CERTIFICATION TEST REPORT

Report Number. : 12081839-E8V2

Applicant	:	SONY MOBILE COMMUNICATIONS INC. 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA -KU,TOKYO, 140-0002, JAPAN
FCC ID	:	PY7-24118Q
EUT Description	:	GSM/WCDMA/LTE Phone with BT,DTS/UNII a/b/g/n/ac, & NFC
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART B

Date Of Issue:

January 23, 2018

Prepared by:
UL Verification Services Inc.
47173 Benicia Street
Fremont, CA 94538, U.S.A.
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NVLAP TESTING
NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	01/16/18	Initial Issue	
V2	01/23/18	Updated Section 5.6	Dan Coronia

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SONY MOBILE COMMUNICATIONS INC.
4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA-KU
TOKYO, 140-0002, JAPAN

EUT DESCRIPTION: GSM/WCDMA/LTE PHONE with BT, DTS/UNII a/b/g/n/ac, & NFC.

SERIAL NUMBER: BH90002BAW

DATE TESTED: DECEMBER 28- 29, 2017

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47 CFR PART 15 SUBPART B	Complies

UL Verification Services Inc. 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 Verification Services Inc. 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 Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. 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 NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Verification Services Inc By:

Dan Coronia
Operations Leader
UL Verification Services Inc.

Prepared By:

Kiya Kedida
Project Engineer
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2014.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 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.

47173 Benicia Street	47266 Benicia Street
☐ Chamber A(IC: 2324B-1)	☐ Chamber D(IC: 22541-1)
☒ Chamber B(IC: 2324B-2)	☐ Chamber E(IC: 22541-2)
☐ Chamber C(IC: 2324B-3)	☐ Chamber F(IC: 22541-3)
	☐ Chamber G(IC: 22541-4)
	☐ Chamber H(IC: 22541-5)

The above test sites and facilities are covered under FCC Test Firm Registration # 208313.
UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.
Chambers A through C are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-3, respectively. Chambers D through H are covered under Industry Canada company address code 22541 with site numbers 22541 -1 through 22541-5, respectively.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

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	3.84 dB
Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Radiated Disturbance,1000 to 18000 MHz	4.32 dB
Radiated Disturbance,18000 to 26000 MHz	4.45 dB
Radiated Disturbance,26000 to 40000 MHz	5.24 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, & NFC.

GENERAL INFORMATION

Highest frequency generated or used by the EUT	5825 MHz

5.2. TEST CONFIGURATIONS

The following configuration was tested:

EUT Configuration	Description
1	Laptop Sync Mode - The EUT was configured as table top equipment. The EUT is installed in a typical configuration. The EUT is connected to a laptop via USB, is charging and transferring data via the laptop.
2	Charging - The EUT was configured as table top equipment. The EUT is installed in a typical configuration. The EUT is connected to an AC adapter for charging and in a functional mode.

5.3. MODE(S) OF OPERATION

Mode	Description
Sync mode	Data transfer; Sync video file from laptop to EUT and continued playing video during testing.
Charging Mode	Charging with supplied USB charger. EUT and its charger shall be on back edge of table, with charger connected to extension cord.

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was SONY, s_atp_1_00139_B_10_5.
The test utility software used during testing was Tera Term Ver 4.79.

5.5. MODIFICATIONS

No modifications were made during testing.

5.6. DETAILS OF TESTED SYSTEM

SUPPORT EQUIPMENT & PERIPHERALS

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Lenovo	2349CW5	PB05HPL	DoC
Earphone	Sony	N/A	N/A	N/A
Audio & Charger Splitter	SONY	1312-8675.1B	YYWWSSPCXXXXXC	N/A
AC Adapter	Lenovo	ADLX90NLT2A	11S45N0307ZLZ436RDM2	N/A
Mouse	Logitech	M-U0026	1304HS02AX68	N/A
Keyboard	Lenovo	KU-0225	54Y9400	N/A
Switch	Netgear	FS105 v2	1D52163304A74	DoC
AC Adapter	Netgear	FA-0751000SUA	332-10154-01	N/A

I/O CABLES Sync Mode

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	AC	Unshielded	1.2m	AC Mains to AC/DC Adapter
2	DC Power	1	DC	Unshielded	1m	AC/DC Adapter to Switch and Laptop
3	USB	2	USB	Unshielded	1m	Laptop to keyboard and mouse
4	USB	1	USB-type-C	Unshielded	1m	EUT to Laptop
5	Ethernet	1	RJ45	Unshielded	>2m	Laptop to Switch

I/O CABLES Charging Mode

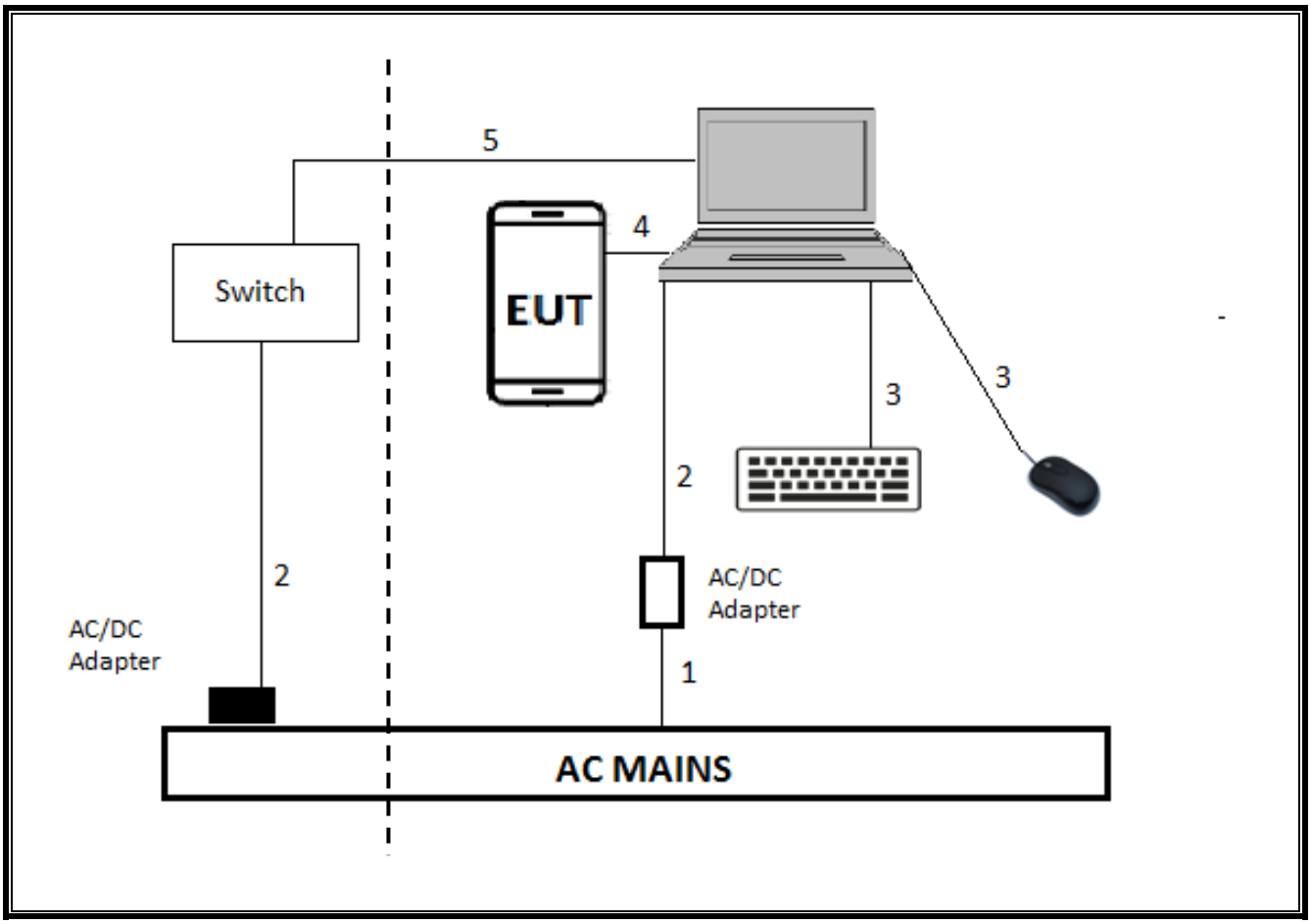
I/O Cable List						
Cable No	Port	# of identi	Connector Type	Cable Type	Cable Length	Remarks
1	USB	1	AC Adapter	Un-shielded	1.2m	No
2	Jack	1	Headset	Shielded	1m	No
3	USB/Headphone Jack	1	USB Type-C/Audio	Un-shielded	.2m	Audio & Charger Splitter

TEST SETUP

The EUT is installed in a typical configuration. Test software exercised the EUT.

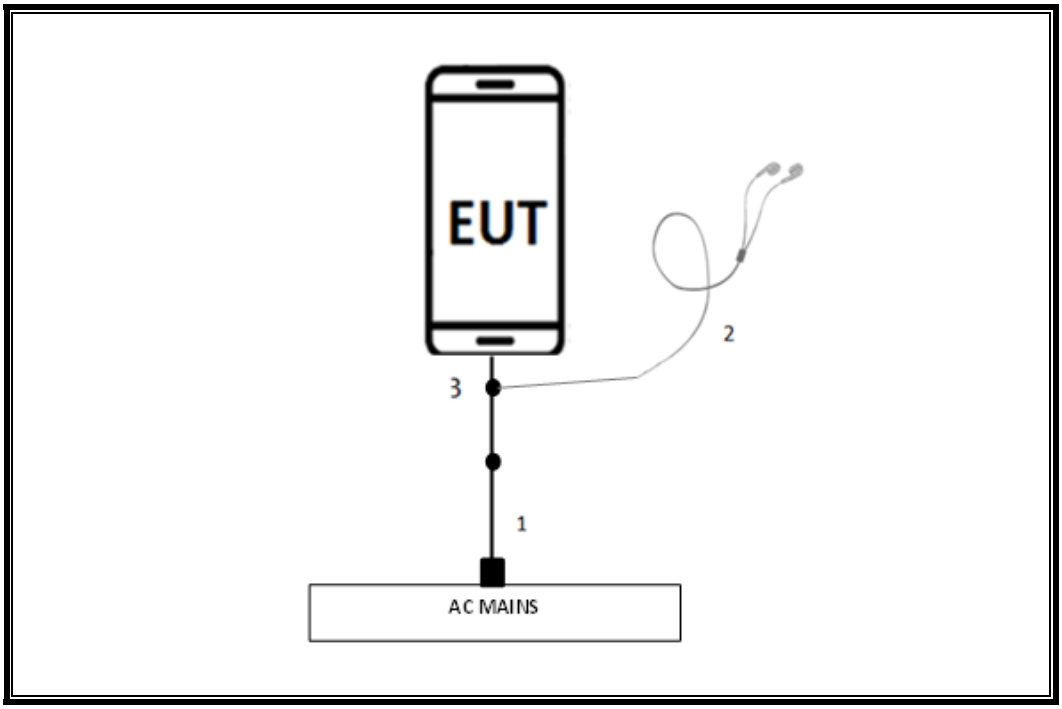
SETUP DIAGRAM

Sync Mode



NOTE: Switch location is outside chamber (located in the control room).

Charging Mode



6. APPLICABLE EMISSIONS LIMITS AND TEST RESULTS

6.1. EMISSIONS 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**	**T Number**	**Cal Date**	**Cal Due**
Amplifier, 1 to 18 GHz	Miteq	AFS43-00101800-25-S-42	493	06/23/17	06/23/2018
Amplifier, 10KHz to 1GHz, 32dB	Keysight	8447D	10	02/15/17	02/15/2018
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	863	06/09/17	06/09/2018
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	899	06/15/17	06/15/2018
PXA Spectrum Analyzer, 3Hz to 44GHz	Agilent	N9030A	907	01/23/17	01/23/2018
EMI Reciever	Rohde & Schwarz	ESR-EMI	1436	01/06/17	01/06/2018
LISN	FISCHER	FCC-LISN-50/250-25-2-01	1310	06/08/17	06/08/2018
18 - 26.5 GHz Horn Antenna	Seavey Division	MWH-1826/B	89	01/04/17	01/04/2018
26.5 - 40 GHz Horn Antenna	ARA	MWH-2640/B	90	08/25/17	08/25/2018
Pre-Amp 1-26.5 GHz	Agilent	8449B	404	07/23/17	07/23/2018
Pre-Amp, 26-40GHz	MITEQ	NSTTA2640-35-HG	1864	09/21/17	09/21/2018
PXA Spectrum Analyzer, 3Hz to 44GHz	Keysight	N9030A	1454	12/15/17	12/15/2018

Test Software List			
Description	**Manufacturer**	**Model**	**Version**
Radiated Software	UL	UL EMC	Ver 9.5, Dec 01, 2016

6.2. RADIATED EMISSIONS LIMITS AND RESULTS

LIMIT

FCC Part 15 Subpart B

§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.	

TEST PROCEDURE

ANSI C63.4: 2014

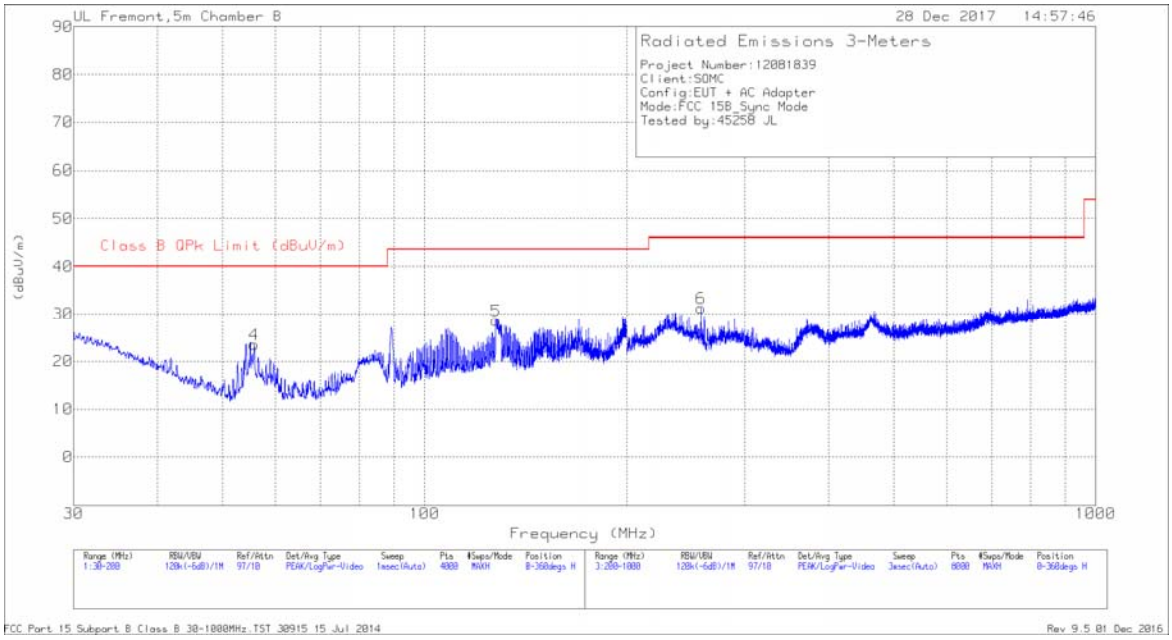
The highest frequency generated or used in the EUT is 5.8 GHz therefore the frequency range was investigated from 30 MHz to 40 GHz.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	**Upper frequency of measurement range** (MHz)
Below 108	1000
108-500	2000
500-1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 40 GHz, whichever is lower

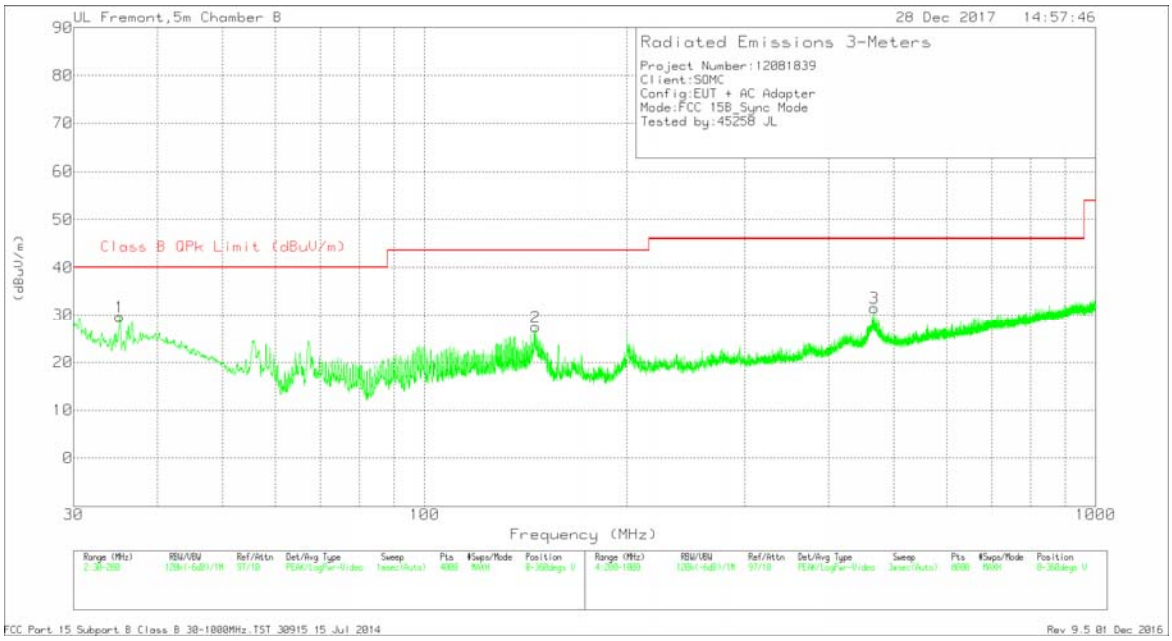
RESULTS

6.2.1. RADIATED EMISSIONS 30 TO 1000 MHz (SYNC MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

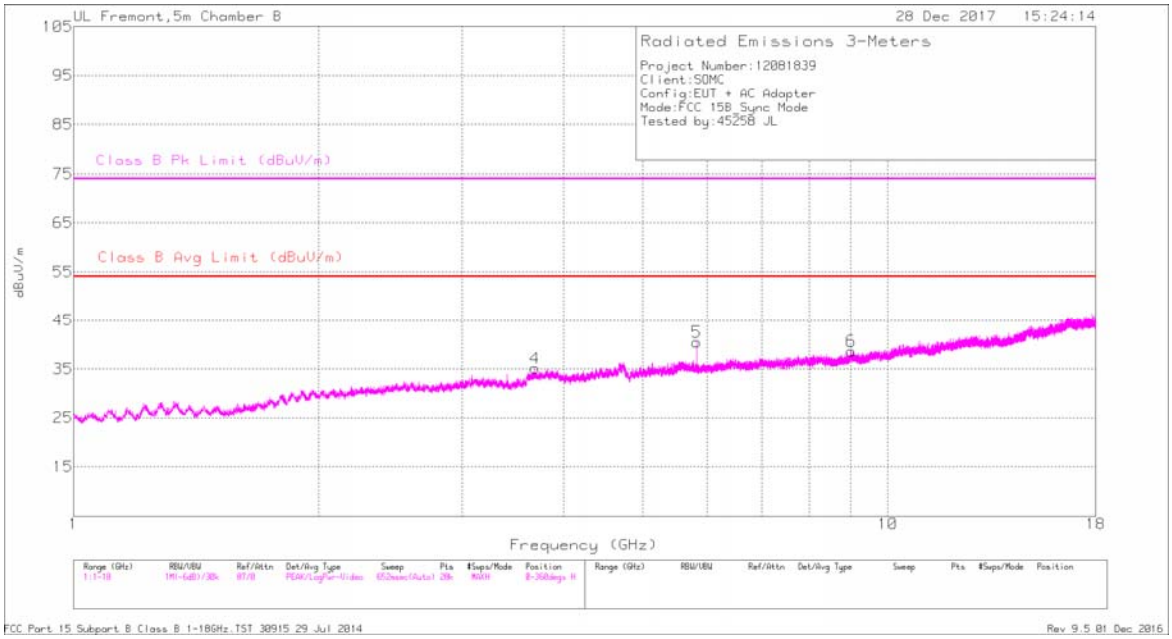
Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T899 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	35.1438	36.47	Pk	21.9	-28.7	29.67	40	-10.33	0-360	100	V
4	55.7617	40.9	Pk	11.1	-28.5	23.5	40	-16.5	0-360	400	H
5	127.9028	38.5	Pk	17.7	-27.6	28.6	43.52	-14.92	0-360	200	H
2	146.3526	38	Pk	16.8	-27.4	27.4	43.52	-16.12	0-360	100	V
6	258.0075	41.46	Pk	16	-26.2	31.26	46.02	-14.76	0-360	100	H
3	467.5348	36.33	Pk	21.2	-26	31.53	46.02	-14.49	0-360	100	V

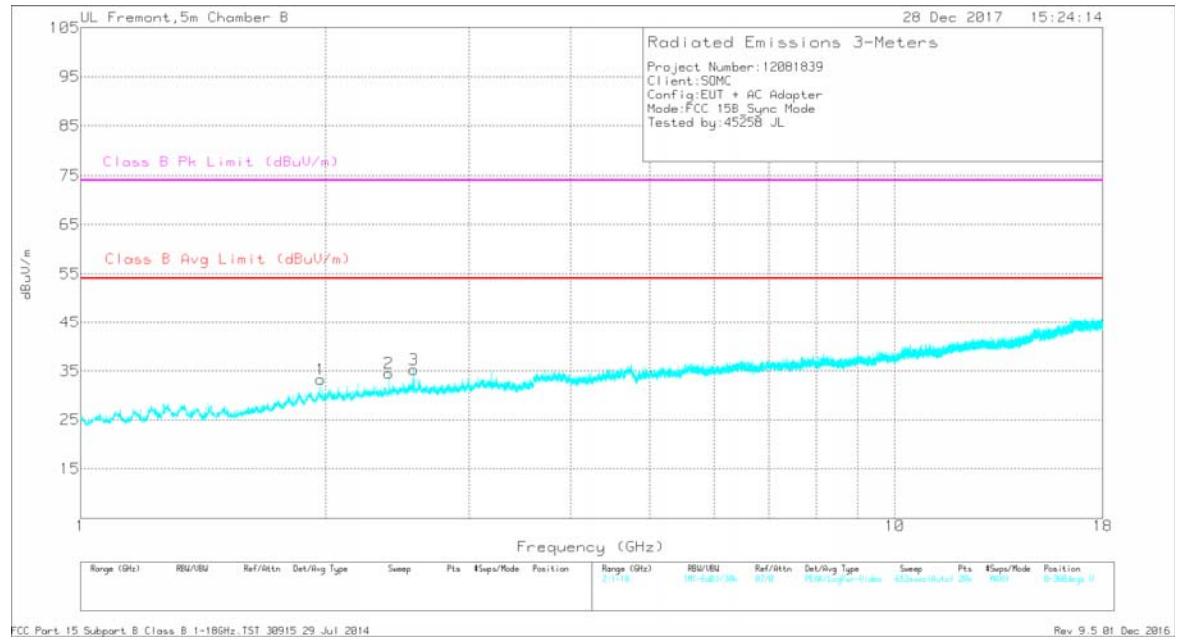
Pk - Peak detector

6.2.2. RADIATED EMISSIONS 1GHz to 18GHz (SYNC MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

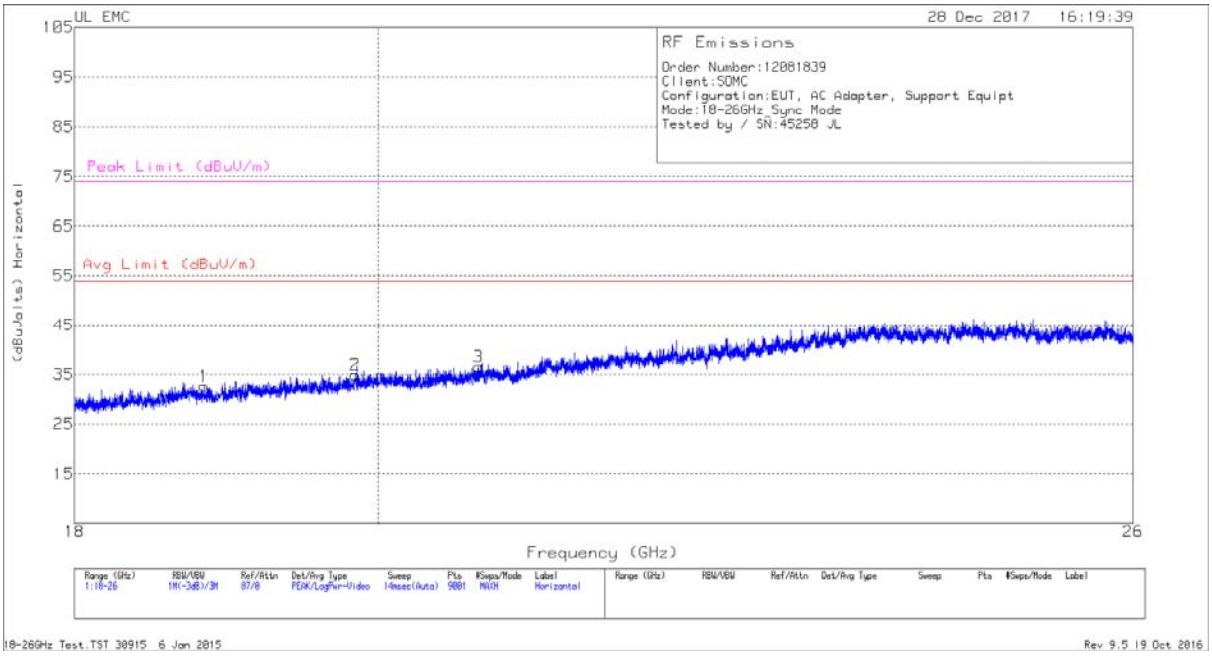
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.971	28.38	Av	31.2	-33.5	26.08	54	-27.92	-	-	243	181	V
1.973	41.11	Pk	31.2	-33.5	38.81	-	-	74	-35.19	243	181	V
2.39	48.42	Pk	32	-33	47.42	-	-	74	-26.58	150	205	V
2.39	27.66	Av	32	-33	26.66	54	-27.34	-	-	150	205	V
2.566	27.13	Av	32.5	-32.5	27.13	54	-26.87	-	-	322	162	V
2.569	40.79	Pk	32.5	-32.5	40.79	-	-	74	-33.21	322	162	V
3.686	40.1	Pk	33.2	-31.8	41.5	-	-	74	-32.5	35	139	H
3.687	27.94	Av	33.2	-31.8	29.34	54	-24.66	-	-	35	139	H
5.824	26.71	Av	35.1	-30.8	31.01	54	-22.99	-	-	93	161	H
5.825	38.81	Pk	35.1	-30.8	43.11	-	-	74	-30.89	93	161	H
9.013	36.08	Pk	36.2	-26.2	46.08	-	-	74	-27.92	199	238	H
9.013	23.46	Av	36.2	-26.2	33.46	54	-20.54	-	-	199	238	H

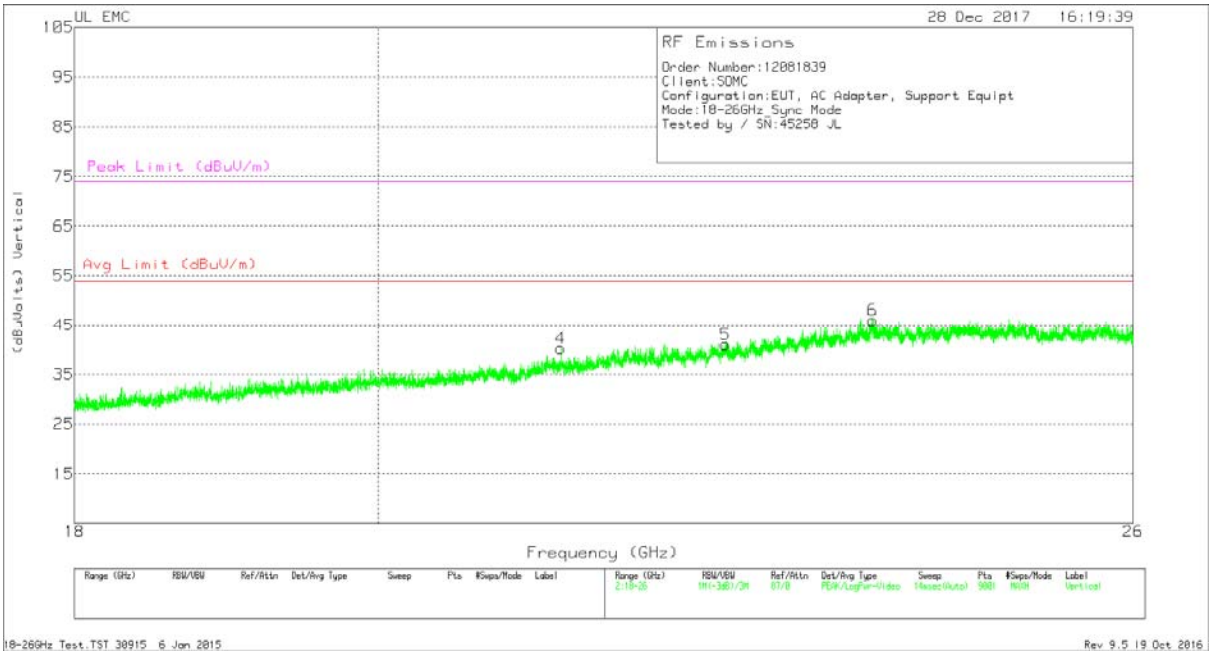
Pk - Peak detector
Av - Average detection

6.2.3. RADIATED EMISSIONS 18 to 26 GHz (SYNC MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

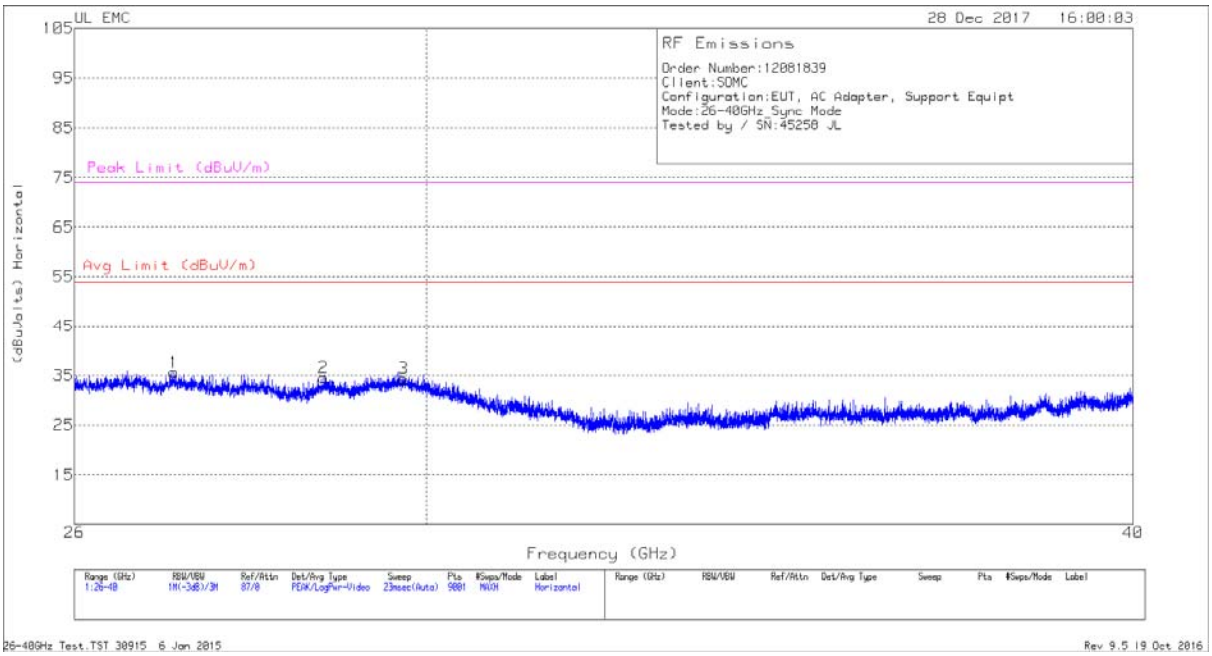
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T89 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	18.828	34.74	Pk	32.4	-25	-9.5	32.64	54	-21.36	74	-41.36
2	19.843	36.72	Pk	32.7	-25	-9.5	34.92	54	-19.08	74	-39.08
3	20.712	38.4	Pk	32.8	-25.2	-9.5	36.5	54	-17.5	74	-37.5
4	21.312	41.76	Pk	33.2	-25.2	-9.5	40.26	54	-13.74	74	-33.74
5	22.566	42.02	Pk	33.3	-24.8	-9.5	41.02	54	-12.98	74	-32.98
6	23.751	46.06	Pk	33.8	-24.3	-9.5	46.06	54	-7.94	74	-27.94

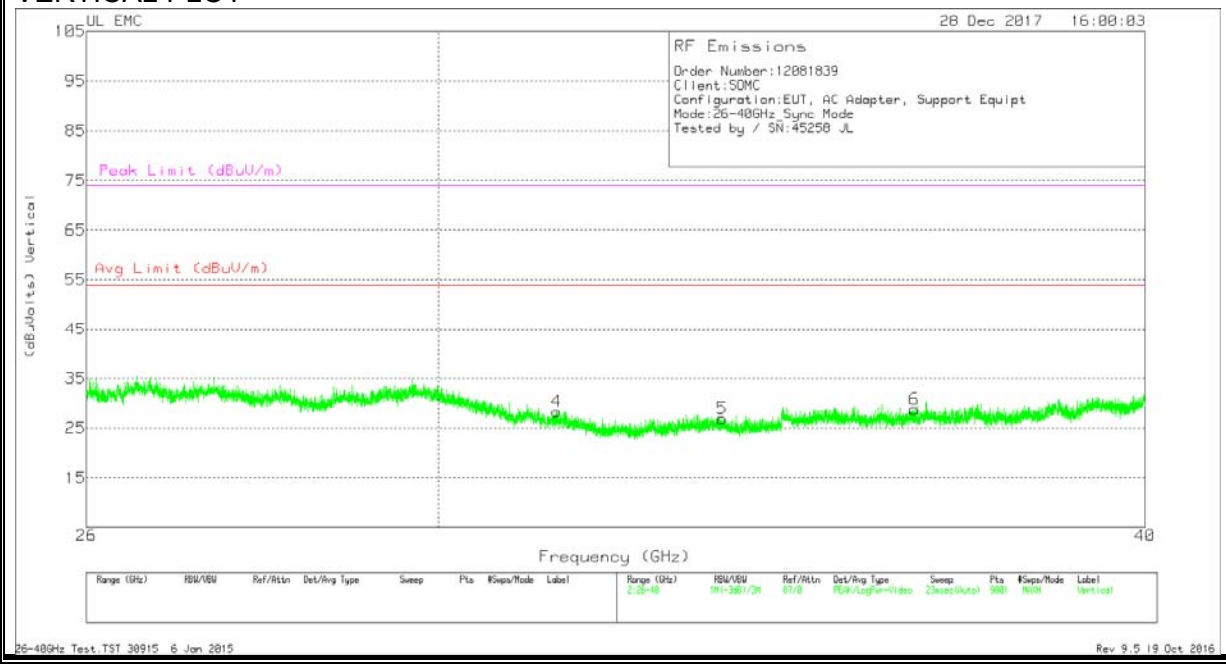
Pk - Peak detector

6.2.4. RADIATED EMISSIONS 26 to 40 GHz (SYNC MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

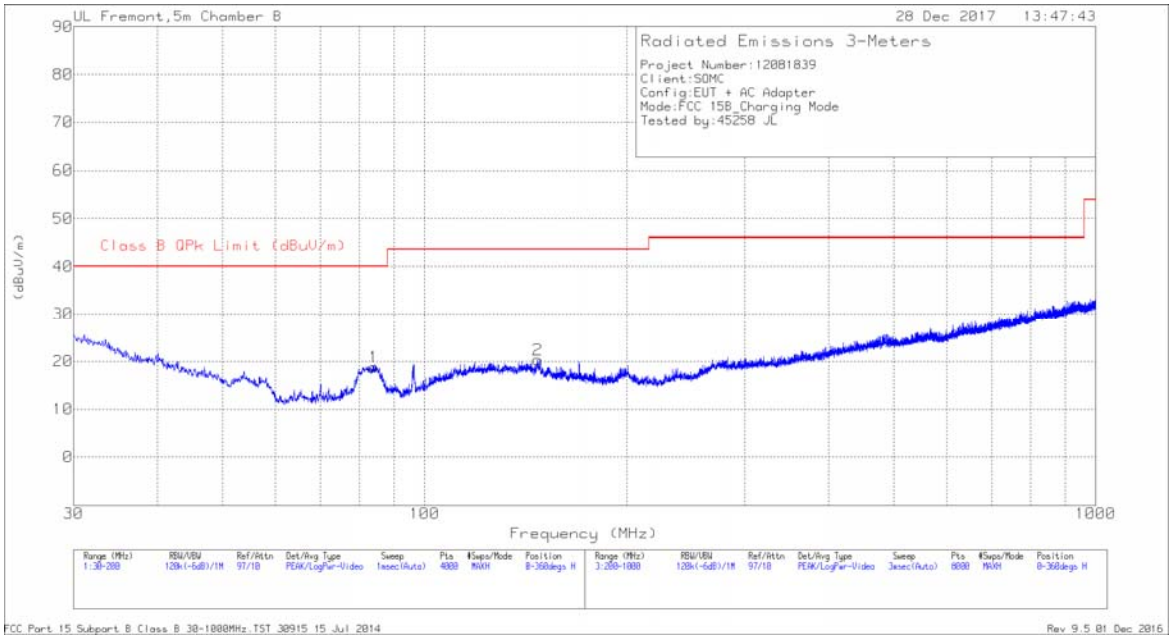
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	27.075	40.6	Pk	35.5	-31	-9.5	35.6	54	-18.4	74	-38.4
2	28.772	40.16	Pk	35.7	-31.8	-9.5	34.56	54	-19.44	74	-39.44
3	29.726	40.25	Pk	36.1	-32.5	-9.5	34.35	54	-19.65	74	-39.65
4	31.482	34.65	Pk	36.2	-33	-9.5	28.35	54	-25.65	74	-45.65
5	33.672	32.32	Pk	36.9	-32.8	-9.5	26.92	54	-27.08	74	-47.08
6	36.416	34.16	Pk	37.2	-33.1	-9.5	28.76	54	-25.24	74	-45.24

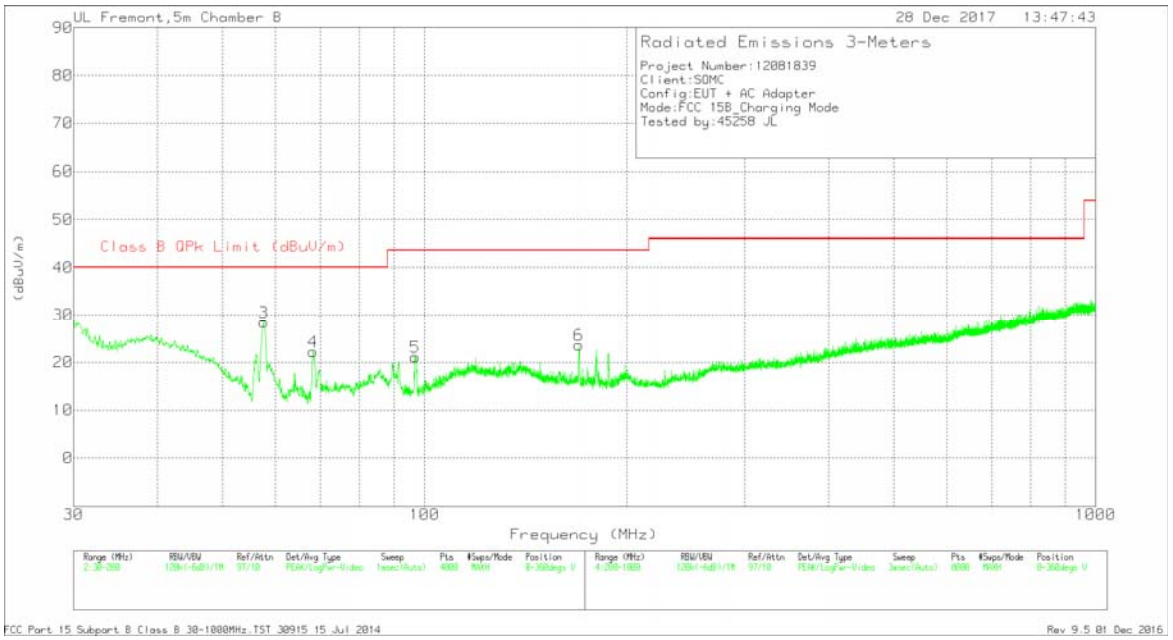
Pk - Peak detector

6.2.5. RADIATED EMISSIONS 30 TO 1000 MHz (CHARGING MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

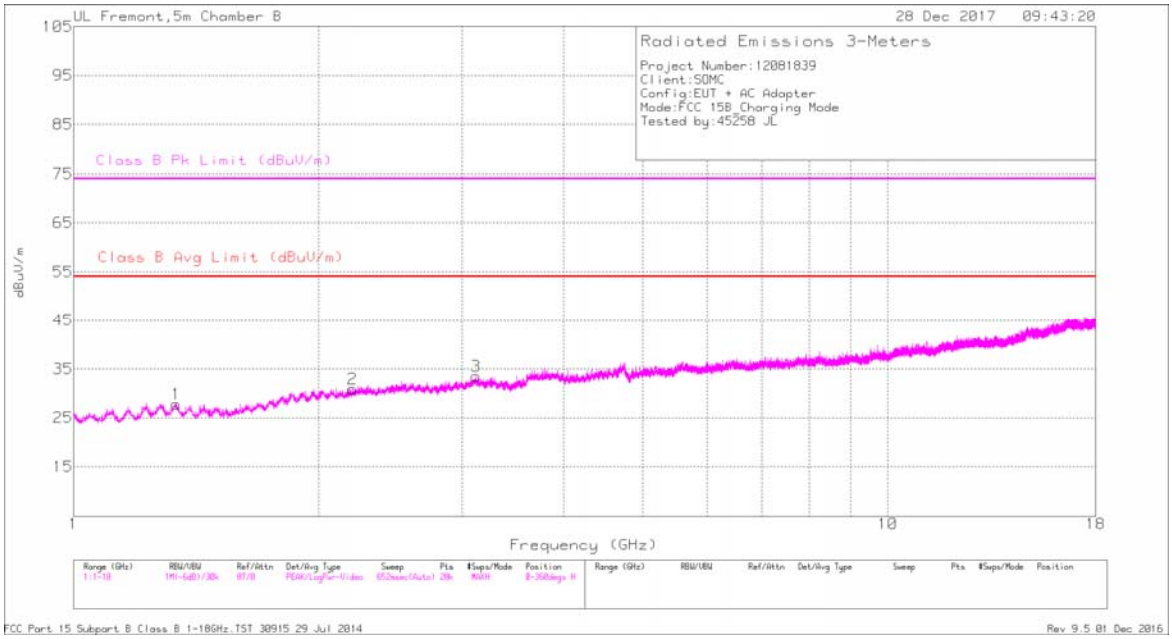
Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T899 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	57.5896	45.52	Pk	11.4	-28.5	28.42	40	-11.58	0-360	100	V
4	68.2599	38.49	Pk	12.1	-28.3	22.29	40	-17.71	0-360	100	V
1	84.0315	35.91	Pk	11	-28.1	18.81	40	-21.19	0-360	200	H
5	96.7848	35.83	Pk	13.3	-28	21.13	43.52	-22.39	0-360	100	V
2	147.4579	31.1	Pk	16.7	-27.4	20.4	43.52	-23.12	0-360	200	H
6	169.8612	35.21	Pk	15.6	-27.2	23.61	43.52	-19.91	0-360	100	V

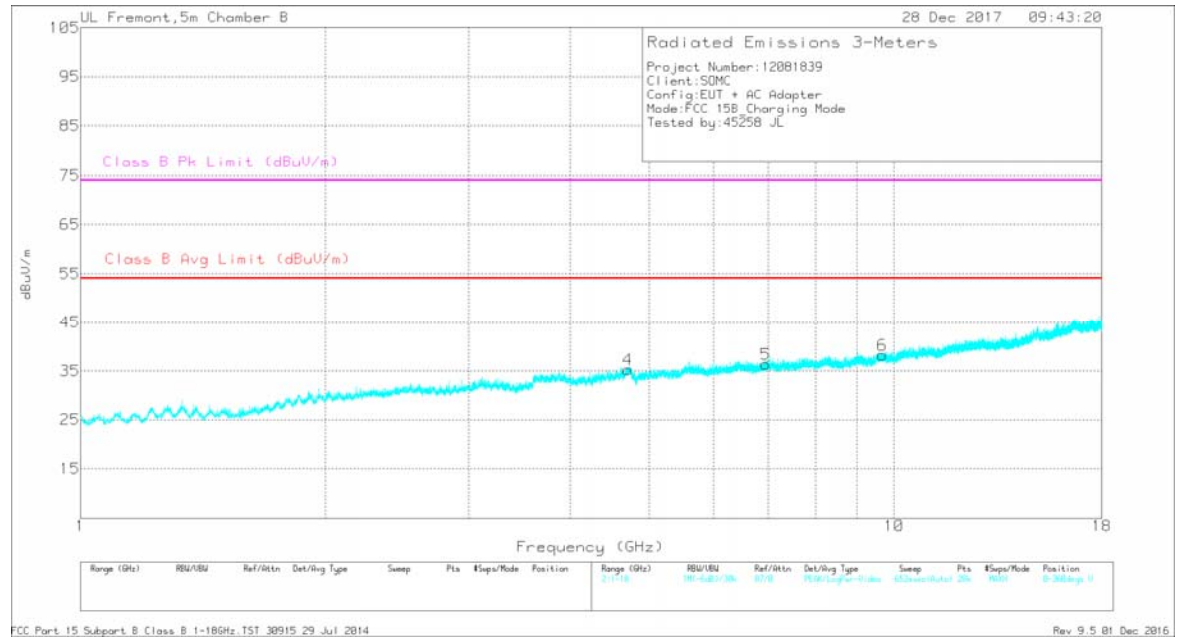
Pk - Peak detector

6.2.6. RADIATED EMISSIONS 1GHz to 18GHz (CHARGING MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

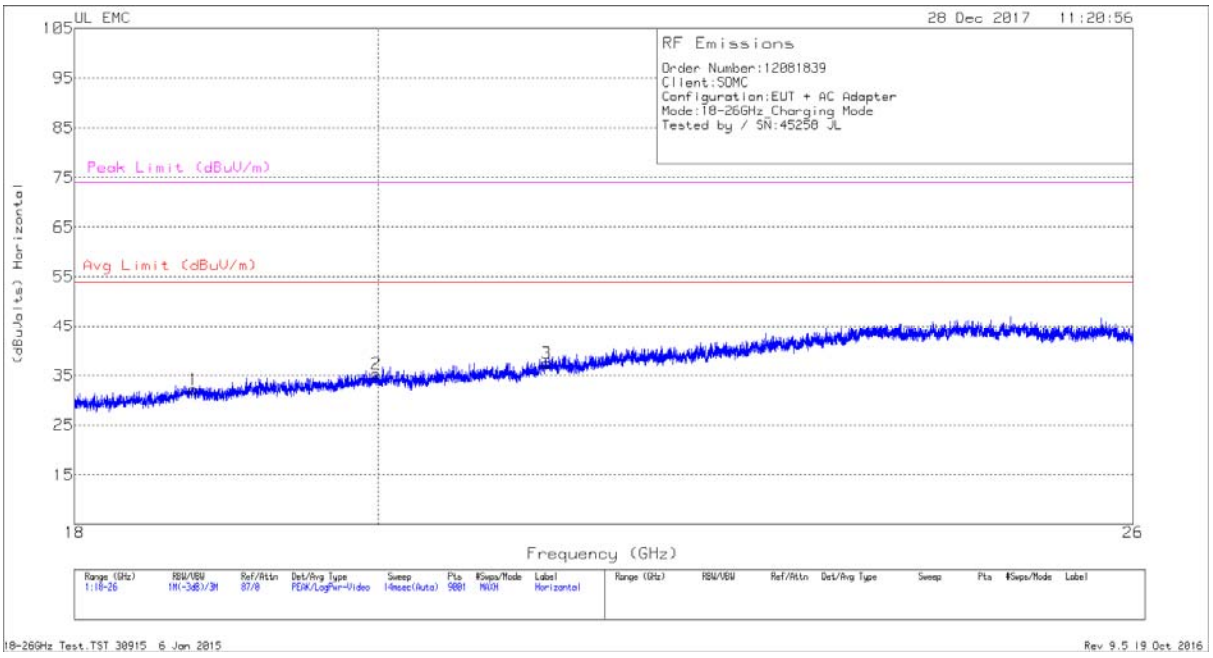
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.338	41.97	Pk	28.9	-34.3	36.57	-	-	74	-37.43	28	137	H
1.338	28.85	Av	28.9	-34.3	23.45	54	-30.55	-	-	28	137	H
2.199	27.71	Av	31.5	-33.2	26.01	54	-27.99	-	-	8	178	H
2.201	40.57	Pk	31.5	-33.2	38.87	-	-	74	-35.13	88	178	H
3.117	40.07	Pk	33.2	-31.7	41.57	-	-	74	-32.43	170	228	H
3.121	26.8	Av	33.1	-31.7	28.2	54	-25.8	-	-	170	228	H
4.707	40.55	Pk	34.2	-31.3	43.45	-	-	74	-30.55	238	185	V
4.707	27.94	Av	34.2	-31.3	30.84	54	-23.16	-	-	238	185	V
6.954	38.14	Pk	35.8	-29.4	44.54	-	-	74	-29.46	306	158	V
6.955	25.67	Av	35.8	-29.4	32.07	54	-21.93	-	-	306	158	V
9.672	34.9	Pk	36.9	-26.1	45.7	-	-	74	-28.3	279	190	V
9.673	22.8	Av	36.9	-26.1	33.6	54	-20.4	-	-	279	190	V

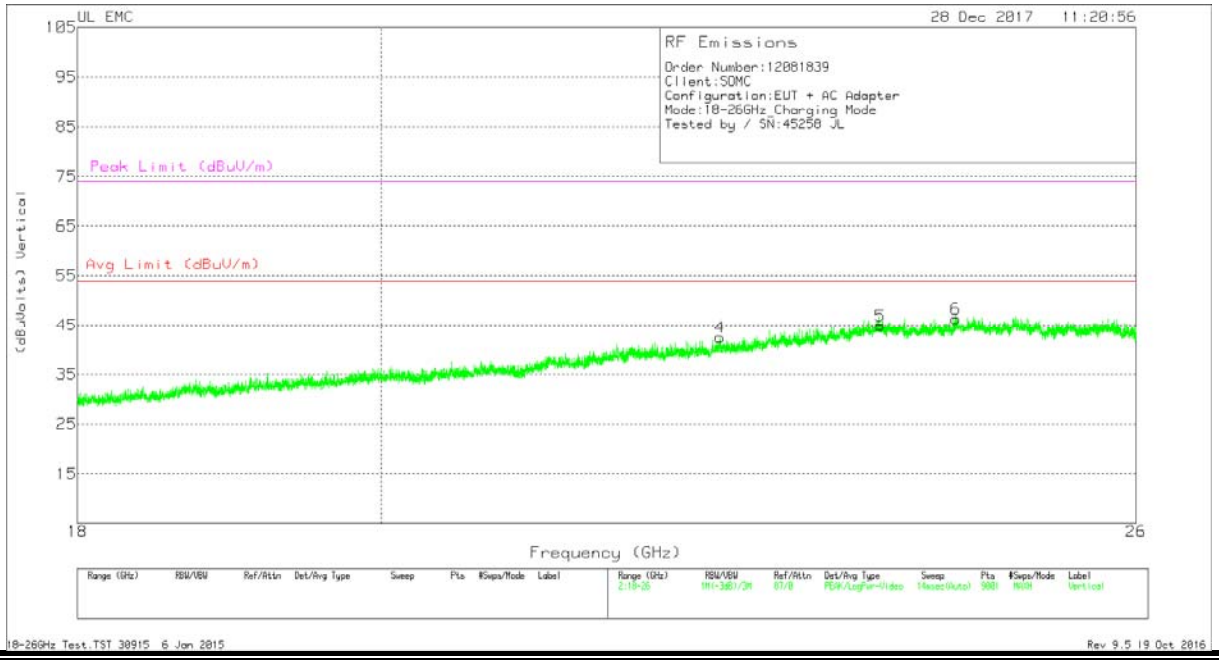
Pk - Peak detector
Av - Average detection

6.2.7. RADIATED EMISSIONS 18 to 26 GHz (CHARGING MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

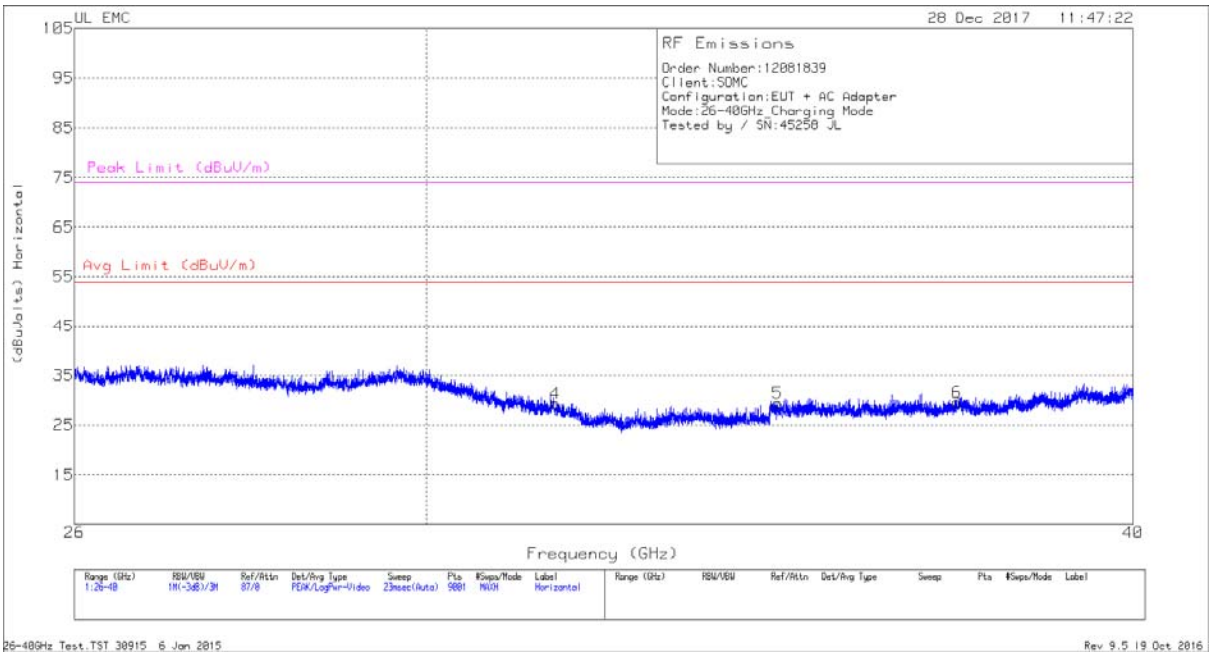
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T89 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	18.761	33.86	Pk	32.5	-24.7	-9.5	32.16	54	-21.84	74	-41.84
2	19.989	36.93	Pk	33	-25.1	-9.5	35.33	54	-18.67	74	-38.67
3	21.208	38.54	Pk	33.1	-24.7	-9.5	37.44	54	-16.56	74	-36.56
4	22.5	43.35	Pk	33.4	-24.8	-9.5	42.45	54	-11.55	74	-31.55
5	23.789	44.92	Pk	33.7	-24.2	-9.5	44.92	54	-9.08	74	-29.08
6	24.421	46.12	Pk	33.8	-24.1	-9.5	46.32	54	-7.68	74	-27.68

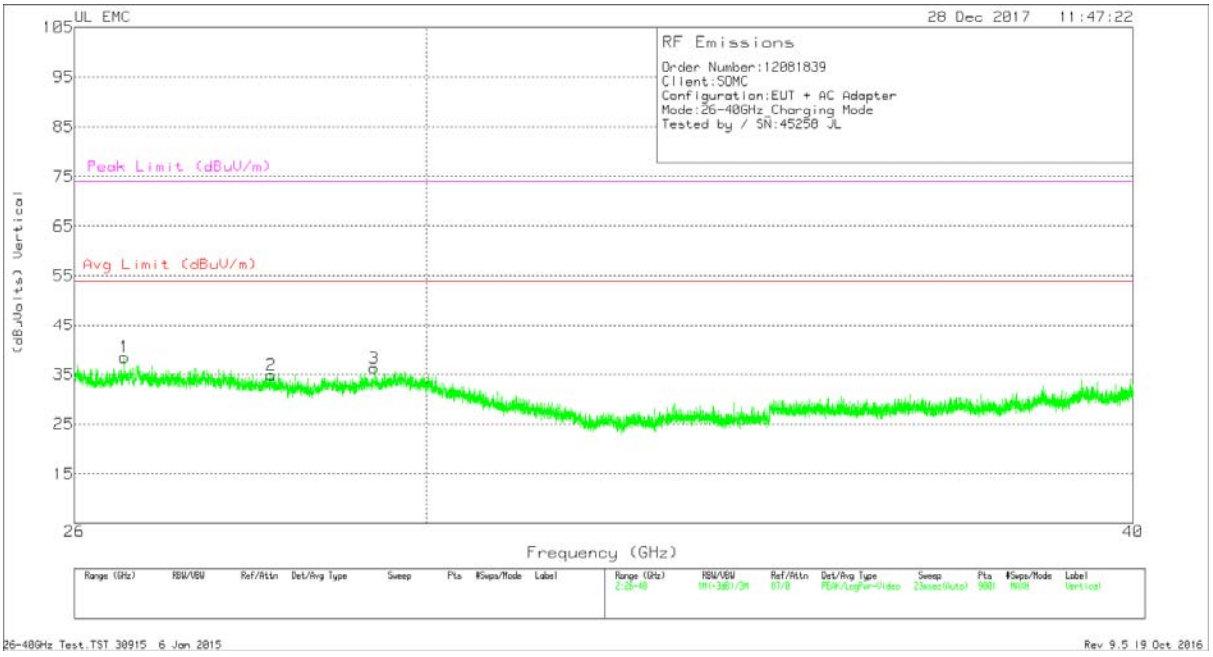
Pk - Peak detector

6.2.8. RADIATED EMISSIONS 26 to 40 GHz (CHARGING MODE)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
4	31.62	35.52	Pk	36.3	-33	-9.5	29.32	54	-24.68	74	-44.68
5	34.613	34.61	Pk	37.3	-33	-9.5	29.41	54	-24.59	74	-44.59
6	37.233	34.74	Pk	37.3	-33	-9.5	29.54	54	-24.46	74	-44.46
1	26.532	42.77	Pk	35.5	-30.3	-9.5	38.47	54	-15.53	74	-35.53
2	28.167	40.34	Pk	35.9	-31.9	-9.5	34.84	54	-19.16	74	-39.16
3	29.371	42.26	Pk	35.9	-32.4	-9.5	36.26	54	-17.74	74	-37.74

Pk - Peak detector

6.3. AC MAINS LINE CONDUCTED EMISSIONS

TEST PROCEDURE

ANSI C63.4: 2014

LIMIT

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

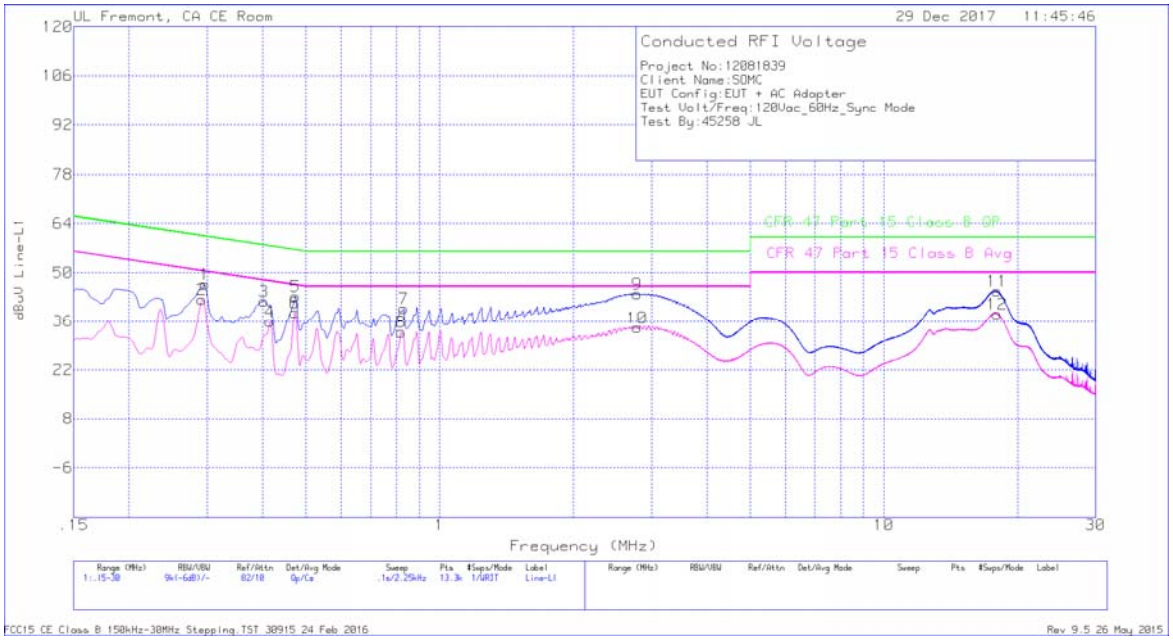
Frequency range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50
Notes: 1. The lower limit shall apply at the transition frequencies 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz		

6.3.1. RESULTS- SYNC MODE

6 WORST EMISSIONS

Line-L1 .15 - 30MHz

LINE-L1 PLOT



Trace Markers

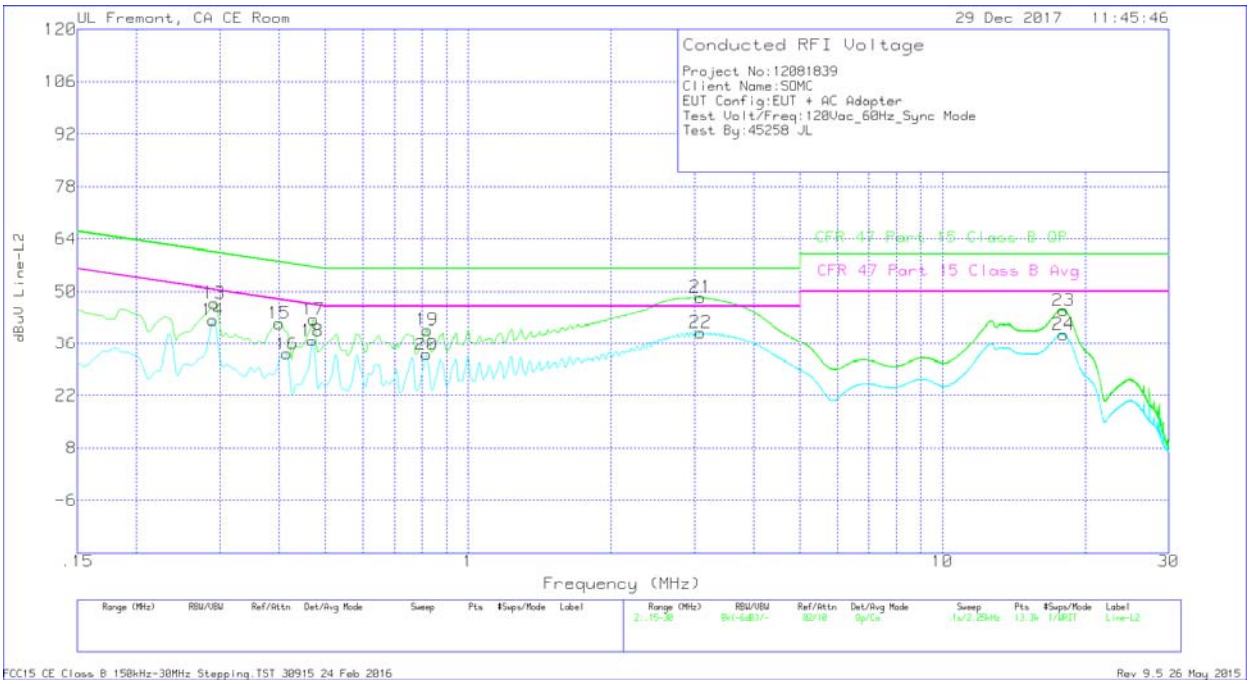
Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
1	.29625	36.6	Qp	0	0	10.1	46.7	60.35	-13.65	-	-
2	.29175	32.19	Ca	0	0	10.1	42.29	-	-	50.47	-8.18
3	.402	31.71	Qp	0	0	10.1	41.81	57.81	-16	-	-
4	.4155	25.79	Ca	0	0	10.1	35.89	-	-	47.54	-11.65
5	.474	33.18	Qp	0	0	10.1	43.28	56.44	-13.16	-	-
6	.47175	28.5	Ca	0	0	10.1	38.6	-	-	46.48	-7.88
7	.8295	29.59	Qp	0	0	10.1	39.69	56	-16.31	-	-
8	.8205	22.78	Ca	0	0	10.1	32.88	-	-	46	-13.12
9	2.78475	33.67	Qp	0	.1	10.1	43.87	56	-12.13	-	-
10	2.7825	23.91	Ca	0	.1	10.1	34.11	-	-	46	-11.89
11	17.99925	34.13	Qp	0	.3	10.3	44.73	60	-15.27	-	-
12	17.99925	27.63	Ca	0	.3	10.3	38.23	-	-	50	-11.77

Qp - Quasi-Peak detector

Ca - CISPR average detection

Line-L2 .15 - 30MHz

LINE-L2 PLOT



Trace Markers

Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.29175	36.72	Qp	0	0	10.1	46.82	60.47	-13.65	-	-
14	.2895	32.19	Ca	0	0	10.1	42.29	-	-	50.54	-8.25
15	.39975	31.36	Qp	0	0	10.1	41.46	57.86	-16.4	-	-
16	.4155	23.11	Ca	0	0	10.1	33.21	-	-	47.54	-14.33
17	.47175	32.37	Qp	0	0	10.1	42.47	56.48	-14.01	-	-
18	.4695	26.7	Ca	0	0	10.1	36.8	-	-	46.52	-9.72
19	.8205	29.6	Qp	0	0	10.1	39.7	56	-16.3	-	-
20	.81825	22.88	Ca	0	0	10.1	32.98	-	-	46	-13.02
21	3.08963	38.3	Qp	0	.1	10.1	48.5	56	-7.5	-	-
22	3.0885	28.9	Ca	0	.1	10.1	39.1	-	-	46	-6.9
23	18.006	34.39	Qp	0	.3	10.3	44.99	60	-15.01	-	-
24	17.98688	27.93	Ca	0	.3	10.3	38.53	-	-	50	-11.47

Qp - Quasi-Peak detector

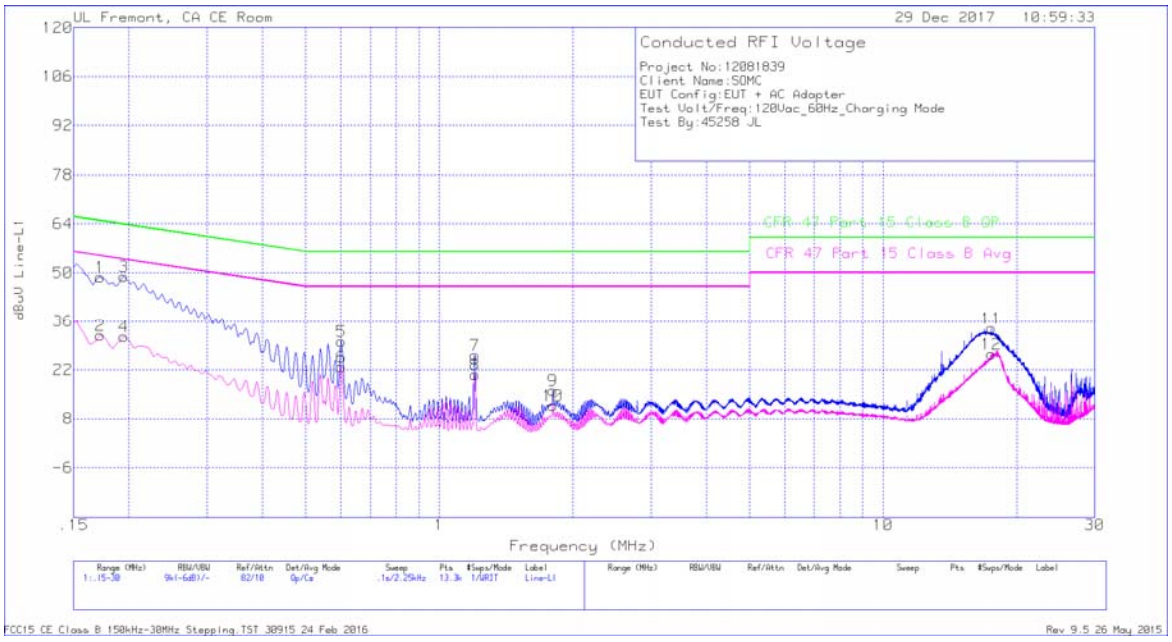
Ca - CISPR average detection

6.3.2. RESULTS- CHARGING MODE

6 WORST EMISSIONS

Line-L1 .15 - 30MHz

LINE-L1 PLOT



Trace Markers

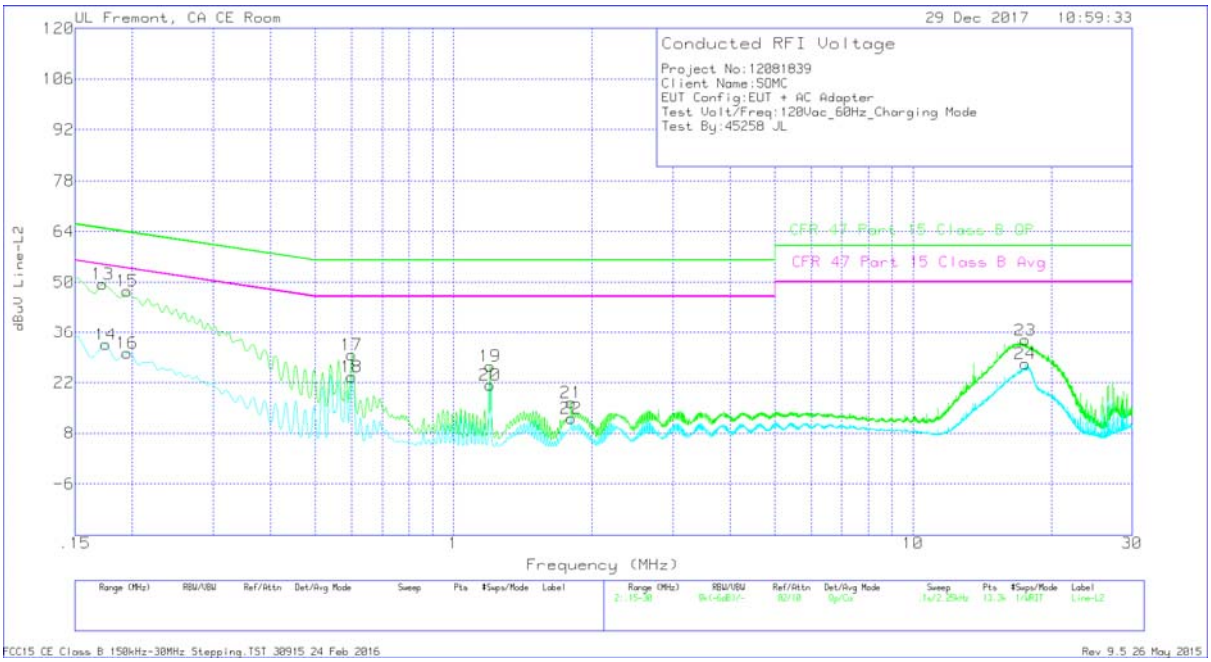
Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.1725	38.73	Qp	0	0	10.1	48.83	64.84	-16.01	-	-
2	.1725	21.86	Ca	0	0	10.1	31.96	-	-	54.84	-22.88
3	.195	38.81	Qp	0	0	10.1	48.91	63.82	-14.91	-	-
4	.195	21.42	Ca	0	0	10.1	31.52	-	-	53.82	-22.3
5	.60225	20.11	Qp	0	0	10.1	30.21	56	-25.79	-	-
6	.60225	12.72	Ca	0	0	10.1	22.82	-	-	46	-23.18
7	1.203	15.95	Qp	0	.1	10.1	26.15	56	-29.85	-	-
8	1.203	10.36	Ca	0	.1	10.1	20.56	-	-	46	-25.44
9	1.80375	5.86	Qp	0	.1	10.1	16.06	56	-39.94	-	-
10	1.80375	1.62	Ca	0	.1	10.1	11.82	-	-	46	-34.18
11	17.538	23.42	Qp	0	.3	10.3	34.02	60	-25.98	-	-
12	17.547	15.99	Ca	0	.3	10.3	26.59	-	-	50	-23.41

Qp - Quasi-Peak detector

Ca - CISPR average detection

Line-L2 .15 - 30MHz

LINE-L2 PLOT



Trace Markers

Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.1725	39.35	Qp	0	0	10.1	49.45	64.84	-15.39	-	-
14	.17475	22.52	Ca	0	0	10.1	32.62	-	-	54.73	-22.11
15	.195	37.43	Qp	0	0	10.1	47.53	63.82	-16.29	-	-
16	.195	20.15	Ca	0	0	10.1	30.25	-	-	53.82	-23.57
17	.6	19.55	Qp	0	0	10.1	29.65	56	-26.35	-	-
18	.6	13.41	Ca	0	0	10.1	23.51	-	-	46	-22.49
19	1.20075	16.41	Qp	0	.1	10.1	26.61	56	-29.39	-	-
20	1.20075	11.19	Ca	0	.1	10.1	21.39	-	-	46	-24.61
21	1.8015	6.28	Qp	0	.1	10.1	16.48	56	-39.52	-	-
22	1.8015	1.96	Ca	0	.1	10.1	12.16	-	-	46	-33.84
23	17.538	23.28	Qp	0	.3	10.3	33.88	60	-26.12	-	-
24	17.538	16.64	Ca	0	.3	10.3	27.24	-	-	50	-22.76

Qp - Quasi-Peak detector

Ca - CISPR average detection