



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

CERTIFICATION TEST REPORT

FOR

CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS

MODEL NUMBER: A1784

**FCC ID: BCG-E3092A
IC: 579C-E3092A**

REPORT NUMBER: 16U23366-E10V3

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Prepared for
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	07/27/2016	Initial Issue	Joe Vang
V2	07/30/2016	Address TCB Questions	Francisco Guarnero
V2	08/02/2016	Address TCB 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: CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS

MODEL: A1784

SERIAL NUMBER: C39RV04ZHFPQ

DATE TESTED: FEBRUARY 23, 2016 – MARCH 30, 2016

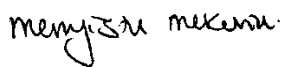
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	Pass
INDUSTRY CANADA RSS-210 Issue 8, Annex 2	Pass
INDUSTRY CANADA RSS-GEN Issue 4	Pass

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.

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SENIOR ENGINEER
UL Verification Services Inc.

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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, Model A1784 is a mobile phone with multimedia functions (music, application support, and video), cellular GSM/GPRS/EGPRS/WCDMA/HSPA+/DC-HSDPA/LTE-radio, IEEE 802.11a/b/g/n/ac, NFC and Bluetooth radio. The rechargeable battery is not user accessible. CE mode is NFC Card Emulation Mode.

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	24.69
		B	24.71
		F	24.37
13.56	Reader	A	23.79
		B	23.79
		F	23.76

5.3. SOFTWARE AND FIRMWARE

The test utility software used during testing was 1.24.

5.4. WORST-CASE CONFIGURATION AND MODE

The fundamental of the EUT was investigated under three orthogonal orientations X (Flatbed), Y (Landscape), and Z (Portrait). The Y (Landscape) orientation was determined to be the worst-case orientation.

The worst case position of the EUT was investigated under two configurations: EUT with power supply, EUT with earphones. The EUT with power supply configuration was determined to be worst-case configurations; therefore, all final tests were performed on the EUT with power supply.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 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
EUT AC/DC Adapter	Apple	A1385	D292365B2FQDHLHC7	n/a

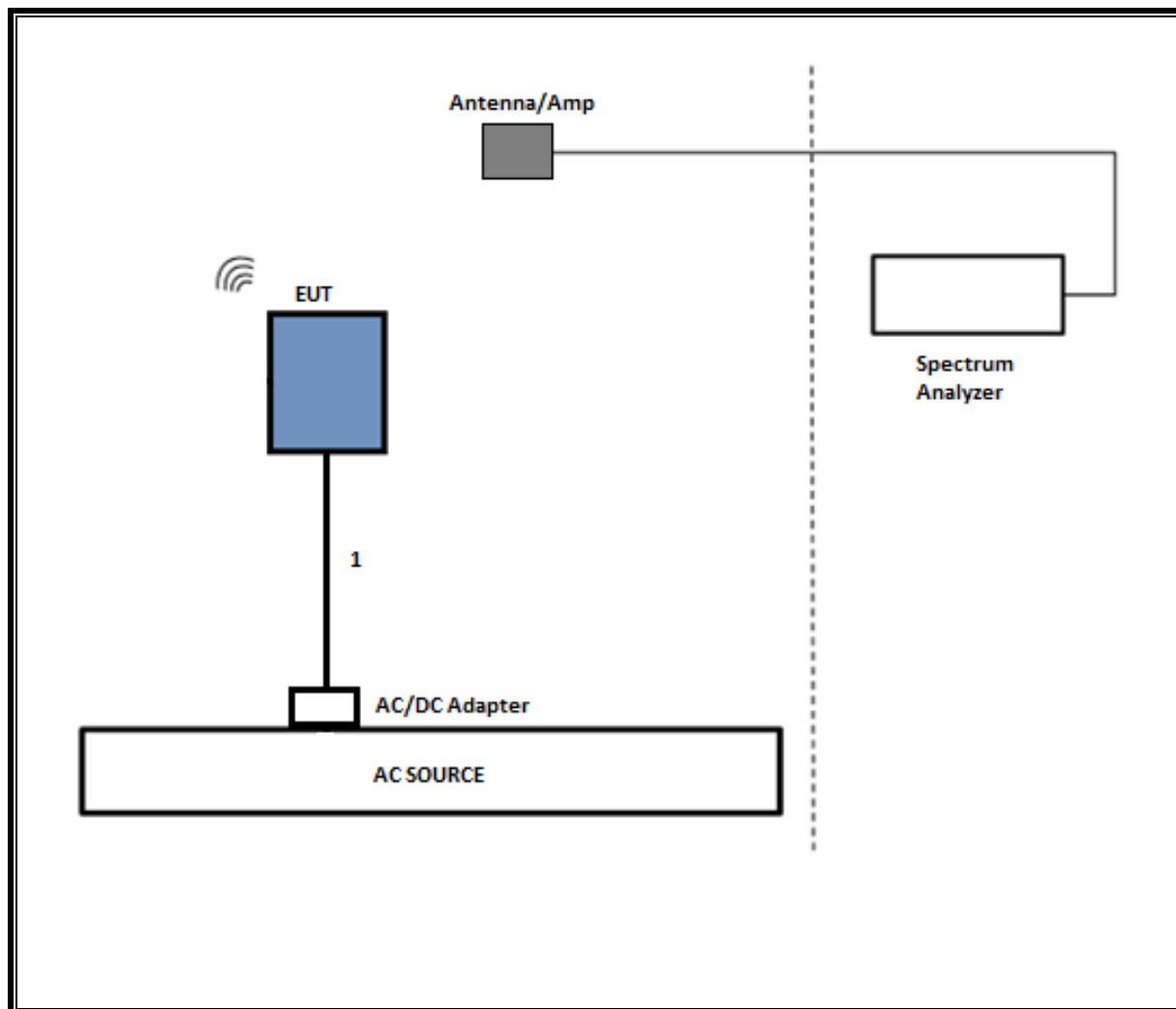
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	lightning	Un-shielded	1	n/a
2	Audio	1	Jack	Un-shielded	0.5	n/a
3	DC	2	Alligator	18 AWG strand	1	Insulated cable

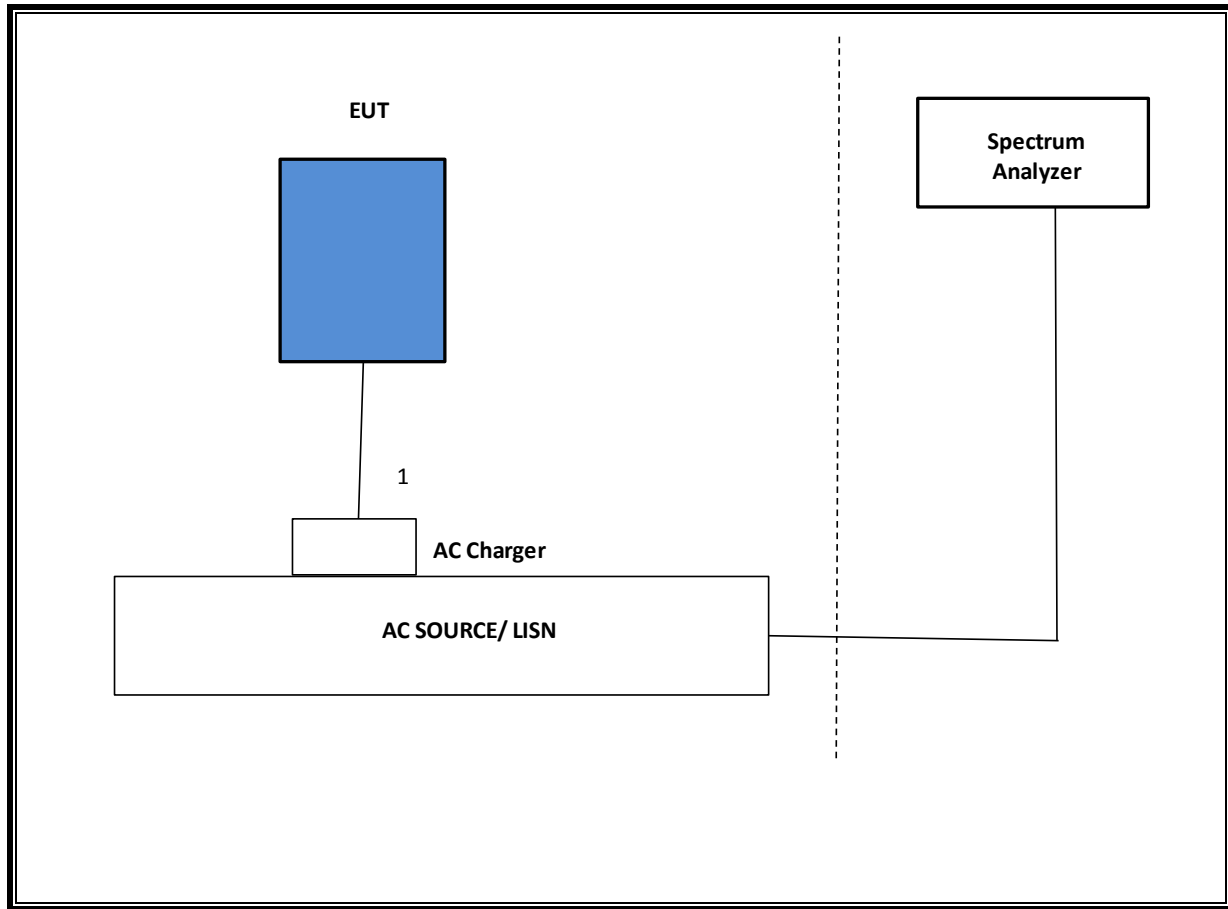
TEST SETUP

The EUT is installed in a host laptop computer during the tests. Test software exercised the EUT.

SETUP DIAGRAM FOR TESTS



SETUP DIAGRAM FOR LINE CONDUCTED TESTS



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
**Spectrum Analyzer	Agilent	N9030A	906	06/11/16
**Antenna, Broadband Hybrid	Sunol Sciences	JB3	900	04/10/16
**Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	835	06/09/16
**Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	834	06/08/16
**Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent	N9030A	906	06/11/16
**Antenna, Loop, 30 MHz	ETS Lindgren	6502	757	05/21/16
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	754	09/21/16
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent	N9030A	1222	12/17/16
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	212	08/07/16
LISN for Conducted Emissions CISPR-16	FCC	LISN-50/250-25-2	24	01/16/17
Line conducted Power cable ANSI 63.4	UL	PG1	861	07/28/16
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

** Testing is completed before equipment expiration date.

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:	3/16/16
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CE MODE

Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KMHz)	20dB BW (KMHz)
Type A	13.56	848	21.369	28.45
		424	21.526	28.15
		212	21.279	29.23
		106	21.340	28.37

Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB BW (KHz)
Type B	13.56	848	21.170	28.25
		424	21.223	28.88
		212	21.342	28.22
		106	21.486	28.01

Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB BW (KHz)
Type F	13.56	424	21.394	27.96
		212	21.245	28.11

READER MODE

Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB BW (KHz)
Type A	13.56	848	21.372	28.53
		424	21.738	29.25
		212	21.978	32.01
		106	22.821	28.83

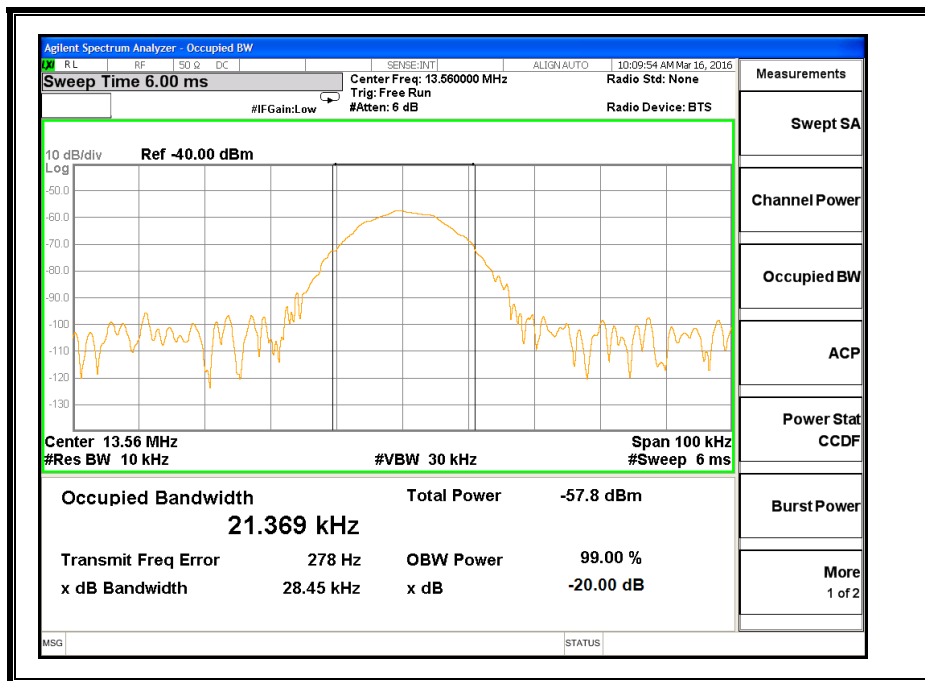
Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB BW (KHz)
Type B	13.56	848	21.842	28.40
		424	22.168	40.37
		212	22.012	30.51
		106	21.784	28.67

Moduation	Frequency (MHz)	Data Rate (Kbps)	99% Bandwidth (KHz)	20dB BW (KHz)
Type F	13.56	424	21.140	27.60
		212	21.382	27.98

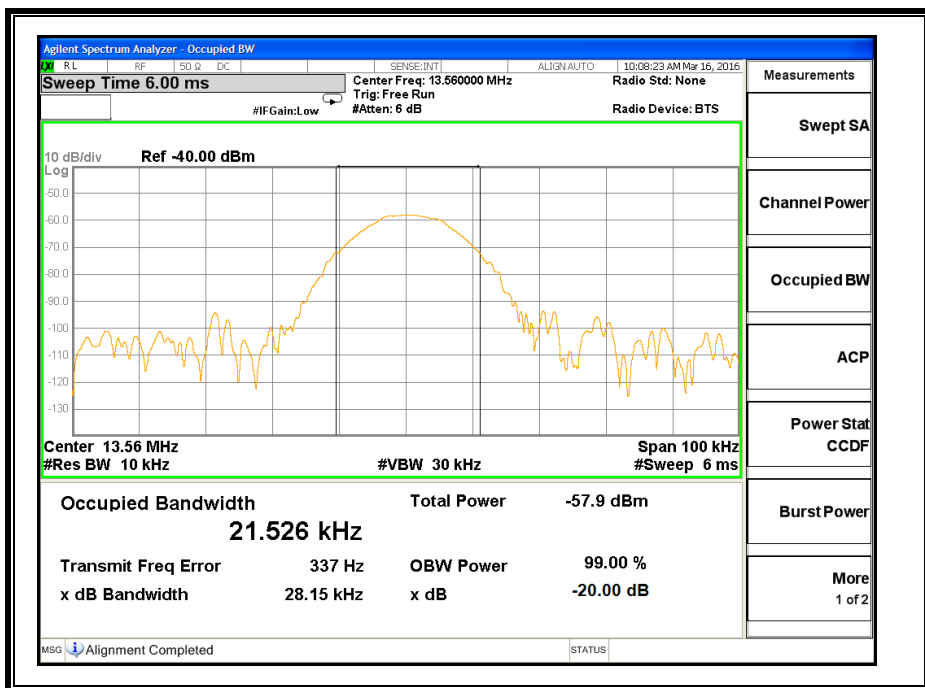
7.1. CE MODE

Type A

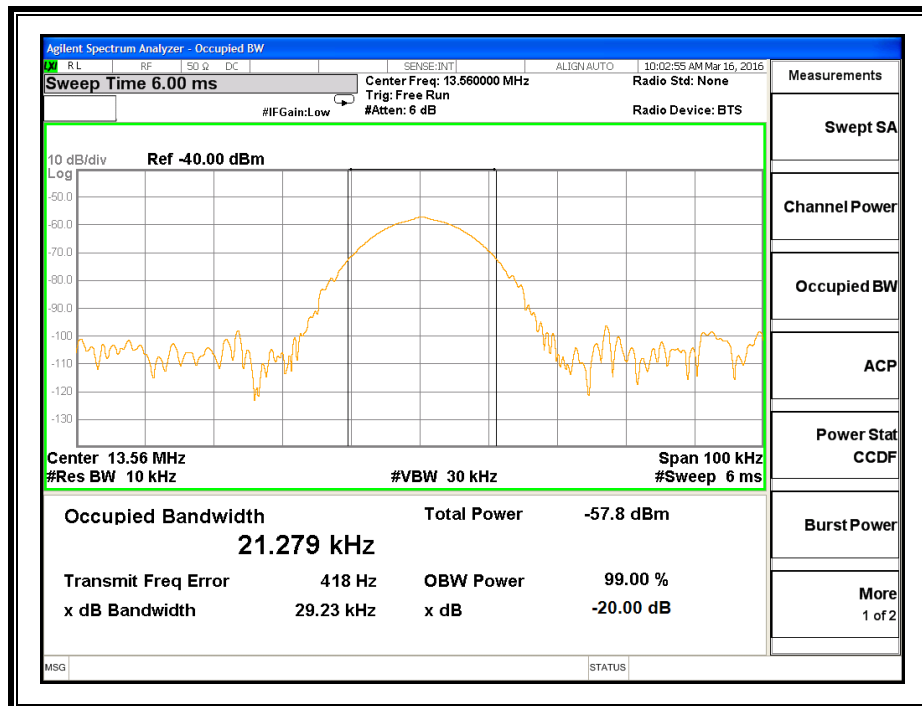
848Kbps



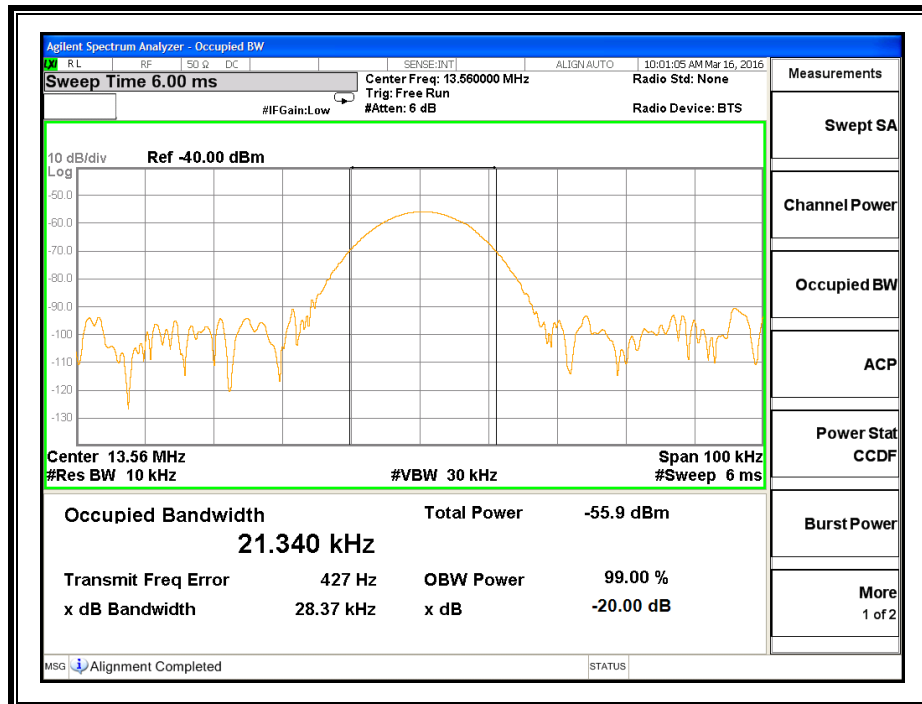
424Kbps



212Kbps

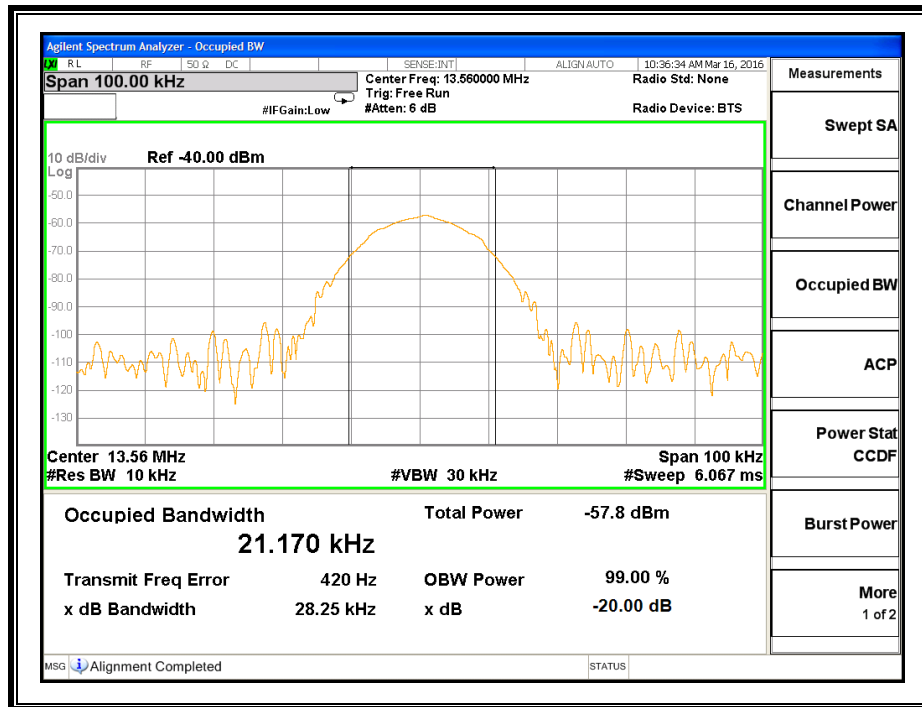


106Kbps

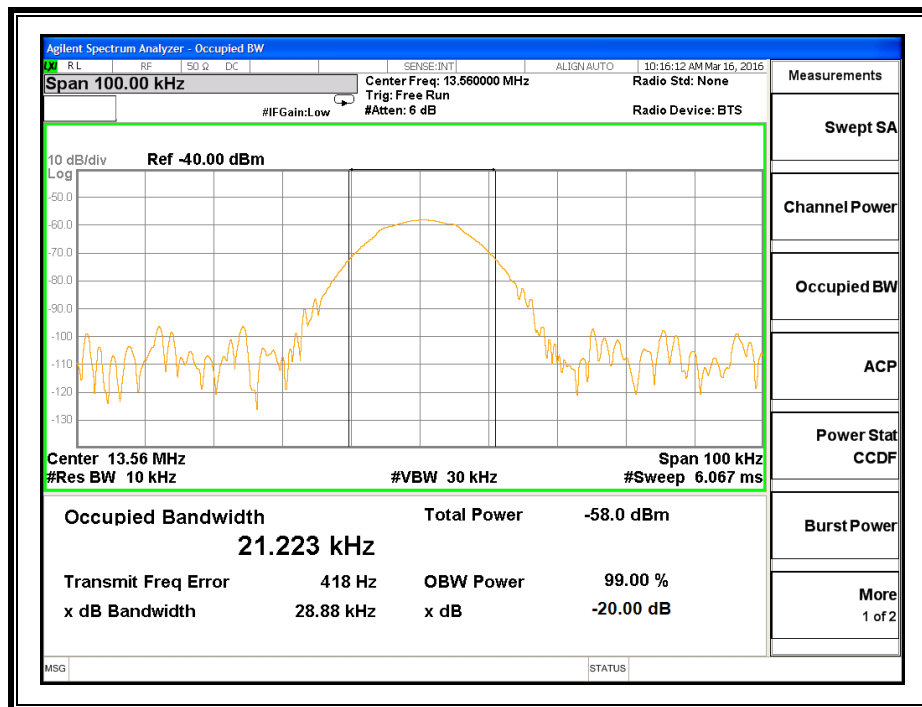


Type B

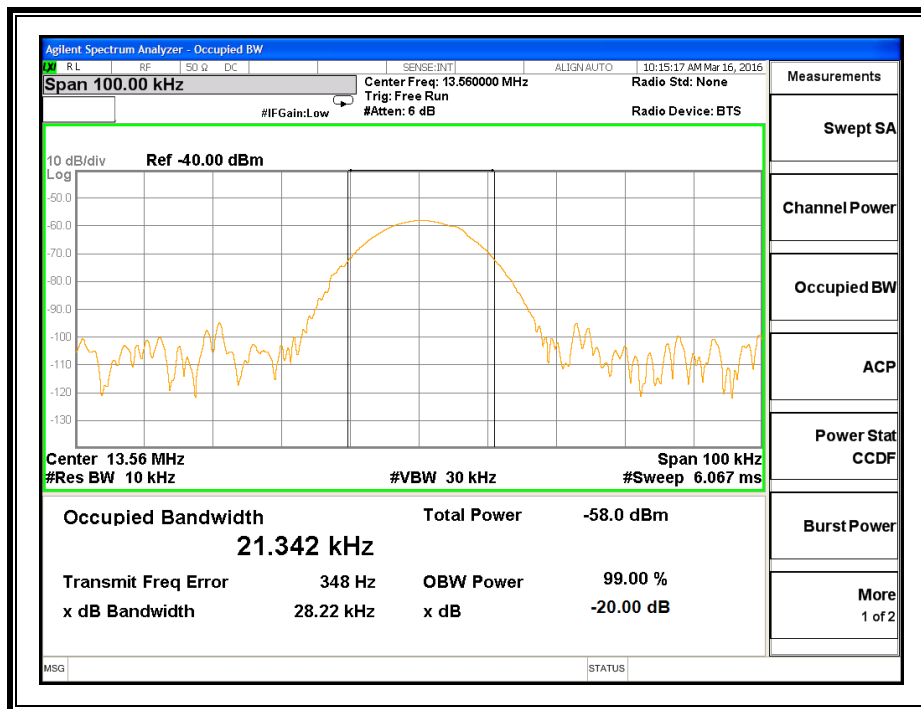
848Kbps



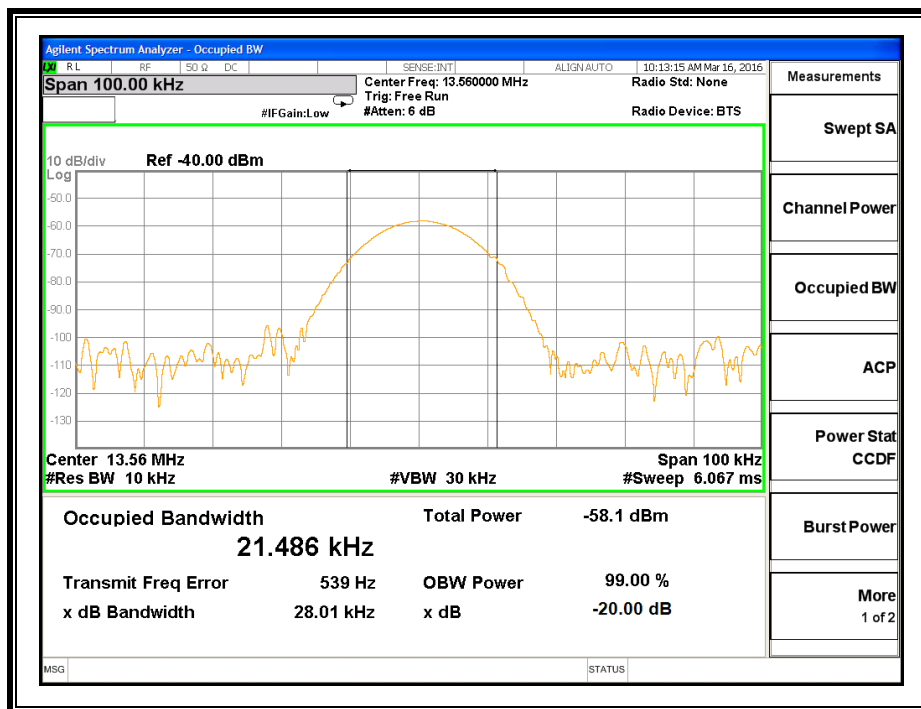
424Kbps



212Kbps

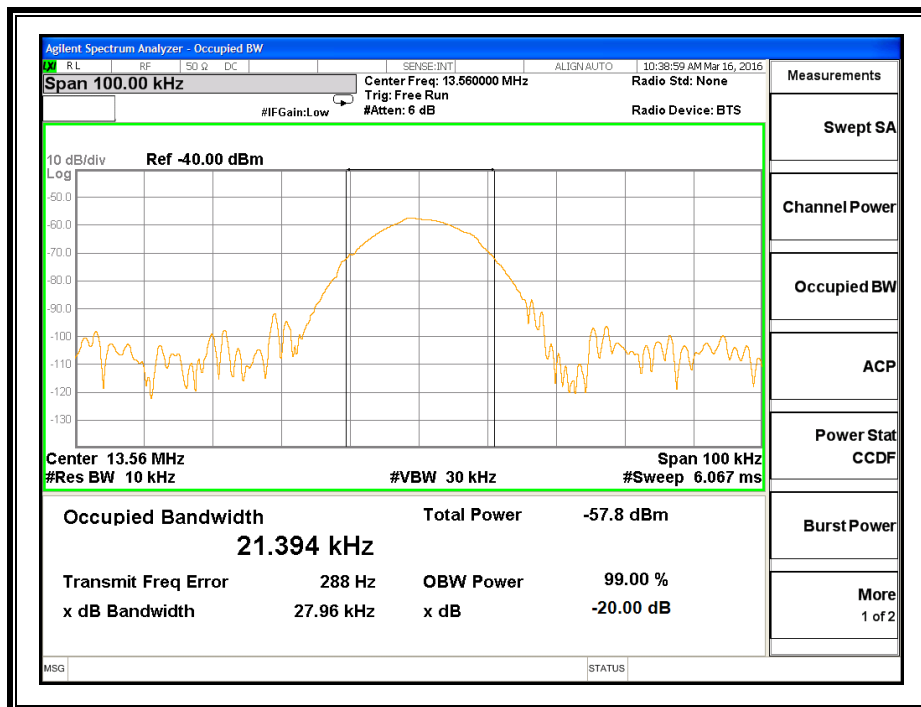


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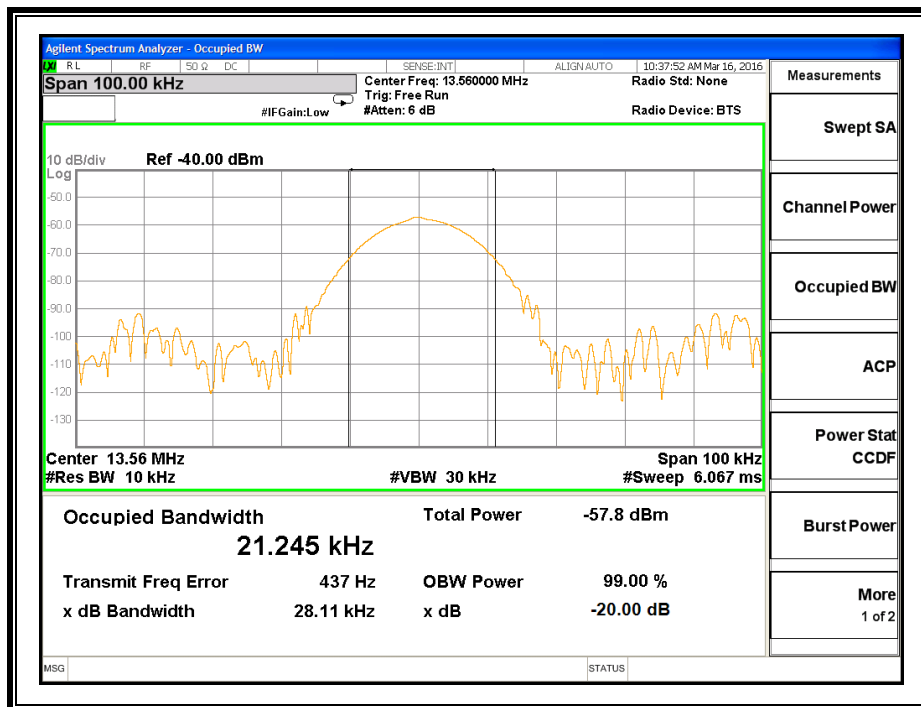


TYPE F

424Kbps



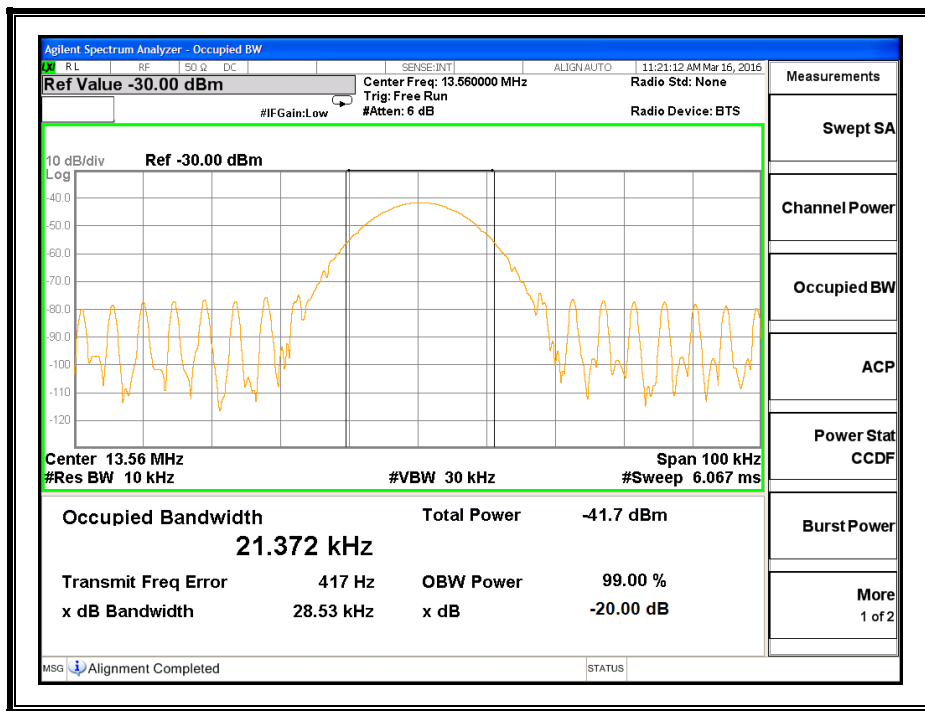
212Kbps



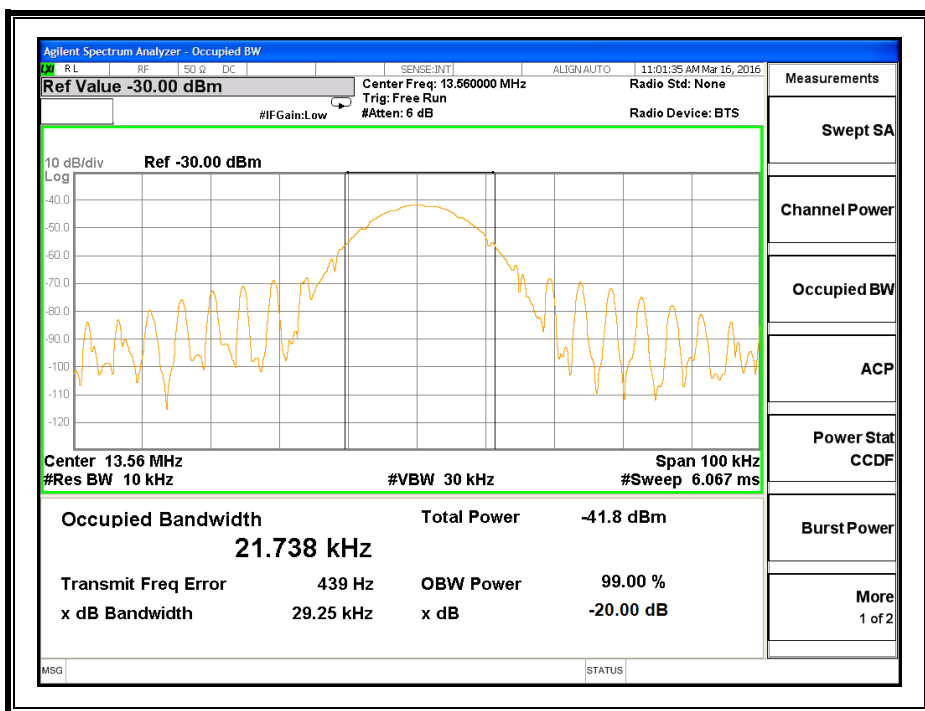
7.2. READER MODE

Type A

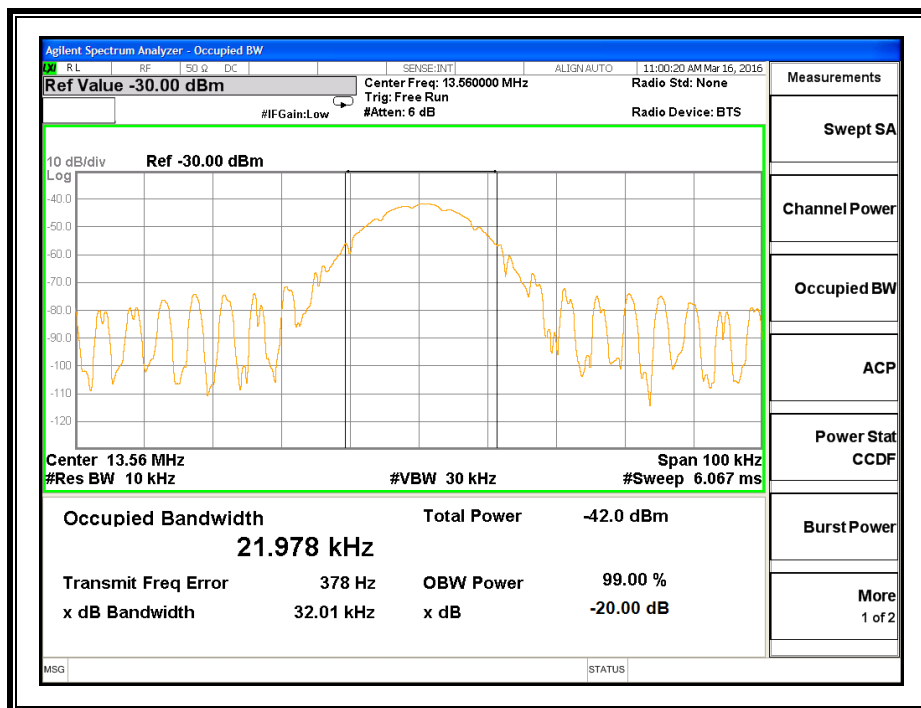
848Kbps



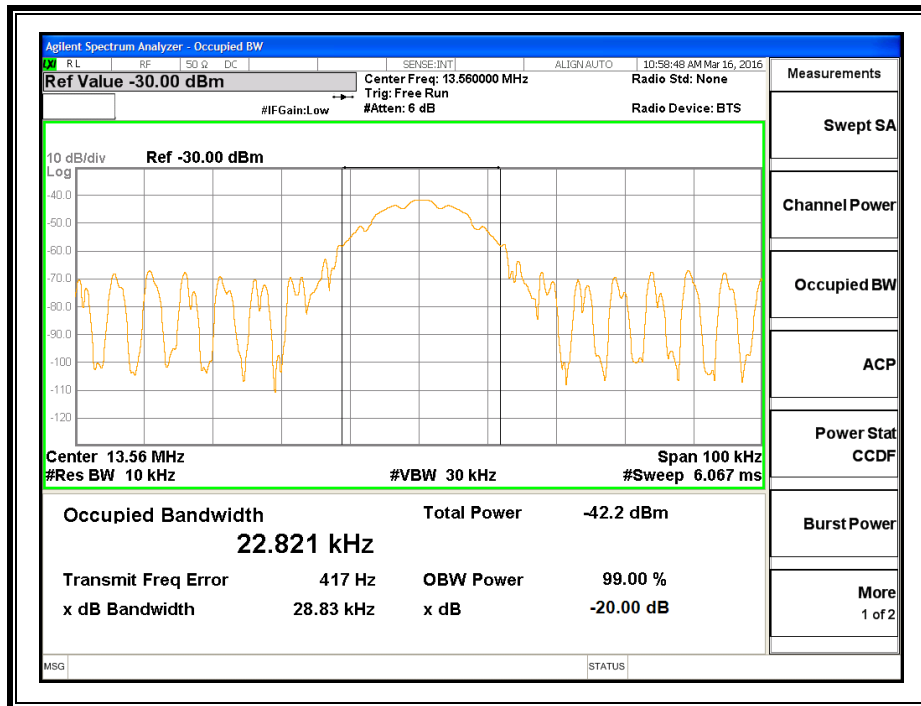
424Kbps



212Kbps

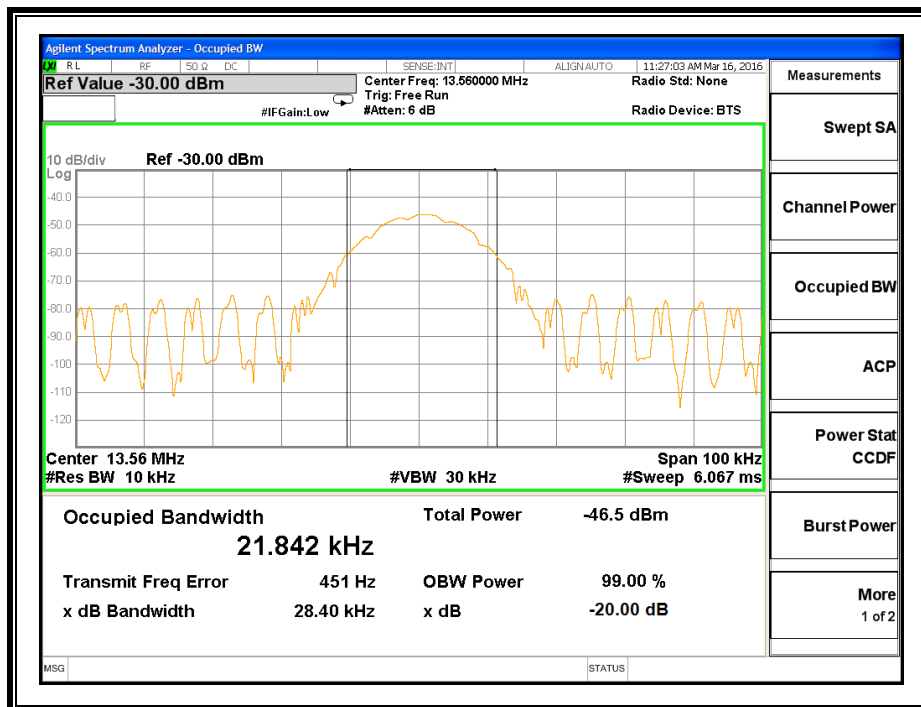


106Kbps

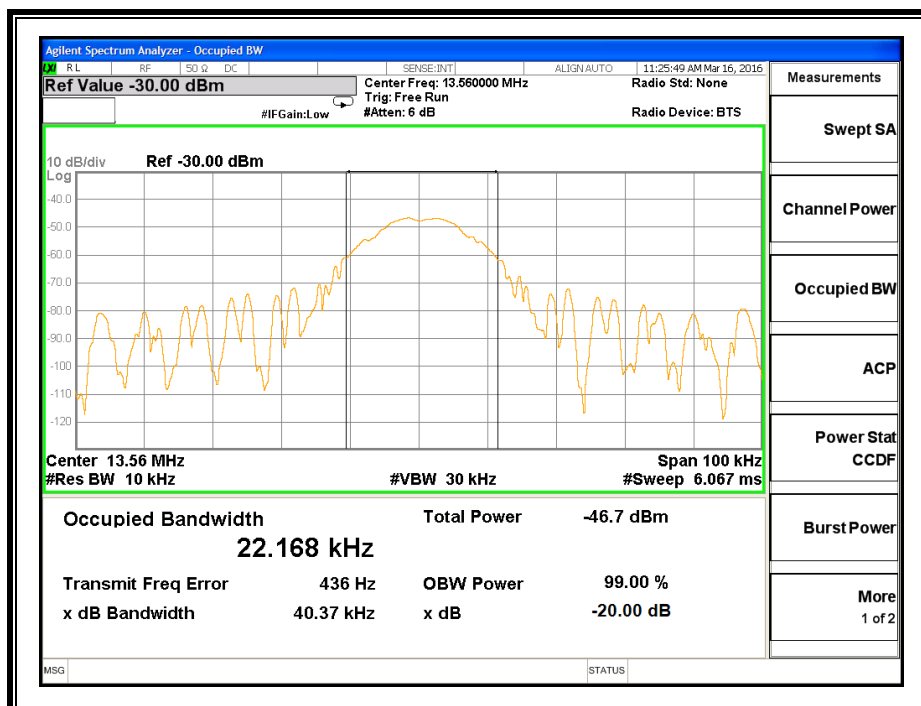


Type B

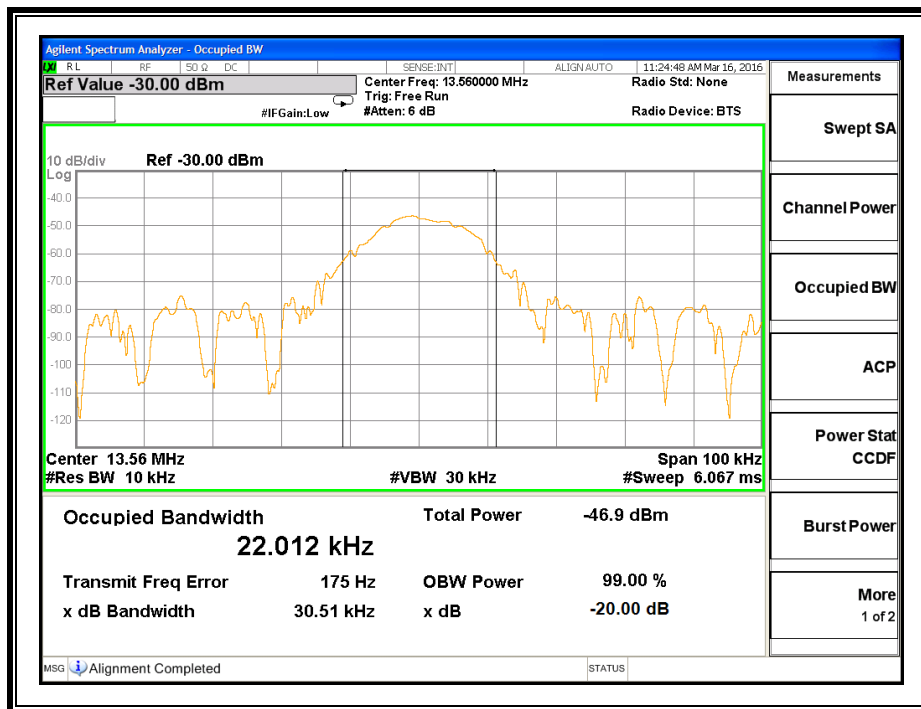
848Kbps



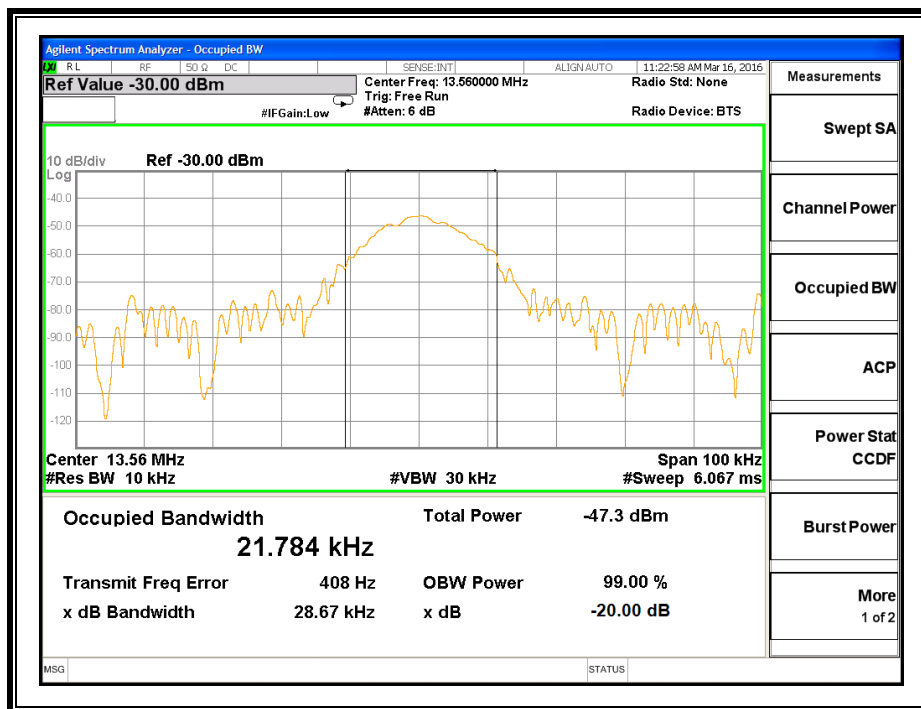
424Kbps



212Kbps

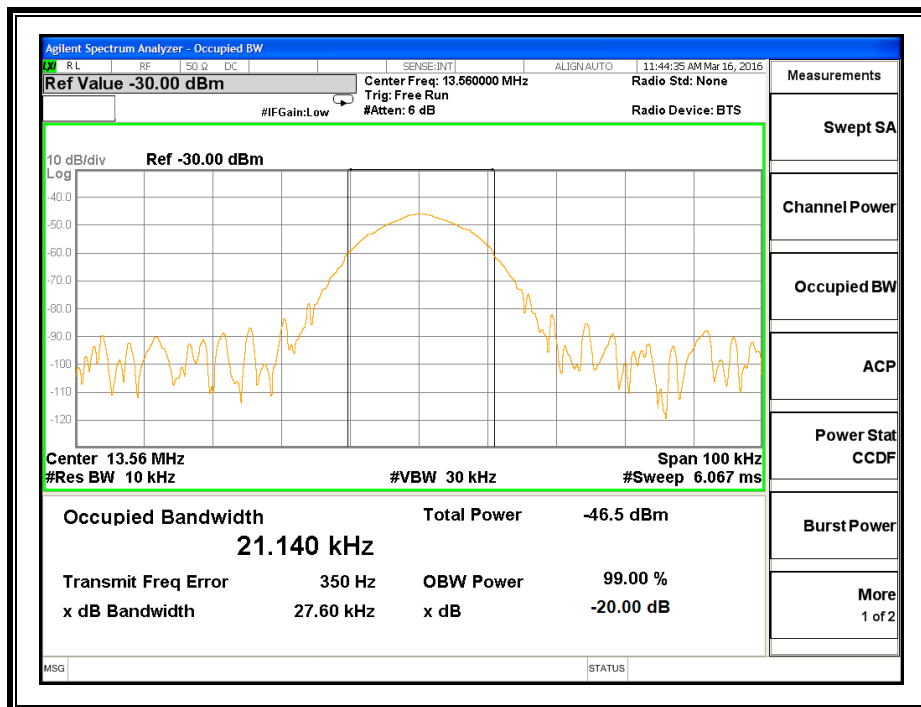


106Kbps

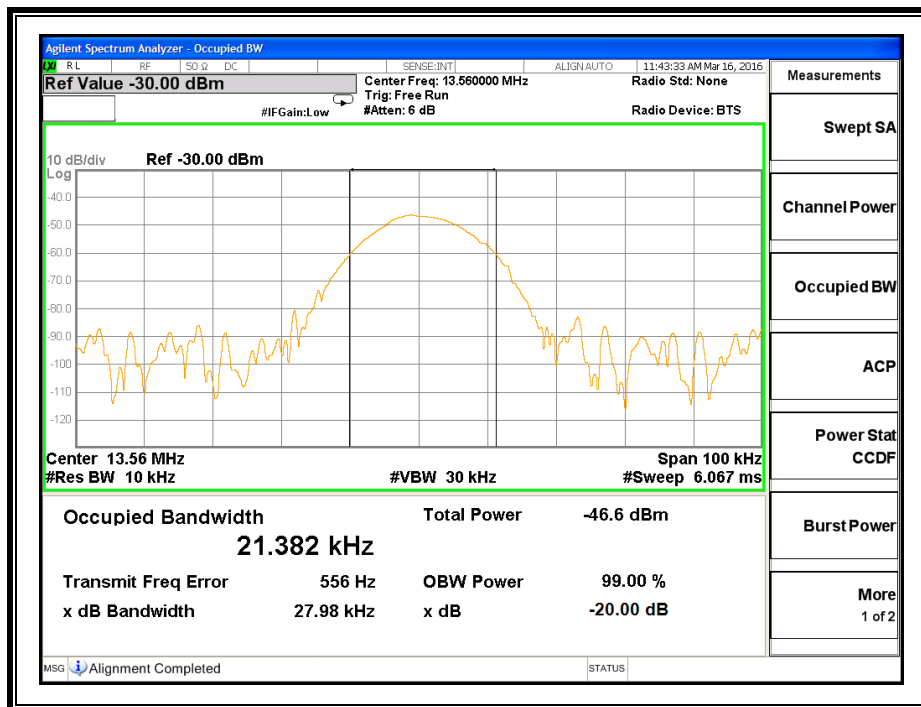


TYPE F

424Kbps



212Kbps



8. RADIATED EMISSION TEST RESULTS

8.1. 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 µV/m to dBuV/m is:

Limit (dBuV/m) = 20 log limit (µV/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.

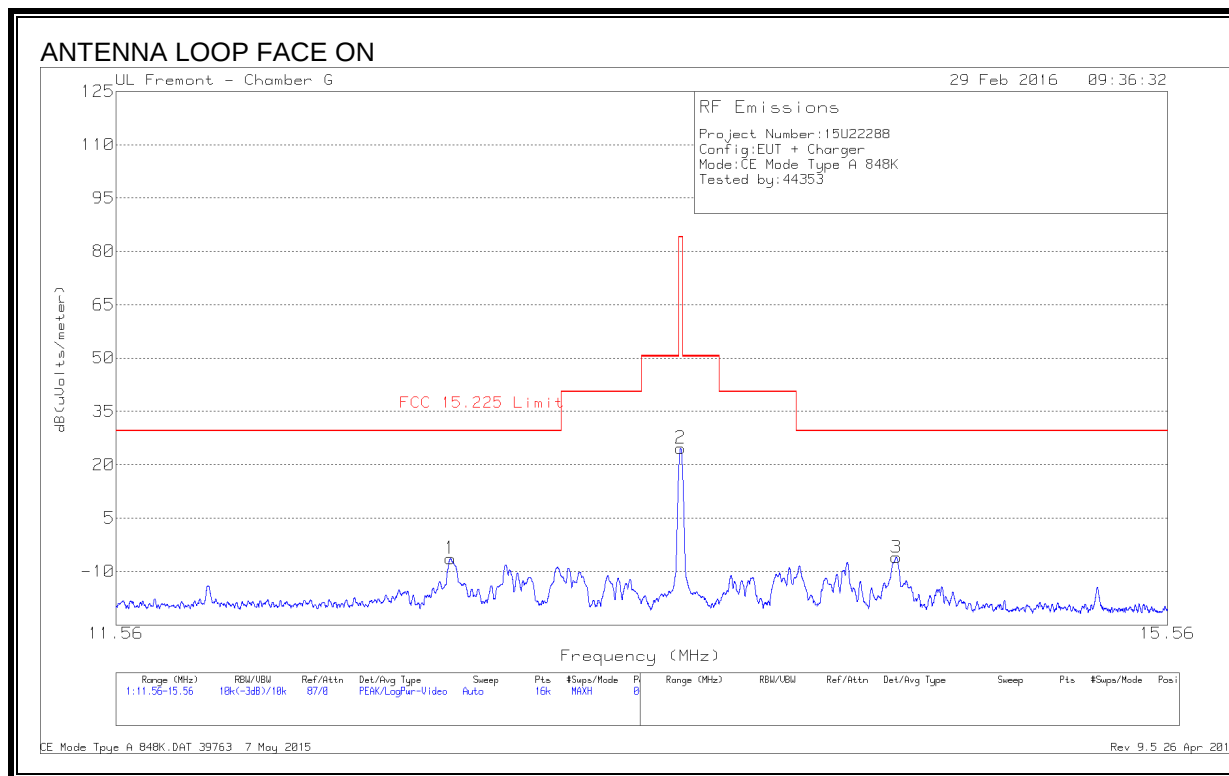
§15.209 (d) The provisions in §§ 15.225, measuring emissions at distances other than the distances specified in the above table, determining the frequency range over which radiated emissions are to be measured, and limiting peak emissions apply to all devices operated under this part.

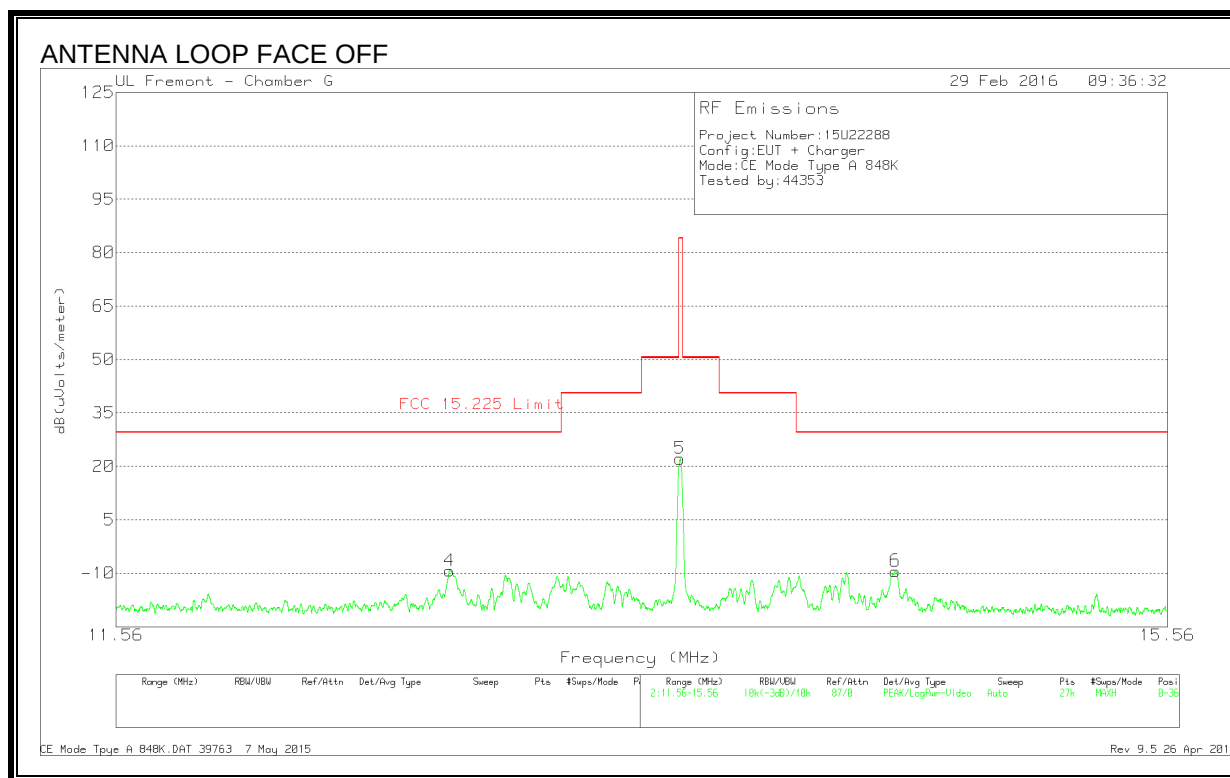
RESULTS

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

8.2.1. CE MODE

TYPE A 848Kbps FUNDAMENTAL



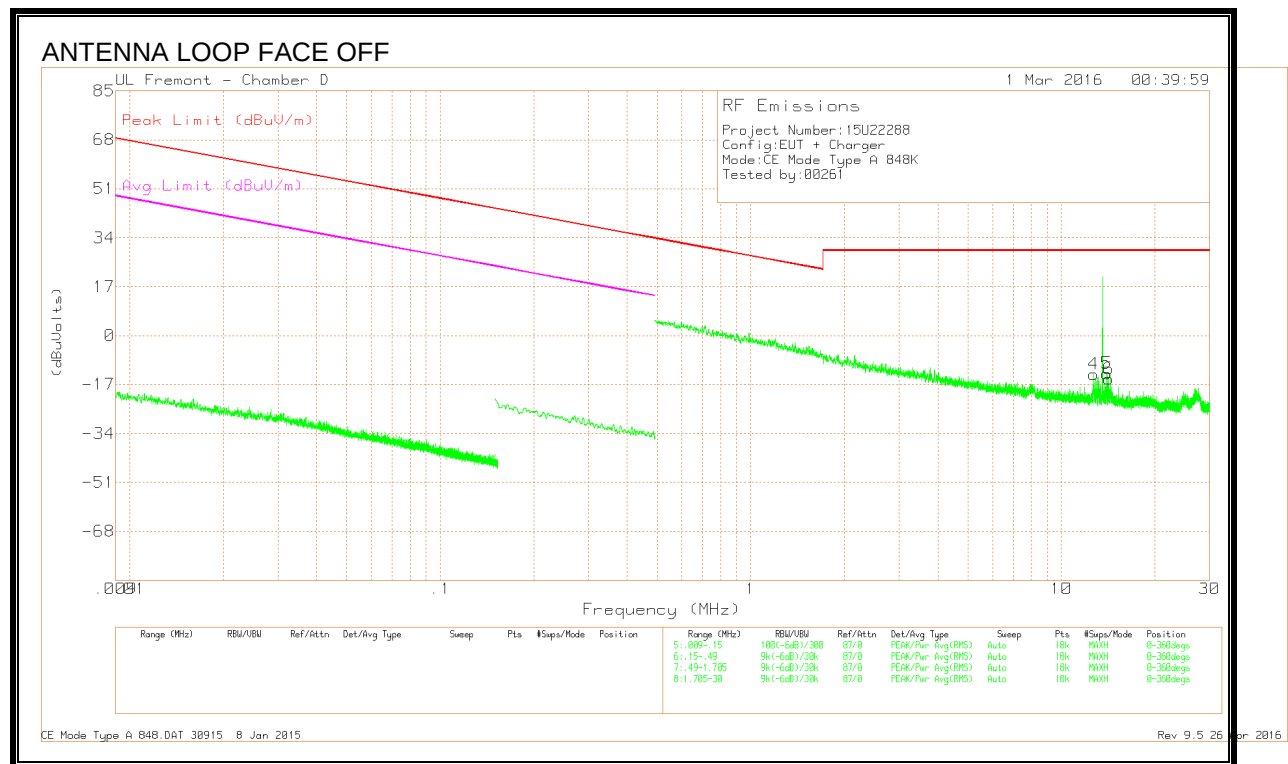
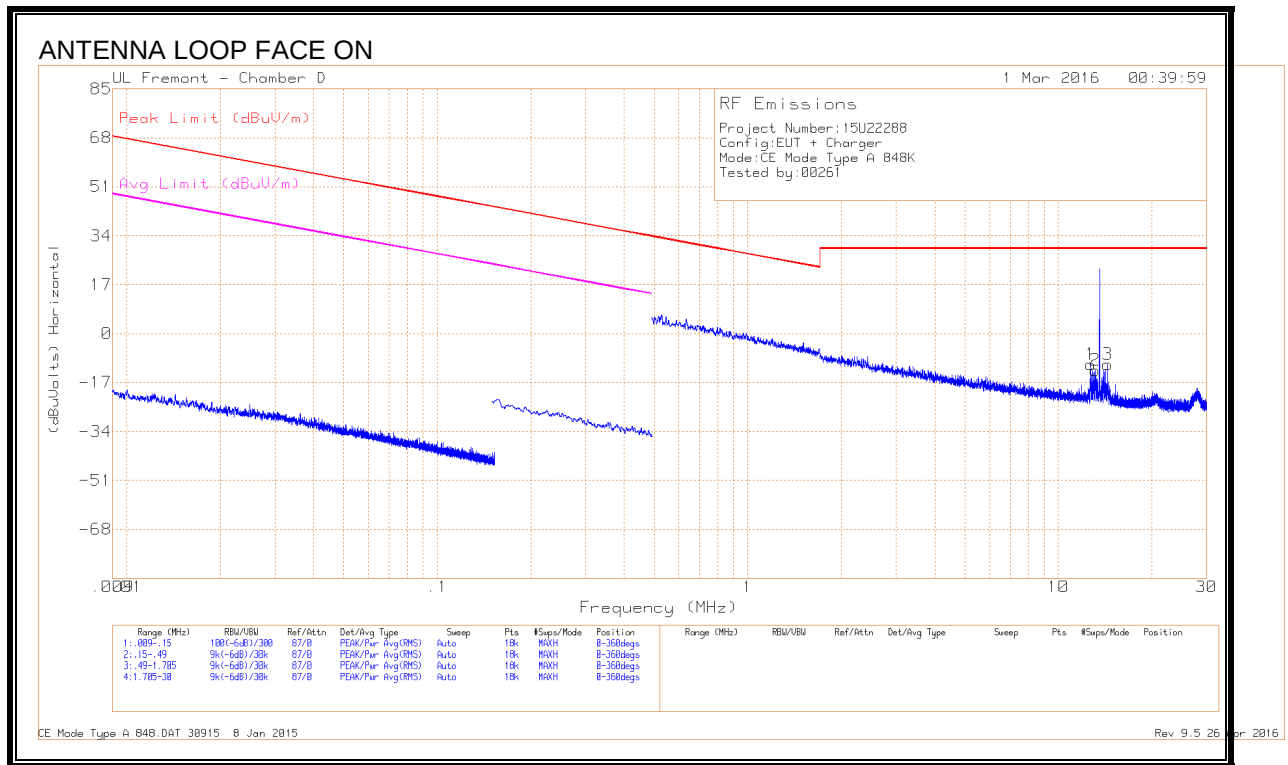


DATA

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	Margin (dB)	Azimuth (Degs)
4	12.70271	19.66	Pk	10.4	.6	-40	-9.34	29.54	-38.88	0-360
1	12.70663	22.66	Pk	10.4	.6	-40	-6.34	29.54	-35.88	0-360
5	13.55867	51.16	Pk	10.4	.6	-40	22.16	84	-61.84	0-360
2	13.5605	53.69	Pk	10.4	.6	-40	24.69	84	-59.31	0-360
6	14.40922	19.66	Pk	10.3	.6	-40	-9.44	29.54	-38.98	0-360
3	14.41288	23.05	Pk	10.3	.6	-40	-6.05	29.54	-35.59	0-360

Pk - Peak detector

SPURIOUS EMISSION Type A 848kpbs

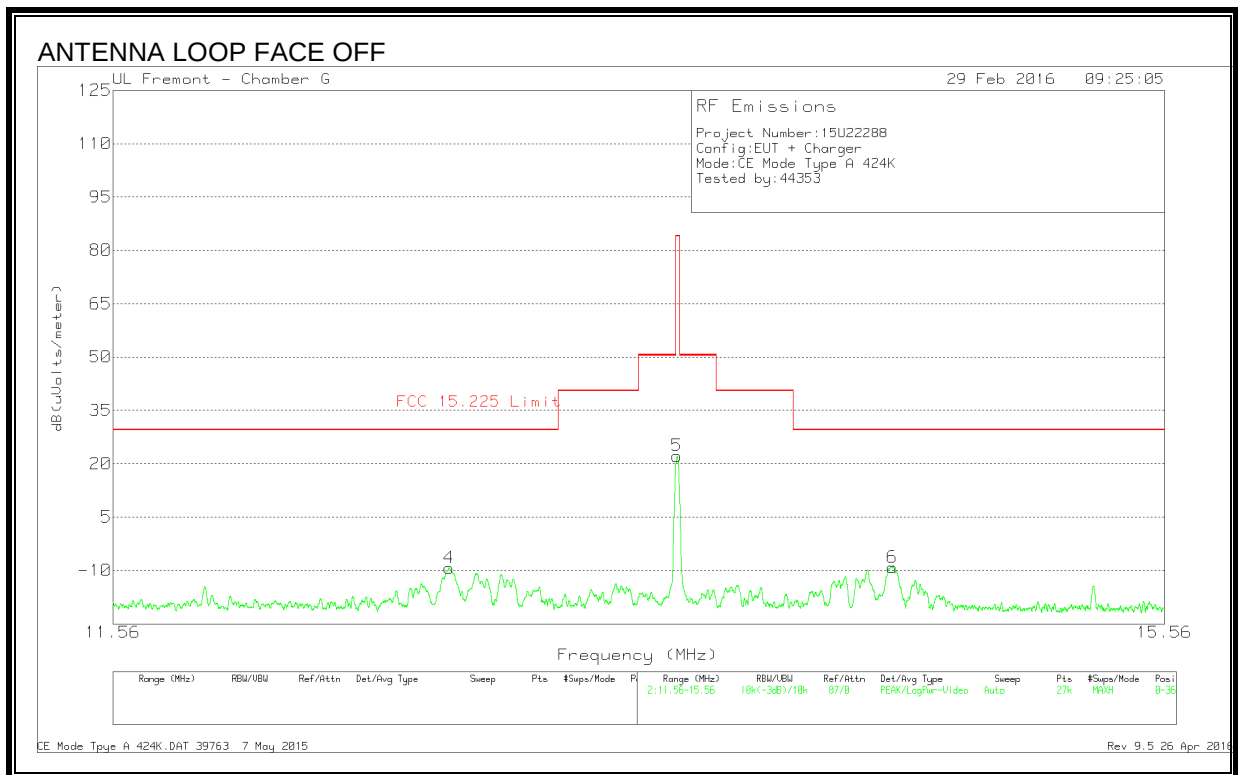
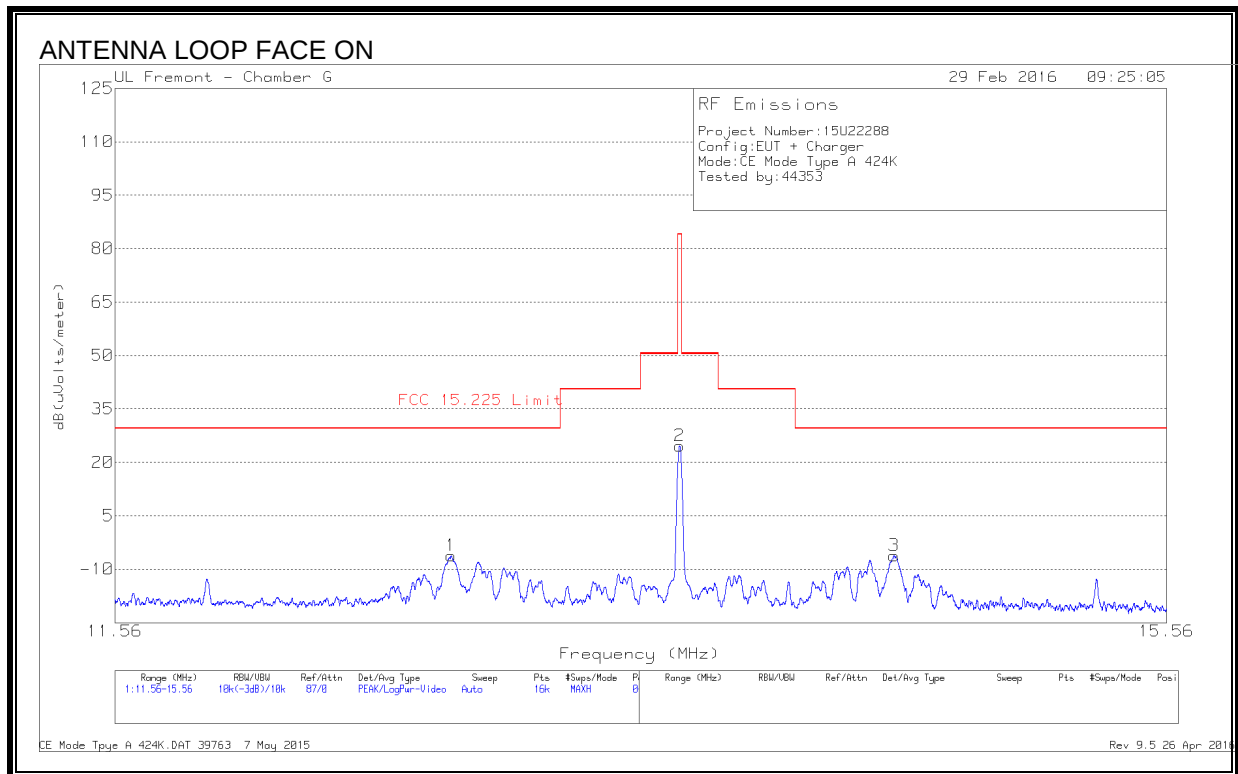


DATA

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	12.709	18.26	Pk	10.4	.6	-40	-10.74	29.54	-40.28	-	-	0-360
4	12.71529	15.47	Pk	10.4	.6	-40	-13.53	29.54	-43.07	-	-	0-360
2	13.13658	16.33	Pk	10.4	.6	-40	-12.67	29.54	-42.21	-	-	0-360
5	13.98311	15.98	Pk	10.3	.6	-40	-13.12	29.54	-42.66	-	-	0-360
6	14.2134	14.09	Pk	10.3	.6	-40	-15.01	29.54	-44.55	-	-	0-360
3	14.41148	18.41	Pk	10.3	.6	-40	-10.69	29.54	-40.23	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL

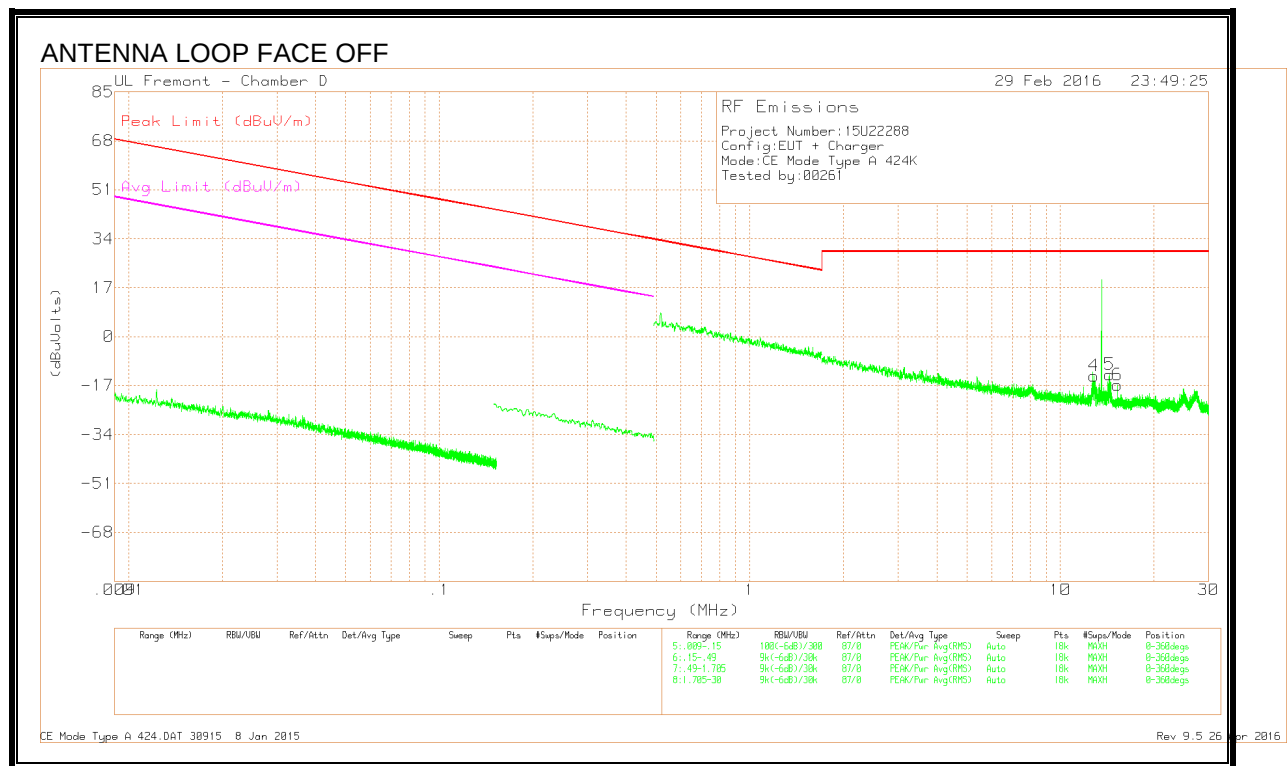
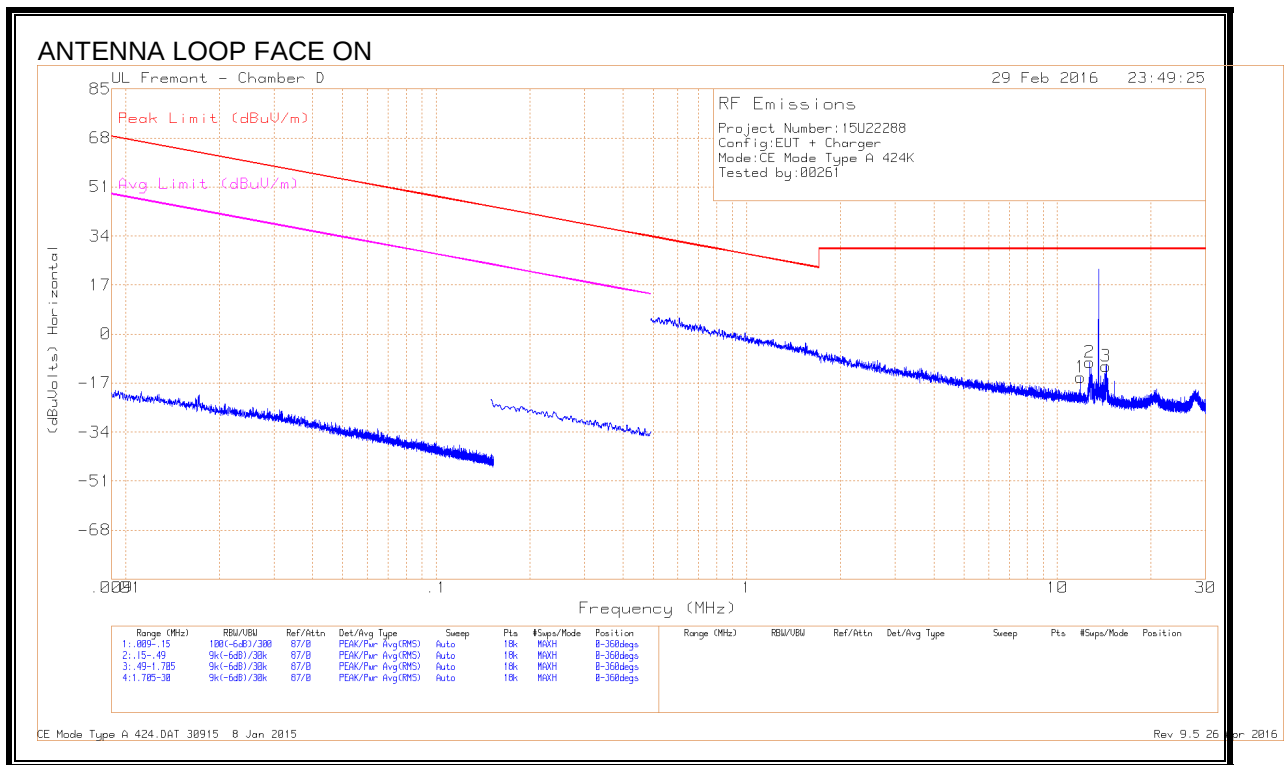


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	12.71233	19.68	Pk	10.4	.6	-40	-9.32	29.54	-38.86	0-360
1	12.71313	22.76	Pk	10.4	.6	-40	-6.24	29.54	-35.78	0-360
5	13.55867	51.17	Pk	10.4	.6	-40	22.17	84	-61.83	0-360
2	13.56038	53.63	Pk	10.4	.6	-40	24.63	84	-59.37	0-360
3	14.40763	22.91	Pk	10.3	.6	-40	-6.19	29.54	-35.73	0-360
6	14.4087	19.96	Pk	10.3	.6	-40	-9.14	29.54	-38.68	0-360

Pk - Peak detector

SPURIOUS EMISSION

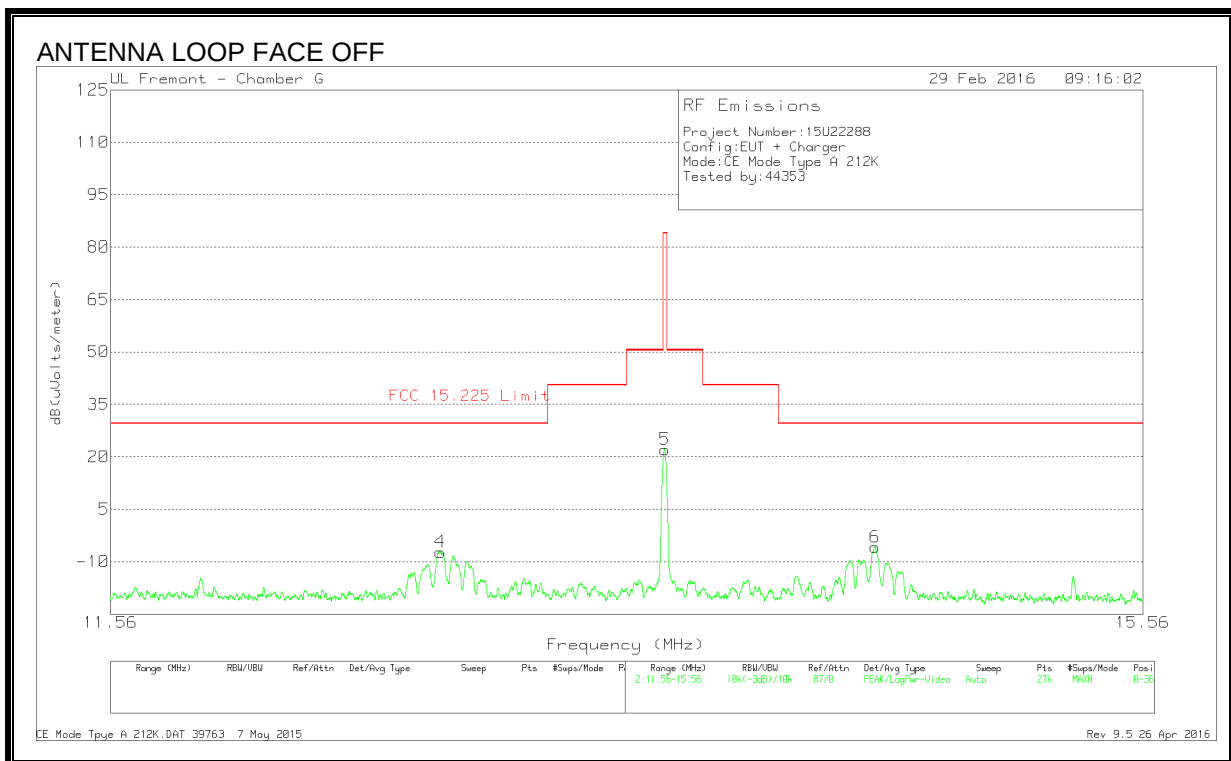
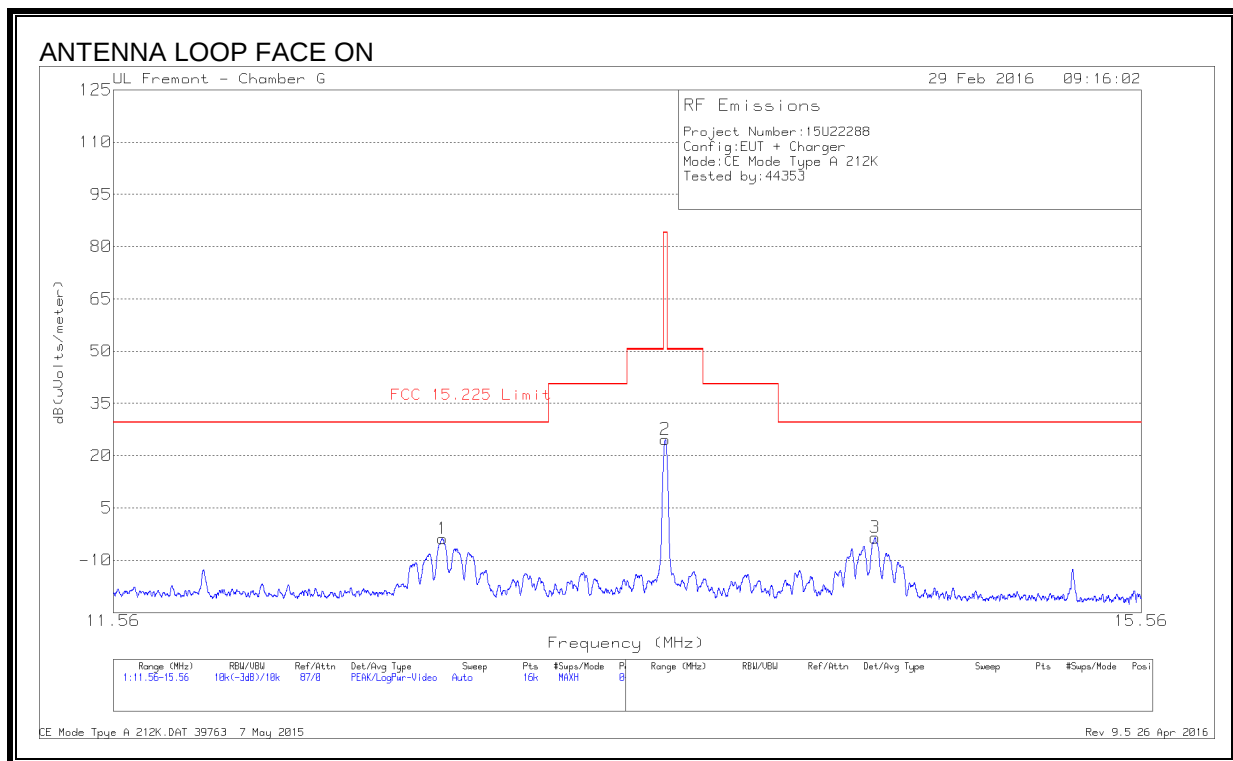


DATA

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	11.86484	13.93	Pk	10.4	.6	-40	-15.07	29.54	-44.61	-	-	0-360
2	12.7145	19.14	Pk	10.4	.6	-40	-9.86	29.54	-39.4	-	-	0-360
4	12.81118	15.34	Pk	10.4	.6	-40	-13.66	29.54	-43.2	-	-	0-360
3	14.31244	17.87	Pk	10.3	.6	-40	-11.23	29.54	-40.77	-	-	0-360
5	14.41383	15.9	Pk	10.3	.6	-40	-13.2	29.54	-42.74	-	-	0-360
6	15.25407	12.31	Pk	10.3	.6	-40	-16.79	29.54	-46.33	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

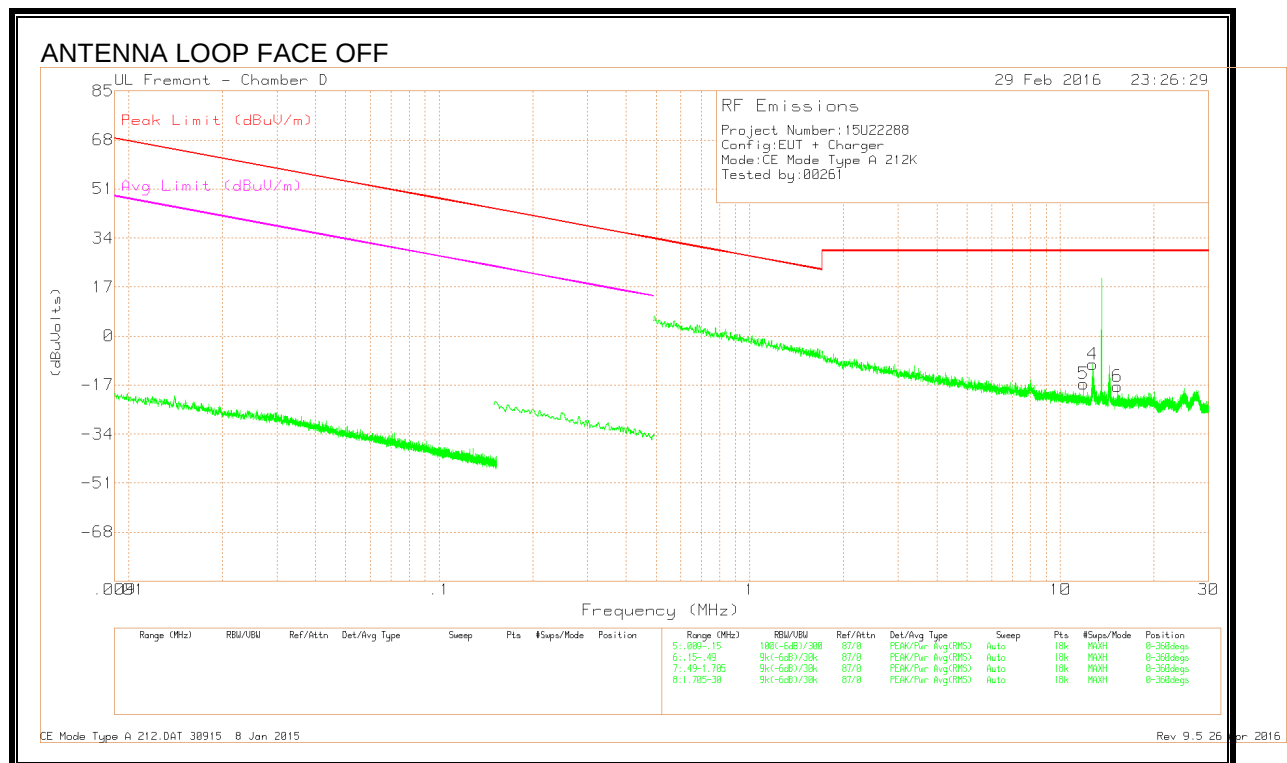
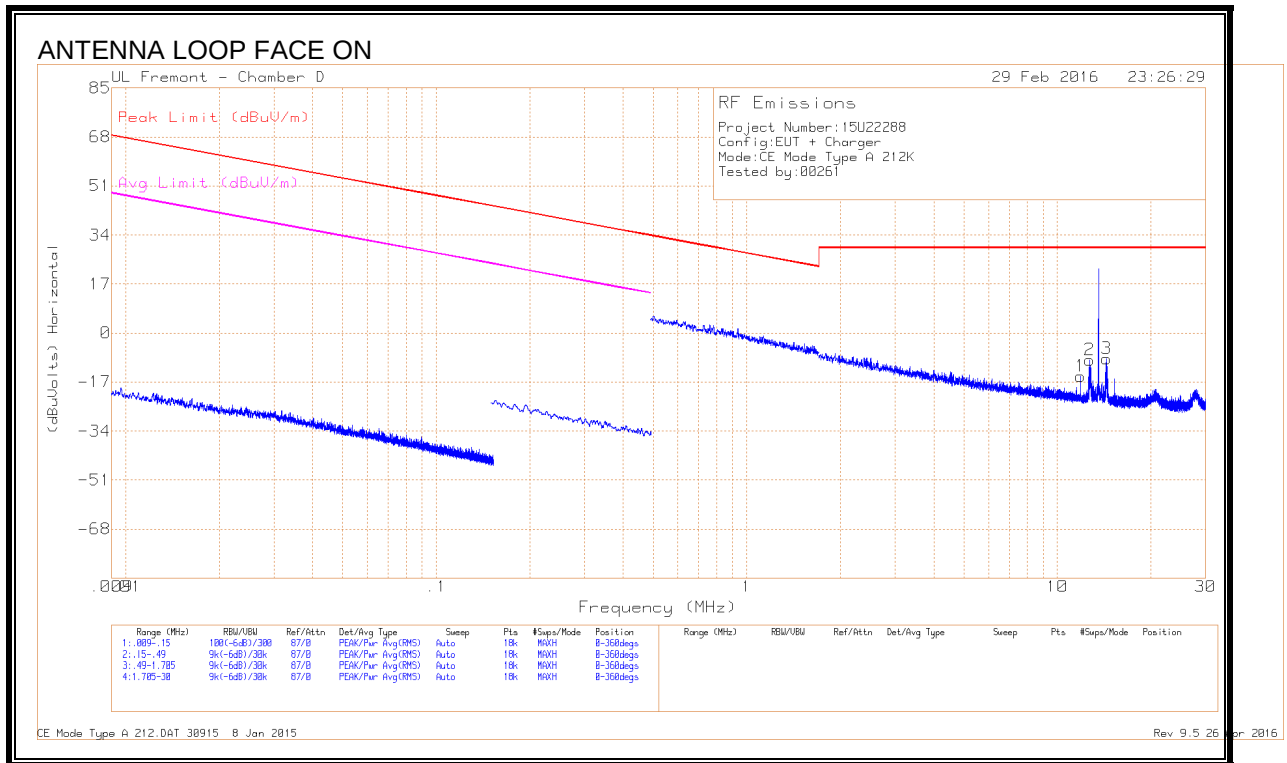


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	12.71159	21.77	Pk	10.4	.6	-40	-7.23	29.54-	-36.77	0-360
1	12.71425	25.15	Pk	10.4	.6	-40	-3.85	29.54	-33.39	0-360
5	13.55963	51.09	Pk	10.4	.6	-40	22.09	84	-61.91	0-360
2	13.56063	53.65	Pk	10.4	.6	-40	24.65	84	-59.35	0-360
6	14.40722	23.27	Pk	10.3	.6	-40	-5.83	29.54	-35.37	0-360
3	14.40813	25.58	Pk	10.3	.6	-40	-3.52	29.54	-33.06	0-360

Pk - Peak detector

SPURIOUS EMISSION

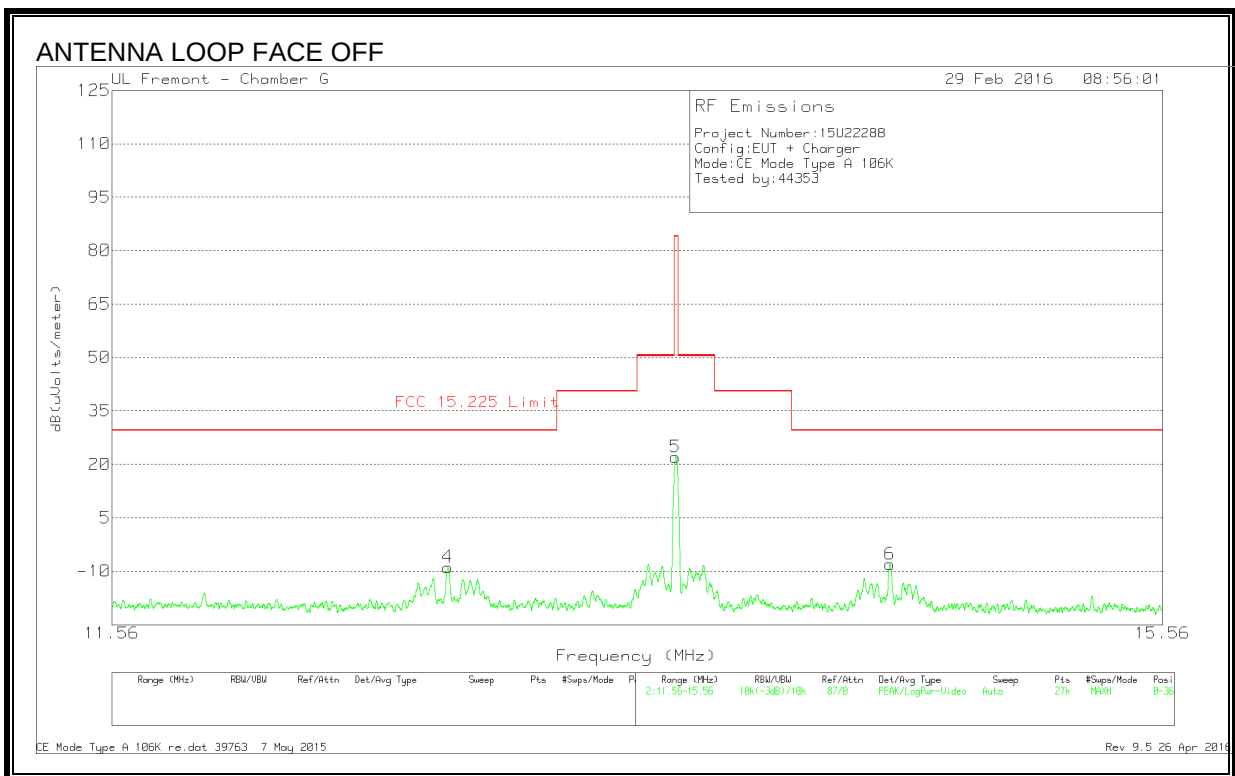
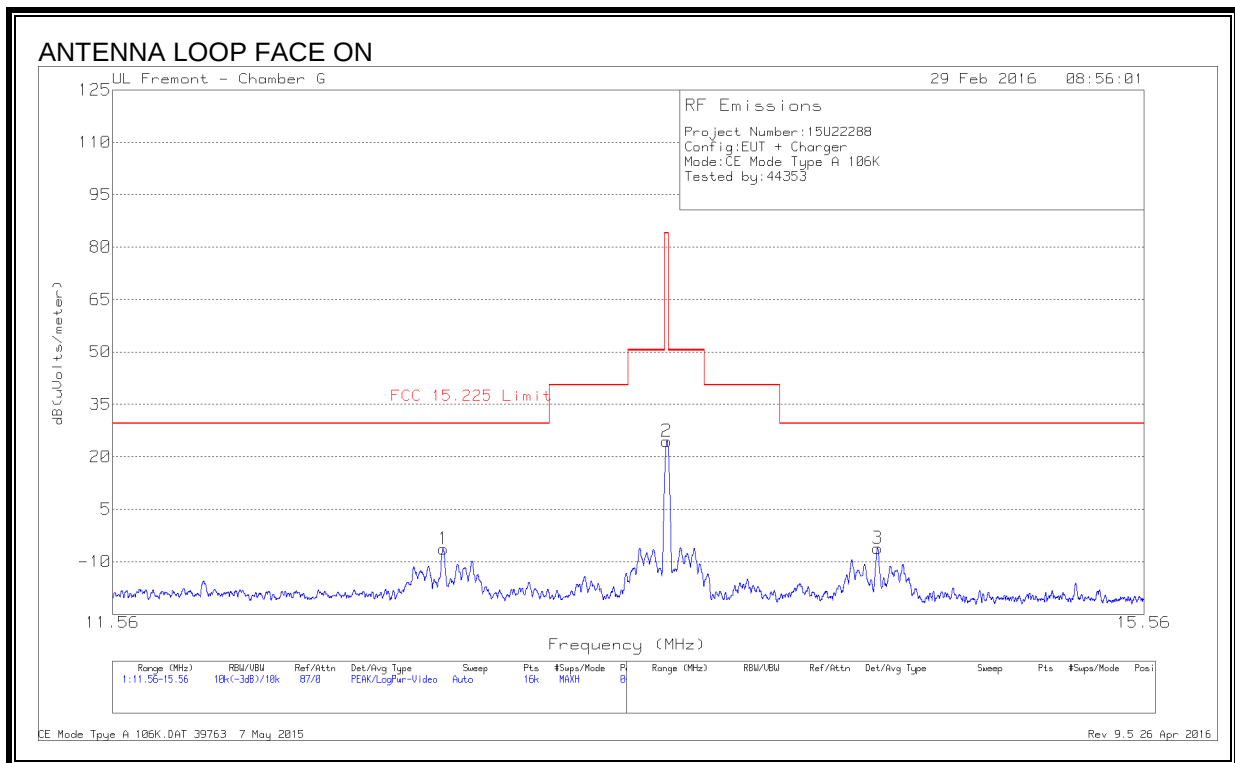


DATA

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)
5	11.86484	12.31	Pk	10.4	.6	-40	-16.69	29.54	-46.23	-	-	0-360
1	11.86641	14.02	Pk	10.4	.6	-40	-14.98	29.54	-44.52	-	-	0-360
2	12.71372	19.67	Pk	10.4	.6	-40	-9.33	29.54	-38.87	-	-	0-360
4	12.71372	19.1	Pk	10.4	.6	-40	-9.9	29.54	-39.44	-	-	0-360
3	14.40519	20.2	Pk	10.3	.6	-40	-8.9	29.54	-38.44	-	-	0-360
6	15.25721	11.5	Pk	10.3	.6	-40	-17.6	29.54	-47.14	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

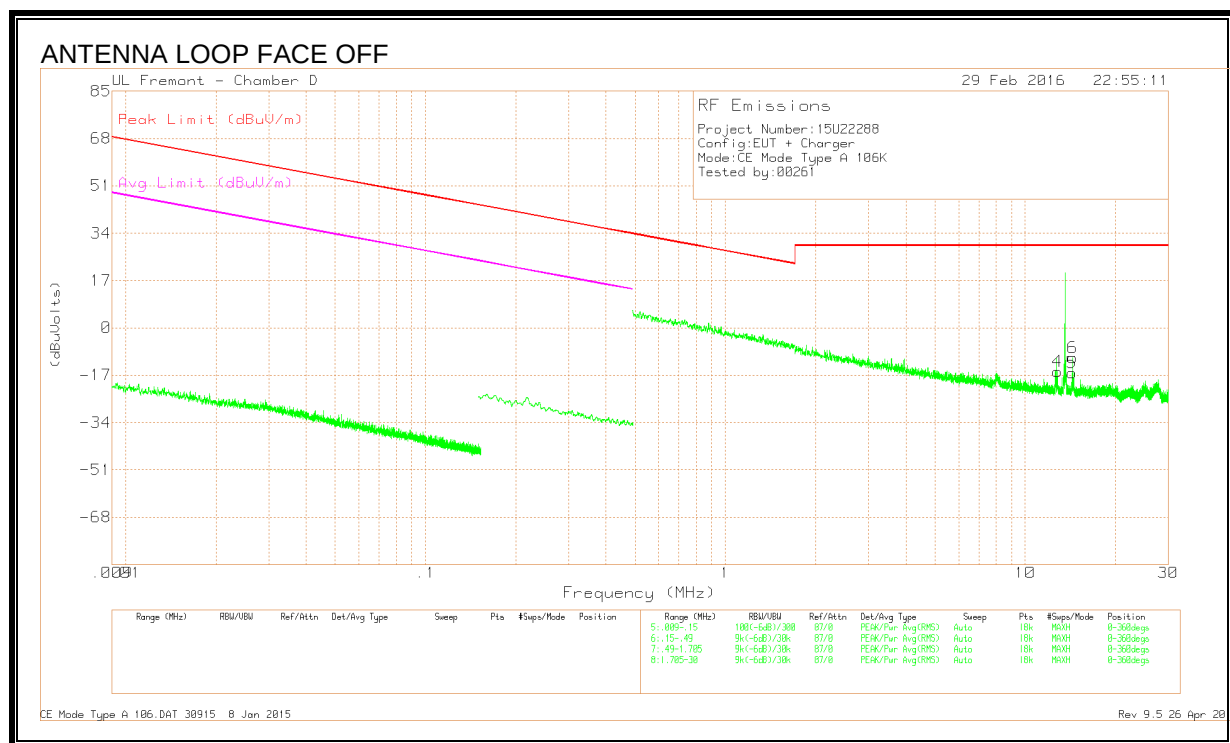
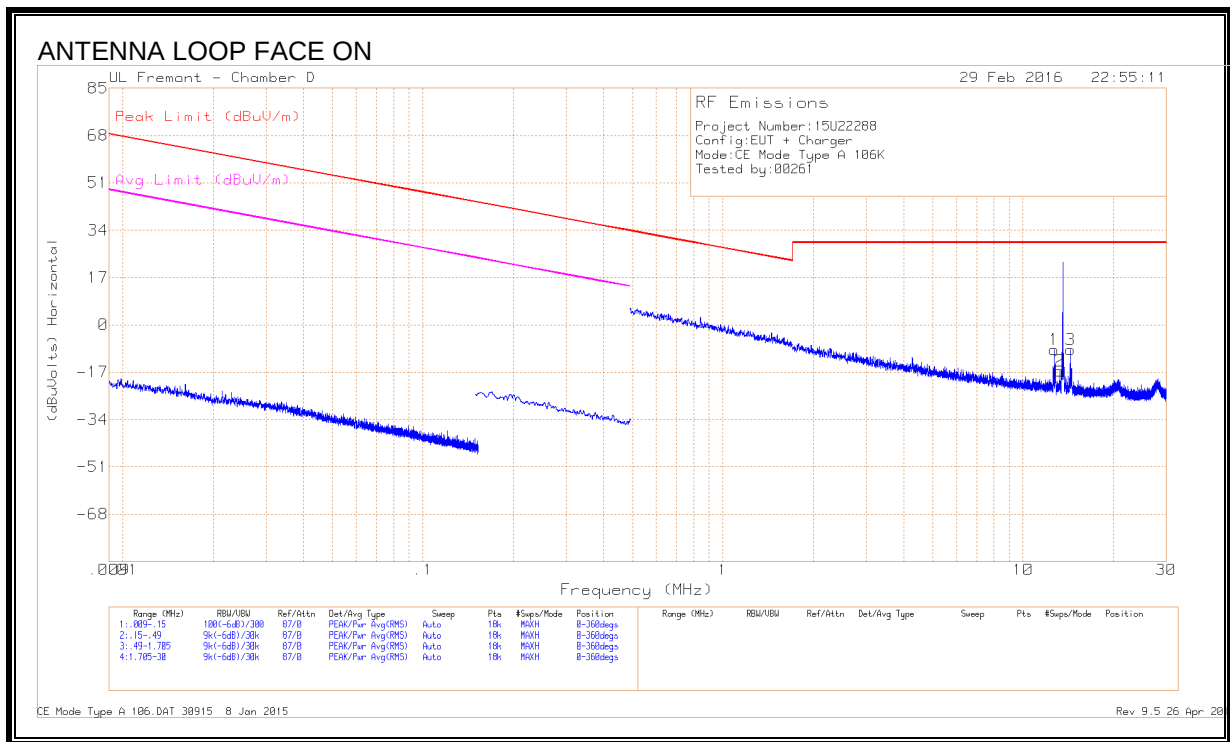


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	12.71255	20.1	Pk	10.4	.6	-40	-8.9	29.54	-38.44	0-360
1	12.7165	22.65	Pk	10.4	.6	-40	-6.35	29.54	-35.89	0-360
5	13.55874	51.06	Pk	10.4	.6	-40	22.06	84	-61.94	0-360
2	13.56175	53.49	Pk	10.4	.6	-40	24.49	84	-59.51	0-360
6	14.40611	21.01	Pk	10.3	.6	-40	-8.09	29.54	-37.63	0-360
3	14.41175	22.96	Pk	10.3	.6	-40	-6.14	29.54	-35.68	0-360

Pk - Peak detector

SPURIOUS EMISSION

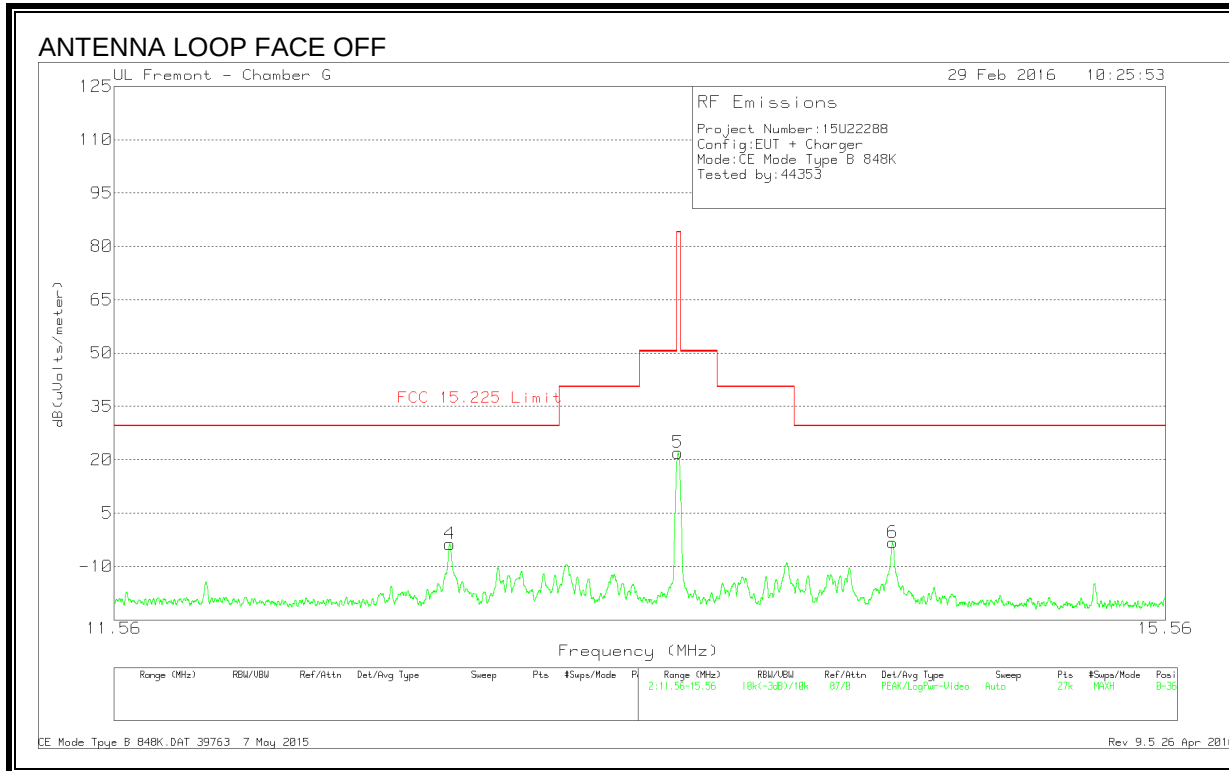
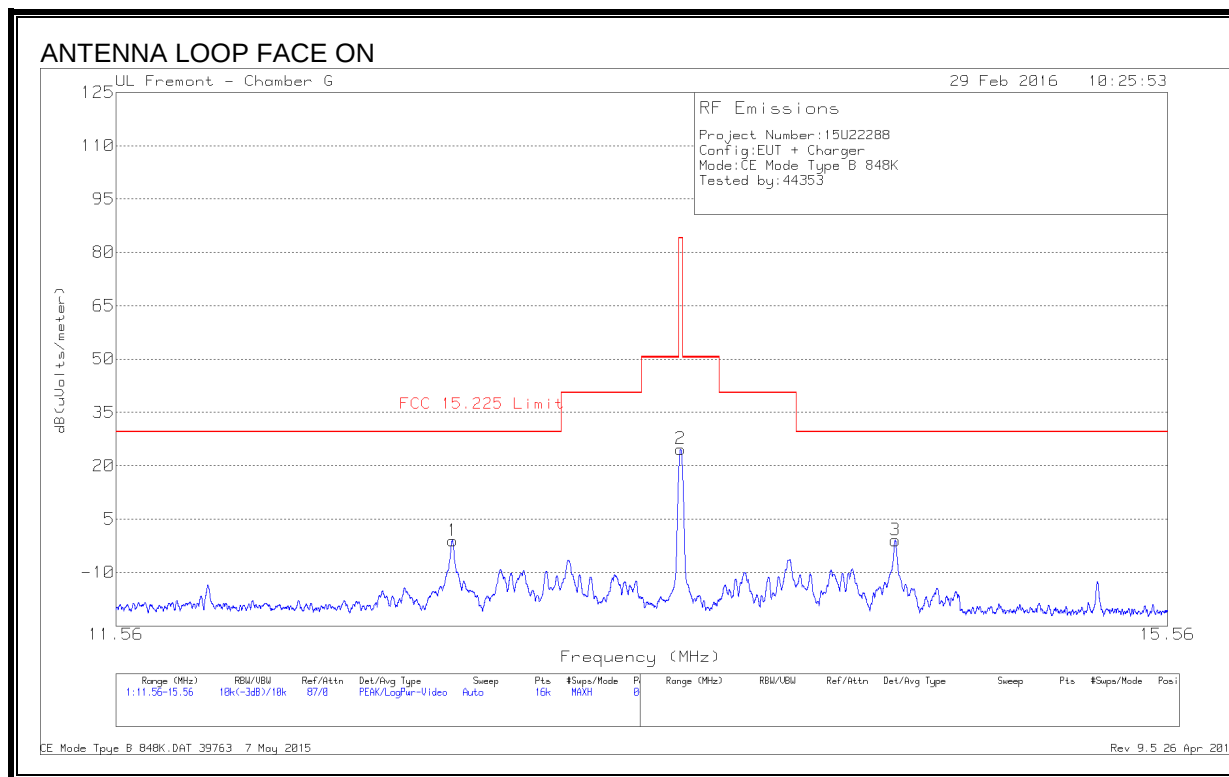


DATA

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	12.71214	20.1	Pk	10.4	.6	-40	-8.9	29.54	-38.44	-	-	0-360
4	12.82061	13.29	Pk	10.4	.6	-40	-15.71	29.54	-45.25	-	-	0-360
2	13.24348	12.49	Pk	10.4	.6	-40	-16.51	29.54	-46.05	-	-	0-360
5	14.30301	12.91	Pk	10.3	.6	-40	-16.19	29.54	-45.73	-	-	0-360
3	14.40833	20.27	Pk	10.3	.6	-40	-8.83	29.54	-38.37	-	-	0-360
6	14.40833	18.32	Pk	10.3	.6	-40	-10.78	29.54	-40.32	-	-	0-360

Pk - Peak detector

TYPE B 848Kbps FUNDAMENTAL

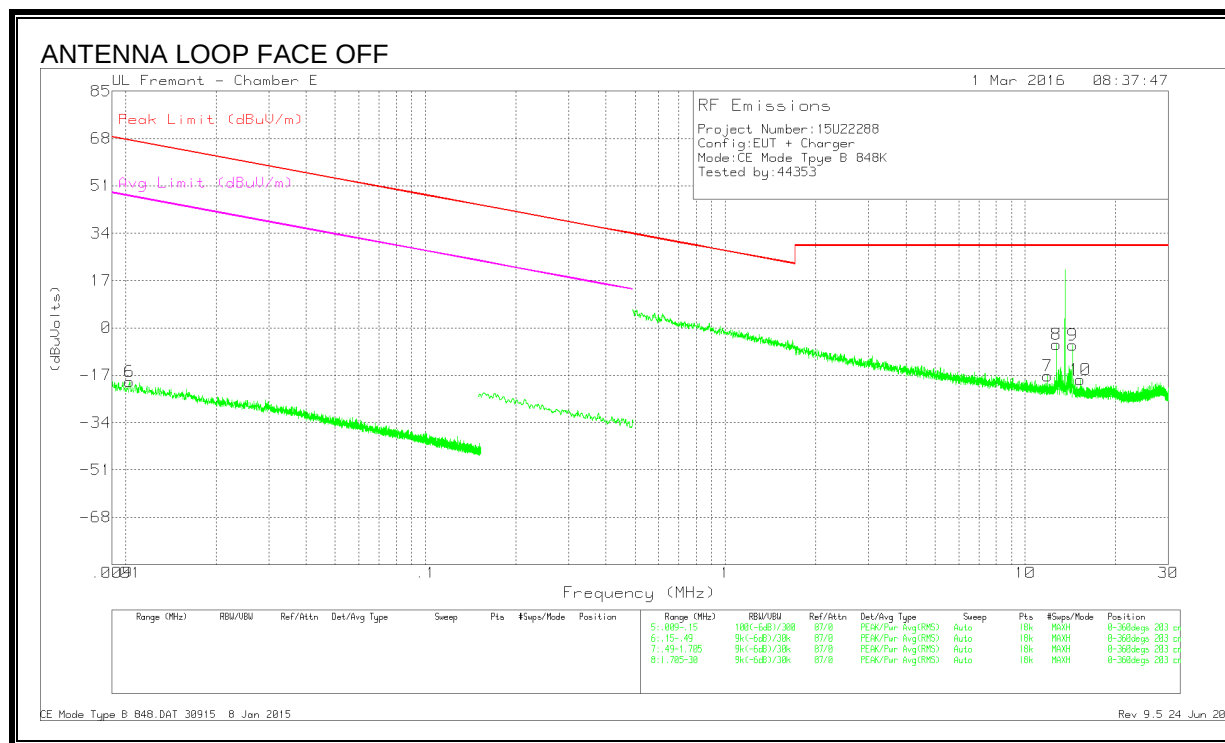
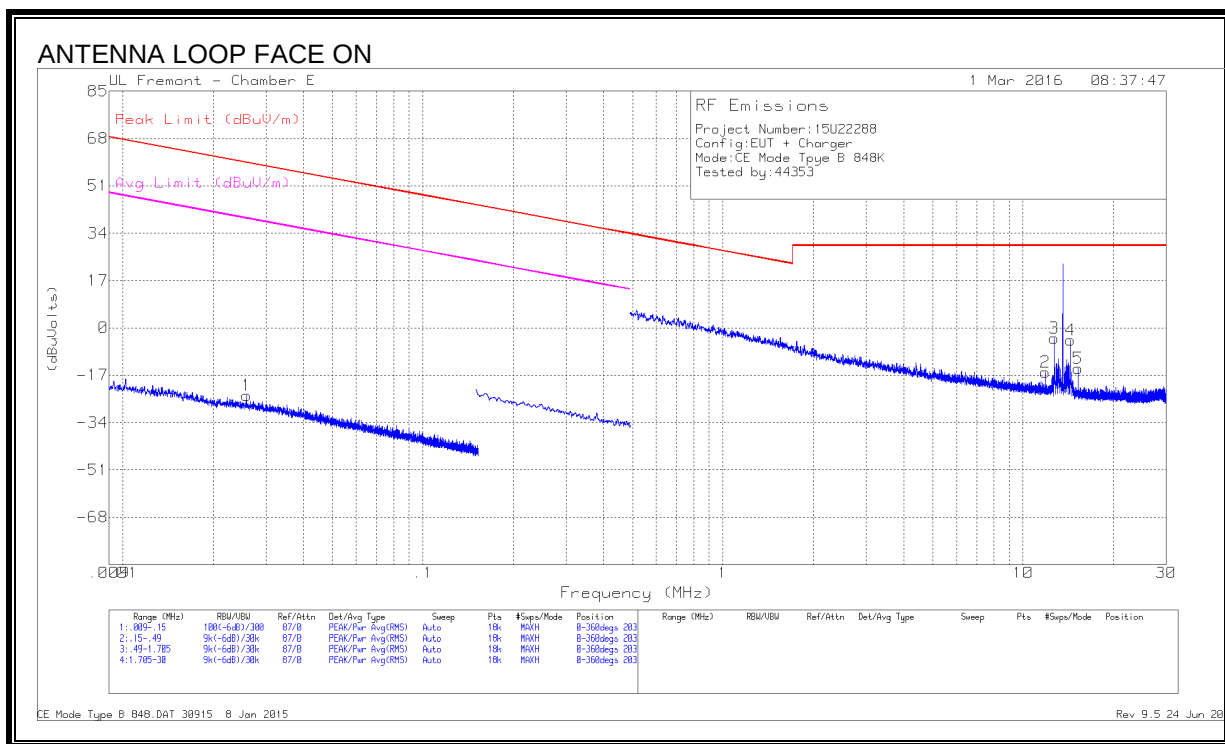


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	12.71137	25.3	Pk	10.4	.6	-40	-3.7	29.54	-33.24	0-360
1	12.71425	27.94	Pk	10.4	.6	-40	-1.06	29.54	-30.6	0-360
5	13.55867	50.97	Pk	10.4	.6	-40	21.97	84	-62.03	0-360
2	13.5605	53.71	Pk	10.4	.6	-40	24.71	84	-59.29	0-360
6	14.40552	25.79	Pk	10.3	.6	-40	-3.31	29.54	-32.85	0-360
3	14.40838	28.14	Pk	10.3	.6	-40	-.96	29.54	-30.5	0-360

Pk - Peak detector

SPURIOUS EMISSION

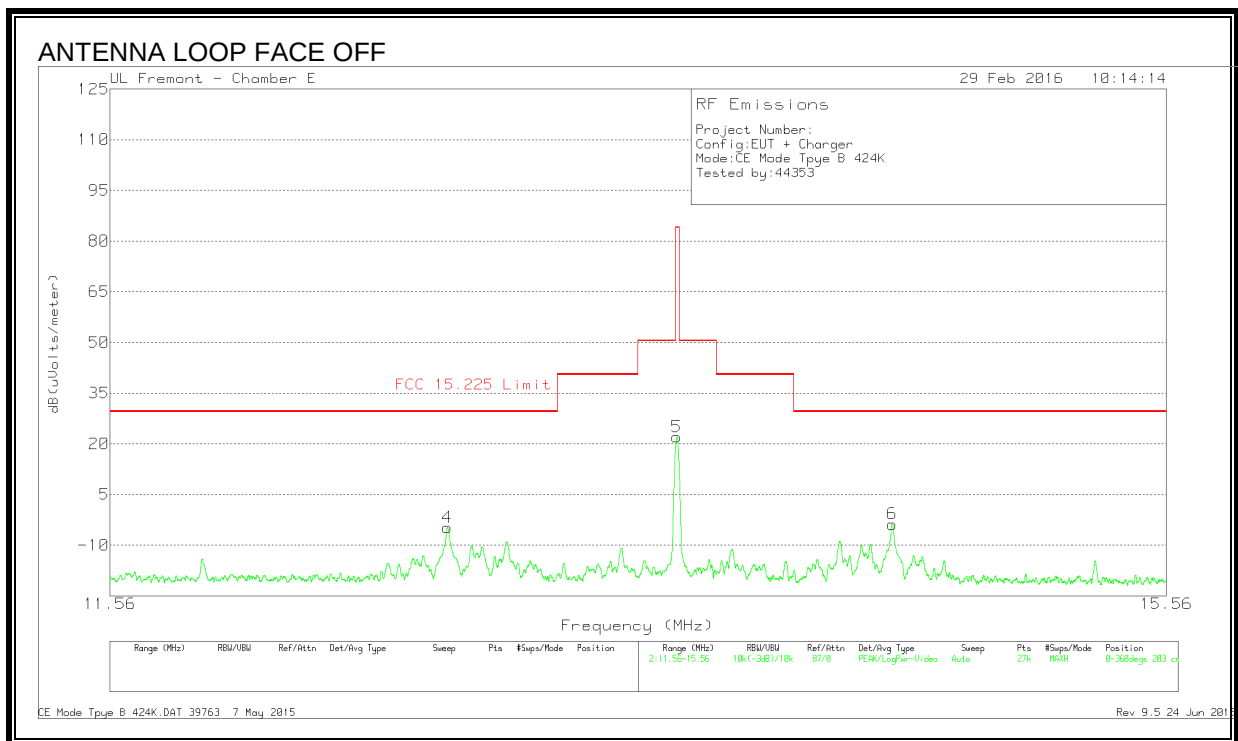
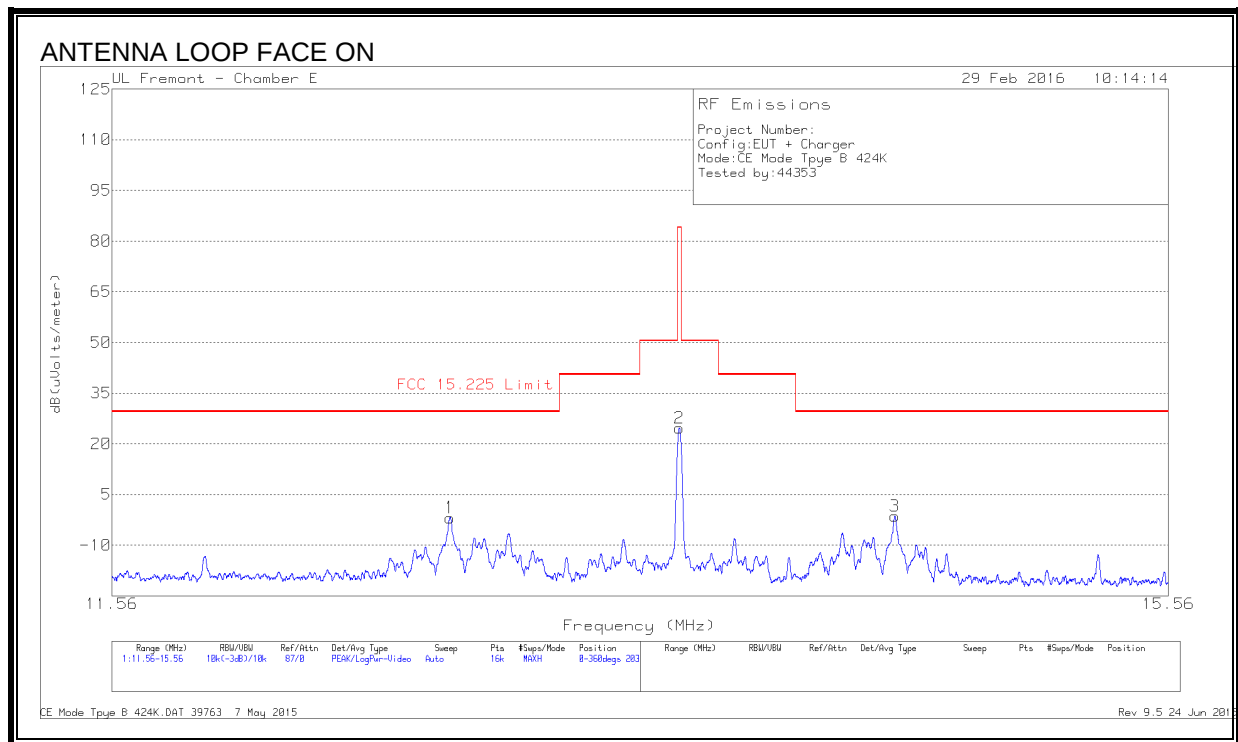


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
6	.01031	41.99	Pk	18.7	.1	-80	-19.21	67.34	-86.55	47.34	-66.55	0-360
1	.02586	41.04	Pk	14.5	.1	-80	-24.36	59.35	-83.71	39.35	-63.71	0-360
2	11.86562	13.12	Pk	10.4	.6	-40	-15.88	29.54	-45.42	-	-	0-360
7	11.86641	11.72	Pk	10.4	.6	-40	-17.28	29.54	-46.82	-	-	0-360
8	12.71214	22.98	Pk	10.4	.6	-40	-6.02	29.54	-35.56	-	-	0-360
3	12.71293	25.2	Pk	10.4	.6	-40	-3.8	29.54	-33.34	-	-	0-360
4	14.40833	24.71	Pk	10.3	.6	-40	-4.39	29.54	-33.93	-	-	0-360
9	14.40833	22.89	Pk	10.3	.6	-40	-6.21	29.54	-35.75	-	-	0-360
10	15.25485	10.55	Pk	10.3	.6	-40	-18.55	29.54	-48.09	-	-	0-360
5	15.25643	14.5	Pk	10.3	.6	-40	-14.6	29.54	-44.14	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL **stop here**

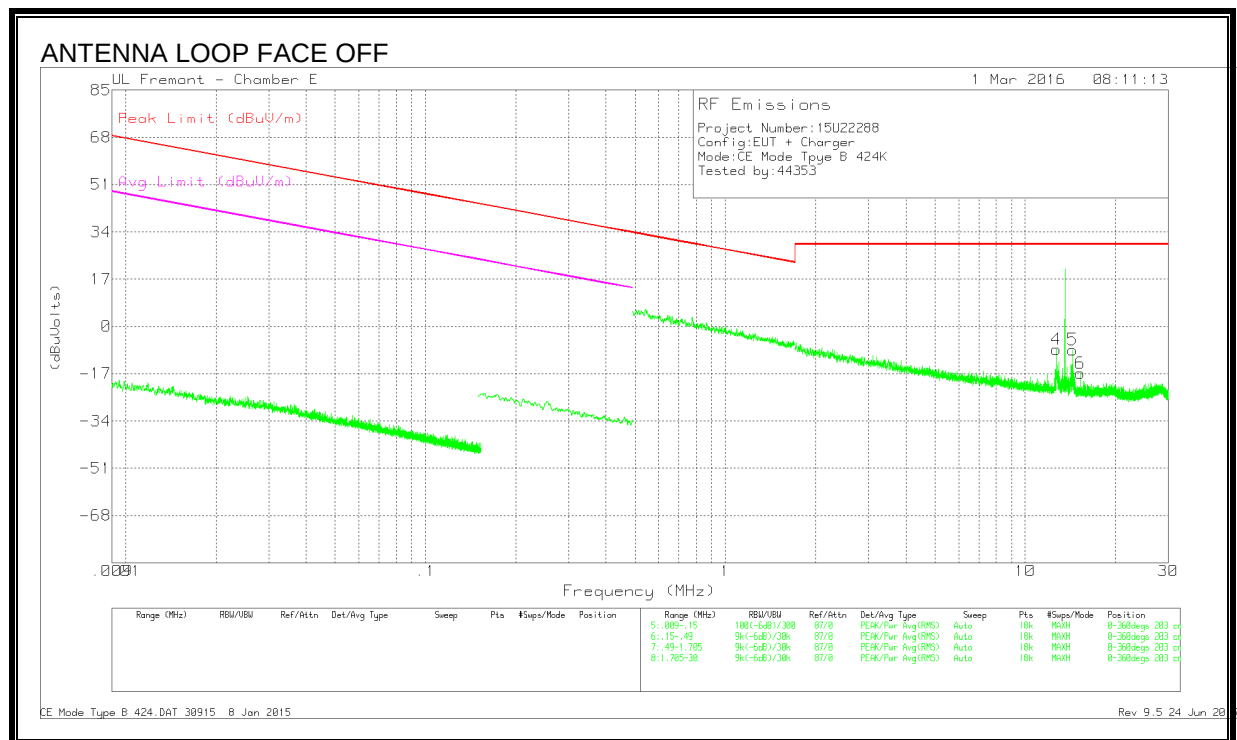
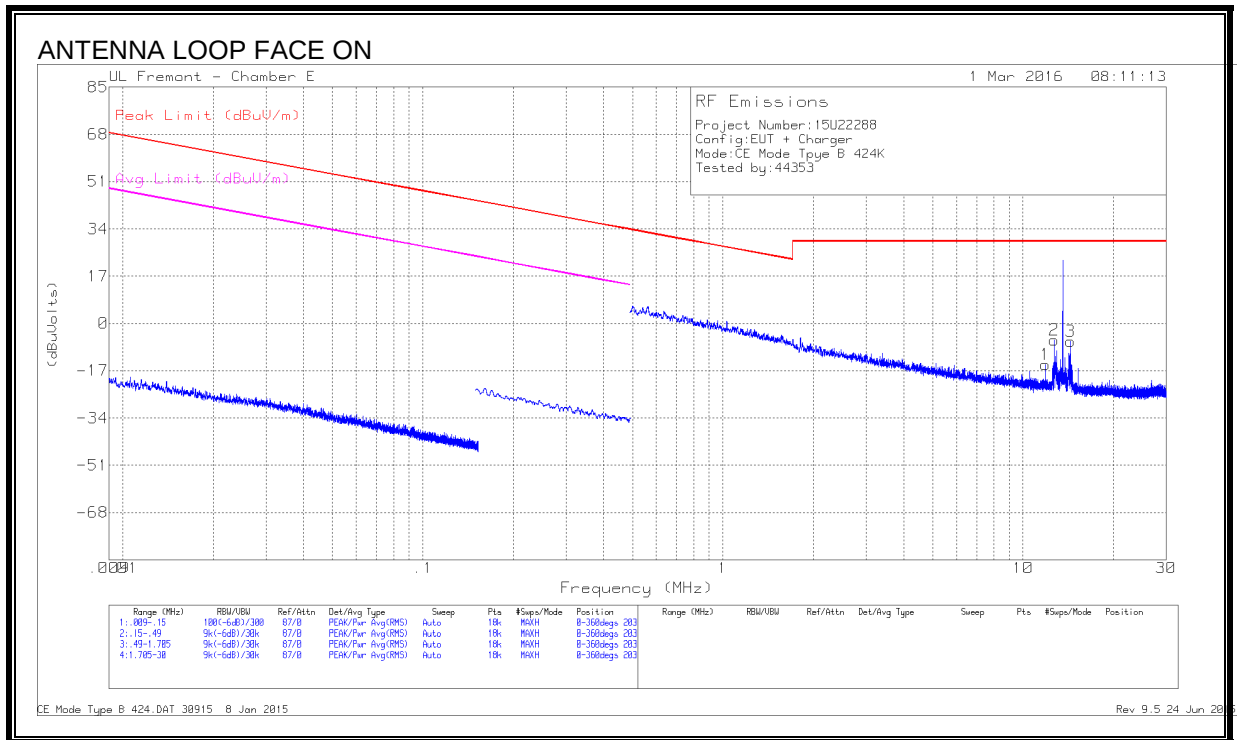


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	12.71151	24.26	Pk	10.4	.6	-40	-4.74	29.54	-34.28	0-360
1	12.71225	27.13	Pk	10.4	.6	-40	-1.87	29.54	-31.41	0-360
5	13.55867	51.12	Pk	10.4	.6	-40	22.12	84	-61.88	0-360
2	13.56	53.68	Pk	10.4	.6	-40	24.68	84	-59.32	0-360
6	14.40537	25.37	Pk	10.3	.6	-40	-3.73	29.54	-33.27	0-360
3	14.40775	27.65	Pk	10.3	.6	-40	-1.45	29.54	-30.99	0-360

Pk - Peak detector

SPURIOUS EMISSION

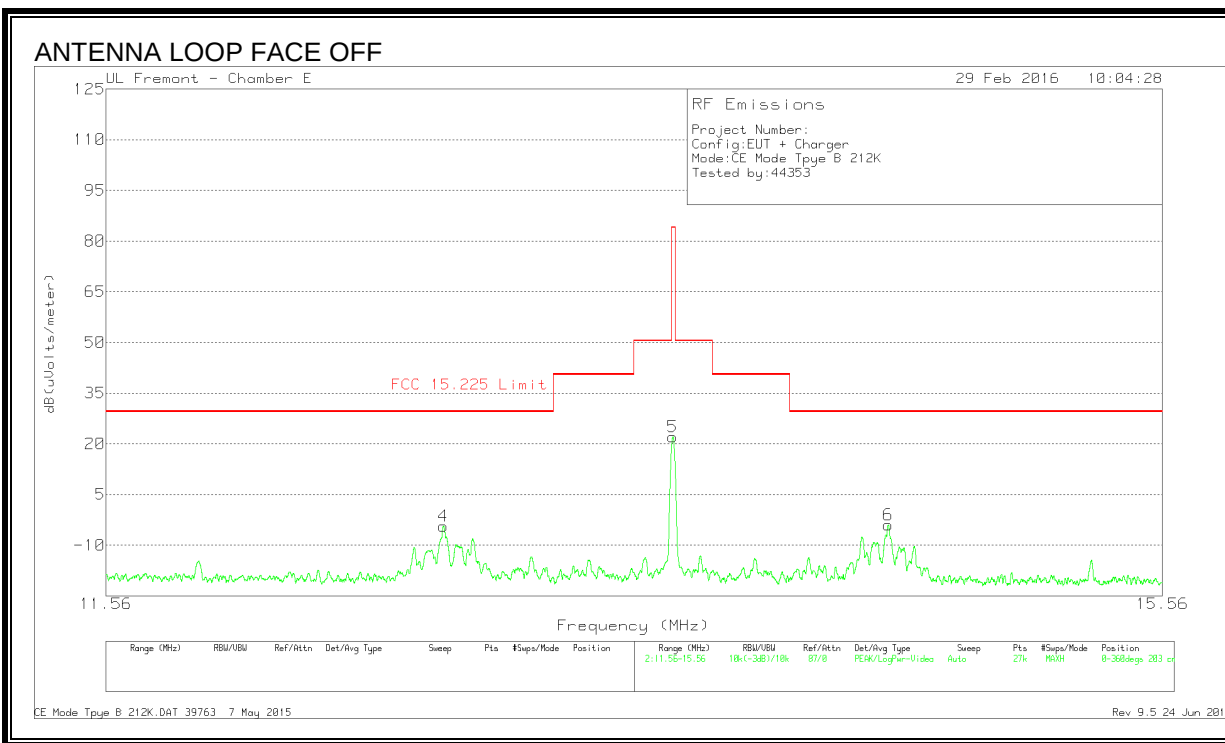
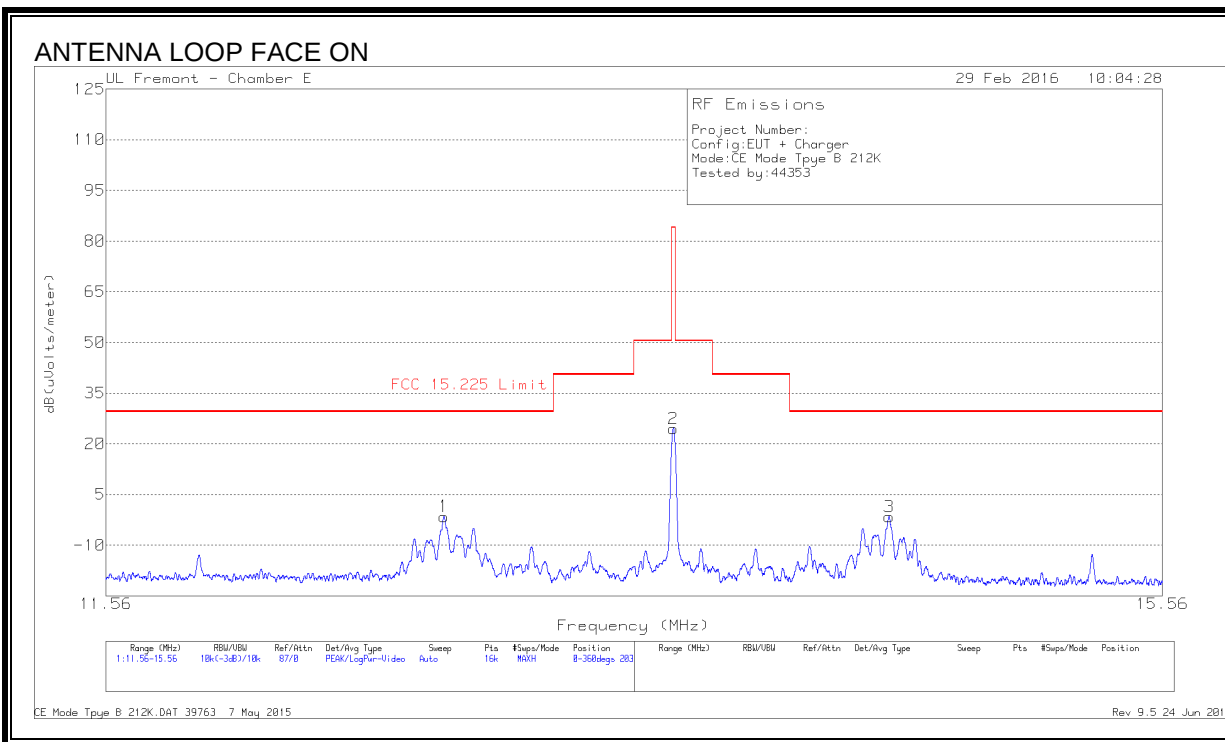


DATA

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	11.86641	14.25	Pk	10.4	.6	-40	-14.75	29.54	-44.29	-	-	0-360
2	12.71293	22.95	Pk	10.4	.6	-40	-6.05	29.54	-35.59	-	-	0-360
4	12.71372	20.68	Pk	10.4	.6	-40	-8.32	29.54	-37.86	-	-	0-360
5	14.40676	20.75	Pk	10.3	.6	-40	-8.35	29.54	-37.89	-	-	0-360
3	14.41069	22.69	Pk	10.3	.6	-40	-6.41	29.54	-35.95	-	-	0-360
6	15.25643	12.24	Pk	10.3	.6	-40	-16.86	29.54	-46.4	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

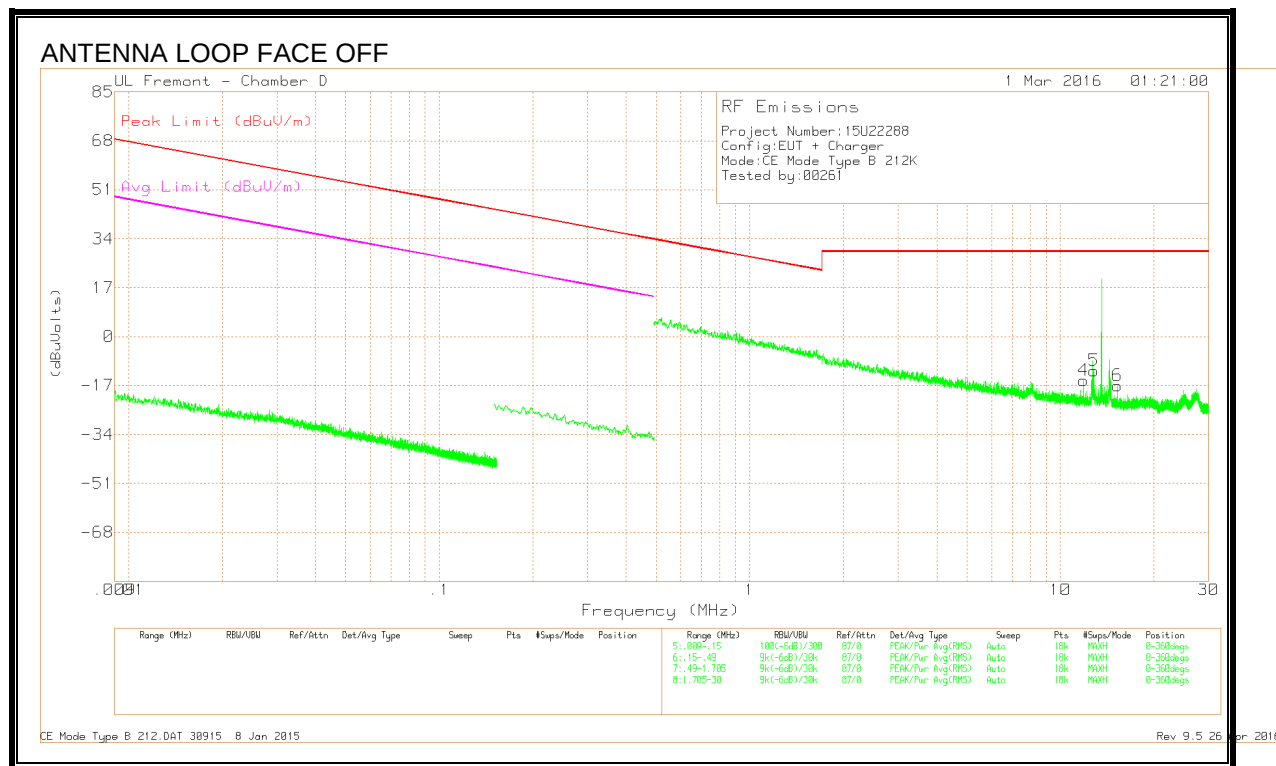
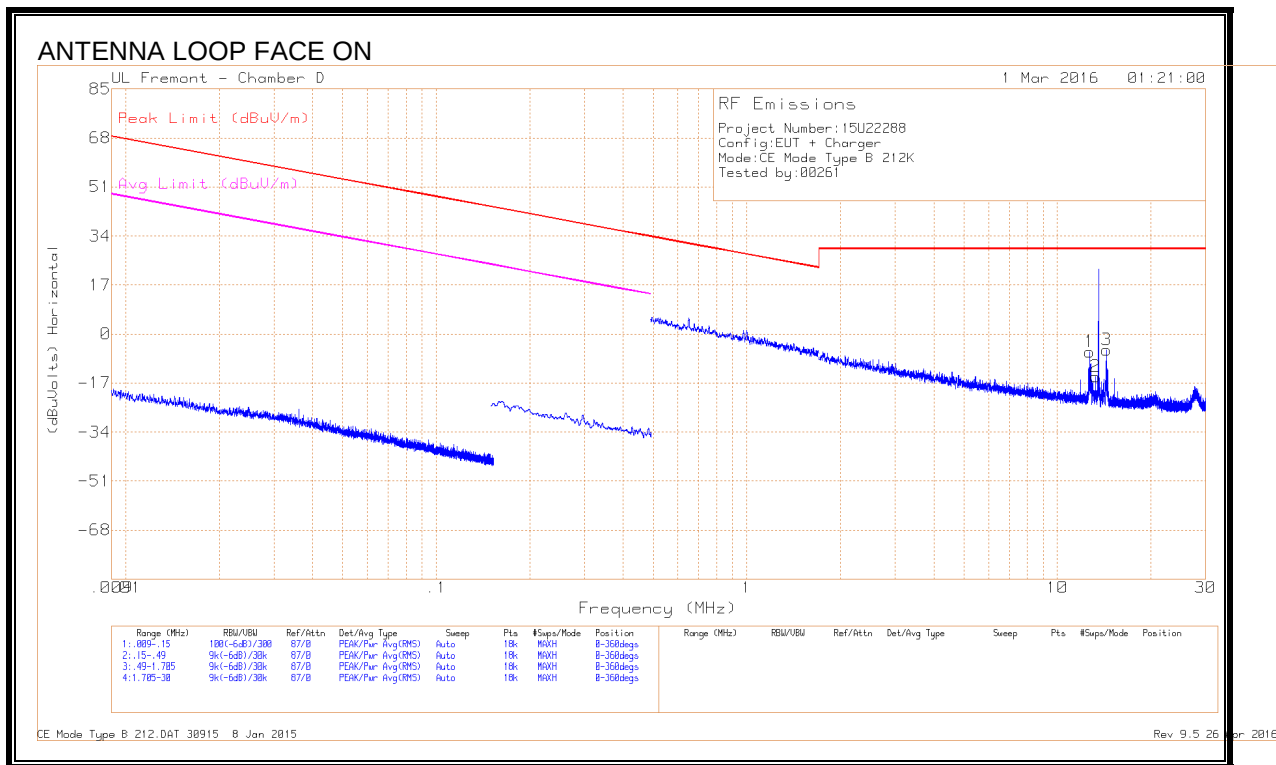


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	12.71122	24.58	Pk	10.4	.6	-40	-4.42	29.54	-33.96	0-360
1	12.71288	27.5	Pk	10.4	.6	-40	-1.5	29.54	-31.04	0-360
5	13.55867	51.05	Pk	10.4	.6	-40	22.05	84	-61.95	0-360
2	13.5615	53.51	Pk	10.4	.6	-40	24.51	84	-59.49	0-360
6	14.40567	25.09	Pk	10.3	.6	-40	-4.01	29.54	-33.55	0-360
3	14.40925	27.57	Pk	10.3	.6	-40	-1.53	29.54	-31.07	0-360

Pk - Peak detector

SPURIOUS EMISSION

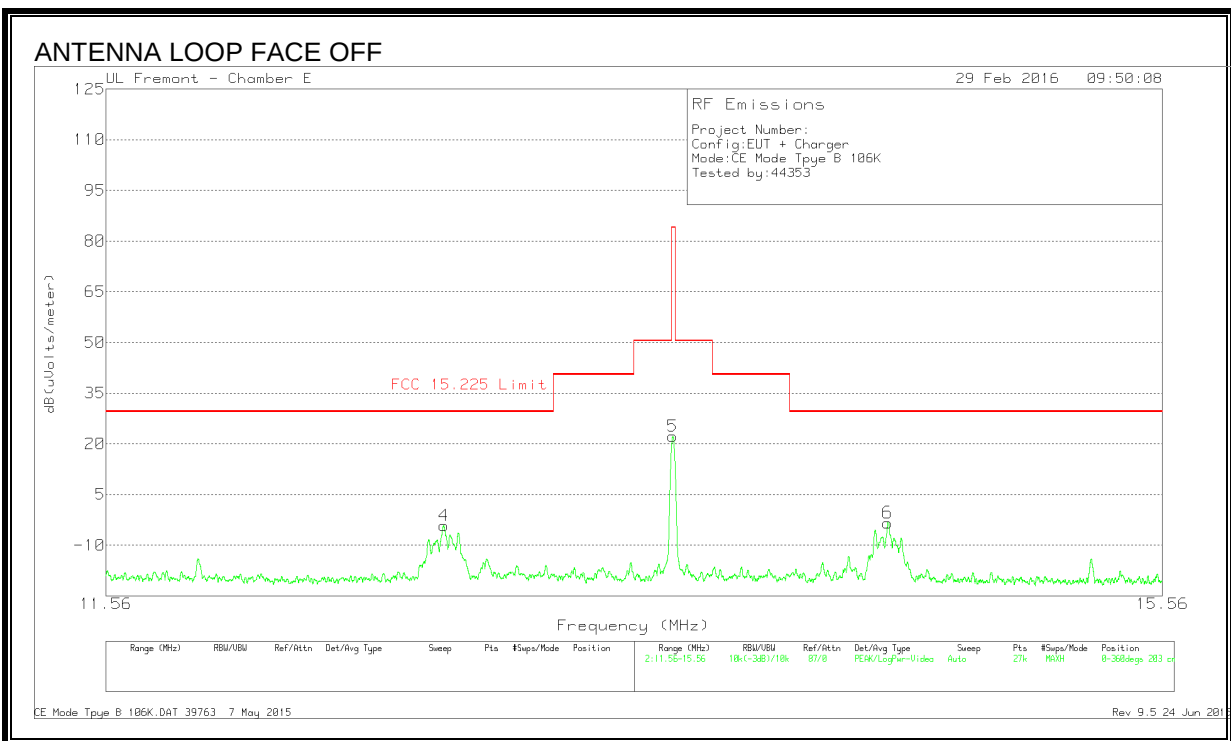
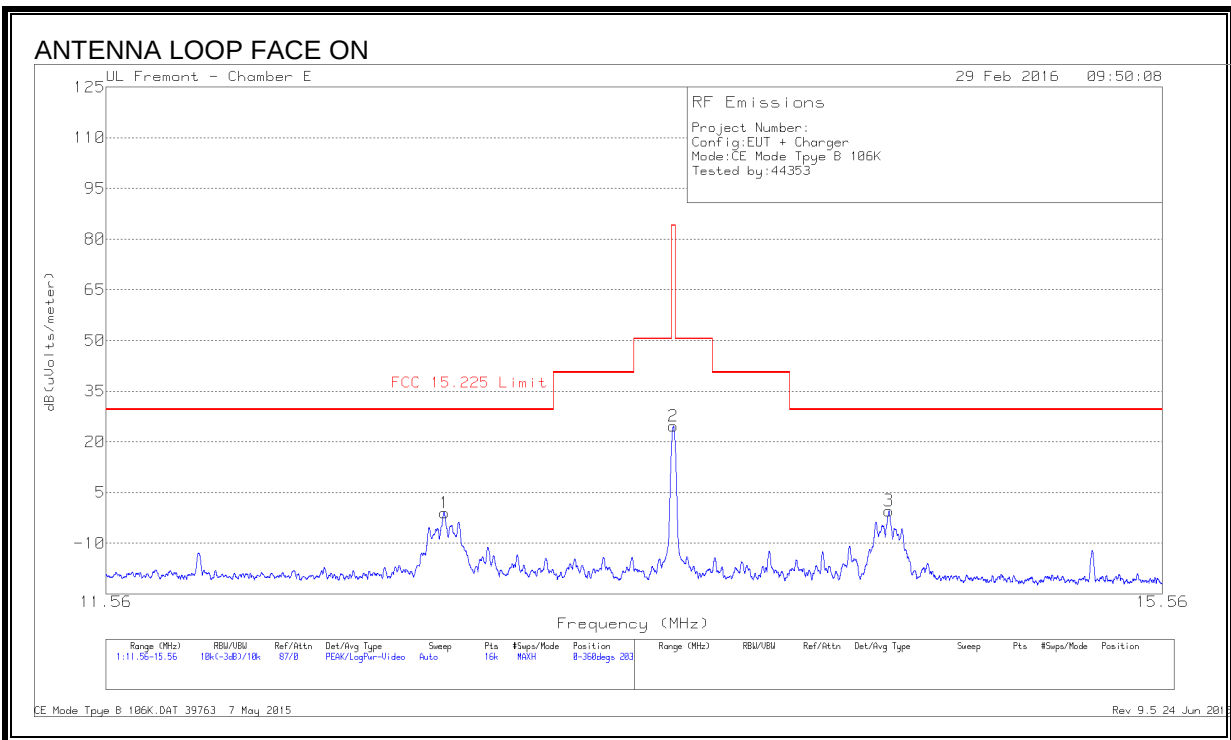


DATA

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	11.86484	13.8	Pk	10.4	.6	-40	-15.2	29.54	-44.74	-	-	0-360
1	12.71214	22.73	Pk	10.4	.6	-40	-6.27	29.54	-35.81	-	-	0-360
5	12.81825	17.23	Pk	10.4	.6	-40	-11.77	29.54	-41.31	-	-	0-360
2	13.24348	14.19	Pk	10.4	.6	-40	-14.81	29.54	-44.35	-	-	0-360
3	14.40755	23.52	Pk	10.3	.6	-40	-5.58	29.54	-35.12	-	-	0-360
6	15.25564	12.04	Pk	10.3	.6	-40	-17.06	29.54	-46.6	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

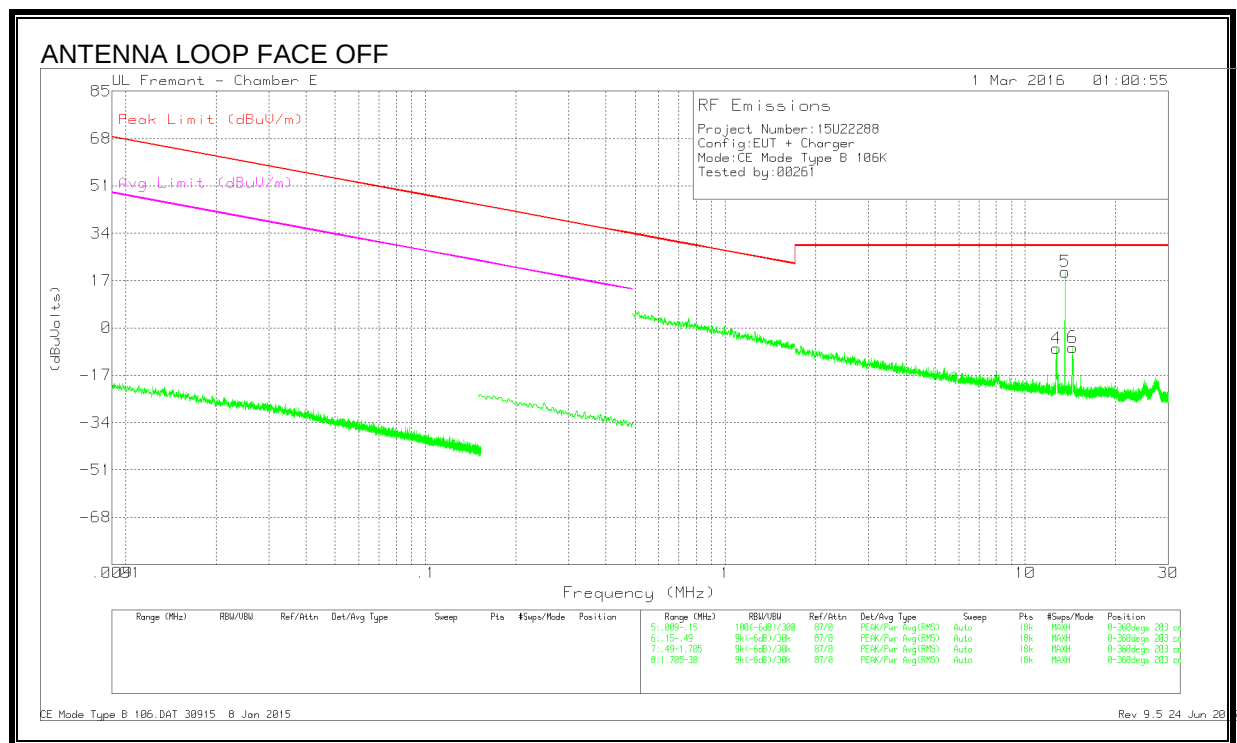
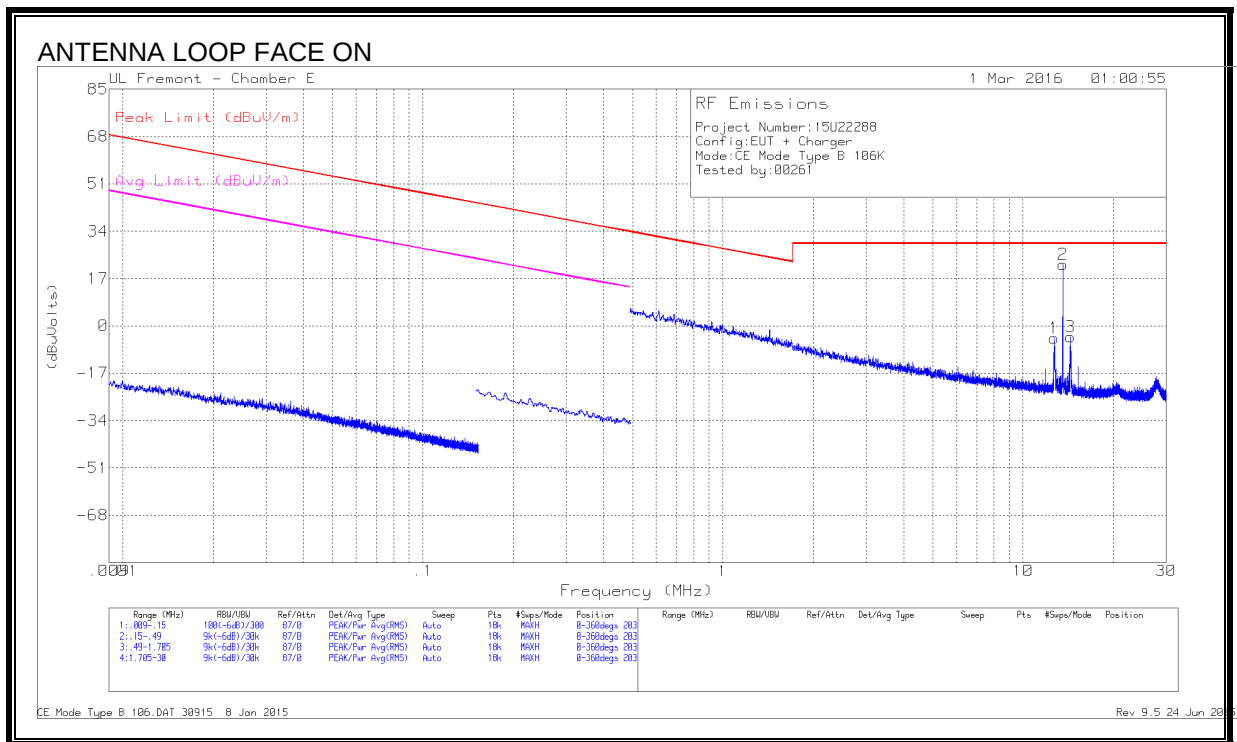


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	12.71233	24.76	Pk	10.4	.6	-40	-4.24	29.54	-33.78	0-360
1	12.71425	27.96	Pk	10.4	.6	-40	-1.04	29.54	-30.58	0-360
5	13.55867	51.17	Pk	10.4	.6	-40	22.17	84	-61.83	0-360
2	13.56063	53.6	Pk	10.4	.6	-40	24.6	84	-59.4	0-360
6	14.40367	25.74	Pk	10.3	.6	-40	-3.36	29.54	-32.9	0-360
3	14.40813	28.72	Pk	10.3	.6	-40	-.38	29.54	-29.92	0-360

Pk - Peak detector

SPURIOUS EMISSION

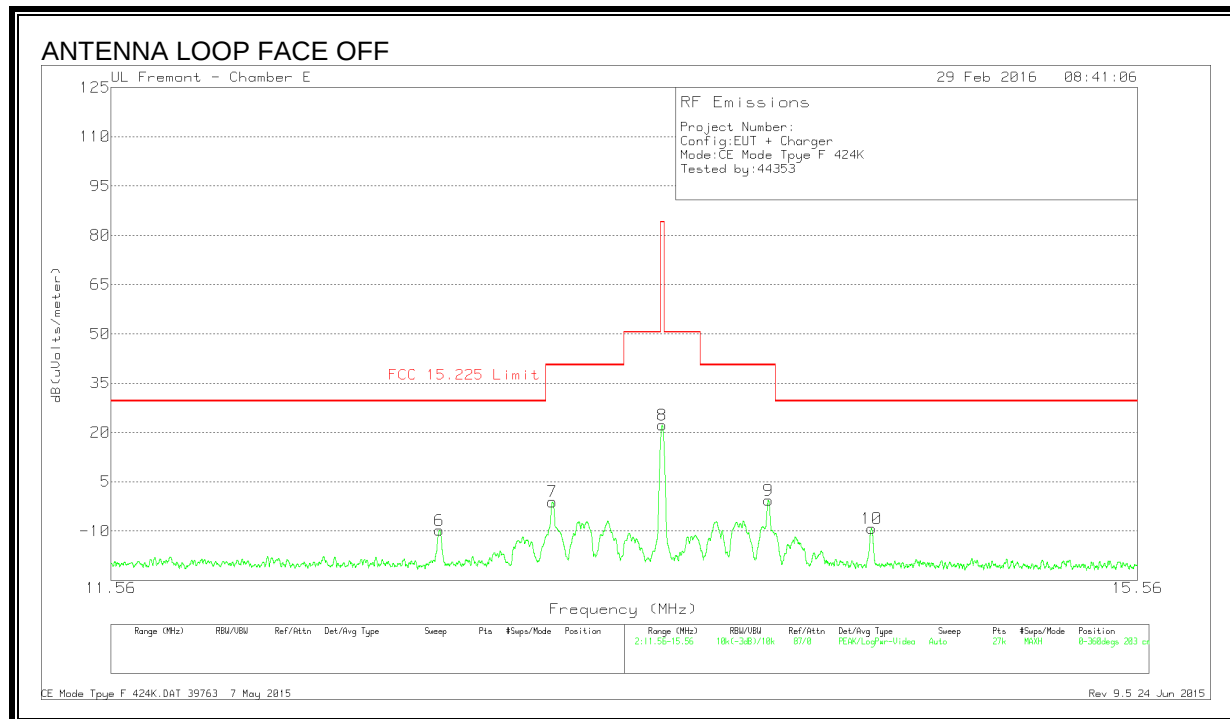
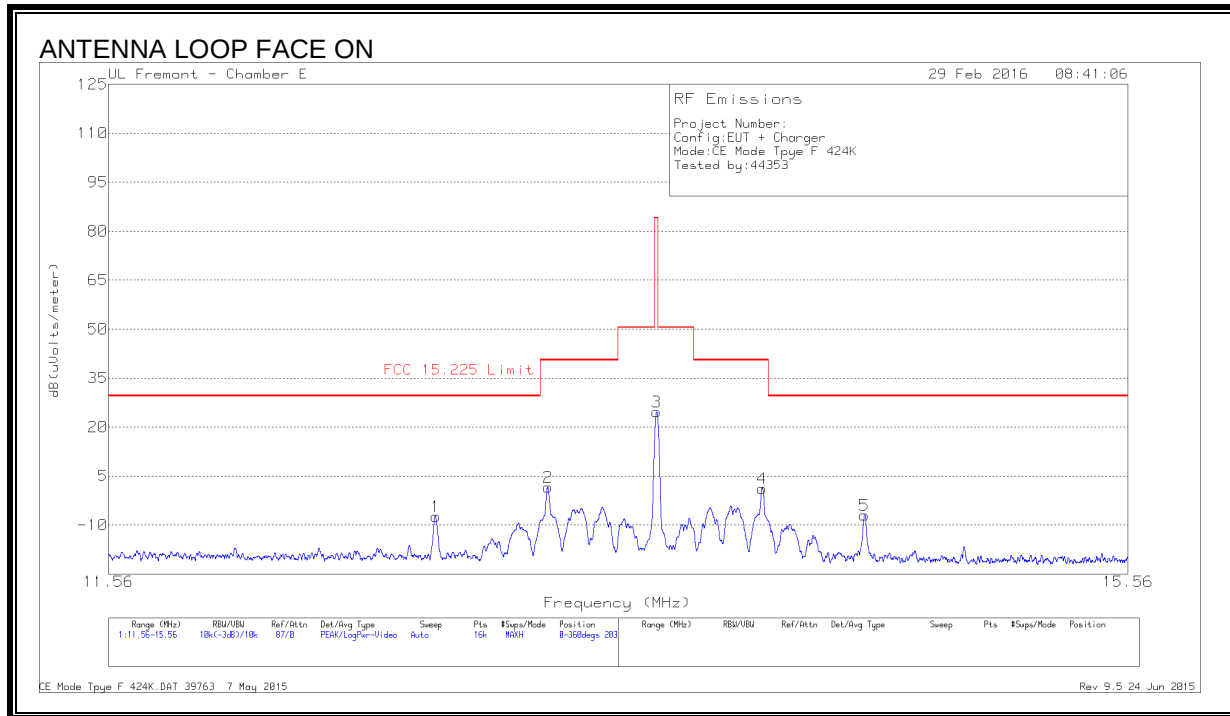


DATA

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	12.71214	24.62	Pk	10.4	.6	-40	-4.38	29.54	-33.92	-	-	0-360
4	12.71293	21.61	Pk	10.4	.6	-40	-7.39	29.54	-36.93	-	-	0-360
2	13.56102	51.13	Pk	10.4	.6	-40	22.13	29.54	-7.41	-	-	0-360
5	13.56102	49.12	Pk	10.4	.6	-40	20.12	29.54	-9.42	-	-	0-360
3	14.40912	25.15	Pk	10.3	.6	-40	-3.95	29.54	-33.49	-	-	0-360
6	14.40912	22.1	Pk	10.3	.6	-40	-7	29.54	-36.54	-	-	0-360

Pk - Peak detector

TYPE F 424Kbps FUNDAMENTAL

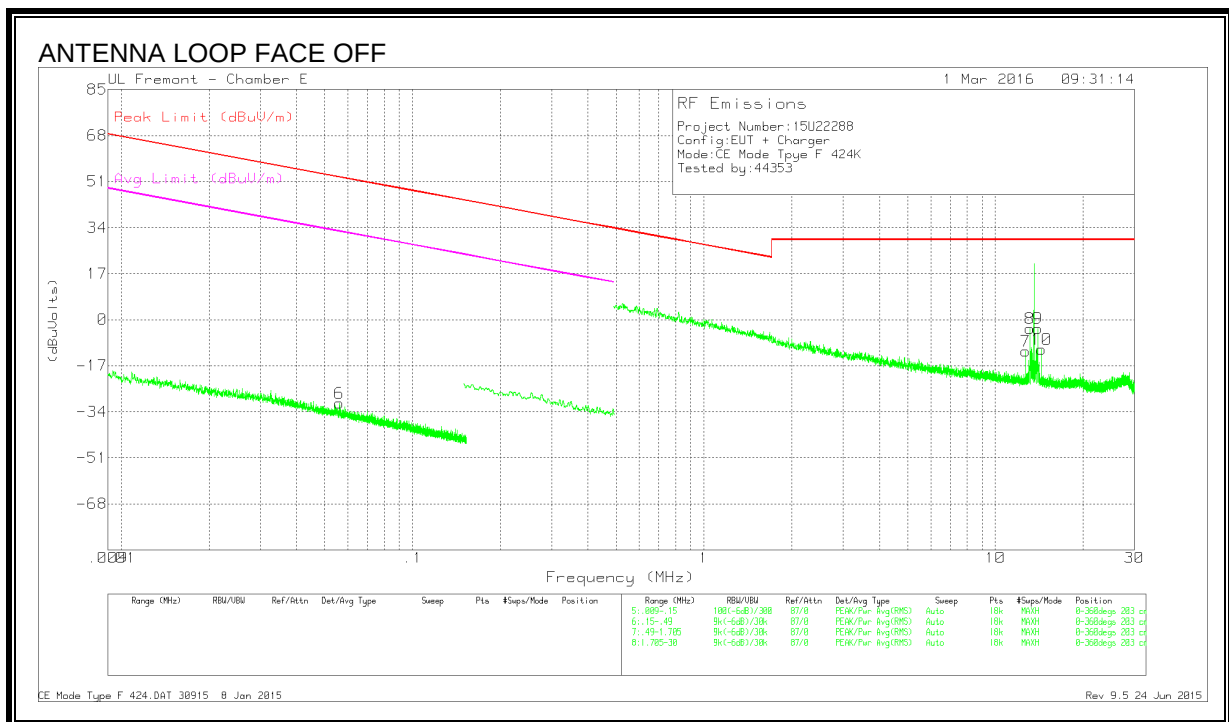
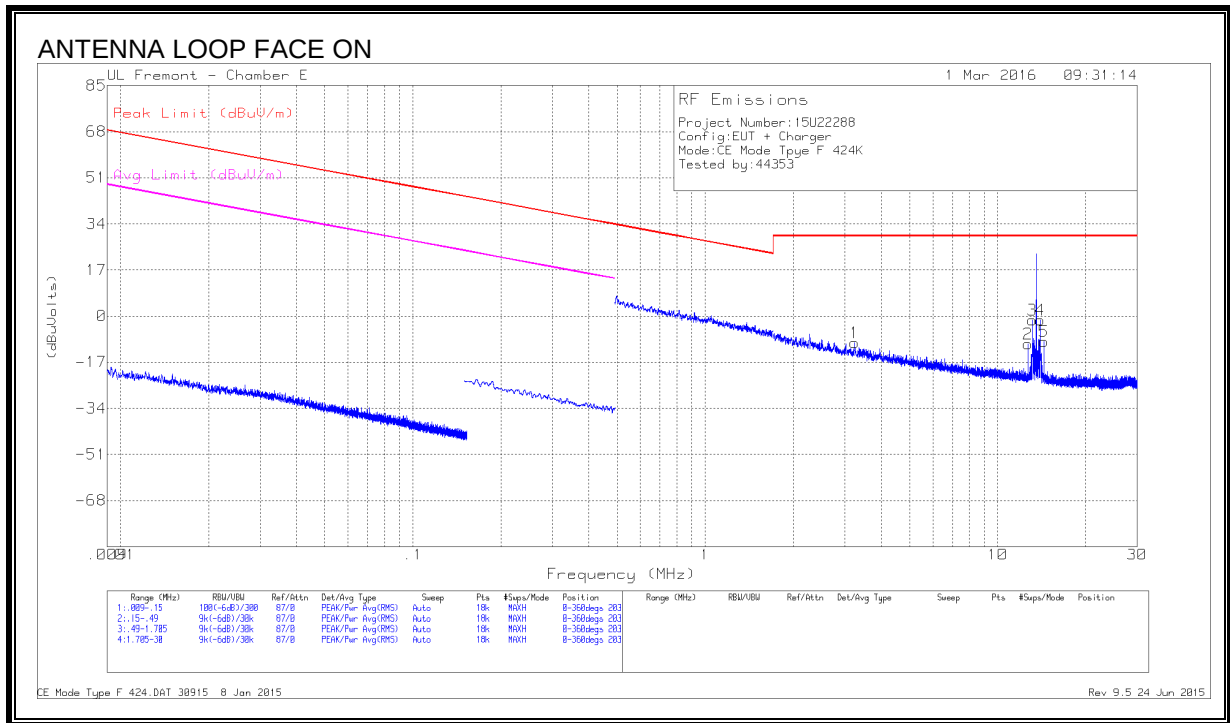


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
6	12.71373	19.26	Pk	10.4	.6	-40	-9.74	29.54	-39.28	0-360
1	12.7165	21.66	Pk	10.4	.6	-40	-7.34	29.54	-36.88	0-360
7	13.13657	27.88	Pk	10.4	.6	-40	-1.12	40.51	-41.63	0-360
2	13.13925	30.57	Pk	10.4	.6	-40	1.57	40.51	-38.94	0-360
8	13.56015	51.19	Pk	10.4	.6	-40	22.19	84	-61.81	0-360
3	13.56288	53.65	Pk	10.4	.6	-40	24.65	84	-59.35	0-360
9	13.98328	28.42	Pk	10.3	.6	-40	-.68	40.51	-41.19	0-360
4	13.98525	30.31	Pk	10.3	.6	-40	1.21	40.51	-39.3	0-360
10	14.407	19.93	Pk	10.3	.6	-40	-9.17	29.54	-38.71	0-360
5	14.40925	22.03	Pk	10.3	.6	-40	-7.07	29.54	-36.61	0-360

Pk - Peak detector

SPURIOUS EMISSION

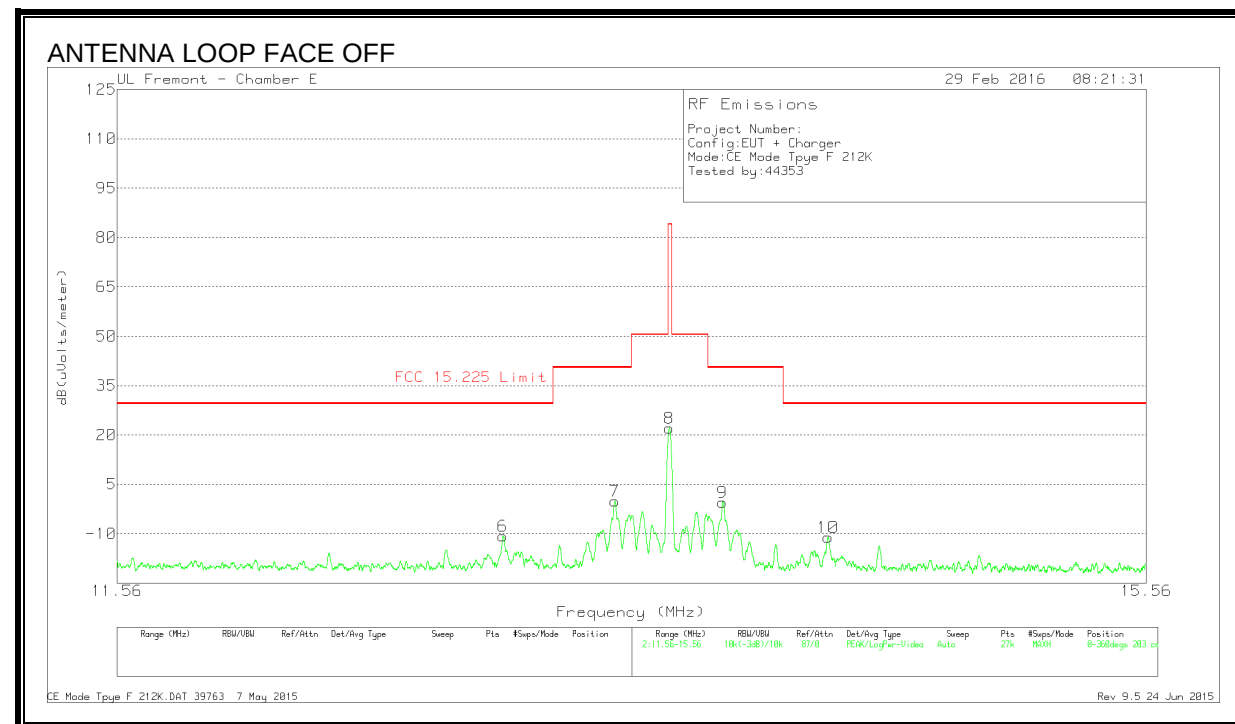
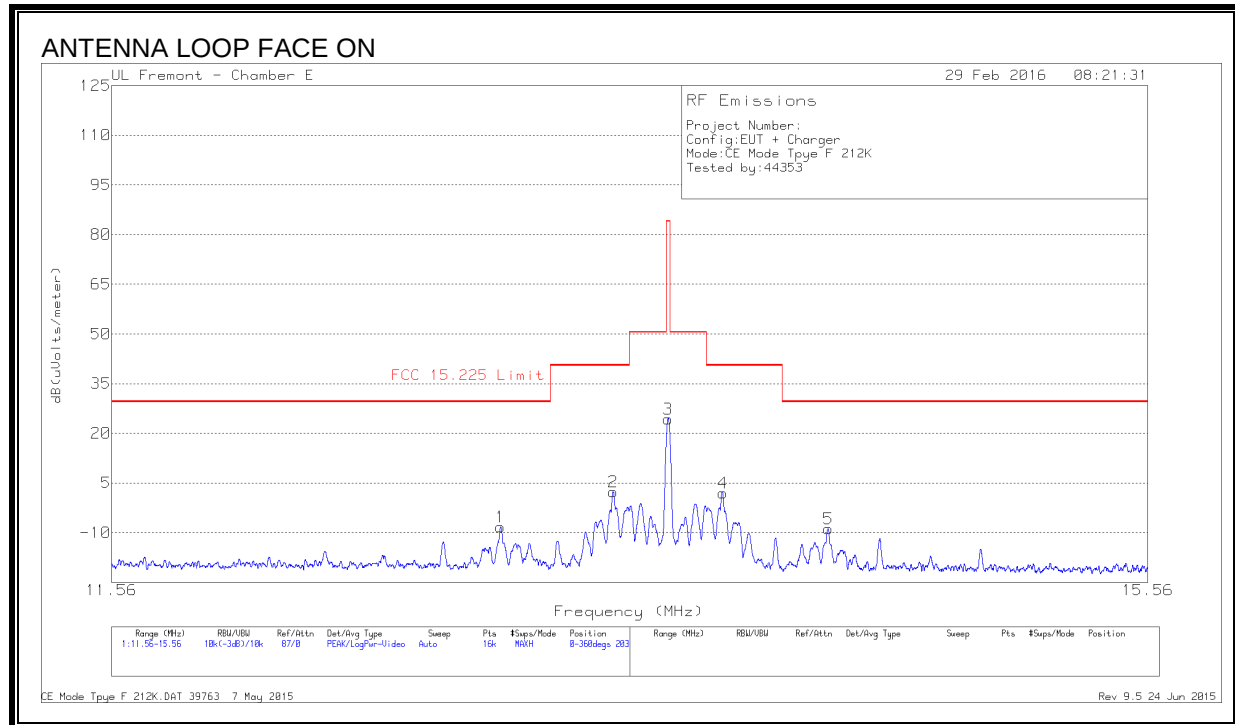


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
6	.05612	36.99	Pk	12.1	.1	-80	-30.81	52.62	-83.43	32.62	-63.43	0-360
1	3.2377	19.42	Pk	10.4	.3	-40	-9.88	29.54	-39.42	-	-	0-360
2	12.71214	18.78	Pk	10.4	.6	-40	-10.22	29.54	-39.76	-	-	0-360
7	12.71372	17.4	Pk	10.4	.6	-40	-11.6	29.54	-41.14	-	-	0-360
3	13.13658	27.64	Pk	10.4	.6	-40	-1.36	29.54	-30.9	-	-	0-360
8	13.13658	25.75	Pk	10.4	.6	-40	-3.25	29.54	-32.79	-	-	0-360
4	13.98546	27.7	Pk	10.3	.6	-40	-1.4	29.54	-30.94	-	-	0-360
9	13.98546	25.74	Pk	10.3	.6	-40	-3.36	29.54	-32.9	-	-	0-360
5	14.40833	19.81	Pk	10.3	.6	-40	-9.29	29.54	-38.83	-	-	0-360
10	14.40833	18.17	Pk	10.3	.6	-40	-10.93	29.54	-40.47	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

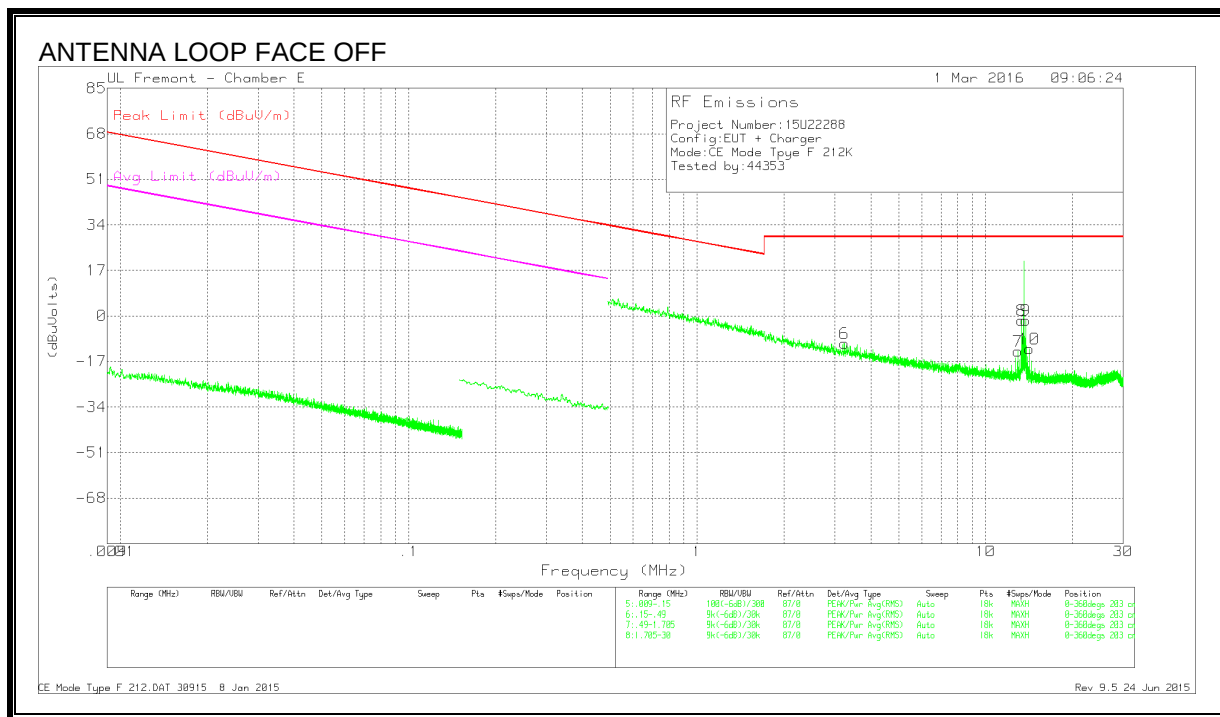
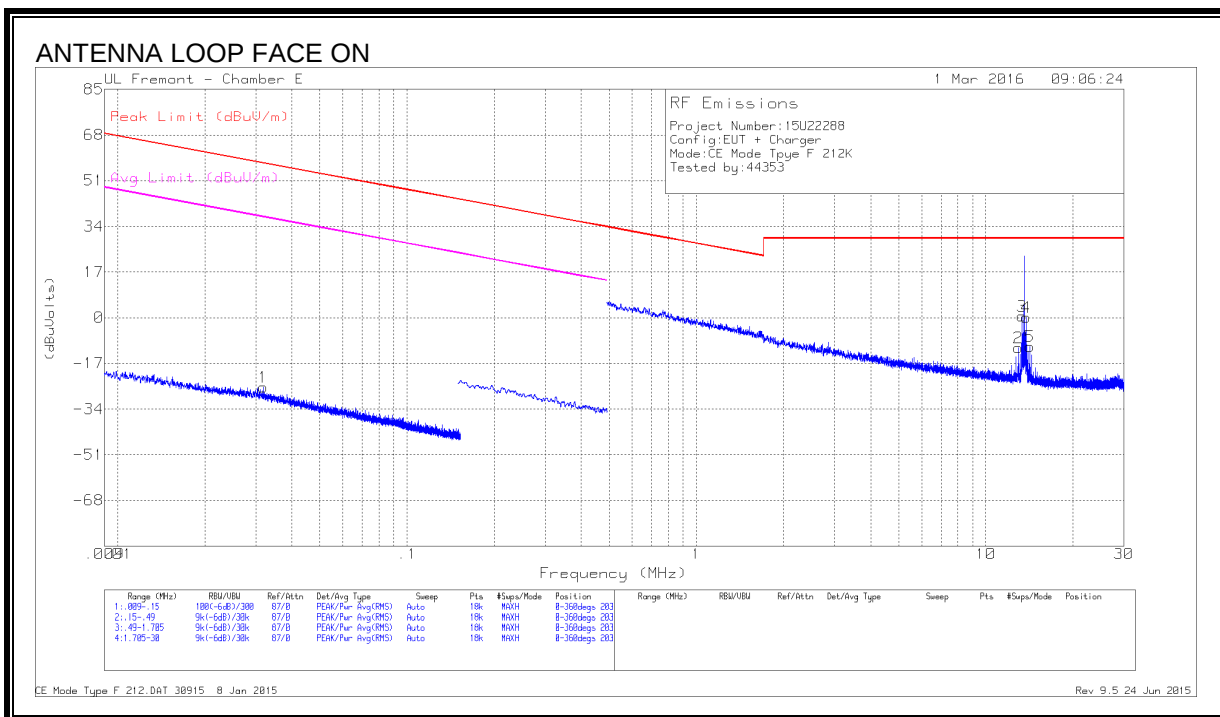


DATA

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	Margin (dB)	Azimuth (Degs)
6	12.92234	18.21	Pk	10.4	.6	-40	-10.79	29.54	-40.33	0-360
1	12.92488	20.75	Pk	10.4	.6	-40	-8.25	29.54	-37.79	0-360
7	13.34703	28.97	Pk	10.4	.6	-40	-.03	40.51	-40.54	0-360
2	13.34775	31.36	Pk	10.4	.6	-40	2.36	40.51	-38.15	0-360
8	13.55867	51.13	Pk	10.4	.6	-40	22.13	84	-61.87	0-360
3	13.55925	53.37	Pk	10.4	.6	-40	24.37	84	-59.63	0-360
9	13.7689	28.67	Pk	10.3	.6	-40	-.43	40.51	-40.94	0-360
4	13.77425	31.08	Pk	10.3	.6	-40	1.98	40.51	-38.53	0-360
10	14.19433	18.01	Pk	10.3	.6	-40	-11.09	29.54	-40.63	0-360
5	14.197	20.2	Pk	10.3	.6	-40	-8.9	29.54	-38.44	0-360

Pk - Peak detector

SPURIOUS EMISSION



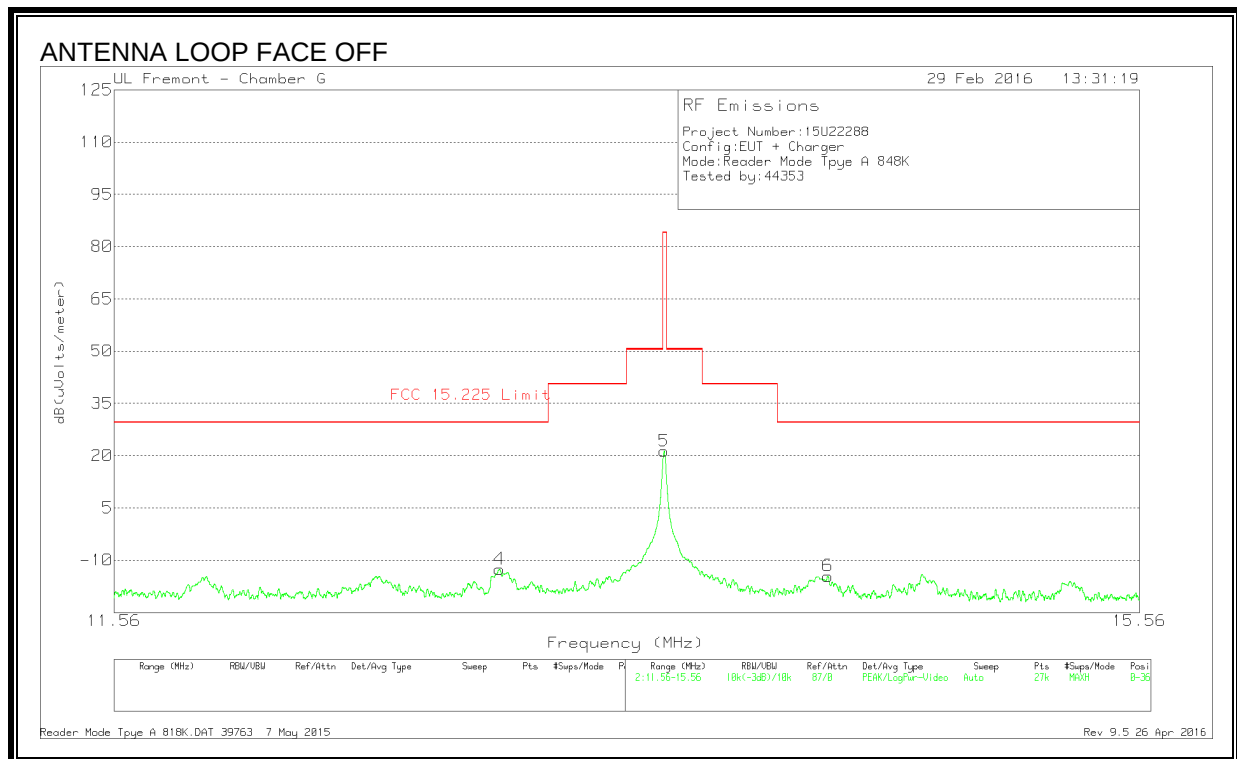
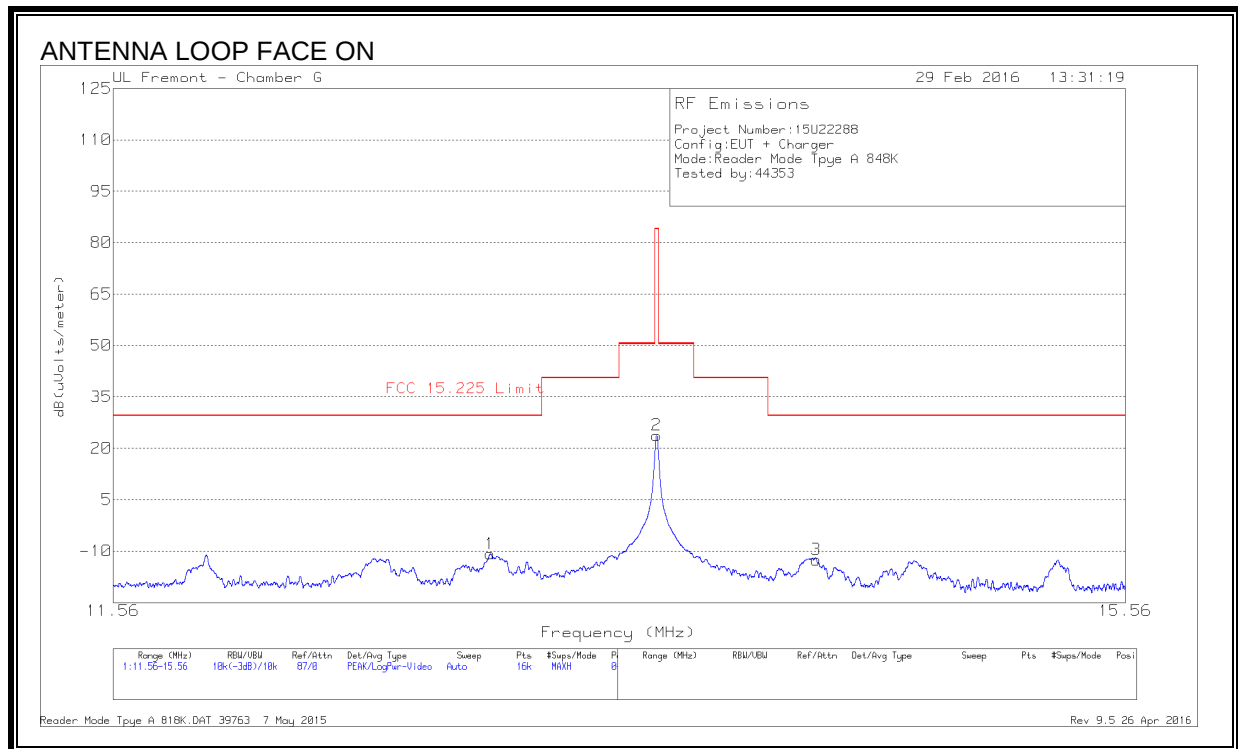
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.03181	39.94	Pk	14.1	.1	-80	-25.86	57.55	-83.41	37.55	-63.41	0-360
6	3.23456	19.03	Pk	10.4	.3	-40	-10.27	29.54	-39.81	-	-	0-360
2	12.92436	17.82	Pk	10.4	.6	-40	-11.18	29.54	-40.72	-	-	0-360
7	12.92594	15.8	Pk	10.4	.6	-40	-13.2	29.54	-42.74	-	-	0-360
3	13.3488	29.49	Pk	10.4	.6	-40	.49	29.54	-29.05	-	-	0-360
8	13.3488	27.33	Pk	10.4	.6	-40	-1.67	29.54	-31.21	-	-	0-360
4	13.77246	29.32	Pk	10.3	.6	-40	.22	29.54	-29.32	-	-	0-360
9	13.77246	27.43	Pk	10.3	.6	-40	-1.67	29.54	-31.21	-	-	0-360
5	14.19611	18.35	Pk	10.3	.6	-40	-10.75	29.54	-40.29	-	-	0-360
10	14.19611	16.73	Pk	10.3	.6	-40	-12.37	29.54	-41.91	-	-	0-360

Pk - Peak detector

8.2.2. READER MODE

TYPE A 848Kbps FUNDAMENTAL

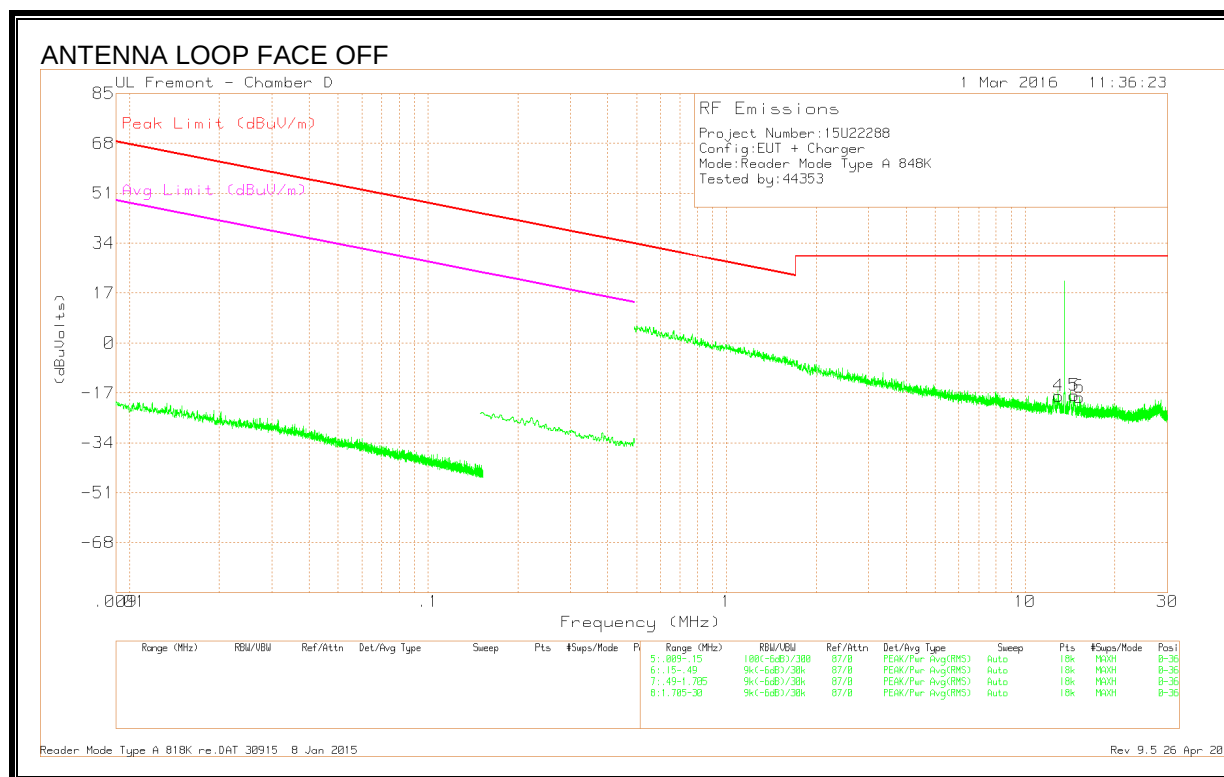
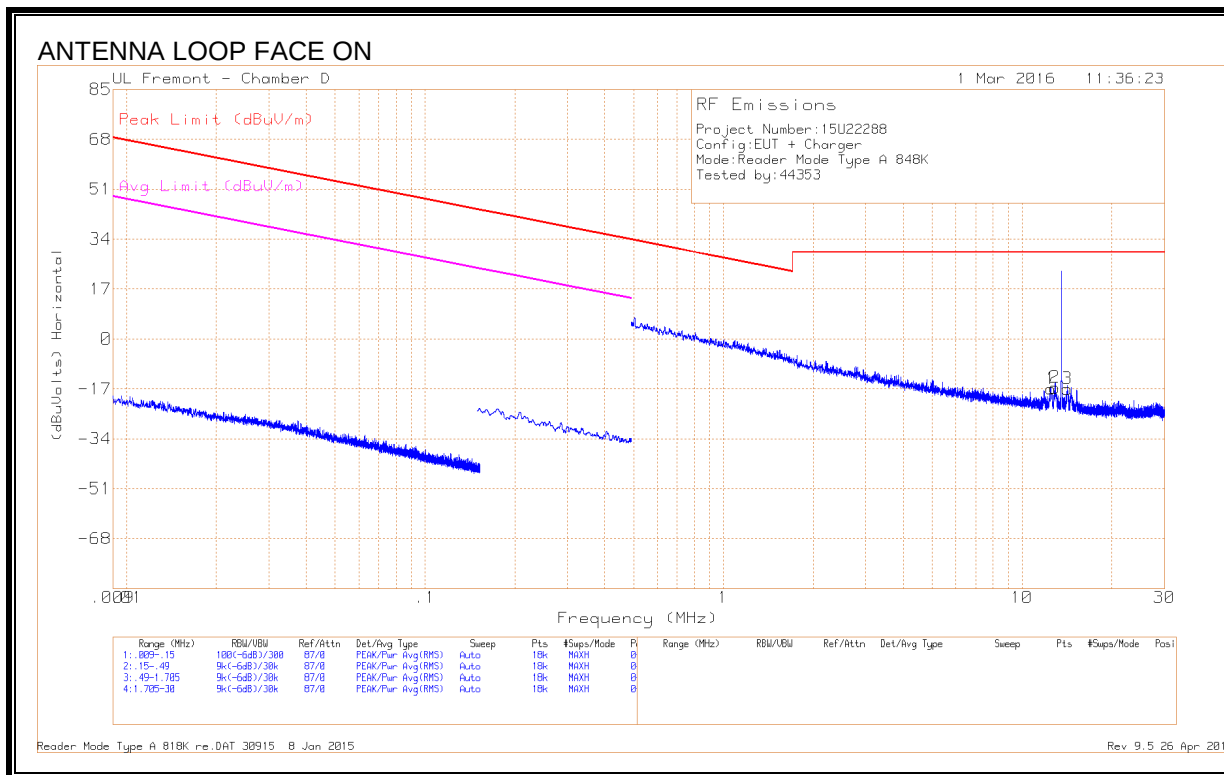


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
1	12.91375	18.17	Pk	10.4	.6	-40	-10.83	29.54	-40.37	0-360
4	12.92685	16.4	Pk	10.4	.6	-40	-12.6	29.54	-42.14	0-360
5	13.55867	50.29	Pk	10.4	.6	-40	21.29	84	-62.71	0-360
2	13.5605	52.79	Pk	10.4	.6	-40	23.79	84	-60.21	0-360
3	14.212	16.58	Pk	10.3	.6	-40	-12.52	29.54	-42.06	0-360
6	14.21756	14.54	Pk	10.3	.6	-40	-14.56	29.54	-44.1	0-360

Pk - Peak detector

SPURIOUS EMISSION

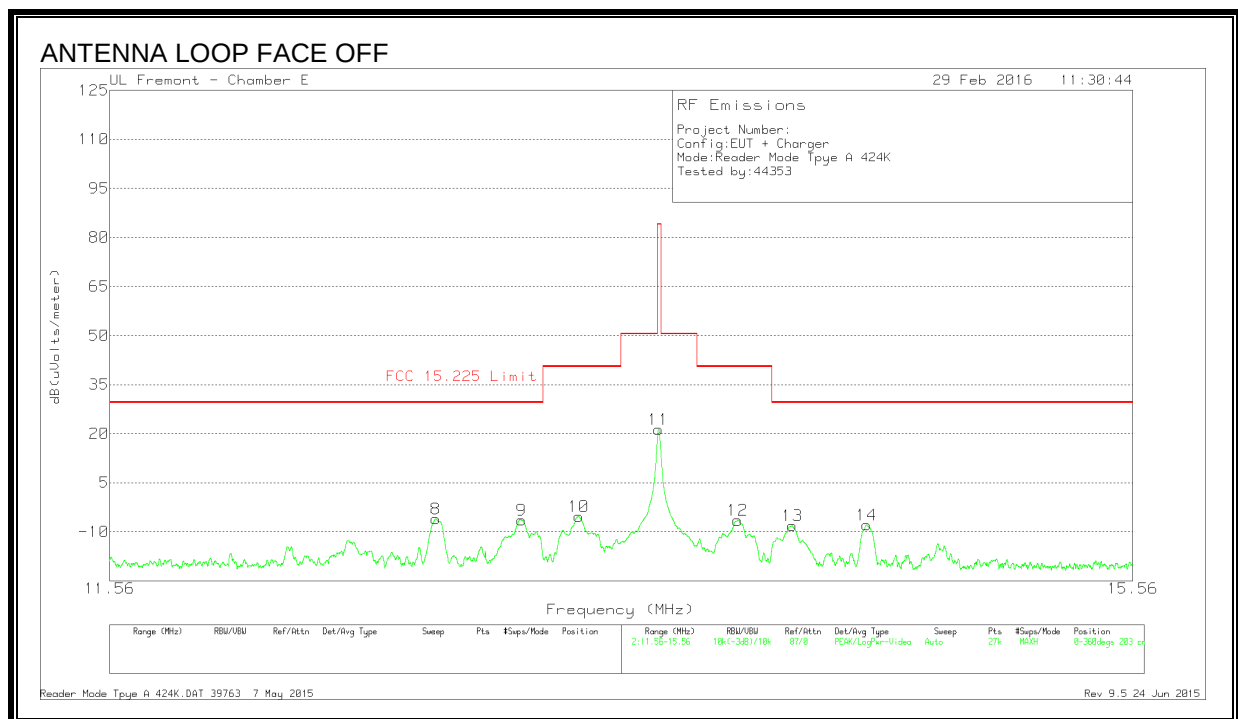
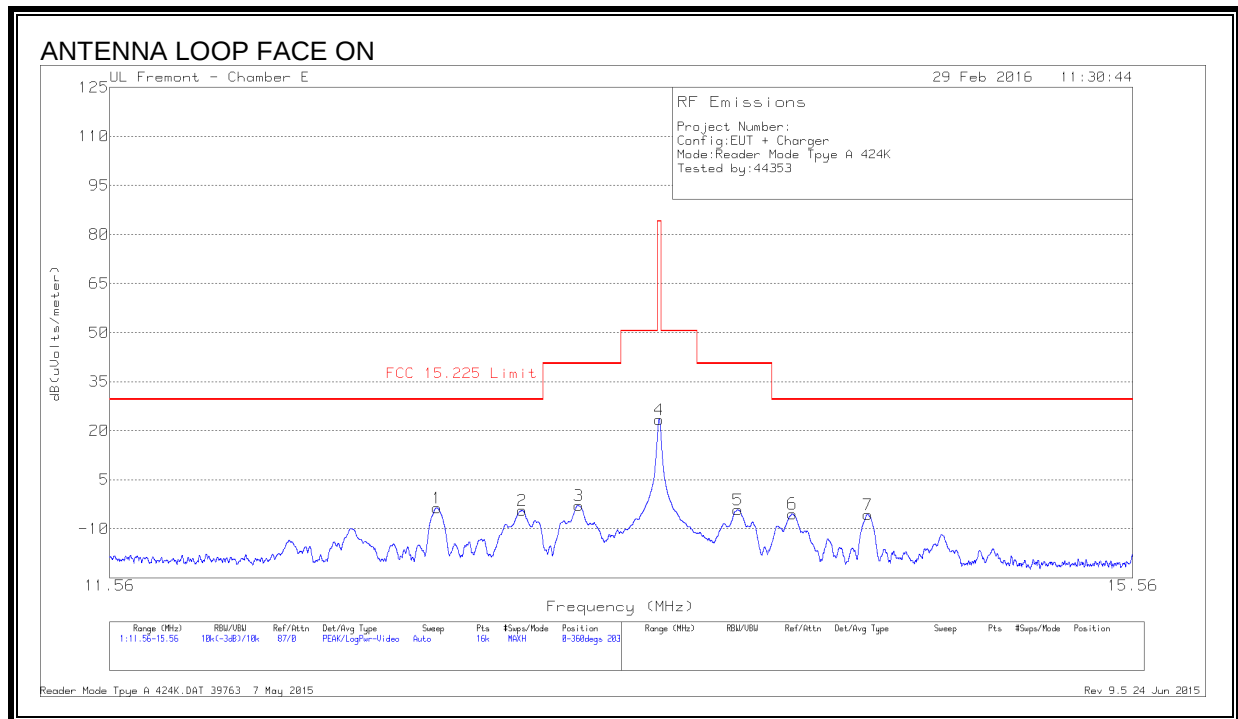


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
5	.01916	41.75	Pk	15.1	.1	-80	-23.05	61.96	-85.01	41.96	-65.01	0-360
1	.5036	36.82	Pk	10.3	.2	-40	7.32	33.56	-26.24	-	-	0-360
6	12.91965	12.84	Pk	10.4	.6	-40	-16.16	29.54	-45.7	-	-	0-360
2	12.94244	14.23	Pk	10.4	.6	-40	-14.77	29.54	-44.31	-	-	0-360
7	14.18196	12.68	Pk	10.3	.6	-40	-16.42	29.54	-45.96	-	-	0-360
3	14.1914	13.27	Pk	10.3	.6	-40	-15.83	29.54	-45.37	-	-	0-360
8	14.60169	11.21	Pk	10.3	.6	-40	-17.89	29.54	-47.43	-	-	0-360
4	14.61426	12.54	Pk	10.3	.6	-40	-16.56	29.54	-46.1	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL

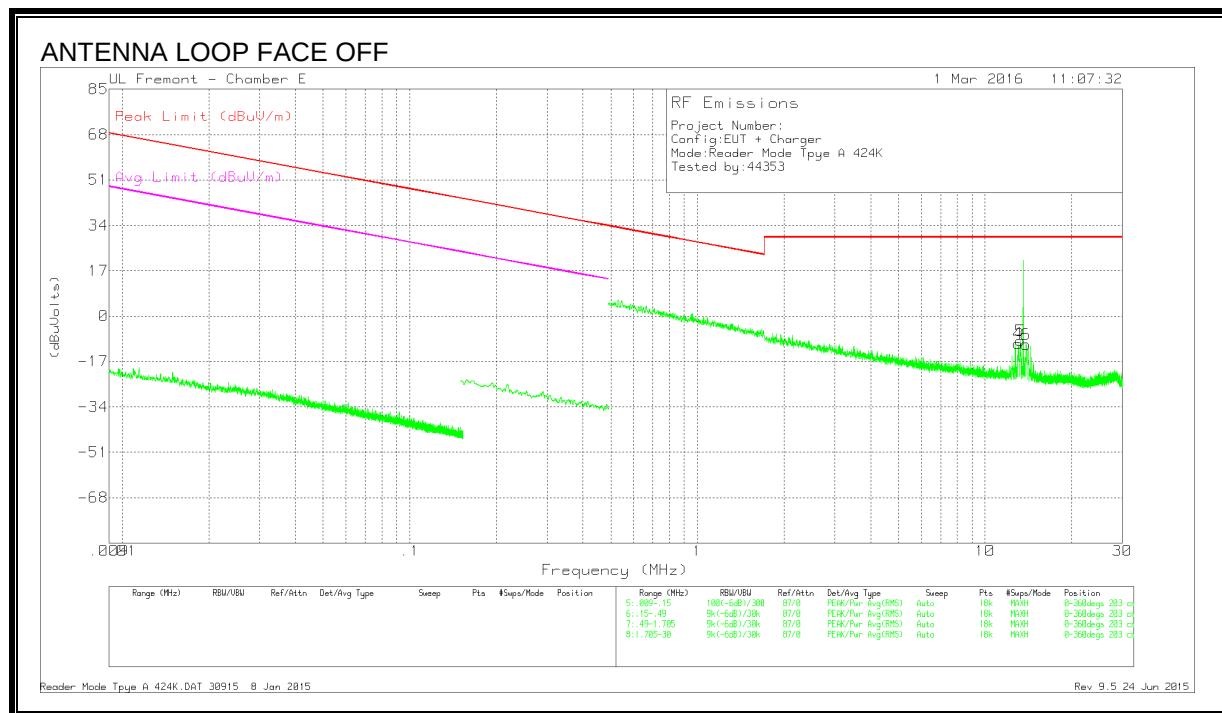
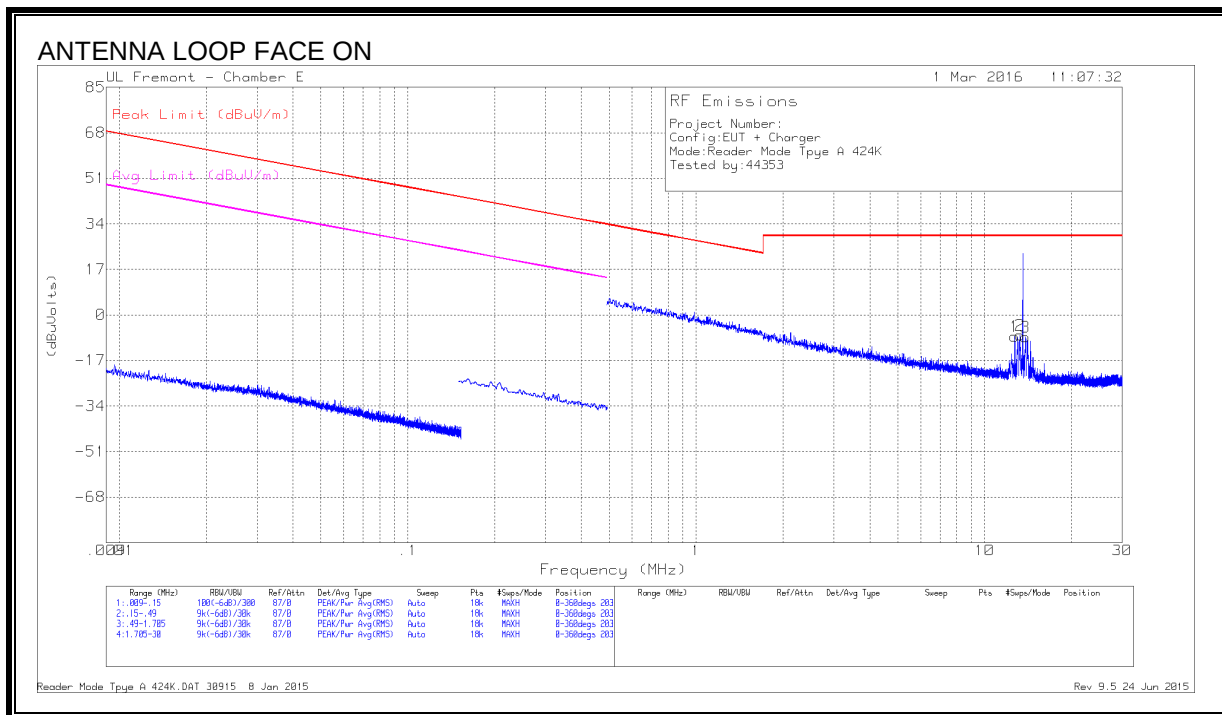


DATA

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	Margin (dB)	Azimuth (Degs)
8	12.70929	22.91	Pk	10.4	.6	-40	-6.09	29.54	-35.63	0-360
1	12.71238	25.4	Pk	10.4	.6	-40	-3.6	29.54	-33.14	0-360
9	13.02986	22.51	Pk	10.4	.6	-40	-6.49	40.51	-47	0-360
2	13.03263	24.56	Pk	10.4	.6	-40	-4.44	40.51	-44.95	0-360
3	13.2465	26.03	Pk	10.4	.6	-40	-2.97	40.51	-43.48	0-360
10	13.24698	23.67	Pk	10.4	.6	-40	-5.33	40.51	-45.84	0-360
11	13.55852	50.38	Pk	10.4	.6	-40	21.38	84	-62.62	0-360
4	13.5615	52.44	Pk	10.4	.6	-40	23.44	84	-60.56	0-360
12	13.87383	22.58	Pk	10.3	.6	-40	-6.52	40.51	-47.03	0-360
5	13.87438	24.85	Pk	10.3	.6	-40	-4.25	40.51	-44.76	0-360
13	14.09531	20.96	Pk	10.3	.6	-40	-8.14	29.54	-37.68	0-360
6	14.09538	23.69	Pk	10.3	.6	-40	-5.41	29.54	-34.95	0-360
14	14.40271	21.21	Pk	10.3	.6	-40	-7.89	29.54	-37.43	0-360
7	14.40675	23.49	Pk	10.3	.6	-40	-5.61	29.54	-35.15	0-360

Pk - Peak detector

SPURIOUS EMISSION

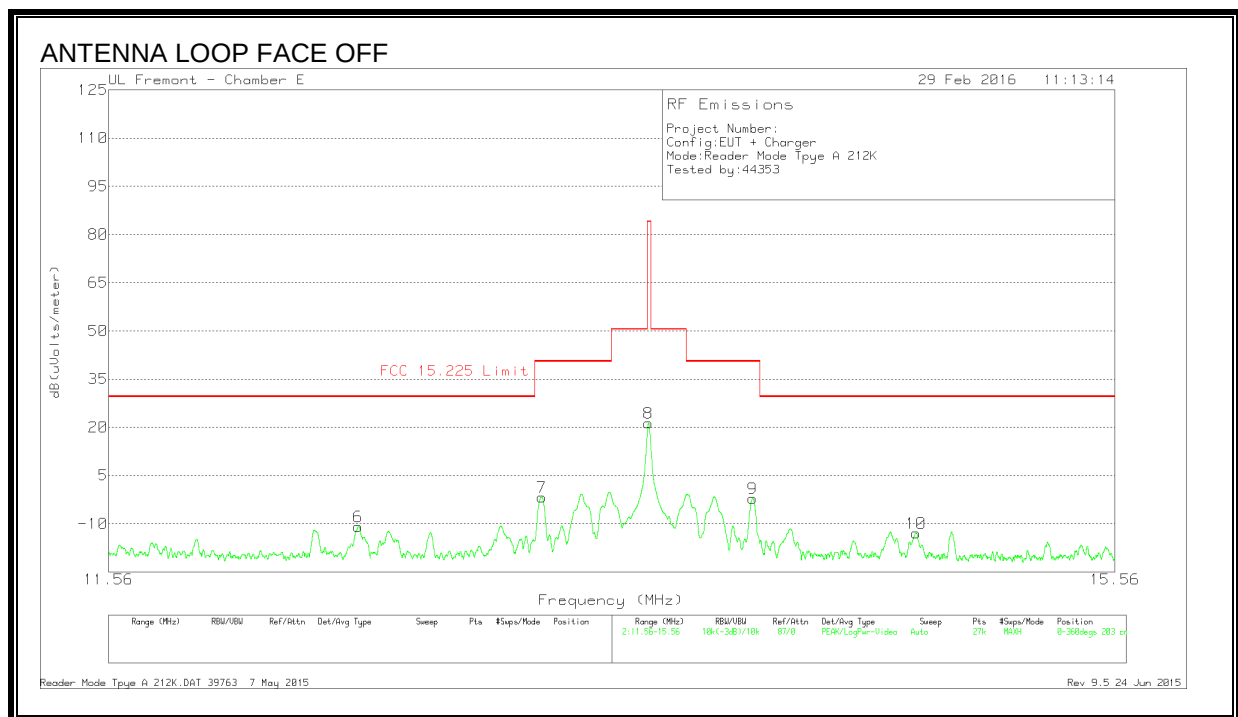
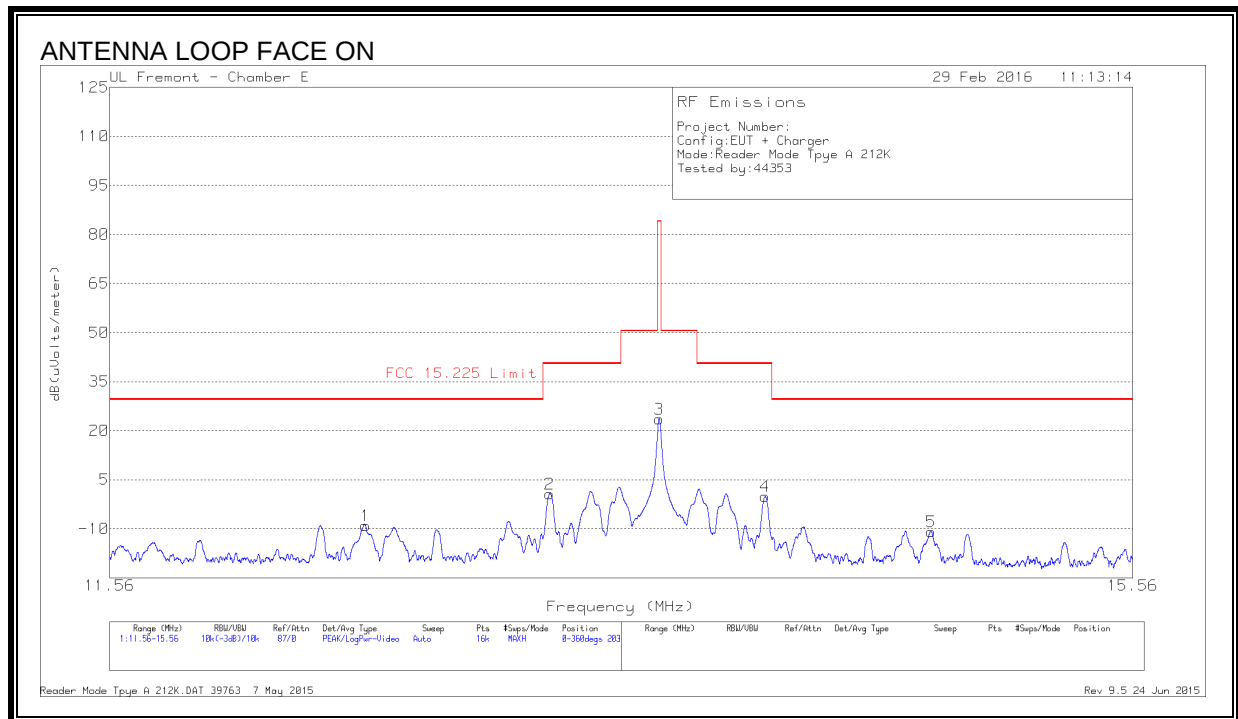


DATA

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	12.71686	20.93	Pk	10.4	.6	-40	-8.07	29.54	-37.61	-	-	0-360
4	13.02419	18.84	Pk	10.4	.6	-40	-10.16	29.54	-39.7	-	-	0-360
2	13.23876	21.39	Pk	10.4	.6	-40	-7.61	29.54	-37.15	-	-	0-360
5	13.25448	19.83	Pk	10.4	.6	-40	-9.17	29.54	-38.71	-	-	0-360
6	13.87935	18.5	Pk	10.3	.6	-40	-10.6	29.54	-40.14	-	-	0-360
3	13.88171	20.9	Pk	10.3	.6	-40	-8.2	29.54	-37.74	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

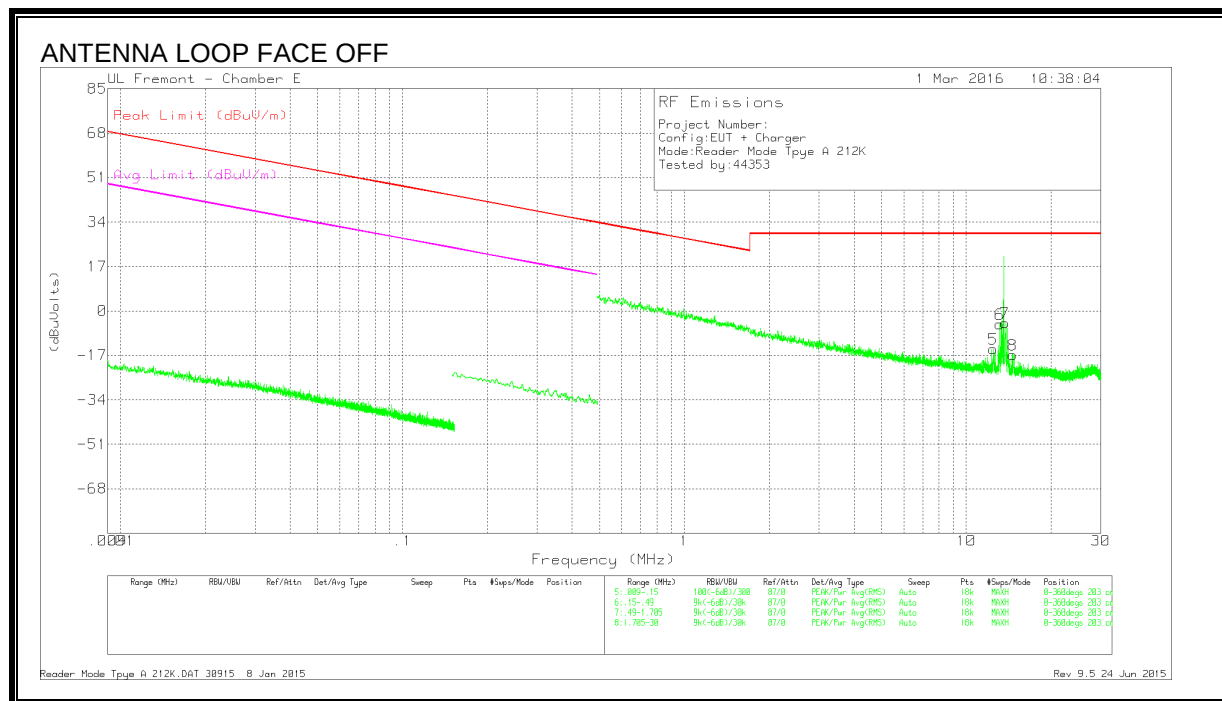
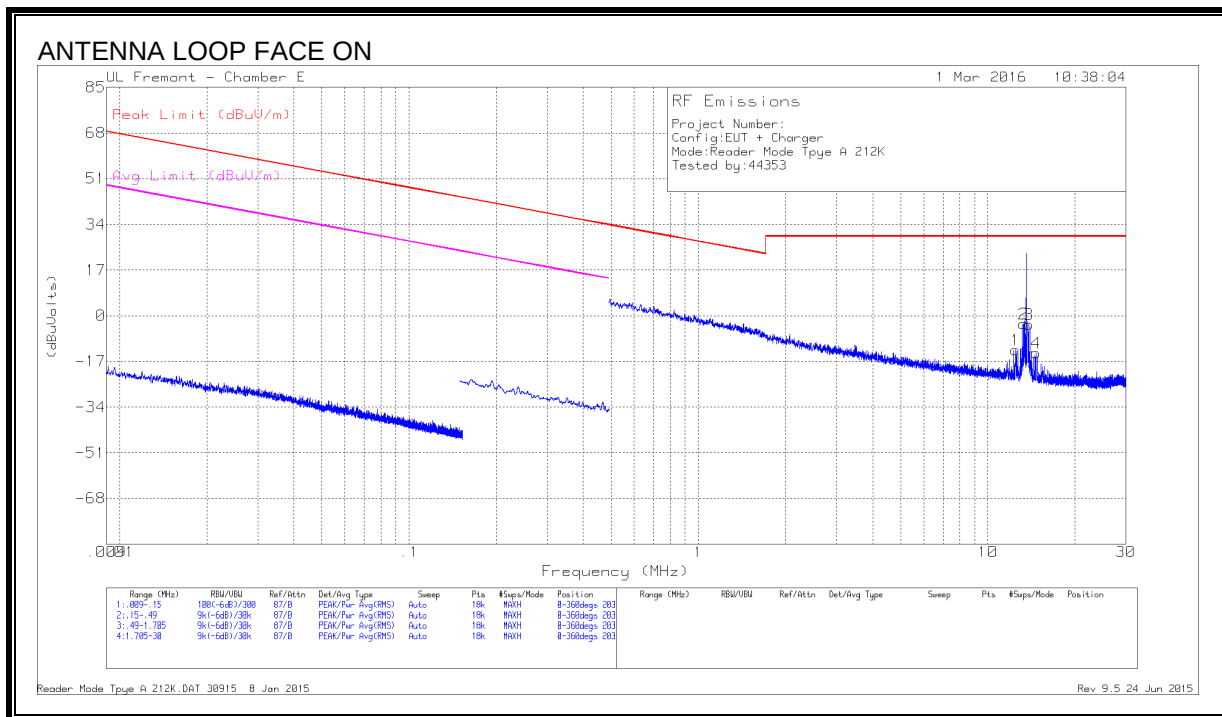


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
6	12.44489	18.15	Pk	10.4	.6	-40	-10.85	29.54	-40.39	0-360
1	12.45175	19.97	Pk	10.4	.6	-40	-9.03	29.54	-38.57	0-360
2	13.13475	29.72	Pk	10.4	.6	-40	.72	40.51	-39.79	0-360
7	13.13746	27.27	Pk	10.4	.6	-40	-1.73	40.51	-42.24	0-360
8	13.55852	50.32	Pk	10.4	.6	-40	21.32	84	-62.68	0-360
3	13.55925	52.56	Pk	10.4	.6	-40	23.56	84	-60.44	0-360
9	13.98195	27.01	Pk	10.3	.6	-40	-2.09	40.51	-42.6	0-360
4	13.98438	28.97	Pk	10.3	.6	-40	-.13	40.51	-40.64	0-360
10	14.67348	16.1	Pk	10.3	.6	-40	-13	29.54	-42.54	0-360
5	14.67613	18.26	Pk	10.3	.6	-40	-10.84	29.54	-40.38	0-360

Pk - Peak detector

SPURIOUS EMISSION

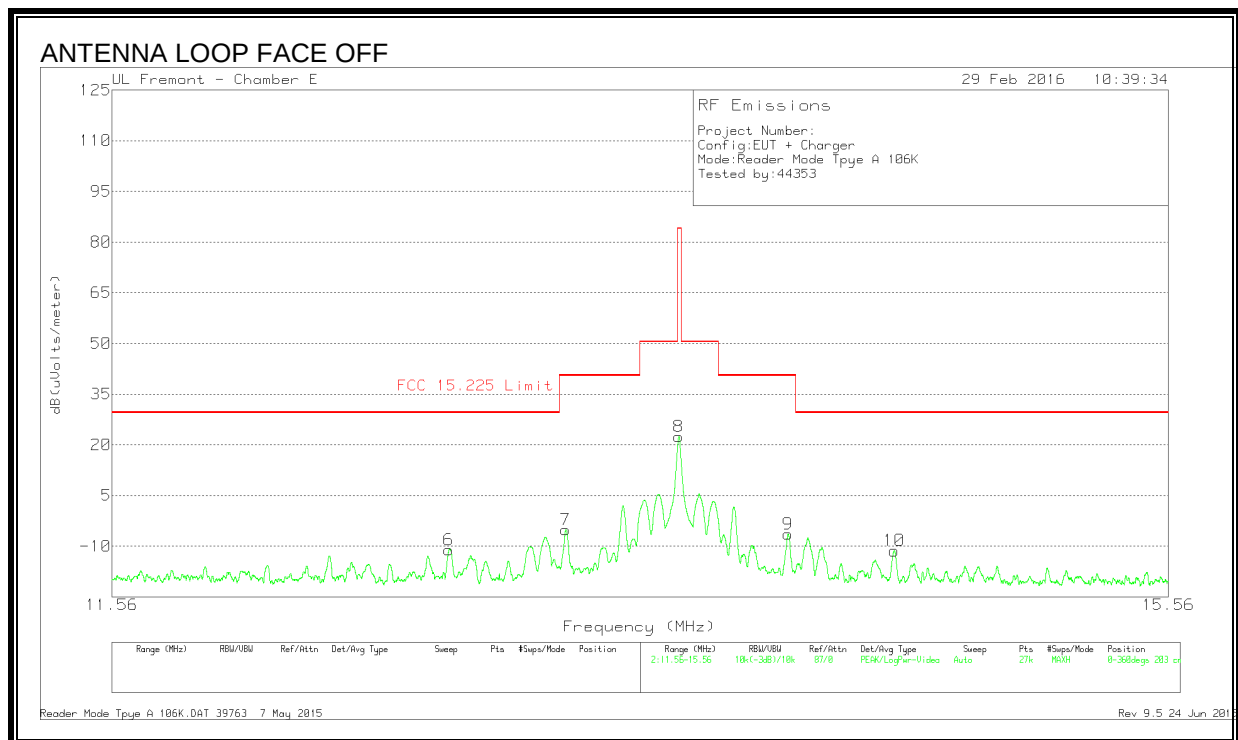
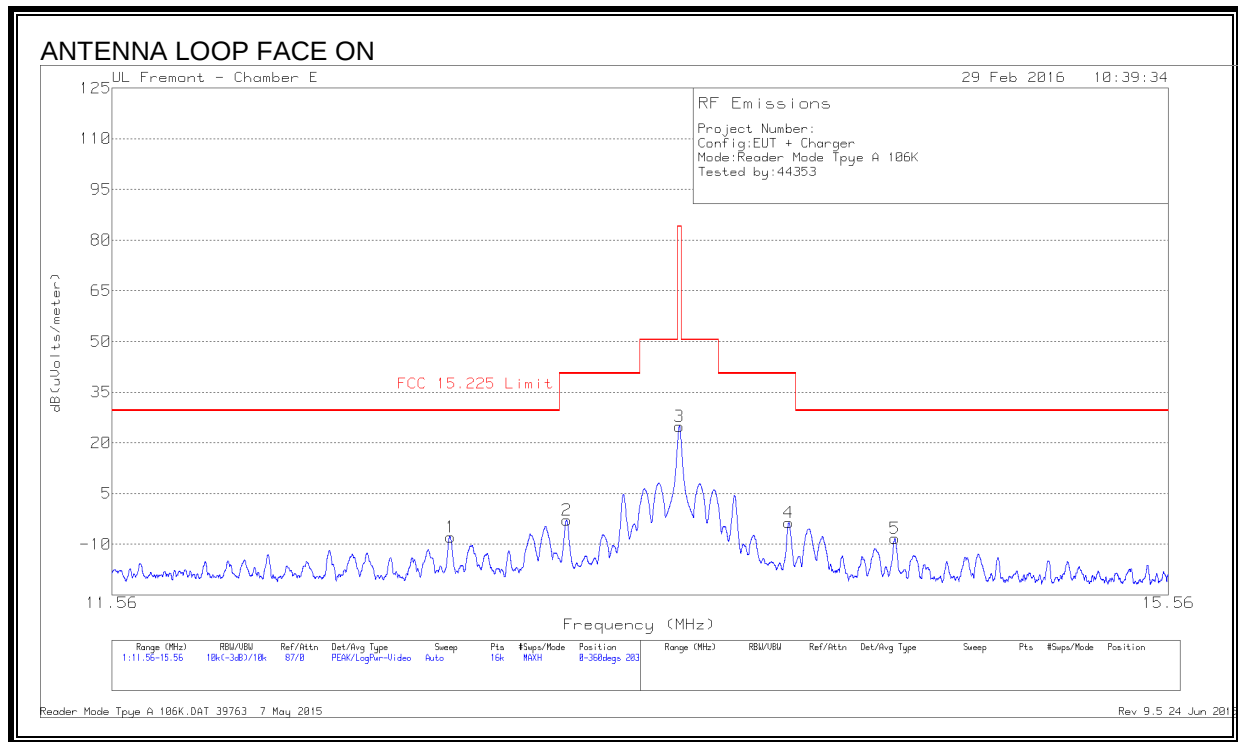


DATA

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	12.44726	16.23	Pk	10.4	.6	-40	-12.77	29.54	-42.31	-	-	0-360
5	12.44962	14.37	Pk	10.4	.6	-40	-14.63	29.54	-44.17	-	-	0-360
6	13.13501	23.86	Pk	10.4	.6	-40	-5.14	29.54	-34.68	-	-	0-360
2	13.29536	26.04	Pk	10.4	.6	-40	-2.96	29.54	-32.5	-	-	0-360
7	13.71822	24.46	Pk	10.4	.6	-40	-4.54	29.54	-34.08	-	-	0-360
3	13.82591	25.78	Pk	10.3	.6	-40	-3.32	29.54	-32.86	-	-	0-360
8	14.57496	12.29	Pk	10.3	.6	-40	-16.81	29.54	-46.35	-	-	0-360
4	14.67714	15.12	Pk	10.3	.6	-40	-13.98	29.54	-43.52	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

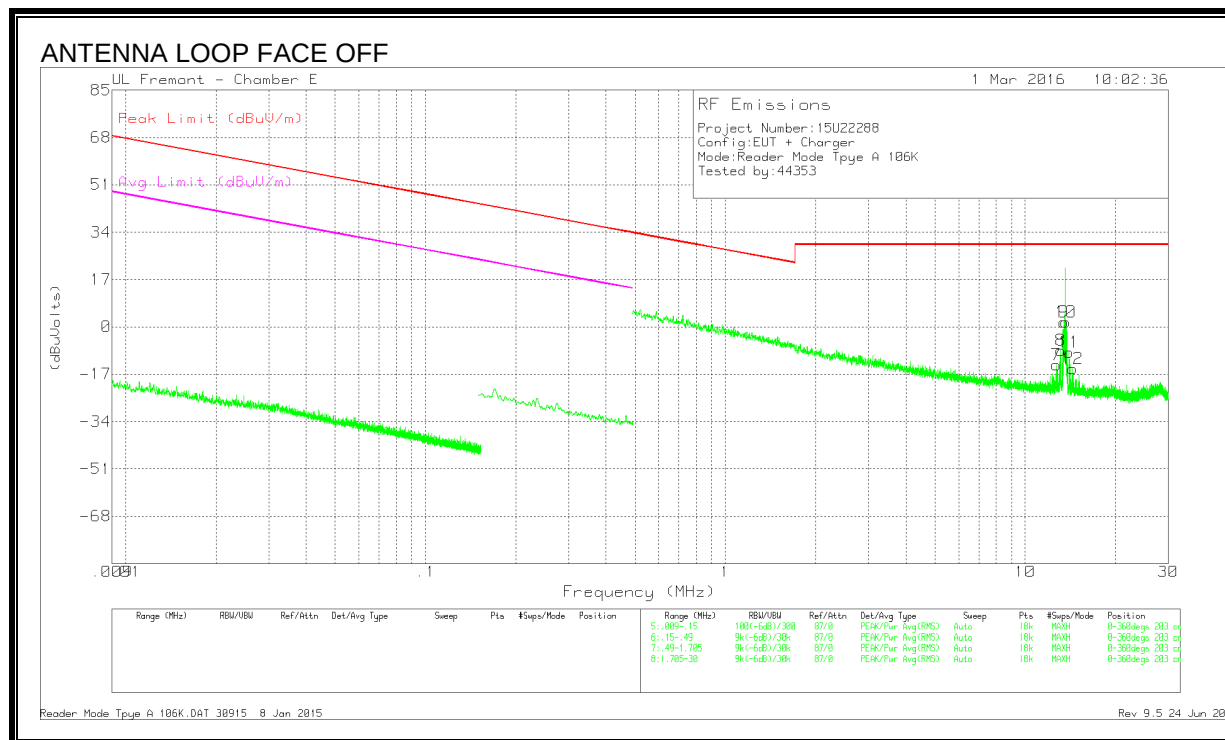
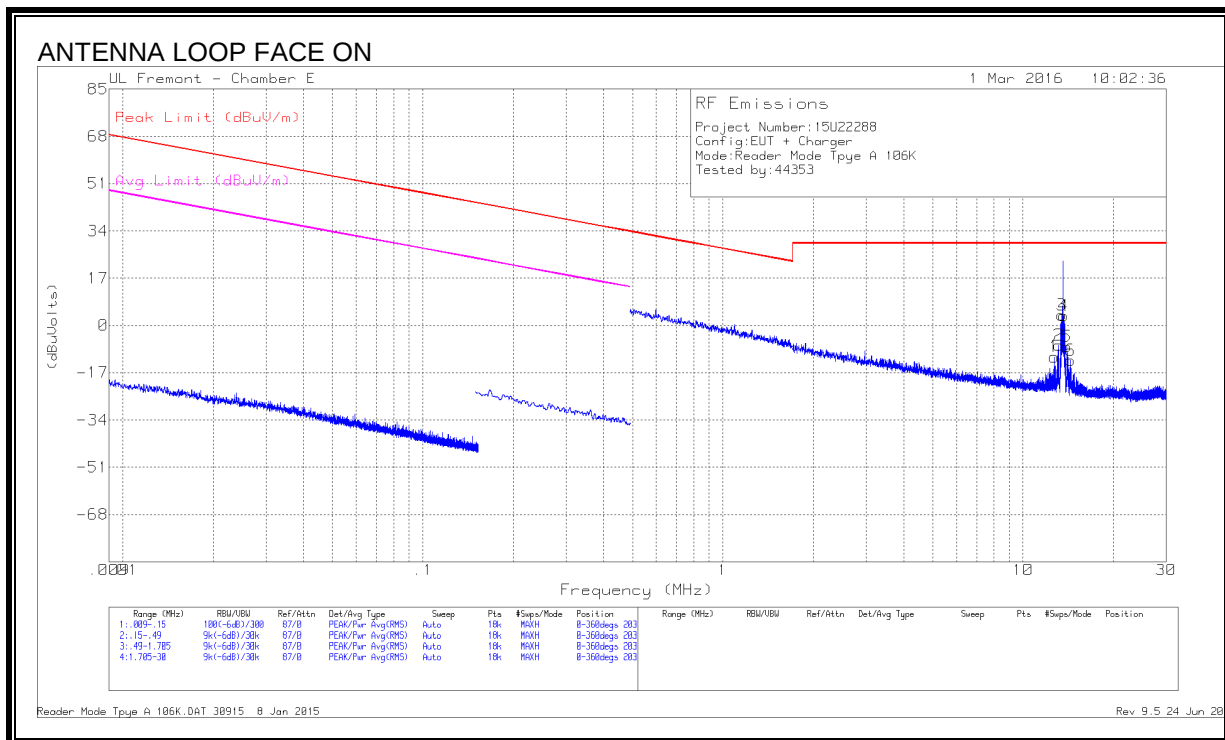


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
6	12.70937	17.88	Pk	10.4	.6	-40	-11.12	29.54	-40.66	0-360
1	12.71425	21.06	Pk	10.4	.6	-40	-7.94	29.54	-37.48	0-360
7	13.13413	23.9	Pk	10.4	.6	-40	-5.1	40.51	-45.61	0-360
2	13.13738	26.08	Pk	10.4	.6	-40	-2.92	40.51	-43.43	0-360
8	13.55867	51.38	Pk	10.4	.6	-40	22.38	84	-61.62	0-360
3	13.5615	53.87	Pk	10.4	.6	-40	24.87	84	-59.13	0-360
9	13.98224	22.73	Pk	10.3	.6	-40	-6.37	40.51	-46.88	0-360
4	13.98438	25.45	Pk	10.3	.6	-40	-3.65	40.51	-44.16	0-360
10	14.40611	17.74	Pk	10.3	.6	-40	-11.36	29.54	-40.9	0-360
5	14.40763	20.77	Pk	10.3	.6	-40	-8.33	29.54	-37.87	0-360

Pk - Peak detector

SPURIOUS EMISSION

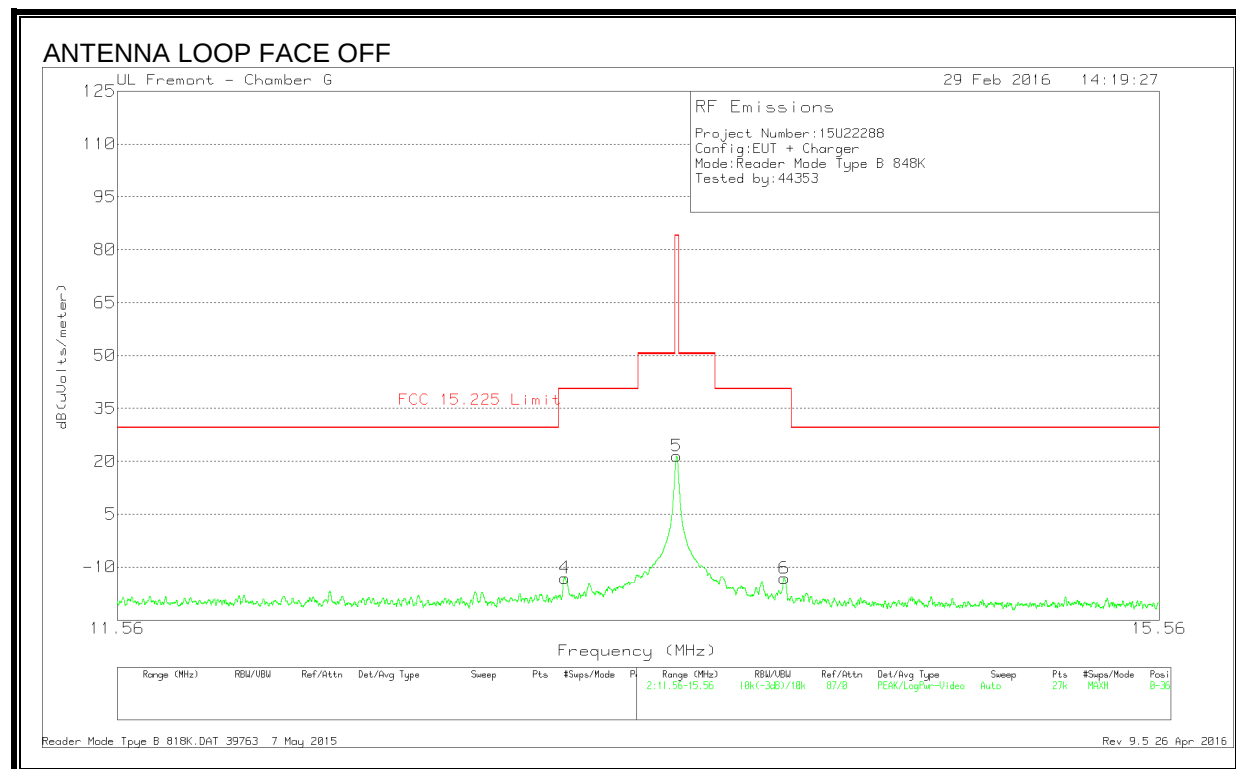
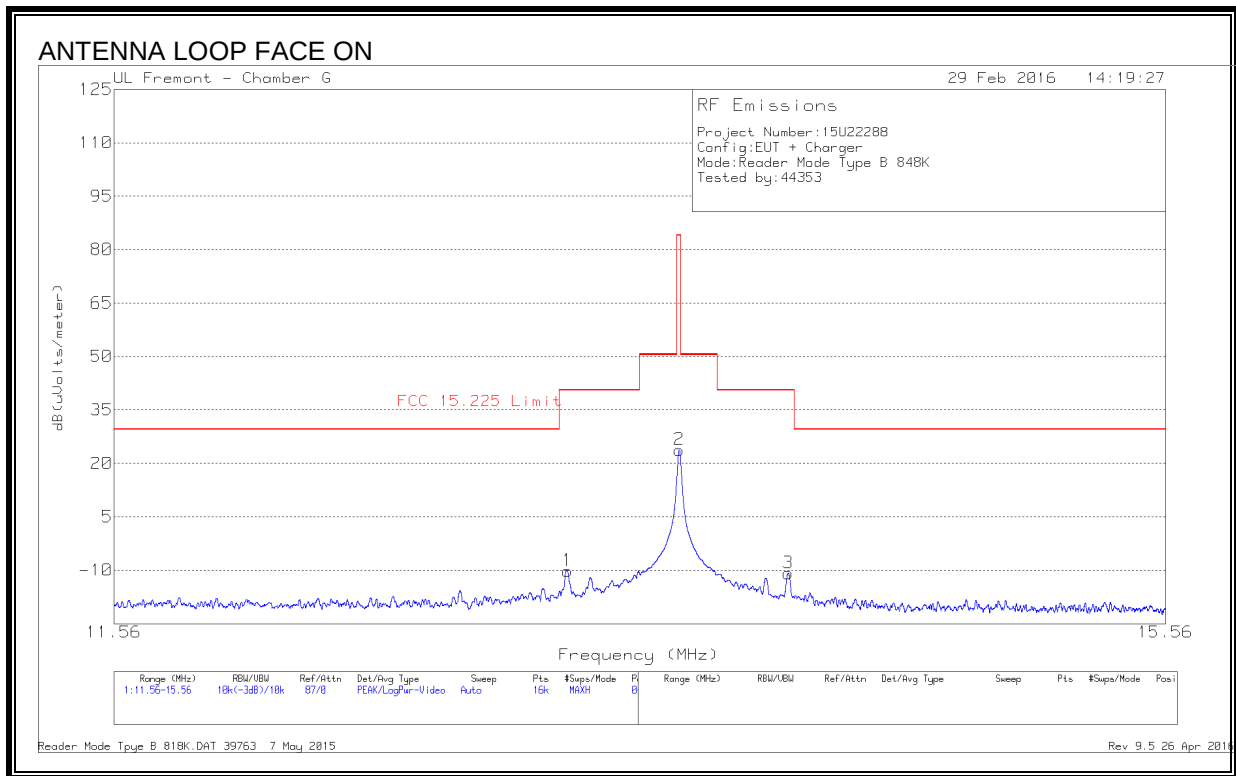


DATA

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)
7	12.71214	15.44	Pk	10.4	.6	-40	-13.56	29.54	-43.1	-	-	0-360
1	12.71372	17.72	Pk	10.4	.6	-40	-11.28	29.54	-40.82	-	-	0-360
2	13.13501	21.84	Pk	10.4	.6	-40	-7.16	29.54	-36.7	-	-	0-360
8	13.13658	20.47	Pk	10.4	.6	-40	-8.53	29.54	-38.07	-	-	0-360
3	13.48242	32.76	Pk	10.4	.6	-40	3.76	29.54	-25.78	-	-	0-360
9	13.48242	30.78	Pk	10.4	.6	-40	1.78	29.54	-27.76	-	-	0-360
4	13.63805	32.56	Pk	10.4	.6	-40	3.56	29.54	-25.98	-	-	0-360
10	13.63884	30.8	Pk	10.4	.6	-40	1.8	29.54	-27.74	-	-	0-360
5	13.98546	21.62	Pk	10.3	.6	-40	-7.48	29.54	-37.02	-	-	0-360
11	13.98546	20.05	Pk	10.3	.6	-40	-9.05	29.54	-38.59	-	-	0-360
6	14.40755	16.65	Pk	10.3	.6	-40	-12.45	29.54	-41.99	-	-	0-360
12	14.40833	14.09	Pk	10.3	.6	-40	-15.01	29.54	-44.55	-	-	0-360

Pk - Peak detector

TYPE B 848Kbps FUNDAMENTAL

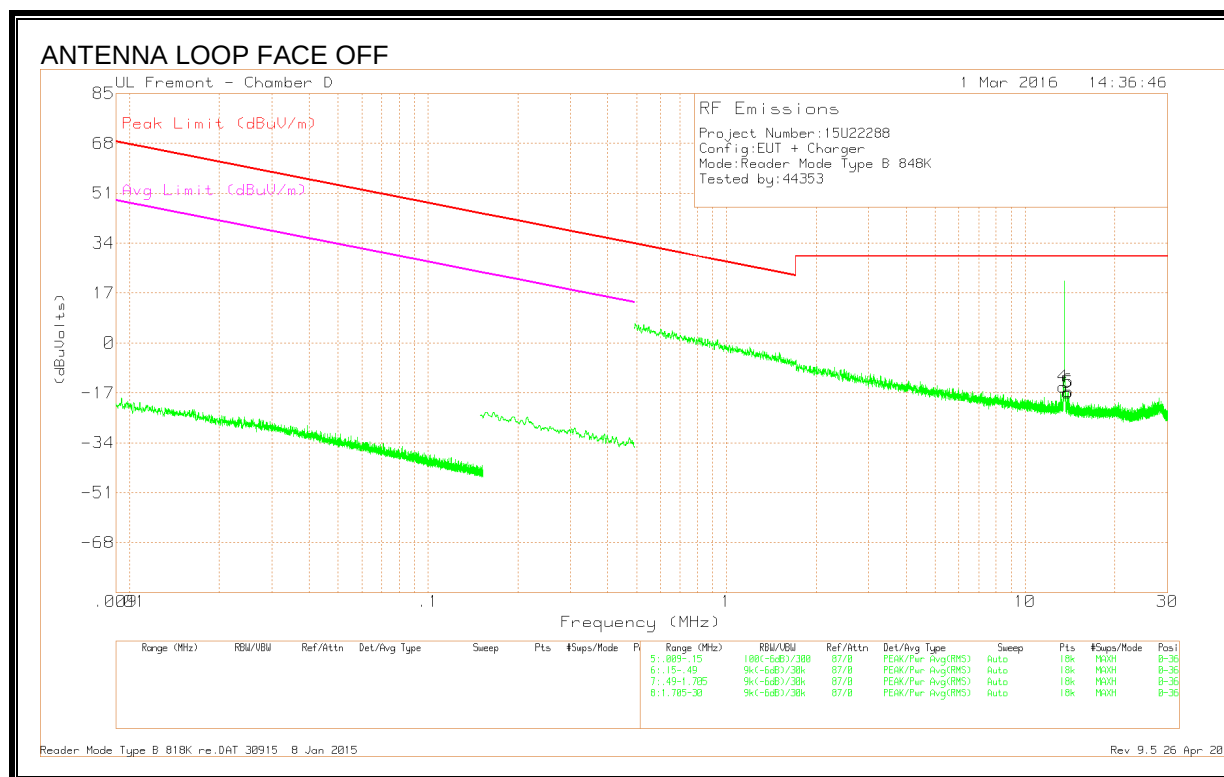
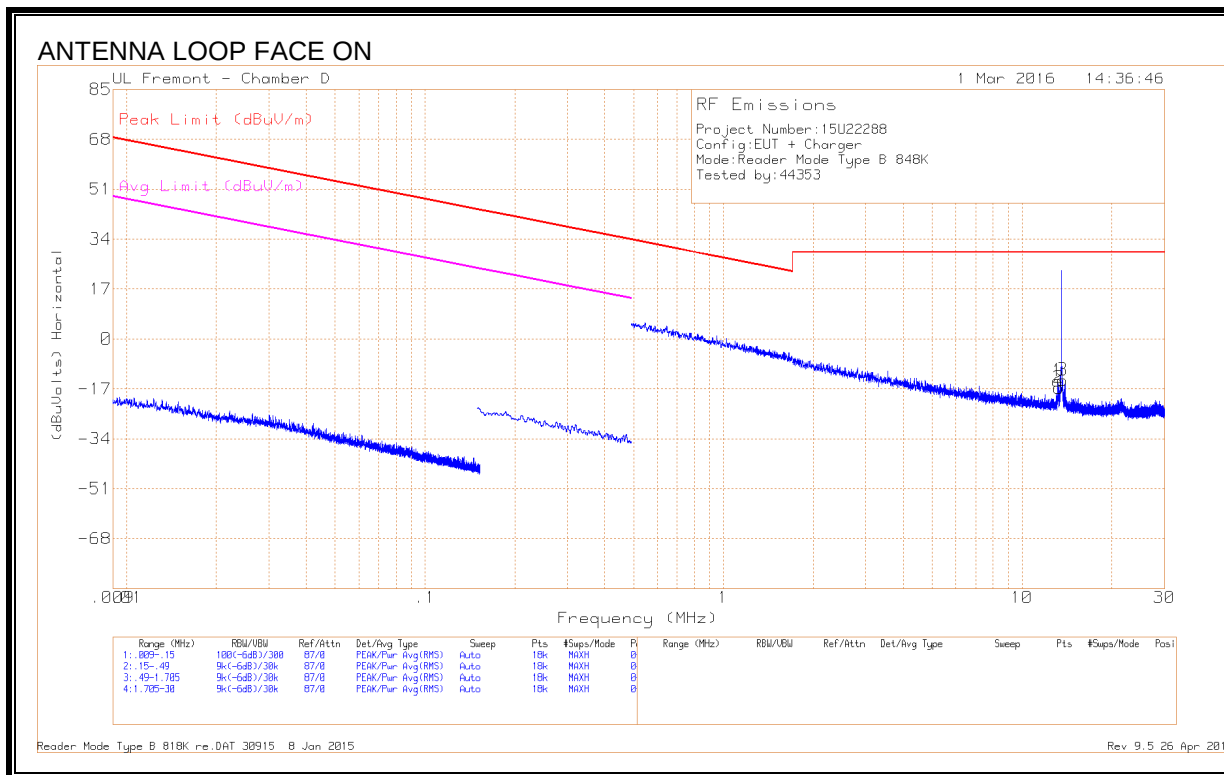


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	13.13502	15.88	Pk	10.4	.6	-40	-13.12	29.54	-42.66	0-360
1	13.1415	18.82	Pk	10.4	.6	-40	-10.18	29.54	-39.72	0-360
5	13.56	50.44	Pk	10.4	.6	-40	21.44	84	-62.56	0-360
2	13.56288	52.79	Pk	10.4	.6	-40	23.79	84	-60.21	0-360
6	13.9832	15.9	Pk	10.3	.6	-40	-13.2	29.54	-42.74	0-360
3	13.98775	18.25	Pk	10.3	.6	-40	-10.85	29.54	-40.39	0-360

Pk - Peak detector

SPURIOUS EMISSION

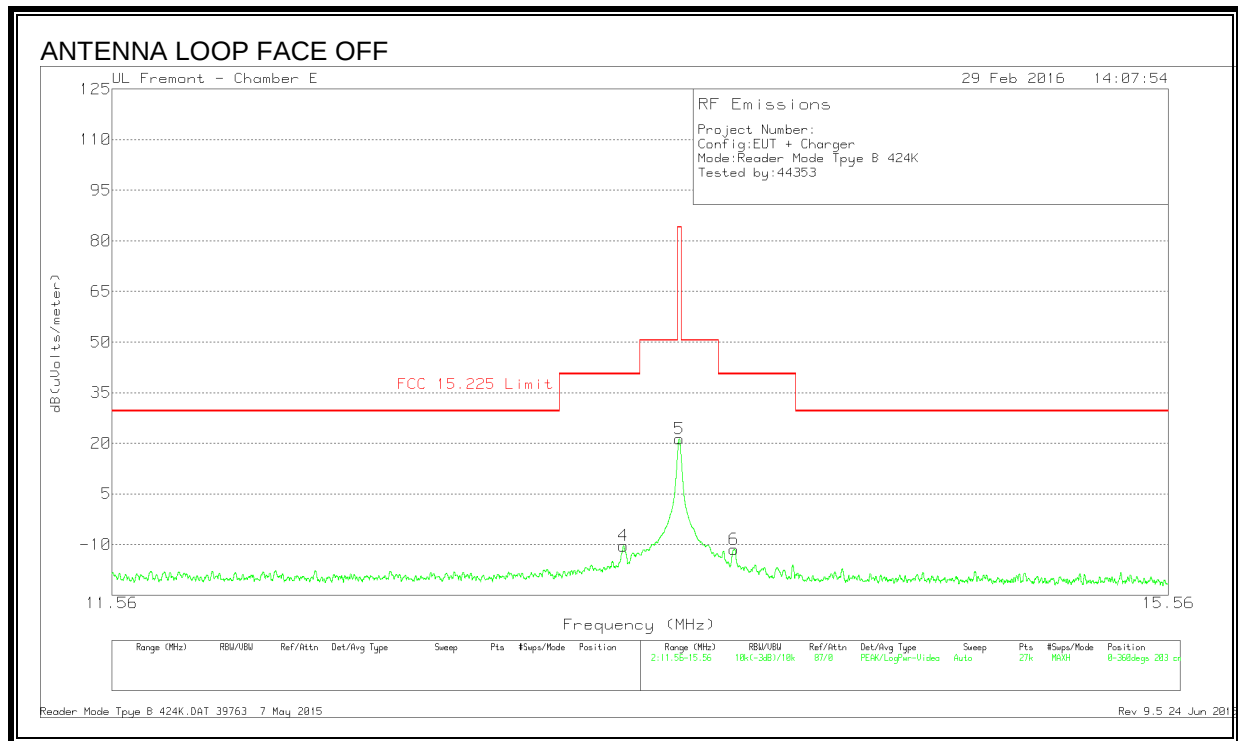
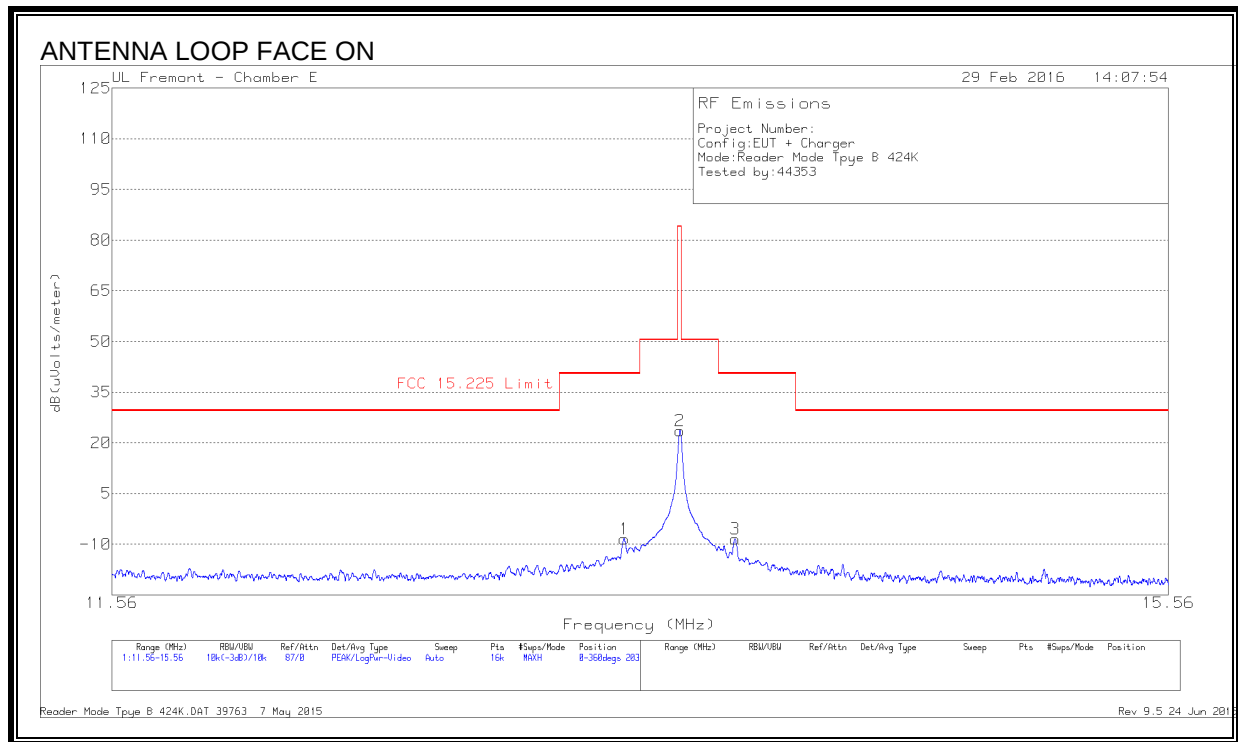


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.01489	41.66	Pk	16.8	.1	-80	-21.44	64.15	-85.59	44.15	-65.59	0-360
2	13.13816	14.75	Pk	10.4	.6	-40	-14.25	29.54	-43.79	-	-	0-360
4	13.40382	13.99	Pk	10.4	.6	-40	-15.01	29.54	-44.55	-	-	0-360
3	13.98232	14.6	Pk	10.3	.6	-40	-14.5	29.54	-44.04	-	-	0-360
5	13.98232	12.62	Pk	10.3	.6	-40	-16.48	29.54	-46.02	-	-	0-360
6	28.15704	12.16	Pk	8.2	.9	-40	-18.74	29.54	-48.28	-	-	0-360

Pk - Peak detector

424Kbps FUNDAMENTAL

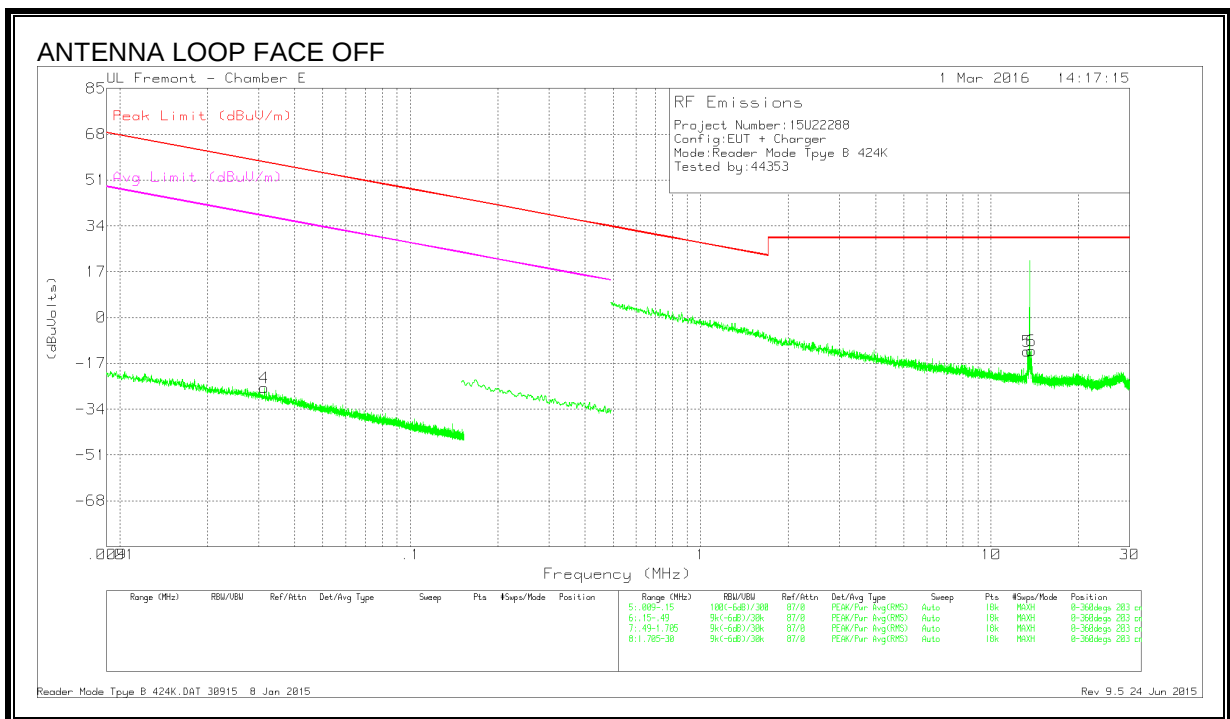
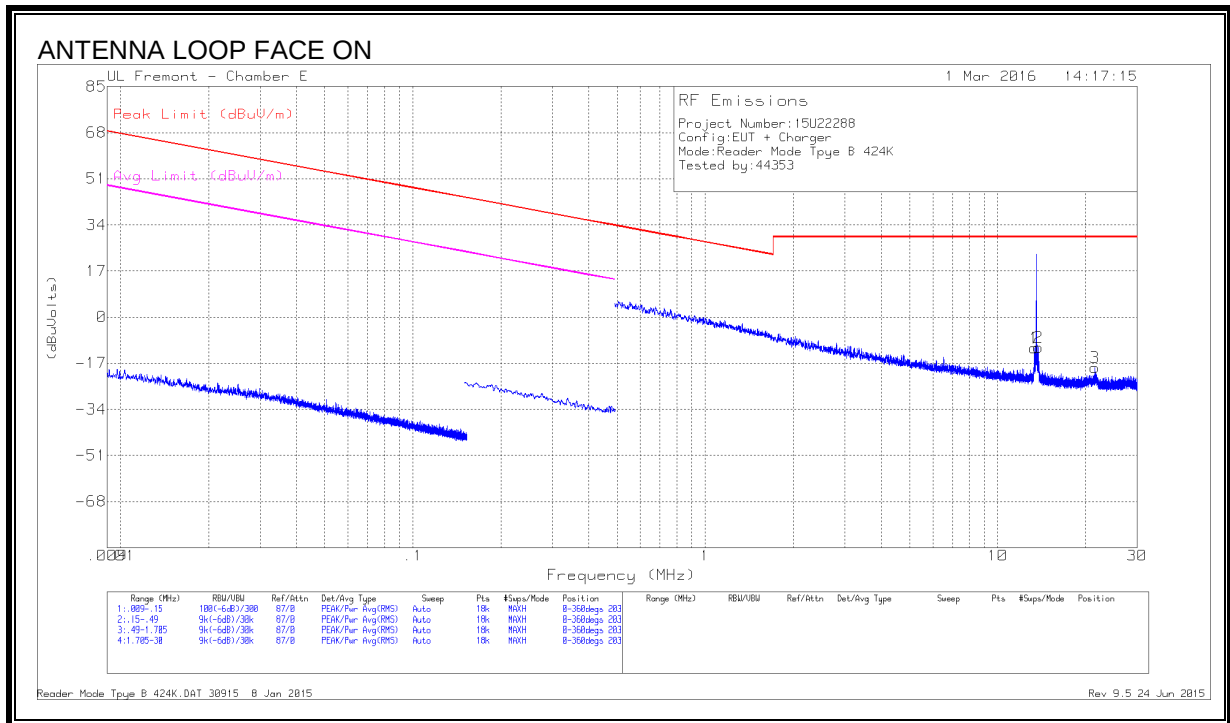


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	13.34895	18.57	Pk	10.4	.6	-40	-10.43	29.54	-39.97	0-360
1	13.35225	20.49	Pk	10.4	.6	-40	-8.51	29.54	-38.05	0-360
5	13.56	50.3	Pk	10.4	.6	-40	21.3	84	-62.7	0-360
2	13.56175	52.62	Pk	10.4	.6	-40	23.62	84	-60.38	0-360
6	13.77127	17.62	Pk	10.3	.6	-40	-11.48	29.54	-41.02	0-360
3	13.77488	20.58	Pk	10.3	.6	-40	-8.52	29.54	-38.06	0-360

Pk - Peak detector

SPURIOUS EMISSION

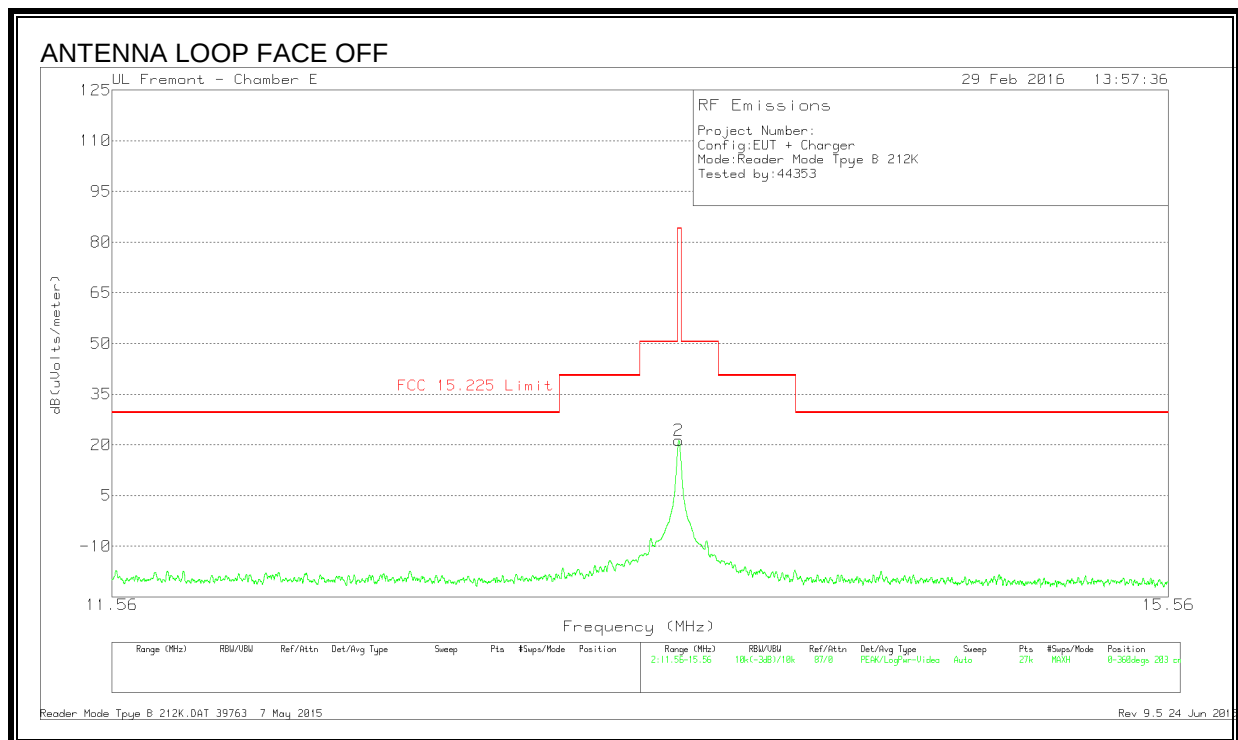
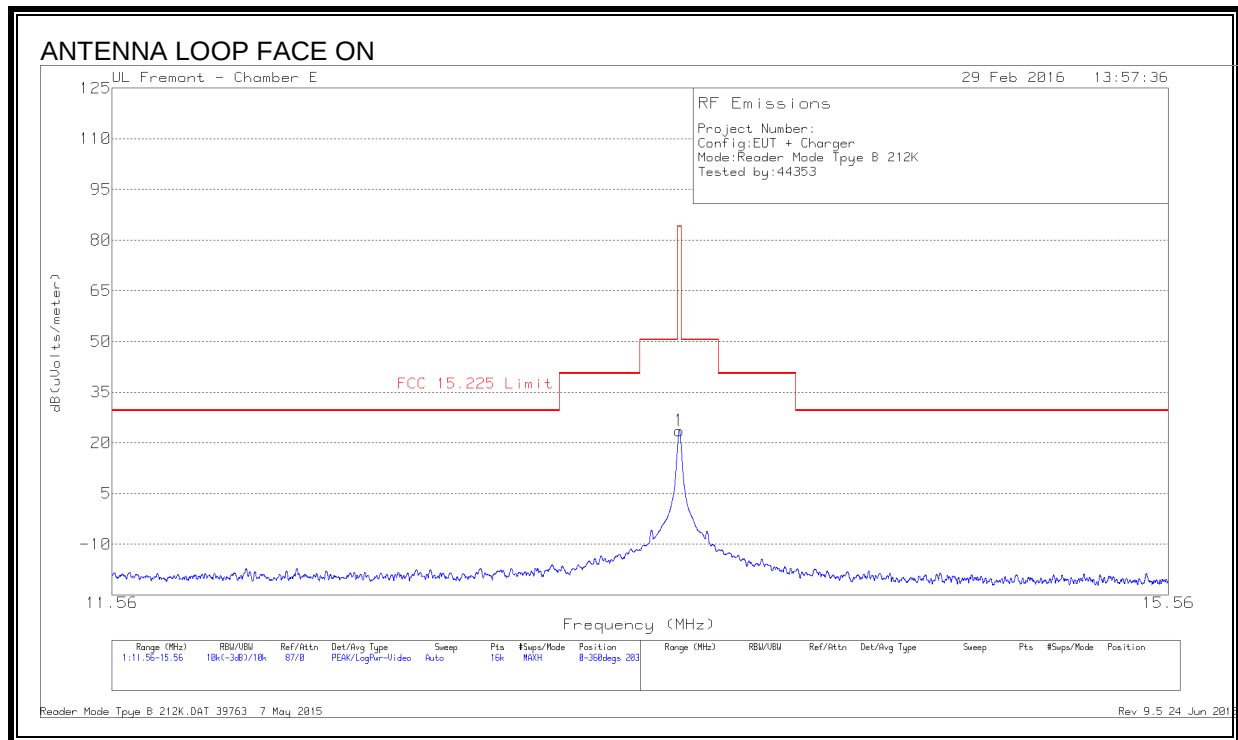


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	.03141	39.76	Pk	14.1	.1	-80	-26.04	57.66	-83.7	37.66	-63.7	0-360
1	13.3488	17.67	Pk	10.4	.6	-40	-11.33	29.54	-40.87	-	-	0-360
5	13.3488	16.47	Pk	10.4	.6	-40	-12.53	29.54	-42.07	-	-	0-360
2	13.77167	17.98	Pk	10.3	.6	-40	-11.12	29.54	-40.66	-	-	0-360
6	13.77324	16.81	Pk	10.3	.6	-40	-12.29	29.54	-41.83	-	-	0-360
3	21.45875	11.11	Pk	9.5	.8	-40	-18.59	29.54	-48.13	-	-	0-360

Pk - Peak detector

212Kbps FUNDAMENTAL

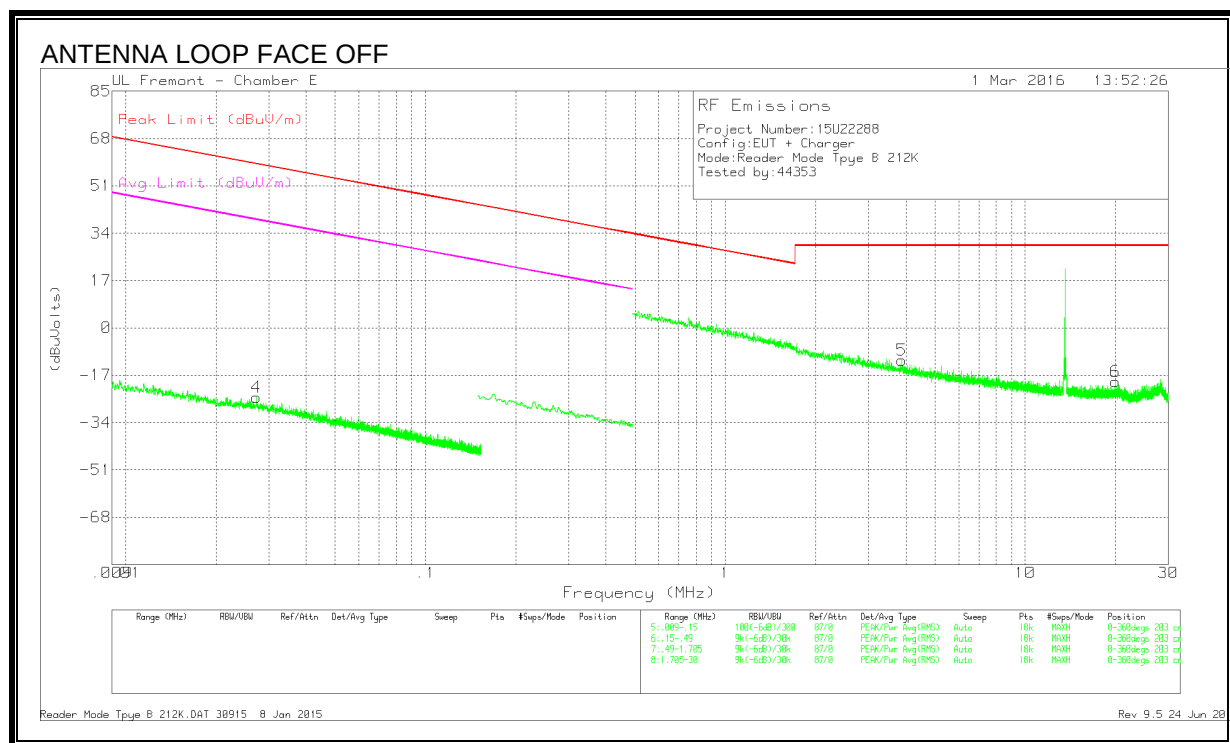
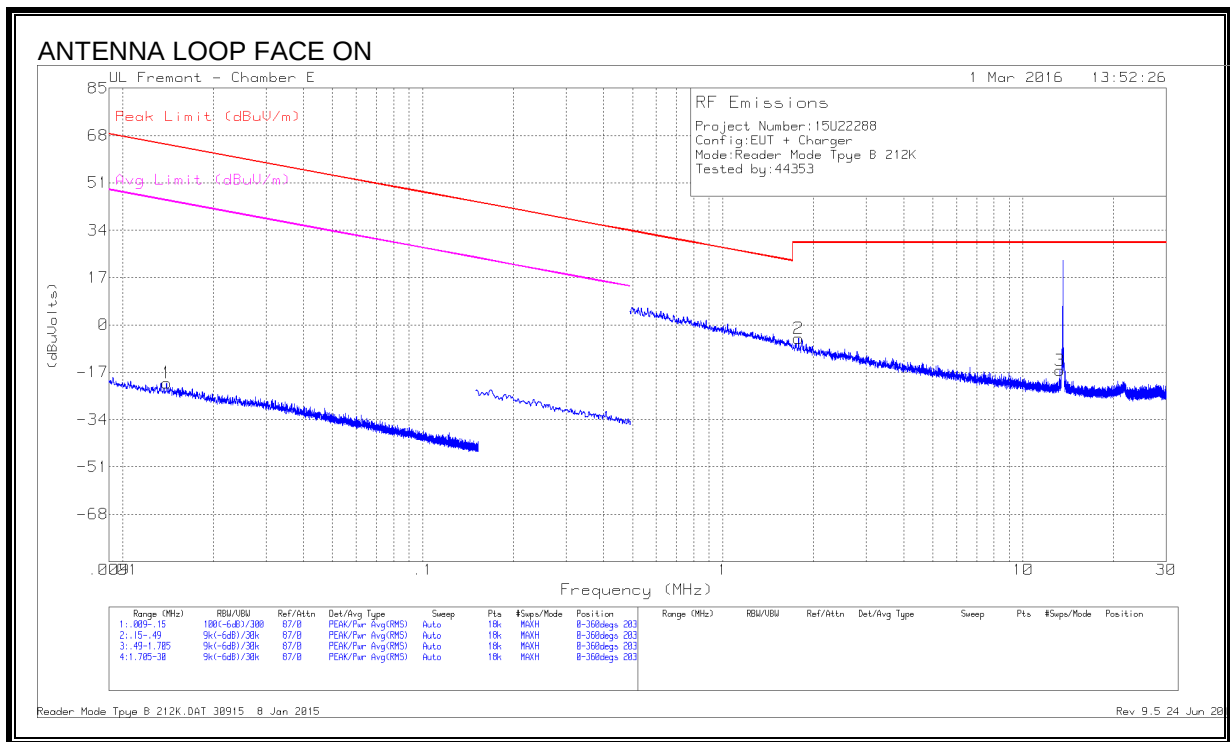


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
2	13.55867	50.24	Pk	10.4	.6	-40	21.24	84	-62.76	0-360
1	13.5615	52.64	Pk	10.4	.6	-40	23.64	84	-60.36	0-360

Pk - Peak detector

SPURIOUS EMISSION

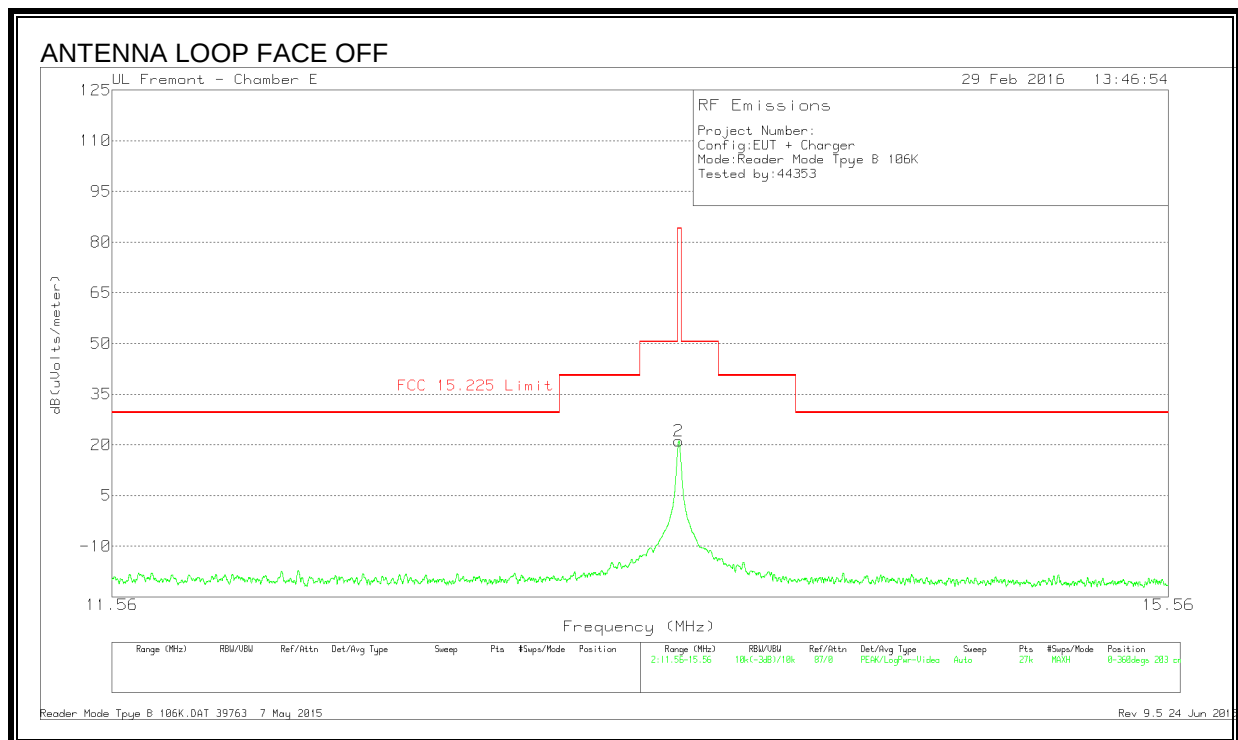
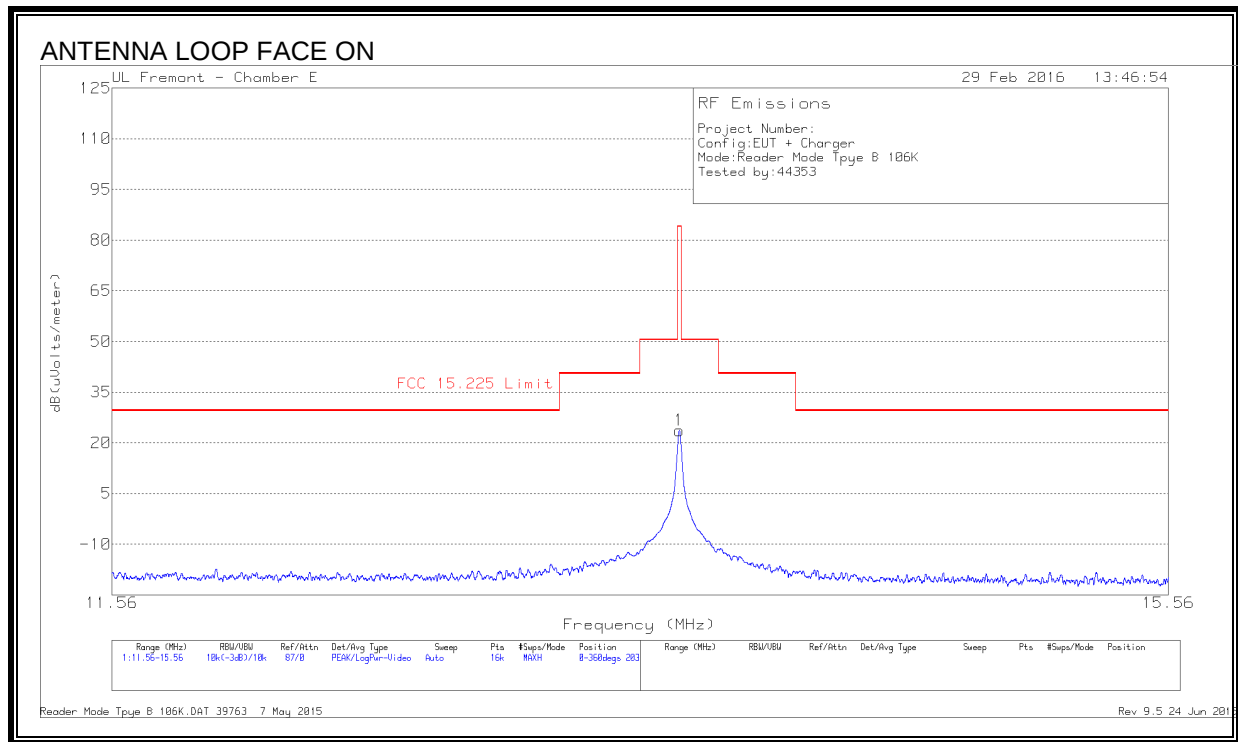


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.014	41.92	Pk	17.2	.1	-80	-20.78	64.68	-85.46	44.68	-65.46	0-360
4	.02726	40.5	Pk	14.4	.1	-80	-25	58.89	-83.89	38.89	-63.89	0-360
2	1.78596	24.61	Pk	10.4	.2	-40	-4.79	29.54	-34.33	-	-	0-360
5	3.87357	17.5	Pk	10.5	.3	-40	-11.7	29.54	-41.24	-	-	0-360
3	13.24348	12.54	Pk	10.4	.6	-40	-16.46	29.54	-46	-	-	0-360
6	19.985	10.14	Pk	9.8	.7	-40	-19.36	29.54	-48.9	-	-	0-360

Pk - Peak detector

106Kbps FUNDAMENTAL

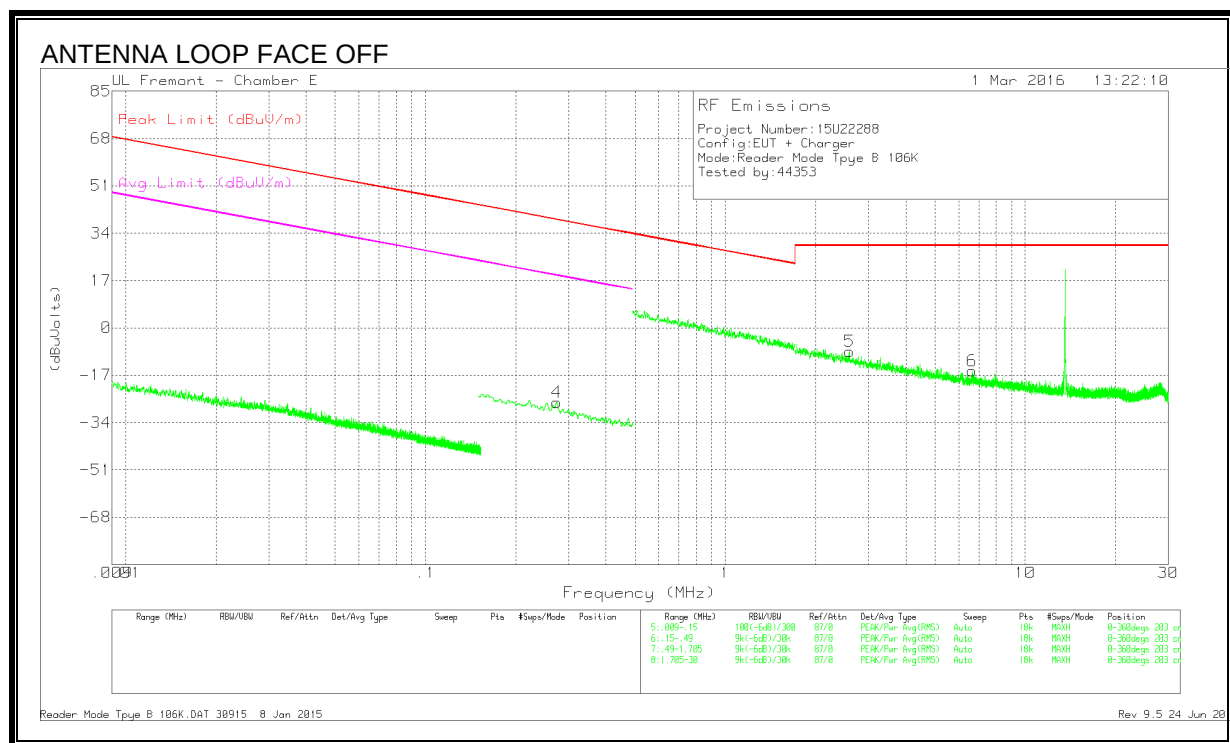
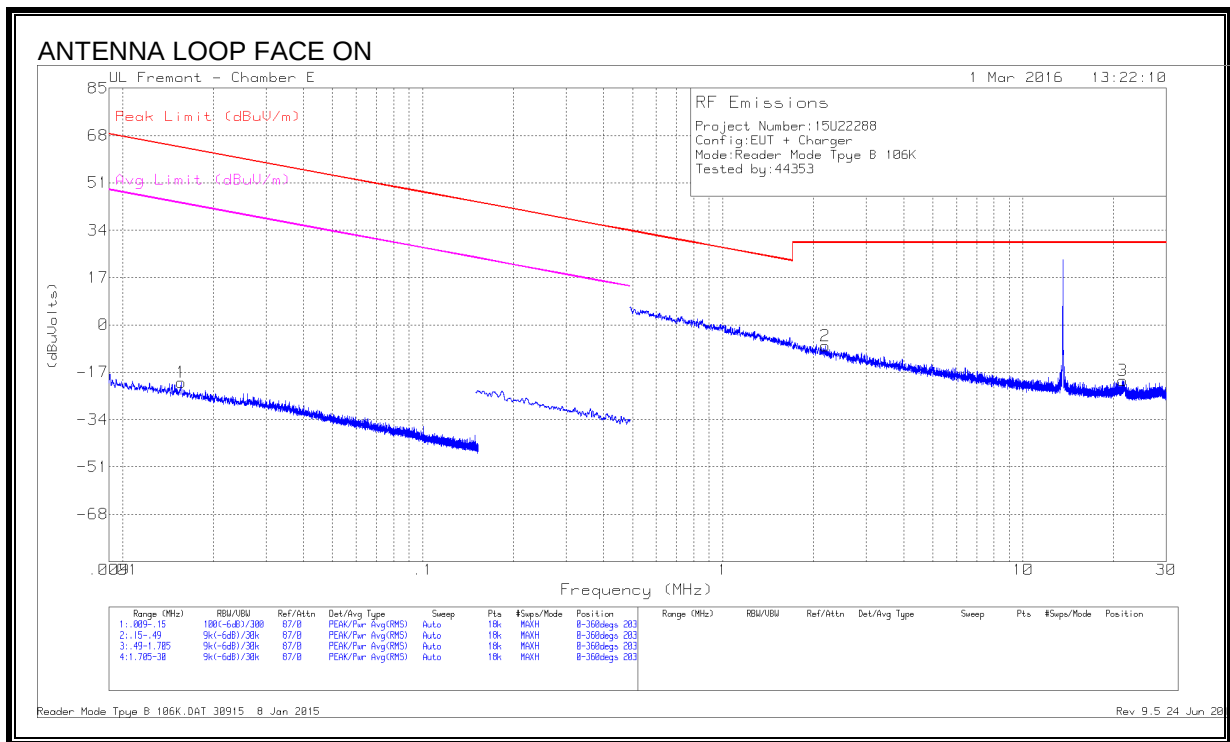


DATA

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
2	13.55867	50.1	Pk	10.4	.6	-40	21.1	84	-62.9	0-360
1	13.56038	52.65	Pk	10.4	.6	-40	23.65	84	-60.35	0-360

Pk - Peak detector

SPURIOUS EMISSION

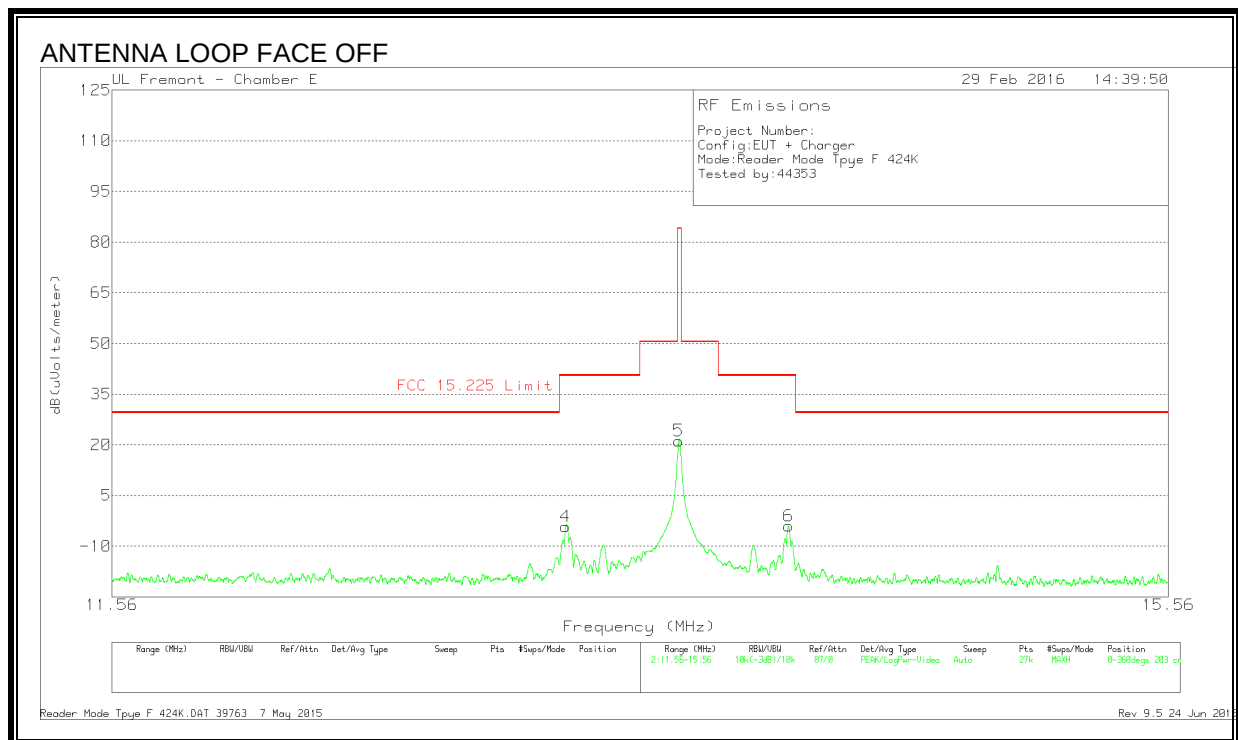
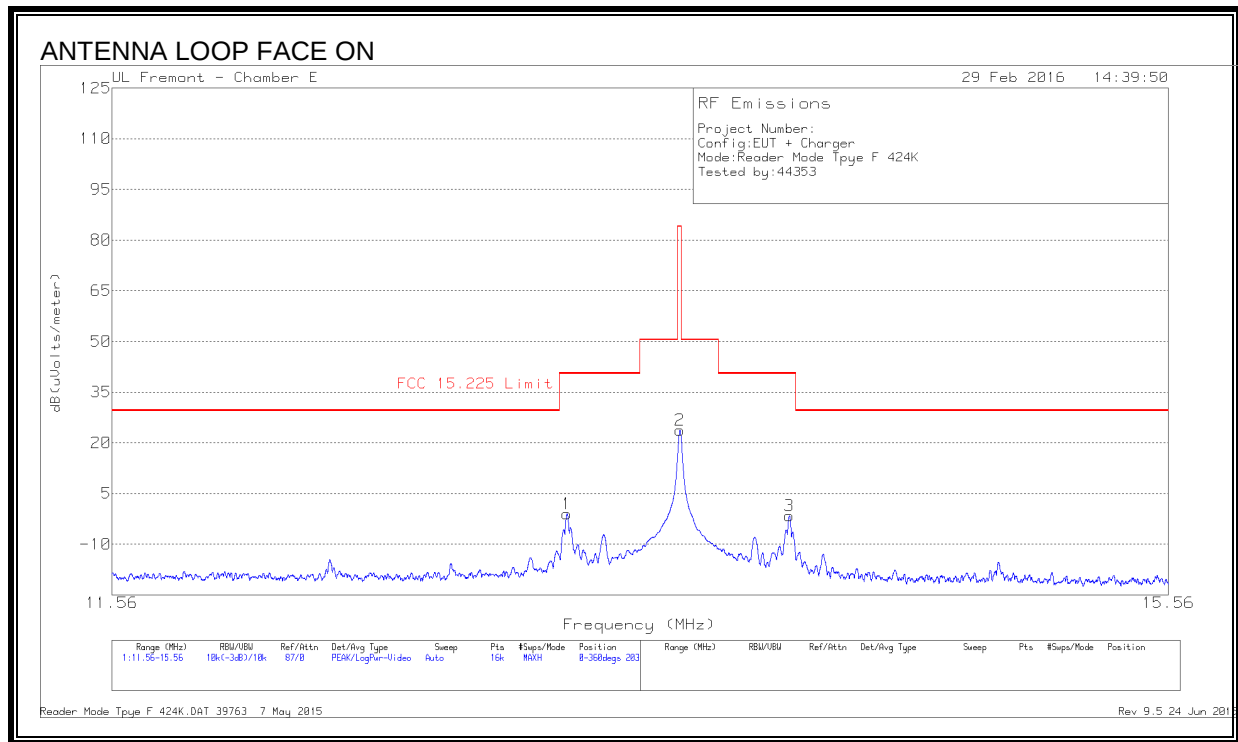


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.01566	42.68	Pk	16.5	.1	-80	-20.72	63.71	-84.43	43.71	-64.43	0-360
4	.27391	42.81	Pk	10.3	.1	-80	-26.79	38.85	-65.64	18.85	-45.64	0-360
2	2.18918	21.82	Pk	10.4	.3	-40	-7.48	29.54	-37.02	-	-	0-360
5	2.59161	20.9	Pk	10.4	.3	-40	-8.4	29.54	-37.94	-	-	0-360
6	6.65366	13.63	Pk	10.5	.4	-40	-15.47	29.54	-45.01	-	-	0-360
3	21.46347	9.68	Pk	9.5	.8	-40	-20.02	29.54	-49.56	-	-	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 30m	Corrected Reading dB(uVolts /meter)	FCC 15.225 Limit	Margin (dB)	Azimuth (Degs)
4	13.13413	24.87	Pk	10.4	.6	-40	-4.13	29.54	-33.67	0-360
1	13.13888	27.96	Pk	10.4	.6	-40	-1.04	29.54	-30.58	0-360
5	13.55874	50.22	Pk	10.4	.6	-40	21.22	84	-62.78	0-360
2	13.56288	52.76	Pk	10.4	.6	-40	23.76	84	-60.24	0-360
6	13.98313	25.03	Pk	10.3	.6	-40	-4.07	29.54	-33.61	0-360
3	13.98688	27.47	Pk	10.3	.6	-40	-1.63	29.54	-31.17	0-360

Pk - Peak detector