TEST DATA

Test Data Number: 3163125MIN-001
Project Number: 3163125

Testing performed on the
URH Prism Cell

To
47 CFR, Part 22

For
ADC Telecommunications Inc.

Test Performed by:
Intertek Testing Services NA, Inc.
7250 Hudson Blvd., Suite 100
Oakdale, MN 55128

Test Authorized by:
ADC Telecommunications Inc.
1187 Park Place
Shakopee, MN 55379

Prepared by: _____ Date: November 5, 2008
Uri Spector

Reviewed by: _____ Date: November 5, 2008
Simon Khazon

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1.0 DESCRIPTION OF THE SAMPLE (EUT)

Model:	URH Prism-Cell
Type of EUT:	Outdoor Repeater
Serial Number:	N/A
Company:	ADC Telecommunications Inc.
Customer:	Mr. Mark Miska
Address:	1187 Park Place Shakopee, MN 55379
Phone:	952-403-8340
Fax:	952-403-8858
Test Standards:	☐ EN 55022:2006, Class A ☐ EN 55011:1998 + A1:1999 + A2:2002, Group , Class ☐ 47 CFR, Part 15:2007, §15.107 and §15.109, Class A ☒ 47 CFR, Part 22:2007 ☐ 47 CFR, Part 24:2007 ☐ 47 CFR, Part 90:2007 ☐ EN 55014-1:2000 + A1:2001 + A2:2002 ☐ EN 61326-1:2006 ☐ Class for Radiated and Conducted Emissions ☐ EN 60601-1-2:2001 +A1:2006 ☐ Class Radiated and Conducted Emissions ☐ EN 61000-6-3:2007 ☐ EN 61000-6-4:2007 ☐ EN 61000-3-2:2006 ☐ EN 61000-3-3:1995 +A1:2001 +A2:2006 ☐ Other

2.0 TEST SUMMARY

Referring to the performance criteria and the operating mode during the tests specified in this report, the equipment complies with the requirements according to the following standards.

TEST STANDARD	TEST	RESULT
Part 22	Spurious Enclosure Radiated Emissions	Pass

2.1 Statement of the Measurement Uncertainty

Note: The measured result in this report is within the specification limits by more than the measurement uncertainty; the measured result indicates that the product tested complies with the specification limit.

The expanded uncertainty (k = 2) for radiated emissions from 30 to 1000 MHz has been determined to be: ±4 dB at 10m and ±5.4 dB at 3m

The expanded uncertainty (k = 2) for conducted emissions from 150 kHz to 30 MHz has been determined to be:
±2.6 dB

General notes:
1. Test was performed with the EUT tuned to the low frequency (869MHz), middle frequency (881.5MHz), and upper frequency (894MHz) of the operating band.
Testing was performed in frequency range from 30MHz to 10GHz. EUT tuned frequencies 869MHz, 881.5MHz, and 894MHz were excluded form the table.
2. The Spurious Radiated Power limits of -13dBm was correlated with field strength reference level of 82.2dBµV/m during field strength measurements at 3m measurement distance

3.0 TEST RESULTS

3.1 Spurious Radiated Emissions

Tables 1 and 2 show detected Radiated Emissions.
Graphs 1 to 12 show the EUT peak Radiated Emissions.
No emissions were chosen for substitution measurements as the maximum emission is more than 20dB below the reference limit.

Radiated Emissions from 30MHz to 1GHz **Date:** 11-05-2008

Company: ADC Telecommunications Inc.
Model: URH Prism-Cell
Test Engineer: Uri Spector
Standard: FCC Part 22
Test Site: 3m Anechoic Chamber, 3m measurement distance
Note: The table shows the worst case radiated emissions
Measurements were taken using a Peak detector

Table # 1

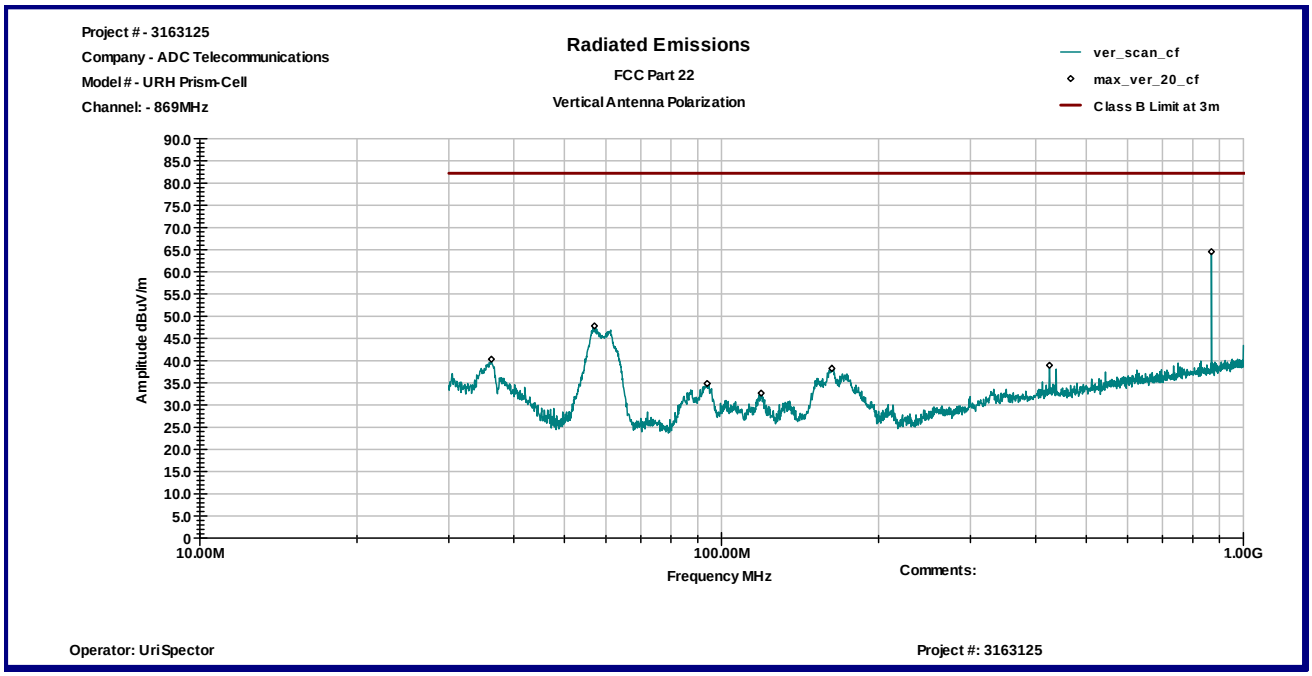
Frequency	Ant. Polarity	Peak Reading dBµV	Ant.Factor dB1/m	Total at 3m dBµV/m	QP Limit dBµV/m	Margin dB
	Operating Frequency 869MHz					
36.234 MHz	V	23.1	17.2	40.3	82.2	-41.9
57.083 MHz	V	39.7	8.2	47.8	82.2	-34.4
93.882 MHz	V	24.1	10.8	34.8	82.2	-47.4
119.1 MHz	V	18.9	13.8	32.7	82.2	-49.6
425.37 MHz	V	19.4	19.5	39.0	82.2	-43.3
30.139 MHz	H	15.0	20.5	35.5	82.2	-46.7
399.05 MHz	H	25.3	18.5	43.7	82.2	-38.5
437.84 MHz	H	26.6	19.4	46.0	82.2	-36.2
829.53 MHz	H	22.2	24.0	46.2	82.2	-36.0
	Operating Frequency 881.5MHz					
36.372 MHz	V	23.6	17.2	40.8	82.2	-41.4
57.083 MHz	V	39.2	8.2	47.3	82.2	-34.9
162.72 MHz	V	26.7	11.9	38.7	82.2	-43.6
425.37 MHz	V	19.4	19.5	38.9	82.2	-43.3
60.754 MHz	H	27.8	8.0	35.7	82.2	-46.5
399.05 MHz	H	24.9	18.5	43.4	82.2	-38.8
437.84 MHz	H	26.3	19.4	45.7	82.2	-36.5
829.53 MHz	H	22.7	24.0	46.6	82.2	-35.6
750.31 MHz	H	25.7	23.7	49.3	82.2	-32.9
921.49 MHz	H	20.9	25.4	46.2	82.2	-36.0
	Operating Frequency 894MHz					
36.165 MHz	V	22.7	17.3	39.9	82.2	-42.3
57.222 MHz	V	39.3	8.1	47.4	82.2	-34.8
162.72 MHz	V	26.4	11.9	38.3	82.2	-43.9
437.84 MHz	V	18.9	19.4	38.3	82.2	-43.9
61.17 MHz	H	28.0	8.0	35.9	82.2	-46.3
240.2 MHz	H	25.5	13.4	38.9	82.2	-43.3
399.05 MHz	H	24.6	18.5	43.0	82.2	-39.2
437.84 MHz	H	26.7	19.4	46.1	82.2	-36.1
829.53 MHz	H	22.6	24.0	46.6	82.2	-35.6

Radiated Emissions from 1GHz to 10GHz **Date:** 11-05-2008

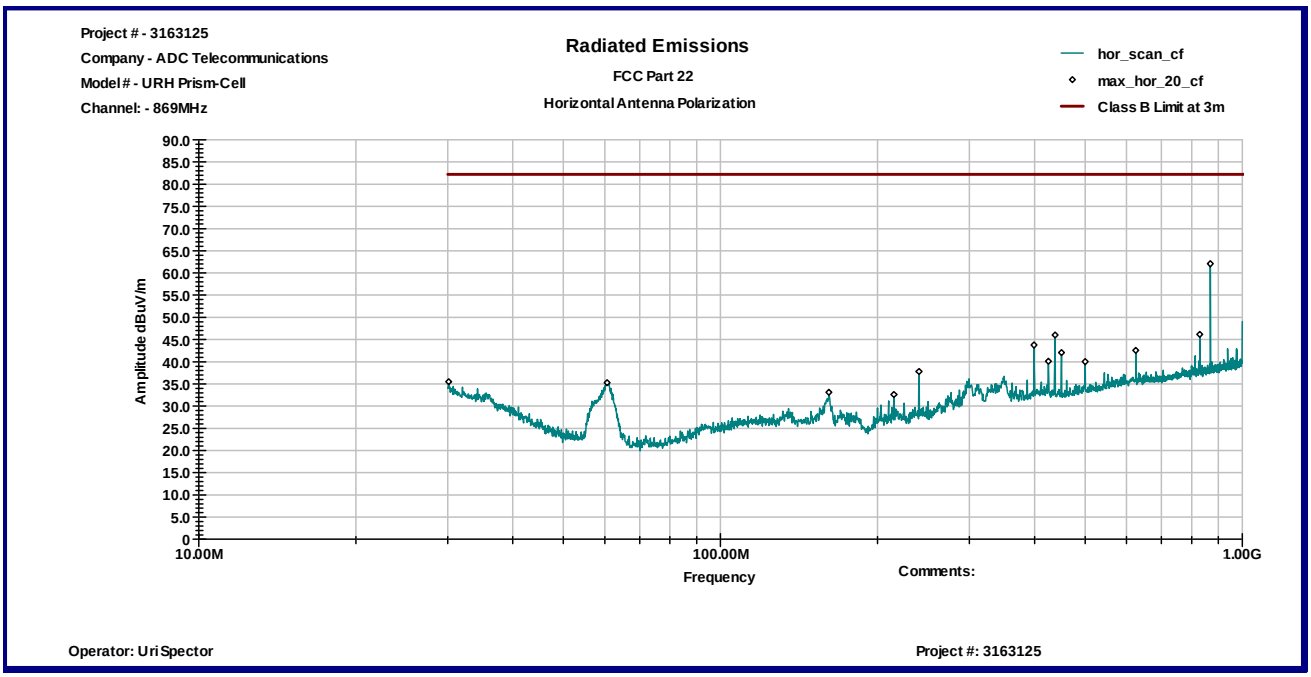
Company: ADC Telecommunications Inc.
Model: URH Prism-Cell
Test Engineer: Uri Spector
Special Info:
Standard: FCC Part 22
Test Site: 3m Anechoic Chamber, 3m measurement distance
Note: The table shows the worst case radiated emissions
All measurements were taken using a Peak detector

Table # 2

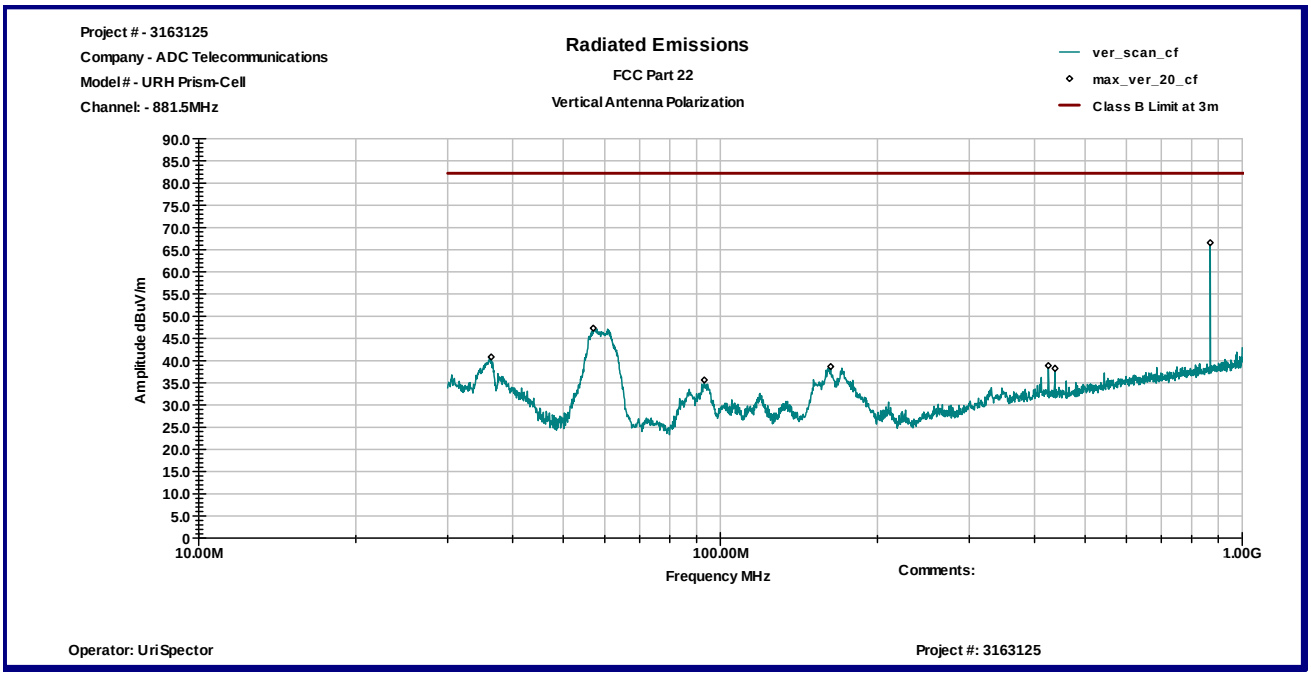
Frequency MHz	Antenna Polarity	Reading dBµV	Total C.F. dB1/m	Pre-Amp. Gain (dB)	Total at 3m dBµV/m	QP Limit dBµV/m	Margin dB
		Operating Frequency 869 MHz					
1.2475 GHz	V	49.0	27.5	41.2	35.2	82.2	-47.0
1.4725 GHz	V	48.3	28.5	41.1	35.7	82.2	-46.5
1.8415 GHz	V	52.1	30.3	40.5	41.9	82.2	-40.4
9.181 GHz	V	37.6	46.2	38.8	45.0	82.2	-37.2
1.2475 GHz	H	56.7	27.5	41.2	42.9	82.2	-39.3
1.6615 GHz	H	55.8	29.4	40.8	44.4	82.2	-37.8
1.8415 GHz	H	59.7	30.3	40.5	49.4	82.2	-32.8
2.5795 GHz	H	51.5	33.0	39.8	44.7	82.2	-37.5
9.937 GHz	H	36.1	47.0	38.6	44.5	82.2	-37.7
		Operating Frequency 881.5 MHz					
1.2475 GHz	V	48.3	27.5	41.2	34.6	82.2	-47.6
1.6255 GHz	V	47.6	29.2	40.9	35.9	82.2	-46.3
1.8415 GHz	V	51.5	30.3	40.5	41.2	82.2	-41.0
9.7165 GHz	V	36.3	46.8	38.6	44.5	82.2	-37.7
1.2475 GHz	H	56.7	27.5	41.2	42.9	82.2	-39.3
1.4725 GHz	H	54.9	28.5	41.1	42.3	82.2	-39.9
1.6615 GHz	H	55.9	29.4	40.8	44.5	82.2	-37.8
2.2105 GHz	H	50.6	31.8	40.0	42.3	82.2	-39.9
2.5795 GHz	H	51.4	33.0	39.8	44.6	82.2	-37.6
9.712 GHz	H	36.1	46.8	38.6	44.4	82.2	-37.9
		Operating Frequency 894 MHz					
1.2475 GHz	V	48.2	27.5	41.2	34.4	82.2	-47.8
1.8415 GHz	V	51.7	30.3	40.5	41.4	82.2	-40.8
1.8775 GHz	V	47.9	30.4	40.5	37.9	82.2	-44.3
9.946 GHz	V	36.1	47.0	38.6	44.5	82.2	-37.7
1.2475 GHz	H	55.8	27.5	41.2	42.0	82.2	-40.2
1.6615 GHz	H	54.9	29.4	40.8	43.5	82.2	-38.7
1.8415 GHz	H	58.6	30.3	40.5	48.4	82.2	-33.9
2.5795 GHz	H	51.2	33.0	39.8	44.4	82.2	-37.8
9.6085 GHz	H	37.4	46.7	38.6	45.5	82.2	-36.7



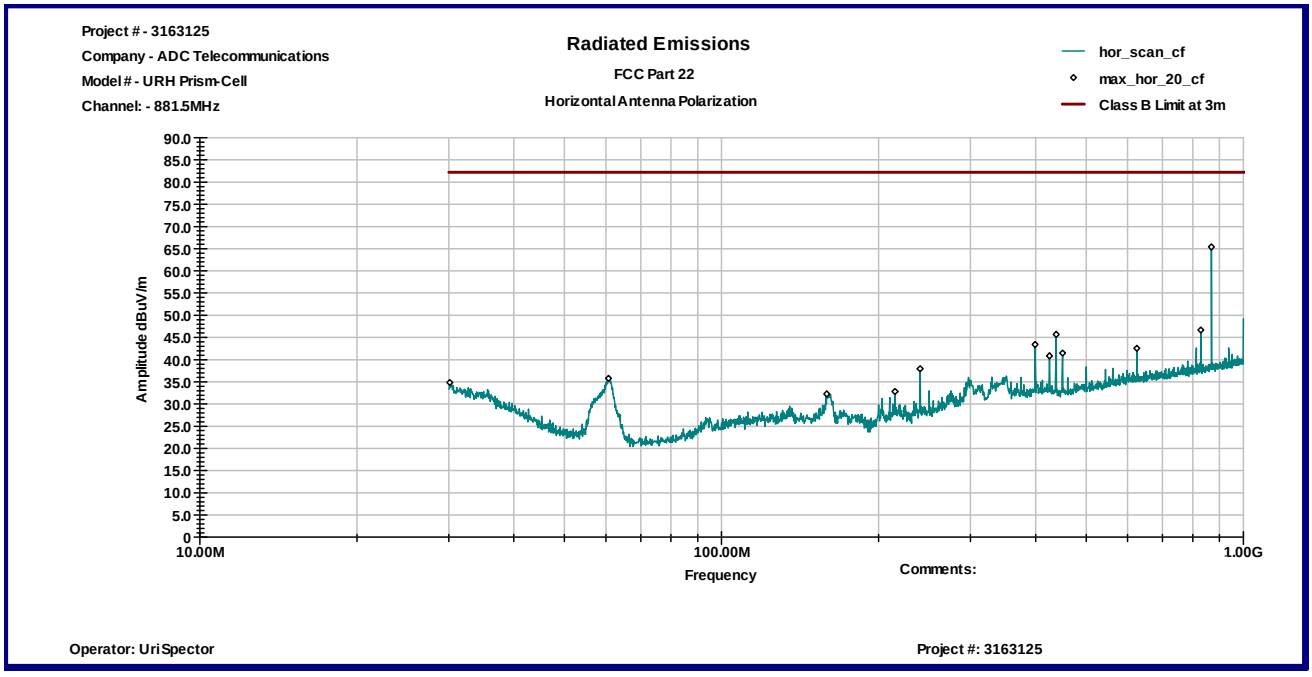
Graph 1



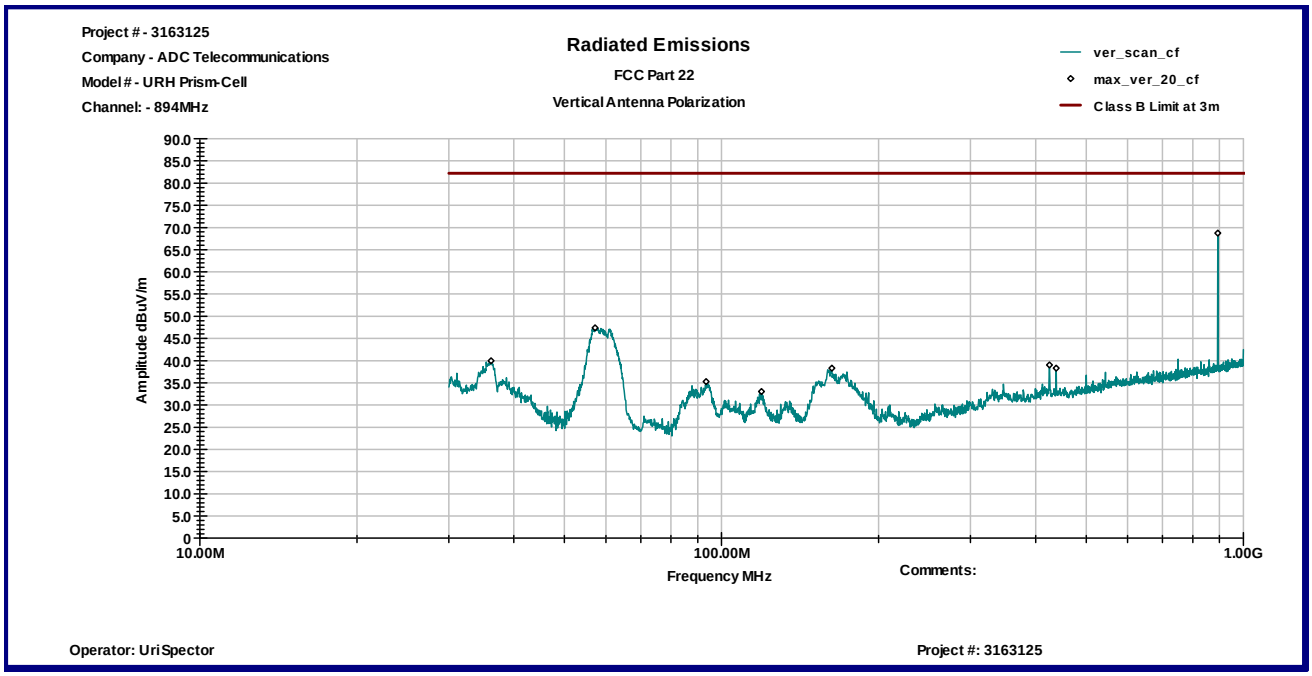
Graph 2



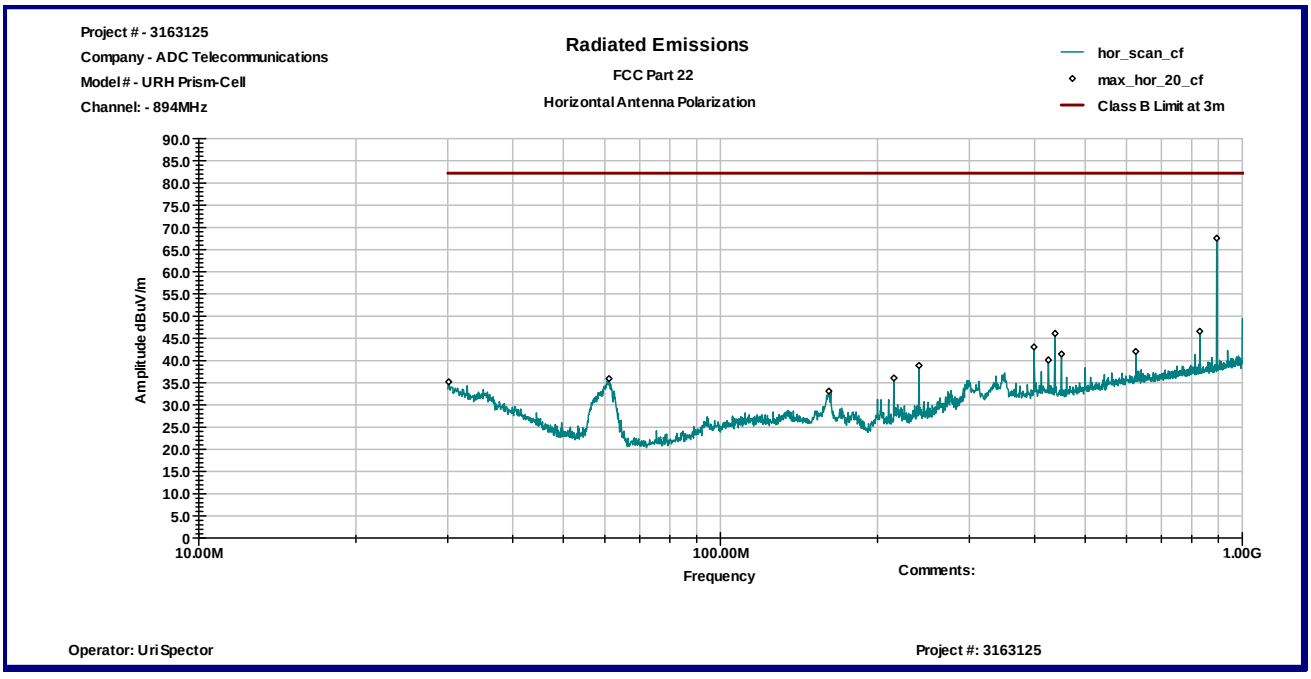
Graph 3



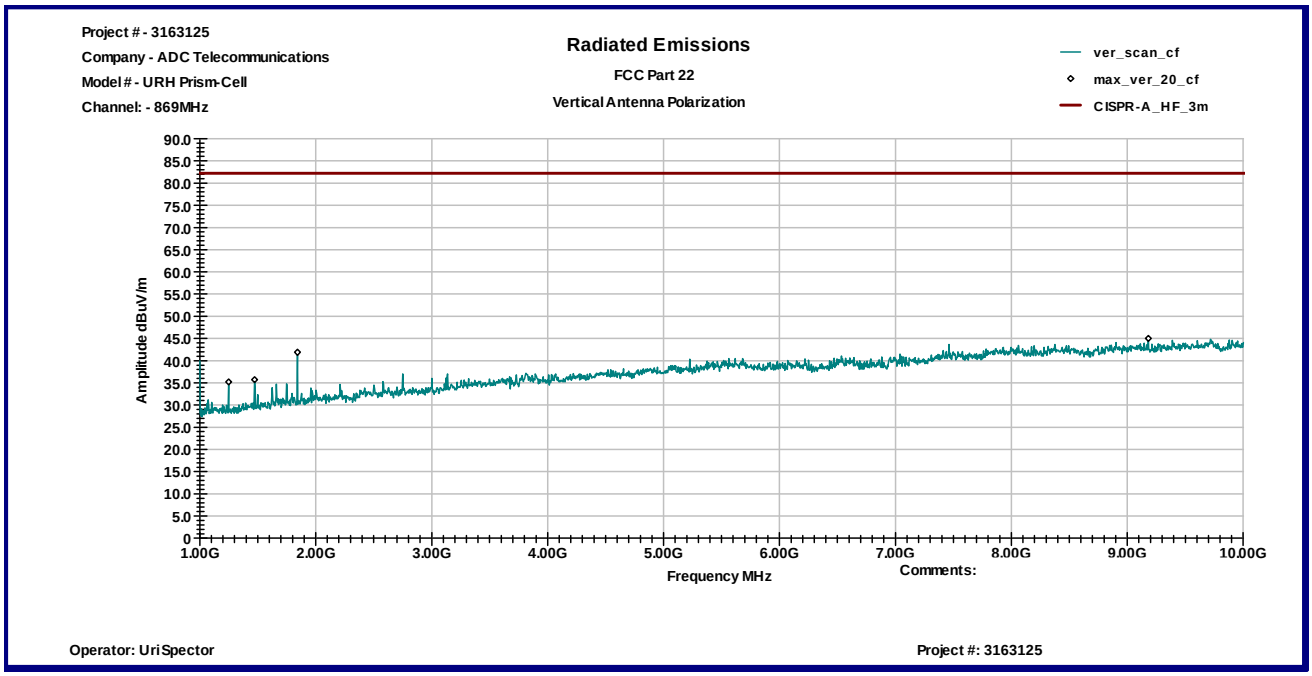
Graph 4



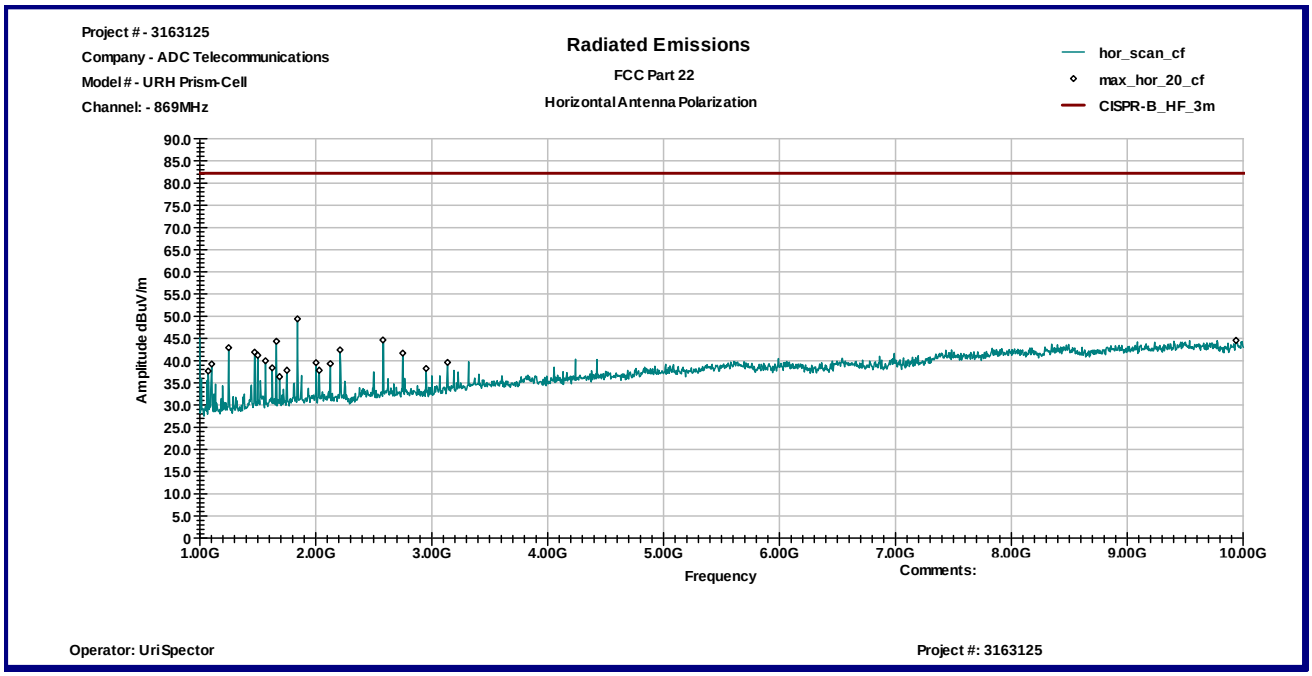
Graph 5



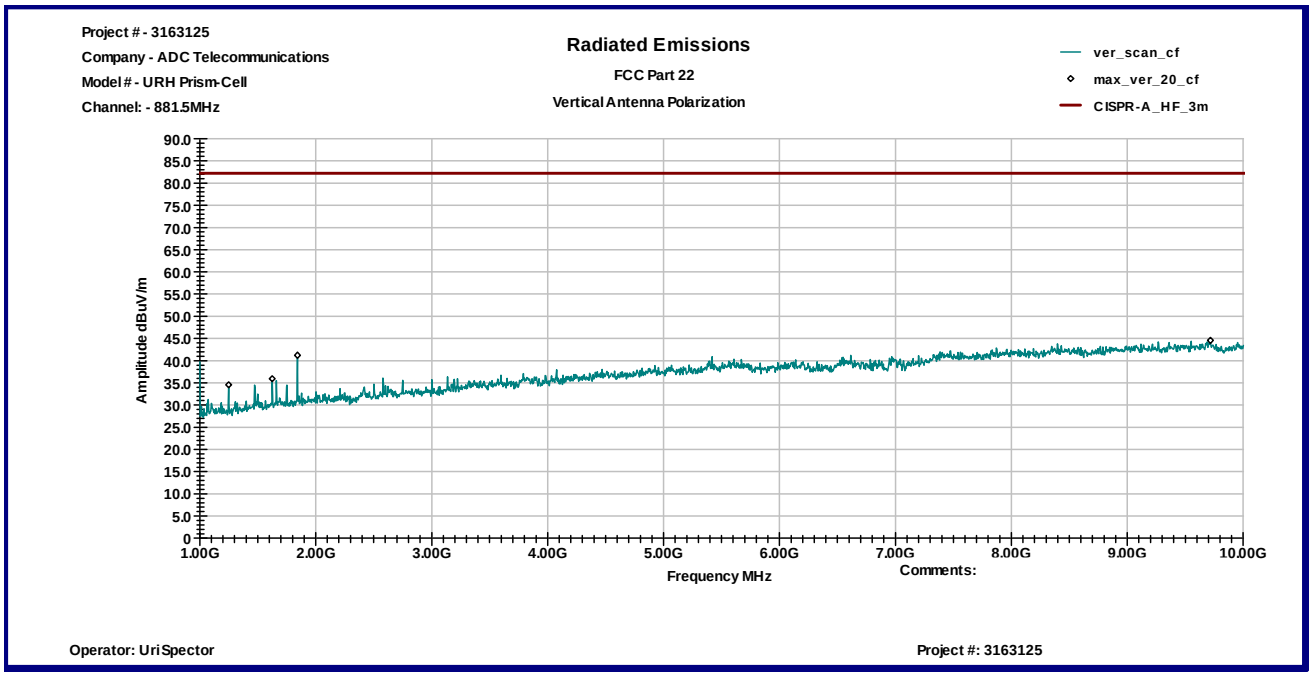
Graph 6



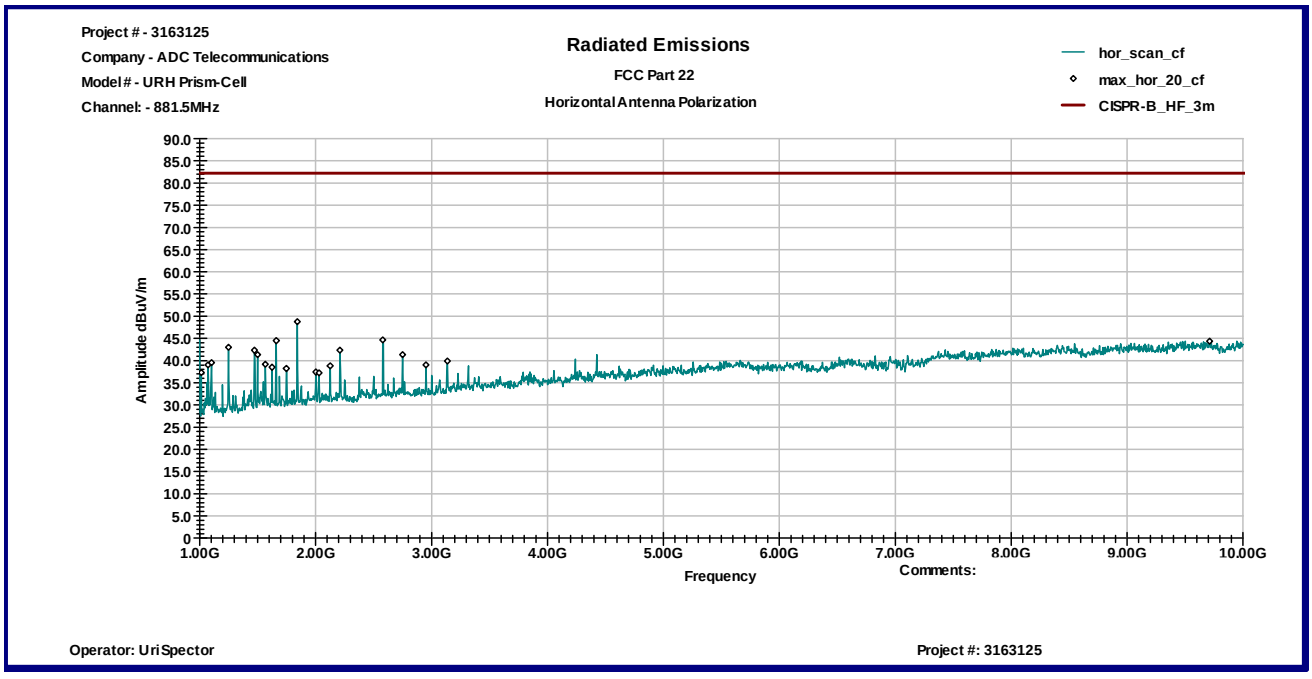
Graph 7



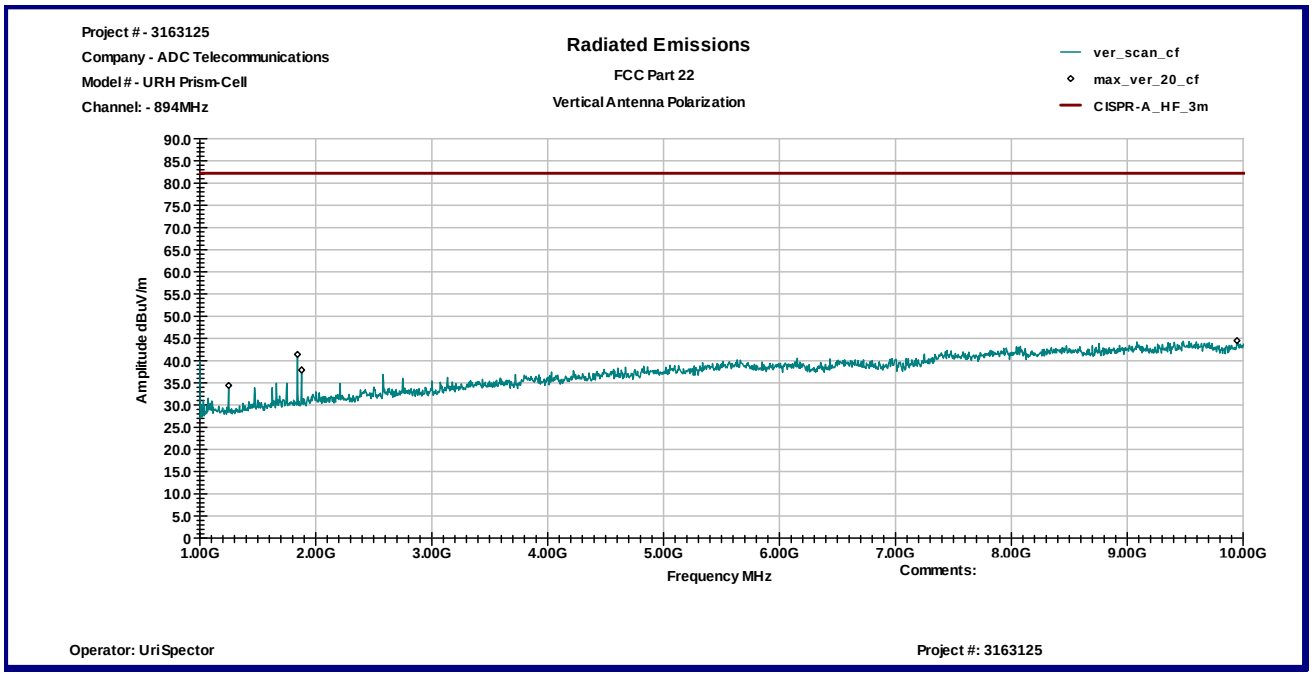
Graph 8



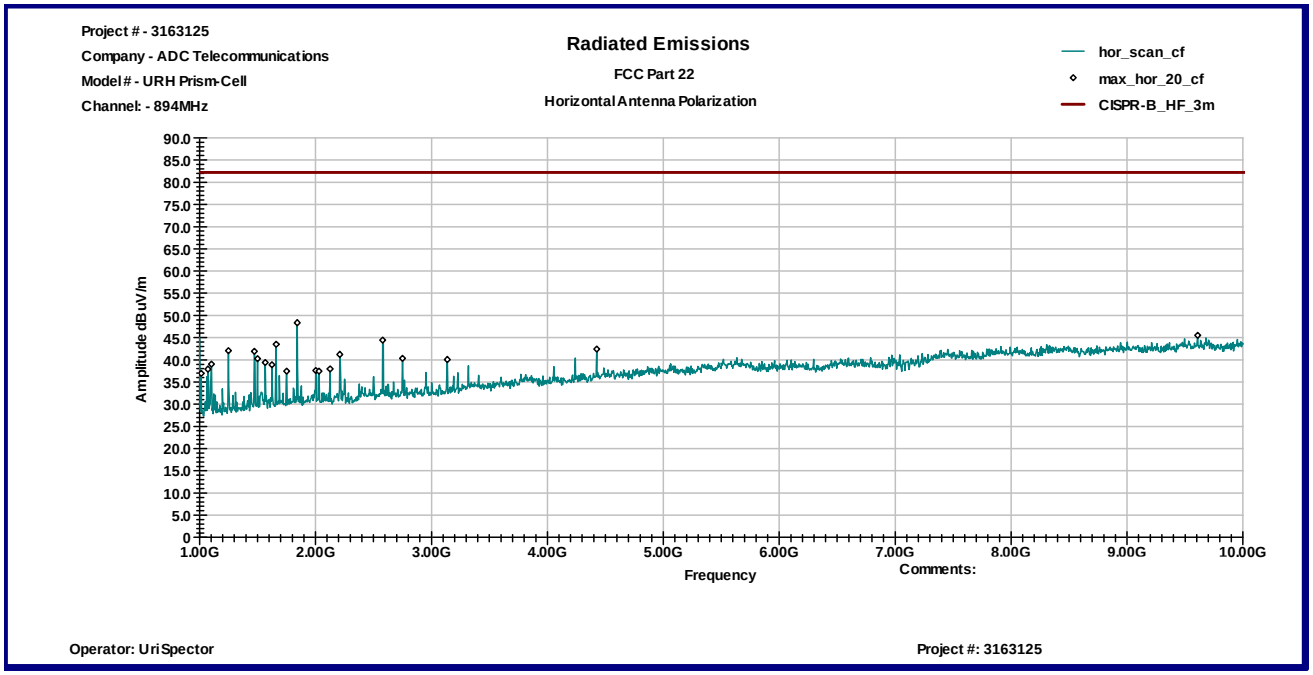
Graph 9



Graph 10



Graph 11



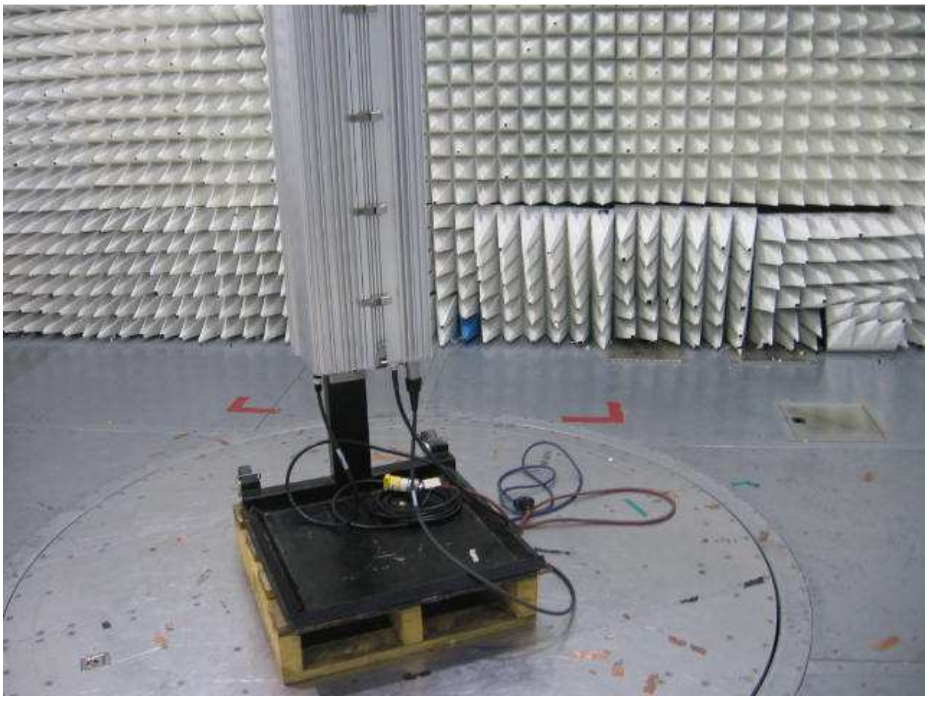
Graph 12

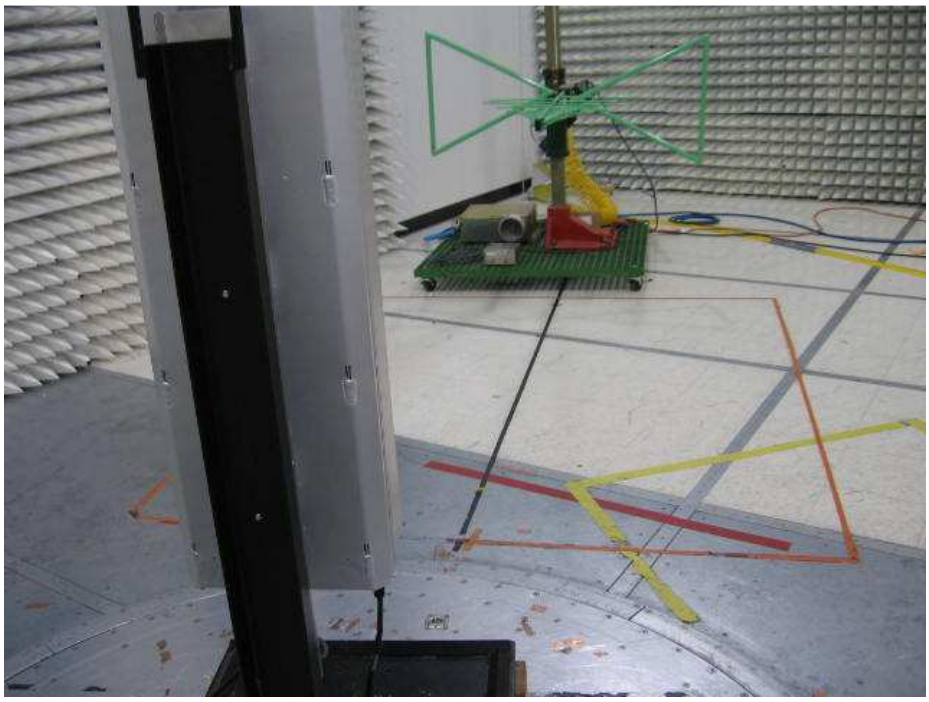
3.2 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 °C
Humidity:	30-60 %
Atmospheric pressure:	86-106 kPa

4.0 PHOTOS





Test Setup Photos

5.0 TEST EQUIPMENT

DESCRIPTION	MANUFACTURER	MODEL	SERIAL NO.	CAL DUE	USED
Spectrum Analyzer	R & S	FSP 40	100024	08/22/2009	☒
Spectrum Analyzer	R & S	ESCI	100358	05/07/2009	☒
Bicono-Log Antenna	Schaffner-Chase	CBL 6112 B	2630	09/26/2009	☒
Horn Antenna	EMCO	3115	9507-4513	02/13/2009	☒
Waveguide Horn Antenna	EMCO	3116	9904-2423	07/20/2009	☐
Pre-Amplifier	MITEQ	AMF-5D-00501800-28-13P	1122951	04/28/2009	☒
Pre-Amplifier	MITEQ	AMF-6F-16002600-25-10P	1222383	01/17/2009	☐
System	TILE! Instrument Control		Ver. 3.4.K.29	VBU	☒