

Report No.: SZEM160100046804

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FCC REPORT

Application No: SZEM1601000468RG

Applicant: Hisense International Co., Ltd.

Manufacturer: Hisense Communications Co., Ltd.

Factory: Hisense Communications Co., Ltd.

Product Name: Mobile Phone
Model No.(EUT): Hisense L675
Trade Mark: Hisense

Trade Mark: Hisense FCC ID: 2ADOBL675

Standards: 47 CFR Part 15, Subpart C (2015)

 Date of Receipt:
 2016-01-29

 Date of Test:
 2016-02-04

 Date of Issue:
 2016-02-23

Test Result: PASS *

. * In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Jack Zhang EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.



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2 Version

Revision Record							
Version Chapter Date Modifier Remark							
00		2016-02-23		Original			

Authorized for issue by:		
Tested By	Benson Wang) /Project Engineer	2016-02-04 Date
Prepared By	Joyce Shi	2016-02-23
	(Joyce Shi) /Clerk	Date
Checked By	Eric Fu	2016-02-23
	(Eric Fu) /Reviewer	Date



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3 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	ANSI C63.10 2013	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10 2013	PASS
Conducted Peak Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(3)	ANSI C63.10 2013	PASS
6dB Occupied Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(2)	ANSI C63.10 2013	PASS
Power Spectral Density	47 CFR Part 15, Subpart C Section 15.247 (e)	ANSI C63.10 2013	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 2013	PASS
RF Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 2013	PASS
Radiated Spurious Emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2013	PASS
Restricted bands around fundamental frequency (Radiated Emission) 47 CFR Part 15, Subpart C Section 15.205/15.209		ANSI C63.10 2013	PASS



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5 General Information

5.1 Client Information

Applicant:	Hisense International Co., Ltd.				
Address of Applicant:	Floor 22, Hisense Tower, 17 Donghai Xi Road, Qingdao, 266071, China				
Manufacturer:	Hisense Communications Co., Ltd.				
Address of Manufacturer:	218 Qianwangang Road, Qingdao Economic & Technological Development Zone, Qingdao				
Factory:	Hisense Communications Co., Ltd.				
Address of Factory:	218 Qianwangang Road, Qingdao Economic & Technological Development Zone, Qingdao				

5.2 General Description of EUT

Product Name:	Mobile Phone		
Model No.:	Hisense L675		
Trade Mark:	Hisense		
Operation Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz		
	IEEE 802.11n(HT40): 2422MHz to 2452MHz		
Channel Numbers:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels		
	IEEE 802.11n HT40: 7 Channels		
Channel Separation:	5MHz		
Type of Modulation:	IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK)		
	IEEE for 802.11g : OFDM(64QAM, 16QAM, QPSK, BPSK)		
	IEEE for 802.11n(HT20 and HT40) : OFDM (64QAM, 16QAM,		
	QPSK,BPSK)		
Sample Type:	Portable product		
Test Software of EUT:	L675-userdebug 6.0 MRA58K L1224.6.01.01 release-keys		
Antenna Type:	PIFA		
Antenna Gain:	0.7dBi		
Battery:	Lithium-ion battery:3.8V(charge by adapter)		

Remark:

Model No.: Hisense L675

There are two kinds of color in this model, Only the sample in section 7 was tested, since the circuit design, PCB layout, electrical components used, internal wiring and functions were identical for the above samples, only different on colors.

And the accessories have different colors as below for marketing purpose.

me the discourse hair a dimension to the desired management of the process					
Accessories	Model No	Color			
Earphone	NLD-EM116T-50SH/ NLD-EM116T-40SH	white and black			
Data cable	GEM1-2828L08WHR/ GEM1-2828L08BKR	white and black			
Adaptor	A31-501000	white and black			



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Operation Frequency each of channel(802.11b/g/n HT20)												
Channel	Fr	equency	Channe	Frequency	Channel	Fre	Frequency		quency Chan		nnel	Frequency
1	24	112MHz	4	2427MHz	7	244	2442MHz)	2457MHz		
2	24	417MHz	5	2432MHz	8	244	47MHz 11		1	2462MHz		
3	24	122MHz	6	2437MHz	9	245	2452MHz					
Operation F	requ	ency each	of channe	el(802.11n HT40)							
Channe		Frequ	ency	Channel	Frequen	су	Chan	nel	F	Frequency		
1		2422	ИНz	4	2437MF	lz	7		7			2452MHz
2	·	2427	MHz	5	2442MF	lz						
3		2432	ИНz	6	2447MH	lz						

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11b/g/n (HT20):

Channel	Frequency		
The Lowest channel	2412MHz		
The Middle channel	2437MHz		
The Highest channel	2462MHz		

For 802.11n (HT40):

` '	
Channel	Frequency
The Lowest channel	2422MHz
The Middle channel	2437MHz
The Highest channel	2452MHz



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5.3 Test Environment and Mode

Operating Environment:	Operating Environment:				
Temperature:	25.0 °C				
Humidity:	53 % RH				
Atmospheric Pressure:	1020mbar				
Test mode:					
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all				
	kind of data rate.				

5.4 Description of Support Units

The EUT has been tested independent unit.

5.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.



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5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

VCC

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

• FCC - Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

Industry Canada (IC)

The 3m Semi-anechoic chambers and the 10m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-2, 4620C-3.

5.7 Deviation from Standards

None.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.



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5.10Equipment List

	Conducted Emission							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)		
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	2015-05-13	2016-05-13		
2	LISN	Rohde & Schwarz	ENV216	SEL0152	2015-10-09	2016-10-09		
3	LISN	ETS-LINDGREN	3816/2	SEL0021	2015-05-13	2016-05-13		
4	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLIS N-T8-02	SEL0162	2015-08-30	2016-08-30		
5	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLIS N-T4-02	SEL0163	2015-08-30	2016-08-30		
6	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLIS N-T2-02	SEL0164	2015-08-30	2016-08-30		
7	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2015-05-13	2016-05-13		
8	Coaxial Cable	SGS	N/A	SEL0025	2015-05-13	2016-05-13		
9	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-09	2016-10-09		
10	Humidity/ Temperature Indicator	Shanhai Qixiang	ZJ1-2B	SEL0103	2015-10-24	2016-10-24		
11	Barometer	Chang Chun	DYM3	SEL0088	2015-05-13	2016-05-13		



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	RE in Chamber					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2015-05-13	2016-05-13
2	EMI Test Receiver	Agilent Technologies	N9038A	SEL0312	2015-09-16	2016-09-16
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2014-11-15	2017-11-15
5	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2015-10-17	2016-10-17
6	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2014-11-24	2017-11-24
7	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2015-05-13	2016-05-13
8	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2015-10-17	2016-10-17
9	Coaxial cable	SGS	N/A	SEL0027	2015-05-13	2016-05-13
10	Coaxial cable	SGS	N/A	SEL0189	2015-05-13	2016-05-13
11	Coaxial cable	SGS	N/A	SEL0121	2015-05-13	2016-05-13
12	Coaxial cable	SGS	N/A	SEL0178	2015-05-13	2016-05-13
13	Band filter	Amindeon	82346	SEL0094	2015-05-13	2016-05-13
14	Barometer	Chang Chun	DYM3	SEL0088	2015-05-13	2016-05-13
15	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-09	2016-10-09
16	Humidity/ Temperature Indicator	Shanhai Qixiang	ZJ1-2B	SEL0103	2015-10-24	2016-10-24
17	Signal Generator (10M-27GHz)	Rohde & Schwarz	SMR27	SEL0067	2015-05-13	2016-05-13
18	Loop Antenna	Beijing Daze	ZN30401	SEL0203	2015-05-13	2016-05-13



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RF connected test								
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)		
1	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-09	2016-10-09		
2	Humidity/ Temperature Indicator	HYGRO	ZJ1-2B	SEL0033	2015-10-24	2016-10-24		
3	Spectrum Analyzer	Rohde & Schwarz	FSP	SEL0154	2015-10-17	2016-10-17		
4	Coaxial cable	SGS	N/A	SEL0178	2015-05-13	2016-05-13		
5	Coaxial cable	SGS	N/A	SEL0179	2015-05-13	2016-05-13		
6	Barometer	ChangChun	DYM3	SEL0088	2015-05-13	2016-05-13		
7	Signal Generator	Rohde & Schwarz	SML03	SEL0068	2015-04-25	2016-04-25		
8	POWER METER	R & S	NRVS	SEL0144	2015-10-09	2016-10-09		
9	Attenuator	Beijin feihang taida	TST-2-6dB	SEL0205	2015-04-25	2016-04-25		



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6 Test results and Measurement Data

6.1 Antenna Requirement

Standard 47 CFR Part 15C Section 15.203 /247(c) requirement:

15.203 requirement:

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, 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.

15.247(b) (4) requirement:

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

EUT Antenna:



The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0.7dBi.



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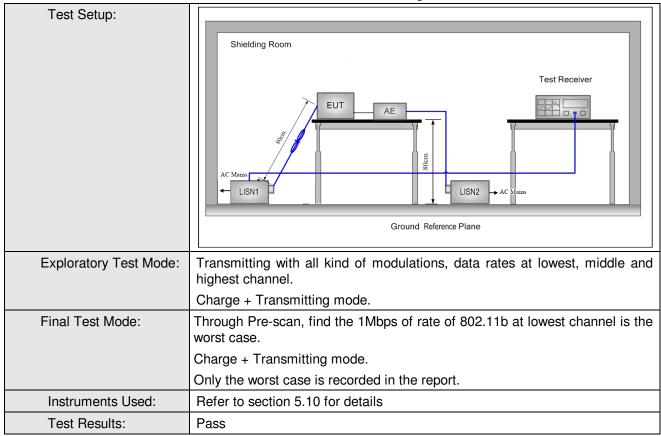
6.2 Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207						
Test Method:	ANSI C63.10: 2013						
Test Frequency Range:	150kHz to 30MHz						
Limit:	Fueron and a control (Add In)	Limit (c	IBuV)				
	Frequency range (MHz)	Quasi-peak	Average				
	0.15-0.5	66 to 56*	56 to 46*				
	0.5-5	56	46				
	5-30	60	50				
	* Decreases with the logarithm	n of the frequency.		1			
Test Procedure:	 The mains terminal disturble room. The EUT was connected to Impedance Stabilization 	o AC power source thro	ough a LISN 1 (Line				
	Impedance Stabilization Network) which provides a 50Ω/50μH linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the reference plane in the same way as the LISN 1 for the unit being measured. multiple socket outlet strip was used to connect multiple power cata single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above						
	ference plane. The read reference plane. The read reference plane. The horizontal ground om the boundary of the plane for LISNs his distance was	ear the the					
	the EUT and associated ed 5) In order to find the maximized equipment and all of the in ANSI C63.10: 2013 on cor	um emission, the relatinterface cables must be	ve positions of				



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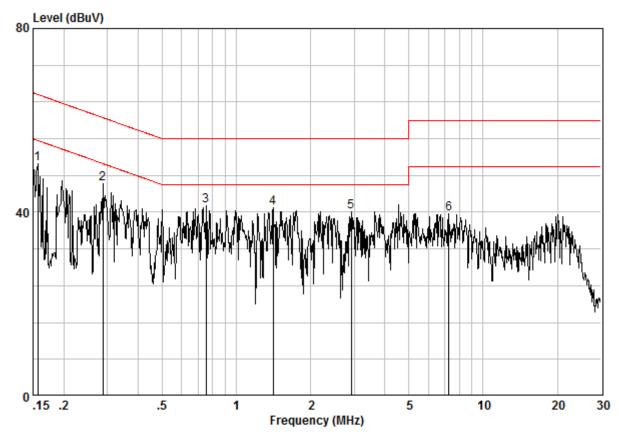
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Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:



Site : Shielding Room
Condition : CE LINE
Job No. : 0468RG
Test Mode : Charge+TX

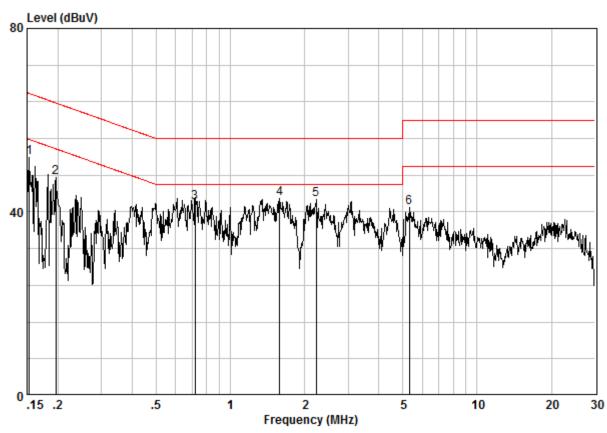
		Freq		LISN Factor			Limit Line		Remark
		MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	@	0.15649	0.02	9.59	40.93	50.54	55.65	-5.11	Peak
2	@	0.28782	0.01	9.59	36.52	46.13	50.59	-4.46	Peak
3	@	0.75493	0.02	9.60	31.85	41.48	46.00	-4.52	Peak
4	@	1.411	0.02	9.59	31.37	40.98	46.00	-5.02	Peak
5		2.915	0.02	9.62	30.48	40.12	46.00	-5.88	Peak
6		7.252	0.01	9.68	30.08	39.78	50.00	-10.22	Peak



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Neutral Line:



Site : Shielding Room Condition : CE NEUTRAL Job No. : 0468RG Test Mode : Charge+TX

		Freq		LISN Factor			Limit Line	Over Limit	Remark
		MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	@	0.15321	0.02	9.62	42.14	51.78	55.82	-4.04	Peak
2		0.19654	0.02	9.62	37.88	47.52	53.76	-6.23	Peak
3	@	0.71977	0.02	9.63	32.40	42.06	46.00	-3.94	Peak
4	@	1.585	0.02	9.64	33.21	42.88	46.00	-3.12	Peak
5	@	2.225	0.02	9.66	33.00	42.68	46.00	-3.32	Peak
6		5.305	0.01	9.72	31.28	41.01	50.00	-8.99	Peak

Notes:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.



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6.3 Conducted Peak Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)					
Test Method:	ANSI C63.10 2013					
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.					
Test Instruments:	Refer to section 5.10 for details					
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates					
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;					
	6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)					
Limit:	30dBm					
Test Results:	Pass					



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Pre-scan under all rate at lowest channel 1								
Mode		802	.11b					
Data Rate	1Mbps	2Mbps	5.5Mbps	11Mbps				
Power (dBm)	14.83	14.82	14.80	14.78				
Mode				802	2.11g			
Data Rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Power (dBm)	20.60	20.58	20.56	20.55	20.56	20.58	20.50	20.53
Mode				802.11	n(HT20)			
Data Rate	6.5Mbps	13Mbps	19.5Mbps	26Mbps	39Mbps	52Mbps	58.5Mbps	65Mbps
Power (dBm)	19.92	19.90	19.85	19.86	19.88	19.87	19.80	19.82
Mode	802.11n(HT40)							
Data Rate	13.5Mbps	27Mbps	40.5Mbps	54Mbps	81Mbps	108Mbps	121.5Mbps	135Mbps
Power (dBm)	19.98	19.95	19.85	19.86	19.88	19.92	19.96	19.90

Through Pre-scan, 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40).



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Measurement Data

	Micasurement Data						
	802.11b mode						
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result				
Lowest	14.94	30.00	Pass				
Middle	15.81	30.00	Pass				
Highest	16.83	30.00	Pass				
	802.11g mo	de					
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result				
Lowest	20.90	30.00	Pass				
Middle	20.69	30.00	Pass				
Highest	20.60	30.00	Pass				
	802.11n(HT20)	mode					
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result				
Lowest	19.92	30.00	Pass				
Middle	19.65	30.00	Pass				
Highest	19.36	30.00	Pass				
802.11n(HT40)mode							
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result				
Lowest	19.98	30.00	Pass				
Middle	19.99	30.00	Pass				
Highest	19.74	30.00	Pass				

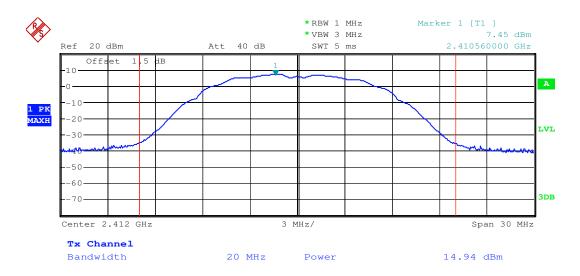


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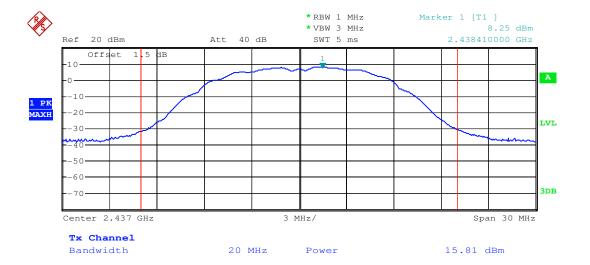
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Test plot as follows:

Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle

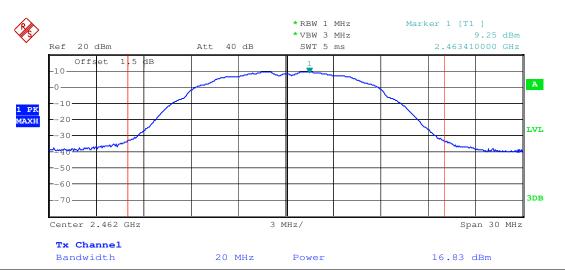




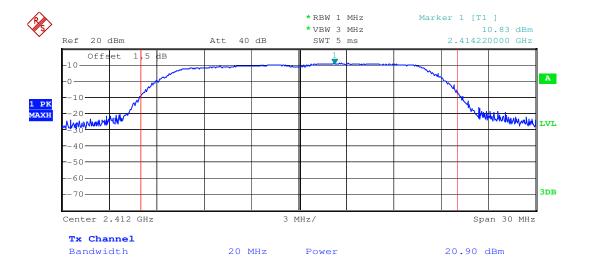
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Test mode: 802.11b Test channel: Highest



Test mode: 802.11g Test channel: Lowest

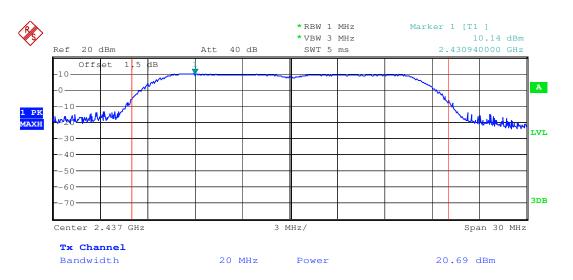




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Test mode: 802.11g Test channel: Middle



Test mode: 802.11g Test channel: Highest



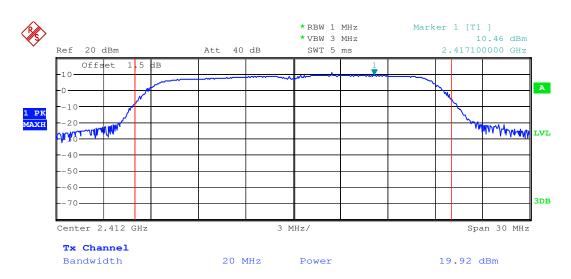




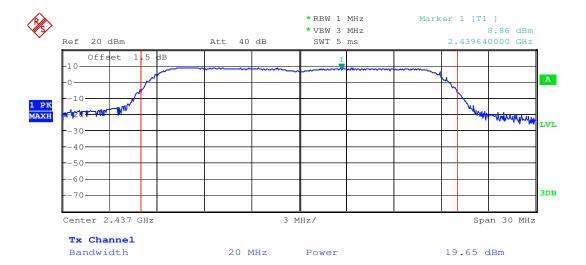
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Test mode: 802.11n(HT20) Test channel: Lowest



Test mode: 802.11n(HT20) Test channel: Middle

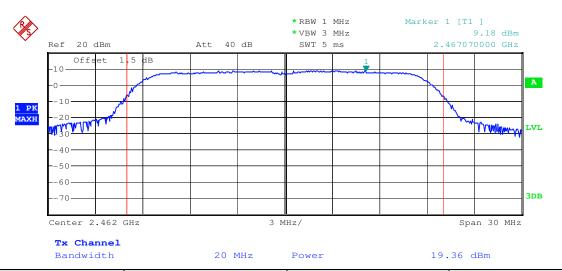




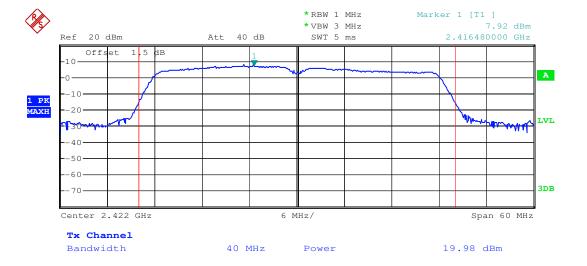
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Test mode: 802.11n(HT40) Test channel: Lowest

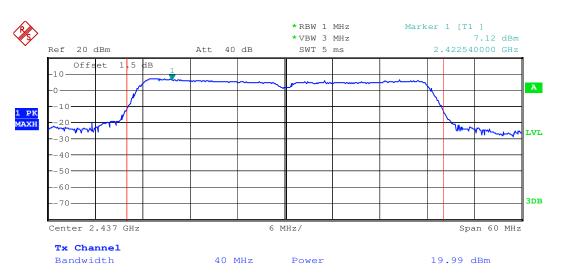




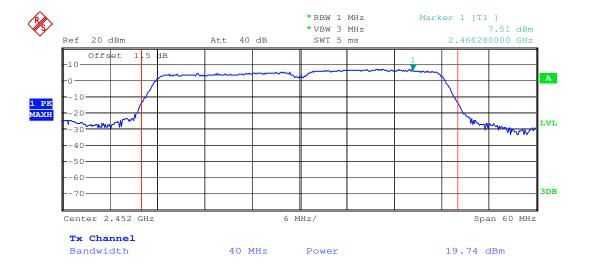
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Test mode: 802.11n(HT40) Test channel: Middle



Test mode: 802.11n(HT40) Test channel: Highest

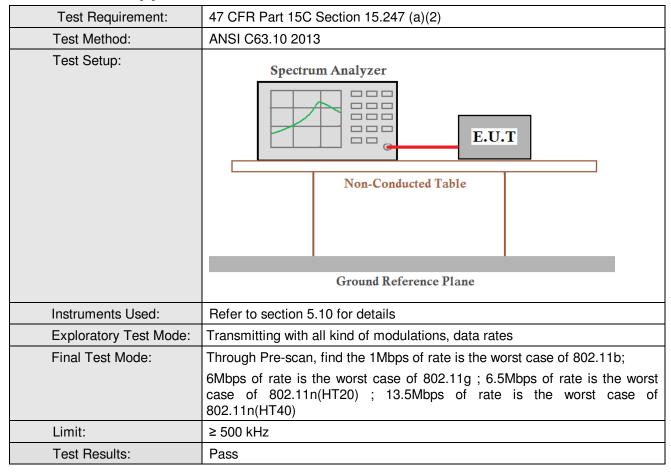




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6.4 6dB Occupy Bandwidth





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Measurement Data

	measurement bata							
	802.11b mode							
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result					
Lowest	9.12	≥500	Pass					
Middle	9.63	≥500	Pass					
Highest	9.63	≥500	Pass					
	802.11g mode							
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result					
Lowest	16.38	≥500	Pass					
Middle	16.41	≥500	Pass					
Highest	lighest 16.41		Pass					
	802.11n(HT20) mode							
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result					
Lowest	17.61	≥500	Pass					
Middle	17.67	≥500	Pass					
Highest	17.61	≥500	Pass					
	802.11n(HT40)mode							
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result					
Lowest	36.18	≥500	Pass					
Middle	36.06	≥500	Pass					
Highest	35.28	≥500	Pass					

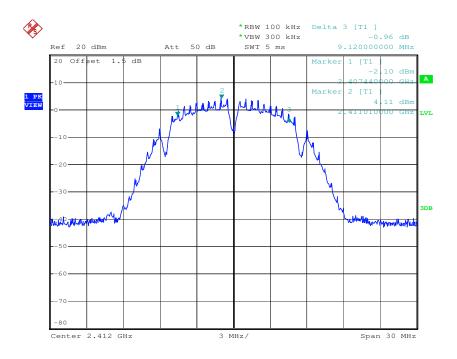


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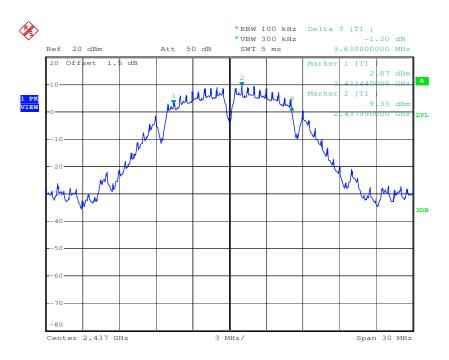
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Test plot as follows:

Test mode: 802.11b Test channel: Lowest





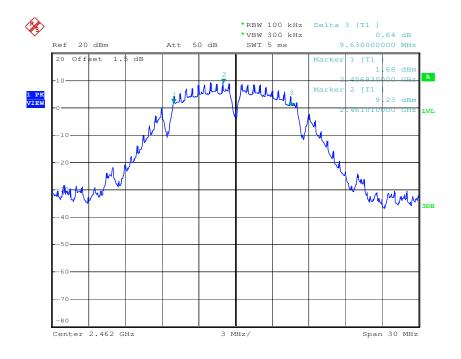




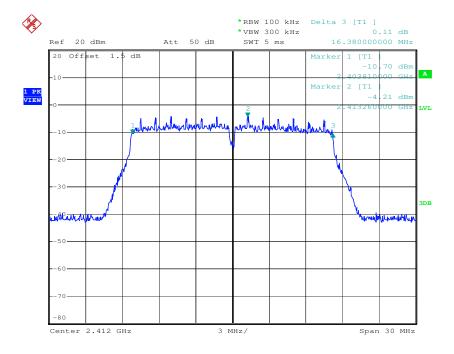
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Test mode: 802.11b Test channel: Highest





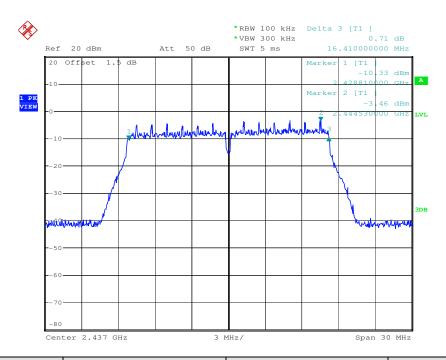




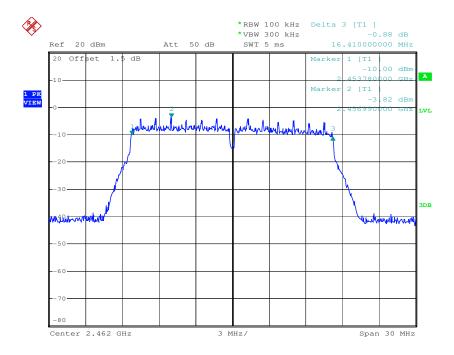
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Test mode: 802.11g Test channel: Middle





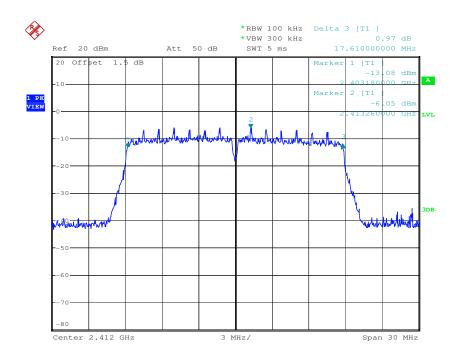




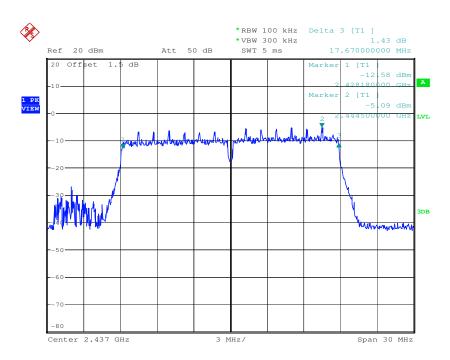
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Test mode: 802.11n(HT20) Test channel: Lowest





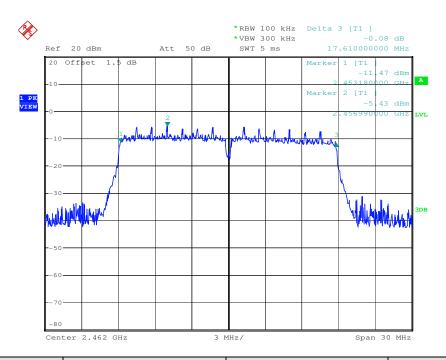




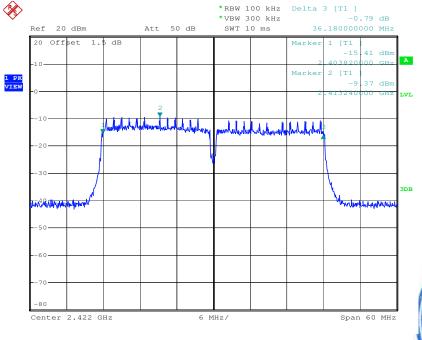
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Test mode: 802.11n(HT20) Test channel: Highest



Test mode: 802.11n(HT40) Test channel: Lowest



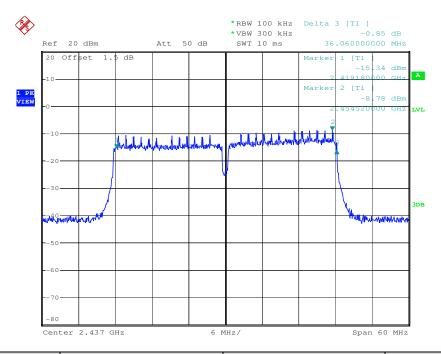




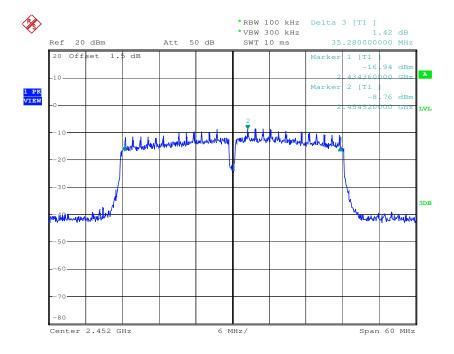
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Test mode: 802.11n(HT40) Test channel: Middle









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6.5 Power Spectral Density

Test Requirement:	47 CFR Part 15C Section 15.247 (e)					
Test Method:	ANSI C63.10 2013					
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark:					
	Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.					
Test Instruments:	Refer to section 5.10 for details					
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates					
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;					
	6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)					
Limit:	≤8.00dBm/3kHz					
Test Results:	Pass					



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Measurement Data

802.11b mode								
Test channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result					
Lowest	-9.70	≤8.00	Pass					
Middle	-4.52	≤8.00	Pass					
Highest	-4.75	≤8.00	Pass					
	802.11g mode							
Test channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result					
Lowest	-17.65	≤8.00	Pass					
Middle	-16.31	≤8.00	Pass					
Highest	-18.33	≤8.00	Pass					
	802.11n(HT20) mode							
Test channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result					
Lowest	-20.12	≤8.00	Pass					
Middle	-20.00	≤8.00	Pass					
Highest	-19.86	≤8.00	Pass					
	802.11n(HT40) mode							
Test channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result					
Lowest	-24.01	≤8.00	Pass					
Middle	-23.06	≤8.00	Pass					
Highest	-22.84	≤8.00	Pass					

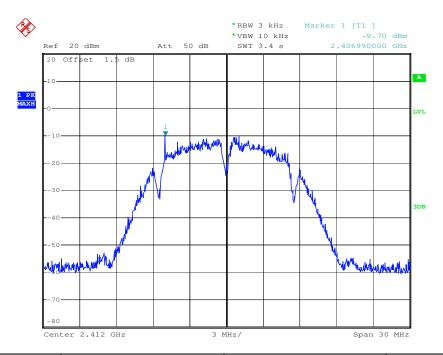


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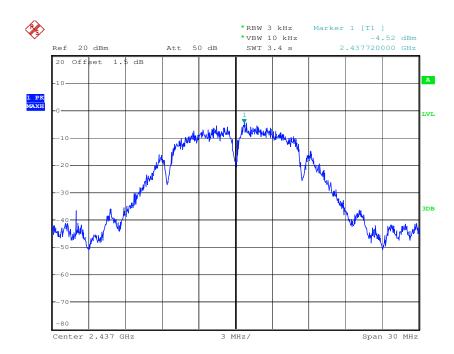
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Test plot as follows:

Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle

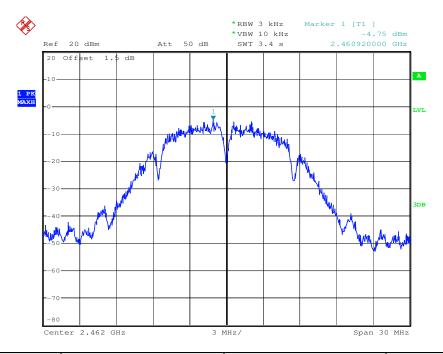




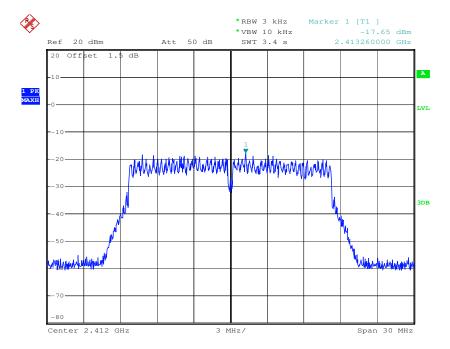
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Test mode: 802.11b Test channel: Highest



Test mode: 802.11g Test channel: Lowest

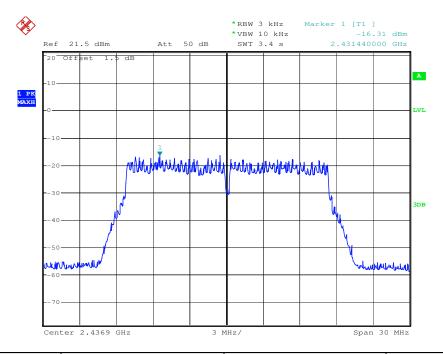




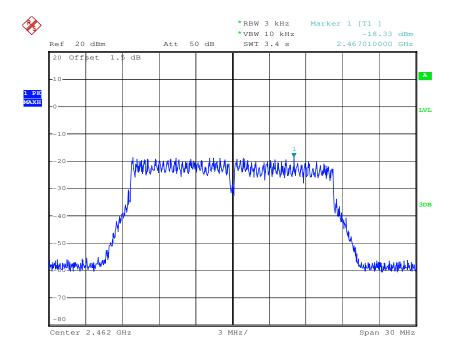
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Test mode: 802.11g Test channel: Middle





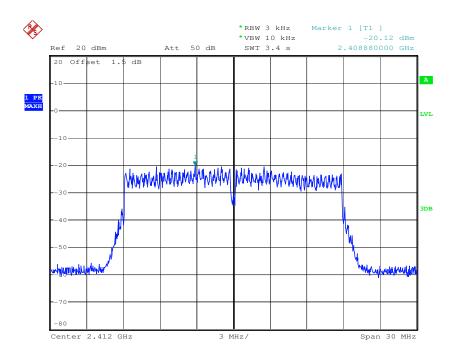




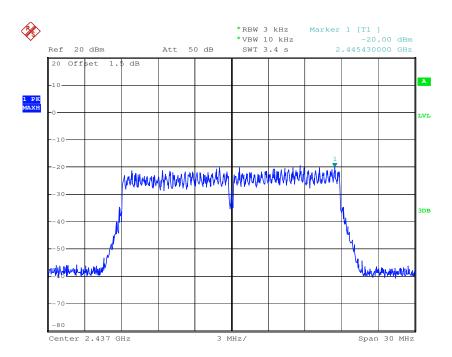
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Test mode: 802.11n(HT20) Test channel: Lowest





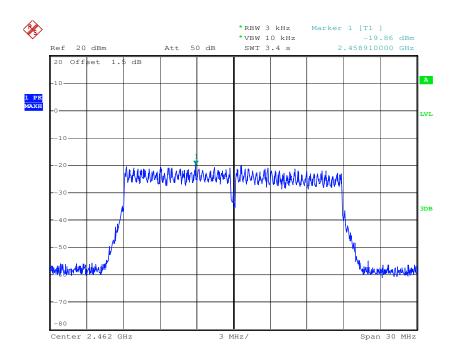




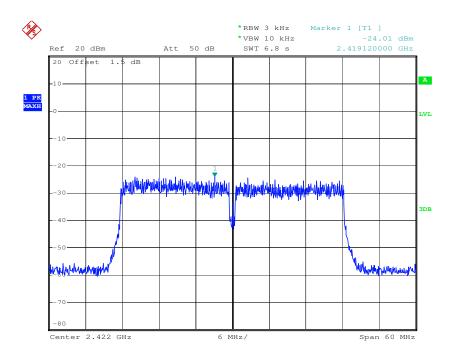
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Test mode: 802.11n(HT20) Test channel: Highest





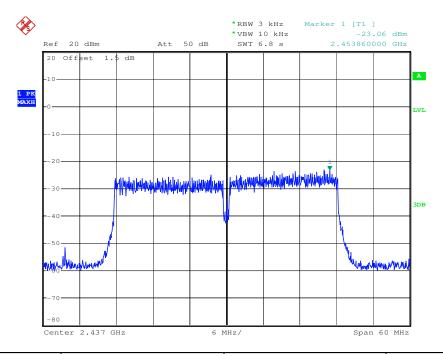




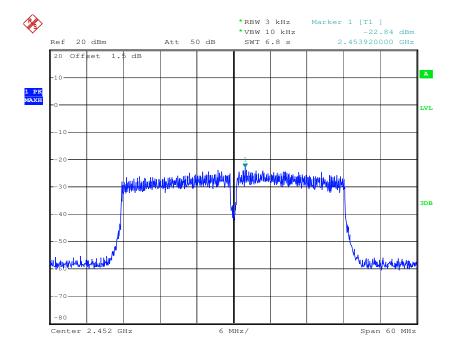
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Test mode: 802.11n(HT40) Test channel: Middle









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6.6 Band-edge for RF Conducted Emissions

	,
Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10 2013
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;
	6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



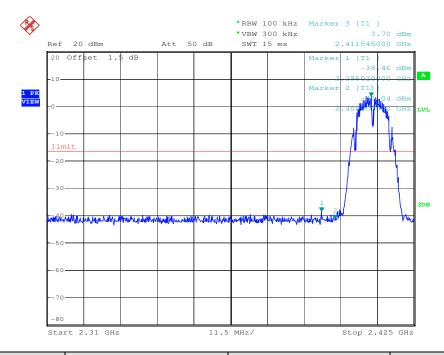


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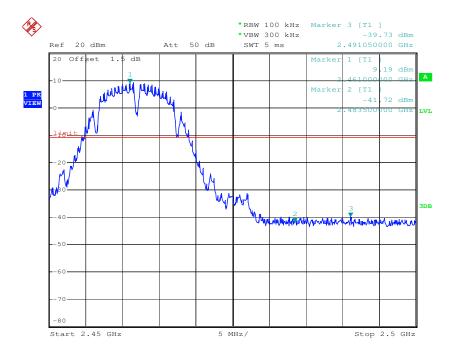
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Test plot as follows:

Test mode: 802.11b Test channel: Lowest





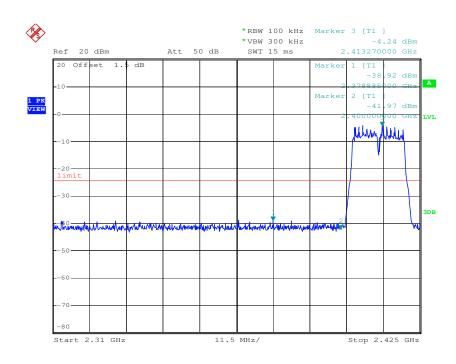




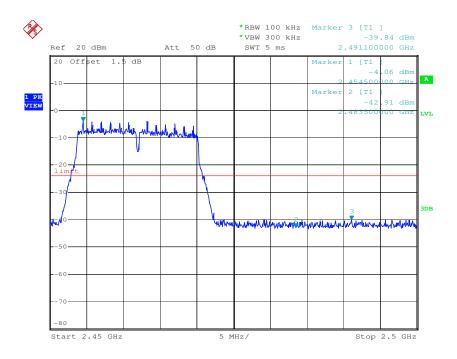
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Test mode: 802.11g Test channel: Lowest





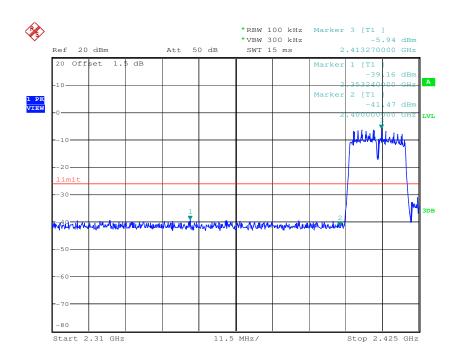




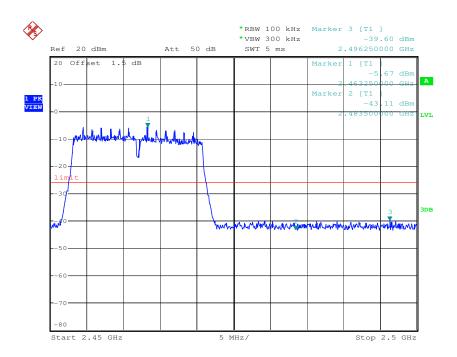
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Test mode: 802.11n(HT20) Test channel: Lowest





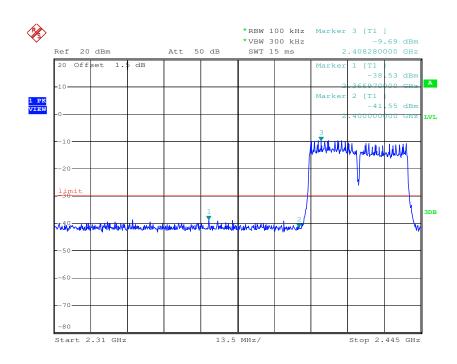


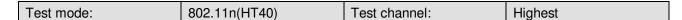


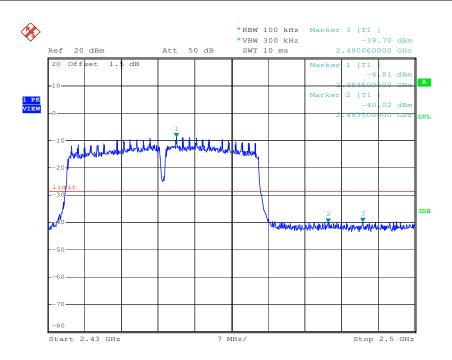
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Test mode: 802.11n(HT40) Test channel: Lowest









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6.7 RF Conducted Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)					
Test Method:	ANSI C63.10 2013					
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane					
	Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.					
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates					
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;					
	6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case					
I imait.	of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.					
Instruments Used:	Refer to section 5.10 for details					
Test Results:	Pass					

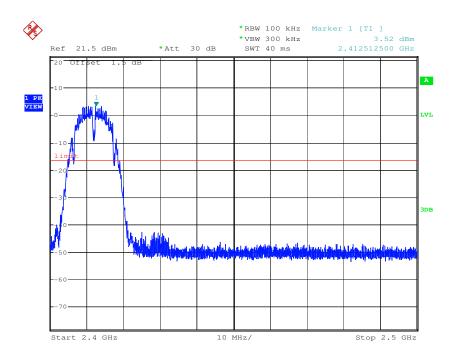


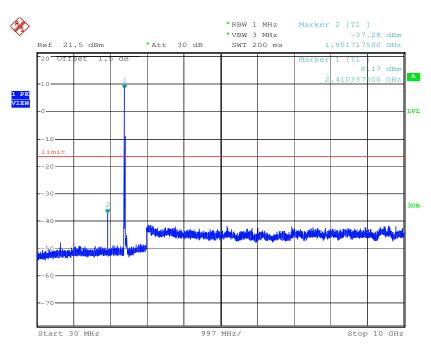
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Test plot as follows:

Test mode: 802.11b Test channel: Lowest

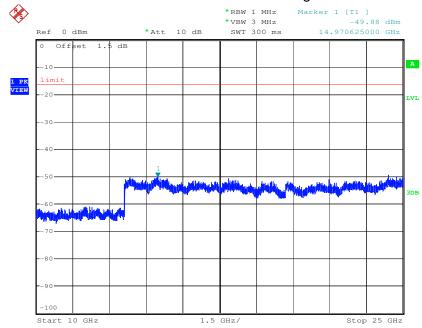




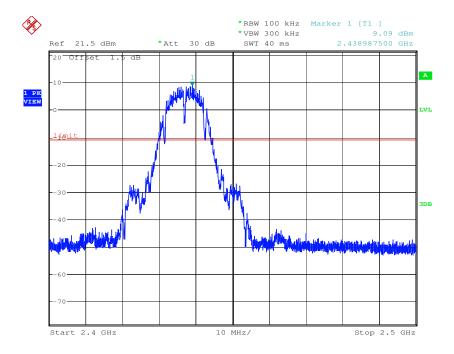


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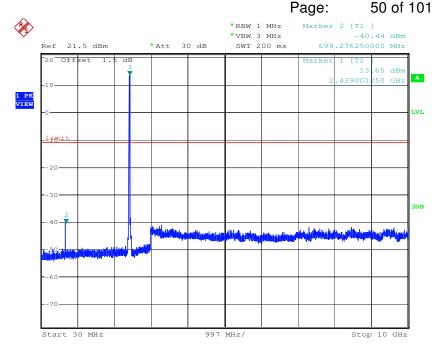


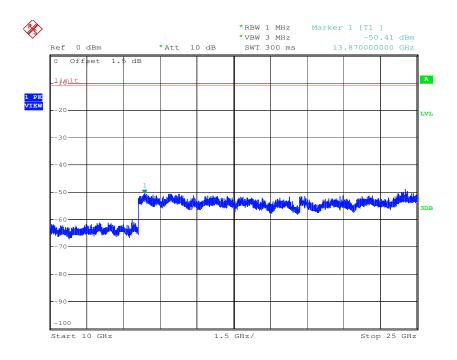






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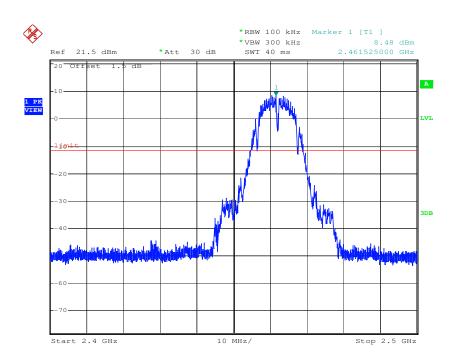


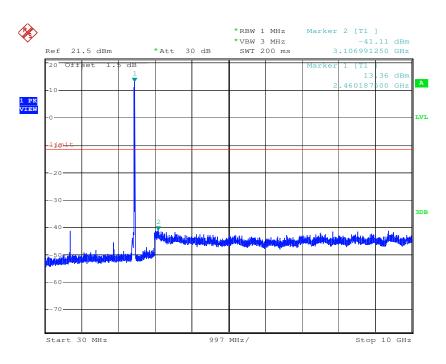


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Test mode: 802.11b Test channel: Highest

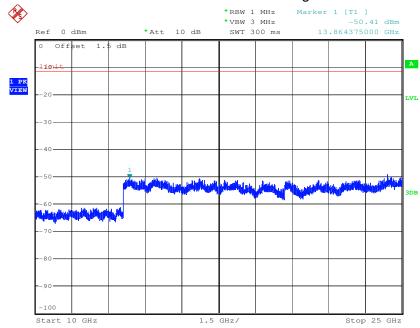




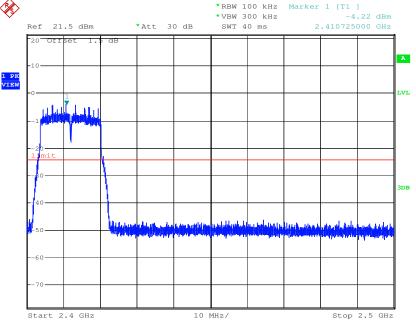


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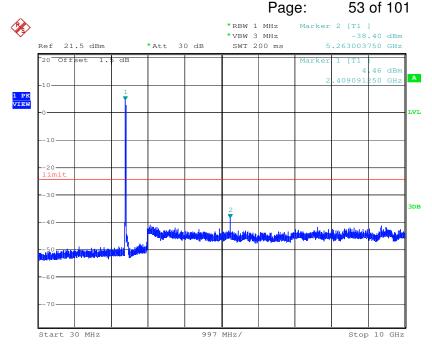
Test mode: 802.11g Test channel: Lowest

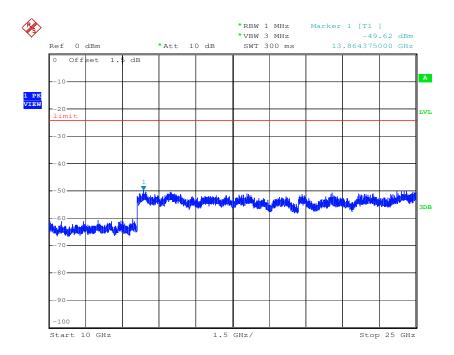






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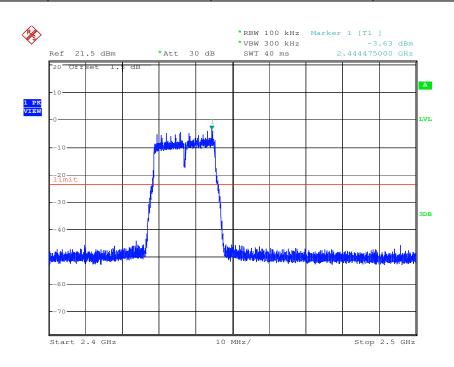


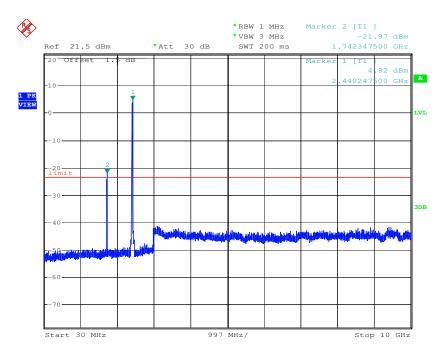


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Test mode: 802.11g Test channel: Middle

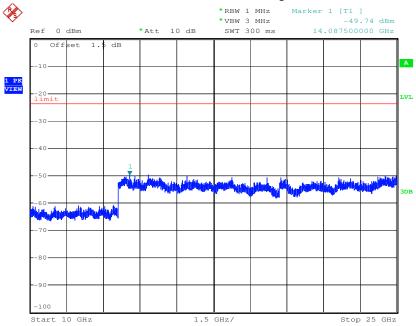




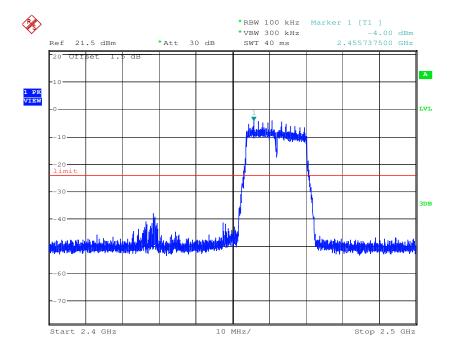


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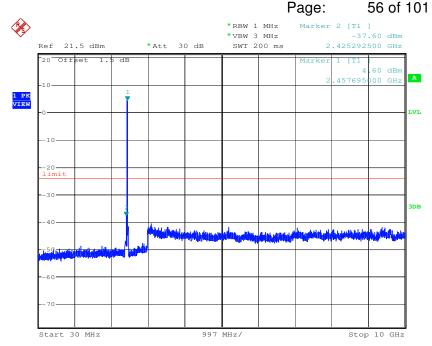


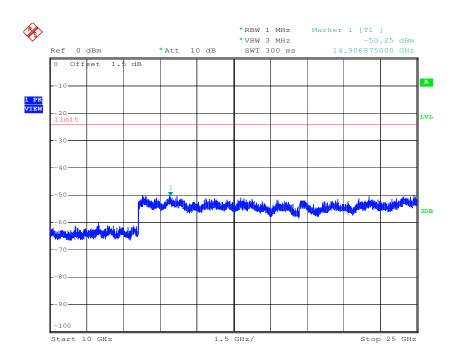
Test mode: 802.11g Test channel: Highest





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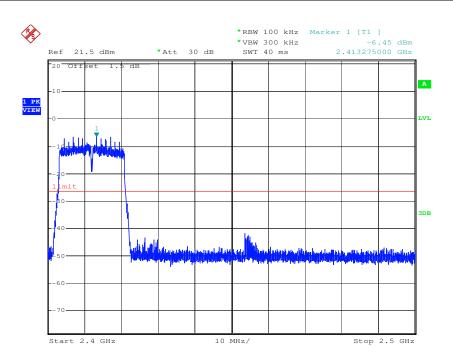


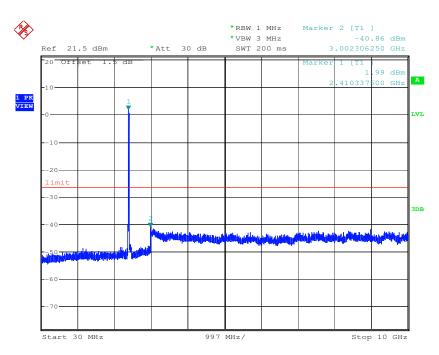


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Test mode: 802.11n(HT20) Test channel: Lowest

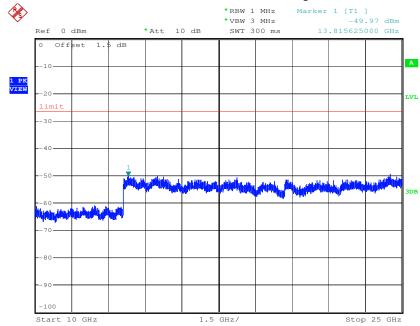




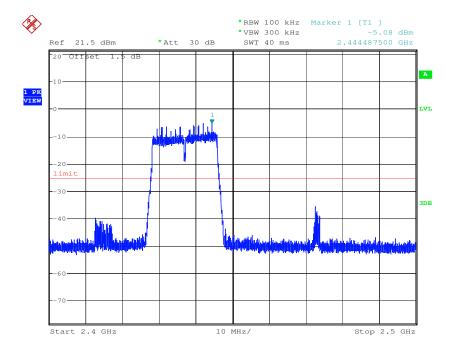


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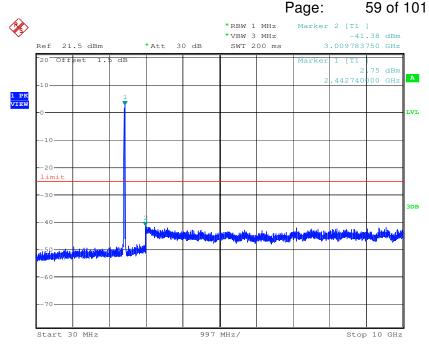


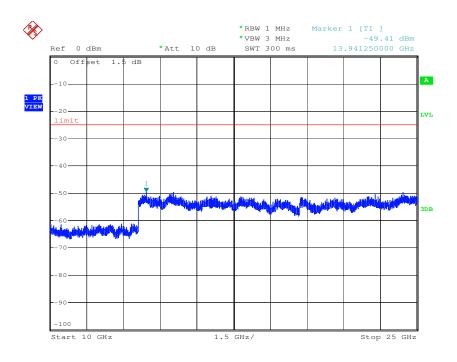






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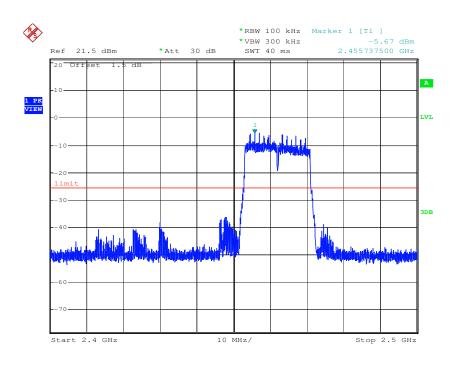


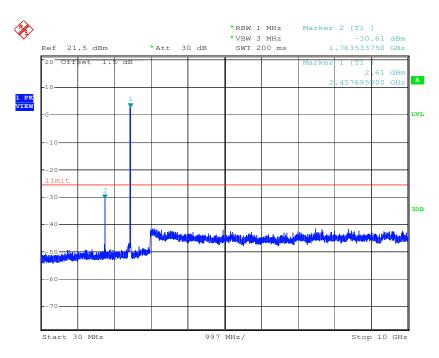


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Test mode: 802.11n(HT20) Test channel: Highest

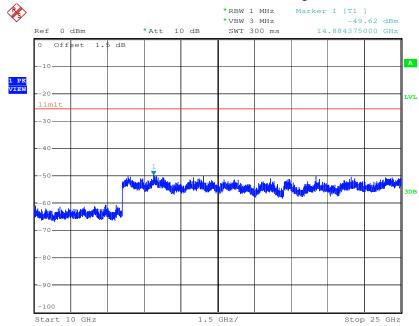




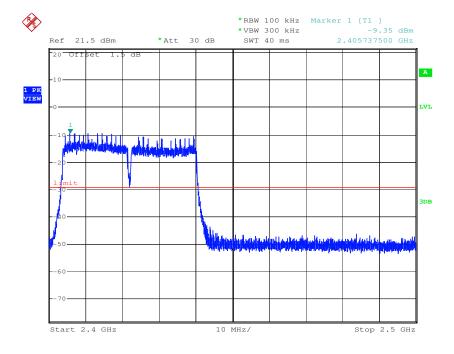


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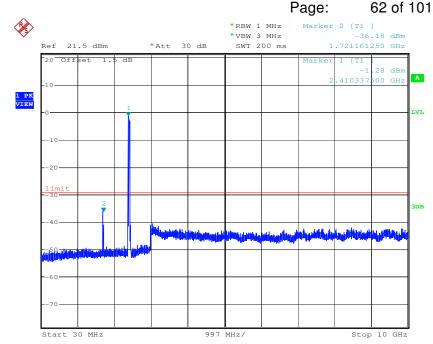


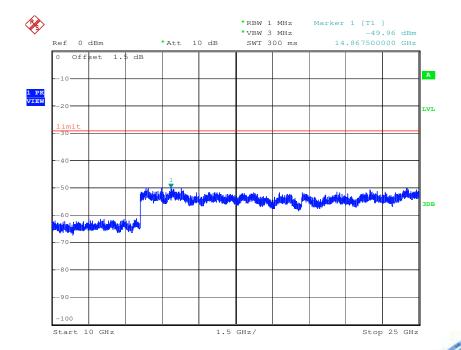






Report No.: SZEM160100046804



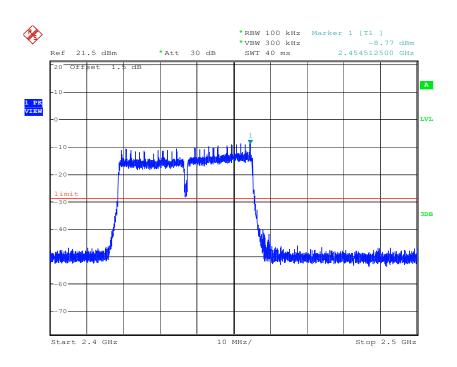


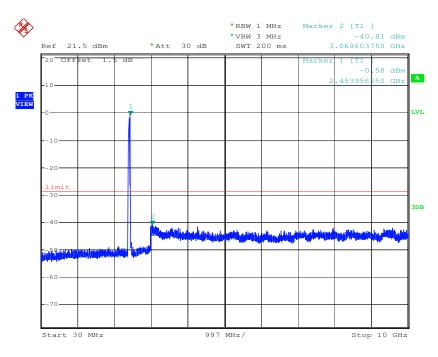


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Test mode: 802.11n(HT40) Test channel: Middle

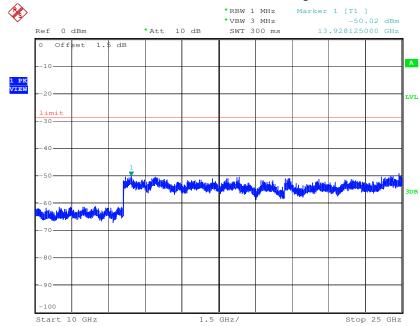




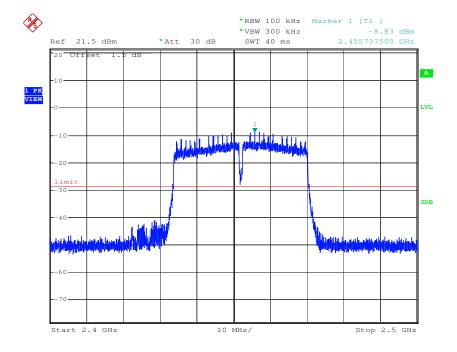


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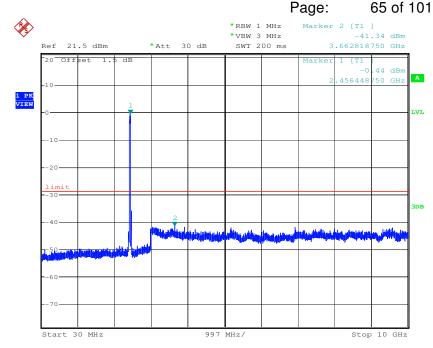


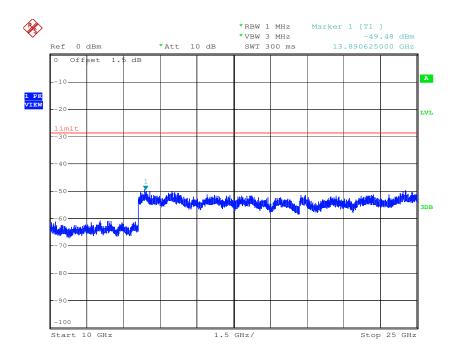






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Remark:

Use 100kHz RBW to determine the relative limit in the band 2.4GHz to 2.5GHz, and Use 1MHz RBW to measure spurious emissions in the band 30MHz to 10GHz and 10GHz to 25GHz. The sweep points set to 30001.



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6.8 Radiated Spurious Emissions

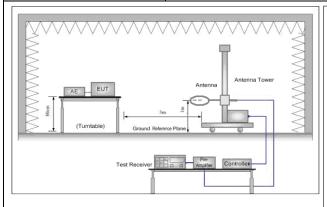
Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205									
Test Method:	ANSI C63.10 2013									
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)									
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark					
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak					
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average					
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak					
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak					
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average					
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak					
	30MHz-1GHz	Quasi-peak	100 kHz	300kHz	Quasi-peak					
	Above 1GHz	Peak	1MHz	3MHz	Peak					
	Above IGHZ	Peak	1MHz	10Hz	Average					
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)					
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300					
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30					
	1.705MHz-30MHz	30	-	-	30					
	30MHz-88MHz	100	40.0	Quasi-peak	3					
	88MHz-216MHz	150	43.5	Quasi-peak	3					
	216MHz-960MHz	200	46.0	Quasi-peak	3					
	960MHz-1GHz	500	54.0	Quasi-peak	3					
	Above 1GHz	500	54.0	Average	3					
	Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency									
	emissions is 20dB above the maximum permitted average emission limit									
	applicable to the peak		·	eak limit app	olies to the total					
	emission level rad	iated by the device	е.							



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Test Setup:



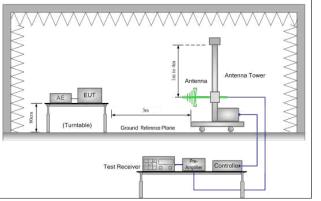


Figure 1. Below 30MHz

Figure 2. 30MHz to 1GHz

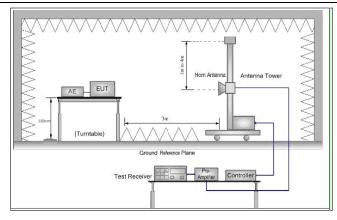


Figure 3. Above 1 GHz

Test Procedure:

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation
- c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters(for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



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g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
j. Repeat above procedures until all frequencies measured was complete.
Transmitting with all kind of modulations, data rates.
Transmitting mode, Charge + Transmitting mode.
Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case
Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;
6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case
of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)
For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11b at lowest channel is the worst case.
Only the worst case is recorded in the report.
Refer to section 5.10 for details
Pass



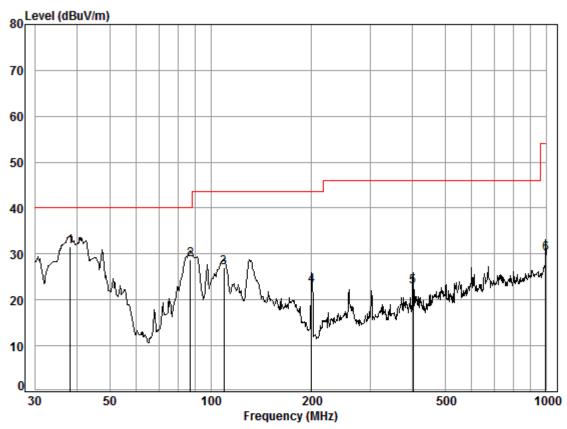
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6.8.1 Radiated emission below 1GHz

30MHz~1GHz (QP)		
Test mode:	Charge + Transmitting	Vertical





Condition: 3m VERTICAL

Job No. : 0468RG

Test mode: Charge+Tx mode

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	——dB	dBuV	dBuV/m	dBuV/m	——dB
			GD,			asar,	asar,	
1	38.21	0.60	14.12	27.33	44.31	31.70	40.00	-8.30
2	87.11	1.10	8.52	27.22	46.30	28.70	40.00	-11.30
3	109.41	1.23	8.72	27.14	44.21	27.02	43.50	-16.48
4	199.99	1.40	10.20	26.70	38.13	23.03	43.50	-20.47
5	400.43	2.20	16.40	27.13	31.37	22.84	46.00	-23.16
6	996.50	3.70	24.04	26.33	28.75	30.16	54.00	-23.84

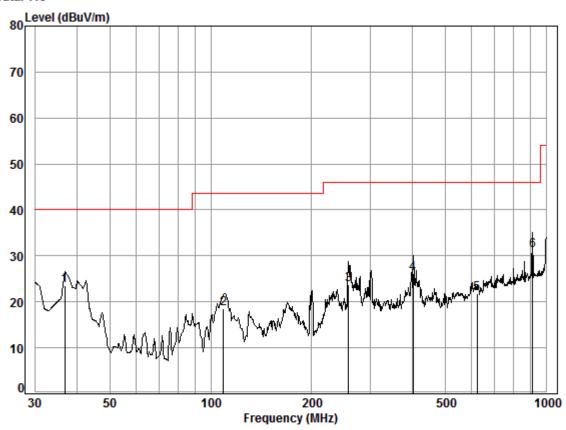


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Test mode: Charge + Transmitting Horizontal

Data: 113



Condition: 3m HORIZONTAL

Job No. : 0468RG

Test mode: Charge+Tx mode

		0						
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	36.77	0.60	14.90	27.33	35.44	23.61	40.00	-16.39
2	109.03	1.23	8.74	27.14	35.65	18.48	43.50	-25.02
3	257.42	1.71	12.35	26.51	36.23	23.78	46.00	-22.22
4	400.43	2.20	16.40	27.13	34.65	26.12	46.00	-19.88
5	622.89	2.75	20.25	27.51	26.22	21.71	46.00	-24.29
6	909.67	3.61	23.28	26.71	30.89	31.07	46.00	-14.93



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6.8.2 Transmitter emission above 1GHz

Test mode:	802	.11b	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3663.017	32.36	7.69	38.43	46.27	47.89	74	-26.11	Vertical
4824.000	34.12	8.90	38.75	45.92	50.19	74	-23.81	Vertical
5982.226	34.66	10.51	38.96	46.23	52.44	74	-21.56	Vertical
7236.000	35.58	10.69	37.63	41.15	49.79	74	-24.21	Vertical
9648.000	37.10	12.52	36.29	35.86	49.19	74	-24.81	Vertical
12566.850	37.87	14.34	37.72	38.65	53.14	74	-20.86	Vertical
3903.804	33.01	7.78	38.52	45.91	48.18	74	-25.82	Horizontal
4824.000	34.12	8.90	38.75	45.98	50.25	74	-23.75	Horizontal
5947.702	34.57	10.42	38.95	46.38	52.42	74	-21.58	Horizontal
7236.000	35.58	10.69	37.63	41.40	50.04	74	-23.96	Horizontal
9648.000	37.10	12.52	36.29	37.15	50.48	74	-23.52	Horizontal
12603.270	37.90	14.44	37.75	37.65	52.24	74	-21.76	Horizontal

Test mode:	802	.11b	Test ch	annel:	Middle	Remark		Peak
Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Polarization
3663.017	32.36	7.69	38.43	45.80	47.42	74	-26.58	Vertical
4874.000	34.17	8.97	38.76	46.28	50.66	74	-23.34	Vertical
5964.939	34.61	10.46	38.95	46.56	52.68	74	-21.32	Vertical
7311.000	35.54	10.72	37.59	42.56	51.23	74	-22.77	Vertical
9748.000	37.10	12.58	36.16	38.25	51.77	74	-22.23	Vertical
12639.790	37.92	14.55	37.79	39.04	53.72	74	-20.28	Vertical
3881.276	32.98	7.77	38.52	45.94	48.17	74	-25.83	Horizontal
4874.000	34.17	8.97	38.76	47.04	51.42	74	-22.58	Horizontal
6157.871	34.78	10.36	38.75	46.06	52.45	74	-21.55	Horizontal
7311.000	35.54	10.72	37.59	42.12	50.79	74	-23.21	Horizontal
9748.000	37.10	12.58	36.16	38.45	51.97	74	-22.03	Horizontal
12639.790	37.92	14.55	37.79	38.29	52.97	74	-21.03	Horizontal



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Test mode: 802.11b		Test ch	annel:	Highest Remark:		:	Peak	
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3781.495	32.83	7.73	38.48	45.56	47.64	74	-26.36	Vertical
4924.000	34.22	9.04	38.77	45.65	50.14	74	-23.86	Vertical
6140.076	34.77	10.38	38.78	47.55	53.92	74	-20.08	Vertical
7386.000	35.51	10.75	37.56	40.81	49.51	74	-24.49	Vertical
9848.000	37.15	12.63	36.03	38.80	52.55	74	-21.45	Vertical
12639.790	37.92	14.55	37.79	37.61	52.29	74	-21.71	Vertical
3792.453	32.87	7.74	38.48	45.07	47.20	74	-26.80	Horizontal
4924.000	34.22	9.04	38.77	46.20	50.69	74	-23.31	Horizontal
6140.076	34.77	10.38	38.78	46.28	52.65	74	-21.35	Horizontal
7386.000	35.51	10.75	37.56	39.84	48.54	74	-25.46	Horizontal
9848.000	37.15	12.63	36.03	38.58	52.33	74	-21.67	Horizontal
12676.420	37.94	14.65	37.82	37.15	51.92	74	-22.08	Horizontal

Test mode:	802	.11g	Test ch	annel:	Lowest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3748.808	32.70	7.72	38.47	45.59	47.54	74	-26.46	Vertical
4824.000	34.12	8.90	38.75	46.47	50.74	74	-23.26	Vertical
5999.562	34.70	10.56	38.96	46.05	52.35	74	-21.65	Vertical
7236.000	35.58	10.69	37.63	41.15	49.79	74	-24.21	Vertical
9648.000	37.10	12.52	36.29	36.42	49.75	74	-24.25	Vertical
12530.530	37.83	14.24	37.68	37.59	51.98	74	-22.02	Vertical
3694.956	32.49	7.70	38.44	46.16	47.91	74	-26.09	Horizontal
4824.000	34.12	8.90	38.75	46.68	50.95	74	-23.05	Horizontal
5930.516	34.53	10.37	38.95	46.83	52.78	74	-21.22	Horizontal
7236.000	35.58	10.69	37.63	41.50	50.14	74	-23.86	Horizontal
9648.000	37.10	12.52	36.29	36.32	49.65	74	-24.35	Horizontal
12530.530	37.83	14.24	37.68	37.70	52.09	74	-21.91	Horizontal



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Test mode:	802	.11g	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3926.464	33.03	7.78	38.53	46.10	48.38	74	-25.62	Vertical
4874.000	34.17	8.97	38.76	45.97	50.35	74	-23.65	Vertical
5964.939	34.61	10.46	38.95	45.63	51.75	74	-22.25	Vertical
7311.000	35.54	10.72	37.59	41.71	50.38	74	-23.62	Vertical
9748.000	37.10	12.58	36.16	37.75	51.27	74	-22.73	Vertical
12530.530	37.83	14.24	37.68	38.87	53.26	74	-20.74	Vertical
3748.808	32.70	7.72	38.47	45.04	46.99	74	-27.01	Horizontal
4874.000	34.17	8.97	38.76	45.92	50.30	74	-23.70	Horizontal
5982.226	34.66	10.51	38.96	45.85	52.06	74	-21.94	Horizontal
7311.000	35.54	10.72	37.59	41.88	50.55	74	-23.45	Horizontal
9748.000	37.10	12.58	36.16	38.95	52.47	74	-21.53	Horizontal
12530.530	37.83	14.24	37.68	37.68	52.07	74	-21.93	Horizontal

Test mode:	802	2.11g	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3915.118	33.02	7.78	38.53	46.19	48.46	74	-25.54	Vertical
4924.000	34.22	9.04	38.77	46.31	50.80	74	-23.20	Vertical
5896.291	34.44	10.27	38.94	46.40	52.17	74	-21.83	Vertical
7386.000	35.51	10.75	37.56	40.29	48.99	74	-25.01	Vertical
9848.000	37.15	12.63	36.03	38.64	52.39	74	-21.61	Vertical
12621.510	37.91	14.50	37.77	37.38	52.02	74	-21.98	Vertical
3915.118	33.02	7.78	38.53	45.23	47.50	74	-26.50	Horizontal
4924.000	34.22	9.04	38.77	45.74	50.23	74	-23.77	Horizontal
5964.939	34.61	10.46	38.95	46.29	52.41	74	-21.59	Horizontal
7386.000	35.51	10.75	37.56	40.18	48.88	74	-25.12	Horizontal
9848.000	37.15	12.63	36.03	38.58	52.33	74	-21.67	Horizontal
12566.850	37.87	14.34	37.72	37.58	52.07	74	-21.93	Horizontal



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Test mode:	802	2.11n(HT20)	Test ch	annel:	Lowest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3759.672	32.74	7.73	38.47	45.72	47.72	74	-26.28	Vertical
4824.000	34.12	8.90	38.75	45.86	50.13	74	-23.87	Vertical
5999.562	34.70	10.56	38.96	45.30	51.60	74	-22.40	Vertical
7236.000	35.58	10.69	37.63	40.75	49.39	74	-24.61	Vertical
9648.000	37.10	12.52	36.29	36.93	50.26	74	-23.74	Vertical
12566.850	37.87	14.34	37.72	37.85	52.34	74	-21.66	Vertical
3792.453	32.87	7.74	38.48	44.95	47.08	74	-26.92	Horizontal
4824.000	34.12	8.90	38.75	46.25	50.52	74	-23.48	Horizontal
6016.949	34.71	10.54	38.94	45.63	51.94	74	-22.06	Horizontal
7236.000	35.58	10.69	37.63	41.90	50.54	74	-23.46	Horizontal
9648.000	37.10	12.52	36.29	36.28	49.61	74	-24.39	Horizontal
12566.850	37.87	14.34	37.72	37.64	52.13	74	-21.87	Horizontal

Test mode:		802.	.11n(HT20)	Test cha	annel:	Middle	Remark		Peak
Frequency (MHz)	Cal Lo: (dl	SS	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3684.279	32.	44	7.70	38.44	45.55	47.25	74	-26.75	Vertical
4874.000	34.	17	8.97	38.76	45.77	50.15	74	-23.85	Vertical
5913.378	34.	49	10.32	38.95	46.50	52.36	74	-21.64	Vertical
7311.000	35.	54	10.72	37.59	41.90	50.57	74	-23.43	Vertical
9748.000	37.	10	12.58	36.16	38.36	51.88	74	-22.12	Vertical
12603.270	37.	90	14.44	37.75	37.83	52.42	74	-21.58	Vertical
3705.664	32.	53	7.71	38.45	45.57	47.36	74	-26.64	Horizontal
4874.000	34.	17	8.97	38.76	45.83	50.21	74	-23.79	Horizontal
6175.716	34.	79	10.33	38.73	46.29	52.68	74	-21.32	Horizontal
7311.000	35.	54	10.72	37.59	41.81	50.48	74	-23.52	Horizontal
9748.000	37.	10	12.58	36.16	37.16	50.68	74	-23.32	Horizontal
12694.780	37.	95	14.70	37.84	37.86	52.67	74	-21.33	Horizontal



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Test mode:	80)2.11n(HT20)	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3937.843	33.04	7.79	38.54	45.84	48.13	74	-25.87	Vertical
4924.000	34.22	9.04	38.77	45.91	50.40	74	-23.60	Vertical
5947.702	34.57	10.42	38.95	45.82	51.86	74	-22.14	Vertical
7386.000	35.51	10.75	37.56	40.20	48.90	74	-25.10	Vertical
9848.000	37.15	12.63	36.03	38.25	52.00	74	-22.00	Vertical
12639.790	37.92	14.55	37.79	37.30	51.98	74	-22.02	Vertical
3781.495	32.83	7.73	38.48	44.68	46.76	74	-27.24	Horizontal
4924.000	34.22	9.04	38.77	45.55	50.04	74	-23.96	Horizontal
5982.226	34.66	10.51	38.96	46.21	52.42	74	-21.58	Horizontal
7386.000	35.51	10.75	37.56	40.17	48.87	74	-25.13	Horizontal
9848.000	37.15	12.63	36.03	38.60	52.35	74	-21.65	Horizontal
12603.270	37.90	14.44	37.75	38.19	52.78	74	-21.22	Horizontal

Test mode:	802	2.11n(HT40)	D) Test channel: Lowest Ro		Remark	:	Peak	
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3814.467	32.91	7.75	38.49	45.25	47.42	74	-26.58	Vertical
4844.000	34.14	8.92	38.76	46.21	50.51	74	-23.49	Vertical
6087.002	34.74	10.45	38.85	45.95	52.29	74	-21.71	Vertical
7266.000	35.57	10.70	37.61	41.75	50.41	74	-23.59	Vertical
9688.000	37.10	12.54	36.24	36.40	49.80	74	-24.20	Vertical
12566.850	37.87	14.34	37.72	37.35	51.84	74	-22.16	Vertical
3915.118	33.02	7.78	38.53	45.30	47.57	74	-26.43	Horizontal
4844.000	34.14	8.92	38.76	45.37	49.67	74	-24.33	Horizontal
5982.226	34.66	10.51	38.96	46.62	52.83	74	-21.17	Horizontal
7266.000	35.57	10.70	37.61	41.97	50.63	74	-23.37	Horizontal
9688.000	37.10	12.54	36.24	36.69	50.09	74	-23.91	Horizontal
12676.420	37.94	14.65	37.82	37.97	52.74	74	-21.26	Horizontal



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Test mode:		802.	.11n(HT40)	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cab Los (dE	SS	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3915.118	33.0)2	7.78	38.53	45.06	47.33	74	-26.67	Vertical
4874.000	34.1	17	8.97	38.76	45.79	50.17	74	-23.83	Vertical
5913.378	34.4	49	10.32	38.95	46.71	52.57	74	-21.43	Vertical
7311.000	35.5	54	10.72	37.59	41.66	50.33	74	-23.67	Vertical
9748.000	37.1	10	12.58	36.16	38.20	51.72	74	-22.28	Vertical
12530.530	37.8	33	14.24	37.68	37.59	51.98	74	-22.02	Vertical
3983.689	33.0	80	7.80	38.55	45.85	48.18	74	-25.82	Horizontal
4874.000	34.1	17	8.97	38.76	45.51	49.89	74	-24.11	Horizontal
5964.939	34.6	61	10.46	38.95	46.57	52.69	74	-21.31	Horizontal
7311.000	35.5	54	10.72	37.59	42.11	50.78	74	-23.22	Horizontal
9748.000	37.1	10	12.58	36.16	37.85	51.37	74	-22.63	Horizontal
12530.530	37.8	33	14.24	37.68	38.44	52.83	74	-21.17	Horizontal

Test mode:	802	.11n(HT40)	Test ch	annel:	Highest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3926.464	33.03	7.78	38.53	45.69	47.97	74	-26.03	Vertical
4904.000	34.21	9.01	38.77	46.33	50.78	74	-23.22	Vertical
6140.076	34.77	10.38	38.78	46.41	52.78	74	-21.22	Vertical
7356.000	35.52	10.74	37.57	42.32	51.01	74	-22.99	Vertical
9808.000	37.11	12.61	36.08	38.18	51.82	74	-22.18	Vertical
12530.530	37.83	14.24	37.68	37.41	51.80	74	-22.20	Vertical
3705.664	32.53	7.71	38.45	45.01	46.80	74	-27.20	Horizontal
4904.000	34.21	9.01	38.77	46.18	50.63	74	-23.37	Horizontal
6122.333	34.76	10.40	38.80	45.24	51.60	74	-22.40	Horizontal
7356.000	35.52	10.74	37.57	42.55	51.24	74	-22.76	Horizontal
9808.000	37.11	12.61	36.08	38.42	52.06	74	-21.94	Horizontal
12530.530	37.83	14.24	37.68	37.87	52.26	74	-21.74	Horizontal



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Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

- 2) Scan from 9kHz to 25GHz, The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

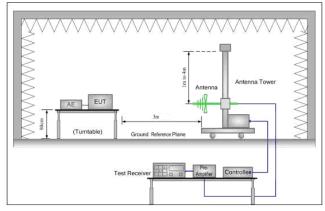


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6.9 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 1	17 CFR Part 15C Section 15.209 and 15.205								
Test Method:	ANSI C63.10 2013	ANSI C63.10 2013								
Test Site:	Measurement Distance: 3n	Measurement Distance: 3m (Semi-Anechoic Chamber)								
Limit:	Frequency	Limit (dBuV/m @3m)	Remark							
	30MHz-88MHz	40.0	Quasi-peak Value							
	88MHz-216MHz 43.5 Quasi-peak Val									
	216MHz-960MHz	46.0	Quasi-peak Value							
	960MHz-1GHz	54.0	Quasi-peak Value							
	Above 1GHz	54.0 Average Value								
	Above IGHZ	74.0 Peak Value								
Test Setup:										



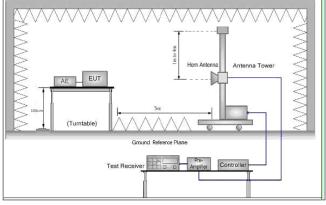


Figure 1. 30MHz to 1GHz

Figure 2. Above 1 GHz



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Test Procedure: a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tunned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel, the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, Charge + Transmitting mode. Pretest the EUT at Transmitting mode and Charge + Transmitting mode, Charge + Transmitting mode. Pretest the EUT at Transmitting mode and Charge + Transmitting mode, found the Charge + Transmitting		
1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel , the Highest channel h. Test the EUT in the lowest channel , the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode. Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n (HT40) Only the worst case is recorded in the report.	Test Procedure:	meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest
antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel , the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Transmitting with all kind of modulations, data rates. Transmitting mode, Charge + Transmitting mode. Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report.		1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest
ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel , the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report.		antenna, which was mounted on the top of a variable-height antenna
and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel , the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Transmitting with all kind of modulations, data rates. Transmitting mode, Charge + Transmitting mode. Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report.		ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make
Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel, the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Transmitting with all kind of modulations, data rates. Transmitting mode, Charge + Transmitting mode. Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to
transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel, the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Transmitting with all kind of modulations, data rates. Transmitting mode, Charge + Transmitting mode. Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Transmitting with all kind of modulations, data rates. Transmitting mode, Charge + Transmitting mode. Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for
for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Transmitting with all kind of modulations, data rates. Transmitting mode, Charge + Transmitting mode. Pretest the EUT at Transmitting mode and Charge + Transmitting mode, found the Charge + Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		h. Test the EUT in the lowest channel, the Highest channel
complete. Exploratory Test Mode: Transmitting with all kind of modulations, data rates. Transmitting mode, Charge + Transmitting mode. Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		for Transmitting mode, And found the X axis positioning which it is
Transmitting mode, Charge + Transmitting mode. Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
Final Test Mode: Pretest the EUT at Transmitting mode and Charge +Transmitting mode, found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details	Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
found the Charge +Transmitting mode which it is worse case Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		Transmitting mode, Charge + Transmitting mode.
6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details	Final Test Mode:	
case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;
Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		
Instruments Used: Refer to section 5.10 for details		of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)
		Only the worst case is recorded in the report.
Test Results: Pass	Instruments Used:	Refer to section 5.10 for details
	Test Results:	Pass

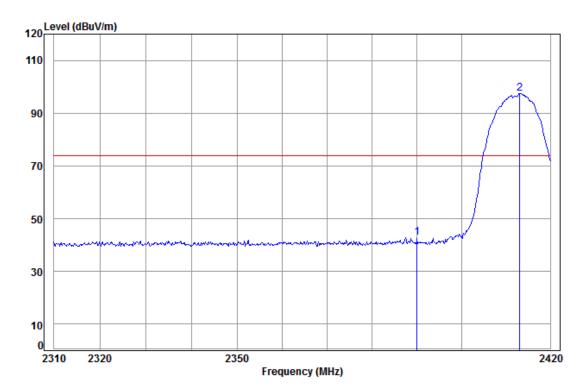


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Test plot as follows:

Worse case mode: 802.11b Test channel: Remark: Peak Vertical Lowest



Condition: 3m Vertical

Job No: : 0616CR

Mode: : 2412 Band edge

: B

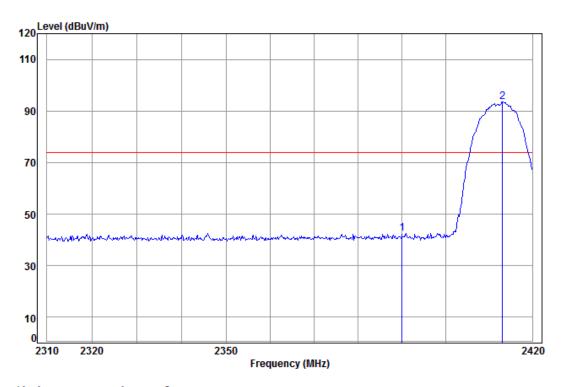
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	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
_								
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pk	2390.00	5.34	28.57	38.11	47.17	42.97	74.00	-31.03
2 pp	2413.14	5.36	28.66	38.11	101.60	97.51	74.00	23.51



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Worse case mode: 802.11b Test channel: Lowest Remark: Peak Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2412 Band edge

: B

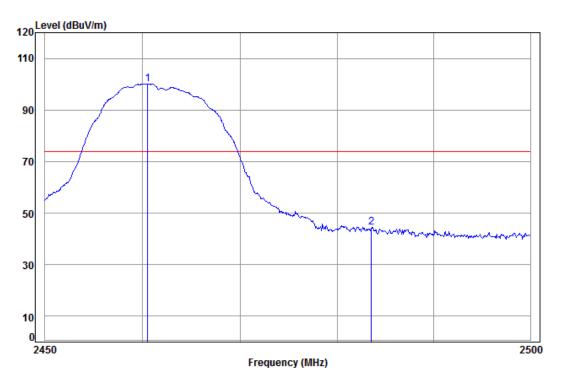
Ant Preamp Cable Read Limit 0ver Loss Factor Factor Freq Level Level Line limit dBuV dBuV/m dBuV/m MHz dΒ dB/m dΒ 2390.00 5.34 28.57 38.11 46.57 42.37 74.00 -31.63 2413.14 5.36 28.66 38.11 97.56 93.47 74.00 19.47



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Worse case mode: 802.11b Test channel: Highest Remark: Peak Vertical



Condition: 3m Vertical Job No: : 0616CR

Mode: : 2462 Band edge

: B

Ant Preamp Cable Read Limit 0ver Freq Loss Factor Factor Level Level Line limit MHz dΒ dB/m dΒ dBuV dBuV/m dBuV/m 2460.52 5.39 28.88 38.12 103.99 100.14 74.00 2483.50 5.41 28.98 38.12 48.13 44.40 74.00 -29.60

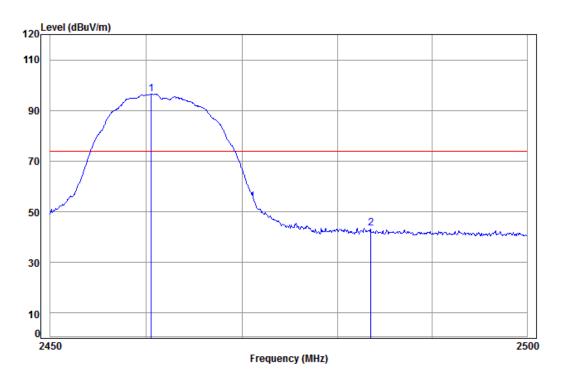




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Worse case mode: 802.11b Test channel: Highest Remark: Peak Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2462 Band edge

: E

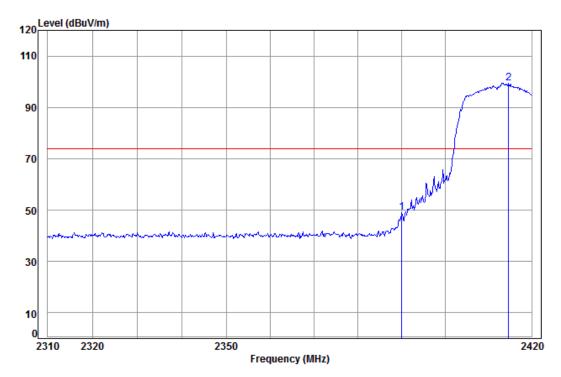
	Freq			Preamp Factor				
_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
	2460.52 2483.50							



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Worse case mode: 802.11g Test channel: Lowest Remark: Peak Vertical



Condition: 3m Vertical Job No: : 0616CR

Mode: : 2412 Band edge

: G

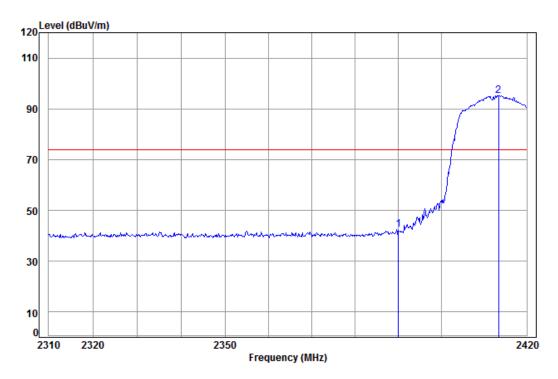
Cable Ant Preamp Read Limit 0ver Freq Loss Factor Factor Line Limit Level Level MHz dB dB/m dB dBuV dBuV/m dBuV/m 1 pk 2390.00 5.34 28.57 38.11 53.11 48.91 74.00 -25.09 2414.72 5.36 28.67 38.11 103.60 99.52 74.00 25.52



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802.11g Test channel: Remark: Peak Horizontal Worse case mode: Lowest



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2412 Band edge

: G

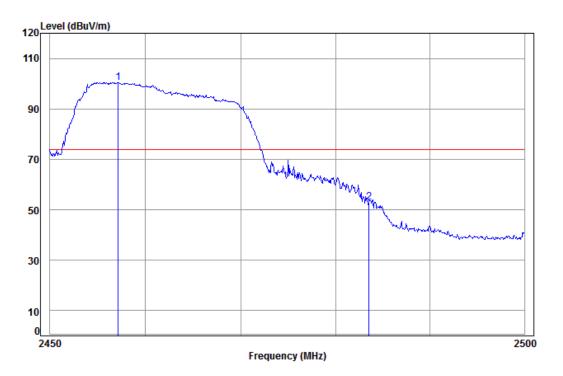
				Preamp Factor			Freq	
dB	dBuV/m	dBuV/m	dBuV	dB	dB/m	dB	MHz	-
							2390.00 2413.37	



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Worse case mode: 802.11g Test channel: Highest Remark: Peak Vertical



Condition: 3m Vertical Job No: : 0616CR

Mode: : 2462 Band edge

: G

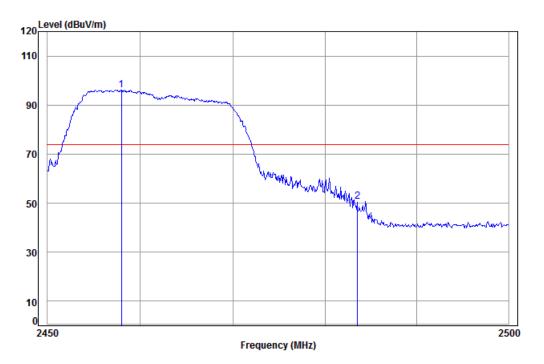
	Limit Line						Freq	
dB	dBuV/m	dBuV/m	dBuV	dB	dB/m	dB	MHz	_
							2457.14	



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Worse case mode: 802.11g Test channel: Highest Remark: Peak Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

1 pp 2 pk

Mode: : 2462 Band edge

: G

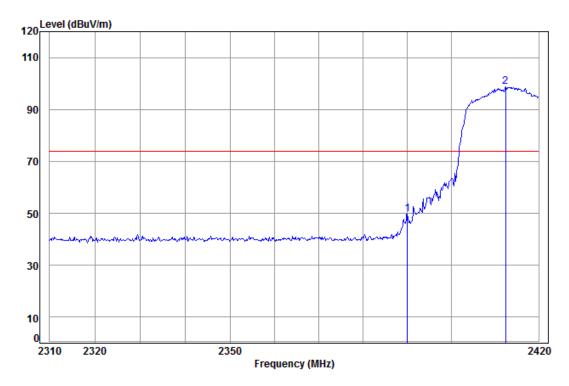
Cable Ant Preamp Limit 0ver Read Freq Loss Factor Factor Level Level Line Limit dBuV dBuV/m dBuV/m MHz dΒ dB/m dΒ 5.39 28.87 38.12 100.10 96.24 74.00 22.24 2457.93 2483.50 5.41 28.98 38.12 54.33 50.60 74.00 -23.40



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Worse case mode: 802.11n(HT20) Test channel: Lowest Remark: Peak Vertical



Condition: 3m Vertical

Job No: : 0616CR

Mode: : 2412 Band edge

: N20

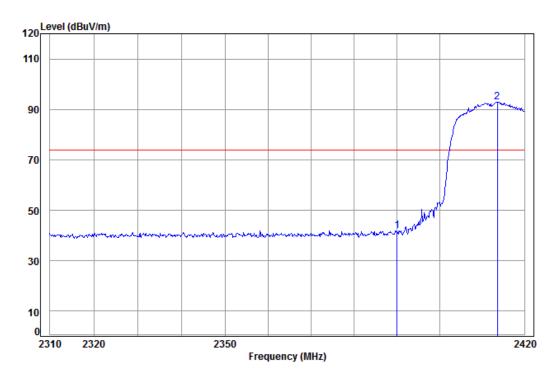
Cable Ant Preamp Read Limit 0ver Loss Factor Factor Level Line Limit Freq Level MHz dB dB/m dB dBuV dBuV/m dBuV/m 1 pk 2390.00 5.34 28.57 38.11 53.93 49.73 74.00 -24.27 2 pp 2412.47 5.35 28.66 38.11 102.73 98.63 74.00 24.63



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Worse case mode: 802.11n(HT20) Test channel: Lowest Remark: Peak Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2412 Band edge

: N20

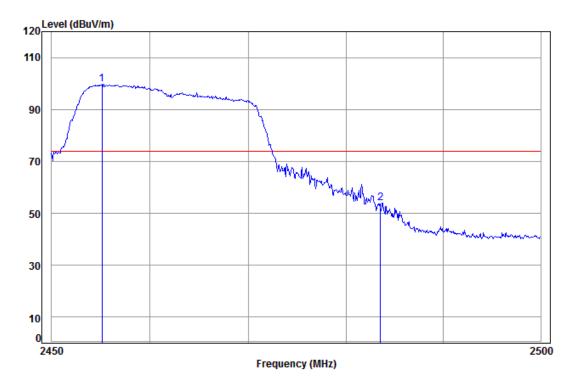
Ant Preamp Cable Read Limit 0ver Freq Loss Factor Factor Level Level Line Limit MHz dB dB/m dB dBuV dBuV/m dBuV/m 1 pk 2390.00 5.34 28.57 38.11 46.20 42.00 74.00 -32.00 28.66 38.11 97.06 92.97 74.00 18.97 2413.59 5.36



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Worse case mode: 802.11n(HT20) Test channel: Highest Remark: Peak Vertical



Condition: 3m Vertical Job No: : 0616CR

Mode: : 2462 Band edge

: N20

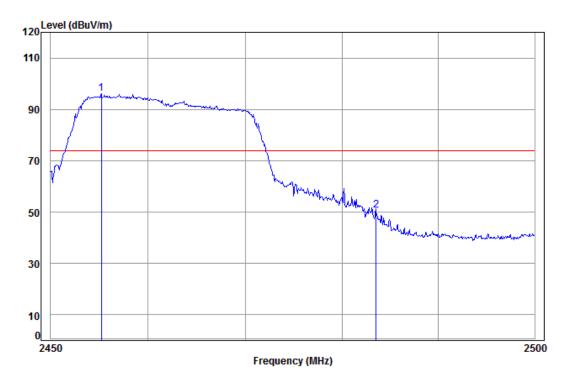
Ant Preamp Cable Read Limit 0ver Loss Factor Factor Line Limit Freq Level Level MHz dB dB/m dB dBuV dBuV/m dBuV/m 1 pp 2455.10 5.39 28.86 38.12 103.66 99.79 74.00 25.79 2 pk 2483.50 5.41 28.98 38.12 57.63 53.90 74.00 -20.10



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Worse case mode: 802.11n(HT20) Test channel: Highest Remark: Peak Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2462 Band edge

: N20

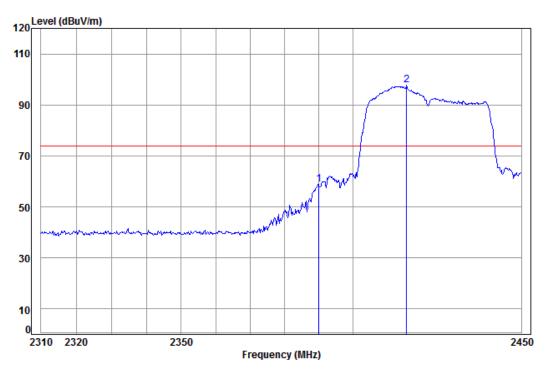
				Preamp Factor			Freq	
dB	dBuV/m	dBuV/m	dBuV	dB	dB/m	dB	MHz	-
							2455.20 2483.50	



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Worse case mode: 802.11n(HT40) Test channel: Lowest Remark: Peak Vertical



Condition: 3m Vertical Job No: : 0616CR

Mode: : 2422 Band edge

: N40

Cable Ant Preamp Read Limit 0ver Freq Loss Factor Factor Level Line Limit MHz dΒ dB/m dBuV dBuV/m dBuV/m 1 pk 2390.00 5.34 28.57 38.11 63.19 58.99 74.00 -15.01 2415.79 5.36 28.67 38.11 101.74 97.66 74.00 23.66

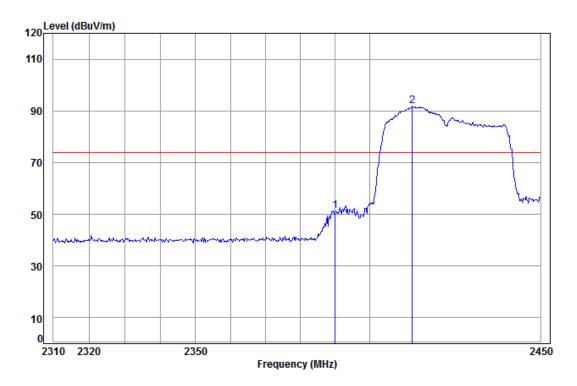




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Worse case mode: 802.11n(HT40) Test channel: Lowest Remark: Peak Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2422 Band edge

: N40

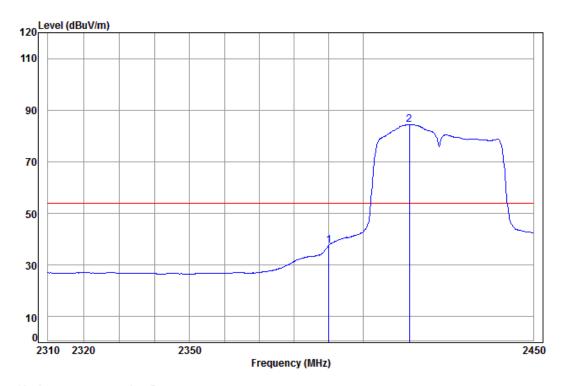
Ant Preamp Cable Read Limit 0ver Loss Factor Factor Limit Freq Level Level Line dB dBuV dBuV/m dBuV/m MHz dB/m dΒ 1 pk 2390.00 5.34 28.57 38.11 55.63 51.43 74.00 -22.57 2412.38 5.35 28.66 38.11 95.98 91.88 74.00 17.88



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Worse case mode: 802.11n(HT40) Test channel: Lowest Remark: Average Vertical



Condition: 3m Vertical Job No: : 0616CR

Mode: : 2422 Band edge

: N40

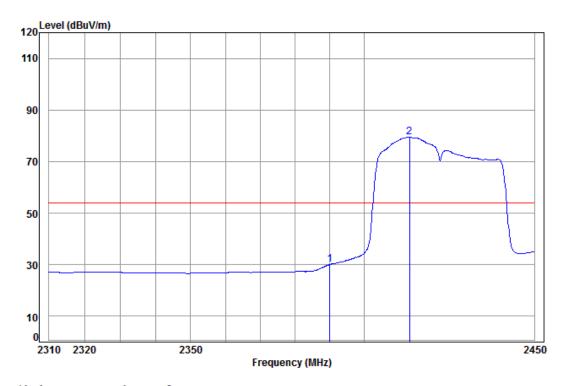
Cable Ant Preamp Read Limit 0ver Freq Loss Factor Factor Level Level Line Limit dBuV dBuV/m dBuV/m MHz dΒ dB/m dB 2390.00 5.34 28.57 38.11 41.94 37.74 54.00 -16.26 5.36 28.66 38.11 88.48 84.39 54.00 30.39 2413.51



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Worse case mode: 802.11n(HT40) Test channel: Lowest Remark: Average Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2422 Band edge

: N40

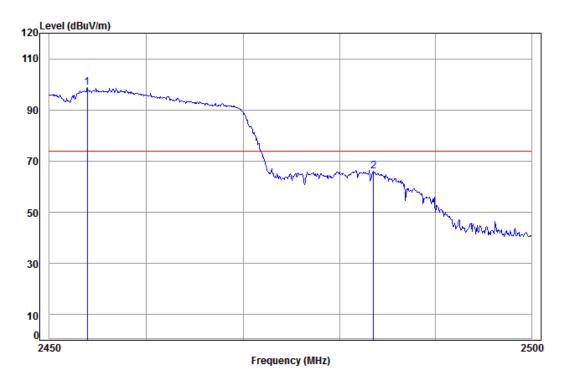
Ant Preamp Cable Read Limit 0ver Loss Factor Factor Freq Level Level Line limit dBuV dBuV/m dBuV/m MHz dΒ dB/m dΒ 2390.00 5.34 28.57 38.11 34.27 30.07 54.00 -23.93 2413.23 5.36 28.66 38.11 83.54 79.45 54.00 25.45



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Worse case mode: 802.11n(HT40) Test channel: Highest Remark: Peak Vertical



Condition: 3m Vertical

Job No: : 0616CR

Mode: : 2452 Band edge

: N40

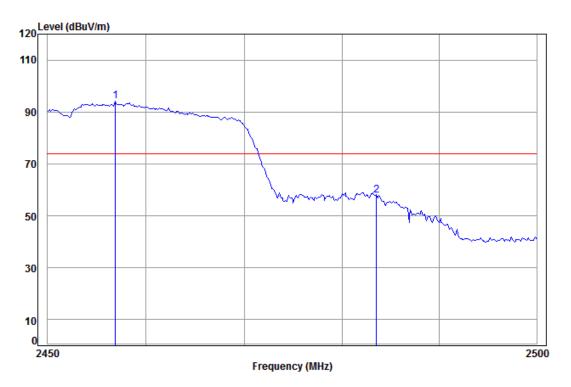
Cable Ant Preamp Limit 0ver Read Limit Freq Loss Factor Factor Line Level Level MHz dB dB/m dBuV dBuV/m dBuV/m dB 5.39 2453.91 28.85 38.12 102.79 98.91 74.00 24.91 1 pp 66.00 74.00 5.41 28.98 38.12 69.73 2483.50 -8.00



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Worse case mode: 802.11n(HT40) Test channel: Highest Remark: Peak Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2452 Band edge

: N40

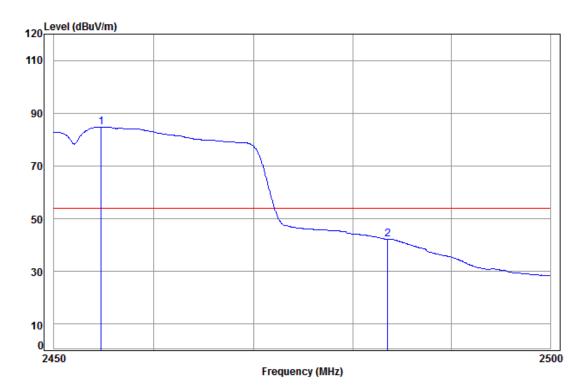
				Preamp Factor			Cal Freq Lo	
dB	dBuV/m	dBuV/m	dBuV	dB	dB/m	dB	MHz	-
							2456.88	



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Worse case mode: 802.11n(HT40) Test channel: Highest Remark: Average Vertical



Condition: 3m Vertical Job No: : 0616CR

Mode: : 2452 Band edge

: N40

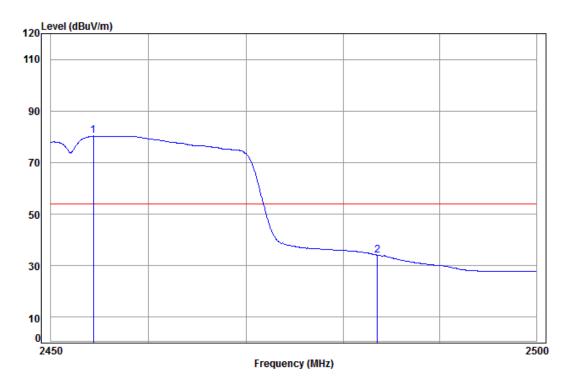
Cable Ant Preamp Read limit Over Freq Loss Factor Factor Level Level Line Limit MHz dB dB/m dB dBuV dBuV/m dBuV/m dB 2454.71 5.39 28.85 38.12 88.58 84.70 54.00 30.70 2 av 2483.50 5.41 28.98 38.12 45.78 42.05 54.00 -11.95



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Worse case mode: | 802.11n(HT40) | Test channel: | Highest | Remark: | Average | Horizontal



Condition: 3m Horizontal

Job No: : 0616CR

Mode: : 2452 Band edge

: N40

	Freq							Over Limit
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
	2454.31 2483.50							

Note:

1 2

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor



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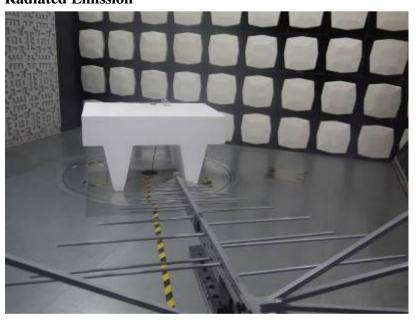
7 Photographs - EUT Test Setup

Test model No.: Hisense L675

7.1 Conducted Emission



7.2 Radiated Emission

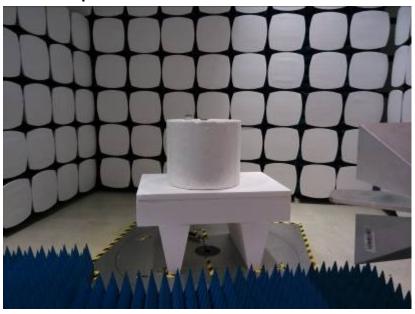




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7.3 Radiated Spurious Emission





8 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1601000468RG.