



CERTIFICATION TEST REPORT

Report Number. : 11626381H-E8V2

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

FCC ID : PY7-54254H

EUT Description : GSM/WCDMA/LTE Phone with BT,DTS/UNII a/b/g/n/ac, GPS & NFC

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

Date Of Issue:

April 07, 2017

Prepared by:

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NVLAP LAB CODE 200065-0

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	03/24/2017	Initial Issue	C. Vergonio
V2	04/07/2017	Updated setup photos in Section 7.	C. Vergonio

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SONY MOBILE COMMUNICATIONS, INC.
EUT DESCRIPTION: GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, GPS & NFC.
SERIAL NUMBER: CB512DQZYE
DATE TESTED: March 23, 2017

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

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.

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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
<input type="checkbox"/> Chamber A	<input type="checkbox"/> Chamber D
<input checked="" type="checkbox"/> Chamber B	<input type="checkbox"/> Chamber E
<input type="checkbox"/> Chamber C	<input type="checkbox"/> Chamber F
	<input type="checkbox"/> Chamber G
	<input type="checkbox"/> Chamber H

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.

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:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

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

Parameter	Uncertainty
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.32 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.45 dB
Worst Case 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, GPS & NFC.

GENERAL INFORMATION

Highest frequency generated or used by the EUT	5GHz
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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 software version installed in the EUT during testing was 0.274.

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
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

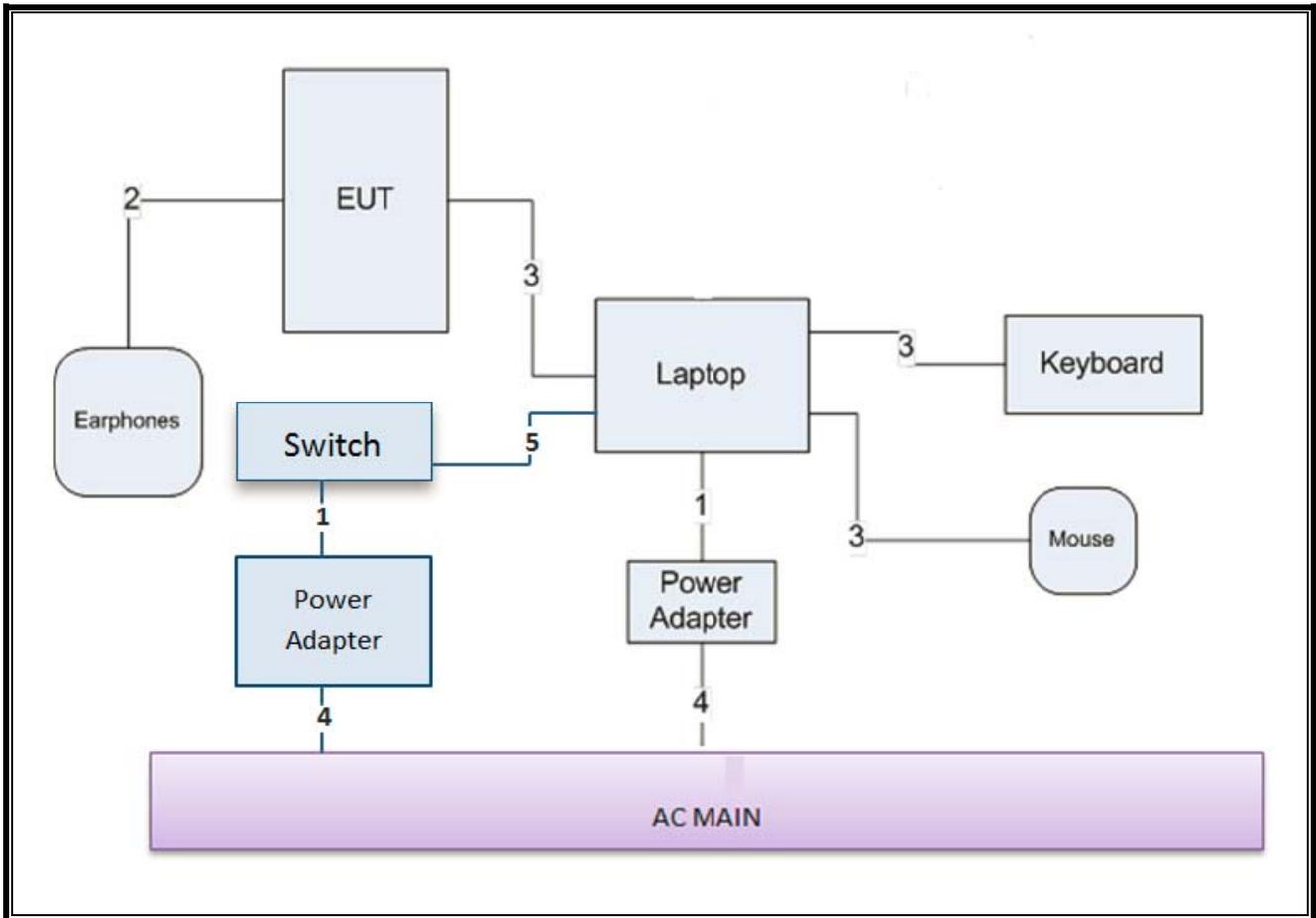
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	2	Power	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1m	N/A
3	USB	1	Mini-USB	Shielded	0.9 m	UCB16 cable from EUT to Laptop
3	USB	2	USB	Shielded	2m	From laptop to keyboard & mouse
4	AC Power	2	IEC	Unshielded	1m	N/A
5	Ethernet	1	RJ45	Unshielded	2m	N/A

TEST SETUP

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

SETUP DIAGRAM



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	02/15/17	02/15/18
Amplifier, 1 to 8 GHz	Miteq	AMF-4D-01000800-30-29P	1156	02/15/17	02/15/18
Amplifier, 10KHz to 1GHz, 32dB	Keysight	8447D	10	02/15/17	02/15/18
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	477	06/22/16	06/22/17
LISN	FISCHER	FCC-LISN-50/250-25-2-01	T1310	06/08/16	06/08/17
Amplifier, 1 to 8 GHz	Miteq	AMF-4D-01000800-30-29P	1170	04/28/16	04/28/17
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	907	01/23/17	01/23/18
EMI Reciever	Rohde & Schwarz	ESR-EMI	1436	01/06/17	01/06/18
LISN	FISCHER	FCC-LISN-50/250-25-2-01	1310	06/08/16	06/08/17
18 - 26.5 GHz Horn Antenna	Seavey Division	MWH-1826/B	449	05/26/16	5/26/2017
26.5 - 40 GHz Horn Antenna	ARA	MWH-2640/B	446	05/25/16	5/25/2017
Pre-Amp 1-26.5 GHz	Agilent	8449B	404	07/05/16	07/05/17
Pre-Amp, 26-40GHz	MITEQ	NSP4000-SP2	88	04/07/16	4/7/2017
Spectrum Analyzer	Agilent	8564E	106	09/07/16	09/07/17

Test Software List			
Description	Manufacturer	Model	Version
Radiated Software	UL	UL EMC	Ver 9.5, Apr 26, 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

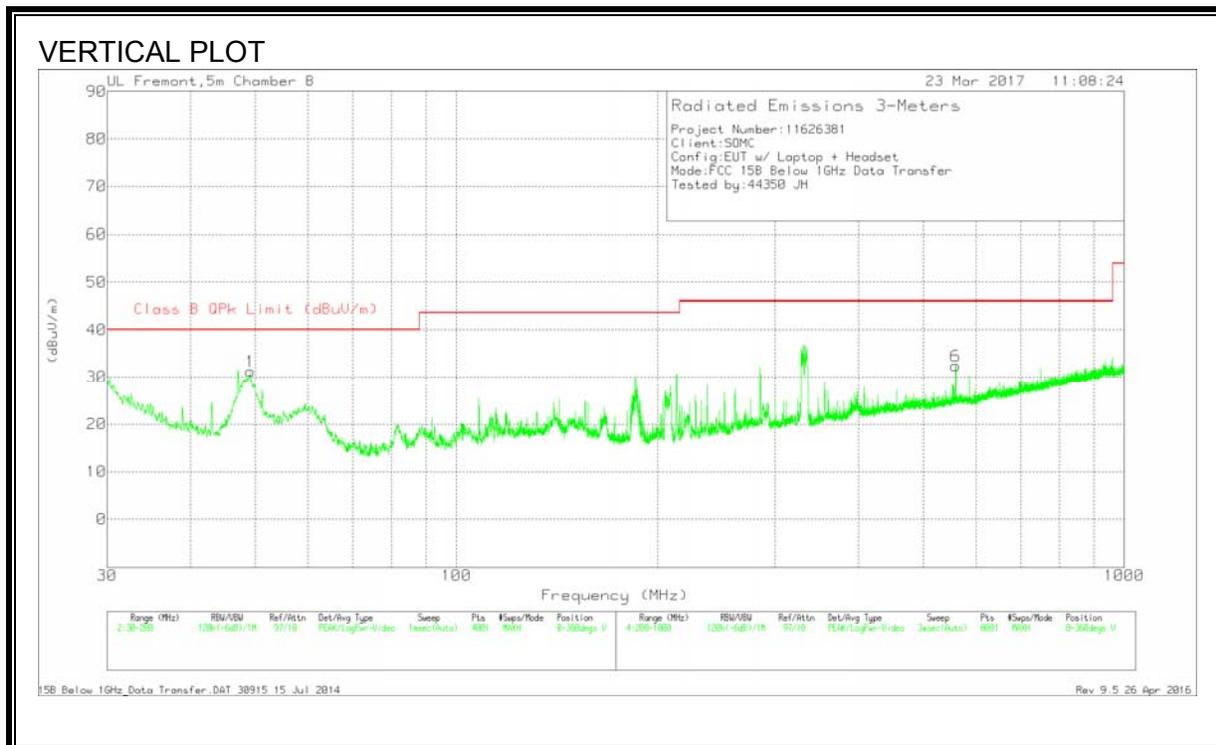
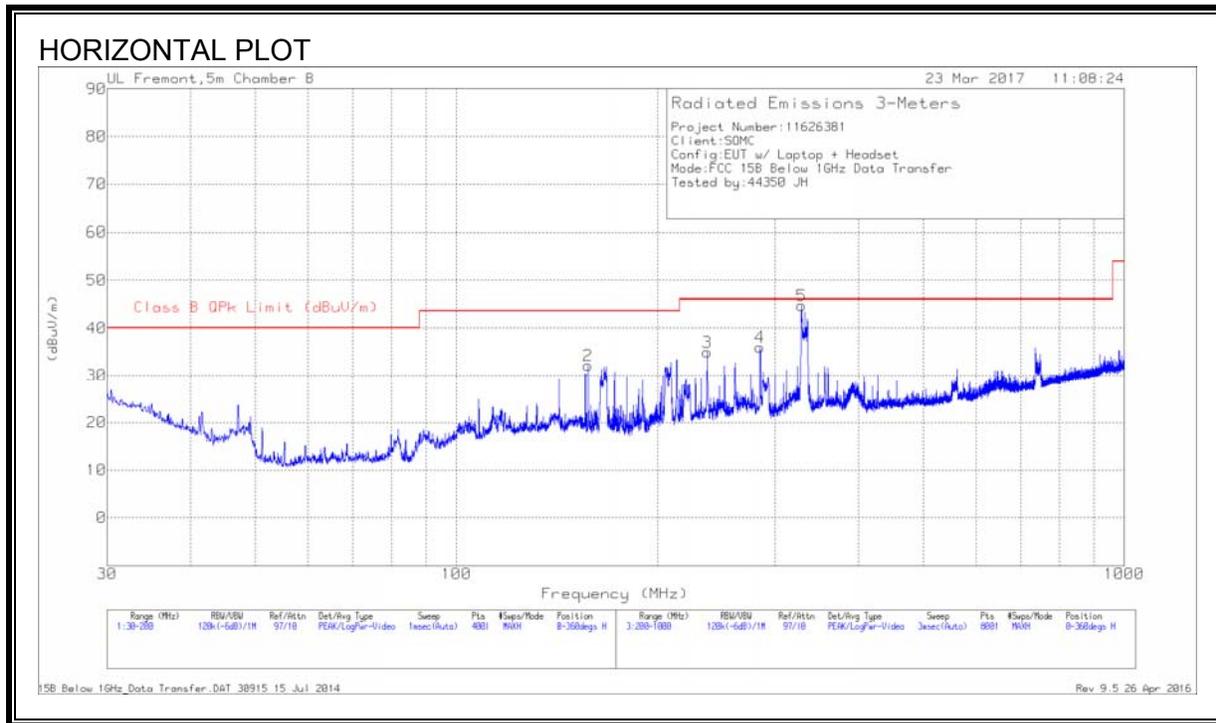
ANSI C63.4: 2014

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)



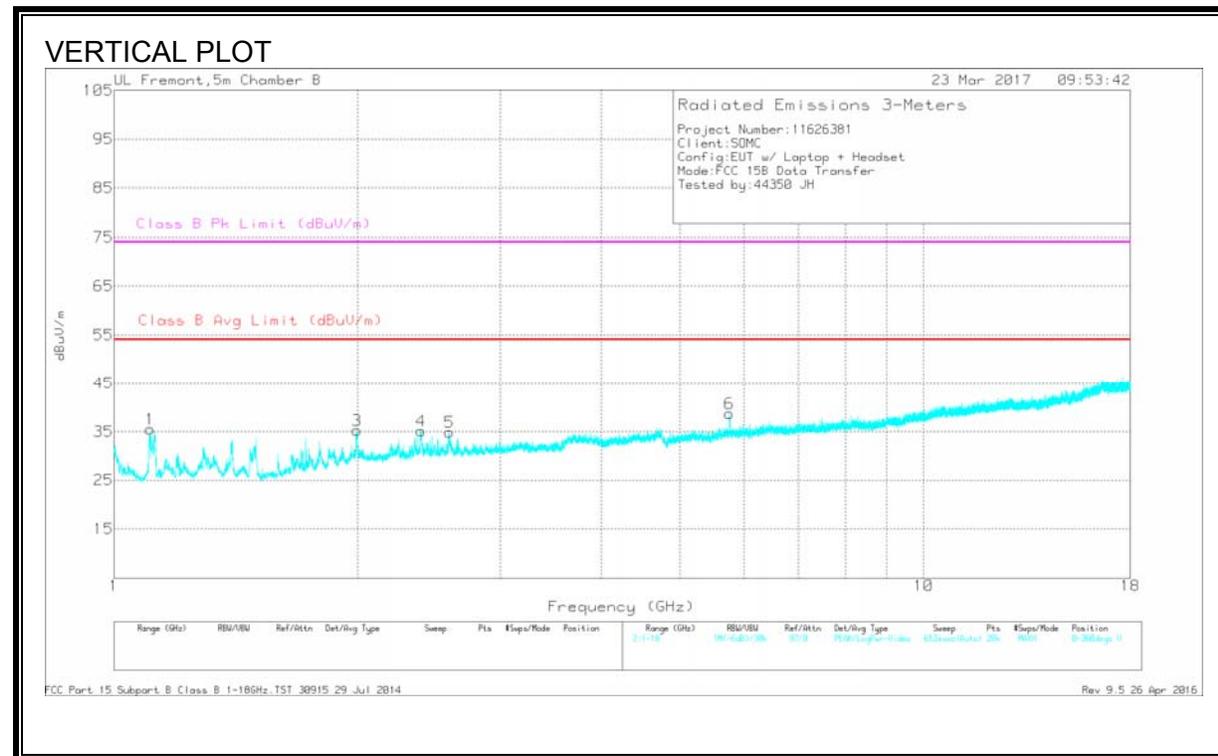
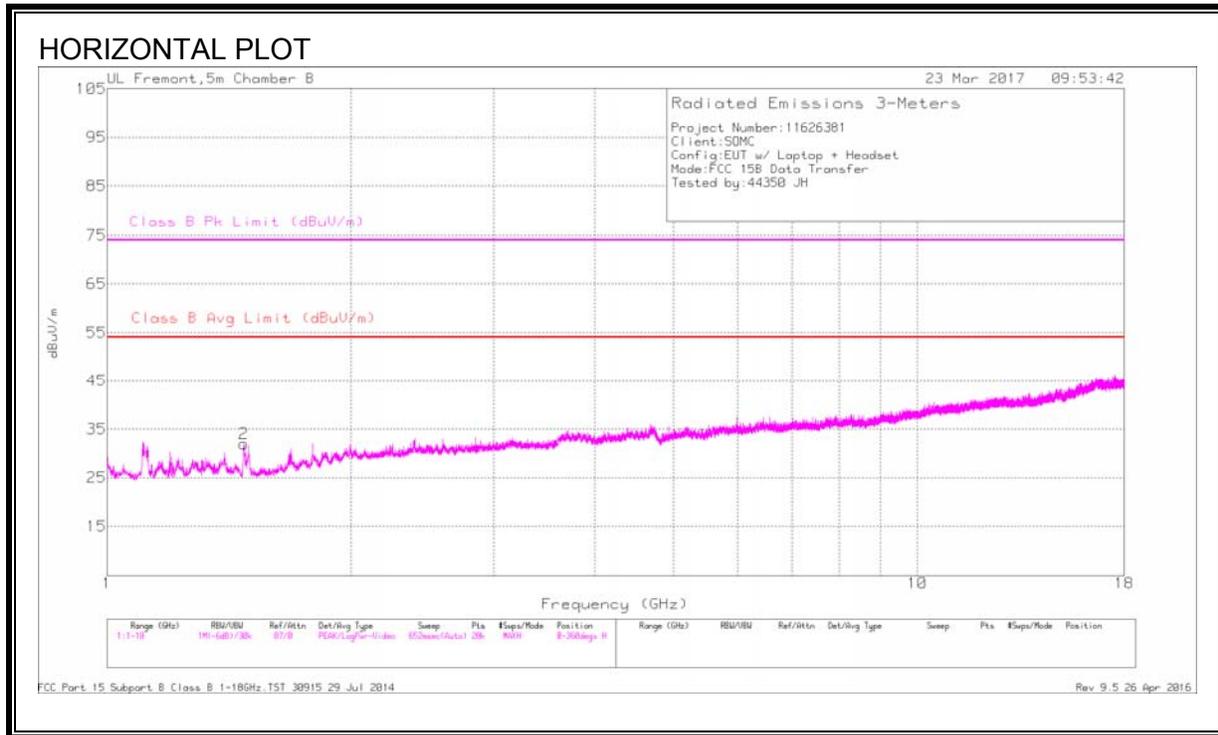
HORIZONTAL AND VERTICAL DATA

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
49.1531	40.95	Qp	12.3	-28.6	24.65	40	-15.35	46	105	V
157.5034	40.85	Qp	16.3	-27.3	29.85	43.52	-13.67	4	163	H
237.497	21.48	Qp	15.4	-26.4	10.48	46.02	-35.54	19	140	H
284.9549	40.18	Qp	17.2	-26	31.38	46.02	-14.64	355	147	H
328.9352	42.08	Qp	17.9	-25.8	34.18	46.02	-11.84	354	115	H
559.0363	20.98	Qp	22.4	-25.8	17.58	46.02	-28.44	46	284	V

Qp - Quasi-Peak detector

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



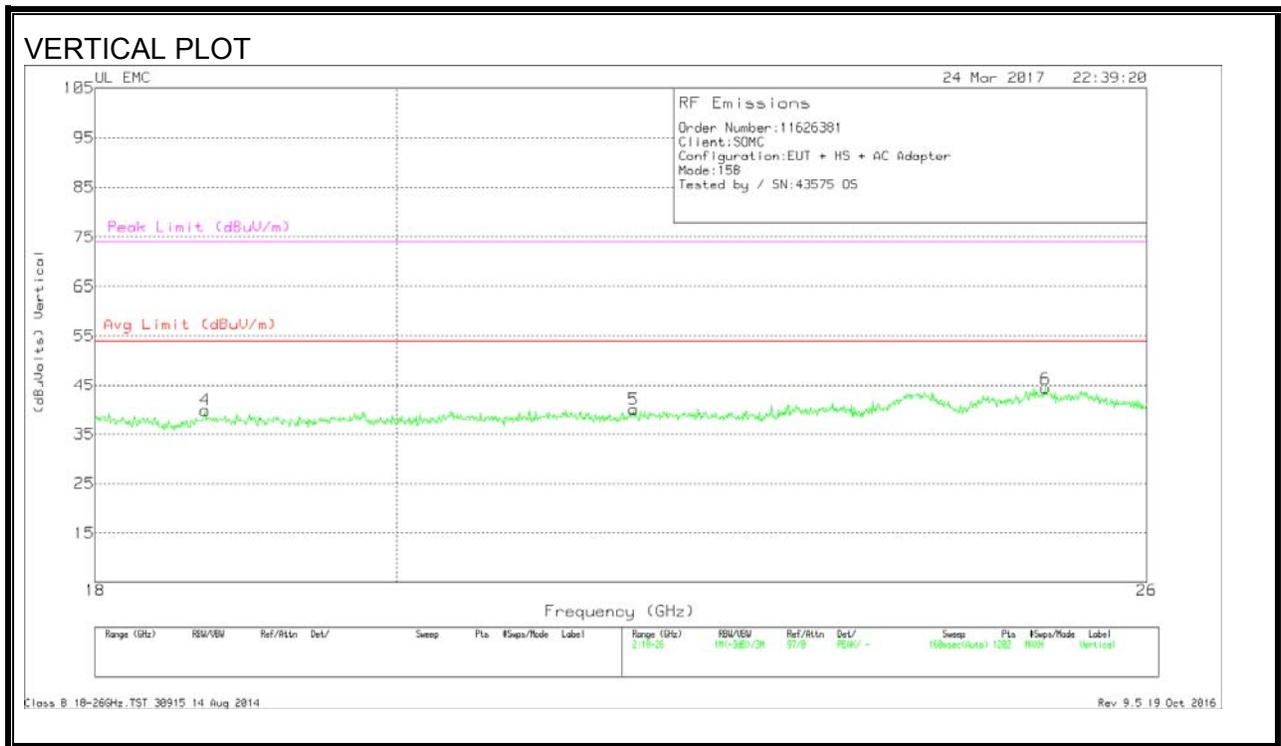
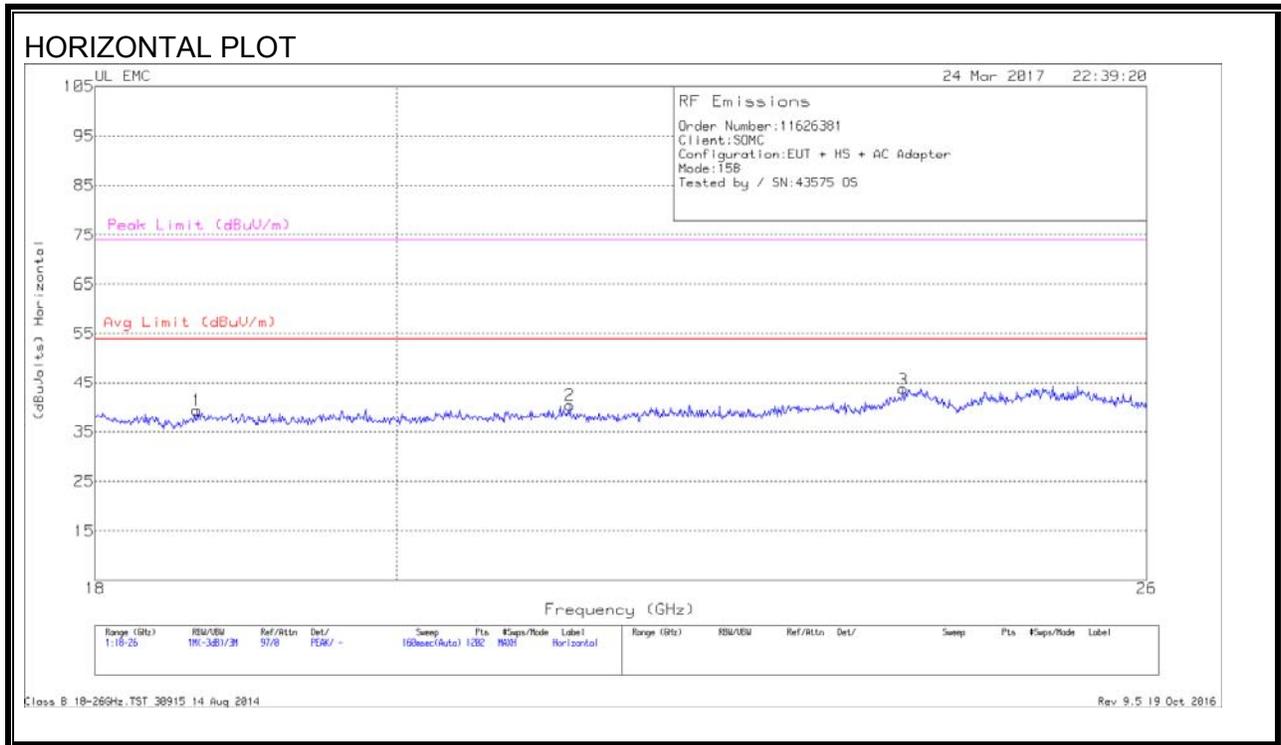
HORIZONTAL AND VERTICAL DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.109	49.11	Pk	28	-34.4	42.71	-	-	74	-31.29	179	332	V
1.109	29.96	Av	28	-34.4	23.56	54	-30.44	-	-	179	332	V
1.477	50.95	Pk	28	-33.7	45.25	-	-	74	-28.75	94	201	H
1.477	28.88	Av	28	-33.7	23.18	54	-30.82	-	-	94	201	H
1.994	27.01	Av	31.5	-32.9	25.61	54	-28.39	-	-	7	114	V
1.994	46.67	Pk	31.5	-32.9	45.27	-	-	74	-28.73	7	114	V
2.394	48.43	Pk	32.2	-32.3	48.33	-	-	74	-25.67	135	187	V
2.394	27	Av	32.2	-32.3	26.9	54	-27.1	-	-	135	187	V
2.595	47.37	Pk	32.2	-32	47.57	-	-	74	-26.43	128	100	V
2.595	27.15	Av	32.2	-32	27.35	54	-26.65	-	-	128	100	V
5.76	41.11	Pk	35	-29.4	46.71	-	-	74	-27.29	115	136	V
5.76	30.39	Av	35	-29.4	35.99	54	-18.01	-	-	115	136	V

Pk - Peak detector
 Av - Average detection

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

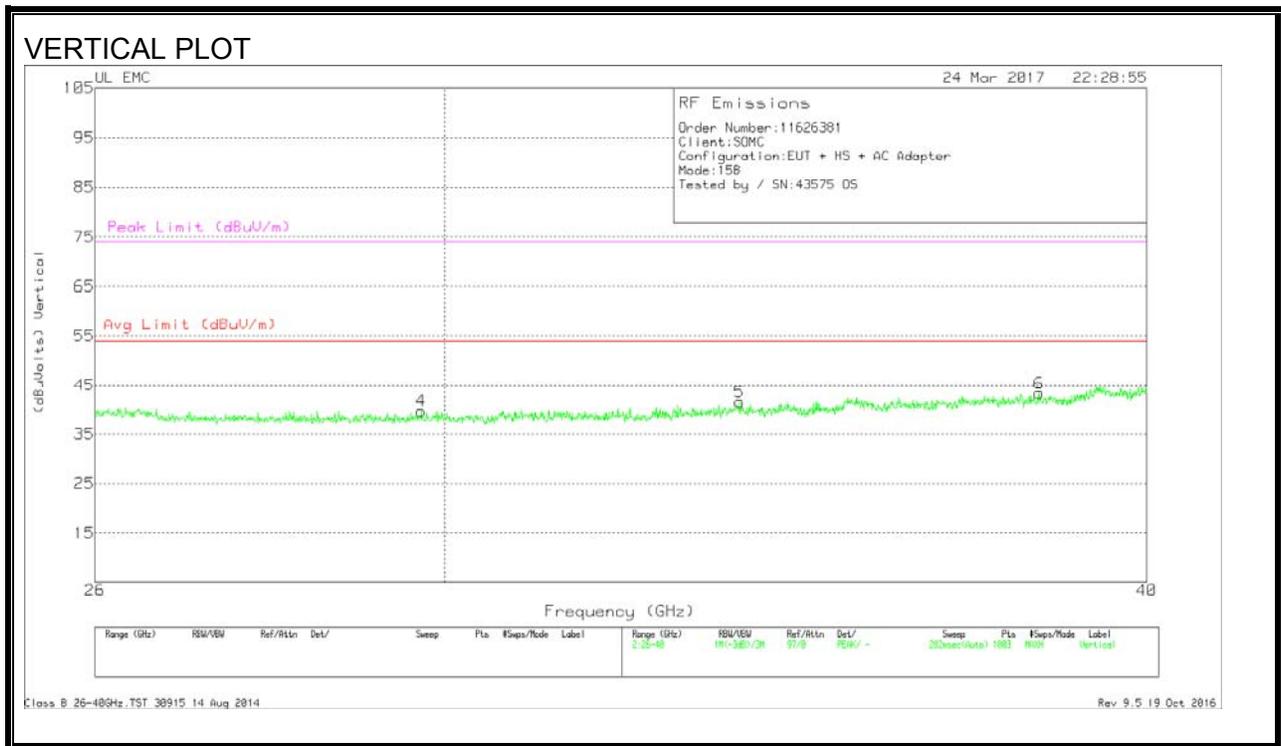
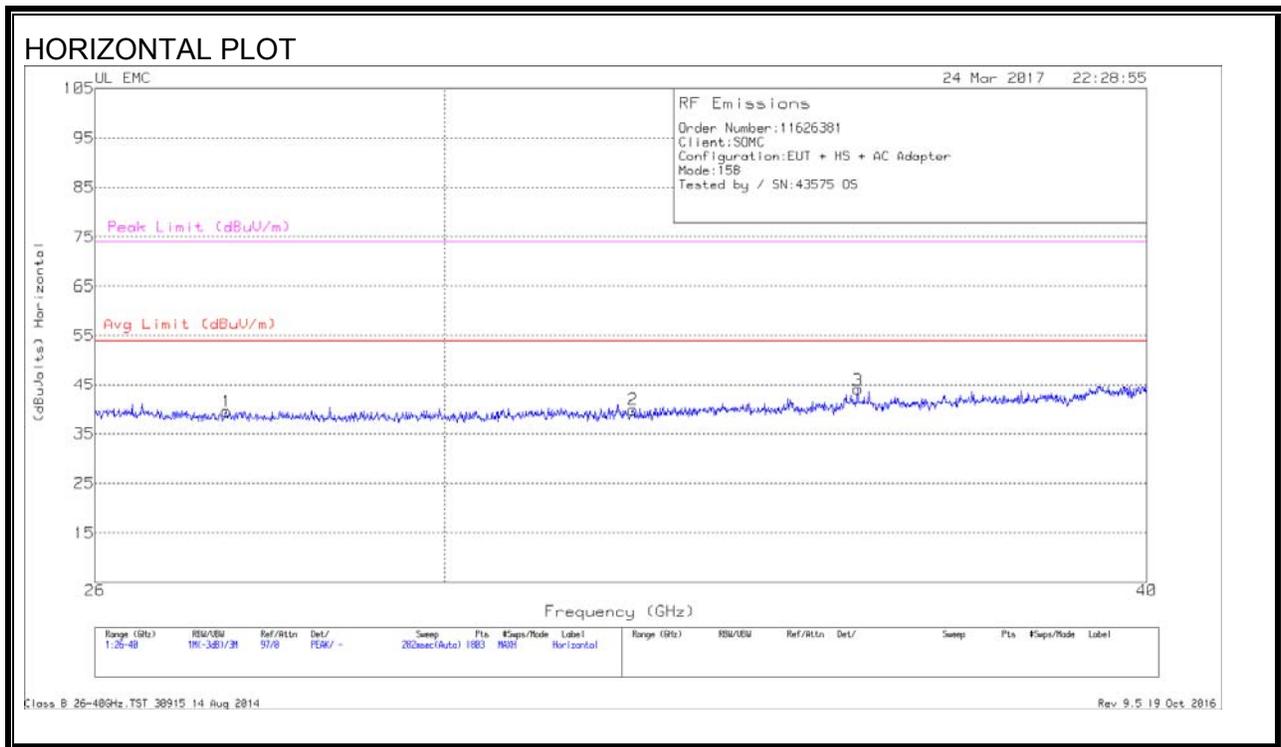


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T449 (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	18.653	41.23	Pk	32.5	-24.9	-9.5	39.3	54	-14.66	74	-34.66
2	21.251	42.13	Pk	33.1	-25.4	-9.5	40.33	54	-13.66	74	-33.66
3	23.875	43.37	Pk	33.9	-24.1	-9.5	43.66	54	-10.33	74	-30.33
4	18.706	41.33	Pk	32.4	-24.4	-9.5	39.83	54	-14.166	74	-34.166
5	21.73	41.1	Pk	33.2	-24.8	-9.5	40	54	-14	74	-34
6	25.094	44.03	Pk	34.3	-24.5	-9.5	44.33	54	-9.66	74	-29.66

Pk - Peak detector

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

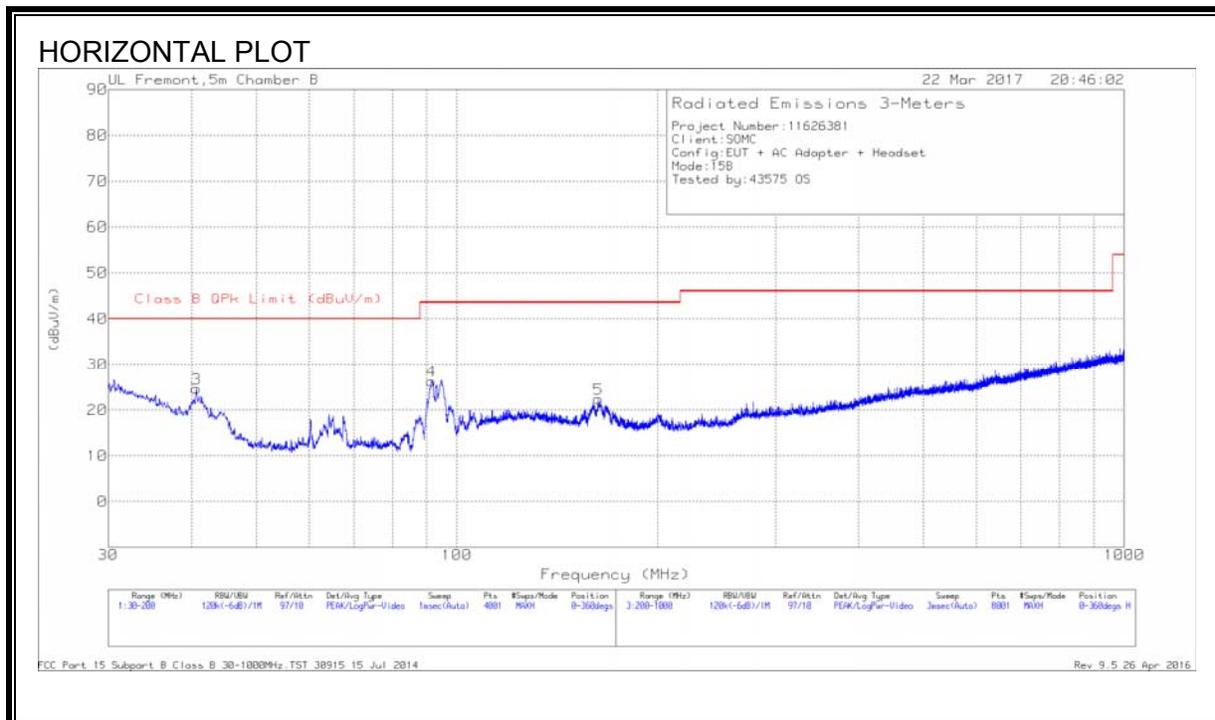
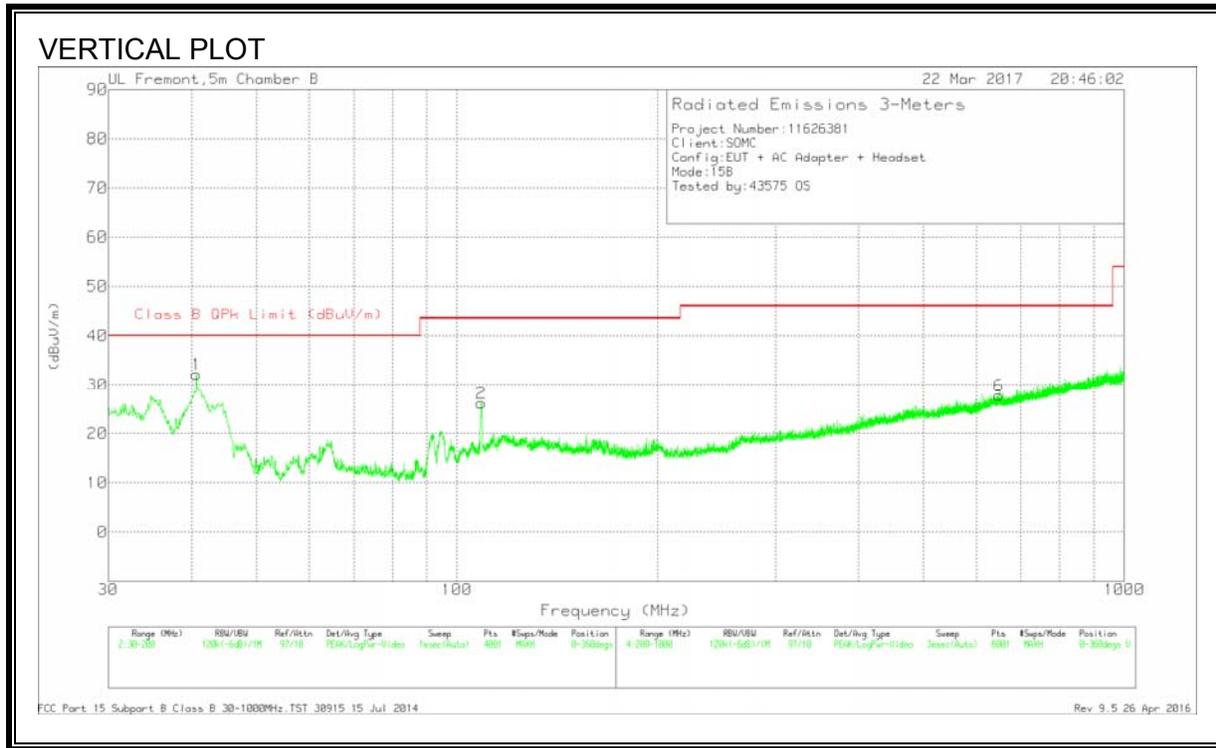


Trace Markers

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	27.437	45.1	Pk	35.7	-31.8	-9.5	39.5	54	-14.5	74	-34.5
2	32.41	46.53	Pk	36.3	-33.5	-9.5	39.83	54	-14.166	74	-34.166
3	35.533	49.4	Pk	37.8	-33.7	-9.5	44	54	-10	74	-30
4	29.714	45.87	Pk	36.1	-32.8	-9.5	39.66	54	-14.33	74	-34.33
5	33.855	47.8	Pk	36.9	-33.7	-9.5	41.5	54	-12.5	74	-32.5
6	38.275	48.93	Pk	37.1	-33.2	-9.5	43.33	54	-10.66	74	-30.66

Pk - Peak detector

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



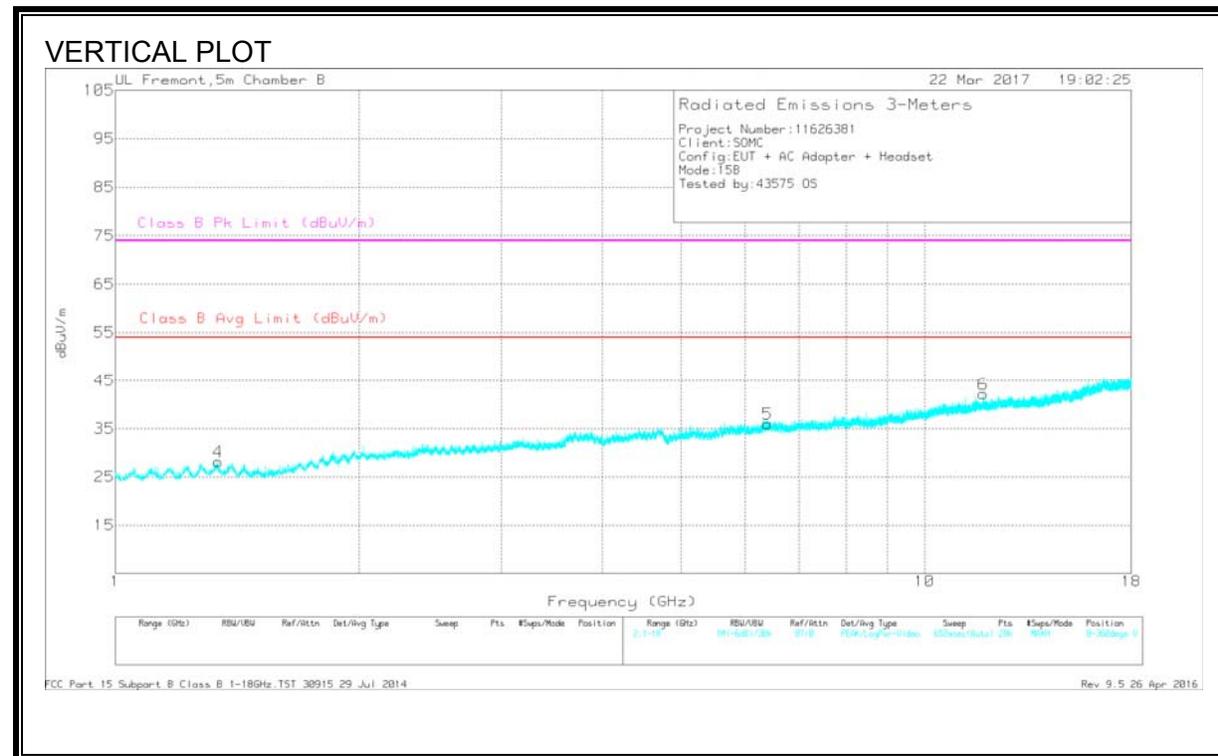
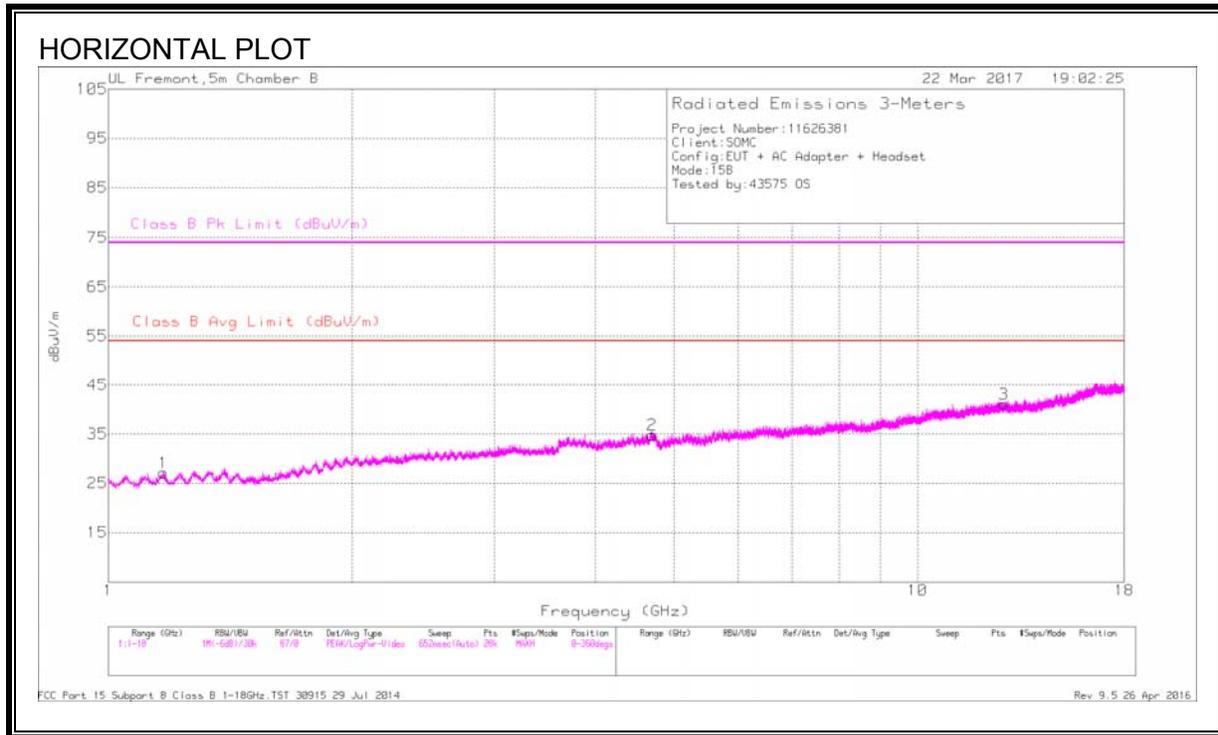
HORIZONTAL AND VERTICAL DATA

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
40.8542	28.49	Qp	17.4	-28.7	17.19	40	-22.81	127	290	H
40.8864	28.21	Qp	17.4	-28.7	16.91	40	-23.09	293	108	V
91.3163	35.75	Qp	11.8	-28	19.55	43.52	-23.97	137	191	H
108.8492	23.83	Qp	16.4	-27.8	12.43	43.52	-31.09	63	292	V
162.9395	28.13	Qp	16.1	-27.1	17.13	43.52	-26.39	165	146	H
649.4326	23.31	Qp	23.7	-25.3	21.71	46.02	-24.31	321	167	V

Qp - Quasi-Peak detector

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



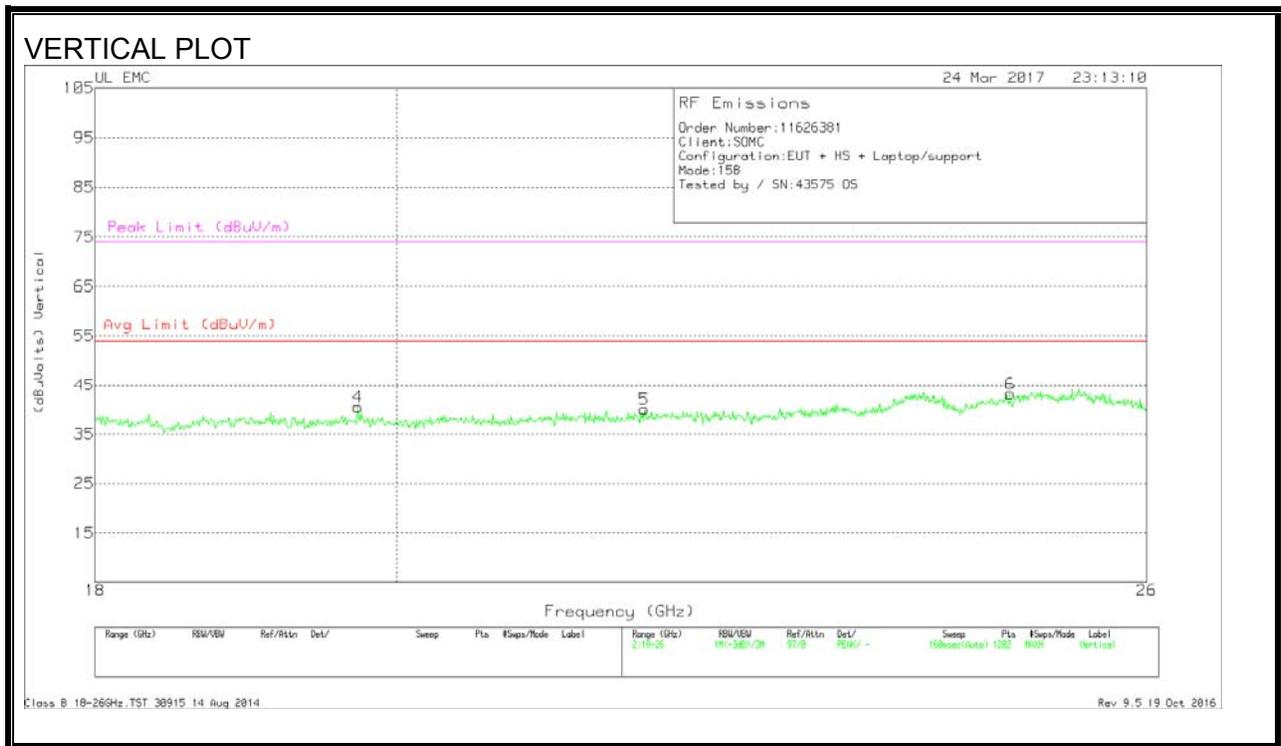
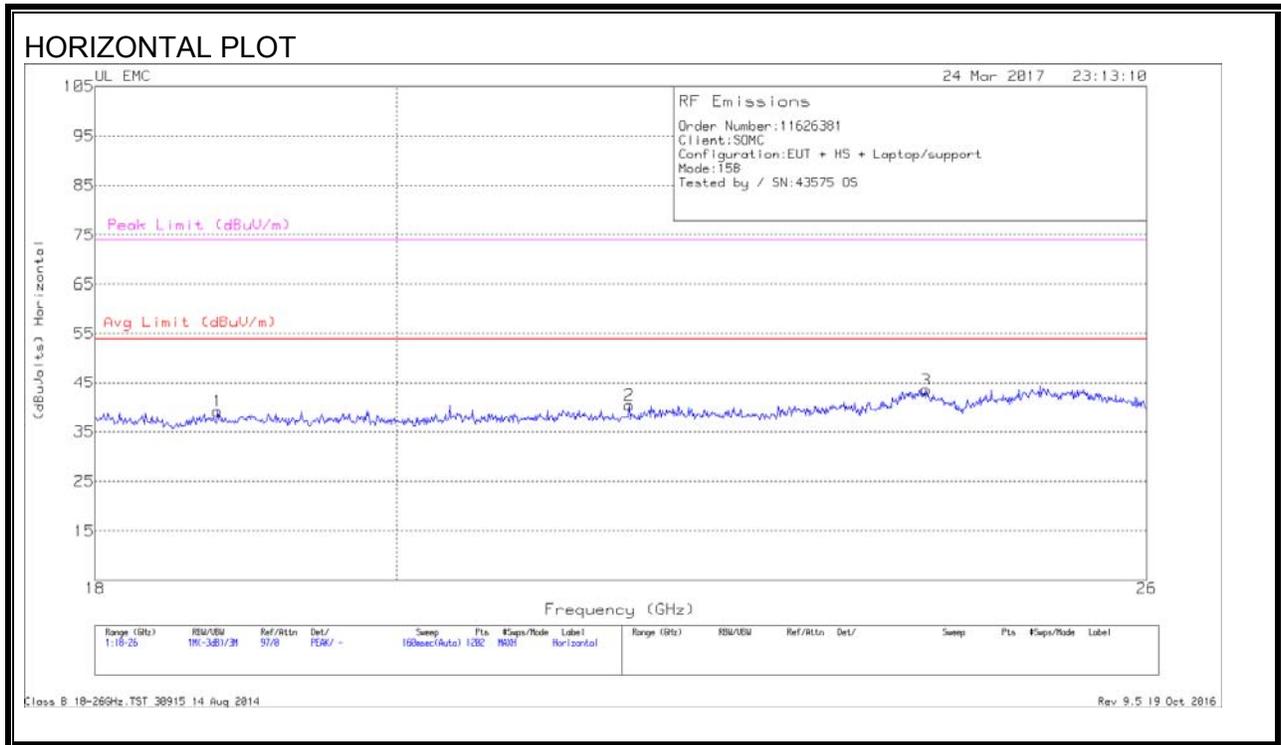
HORIZONTAL AND VERTICAL DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (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
1.168	41.74	Pk	28.2	-34.2	35.74	-	-	74	-38.26	360	353	H
1.168	28.57	Av	28.2	-34.2	22.57	-	-	-	-	360	353	H
1.339	41.35	Pk	28.9	-34	36.25	-	-	74	-37.75	140	124	V
1.339	28.04	Av	28.9	-34	22.94	-	-	-	-	140	124	V
4.697	39.2	Pk	34.1	-30.5	42.8	-	-	74	-31.2	300	303	H
4.697	26.67	Av	34.1	-30.5	30.27	-	-	-	-	300	303	H
6.401	37.24	Pk	35.6	-28.9	43.94	-	-	74	-30.06	253	110	V
6.401	24.77	Av	35.6	-28.9	31.47	-	-	-	-	253	110	V
11.813	32.67	Pk	38.7	-23.1	48.27	-	-	74	-25.73	119	316	V
11.813	20.37	Av	38.7	-23.1	35.97	-	-	-	-	119	316	V
12.774	32.72	Pk	39.4	-23.2	48.92	-	-	74	-25.08	293	168	H
12.774	20.26	Av	39.4	-23.2	36.46	-	-	-	-	293	168	H

Pk - Peak detector
 Av - Average detection

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

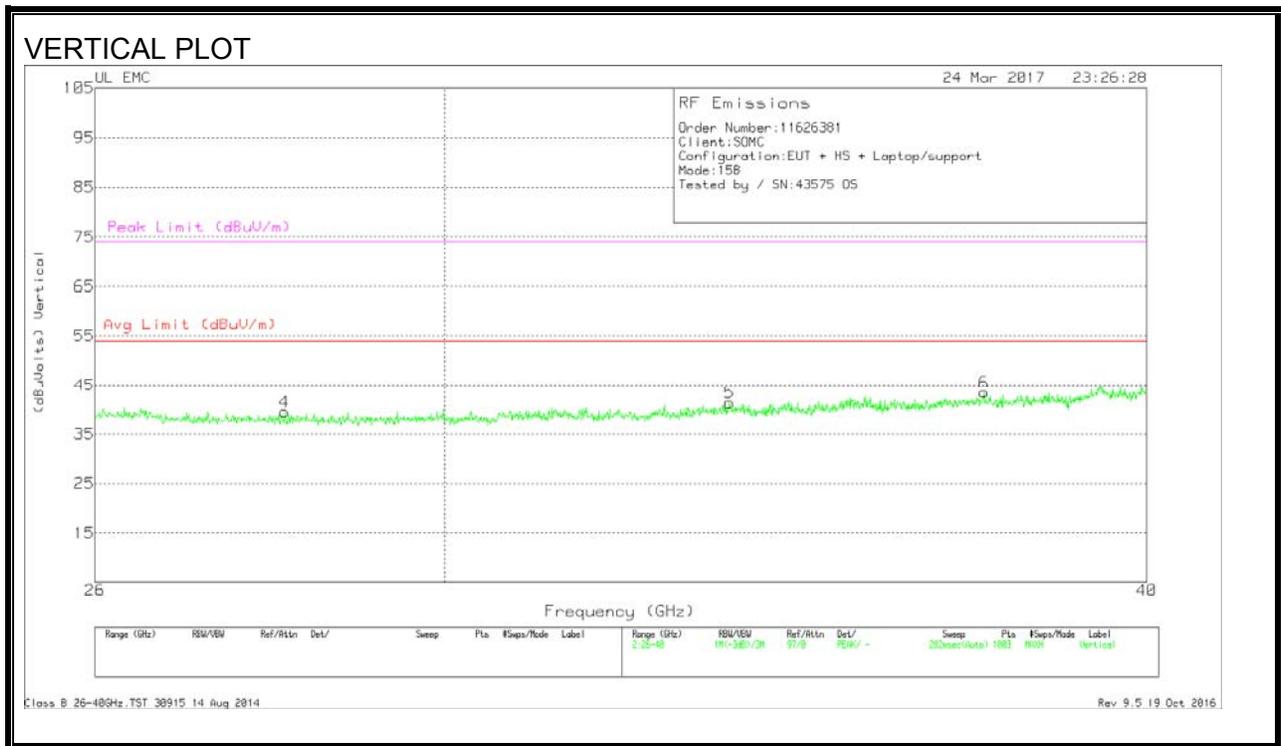
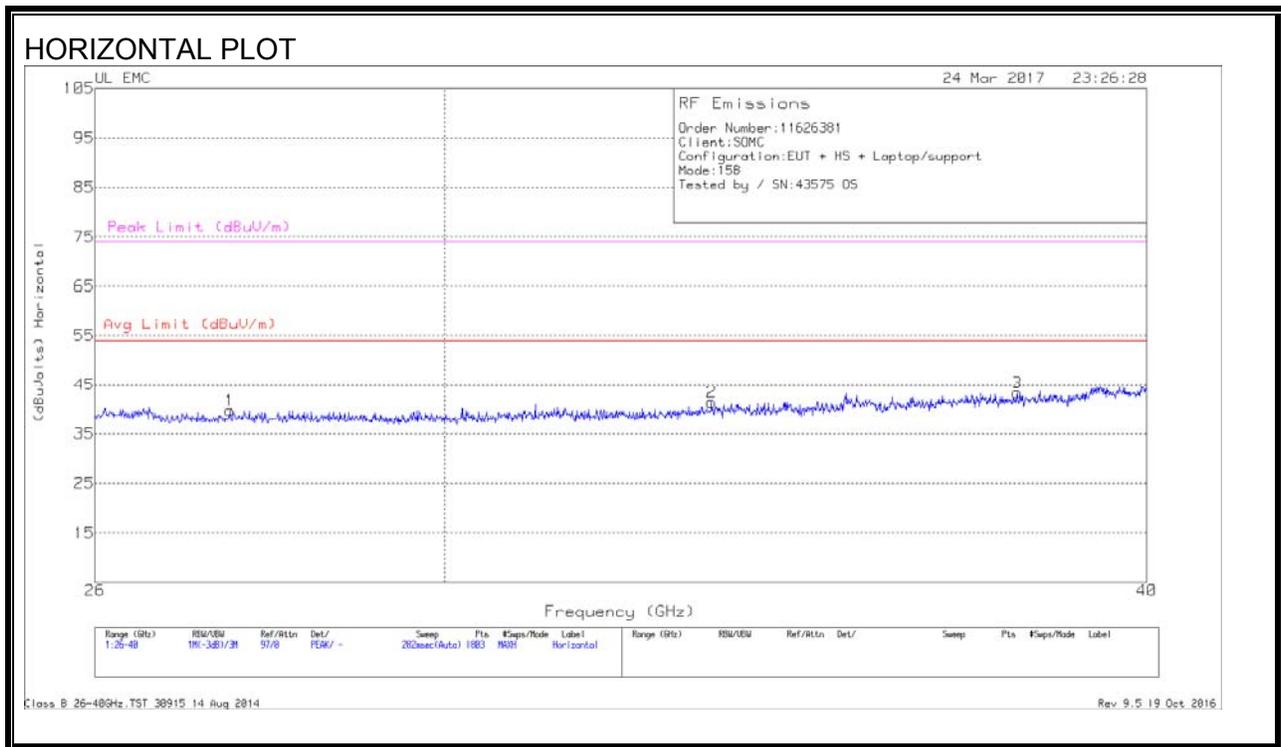


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T449 (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	18.786	41.27	Pk	32.4	-25	-9.5	39.16	54	-14.83	74	-34.83
2	21.697	41.23	Pk	33.2	-24.6	-9.5	40.33	54	-13.66	74	-33.66
3	24.068	43.5	Pk	34	-24.5	-9.5	43.5	54	-10.5	74	-30.5
4	19.732	42.2	Pk	32.7	-24.9	-9.5	40.5	54	-13.5	74	-33.5
5	21.81	40.6	Pk	33.3	-24.4	-9.5	40	54	-14	74	-34
6	24.788	42.97	Pk	34.2	-24.5	-9.5	43.16	54	-10.83	74	-30.83

Pk - Peak detector

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



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	27.476	45.27	Pk	35.7	-31.8	-9.5	39.66	54	-14.33	74	-34.33
2	33.466	47.03	Pk	37.1	-33.3	-9.5	41.33	54	-12.66	74	-32.66
3	37.933	49.33	Pk	37.2	-33.7	-9.5	43.33	54	-10.66	74	-30.66
4	28.098	45.3	Pk	35.8	-32.1	-9.5	39.5	54	-14.5	74	-34.5
5	33.715	47.43	Pk	36.9	-33.5	-9.5	41.33	54	-12.66	74	-32.66
6	37.421	49.9	Pk	37.3	-34.2	-9.5	43.5	54	-10.5	74	-30.5

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 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

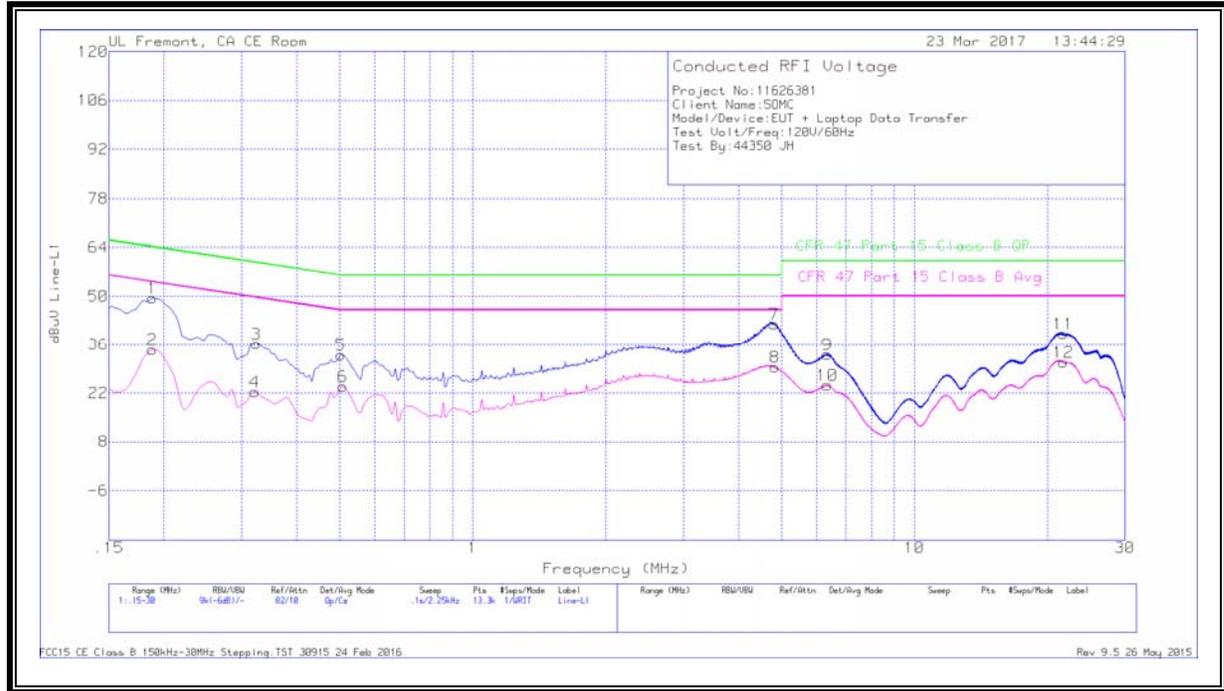
Notes:
1. The lower limit shall apply at the transition frequencies
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

6.3.1. RESULTS- SYNC MODE

6 WORST EMISSIONS

Line-L1 .15 - 30MHz

PLOT



DATA

Trace Markers

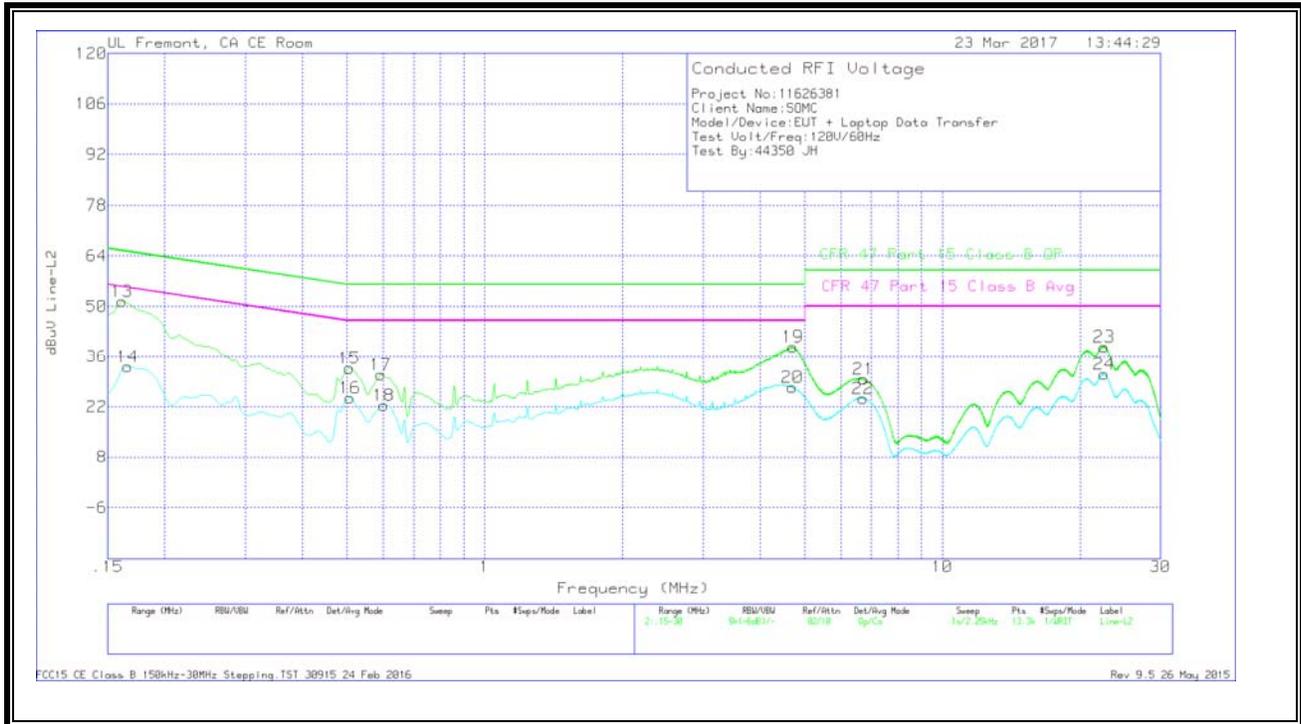
Range 1: Line-L1 .15 - 30MHz

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	.18825	39.24	Qp	0	.1	10.1	49.44	64.11	-14.67	-	-
2	.18825	24.41	Ca	0	.1	10.1	34.61	-	-	54.11	-19.5
3	.32325	26.03	Qp	0	.1	10.1	36.23	59.62	-23.39	-	-
4	.321	12.1	Ca	0	.1	10.1	22.3	-	-	49.68	-27.38
5	.50325	22.85	Qp	0	.1	10.1	33.05	56	-22.95	-	-
6	.50775	13.71	Ca	0	.1	10.1	23.91	-	-	46	-22.09
7	4.812	31.88	Qp	0	.1	10.1	42.08	56	-13.92	-	-
8	4.83	19.24	Ca	0	.1	10.1	29.44	-	-	46	-16.56
9	6.34988	22.85	Qp	0	.1	10.2	33.15	60	-26.85	-	-
10	6.34988	13.91	Ca	0	.1	10.2	24.21	-	-	50	-25.79
11	21.732	28.56	Qp	0	.3	10.4	39.26	60	-20.74	-	-
12	21.741	20.13	Ca	0	.3	10.4	30.83	-	-	50	-19.17

Qp - Quasi-Peak detector
 Ca - CISPR average detection

Line-L2 .15 - 30MHz

PLOT



DATA

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	.16125	41.19	Qp	0	.1	10.1	51.39	65.4	-14.01	-	-
14	.16575	23.04	Ca	0	0	10.1	33.14	-	-	55.17	-22.03
15	.5055	22.51	Qp	0	.1	10.1	32.71	56	-23.29	-	-
16	.50775	14.31	Ca	0	.1	10.1	24.51	-	-	46	-21.49
17	.59325	20.68	Qp	0	.1	10.1	30.88	56	-25.12	-	-
18	.60112	12.14	Ca	0	.1	10.1	22.34	-	-	46	-23.66
19	4.7085	28.58	Qp	0	.1	10.1	38.78	56	-17.22	-	-
20	4.70625	17.23	Ca	0	.1	10.1	27.43	-	-	46	-18.57
21	6.72225	19.22	Qp	0	.2	10.2	29.62	60	-30.38	-	-
22	6.702	13.95	Ca	0	.2	10.2	24.35	-	-	50	-25.65
23	22.5825	28.08	Qp	0	.3	10.4	38.78	60	-21.22	-	-
24	22.5825	20.36	Ca	0	.3	10.4	31.06	-	-	50	-18.94

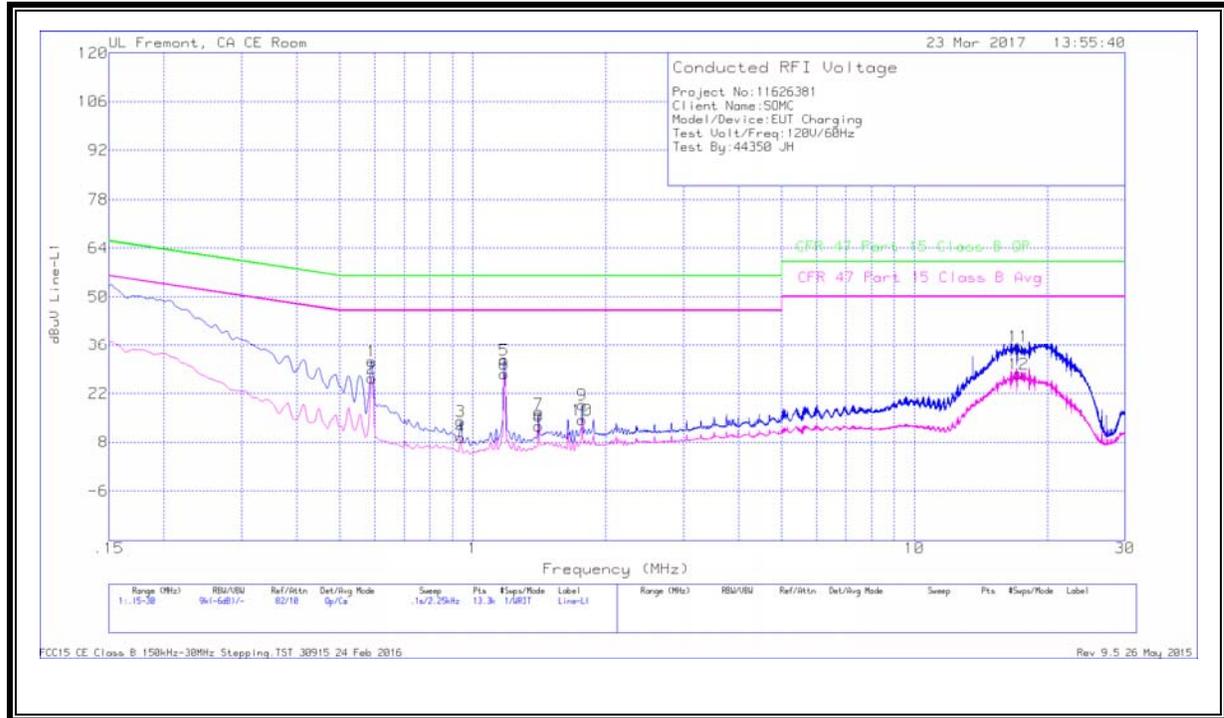
Qp - Quasi-Peak detector
 Ca - CISPR average detection

6.3.2. RESULTS- CHARGING MODE

6 WORST EMISSIONS

Line-L1 .15 - 30MHz

PLOT



DATA

Trace Markers

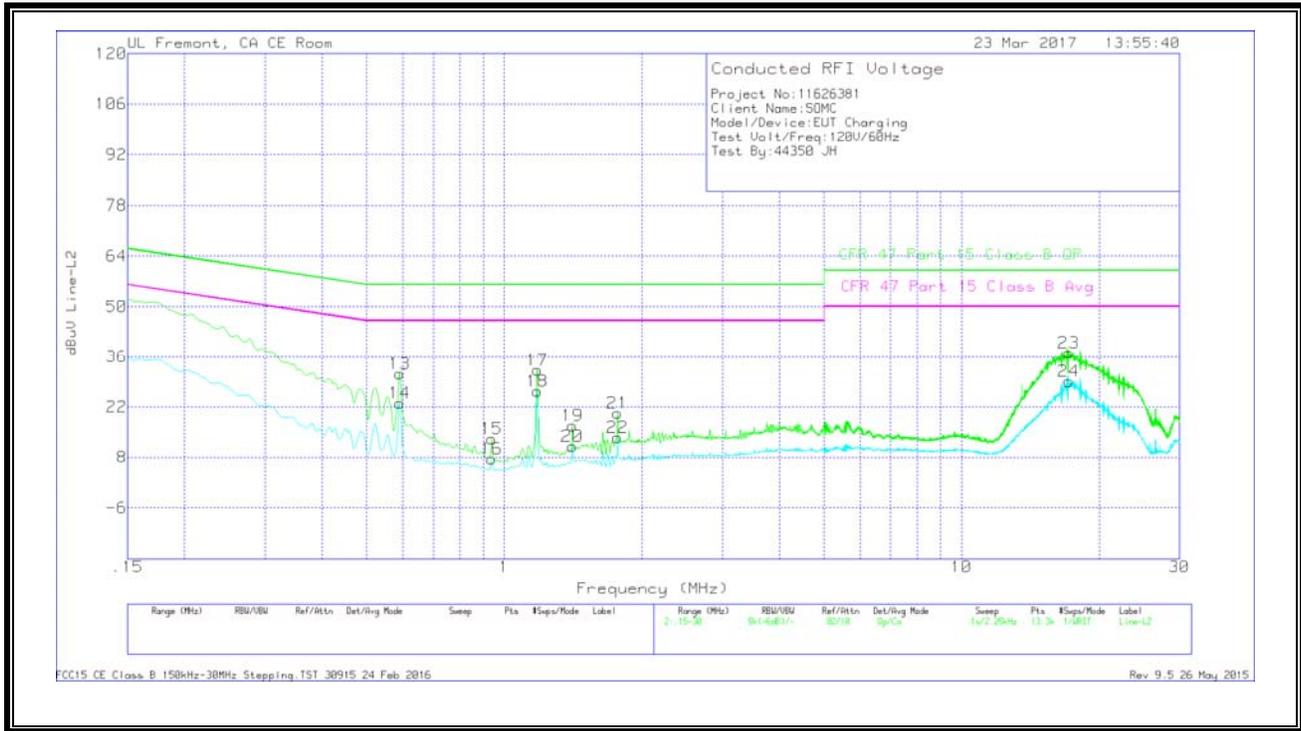
Range 1: Line-L1 .15 - 30MHz

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	.591	21.02	Qp	0	.1	10.1	31.22	56	-24.78	-	-
2	.591	16.15	Ca	0	.1	10.1	26.35	-	-	46	-19.65
3	.9375	3.88	Qp	0	.1	10.1	14.08	56	-41.92	-	-
4	.9375	-.82	Ca	0	.1	10.1	9.38	-	-	46	-36.62
5	1.17825	21.4	Qp	0	.1	10.1	31.6	56	-24.4	-	-
6	1.17825	17.43	Ca	0	.1	10.1	27.63	-	-	46	-18.37
7	1.40775	5.89	Qp	0	.1	10.1	16.09	56	-39.91	-	-
8	1.40775	2.36	Ca	0	.1	10.1	12.56	-	-	46	-33.44
9	1.77	8.48	Qp	0	.1	10.1	18.68	56	-37.32	-	-
10	1.77	4.18	Ca	0	.1	10.1	14.38	-	-	46	-31.62
11	17.214	25.16	Qp	0	.2	10.3	35.66	60	-24.34	-	-
12	17.20725	17.1	Ca	0	.2	10.3	27.6	-	-	50	-22.4

Qp - Quasi-Peak detector
 Ca - CISPR average detection

Line-L2 .15 - 30MHz

PLOT



DATA

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	.591	21.03	Qp	0	.1	10.1	31.23	56	-24.77	-	-
14	.591	12.79	Ca	0	.1	10.1	22.99	-	-	46	-23.01
15	.9375	3.01	Qp	0	.1	10.1	13.21	56	-42.79	-	-
16	.9375	-2.63	Ca	0	.1	10.1	7.57	-	-	46	-38.43
17	1.1805	22.12	Qp	0	.1	10.1	32.32	56	-23.68	-	-
18	1.1805	16.17	Ca	0	.1	10.1	26.37	-	-	46	-19.63
19	1.40775	6.57	Qp	0	.1	10.1	16.77	56	-39.23	-	-
20	1.40775	.79	Ca	0	.1	10.1	10.99	-	-	46	-35.01
21	1.77	10	Qp	0	.1	10.1	20.2	56	-35.8	-	-
22	1.77	3.34	Ca	0	.1	10.1	13.54	-	-	46	-32.46
23	17.169	26.69	Qp	0	.2	10.3	37.19	60	-22.81	-	-
24	17.169	18.56	Ca	0	.2	10.3	29.06	-	-	50	-20.94

Qp - Quasi-Peak detector
 Ca - CISPR average detection