FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

WIRELESS DEVICE

MODEL NUMBER: A1844

FCC ID: BCGA1844

REPORT NUMBER: 16U23799-E2V4

ISSUE DATE: SEPTEMBER 16, 2016

Prepared for
APPLE, INC.
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

Prepared by
UL VERIFICATION SERVICES INC.
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888

NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	09/07/2016	Initial Issue	Chin Pang
V2	09/12/2016	Address TCB's Question	Chin Pang
V3	09/13/2016	Address TCB's Question	Chin Pang
V4	09/13/2016	Address TCB's Comments	Chin Pang

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE, INC.
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

EUT DESCRIPTION: WIRELESS DEVICE

MODEL: A1844

SERIAL NUMBER: 002

DATE TESTED: AUGUST 03-AUGUST 31, 2016

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 15 SUBPART C	Pass

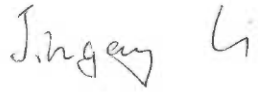
UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement 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.

Approved & Released For
UL Verification Services Inc. By:

CHIN PANG
SENIOR ENGINEER
UL VERIFICATION SERVICES INC.

Prepared By:



JINGANG LI
EMC 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, FCC CFR 47 Part 15.

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	☐ Chamber D
☐ Chamber B	☐ Chamber E
☐ Chamber C	☒ Chamber F
	☐ Chamber G
	☐ Chamber H

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://ts.nist.gov/standards/scopes/2000650.htm.

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, 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 device with Bluetooth and NFC capability

5.2. MAXIMUM OUTPUT POWER

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

Frequency Range (MHz)	Mode	kbps	E Field at 30m distance (dBuV/m)
13.56	14443 A	848	37.57
		424	36.58
		212	38.83
		106	35.70
	14443 B	848	37.64
		424	35.26
		212	34.88
		106	**38.90**
	ISO 15693	26.48	35.10

5.3. SOFTWARE AND FIRMWARE

The test utility software used during testing was Cool Term for Mac, version 1.4.6

5.4. WORST-CASE CONFIGURATION AND MODE

The fundamental of the EUT was investigated in three orthogonal orientations X (Flatbed), Y (Landscape) and Z (Portrait). It was determined that Z orientation was worst-case orientation. Therefore, all final radiated testing was performed with the EUT in Z orientation.

There is no significant difference between OAT and chamber readings by comparison; therefore All radiated test was performed in the chamber.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Apple	MacBook Pro	73043BDQAGU	N/A
DC power supply	Sorensen	XT 15-4	1319A02779	N/A

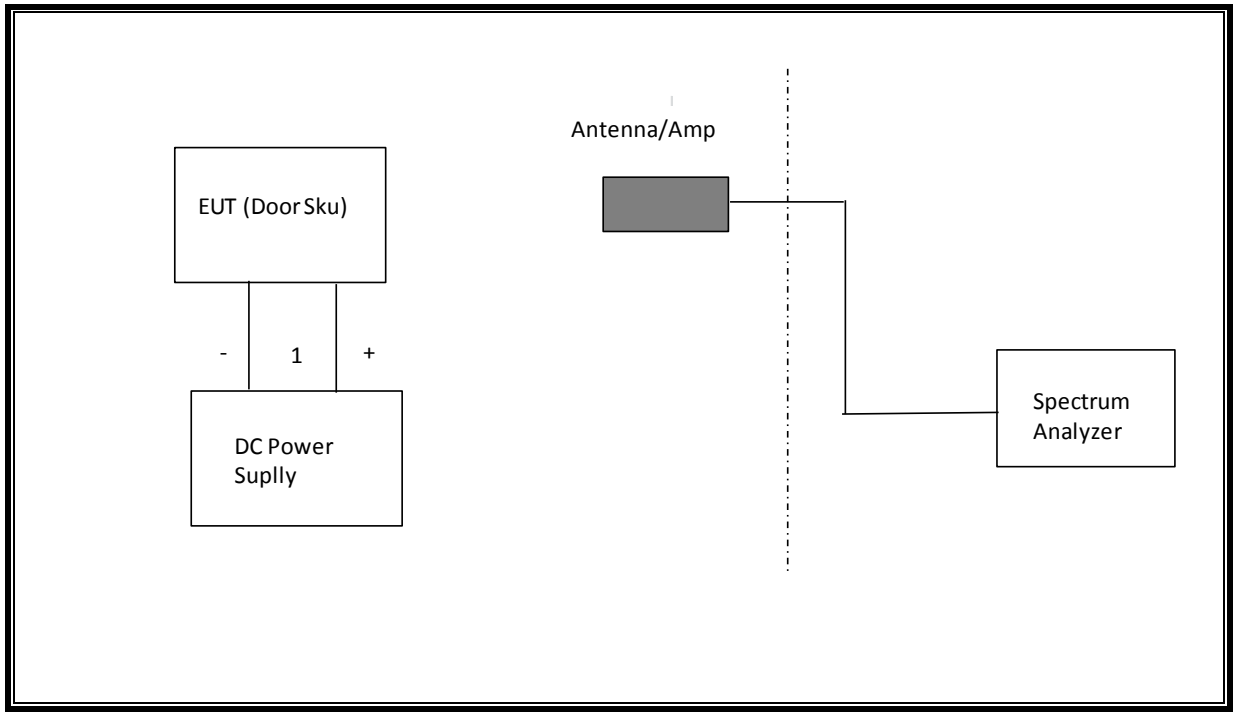
I/O CABLES (RADIATED BELOW 1 GHZ)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC	1	4 pins connector	Un-Shielded	1	N/A

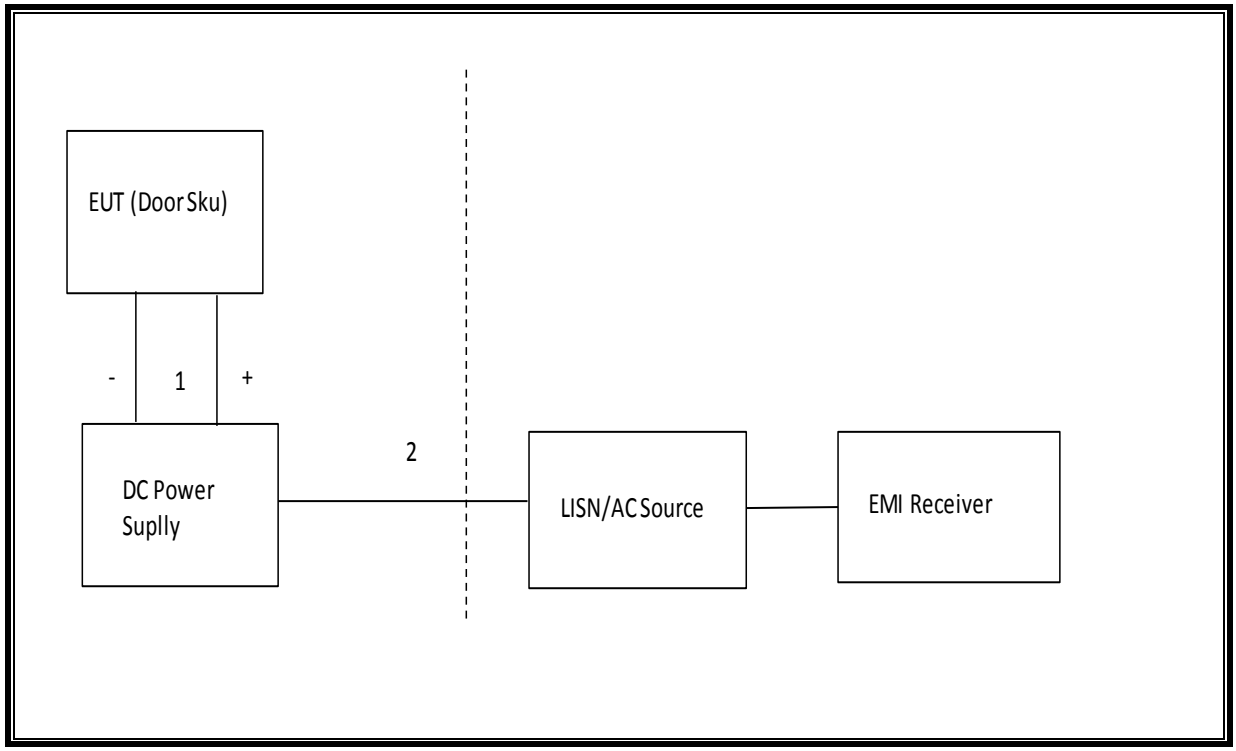
I/O CABLES (AC LINE CONDUCTED)

I/O Cable List						
Cable No	Port	# of identical	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC	1	DC	Un-shielded	1	N/A
2	AC	1	AC	Un-shielded	3	N/A

SETUP DIAGRAM FOR TESTS



SETUP DIAGRAM LINE CONDUCTED



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**	**T No.**	**Cal Due**
Antenna, Horn 1-18GHz	ETS Lindgren	3117	00143449	04/05/17
Antenna, Broadband Hybrid, 30MH	Sunol Sciences	JB3	A022813-1	01/29/17
Amplifier, 1 - 18GHz	Miteq	AFS42-00101800-25-S-42	No Serial Numbe	01/25/17
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	185623	06/17/17
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	MY51380911	10/14/16
Antenna, Loop, 30 MHz	ETS Lindgren	6502	757	05/31/17
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	754	09/14/16
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	212	09/09/16
LISN for Conducted Emissions CISPR-16	FCC	LISN-50/250-25-2	24	06/08/17
Line conducted Power cable ANSI 63.4	UL	PG1	861	09/30/16
UL SOFTWARE				
*Radiated Software	UL	UL EMC	Fundamental mask, 5/7/15	
*Conducted Software	UL	UL EMC	Ver 2.2, March 31, 2015	
*Radiated Software	UL	UL EMC	Below 30Mhz, 6/24/15	
*Radiated Software	UL	UL EMC	Below 1Ghz, 7/15/14	
*AC Line Conducted Software	UL	UL EMC	Ver 9.5, April 3, 2015	

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

7. OCCUPIED BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 10kHz. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

ID:	38602	Date:	8/18/16

99% and 20dB BW

Type A (READER MODE)

Mode Kbps	Frequency (MHz)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
848	13.56	21.162	24.97
424	13.56	21.167	24.96
212	13.56	21.160	24.97
106	13.56	21.165	24.97

Type B (READER MODE)

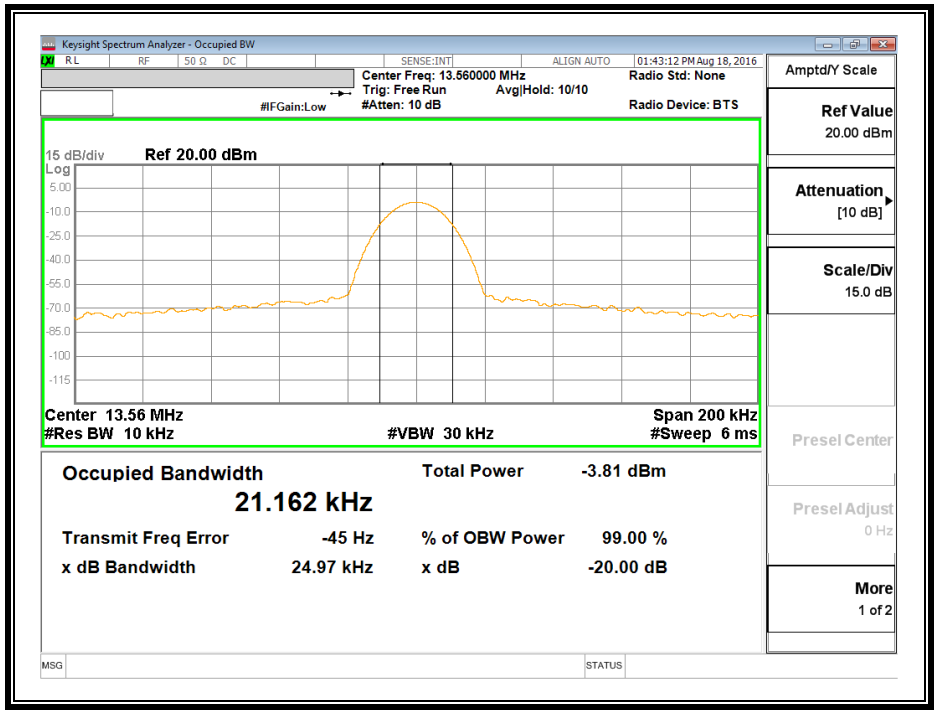
Mode Kbps	Frequency (MHz)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
848	13.56	21.164	24.97
424	13.56	21.162	24.98
212	13.56	21.164	24.97
106	13.56	21.165	24.97

ISO 15693 (READER MODE)

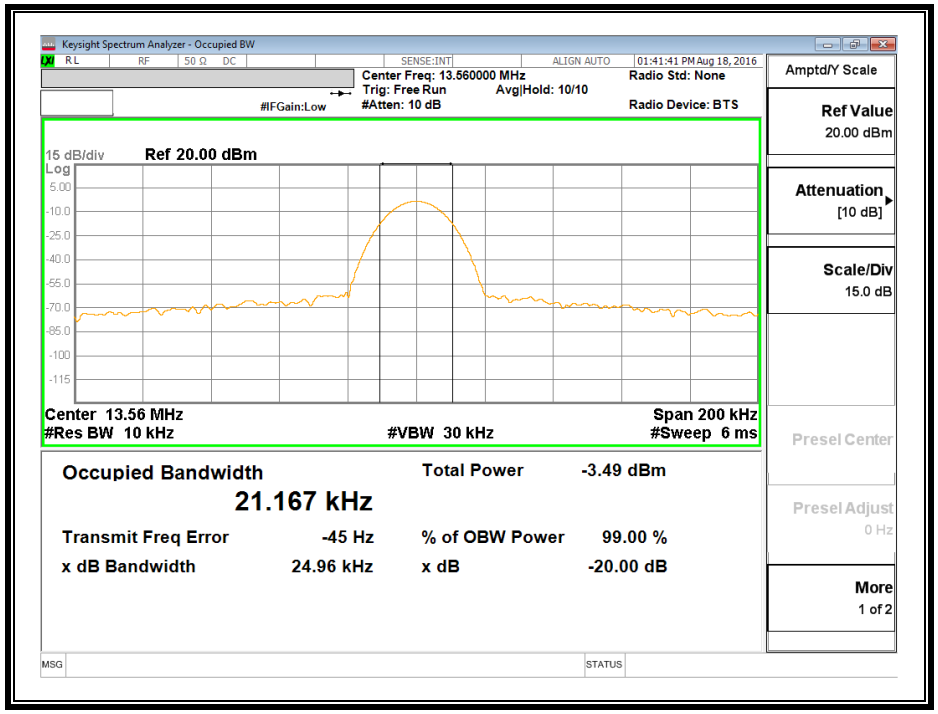
Mode Kbps	Frequency (MHz)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
26.48	13.56	21.160	24.97

7.1. TYPE A (14443A)

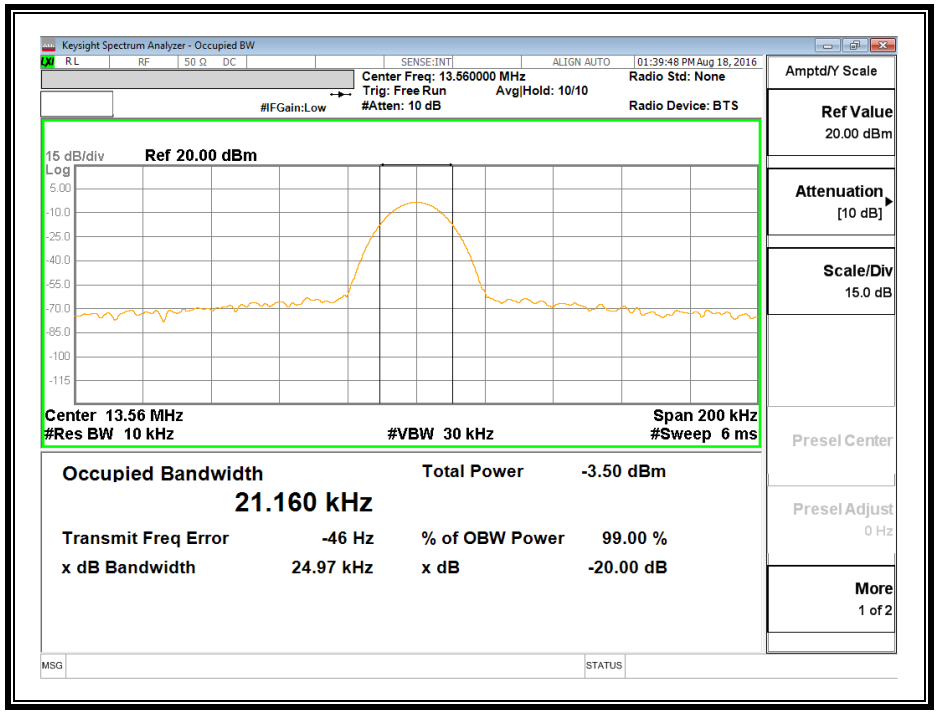
848Kbps



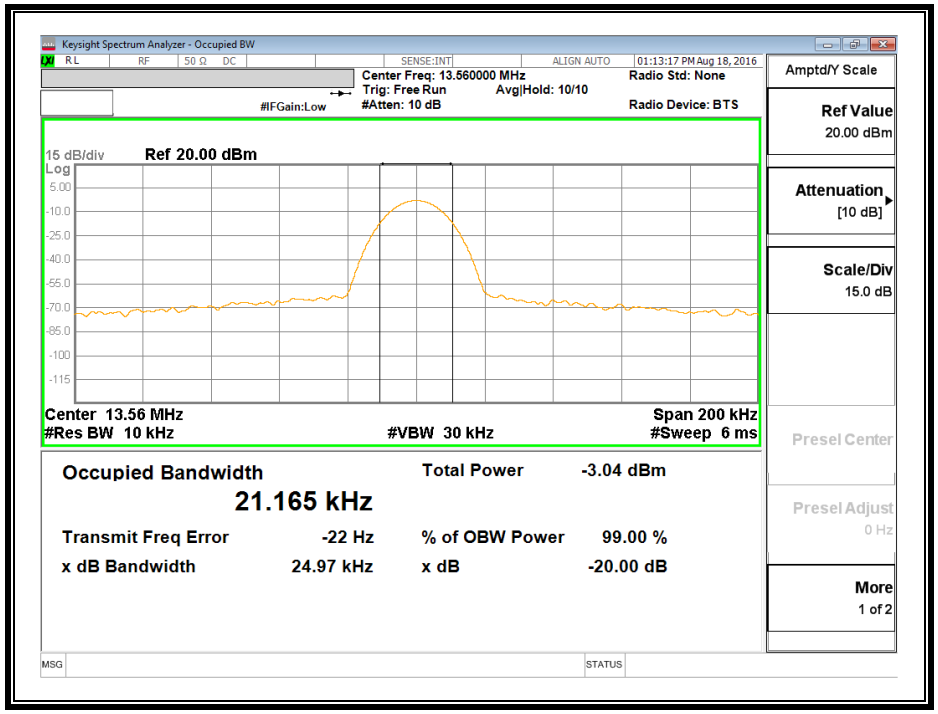
424Kbps



212Kbps

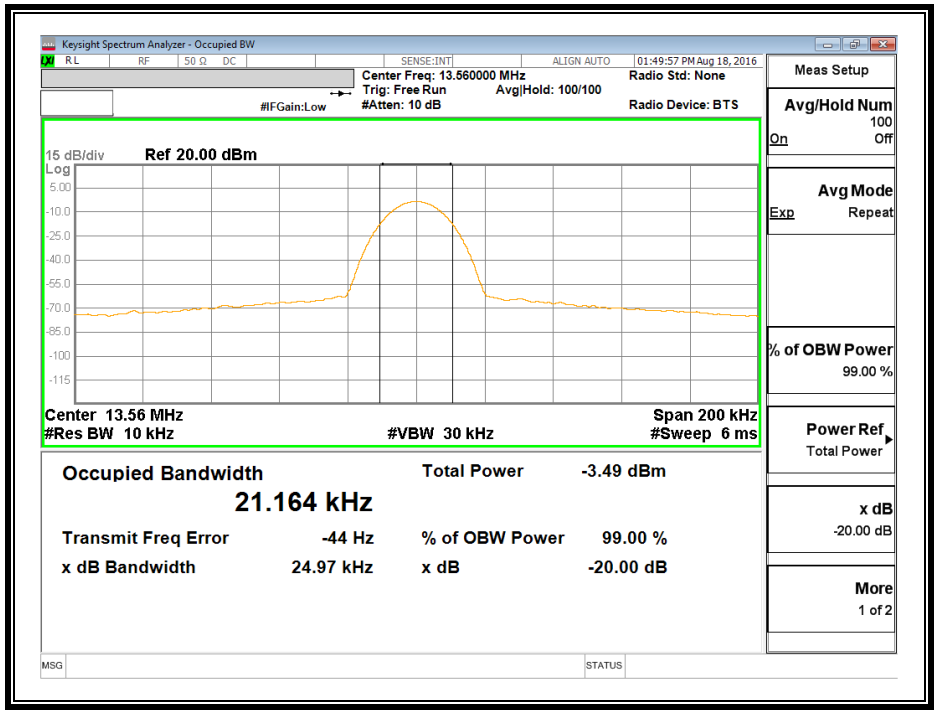


106Kbps

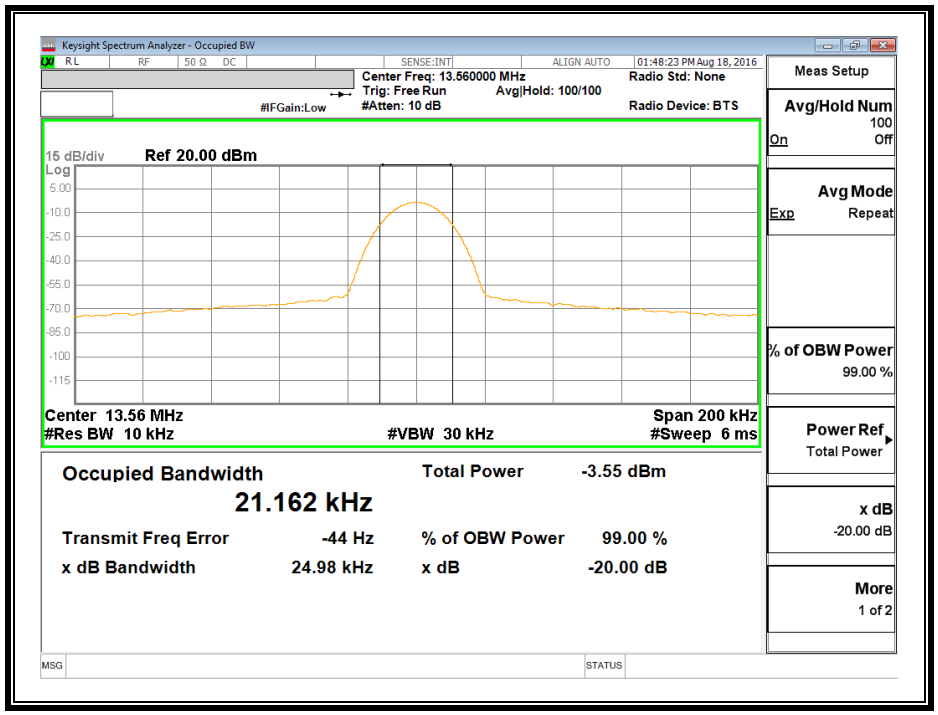


7.2. TYPE B (14443B)

848kbps



424kbps

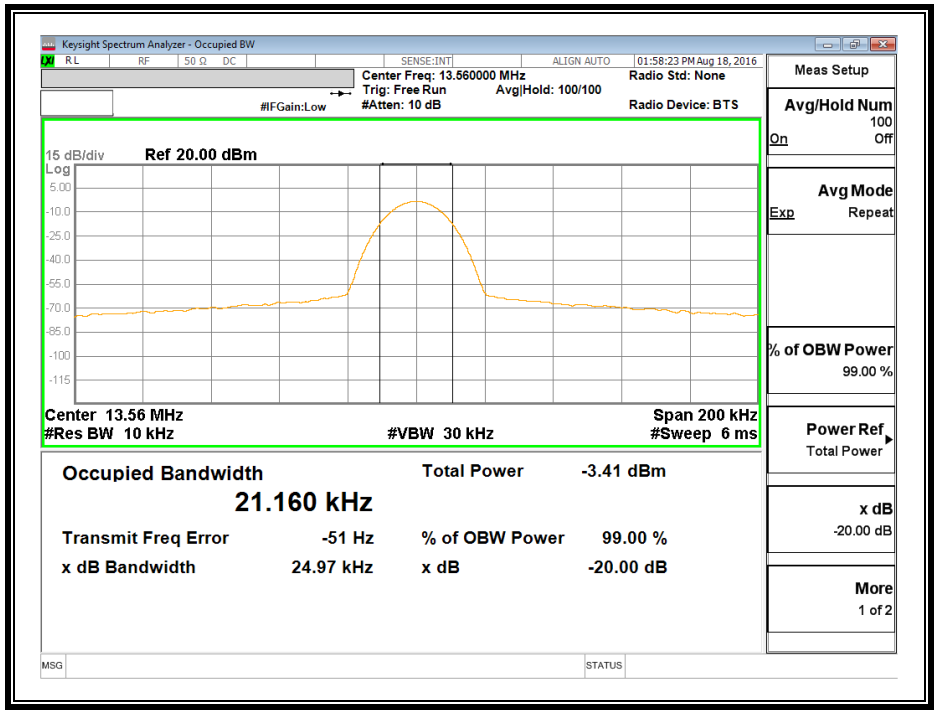


212kbps

106Kbps

7.3. ISO 15693 MODE

26.48Kbps



8. RADIATED EMISSION TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMIT

§15.225

(a) The field strength of any emissions within the band 13.553–13.567 MHz shall not exceed 15,848 microvolts/ meter at 30 meters.

(b) Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

(c) Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

(d) The field strength of any emissions appearing outside of the 13.110– 14.010 MHz and shall not exceed the general radiated emission limits in § 15.209 as follows:
§15.209 (a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits (µV/m)	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 - 216	150**	3
216 – 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.
§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

Formula for converting the filed strength from uV/m to dBuV/m is:
Limit (dBuV/m) = 20 log limit (uV/m)

In addition:

§15.209 (d) The emission limits shown the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

§15.209 (d) The provisions in §§ 15.225, measuring emissions at distances other than the distances specified in the above table, determining the frequency range over which radiated emissions are to be measured, and limiting peak emissions apply to all devices operated under this part.

TEST PROCEDURE

ANSI C63.10, 2013

The EUT is an intentional radiator that incorporates a digital device, the highest fundamental frequency generated or used in the device is 13.56 MHz; therefore, the frequency range was investigated from 0.15 MHz to the 10th harmonic of the highest fundamental frequency, or 1000 MHz, whichever is greater.

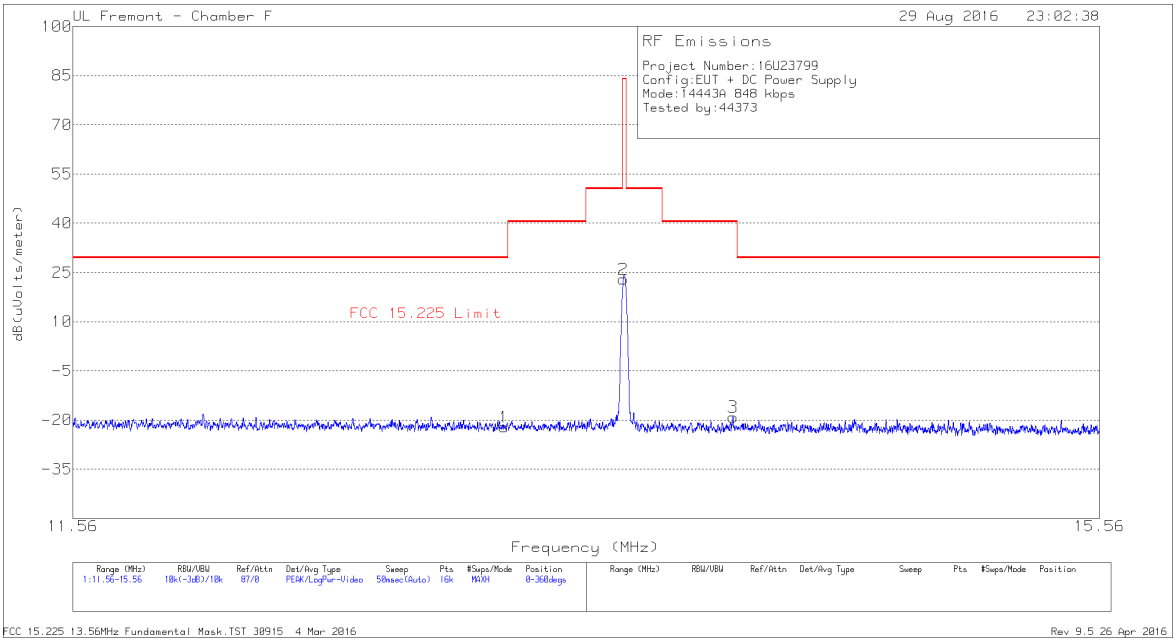
RESULTS

8.2. FUNDAMENTAL AND SPURIOUS EMISSIONS (0.15 – 30 MHz)

8.2.1. TYPE A (14443A)

FUNDAMENTAL 848Kbps

ANTENNA LOOP FACE ON



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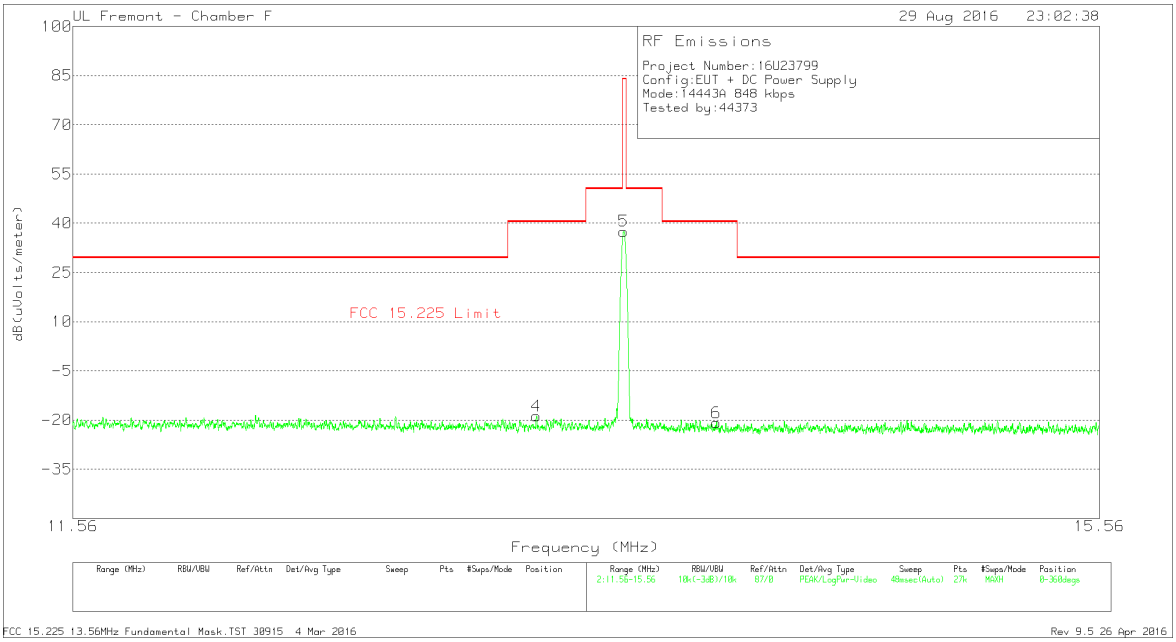


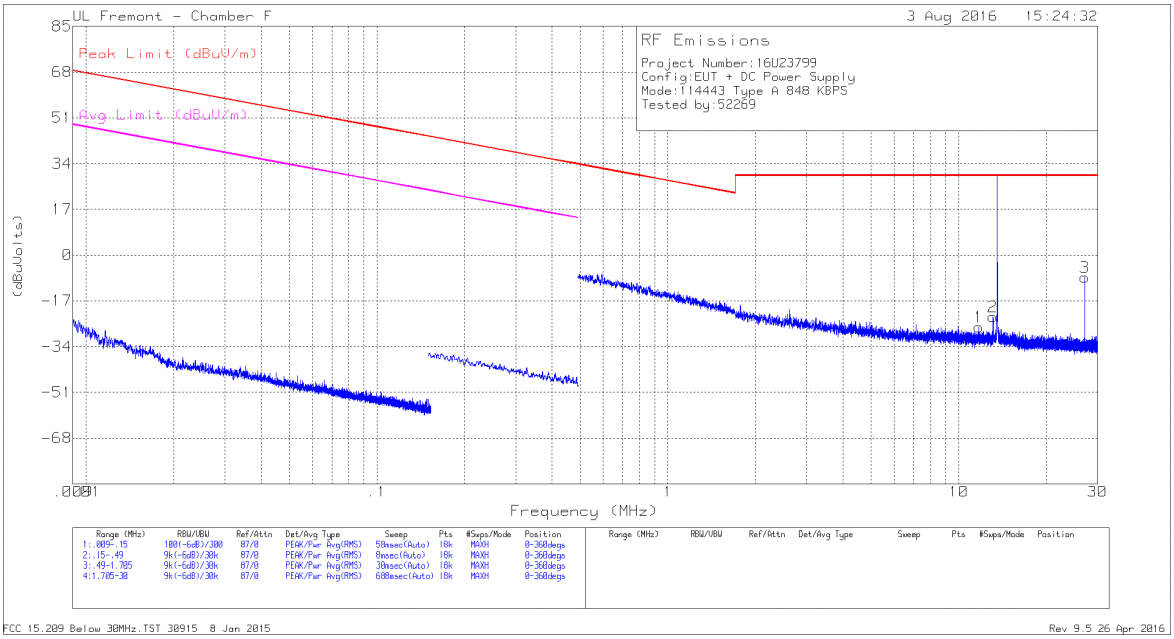
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.09675	6.74	Pk	10.7	.4	-40	-22.16	29.54	-51.7	0-360
2	13.55675	52.02	Pk	10.6	.4	-40	23.02	84	-60.98	0-360
3	13.9945	9.95	Pk	10.6	.4	-40	-19.05	40.51	-59.56	0-360
4	13.22034	10.19	Pk	10.7	.4	-40	-18.71	40.51	-59.22	0-360
5	13.55867	66.57	Pk	10.6	.4	-40	37.57	84	-46.43	0-360
6	13.92756	8.17	Pk	10.6	.4	-40	-20.83	40.51	-61.34	0-360

Pk - Peak detector

SPURIOUS EMISSIONS 848kbps

ANTENNA LOOP FACE ON



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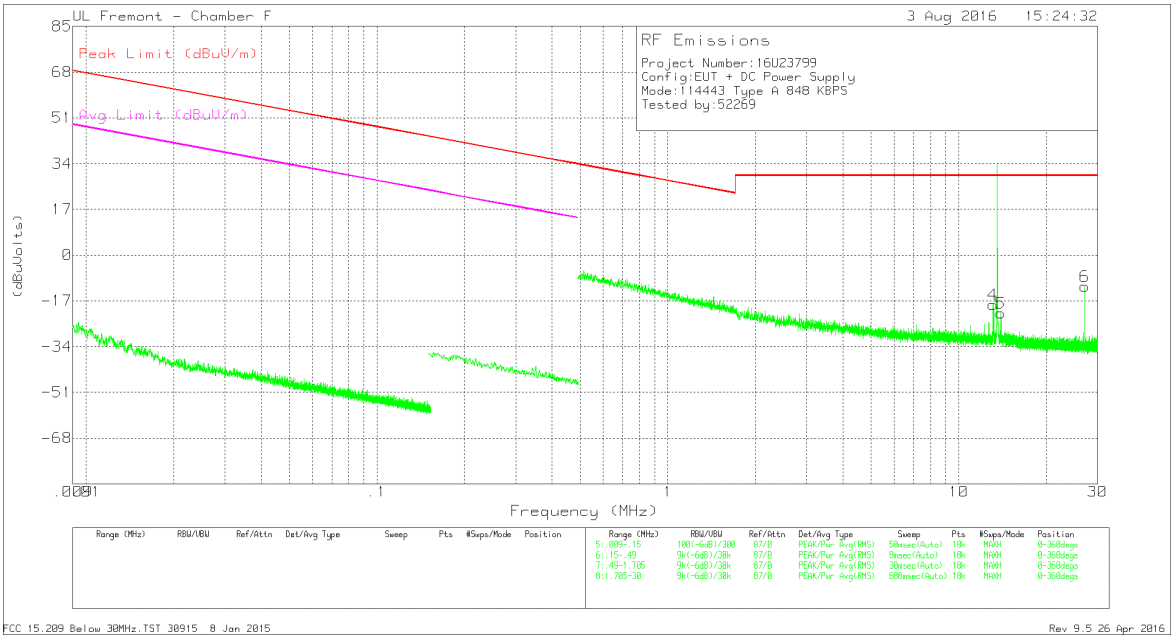


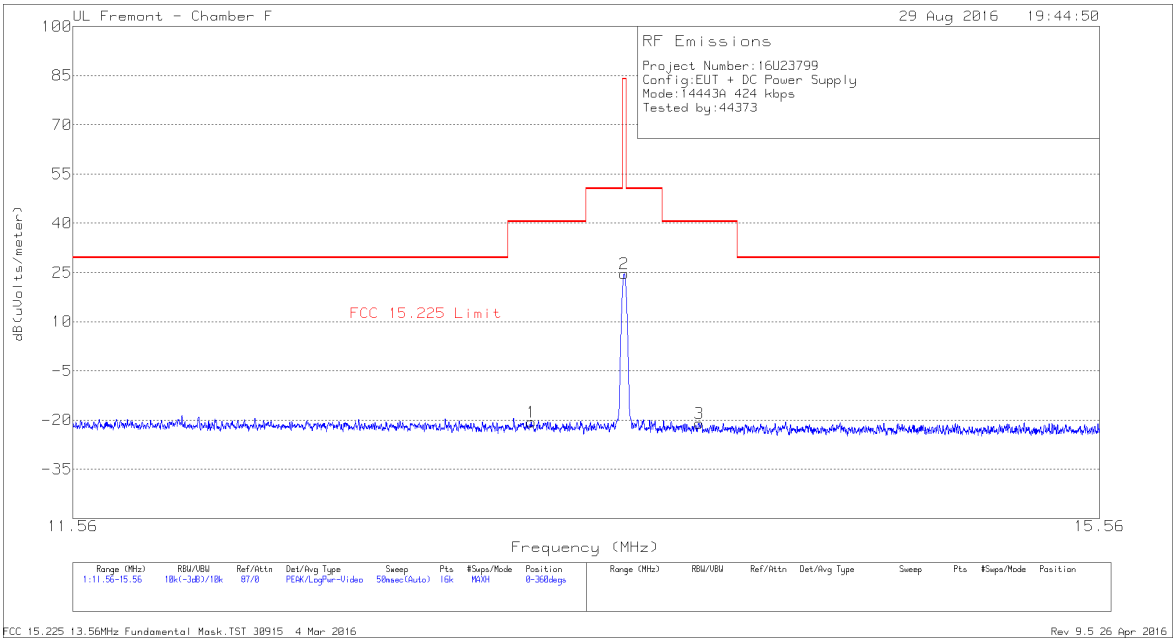
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	11.71078	2.07	Pk	10.8	.4	-40	-26.73	29.54	-56.27	-	-	0-360
2	13.11929	5.88	Pk	10.7	.4	-40	-23.02	29.54	-52.56	-	-	0-360
3	27.12267	22.29	Pk	8.8	.7	-40	-8.21	29.54	-37.75	-	-	0-360
4	13.12244	10.51	Pk	10.7	.4	-40	-18.39	29.54	-47.93	-	-	0-360
5	13.93673	7.41	Pk	10.6	.4	-40	-21.59	29.54	-51.13	-	-	0-360
6	27.12267	18.96	Pk	8.8	.7	-40	-11.54	29.54	-41.08	-	-	0-360

Pk - Peak detector

FUNDAMENTAL 424kbps

ANTENNA LOOP FACE ON



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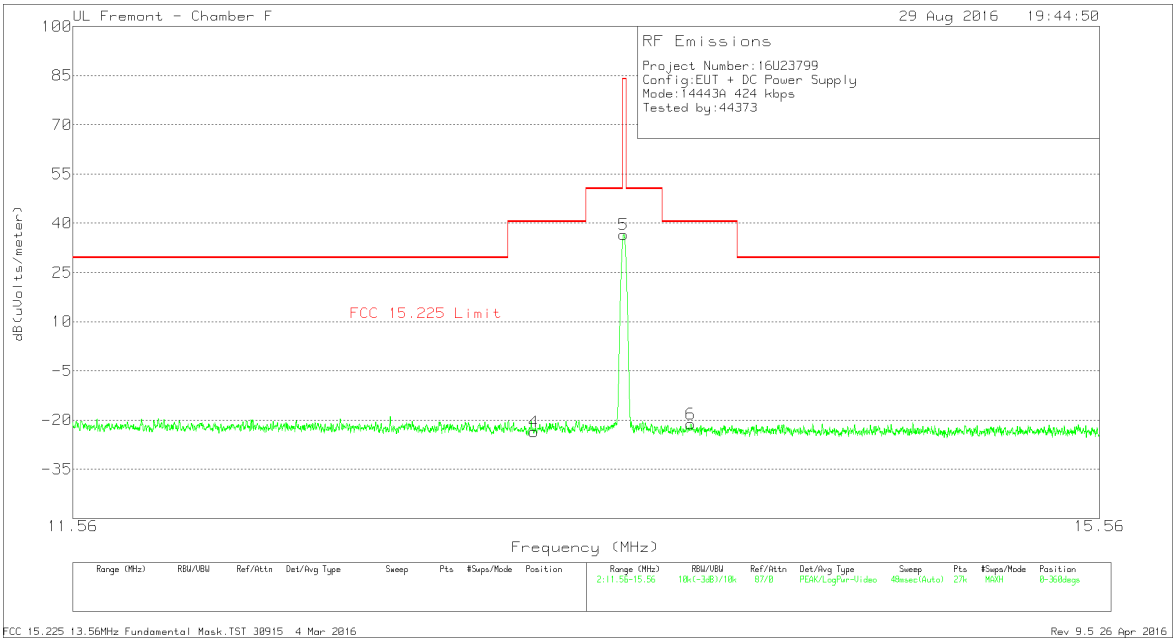

DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/ meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.20013	8.32	Pk	10.7	.4	-40	-20.58	40.51	-61.09	0-360
2	13.56	53.61	Pk	10.6	.4	-40	24.61	84	-59.39	0-360
3	13.857	8	Pk	10.6	.4	-40	-21	40.51	-61.51	0-360
4	13.20998	5.28	Pk	10.7	.4	-40	-23.62	40.51	-64.13	0-360
5	13.55852	65.58	Pk	10.6	.4	-40	36.58	84	-47.42	0-360
6	13.82388	7.75	Pk	10.6	.4	-40	-21.25	40.51	-61.76	0-360

Pk - Peak detector

SPURIOUS EMISSIONS 424kbps

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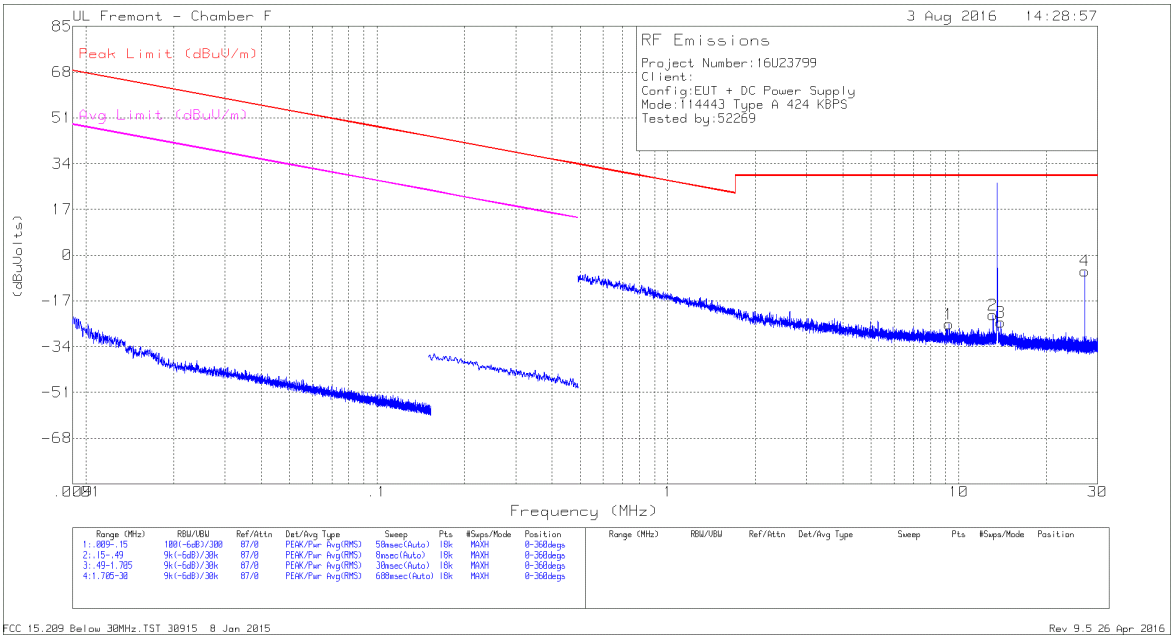

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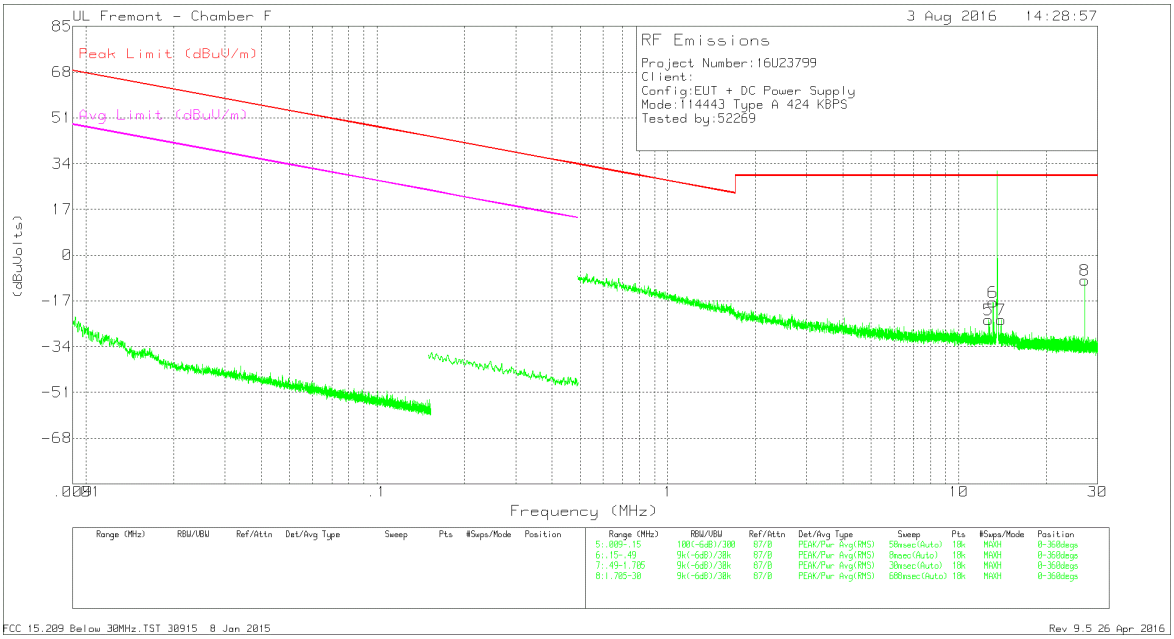

DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	9.24903	3	Pk	11.1	.3	-40	-25.6	29.54	-55.14	-	-	0-360
2	13.11929	6.75	Pk	10.7	.4	-40	-22.15	29.54	-51.69	-	-	0-360
3	13.93437	4.1	Pk	10.6	.4	-40	-24.9	29.54	-54.44	-	-	0-360
4	27.12267	24.64	Pk	8.8	.7	-40	-5.86	29.54	-35.4	-	-	0-360
5	12.68542	4.93	Pk	10.7	.4	-40	-23.97	29.54	-53.51	-	-	0-360
6	13.12244	11.48	Pk	10.7	.4	-40	-17.42	29.54	-46.96	-	-	0-360
7	14.0004	4.92	Pk	10.6	.4	-40	-24.08	29.54	-53.62	-	-	0-360
8	27.12267	21.13	Pk	8.8	.7	-40	-9.37	29.54	-38.91	-	-	0-360

Pk - Peak detector

FUNDAMENTAL 212kbps

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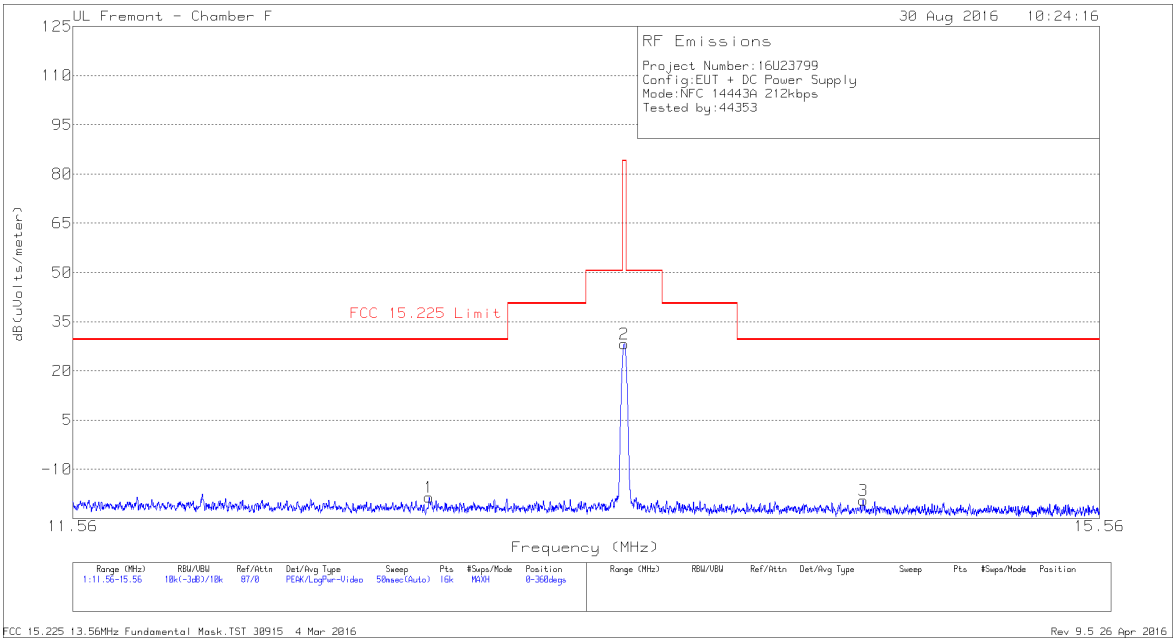

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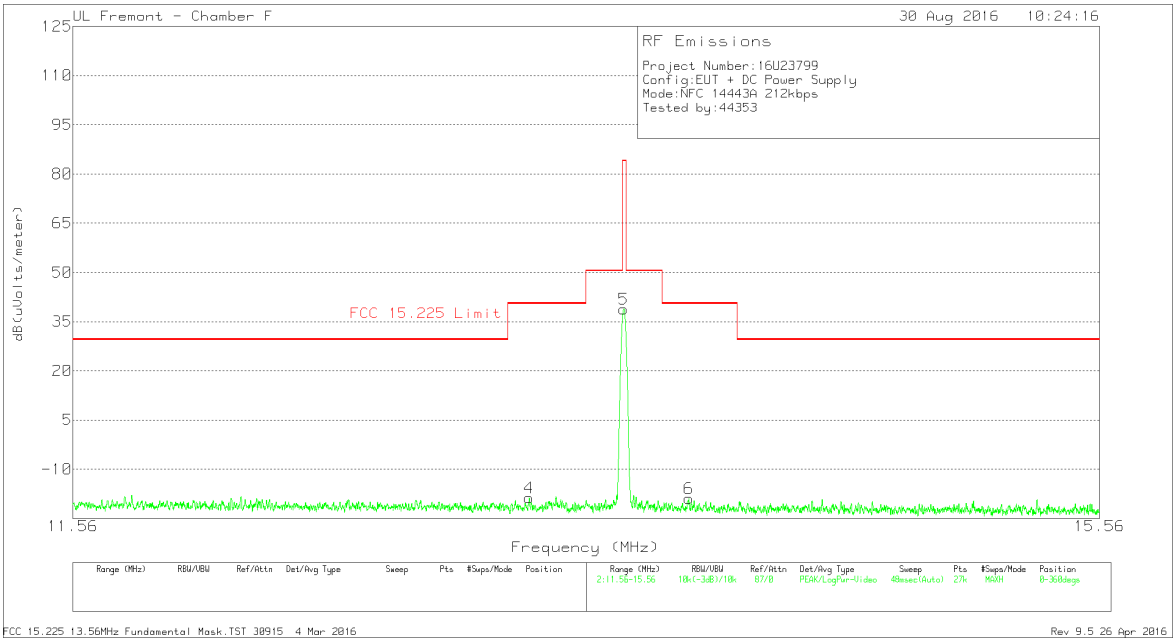


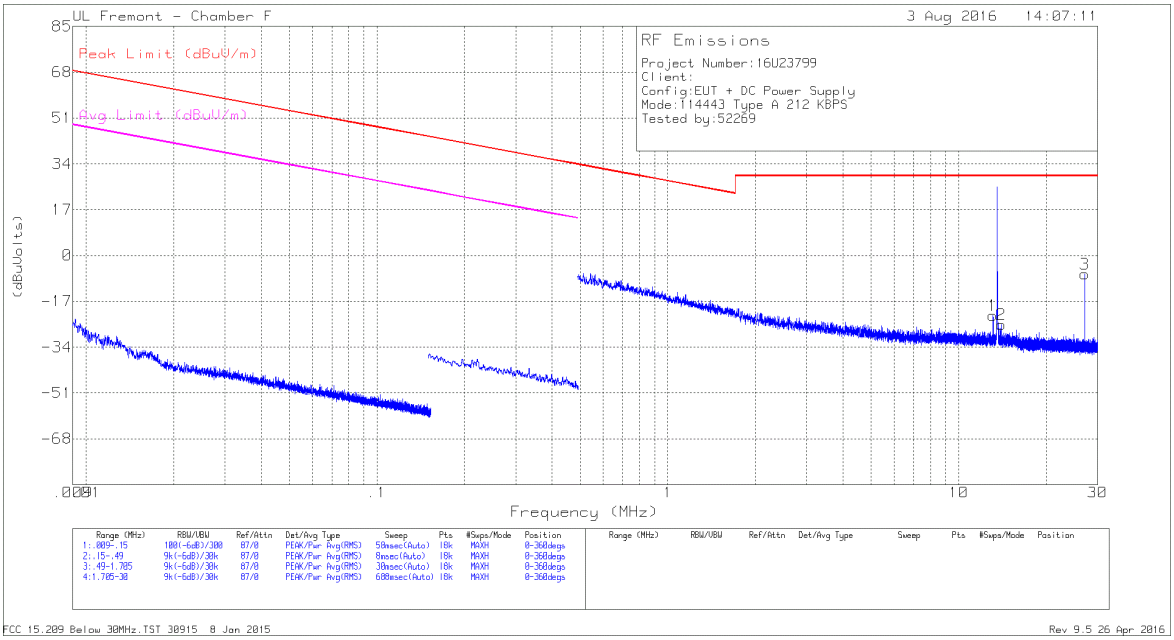
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/ meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	12.81613	10.31	Pk	10.7	.4	-40	-18.59	29.54	-48.13	0-360
2	13.56063	57.26	Pk	10.6	.4	-40	28.26	84	-55.74	0-360
3	14.53113	9.59	Pk	10.5	.4	-40	-19.51	29.54	-49.05	0-360
4	13.19244	10.18	Pk	10.7	.4	-40	-18.72	40.51	-59.23	0-360
5	13.55852	67.83	Pk	10.6	.4	-40	38.83	84	-45.17	0-360
6	13.81633	10.02	Pk	10.6	.4	-40	-18.98	40.51	-59.49	0-360

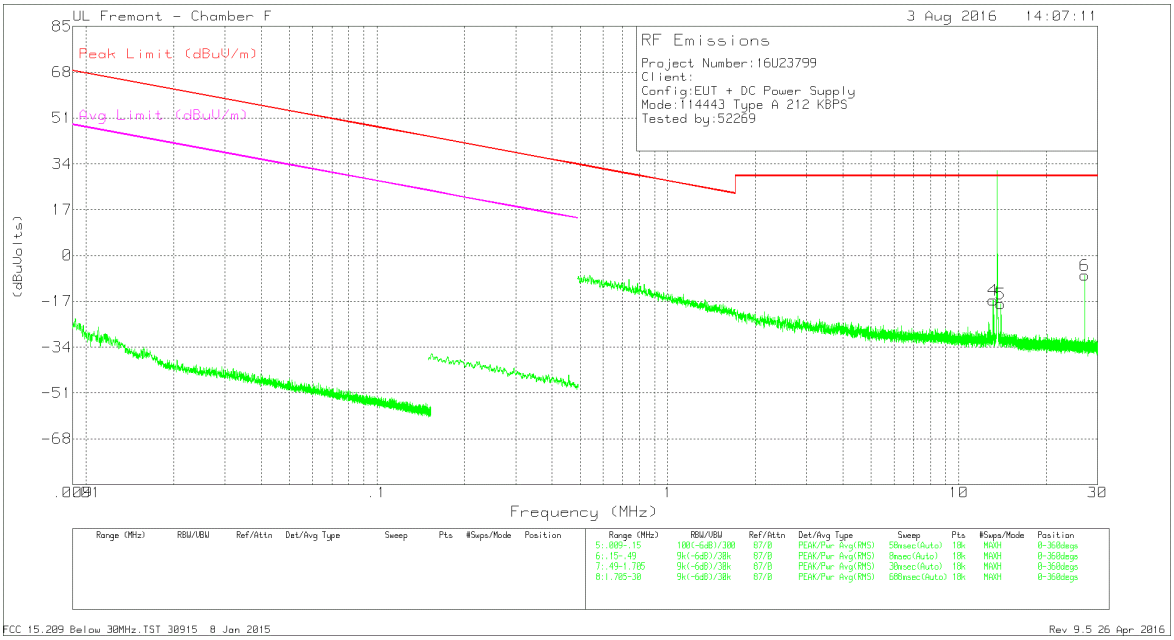
Pk - Peak detector

SPURIOUS EMISSIONS 212kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



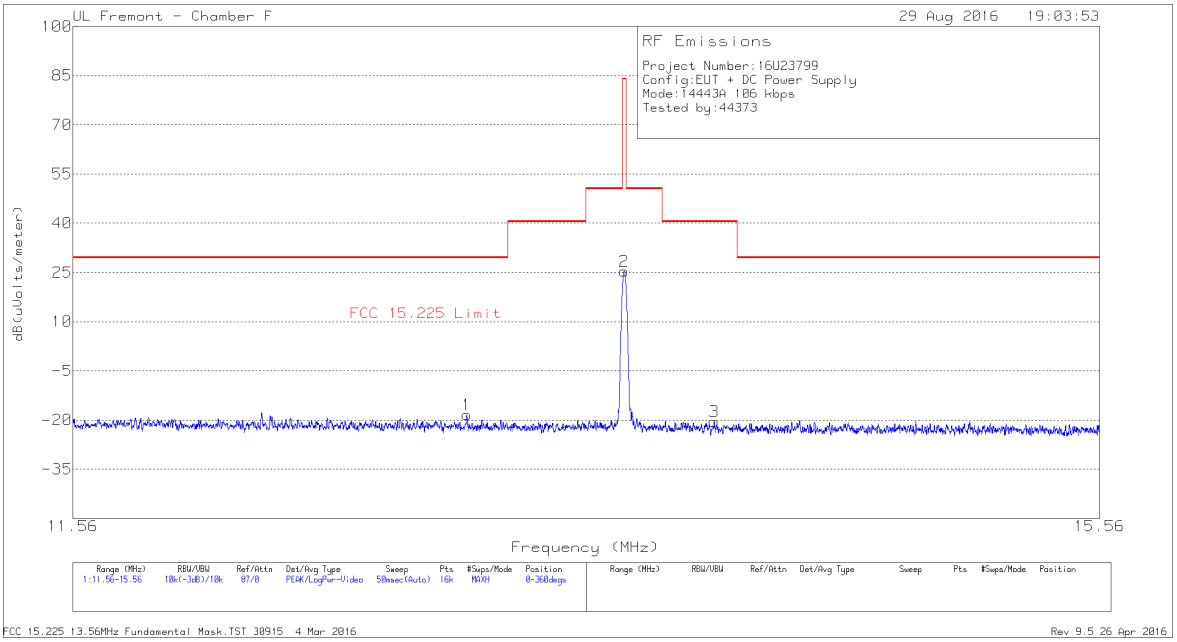
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/ Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	13.12086	6.57	Pk	10.7	.4	-40	-22.33	29.54	-51.87	-	-	0-360
2	14.00276	3.28	Pk	10.6	.4	-40	-25.72	29.54	-55.26	-	-	0-360
3	27.12267	23.65	Pk	8.8	.7	-40	-6.85	29.54	-36.39	-	-	0-360
4	13.12322	12.25	Pk	10.7	.4	-40	-16.65	29.54	-46.19	-	-	0-360
5	13.9383	11.03	Pk	10.6	.4	-40	-17.97	29.54	-47.51	-	-	0-360
6	27.12267	23.07	Pk	8.8	.7	-40	-7.43	29.54	-36.97	-	-	0-360

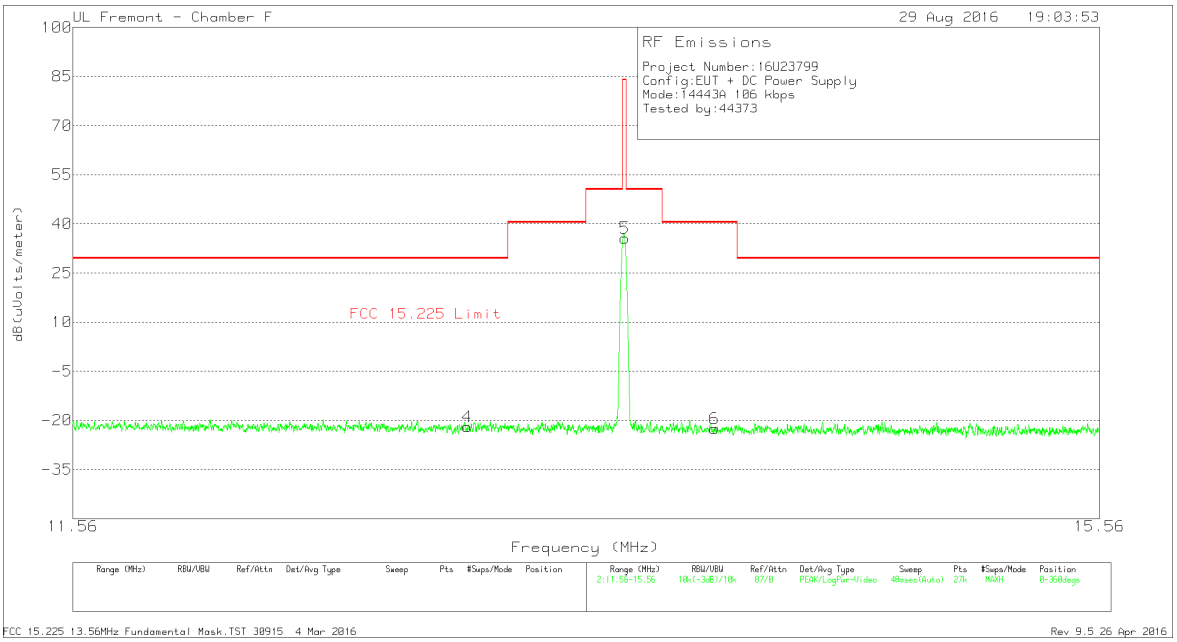
Pk - Peak detector

FUNDAMENTAL 106kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF

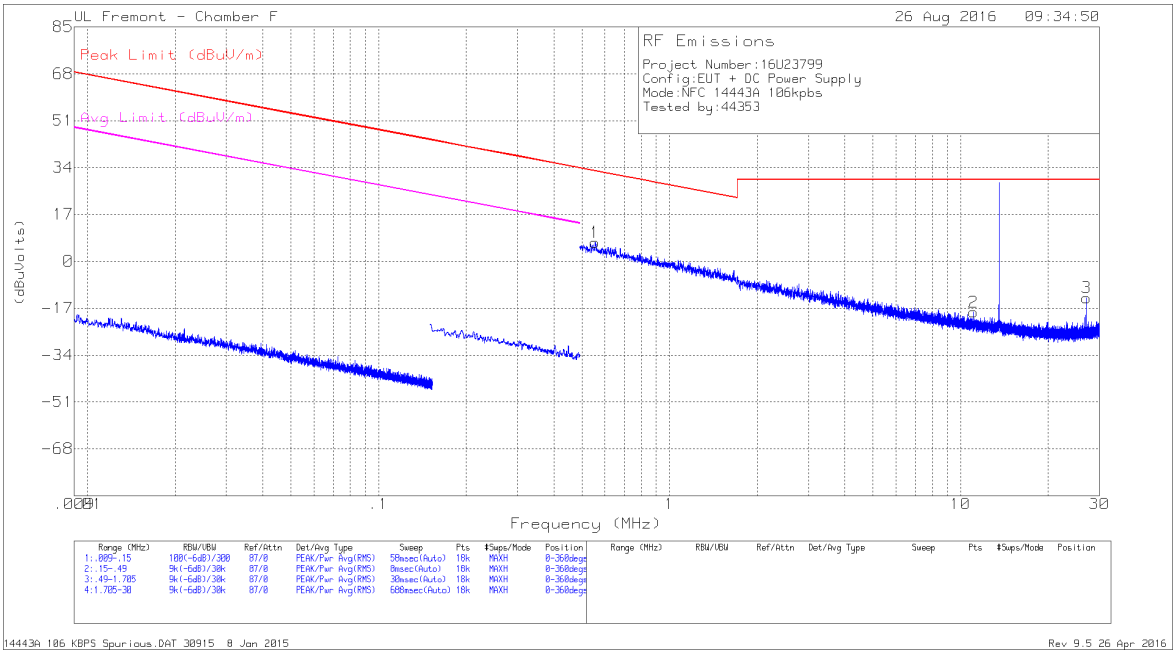


DATA

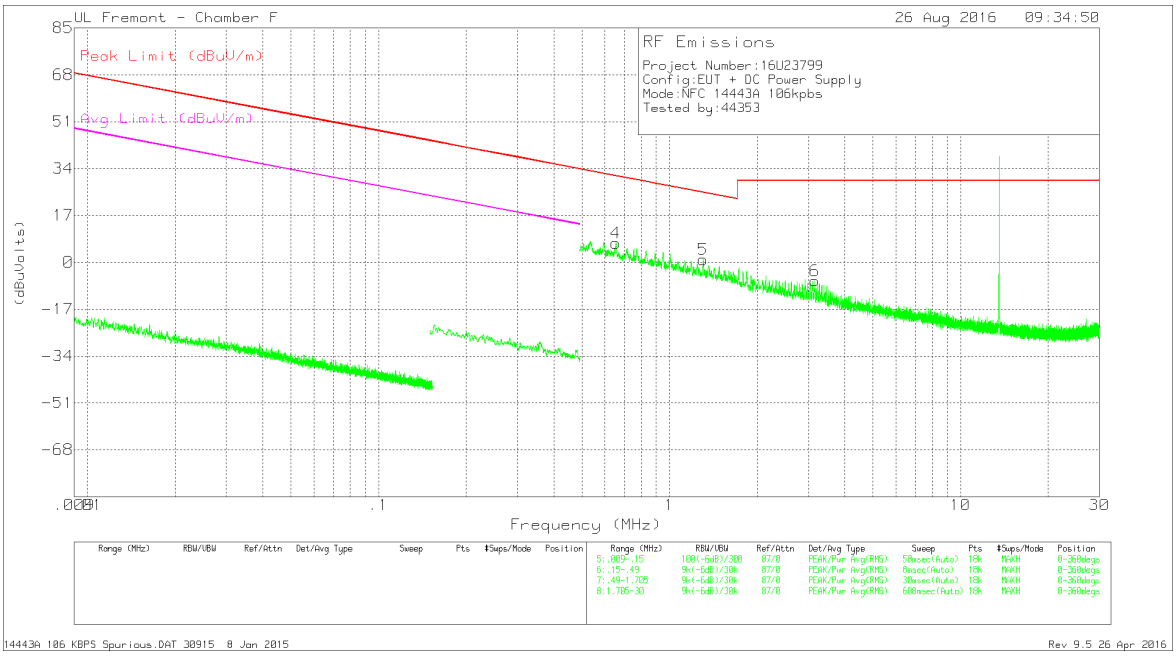
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/ meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	12.95613	10.46	Pk	10.7	.4	-40	-18.44	29.54	-47.98	0-360
2	13.56	54.4	Pk	10.6	.4	-40	25.4	84	-58.6	0-360
3	13.91813	8.64	Pk	10.6	.4	-40	-20.36	40.51	-60.87	0-360
4	12.95949	6.92	Pk	10.7	.4	-40	-21.98	29.54	-51.52	0-360
5	13.562	64.7	Pk	10.6	.4	-40	35.7	84	-48.3	0-360
6	13.9189	6.54	Pk	10.6	.4	-40	-22.46	40.51	-62.97	0-360

Pk - Peak detector

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



SPURIOUS EMISSIONS 106Kbps

DATA

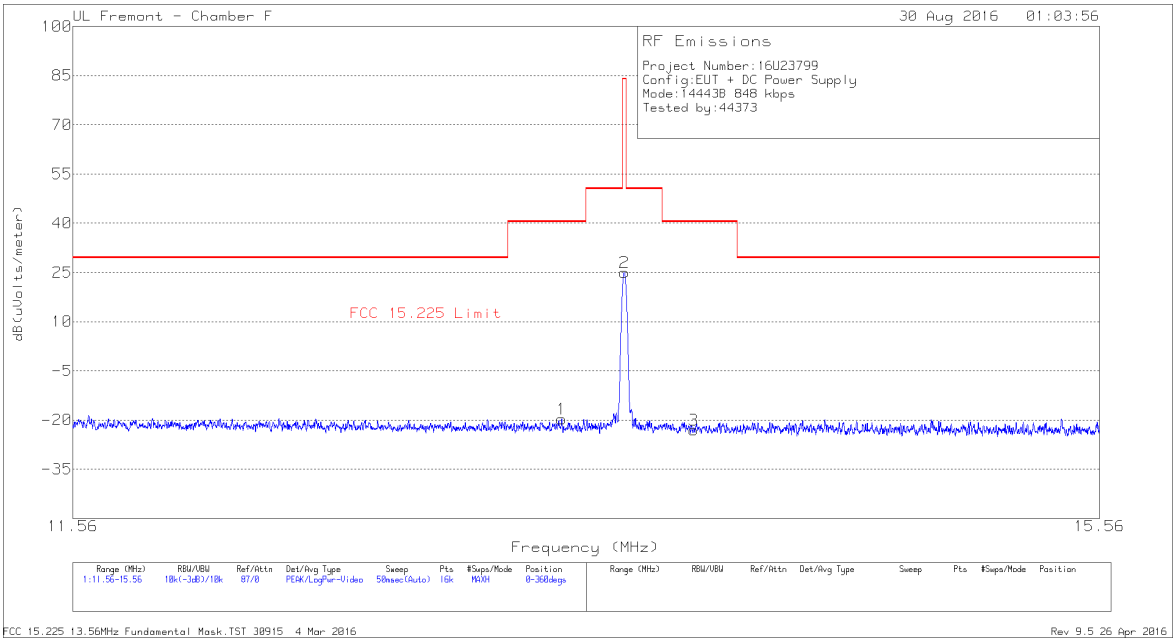
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.55509	35.04	Pk	11.7	.1	-40	6.84	32.72	-25.88	-	-	0-360
2	11.07884	10.34	Pk	10.9	.3	-40	-18.46	29.54	-48	-	-	0-360
3	27.12188	17.29	Pk	8.8	.7	-40	-13.21	29.54	-42.75	-	-	0-360
4	.65335	35.07	Pk	11.8	.1	-40	6.97	31.3	-24.33	-	-	0-360
5	1.30549	29.1	Pk	11.8	.1	-40	1	25.29	-24.29	-	-	0-360
6	3.15438	21.31	Pk	11.8	.2	-40	-6.69	29.54	-36.23	-	-	0-360

Pk - Peak detector

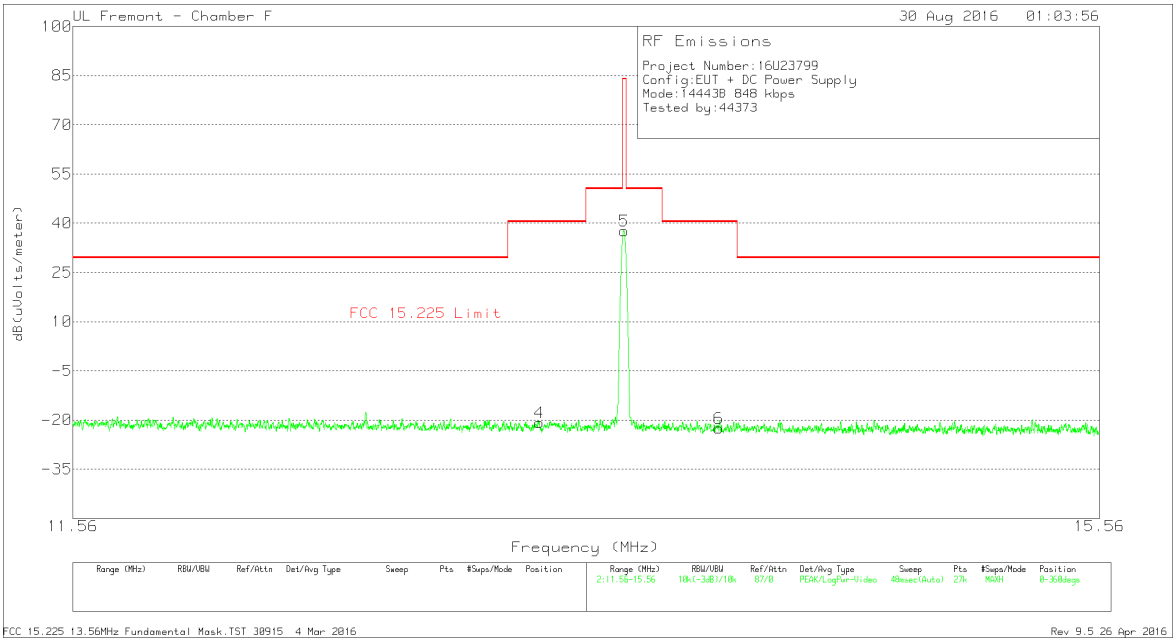
8.2.2. TYPE B (14443B)

FUNDAMENTAL 848kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



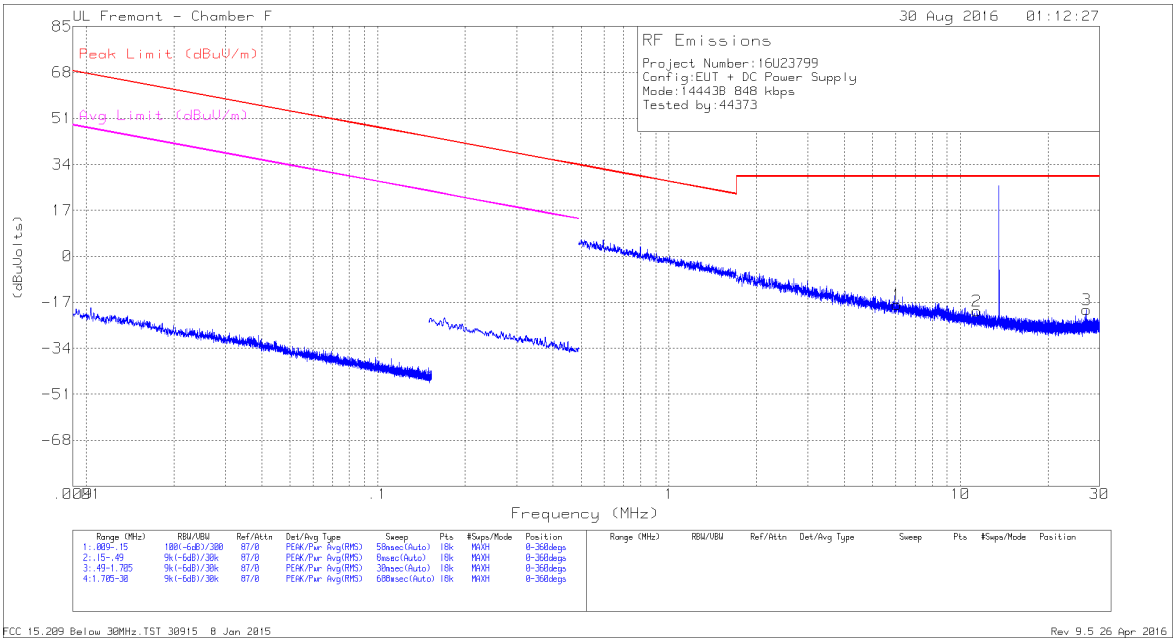
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/ meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.31713	9.15	Pk	10.7	.4	-40	-19.75	40.51	-60.26	0-360
2	13.5615	53.94	Pk	10.6	.4	-40	24.94	84	-59.06	0-360
3	13.835	5.89	Pk	10.6	.4	-40	-23.11	40.51	-63.62	0-360
4	13.23092	8.11	Pk	10.7	.4	-40	-20.79	40.51	-61.3	0-360
5	13.55963	66.64	Pk	10.6	.4	-40	37.64	84	-46.36	0-360
6	13.93732	6.56	Pk	10.6	.4	-40	-22.44	40.51	-62.95	0-360

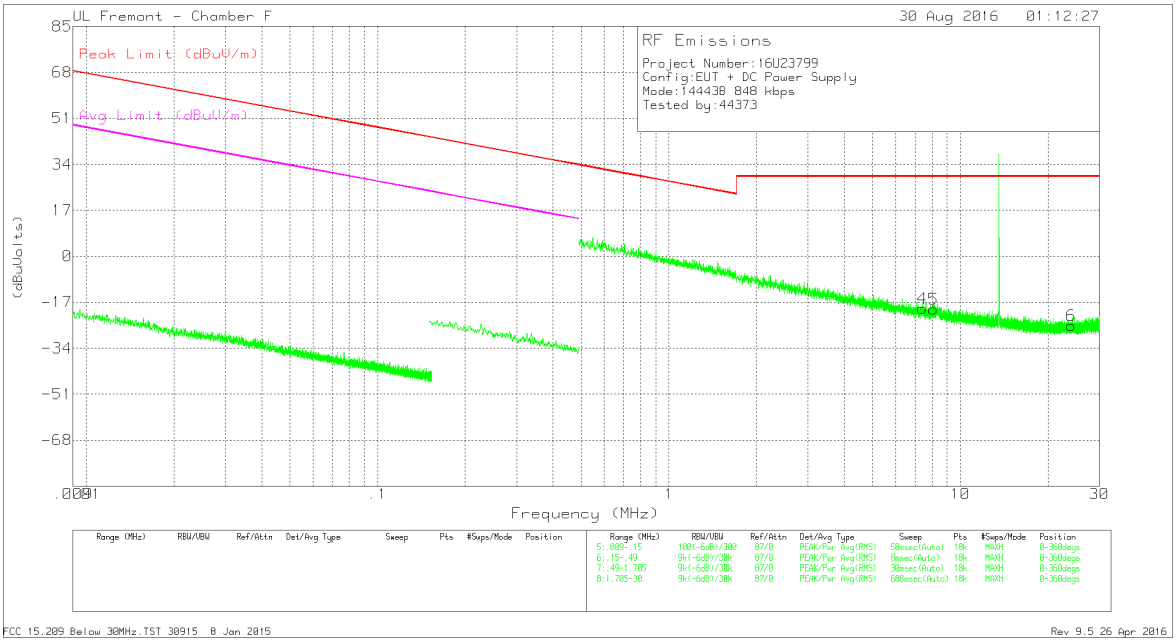
Pk - Peak detector

SPURIOUS EMISSIONS 848Kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



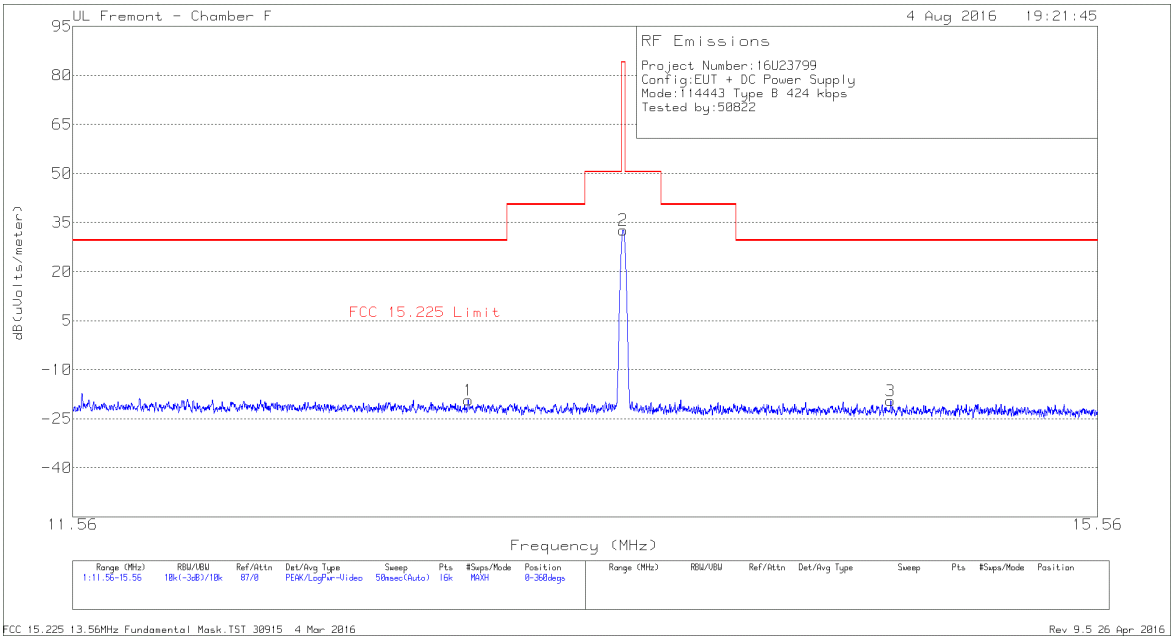
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/ Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	6.05865	10.42	Pk	11.4	.2	-40	-17.98	29.54	-47.52	-	-	0-360
2	11.39009	8.56	Pk	10.9	.3	-40	-20.24	29.54	-49.78	-	-	0-360
3	27.12267	10.8	Pk	8.8	.7	-40	-19.7	29.54	-49.24	-	-	0-360
4	7.40979	9.09	Pk	11.3	.3	-40	-19.31	29.54	-48.85	-	-	0-360
5	8.08889	8.89	Pk	11.2	.3	-40	-19.61	29.54	-49.15	-	-	0-360
6	24.03526	4.61	Pk	9.2	.6	-40	-25.59	29.54	-55.13	-	-	0-360

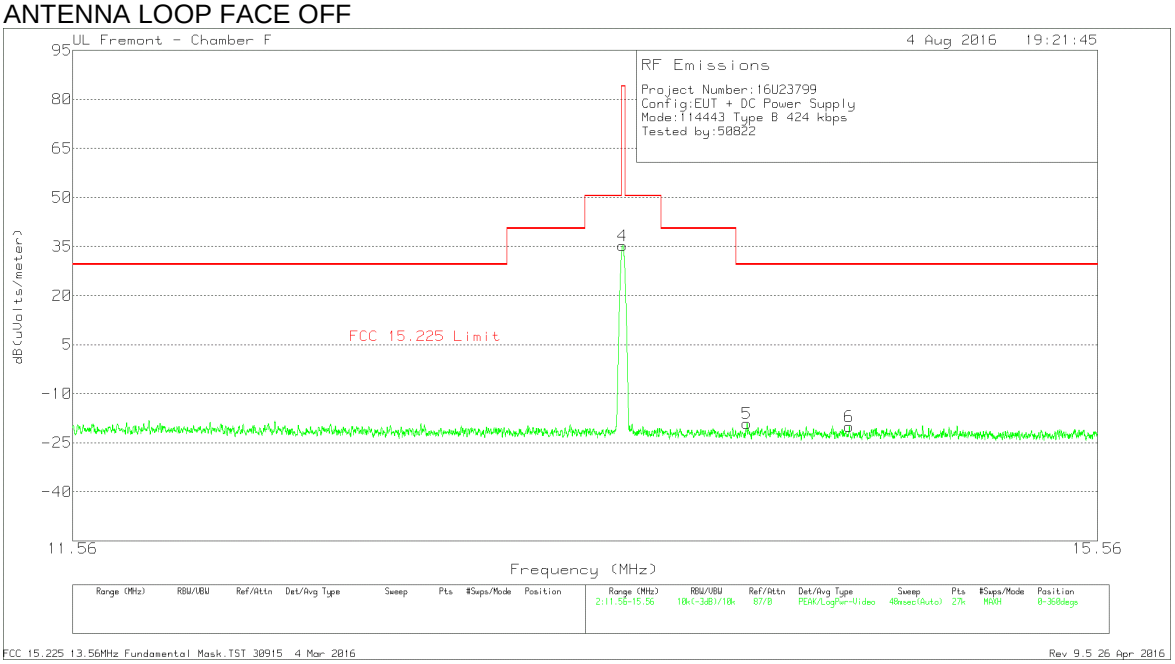
Pk - Peak detector

FUNDAMENTAL 424kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



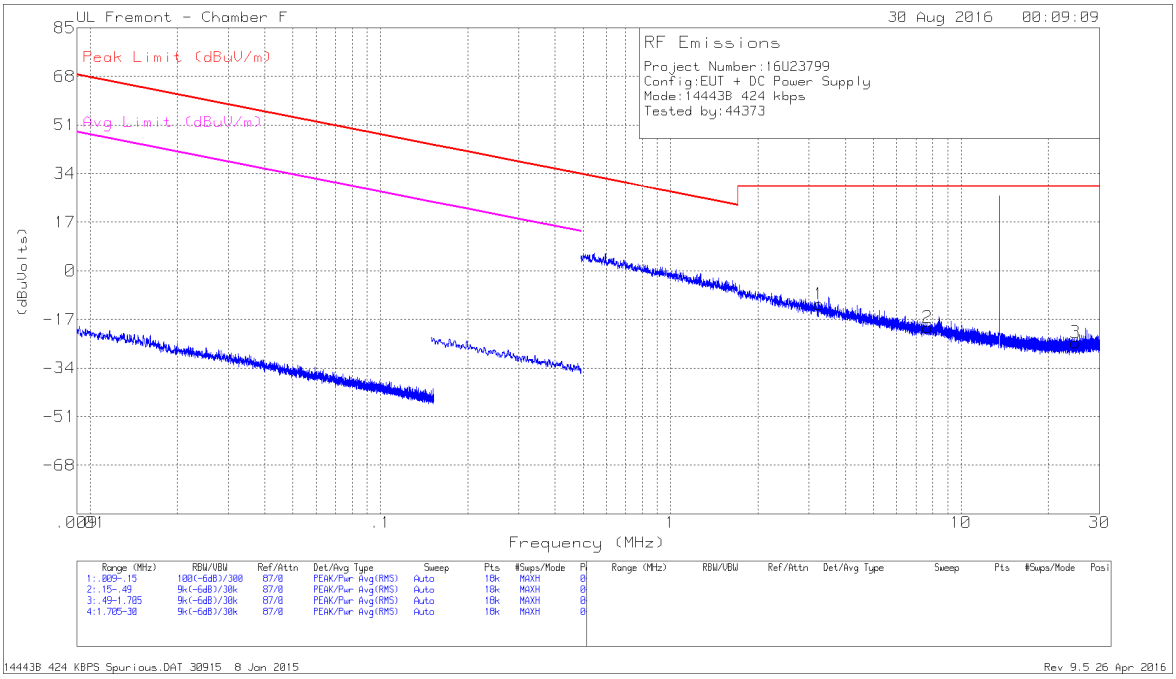
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/ meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	12.96488	9.65	Pk	10.7	.4	-40	-19.25	29.54	-48.79	0-360
2	13.56063	61.75	Pk	10.6	.4	-40	32.75	84	-51.25	0-360
3	14.65438	9.55	Pk	10.5	.4	-40	-19.55	29.54	-49.09	0-360
4	13.55852	64.26	Pk	10.6	.4	-40	35.26	84	-48.74	0-360
5	14.05609	9.92	Pk	10.6	.4	-40	-19.08	29.54	-48.62	0-360
6	14.47923	9.01	Pk	10.6	.4	-40	-19.99	29.54	-49.53	0-360

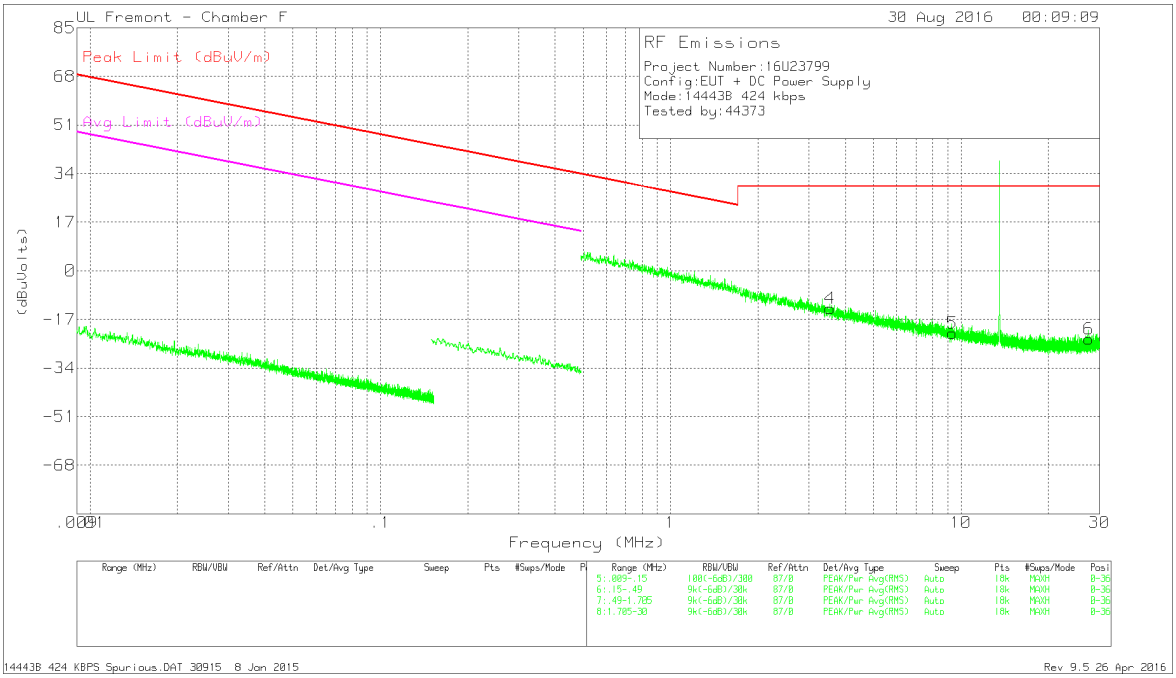
Pk - Peak detector

SPURIOUS EMISSIONS 424kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



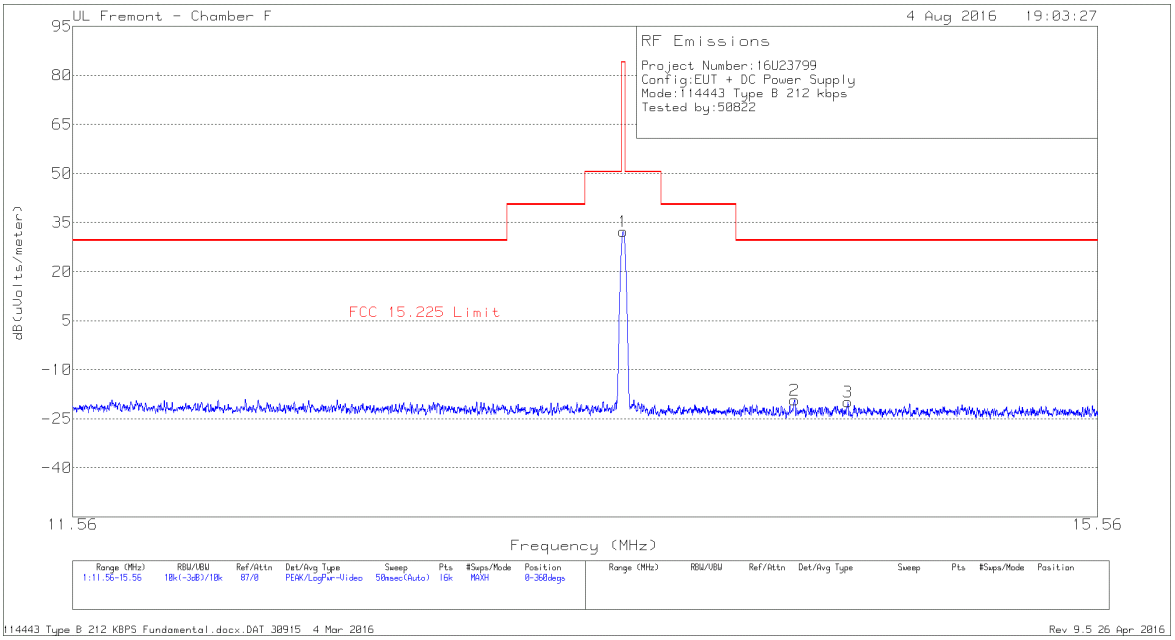
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp /Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	3.24556	16.29	Pk	11.8	.2	-40	-11.71	29.54	-41.25	-	-	0-360
2	7.67388	8.68	Pk	11.2	.3	-40	-19.82	29.54	-49.36	-	-	0-360
3	24.81104	5.17	Pk	9.1	.6	-40	-25.13	29.54	-54.67	-	-	0-360
4	3.54581	14.91	Pk	11.7	.2	-40	-13.19	29.54	-42.73	-	-	0-360
5	9.33863	6.68	Pk	11.1	.3	-40	-21.92	29.54	-51.46	-	-	0-360
6	27.59034	6.76	Pk	8.7	.7	-40	-23.84	29.54	-53.38	-	-	0-360

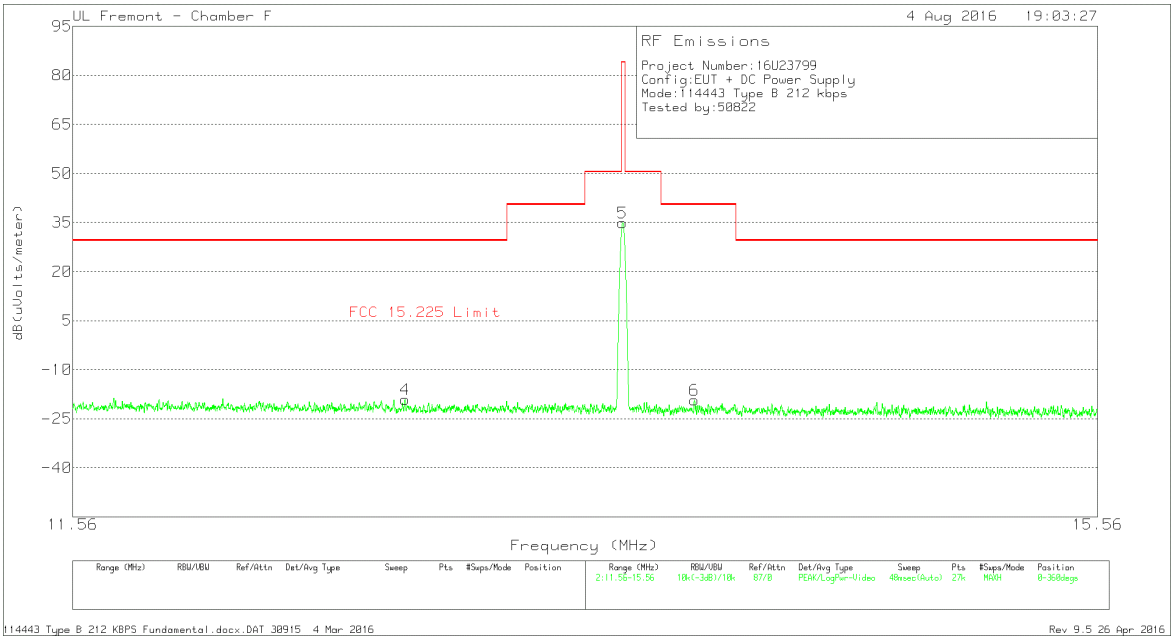
Pk - Peak detector

FUNDAMENTAL 212kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



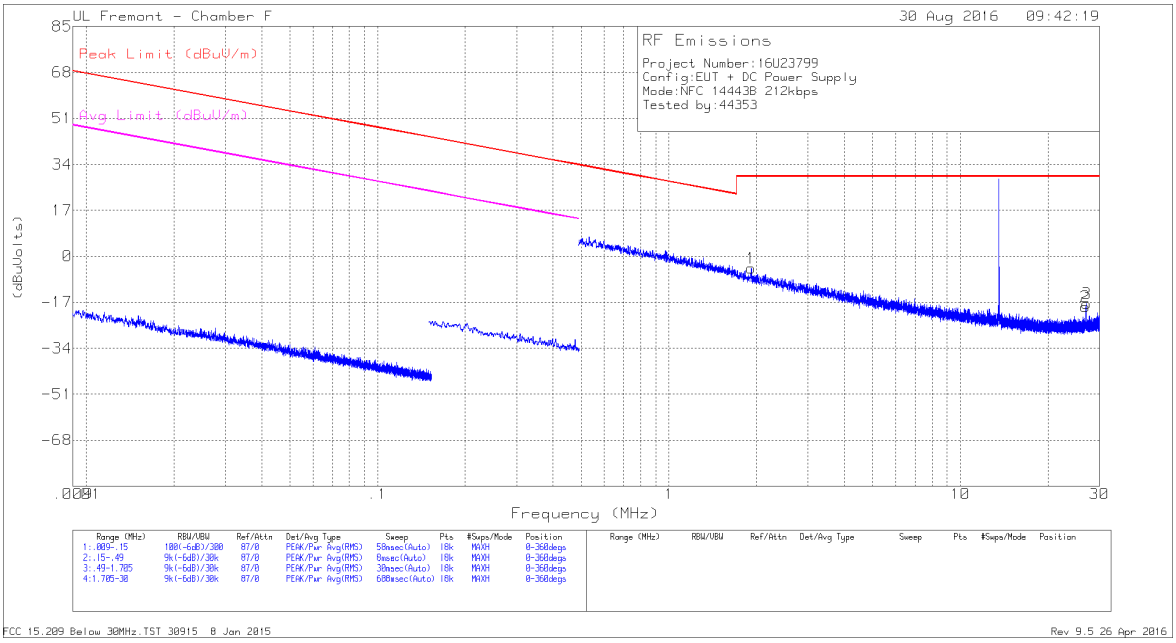
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.56063	61.33	Pk	10.6	.4	-40	32.33	84	-51.67	0-360
2	14.25138	9.77	Pk	10.6	.4	-40	-19.23	29.54	-48.77	0-360
3	14.47338	9.2	Pk	10.6	.4	-40	-19.8	29.54	-49.34	0-360
4	12.72913	9.72	Pk	10.7	.4	-40	-19.18	29.54	-48.72	0-360
5	13.55867	63.88	Pk	10.6	.4	-40	34.88	84	-49.12	0-360
6	13.84342	9.75	Pk	10.6	.4	-40	-19.25	40.51	-59.76	0-360

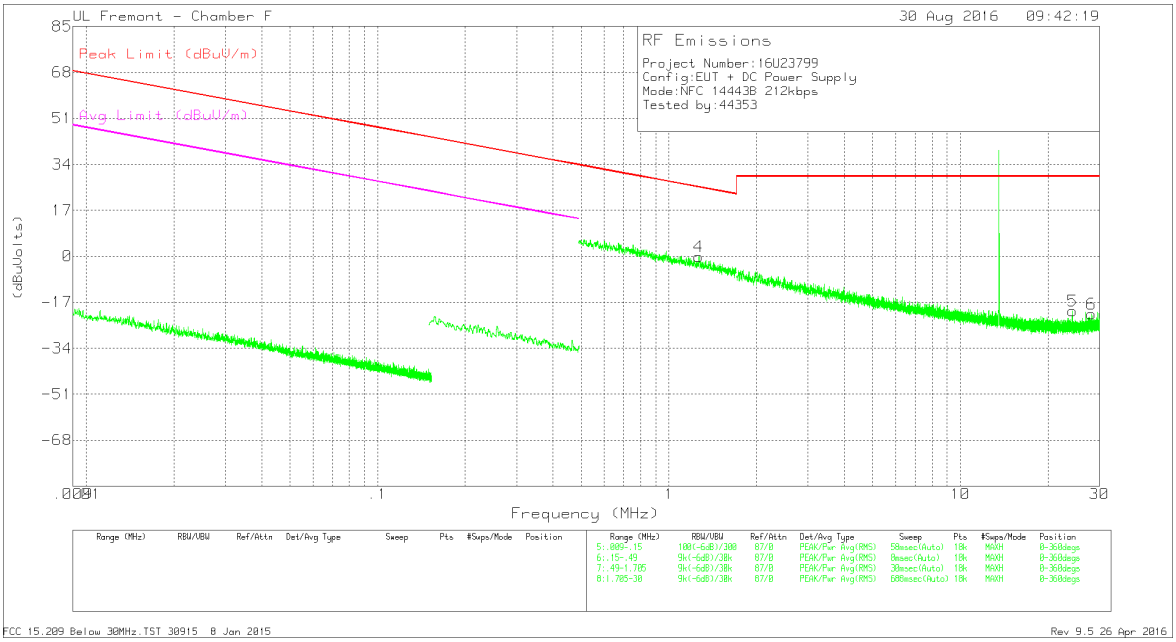
Pk - Peak detector

SPURIOUS EMISSIONS 212kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



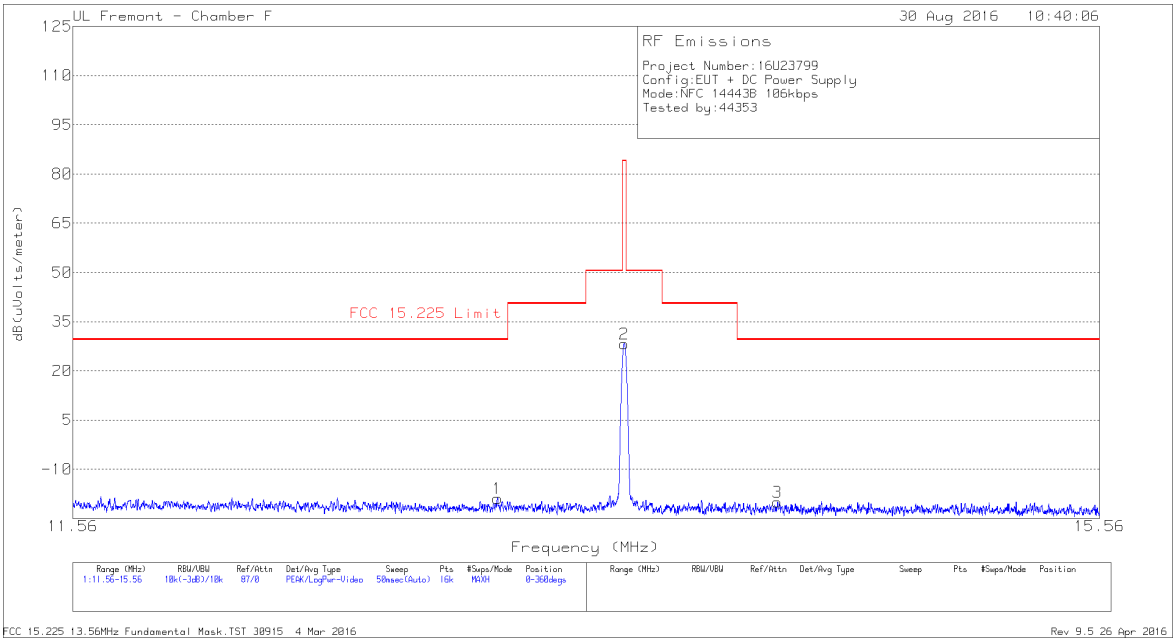
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	1.91722	23.7	Pk	11.9	.1	-40	-4.3	29.54	-33.84	-	-	0-360
2	26.88451	11.89	Pk	8.8	.7	-40	-18.61	29.54	-48.15	-	-	0-360
3	27.12267	13.05	Pk	8.8	.7	-40	-17.45	29.54	-46.99	-	-	0-360
4	1.26676	27.95	Pk	11.8	.1	-40	-.15	25.55	-25.7	-	-	0-360
5	24.21054	9.92	Pk	9.2	.6	-40	-20.28	29.54	-49.82	-	-	0-360
6	28.22307	9.29	Pk	8.6	.7	-40	-21.41	29.54	-50.95	-	-	0-360

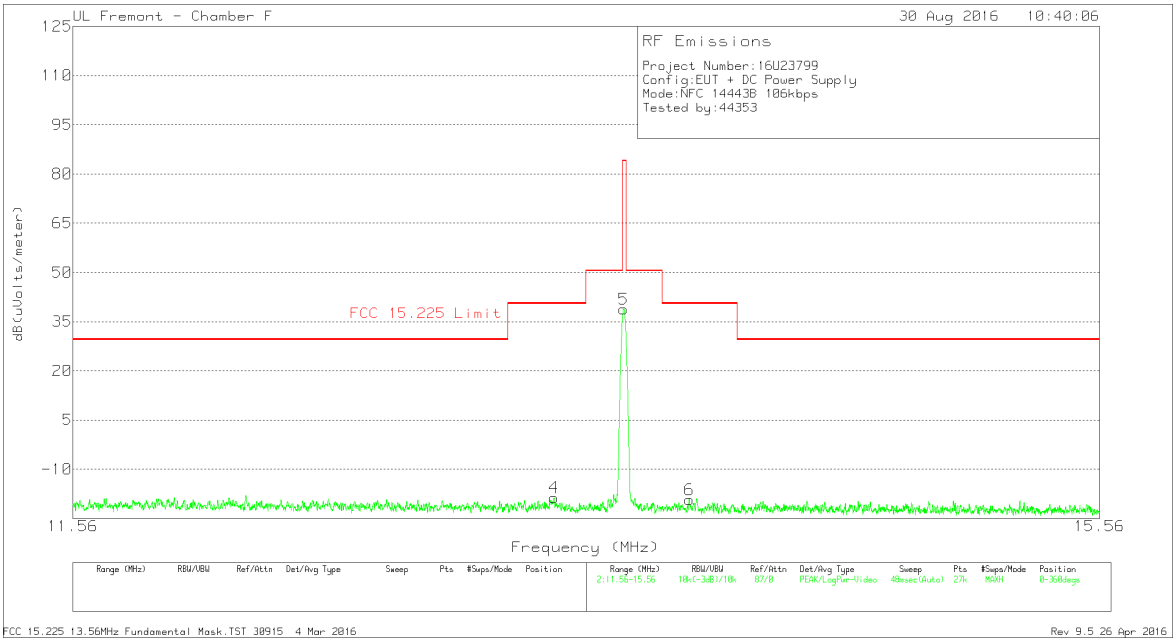
Pk - Peak detector

FUNDAMENTAL 106kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



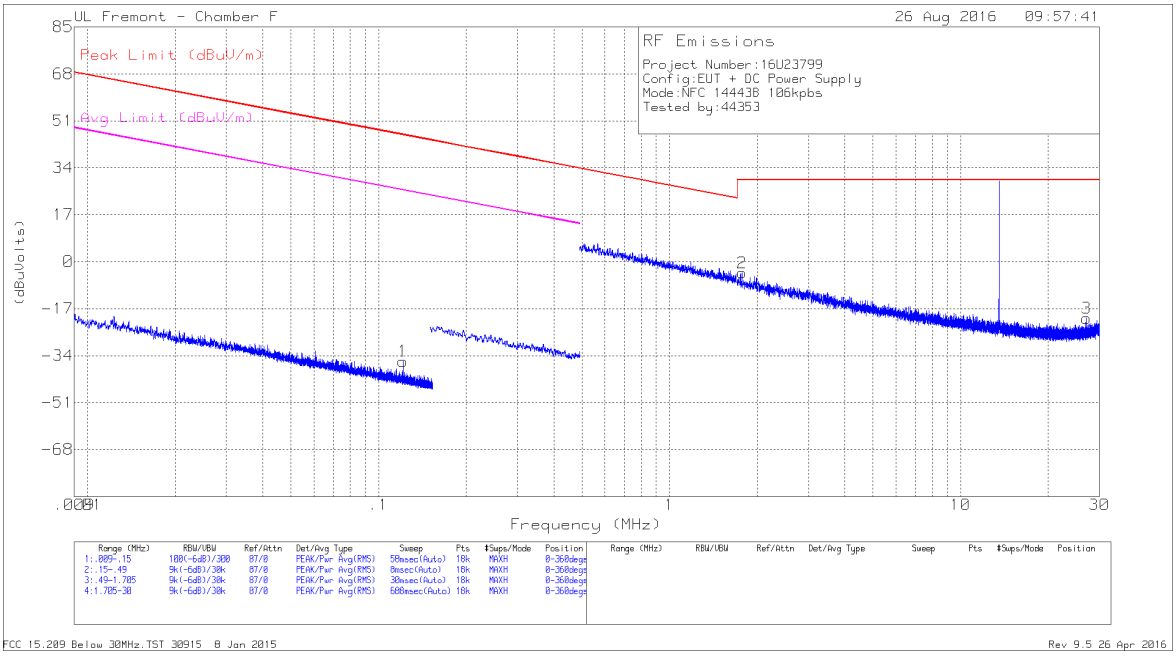
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.0725	10.01	Pk	10.7	.4	-40	-18.89	29.54	-48.43	0-360
2	13.55925	57.25	Pk	10.6	.4	-40	28.25	84	-55.75	0-360
3	14.17588	9.01	Pk	10.6	.4	-40	-19.99	29.54	-49.53	0-360
4	13.28783	10.27	Pk	10.7	.4	-40	-18.63	40.51	-59.14	0-360
5	13.55867	67.9	Pk	10.6	.4	-40	38.9	84	-45.1	0-360
6	13.81833	9.76	Pk	10.6	.4	-40	-19.24	40.51	-59.75	0-360

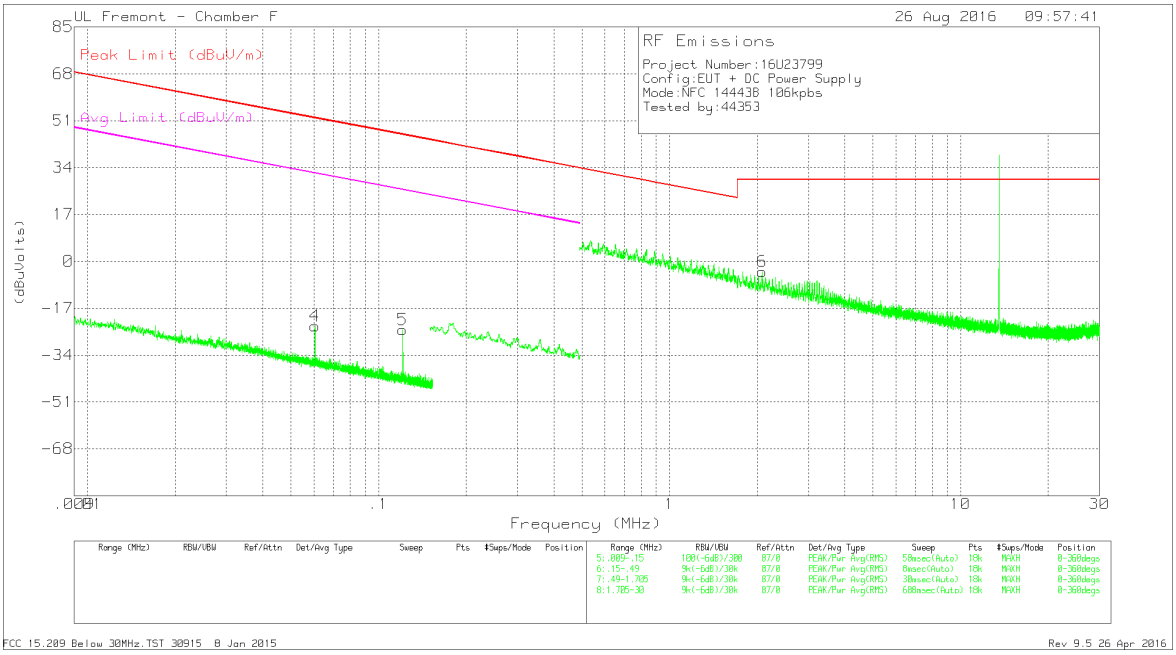
Pk - Peak detector

SPURIOUS EMISSIONS 106kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



DATA

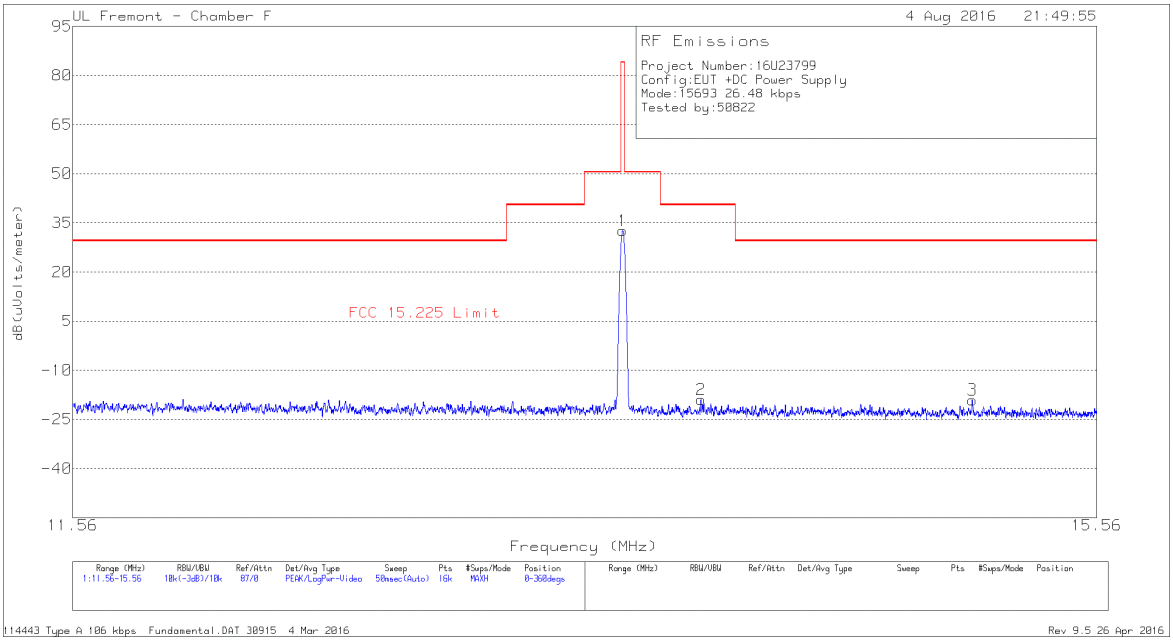
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/ Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.12126	32.02	Pk	11.8	.1	-80	-36.08	45.93	-82.01	25.93	-62.01	0-360
4	.06048	44.38	Pk	12.1	.1	-80	-23.42	51.97	-75.39	31.97	-55.39	0-360
5	.12115	43.33	Pk	11.8	.1	-80	-24.77	45.94	-70.71	25.94	-50.71	0-360
2	1.7726	23.93	Pk	11.9	.1	-40	-4.07	29.54	-33.61	-	-	0-360
3	27.12424	10.01	Pk	8.8	.7	-40	-20.49	29.54	-50.03	-	-	0-360
6	2.08228	24.22	Pk	11.9	.2	-40	-3.68	29.54	-33.22	-	-	0-360

Pk - Peak detector

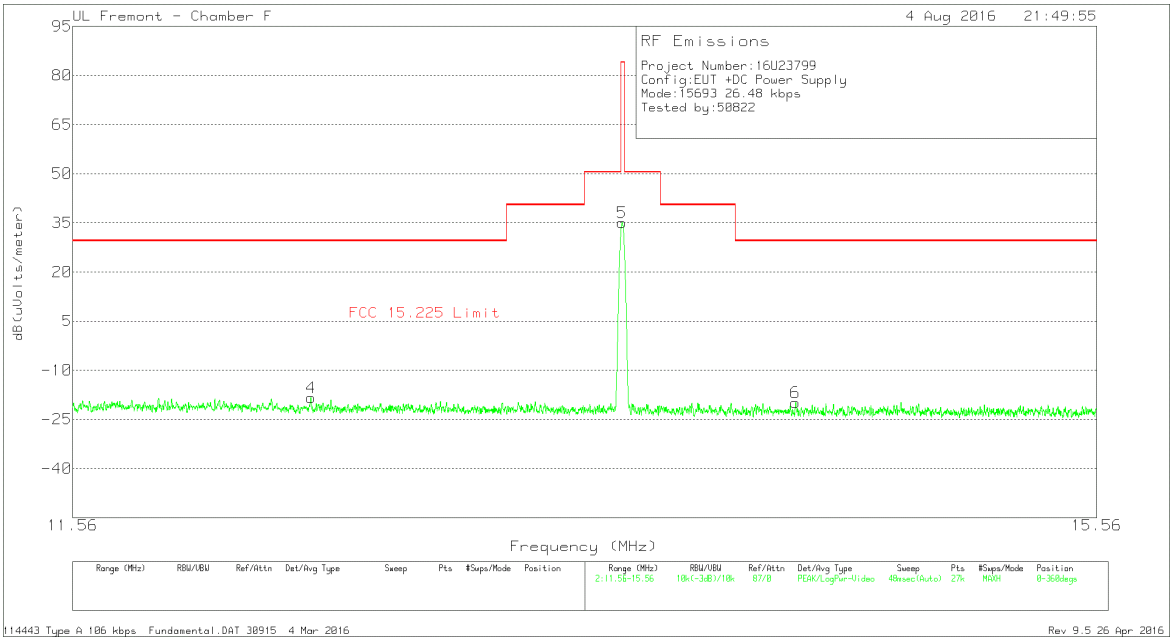
8.2.3. ISO 15693 MODE

FUNDAMENTAL 26.48Kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



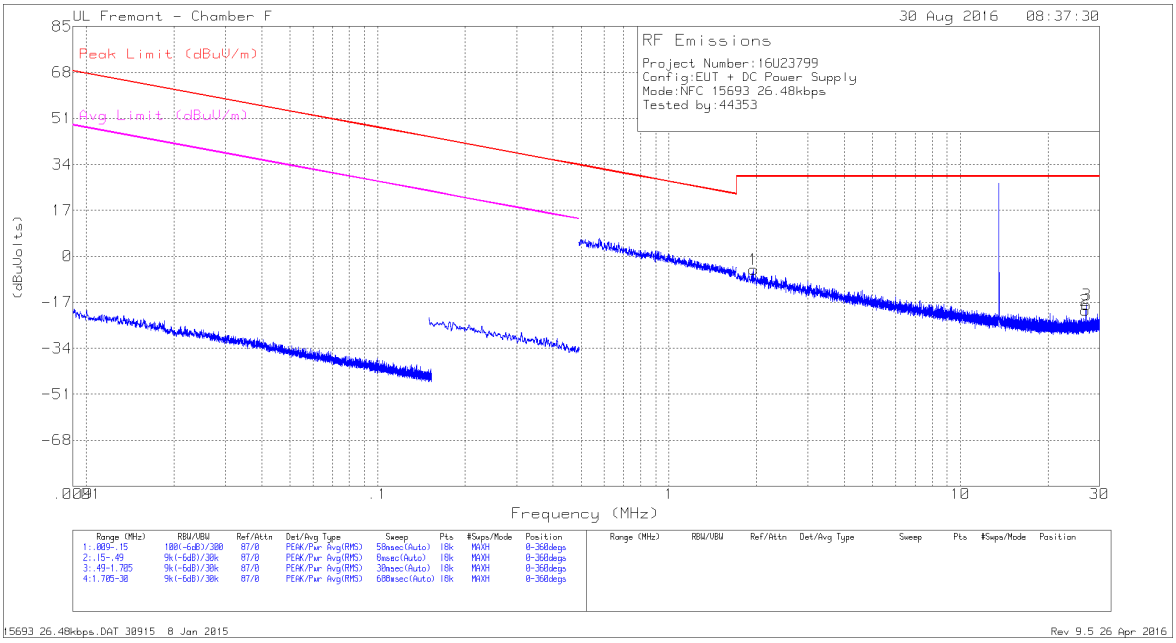
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.5605	61.59	Pk	10.6	.4	-40	32.59	84	-51.41	0-360
2	13.87225	10.12	Pk	10.6	.4	-40	-18.88	40.51	-59.39	0-360
3	15.00825	10.08	Pk	10.5	.4	-40	-19.02	29.54	-48.56	0-360
4	12.38725	10.5	Pk	10.8	.4	-40	-18.3	29.54	-47.84	0-360
5	13.55867	64.1	Pk	10.6	.4	-40	35.1	84	-48.9	0-360
6	14.25885	9.06	Pk	10.6	.4	-40	-19.94	29.54	-49.48	0-360

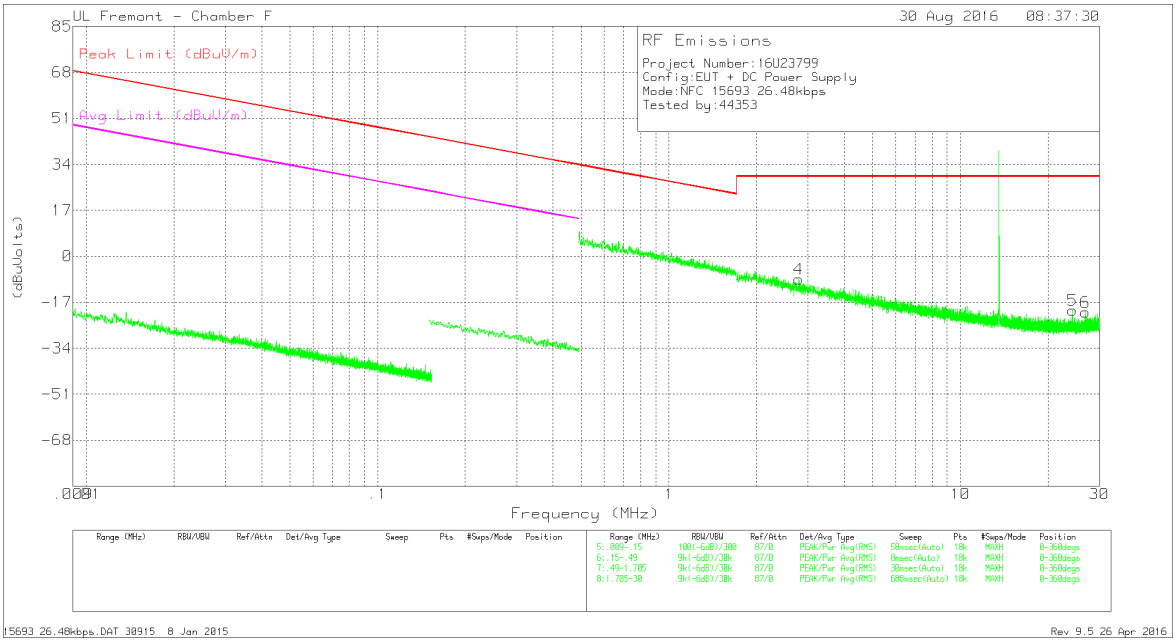
Pk - Peak detector

SPURIOUS EMISSIONS 26.48Kbps

ANTENNA LOOP FACE ON



ANTENNA LOOP FACE OFF



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Amp/Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	1.94866	23.22	Pk	11.9	.1	-40	-4.78	29.54	-34.32	-	-	0-360
2	26.88608	10.56	Pk	8.8	.7	-40	-19.94	29.54	-49.48	-	-	0-360
3	27.1211	12.51	Pk	8.8	.7	-40	-17.99	29.54	-47.53	-	-	0-360
4	2.79282	19.56	Pk	11.8	.2	-40	-8.44	29.54	-37.98	-	-	0-360
5	24.21918	10.14	Pk	9.2	.6	-40	-20.06	29.54	-49.6	-	-	0-360
6	26.87901	9.82	Pk	8.8	.7	-40	-20.68	29.54	-50.22	-	-	0-360

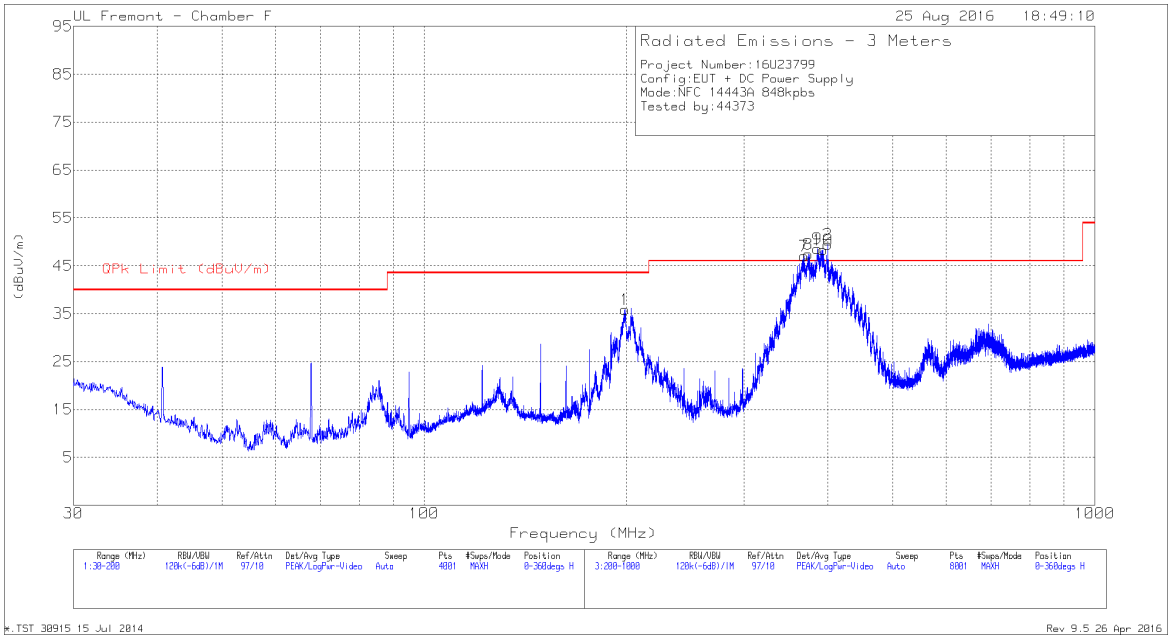
Pk - Peak detector

8.3. TX SPURIOUS EMISSION 30 TO 1000 MHz

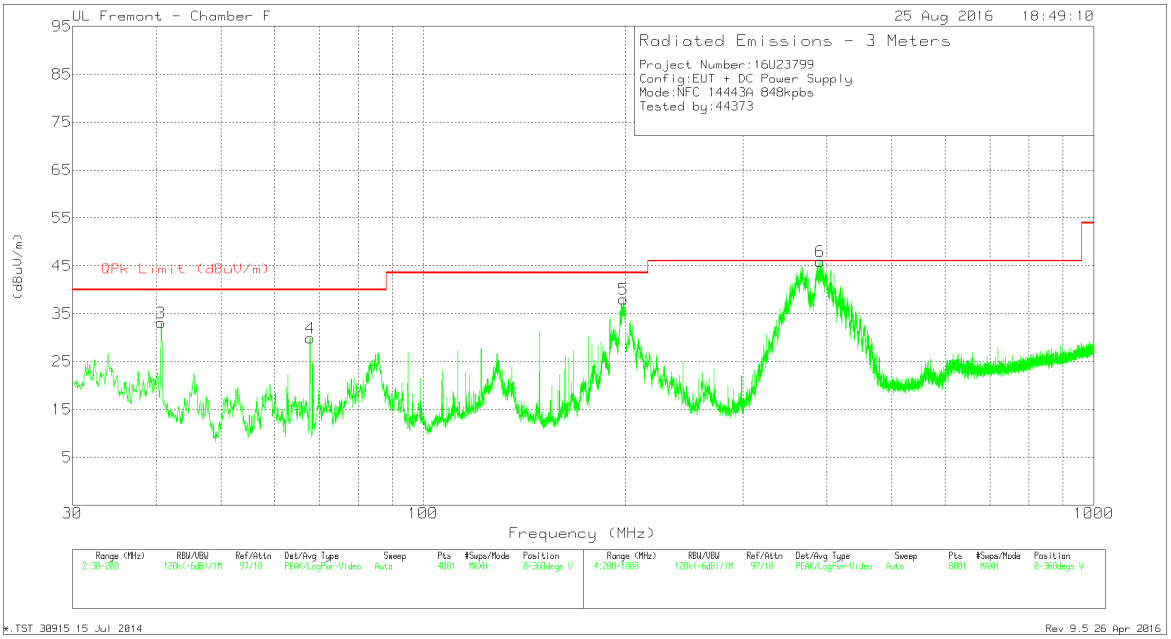
8.3.1. TYPE A (14443A)

848Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	199.4475	49.93	Pk	16.3	-30.4	35.83	43.52	-7.69	0-360	100	H
3	40.6675	47.58	Pk	17.2	-31.7	33.08	40	-6.92	0-360	100	V
4	67.825	49.3	Pk	12	-31.4	29.9	40	-10.1	0-360	100	V
5	198.895	52.35	Pk	16.2	-30.5	38.05	43.52	-5.47	0-360	100	V
2	399.5	59.24	Pk	19.6	-29.4	49.44	**46.02**	**3.42**	0-360	99	H
7	368.8	57.64	Pk	19	-29.6	47.04	**46.02**	**1.02**	0-360	99	H
8	374.2	57.85	Pk	19.1	-29.5	47.45	**46.02**	**1.43**	0-360	99	H
9	385.9	59.03	Pk	19	-29.5	48.53	**46.02**	**2.51**	0-360	199	H
10	393.3	58.66	Pk	19.2	-29.5	48.36	**46.02**	**2.34**	0-360	99	H
6	391.1	56.32	Pk	19.1	-29.5	45.92	46.02	-.1	0-360	201	V

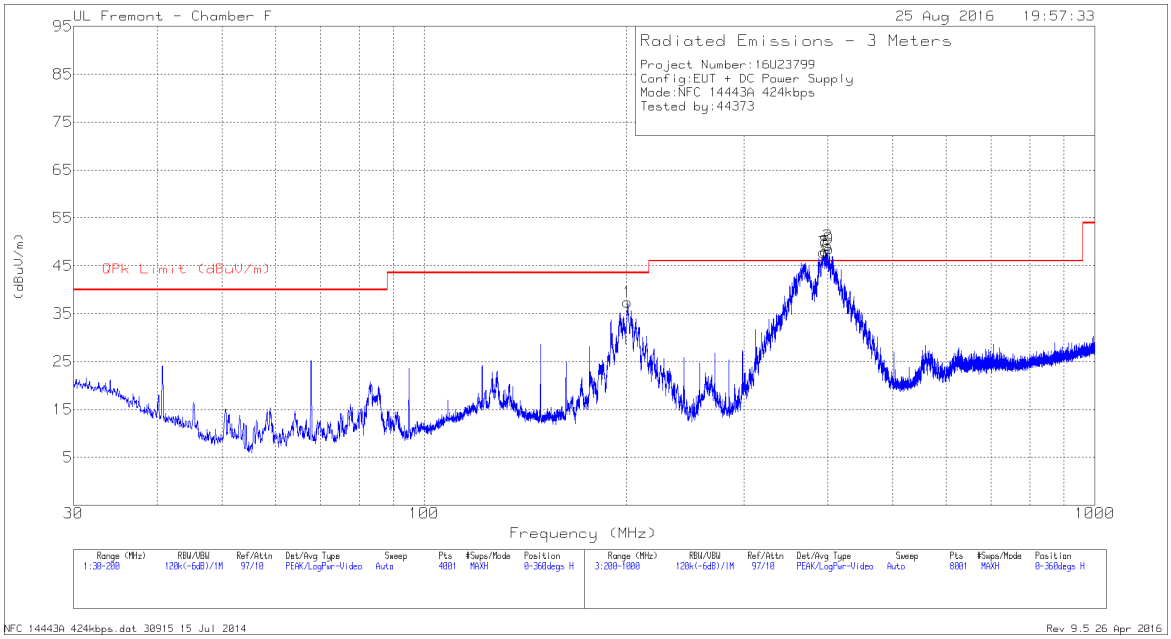
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	399.5	52.06	Qp	19.6	-29.4	42.26	46.02	-3.76	243	233	H
7	368.8	42.73	Qp	19	-29.6	32.13	46.02	-13.89	22	246	H
8	374.2	47.46	Qp	19.1	-29.5	37.06	46.02	-8.96	151	102	H
9	385.9	51.5	Qp	19	-29.5	41	46.02	-5.02	8	100	H
10	393.26	53.59	Qp	19.2	-29.5	43.29	46.02	-2.73	13	237	H
6	391.1	54.18	Qp	19.2	-29.5	43.88	46.02	-2.14	78	149	V

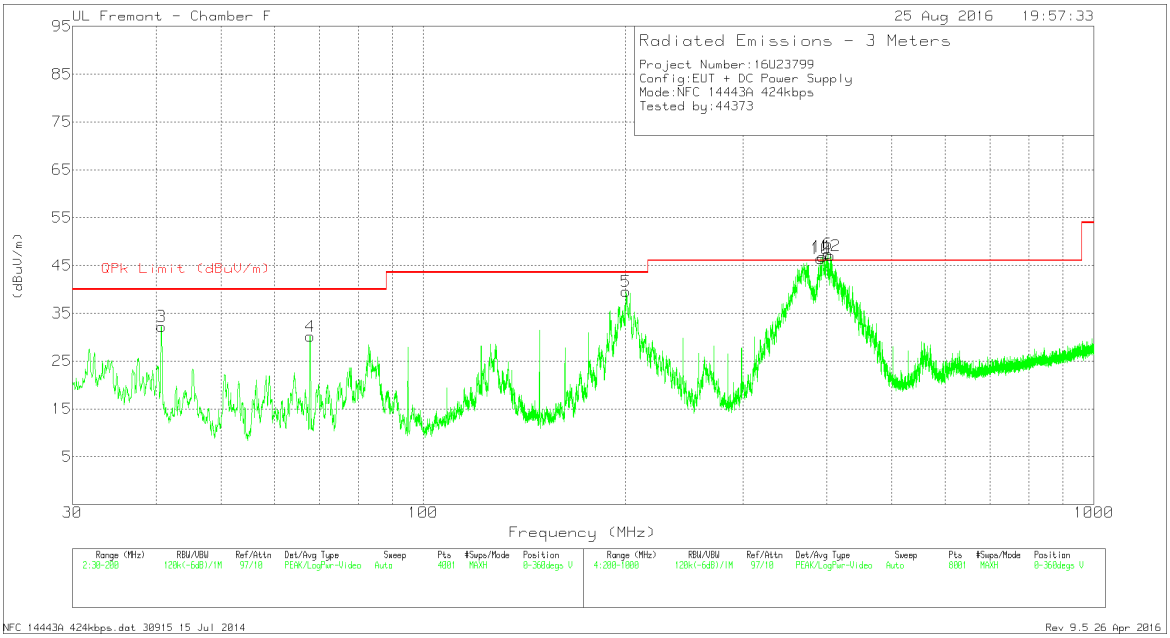
Qp - Quasi-Peak detector

424Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	40.71	46.76	Pk	17.2	-31.7	32.26	40	-7.74	0-360	100	V
4	67.825	49.6	Pk	12	-31.4	30.2	40	-9.8	0-360	100	V
1	201	51.58	Pk	16.2	-30.4	37.38	43.52	-6.14	0-360	99	H
2	399.6	59.06	Pk	19.6	-29.4	49.26	**46.02**	**3.24**	0-360	99	H
7	394.1	58.02	Pk	19.3	-29.5	47.82	**46.02**	**1.8**	0-360	99	H
8	396.3	58.03	Pk	19.4	-29.4	48.03	**46.02**	**2.01**	0-360	99	H
9	* 401.6	58.24	Pk	19.7	-29.4	48.54	**46.02**	**2.52**	0-360	99	H
5	200.7	53.64	Pk	16.3	-30.4	39.54	43.52	-3.98	0-360	100	V
6	* 401.6	57.09	Pk	19.7	-29.4	47.39	**46.02**	**1.37**	0-360	100	V
10	391.6	56.77	Pk	19.2	-29.5	46.47	**46.02**	**.45**	0-360	100	V
11	393.9	57.06	Pk	19.3	-29.5	46.86	**46.02**	**.84**	0-360	100	V
12	* 405	56.61	Pk	19.8	-29.4	47.01	**46.02**	**.99**	0-360	100	V

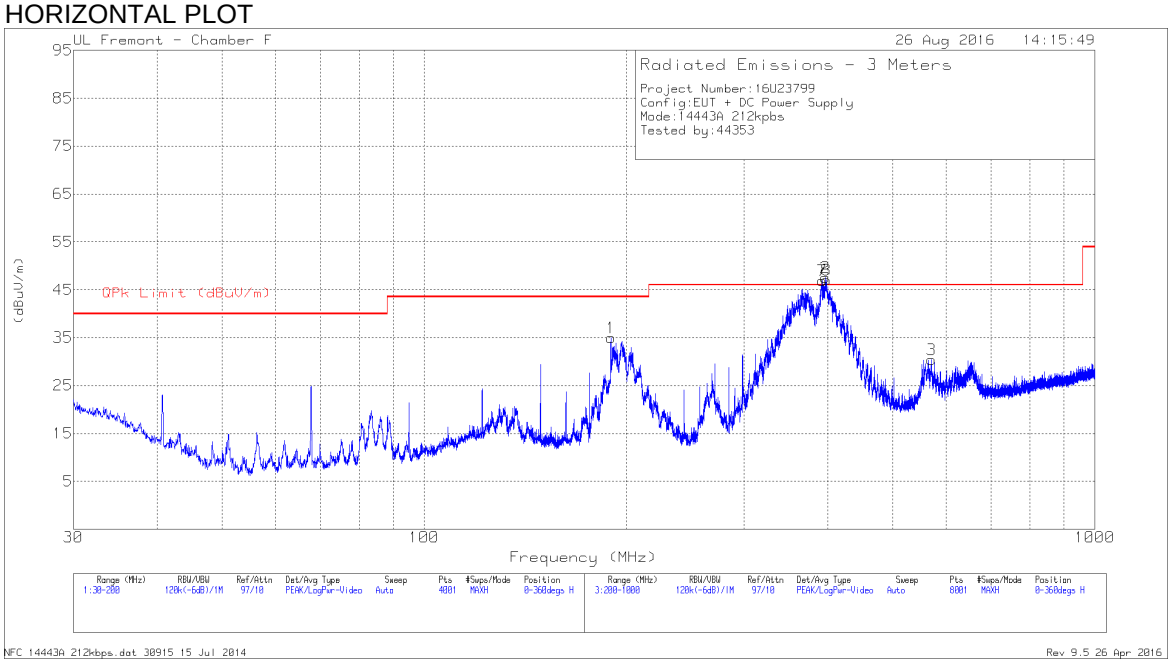
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	399.6	53.82	Qp	19.6	-29.4	44.02	46.02	-2	157	108	H
7	394.1	53.16	Qp	19.2	-29.5	42.86	46.02	-3.16	358	104	H
8	396.964	52.13	Qp	19.5	-29.3	42.33	46.02	-3.69	129	101	H
9	* 401.5	50.75	Qp	19.7	-29.4	41.05	46.02	-4.97	128	102	H
6	* 401.5	52.85	Qp	19.7	-29.4	43.15	46.02	-2.87	295	103	V
10	393.3	49.8	Qp	19.2	-29.5	39.5	46.02	-6.52	325	112	V
11	393.9	50.93	Qp	19.2	-29.5	40.63	46.02	-5.39	310	125	V
12	* 405	50.94	Qp	19.7	-29.4	41.24	46.02	-4.78	329	115	V

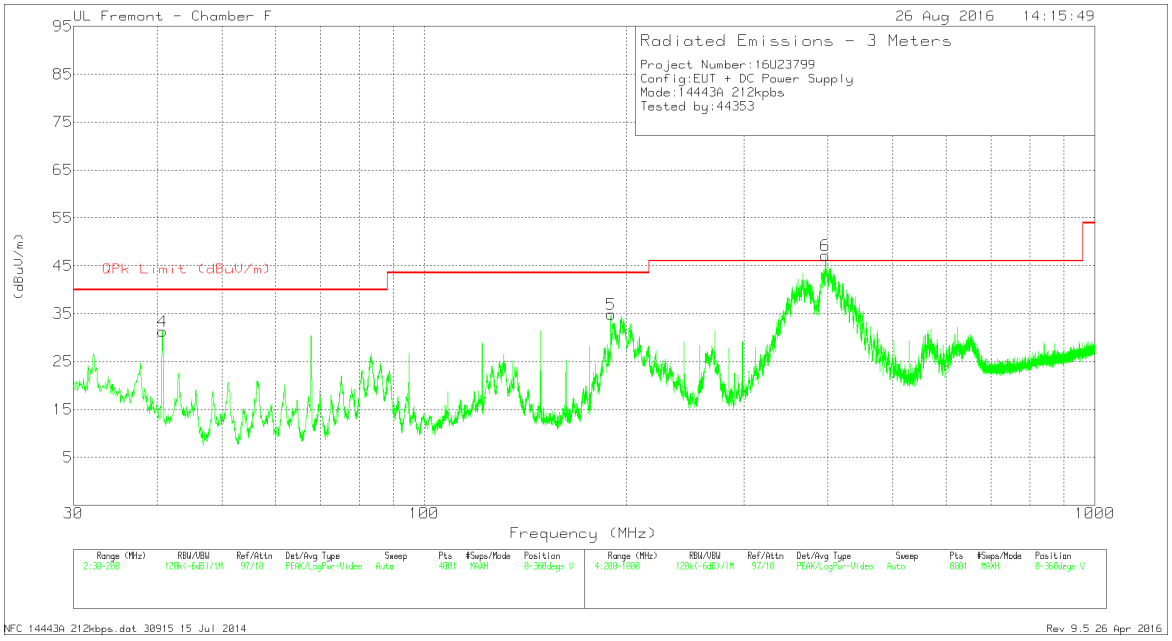
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Qp - Quasi-Peak detector

212Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	189.885	50.26	Pk	15.2	-30.5	34.96	43.52	-8.56	0-360	99	H
4	40.71	45.87	Pk	17.2	-31.7	31.37	40	-8.63	0-360	100	V
5	189.8425	50.2	Pk	15.2	-30.5	34.9	43.52	-8.62	0-360	100	V
2	396.4	57.54	Pk	19.4	-29.4	47.54	**46.02**	**1.52**	0-360	99	H
3	571.3	36.45	Pk	22.7	-28.7	30.45	46.02	-15.57	0-360	99	H
7	392	57.18	Pk	19.2	-29.5	46.88	**46.02**	**.86**	0-360	99	H
8	398.1	56.85	Pk	19.5	-29.3	47.05	**46.02**	**1.03**	0-360	99	H
6	396.7	57.19	Pk	19.4	-29.4	47.19	**46.02**	**1.17**	0-360	100	V

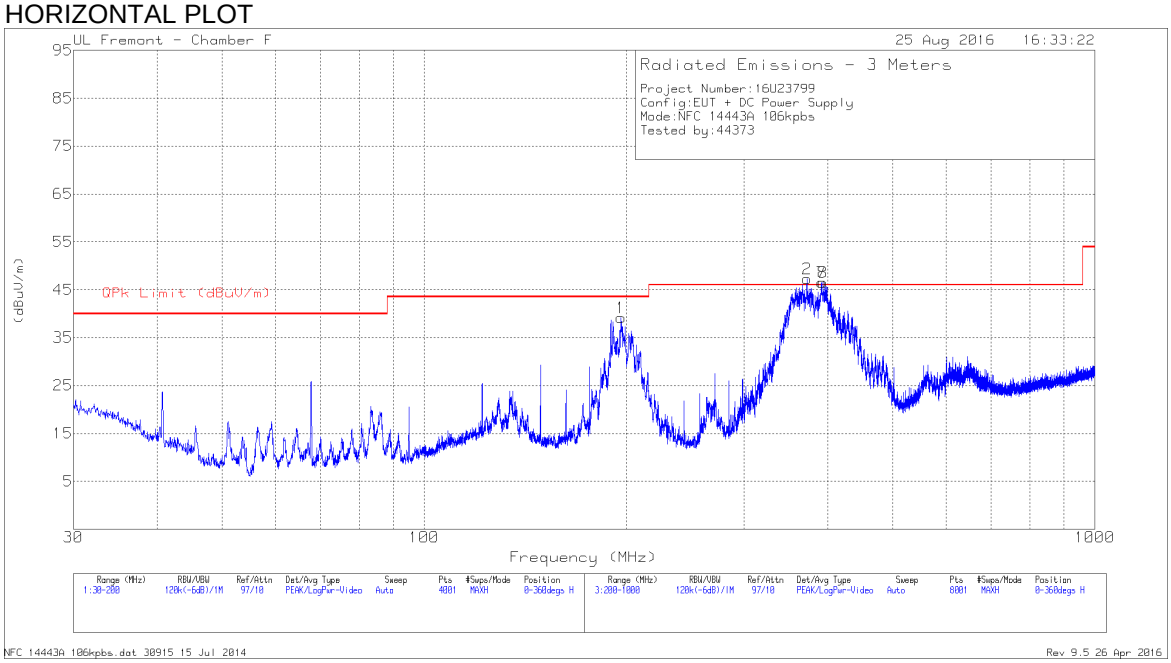
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	396.4	54.1	Qp	19.4	-29.4	44.1	46.02	-1.92	345	102	H
7	392	52.28	Qp	19.2	-29.5	41.98	46.02	-4.04	8	237	H
8	398.1	52.87	Qp	19.4	-29.4	42.87	46.02	-3.15	139	101	H
6	396.7	54.27	Qp	19.4	-29.4	44.27	46.02	-1.75	302	117	V

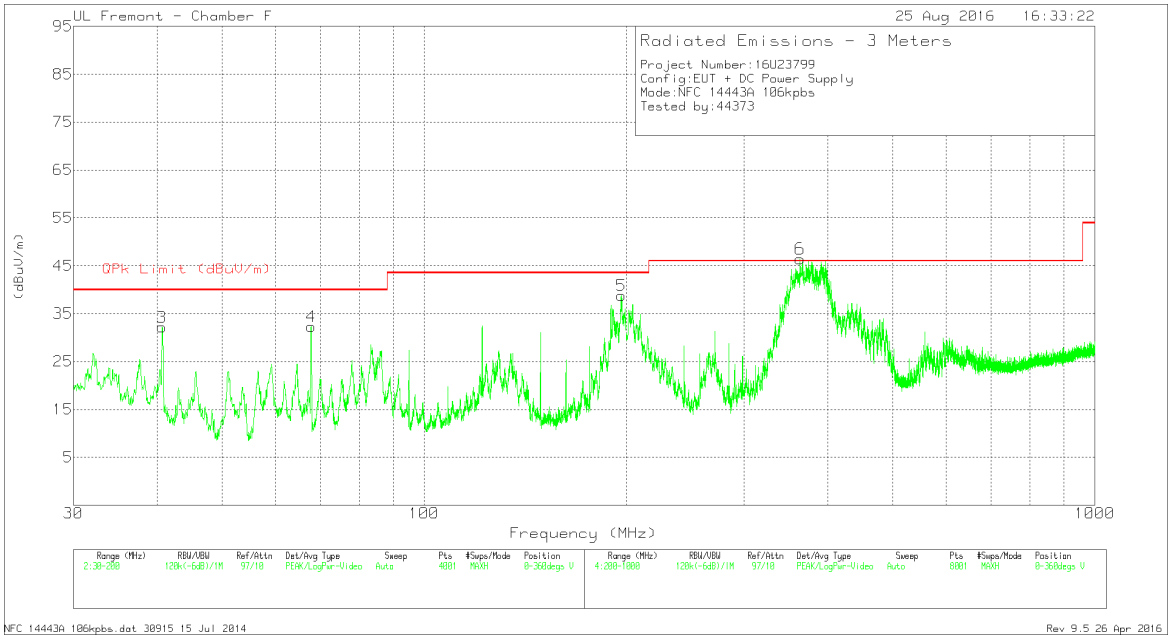
Qp - Quasi-Peak detector

106Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	196.6425	53.75	Pk	15.9	-30.5	39.15	43.52	-4.37	0-360	199	H
3	40.6675	46.67	Pk	17.2	-31.7	32.17	40	-7.83	0-360	100	V
4	67.825	51.68	Pk	12	-31.4	32.28	40	-7.72	0-360	100	V
5	196.7275	53.42	Pk	15.9	-30.5	38.82	43.52	-4.7	0-360	100	V
2	372.1	57.83	Pk	19	-29.5	47.33	**46.02**	**1.31**	0-360	99	H
7	391.5	56.8	Pk	19.2	-29.5	46.5	**46.02**	**.48**	0-360	199	H
8	393.3	56.85	Pk	19.2	-29.5	46.55	**46.02**	**.53**	0-360	199	H
6	363.6	57.18	Pk	18.9	-29.6	46.48	**46.02**	**.46**	0-360	100	V

Pk - Peak detector

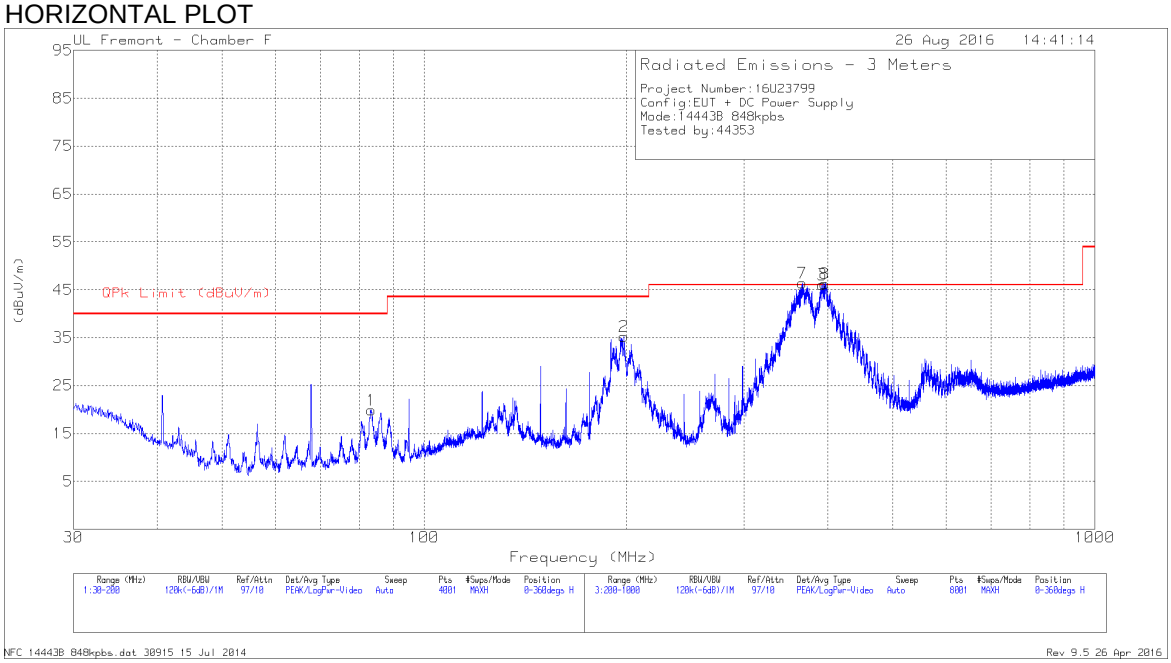
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	371.2	54.07	Qp	19	-29.6	43.47	46.02	-2.55	350	100	H
7	391.5	51.78	Qp	19.2	-29.5	41.48	46.02	-4.54	19	242	H
8	393.3	53.7	Qp	19.2	-29.5	43.4	46.02	-2.62	5	244	H
6	363.6	53.37	Qp	18.9	-29.6	42.67	46.02	-3.35	41	138	V

Qp - Quasi-Peak detector

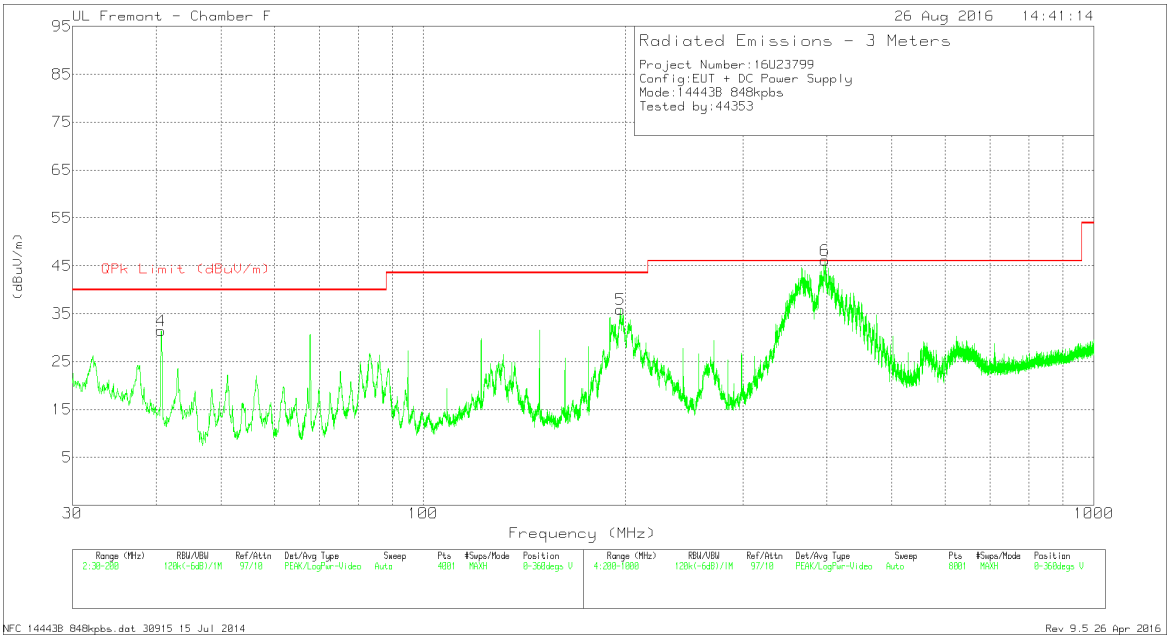
8.3.2. TYPE B (14443B)

848Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	83.465	39.65	Pk	11.5	-31.3	19.85	40	-20.15	0-360	299	H
2	198.5975	49.57	Pk	16.2	-30.5	35.27	43.52	-8.25	0-360	99	H
4	40.6675	45.9	Pk	17.2	-31.7	31.4	40	-8.6	0-360	100	V
5	196.94	50.48	Pk	15.9	-30.5	35.88	43.52	-7.64	0-360	100	V
3	392.1	56.4	Pk	19.2	-29.5	46.1	**46.02**	**.08**	0-360	100	H
7	366.2	57.09	Pk	18.9	-29.6	46.39	**46.02**	**.37**	0-360	100	H
8	395.5	56.37	Pk	19.3	-29.4	46.27	**46.02**	**.25**	0-360	100	H
6	397.4	56.14	Pk	19.4	-29.4	46.14	**46.02**	**.12**	0-360	100	V

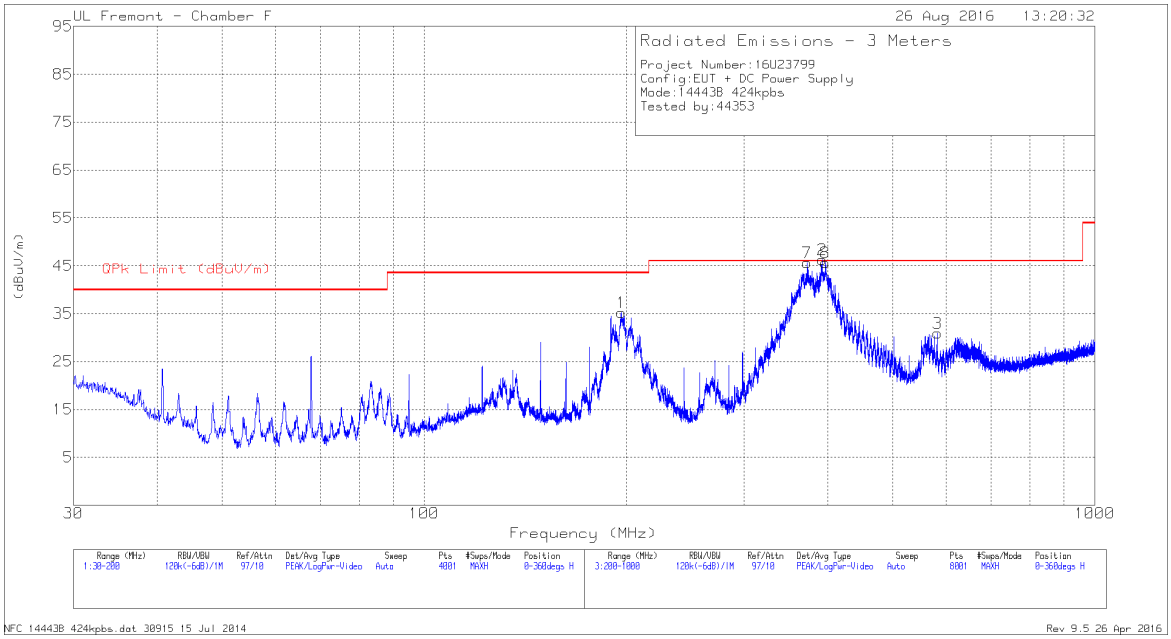
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	392.1	53.54	Qp	19.2	-29.5	43.24	46.02	-2.78	0	104	H
7	366.2	49.64	Qp	18.9	-29.6	38.94	46.02	-7.08	5	102	H
8	395.5	51.68	Qp	19.3	-29.4	41.58	46.02	-4.44	5	262	H
6	397.4	53.67	Qp	19.4	-29.4	43.67	46.02	-2.35	295	121	V

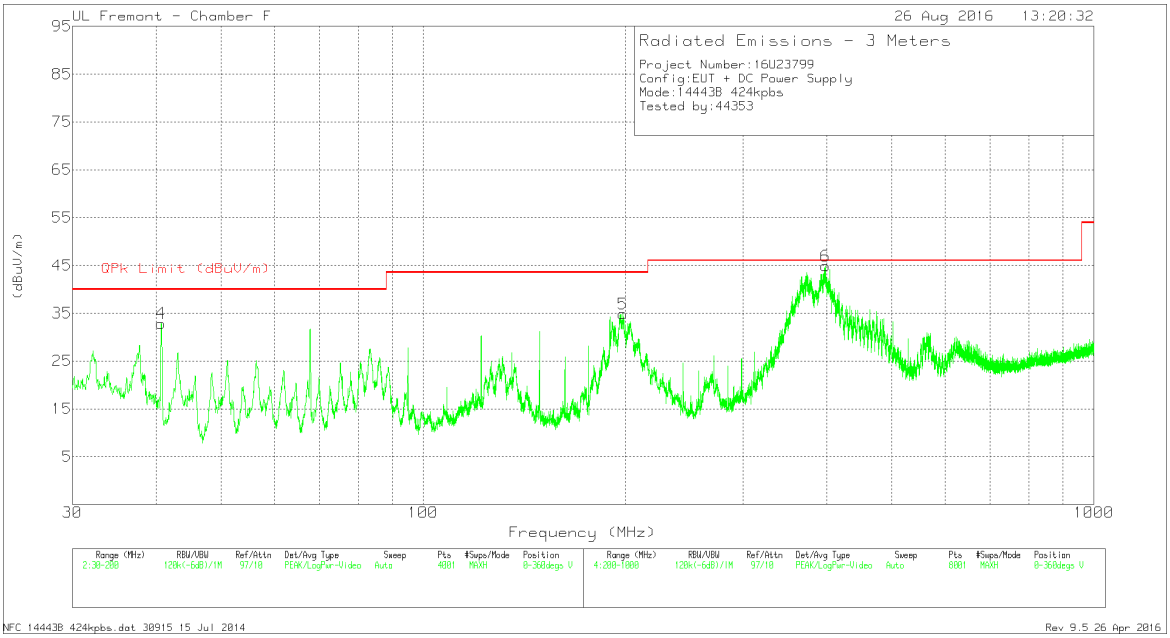
Qp - Quasi-Peak detector

424Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	196.7275	49.88	Pk	15.9	-30.5	35.28	43.52	-8.24	0-360	100	H
4	40.6675	47.4	Pk	17.2	-31.7	32.9	40	-7.1	0-360	100	V
5	198.6825	49.13	Pk	16.2	-30.5	34.83	43.52	-8.69	0-360	100	V
2	392.2	56.61	Pk	19.2	-29.5	46.31	**46.02**	**.29**	0-360	99	H
3	583.1	37.13	Pk	22.6	-28.8	30.93	46.02	-15.09	0-360	99	H
7	372.6	56.1	Pk	19.1	-29.5	45.7	46.02	-.32	0-360	99	H
8	396.7	55.6	Pk	19.4	-29.4	45.6	46.02	-.42	0-360	199	H
6	397.9	54.7	Pk	19.5	-29.3	44.9	46.02	-1.12	0-360	100	V

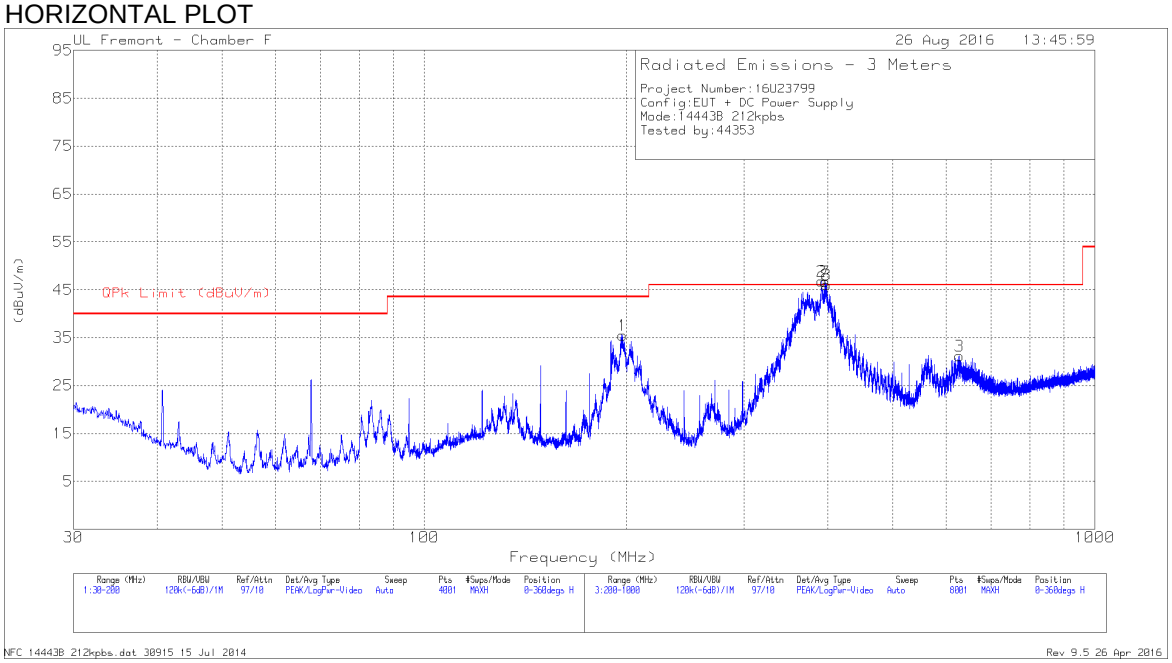
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	391.2	51.58	Qp	19.2	-29.5	41.28	46.02	-4.74	128	210	H
7	372.8	43.24	Qp	19.1	-29.5	32.84	46.02	-13.18	290	241	H
8	396.8	52.3	Qp	19.4	-29.4	42.3	46.02	-3.72	9	221	H
6	397.9	52.92	Qp	19.4	-29.4	42.92	46.02	-3.1	291	123	V

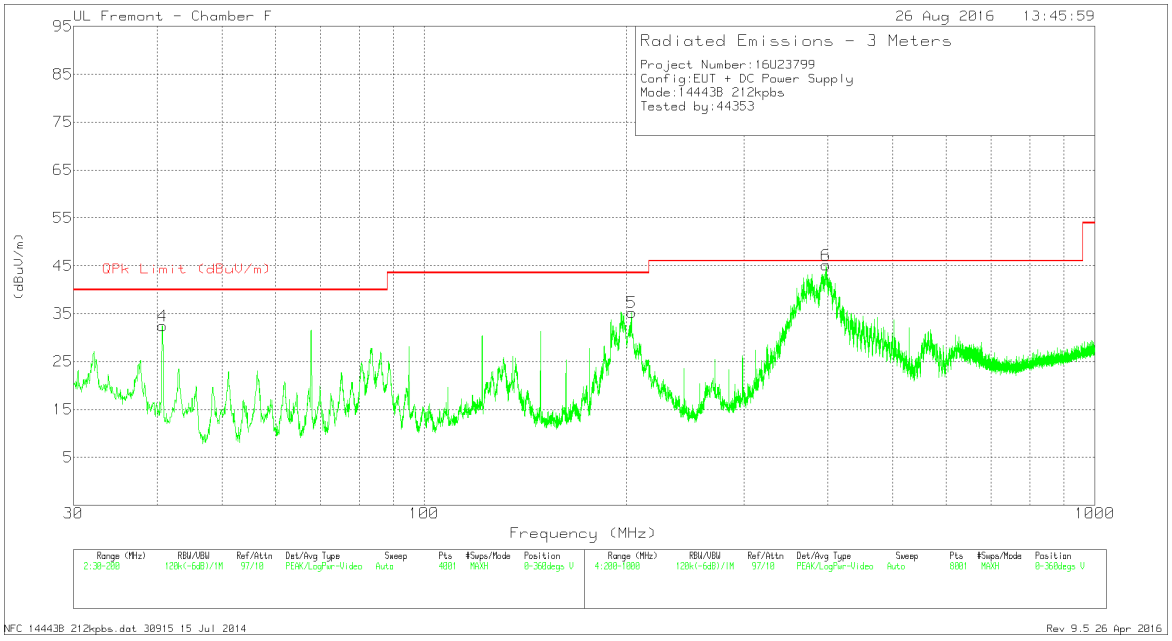
Qp - Quasi-Peak detector

212Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	197.5775	50.06	Pk	16	-30.5	35.56	43.52	-7.96	0-360	100	H
4	40.71	47.01	Pk	17.2	-31.7	32.51	40	-7.49	0-360	100	V
2	391.9	57.08	Pk	19.2	-29.5	46.78	**46.02**	**.76**	0-360	199	H
3	628.7	36.12	Pk	23.6	-28.5	31.22	46.02	-14.8	0-360	99	H
7	396.8	56.71	Pk	19.4	-29.4	46.71	**46.02**	**.69**	0-360	199	H
8	398.4	55.83	Pk	19.5	-29.3	46.03	**46.02**	**.01**	0-360	99	H
5	203.8	50.04	Pk	15.6	-30.4	35.24	43.52	-8.28	0-360	100	V
6	396.9	55.19	Pk	19.4	-29.4	45.19	46.02	-.83	0-360	100	V

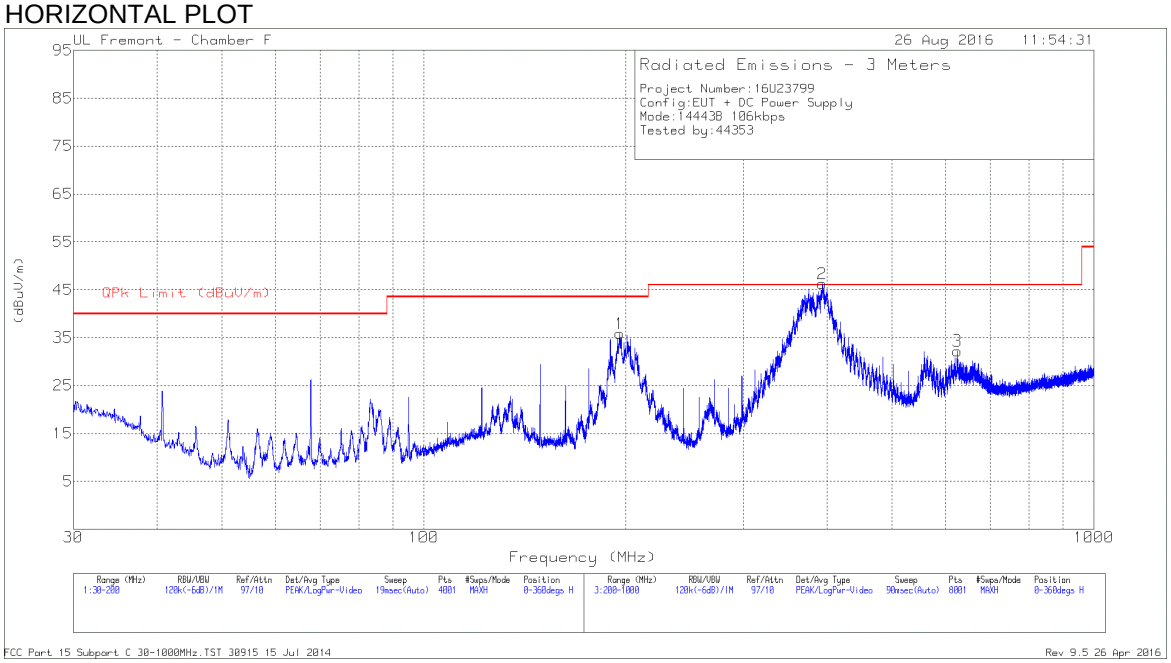
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	391.9	53.77	Qp	19.2	-29.5	43.47	46.02	-2.55	130	100	H
7	396.9	51.42	Qp	19.4	-29.4	41.42	46.02	-4.6	15	236	H
8	398.4	51.08	Qp	19.5	-29.3	41.28	46.02	-4.74	12	217	H
6	396.8	53.22	Qp	19.4	-29.4	43.22	46.02	-2.8	295	117	V

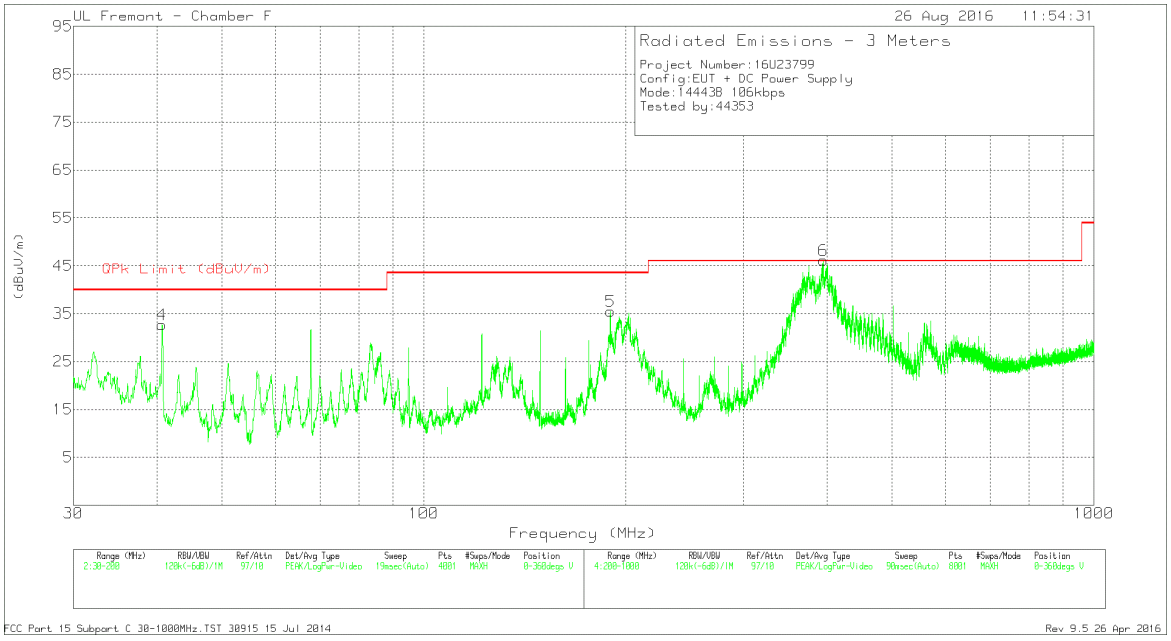
Qp - Quasi-Peak detector

106Kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

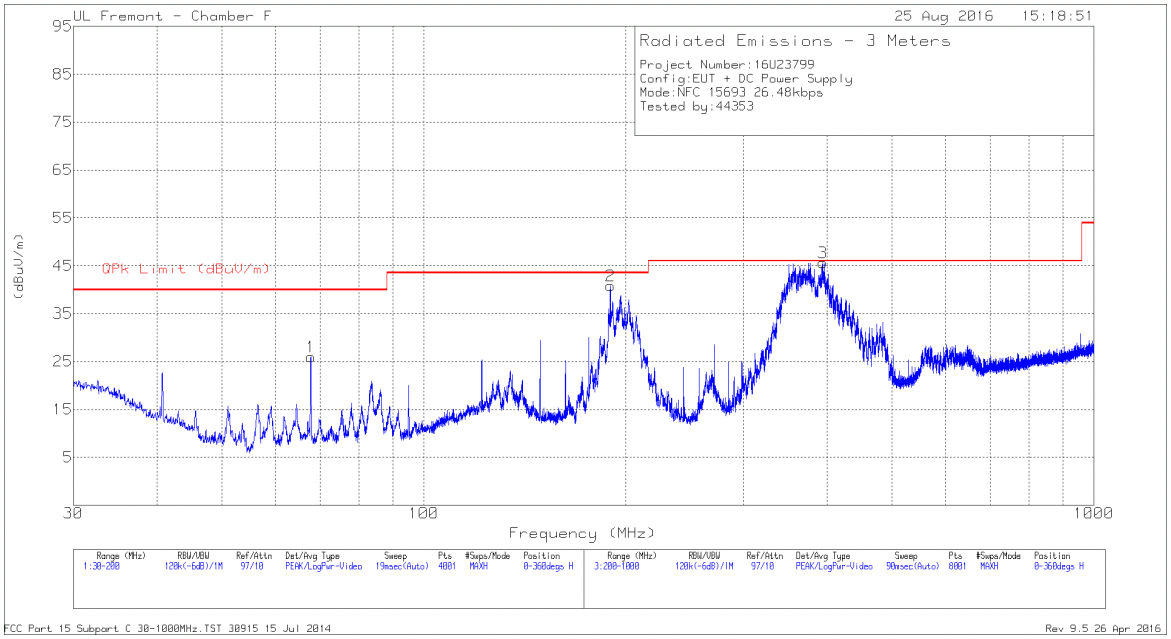
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	195.8775	50.61	Pk	15.8	-30.5	35.91	43.52	-7.61	0-360	199	H
4	40.6675	47.16	Pk	17.2	-31.7	32.66	40	-7.34	0-360	100	V
5	189.8425	50.76	Pk	15.2	-30.5	35.46	43.52	-8.06	0-360	100	V
2	393.315	53.2	Qp	19.2	-29.5	42.9	46.02	-3.12	266	177	H
3	626	37.36	Pk	23.5	-28.6	32.26	46.02	-13.76	0-360	99	H
6	393.49	53.96	Qp	19.2	-29.5	43.66	46.02	-2.36	309	124	V

Pk - Peak detector
Qp - Quasi-Peak detector

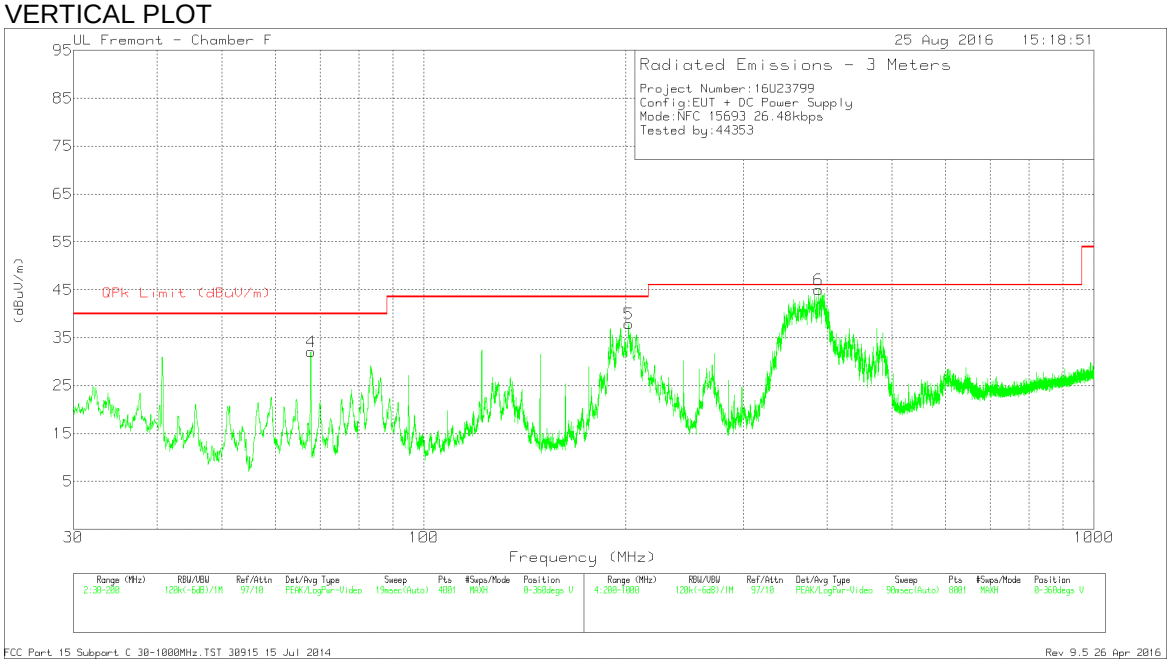
8.3.3. ISO 15693 MODE

26.48kbps

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	67.825	45.39	Pk	12	-31.4	25.99	40	-14.01	0-360	199	H
2	189.8281	54.63	Qp	15.2	-30.5	39.33	43.52	-4.19	67	113	H
4	67.825	51.51	Pk	12	-31.4	32.11	40	-7.89	0-360	100	V
3	393.234	53.87	Qp	19.2	-29.5	43.57	46.02	-2.45	50	198	H
5	202.1	52.33	Pk	16	-30.4	37.93	43.52	-5.59	0-360	100	V
6	388.021	53.31	Qp	19.1	-29.4	43.01	46.02	-3.01	82	142	V

Pk - Peak detector
Qp - Quasi-Peak detector

9. FREQUENCY STABILITY

LIMIT

§15.225 (e) The frequency tolerance of the carrier signal shall be maintained within ±0.01% of the operating frequency, over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

TEST PROCEDURE

ANSI C63.10 Clause 6.8

RESULTS

9.1. TYPE A (READER MODE)

ID:	38602	Date:	8/17/16

848kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599051	0.950	13.5599053	0.933	13.5599056	0.915	13.5599058	0.897	± 100
12.00	40	13.5599010	1.255	13.5599009	1.259	13.5599009	1.259	13.5599010	1.257	± 100
12.00	30	13.5599114	0.488	13.5599132	0.357	13.5599137	0.316	13.5599140	0.297	± 100
12.00	***20***	***13.5599180***	***0.000***	***13.5599170***	***0.074***	***13.5599170***	***0.074***	***13.5599170***	***0.074***	***± 100***
12.00	10	13.5599492	-2.301	13.5599475	-2.176	13.5599460	-2.065	13.5599445	-1.954	± 100
12.00	0	13.5599510	-2.434	13.5599535	-2.618	13.5599554	-2.758	13.5599566	-2.847	± 100
12.00	-10	13.5599631	-3.326	13.5599641	-3.400	13.5599648	-3.451	13.5599653	-3.488	± 100
12.00	-20	13.5599613	-3.193	13.5599593	-3.046	13.5599569	-2.869	13.5599545	-2.692	± 100
10.20	20	13.5599188	-0.058	13.5599184	-0.029	13.5599179	0.006	13.5599176	0.027	± 100
13.8	20	13.5599240	-0.442	13.5599237	-0.421	13.5599212	-0.237	13.5599199	-0.137	± 100

424kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599050	0.884	13.5599052	0.868	13.5599055	0.849	13.5599057	0.832	± 100
12.00	40	13.5599010	1.181	13.5599009	1.186	13.5599009	1.185	13.5599010	1.184	± 100
12.00	30	13.5599112	0.425	13.5599131	0.284	13.5599137	0.242	13.5599140	0.225	± 100
12.00	***20***	***13.5599170***	***0.000***	***13.5599160***	***0.074***	***13.5599160***	***0.074***	***13.5599160***	***0.074***	***± 100***
12.00	10	13.5599438	-1.976	13.5599437	-1.969	13.5599436	-1.962	13.5599435	-1.954	± 100
12.00	0	13.5599571	-2.957	13.5599572	-2.965	13.5599573	-2.972	13.5599574	-2.979	± 100
12.00	-10	13.5599654	-3.569	13.5599655	-3.577	13.5599655	-3.577	13.5599655	-3.577	± 100
12.00	-20	13.5599535	-2.692	13.5599533	-2.677	13.5599529	-2.647	13.5599527	-2.633	± 100
10.20	20	13.5599190	-0.144	13.5599185	-0.112	13.5599180	-0.073	13.5599177	-0.054	± 100
13.8	20	13.5599252	-0.604	13.5599240	-0.517	13.5599215	-0.334	13.5599201	-0.231	± 100

212kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599049	0.889	13.5599052	0.871	13.5599054	0.852	13.5599057	0.832	± 100
12.00	40	13.5599009	1.188	13.5599009	1.186	13.5599009	1.185	13.5599008	1.191	± 100
12.00	30	13.5599108	0.459	13.5599130	0.295	13.5599137	0.246	13.5599139	0.229	± 100
12.00	***20***	***13.5599170***	***0.000***	***13.5599170***	***0.000***	***13.5599170***	***0.000***	***13.5599160***	***0.074***	***± 100***
12.00	10	13.5599691	-3.844	13.5599699	-3.899	13.5599725	-4.092	13.5599733	-4.154	± 100
12.00	0	13.5599574	-2.979	13.5599574	-2.979	13.5599574	-2.979	13.5599575	-2.987	± 100
12.00	-10	13.5599655	-3.577	13.5599655	-3.577	13.5599655	-3.577	13.5599654	-3.569	± 100
12.00	-20	13.5599535	-2.692	13.5599533	-2.677	13.5599529	-2.647	13.5599527	-2.633	± 100
10.20	20	13.5599302	-0.974	13.5599186	-0.120	13.5599180	-0.075	13.5599177	-0.055	± 100
13.8	20	13.5599281	-0.821	13.5599242	-0.532	13.5599218	-0.350	13.5599201	-0.228	± 100

106kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599047	0.904	13.5599054	0.854	13.5599054	0.853	13.5599057	0.832	± 100
12.00	40	13.5599009	1.189	13.5599009	1.187	13.5599009	1.185	13.5599009	1.184	± 100
12.00	30	13.5599103	0.491	13.5599129	0.305	13.5599136	0.250	13.5599138	0.233	± 100
12.00	***20***	***13.5599170***	***0.000***	***13.5599170***	***0.000***	***13.5599170***	***0.000***	***13.5599160***	***0.074***	***± 100***
12.00	10	13.5599687	-3.811	13.5599703	-3.928	13.5599720	-4.059	13.5599734	-4.158	± 100
12.00	0	13.5599575	-2.989	13.5599575	-2.987	13.5599575	-2.987	13.5599575	-2.987	± 100
12.00	-10	13.5599654	-3.569	13.5599654	-3.569	13.5599654	-3.569	13.5599655	-3.577	± 100
12.00	-20	13.5599554	-2.832	13.5599545	-2.765	13.5599536	-2.699	13.5599528	-2.640	± 100
10.20	20	13.5599323	-1.126	13.5599187	-0.123	13.5599180	-0.075	13.5599177	-0.054	± 100
13.8	20	13.5599273	-0.758	13.5599245	-0.552	13.5599222	-0.386	13.5599201	-0.230	± 100

9.2. TYPE B (READER MODE)

ID:	38602	Date:	8/18/16

848kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599297	0.157	13.5599299	0.143	13.5599302	0.120	13.5599150	1.243	± 100
12.00	40	13.5599126	1.419	13.5599124	1.431	13.5599122	1.444	13.5599128	1.400	± 100
12.00	30	13.5599101	1.606	13.5599103	1.589	13.5599106	1.565	13.5599099	1.619	± 100
12.00	***20***	***13.5599318***	***0.000***	***13.5599317***	***0.007***	***13.5599316***	***0.017***	***13.5599315***	***0.027***	***± 100***
12.00	10	13.5599508	-1.396	13.5599512	-1.426	13.5599517	-1.464	13.5599504	-1.371	± 100
12.00	0	13.5599585	-1.971	13.5599616	-2.197	13.5599655	-2.480	13.5599701	-2.823	± 100
12.00	-10	13.5599933	-4.535	13.5599943	-4.606	13.5599954	-4.687	13.5599922	-4.454	± 100
12.00	-20	13.5600001	-5.034	13.5600017	-5.155	13.5600034	-5.278	13.5600049	-5.387	± 100
10.20	20	13.5599328	-0.072	13.5599328	-0.069	13.5599327	-0.062	13.5599326	-0.054	± 100
13.8	20	13.5599325	-0.047	13.5599325	-0.049	13.5599325	-0.046	13.5599324	-0.041	± 100

424kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599307	0.187	13.5599307	0.181	13.5599309	0.171	13.5599310	0.160	± 100
12.00	40	13.5599146	1.369	13.5599141	1.407	13.5599135	1.450	13.5599153	1.322	± 100
12.00	30	13.5599112	1.618	13.5599114	1.606	13.5599116	1.592	13.5599118	1.574	± 100
12.00	***20***	***13.5599332***	***0.000***	***13.5599329***	***0.023***	***13.5599325***	***0.050***	***13.5599338***	***-0.046***	***± 100***
12.00	10	13.5599475	-1.059	13.5599482	-1.108	13.5599491	-1.177	13.5599504	-1.271	± 100
12.00	0	13.5599712	-2.805	13.5599725	-2.899	13.5599740	-3.012	13.5599701	-2.723	± 100
12.00	-10	13.5599968	-4.691	13.5599971	-4.716	13.5599975	-4.742	13.5599966	-4.675	± 100
12.00	-20	13.5600049	-5.286	13.5600017	-5.054	13.5600034	-5.178	13.5600049	-5.286	± 100
10.20	20	13.5599362	-0.219	13.5599356	-0.178	13.5599349	-0.128	13.5599341	-0.069	± 100
13.8	20	13.5599321	0.082	13.5599321	0.081	13.5599321	0.083	13.5599321	0.084	± 100

212kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599312	0.412	13.5599313	0.404	13.5599314	0.393	13.5599310	0.423	± 100
12.00	40	13.5599216	1.118	13.5599198	1.253	13.5599176	1.411	13.5599153	1.585	± 100
12.00	30	13.5599119	1.834	13.5599120	1.828	13.5599121	1.821	13.5599118	1.838	± 100
12.00	***20***	***13.5599368***	***0.000***	***13.5599358***	***0.068***	***13.5599348***	***0.145***	***13.5599336***	***0.234***	***± 100***
12.00	10	13.5599211	1.152	13.5599211	1.152	13.5599300	0.502	13.5599372	-0.033	± 100
12.00	0	13.5599766	-2.942	13.5599770	-2.971	13.5599775	-3.005	13.5599758	-2.881	± 100
12.00	-10	13.5600053	-5.054	13.5600047	-5.014	13.5600039	-4.948	13.5600025	-4.849	± 100
12.00	-20	13.5600052	-5.049	13.5600055	-5.070	13.5600056	-5.080	13.5600058	-5.092	± 100
10.20	20	13.5599440	-0.531	13.5599422	-0.401	13.5599401	-0.243	13.5599375	-0.057	± 100
13.8	20	13.5599320	0.350	13.5599320	0.352	13.5599320	0.352	13.5599320	0.353	± 100

106kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599123	-0.105	13.5599135	-0.193	13.5599155	-0.345	13.5599191	-0.606	± 100
12.00	40	13.5599126	-0.127	13.5599118	-0.068	13.5599110	-0.009	13.5599105	0.026	± 100
12.00	30	13.5599133	-0.177	13.5599115	-0.048	13.5599100	0.063	13.5599093	0.114	± 100
12.00	***20***	***13.5599109***	***0.000***	***13.5599122***	***-0.100***	***13.5599145***	***-0.268***	***13.5599181***	***-0.534***	***± 100***
12.00	10	13.5599256	-1.088	13.5599290	-1.335	13.5599335	-1.668	13.5599395	-2.113	± 100
12.00	0	13.5599504	-2.913	13.5599545	-3.218	13.5599597	-3.604	13.5599662	-4.082	± 100
12.00	-10	13.5599793	-5.049	13.5599825	-5.280	13.5599865	-5.577	13.5599905	-5.872	± 100
12.00	-20	13.5600001	-6.584	13.5600014	-6.678	13.5600031	-6.803	13.5600046	-6.909	± 100
10.20	20	13.5599667	-4.122	13.5599615	-3.735	13.5599551	-3.259	13.5599905	-5.872	± 100
13.8	20	13.5599462	-2.606	13.5599441	-2.449	13.5599415	-2.263	13.5599905	-5.872	± 100

9.3. ISO 15693 MODE

ID:	38602	Date:	8/19/16

26.48 kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20ºC Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measureed with Time Elapse								
(Vdc)	(ºC)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
12.00	50	13.5599109	1.505	13.5599108	1.515	13.5599118	1.443	13.5599150	1.206	± 100
12.00	40	13.5599120	1.426	13.5599118	1.442	13.5599119	1.433	13.5599120	1.422	± 100
12.00	30	13.5599101	1.563	13.5599098	1.590	13.5599096	1.603	13.5599099	1.582	± 100
12.00	***20***	***13.5599313***	***0.000***	***13.5599312***	***0.009***	***13.5599311***	***0.015***	***13.5599310***	***0.023***	***± 100***
12.00	10	13.5599393	-0.591	13.5599413	-0.738	13.5599438	-0.921	13.5599372	-0.434	± 100
12.00	0	13.5599783	-3.461	13.5599784	-3.471	13.5599785	-3.482	13.5599781	-3.449	± 100
12.00	-10	13.5599846	-3.926	13.5599872	-4.123	13.5599897	-4.309	13.5599922	-4.491	± 100
12.00	-20	13.5600053	-5.454	13.5600047	-5.414	13.5600039	-5.349	13.5600025	-5.249	± 100
10.20	20	13.5599785	-3.480	13.5599719	-2.989	13.5599633	-2.356	13.5599525	-1.565	± 100
13.8	20	13.5599319	-0.044	13.5599319	-0.040	13.5599318	-0.037	13.5599318	-0.036	± 100

10. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

§15.207

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator 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 50µH/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.		

TEST PROCEDURE

ANSI C63.10:2013

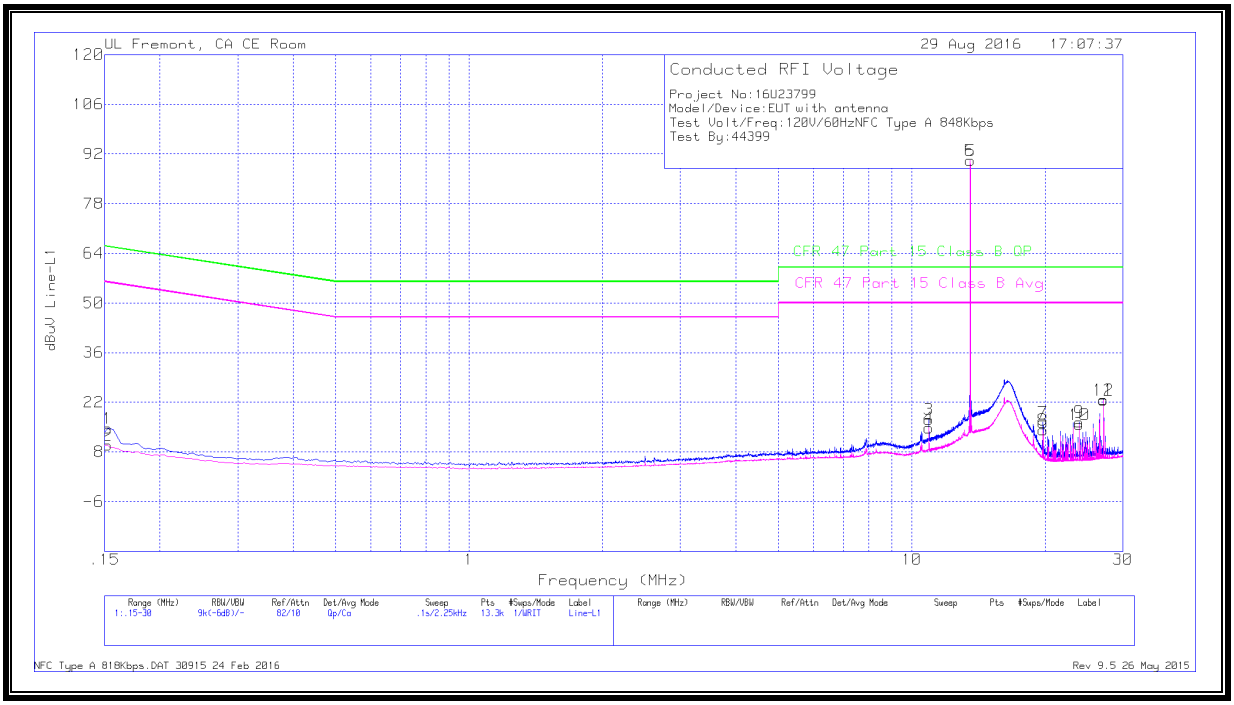
RESULTS

No non-compliance noted:

10.1. TYPE A (14443A)

10.1.1. NORMAL OPERATION, 848 KBPS

LINE 1 RESULTS



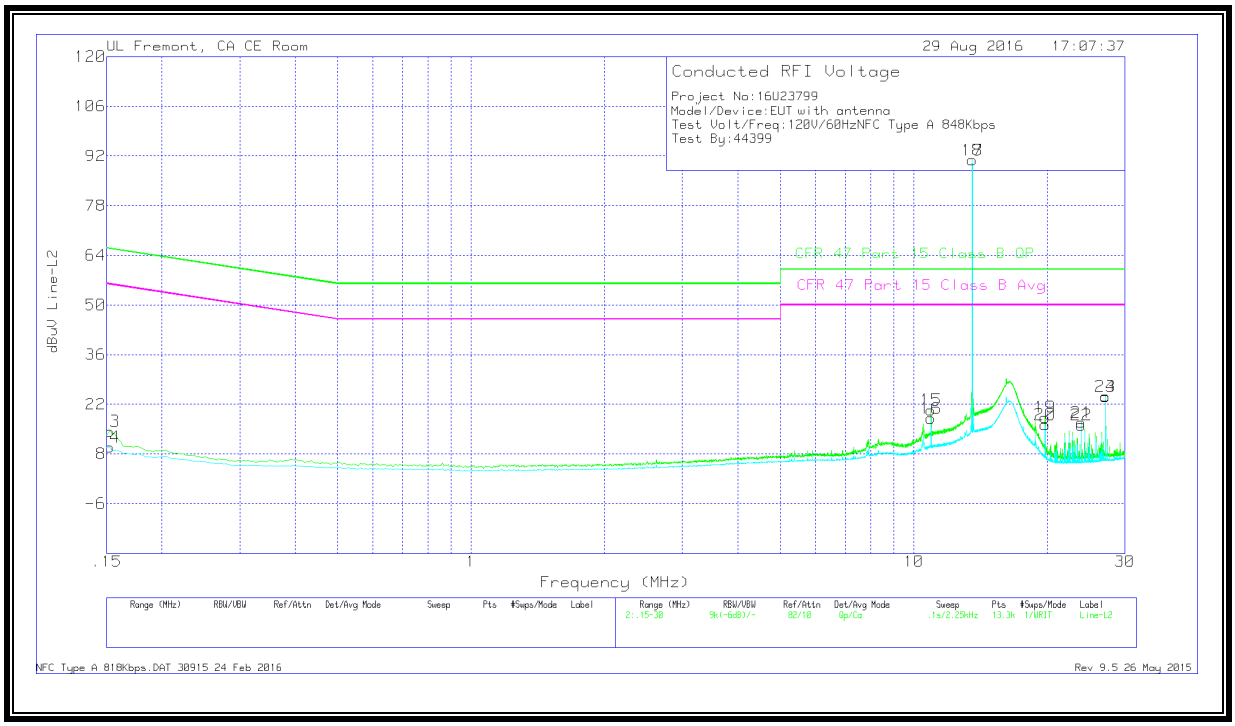
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	4.47	Qp	.1	0	10.1	14.67	65.88	-51.21	-	-
2	.15225	-.28	Ca	.1	0	10.1	9.92	-	-	55.88	-45.96
3	10.9365	6.77	Qp	0	.2	10.2	17.17	60	-42.83	-	-
4	10.9365	4.4	Ca	0	.2	10.2	14.8	-	-	50	-35.2
5	13.56	79.69	Qp	.1	.2	10.2	90.19	**60**	**30.19**	-	-
6	13.56	79.67	Ca	.1	.2	10.2	90.17	-	-	**50**	**40.17**
7	19.8015	5.84	Qp	0	.2	10.3	16.34	60	-43.66	-	-
8	19.8015	3.7	Ca	0	.2	10.3	14.2	-	-	50	-35.8
9	23.92125	5.72	Qp	.1	.2	10.4	16.42	60	-43.58	-	-
10	23.92125	4.99	Ca	.1	.2	10.4	15.69	-	-	50	-34.31
11	27.12075	11.81	Qp	.1	.3	10.5	22.71	60	-37.29	-	-
12	27.12075	11.71	Ca	.1	.3	10.5	22.61	-	-	50	-27.39

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

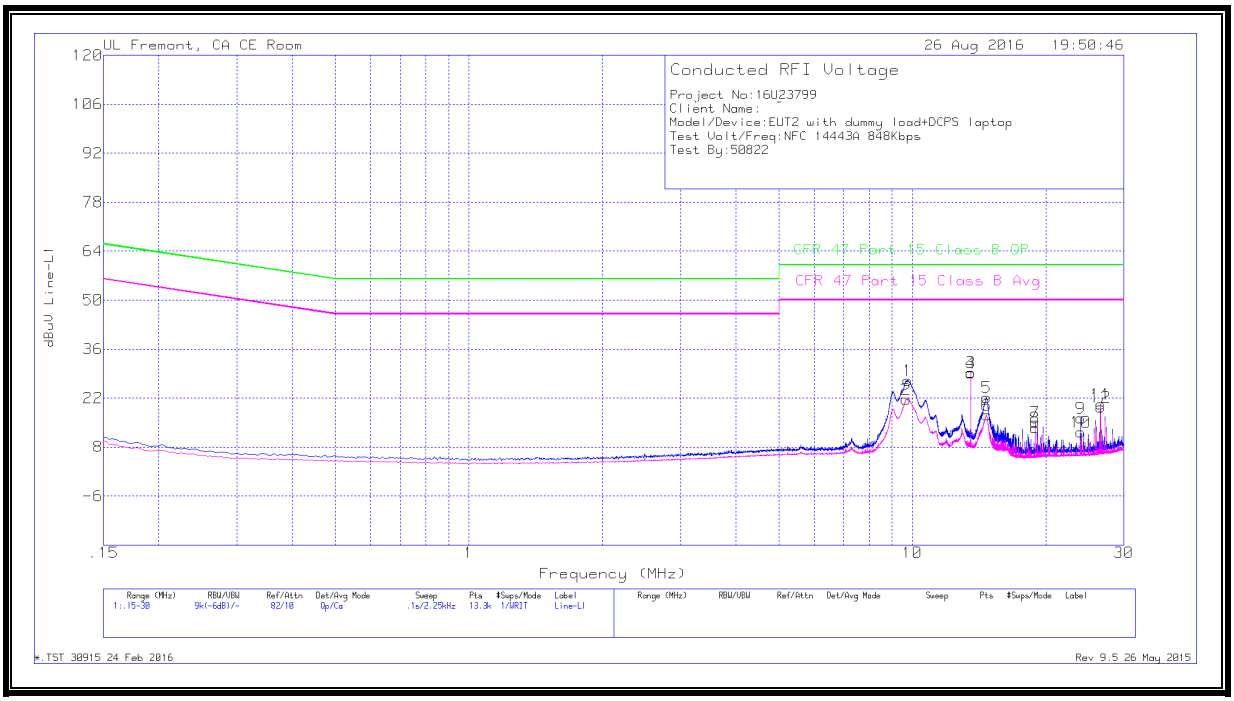
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.15225	4.29	Qp	0	0	10.1	14.39	65.88	-51.49	-	-
14	.15225	-.15	Ca	0	0	10.1	9.95	-	-	55.88	-45.93
15	10.93875	10	Qp	0	.2	10.2	20.4	60	-39.6	-	-
16	10.93875	7.66	Ca	0	.2	10.2	18.06	-	-	50	-31.94
17	13.56	80.34	Qp	.1	.2	10.2	90.84	**60**	**30.84**	-	-
18	13.56	80.32	Ca	.1	.2	10.2	90.82	-	-	**50**	**40.82**
19	19.8015	7.87	Qp	0	.2	10.3	18.37	60	-41.63	-	-
20	19.8015	5.8	Ca	0	.2	10.3	16.3	-	-	50	-33.7
21	23.92125	6.17	Qp	.1	.2	10.4	16.87	60	-43.13	-	-
22	23.92125	5.46	Ca	.1	.2	10.4	16.16	-	-	50	-33.84
23	27.12075	13.34	Qp	.1	.3	10.5	24.24	60	-35.76	-	-
24	27.12075	13.28	Ca	.1	.3	10.5	24.18	-	-	50	-25.82

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.2. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 848 KBPS

LINE 1 RESULTS



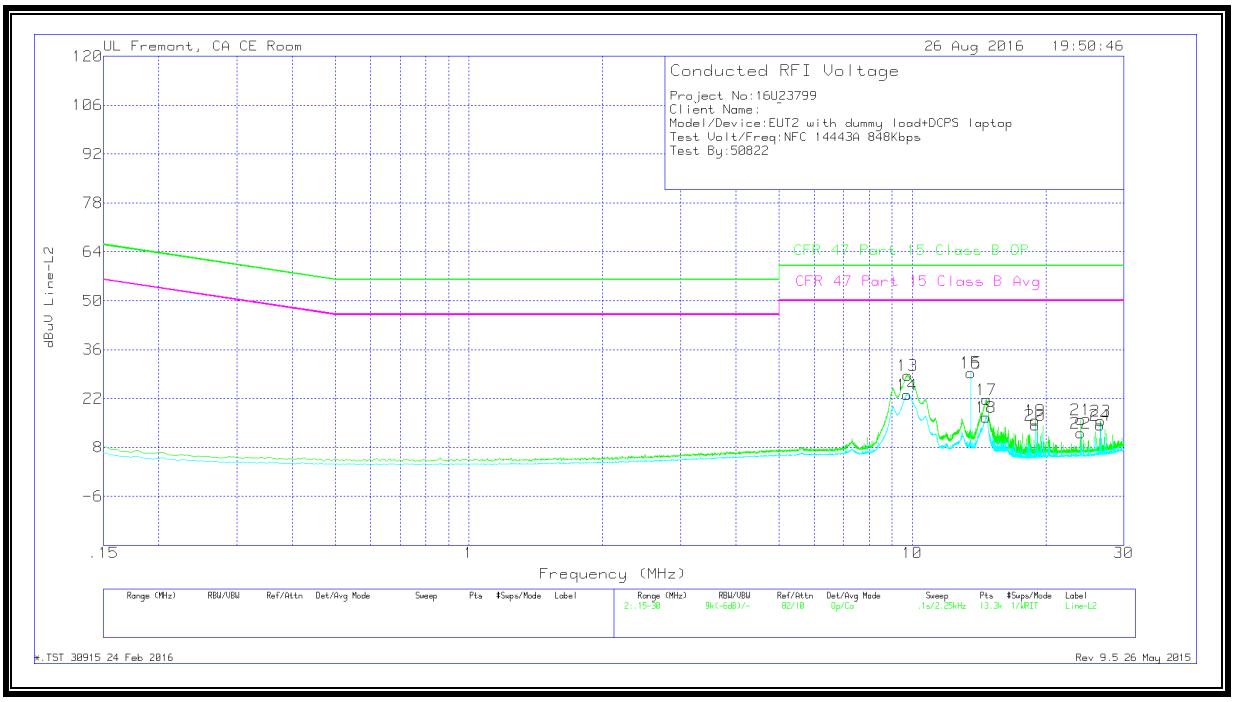
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.753	16.65	Qp	0	.2	10.2	27.05	60	-32.95	-	-
2	9.68663	11.29	Ca	0	.2	10.2	21.69	-	-	50	-28.31
3	13.56	18.75	Qp	.1	.2	10.2	29.25	60	-30.75	-	-
4	13.56	18.62	Ca	.1	.2	10.2	29.12	-	-	50	-20.88
5	14.72325	11.71	Qp	0	.2	10.2	22.11	60	-37.89	-	-
6	14.703	6.7	Ca	0	.2	10.2	17.1	-	-	50	-32.9
7	18.915	4.55	Qp	0	.2	10.3	15.05	60	-44.95	-	-
8	18.915	2.96	Ca	0	.2	10.3	13.46	-	-	50	-36.54
9	24	5.44	Qp	.1	.2	10.5	16.24	60	-43.76	-	-
10	24	1.55	Ca	.1	.2	10.5	12.35	-	-	50	-37.65
11	26.61225	9.33	Qp	.1	.3	10.5	20.23	60	-39.77	-	-
12	26.61225	8.52	Ca	.1	.3	10.5	19.42	-	-	50	-30.58

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

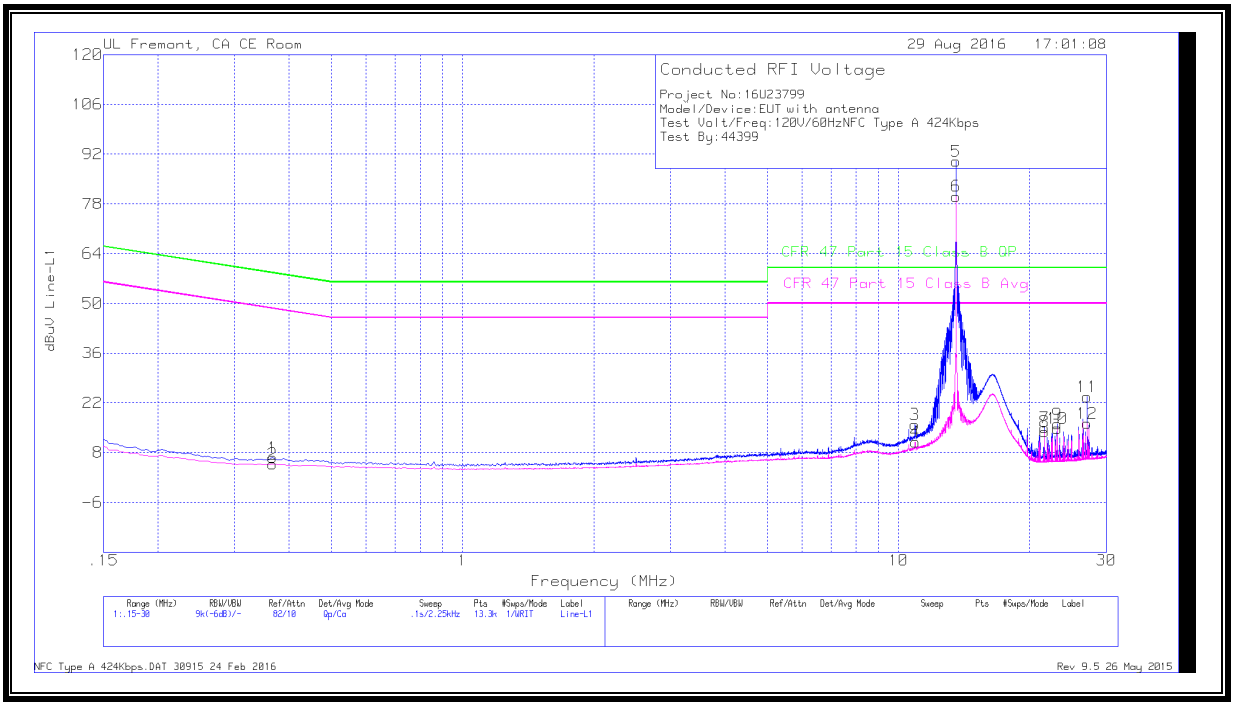
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	9.762	18.2	Qp	0	.2	10.2	28.6	60	-31.4	-	-
14	9.72488	12.7	Ca	0	.2	10.2	23.1	-	-	50	-26.9
15	13.56	18.9	Qp	.1	.2	10.2	29.4	60	-30.6	-	-
16	13.56	18.75	Ca	.1	.2	10.2	29.25	-	-	50	-20.75
17	14.703	11.13	Qp	.1	.2	10.2	21.63	60	-38.37	-	-
18	14.667	6.18	Ca	.1	.2	10.2	16.68	-	-	50	-33.32
19	18.915	5.31	Qp	0	.2	10.3	15.81	60	-44.19	-	-
20	18.915	3.94	Ca	0	.2	10.3	14.44	-	-	50	-35.56
21	24	5.1	Qp	.1	.2	10.5	15.9	60	-44.1	-	-
22	24	1.32	Ca	.1	.2	10.5	12.12	-	-	50	-37.88
23	26.61225	4.76	Qp	.1	.3	10.5	15.66	60	-44.34	-	-
24	26.49075	3.48	Ca	.1	.3	10.5	14.38	-	-	50	-35.62

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.3. NORMAL OPERATION, 424 KBPS

LINE 1 RESULTS



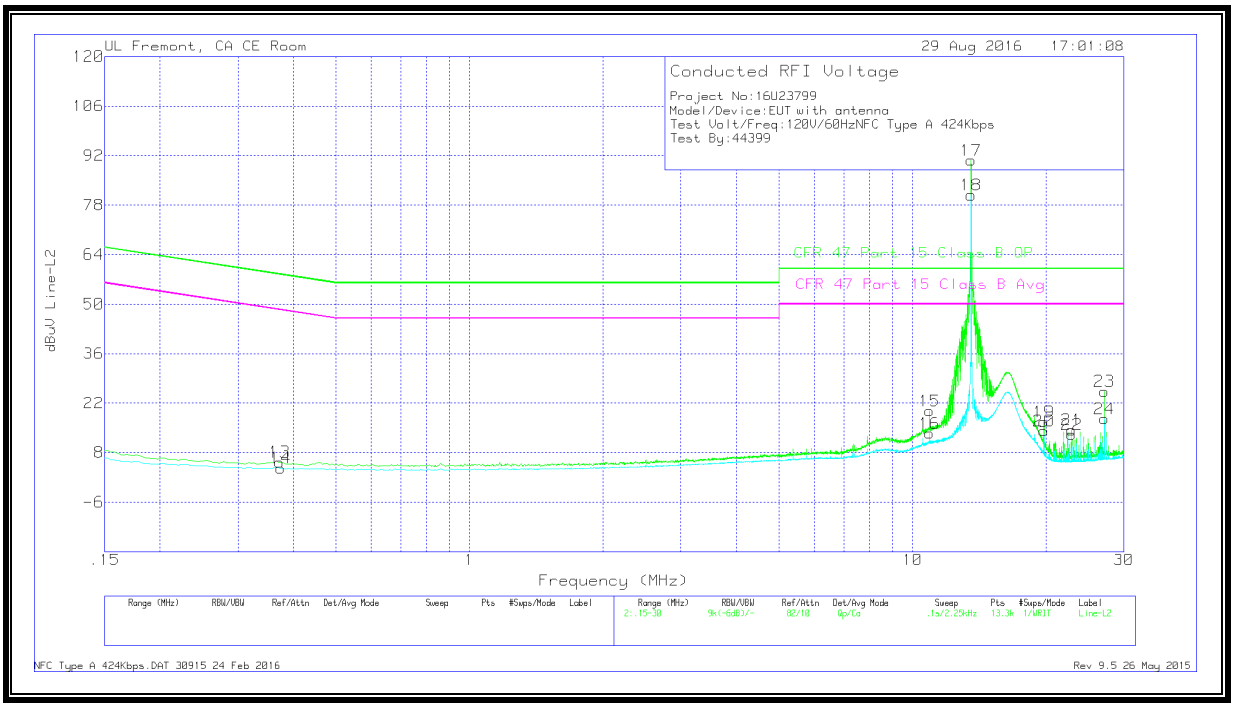
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	.366	-3.47	Qp	0	0	10.1	6.63	58.59	-51.96	-	-
2	.366	-5.32	Ca	0	0	10.1	4.78	-	-	48.59	-43.81
3	10.92075	5.51	Qp	0	.2	10.2	15.91	60	-44.09	-	-
4	10.923	.62	Ca	0	.2	10.2	11.02	-	-	50	-38.98
5	13.56	79.49	Qp	.1	.2	10.2	89.99	**60**	**29.99**	-	-
6	13.56	69.66	Ca	.1	.2	10.2	80.16	-	-	**50**	**30.16**
7	21.66675	4.41	Qp	0	.2	10.4	15.01	60	-44.99	-	-
8	21.66675	3.28	Ca	0	.2	10.4	13.88	-	-	50	-36.12
9	23.1315	5.31	Qp	.1	.2	10.4	16.01	60	-43.99	-	-
10	23.1315	4.09	Ca	.1	.2	10.4	14.79	-	-	50	-35.21
11	27.12075	12.79	Qp	.1	.3	10.5	23.69	60	-36.31	-	-
12	27.12075	5.3	Ca	.1	.3	10.5	16.2	-	-	50	-33.8

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

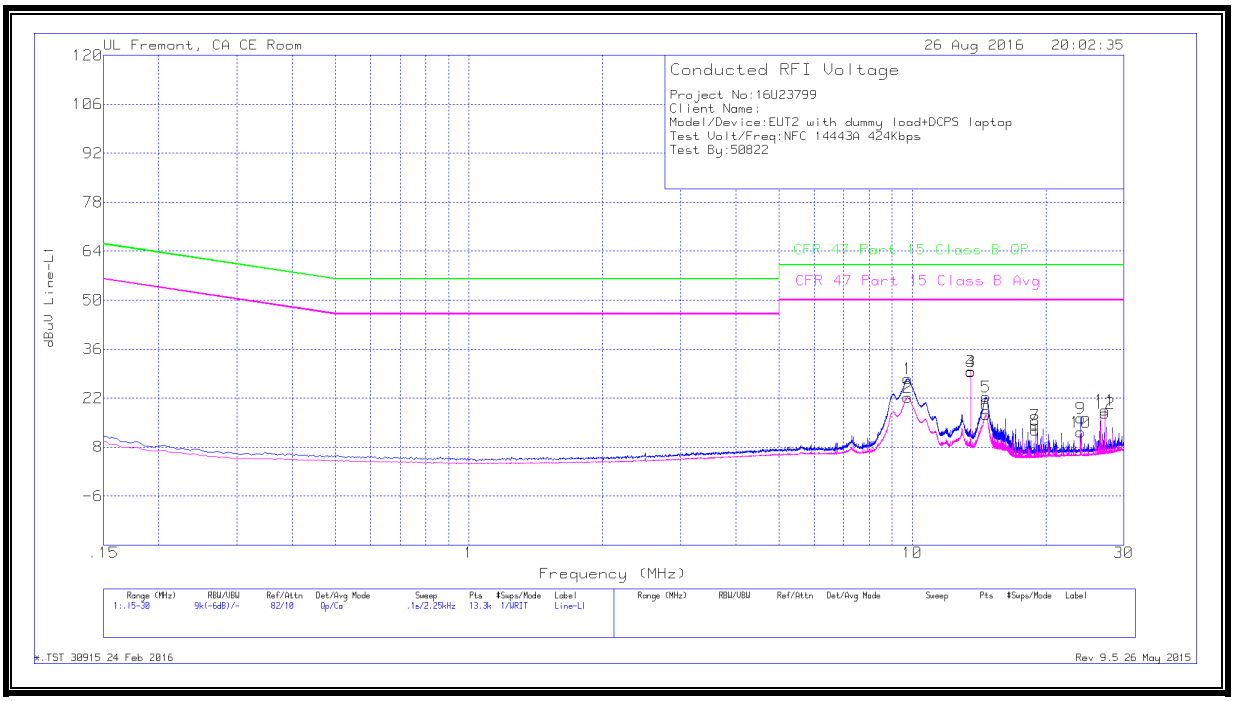
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.37275	-4.76	Qp	0	0	10.1	5.34	58.44	-53.1	-	-
14	.375	-6.45	Ca	0	0	10.1	3.65	-	-	48.39	-44.74
15	10.92075	9.4	Qp	0	.2	10.2	19.8	60	-40.2	-	-
16	10.923	3.08	Ca	0	.2	10.2	13.48	-	-	50	-36.52
17	13.56	80.19	Qp	.1	.2	10.2	90.69	**60**	**30.69**	-	-
18	13.56	70.36	Ca	.1	.2	10.2	80.86	-	-	**50**	**30.86**
19	19.79925	6.23	Qp	0	.2	10.3	16.73	60	-43.27	-	-
20	19.79925	3.66	Ca	0	.2	10.3	14.16	-	-	50	-35.84
21	22.88625	3.85	Qp	0	.2	10.4	14.45	60	-45.55	-	-
22	22.8885	2.51	Ca	0	.2	10.4	13.11	-	-	50	-36.89
23	27.12075	14.45	Qp	.1	.3	10.5	25.35	60	-34.65	-	-
24	27.12075	6.71	Ca	.1	.3	10.5	17.61	-	-	50	-32.39

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.4. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 424 KBPS

LINE 1 RESULTS



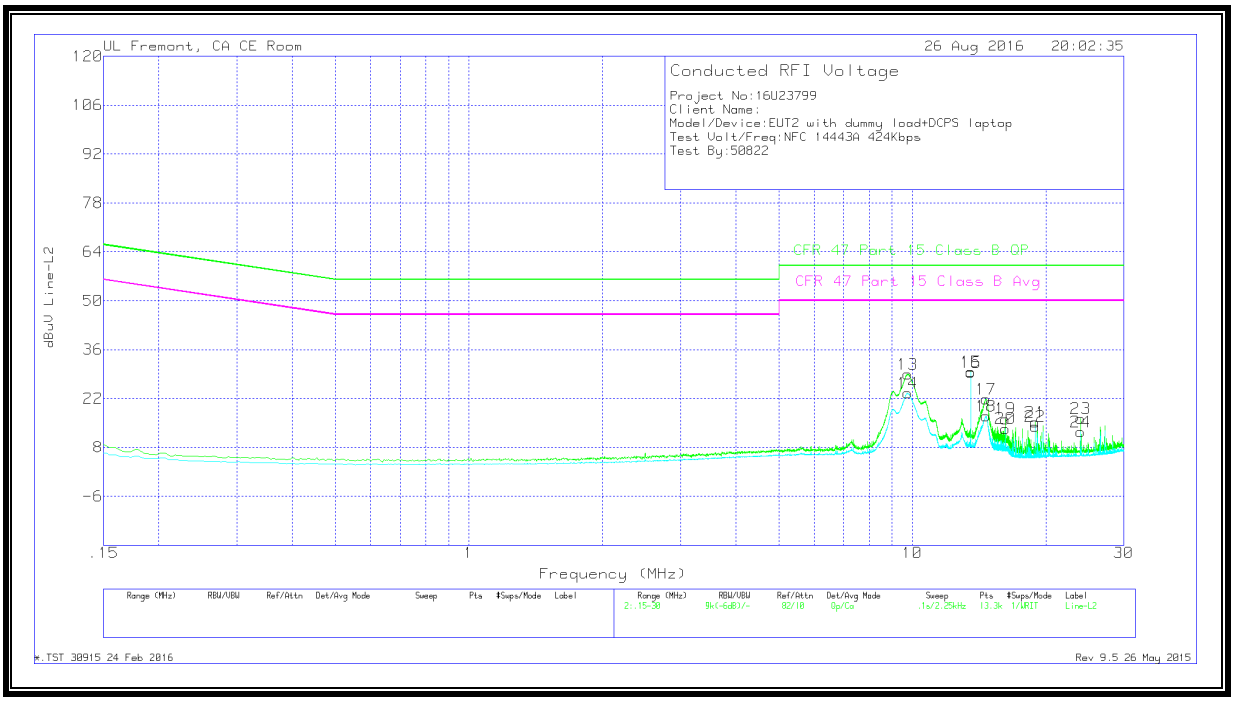
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.75075	17.23	Qp	0	.2	10.2	27.63	60	-32.37	-	-
2	9.771	11.75	Ca	0	.2	10.2	22.15	-	-	50	-27.85
3	13.56	19.09	Qp	.1	.2	10.2	29.59	60	-30.41	-	-
4	13.56	18.95	Ca	.1	.2	10.2	29.45	-	-	50	-20.55
5	14.667	12.04	Qp	0	.2	10.2	22.44	60	-37.56	-	-
6	14.667	6.94	Ca	0	.2	10.2	17.34	-	-	50	-32.66
7	18.915	3.69	Qp	0	.2	10.3	14.19	60	-45.81	-	-
8	18.915	2.37	Ca	0	.2	10.3	12.87	-	-	50	-37.13
9	24	5.41	Qp	.1	.2	10.5	16.21	60	-43.79	-	-
10	24	1.47	Ca	.1	.2	10.5	12.27	-	-	50	-37.73
11	27.1635	7.56	Qp	.1	.3	10.5	18.46	60	-41.54	-	-
12	27.1635	6.8	Ca	.1	.3	10.5	17.7	-	-	50	-32.3

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

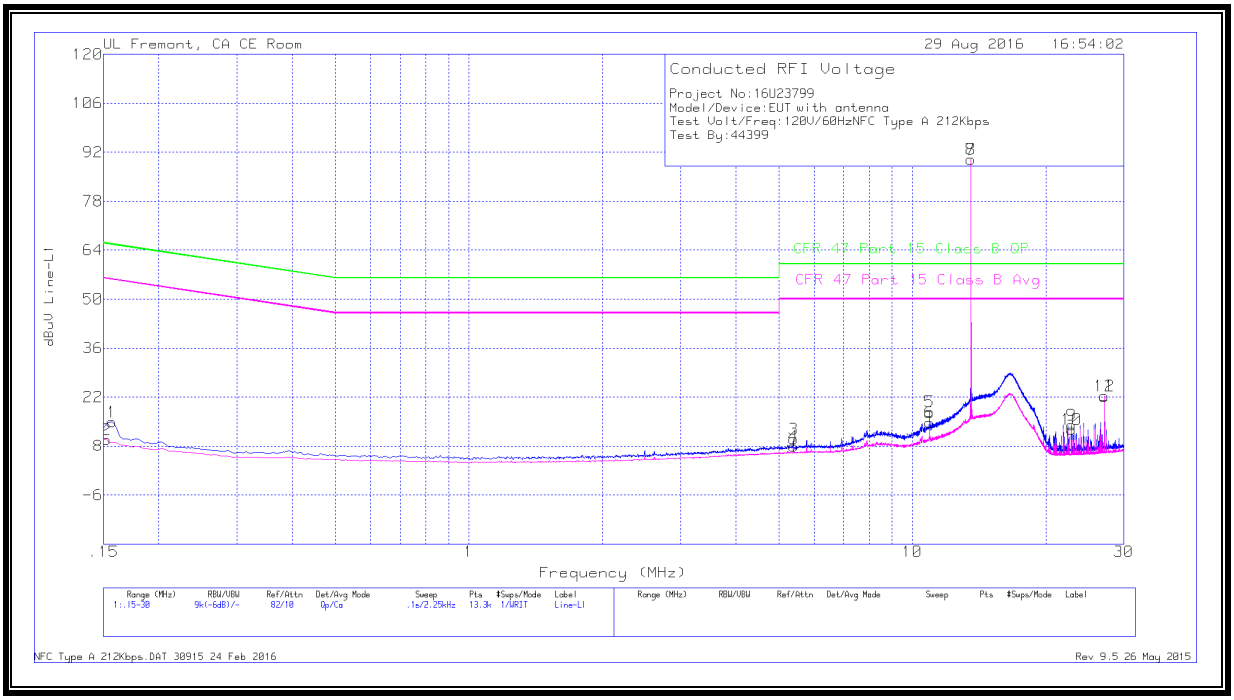
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	9.77325	18.59	Qp	0	.2	10.2	28.99	60	-31.01	-	-
14	9.77325	13.12	Ca	0	.2	10.2	23.52	-	-	50	-26.48
15	13.56	19.13	Qp	.1	.2	10.2	29.63	60	-30.37	-	-
16	13.56	19	Ca	.1	.2	10.2	29.5	-	-	50	-20.5
17	14.667	11.41	Qp	.1	.2	10.2	21.91	60	-38.09	-	-
18	14.667	6.51	Ca	.1	.2	10.2	17.01	-	-	50	-32.99
19	16.23075	5.69	Qp	0	.2	10.3	16.19	60	-43.81	-	-
20	16.23075	2.91	Ca	0	.2	10.3	13.41	-	-	50	-36.59
21	18.915	4.78	Qp	0	.2	10.3	15.28	60	-44.72	-	-
22	18.915	3.49	Ca	0	.2	10.3	13.99	-	-	50	-36.01
23	24	5.4	Qp	.1	.2	10.5	16.2	60	-43.8	-	-
24	24	1.6	Ca	.1	.2	10.5	12.4	-	-	50	-37.6

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.5. NORMAL OPERATION, 212 KBPS

LINE 1 RESULTS



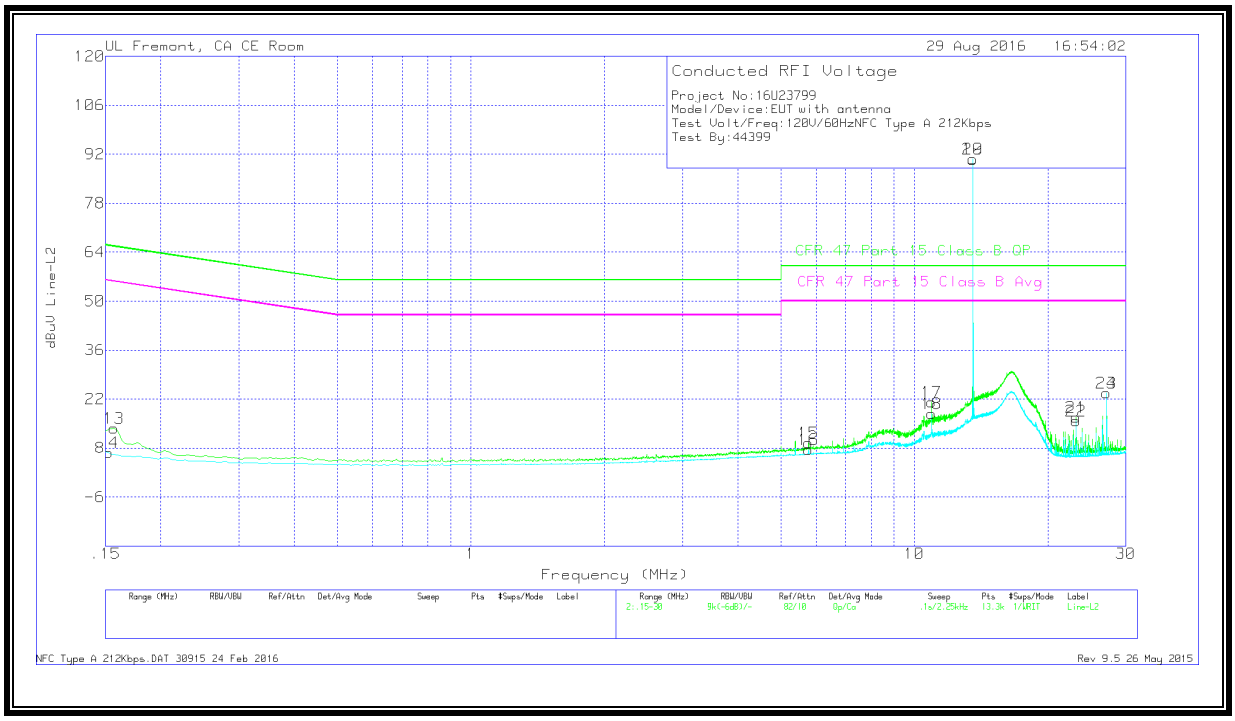
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	4.83	Qp	0	0	10.1	14.93	65.63	-50.7	-	-
2	.15225	-.29	Ca	.1	0	10.1	9.91	-	-	55.88	-45.97
3	5.3925	-.14	Qp	0	.1	10.1	10.06	60	-49.94	-	-
4	5.3925	-2.27	Ca	0	.1	10.1	7.93	-	-	50	-42.07
5	10.941	7.46	Qp	0	.2	10.2	17.86	60	-42.14	-	-
6	10.941	4.26	Ca	0	.2	10.2	14.66	-	-	50	-35.34
7	13.56	79.49	Qp	.1	.2	10.2	89.99	**60**	**29.99**	-	-
8	13.56	79.47	Ca	.1	.2	10.2	89.97	-	-	**50**	**39.97**
9	22.88625	3.29	Qp	.1	.3	10.4	14.09	60	-45.91	-	-
10	22.8885	1.95	Ca	.1	.3	10.4	12.75	-	-	50	-37.25
11	27.12075	11.5	Qp	.1	.3	10.5	22.4	60	-37.6	-	-
12	27.12075	11.38	Ca	.1	.3	10.5	22.28	-	-	50	-27.72

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

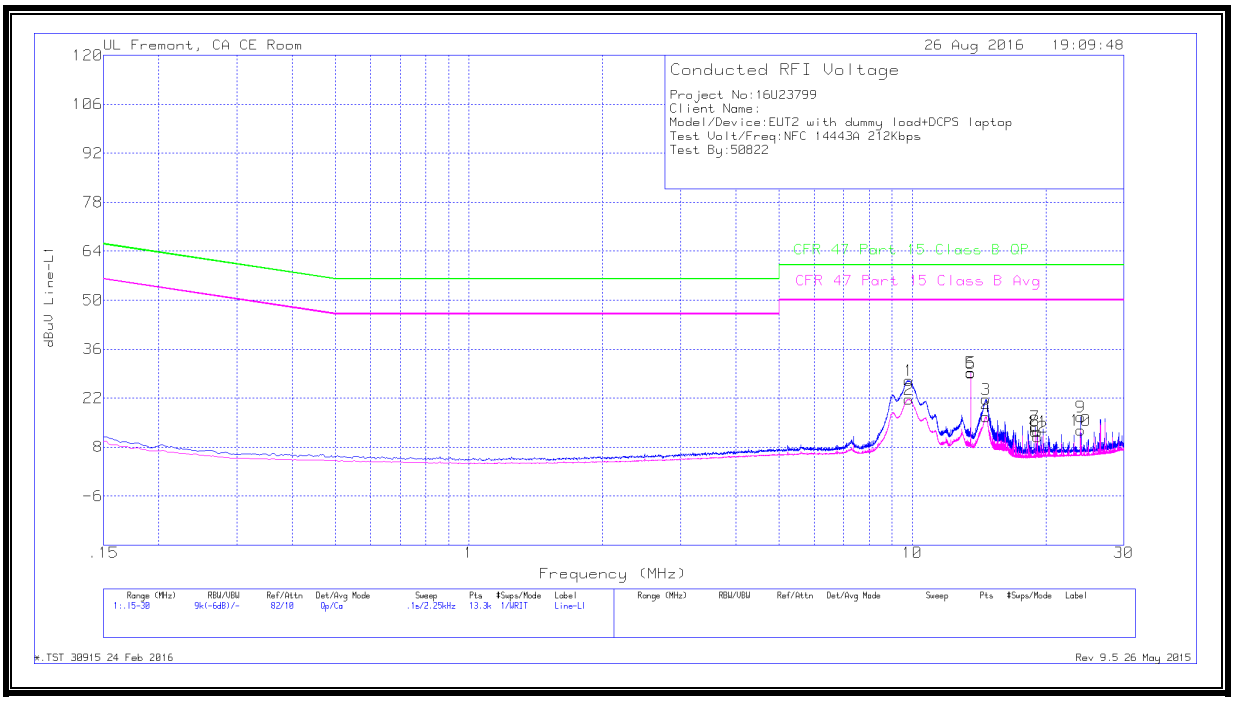
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.15675	3.56	Qp	0	0	10.1	13.66	65.63	-51.97	-	-
14	.15225	-3.32	Ca	0	0	10.1	6.78	-	-	55.88	-49.1
15	5.775	-.84	Qp	0	.1	10.2	9.46	60	-50.54	-	-
16	5.775	-2.76	Ca	0	.1	10.2	7.54	-	-	50	-42.46
17	10.94325	10.71	Qp	0	.2	10.2	21.11	60	-38.89	-	-
18	10.94325	7.5	Ca	0	.2	10.2	17.9	-	-	50	-32.1
19	13.56	80.11	Qp	.1	.2	10.2	90.61	**60**	**30.61**	-	-
20	13.56	80.09	Ca	.1	.2	10.2	90.59	-	-	**50**	**40.59**
21	23.1315	6.15	Qp	.1	.2	10.4	16.85	60	-43.15	-	-
22	23.1315	5.13	Ca	.1	.2	10.4	15.83	-	-	50	-34.17
23	27.12075	12.83	Qp	.1	.3	10.5	23.73	60	-36.27	-	-
24	27.12075	12.78	Ca	.1	.3	10.5	23.68	-	-	50	-26.32

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.6. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 212 KBPS

LINE 1 RESULTS



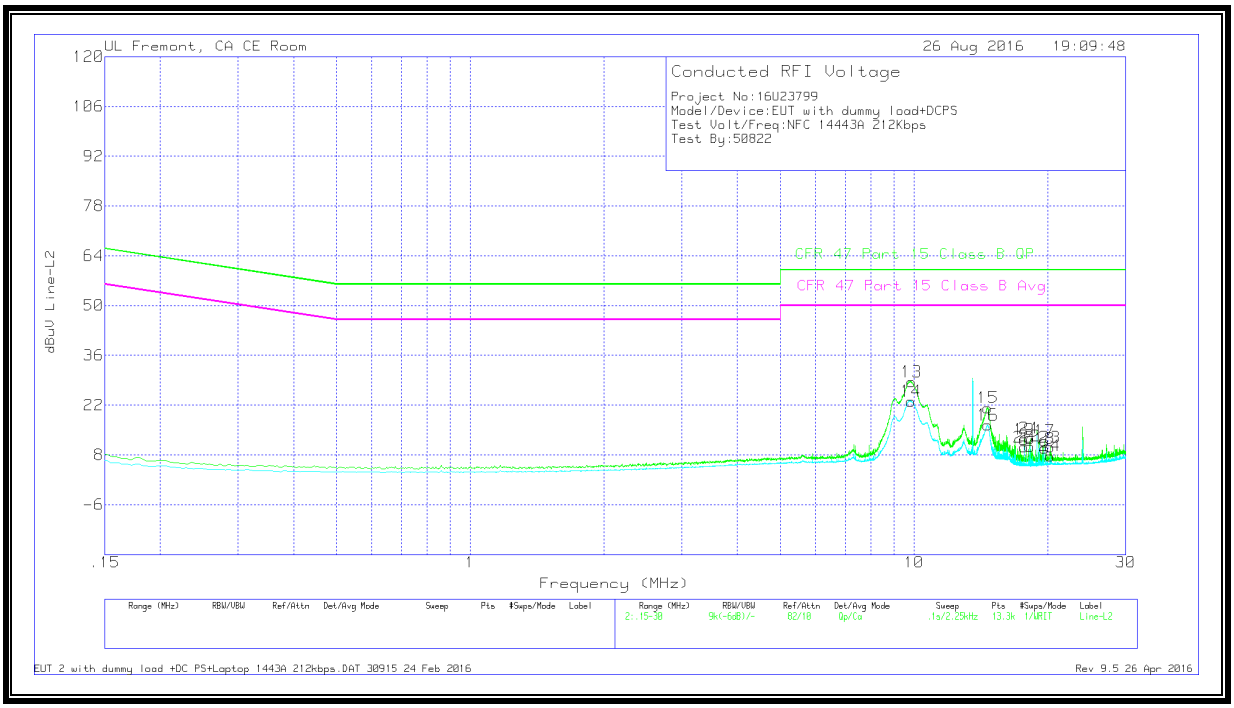
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.83175	16.59	Qp	0	.2	10.2	26.99	60	-33.01	-	-
2	9.834	11.29	Ca	0	.2	10.2	21.69	-	-	50	-28.31
3	14.66475	11.27	Qp	0	.2	10.2	21.67	60	-38.33	-	-
4	14.667	6.27	Ca	0	.2	10.2	16.67	-	-	50	-33.33
5	13.56	18.83	Qp	.1	.2	10.2	29.33	60	-30.67	-	-
6	13.56	18.69	Ca	.1	.2	10.2	29.19	-	-	50	-20.81
7	18.915	3.41	Qp	0	.2	10.3	13.91	60	-46.09	-	-
8	18.915	2.04	Ca	0	.2	10.3	12.54	-	-	50	-37.46
9	24	5.86	Qp	.1	.2	10.5	16.66	60	-43.34	-	-
10	24	1.96	Ca	.1	.2	10.5	12.76	-	-	50	-37.24
11	19.158	1.9	Qp	0	.2	10.3	12.4	60	-47.6	-	-
12	19.158	.36	Ca	0	.2	10.3	10.86	-	-	50	-39.14

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

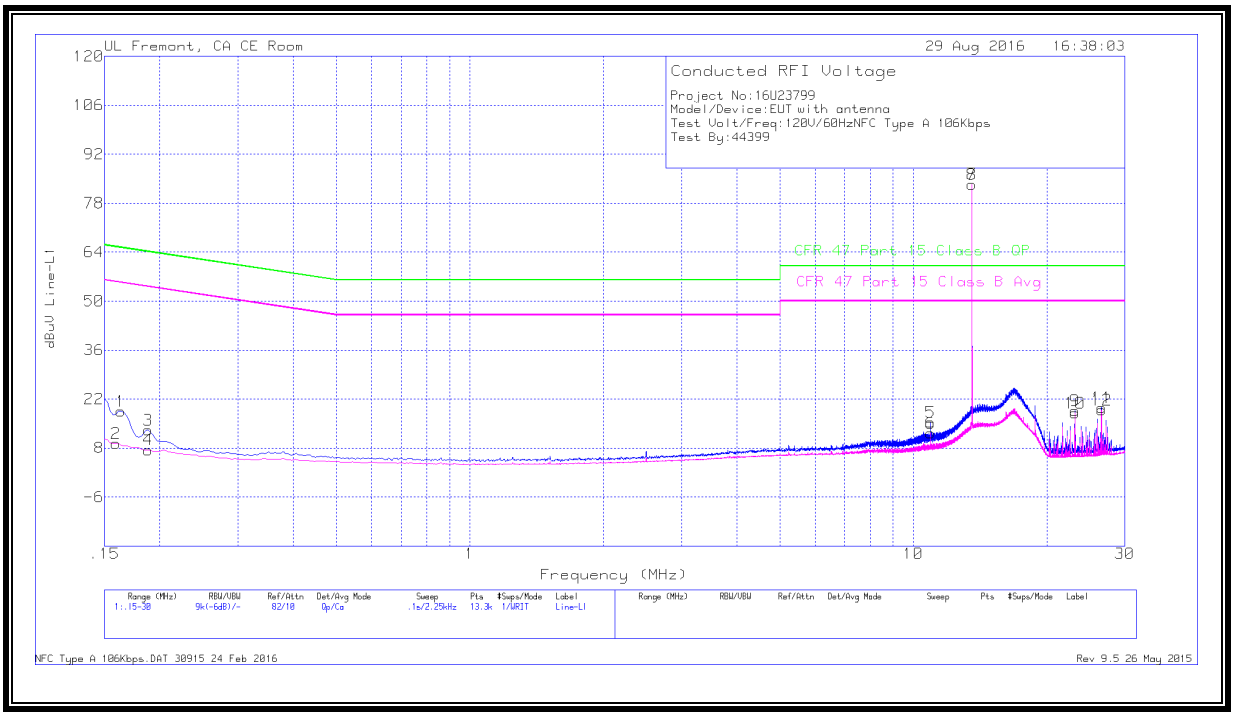
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	9.86775	18.16	Qp	0	.2	10.2	28.56	60	-31.44	-	-
14	9.84525	12.69	Ca	0	.2	10.2	23.09	-	-	50	-26.91
15	14.667	10.75	Qp	.1	.2	10.2	21.25	60	-38.75	-	-
16	14.667	5.91	Ca	.1	.2	10.2	16.41	-	-	50	-33.59
17	19.70925	1.48	Qp	0	.2	10.3	11.98	60	-48.02	-	-
18	19.70925	-.67	Ca	0	.2	10.3	9.83	-	-	50	-40.17
19	17.6955	1.87	Qp	0	.2	10.3	12.37	60	-47.63	-	-
20	17.6955	-.27	Ca	0	.2	10.3	10.23	-	-	50	-39.77
21	18.2445	2.2	Qp	0	.2	10.3	12.7	60	-47.3	-	-
22	18.2445	-.04	Ca	0	.2	10.3	10.46	-	-	50	-39.54
23	20.25938	-.33	Qp	0	.2	10.3	10.17	60	-49.83	-	-
24	20.2605	-2.78	Ca	0	.2	10.3	7.72	-	-	50	-42.28

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.7. NORMAL OPERATION, 106 KBPS

LINE 1 RESULTS



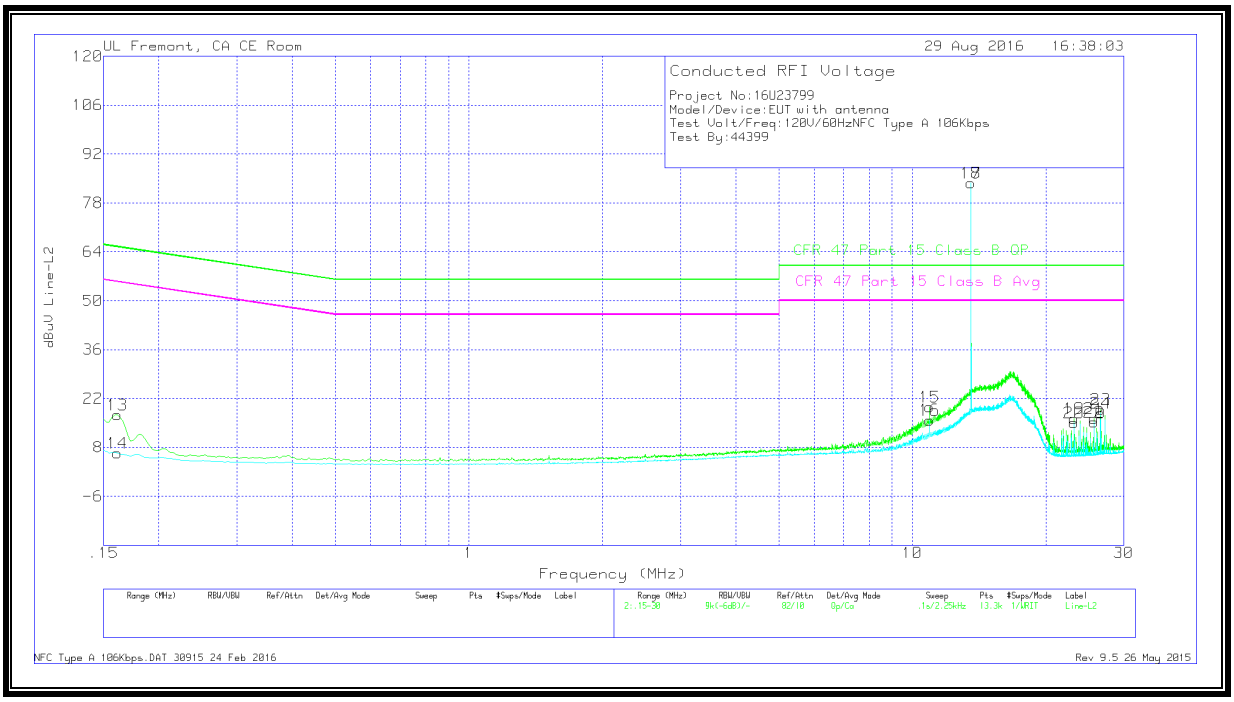
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	.1635	8.41	Qp	0	0	10.1	18.51	65.28	-46.77	-	-
2	.159	-.8	Ca	0	0	10.1	9.3	-	-	55.52	-46.22
3	.18825	3.03	Qp	0	0	10.1	13.13	64.11	-50.98	-	-
4	.18825	-2.6	Ca	0	0	10.1	7.5	-	-	54.11	-46.61
5	10.92975	5	Qp	0	.2	10.2	15.4	60	-44.6	-	-
6	10.92975	1.88	Ca	0	.2	10.2	12.28	-	-	50	-37.72
7	13.56	72.96	Qp	.1	.2	10.2	83.46	**60**	**23.46**	-	-
8	13.56	72.94	Ca	.1	.2	10.2	83.44	-	-	**50**	**33.44**
9	23.1315	8.05	Qp	.1	.2	10.4	18.75	60	-41.25	-	-
10	23.1315	7.35	Ca	.1	.2	10.4	18.05	-	-	50	-31.95
11	26.61225	8.68	Qp	.1	.3	10.5	19.58	60	-40.42	-	-
12	26.61225	7.91	Ca	.1	.3	10.5	18.81	-	-	50	-31.19

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

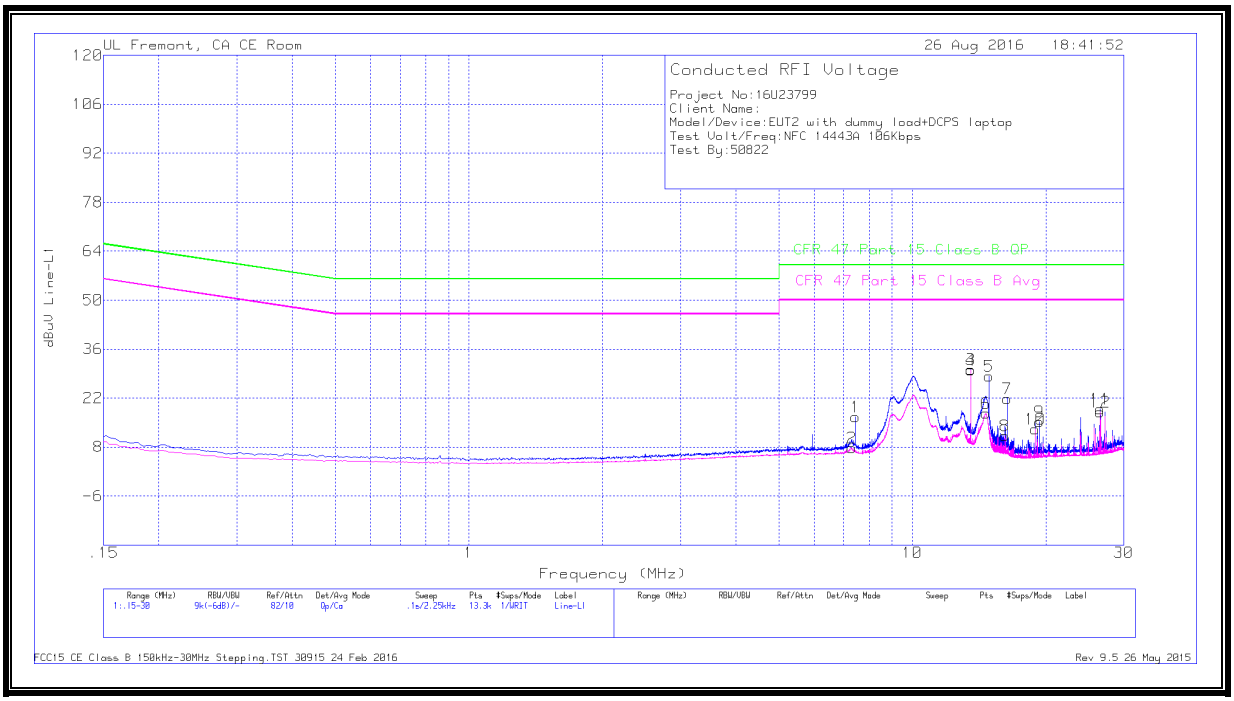
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.16125	7.27	Qp	0	0	10.1	17.37	65.4	-48.03	-	-
14	.16125	-3.72	Ca	0	0	10.1	6.38	-	-	55.4	-49.02
15	10.9365	9.13	Qp	0	.2	10.2	19.53	60	-40.47	-	-
16	10.9365	5.44	Ca	0	.2	10.2	15.84	-	-	50	-34.16
17	13.56	73.27	Qp	.1	.2	10.2	83.77	**60**	**23.77**	-	-
18	13.56	73.25	Ca	.1	.2	10.2	83.75	-	-	**50**	**33.75**
19	23.1315	5.57	Qp	.1	.2	10.4	16.27	60	-43.73	-	-
20	23.1315	4.4	Ca	.1	.2	10.4	15.1	-	-	50	-34.9
21	25.6965	5.39	Qp	.1	.3	10.5	16.29	60	-43.71	-	-
22	25.6965	4.37	Ca	.1	.3	10.5	15.27	-	-	50	-34.73
23	26.61225	7.96	Qp	.1	.3	10.5	18.86	60	-41.14	-	-
24	26.61225	6.95	Ca	.1	.3	10.5	17.85	-	-	50	-32.15

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.8. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 106 KBPS

LINE 1 RESULTS



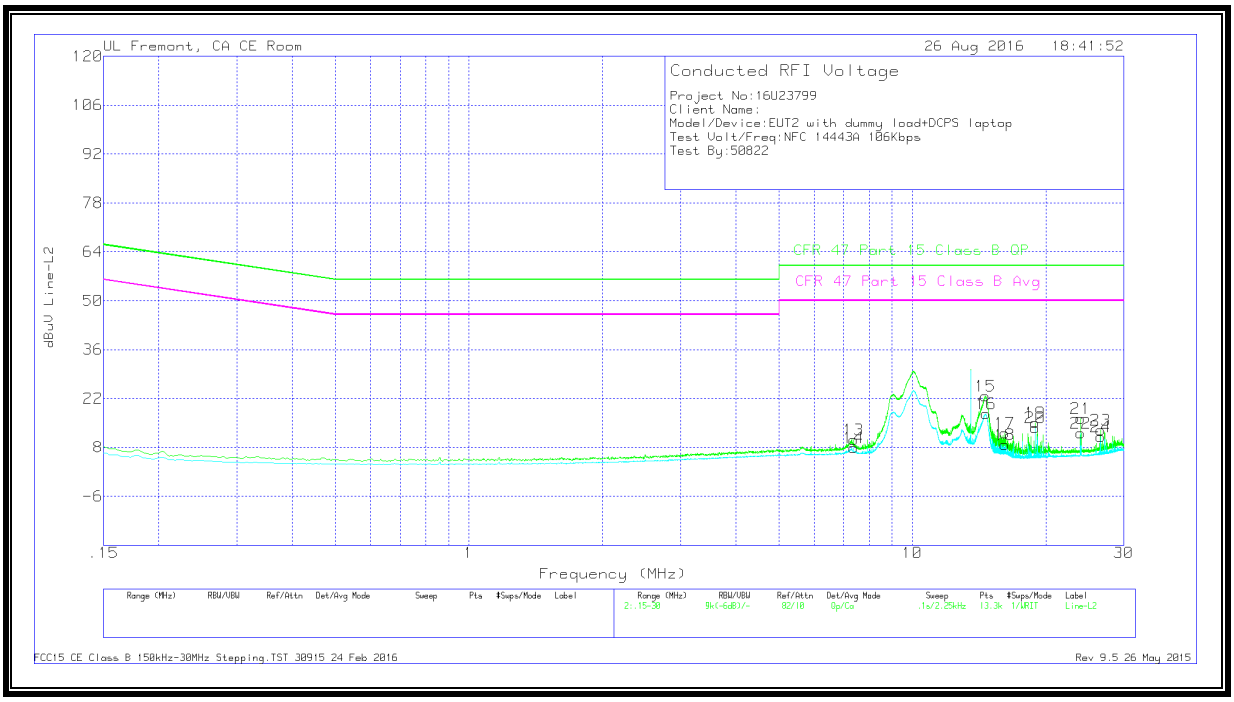
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	7.44675	6.28	Qp	0	.1	10.2	16.58	60	-43.42	-	-
2	7.314	-2.5	Ca	0	.1	10.2	7.8	-	-	50	-42.2
3	13.56	19.7	Qp	.1	.2	10.2	30.2	60	-29.8	-	-
4	13.56	19.49	Ca	.1	.2	10.2	29.99	-	-	50	-20.01
5	14.89425	17.86	Qp	0	.2	10.2	28.26	60	-31.74	-	-
6	14.66588	7.19	Ca	0	.2	10.2	17.59	-	-	50	-32.41
7	16.38375	11.34	Qp	0	.2	10.3	21.84	60	-38.16	-	-
8	16.17	.76	Ca	0	.2	10.3	11.26	-	-	50	-38.74
9	19.36275	4.78	Qp	0	.2	10.3	15.28	60	-44.72	-	-
10	18.915	2.64	Ca	0	.2	10.3	13.14	-	-	50	-36.86
11	26.49075	7.96	Qp	.1	.3	10.5	18.86	60	-41.14	-	-
12	26.49075	7.06	Ca	.1	.3	10.5	17.96	-	-	50	-32.04

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	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	7.37475	-.1	Qp	0	.1	10.2	10.2	60	-49.8	-	-
14	7.37475	-2.43	Ca	0	.1	10.2	7.87	-	-	50	-42.13
15	14.62425	12.13	Qp	.1	.2	10.2	22.63	60	-37.37	-	-
16	14.667	7.09	Ca	.1	.2	10.2	17.59	-	-	50	-32.41
17	16.16775	1.62	Qp	0	.2	10.3	12.12	60	-47.88	-	-
18	16.16775	-1.67	Ca	0	.2	10.3	8.83	-	-	50	-41.17
19	18.915	4.6	Qp	0	.2	10.3	15.1	60	-44.9	-	-
20	18.915	3.21	Ca	0	.2	10.3	13.71	-	-	50	-36.29
21	24	5.46	Qp	.1	.2	10.5	16.26	60	-43.74	-	-
22	24	1.36	Ca	.1	.2	10.5	12.16	-	-	50	-37.84
23	26.61225	2.09	Qp	.1	.3	10.5	12.99	60	-47.01	-	-
24	26.61225	.09	Ca	.1	.3	10.5	10.99	-	-	50	-39.01

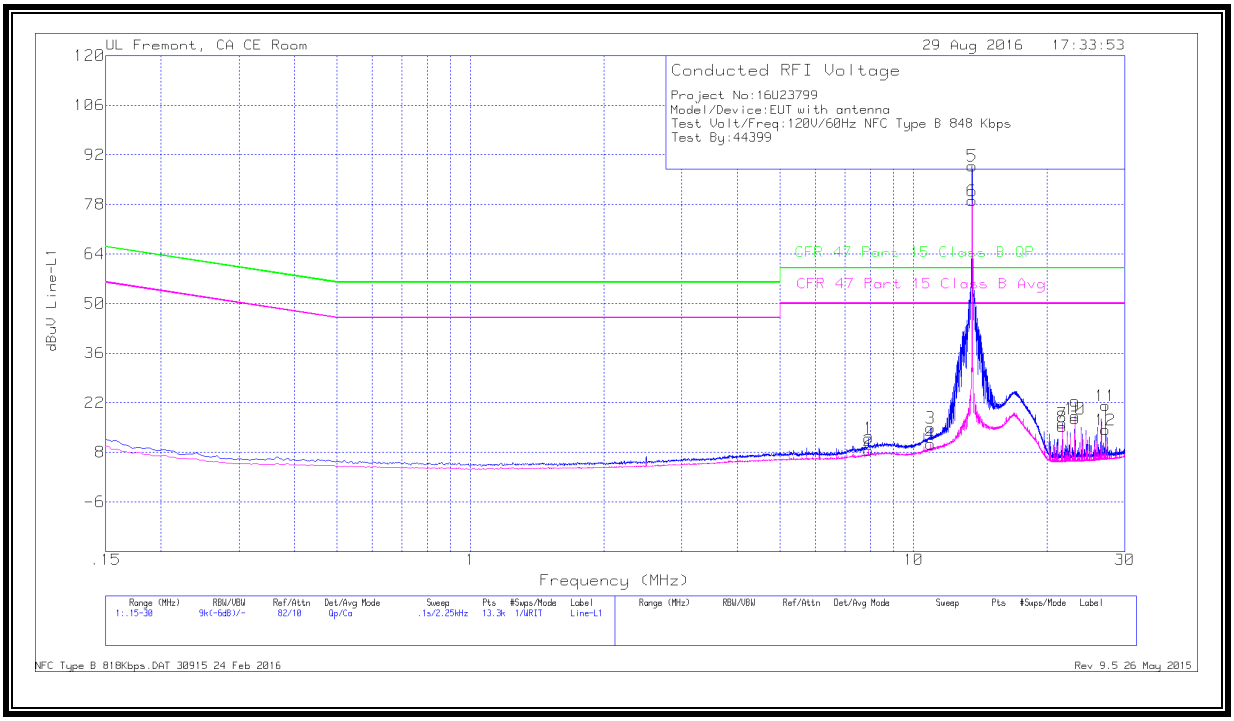
Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2. TYPE B (14443B)

10.2.1. NORMAL OPERATION, 848 KBPS

LINE 1 RESULTS



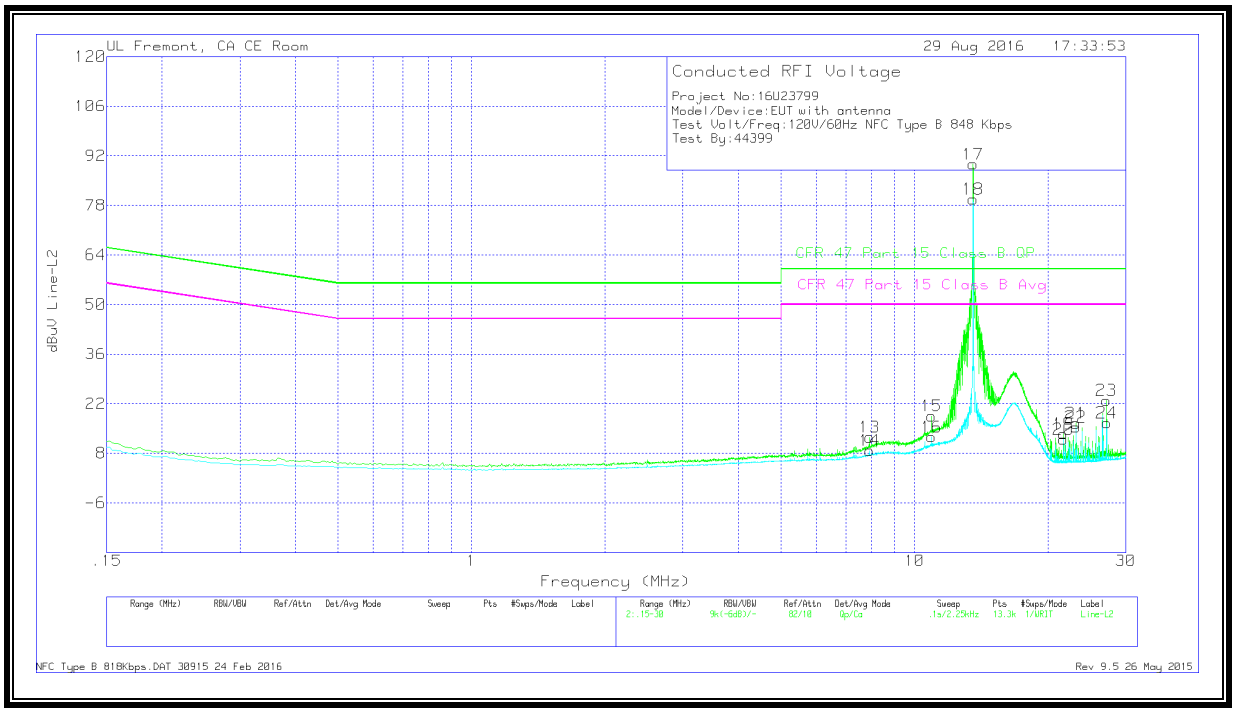
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	7.917	1.72	Qp	0	.1	10.2	12.02	60	-47.98	-	-
2	7.917	-1.78	Ca	0	.1	10.2	8.52	-	-	50	-41.48
3	10.92075	4.5	Qp	0	.2	10.2	14.9	60	-45.1	-	-
4	10.92075	-.06	Ca	0	.2	10.2	10.34	-	-	50	-39.66
5	13.56	78.37	Qp	.1	.2	10.2	88.87	**60**	**28.87**	-	-
6	13.56	68.54	Ca	.1	.2	10.2	79.04	-	-	**50**	**29.04**
7	21.66675	5.6	Qp	0	.2	10.4	16.2	60	-43.8	-	-
8	21.66675	4.59	Ca	0	.2	10.4	15.19	-	-	50	-34.81
9	23.1315	7.62	Qp	.1	.2	10.4	18.32	60	-41.68	-	-
10	23.1315	6.76	Ca	.1	.2	10.4	17.46	-	-	50	-32.54
11	27.12075	10.26	Qp	.1	.3	10.5	21.16	60	-38.84	-	-
12	27.12075	3.45	Ca	.1	.3	10.5	14.35	-	-	50	-35.65

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

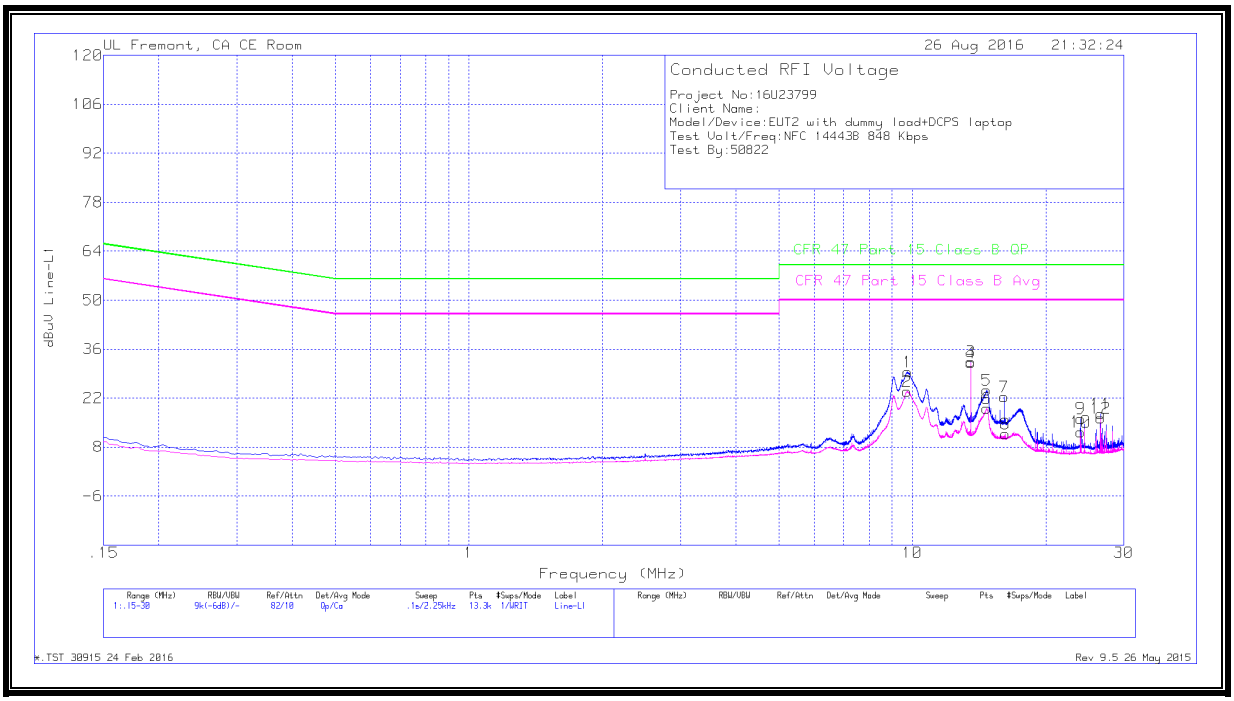
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	7.917	2.26	Qp	0	.1	10.2	12.56	60	-47.44	-	-
14	7.917	-1.51	Ca	0	.1	10.2	8.79	-	-	50	-41.21
15	10.92075	8.15	Qp	0	.2	10.2	18.55	60	-41.45	-	-
16	10.92075	2.21	Ca	0	.2	10.2	12.61	-	-	50	-37.39
17	13.56	79.12	Qp	.1	.2	10.2	89.62	**60**	**29.62**	-	-
18	13.56	69.27	Ca	.1	.2	10.2	79.77	-	-	**50**	**29.77**
19	21.66675	2.92	Qp	0	.2	10.4	13.52	60	-46.48	-	-
20	21.66675	1.37	Ca	0	.2	10.4	11.97	-	-	50	-38.03
21	23.1315	5.82	Qp	.1	.2	10.4	16.52	60	-43.48	-	-
22	23.1315	4.7	Ca	.1	.2	10.4	15.4	-	-	50	-34.6
23	27.12075	12.06	Qp	.1	.3	10.5	22.96	60	-37.04	-	-
24	27.1635	5.71	Ca	.1	.3	10.5	16.61	-	-	50	-33.39

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2.2. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 848 KBPS

LINE 1 RESULTS



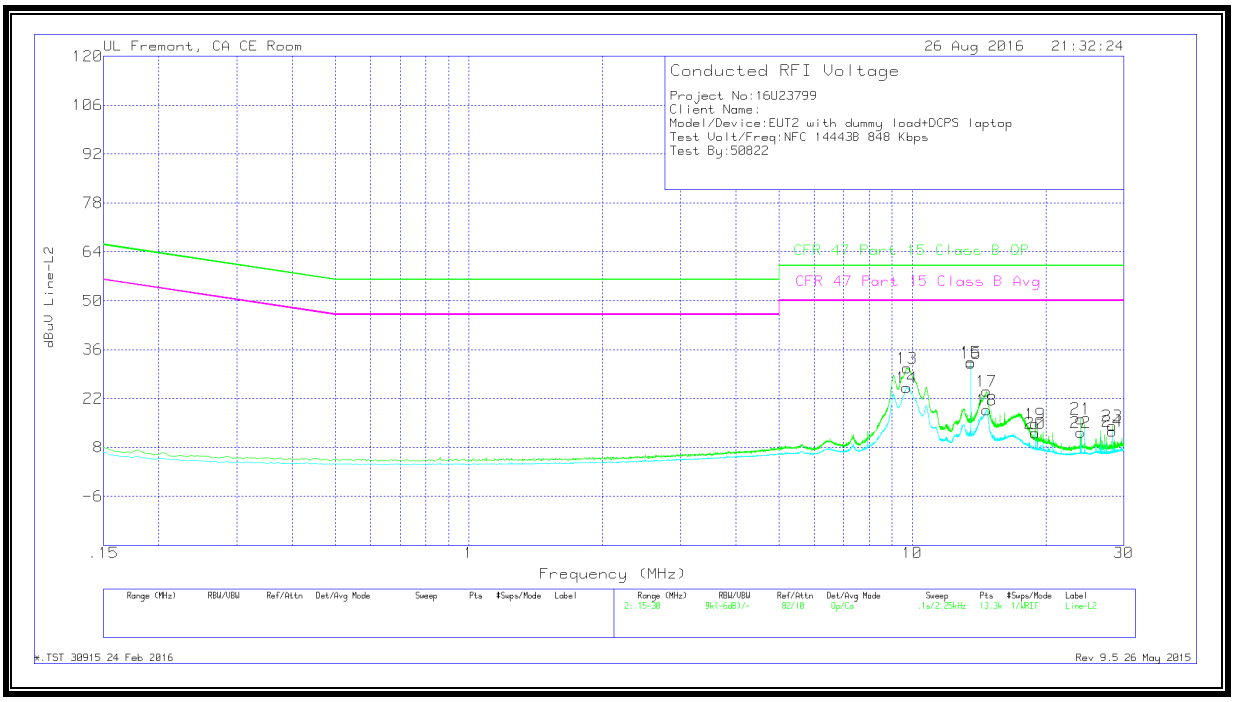
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.75525	19.05	Qp	0	.2	10.2	29.45	60	-30.55	-	-
2	9.73163	13.5	Ca	0	.2	10.2	23.9	-	-	50	-26.1
3	13.56	21.94	Qp	.1	.2	10.2	32.44	60	-27.56	-	-
4	13.56	21.62	Ca	.1	.2	10.2	32.12	-	-	50	-17.88
5	14.72325	13.84	Qp	0	.2	10.2	24.24	60	-35.76	-	-
6	14.721	8.67	Ca	0	.2	10.2	19.07	-	-	50	-30.93
7	16.11825	11.91	Qp	0	.2	10.3	22.41	60	-37.59	-	-
8	16.23075	1.28	Ca	0	.2	10.3	11.78	-	-	50	-38.22
9	24	5.39	Qp	.1	.2	10.5	16.19	60	-43.81	-	-
10	24	1.56	Ca	.1	.2	10.5	12.36	-	-	50	-37.64
11	26.61225	6.56	Qp	.1	.3	10.5	17.46	60	-42.54	-	-
12	26.61225	5.35	Ca	.1	.3	10.5	16.25	-	-	50	-33.75

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

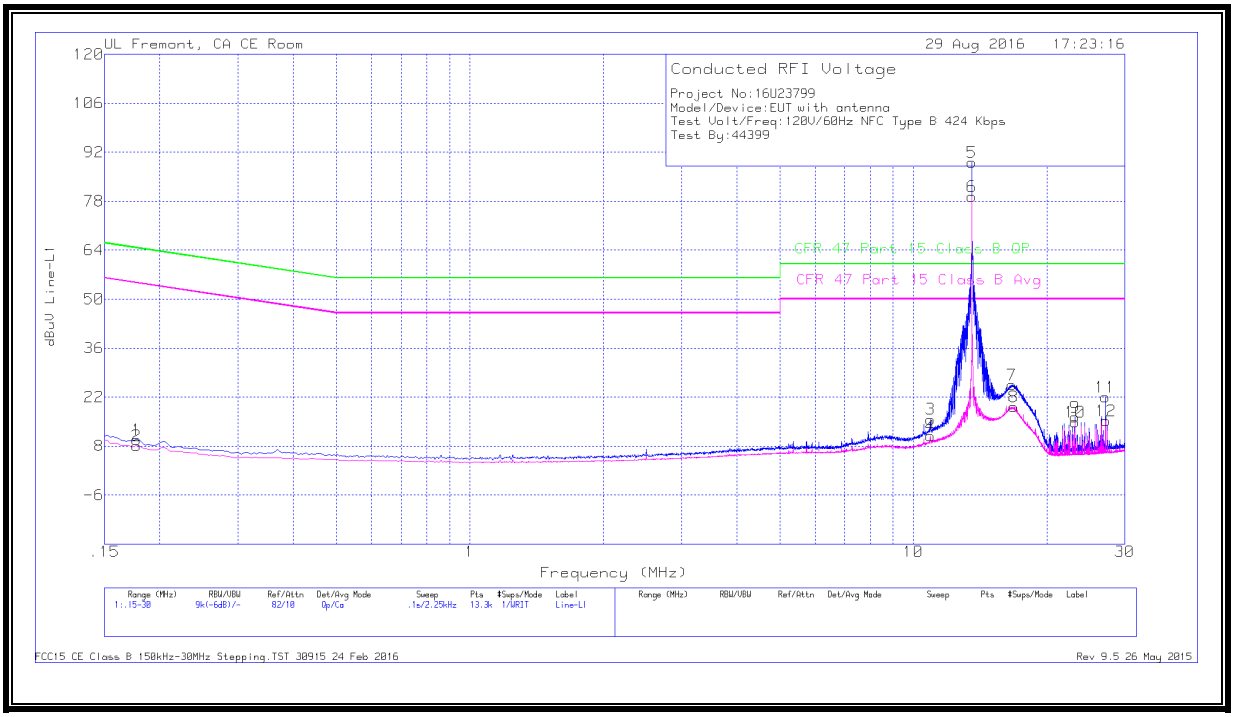
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	9.71925	20.34	Qp	0	.2	10.2	30.74	60	-29.26	-	-
14	9.717	14.75	Ca	0	.2	10.2	25.15	-	-	50	-24.85
15	13.56	21.91	Qp	.1	.2	10.2	32.41	60	-27.59	-	-
16	13.56	21.57	Ca	.1	.2	10.2	32.07	-	-	50	-17.93
17	14.721	13.54	Qp	.1	.2	10.2	24.04	60	-35.96	-	-
18	14.703	8.26	Ca	.1	.2	10.2	18.76	-	-	50	-31.24
19	18.915	4.27	Qp	0	.2	10.3	14.77	60	-45.23	-	-
20	18.915	1.61	Ca	0	.2	10.3	12.11	-	-	50	-37.89
21	24	5.39	Qp	.1	.2	10.5	16.19	60	-43.81	-	-
22	24	1.53	Ca	.1	.2	10.5	12.33	-	-	50	-37.67
23	28.22325	3.37	Qp	.1	.3	10.4	14.17	60	-45.83	-	-
24	28.22325	1.84	Ca	.1	.3	10.4	12.64	-	-	50	-37.36

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2.3. NORMAL OPERATION, 424 KBPS

LINE 1 RESULTS



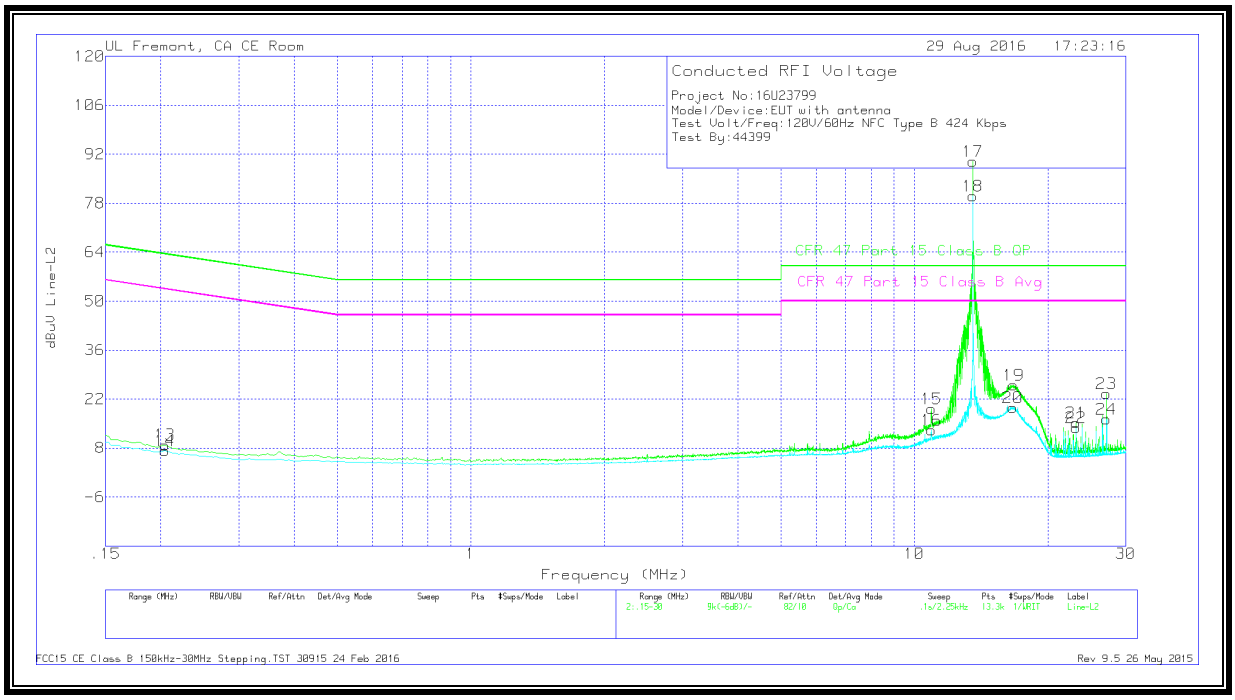
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	.177	-.33	Qp	0	0	10.1	9.77	64.63	-54.86	-	-
2	.177	-1.99	Ca	0	0	10.1	8.11	-	-	54.63	-46.52
3	10.92075	5.27	Qp	0	.2	10.2	15.67	60	-44.33	-	-
4	10.923	.5	Ca	0	.2	10.2	10.9	-	-	50	-39.1
5	13.56	78.66	Qp	.1	.2	10.2	89.16	**60**	**29.16**	-	-
6	13.56	68.84	Ca	.1	.2	10.2	79.34	-	-	**50**	**29.34**
7	16.6965	14.94	Qp	0	.2	10.3	25.44	60	-34.56	-	-
8	16.8405	8.69	Ca	0	.2	10.3	19.19	-	-	50	-30.81
9	23.1315	5.55	Qp	.1	.2	10.4	16.25	60	-43.75	-	-
10	23.1315	4.24	Ca	.1	.2	10.4	14.94	-	-	50	-35.06
11	27.12075	11.11	Qp	.1	.3	10.5	22.01	60	-37.99	-	-
12	27.1635	4.38	Ca	.1	.3	10.5	15.28	-	-	50	-34.72

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

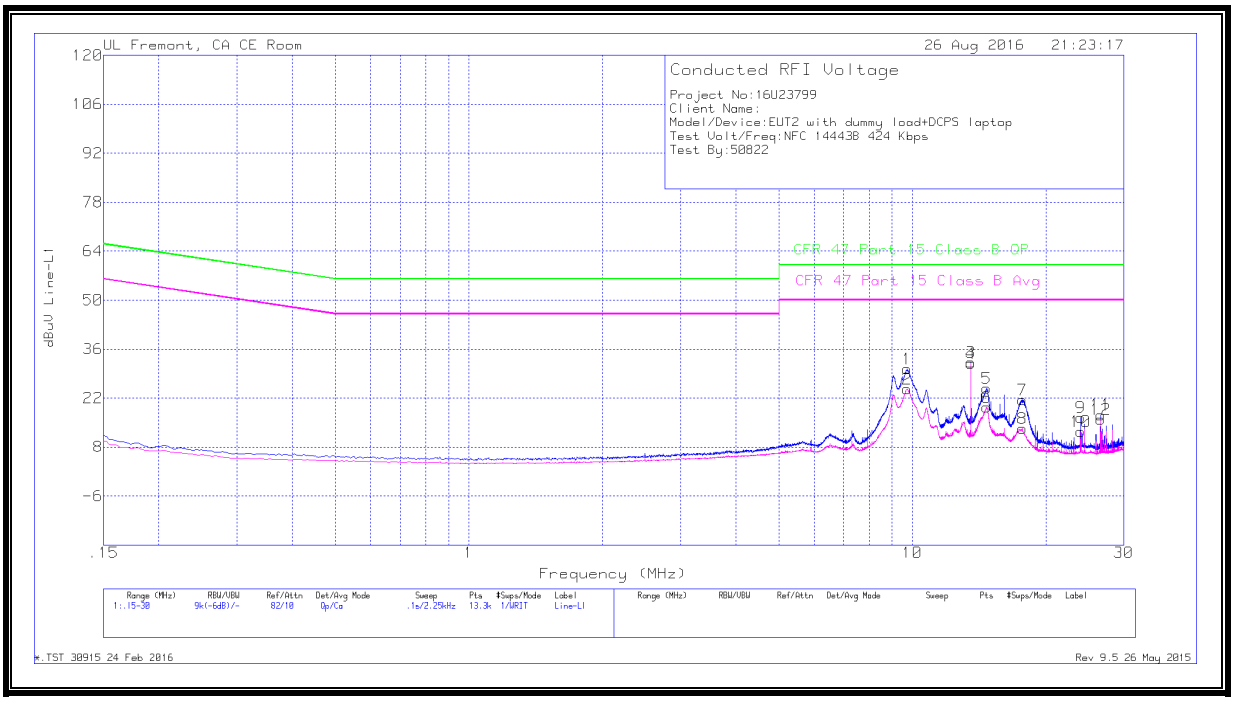
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.204	-1.21	Qp	0	0	10.1	8.89	63.45	-54.56	-	-
14	.204	-2.94	Ca	0	0	10.1	7.16	-	-	53.45	-46.29
15	10.92075	8.89	Qp	0	.2	10.2	19.29	60	-40.71	-	-
16	10.923	2.7	Ca	0	.2	10.2	13.1	-	-	50	-36.9
17	13.56	79.42	Qp	.1	.2	10.2	89.92	**60**	**29.92**	-	-
18	13.56	69.61	Ca	.1	.2	10.2	80.11	-	-	**50**	**30.11**
19	16.76175	15.47	Qp	0	.2	10.3	25.97	60	-34.03	-	-
20	16.6875	9.12	Ca	0	.2	10.3	19.62	-	-	50	-30.38
21	23.1315	4.46	Qp	.1	.2	10.4	15.16	60	-44.84	-	-
22	23.1315	3.09	Ca	.1	.2	10.4	13.79	-	-	50	-36.21
23	27.12075	12.74	Qp	.1	.3	10.5	23.64	60	-36.36	-	-
24	27.12075	5.32	Ca	.1	.3	10.5	16.22	-	-	50	-33.78

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2.4. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 424 KBPS

LINE 1 RESULTS



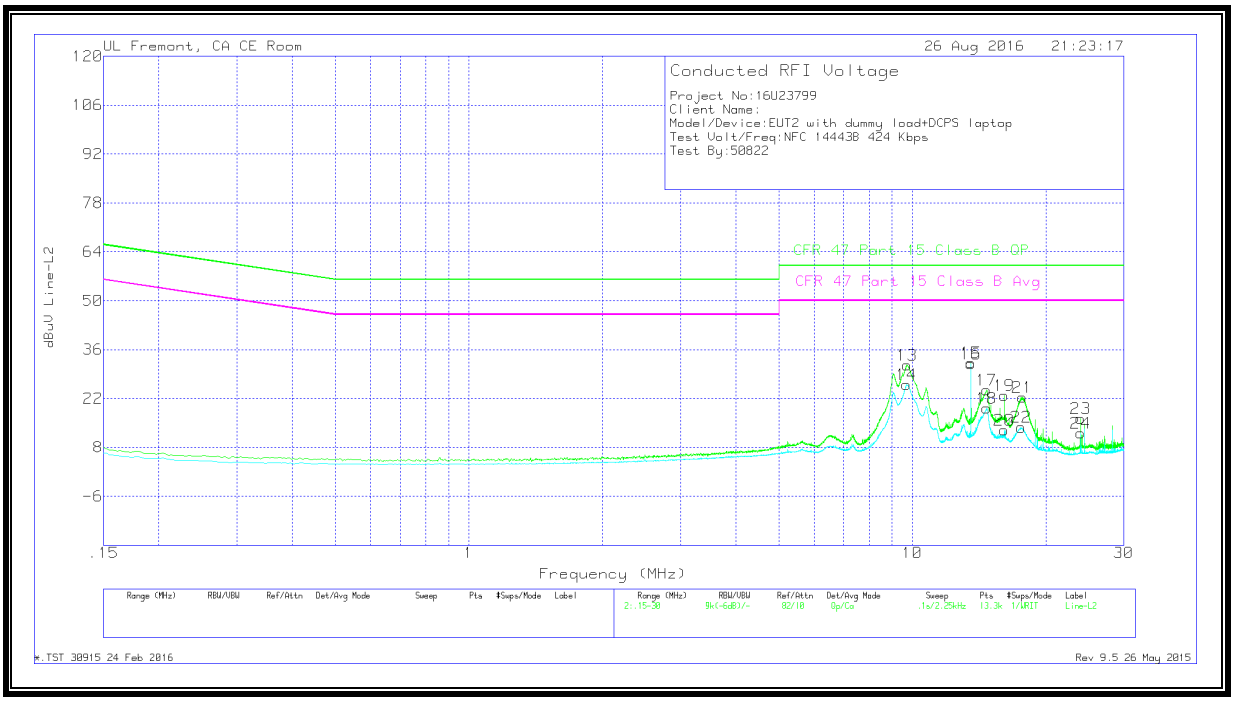
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.7305	19.89	Qp	0	.2	10.2	30.29	60	-29.71	-	-
2	9.72825	14.27	Ca	0	.2	10.2	24.67	-	-	50	-25.33
3	13.56	21.8	Qp	.1	.2	10.2	32.3	60	-27.7	-	-
4	13.56	21.48	Ca	.1	.2	10.2	31.98	-	-	50	-18.02
5	14.72325	14.34	Qp	0	.2	10.2	24.74	60	-35.26	-	-
6	14.72325	8.97	Ca	0	.2	10.2	19.37	-	-	50	-30.63
7	17.68875	11.05	Qp	0	.2	10.3	21.55	60	-38.45	-	-
8	17.6955	2.75	Ca	0	.2	10.3	13.25	-	-	50	-36.75
9	24	5.6	Qp	.1	.2	10.5	16.4	60	-43.6	-	-
10	24	1.61	Ca	.1	.2	10.5	12.41	-	-	50	-37.59
11	26.61225	6.33	Qp	.1	.3	10.5	17.23	60	-42.77	-	-
12	26.61225	5.06	Ca	.1	.3	10.5	15.96	-	-	50	-34.04

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

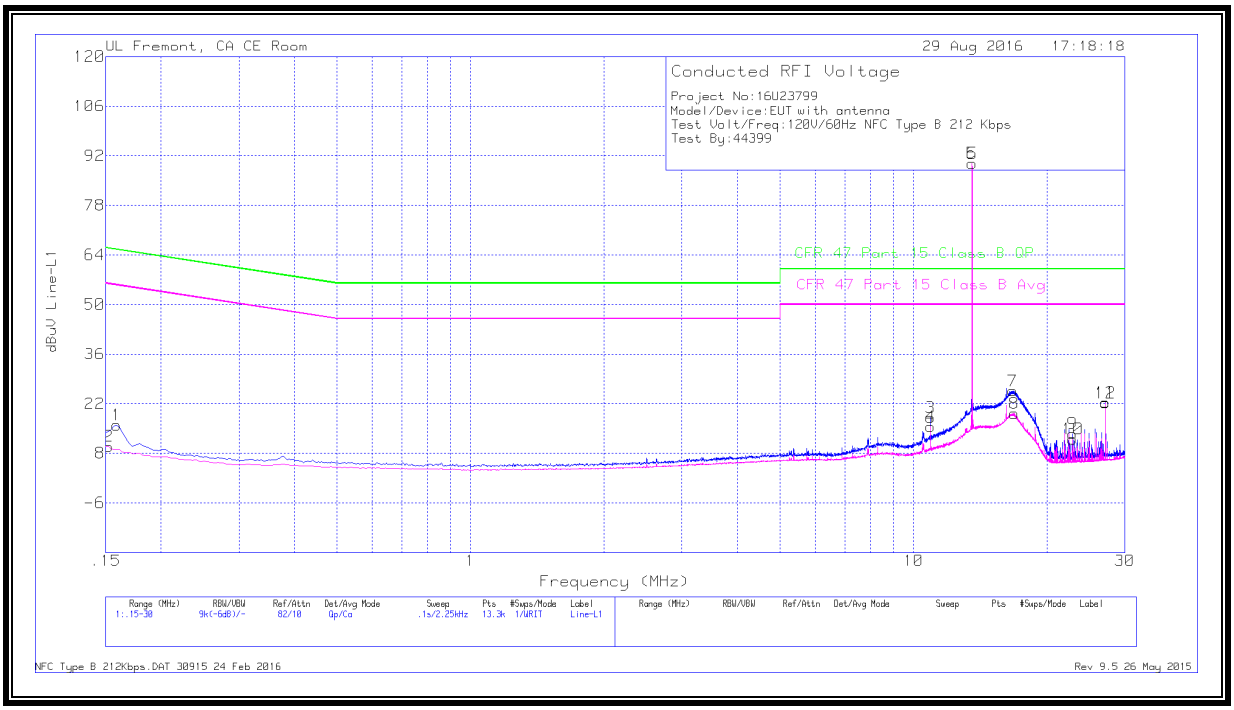
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	9.744	21.13	Qp	0	.2	10.2	31.53	60	-28.47	-	-
14	9.708	15.54	Ca	0	.2	10.2	25.94	-	-	50	-24.06
15	13.56	21.72	Qp	.1	.2	10.2	32.22	60	-27.78	-	-
16	13.56	21.43	Ca	.1	.2	10.2	31.93	-	-	50	-18.07
17	14.721	13.96	Qp	.1	.2	10.2	24.46	60	-35.54	-	-
18	14.72325	8.69	Ca	.1	.2	10.2	19.19	-	-	50	-30.81
19	16.11825	12.32	Qp	0	.2	10.3	22.82	60	-37.18	-	-
20	16.11825	2.4	Ca	0	.2	10.3	12.9	-	-	50	-37.1
21	17.736	11.85	Qp	0	.2	10.3	22.35	60	-37.65	-	-
22	17.6055	3.26	Ca	0	.2	10.3	13.76	-	-	50	-36.24
23	24	5.49	Qp	.1	.2	10.5	16.29	60	-43.71	-	-
24	24	1.33	Ca	.1	.2	10.5	12.13	-	-	50	-37.87

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2.5. NORMAL OPERATION, 212 KBPS

LINE 1 RESULTS



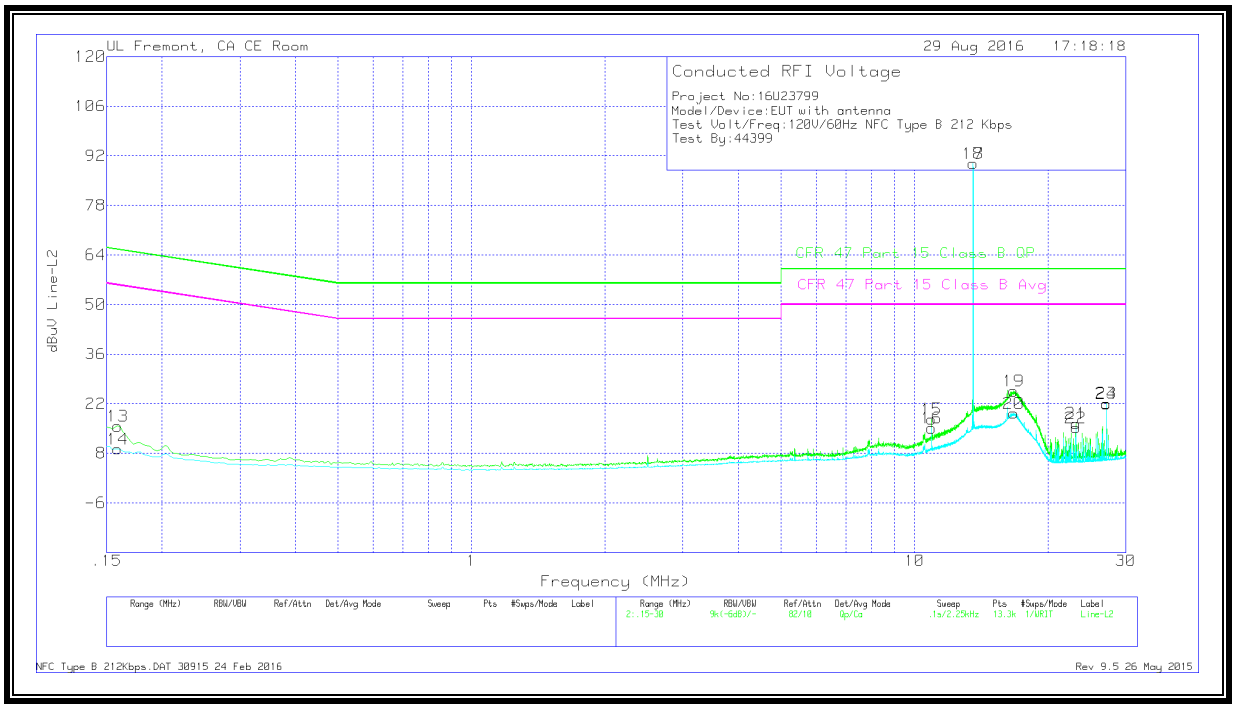
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	.159	5.88	Qp	0	0	10.1	15.98	65.52	-49.54	-	-
2	.15225	-.23	Ca	.1	0	10.1	9.97	-	-	55.88	-45.91
3	10.932	7.69	Qp	0	.2	10.2	18.09	60	-41.91	-	-
4	10.932	5.16	Ca	0	.2	10.2	15.56	-	-	50	-34.44
5	13.56	79.41	Qp	.1	.2	10.2	89.91	**60**	**29.91**	-	-
6	13.56	79.39	Ca	.1	.2	10.2	89.89	-	-	**50**	**39.89**
7	16.75613	15.1	Qp	0	.2	10.3	25.6	60	-34.4	-	-
8	16.90125	8.75	Ca	0	.2	10.3	19.25	-	-	50	-30.75
9	22.88625	2.78	Qp	.1	.3	10.4	13.58	60	-46.42	-	-
10	22.8885	1.25	Ca	.1	.3	10.4	12.05	-	-	50	-37.95
11	27.12075	11.49	Qp	.1	.3	10.5	22.39	60	-37.61	-	-
12	27.12075	11.35	Ca	.1	.3	10.5	22.25	-	-	50	-27.75

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

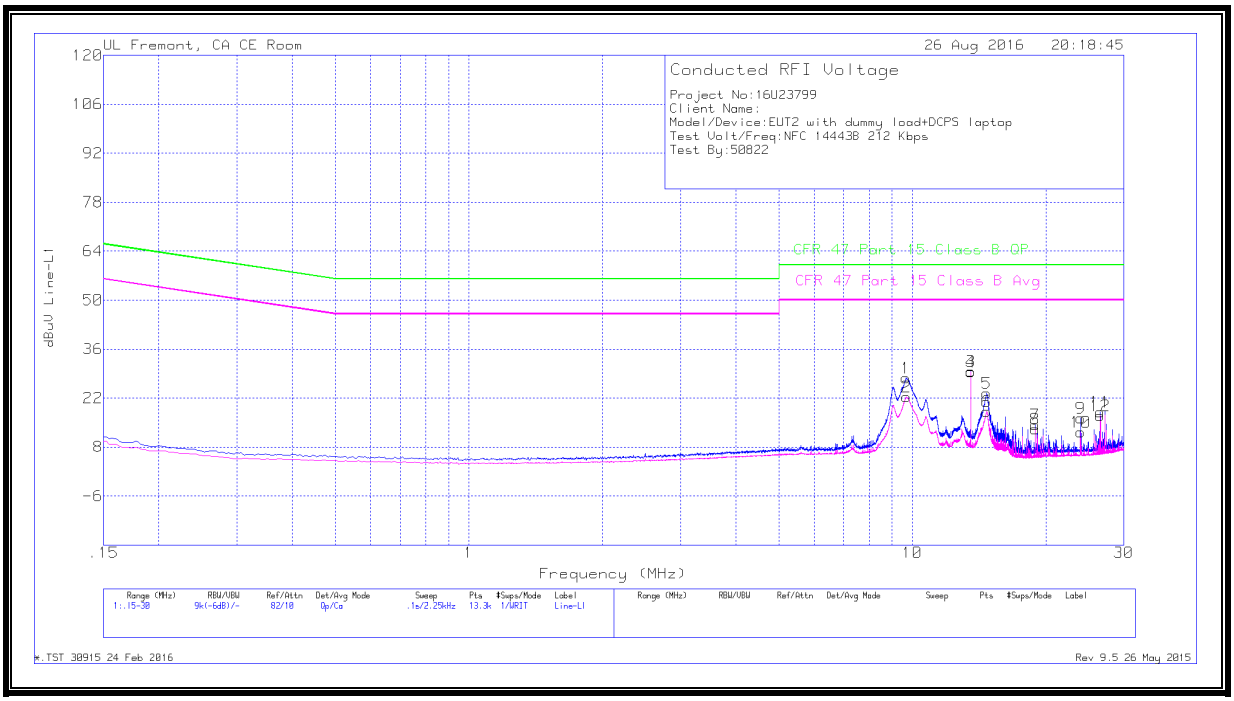
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.159	5.55	Qp	0	0	10.1	15.65	65.52	-49.87	-	-
14	.159	-.92	Ca	0	0	10.1	9.18	-	-	55.52	-46.34
15	10.93425	7.22	Qp	0	.2	10.2	17.62	60	-42.38	-	-
16	10.93425	4.74	Ca	0	.2	10.2	15.14	-	-	50	-34.86
17	13.56	79.32	Qp	.1	.2	10.2	89.82	**60**	**29.82**	-	-
18	13.56	79.3	Ca	.1	.2	10.2	89.8	-	-	**50**	**39.8**
19	16.74825	15.09	Qp	0	.2	10.3	25.59	60	-34.41	-	-
20	16.7505	8.81	Ca	0	.2	10.3	19.31	-	-	50	-30.69
21	23.1315	5.72	Qp	.1	.2	10.4	16.42	60	-43.58	-	-
22	23.1315	4.49	Ca	.1	.2	10.4	15.19	-	-	50	-34.81
23	27.12075	11.24	Qp	.1	.3	10.5	22.14	60	-37.86	-	-
24	27.12075	11.06	Ca	.1	.3	10.5	21.96	-	-	50	-28.04

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2.6. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 212 KBPS

LINE 1 RESULTS



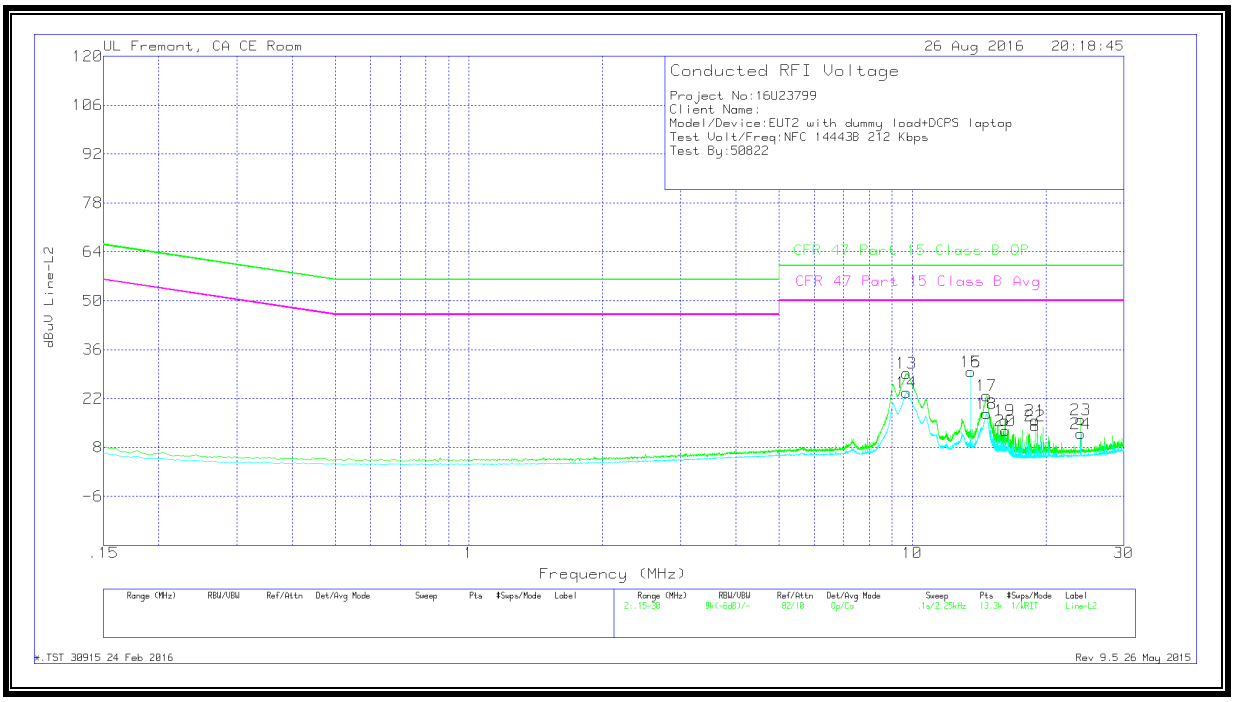
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.68325	17.33	Qp	0	.2	10.2	27.73	60	-32.27	-	-
2	9.6945	11.92	Ca	0	.2	10.2	22.32	-	-	50	-27.68
3	13.56	19.11	Qp	.1	.2	10.2	29.61	60	-30.39	-	-
4	13.56	18.99	Ca	.1	.2	10.2	29.49	-	-	50	-20.51
5	14.721	12.93	Qp	0	.2	10.2	23.33	60	-36.67	-	-
6	14.721	7.84	Ca	0	.2	10.2	18.24	-	-	50	-31.76
7	18.915	3.85	Qp	0	.2	10.3	14.35	60	-45.65	-	-
8	18.915	2.68	Ca	0	.2	10.3	13.18	-	-	50	-36.82
9	24	5.4	Qp	.1	.2	10.5	16.2	60	-43.8	-	-
10	24	1.52	Ca	.1	.2	10.5	12.32	-	-	50	-37.68
11	26.49075	7.16	Qp	.1	.3	10.5	18.06	60	-41.94	-	-
12	26.49075	6.14	Ca	.1	.3	10.5	17.04	-	-	50	-32.96

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

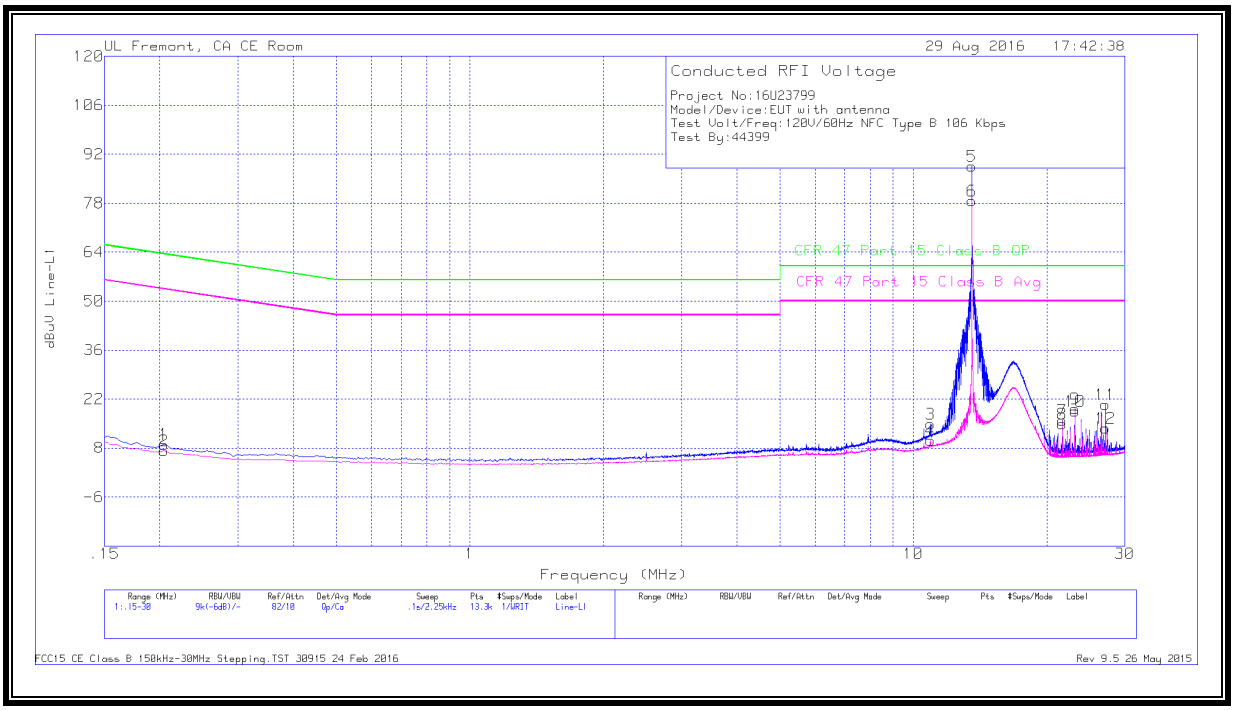
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	9.6945	18.83	Qp	0	.2	10.2	29.23	60	-30.77	-	-
14	9.69225	13.45	Ca	0	.1	10.2	23.75	-	-	50	-26.25
15	13.56	19.24	Qp	.1	.2	10.2	29.74	60	-30.26	-	-
16	13.56	19.12	Ca	.1	.2	10.2	29.62	-	-	50	-20.38
17	14.72325	12.3	Qp	.1	.2	10.2	22.8	60	-37.2	-	-
18	14.721	7.24	Ca	.1	.2	10.2	17.74	-	-	50	-32.26
19	16.16775	5.3	Qp	0	.2	10.3	15.8	60	-44.2	-	-
20	16.23075	2.28	Ca	0	.2	10.3	12.78	-	-	50	-37.22
21	18.915	5.33	Qp	0	.2	10.3	15.83	60	-44.17	-	-
22	18.915	3.76	Ca	0	.2	10.3	14.26	-	-	50	-35.74
23	24	5.19	Qp	.1	.2	10.5	15.99	60	-44.01	-	-
24	24	1.17	Ca	.1	.2	10.5	11.97	-	-	50	-38.03

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2.7. NORMAL OPERATION, 106 KBPS

LINE 1 RESULTS



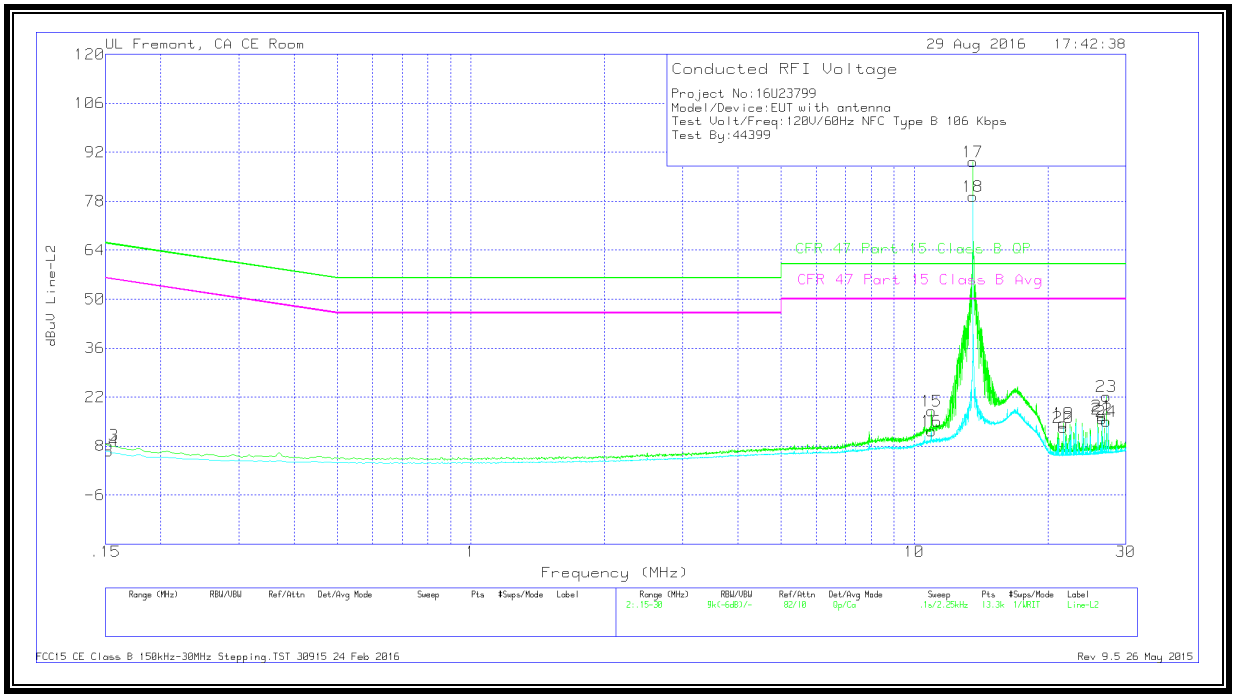
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	.204	-1.04	Qp	0	0	10.1	9.06	63.45	-54.39	-	-
2	.204	-2.91	Ca	0	0	10.1	7.19	-	-	53.45	-46.26
3	10.92075	4.49	Qp	0	.2	10.2	14.89	60	-45.11	-	-
4	10.923	-.26	Ca	0	.2	10.2	10.14	-	-	50	-39.86
5	13.56	78.01	Qp	.1	.2	10.2	88.51	**60**	**28.51**	-	-
6	13.56	68.16	Ca	.1	.2	10.2	78.66	-	-	**50**	**28.66**
7	21.66675	5.29	Qp	0	.2	10.4	15.89	60	-44.11	-	-
8	21.66675	4.32	Ca	0	.2	10.4	14.92	-	-	50	-35.08
9	23.1315	8.5	Qp	.1	.2	10.4	19.2	60	-40.8	-	-
10	23.1315	7.81	Ca	.1	.2	10.4	18.51	-	-	50	-31.49
11	27.12075	9.54	Qp	.1	.3	10.5	20.44	60	-39.56	-	-
12	27.12075	2.84	Ca	.1	.3	10.5	13.74	-	-	50	-36.26

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

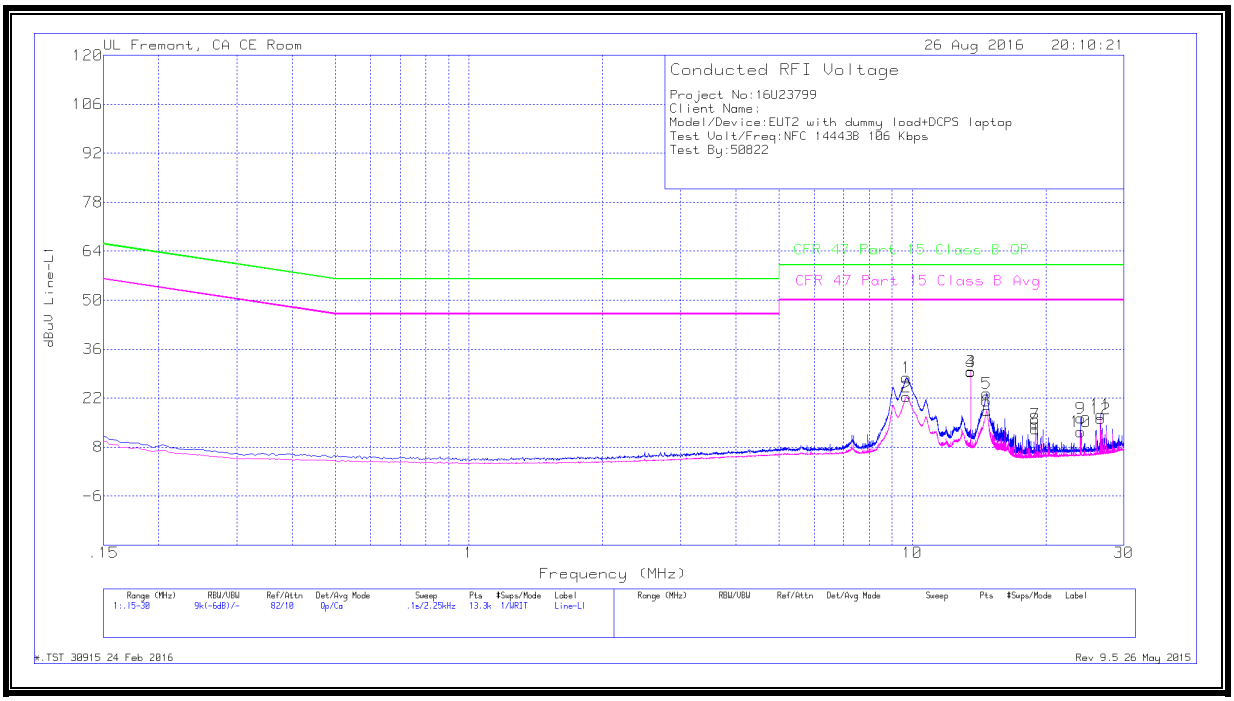
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.15225	-1.89	Qp	0	0	10.1	8.21	65.88	-57.67	-	-
14	.15225	-3.51	Ca	0	0	10.1	6.59	-	-	55.88	-49.29
15	10.92075	7.59	Qp	0	.2	10.2	17.99	60	-42.01	-	-
16	10.923	1.93	Ca	0	.2	10.2	12.33	-	-	50	-37.67
17	13.56	78.73	Qp	.1	.2	10.2	89.23	**60**	**29.23**	-	-
18	13.56	68.89	Ca	.1	.2	10.2	79.39	-	-	**50**	**29.39**
19	21.66675	3.95	Qp	0	.2	10.4	14.55	60	-45.45	-	-
20	21.66675	2.67	Ca	0	.2	10.4	13.27	-	-	50	-36.73
21	26.49075	5.73	Qp	.1	.3	10.5	16.63	60	-43.37	-	-
22	26.49075	4.79	Ca	.1	.3	10.5	15.69	-	-	50	-34.31
23	27.12075	11.27	Qp	.1	.3	10.5	22.17	60	-37.83	-	-
24	27.12075	4.1	Ca	.1	.3	10.5	15	-	-	50	-35

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.2.8. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 106 KBPS

LINE 1 RESULTS



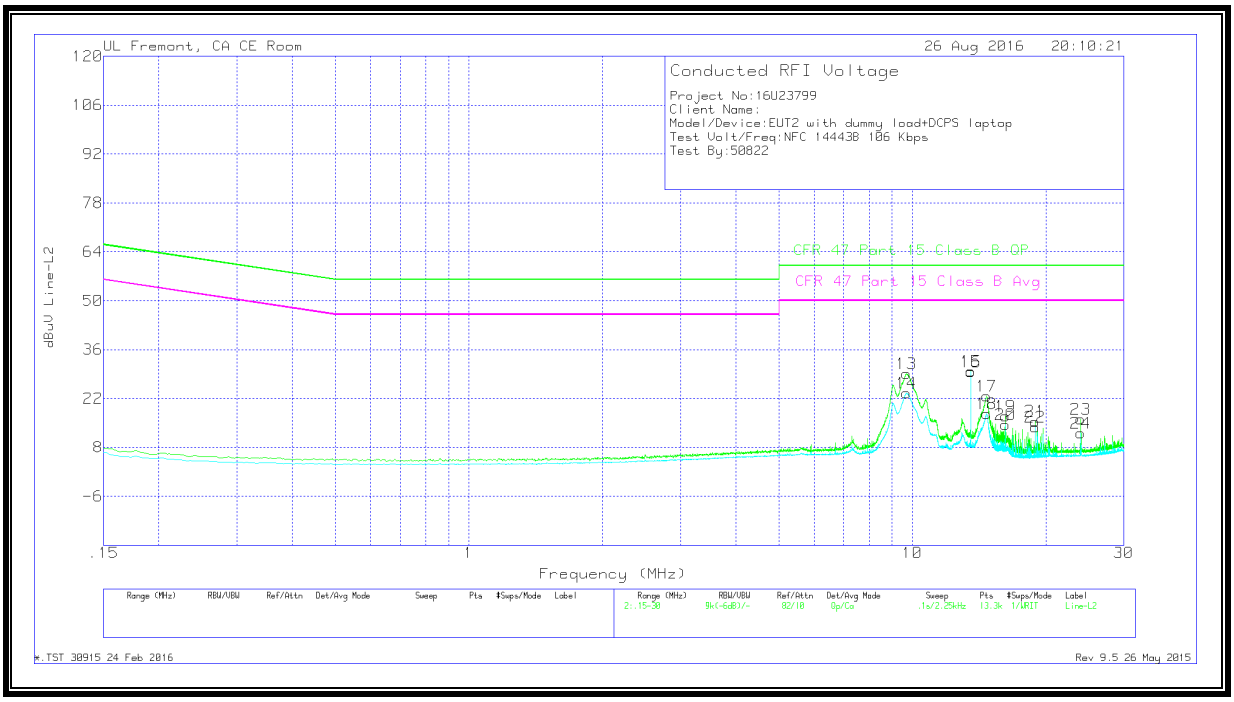
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.6945	17.44	Qp	0	.2	10.2	27.84	60	-32.16	-	-
2	9.6945	11.96	Ca	0	.2	10.2	22.36	-	-	50	-27.64
3	13.56	19.13	Qp	.1	.2	10.2	29.63	60	-30.37	-	-
4	13.56	19.01	Ca	.1	.2	10.2	29.51	-	-	50	-20.49
5	14.721	13.03	Qp	0	.2	10.2	23.43	60	-36.57	-	-
6	14.721	7.89	Ca	0	.2	10.2	18.29	-	-	50	-31.71
7	18.915	4.02	Qp	0	.2	10.3	14.52	60	-45.48	-	-
8	18.915	2.72	Ca	0	.2	10.3	13.22	-	-	50	-36.78
9	24	5.49	Qp	.1	.2	10.5	16.29	60	-43.71	-	-
10	24	1.57	Ca	.1	.2	10.5	12.37	-	-	50	-37.63
11	26.61225	6.43	Qp	.1	.3	10.5	17.33	60	-42.67	-	-
12	26.61225	5.28	Ca	.1	.3	10.5	16.18	-	-	50	-33.82

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	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	9.7125	18.72	Qp	0	.2	10.2	29.12	60	-30.88	-	-
14	9.71025	13.18	Ca	0	.2	10.2	23.58	-	-	50	-26.42
15	13.56	19.27	Qp	.1	.2	10.2	29.77	60	-30.23	-	-
16	13.56	19.15	Ca	.1	.2	10.2	29.65	-	-	50	-20.35
17	14.70075	12.21	Qp	.1	.2	10.2	22.71	60	-37.29	-	-
18	14.72325	7.12	Ca	.1	.2	10.2	17.62	-	-	50	-32.38
19	16.23075	6.53	Qp	0	.2	10.3	17.03	60	-42.97	-	-
20	16.23075	4	Ca	0	.2	10.3	14.5	-	-	50	-35.5
21	18.915	4.99	Qp	0	.2	10.3	15.49	60	-44.51	-	-
22	18.915	3.37	Ca	0	.2	10.3	13.87	-	-	50	-36.13
23	24	5.27	Qp	.1	.2	10.5	16.07	60	-43.93	-	-
24	24	1.27	Ca	.1	.2	10.5	12.07	-	-	50	-37.93

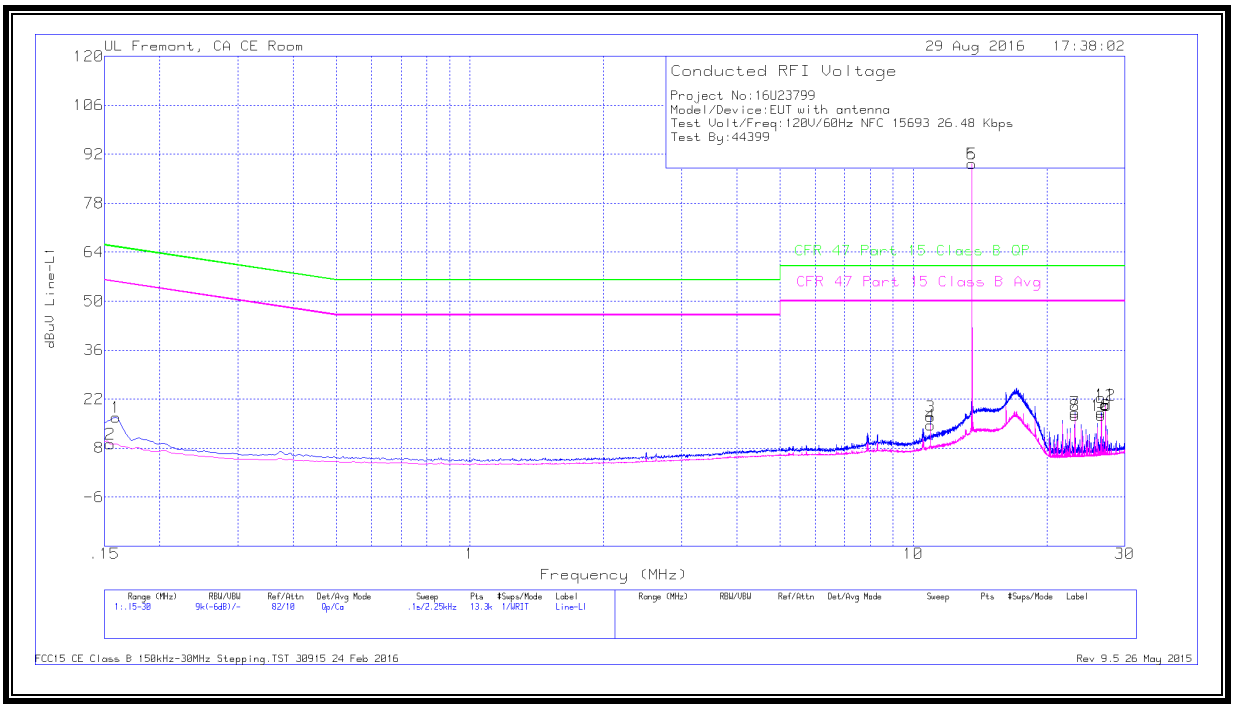
Qp - Quasi-Peak detector

Ca - CISPR average detection

10.3. ISO 15693 MODE

10.3.1. NORMAL OPERATION, 26.48 KBPS

LINE 1 RESULTS



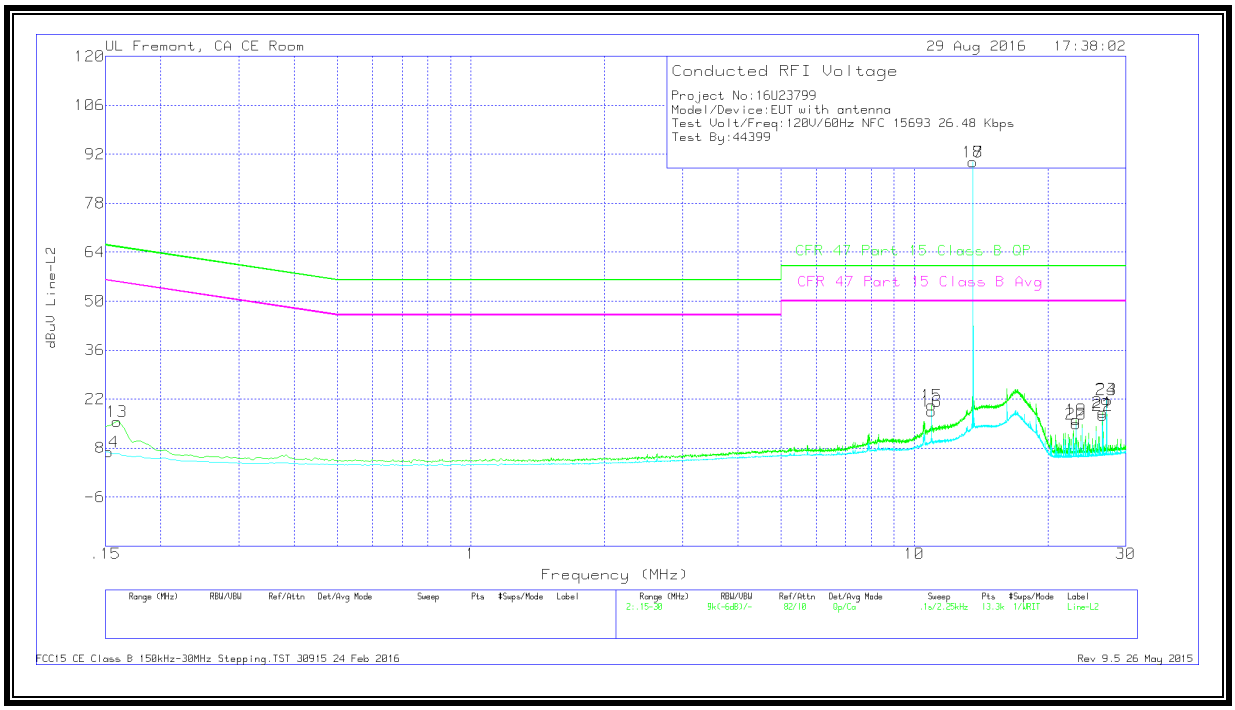
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	.159	6.73	Qp	0	0	10.1	16.83	65.52	-48.69	-	-
2	.1545	-1.01	Ca	.1	0	10.1	9.19	-	-	55.75	-46.56
3	10.932	6.5	Qp	0	.2	10.2	16.9	60	-43.1	-	-
4	10.93088	4.19	Ca	0	.2	10.2	14.59	-	-	50	-35.41
5	13.56	78.73	Qp	.1	.2	10.2	89.23	**60**	**29.23**	-	-
6	13.56	78.71	Ca	.1	.2	10.2	89.21	-	-	**50**	**39.21**
7	23.1315	7.5	Qp	.1	.2	10.4	18.2	60	-41.8	-	-
8	23.1315	6.63	Ca	.1	.2	10.4	17.33	-	-	50	-32.67
9	26.49075	7.23	Qp	.1	.3	10.5	18.13	60	-41.87	-	-
10	26.49075	6.35	Ca	.1	.3	10.5	17.25	-	-	50	-32.75
11	27.12075	9.62	Qp	.1	.3	10.5	20.52	60	-39.48	-	-
12	27.12075	9.33	Ca	.1	.3	10.5	20.23	-	-	50	-29.77

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

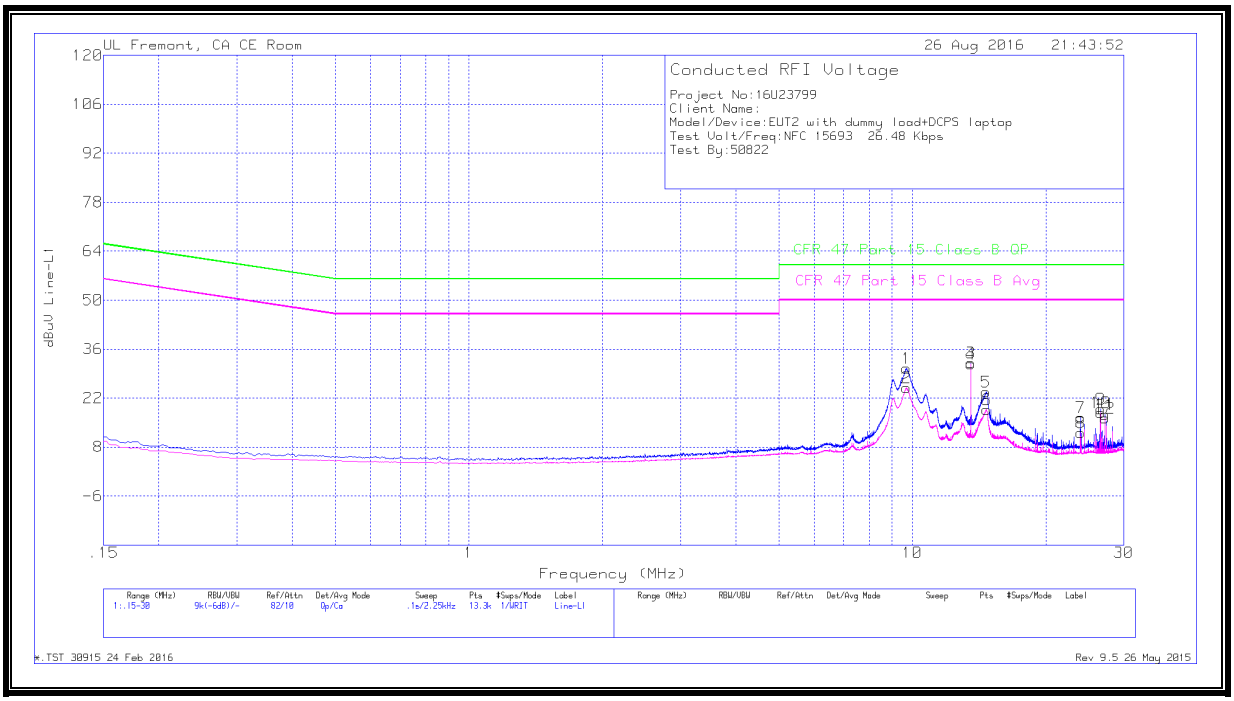
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.159	5.45	Qp	0	0	10.1	15.55	65.52	-49.97	-	-
14	.15225	-3.28	Ca	0	0	10.1	6.82	-	-	55.88	-49.06
15	10.932	9.85	Qp	0	.2	10.2	20.25	60	-39.75	-	-
16	10.932	8.1	Ca	0	.2	10.2	18.5	-	-	50	-31.5
17	13.56	79.34	Qp	.1	.2	10.2	89.84	**60**	**29.84**	-	-
18	13.56	79.32	Ca	.1	.2	10.2	89.82	-	-	**50**	**39.82**
19	23.1315	5.4	Qp	.1	.2	10.4	16.1	60	-43.9	-	-
20	23.1315	4.2	Ca	.1	.2	10.4	14.9	-	-	50	-35.1
21	26.61225	7.24	Qp	.1	.3	10.5	18.14	60	-41.86	-	-
22	26.61225	6.36	Ca	.1	.3	10.5	17.26	-	-	50	-32.74
23	27.12075	11.02	Qp	.1	.3	10.5	21.92	60	-38.08	-	-
24	27.12075	10.89	Ca	.1	.3	10.5	21.79	-	-	50	-28.21

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.3.2. NORMAL OPERATION WITH ANTENNA PORT TERMINATED, 26.48 KBPS

LINE 1 RESULTS



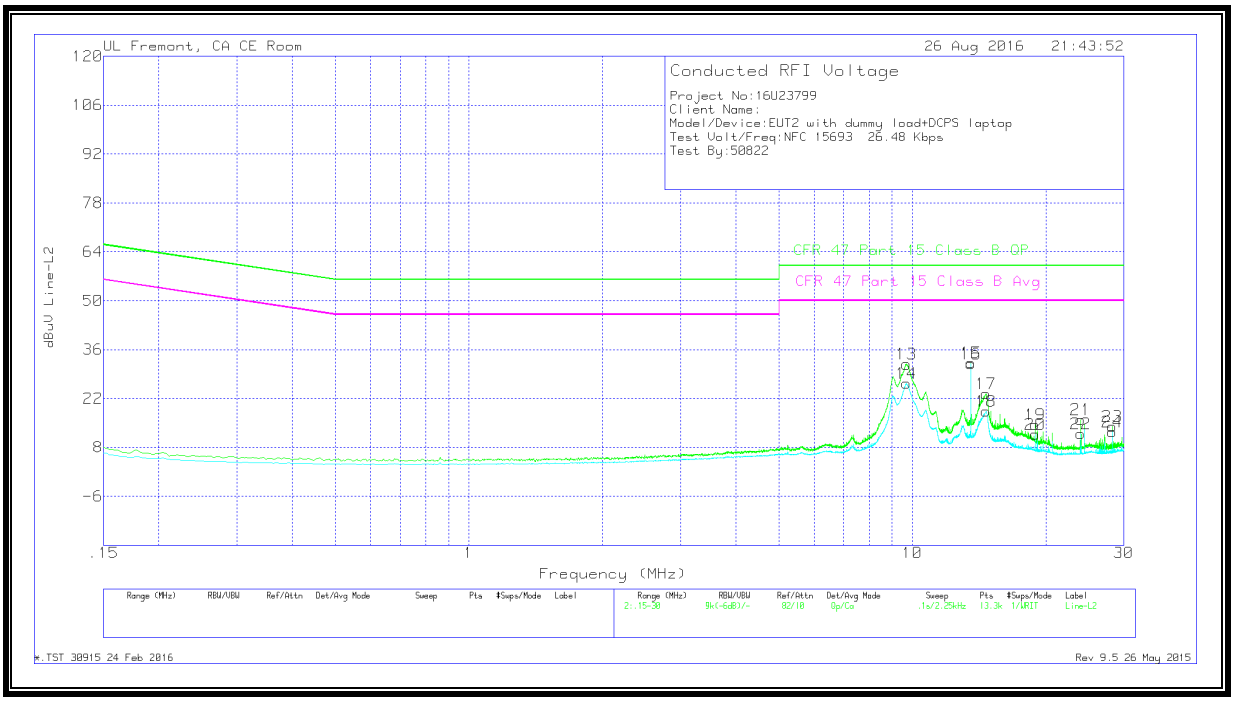
WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	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	9.70575	20.08	Qp	0	.2	10.2	30.48	60	-29.52	-	-
2	9.70575	14.49	Ca	0	.2	10.2	24.89	-	-	50	-25.11
3	13.56	21.61	Qp	.1	.2	10.2	32.11	60	-27.89	-	-
4	13.56	21.33	Ca	.1	.2	10.2	31.83	-	-	50	-18.17
5	14.667	13.43	Qp	0	.2	10.2	23.83	60	-36.17	-	-
6	14.703	8.24	Ca	0	.2	10.2	18.64	-	-	50	-31.36
7	24	5.57	Qp	.1	.2	10.5	16.37	60	-43.63	-	-
8	24	1.29	Ca	.1	.2	10.5	12.09	-	-	50	-37.91
9	26.61225	7.97	Qp	.1	.3	10.5	18.87	60	-41.13	-	-
10	26.61225	7.01	Ca	.1	.3	10.5	17.91	-	-	50	-32.09
11	27.1635	6.4	Qp	.1	.3	10.5	17.3	60	-42.7	-	-
12	27.1635	5.31	Ca	.1	.3	10.5	16.21	-	-	50	-33.79

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	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	9.69225	21.54	Qp	0	.1	10.2	31.84	60	-28.16	-	-
14	9.68775	16.05	Ca	0	.1	10.2	26.35	-	-	50	-23.65
15	13.56	21.76	Qp	.1	.2	10.2	32.26	60	-27.74	-	-
16	13.56	21.46	Ca	.1	.2	10.2	31.96	-	-	50	-18.04
17	14.667	12.97	Qp	.1	.2	10.2	23.47	60	-36.53	-	-
18	14.667	7.9	Ca	.1	.2	10.2	18.4	-	-	50	-31.6
19	18.915	4.11	Qp	0	.2	10.3	14.61	60	-45.39	-	-
20	18.915	1.32	Ca	0	.2	10.3	11.82	-	-	50	-38.18
21	24	5.21	Qp	.1	.2	10.5	16.01	60	-43.99	-	-
22	24	1.19	Ca	.1	.2	10.5	11.99	-	-	50	-38.01
23	28.22325	3.14	Qp	.1	.3	10.4	13.94	60	-46.06	-	-
24	28.22325	1.59	Ca	.1	.3	10.4	12.39	-	-	50	-37.61

Qp - Quasi-Peak detector

Ca - CISPR average detection