



**FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-210 ISSUE 8**

CERTIFICATION TEST REPORT

FOR

APPLE WATCH

MODEL NUMBER: A1757, A1816

**FCC ID: BCG-E3104
IC: 579C-E3104**

REPORT NUMBER: 16U23781-E4V2

ISSUE DATE: AUGUST 26, 2016

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

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	08/16/2016	Initial Issue	Chin Pang
V2	08/26/2016	Revised report to address TCB's questions	Tina Chu

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1. ATTESTATION OF TEST RESULTS

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

EUT DESCRIPTION: APPLE WATCH

MODEL: A1757, A1816

SERIAL NUMBER: FH7RP02FH8YR

DATE TESTED: JUNE 15 – AUGUST 25, 2016

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	Pass
INDUSTRY CANADA RSS-210 Issue 8, Annex 2	Pass
INDUSTRY CANADA RSS-GEN Issue 4	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:

Prepared By:



CHIN PANG
SENIOR ENGINEER
UL VERIFICATION SERVICES INC.



TOM CHEN
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, RSS-GEN Issue 4, and RSS-210 Issue 8.

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:

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

4.3. MEASUREMENT UNCERTAINTY

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

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

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is an Apple Watch with WLAN, Bluetooth, NFC support, and GPS radio.

5.2. MAXIMUM OUTPUT POWER

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

Frequency Range (MHz)	Mode	Type	E Field at 30m distance (dBuV/m)
13.56	CE Mode	A	7.54
		B	6.51
		F	6.12
	Reader	A	6.18
		B	5.11
		F	5.38

5.3. SOFTWARE AND FIRMWARE

The test utility software used during testing was 14S310.

5.4. WORST-CASE CONFIGURATION AND MODE

EUT has 3 types of enclosures and various kinds of metallic and non-metallic wristbands. There are 2 types of metallic bands; Metal Links, and Metal Mesh. Worst case configuration was investigated; and it was found that ceramic enclosure and metal mesh wristband was the worst case. All testing are performed on the worst case.

The fundamental of the EUT and radiated emission were investigated in three orthogonal orientations X (Flatbed), Y (Landscape), Z (Portrait). The Z (Portrait) orientation was determined to be the worst-case orientation; therefore, all final fundamental and radiated testing were performed with the EUT in Z (Portrait) orientation.

Fundamental and radiated emissions were investigated with EUT charging with wireless charger and as standalone. EUT charging with wireless charger was determined to be worst case. Therefore all final fundamental and radiated emissions were performed with the EUT charged by wireless charger

Based on all of the CE mode data rates, no significant difference among the data rates, therefore, all Reader mode 30-1000MHz spurious emission and frequency stability only performed on highest data rate.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 937606.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Apple	Mac Book Pro	W801200UD94	n/a
Laptop AC/DC Adapter	Apple	85W MagSAfe Power adapter	A122	n/a
Wireless Charger AC/DC Adapter	Apple	A1385	D292365B2FQDHLHC7	n/a
Wireless Charger	Apple	A1768	DLC616200ZYHE1Y835	BCGA1768

I/O CABLES (RADIATED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	USB	Un-Shielded	2	To AC/DC adapter

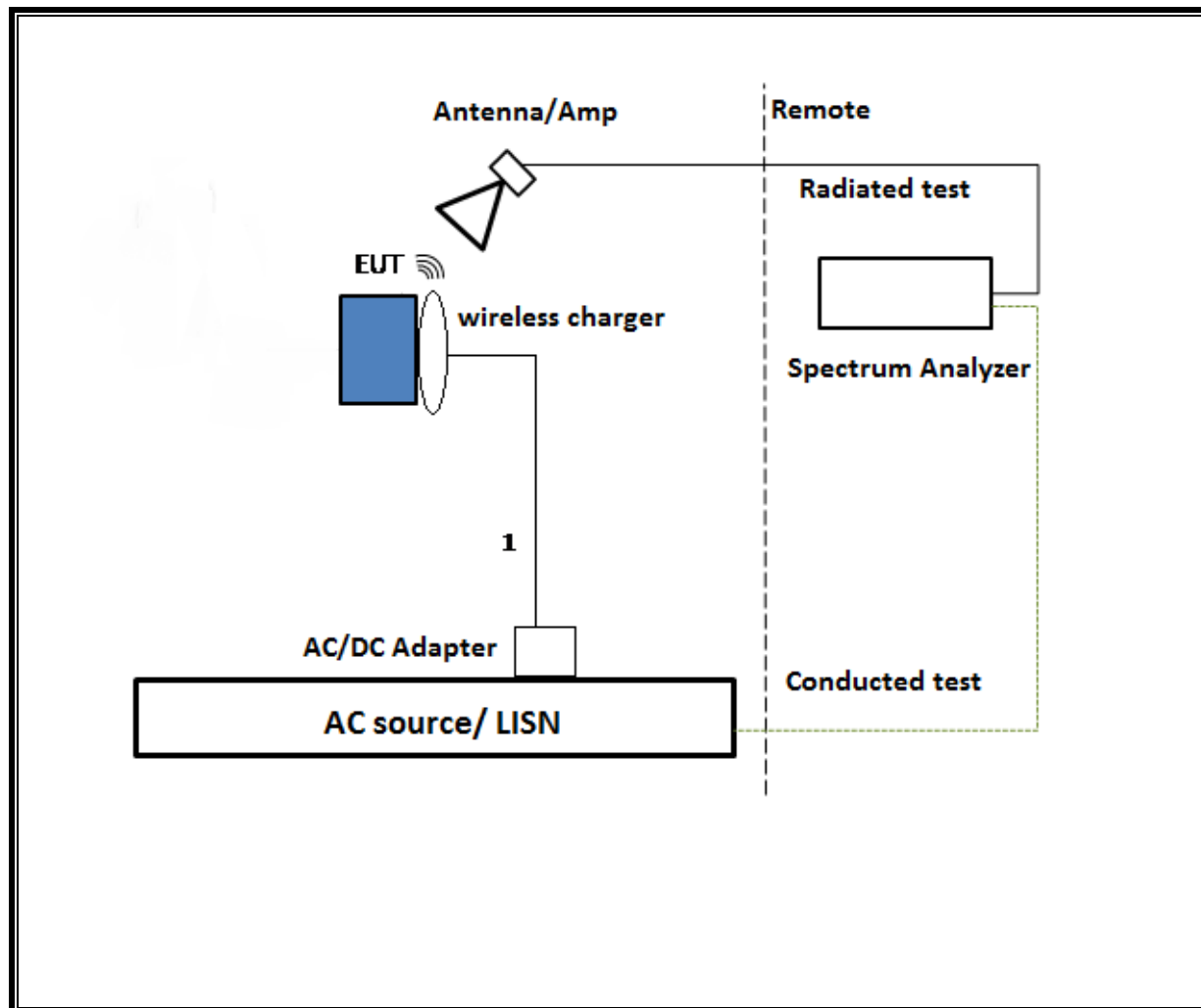
I/O CABLES (CONDUCTED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
2	USB	1	USB to mini USB	Shielded	1	To laptop and fixture

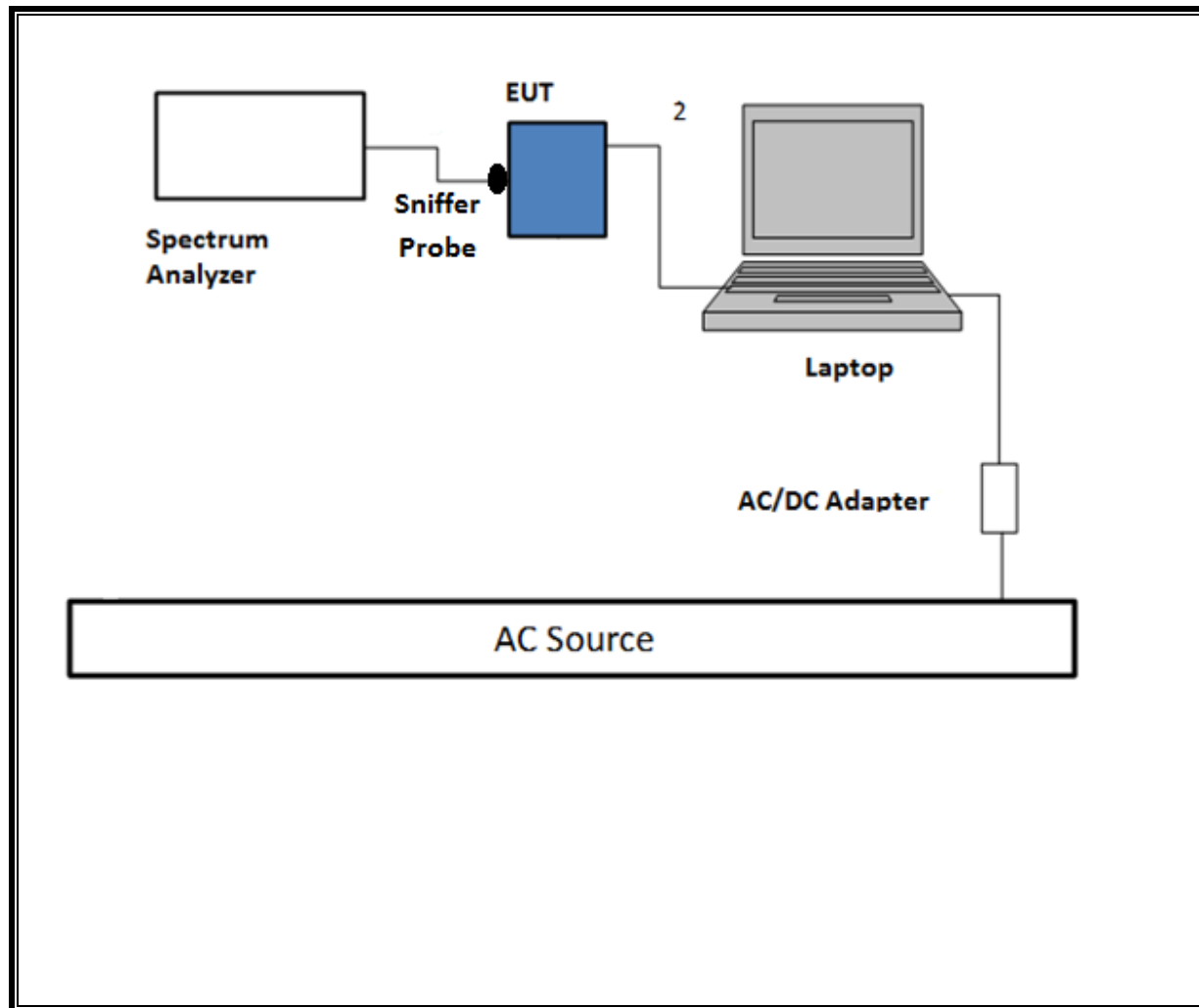
I/O CABLES (TEMPERATURE CHAMBER)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
3	DC	2	Alligator	18 AWG strand	1	Insulated cable

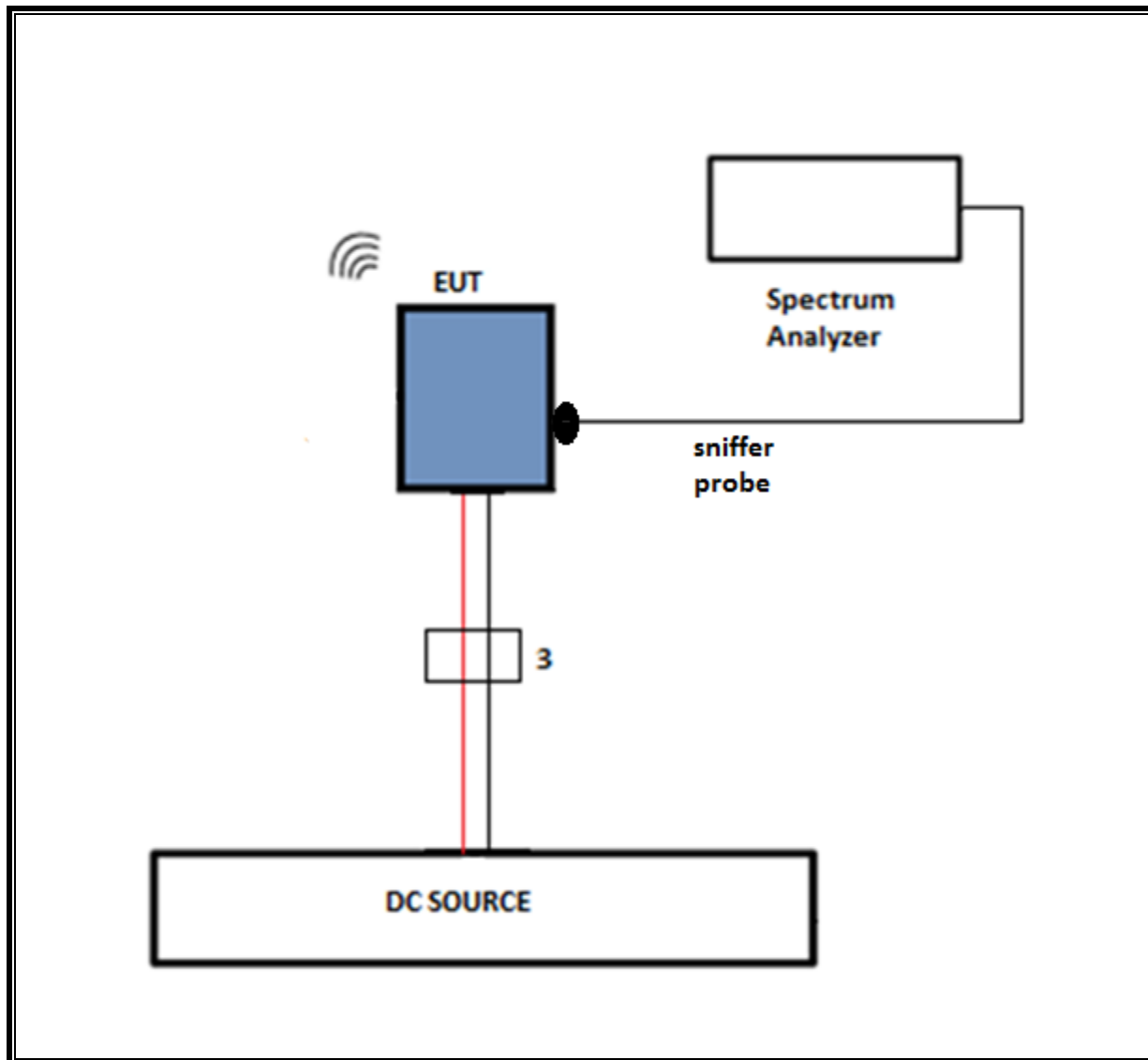
SETUP DIAGRAM RADIATED



SETUP DIAGRAM- CONDUCTED



SETUP DIAGRAM FREQUENCY STABILITY



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, Broadband Hybrid	Sunol Sciences	JB3	899	05/26/17
** Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	835	06/18/16
*** Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	835	06/18/17
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent	N9030A	906	02/03/17
Antenna, Loop, 30 MHz	ETS Lindgren	6502	757	05/31/17
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	754	09/21/16
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent	N9030A	340	11/16/16
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	

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

** Equipment was used before calibration due date.

*** Equipment was used after calibration.

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:	29435	Date:	7/25/16
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99% and 20dB BW

CE MODE

Modulation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
Type A	13.56	848	21.594	25.05
		424	21.642	25.51
		212	21.262	25.13
		106	21.771	25.06

Modulation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
Type B	13.56	848	21.538	25.67
		424	21.160	24.55
		212	21.292	25.17
		106	21.765	25.85

Modulation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
Type F	13.56	424	21.734	25.41
		212	21.788	25.14

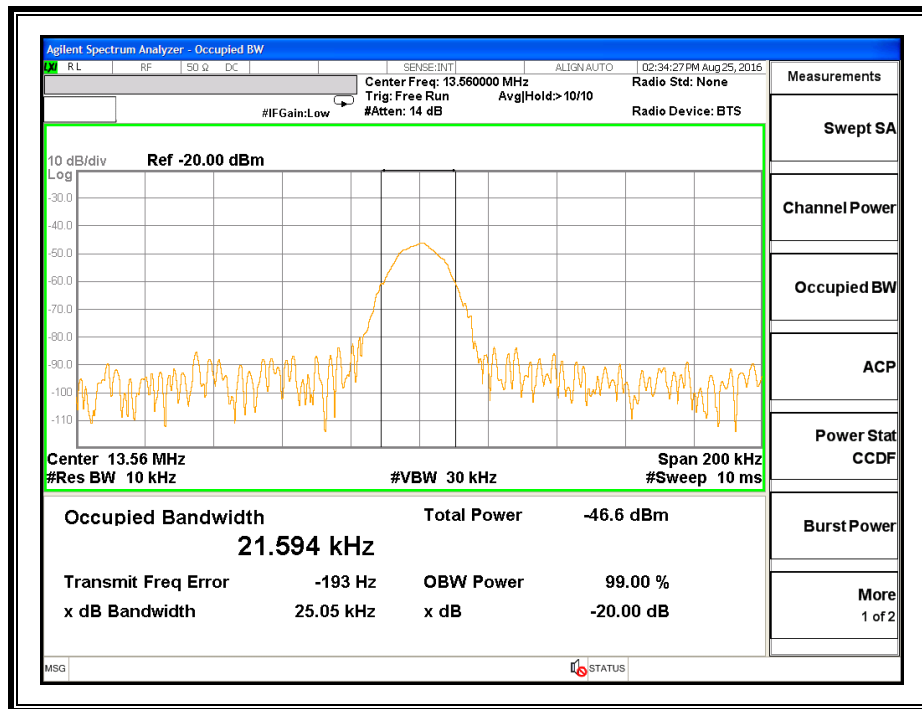
READER Mode

Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
Type A	13.56	848	21.537	24.96
		424	21.787	24.99
		212	22.265	25.74
		106	22.625	26.08

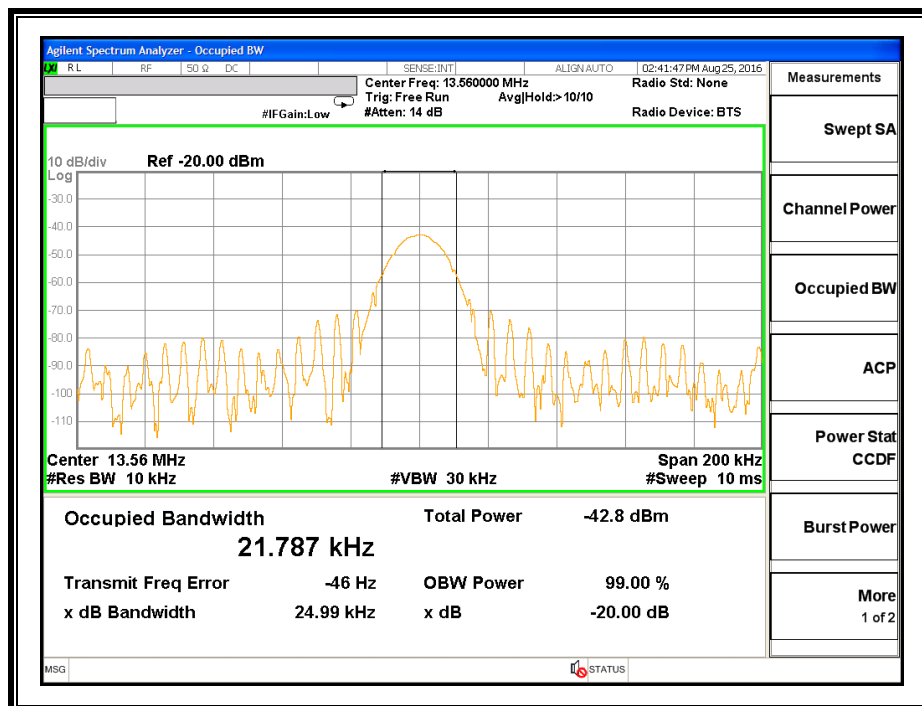
Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
Type B	13.56	848	22.051	24.62
		424	22.044	25.41
		212	22.907	25.07
		106	22.819	25.18

Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
Type F	13.56	424	21.169	24.91
		212	21.621	25.22

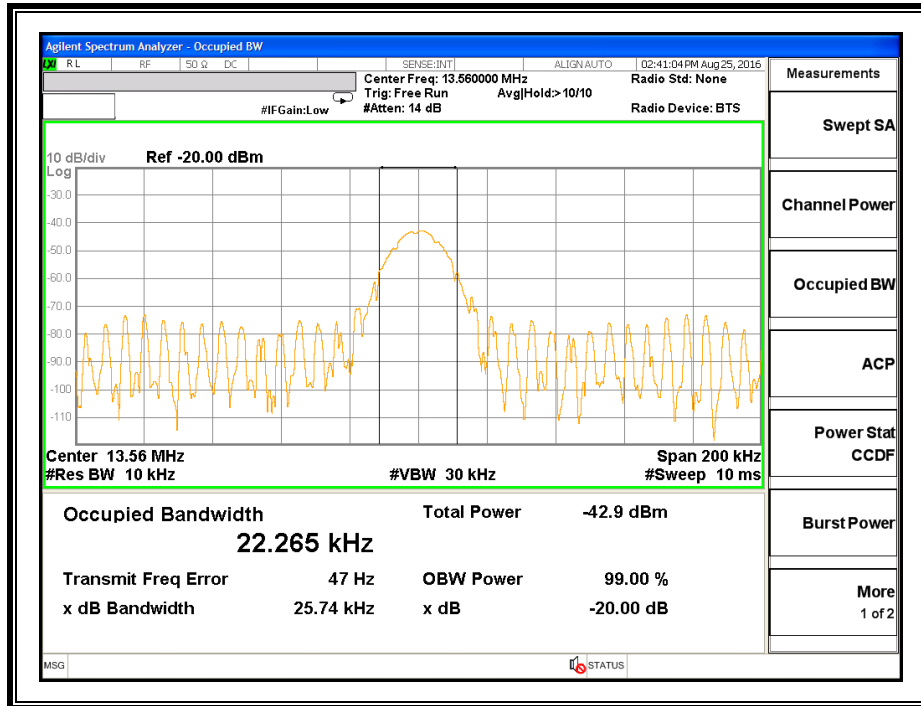
CE MODE TYPE A 848Kbps



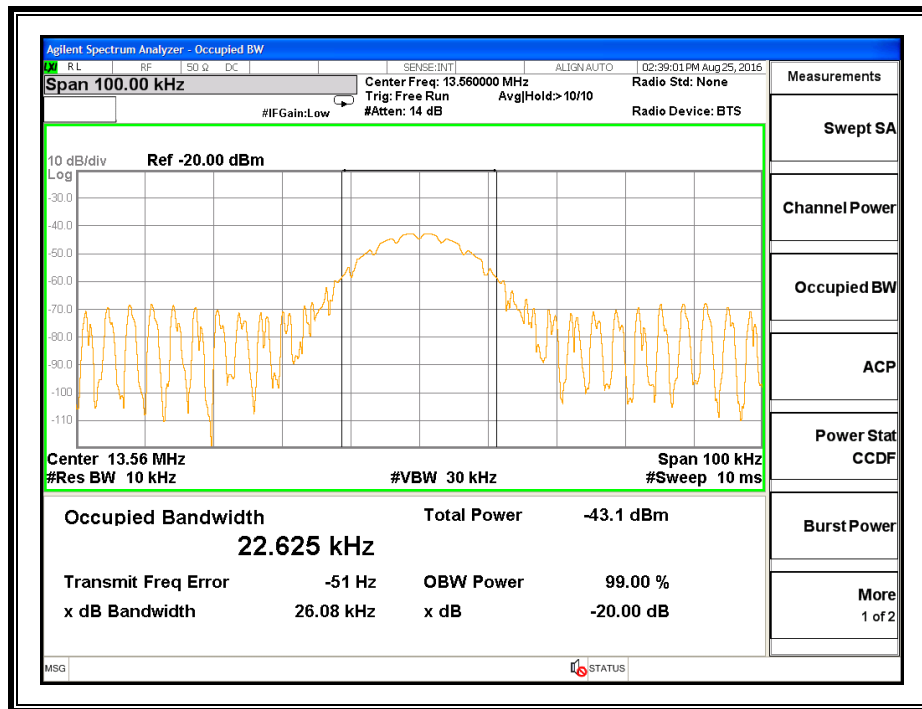
424Kbps



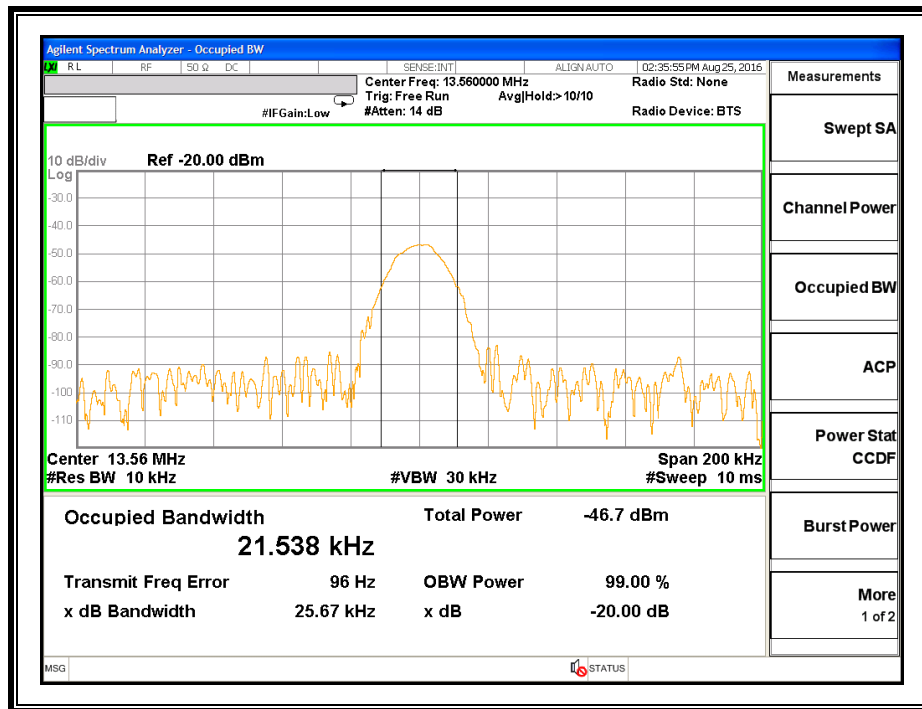
212Kbps



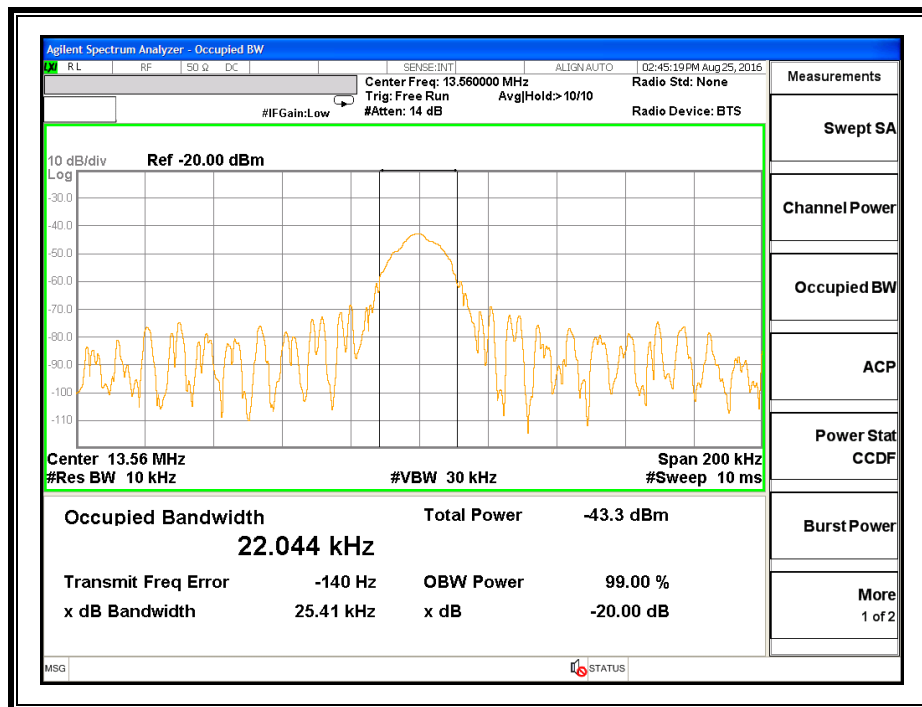
106Kbps



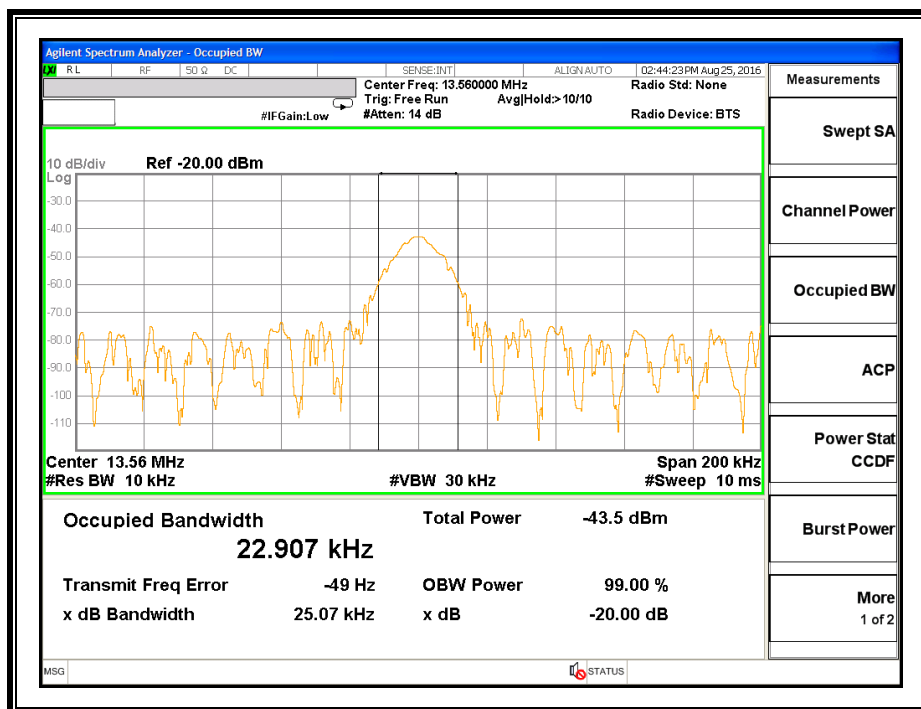
TYPE B 848Kbps



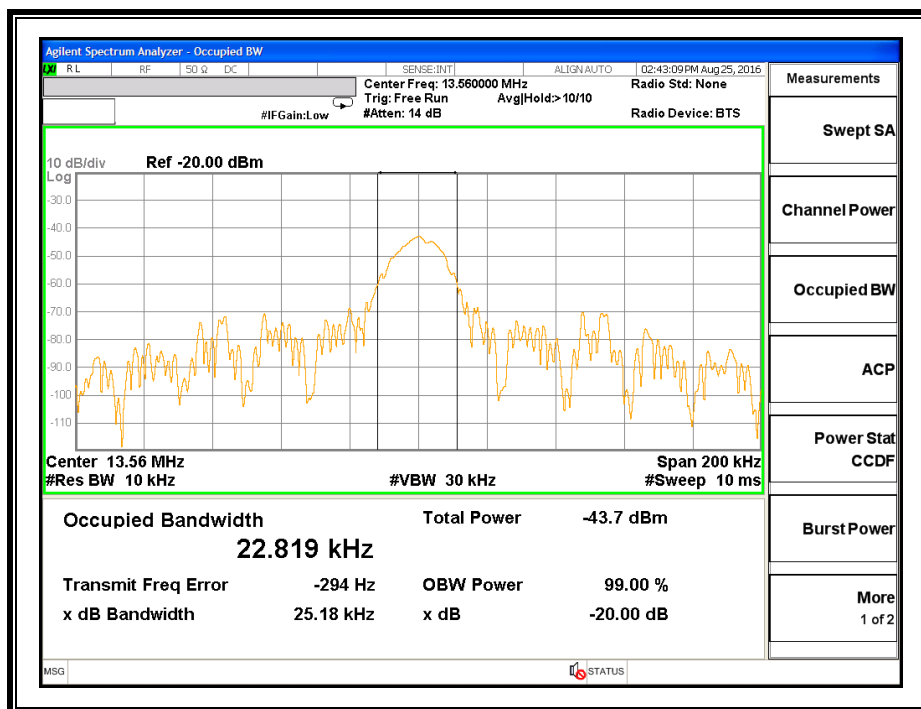
424Kbps



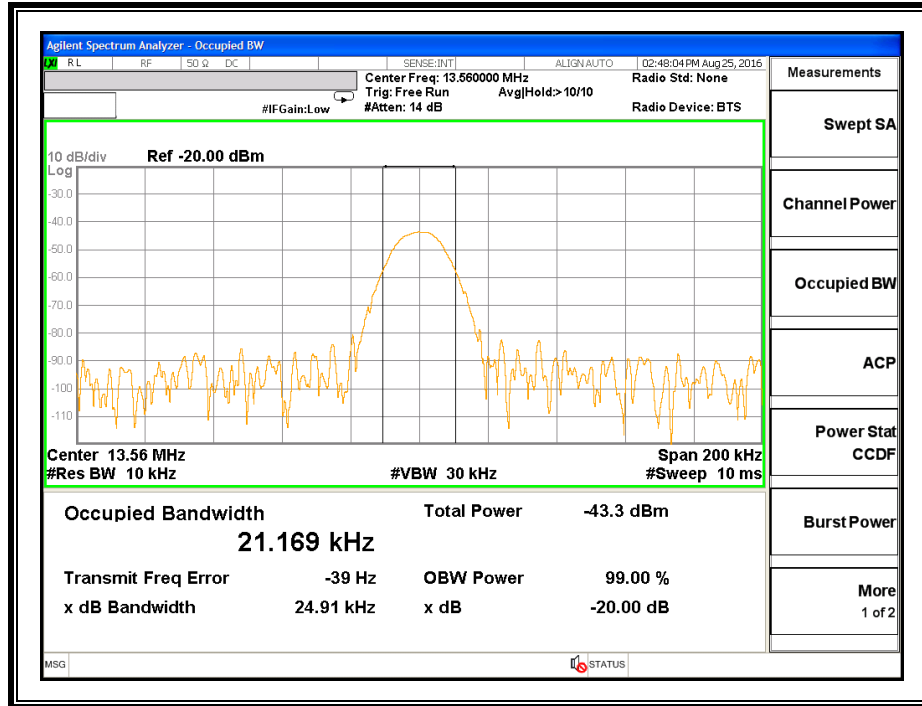
212Kbps



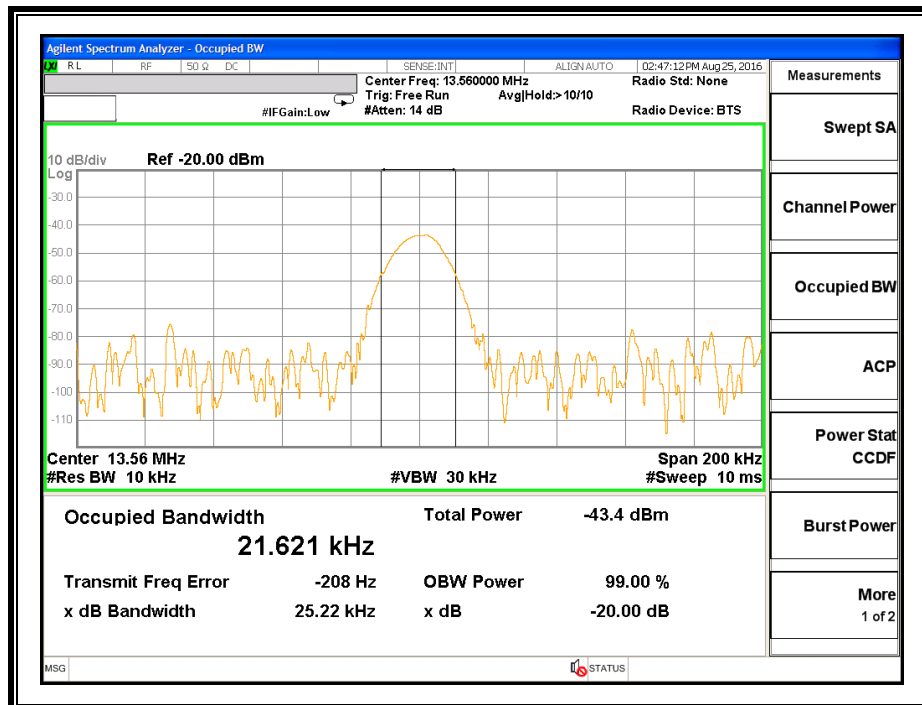
106Kbps



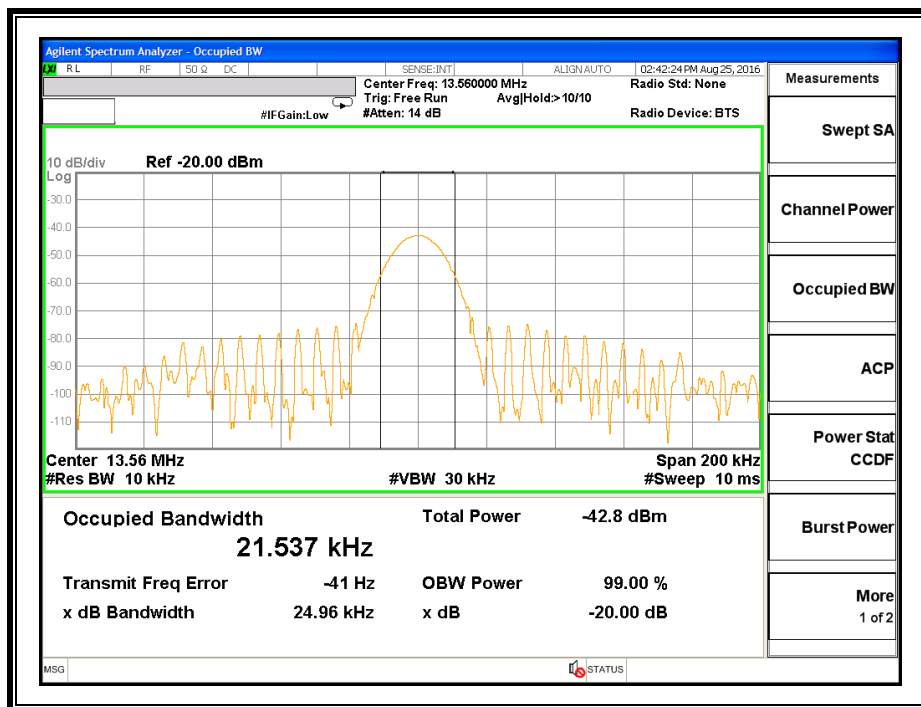
TYPE F 424Kbps



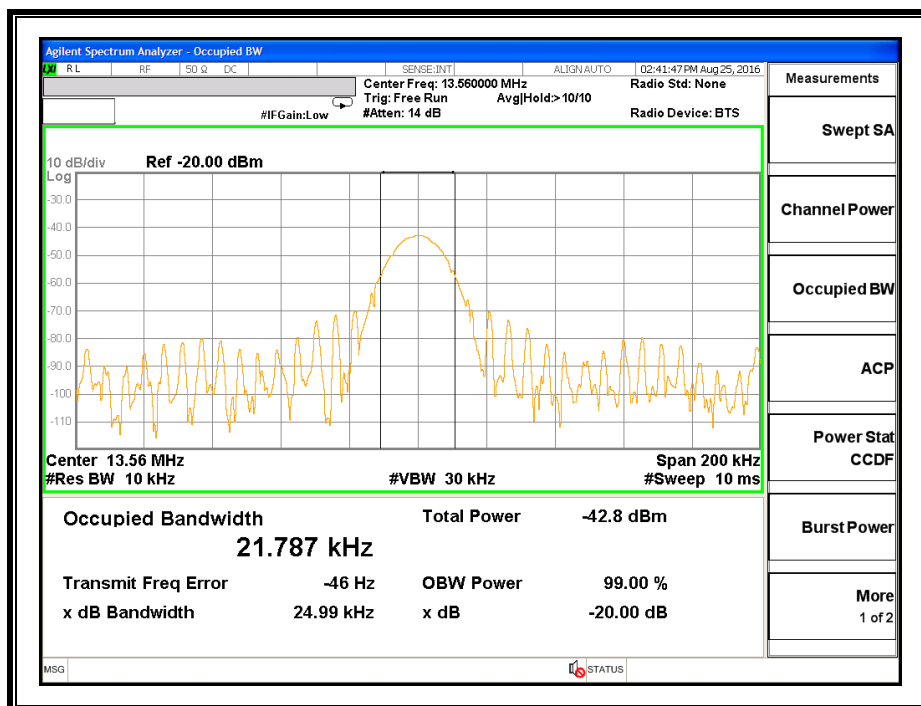
212Kbps



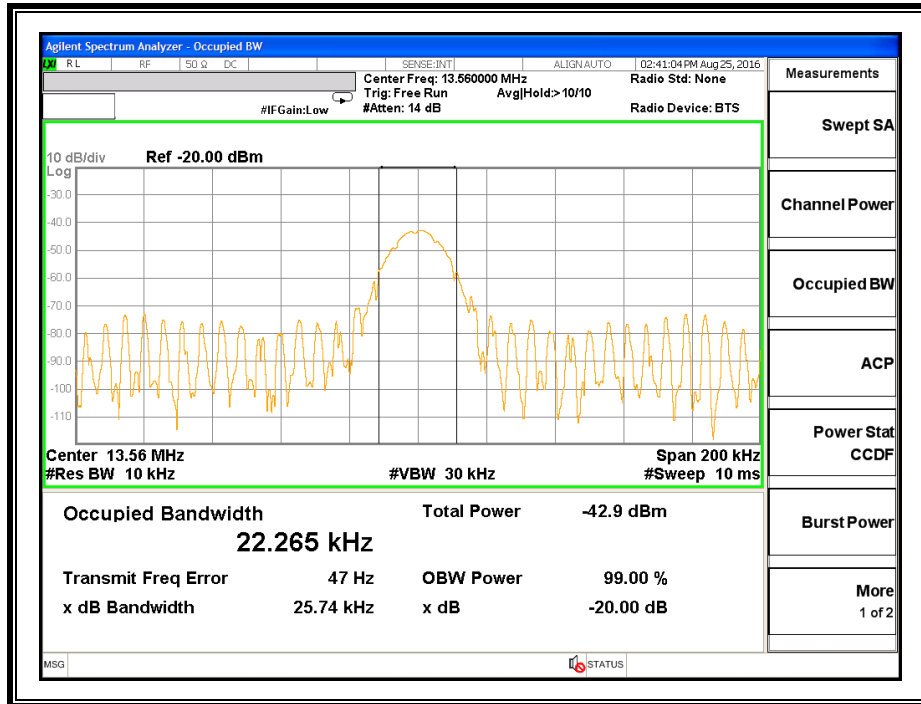
READER MODE Type A 848Kbps



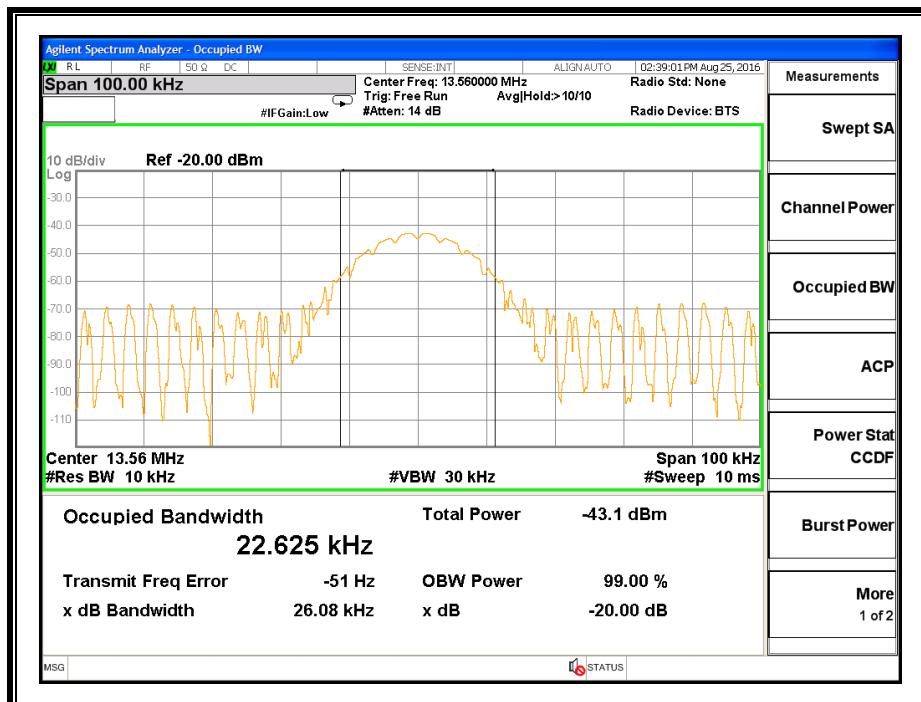
424Kbps



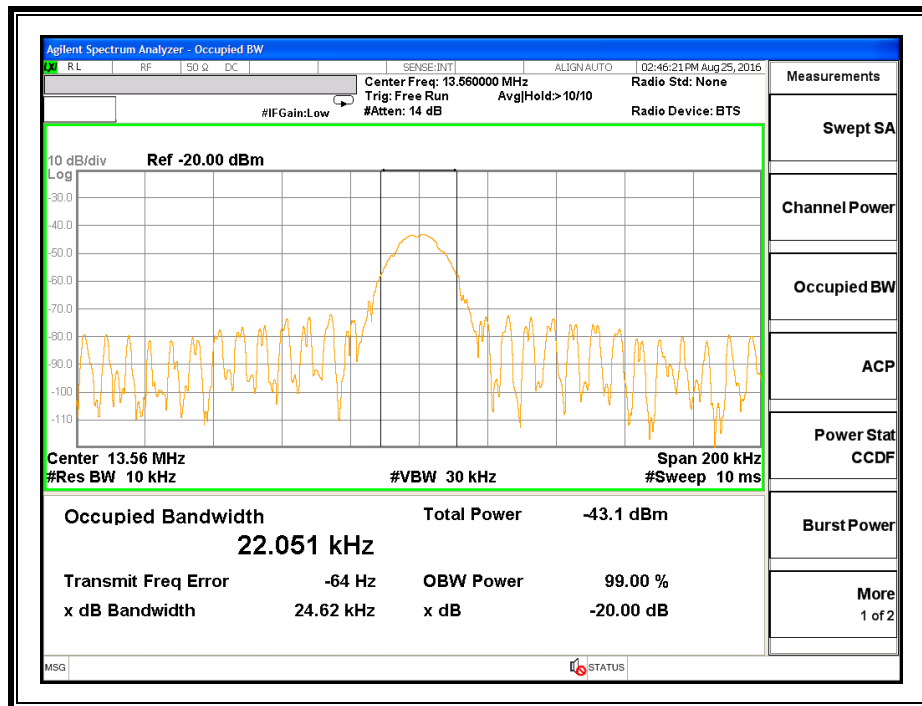
212Kbps



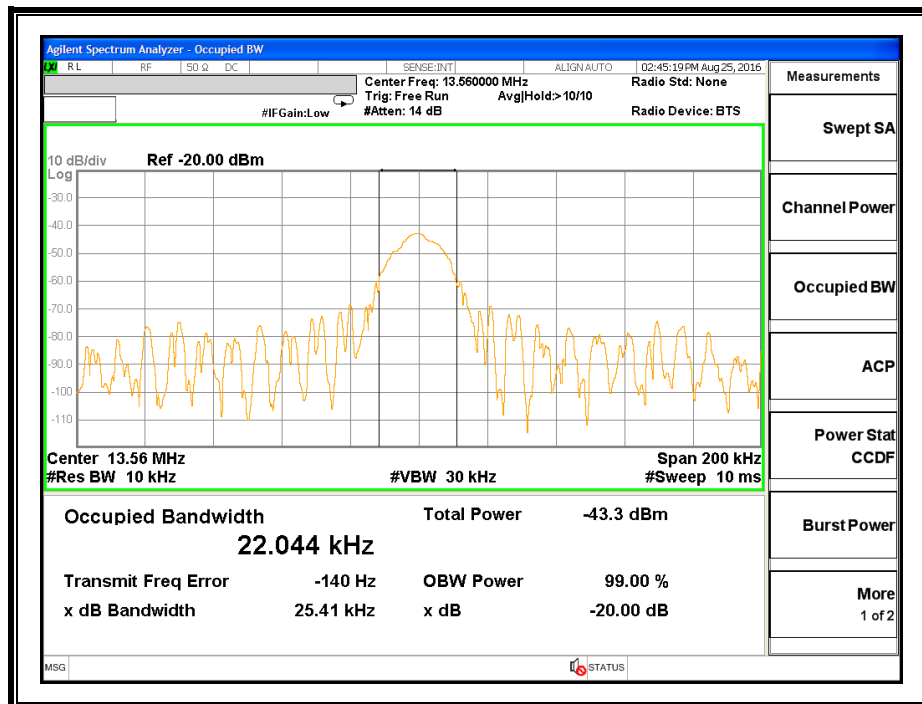
106Kbps



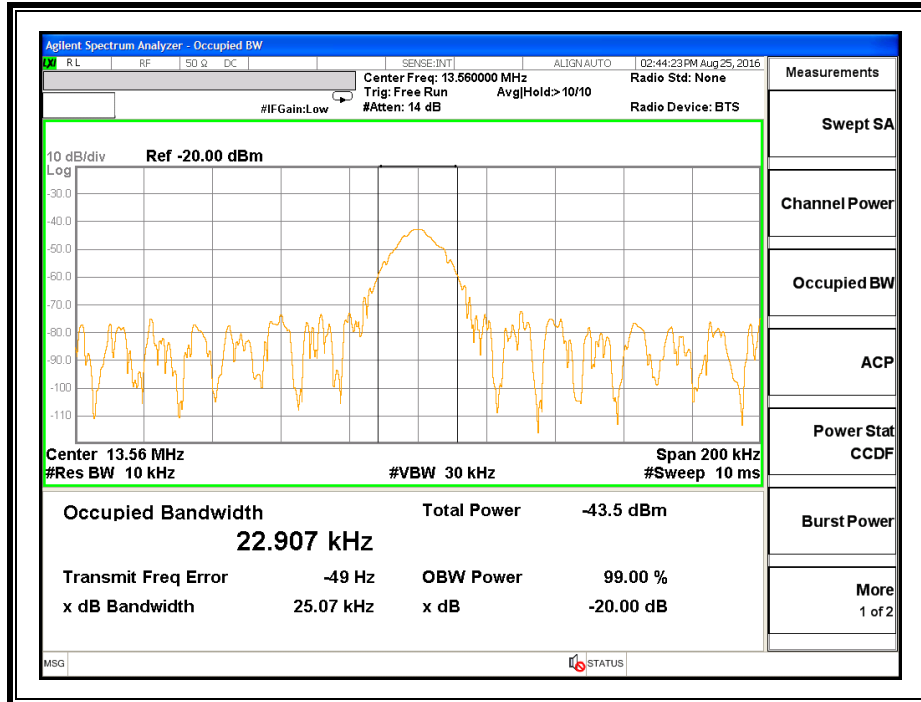
Type B 848Kbps



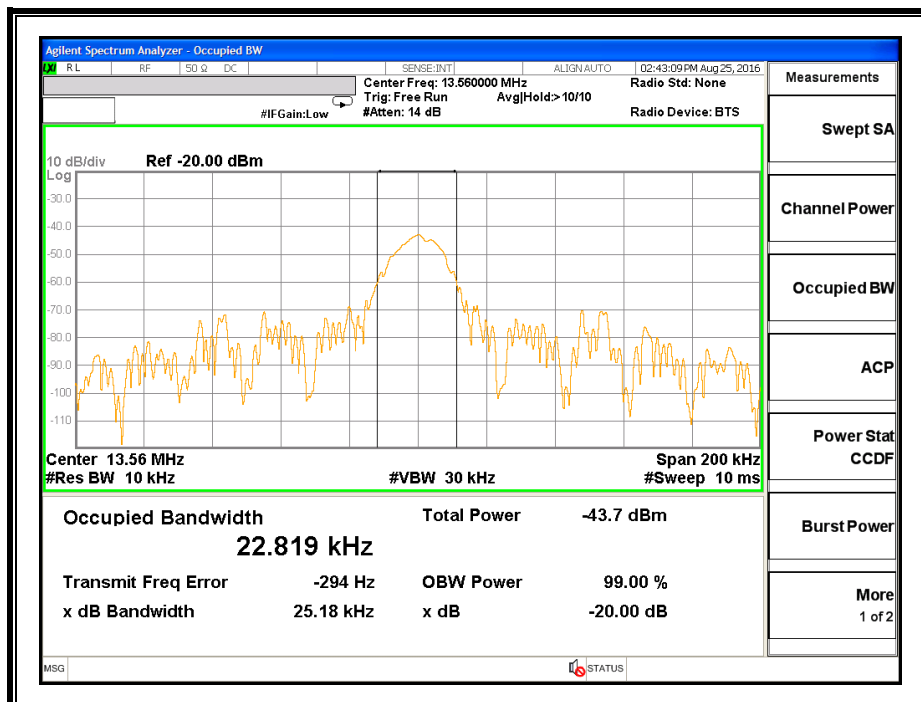
424Kbps



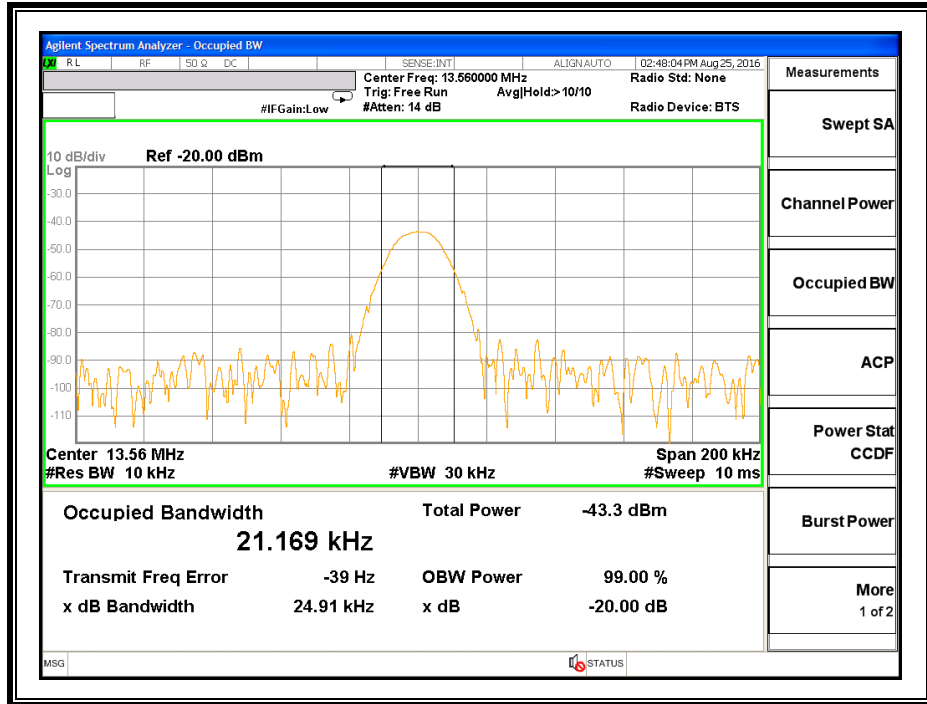
212Kbps



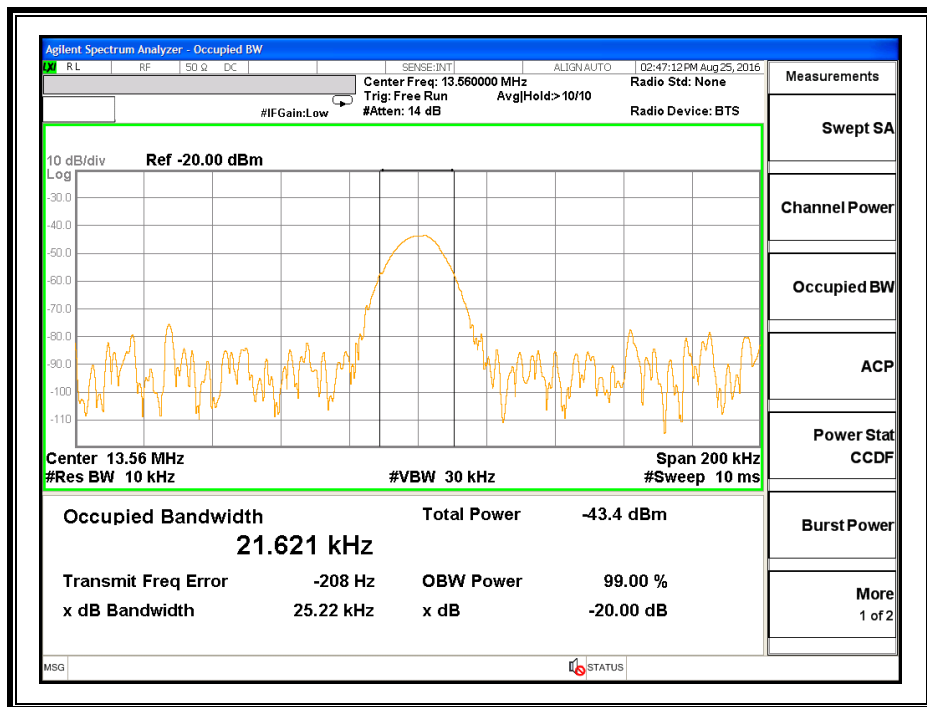
106Kbps



TYPE F, 424Kbps



212Kbps



8. RADIATED EMISSION TEST RESULTS

LIMITS AND PROCEDURE

LIMIT

§15.225

IC RSS-210, A2.6

IC RSS-GEN, Section 8.9 (Transmitter)

IC RSS-GEN, Section 7.1.2 (Receiver)

(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 field 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

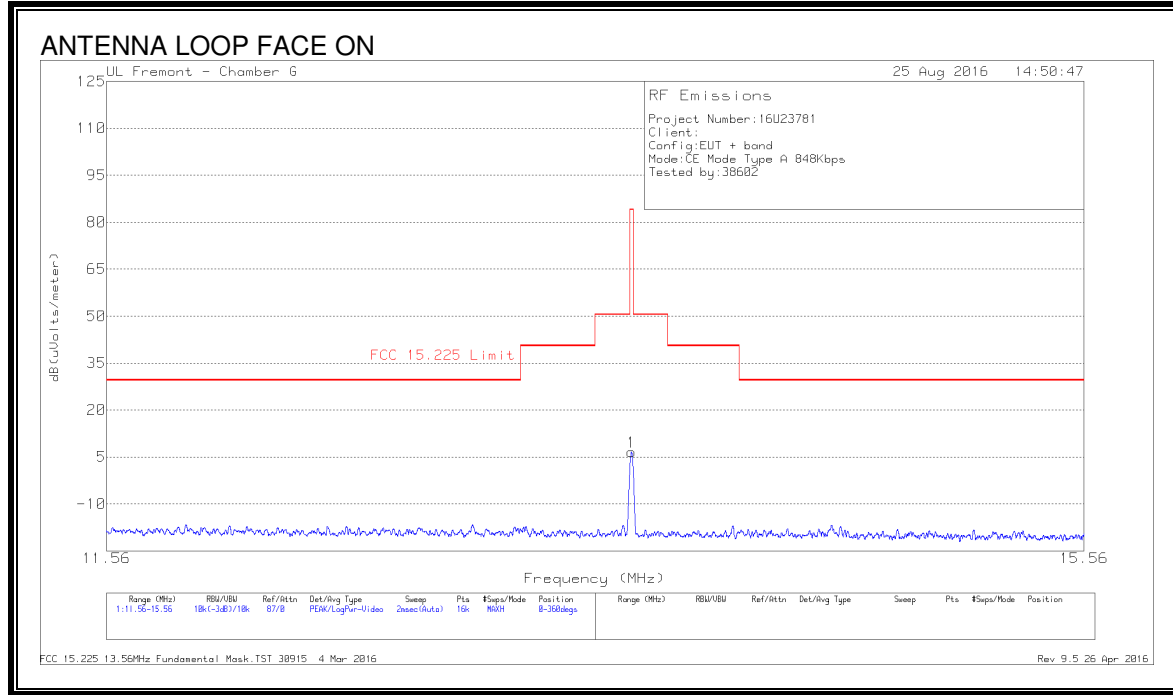
The EUT is an intentional radiator that incorporates a digital device, the highest fundamental frequency generated or used in the device is 13.56 MHz; therefore, the frequency range was investigated from 0.15 MHz to the 10th harmonic of the highest fundamental frequency, or 1000 MHz, whichever is greater.

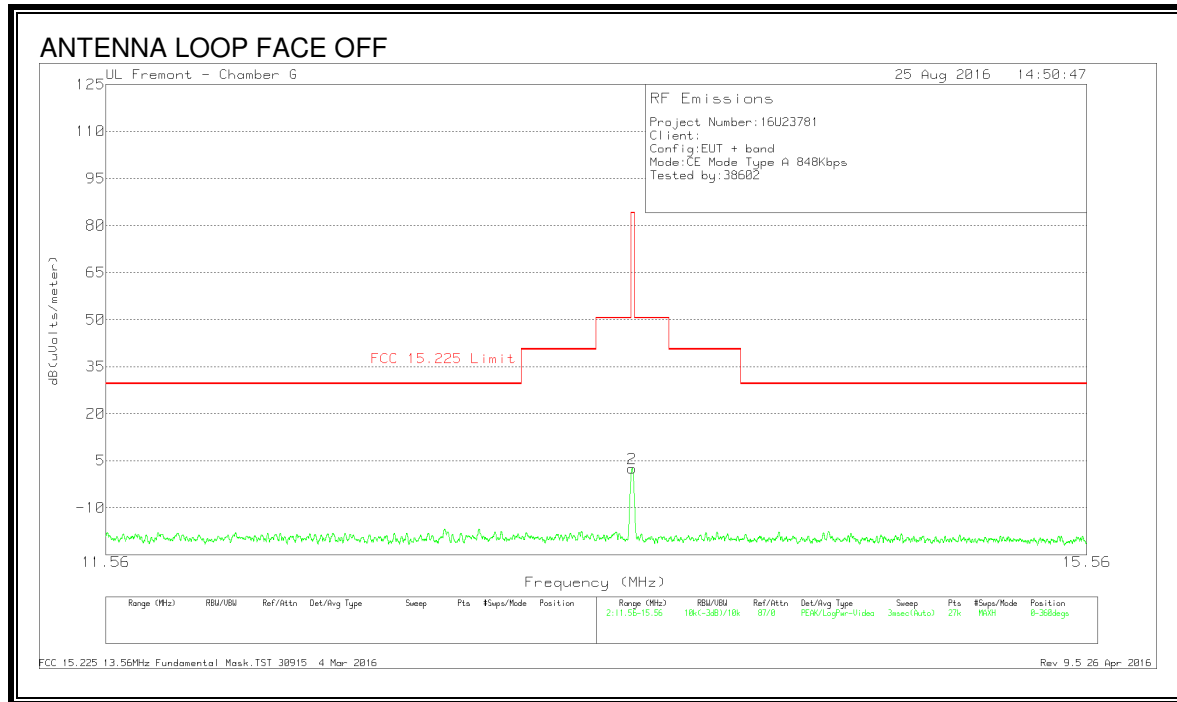
RESULTS

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

8.1.1. CE MODE

TYPE A 848Kbps FUNDAMENTAL



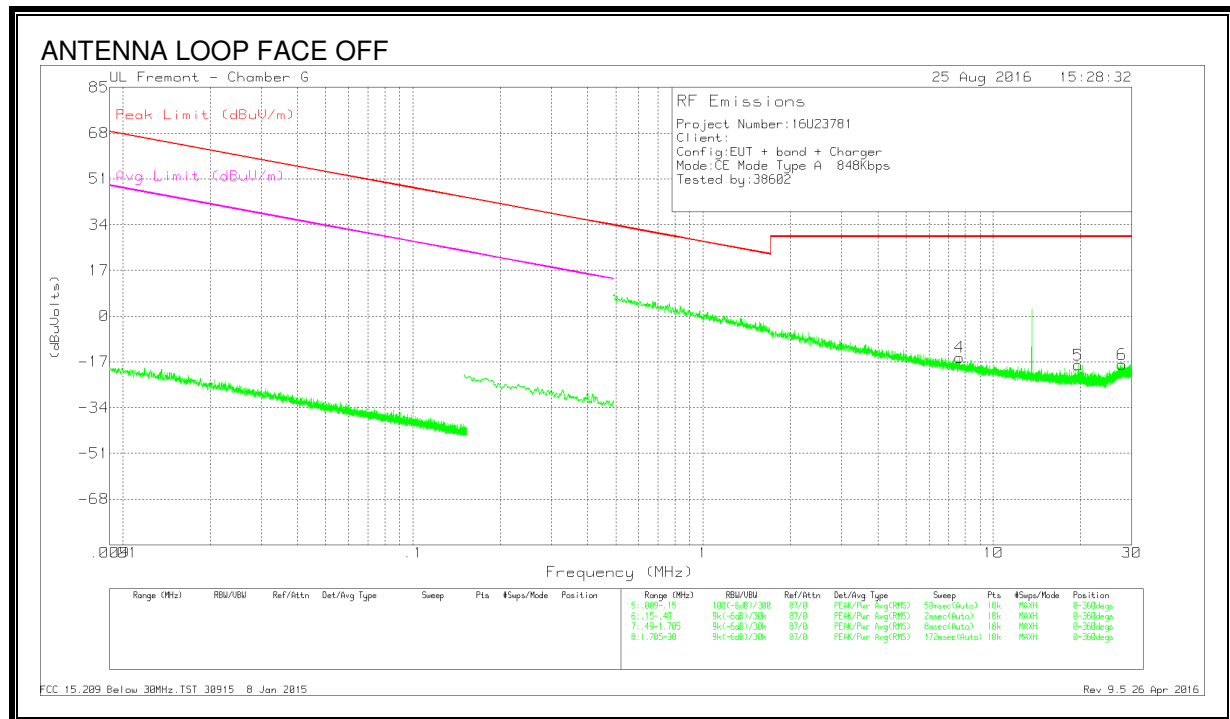
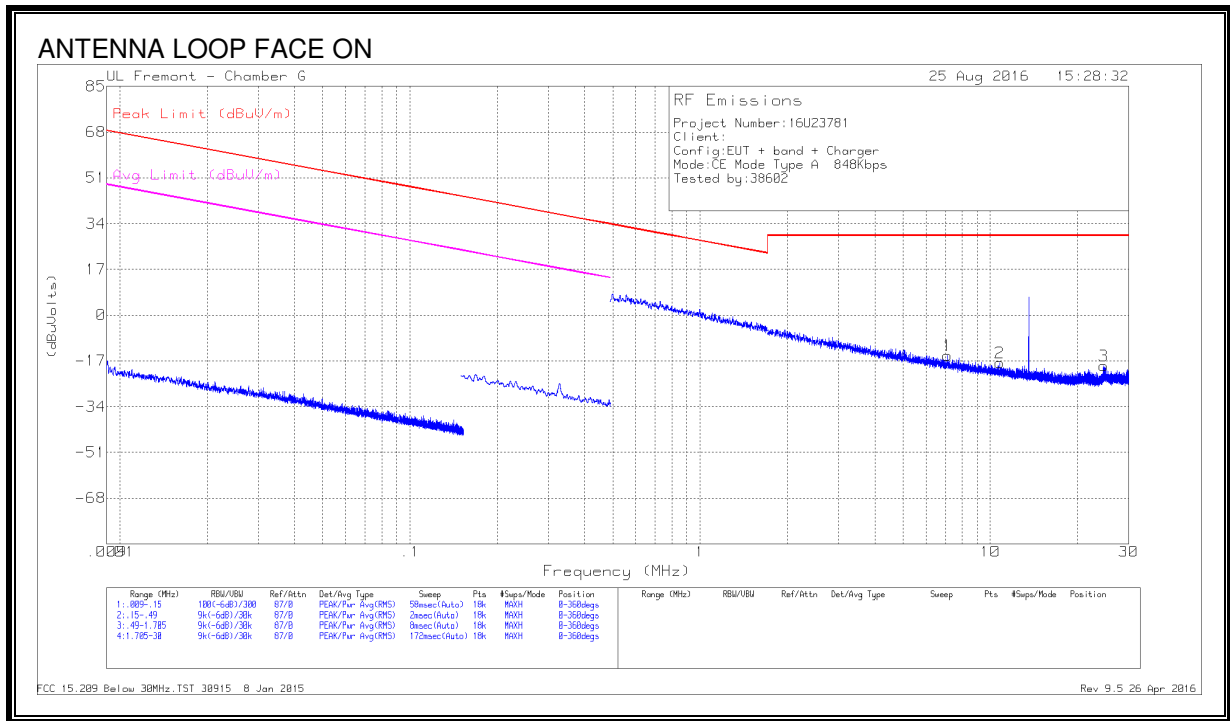


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
2	13.55822	31.32	Pk	10.6	.6	-40	2.52	84	-81.48	0-360
1	13.55988	35.4	Pk	10.6	.6	-40	6.6	84	-77.4	0-360

Pk - Peak detector

SPURIOUS EMISSION

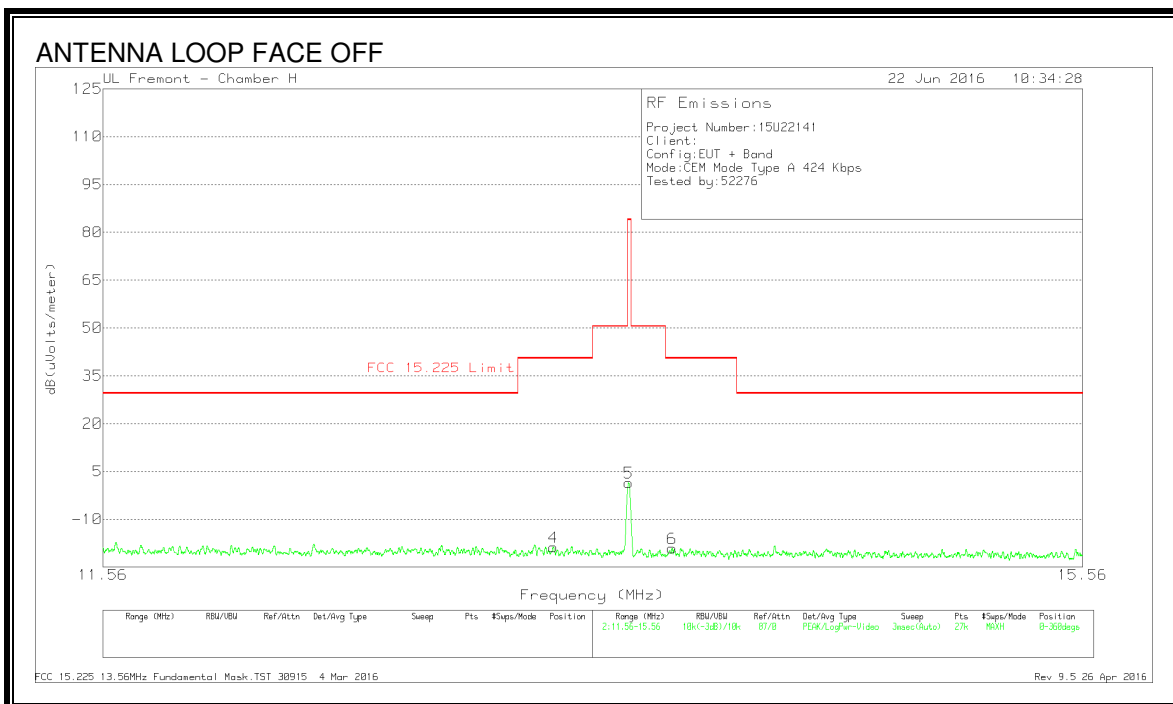
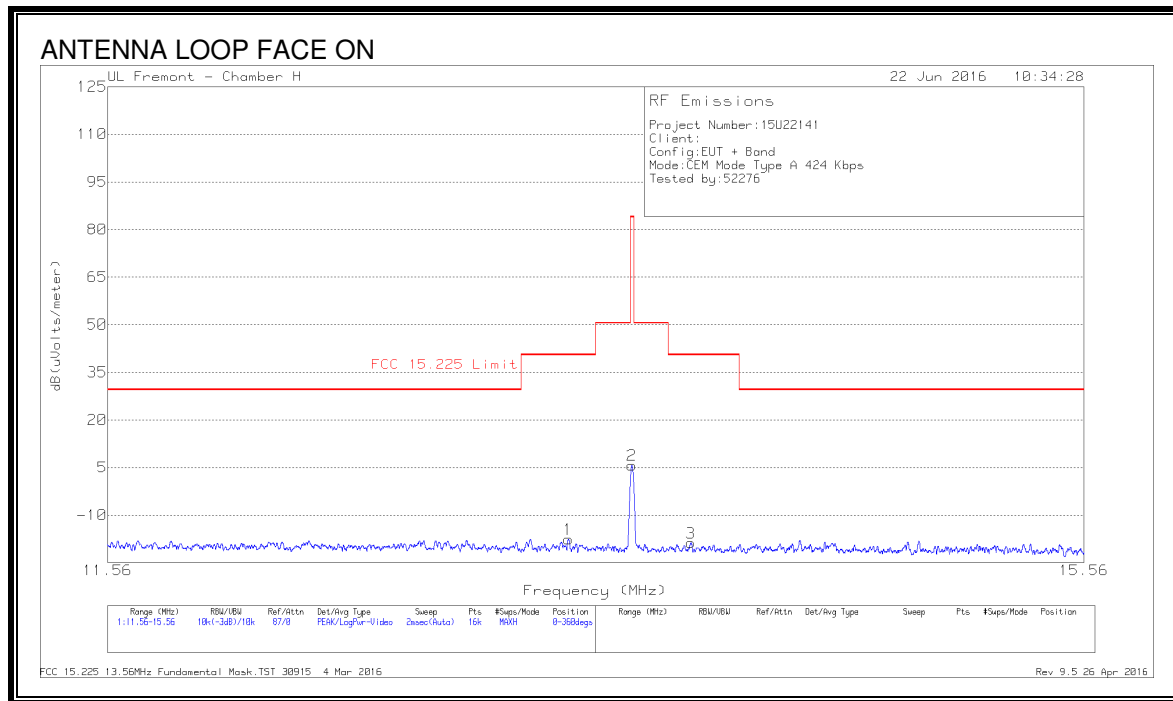


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	7.11897	13.18	Pk	11.3	.5	-40	-15.02	29.54	-44.56	-	-	0-360
4	7.63616	12.95	Pk	11.2	.5	-40	-15.35	29.54	-44.89	-	-	0-360
2	10.79116	10.86	Pk	10.9	.6	-40	-17.64	29.54	-47.18	-	-	0-360
5	19.59436	11.19	Pk	9.9	.7	-40	-18.21	29.54	-47.75	-	-	0-360
3	24.59018	11.22	Pk	9.2	.8	-40	-18.78	29.54	-48.32	-	-	0-360
6	27.75933	12.4	Pk	8.7	.9	-40	-18	29.54	-47.54	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL

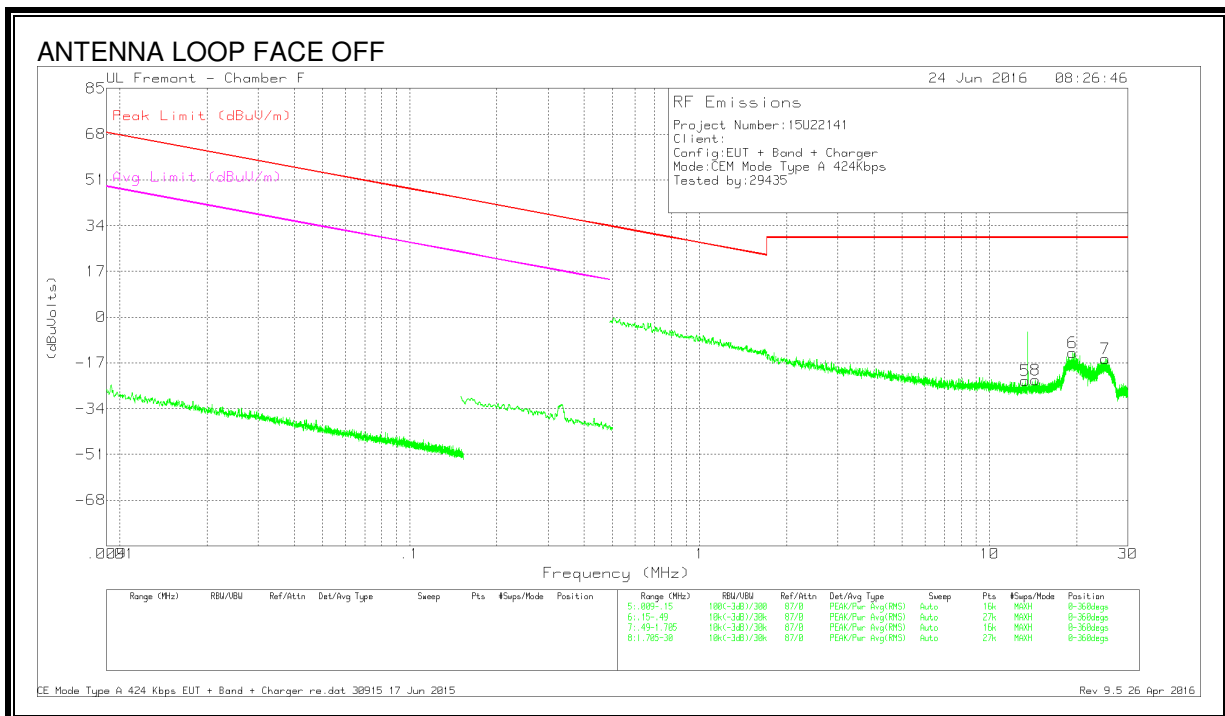
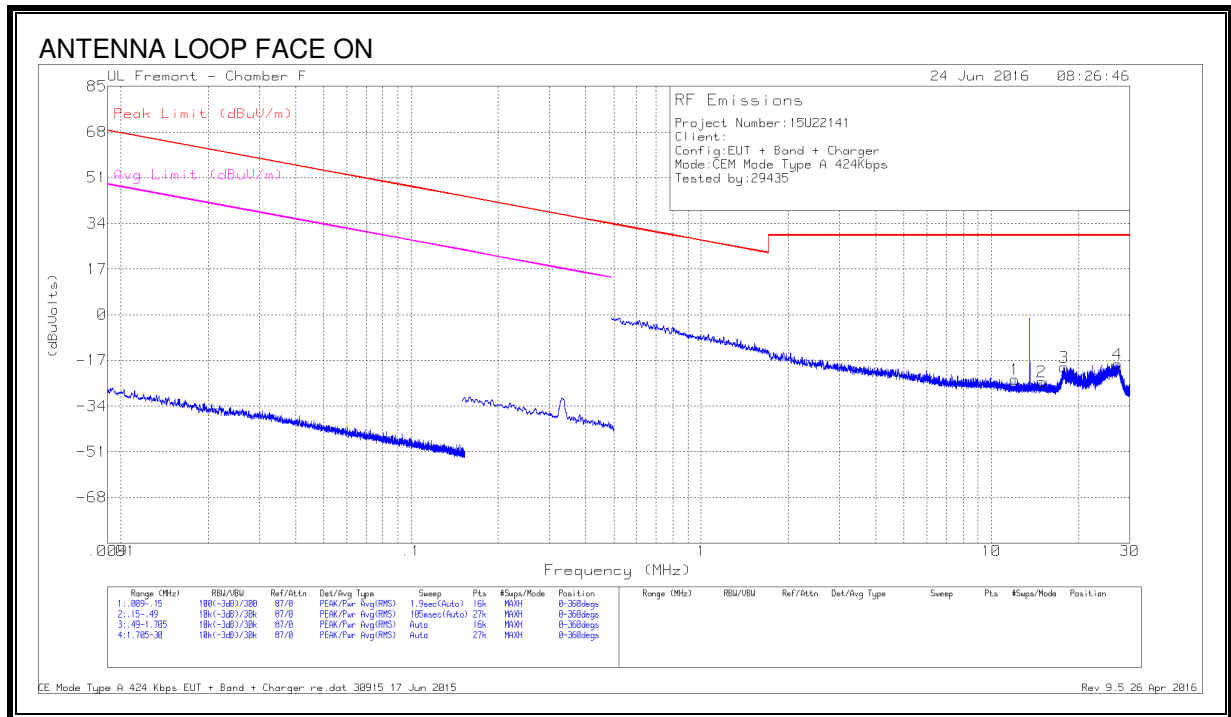


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degr)
4	13.25216	10	Pk	10.7	.6	-40	-18.7	40.51	-59.21	0-360
1	13.30063	11.13	Pk	10.7	.6	-40	-17.57	40.51	-58.08	0-360
5	13.55822	30.27	Pk	10.6	.6	-40	1.47	84	-82.53	0-360
2	13.55988	34.55	Pk	10.6	.6	-40	5.75	84	-78.25	0-360
6	13.73819	9.72	Pk	10.6	.6	-40	-19.08	40.51	-59.59	0-360
3	13.80613	10.19	Pk	10.6	.5	-40	-18.71	40.51	-59.22	0-360

Pk - Peak detector

SPURIOUS EMISSION

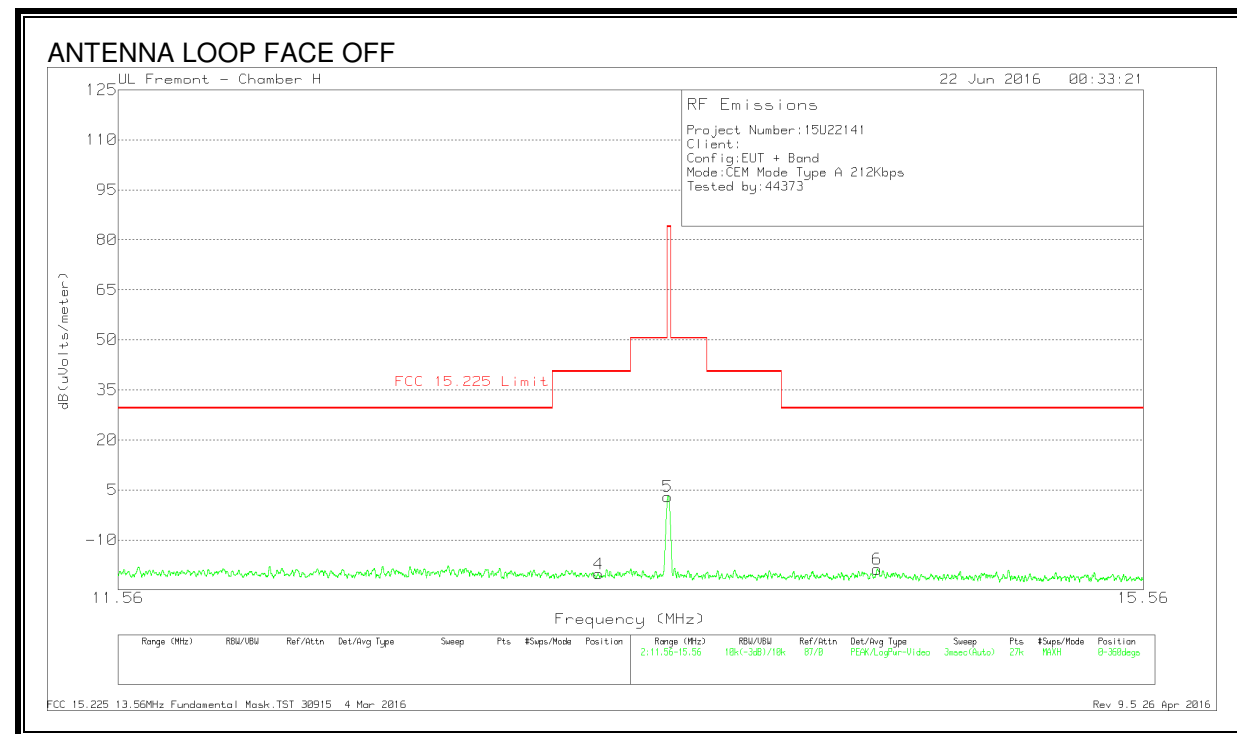
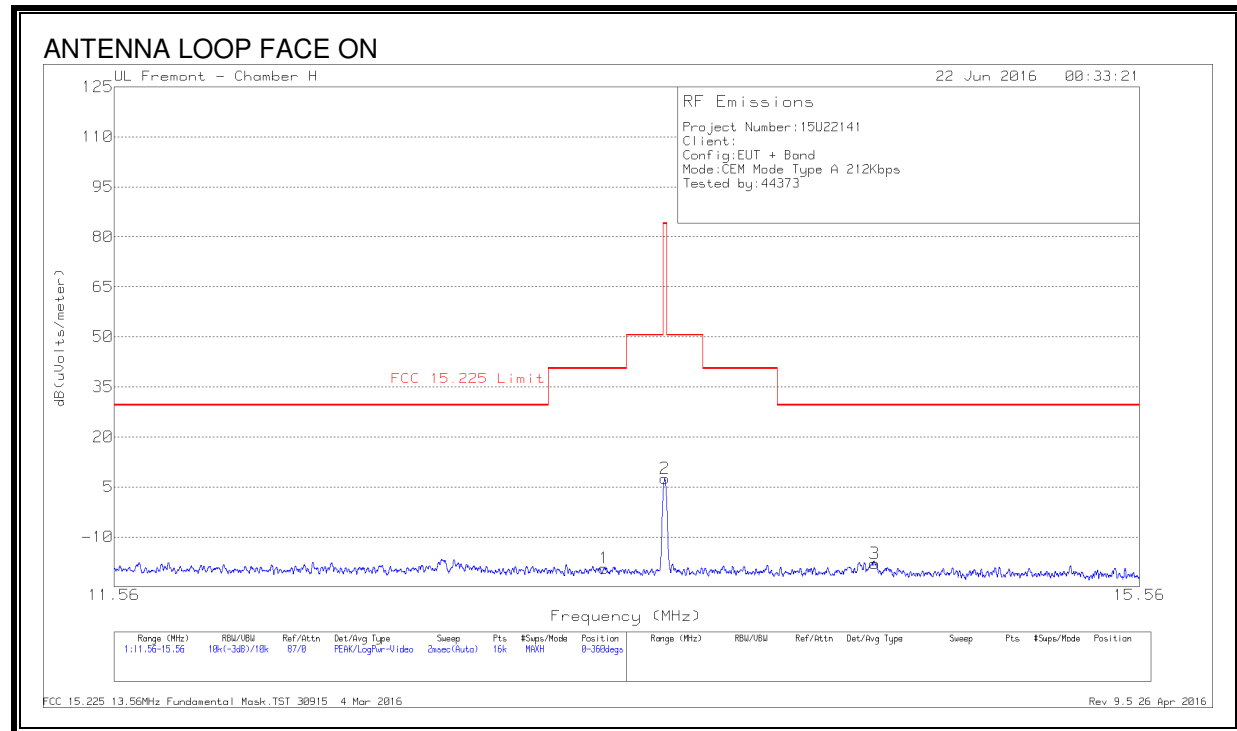


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	12.04771	4.7	Pk	10.7	.5	-40	-24.1	29.54	-53.64	-	-	0-360
2	14.89722	3.91	Pk	10.6	.6	-40	-24.89	29.54	-54.43	-	-	0-360
3	17.82638	9.66	Pk	10.3	.6	-40	-19.44	29.54	-48.98	-	-	0-360
4	27.23218	12.15	Pk	8.7	.8	-40	-18.35	29.54	-47.89	-	-	0-360
5	13.26339	5.11	Pk	10.7	.6	-40	-23.59	29.54	-53.13	-	-	0-360
6	19.38109	15.97	Pk	10.2	.7	-40	-13.13	29.54	-42.67	-	-	0-360
7	25.04501	14.68	Pk	9.2	.7	-40	-15.42	29.54	-44.96	-	-	0-360
8	14.40571	5.45	Pk	10.6	.5	-40	-23.45	29.54	-52.99	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

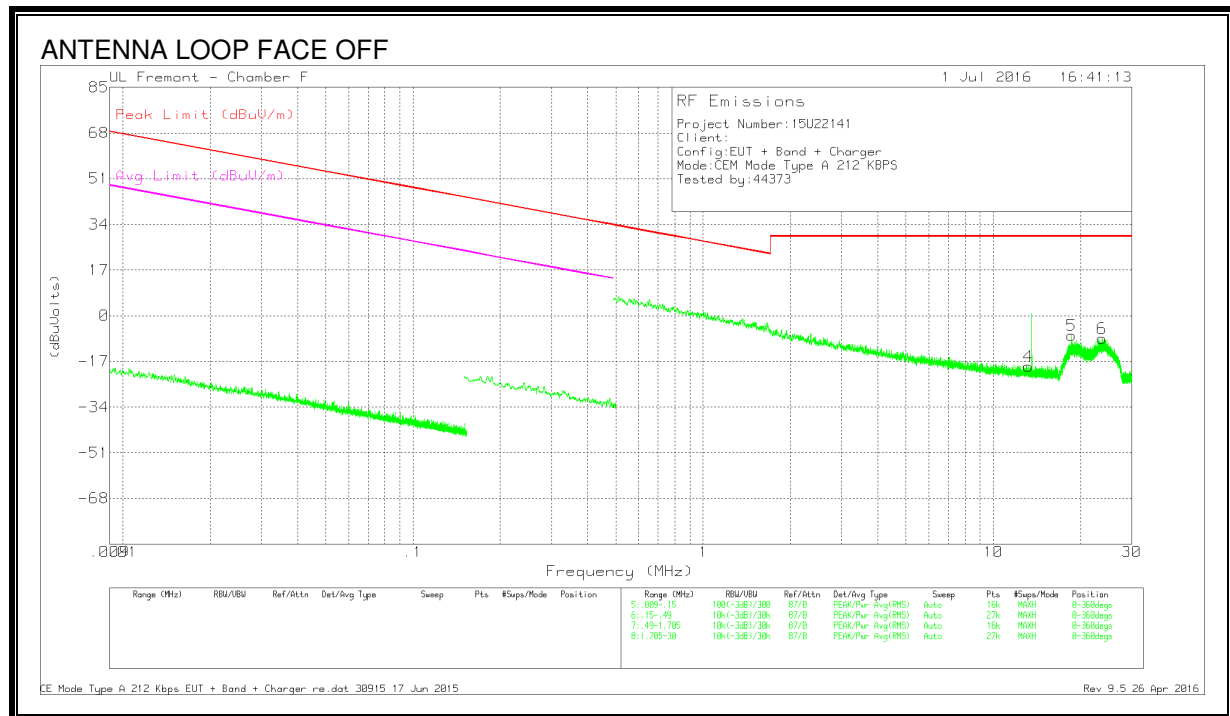
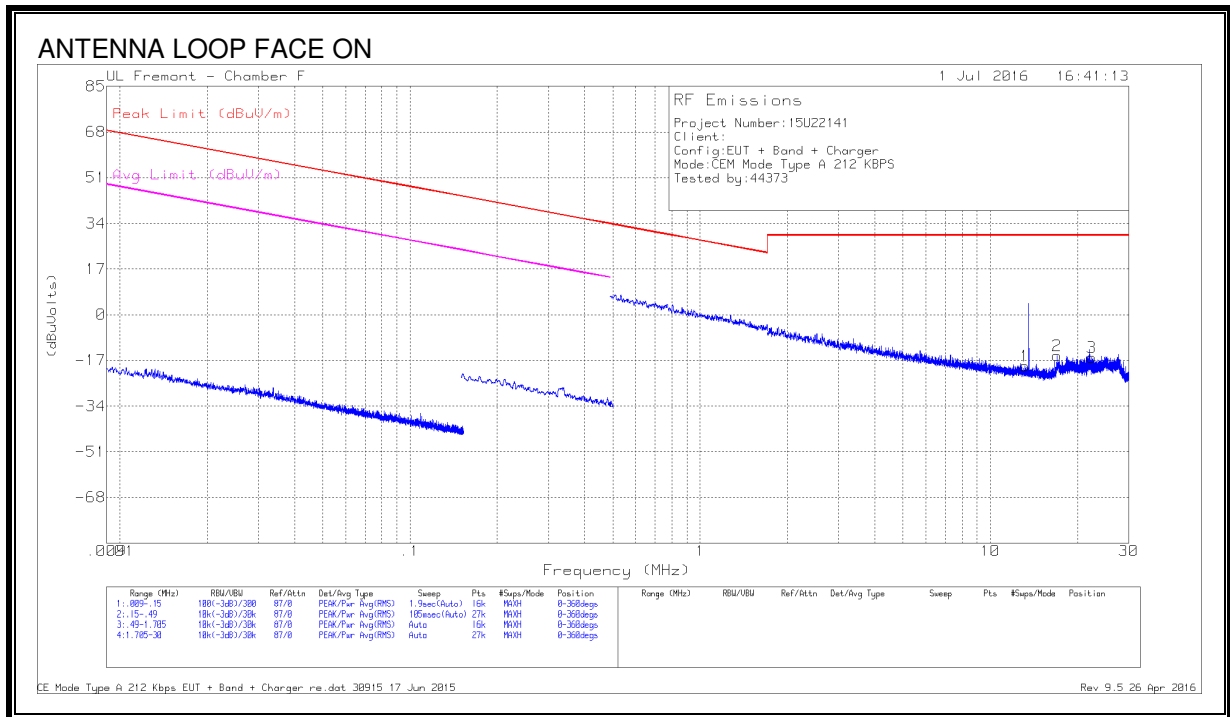


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
4	13.28701	8.5	Pk	10.7	.6	-40	-20.2	40.51	-60.71	0-360
1	13.32425	9.35	Pk	10.7	.6	-40	-19.35	40.51	-59.86	0-360
5	13.55682	31.8	Pk	10.6	.6	-40	3	84	-81	0-360
2	13.56	36.34	Pk	10.6	.6	-40	7.54	84	-76.46	0-360
6	14.40493	10.12	Pk	10.6	.5	-40	-18.78	29.54	-48.32	0-360
3	14.41075	10.96	Pk	10.6	.5	-40	-17.94	29.54	-47.48	0-360

Pk - Peak detector

SPURIOUS EMISSION

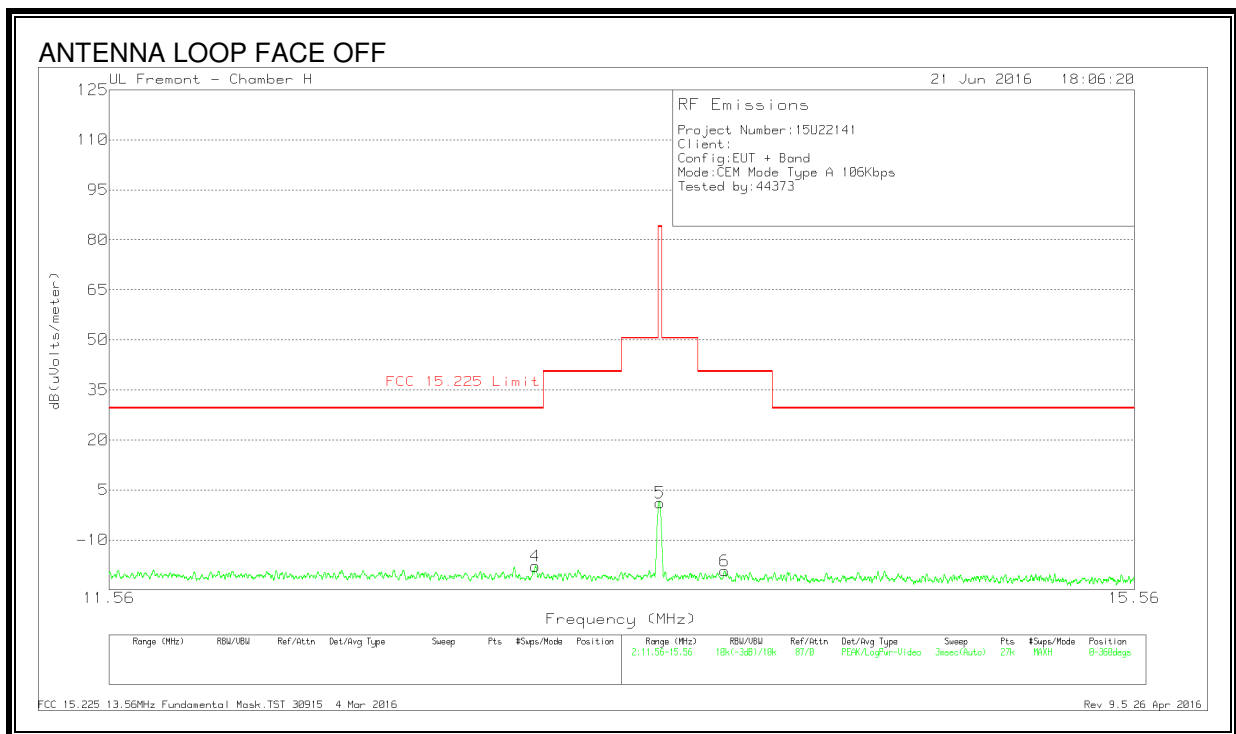
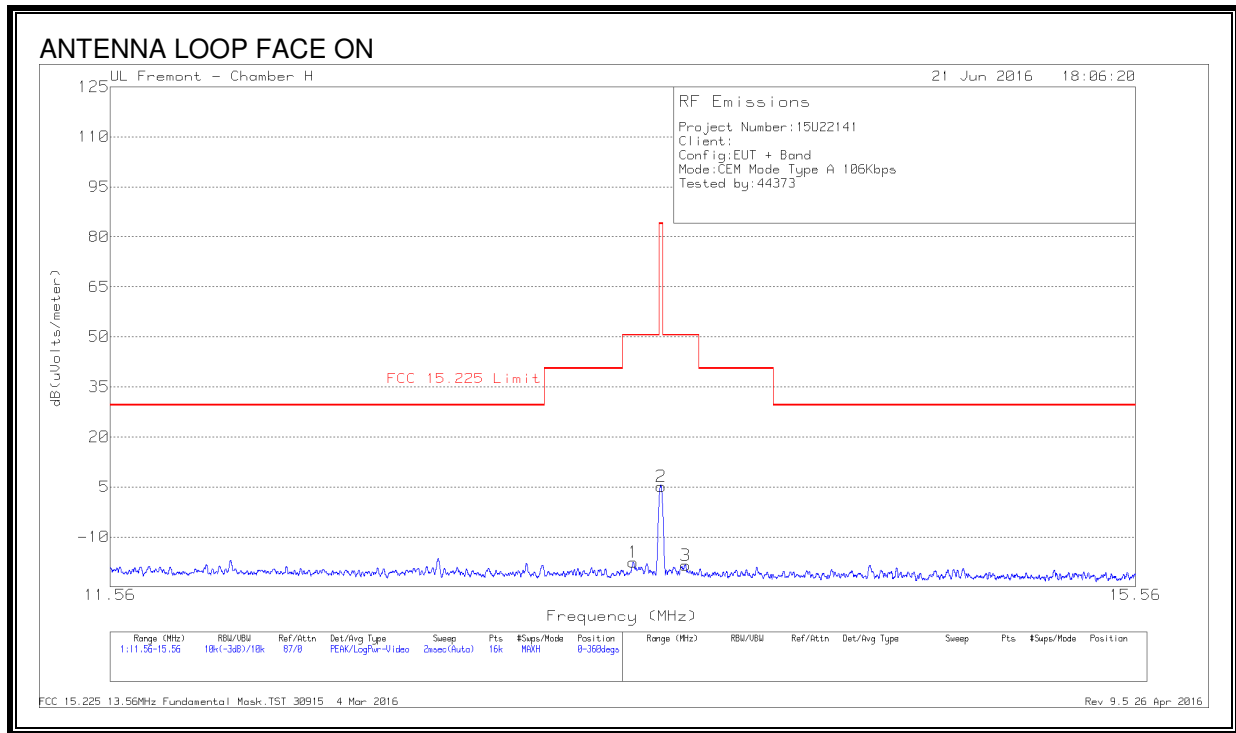


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	13.1392	9.67	Pk	10.7	.6	-40	-19.03	29.54	-48.57	-	-	0-360
2	16.97698	13.83	Pk	10.4	.6	-40	-15.17	29.54	-44.71	-	-	0-360
3	22.3899	13.68	Pk	9.7	.7	-40	-15.92	29.54	-45.46	-	-	0-360
4	13.1937	9.93	Pk	10.7	.6	-40	-18.77	29.54	-48.31	-	-	0-360
5	18.61134	21.95	Pk	10.2	.6	-40	-7.25	29.54	-36.79	-	-	0-360
6	23.69833	21.47	Pk	9.4	.7	-40	-8.43	29.54	-37.97	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

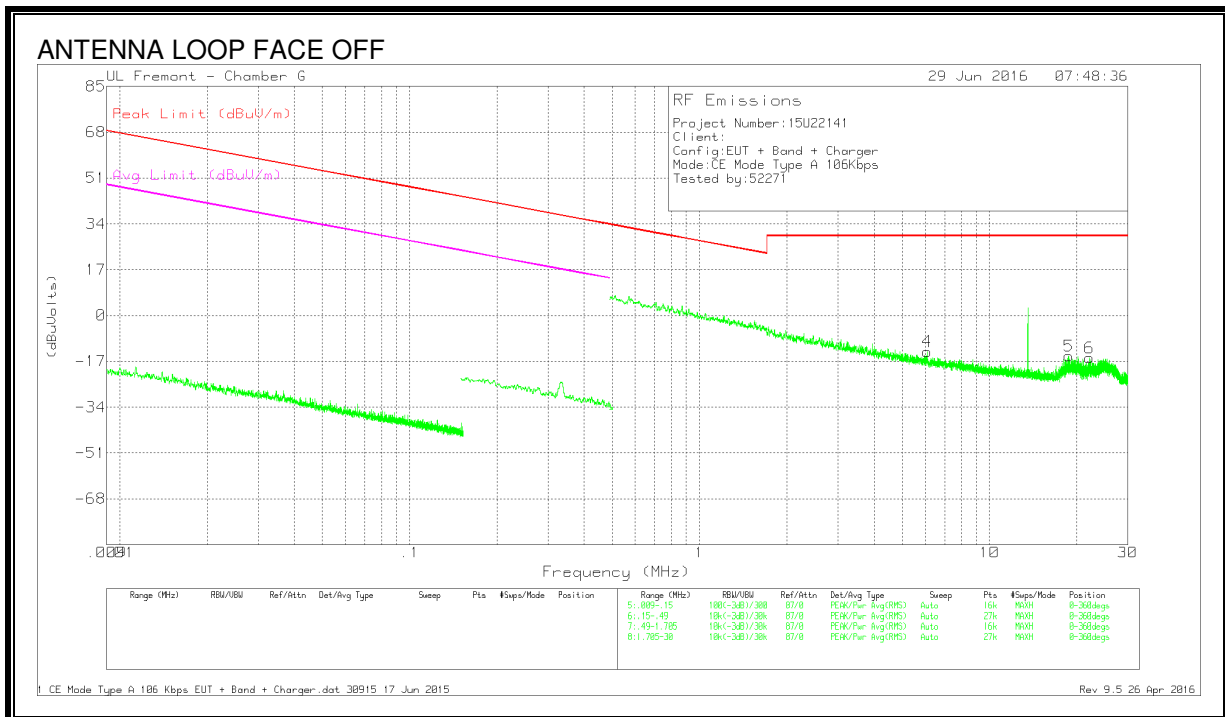
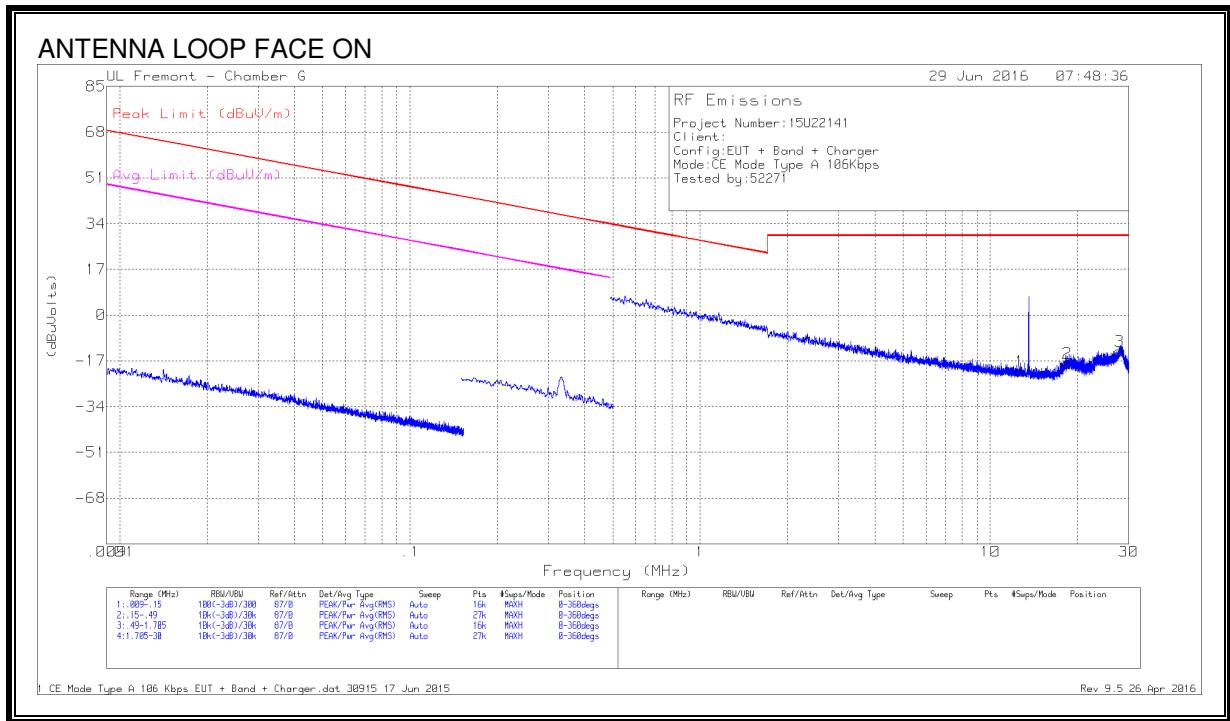


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
4	13.08085	10.82	Pk	10.7	.6	-40	-17.88	29.54	-47.42	0-360
1	13.45238	11.14	Pk	10.7	.6	-40	-17.56	50.5	-68.06	0-360
5	13.56007	29.95	Pk	10.6	.6	-40	1.15	84	-82.85	0-360
2	13.562	33.95	Pk	10.6	.6	-40	5.15	84	-78.85	0-360
3	13.65825	10.31	Pk	10.6	.6	-40	-18.49	50.5	-68.99	0-360
6	13.81767	9.62	Pk	10.6	.5	-40	-19.28	40.51	-59.79	0-360

Pk - Peak detector

SPURIOUS EMISSION

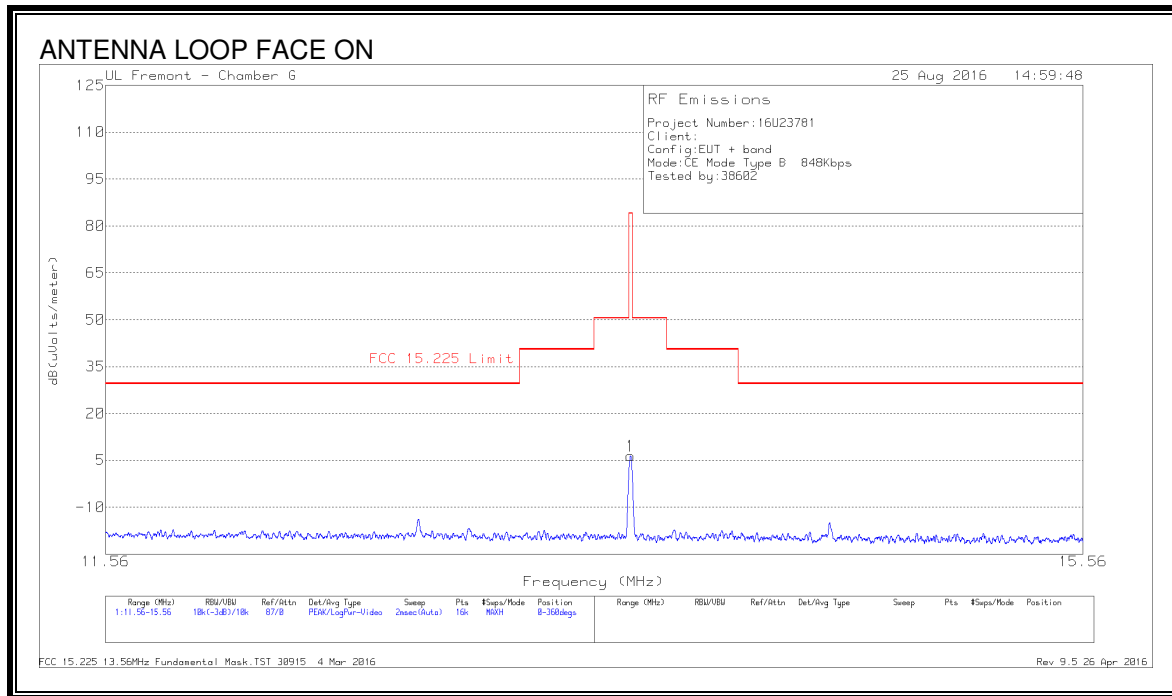


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	6.09979	15.38	Pk	10.9	.4	-40	-13.32	29.54	-42.86	-	-	0-360
1	12.64245	7.89	Pk	10.7	.6	-40	-20.81	29.54	-50.35	-	-	0-360
2	18.40698	11.23	Pk	10.3	.6	-40	-17.87	29.54	-47.41	-	-	0-360
5	18.7722	14.26	Pk	10.2	.6	-40	-14.94	29.54	-44.48	-	-	0-360
6	22.08598	13.93	Pk	9.7	.7	-40	-15.67	29.54	-45.21	-	-	0-360
3	27.88823	17.24	Pk	8.5	.8	-40	-13.46	29.54	-43	-	-	0-360

Pk - Peak detector

TYPE B 848Kbps FUNDAMENTAL



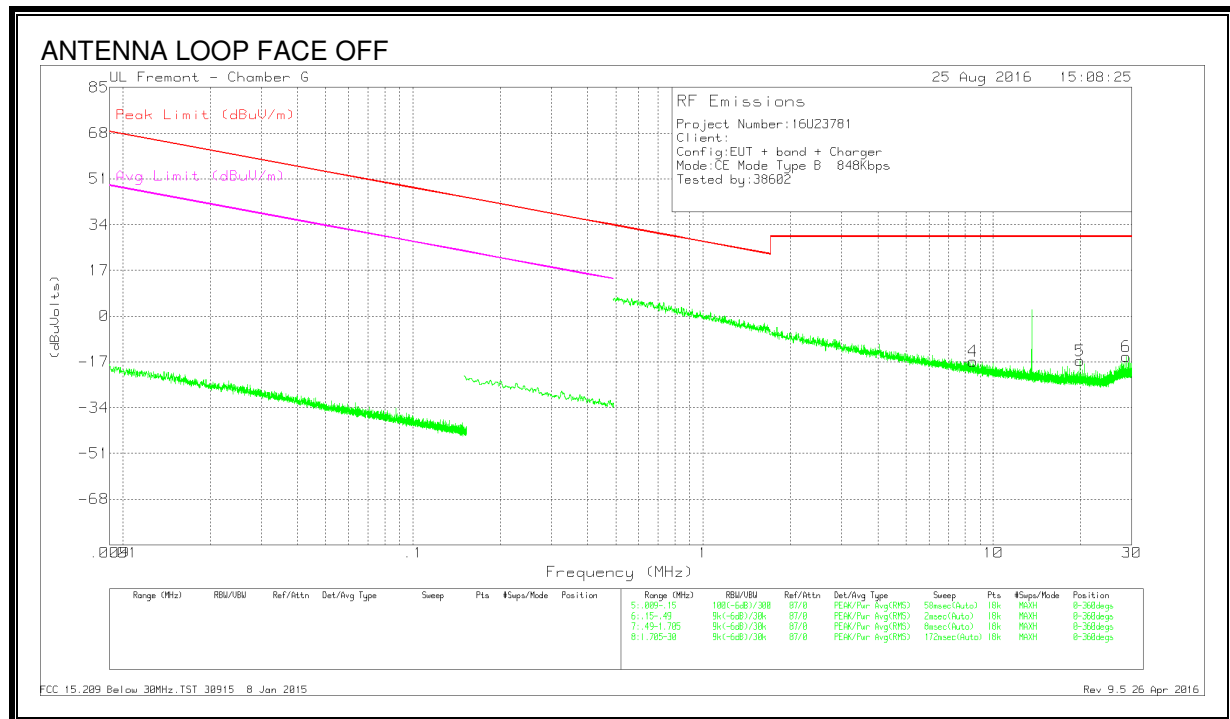
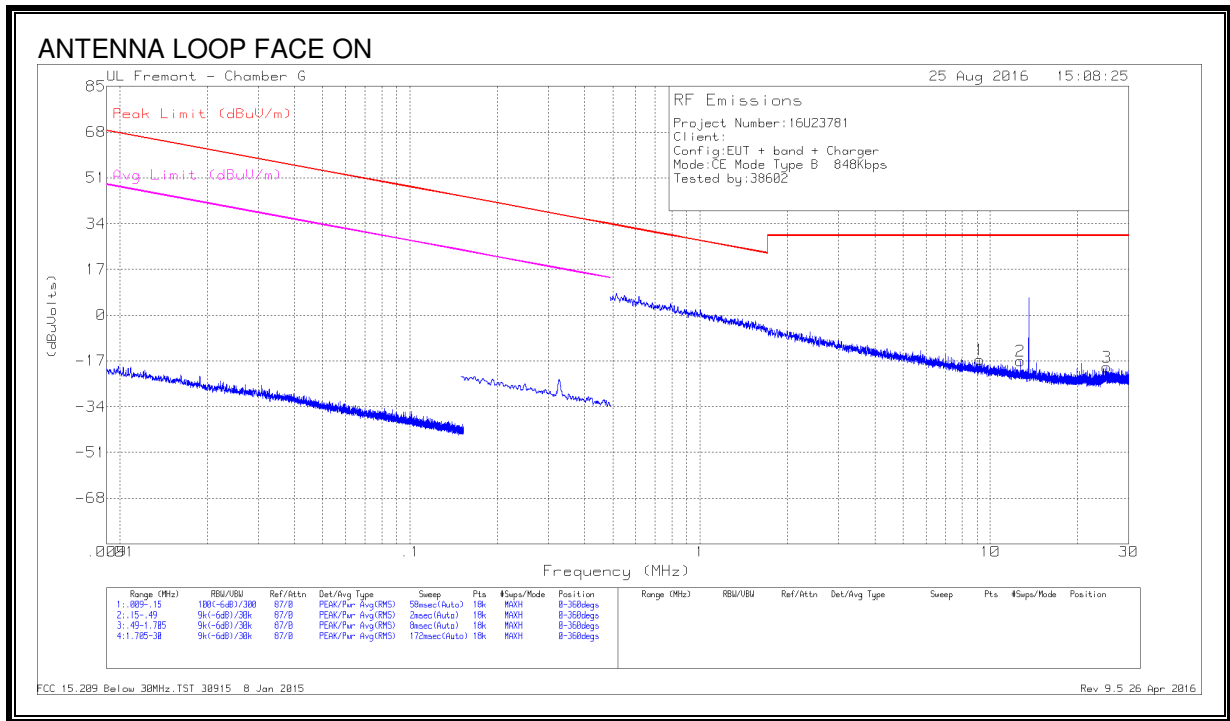


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
2	13.55963	30.96	Pk	10.6	.6	-40	2.16	84	-81.84	0-360
1	13.56025	35.31	Pk	10.6	.6	-40	6.51	84	-77.49	0-360

Pk - Peak detector

SPURIOUS EMISSION

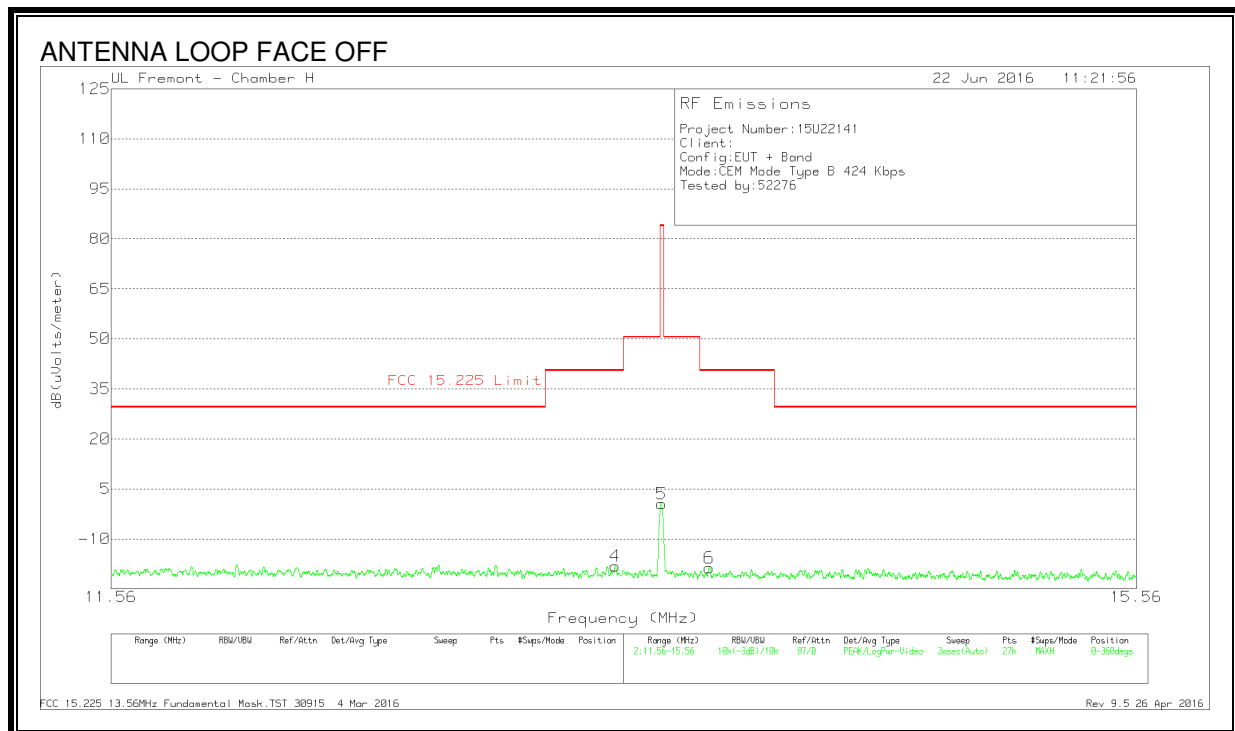
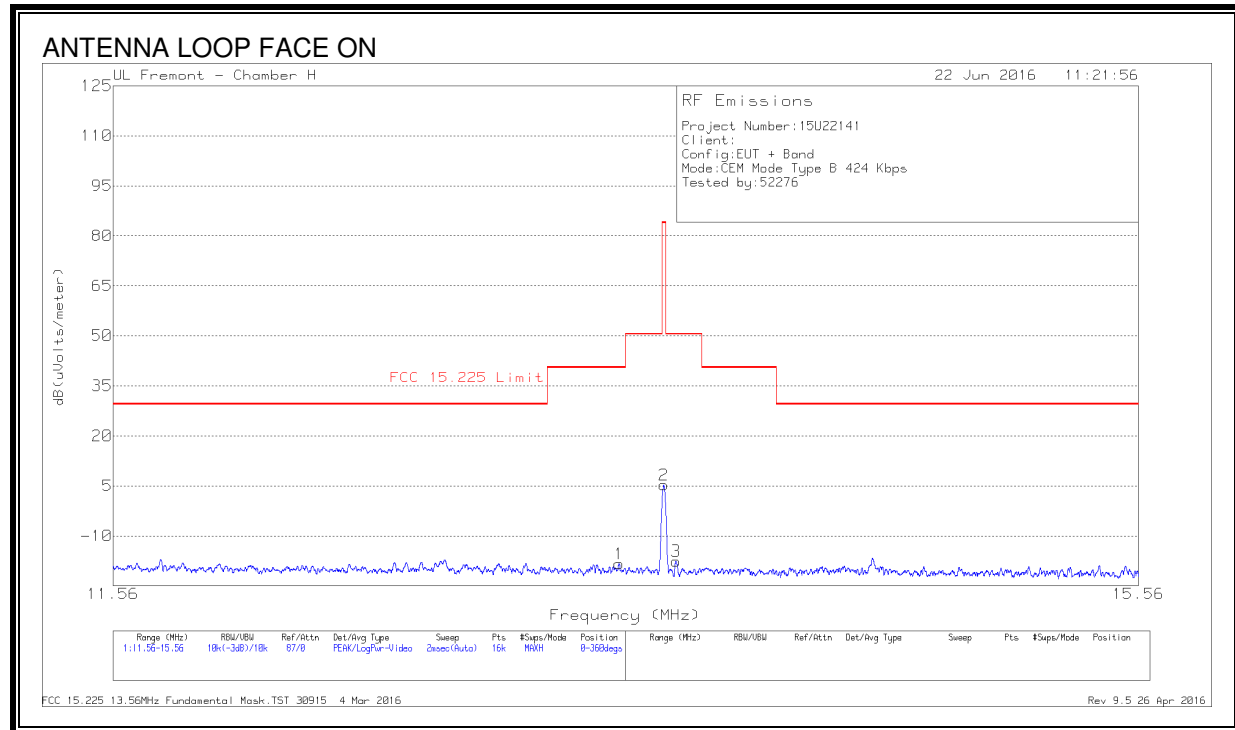


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	8.49447	11.59	Pk	11.2	.5	-40	-16.71	29.54	-46.25	-	-	0-360
1	9.18772	11.79	Pk	11.1	.5	-40	-16.61	29.54	-46.15	-	-	0-360
2	12.71136	11.69	Pk	10.7	.6	-40	-17.01	29.54	-46.55	-	-	0-360
5	19.91976	12.95	Pk	9.8	.7	-40	-16.55	29.54	-46.09	-	-	0-360
3	25.14431	10.75	Pk	9.1	.8	-40	-19.35	29.54	-48.89	-	-	0-360
6	28.73633	15.57	Pk	8.6	.9	-40	-14.93	29.54	-44.47	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL

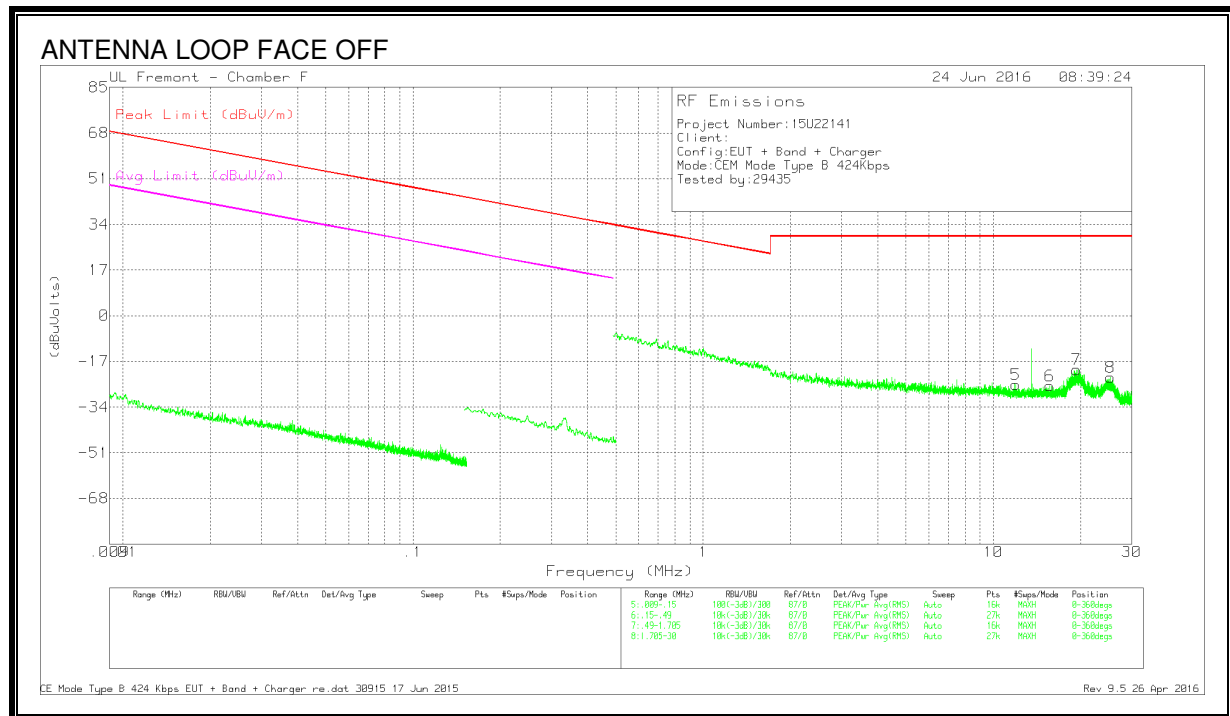
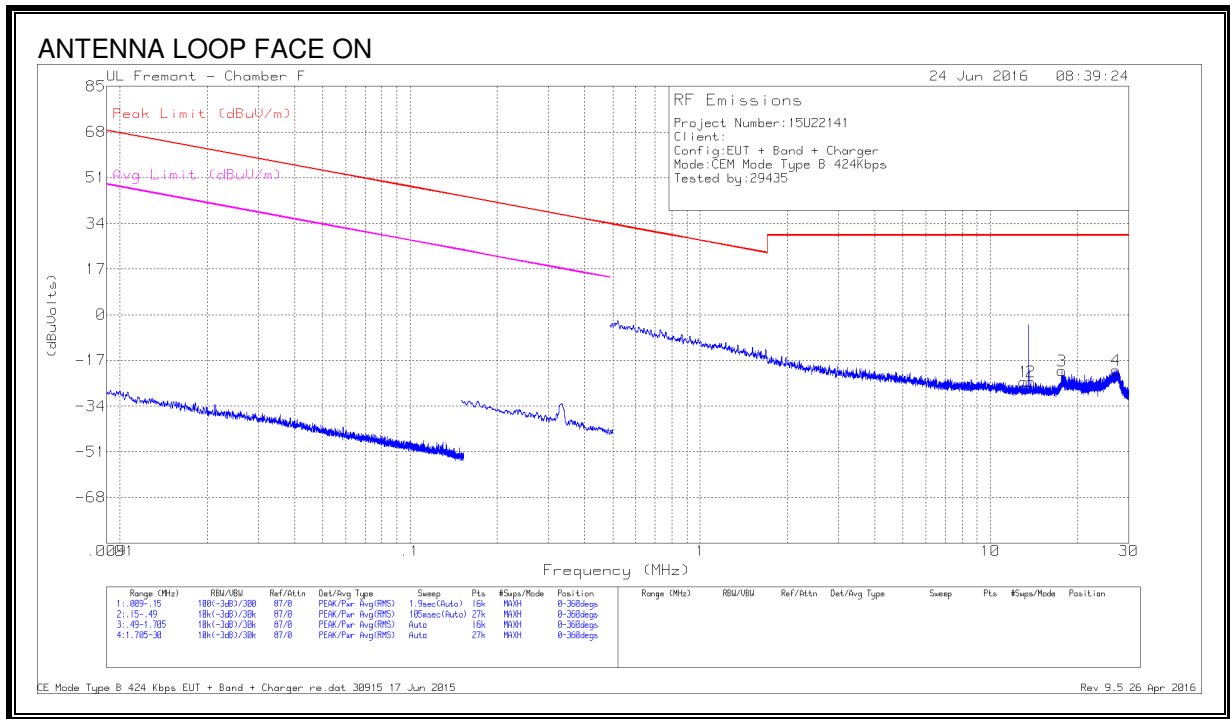


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
4	13.37877	10.57	Pk	10.7	.6	-40	-18.13	40.51	-58.64	0-360
1	13.38588	10.36	Pk	10.7	.6	-40	-18.34	40.51	-58.85	0-360
5	13.55978	29.36	Pk	10.6	.6	-40	.56	84	-83.44	0-360
2	13.56025	34.05	Pk	10.6	.6	-40	5.25	84	-78.75	0-360
3	13.60888	11.23	Pk	10.6	.6	-40	-17.57	50.5	-68.07	0-360
6	13.74803	10.15	Pk	10.6	.6	-40	-18.65	40.51	-59.16	0-360

Pk - Peak detector

SPURIOUS EMISSION

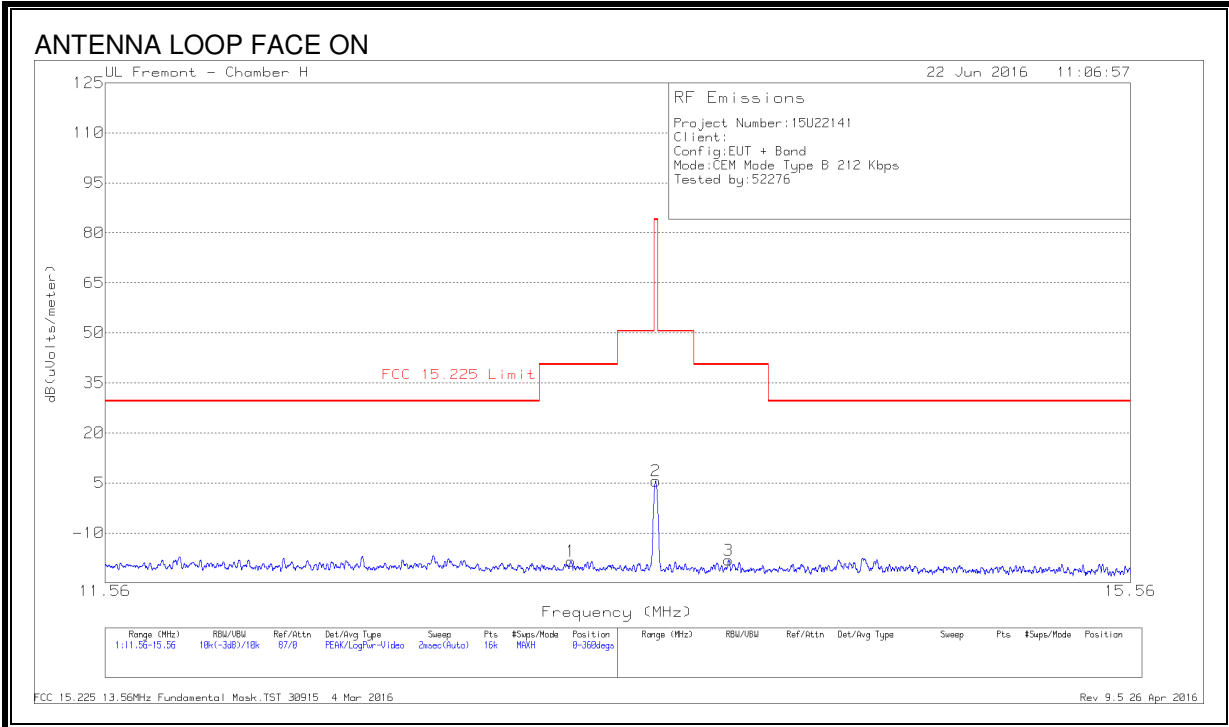


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	13.04331	3.78	Pk	10.7	.6	-40	-24.92	29.54	-54.46	-	-	0-360
2	13.82669	3.9	Pk	10.6	.5	-40	-25	29.54	-54.54	-	-	0-360
3	17.6346	8.2	Pk	10.3	.6	-40	-20.9	29.54	-50.44	-	-	0-360
4	27.12476	9.75	Pk	8.7	.8	-40	-20.75	29.54	-50.29	-	-	0-360
5	11.95339	3.1	Pk	10.7	.5	-40	-25.7	29.54	-55.24	-	-	0-360
6	15.62558	2.91	Pk	10.5	.6	-40	-25.99	29.54	-55.53	-	-	0-360
7	19.30511	9.01	Pk	10.2	.7	-40	-20.09	29.54	-49.63	-	-	0-360
8	25.29024	7.24	Pk	9.1	.7	-40	-22.96	29.54	-52.5	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

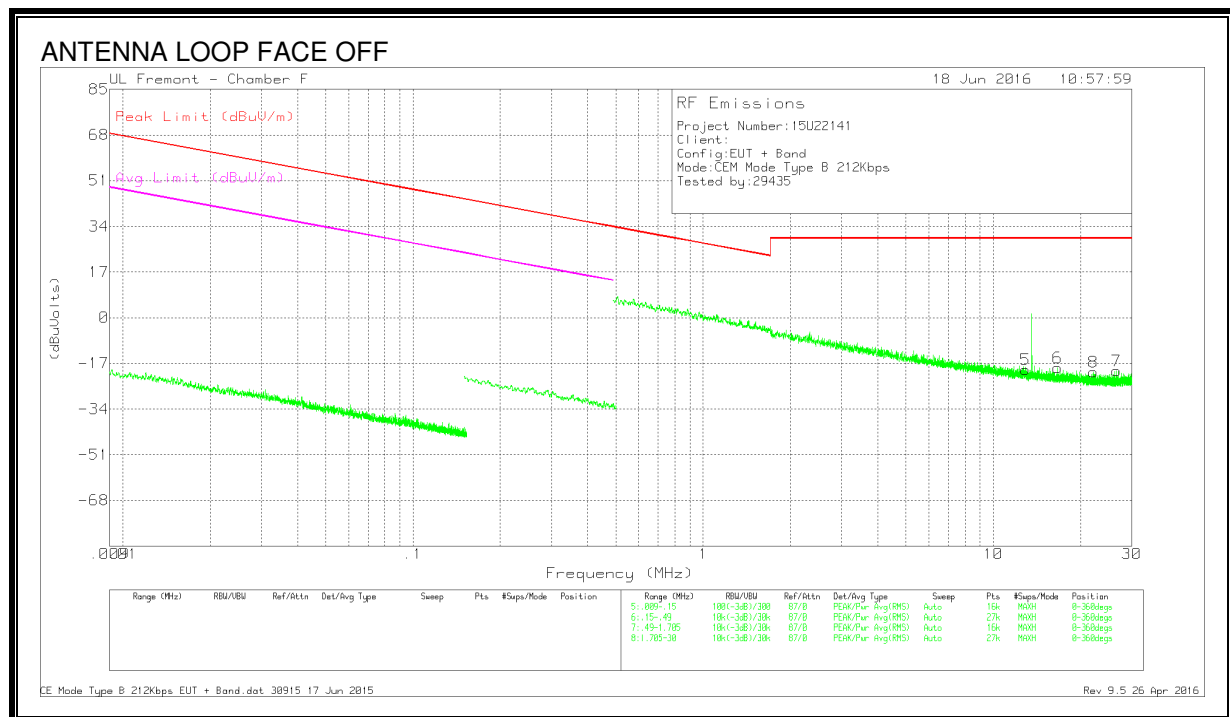
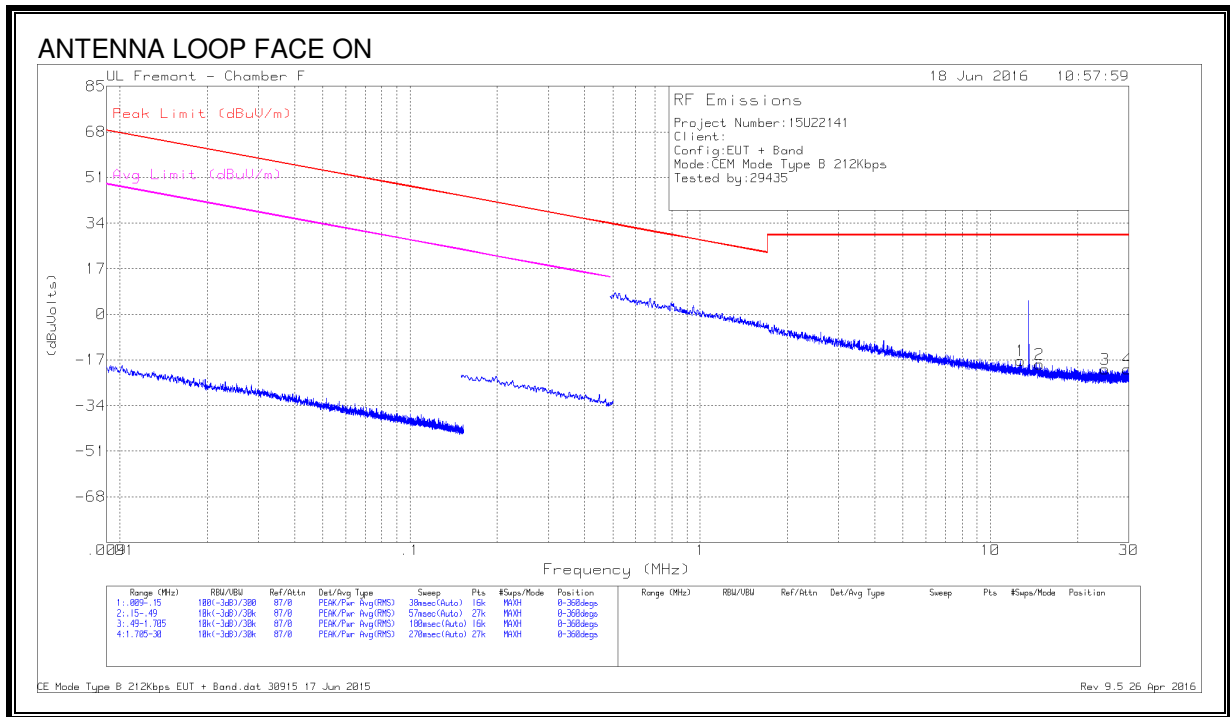


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.23138	10.22	Pk	10.7	.6	-40	-18.48	40.51	-58.99	0-360
4	13.43538	10.21	Pk	10.7	.6	-40	-18.49	50.5	-68.99	0-360
5	13.55807	30.25	Pk	10.6	.6	-40	1.45	84	-82.55	0-360
2	13.56	34.39	Pk	10.6	.6	-40	5.59	84	-78.41	0-360
6	13.75255	9.8	Pk	10.6	.5	-40	-19.1	40.51	-59.61	0-360
3	13.85038	10.72	Pk	10.6	.5	-40	-18.18	40.51	-58.69	0-360

Pk - Peak detector

SPURIOUS EMISSION

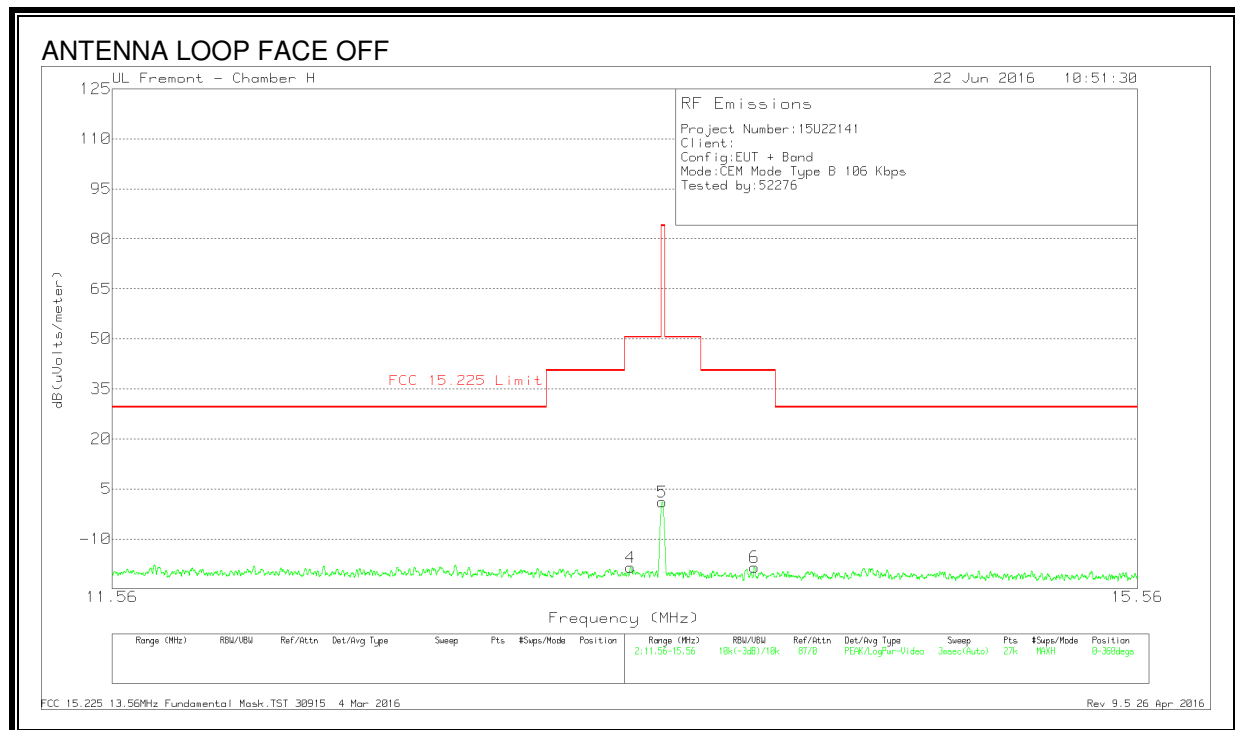
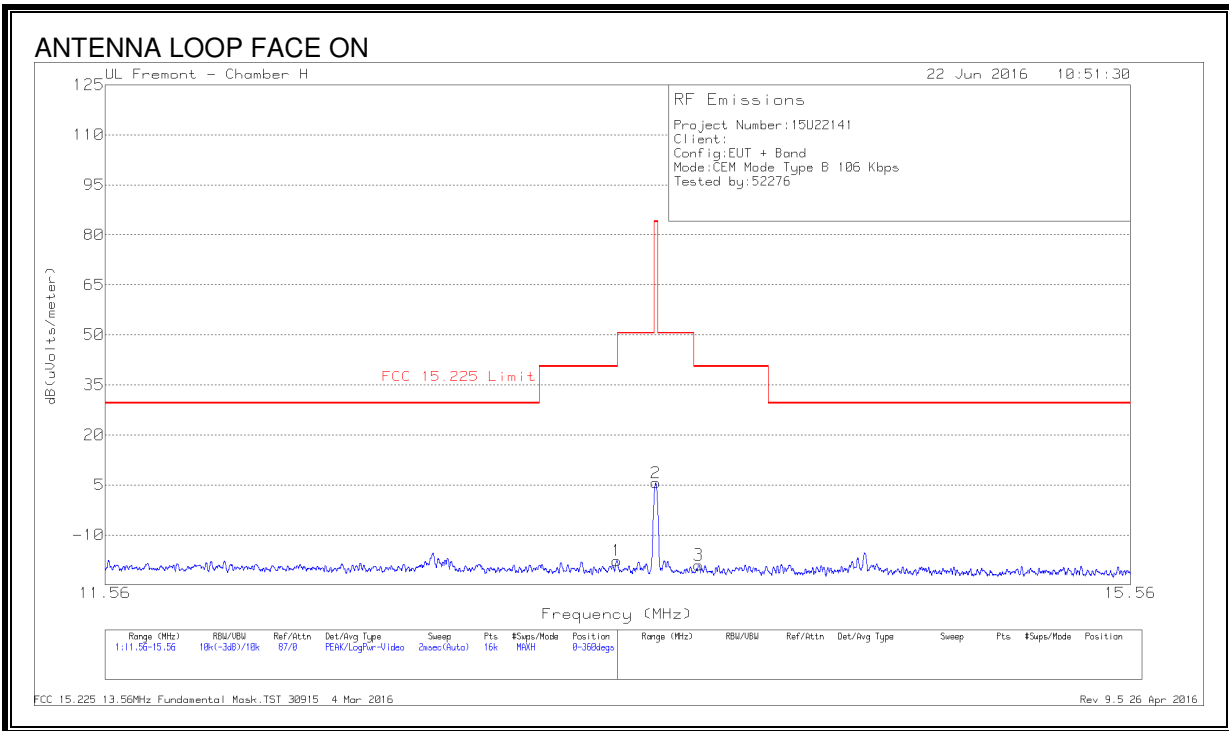


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	12.71319	11.46	Pk	10.7	.6	-40	-17.24	29.54	-46.78	-	-	0-360
2	14.79871	10.11	Pk	10.6	.6	-40	-18.69	29.54	-48.23	-	-	0-360
3	24.87471	9.57	Pk	9.2	.7	-40	-20.53	29.54	-50.07	-	-	0-360
4	29.74319	10.77	Pk	8.1	.8	-40	-20.33	29.54	-49.87	-	-	0-360
5	12.91965	9.44	Pk	10.7	.6	-40	-19.26	29.54	-48.8	-	-	0-360
6	16.6914	10.28	Pk	10.4	.6	-40	-18.72	29.54	-48.26	-	-	0-360
7	26.53055	10.66	Pk	8.8	.8	-40	-19.74	29.54	-49.28	-	-	0-360
8	22.1541	9.45	Pk	9.7	.7	-40	-20.15	29.54	-49.69	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

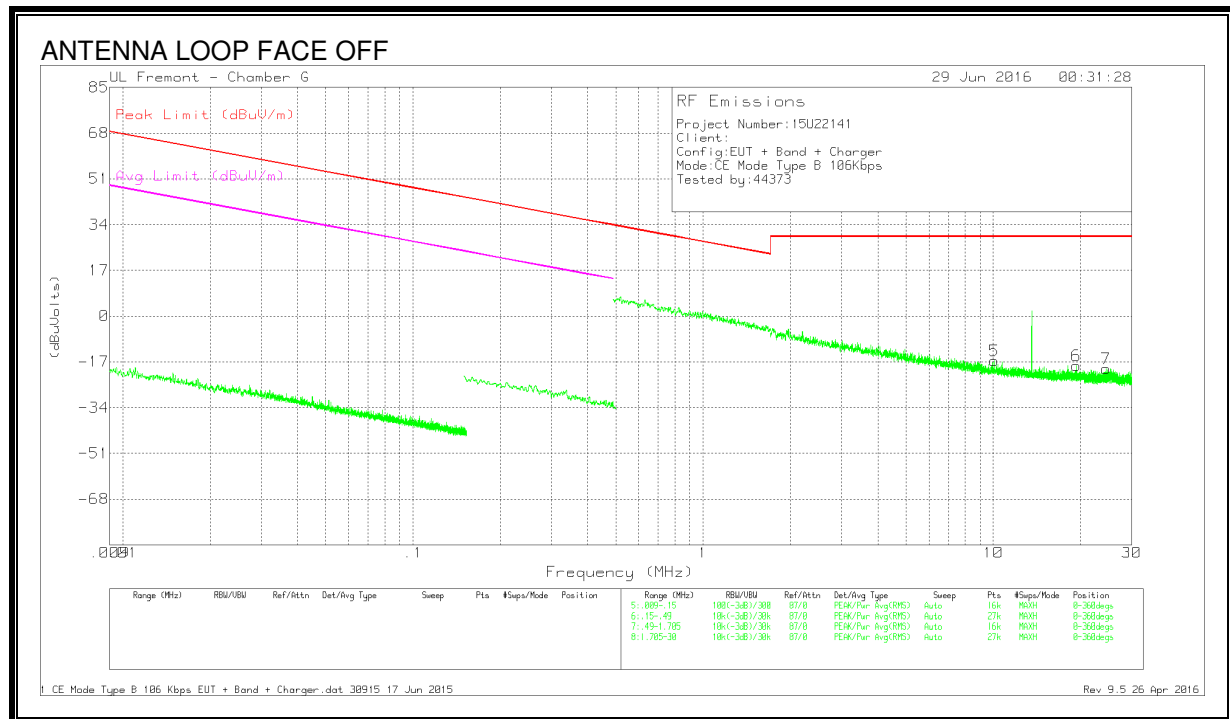
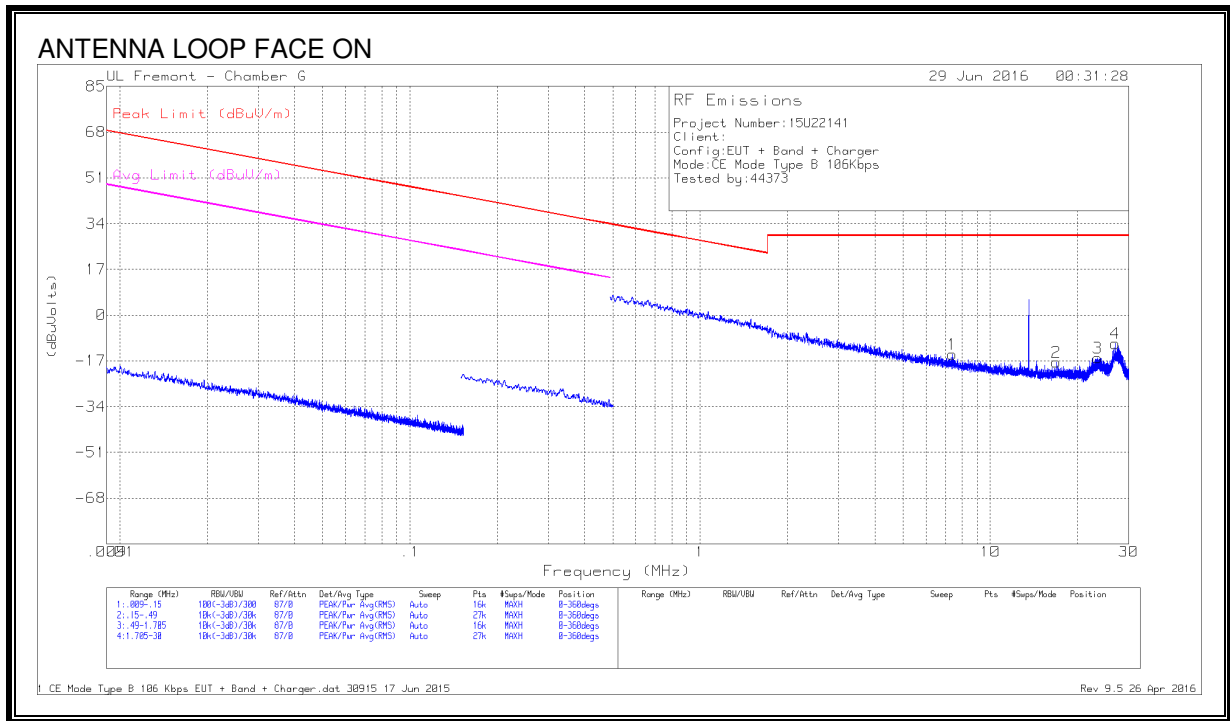


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.40838	11	Pk	10.7	.6	-40	-17.7	40.51	-58.21	0-360
4	13.43523	10.13	Pk	10.7	.6	-40	-18.57	50.5	-69.07	0-360
5	13.55807	29.87	Pk	10.6	.6	-40	1.07	84	-82.93	0-360
2	13.56025	34.43	Pk	10.6	.6	-40	5.63	84	-78.37	0-360
3	13.73038	9.79	Pk	10.6	.6	-40	-19.01	40.51	-59.52	0-360
6	13.92541	10.39	Pk	10.6	.5	-40	-18.51	40.51	-59.02	0-360

Pk - Peak detector

SPURIOUS EMISSION

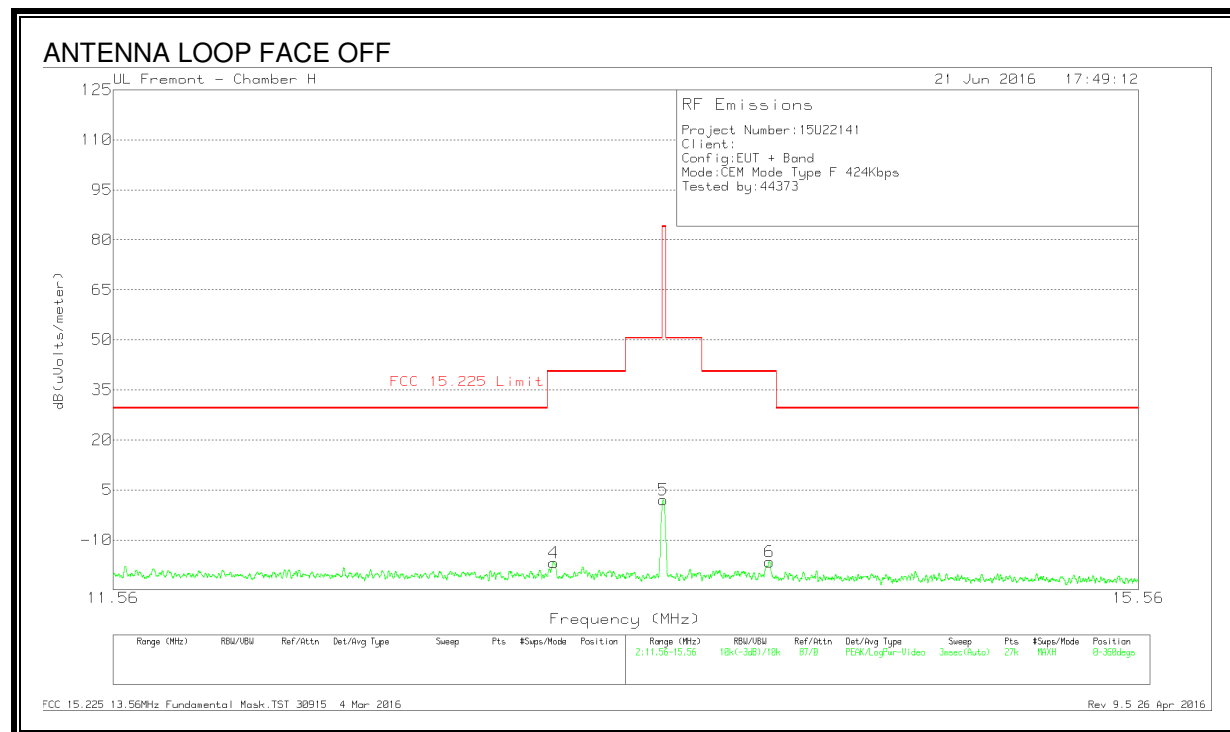
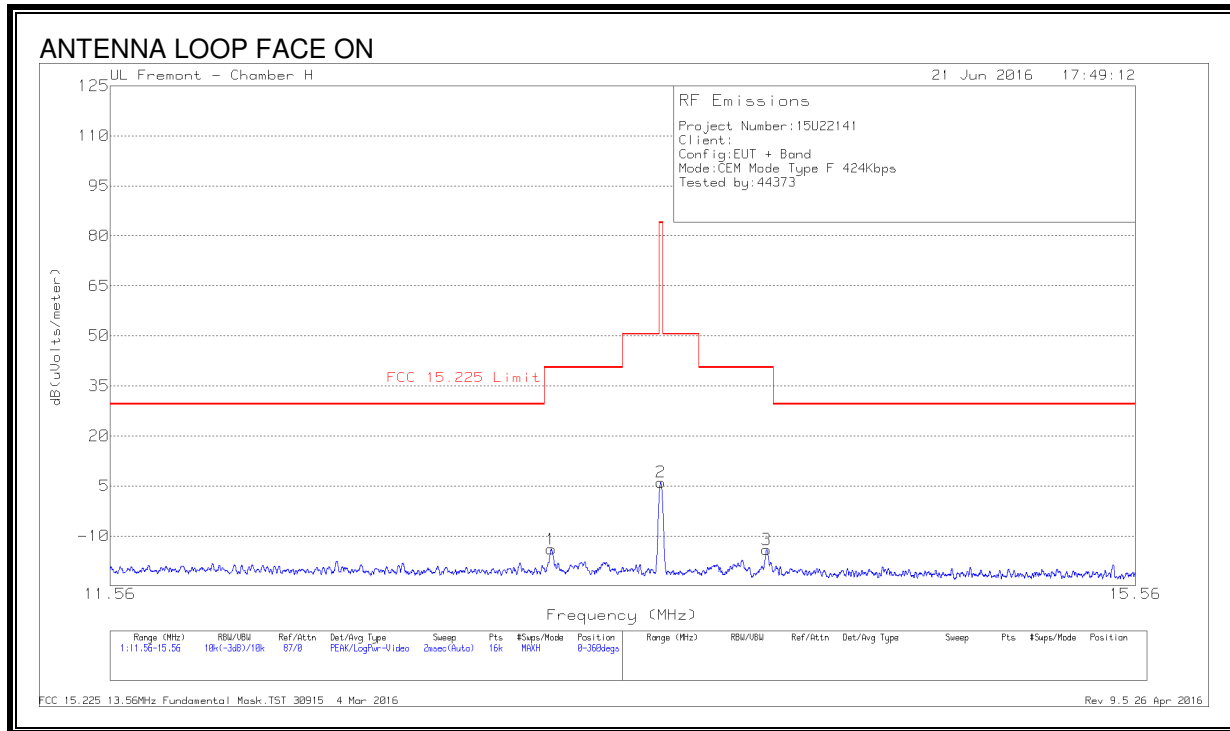


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	7.3883	14.24	Pk	10.9	.4	-40	-14.46	29.54	-44	-	-	0-360
5	10.08271	12.17	Pk	10.8	.4	-40	-16.63	29.54	-46.17	-	-	0-360
2	16.8507	11.43	Pk	10.4	.6	-40	-17.57	29.54	-47.11	-	-	0-360
6	19.3093	10.65	Pk	10.2	.7	-40	-18.45	29.54	-47.99	-	-	0-360
3	23.46882	13.98	Pk	9.5	.7	-40	-15.82	29.54	-45.36	-	-	0-360
7	24.50057	10.5	Pk	9.3	.7	-40	-19.5	29.54	-49.04	-	-	0-360
4	26.97542	19.9	Pk	8.7	.8	-40	-10.6	29.54	-40.14	-	-	0-360

Pk - Peak detector

TYPE F 424Kbps FUNDAMENTAL

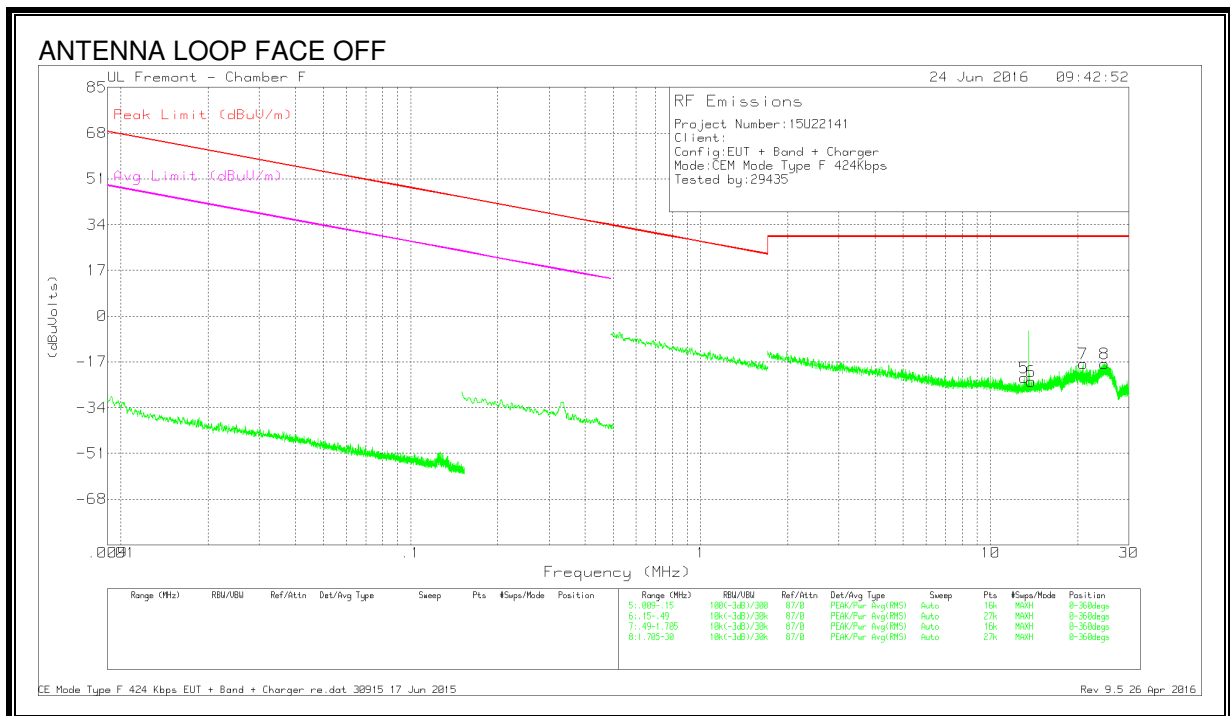
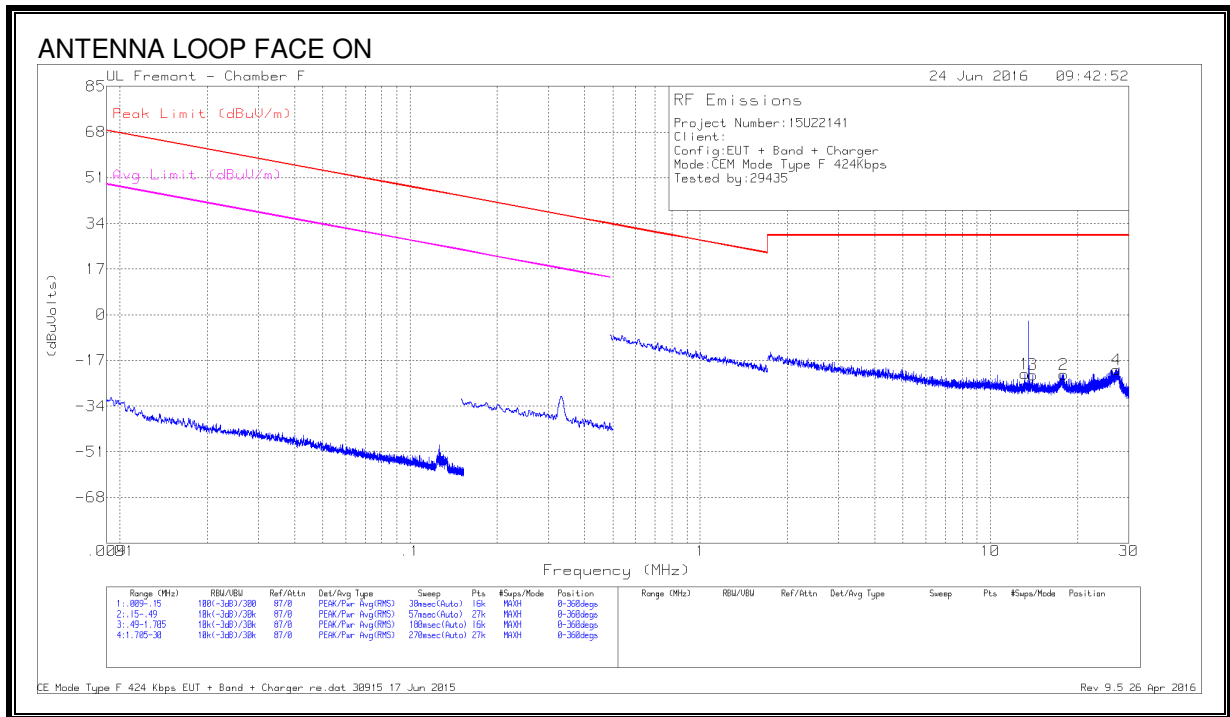


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
4	13.13487	11.87	Pk	10.7	.6	-40	-16.83	40.51	-57.34	0-360
1	13.13675	14.7	Pk	10.7	.6	-40	-14	40.51	-54.51	0-360
5	13.55837	30.85	Pk	10.6	.6	-40	2.05	84	-81.95	0-360
2	13.56	34.92	Pk	10.6	.6	-40	6.12	84	-77.88	0-360
6	13.98254	12.31	Pk	10.6	.5	-40	-16.59	40.51	-57.1	0-360
3	13.98313	14.82	Pk	10.6	.5	-40	-14.08	40.51	-54.59	0-360

Pk - Peak detector

SPURIOUS EMISSION

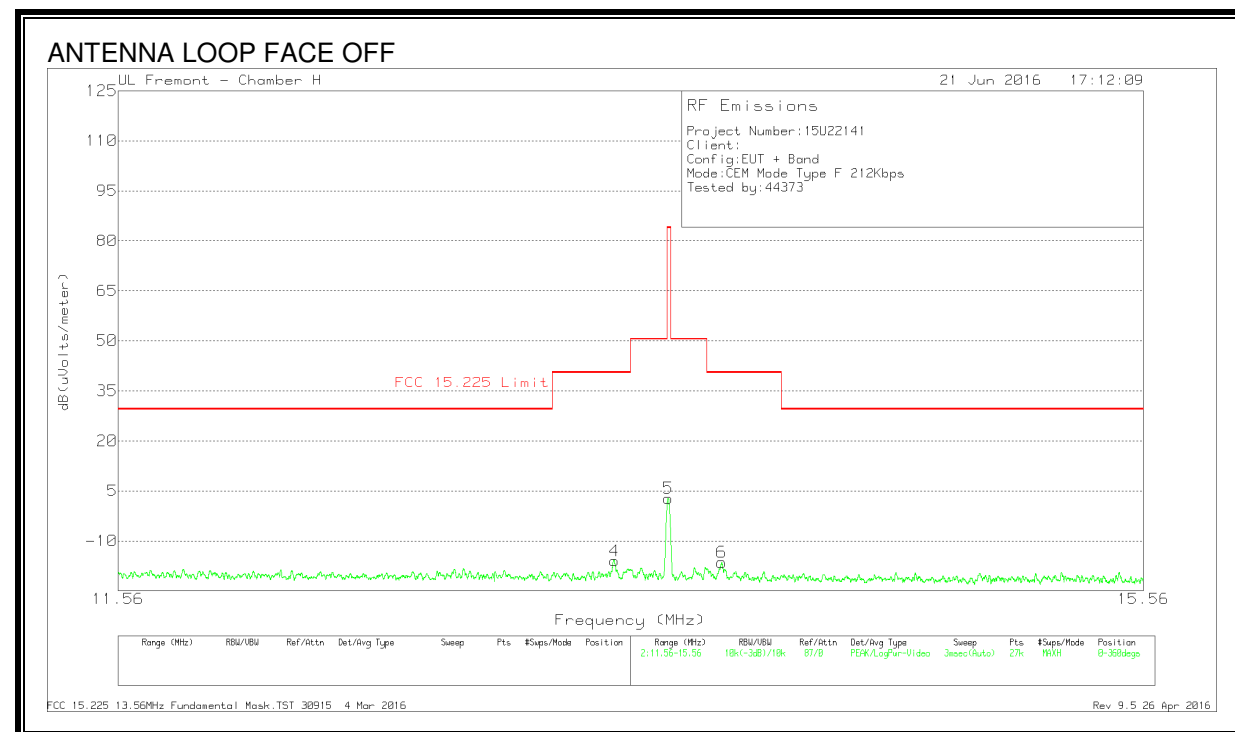
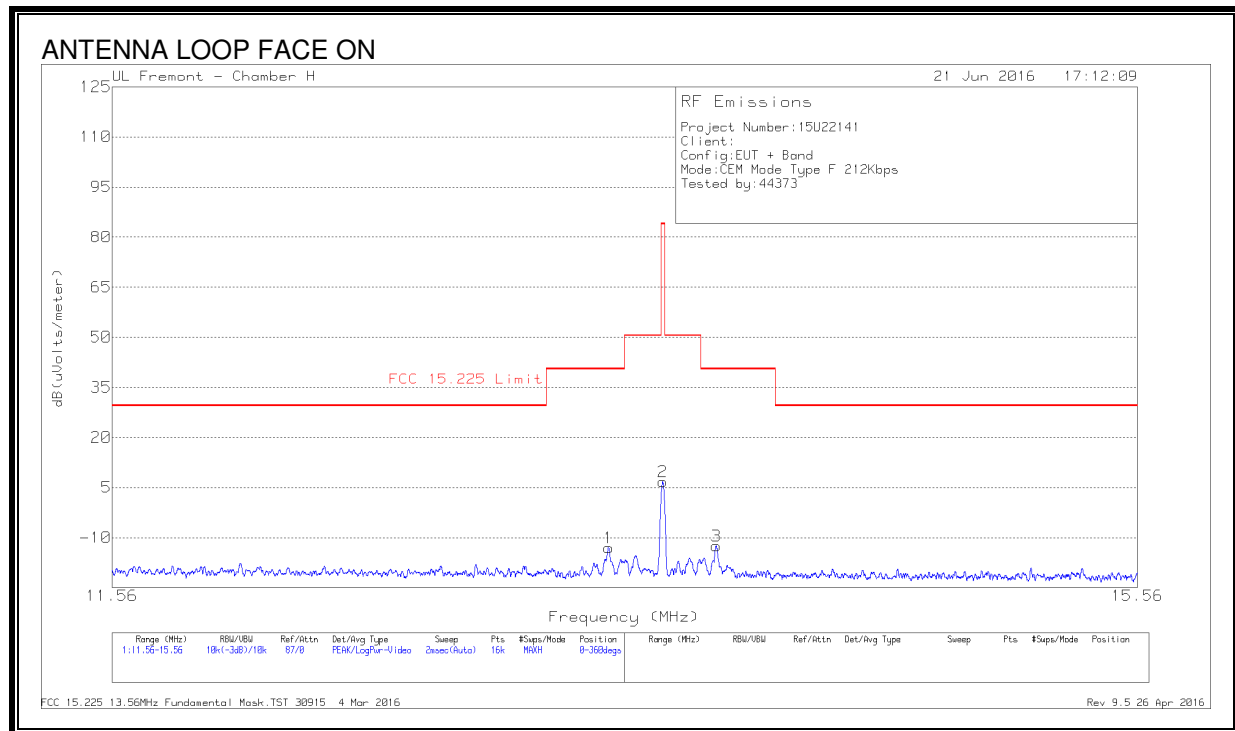


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	13.13658	6.69	Pk	10.7	.6	-40	-22.01	29.54	-51.55	-	-	0-360
2	17.92332	6.93	Pk	10.3	.6	-40	-22.17	29.54	-51.71	-	-	0-360
3	13.98389	6.55	Pk	10.6	.5	-40	-22.35	29.54	-51.89	-	-	0-360
4	27.29087	10.14	Pk	8.7	.8	-40	-20.36	29.54	-49.9	-	-	0-360
5	13.0627	5.73	Pk	10.7	.6	-40	-22.97	29.54	-52.51	-	-	0-360
6	13.81778	4.72	Pk	10.6	.5	-40	-24.18	29.54	-53.72	-	-	0-360
7	20.89912	11.62	Pk	9.9	.7	-40	-17.78	29.54	-47.32	-	-	0-360
8	24.69812	12.31	Pk	9.3	.7	-40	-17.69	29.54	-47.23	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

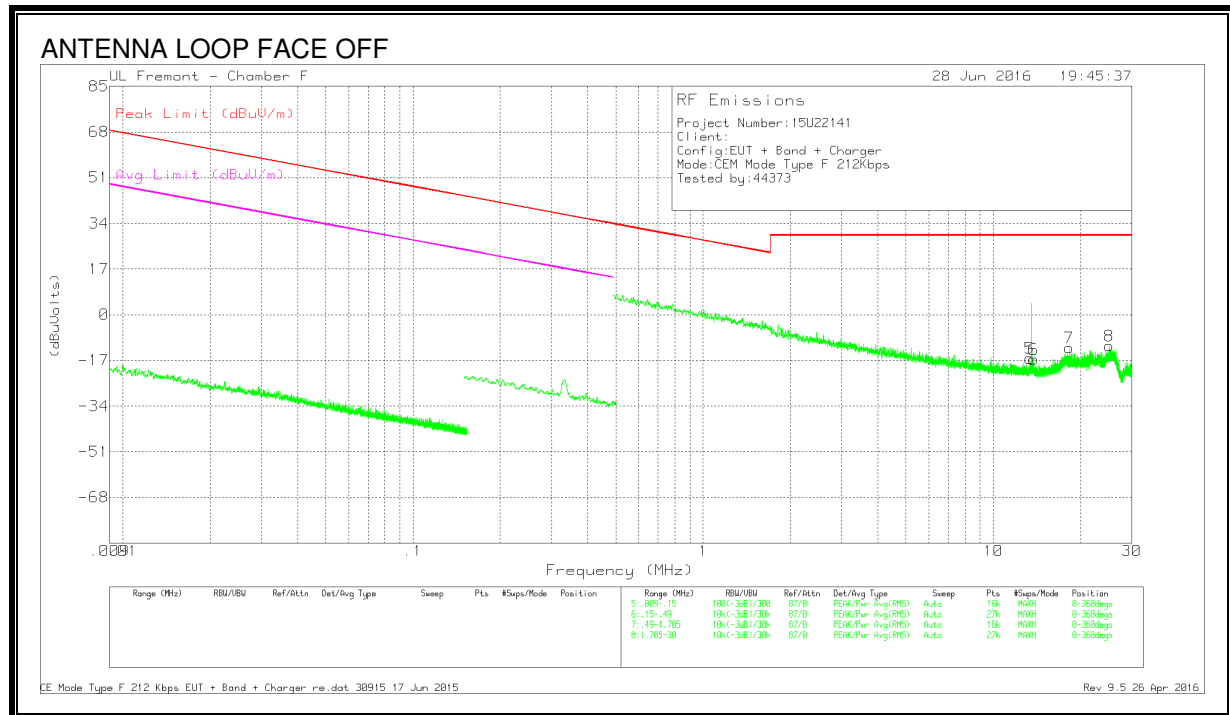
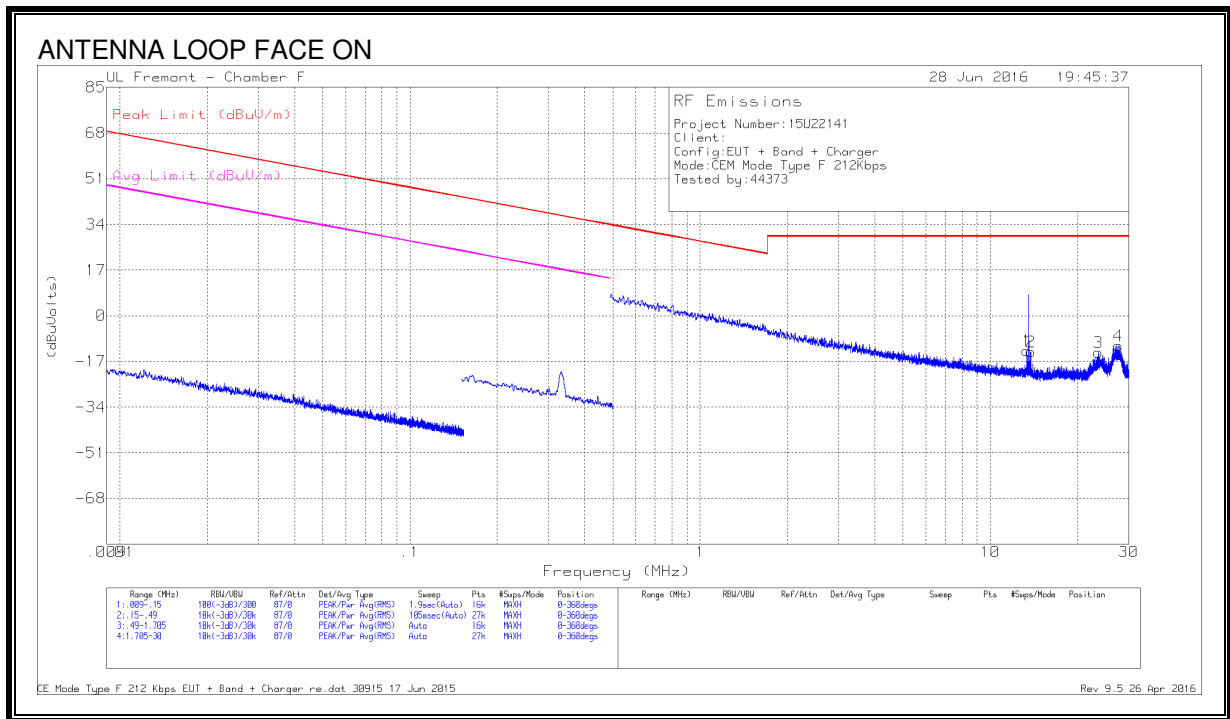


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
2	13.56025	35.54	Pk	10.6	.6	-40	6.74	84	-77.26	0-360
3	13.7725	16.38	Pk	10.6	.5	-40	-12.52	40.51	-53.03	0-360
4	13.34828	12.71	Pk	10.7	.6	-40	-15.99	40.51	-56.5	0-360
5	13.55807	31.59	Pk	10.6	.6	-40	2.79	84	-81.21	0-360
6	13.77001	12.49	Pk	10.6	.5	-40	-16.41	40.51	-56.92	0-360
1	13.35	15.62	Pk	10.7	.6	-40	-13.08	40.51	-53.59	0-360

Pk - Peak detector

SPURIOUS EMISSION



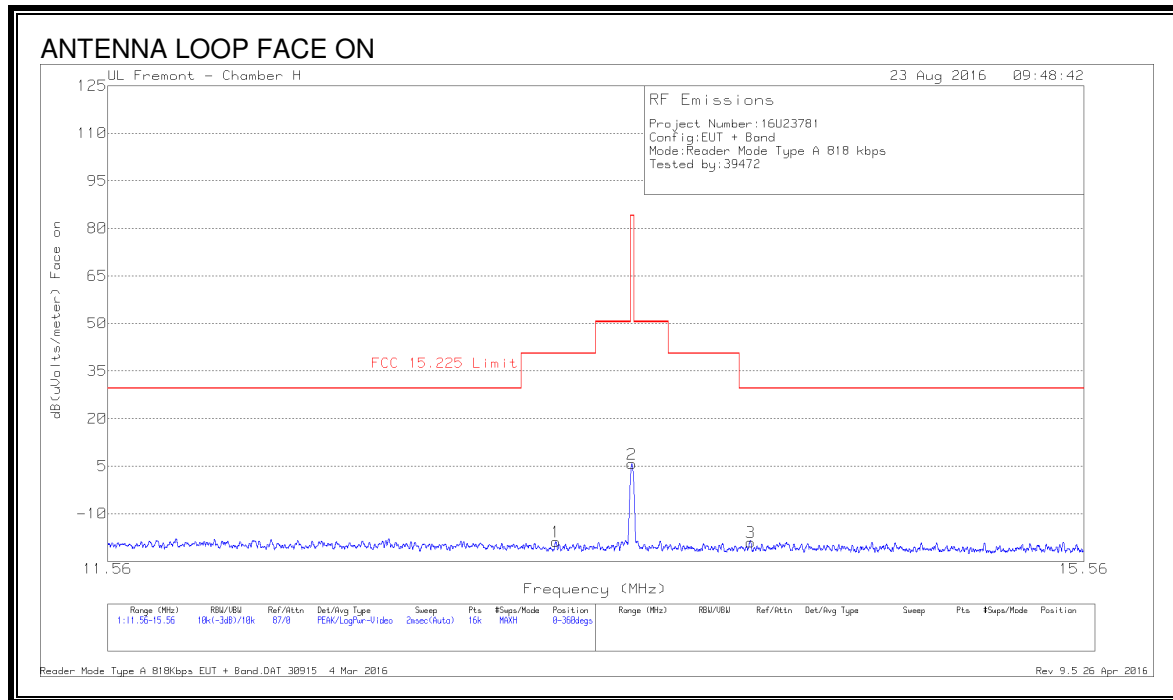
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	13.3488	15.63	Pk	10.7	.6	-40	-13.07	29.54	-42.61	-	-	0-360
2	13.77429	15.56	Pk	10.6	.5	-40	-13.34	29.54	-42.88	-	-	0-360
3	23.53327	16.04	Pk	9.5	.7	-40	-13.76	29.54	-43.3	-	-	0-360
4	27.57855	19.33	Pk	8.6	.8	-40	-11.27	29.54	-40.81	-	-	0-360
5	13.34933	12.45	Pk	10.7	.6	-40	-16.25	29.54	-45.79	-	-	0-360
6	13.77167	12.33	Pk	10.6	.5	-40	-16.57	29.54	-46.11	-	-	0-360
7	18.28908	16.82	Pk	10.3	.6	-40	-12.28	29.54	-41.82	-	-	0-360
8	25.04972	18.41	Pk	9.2	.7	-40	-11.69	29.54	-41.23	-	-	0-360

Pk - Peak detector

8.1.2. READER MODE

TYPE A 848Kbps FUNDAMENTAL



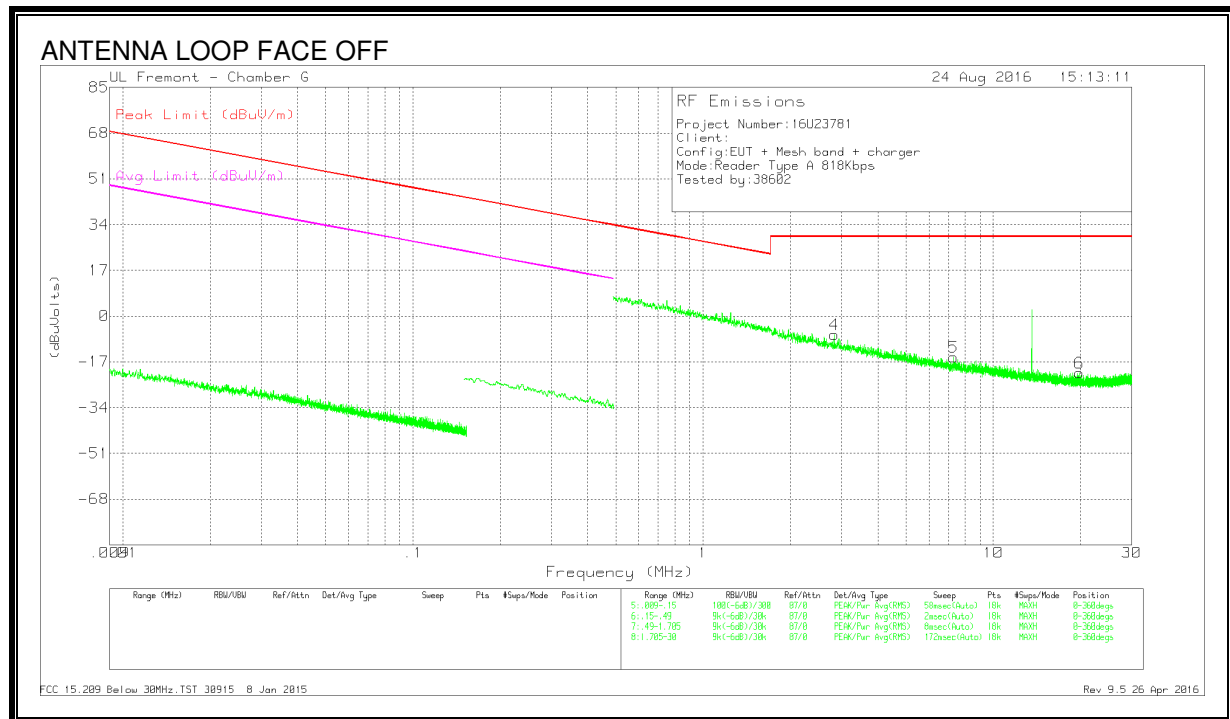
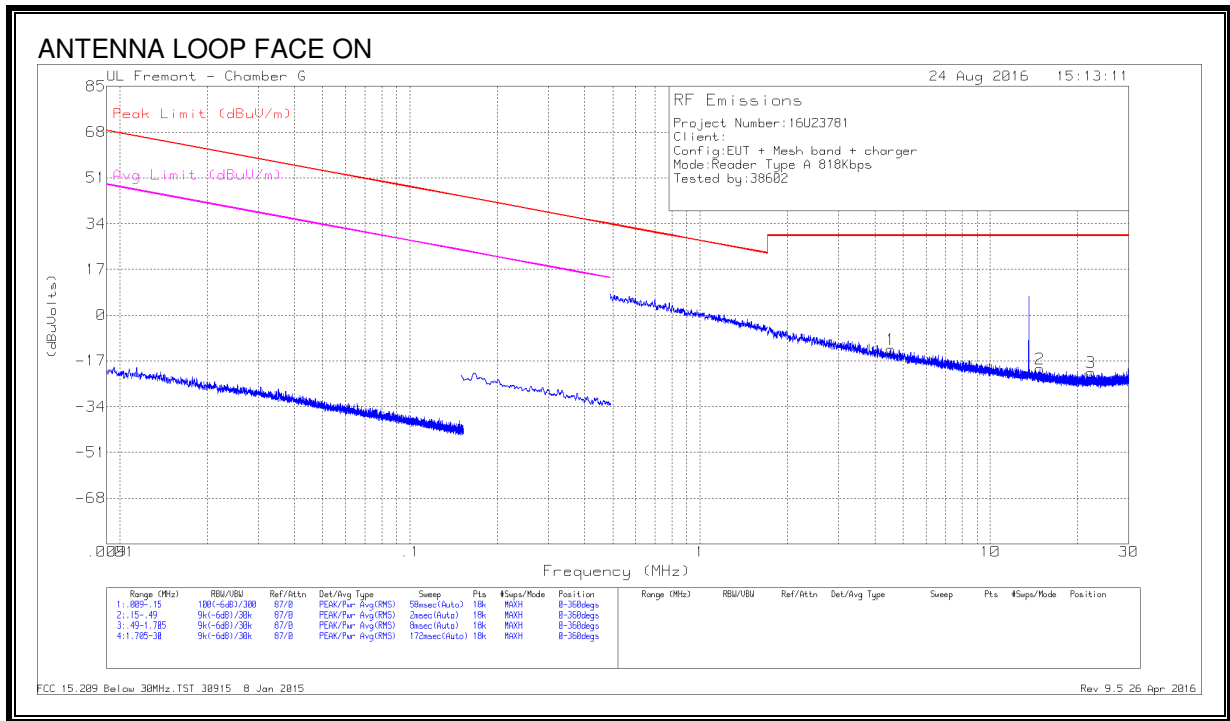


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.24963	9.88	Pk	10.7	.6	-40	-18.82	40.51	-59.33	0-360
2	13.55975	34.51	Pk	10.6	.6	-40	5.71	84	-78.29	0-360
3	14.06	9.92	Pk	10.6	.5	-40	-18.98	29.54	-48.52	0-360
4	13.36183	10.37	Pk	10.7	.6	-40	-18.33	40.51	-58.84	0-360
5	13.56022	30	Pk	10.6	.6	-40	1.2	84	-82.8	0-360
6	13.65168	10.82	Pk	10.6	.6	-40	-17.98	50.5	-68.48	0-360

Pk - Peak detector

SPURIOUS EMISSION

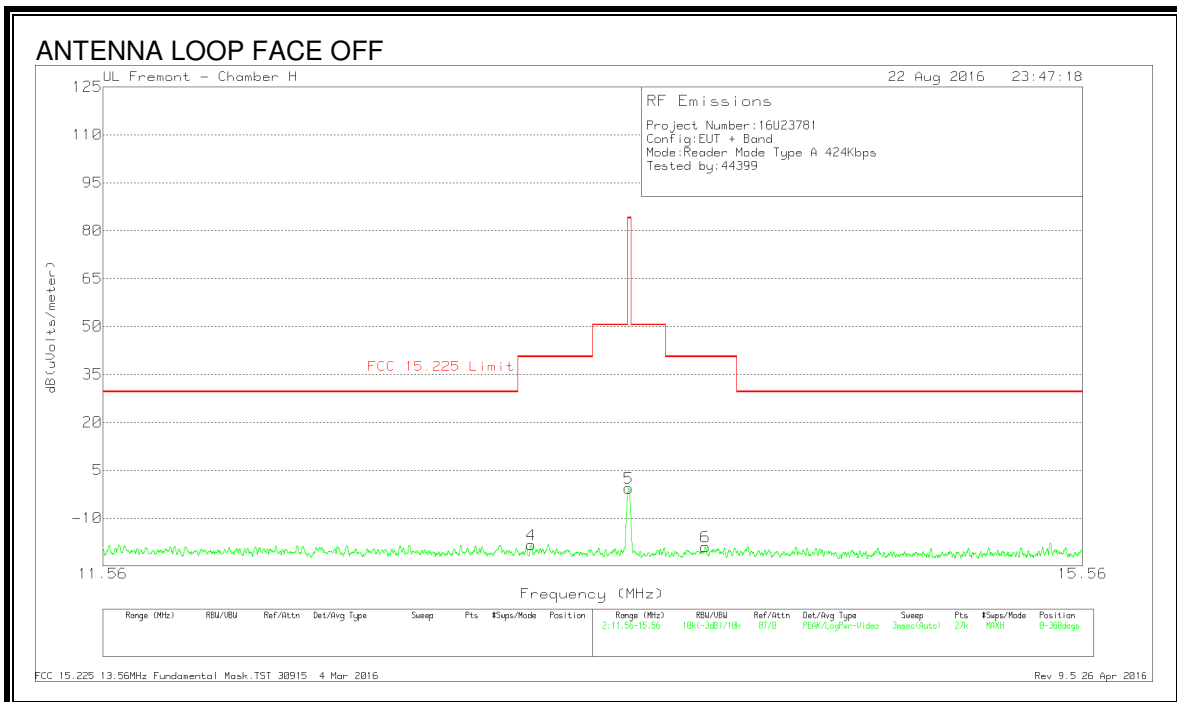
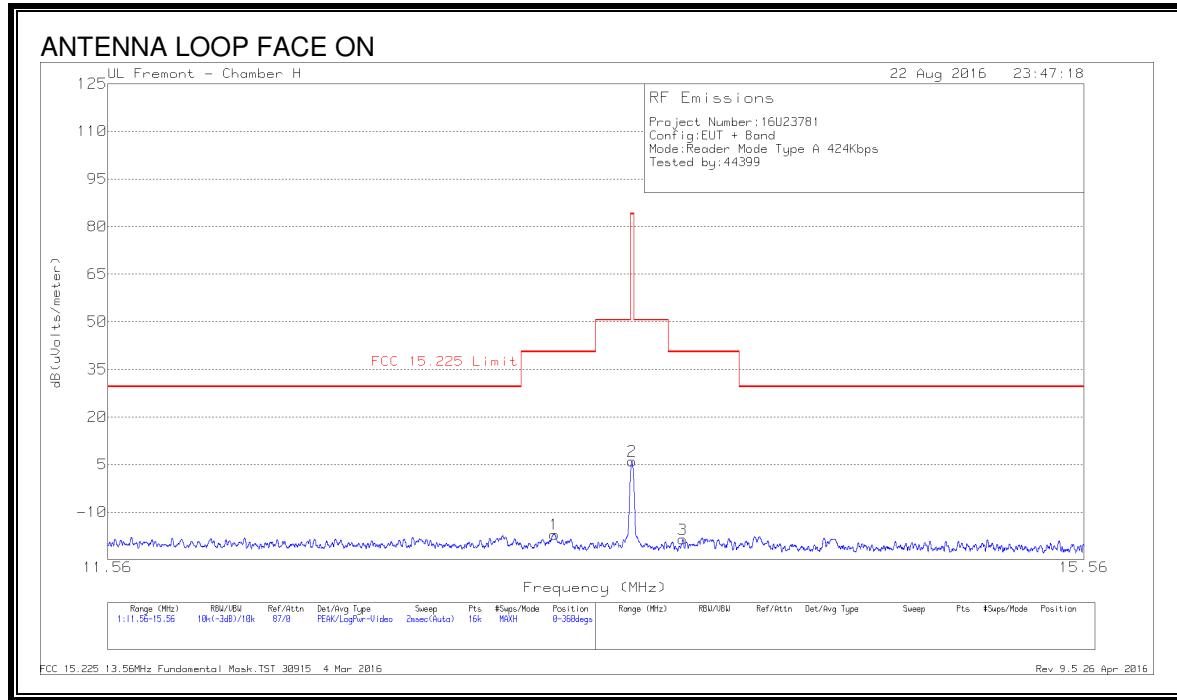


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	2.82819	20.93	Pk	11.8	.3	-40	-6.97	29.54	-36.51	-	-	0-360
1	4.54875	15.41	Pk	11.5	.3	-40	-12.79	29.54	-42.33	-	-	0-360
5	7.29503	12.87	Pk	11.3	.5	-40	-15.33	29.54	-44.87	-	-	0-360
2	14.80133	8.84	Pk	10.5	.6	-40	-20.06	29.54	-49.6	-	-	0-360
6	19.79793	8.37	Pk	9.8	.7	-40	-21.13	29.54	-50.67	-	-	0-360
3	22.24868	8.29	Pk	9.5	.8	-40	-21.41	29.54	-50.95	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL

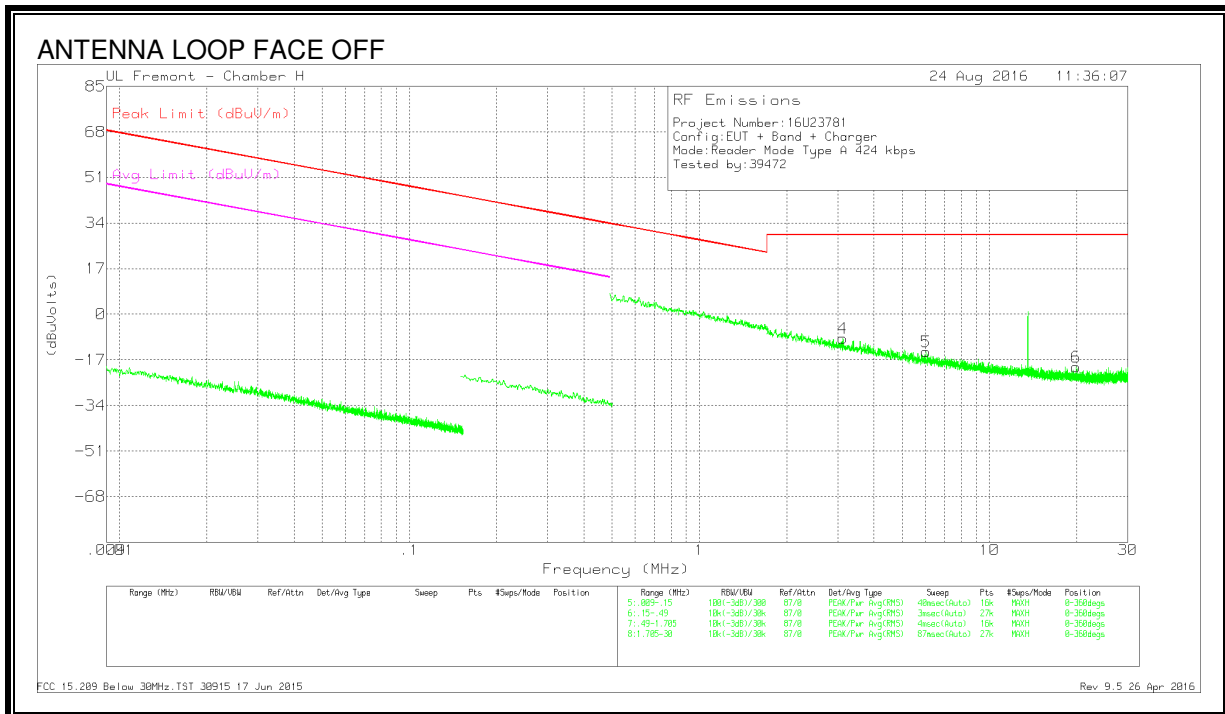
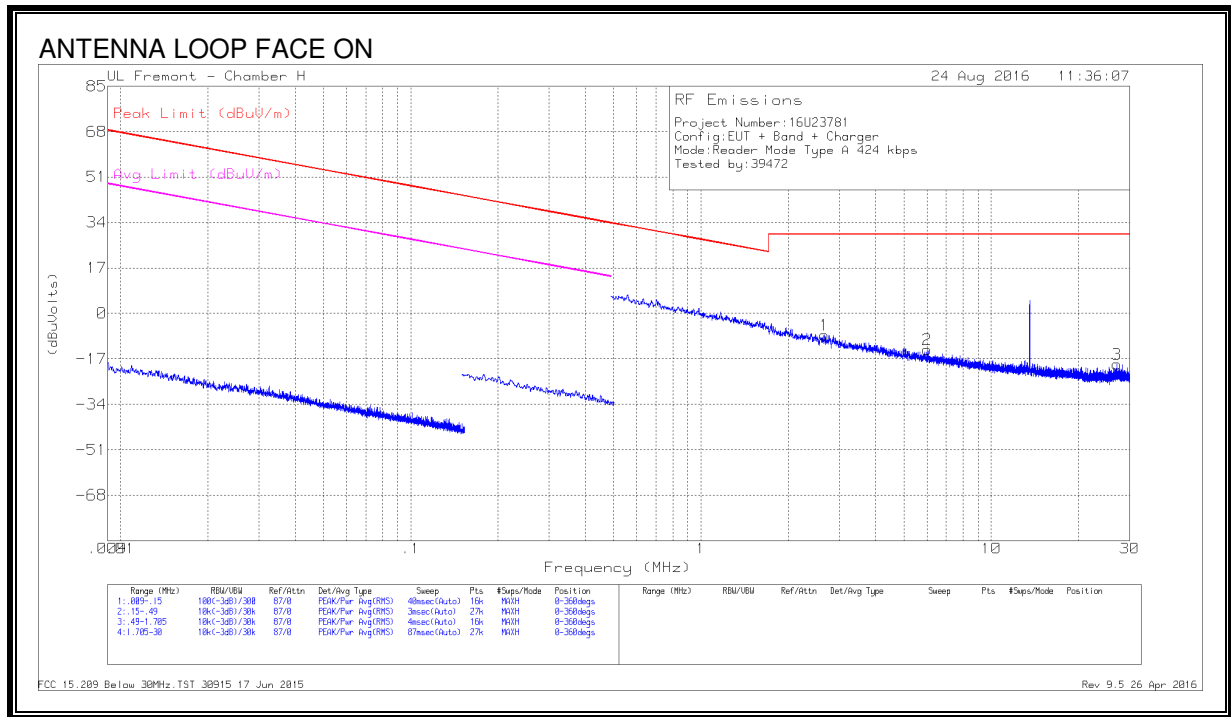


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
4	13.16351	10.31	Pk	10.7	.6	-40	-18.39	40.51	-58.9	0-360
1	13.24425	11.72	Pk	10.7	.6	-40	-16.98	40.51	-57.49	0-360
5	13.55807	28.16	Pk	10.6	.6	-40	-.64	84	-84.64	0-360
2	13.56	34.88	Pk	10.6	.6	-40	6.08	84	-77.92	0-360
3	13.77175	10.33	Pk	10.6	.5	-40	-18.57	40.51	-59.08	0-360
6	13.87775	9.92	Pk	10.6	.5	-40	-18.98	40.51	-59.49	0-360

Pk - Peak detector

SPURIOUS EMISSION

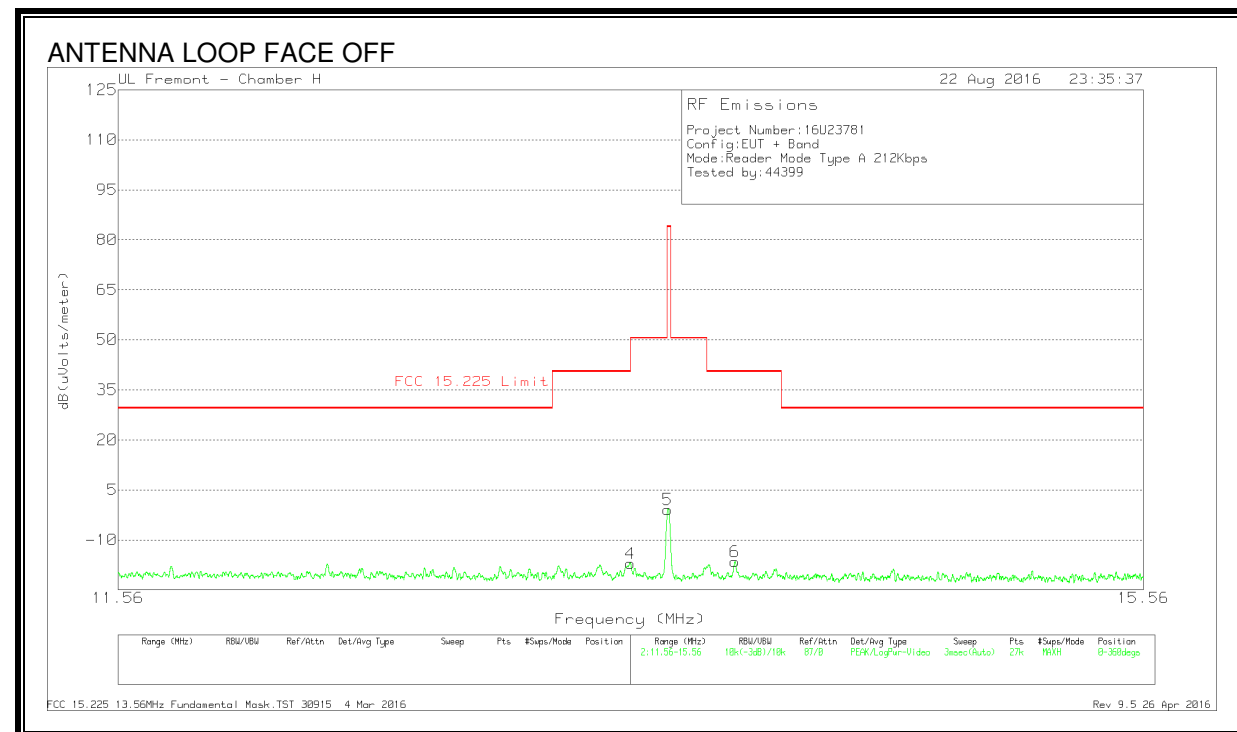
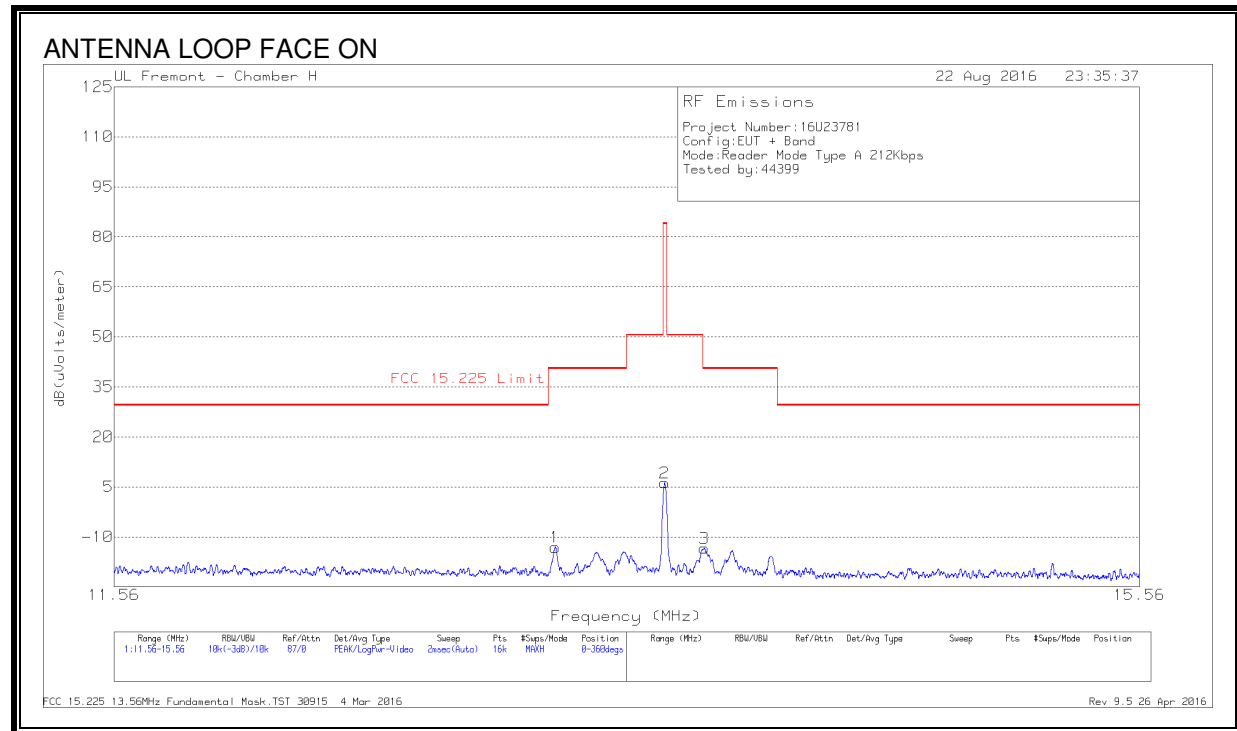


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	2.66549	20.92	Pk	10.8	.3	-40	-7.98	29.54	-37.52	-	-	0-360
2	6.01228	15.21	Pk	10.9	.4	-40	-13.49	29.54	-43.03	-	-	0-360
3	27.08389	11.58	Pk	8.7	.8	-40	-18.92	29.54	-48.46	-	-	0-360
4	3.12452	20.01	Pk	10.8	.3	-40	-8.89	29.54	-38.43	-	-	0-360
5	6.03743	14.75	Pk	10.9	.4	-40	-13.95	29.54	-43.49	-	-	0-360
6	19.91348	9.64	Pk	10.1	.7	-40	-19.56	29.54	-49.1	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

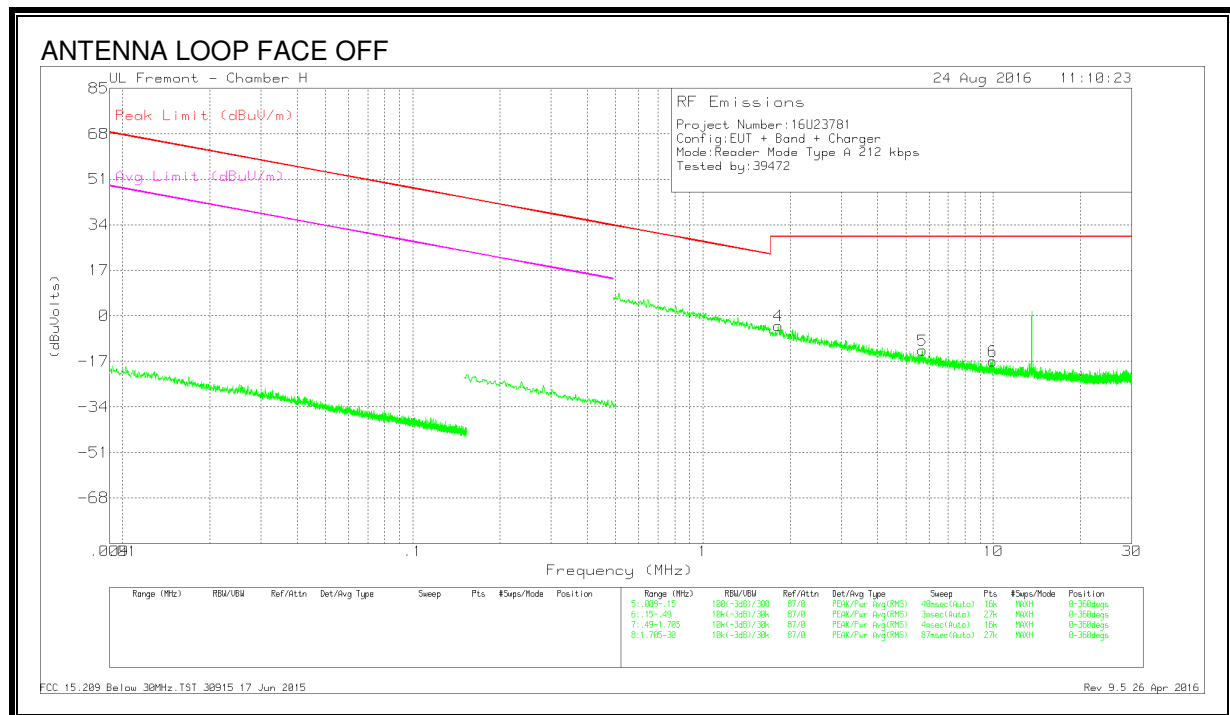
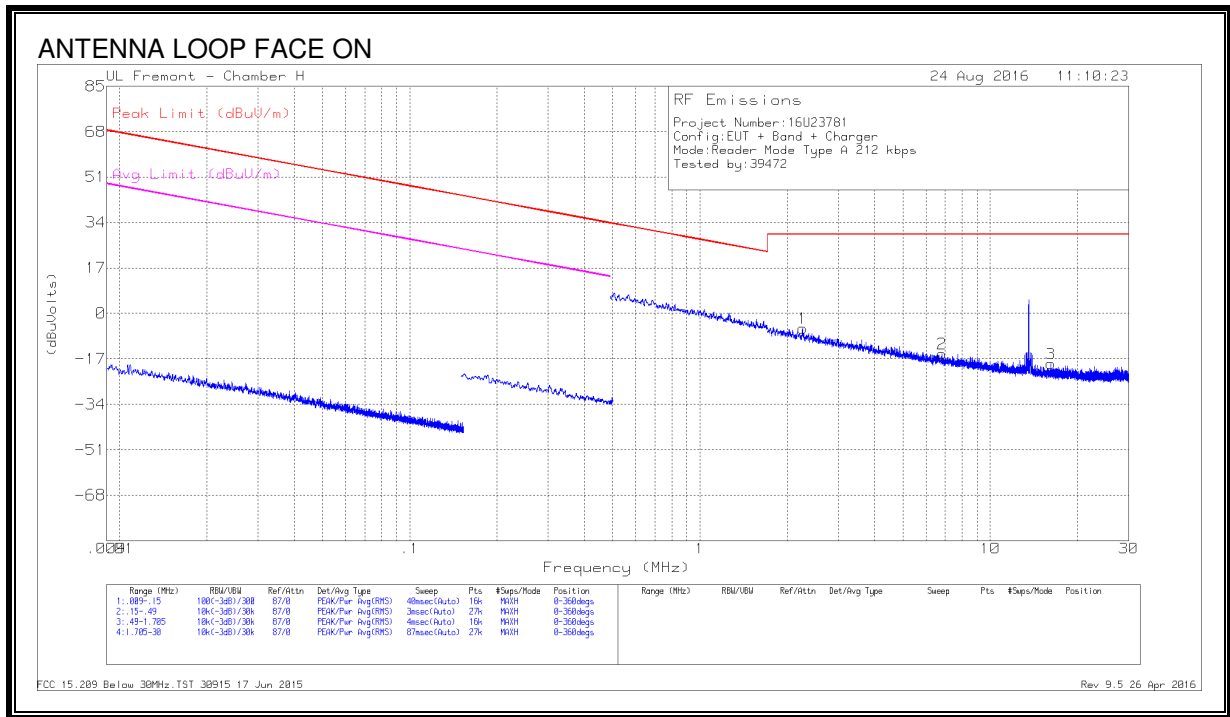


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.13688	15.59	Pk	10.7	.6	-40	-13.11	40.51	-53.62	0-360
4	13.41089	11.59	Pk	10.7	.6	-40	-17.11	50.5	-67.61	0-360
5	13.55652	27.89	Pk	10.6	.6	-40	-.91	84	-84.91	0-360
2	13.55988	34.98	Pk	10.6	.6	-40	6.18	84	-77.82	0-360
3	13.71663	15.39	Pk	10.6	.6	-40	-13.41	40.51	-53.92	0-360
6	13.82329	12.39	Pk	10.6	.5	-40	-16.51	40.51	-57.02	0-360

Pk - Peak detector

SPURIOUS EMISSION

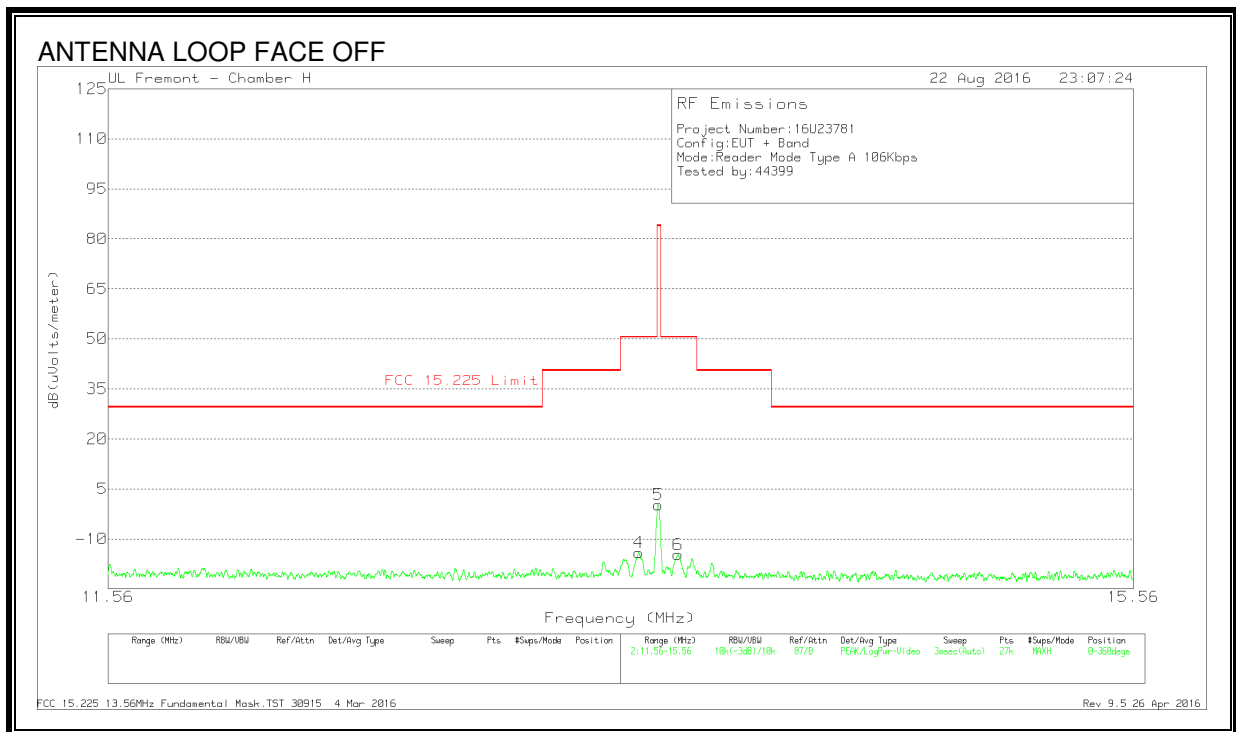
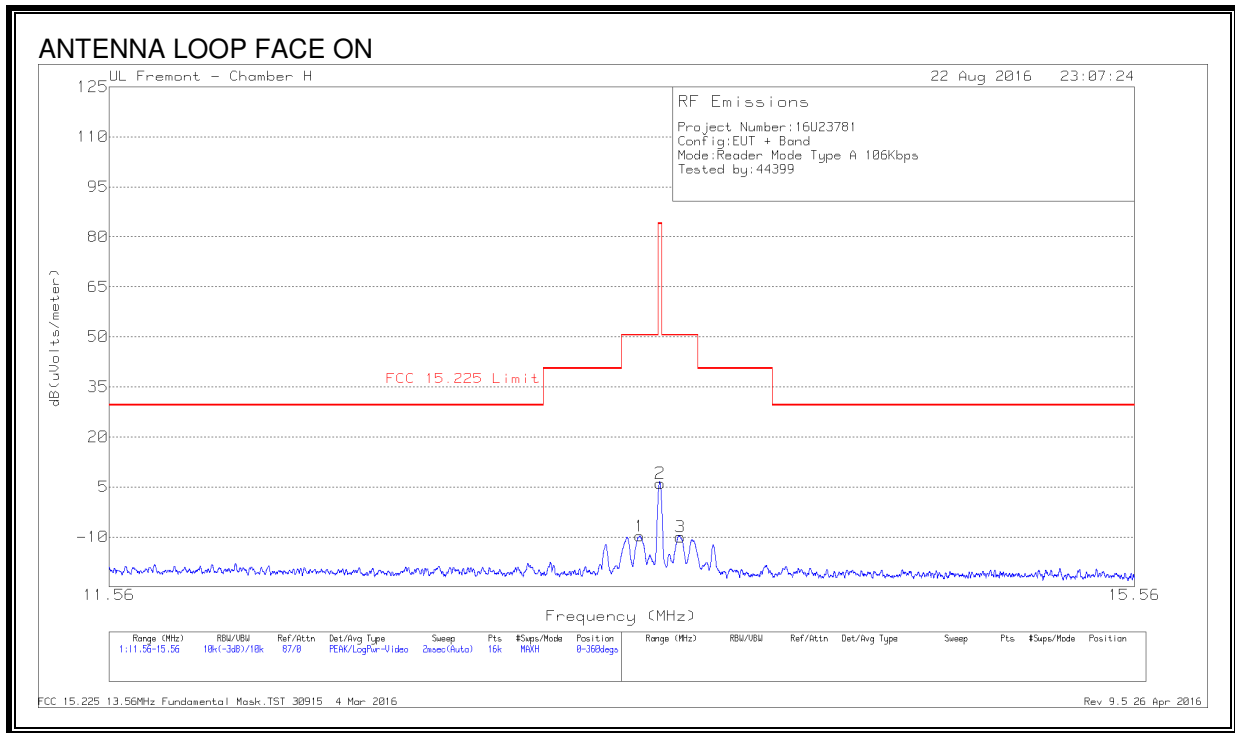


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	2.25625	23.47	Pk	10.8	.2	-40	-5.53	29.54	-35.07	-	-	0-360
2	6.81452	13.69	Pk	10.9	.4	-40	-15.01	29.54	-44.55	-	-	0-360
3	16.1784	10.06	Pk	10.5	.6	-40	-18.84	29.54	-48.38	-	-	0-360
4	1.81556	25.18	Pk	10.8	.2	-40	-3.82	29.54	-33.36	-	-	0-360
5	5.69107	15.76	Pk	10.9	.4	-40	-12.94	29.54	-42.48	-	-	0-360
6	9.95538	11.8	Pk	10.8	.4	-40	-17	29.54	-46.54	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

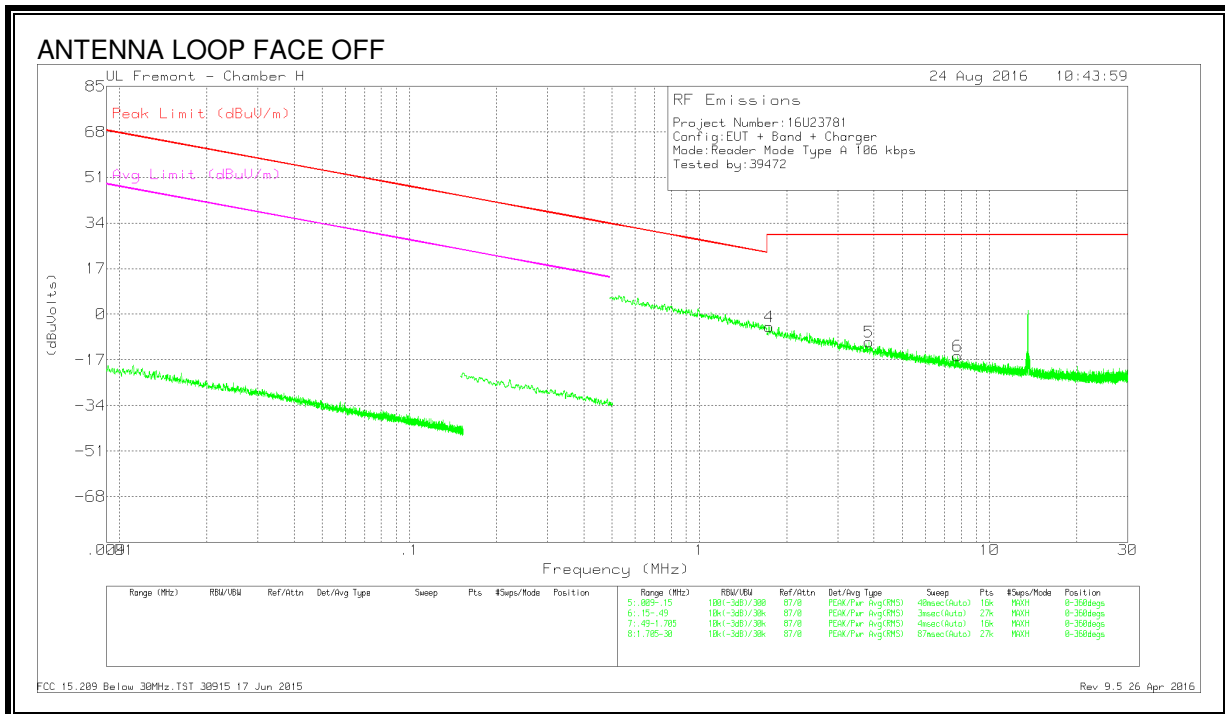
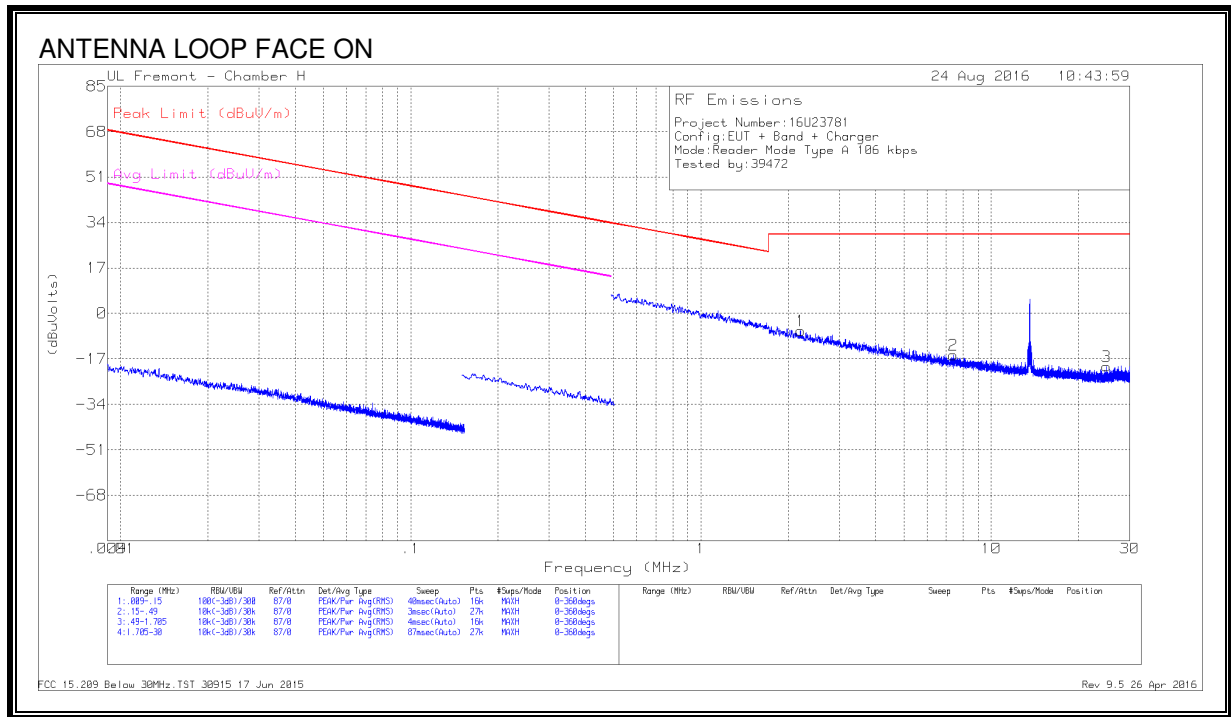


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
4	13.48141	14.64	Pk	10.7	.6	-40	-14.06	50.5	-64.56	0-360
1	13.48263	18.98	Pk	10.7	.6	-40	-9.72	50.5	-60.22	0-360
5	13.55822	29.05	Pk	10.6	.6	-40	.25	84	-83.75	0-360
2	13.562	34.9	Pk	10.6	.6	-40	6.1	84	-77.9	0-360
6	13.63651	14.12	Pk	10.6	.6	-40	-14.68	50.5	-65.18	0-360
3	13.6415	18.8	Pk	10.6	.6	-40	-10	50.5	-60.5	0-360

Pk - Peak detector

SPURIOUS EMISSION

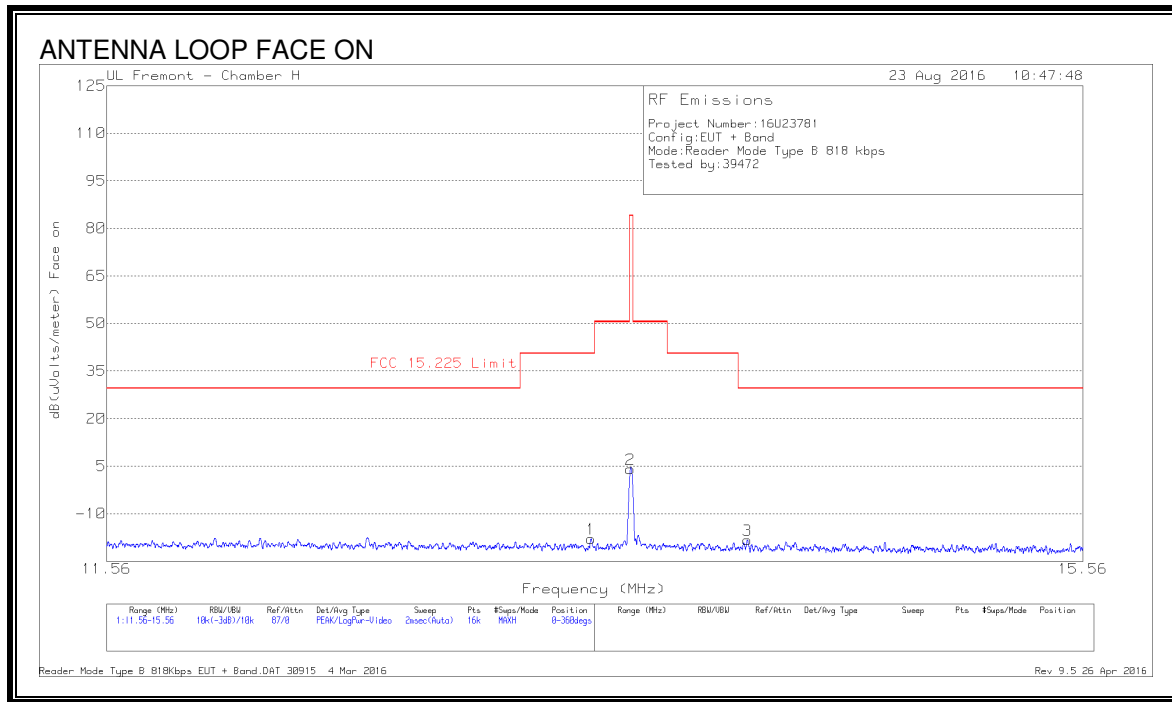


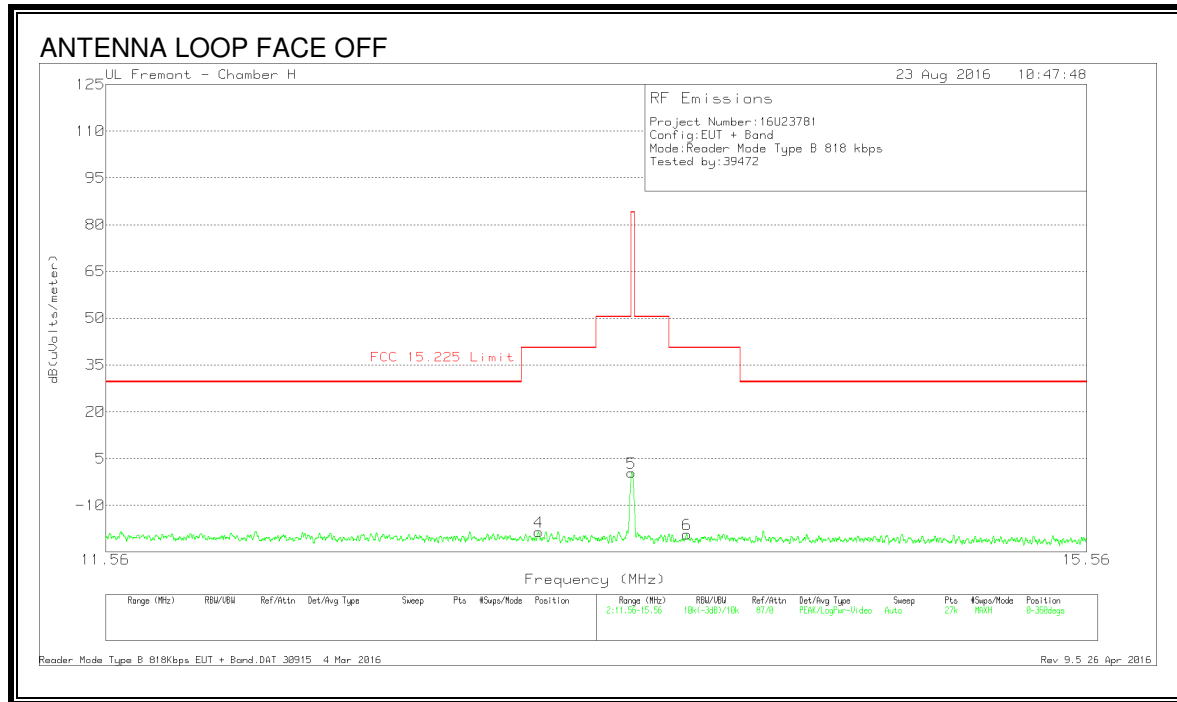
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuV olts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degrees)
1	2.20018	22.57	Pk	10.8	.2	-40	-6.43	29.54	-35.97	-	-	0-360
2	7.41293	13.1	Pk	10.9	.4	-40	-15.6	29.54	-45.14	-	-	0-360
3	25.00571	10.34	Pk	9.2	.7	-40	-19.76	29.54	-49.3	-	-	0-360
4	1.73749	24.38	Pk	10.8	.2	-40	-4.62	29.54	-34.16	-	-	0-360
5	3.83716	18.37	Pk	10.9	.3	-40	-10.43	29.54	-39.97	-	-	0-360
6	7.78026	13.3	Pk	10.8	.4	-40	-15.5	29.54	-45.04	-	-	0-360

Pk - Peak detector

TYPE B 848Kbps FUNDAMENTAL



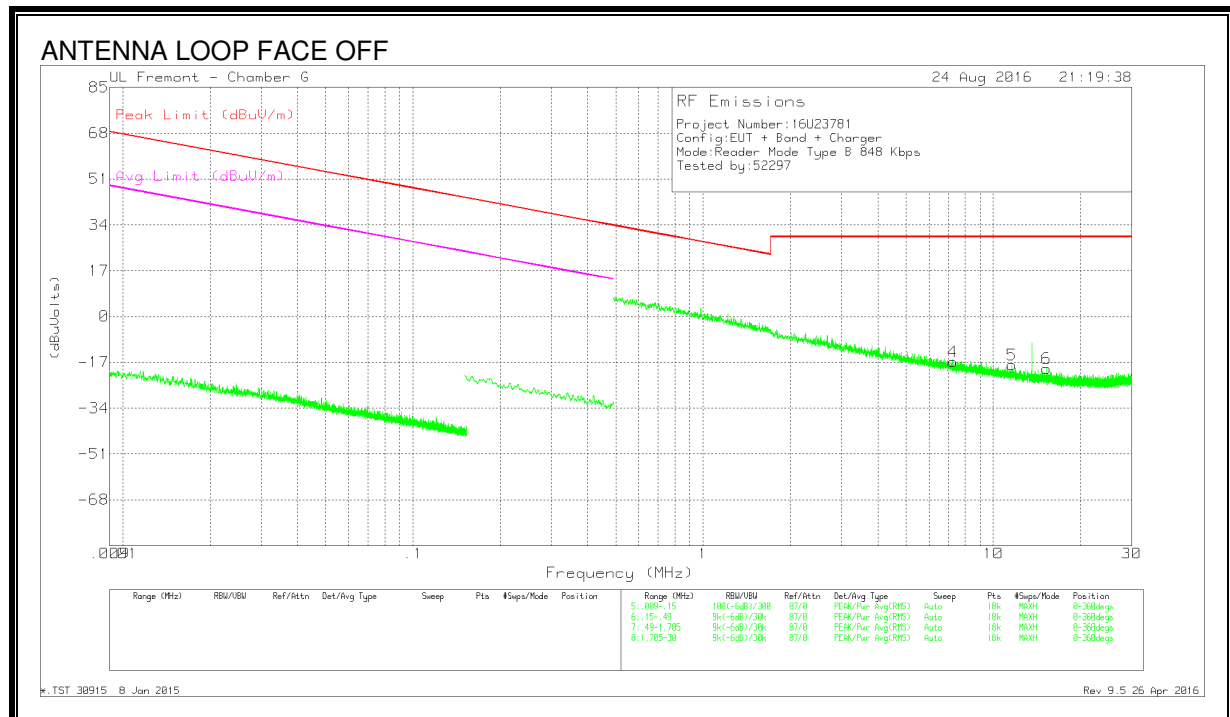
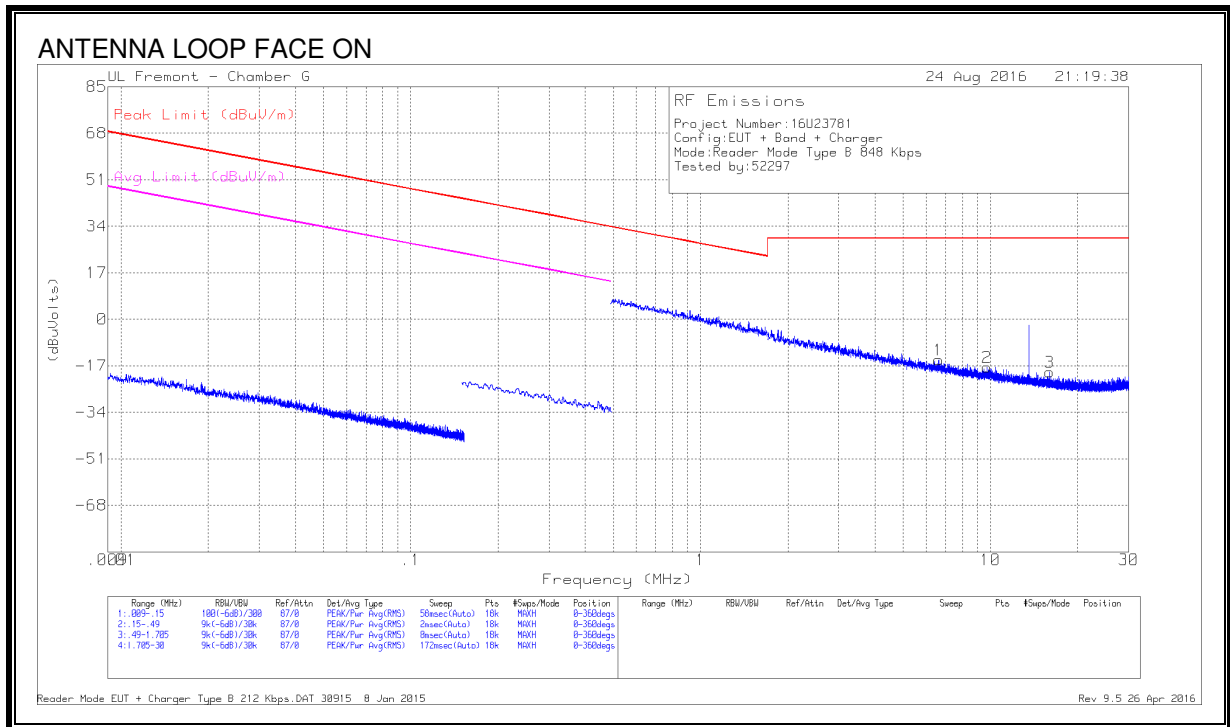


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.39663	10.78	Pk	10.7	.6	-40	-17.92	40.51	-58.43	0-360
2	13.5575	32.83	Pk	10.6	.6	-40	4.03	84	-79.97	0-360
3	14.04913	10.54	Pk	10.6	.5	-40	-18.36	29.54	-47.9	0-360
4	13.17986	10.08	Pk	10.7	.6	-40	-18.62	40.51	-59.13	0-360
5	13.55696	29.25	Pk	10.6	.6	-40	.45	84	-83.55	0-360
6	13.78488	9.61	Pk	10.6	.5	-40	-19.29	40.51	-59.8	0-360

Pk - Peak detector

SPURIOUS EMISSION

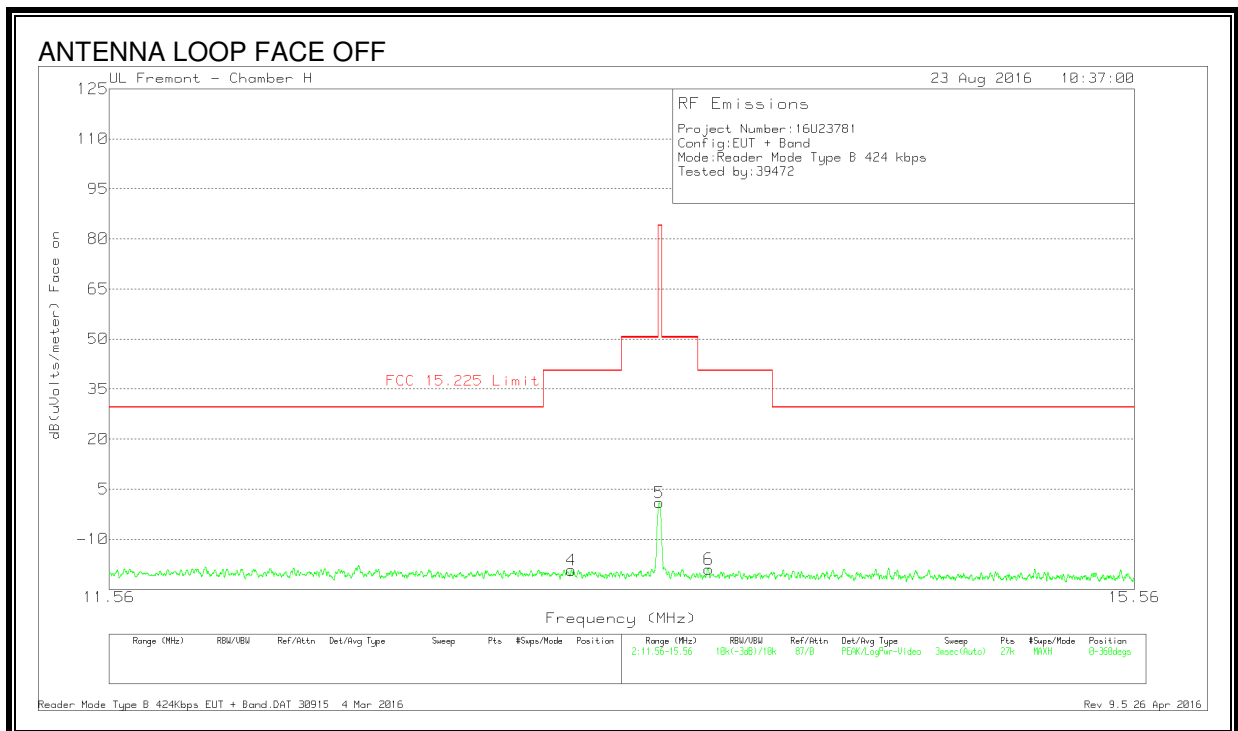
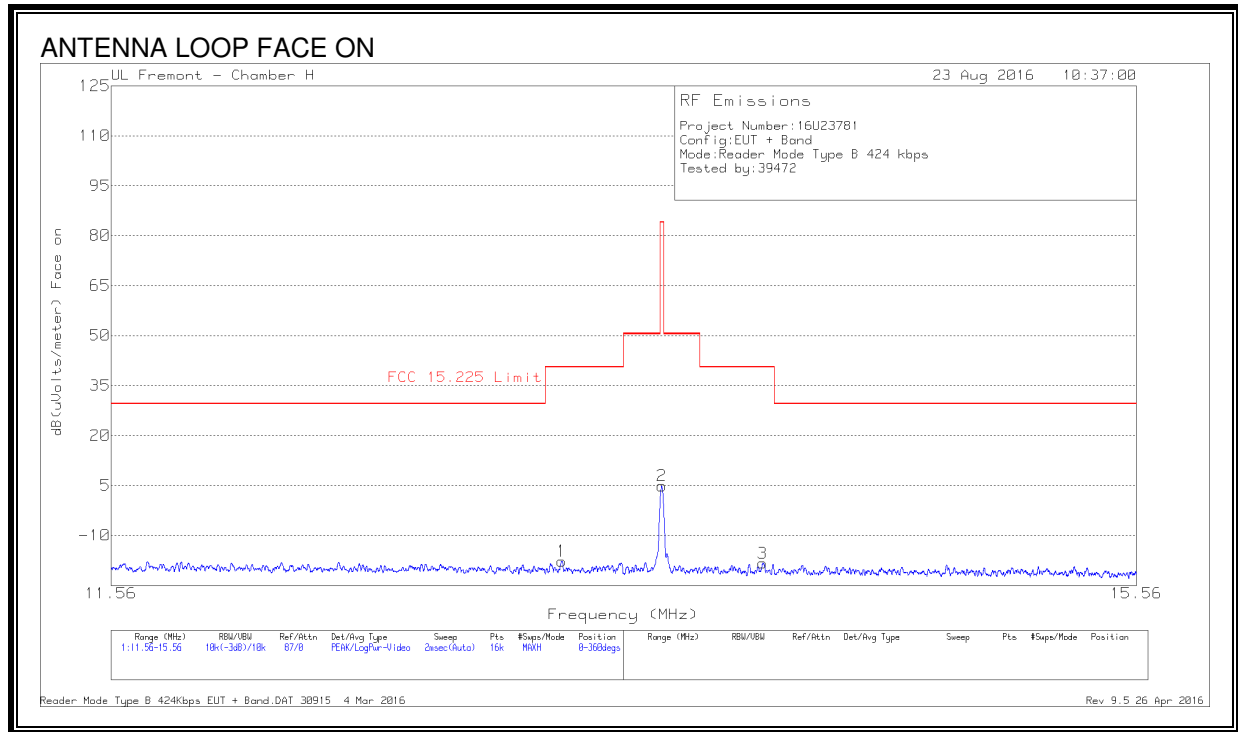


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	6.62693	13.46	Pk	11.3	.4	-40	-14.84	29.54	-44.38	-	-	0-360
4	7.24001	11.39	Pk	11.3	.5	-40	-16.81	29.54	-46.35	-	-	0-360
2	9.73949	10.95	Pk	11	.5	-40	-17.55	29.54	-47.09	-	-	0-360
5	11.60546	10.71	Pk	10.8	.6	-40	-17.89	29.54	-47.43	-	-	0-360
6	15.26979	9.61	Pk	10.5	.6	-40	-19.29	29.54	-48.83	-	-	0-360
3	15.97247	9.57	Pk	10.4	.7	-40	-19.33	29.54	-48.87	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL

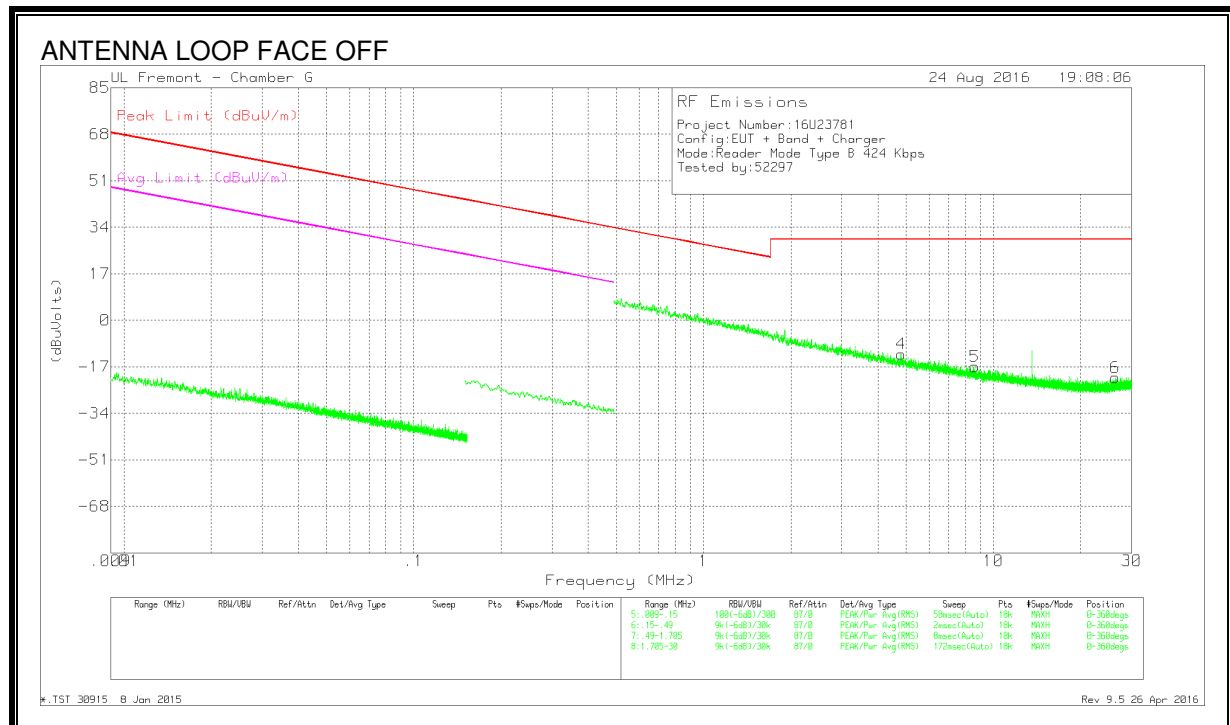
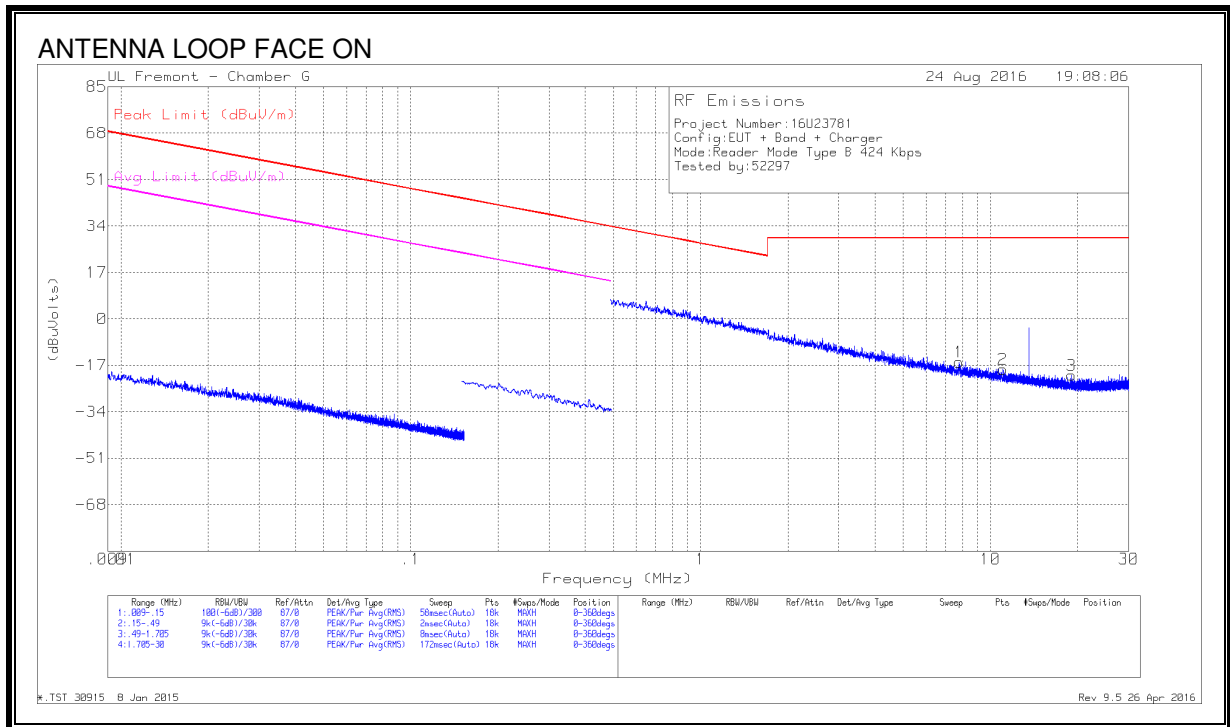


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.17338	10.97	Pk	10.7	.6	-40	-17.73	40.51	-58.24	0-360
2	13.56025	33.7	Pk	10.6	.6	-40	4.9	84	-79.1	0-360
3	13.9635	10.57	Pk	10.6	.5	-40	-18.33	40.51	-58.84	0-360
4	13.21827	9.4	Pk	10.7	.6	-40	-19.3	40.51	-59.81	0-360
5	13.55822	29.74	Pk	10.6	.6	-40	.94	84	-83.06	0-360
6	13.75336	9.89	Pk	10.6	.5	-40	-19.01	40.51	-59.52	0-360

Pk - Peak detector

SPURIOUS EMISSION

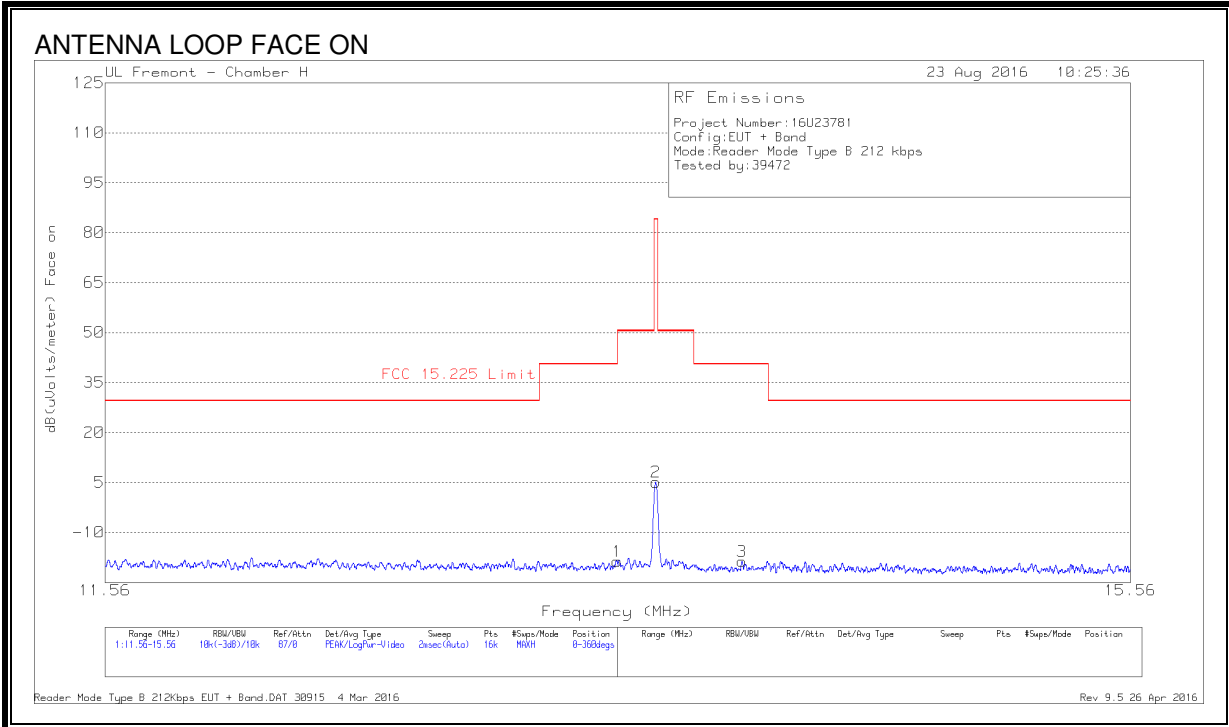


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	4.80656	15.91	Pk	11.5	.3	-40	-12.29	29.54	-41.83	-	-	0-360
1	7.802	12.46	Pk	11.2	.5	-40	-15.84	29.54	-45.38	-	-	0-360
5	8.63595	11.48	Pk	11.1	.5	-40	-16.92	29.54	-46.46	-	-	0-360
2	11.03561	10.03	Pk	10.9	.6	-40	-18.47	29.54	-48.01	-	-	0-360
3	19.03237	8.77	Pk	9.9	.7	-40	-20.63	29.54	-50.17	-	-	0-360
6	26.30366	9.25	Pk	8.9	.9	-40	-20.95	29.54	-50.49	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

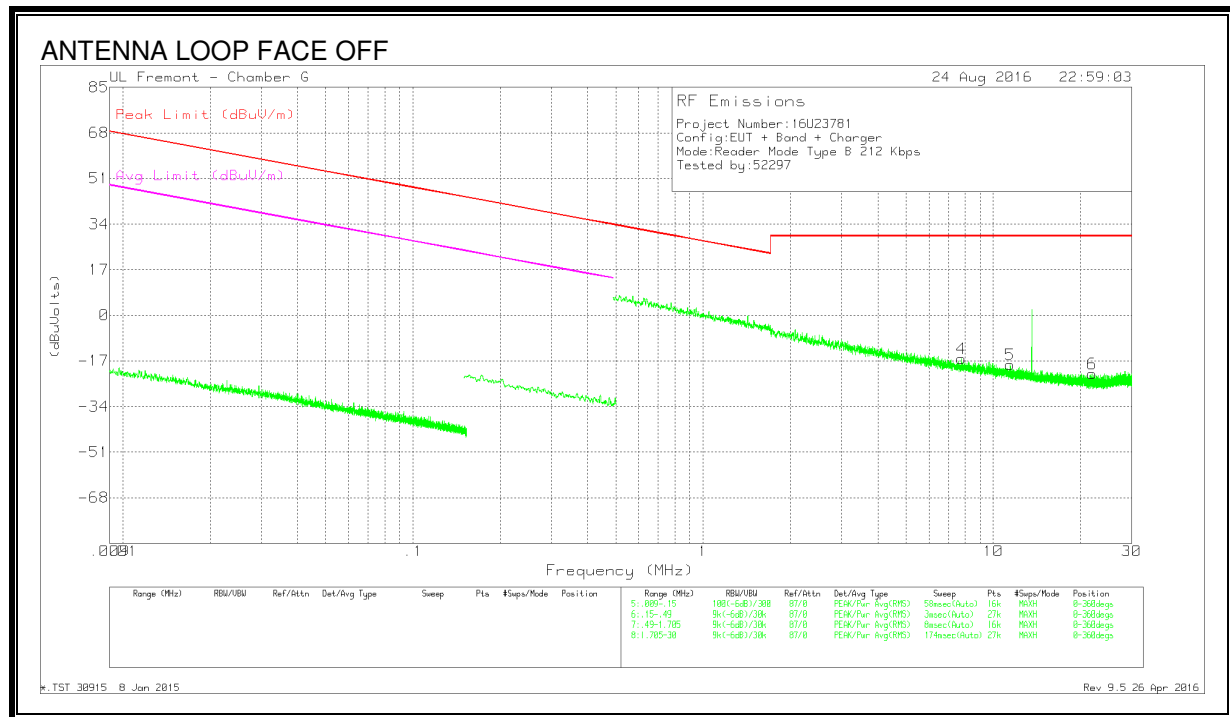
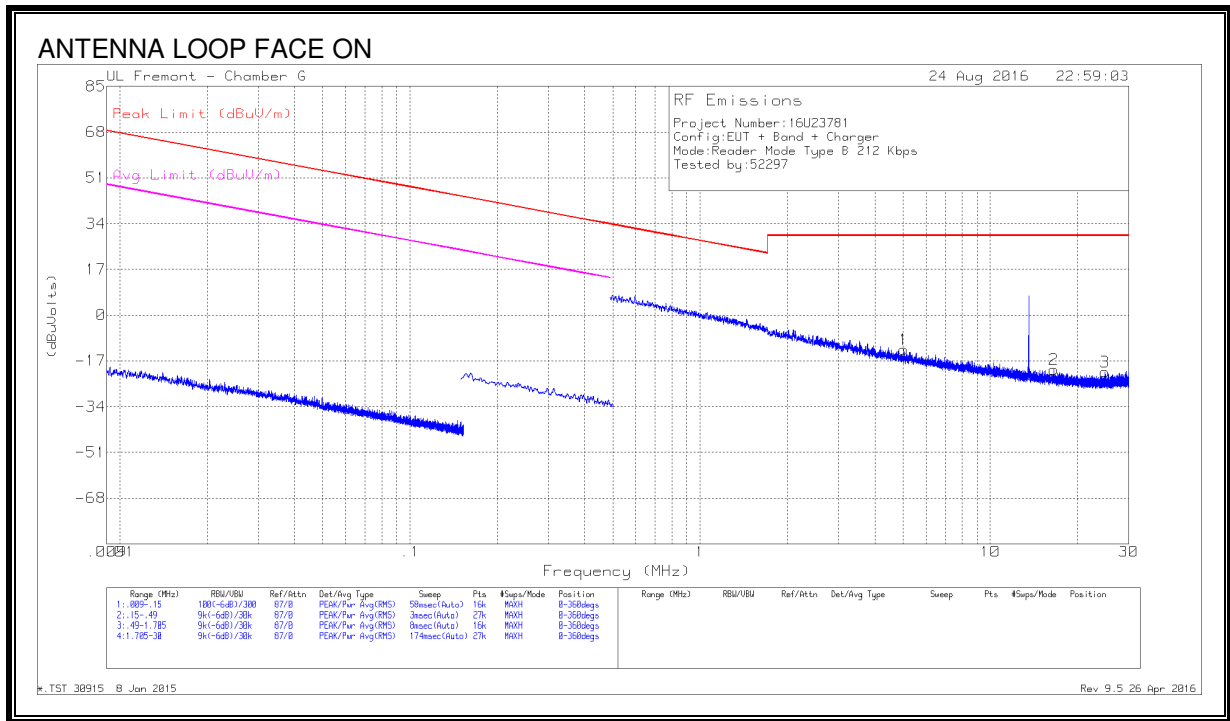


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.4095	9.99	Pk	10.7	.6	-40	-18.71	40.51	-59.22	0-360
2	13.56025	33.91	Pk	10.6	.6	-40	5.11	84	-78.89	0-360
3	13.9035	10.2	Pk	10.6	.5	-40	-18.7	40.51	-59.21	0-360
4	13.4504	10.97	Pk	10.7	.6	-40	-17.73	50.5	-68.23	0-360
5	13.56022	29.44	Pk	10.6	.6	-40	.64	84	-83.36	0-360
6	13.75965	10.26	Pk	10.6	.5	-40	-18.64	40.51	-59.15	0-360

Pk - Peak detector

SPURIOUS EMISSION

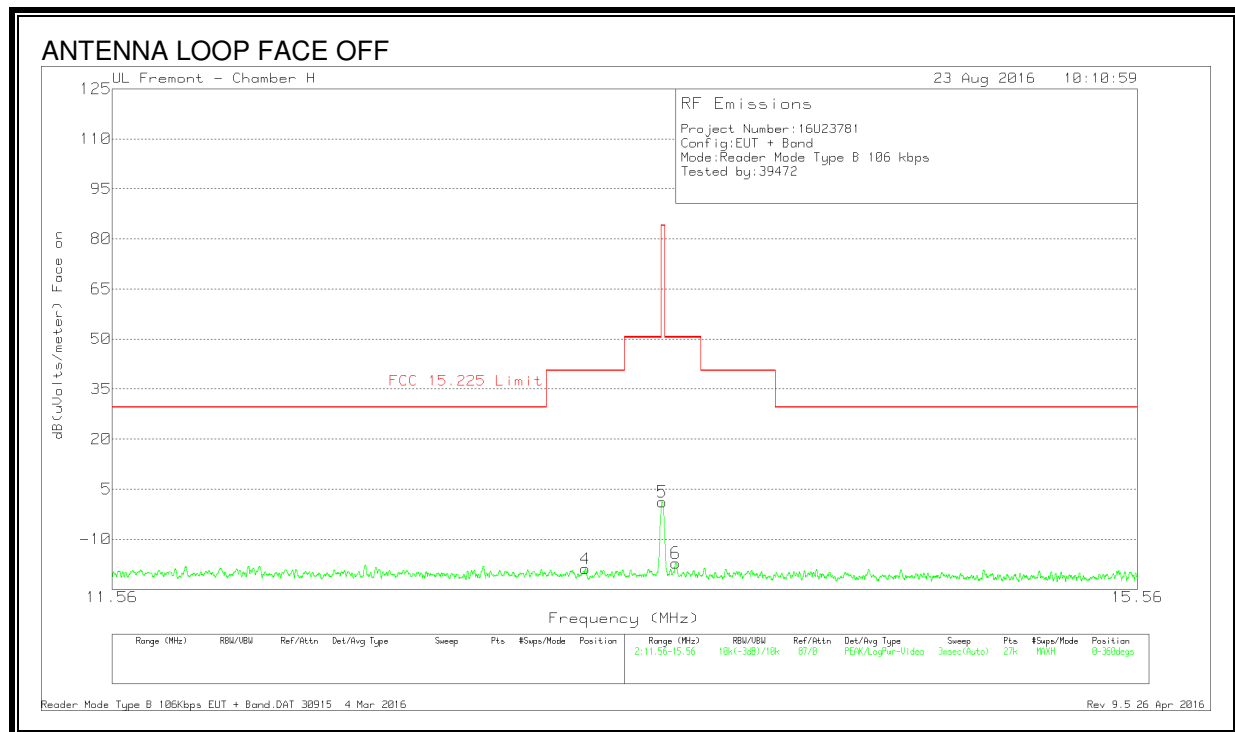
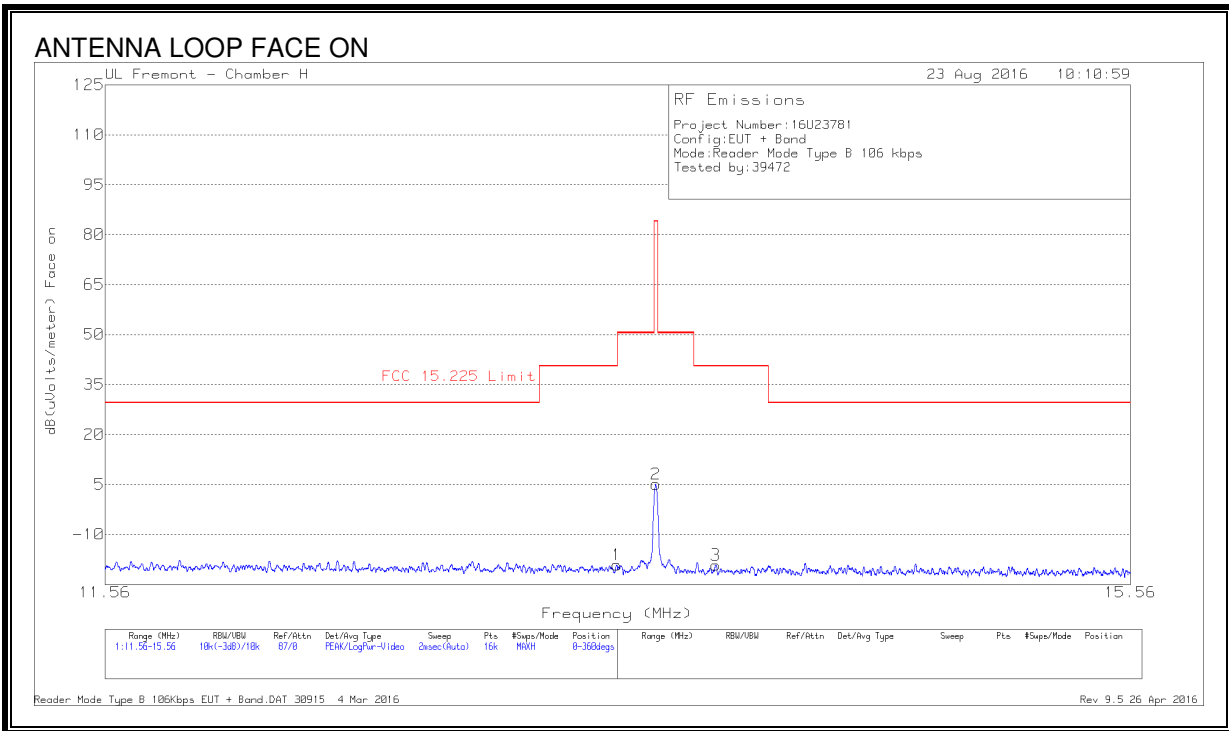


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	5.02506	15.44	Pk	11.5	.3	-40	-12.76	29.54	-42.3	-	-	0-360
4	7.76454	12.1	Pk	11.2	.5	-40	-16.2	29.54	-45.74	-	-	0-360
5	11.43358	10.03	Pk	10.9	.6	-40	-18.47	29.54	-48.01	-	-	0-360
2	16.52267	8.76	Pk	10.3	.7	-40	-20.24	29.54	-49.78	-	-	0-360
6	21.92878	7.98	Pk	9.5	.8	-40	-21.72	29.54	-51.26	-	-	0-360
3	24.88257	8.93	Pk	9.1	.8	-40	-21.17	29.54	-50.71	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

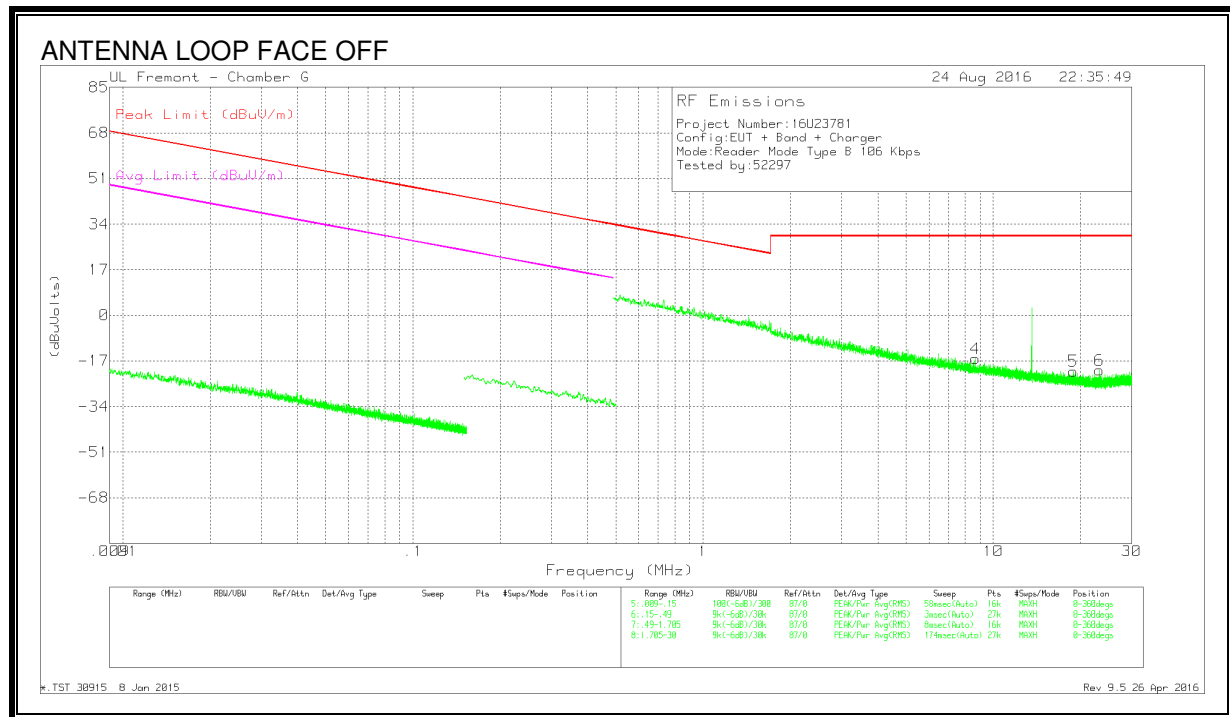
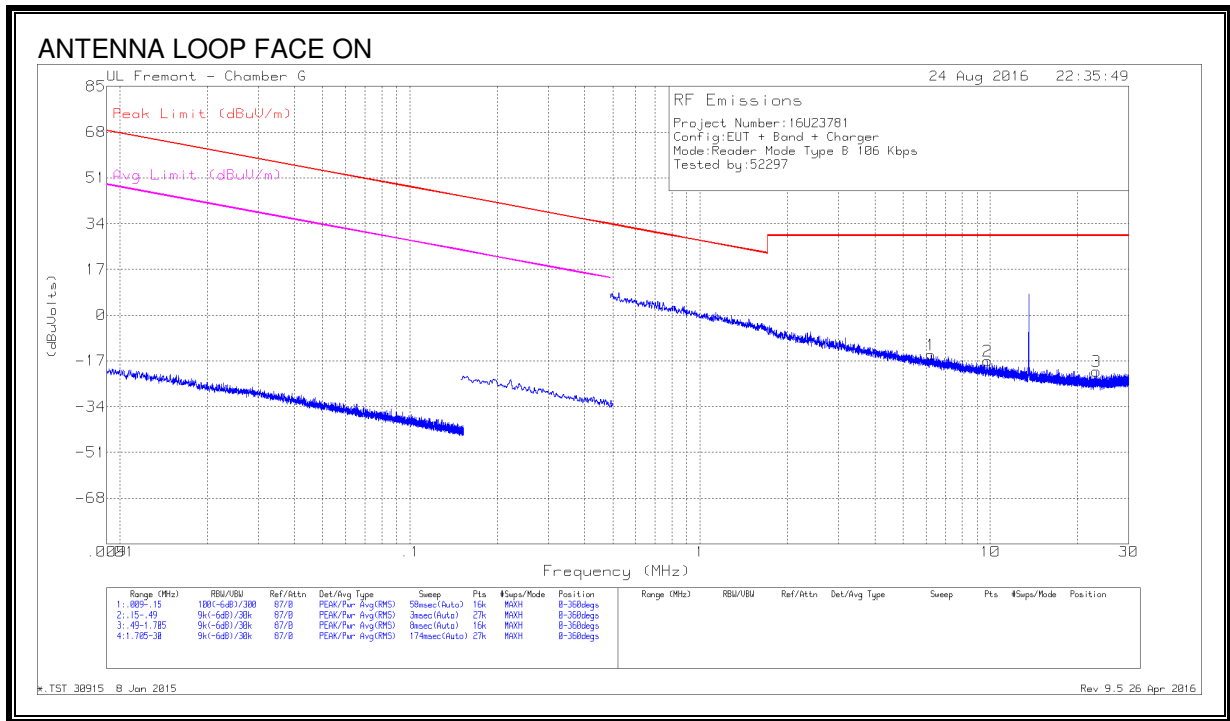


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/m eter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.40738	9.57	Pk	10.7	.6	-40	-19.13	40.51	-59.64	0-360
2	13.56025	33.89	Pk	10.6	.6	-40	5.09	84	-78.91	0-360
3	13.79813	9.71	Pk	10.6	.5	-40	-19.19	40.51	-59.7	0-360
4	13.2603	9.82	Pk	10.7	.6	-40	-18.88	40.51	-59.39	0-360
5	13.55822	29.97	Pk	10.6	.6	-40	1.17	84	-82.83	0-360
6	13.61209	11.62	Pk	10.6	.6	-40	-17.18	50.5	-67.68	0-360

Pk - Peak detector

SPURIOUS EMISSION

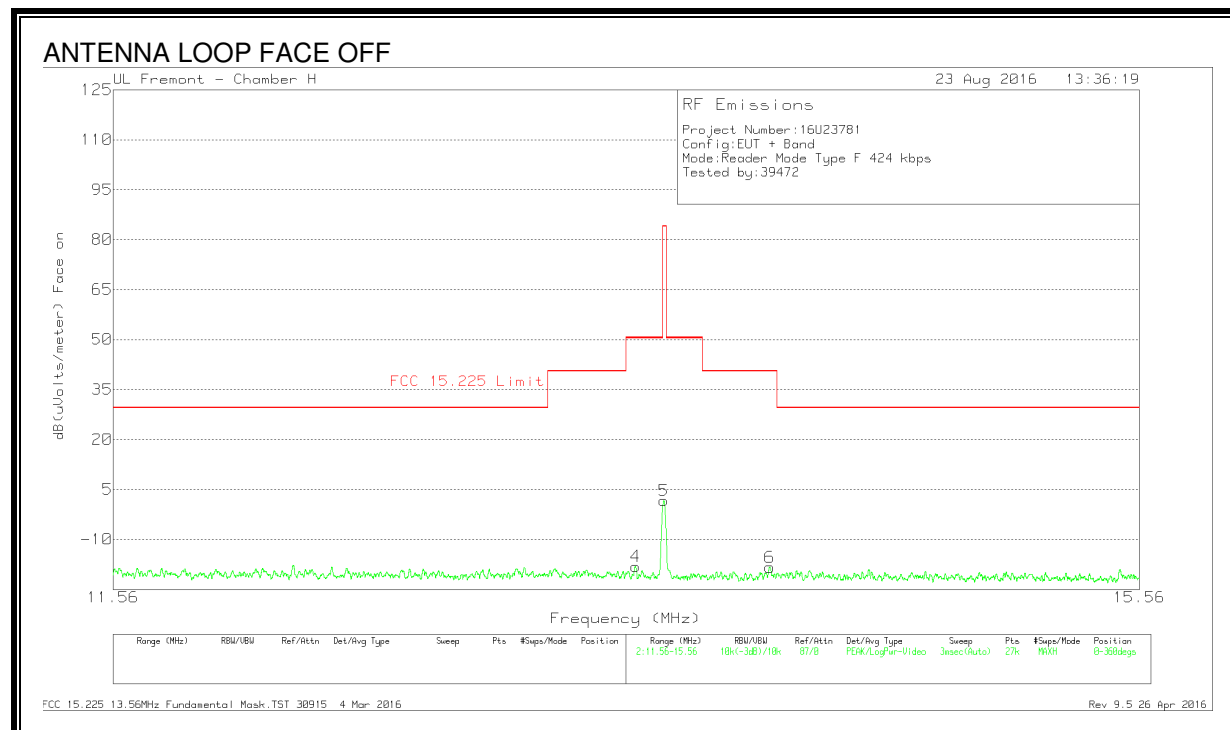
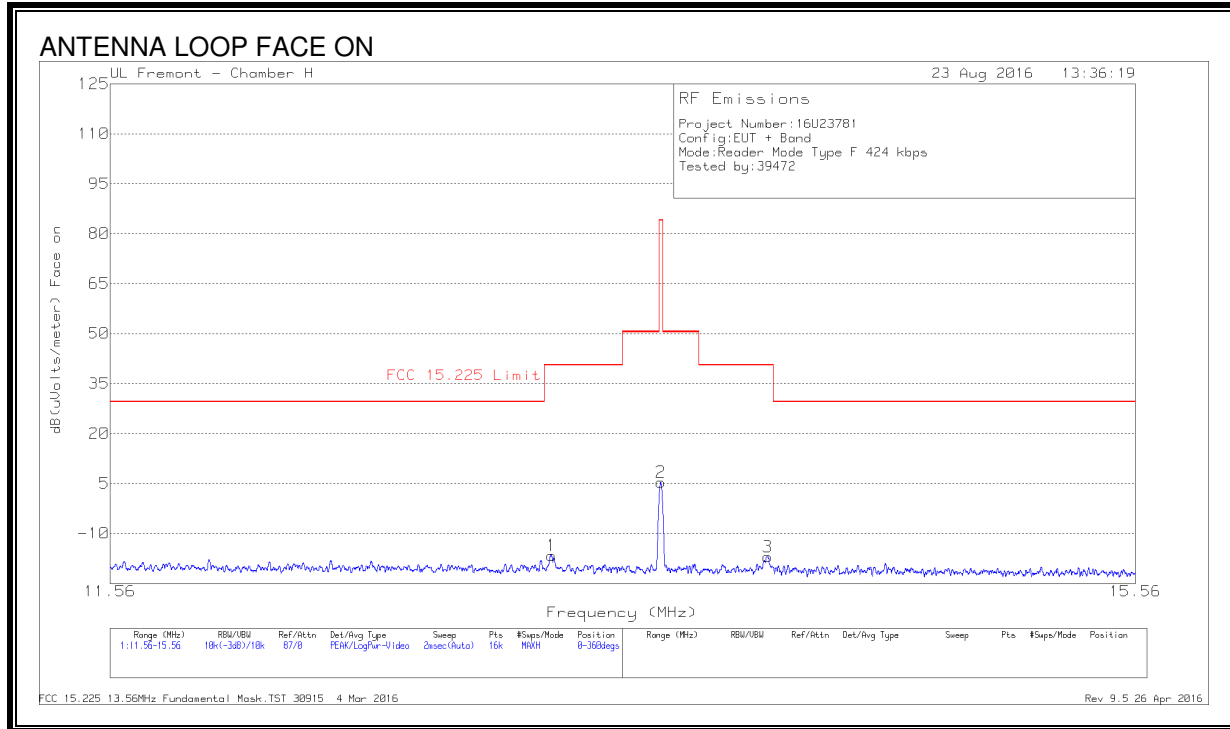


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	6.2617	13.45	Pk	11.4	.4	-40	-14.75	29.54	-44.29	-	-	0-360
4	8.66058	12.22	Pk	11.1	.5	-40	-16.18	29.54	-45.72	-	-	0-360
2	9.78351	11.38	Pk	11	.5	-40	-17.12	29.54	-46.66	-	-	0-360
5	18.87753	8.52	Pk	10	.7	-40	-20.78	29.54	-50.32	-	-	0-360
3	23.23826	9.09	Pk	9.3	.8	-40	-20.81	29.54	-50.35	-	-	0-360
6	23.26026	9.38	Pk	9.3	.8	-40	-20.52	29.54	-50.06	-	-	0-360

Pk - Peak detector

TYPE F 424Kbps FUNDAMENTAL

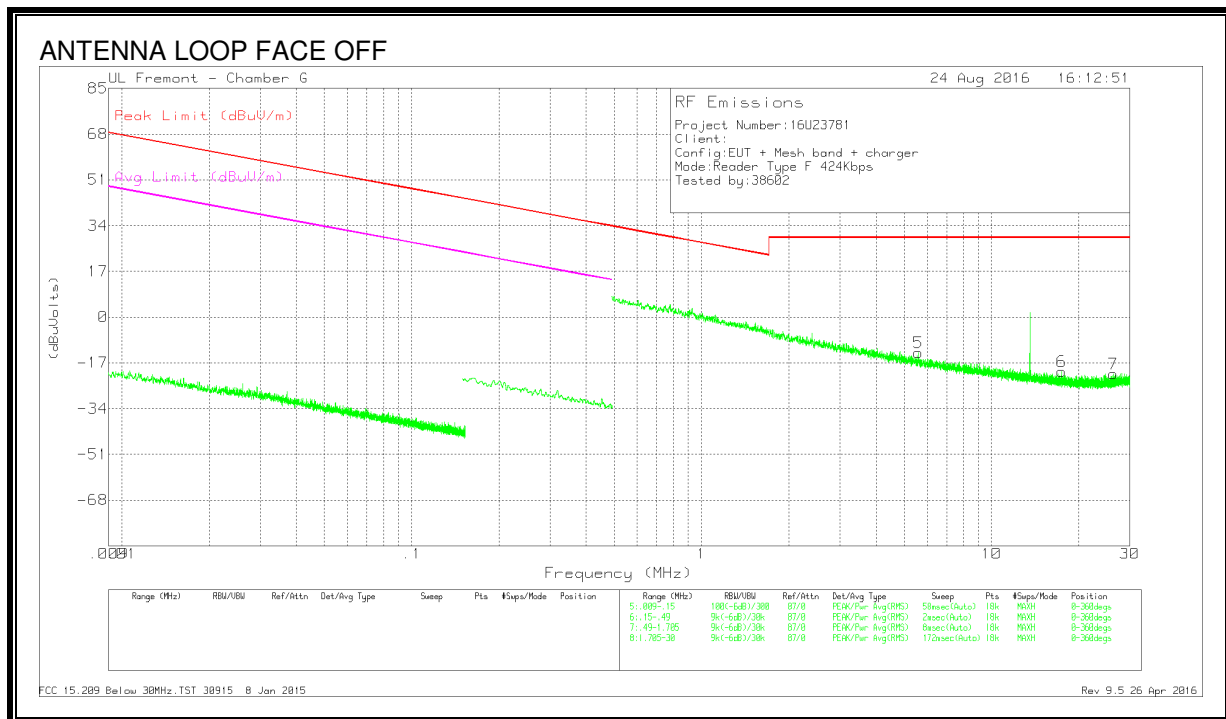
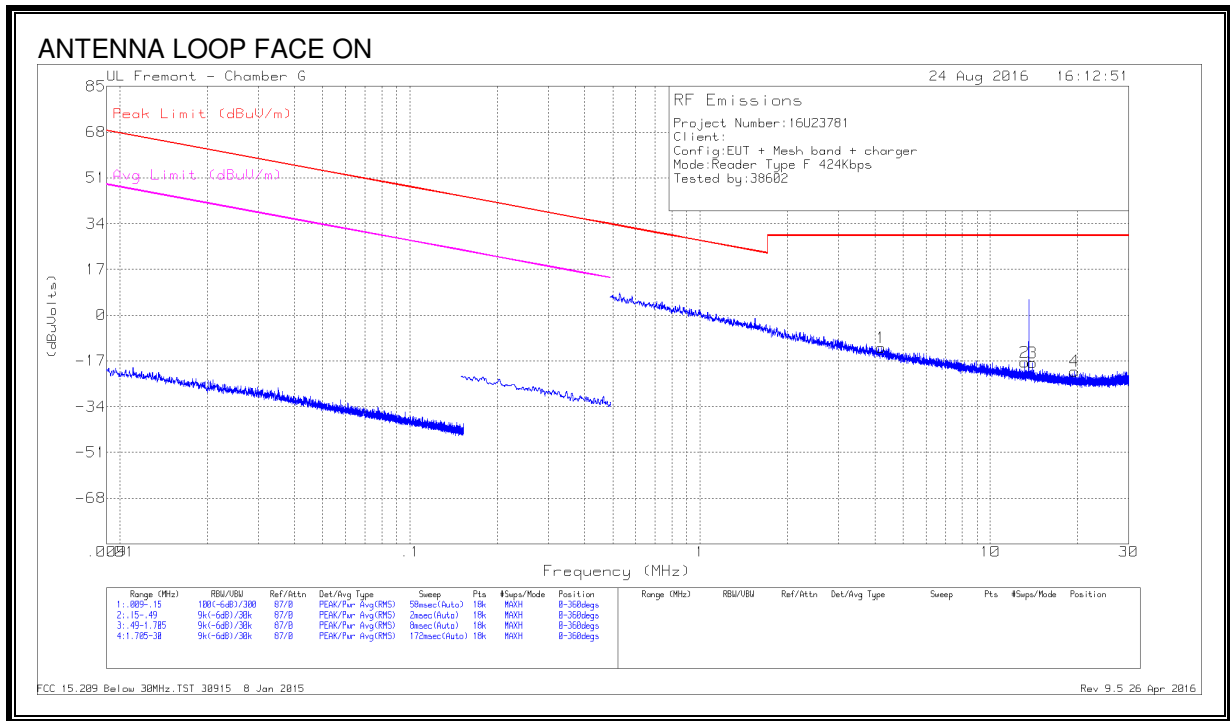


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.1375	12.11	Pk	10.7	.6	-40	-16.59	40.51	-57.1	0-360
2	13.56	34.18	Pk	10.6	.6	-40	5.38	84	-78.62	0-360
3	13.98788	11.92	Pk	10.6	.5	-40	-16.98	40.51	-57.49	0-360
4	13.44804	10.61	Pk	10.7	.6	-40	-18.09	50.5	-68.59	0-360
5	13.55822	30.48	Pk	10.6	.6	-40	1.68	84	-82.32	0-360
6	13.98128	10.53	Pk	10.6	.5	-40	-18.37	40.51	-58.88	0-360

Pk - Peak detector

SPURIOUS EMISSION

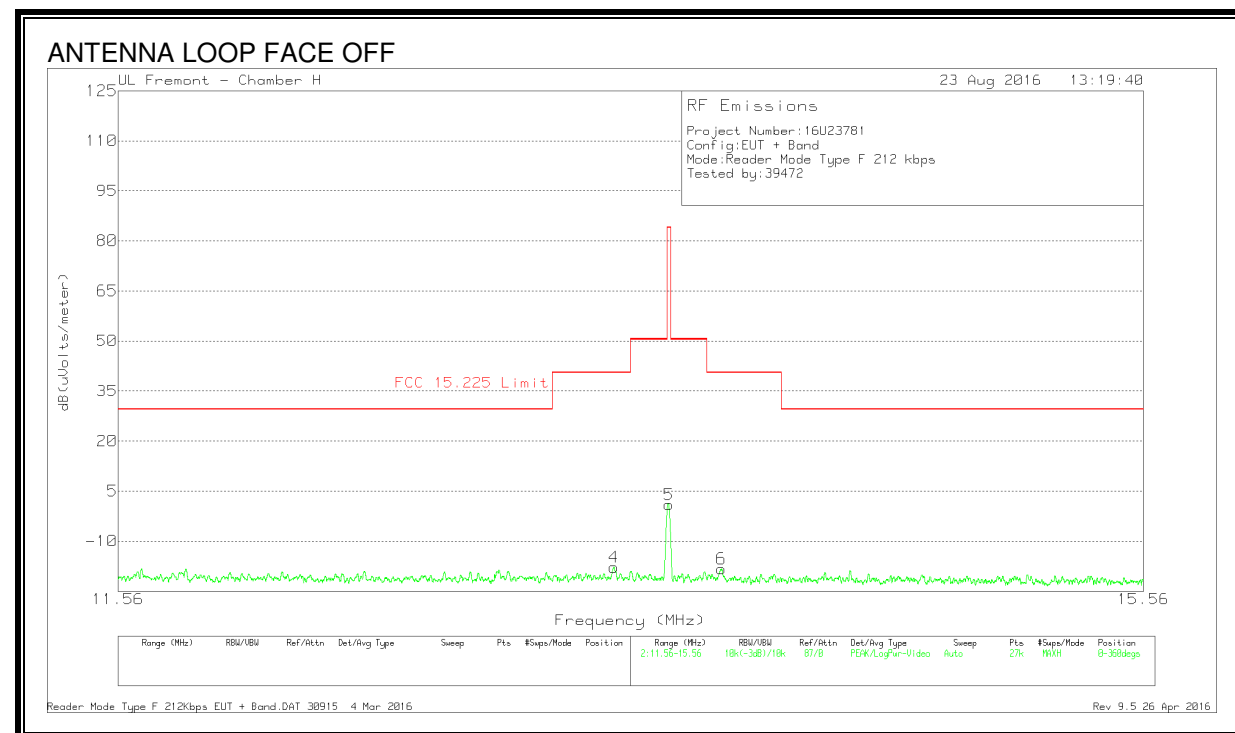
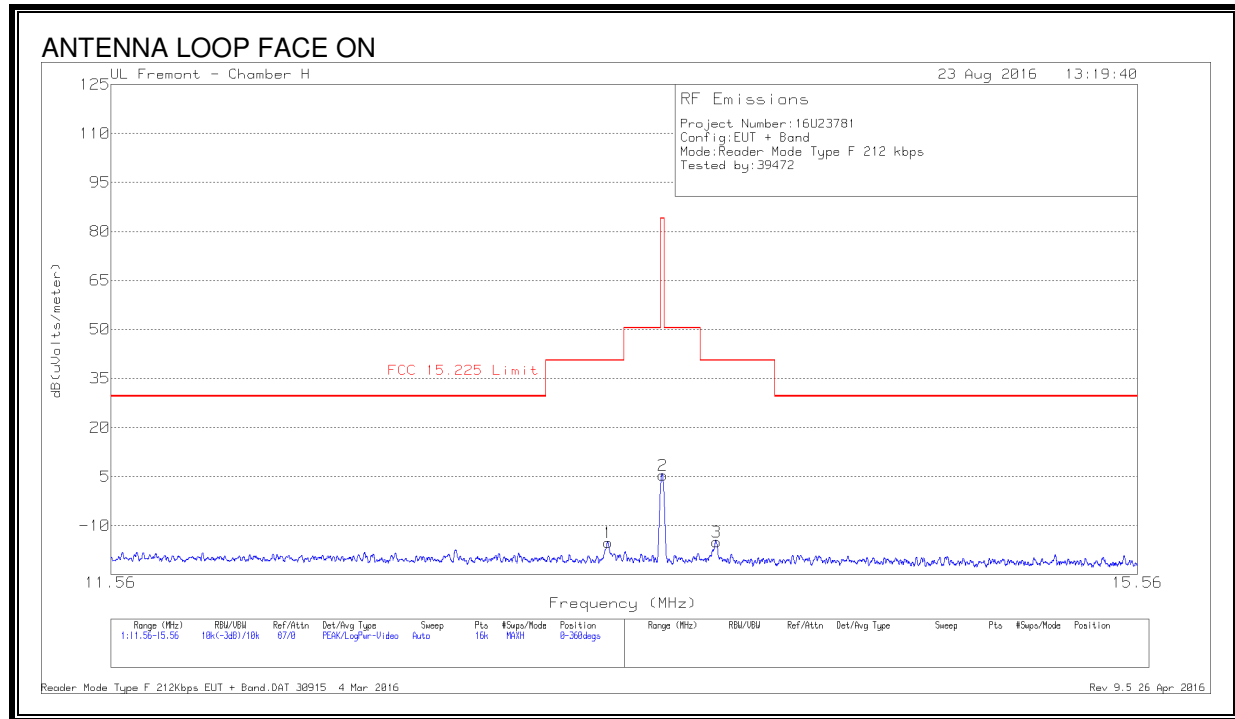


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	4.20134	16.11	Pk	11.6	.3	-40	-11.99	29.54	-41.53	-	-	0-360
5	5.59256	14.95	Pk	11.4	.4	-40	-13.25	29.54	-42.79	-	-	0-360
2	13.1358	11.14	Pk	10.7	.6	-40	-17.56	29.54	-47.1	-	-	0-360
3	13.98311	11.15	Pk	10.6	.6	-40	-17.65	29.54	-47.19	-	-	0-360
6	17.42186	8.82	Pk	10.2	.7	-40	-20.28	29.54	-49.82	-	-	0-360
4	19.50004	8.62	Pk	9.9	.7	-40	-20.78	29.54	-50.32	-	-	0-360
7	26.32252	9.13	Pk	8.9	.9	-40	-21.07	29.54	-50.61	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

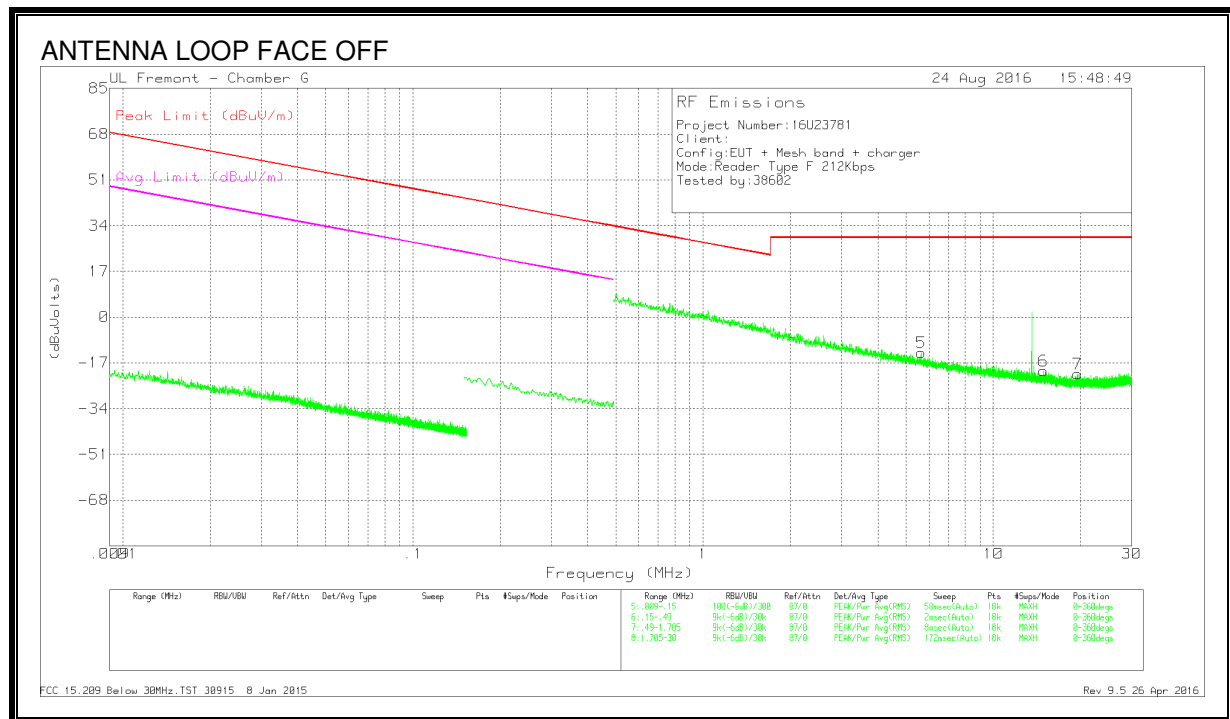
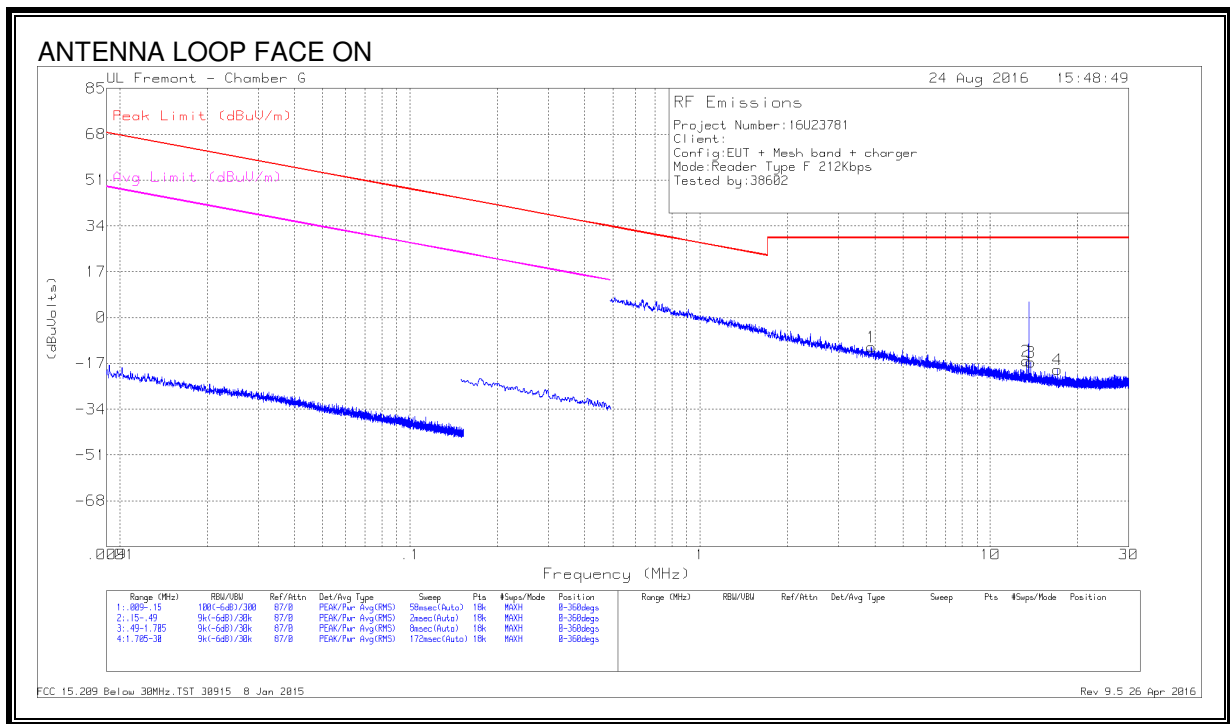


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr (dB) 40Log	Corrected Reading dB(uVolts/meter)	FCC 15.225 Limit	PK Margin (dB)	Azimuth (Degs)
1	13.3505	13.45	Pk	10.7	.6	-40	-15.25	40.51	-55.76	0-360
2	13.56225	34.18	Pk	10.6	.6	-40	5.38	84	-78.62	0-360
3	13.77475	13.98	Pk	10.6	.5	-40	-14.92	40.51	-55.43	0-360
4	13.34688	10.88	Pk	10.7	.6	-40	-17.82	40.51	-58.33	0-360
5	13.56022	29.73	Pk	10.6	.6	-40	.93	84	-83.07	0-360
6	13.76934	10.65	Pk	10.6	.5	-40	-18.25	40.51	-58.76	0-360

Pk - Peak detector

SPURIOUS EMISSION



DATA

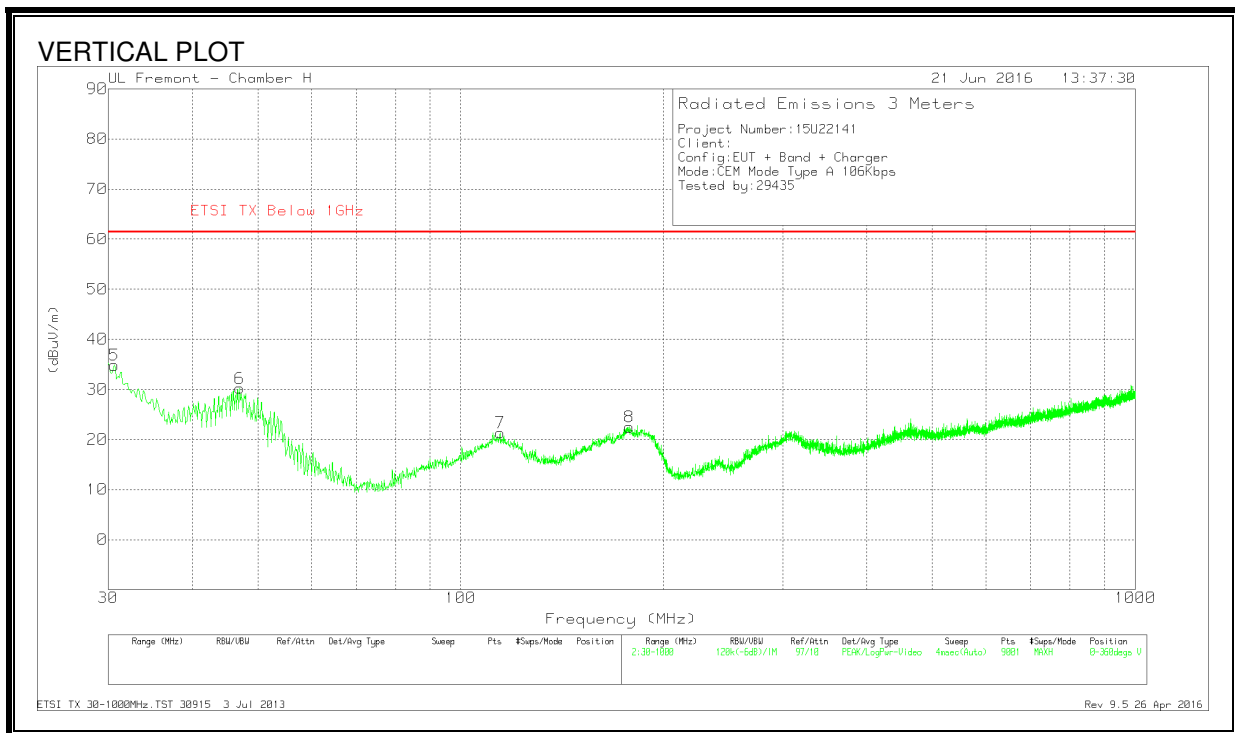
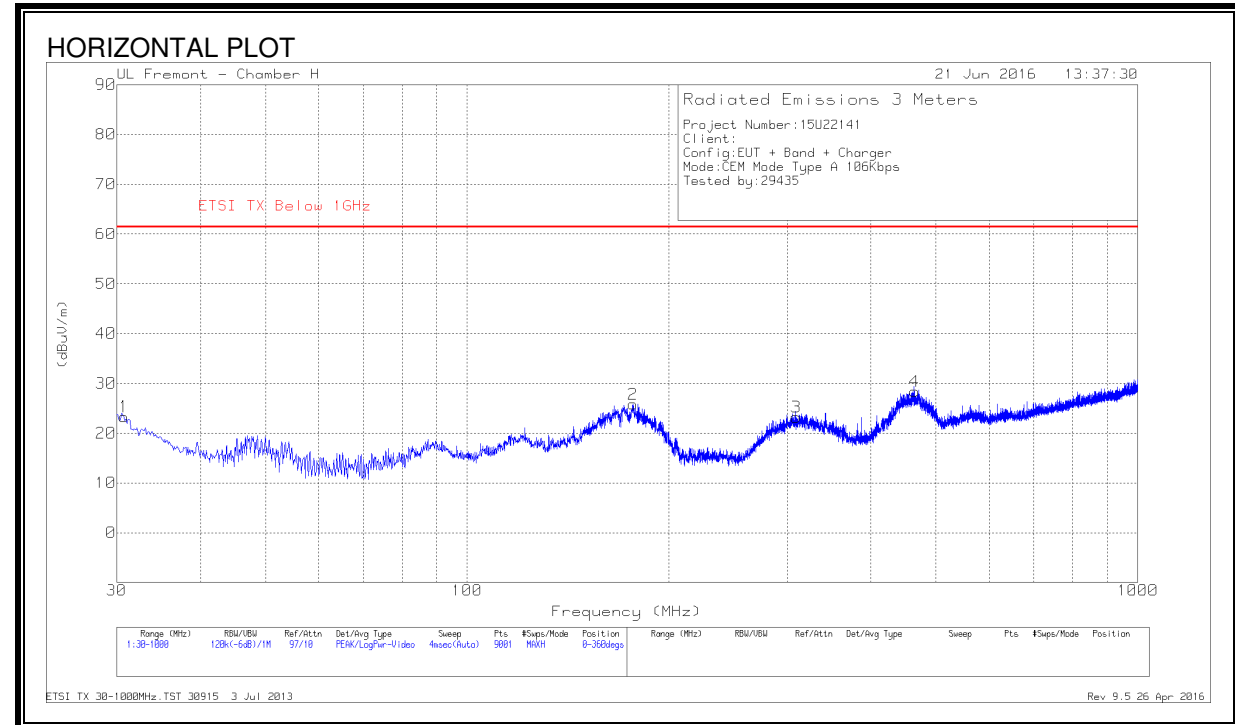
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	3.88536	17.16	Pk	11.6	.3	-40	-10.94	29.54	-40.48	-	-	0-360
5	5.63343	15.08	Pk	11.4	.4	-40	-13.12	29.54	-42.66	-	-	0-360
2	13.34723	12.47	Pk	10.7	.6	-40	-16.23	29.54	-45.77	-	-	0-360
3	13.77167	12.18	Pk	10.6	.6	-40	-16.62	29.54	-46.16	-	-	0-360
6	14.88622	8.86	Pk	10.5	.6	-40	-20.04	29.54	-49.58	-	-	0-360
4	17.04143	9.78	Pk	10.2	.7	-40	-19.32	29.54	-48.86	-	-	0-360
7	19.53148	8.23	Pk	9.9	.7	-40	-21.17	29.54	-50.71	-	-	0-360

Pk - Peak detector

8.2. TX SPURIOUS EMISSION 30 TO 1000 MHz

8.2.1. CE MODE

TYPE A 848Kbps



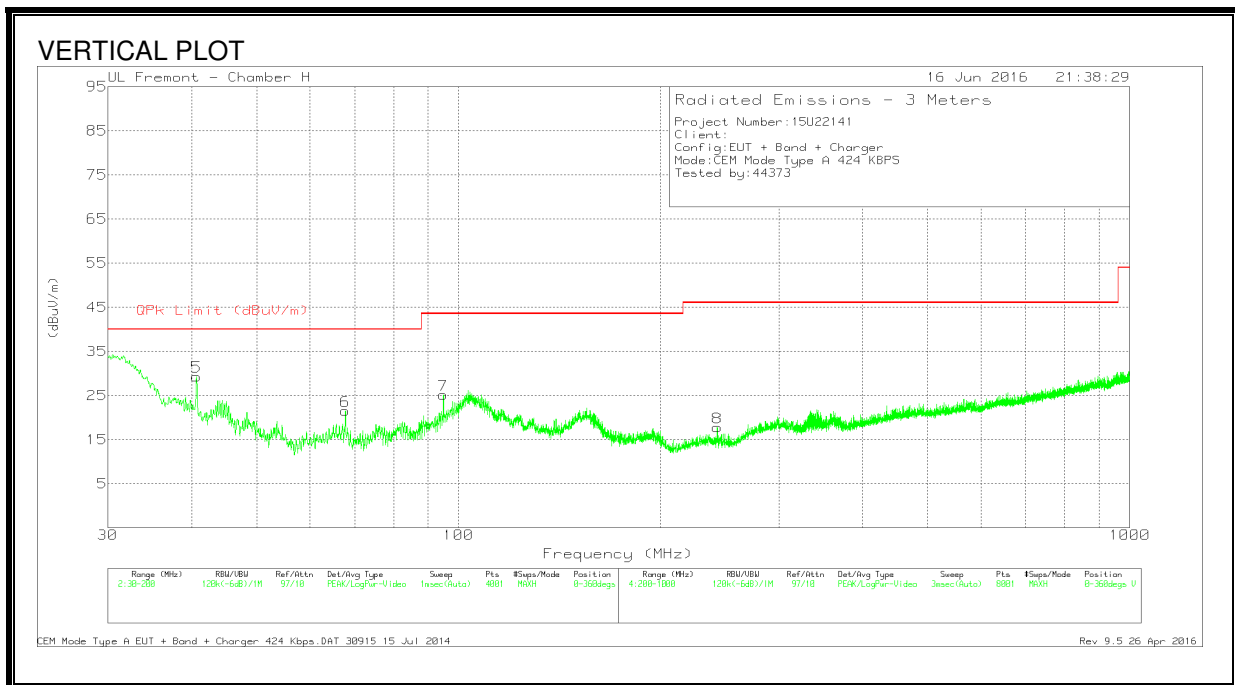
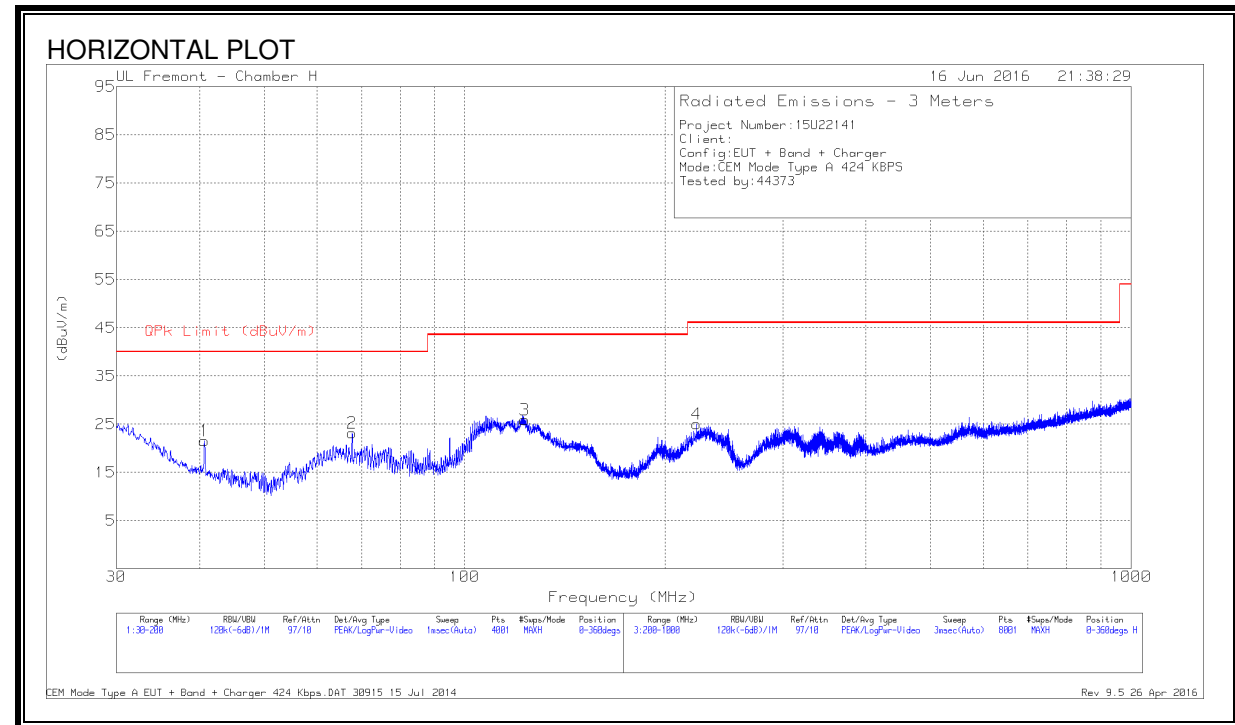
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	ETSI TX Below 1GHz	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7	* 114.3902	34.54	Pk	17.2	-30.4	21.34	61.38	-40.04	0-360	100	V
5	30.6467	41.43	Pk	24.7	-31.3	34.83	61.38	-26.55	0-360	100	V
1	30.7544	29.91	Pk	24.7	-31.3	23.31	61.38	-38.07	0-360	100	H
6	47.0289	48.12	Pk	13.1	-31	30.22	61.38	-31.16	0-360	100	V
2	176.6859	40.53	Pk	15.1	-29.8	25.83	61.38	-35.55	0-360	100	H
8	177.7636	37.29	Pk	15.1	-29.9	22.49	61.38	-38.89	0-360	149	V
3	309.4684	34.73	Pk	17.6	-29.1	23.23	61.38	-38.15	0-360	199	H
4	464.992	35.68	Pk	21.1	-28.4	28.38	61.38	-33	0-360	199	H

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

Pk - Peak detector

TYPE A 424Kbps



DATA

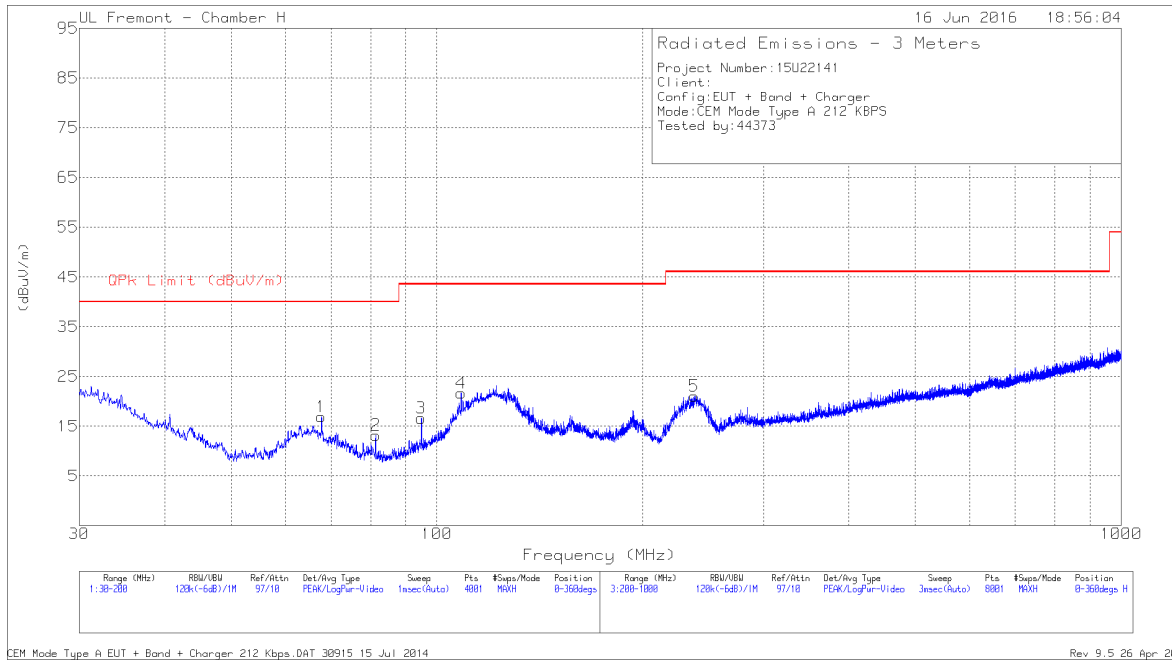
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 122.99	38.42	Pk	17.8	-30.3	25.92	43.52	-17.6	0-360	199	H
8	* 242.9	31.68	Pk	15.5	-29.4	17.78	46.02	-28.24	0-360	201	V
1	40.6675	35.47	Pk	17.3	-31.2	21.57	40	-18.43	0-360	399	H
5	40.6675	43.21	Pk	17.3	-31.2	29.31	40	-10.69	0-360	100	V
2	67.7825	42	Pk	12	-30.8	23.2	40	-16.8	0-360	299	H
6	67.7825	40.3	Pk	12	-30.8	21.5	40	-18.5	0-360	100	V
7	94.8975	42.96	Pk	12.8	-30.6	25.16	43.52	-18.36	0-360	100	V
4	222.7	39.85	Pk	14.7	-29.5	25.05	46.02	-20.97	0-360	100	H

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

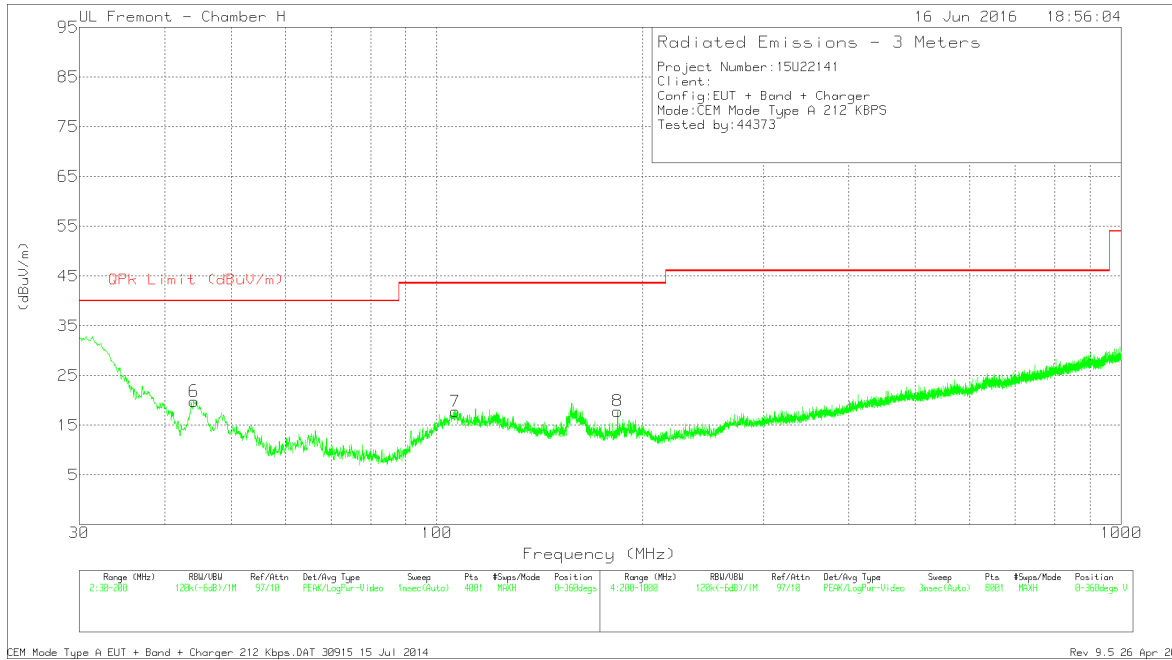
Pk - Peak detector

212Kbps

HORIZONTAL PLOT



VERTICAL PLOT



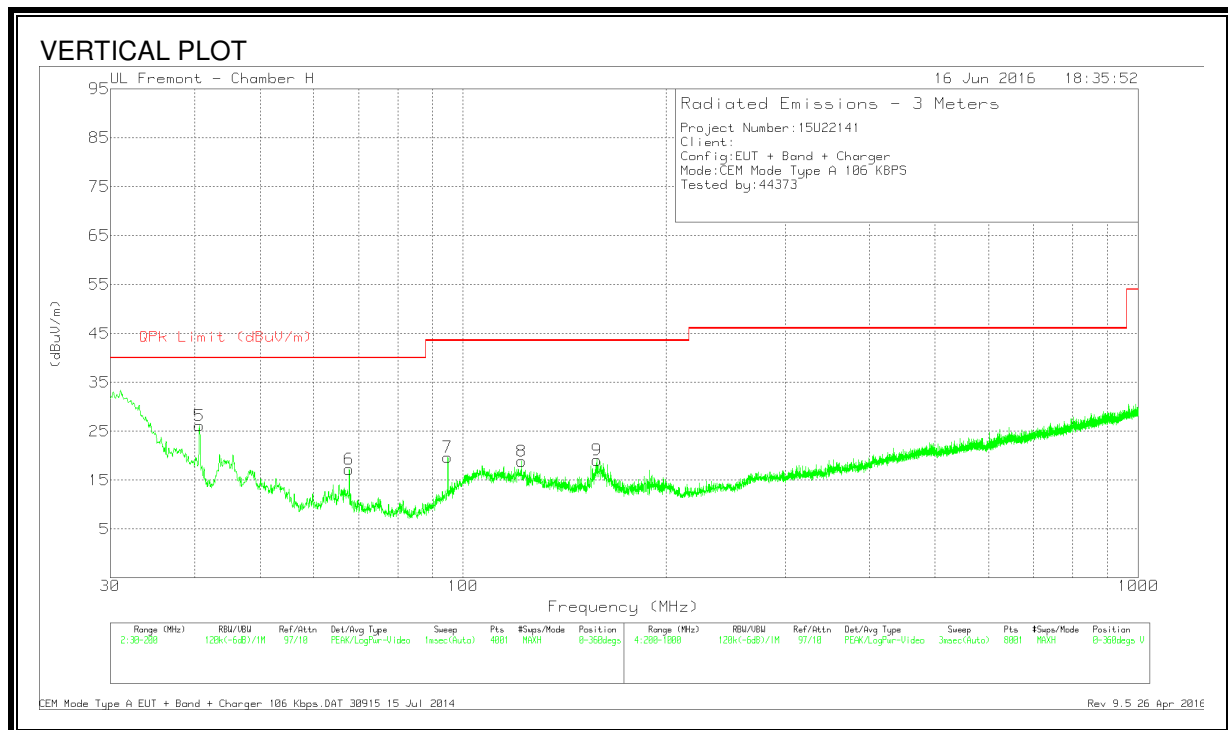
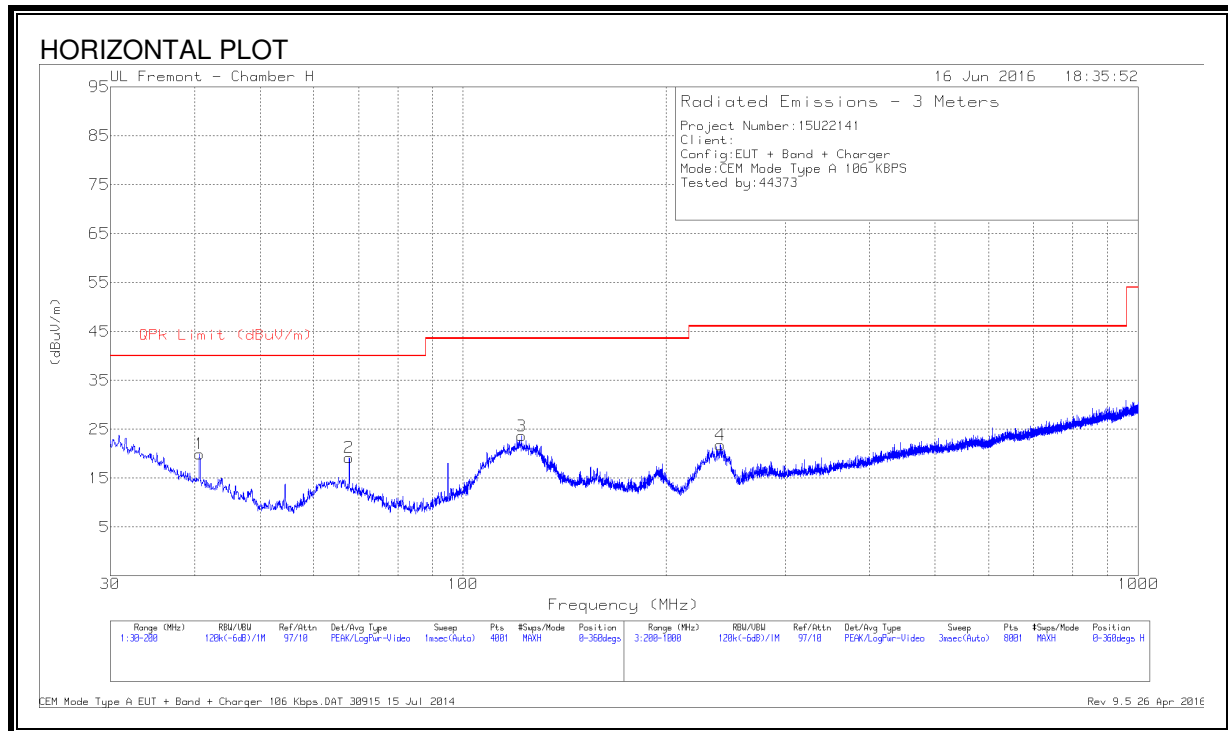
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 108.4975	35.86	Pk	16.2	-30.4	21.66	43.52	-21.86	0-360	299	H
6	44.1525	36.11	Pk	14.8	-31.1	19.81	40	-20.19	0-360	100	V
1	67.7825	35.7	Pk	12	-30.8	16.9	40	-23.1	0-360	199	H
2	81.3825	32.49	Pk	11.4	-30.7	13.19	40	-26.81	0-360	299	H
3	94.8975	34.42	Pk	12.8	-30.6	16.62	43.52	-26.9	0-360	299	H
7	106.4575	32.46	Pk	15.8	-30.5	17.76	43.52	-25.76	0-360	100	V
8	183.6375	32.74	Pk	15	-29.9	17.84	43.52	-25.68	0-360	100	V
5	237.5	35.15	Pk	15.4	-29.5	21.05	46.02	-24.97	0-360	100	H

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

Pk - Peak detector

106Kbps



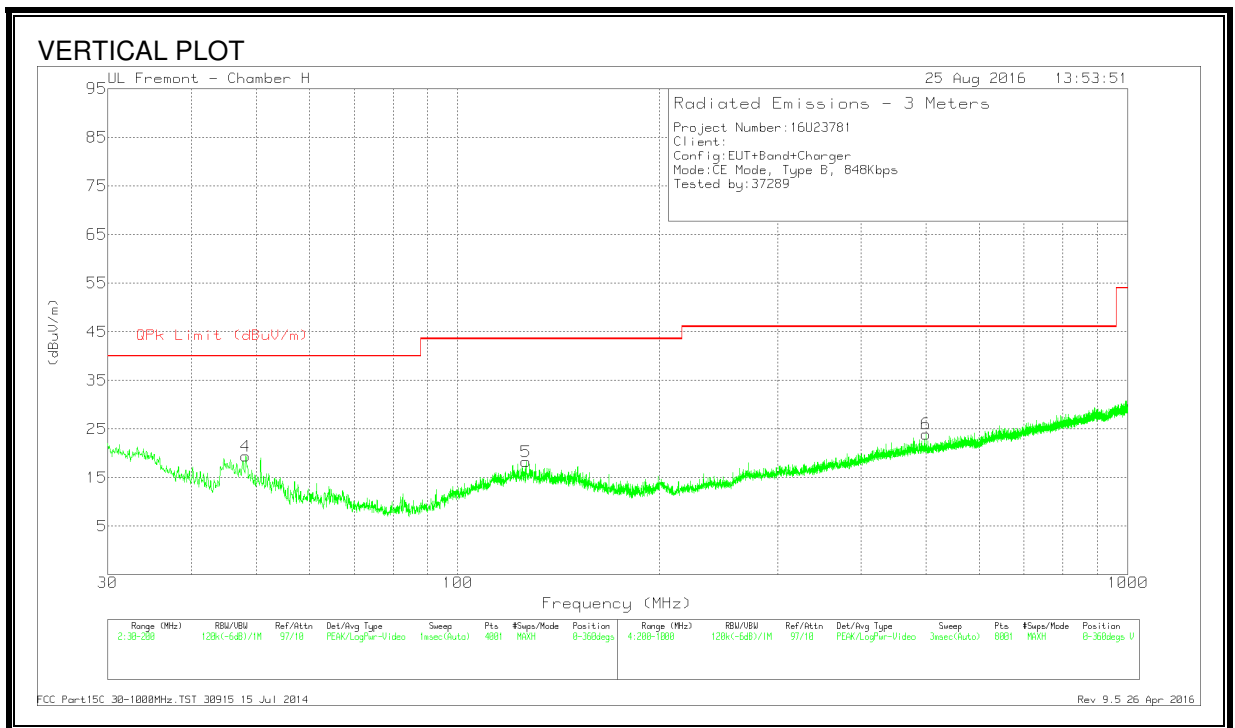
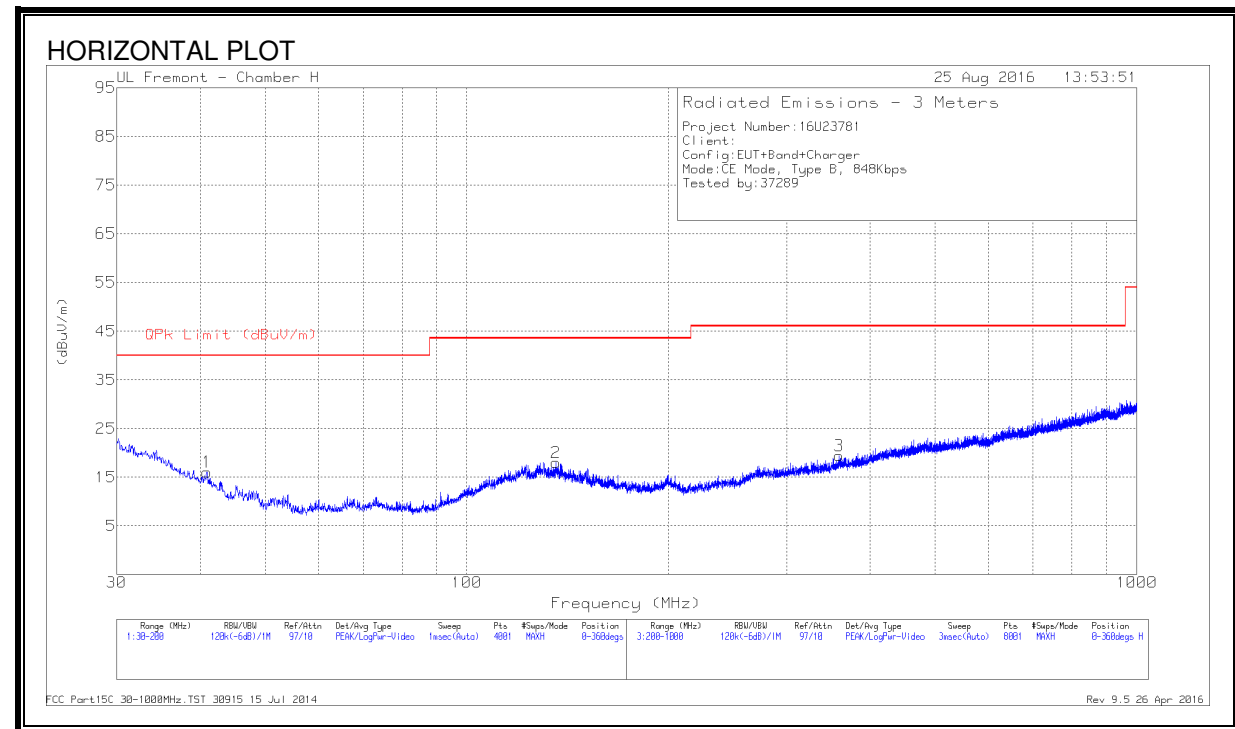
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 122.055	36.12	Pk	17.8	-30.3	23.62	43.52	-19.9	0-360	199	H
8	* 122.055	31.37	Pk	17.8	-30.3	18.87	43.52	-24.65	0-360	100	V
4	* 240.4	35.7	Pk	15.5	-29.4	21.8	46.02	-24.22	0-360	100	H
5	40.6675	40.05	Pk	17.3	-31.2	26.15	40	-13.85	0-360	100	V
1	40.6888	33.96	Pk	17.2	-31.2	19.96	40	-20.04	0-360	299	H
2	67.7825	38.02	Pk	12	-30.8	19.22	40	-20.78	0-360	199	H
6	67.7825	36.04	Pk	12	-30.8	17.24	40	-22.76	0-360	100	V
7	94.8975	37.47	Pk	12.8	-30.6	19.67	43.52	-23.85	0-360	100	V
9	157.7975	32.9	Pk	16.2	-30	19.1	43.52	-24.42	0-360	100	V

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

Pk - Peak detector

TYPE B 848Kbps



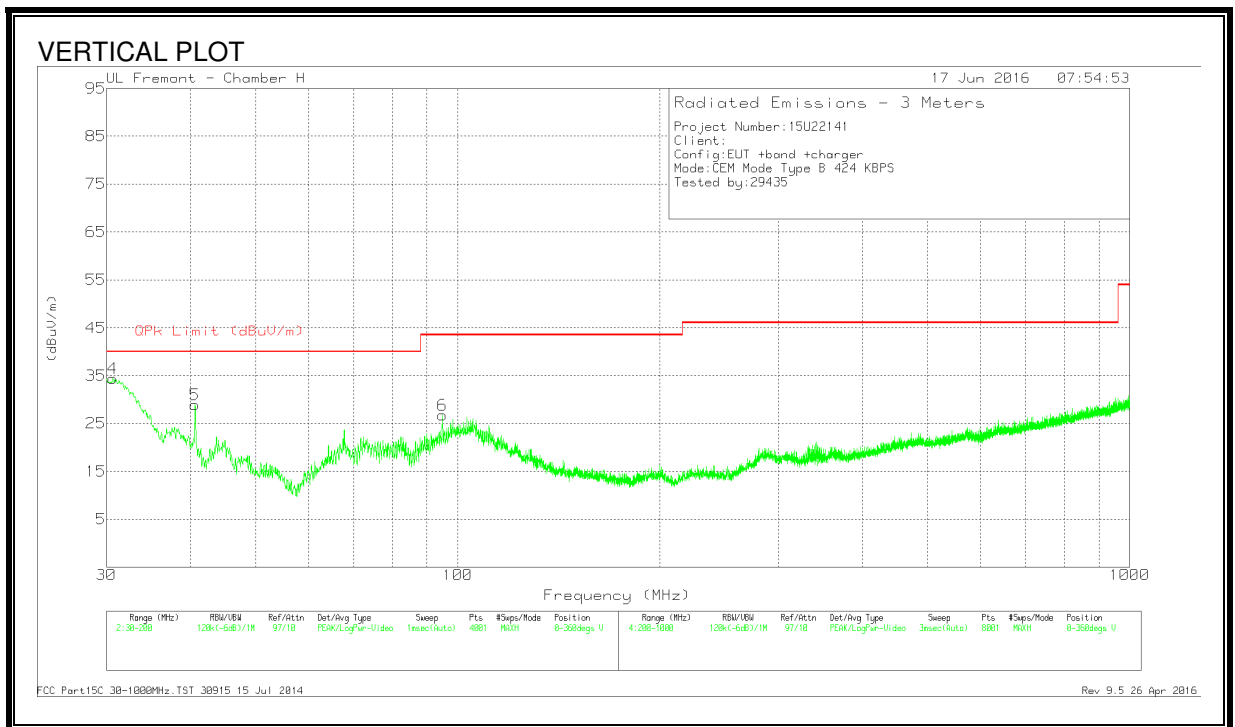
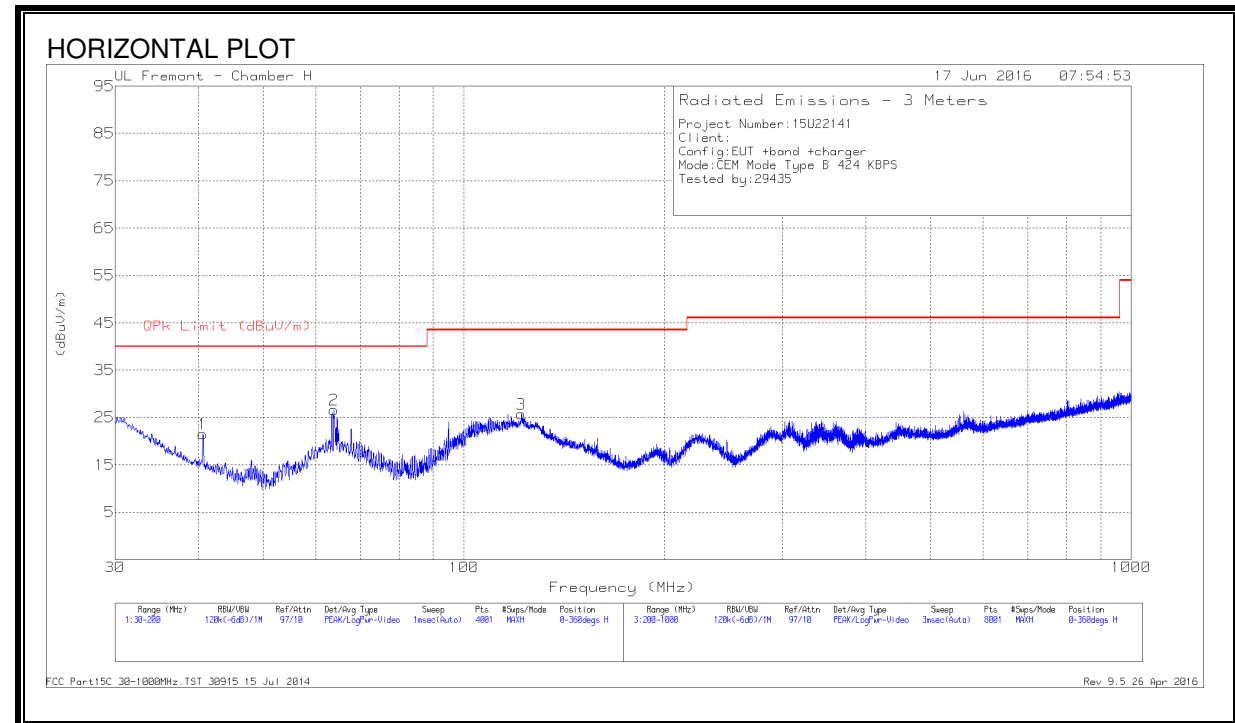
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 135.74	31.02	Pk	17.2	-30.2	18.02	43.52	-25.5	0-360	199	H
5	* 126.39	30.75	Pk	17.8	-30.3	18.25	43.52	-25.27	0-360	100	V
1	40.9225	30.18	Pk	17.1	-31.2	16.08	40	-23.92	0-360	199	H
4	48.2325	37.9	Pk	12.5	-31	19.4	40	-20.6	0-360	100	V
3	359.6	29.54	Pk	18.7	-28.8	19.44	46.02	-26.58	0-360	399	H
6	499.7	30.66	Pk	21.6	-28.3	23.96	46.02	-22.06	0-360	399	V

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

Pk - Peak detector

424Kbps



DATA

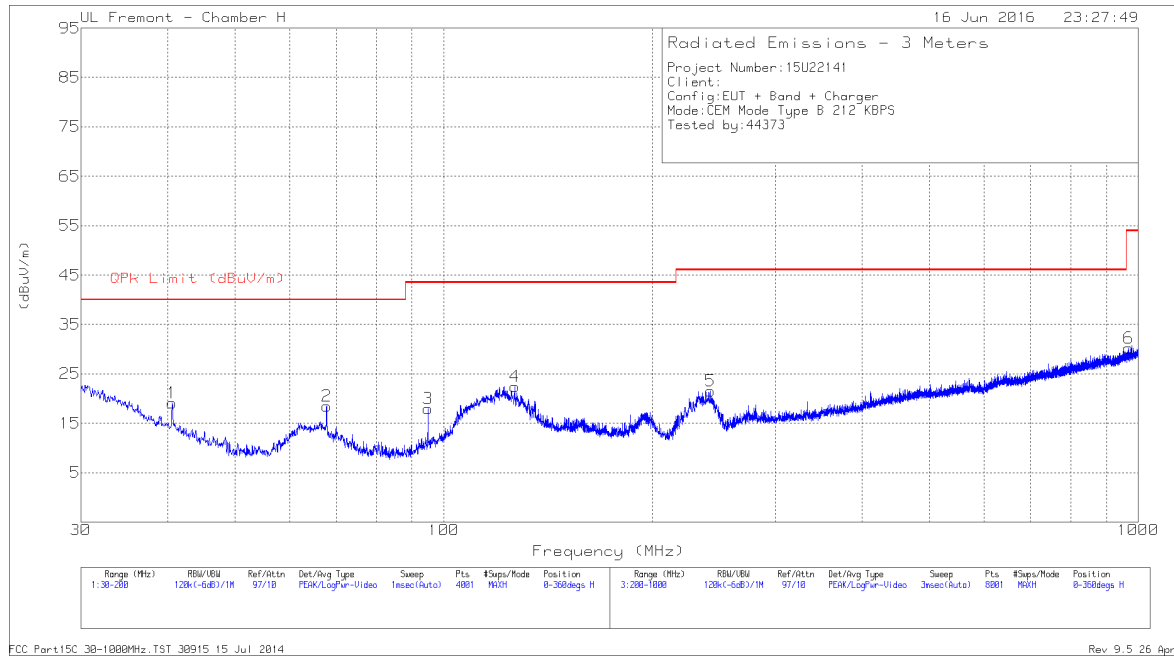
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 122.0338	38.26	Pk	17.8	-30.3	25.76	43.52	-17.76	0-360	199	H
4	30.68	40.96	Pk	24.7	-31.3	34.36	40	-5.64	0-360	100	V
1	40.6675	35.38	Pk	17.3	-31.2	21.48	40	-18.52	0-360	399	H
5	40.6675	42.78	Pk	17.3	-31.2	28.88	40	-11.12	0-360	100	V
2	63.8725	45.69	Pk	11.8	-30.9	26.59	40	-13.41	0-360	100	H
6	94.94	44.6	Pk	12.8	-30.6	26.8	43.52	-16.72	0-360	100	V

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

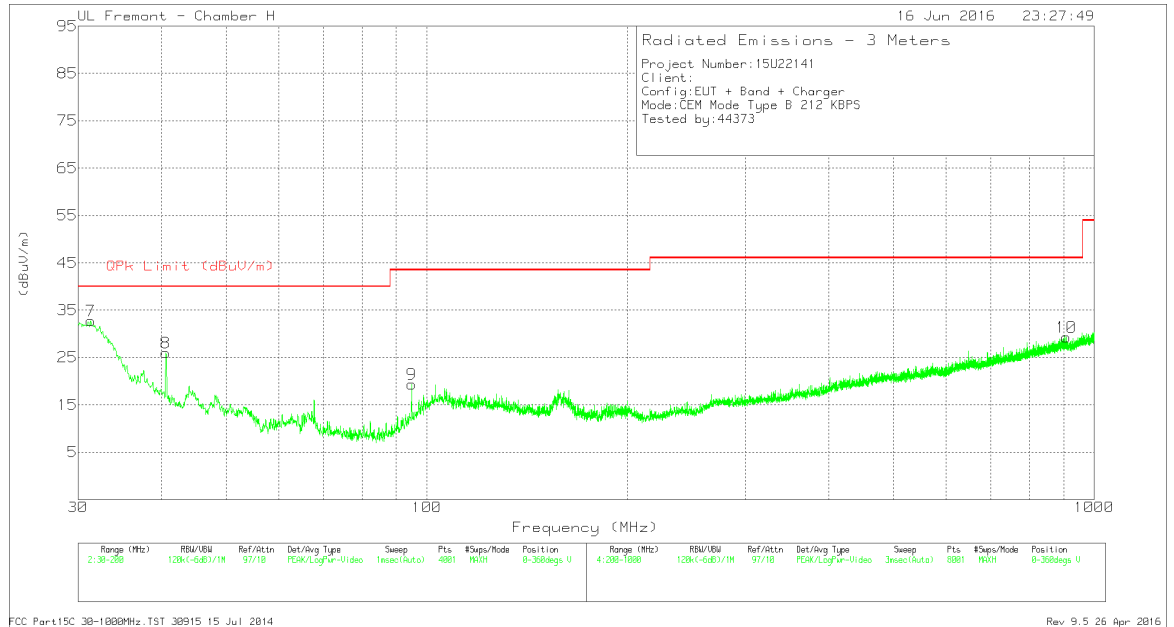
Pk - Peak detector

212Kbps

HORIZONTAL PLOT



VERTICAL PLOT



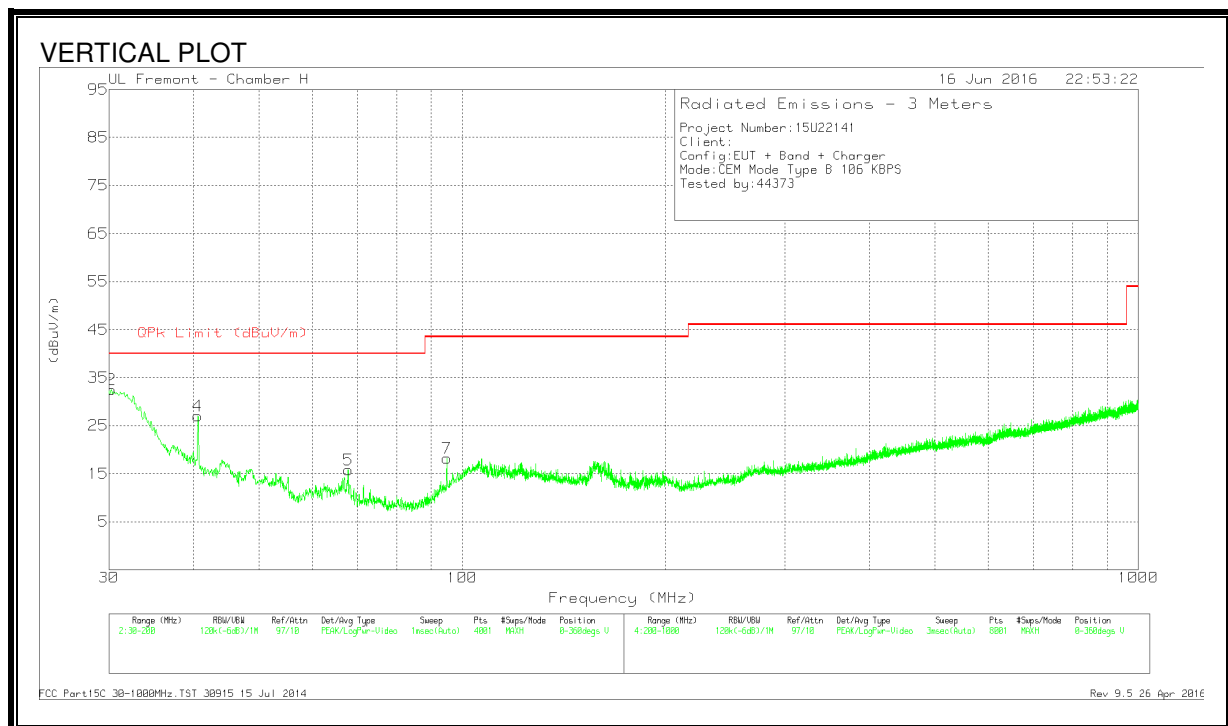
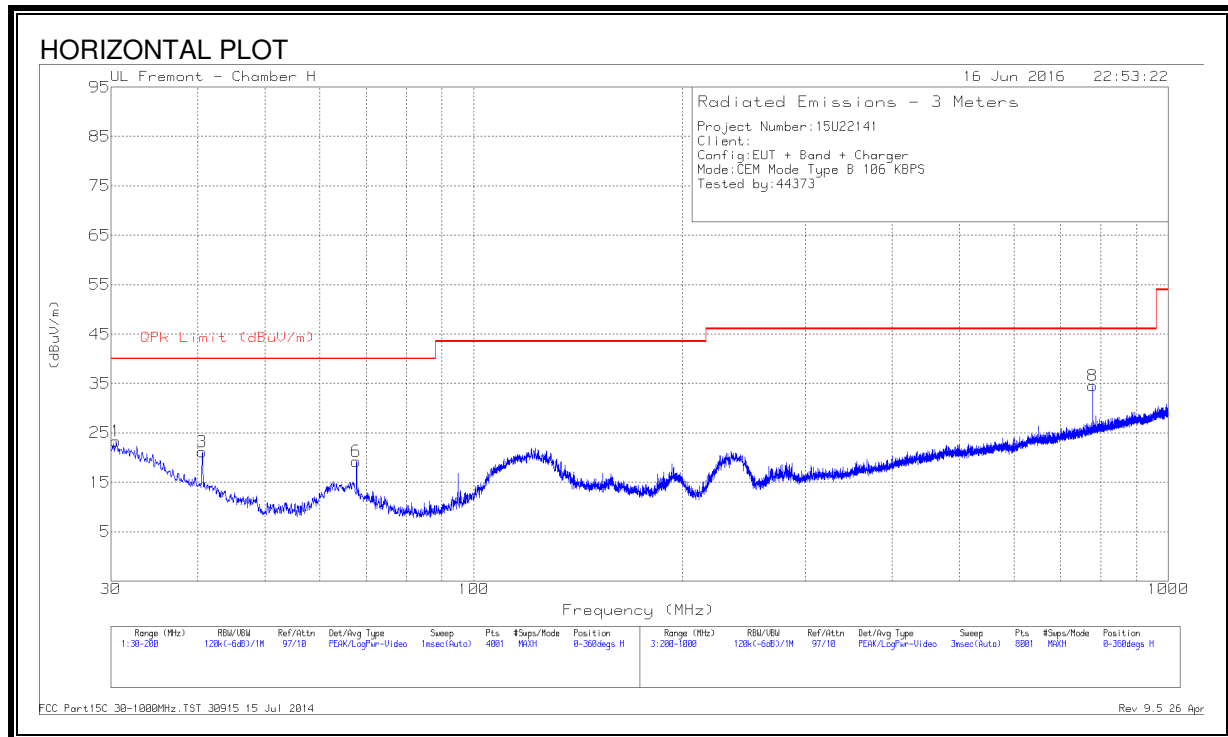
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 126.56	34.92	Pk	17.8	-30.3	22.42	43.52	-21.1	0-360	199	H
5	* 242	35.47	Pk	15.5	-29.4	21.57	46.02	-24.45	0-360	100	H
6	* 969.5	28.82	Pk	27	-25.6	30.22	53.97	-23.75	0-360	299	H
7	31.36	39.71	Pk	24.3	-31.3	32.71	40	-7.29	0-360	100	V
1	40.6675	32.96	Pk	17.3	-31.2	19.06	40	-20.94	0-360	299	H
8	40.6675	39.86	Pk	17.3	-31.2	25.96	40	-14.04	0-360	100	V
2	67.825	37.21	Pk	12	-30.8	18.41	40	-21.59	0-360	199	H
3	94.94	35.76	Pk	12.8	-30.6	17.96	43.52	-25.56	0-360	299	H
9	94.94	37.2	Pk	12.8	-30.6	19.4	43.52	-24.12	0-360	100	V
10	908.1	29.44	Pk	26.3	-26.4	29.34	46.02	-16.68	0-360	201	V

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

Pk - Peak detector

106Kbps

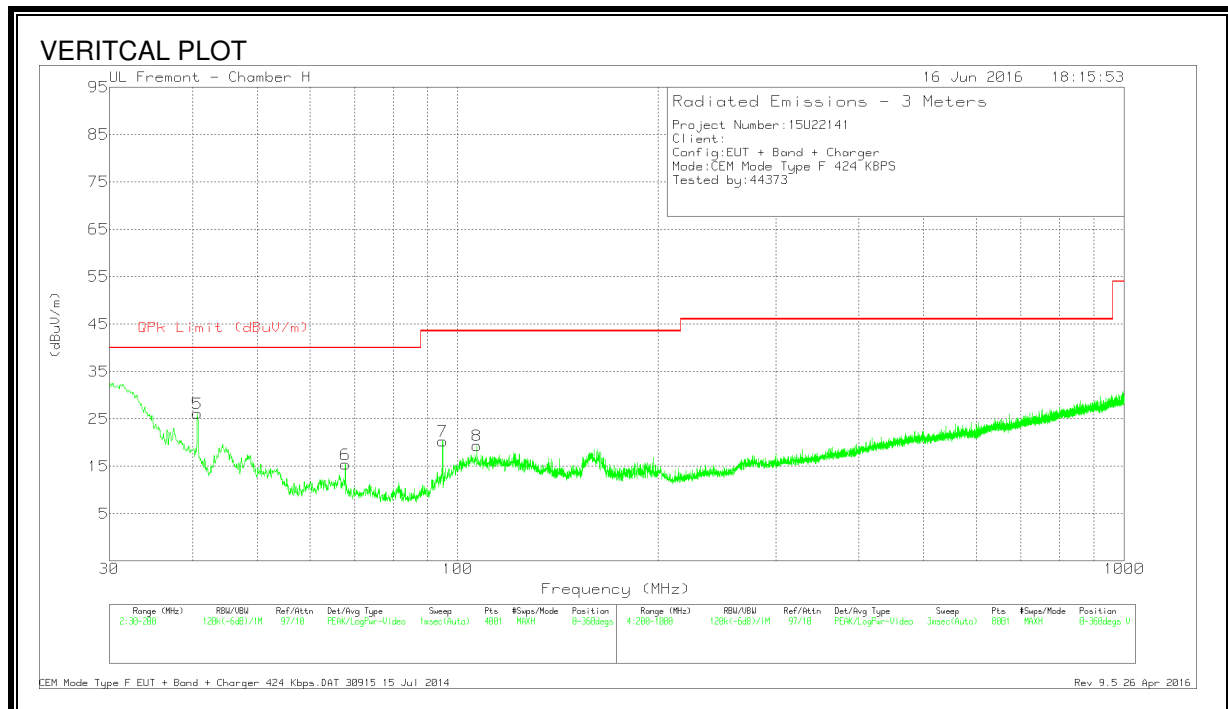
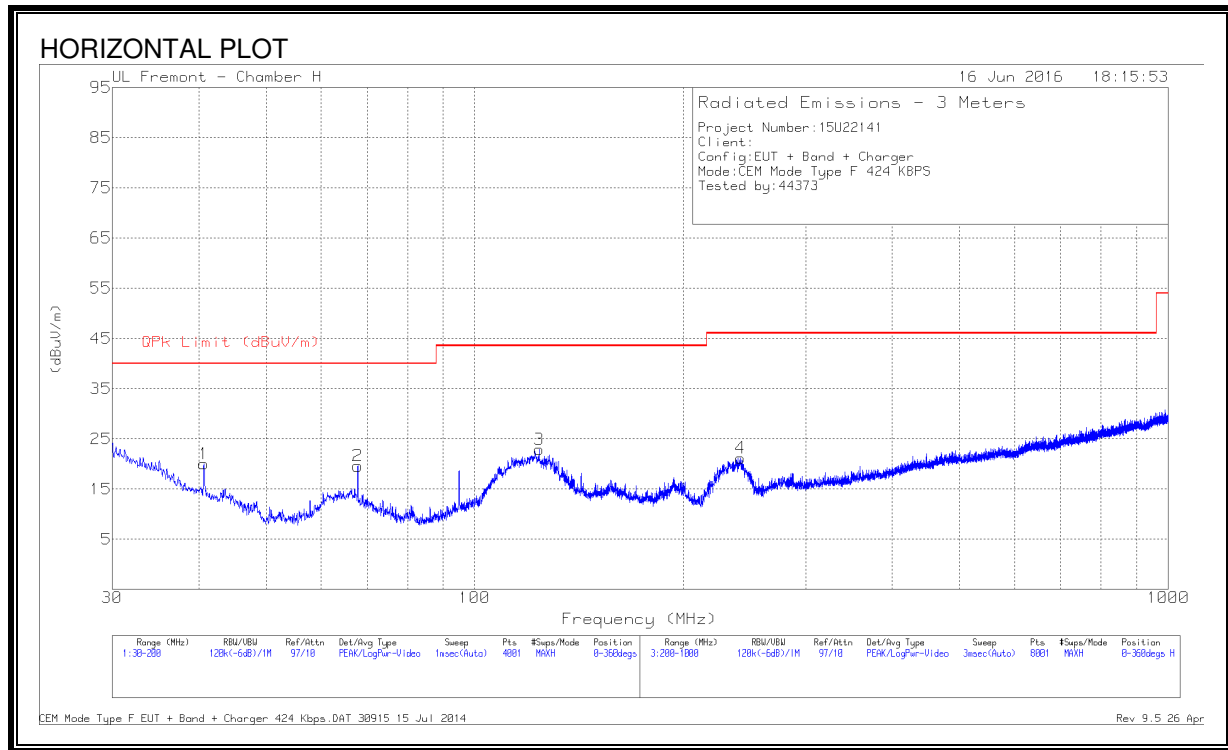


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	30.255	38.9	Pk	24.9	-31.3	32.5	40	-7.5	0-360	100	V
1	30.5525	29.85	Pk	24.8	-31.3	23.35	40	-16.65	0-360	299	H
3	40.6675	35.03	Pk	17.3	-31.2	21.13	40	-18.87	0-360	399	H
4	40.6675	40.92	Pk	17.3	-31.2	27.02	40	-12.98	0-360	100	V
6	67.7825	38.02	Pk	12	-30.8	19.22	40	-20.78	0-360	299	H
5	67.825	34.62	Pk	12	-30.8	15.82	40	-24.18	0-360	100	V
7	94.8975	36.03	Pk	12.8	-30.6	18.23	43.52	-25.29	0-360	100	V
8	778.5	36.92	Pk	24.9	-27.3	34.52	46.02	-11.5	0-360	399	H

Pk - Peak detector

TYPE F 424Kbps



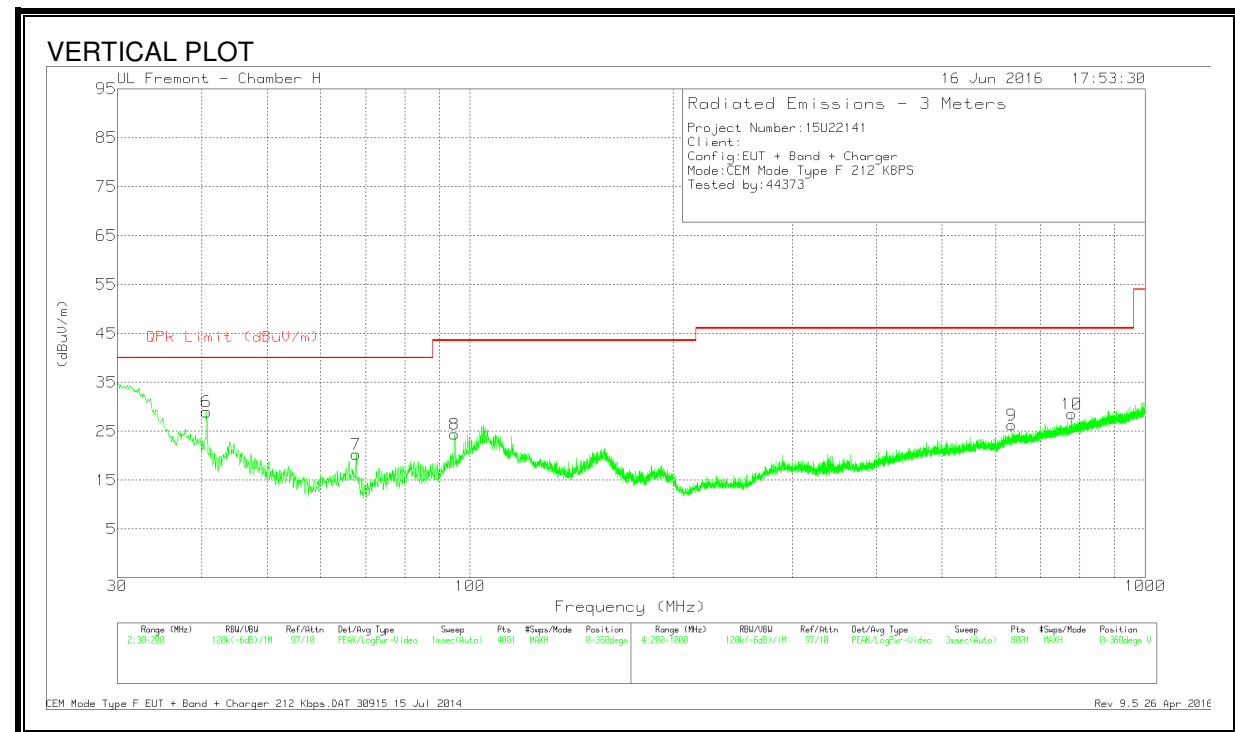
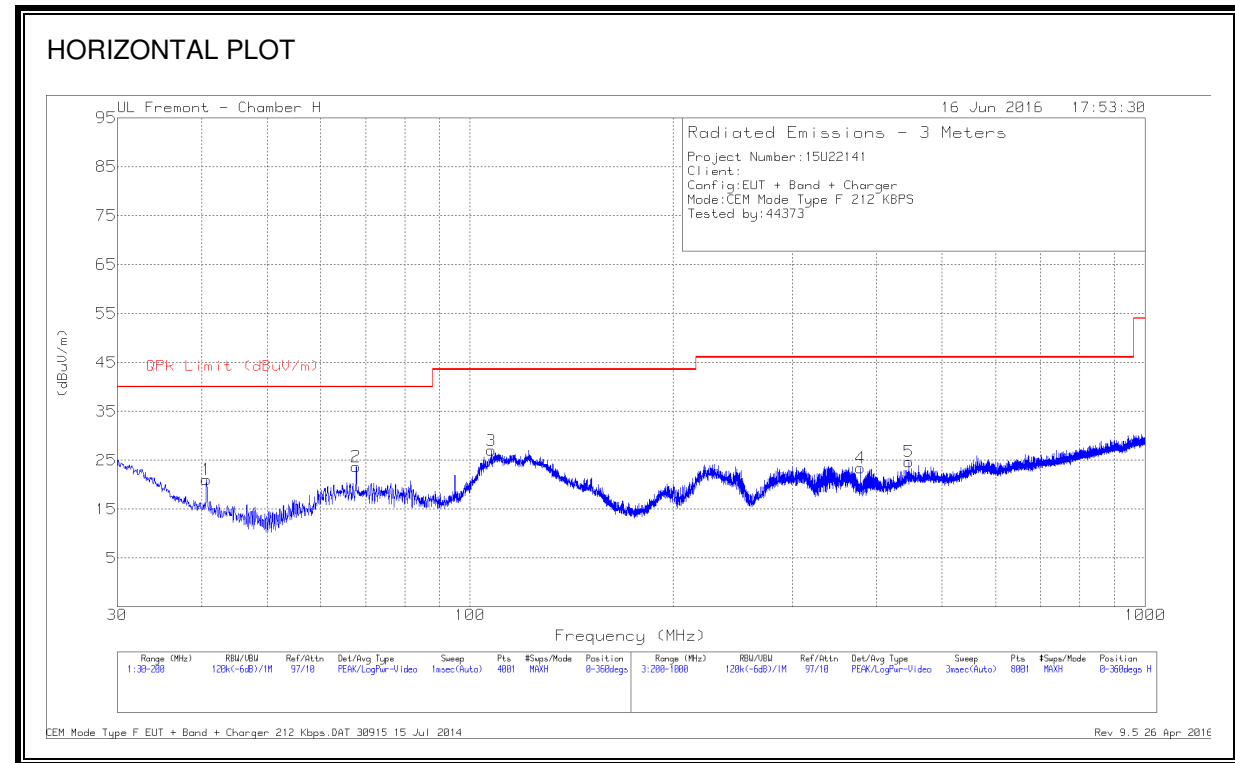
RESULTS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 123.84	35.4	Pk	17.8	-30.3	22.9	43.52	-20.62	0-360	199	H
4	* 241.7	35.09	Pk	15.5	-29.4	21.19	46.02	-24.83	0-360	100	H
1	40.6675	33.94	Pk	17.3	-31.2	20.04	40	-19.96	0-360	299	H
5	40.6675	40.03	Pk	17.3	-31.2	26.13	40	-13.87	0-360	100	V
2	67.825	38.42	Pk	12	-30.8	19.62	40	-20.38	0-360	299	H
6	67.825	34.19	Pk	12	-30.8	15.39	40	-24.61	0-360	100	V
7	94.9188	38.13	Pk	12.8	-30.6	20.33	43.52	-23.19	0-360	100	V
8	106.7975	33.95	Pk	15.9	-30.5	19.35	43.52	-24.17	0-360	100	V

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

Pk - Peak detector

212Kbps



DATA

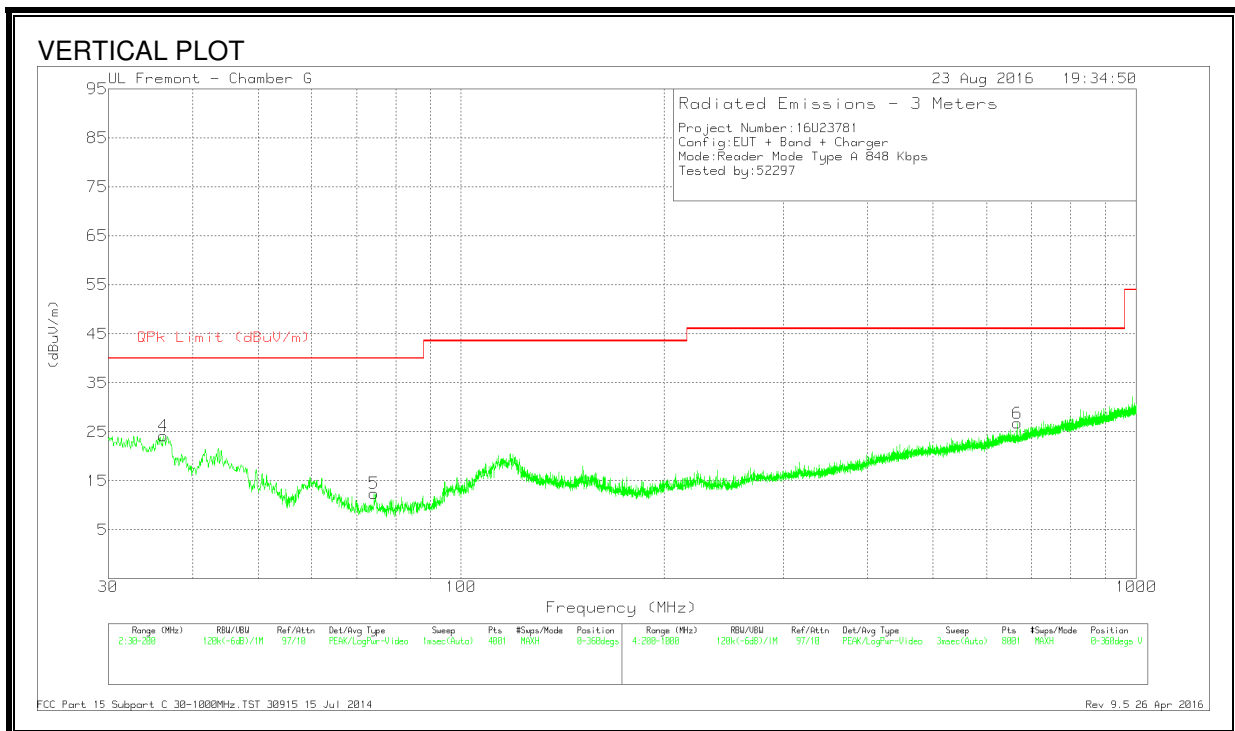
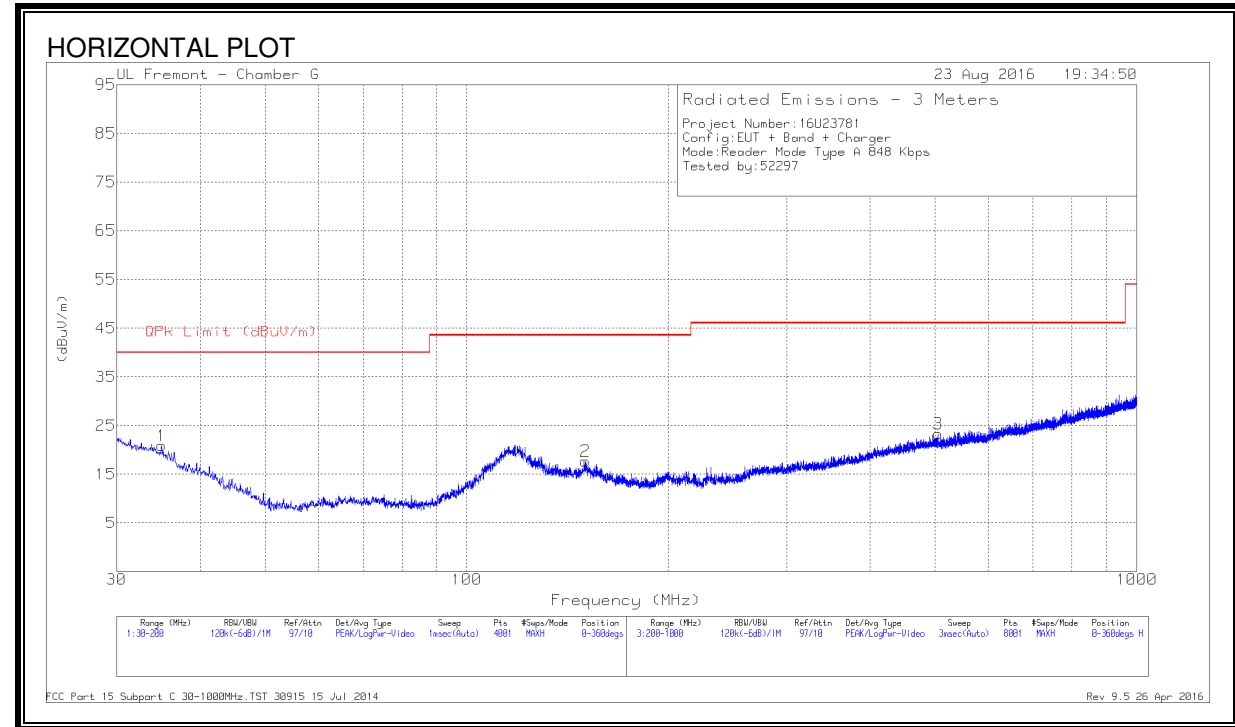
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	40.6675	34.98	Pk	17.3	-31.2	21.08	40	-18.92	0-360	399	H
6	40.6675	42.88	Pk	17.3	-31.2	28.98	40	-11.02	0-360	100	V
2	67.7825	42.5	Pk	12	-30.8	23.7	40	-16.3	0-360	299	H
7	67.7825	39.05	Pk	12	-30.8	20.25	40	-19.75	0-360	100	V
8	94.8975	42.2	Pk	12.8	-30.6	24.4	43.52	-19.12	0-360	100	V
3	107.5625	41.49	Pk	16	-30.5	26.99	43.52	-16.53	0-360	299	H
4	378.4	33.22	Pk	18.9	-28.7	23.42	46.02	-22.6	0-360	199	H
5	446.3	32.51	Pk	20.6	-28.4	24.71	46.02	-21.31	0-360	199	H
9	634.4	30.66	Pk	23.6	-28	26.26	46.02	-19.76	0-360	301	V
10	778.4	30.93	Pk	24.9	-27.3	28.53	46.02	-17.49	0-360	399	V

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

Pk - Peak detector

8.2.2. READER MODE

TYPE A 848Kbps



DATA

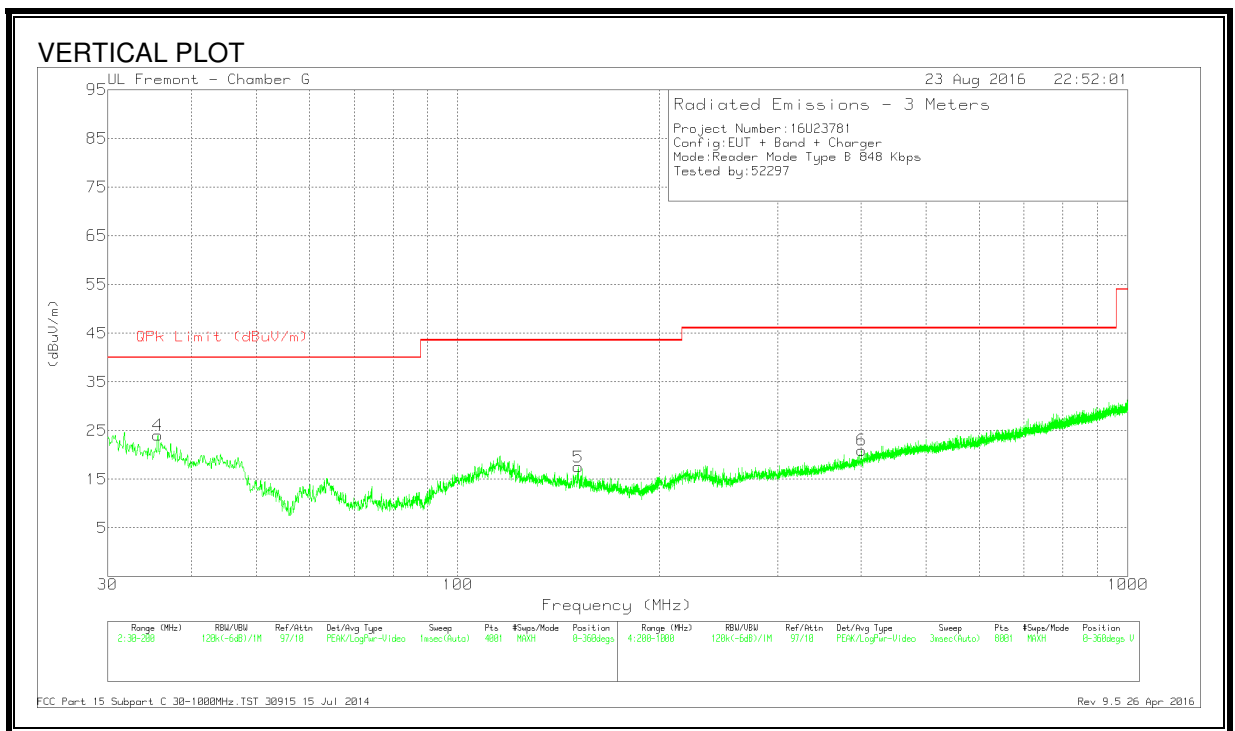
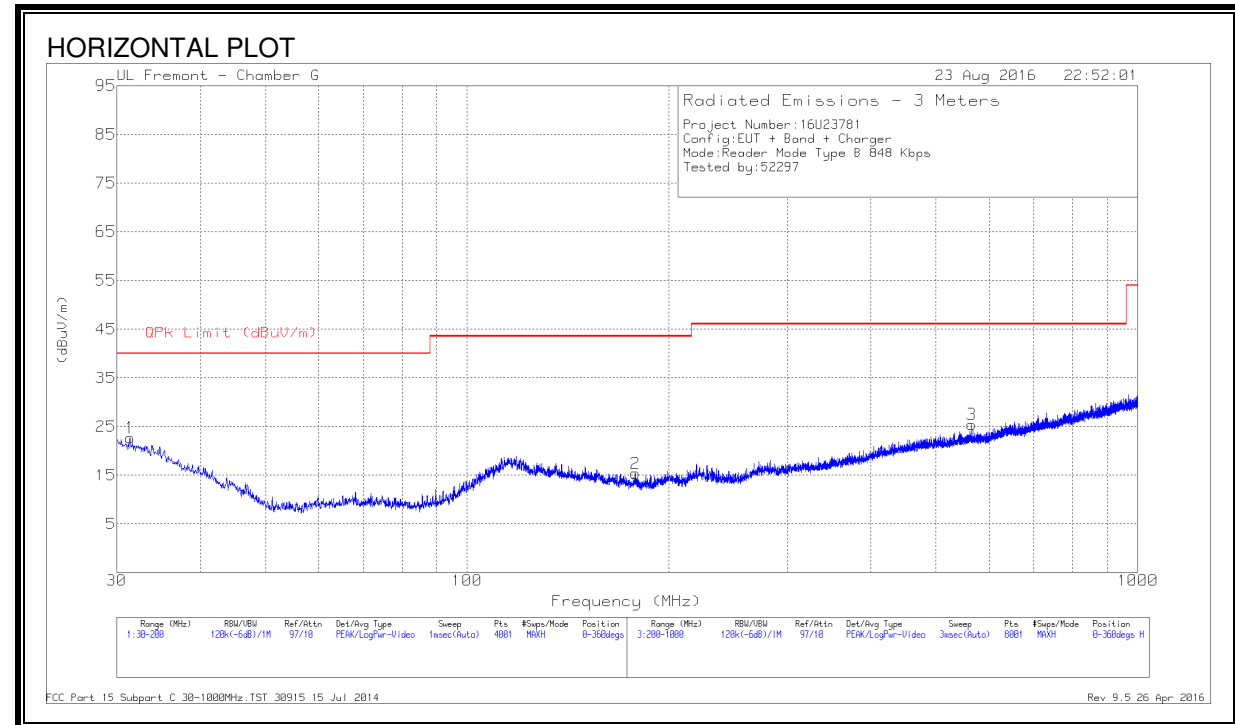
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 74.285	31.15	Pk	12	-30.7	12.45	40	-27.55	0-360	100	V
1	35.015	30.19	Pk	22	-31.3	20.89	40	-19.11	0-360	200	H
4	36.205	34.28	Pk	21.1	-31.2	24.18	40	-15.82	0-360	100	V
2	150.275	31.09	Pk	16.6	-30	17.69	43.52	-25.83	0-360	300	H
3	504.9	29.53	Pk	21.7	-27.9	23.33	46.02	-22.69	0-360	300	H
6	666.6	30.55	Pk	23.6	-27.4	26.75	46.02	-19.27	0-360	299	V

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

Pk - Peak detector

TYPE B

848Kbps



DATA

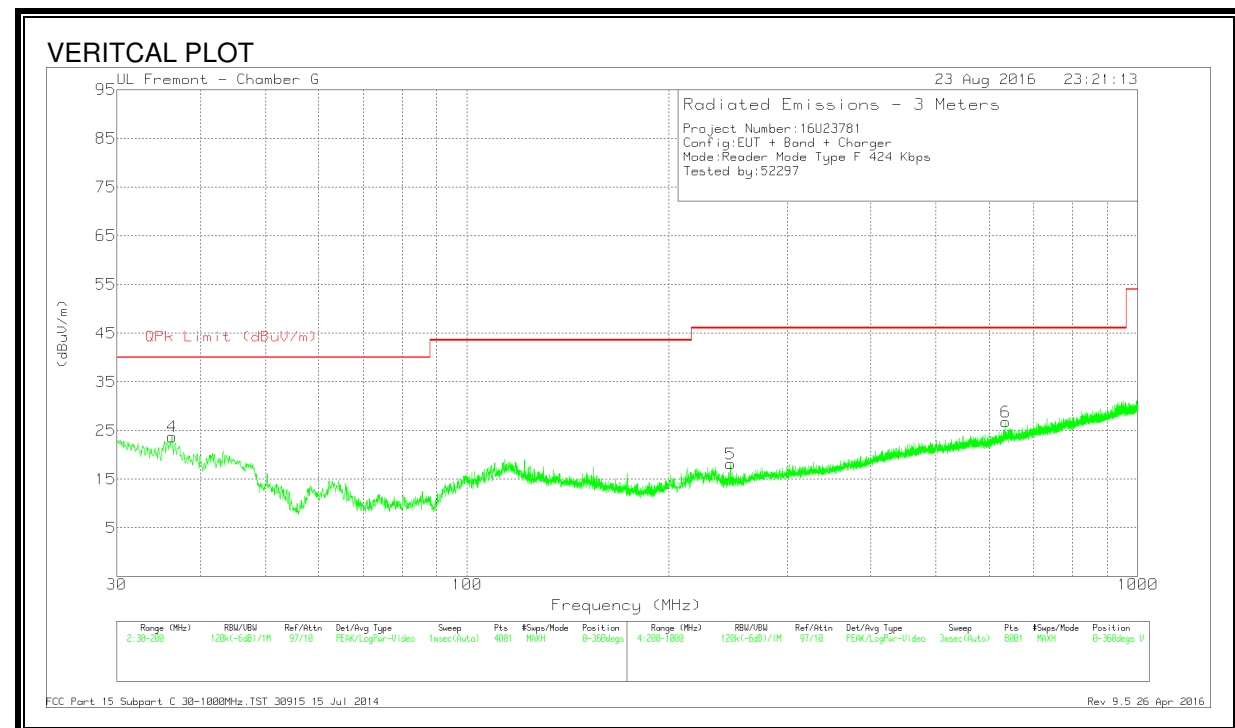
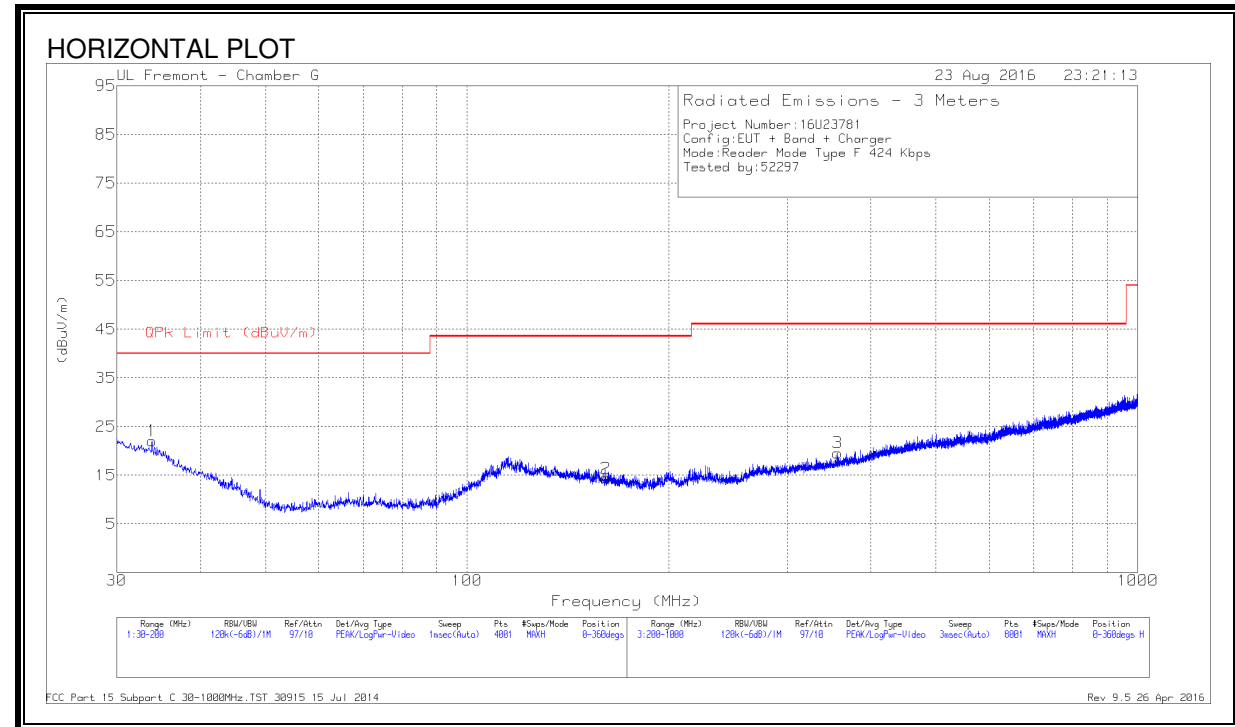
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 400.7	29.66	Pk	19.6	-28.3	20.96	46.02	-25.06	0-360	200	V
1	31.4025	29.39	Pk	24.6	-31.3	22.69	40	-17.31	0-360	400	H
4	35.6525	33.75	Pk	21.5	-31.2	24.05	40	-15.95	0-360	100	V
5	151.2525	31.04	Pk	16.5	-30	17.54	43.52	-25.98	0-360	100	V
2	178.155	29.87	Pk	15.3	-29.8	15.37	43.52	-28.15	0-360	300	H
3	565	30.52	Pk	22.5	-27.6	25.42	46.02	-20.6	0-360	400	H

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

Pk - Peak detector

TYPE F

424Kbps



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 247	32.03	Pk	15.4	-29.3	18.13	46.02	-27.89	0-360	100	V
1	33.8675	30.58	Pk	22.8	-31.3	22.08	40	-17.92	0-360	300	H
4	36.29	33.83	Pk	21.1	-31.2	23.73	40	-16.27	0-360	100	V
2	160.985	28.3	Pk	16	-29.9	14.4	43.52	-29.12	0-360	200	H
3	356.7	29.89	Pk	18.4	-28.7	19.59	46.02	-26.43	0-360	300	H
6	635.7	30.47	Pk	23.7	-27.4	26.77	46.02	-19.25	0-360	300	V

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

Pk - Peak detector

9. FREQUENCY STABILITY

LIMIT

§15.225 (e) The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ 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. CE MODE

ID:	52275	Date:	8/25/16
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TYPE A 848Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5600481	-1.232	13.5600442	-0.944	13.5600521	-1.524	13.5600536	-1.639	± 100
3.80	40	13.5600114	1.472	13.5600723	-3.019	13.5600741	-3.147	13.5600761	-3.297	± 100
3.80	30	13.5600128	1.373	13.5600191	0.907	13.5600724	-3.024	13.5600701	-2.854	± 100
3.80	20	13.5600314	0.000	13.5600314	0.000	13.5600314	0.001	13.5600351	-0.273	± 100
3.80	10	13.5600481	-1.232	13.5600497	-1.346	13.5600507	-1.423	13.5600517	-1.499	± 100
3.80	0	13.5600732	-3.086	13.5600752	-3.227	13.5600765	-3.323	13.5600776	-3.408	± 100
3.80	-10	13.5600999	-5.050	13.5601011	-5.137	13.5601024	-5.233	13.5601033	-5.302	± 100
3.80	-20	13.5600718	-2.979	13.5601121	-5.951	13.5600924	-4.496	13.5600833	-3.827	± 100
3.23	20	13.5600311	0.022	13.5600324	-0.074	13.5600293	0.155	13.5600322	-0.057	± 100
4.37	20	13.5600130	1.356	13.5600123	1.408	13.5600281	0.243	13.5600312	0.015	± 100

424Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598696	2.240	13.5598685	2.323	13.5598677	2.380	13.5598677	2.379	± 100
3.80	40	13.5598782	1.608	13.5598755	1.807	13.5598722	2.050	13.5598692	2.271	± 100
3.80	30	13.5599064	-0.472	13.5598900	0.737	13.5598878	0.900	13.5598861	1.025	± 100
3.80	20	13.5599000	0.000	13.5598890	0.811	13.5598800	1.475	13.5598750	1.844	± 100
3.80	10	13.5599162	-1.195	13.5599242	-1.785	13.5599336	-2.478	13.5599433	-3.193	± 100
3.80	0	13.5599705	-5.199	13.5599759	-5.597	13.5599824	-6.077	13.5599892	-6.578	± 100
3.80	-10	13.5600369	-10.096	13.5600369	-10.096	13.5600370	-10.103	13.5600372	-10.118	± 100
3.80	-20	13.5600405	-10.358	13.5600466	-10.809	13.5600527	-11.259	13.5600583	-11.674	± 100
3.23	20	13.5600266	-9.336	13.5600274	-9.395	13.5600275	-9.401	13.5600276	-9.409	± 100
4.37	20	13.5600267	-9.346	13.5600275	-9.403	13.5600277	-9.416	13.5600264	-9.318	± 100

212Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598676	0.767	13.5598673	0.789	13.5598678	0.752	13.5598695	0.627	± 100
3.80	40	13.5598696	0.622	13.5598716	0.475	13.5598703	0.565	13.5598695	0.625	± 100
3.80	30	13.5598901	-0.892	13.5598862	-0.605	13.5598854	-0.546	13.5598845	-0.479	± 100
3.80	20	13.5598780	0.000	13.5598740	0.295	13.5598730	0.369	13.5598720	0.442	± 100
3.80	10	13.5599294	-3.793	13.5599334	-4.085	13.5599393	-4.518	13.5599473	-5.110	± 100
3.80	0	13.5600131	-9.963	13.5599973	-8.798	13.5599966	-8.746	13.5599974	-8.805	± 100
3.80	-10	13.5600408	-12.006	13.5600319	-11.350	13.5600328	-11.416	13.5600344	-11.534	± 100
3.80	-20	13.5600405	-11.981	13.5600466	-12.432	13.5600527	-12.881	13.5600583	-13.297	± 100
3.23	20	13.5600253	-10.865	13.5600253	-10.860	13.5600253	-10.860	13.5600253	-10.865	± 100
4.37	20	13.5600262	-10.929	13.5600268	-10.972	13.5600271	-10.992	13.5600253	-10.865	± 100

106Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598675	0.627	13.5598672	0.649	13.5598673	0.642	13.5598675	0.627	± 100
3.80	40	13.5598696	0.475	13.5598696	0.473	13.5598698	0.456	13.5598702	0.430	± 100
3.80	30	13.5598950	-1.401	13.5598842	-0.605	13.5598834	-0.546	13.5598829	-0.509	± 100
3.80	20	13.5598760	0.000	13.5598710	0.369	13.5598700	0.442	13.5598693	0.494	± 100
3.80	10	13.5599294	-3.940	13.5599334	-4.233	13.5599393	-4.665	13.5599473	-5.258	± 100
3.80	0	13.5600076	-9.705	13.5599983	-9.019	13.5599977	-8.975	13.5599978	-8.982	± 100
3.80	-10	13.5599978	-8.982	13.5600061	-9.594	13.5600151	-10.258	13.5600239	-10.907	± 100
3.80	-20	13.5600623	-13.736	13.5600614	-13.673	13.5600624	-13.748	13.5600637	-13.842	± 100
3.23	20	13.5600267	-11.116	13.5600275	-11.172	13.5600277	-11.186	13.5600277	-11.186	± 100
4.37	20	13.5600279	-11.203	13.5600279	-11.203	13.5600279	-11.203	13.5600278	-11.191	± 100

TYPE B 848Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5600262	0.299	13.5600315	-0.090	13.5600621	-2.351	13.5600280	0.164	± 100
3.80	40	13.5600093	1.541	13.5600124	1.314	13.5600716	-3.053	13.5600310	-0.058	± 100
3.80	30	13.5600262	0.297	13.5600134	1.244	13.5600422	-0.883	13.5600303	-0.006	± 100
3.80	20	13.5600302	0.000	13.5600331	-0.213	13.5600322	-0.146	13.5600306	-0.028	± 100
3.80	10	13.5600290	0.089	13.5600302	-0.001	13.5600706	-2.978	13.5600319	-0.124	± 100
3.80	0	13.5600031	1.998	13.5600131	1.263	13.5600071	1.705	13.5600336	-0.249	± 100
3.80	-10	13.5600331	-0.214	13.5600113	1.393	13.5600422	-0.883	13.5600294	0.064	± 100
3.80	-20	13.5600361	-0.435	13.5600413	-0.819	13.5600322	-0.146	13.5600274	0.212	± 100
3.23	20	13.5600322	-0.142	13.5600291	0.082	13.5600322	-0.147	13.5600322	-0.143	± 100
4.37	20	13.5600281	0.157	13.5601062	-5.604	13.5601112	-5.972	13.5601303	-7.378	± 100

424Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598697	0.103	13.5598697	0.103	13.5598696	0.111	13.5598693	0.133	± 100
3.80	40	13.5598720	-0.068	13.5598721	-0.074	13.5598722	-0.080	13.5598723	-0.085	± 100
3.80	30	13.5598945	-1.726	13.5598840	-0.951	13.5598837	-0.929	13.5598837	-0.929	± 100
3.80	20	13.5598711	0.000	13.5598693	0.133	13.5598688	0.170	13.5598686	0.184	± 100
3.80	10	13.5599694	-7.250	13.5599701	-7.298	13.5599710	-7.370	13.5599674	-7.105	± 100
3.80	0	13.5600064	-9.978	13.5600089	-10.162	13.5599888	-8.681	13.5600000	-9.507	± 100
3.80	-10	13.5600511	-13.274	13.5600419	-12.596	13.5600411	-12.537	13.5600406	-12.500	± 100
3.80	-20	13.5600696	-14.637	13.5600661	-14.378	13.5600652	-14.316	13.5600654	-14.326	± 100
3.23	20	13.5600280	-11.571	13.5600280	-11.572	13.5600280	-11.571	13.5600296	-11.691	± 100
4.37	20	13.5600281	-11.577	13.5600296	-11.685	13.5600280	-11.571	13.5600281	-11.576	± 100

212Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598689	0.251	13.5598693	0.221	13.5598733	-0.071	13.5598736	-0.094	± 100
3.80	40	13.5598730	-0.050	13.5598729	-0.046	13.5598730	-0.055	13.5598730	-0.055	± 100
3.80	30	13.5598950	-1.674	13.5598845	-0.900	13.5598841	-0.870	13.5598839	-0.855	± 100
3.80	20	13.5598723	0.000	13.5598691	0.236	13.5598687	0.265	13.5598685	0.280	± 100
3.80	10	13.5599694	-7.162	13.5599701	-7.210	13.5599710	-7.282	13.5599728	-7.411	± 100
3.80	0	13.5600368	-12.135	13.5600410	-12.443	13.5600223	-11.059	13.5600097	-10.133	± 100
3.80	-10	13.5600468	-12.869	13.5600411	-12.448	13.5600408	-12.426	13.5600406	-12.412	± 100
3.80	-20	13.5600696	-14.549	13.5600661	-14.289	13.5600659	-14.275	13.5600658	-14.272	± 100
3.23	20	13.5600287	-11.531	13.5600296	-11.597	13.5600298	-11.617	13.5600299	-11.619	± 100
4.37	20	13.5600287	-11.531	13.5600283	-11.501	13.5600283	-11.503	13.5600283	-11.504	± 100

106Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598685	0.147	13.5598674	0.229	13.5598670	0.258	13.5598669	0.265	± 100
3.80	40	13.5598752	-0.349	13.5598778	-0.540	13.5597580	8.296	13.5598842	-1.010	± 100
3.80	30	13.5598932	-1.674	13.5598850	-1.069	13.5598842	-1.010	13.5598842	-1.010	± 100
3.80	20	13.5598705	0.000	13.5598690	0.111	13.5598686	0.140	13.5598685	0.147	± 100
3.80	10	13.5599397	-5.103	13.5599432	-5.361	13.5599479	-5.705	13.5599544	-6.186	± 100
3.80	0	13.5600191	-10.960	13.5600219	-11.167	13.5600257	-11.444	13.5600304	-11.790	± 100
3.80	-10	13.5600453	-12.891	13.5600402	-12.515	13.5600402	-12.515	13.5600403	-12.522	± 100
3.80	-20	13.5600435	-12.759	13.5600480	-13.092	13.5600532	-13.470	13.5600583	-13.850	± 100
3.23	20	13.5600287	-11.670	13.5600298	-11.745	13.5600299	-11.753	13.5600300	-11.763	± 100
4.37	20	13.5600295	-11.722	13.5600299	-11.755	13.5600300	-11.760	13.5600284	-11.647	± 100

TYPE F 424Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598669	1.615	13.5598669	1.615	13.5598670	1.608	13.5598671	1.600	± 100
3.80	40	13.5598774	0.841	13.5598762	0.929	13.5598748	1.032	13.5598737	1.114	± 100
3.80	30	13.5598975	-0.642	13.5598848	0.295	13.5598723	1.217	13.5598839	0.361	± 100
3.80	20	13.5598888	0.000	13.5598889	-0.007	13.5598847	0.302	13.5598847	0.302	± 100
3.80	10	13.5599397	-3.754	13.5599432	-4.011	13.5599479	-4.355	13.5599544	-4.836	± 100
3.80	0	13.5599933	-7.704	13.5599990	-8.129	13.5600058	-8.632	13.5600146	-9.276	± 100
3.80	-10	13.5600469	-11.659	13.5600391	-11.084	13.5600390	-11.077	13.5600395	-11.114	± 100
3.80	-20	13.5600683	-13.238	13.5600646	-12.966	13.5600620	-12.775	13.5600633	-12.868	± 100
3.23	20	13.5600295	-10.372	13.5600299	-10.405	13.5600300	-10.410	13.5600300	-10.410	± 100
4.37	20	13.5600285	-10.302	13.5600285	-10.303	13.5600285	-10.304	13.5600285	-10.305	± 100

212Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5598670	1.037	13.5598673	1.021	13.5598675	1.004	13.5598676	0.993	± 100
3.80	40	13.5598667	1.059	13.5598668	1.051	13.5598667	1.059	13.5598673	1.017	± 100
3.80	30	13.5598907	-0.708	13.5598846	-0.258	13.5598844	-0.243	13.5598843	-0.236	± 100
3.80	20	13.5598811	0.000	13.5598829	-0.133	13.5598853	-0.310	13.5598882	-0.524	± 100
3.80	10	13.5599590	-5.748	13.5599608	-5.879	13.5599634	-6.073	13.5599672	-6.347	± 100
3.80	0	13.5599933	-8.272	13.5599990	-8.697	13.5600058	-9.199	13.5600146	-9.844	± 100
3.80	-10	13.5600242	-10.553	13.5600282	-10.848	13.5600322	-11.143	13.5600362	-11.438	± 100
3.80	-20	13.5600683	-13.806	13.5600646	-13.534	13.5600647	-13.538	13.5600650	-13.561	± 100
3.23	20	13.5600285	-10.870	13.5600285	-10.871	13.5600285	-10.872	13.5600285	-10.873	± 100
4.37	20	13.5600286	-10.875	13.5600286	-10.876	13.5600286	-10.878	13.5600286	-10.880	± 100

9.2. READER MODE

ID:	50822	Date:	8/24/16
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TYPE A

848Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5600625	-1.962	13.5600660	-2.216	13.5600706	-2.559	13.5600748	-2.867	± 100
3.80	40	13.5600510	-1.110	13.5600486	-0.933	13.5600466	-0.788	13.5600456	-0.712	± 100
3.80	30	13.5600329	0.220	13.5600323	0.265	13.5600319	0.293	13.5600317	0.310	± 100
3.80	20	13.5600359	0.000	13.5600359	0.000	13.5600359	0.001	13.5600359	0.001	± 100
3.80	10	13.5600478	-0.874	13.5600490	-0.964	13.5600501	-1.050	13.5600511	-1.123	± 100
3.80	0	13.5600721	-2.668	13.5600739	-2.800	13.5600754	-2.911	13.5600763	-2.982	± 100
3.80	-10	13.5600990	-4.654	13.5601001	-4.736	13.5601016	-4.842	13.5601024	-4.904	± 100
3.80	-20	13.5601211	-6.284	13.5601217	-6.329	13.5601223	-6.370	13.5601229	-6.414	± 100
3.23	20	13.5600422	-0.462	13.5600435	-0.560	13.5600448	-0.653	13.5600458	-0.727	± 100
4.37	20	13.5600322	0.271	13.5600313	0.338	13.5600322	0.271	13.5600310	0.362	± 100

TYPE B

848Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5600624	-1.992	13.5600646	-2.155	13.5600759	-2.988	13.5600370	-0.118	± 100
3.80	40	13.5600524	-1.257	13.5600997	-4.741	13.5600437	-0.615	13.5600445	-0.672	± 100
3.80	30	13.5600320	0.247	13.5600365	-0.087	13.5600401	-0.346	13.5600300	0.394	± 100
3.80	20	13.5600354	0.000	13.5600360	-0.047	13.5600370	-0.120	13.5600337	0.123	± 100
3.80	10	13.5600479	-0.924	13.5600304	0.362	13.5600024	2.433	13.5600214	1.029	± 100
3.80	0	13.5600737	-2.827	13.5600787	-3.200	13.5600697	-2.529	13.5600770	-3.070	± 100
3.80	-10	13.5600906	-4.072	13.5601037	-5.039	13.5601125	-5.692	13.5600325	0.208	± 100
3.80	-20	13.5601219	-6.381	13.5601237	-6.511	13.5601237	-6.514	13.5600559	-1.512	± 100
3.23	20	13.5600437	-0.614	13.5600437	-0.615	13.5600469	-0.850	13.5600452	-0.728	± 100
4.37	20	13.5600337	0.123	13.5600337	0.126	13.5600324	0.221	13.5600146	1.532	± 100

TYPE F

424Kbps

Reference Frequency: EUT Channel 13.56 MHz @ 20°C Limit: ± 100 ppm = 1.356 kHz										
Power Supply	Envir. Temp	Frequency Deviation Measured with Time Elapse								
(Vdc)	(°C)	Startup (MHz)	Delta (ppm)	@ 2 mins (MHz)	Delta (ppm)	@ 5 mins (MHz)	Delta (ppm)	@ 10 mins (MHz)	Delta (ppm)	Limit (ppm)
3.80	50	13.5600845	-4.004	13.5601095	-5.846	13.5601133	-6.129	13.5601027	-5.349	± 100
3.80	40	13.5600545	-1.794	13.5600664	-2.667	13.5600662	-2.658	13.5600678	-2.773	± 100
3.80	30	13.5600313	-0.084	13.5600365	-0.467	13.5600363	-0.452	13.5600364	-0.460	± 100
3.80	20	13.5600302	0.000	13.5600302	-0.002	13.5600303	-0.006	13.5600304	-0.012	± 100
3.80	10	13.5600464	-1.197	13.5600403	-0.744	13.5600399	-0.718	13.5600406	-0.768	± 100
3.80	0	13.5600517	-1.587	13.5600536	-1.725	13.5600551	-1.834	13.5600564	-1.936	± 100
3.80	-10	13.5601017	-5.272	13.5600869	-4.184	13.5600858	-4.099	13.5600871	-4.198	± 100
3.80	-20	13.5601137	-6.154	13.5601095	-5.845	13.5601093	-5.832	13.5601095	-5.845	± 100
3.23	20	13.5600340	-0.283	13.5600317	-0.110	13.5600315	-0.098	13.5600318	-0.120	± 100
4.37	20	13.5600315	-0.096	13.5600317	-0.108	13.5600317	-0.110	13.5600317	-0.113	± 100

10. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

§15.207

IC RSS-GEN, Section 8.8

(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 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

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

TEST PROCEDURE

ANSI C63.10:2013

RESULTS

EUT is powered by battery. AC line conducted emission is not applicable.