



**FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-216 ISSUE 2**

CERTIFICATION TEST REPORT

FOR

WIRELESS CHARGER

MODEL NO: F7U052V2

FCC ID: K7SF7U052V2

IC: 3623A-F7U052V2

REPORT NUMBER: 12420404-E1V2

ISSUE DATE: SEPTEMBER 20, 2018

Prepared for

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PLAYA VISTA, CA 90094, U.S.A.**

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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	09/10/2018	Initial Issue	Jason Qian
V2	09/20/2018	Convert below 1GHz file to 10 meter distance on page 40-48	Jason Qian

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: BELKIN INTERNATIONAL, INC.
12045 EAST WATERFRONT DRIVE
PLAYA VISTA, CA 90094 U.S.A.

EUT DESCRIPTION: WIRELESS CHARGER

MODEL NUMBER: F7U052V2

SERIAL NUMBER: 27B10EH6802914

DATE TESTED: August 18 - September 06, 2018

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	Complies
INDUSTRY CANADA RSS-216 ISSUE 2	Complies
INDUSTRY CANADA RSS-GEN ISSUE 5	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:

Prepared By:



CHIN PANG
SENIOR TEST ENGINEER
UL VERIFICATION SERVICES INC.

JASON QIAN
TEST ENGINEER
UL VERIFICATION SERVICES INC.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, and FCC CFR 47 Part 15, RSS-GEN Issue 5 and RSS-216 Issue 2 January 2016.

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 checked="" type="checkbox"/> Chamber A (IC:2324B-1)	<input type="checkbox"/> Chamber G (IC: 22541-1)
<input type="checkbox"/> Chamber B (IC:2324B-2)	<input type="checkbox"/> Chamber E (IC: 22541-2)
<input checked="" type="checkbox"/> Chamber C (IC:2324B-3)	<input type="checkbox"/> Chamber F (IC: 22541-3)
	<input type="checkbox"/> Chamber G (IC: 22541-4)
	<input type="checkbox"/> 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. The full scope of accreditation can be viewed at [NVLAP Lab Search](#).

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
Conducted Disturbance, 9KHz to 0.15 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 wireless charging base capable of up to 10 watt power transfer.

5.2. MAXIMUM OUTPUT POWER

The transmitter has maximum peak radiated electric and magnetic field strength as follows:

Fundamental Frequency (KHz)	Mode	E field (300m distance) FCC (dBuV/m)	H field (3m distance) IC (dBuA/m)
127.8	Standby(Config 1)	6.93	28.27
127.8	Operating(Config 2)	-4.16	17.32
127.8	Operating(Config 3)	12.65	27.42

5.3. SOFTWARE AND FIRMWARE

The firmware version installed in the EUT during testing was 6.10

5.4. WORST-CASE CONFIGURATION AND MODE

The EUT is a single frequency magnetic charger enclosed in a plastic case. For the entire radiated emissions test, the EUT was examining on the following configuration.

Config	Mode	Descriptions
1	Standby	EUT Alone powered by AC/DC adapter
2	Operating (With & without 3mm gap)	EUT and smart phone powered by AC/DC adapter (Phone 5W, 20-50% power Charging)
3	Operating (with & without 3mm gap)	EUT and 10W load powered by AC/DC adapter (10W Load, >90% power charging)

Note that the EUT was tested as standby and operation modes. Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 300 m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788 D01.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT & PERIPHERALS

SUPPORT EQUIPMENT & PERIPHERALS LIST			
Description	Manufacturer	Model	Serial Number
QI Receiver Simulator	AVID Technologies	102-03	00011122117
AC Adapter	Shenzhen Honor Electronics	ADS-26FSG-12 15023EPCU	N/A
10W Resistor Load	N/A	N/A	N/A
Phone	Apple	iPhone X	G6TVJ7H8JCLH

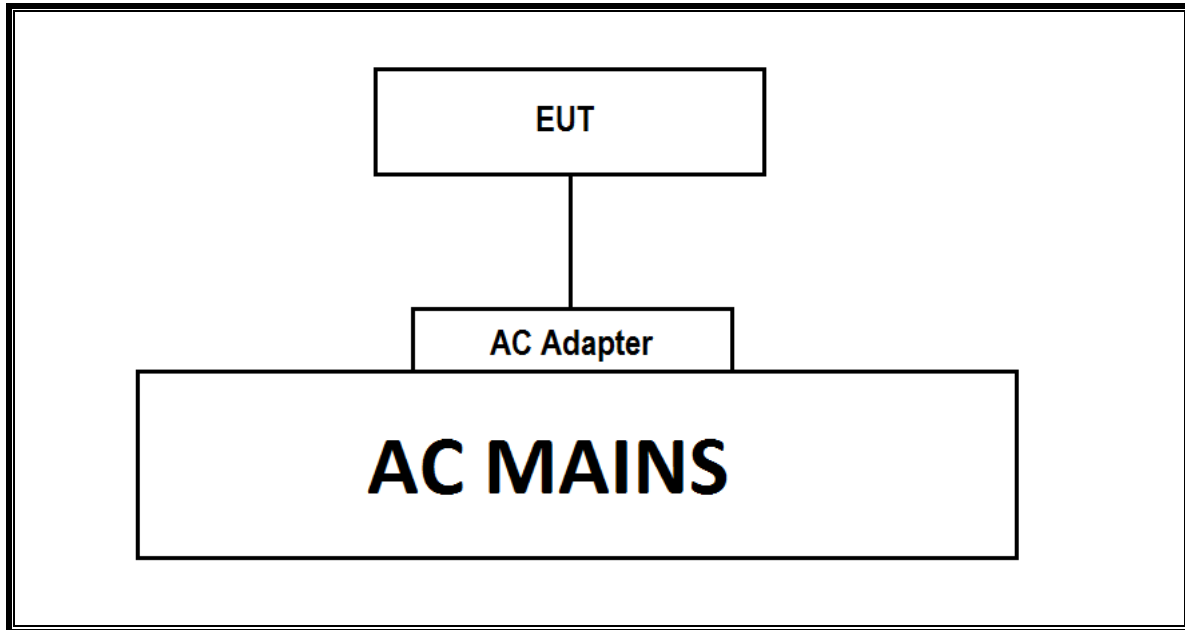
I/O CABLES

N/A

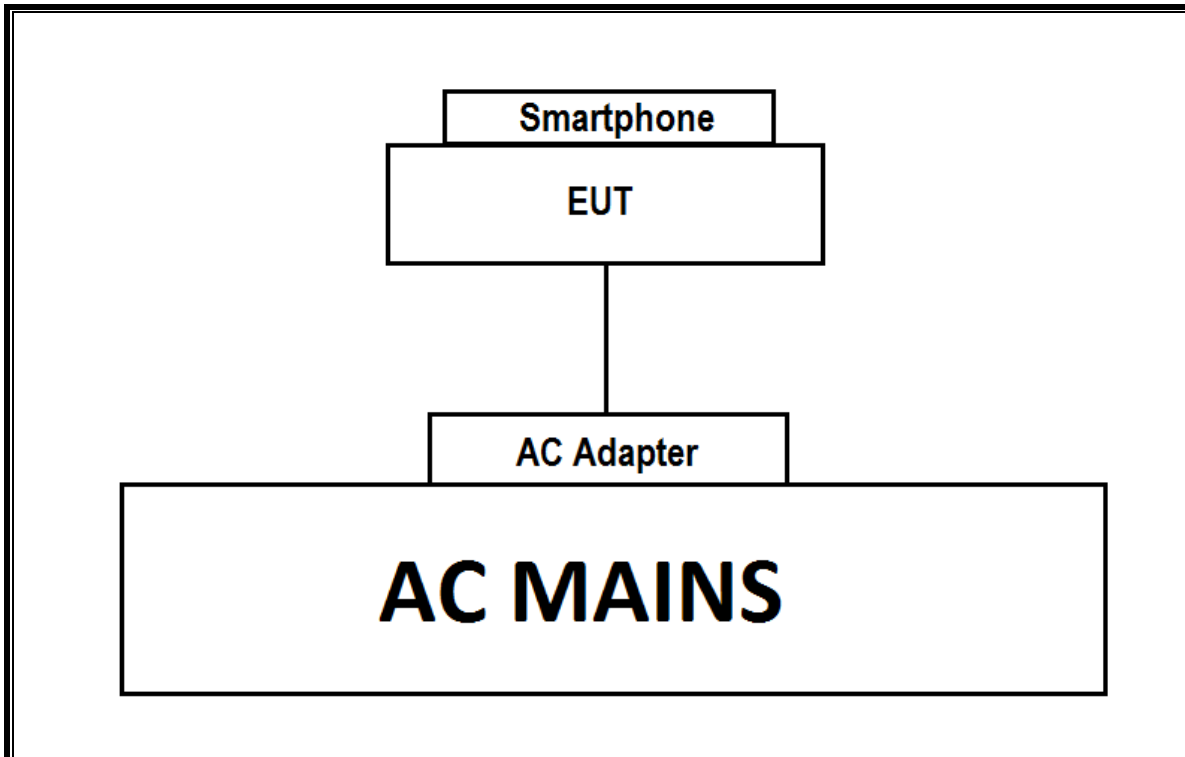
TEST SETUP

Please see the following configurations for the test setups. Both configurations indicate that the EUT is directly connected to an AC/DC adapter.

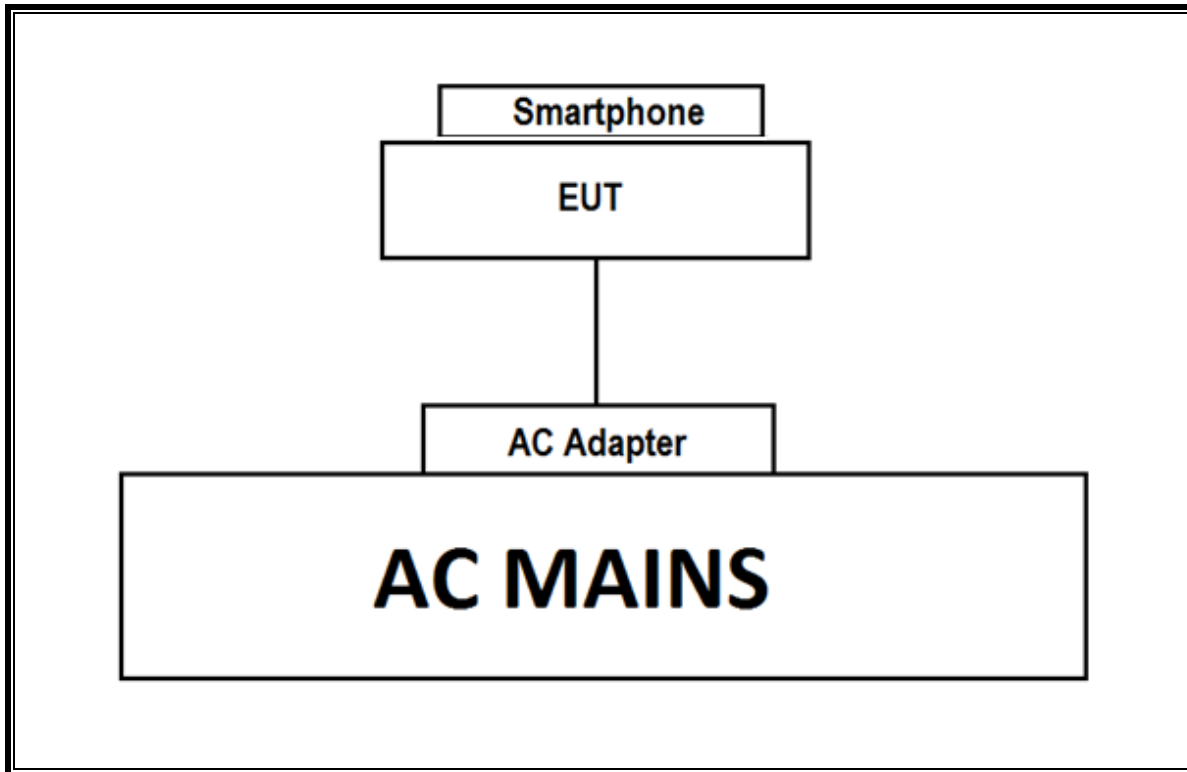
CONFIGURATION 1: STANDBY MODE



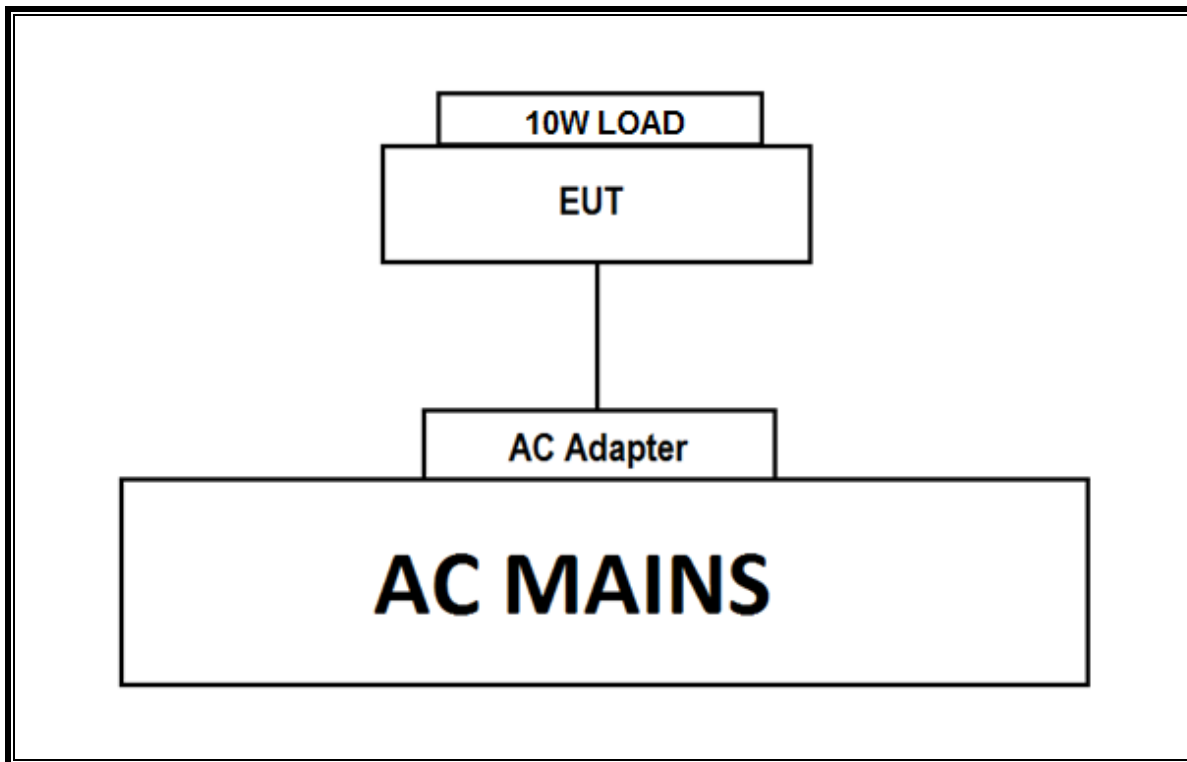
CONFIGURATION 2: OPERATING MODE WITH PHONE (WITHOUT 3mm AIRGAP)



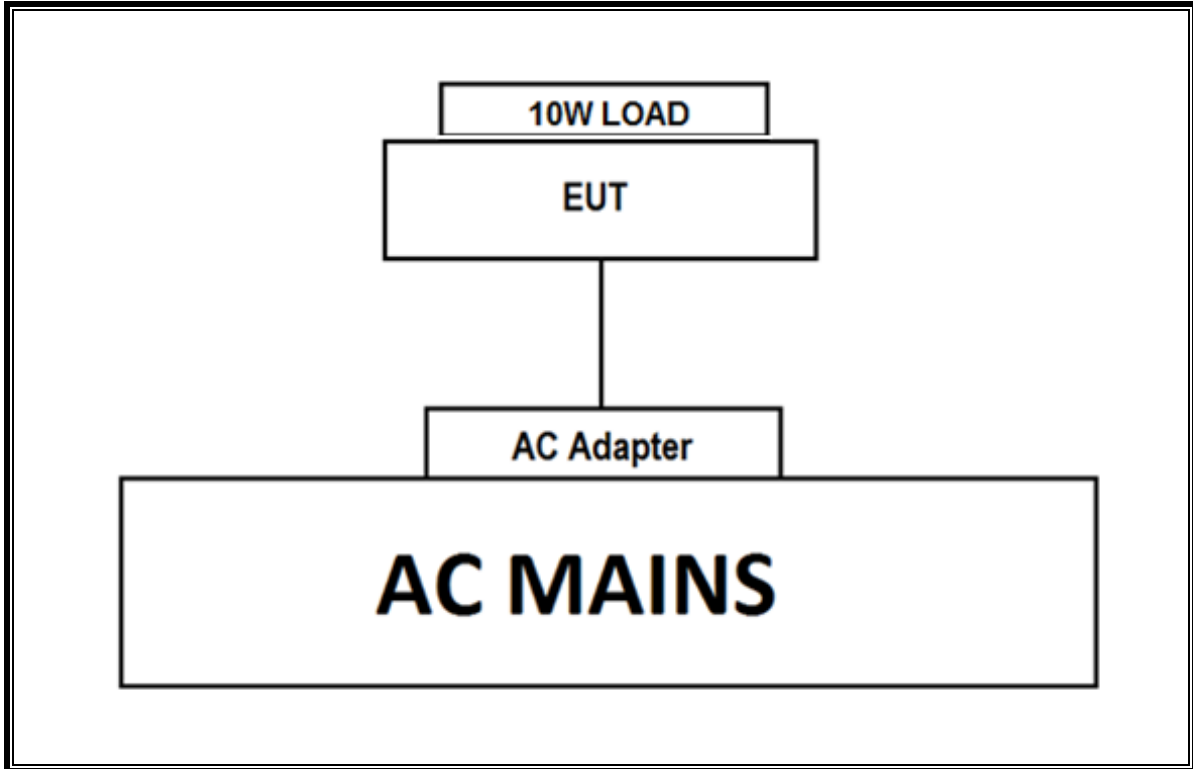
CONFIGURATION 2: OPERATING MODE WITH PHONE (3mm AIRGAP)



CONFIGURATION 3: OPERATING MODE WITH 10W LOAD (WITHOUT 3mm AIRGAP)



CONFIGURATION 3: OPERATING MODE WITH 10W LOAD (3mm AIRGAP)



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	Asset	Cal Due
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB3	T130	10/16/2018
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB3	T243	05/10/2019
Amplifier, 10KHz to 1.3GHz, 25dB	HP	8447D	T10	02/14/2019
Amplifier, 10KHz to 1.3GHz, 25dB	HP	8447D	T15	08/14/2018
Antenna, Active Loop 9kHz-30MHz	Com-Power Corp.	AL-130R	T866	12/13/2018
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T1454	01/08/2019
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T1450	02/05/2019
EMI Test Receiver	Rohde & Schwarz	ESR	T1436	01/25/2019
LISN	Fischer Custom Communications, Inc	FCC-LISN-50/250-25-2	T1310	01/31/2019
LIT-930 Transient Limiter	COM-POWER	N/A	T1457	03/01/2019

Test Software List			
Description	Manufacturer	Model	Version
Antenna Port Software	UL	UL EMC	Ver 7.9 Jan 24, 2018
Radiated Software	UL	UL EMC	Ver 9.5, April 26, 2016
Conducted Software	UL	UL EMC	Ver 9.5, May 26 2015

Note: * indicates automation software version used in the compliance certification testing

7. OCCUPIED BANDWIDTH

TEST PROCEDURE

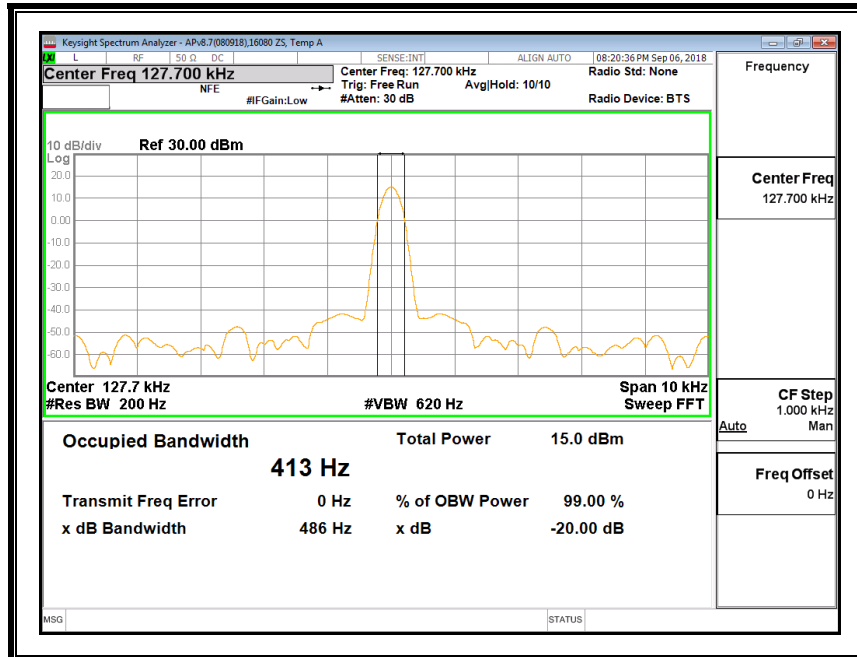
The transmitter output is connected to the spectrum analyzer. The RBW is set to 200Hz. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.

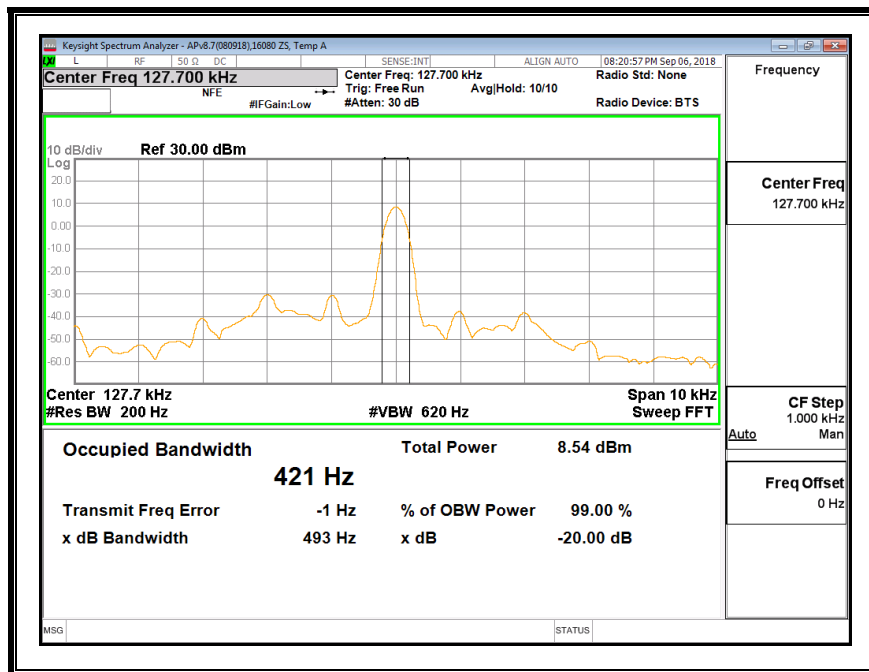
RESULTS

ID:	12981	Date:	9/6/18
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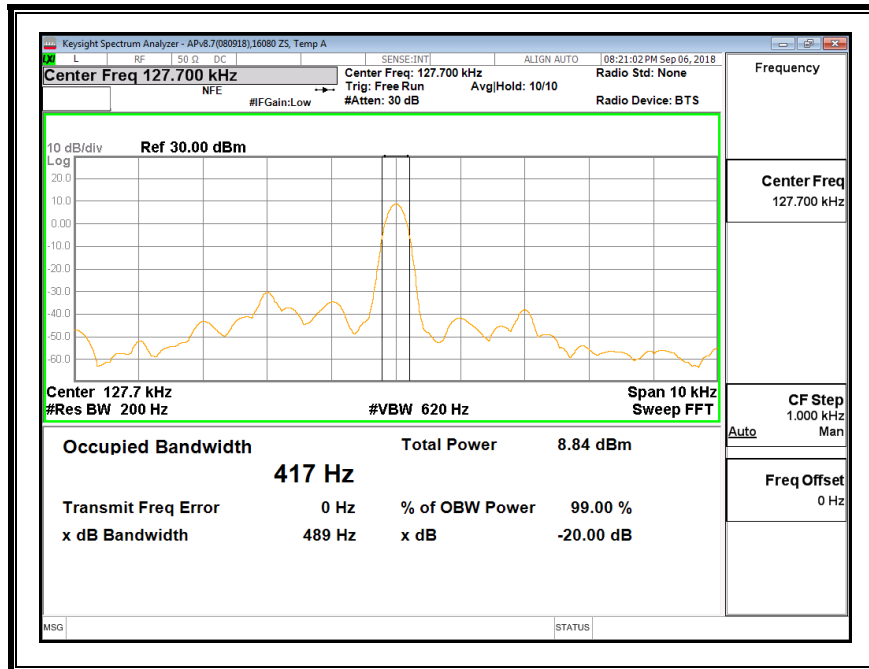
7.1.1. STANDBY CONFIGURATION CHARGER



7.1.2. OPERATING CONFIGURATION WITH PHONE



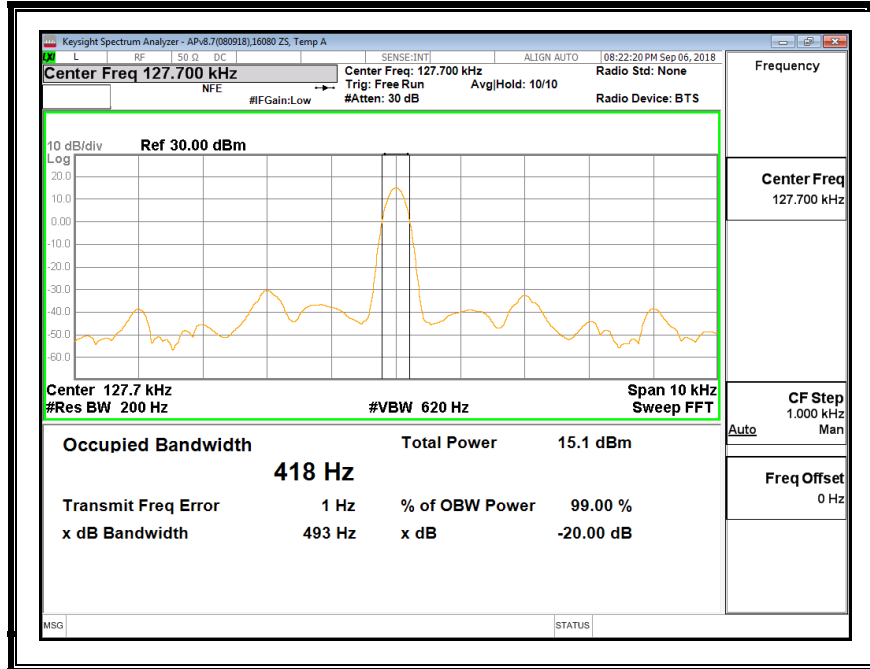
7.1.3. OPERATING CONFIGURATION WITH PHONE 3mm Gap



7.1.4. OPERATING CONFIGURATION WITH 10W LOAD



7.1.5. OPERATING CONFIGURATION WITH 10W LOAD at 3mm Gap



8. RADIATED EMISSION TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.209 (a)

ICES-001 Section 6.2, IC RSS-216 6.2.2, and IC RSS-GEN Sections 8.9 and 8.10.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (m)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960 MHz	500	3

Note: The lower limit shall apply at the transition frequency.

CISPR 11:04

Electromagnetic radiation disturbance limits for class B group 2 equipment measured on a test site

Frequency Range (MHz)	Magnetic Field Strength Limit Class B Group 2 @ 3m Distance (dBuA/m)
	Quasi-peak
0.009 - 0.070	69
0.070 - 0.1485	69
	Decreasing Linearly with Logarithm of Frequency to 39
0.1485 - 4.0	39
	Decreasing Linearly with Logarithm of Frequency to 3
4.0 - 30	3

The limits of this table apply to induction cooking appliances intended for commercial use and those for domestic use with a diagonal diameter of more than 1.6m.
 The measurements are performed at 3m distance with a 0.6 m loop antenna as described in 4.2.1 of CISPR 16-1-4.
 The antenna should be vertically installed, with the lower edge of the loop at 1m height above the floor.

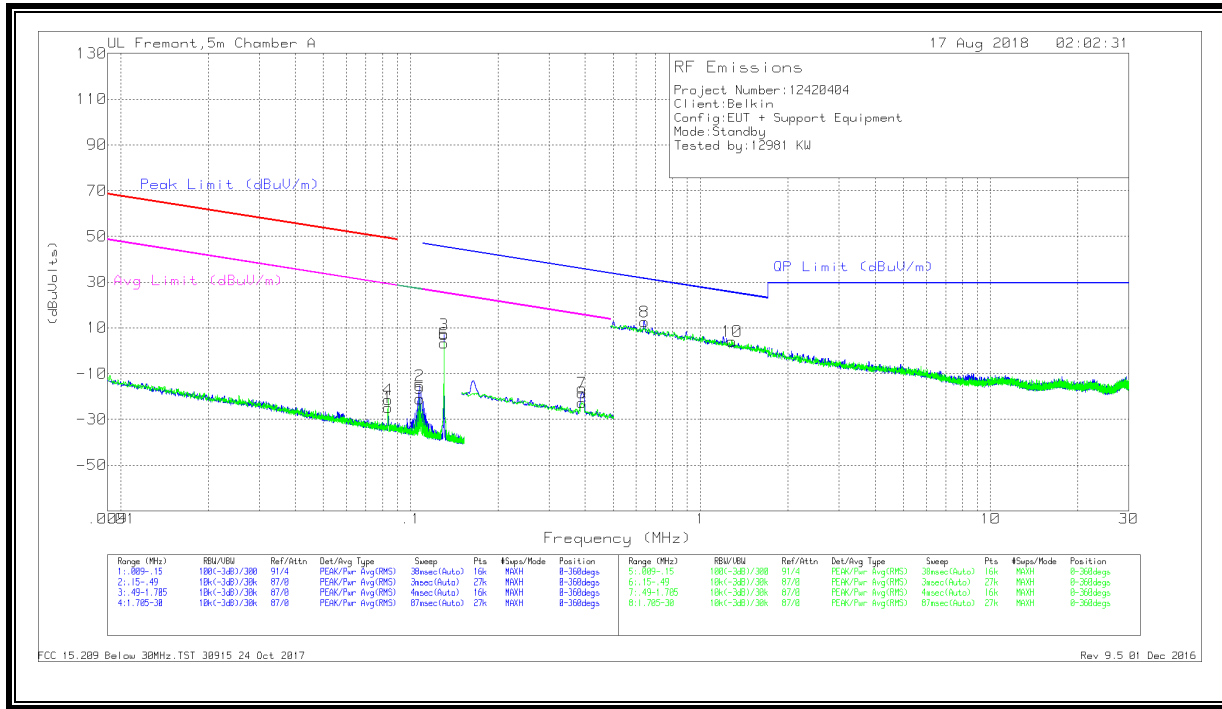
Frequency Range (MHz)	Electric Field Strength Limit Class B Group 2 @ 10m distance	
	Quasi-Peak	Average
30-80,872	30	25
80,872-81,848	50	45
81,848-134,786	30	25
134,786-136,414	50	45
136,414-230	30	25
230-1000	37	32

RESULTS

The EUT belongs to Type 3 (Category I Radio Apparatus).

8.2. FCC TX FUNDAMENTAL AND SPURIOUS EMISSIONS FROM 9 kHz TO 30 MHz

8.2.1. STANDBY CONFIGURATION



DATA

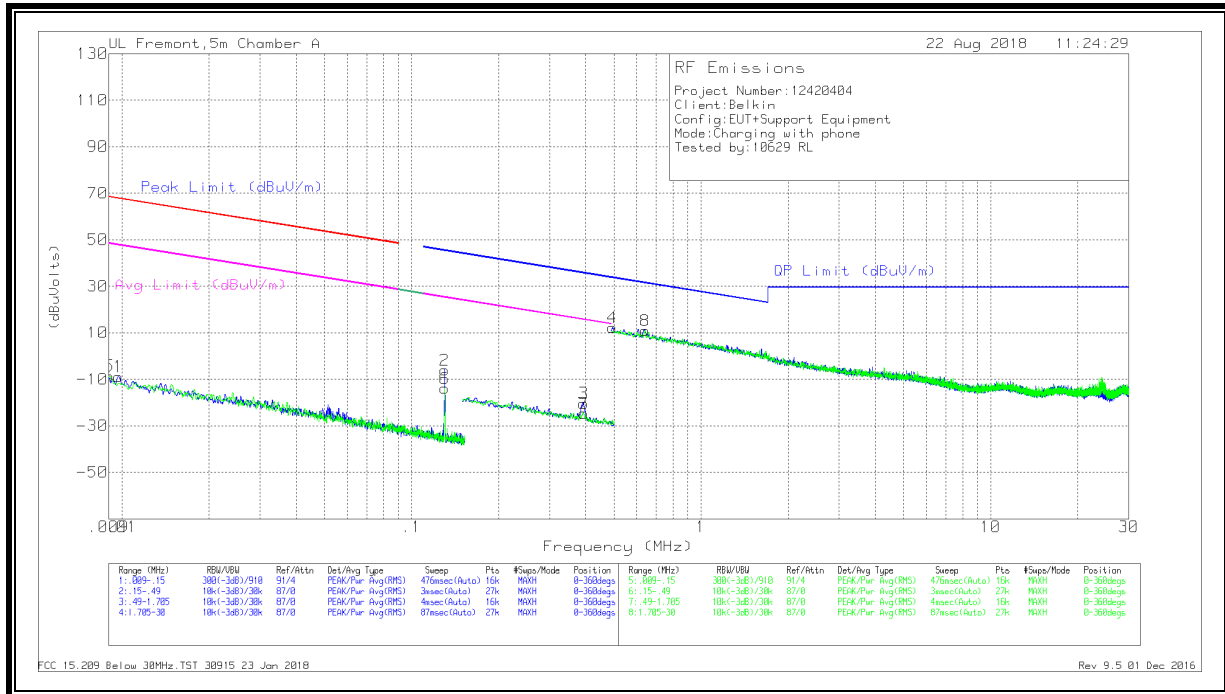
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.08357	40.8	Pk	14.2	.1	-80	-24.9	49.14	-74.04	29.14	-54.04	0-360
4	.08362	44.27	Pk	14.2	.1	-80	-21.43	49.14	-70.57	29.14	-50.57	0-360
3	.13022	72.83	Pk	14	.1	-80	6.93	45.33	-38.4	25.33	-18.4	0-360
6	.13024	69.31	Pk	14	.1	-80	3.41	45.33	-41.92	25.33	-21.92	0-360
9	.38967	43.39	Pk	13.8	.1	-80	-22.71	35.79	-58.5	15.79	-38.5	0-360
7	.38977	47.68	Pk	13.8	.1	-80	-18.42	35.79	-54.21	15.79	-34.21	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
2	.1075	50.51	Pk	14	.1	-80	-15.39	27	-42.39	0-360
5	.1075	44.89	Pk	14	.1	-80	-21.01	27	-48.01	0-360
8	.64025	38.43	Pk	14	.1	-40	12.53	31.48	-18.95	0-360
10	1.28298	29.57	Pk	14.3	.2	-40	4.07	25.46	-21.39	0-360

Pk - Peak detector

8.2.2. OPERATING WITH PHONE



DATA

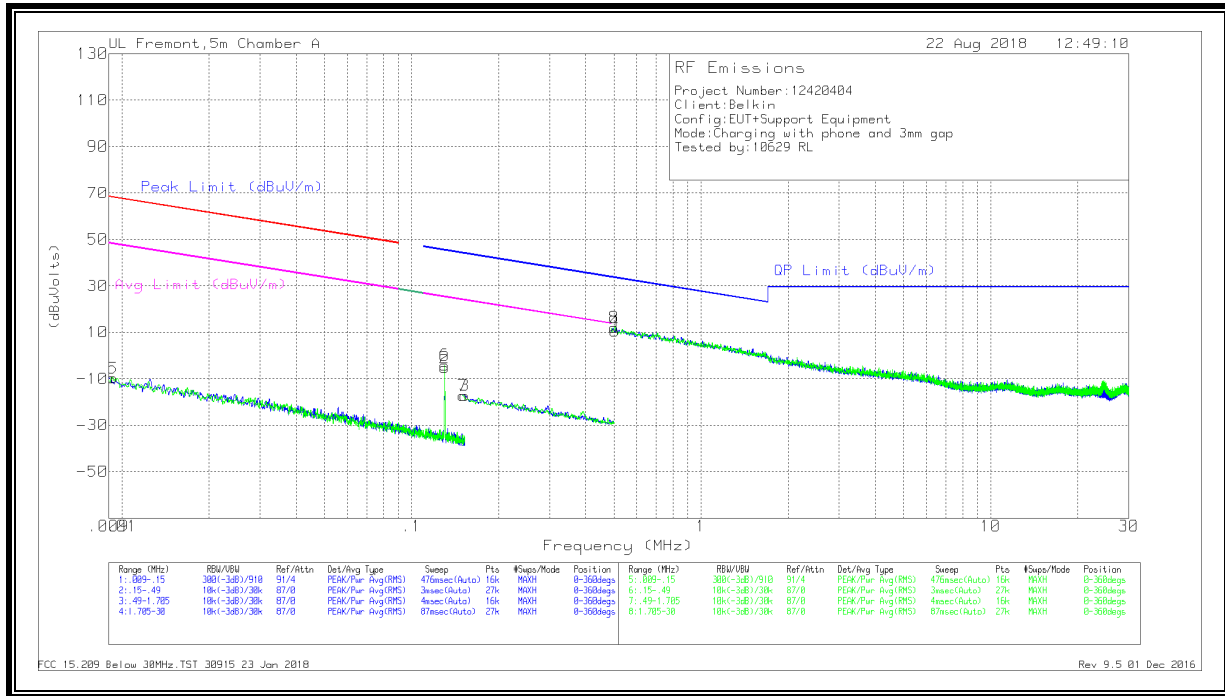
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
5	.00906	55.63	Pk	15.7	.1	-80	-8.57	68.44	-77.01	48.44	-57.01	0-360
1	.00973	55.79	Pk	15.3	.1	-80	-8.81	67.82	-76.63	47.82	-56.63	0-360
6	.13023	52.22	Pk	13.8	.1	-80	-13.88	45.33	-59.21	25.33	-39.21	0-360
2	.13026	60.09	Pk	13.8	.1	-80	-6.01	45.33	-51.34	25.33	-31.34	0-360
3	.39266	45.85	Pk	13.7	.1	-80	-20.35	35.73	-56.08	15.73	-36.08	0-360
7	.39357	41.51	Pk	13.7	.1	-80	-24.69	35.71	-60.4	15.71	-40.4	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	.49433	38.26	Pk	13.9	.1	-40	12.26	33.72	-21.46	0-360
4	.49433	38.26	Pk	13.9	.1	-40	12.26	31.48	-20.58	0-360

Pk - Peak detector

8.2.3. OPERATING WITH PHONE WITH 3mm Gap



DATA

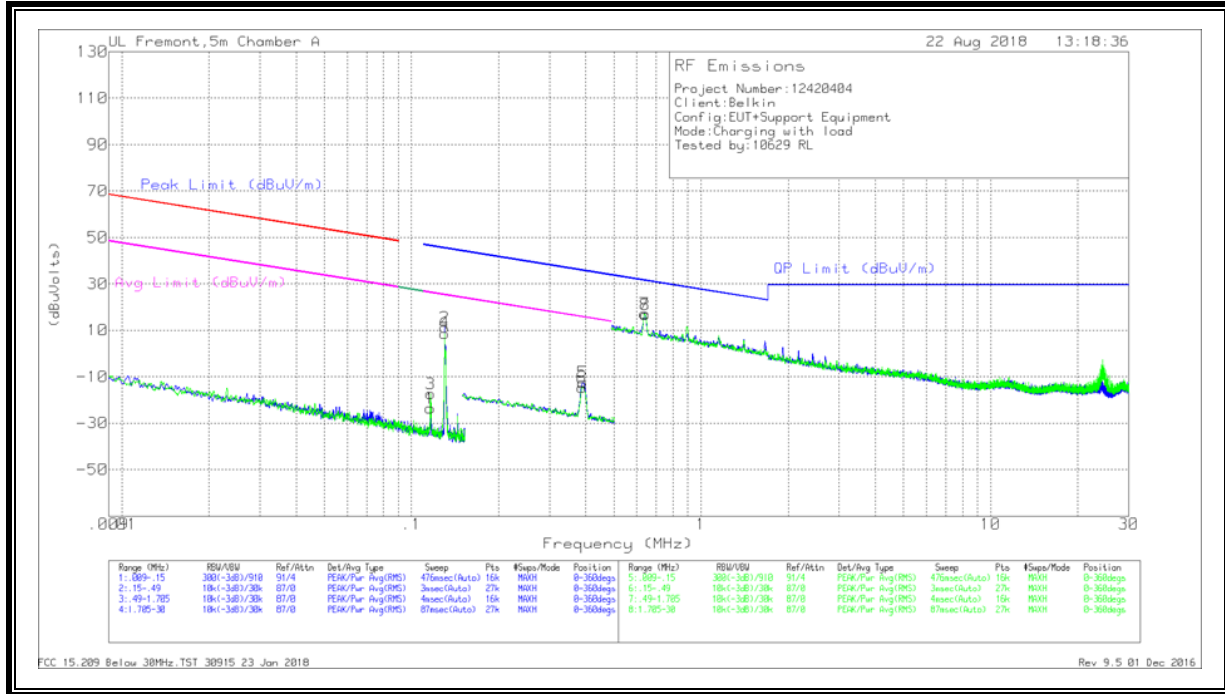
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.00905	54.48	Pk	15.7	.1	-80	-9.72	68.45	-78.17	48.45	-58.17	0-360
5	.00932	54.69	Pk	15.5	.1	-80	-9.71	68.2	-77.91	48.2	-57.91	0-360
6	.13022	61.94	Pk	13.8	.1	-80	-4.16	45.33	-49.49	25.33	-29.49	0-360
2	.13023	60.92	Pk	13.8	.1	-80	-5.18	45.33	-50.51	25.33	-30.51	0-360
7	.15047	48.9	Pk	13.8	.1	-80	-17.2	44.07	-61.27	24.07	-41.27	0-360
3	.15267	48.95	Pk	13.8	.1	-80	-17.15	43.95	-61.1	23.95	-41.1	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
8	.50155	38.11	Pk	13.9	.1	-40	12.11	33.6	-21.49	0-360
4	.50322	36.38	Pk	13.9	.1	-40	10.38	33.57	-23.19	0-360

Pk - Peak detector

8.2.4. OPERATING WITH 10W LOAD



DATA

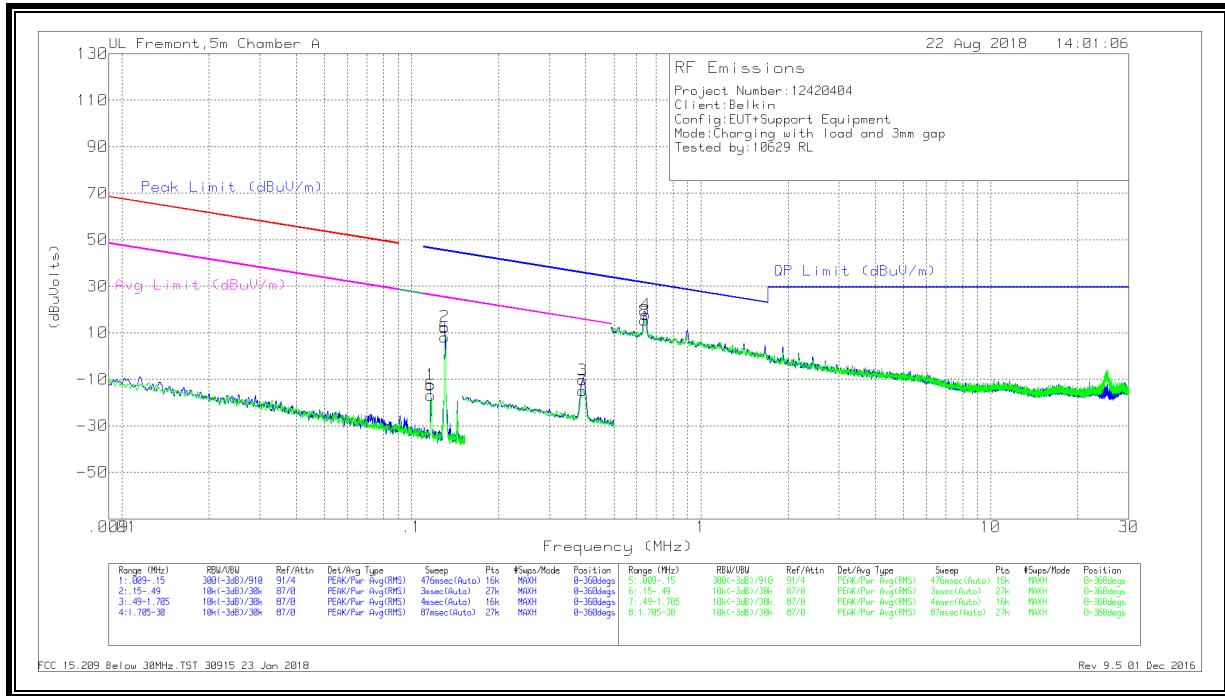
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.11619	42.57	Pk	13.8	.1	-80	-23.53	46.32	-69.85	26.32	-49.85	0-360
3	.11637	48.84	Pk	13.8	.1	-80	-17.26	46.31	-63.57	26.31	-43.57	0-360
4	.13022	74.78	Pk	13.8	.1	-80	8.68	45.33	-36.65	25.33	-16.65	0-360
2	.13028	77.32	Pk	13.8	.1	-80	11.22	45.33	-34.11	25.33	-14.11	0-360
6	.38765	51.62	Pk	13.7	.1	-80	-14.58	35.84	-50.42	15.84	-30.42	0-360
5	.38999	53.8	Pk	13.7	.1	-80	-12.4	35.79	-48.19	15.79	-28.19	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
7	.63972	43.24	Pk	13.9	.1	-40	17.24	31.49	-14.25	0-360
8	.64162	42.73	Pk	13.9	.1	-40	16.73	31.46	-14.73	0-360

Pk - Peak detector

8.2.5. OPERATING WITH 10W LOAD AT 3mm Gap



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.11652	53.83	Pk	13.8	.1	-80	-12.27	46.3	-58.57	26.3	-38.57	0-360
5	.1166	49.25	Pk	13.8	.1	-80	-16.85	46.29	-63.14	26.29	-43.14	0-360
6	.13029	74.21	Pk	13.8	.1	-80	8.11	45.33	-37.22	25.33	-17.22	0-360
2	.13034	78.75	Pk	13.8	.1	-80	12.65	45.32	-32.67	25.32	-12.67	0-360
3	.39001	55.99	Pk	13.7	.1	-80	-10.21	35.79	-46	15.79	-26	0-360
7	.39027	51.31	Pk	13.7	.1	-80	-14.89	35.78	-50.67	15.78	-30.67	0-360

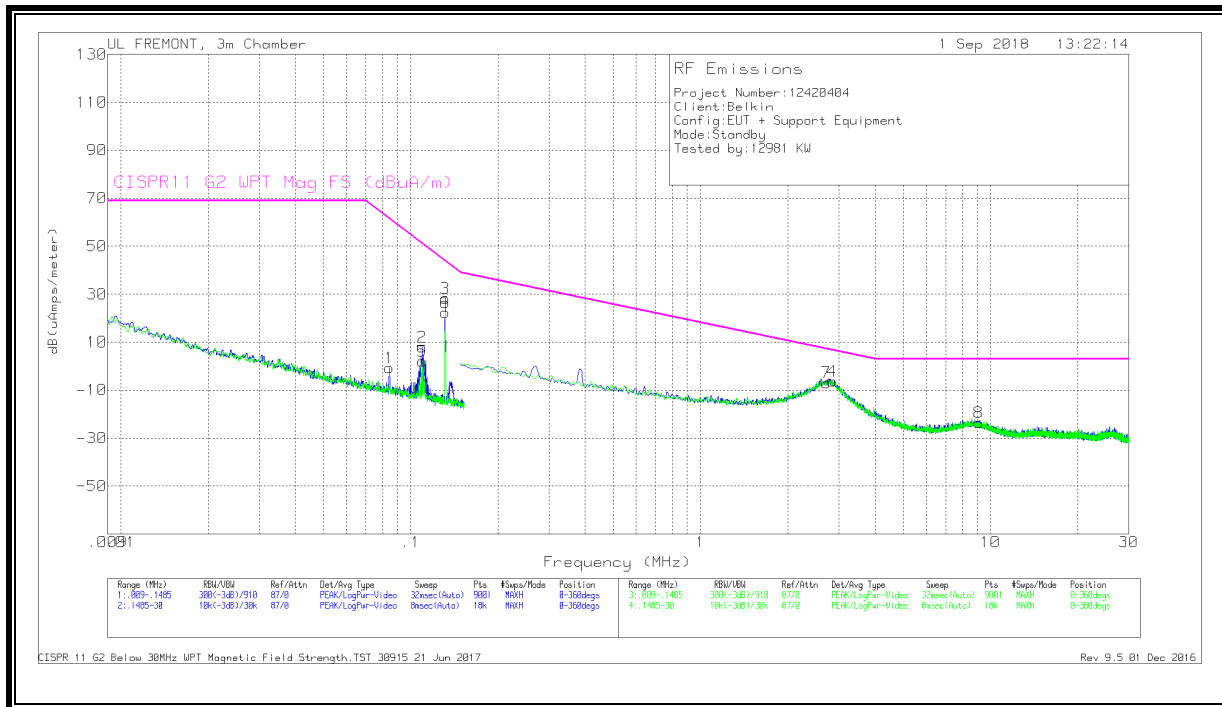
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
8	.63983	41.36	Pk	13.9	.1	-40	15.36	31.49	-16.13	0-360
4	.64451	43.79	Pk	13.9	.1	-40	17.79	31.43	-13.64	0-360

Pk - Peak detector

8.3. IC / CISPR 11 TX FUNDAMENTAL AND SPURIOUS EMISSIONS FROM 9 kHz TO 30 MHz

8.3.1. STANDBY CONFIGURATION

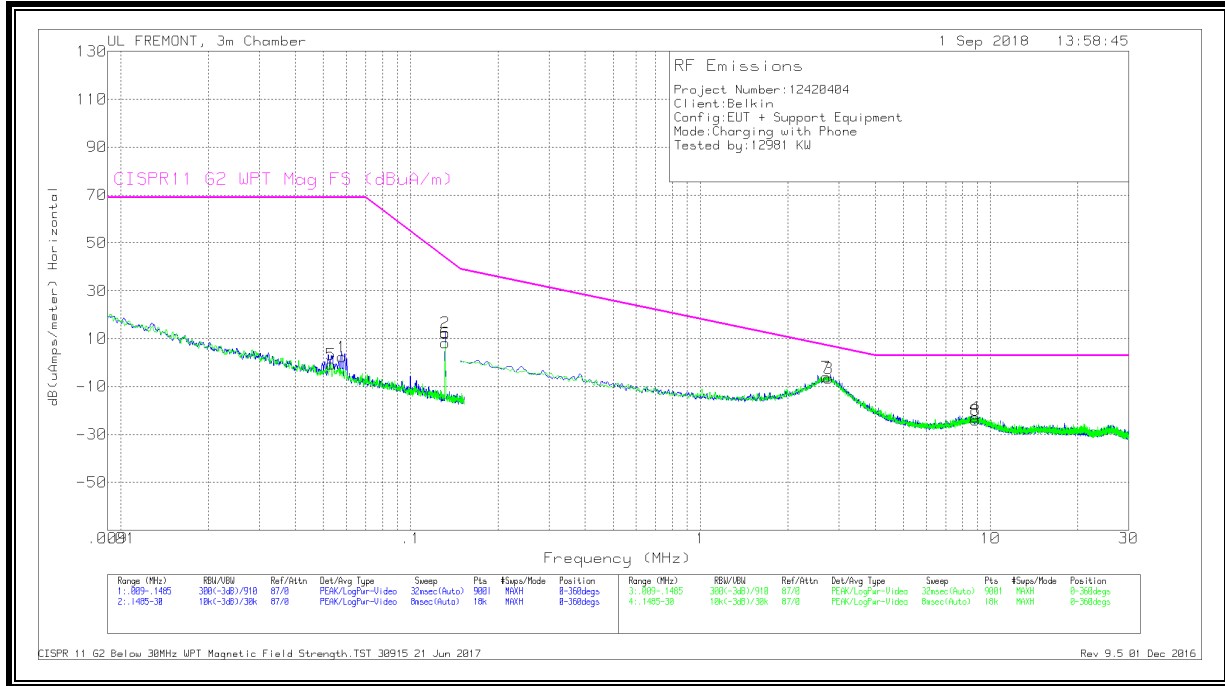


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Corrected Reading dB(uAmps/meter)	CISPR11 G2 WPT Mag FS (dBuA/m)	Margin (dB)	Azimuth (Degs)
1	.0844	37.47	Pk	-39.5	1.4	-63	61.54	-62.17	0-360
2	.10954	46.64	Pk	-40	1.4	8.04	51.14	-43.1	0-360
5	.10958	40.78	Pk	-40	1.4	2.18	51.12	-48.94	0-360
6	.13148	61.08	Pk	-40.1	1.4	22.38	43.86	-21.48	0-360
3	.13152	66.97	Pk	-40.1	1.4	28.27	43.84	-15.57	0-360
7	2.70845	31.71	Pk	-40.1	1.5	-6.89	7.26	-14.15	0-360
4	2.83943	32.26	Pk	-40.1	1.5	-6.34	6.75	-13.09	0-360
8	9.09921	15.73	Pk	-40.8	1.5	-23.57	3	-26.57	0-360

Pk - Peak detector

8.3.2. OPERATING WITH PHONE

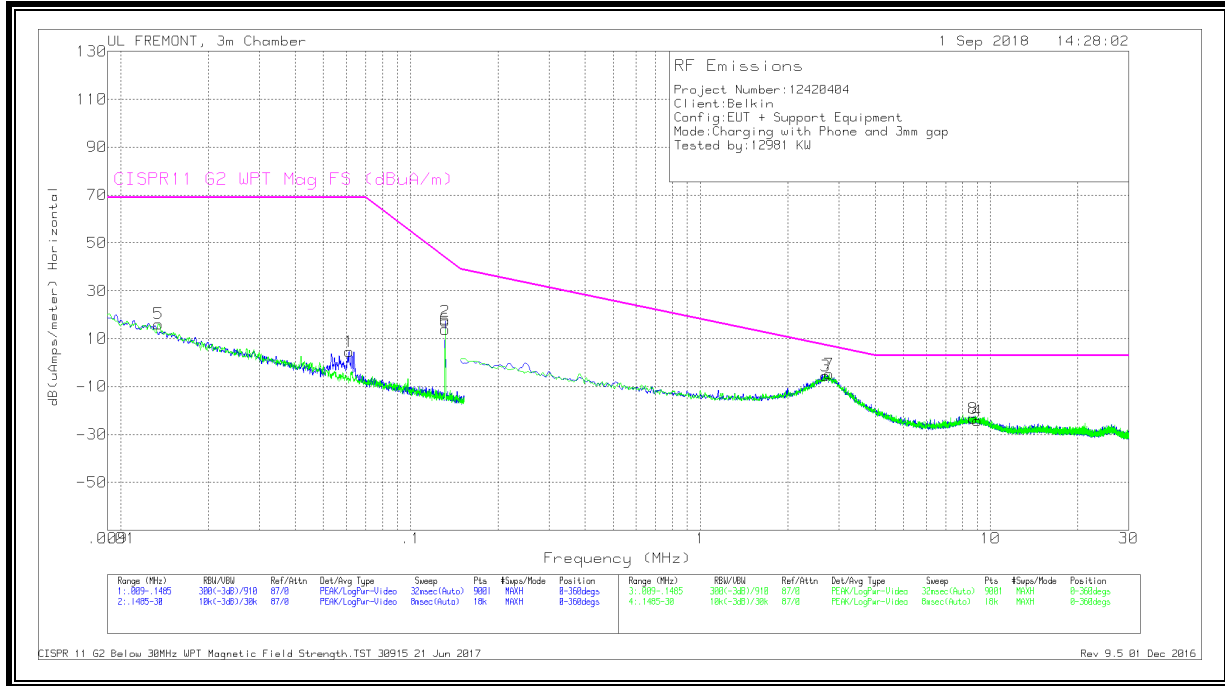


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Corrected Reading dB(uAmps/meter)	CISPR11 G2 WPT Mag FS (dBuA/m)	Margin (dB)	Azimuth (Degs)
5	.05304	36.76	Pk	-38.8	1.4	-64	69	-69.64	0-360
1	.05786	39.93	Pk	-38.9	1.4	2.43	69	-66.57	0-360
2	.13152	51.22	Pk	-40.1	1.4	12.52	43.84	-31.32	0-360
6	.13152	47	Pk	-40.1	1.4	8.3	43.84	-35.54	0-360
7	2.71674	32.48	Pk	-40.1	1.5	-6.12	7.23	-13.35	0-360
3	2.75985	32.19	Pk	-40.1	1.5	-6.41	7.06	-13.47	0-360
4	8.83974	16.64	Pk	-40.8	1.5	-22.66	3	-25.66	0-360
8	8.89611	15.23	Pk	-40.8	1.5	-24.07	3	-27.07	0-360

Pk - Peak detector

8.3.3. OPERATING WITH iPhone AT 3mm Gap

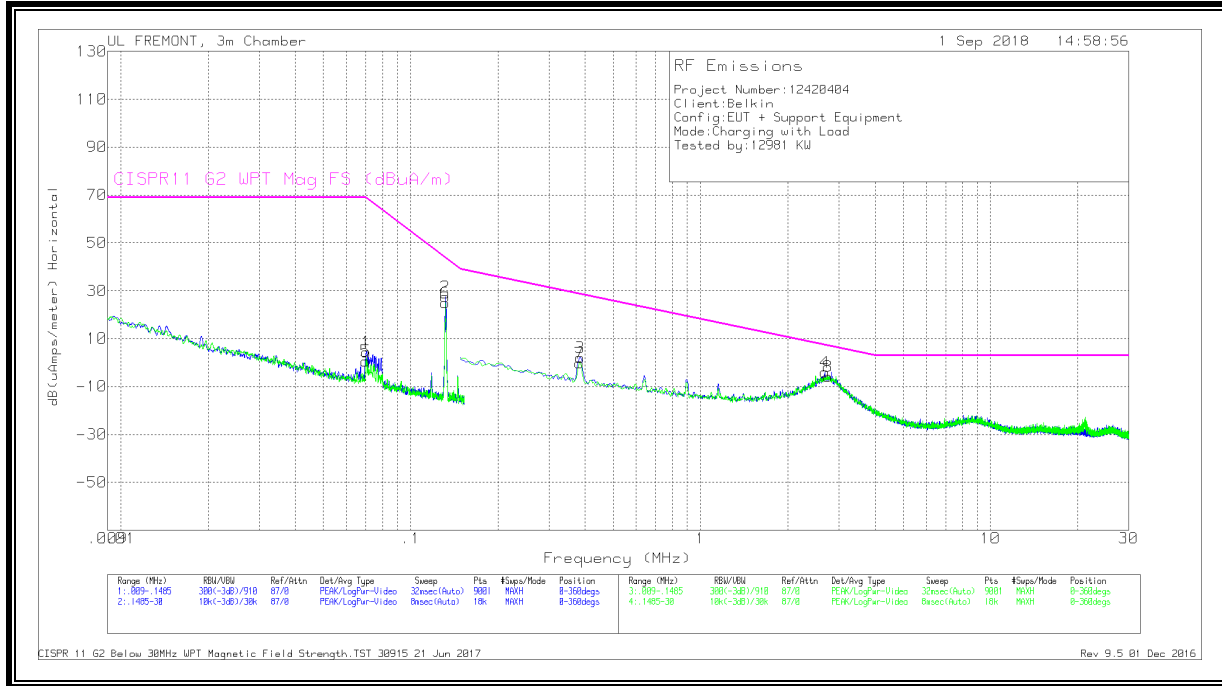


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Corrected Reading dB(uAmps/meter)	CISPR11 G2 WPT Mag FS (dBuA/m)	Margin (dB)	Azimuth (Degs)
5	.0135	48.21	Pk	-33.4	1.4	16.21	69	-52.79	0-360
1	.06133	42.37	Pk	-39	1.4	4.77	69	-64.23	0-360
2	.13152	56.02	Pk	-40.1	1.4	17.32	43.84	-26.52	0-360
6	.13153	52.63	Pk	-40.1	1.4	13.93	43.84	-29.91	0-360
3	2.70182	33	Pk	-40.1	1.5	-5.6	7.29	-12.89	0-360
7	2.77477	33.9	Pk	-40.1	1.5	-4.7	7	-11.7	0-360
8	8.71373	16.01	Pk	-40.7	1.5	-23.19	3	-26.19	0-360
4	8.9989	15.12	Pk	-40.8	1.5	-24.18	3	-27.18	0-360

Pk - Peak detector

8.3.4. OPERATING WITH 10W LOAD

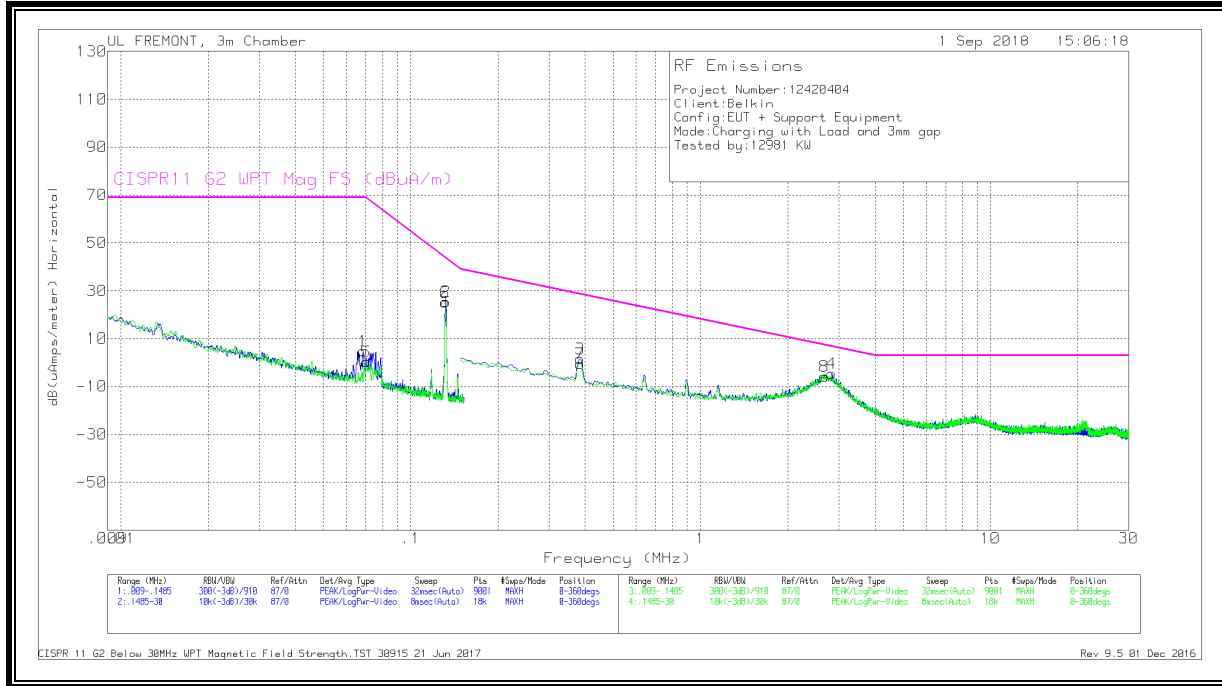


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Corrected Reading dB(uAmps/meter)	CISPR11 G2 WPT Mag FS (dBuA/m)	Margin (dB)	Azimuth (Degs)
5	.07004	38.62	Pk	-39.3	1.4	.72	68.98	-68.26	0-360
1	.07036	42.2	Pk	-39.3	1.4	4.3	68.8	-64.5	0-360
2	.13152	66.12	Pk	-40.1	1.4	27.42	43.84	-16.42	0-360
6	.13152	63.59	Pk	-40.1	1.4	24.89	43.84	-18.95	0-360
7	.38228	38.87	Pk	-40.6	1.5	-.23	28.66	-28.89	0-360
3	.38394	41.3	Pk	-40.6	1.5	2.2	28.62	-26.42	0-360
4	2.68358	34.51	Pk	-40.1	1.5	-4.09	7.36	-11.45	0-360
8	2.75488	32.89	Pk	-40.1	1.5	-5.71	7.08	-12.79	0-360

Pk - Peak detector

8.3.5. OPERATING WITH 10W LOAD AT 3mm Gap



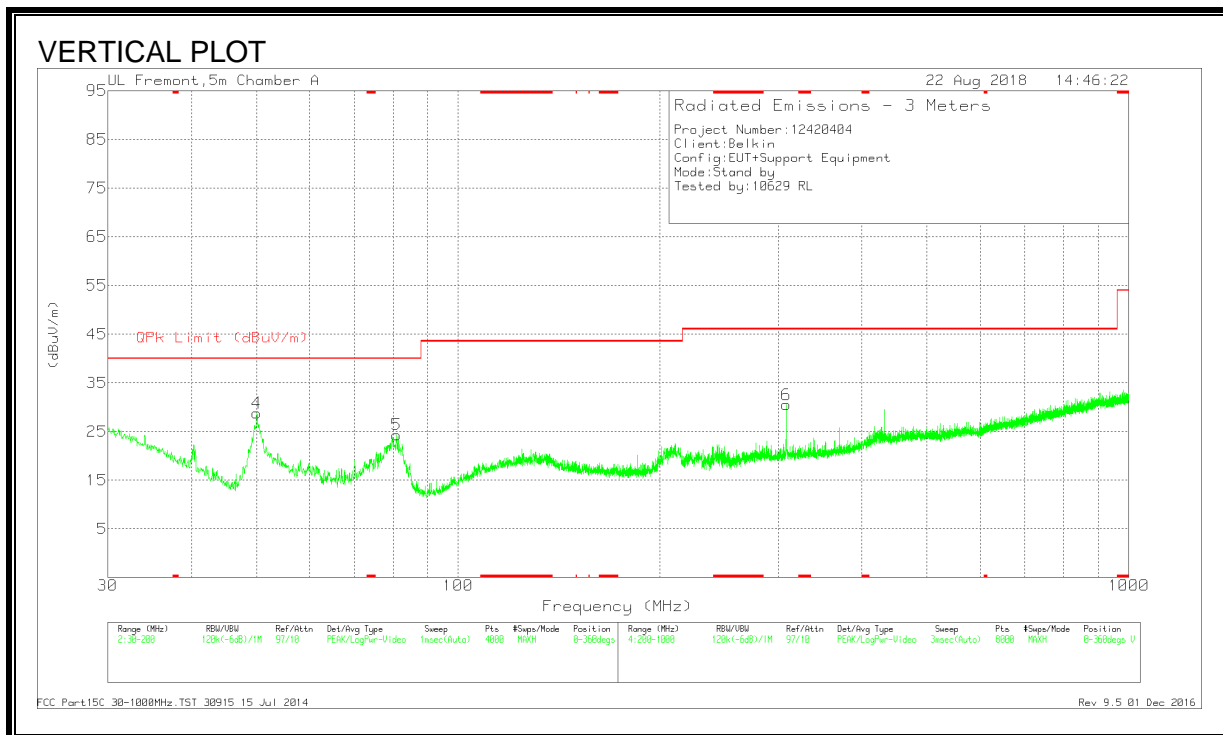
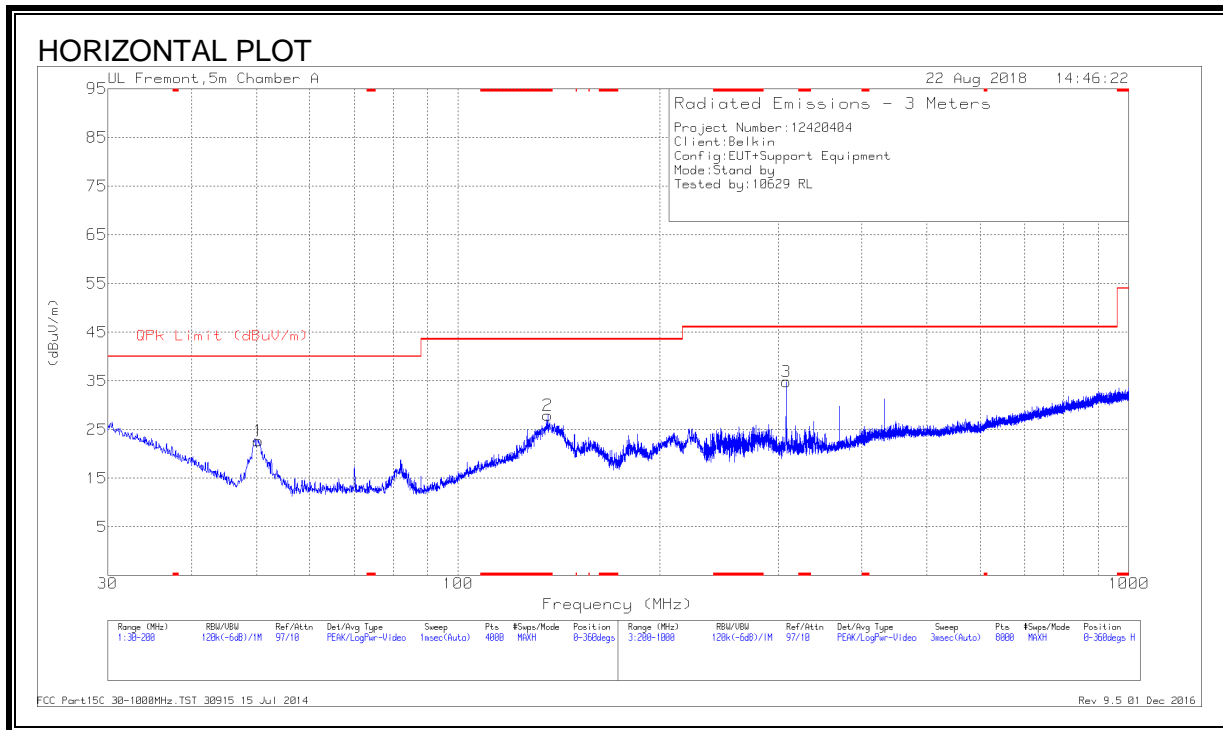
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Corrected Reading dB(uAmps/meter)	CISPR11 G2 WPT Mag FS (dBuA/m)	Margin (dB)	Azimuth (Degs)
1	.06858	42.74	Pk	-39.2	1.4	4.94	69	-64.06	0-360
5	.07027	38.18	Pk	-39.3	1.4	.28	68.85	-68.57	0-360
6	.13152	63.85	Pk	-40.1	1.4	25.15	43.84	-18.69	0-360
2	.13227	64.26	Pk	-40.1	1.4	25.56	43.62	-18.06	0-360
3	.38394	40.6	Pk	-40.6	1.5	1.5	28.62	-27.12	0-360
7	.38394	38.75	Pk	-40.6	1.5	-3.5	28.62	-28.97	0-360
8	2.67032	32.74	Pk	-40.1	1.5	-5.86	7.42	-13.28	0-360
4	2.83612	34.12	Pk	-40.1	1.5	-4.48	6.76	-11.24	0-360

Pk - Peak detector

8.4. FCC TX SPURIOUS EMISSION 30 TO 1000 MHz

8.4.1. STANDBY CONFIGURATION

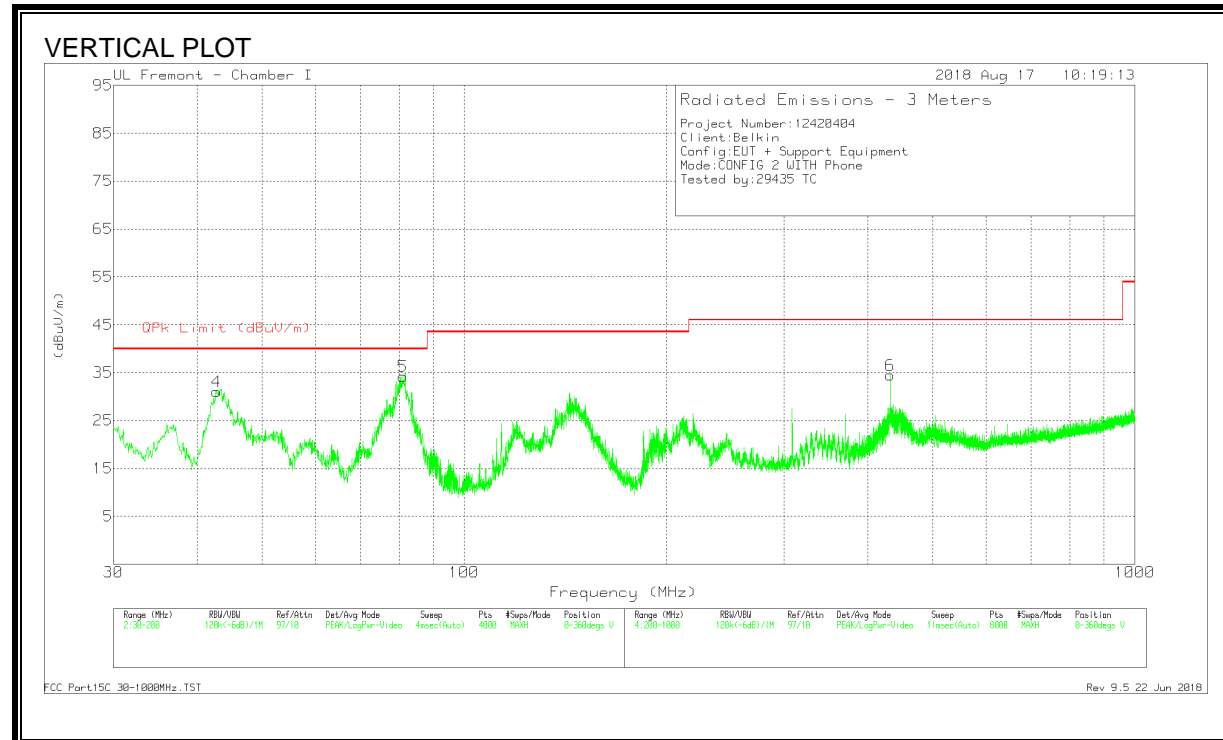
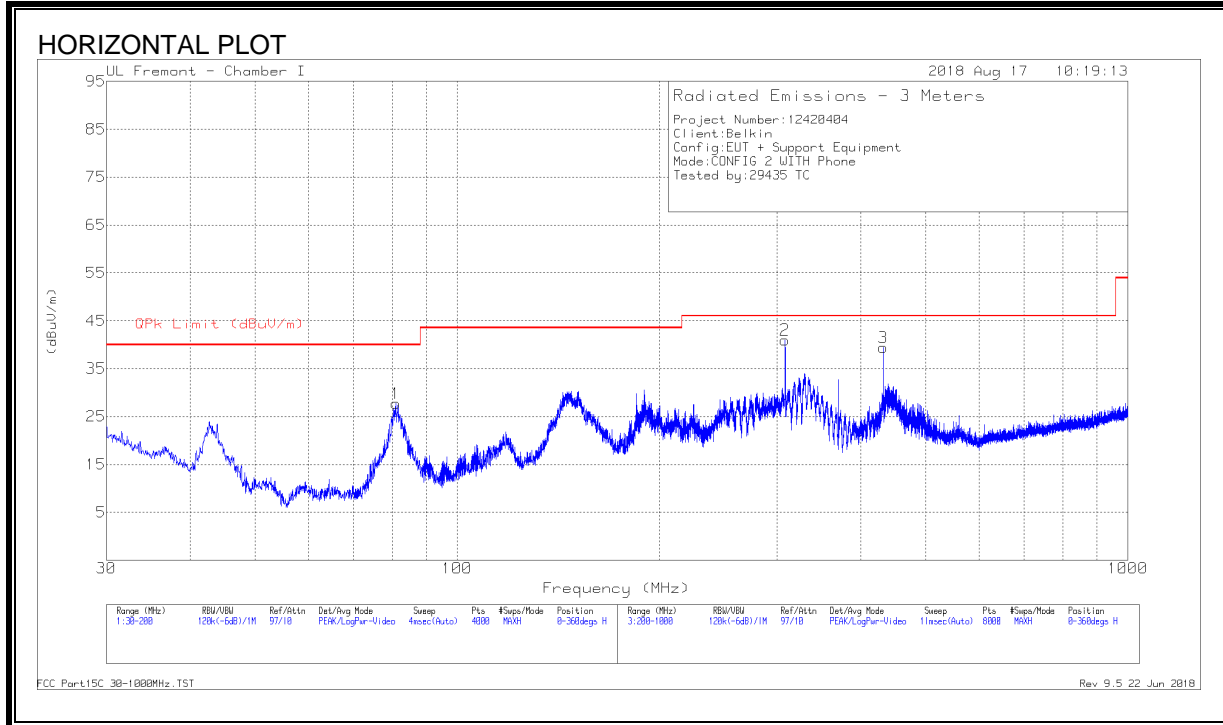


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 135.9799	36.44	Pk	17.5	-26	27.94	43.52	-15.58	0-360	200	H
4	50.0652	44.2	Pk	11.6	-27	28.8	40	-11.2	0-360	100	V
1	50.3203	38.21	Pk	11.5	-27	22.71	40	-17.29	0-360	300	H
5	80.8857	39.54	Pk	11.4	-26.6	24.34	40	-15.66	0-360	100	V
3	308.4141	41.84	Pk	17.6	-24.6	34.84	46.02	-11.18	0-360	101	H
6	308.4141	37.53	Pk	17.6	-24.6	30.53	46.02	-15.49	0-360	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector

8.4.2. OPERATING WITH PHONE



DATA

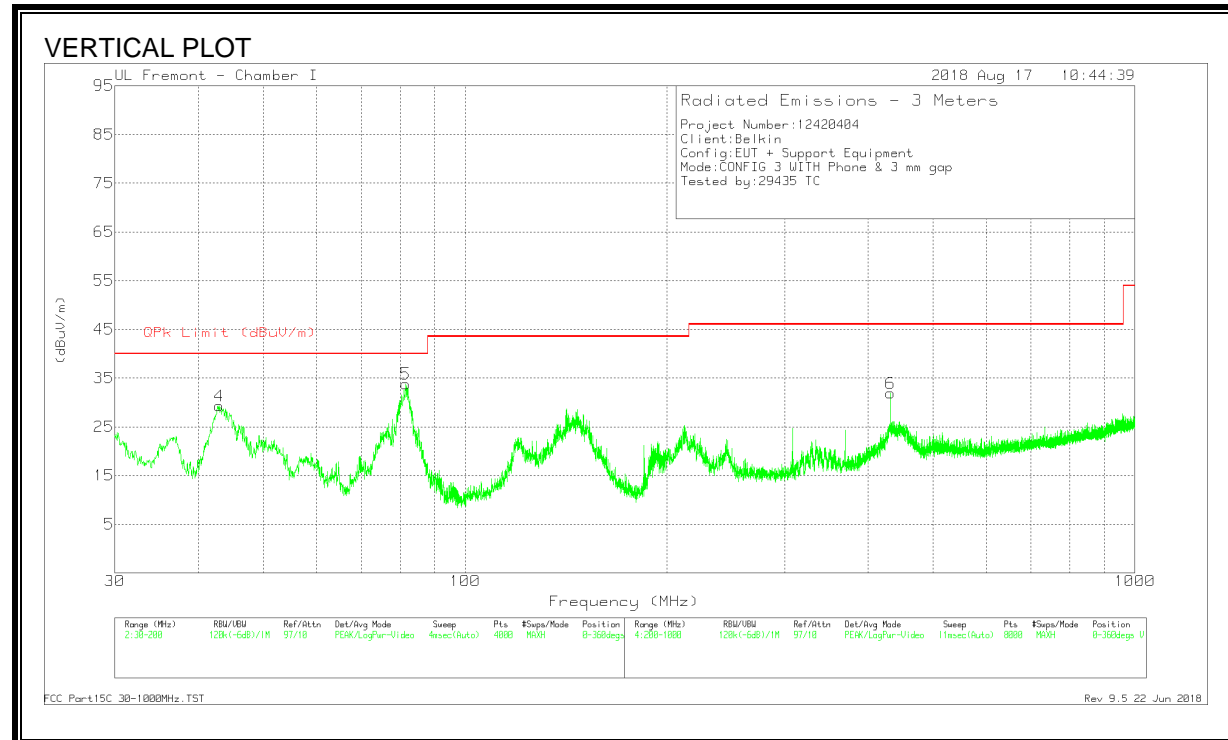
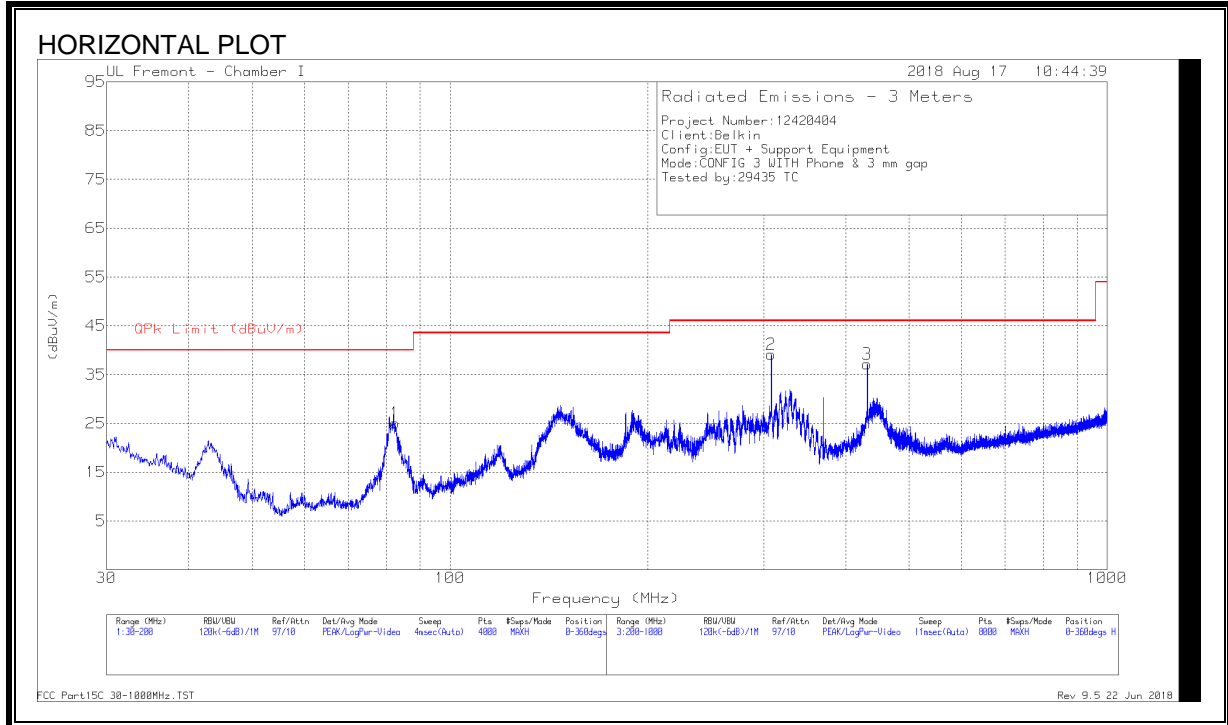
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	81.0132	47.25	Pk	11.4	-30.9	27.75	40	-12.25	0-360	399	H
4	42.7108	46.01	Pk	16.2	-31.2	31.01	40	-8.99	0-360	101	V
5	81.0132	53.74	Pk	11.4	-30.9	34.24	40	-5.76	0-360	101	V
		51.32	Qp	11.4	-30.9	31.82	40	-8.18	155	111	V
2	308.3141	53.22	Pk	17.6	-29.8	41.02	46.02	-5	0-360	101	H
		52.39	Qp	17.6	-29.8	40.19	46.02	-5.83	225	102	H
3	431.7301	48.44	Pk	20.5	-29.5	39.44	46.02	-6.58	0-360	101	H
6	431.7801	43.51	Pk	20.5	-29.5	34.51	46.02	-11.51	0-360	199	V

Pk - Peak detector

Qp - Quasi-Peak detector

8.4.3. OPERATING WITH PHONE 3mm Gap

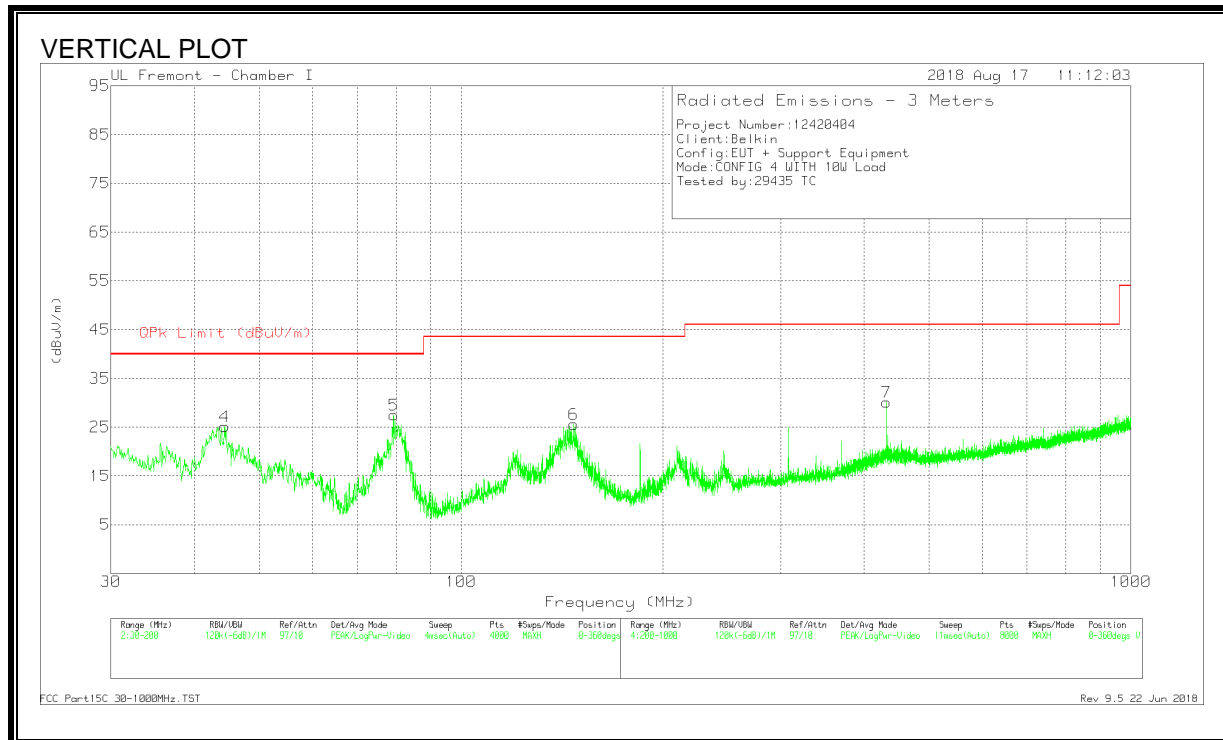
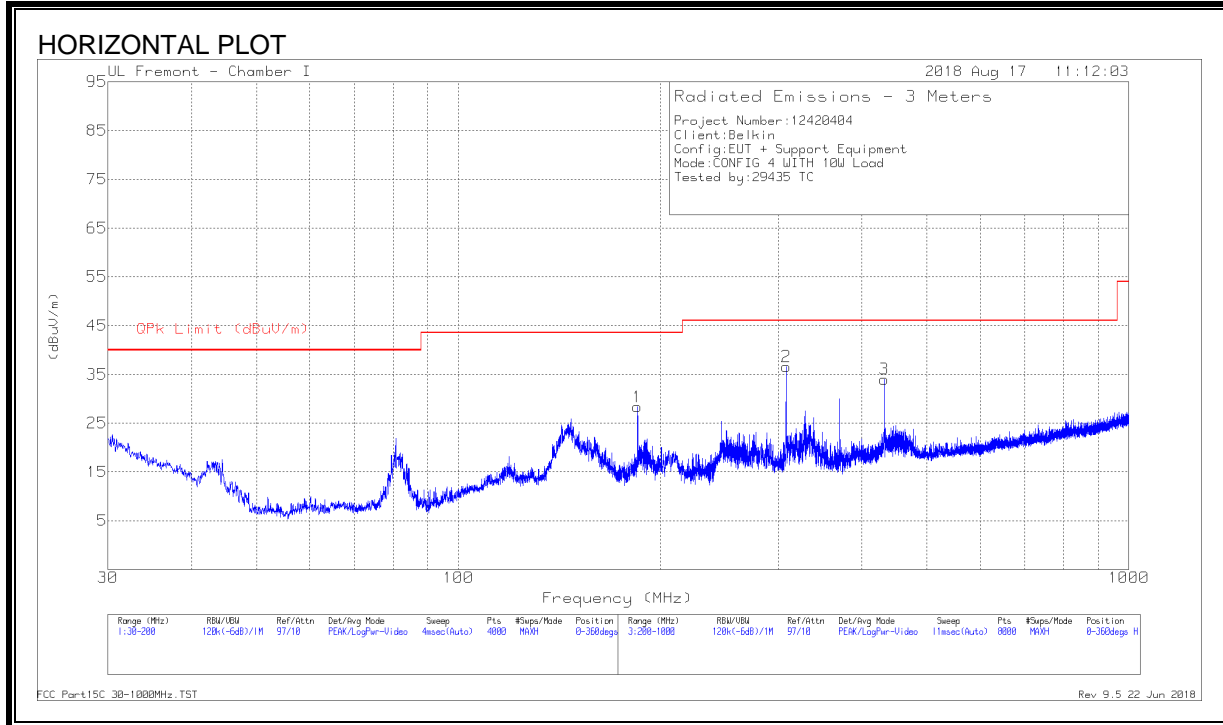


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	82.4586	44.62	Pk	11.3	-30.8	25.12	40	-14.88	0-360	299	H
4	42.9233	44.37	Pk	16.1	-31.2	29.27	40	-10.73	0-360	101	V
5	81.5658	53.3	Pk	11.3	-30.8	33.8	40	-6.2	0-360	101	V
2	308.3141	51.35	Pk	17.6	-29.8	39.15	46.02	-6.87	0-360	101	H
3	431.6301	46.17	Pk	20.5	-29.5	37.17	46.02	-8.85	0-360	101	H
6	431.7301	40.89	Pk	20.5	-29.5	31.89	46.02	-14.13	0-360	199	V

Pk - Peak detector

8.4.4. OPERATING WITH 10W LOAD

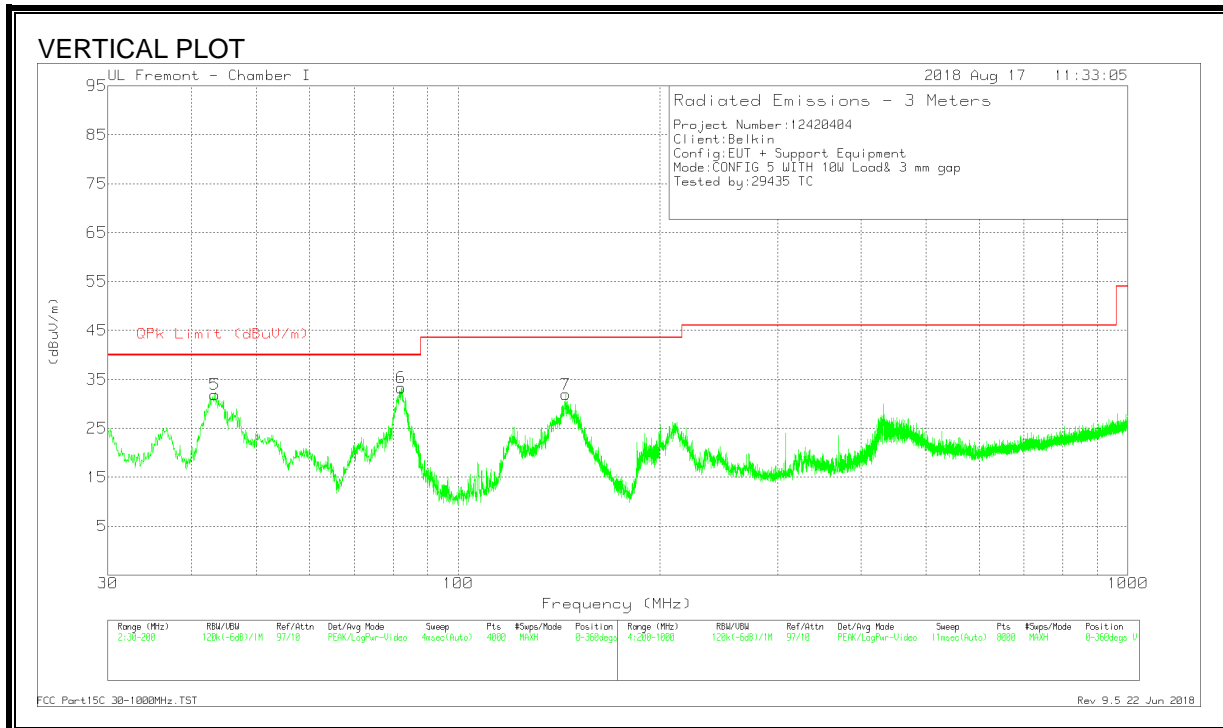
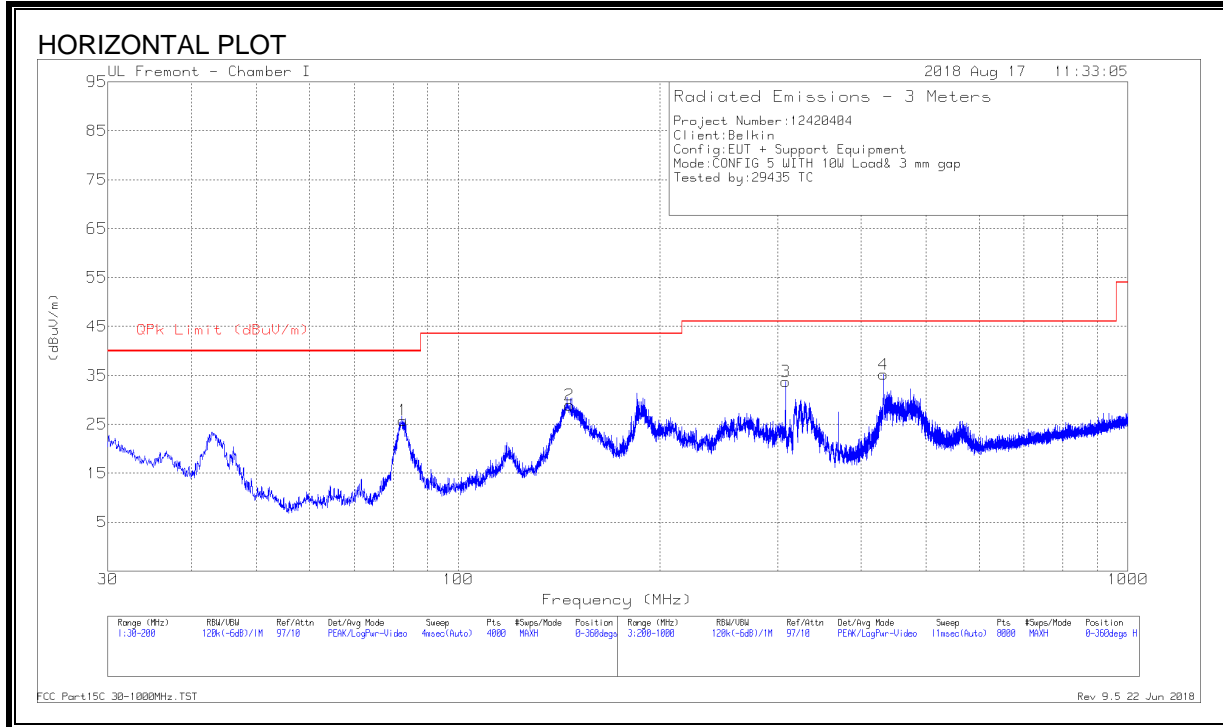


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	184.9951	43.55	Pk	15.1	-30.3	28.35	43.52	-15.17	0-360	200	H
4	44.3687	41.3	Pk	15	-31.2	25.1	40	-14.9	0-360	101	V
5	79.3128	46.88	Pk	11.5	-30.9	27.48	40	-12.52	0-360	101	V
6	147.3304	39.08	Pk	16.9	-30.4	25.58	43.52	-17.94	0-360	101	V
2	308.3141	48.8	Pk	17.6	-29.8	36.6	46.02	-9.42	0-360	101	H
3	431.6301	43.03	Pk	20.5	-29.5	34.03	46.02	-11.99	0-360	101	H
7	431.6301	39.1	Pk	20.5	-29.5	30.1	46.02	-15.92	0-360	199	V

Pk - Peak detector

8.4.5. OPERATING WITH 10W LOAD AT 3MM GAP



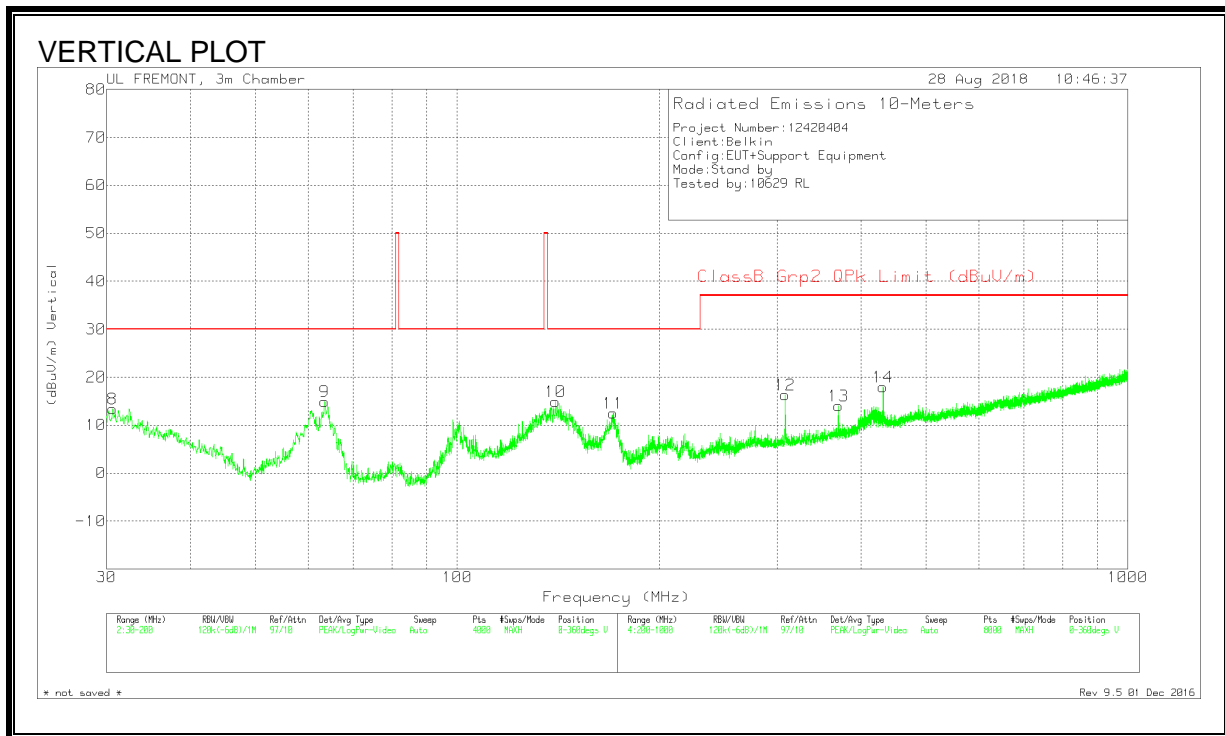
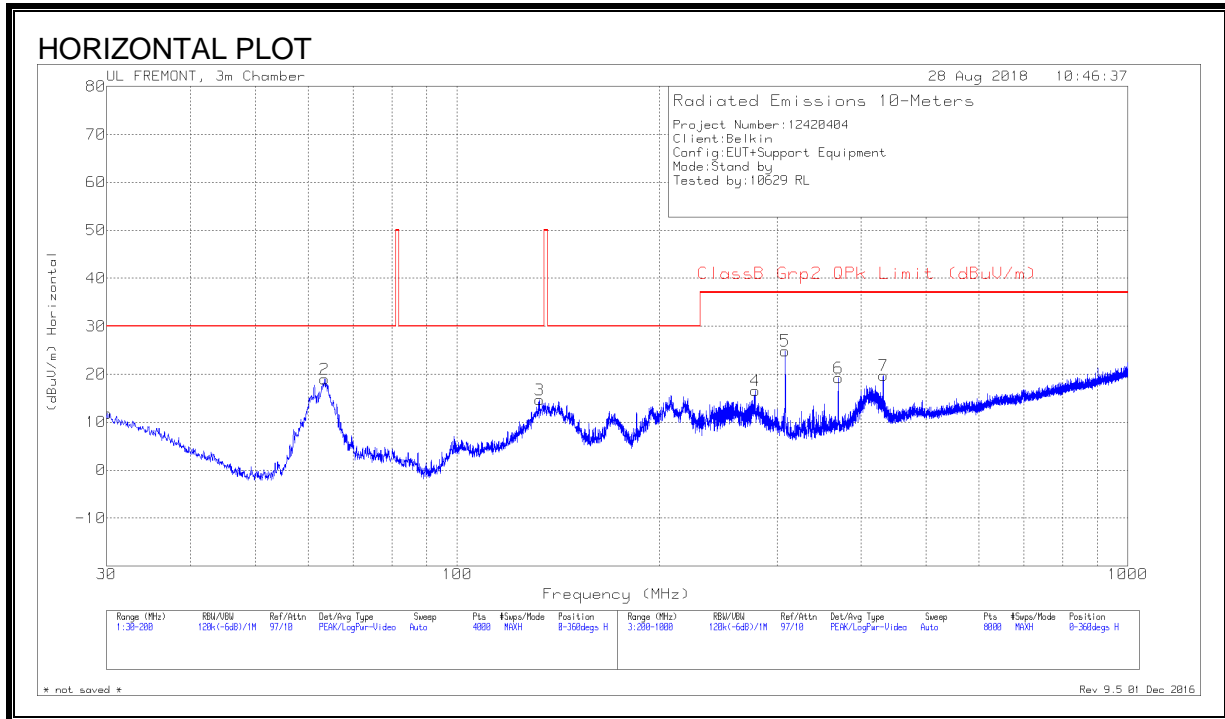
DATA

Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBUV/m)	QPk Limit (dBUV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	82.7136	45.4	Pk	11.2	-30.8	25.8	40	-14.2	0-360	400	H
2	146.6077	42.43	Pk	16.9	-30.4	28.93	43.52	-14.59	0-360	199	H
5	43.3485	47.31	Pk	15.8	-31.2	31.91	40	-8.09	0-360	101	V
6	82.246	52.79	Pk	11.3	-30.8	33.29	40	-6.71	0-360	101	V
7	144.9072	45.44	Pk	17	-30.5	31.94	43.52	-11.58	0-360	101	V
3	308.3141	45.96	Pk	17.6	-29.8	33.76	46.02	-12.26	0-360	101	H
4	431.6301	44.2	Pk	20.5	-29.5	35.2	46.02	-10.82	0-360	101	H

Pk - Peak detector

8.5. IC / CISPR 11 TX SPURIOUS EMISSION 30 TO 1000 MHz

8.5.1. STANDBY CONFIGURATION

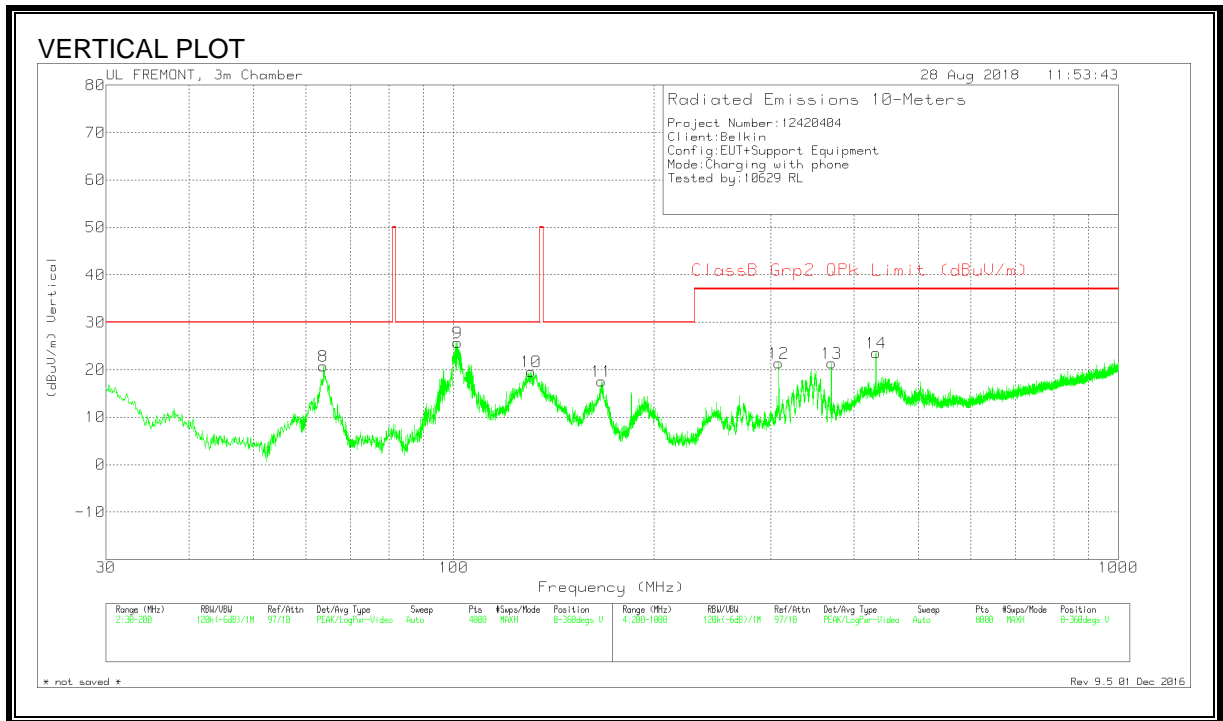
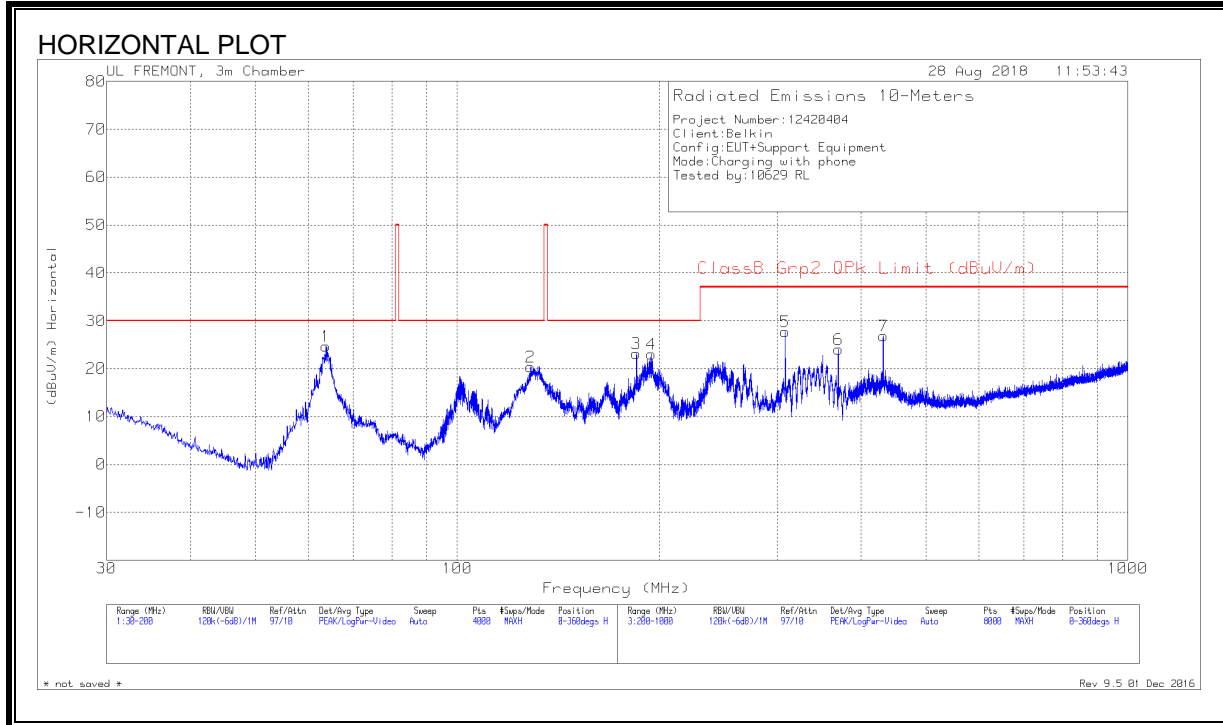


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB/m)	Dist Corr (dB) 20Log	Corrected Reading (dBuV/m)	ClassB Grp2 QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.085	28.01	Pk	25.4	-31.1	-10.5	11.81	30	-18.19	0-360	300	H
8	30.6375	29.92	Pk	25.1	-31.1	-10.5	13.42	30	-16.58	0-360	100	V
2	63.4475	48.45	Pk	11.7	-30.7	-10.5	18.95	30	-11.05	0-360	300	H
9	63.4475	44.38	Pk	11.7	-30.7	-10.5	14.88	30	-15.12	0-360	100	V
3	132.6588	37.42	Pk	17.7	-29.9	-10.5	14.72	30	-15.28	0-360	200	H
10	140.0325	38.17	Pk	17.1	-29.9	-10.5	14.87	30	-15.13	0-360	100	V
11	170.9725	37.02	Pk	15.6	-29.6	-10.5	12.52	30	-17.48	0-360	100	V
4	278.1	38.38	Pk	17.5	-28.8	-10.5	16.58	37	-20.42	0-360	100	H
5	308.4	46.48	Pk	17.6	-28.7	-10.5	24.88	37	-12.12	0-360	100	H
12	308.4	37.92	Pk	17.6	-28.7	-10.5	16.32	37	-20.68	0-360	100	V
6	370.1	38.99	Pk	19	-28.3	-10.5	19.19	37	-17.81	0-360	200	H
13	370.1	33.84	Pk	19	-28.3	-10.5	14.04	37	-22.96	0-360	100	V
14	431.7	35.82	Pk	20.6	-28	-10.5	17.92	37	-19.08	0-360	200	V
7	431.8	37.62	Pk	20.6	-28	-10.5	19.72	37	-17.28	0-360	200	H

Pk - Peak detector

8.5.2. OPERATING WITH PHONE



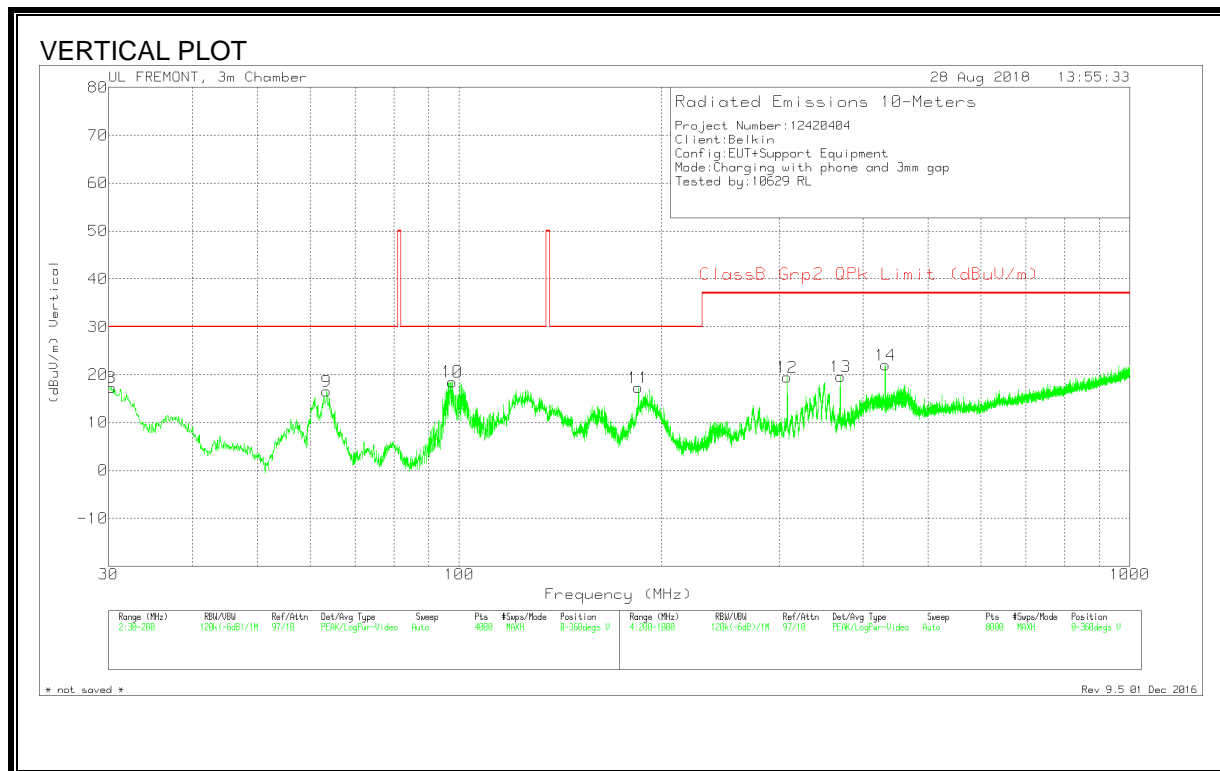
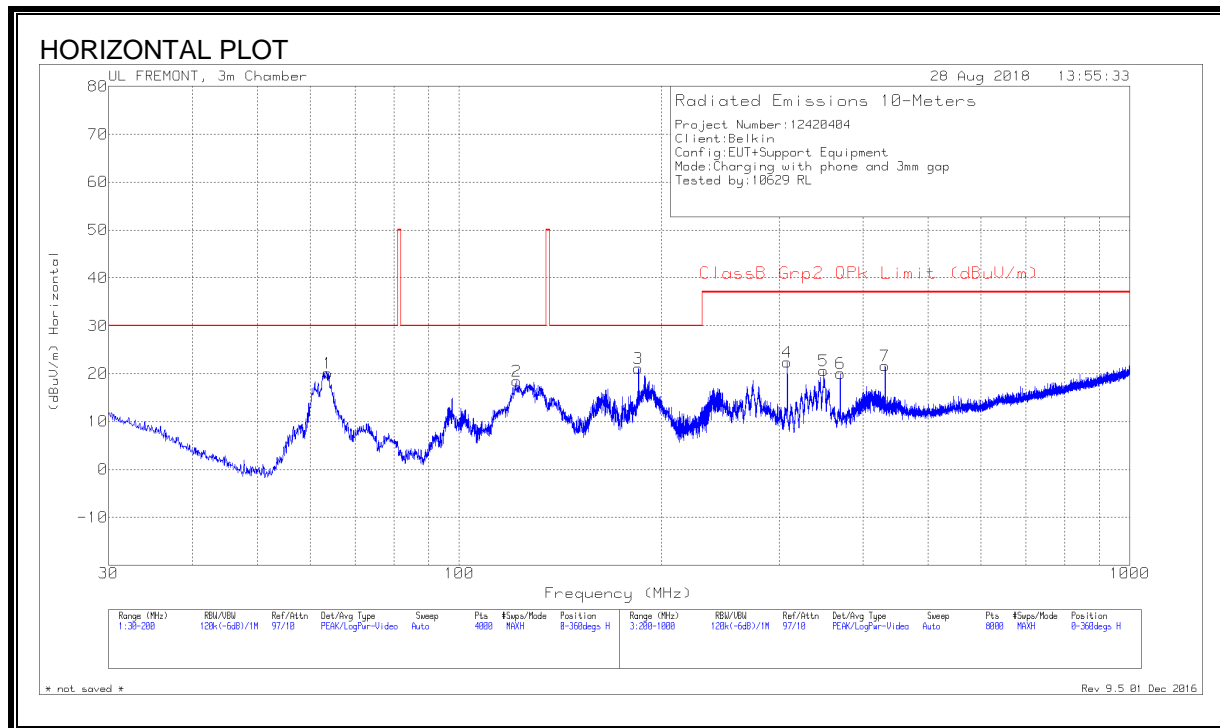
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB/m)	Dist Corr (dB) 20Log	Corrected Reading (dBuV/m)	ClassB Grp2 QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	63.7025	54.11	Pk	11.8	-30.7	-10.5	24.71	30	-5.29	0-360	300	H
	63.8	48.92	Qp	11.8	-30.6	-10.5	19.62	30	-10.38	243	320	H
8	63.745	50.12	Pk	11.8	-30.7	-10.5	20.72	30	-9.28	0-360	100	V
9	101.4	51.8	Pk	14.7	-30.3	-10.5	25.7	30	-4.3	0-360	100	V
	101.0	49.09	Qp	14.6	-30.3	-10.5	22.89	30	-7.11	0	100	V
2	128.7488	42.86	Pk	18	-30	-10.5	20.36	30	-9.64	0-360	200	H
10	130.7675	42.24	Pk	17.9	-30	-10.5	19.64	30	-10.36	0-360	100	V
11	167.0625	41.86	Pk	15.9	-29.7	-10.5	17.56	30	-12.44	0-360	100	V
3	184.9975	48.06	Pk	15.1	-29.5	-10.5	23.16	30	-6.84	0-360	100	H
4	194.9	47	Pk	15.9	-29.4	-10.5	23	30	-7	0-360	100	H
5	308.3	49.31	Pk	17.6	-28.7	-10.5	27.71	37	-9.29	0-360	100	H
12	308.4	42.95	Pk	17.6	-28.7	-10.5	21.35	37	-15.65	0-360	100	V
6	370.05	43.85	Pk	19	-28.3	-10.5	24.05	37	-12.95	0-360	100	H
13	370.1	41.22	Pk	19	-28.3	-10.5	21.42	37	-15.58	0-360	100	V
7	431.8	44.8	Pk	20.6	-28	-10.5	26.9	37	-10.1	0-360	200	H
14	431.8	41.47	Pk	20.6	-28	-10.5	23.57	37	-13.43	0-360	200	V

Pk - Peak detector

Qp - Quasi-Peak detector

8.5.3. OPERATING WITH iPhone AT 3mm Gap

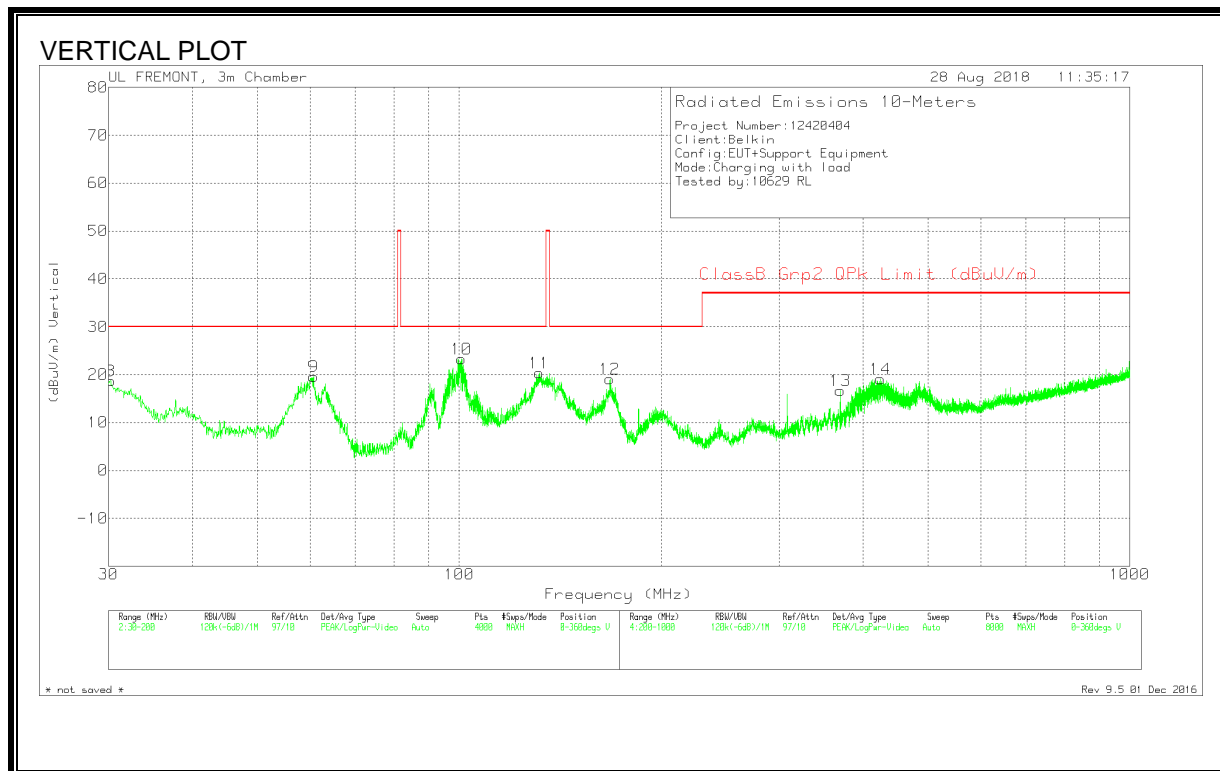
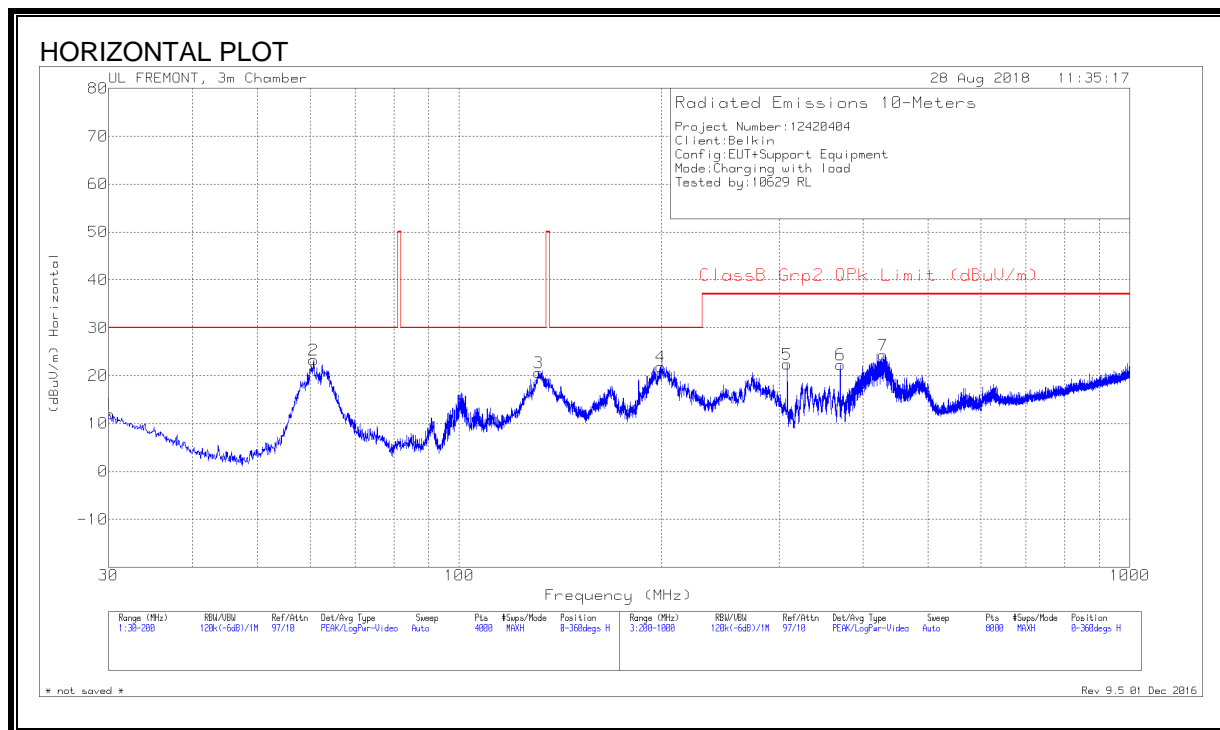


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB/m)	Dist Corr (dB) 20Log	Corrected Reading (dBuV/m)	ClassB Grp2 QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
8	30.2975	33.68	Pk	25.3	-31.1	-10.5	17.38	30	-12.62	0-360	100	V
9	63.4475	46.1	Pk	11.7	-30.7	-10.5	16.6	30	-13.4	0-360	100	V
1	63.745	49.57	Pk	11.8	-30.7	-10.5	20.17	30	-9.83	0-360	300	H
10	97.575	45.73	Pk	13.6	-30.3	-10.5	18.53	30	-11.47	0-360	100	V
2	121.8425	41.08	Pk	18	-30.1	-10.5	18.48	30	-11.52	0-360	200	H
11	184.9975	42.22	Pk	15.1	-29.5	-10.5	17.32	30	-12.68	0-360	100	V
3	185.04	45.99	Pk	15.1	-29.5	-10.5	21.09	30	-8.91	0-360	100	H
4	308.4	44.03	Pk	17.6	-28.7	-10.5	22.43	37	-14.57	0-360	100	H
12	308.4	41.08	Pk	17.6	-28.7	-10.5	19.48	37	-17.52	0-360	100	V
5	349.5	41.38	Pk	18.3	-28.5	-10.5	20.68	37	-16.32	0-360	100	H
6	370.1	39.86	Pk	19	-28.3	-10.5	20.06	37	-16.94	0-360	200	H
13	370.1	39.46	Pk	19	-28.3	-10.5	19.66	37	-17.34	0-360	100	V
7	431.7	39.49	Pk	20.6	-28	-10.5	21.59	37	-15.41	0-360	200	H
14	431.8	39.93	Pk	20.6	-28	-10.5	22.03	37	-14.97	0-360	100	V

Pk - Peak detector

8.5.4. OPERATING WITH 10W LOAD

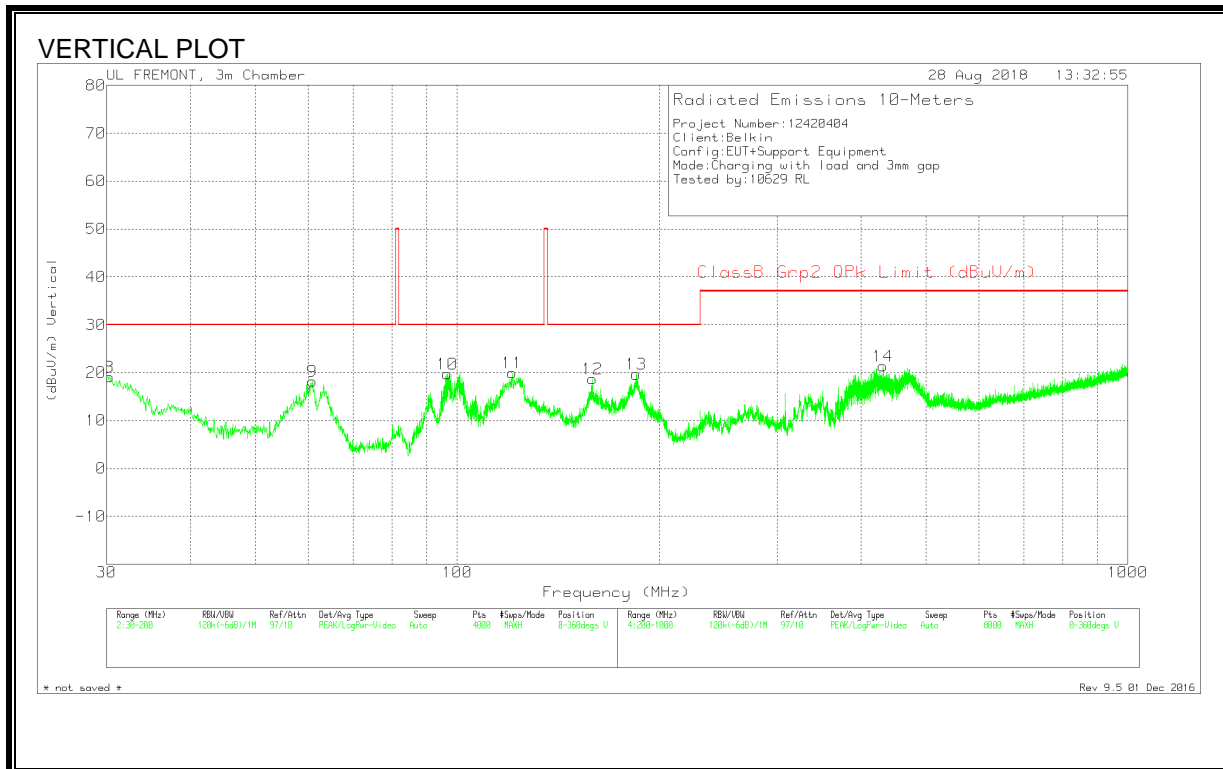
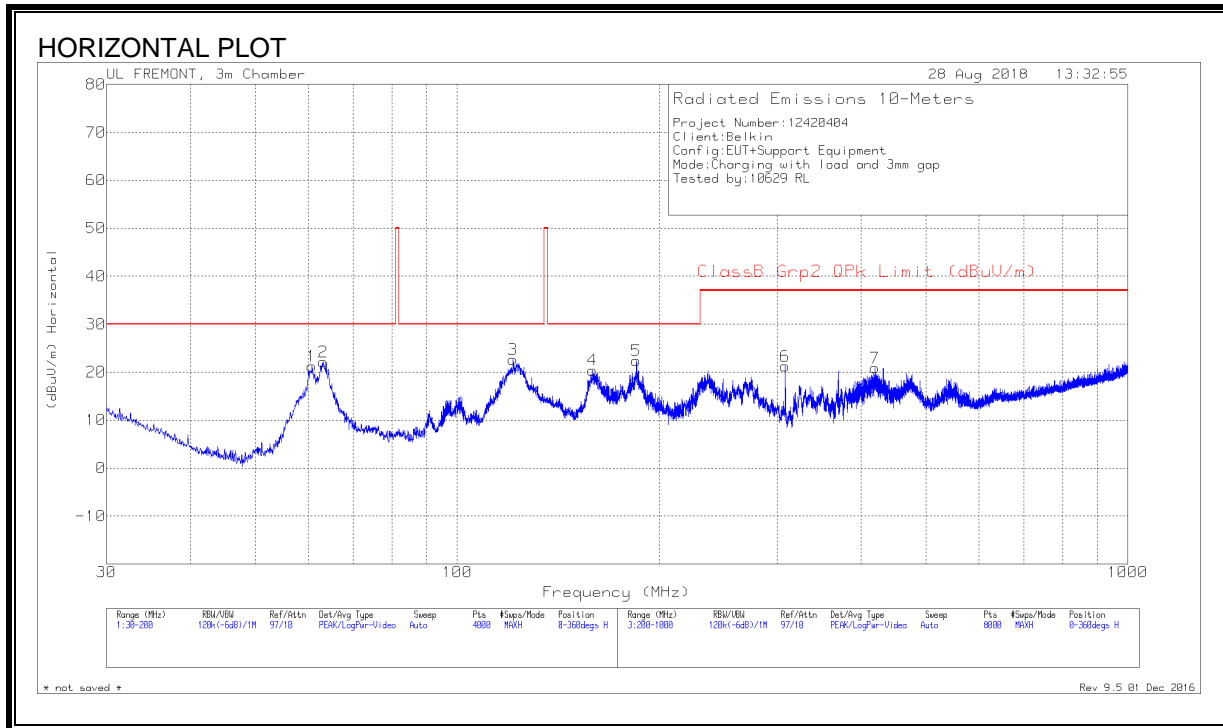


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB/m)	Dist Corr (dB) 20Log	Corrected Reading (dBuV/m)	ClassB Grp2 QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.1275	28.26	Pk	25.4	-31.1	-10.5	12.06	30	-17.94	0-360	300	H
8	30.2125	34.97	Pk	25.4	-31.1	-10.5	18.77	30	-11.23	0-360	100	V
2	60.6425	52.84	Pk	11.6	-30.7	-10.5	23.24	30	-6.76	0-360	300	H
9	60.6425	49.25	Pk	11.6	-30.7	-10.5	19.65	30	-10.35	0-360	100	V
10	100.8475	49.46	Pk	14.6	-30.3	-10.5	23.26	30	-6.74	0-360	100	V
3	131.32	43.25	Pk	17.9	-30	-10.5	20.65	30	-9.35	0-360	200	H
11	131.49	42.96	Pk	17.9	-30	-10.5	20.36	30	-9.64	0-360	100	V
12	167.785	43.49	Pk	15.8	-29.7	-10.5	19.09	30	-10.91	0-360	100	V
4	199.7875	45.15	Pk	16.7	-29.4	-10.5	21.95	30	-8.05	0-360	100	H
5	308.4	44.06	Pk	17.6	-28.7	-10.5	22.46	37	-14.54	0-360	100	H
13	370	36.49	Pk	19	-28.3	-10.5	16.69	37	-20.31	0-360	100	V
6	370.1	42.14	Pk	19	-28.3	-10.5	22.34	37	-14.66	0-360	200	H
14	424.6	37.19	Pk	20.5	-28.1	-10.5	19.09	37	-17.91	0-360	100	V
7	428.9	42.16	Pk	20.6	-28	-10.5	24.26	37	-12.74	0-360	200	H

Pk - Peak detector

8.5.5. OPERATING WITH 10W LOAD AT 3mm Gap



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB/m)	Dist Corr (dB) 20Log	Corrected Reading (dBuV/m)	ClassB Grp2 QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
8	30.2763	35.41	Pk	25.3	-31.1	-10.5	19.11	30	-10.89	0-360	100	V
1	60.685	50.87	Pk	11.6	-30.7	-10.5	21.27	30	-8.73	0-360	200	H
9	60.855	47.78	Pk	11.6	-30.7	-10.5	18.18	30	-11.82	0-360	100	V
2	63.15	51.61	Pk	11.7	-30.7	-10.5	22.11	30	-7.89	0-360	300	H
10	96.5763	47.29	Pk	13.3	-30.3	-10.5	19.79	30	-10.21	0-360	100	V
11	120.78	42.62	Pk	18	-30.1	-10.5	20.02	30	-9.98	0-360	100	V
3	121.1413	45.24	Pk	18	-30.1	-10.5	22.64	30	-7.36	0-360	200	H
12	159.0725	42.69	Pk	16.2	-29.7	-10.5	18.69	30	-11.31	0-360	100	V
4	159.2425	44.44	Pk	16.2	-29.7	-10.5	20.44	30	-9.56	0-360	200	H
5	185.04	47.34	Pk	15.1	-29.5	-10.5	22.44	30	-7.56	0-360	100	H
13	185.04	44.58	Pk	15.1	-29.5	-10.5	19.68	30	-10.32	0-360	100	V
6	308.4	42.84	Pk	17.6	-28.7	-10.5	21.24	37	-15.76	0-360	100	H
7	420	39.22	Pk	20.4	-28.2	-10.5	20.92	37	-16.08	0-360	200	H
14	431.7	39.24	Pk	20.6	-28	-10.5	21.34	37	-15.66	0-360	100	V

Pk - Peak detector

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

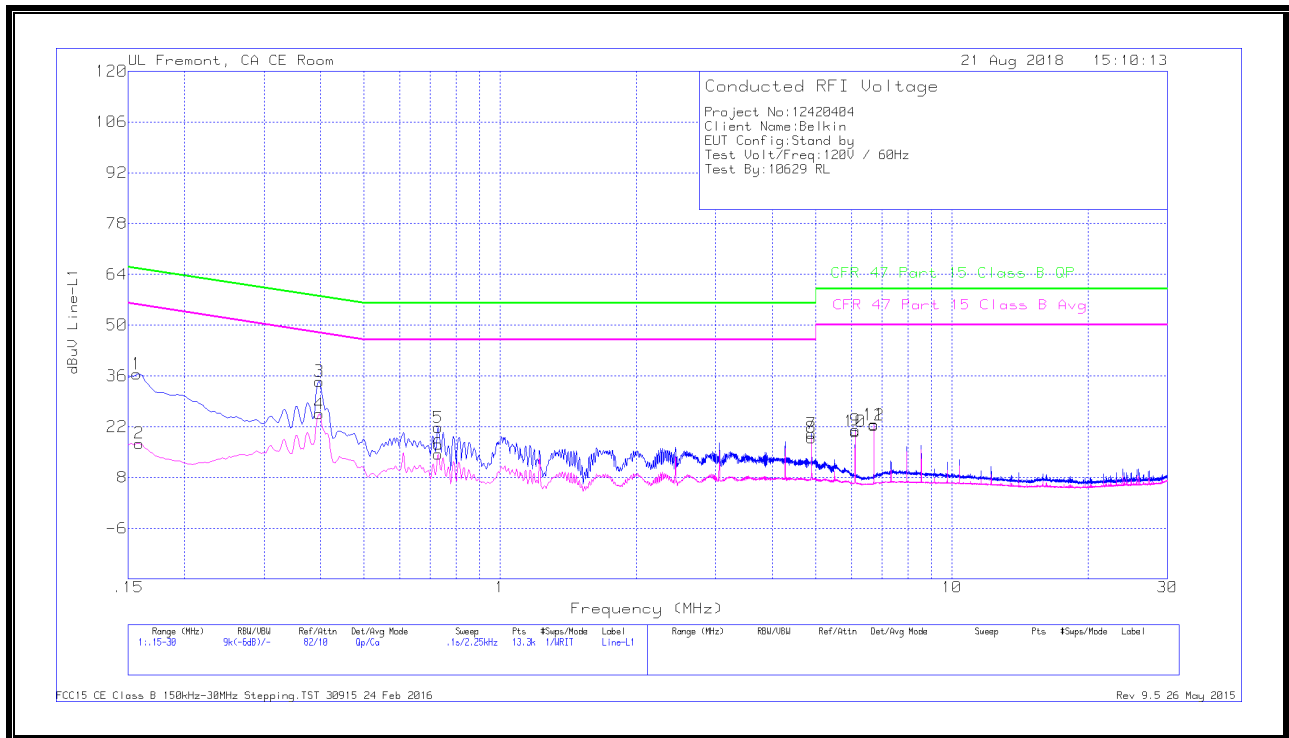
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

STANDBY MODE

LINE 1 RESULTS

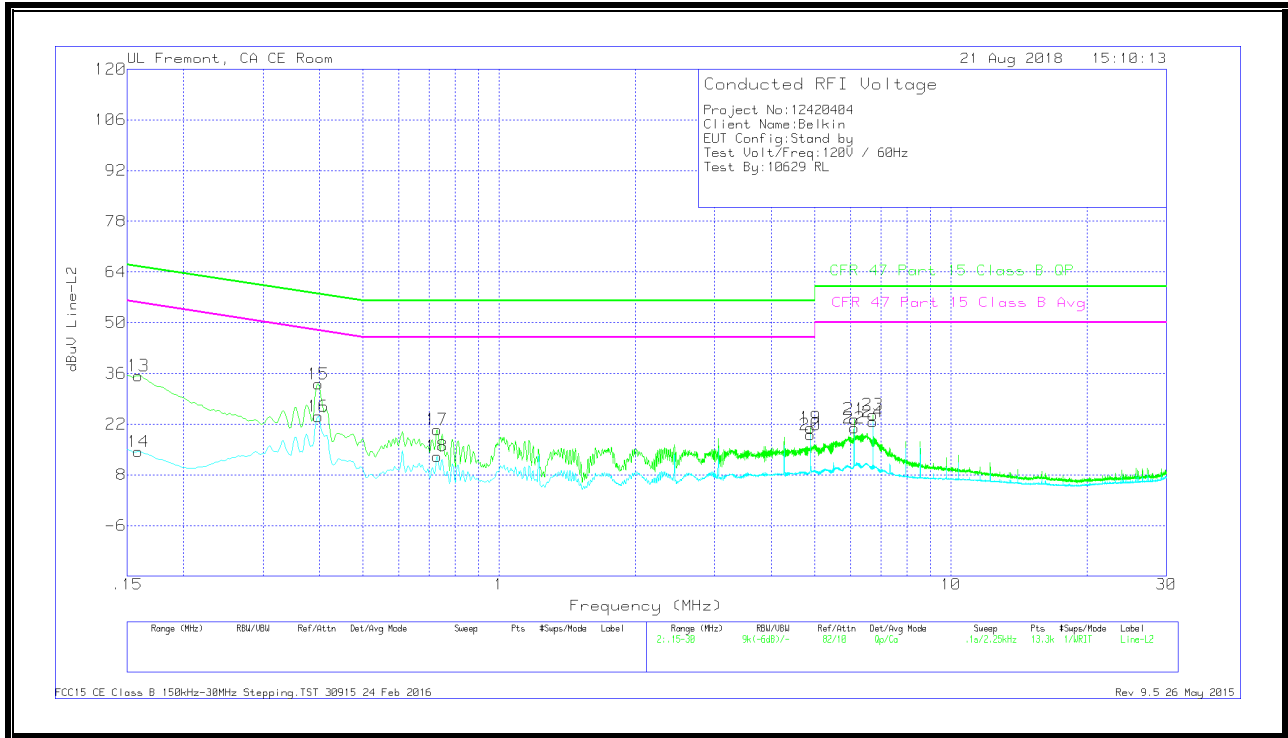


WORST EMISSIONS

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	.15675	26.35	Qp	.1	0	10.1	36.55	65.63	-29.08	-	-
2	.159	7.23	Ca	.1	0	10.1	17.43	-	-	55.52	-38.09
3	.3975	24.41	Qp	0	0	10.1	34.51	57.91	-23.4	-	-
4	.3975	15.45	Ca	0	0	10.1	25.55	-	-	47.91	-22.36
5	.72825	11.67	Qp	0	0	10.1	21.77	56	-34.23	-	-
6	.72825	4.35	Ca	0	0	10.1	14.45	-	-	46	-31.55
7	4.88625	9.87	Qp	0	.1	10.1	20.07	56	-35.93	-	-
8	4.88625	8.77	Ca	0	.1	10.1	18.97	-	-	46	-27.03
9	6.108	10.65	Qp	0	.2	10.2	21.05	60	-38.95	-	-
10	6.108	10.27	Ca	0	.2	10.2	20.67	-	-	50	-29.33
11	6.72	12.2	Qp	0	.2	10.2	22.6	60	-37.4	-	-
12	6.72	12.01	Ca	0	.2	10.2	22.41	-	-	50	-27.59

Qp - Quasi-Peak detector
 Ca - CISPR average detection

LINE 2 RESULTS



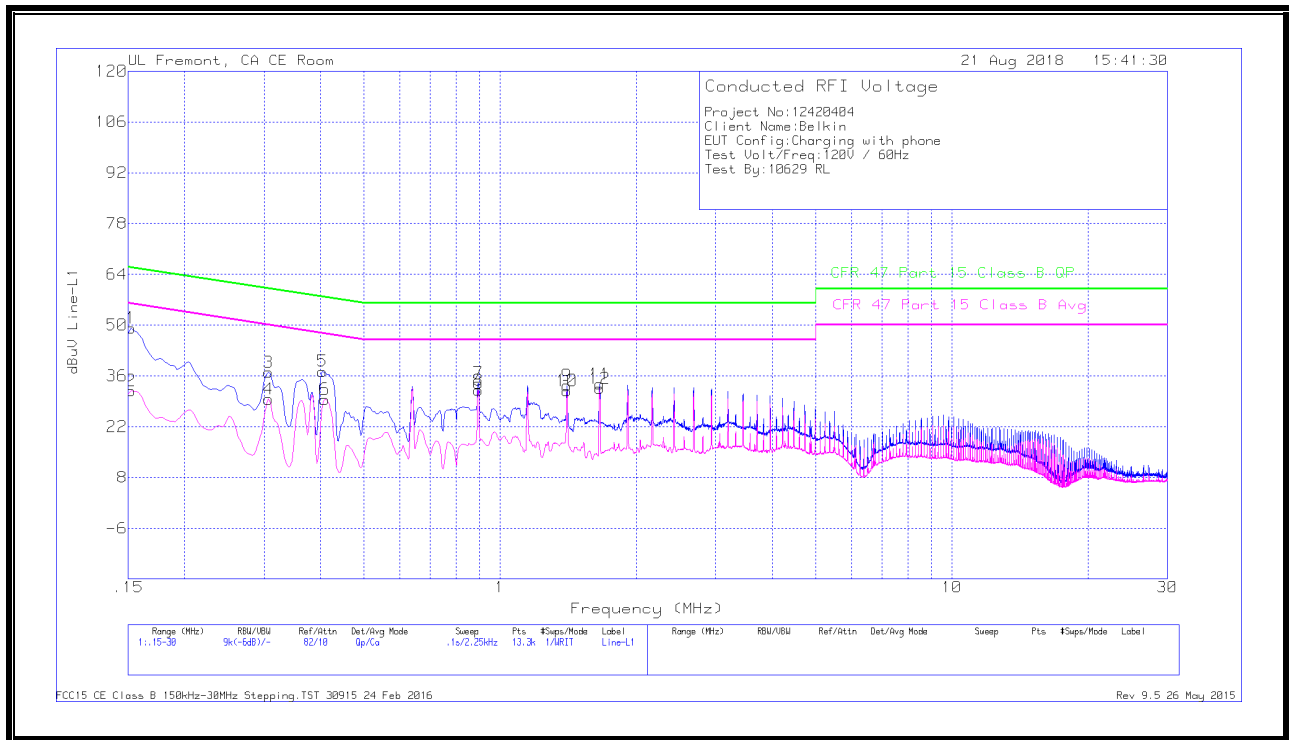
WORST EMISSIONS

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	.159	25.14	Qp	.1	0	10.1	35.34	65.52	-30.18	-	-	
14	.159	4.22	Ca	.1	0	10.1	14.42	-	-	55.52	-41.1	
15	.3975	22.96	Qp	0	0	10.1	33.06	57.91	-24.85	-	-	
16	.3975	14.02	Ca	0	0	10.1	24.12	-	-	47.91	-23.79	
17	.72825	10.37	Qp	0	0	10.1	20.47	56	-35.53	-	-	
18	.72825	3.04	Ca	0	0	10.1	13.14	-	-	46	-32.86	
19	4.88625	10.8	Qp	0	.1	10.1	21	56	-35	-	-	
20	4.88625	8.87	Ca	0	.1	10.1	19.07	-	-	46	-26.93	
21	6.108	12.95	Qp	0	.2	10.2	23.35	60	-36.65	-	-	
22	6.108	10.5	Ca	0	.2	10.2	20.9	-	-	50	-29.1	
23	6.72	14.17	Qp	0	.2	10.2	24.57	60	-35.43	-	-	
24	6.72	12.22	Ca	0	.2	10.2	22.62	-	-	50	-27.38	

Qp - Quasi-Peak detector
 Ca - CISPR average detection

OPERATING MODE WITH PHONE

LINE 1 RESULTS

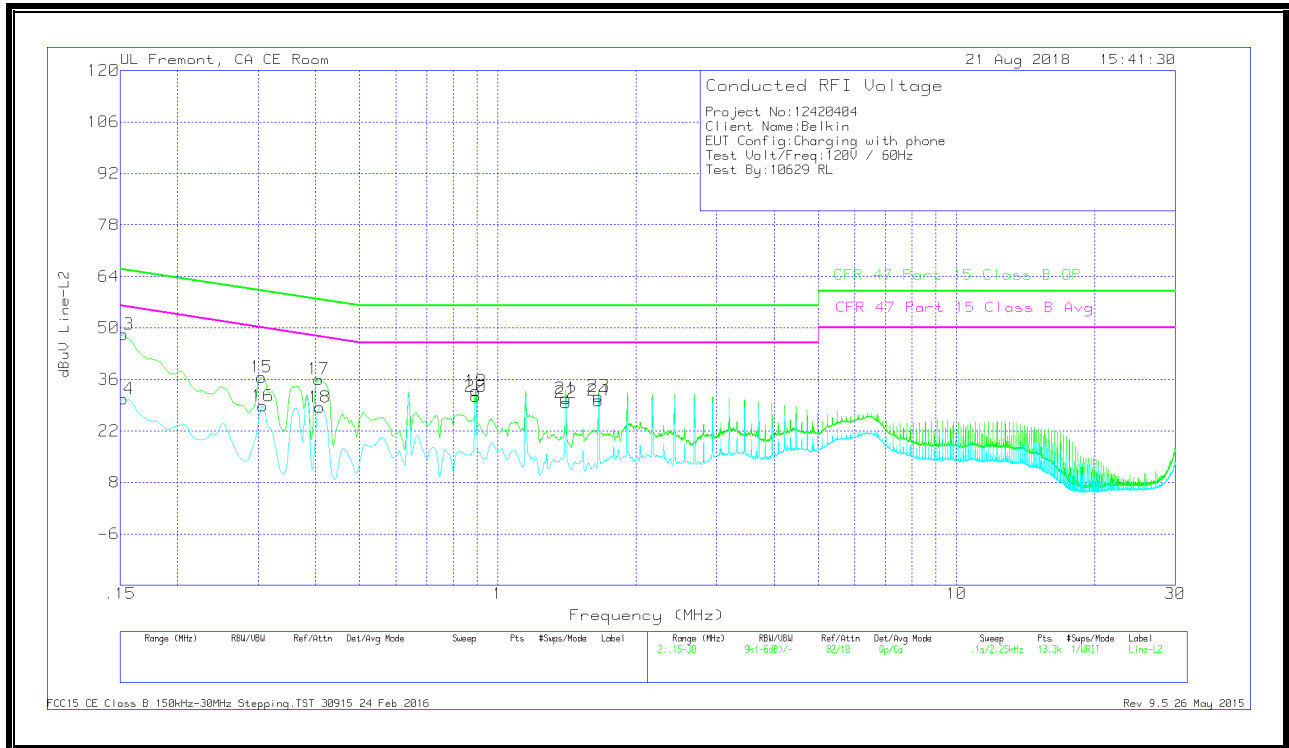


WORST EMISSIONS

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	.15225	38.99	Qp	.1	0	10.1	49.19	65.88	-16.69	-	-
2	.15225	21.73	Ca	.1	0	10.1	31.93	-	-	55.88	-23.95
3	.3075	26.86	Qp	0	0	10.1	36.96	60.04	-23.08	-	-
4	.3075	19.49	Ca	0	0	10.1	29.59	-	-	50.04	-20.45
5	.40425	27.17	Qp	0	0	10.1	37.27	57.77	-20.5	-	-
6	.40875	19.44	Ca	0	0	10.1	29.54	-	-	47.67	-18.13
7	.89475	23.87	Qp	0	0	10.1	33.97	56	-22.03	-	-
8	.89475	21.9	Ca	0	0	10.1	32	-	-	46	-14
9	1.4055	23.14	Qp	0	.1	10.1	33.34	56	-22.66	-	-
10	1.4055	21.7	Ca	0	.1	10.1	31.9	-	-	46	-14.1
11	1.65975	23.51	Qp	0	.1	10.1	33.71	56	-22.29	-	-
12	1.65975	22.35	Ca	0	.1	10.1	32.55	-	-	46	-13.45

Qp - Quasi-Peak detector
 Ca - CISPR average detection

LINE 2 RESULTS



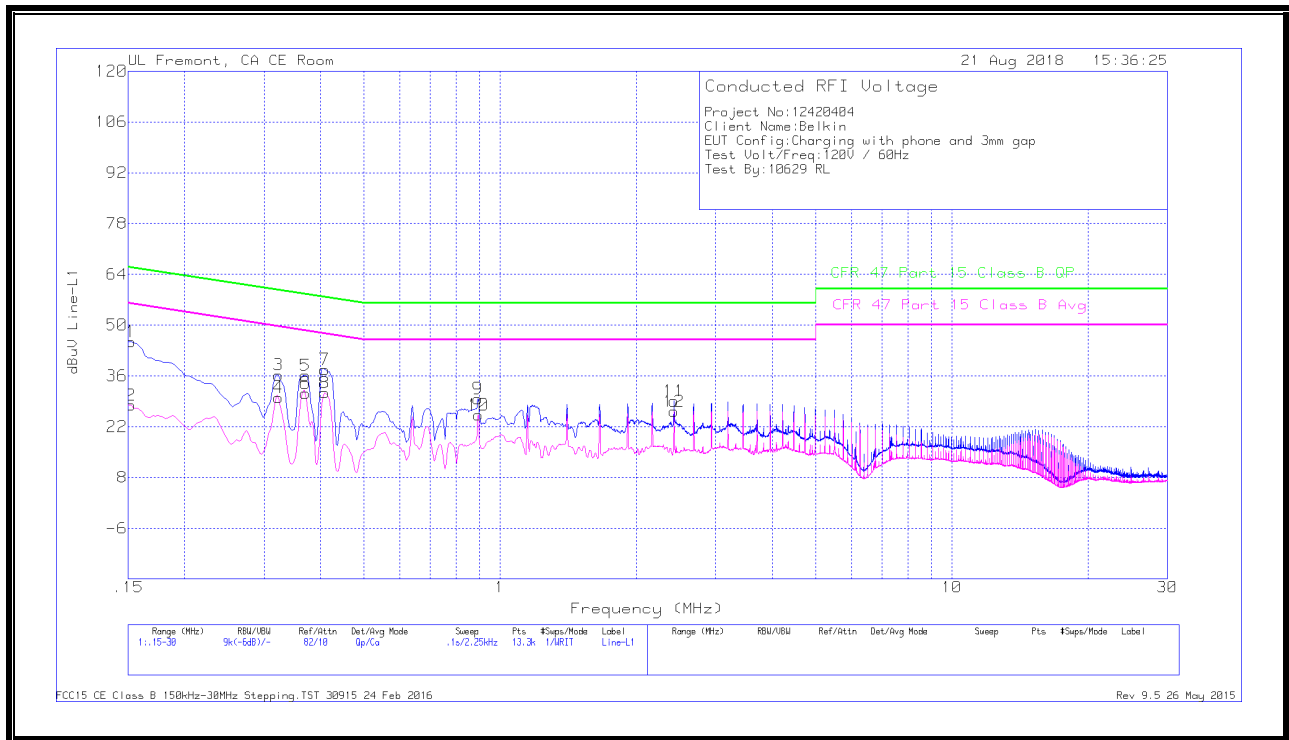
WORST EMISSIONS

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	.15225	38.04	Qp	.1	0	10.1	48.24	65.88	-17.64	-	-
14	.15225	20.5	Ca	.1	0	10.1	30.7	-	-	55.88	-25.18
15	.30525	26.49	Qp	0	0	10.1	36.59	60.1	-23.51	-	-
16	.3075	18.65	Ca	0	0	10.1	28.75	-	-	50.04	-21.29
17	.4065	25.96	Qp	0	0	10.1	36.06	57.72	-21.66	-	-
18	.40875	18.31	Ca	0	0	10.1	28.41	-	-	47.67	-19.26
19	.89475	22.82	Qp	0	0	10.1	32.92	56	-23.08	-	-
20	.89475	21.28	Ca	0	0	10.1	31.38	-	-	46	-14.62
21	1.40775	20.61	Qp	0	.1	10.1	30.81	56	-25.19	-	-
22	1.40775	19.48	Ca	0	.1	10.1	29.68	-	-	46	-16.32
23	1.6575	21.22	Qp	0	.1	10.1	31.42	56	-24.58	-	-
24	1.6575	20.08	Ca	0	.1	10.1	30.28	-	-	46	-15.72

Qp - Quasi-Peak detector
 Ca - CISPR average detection

OPERATING WITH Phone 3mm GAP

LINE 1 RESULTS

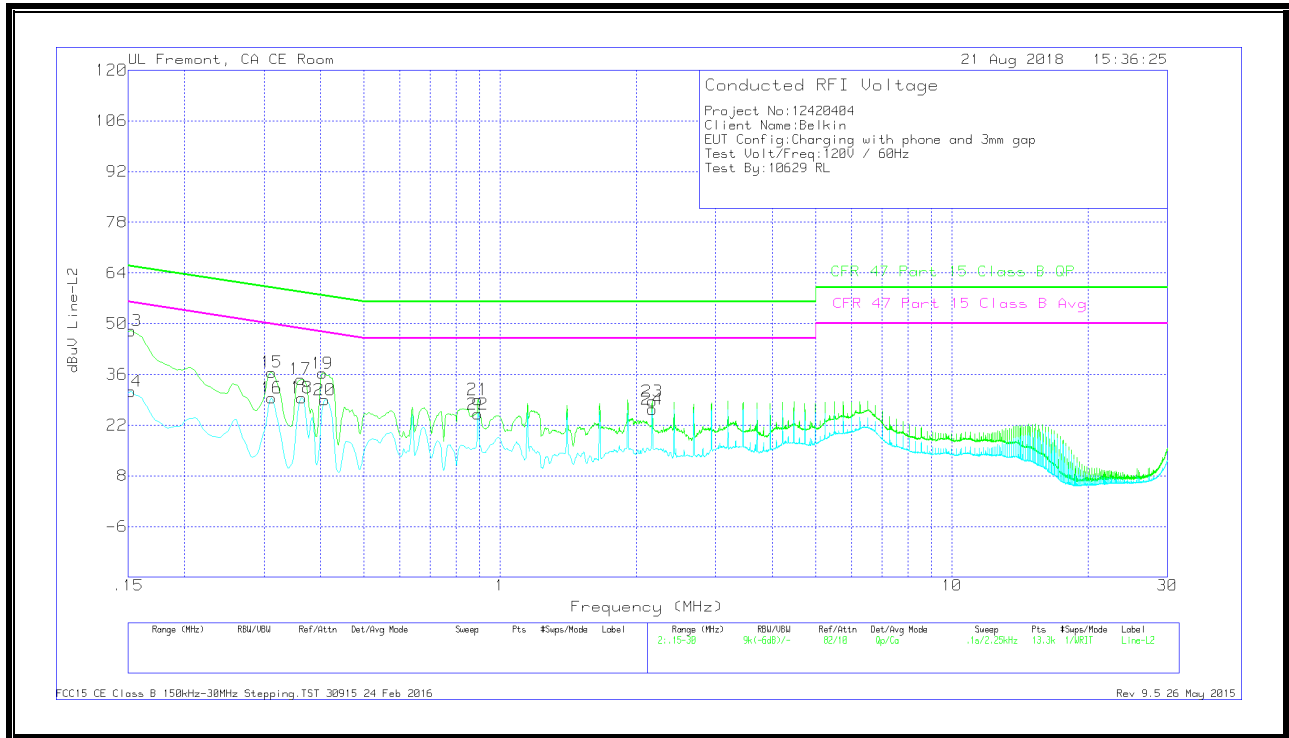


WORST EMISSIONS

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	.15225	35.24	Qp	.1	0	10.1	45.44	65.88	-20.44	-	-
2	.15225	17.76	Ca	.1	0	10.1	27.96	-	-	55.88	-27.92
3	.32325	26.13	Qp	0	0	10.1	36.23	59.62	-23.39	-	-
4	.32325	19.92	Ca	0	0	10.1	30.02	-	-	49.62	-19.6
5	.3705	26.03	Qp	0	0	10.1	36.13	58.49	-22.36	-	-
6	.3705	21.16	Ca	0	0	10.1	31.26	-	-	48.49	-17.23
7	.40875	27.62	Qp	0	0	10.1	37.72	57.67	-19.95	-	-
8	.40875	21.27	Ca	0	0	10.1	31.37	-	-	47.67	-16.3
9	.8925	19.6	Qp	0	0	10.1	29.7	56	-26.3	-	-
10	.89475	15.13	Ca	0	0	10.1	25.23	-	-	46	-20.77
11	2.427	18.89	Qp	0	.1	10.1	29.09	56	-26.91	-	-
12	2.427	16	Ca	0	.1	10.1	26.2	-	-	46	-19.8

Qp - Quasi-Peak detector
 Ca - CISPR average detection

LINE 2 RESULTS



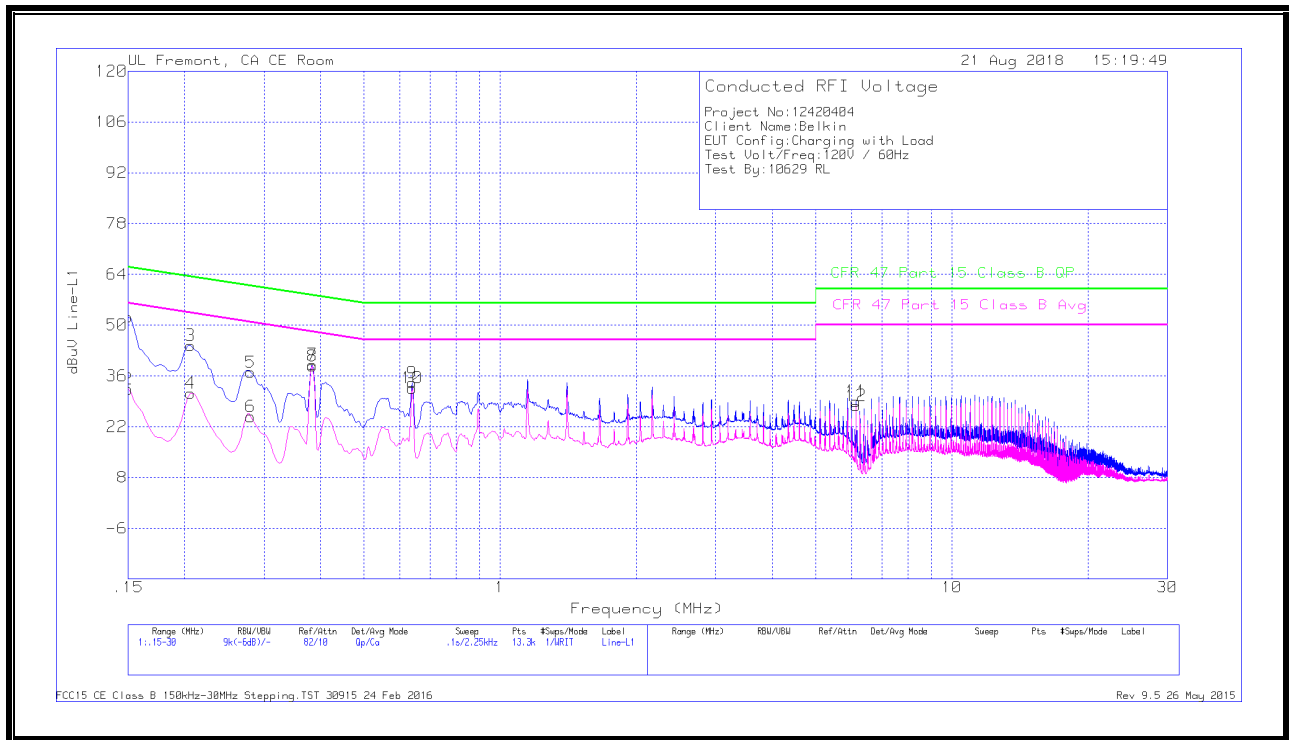
WORST EMISSIONS

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	.15225	37.86	Qp	.1	0	10.1	48.06	65.88	-17.82	-	-
14	.15225	21.11	Ca	.1	0	10.1	31.31	-	-	55.88	-24.57
15	.312	26.47	Qp	0	0	10.1	36.57	59.92	-23.35	-	-
16	.312	19.41	Ca	0	0	10.1	29.51	-	-	49.92	-20.41
17	.3615	24.59	Qp	0	0	10.1	34.69	58.69	-24	-	-
18	.36375	19.44	Ca	0	0	10.1	29.54	-	-	48.64	-19.1
19	.40425	26.23	Qp	0	0	10.1	36.33	57.77	-21.44	-	-
20	.40875	18.87	Ca	0	0	10.1	28.97	-	-	47.67	-18.7
21	.8925	18.93	Qp	0	0	10.1	29.03	56	-26.97	-	-
22	.8925	14.92	Ca	0	0	10.1	25.02	-	-	46	-20.98
23	2.1705	18.4	Qp	0	.1	10.1	28.6	56	-27.4	-	-
24	2.1705	16.15	Ca	0	.1	10.1	26.35	-	-	46	-19.65

Qp - Quasi-Peak detector
 Ca - CISPR average detection

OPERATING with RECEIVER 10 W LOAD

LINE 1 RESULTS

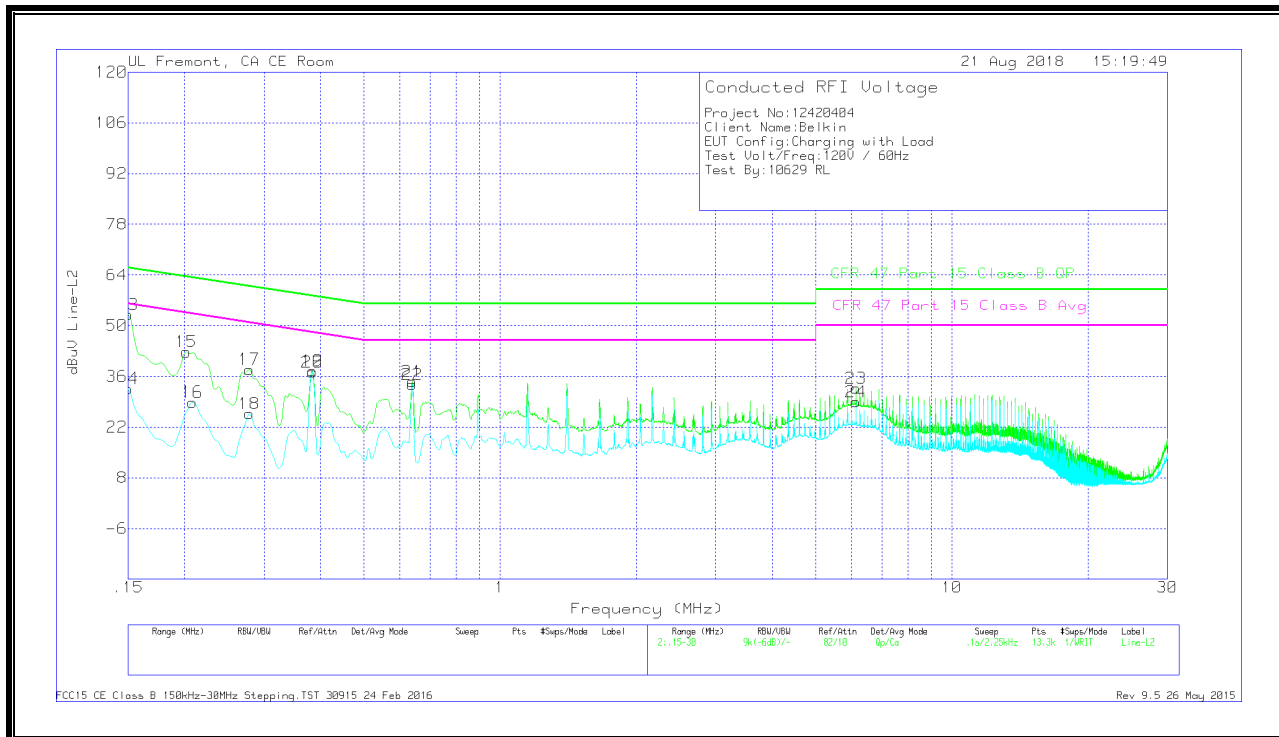


WORST EMISSIONS

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	.15	42.01	Qp	.1	0	10.1	52.21	66	-13.79	-	-
2	.15	22.12	Ca	.1	0	10.1	32.32	-	-	56	-23.68
3	.20625	34.3	Qp	0	0	10.1	44.4	63.35	-18.95	-	-
4	.20625	21.13	Ca	0	0	10.1	31.23	-	-	53.35	-22.12
5	.2805	26.88	Qp	0	0	10.1	36.98	60.8	-23.82	-	-
6	.2805	14.69	Ca	0	0	10.1	24.79	-	-	50.8	-26.01
7	.384	29.02	Qp	0	0	10.1	39.12	58.19	-19.07	-	-
8	.384	28.59	Ca	0	0	10.1	38.69	-	-	48.19	-9.5
9	.63825	24	Qp	0	0	10.1	34.1	56	-21.9	-	-
10	.63825	22.56	Ca	0	0	10.1	32.66	-	-	46	-13.34
11	6.1305	18.59	Qp	0	.2	10.2	28.99	60	-31.01	-	-
12	6.1305	17.4	Ca	0	.2	10.2	27.8	-	-	50	-22.2

Qp - Quasi-Peak detector
 Ca - CISPR average detection

LINE 2 RESULTS



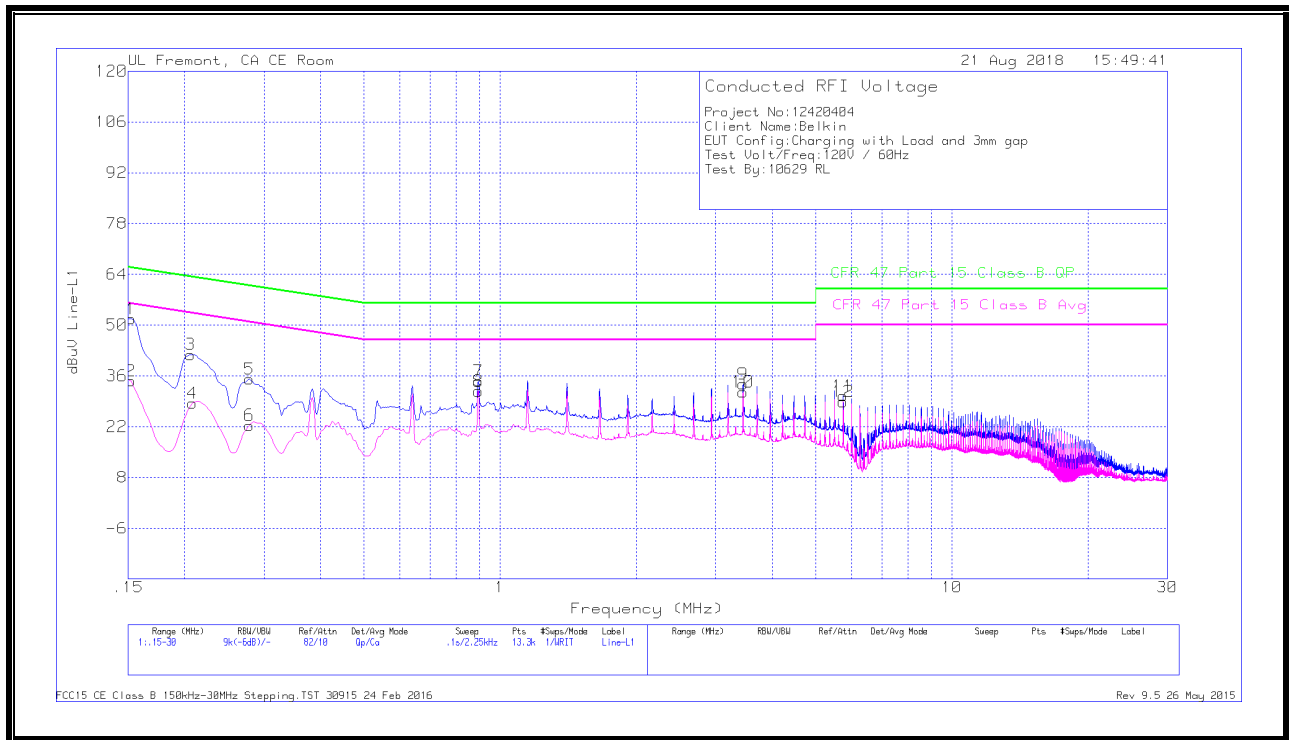
WORST EMISSIONS

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	.15	42.89	Qp	.1	0	10.1	53.09	66	-12.91	-	-
14	.15	22.39	Ca	.1	0	10.1	32.59	-	-	56	-23.41
15	.20175	32.67	Qp	0	0	10.1	42.77	63.54	-20.77	-	-
16	.2085	18.74	Ca	0	0	10.1	28.84	-	-	53.26	-24.42
17	.27825	27.79	Qp	0	0	10.1	37.89	60.87	-22.98	-	-
18	.27825	15.62	Ca	0	0	10.1	25.72	-	-	50.87	-25.15
19	.384	27.39	Qp	0	0	10.1	37.49	58.19	-20.7	-	-
20	.384	27.04	Ca	0	0	10.1	37.14	-	-	48.19	-11.05
21	.63825	24.53	Qp	0	0	10.1	34.63	56	-21.37	-	-
22	.63825	23.63	Ca	0	0	10.1	33.73	-	-	46	-12.27
23	6.1305	22.29	Qp	0	.2	10.2	32.69	60	-27.31	-	-
24	6.1305	18.53	Ca	0	.2	10.2	28.93	-	-	50	-21.07

Qp - Quasi-Peak detector
 Ca - CISPR average detection

OPERATING WITH RECEIVER 10W LOAD 3mm AIRGAP

LINE 1 RESULTS

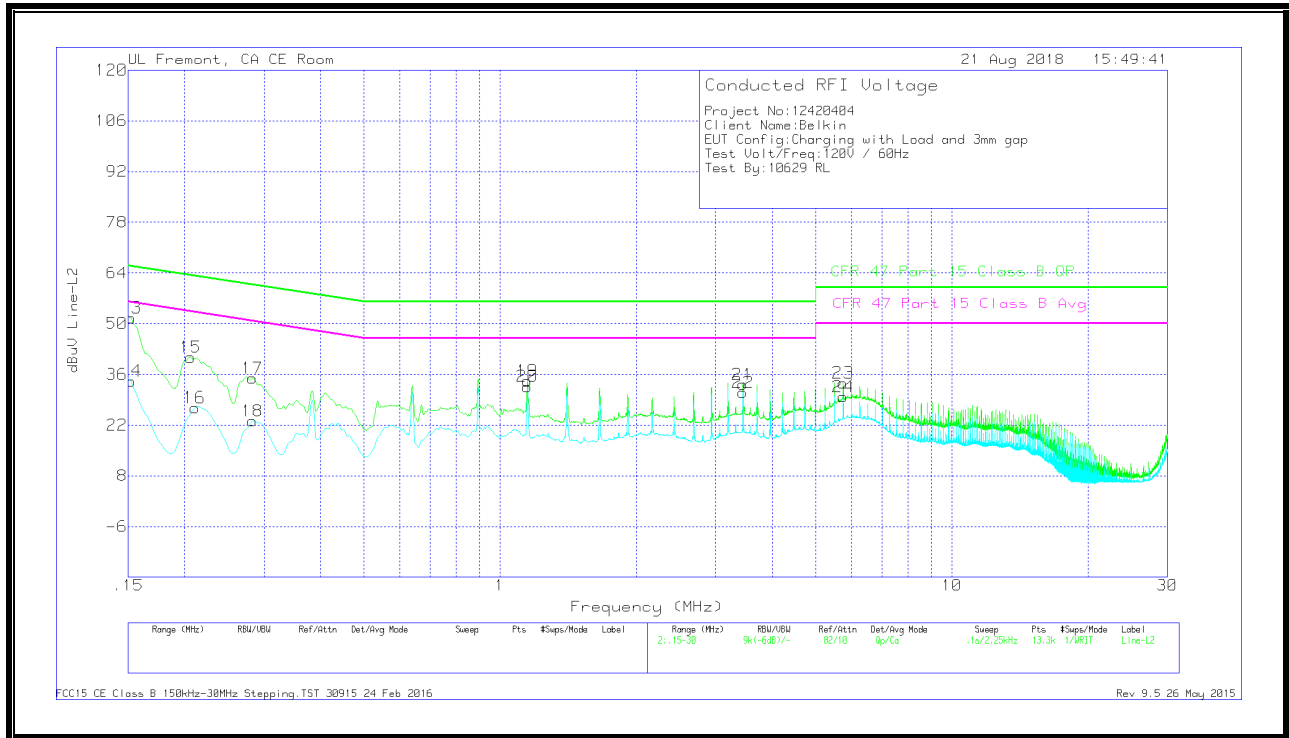


WORST EMISSIONS

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	.15225	41.52	Qp	.1	0	10.1	51.72	65.88	-14.16	-	-
2	.15225	24.39	Ca	.1	0	10.1	34.59	-	-	55.88	-21.29
3	.20625	31.78	Qp	0	0	10.1	41.88	63.35	-21.47	-	-
4	.2085	18.37	Ca	0	0	10.1	28.47	-	-	53.26	-24.79
5	.27825	24.99	Qp	0	0	10.1	35.09	60.87	-25.78	-	-
6	.27825	12.25	Ca	0	0	10.1	22.35	-	-	50.87	-28.52
7	.89475	24.4	Qp	0	0	10.1	34.5	56	-21.5	-	-
8	.89475	21.72	Ca	0	0	10.1	31.82	-	-	46	-14.18
9	3.4485	23.51	Qp	0	.1	10.1	33.71	56	-22.29	-	-
10	3.4485	21.38	Ca	0	.1	10.1	31.58	-	-	46	-14.42
11	5.74575	20.11	Qp	0	.2	10.2	30.51	60	-29.49	-	-
12	5.74575	18.5	Ca	0	.2	10.2	28.9	-	-	50	-21.1

Qp - Quasi-Peak detector
 Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

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	.15225	41.42	Qp	.1	0	10.1	51.62	65.88	-14.26	-	-
14	.15225	23.96	Ca	.1	0	10.1	34.16	-	-	55.88	-21.72
15	.20625	30.6	Qp	0	0	10.1	40.7	63.35	-22.65	-	-
16	.21075	16.68	Ca	0	0	10.1	26.78	-	-	53.18	-26.4
17	.28275	24.87	Qp	0	0	10.1	34.97	60.73	-25.76	-	-
18	.28275	13.06	Ca	0	0	10.1	23.16	-	-	50.73	-27.57
19	1.149	24.02	Qp	0	.1	10.1	34.22	56	-21.78	-	-
20	1.149	22.44	Ca	0	.1	10.1	32.64	-	-	46	-13.36
21	3.44625	23.04	Qp	0	.1	10.1	33.24	56	-22.76	-	-
22	3.44625	20.83	Ca	0	.1	10.1	31.03	-	-	46	-14.97
23	5.74575	23.25	Qp	0	.2	10.2	33.65	60	-26.35	-	-
24	5.74575	19.38	Ca	0	.2	10.2	29.78	-	-	50	-20.22

Qp - Quasi-Peak detector
 Ca - CISPR average detection