FCC PART 15, SUBPART B and C
TEST REPORT

for

ACCESS 8

MODEL: 144858

Prepared for

CROWN EQUIPMENT CORPORATION
44 SOUTH WASHINGTON STREET
NEW BREMEN, OHIO 45869

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

JAMES ROSS

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DATE: JUNE 24, 2010

	REPORT	APPENDICES					TOTAL
	BODY	*A*	*B*	*C*	*D*	*E*	
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GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Device Tested:	Access 8 Model: 144858 S/N: N/A
Product Description:	See Expository Statement
Modifications:	The EUT was not modified in order to meet the specifications.
Customer:	Crown Equipment Corporation 44 South Washington Street New Bremen, Ohio 45869
Test Date(s):	May 20 and 21, 2010
Test Specifications:	EMI requirements CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249
Test Procedure:	ANSI C63.4: 2003
Test Deviations:	The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	Complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.207 Highest reading in relation to spec limit: 36.87 dBuV @ 0.621 MHz (*U = 0.89 dB)
2	Radiated RF Emissions 10 kHz – 25000 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.249 Highest reading in relation to spec limit: 49.39 (Avg) dBuV @ 2483.86 MHz (*Uc = 5.34 dB)
3	Radiated RF Emissions 10 kHz – 25000 MHz (Digital and Receiver Portion)	Complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B Highest reading in relation to spec limit: 34.35 dBuV @ 940.910 MHz (*Uc = 3.59 dB)

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Access 8, Model: 144858. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2003. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.

Note: For the unintentional portion of the test, the EUT was within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Crown Equipment Corporation

Richard E Spencer	Group Leader – Test Engineering
Vern Siefring	Engineering Department
Timothy Quellhorst	Vice President Engineering
Joe Stape	Test Engineer

Compatible Electronics Inc.

Kyle Fujimoto	Test Engineer
James Ross	Test Engineer

2.4 Date Test Sample was Received

The test sample was received prior to the date of testing.

2.5 Disposition of the Test Sample

The test sample has not been returned to Crown Equipment Corporation as of the date of this report.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
N/A	Not Applicable

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
ANSI C63.4 2003	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - EMI

The Access 8, Model: 144858 (EUT) was connected to three solenoids, an AC Adapter and a laptop via a serial to USB adapter. The laptop was also connected to its AC Adapter. The laptop was palced 10-meters away from the test site in a shielded enclosure. The EUT was continuously transmitting and receiving while sending updates to the laptop.

The EUT has separate antenna ports. Only antenna #0 can be used to transmit while both antennas can be used to receive.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in these modes of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.

4.1.1 Cable Construction and Termination

Cable 1

This is a 3-meter unshielded cable connecting the EUT to 3 solenoids, cable #2, and cable #3. The cable has a 6-pin connector at the cable 2 end. The cable is also hard wired to the EUT, 3 solenoids, and cable #3. The cable is bundled to a length of 1-meter.

Cable 2

This is a 1-meter unshielded cable connecting cable #1 to cable #4. The cable has a 6-pin connector at the cable #4 and is hard wired into cable #1.

Cable 3

This is a 2-meter unshielded cable connecting cable #1 to the AC Adapter. The cable is hard wired at each end.

Cable 4

This is a 10-meter unshielded cable connecting cable #2 to the USB to Serial Adapter. The cable has a 6-poin connector at the cable #2 end and a D-9 pin metallic connector at the USB to Serial Adapter end.

Cable 5

This is a 50-centimeter braid shielded cable connecting the USB to Serial Adapter to the laptop. The cable has a USB type 'A' connector at the laptop end and is hard wired into the USB to Serial Adapter.

Cable 6

This is a 2-meter unshielded cable connecting the laptop to the AC Adapter. The cable has a 4 pin power connector at the laptop end and is hard wired into the AC Adapter.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
ACCESS 8 (EUT)	CROWN EQUIPMENT CORPORATION	144858	N/A	YGP144858
LAPTOP	TOSHIBA	A40-S161	54014932H	DoC
AC ADATPER FOR LAPTOP	TOSHIBA	PA3237U-1ACA	04397975	N/A
USB TO SERIAL ADAPTER	PEAK	N/A	00202105212	N/A
(3) SOLENOIDS	HYDRAFORCE, INC.	N/A	N/A	N/A
ITE POWER SUPPLY (FOR EUT)	N/A	WND-1807-A	9912	N/A

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 29, 2009	May 29, 2010
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	May 29, 2009	May 29, 2010
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	May 29, 2009	May 29, 2010
EMI Receiver	Rohde & Schwarz	ESIB40	100194	September 17, 2008	Sept. 17, 2010
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Biconical Antenna	Com Power	AB-900	15250	February 16, 2010	Feb. 16, 2011
Log Periodic Antenna	Com Power	AL-100	16060	June 15, 2009	June 15, 2010
Preamplifier	Com-Power	PA-102	1017	January 6, 2010	Jan. 6, 2011
Loop Antenna	Com-Power	AL-130	17089	September 29, 2008	Sept. 29, 2010
Horn Antenna	Com-Power	AH-118	071175	March 18, 2010	March 18, 2012
Microwave Preamplifier	Com-Power	PA-122	181921	March 10, 2010	March 10, 2011
Horn Antenna	Com-Power	AH826	71957	N/A	N/A
Microwave Preamplifier	Com-Power	PA-840	711013	March 11, 2010	March 11, 2011
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.

7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 RF Emissions

7.1.1 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4: 2003. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.207.

7.1.2 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer and EMI Receiver were used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-102 was used for frequencies from 30 MHz to 1 GHz, the Com Power Microwave Preamplifier Model: PA-122 was used for frequencies from 1 GHz to 18 GHz, and the Com Power Microwave Amplifier Model: PA-840 was used for frequencies above 18 GHz. The spectrum analyzer and EMI Receiver were used in the peak detect mode with the "Max Hold" feature activated. In this mode, the measuring receiver records the highest measured reading over all the sweeps.

The quasi-peak adapter was used only for those readings which are marked accordingly on the data sheets.

The frequencies above 1 GHz were averaged manually by narrowing the video filter down to 10 Hz and putting the sweep time on AUTO on the spectrum analyzer to keep the amplitude reading calibrated.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 25 GHz	1 MHz	Horn Antenna

Radiated Emissions (Spurious and Harmonics) Test (con't)

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4: 2003. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT by the Radiated Emission Manual Test software. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3-meter test distance to obtain the final test data.

Test Results:

The EUT complies with the **Class B** Limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.249.

8. CONCLUSIONS

The Access 8 Model: 144858, as tested, meets all of the specification limits defined in CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.

APPENDIX A

LABORATORY RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.249 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Access 8
Model: 144858
S/N: N/A

No additional models were covered under this report.

APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

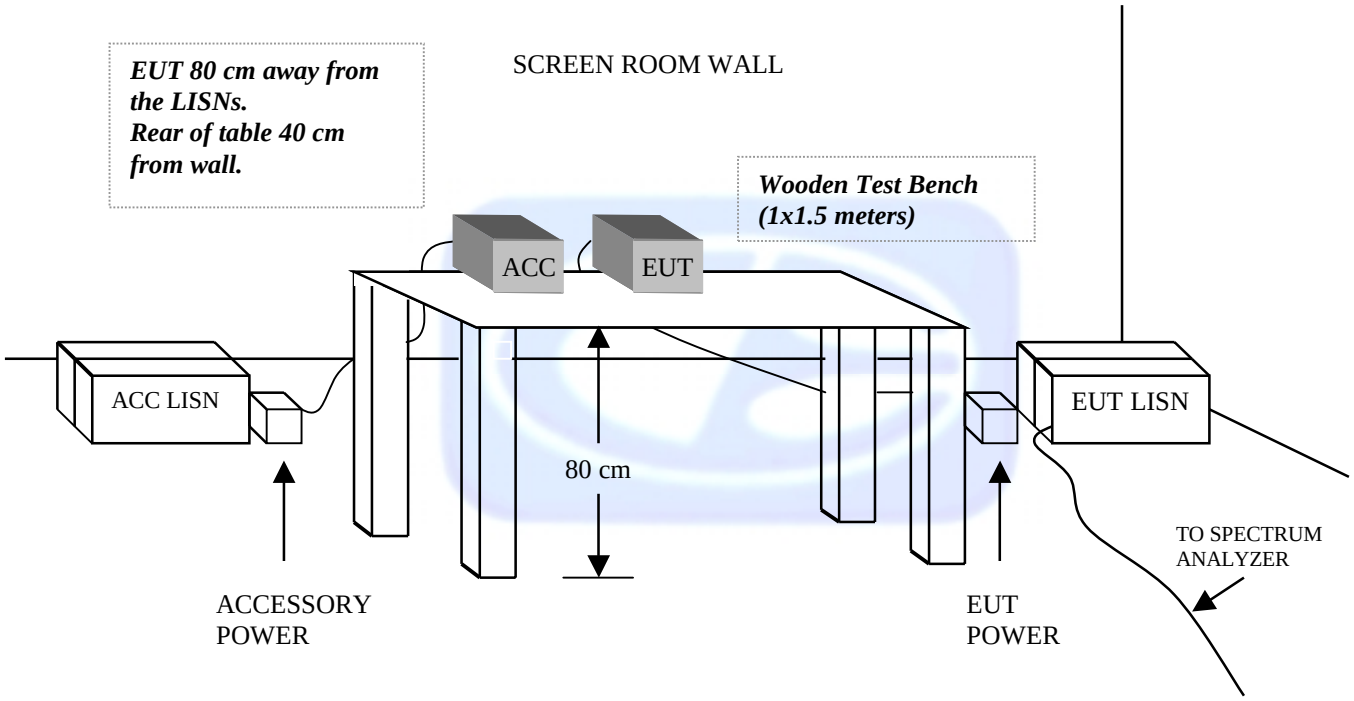
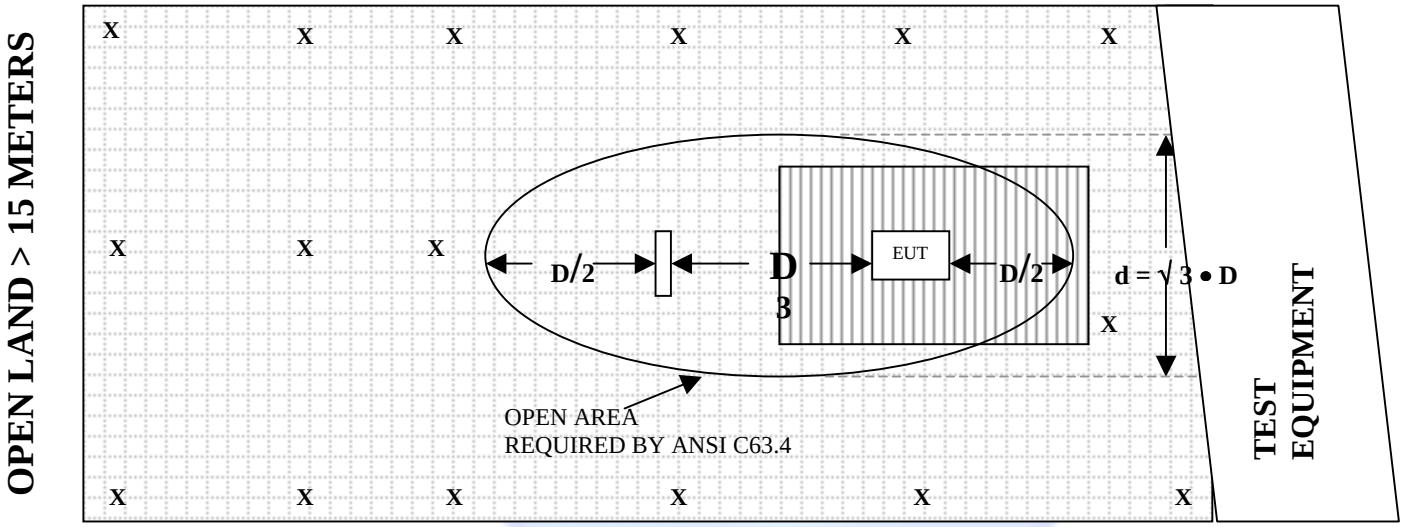


FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

X = GROUND RODS	= GROUND SCREEN
D = TEST DISTANCE (meters)	= WOOD COVER

COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: FEBRUARY 16, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	13.5	100	11.1
35	10.4	120	13.1
40	10.3	140	12.2
45	9.8	160	13.6
50	10.6	180	15.9
60	9.5	200	16.4
70	8.4	250	15.1
80	5.5	275	17.7
90	7.3	300	19.5

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: JUNE 15, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	14.2	700	20.1
400	15.9	800	21.2
500	17.1	900	21.3
600	18.8	1000	22.3

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: MARCH 18, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	22.2	10.0	39.8
1.5	24.2	10.5	40.2
2.0	27.2	11.0	39.7
2.5	27.8	11.5	39.9
3.0	30.5	12.0	41.7
3.5	30.9	12.5	42.7
4.0	31.9	13.0	42.3
4.5	33.2	13.5	40.3
5.0	33.6	14.0	42.6
5.5	36.2	14.5	43.4
6.0	35.8	15.0	41.9
6.5	36.1	15.5	40.8
7.0	37.9	16.0	41.0
7.5	37.4	16.5	41.5
8.0	38.0	17.0	44.5
8.5	38.8	17.5	47.6
9.0	38.0	18.0	50.8
9.5	39.2		

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 6, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
20	38.0	300	38.2
30	38.3	350	38.1
40	38.4	400	38.5
50	38.2	450	38.0
60	38.2	500	37.9
70	38.3	550	38.2
80	38.1	600	38.2
90	38.2	650	37.7
100	38.3	700	38.3
125	38.2	750	38.3
150	38.3	800	37.4
175	38.3	850	37.5
200	38.1	900	37.6
225	38.2	950	37.4
250	38.3	1000	37.3
275	38.2		

COM-POWER PA-122

PREAMPLIFIER

S/N: 181921

CALIBRATION DATE: MARCH 10, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	35.53	10.0	34.78
1.5	34.92	10.5	34.36
2.0	34.63	11.0	33.14
2.5	34.42	11.5	34.42
3.0	34.40	12.0	34.24
3.5	34.36	12.5	34.95
4.0	34.11	13.0	34.62
4.5	33.61	13.5	35.24
5.0	33.83	14.0	35.40
5.5	34.53	14.5	36.66
6.0	35.09	15.0	35.98
6.5	35.58	15.5	35.94
7.0	36.50	16.0	35.80
7.5	34.83	16.5	34.98
8.0	34.08	17.0	35.00
8.5	33.57	17.5	34.25
9.0	34.68	18.0	33.51
9.5	35.84	18.5	32.88

COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.57	9.93
0.01	-42.06	9.44
0.02	-42.43	9.07
0.05	-42.50	9.00
0.07	-42.10	9.40
0.1	-42.03	9.47
0.2	-44.50	7.00
0.3	-41.93	9.57
0.5	-41.90	9.60
0.7	-41.73	9.77
1	-41.23	10.27
2	-40.90	10.60
3	-41.20	10.30
4	-41.30	10.20
5	-40.70	10.80
10	-41.10	10.40
15	-42.17	9.33
20	-42.00	9.50
25	-42.20	9.30
30	-43.10	8.40

COM-POWER PA-840

PREAMPLIFIER-MICROWAVE

S/N: 711013

CALIBRATION DATE: MARCH 11, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	24.36	29.0	24.83
18.5	24.54	29.5	23.52
19.0	24.06	30.0	21.73
19.5	23.71	30.5	22.34
20.0	23.42	31.0	20.06
20.5	22.87	31.5	20.02
21.0	22.60	32.0	18.11
21.5	21.08	32.5	19.35
22.0	22.13	33.0	17.50
22.5	22.42	33.5	17.49
23.0	22.85	34.0	17.48
23.5	22.85	34.5	18.57
24.0	23.82	35.0	18.64
24.5	22.33	35.5	18.82
25.0	24.09	36.0	19.14
25.5	23.20	36.5	18.58
26.0	23.18	37.0	15.07
26.5	23.50	37.5	17.29
27.0	24.25	38.0	20.82
27.5	23.58	38.5	19.96
28.0	23.81	39.0	20.06
28.5	23.76	39.5	21.41

COM-POWER AH826

HORN ANTENNA

S/N: 71957

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7

FRONT VIEW

CROWN EQUIPMENT CORPORATION
ACCESS 8
MODEL: 144858
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

CROWN EQUIPMENT CORPORATION
ACCESS 8
MODEL: 144858
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

FRONT VIEW

CROWN EQUIPMENT CORPORATION
ACCESS 8
MODEL: 144858
FCC SUBPART B AND C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

CROWN EQUIPMENT CORPORATION
ACCESS 8
MODEL: 144858
FCC SUBPART B AND C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISISONS

DATA SHEETS

FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Low Channel - Antenna #0
ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2405	91.09	V	94	-2.91	Peak	1.25	315	
2405	86.65	V	94	-7.35	Avg	1.25	315	
4810	45.31	V	74	-28.69	Peak	1.25	180	
4810	36.78	V	54	-17.22	Avg	1.25	180	
7215	48.46	V	74	-25.54	Peak	1.35	155	
7215	35.65	V	54	-18.35	Avg	1.35	155	
9620								**No Emission**
9620								**Detected**
12025								**No Emission**
12025								**Detected**
14430								**No Emission**
14430								**Detected**
16835								**No Emission**
16835								**Detected**
19240								**No Emission**
19240								**Detected**
21645								**No Emission**
21645								**Detected**
24050								**No Emission**
24050								**Detected**

FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Low Channel - Antenna #0
ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2405	79.6	H	94	-14.4	Peak	1.25	135	
2405	74.83	H	94	-19.17	Avg	1.25	135	
4810	44.92	H	74	-29.08	Peak	1.25	135	
4810	33.31	H	54	-20.69	Avg	1.25	135	
7215	46.98	H	74	-27.02	Peak	1.25	135	
7215	35.68	H	54	-18.32	Avg	1.25	135	
9620								**No Emission**
9620								**Detected**
12025								**No Emission**
12025								**Detected**
14430								**No Emission**
14430								**Detected**
16835								**No Emission**
16835								**Detected**
19240								**No Emission**
19240								**Detected**
21645								**No Emission**
21645								**Detected**
24050								**No Emission**
24050								**Detected**

FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Middle Channel - Antenna #0
ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2445	91.39	V	94	-2.61	Peak	1.25	315	
2445	86.81	V	94	-7.19	Avg	1.25	315	
4890	47.34	V	74	-26.66	Peak	1.25	135	
4890	36.61	V	54	-17.39	Avg	1.25	135	
7335	47.44	V	74	-26.56	Peak	1.35	155	
7335	35.31	V	54	-18.69	Avg	1.35	155	
9780								**No Emission**
9780								**Detected**
12225								**No Emission**
12225								**Detected**
14670								**No Emission**
14670								**Detected**
17115								**No Emission**
17115								**Detected**
19560								**No Emission**
19560								**Detected**
22005								**No Emission**
22005								**Detected**
24450								**No Emission**
24450								**Detected**

FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Middle Channel - Antenna #0
ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2445	81.46	H	94	-12.54	Peak	2.25	180	
2445	76.27	H	94	-17.73	Avg	2.25	180	
4890	45.86	H	74	-28.14	Peak	2.25	135	
4890	34.37	H	54	-19.63	Avg	2.25	135	
7335	47.25	H	74	-26.75	Peak	1.25	155	
7335	35.23	H	54	-18.77	Avg	1.25	155	
9780								**No Emission**
9780								**Detected**
12225								**No Emission**
12225								**Detected**
14670								**No Emission**
14670								**Detected**
17115								**No Emission**
17115								**Detected**
19560								**No Emission**
19560								**Detected**
22005								**No Emission**
22005								**Detected**
24450								**No Emission**
24450								**Detected**

FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

High Channel - Antenna #0
ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480	90.38	V	94	-3.62	Peak	1.25	315	
2480	85.84	V	94	-8.16	Avg	1.25	315	
4960	45.34	V	74	-28.66	Peak	1.25	135	
4960	36.98	V	54	-17.02	Avg	1.25	135	
7440	47.64	V	74	-26.36	Peak	1.25	135	
7440	35.42	V	54	-18.58	Avg	1.25	135	
9920								**No Emission**
9920								**Detected**
12400								**No Emission**
12400								**Detected**
14880								**No Emission**
14880								**Detected**
17360								**No Emission**
17360								**Detected**
19840								**No Emission**
19840								**Detected**
22320								**No Emission**
22320								**Detected**
24800								**No Emission**
24800								**Detected**

FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

High Channel - Antenna #0
ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480	80.07	H	94	-13.93	Peak	1.25	155	
2480	75.17	H	94	-18.83	Avg	1.25	155	
4960	47.67	H	74	-26.33	Peak	1.25	225	
4960	38.24	H	54	-15.76	Avg	1.25	225	
7440	47.41	H	74	-26.59	Peak	1.35	165	
7440	35.42	H	54	-18.58	Avg	1.35	165	
9920								**No Emission**
9920								**Detected**
12400								**No Emission**
12400								**Detected**
14880								**No Emission**
14880								**Detected**
17360								**No Emission**
17360								**Detected**
19840								**No Emission**
19840								**Detected**
22320								**No Emission**
22320								**Detected**
24800								**No Emission**
24800								**Detected**

FCC Class B and RSS-210
Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Middle Channel - Antenna #0
Receive Mode - ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found
								from the Receiver Mode
								from 1 GHz to 25 GHz

FCC Class B and RSS-210

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Middle Channel - Antenna #0
Receive Mode - CapRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found
								from the Receiver Mode
								from 1 GHz to 25 GHz

FCC 15.249 and FCC Class B

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Digital Portion of the EUT and Non-Harmonic Emissions from the EUT
ComRX Radio Chip - Antenna #0

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found
								from the Non-Harmonic
								Emissions from the Transmitter
								from 1 GHz to 25 GHz
								No Emissions Found
								from the Digital Portion
								from 1 GHz to 25 GHz
								Tested in Both Vertical
								and Horizontal Polarizations

Test Location : Compatible Electronics **Page** : 1/1
Customer : Crown Equipment Corporation **Date** : 5/21/2010
Manufacturer : Crown Equipment Corporation **Time** : 8:31:12
Eut name : Access 8 **Lab** : D
Model : 144858 **Test Distance** : 3 Meters
Serial # : N/A
Specification : FCC Class B
Distance correction factor (20 * log(test/spec) : 0.00
Test Mode : Radiated Emissions - 10 kHz to 1 GHz
Transmit Mode - Antenna #0 (Worst Case)
Vertical and Horizontal Polarization
Tested By: Kyle Fujimoto

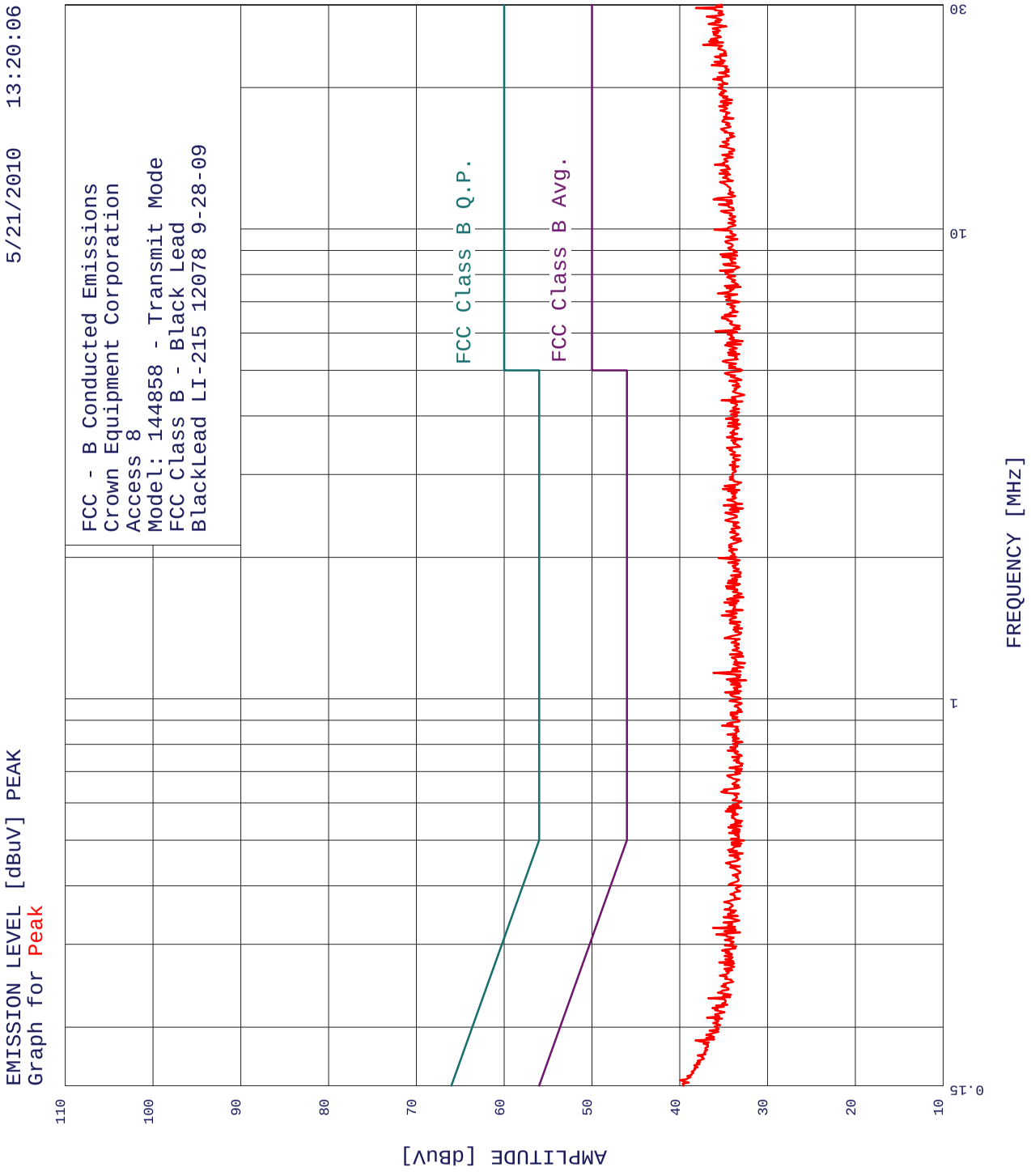
Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
1V	48.300	53.20	1.17	10.34	38.23	26.48	40.00	-13.52
2H	48.343	41.60	1.17	10.34	38.23	14.88	40.00	-25.12
3H	68.354	47.90	1.30	8.57	38.28	19.49	40.00	-20.51
4V	68.460	50.90	1.30	8.56	38.29	22.47	40.00	-17.53
5H	120.064	49.00	1.76	13.10	38.22	25.64	43.50	-17.86
6V	120.109	49.40	1.76	13.09	38.22	26.04	43.50	-17.46
7V	132.109	47.90	1.83	12.54	38.23	24.04	43.50	-19.46
8V	150.109	41.80	1.90	12.93	38.30	18.33	43.50	-25.17
9V	224.065	45.90	2.30	15.74	38.20	25.74	46.00	-20.26
10H	262.410	41.20	2.65	16.42	38.25	22.02	46.00	-23.98
11V	303.730	35.10	2.92	14.27	38.19	14.10	46.00	-31.90
12H	308.190	46.70	2.93	14.36	38.18	25.81	46.00	-20.19
13V	337.330	37.20	3.05	14.89	38.12	17.02	46.00	-28.98
14H	468.106	41.20	3.43	16.75	37.96	23.41	46.00	-22.59

Test Location : Compatible Electronics **Page** : 1/1
Customer : Crown Equipment Corporation **Date** : 5/21/2010
Manufacturer : Crown Equipment Corporation **Time** : 9:12:04
Eut name : Access 8 **Lab** : D
Model : 144858 **Test Distance** : 3 Meters
Serial # : N/A
Specification : FCC Class B
Distance correction factor (20 * log(test/spec) : 0.00
Test Mode : Radiated Emissions - 10 kHz to 1 GHz
Receive Mode - ComRX (Worst Case) - Antenna #0 (Worst Case)
Vertical and Horizontal Polarization
Tested By: Kyle Fujimoto

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
1H	39.891	40.00	1.00	10.30	38.40	12.90	40.00	-27.10
2V	52.980	42.00	1.23	10.25	38.20	15.28	40.00	-24.72
3V	69.780	48.20	1.30	8.42	38.30	19.62	40.00	-20.38
4V	80.000	46.60	1.40	5.50	38.10	15.40	40.00	-24.60
5V	81.780	50.00	1.42	5.84	38.12	19.14	40.00	-20.86
6V	120.053	54.70	1.76	13.10	38.22	31.34	43.50	-12.16
7H	120.106	51.50	1.76	13.09	38.22	28.14	43.50	-15.36
8V	160.053	50.20	1.98	13.61	38.30	27.49	43.50	-16.01
9H	160.106	47.70	1.98	13.61	38.30	25.00	43.50	-18.50
10V	200.053	43.50	2.20	16.40	38.10	24.00	43.50	-19.50
11V	220.053	49.60	2.28	15.84	38.18	29.54	46.00	-16.46
12H	220.106	43.80	2.28	15.84	38.18	23.74	46.00	-22.26
13H	280.106	38.70	2.74	18.08	38.20	21.32	46.00	-24.68
14V	300.910	34.20	2.90	14.22	38.20	13.12	46.00	-32.88
15V	372.150	38.40	3.19	15.47	38.28	18.78	46.00	-27.22
16H	400.050	42.40	3.30	15.90	38.50	23.10	46.00	-22.90
17V	401.970	37.50	3.31	15.93	38.48	18.26	46.00	-27.74
18V	522.550	36.00	3.35	17.51	38.04	18.82	46.00	-27.18
19V	925.803	32.10	4.60	21.57	37.50	20.78	46.00	-25.22
20H	929.510	41.90	4.62	21.61	37.48	30.64	46.00	-15.36
21H	940.910	45.40	4.66	21.72	37.44	34.35	46.00	-11.65

CONDUCTED EMISISONS

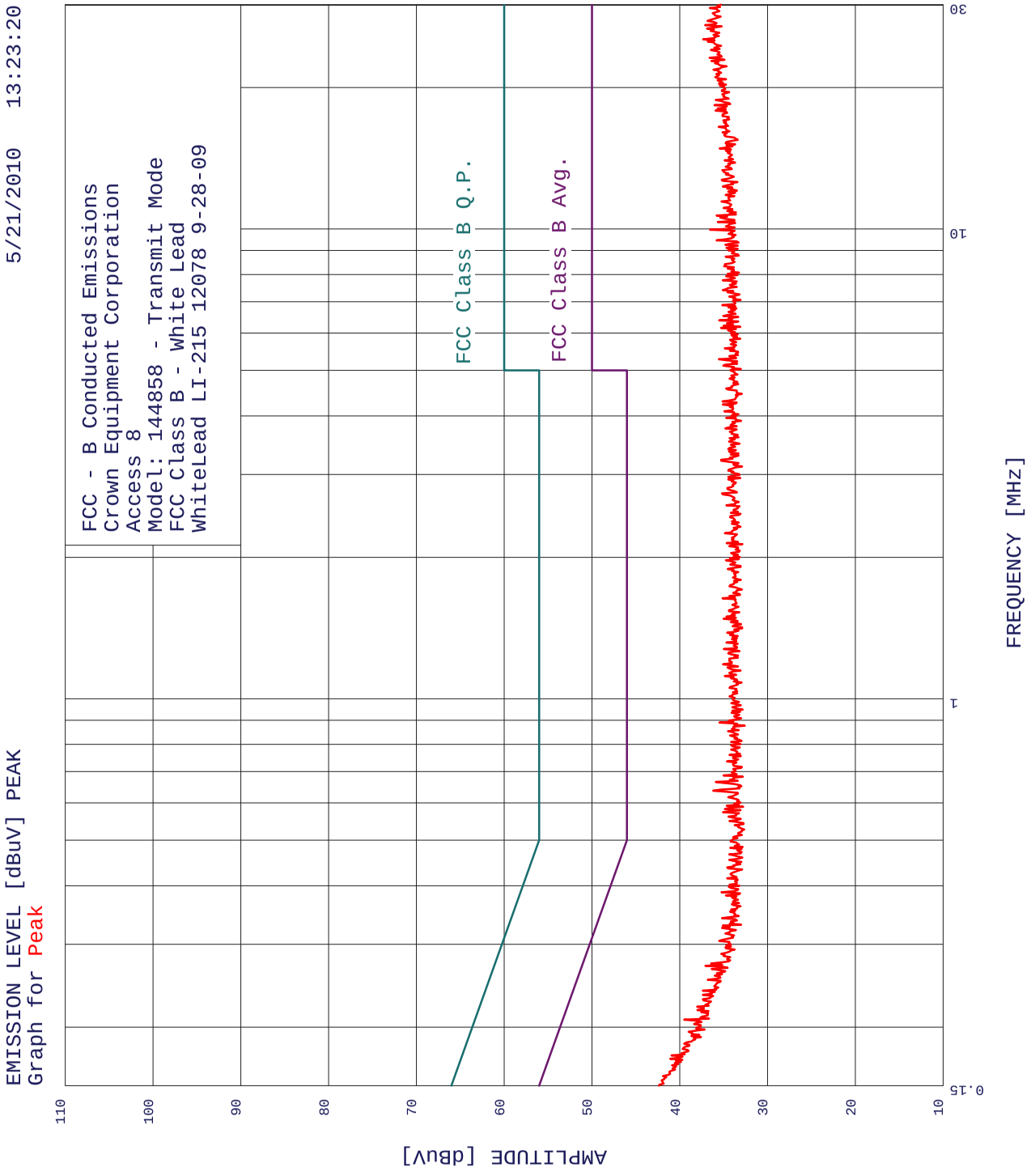
DATA SHEETS


5/21/2010 13:20:06
FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Transmit Mode
FCC Class B - Black Lead
BlackLead LI-215 12078 9-28-09
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak
AMPLITUDE [dBuV]
FREQUENCY [MHz]
110
100
90
80
70
60
50
40
30
20
10
30
10
1
0.15

FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Transmit Mode
FCC Class B - Black Lead
BlackLead LI-215 12078 9-28-09
TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 0.00 dB, Curve : Peak

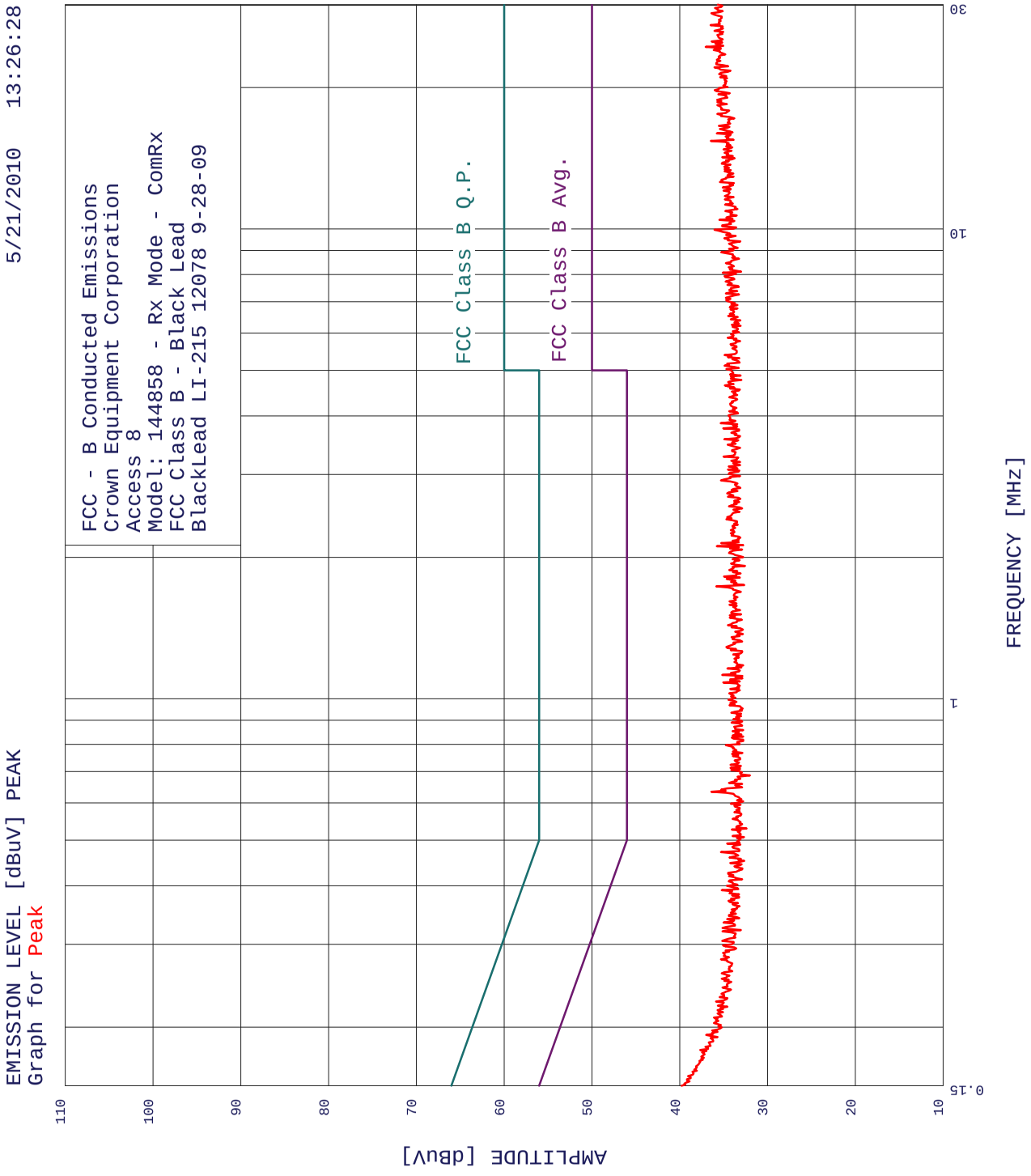
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	1.136	36.15	46.00	-9.85
2	1.992	35.57	46.00	-10.43
3	0.634	35.27	46.00	-10.73
4	4.316	35.24	46.00	-10.76
5	1.504	35.20	46.00	-10.80
6	0.876	35.18	46.00	-10.82
7	2.796	35.09	46.00	-10.91
8	2.582	34.99	46.00	-11.01
9	0.641	34.98	46.00	-11.02
10	1.603	34.91	46.00	-11.09
11	2.840	34.90	46.00	-11.10
12	1.345	34.88	46.00	-11.12
13	4.928	34.87	46.00	-11.13
14	1.032	34.84	46.00	-11.16
15	2.488	34.78	46.00	-11.22
16	2.397	34.78	46.00	-11.22
17	0.577	34.76	46.00	-11.24
18	3.945	34.73	46.00	-11.27
19	1.735	34.73	46.00	-11.27
20	1.536	34.70	46.00	-11.30
21	1.100	34.65	46.00	-11.35
22	1.717	34.63	46.00	-11.37
23	3.605	34.62	46.00	-11.38
24	1.629	34.62	46.00	-11.38
25	3.419	34.61	46.00	-11.39
26	0.686	34.60	46.00	-11.40
27	2.651	34.59	46.00	-11.41
28	0.885	34.58	46.00	-11.42
29	0.583	34.56	46.00	-11.44
30	0.839	34.56	46.00	-11.44
31	0.775	34.54	46.00	-11.46
32	1.763	34.54	46.00	-11.46
33	3.800	34.53	46.00	-11.47
34	2.766	34.49	46.00	-11.51
35	0.532	34.47	46.00	-11.53
36	1.950	34.46	46.00	-11.54
37	1.781	34.44	46.00	-11.56
38	3.862	34.43	46.00	-11.57
39	2.123	34.37	46.00	-11.63
40	2.100	34.37	46.00	-11.63
41	2.066	34.37	46.00	-11.63
42	0.518	34.37	46.00	-11.63
43	0.589	34.36	46.00	-11.64
44	4.748	34.36	46.00	-11.64
45	0.990	34.33	46.00	-11.67
46	3.383	34.31	46.00	-11.69
47	1.586	34.31	46.00	-11.69
48	0.713	34.31	46.00	-11.69


5/21/2010 13:23:20
FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Transmit Mode
FCC Class B - White Lead
WhiteLead LI-215 12078 9-28-09
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak
AMPLITUDE [dBuV]
FREQUENCY [MHz]
110
100
90
80
70
60
50
40
30
20
10
30
10
1
0.15

FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8 Transceiver
Model: 144858 - Transmit Mode
FCC Class B - White Lead
WhiteLead LI-215 12078 9-28-09
TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 0.00 dB, Curve : Peak

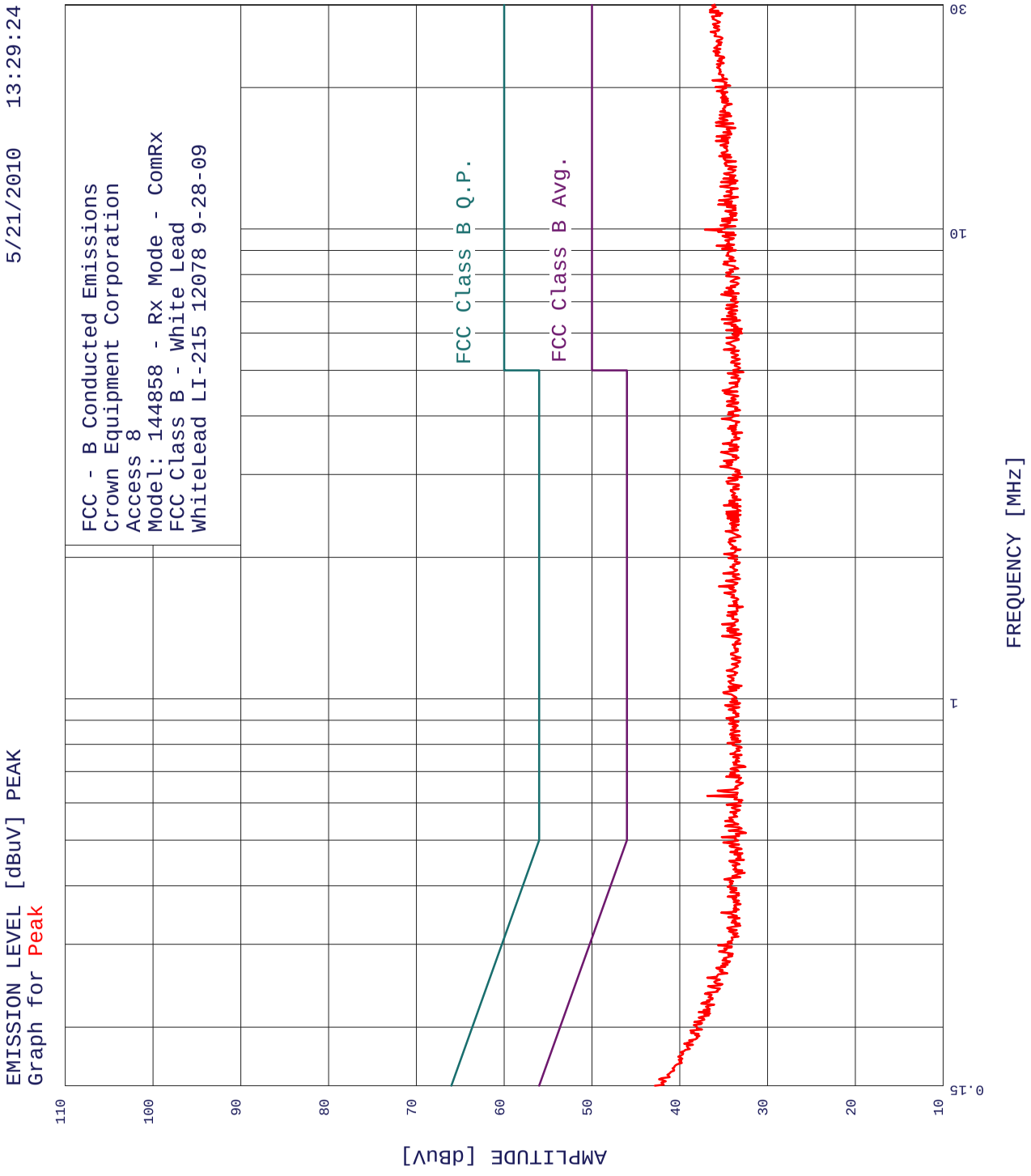
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.637	36.17	46.00	-9.83
2	0.665	35.88	46.00	-10.12
3	0.890	35.48	46.00	-10.52
4	3.226	35.28	46.00	-10.72
5	2.736	35.17	46.00	-10.83
6	1.637	35.11	46.00	-10.89
7	4.294	35.10	46.00	-10.90
8	4.227	35.10	46.00	-10.90
9	1.184	35.05	46.00	-10.95
10	0.573	35.05	46.00	-10.95
11	0.686	34.99	46.00	-11.01
12	1.480	34.99	46.00	-11.01
13	1.276	34.96	46.00	-11.04
14	4.092	34.90	46.00	-11.10
15	2.250	34.86	46.00	-11.14
16	0.583	34.85	46.00	-11.15
17	1.118	34.84	46.00	-11.16
18	3.761	34.79	46.00	-11.21
19	1.971	34.75	46.00	-11.25
20	4.576	34.71	46.00	-11.29
21	3.966	34.70	46.00	-11.30
22	1.496	34.69	46.00	-11.31
23	1.318	34.67	46.00	-11.33
24	2.582	34.66	46.00	-11.34
25	2.145	34.65	46.00	-11.35
26	0.592	34.65	46.00	-11.35
27	0.735	34.61	46.00	-11.39
28	1.382	34.57	46.00	-11.43
29	2.811	34.57	46.00	-11.43
30	1.166	34.55	46.00	-11.45
31	1.889	34.54	46.00	-11.46
32	3.401	34.48	46.00	-11.52
33	3.059	34.48	46.00	-11.52
34	2.963	34.47	46.00	-11.53
35	2.932	34.47	46.00	-11.53
36	0.618	34.46	46.00	-11.54
37	0.853	34.46	46.00	-11.54
38	1.249	34.46	46.00	-11.54
39	0.561	34.44	46.00	-11.56
40	1.544	34.39	46.00	-11.61
41	3.529	34.39	46.00	-11.61
42	0.899	34.38	46.00	-11.62
43	3.365	34.38	46.00	-11.62
44	1.217	34.35	46.00	-11.65
45	2.111	34.35	46.00	-11.65
46	1.204	34.35	46.00	-11.65
47	1.136	34.34	46.00	-11.66
48	0.550	34.34	46.00	-11.66


5/21/2010 13:26:28
FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - ComRx
FCC Class B - Black Lead
BlackLead LI-215 12078 9-28-09
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak
AMPLITUDE [dBuV]
FREQUENCY [MHz]
110
100
90
80
70
60
50
40
30
20
10
30
10
1
0.15

FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - ComRx
FCC Class B - Black Lead
BlackLead LI-215 12078 9-28-09
TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 0.00 dB, Curve : Peak

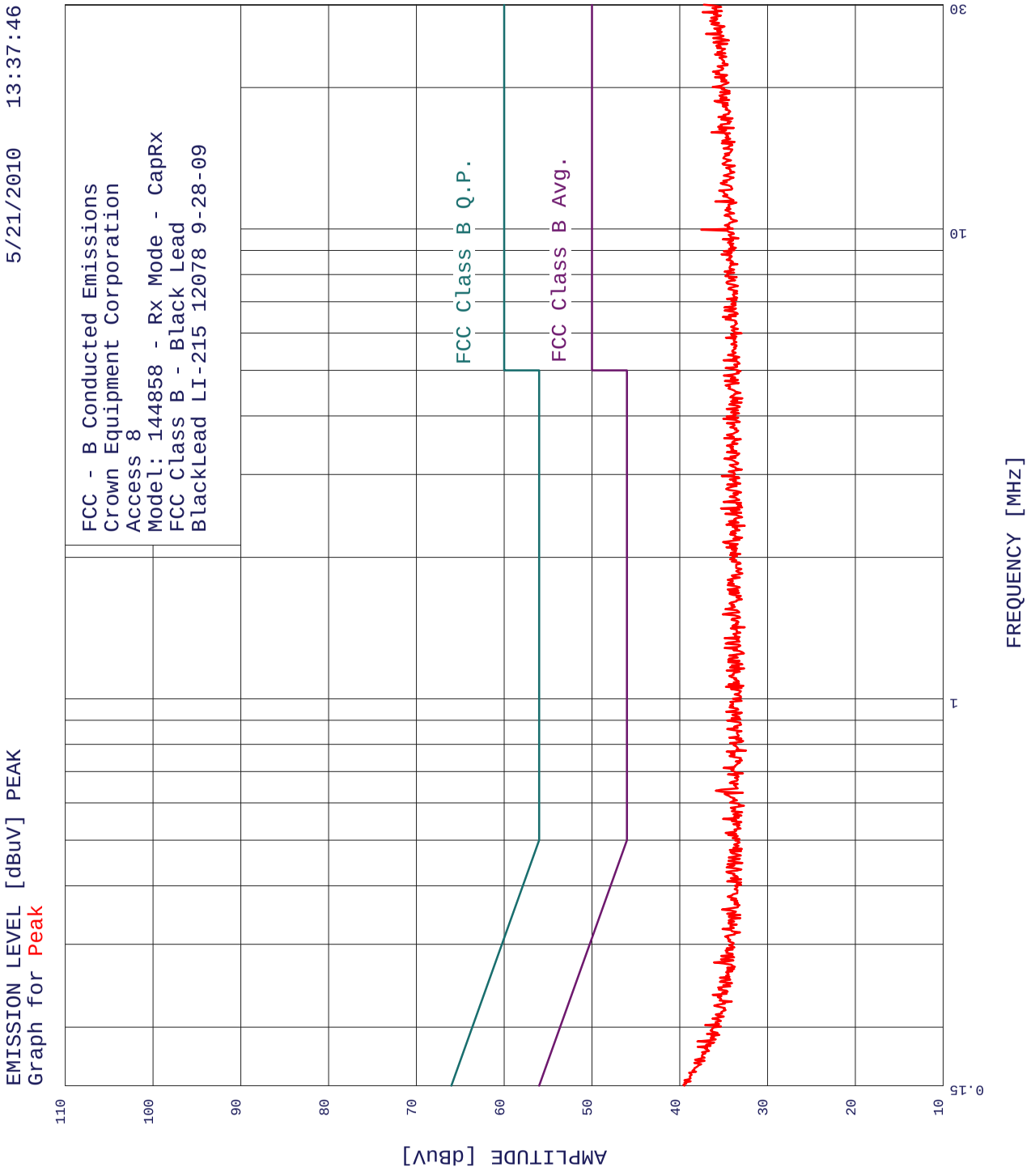
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.634	36.37	46.00	-9.63
2	1.735	35.83	46.00	-10.17
3	2.111	35.77	46.00	-10.23
4	3.862	35.33	46.00	-10.67
5	2.916	35.30	46.00	-10.70
6	0.641	35.28	46.00	-10.72
7	2.145	35.27	46.00	-10.73
8	1.124	35.15	46.00	-10.85
9	1.083	35.04	46.00	-10.96
10	3.761	35.03	46.00	-10.97
11	3.277	35.01	46.00	-10.99
12	1.820	34.94	46.00	-11.06
13	3.565	34.92	46.00	-11.08
14	4.648	34.86	46.00	-11.14
15	0.471	35.31	46.49	-11.18
16	0.796	34.74	46.00	-11.26
17	2.410	34.68	46.00	-11.32
18	1.290	34.67	46.00	-11.33
19	1.800	34.64	46.00	-11.36
20	2.736	34.59	46.00	-11.41
21	2.436	34.58	46.00	-11.42
22	1.160	34.55	46.00	-11.45
23	3.474	34.52	46.00	-11.48
24	3.075	34.50	46.00	-11.50
25	1.434	34.49	46.00	-11.51
26	2.693	34.49	46.00	-11.51
27	4.722	34.46	46.00	-11.54
28	0.492	34.58	46.14	-11.56
29	4.008	34.43	46.00	-11.57
30	0.995	34.43	46.00	-11.57
31	3.124	34.40	46.00	-11.60
32	3.011	34.40	46.00	-11.60
33	0.662	34.39	46.00	-11.61
34	2.568	34.39	46.00	-11.61
35	2.044	34.37	46.00	-11.63
36	1.879	34.35	46.00	-11.65
37	4.384	34.35	46.00	-11.65
38	4.092	34.34	46.00	-11.66
39	1.027	34.34	46.00	-11.66
40	3.924	34.33	46.00	-11.67
41	0.969	34.32	46.00	-11.68
42	1.611	34.31	46.00	-11.69
43	1.586	34.31	46.00	-11.69
44	1.504	34.30	46.00	-11.70
45	2.963	34.30	46.00	-11.70
46	1.488	34.30	46.00	-11.70
47	2.089	34.27	46.00	-11.73
48	4.902	34.26	46.00	-11.74


5/21/2010 13:29:24
FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - ComRx
FCC Class B - White Lead
WhiteLead LI-215 12078 9-28-09
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak
AMPLITUDE [dBuV]
FREQUENCY [MHz]
110
100
90
80
70
60
50
40
30
20
10
30
10
1
0.15

FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - ComRx
FCC Class B - White Lead
WhiteLead LI-215 12078 9-28-09
TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 0.00 dB, Curve : Peak

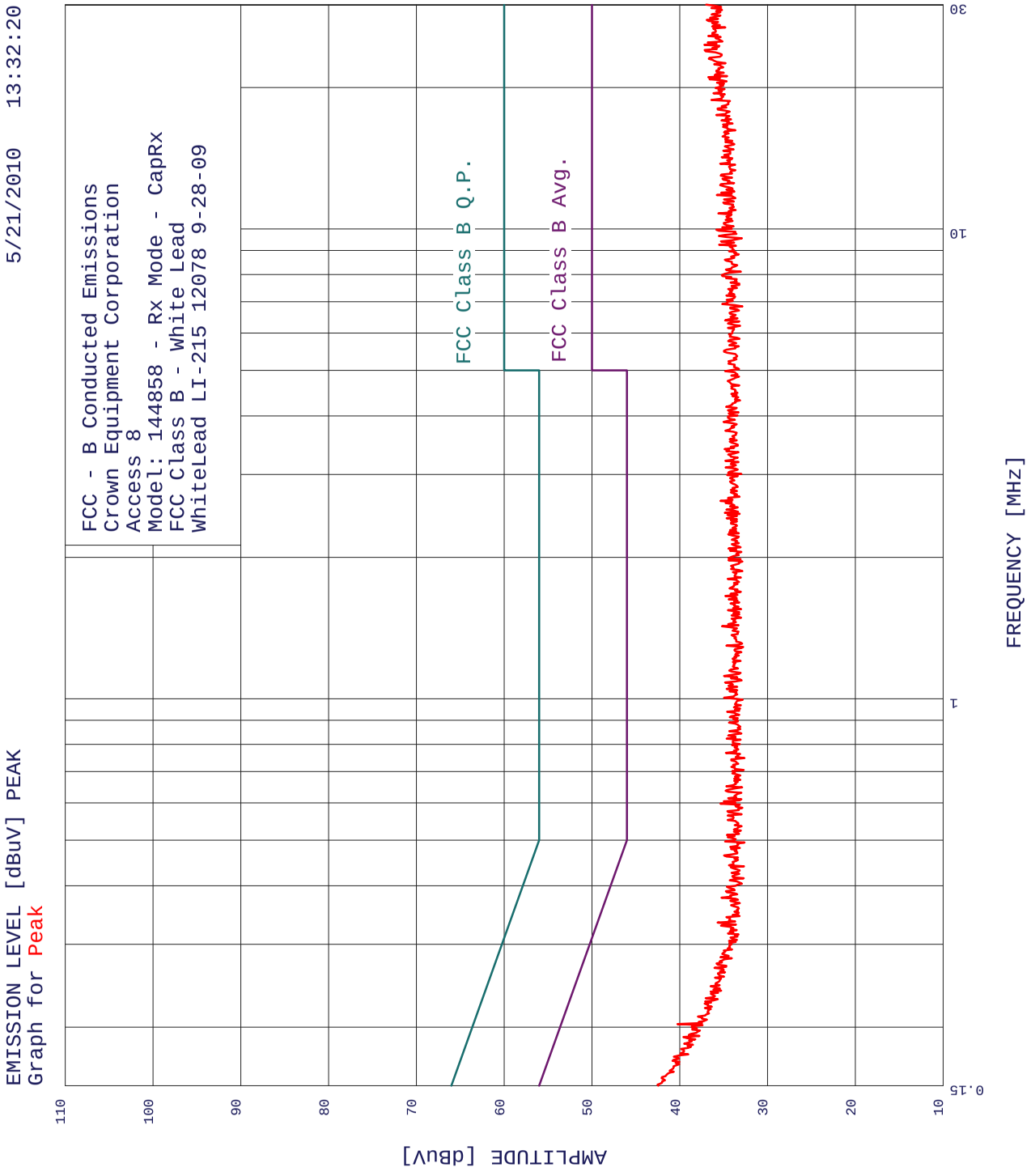
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.621	36.87	46.00	-9.13
2	0.637	35.67	46.00	-10.33
3	1.735	35.52	46.00	-10.48
4	3.124	35.38	46.00	-10.62
5	3.346	35.28	46.00	-10.72
6	0.508	35.22	46.00	-10.78
7	3.945	35.20	46.00	-10.80
8	1.441	35.18	46.00	-10.82
9	1.359	35.17	46.00	-10.83
10	4.528	35.11	46.00	-10.89
11	3.492	35.09	46.00	-10.91
12	1.849	35.03	46.00	-10.97
13	1.032	35.03	46.00	-10.97
14	3.209	34.98	46.00	-11.02
15	2.582	34.96	46.00	-11.04
16	2.034	34.95	46.00	-11.05
17	0.494	35.02	46.09	-11.07
18	1.680	34.91	46.00	-11.09
19	4.480	34.91	46.00	-11.09
20	0.550	34.84	46.00	-11.16
21	0.535	34.83	46.00	-11.17
22	0.969	34.81	46.00	-11.19
23	2.274	34.76	46.00	-11.24
24	1.781	34.72	46.00	-11.28
25	0.683	34.69	46.00	-11.31
26	0.909	34.69	46.00	-11.31
27	3.175	34.68	46.00	-11.32
28	2.900	34.67	46.00	-11.33
29	2.501	34.66	46.00	-11.34
30	2.475	34.66	46.00	-11.34
31	0.595	34.65	46.00	-11.35
32	1.148	34.64	46.00	-11.36
33	4.294	34.60	46.00	-11.40
34	4.204	34.60	46.00	-11.40
35	1.504	34.59	46.00	-11.41
36	1.412	34.58	46.00	-11.42
37	1.397	34.58	46.00	-11.42
38	2.870	34.57	46.00	-11.43
39	2.449	34.56	46.00	-11.44
40	2.423	34.56	46.00	-11.44
41	0.805	34.54	46.00	-11.46
42	1.118	34.54	46.00	-11.46
43	4.928	34.52	46.00	-11.48
44	4.029	34.50	46.00	-11.50
45	3.761	34.49	46.00	-11.51
46	1.528	34.49	46.00	-11.51
47	2.948	34.47	46.00	-11.53
48	2.156	34.45	46.00	-11.55


5/21/2010 13:37:46
FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - CapRx
FCC Class B - Black Lead
BlackLead LI-215 12078 9-28-09
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak
AMPLITUDE [dBuV]
FREQUENCY [MHz]
110
100
90
80
70
60
50
40
30
20
10
30
10
1
0.15

FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - CapRx
FCC Class B - Black Lead
BlackLead LI-215 12078 9-28-09
TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 0.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.637	35.88	46.00	-10.12
2	2.540	35.28	46.00	-10.72
3	2.979	35.20	46.00	-10.80
4	1.512	35.10	46.00	-10.90
5	2.156	35.07	46.00	-10.93
6	0.555	35.07	46.00	-10.93
7	3.945	35.03	46.00	-10.97
8	0.713	35.01	46.00	-10.99
9	2.624	34.99	46.00	-11.01
10	4.877	34.96	46.00	-11.04
11	3.585	34.92	46.00	-11.08
12	3.243	34.91	46.00	-11.09
13	1.345	34.88	46.00	-11.12
14	0.627	34.87	46.00	-11.13
15	1.283	34.87	46.00	-11.13
16	4.748	34.86	46.00	-11.14
17	1.552	34.81	46.00	-11.19
18	2.475	34.78	46.00	-11.22
19	1.311	34.77	46.00	-11.23
20	0.518	34.77	46.00	-11.23
21	4.648	34.76	46.00	-11.24
22	1.060	34.74	46.00	-11.26
23	0.939	34.71	46.00	-11.29
24	2.796	34.69	46.00	-11.31
25	2.346	34.68	46.00	-11.32
26	2.100	34.67	46.00	-11.33
27	1.148	34.65	46.00	-11.35
28	4.137	34.64	46.00	-11.36
29	0.771	34.63	46.00	-11.37
30	3.987	34.63	46.00	-11.37
31	3.862	34.63	46.00	-11.37
32	3.644	34.62	46.00	-11.38
33	3.456	34.62	46.00	-11.38
34	3.346	34.61	46.00	-11.39
35	2.855	34.60	46.00	-11.40
36	0.899	34.59	46.00	-11.41
37	0.862	34.57	46.00	-11.43
38	1.790	34.54	46.00	-11.46
39	1.745	34.53	46.00	-11.47
40	1.708	34.53	46.00	-11.47
41	0.690	34.50	46.00	-11.50
42	0.513	34.47	46.00	-11.53
43	1.210	34.46	46.00	-11.54
44	1.197	34.46	46.00	-11.54
45	4.576	34.45	46.00	-11.55
46	1.072	34.44	46.00	-11.56
47	1.763	34.44	46.00	-11.56
48	3.043	34.40	46.00	-11.60


5/21/2010 13:32:20
FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - CapRx
FCC Class B - White Lead
WhiteLead LI-215 12078 9-28-09
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak
AMPLITUDE [dBuV]
FREQUENCY [MHz]
110
100
90
80
70
60
50
40
30
20
10
30
10
1
0.15

FCC - B Conducted Emissions
Crown Equipment Corporation
Access 8
Model: 144858 - Rx Mode - CapRx
FCC Class B - White Lead
WhiteLead LI-215 12078 9-28-09
TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 0.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	2.637	35.37	46.00	-10.63
2	0.598	35.36	46.00	-10.64
3	1.426	35.18	46.00	-10.82
4	3.882	34.99	46.00	-11.01
5	0.605	34.96	46.00	-11.04
6	1.118	34.94	46.00	-11.06
7	1.006	34.93	46.00	-11.07
8	3.401	34.88	46.00	-11.12
9	2.488	34.86	46.00	-11.14
10	1.083	34.84	46.00	-11.16
11	4.980	34.82	46.00	-11.18
12	1.654	34.81	46.00	-11.19
13	3.722	34.79	46.00	-11.21
14	3.209	34.78	46.00	-11.22
15	3.107	34.78	46.00	-11.22
16	0.637	34.77	46.00	-11.23
17	0.497	34.82	46.05	-11.23
18	2.610	34.76	46.00	-11.24
19	0.767	34.73	46.00	-11.27
20	4.182	34.70	46.00	-11.30
21	3.365	34.68	46.00	-11.32
22	0.651	34.68	46.00	-11.32
23	1.297	34.66	46.00	-11.34
24	2.527	34.66	46.00	-11.34
25	2.423	34.66	46.00	-11.34
26	0.822	34.65	46.00	-11.35
27	1.049	34.63	46.00	-11.37
28	0.513	34.62	46.00	-11.38
29	0.939	34.60	46.00	-11.40
30	2.995	34.57	46.00	-11.43
31	2.462	34.56	46.00	-11.44
32	0.577	34.55	46.00	-11.45
33	0.564	34.54	46.00	-11.46
34	0.552	34.54	46.00	-11.46
35	1.800	34.53	46.00	-11.47
36	0.508	34.52	46.00	-11.48
37	4.748	34.52	46.00	-11.48
38	4.114	34.50	46.00	-11.50
39	3.987	34.50	46.00	-11.50
40	1.544	34.49	46.00	-11.51
41	3.311	34.48	46.00	-11.52
42	1.441	34.48	46.00	-11.52
43	3.027	34.47	46.00	-11.53
44	2.679	34.47	46.00	-11.53
45	0.614	34.46	46.00	-11.54
46	0.835	34.46	46.00	-11.54
47	2.238	34.46	46.00	-11.54
48	2.089	34.45	46.00	-11.55

BAND EDGES

DATA SHEETS

FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Band Edges - Antenna #0
ComRx Radio Chip

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2405	91.09	V	94	-2.91	Peak	1.25	315	Fundamental of Channel 1
2405	86.65	V	94	-7.35	Avg	1.25	315	@ 3 meters
2400	50.81	V	74	-23.19	Peak	1.25	315	**No** Marker Delta Method
2400	40.76	V	54	-13.24	Avg	1.25	315	Method Used
2480	90.38	V	94	-3.62	Peak	1.25	315	Fundamental of Channel 11
2480	85.84	V	94	-8.16	Avg	1.25	315	@ 3 meters
2483.5	59.32	V	74	-14.68	Peak	1.25	315	**No** Marker Delta Method
2483.86	49.39	V	54	-4.61	Avg	1.25	315	Method Used

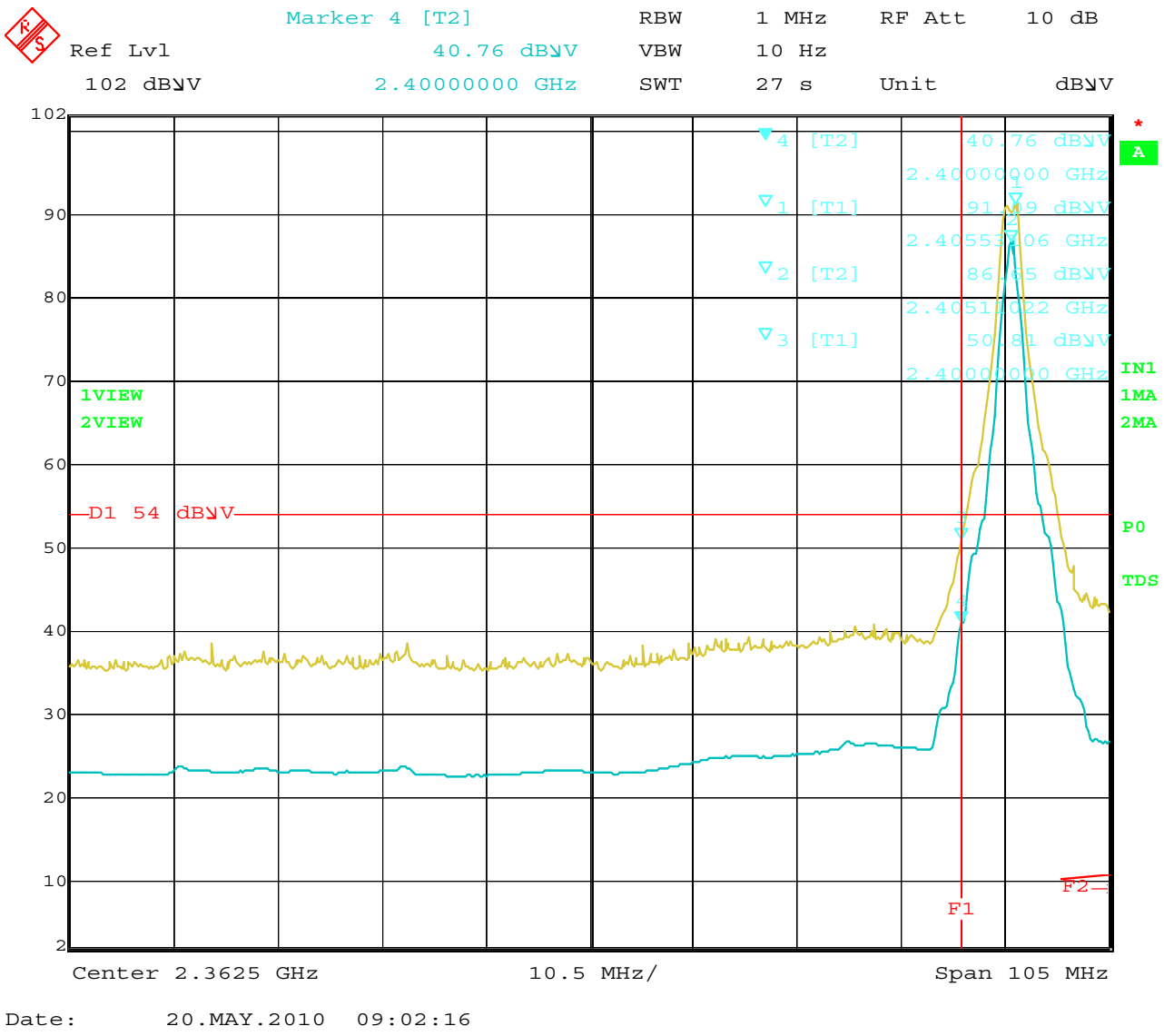
FCC 15.249

Crown Equipment Corporation
Access 8
Model: 144858

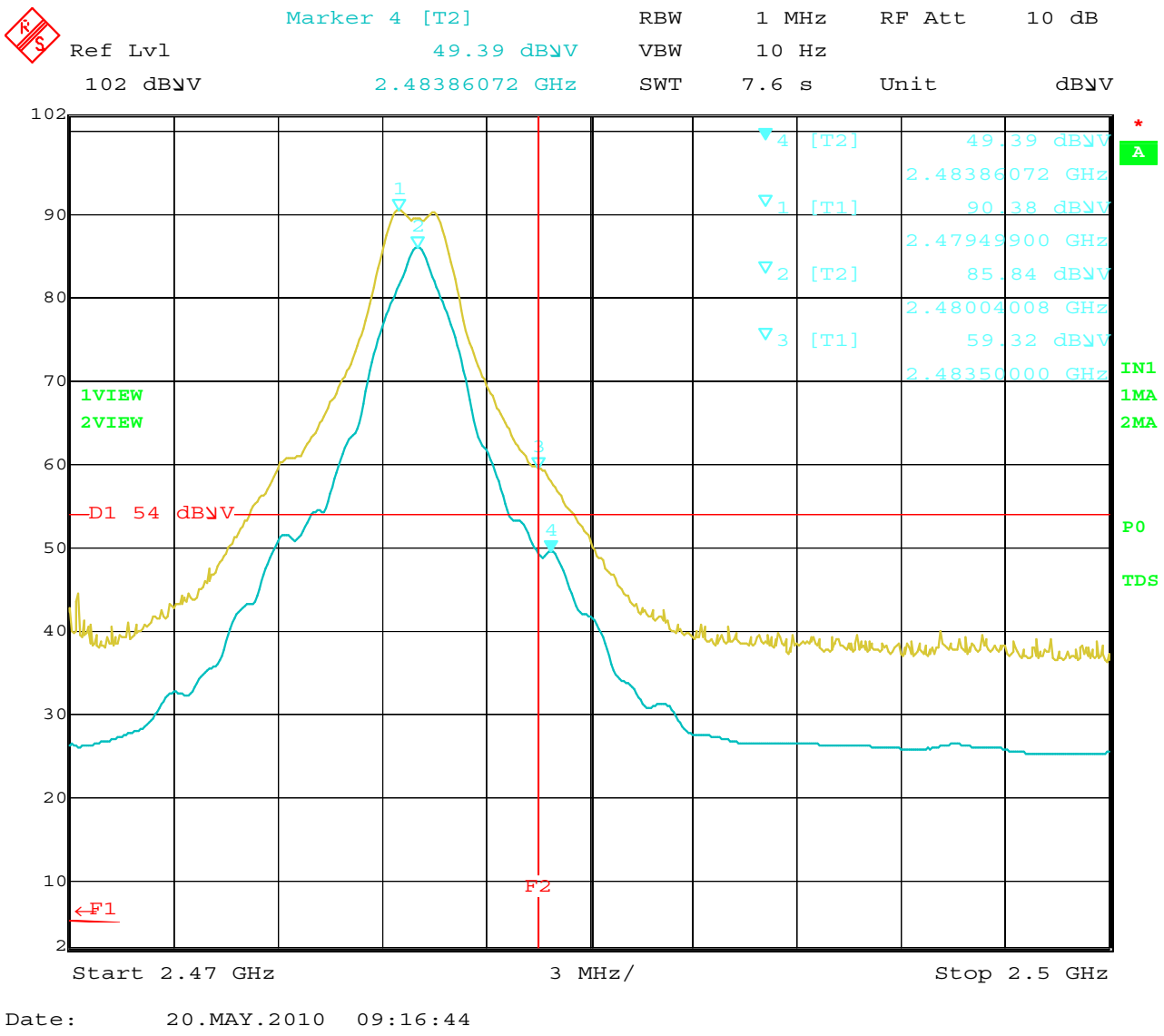
Date: 05/20/2010
Lab: B
Tested By: Kyle Fujimoto

Band Edges - Antenna #0
ComRx Radio Chip

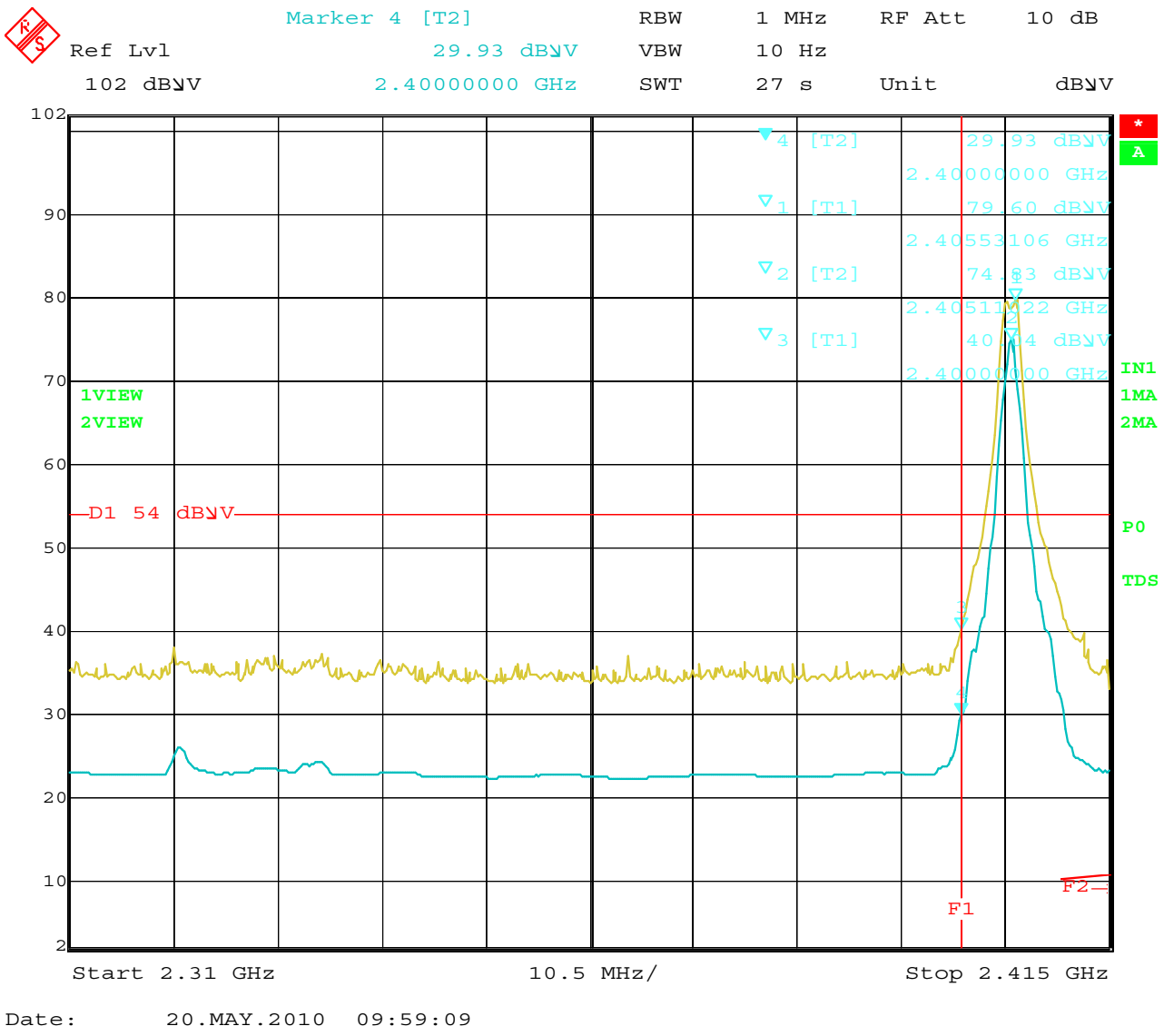
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2405	79.6	H	94	-14.4	Peak	1.25	135	Fundamental of Channel 1
2405	74.83	H	94	-19.17	Avg	1.25	135	@ 3 meters
2400	40.04	H	74	-33.96	Peak	1.25	135	**No** Marker Delta Method
2400	29.93	H	54	-24.07	Avg	1.25	135	Method Used
2480	80.07	H	94	-13.93	Peak	1.25	155	Fundamental of Channel 11
2480	75.17	H	94	-18.83	Avg	1.25	155	@ 3 meters
2483.5	49.3	H	74	-24.7	Peak	1.25	155	**No** Marker Delta Method
2483.89	39.2	H	54	-14.8	Avg	1.25	155	Method Used



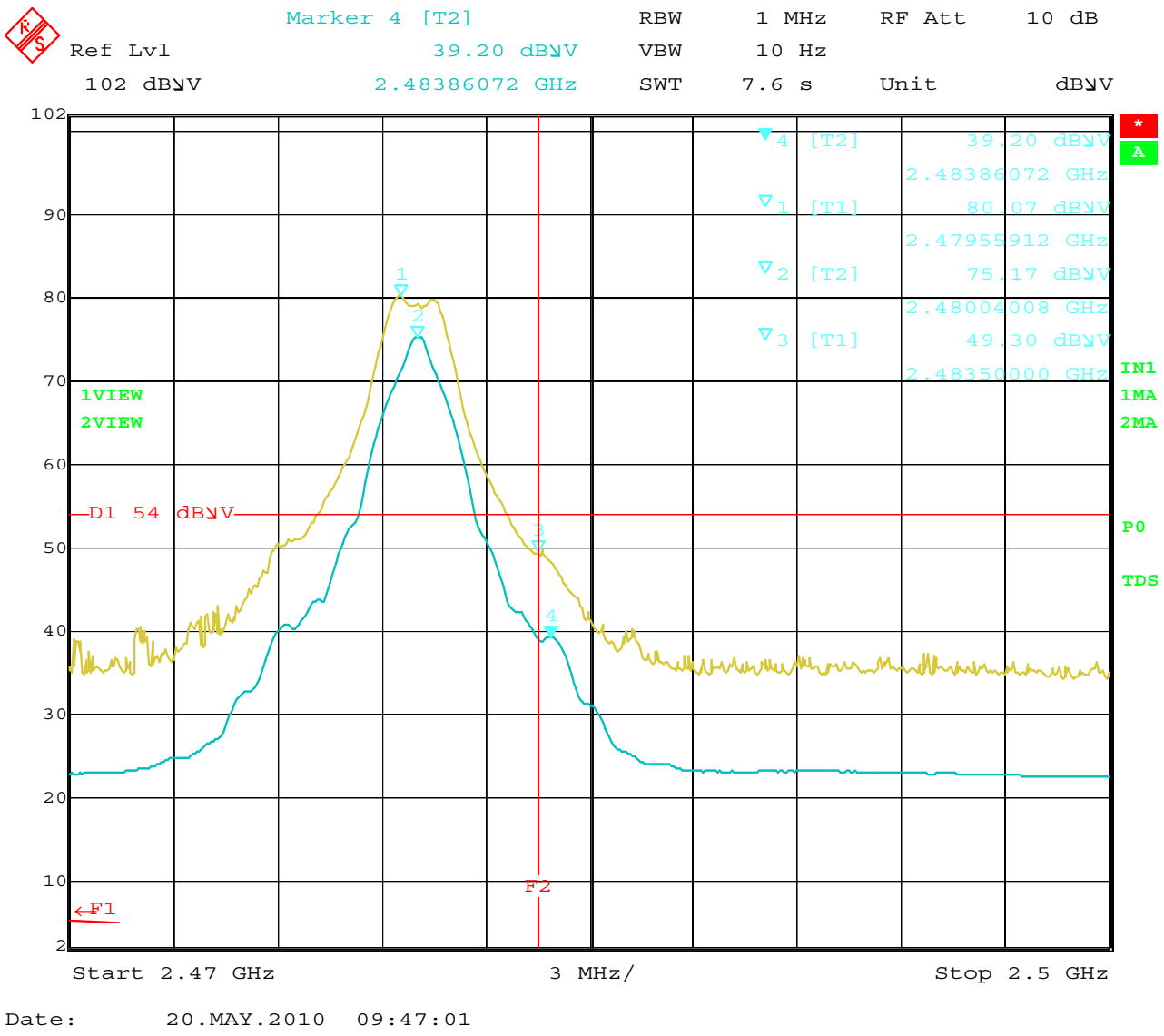
Band Edge – Low Channel – Vertical Polarization – Antenna 0



Band Edge – High Channel – Vertical Polarization – Antenna 0



Band Edge – Low Channel – Horizontal Polarization – Antenna 0



Band Edge – High Channel – Horizontal Polarization – Antenna 0