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TEST REPORT

Application No.: SZEM1705004503CR

Applicant: Sichuan Changhong Network Technologies Co., Ltd.

Address of Applicant: Science and Technology Park, Mianyang City, Sichuan Province, China

Manufacturer: Sichuan Changhong Network Technologies Co., Ltd.

Address of Manufacturer: Science and Technology Park, Mianyang City, Sichuan Province, China

Factory: Sichuan Changhong Network Technologies Co., Ltd.

Address of Factory: No. 49 North HuoJu West Street, high-tech park, mianyang, sichuan, china

Equipment Under Test (EUT):

EUT Name: Network Set-Top Box

Model No.: IHO-4000 I

Trade mark: FREEDOCAST

FCC ID: 2AIFQIHO-4000I

Standards: 47 CFR Part 15, Subpart E 15.407

Date of Receipt: 2017-05-15

Date of Test: 2017-05-19 to 2017-06-20

Date of Issue: 2017-07-14

Test Result : Pass*

SERVINCES CO

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.

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



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Revision Record							
Version Chapter Date Modifier Ren							
01		2017-07-14		Original			

Authorized for issue by:		
	Zdison li	
	Edison Li /Project Engineer	
	Eric Fu	
	Eric Fu /Reviewer	



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2 Test Summary

Radio Spectrum Tecl	Radio Spectrum Technical Requirement						
Item Standard Method Requirement Re							
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart E 15.203	Pass			
Transmission in the Absence of Data	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart E 15.407 (c)	Pass			

N/A: Not applicable

Radio Spectrum Matt	er Part			
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz) 47 CFR Part Subpart E 15		ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart E 15.207 & 15.407 b(6)	Pass
99% Bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 II D	N/A	Pass
26dB Emission bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 1	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Minimum 6 dB bandwidth (5.725- 5.85 GHz band)	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 2	47 CFR Part 15, Subpart E 15.407 (e)	Pass
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Peak Power spectrum density	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II F	47 CFR Part 15, Subpart E 15.407 (a)	Pass
DFS: Channel Move Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
DFS: Channel Closing Transmission Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Radiated Emissions	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart E 15.209 & 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart E 15.209 & 15.407(b)	Pass
Frequency Stability	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	Pass

N/A: Not applicable



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4 General Information

4.1 Details of E.U.T.

Power supply: DC 7.2V, 2600mAh rechargeable lithium-ion battery which charged by AC /DC adapter

AC/DC Adapter

3.0V DC(1.5V x 2 "AAA" Size Batteries) for remote controller

Model: GSCU1500S012V18N

Input: AC 100-240V, 50/60Hz, 0.5A Max

Output: DC 12V, 1.5A

Cable: DC cable: 150cm unshielded

Network cable: 147cm unshielded HDMI cable: 142cm unshielded

Operation Frequency: Band Mode Frequency Number of Range(MHz) channels

Range(MHz) IEEE 802.11a/n(HT20) UNII Band I 5180-5240 4 IEEE 802.11n(HT40) 5190-5230 2 UNII Band II-A 4 IEEE 802.11a/n(HT20) 5260-5320 IEEE 802.11n(HT40) 5270-5310 2 **UNII Band II-C** IEEE 802.11a/n(HT20) 5500-5700 11 5 IEEE 802.11n(HT40) 5510-5670 **UNII Band III** IEEE 802.11a/n(HT20) 5745-5825 5 2 IEEE 802.11n(HT40) 5755-5795

Modulation Type: IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK)

IEEE 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM)

DFS Function: Slave without radar detection

Sample Type: Fixed device Antenna Type: Integral

Antenna Gain: Antenna 1/ Antenna 2: 3dBi

Note: MIMO for 802.11n



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Channel list for 802.11a/n(HT20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	80MHz 60 50		116	5580MHz	140	5700MHz
40	5200MHz	64	5320MHz	120	5600MHz	149	5745MHz
44	5220MHz	100	5500MHz	124	5620MHz	153	5765MHz
48	5240MHz	104	5520MHz	128	5640MHz	157	5785MHz
52	5260MHz	108	5540MHz	132	5660MHz	161	5805MHz
56	5280MHz	112	5560MHz	136	5680MHz	165	5825MHz

Channel list for 802.11n(HT40)							
Channel Frequency Channel Frequency Cha					Frequency	Channel	Frequency
38	5190MHz	ИHz 62 5310M		118	5590MHz	151	5755MHz
46	5230MHz	102	5510MHz	126	5630MHz	159	5795MHz
54	5270MHz	110	5550MHz	134	5670MHz		

Selected Test Chann	el for 802.11a/n(HT20)	
Band	Channel	Frequency
	The lowest channel (CH36)	5180MHz
U-NII Band I	The middle channel (CH40)	5200MHz
	The highest channel (CH48)	5240MHz
	The lowest channel (CH52)	5260MHz
U-NII Band II-A	The middle channel (CH60)	5300MHz
	The highest channel (CH64)	5320MHz
	The lowest channel (CH100)	5500MHz
U-NII Band II-C	The middle channel (CH116)	5580MHz
	The highest channel (CH140)	5700MHz
	The lowest channel (CH149)	5745MHz
U-NII Band III	The middle channel (CH157)	5785MHz
	The highest channel (CH165)	5825MHz

Selected Test Channel for 802.11n(HT40)			
Band	Channel	Frequency	
LI NII Dand I	The lowest channel (CH38)	5190MHz	
U-NII Band I	The highest channel (CH46)	5230MHz	
LL NIII Danal II A	The lowest channel (CH54)	5270MHz	
U-NII Band II-A	The highest channel (CH62)	5310MHz	
	The lowest channel (CH102)	5510MHz	
U-NII Band II-C	The middle channel (CH110)	5550MHz	
	The highest channel (CH134)	5670MHz	
	The lowest channel (CH151)	5755MHz	
U-NII Band III	The highest channel (CH159)	5795MHz	



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4.2 Description of Support Units

The EUT has been tested independent unit.

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty		
1	Radio Frequency	7.25 x 10 ⁻⁸		
2	Duty cycle	0.37%		
3	Occupied Bandwidth	3%		
4	RF conducted power	0.75dB		
5	RF power density	2.84dB		
6	Conducted Spurious emissions	0.75dB		
7	DE Dadiated power	4.5dB (below 1GHz)		
/	RF Radiated power	4.8dB (above 1GHz)		
8	Padiated Spurious emission test	4.5dB (30MHz-1GHz)		
0	Radiated Spurious emission test	4.8dB (1GHz-18GHz)		
9	Temperature test	1℃		
10	Humidity test	3%		
11	Supply voltages	1.5%		



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4.4 Test Location

All tests were performed at:

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

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.

4.5 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 –Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• Industry Canada (IC)

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber 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-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

Conducted Emissions at AC Power Line (150kHz-30MHz)							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2017-05-10	2018-05-10		
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A		
LISN	Rohde & Schwarz	ENV216	SEM007-01	2016-10-09	2017-10-09		
LISN	ETS-LINDGREN	3816/2	SEM007-02	2017-04-14	2018-04-13		
8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T8-02	EMC0120	2016-09-28	2017-09-28		
4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T4-02	EMC0121	2016-09-28	2017-09-28		
2 Line ISN	Fischer Custom	FCC-TLISN- T2-02	EMC0122	2016-09-28	2017-09-28		

RF Conduced Test					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2016-10-09	2017-10-09
Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2016-10-09	2017-10-09
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Signal Generator	Rohde & Schwarz	SML03	SEM006-02	2017-04-14	2018-04-13
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2016-10-09	2017-10-09



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Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2017-05-10	2018-05-10
Measurement Software	AUDIX	e3 V8.2014- 6-27	N/A	N/A	N/A
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2017-04-14	2018-04-13
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-02	2017-03-05	2020-03-05
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2014-11-24	2017-11-24
Horn Antenna (15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-14	2015-02-12	2018-02-12
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2016-10-09	2017-10-09
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA- 0118-352810	SEM005-05	2016-10-09	2017-10-09
Pre-amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-10	2016-10-17	2017-10-17
Pre-amplifier (26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2017-04-14	2018-04-13
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2016-10-09	2017-10-09
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2015-08-14	2018-08-14
Band filter	N/A	N/A	SEM023-01	N/A	N/A



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Radiated Spurious Emis	ssions				
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2017-05-10	2018-05-10
Measurement Software	AUDIX	e3 V8.2014- 6-27	N/A	N/A	N/A
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2017-04-14	2018-04-13
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-02	2017-03-05	2020-03-05
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2014-11-24	2017-11-24
Horn Antenna (15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-14	2015-02-12	2018-02-12
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2016-10-09	2017-10-09
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA- 0118-352810	SEM005-05	2016-10-09	2017-10-09
Pre-amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-10	2016-10-17	2017-10-17
Pre-amplifier (26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2017-04-14	2018-04-13
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2016-10-09	2017-10-09
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2015-08-14	2018-08-14
Band filter	N/A	N/A	SEM023-01	N/A	N/A



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DFS test system					
Test Equipment	Test Equipment Manufacturer		Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
Power Meter	Agilent Technologies	U2021XA_Ch1	SEM009-01	2016-10-09	2017-10-09
Power Meter	Agilent Technologies	U2021XA_Ch2	SEM009-02	2016-10-09	2017-10-09
Power Meter	Agilent Technologies	U2021XA_Ch3	SEM009-03	2016-10-09	2017-10-09
Power Meter	Agilent Technologies	U2021XA_Ch4	SEM009-04	2016-10-09	2017-10-09
DAQ Device	Agilent Technologies	U2531A	SEN005-01	N/A	N/A
EXG Analog Signal Generator	KEYSIGHT	N5171B	SEM006-04	2014-08-27	2017-08-27
EXA Signal Analyzer	Agilent Technologies	N9010A	SEM004-09	2016-07-19	2017-07-19
ESG vector signal generator	Agilent Technologies	E4438C	SEM006-03	2016-07-19	2017-07-19
Router	Skyworth	ROUTER 750	SEM007-03	N/A	N/A

General used equipment							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2016-10-12	2017-10-12		
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2016-10-12	2017-10-12		
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2016-10-12	2017-10-12		
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2017-04-18	2018-04-18		



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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart E 15.203

6.1.2 Conclusion

Standard Requirement:

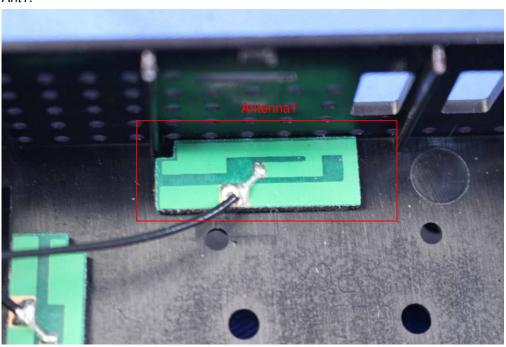
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an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

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 3dBi.

Direction Gain = $3.0dBi + 10 \times log(2) = 6dBi$

Ant1:

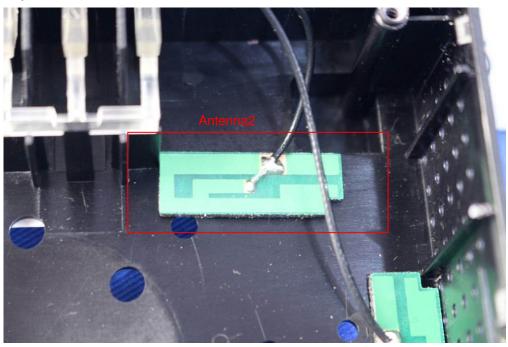




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Ant2:





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6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip (MT7632U) support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.



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6.3 Dynamic Frequency Selection

6.3.1 Applicability of DFS requirements

47 CFR Part 15, Subpart E 15.407 (c)

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

radio 117 ppinoadimity of 21 of 10 quinomitation to 000 of a official mon						
	Operational Mode					
Requirement	□Master	⊠Client Without Radar Detection	Client With Radar Detection			
Non-Occupancy Period	Yes	Not required	Yes			
DFS Detection Threshold	Yes	Not required	Yes			
Channel Availability Check Time	Yes	Not required	Not required			
U-NII Detection Bandwidth	Yes	Not required	Yes			

Table 2: Applicability of DFS requirements during normal operation

	Operational Mode				
Requirement	☐Master Device or Client with Radar Detection	⊠Client Without Radar Detection			
DFS Detection Threshold	Yes	Not required			
Channel Closing Transmission Time	Yes	Yes			
Channel Move Time	Yes	Yes			
U-NII Detection Bandwidth	Yes	Not required			

Additional requirements for devices with multiple bandwidth modes	☐Master Device or Client with Radar Detection	⊠Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.



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6.3.2 Limit

DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)		
EIRP ≥ 200 milliwatt	-64 dBm		
EIRP < 200 milliwatt and	-62 dBm		
power spectral density < 10 dBm/MHz	02 dB.III		
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm		

- Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.
- Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
- Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

DFS Detection Thresholds

Table 4: DFS Response Requirement Values

Parameter	Value			
Non-occupancy period	Minimum 30 minutes			
Channel Availability Check Time	60 seconds			
Channel Mayo Time	10 seconds			
Channel Move Time	See Note 1.			
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.			
g .	See Notes 1 and 2.			
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.			

- Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
- Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required facilitating a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
- Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.



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7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart E 15.207 & 15.407 b(6)

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

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

7.1.1 E.U.T. Operation

Operating Environment:

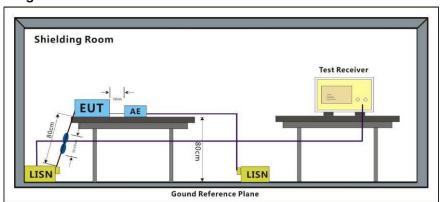
Temperature: 25 °C Humidity: 54 % RH Atmospheric Pressure: 1015 mbar

Test mode g: Charge + TX mode (Band I)_Keep the EUT in charging and continuously

transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only

the data of worst case is recorded in the report.

7.1.2 Test Setup Diagram





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7.1.3 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50 \text{ohm}/50 \mu\text{H} + 5 \text{ohm}$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a 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 the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

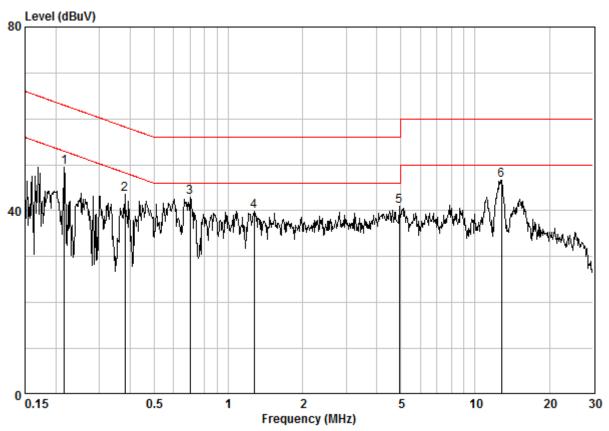
Remark: LISN=Read Level+ Cable Loss+ LISN Factor



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Mode:g; Line:Live Line



Site : Shielding Room Condition : CE LINE Job No, : 04503CR Test Mode : g

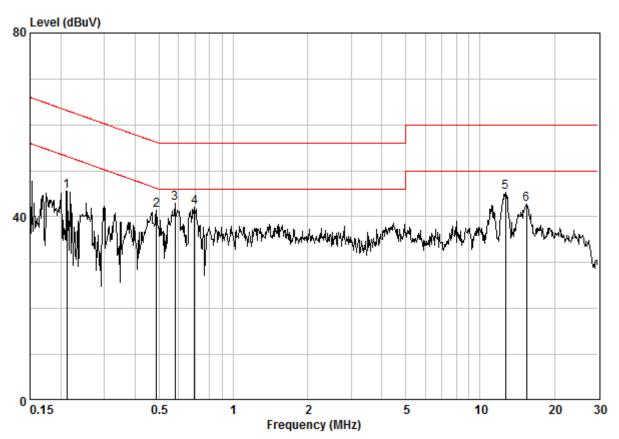
				Read			0ver	D1-
	rreq	Loss	ractor	revel	revel	Line	Limit	Kemark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.21620	0.02	9.64	39.84	49.50	52.96	-3.46	Peak
2	0.38113	0.02	9.64	33.95	43.61	48.25	-4.64	Peak
3 @	0.70096	0.02	9.65	33.30	42.98	46.00	-3.02	Peak
4	1.269	0.03	9.66	30.17	39.86	46.00	-6.14	Peak
5	4.926	0.02	9.74	31.22	40.97	46.00	-5.03	Peak
6	12.784	0.15	9.92	36.63	46.70	50.00	-3.30	Peak



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Mode:g; Line:Neutral Line



Site : Shielding Room Condition : CE NEUTRAL Job No, : 04503CR

Test Mode : g

	Freq		LISN Factor			Limit Line		Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.21167	0.02	9.63	35.92	45.57	53.14	-7.57	Peak
2	0.48890	0.02	9.63	31.74	41.39	46.19	-4.79	Peak
3	0.57923	0.02	9.63	33.29	42.95	46.00	-3.05	Peak
4	0.69725	0.02	9.64	32.42	42.08	46.00	-3.92	Peak
5	12.649	0.15	9.92	35.36	45.42	50.00	-4.58	Peak
6	15.388	0.16	9.99	32.48	42.63	50.00	-7.37	Peak



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Atmospheric Pressure:

1010 mbar

7.2 99% Bandwidth

Test Requirement N/A

Test Method: KDB 789033 II D

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

Pretest these mode to find the worst case:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

56 % RH

Humidity:

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

The worst case for final test:

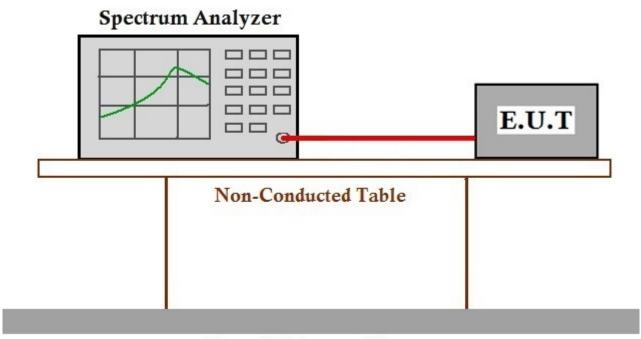
f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.



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7.2.2 Test Setup Diagram



Ground Reference Plane

7.2.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407



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Atmospheric Pressure:

1010 mbar

7.3 26dB Emission bandwidth

47 CFR Part 15, Subpart E 15.407 (a) Test Requirement

Humidity:

Test Method: KDB 789033 D02 II C 1

7.3.1 E.U.T. Operation

Operating Environment:

23 °C

Pretest these mode to find the worst case:

Temperature:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is

56 % RH

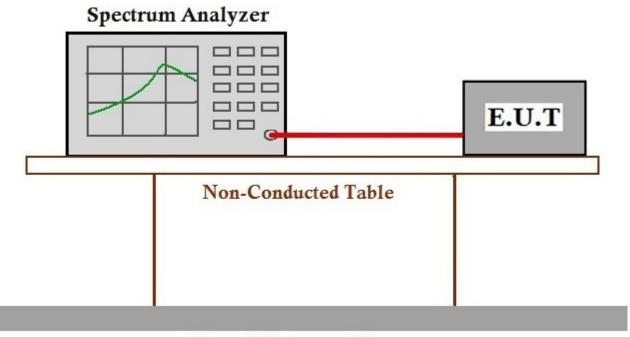
recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III) Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

The worst case for final test:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

7.3.2 Test Setup Diagram



Ground Reference Plane

7.3.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

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7.4 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart E 15.407 (e)

Test Method: KDB 789033 D02 II C 2

Limit: ≥500 kHz

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 56 % RH Atmospheric Pressure: 1010 mbar

Pretest these mode to find the worst case:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is

recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only

the data of worst case is recorded in the report.

The worst case for final test:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is

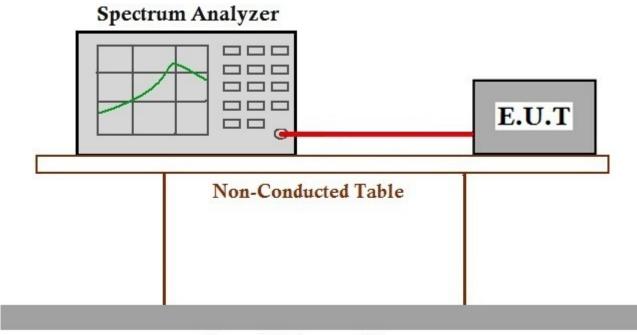
recorded in the report.



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7.4.2 Test Setup Diagram



Ground Reference Plane

7.4.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407



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7.5 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Limit				
≤1W(30dBm) for master device				
≤250mW(24dBm) for client device				
≤250mW(24dBm) for client device or 11dBm+10logB*				
≤250mW(24dBm) for client device or 11dBm+10logB*				
≤1W(30dBm)				

Remark: *Where B is the 26dB emission bandwidth in MHz.

The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 56 % RH

Atmospheric Pressure: 1010 mbar

Pretest these mode to find the worst case:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

The worst case for final test:

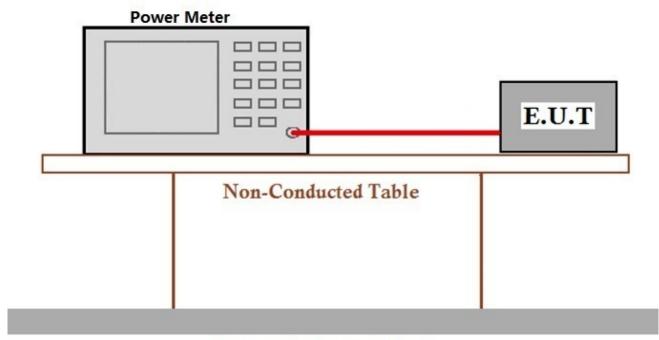
f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.



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7.5.2 Test Setup Diagram



Ground Reference Plane

7.5.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407



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7.6 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II F

Limit:

Frequency band(MHz)	Limit				
E1E0 E2E0	≤17dBm in 1MHz for master device				
5150-5250	≤11dBm in 1MHz for client device				
5250-5350	≤11dBm in 1MHz for client device				
5470-5725	≤11dBm in 1MHz for client device				
5725-5850	≤30dBm in 500 kHz				

Remark: The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 56 % RH Atmospheric Pressure: 1010 mbar

Pretest these mode to find the worst case:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

The worst case for final test:

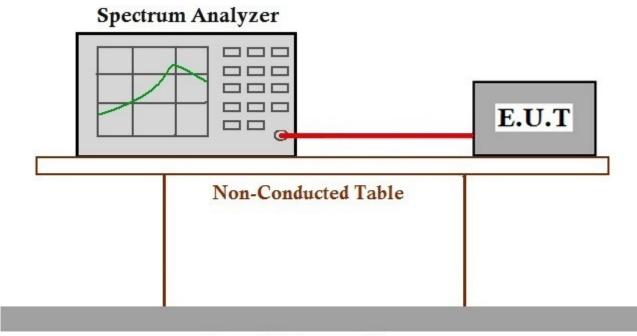
f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.



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7.6.2 Test Setup Diagram



Ground Reference Plane

7.6.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407



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7.7 DFS: Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit: 10 seconds(should be performed with Radar Type 0. The measurement

timing begins at the end of the Radar Type 0 burst)

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 55 % RH Atmospheric Pressure: 1005 mbar

Pretest these mode to find the worst case:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is

recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only

the data of worst case is recorded in the report.

The worst case for final test:

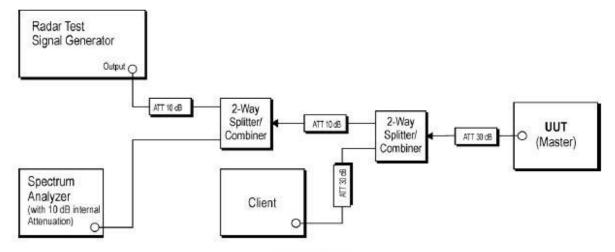
f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.



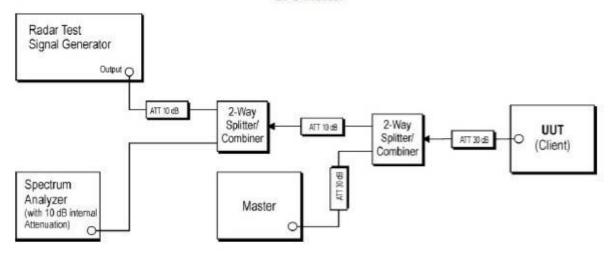
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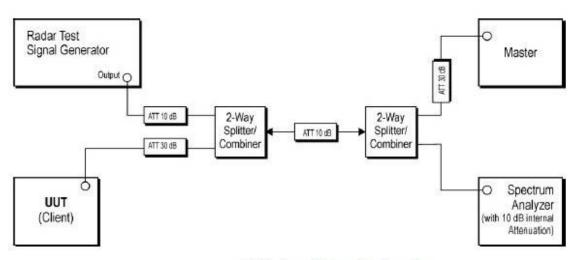
7.7.2 Test Setup Diagram



DFS master



DFS slave with radar detection



DFS slave without radar detection

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7.7.3 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407



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7.8 DFS: Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit: 200 milliseconds + an aggregate of 60 milliseconds over remaining 10

second period(should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. It is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in

between transmissions)

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 55 % RH Atmospheric Pressure: 1005 mbar

Pretest these mode to find the worst case:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

The worst case for final test:

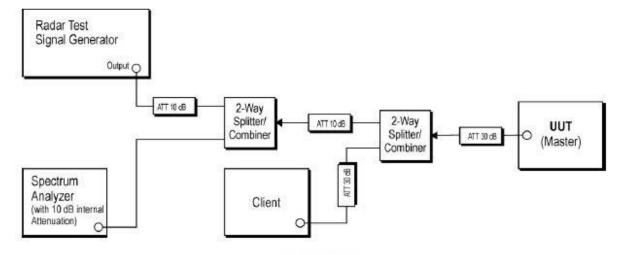
f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.



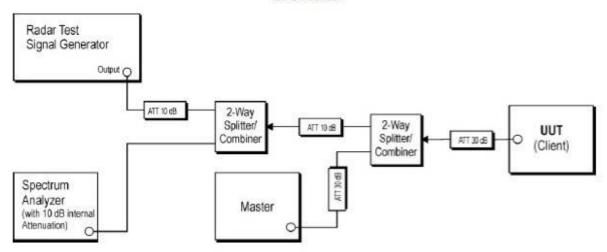
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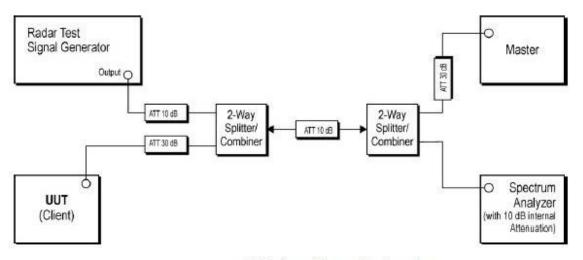
7.8.2 Test Setup Diagram



DFS master



DFS slave with radar detection



DFS slave without radar detection

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7.8.3 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407



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7.9 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart E 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 55 % RH Atmospheric Pressure: 1015 mbar

Pretest these mode to find the worst case:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is

recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only

the data of worst case is recorded in the report.

The worst case for final test:

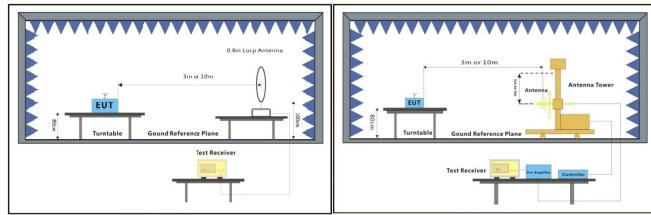
g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.



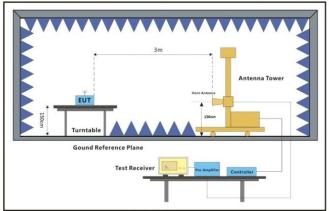
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7.9.2 Test Setup Diagram



Below 30MHz 30MHz-1GHz



Above 1GHz



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7.9.3 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. 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 fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 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.
- 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 the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

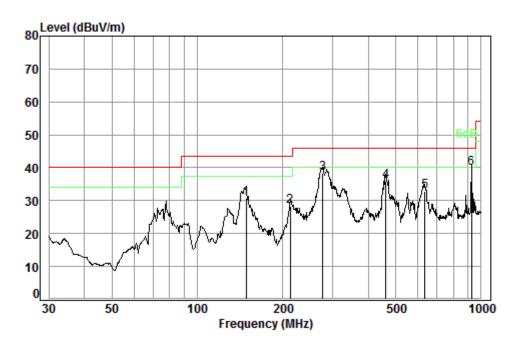


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Below 1GHz

Mode:g; Polarization:Horizontal; Modulation Type:802.11a;



Condition: 3m HORIZONTAL

Job No. : 04503CR

Test mode: g

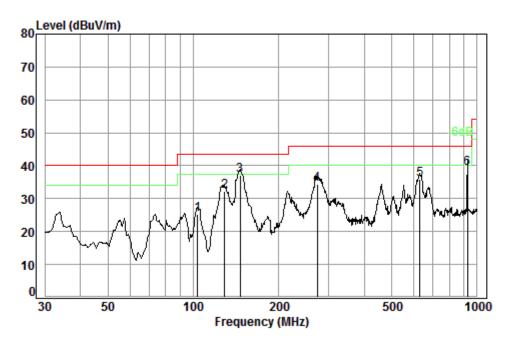
	Freq			Preamp Factor				Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	148.44	1.31	8.86	26.91	47.53	30.79	43.50	-12.71
2	213.02	1.48	10.88	26.65	42.71	28.42	43.50	-15.08
3	277.09	1.80	12.89	26.46	49.97	38.20	46.00	-7.80
4	462.35	2.46	17.34	27.52	43.74	36.02	46.00	-9.98
5	633.91	2.77	20.54	27.49	37.06	32.88	46.00	-13.12
6 рр	925.76	3.63	23.30	26.64	39.58	39.87	46.00	-6.13



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Mode:g; Polarization:Vertical; Modulation Type:802.11a;



Condition: 3m VERTICAL Job No. : 04503CR

Test mode: g

C3 C	moue. g							
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
						ID. 1//	ID. 1//	
	MHz	ав	aB/m	dB	aBuv	aBuv/m	aBuv/m	dB
1	103.81	1.21	8 91	27.17	42 42	25.37	43.50	-18.13
2	129.01			27.02				
3 p	p 146.37	1.31	8.67	26.93	53.98	37.03	43.50	-6.47
4	273.23	1.78	12.76	26.47	46.19	34.26	46.00	-11.74
5	629.48	2.76	20.52	27.50	40.08	35.86	46.00	-10.14
6	925.76	3.63	23.30	26.64	38.81	39.10	46.00	-6.90

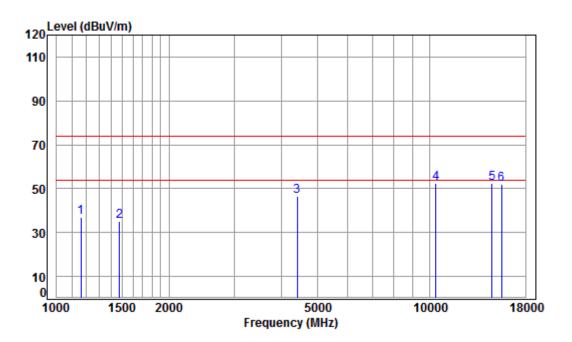


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Above 1GHz (Band 1)

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5180 TX RSE

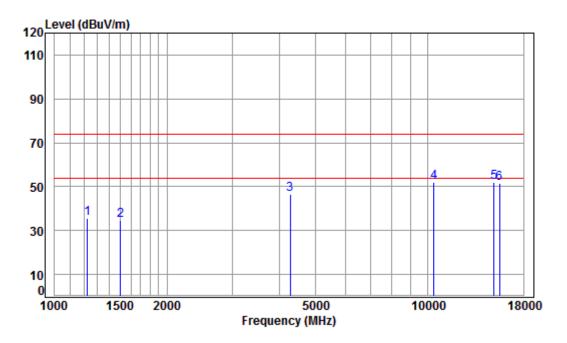
	· WIL	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1162.182	4.02	24.29	38.08	46.72	36.95	74.00	-37.05	peak
2	1473.013	4.44	25.69	38.05	43.17	35.25	74.00	-38.75	peak
3	4405.090	7.18	33.60	38.20	44.06	46.64	74.00	-27.36	peak
4	10360.000	11.74	37.24	35.08	38.61	52.51	74.00	-21.49	peak
5	pp14660.480	14.76	40.69	38.93	36.15	52.67	74.00	-21.33	peak
6	155/0 000	15 28	/11 38	38 31	33 55	51 90	7/ 00	-22 10	nook



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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5180 TX RSE

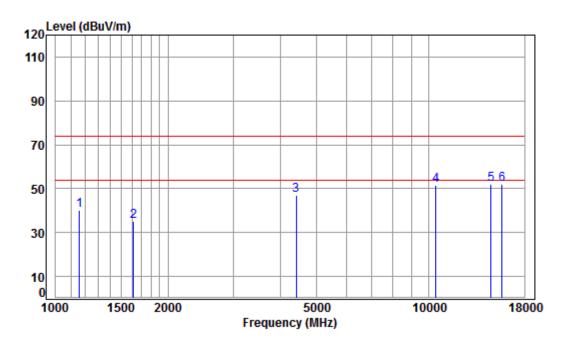
	: WIF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1224.247	4.11	24.60	38.08	44.97	35.60	74.00	-38.40	peak
2	1503.119	4.47	25.81	38.05	42.48	34.71	74.00	-39.29	peak
3	4279.589	7.03	33.60	38.14	44.11	46.60	74.00	-27.40	peak
4	10360.000	11.74	37.24	35.08	37.93	51.83	74.00	-22.17	peak
5	pp15003.420	14.85	41.30	38.90	34.82	52.07	74.00	-21.93	peak
6	15540 000	15 28	41 38	38 31	33 27	51 62	74 99	-22 38	neak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5220 TX RSE

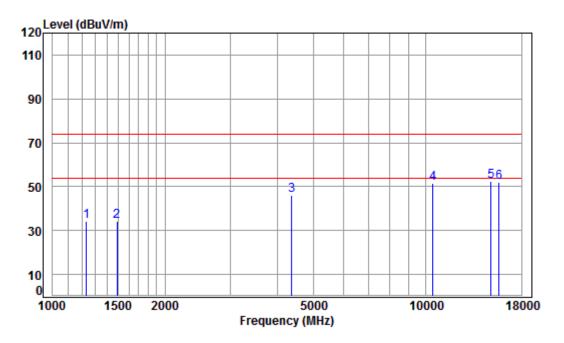
	· WIF.	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
	4450 000			20.00	50.43		74.00	22.66	
1	1158.828	4.02	24.2/	38.08	50.13	40.34	/4.00	-33.66	peak
2	1615.754	4.61	26.32	38.04	42.04	34.93	74.00	-39.07	peak
3	4405.090	7.18	33.60	38.20	44.57	47.15	74.00	-26.85	peak
4	10440.000	11.81	37.16	35.12	37.68	51.53	74.00	-22.47	peak
5	14660.480	14.76	40.69	38.93	35.27	51.79	74.00	-22.21	peak
6	pp15660.000	15.38	41.34	38.17	33.26	51.81	74.00	-22.19	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5220 TX RSE

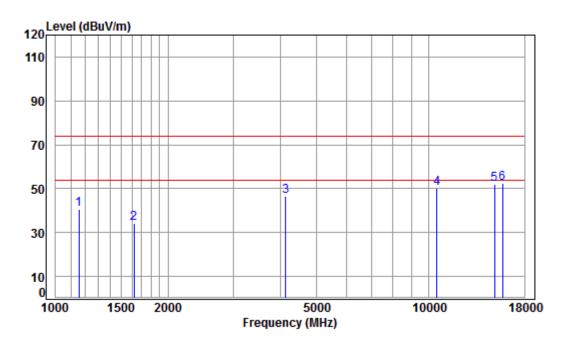
	: MTE	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1231.345	4.12	24.63	38.08	43.40	34.07	74.00	-39.93	peak
2	1490.142	4.46	25.76	38.05	42.12	34.29	74.00	-39.71	peak
3	4367.058	7.13	33.60	38.18	43.57	46.12	74.00	-27.88	peak
4	10440.000	11.81	37.16	35.12	37.77	51.62	74.00	-22.38	peak
5	pp14916.940	14.83	41.15	38.91	35.41	52.48	74.00	-21.52	peak
6	15660 000	15 38	41 34	38 17	33 51	52 06	74 99	-21 94	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5240 TX RSE

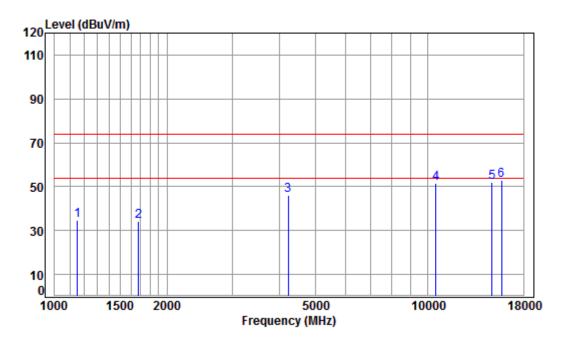
	. WII	I IIM							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.25	40.44	74.00	-33.56	peak
2	1620.431	4.61	26.34	38.04	41.30	34.21	74.00	-39.79	peak
3	4133.699	6.86	33.60	38.07	43.99	46.38	74.00	-27.62	peak
4	10480.000	11.84	37.12	35.14	36.51	50.33	74.00	-23.67	peak
5	14960.120	14.84	41.23	38.90	34.69	51.86	74.00	-22.14	peak
6	pp15720.000	15.42	41.31	38.11	34.08	52.70	74.00	-21.30	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5240 TX RSE

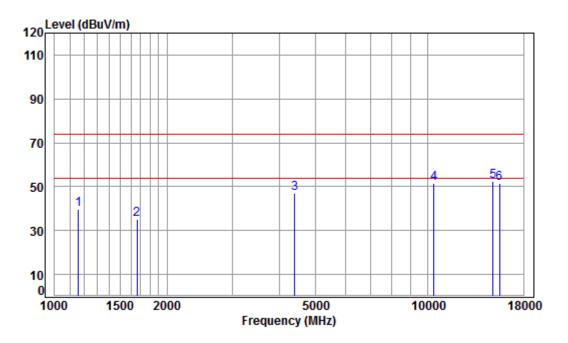
	: MTF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	——————————————————————————————————————	dB	dB/m	——dB	dBuV	dBuV/m	dBuV/m	dB	
			•			•	•		
1	1152.148	4.01	24.24	38.08	44.59	34.76	74.00	-39.24	peak
2	1677.621	4.68	26.58	38.03	40.91	34.14	74.00	-39.86	peak
3	4218.186	6.96	33.60	38.11	43.83	46.28	74.00	-27.72	peak
4	10480.000	11.84	37.12	35.14	37.77	51.59	74.00	-22.41	peak
5	14830.960	14.81	41.00	38.92	35.29	52.18	74.00	-21.82	peak
6	pp15720_000	15.42	41.31	38.11	34.27	52.89	74.00	-21.11	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5180 TX RSE

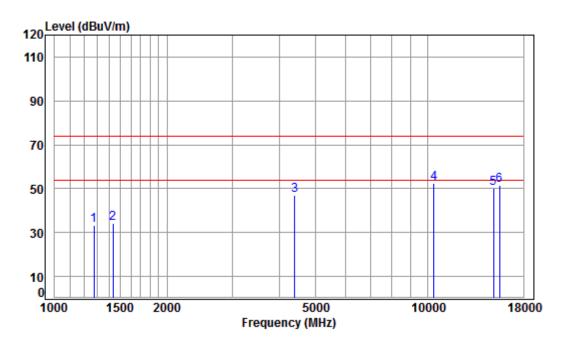
	: MTE	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	49.35	39.56	74.00	-34.44	peak
2	1663.137	4.66	26.52	38.03	41.92	35.07	74.00	-38.93	peak
3	4392.376	7.16	33.60	38.20	44.49	47.05	74.00	-26.95	peak
4	10360.000	11.74	37.24	35.08	37.78	51.68	74.00	-22.32	peak
5	pp14916.940	14.83	41.15	38.91	35.48	52.55	74.00	-21.45	peak
6	15540 000	15 28	41 38	38 31	33 02	51 37	74 99	-22 63	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5180 TX RSE

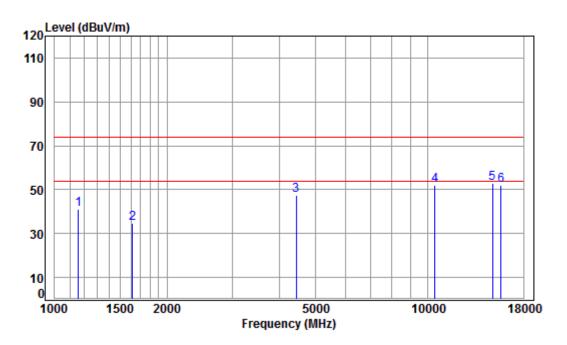
	: MTF	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1274.802	4.19	24.84	38.07	42.37	33.33	74.00	-40.67	peak
2	1435.189	4.39	25.54	38.06	42.19	34.06	74.00	-39.94	peak
3	4392.376	7.16	33.60	38.20	44.28	46.84	74.00	-27.16	peak
4	pp10360.000	11.74	37.24	35.08	38.41	52.31	74.00	-21.69	peak
5	14960.120	14.84	41.23	38.90	33.13	50.30	74.00	-23.70	peak
6	15540.000	15.28	41 38	38 31	33 16	51 51	74 99	-22 49	neak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5220 TX RSE

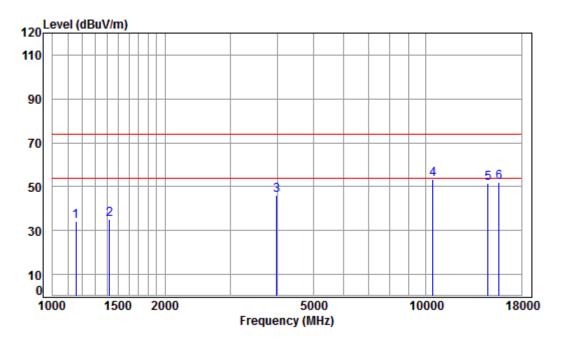
	: MTE	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.86	41.07	74.00	-32.93	peak
2	1615.754	4.61	26.32	38.04	41.66	34.55	74.00	-39.45	peak
3	4430.628	7.20	33.60	38.22	44.65	47.23	74.00	-26.77	peak
4	10440.000	11.81	37.16	35.12	38.35	52.20	74.00	-21.80	peak
5	pp14873.890	14.82	41.08	38.91	35.76	52.75	74.00	-21.25	peak
6	15660 000	15 38	41 34	38 17	33 54	52 09	74 99	-21 91	neak



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Mode:g; Polarization: Vertical; Modulation Type: 802.11n; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5220 TX RSE

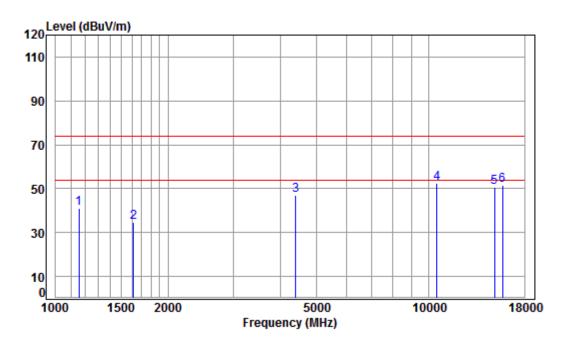
	: MIL	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.90	34.09	74.00	-39.91	peak
2	1422.798	4.38	25.49	38.06	43.13	34.94	74.00	-39.06	peak
3	3981.257	6.69	33.55	38.00	43.92	46.16	74.00	-27.84	peak
4	pp10440.000	11.81	37.16	35.12	39.39	53.24	74.00	-20.76	peak
5	14660.480	14.76	40.69	38.93	35.22	51.74	74.00	-22.26	peak
6	15660 000	15 38	41 34	38 17	33 53	52 08	74 99	-21 92	neak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5240 TX RSE

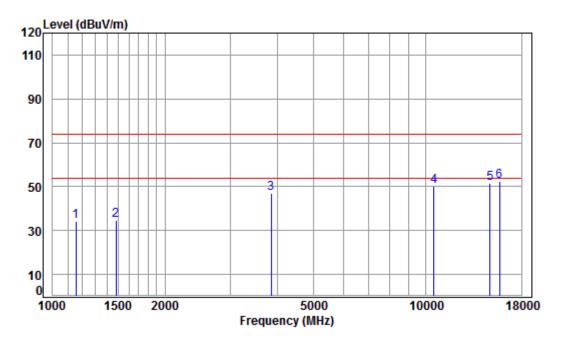
	: MIL	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.88	41.07	74.00	-32.93	peak
2	1615.754	4.61	26.32	38.04	41.97	34.86	74.00	-39.14	peak
3	4392.376	7.16	33.60	38.20	44.22	46.78	74.00	-27.22	peak
4	pp10480.000	11.84	37.12	35.14	38.53	52.35	74.00	-21.65	peak
5	14960.120	14.84	41.23	38.90	33.53	50.70	74.00	-23.30	peak
6	15720 000	15 42	41 31	38 11	32 96	51 58	74 99	-22 42	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5240 TX RSE

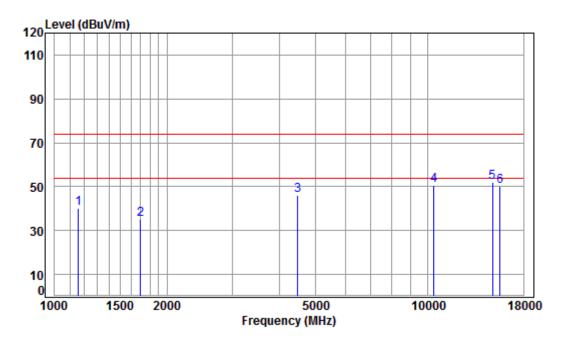
	: MTE	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.96	34.15	74.00	-39.85	peak
2	1477.276	4.44	25.71	38.05	42.69	34.79	74.00	-39.21	peak
3	3845.537	6.58	33.19	37.98	45.07	46.86	74.00	-27.14	peak
4	10480.000	11.84	37.12	35.14	36.52	50.34	74.00	-23.66	peak
5	14830.960	14.81	41.00	38.92	34.70	51.59	74.00	-22.41	peak
6	nn15720 000	15 42	41 31	38 11	33 68	52 30	74 99	-21 70	neak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5190 TX RSE

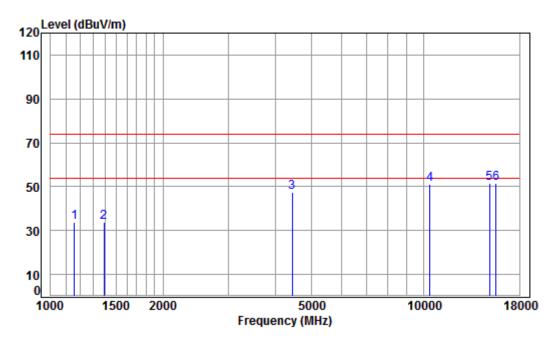
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	49.88	40.09	74.00	-33.91	peak
2	1697.129	4.70	26.66	38.03	41.77	35.10	74.00	-38.90	peak
3	4482.150	7.26	33.60	38.24	43.63	46.25	74.00	-27.75	peak
4	10380.000	11.76	37.22	35.09	36.82	50.71	74.00	-23.29	peak
5	pp14873.890	14.82	41.08	38.91	34.82	51.81	74.00	-22.19	peak
6	15570.000	15.31	41.37	38.27	31.66	50.07	74.00	-23.93	peak



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5190 TX RSE

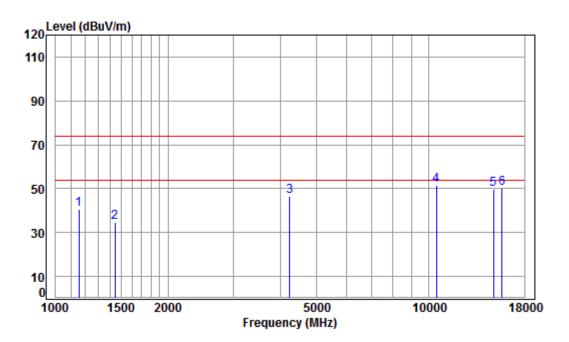
	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	43.70	33.91	74.00	-40.09	peak
2	1390.276	4.34	25.35	38.06	42.36	33.99	74.00	-40.01	peak
3	4430.628	7.20	33.60	38.22	45.07	47.65	74.00	-26.35	peak
4	10380.000	11.76	37.22	35.09	37.06	50.95	74.00	-23.05	peak
5	14960.120	14.84	41.23	38.90	34.35	51.52	74.00	-22.48	peak
6	nn15570 000	15 31	∆ 1 37	38 27	33 14	51 55	74 99	-22 45	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5230 TX RSE

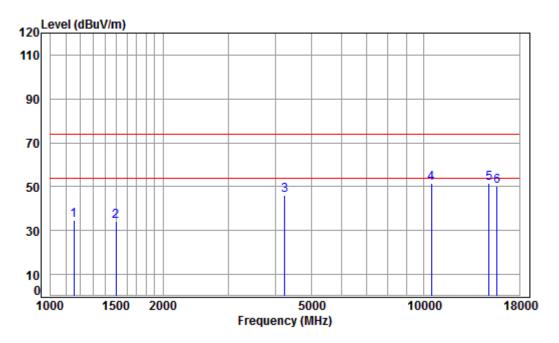
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.60	40.79	74.00	-33.21	peak
2	1443.509	4.40	25.57	38.06	42.78	34.69	74.00	-39.31	peak
3	4230.396	6.98	33.60	38.12	43.97	46.43	74.00	-27.57	peak
4	pp10460.000	11.83	37.14	35.13	37.89	51.73	74.00	-22.27	peak
5	14873.890	14.82	41.08	38.91	32.68	49.67	74.00	-24.33	peak
6	15690.000	15.40	41.32	38.14	31.55	50.13	74.00	-23.87	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5230 TX RSE

	: MIL	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	44.45	34.64	74.00	-39.36	peak
2	1498.781	4.47	25.80	38.05	42.23	34.45	74.00	-39.55	peak
3	4230.396	6.98	33.60	38.12	43.54	46.00	74.00	-28.00	peak
4	pp10460.000	11.83	37.14	35.13	37.95	51.79	74.00	-22.21	peak
5	14916.940	14.83	41.15	38.91	34.60	51.67	74.00	-22.33	peak
6	15690 000	15 40	41 32	38 14	31 78	50 36	74 99	-23 64	neak

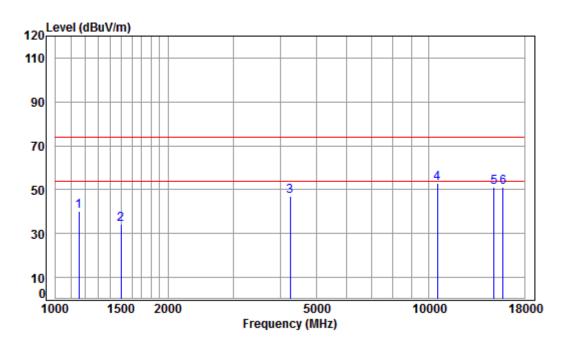


Report No.: SZEM170500450305

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Band2

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5260 TX RSE

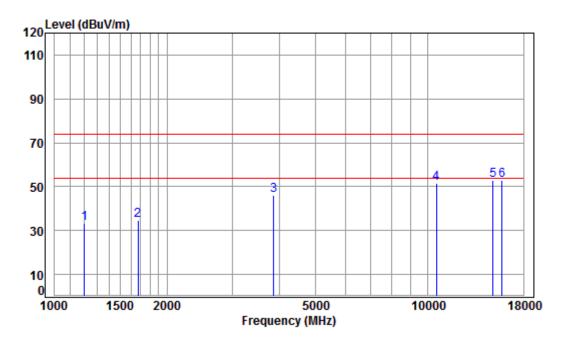
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.14	40.33	74.00	-33.67	peak
2	1498.781	4.47	25.80	38.05	41.85	34.07	74.00	-39.93	peak
3	4254.921	7.00	33.60	38.13	44.38	46.85	74.00	-27.15	peak
4	pp10520.000	11.88	37.12	35.16	39.21	53.05	74.00	-20.95	peak
5	14916.940	14.83	41.15	38.91	34.14	51.21	74.00	-22.79	peak
6	15780.000	15.47	41.29	38.04	32.55	51.27	74.00	-22.73	peak



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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5260 TX RSE

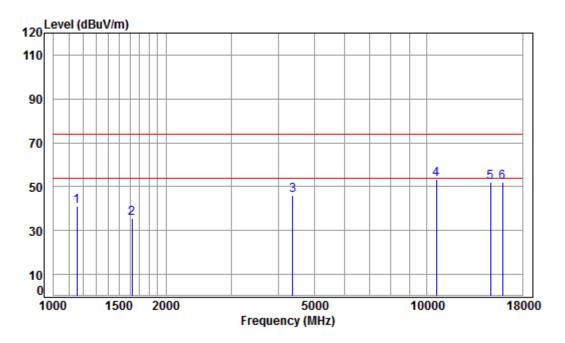
	: MTF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	——————————————————————————————————————	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
			,						
1	1203.199	4.08	24.49	38.08	42.71	33.20	74.00	-40.80	peak
2	1672.779	4.67	26.56	38.03	41.60	34.80	74.00	-39.20	peak
3	3856.668	6.59	33.22	37.99	44.49	46.31	74.00	-27.69	peak
4	10520.000	11.88	37.12	35.16	37.71	51.55	74.00	-22.45	peak
5	pp14916.940	14.83	41.15	38.91	35.83	52.90	74.00	-21.10	peak
6	15780.000	15.47	41.29	38.04	34.06	52.78	74.00	-21.22	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5300 TX RSE

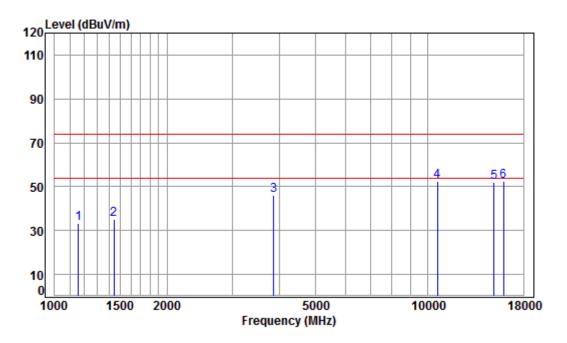
	: MIL	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.91	41.10	74.00	-32.90	peak
2	1620.431	4.61	26.34	38.04	42.78	35.69	74.00	-38.31	peak
3	4367.058	7.13	33.60	38.18	43.50	46.05	74.00	-27.95	peak
4	pp10600.000	11.94	37.22	35.20	39.39	53.35	74.00	-20.65	peak
5	14788.150	14.80	40.92	38.92	35.39	52.19	74.00	-21.81	peak
6	15900 000	15 56	41 24	37 91	33 16	52 05	74 99	-21 95	neak



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Mode:g; Polarization: Vertical; Modulation Type: 802.11a; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5300 TX RSE

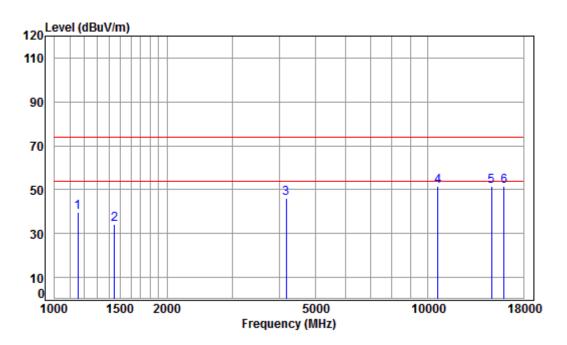
	: WIF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	43.30	33.51	74.00	-40.49	peak
2	1443.509	4.40	25.57	38.06	43.34	35.25	74.00	-38.75	peak
3	3856.668	6.59	33.22	37.99	44.28	46.10	74.00	-27.90	peak
4	pp10600.000	11.94	37.22	35.20	38.57	52.53	74.00	-21.47	peak
5	15003.420	14.85	41.30	38.90	34.82	52.07	74.00	-21.93	peak
6	15900 000	15 56	41 24	37 91	33 45	52 34	74 99	-21 66	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5320 TX RSE

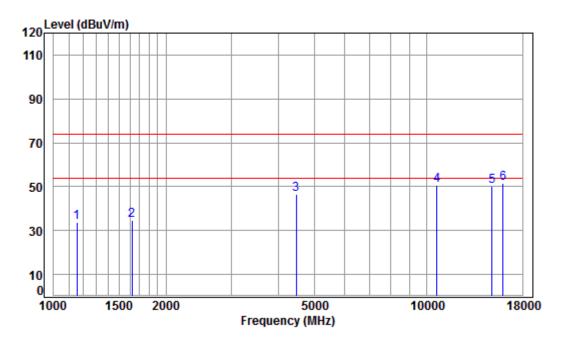
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	49.56	39.75	74.00	-34.25	peak
2	1447.688	4.41	25.59	38.06	42.39	34.33	74.00	-39.67	peak
3	4169.698	6.90	33.60	38.08	43.68	46.10	74.00	-27.90	peak
4	10640.000	11.97	37.27	35.22	37.41	51.43	74.00	-22.57	peak
5	pp14788.150	14.80	40.92	38.92	34.91	51.71	74.00	-22.29	peak
6	15960.000	15.61	41.22	37.84	32.51	51.50	74.00	-22.50	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5320 TX RSE

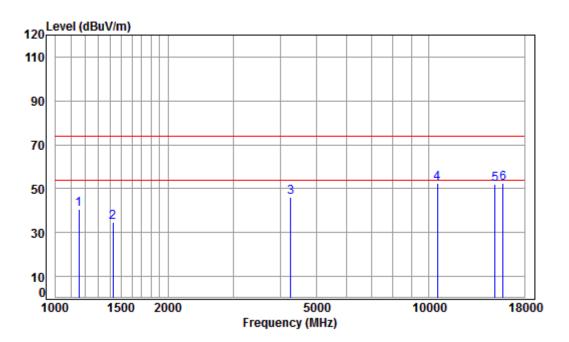
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.66	33.85	74.00	-40.15	peak
2	1620.431	4.61	26.34	38.04	41.80	34.71	74.00	-39.29	peak
3	4469.214	7.25	33.60	38.23	43.86	46.48	74.00	-27.52	peak
4	10640.000	11.97	37.27	35.22	36.58	50.60	74.00	-23.40	peak
5	14916.940	14.83	41.15	38.91	33.23	50.30	74.00	-23.70	peak
6	pp15960.000	15.61	41.22	37.84	32.52	51.51	74.00	-22.49	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5260 TX RSE

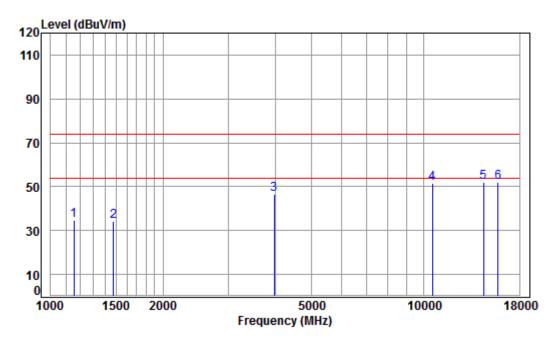
	: MIL	T TIM							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.27	40.46	74.00	-33.54	peak
2	1426.916	4.38	25.50	38.06	42.66	34.48	74.00	-39.52	peak
3	4267.237	7.02	33.60	38.13	43.73	46.22	74.00	-27.78	peak
4	pp10520.000	11.88	37.12	35.16	38.72	52.56	74.00	-21.44	peak
5	15003.420	14.85	41.30	38.90	34.58	51.83	74.00	-22.17	peak
6	15780 000	15 47	41 29	38 04	33 69	52 41	74 99	-21 59	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5260 TX RSE

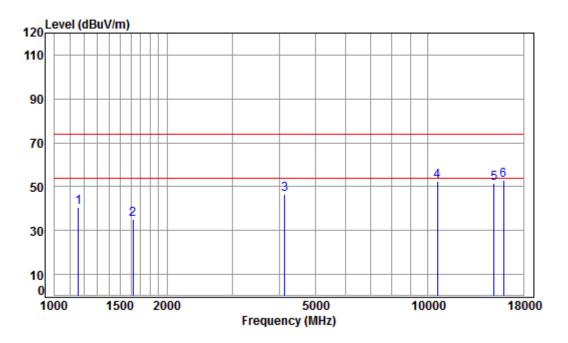
	: MTE	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	44.41	34.60	74.00	-39.40	peak
2	1473.013	4.44	25.69	38.05	42.08	34.16	74.00	-39.84	peak
3	3969.767	6.68	33.52	38.00	44.18	46.38	74.00	-27.62	peak
4	10520.000	11.88	37.12	35.16	37.57	51.41	74.00	-22.59	peak
5	14408.430	14.70	40.18	38.96	35.88	51.80	74.00	-22.20	peak
6	nn15780 000	15 47	41 29	38 04	33 35	52 07	74 99	-21 93	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5300 TX RSE

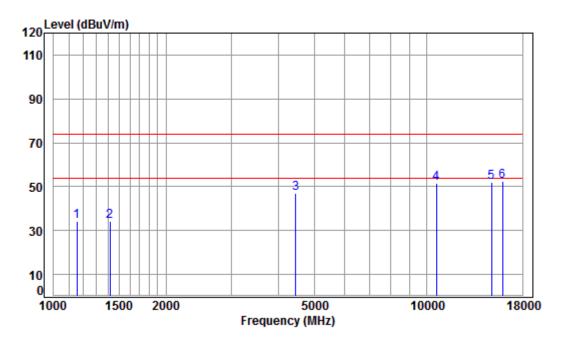
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.31	40.52	74.00	-33.48	peak
2	1620.431	4.61	26.34	38.04	42.25	35.16	74.00	-38.84	peak
3	4133.699	6.86	33.60	38.07	44.25	46.64	74.00	-27.36	peak
4	10600.000	11.94	37.22	35.20	38.46	52.42	74.00	-21.58	peak
5	15003.420	14.85	41.30	38.90	34.22	51.47	74.00	-22.53	peak
6	pp15900.000	15.56	41.24	37.91	34.04	52.93	74.00	-21.07	peak



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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5300 TX RSE

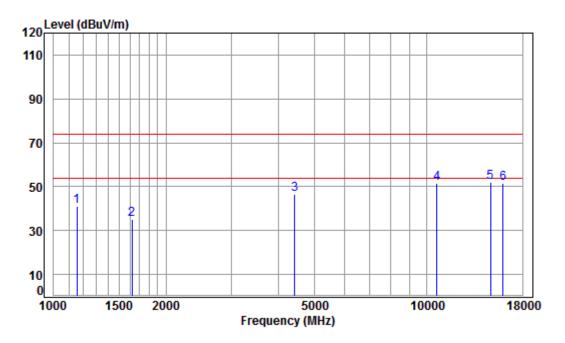
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.84	34.03	74.00	-39.97	peak
2	1414.597	4.37	25.45	38.06	42.33	34.09	74.00	-39.91	peak
3	4456.315	7.23	33.60	38.23	44.46	47.06	74.00	-26.94	peak
4	10600.000	11.94	37.22	35.20	37.41	51.37	74.00	-22.63	peak
5	14873.890	14.82	41.08	38.91	35.13	52.12	74.00	-21.88	peak
6	pp15900.000	15.56	41.24	37.91	33.38	52.27	74.00	-21.73	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5320 TX RSE

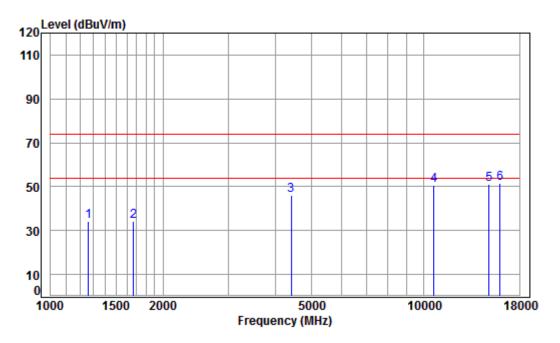
	· WIL	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.89	41.08	74.00	-32.92	peak
2	1620.431	4.61	26.34	38.04	42.26	35.17	74.00	-38.83	peak
3	4417.841	7.19	33.60	38.21	44.15	46.73	74.00	-27.27	peak
4	10640.000	11.97	37.27	35.22	37.51	51.53	74.00	-22.47	peak
5	pp14788.150	14.80	40.92	38.92	35.25	52.05	74.00	-21.95	peak
6	15960 000	15 61	/11 22	37 8/	32 69	51 68	7/ 00	-22 32	nook



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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5320 TX RSE

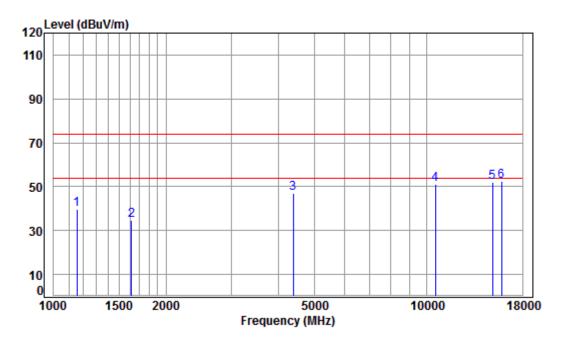
	· WIL	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1263.796	4.17	24.79	38.07	43.13	34.02	74.00	-39.98	peak
2	1667.951	4.67	26.54	38.03	40.92	34.10	74.00	-39.90	peak
3	4405.090	7.18	33.60	38.20	43.69	46.27	74.00	-27.73	peak
4	10640.000	11.97	37.27	35.22	36.61	50.63	74.00	-23.37	peak
5	14916.940	14.83	41.15	38.91	33.97	51.04	74.00	-22.96	peak
6	nn15960 000	15 61	/11 22	37 8/	32 /15	51 //	7/ 00	-22 56	noak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5270 TX RSE

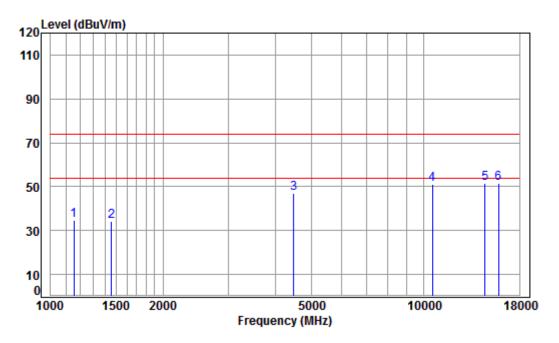
	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	49.54	39.73	74.00	-34.27	peak
2	1615.754	4.61	26.32	38.04	41.89	34.78	74.00	-39.22	peak
3	4379.699	7.15	33.60	38.19	44.28	46.84	74.00	-27.16	peak
4	10540.000	11.89	37.15	35.17	37.39	51.26	74.00	-22.74	peak
5	14960.120	14.84	41.23	38.90	34.88	52.05	74.00	-21.95	peak
6	nn15810 000	15 49	41 28	38 01	33 91	52 67	74 99	-21 33	neak



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5270 TX RSE

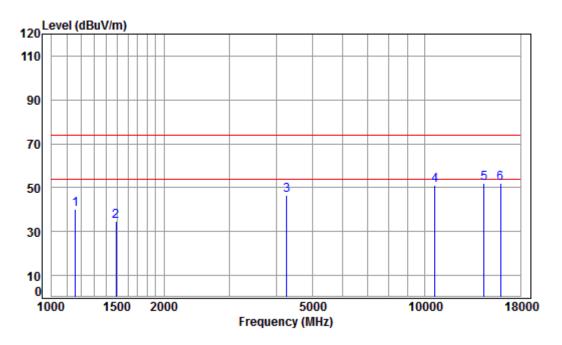
	: MTF	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	44.61	34.80	74.00	-39.20	peak
2	1456.081	4.42	25.62	38.05	42.30	34.29	74.00	-39.71	peak
3	4482.150	7.26	33.60	38.24	44.24	46.86	74.00	-27.14	peak
4	10540.000	11.89	37.15	35.17	37.35	51.22	74.00	-22.78	peak
5	pp14575.970	14.74	40.54	38.94	35.41	51.75	74.00	-22.25	peak
6	15810 000	15 49	41 28	38 01	32 67	51 43	74 99	-22 57	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5310 TX RSE

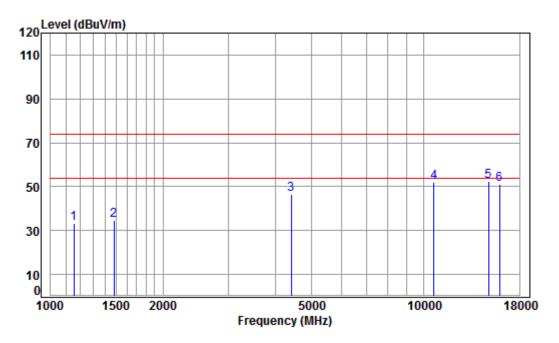
	· WIL	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.00	40.21	74.00	-33.79	peak
2	1485.841	4.45	25.74	38.05	42.70	34.84	74.00	-39.16	peak
3	4267.237	7.02	33.60	38.13	43.86	46.35	74.00	-27.65	peak
4	10620.000	11.96	37.25	35.21	37.18	51.18	74.00	-22.82	peak
5	pp14366.840	14.69	40.08	38.96	36.34	52.15	74.00	-21.85	peak
6	15930 000	15 59	/11 23	37 88	32 92	51 86	7/ 00	-22 1/	nook



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5310 TX RSE

	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.15	33.34	74.00	-40.66	peak
2	1477.276	4.44	25.71	38.05	42.46	34.56	74.00	-39.44	peak
3	4405.090	7.18	33.60	38.20	43.75	46.33	74.00	-27.67	peak
4	10620.000	11.96	37.25	35.21	37.90	51.90	74.00	-22.10	peak
5	pp14873.890	14.82	41.08	38.91	35.56	52.55	74.00	-21.45	peak
6	15930.000	15.59	41 23	37 88	32 35	51 29	74 99	-22 71	neak

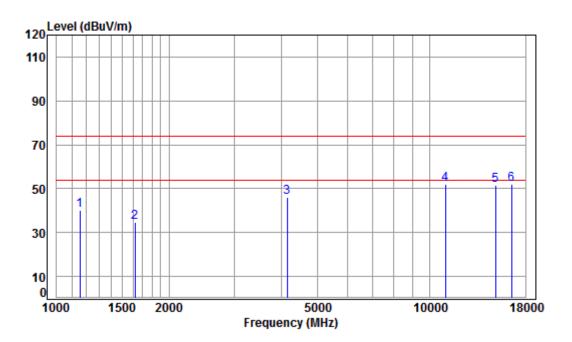


Report No.: SZEM170500450305

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Band3

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5500 TX RSE

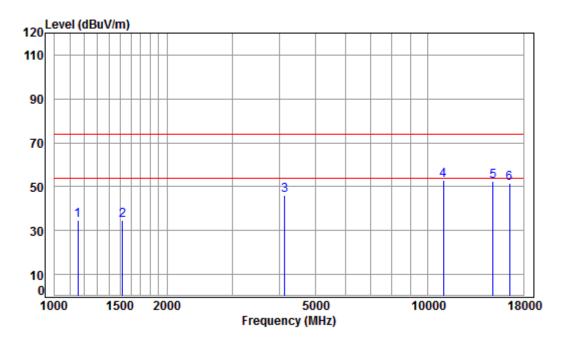
	Freq			Preamp Factor					Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	49.78	39.97	74.00	-34.03	peak
2	1620.431	4.61	26.34	38.04	41.74	34.65	74.00	-39.35	peak
3	4145.664	6.88	33.60	38.07	43.90	46.31	74.00	-27.69	peak
4	11000.000	12.26	37.70	35.40	37.37	51.93	74.00	-22.07	peak
5	14960.120	14.84	41.23	38.90	34.61	51.78	74.00	-22.22	peak
6	pp16500.000	16.03	42.70	37.05	30.30	51.98	74.00	-22.02	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5500 TX RSE

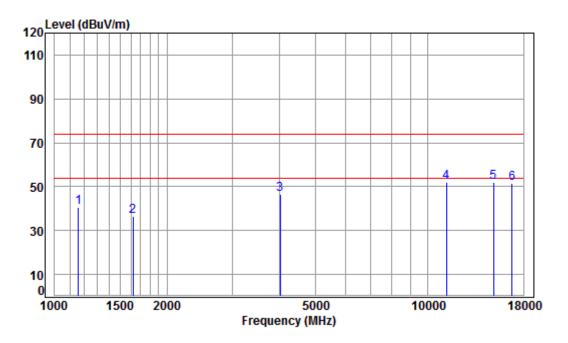
	: MTE	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	44.31	34.50	74.00	-39.50	peak
2	1520.598	4.50	25.89	38.05	42.43	34.77	74.00	-39.23	peak
3	4133.699	6.86	33.60	38.07	43.54	45.93	74.00	-28.07	peak
4	pp11000.000	12.26	37.70	35.40	38.19	52.75	74.00	-21.25	peak
5	14916.940	14.83	41.15	38.91	35.20	52.27	74.00	-21.73	peak
6	16500 000	16 03	42 70	37 05	29 73	51 4 1	74 99	-22 59	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5600 TX RSE

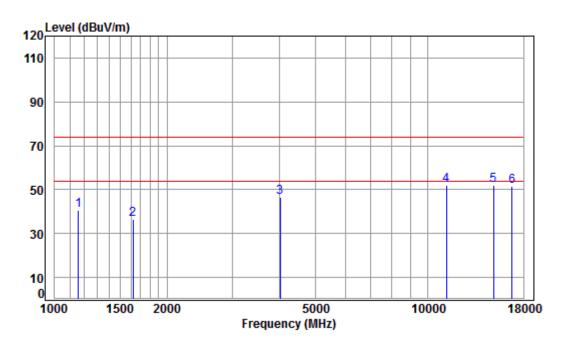
	Freq			Preamp Factor					Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.40	40.61	74.00	-33.39	peak
2	1620.431	4.61	26.34	38.04	43.71	36.62	74.00	-37.38	peak
3	4015.929	6.72	33.60	38.01	44.38	46.69	74.00	-27.31	peak
4	pp11200.000	12.29	37.86	35.44	37.33	52.04	74.00	-21.96	peak
5	14960.120	14.84	41.23	38.90	34.70	51.87	74.00	-22.13	peak
6	16800.000	16.59	42.76	36.60	28.73	51.48	74.00	-22.52	peak



Report No.: SZEM170500450305

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Mode:g; Polarization: Vertical; Modulation Type: 802.11a; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5600 TX RSE

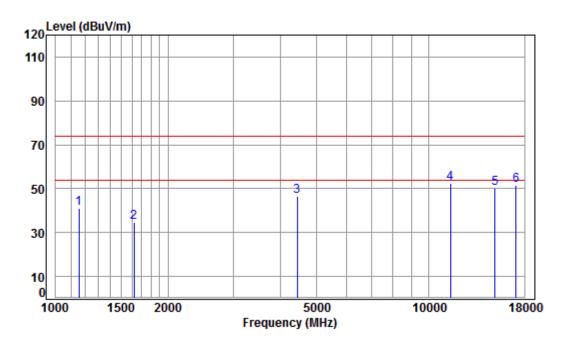
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.40	40.61	74.00	-33.39	peak
2	1620.431	4.61	26.34	38.04	43.71	36.62	74.00	-37.38	peak
3	4015.929	6.72	33.60	38.01	44.38	46.69	74.00	-27.31	peak
4	pp11200.000	12.29	37.86	35.44	37.33	52.04	74.00	-21.96	peak
5	14960.120	14.84	41.23	38.90	34.70	51.87	74.00	-22.13	peak
6	16800.000	16.59	42.76	36.60	28.73	51.48	74.00	-22.52	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5700 TX RSE

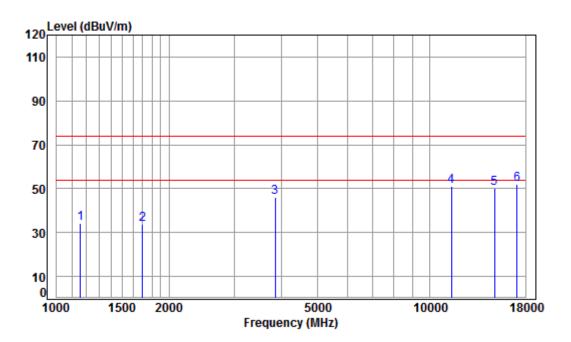
	: WIF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.72	40.91	74.00	-33.09	peak
2	1620.431	4.61	26.34	38.04	41.71	34.62	74.00	-39.38	peak
3	4443.453	7.22	33.60	38.22	44.13	46.73	74.00	-27.27	peak
4	pp11400.000	12.32	38.02	35.48	37.39	52.25	74.00	-21.75	peak
5	15003.420	14.85	41.30	38.90	33.06	50.31	74.00	-23.69	peak
6	17100 000	17 23	42 92	36 25	27 67	51 57	74 99	-22 43	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5700 TX RSE

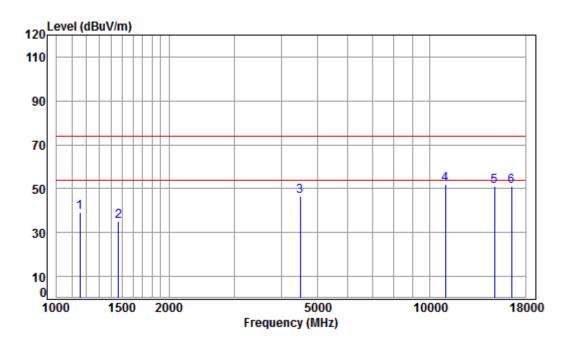
	: MTF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	——dB	
1	1158.828	4.02	24.27	38.08	44.15	34.36	74.00	-39.64	peak
2	1697.129	4.70	26.66	38.03	40.55	33.88	74.00	-40.12	peak
3	3845.537	6.58	33.19	37.98	44.50	46.29	74.00	-27.71	peak
4	11400.000	12.32	38.02	35.48	36.40	51.26	74.00	-22.74	peak
5	14873.890	14.82	41.08	38.91	33.30	50.29	74.00	-23.71	peak
6	pp17100_000	17.23	42.92	36.25	28.31	52.21	74.00	-21.79	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5500 TX RSE

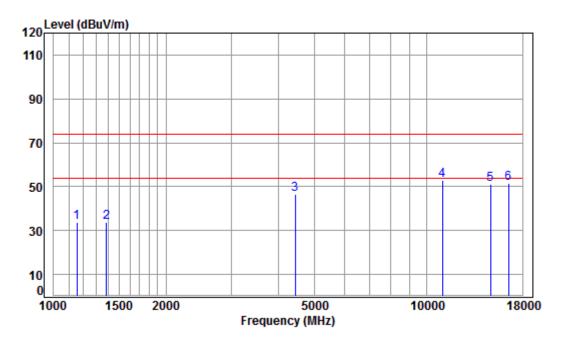
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	49.21	39.40	74.00	-34.60	peak
2	1464.522	4.43	25.66	38.05	43.25	35.29	74.00	-38.71	peak
3	4495.125	7.27	33.60	38.25	44.00	46.62	74.00	-27.38	peak
4	pp11000.000	12.26	37.70	35.40	37.31	51.87	74.00	-22.13	peak
5	14873.890	14.82	41.08	38.91	34.15	51.14	74.00	-22.86	peak
6	16500.000	16.03	42.70	37.05	29.51	51.19	74.00	-22.81	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5500 TX RSE

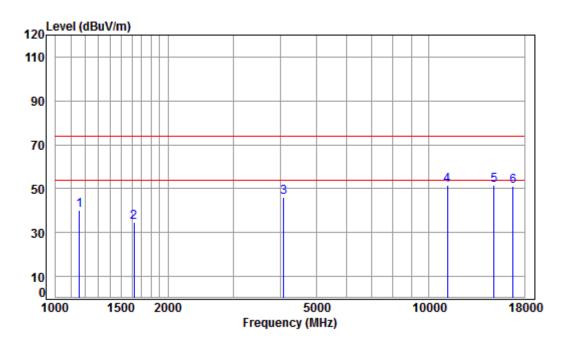
	: MTF	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.71	33.90	74.00	-40.10	peak
2	1386.264	4.33	25.33	38.06	42.02	33.62	74.00	-40.38	peak
3	4443.453	7.22	33.60	38.22	43.92	46.52	74.00	-27.48	peak
4	pp11000.000	12.26	37.70	35.40	38.19	52.75	74.00	-21.25	peak
5	14788.150	14.80	40.92	38.92	34.43	51.23	74.00	-22.77	peak
6	16500 000	16 03	42 70	37 05	30 05	51 73	74 99	-22 27	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5600 TX RSE

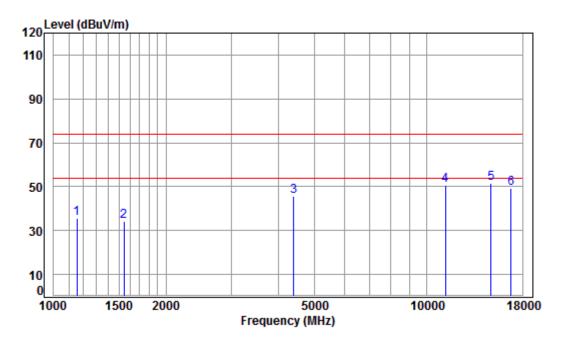
	: MIL	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	49.78	39.99	74.00	-34.01	peak
2	1620.431	4.61	26.34	38.04	41.99	34.90	74.00	-39.10	peak
3	4086.182	6.80	33.60	38.04	43.95	46.31	74.00	-27.69	peak
4	pp11200.000	12.29	37.86	35.44	36.99	51.70	74.00	-22.30	peak
5	14916.940	14.83	41.15	38.91	34.57	51.64	74.00	-22.36	peak
6	16800 000	16 59	42 76	36 60	28 55	51 30	74 99	-22 70	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5600 TX RSE

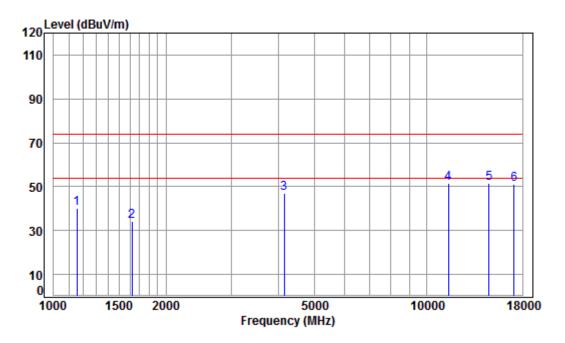
	: MTF	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	45.63	35.82	74.00	-38.18	peak
2	1542.733	4.52	26.00	38.05	41.69	34.16	74.00	-39.84	peak
3	4392.376	7.16	33.60	38.20	43.23	45.79	74.00	-28.21	peak
4	11200.000	12.29	37.86	35.44	35.93	50.64	74.00	-23.36	peak
5	pp14830.960	14.81	41.00	38.92	34.61	51.50	74.00	-22.50	peak
6	16800.000	16.59	42 76	36 60	26 57	49 32	74 99	-24 68	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5700 TX RSE

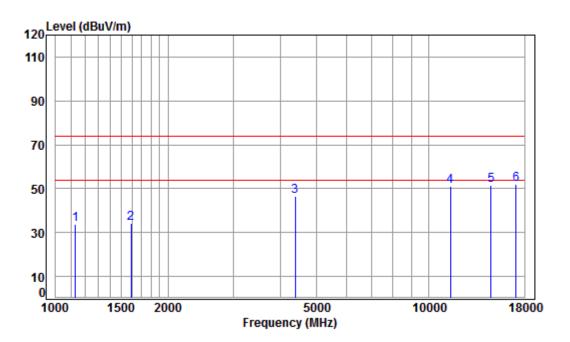
	. WIF	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	49.81	40.00	74.00	-34.00	peak
2	1620.431	4.61	26.34	38.04	41.31	34.22	74.00	-39.78	peak
3	4145.664	6.88	33.60	38.07	44.52	46.93	74.00	-27.07	peak
4	pp11400.000	12.32	38.02	35.48	36.69	51.55	74.00	-22.45	peak
5	14660.480	14.76	40.69	38.93	34.99	51.51	74.00	-22.49	peak
6	17100 000	17 23	12 92	36 25	27 20	51 10	7/ 00	-22 90	noak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5700 TX RSE

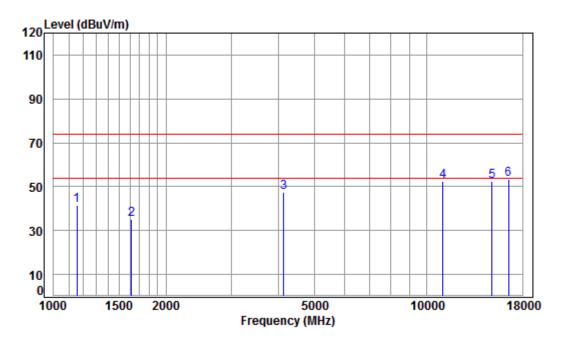
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1129.072	3.97	24.12	38.09	43.69	33.69	74.00	-40.31	peak
2	1592.571	4.58	26.22	38.04	41.59	34.35	74.00	-39.65	peak
3	4379.699	7.15	33.60	38.19	43.82	46.38	74.00	-27.62	peak
4	11400.000	12.32	38.02	35.48	36.29	51.15	74.00	-22.85	peak
5	14660.480	14.76	40.69	38.93	35.09	51.61	74.00	-22.39	peak
6	pp17100.000	17.23	42.92	36.25	28.26	52.16	74.00	-21.84	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5510 TX RSE

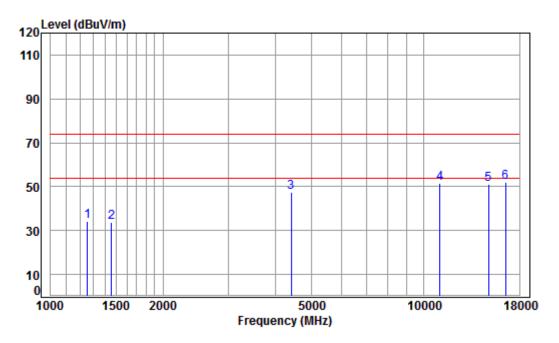
	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	51.18	41.37	74.00	-32.63	peak
2	1615.754	4.61	26.32	38.04	42.36	35.25	74.00	-38.75	peak
3	4133.699	6.86	33.60	38.07	45.05	47.44	74.00	-26.56	peak
4	11020.000	12.26	37.72	35.40	38.08	52.66	74.00	-21.34	peak
5	14916.940	14.83	41.15	38.91	35.21	52.28	74.00	-21.72	peak
6	nn16530 000	16 09	42 71	37 01	31 38	53 17	74 99	-20 83	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5510 TX RSE

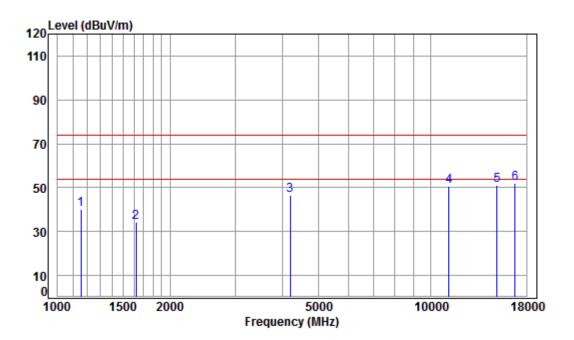
	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1256.512	4.16	24.75	38.07	43.19	34.03	74.00	-39.97	peak
2	1456.081	4.42	25.62	38.05	41.55	33.54	74.00	-40.46	peak
3	4405.090	7.18	33.60	38.20	44.97	47.55	74.00	-26.45	peak
4	11020.000	12.26	37.72	35.40	36.82	51.40	74.00	-22.60	peak
5	14873.890	14.82	41.08	38.91	33.89	50.88	74.00	-23.12	peak
6	nn16530 000	16 09	42 71	37 01	30 17	51 96	74 99	-22 04	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5590 TX RSE

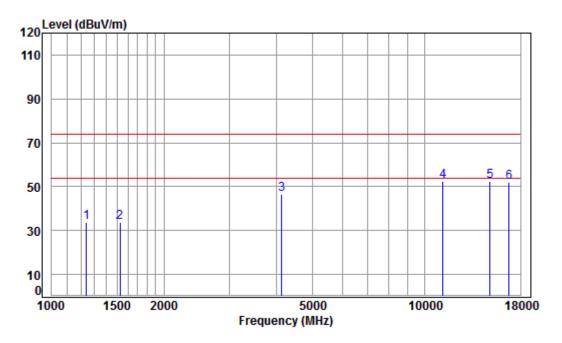
	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	50.09	40.28	74.00	-33.72	peak
2	1620.431	4.61	26.34	38.04	41.29	34.20	74.00	-39.80	peak
3	4193.872	6.93	33.60	38.10	44.06	46.49	74.00	-27.51	peak
4	11180.000	12.29	37.85	35.44	35.98	50.68	74.00	-23.32	peak
5	15003.420	14.85	41.30	38.90	34.01	51.26	74.00	-22.74	peak
6	nn16770 000	16 54	42 75	36 65	29 41	52 05	74 99	-21 95	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5590 TX RSE

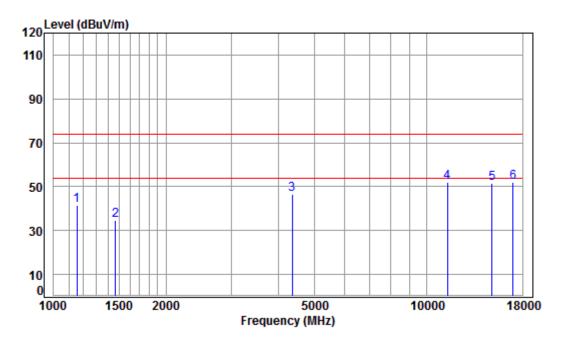
	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1238.483	4.13	24.67	38.08	42.86	33.58	74.00	-40.42	peak
2	1525.000	4.50	25.91	38.05	41.46	33.82	74.00	-40.18	peak
3	4133.699	6.86	33.60	38.07	44.20	46.59	74.00	-27.41	peak
4	11180.000	12.29	37.85	35.44	37.63	52.33	74.00	-21.67	peak
5	pp14916.940	14.83	41.15	38.91	35.56	52.63	74.00	-21.37	peak
6	16770.000	16 54	42 75	36 65	29 47	52 11	74 99	-21 89	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5670 TX RSE

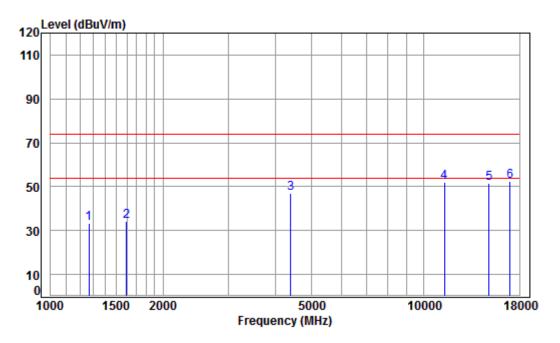
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	51.19	41.38	74.00	-32.62	peak
2	1464.522	4.43	25.66	38.05	42.80	34.84	74.00	-39.16	peak
3	4354.454	7.12	33.60	38.18	43.79	46.33	74.00	-27.67	peak
4	pp11340.000	12.31	37.97	35.47	37.29	52.10	74.00	-21.90	peak
5	14916.940	14.83	41.15	38.91	34.33	51.40	74.00	-22.60	peak
6	17010.000	16.99	42.81	36.29	28.42	51.93	74.00	-22.07	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5670 TX RSE

		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1267.454	4.18	24.80	38.07	42.54	33.45	74.00	-40.55	peak
2	1597.181	4.59	26.24	38.04	41.64	34.43	74.00	-39.57	peak
3	4392.376	7.16	33.60	38.20	44.22	46.78	74.00	-27.22	peak
4	11340.000	12.31	37.97	35.47	37.29	52.10	74.00	-21.90	peak
5	14916.940	14.83	41.15	38.91	34.50	51.57	74.00	-22.43	peak
6	pp17010.000	16.99	42.81	36.29	29.00	52.51	74.00	-21.49	peak

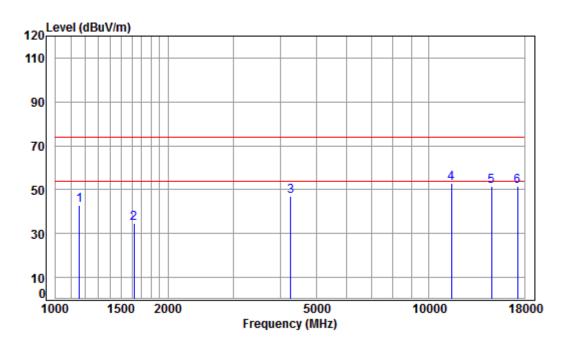


Report No.: SZEM170500450305

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Band4

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5745 TX RSE

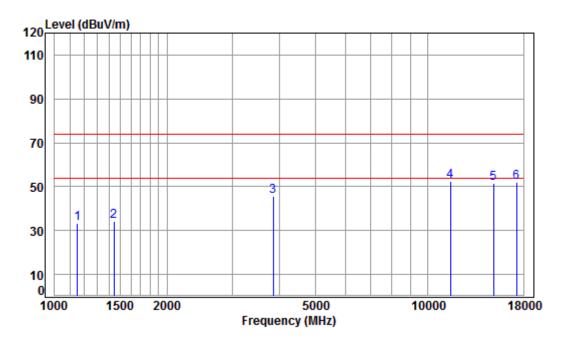
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	52.62	42.83	74.00	-31.17	peak
2	1620.431	4.61	26.34	38.04	41.59	34.50	74.00	-39.50	peak
3	4267.237	7.02	33.60	38.13	44.34	46.83	74.00	-27.17	peak
4	pp11490.000	12.33	38.09	35.50	37.85	52.77	74.00	-21.23	peak
5	14702.910	14.77	40.77	38.93	35.15	51.76	74.00	-22.24	peak
6	17235.000	17.60	43.08	36.18	27.24	51.74	74.00	-22.26	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5745 TX RSE

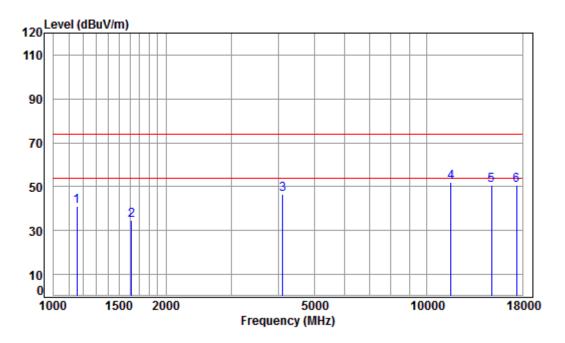
	: MTF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
			,						
1	1152.148	4.01	24.24	38.08	43.32	33.49	74.00	-40.51	peak
2	1443.509	4.40	25.57	38.06	42.42	34.33	74.00	-39.67	peak
3	3845.537	6.58	33.19	37.98	44.04	45.83	74.00	-28.17	peak
4	pp11490.000	12.33	38.09	35.50	37.50	52.42	74.00	-21.58	peak
5	14960.120	14.84	41.23	38.90	34.44	51.61	74.00	-22.39	peak
6	17235.000	17.60	43.08	36.18	27.39	51.89	74.00	-22.11	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5785 TX RSE

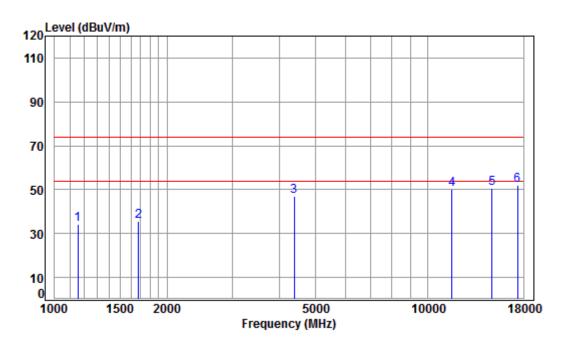
	: WIF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	51.06	41.25	74.00	-32.75	peak
2	1615.754	4.61	26.32	38.04	41.72	34.61	74.00	-39.39	peak
3	4109.872	6.83	33.60	38.05	44.07	46.45	74.00	-27.55	peak
4	pp11570.000	12.34	38.17	35.51	36.91	51.91	74.00	-22.09	peak
5	14873.890	14.82	41.08	38.91	33.46	50.45	74.00	-23.55	peak
6	17355 000	17 93	43 23	36 12	25 52	50 56	74 99	-23 44	neak



Report No.: SZEM170500450305

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Mode:g; Polarization: Vertical; Modulation Type: 802.11a; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5785 TX RSE

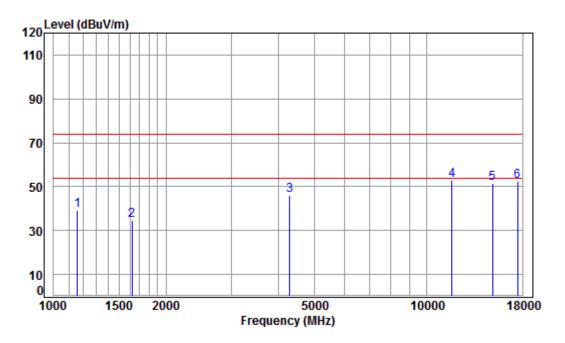
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
_	4455 403	4 04	24.26	30.00	44.00	24.07	74.00	20.72	
1	1155.483	4.01	24.26	38.08	44.08	34.2/	74.00	-39./3	peak
2	1677.621	4.68	26.58	38.03	42.43	35.66	74.00	-38.34	peak
3	4379.699	7.15	33.60	38.19	44.32	46.88	74.00	-27.12	peak
4	11570.000	12.34	38.17	35.51	35.00	50.00	74.00	-24.00	peak
5	14830.960	14.81	41.00	38.92	33.89	50.78	74.00	-23.22	peak
6	pp17355.000	17.93	43.23	36.12	26.82	51.86	74.00	-22.14	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5825 TX RSE

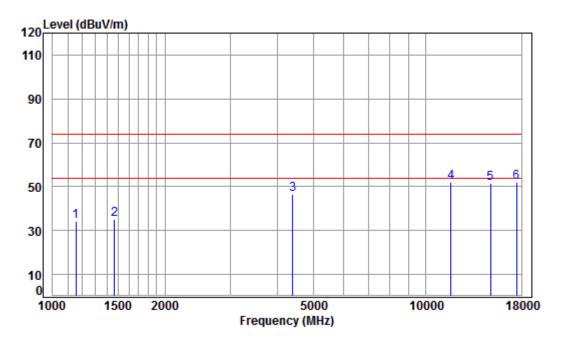
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	49.19	39.40	74.00	-34.60	peak
2	1620.431	4.61	26.34	38.04	41.96	34.87	74.00	-39.13	peak
3	4291.977	7.05	33.60	38.15	43.47	45.97	74.00	-28.03	peak
4	pp11650.000	12.35	38.25	35.53	37.84	52.91	74.00	-21.09	peak
5	14960.120	14.84	41.23	38.90	34.61	51.78	74.00	-22.22	peak
6	17475.000	18.25	43.37	36.06	26.88	52.44	74.00	-21.56	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11a; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5825 TX RSE

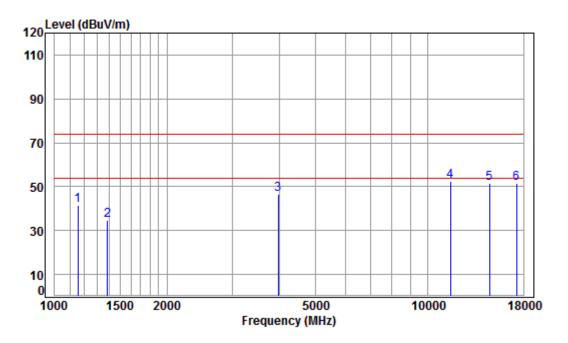
	: WIF	I IIA							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.87	34.06	74.00	-39.94	peak
2	1464.522	4.43	25.66	38.05	43.06	35.10	74.00	-38.90	peak
3	4392.376	7.16	33.60	38.20	43.79	46.35	74.00	-27.65	peak
4	11650.000	12.35	38.25	35.53	36.82	51.89	74.00	-22.11	peak
5	14873.890	14.82	41.08	38.91	34.79	51.78	74.00	-22.22	peak
6	nn17475 000	18 25	43 37	36 06	26 55	52 11	74 99	-21 89	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5745 TX RSE

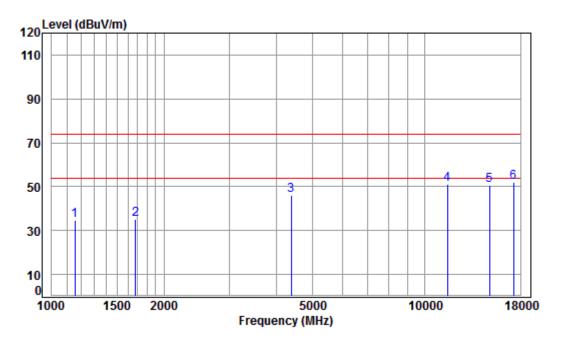
	: MIL	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	51.18	41.37	74.00	-32.63	peak
2	1386.264	4.33	25.33	38.06	43.10	34.70	74.00	-39.30	peak
3	3969.767	6.68	33.52	38.00	44.32	46.52	74.00	-27.48	peak
4	pp11490.000	12.33	38.09	35.50	37.57	52.49	74.00	-21.51	peak
5	14618.170	14.75	40.62	38.94	34.91	51.34	74.00	-22.66	peak
6	17235 000	17 60	43 08	36 18	27 22	51 72	74 99	-22 28	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5745 TX RSE

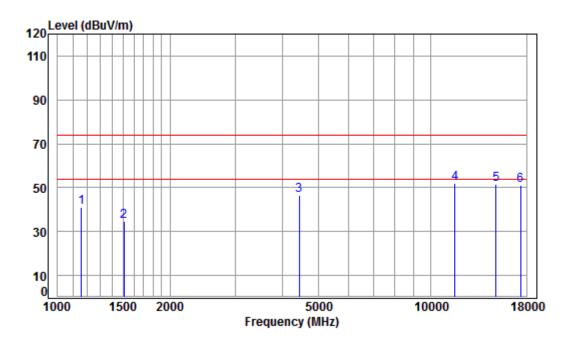
	: MTE	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	44.54	34.73	74.00	-39.27	peak
2	1677.621	4.68	26.58	38.03	42.13	35.36	74.00	-38.64	peak
3	4379.699	7.15	33.60	38.19	43.59	46.15	74.00	-27.85	peak
4	11490.000	12.33	38.09	35.50	36.40	51.32	74.00	-22.68	peak
5	14873.890	14.82	41.08	38.91	33.85	50.84	74.00	-23.16	peak
6	nn17235 000	17 60	43 08	36 18	27 49	51 99	74 99	-22 01	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Middle



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5785 TX RSE

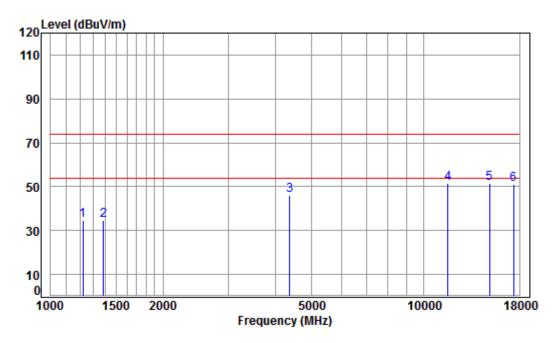
	: MIL	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.89	41.10	74.00	-32.90	peak
2	1507.470	4.48	25.83	38.05	42.59	34.85	74.00	-39.15	peak
3	4443.453	7.22	33.60	38.22	44.04	46.64	74.00	-27.36	peak
4	pp11570.000	12.34	38.17	35.51	37.15	52.15	74.00	-21.85	peak
5	14916.940	14.83	41.15	38.91	34.56	51.63	74.00	-22.37	peak
6	17355 000	17 93	43 23	36 12	26 17	51 21	74 99	-22 79	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: Middle



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5785 TX RSE

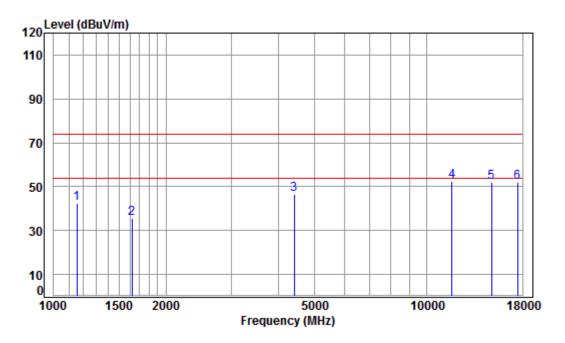
	: MTE	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
4	4000 744		24.50	30.00	44.46	24.77	74.00	20.02	
1	1220.714	4.11	24.58	38.08	44.16	34.//	74.00	-39.23	реак
2	1386.264	4.33	25.33	38.06	43.07	34.67	74.00	-39.33	peak
3	4367.058	7.13	33.60	38.18	43.58	46.13	74.00	-27.87	peak
4	11570.000	12.34	38.17	35.51	36.38	51.38	74.00	-22.62	peak
5	pp14960.120	14.84	41.23	38.90	34.22	51.39	74.00	-22.61	peak
6	17355.000	17.93	43 23	36 12	26 15	51 19	74 99	-22 81	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5825 TX RSE

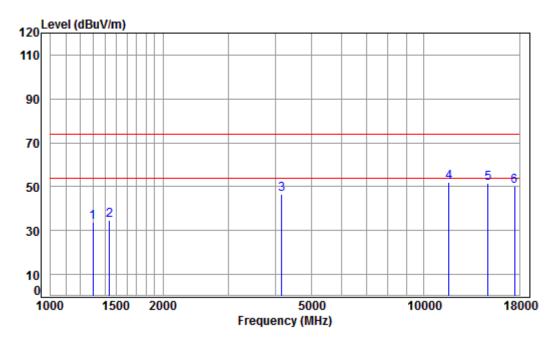
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	52.02	42.21	74.00	-31.79	peak
2	1620.431	4.61	26.34	38.04	42.70	35.61	74.00	-38.39	peak
3	4405.090	7.18	33.60	38.20	43.75	46.33	74.00	-27.67	peak
4	pp11650.000	12.35	38.25	35.53	37.23	52.30	74.00	-21.70	peak
5	14873.890	14.82	41.08	38.91	35.20	52.19	74.00	-21.81	peak
6	17475.000	18.25	43.37	36.06	26.37	51.93	74.00	-22.07	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5825 TX RSE

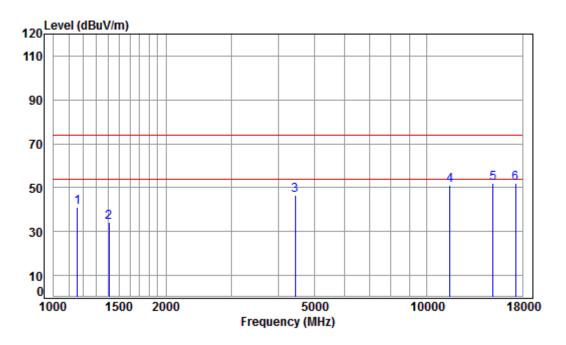
	: MTF	T TIM	20						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1297.103	4.22	24.94	38.07	42.70	33.79	74.00	-40.21	peak
2	1439.343	4.40	25.56	38.06	42.56	34.46	74.00	-39.54	peak
3	4157.664	6.89	33.60	38.08	44.26	46.67	74.00	-27.33	peak
4	pp11650.000	12.35	38.25	35.53	37.01	52.08	74.00	-21.92	peak
5	14830.960	14.81	41.00	38.92	34.61	51.50	74.00	-22.50	peak
6	17475 000	18 25	43 37	36 96	24 66	50 22	74 99	-23 78	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5755 TX RSE

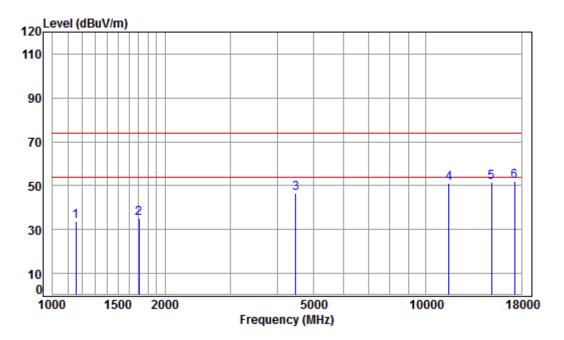
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.91	41.12	74.00	-32.88	peak
2	1406.443	4.36	25.42	38.06	42.55	34.27	74.00	-39.73	peak
3	4430.628	7.20	33.60	38.22	44.11	46.69	74.00	-27.31	peak
4	11510.000	12.33	38.11	35.50	36.16	51.10	74.00	-22.90	peak
5	pp15003.420	14.85	41.30	38.90	34.96	52.21	74.00	-21.79	peak
6	17265.000	17.68	43.12	36.17	27.33	51.96	74.00	-22.04	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5755 TX RSE

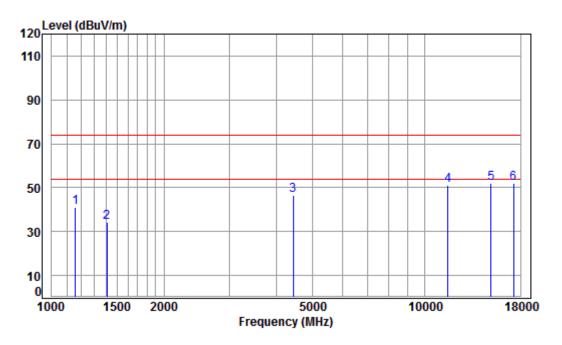
	: MTE	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	4.01	24.26	38.08	43.58	33.77	74.00	-40.23	peak
2	1702.042	4.71	26.68	38.03	41.73	35.09	74.00	-38.91	peak
3	4482.150	7.26	33.60	38.24	43.88	46.50	74.00	-27.50	peak
4	11510.000	12.33	38.11	35.50	36.36	51.30	74.00	-22.70	peak
5	14960.120	14.84	41.23	38.90	34.44	51.61	74.00	-22.39	peak
6	nn17265 000	17 68	43 12	36 17	27 30	51 93	74 99	-22 07	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5755 TX RSE

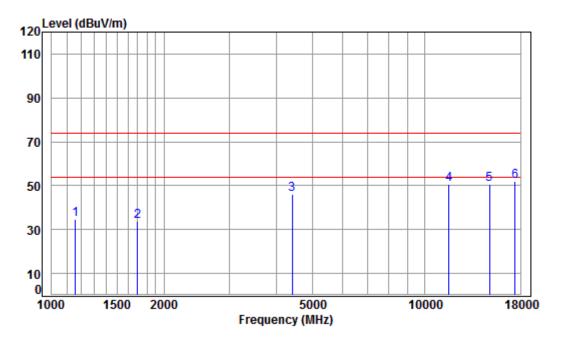
	· WIL	T TIM	40						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	50.91	41.12	74.00	-32.88	peak
2	1406.443	4.36	25.42	38.06	42.55	34.27	74.00	-39.73	peak
3	4430.628	7.20	33.60	38.22	44.11	46.69	74.00	-27.31	peak
4	11510.000	12.33	38.11	35.50	36.16	51.10	74.00	-22.90	peak
5	pp15003.420	14.85	41.30	38.90	34.96	52.21	74.00	-21.79	peak
6	17265 000	17 68	/13 12	36 17	27 33	51 96	7/ 00	-22 04	nook



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High



Condition: 3m VERTICAL

Job No: : 04503CR

Mode: : 5795 TX RSE

		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	4.02	24.27	38.08	44.61	34.82	74.00	-39.18	peak
2	1697.129	4.70	26.66	38.03	40.66	33.99	74.00	-40.01	peak
3	4405.090	7.18	33.60	38.20	43.71	46.29	74.00	-27.71	peak
4	11590.000	12.34	38.19	35.52	35.53	50.54	74.00	-23.46	peak
5	14873.890	14.82	41.08	38.91	33.67	50.66	74.00	-23.34	peak
6	pp17385.000	18.01	43.26	36.11	26.81	51.97	74.00	-22.03	peak



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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 40GHz, the disturbance above 18GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points 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. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
- 4) For 802.11a mode, the test was performed at SISO mode, and only the data of worst case (transmitting with antenna 1) is recorded in the report. For 802.11n mode, the test was performed at MIMO mode.
- 5) For below 1GHz, through Pre-scan, found that the 802.11a mode @ 6Mbps rate on the lowest channel is the worst case.
- 6) Only the data of worst case is recorded in the report.



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7.10 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart E 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, 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.



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1010 mbar

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7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 54 % RH Atmospheric Pressure:

Pretest these mode to find the worst case:

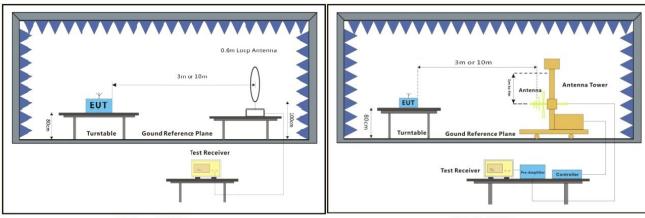
f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

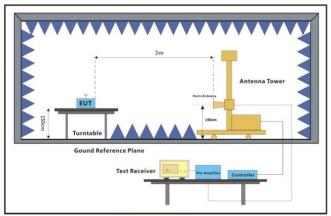
The worst case for final test:

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

7.10.2Test Setup Diagram



Below 30MHz 30MHz-1GHz



Above 1GHz

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7.10.3 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. 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 fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 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.
- 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 the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark: For 802.11a mode, the test was performed at SISO mode, and only the data of worst case (transmitting with antenna 1) is recorded in the report. For 802.11n mode, the test was performed at MIMO mode.

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

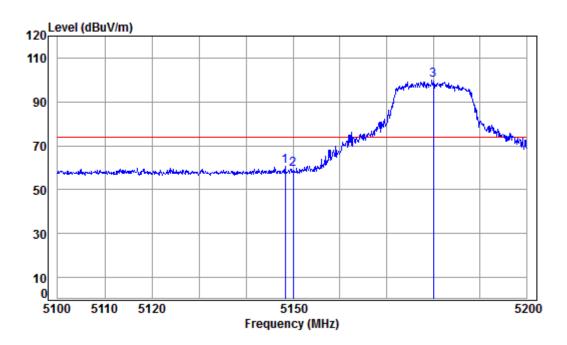


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Band1

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5180 Band edge

: WIFI 11A

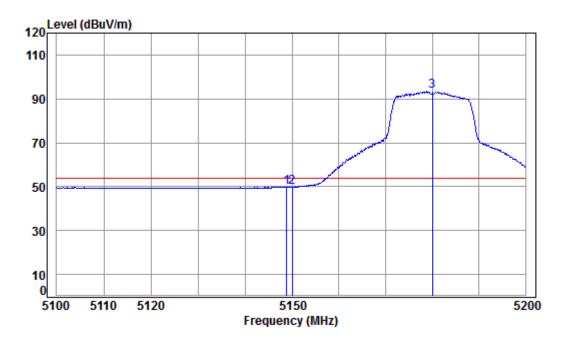
				Preamp					
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5148.357	8.08	34.47	38.47	56.62	60.70	74.00	-13.30	peak
2	5150.000	8.08	34.47	38.47	55.27	59.35	74.00	-14.65	peak
3 рр	5180.000	8.09	34.46	38.46	96.01	100.10	74.00	26.10	peak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5180 Band edge

: WIFI 11A

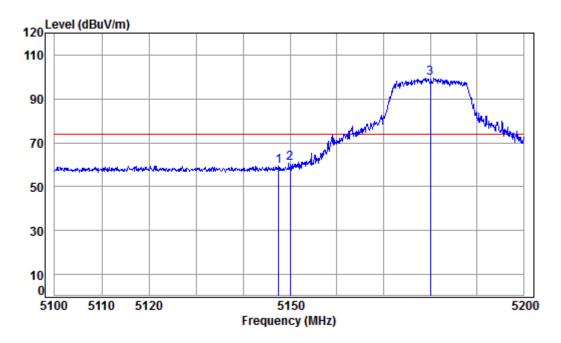
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_								
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
			-			-			
1	5148.857	8.08	34.47	38.47	45.79	49.87	54.00	-4.13	Average
2	5150.000	8.08	34.47	38.47	45.82	49.90	54.00	-4.10	Average
3 рр	5180.000	8.09	34.46	38.46	89.33	93.42	54.00	39.42	Average



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5180 Band edge

: WIFI 11A

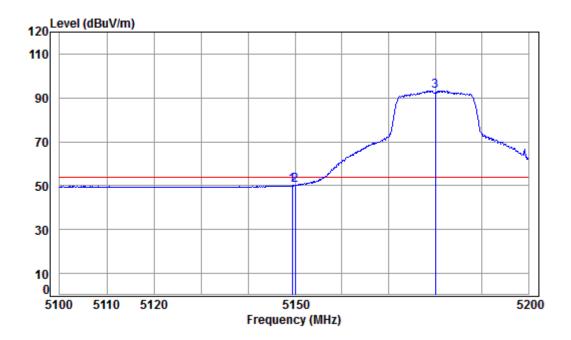
			- 0							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1	5147.558	8.08	34.47	38.47	55.45	59.53	74.00	-14.47	Peak	
2	5150.000	8.08	34.47	38.47	56.62	60.70	74.00	-13.30	Peak	
3	pp 5180.000	8.09	34.46	38.46	95.17	99.26	74.00	25.26	Peak	



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5180 Band edge

: WIFI 11A

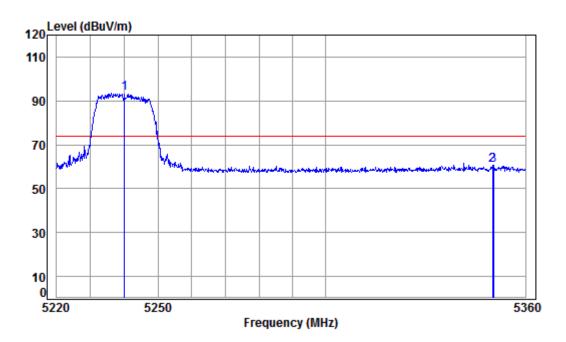
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
							•		
1	5149.357	8.08	34.47	38.47	45.90	49.98	54.00	-4.02	Average
2	5150.000	8.08	34.47	38.47	46.26	50.34	54.00	-3.66	Average
3 рр	5180.000	8.09	34.46	38.46	89.12	93.21	54.00	39.21	Average
- FF	2200.000		2	20			2		e. age



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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5240 Band edge

: WIFI 11A

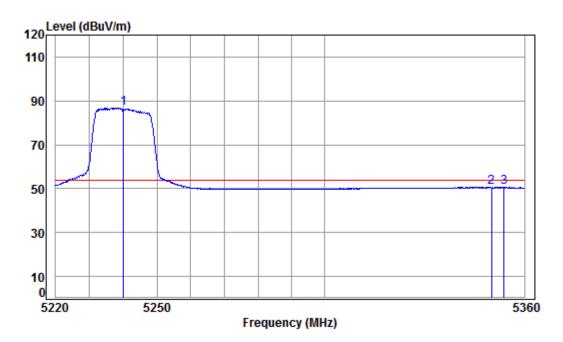
	Freq			Preamp Factor					Remark
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5240.000	8.12	34.45	38.45	89.46	93.58	74.00	19.58	peak
2	5350.000	8.18	34.43	38.43	56.43	60.61	74.00	-13.39	peak
3	5350.362	8.18	34.43	38.43	56.53	60.71	74.00	-13.29	neak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5240 Band edge

: WIFI 11A

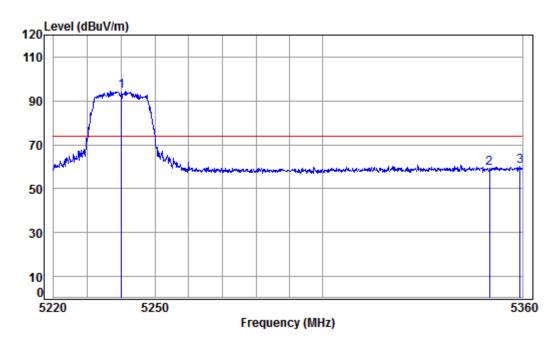
		_			Preamp						
		Freq	LOSS	Factor	Factor	revel	revel	Line	Limit	Kemark	
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1	pp 5246	0.000	8.12	34.45	38.45	82.74	86.86	54.00	32.86	Average	
2	5356	0.000	8.18	34.43	38.43	46.27	50.45	54.00	-3.55	Average	
3	5353	3.903	8.18	34.43	38.43	46.33	50.51	54.00	-3.49	Average	



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

1 2 3

Mode: : 5240 Band edge

: WIFI 11A

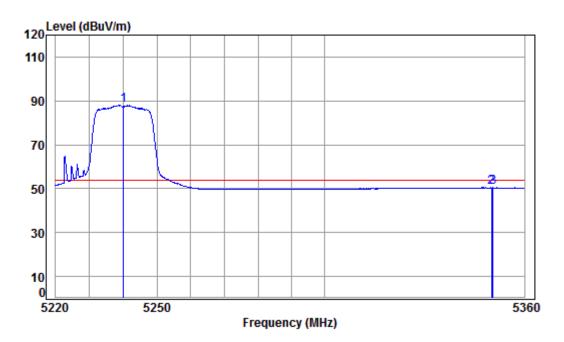
	Freq			Preamp Factor					
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
рр	5240.000	8.12	34.45	38.45	90.54	94.66	74.00	20.66	Peak
	5350.000	8.18	34.43	38.43	55.06	59.24	74.00	-14.76	Peak
	5359,291	8.18	34.43	38.43	55.90	60.08	74.00	-13.92	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5240 Band edge

: WIFI 11A

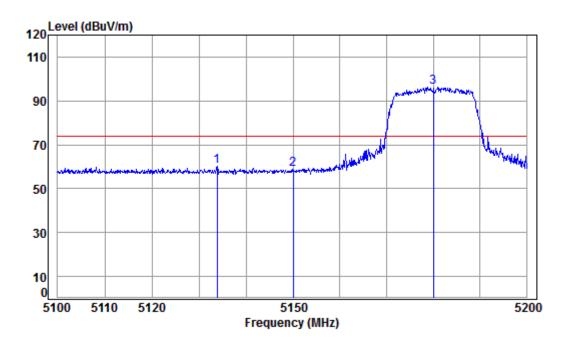
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp	5240.000	8.12	34.45	38.45	83.93	88.05	54.00	34.05	Average
2		5350.000	8.18	34.43	38.43	46.24	50.42	54.00	-3.58	Average
3		5350.504	8.18	34.43	38.43	46.30	50.48	54.00	-3.52	Average



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5180 Band edge

: WIFI 11N20

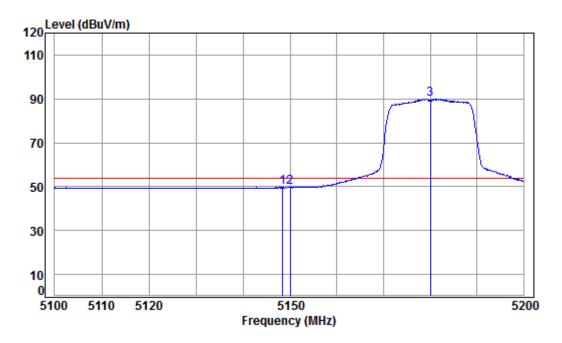
			- 0						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5133.782	8.07	34.47	38.47	56.11	60.18	74.00	-13.82	peak
2	5150.000								•
3 pi	5180.000								•



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5180 Band edge

: WIFI 11N20

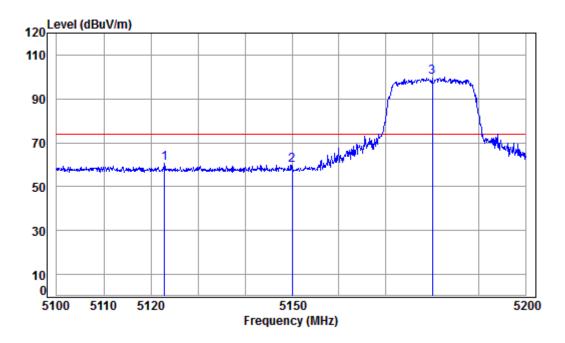
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		5148.458	8.08	34.47	38.47	45.59	49.67	54.00	-4.33	Average
2		5150.000	8.08	34.47	38.47	45.55	49.63	54.00	-4.37	Average
3	pp	5180.000	8.09	34.46	38.46	85.77	89.86	54.00	35.86	Average



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5180 Band edge

: WIFI 11N20

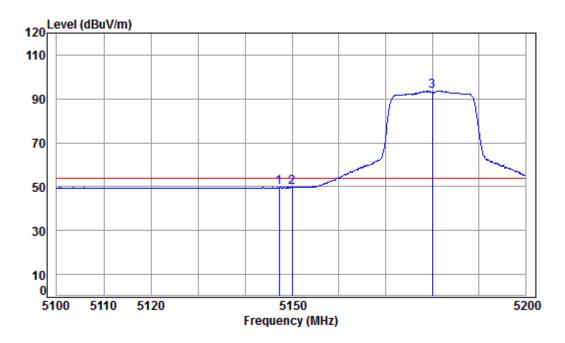
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5122.828	8.06	34.47	38.48	56.43	60.48	74.00	-13.52	Peak
2	5150.000	8.08	34.47	38.47	55.76	59.84	74.00	-14.16	Peak
3 рр	5180.000	8.09	34.46	38.46	95.63	99.72	74.00	25.72	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

1 2

Mode: : 5180 Band edge

: WIFI 11N20

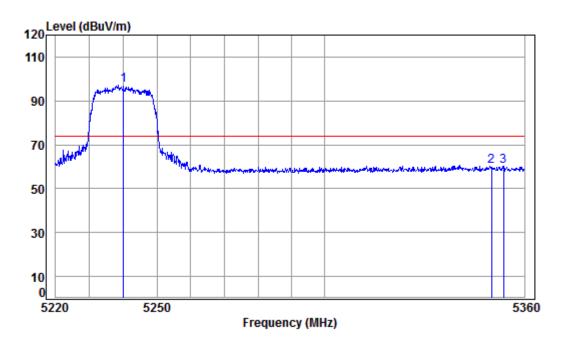
Freq			Preamp Factor					Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
								Average
5150.000								_
pp 5180,000	8.09	34.46	38.46	89.63	93.72	54.00	39.72	Average



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

1 2 3

Mode: : 5240 Band edge

: WIFI 11N20

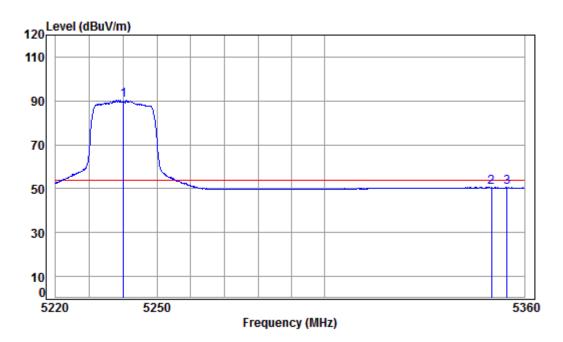
	Freq			Preamp Factor					Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
рр	5240.000	8.12	34.45	38.45	93.12	97.24	74.00	23.24	peak
	5350.000	8.18	34.43	38.43	56.06	60.24	74.00	-13.76	peak
	5353,620	8.18	34.43	38.43	56.10	60.28	74.00	-13.72	neak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5240 Band edge

: WIFI 11N20

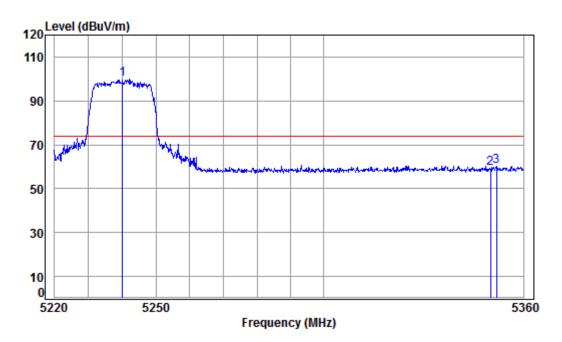
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
			•			•	•		
1 pp	5240.000	8.12	34.45	38.45	86.13	90.25	54.00	36.25	Average
2	5350.000	8.18	34.43	38.43	46.25	50.43	54.00	-3.57	Average
3	5354.754	8.18	34.43	38.43	46.30	50.48	54.00	-3.52	Average



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5240 Band edge

: WIFI 11N20

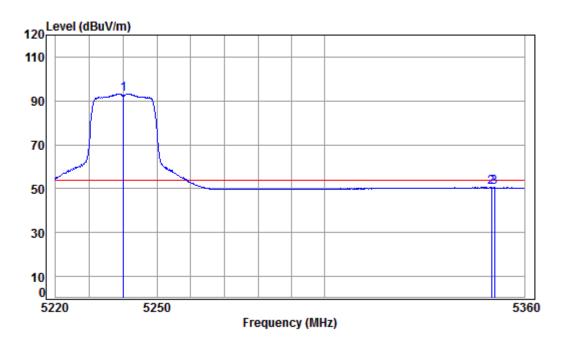
	Freq			Preamp Factor					Remark
•	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5240.000	8.12	34.45	38.45	95.63	99.75	74.00	25.75	Peak
2	5350.000	8.18	34.43	38.43	54.94	59.12	74.00	-14.88	Peak
3	5351.920	8.18	34.43	38.43	56.27	60.45	74.00	-13.55	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5240 Band edge

: WIFI 11N20

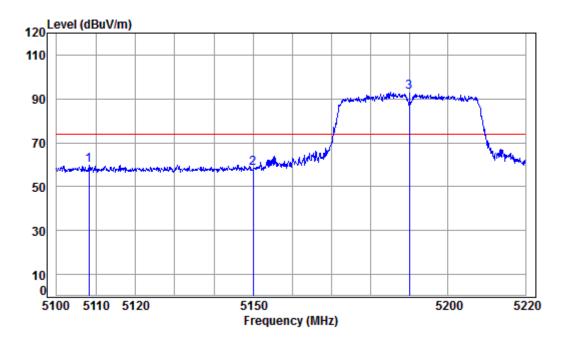
Cable Ant Preamp Read Limit Over Freq Loss Factor Factor Level Level Line Limit Remark	c
MHz dB dB/m dB dBuV dBuV/m dBuV/m dB	
1 pp 5240.000 8.12 34.45 38.45 89.08 93.20 54.00 39.20 Averag	_
2 5350.000 8.18 34.43 38.43 46.26 50.44 54.00 -3.56 Average 5350.929 8.18 34.43 38.43 46.31 50.49 54.00 -3.51 Average	



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5190 Band edge

: WIFI 11N40

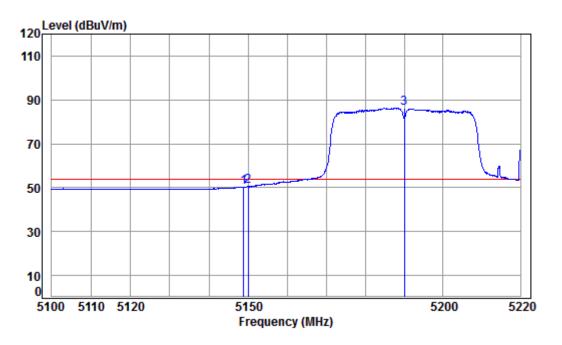
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
			•			•	•		
1	5108.190	8.06	34.48	38.48	55.84	59.90	74.00	-14.10	peak
2	5150.000	8.08	34.47	38.47	54.51	58.59	74.00	-15.41	peak
3 pp	5190.000	8.10	34.46	38.46	88.86	92.96	74.00	18.96	peak
									-



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5190 Band edge

: WIFI 11N40

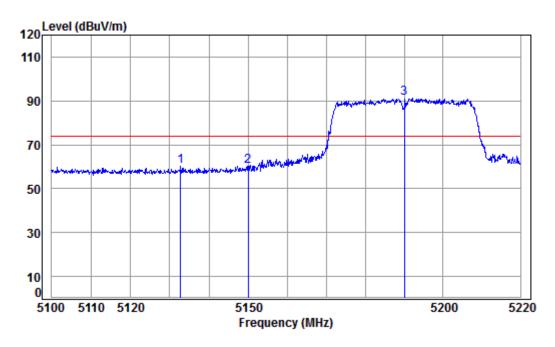
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5148.863	8.08	34.47	38.47	46.32	50.40	54.00	-3.60	Average
2	5150.000	8.08	34.47	38.47	46.64	50.72	54.00	-3.28	Average
3 рр	5190.000	8.10	34.46	38.46	82.07	86.17	54.00	32.17	Average



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5190 Band edge

: WIFI 11N40

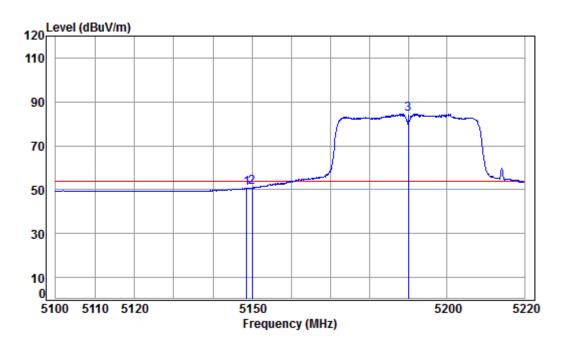
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5132.722	8.07	34.47	38.47	56.30	60.37	74.00	-13.63	Peak
2	5150.000	8.08	34.47	38.47	56.16	60.24	74.00	-13.76	Peak
3 рр	5190.000	8.10	34.46	38.46	87.25	91.35	74.00	17.35	Peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5190 Band edge

: WIFI 11N40

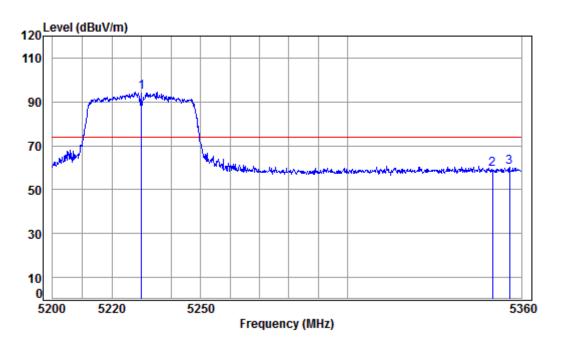
			- 0						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
							-		
1	5148.623	8.08	34.47	38.47	46.63	50.71	54.00	-3.29	Average
	5150.000								_
	5190.000								_



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5230 Band edge

: WIFI 11N40

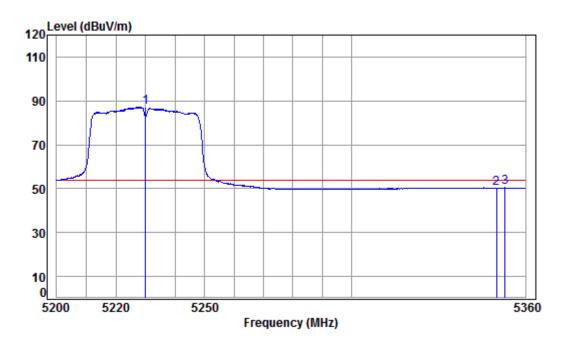
			0							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1 pr	5230.000	8.12	34.45	38.45	90.45	94.57	74.00	20.57	peak	
	5350.000								•	
	5355.940								•	



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5230 Band edge

: WIFI 11N40

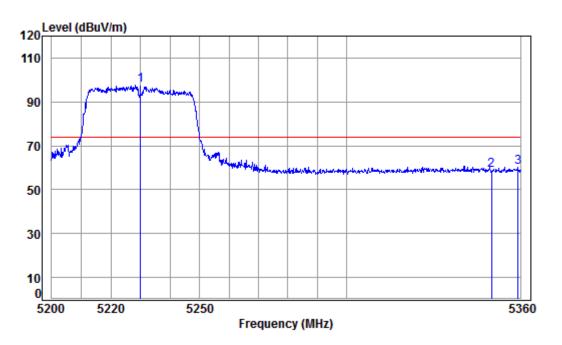
		- 0						
	Cable	Ant	Preamp	Read		Limit	0ver	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
		•			•	•		
1 pp 5230.000	8.12	34.45	38.45	82.99	87.11	54.00	33.11	Average
2 5350.000								_
3 5352.857								_



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

1 2 3

Mode: : 5230 Band edge

: WIFI 11N40

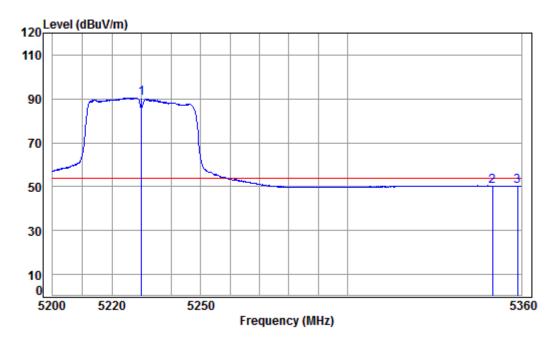
	Freq			Preamp Factor					
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
рр	5230.000	8.12	34.45	38.45	93.36	97.48	74.00	23.48	Peak
	5350.000	8.18	34.43	38.43	54.73	58.91	74.00	-15.09	Peak
	5359,188	8.18	34.43	38.43	55.98	60.16	74.00	-13.84	Peak



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

1 2 3

Mode: : 5230 Band edge

: WIFI 11N40

Freq			Preamp Factor					Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
 5230.000 5350.000								_
5358.701								_

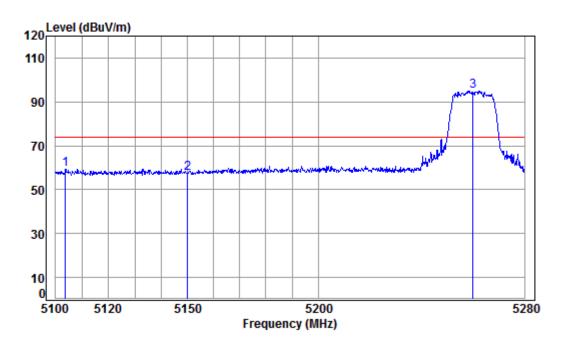


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Band2

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5260 Band edge

: WIFI 11A

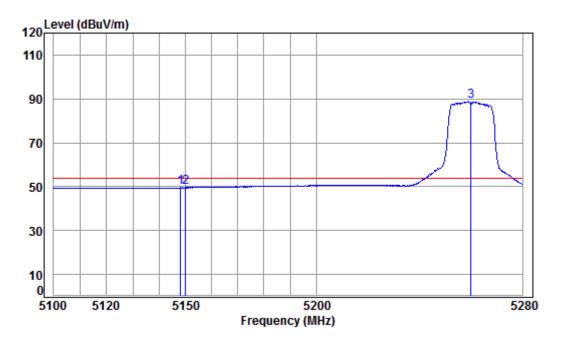
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5103.716	8.05	34.48	38.48	55.46	59.51	74.00	-14.49	peak
2	5150.000	8.08	34.47	38.47	53.57	57.65	74.00	-16.35	peak
3 рр	5260.000	8.13	34.45	38.45	90.81	94.94	74.00	20.94	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5260 Band edge

: WIFI 11A

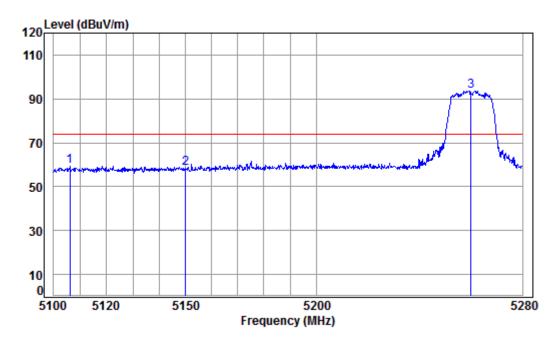
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	•								
	MHz	dB	dB/m	dB	dRuV	dBuV/m	dBuV/m	dB	
	1112	u.o	ub/ III	u.b	abar	abav,	abav, iii	u.	
1	5148.165	8.08	34.47	38.47	45.44	49.52	54.00	-4.48	Average
2	5150.000	8.08	34.47	38.47	45.48	49.56	54.00	-4.44	Average
3 pp	5260.000								_



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

1 2

Mode: : 5260 Band edge

: WIFI 11A

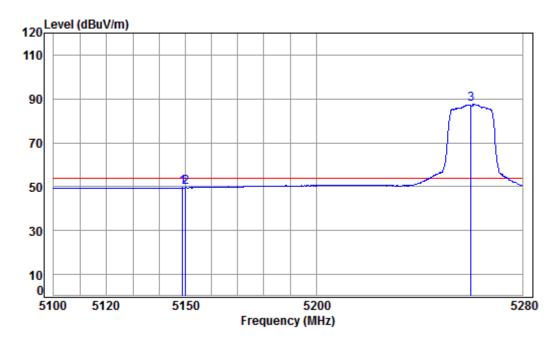
			- 0						
	Freq			Preamp Factor					
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
	5106.195	8.06	34.48	38.48	55.34	59.40	74.00	-14.60	Peak
	5150.000	8.08	34.47	38.47	54.42	58.50	74.00	-15.50	Peak
pp	5260.000	8.13	34.45	38.45	89.58	93.71	74.00	19.71	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5260 Band edge

: WIFI 11A

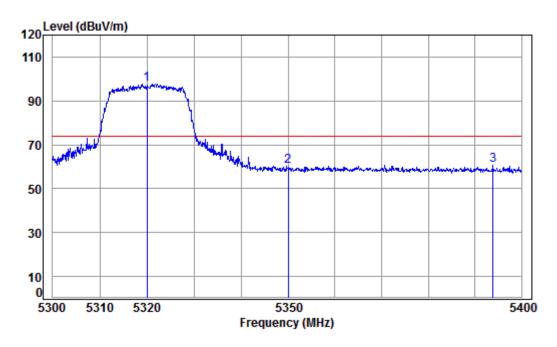
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5148.879	8.08	34.47	38.47	45.43	49.51	54.00	-4.49	Average
2	5150.000	8.08	34.47	38.47	45.48	49.56	54.00	-4.44	Average
3 рр	5260.000	8.13	34.45	38.45	83.38	87.51	54.00	33.51	Average
									_



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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5320 Band edge

: WIFI 11A

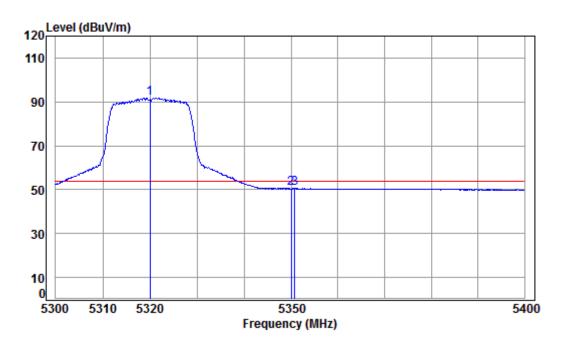
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp	5320.000	8.16	34.43	38.44	93.53	97.68	74.00	23.68	peak
2		5350.000	8.18	34.43	38.43	55.82	60.00	74.00	-14.00	peak
3		5393.846	8.20	34.42	38.42	56.50	60.70	74.00	-13.30	peak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5320 Band edge

: WIFI 11A

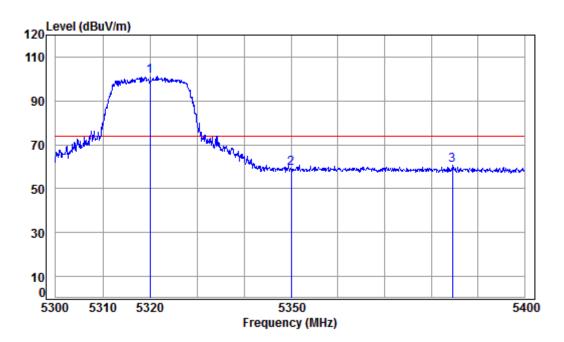
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp	5320.000	8.16	34.43	38.44	87.59	91.74	54.00	37.74	Average
2		5350.000	8.18	34.43	38.43	46.27	50.45	54.00	-3.55	Average
3		5350.767	8.18	34.43	38.43	46.28	50.46	54.00	-3.54	Average



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

1 2 3

Mode: : 5320 Band edge

: WIFI 11A

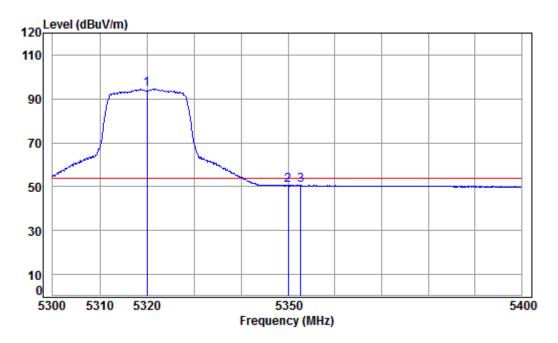
	Freq			Preamp Factor					Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
рр	5320.000	8.16	34.43	38.44	97.23	101.38	74.00	27.38	Peak
	5350.000	8.18	34.43	38.43	55.13	59.31	74.00	-14.69	Peak
	5384.478	8.19	34.42	38.42	56.50	60.69	74.00	-13.31	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5320 Band edge

: WIFI 11A

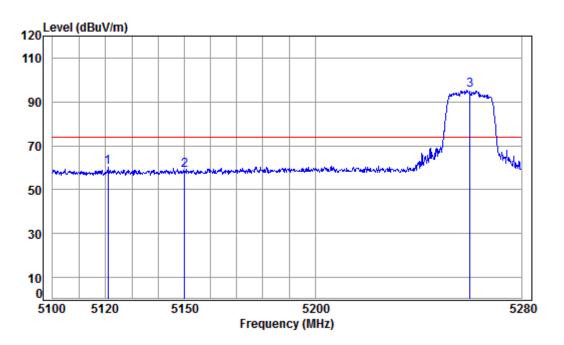
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp	5320.000	8.16	34.43	38.44	90.30	94.45	54.00	40.45	Average
2		5350.000	8.18	34.43	38.43	46.33	50.51	54.00	-3.49	Average
3		5352.667	8.18	34.43	38.43	46.35	50.53	54.00	-3.47	Average



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5260 Band edge

: WIFI 11N20

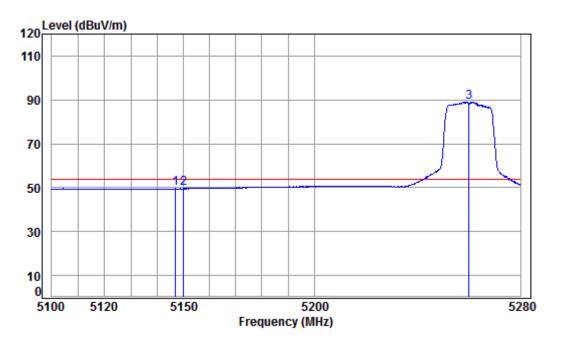
			8							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1	5120.917	8.06	34.47	38.48	56.36	60.41	74.00	-13.59	peak	
	5150.000								•	
	5260.000								•	



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5260 Band edge

: WIFI 11N20

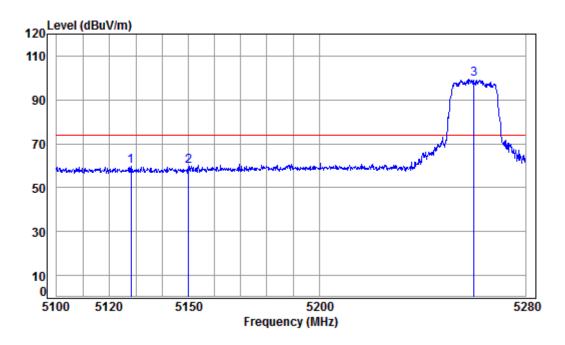
				6							
			Cable	Ant	Preamp	Read		Limit	0ver		
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
								•			
•	1	5147.094	8.08	34.47	38.47	45.48	49.56	54.00	-4.44	Average	
	2	5150.000								_	
4	_	3130.000	0.00	34.47	30.47	43.40	45.54	34.00	-4.40	Average	
3	gg 8	5260.000	8.13	34.45	38.45	85.06	89.19	54.00	35.19	Average	



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

1 2

Mode: : 5260 Band edge

: WIFI 11N20

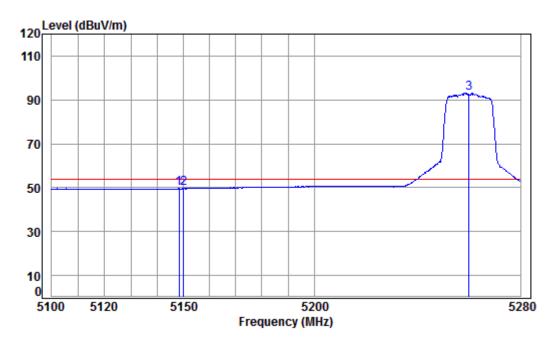
Freq			Preamp Factor					Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
5128.204								
5150.000	8.08	34.47	38.47	55.55	59.63	74.00	-14.37	Peak
nn 5260 000	8 13	34 45	38 45	95 34	99 47	74 00	25 47	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5260 Band edge

: WIFI 11N20

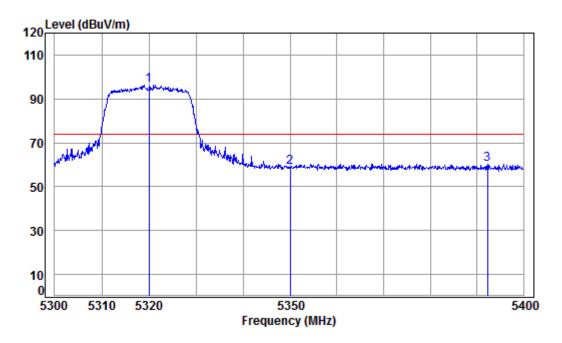
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
			-						
1	5148.343	8.08	34.47	38.47	45.47	49.55	54.00	-4.45	Average
2	5150.000	8.08	34.47	38.47	45.56	49.64	54.00	-4.36	Average
3 рр	5260.000	8.13	34.45	38.45	88.97	93.10	54.00	39.10	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5320 Band edge

: WIFI 11N20

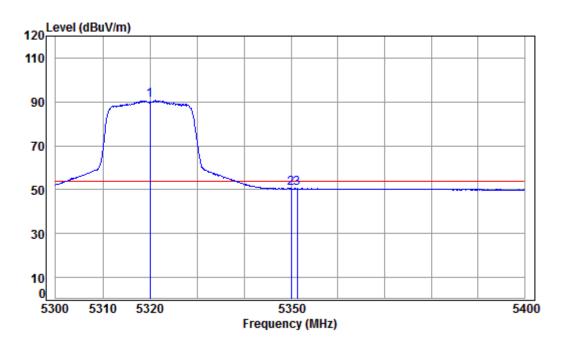
			Cable	Ant	Preamp	Read		Limit	0ver		
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
											_
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	pp	5320.000	8.16	34.43	38.44	92.34	96.49	74.00	22.49	peak	
2		5350.000	8.18	34.43	38.43	54.88	59.06	74.00	-14.94	peak	
3		5392.233	8.20	34.42	38.42	56.19	60.39	74.00	-13.61	peak	



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5320 Band edge

: WIFI 11N20

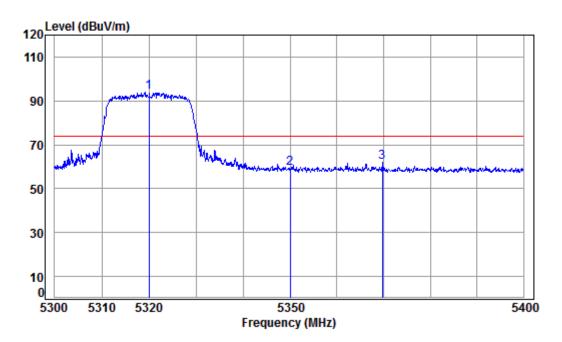
	_			Preamp					
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Kemark
	- MII-					ID 1//	ID 1//		
	MHZ	ав	aB/m	dB	abuv	aBuv/m	aBuv/m	ав	
1 pp	5320.000	8.16	34.43	38.44	86.42	90.57	54.00	36.57	Average
2	5350.000	8.18	34.43	38.43	46.32	50.50	54.00	-3.50	Average
3	5351.367	8.18	34.43	38.43	46.35	50.53	54.00	-3.47	Average



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5320 Band edge

: WIFI 11N20

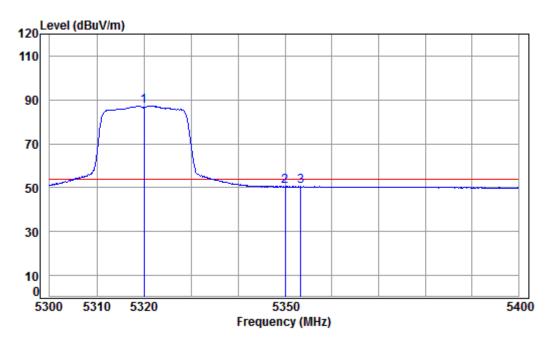
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5320.000	8.16	34.43	38.44	89.74	93.89	74.00	19.89	Peak
2	5350.000	8.18	34.43	38.43	55.21	59.39	74.00	-14.61	Peak
3	5369.703	8.19	34.43	38.43	57.75	61.94	74.00	-12.06	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5320 Band edge

: WIFI 11N20

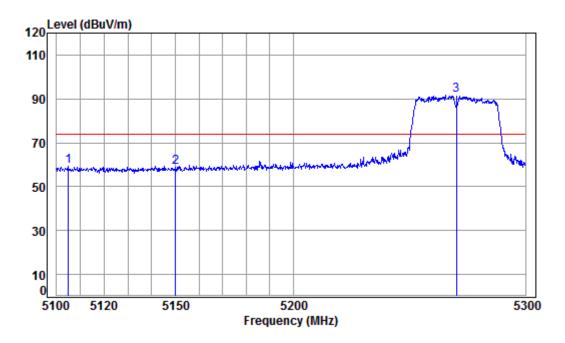
Freq			Preamp Factor					Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp 5320.000	8.16	34.43	38.44	83.13	87.28	54.00	33.28	Average
2 5350.000	8.18	34.43	38.43	46.32	50.50	54.00	-3.50	Average
3 5353.368	8.18	34.43	38.43	46.30	50.48	54.00	-3.52	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5270 Band edge

: WIFI 11N40

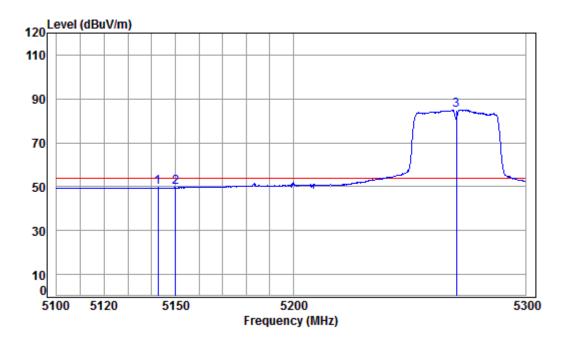
			6						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_								
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
			•			•	•		
1	5104.907	8.05	34.48	38.48	55.15	59.20	74.00	-14.80	peak
_									•
2	5150.000	8.08	34.4/	38.4/	54.96	59.04	/4.00	-14.96	peak
3 nn	5270.000	8.14	34.44	38.45	87.80	91.93	74.00	17.93	neak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5270 Band edge

: WIFI 11N40

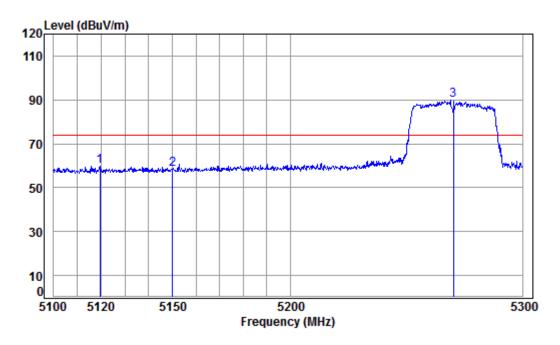
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		5142.551	8.07	34.47	38.47	45.46	49.53	54.00	-4.47	Average
2		5150.000	8.08	34.47	38.47	45.44	49.52	54.00	-4.48	Average
3	pp	5270.000	8.14	34.44	38.45	80.87	85.00	54.00	31.00	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5270 Band edge

: WIFI 11N40

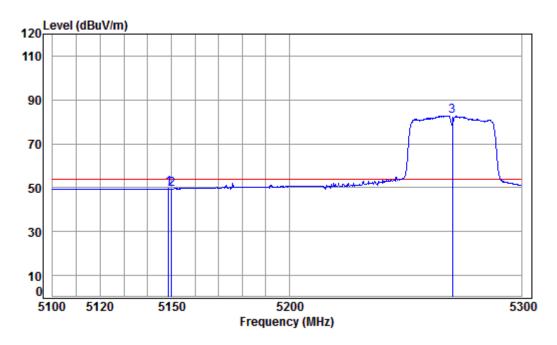
				6						
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		5119.458	8.06	34.48	38.48	55.85	59.91	74.00	-14.09	Peak
_										
2		5150.000	8.08	34.4/	38.4/	54.54	58.62	74.00	-15.38	reak
3	pp	5270.000	8.14	34.44	38.45	85.63	89.76	74.00	15.76	Peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5270 Band edge

: WIFI 11N40

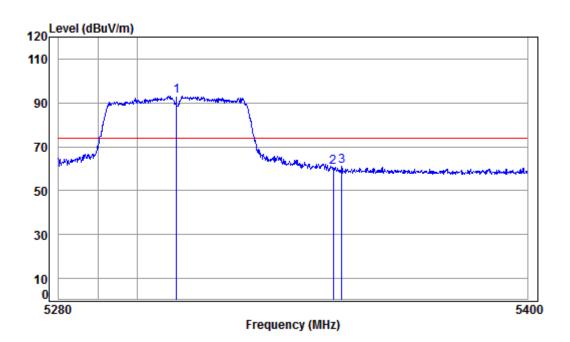
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5148.687	8.08	34.47	38.47	45.43	49.51	54.00	-4.49	Average
2	5150.000	8.08	34.47	38.47	45.39	49.47	54.00	-4.53	Average
3 рр	5270.000	8.14	34.44	38.45	78.52	82.65	54.00	28.65	Average
3 pp	5270.000	8.14	34.44	38.45	78.52	82.65	54.00	28.65	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5310 Band edge

: WIFI 11N40

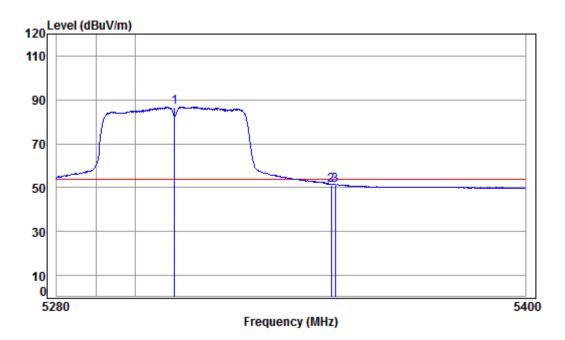
	(Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp 533	10.000	8.16	34.44	38.44	89.03	93.19	74.00	19.19	peak
2 535	50.000	8.18	34.43	38.43	56.45	60.63	74.00	-13.37	peak
3 535	52.157	8.18	34.43	38.43	56.88	61.06	74.00	-12.94	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5310 Band edge

: WIFI 11N40

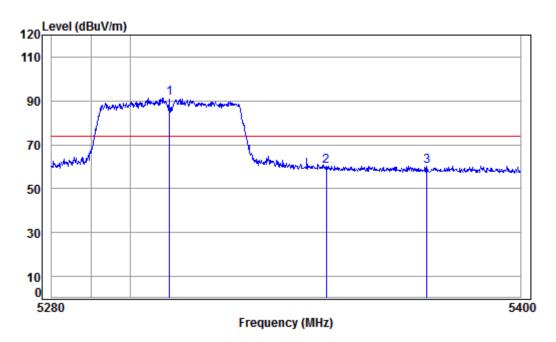
			0							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	_									
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1 pp	5310.000	8.16	34.44	38.44	82.66	86.82	54.00	32.82	Average	
	5350.000								_	
	5350.955								_	



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5310 Band edge

: WIFI 11N40

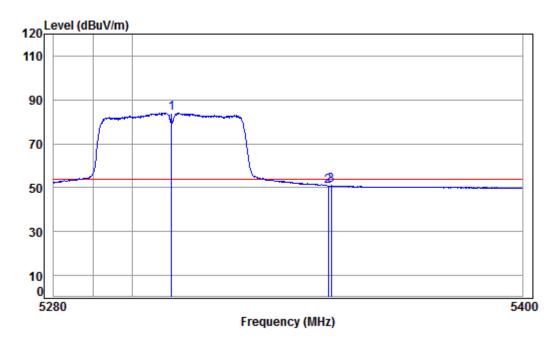
			- 0							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
			•			•	•			
1 pp	5310.000	8.16	34.44	38.44	87.19	91.35	74.00	17.35	Peak	
	5350.000									
	5375.905									
_	33/3.703	0.17	J4.42	JU.42	30.20	00.55	74.00	10.01	I Cak	



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5310 Band edge

: WIFI 11N40

			0							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1 p	p 5310.000	8.16	34.44	38.44	79.84	84.00	54.00	30.00	Average	
	5350.000								_	
	5350.714								_	

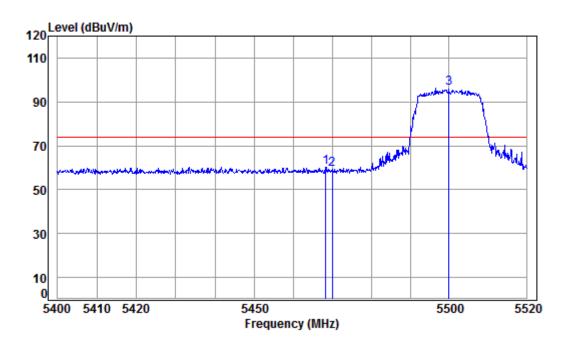


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Band3

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11A

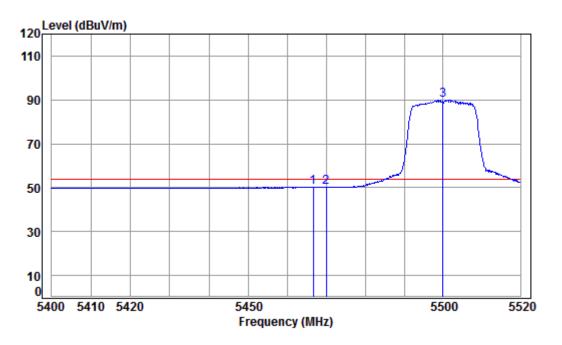
				Preamp					
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	——dB	
_	5450 347		24.44	20.44			74.00	43.66	
1	5468.317	8.23	34.41	38.41	56.11	60.34	/4.00	-13.66	peak
2	5470.000	8.24	34.41	38.41	54.96	59.20	74.00	-14.80	peak
3 pp	5500.000	8.25	34.40	38.40	91.86	96.11	74.00	22.11	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11A

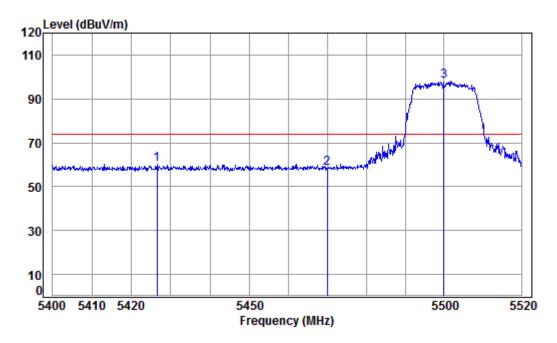
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	•								
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
		45	u.,	45	abar	usu*/	ubu*/	40	
1	5466.635	8.23	34.41	38.41	45.93	50.16	54.00	-3.84	Average
2	5470.000	8.24	34.41	38.41	45.86	50.10	54.00	-3.90	Average
3 pp	5500.000								_



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11A

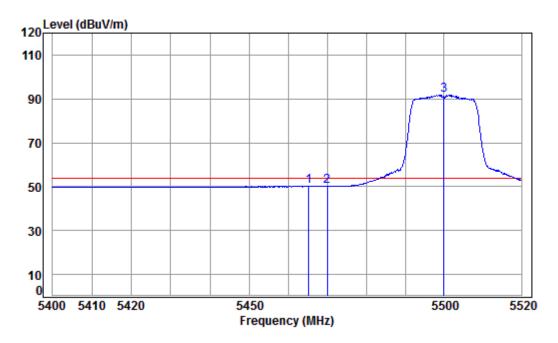
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5426.532	8.21	34.41	38.41	56.11	60.32	74.00	-13.68	Peak
2	5470.000	8.24	34.41	38.41	54.38	58.62	74.00	-15.38	Peak
3 рр	5500.000	8.25	34.40	38.40	93.78	98.03	74.00	24.03	Peak



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11A

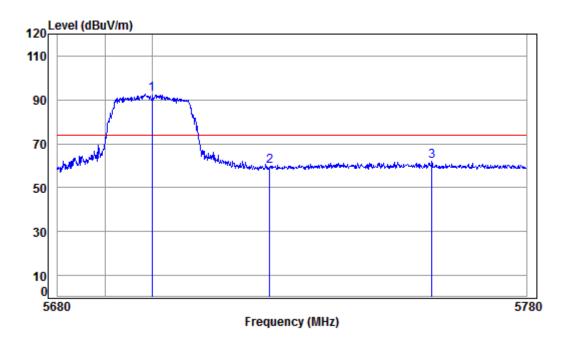
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_								
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5465.193	8.23	34.41	38.41	46.02	50.25	54.00	-3.75	Average
2	5470.000	8.24	34.41	38.41	45.83	50.07	54.00	-3.93	Average
3 рр	5500.000	8.25	34.40	38.40	87.51	91.76	54.00	37.76	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5700 Band edge

: WIFI 11A

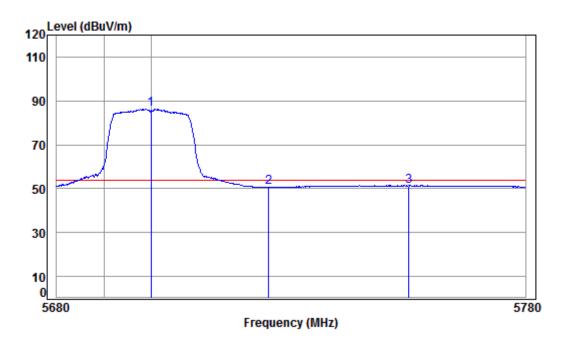
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	p 5700.000	8.46	34.52	38.36	87.85	92.47	74.00	18.47	peak
2	5725.000	8.48	34.54	38.35	54.97	59.64	74.00	-14.36	peak
3	5759.659	8.52	34.56	38.35	57.17	61.90	74.00	-12.10	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5700 Band edge

: WIFI 11A

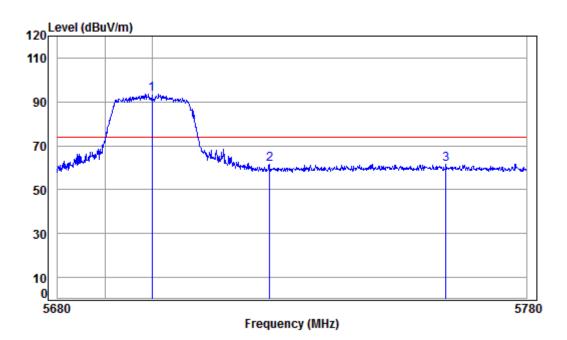
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp	5700.000	8.46	34.52	38.36	81.71	86.33	54.00	32.33	Average
2		5725.000	8.48	34.54	38.35	46.02	50.69	54.00	-3.31	Average
3		5754.937	8.51	34.56	38.35	46.23	50.95	54.00	-3.05	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5700 Band edge

: WIFI 11A

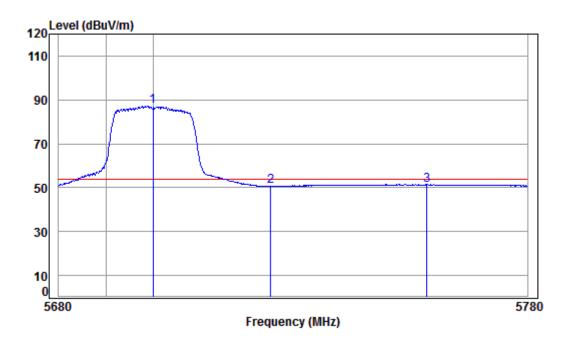
			8						
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5700.000	8.46	34.52	38.36	88.82	93.44	74.00	19.44	Peak
	5725.000								
3	5762.675	8.52	34.56	38.35	56.72	61.45	74.00	-12.55	Peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5700 Band edge

: WIFI 11A

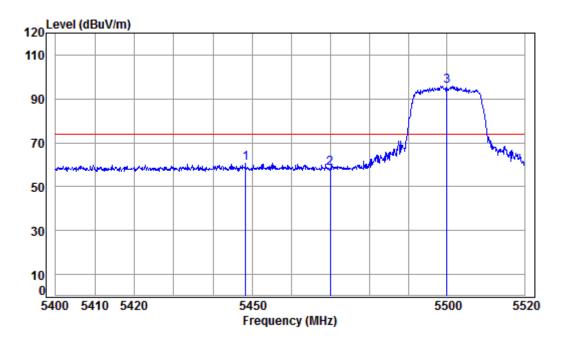
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp	5700.000	8.46	34.52	38.36	82.54	87.16	54.00	33.16	Average
2		5725.000	8.48	34.54	38.35	46.04	50.71	54.00	-3.29	Average
3		5758.453	8.51	34.56	38.35	46.20	50.92	54.00	-3.08	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11N20

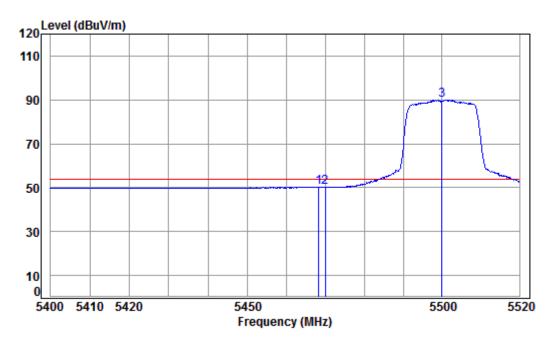
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		5448.282	8.23	34.41	38.41	56.57	60.80	74.00	-13.20	peak
2		5470.000	8.24	34.41	38.41	54.26	58.50	74.00	-15.50	peak
3	pp	5500.000	8.25	34.40	38.40	91.62	95.87	74.00	21.87	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11N20

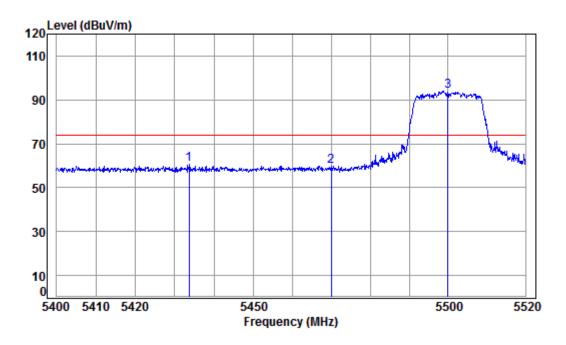
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5468.317	8.23	34.41	38.41	45.96	50.19	54.00	-3.81	Average
2	5470.000	8.24	34.41	38.41	45.92	50.16	54.00	-3.84	Average
3 рр	5500.000	8.25	34.40	38.40	85.84	90.09	54.00	36.09	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11N20

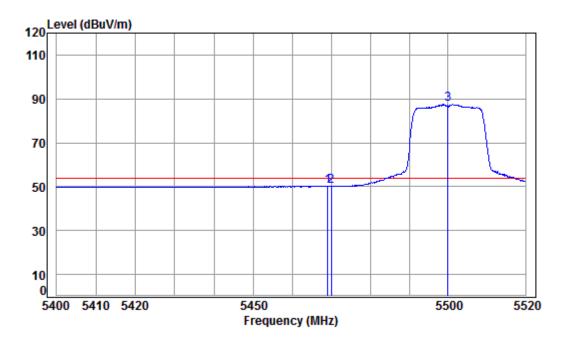
	-			Preamp					
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Kemark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5433.693	8.22	34.41	38.41	56.37	60.59	74.00	-13.41	Peak
2	5470.000	8.24	34.41	38.41	55.34	59.58	74.00	-14.42	Peak
3 рр	5500.000	8.25	34.40	38.40	89.62	93.87	74.00	19.87	Peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5500 Band edge

: WIFI 11N20

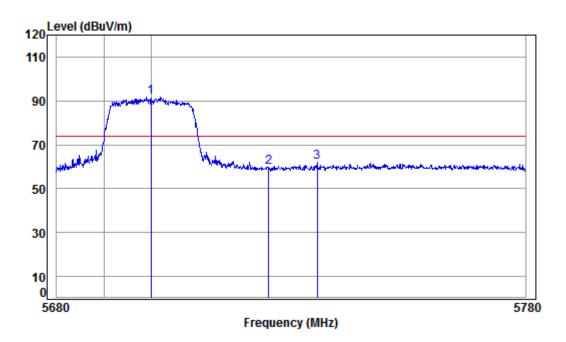
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5469.038	8.24	34.41	38.41	46.02	50.26	54.00	-3.74	Average
2	5470.000	8.24	34.41	38.41	45.81	50.05	54.00	-3.95	Average
3 рр	5500.000	8.25	34.40	38.40	83.18	87.43	54.00	33.43	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5700 Band edge

: WIFI 11N20

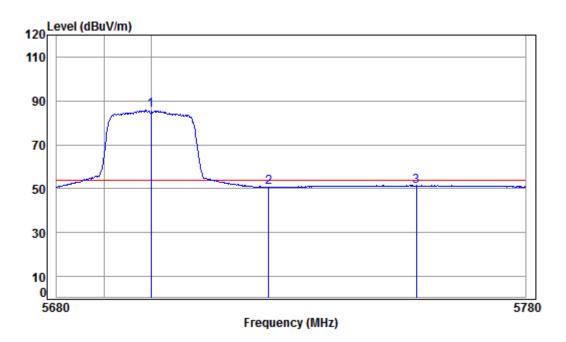
	Cable	Ant	Preamp	Read		Limit	0ver		
Fred	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
MHz	z dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1 pp 5700.000	8.46	34.52	38.36	87.17	91.79	74.00	17.79	peak	
								•	
2 5725.000	8.48	34.54	38.35	55.23	59.90	74.00	-14.10	реак	
3 5735.384	8.49	34.54	38.35	57.16	61.84	74.00	-12.16	peak	



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5700 Band edge

: WIFI 11N20

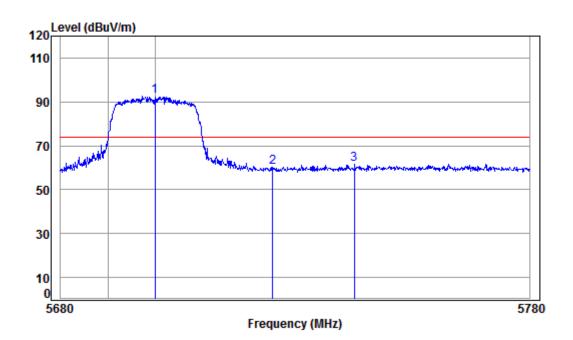
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	p 5700.000	8.46	34.52	38.36	80.97	85.59	54.00	31.59	Average
2	5725.000	8.48	34.54	38.35	46.06	50.73	54.00	-3.27	Average
3	5756.644	8.51	34.56	38.35	46.25	50.97	54.00	-3.03	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: High for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5700 Band edge

: WIFI 11N20

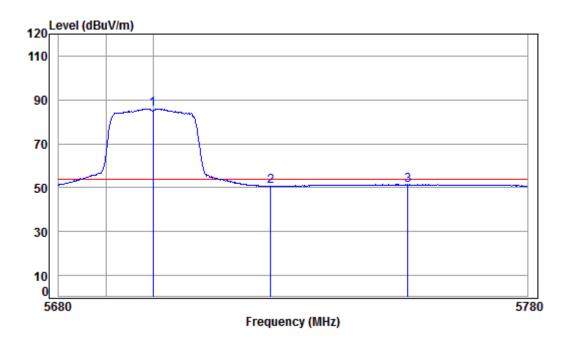
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5700.000	8.46	34.52	38.36	88.02	92.64	74.00	18.64	Peak
2	5725.000	8.48	34.54	38.35	55.58	60.25	74.00	-13.75	Peak
3	5742.496	8.50	34.55	38.35	56.87	61.57	74.00	-12.43	Peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

1 2 3

Mode: : 5700 Band edge

: WIFI 11N20

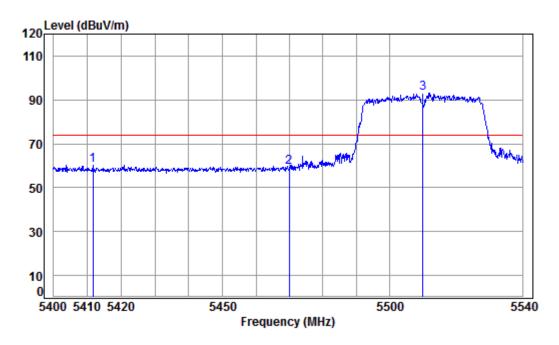
	Freq						Limit Line		
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
pp	5700.000	8.46	34.52	38.36	81.33	85.95	54.00	31.95	Average
	5725.000	8.48	34.54	38.35	46.11	50.78	54.00	-3.22	Average
	5754.334	8.51	34.56	38.35	46.20	50.92	54.00	-3.08	Average



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5510 Band edge

: WIFI 11N40

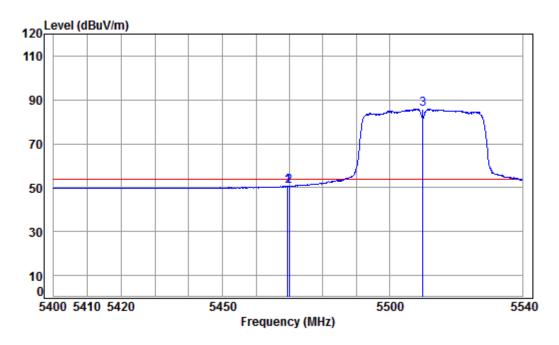
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5411.623	8.21	34.42	38.42	55.96	60.17	74.00	-13.83	peak
2	5470.000	8.24	34.41	38.41	55.08	59.32	74.00	-14.68	peak
3 рр	5510.000	8.26	34.41	38.40	88.70	92.97	74.00	18.97	peak



Report No.: SZEM170500450305

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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5510 Band edge

: WIFI 11N40

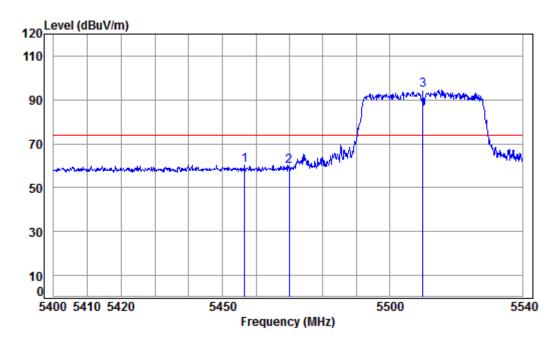
	Cable	Ant	Preamp	Read		Limit	0ver	
Fre	q Loss	Factor	Factor	Level	Level	Line	Limit	Remark
M	Iz dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
						-		
1 5469.43	2 8.24	34.41	38.41	46.38	50.62	54.00	-3.38	Average
2 5470.00	0 8.24	34.41	38.41	46.34	50.58	54.00	-3.42	Average
3 pp 5510.00	0 8.26	34.41	38.40	81.60	85.87	54.00	31.87	Average
• • • • • • • • • • • • • • • • • • • •								



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low for Peak



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5510 Band edge

: WIFI 11N40

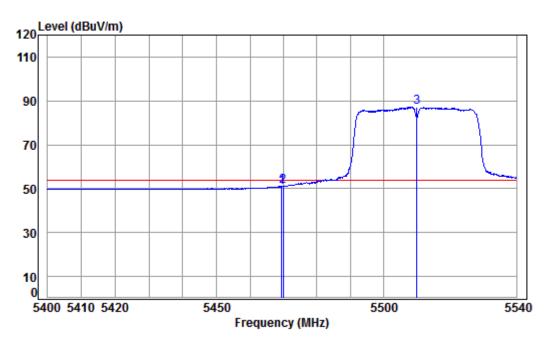
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5456.688	8.23	34.41	38.41	56.15	60.38	74.00	-13.62	Peak
2	5470.000	8.24	34.41	38.41	55.49	59.73	74.00	-14.27	Peak
3 рр	5510.000	8.26	34.41	38.40	90.07	94.34	74.00	20.34	Peak



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5510 Band edge

: WIFI 11N40

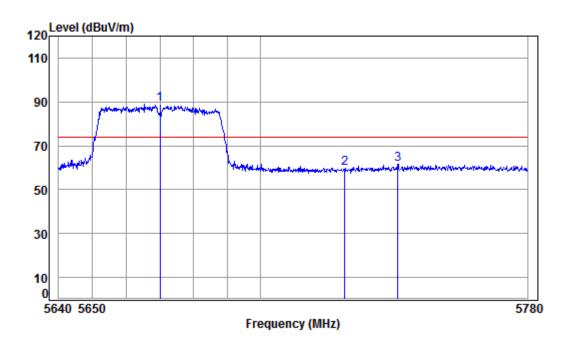
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5469.552	8.24	34.41	38.41	46.52	50.76	54.00	-3.24	Average
2	5470.000	8.24	34.41	38.41	46.72	50.96	54.00	-3.04	Average
3 рр	5510.000	8.26	34.41	38.40	82.80	87.07	54.00	33.07	Average



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High for Peak



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5670 Band edge

: WIFI 11N40

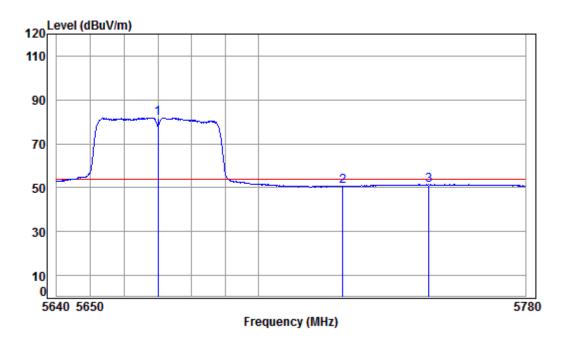
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	p 5670.000	8.42	34.50	38.37	84.24	88.79	74.00	14.79	peak
2	5725.000	8.48	34.54	38.35	54.99	59.66	74.00	-14.34	peak
3	5741.017	8.50	34.55	38.35	57.03	61.73	74.00	-12.27	peak



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High for Average



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5670 Band edge

: WIFI 11N40

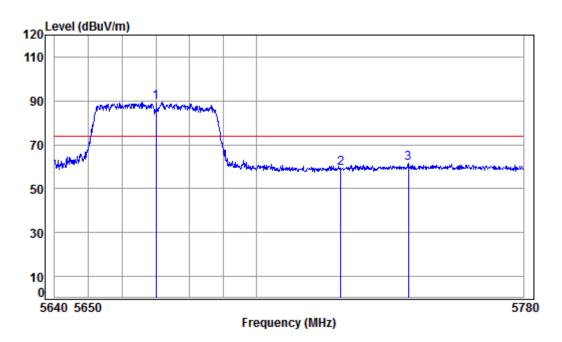
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5670.000	8.42	34.50	38.37	77.29	81.84	54.00	27.84	Average
2	5725.000	8.48	34.54	38.35	46.00	50.67	54.00	-3.33	Average
3	5750.878	8.51	34.55	38.35	46.25	50.96	54.00	-3.04	Average



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High for Peak



Condition: 3m VERTICAL

Job No: : 04503CR

1 2 3

Mode: : 5670 Band edge

: WIFI 11N40

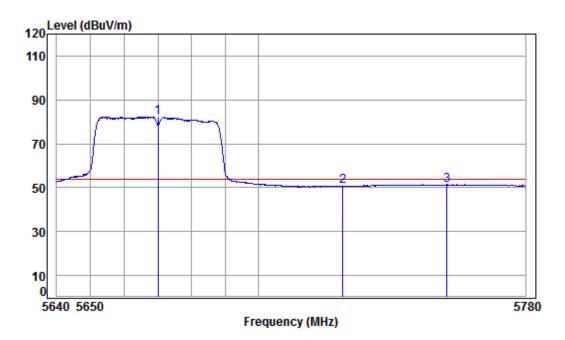
	Freq			Preamp Factor					Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
рр	5670.000	8.42	34.50	38.37	84.98	89.53	74.00	15.53	Peak
	5725.000	8.48	34.54	38.35	54.63	59.30	74.00	-14.70	Peak
	5745.382	8.50	34.55	38.35	56.89	61.59	74.00	-12.41	Peak



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High for Average



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5670 Band edge

: WIFI 11N40

			0							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1 pp	5670.000	8.42	34.50	38.37	77.77	82.32	54.00	28.32	Average	
	5725.000								_	
	5756.380								_	

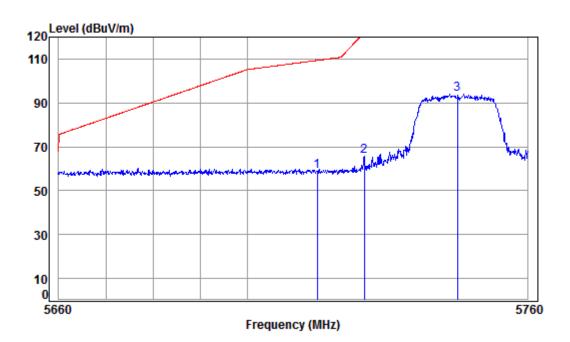


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Band4

Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5745 Band edge

: WIFI 11A

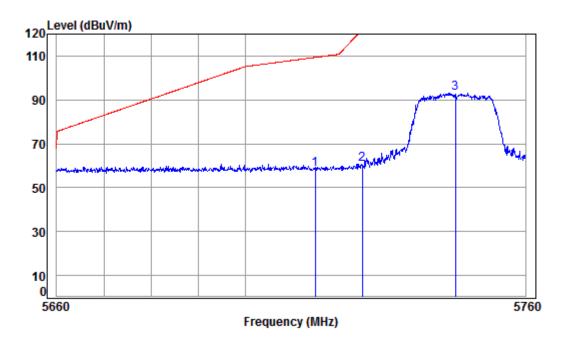
			T8 23							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	_									
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
							•			
1	5715.000	8.47	34.53	38.36	54.13	58.77	109.40	-50.63	peak	
2	5725.000	8.48	34.54	38.35	61.11	65.78	122.20	-56.42	peak	:
3 рр	5745.000	8.50	34.55	38.35	89.17	93.87	125.20	-31.33	peak	:
									•	



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: Low



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5745 Band edge

: WIFI 11A

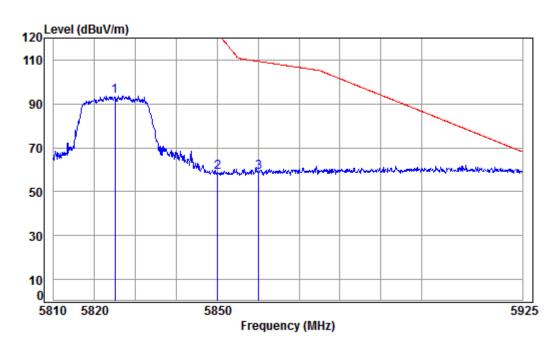
			T8 23							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	_									
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	5715.000	8.47	34.53	38.36	53.64	58.28	109.40	-51.12	peak	
2	5725.000	8.48	34.54	38.35	55.95	60.62	122.20	-61.58	peak	1
3 рр	5745.000	8.50	34.55	38.35	88.45	93.15	125.20	-32.05	peak	:
									•	



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Mode:g; Polarization:Horizontal; Modulation Type:802.11a; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5825 Band edge

: WIFI 11A

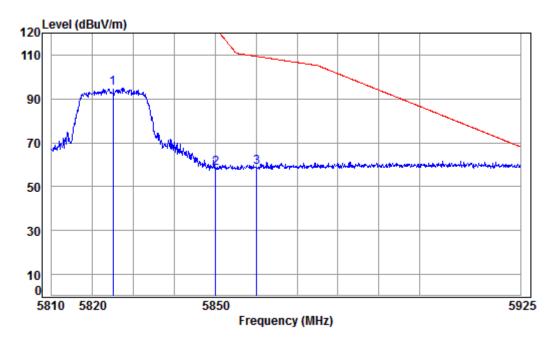
			Cable	Ant	Preamp	Read		Limit	0ver		
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	_										
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	pp	5825.000	8.58	34.60	38.33	88.78	93.63	125.20	-31.57	peak	1
2		5850.000	8.60	34.61	38.33	53.76	58.64	122.20	-63.56	peak	:
3		5860.000	8.61	34.62	38.33	54.12	59.02	109.40	-50.38	peak	



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Mode:g; Polarization:Vertical; Modulation Type: 802.11a; Channel: High



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5825 Band edge

: WIFI 11A

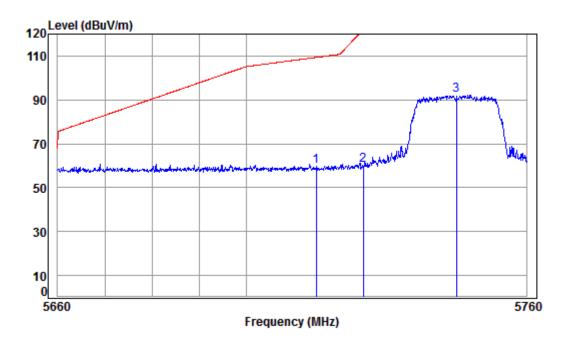
			Cable	Ant	Preamp	Read		Limit	0ver		
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	_										
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	pp	5825.000	8.58	34.60	38.33	90.15	95.00	125.20	-30.20	peak	1
2		5850.000	8.60	34.61	38.33	53.69	58.57	122.20	-63.63	peak	1
3		5860.000	8.61	34.62	38.33	53.92	58.82	109.40	-50.58	peak	



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5745 Band edge

: WIFI 11N20

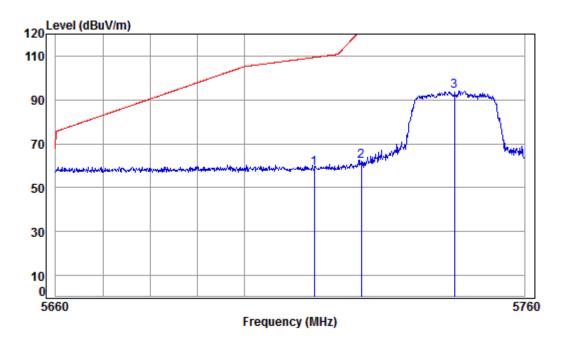
			T.1.8 E.2							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
			•			•	•			
1	5715.000	8.47	34.53	38.36	55.11	59.75	109.40	-49.65	peak	
_									•	
2	5725.000	8.48	34.54	38.35	55.56	60.23	122.20	-61.97	peak	1
3	pp 5745.000	8.50	34.55	38.35	87.62	92.32	125.20	-32.88	peak	



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: Low



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5745 Band edge

: WIFI 11N20

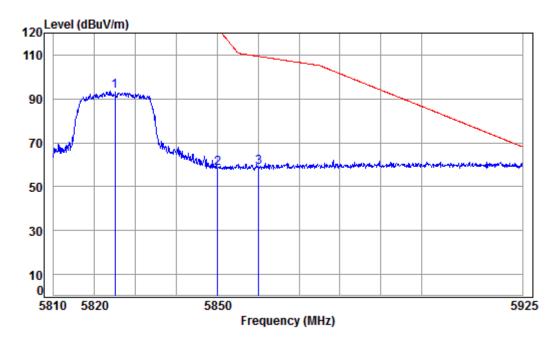
			1118 23							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	5715.000	8.47	34.53	38.36	54.18	58.82	109.40	-50.58	peak	
2	5725.000	8.48	34.54	38.35	57.33	62.00	122.20	-60.20	peak	1
3 рр	5745.000								•	
									•	



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5825 Band edge

: WIFI 11N20

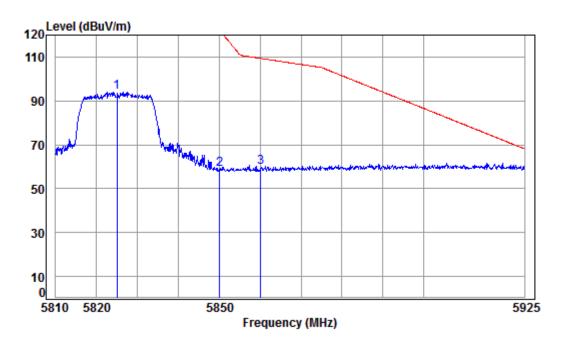
	Freq			Preamp Factor						
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
	5825.000								•	:
2	5850.000	8.60	34.61	38.33	53.49	58.37	122.20	-63.83	peak	1
3	5860,000	8.61	34.62	38.33	53.97	58.87	109.40	-50.53	neak	



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Mode:g; Polarization:Vertical; Modulation Type: 802.11n; Channel: High



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5825 Band edge

: WIFI 11N20

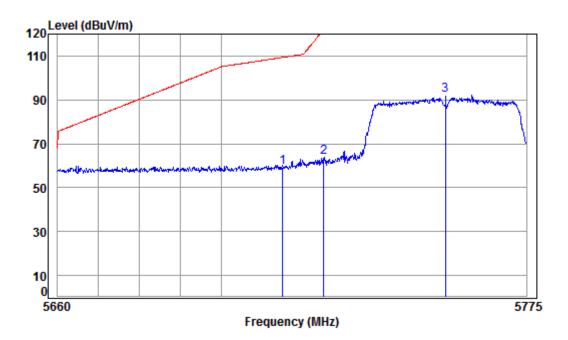
	Freq			Preamp Factor					Remark	
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1 pp	5825.000	8.58	34.60	38.33	89.27	94.12	125.20	-31.08	peak	:
2	5850.000	8.60	34.61	38.33	53.93	58.81	122.20	-63.39	peak	-
3	5860.000	8.61	34.62	38.33	54.87	59.77	109.40	-49.63	peak	



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m HORIZONTAL

Job No: : 04503CR

1

3

Mode: : 5755 Band edge

: WIFI 1140

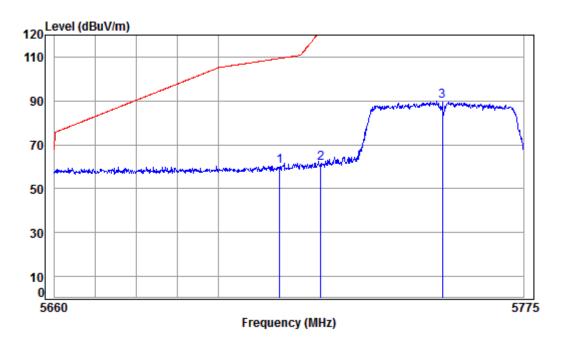
rreq	Loss	Factor	Factor	Level			Over Limit	Remark	
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
5715.000	8.47	34.53	38.36	54.83	59.47	109.40	-49.93	peak	
5725.000	8.48	34.54	38.35	59.05	63.72	122.20	-58.48	peak	:
p 5755.000	8.51	34.56	38.35	87.30	92.02	125.20	-33.18	peak	:
	MHz 5715.000 5725.000	MHz dB 5715.000 8.47 5725.000 8.48	MHz dB dB/m 5715.000 8.47 34.53 5725.000 8.48 34.54	MHz dB dB/m dB 5715.000 8.47 34.53 38.36 5725.000 8.48 34.54 38.35	MHz dB dB/m dB dBuV 5715.000 8.47 34.53 38.36 54.83 5725.000 8.48 34.54 38.35 59.05	MHz dB dB/m dB dBuV dBuV/m 5715.000 8.47 34.53 38.36 54.83 59.47 5725.000 8.48 34.54 38.35 59.05 63.72	MHz dB dB/m dB dBuV dBuV/m dBuV/m 5715.000 8.47 34.53 38.36 54.83 59.47 109.40 5725.000 8.48 34.54 38.35 59.05 63.72 122.20	MHz dB dB/m dB dBuV dBuV/m dBuV/m dB 5715.000 8.47 34.53 38.36 54.83 59.47 109.40 -49.93 5725.000 8.48 34.54 38.35 59.05 63.72 122.20 -58.48	



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: Low



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5755 Band edge

: WIFI 1140

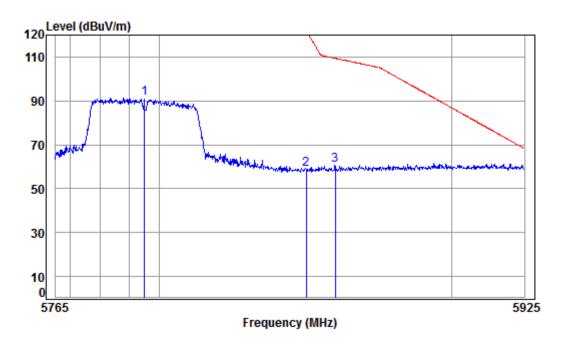
	Freq			Preamp Factor						
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	5715.000	8.47	34.53	38.36	55.48	60.12	109.40	-49.28	peak	
2	5725.000	8.48	34.54	38.35	57.01	61.68	122.20	-60.52	peak	:
3 рр	5755.000	8.51	34.56	38.35	85.28	90.00	125.20	-35.20	peak	:



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Mode:g; Polarization:Horizontal; Modulation Type:802.11n HT40; Channel: High



Condition: 3m HORIZONTAL

Job No: : 04503CR

Mode: : 5795 Band edge

: WIFI 1140

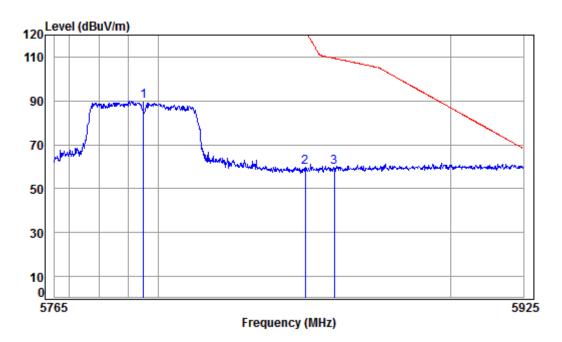
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1 pp	5795.000	8.55	34.58	38.34	86.63	91.42	125.20	-33.78	peak	1
2	5850.000	8.60	34.61	38.33	53.81	58.69	122.20	-63.51	peak	1
3	5860.000	8.61	34.62	38.33	55.58	60.48	109.40	-48.92	peak	



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Mode:g; Polarization:Vertical; Modulation Type:802.11n HT40; Channel: High



Condition: 3m VERTICAL Job No: : 04503CR

Mode: : 5795 Band edge

: WIFI 1140

emark	
eak	•
	eak :



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7.11 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8

Limit: The frequency tolerance shall be maintained within the band of operation

frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 56 % RH Atmospheric Pressure: 1010 mbar

Pretest these mode to find the worst case:

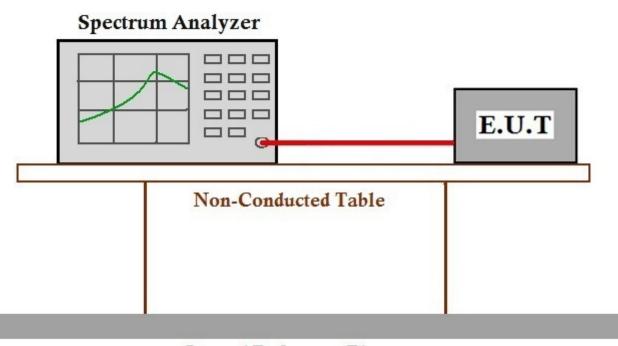
f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

g: Charge + TX mode (I/II-A/II-C/III)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

The worst case for final test:

f: TX mode (Band I/II-A/II-C/III)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20/HT40). Only the data of worst case is recorded in the report.

7.11.2Test Setup Diagram



Ground Reference Plane

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7.11.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407



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8 Photographs

8.1 Conducted Emissions at AC Power Line (150kHz-30MHz) Test Setup



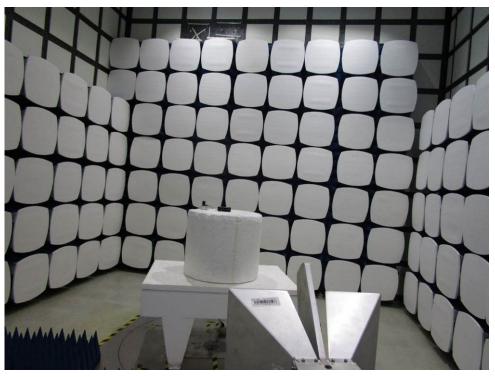


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8.2 Radiated Spurious Emissions Test Setup







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8.3 DFS Test Setup

