TEST REPORT

Report Number: 102293594DEN-002
Project Number: G102293594

Report Issue Date: 4/20/2016

Product Designation: **Model: Z9-T & Z9-C**

Standards: **FCC Part 15 Subpart C (15.247)**
Operation within the bands 902-928 MHz
IC RSS-247, Issue 1: 2015
IC RSS-GEN, Issue 4: 2014

Tested by:
Intertek Testing Services NA, Inc.
1795 Dogwood St. Suite 200
Louisville, CO 80027 USA

Client:
FreeWave Technologies, Inc.
5395 Pearl Parkway, Suite 100
Boulder, CO 80301 USA

Report prepared by

Son La
Project Engineer

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Mike Spataro
Engineering Team Leader

TABLE OF CONTENTS

1 Introduction and Conclusion

The tests indicated in section 2.0 were performed on the product constructed as described in section 3.0. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded **the product tested complies with the requirements of the standard(s) indicated.** The results obtained in this test report pertain only to the item(s) tested.

1.1 Test Report Scope

This report covers the Z9 radio module for FreeWave Technologies, the purpose is for Class 2 permissive change to add a higher gain yagi antenna(16dBi) and additional saw filter between the RF chip and final PA.

1.2 Test Methodology

All measurements were performed according to the procedures in the following documents:

- ANSI C63.10: 2013 – ANSI Standard for Testing Unlicensed Wireless Devices
- FCC Publication 558074, June 9, 2015 (Guidelines for Compliance Measurements on DTS Operating Under 15.247)

Radiated emissions tests were formed at an antenna-to-product distance of 3-meters.

1.3 Test Facility

Intertek Denver's testing facilities are located at 1795 Dogwood St. Suite 200 Louisville, CO 80027. The testing facility is ISO17025:2005 accredited by A2LA, our lab code is 2506.02, our VCCI registration numbers are. R-1643, C-1752 and T-1558, our FCC designation no. US1121 and our IC lab no. 2042N.

Testing contained in this test report may not be covered under the laboratories scope of accreditation. A note will be placed in the specific test section for testing not coved under the laboratories scope.

2 Test Summary

TEST SECTION	TESTS	FCC/IC REFERENCE	TEST DATE	RESULT
5	Voltage Variation	FCC 15.31(e)	N/A	N/A
6	Antenna Requirement	FCC 15.203	04/19/2016	Pass
7	DTS Requirement	FCC 15.247(a) RSS-247 5.2	04/19/2016	Pass
8	6dB Bandwidth	FCC 15.247(a)(2) RSS-247 5.2(1)	N/A	N/A
9	RF Conducted Output Power (includes requirements for antenna gain > 6dBi)	FCC 15.247(b)(3)(4) RSS-247 5.4(4)	04/11/2016	Pass
10	RF Conducted Spurious Emissions (-20dBc) Includes Band Edge	FCC 15.247(d) RSS-247 5.5	04/11/2016	Pass
11	Transmitter Radiated Spurious Emissions (Restricted Bands – Band Edge)	FCC 15.247(d) FCC 15.209/15.205 RSS-247 5.5 RSS-Gen 8.10	04/07/2016 To 04/08/2016	Pass
12	Power Spectral Density (PSD)	FCC 15.247(e) RSS-247 5.2(2)	04/11/2016	Pass
13	Radiated Emissions – Digital Receiver	FCC 15.109 RSS-Gen 7.1	N/A	N/A
14	Tx AC Line Conducted Emissions	FCC 15.207 RSS-Gen 8.8	N/A	N/A
15	RF Exposure Requirement	FCC 15.247(i) FCC 15.1.1307(b)(1) RSS 102	04/19/2016	Pass
16	Duty Cycle/ Duty Cycle Correction Factor	FCC 15.35(c) RSS-Gen 6.10	04/11/2016	Pass

Notes:none

Description of Product Under Test

Model:	Z9-T(TTL interface) & Z9-C(RS-232 interface)
Type of EUT:	900 MHz ISM band FHSS/DTS transceiver.
Serial Number:	402-669-5017
FCC ID:	KNYPMT0101AA
Industry Canada ID:	2329B-PMT0101AA
Related Submittal(s) Grants:	N/A
Company:	FreeWave Technologies, Inc.
Customer:	FreeWave Technologies, Inc.
Address:	5395 Pearl Parkway, Suite 100 Boulder, CO 80301 USA
Phone:	+1 (303) 962-7879
Fax:	None
e-mail:	dbusch@freewave.com
Test Standards:	☒ 47 CFR, Part 15C:§15.247 FHSS/DTS ☒ RSS–247, Issue 1, 2015 ☒ RSS-Gen, Issue 3, 2010 ☐ 47 CFR, Part 15C:§15.207 ☐ Other
Type of radio:	☐ Stand -alone ☒ Module ☐ Hybrid
Date Sample Submitted:	04/08/016
Test Work Started:	04/08/2016
Test Work Completed:	04/19/2016
Test Sample Conditions:	☐ Damaged ☐ Poor (Usable) ☒ Good

Product Description:	900 MHz ISM band radio module for use in commercial, industrial, and M2M applications.
Transmitter Type:	☒ FHSS ☒ Digital Modulation ☐ WiFi ☐ Blue Tooth
Operating Frequency Range(s):	902 MHz – 928 MHz
Number of Channels:	RF Data Rate = 115.2 kbps = 110 ch RF Data Rate = 250 kbps = 73 ch RF Data Rate = 500 kbps = 36 ch RF Data Rate = 1 Mbps = 18 ch RF Data Rate = 4 Mbps = 7 ch
Modulation:	GFSK 8-ary FSK
Antenna(s) Info:	16 dBi yagi
Rated Power:	Output Power: 100 mW EIRP:4W
Antenna Installation:	☐ User ☒ Professional ☐ Factory
Transmitter power configuration:	☐ Internal battery ☒ External power source
Special Test Arrangement:	The EUT was rotated and tested in three orthogonal axes to determine the maximum emissions.
Test Facility Accreditation:	A2LA (Certificate No. 2506.01)
Test Methodology:	Measurements performed according to the procedures in ANSI C63.10-2013

2.1 Product Description - Detailed

Description of Equipment Under Test (provided by client)
900 MHz ISM band radio module for use in commercial, industrial, and M2M applications. The radio module comes in two configurations, -T for TTL interface and –C for RS-232 interface. The radio is configured for a single output stream (SISO) via one MMCX rf connector. RF output power and data rates are user selectable.

Equipment Under Test Power Configuration			
Rated Voltage	Rated Current	Rated Frequency	Number of Phases
3-5 VDC	0.6 -1.2 A	NA DCV	NA DCV

Descriptions of EUT Exercising
☐ Standby/Idle Mode
☒ Continuous transmission, un-modulated carrier (CW)
☒ Continuous transmission, modulated carrier (CW) utilizing worst-case data rate
☐ Continuous Receive Mode

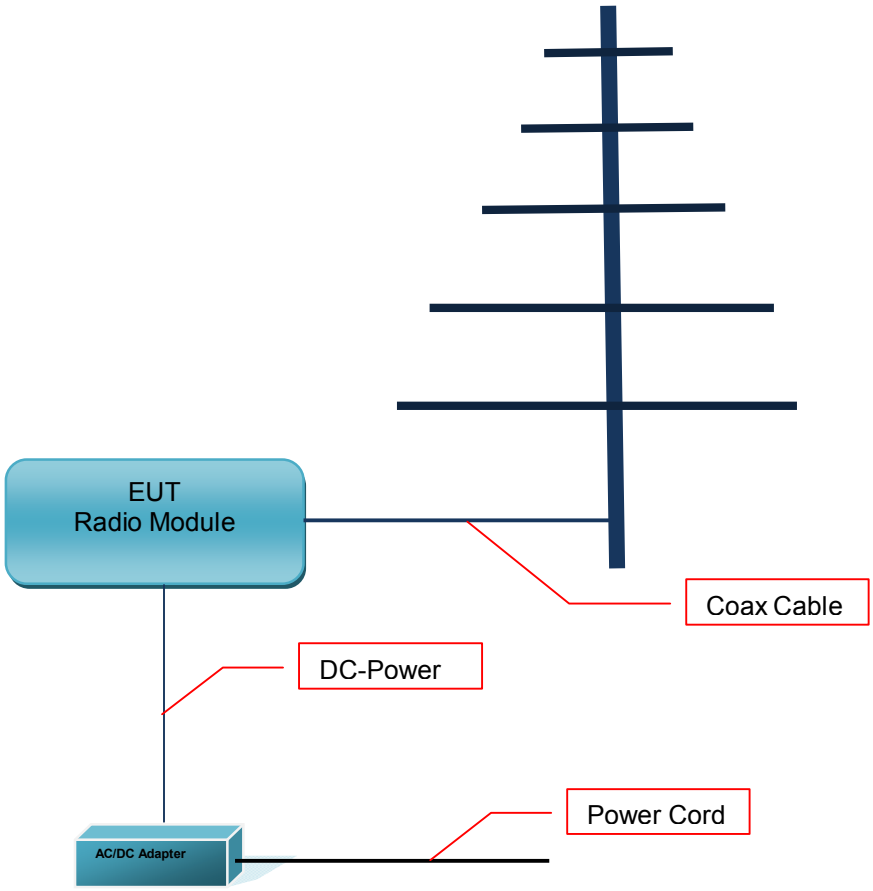
Note: The chosen mode of operation described above is dependent upon the specific test to be performed.

3 System setup including cable interconnection details, support equipment and simplified block diagram

3.1 Method:

Record the details of EUT cabling, document the support equipment, and show the interconnections in a block diagram.

3.2 EUT Block Diagram:



Note: None

3.3 Antenna Specifications:

900 MHz					
Model	**Type**	**Gain (dBi)**	**Beamwidth (degrees)**	**Polarization**	**Datasheet**
PRO890-16-40F02N4	Yagi	16	25	H/V	Appendix A

3.4 Support Data:

ID	Description/ Function	Shield Type	Length	Connector	Connection	Ferrites
1	Cable	Foil	2 ft	DB9	Serial	none

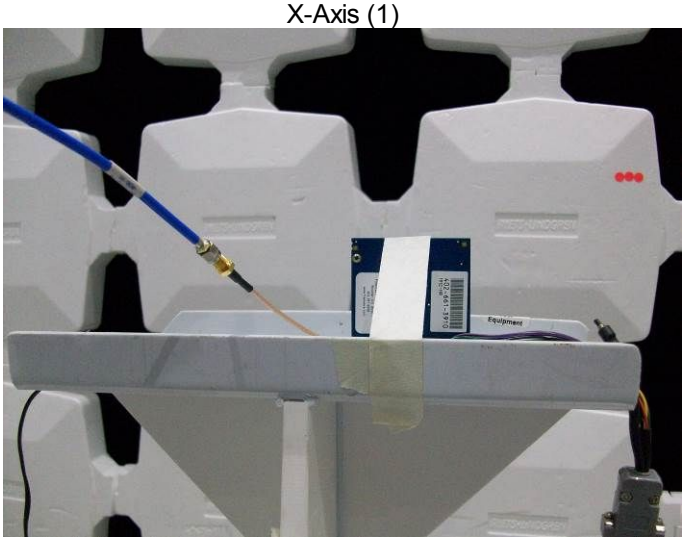
Support Equipment			
Description	Manufacturer	Model Number	Serial Number
Laptop	Dell	D620	43245108577

Notes:

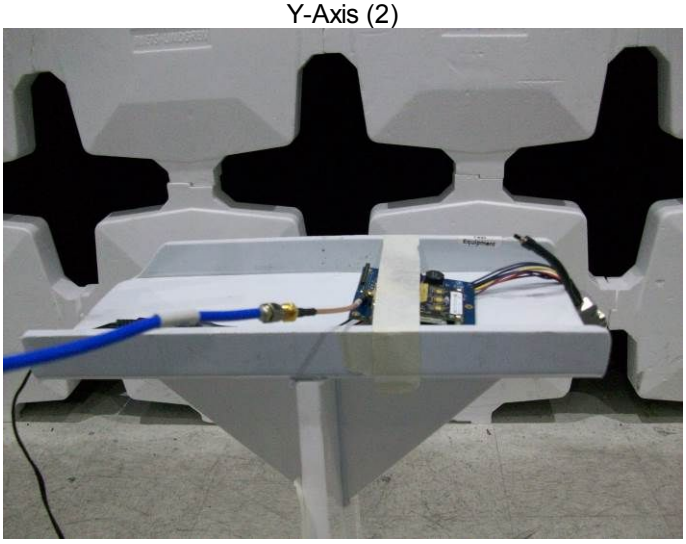
1) Add as needed

3.5 Photograph: Product Tested - X, Y, Z Dimensional

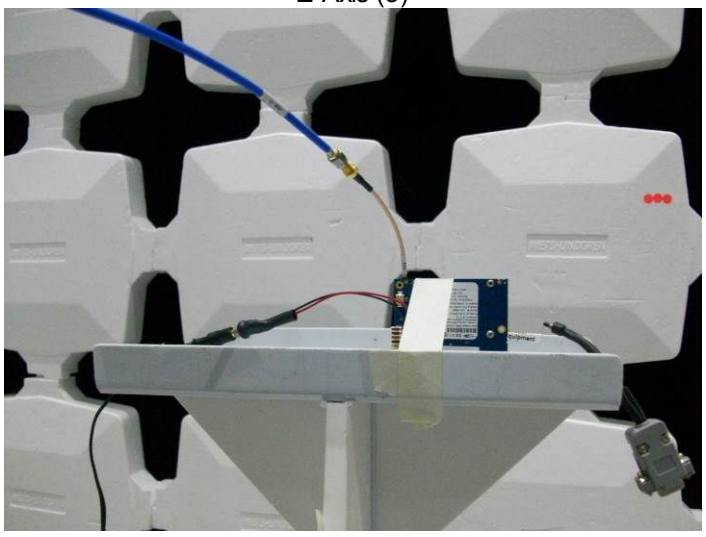
X-Axis (1)



Y-Axis (2)



Z-Axis (3)



4 Voltage Variation/ Battery Requirement – Not required for C2PC

5 Antenna Requirement

5.1 Method

Unless otherwise stated no deviations were made from FCC Part 15.203.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

5.2 Test Requirement/Specification

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

5.3 Results:

The sample tested was found to comply.

Antenna is professionally installed.

6 DTS/FHSS Requirement

Unless otherwise stated no deviations were made from FCC Part 15.247(a).

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

6.1 Test Requirement/Specification

Operation under the provisions of this Section is limited to digitally-modulated intentional radiators.

- FCC 15.247(a)

6.2 Results:

The sample tested was found to comply.

The product incorporates the following digital modulation schemes and FHSS modes:

- 73-110 pseudo random hopping channels at 115.2 and 250 kbps data rates
- GFSK modulation
- 8-ary FSK modulation

7 DTS Bandwidth (6dB Bandwidth) – Not required for C2PC

8 RF Conducted Output Power

8.1 Method:

The test methods used comply with ANSI C63.10 section 6.10.1. Unless otherwise stated no deviations were made from FCC 15.247 or RSS-247.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

8.2 Test Requirement/Specification:

The maximum peak conducted output power

Fundamental Frequency	Output power (Watts)
902-928 MHz	1

- FCC 15.247(b)(2)&(3)
- RSS-247 5.4

8.3 Test Equipment Used:

Asset ID	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DEN-073	EMI Receiver (10Hz – 26.5GHz)	RHODE & SCHWARZ	ESU 26	100265	12/19/2015	12/19/2016
DEN-206	RF Conducted Port Cable	TELEDYNE	True Blue	14-11-401	12/23/2014	05/30/2016
SW-6	Software for Radiated and Conducted emissions.	Intertek	OATS vba	V. 3.0	VBU	VBU
18869	10 db Attenuator	Weinschel Eng	23-10-34	AV2626	06/23/2015	06/23/2016

8.4 Results:

The sample tested was found to comply.

8.5 Test Summary:

Fundamental		Conducted port Max Output Power					
Frequency Range:		☒ 902-928MHz	☐ 2400-2483.5MHz		☐ 5725-5850MHz		
Low Frequency MHz		Measured Power (dBm)	Duty Cycle Correction (dB)	Final Corrected (dBm)	Standard Limit (dBm)	Limit Reduction (dB)	Margin (dB)
Data Rate	Frequency						
115.2 kbps	902.4768	29.65	0	29.65	30	N/A	0.35
250 kbps	902.5344	29.61	0	29.61	30	N/A	0.39
500 kbps	902.7072	29.37	0.20	29.57	30	N/A	0.43
1 Mbps	903.0528	28.85	0.44	29.29	30	N/A	0.71
4 Mbps	904.5504	24.79	1.30	26.09	30	N/A	3.91
Mid Frequency MHz							
Data Rate	Frequency						
115.2 kbps	914.9184	29.73	0	29.73	30	N/A	0.27
250 kbps	914.7960	29.77	0	29.77	30	N/A	0.23
500 kbps	914.4576	29.46	0.20	29.66	30	N/A	0.34
1 Mbps	914.1120	28.79	0.44	29.23	30	N/A	0.77
4 Mbps	914.2272	23.37	1.30	24.67	30	N/A	5.33
High Frequency MHz							
Data Rate	Frequency						
115.2 kbps	927.5904	29.82	0	29.82	30	N/A	0.18
250 kbps	927.4176	29.69	0	29.69	30	N/A	0.31
500 kbps	927.3600	29.32	0.20	29.52	30	N/A	0.48
1 Mbps	927.0144	28.67	0.44	29.11	30	N/A	0.89
4 Mbps	925.7472	24.45	1.30	25.75	30	N/A	4.25
Antenna Gain:		☒ ≤ 6dBi	☐ >6dBi and Output power reduction =		dB		
Remarks:							

Fundamental		Conducted port Reduced Output Power					
Frequency Range:		☒ 902-928MHz ☐ 2400-2483.5MHz ☐ 5725-5850MHz					
Low Frequency MHz		**Measured Power (dBm)**	**Duty Cycle Correction (dB)**	**Final Corrected (dBm)**	**Standard Limit (dBm)**	**Limit Reduction (dB)**	**Margin (dB)**
Data Rate	**Frequency**						
115.2 kbps	902.4768	19.90	0	19.9	20	N/A	0.1
250 kbps	902.5344	19.95	0	19.95	20	N/A	0.05
500 kbps	902.7072	19.44	0.20	19.64	20	N/A	0.36
1 Mbps	903.0528	19.41	0.44	19.85	20	N/A	0.15
4 Mbps	904.5504	12.16	1.30	13.46	20	N/A	6.54
Mid Frequency MHz							
Data Rate	**Frequency**						
115.2 kbps	914.9184	19.97	0	19.97	20	N/A	0.03
250 kbps	914.7960	19.98	0	19.98	20	N/A	0.02
500 kbps	914.4576	19.47	0.20	19.67	20	N/A	0.33
1 Mbps	914.1120	19.23	0.44	19.67	20	N/A	0.33
4 Mbps	914.2272	14.62	1.30	15.92	20	N/A	4.08
High Frequency MHz							
Data Rate	**Frequency**						
115.2 kbps	927.5904	19.21	0	19.21	20	N/A	0.79
250 kbps	927.4176	19.15	0	19.15	20	N/A	0.85
500 kbps	927.3600	18.53	0.20	18.73	20	N/A	1.27
1 Mbps	927.0144	19.24	0.44	19.68	20	N/A	0.32
4 Mbps	925.7472	14.38	1.30	15.68	20	N/A	4.32
Antenna Gain:		☐ ≤ 6dBi ☒ >6dBi and Output power reduction = 10 dB					
Remarks:							

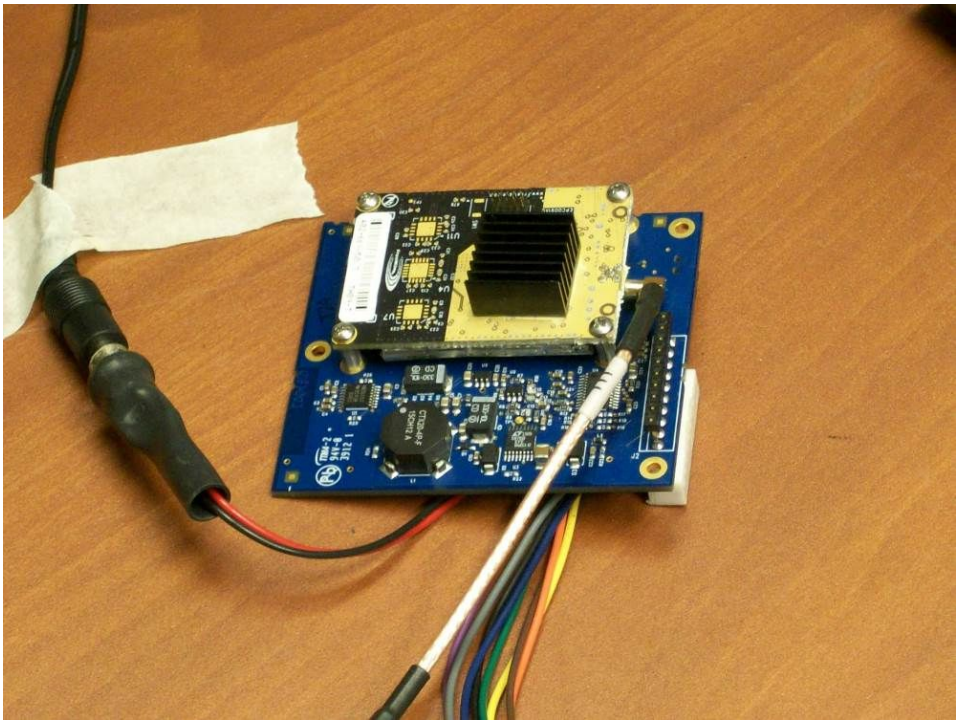
8.6 Test Method:

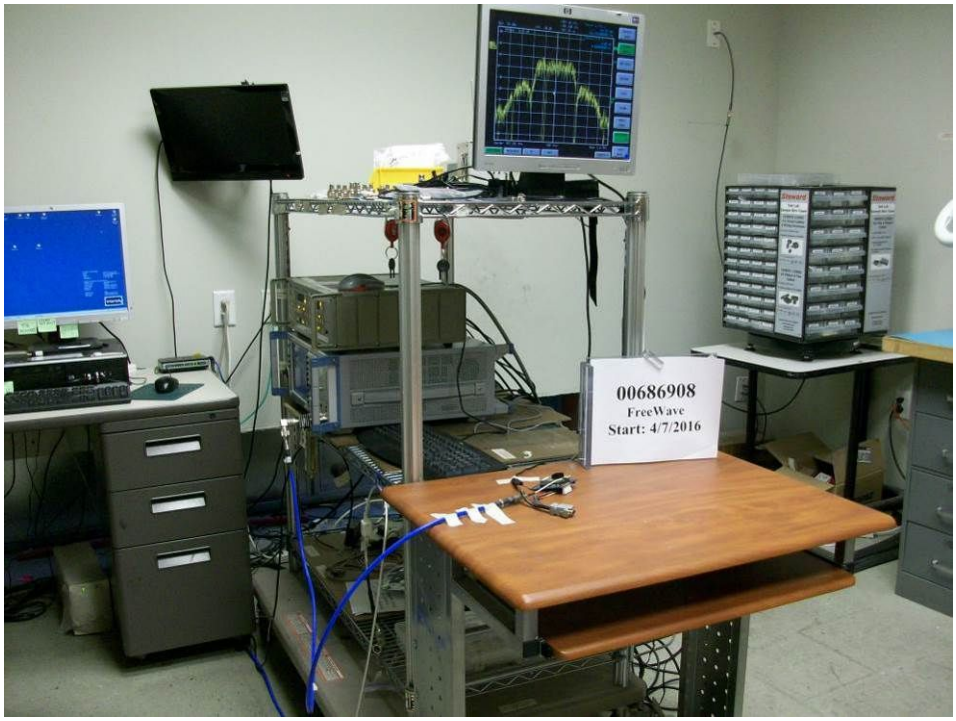
- For 115 and 250 kbps conducted output power measurements were made using ANSI C63.10 section 7.8.5, Peak conducted output power.
- For 500 kbps, 1 and 4 Mbps conducted output power measurements were using ANSI C63.10 section 11.9.2.2.4 AVGSA-2.

8.7 Notes:

1. The limit for RSS-247 is identical to the limit for FCC 15.247.
2. Band edge measurements taken with the hopping function turned off for 115.2 and 250 kbps data rates. Band edge measurements with the hopping function turned on were completed under the original filing.

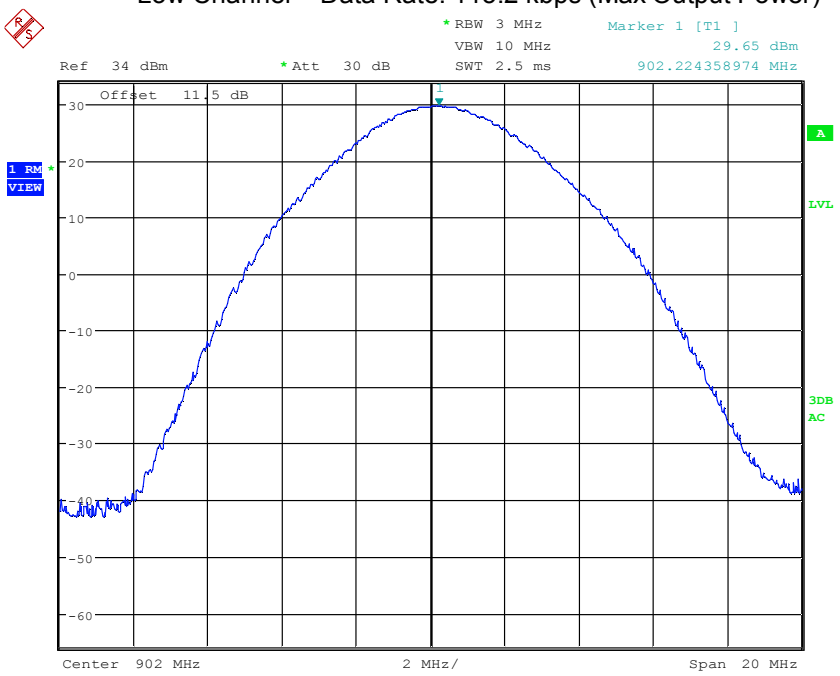
8.8 Setup Photographs: Conducted Port





8.9 Plots:

Low Channel – Data Rate: 115.2 kbps (Max Output Power)



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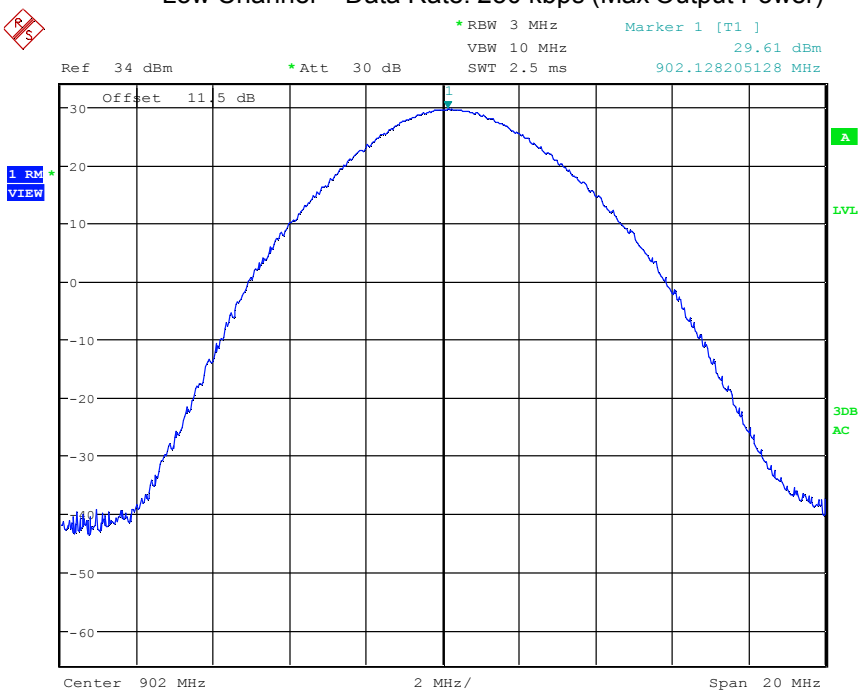
Low Channel – Data Rate: 250 kbps (Max Output Power)



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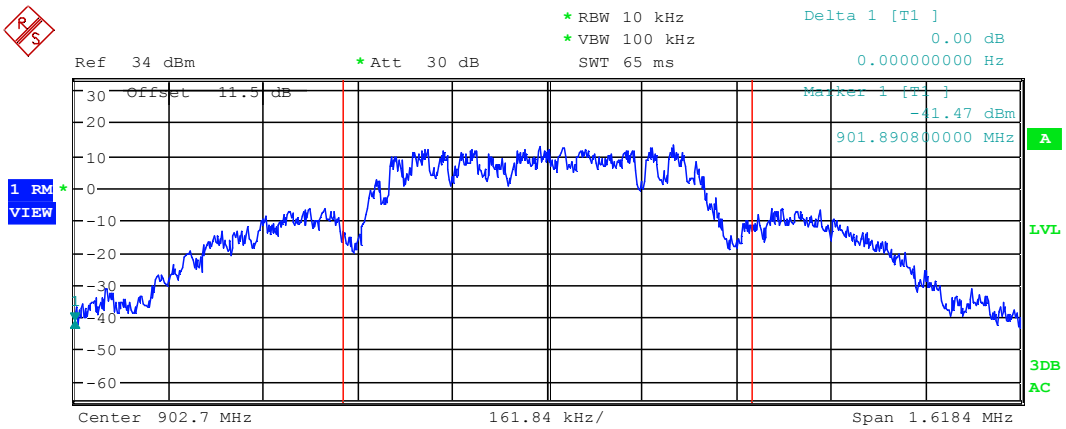
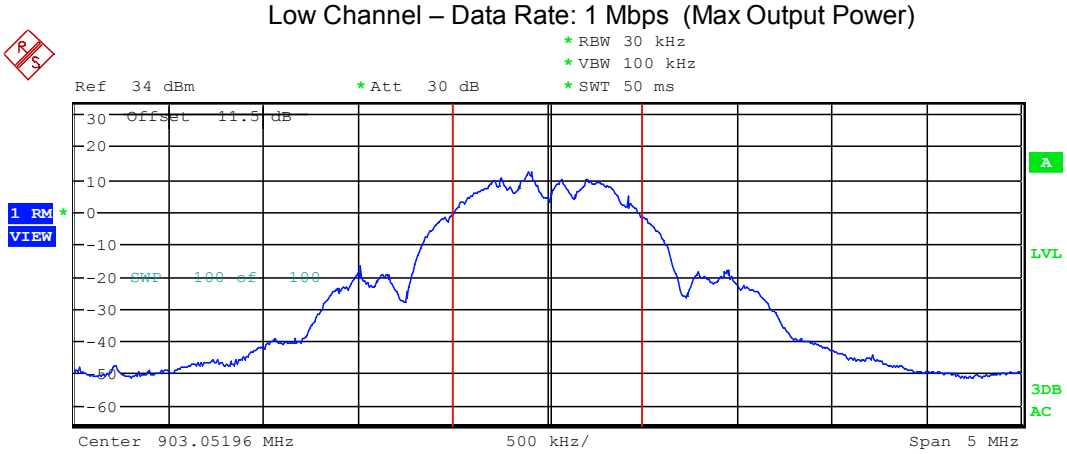
Low Channel – Data Rate: 500 kbps (Max Output Power)



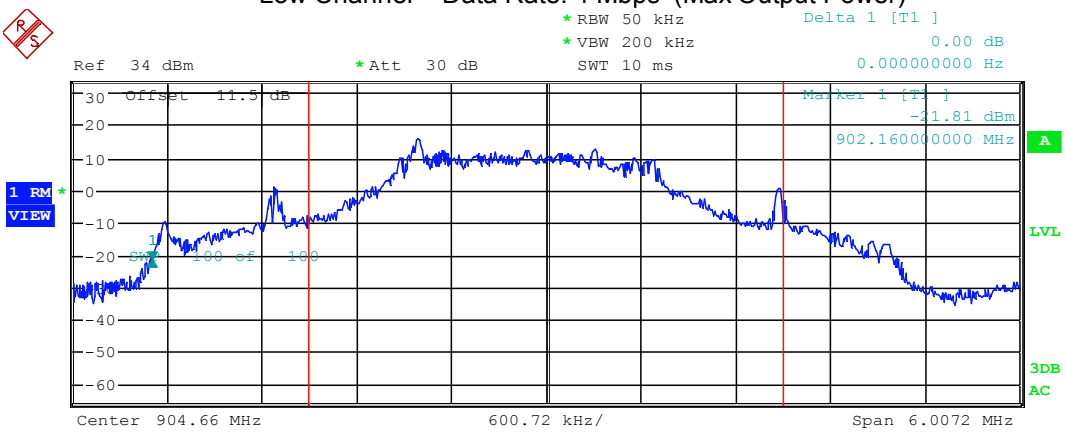
Tx Channel
Bandwidth 700 kHz Power 29.37 dBm

Low Channel – Data Rate: 1 Mbps (Max Output Power)



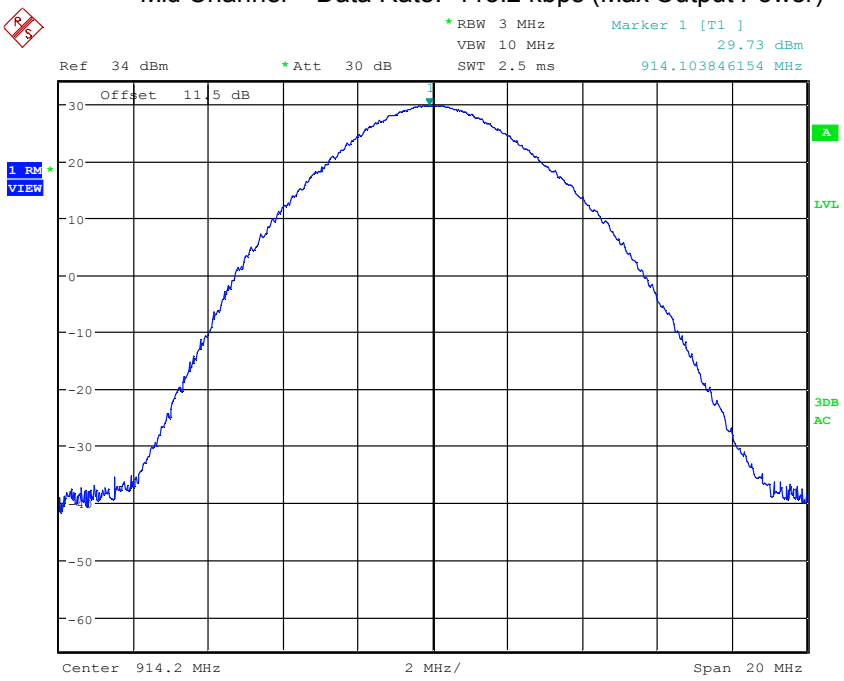
Tx Channel
Bandwidth 1 MHz Power 28.85 dBm

Low Channel – Data Rate: 4 Mbps (Max Output Power)



Tx Channel
Bandwidth 3 MHz Power 24.79 dBm

Mid Channel – Data Rate: 115.2 kbps (Max Output Power)



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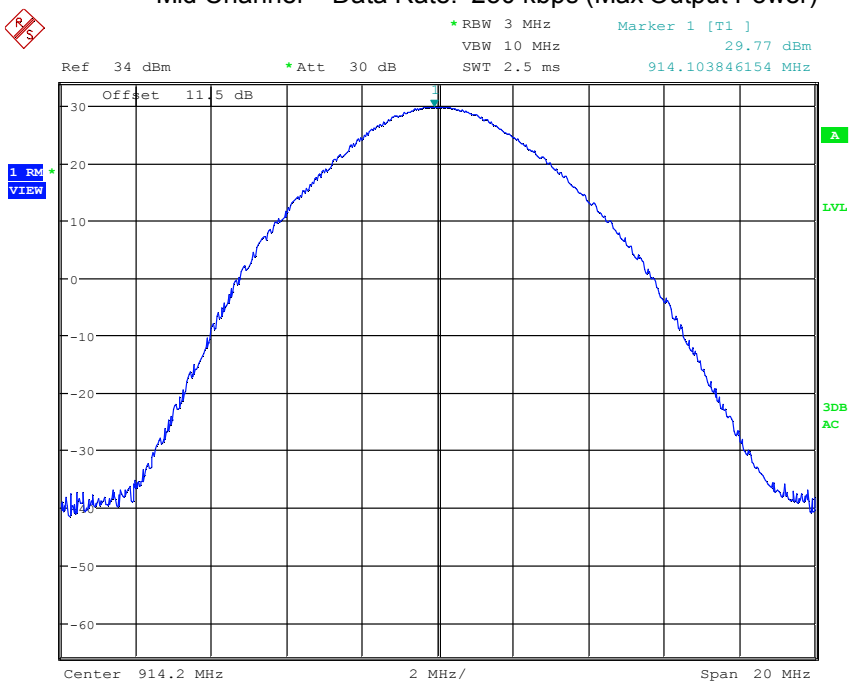
Mid Channel – Data Rate: 250 kbps (Max Output Power)



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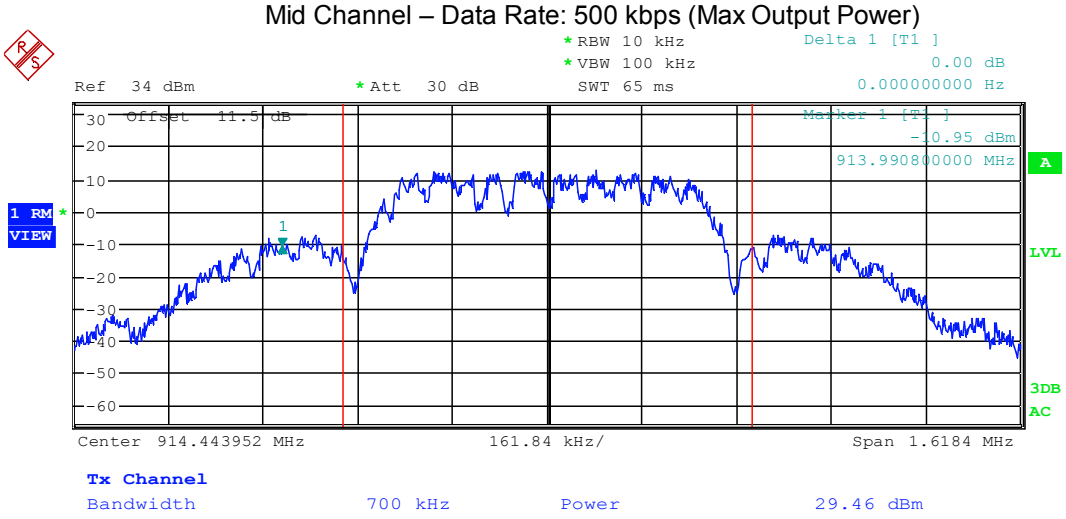
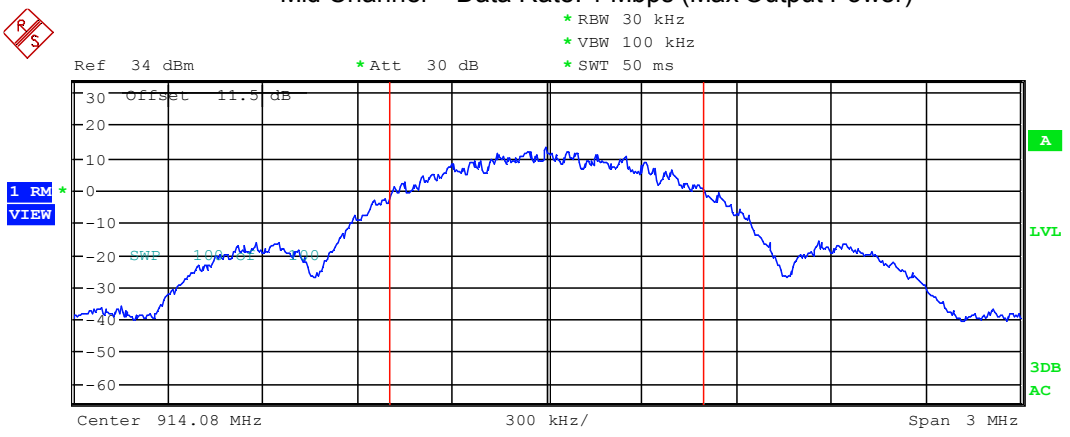
Mid Channel – Data Rate: 500 kbps (Max Output Power)



Tx Channel

Bandwidth	700 kHz	Power	29.46 dBm

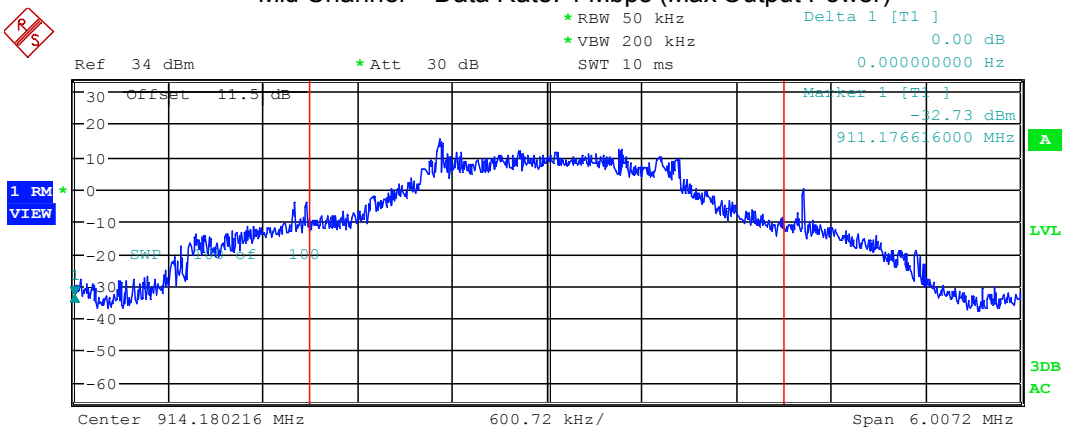
Mid Channel – Data Rate: 1 Mbps (Max Output Power)



Tx Channel

Bandwidth	1 MHz	Power	28.79 dBm

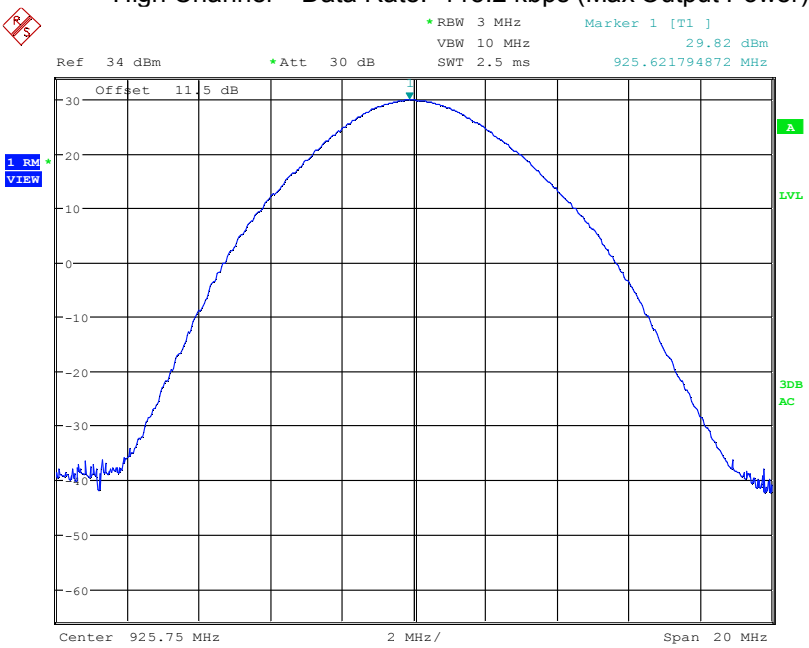
Mid Channel – Data Rate: 4 Mbps (Max Output Power)



Tx Channel

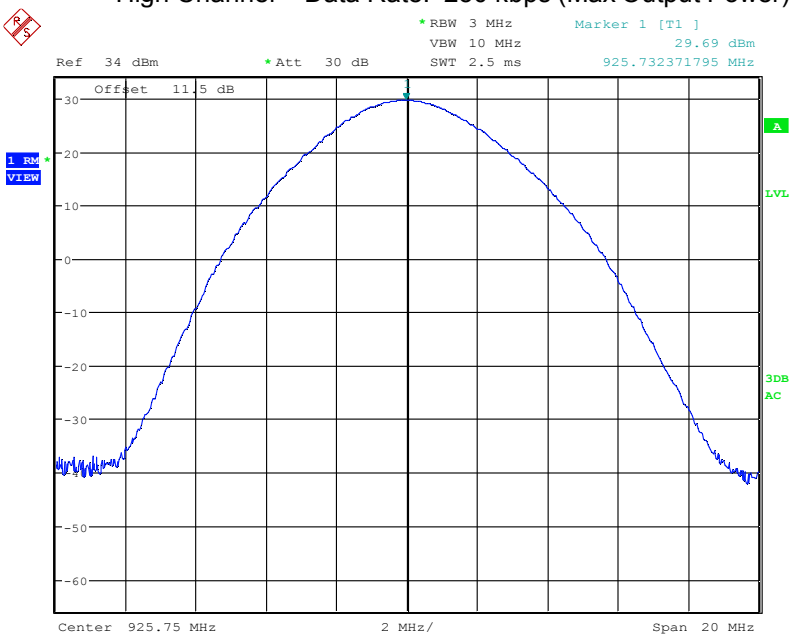
Bandwidth	3 MHz	Power	23.37 dBm

High Channel – Data Rate: 115.2 kbps (Max Output Power)



Date: 11.APR.2016 12:30:23

High Channel – Data Rate: 250 kbps (Max Output Power)



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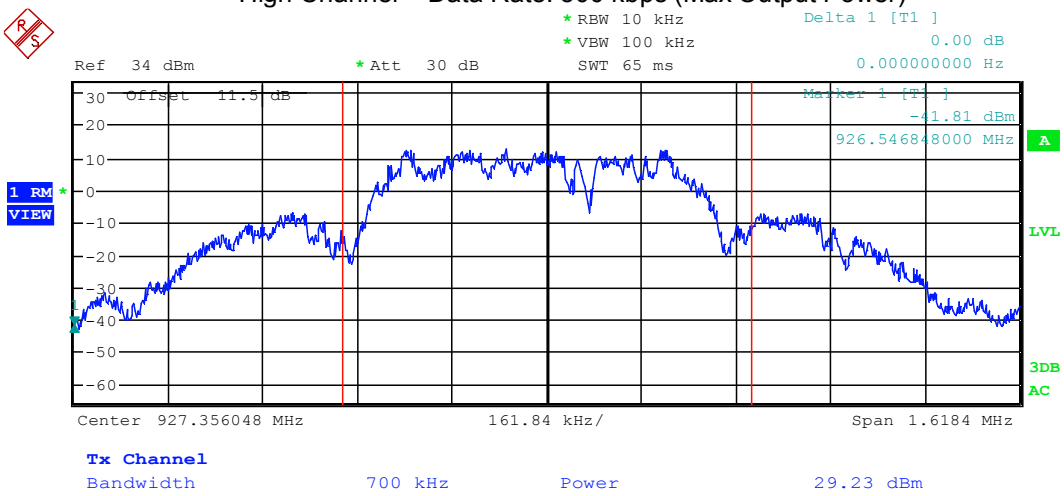
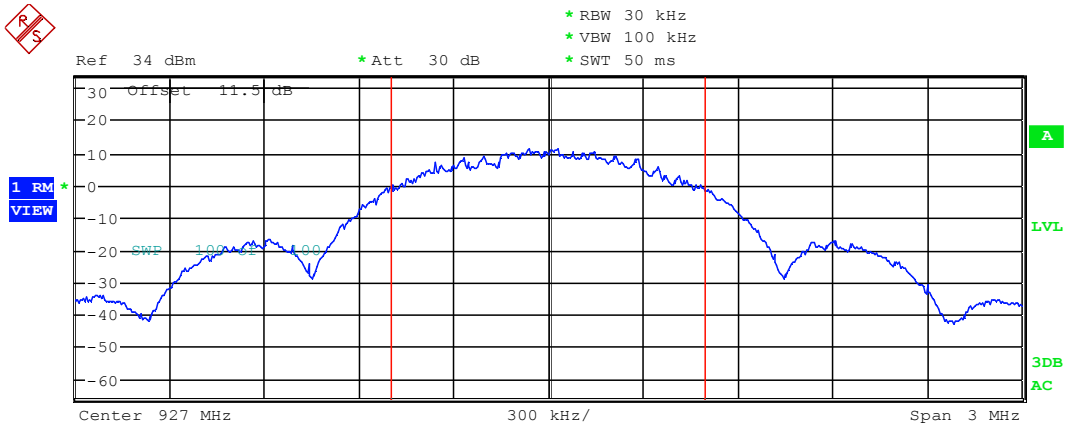
High Channel – Data Rate: 500 kbps (Max Output Power)



Tx Channel

Bandwidth	700 kHz	Power	29.23 dBm

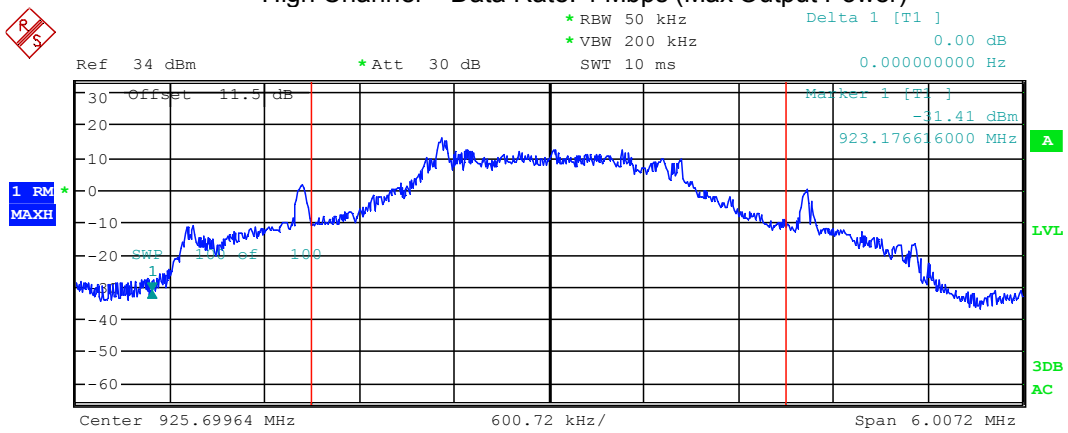
High Channel – Data Rate: 1 Mbps (Max Output Power)



Tx Channel

Bandwidth	1 MHz	Power	28.67 dBm

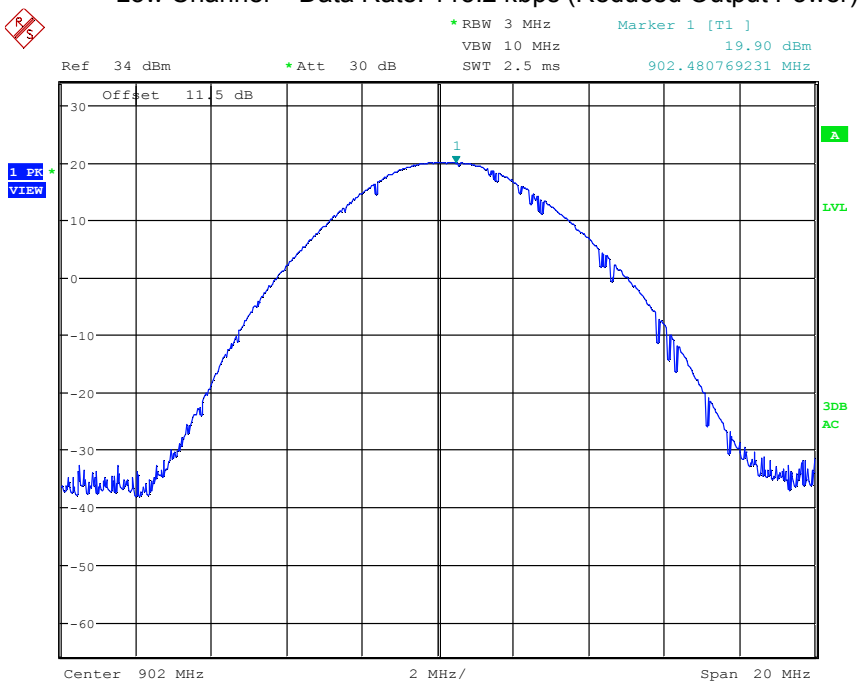
High Channel – Data Rate: 4 Mbps (Max Output Power)



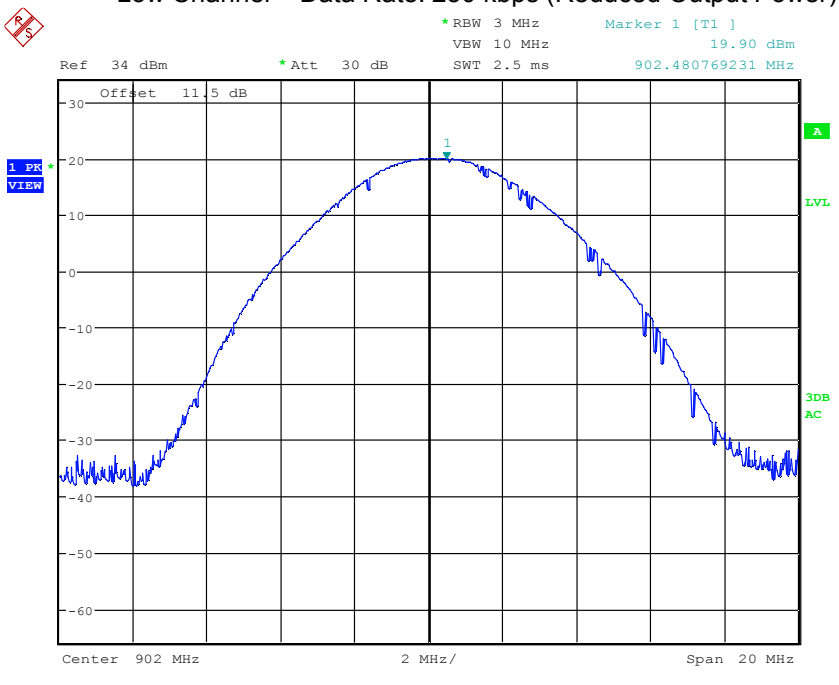
Tx Channel

Bandwidth	3 MHz	Power	24.45 dBm

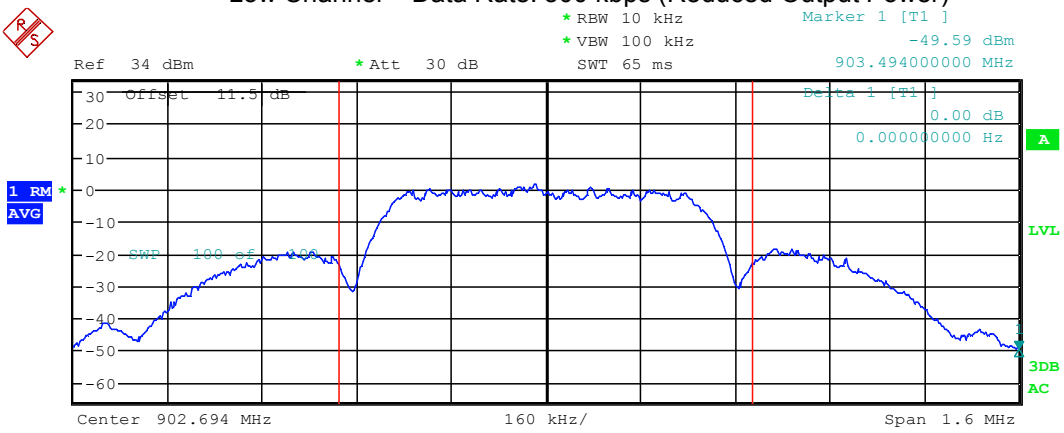
Low Channel – Data Rate: 115.2 kbps (Reduced Output Power)



Low Channel – Data Rate: 250 kbps (Reduced Output Power)



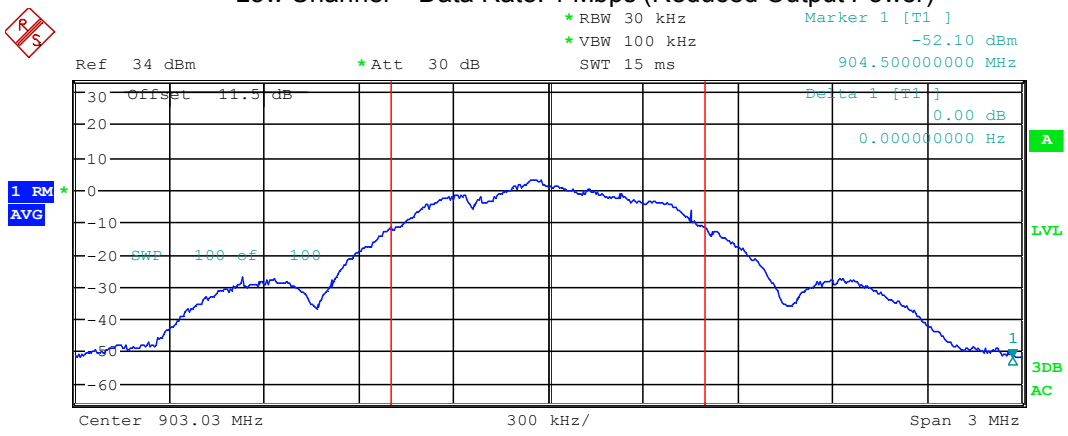
Low Channel – Data Rate: 500 kbps (Reduced Output Power)



Tx Channel

Bandwidth	700 kHz	Power	19.44 dBm

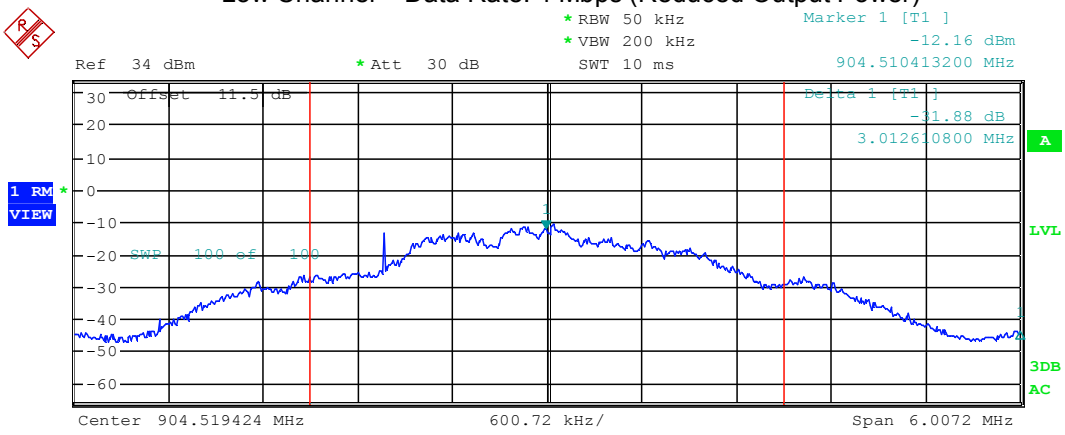
Low Channel – Data Rate: 1 Mbps (Reduced Output Power)



Tx Channel

Bandwidth	1 MHz	Power	19.41 dBm

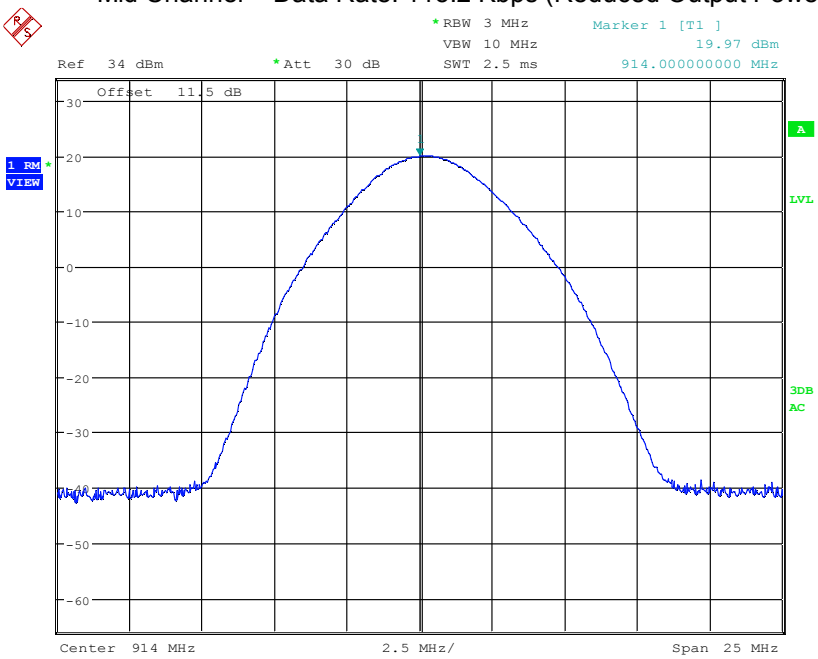
Low Channel – Data Rate: 4 Mbps (Reduced Output Power)



Tx Channel

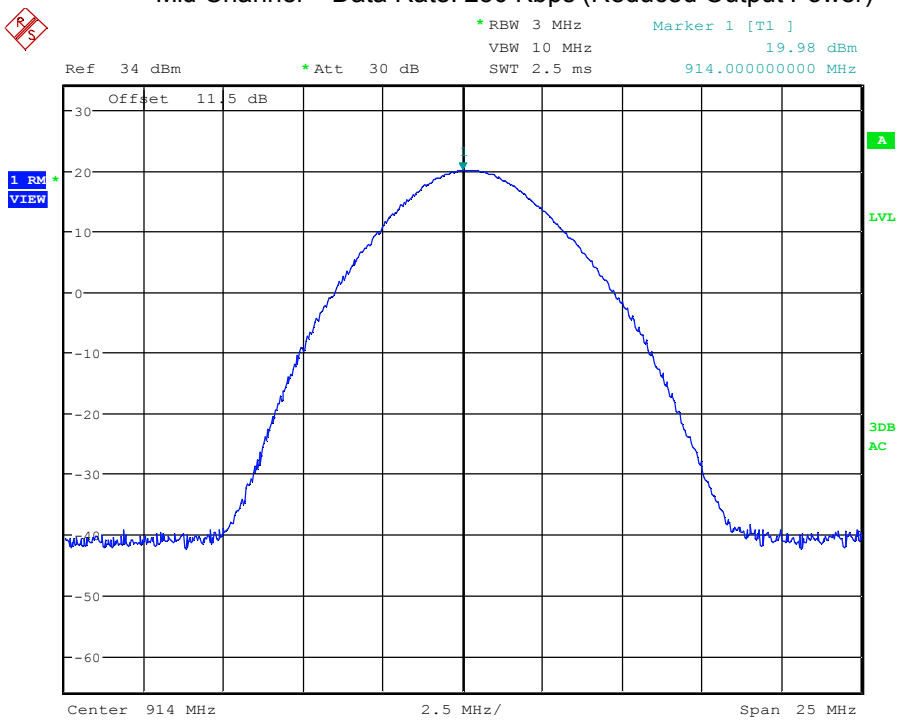
Bandwidth	3 MHz	Power	14.12 dBm

Mid Channel – Data Rate: 115.2 Kbps (Reduced Output Power)



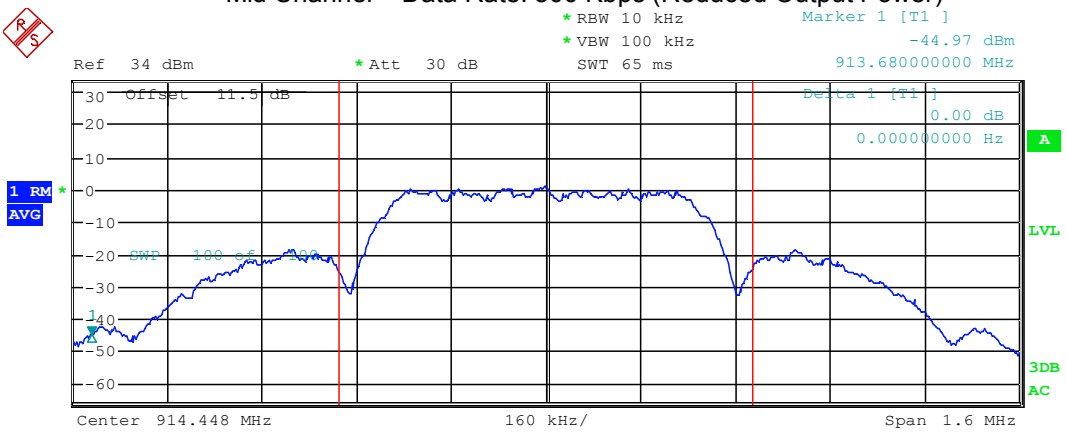
Date: 11.APR.2016 12:17:19

Mid Channel – Data Rate: 250 Kbps (Reduced Output Power)



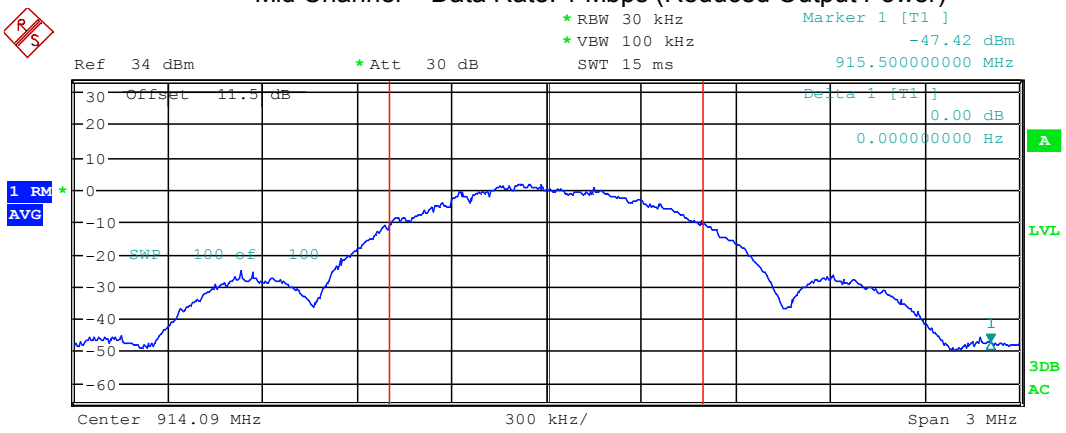
Date: 11.APR.2016 12:16:35

Mid Channel – Data Rate: 500 Kbps (Reduced Output Power)



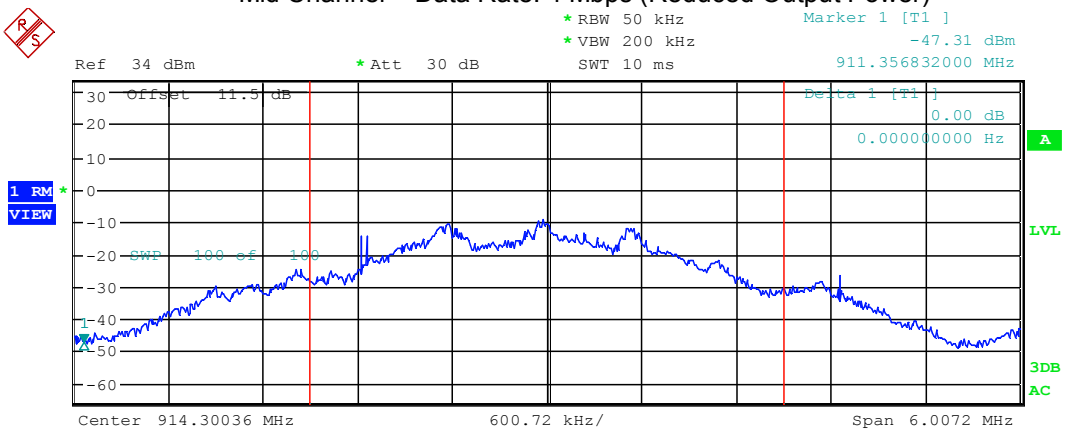
Tx Channel
Bandwidth 700 kHz Power 19.47 dBm

Mid Channel – Data Rate: 1 Mbps (Reduced Output Power)



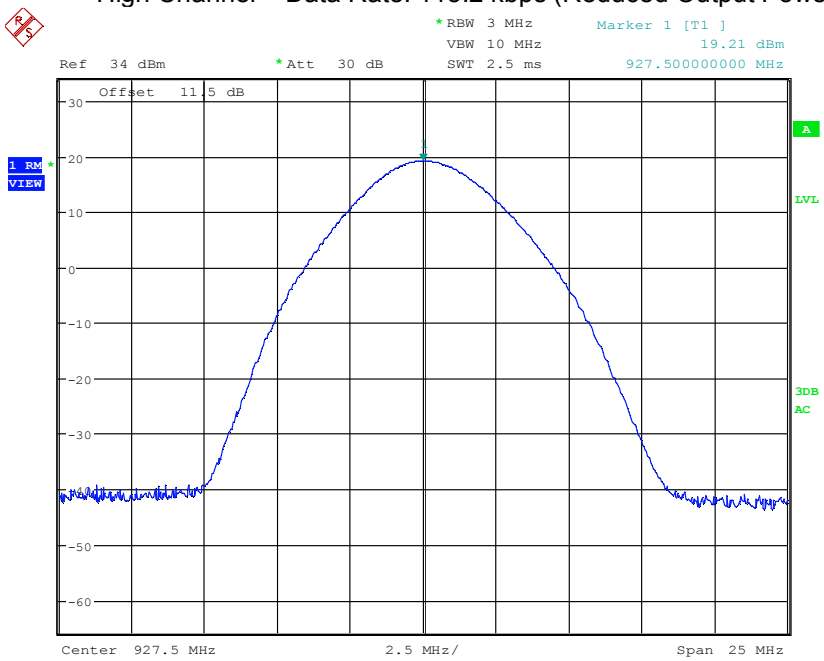
Tx Channel
Bandwidth 1 MHz Power 19.23 dBm

Mid Channel – Data Rate: 4 Mbps (Reduced Output Power)



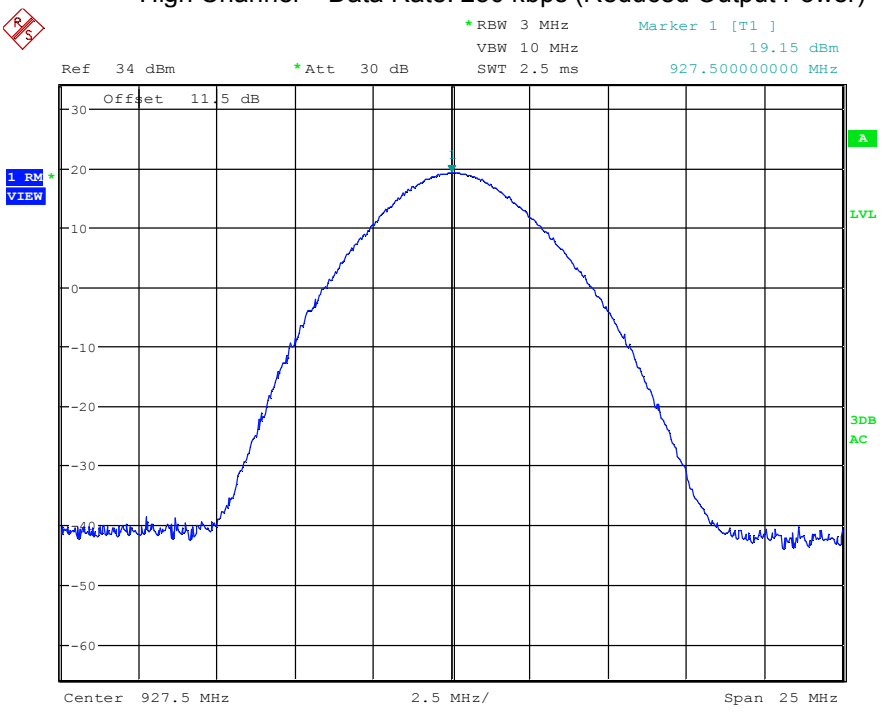
Tx Channel
Bandwidth 3 MHz Power 14.62 dBm

High Channel – Data Rate: 115.2 kbps (Reduced Output Power)



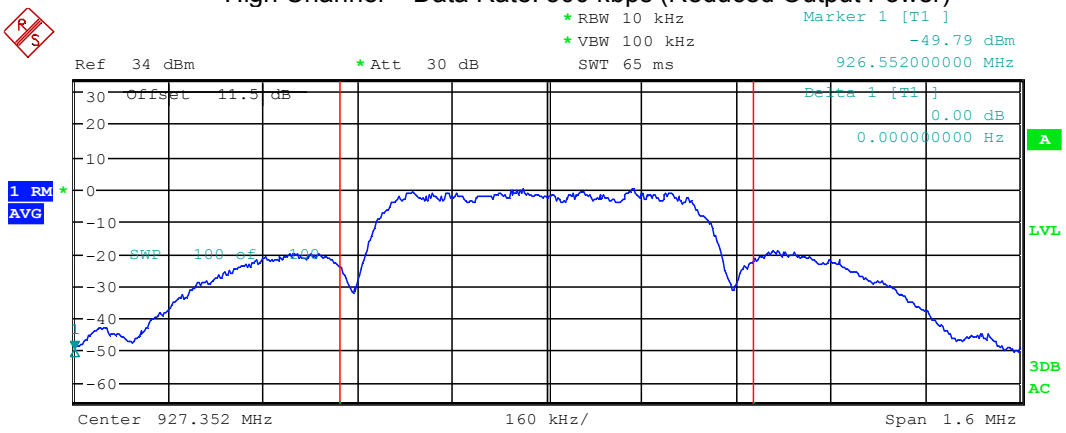
Date: 11.APR.2016 12:18:22

High Channel – Data Rate: 250 kbps (Reduced Output Power)



Date: 11.APR.2016 12:18:57

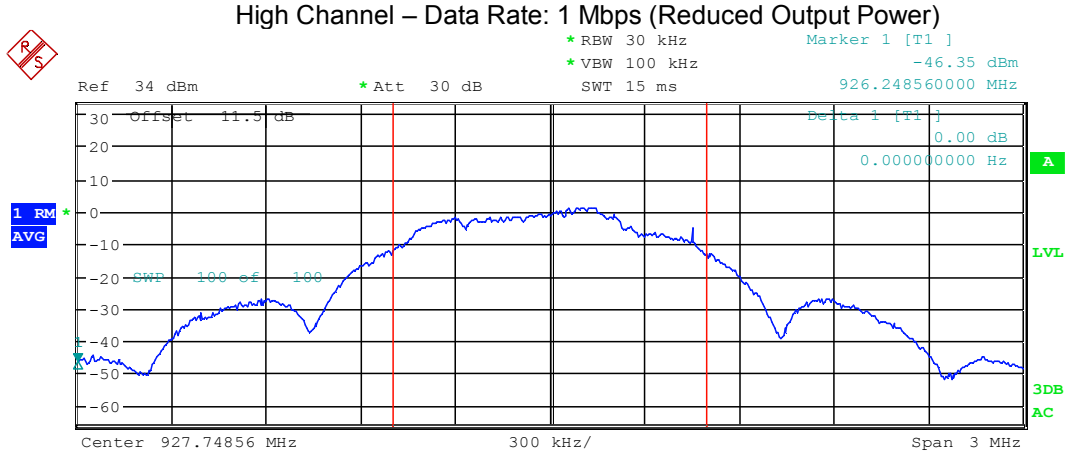
High Channel – Data Rate: 500 kbps (Reduced Output Power)



Tx Channel

Bandwidth	700 kHz	Power	18.53 dBm

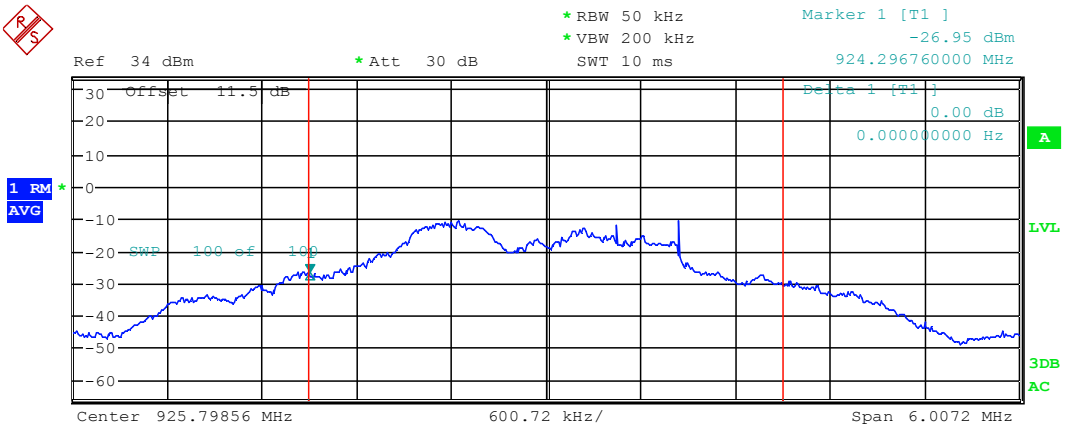
High Channel – Data Rate: 1 Mbps (Reduced Output Power)



Tx Channel

Bandwidth	1 MHz	Power	19.24 dBm

High Channel – Data Rate: 4 Mbps (Reduced Output Power)



Tx Channel

Bandwidth	3 MHz	Power	14.38 dBm

9 RF Conducted Spurious Emissions (-20dBc) – Including Band Edge

9.1 Method:

The test methods used comply with ANSI C63.10. Unless otherwise stated no deviations were made from FCC 15.247 & RSS-247.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

9.2 Test Requirement/Specification:

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)).

- 15.247(d)
- RSS-247 5.5

Frequency Range:		☒ 902-928MHz ☐ 2400-2483.5MHz ☐ 5725-5850MHz		
		Output Power with 100 kHz Bandwidth dBm	**Minimum Allowed Attenuation dB**	**Limit dB**
Data Rate	Frequency			
115.2 kbps	927.5904	29.47	20	9
250 kbps	927.4176	29.57	20	9
500 kbps	927.3600	29.65	30	-1
1 Mbps	927.0144	29.20	30	-1
4 Mbps	925.7472	14.81	30	-15
Analyzer Settings:		☒ RBW=100KHz		
Minimum Allowed Attenuation:		☒ 20dB ☒ 30dB (for digital systems with conducted power measured using RMS averaging over a time interval)		
Remarks: The high channel frequencies represented the worst case for this test.				

9.3 Test Equipment Used:

Asset ID	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DEN-073	EMI Receiver (10Hz – 26.5GHz)	RHODE & SCHWARZ	ESU 26	100265	12/19/2015	12/19/2016
DEN-206	RF Conducted Port Cable	TELEDYNE	True Blue	14-11-401	12/23/2014	05/30/2016
SW-6	Software for Radiated and Conducted emissions.	Intertek	OATS vba	V. 3.0	VBU	VBU
18869	10 db Attenuator	Weinschel Eng	23-10-34	AV2626	06/23/2015	06/23/2016
DEN-155	Ban Reject Filter	Micro-Tronics	BRC50722	004	12/09/2014	05/30/2016

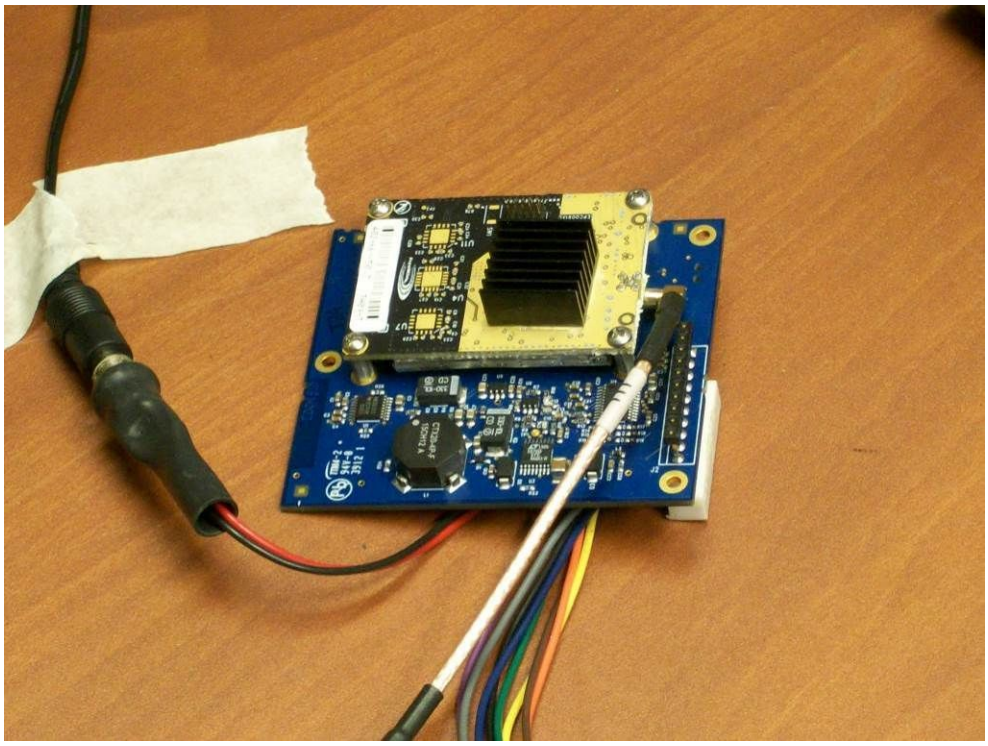
9.4 Results:

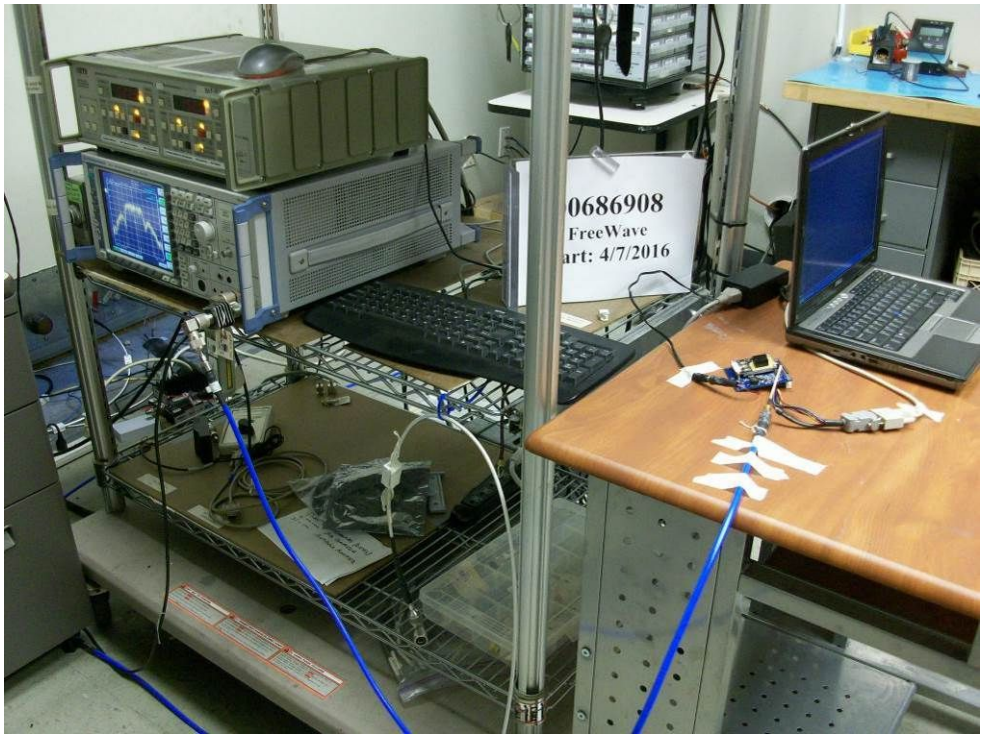
The sample tested was found to comply.

9.5 Test Method:

- ANSI C63.10: 2013, Clause 11.11 & 11.13

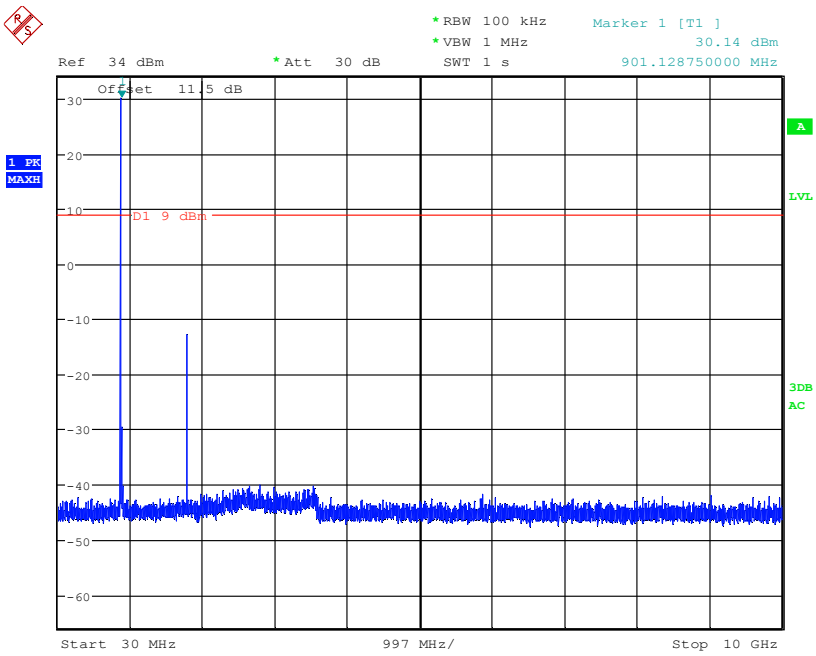
9.6 Setup Photographs





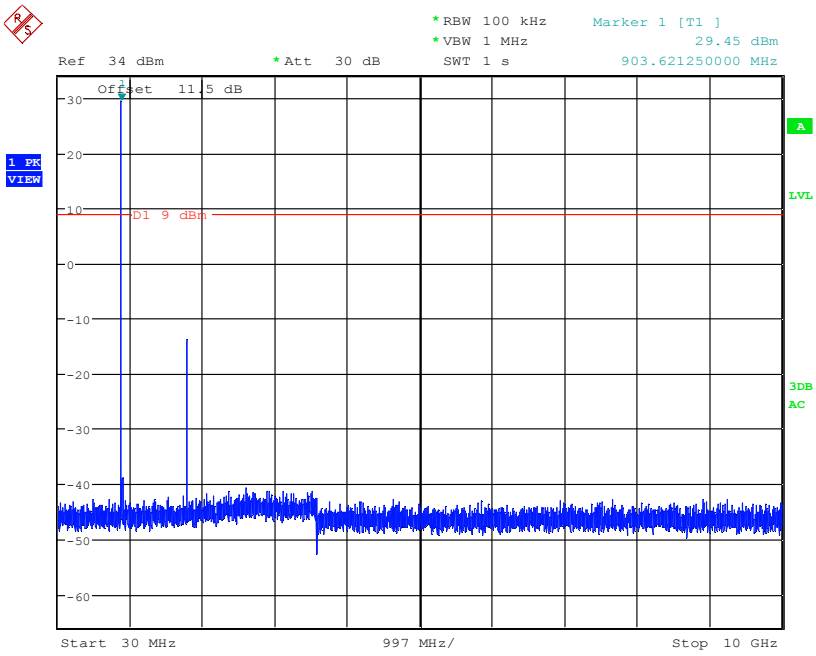
9.7 Plots:

Low Channel – Data Rate: 115.2 kbps



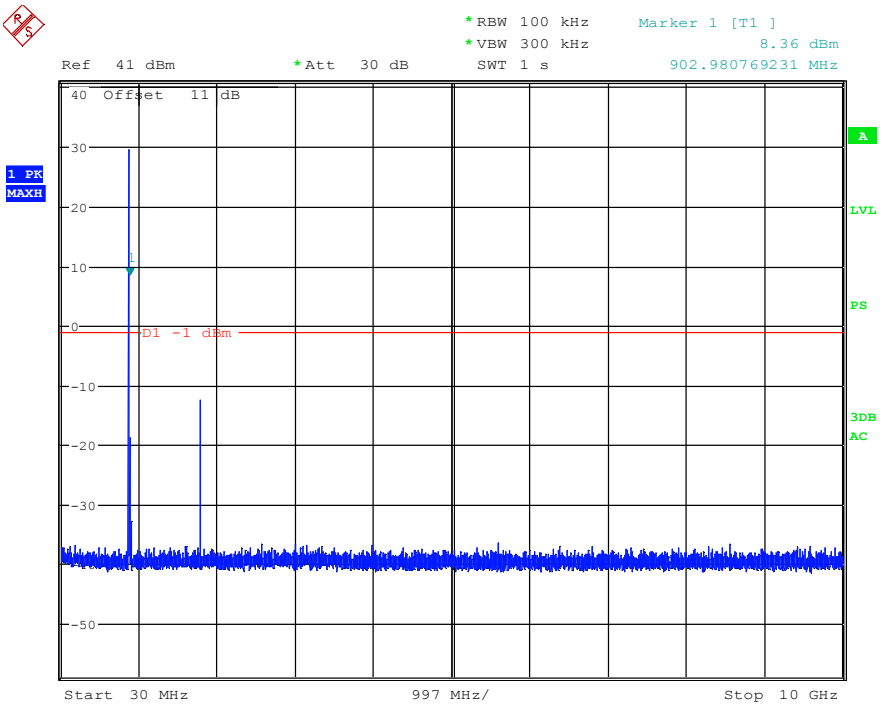
Date: 11.APR.2016 14:35:37

Low Channel – Data Rate: 250 kbps



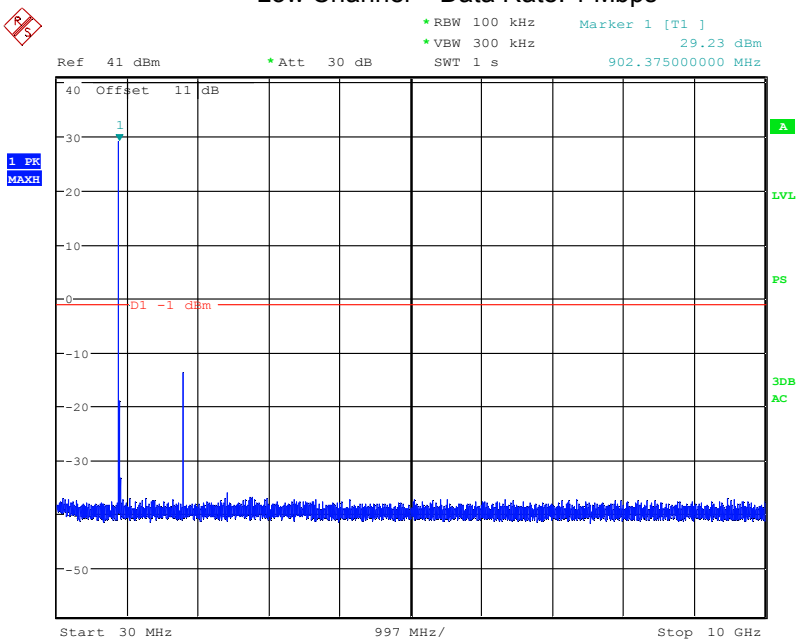
Date: 11.APR.2016 14:34:42

Low Channel – Data Rate: 500 kbps



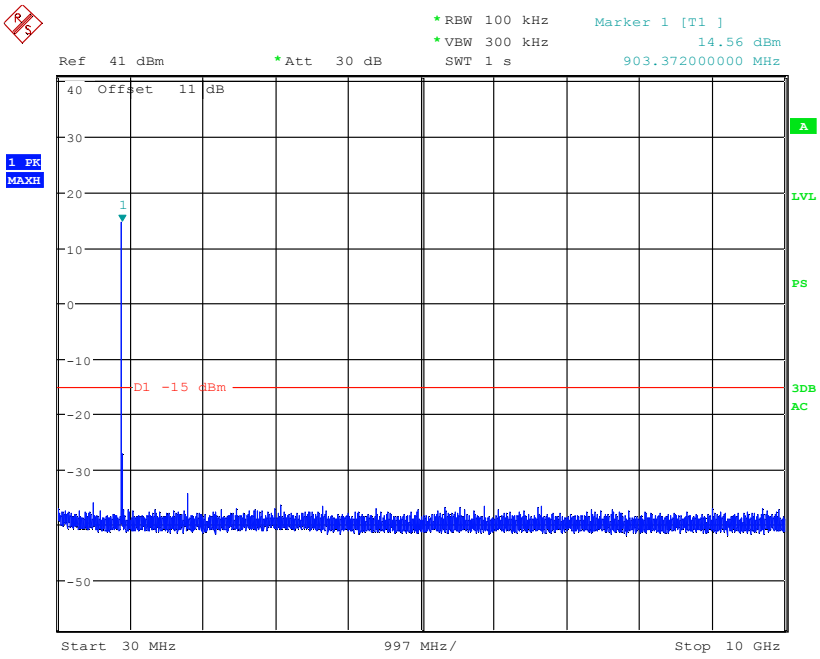
Date: 19.MAY.2016 12:23:34

Low Channel – Data Rate: 1 Mbps



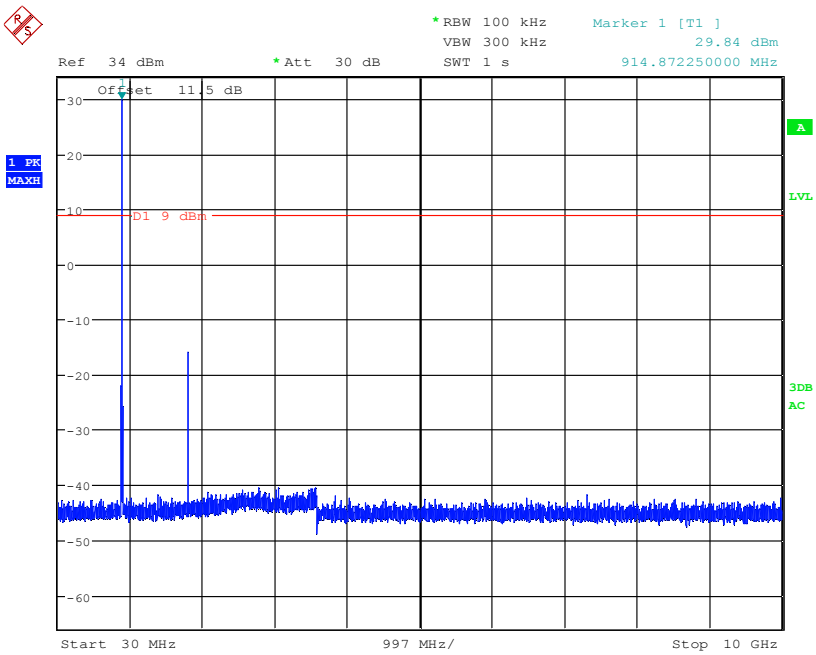
Date: 19.MAY.2016 12:35:17

Low Channel – Data Rate: 4 Mbps



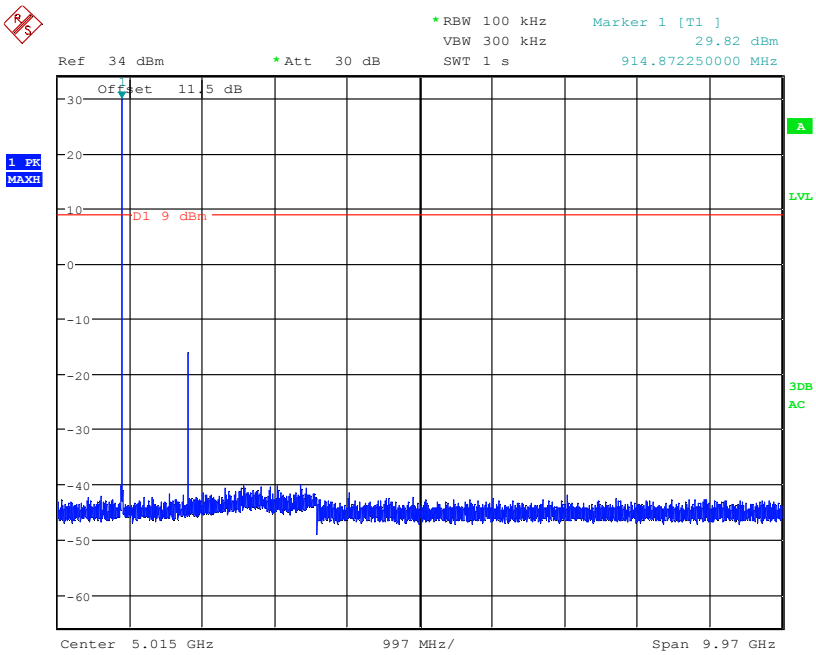
Date: 19.MAY.2016 12:41:10

Mid Channel – Data Rate: 115.2 kbps



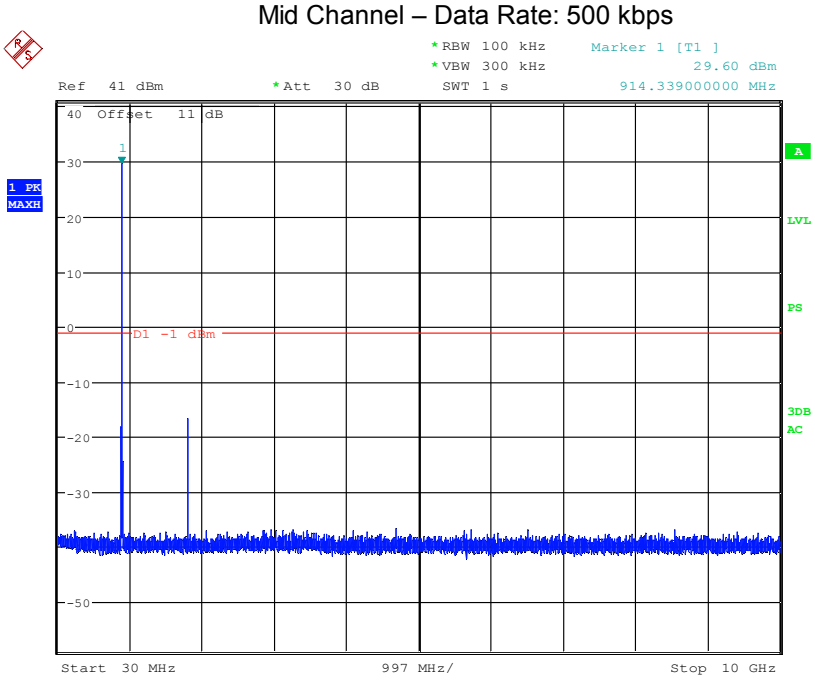
Date: 11.APR.2016 14:26:51

Mid Channel – Data Rate: 250 kbps



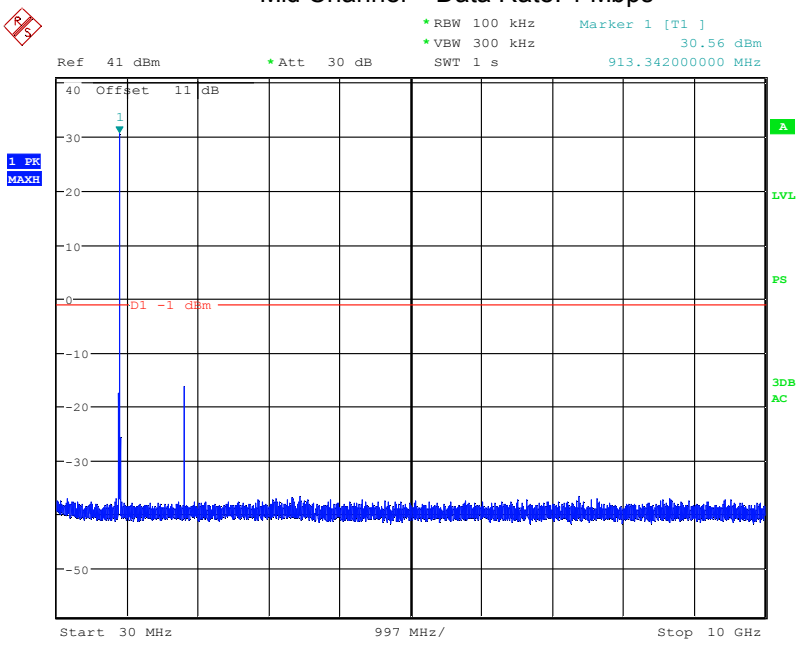
Date: 11.APR.2016 14:27:43

Mid Channel – Data Rate: 500 kbps



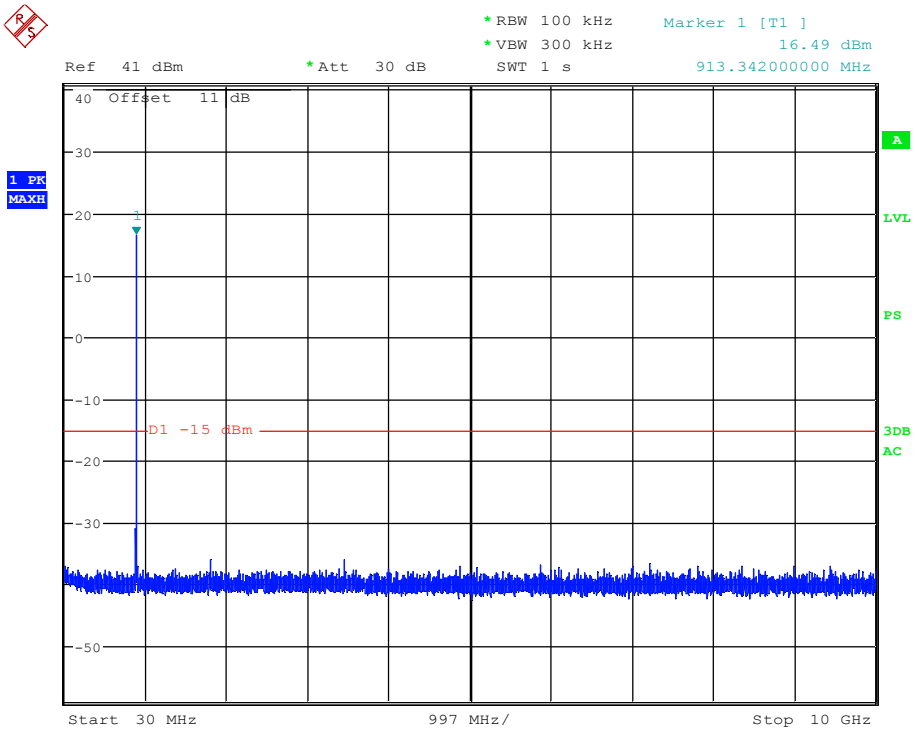
Date: 19.MAY.2016 12:25:56

Mid Channel – Data Rate: 1 Mbps



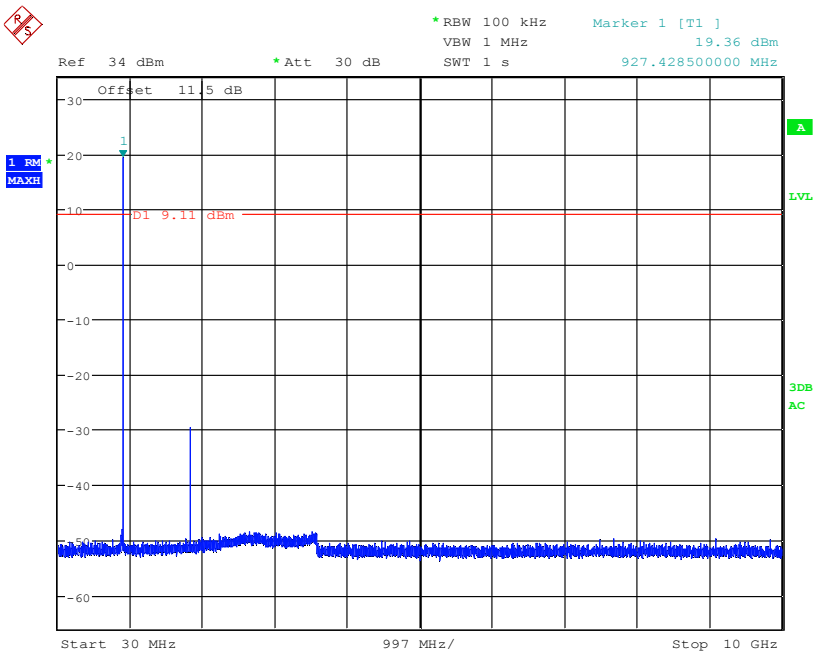
Date: 19.MAY.2016 12:37:00

Mid Channel – Data Rate: 4 Mbps



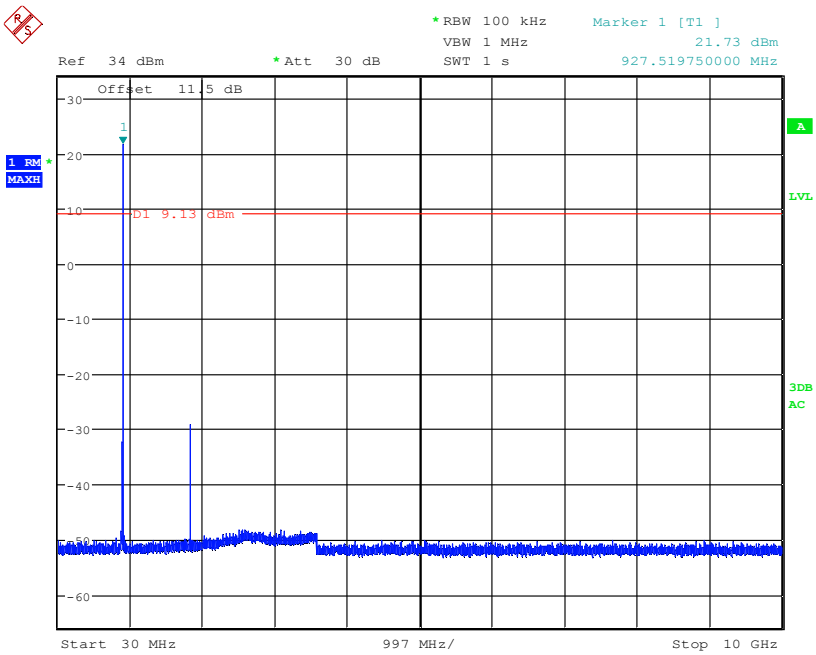
Date: 19.MAY.2016 12:42:57

High Channel – Data Rate: 115.2 kbps



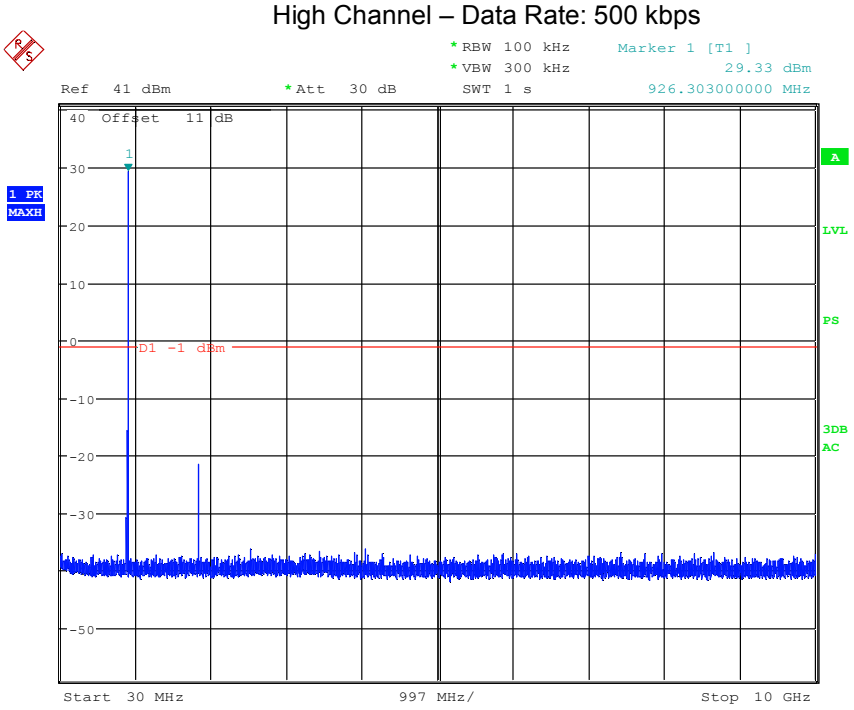
Date: 11.APR.2016 14:23:35

High Channel – Data Rate: 250 kbps



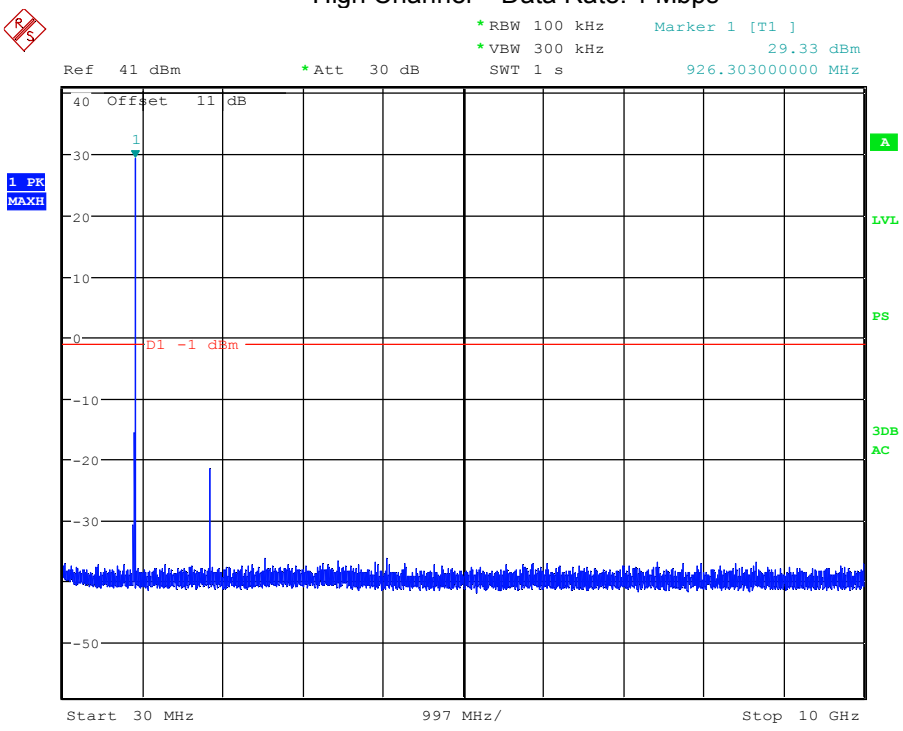
Date: 11.APR.2016 14:21:49

High Channel – Data Rate: 500 kbps



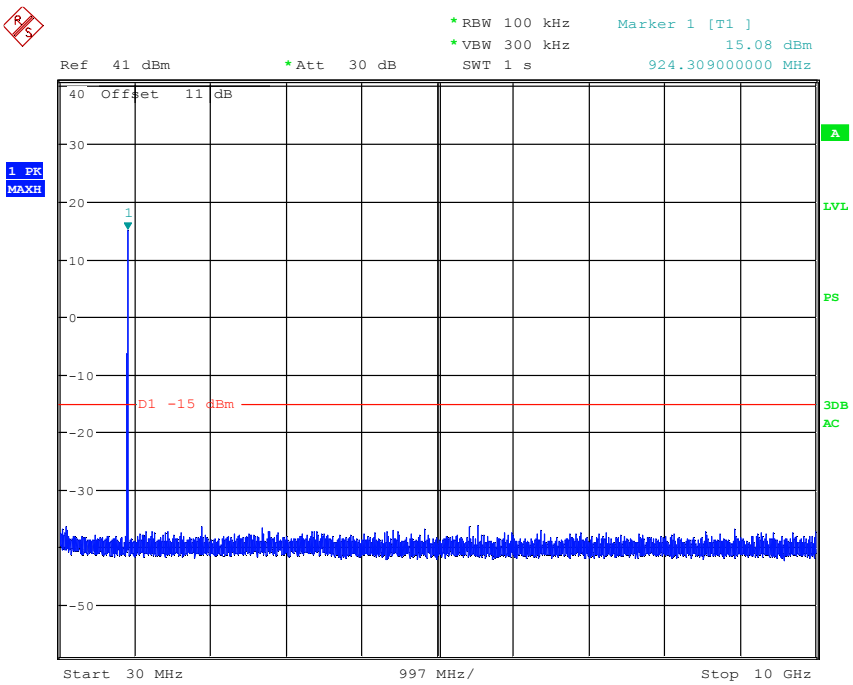
Date: 19.MAY.2016 12:38:41

High Channel – Data Rate: 1 Mbps



Date: 19.MAY.2016 12:38:41

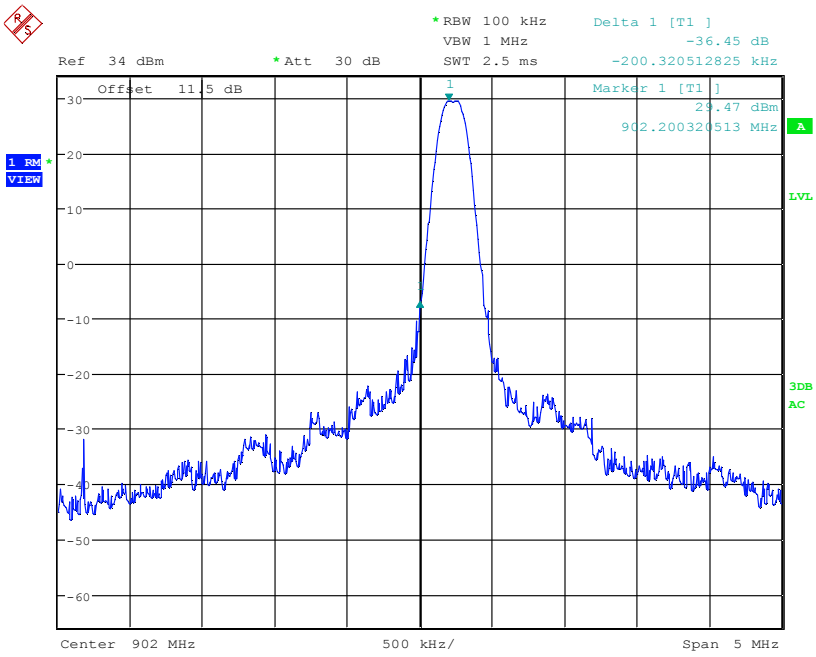
High Channel – Data Rate: 4 Mbps



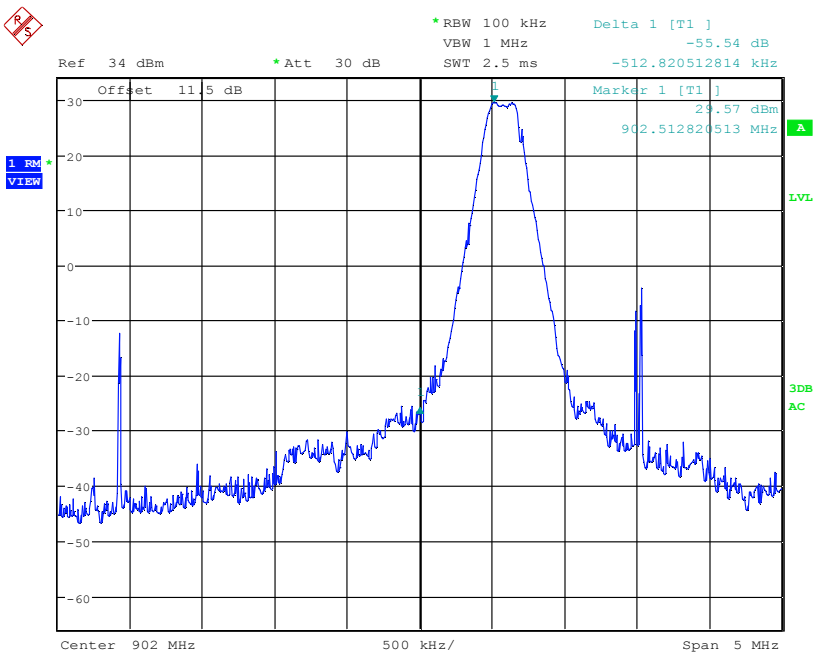
Date: 19.MAY.2016 12:44:11

9.8 Band Edge

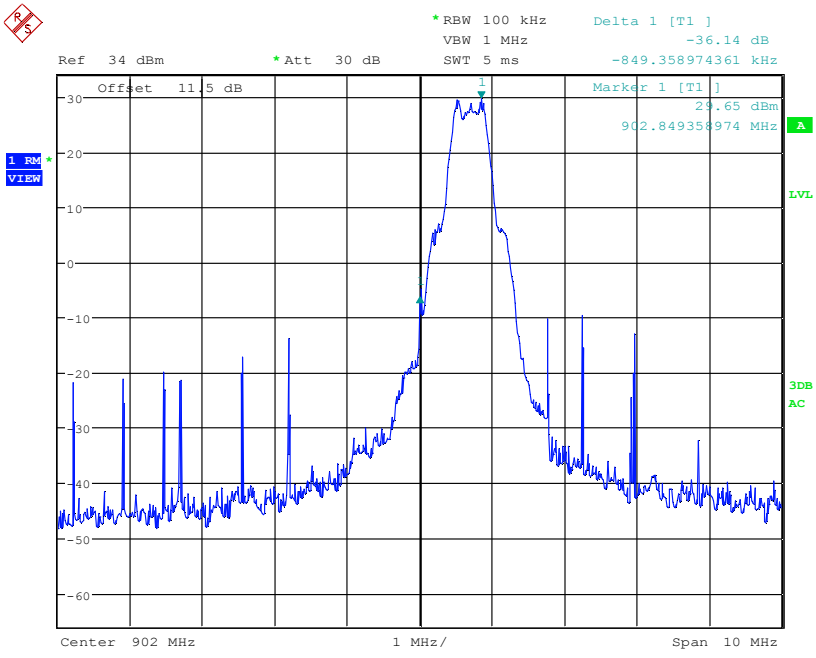
Low Channel – Data Rate: 115.2 kbps



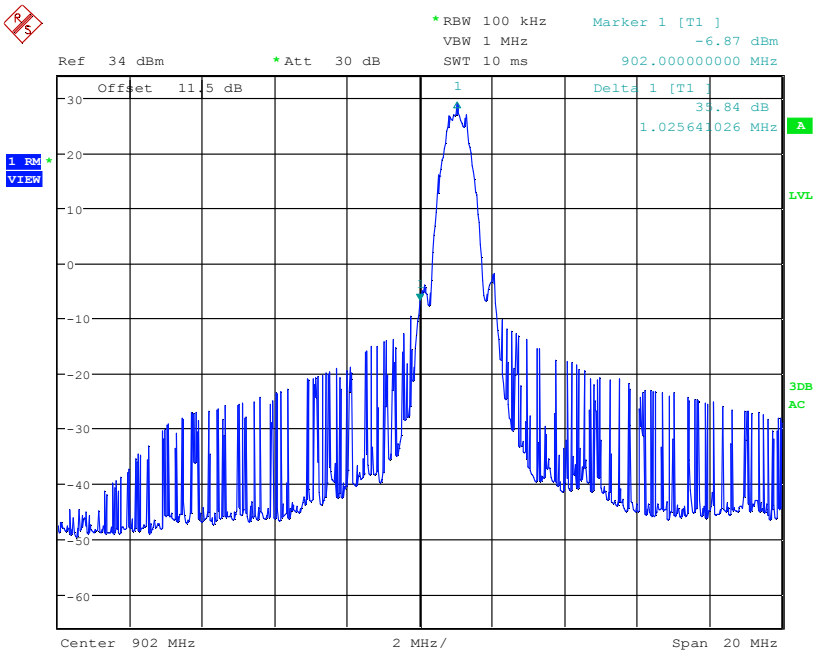
Low Channel – Data Rate: 250 kbps



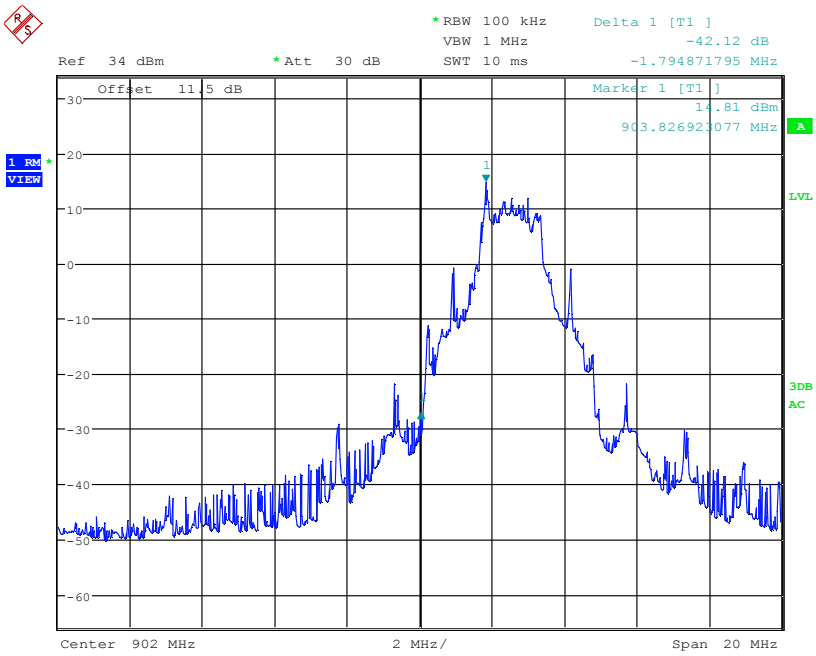
Low Channel – Data Rate: 500 kbps



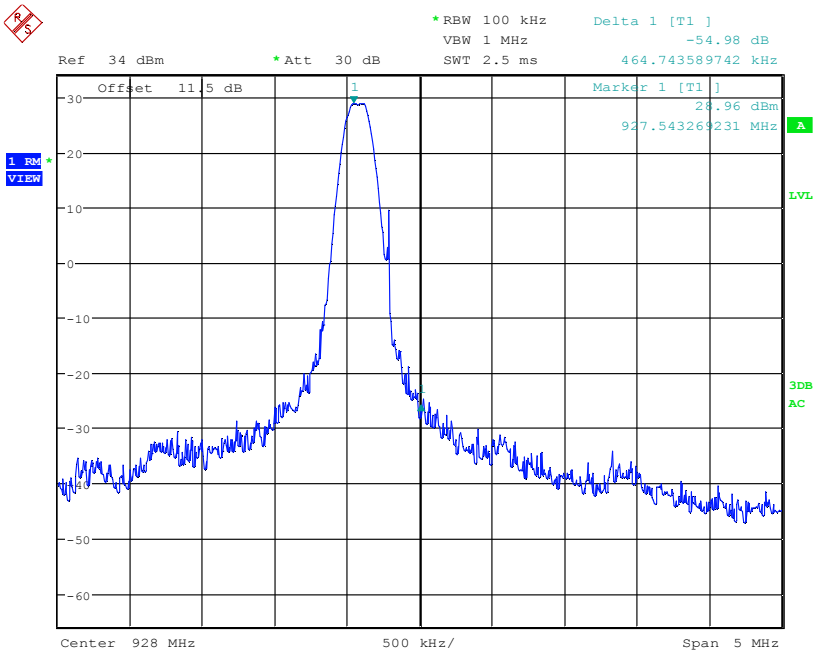
Low Channel – Data Rate: 1 Mbps



Low Channel – Data Rate: 4 Mbps

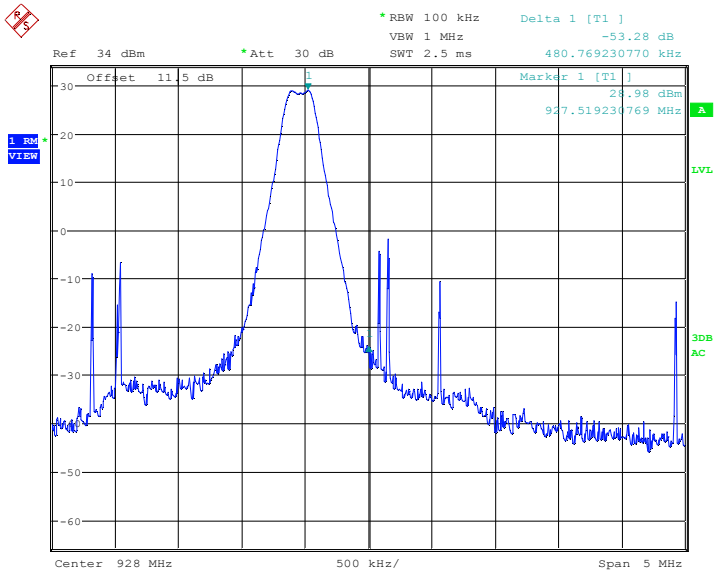


High Channel – Data Rate: 115.2 kbps



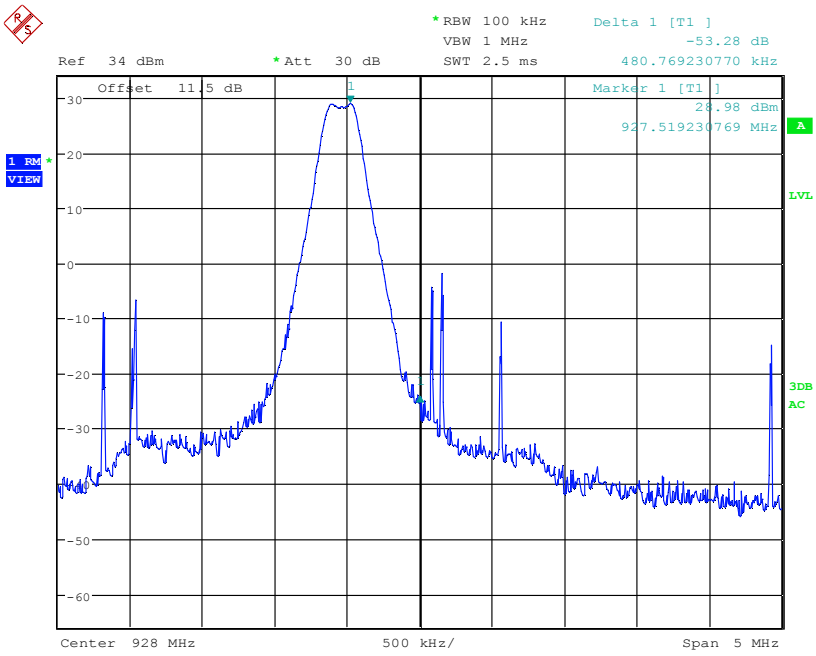
Date: 11.APR.2016 14:05:06

High Channel – Data Rate: 125 kbps

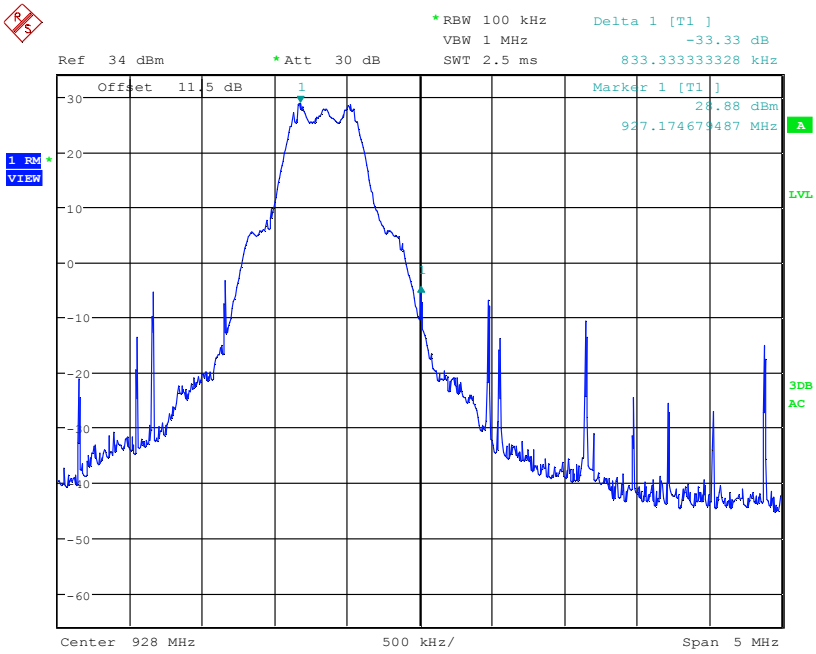


Date: 11.APR.2016 14:06:58

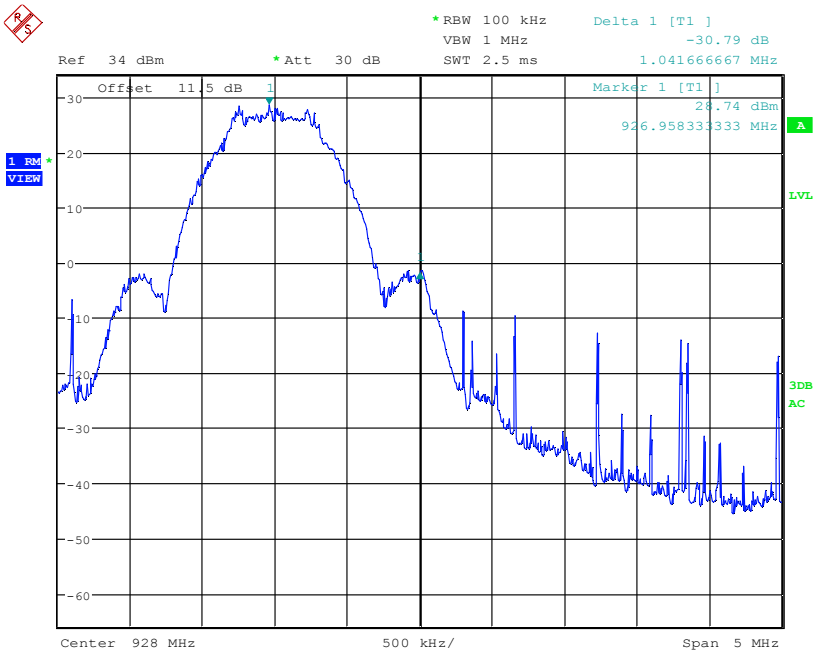
High Channel – Data Rate: 250 kbps



High Channel – Data Rate: 500 kbps

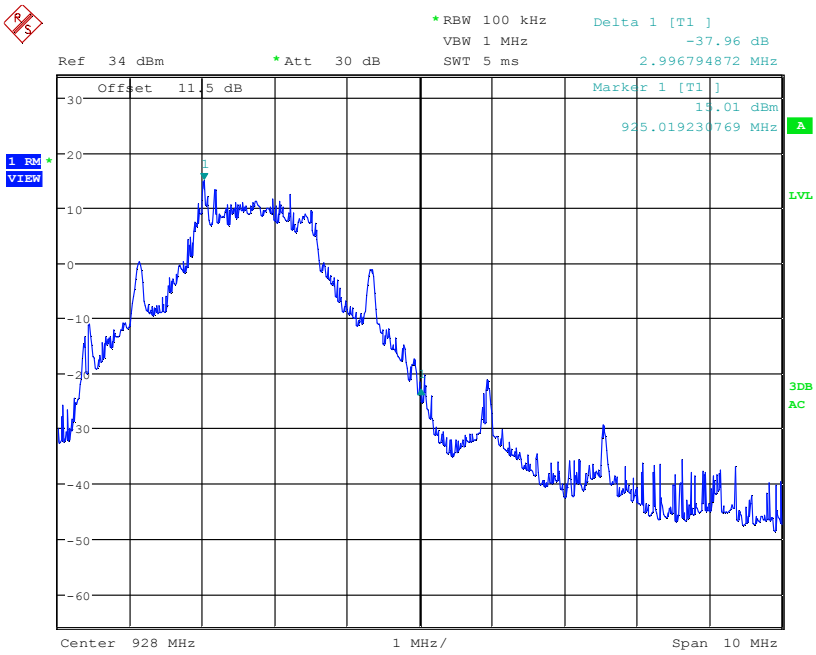


High Channel – Data Rate: 1 Mbps



Date: 11.APR.2016 14:09:31

High Channel – Data Rate: 4 Mbps



Date: 11.APR.2016 14:10:43

10 Spurious and Band Edge/Restricted Band Emissions - Radiated

10.1 Method

The test methods used comply with ANSI C63.10. Unless otherwise stated no deviations were made from FCC 15.247 and RSS-247.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

10.2 Test Requirement/ Specification:

Radiated emissions which fall in the restricted bands, as defined in FCC Part 15.205(a), must also comply with the radiated emission limits specified in Part 15.209(a) and Part 15.205(c). Measurements in the restricted bands include both peak detector and average detector measurements.
Measurements in non-restricted bands include peak detector measurements.

Unwanted emissions below 1GHz must comply with the general field strength limits defined in FCC Part 15.209, when measured with a quasi-peak detector.

FCC part 15.209	
Freq. MHz	Amp. dBuV/m @ 3 m
30	40
88	40
88	43.5
216	43.5
216	46
960	46
960	54
40000	54

10.3 Test Equipment Used:

Asset ID	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
18901	RF Pre-Amplifier (8-18 GHz)	Avantek	AWT-18037	1002	05/01/2015	05/01/2016
18886	Ridged Guide Antenna 1-18GHz	TENSOR	4105	2020	12/28/2015	12/28/2016
18900	RF Pre-Amplifier (4-8 GHz)	Avantek	AFT97-8434-10F	1007	05/01/2015	05/01/2016
18906	Amplifier	Mini-Circuits Lab	ZHL-42	N052792-2	05/01/2015	05/01/2016
19937	Bilog Antenna 30 MHz - 6GHz	Sunol Sciences	JB6	A050707-2	03/09/2016	03/09/2017
DEN-060	1GHz low Pass Filter	Mini-Circuits	VHF-3100+	3 1022	06/22/2015	06/22/2016
18901	RF Pre-Amplifier (8-18 GHz)	Avantek	AWT-18037	1002	05/01/2015	05/01/2016
DEN-073	EMI Receiver (10Hz – 26.5GHz)	RHODE & SCHWARZ	ESU 26	100265	12/19/2015	12/19/2016
DEN-155	Band Reject Filter	Micro-Tronics	BRC50722	004	12/09/2014	05/30/2016
CC1-E2	Radiated Cable	Teledyne	90-206-300; PN:F-130-S1S1-100; 90-206-072;	E2-A; 5026702 002; E2-C; E2-D	11/17/2015	11/17/2016
LAB-012	Wireless BP, Tem and Humidity sensor	Omega	zED-BTH	0070368	9/01/2015	9/1/2016

10.4 Test Procedure:

The Resolution Bandwidth is 120 kHz or greater for frequencies 30 MHz -1000 MHz and 1 MHz for frequencies above 1000 MHz. The Video Bandwidth was at least 3x the RBW.

The EUT is placed on a plastic turntable that is 80 cm in height for testing <1GHz and 150cm for testing >1GHz. If the EUT attaches to peripherals, they are connected and operational (as typical as possible). During testing, all cables are manipulated to produce worst-case emissions. The signal is maximized by rotating the turntable through a 360º rotation. The antenna height is varied from 1-4 meters. Both vertical and horizontal antenna configurations are utilized in the testing.

Radiated emissions 30MHz to 10GHz are taken at 3-meter antenna-to-product test distance.

Data is included for the worst-case configuration - the configuration which resulted in the highest emission levels.

ANSI C63.10: 2013 – Clause 11.12

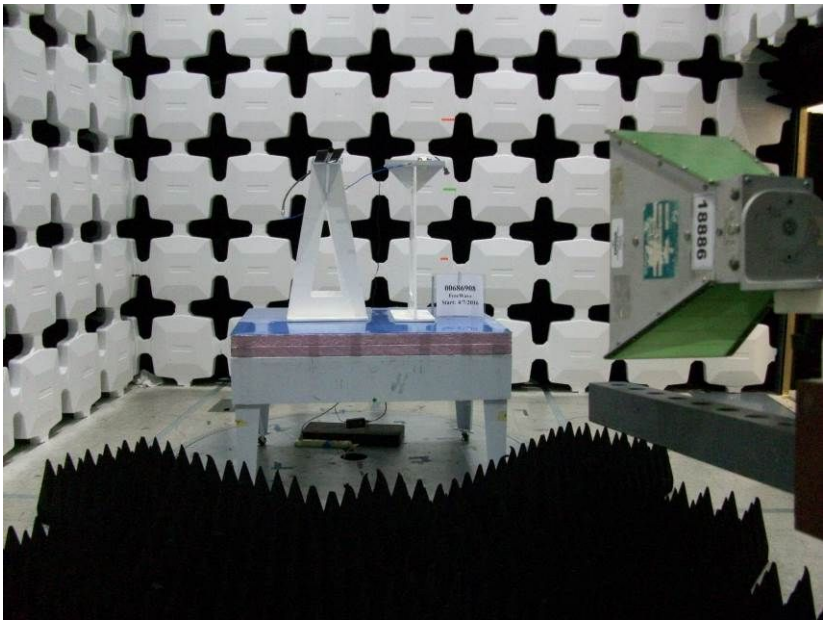
10.5 Test Results:

The sample tested was found to Comply.

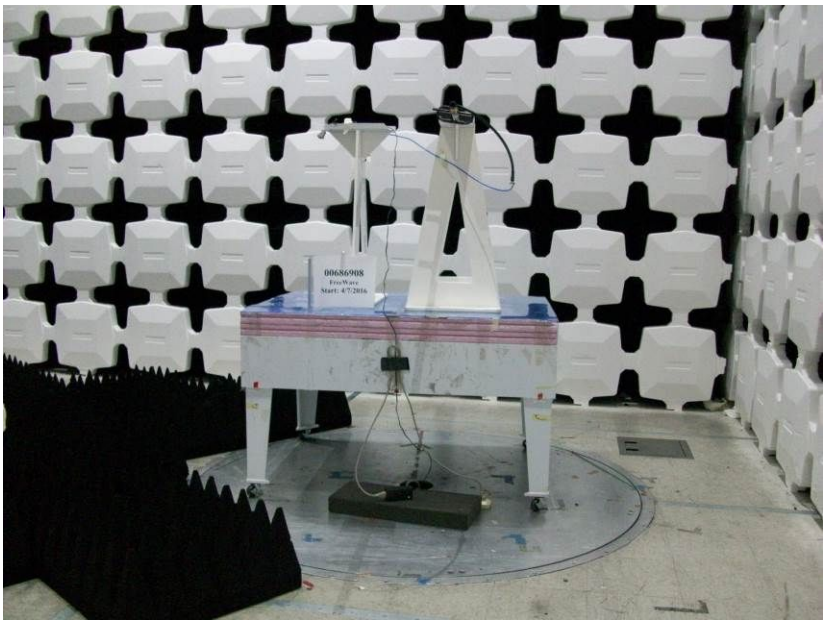
10.6 Test Summary – Worst-Case Measurements

Setup Photographs:

Front View (1000 MHz – 10000 MHz)



Rear View



Test Data Summary: Tx Radiated Spurious Emissions in Restricted Band

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Low CH_Z9-T_/Antenna Horizontal/115.2 kbps/ Axis 1															
2706.6118	49.97	**Av**	4.79	29.11	37.94	0.42	46.35	H	2.15	176.9	- 7.63	NA	1.000	53.98	NA
3611.1374	34.54	**Av**	5.56	31.75	37.98	0.29	34.17	H	2.15	176.9	- 19.81	NA	1.000	53.98	NA
4511.0217	34.60	**Av**	6.25	32.69	39.93	0.00	33.61	H	2.15	176.9	- 20.37	NA	1.000	53.98	NA
5411.9415	32.23	**Av**	6.94	34.30	39.83	0.00	33.64	H	2.15	176.9	- 20.34	NA	1.000	53.98	NA
8116.4059	41.85	**Av**	8.84	36.99	46.29	0.00	41.39	H	2.15	176.9	- 12.59	NA	1.000	53.98	NA
9022.0914	42.54	**Av**	9.22	37.42	47.16	0.00	42.02	H	2.15	176.9	- 11.96	NA	1.000	53.98	NA
2706.6118	50.09	**Av**	4.79	29.11	37.94	0.42	46.47	V	2.15	176.9	- 7.51	NA	1.000	53.98	NA
3609.0381	35.96	**Av**	5.56	31.74	37.97	0.29	35.59	V	2.15	176.9	- 18.39	NA	1.000	53.98	NA
4511.0217	34.60	**Av**	6.25	32.69	39.93	0.00	33.61	V	2.15	176.9	- 20.37	NA	1.000	53.98	NA
8121.9508	41.74	**Av**	8.84	36.98	46.29	0.00	41.28	V	2.15	176.9	- 12.70	NA	1.000	53.98	NA
9022.0914	42.54	**Av**	9.22	37.42	47.16	0.00	42.02	V	2.15	176.9	- 11.96	NA	1.000	53.98	NA
2706.6118	55.30	**Pk**	4.79	29.11	37.94	0.42	51.68	H	2.15	176.9	NA	- 22.32	1.000	NA	74.00
3611.1374	48.29	**Pk**	5.56	31.75	37.98	0.29	47.92	H	2.15	176.9	NA	- 26.08	1.000	NA	74.00
4511.0217	52.60	**Pk**	6.25	32.69	39.93	0.00	51.61	H	2.15	176.9	NA	- 22.39	1.000	NA	74.00
5411.9415	45.83	**Pk**	6.94	34.30	39.83	0.00	47.24	H	2.15	176.9	NA	- 26.76	1.000	NA	74.00
8116.4059	55.13	**Pk**	8.84	36.99	46.29	0.00	54.67	H	2.15	176.9	NA	- 19.33	1.000	NA	74.00
9022.0914	56.55	**Pk**	9.22	37.42	47.16	0.00	56.03	H	2.15	176.9	NA	- 17.97	1.000	NA	74.00
2706.6118	60.14	**Pk**	4.79	29.11	37.94	0.42	56.52	V	2.15	176.9	NA	- 17.48	1.000	NA	74.00
3609.0381	48.44	**Pk**	5.56	31.74	37.97	0.29	48.07	V	2.15	176.9	NA	- 25.93	1.000	NA	74.00
4511.0217	48.26	**Pk**	6.25	32.69	39.93	0.00	47.27	V	2.15	176.9	NA	- 26.73	1.000	NA	74.00
8121.9508	53.96	**Pk**	8.84	36.98	46.29	0.00	53.50	V	2.15	176.9	NA	- 20.50	1.000	NA	74.00
9022.0914	56.09	**Pk**	9.22	37.42	47.16	0.00	55.57	V	2.15	176.9	NA	- 18.43	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/115.2 kbps/ Axis 2															
2706.6078	51.84	**Av**	4.79	29.11	37.94	0.42	48.22	H	1.50	359.9	- 5.76	NA	1.000	53.98	NA
3611.7965	35.38	**Av**	5.56	31.75	37.98	0.29	35.01	H	1.00	249.6	- 18.97	NA	1.000	53.98	NA
4506.8090	34.06	**Av**	6.25	32.69	39.94	0.00	33.06	H	1.50	87.4	- 20.92	NA	1.000	53.98	NA
5416.1323	33.49	**Av**	6.94	34.31	39.84	0.00	34.90	H	1.59	123.1	- 19.08	NA	1.000	53.98	NA
2706.7200	66.09	**Pk**	4.79	29.11	37.94	0.42	62.47	H	1.50	359.9	NA	- 11.53	1.000	NA	74.00
3611.7965	50.58	**Pk**	5.56	31.75	37.98	0.29	50.21	H	1.00	249.6	NA	- 23.79	1.000	NA	74.00
4506.8090	50.93	**Pk**	6.25	32.69	39.94	0.00	49.93	H	1.50	87.4	NA	- 24.07	1.000	NA	74.00
5416.1323	47.39	**Pk**	6.94	34.31	39.84	0.00	48.80	H	1.59	123.1	NA	- 25.20	1.000	NA	74.00
2706.6078	51.84	**Av**	4.79	29.11	37.94	0.42	48.22	V	1.00	282.2	- 5.76	NA	1.000	53.98	NA
3611.7965	35.38	**Av**	5.56	31.75	37.98	0.29	35.01	V	1.00	249.6	- 18.97	NA	1.000	53.98	NA
4506.8090	34.06	**Av**	6.25	32.69	39.94	0.00	33.06	V	1.19	87.4	- 20.92	NA	1.000	53.98	NA
5416.1323	33.48	**Av**	6.94	34.31	39.84	0.00	34.89	V	1.32	88.9	- 19.09	NA	1.000	53.98	NA
8120.2401	42.18	**Av**	8.84	36.98	46.29	0.00	41.72	V	1.10	74.1	- 12.26	NA	1.000	53.98	NA
9024.4353	42.96	**Av**	9.22	37.42	47.16	0.00	42.43	V	1.66	103.8	- 11.55	NA	1.000	53.98	NA
2706.6078	58.08	**Pk**	4.79	29.11	37.94	0.42	54.46	V	1.00	282.2	NA	- 19.54	1.000	NA	74.00
3611.7965	50.58	**Pk**	5.56	31.75	37.98	0.29	50.21	V	1.00	249.6	NA	- 23.79	1.000	NA	74.00
4506.8090	47.83	**Pk**	6.25	32.69	39.94	0.00	46.83	V	1.19	87.4	NA	- 27.17	1.000	NA	74.00
5416.1323	47.39	**Pk**	6.94	34.31	39.84	0.00	48.80	V	1.32	88.9	NA	- 25.20	1.000	NA	74.00
8120.2401	55.72	**Pk**	8.84	36.98	46.29	0.00	55.26	V	1.10	74.1	NA	- 18.74	1.000	NA	74.00
9024.4353	56.83	**Pk**	9.22	37.42	47.16	0.00	56.30	V	1.66	103.8	NA	- 17.70	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/115.2 kbps/ Axis 3															
2706.6078	51.81	**Av**	4.79	29.11	37.94	0.42	48.19	H	1.34	260.7	- 5.79	NA	1.000	53.98	NA
3609.4408	36.56	**Av**	5.56	31.75	37.97	0.29	36.19	H	1.42	108.6	- 17.79	NA	1.000	53.98	NA
4508.1231	34.24	**Av**	6.25	32.69	39.94	0.00	33.25	H	1.27	42.7	- 20.73	NA	1.000	53.98	NA
5415.5394	33.41	**Av**	6.94	34.31	39.84	0.00	34.82	H	1.48	101.4	- 19.16	NA	1.000	53.98	NA
8120.0158	41.76	**Av**	8.84	36.98	46.29	0.00	41.30	H	1.68	142.7	- 12.68	NA	1.000	53.98	NA
9021.4865	42.61	**Av**	9.22	37.42	47.16	0.00	42.09	H	1.77	128.8	- 11.89	NA	1.000	53.98	NA
2706.6078	50.81	**Av**	4.79	29.11	37.94	0.42	47.19	V	1.02	195.6	- 6.79	NA	1.000	53.98	NA
3609.4408	36.43	**Av**	5.56	31.75	37.97	0.29	36.06	V	1.00	60.2	- 17.92	NA	1.000	53.98	NA
4508.1231	34.24	**Av**	6.25	32.69	39.94	0.00	33.25	V	1.27	42.7	- 20.73	NA	1.000	53.98	NA
5415.5394	33.41	**Av**	6.94	34.31	39.84	0.00	34.82	V	1.13	82.1	- 19.16	NA	1.000	53.98	NA
8120.0158	41.76	**Av**	8.84	36.98	46.29	0.00	41.30	V	1.48	142.7	- 12.68	NA	1.000	53.98	NA
9021.4865	42.61	**Av**	9.22	37.42	47.16	0.00	42.09	V	1.44	102.5	- 11.89	NA	1.000	53.98	NA
2706.6078	66.17	**Pk**	4.79	29.11	37.94	0.42	62.55	H	1.34	260.7	NA	- 11.45	1.000	NA	74.00
3609.4408	57.14	**Pk**	5.56	31.75	37.97	0.29	56.77	H	1.42	108.6	NA	- 17.23	1.000	NA	74.00
4508.1231	47.64	**Pk**	6.25	32.69	39.94	0.00	46.65	H	1.27	42.7	NA	- 27.35	1.000	NA	74.00
5415.5394	48.72	**Pk**	6.94	34.31	39.84	0.00	50.13	H	1.48	101.4	NA	- 23.87	1.000	NA	74.00
8120.0158	56.18	**Pk**	8.84	36.98	46.29	0.00	55.72	H	1.68	142.7	NA	- 18.28	1.000	NA	74.00
9021.4865	56.48	**Pk**	9.22	37.42	47.16	0.00	55.96	H	1.77	128.8	NA	- 18.04	1.000	NA	74.00
2706.6078	57.66	**Pk**	4.79	29.11	37.94	0.42	54.04	V	1.02	195.6	NA	- 19.96	1.000	NA	74.00
3609.4408	50.73	**Pk**	5.56	31.75	37.97	0.29	50.36	V	1.00	60.2	NA	- 23.64	1.000	NA	74.00
4508.1231	47.64	**Pk**	6.25	32.69	39.94	0.00	46.65	V	1.27	42.7	NA	- 27.35	1.000	NA	74.00
5415.5394	48.72	**Pk**	6.94	34.31	39.84	0.00	50.13	V	1.13	82.1	NA	- 23.87	1.000	NA	74.00
8120.0158	56.18	**Pk**	8.84	36.98	46.29	0.00	55.72	V	1.48	142.7	NA	- 18.28	1.000	NA	74.00
9021.4865	56.48	**Pk**	9.22	37.42	47.16	0.00	55.96	V	1.44	102.5	NA	- 18.04	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1GHz_Pk+20dB from Av
Low CH_Z9-T_/Antenna Horizontal/250 kbps/ Axis 1															
2705.9851	48.17	**Av**	4.79	29.11	37.94	0.42	44.55	H	1.50	160.3	- 9.43	NA	1.000	53.98	NA
3613.3828	36.23	**Av**	5.57	31.76	37.98	0.29	35.87	H	1.54	142.3	- 18.11	NA	1.000	53.98	NA
4514.6106	34.43	**Av**	6.26	32.69	39.93	0.00	33.45	H	1.42	75.0	- 20.53	NA	1.000	53.98	NA
5414.2038	33.75	**Av**	6.94	34.30	39.84	0.00	35.16	H	1.48	143.4	- 18.82	NA	1.000	53.98	NA
8123.0255	41.65	**Av**	8.84	36.98	46.29	0.00	41.19	H	1.61	157.4	- 12.79	NA	1.000	53.98	NA
9026.2565	42.44	**Av**	9.22	37.41	47.16	0.00	41.91	H	1.59	205.3	- 12.07	NA	1.000	53.98	NA
2705.9851	42.64	**Av**	4.79	29.11	37.94	0.42	39.02	V	1.11	226.1	- 14.96	NA	1.000	53.98	NA
3613.3828	36.23	**Av**	5.57	31.76	37.98	0.29	35.87	V	1.30	125.8	- 18.11	NA	1.000	53.98	NA
4514.6106	34.43	**Av**	6.26	32.69	39.93	0.00	33.45	V	1.00	42.5	- 20.53	NA	1.000	53.98	NA
5415.5500	33.55	**Av**	6.94	34.31	39.84	0.00	34.96	V	1.22	113.7	- 19.02	NA	1.000	53.98	NA
8123.0255	41.65	**Av**	8.84	36.98	46.29	0.00	41.19	V	1.21	110.8	- 12.79	NA	1.000	53.98	NA
9026.2565	42.44	**Av**	9.22	37.41	47.16	0.00	41.91	V	1.07	183.3	- 12.07	NA	1.000	53.98	NA
2705.9851	63.59	**Pk**	4.79	29.11	37.94	0.42	59.97	H	1.50	160.3	NA	- 14.03	1.000	NA	74.00
3613.3828	52.07	**Pk**	5.57	31.76	37.98	0.29	51.71	H	1.54	142.3	NA	- 22.29	1.000	NA	74.00
4514.6106	49.94	**Pk**	6.26	32.69	39.93	0.00	48.96	H	1.42	75.0	NA	- 25.04	1.000	NA	74.00
5414.2038	46.91	**Pk**	6.94	34.30	39.84	0.00	48.32	H	1.48	143.4	NA	- 25.68	1.000	NA	74.00
8123.0255	55.53	**Pk**	8.84	36.98	46.29	0.00	55.07	H	1.61	157.4	NA	- 18.93	1.000	NA	74.00
9026.2565	55.86	**Pk**	9.22	37.41	47.16	0.00	55.33	H	1.59	205.3	NA	- 18.67	1.000	NA	74.00
2705.9851	55.53	**Pk**	4.79	29.11	37.94	0.42	51.91	V	1.11	226.1	NA	- 22.09	1.000	NA	74.00
3613.3828	51.85	**Pk**	5.57	31.76	37.98	0.29	51.49	V	1.30	125.8	NA	- 22.51	1.000	NA	74.00
4514.6106	47.80	**Pk**	6.26	32.69	39.93	0.00	46.82	V	1.00	42.5	NA	- 27.18	1.000	NA	74.00
5414.2038	46.72	**Pk**	6.94	34.30	39.84	0.00	48.13	V	1.22	113.7	NA	- 25.87	1.000	NA	74.00
8123.0255	55.53	**Pk**	8.84	36.98	46.29	0.00	55.07	V	1.21	110.8	NA	- 18.93	1.000	NA	74.00
9026.2565	55.70	**Pk**	9.22	37.41	47.16	0.00	55.17	V	1.07	183.3	NA	- 18.83	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/250 kbps/ Axis 2															
2706.3217	50.81	**Av**	4.79	29.11	37.94	0.42	47.19	H	1.53	182.3	- 6.79	NA	1.000	53.98	NA
3608.0623	37.24	**Av**	5.56	31.74	37.97	0.29	36.87	H	1.33	162.6	- 17.11	NA	1.000	53.98	NA
4510.6363	34.45	**Av**	6.25	32.69	39.93	0.00	33.46	H	1.63	97.6	- 20.52	NA	1.000	53.98	NA
5416.5436	33.23	**Av**	6.94	34.31	39.84	0.00	34.64	H	1.63	151.0	- 19.34	NA	1.000	53.98	NA
9025.4232	42.54	**Av**	9.22	37.41	47.16	0.00	42.01	H	1.74	112.2	- 11.97	NA	1.000	53.98	NA
9026.2565	42.45	**Av**	9.22	37.41	47.16	0.00	41.92	H	1.74	127.7	- 12.06	NA	1.000	53.98	NA
2706.3217	50.81	**Av**	4.79	29.11	37.94	0.42	47.19	V	1.22	266.0	- 6.79	NA	1.000	53.98	NA
3608.0623	36.28	**Av**	5.56	31.74	37.97	0.29	35.91	V	1.00	319.5	- 18.07	NA	1.000	53.98	NA
4510.6363	34.43	**Av**	6.25	32.69	39.93	0.00	33.44	V	1.35	73.5	- 20.54	NA	1.000	53.98	NA
5416.5436	33.23	**Av**	6.94	34.31	39.84	0.00	34.64	V	1.49	130.8	- 19.34	NA	1.000	53.98	NA
9025.4232	42.55	**Av**	9.22	37.41	47.16	0.00	42.02	V	1.56	130.0	- 11.96	NA	1.000	53.98	NA
9026.2565	42.45	**Av**	9.22	37.41	47.16	0.00	41.92	V	1.36	111.2	- 12.06	NA	1.000	53.98	NA
2706.3217	65.94	**Pk**	4.79	29.11	37.94	0.42	62.32	H	1.53	182.3	NA	- 11.68	1.000	NA	74.00
3608.0623	49.84	**Pk**	5.56	31.74	37.97	0.29	49.47	H	1.33	162.6	NA	- 24.53	1.000	NA	74.00
4510.6363	54.72	**Pk**	6.25	32.69	39.93	0.00	53.73	H	1.63	97.6	NA	- 20.27	1.000	NA	74.00
5416.5436	46.47	**Pk**	6.94	34.31	39.84	0.00	47.88	H	1.63	151.0	NA	- 26.12	1.000	NA	74.00
9025.4232	55.43	**Pk**	9.22	37.41	47.16	0.00	54.90	H	1.74	112.2	NA	- 19.10	1.000	NA	74.00
9026.2565	56.57	**Pk**	9.22	37.41	47.16	0.00	56.04	H	1.74	127.7	NA	- 17.96	1.000	NA	74.00
2706.3217	65.94	**Pk**	4.79	29.11	37.94	0.42	62.32	V	1.22	266.0	NA	- 11.68	1.000	NA	74.00
3608.0623	49.43	**Pk**	5.56	31.74	37.97	0.29	49.06	V	1.00	319.5	NA	- 24.94	1.000	NA	74.00
4510.6363	54.72	**Pk**	6.25	32.69	39.93	0.00	53.73	V	1.35	73.5	NA	- 20.27	1.000	NA	74.00
5416.5436	46.47	**Pk**	6.94	34.31	39.84	0.00	47.88	V	1.49	130.8	NA	- 26.12	1.000	NA	74.00
9025.4232	56.09	**Pk**	9.22	37.41	47.16	0.00	55.56	V	1.56	130.0	NA	- 18.44	1.000	NA	74.00
9026.2565	56.57	**Pk**	9.22	37.41	47.16	0.00	56.04	V	1.36	111.2	NA	- 17.96	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/250 kbps/ Axis 3															
2706.2896	46.18	**Av**	4.79	29.11	37.94	0.42	42.56	H	1.87	257.9	- 11.42	NA	1.000	53.98	NA
3608.9437	36.28	**Av**	5.56	31.74	37.97	0.29	35.91	H	1.87	205.1	- 18.07	NA	1.000	53.98	NA
4513.8254	33.97	**Av**	6.26	32.69	39.93	0.00	32.98	H	1.62	126.1	- 21.00	NA	1.000	53.98	NA
5413.5147	32.91	**Av**	6.94	34.30	39.83	0.00	34.32	H	1.51	101.7	- 19.66	NA	1.000	53.98	NA
8119.6281	41.67	**Av**	8.84	36.98	46.29	0.00	41.21	H	1.51	84.0	- 12.77	NA	1.000	53.98	NA
9027.7950	42.42	**Av**	9.22	37.41	47.17	0.00	41.89	H	1.41	102.9	- 12.09	NA	1.000	53.98	NA
2706.2896	46.18	**Av**	4.79	29.11	37.94	0.42	42.56	V	1.00	265.5	- 11.42	NA	1.000	53.98	NA
3608.9437	36.28	**Av**	5.56	31.74	37.97	0.29	35.91	V	1.74	171.6	- 18.07	NA	1.000	53.98	NA
4513.8254	33.96	**Av**	6.26	32.69	39.93	0.00	32.97	V	1.44	146.0	- 21.01	NA	1.000	53.98	NA
8119.6281	41.67	**Av**	8.84	36.98	46.29	0.00	41.21	V	1.42	107.0	- 12.77	NA	1.000	53.98	NA
9027.7950	42.40	**Av**	9.22	37.41	47.17	0.00	41.87	V	1.26	85.1	- 12.11	NA	1.000	53.98	NA
2706.2896	64.13	**Pk**	4.79	29.11	37.94	0.42	60.51	H	1.87	257.9	NA	- 13.49	1.000	NA	74.00
3608.9437	49.42	**Pk**	5.56	31.74	37.97	0.29	49.05	H	1.87	205.1	NA	- 24.95	1.000	NA	74.00
4513.8254	47.78	**Pk**	6.26	32.69	39.93	0.00	46.79	H	1.62	126.1	NA	- 27.21	1.000	NA	74.00
5413.5147	45.91	**Pk**	6.94	34.30	39.83	0.00	47.32	H	1.51	101.7	NA	- 26.68	1.000	NA	74.00
8119.6281	55.05	**Pk**	8.84	36.98	46.29	0.00	54.59	H	1.51	84.0	NA	- 19.41	1.000	NA	74.00
9027.7950	56.08	**Pk**	9.22	37.41	47.17	0.00	55.55	H	1.41	102.9	NA	- 18.45	1.000	NA	74.00
2706.2896	56.69	**Pk**	4.79	29.11	37.94	0.42	53.07	V	1.00	265.5	NA	- 20.93	1.000	NA	74.00
3608.9437	49.78	**Pk**	5.56	31.74	37.97	0.29	49.41	V	1.74	171.6	NA	- 24.59	1.000	NA	74.00
4513.8254	46.96	**Pk**	6.26	32.69	39.93	0.00	45.97	V	1.44	146.0	NA	- 28.03	1.000	NA	74.00
8119.6281	55.60	**Pk**	8.84	36.98	46.29	0.00	55.14	V	1.42	107.0	NA	- 18.86	1.000	NA	74.00
9027.7950	56.03	**Pk**	9.22	37.41	47.17	0.00	55.50	V	1.26	85.1	NA	- 18.50	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Low CH_Z9-T_/Antenna Horizontal/500 kbps/ Axis 1															
2708.5847	33.19	**Av**	4.79	29.11	37.93	0.42	29.57	H	2.15	176.9	- 24.41	NA	1.000	53.98	NA
3610.8200	34.52	**Av**	5.56	31.75	37.98	0.29	34.15	H	2.15	176.9	- 19.83	NA	1.000	53.98	NA
4516.0621	34.21	**Av**	6.26	32.69	39.93	0.00	33.23	H	2.15	176.9	- 20.75	NA	1.000	53.98	NA
5418.3614	33.14	**Av**	6.94	34.31	39.83	0.00	34.56	H	2.15	176.9	- 19.42	NA	1.000	53.98	NA
8123.1481	41.79	**Av**	8.84	36.98	46.29	0.00	41.33	H	2.15	176.9	- 12.65	NA	1.000	53.98	NA
9027.0500	42.77	**Av**	9.22	37.41	47.16	0.00	42.24	H	2.15	176.9	- 11.74	NA	1.000	53.98	NA
2708.1200	34.74	**Av**	4.79	29.11	37.94	0.42	31.12	V	2.15	176.9	- 22.86	NA	1.000	53.98	NA
3610.8200	34.55	**Av**	5.56	31.75	37.98	0.29	34.18	V	2.15	176.9	- 19.80	NA	1.000	53.98	NA
4516.0621	34.22	**Av**	6.26	32.69	39.93	0.00	33.24	V	2.15	176.9	- 20.74	NA	1.000	53.98	NA
5418.3614	33.41	**Av**	6.94	34.31	39.83	0.00	34.83	V	2.15	176.9	- 19.15	NA	1.000	53.98	NA
8123.4365	41.80	**Av**	8.84	36.98	46.29	0.00	41.34	V	2.15	176.9	- 12.64	NA	1.000	53.98	NA
9027.0500	42.80	**Av**	9.22	37.41	47.16	0.00	42.27	V	2.15	176.9	- 11.71	NA	1.000	53.98	NA
2708.5847	46.15	**Pk**	4.79	29.11	37.93	0.42	42.53	H	2.15	176.9	NA	- 31.47	1.000	NA	74.00
3610.8200	47.54	**Pk**	5.56	31.75	37.98	0.29	47.17	H	2.15	176.9	NA	- 26.83	1.000	NA	74.00
4516.0621	47.28	**Pk**	6.26	32.69	39.93	0.00	46.30	H	2.15	176.9	NA	- 27.70	1.000	NA	74.00
5415.0922	46.53	**Pk**	6.94	34.31	39.84	0.00	47.94	H	2.15	176.9	NA	- 26.06	1.000	NA	74.00
8123.1481	55.13	**Pk**	8.84	36.98	46.29	0.00	54.67	H	2.15	176.9	NA	- 19.33	1.000	NA	74.00
9027.0500	56.19	**Pk**	9.22	37.41	47.16	0.00	55.66	H	2.15	176.9	NA	- 18.34	1.000	NA	74.00
2708.1200	53.93	**Pk**	4.79	29.11	37.94	0.42	50.31	V	2.15	176.9	NA	- 23.69	1.000	NA	74.00
3610.8200	47.50	**Pk**	5.56	31.75	37.98	0.29	47.13	V	2.15	176.9	NA	- 26.87	1.000	NA	74.00
4516.0621	47.36	**Pk**	6.26	32.69	39.93	0.00	46.38	V	2.15	176.9	NA	- 27.62	1.000	NA	74.00
5418.3614	46.55	**Pk**	6.94	34.31	39.83	0.00	47.97	V	2.15	176.9	NA	- 26.03	1.000	NA	74.00
8123.4365	55.17	**Pk**	8.84	36.98	46.29	0.00	54.71	V	2.15	176.9	NA	- 19.29	1.000	NA	74.00
9027.0500	56.10	**Pk**	9.22	37.41	47.16	0.00	55.57	V	2.15	176.9	NA	- 18.43	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/500 kbps/ Axis 2															
2707.5751	44.72	**Av**	4.79	29.11	37.94	0.42	41.10	H	2.34	259.0	- 12.88	NA	1.000	53.98	NA
3610.9806	36.24	**Av**	5.56	31.75	37.98	0.29	35.87	H	1.87	229.0	- 18.11	NA	1.000	53.98	NA
4513.5336	34.56	**Av**	6.26	32.69	39.93	0.00	33.57	H	1.71	105.7	- 20.41	NA	1.000	53.98	NA
5416.4692	33.28	**Av**	6.94	34.31	39.84	0.00	34.69	H	1.58	81.7	- 19.29	NA	1.000	53.98	NA
8122.7414	41.74	**Av**	8.84	36.98	46.29	0.00	41.28	H	1.29	140.0	- 12.70	NA	1.000	53.98	NA
9027.0700	42.41	**Av**	9.22	37.41	47.16	0.00	41.88	H	2.08	151.8	- 12.10	NA	1.000	53.98	NA
2707.5751	44.72	**Av**	4.79	29.11	37.94	0.42	41.10	V	1.24	253.7	- 12.88	NA	1.000	53.98	NA
3610.9806	36.24	**Av**	5.56	31.75	37.98	0.29	35.87	V	1.69	181.7	- 18.11	NA	1.000	53.98	NA
4513.5336	34.56	**Av**	6.26	32.69	39.93	0.00	33.57	V	1.51	75.4	- 20.41	NA	1.000	53.98	NA
5416.4692	33.27	**Av**	6.94	34.31	39.84	0.00	34.68	V	1.24	47.4	- 19.30	NA	1.000	53.98	NA
8122.7414	41.74	**Av**	8.84	36.98	46.29	0.00	41.28	V	1.78	165.3	- 12.70	NA	1.000	53.98	NA
9027.0700	42.35	**Av**	9.22	37.41	47.16	0.00	41.82	V	1.78	165.3	- 12.16	NA	1.000	53.98	NA
2707.5751	66.63	**Pk**	4.79	29.11	37.94	0.42	63.01	H	2.34	259.0	NA	- 10.99	1.000	NA	74.00
3610.9806	50.07	**Pk**	5.56	31.75	37.98	0.29	49.70	H	1.87	229.0	NA	- 24.30	1.000	NA	74.00
4513.5336	50.22	**Pk**	6.26	32.69	39.93	0.00	49.23	H	1.71	105.7	NA	- 24.77	1.000	NA	74.00
5416.4692	47.50	**Pk**	6.94	34.31	39.84	0.00	48.91	H	1.58	81.7	NA	- 25.09	1.000	NA	74.00
8122.7414	55.39	**Pk**	8.84	36.98	46.29	0.00	54.93	H	1.29	140.0	NA	- 19.07	1.000	NA	74.00
9027.0700	55.94	**Pk**	9.22	37.41	47.16	0.00	55.41	H	2.08	151.8	NA	- 18.59	1.000	NA	74.00
2707.5751	66.63	**Pk**	4.79	29.11	37.94	0.42	63.01	V	1.24	253.7	NA	- 10.99	1.000	NA	74.00
3610.9806	50.07	**Pk**	5.56	31.75	37.98	0.29	49.70	V	1.69	181.7	NA	- 24.30	1.000	NA	74.00
4513.5336	50.22	**Pk**	6.26	32.69	39.93	0.00	49.23	V	1.51	75.4	NA	- 24.77	1.000	NA	74.00
5416.4692	47.50	**Pk**	6.94	34.31	39.84	0.00	48.91	V	1.24	47.4	NA	- 25.09	1.000	NA	74.00
8122.7414	55.39	**Pk**	8.84	36.98	46.29	0.00	54.93	V	1.78	165.3	NA	- 19.07	1.000	NA	74.00
9027.0700	54.92	**Pk**	9.22	37.41	47.16	0.00	54.39	V	1.78	165.3	NA	- 19.61	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/500 kbps/ Axis 3															
2708.5815	45.49	**Av**	4.79	29.11	37.93	0.42	41.87	V	1.20	222.3	- 12.11	NA	1.000	53.98	NA
3611.0031	36.21	**Av**	5.56	31.75	37.98	0.29	35.84	V	1.43	105.0	- 18.14	NA	1.000	53.98	NA
4513.0945	34.38	**Av**	6.26	32.69	39.93	0.00	33.39	V	1.30	84.3	- 20.59	NA	1.000	53.98	NA
5415.9964	33.30	**Av**	6.94	34.31	39.84	0.00	34.71	V	1.96	57.4	- 19.27	NA	1.000	53.98	NA
8124.3023	41.49	**Av**	8.84	36.98	46.29	0.00	41.02	V	2.55	86.8	- 12.96	NA	1.000	53.98	NA
9027.7815	42.35	**Av**	9.22	37.41	47.17	0.00	41.82	V	1.75	110.3	- 12.16	NA	1.000	53.98	NA
2708.5815	45.49	**Av**	4.79	29.11	37.93	0.42	41.87	H	1.72	168.9	- 12.11	NA	1.000	53.98	NA
3611.0031	35.99	**Av**	5.56	31.75	37.98	0.29	35.62	H	1.56	142.8	- 18.36	NA	1.000	53.98	NA
4513.0945	34.38	**Av**	6.26	32.69	39.93	0.00	33.39	H	1.55	43.7	- 20.59	NA	1.000	53.98	NA
5415.9964	33.29	**Av**	6.94	34.31	39.84	0.00	34.70	H	1.55	28.1	- 19.28	NA	1.000	53.98	NA
8124.3023	41.51	**Av**	8.84	36.98	46.29	0.00	41.04	H	2.25	113.9	- 12.94	NA	1.000	53.98	NA
9027.7815	42.34	**Av**	9.22	37.41	47.17	0.00	41.81	H	2.02	88.5	- 12.17	NA	1.000	53.98	NA
2708.5815	64.11	**Pk**	4.79	29.11	37.93	0.42	60.49	V	1.20	222.3	NA	- 13.51	1.000	NA	74.00
3611.0031	51.99	**Pk**	5.56	31.75	37.98	0.29	51.62	V	1.43	105.0	NA	- 22.38	1.000	NA	74.00
4513.0945	50.61	**Pk**	6.26	32.69	39.93	0.00	49.62	V	1.30	84.3	NA	- 24.38	1.000	NA	74.00
5415.9964	48.34	**Pk**	6.94	34.31	39.84	0.00	49.75	V	1.96	57.4	NA	- 24.25	1.000	NA	74.00
8124.3023	54.19	**Pk**	8.84	36.98	46.29	0.00	53.72	V	2.55	86.8	NA	- 20.28	1.000	NA	74.00
9027.7815	56.22	**Pk**	9.22	37.41	47.17	0.00	55.69	V	1.75	110.3	NA	- 18.31	1.000	NA	74.00
2708.5815	64.11	**Pk**	4.79	29.11	37.93	0.42	60.49	H	1.72	168.9	NA	- 13.51	1.000	NA	74.00
3611.0031	50.12	**Pk**	5.56	31.75	37.98	0.29	49.75	H	1.56	142.8	NA	- 24.25	1.000	NA	74.00
4513.0945	50.98	**Pk**	6.26	32.69	39.93	0.00	49.99	H	1.55	43.7	NA	- 24.01	1.000	NA	74.00
5415.9964	46.87	**Pk**	6.94	34.31	39.84	0.00	48.28	H	1.55	28.1	NA	- 25.72	1.000	NA	74.00
8124.3023	55.40	**Pk**	8.84	36.98	46.29	0.00	54.93	H	2.25	113.9	NA	- 19.07	1.000	NA	74.00
9027.7815	56.22	**Pk**	9.22	37.41	47.17	0.00	55.69	H	2.02	88.5	NA	- 18.31	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Low CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 1															
2709.0618	44.71	**Av**	4.79	29.12	37.93	0.42	41.10	V	1.19	268.6	- 12.88	NA	1.000	53.98	NA
3613.1245	36.64	**Av**	5.57	31.76	37.98	0.29	36.28	V	1.61	175.5	- 17.70	NA	1.000	53.98	NA
4515.5877	34.35	**Av**	6.26	32.69	39.93	0.00	33.37	V	1.24	66.3	- 20.61	NA	1.000	53.98	NA
5419.1535	33.39	**Av**	6.95	34.31	39.83	0.00	34.81	V	1.14	118.6	- 19.17	NA	1.000	53.98	NA
9027.7815	42.63	**Av**	9.22	37.41	47.17	0.00	42.10	V	1.61	82.1	- 11.88	NA	1.000	53.98	NA
9030.6274	42.59	**Av**	9.22	37.41	47.17	0.00	42.05	V	1.73	145.3	- 11.93	NA	1.000	53.98	NA
2709.0618	44.71	**Av**	4.79	29.12	37.93	0.42	41.10	H	2.20	255.7	- 12.88	NA	1.000	53.98	NA
3613.1245	36.64	**Av**	5.57	31.76	37.98	0.29	36.28	H	1.90	197.7	- 17.70	NA	1.000	53.98	NA
4515.5877	34.30	**Av**	6.26	32.69	39.93	0.00	33.32	H	1.52	89.3	- 20.66	NA	1.000	53.98	NA
5419.1535	33.39	**Av**	6.95	34.31	39.83	0.00	34.81	H	1.33	70.9	- 19.17	NA	1.000	53.98	NA
8127.4750	41.44	**Av**	8.84	36.98	46.29	0.00	40.97	H	1.73	120.2	- 13.01	NA	1.000	53.98	NA
9030.6274	42.59	**Av**	9.22	37.41	47.17	0.00	42.05	H	1.91	127.8	- 11.93	NA	1.000	53.98	NA
2709.0618	65.28	**Pk**	4.79	29.12	37.93	0.42	61.67	V	1.19	268.6	NA	- 12.33	1.000	NA	74.00
3613.1245	57.61	**Pk**	5.57	31.76	37.98	0.29	57.25	V	1.61	175.5	NA	- 16.75	1.000	NA	74.00
4515.5877	55.37	**Pk**	6.26	32.69	39.93	0.00	54.39	V	1.24	66.3	NA	- 19.61	1.000	NA	74.00
5419.1535	46.95	**Pk**	6.95	34.31	39.83	0.00	48.37	V	1.14	118.6	NA	- 25.63	1.000	NA	74.00
9027.7815	57.15	**Pk**	9.22	37.41	47.17	0.00	56.62	V	1.61	82.1	NA	- 17.38	1.000	NA	74.00
9030.6274	56.59	**Pk**	9.22	37.41	47.17	0.00	56.05	V	1.73	145.3	NA	- 17.95	1.000	NA	74.00
2709.0618	65.28	**Pk**	4.79	29.12	37.93	0.42	61.67	H	2.20	255.7	NA	- 12.33	1.000	NA	74.00
3613.1245	57.61	**Pk**	5.57	31.76	37.98	0.29	57.25	H	1.90	197.7	NA	- 16.75	1.000	NA	74.00
4515.5877	51.32	**Pk**	6.26	32.69	39.93	0.00	50.34	H	1.52	89.3	NA	- 23.66	1.000	NA	74.00
5419.1535	46.95	**Pk**	6.95	34.31	39.83	0.00	48.37	H	1.33	70.9	NA	- 25.63	1.000	NA	74.00
8127.4750	55.06	**Pk**	8.84	36.98	46.29	0.00	54.59	H	1.73	120.2	NA	- 19.41	1.000	NA	74.00
9030.6274	56.59	**Pk**	9.22	37.41	47.17	0.00	56.05	H	1.91	127.8	NA	- 17.95	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 2															
2708.1163	35.54	**Av**	4.79	29.11	37.94	0.42	31.92	V	1.00	75.6	- 22.06	NA	1.000	53.98	NA
3612.2591	36.10	**Av**	5.56	31.76	37.98	0.29	35.73	V	1.81	40.7	- 18.25	NA	1.000	53.98	NA
4512.8121	34.31	**Av**	6.26	32.69	39.93	0.00	33.32	V	1.67	64.3	- 20.66	NA	1.000	53.98	NA
5418.8458	33.44	**Av**	6.95	34.31	39.83	0.00	34.86	V	1.84	94.4	- 19.12	NA	1.000	53.98	NA
8127.4750	41.62	**Av**	8.84	36.98	46.29	0.00	41.15	V	1.62	61.9	- 12.83	NA	1.000	53.98	NA
9028.6530	42.67	**Av**	9.22	37.41	47.17	0.00	42.14	V	1.54	132.2	- 11.84	NA	1.000	53.98	NA
2709.1580	35.55	**Av**	4.79	29.12	37.93	0.42	31.94	H	1.58	75.6	- 22.04	NA	1.000	53.98	NA
3611.5539	36.10	**Av**	5.56	31.75	37.98	0.29	35.73	H	1.95	51.1	- 18.25	NA	1.000	53.98	NA
4512.8121	34.31	**Av**	6.26	32.69	39.93	0.00	33.32	H	1.80	93.6	- 20.66	NA	1.000	53.98	NA
5418.8458	33.44	**Av**	6.95	34.31	39.83	0.00	34.86	H	1.97	121.0	- 19.12	NA	1.000	53.98	NA
8127.4750	41.62	**Av**	8.84	36.98	46.29	0.00	41.15	H	1.92	86.0	- 12.83	NA	1.000	53.98	NA
9028.6530	42.67	**Av**	9.22	37.41	47.17	0.00	42.14	H	1.54	132.2	- 11.84	NA	1.000	53.98	NA
2708.1163	48.87	**Pk**	4.79	29.11	37.94	0.42	45.25	V	1.00	75.6	NA	- 28.75	1.000	NA	74.00
3612.2591	49.33	**Pk**	5.56	31.76	37.98	0.29	48.96	V	1.81	40.7	NA	- 25.04	1.000	NA	74.00
4512.8121	52.71	**Pk**	6.26	32.69	39.93	0.00	51.72	V	1.67	64.3	NA	- 22.28	1.000	NA	74.00
5418.8458	47.64	**Pk**	6.95	34.31	39.83	0.00	49.06	V	1.84	94.4	NA	- 24.94	1.000	NA	74.00
8127.4750	55.23	**Pk**	8.84	36.98	46.29	0.00	54.76	V	1.62	61.9	NA	- 19.24	1.000	NA	74.00
9028.6530	56.09	**Pk**	9.22	37.41	47.17	0.00	55.56	V	1.54	132.2	NA	- 18.44	1.000	NA	74.00
2708.1163	65.87	**Pk**	4.79	29.11	37.94	0.42	62.25	H	1.58	75.6	NA	- 11.75	1.000	NA	74.00
3611.5539	50.73	**Pk**	5.56	31.75	37.98	0.29	50.36	H	1.95	51.1	NA	- 23.64	1.000	NA	74.00
4512.8121	52.71	**Pk**	6.26	32.69	39.93	0.00	51.72	H	1.80	93.6	NA	- 22.28	1.000	NA	74.00
5418.8458	46.68	**Pk**	6.95	34.31	39.83	0.00	48.10	H	1.97	121.0	NA	- 25.90	1.000	NA	74.00
8127.4750	55.23	**Pk**	8.84	36.98	46.29	0.00	54.76	H	1.92	86.0	NA	- 19.24	1.000	NA	74.00
9028.6530	56.09	**Pk**	9.22	37.41	47.17	0.00	55.56	H	1.54	132.2	NA	- 18.44	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 3															
2709.3423	44.27	**Av**	4.79	29.12	37.93	0.42	40.66	V	1.09	126.5	- 13.32	NA	1.000	53.98	NA
3612.1629	36.07	**Av**	5.56	31.76	37.98	0.29	35.70	V	1.30	49.7	- 18.28	NA	1.000	53.98	NA
4512.1230	34.13	**Av**	6.25	32.69	39.93	0.00	33.14	V	1.38	102.4	- 20.84	NA	1.000	53.98	NA
5415.2241	33.23	**Av**	6.94	34.31	39.84	0.00	34.64	V	1.69	126.6	- 19.34	NA	1.000	53.98	NA
8127.9237	41.53	**Av**	8.84	36.98	46.29	0.00	41.06	V	1.48	106.2	- 12.92	NA	1.000	53.98	NA
9032.0825	42.60	**Av**	9.23	37.40	47.17	0.00	42.06	V	1.23	70.1	- 11.92	NA	1.000	53.98	NA
2709.3423	45.05	**Av**	4.79	29.12	37.93	0.42	41.44	H	1.54	205.3	- 12.54	NA	1.000	53.98	NA
3612.1629	36.00	**Av**	5.56	31.76	37.98	0.29	35.63	H	1.45	65.9	- 18.35	NA	1.000	53.98	NA
4512.1230	34.15	**Av**	6.25	32.69	39.93	0.00	33.16	H	1.53	102.4	- 20.82	NA	1.000	53.98	NA
5415.2241	33.22	**Av**	6.94	34.31	39.84	0.00	34.63	H	1.53	87.8	- 19.35	NA	1.000	53.98	NA
8127.9237	41.54	**Av**	8.84	36.98	46.29	0.00	41.07	H	1.32	91.3	- 12.91	NA	1.000	53.98	NA
9032.0825	42.60	**Av**	9.23	37.40	47.17	0.00	42.06	H	1.20	70.1	- 11.92	NA	1.000	53.98	NA
2709.3423	54.49	**Pk**	4.79	29.12	37.93	0.42	50.88	V	1.09	126.5	NA	- 23.12	1.000	NA	74.00
3612.1629	51.92	**Pk**	5.56	31.76	37.98	0.29	51.55	V	1.30	49.7	NA	- 22.45	1.000	NA	74.00
4512.1230	52.58	**Pk**	6.25	32.69	39.93	0.00	51.59	V	1.38	102.4	NA	- 22.41	1.000	NA	74.00
5415.2241	46.64	**Pk**	6.94	34.31	39.84	0.00	48.05	V	1.69	126.6	NA	- 25.95	1.000	NA	74.00
8127.9237	54.61	**Pk**	8.84	36.98	46.29	0.00	54.14	V	1.48	106.2	NA	- 19.86	1.000	NA	74.00
9032.0825	56.40	**Pk**	9.23	37.40	47.17	0.00	55.86	V	1.23	70.1	NA	- 18.14	1.000	NA	74.00
2709.3423	65.18	**Pk**	4.79	29.12	37.93	0.42	61.57	H	1.54	205.3	NA	- 12.43	1.000	NA	74.00
3612.1629	48.83	**Pk**	5.56	31.76	37.98	0.29	48.46	H	1.45	65.9	NA	- 25.54	1.000	NA	74.00
4512.1230	52.58	**Pk**	6.25	32.69	39.93	0.00	51.59	H	1.53	102.4	NA	- 22.41	1.000	NA	74.00
5415.2241	46.64	**Pk**	6.94	34.31	39.84	0.00	48.05	H	1.53	87.8	NA	- 25.95	1.000	NA	74.00
8127.9237	55.47	**Pk**	8.84	36.98	46.29	0.00	55.00	H	1.32	91.3	NA	- 19.00	1.000	NA	74.00
9032.0825	55.88	**Pk**	9.23	37.40	47.17	0.00	55.34	H	1.20	70.1	NA	- 18.66	1.000	NA	74.00

MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Low CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 1															
2713.7095	35.47	**Av**	4.78	29.13	37.93	0.42	31.87	V	1.05	108.6	- 22.11	NA	1.000	53.98	NA
3618.0193	36.04	**Av**	5.57	31.78	38.00	0.29	35.68	V	1.58	119.5	- 18.30	NA	1.000	53.98	NA
4522.6959	35.16	**Av**	6.27	32.69	39.93	0.00	34.19	V	1.19	83.7	- 19.79	NA	1.000	53.98	NA
5427.4094	33.52	**Av**	6.95	34.32	39.82	0.00	34.98	V	1.35	123.4	- 19.00	NA	1.000	53.98	NA
8140.8018	41.67	**Av**	8.85	36.98	46.29	0.00	41.20	V	1.00	0.1	- 12.78	NA	1.000	53.98	NA
9045.4543	42.64	**Av**	9.24	37.39	47.19	0.00	42.07	V	1.00	0.1	- 11.91	NA	1.000	53.98	NA
2713.7952	35.49	**Av**	4.78	29.13	37.93	0.42	31.89	H	1.40	65.6	- 22.09	NA	1.000	53.98	NA
3618.0193	36.04	**Av**	5.57	31.78	38.00	0.29	35.68	H	1.41	107.2	- 18.30	NA	1.000	53.98	NA
4522.6959	35.25	**Av**	6.27	32.69	39.93	0.00	34.28	H	1.33	101.7	- 19.70	NA	1.000	53.98	NA
5427.4094	33.55	**Av**	6.95	34.32	39.82	0.00	35.01	H	1.47	156.8	- 18.97	NA	1.000	53.98	NA
8140.8018	41.65	**Av**	8.85	36.98	46.29	0.00	41.18	H	1.50	6.9	- 12.80	NA	1.000	53.98	NA
9045.4543	42.65	**Av**	9.24	37.39	47.19	0.00	42.08	H	1.50	5.4	- 11.90	NA	1.000	53.98	NA
2713.7095	47.84	**Pk**	4.78	29.13	37.93	0.42	44.24	V	1.05	108.6	NA	- 29.76	1.000	NA	74.00
3618.0193	49.68	**Pk**	5.57	31.78	38.00	0.29	49.32	V	1.58	119.5	NA	- 24.68	1.000	NA	74.00
4522.6959	50.56	**Pk**	6.27	32.69	39.93	0.00	49.59	V	1.19	83.7	NA	- 24.41	1.000	NA	74.00
5427.4094	46.60	**Pk**	6.95	34.32	39.82	0.00	48.06	V	1.35	123.4	NA	- 25.94	1.000	NA	74.00
8140.8018	54.83	**Pk**	8.85	36.98	46.29	0.00	54.36	V	1.00	0.1	NA	- 19.64	1.000	NA	74.00
9045.4543	55.72	**Pk**	9.24	37.39	47.19	0.00	55.15	V	1.00	0.1	NA	- 18.85	1.000	NA	74.00
2713.7952	62.48	**Pk**	4.78	29.13	37.93	0.42	58.88	H	1.40	65.6	NA	- 15.12	1.000	NA	74.00
3618.0193	49.64	**Pk**	5.57	31.78	38.00	0.29	49.28	H	1.41	107.2	NA	- 24.72	1.000	NA	74.00
4522.6959	52.17	**Pk**	6.27	32.69	39.93	0.00	51.20	H	1.33	101.7	NA	- 22.80	1.000	NA	74.00
5427.4094	46.91	**Pk**	6.95	34.32	39.82	0.00	48.37	H	1.47	156.8	NA	- 25.63	1.000	NA	74.00
8140.8018	54.17	**Pk**	8.85	36.98	46.29	0.00	53.70	H	1.50	6.9	NA	- 20.30	1.000	NA	74.00
9045.4543	56.26	**Pk**	9.24	37.39	47.19	0.00	55.69	H	1.50	5.4	NA	- 18.31	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 2															
2713.5661	35.44	**Av**	4.78	29.13	37.93	0.42	31.84	V	1.00	98.8	- 22.14	NA	1.000	53.98	NA
3618.0962	36.00	**Av**	5.57	31.78	38.00	0.29	35.64	V	1.10	143.4	- 18.34	NA	1.000	53.98	NA
4522.4058	34.35	**Av**	6.27	32.69	39.93	0.00	33.38	V	1.54	133.1	- 20.60	NA	1.000	53.98	NA
5427.0472	33.56	**Av**	6.95	34.32	39.82	0.00	35.01	V	1.48	101.7	- 18.97	NA	1.000	53.98	NA
8141.0582	41.65	**Av**	8.85	36.98	46.29	0.00	41.18	V	1.23	43.2	- 12.80	NA	1.000	53.98	NA
9045.5777	42.66	**Av**	9.24	37.38	47.19	0.00	42.09	V	1.23	68.1	- 11.89	NA	1.000	53.98	NA
9045.5777	42.67	**Av**	9.24	37.38	47.19	0.00	42.10	V	1.54	98.5	- 11.88	NA	1.000	53.98	NA
2713.6334	35.43	**Av**	4.78	29.13	37.93	0.42	31.83	H	1.25	98.8	- 22.15	NA	1.000	53.98	NA
3618.0962	36.00	**Av**	5.57	31.78	38.00	0.29	35.64	H	1.25	143.4	- 18.34	NA	1.000	53.98	NA
4522.4058	34.35	**Av**	6.27	32.69	39.93	0.00	33.38	H	1.79	133.1	- 20.60	NA	1.000	53.98	NA
5427.0472	33.56	**Av**	6.95	34.32	39.82	0.00	35.01	H	1.80	102.4	- 18.97	NA	1.000	53.98	NA
8141.0582	41.65	**Av**	8.85	36.98	46.29	0.00	41.18	H	1.50	25.7	- 12.80	NA	1.000	53.98	NA
2713.5661	48.85	**Pk**	4.78	29.13	37.93	0.42	45.25	V	1.00	98.8	NA	- 28.75	1.000	NA	74.00
3618.0962	53.45	**Pk**	5.57	31.78	38.00	0.29	53.09	V	1.10	143.4	NA	- 20.91	1.000	NA	74.00
4522.4058	47.43	**Pk**	6.27	32.69	39.93	0.00	46.46	V	1.54	133.1	NA	- 27.54	1.000	NA	74.00
5427.0472	47.12	**Pk**	6.95	34.32	39.82	0.00	48.57	V	1.48	101.7	NA	- 25.43	1.000	NA	74.00
8141.0582	54.87	**Pk**	8.85	36.98	46.29	0.00	54.40	V	1.23	43.2	NA	- 19.60	1.000	NA	74.00
9045.5777	56.26	**Pk**	9.24	37.38	47.19	0.00	55.69	V	1.23	68.1	NA	- 18.31	1.000	NA	74.00
9045.5777	56.26	**Pk**	9.24	37.38	47.19	0.00	55.69	V	1.54	98.5	NA	- 18.31	1.000	NA	74.00
2713.6334	48.96	**Pk**	4.78	29.13	37.93	0.42	45.36	H	1.25	98.8	NA	- 28.64	1.000	NA	74.00
3618.0962	49.62	**Pk**	5.57	31.78	38.00	0.29	49.26	H	1.25	143.4	NA	- 24.74	1.000	NA	74.00
4522.4058	51.77	**Pk**	6.27	32.69	39.93	0.00	50.80	H	1.79	133.1	NA	- 23.20	1.000	NA	74.00
5427.0472	46.60	**Pk**	6.95	34.32	39.82	0.00	48.05	H	1.80	102.4	NA	- 25.95	1.000	NA	74.00
8141.0582	54.54	**Pk**	8.85	36.98	46.29	0.00	54.07	H	1.50	25.7	NA	- 19.93	1.000	NA	74.00
Low CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 3															
2713.5516	35.45	**Av**	4.78	29.13	37.93	0.42	31.85	V	1.00	34.0	- 22.13	NA	1.000	53.98	NA
3617.9504	35.99	**Av**	5.57	31.78	38.00	0.29	35.63	V	1.11	80.3	- 18.35	NA	1.000	53.98	NA
4522.6158	34.02	**Av**	6.27	32.69	39.93	0.00	33.05	V	1.15	69.2	- 20.93	NA	1.000	53.98	NA
5427.3533	33.15	**Av**	6.95	34.32	39.82	0.00	34.61	V	1.14	109.7	- 19.37	NA	1.000	53.98	NA
8141.1255	41.70	**Av**	8.85	36.98	46.29	0.00	41.23	V	1.05	131.4	- 12.75	NA	1.000	53.98	NA
9045.8502	42.73	**Av**	9.24	37.38	47.19	0.00	42.16	V	1.40	125.1	- 11.82	NA	1.000	53.98	NA
2713.5516	35.45	**Av**	4.78	29.13	37.93	0.42	31.85	H	1.26	47.3	- 22.13	NA	1.000	53.98	NA
3617.9504	35.99	**Av**	5.57	31.78	38.00	0.29	35.63	H	1.32	90.1	- 18.35	NA	1.000	53.98	NA
4522.6158	34.04	**Av**	6.27	32.69	39.93	0.00	33.07	H	1.34	99.5	- 20.91	NA	1.000	53.98	NA
5427.3533	33.14	**Av**	6.95	34.32	39.82	0.00	34.60	H	1.34	131.8	- 19.38	NA	1.000	53.98	NA
8141.1255	41.70	**Av**	8.85	36.98	46.29	0.00	41.23	H	1.29	131.4	- 12.75	NA	1.000	53.98	NA
9045.8502	42.73	**Av**	9.24	37.38	47.19	0.00	42.16	H	1.46	162.4	- 11.82	NA	1.000	53.98	NA
2713.5516	55.16	**Pk**	4.78	29.13	37.93	0.42	51.56	V	1.00	34.0	NA	- 22.44	1.000	NA	74.00
3617.9504	53.22	**Pk**	5.57	31.78	38.00	0.29	52.86	V	1.11	80.3	NA	- 21.14	1.000	NA	74.00
4522.6158	49.73	**Pk**	6.27	32.69	39.93	0.00	48.76	V	1.15	69.2	NA	- 25.24	1.000	NA	74.00
5427.3533	47.78	**Pk**	6.95	34.32	39.82	0.00	49.24	V	1.14	109.7	NA	- 24.76	1.000	NA	74.00
8141.1255	55.32	**Pk**	8.85	36.98	46.29	0.00	54.85	V	1.05	131.4	NA	- 19.15	1.000	NA	74.00
9045.8502	56.38	**Pk**	9.24	37.38	47.19	0.00	55.81	V	1.40	125.1	NA	- 18.19	1.000	NA	74.00
2713.5516	63.86	**Pk**	4.78	29.13	37.93	0.42	60.26	H	1.26	47.3	NA	- 13.74	1.000	NA	74.00
3617.9504	53.26	**Pk**	5.57	31.78	38.00	0.29	52.90	H	1.32	90.1	NA	- 21.10	1.000	NA	74.00
4522.6158	49.73	**Pk**	6.27	32.69	39.93	0.00	48.76	H	1.34	99.5	NA	- 25.24	1.000	NA	74.00
5427.3533	47.78	**Pk**	6.95	34.32	39.82	0.00	49.24	H	1.34	131.8	NA	- 24.76	1.000	NA	74.00
8141.1255	55.32	**Pk**	8.85	36.98	46.29	0.00	54.85	H	1.29	131.4	NA	- 19.15	1.000	NA	74.00
9045.8502	56.05	**Pk**	9.24	37.38	47.19	0.00	55.48	H	1.46	162.4	NA	- 18.52	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Mid CH_Z9-T_/Antenna Horizontal/115.2kbps/ Axis 1															
2744.7999	51.69	**Av**	4.80	29.24	37.92	0.41	48.22	V	1.19	270.0	- 5.76	NA	1.000	53.98	NA
3659.5073	37.71	**Av**	5.60	31.94	37.95	0.30	37.61	V	1.00	51.0	- 16.37	NA	1.000	53.98	NA
4574.6753	35.04	**Av**	6.30	32.68	39.90	0.00	34.12	V	1.38	86.0	- 19.86	NA	1.000	53.98	NA
7319.0153	33.75	**Av**	8.31	36.79	40.05	0.00	38.80	V	1.49	105.0	- 15.18	NA	1.000	53.98	NA
8234.9356	42.06	**Av**	8.89	36.97	46.36	0.00	41.57	V	1.93	120.0	- 12.41	NA	1.000	53.98	NA
9149.1840	42.78	**Av**	9.27	37.33	47.32	0.00	42.06	V	2.05	83.0	- 11.92	NA	1.000	53.98	NA
2744.7999	52.15	**Av**	4.80	29.24	37.92	0.41	48.68	H	1.91	270.0	- 5.30	NA	1.000	53.98	NA
3659.5073	37.71	**Av**	5.60	31.94	37.95	0.30	37.61	H	1.47	82.0	- 16.37	NA	1.000	53.98	NA
4574.6753	35.04	**Av**	6.30	32.68	39.90	0.00	34.12	H	1.60	105.0	- 19.86	NA	1.000	53.98	NA
7319.0153	33.75	**Av**	8.31	36.79	40.05	0.00	38.80	H	1.74	124.0	- 15.18	NA	1.000	53.98	NA
8234.9356	42.06	**Av**	8.89	36.97	46.36	0.00	41.57	H	1.74	102.0	- 12.41	NA	1.000	53.98	NA
9149.1840	42.78	**Av**	9.27	37.33	47.32	0.00	42.06	H	1.81	83.0	- 11.92	NA	1.000	53.98	NA
2744.7999	66.92	**Pk**	4.80	29.24	37.92	0.41	63.45	V	1.19	270.0	NA	- 10.55	1.000	NA	74.00
3659.5073	55.89	**Pk**	5.60	31.94	37.95	0.30	55.79	V	1.00	51.0	NA	- 18.21	1.000	NA	74.00
4574.6753	54.23	**Pk**	6.30	32.68	39.90	0.00	53.31	V	1.38	86.0	NA	- 20.69	1.000	NA	74.00
7319.0153	47.47	**Pk**	8.31	36.79	40.05	0.00	52.52	V	1.49	105.0	NA	- 21.48	1.000	NA	74.00
8234.9356	56.05	**Pk**	8.89	36.97	46.36	0.00	55.56	V	1.93	120.0	NA	- 18.44	1.000	NA	74.00
9149.1840	56.42	**Pk**	9.27	37.33	47.32	0.00	55.70	V	2.05	83.0	NA	- 18.30	1.000	NA	74.00
2744.7999	66.92	**Pk**	4.80	29.24	37.92	0.41	63.45	H	1.91	270.0	NA	- 10.55	1.000	NA	74.00
3659.5073	56.64	**Pk**	5.60	31.94	37.95	0.30	56.54	H	1.47	82.0	NA	- 17.46	1.000	NA	74.00
4574.6753	54.23	**Pk**	6.30	32.68	39.90	0.00	53.31	H	1.60	105.0	NA	- 20.69	1.000	NA	74.00
7319.0153	47.47	**Pk**	8.31	36.79	40.05	0.00	52.52	H	1.74	124.0	NA	- 21.48	1.000	NA	74.00
8234.9356	55.98	**Pk**	8.89	36.97	46.36	0.00	55.49	H	1.74	102.0	NA	- 18.51	1.000	NA	74.00
9149.1840	56.42	**Pk**	9.27	37.33	47.32	0.00	55.70	H	1.81	83.0	NA	- 18.30	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/115.2kbps/ Axis 2															
2744.6428	49.42	**Av**	4.80	29.24	37.92	0.41	45.95	V	1.23	210.0	- 8.03	NA	1.000	53.98	NA
3661.9817	36.22	**Av**	5.60	31.95	37.95	0.30	36.13	V	1.25	155.0	- 17.85	NA	1.000	53.98	NA
4574.4349	34.00	**Av**	6.30	32.68	39.90	0.00	33.08	V	1.00	128.0	- 20.90	NA	1.000	53.98	NA
7319.1547	33.71	**Av**	8.31	36.79	40.05	0.00	38.76	V	1.26	54.0	- 15.22	NA	1.000	53.98	NA
8234.4421	41.73	**Av**	8.89	36.97	46.36	0.00	41.24	V	1.66	126.0	- 12.74	NA	1.000	53.98	NA
9149.1439	42.68	**Av**	9.27	37.33	47.32	0.00	41.96	V	1.66	109.0	- 12.02	NA	1.000	53.98	NA
2744.6428	49.54	**Av**	4.80	29.24	37.92	0.41	46.07	H	1.57	210.0	- 7.91	NA	1.000	53.98	NA
3661.9817	36.22	**Av**	5.60	31.95	37.95	0.30	36.13	H	1.57	189.0	- 17.85	NA	1.000	53.98	NA
4574.4349	34.55	**Av**	6.30	32.68	39.90	0.00	33.63	H	1.41	72.0	- 20.35	NA	1.000	53.98	NA
7319.1547	33.71	**Av**	8.31	36.79	40.05	0.00	38.76	H	1.41	72.0	- 15.22	NA	1.000	53.98	NA
8234.4421	41.73	**Av**	8.89	36.97	46.36	0.00	41.24	H	1.98	113.0	- 12.74	NA	1.000	53.98	NA
9149.1439	42.70	**Av**	9.27	37.33	47.32	0.00	41.98	H	1.30	109.0	- 12.00	NA	1.000	53.98	NA
2744.6428	65.14	**Pk**	4.80	29.24	37.92	0.41	61.67	V	1.23	210.0	NA	- 12.33	1.000	NA	74.00
3661.9817	52.43	**Pk**	5.60	31.95	37.95	0.30	52.34	V	1.25	155.0	NA	- 21.66	1.000	NA	74.00
4574.4349	47.28	**Pk**	6.30	32.68	39.90	0.00	46.36	V	1.00	128.0	NA	- 27.64	1.000	NA	74.00
7319.1547	46.79	**Pk**	8.31	36.79	40.05	0.00	51.84	V	1.26	54.0	NA	- 22.16	1.000	NA	74.00
8234.4421	55.39	**Pk**	8.89	36.97	46.36	0.00	54.90	V	1.66	126.0	NA	- 19.10	1.000	NA	74.00
9149.1439	55.73	**Pk**	9.27	37.33	47.32	0.00	55.01	V	1.66	109.0	NA	- 18.99	1.000	NA	74.00
2744.6428	65.14	**Pk**	4.80	29.24	37.92	0.41	61.67	H	1.57	210.0	NA	- 12.33	1.000	NA	74.00
3661.9817	49.80	**Pk**	5.60	31.95	37.95	0.30	49.71	H	1.57	189.0	NA	- 24.29	1.000	NA	74.00
4574.4349	52.76	**Pk**	6.30	32.68	39.90	0.00	51.84	H	1.41	72.0	NA	- 22.16	1.000	NA	74.00
7319.1547	46.79	**Pk**	8.31	36.79	40.05	0.00	51.84	H	1.41	72.0	NA	- 22.16	1.000	NA	74.00
8234.4421	55.09	**Pk**	8.89	36.97	46.36	0.00	54.60	H	1.98	113.0	NA	- 19.40	1.000	NA	74.00
9149.1439	56.09	**Pk**	9.27	37.33	47.32	0.00	55.37	H	1.30	109.0	NA	- 18.63	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/115.2kbps/ Axis 3															
2744.7550	48.78	**Av**	4.80	29.24	37.92	0.41	45.31	V	1.06	270.0	- 8.67	NA	1.000	53.98	NA
3659.5778	36.86	**Av**	5.60	31.94	37.95	0.30	36.76	V	1.23	244.0	- 17.22	NA	1.000	53.98	NA
4575.6337	34.10	**Av**	6.30	32.68	39.90	0.00	33.18	V	1.12	167.0	- 20.80	NA	1.000	53.98	NA
7316.3662	33.77	**Av**	8.31	36.79	40.05	0.00	38.82	V	1.19	129.0	- 15.16	NA	1.000	53.98	NA
8236.7914	41.78	**Av**	8.89	36.98	46.37	0.00	41.28	V	1.20	89.0	- 12.70	NA	1.000	53.98	NA
9150.2417	42.85	**Av**	9.27	37.33	47.32	0.00	42.13	V	1.11	100.0	- 11.85	NA	1.000	53.98	NA
2744.7550	48.78	**Av**	4.80	29.24	37.92	0.41	45.31	H	1.35	309.0	- 8.67	NA	1.000	53.98	NA
3659.5778	36.69	**Av**	5.60	31.94	37.95	0.30	36.59	H	1.35	288.0	- 17.39	NA	1.000	53.98	NA
4575.6337	34.10	**Av**	6.30	32.68	39.90	0.00	33.18	H	1.29	142.0	- 20.80	NA	1.000	53.98	NA
7316.3662	33.77	**Av**	8.31	36.79	40.05	0.00	38.82	H	1.42	114.0	- 15.16	NA	1.000	53.98	NA
8236.7914	41.77	**Av**	8.89	36.98	46.37	0.00	41.27	H	1.42	101.0	- 12.71	NA	1.000	53.98	NA
9150.2417	42.85	**Av**	9.27	37.33	47.32	0.00	42.13	H	1.37	120.0	- 11.85	NA	1.000	53.98	NA
2744.6428	68.69	**Pk**	4.80	29.24	37.92	0.41	65.22	V	1.06	270.0	NA	- 8.78	1.000	NA	74.00
3659.5778	50.14	**Pk**	5.60	31.94	37.95	0.30	50.04	V	1.23	244.0	NA	- 23.96	1.000	NA	74.00
4575.6337	56.31	**Pk**	6.30	32.68	39.90	0.00	55.39	V	1.12	167.0	NA	- 18.61	1.000	NA	74.00
7316.3662	47.22	**Pk**	8.31	36.79	40.05	0.00	52.27	V	1.19	129.0	NA	- 21.73	1.000	NA	74.00
8236.7914	55.47	**Pk**	8.89	36.98	46.37	0.00	54.97	V	1.20	89.0	NA	- 19.03	1.000	NA	74.00
9150.2417	56.13	**Pk**	9.27	37.33	47.32	0.00	55.41	V	1.11	100.0	NA	- 18.59	1.000	NA	74.00
2744.6428	68.69	**Pk**	4.80	29.24	37.92	0.41	65.22	H	1.35	309.0	NA	- 8.78	1.000	NA	74.00
3659.5778	49.59	**Pk**	5.60	31.94	37.95	0.30	49.49	H	1.35	288.0	NA	- 24.51	1.000	NA	74.00
4575.6337	56.31	**Pk**	6.30	32.68	39.90	0.00	55.39	H	1.29	142.0	NA	- 18.61	1.000	NA	74.00
7316.3662	47.37	**Pk**	8.31	36.79	40.05	0.00	52.42	H	1.42	114.0	NA	- 21.58	1.000	NA	74.00
8236.7914	55.47	**Pk**	8.89	36.98	46.37	0.00	54.97	H	1.42	101.0	NA	- 19.03	1.000	NA	74.00
9150.2417	56.13	**Pk**	9.27	37.33	47.32	0.00	55.41	H	1.37	120.0	NA	- 18.59	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Mid CH_Z9-T_/Antenna Horizontal/250kbps/ Axis 1															
2742.4331	47.43	**Av**	4.79	29.24	37.92	0.41	43.95	V	1.00	231.0	- 10.03	NA	1.000	53.98	NA
3660.8456	36.13	**Av**	5.60	31.95	37.95	0.30	36.03	V	1.19	160.0	- 17.95	NA	1.000	53.98	NA
4574.2421	34.19	**Av**	6.30	32.68	39.90	0.00	33.27	V	1.12	123.0	- 20.71	NA	1.000	53.98	NA
7321.0982	33.75	**Av**	8.31	36.79	40.05	0.00	38.80	V	1.00	66.0	- 15.18	NA	1.000	53.98	NA
8232.1212	41.66	**Av**	8.89	36.97	46.35	0.00	41.17	V	1.12	84.0	- 12.81	NA	1.000	53.98	NA
2742.4331	49.92	**Av**	4.79	29.24	37.92	0.41	46.44	H	1.10	183.0	- 7.54	NA	1.000	53.98	NA
3660.8456	36.13	**Av**	5.60	31.95	37.95	0.30	36.03	H	1.10	160.0	- 17.95	NA	1.000	53.98	NA
4574.2421	34.19	**Av**	6.30	32.68	39.90	0.00	33.27	H	1.03	118.0	- 20.71	NA	1.000	53.98	NA
7321.0982	33.74	**Av**	8.31	36.79	40.05	0.00	38.79	H	1.00	94.0	- 15.19	NA	1.000	53.98	NA
8232.1212	41.66	**Av**	8.89	36.97	46.35	0.00	41.17	H	1.29	101.0	- 12.81	NA	1.000	53.98	NA
9145.2651	42.57	**Av**	9.27	37.33	47.31	0.00	41.85	H	1.60	88.0	- 12.13	NA	1.000	53.98	NA
9145.2651	42.58	**Av**	9.27	37.33	47.31	0.00	41.86	H	1.30	88.0	- 12.12	NA	1.000	53.98	NA
2742.4331	58.99	**Pk**	4.79	29.24	37.92	0.41	55.51	V	1.00	231.0	NA	- 18.49	1.000	NA	74.00
3660.8456	53.41	**Pk**	5.60	31.95	37.95	0.30	53.31	V	1.19	160.0	NA	- 20.69	1.000	NA	74.00
4574.2421	47.97	**Pk**	6.30	32.68	39.90	0.00	47.05	V	1.12	123.0	NA	- 26.95	1.000	NA	74.00
7321.0982	47.53	**Pk**	8.31	36.79	40.05	0.00	52.58	V	1.00	66.0	NA	- 21.42	1.000	NA	74.00
8232.1212	55.38	**Pk**	8.89	36.97	46.35	0.00	54.89	V	1.12	84.0	NA	- 19.11	1.000	NA	74.00
2742.4331	64.49	**Pk**	4.79	29.24	37.92	0.41	61.01	H	1.10	183.0	NA	- 12.99	1.000	NA	74.00
3660.8456	49.70	**Pk**	5.60	31.95	37.95	0.30	49.60	H	1.10	160.0	NA	- 24.40	1.000	NA	74.00
4574.2421	51.87	**Pk**	6.30	32.68	39.90	0.00	50.95	H	1.03	118.0	NA	- 23.05	1.000	NA	74.00
7321.0982	47.53	**Pk**	8.31	36.79	40.05	0.00	52.58	H	1.00	94.0	NA	- 21.42	1.000	NA	74.00
8232.1212	55.38	**Pk**	8.89	36.97	46.35	0.00	54.89	H	1.29	101.0	NA	- 19.11	1.000	NA	74.00
9145.2651	56.81	**Pk**	9.27	37.33	47.31	0.00	56.09	H	1.60	88.0	NA	- 17.91	1.000	NA	74.00
9145.2651	56.81	**Pk**	9.27	37.33	47.31	0.00	56.09	H	1.30	88.0	NA	- 17.91	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/250kbps/ Axis 2															
2742.0324	51.60	**Av**	4.79	29.23	37.92	0.41	48.12	V	1.08	203.0	- 5.86	NA	1.000	53.98	NA
3661.5988	36.19	**Av**	5.60	31.95	37.95	0.30	36.10	V	1.19	207.0	- 17.88	NA	1.000	53.98	NA
4578.1203	34.16	**Av**	6.30	32.68	39.90	0.00	33.25	V	1.30	47.0	- 20.73	NA	1.000	53.98	NA
7318.5020	33.73	**Av**	8.31	36.79	40.05	0.00	38.78	V	1.19	33.0	- 15.20	NA	1.000	53.98	NA
8227.4417	41.65	**Av**	8.89	36.97	46.34	0.00	41.17	V	1.14	43.0	- 12.81	NA	1.000	53.98	NA
9140.3933	42.42	**Av**	9.27	37.32	47.31	0.00	41.71	V	1.07	28.0	- 12.27	NA	1.000	53.98	NA
2742.0324	51.60	**Av**	4.79	29.23	37.92	0.41	48.12	H	1.00	297.0	- 5.86	NA	1.000	53.98	NA
3661.5988	36.18	**Av**	5.60	31.95	37.95	0.30	36.09	H	1.59	256.0	- 17.89	NA	1.000	53.98	NA
4578.1203	34.16	**Av**	6.30	32.68	39.90	0.00	33.25	H	1.58	71.0	- 20.73	NA	1.000	53.98	NA
7318.5020	33.73	**Av**	8.31	36.79	40.05	0.00	38.78	H	1.53	37.0	- 15.20	NA	1.000	53.98	NA
8227.4417	41.64	**Av**	8.89	36.97	46.34	0.00	41.16	H	1.20	63.0	- 12.82	NA	1.000	53.98	NA
9140.3933	42.42	**Av**	9.27	37.32	47.31	0.00	41.71	H	1.44	46.0	- 12.27	NA	1.000	53.98	NA
2742.0324	61.91	**Pk**	4.79	29.23	37.92	0.41	58.43	V	1.08	203.0	NA	- 15.57	1.000	NA	74.00
3661.5988	57.95	**Pk**	5.60	31.95	37.95	0.30	57.86	V	1.19	207.0	NA	- 16.14	1.000	NA	74.00
4578.1203	50.51	**Pk**	6.30	32.68	39.90	0.00	49.60	V	1.30	47.0	NA	- 24.40	1.000	NA	74.00
7318.5020	47.04	**Pk**	8.31	36.79	40.05	0.00	52.09	V	1.19	33.0	NA	- 21.91	1.000	NA	74.00
8227.4417	55.37	**Pk**	8.89	36.97	46.34	0.00	54.89	V	1.14	43.0	NA	- 19.11	1.000	NA	74.00
9140.3933	56.04	**Pk**	9.27	37.32	47.31	0.00	55.33	V	1.07	28.0	NA	- 18.67	1.000	NA	74.00
2742.0324	63.08	**Pk**	4.79	29.23	37.92	0.41	59.60	H	1.00	297.0	NA	- 14.40	1.000	NA	74.00
3661.5988	57.95	**Pk**	5.60	31.95	37.95	0.30	57.86	H	1.59	256.0	NA	- 16.14	1.000	NA	74.00
4578.1203	50.51	**Pk**	6.30	32.68	39.90	0.00	49.60	H	1.58	71.0	NA	- 24.40	1.000	NA	74.00
7318.5020	48.20	**Pk**	8.31	36.79	40.05	0.00	53.25	H	1.53	37.0	NA	- 20.75	1.000	NA	74.00
8227.4417	55.37	**Pk**	8.89	36.97	46.34	0.00	54.89	H	1.20	63.0	NA	- 19.11	1.000	NA	74.00
9140.3933	56.06	**Pk**	9.27	37.32	47.31	0.00	55.35	H	1.44	46.0	NA	- 18.65	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/250kbps/ Axis 3															
2742.1125	48.37	**Av**	4.79	29.23	37.92	0.41	44.89	V	1.03	264.0	- 9.09	NA	1.000	53.98	NA
3660.9097	36.12	**Av**	5.60	31.95	37.95	0.30	36.02	V	1.09	282.0	- 17.96	NA	1.000	53.98	NA
7319.1431	33.80	**Av**	8.31	36.79	40.05	0.00	38.85	V	1.16	109.0	- 15.13	NA	1.000	53.98	NA
8234.2847	41.68	**Av**	8.89	36.97	46.36	0.00	41.19	V	1.04	83.0	- 12.79	NA	1.000	53.98	NA
9145.3933	42.68	**Av**	9.27	37.33	47.31	0.00	41.96	V	1.15	50.0	- 12.02	NA	1.000	53.98	NA
2742.1125	48.37	**Av**	4.79	29.23	37.92	0.41	44.89	H	1.09	335.0	- 9.09	NA	1.000	53.98	NA
3660.9097	36.13	**Av**	5.60	31.95	37.95	0.30	36.03	H	1.61	242.0	- 17.95	NA	1.000	53.98	NA
4571.7421	34.27	**Av**	6.30	32.68	39.90	0.00	33.35	H	1.54	85.0	- 20.63	NA	1.000	53.98	NA
4571.7421	34.27	**Av**	6.30	32.68	39.90	0.00	33.35	H	1.15	102.0	- 20.63	NA	1.000	53.98	NA
7319.1431	33.79	**Av**	8.31	36.79	40.05	0.00	38.84	H	1.38	91.0	- 15.14	NA	1.000	53.98	NA
8234.2847	41.69	**Av**	8.89	36.97	46.36	0.00	41.20	H	1.22	83.0	- 12.78	NA	1.000	53.98	NA
9145.3933	42.68	**Av**	9.27	37.33	47.31	0.00	41.96	H	1.63	50.0	- 12.02	NA	1.000	53.98	NA
2742.1125	58.97	**Pk**	4.79	29.23	37.92	0.41	55.49	V	1.03	264.0	NA	- 18.51	1.000	NA	74.00
3660.9097	50.19	**Pk**	5.60	31.95	37.95	0.30	50.09	V	1.09	282.0	NA	- 23.91	1.000	NA	74.00
7319.1431	47.48	**Pk**	8.31	36.79	40.05	0.00	52.53	V	1.16	109.0	NA	- 21.47	1.000	NA	74.00
8234.2847	54.78	**Pk**	8.89	36.97	46.36	0.00	54.29	V	1.04	83.0	NA	- 19.71	1.000	NA	74.00
9145.3933	56.98	**Pk**	9.27	37.33	47.31	0.00	56.26	V	1.15	50.0	NA	- 17.74	1.000	NA	74.00
2742.1125	58.97	**Pk**	4.79	29.23	37.92	0.41	55.49	H	1.09	335.0	NA	- 18.51	1.000	NA	74.00
3660.9097	56.28	**Pk**	5.60	31.95	37.95	0.30	56.18	H	1.61	242.0	NA	- 17.82	1.000	NA	74.00
4571.7421	49.14	**Pk**	6.30	32.68	39.90	0.00	48.22	H	1.54	85.0	NA	- 25.78	1.000	NA	74.00
4571.7421	51.96	**Pk**	6.30	32.68	39.90	0.00	51.04	H	1.15	102.0	NA	- 22.96	1.000	NA	74.00
7319.1431	47.48	**Pk**	8.31	36.79	40.05	0.00	52.53	H	1.38	91.0	NA	- 21.47	1.000	NA	74.00
8234.2847	55.10	**Pk**	8.89	36.97	46.36	0.00	54.61	H	1.22	83.0	NA	- 19.39	1.000	NA	74.00
9145.3933	56.98	**Pk**	9.27	37.33	47.31	0.00	56.26	H	1.63	50.0	NA	- 17.74	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Mid CH_Z9-T_/Antenna Horizontal/500kbps/ Axis 1															
2743.2183	46.45	**Av**	4.79	29.24	37.92	0.41	42.98	V	1.16	213.0	- 11.00	NA	1.000	53.98	NA
3656.8712	37.18	**Av**	5.60	31.93	37.96	0.30	37.06	V	1.47	115.0	- 16.92	NA	1.000	53.98	NA
4574.7549	34.21	**Av**	6.30	32.68	39.90	0.00	33.29	V	1.35	99.0	- 20.69	NA	1.000	53.98	NA
7321.2424	33.84	**Av**	8.31	36.79	40.05	0.00	38.89	V	1.08	79.0	- 15.09	NA	1.000	53.98	NA
8230.6308	41.49	**Av**	8.89	36.97	46.35	0.00	41.01	V	1.29	111.0	- 12.97	NA	1.000	53.98	NA
9143.2619	42.56	**Av**	9.27	37.33	47.31	0.00	41.84	V	1.16	84.0	- 12.14	NA	1.000	53.98	NA
2743.2183	48.11	**Av**	4.79	29.24	37.92	0.41	44.64	H	2.13	204.0	- 9.34	NA	1.000	53.98	NA
3656.8712	37.18	**Av**	5.60	31.93	37.96	0.30	37.06	H	1.71	136.0	- 16.92	NA	1.000	53.98	NA
4574.7549	34.20	**Av**	6.30	32.68	39.90	0.00	33.28	H	1.57	99.0	- 20.70	NA	1.000	53.98	NA
7321.2424	33.84	**Av**	8.31	36.79	40.05	0.00	38.89	H	1.38	79.0	- 15.09	NA	1.000	53.98	NA
8230.6308	41.49	**Av**	8.89	36.97	46.35	0.00	41.01	H	1.60	111.0	- 12.97	NA	1.000	53.98	NA
9143.2619	42.56	**Av**	9.27	37.33	47.31	0.00	41.84	H	1.61	84.0	- 12.14	NA	1.000	53.98	NA
2743.2183	64.55	**Pk**	4.79	29.24	37.92	0.41	61.08	V	1.16	213.0	NA	- 12.92	1.000	NA	74.00
3656.8712	54.16	**Pk**	5.60	31.93	37.96	0.30	54.04	V	1.47	115.0	NA	- 19.96	1.000	NA	74.00
4574.7549	51.44	**Pk**	6.30	32.68	39.90	0.00	50.52	V	1.35	99.0	NA	- 23.48	1.000	NA	74.00
7321.2424	47.27	**Pk**	8.31	36.79	40.05	0.00	52.32	V	1.08	79.0	NA	- 21.68	1.000	NA	74.00
8230.6308	55.01	**Pk**	8.89	36.97	46.35	0.00	54.53	V	1.29	111.0	NA	- 19.47	1.000	NA	74.00
9143.2619	55.88	**Pk**	9.27	37.33	47.31	0.00	55.16	V	1.16	84.0	NA	- 18.84	1.000	NA	74.00
2743.2183	64.55	**Pk**	4.79	29.24	37.92	0.41	61.08	H	2.13	204.0	NA	- 12.92	1.000	NA	74.00
3656.8712	54.16	**Pk**	5.60	31.93	37.96	0.30	54.04	H	1.71	136.0	NA	- 19.96	1.000	NA	74.00
4574.7549	48.60	**Pk**	6.30	32.68	39.90	0.00	47.68	H	1.57	99.0	NA	- 26.32	1.000	NA	74.00
7321.2424	47.27	**Pk**	8.31	36.79	40.05	0.00	52.32	H	1.38	79.0	NA	- 21.68	1.000	NA	74.00
8230.6308	55.01	**Pk**	8.89	36.97	46.35	0.00	54.53	H	1.60	111.0	NA	- 19.47	1.000	NA	74.00
9143.2619	55.88	**Pk**	9.27	37.33	47.31	0.00	55.16	H	1.61	84.0	NA	- 18.84	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/500kbps/ Axis 2															
2742.8177	44.23	**Av**	4.79	29.24	37.92	0.41	40.76	V	1.04	284.0	- 13.22	NA	1.000	53.98	NA
3658.8424	36.04	**Av**	5.60	31.94	37.95	0.30	35.93	V	1.05	323.0	- 18.05	NA	1.000	53.98	NA
4574.5305	34.20	**Av**	6.30	32.68	39.90	0.00	33.28	V	1.32	101.0	- 20.70	NA	1.000	53.98	NA
7317.4443	33.81	**Av**	8.31	36.79	40.05	0.00	38.86	V	1.20	95.0	- 15.12	NA	1.000	53.98	NA
8233.2911	41.45	**Av**	8.89	36.97	46.36	0.00	40.96	V	1.16	67.0	- 13.02	NA	1.000	53.98	NA
9146.8196	42.59	**Av**	9.27	37.33	47.32	0.00	41.87	V	1.23	85.0	- 12.11	NA	1.000	53.98	NA
2742.8177	44.23	**Av**	4.79	29.24	37.92	0.41	40.76	H	1.05	357.0	- 13.22	NA	1.000	53.98	NA
3658.8424	36.05	**Av**	5.60	31.94	37.95	0.30	35.94	H	1.25	288.0	- 18.04	NA	1.000	53.98	NA
4574.5305	34.20	**Av**	6.30	32.68	39.90	0.00	33.28	H	1.61	101.0	- 20.70	NA	1.000	53.98	NA
7317.4443	33.81	**Av**	8.31	36.79	40.05	0.00	38.86	H	1.63	109.0	- 15.12	NA	1.000	53.98	NA
8233.2911	41.42	**Av**	8.89	36.97	46.36	0.00	40.93	H	1.68	67.0	- 13.05	NA	1.000	53.98	NA
9146.8196	42.59	**Av**	9.27	37.33	47.32	0.00	41.87	H	1.51	85.0	- 12.11	NA	1.000	53.98	NA
2742.8177	62.08	**Pk**	4.79	29.24	37.92	0.41	58.61	V	1.04	284.0	NA	- 15.39	1.000	NA	74.00
3658.8424	49.47	**Pk**	5.60	31.94	37.95	0.30	49.36	V	1.05	323.0	NA	- 24.64	1.000	NA	74.00
4574.5305	53.16	**Pk**	6.30	32.68	39.90	0.00	52.24	V	1.32	101.0	NA	- 21.76	1.000	NA	74.00
7317.4443	47.28	**Pk**	8.31	36.79	40.05	0.00	52.33	V	1.20	95.0	NA	- 21.67	1.000	NA	74.00
8233.2911	54.65	**Pk**	8.89	36.97	46.36	0.00	54.16	V	1.16	67.0	NA	- 19.84	1.000	NA	74.00
9146.8196	55.69	**Pk**	9.27	37.33	47.32	0.00	54.97	V	1.23	85.0	NA	- 19.03	1.000	NA	74.00
2742.8177	63.52	**Pk**	4.79	29.24	37.92	0.41	60.05	H	1.05	357.0	NA	- 13.95	1.000	NA	74.00
3658.8424	60.12	**Pk**	5.60	31.94	37.95	0.30	60.01	H	1.25	288.0	NA	- 13.99	1.000	NA	74.00
4574.5305	52.56	**Pk**	6.30	32.68	39.90	0.00	51.64	H	1.61	101.0	NA	- 22.36	1.000	NA	74.00
7317.4443	47.50	**Pk**	8.31	36.79	40.05	0.00	52.55	H	1.63	109.0	NA	- 21.45	1.000	NA	74.00
8233.2911	54.32	**Pk**	8.89	36.97	46.36	0.00	53.83	H	1.68	67.0	NA	- 20.17	1.000	NA	74.00
9146.8196	55.92	**Pk**	9.27	37.33	47.32	0.00	55.20	H	1.51	85.0	NA	- 18.80	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/500kbps/ Axis 3															
2743.8273	42.85	**Av**	4.80	29.24	37.92	0.41	39.38	V	1.06	237.0	- 14.60	NA	1.000	53.98	NA
3662.7206	36.07	**Av**	5.61	31.96	37.95	0.30	35.98	V	1.10	177.0	- 18.00	NA	1.000	53.98	NA
4575.2517	34.01	**Av**	6.30	32.68	39.90	0.00	33.09	V	1.10	149.0	- 20.89	NA	1.000	53.98	NA
7316.0661	33.71	**Av**	8.31	36.79	40.05	0.00	38.76	V	1.15	111.0	- 15.22	NA	1.000	53.98	NA
8232.7783	41.60	**Av**	8.89	36.97	46.36	0.00	41.11	V	1.29	84.0	- 12.87	NA	1.000	53.98	NA
9144.8004	42.56	**Av**	9.27	37.33	47.31	0.00	41.84	V	1.15	74.0	- 12.14	NA	1.000	53.98	NA
2743.8273	44.33	**Av**	4.80	29.24	37.92	0.41	40.86	H	1.26	236.0	- 13.12	NA	1.000	53.98	NA
3662.7206	36.06	**Av**	5.61	31.96	37.95	0.30	35.97	H	1.35	177.0	- 18.01	NA	1.000	53.98	NA
4575.2517	34.03	**Av**	6.30	32.68	39.90	0.00	33.11	H	1.26	149.0	- 20.87	NA	1.000	53.98	NA
7316.0661	33.71	**Av**	8.31	36.79	40.05	0.00	38.76	H	1.60	111.0	- 15.22	NA	1.000	53.98	NA
8232.7783	41.60	**Av**	8.89	36.97	46.36	0.00	41.11	H	1.60	84.0	- 12.87	NA	1.000	53.98	NA
9144.8004	42.53	**Av**	9.27	37.33	47.31	0.00	41.81	H	1.36	91.0	- 12.17	NA	1.000	53.98	NA
2743.8273	57.49	**Pk**	4.80	29.24	37.92	0.41	54.02	V	1.06	237.0	NA	- 19.98	1.000	NA	74.00
3662.7206	60.35	**Pk**	5.61	31.96	37.95	0.30	60.26	V	1.10	177.0	NA	- 13.74	1.000	NA	74.00
4575.2517	47.73	**Pk**	6.30	32.68	39.90	0.00	46.81	V	1.10	149.0	NA	- 27.19	1.000	NA	74.00
7316.0661	46.99	**Pk**	8.31	36.79	40.05	0.00	52.04	V	1.15	111.0	NA	- 21.96	1.000	NA	74.00
8232.7783	55.26	**Pk**	8.89	36.97	46.36	0.00	54.77	V	1.29	84.0	NA	- 19.23	1.000	NA	74.00
9144.8004	55.64	**Pk**	9.27	37.33	47.31	0.00	54.92	V	1.15	74.0	NA	- 19.08	1.000	NA	74.00
2743.8273	59.08	**Pk**	4.80	29.24	37.92	0.41	55.61	H	1.26	236.0	NA	- 18.39	1.000	NA	74.00
3662.7206	60.35	**Pk**	5.61	31.96	37.95	0.30	60.26	H	1.35	177.0	NA	- 13.74	1.000	NA	74.00
4575.2517	50.27	**Pk**	6.30	32.68	39.90	0.00	49.35	H	1.26	149.0	NA	- 24.65	1.000	NA	74.00
7316.0661	46.99	**Pk**	8.31	36.79	40.05	0.00	52.04	H	1.60	111.0	NA	- 21.96	1.000	NA	74.00
8232.7783	54.50	**Pk**	8.89	36.97	46.36	0.00	54.01	H	1.60	84.0	NA	- 19.99	1.000	NA	74.00
9144.8004	55.74	**Pk**	9.27	37.33	47.31	0.00	55.02	H	1.36	91.0	NA	- 18.98	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
Mid CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 1															
2742.6019	45.56	**Av**	4.79	29.24	37.92	0.41	42.08	V	1.15	266.0	- 11.90	NA	1.000	53.98	NA
3655.9795	36.31	**Av**	5.60	31.93	37.96	0.30	36.19	V	1.55	69.0	- 17.79	NA	1.000	53.98	NA
4571.1360	34.35	**Av**	6.30	32.68	39.90	0.00	33.43	V	1.56	211.0	- 20.55	NA	1.000	53.98	NA
7315.4922	33.70	**Av**	8.31	36.79	40.05	0.00	38.75	V	1.70	165.0	- 15.23	NA	1.000	53.98	NA
8228.7067	41.72	**Av**	8.89	36.97	46.34	0.00	41.24	V	1.24	93.0	- 12.74	NA	1.000	53.98	NA
9139.5335	42.47	**Av**	9.27	37.32	47.31	0.00	41.76	V	1.12	39.0	- 12.22	NA	1.000	53.98	NA
2742.6019	47.64	**Av**	4.79	29.24	37.92	0.41	44.16	H	1.15	231.0	- 9.82	NA	1.000	53.98	NA
3655.9795	36.10	**Av**	5.60	31.93	37.96	0.30	35.98	H	1.43	59.0	- 18.00	NA	1.000	53.98	NA
4571.1360	34.28	**Av**	6.30	32.68	39.90	0.00	33.36	H	1.27	211.0	- 20.62	NA	1.000	53.98	NA
7315.4922	33.71	**Av**	8.31	36.79	40.05	0.00	38.76	H	1.32	140.0	- 15.22	NA	1.000	53.98	NA
8228.7067	41.72	**Av**	8.89	36.97	46.34	0.00	41.24	H	1.51	105.0	- 12.74	NA	1.000	53.98	NA
9139.5335	42.47	**Av**	9.27	37.32	47.31	0.00	41.76	H	1.43	59.0	- 12.22	NA	1.000	53.98	NA
2742.6019	65.07	**Pk**	4.79	29.24	37.92	0.41	61.59	V	1.15	266.0	NA	- 12.41	1.000	NA	74.00
3655.9795	58.83	**Pk**	5.60	31.93	37.96	0.30	58.71	V	1.55	69.0	NA	- 15.29	1.000	NA	74.00
4571.1360	51.51	**Pk**	6.30	32.68	39.90	0.00	50.59	V	1.56	211.0	NA	- 23.41	1.000	NA	74.00
7315.4922	46.95	**Pk**	8.31	36.79	40.05	0.00	52.00	V	1.70	165.0	NA	- 22.00	1.000	NA	74.00
8228.7067	55.32	**Pk**	8.89	36.97	46.34	0.00	54.84	V	1.24	93.0	NA	- 19.16	1.000	NA	74.00
9139.5335	55.50	**Pk**	9.27	37.32	47.31	0.00	54.79	V	1.12	39.0	NA	- 19.21	1.000	NA	74.00
2742.6019	65.07	**Pk**	4.79	29.24	37.92	0.41	61.59	H	1.15	231.0	NA	- 12.41	1.000	NA	74.00
3655.9795	49.32	**Pk**	5.60	31.93	37.96	0.30	49.20	H	1.43	59.0	NA	- 24.80	1.000	NA	74.00
4571.1360	47.30	**Pk**	6.30	32.68	39.90	0.00	46.38	H	1.27	211.0	NA	- 27.62	1.000	NA	74.00
7315.4922	47.10	**Pk**	8.31	36.79	40.05	0.00	52.15	H	1.32	140.0	NA	- 21.85	1.000	NA	74.00
8228.7067	54.89	**Pk**	8.89	36.97	46.34	0.00	54.41	H	1.51	105.0	NA	- 19.59	1.000	NA	74.00
9139.5335	55.61	**Pk**	9.27	37.32	47.31	0.00	54.90	H	1.43	59.0	NA	- 19.10	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 2															
2742.6179	44.78	**Av**	4.79	29.24	37.92	0.41	41.30	V	1.03	255.0	- 12.68	NA	1.000	53.98	NA
3658.7359	36.05	**Av**	5.60	31.94	37.95	0.30	35.94	V	1.23	225.0	- 18.04	NA	1.000	53.98	NA
4573.1392	34.16	**Av**	6.30	32.68	39.90	0.00	33.24	V	1.04	155.0	- 20.74	NA	1.000	53.98	NA
7315.0114	33.54	**Av**	8.31	36.79	40.05	0.00	38.59	V	1.11	100.0	- 15.39	NA	1.000	53.98	NA
8224.6683	41.44	**Av**	8.89	36.97	46.33	0.00	40.97	V	1.06	87.0	- 13.01	NA	1.000	53.98	NA
9141.0879	42.48	**Av**	9.27	37.32	47.31	0.00	41.77	V	1.07	70.0	- 12.21	NA	1.000	53.98	NA
2741.4160	44.00	**Av**	4.79	29.23	37.92	0.41	40.52	H	1.32	280.0	- 13.46	NA	1.000	53.98	NA
3658.7359	36.04	**Av**	5.60	31.94	37.95	0.30	35.93	H	1.46	259.0	- 18.05	NA	1.000	53.98	NA
4573.1392	34.18	**Av**	6.30	32.68	39.90	0.00	33.26	H	1.37	155.0	- 20.72	NA	1.000	53.98	NA
7315.0114	33.54	**Av**	8.31	36.79	40.05	0.00	38.59	H	1.27	100.0	- 15.39	NA	1.000	53.98	NA
8224.6683	41.44	**Av**	8.89	36.97	46.33	0.00	40.97	H	1.24	87.0	- 13.01	NA	1.000	53.98	NA
9141.0879	42.48	**Av**	9.27	37.32	47.31	0.00	41.77	H	1.27	70.0	- 12.21	NA	1.000	53.98	NA
2742.6179	58.88	**Pk**	4.79	29.24	37.92	0.41	55.40	V	1.03	255.0	NA	- 18.60	1.000	NA	74.00
3658.7359	56.10	**Pk**	5.60	31.94	37.95	0.30	55.99	V	1.23	225.0	NA	- 18.01	1.000	NA	74.00
4573.1392	46.89	**Pk**	6.30	32.68	39.90	0.00	45.97	V	1.04	155.0	NA	- 28.03	1.000	NA	74.00
7315.0114	46.96	**Pk**	8.31	36.79	40.05	0.00	52.01	V	1.11	100.0	NA	- 21.99	1.000	NA	74.00
8224.6683	54.82	**Pk**	8.89	36.97	46.33	0.00	54.35	V	1.06	87.0	NA	- 19.65	1.000	NA	74.00
9141.0879	56.09	**Pk**	9.27	37.32	47.31	0.00	55.38	V	1.07	70.0	NA	- 18.62	1.000	NA	74.00
2741.4160	55.46	**Pk**	4.79	29.23	37.92	0.41	51.98	H	1.32	280.0	NA	- 22.02	1.000	NA	74.00
3658.7359	54.06	**Pk**	5.60	31.94	37.95	0.30	53.95	H	1.46	259.0	NA	- 20.05	1.000	NA	74.00
4573.1392	51.01	**Pk**	6.30	32.68	39.90	0.00	50.09	H	1.37	155.0	NA	- 23.91	1.000	NA	74.00
7315.0114	46.96	**Pk**	8.31	36.79	40.05	0.00	52.01	H	1.27	100.0	NA	- 21.99	1.000	NA	74.00
8224.6683	55.14	**Pk**	8.89	36.97	46.33	0.00	54.67	H	1.24	87.0	NA	- 19.33	1.000	NA	74.00
9141.0879	56.09	**Pk**	9.27	37.32	47.31	0.00	55.38	H	1.27	70.0	NA	- 18.62	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 3															
2741.3679	44.78	**Av**	4.79	29.23	37.92	0.41	41.30	V	1.07	282.0	- 12.68	NA	1.000	53.98	NA
3653.9443	36.05	**Av**	5.60	31.92	37.96	0.30	35.91	V	1.08	235.0	- 18.07	NA	1.000	53.98	NA
4572.0655	34.26	**Av**	6.30	32.68	39.90	0.00	33.34	V	1.24	110.0	- 20.64	NA	1.000	53.98	NA
7308.7774	33.54	**Av**	8.31	36.78	40.04	0.00	38.59	V	1.29	130.0	- 15.39	NA	1.000	53.98	NA
8228.9471	41.47	**Av**	8.89	36.97	46.35	0.00	40.99	V	1.00	48.0	- 12.99	NA	1.000	53.98	NA
9144.6296	42.50	**Av**	9.27	37.33	47.31	0.00	41.78	V	1.31	87.0	- 12.20	NA	1.000	53.98	NA
2741.3679	44.78	**Av**	4.79	29.23	37.92	0.41	41.30	H	1.27	285.0	- 12.68	NA	1.000	53.98	NA
3653.9443	36.05	**Av**	5.60	31.92	37.96	0.30	35.91	H	1.34	235.0	- 18.07	NA	1.000	53.98	NA
4572.0655	34.26	**Av**	6.30	32.68	39.90	0.00	33.34	H	1.51	110.0	- 20.64	NA	1.000	53.98	NA
7308.7774	33.53	**Av**	8.31	36.78	40.04	0.00	38.58	H	1.58	130.0	- 15.40	NA	1.000	53.98	NA
8228.9471	41.49	**Av**	8.89	36.97	46.35	0.00	41.01	H	1.28	48.0	- 12.97	NA	1.000	53.98	NA
9144.6296	42.50	**Av**	9.27	37.33	47.31	0.00	41.78	H	1.53	87.0	- 12.20	NA	1.000	53.98	NA
2741.3679	62.33	**Pk**	4.79	29.23	37.92	0.41	58.85	V	1.07	282.0	NA	- 15.15	1.000	NA	74.00
3653.9443	59.09	**Pk**	5.60	31.92	37.96	0.30	58.95	V	1.08	235.0	NA	- 15.05	1.000	NA	74.00
4572.0655	49.57	**Pk**	6.30	32.68	39.90	0.00	48.65	V	1.24	110.0	NA	- 25.35	1.000	NA	74.00
7308.7774	47.10	**Pk**	8.31	36.78	40.04	0.00	52.15	V	1.29	130.0	NA	- 21.85	1.000	NA	74.00
8228.9471	55.51	**Pk**	8.89	36.97	46.35	0.00	55.03	V	1.00	48.0	NA	- 18.97	1.000	NA	74.00
9144.6296	55.87	**Pk**	9.27	37.33	47.31	0.00	55.15	V	1.31	87.0	NA	- 18.85	1.000	NA	74.00
2741.3679	62.33	**Pk**	4.79	29.23	37.92	0.41	58.85	H	1.27	285.0	NA	- 15.15	1.000	NA	74.00
3653.9443	59.09	**Pk**	5.60	31.92	37.96	0.30	58.95	H	1.34	235.0	NA	- 15.05	1.000	NA	74.00
4572.0655	49.57	**Pk**	6.30	32.68	39.90	0.00	48.65	H	1.51	110.0	NA	- 25.35	1.000	NA	74.00
7308.7774	47.10	**Pk**	8.31	36.78	40.04	0.00	52.15	H	1.58	130.0	NA	- 21.85	1.000	NA	74.00
8228.9471	55.51	**Pk**	8.89	36.97	46.35	0.00	55.03	H	1.28	48.0	NA	- 18.97	1.000	NA	74.00
9144.6296	55.87	**Pk**	9.27	37.33	47.31	0.00	55.15	H	1.53	87.0	NA	- 18.85	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1GHz_Pk+20dB from Av
Mid CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 1															
9142.3682	42.53	**Av**	9.27	37.33	47.31	0.00	41.82	H	1.40	101.0	- 12.16	NA	1.000	53.98	NA
9142.3682	42.50	**Av**	9.27	37.33	47.31	0.00	41.79	V	1.12	76.0	- 12.19	NA	1.000	53.98	NA
8560.1764	41.76	**Av**	9.00	37.29	46.95	0.00	41.10	H	1.54	112.0	- 12.88	NA	1.000	53.98	NA
8560.1764	41.76	**Av**	9.00	37.29	46.95	0.00	41.10	V	1.26	96.0	- 12.88	NA	1.000	53.98	NA
7311.5584	33.60	**Av**	8.31	36.78	40.05	0.00	38.65	H	1.12	119.0	- 15.33	NA	1.000	53.98	NA
7311.5584	33.60	**Av**	8.31	36.78	40.05	0.00	38.65	V	1.28	111.0	- 15.33	NA	1.000	53.98	NA
4571.4725	34.42	**Av**	6.30	32.68	39.90	0.00	33.50	H	1.54	154.0	- 20.48	NA	1.000	53.98	NA
4569.8059	34.31	**Av**	6.29	32.68	39.90	0.00	33.39	V	1.02	48.0	- 20.59	NA	1.000	53.98	NA
2739.1685	35.50	**Av**	4.79	29.22	37.92	0.41	32.01	H	1.43	113.0	- 21.97	NA	1.000	53.98	NA
2739.1685	35.59	**Av**	4.79	29.22	37.92	0.41	32.10	V	1.16	133.0	- 21.88	NA	1.000	53.98	NA
2653.1269	35.65	**Av**	4.75	29.03	37.96	0.43	31.90	H	1.53	93.0	- 22.08	NA	1.000	53.98	NA
2653.1269	35.68	**Av**	4.75	29.03	37.96	0.43	31.93	V	1.14	82.0	- 22.05	NA	1.000	53.98	NA
2653.1269	62.59	**Pk**	4.75	29.03	37.96	0.43	58.84	V	1.14	82.0	NA	- 15.16	1.000	NA	74.00
2739.1685	65.28	**Pk**	4.79	29.22	37.92	0.41	61.79	V	1.16	133.0	NA	- 12.21	1.000	NA	74.00
4569.8059	56.06	**Pk**	6.29	32.68	39.90	0.00	55.14	V	1.02	48.0	NA	- 18.86	1.000	NA	74.00
7311.5584	46.88	**Pk**	8.31	36.78	40.05	0.00	51.93	V	1.28	111.0	NA	- 22.07	1.000	NA	74.00
8560.1764	55.25	**Pk**	9.00	37.29	46.95	0.00	54.59	V	1.26	96.0	NA	- 19.41	1.000	NA	74.00
9142.3682	55.10	**Pk**	9.27	37.33	47.31	0.00	54.39	V	1.12	76.0	NA	- 19.61	1.000	NA	74.00
2653.1269	62.59	**Pk**	4.75	29.03	37.96	0.43	58.84	H	1.53	93.0	NA	- 15.16	1.000	NA	74.00
2739.1685	48.97	**Pk**	4.79	29.22	37.92	0.41	45.48	H	1.43	113.0	NA	- 28.52	1.000	NA	74.00
4571.4725	53.21	**Pk**	6.30	32.68	39.90	0.00	52.29	H	1.54	154.0	NA	- 21.71	1.000	NA	74.00
7311.5584	47.78	**Pk**	8.31	36.78	40.05	0.00	52.83	H	1.12	119.0	NA	- 21.17	1.000	NA	74.00
8560.1764	55.25	**Pk**	9.00	37.29	46.95	0.00	54.59	H	1.54	112.0	NA	- 19.41	1.000	NA	74.00
9142.3682	55.82	**Pk**	9.27	37.33	47.31	0.00	55.11	H	1.40	101.0	NA	- 18.89	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 2															
2654.2007	35.59	**Av**	4.75	29.03	37.96	0.43	31.84	V	1.09	155.0	- 22.14	NA	1.000	53.98	NA
2745.8673	35.45	**Av**	4.80	29.25	37.92	0.41	31.99	V	1.23	189.0	- 21.99	NA	1.000	53.98	NA
4567.2578	34.28	**Av**	6.29	32.68	39.90	0.00	33.35	V	1.13	74.0	- 20.63	NA	1.000	53.98	NA
7314.8276	33.54	**Av**	8.31	36.79	40.05	0.00	38.59	V	1.03	113.0	- 15.39	NA	1.000	53.98	NA
8558.9424	41.74	**Av**	9.00	37.29	46.95	0.00	41.08	V	1.35	132.0	- 12.90	NA	1.000	53.98	NA
9139.0348	42.35	**Av**	9.27	37.32	47.31	0.00	41.64	V	1.23	104.0	- 12.34	NA	1.000	53.98	NA
2654.2007	35.59	**Av**	4.75	29.03	37.96	0.43	31.84	H	1.51	155.0	- 22.14	NA	1.000	53.98	NA
2745.8673	35.44	**Av**	4.80	29.25	37.92	0.41	31.98	H	1.09	157.0	- 22.00	NA	1.000	53.98	NA
4567.2578	34.27	**Av**	6.29	32.68	39.90	0.00	33.34	H	1.27	99.0	- 20.64	NA	1.000	53.98	NA
7314.8276	33.54	**Av**	8.31	36.79	40.05	0.00	38.59	H	1.26	113.0	- 15.39	NA	1.000	53.98	NA
8558.9424	41.74	**Av**	9.00	37.29	46.95	0.00	41.08	H	1.58	132.0	- 12.90	NA	1.000	53.98	NA
9139.0348	42.35	**Av**	9.27	37.32	47.31	0.00	41.64	H	1.35	119.0	- 12.34	NA	1.000	53.98	NA
2654.2007	60.69	**Pk**	4.75	29.03	37.96	0.43	56.94	V	1.09	155.0	NA	- 17.06	1.000	NA	74.00
2745.8673	61.25	**Pk**	4.80	29.25	37.92	0.41	57.79	V	1.23	189.0	NA	- 16.21	1.000	NA	74.00
4567.2578	56.78	**Pk**	6.29	32.68	39.90	0.00	55.85	V	1.13	74.0	NA	- 18.15	1.000	NA	74.00
7314.8276	47.12	**Pk**	8.31	36.79	40.05	0.00	52.17	V	1.03	113.0	NA	- 21.83	1.000	NA	74.00
8558.9424	55.46	**Pk**	9.00	37.29	46.95	0.00	54.80	V	1.35	132.0	NA	- 19.20	1.000	NA	74.00
9139.0348	55.45	**Pk**	9.27	37.32	47.31	0.00	54.74	V	1.23	104.0	NA	- 19.26	1.000	NA	74.00
2654.2007	65.86	**Pk**	4.75	29.03	37.96	0.43	62.11	H	1.51	155.0	NA	- 11.89	1.000	NA	74.00
2745.8673	49.47	**Pk**	4.80	29.25	37.92	0.41	46.01	H	1.09	157.0	NA	- 27.99	1.000	NA	74.00
4567.2578	56.78	**Pk**	6.29	32.68	39.90	0.00	55.85	H	1.27	99.0	NA	- 18.15	1.000	NA	74.00
7314.8276	47.12	**Pk**	8.31	36.79	40.05	0.00	52.17	H	1.26	113.0	NA	- 21.83	1.000	NA	74.00
8558.9424	55.44	**Pk**	9.00	37.29	46.95	0.00	54.78	H	1.58	132.0	NA	- 19.22	1.000	NA	74.00
9139.0348	55.74	**Pk**	9.27	37.32	47.31	0.00	55.03	H	1.35	119.0	NA	- 18.97	1.000	NA	74.00
Mid CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 3															
2653.0468	35.58	**Av**	4.75	29.03	37.96	0.43	31.83	V	1.03	93.0	- 22.15	NA	1.000	53.98	NA
2743.9602	35.47	**Av**	4.80	29.24	37.92	0.41	32.00	V	1.16	106.0	- 21.98	NA	1.000	53.98	NA
4572.9629	34.07	**Av**	6.30	32.68	39.90	0.00	33.15	V	1.10	144.0	- 20.83	NA	1.000	53.98	NA
7311.1738	33.64	**Av**	8.31	36.78	40.05	0.00	38.69	V	1.01	144.0	- 15.29	NA	1.000	53.98	NA
8235.6376	41.75	**Av**	8.89	36.97	46.36	0.00	41.26	V	1.05	114.0	- 12.72	NA	1.000	53.98	NA
9143.3617	42.48	**Av**	9.27	37.33	47.31	0.00	41.76	V	1.05	114.0	- 12.22	NA	1.000	53.98	NA
2653.0468	35.59	**Av**	4.75	29.03	37.96	0.43	31.84	H	1.37	93.0	- 22.14	NA	1.000	53.98	NA
2743.9602	35.46	**Av**	4.80	29.24	37.92	0.41	31.99	H	1.32	120.0	- 21.99	NA	1.000	53.98	NA
4572.9629	34.06	**Av**	6.30	32.68	39.90	0.00	33.14	H	1.53	144.0	- 20.84	NA	1.000	53.98	NA
7311.1738	33.65	**Av**	8.31	36.78	40.05	0.00	38.70	H	1.36	171.0	- 15.28	NA	1.000	53.98	NA
8235.6376	41.74	**Av**	8.89	36.97	46.36	0.00	41.25	H	1.57	138.0	- 12.73	NA	1.000	53.98	NA
9143.3617	42.53	**Av**	9.27	37.33	47.31	0.00	41.81	H	1.49	163.0	- 12.17	NA	1.000	53.98	NA
2653.0468	58.82	**Pk**	4.75	29.03	37.96	0.43	55.07	V	1.03	93.0	NA	- 18.93	1.000	NA	74.00
2743.9602	61.11	**Pk**	4.80	29.24	37.92	0.41	57.64	V	1.16	106.0	NA	- 16.36	1.000	NA	74.00
4572.9629	52.92	**Pk**	6.30	32.68	39.90	0.00	52.00	V	1.10	144.0	NA	- 22.00	1.000	NA	74.00
7311.1738	47.27	**Pk**	8.31	36.78	40.05	0.00	52.32	V	1.01	144.0	NA	- 21.68	1.000	NA	74.00
8235.6376	55.44	**Pk**	8.89	36.97	46.36	0.00	54.95	V	1.05	114.0	NA	- 19.05	1.000	NA	74.00
9143.3617	55.00	**Pk**	9.27	37.33	47.31	0.00	54.28	V	1.05	114.0	NA	- 19.72	1.000	NA	74.00
2653.0468	58.82	**Pk**	4.75	29.03	37.96	0.43	55.07	H	1.37	93.0	NA	- 18.93	1.000	NA	74.00
2743.9602	58.73	**Pk**	4.80	29.24	37.92	0.41	55.26	H	1.32	120.0	NA	- 18.74	1.000	NA	74.00
4572.9629	52.92	**Pk**	6.30	32.68	39.90	0.00	52.00	H	1.53	144.0	NA	- 22.00	1.000	NA	74.00
7311.1738	47.27	**Pk**	8.31	36.78	40.05	0.00	52.32	H	1.36	171.0	NA	- 21.68	1.000	NA	74.00
8235.6376	54.97	**Pk**	8.89	36.97	46.36	0.00	54.48	H	1.57	138.0	NA	- 19.52	1.000	NA	74.00
9143.3617	55.78	**Pk**	9.27	37.33	47.31	0.00	55.06	H	1.49	163.0	NA	- 18.94	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
		Qp Av Pk									FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av		FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
MHz	dBuV	Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)			(MHz)		
High CH_Z9-T_/Antenna Horizontal/115.2kbps/ Axis 1															
2782.8191	44.40	**Av**	4.85	29.38	37.90	0.40	41.14	V	1.18	207.0	- 12.84	NA	1.000	53.98	NA
3707.6697	36.01	**Av**	5.64	32.15	37.89	0.31	36.21	V	1.33	281.0	- 17.77	NA	1.000	53.98	NA
4640.2757	34.14	**Av**	6.34	32.82	39.88	0.00	33.42	V	2.10	167.0	- 20.56	NA	1.000	53.98	NA
7421.7006	33.42	**Av**	8.38	36.82	40.08	0.00	38.54	V	1.80	138.0	- 15.44	NA	1.000	53.98	NA
8351.2627	41.93	**Av**	8.91	37.03	46.66	0.00	41.20	V	1.48	110.0	- 12.78	NA	1.000	53.98	NA
2782.6588	45.25	**Av**	4.85	29.38	37.90	0.40	41.99	H	1.41	307.0	- 11.99	NA	1.000	53.98	NA
3707.6697	36.01	**Av**	5.64	32.15	37.89	0.31	36.21	H	1.73	299.0	- 17.77	NA	1.000	53.98	NA
4640.2757	34.13	**Av**	6.34	32.82	39.88	0.00	33.41	H	3.64	210.0	- 20.57	NA	1.000	53.98	NA
7421.7006	33.43	**Av**	8.38	36.82	40.08	0.00	38.55	H	1.98	162.0	- 15.43	NA	1.000	53.98	NA
8351.2627	41.92	**Av**	8.91	37.03	46.66	0.00	41.19	H	1.85	137.0	- 12.79	NA	1.000	53.98	NA
2782.8191	53.82	**Pk**	4.85	29.38	37.90	0.40	50.56	V	1.18	207.0	NA	- 23.44	1.000	NA	74.00
3707.6697	49.37	**Pk**	5.64	32.15	37.89	0.31	49.57	V	1.33	281.0	NA	- 24.43	1.000	NA	74.00
4640.2757	47.96	**Pk**	6.34	32.82	39.88	0.00	47.24	V	2.10	167.0	NA	- 26.76	1.000	NA	74.00
7421.7006	47.18	**Pk**	8.38	36.82	40.08	0.00	52.30	V	1.80	138.0	NA	- 21.70	1.000	NA	74.00
8351.2627	56.01	**Pk**	8.91	37.03	46.66	0.00	55.28	V	1.48	110.0	NA	- 18.72	1.000	NA	74.00
2782.6588	62.01	**Pk**	4.85	29.38	37.90	0.40	58.75	H	1.41	307.0	NA	- 15.25	1.000	NA	74.00
3707.6697	51.95	**Pk**	5.64	32.15	37.89	0.31	52.15	H	1.73	299.0	NA	- 21.85	1.000	NA	74.00
4640.2757	47.39	**Pk**	6.34	32.82	39.88	0.00	46.67	H	3.64	210.0	NA	- 27.33	1.000	NA	74.00
7421.7006	47.18	**Pk**	8.38	36.82	40.08	0.00	52.30	H	1.98	162.0	NA	- 21.70	1.000	NA	74.00
8351.2627	55.47	**Pk**	8.91	37.03	46.66	0.00	54.74	H	1.85	137.0	NA	- 19.26	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/115.2kbps/ Axis 2															
2782.8191	47.09	**Av**	4.85	29.38	37.90	0.40	43.83	V	1.04	194.0	- 10.15	NA	1.000	53.98	NA
3709.9934	36.35	**Av**	5.64	32.16	37.89	0.31	36.57	V	1.18	163.0	- 17.41	NA	1.000	53.98	NA
4633.2084	34.26	**Av**	6.34	32.80	39.88	0.00	33.51	V	1.04	112.0	- 20.47	NA	1.000	53.98	NA
7422.1653	33.51	**Av**	8.39	36.82	40.08	0.00	38.63	V	1.01	91.0	- 15.35	NA	1.000	53.98	NA
8350.9262	42.02	**Av**	8.91	37.03	46.66	0.00	41.30	V	2.01	192.0	- 12.68	NA	1.000	53.98	NA
2782.8191	47.09	**Av**	4.85	29.38	37.90	0.40	43.83	H	1.35	213.0	- 10.15	NA	1.000	53.98	NA
3709.9934	36.35	**Av**	5.64	32.16	37.89	0.31	36.57	H	1.35	180.0	- 17.41	NA	1.000	53.98	NA
4633.2084	34.26	**Av**	6.34	32.80	39.88	0.00	33.51	H	1.21	118.0	- 20.47	NA	1.000	53.98	NA
7422.1653	33.51	**Av**	8.39	36.82	40.08	0.00	38.63	H	1.41	136.0	- 15.35	NA	1.000	53.98	NA
8350.9262	42.02	**Av**	8.91	37.03	46.66	0.00	41.30	H	1.82	173.0	- 12.68	NA	1.000	53.98	NA
2782.8191	56.81	**Pk**	4.85	29.38	37.90	0.40	53.55	V	1.04	194.0	NA	- 20.45	1.000	NA	74.00
3709.9934	50.08	**Pk**	5.64	32.16	37.89	0.31	50.30	V	1.18	163.0	NA	- 23.70	1.000	NA	74.00
4633.2084	58.68	**Pk**	6.34	32.80	39.88	0.00	57.93	V	1.04	112.0	NA	- 16.07	1.000	NA	74.00
7422.1653	47.37	**Pk**	8.39	36.82	40.08	0.00	52.49	V	1.01	91.0	NA	- 21.51	1.000	NA	74.00
8350.9262	56.37	**Pk**	8.91	37.03	46.66	0.00	55.65	V	2.01	192.0	NA	- 18.35	1.000	NA	74.00
2782.8191	62.87	**Pk**	4.85	29.38	37.90	0.40	59.61	H	1.35	213.0	NA	- 14.39	1.000	NA	74.00
3709.9934	49.70	**Pk**	5.64	32.16	37.89	0.31	49.92	H	1.35	180.0	NA	- 24.08	1.000	NA	74.00
4633.2084	58.68	**Pk**	6.34	32.80	39.88	0.00	57.93	H	1.21	118.0	NA	- 16.07	1.000	NA	74.00
7422.1653	47.37	**Pk**	8.39	36.82	40.08	0.00	52.49	H	1.41	136.0	NA	- 21.51	1.000	NA	74.00
8350.9262	56.37	**Pk**	8.91	37.03	46.66	0.00	55.65	H	1.82	173.0	NA	- 18.35	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/115.2kbps/ Axis 3															
2782.6588	47.64	**Av**	4.85	29.38	37.90	0.40	44.38	V	1.52	295.0	- 9.60	NA	1.000	53.98	NA
3708.6473	36.02	**Av**	5.64	32.15	37.89	0.31	36.23	V	1.22	153.0	- 17.75	NA	1.000	53.98	NA
4638.7693	34.21	**Av**	6.34	32.82	39.88	0.00	33.49	V	1.02	110.0	- 20.49	NA	1.000	53.98	NA
7423.0147	33.29	**Av**	8.39	36.81	40.07	0.00	38.42	V	1.10	70.0	- 15.56	NA	1.000	53.98	NA
8348.6986	41.85	**Av**	8.91	37.02	46.65	0.00	41.13	V	1.05	132.0	- 12.85	NA	1.000	53.98	NA
2782.6588	47.64	**Av**	4.85	29.38	37.90	0.40	44.38	H	1.14	228.0	- 9.60	NA	1.000	53.98	NA
3708.6473	36.00	**Av**	5.64	32.15	37.89	0.31	36.21	H	1.40	212.0	- 17.77	NA	1.000	53.98	NA
4638.7693	34.20	**Av**	6.34	32.82	39.88	0.00	33.48	H	1.07	129.0	- 20.50	NA	1.000	53.98	NA
7423.0147	33.29	**Av**	8.39	36.81	40.07	0.00	38.42	H	1.38	110.0	- 15.56	NA	1.000	53.98	NA
8348.6986	41.85	**Av**	8.91	37.02	46.65	0.00	41.13	H	1.35	153.0	- 12.85	NA	1.000	53.98	NA
2782.6588	59.88	**Pk**	4.85	29.38	37.90	0.40	56.62	V	1.52	295.0	NA	- 17.38	1.000	NA	74.00
3708.6473	53.63	**Pk**	5.64	32.15	37.89	0.31	53.84	V	1.22	153.0	NA	- 20.16	1.000	NA	74.00
4638.7693	50.95	**Pk**	6.34	32.82	39.88	0.00	50.23	V	1.02	110.0	NA	- 23.77	1.000	NA	74.00
7423.0147	47.55	**Pk**	8.39	36.81	40.07	0.00	52.68	V	1.10	70.0	NA	- 21.32	1.000	NA	74.00
8348.6986	55.50	**Pk**	8.91	37.02	46.65	0.00	54.78	V	1.05	132.0	NA	- 19.22	1.000	NA	74.00
2782.6588	59.88	**Pk**	4.85	29.38	37.90	0.40	56.62	H	1.14	228.0	NA	- 17.38	1.000	NA	74.00
3708.6473	50.75	**Pk**	5.64	32.15	37.89	0.31	50.96	H	1.40	212.0	NA	- 23.04	1.000	NA	74.00
4638.7693	47.07	**Pk**	6.34	32.82	39.88	0.00	46.35	H	1.07	129.0	NA	- 27.65	1.000	NA	74.00
7423.0147	47.55	**Pk**	8.39	36.81	40.07	0.00	52.68	H	1.38	110.0	NA	- 21.32	1.000	NA	74.00
8348.6986	55.52	**Pk**	8.91	37.02	46.65	0.00	54.80	H	1.35	153.0	NA	- 19.20	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1GHz_Pk+20dB from Av
High CH_Z9-T_/Antenna Horizontal/250 kbps/ Axis 1															
2782.5542	45.16	**Av**	4.85	29.38	37.90	0.40	41.89	V	1.14	272.0	- 12.09	NA	1.000	53.98	NA
3709.5805	37.51	**Av**	5.64	32.16	37.89	0.31	37.73	V	1.01	218.0	- 16.25	NA	1.000	53.98	NA
4639.4273	34.30	**Av**	6.34	32.82	39.88	0.00	33.58	V	1.08	184.0	- 20.40	NA	1.000	53.98	NA
7415.7796	33.57	**Av**	8.38	36.82	40.10	0.00	38.67	V	1.78	152.0	- 15.31	NA	1.000	53.98	NA
8346.5031	41.78	**Av**	8.91	37.02	46.65	0.00	41.06	V	1.26	112.0	- 12.92	NA	1.000	53.98	NA
2782.5542	45.16	**Av**	4.85	29.38	37.90	0.40	41.89	H	1.23	253.0	- 12.09	NA	1.000	53.98	NA
3709.5805	37.51	**Av**	5.64	32.16	37.89	0.31	37.73	H	1.16	235.0	- 16.25	NA	1.000	53.98	NA
4639.4273	34.30	**Av**	6.34	32.82	39.88	0.00	33.58	H	1.35	167.0	- 20.40	NA	1.000	53.98	NA
7415.7796	33.57	**Av**	8.38	36.82	40.10	0.00	38.67	H	1.61	135.0	- 15.31	NA	1.000	53.98	NA
8346.5031	41.78	**Av**	8.91	37.02	46.65	0.00	41.06	H	1.62	93.0	- 12.92	NA	1.000	53.98	NA
2782.5542	60.91	**Pk**	4.85	29.38	37.90	0.40	57.64	V	1.14	272.0	NA	- 16.36	1.000	NA	74.00
3709.5805	51.33	**Pk**	5.64	32.16	37.89	0.31	51.55	V	1.01	218.0	NA	- 22.45	1.000	NA	74.00
4639.4273	48.95	**Pk**	6.34	32.82	39.88	0.00	48.23	V	1.08	184.0	NA	- 25.77	1.000	NA	74.00
7415.7796	47.59	**Pk**	8.38	36.82	40.10	0.00	52.69	V	1.78	152.0	NA	- 21.31	1.000	NA	74.00
8346.5031	55.28	**Pk**	8.91	37.02	46.65	0.00	54.56	V	1.26	112.0	NA	- 19.44	1.000	NA	74.00
2782.5542	60.91	**Pk**	4.85	29.38	37.90	0.40	57.64	H	1.23	253.0	NA	- 16.36	1.000	NA	74.00
3709.5805	49.41	**Pk**	5.64	32.16	37.89	0.31	49.63	H	1.16	235.0	NA	- 24.37	1.000	NA	74.00
4639.4273	49.36	**Pk**	6.34	32.82	39.88	0.00	48.64	H	1.35	167.0	NA	- 25.36	1.000	NA	74.00
7415.7796	47.59	**Pk**	8.38	36.82	40.10	0.00	52.69	H	1.61	135.0	NA	- 21.31	1.000	NA	74.00
8346.5031	55.28	**Pk**	8.91	37.02	46.65	0.00	54.56	H	1.62	93.0	NA	- 19.44	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/250 kbps/ Axis 2															
2782.2016	44.81	**Av**	4.85	29.38	37.90	0.40	41.54	V	1.22	236.0	- 12.44	NA	1.000	53.98	NA
3709.9170	37.32	**Av**	5.64	32.16	37.89	0.31	37.54	V	1.07	157.0	- 16.44	NA	1.000	53.98	NA
4636.9433	34.37	**Av**	6.34	32.81	39.88	0.00	33.64	V	1.21	109.0	- 20.34	NA	1.000	53.98	NA
7417.7187	33.47	**Av**	8.38	36.82	40.09	0.00	38.58	V	1.13	41.0	- 15.40	NA	1.000	53.98	NA
8347.2770	41.79	**Av**	8.91	37.02	46.65	0.00	41.07	V	1.06	80.0	- 12.91	NA	1.000	53.98	NA
2782.2016	47.93	**Av**	4.85	29.38	37.90	0.40	44.66	H	1.11	219.0	- 9.32	NA	1.000	53.98	NA
3709.9170	37.32	**Av**	5.64	32.16	37.89	0.31	37.54	H	1.23	169.0	- 16.44	NA	1.000	53.98	NA
4636.9433	34.38	**Av**	6.34	32.81	39.88	0.00	33.65	H	1.42	90.0	- 20.33	NA	1.000	53.98	NA
7417.7187	33.45	**Av**	8.38	36.82	40.09	0.00	38.56	H	1.29	110.0	- 15.42	NA	1.000	53.98	NA
8347.2770	41.79	**Av**	8.91	37.02	46.65	0.00	41.07	H	1.16	57.0	- 12.91	NA	1.000	53.98	NA
2782.2016	62.10	**Pk**	4.85	29.38	37.90	0.40	58.83	V	1.22	236.0	NA	- 15.17	1.000	NA	74.00
3709.9170	55.76	**Pk**	5.64	32.16	37.89	0.31	55.98	V	1.07	157.0	NA	- 18.02	1.000	NA	74.00
4636.9433	54.26	**Pk**	6.34	32.81	39.88	0.00	53.53	V	1.21	109.0	NA	- 20.47	1.000	NA	74.00
7417.7187	47.27	**Pk**	8.38	36.82	40.09	0.00	52.38	V	1.13	41.0	NA	- 21.62	1.000	NA	74.00
8346.5031	55.95	**Pk**	8.91	37.02	46.65	0.00	55.23	V	1.06	80.0	NA	- 18.77	1.000	NA	74.00
2782.2016	62.10	**Pk**	4.85	29.38	37.90	0.40	58.83	H	1.11	219.0	NA	- 15.17	1.000	NA	74.00
3709.9170	53.11	**Pk**	5.64	32.16	37.89	0.31	53.33	H	1.23	169.0	NA	- 20.67	1.000	NA	74.00
4636.9433	54.26	**Pk**	6.34	32.81	39.88	0.00	53.53	H	1.42	90.0	NA	- 20.47	1.000	NA	74.00
7417.7187	47.27	**Pk**	8.38	36.82	40.09	0.00	52.38	H	1.29	110.0	NA	- 21.62	1.000	NA	74.00
8346.5031	55.95	**Pk**	8.91	37.02	46.65	0.00	55.23	H	1.16	57.0	NA	- 18.77	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/250 kbps/ Axis 3															
2782.2177	45.34	**Av**	4.85	29.38	37.90	0.40	42.07	V	1.14	275.0	- 11.91	NA	1.000	53.98	NA
3709.0356	36.07	**Av**	5.64	32.16	37.89	0.31	36.28	V	1.15	297.0	- 17.70	NA	1.000	53.98	NA
4633.5939	34.09	**Av**	6.34	32.80	39.88	0.00	33.35	V	1.03	226.0	- 20.63	NA	1.000	53.98	NA
7416.4366	33.46	**Av**	8.38	36.82	40.10	0.00	38.56	V	1.37	171.0	- 15.42	NA	1.000	53.98	NA
8348.7033	42.02	**Av**	8.91	37.02	46.65	0.00	41.30	V	1.10	132.0	- 12.68	NA	1.000	53.98	NA
2782.2177	45.34	**Av**	4.85	29.38	37.90	0.40	42.07	H	1.08	329.0	- 11.91	NA	1.000	53.98	NA
3709.0356	36.07	**Av**	5.64	32.16	37.89	0.31	36.28	H	1.01	311.0	- 17.70	NA	1.000	53.98	NA
4633.5939	34.10	**Av**	6.34	32.80	39.88	0.00	33.36	H	1.24	193.0	- 20.62	NA	1.000	53.98	NA
7416.4366	33.45	**Av**	8.38	36.82	40.10	0.00	38.55	H	1.15	158.0	- 15.43	NA	1.000	53.98	NA
8348.7033	42.02	**Av**	8.91	37.02	46.65	0.00	41.30	H	1.27	94.0	- 12.68	NA	1.000	53.98	NA
2782.2177	61.49	**Pk**	4.85	29.38	37.90	0.40	58.22	V	1.14	275.0	NA	- 15.78	1.000	NA	74.00
3709.0356	50.87	**Pk**	5.64	32.16	37.89	0.31	51.08	V	1.15	297.0	NA	- 22.92	1.000	NA	74.00
4633.5939	47.44	**Pk**	6.34	32.80	39.88	0.00	46.70	V	1.03	226.0	NA	- 27.30	1.000	NA	74.00
7416.4366	47.38	**Pk**	8.38	36.82	40.10	0.00	52.48	V	1.37	171.0	NA	- 21.52	1.000	NA	74.00
8348.7033	55.62	**Pk**	8.91	37.02	46.65	0.00	54.90	V	1.10	132.0	NA	- 19.10	1.000	NA	74.00
2782.2177	61.49	**Pk**	4.85	29.38	37.90	0.40	58.22	H	1.08	329.0	NA	- 15.78	1.000	NA	74.00
3709.0356	50.87	**Pk**	5.64	32.16	37.89	0.31	51.08	H	1.01	311.0	NA	- 22.92	1.000	NA	74.00
4633.5939	51.61	**Pk**	6.34	32.80	39.88	0.00	50.87	H	1.24	193.0	NA	- 23.13	1.000	NA	74.00
7416.4366	47.38	**Pk**	8.38	36.82	40.10	0.00	52.48	H	1.15	158.0	NA	- 21.52	1.000	NA	74.00
8348.7033	55.62	**Pk**	8.91	37.02	46.65	0.00	54.90	H	1.27	94.0	NA	- 19.10	1.000	NA	74.00

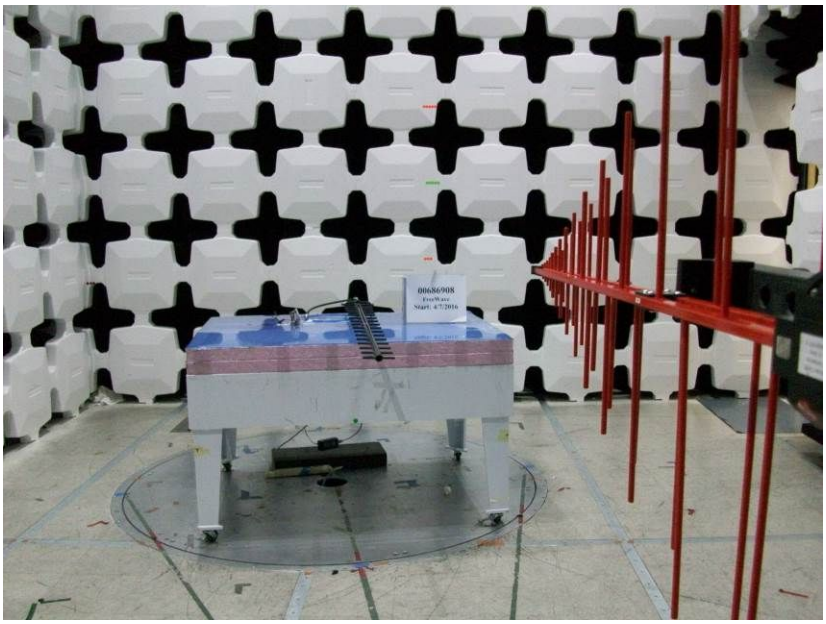
FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1G Hz_Pk+20dB from Av
High CH_Z9-T_/Antenna Horizontal/500 kbps/ Axis 1															
2780.4614	43.53	**Av**	4.85	29.37	37.90	0.40	40.26	V	1.08	200.0	- 13.72	NA	1.000	53.98	NA
3706.4753	35.99	**Av**	5.64	32.14	37.90	0.31	36.18	V	1.42	199.0	- 17.80	NA	1.000	53.98	NA
4634.3801	34.87	**Av**	6.34	32.80	39.88	0.00	34.13	V	1.17	129.0	- 19.85	NA	1.000	53.98	NA
7416.2678	33.48	**Av**	8.38	36.82	40.10	0.00	38.58	V	1.32	95.0	- 15.40	NA	1.000	53.98	NA
2780.4614	43.53	**Av**	4.85	29.37	37.90	0.40	40.26	H	1.39	270.0	- 13.72	NA	1.000	53.98	NA
3706.4753	35.99	**Av**	5.64	32.14	37.90	0.31	36.18	H	1.23	217.0	- 17.80	NA	1.000	53.98	NA
4634.3801	34.87	**Av**	6.34	32.80	39.88	0.00	34.13	H	1.06	111.0	- 19.85	NA	1.000	53.98	NA
7416.2678	33.48	**Av**	8.38	36.82	40.10	0.00	38.58	H	1.45	118.0	- 15.40	NA	1.000	53.98	NA
8348.7033	42.02	**Av**	8.91	37.02	46.65	0.00	41.30	H	1.21	21.0	- 12.68	NA	1.000	53.98	NA
8348.7033	42.02	**Av**	8.91	37.02	46.65	0.00	41.30	H	1.00	46.0	- 12.68	NA	1.000	53.98	NA
2780.4614	64.01	**Pk**	4.85	29.37	37.90	0.40	60.74	V	1.08	200.0	NA	- 13.26	1.000	NA	74.00
3706.4753	53.31	**Pk**	5.64	32.14	37.90	0.31	53.50	V	1.42	199.0	NA	- 20.50	1.000	NA	74.00
4634.3801	53.14	**Pk**	6.34	32.80	39.88	0.00	52.40	V	1.17	129.0	NA	- 21.60	1.000	NA	74.00
7416.2678	47.29	**Pk**	8.38	36.82	40.10	0.00	52.39	V	1.32	95.0	NA	- 21.61	1.000	NA	74.00
2780.4614	64.01	**Pk**	4.85	29.37	37.90	0.40	60.74	H	1.39	270.0	NA	- 13.26	1.000	NA	74.00
3706.4753	51.60	**Pk**	5.64	32.14	37.90	0.31	51.79	H	1.23	217.0	NA	- 22.21	1.000	NA	74.00
4634.3801	47.89	**Pk**	6.34	32.80	39.88	0.00	47.15	H	1.06	111.0	NA	- 26.85	1.000	NA	74.00
7416.2678	47.29	**Pk**	8.38	36.82	40.10	0.00	52.39	H	1.45	118.0	NA	- 21.61	1.000	NA	74.00
8348.7033	56.10	**Pk**	8.91	37.02	46.65	0.00	55.38	H	1.21	21.0	NA	- 18.62	1.000	NA	74.00
8348.7033	56.10	**Pk**	8.91	37.02	46.65	0.00	55.38	H	1.00	46.0	NA	- 18.62	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/500 kbps/ Axis 2															
2780.4614	42.28	**Av**	4.85	29.37	37.90	0.40	39.01	V	1.00	282.0	- 14.97	NA	1.000	53.98	NA
3709.0554	36.09	**Av**	5.64	32.16	37.89	0.31	36.30	V	1.15	204.0	- 17.68	NA	1.000	53.98	NA
4638.8353	33.94	**Av**	6.34	32.82	39.88	0.00	33.22	V	1.07	151.0	- 20.76	NA	1.000	53.98	NA
7416.3479	33.45	**Av**	8.38	36.82	40.10	0.00	38.55	V	1.24	119.0	- 15.43	NA	1.000	53.98	NA
8348.9483	41.84	**Av**	8.91	37.02	46.66	0.00	41.12	V	1.13	121.0	- 12.86	NA	1.000	53.98	NA
2780.4614	42.28	**Av**	4.85	29.37	37.90	0.40	39.01	H	1.18	261.0	- 14.97	NA	1.000	53.98	NA
3709.0554	36.05	**Av**	5.64	32.16	37.89	0.31	36.26	H	1.40	231.0	- 17.72	NA	1.000	53.98	NA
4638.8353	33.94	**Av**	6.34	32.82	39.88	0.00	33.22	H	1.22	130.0	- 20.76	NA	1.000	53.98	NA
7416.3479	33.45	**Av**	8.38	36.82	40.10	0.00	38.55	H	1.11	98.0	- 15.43	NA	1.000	53.98	NA
8348.9483	41.84	**Av**	8.91	37.02	46.66	0.00	41.12	H	1.26	136.0	- 12.86	NA	1.000	53.98	NA
2780.4614	58.37	**Pk**	4.85	29.37	37.90	0.40	55.10	V	1.00	282.0	NA	- 18.90	1.000	NA	74.00
3709.0554	57.73	**Pk**	5.64	32.16	37.89	0.31	57.94	V	1.15	204.0	NA	- 16.06	1.000	NA	74.00
4638.8353	53.34	**Pk**	6.34	32.82	39.88	0.00	52.62	V	1.07	151.0	NA	- 21.38	1.000	NA	74.00
7416.3479	47.78	**Pk**	8.38	36.82	40.10	0.00	52.88	V	1.24	119.0	NA	- 21.12	1.000	NA	74.00
8348.9483	55.56	**Pk**	8.91	37.02	46.66	0.00	54.84	V	1.13	121.0	NA	- 19.16	1.000	NA	74.00
2780.4614	63.38	**Pk**	4.85	29.37	37.90	0.40	60.11	H	1.18	261.0	NA	- 13.89	1.000	NA	74.00
3709.0554	57.37	**Pk**	5.64	32.16	37.89	0.31	57.58	H	1.40	231.0	NA	- 16.42	1.000	NA	74.00
4638.8353	53.34	**Pk**	6.34	32.82	39.88	0.00	52.62	H	1.22	130.0	NA	- 21.38	1.000	NA	74.00
7416.3479	46.88	**Pk**	8.38	36.82	40.10	0.00	51.98	H	1.11	98.0	NA	- 22.02	1.000	NA	74.00
8348.9483	55.60	**Pk**	8.91	37.02	46.66	0.00	54.88	H	1.26	136.0	NA	- 19.12	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/500 kbps/ Axis 3															
2781.4710	37.10	**Av**	4.85	29.38	37.90	0.40	33.83	V	1.09	230.0	- 20.15	NA	1.000	53.98	NA
3709.5201	35.97	**Av**	5.64	32.16	37.89	0.31	36.19	V	1.50	171.0	- 17.79	NA	1.000	53.98	NA
4635.7583	34.74	**Av**	6.34	32.81	39.88	0.00	34.01	V	1.08	62.0	- 19.97	NA	1.000	53.98	NA
7416.2518	33.39	**Av**	8.38	36.82	40.10	0.00	38.49	V	1.19	122.0	- 15.49	NA	1.000	53.98	NA
8343.9163	41.78	**Av**	8.91	37.02	46.64	0.00	41.06	V	1.01	82.0	- 12.92	NA	1.000	53.98	NA
2781.4710	37.79	**Av**	4.85	29.38	37.90	0.40	34.52	H	1.48	280.0	- 19.46	NA	1.000	53.98	NA
3709.5201	35.97	**Av**	5.64	32.16	37.89	0.31	36.19	H	1.69	201.0	- 17.79	NA	1.000	53.98	NA
4635.7583	34.74	**Av**	6.34	32.81	39.88	0.00	34.01	H	1.24	72.0	- 19.97	NA	1.000	53.98	NA
7416.2518	33.38	**Av**	8.38	36.82	40.10	0.00	38.48	H	1.42	138.0	- 15.50	NA	1.000	53.98	NA
8343.9163	41.78	**Av**	8.91	37.02	46.64	0.00	41.06	H	1.37	102.0	- 12.92	NA	1.000	53.98	NA
2781.4710	53.67	**Pk**	4.85	29.38	37.90	0.40	50.40	V	1.09	230.0	NA	- 23.60	1.000	NA	74.00
3709.5201	51.79	**Pk**	5.64	32.16	37.89	0.31	52.01	V	1.50	171.0	NA	- 21.99	1.000	NA	74.00
4635.7583	48.83	**Pk**	6.34	32.81	39.88	0.00	48.10	V	1.08	62.0	NA	- 25.90	1.000	NA	74.00
7416.2518	46.90	**Pk**	8.38	36.82	40.10	0.00	52.00	V	1.19	122.0	NA	- 22.00	1.000	NA	74.00
8343.9163	55.43	**Pk**	8.91	37.02	46.64	0.00	54.71	V	1.01	82.0	NA	- 19.29	1.000	NA	74.00
2781.4710	53.68	**Pk**	4.85	29.38	37.90	0.40	50.41	H	1.48	280.0	NA	- 23.59	1.000	NA	74.00
3709.5201	51.72	**Pk**	5.64	32.16	37.89	0.31	51.94	H	1.69	201.0	NA	- 22.06	1.000	NA	74.00
4635.7583	49.52	**Pk**	6.34	32.81	39.88	0.00	48.79	H	1.24	72.0	NA	- 25.21	1.000	NA	74.00
7416.2518	46.72	**Pk**	8.38	36.82	40.10	0.00	51.82	H	1.42	138.0	NA	- 22.18	1.000	NA	74.00
8343.9163	55.43	**Pk**	8.91	37.02	46.64	0.00	54.71	H	1.37	102.0	NA	- 19.29	1.000	NA	74.00

FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1GHz_Pk+20dB from Av
High CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 1															
2781.5718	37.73	**Av**	4.85	29.38	37.90	0.40	34.46	V	1.05	305.0	- 19.52	NA	1.000	53.98	NA
3706.0548	35.97	**Av**	5.64	32.14	37.90	0.31	36.16	V	1.26	197.0	- 17.82	NA	1.000	53.98	NA
4637.8444	34.12	**Av**	6.34	32.81	39.88	0.00	33.39	V	1.12	121.0	- 20.59	NA	1.000	53.98	NA
7416.2592	33.37	**Av**	8.38	36.82	40.10	0.00	38.47	V	1.04	88.0	- 15.51	NA	1.000	53.98	NA
8345.0691	41.80	**Av**	8.91	37.02	46.65	0.00	41.08	V	1.07	124.0	- 12.90	NA	1.000	53.98	NA
2781.5718	38.83	**Av**	4.85	29.38	37.90	0.40	35.56	H	1.20	226.0	- 18.42	NA	1.000	53.98	NA
3706.0548	35.97	**Av**	5.64	32.14	37.90	0.31	36.16	H	1.12	210.0	- 17.82	NA	1.000	53.98	NA
4637.8444	34.11	**Av**	6.34	32.81	39.88	0.00	33.38	H	1.37	144.0	- 20.60	NA	1.000	53.98	NA
7416.2592	33.38	**Av**	8.38	36.82	40.10	0.00	38.48	H	1.23	106.0	- 15.50	NA	1.000	53.98	NA
8345.0691	41.80	**Av**	8.91	37.02	46.65	0.00	41.08	H	1.14	132.0	- 12.90	NA	1.000	53.98	NA
2781.5718	59.35	**Pk**	4.85	29.38	37.90	0.40	56.08	V	1.05	305.0	NA	- 17.92	1.000	NA	74.00
3706.0548	54.26	**Pk**	5.64	32.14	37.90	0.31	54.45	V	1.26	197.0	NA	- 19.55	1.000	NA	74.00
4637.8444	55.06	**Pk**	6.34	32.81	39.88	0.00	54.33	V	1.12	121.0	NA	- 19.67	1.000	NA	74.00
7416.2592	46.86	**Pk**	8.38	36.82	40.10	0.00	51.96	V	1.04	88.0	NA	- 22.04	1.000	NA	74.00
8345.0691	55.19	**Pk**	8.91	37.02	46.65	0.00	54.47	V	1.07	124.0	NA	- 19.53	1.000	NA	74.00
2781.5718	59.35	**Pk**	4.85	29.38	37.90	0.40	56.08	H	1.20	226.0	NA	- 17.92	1.000	NA	74.00
3706.0548	53.11	**Pk**	5.64	32.14	37.90	0.31	53.30	H	1.12	210.0	NA	- 20.70	1.000	NA	74.00
4637.8444	51.73	**Pk**	6.34	32.81	39.88	0.00	51.00	H	1.37	144.0	NA	- 23.00	1.000	NA	74.00
7416.2592	46.88	**Pk**	8.38	36.82	40.10	0.00	51.98	H	1.23	106.0	NA	- 22.02	1.000	NA	74.00
8345.0691	55.19	**Pk**	8.91	37.02	46.65	0.00	54.47	H	1.14	132.0	NA	- 19.53	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 2															
2780.2257	41.46	**Av**	4.85	29.37	37.90	0.40	38.19	V	1.26	273.0	- 15.79	NA	1.000	53.98	NA
3708.4266	36.29	**Av**	5.64	32.15	37.89	0.31	36.50	V	1.02	207.0	- 17.48	NA	1.000	53.98	NA
4631.3380	34.23	**Av**	6.34	32.79	39.88	0.00	33.48	V	1.21	143.0	- 20.50	NA	1.000	53.98	NA
7415.7304	33.45	**Av**	8.38	36.82	40.10	0.00	38.55	V	1.07	183.0	- 15.43	NA	1.000	53.98	NA
8345.0691	41.80	**Av**	8.91	37.02	46.65	0.00	41.08	V	1.01	32.0	- 12.90	NA	1.000	53.98	NA
2780.2257	41.46	**Av**	4.85	29.37	37.90	0.40	38.19	H	1.18	227.0	- 15.79	NA	1.000	53.98	NA
3708.4266	36.27	**Av**	5.64	32.15	37.89	0.31	36.48	H	1.07	185.0	- 17.50	NA	1.000	53.98	NA
4631.3380	34.23	**Av**	6.34	32.79	39.88	0.00	33.48	H	1.41	114.0	- 20.50	NA	1.000	53.98	NA
7415.7304	33.45	**Av**	8.38	36.82	40.10	0.00	38.55	H	1.32	210.0	- 15.43	NA	1.000	53.98	NA
8345.0691	41.80	**Av**	8.91	37.02	46.65	0.00	41.08	H	1.17	70.0	- 12.90	NA	1.000	53.98	NA
2780.2257	58.21	**Pk**	4.85	29.37	37.90	0.40	54.94	V	1.26	273.0	NA	- 19.06	1.000	NA	74.00
3708.4266	54.73	**Pk**	5.64	32.15	37.89	0.31	54.94	V	1.02	207.0	NA	- 19.06	1.000	NA	74.00
4631.3380	54.38	**Pk**	6.34	32.79	39.88	0.00	53.63	V	1.21	143.0	NA	- 20.37	1.000	NA	74.00
7415.7304	47.22	**Pk**	8.38	36.82	40.10	0.00	52.32	V	1.07	183.0	NA	- 21.68	1.000	NA	74.00
8345.0691	56.04	**Pk**	8.91	37.02	46.65	0.00	55.32	V	1.01	32.0	NA	- 18.68	1.000	NA	74.00
2780.2257	58.21	**Pk**	4.85	29.37	37.90	0.40	54.94	H	1.18	227.0	NA	- 19.06	1.000	NA	74.00
3708.4266	54.73	**Pk**	5.64	32.15	37.89	0.31	54.94	H	1.07	185.0	NA	- 19.06	1.000	NA	74.00
4631.3380	47.87	**Pk**	6.34	32.79	39.88	0.00	47.12	H	1.41	114.0	NA	- 26.88	1.000	NA	74.00
7415.7304	47.44	**Pk**	8.38	36.82	40.10	0.00	52.54	H	1.32	210.0	NA	- 21.46	1.000	NA	74.00
8345.0691	56.04	**Pk**	8.91	37.02	46.65	0.00	55.32	H	1.17	70.0	NA	- 18.68	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/1 Mbps/ Axis 3															
2780.5943	38.42	**Av**	4.85	29.37	37.90	0.40	35.15	V	1.14	286.0	- 18.83	NA	1.000	53.98	NA
3704.6606	35.99	**Av**	5.64	32.13	37.90	0.31	36.17	V	1.38	251.0	- 17.81	NA	1.000	53.98	NA
4637.5720	34.00	**Av**	6.34	32.81	39.88	0.00	33.27	V	1.38	251.0	- 20.71	NA	1.000	53.98	NA
7418.5028	33.37	**Av**	8.38	36.82	40.09	0.00	38.48	V	1.39	168.0	- 15.50	NA	1.000	53.98	NA
8346.2467	41.77	**Av**	8.91	37.02	46.65	0.00	41.05	V	1.16	132.0	- 12.93	NA	1.000	53.98	NA
2780.5943	38.42	**Av**	4.85	29.37	37.90	0.40	35.15	H	1.57	349.0	- 18.83	NA	1.000	53.98	NA
3704.6606	35.99	**Av**	5.64	32.13	37.90	0.31	36.17	H	1.50	291.0	- 17.81	NA	1.000	53.98	NA
4637.5720	34.04	**Av**	6.34	32.81	39.88	0.00	33.31	H	1.61	190.0	- 20.67	NA	1.000	53.98	NA
7418.5028	33.36	**Av**	8.38	36.82	40.09	0.00	38.47	H	1.53	180.0	- 15.51	NA	1.000	53.98	NA
8346.2467	41.78	**Av**	8.91	37.02	46.65	0.00	41.06	H	1.04	94.0	- 12.92	NA	1.000	53.98	NA
2780.5943	63.05	**Pk**	4.85	29.37	37.90	0.40	59.78	V	1.14	286.0	NA	- 14.22	1.000	NA	74.00
3704.6606	54.28	**Pk**	5.64	32.13	37.90	0.31	54.46	V	1.38	251.0	NA	- 19.54	1.000	NA	74.00
4637.5720	46.40	**Pk**	6.34	32.81	39.88	0.00	45.67	V	1.38	251.0	NA	- 28.33	1.000	NA	74.00
7418.5028	47.34	**Pk**	8.38	36.82	40.09	0.00	52.45	V	1.39	168.0	NA	- 21.55	1.000	NA	74.00
8346.2467	54.86	**Pk**	8.91	37.02	46.65	0.00	54.14	V	1.16	132.0	NA	- 19.86	1.000	NA	74.00
2780.5943	63.05	**Pk**	4.85	29.37	37.90	0.40	59.78	H	1.57	349.0	NA	- 14.22	1.000	NA	74.00
3704.6606	49.67	**Pk**	5.64	32.13	37.90	0.31	49.85	H	1.50	291.0	NA	- 24.15	1.000	NA	74.00
4637.5720	49.83	**Pk**	6.34	32.81	39.88	0.00	49.10	H	1.61	190.0	NA	- 24.90	1.000	NA	74.00
7418.5028	46.45	**Pk**	8.38	36.82	40.09	0.00	51.56	H	1.53	180.0	NA	- 22.44	1.000	NA	74.00
8346.2467	55.58	**Pk**	8.91	37.02	46.65	0.00	54.86	H	1.04	94.0	NA	- 19.14	1.000	NA	74.00

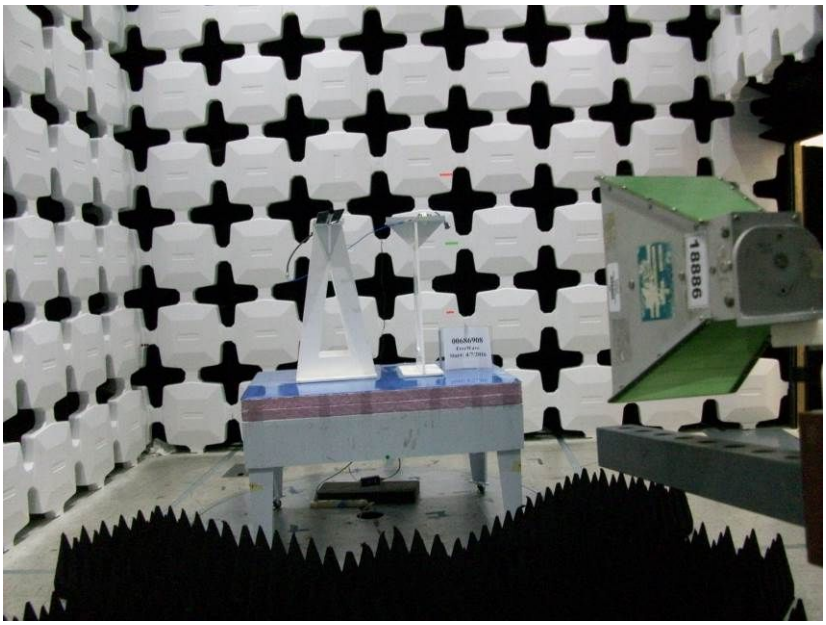
FREQ	LEVEL	DET	CABLE	ANT	PREAMP	ATTEN	FINAL	POL	HGT	AZ	DELTA1	DELTA2	RBW	Limit 1	Limit 2
MHz	dBuV	Qp Av Pk Rms	+ [dB]	+ [dB/m]	- [dB]	+ [dB]	= [dBuV]	(V/H)	(m)	(DEG)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1 GHz_Pk+20 dB from Av	(MHz)	FCC 15.209 >1GHz Av	FCC 15.35(b)>1GHz_Pk+20dB from Av
High CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 1															
2778.7003	35.47	**Av**	4.85	29.37	37.90	0.40	32.19	V	1.29	259.0	- 21.79	NA	1.000	53.98	NA
3702.9890	35.98	**Av**	5.64	32.12	37.90	0.31	36.15	V	1.26	165.0	- 17.83	NA	1.000	53.98	NA
4625.1142	34.47	**Av**	6.33	32.77	39.88	0.00	33.69	V	1.08	126.0	- 20.29	NA	1.000	53.98	NA
7402.3562	33.38	**Av**	8.35	36.83	40.10	0.00	38.47	V	1.17	145.0	- 15.51	NA	1.000	53.98	NA
8346.2467	41.77	**Av**	8.91	37.02	46.65	0.00	41.05	V	1.02	20.0	- 12.93	NA	1.000	53.98	NA
2778.7003	35.49	**Av**	4.85	29.37	37.90	0.40	32.21	H	1.46	218.0	- 21.77	NA	1.000	53.98	NA
3702.9890	35.97	**Av**	5.64	32.12	37.90	0.31	36.14	H	1.41	178.0	- 17.84	NA	1.000	53.98	NA
4625.1142	34.47	**Av**	6.33	32.77	39.88	0.00	33.69	H	1.40	102.0	- 20.29	NA	1.000	53.98	NA
7402.3562	33.38	**Av**	8.35	36.83	40.10	0.00	38.47	H	1.46	160.0	- 15.51	NA	1.000	53.98	NA
8346.2467	41.77	**Av**	8.91	37.02	46.65	0.00	41.05	H	1.30	49.0	- 12.93	NA	1.000	53.98	NA
2778.7003	54.94	**Pk**	4.85	29.37	37.90	0.40	51.66	V	1.29	259.0	NA	- 22.34	1.000	NA	74.00
3702.9890	54.33	**Pk**	5.64	32.12	37.90	0.31	54.50	V	1.26	165.0	NA	- 19.50	1.000	NA	74.00
4625.1142	54.20	**Pk**	6.33	32.77	39.88	0.00	53.42	V	1.08	126.0	NA	- 20.58	1.000	NA	74.00
7402.3562	46.91	**Pk**	8.35	36.83	40.10	0.00	52.00	V	1.17	145.0	NA	- 22.00	1.000	NA	74.00
8346.2467	55.40	**Pk**	8.91	37.02	46.65	0.00	54.68	V	1.02	20.0	NA	- 19.32	1.000	NA	74.00
2778.7003	58.38	**Pk**	4.85	29.37	37.90	0.40	55.10	H	1.46	218.0	NA	- 18.90	1.000	NA	74.00
3702.9890	49.60	**Pk**	5.64	32.12	37.90	0.31	49.77	H	1.41	178.0	NA	- 24.23	1.000	NA	74.00
4625.1142	50.93	**Pk**	6.33	32.77	39.88	0.00	50.15	H	1.40	102.0	NA	- 23.85	1.000	NA	74.00
7402.3562	46.93	**Pk**	8.35	36.83	40.10	0.00	52.02	H	1.46	160.0	NA	- 21.98	1.000	NA	74.00
8346.2467	56.02	**Pk**	8.91	37.02	46.65	0.00	55.30	H	1.30	49.0	NA	- 18.70	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 2															
2776.0882	35.78	**Av**	4.85	29.36	37.90	0.40	32.49	V	1.03	228.0	- 21.49	NA	1.000	53.98	NA
3706.2903	36.00	**Av**	5.64	32.14	37.90	0.31	36.19	V	1.13	117.0	- 17.79	NA	1.000	53.98	NA
4628.6238	34.12	**Av**	6.33	32.78	39.88	0.00	33.36	V	1.08	102.0	- 20.62	NA	1.000	53.98	NA
7403.5581	33.39	**Av**	8.36	36.83	40.10	0.00	38.48	V	1.37	97.0	- 15.50	NA	1.000	53.98	NA
8334.3372	41.55	**Av**	8.90	37.02	46.62	0.00	40.85	V	1.24	116.0	- 13.13	NA	1.000	53.98	NA
2776.0882	35.78	**Av**	4.85	29.36	37.90	0.40	32.49	H	1.16	188.0	- 21.49	NA	1.000	53.98	NA
3706.2903	36.00	**Av**	5.64	32.14	37.90	0.31	36.19	H	1.31	140.0	- 17.79	NA	1.000	53.98	NA
4628.6238	34.12	**Av**	6.33	32.78	39.88	0.00	33.36	H	1.21	91.0	- 20.62	NA	1.000	53.98	NA
7403.5581	33.39	**Av**	8.36	36.83	40.10	0.00	38.48	H	1.56	115.0	- 15.50	NA	1.000	53.98	NA
8334.3372	41.55	**Av**	8.90	37.02	46.62	0.00	40.85	H	1.58	141.0	- 13.13	NA	1.000	53.98	NA
2776.0882	61.97	**Pk**	4.85	29.36	37.90	0.40	58.68	V	1.03	228.0	NA	- 15.32	1.000	NA	74.00
3706.2903	56.97	**Pk**	5.64	32.14	37.90	0.31	57.16	V	1.13	117.0	NA	- 16.84	1.000	NA	74.00
4628.6238	47.31	**Pk**	6.33	32.78	39.88	0.00	46.55	V	1.08	102.0	NA	- 27.45	1.000	NA	74.00
7403.5581	47.04	**Pk**	8.36	36.83	40.10	0.00	52.13	V	1.37	97.0	NA	- 21.87	1.000	NA	74.00
8334.3372	54.93	**Pk**	8.90	37.02	46.62	0.00	54.23	V	1.24	116.0	NA	- 19.77	1.000	NA	74.00
2776.0882	61.97	**Pk**	4.85	29.36	37.90	0.40	58.68	H	1.16	188.0	NA	- 15.32	1.000	NA	74.00
3706.2903	56.97	**Pk**	5.64	32.14	37.90	0.31	57.16	H	1.31	140.0	NA	- 16.84	1.000	NA	74.00
4628.6238	50.85	**Pk**	6.33	32.78	39.88	0.00	50.09	H	1.21	91.0	NA	- 23.91	1.000	NA	74.00
7403.5581	47.04	**Pk**	8.36	36.83	40.10	0.00	52.13	H	1.56	115.0	NA	- 21.87	1.000	NA	74.00
8334.3372	55.70	**Pk**	8.90	37.02	46.62	0.00	55.00	H	1.58	141.0	NA	- 19.00	1.000	NA	74.00
High CH_Z9-T_/Antenna Horizontal/4 Mbps/ Axis 3															
2777.2420	35.44	**Av**	4.85	29.36	37.90	0.40	32.15	V	1.06	239.0	- 21.83	NA	1.000	53.98	NA
3705.8736	35.87	**Av**	5.64	32.14	37.90	0.31	36.06	V	1.16	160.0	- 17.92	NA	1.000	53.98	NA
4625.7713	34.22	**Av**	6.33	32.77	39.88	0.00	33.44	V	1.10	110.0	- 20.54	NA	1.000	53.98	NA
7405.3209	33.40	**Av**	8.36	36.83	40.10	0.00	38.49	V	1.29	163.0	- 15.49	NA	1.000	53.98	NA
8334.3372	41.55	**Av**	8.90	37.02	46.62	0.00	40.85	V	1.39	131.0	- 13.13	NA	1.000	53.98	NA
2777.2420	35.44	**Av**	4.85	29.36	37.90	0.40	32.15	H	1.19	259.0	- 21.83	NA	1.000	53.98	NA
3705.8736	35.86	**Av**	5.64	32.14	37.90	0.31	36.05	H	1.04	206.0	- 17.93	NA	1.000	53.98	NA
4625.7713	34.24	**Av**	6.33	32.77	39.88	0.00	33.46	H	1.19	122.0	- 20.52	NA	1.000	53.98	NA
7405.3209	33.40	**Av**	8.36	36.83	40.10	0.00	38.49	H	1.38	149.0	- 15.49	NA	1.000	53.98	NA
8334.3372	41.55	**Av**	8.90	37.02	46.62	0.00	40.85	H	1.66	159.0	- 13.13	NA	1.000	53.98	NA
2774.7901	60.26	**Pk**	4.85	29.35	37.90	0.41	56.96	V	1.06	239.0	NA	- 17.04	1.000	NA	74.00
3705.8736	53.93	**Pk**	5.64	32.14	37.90	0.31	54.12	V	1.16	160.0	NA	- 19.88	1.000	NA	74.00
4625.7713	48.21	**Pk**	6.33	32.77	39.88	0.00	47.43	V	1.10	110.0	NA	- 26.57	1.000	NA	74.00
7405.3209	47.31	**Pk**	8.36	36.83	40.10	0.00	52.40	V	1.29	163.0	NA	- 21.60	1.000	NA	74.00
8334.3372	55.70	**Pk**	8.90	37.02	46.62	0.00	55.00	V	1.39	131.0	NA	- 19.00	1.000	NA	74.00
2774.7901	60.26	**Pk**	4.85	29.35	37.90	0.41	56.96	H	1.19	259.0	NA	- 17.04	1.000	NA	74.00
3705.8736	53.93	**Pk**	5.64	32.14	37.90	0.31	54.12	H	1.04	206.0	NA	- 19.88	1.000	NA	74.00
4625.7713	50.05	**Pk**	6.33	32.77	39.88	0.00	49.27	H	1.19	122.0	NA	- 24.73	1.000	NA	74.00
7405.3209	47.07	**Pk**	8.36	36.83	40.10	0.00	52.16	H	1.38	149.0	NA	- 21.84	1.000	NA	74.00
8334.3372	55.70	**Pk**	8.90	37.02	46.62	0.00	55.00	H	1.66	159.0	NA	- 19.00	1.000	NA	74.00

10.7 Antenna Setups:

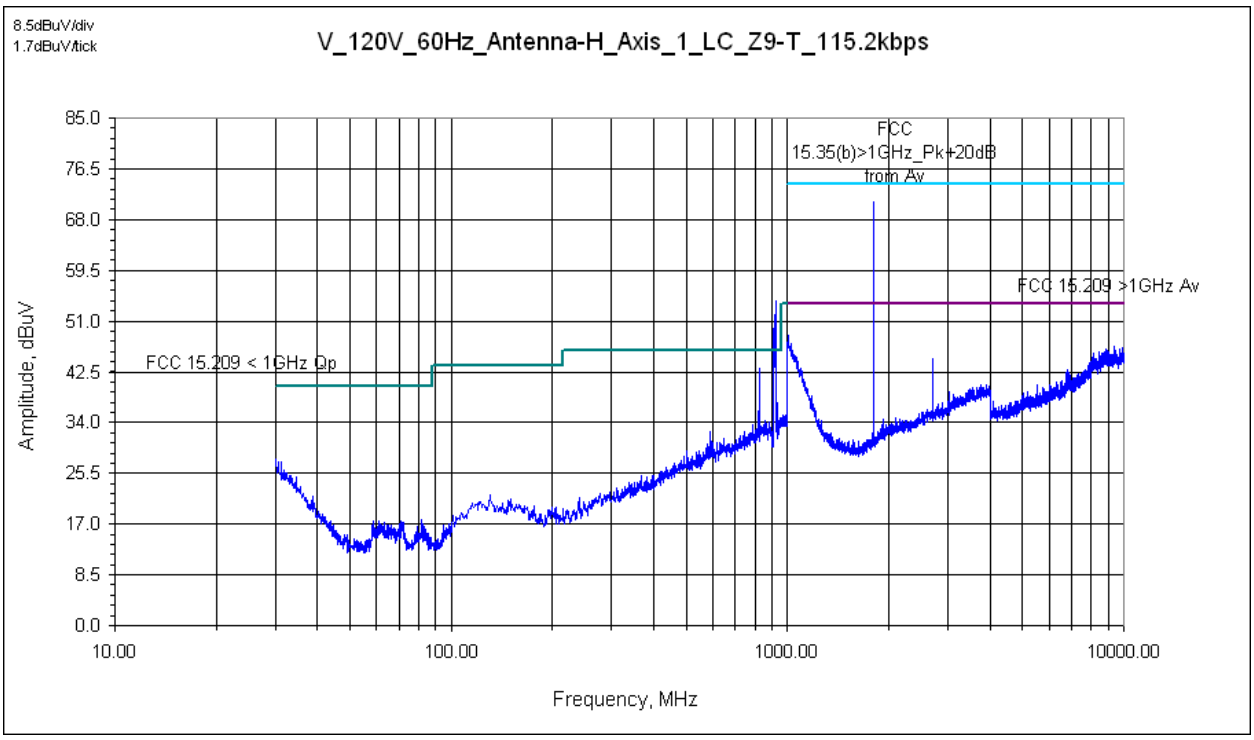
Bilog Antenna (30MHz to 1000 MHz)

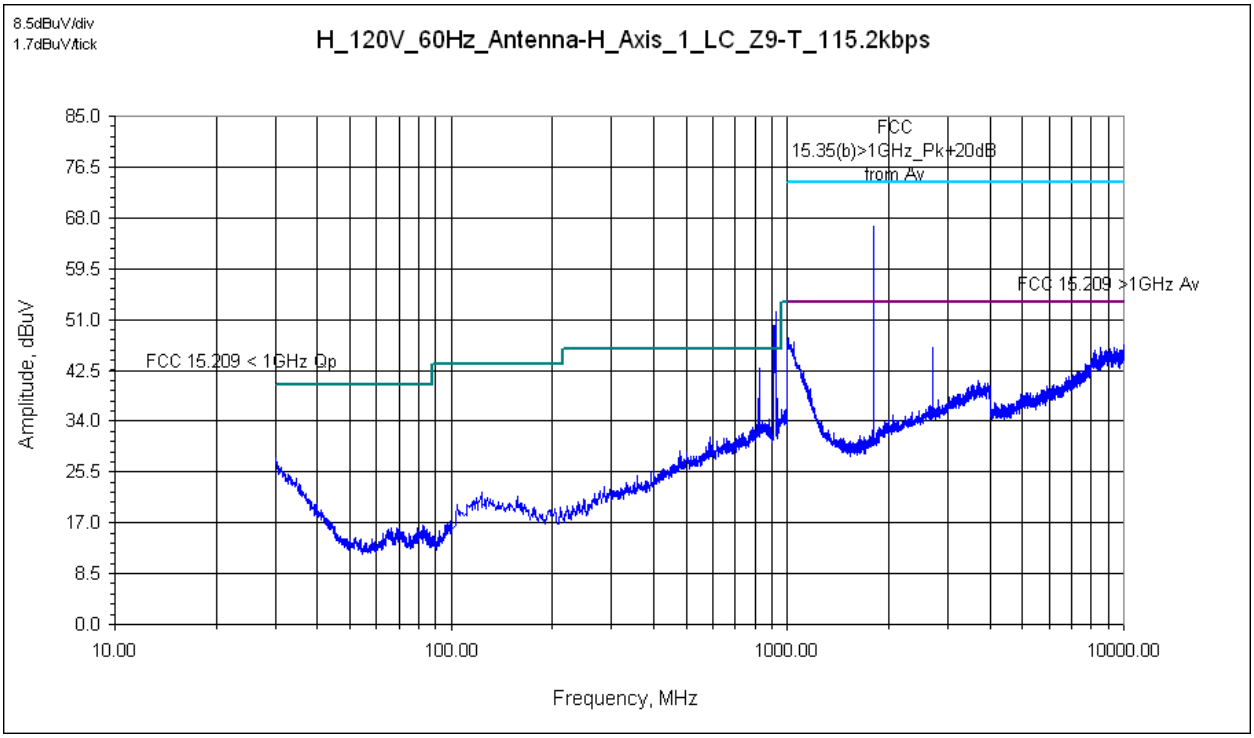


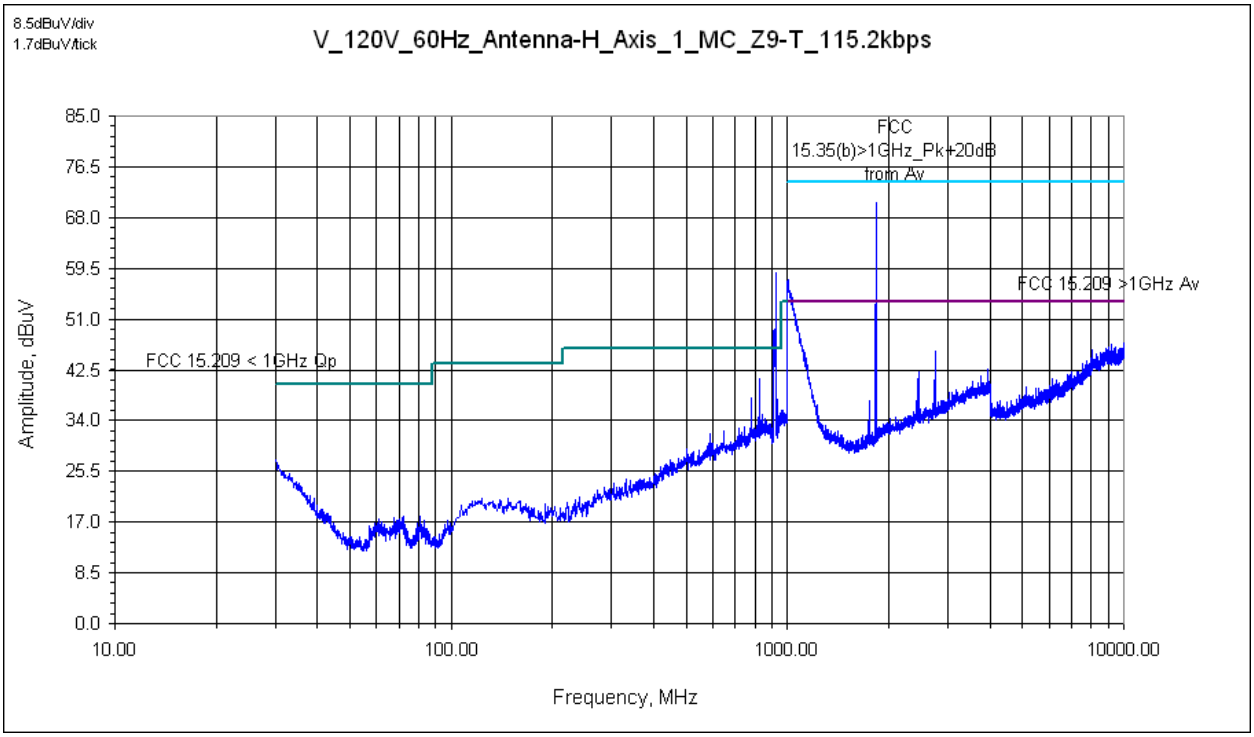
Ridge-Guide Horn Antenna (1GHz to 10GHz)

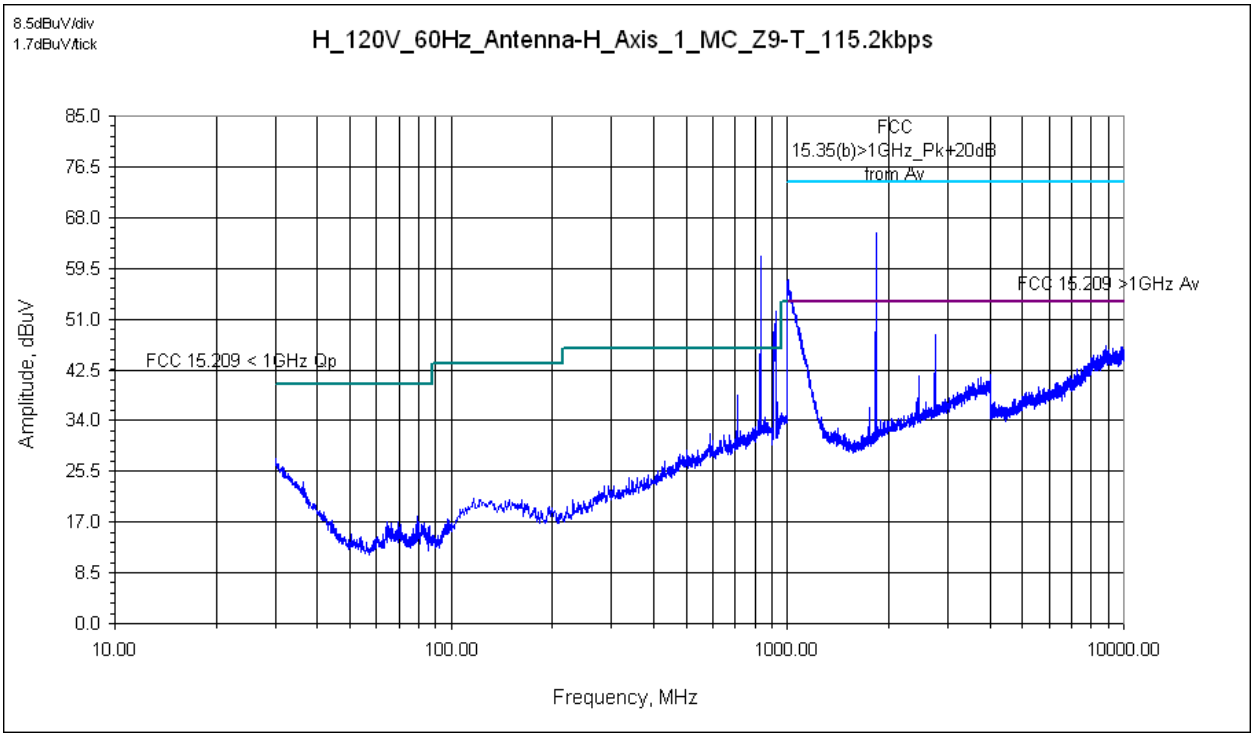


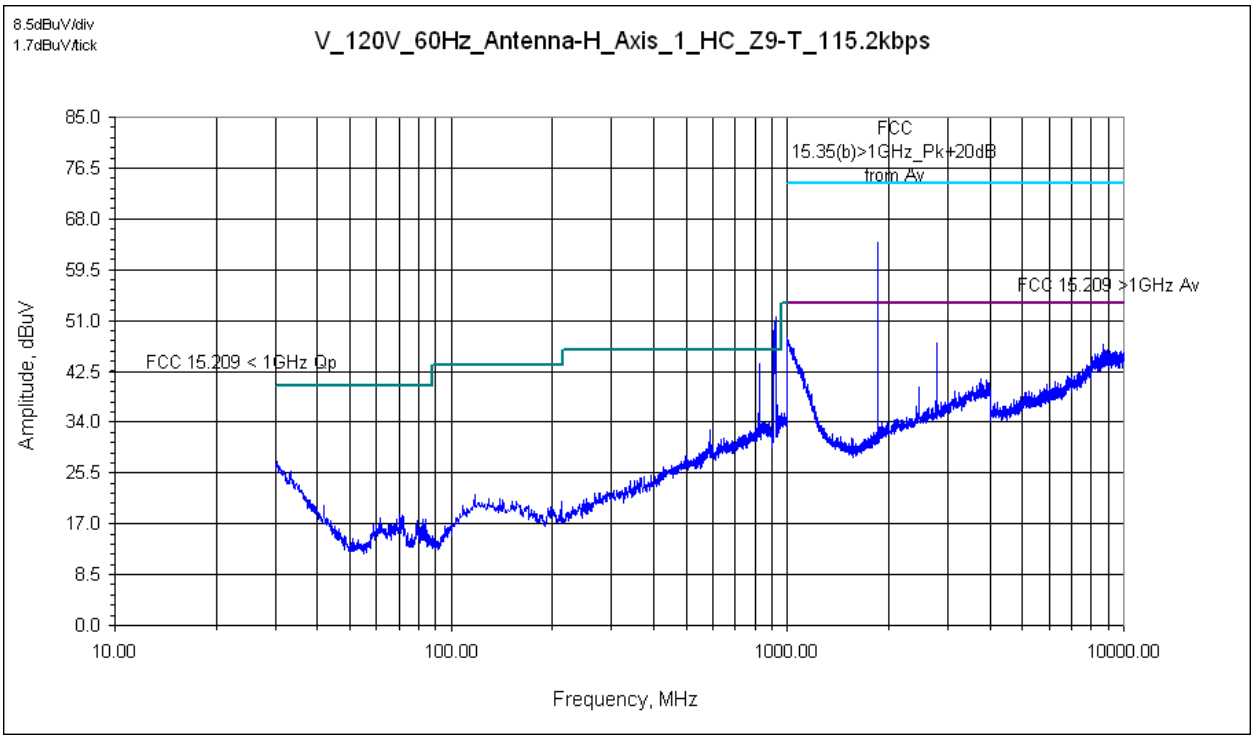
10.8 Plots:

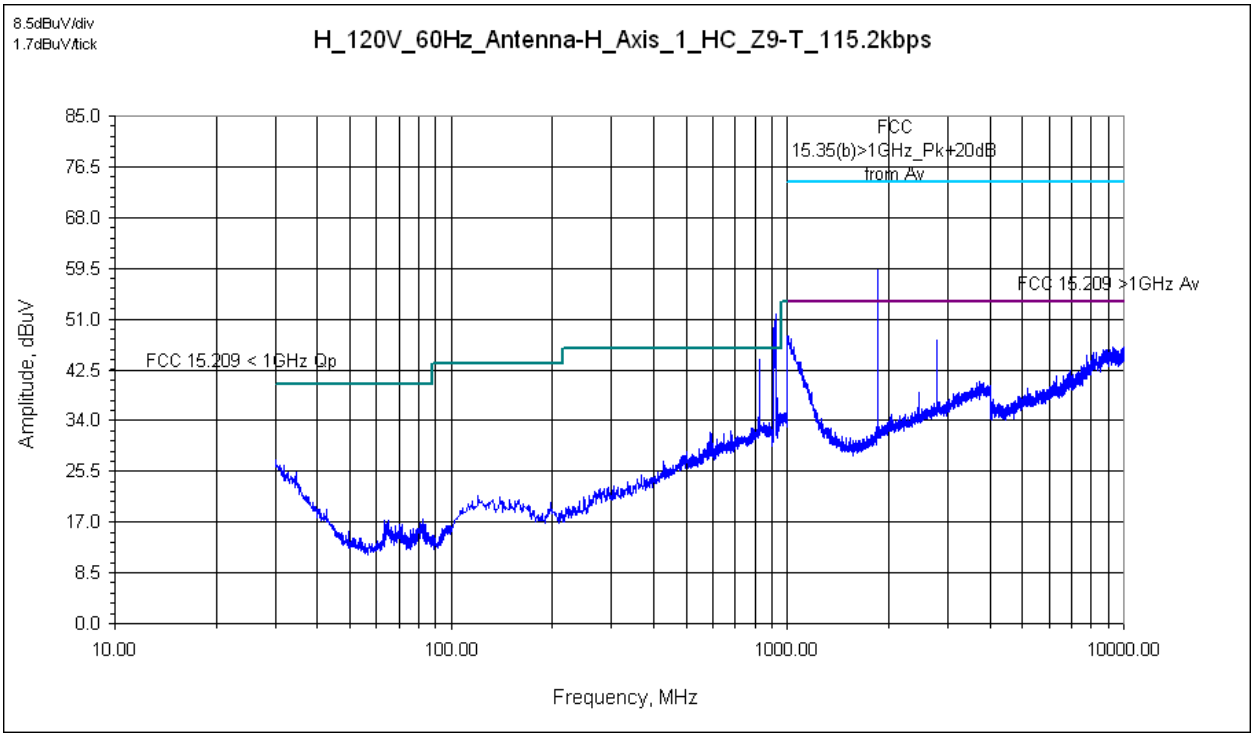

8.5dBuV/div
1.7dBuV/tick
V_120V_60Hz_Antenna-H_Axis_1_LC_Z9-T_115.2kbps
FCC
15.35(b)>1GHz_Pk+20dB
from Av
FCC 15.209 >1GHz Av
FCC 15.209 < 1GHz Qp
Amplitude, dBuV
85.0
76.5
68.0
59.5
51.0
42.5
34.0
25.5
17.0
8.5
0.0
10.00
100.00
1000.00
10000.00
Frequency, MHz


8.5dBuV/div
1.7dBuV/tick
H_120V_60Hz_Antenna-H_Axis_1_LC_Z9-T_115.2kbps
FCC
15.35(b)>1GHz_Pk+20dB
from Av
FCC 15.209 >1GHz Av
FCC 15.209 < 1GHz Qp
Amplitude, dBuV
85.0
76.5
68.0
59.5
51.0
42.5
34.0
25.5
17.0
8.5
0.0
10.00
100.00
1000.00
10000.00
Frequency, MHz


8.5dBuV/div
1.7dBuV/tick
V_120V_60Hz_Antenna-H_Axis_1_MC_Z9-T_115.2kbps
85.0
76.5
68.0
59.5
51.0
42.5
34.0
25.5
17.0
8.5
0.0
Amplitude, dBuV
FCC
15.35(b)>1GHz_Pk+20dB
from Av
FCC 15.209 >1GHz Av
FCC 15.209 < 1GHz Qp
10.00
100.00
1000.00
10000.00
Frequency, MHz


8.5dBuV/div
1.7dBuV/tick
H_120V_60Hz_Antenna-H_Axis_1_MC_Z9-T_115.2kbps
85.0
76.5
68.0
59.5
51.0
42.5
34.0
25.5
17.0
8.5
0.0
Amplitude, dBuV
FCC
15.35(b)>1GHz_Pk+20dB
from Av
FCC 15.209 >1GHz Av
FCC 15.209 < 1GHz Qp
10.00
100.00
1000.00
10000.00
Frequency, MHz


8.5dBuV/div
1.7dBuV/tick
V_120V_60Hz_Antenna-H_Axis_1_HC_Z9-T_115.2kbps
85.0
76.5
68.0
59.5
51.0
42.5
34.0
25.5
17.0
8.5
0.0
Amplitude, dBuV
FCC
15.35(b)>1GHz_Pk+20dB
from Av
FCC 15.209 >1GHz Av
FCC 15.209 < 1GHz Qp
10.00
100.00
1000.00
10000.00
Frequency, MHz


8.5dBuV/div
1.7dBuV/tick
H_120V_60Hz_Antenna-H_Axis_1_HC_Z9-T_115.2kbps
85.0
76.5
68.0
59.5
51.0
42.5
34.0
25.5
17.0
8.5
0.0
Amplitude, dBuV
FCC
15.35(b)>1GHz_Pk+20dB
from Av
FCC 15.209 >1GHz Av
FCC 15.209 < 1GHz Qp
10.00
100.00
1000.00
10000.00
Frequency, MHz

11 Power Spectral Density – PSD

11.1 Method:

The test methods used comply with ANSI C63.10. Unless otherwise stated no deviations were made from FCC 15.247 or RSS-247.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

11.2 Test Requirement/Specification:

For the band 902-928 MHz within digitally modulated systems (DTS) products, the power spectral density conducted from the intentional radiator to the antenna should not be greater than +8 dBm in any 3 kHz to 100kHz band during any time interval of continuous transmission.

Such specifications require that the same method as used to determine the conducted output power shall also be used to determine the power spectral density. This test applies only to 500 kbps, 1Mbps, and 4Mbps data rates. Testing was performed in accordance with ANSI C63.10 section 11.10.5 AVGPSD-2.

- FCC 15.247(e)
- RSS-247 5.2(2)

11.3 Test Equipment Used:

Asset ID	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DEN-073	EMI Receiver (10Hz – 26.5GHz)	RHODE & SCHWARZ	ESU 26	100265	12/19/2015	12/19/2016
DEN-206	RF Conducted Port Cable	TELEDYNE	True Blue	14-11-401	12/23/2014	05/30/2016
SW-6	Software for Radiated and Conducted emissions.	Intertek	OATS vba	V. 3.0	VBU	VBU
18869	10 dB Attenuator	Weinschel Eng	23-10-34	AV2626	06/23/2015	06/23/2016

11.4 Results:

The sample tested was found to comply.

11.5 Test Summary:

Fundamental		Conducted port					
Frequency Range:		☒ 902-928MHz ☐ 2400-2483.5MHz ☐ 5725-5850MHz					
Low Frequency MHz		**Measured Power (dBm)**	**Duty Cycle Correction (dB)**	**Final Corrected (dBm)**	**Standard Limit (dBm)**	**Limit Reduction (dB)**	**Margin (dB)**
Data Rate	**Frequency**						
500 kbps	902.7072	6.71	0.20	6.91	8	N/A	1.09
1 Mbps	903.0528	4.83	0.44	5.27	8	N/A	2.43
4 Mbps	904.5504	-12.01	1.30	-10.71	8	N/A	18.71
Mid Frequency MHz							
Data Rate	**Frequency**						
500 kbps	914.4576	6.71	0.20	6.91	8	N/A	1.09
1 Mbps	914.1120	4.83	0.44	5.27	8	N/A	2.73
4 Mbps	914.2272	-11.5	1.30	-10.2	8	N/A	18.2
High Frequency MHz							
Data Rate	**Frequency**						
500 kbps	927.3600	6.71	0.20	6.91	8	N/A	1.09
1 Mbps	927.0144	4.83	0.44	5.27	8	N/A	2.73
4 Mbps	925.7472	-10.98	1.30	-9.68	8	N/A	17.68
RBW:		☒ 3kHz ☐ 10kHz ☐ 30kHz ☐ 100kHz					
VBW:		☒ 10kHz ☐ 30kHz ☐ 100kHz ☐ 300kHz					
Remarks:							

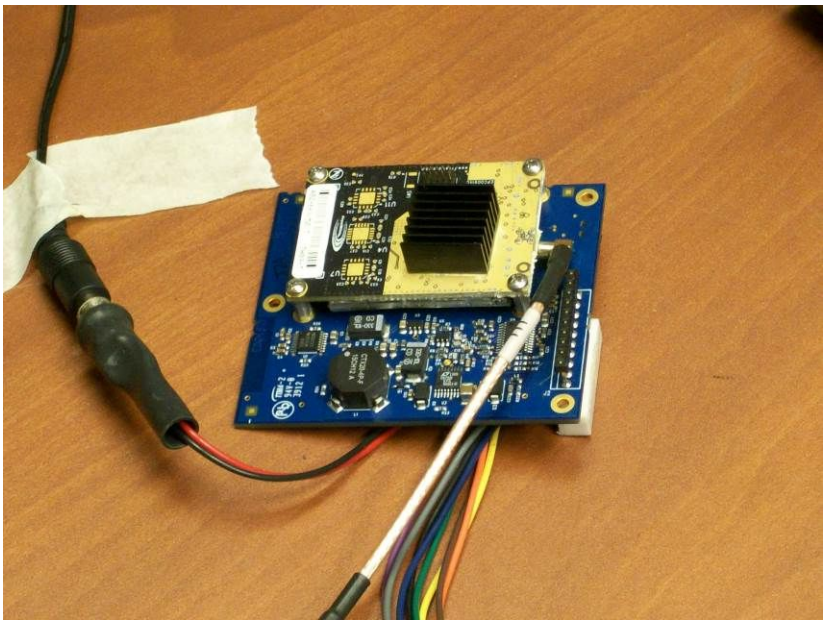
11.6 Test Method:

- ANSI C63.10 section 11.10.5 AVGPSD-2

11.7 Notes:

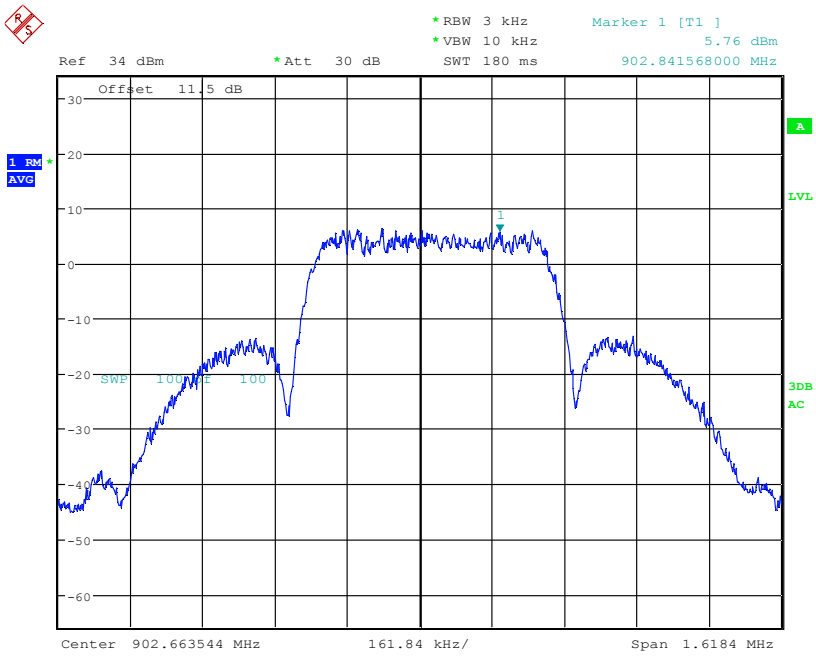
3. The limit for RSS-247 is identical to the limit for FCC 15.247.

11.8 Setup Photographs: Conducted Port

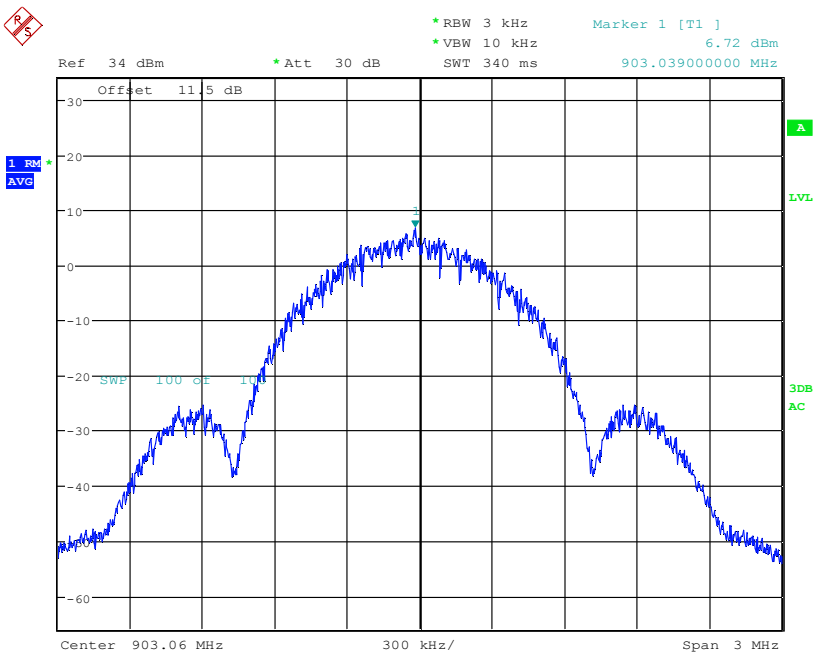


11.9 Plots:

Low Channel – Data Rate: 500 kbps

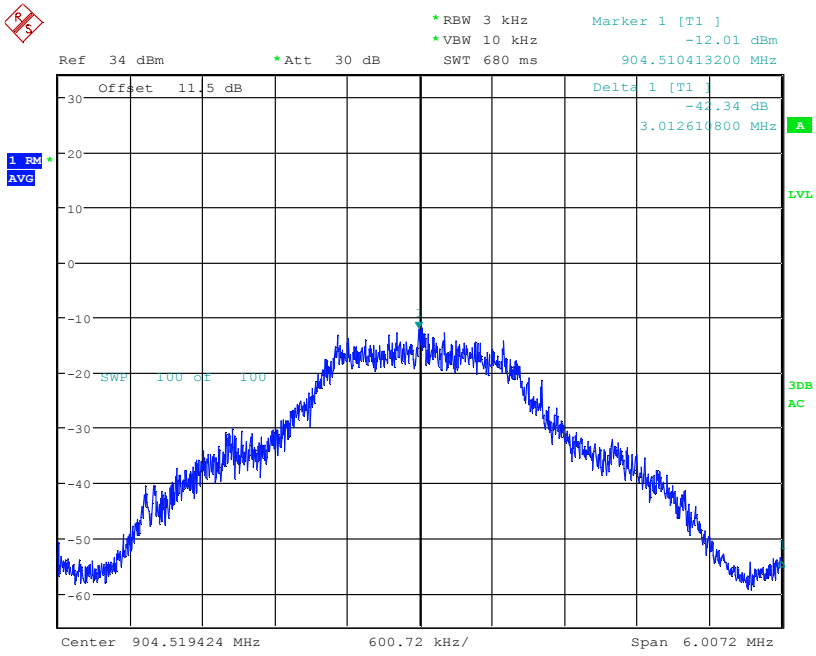


Low Channel – Data Rate: 1 Mbps



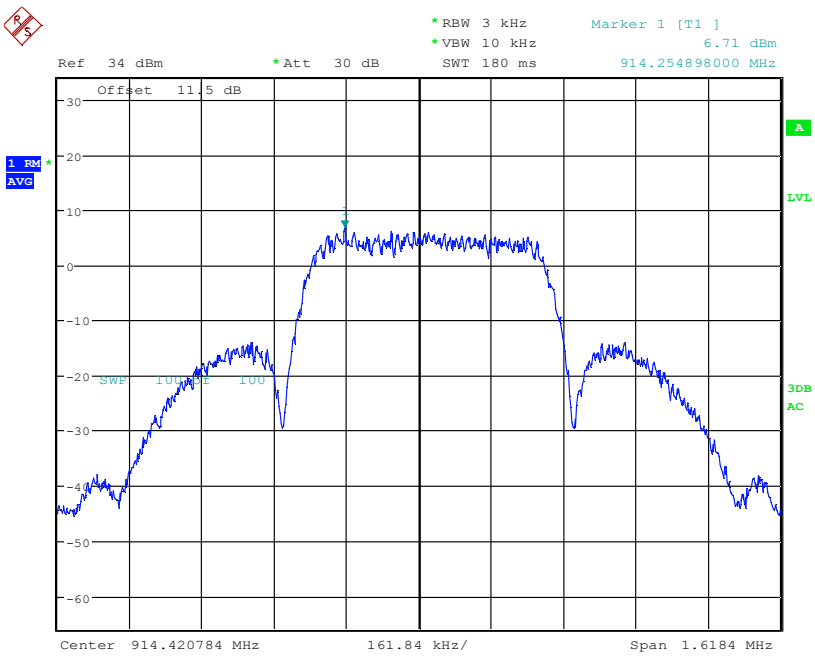
Date: 11.APR.2016 15:26:02

Low Channel – Data Rate: 4 Mbps

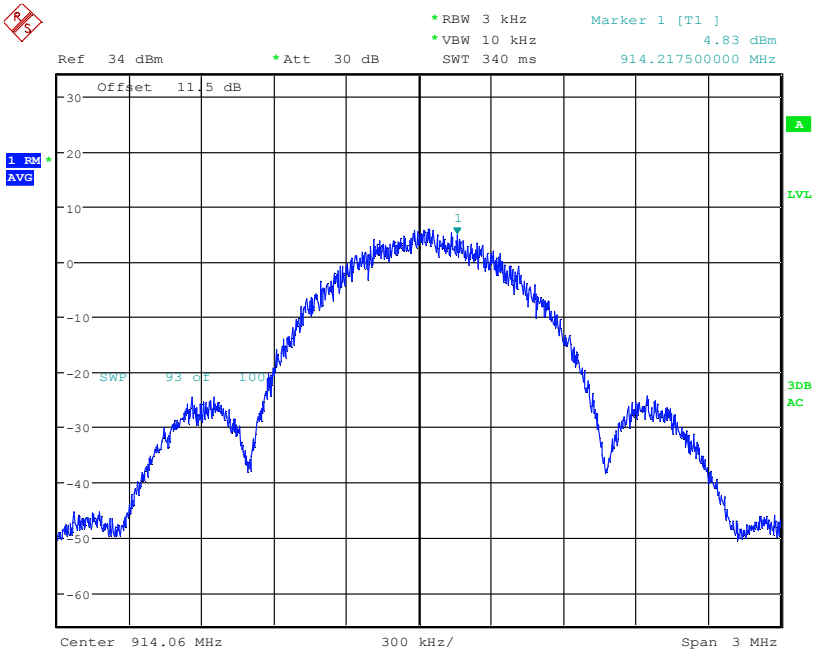


Date: 11.APR.2016 15:41:04

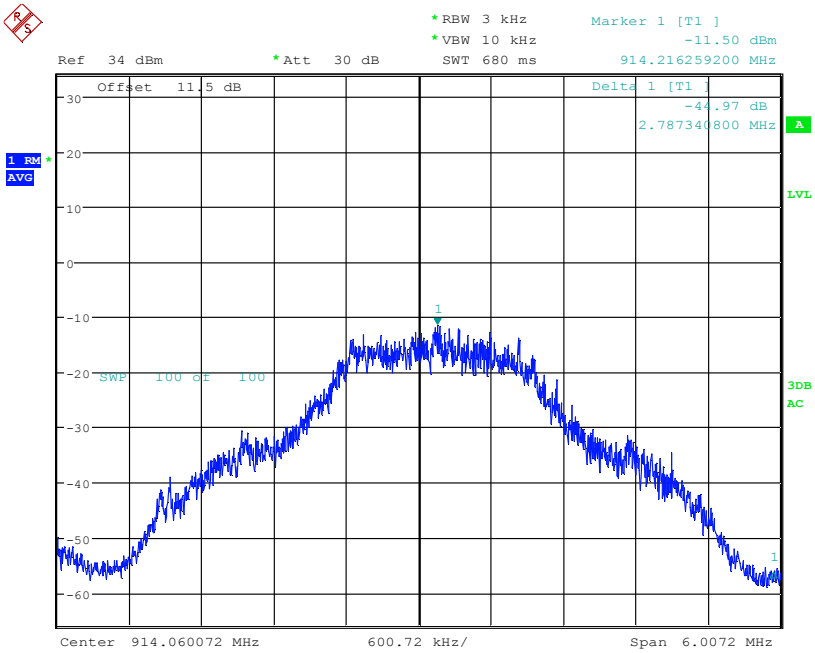
Mid Channel – Data Rate: 500 kbps



Mid Channel – Data Rate: 1 Mbps

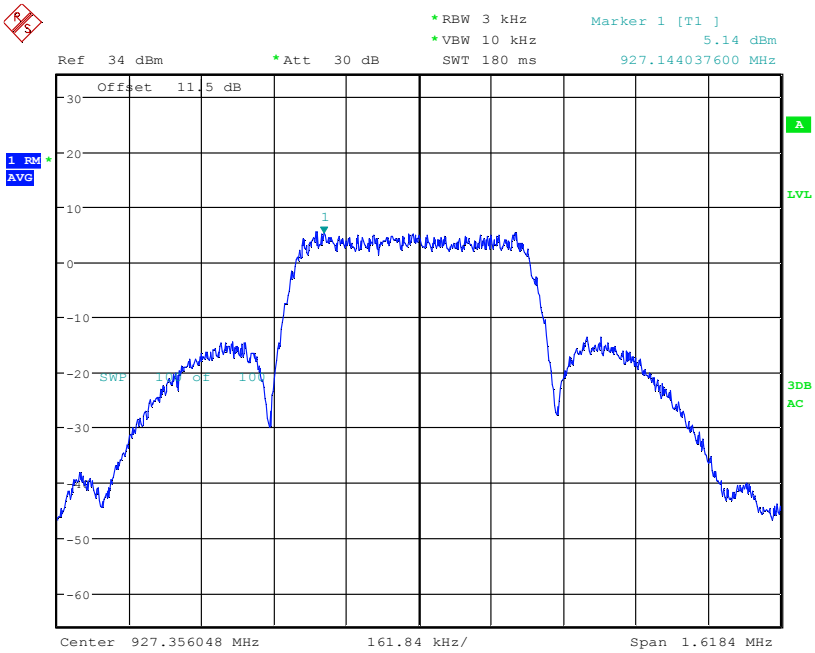


Mid Channel – Data Rate: 4 Mbps



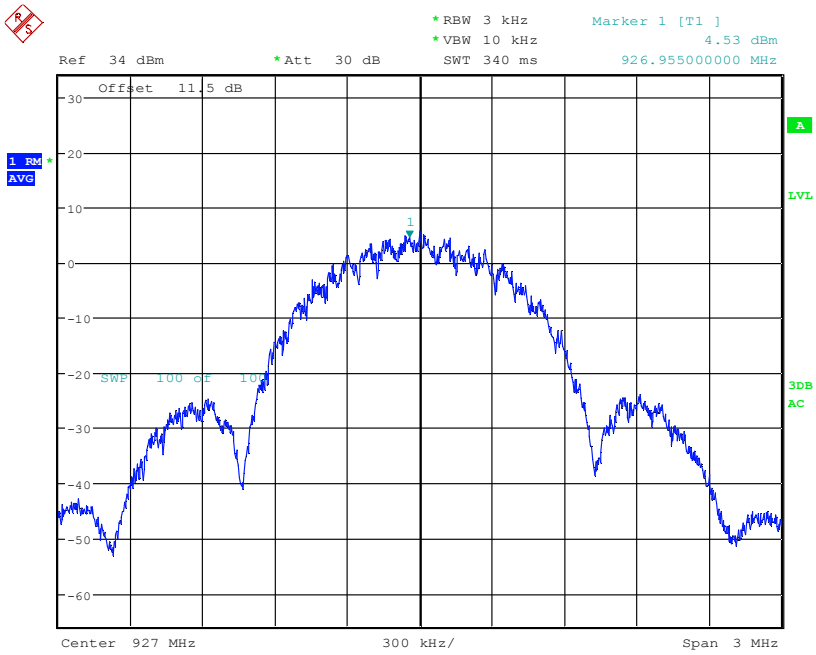
Date: 11.APR.2016 15:39:09

High Channel – Data Rate: 500 kbps



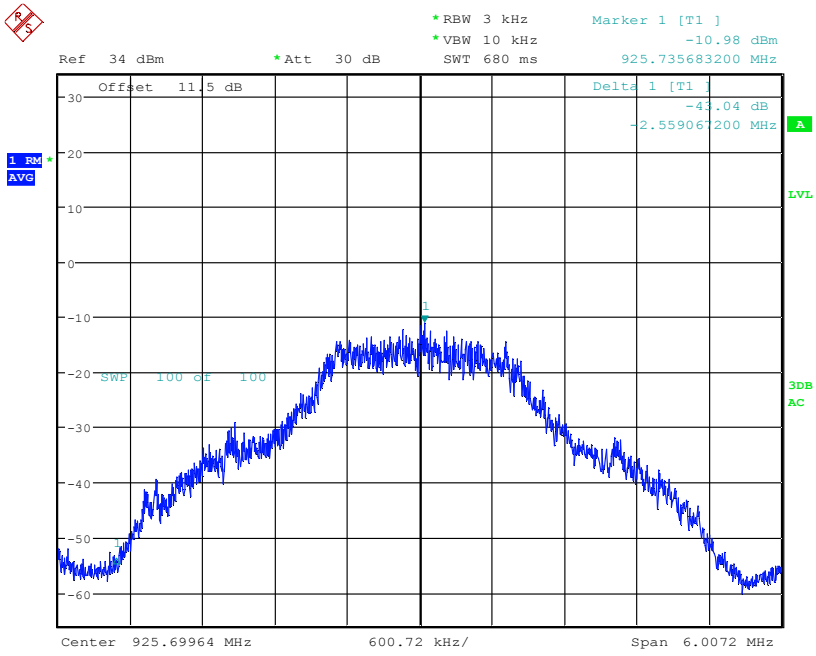
Date: 11.APR.2016 15:05:34

High Channel – Data Rate: 1 Mbps



Date: 11.APR.2016 15:22:51

High Channel – Data Rate: 4 Mbps



Date: 11.APR.2016 15:37:12

12 Radiated Emissions (Digital Part of Receiver) – Not required for C2PC

13 AC Mains Conducted Emissions – Transmitter – Not required for C2PC

14 RF Exposure Requirement

14.1 Method

Unless otherwise stated no deviations were made from FCC Part 1.1310/2.1091/2.093.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

14.2 Test Requirement/ Specification:

- Power Density Limit for Frequency Range: 300 to 1500 MHz = 0.6 mW/cm^2

14.3 Test Results:

The sample tested was found to comply.

14.4 Test Data:

RF Exposure Requirements - MPE

Project #:	**G102542964**	Test Area:	Intertek Louisville
Test Method:	FCC CFR47 Part 1.1310/2.1093	Test Date:	04/19/2016
EUT Model #:	Z9-T		
EUT Serial #:	402-669-5017		
Manufacturer:	FreeWave Technologies, Inc		
EUT Description:	902-928 MHz ISM band transceiver.		
Notes:			

The following limit is from table 1 (A) Limits for General Population/Uncontrolled Exposure in FCC part 1.1310:

Power Density Limit for Frequency Range: 300 to 1500 MHz = f/1500 mW/cm^2

Where:
f = fundamental frequency in MHz.

In this case:
f = 900MHz
Limit = 0.6 mW/cm^2

The following calculation was used to determine compliance to the above limit.

Power Density(S) =$PG/4\pi R^2$ or $S=EIRP/4\pi R^2$

Where:
S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (mW).
G = numeric power gain of the antenna in the direction of interest relative to an isotropic radiator.
R = distance to the center of radiation of the antenna (cm)

In this case:
R = 23cm
P = 19.98dBm = 99.54mW
G = +16.0 dBi = 39.81 (numeric gain)

Power Density

Power (mW)	Gain (dbi)	Gain numeric	Distance (cm)	Power Density (mW/cm^2)
99.54	+16	40	23	0.599

Therefore: Power Density Margin (Δ Limit) = 0.599 – 0.6 = - 0.001 mW/cm^2

To determine what minimum distance the product can satisfy the Power Density Limit:

R(cm) = SQRT[(P*G)/(4*π*S)] = 23 cm

15 Duty Cycle/ Duty Cycle Correction Factor

15.1 Method:

The test methods used comply with ANSI C63.10. Unless otherwise stated no deviations were made from FCC CFR47 15.35(c).

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

15.2 Test Requirement/Specification:

Unless otherwise specified, e.g. §15.255(b), when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

Determine the period of the pulse train, T, in mSec and record the results. T is defined as the time from the beginning of one pulse train to the beginning of the next pulse train.
Count the number of different types of pulses, N and record the results.
For each of the different types of pulses, count the number of occurrences within one pulse train.
Use the Duty Cycle Correction Factor, DCCF, from the results table and use it to adjust the field strength measurements recorded for radiated emissions.

- FCC 15.35(c)

15.3 Test Equipment Used:

15.4 Results:

The sample tested was found to comply.

15.5 Test Method:

- ANSI C63.10: 2013, Clause 11.6

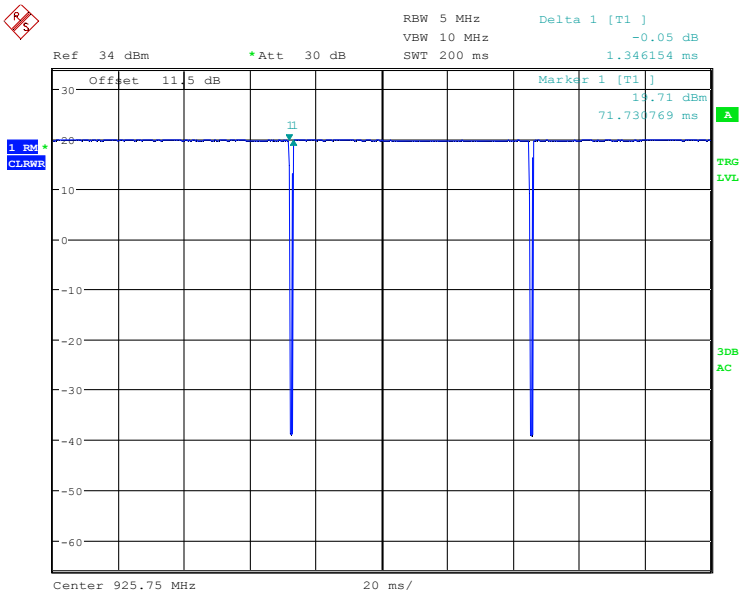
15.6 Test Summary:

Duty Cycle Measurements	
>98%	115 & 250 kbps
94.8%	500 kbps
90.4%	1 Mbps
74.0%	4 Mbps

15.7 Plots:

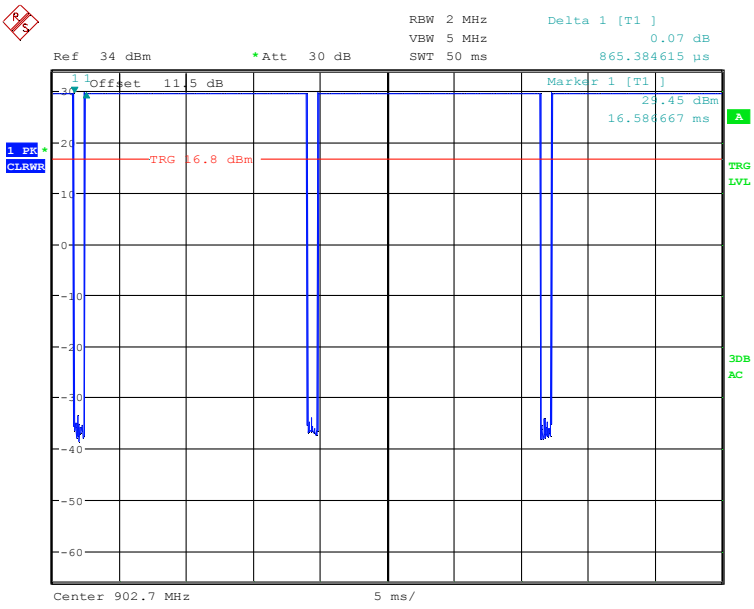
Normal Duty Cycle

Data Rate: 115.2/250 kbps



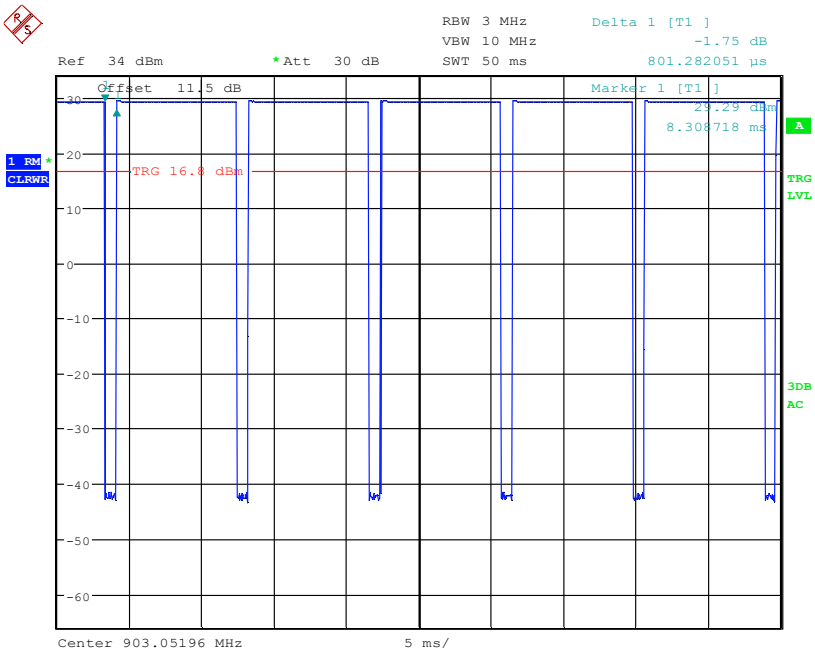
Date: 11.APR.2016 12:25:20

Data Rate: 500 kbps



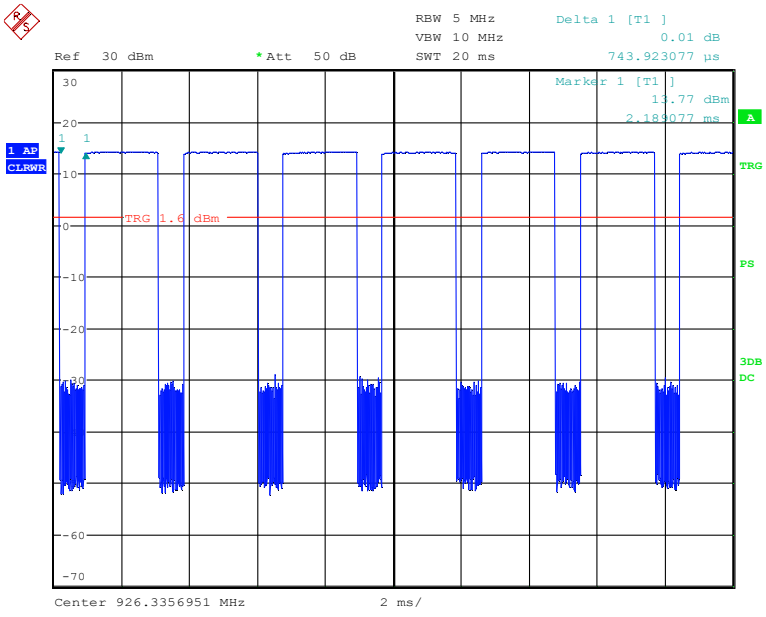
Date: 11.APR.2016 14:44:41

Low Channel – Data Rate: 1 Mbps



Date: 11.APR.2016 15:12:31

High Channel – Data Rate: 4 Mbps



Date: 14.APR.2016 16:55:09

16 Appendix A: Antenna Specifications

WaveLink
Antenna Systems Inc.

PROFESSIONAL GRADE YAGI

PRO890-16

890-960 MHz

ANTENNA SPECIFICATIONS

Operating Frequency (VSWR ≤ 1.5) MHz	890-960
Nominal Gain (dBi)	16
Horizontal Beamwidth (Deg-3dB)	32
Vertical Beamwidth (Deg-3dB)	26
Front To Back Ratio (dB)	25
Power Rating (W)	200
Length (inches)	63
Width (inches)	6.6
Antenna Weight (lbs.)	3.5
Cross Sectional Area (Max. Ft²)	0.67
Lateral Thrust at 100mph (lbs.)	16.75
Rated Wind Velocity (mph)	125
Rated Wind Velocity with 1/2" radial ice (mph)	80

PRO890-16 is equipped with a standard feed line length of 2' LMR400 UltraFlex® cable and N-Female connector. Please contact our sales staff for alternate connector requirements.

Extended feed line available in 5' increments up to a maximum of 50'. All extended feed line antennas equipped with LMR400 cable and N-Male connector.

The **PRO890-16** is engineered to meet or exceed the requirements of a broadband, high gain, *Professional Grade* **900 MHz Yagi antenna**.

The **PRO890-16** provides **16 dBi** gain and operates effectively across the frequency band of **890-960 MHz** with a VSWR of 1.5:1 or less.

All ***Wavelink*** *Professional Grade* antennas are manufactured using high strength 6061-T6 aluminum. The dipole and directive elements are fully welded to the boom completely eliminating misalignment problems. The antenna is also electrically **one piece**, effectively eliminating intermod issues and future performance degradation.

The dipole design incorporates an integral feed cable available in lengths up to 50 feet.
The extended feed line option offers many benefits:

1. Dramatically reduces install time, by up to 2 hours per site
2. Completely eliminates the connector at the antenna
3. Improves signal strength ½ to ¾ of a dB
4. Eliminates connector weatherproofing concerns
5. Significantly reduces long term cost of ownership

The **PRO890-16** is anodized to protect against environmental degradation even in the most severe environments.

To view polar plots for this antenna please visit www.wavelinkantenna.com/plots

Includes mounting bracket C1001A

Easily permits vertical or horizontal polarization. Mounts on 1"-2¾" OD pipe.

Phone: 1 800.805.6922 (Toll Free USA & Canada)
Visit us online at WavelinkAntenna.com

WaveLink
Antenna Systems Inc.

Measurement Uncertainty

The measured value related to the corresponding limit will be used to decide whether the equipment meets the requirements.

The measurement uncertainty figures were calculated and correspond to a coverage factor of k = 2, providing a confidence level of respectively 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian).

Measurement uncertainty Table

Parameter	Uncertainty ±	Notes
Radiated emissions, 10kHz to 30 MHz	3.4 dB	
Radiated emissions, 30 to 200 MHz HP	2.2 dB	
Radiated emissions, 30 to 200 MHz VP	3.8 dB	
Radiated emissions, 200 to 1000 MHz HP	2.8 dB	
Radiated emissions, 200 to 1000 MHz VP	2.7 dB	
Radiated emissions, 1 to 18 GHz	5.2 dB	
Conducted port emissions 10kHz to 1000 MHz	1.0 dB	
Conducted port emissions 1 – 26.5 GHz	1.6 dB	
AC mains Conducted emissions, 9kHz to 30 MHz	3.14 dB	

17 Revision History

Revision Level	Date	Report Number	Notes
0	4/20/2016	102542964DEN-002	Original Issue
1	5/19/2016	102542964DEN-002	Changed standard reference to ANSI C63.10 in sections 8.6, 9.1, 10.1, 11.2, 11.6 Added clarification to section 6.1 Updated reference in section 8.6 for FHSS devices In section 9 changed the limit to -30dBc in the table and updated plots for 500kbps, 1Mbps, 4Mbps Added comments in section 8.7 for band edge tests. Changed frequency in section 14.2 to 300 to 1500 MHz Updated power level in section 14.4 from 19.9 to 19.98 By MAS Reviewed by SL