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Test Report:	86732-1TRFWL
Applicant:	Vecima Networks Inc. Suite 4, 6110 - 1A Street SW Calgary, Alberta T2H 0G3
Apparatus:	915C Radio Module
FCC ID:	OOX-915C
In Accordance With:	FCC Part 15 Subpart C, 15.247 FHSS System and Digitally Modulated Radiators 902-928MHz, 2400 - 2483.5 MHz, 5725-5850MHz
Tested By:	Nemko Canada Inc. 303 River Road Ottawa, Ontario K1V 1H2
Authorized By:	 Jin Xu, Wireless Specialist
Date:	October 15, 2007
Total Number of Pages:	67

Report Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, Subpart C. Radiated tests were conducted in accordance with ANSI C63.4-2003. Radiated emissions are made on an open area test site. A description of the test facility is on file with the FCC.

The assessment summary is as follows:

Apparatus Assessed:	915C Radio Module
Specification:	FCC Part 15 Subpart C, 15.247
Compliance Status:	Complies
Exclusions:	None
Non-compliances:	None
Report Release History:	Original Release

Author: Jason Nixon, Telecom Specialist

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025.

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Section 1 : Equipment Under Test

1.1 Product Identification

The Equipment Under Test was identified as follows:

915C Radio Module

1.2 Samples Submitted for Assessment

The following samples of the apparatus have been submitted for type assessment:

Sample No.	Description	Serial No.
1	Tiltek dipole array (M/N: TA-926UH-8-120)	60108.8
2	Cushcraft Yagi antenna	PC8910
3	Antel Omni dipole antenna	277467
5	915C with integral antenna	PP5
6	915C with integral antenna	PP33
10	PW130 power supply	None
11	PW147 power supply	None
14	Phihong Power supply	None
26	Antel Panel antenna (M/N: RWB 80014/120 NE)	364068
27	Kathrein Omni paraslot antenna (M/N: SL11-915/DT2)	LFA1427091
86731 Sample 1	Swedcom Log Period antenna (M/N: SC 9014-DIN)	00000005995
86731 Sample 8	PW180 Power supply	None

The first samples were received on: May 13, 2007

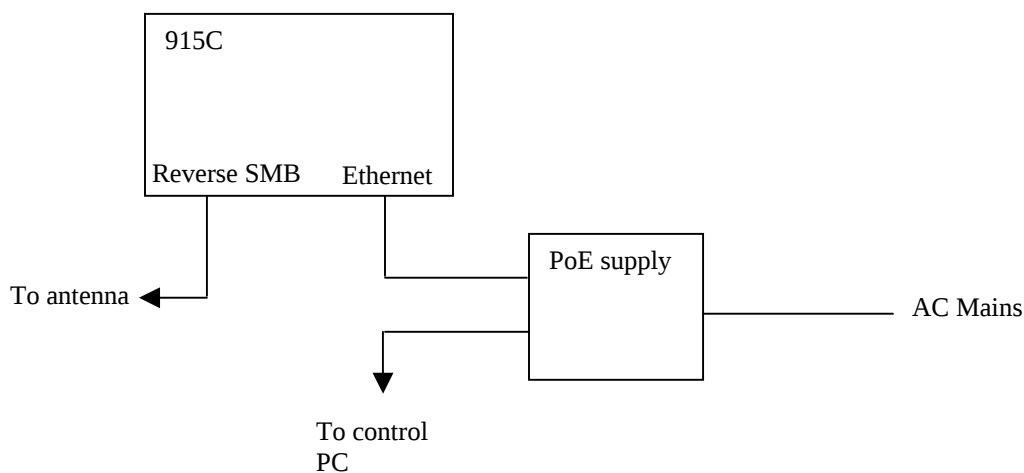
1.3 Theory of Operation

The EUT is a module that is used for installation into only Vecima end units. It is used as a data modem in the 902 to 928MHz band. The end products are powered via –48VDC using Power over Ethernet. There are four such power supplies intended for use and all four have been tested.

1.4 Technical Specifications of the EUT

Operating Frequency:	905 – 925MHz (CCK) 905.2-924.8MHz (64QAM, 16QAM, QPSK, BPSK)
Peak Output Power:	26.53dBm
Emission Designator	G1D
Modulation:	64QAM, 16QAM, QPSK, BPSK, CCK
Antenna Data:	Vecima Integral antenna – 10.2dBi Antel Omni dipole – 10-12dBi Kathrein Omni Paraslot – 11-14dBi Swedcom Log periodic – 14-16dBi Tiltek Dipole array – 11-13dBi Antel Panel – 14-16dBi Cushcraft Yagi – 13dBi
Antenna Connector:	Reverse SMB
Power Source:	-48VDC, Power over Ethernet

1.5 Block Diagram of the EUT



Section 2 : Test Conditions

2.1 Specifications

The apparatus was assessed against the following specifications:

FCC Part 15 Subpart C, 15.247

 FHSS System and Digitally Modulated Radiators
 902-928MHz, 2400 - 2483.5 MHz, 5725-5850MHz

2.2 Deviations From Laboratory Test Procedures

No deviations were made from laboratory test procedures.

2.3 Test Environment

All tests were performed under the following environmental conditions:

Temperature range	:	15 – 30 °C
Humidity range	:	20 - 75 %
Pressure range	:	86 - 106 kPa
Power supply range	:	+/- 5% of rated voltages

2.4 Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next Cal.
Spectrum Analyzer	Rohde & Schwarz	FSU46	FA001877	Jan 16/08
Spectrum Analyzer	HP	8565E	FA00981	Oct 06/07
High Pass Filter	K&L	1.7GHz	FA001434	COU
Horn Antenna #2	EMCO	3115	FA000825	Jan. 30/08
1.0 – 2.0 GHz Amplifier	JCA	12-400	FA001498	Aug. 21/08
2.0 – 4.0 GHz Amplifier	JCA	24-600	FA001496	Aug. 21/08
4.0 – 8.0 GHz Amplifier	JCA	48-600	FA001497	Aug. 21/08
5.0 – 18.0 GHz Amplifier	NARDA	DWT-186N23U40	FA001409	COU
EMI Test Chamber 3m	TDK	SAC-3	FA002047	May 19/08
Biconical	Sunol	BC2	FA002078	July 25/08
Log Periodic Antenna	Sunol	LP5	FA002077	July 25/08
Flush Mount Turntable	Sunol	FM2022	FA002082	NCR
Controller	Sunol	SC104V	FA002060	NCR
Mast	Sunol	TLT2	FA002061	NCR
LISN	Rohde & Schwarz	ENV216	FA002023	Aug. 28/07
Receiver/Spectrum Analyzer	Rohde & Schwarz	ESU	FA002043	Oct. 24/07
International Power Supply	California Inst.	3001i	FA001021	Jan. 09/08

COU – Calibrate on Use

NCR – No Calibration Required

2.5 Measurement Uncertainty

Nemko Canada measurement uncertainty has been calculated using guidance of UKAS LAB 34:2003 and TIA-603-B Nov 7, 2002. All calculations have been performed to provide a confidence level of 95% and can be found in Nemko Canada document MU-003.

Section 3 : Observations

3.1 Modifications Performed During Assessment

The following modification was performed during this assessment:

3.1.1 Modification 1

As originally submitted the receive LO did not comply with the requirements of Part 15 subpart B. A signal trace that was 25mil from the LO trace was moved to 90mils away. Following this modification the EUT was found to be fully compliant.

3.2 Record Of Technical Judgements

No technical judgements were made during the assessment.

3.3 EUT Parameters Affecting Compliance

The user of the apparatus could not alter parameters that would affect compliance.

3.4 Test Deleted

No Tests were deleted from this assessment.

3.5 Additional Observations

There were no additional observations made during this assessment.

Section 4 : Results Summary

This section contains the following:

FCC Part 15 Subpart C : Test Results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

- N No : not applicable / not relevant.
- Y Yes : Mandatory i.e. the apparatus shall conform to these tests.
- N/T Not Tested, mandatory but not assessed. (See section 3.4 Test deleted)

The results contained in this section are representative of the operation of the apparatus as originally submitted.

4.1 FCC Part 15 Subpart C : Test Results

Part 15	Test Description	Required	Result
15.109(a)	Class B Digital emissions	Y	PASS
15.31(e)	Variation of power supply	Y	PASS
15.207(a)	Powerline Conducted Emissions	Y	PASS
15.209(a)	Radiated Emissions within Restricted Bands	Y	PASS
15.247(a)(1)	Frequency hopping systems	N	
15.247(a)(2)	Systems using digital modulation techniques	Y	PASS
15.247(b)(1)	Maximum peak output power of Frequency hopping systems operating in the 2400-2483.5 MHz band and 5725-5850 MHz band	N	
15.247(b)(2)	Maximum peak output power of Frequency hopping systems operating in the 902-928 MHz band	N	
15.247(b)(3)	Maximum peak output power of systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands	Y	PASS
15.247(b)(4)	Maximum peak output power	Y	PASS
15.247(c)(1)	Fixed point-to-point Operation with directional antenna gains greater than 6 dBi	N	
15.247(c)(2)	Transmitters operating in the 2400-2483.5 MHz band that emit multiple directional beams	N	
15.247(d)	Radiated Emissions Not in Restricted Bands	Y	PASS
15.247(e)	Power Spectral Density for Digitally Modulated Devices	Y	PASS
15.247(f)	Time of Occupancy for Hybrid Systems	N	

Notes:

Appendix A : Test Results

Clause 15.109(a) Radiated Emissions

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission (MHz)	Field Strength (microvoltsmeter)
30 - 88	100
88 - 216	150
216 - 960	200
Above 960	500

Test Conditions:

Sample Number:	6	Temperature (°C):	25
Date:	August 30, 2007	Humidity (%):	47
Modification State:	1	Tester:	Jason Nixon
		Laboratory:	3m chamber

Test Results:

See Attached Table for Results

Additional Observations:

The Spectrum was searched from 30MHz to 10GHz.

Measurement equipment setup was 120kHz Quasi-peak detector for measurements below 1GHz and 1MHz RBW/VBW peak detector above 1GHz.

All Measurements were performed at 3 meters in a Semi-Anechoic chamber, all measurements have the correction values for antenna factor and cable loss included.

Measurements were performed with the EUT in receive mode with the highest gain antenna, Swedcom Log Periodic.

Frequency (MHz)	QuasiPeak (dB μ V/m)	Antenna height cm	Polarity	Turntable position (Deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
30.63	39.26	125.17	V	255.00	11.40	0.74	40.0
31.41	38.04	100.00	V	270.00	11.34	1.96	40.0
32.04	37.25	115.00	V	5.00	11.19	2.75	40.0
32.58	38.36	119.95	V	0.00	11.05	1.64	40.0
33.18	36.83	100.04	V	328.00	10.88	3.17	40.0
36.15	37.68	109.95	V	314.00	10.30	2.32	40.0
37.53	35.95	107.91	V	314.00	10.04	4.05	40.0
43.80	34.53	115.95	V	-1.00	9.24	5.47	40.0
47.79	37.59	127.00	V	133.00	9.03	2.41	40.0
48.45	38.29	99.95	V	142.00	9.02	1.71	40.0
49.02	37.47	100.00	V	164.00	8.98	2.53	40.0
50.43	36.25	130.00	V	80.00	8.97	3.75	40.0
60.21	38.36	273.00	V	5.00	9.29	1.64	40.0
62.01	34.92	229.00	V	13.00	9.39	5.08	40.0
62.22	38.32	285.08	V	13.00	9.38	1.68	40.0
62.76	38.74	300.00	V	0.00	9.39	1.26	40.0
80.58	37.84	99.95	V	231.00	10.30	2.16	40.0
85.53	37.29	100.04	V	201.00	10.38	2.71	40.0
86.04	35.78	99.95	V	90.00	10.38	4.22	40.0
108.81	37.14	106.95	V	-1.00	11.48	6.36	43.5
200.03	33.59	132.00	H	30.00	13.38	9.91	43.5
700.01	42.53	120.00	H	221.00	22.69	3.47	46.0
740.00	41.97	108.00	H	176.00	23.27	4.03	46.0
760.01	42.08	112.00	H	177.00	23.49	3.92	46.0
779.00	44.56	185.00	V	240.00	23.14	1.44	46.0
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole							

Clause 15.207(a) Powerline Conducted Emissions

Frequency of Conducted limit (dBµV)		
Emission (MHz)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
* Decreases with the logarithm of the frequency.		

Test Conditions:

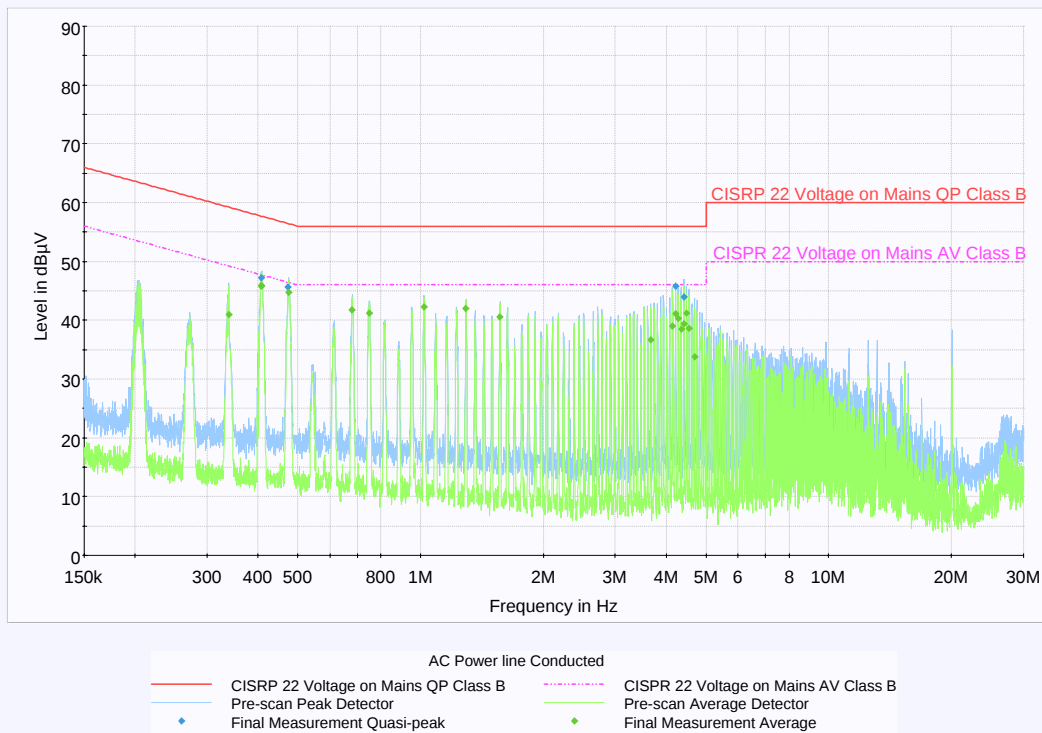
Sample Number:	6	Temperature (°C):	25
Date:	June 29, 2007	Humidity (%):	43
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	Shielded Room

Test Results: See Attached Plots and tables.

Additional Observations:

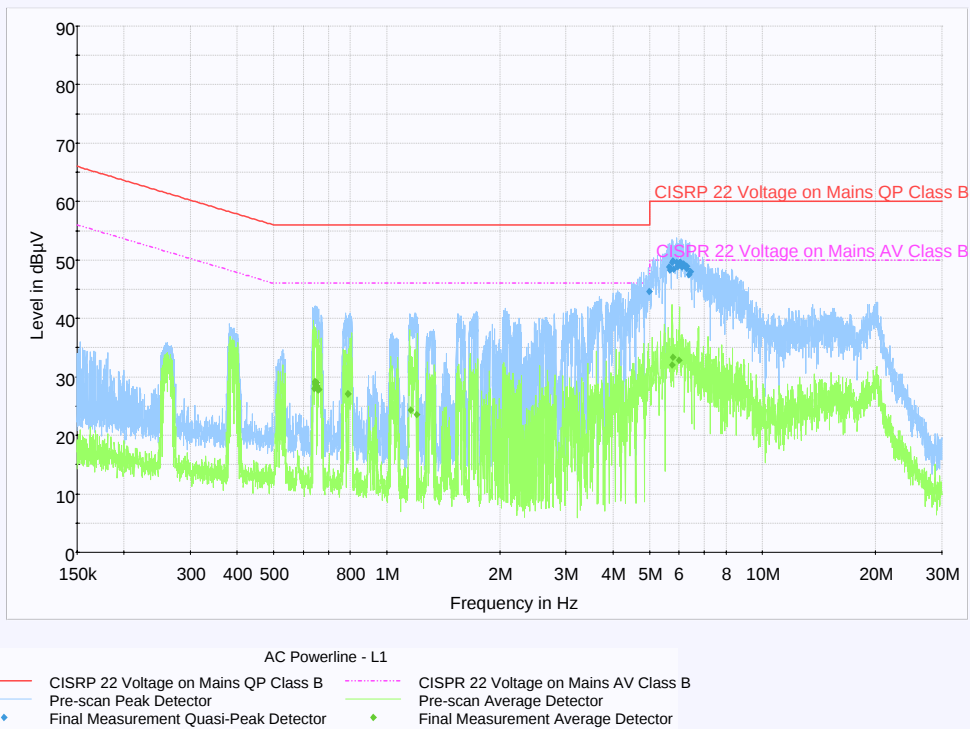
All Plots have been corrected with LISN and Cable losses and performed using a 9kHz RBW Peak and Average detectors to show compliance.

All tabular data was taken using a 9kHz RBW Quasi-peak detector and Average detector. The Rcvd level is already corrected with correction values for the LISN and cable losses.

PW180 Power supply – Line conductor**PW180 Power supply – Neutral conductor**

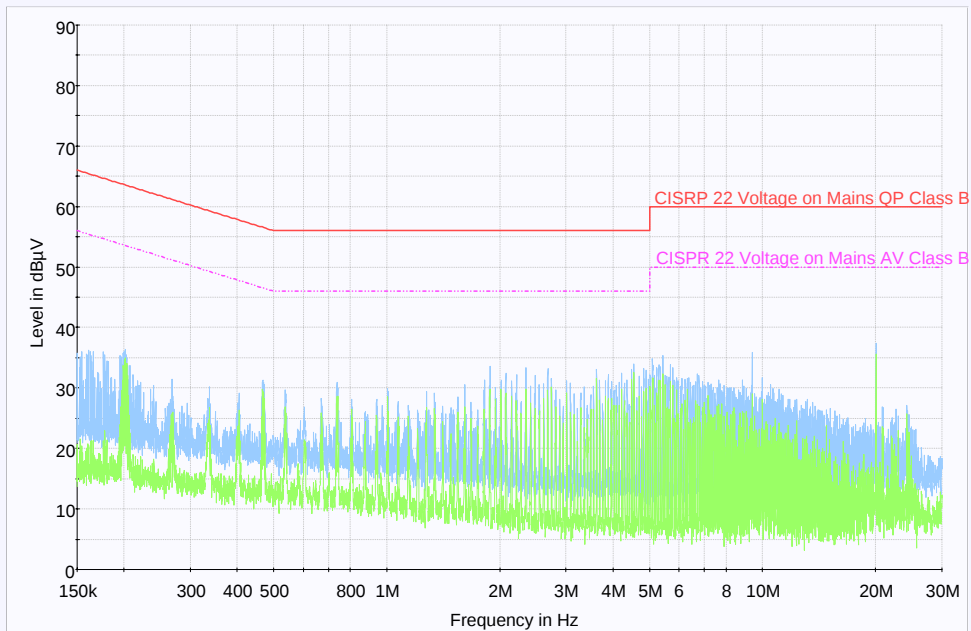
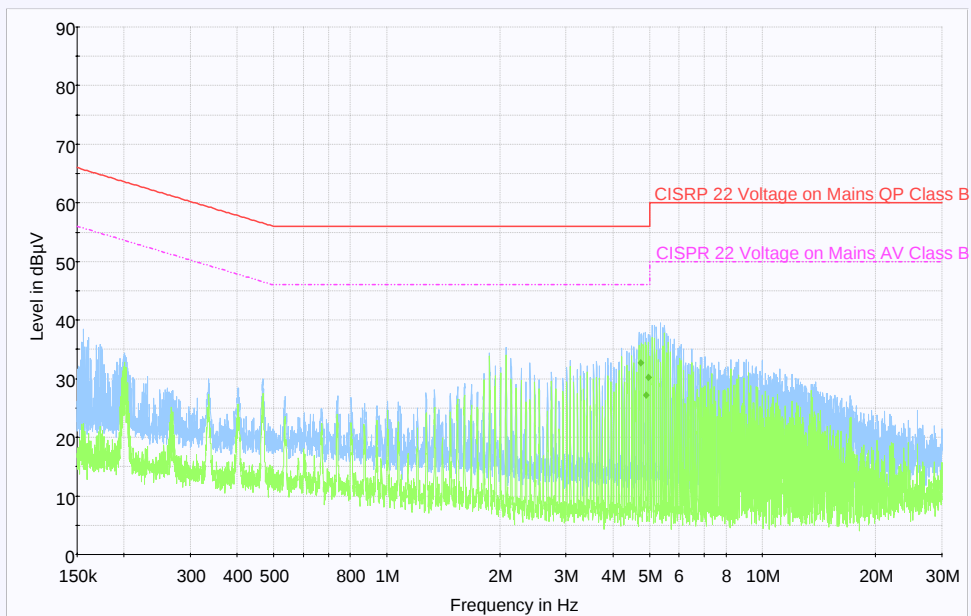
PW180 Tabular results

Frequency (MHz)	Rcvd Level (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Detector
0.4076	47.25	L1	9.89	10.40	57.70	Quasi-peak
0.4737	45.64	L1	9.92	10.80	56.45	Quasi-peak
4.2074	45.73	L1	10.00	10.30	56.00	Quasi-peak
4.4153	44.02	L1	10.00	12.00	56.00	Quasi-peak
0.3395	40.93	L1	9.89	8.30	49.21	Average
0.4068	45.87	L1	9.89	1.80	47.71	Average
0.4078	45.79	L1	9.89	1.90	47.69	Average
0.4756	44.77	L1	9.92	1.60	46.42	Average
0.6787	41.76	L1	9.93	4.20	46.00	Average
0.7464	41.19	L1	9.98	4.80	46.00	Average
1.0188	42.31	L1	9.90	3.70	46.00	Average
1.2895	42.04	L1	9.90	4.00	46.00	Average
1.5608	40.59	L1	9.90	5.40	46.00	Average
3.6661	36.60	L1	9.97	9.40	46.00	Average
4.1445	38.96	L1	10.00	7.00	46.00	Average
4.2116	41.14	L1	10.00	4.90	46.00	Average
4.2799	40.25	L1	10.00	5.70	46.00	Average
4.3492	38.41	L1	10.00	7.60	46.00	Average
4.4153	39.41	L1	10.00	6.60	46.00	Average
4.4823	41.26	L1	10.00	4.70	46.00	Average
4.5459	38.65	L1	10.00	7.30	46.00	Average
4.6896	33.76	L1	10.00	12.20	46.00	Average
4.2074	45.30	N	9.98	10.70	56.00	Quasi-peak
0.4076	42.03	N	9.88	5.70	47.70	Average
0.4727	42.96	N	9.91	3.50	46.47	Average
0.6780	41.68	N	9.93	4.30	46.00	Average
0.7471	41.23	N	9.98	4.80	46.00	Average
1.0177	41.29	N	9.88	4.70	46.00	Average
1.2895	41.89	N	9.88	4.10	46.00	Average
1.3568	38.81	N	9.88	7.20	46.00	Average
1.6287	38.48	N	9.88	7.50	46.00	Average
3.8668	38.11	N	9.95	7.90	46.00	Average
3.9334	42.19	N	9.95	3.80	46.00	Average
4.0012	37.72	N	9.88	8.30	46.00	Average
4.2032	37.59	N	9.98	8.40	46.00	Average
4.2799	37.70	N	9.98	8.30	46.00	Average
4.3449	39.95	N	9.98	6.00	46.00	Average
4.4109	41.75	N	9.98	4.30	46.00	Average
4.4823	38.77	N	9.98	7.20	46.00	Average
4.5504	36.32	N	9.98	9.70	46.00	Average
4.8137	32.05	N	9.98	14.00	46.00	Average

PW147 Power supply – Line conductor**PW147 Power supply – Neutral conductor**

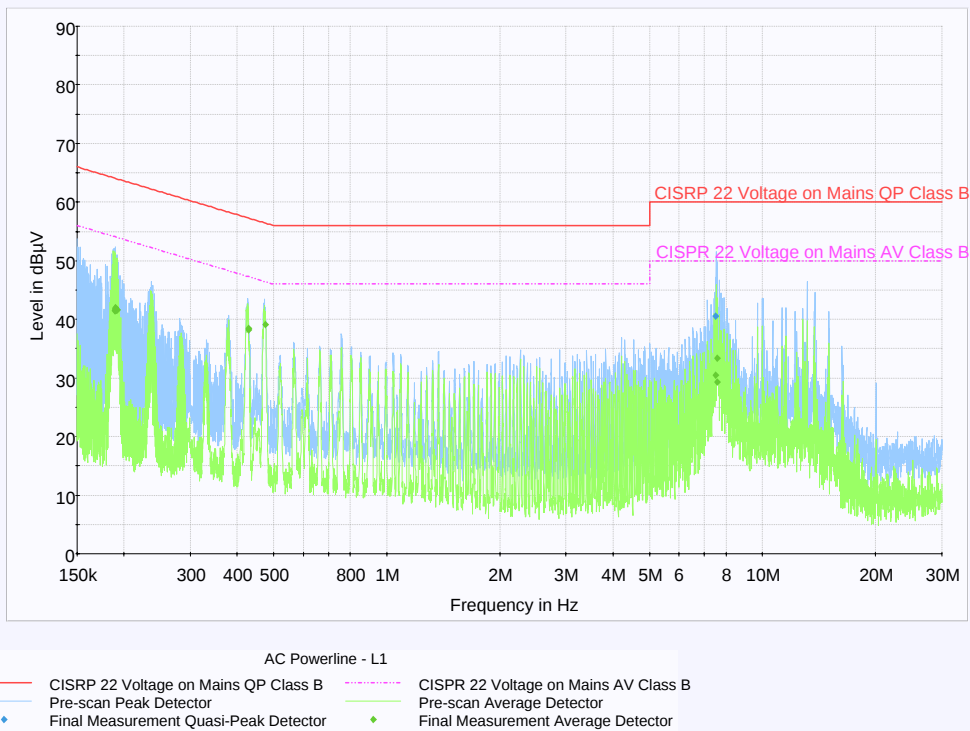
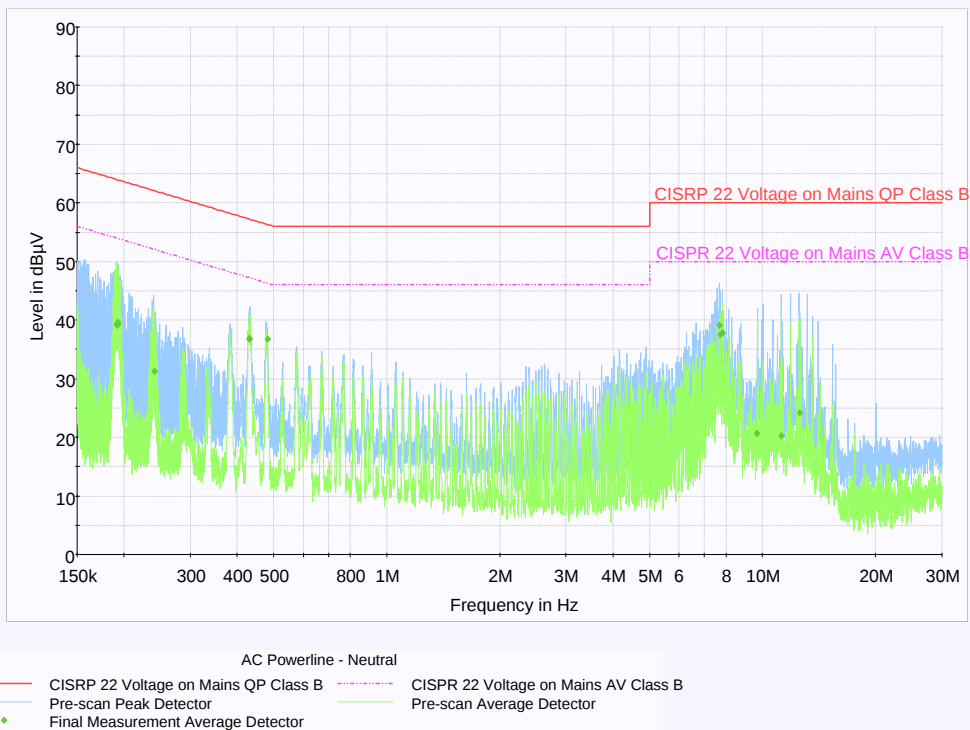
PW147 Tabular results

Frequency (MHz)	Rcvd Level (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Detector
4.9857	44.65	L1	9.93	11.30	56.00	Quasi-peak
5.6240	48.77	L1	9.92	11.20	60.00	Quasi-peak
5.6524	48.24	L1	9.92	11.80	60.00	Quasi-peak
5.7381	49.61	L1	9.92	10.40	60.00	Quasi-peak
5.7727	49.87	L1	9.92	10.10	60.00	Quasi-peak
5.7902	48.46	L1	9.92	11.50	60.00	Quasi-peak
5.9016	49.52	L1	9.92	10.50	60.00	Quasi-peak
5.9348	48.98	L1	9.92	11.00	60.00	Quasi-peak
5.9551	48.94	L1	9.92	11.10	60.00	Quasi-peak
6.0272	49.64	L1	9.92	10.40	60.00	Quasi-peak
6.0394	49.53	L1	9.92	10.50	60.00	Quasi-peak
6.0881	48.96	L1	9.92	11.00	60.00	Quasi-peak
6.0941	48.83	L1	9.92	11.20	60.00	Quasi-peak
6.1495	49.28	L1	9.92	10.70	60.00	Quasi-peak
6.2627	48.87	L1	9.92	11.10	60.00	Quasi-peak
6.2815	48.60	L1	9.92	11.40	60.00	Quasi-peak
6.3507	47.52	L1	9.92	12.50	60.00	Quasi-peak
6.4140	47.98	L1	9.92	12.00	60.00	Quasi-peak
0.6411	28.00	L1	9.93	18.00	46.00	Average
0.6440	29.12	L1	9.93	16.90	46.00	Average
0.6442	28.77	L1	9.93	17.20	46.00	Average
0.6448	29.12	L1	9.93	16.90	46.00	Average
0.6493	29.06	L1	9.93	16.90	46.00	Average
0.6496	28.54	L1	9.93	17.50	46.00	Average
0.6511	28.34	L1	9.93	17.70	46.00	Average
0.6573	27.76	L1	9.93	18.20	46.00	Average
0.6591	27.86	L1	9.93	18.10	46.00	Average
0.7887	27.13	L1	10.02	18.90	46.00	Average
0.7894	27.06	L1	10.02	18.90	46.00	Average
1.1561	24.32	L1	9.90	21.70	46.00	Average
1.1996	23.56	L1	9.90	22.40	46.00	Average
5.7324	32.04	L1	9.92	18.00	50.00	Average
5.7545	33.37	L1	9.92	16.60	50.00	Average
5.9911	32.87	L1	9.92	17.10	50.00	Average
0.6376	26.51	N	9.93	19.50	46.00	Average
0.6419	25.97	N	9.93	20.00	46.00	Average
0.6486	25.30	N	9.93	20.70	46.00	Average
0.6523	26.24	N	9.93	19.80	46.00	Average
9.9795	21.42	N	9.96	28.60	50.00	Average

PW130 Power supply – Line conductor**PW130 Power supply – Neutral conductor**

PW130 Tabular results

Frequency (MHz)	Rcvd Level (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Detector
4.7465	32.73	N	9.98	13.30	46.00	Average
4.8867	27.20	N	9.98	18.80	46.00	Average
4.9559	30.24	N	9.94	15.80	46.00	Average

PhiHong Power supply – Line conductor**PhiHong Power supply – Neutral conductor**

PhiHong Tabular Results

Frequency (MHz)	Rcvd Level (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Detector
7.5002	40.60	L1	9.92	19.40	60.00	Quasi-peak
0.1889	41.47	L1	10.08	12.60	54.08	Average
0.1892	41.54	L1	10.08	12.60	54.07	Average
0.1894	41.42	L1	10.08	12.70	54.06	Average
0.1896	41.89	L1	10.08	12.20	54.05	Average
0.1896	41.76	L1	10.08	12.30	54.05	Average
0.1897	41.81	L1	10.08	12.30	54.05	Average
0.1897	41.95	L1	10.08	12.00	54.05	Average
0.1898	41.79	L1	10.08	12.20	54.04	Average
0.1901	41.65	L1	10.08	12.30	54.03	Average
0.1901	41.57	L1	10.08	12.40	54.03	Average
0.1910	41.59	L1	10.06	12.40	53.99	Average
0.1914	41.58	L1	10.05	12.40	53.97	Average
0.4281	38.51	L1	9.90	8.80	47.29	Average
0.4283	38.20	L1	9.90	9.10	47.28	Average
0.4750	39.14	L1	9.92	7.30	46.43	Average
7.5077	30.43	L1	9.92	19.60	50.00	Average
7.5529	29.33	L1	9.92	20.70	50.00	Average
7.5757	33.30	L1	9.92	16.70	50.00	Average
0.1913	39.21	N	10.04	14.80	53.98	Average
0.1913	39.40	N	10.03	14.60	53.98	Average
0.1915	39.18	N	10.03	14.80	53.97	Average
0.1920	39.69	N	10.02	14.30	53.95	Average
0.1921	39.33	N	10.02	14.60	53.95	Average
0.1924	39.40	N	10.01	14.50	53.93	Average
0.2410	31.22	N	9.87	20.90	52.06	Average
0.4304	36.76	N	9.89	10.40	47.24	Average
0.4308	36.88	N	9.89	10.30	47.24	Average
0.4809	36.73	N	9.92	9.60	46.32	Average
7.6828	39.17	N	9.90	10.80	50.00	Average
7.7059	37.61	N	9.90	12.40	50.00	Average
7.8305	37.80	N	9.90	12.20	50.00	Average
9.6743	20.67	N	9.90	29.30	50.00	Average
11.2314	20.34	N	9.98	29.70	50.00	Average
12.5771	24.19	N	9.98	25.80	50.00	Average

Clause 15.247(a)(2) Systems using digital modulation techniques

Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

Test Conditions:

Sample Number:	6	Temperature (°C):	26
Date:	June 25, 2007	Humidity (%):	47
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	Wireless

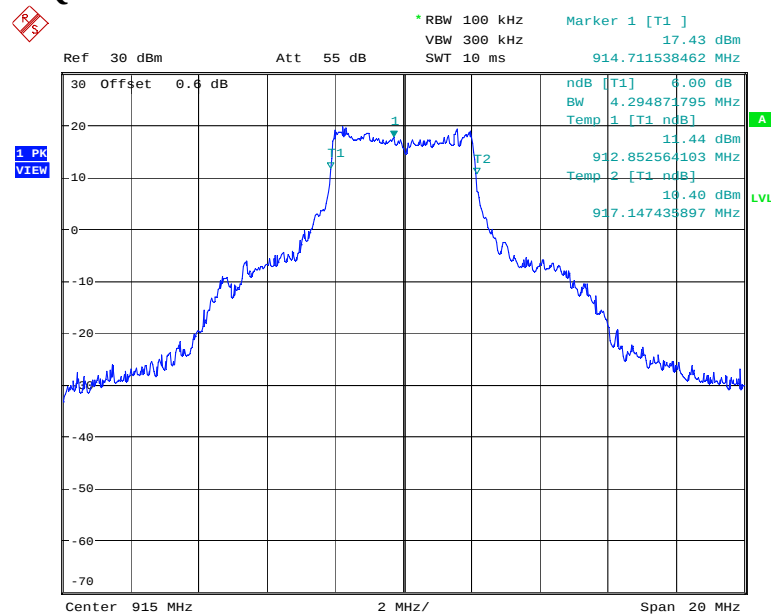
Test Results: See attached plots

6dB Bandwidth:

Modulation	6dB Bandwidth
64QAM	4.29MHz
16QAM	4.33MHz
QPSK	4.29MHz
BPSK	4.29MHz
CCK	3.03MHz

All testing was performed at 915MHz.

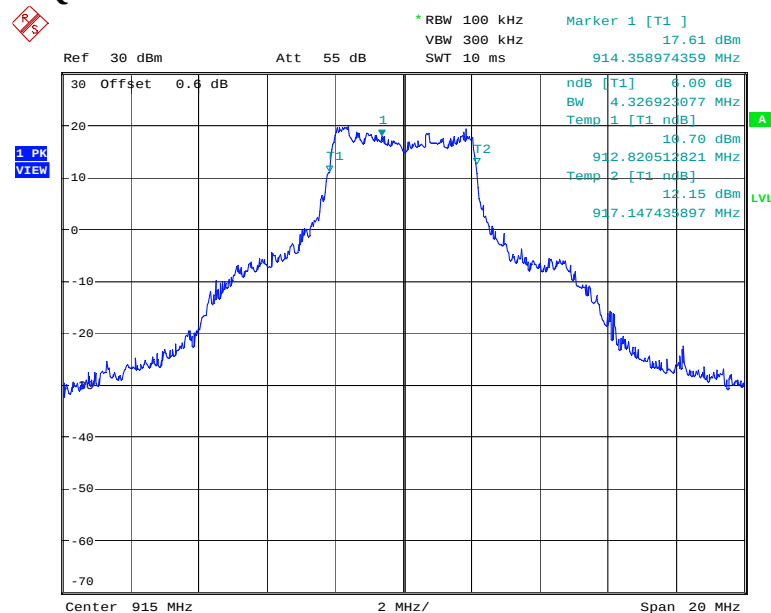
64QAM



64QAM

Date: 25.JUN.2007 14:07:54

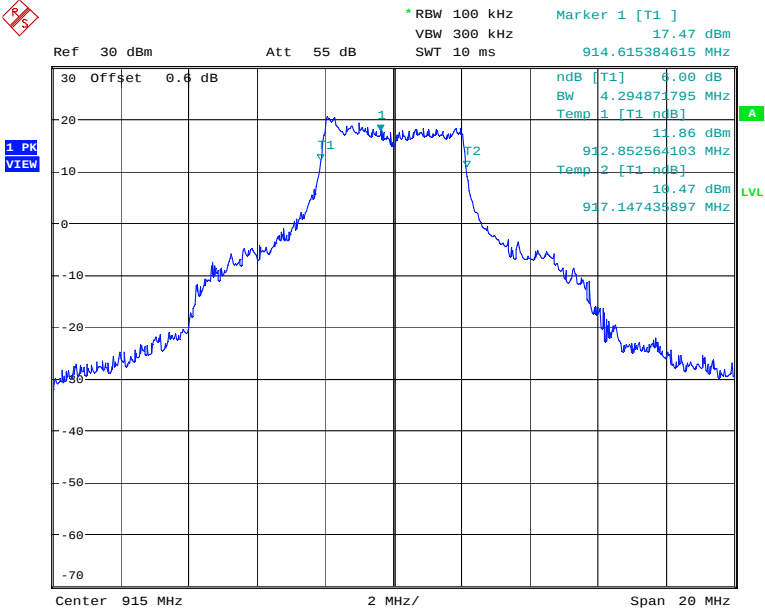
16QAM



16QAM

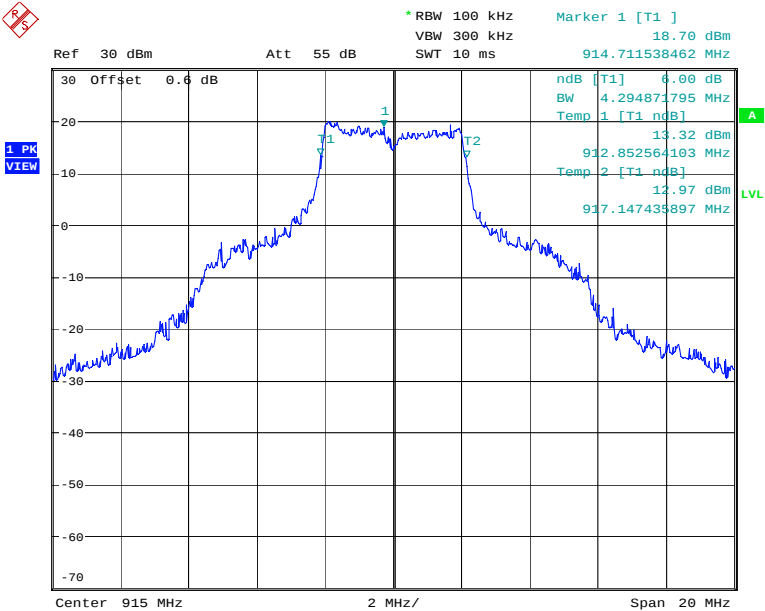
Date: 25.JUN.2007 14:06:38

QPSK



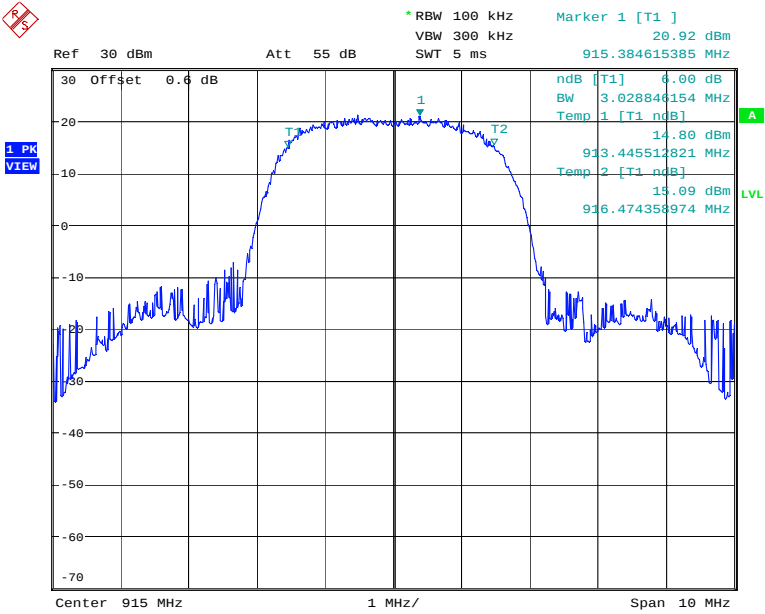
QPSK
Date: 25.JUN.2007 14:05:43

BPSK



BPSK
Date: 25.JUN.2007 14:04:16

CCS



CCK
Date: 25.JUN.2007 14:02:25

Clause 15.247(b)(3) Maximum peak output power of systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signalling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Conditions:

Sample Number:	6	Temperature (°C):	26
Date:	June 25, 2007	Humidity (%):	47
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	Wireless

Test Results:**Conducted Output Power:**

The output power was measured at +/-15% of the supply voltage and found that there was no change.

Power setting for all external antennas

Channel Frequency	Measured Output Power (W)				
	64QAM	16QAM	QPSK	BPSK	CCK
905MHz	—	—	—	—	25.83
905.2MHz	24.54	24.58	24.54	24.52	—
905.6MHz	25.37	25.19	25.27	25.14	—
915MHz	25.90	25.73	25.81	26.53	25.44
924.0MHz	25.51	25.5	25.48	25.51	—
924.8MHz	25.04	25.00	25.06	24.99	—
925MHz	—	—	—	—	25.45

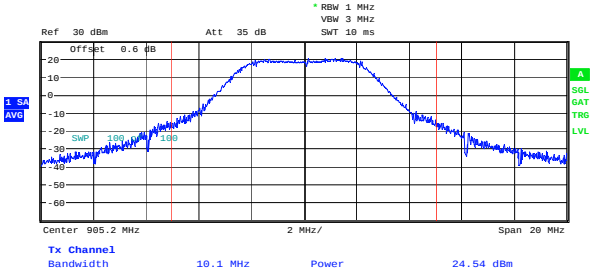
The output is adjusted as the channels of the OFDM modulation get closer to the bandedges. Measurements were performed at all power settings.

Power settings for Integral antenna

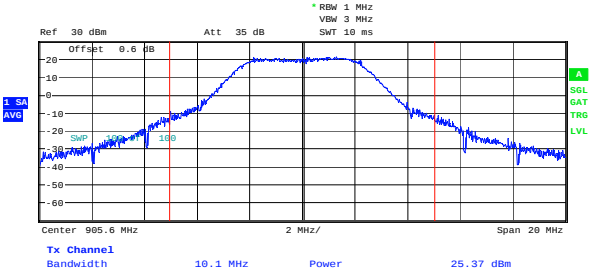
Channel Frequency	Measured Output Power (W)				
	64QAM	16QAM	QPSK	BPSK	CCK
905MHz	—	—	—	—	25.73
905.2MHz	24.54	24.58	24.54	24.52	—
905.6MHz	25.37	25.19	25.27	25.14	—
915MHz	25.80	25.77	25.61	25.68	25.76
924.0MHz	25.51	25.5	25.48	25.51	—
924.8MHz	25.04	25.00	25.06	24.99	—
925MHz	—	—	—	—	25.45

Output power measurements were performed in accordance with Power Output Option 2, method #1 contained in FCC guidance document “Measurement of Digital Transmission Systems Operating under Section 15.247” dated March 23, 2005.

64QAM – Normal power – 905.2MHz

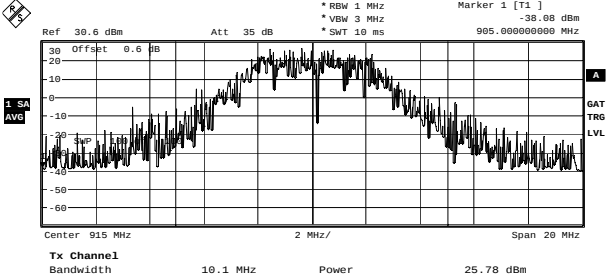


64QAM – Normal power – 905.6MHz



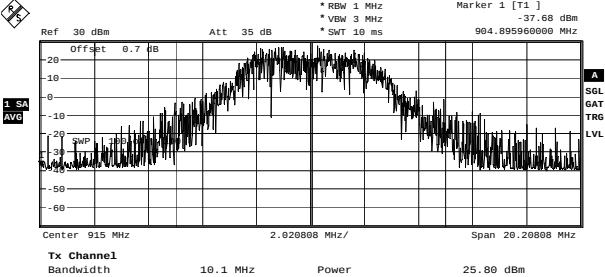
Date: 1.OCT.2007 12:01:34

64QAM – Normal power – 915MHz



Date: 1.OCT.2007 12:04:20

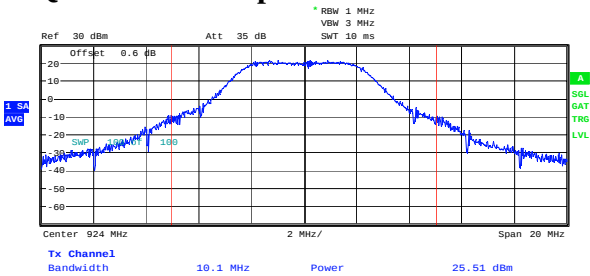
64QAM – Integral antenna – 915MHz



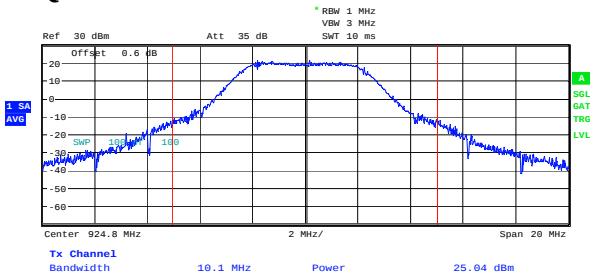
64QAM
Date: 25.JUN.2007 10:34:25

64QAM
Date: 27.JUN.2007 10:00:18

64QAM – Normal power – 924.0MHz



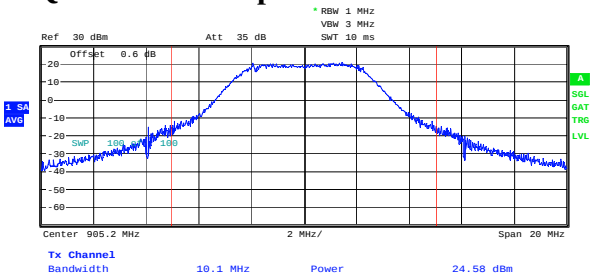
64QAM – Normal Power – 924.8MHz



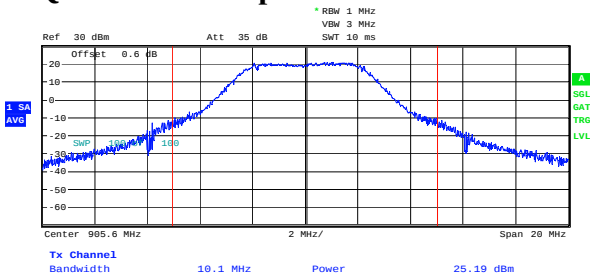
Date: 1.OCT.2007 12:23:59

Date: 1.OCT.2007 12:25:05

16QAM – Normal power – 905.2MHz



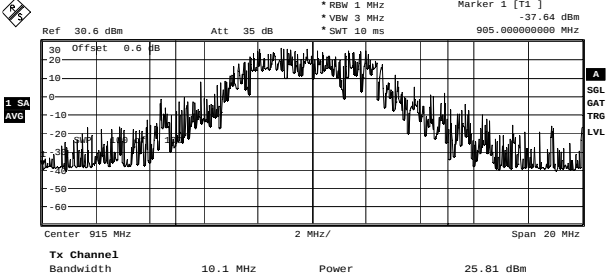
16QAM – Normal power – 905.6MHz



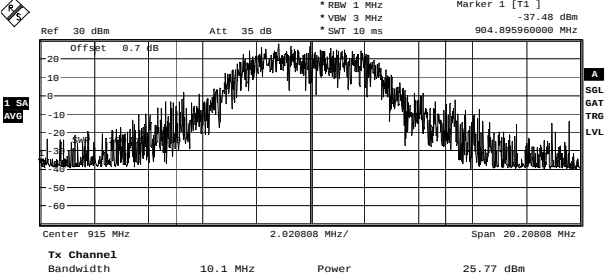
Date: 1.OCT.2007 11:58:28

Date: 1.OCT.2007 12:17:35

16QAM – Normal power – 915MHz

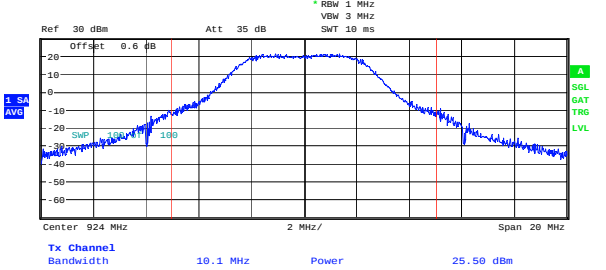


16QAM – Integral antenna – 915MHz



16QAM
Date: 25.JUN.2007 10:35:51

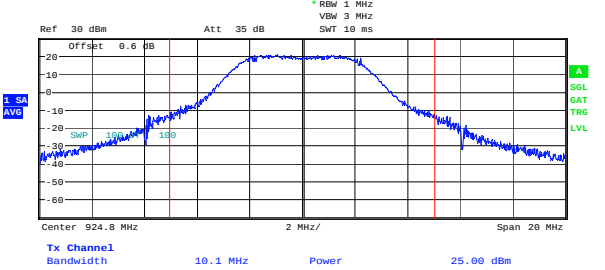
16QAM – Normal power – 924.0MHz



Date: 1.OCT.2007 12:22:57

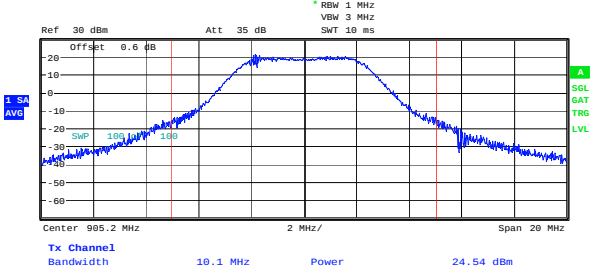
16QAM
Date: 27.JUN.2007 09:51:02

16QAM – Normal power – 924.8MHz

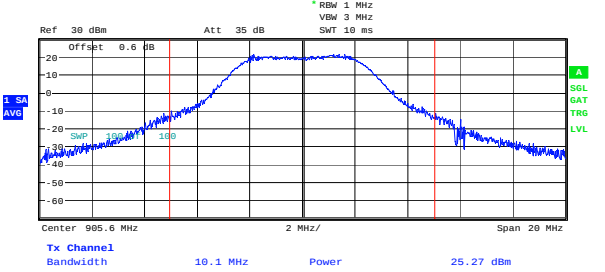


Date: 1.OCT.2007 12:25:54

QPSK – Normal power – 905.2MHz

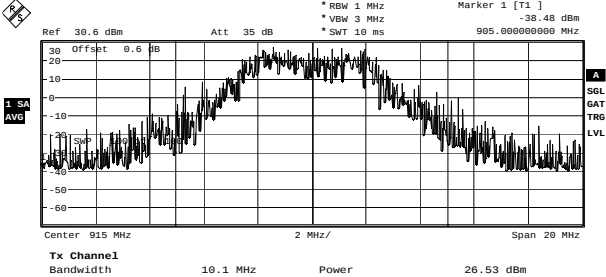


QPSK – Normal power – 905.6MHz



Date: 1.OCT.2007 11:59:21

QPSK – Normal power – 915MHz

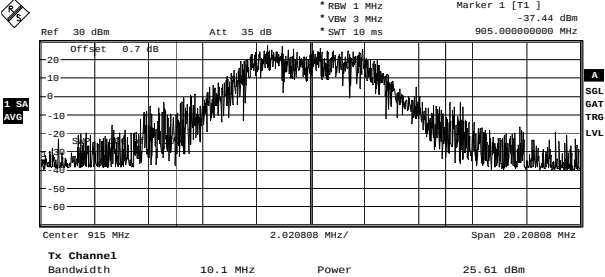


QPSK

Date: 25.JUN.2007 10:37:03

Date: 1.OCT.2007 12:18:46

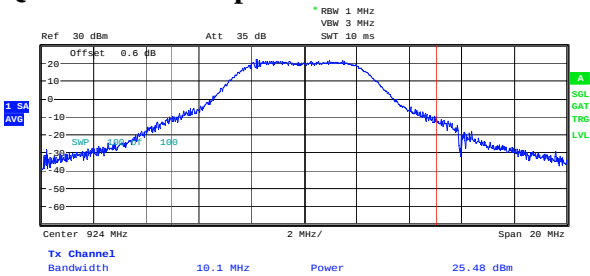
QPSK – Integral antenna – 915MHz



QPSK

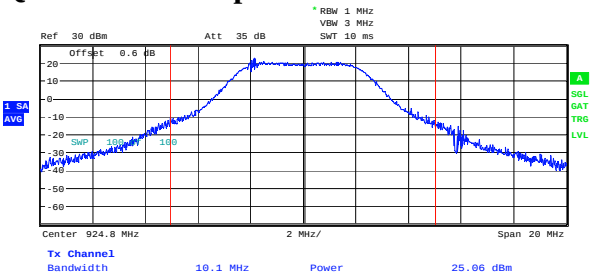
Date: 27.JUN.2007 09:49:11

QPSK – Normal power – 924.0MHz



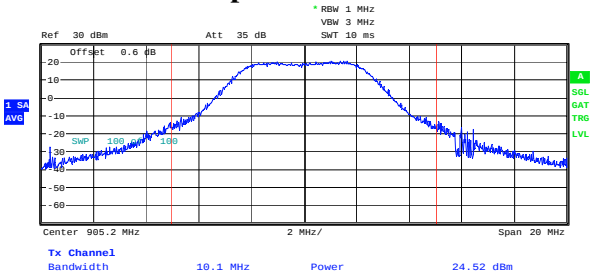
Date: 1.OCT.2007 12:22:01

QPSK – Normal power – 924.8MHz



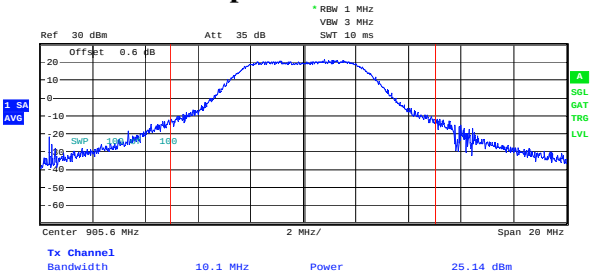
Date: 1.OCT.2007 12:26:51

BPSK – Normal power – 905.2MHz



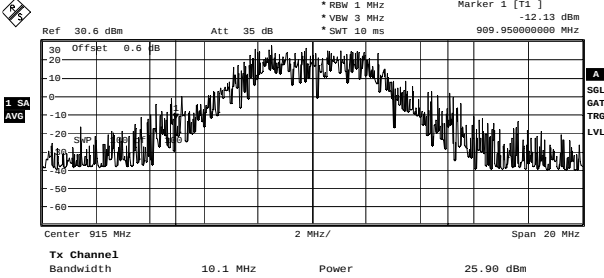
Date: 1.OCT.2007 12:00:40

BPSK – Normal power – 905.6MHz

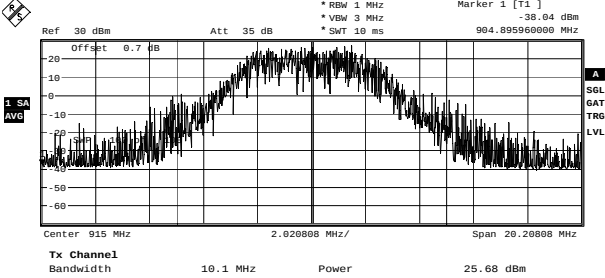


Date: 1.OCT.2007 12:19:53

BPSK – Normal power – 915MHz



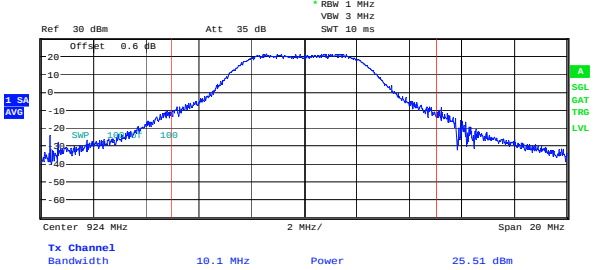
BPSK – Integral antenna – 915MHz



BPSK

Date: 25.JUN.2007 10:31:45

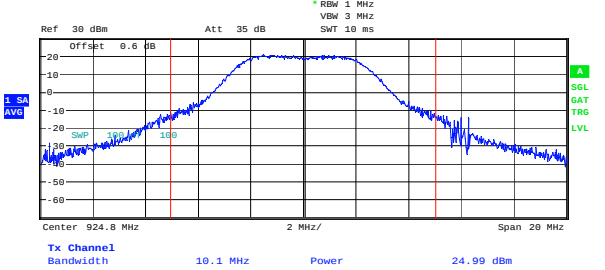
BPSK – Normal power – 924.0MHz



BPSK

Date: 27.JUN.2007 10:02:48

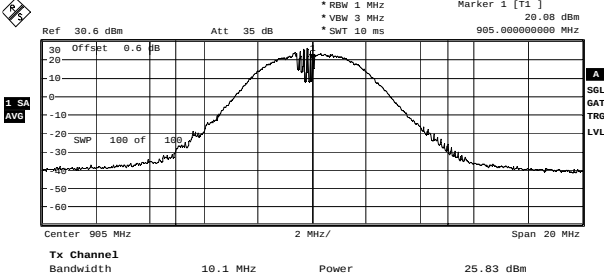
BPSK – Normal power – 924.8MHz



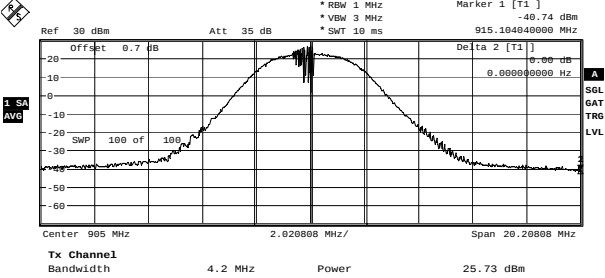
Date: 1.OCT.2007 12:21:00

Date: 1.OCT.2007 12:27:57

CCS – Normal power – 905MHz

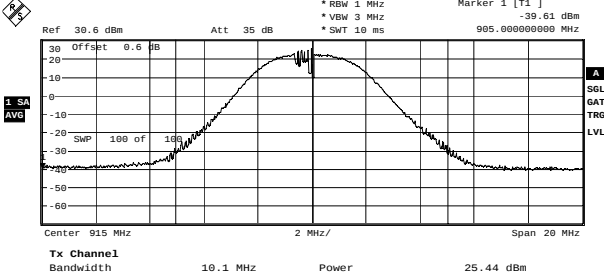


CCS – Integral antenna – 905MHz



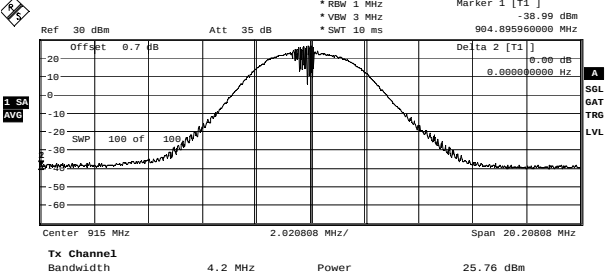
CCK
Date: 25.JUN.2007 10:42:23

CCS – Normal power – 915MHz



CCK
Date: 27.JUN.2007 10:10:30

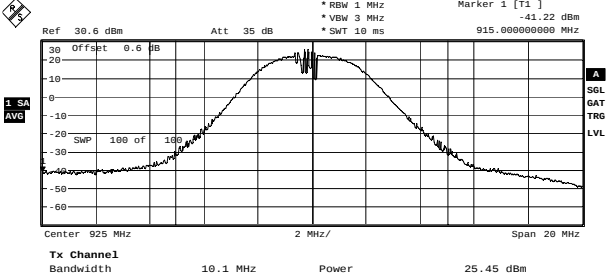
CCS – Integral antenna – 915MHz



CCK
Date: 25.JUN.2007 10:38:25

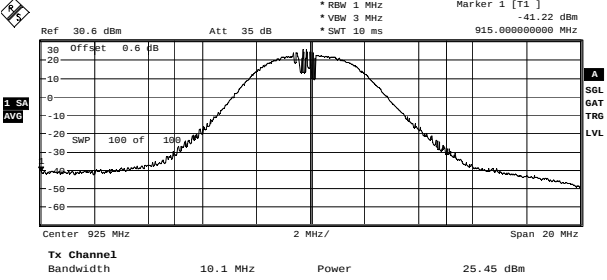
CCK
Date: 27.JUN.2007 10:07:13

CCS – Normal power – 925MHz



CCK
Date: 25.JUN.2007 10:55:50

CCS – Integral antenna – 925MHz



CCK
Date: 25.JUN.2007 10:55:50

Clause 15.247(b)(4) Maximum peak output power

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Conditions:

Sample Number:	6	Temperature (°C):	26
Date:	June 25, 2007	Humidity (%):	47
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	Wireless

Test Results:**Integral antenna:**

Max antenna gain = 10.2dBi
Max conducted power = 25.80dBm
Maximum EIRP = 36dBm

All other antennas:

The user manual specifies a required system loss to compensate for any difference between the conducted power and the antenna gain, which is greater than 36dBm.

Clause 15.247(d) Radiated Emissions Not in Restricted Bands

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Clause 15.209(a) Radiated Emissions within Restricted Bands

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:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
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

Test Conditions:

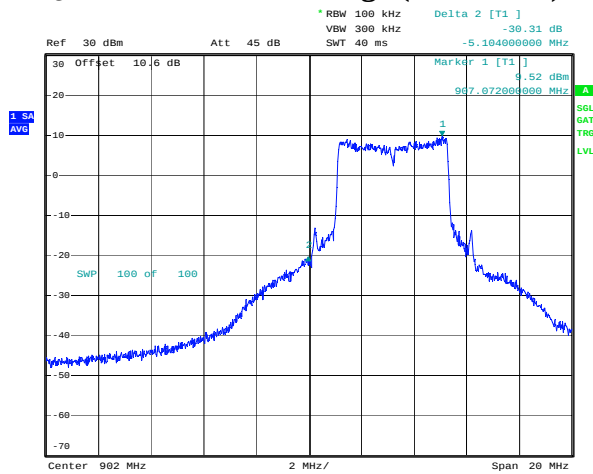
Sample Number:	6	Temperature (°C):	26
Date:	June 25, 2007	Humidity (%):	47
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	Wireless/OATS

Test Results:

See Attached Table and Plots.

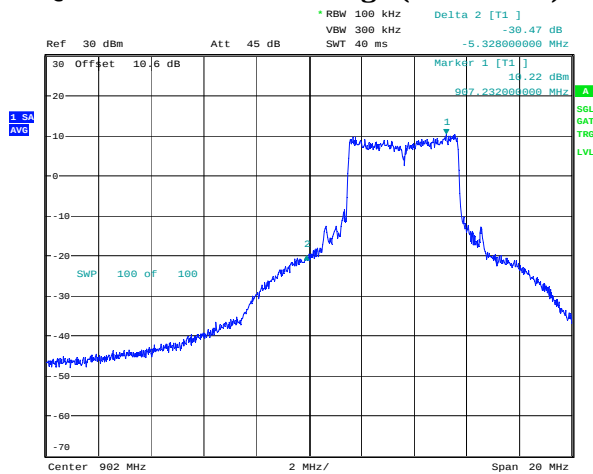
All Radiated test results for harmonic emissions were assessed to comply with the requirements of 15.209 regardless of the frequency.

64QAM - Lower Band Edge (905.2MHz):



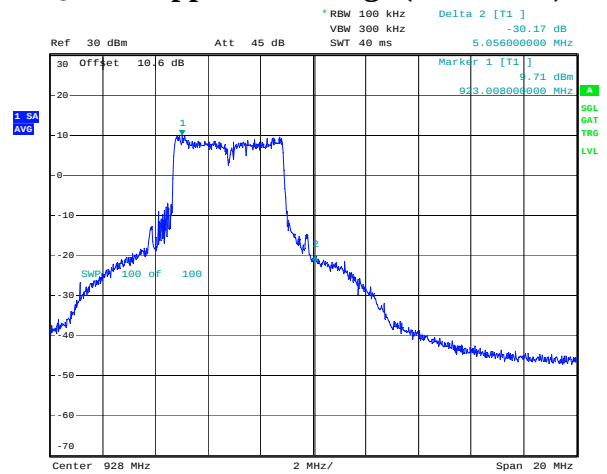
Date: 1.OCT.2007 09:16:12

64QAM - Lower Band Edge (905.6MHz):



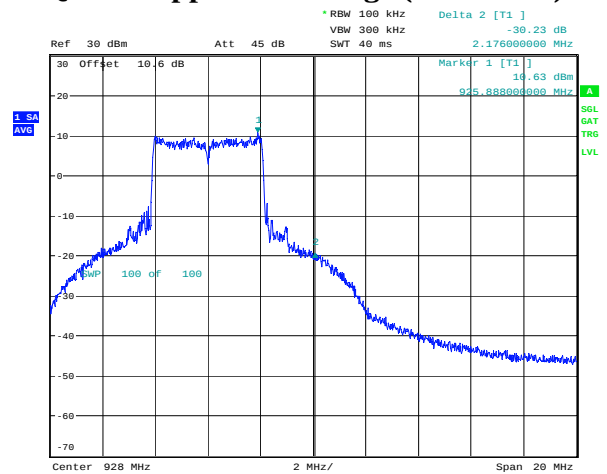
Date: 1.OCT.2007 09:18:36

64QAM - Upper Band Edge (924.8MHz):



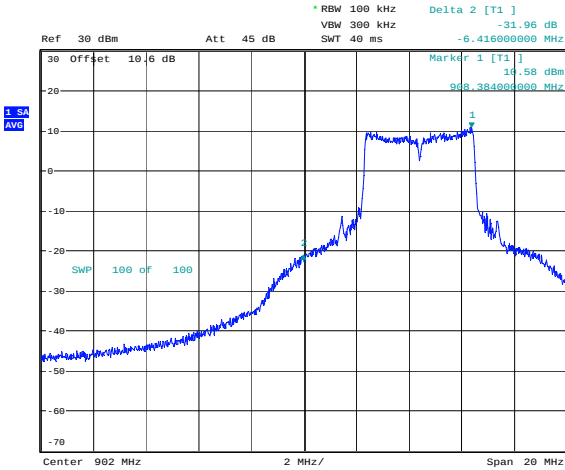
Date: 1.OCT.2007 10:17:57

64QAM - Upper Band Edge (924.0MHz):



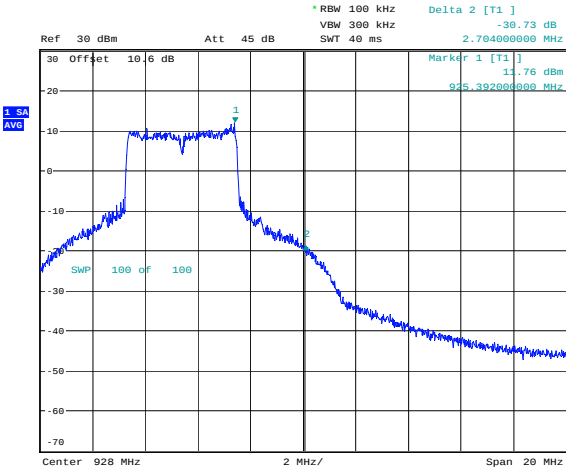
Date: 1.OCT.2007 09:50:51

64QAM - Lower Band Edge (906.4MHz):



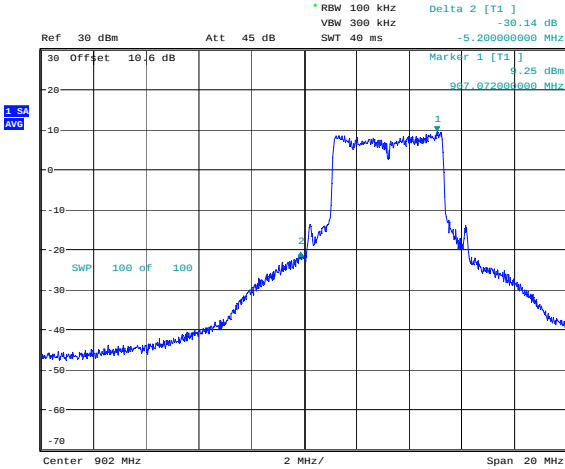
Date: 1.OCT.2007 09:36:45

64QAM - Upper Band Edge (923.4MHz):



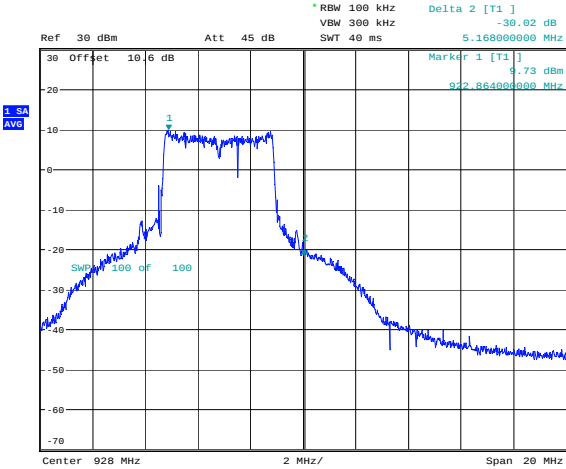
Date: 1.OCT.2007 09:48:35

16QAM - Lower Band Edge (905.2MHz):



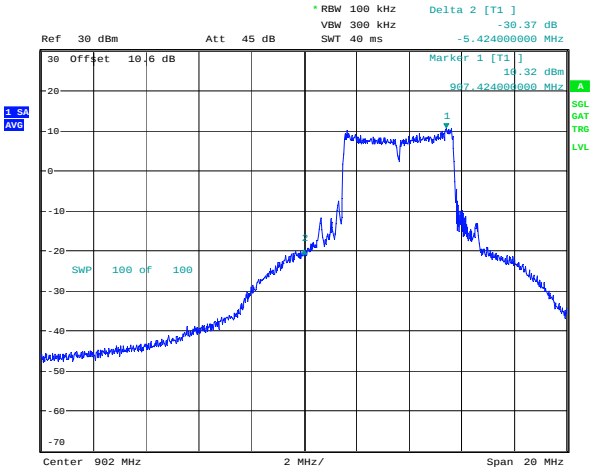
Date: 1.OCT.2007 09:14:48

16QAM - Upper Band Edge (924.8MHz):



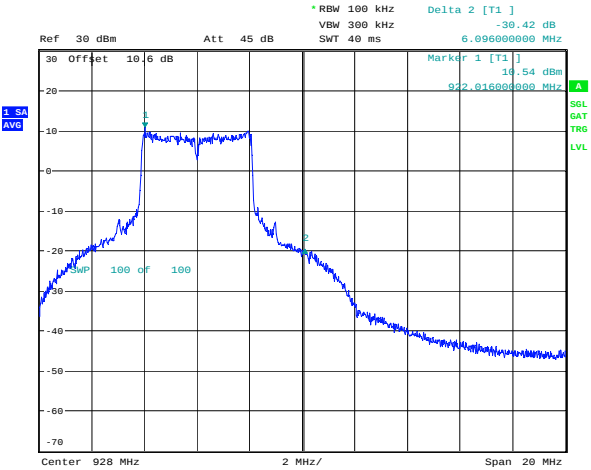
Date: 1.OCT.2007 10:16:35

16QAM - Lower Band Edge (905.6MHz):



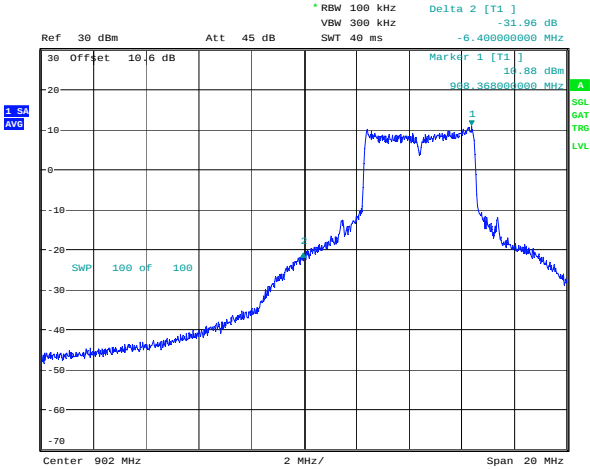
Date: 1.OCT.2007 09:22:28

16QAM - Upper Band Edge (924.0MHz):



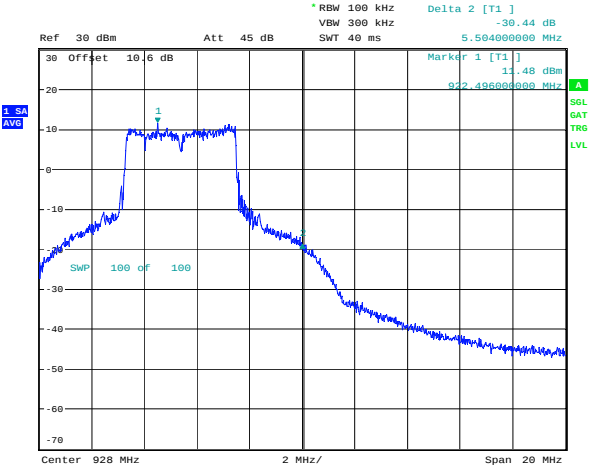
Date: 1.OCT.2007 09:54:13

16QAM - Lower Band Edge (906.4MHz):



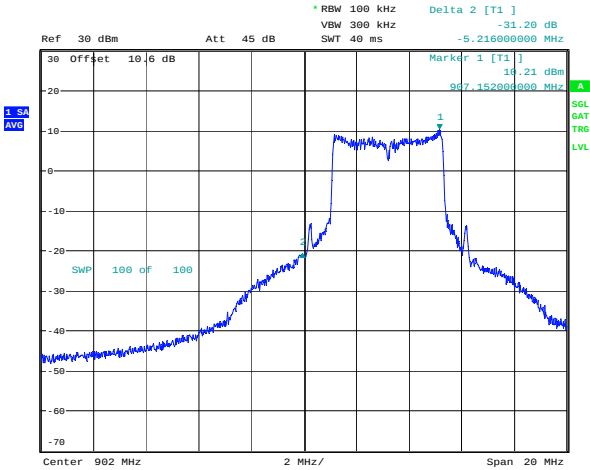
Date: 1.OCT.2007 09:35:48

16QAM - Upper Band Edge (923.4MHz):



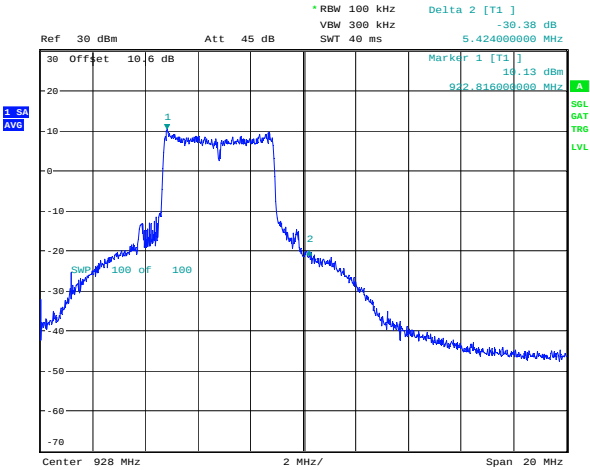
Date: 1.OCT.2007 09:45:17

QPSK - Lower Band Edge (905.2MHz):



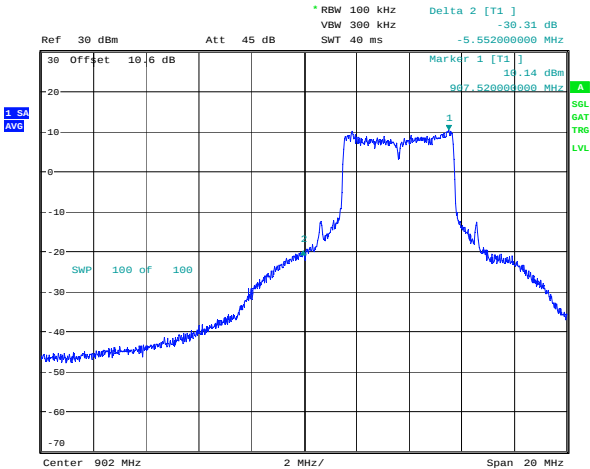
Date: 1.OCT.2007 09:13:05

QPSK - Upper Band Edge (924.8MHz):



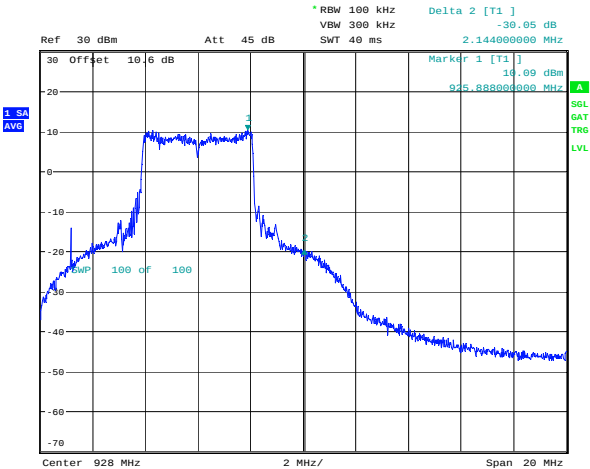
Date: 1.OCT.2007 10:05:45

QPSK - Lower Band Edge (905.6MHz):



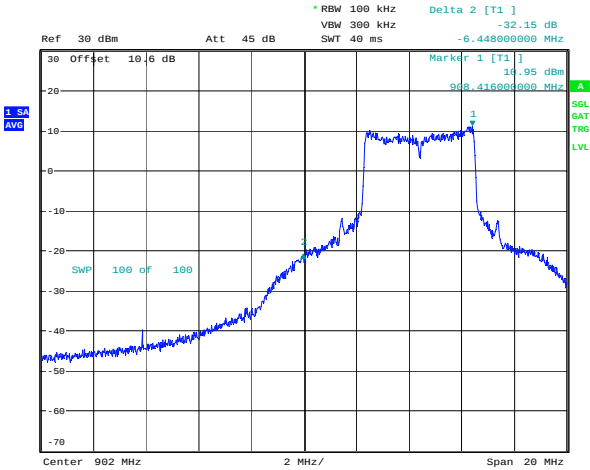
Date: 1.OCT.2007 09:25:35

QPSK - Upper Band Edge (924.0MHz):



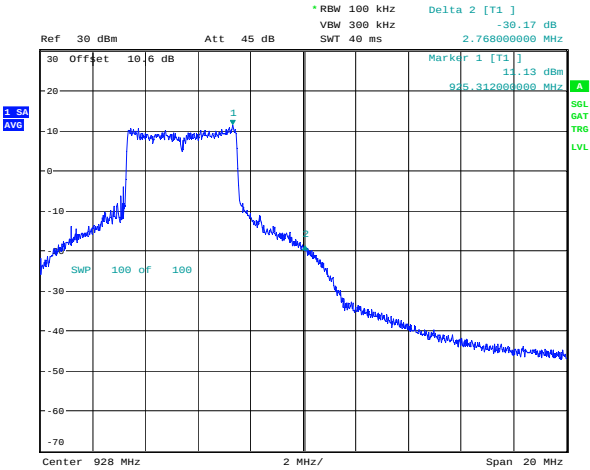
Date: 1.OCT.2007 09:58:21

QPSK - Lower Band Edge (906.4MHz):



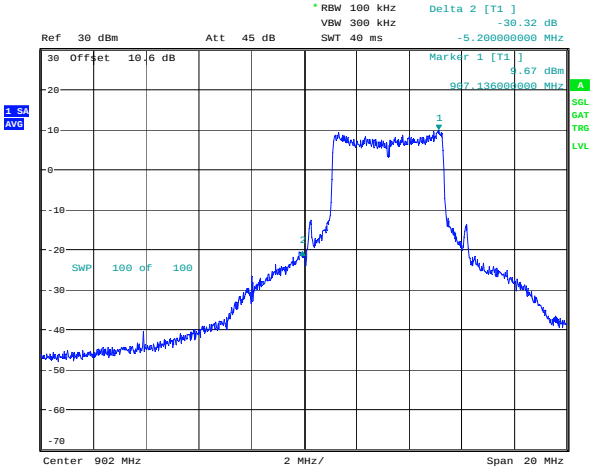
Date: 1.OCT.2007 09:35:06

QPSK - Upper Band Edge (923.4MHz):



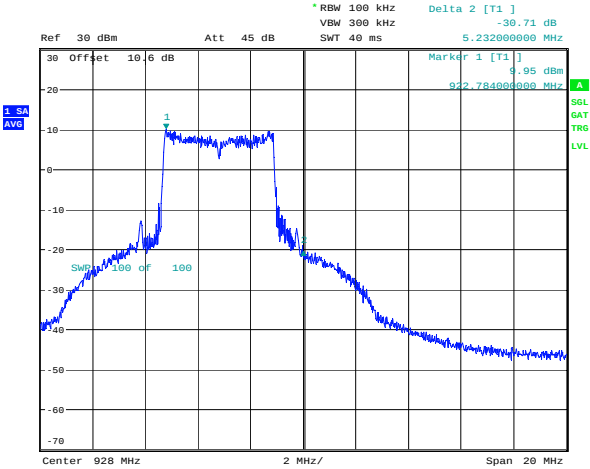
Date: 1.OCT.2007 09:43:38

BPSK - Lower Band Edge (905.2MHz):



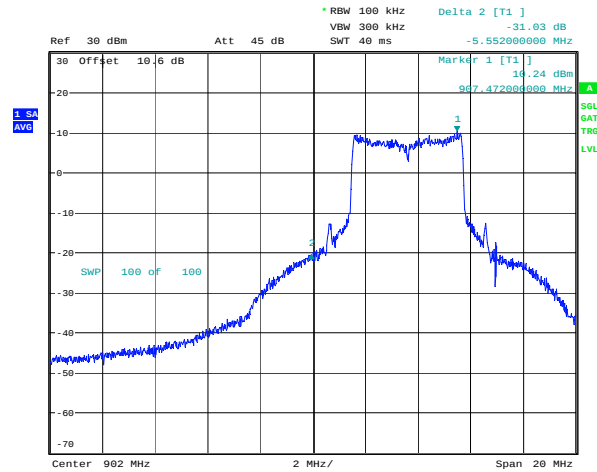
Date: 1.OCT.2007 09:10:46

BPSK - Upper Band Edge (924.8MHz):



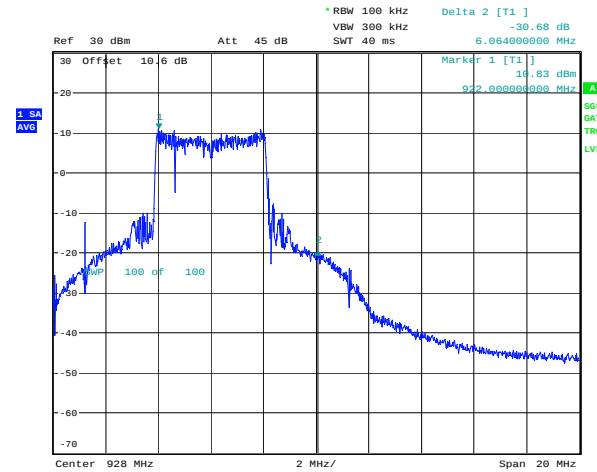
Date: 1.OCT.2007 10:03:09

BPSK - Lower Band Edge (905.6MHz):



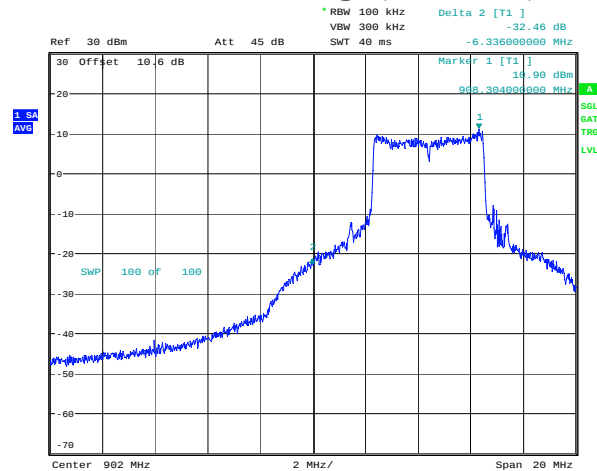
Date: 1.OCT.2007 09:27:51

BPSK - Upper Band Edge (924.0MHz):



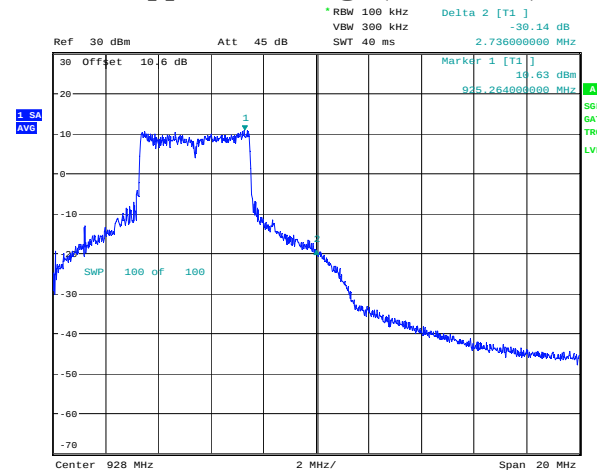
Date: 1.OCT.2007 10:00:55

BPSK - Lower Band Edge (906.4MHz):



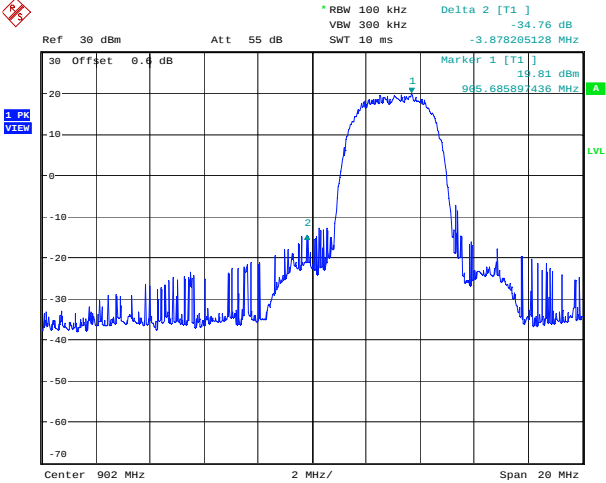
Date: 1.OCT.2007 09:30:57

BPSK - Upper Band Edge (923.4MHz):



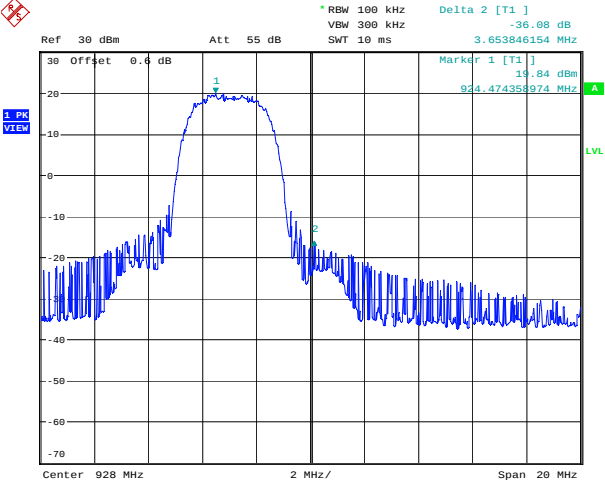
Date: 1.OCT.2007 09:40:45

CCS - Lower Band Edge:



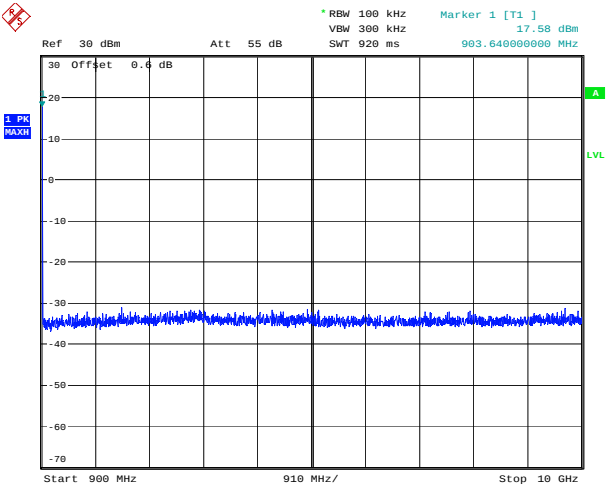
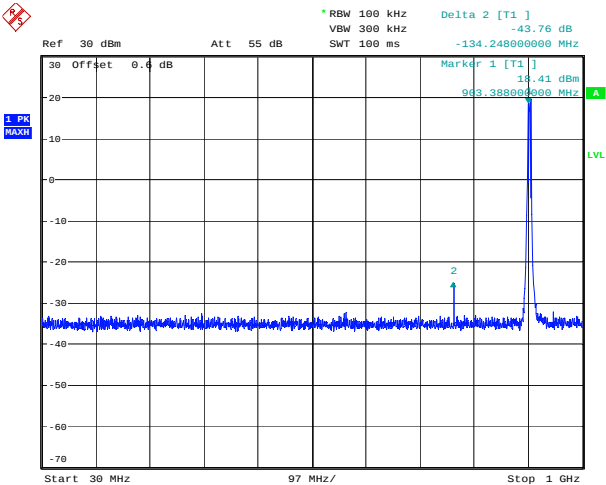
CCK
Date: 25.JUN.2007 14:16:21

CCS - Upper Band Edge:



CCK
Date: 25.JUN.2007 14:17:06

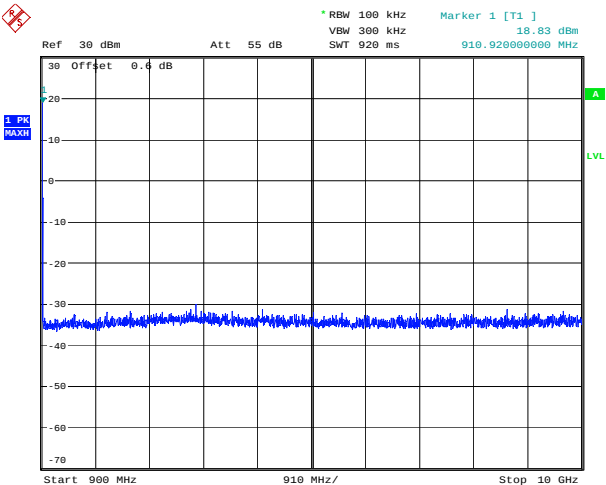
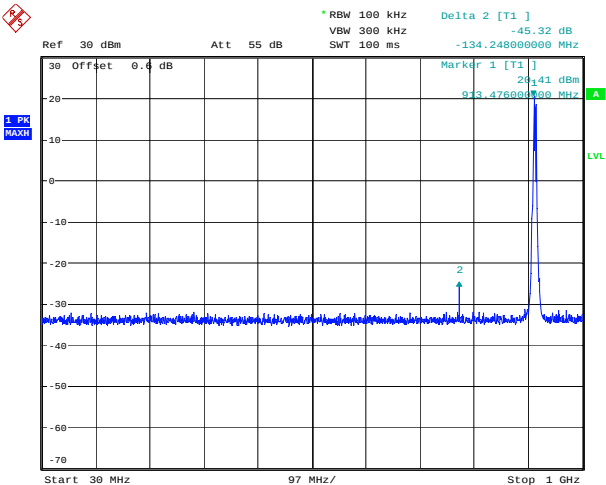
Conducted Emissions
905MHz



QPSK
Date: 25.JUN.2007 14:42:57

QPSK
Date: 25.JUN.2007 14:43:44

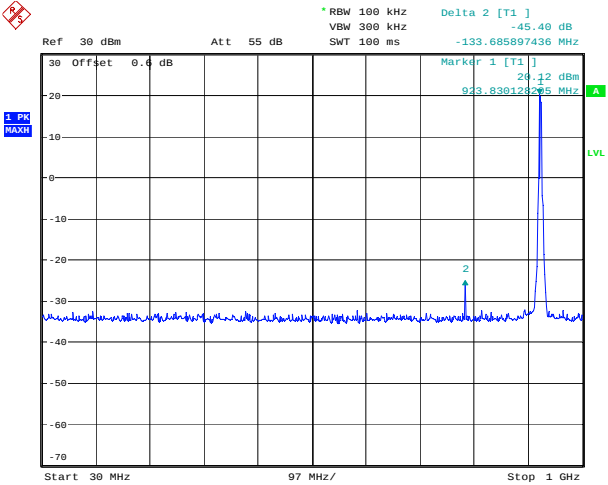
915MHz



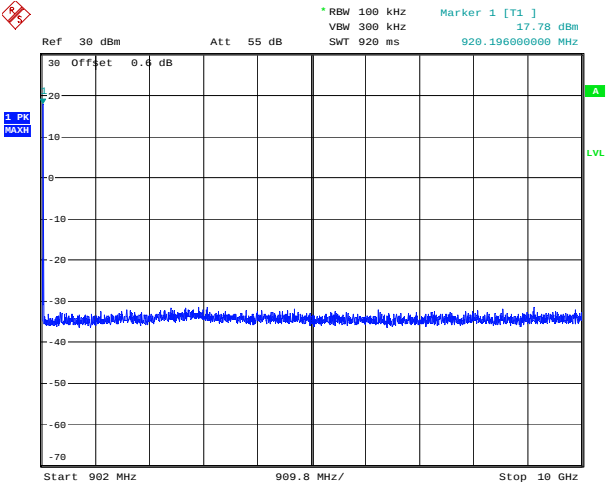
QPSK
Date: 25.JUN.2007 14:42:11

QPSK
Date: 25.JUN.2007 14:37:05

925MHz



QPSK
Date: 25.JUN.2007 14:31:34



QPSK
Date: 25.JUN.2007 14:32:18

Radiated Emissions – Integral Antenna

Freq. (MHz)	Ant	Pol.	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Horizontally mounted A diversity										
1810.0000	Horn2	V	56.1	27.5	49.1	4.5	39.1	54.0	14.9	Peak
1810.0000	Horn2	H	49.3	27.4	49.1	4.5	32.1	54.0	21.9	Peak
2715.0000	Horn2	V	66.5	30.0	59.8	5.9	42.7	54.0	11.3	Peak
2715.0000	Horn2	H	70.6	29.9	59.8	5.9	46.7	54.0	7.3	Peak
4525.0000	Horn2	V	64.4	33.3	55.9	8.3	50.1	54.0	3.9	Peak
1830.0000	Horn2	V	58.0	27.5	49.1	4.6	41.1	54.0	12.9	Peak
1830.0000	Horn2	H	50.9	27.4	49.1	4.6	33.9	54.0	20.1	Peak
1850.0000	Horn2	V	60.7	27.5	49.1	4.7	43.9	54.0	10.1	Peak
1850.0000	Horn2	H	52.8	27.4	49.1	4.7	35.9	54.0	18.1	Peak
2775.0000	Horn2	H	69.6	30.0	59.7	6.0	45.9	54.0	8.1	Peak
Horizontally mounted B diversity										
1810.0000	Horn2	V	62.9	27.5	49.1	4.5	45.9	54.0	8.1	Peak
1810.0000	Horn2	H	56.2	27.4	49.1	4.5	39.1	54.0	14.9	Peak
2715.0000	Horn2	V	65.6	30.0	59.8	5.9	41.8	54.0	12.2	Peak
2715.0000	Horn2	H	66.7	29.9	59.8	5.9	42.7	54.0	11.2	Peak
1830.0000	Horn2	V	52.7	27.5	49.1	4.6	35.8	54.0	18.2	Peak
1830.0000	Horn2	H	62.9	27.4	49.1	4.6	45.9	54.0	8.1	Peak
1850.0000	Horn2	V	55.8	27.5	49.1	4.7	39.0	54.0	15.0	Peak
1850.0000	Horn2	H	62.3	27.4	49.1	4.7	45.4	54.0	8.6	Peak
2775.0000	Horn2	H	67.9	30.0	59.7	6.0	44.1	54.0	9.9	Peak
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole										
Note 2: Positive Peak detector used										

Additional Observations:

The EUT was also investigated in a Vertical mounting position and it was found that Horizontal results were worst case.

Radiated Emissions – Antel Omni Dipole

Freq. (MHz)	Ant	Pol.	Corr. (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1830.00	Horn2	V	-17.90	36.87	54.0	17.13	Peak
1830.00	Horn2	H	-17.10	37.09	54.0	16.91	Peak
1850.00	Horn2	V	-17.60	35.39	54.0	18.61	Peak
1850.00	Horn2	H	-16.90	36.17	54.0	17.83	Peak
1810.00	Horn2	V	-18.06	34.45	54.0	19.56	Peak
1810.00	Horn2	H	-17.26	37.76	54.0	16.24	Peak

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Positive Peak detector used

Additional Observations:

Measurements were performed with a 1MHz RBW and the Level (dBuV/m) includes the Corr (dB) value. The Corr (dB) value is the sum of the antenna factor, cable loss and amplifier gain.

Radiated Emissions – Kathrein Omni Paraslot

Freq. (MHz)	Ant	Pol.	Corr. (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1830.00	Horn2	V	-17.90	35.12	54.0	18.88	Peak
1830.00	Horn2	H	-17.10	38.81	54.0	15.19	Peak
1850.00	Horn2	V	-17.60	33.08	54.0	20.92	Peak
1850.00	Horn2	H	-16.90	34.01	54.0	19.99	Peak
1810.00	Horn2	V	-18.06	34.48	54.0	9.51	Peak
1810.00	Horn2	H	-17.26	44.49	54.0	19.52	Peak

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Positive Peak detector used

Additional Observations:

Measurements were performed with a 1MHz RBW and the Level (dBuV/m) includes the Corr (dB) value. The Corr (dB) value is the sum of the antenna factor, cable loss and amplifier gain.

Radiated Emissions – Swedcom Log Periodic

Freq. (MHz)	Ant	Pol.	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1810.0000	Horn2	V	69.8	27.5	49.1	4.5	52.8	54.0	1.2	Peak
1810.0000	Horn2	H	61.2	27.4	49.1	4.5	44.0	54.0	9.9	Peak
2715.0000	Horn2	V	80.3	30.0	59.8	5.9	56.4	74.0	17.6	Peak
2715.0000	Horn2	H	70.8	29.9	59.8	5.9	46.9	74.0	27.1	Peak
2715.0000	Horn2	V	53.7	30.0	59.8	5.9	29.9	54.0	24.1	Average
2715.0000	Horn2	H	51.4	29.9	59.8	5.9	27.5	54.0	26.5	Average
1830.0000	Horn2	V	64.2	27.5	49.1	4.6	47.3	54.0	6.7	Peak
1830.0000	Horn2	H	61.1	27.4	49.1	4.6	44.1	54.0	9.9	Peak
2745.0000	Horn2	V	70.3	30.0	59.7	5.8	46.4	54.0	7.6	Peak
2745.0000	Horn2	H	68.5	30.0	59.7	5.8	44.5	54.0	9.4	Peak
1850.0000	Horn2	V	68.8	27.5	49.1	4.7	52.0	54.0	2.0	Peak
1850.0000	Horn2	H	61.1	27.4	49.1	4.7	44.2	54.0	9.8	Peak
2775.0000	Horn2	V	81.2	30.1	59.7	6.0	57.5	74.0	16.5	Peak
2775.0000	Horn2	H	79.7	30.0	59.7	6.0	55.9	74.0	18.1	Peak
2775.0000	Horn2	V	54.9	30.1	59.7	6.0	31.2	54.0	22.8	Average
2775.0000	Horn2	H	54.7	30.0	59.7	6.0	30.9	54.0	23.1	Average
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Note 2: Positive Peak detector used										

Radiated Emissions – Tiltek Dipole array – Vertical Polarization

Freq. (MHz)	Ant	Pol.	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1810.0000	Horn2	V	54.8	27.5	49.1	4.5	37.8	54.0	16.2	Peak
1810.0000	Horn2	H	55.5	27.4	49.1	4.5	38.4	54.0	15.6	Peak
1830.0000	Horn2	V	53.5	27.5	49.1	4.6	36.6	54.0	17.4	Peak
1830.0000	Horn2	H	54.0	27.4	49.1	4.6	37.0	54.0	17.0	Peak
1850.0000	Horn2	V	57.7	27.5	49.1	4.7	40.9	74.0	33.1	Peak
1850.0000	Horn2	H	55.2	27.4	49.1	4.7	38.3	74.0	35.7	Peak
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Note 2: Positive Peak detector used										

Radiated Emissions – Tiltek Dipole array – Horizontal Polarization

Freq. (MHz)	Ant	Pol.	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1810.0000	Horn2	V	55.8	27.5	49.1	4.5	38.8	54.0	15.2	Peak
1810.0000	Horn2	H	55.0	27.4	49.1	4.5	37.9	54.0	16.1	Peak
1830.0000	Horn2	V	54.7	27.5	49.1	4.6	37.7	54.0	16.2	Peak
1830.0000	Horn2	H	54.3	27.4	49.1	4.6	37.3	54.0	16.7	Peak
1850.0000	Horn2	V	54.5	27.5	49.1	4.7	37.7	54.0	16.3	Peak
1850.0000	Horn2	H	57.2	27.4	49.1	4.7	40.3	54.0	13.7	Peak
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Note 2: Positive Peak detector used										

Radiated Emissions – Antel Panel

Freq. (MHz)	Ant	Pol.	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1810.0000	Horn2	V	56.5	27.5	49.1	4.5	39.5	54.0	14.5	Peak
1810.0000	Horn2	H	54.3	27.4	49.1	4.5	37.2	54.0	16.8	Peak
1830.0000	Horn2	V	64.0	27.5	49.1	4.6	47.1	54.0	6.9	Peak
1830.0000	Horn2	H	59.3	27.4	49.1	4.6	42.3	54.0	11.7	Peak
1850.0000	Horn2	V	62.7	27.5	49.1	4.7	45.9	54.0	8.1	Peak
1850.0000	Horn2	H	58.3	27.4	49.1	4.7	41.4	54.0	12.6	Peak
2775.0000	Horn2	V	77.0	30.1	59.7	6.0	53.3	54.0	0.7	Peak
2775.0000	Horn2	H	76.8	30.0	59.7	6.0	53.0	54.0	1.0	Peak
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Note 2: Positive Peak detector used										

Radiated Emissions – Cushcraft Yagi

Freq. (MHz)	Ant	Pol.	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1810.0000	Horn2	V	59.5	27.5	49.1	4.5	42.5	54.0	11.5	Peak
1810.0000	Horn2	H	55.8	27.4	49.1	4.5	38.7	54.0	15.3	Peak
1830.0000	Horn2	V	65.7	27.5	49.1	4.6	48.7	54.0	5.2	Peak
1830.0000	Horn2	H	58.2	27.4	49.1	4.6	41.2	54.0	12.8	Peak
1850.0000	Horn2	V	56.5	27.5	49.1	4.7	39.7	54.0	14.3	Peak
1850.0000	Horn2	H	54.3	27.4	49.1	4.7	37.4	54.0	16.6	Peak
2775.0000	Horn2	V	64.2	30.1	59.7	6.0	40.5	54.0	13.5	Peak
2775.0000	Horn2	H	64.0	30.0	59.7	6.0	40.2	54.0	13.8	Peak
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Note 2: Positive Peak detector used										

Additional Observations:

All radiated measurements were made at 3m using a 1MHz RBW/VBW peak detector above 1GHz and a 100kHz RBW/VBW peak detector below 1GHz.

The spectrum was searched from 30MHz to 10GHz.

Clause 15.247(e) Power Spectral Density for Digitally Modulated Devices

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Conditions:

Sample Number:	6	Temperature (°C):	26
Date:	June 25, 2007	Humidity (%):	47
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	Wireless

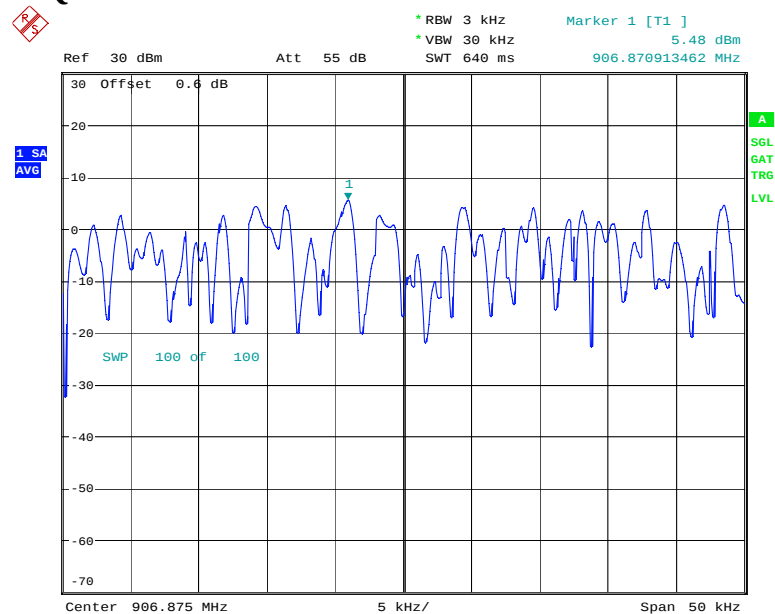
Test Results: See attached plots

Maximum Power Spectral density:

Modulation	905MHz	915MHz	925MHz
64QAM	5.48dBm	6.23dBm	4.48dBm
16QAM	7.13dBm	6.30dBm	5.27dBm
QPSK	4.81dBm	5.74dBm	6.75dBm
BPSK	6.48dBm	6.73dBm	4.55dBm
CCK	5.85dBm	5.68dBm	5.96dBm

PSD measurements were performed in accordance with PSD Option 2 contained in FCC guidance document “Measurement of Digital Transmission Systems Operating under Section 15.247” dated March 23, 2005.

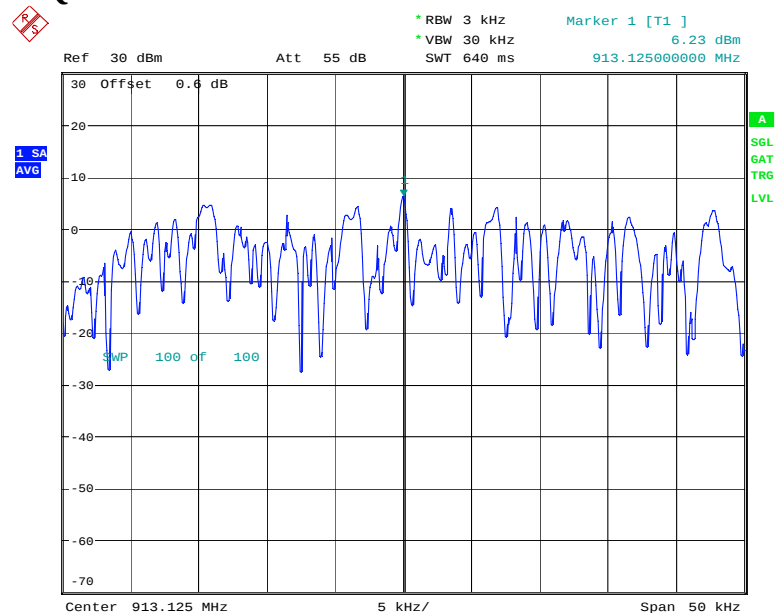
64QAM – 905MHz



64QAM

Date: 25.JUN.2007 13:53:32

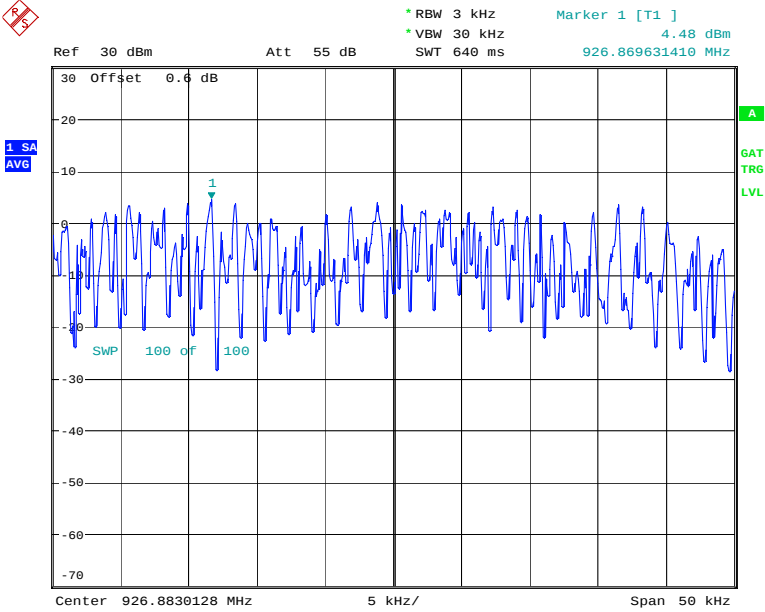
64QAM – 915MHz



64QAM

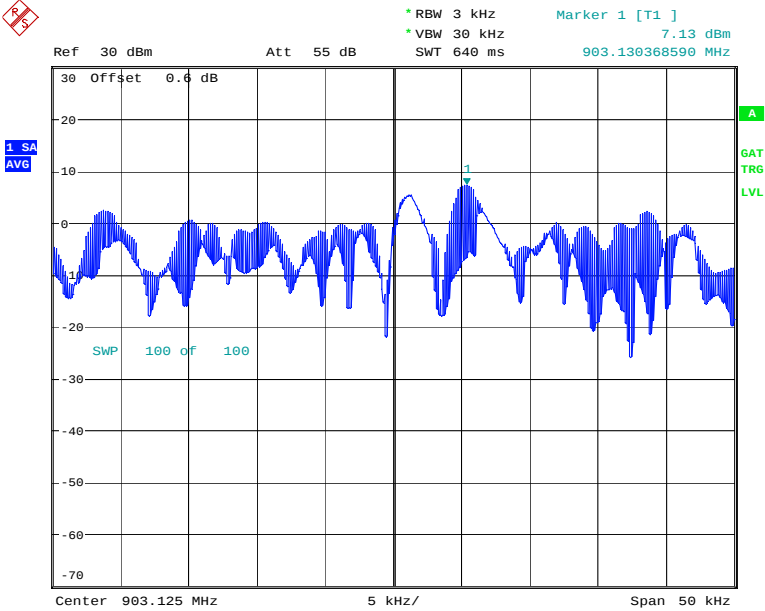
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64QAM – 925MHz



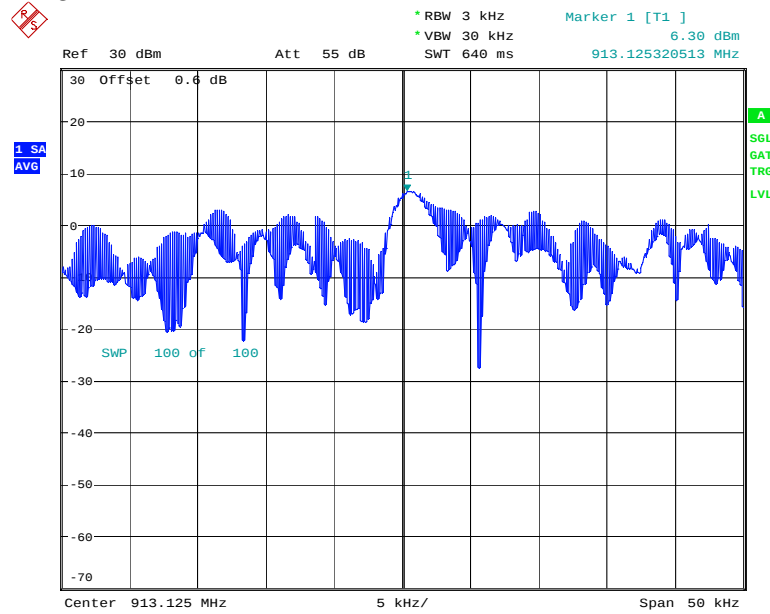
64QAM
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16QAM – 905MHz



16QAM
Date: 25.JUN.2007 13:49:11

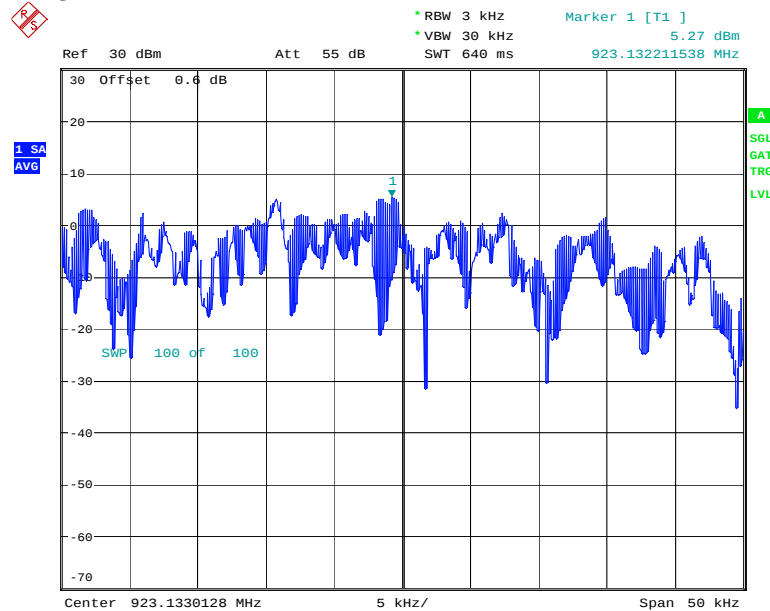
16QAM – 915MHz



16QAM

Date: 25.JUN.2007 13:29:40

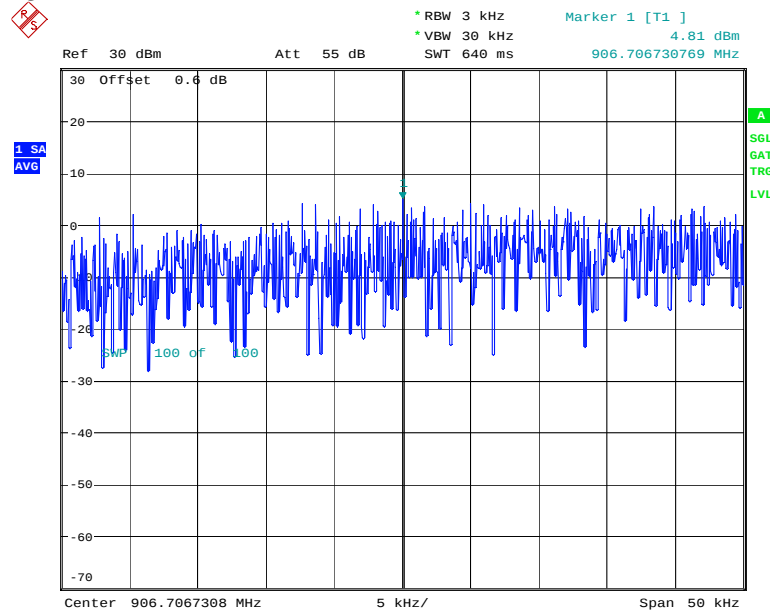
16QAM – 925MHz



16QAM

Date: 25.JUN.2007 13:17:01

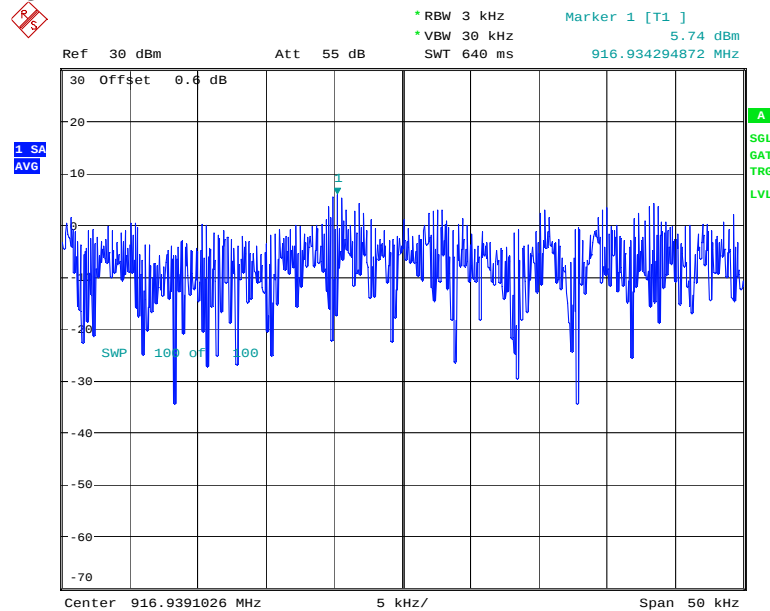
QPSK – 905MHz



QPSK

Date: 25.JUN.2007 13:42:24

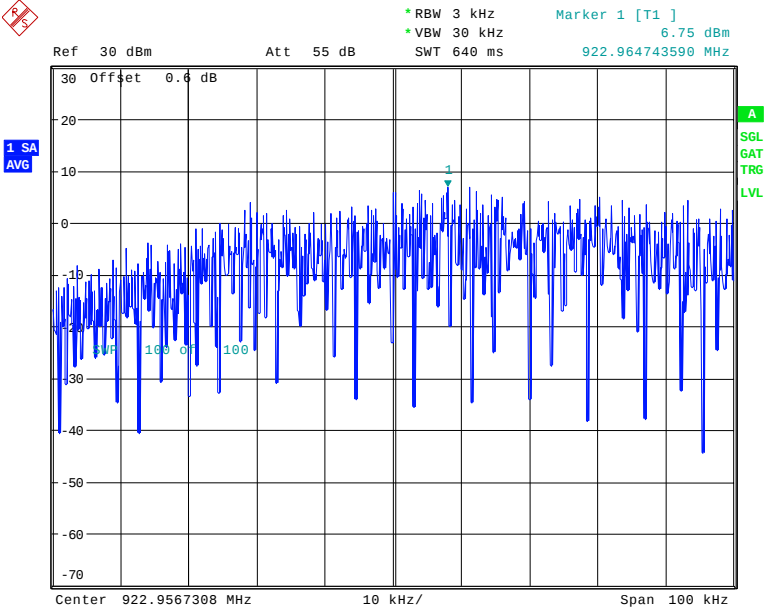
QPSK – 915MHz



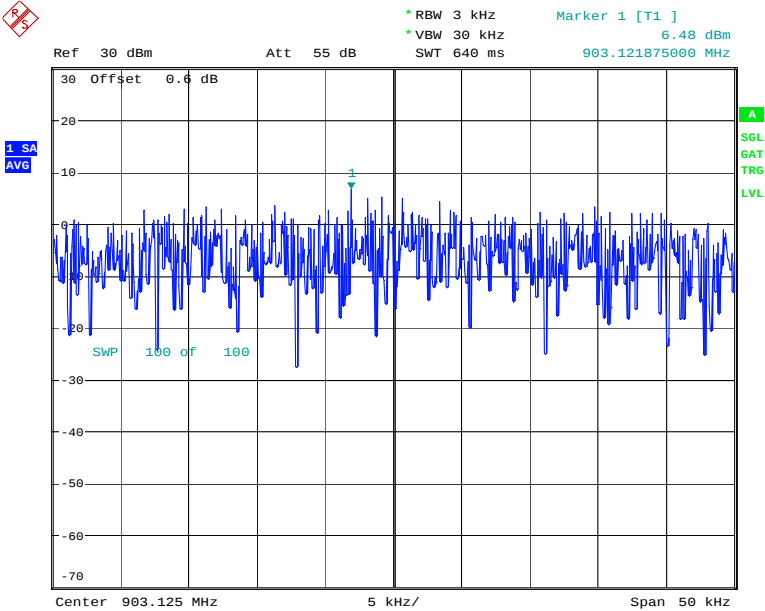
QPSK

Date: 25.JUN.2007 13:33:14

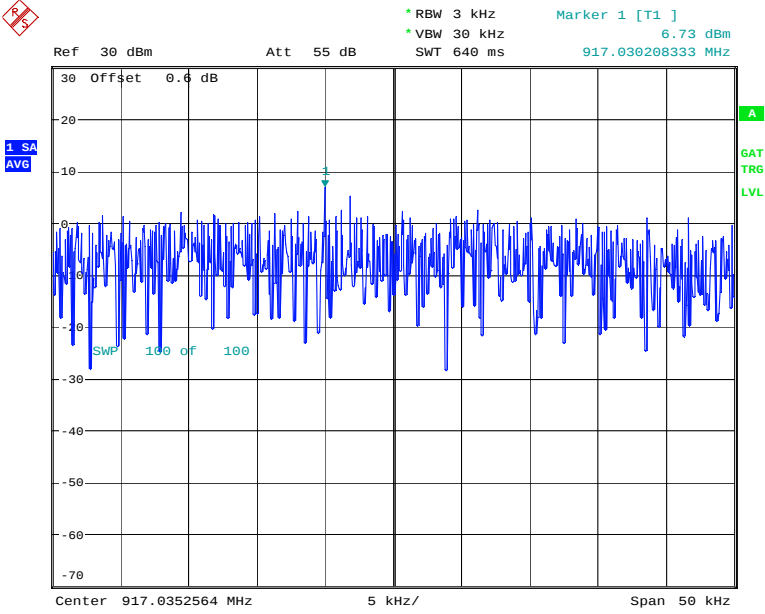
QPSK – 925MHz



BPSK – 905MHz

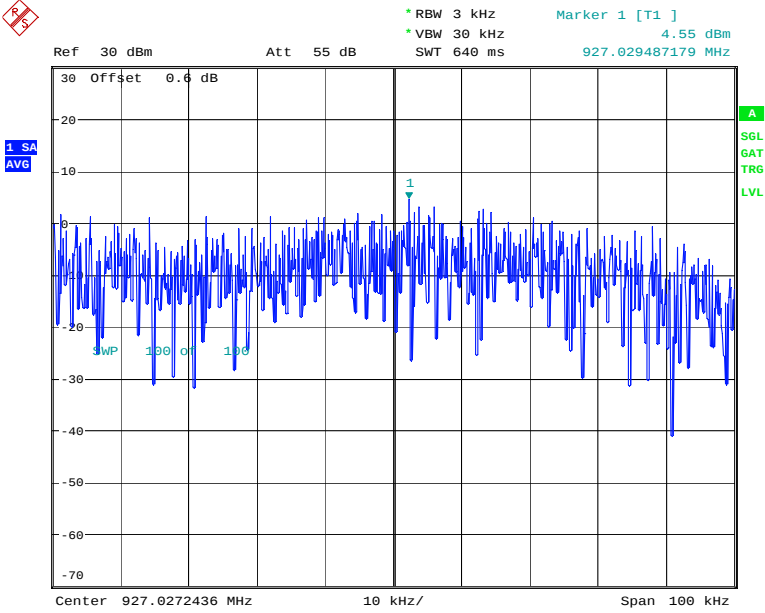


BPSK – 915MHz



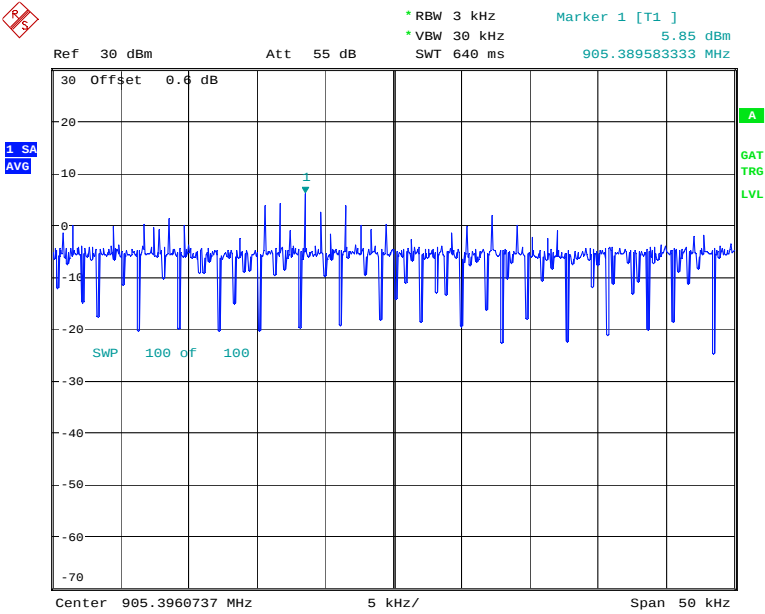
BPSK
Date: 25.JUN.2007 13:36:28

BPSK – 925MHz



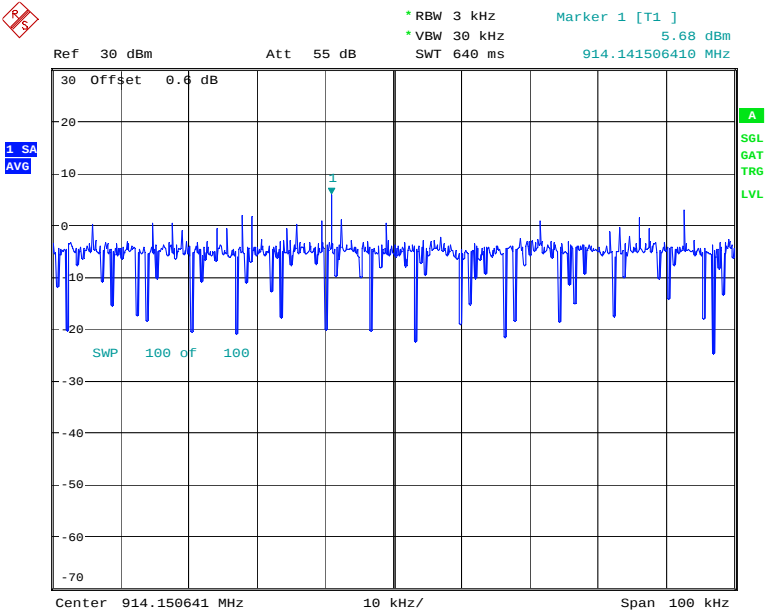
BPSK
Date: 25.JUN.2007 13:08:23

CCS – 905MHz



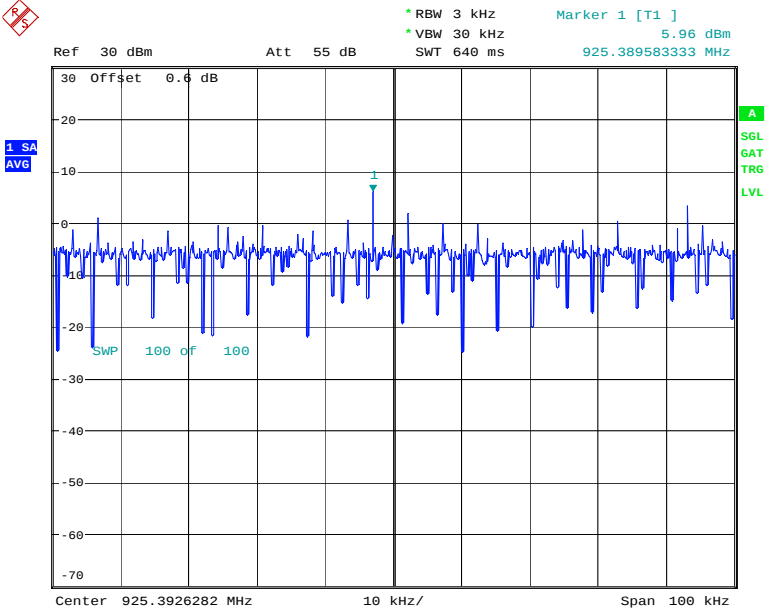
CCK
Date: 25.JUN.2007 11:43:33

CCS – 915MHz



CCK
Date: 25.JUN.2007 12:56:36

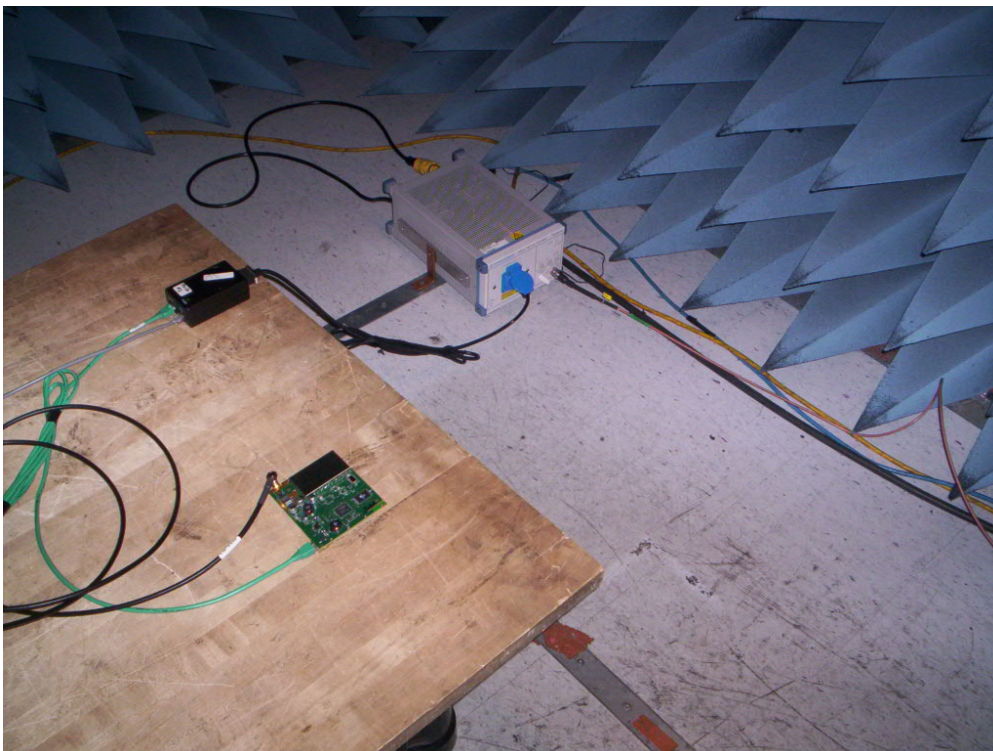
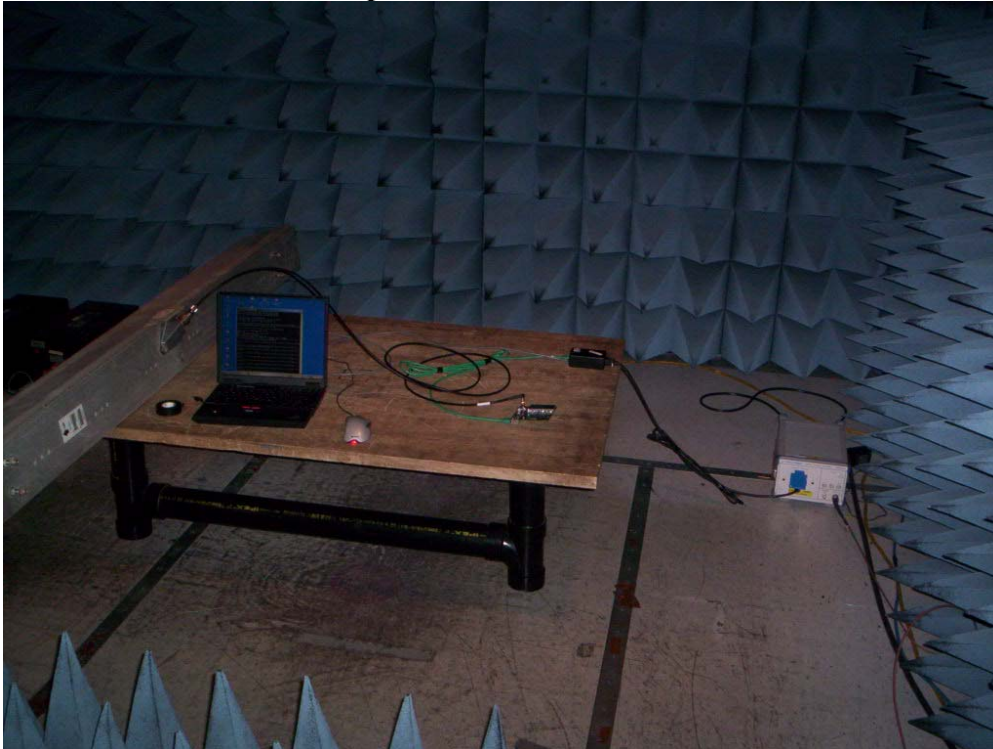
CCS – 925MHz



CCK
Date: 25.JUN.2007 13:04:42

Appendix B : Setup Photographs

Conducted Emissions Setup:



**Spurious Emissions Setup:
Radiated Emissions – Integral Antenna**



Radiated Emissions – Antel Omni Dipole



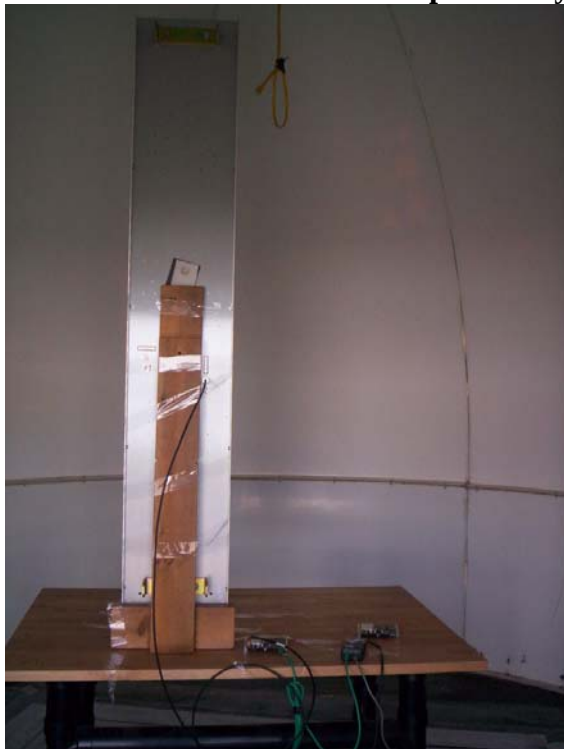
Radiated Emissions – Kathrein Omni Paraslot



Radiated Emissions – Swedcom Log Periodic



Radiated Emissions – Tiltek Dipole array – Vertical Polarization



Radiated Emissions – Antel Panel



Radiated Emissions – Cushcraft Yagi

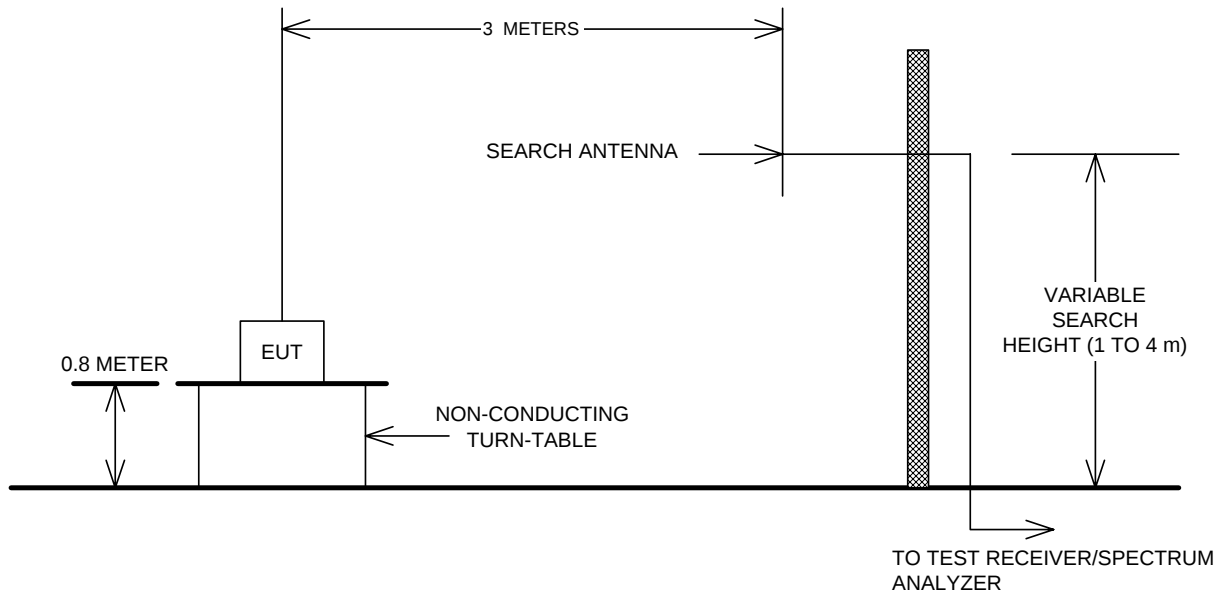


Radiated Emissions – RX mode



Appendix C : Block Diagram of Test Setups

Test Site For Radiated Emissions



Conducted Emissions

