

Report No.: SZEM151000664801

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FCC REPORT

Application No: SZEM1510006648CR

Applicant: ZAGG Inc **Manufacturer:** ZAGG Inc

Factory: Shenzhen Aoni Electronic Industry Co., Ltd

Product Name: ZAGG Now Cam

Model No.(EUT): ZGACTC-GY0

Add Model No.: ZGACTC-WH0

Trade Mark: ZAGG

FCC ID: QTG-ZCAM

Standards: 47 CFR Part 15, Subpart C (2014)

Date of Receipt: 2015-11-12

Date of Test: 2015-11-17 to 2015-12-03

Date of Issue: 2015-12-04

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.



Report No.: SZEM151000664801

Page: 2 of 92

2 Version

Revision Record						
Version Chapter Date Modifier Remark						
00		2015-12-04		Original		

Authorized for issue by:		
Tested By	Gebin Sun	2015-12-03
	(Gebin Sun) /Project Engineer	Date
Prepared By	Venus Wu	2015-12-04
	(Venus Wu) /Clerk	Date
Checked By	Eric Fu	2015-12-04
	(Eric Fu) /Reviewer	Date

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Report No.: SZEM151000664801

Page: 3 of 92

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 2009	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10 2009	PASS
Conducted Peak Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(3)	ANSI C63.10 2009	PASS
6dB Occupied Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(2)	ANSI C63.10 2009	PASS
Power Spectral Density	47 CFR Part 15, Subpart C Section 15.247 (e)	ANSI C63.10 2009	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 2009	PASS
RF Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 2009	PASS
Radiated Spurious Emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2009	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2009	PASS

Remark:

Model No.: ZGACTC-GY0, ZGACTC-WH0

Only the Model ZGACTC-GY0 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for all above models. Only different on model No. and color.



Report No.: SZEM151000664801

Page: 4 of 92

4 Contents

			Page
1	COV	/ER PAGE	1
2	VER	SION	2
3	TES	T SUMMARY	2 3 4 5 5 5 7 8 0 CONDITIONS 8 D BY THE CUSTOMER 8 D BY THE CUSTOMER 9 ENT DATA 11 11 ER 12 20 27 D EMISSIONS 34 SIONS 38 66 67 77 77 98 99 10 11 11 11 11 11 11 11 11
4	CON	ITENTS	4
5	GEN	IERAL INFORMATION	5
	5.1	CLIENT INFORMATION	5
	5.2	GENERAL DESCRIPTION OF EUT	
	5.3	TEST ENVIRONMENT AND MODE	_
	5.4	DESCRIPTION OF SUPPORT UNITS	
	5.5	TEST LOCATION	7
	5.6	TEST FACILITY	
	5.7	DEVIATION FROM STANDARDS	
	5.8	ABNORMALITIES FROM STANDARD CONDITIONS	
	5.9		
	5.10	EQUIPMENT LIST	9
6	TES	T RESULTS AND MEASUREMENT DATA	11
	6.1	ANTENNA REQUIREMENT	11
	6.2	CONDUCTED PEAK OUTPUT POWER	12
	6.3	6DB OCCUPY BANDWIDTH	
	6.4	Power Spectral Density	
	6.5		
	6.6		
	6.7		
	6.7.1		
	6.7.2		
	6.8		
7	PHO	TOGRAPHS - EUT TEST SETUP	_
	7.1	RADIATED SPURIOUS EMISSION	
8	PHC	TOGRAPHS - EUT CONSTRUCTIONAL DETAILS	92



Report No.: SZEM151000664801

Page: 5 of 92

5 General Information

5.1 Client Information

Applicant:	ZAGG Inc	
Address of Applicant:	3855 South 500 West, Suite Q Salt Lake City, Utah, 84115	
Manufacturer:	ZAGG Inc	
Address of Manufacturer:	3855 South 500 West, Suite Q Salt Lake City, Utah, 84115	
Factory:	Shenzhen Aoni Electronic Industry Co., Ltd	
Address of Factory:	No.5,Bldg.,Honghui Industrial Park, 2nd Liuxian, Xin'an, Bao'an District, SZ, China	

5.2 General Description of EUT

Product Name:	ZAGG Now Cam
Model No.:	ZGACTC-GY0
Trade Mark:	ZAGG
Operation Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz
Channel Numbers:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 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): OFDM (64QAM, 16QAM, QPSK,BPSK)
Sample Type:	Portable production
Antenna Type and Gain:	Type: Integral Gain: 0.5dBi
Battery:	Lithium-ion battery:3.7V 300mAh(charge by USB)

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Report No.: SZEM151000664801

Page: 6 of 92

Operation Frequency each of channel(802.11b/g/n HT20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

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	



Report No.: SZEM151000664801

Page: 7 of 92

5.3 Test Environment and Mode

Operating Environment:					
Temperature:	24.0 °C				
Humidity:	52 % RH				
Atmospheric Pressure: 1015 mbar					
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

Description	Manufacturer	Model No.	Serial No.
Test Board	Supplied by client	V1.2	N/A

Remark: The test board is only use to configure the engineering mode and it has not been used during the test.

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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Report No.: SZEM151000664801

Page: 8 of 92

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.

VCCI

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.



Report No.: SZEM151000664801

Page: 9 of 92

5.10 Equipment List

	RE in Chamber					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)	
1	3m Semi-Anechoic Chamber	AUDIX	N/A	SEL0198	2016-03-01	
2	EMI Test Receiver (9k-3GHz)	Rohde & Schwarz	ESCI	SEL0175	2016-05-13	
3	EMI Test software	AUDIX	E3	SEL0201	N/A	
4	Coaxial cable	SGS	N/A	SEL0202	2016-03-01	
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2017-11-15	
6	Amplifier (0.1-1300MHz)	HP	8447D	SEL0153	2016-10-09	

	RE in Chamber					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)	
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2016-05-13	
2	EMI Test Receiver	Agilent Technologies	N9038A	SEL0312	2016-10-09	
3	EMI Test software	AUDIX	E3	SEL0050	N/A	
4	Coaxial cable	SGS	N/A	SEL0028	2016-05-13	
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0014	2017-11-01	
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2016-05-13	
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0005	2018-05-16	
8	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2016-10-17	
9	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2017-11-24	
10	Band filter	Amindeon	Asi 3314	SEL0094	2016-05-13	
11	Loop Antenna	ETS-LINDGREN	6502	SEL0802	2016-08-14	



Report No.: SZEM151000664801

Page: 10 of 92

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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Report No.: SZEM151000664801

Page: 11 of 92

6 Test results and Measurement Data

6.1 Antenna Requirement

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

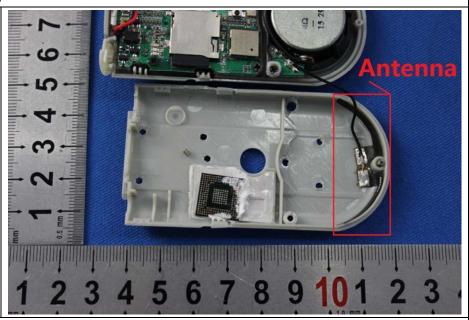
15.203 requirement:

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 0.5dBi.



Report No.: SZEM151000664801

Page: 12 of 92

6.2 Conducted Peak Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)		
Test Method:	ANSI C63.10 2009		
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);		
Limit:	30dBm		
Test Results:	Pass		





Report No.: SZEM151000664801

Page: 13 of 92

Pre-scan under all rate at lowest channel 1								
Mode	Mode 802.11b							
Data Rate	1Mbps	2Mbps	5.5Mbps	11Mbps				
Power (dBm)	13.55	13.47	13.43	13.32				
Mode	802.11g							
Data Rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Power (dBm)	16.71	16.63	16.57	16.52	16.46	16.42	16.37	16.32
Mode	802.11n(HT20)							
Data Rate	6.5Mbps	13Mbps	19.5Mbps	26Mbps	39Mbps	52Mbps	58.5Mbps	65Mbps
Power (dBm)	15.21	15.14	15.07	15.01	14.96	14.92	14.85	14.79

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);



Report No.: SZEM151000664801

Page: 14 of 92

Measurement Data

802.11b mode					
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result		
Lowest	13.55	30.00	Pass		
Middle	12.27	30.00	Pass		
Highest	9.41	30.00	Pass		
	802.11g mo	de			
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result		
Lowest	16.71	30.00	Pass		
Middle	15.96	30.00	Pass		
Highest	Highest 13.00		Pass		
802.11n(HT20)mode					
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result		
Lowest	15.21	30.00	Pass		
Middle	14.08	30.00	Pass		
Highest	Highest 11.26		Pass		



Report No.: SZEM151000664801

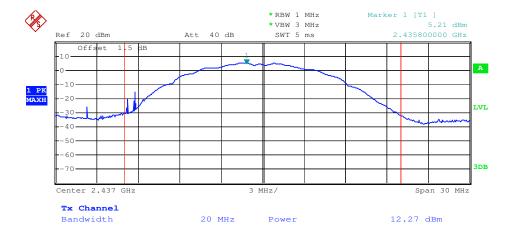
Page: 15 of 92

Test plot as follows:

Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle





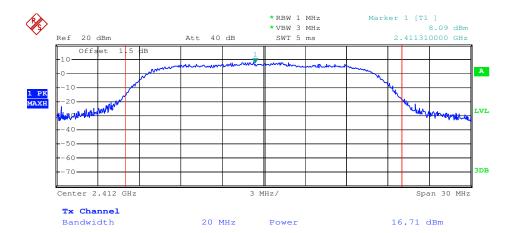
Report No.: SZEM151000664801

Page: 16 of 92

Test mode: 802.11b Test channel: Highest



Test mode: 802.11g Test channel: Lowest

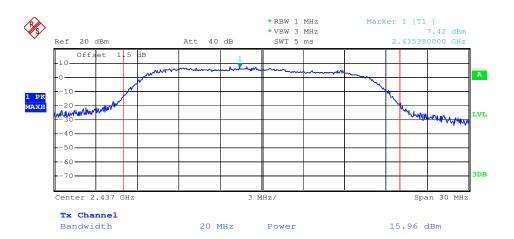




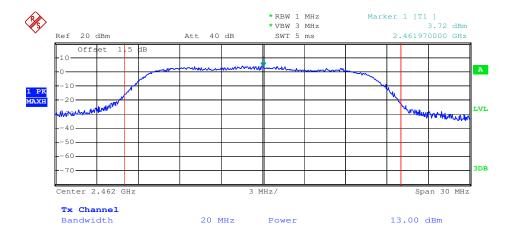
Report No.: SZEM151000664801

Page: 17 of 92

Test mode: 802.11g Test channel: Middle





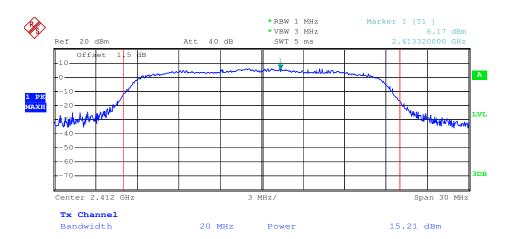




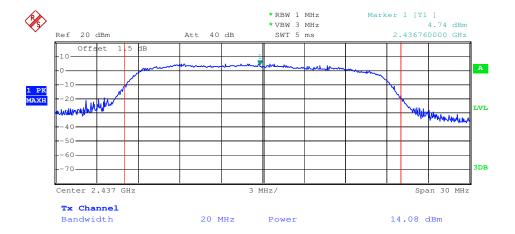
Report No.: SZEM151000664801

Page: 18 of 92

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



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



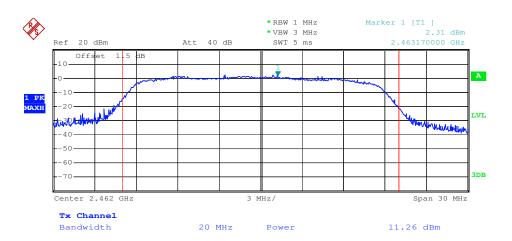
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Report No.: SZEM151000664801

Page: 19 of 92

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



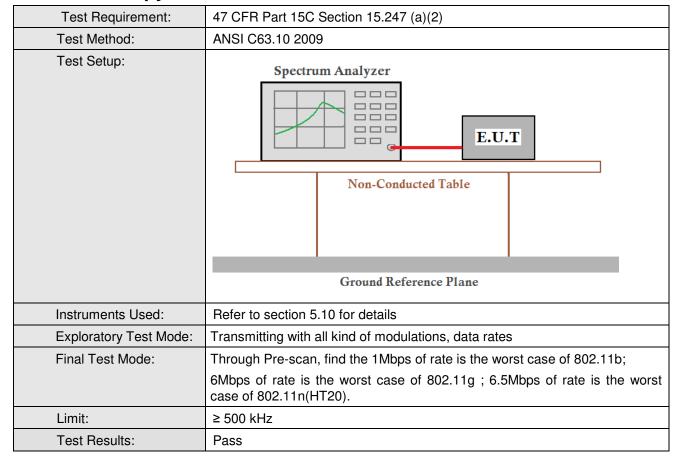
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Report No.: SZEM151000664801

Page: 20 of 92

6.3 6dB Occupy Bandwidth



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Report No.: SZEM151000664801

Page: 21 of 92

Measurement Data

802.11b mode				
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result	
Lowest	8.070	≥500	Pass	
Middle	8.760	≥500	Pass	
Highest	7.650	≥500	Pass	
	802.11g mode		_	
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result	
Lowest	Lowest 16.050		Pass	
Middle	15.780	≥500	Pass	
Highest	15.810	≥500	Pass	
802.11n(HT20) mode				
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result	
Lowest	Lowest 17.010		Pass	
Middle	Middle 16.410		Pass	
Highest	16.410	≥500	Pass	

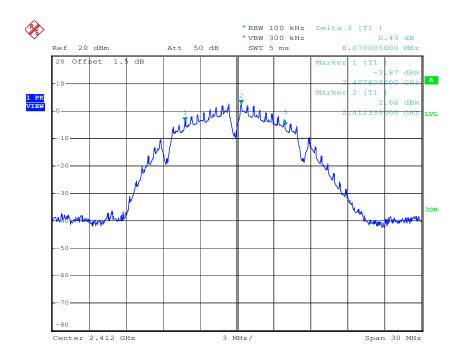


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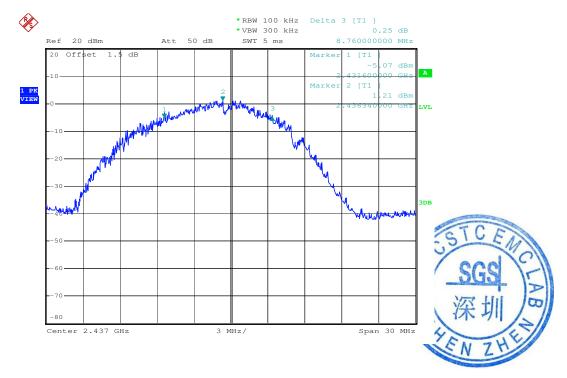
Page: 22 of 92

Test plot as follows:

Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle

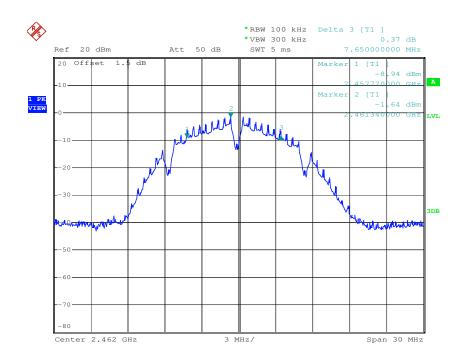




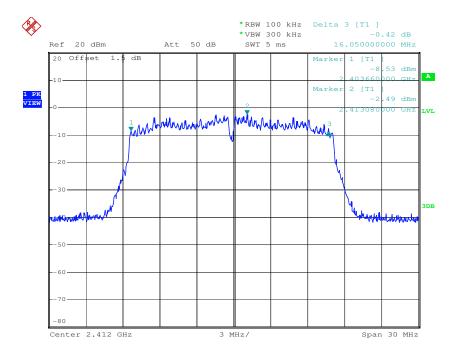
Report No.: SZEM151000664801

Page: 23 of 92

Test mode: 802.11b Test channel: Highest







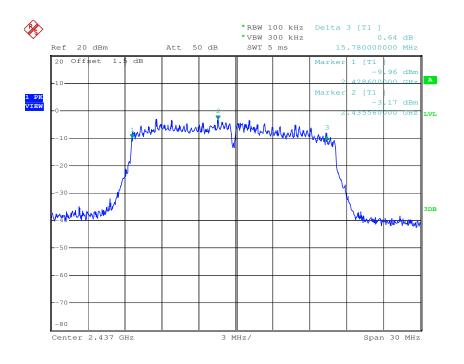
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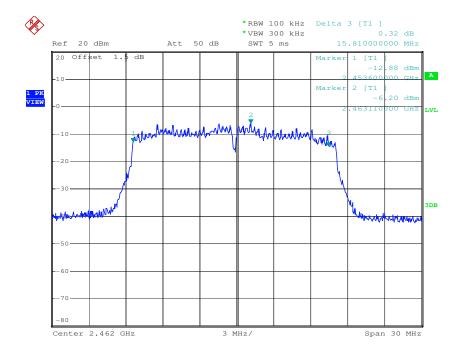
Report No.: SZEM151000664801

Page: 24 of 92

Test mode: 802.11g Test channel: Middle





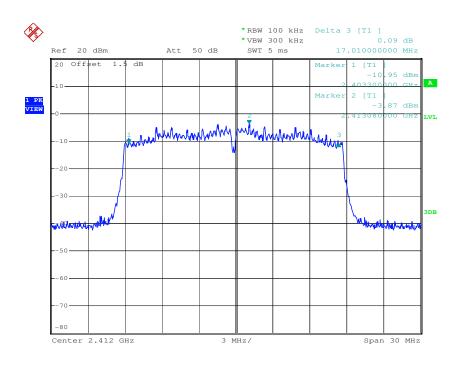




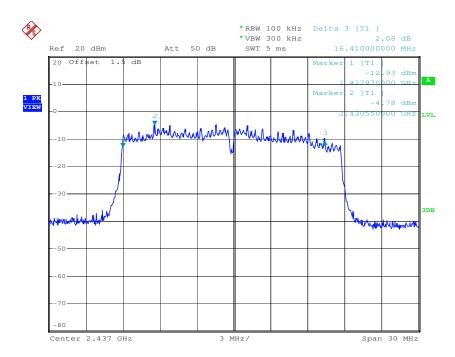
Report No.: SZEM151000664801

Page: 25 of 92

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







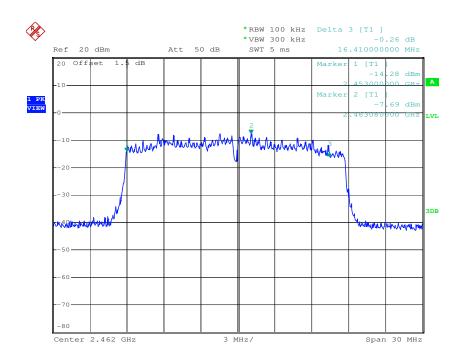
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Report No.: SZEM151000664801

Page: 26 of 92

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



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Report No.: SZEM151000664801

Page: 27 of 92

6.4 Power Spectral Density

Test Requirement:	47 CFR Part 15C Section 15.247 (e)		
Test Method:	ANSI C63.10 2009		
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).		
Limit:	≤8.00dBm/3kHz		
Test Results:	Pass		

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Report No.: SZEM151000664801

Page: 28 of 92

Measurement Data

802.11b mode					
Test channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result		
Lowest	-12.33	≤8.00	Pass		
Middle	-19.50	≤8.00	Pass		
Highest	-14.71	≤8.00	Pass		
	802.11g mode				
Test channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result		
Lowest	-16.88	≤8.00	Pass		
Middle	-17.39	≤8.00	Pass		
Highest	Highest -19.37		Pass		
802.11n(HT20) mode					
Test channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result		
Lowest	-17.12	≤8.00	Pass		
Middle	-18.15	≤8.00	Pass		
Highest	Highest -19.37		Pass		

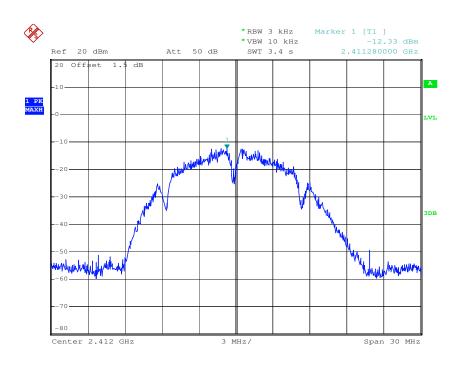


Report No.: SZEM151000664801

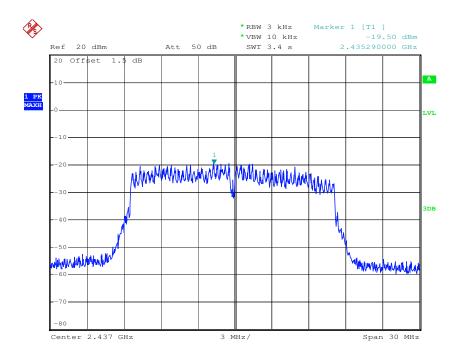
Page: 29 of 92

Test plot as follows:

Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle

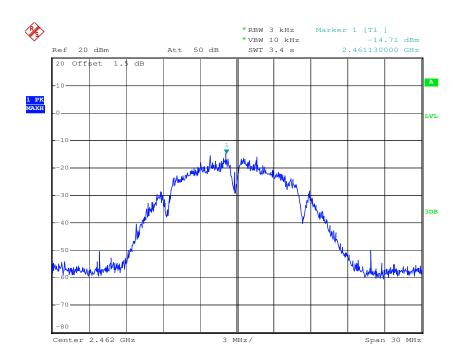




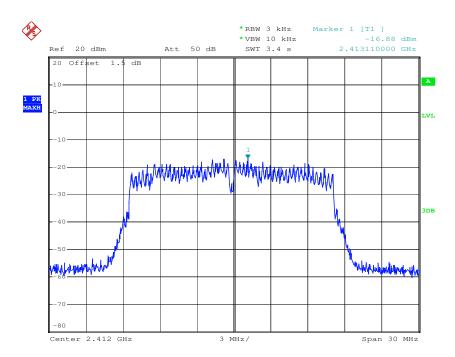
Report No.: SZEM151000664801

Page: 30 of 92

Test mode: 802.11b Test channel: Highest







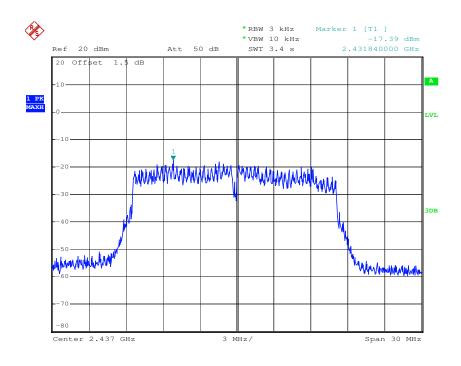
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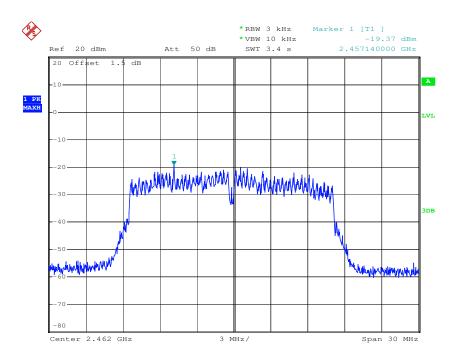
Report No.: SZEM151000664801

Page: 31 of 92

Test mode: 802.11g Test channel: Middle







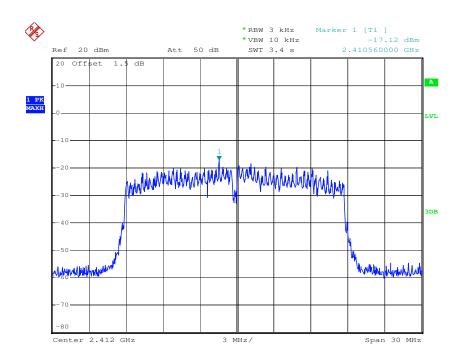
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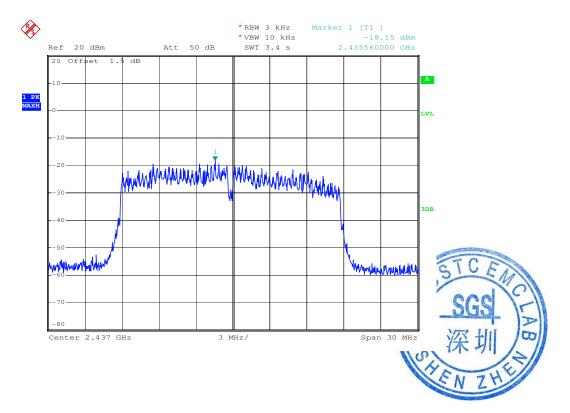
Report No.: SZEM151000664801

Page: 32 of 92

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



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

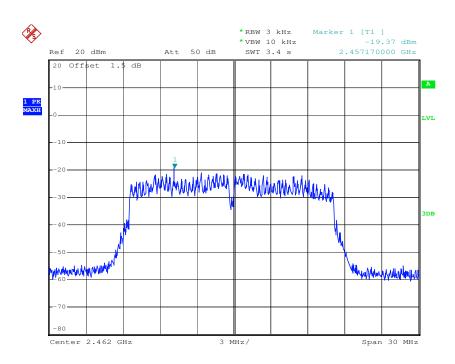




Report No.: SZEM151000664801

Page: 33 of 92

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



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Report No.: SZEM151000664801

Page: 34 of 92

6.5 Band-edge for RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)		
Test Method:	ANSI C63.10 2009		
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).		
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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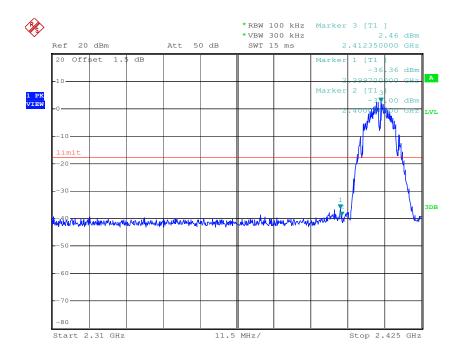


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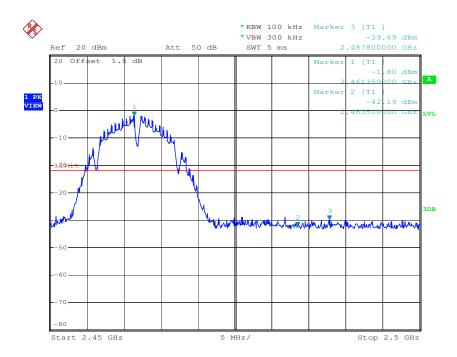
Page: 35 of 92

Test plot as follows:

Test mode: 802.11b Test channel: Lowest





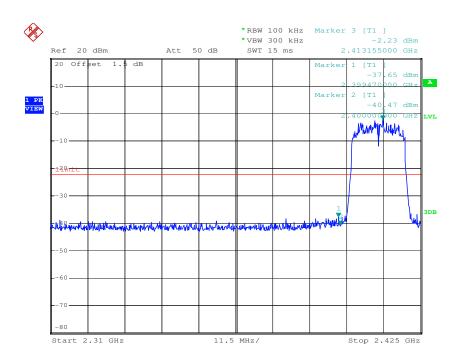




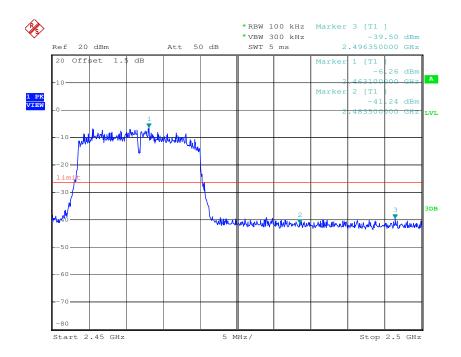
Report No.: SZEM151000664801

Page: 36 of 92

Test mode: 802.11g Test channel: Lowest







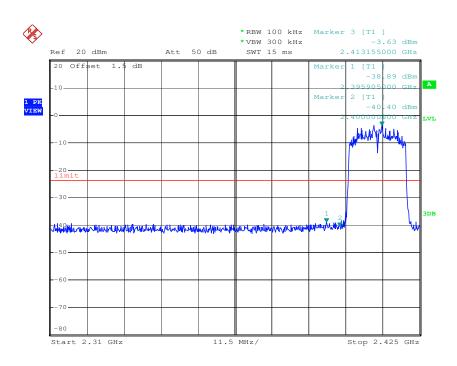
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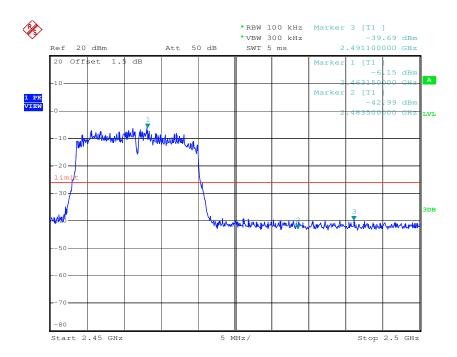
Report No.: SZEM151000664801

Page: 37 of 92

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









Report No.: SZEM151000664801

Page: 38 of 92

6.6 RF Conducted Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)					
Test Method:	ANSI C63.10 2009					
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).					
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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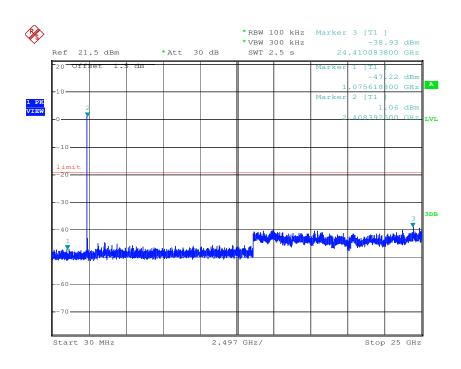


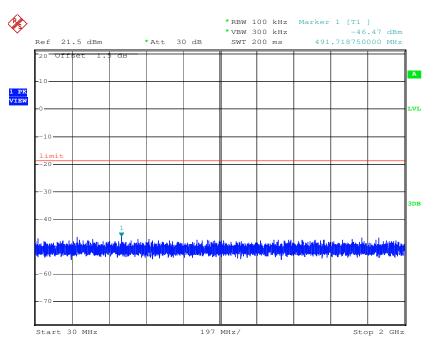
Report No.: SZEM151000664801

Page: 39 of 92

Test plot as follows:

Test mode: 802.11b Test channel: Lowest

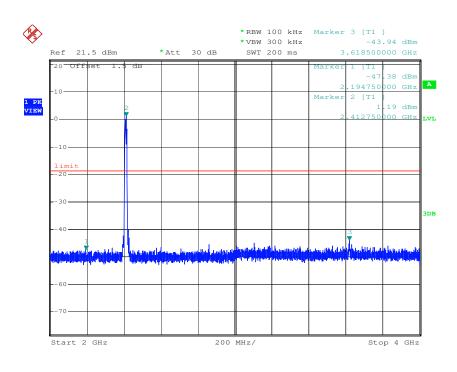


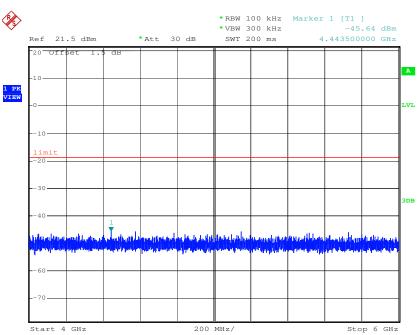




Report No.: SZEM151000664801

Page: 40 of 92



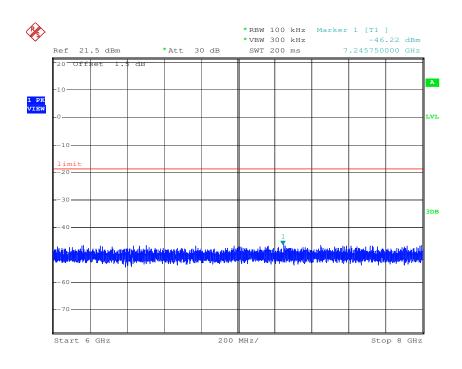


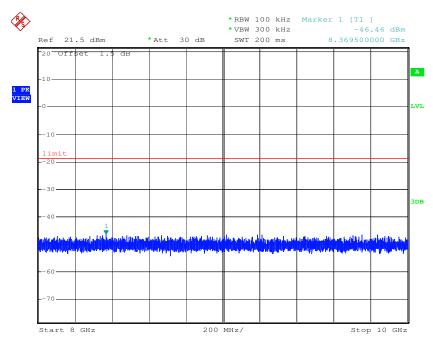
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Report No.: SZEM151000664801

Page: 41 of 92





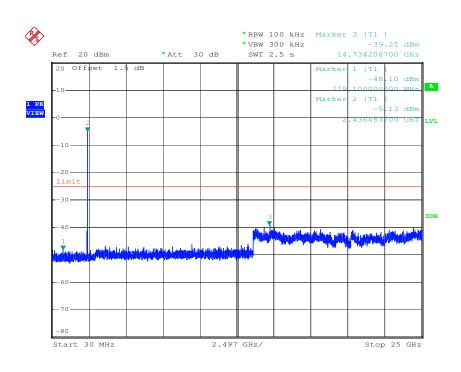
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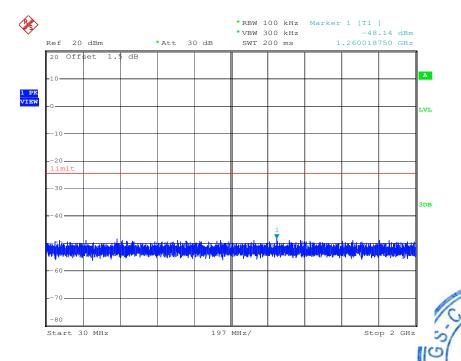


Report No.: SZEM151000664801

Page: 42 of 92

Test mode: 802.11b Test channel: Middle

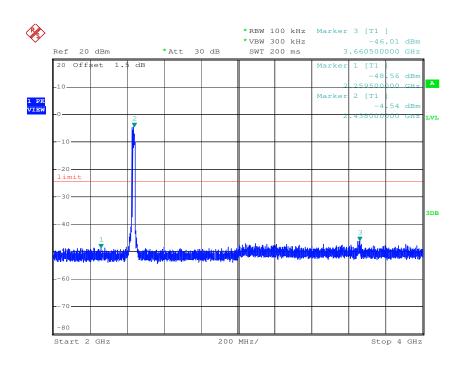


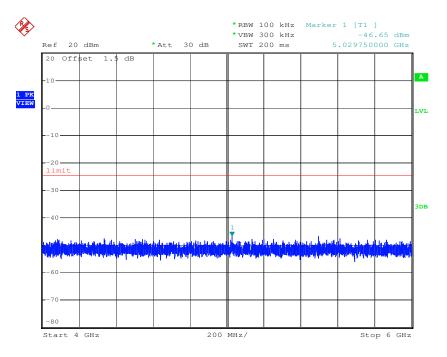




Report No.: SZEM151000664801

Page: 43 of 92



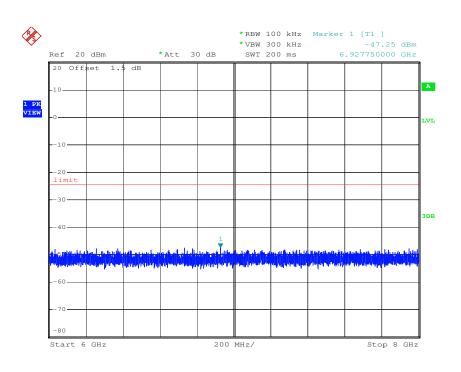


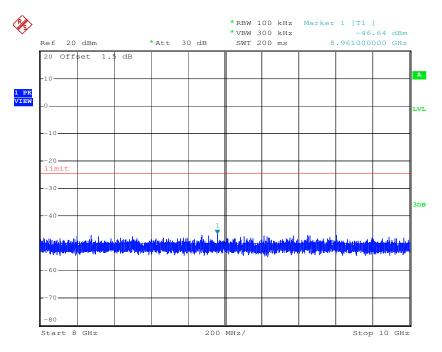
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Report No.: SZEM151000664801

Page: 44 of 92





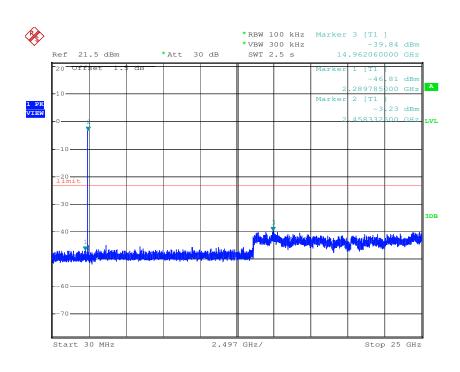
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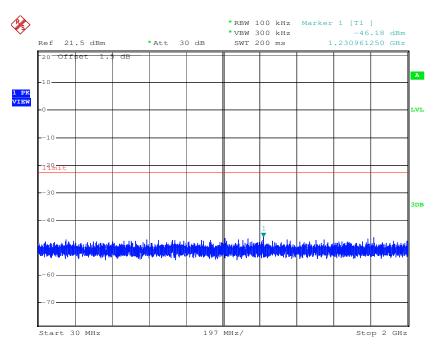


Report No.: SZEM151000664801

Page: 45 of 92

Test mode: 802.11b Test channel: Highest



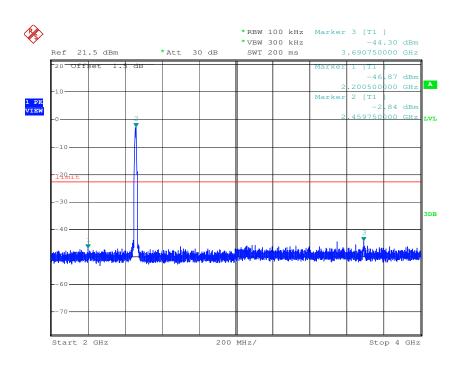


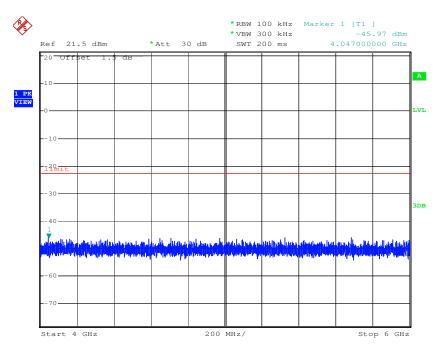
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Report No.: SZEM151000664801

Page: 46 of 92



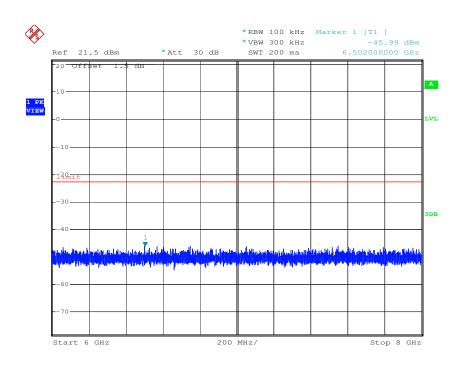


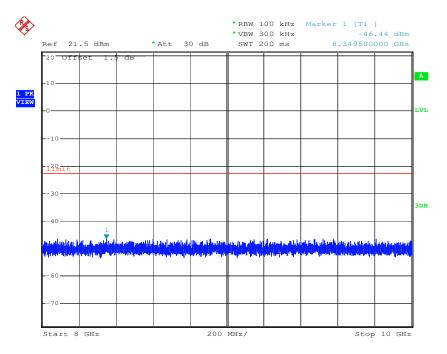
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Report No.: SZEM151000664801

Page: 47 of 92





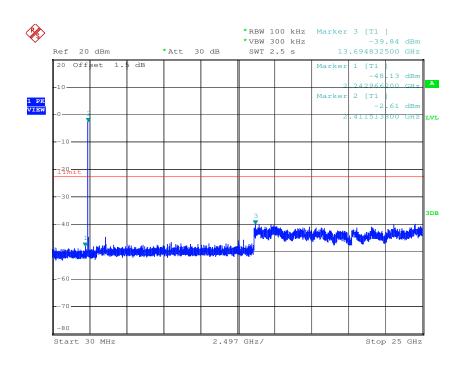
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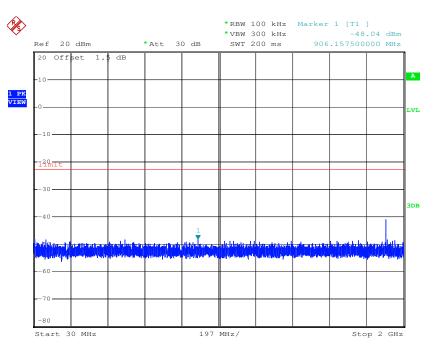


Report No.: SZEM151000664801

Page: 48 of 92

Test mode: 802.11g Test channel: Lowest

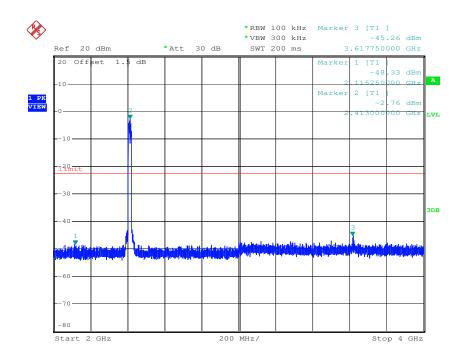


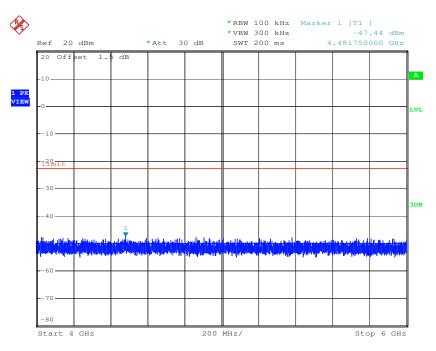




Report No.: SZEM151000664801

Page: 49 of 92



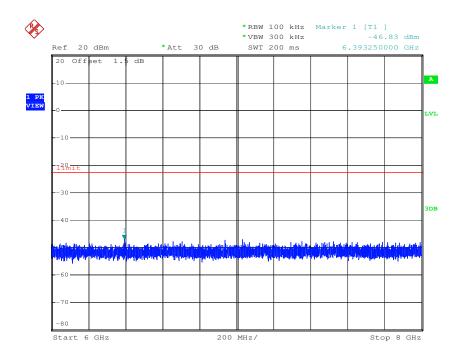


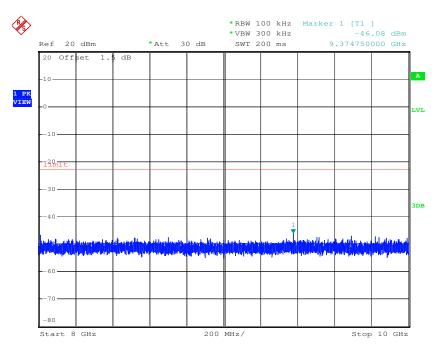
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Report No.: SZEM151000664801

Page: 50 of 92





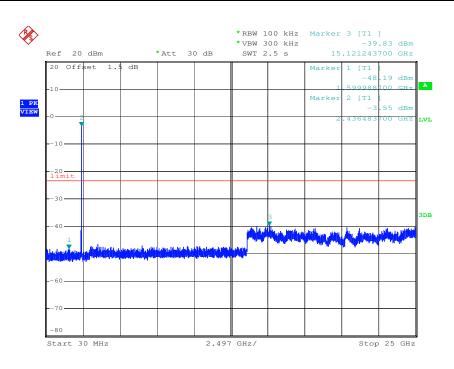
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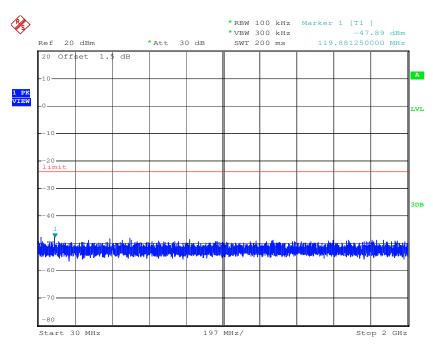


Report No.: SZEM151000664801

Page: 51 of 92

Test mode: 802.11g Test channel: Middle



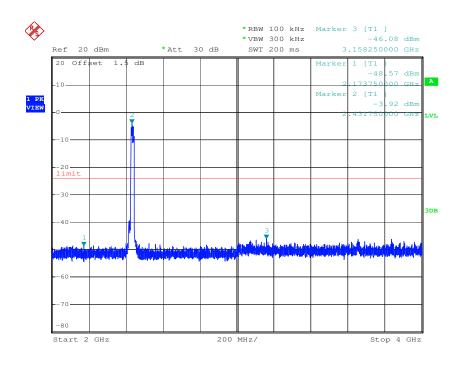


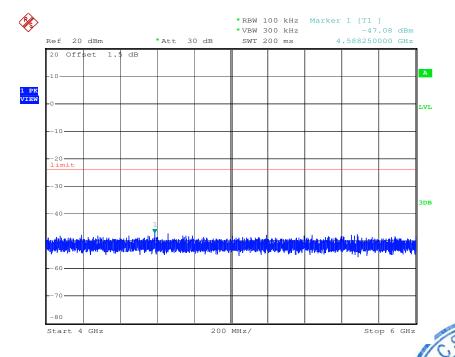
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Report No.: SZEM151000664801

Page: 52 of 92

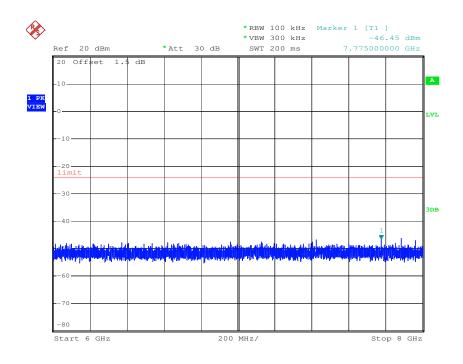


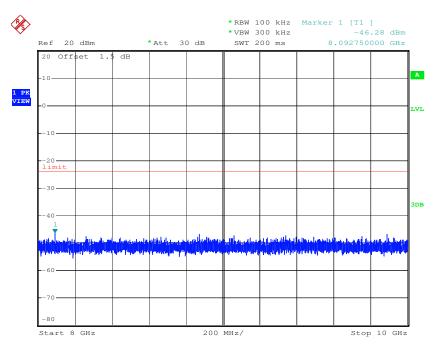




Report No.: SZEM151000664801

Page: 53 of 92





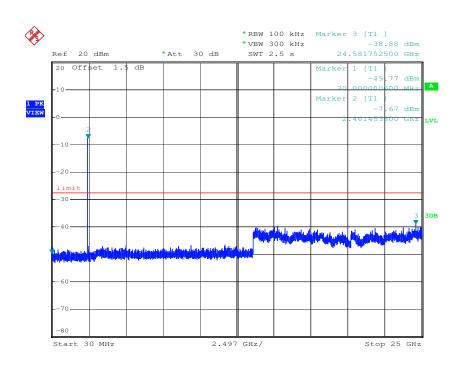
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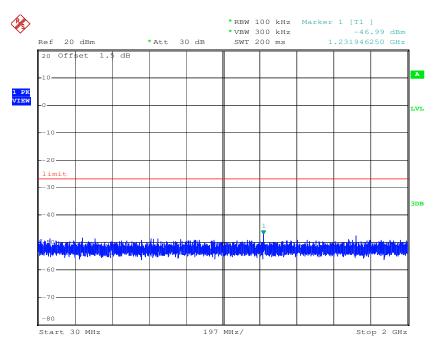


Report No.: SZEM151000664801

Page: 54 of 92

Test mode: 802.11g Test channel: Highest



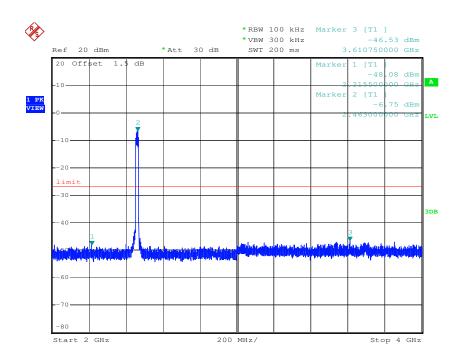


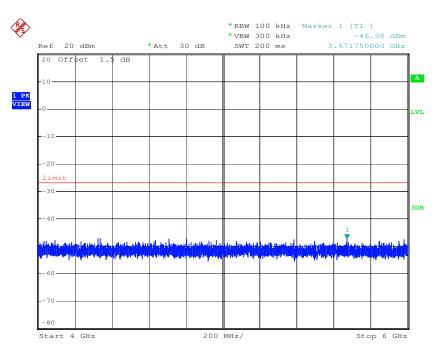
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Report No.: SZEM151000664801

Page: 55 of 92



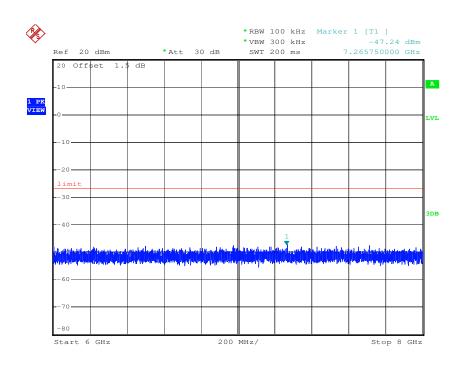


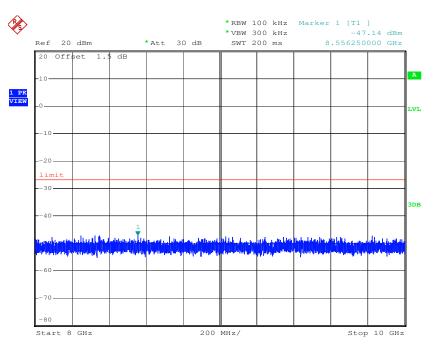
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Report No.: SZEM151000664801

Page: 56 of 92





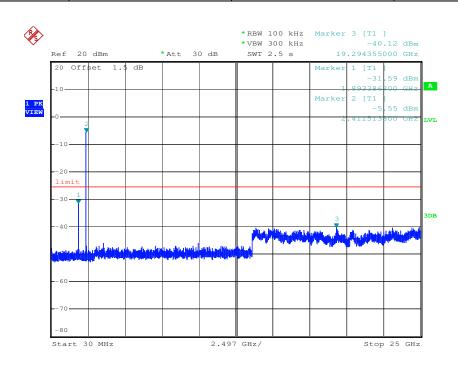
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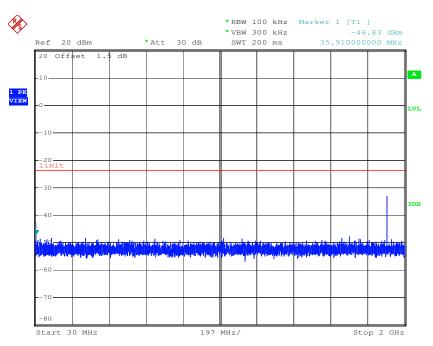


Report No.: SZEM151000664801

Page: 57 of 92

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



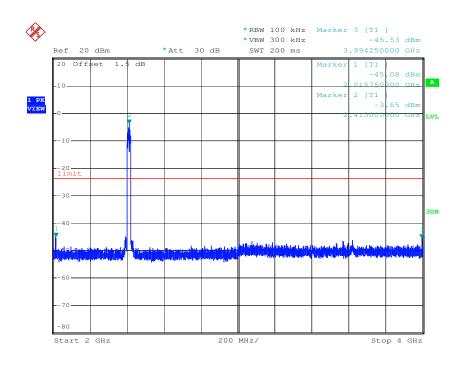


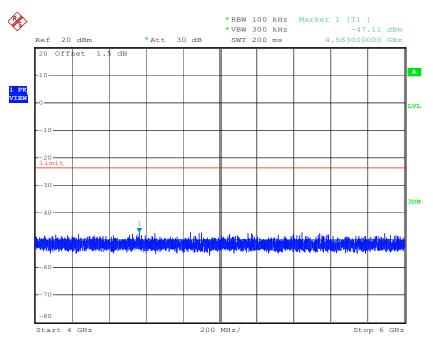
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Report No.: SZEM151000664801

Page: 58 of 92



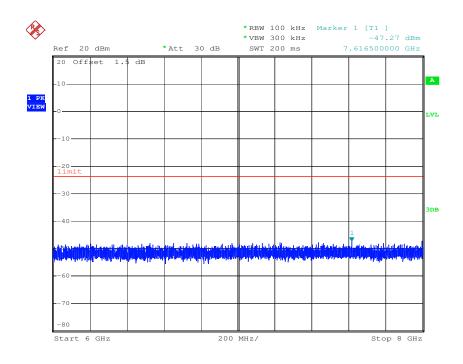


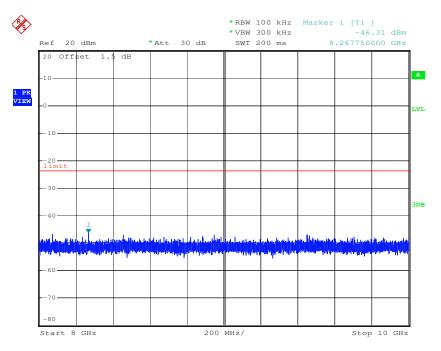
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Report No.: SZEM151000664801

Page: 59 of 92





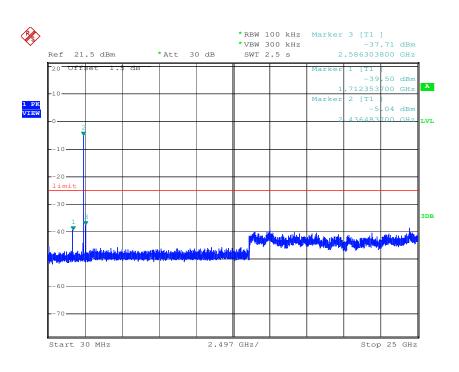
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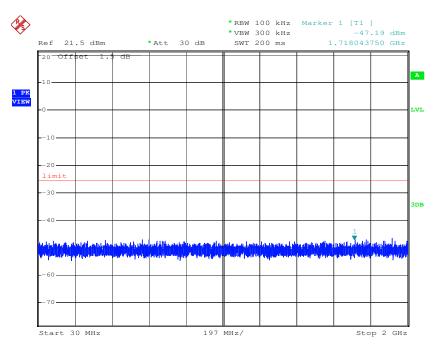


Report No.: SZEM151000664801

Page: 60 of 92

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



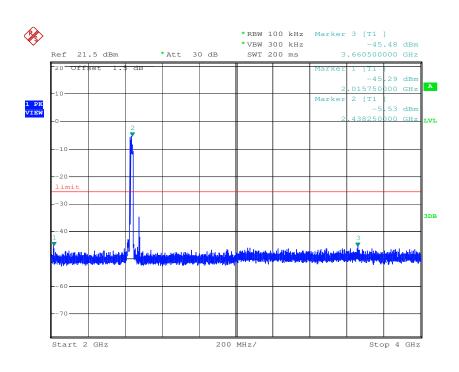


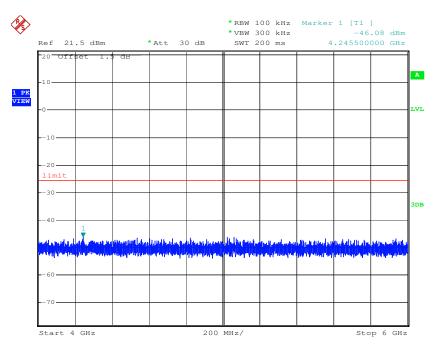
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Report No.: SZEM151000664801

Page: 61 of 92



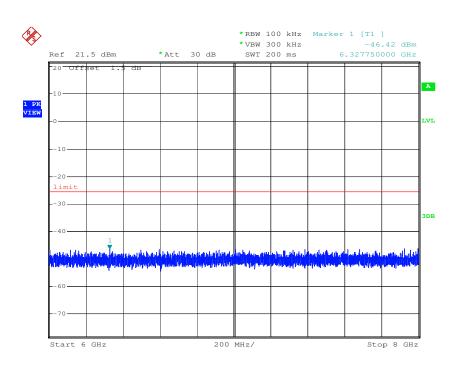


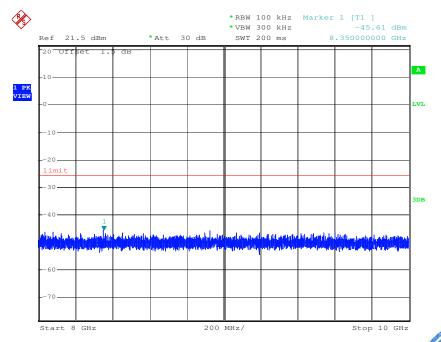
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Report No.: SZEM151000664801

Page: 62 of 92



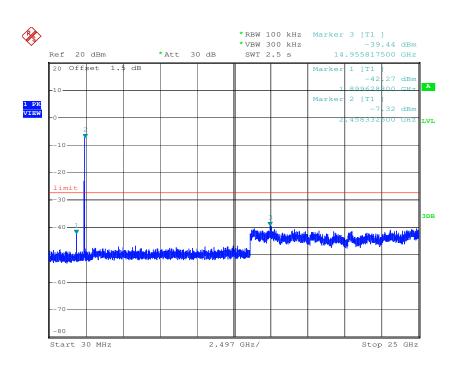


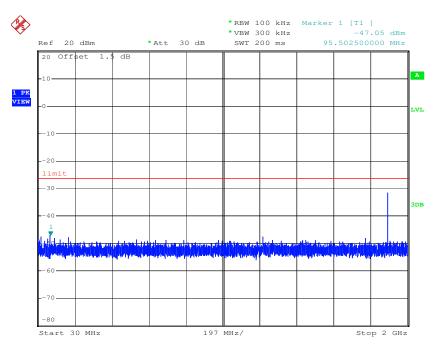


Report No.: SZEM151000664801

Page: 63 of 92

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



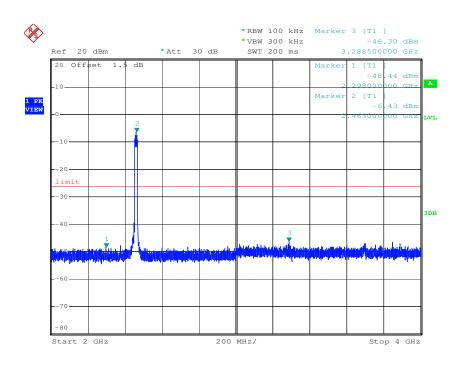


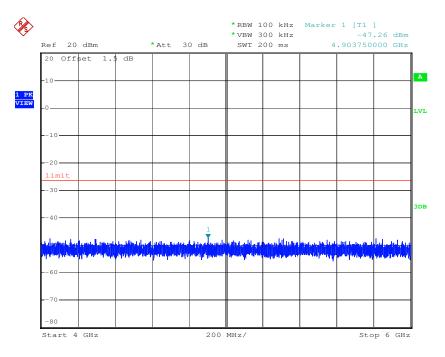
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Report No.: SZEM151000664801

Page: 64 of 92



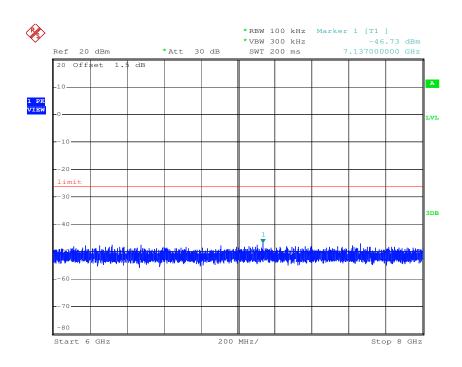


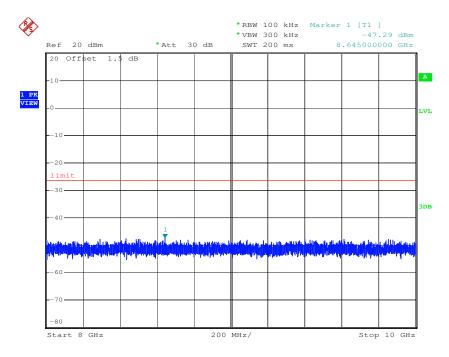
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Report No.: SZEM151000664801

Page: 65 of 92





Remark:

Pretest 9kHz to 25GHz, find the highest point when testing, so only the worst data were shown in the test report. Per FCC Part 15.33 (a) and 15.31 (o) ,The amplitude of spurious emissions from intentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.



Report No.: SZEM151000664801

Page: 66 of 92

6.7 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205										
Test Method:	ANSI C63.10 2009	ANSI C63.10 2009									
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 equipment under test. This peak limit applies to the total peak emission level radiated by the device.										

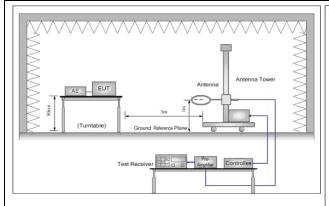
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Report No.: SZEM151000664801

Page: 67 of 92

Test Setup:



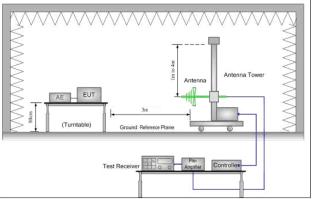


Figure 1. Below 30MHz

Figure 2. 30MHz to 1GHz

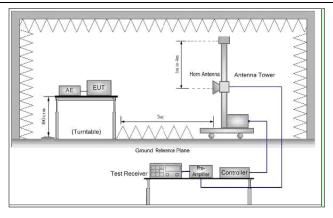


Figure 3. Above 1 GHz

Test Procedure:

- a. 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. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.
- d. 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.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. 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



Report No.: SZEM151000664801

Page: 68 of 92

sheet.
nannel ,the Highest
Y, Z axis positioning for ng which it is worse
easured was complete.
ansmitting mode which it
case of 802.11b;
of rate is the worst case
rate of 802.11b at lowest

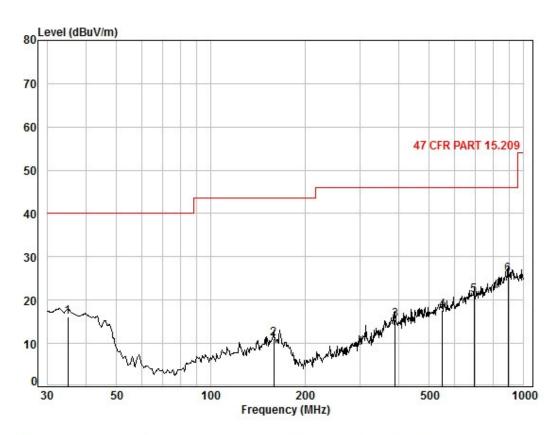


Report No.: SZEM151000664801

Page: 69 of 92

6.7.1 Radiated emission below 1GHz

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



Condition: 47 CFR PART 15.209 3m 3142C 2015 Vertical

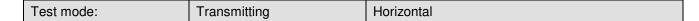
Job No. : 6648CR Mode : TX

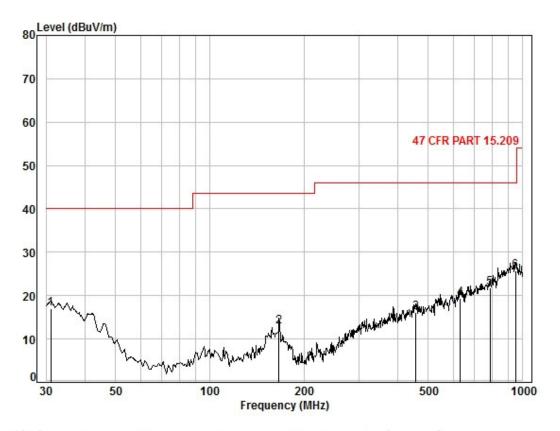
	Freq	Cable Loss		Preamp Factor	Read Level		Limit Line	Over Limit
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	34.88	0.60	17.28	25.99	24.22	16.11	40.00	-23.89
2	159.23	1.33	10.24	25.82	25.30	11.05	43.50	-32.45
3	389.35	2.17	12.81	25.66	26.13	15.45	46.00	-30.55
4	550.95	2.65	14.89	25.61	25.77	17.70	46.00	-28.30
5	694.42	2.89	17.82	25.70	26.12	21.13	46.00	-24.87
6	893.86	3.58	21.44	25.10	26.04	25.96	46.00	-20.04



Report No.: SZEM151000664801

Page: 70 of 92





Condition: 47 CFR PART 15.209 3m 3142C 2015 Horizontal

Job No. : 6648CR

Mode : TX

	Freq	Cable Loss		Preamp Factor	Read Level		Limit Line	Over Limit
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	30.96	0.60	17.60	26.00	24.71	16.91	40.00	-23.09
2	166.65	1.35	9.83	25.81	27.50	12.87	43.50	-30.63
3	455.91	2.43	13.76	25.64	25.65	16.20	46.00	-29.80
4	633.91	2.77	16.70	25.64	25.49	19.32	46.00	-26.68
5	787.85	3.17	19.06	25.79	25.32	21.76	46.00	-24.24
6	952.09	3.65	22.32	24.71	24.37	25.63	46.00	-20.37



Report No.: SZEM151000664801

Page: 71 of 92

6.7.2 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
3750.000	-31.10	32.90	0.00	45.50	47.30	74	-26.70	Vertical
4824.000	-30.40	34.40	0.00	39.90	43.90	74	-30.10	Vertical
6135.000	-29.30	35.00	0.00	40.30	46.00	74	-28.00	Vertical
7236.000	-27.90	35.80	0.00	37.70	45.60	74	-28.40	Vertical
9648.000	-25.00	37.20	0.00	34.30	46.50	74	-27.50	Vertical
12645.000	-23.10	38.10	0.00	35.00	50.00	74	-24.00	Vertical
3615.000	-31.20	32.40	0.00	49.20	50.40	74	-23.60	Horizontal
4824.000	-30.40	34.40	0.00	40.30	44.30	74	-29.70	Horizontal
5940.000	-29.10	34.70	0.00	39.90	45.50	74	-28.50	Horizontal
7236.000	-27.90	35.80	0.00	37.20	45.10	74	-28.90	Horizontal
9648.000	-25.00	37.20	0.00	36.30	48.50	74	-25.50	Horizontal
12645.000	-23.10	38.10	0.00	34.60	49.60	74	-24.40	Horizontal

Test mode:	802	.11b	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
3655.000	-31.20	32.60	0.00	54.40	55.80	74	-18.20	Vertical
4874.000	-30.40	34.50	0.00	39.90	44.00	74	-30.00	Vertical
6105.000	-29.20	35.00	0.00	39.50	45.30	74	-28.70	Vertical
7311.000	-27.90	35.70	0.00	38.10	45.90	74	-28.10	Vertical
9748.000	-25.00	37.30	0.00	35.20	47.50	74	-26.50	Vertical
12660.000	-23.20	38.10	0.00	35.50	50.40	74	-23.60	Vertical
3655.000	-31.20	32.60	0.00	56.10	57.50	74	-16.50	Horizontal
4874.000	-30.40	34.50	0.00	42.20	46.30	74	-27.70	Horizontal
5895.000	-29.20	34.60	0.00	39.50	44.90	74	-29.10	Horizontal
7311.000	-27.90	35.70	0.00	37.60	45.40	74	-28.60	Horizontal
9748.000	-25.00	37.30	0.00	34.70	47.00	74	-27.00	Horizontal
12660.000	-23.20	38.10	0.00	35.30	50.20	74	-23.80	Horizontal



Report No.: SZEM151000664801

Page: 72 of 92

Test mode: 802.11b		Test ch	Test channel: Middle		Remark	Average		
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
3655.000	-31.20	32.60	0.00	43.00	44.40	54	-9.60	Vertical
3655.000	-31.20	32.60	0.00	46.20	47.60	54	-6.40	Horizontal

Test mode:	est mode: 802.11b Test channel: 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
3750.000	-31.10	32.90	0.00	47.00	48.80	74	-25.20	Vertical
4924.000	-30.30	34.60	0.00	40.10	44.40	74	29.60	Vertical
6135.000	-29.30	35.00	0.00	39.10	44.80	74	-29.20	Vertical
7386.000	-27.90	35.70	0.00	38.80	46.60	74	-27.40	Vertical
9848.000	-24.20	37.30	0.00	35.50	48.60	74	-25.40	Vertical
12630.000	-23.00	38.10	0.00	34.90	50.00	74	-24.00	Vertical
3690.000	-31.10	32.70	0.00	51.70	53.30	74	-20.70	Horizontal
4924.000	-30.30	34.60	0.00	41.20	45.50	74	-28.50	Horizontal
6045.000	-29.00	35.00	0.00	39.30	45.30	74	-28.70	Horizontal
7386.000	-27.90	35.70	0.00	38.10	45.90	74	-28.10	Horizontal
9848.000	-24.20	37.30	0.00	34.60	47.70	74	-26.30	Horizontal
12645.000	-23.10	38.10	0.00	35.60	50.60	74	-23.40	Horizontal





Report No.: SZEM151000664801

Page: 73 of 92

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
3750.000	-31.10	32.90	0.00	40.30	42.10	74	-31.90	Vertical
4824.000	-30.40	34.40	0.00	39.20	43.20	74	-30.80	Vertical
5910.000	-29.20	34.60	0.00	39.00	44.40	74	-29.60	Vertical
7236.000	-27.90	35.80	0.00	38.30	46.20	74	-27.80	Vertical
9648.000	-25.00	37.20	0.00	34.50	46.70	74	-27.30	Vertical
12645.000	-23.10	38.10	0.00	34.20	49.20	74	-24.80	Vertical
3825.000	-31.20	33.20	0.00	39.80	41.80	74	-32.20	Horizontal
4824.000	-30.40	34.40	0.00	41.00	45.00	74	-29.00	Horizontal
6000.000	-28.80	34.90	0.00	39.10	45.20	74	-28.80	Horizontal
7236.000	-27.90	35.80	0.00	36.80	44.70	74	-29.30	Horizontal
9648.000	-25.00	37.20	0.00	34.60	46.80	74	-27.20	Horizontal
12645.000	-23.10	38.10	0.00	34.50	49.50	74	-24.50	Horizontal

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
3840.000	-31.20	33.30	0.00	40.90	43.00	74	-31.00	Vertical
4874.000	-30.40	34.50	0.00	40.20	44.30	74	-29.70	Vertical
6000.000	-28.80	34.90	0.00	38.50	44.60	74	-29.40	Vertical
7311.000	-27.90	35.70	0.00	38.20	46.00	74	-28.00	Vertical
9748.000	-25.00	37.30	0.00	35.90	48.20	74	-25.80	Vertical
12645.000	-23.10	38.10	0.00	34.60	49.60	74	-24.40	Vertical
3810.000	-31.20	33.10	0.00	39.60	41.50	74	-32.50	Horizontal
4874.000	-30.40	34.50	0.00	40.60	44.70	74	-29.30	Horizontal
6120.000	-29.20	35.00	0.00	39.30	45.10	74	-28.90	Horizontal
7311.000	-27.90	35.70	0.00	37.80	45.60	74	-28.40	Horizontal
9748.000	-25.00	37.30	0.00	35.60	47.90	74	-26.10	Horizontal
12660.000	-23.20	38.10	0.00	35.00	49.90	74	-24.10	Horizontal



Report No.: SZEM151000664801

Page: 74 of 92

Test mode:	80	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
3690.000	-31.10	32.70	0.00	39.50	41.10 74		-32.90	Vertical
4924.000	-30.30	34.60	0.00	39.20	43.50	74	-30.50	Vertical
5985.000	-28.90	34.80	0.00	41.90	47.80	74	-26.20	Vertical
7386.000	-27.90	35.70	0.00	37.50	45.30	74	-28.70	Vertical
9848.000	-24.20	37.30	0.00	35.50	48.60	74	-25.40	Vertical
12660.000	-23.20	38.10	0.00	34.90	49.80	74	-24.20	Vertical
3840.000	-31.20	33.30	0.00	39.20	41.30	74	-32.70	Horizontal
4924.000	-30.30	34.60	0.00	39.50	43.80	74	-30.20	Horizontal
6030.000	-28.90	34.90	0.00	38.60	44.60	74	-29.40	Horizontal
7386.000	-27.90	35.70	0.00	38.10	45.90	74	-28.10	Horizontal
9848.000	-24.20	37.30	0.00	34.90	48.00	74	-26.00	Horizontal
12660.000	-23.20	38.10	0.00	35.20	50.10	74	-23.90	Horizontal

Test mode:		802	.11n(HT20)	Test ch	annel:	Lowest	Remark	:	Peak
Frequency (MHz)	Lo	ble ss B)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3900.000	-31	.30	33.20	0.00	39.90	41.80	74	-32.20	Vertical
4824.000	-30	.40	34.40	0.00	39.70	43.70	74	-30.30	Vertical
6030.000	-28	3.90	34.90	0.00	39.10	45.10	74	-28.90	Vertical
7236.000	-27	'.90	35.80	0.00	36.80	44.70	74	-29.30	Vertical
9648.000	-25	5.00	37.20	0.00	35.30	47.50	74	-26.50	Vertical
12600.000	-22	2.80	38.10	0.00	35.10	50.40	74	23.60	Vertical
3885.000	-31	.30	33.20	0.00	39.70	41.60	74	-32.40	Horizontal
4824.000	-30	.40	34.40	0.00	40.60	44.60	74	-29.40	Horizontal
6090.000	-29	.10	35.00	0.00	39.00	44.90	74	-29.10	Horizontal
7236.000	-27	'.90	35.80	0.00	37.90	45.80	74	-28.20	Horizontal
9648.000	-25	5.00	37.20	0.00	34.60	46.80	74	-27.20	Horizontal
12630.000	-23	3.00	38.10	0.00	35.30	50.40	74	-23.60	Horizontal



Report No.: SZEM151000664801

Page: 75 of 92

Test mode:	80	2.11n(HT20)	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
3990.000	-30.90	33.20	0.00	39.50	41.80	74	-32.20	Vertical
4874.000	-30.40	34.50	0.00	39.60	43.70	74	-30.30	Vertical
6090.000	-29.10	35.00	0.00	39.20	45.10	74	-28.90	Vertical
7311.000	-27.90	35.70	0.00	36.90	44.70	74	-29.30	Vertical
9748.000	-25.00	37.30	0.00	35.20	47.50	74	-26.50	Vertical
12660.000	-23.20	38.10	0.00	35.50	50.40	74	23.60	Vertical
3825.000	-31.20	33.20	0.00	39.60	41.60	74	-32.40	Horizontal
4874.000	-30.40	34.50	0.00	40.50	44.60	74	-29.40	Horizontal
6225.000	-29.10	34.90	0.00	39.10	44.90	74	-29.10	Horizontal
7311.000	-27.90	35.70	0.00	38.00	45.80	74	-28.20	Horizontal
9748.000	-25.00	37.30	0.00	34.50	46.80	74	-27.20	Horizontal
12630.000	-23.00	38.10	0.00	35.30	50.40	74	-23.60	Horizontal

Test mode:	802	.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
3825.000	-31.20	33.20	0.00	40.20	42.20	74	-31.80	Vertical
4924.000	-30.30	34.60	0.00	39.30	43.60	74	-30.40	Vertical
6000.000	-28.80	34.90	0.00	38.80	44.90	74	-29.10	Vertical
7386.000	-27.90	35.70	0.00	37.60	45.40	74	-28.60	Vertical
9748.000	-25.00	37.30	0.00	35.30	47.60	74	-26.40	Vertical
12660.000	-23.20	38.10	0.00	34.70	49.60	74	-24.40	Vertical
3960.000	-31.00	33.10	0.00	39.70	41.80	74	-32.20	Horizontal
4924.000	-30.30	34.60	0.00	40.00	44.30	74	-29.70	Horizontal
5985.000	-28.90	34.80	0.00	39.40	45.30	74	-28.70	Horizontal
7386.000	-27.90	35.70	0.00	37.80	45.60	74	-28.40	Horizontal
9848.000	-24.20	37.30	0.00	35.00	48.10	74	-25.90	Horizontal
12525.000	-22.90	38.00	0.00	34.10	49.20	74	-24.80	Horizontal



Report No.: SZEM151000664801

Page: 76 of 92

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.

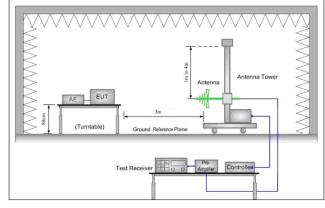


Report No.: SZEM151000664801

Page: 77 of 92

6.8 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 15	5.209 and 15.205							
Test Method:	ANSI C63.10 2009	NSI C63.10 2009							
Test Site:	Measurement Distance: 3m	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 Value						
	216MHz-960MHz	46.0	Quasi-peak Value						
	960MHz-1GHz	54.0	Quasi-peak Value						
	Above 1CUz	54.0	Average Value						
	Above 1GHz 74.0 Peak Value								
Test Setup:									



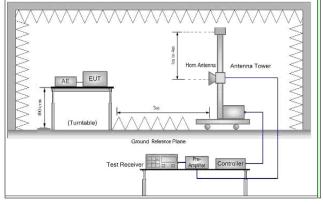


Figure 1. 30MHz to 1GHz

Figure 2. Above 1 GHz

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Report No.: SZEM151000664801

Page: 78 of 92

Test Procedure:	a. 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. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	c. 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.
	d. 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.
	e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	f. 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
	g. Test the EUT in the lowest channel, the Highest channel
	h. 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.
	 Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
	Transmitting mode.
Final Test Mode:	Pretest the EUT at Transmitting mode, found the 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 $802.11n(HT20)$.
	Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass

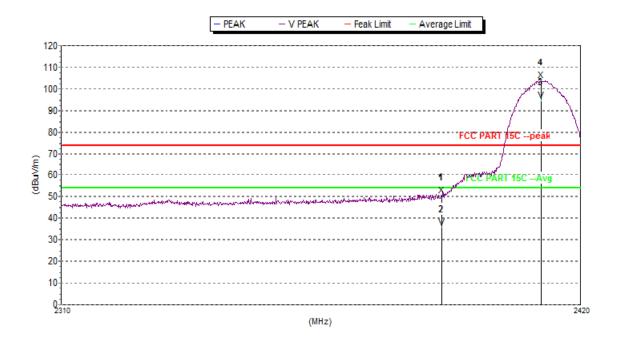
[&]quot;This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



Report No.: SZEM151000664801

Page: 79 of 92

Test plot as follows:

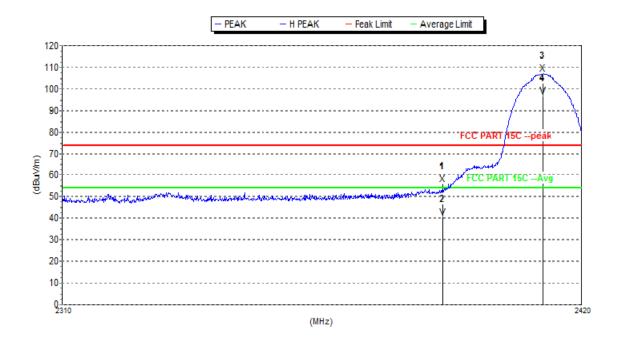


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1	2390	50.5	74.0	23.5	32.5	0.0	-19.3	V
2F	2411.340	103.9	74.0	-29.9	32.6	0.0	-19.3	V
Avg								
1	2390	35.6	54.0	18.4	32.5	0.0	-19.3	V
2F	2411.340	94.6	54.0	-40.6	32.6	0.0	-19.3	V



Report No.: SZEM151000664801

Page: 80 of 92

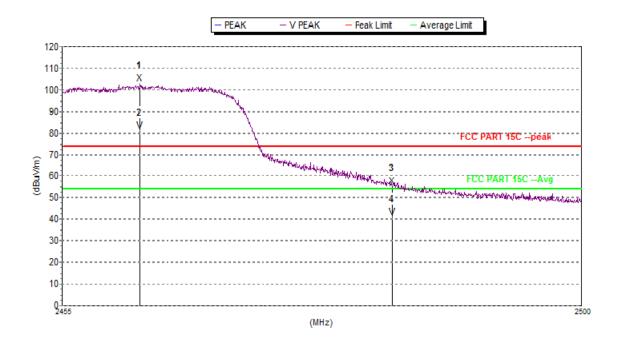


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1	2390	55.7	74.0	18.3	32.5	0.0	-19.3	Н
2 F	2411.640	107.3	74.0	-33.3	32.6	0.0	-19.3	Н
Avg								
1	2390	40.4	54.0	13.6	32.5	0.0	-19.3	Н
2 F	2411.640	96.9	54.0	-42.9	32.6	0.0	-19.3	Н



Report No.: SZEM151000664801

Page: 81 of 92

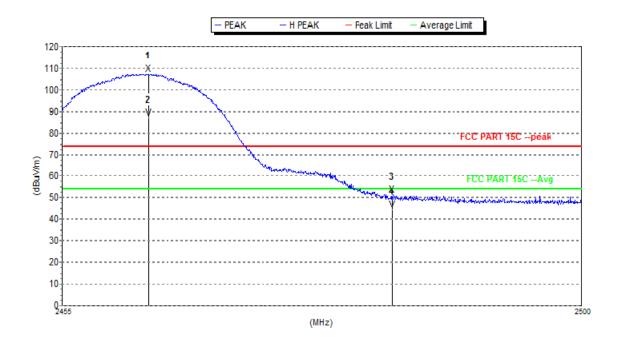


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1 F	2461.705	103.0	74.0	-29.0	32.5	0.0	-19.2	V
2	2483.5	55.2	74.0	18.8	32.5	0.0	-19.1	V
Avg								
1 F	2461.705	81.2	54.0	-27.2	32.5	0.0	-19.2	V
2	2483.5	40.9	54.0	13.1	32.5	0.0	-19.1	V



Report No.: SZEM151000664801

Page: 82 of 92



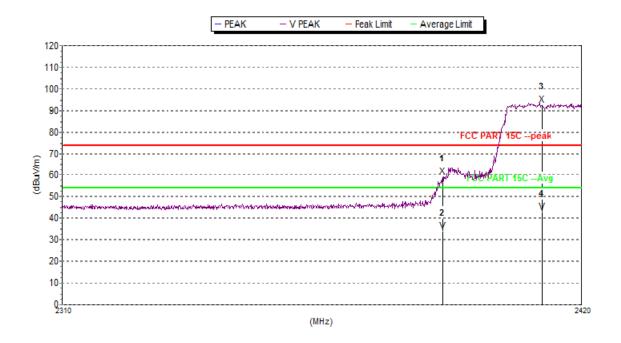
Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1 F	2462.470	107.4	74.0	-33.4	32.5	0.0	-19.2	Н
2	2483.5	51.4	74.0	22.6	32.5	0.0	-19.1	Н
Avg								
1 F	2462.470	87.2	54.0	-33.2	32.5	0.0	-19.2	Н
2	2483.5	44.6	54.0	9.4	32.5	0.0	-19.1	Н





Report No.: SZEM151000664801

Page: 83 of 92

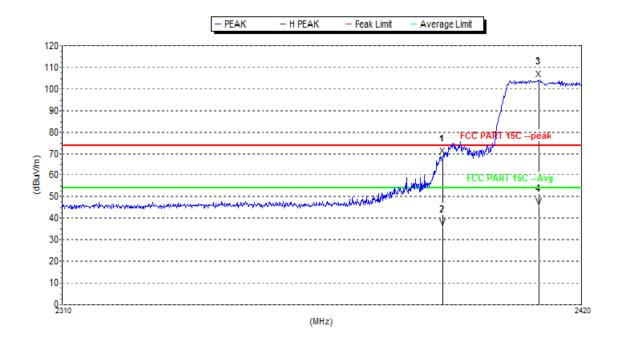


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1	2390	59.5	74.0	14.5	32.5	0.0	-19.3	V
2 F	2411.420	92.8	74.0	-18.8	32.6	0.0	-19.3	V
Avg								
1	2390	34.0	54.0	20.0	32.5	0.0	-19.3	V
2	2411.420	42.9	54.0	11.1	32.6	0.0	-19.3	V



Report No.: SZEM151000664801

Page: 84 of 92

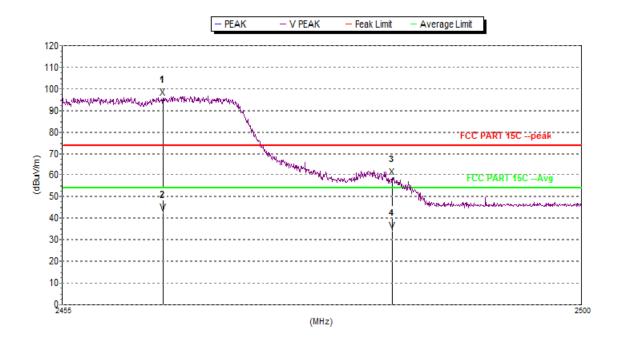


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1	2390	68.5	74.0	5.5	32.5	0.0	-19.3	Н
2 F	2410.760	104.4	74.0	-30.4	32.6	0.0	-19.3	Н
Avg								
1	2390	35.9	54.0	18.1	32.5	0.0	-19.3	Н
2	2410.760	45.2	54.0	8.8	32.6	0.0	-19.3	Н



Report No.: SZEM151000664801

Page: 85 of 92

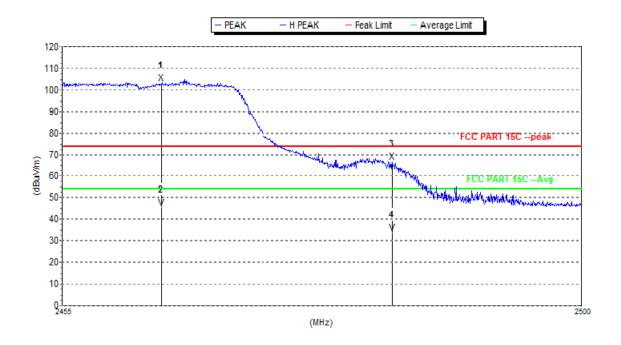


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1 F	2463.685	95.9	74.0	-21.9	32.5	0.0	-19.2	V
2	2483.5	59.1	74.0	14.9	32.5	0.0	-19.1	V
Avg								
1	2463.685	42.6	54.0	11.4	32.5	0.0	-19.2	V
2	2483.5	34.1	54.0	19.9	32.5	0.0	-19.1	V



Report No.: SZEM151000664801

Page: 86 of 92

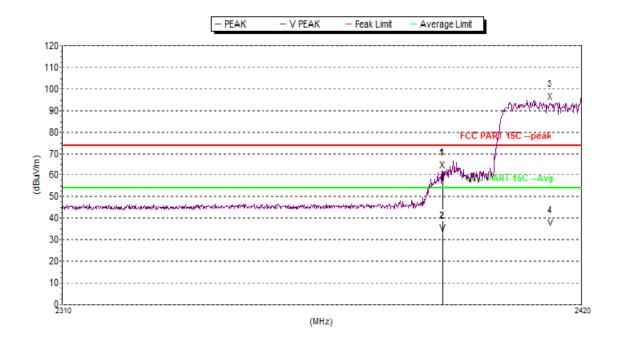


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1 F	2463.550	103.2	74.0	-29.2	32.5	0.0	-19.2	Н
2	2483.5	66.5	74.0	7.5	32.5	0.0	-19.1	Н
Avg								
1	2463.550	45.3	54.0	8.7	32.5	0.0	-19.2	Н
2	2483.5	33.8	54.0	20.2	32.5	0.0	-19.1	Н



Report No.: SZEM151000664801

Page: 87 of 92

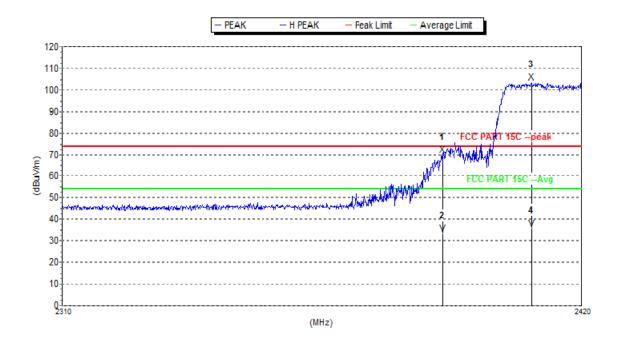


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1	2390	62.4	74.0	11.6	32.5	0.0	-19.3	V
2 F	2413.290	93.9	74.0	-19.9	32.6	0.0	-19.3	V
Avg								
1	2390	32.9	54.0	21.1	32.5	0.0	-19.3	V
2	2413.290	35.2	54.0	18.8	32.6	0.0	-19.3	V



Report No.: SZEM151000664801

Page: 88 of 92

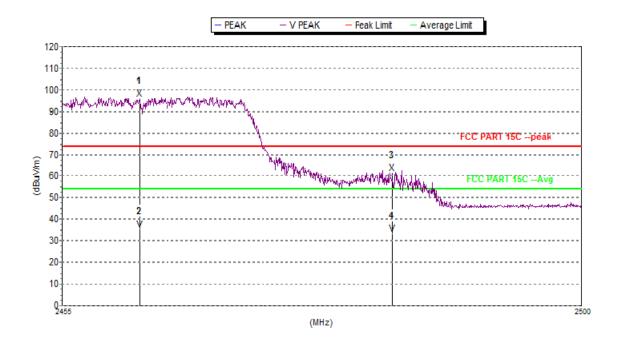


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1	2390	69.8	74.0	4.2	32.5	0.0	-19.3	Н
2 F	2409.110	103.5	74.0	-29.5	32.6	0.0	-19.3	Н
Avg								
1	2390	33.3	54.0	20.7	32.5	0.0	-19.3	Н
2	2409.110	35.8	54.0	18.2	32.6	0.0	-19.3	Н



Report No.: SZEM151000664801

Page: 89 of 92

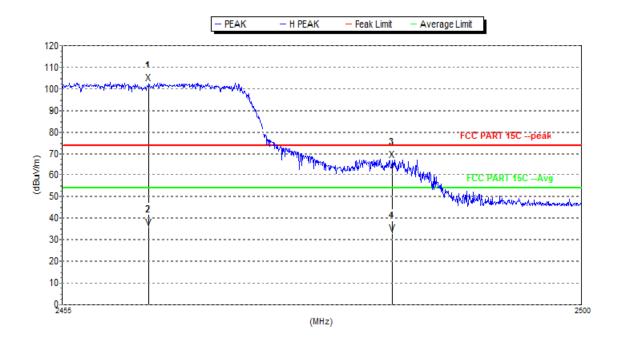


Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1 F	2461.705	96.0	74.0	-22.0	32.5	0.0	-19.2	V
2	2483.5	61.3	74.0	12.7	32.5	0.0	-19.1	V
Avg								
1	2461.705	35.5	54.0	18.5	32.5	0.0	-19.2	V
2	2483.5	33.2	54.0	20.8	32.5	0.0	-19.1	V



Report No.: SZEM151000664801

Page: 90 of 92



Mk.	Freq.(MHz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Ant.F.(dB/m)	Amp.G.(dB)	Cbl.L.(dB)	Pol.
Peak:								
1 F	2462.470	102.6	74.0	-28.6	32.5	0.0	-19.2	Н
2	2483.5	67.2	74.0	6.8	32.5	0.0	-19.1	Н
Avg								
1	2462.470	35.9	54.0	18.1	32.5	0.0	-19.2	Н
2	2483.5	33.1	54.0	20.9	32.5	0.0	-19.1	Н

Note:

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



Report No.: SZEM151000664801

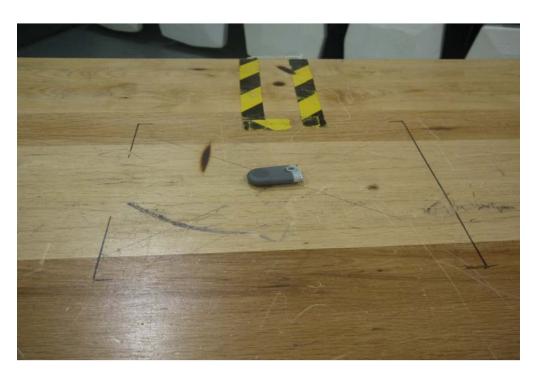
Page: 91 of 92

7 Photographs - EUT Test Setup

Test model No.: ZGACTC-GY0

7.1 Radiated Spurious Emission



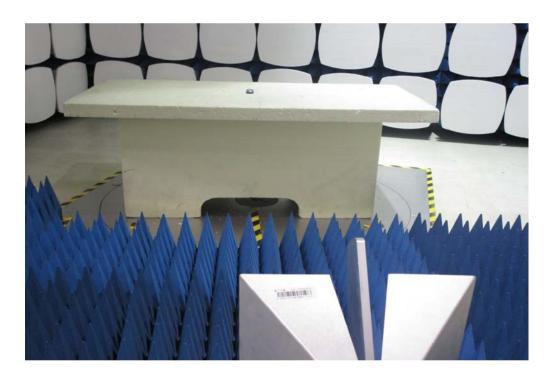




Report No.: SZEM151000664801

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Page: 92 of 92





8 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1510006648CB