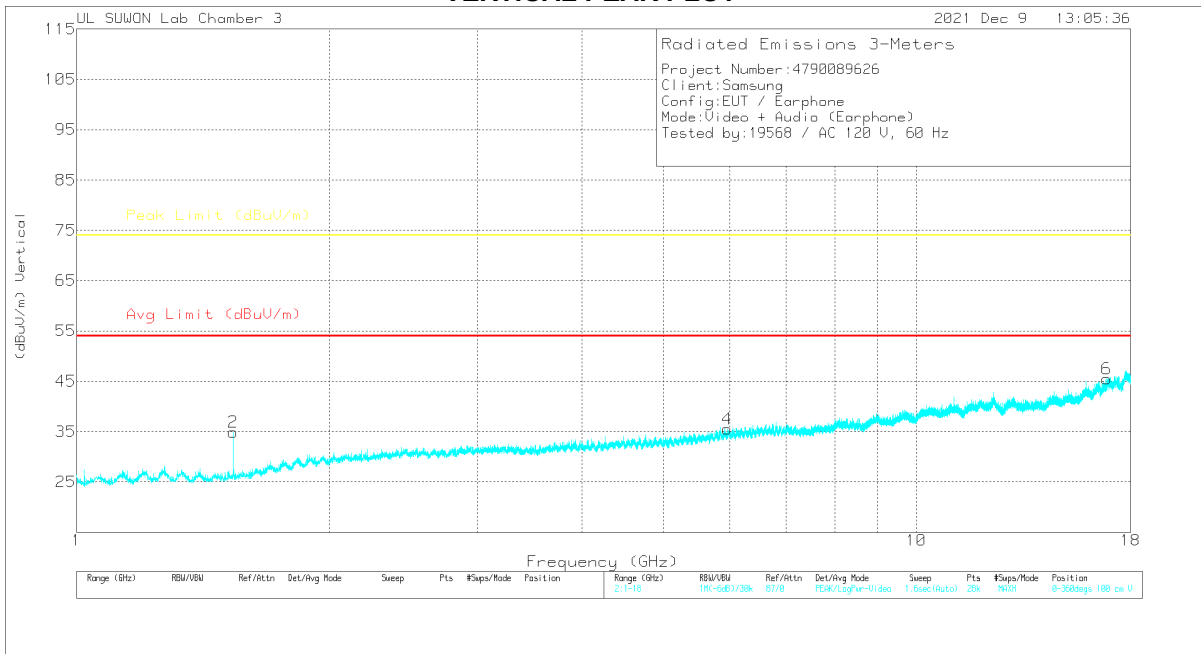
Ca - CISPR average detection

[Test case 3]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.53544	45.13	PK	28.4	-36	37.53	54	-16.47	-	-	0-360	100	H
3	5.98593	28.78	PK	36	-29.7	35.08	54	-18.92	-	-	0-360	100	H
5	16.88662	22.07	PK	42.5	-19.2	45.37	54	-8.63	-	-	0-360	100	H
2	1.53544	42.49	PK	28.4	-36	34.89	54	-19.11	-	-	0-360	100	V
4	5.95558	29.27	PK	36	-29.8	35.47	54	-18.53	-	-	0-360	200	V
6	16.87266	22.17	PK	42.5	-19.2	45.47	54	-8.53	-	-	0-360	200	V

PK – Peak detector

Radiated Emissions

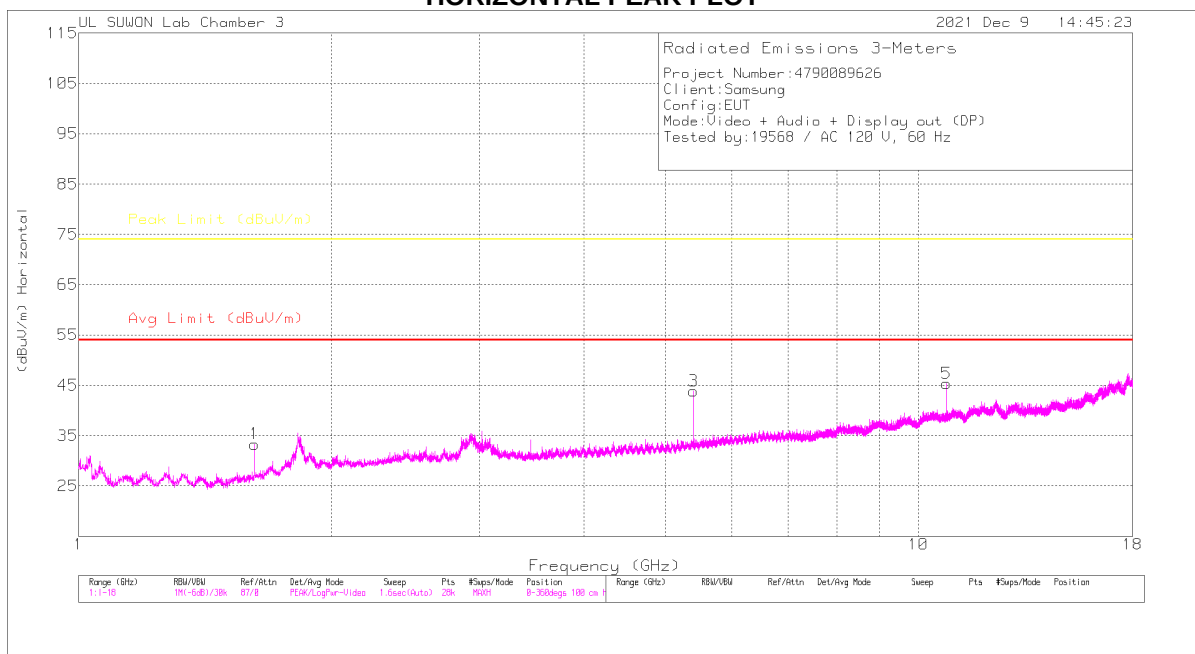
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.53597	49	Pk	28.4	-36	41.4	-	-	74	-32.6	63	100	H
1.53597	44.14	Ca	28.4	-36	36.54	54	-17.46	-	-	63	100	H
1.53597	46.91	Pk	28.4	-36	39.31	-	-	74	-34.69	38	199	V
1.53597	40.17	Ca	28.4	-36	32.57	54	-21.43	-	-	38	199	V
5.98593	37.23	Pk	36	-29.7	43.53	-	-	74	-30.47	0	100	H
5.98593	24.6	Ca	36	-29.7	30.9	54	-23.1	-	-	0	100	H
16.88662	29.95	Pk	42.5	-19.2	53.25	-	-	74	-20.75	0	100	H
16.88662	18.28	Ca	42.5	-19.2	41.58	54	-12.42	-	-	0	100	H
5.95558	36.96	Pk	36	-29.8	43.16	-	-	74	-30.84	0	100	V
5.95558	23.95	Ca	36	-29.8	30.15	54	-23.85	-	-	0	100	V
16.87266	31.17	Pk	42.5	-19.2	54.47	-	-	74	-19.53	0	100	V
16.87266	18.34	Ca	42.5	-19.2	41.64	54	-12.36	-	-	0	100	V

Pk - Peak detector

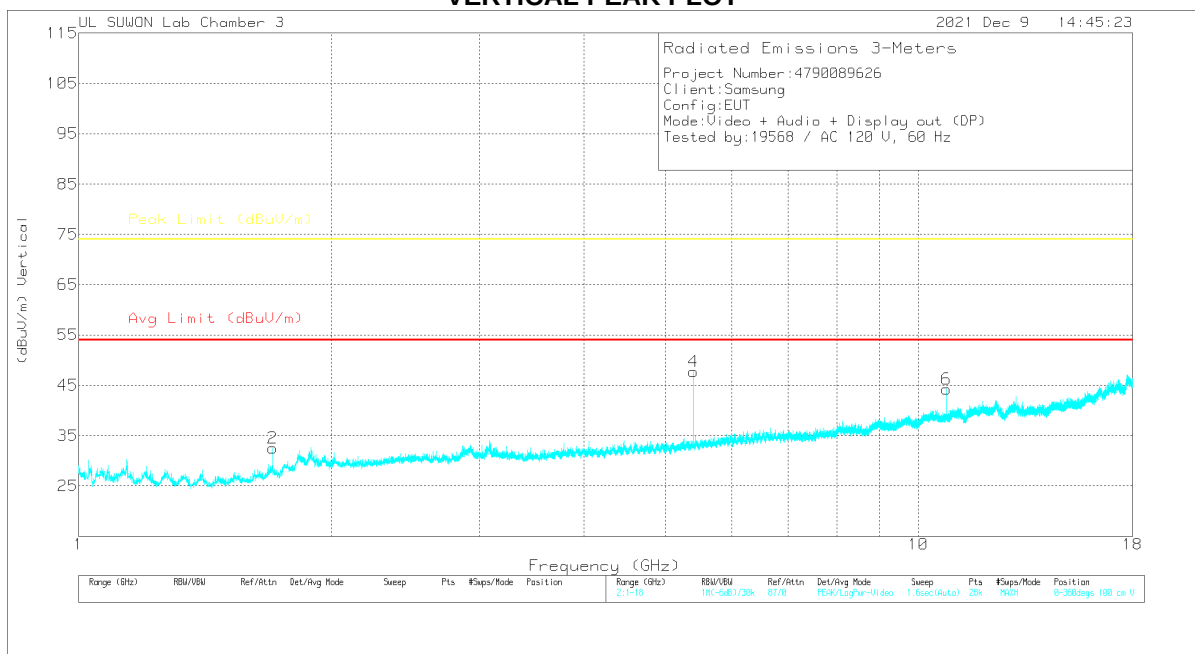
Ca - CISPR average detection

[Test case 4]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.61983	40.14	PK	29.1	-35.9	33.34	54	-20.66	-	-	0-360	100	H
3	5.40071	39.21	PK	35.2	-30.5	43.91	54	-10.09	-	-	0-360	100	H
5	10.80188	29.05	PK	38.4	-22.1	45.35	54	-8.65	-	-	0-360	100	H
2	1.70239	38.26	PK	30	-35.7	32.56	54	-21.44	-	-	0-360	100	V
4	5.40071	43	PK	35.2	-30.5	47.7	54	-6.3	-	-	0-360	100	V
6	10.80188	27.92	PK	38.4	-22.1	44.22	54	-9.78	-	-	0-360	100	V

Pk - Peak detector

Radiated Emissions

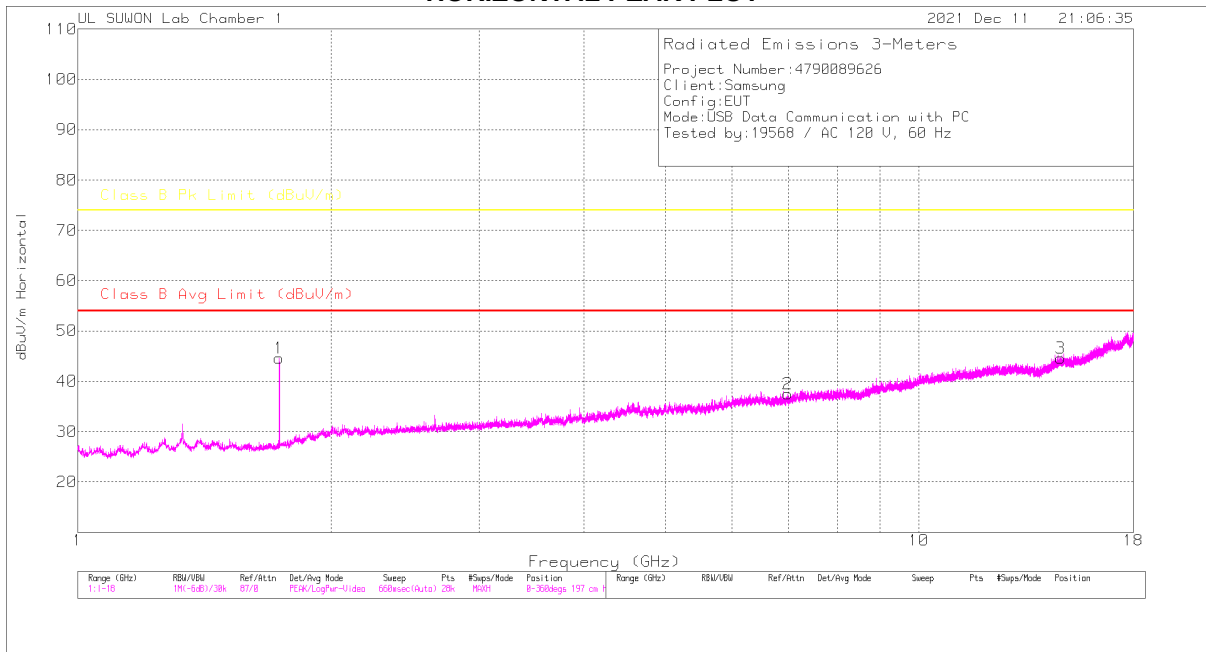
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	1-18GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.62	46.9	Pk	29.1	-35.9	40.1	-	-	74	-33.9	229	179	H
1.62	37.58	Ca	29.1	-35.9	30.78	54	-23.22	-	-	229	179	H
5.40081	44.41	Pk	35.2	-30.5	49.11	-	-	74	-24.89	267	114	H
5.40081	39.82	Ca	35.2	-30.5	44.52	54	-9.48	-	-	267	114	H
5.40081	46.13	PK	35.2	-30.5	50.83	-	-	74	-23.17	163	100	V
5.40081	42.31	Ca	35.2	-30.5	47.01	54	-6.99	-	-	163	100	V
10.80157	35.92	Pk	38.4	-22.1	52.22	-	-	74	-21.78	120	269	H
10.80157	27.46	Ca	38.4	-22.1	43.76	54	-10.24	-	-	120	269	H
10.80157	35.28	PK	38.4	-22.1	51.58	-	-	74	-22.42	119	155	V
10.80157	26.55	Ca	38.4	-22.1	42.85	54	-11.15	-	-	119	155	V
1.70239	33.69	Pk	30	-35.7	27.99	-	-	74	-46.01	142	175	V
1.70239	22.25	Ca	30	-35.7	16.55	54	-37.45	-	-	142	175	V

Pk - Peak detector

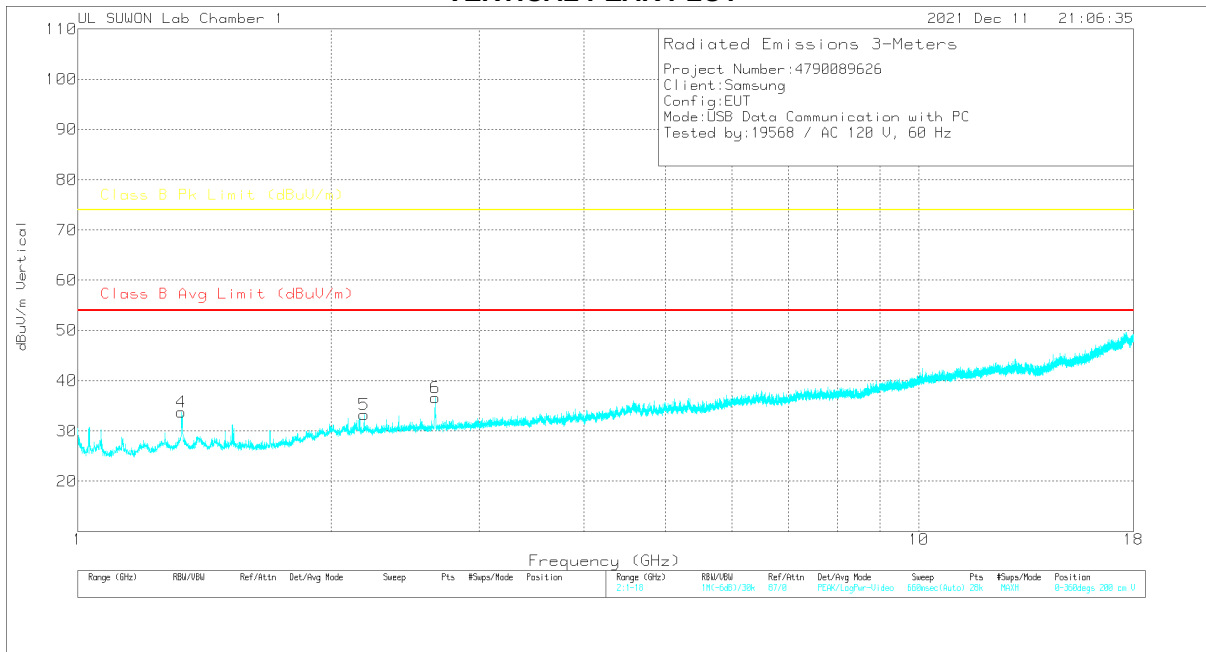
Ca - CISPR average detection

[Test case 5]

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[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	1.73639	52.03	PK	28.9	-36.3	44.63	-	-	74	-29.37	0-360	197	H
2	6.99065	30.34	PK	35.7	-28.5	37.54	-	-	74	-36.46	0-360	100	H
3	14.74364	27.05	PK	40	-22.4	44.65	-	-	74	-29.35	0-360	197	H
4	1.32722	41.32	PK	29.5	-37.1	33.72	-	-	74	-40.28	0-360	200	V
5	2.18987	37.13	PK	31.5	-35.4	33.23	-	-	74	-40.77	0-360	200	V
6	2.66097	39.18	PK	32.1	-34.6	36.68	-	-	74	-37.32	0-360	200	V

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	1-18GHz[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
1.73639	42.39	Pk	28.9	-36.3	34.99	-	-	74	-39.01	179	379	H
1.73639	30.65	Ca	28.9	-36.3	23.25	54	-30.75	-	-	179	379	H
6.99065	37.68	Pk	35.7	-28.5	44.88	-	-	74	-29.12	179	100	H
6.99065	24.85	Ca	35.7	-28.5	32.05	54	-21.95	-	-	179	100	H
14.74364	35.22	PK	40	-22.4	52.82	-	-	74	-21.18	179	197	H
14.74364	22.67	Ca	40	-22.4	40.27	54	-13.73	-	-	179	197	H
1.32722	44.07	Pk	29.5	-37.1	36.47	-	-	74	-37.53	24	105	V
1.32722	31.52	Ca	29.5	-37.1	23.92	54	-30.08	-	-	24	105	V
2.18987	41.81	Pk	31.5	-35.4	37.91	-	-	74	-36.09	8	100	V
2.18987	29.85	Ca	31.5	-35.4	25.95	54	-28.05	-	-	8	100	V
2.66097	40.84	Pk	32.1	-34.6	38.34	-	-	74	-35.66	145	163	V
2.66097	28.94	Ca	32.1	-34.6	26.44	54	-27.56	-	-	145	163	V

Pk - Peak detector

Ca - CISPR average detection

7.2. CONDUCTED EMISSIONS

TEST PROCEDURE

ANSI C63.4-2014

LIMIT

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

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

7.2.1. CONDUCTED EMISSIONS

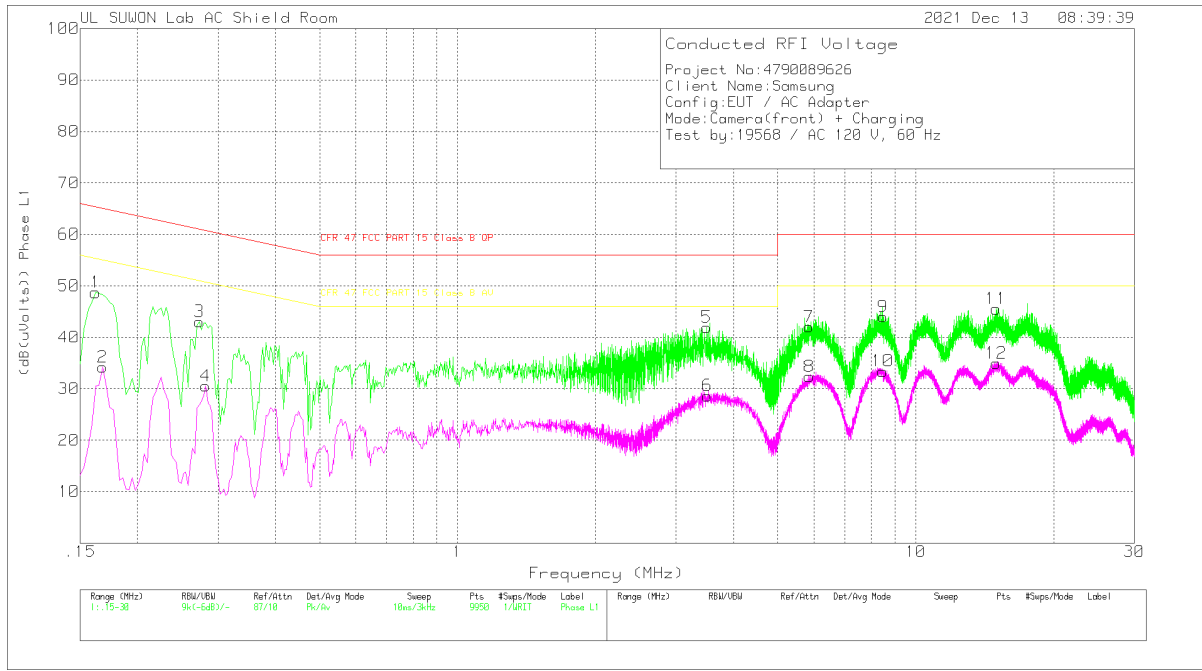
7.2.1.1. Version 2

[Test case 1]

6 WORST EMISSIONS

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

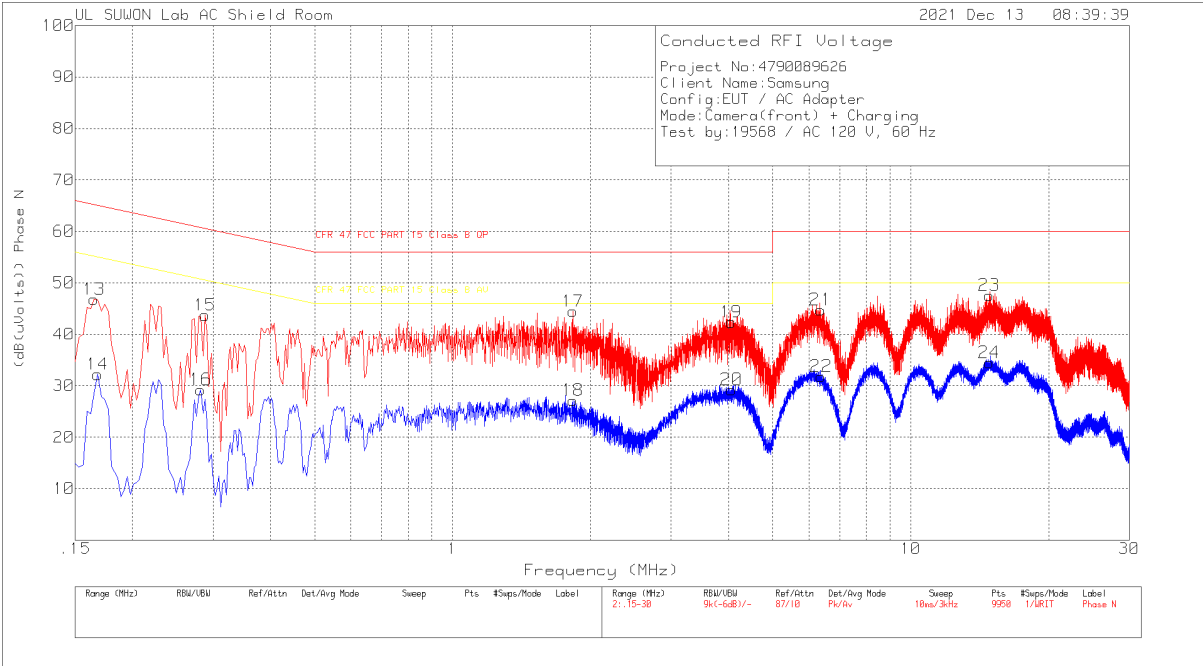
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.162	38.71	Pk	9.9	.1	48.71	65.36	-16.65	-	-
2	.168	24.11	Av	10	.1	34.21	-	-	55.06	-20.85
3	.273	33.23	Pk	9.6	.2	43.03	61.03	-18	-	-
4	.282	20.64	Av	9.7	.2	30.54	-	-	50.76	-20.22
5	3.498	31.93	Pk	9.7	.3	41.93	56	-14.07	-	-
6	3.51	18.64	Av	9.7	.3	28.64	-	-	46	-17.36
7	5.853	32.01	Pk	9.7	.3	42.01	60	-17.99	-	-
8	5.859	22.37	Av	9.7	.3	32.37	-	-	50	-17.63
9	8.496	33.88	Pk	9.8	.3	43.98	60	-16.02	-	-
10	8.472	23.31	Av	9.8	.3	33.41	-	-	50	-16.59
11	14.976	35.13	Pk	10	.4	45.53	60	-14.47	-	-
12	14.97	24.55	Av	10	.4	34.95	-	-	50	-15.05

Pk - Peak detector

Av - Average detection

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.165	36.8	Pk	9.9	.1	46.8	65.21	-18.41	-	-
14	.168	22.11	Av	10	.1	32.21	-	-	55.06	-22.85
15	.288	33.81	Pk	9.7	.2	43.71	60.58	-16.87	-	-
16	.282	19.33	Av	9.7	.2	29.23	-	-	50.76	-21.53
17	1.83	34.45	Pk	9.7	.3	44.45	56	-11.55	-	-
18	1.83	17.14	Av	9.7	.3	27.14	-	-	46	-18.86
19	4.056	32.36	Pk	9.7	.3	42.36	56	-13.64	-	-
20	4.062	19.21	Av	9.7	.3	29.21	-	-	46	-16.79
21	6.357	34.65	Pk	9.8	.3	44.75	60	-15.25	-	-
22	6.375	21.71	Av	9.8	.3	31.81	-	-	50	-18.19
23	14.844	37.08	Pk	10.1	.4	47.58	60	-12.42	-	-
24	14.841	23.98	Av	10.1	.4	34.48	-	-	50	-15.52

Pk - Peak detector

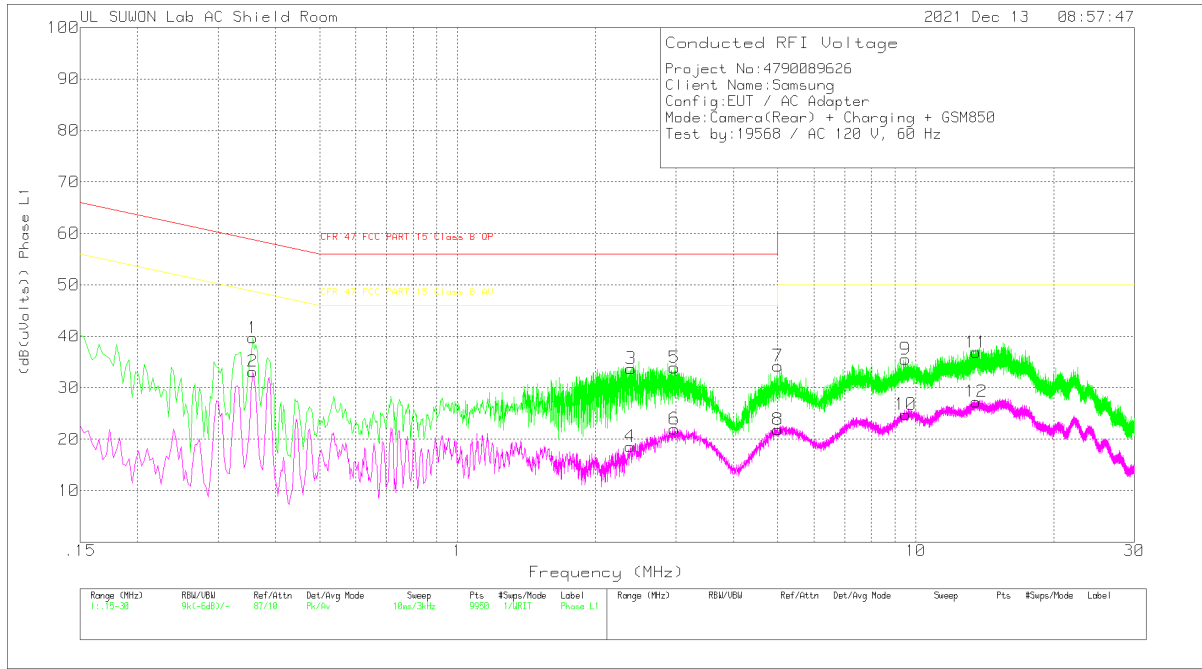
Av - Average detection

[Test case 2]

6 WORST EMISSIONS

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

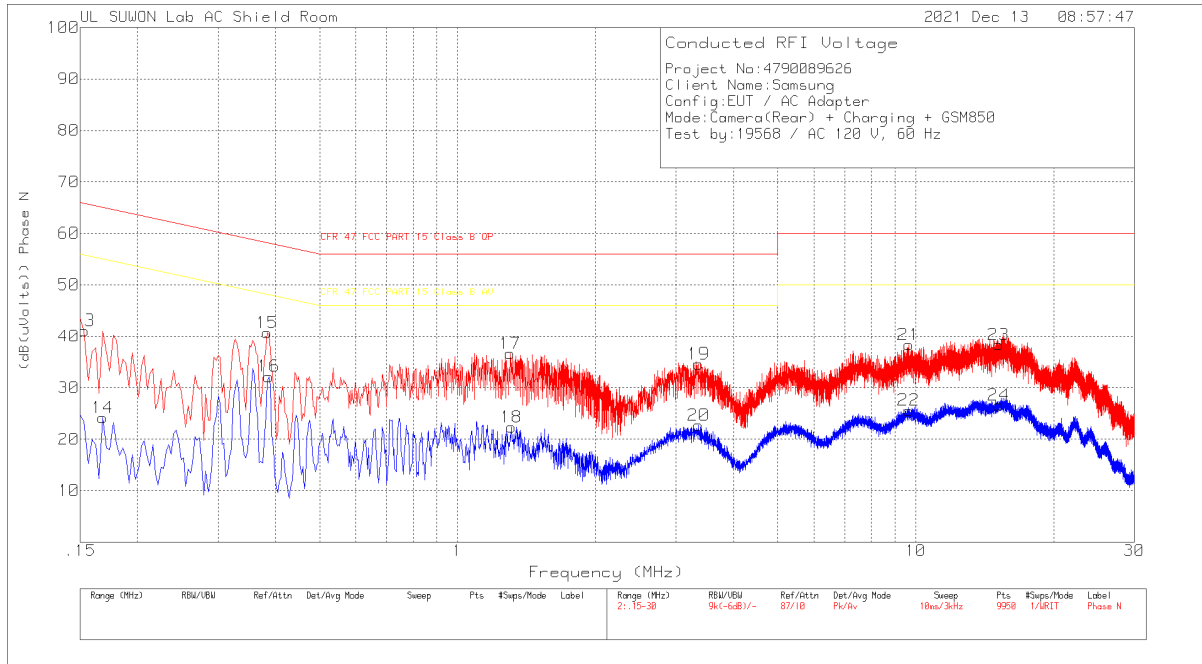
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.357	29.71	Pk	9.8	.2	39.71	58.8	-19.09	-	-
2	.357	23.16	Av	9.8	.2	33.16	-	-	48.8	-15.64
3	2.391	23.74	Pk	9.7	.3	33.74	56	-22.26	-	-
4	2.379	8.59	Av	9.7	.3	18.59	-	-	46	-27.41
5	2.973	23.92	Pk	9.7	.3	33.92	56	-22.08	-	-
6	2.973	12.01	Av	9.7	.3	22.01	-	-	46	-23.99
7	5.001	24.23	Pk	9.7	.3	34.23	60	-25.77	-	-
8	5.001	11.9	Av	9.7	.3	21.9	-	-	50	-28.1
9	9.495	25.36	Pk	9.8	.4	35.56	60	-24.44	-	-
10	9.513	14.63	Av	9.8	.4	24.83	-	-	50	-25.17
11	13.551	26.5	Pk	10	.4	36.9	60	-23.1	-	-
12	13.548	16.89	Av	10	.4	27.29	-	-	50	-22.71

Pk - Peak detector

Av - Average detection

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.153	31.16	Pk	9.8	.1	41.06	65.84	-24.78	-	-
14	.168	14.08	Av	10	.1	24.18	-	-	55.06	-30.88
15	.384	30.66	Pk	9.8	.2	40.66	58.19	-17.53	-	-
16	.387	22.19	Av	9.8	.2	32.19	-	-	48.13	-15.94
17	1.302	26.64	Pk	9.7	.3	36.64	56	-19.36	-	-
18	1.311	12.32	Av	9.7	.3	22.32	-	-	46	-23.68
19	3.36	24.58	Pk	9.7	.3	34.58	56	-21.42	-	-
20	3.36	12.71	Av	9.7	.3	22.71	-	-	46	-23.29
21	9.651	28.06	Pk	9.9	.4	38.36	60	-21.64	-	-
22	9.651	15.28	Av	9.9	.4	25.58	-	-	50	-24.42
23	15.168	27.86	Pk	10.1	.4	38.36	60	-21.64	-	-
24	15.18	16.13	Av	10.1	.4	26.63	-	-	50	-23.37

Pk - Peak detector

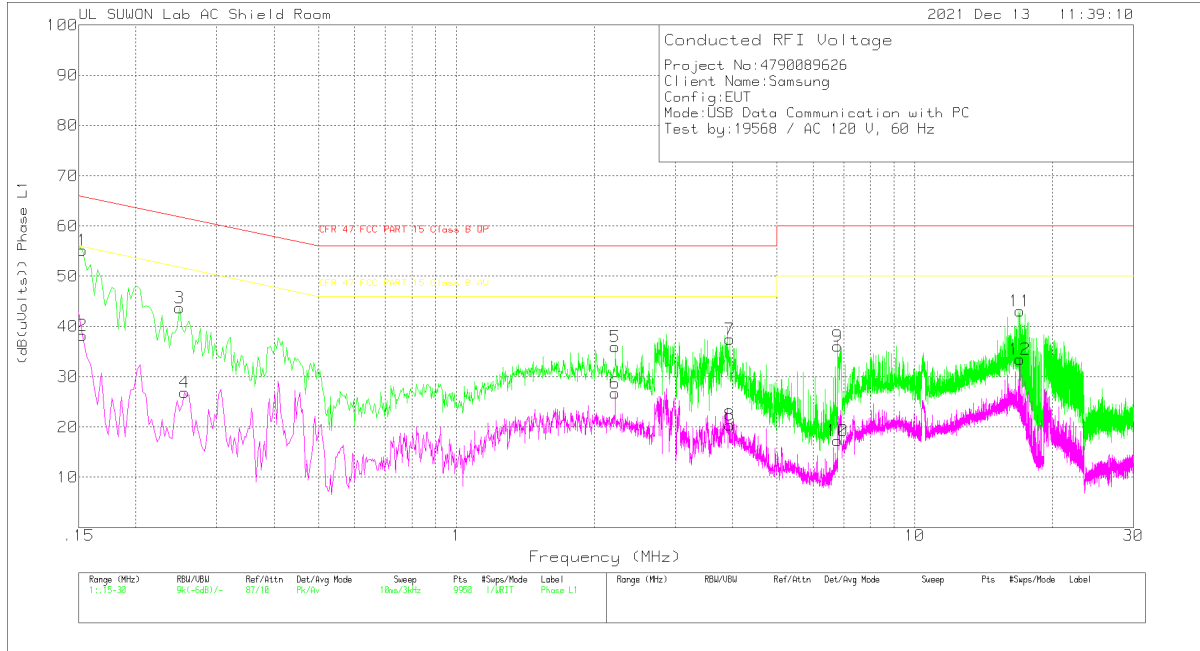
Av - Average detection

[Test case 5]

6 WORST EMISSIONS

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	45.28	Pk	9.8	.1	55.18	65.84	-10.66	-	-
2	.153	28.34	Av	9.8	.1	38.24	-	-	55.84	-17.6
3	.249	33.92	Pk	9.6	.2	43.72	61.79	-18.07	-	-
4	.255	17.03	Av	9.6	.2	26.83	-	-	51.59	-24.76
5	2.22	26.02	Pk	9.7	.3	36.02	56	-19.98	-	-
6	2.22	16.78	Av	9.7	.3	26.78	-	-	46	-19.22
7	3.948	27.46	Pk	9.7	.3	37.46	56	-18.54	-	-
8	3.954	10.34	Av	9.7	.3	20.34	-	-	46	-25.66
9	6.786	25.96	Pk	9.8	.3	36.06	60	-23.94	-	-
10	6.786	7.21	Av	9.8	.3	17.31	-	-	50	-32.69
11	16.956	32.61	Pk	10.1	.4	43.11	60	-16.89	-	-
12	16.962	22.94	Av	10.1	.4	33.44	-	-	50	-16.56

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

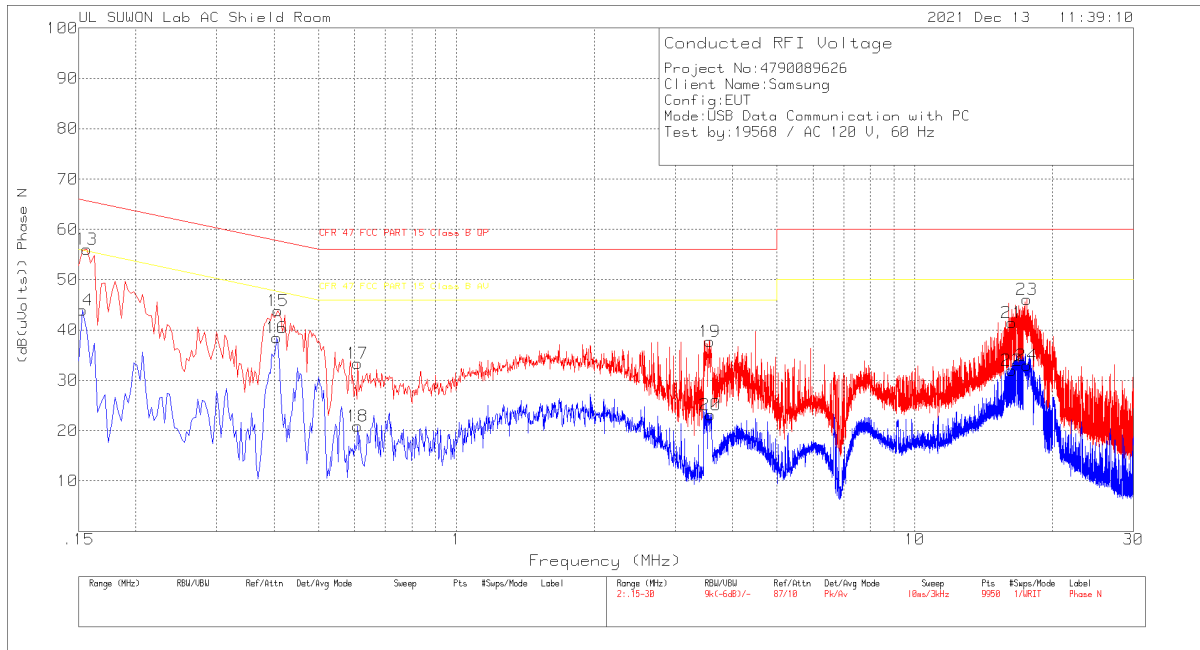
Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	41.81	Qp	9.7	.1	51.61	65.88	-14.27	-	-
.24825	27.73	Qp	9.6	.2	37.53	61.82	-24.29	-	-

Qp - Quasi-Peak detector

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_N[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.156	46.19	Pk	9.8	.1	56.09	65.67	-9.58	-	-
14	.153	34.06	Av	9.8	.1	43.96	-	-	55.84	-11.88
15	.408	33.79	Pk	9.8	.2	43.79	57.69	-13.9	-	-
16	.405	28.5	Av	9.8	.2	38.5	-	-	47.75	-9.25
17	.609	23.33	Pk	9.8	.2	33.33	56	-22.67	-	-
18	.609	10.85	Av	9.8	.2	20.85	-	-	46	-25.15
19	3.573	27.69	Pk	9.7	.3	37.69	56	-18.31	-	-
20	3.582	13.13	Av	9.7	.3	23.13	-	-	46	-22.87
21	16.266	30.98	Pk	10.1	.4	41.48	60	-18.52	-	-
22	16.266	21.48	Av	10.1	.4	31.98	-	-	50	-18.02
23	17.55	35.52	Pk	10.2	.4	46.12	60	-13.88	-	-
24	17.55	22.38	Av	10.2	.4	32.98	-	-	50	-17.02

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_N[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15615	42.02	Qp	9.8	.1	51.92	65.67	-13.75	-	-
.15315	41.34	Qp	9.8	.1	51.24	65.83	-14.59	-	-

Qp - Quasi-Peak detector

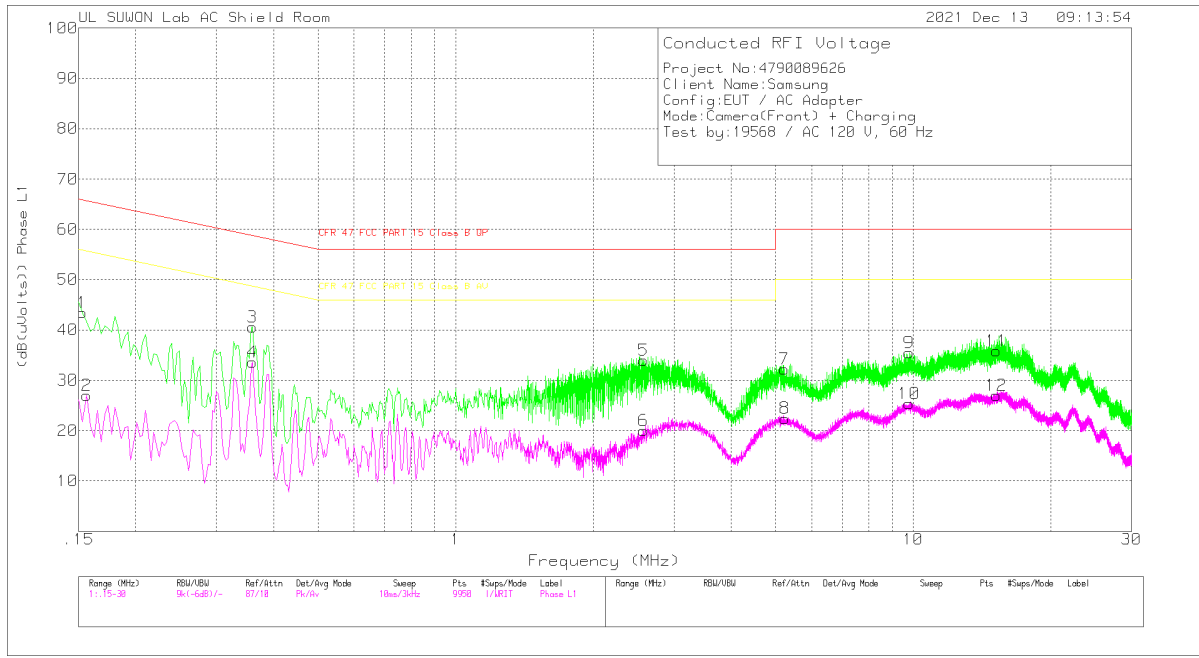
7.2.1.1. Version 3

[Test case 1]

6 WORST EMISSIONS

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

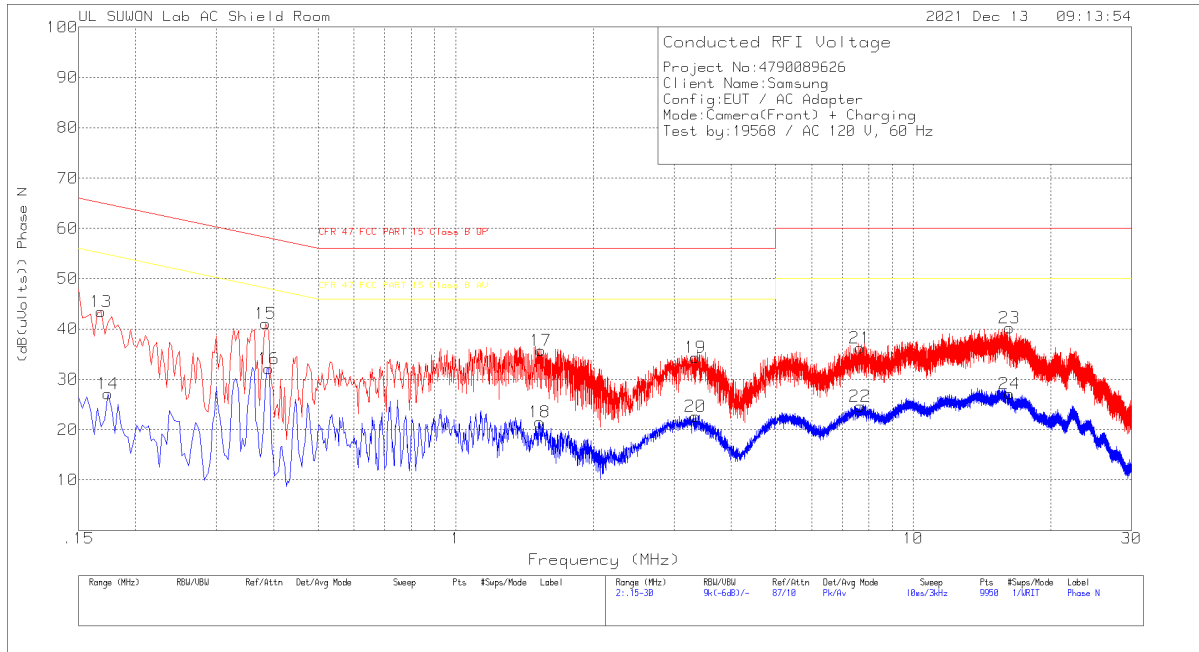
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	33.56	Pk	9.8	.1	43.46	65.84	-22.38	-	-
2	.156	17.12	Av	9.8	.1	27.02	-	-	55.67	-28.65
3	.36	30.53	Pk	9.8	.2	40.53	58.73	-18.2	-	-
4	.36	23.65	Av	9.8	.2	33.65	-	-	48.73	-15.08
5	2.574	24.01	Pk	9.7	.3	34.01	56	-21.99	-	-
6	2.574	9.97	Av	9.7	.3	19.97	-	-	46	-26.03
7	5.226	22.19	Pk	9.7	.3	32.19	60	-27.81	-	-
8	5.25	12.45	Av	9.7	.3	22.45	-	-	50	-27.55
9	9.795	25.31	Pk	9.8	.4	35.51	60	-24.49	-	-
10	9.795	15.17	Av	9.8	.4	25.37	-	-	50	-24.63
11	15.219	25.43	Pk	10	.4	35.83	60	-24.17	-	-
12	15.207	16.57	Av	10	.4	26.97	-	-	50	-23.03

Pk - Peak detector

Av - Average detection

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.168	33.4	Pk	10	.1	43.5	65.06	-21.56	-	-
14	.174	16.97	Av	10	.2	27.17	-	-	54.77	-27.6
15	.384	31.07	Pk	9.8	.2	41.07	58.19	-17.12	-	-
16	.39	22.13	Av	9.8	.2	32.13	-	-	48.06	-15.93
17	1.536	25.78	Pk	9.7	.3	35.78	56	-20.22	-	-
18	1.527	11.49	Av	9.7	.3	21.49	-	-	46	-24.51
19	3.342	24.4	Pk	9.7	.3	34.4	56	-21.6	-	-
20	3.342	12.68	Av	9.7	.3	22.68	-	-	46	-23.32
21	7.659	26.07	Pk	9.8	.3	36.17	60	-23.83	-	-
22	7.659	14.54	Av	9.8	.3	24.64	-	-	50	-25.36
23	16.233	29.76	Pk	10.1	.4	40.26	60	-19.74	-	-
24	16.236	16.62	Av	10.1	.4	27.12	-	-	50	-22.88

Pk - Peak detector

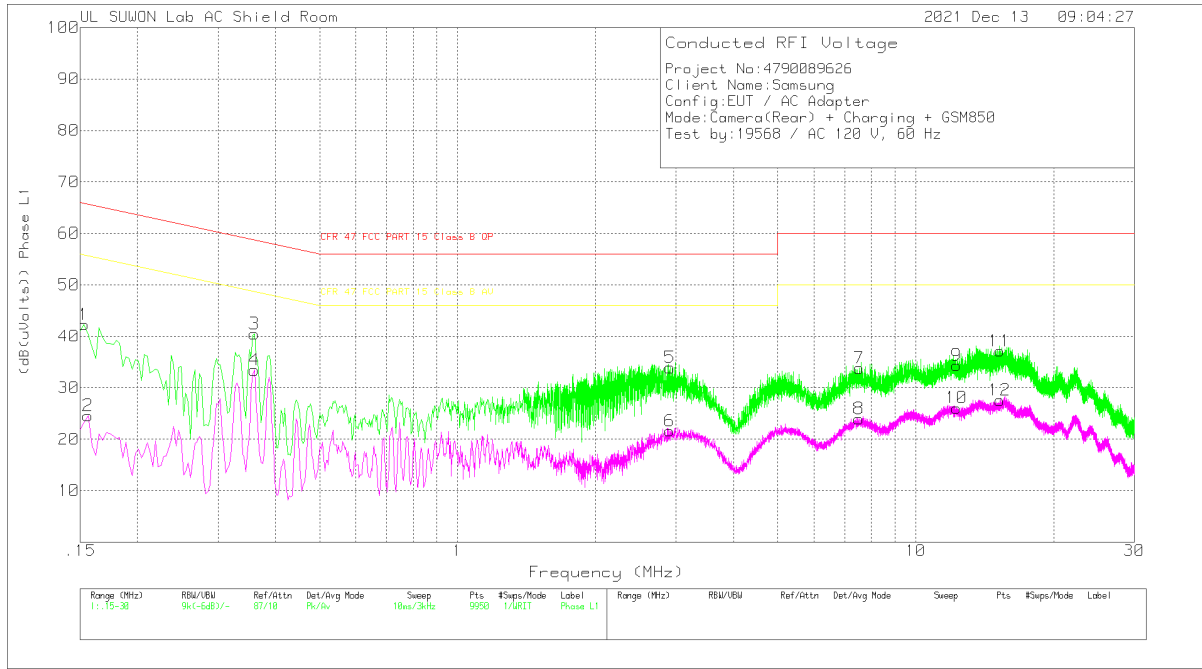
Av - Average detection

[Test case 2]

6 WORST EMISSIONS

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

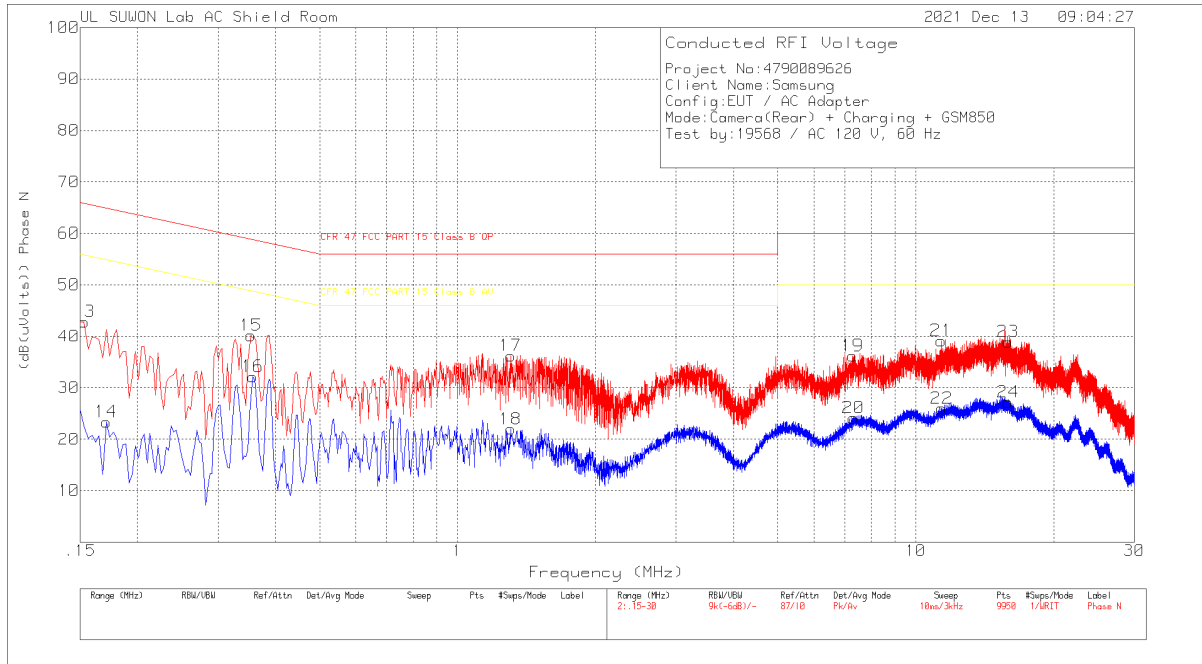
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	32.38	Pk	9.8	.1	42.28	65.84	-23.56	-	-
2	.156	14.67	Av	9.8	.1	24.57	-	-	55.67	-31.1
3	.36	30.46	Pk	9.8	.2	40.46	58.73	-18.27	-	-
4	.36	23.44	Av	9.8	.2	33.44	-	-	48.73	-15.29
5	2.907	23.92	Pk	9.7	.3	33.92	56	-22.08	-	-
6	2.901	11.62	Av	9.7	.3	21.62	-	-	46	-24.38
7	7.524	23.71	Pk	9.8	.3	33.81	60	-26.19	-	-
8	7.518	13.88	Av	9.8	.3	23.98	-	-	50	-26.02
9	12.27	24.14	Pk	9.9	.3	34.34	60	-25.66	-	-
10	12.285	15.88	Av	9.9	.3	26.08	-	-	50	-23.92
11	15.249	26.73	Pk	10	.4	37.13	60	-22.87	-	-
12	15.249	17.15	Av	10	.4	27.55	-	-	50	-22.45

Pk - Peak detector

Av - Average detection

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.153	32.92	Pk	9.8	.1	42.82	65.84	-23.02	-	-
14	.171	13.17	Av	10	.2	23.37	-	-	54.91	-31.54
15	.354	30.15	Pk	9.8	.2	40.15	58.87	-18.72	-	-
16	.357	22.16	Av	9.8	.2	32.16	-	-	48.8	-16.64
17	1.305	26.23	Pk	9.7	.3	36.23	56	-19.77	-	-
18	1.305	11.96	Av	9.7	.3	21.96	-	-	46	-24.04
19	7.278	26.08	Pk	9.8	.3	36.18	60	-23.82	-	-
20	7.308	14.03	Av	9.8	.3	24.13	-	-	50	-25.87
21	11.367	28.93	Pk	9.9	.3	39.13	60	-20.87	-	-
22	11.397	15.77	Av	9.9	.3	25.97	-	-	50	-24.03
23	15.906	28.42	Pk	10.1	.4	38.92	60	-21.08	-	-
24	15.918	16.7	Av	10.1	.4	27.2	-	-	50	-22.8

Pk - Peak detector

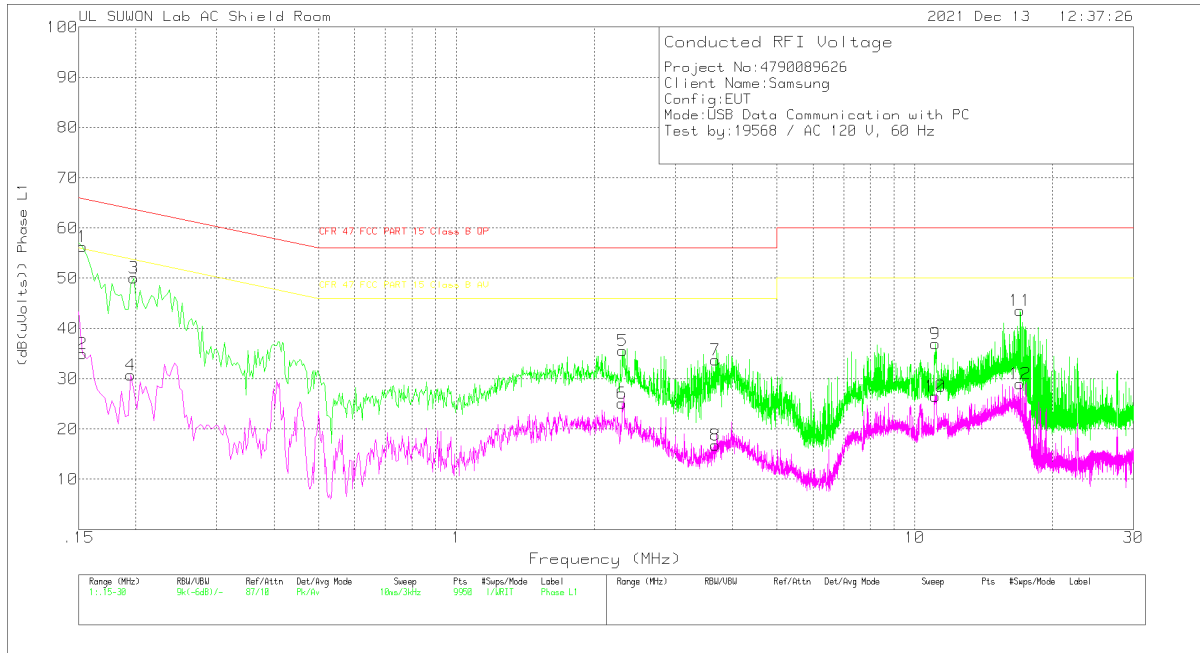
Av - Average detection

[Test case 5]

6 WORST EMISSIONS

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	46.35	Pk	9.8	.1	56.25	65.84	-9.59	-	-
2	.153	25.09	Av	9.8	.1	34.99	-	-	55.84	-20.85
3	.198	40.03	Pk	9.8	.2	50.03	63.69	-13.66	-	-
4	.195	20.59	Av	9.9	.2	30.69	-	-	53.82	-23.13
5	2.304	25.56	Pk	9.7	.3	35.56	56	-20.44	-	-
6	2.298	15.08	Av	9.7	.3	25.08	-	-	46	-20.92
7	3.678	23.71	Pk	9.7	.3	33.71	56	-22.29	-	-
8	3.678	6.75	Av	9.7	.3	16.75	-	-	46	-29.25
9	11.1	26.74	Pk	9.9	.3	36.94	60	-23.06	-	-
10	11.088	16.28	Av	9.9	.3	26.48	-	-	50	-23.52
11	16.992	33.12	Pk	10.1	.4	43.62	60	-16.38	-	-
12	16.992	18.49	Av	10.1	.4	28.99	-	-	50	-21.01

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

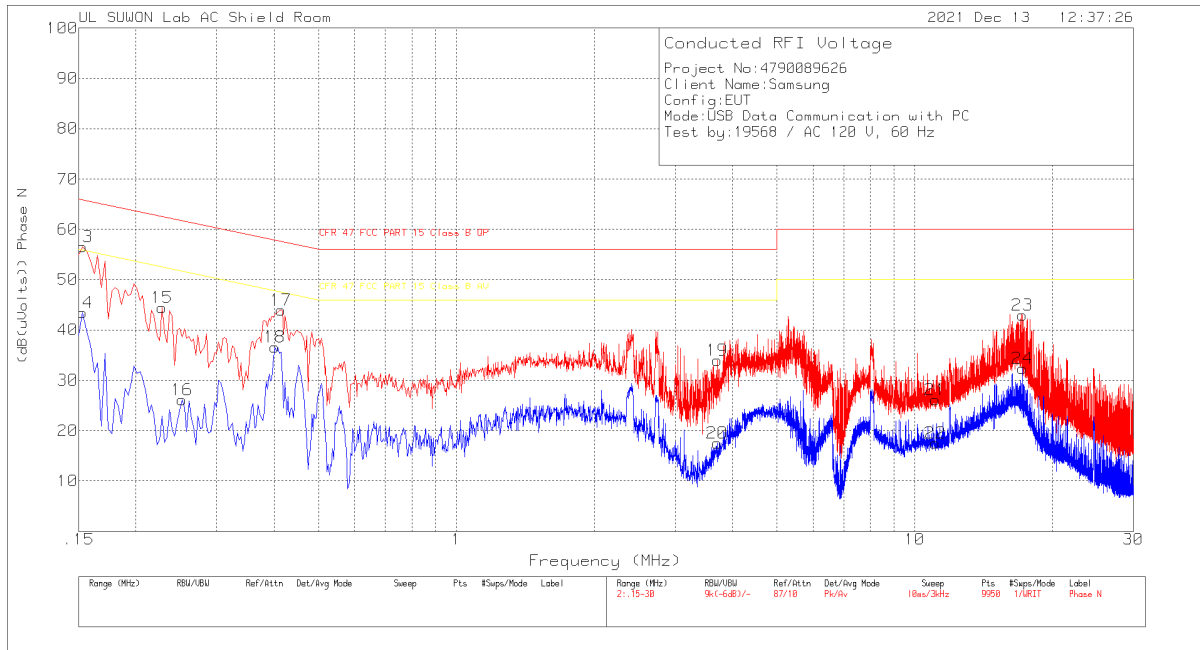
Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	44.57	Qp	9.7	.1	54.37	65.88	-11.51	-	-

Qp - Quasi-Peak detector

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_N[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.153	46.64	Pk	9.8	.1	56.54	65.84	-9.3	-	-
14	.153	33.57	Av	9.8	.1	43.47	-	-	55.84	-12.37
15	.228	34.52	Pk	9.7	.2	44.42	62.52	-18.1	-	-
16	.252	16.31	Av	9.6	.2	26.11	-	-	51.69	-25.58
17	.414	33.97	Pk	9.8	.2	43.97	57.57	-13.6	-	-
18	.402	26.56	Av	9.8	.2	36.56	-	-	47.81	-11.25
19	3.705	23.95	Pk	9.7	.3	33.95	56	-22.05	-	-
20	3.711	7.58	Av	9.7	.3	17.58	-	-	46	-28.42
21	11.1	15.89	Pk	9.9	.3	26.09	60	-33.91	-	-
22	11.1	7.28	Av	9.9	.3	17.48	-	-	50	-32.52
23	17.178	32.47	Pk	10.1	.4	42.97	60	-17.03	-	-
24	17.178	21.89	Av	10.1	.4	32.39	-	-	50	-17.61

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_N[dB]	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15315	44.37	Qp	9.8	.1	54.27	65.83	-11.56	-	-

Qp - Quasi-Peak detector

END OF TEST REPORT