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Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Report No.: SZEM180600535604

Fax: +86 (0) 755 2671 0594 Page: 1 of 54

### TEST REPORT

**Application No.:** SZEM1806005356CR **Applicant:** Sensoro Co., Ltd.

Address of Applicant: Room 2807, Building 1B, Wangjing SOHO, No.10, Wangjing Street,

Chaoyang District, Beijing, China

Manufacturer: Sensoro Co., Ltd.

Address of Manufacturer: Room 2807, Building 1B, Wangjing SOHO, No.10, Wangjing Street,

Chaoyang District, Beijing, China

Factory: Sensoro Co., Ltd.

Address of Factory: Room 2807, Building 1B, Wangjing SOHO, No.10, Wangjing Street,

Chaoyang District, Beijing, China

**Equipment Under Test (EUT):** 

EUT Name:α GatewayModel No.:GW-1209Trade Mark:SENSORO

**FCC ID:** 2ADYO-S001209

Standard(s): 47 CFR Part 15, Subpart C 15.249

**Date of Receipt:** 2018-06-27

**Date of Test:** 2018-07-03 to 2018-07-22

**Date of Issue:** 2018-07-25

Test Result: Pass\*



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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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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	Revision Record					
Version	Version Chapter Date Modifier					
01		2018-07-25		Original		

Authorized for issue by:		
	Hany Ul	
	Harry Wu /Project Engineer	
	EvicFu	
	Eric Fu /Reviewer	



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### 2 Test Summary

Radio Spectrum Technical Requirement					
Item Standard Method Requirement Result					
Antenna Requirement	47 CFR Part 15, Subpart C 15.249	N/A	47 CFR Part 15, Subpart C 15.203	Pass	

Radio Spectrum Matt	Radio Spectrum Matter Part							
Item	Standard	Method	Requirement	Result				
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass				
20dB Bandwidth	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass				
Field Strength of the Fundamental Signal (15.249(a))	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.5&6.6	47 CFR Part 15, Subpart C 15.249(a)	Pass				
Restricted Band Around Fundamental Frequency	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.4&6.5&6.6	47 CFR Part 15, Subpart C 15.205 & 15.249(d) & 15.209	Pass				
Radiated Emissions	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.4&6.5&6.6	47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)	Pass				



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### 4 General Information

### 4.1 Details of E.U.T.

Power supply:	AC/DC Adapter
	Model: GP304C-120-200
	Input: AC100-240V, 50/60Hz, 1A Max
	Output: DC12V, 2A
Operation Frequency:	902.3-927.5MHz
Modulation Type:	CSS
Number of Channels:	16
Antenna Gain:	1.5dBi
Antenna Type:	External Antenna
Module Model:	A: SX1301, B: SX1276

Operation Frequency each of channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)		
1	902.3	9	923.3		
2	902.5	10	923.9		
3	902.7	11	924.5		
4	902.9	12	925.1		
5	903.1	13	925.7		
6	903.3	14	926.3		
7	903.5	15	926.9		
8	903.7	16	927.5		

### 4.2 Description of Support Units

The EUT has been tested as an independent unit.

### 4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	± 7.25 x 10 <sup>-8</sup>
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 Dodieted news	± 4.5dB (below 1GHz)
/	RF Radiated power	± 4.8dB (above 1GHz)
8	Dadicted Courieus emission test	± 4.5dB (Below 1GHz)
8	Radiated Spurious emission test	± 4.8dB (Above 1GHz)
9	Temperature test	± 1 ℃
10	Humidity test	± 3%
11	Supply voltages	± 1.5%
12	Time	± 3%

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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 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 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	2020-05-09	
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A	
Coaxial Cable	SGS	N/A	SEM024-01	2018-07-12	2019-07-11	
LISN	Rohde & Schwarz	ENV216	SEM007-01	2017-09-27	2018-09-26	
LISN	ETS-LINDGREN	3816/2	SEM007-02	2018-04-02	2019-04-01	
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2018-04-02	2019-04-01	

20dB Bandwidth						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26	
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01	
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A	
Coaxial Cable	SGS	N/A	SEM031-01	2018-07-12	2019-07-11	
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A	
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26	
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26	

Field Strength of the Fundamental Signal (15.249(a))						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12	
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A	
Coaxial Cable	SGS	N/A	SEM026-01	2018-07-12	2019-07-11	
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01	
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26	
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12	
Horn Antenna (15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16	
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26	
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118- 352810	SEM005-05	2017-09-27	2018-09-27	
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2018-04-02	2019-04-01	
Pre-amplifier (26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018-04-02	2019-04-01	

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DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Band filter	N/A	N/A	SEM023-01	N/A	N/A

Restricted Band Around	Restricted Band Around Fundamental Frequency									
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date					
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12					
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A					
Coaxial Cable	SGS	N/A	SEM026-01	2018-07-12	2019-07-11					
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01					
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26					
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12					
Horn Antenna (15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16					
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26					
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118- 352810	SEM005-05	2017-09-27	2018-09-27					
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2018-04-02	2019-04-01					
Pre-amplifier (26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018-04-02	2019-04-01					
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26					
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21					
Band filter	N/A	N/A	SEM023-01	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	2017-09-29	2018-09-28			
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2017-09-29	2018-09-28			
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2017-09-29	2018-09-28			
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2018-04-08	2019-04-07			



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### 6 Radio Spectrum Technical Requirement

### 6.1 Antenna Requirement

### 6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 Limit:

#### 15.203 requirement:

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

#### 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 permanently

attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### EUT Antenna:

The antenna is dedicated on the main PCB. The best case gain of the antenna is 3dBi.



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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 C 15.207 Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Francisco (MIII-)	Limit (c	dBuV)
Frequency range (MHz)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

<sup>\*</sup> Decreases with the logarithm of the frequency.

#### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.3 °C Humidity: 58.4 % RH Atmospheric Pressure: 1005 mbar

Pretest these d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode. e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode. the worst case:

ille worst case.

The worst case d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode.

for final test:

#### 7.1.2 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.

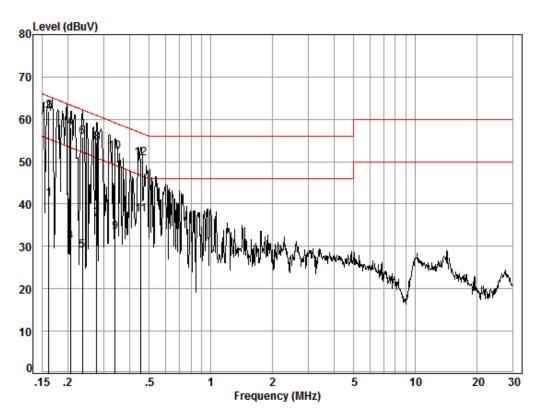
Remark: LISN=Read Level+ Cable Loss+ LISN Factor



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Mode:d; Line:Live Line



Site : Shielding Room

Condition: Line Job No. : 05356CR

Test mode: d

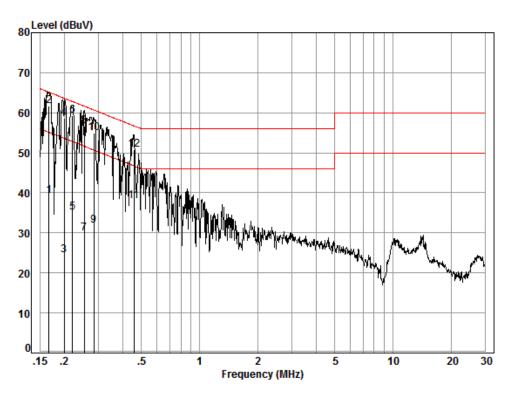
		Cable	LISN	Read		Limit	0ver	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.16	0.02	9.52	31.64	41.18	55.38	-14.20	Average
2	0.16	0.02	9.52	52.32	61.86	65.38	-3.52	QP
3	0.21	0.03	9.50	21.55	31.08	53.36	-22.28	Average
4	0.21	0.03	9.50	48.50	58.03	63.36	-5.33	QP
5	0.24	0.03	9.51	19.46	29.00	52.26	-23.26	Average
6	0.24	0.03	9.51	46.24	55.78	62.26	-6.48	QP
7	0.28	0.03	9.51	26.87	36.41	50.90	-14.49	Average
8	0.28	0.03	9.51	44.97	54.51	60.90	-6.39	QP
9	0.34	0.03	9.50	23.81	33.34	49.18	-15.84	Average
10	0.34	0.03	9.50	42.76	52.29	59.18	-6.89	QP
11	0.46	0.04	9.49	28.03	37.56	46.76	-9.20	Average
12	0.46	0.04	9.49	41.18	50.71	56.76	-6.05	QP



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Mode:d; Line:Neutral Line



Site : Shielding Room

Condition: Neutral Job No. : 05356CR

Test mode: d

		Cable	LISN	Read		Limit	0ver	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.17	0.02	9.59	29.52	39.13	55.12	-15.99	Average
2	0.17	0.02	9.59	51.98	61.59	65.12	-3.53	QP
3	0.20	0.03	9.57	14.73	24.33	53.62	-29.29	Average
4	0.20	0.03	9.57	49.03	58.63	63.62	-4.99	QP
5	0.22	0.03	9.57	25.59	35.19	52.79	-17.60	Average
6	0.22	0.03	9.57	49.78	59.38	62.79	-3.41	QP
7	0.25	0.03	9.58	20.29	29.90	51.64	-21.74	Average
8	0.25	0.03	9.58	47.14	56.75	61.64	-4.89	QP
9	0.28	0.03	9.58	22.25	31.86	50.68	-18.82	Average
10	0.28	0.03	9.58	45.38	54.99	60.68	-5.69	QP
11	0.46	0.04	9.60	28.28	37.92	46.71	-8.79	Average
12	0.46	0.04	9.60	41.14	50.78	56.71	-5.93	QP



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### 7.2 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215 Test Method: ANSI C63.10 (2013) Section 6.9

Limit: N/A

### 7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.7 °C Humidity: 49.9 % RH Atmospheric Pressure: 1005 mbar

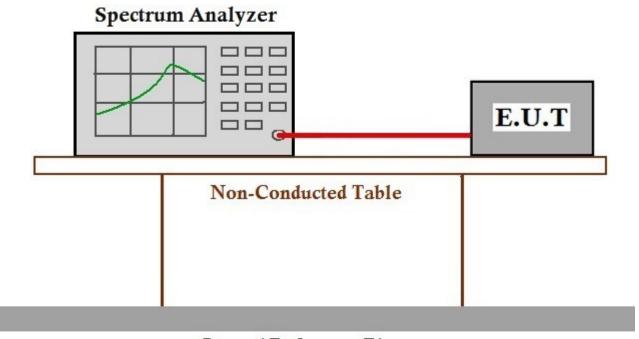
Pretest these modes to find the worst case:

d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode.

e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode.

The worst case d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode. e:TX mode(Module B) Keep the EUT in transmitting with modulation mode.

#### 7.2.2 Test Setup Diagram



### Ground Reference Plane

### 7.2.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.249



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### 7.3 Field Strength of the Fundamental Signal (15.249(a))

Test Requirement 47 CFR Part 15, Subpart C 15.249(a)
Test Method: ANSI C63.10 (2013) Section 6.5&6.6

Measurement Distance: 3m

Limit:

Frequency	Limit (dBuV/m @3m)	Remark
902MHz-928MHz	94.0	Quasi-peak Value



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#### 7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22.3 °C Humidity: 55.6 % RH Atmospheric Pressure: 1005 mbar

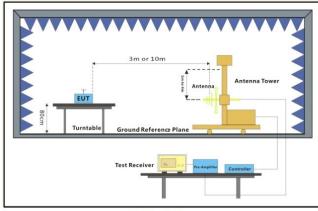
Pretest these modes to find the worst case:

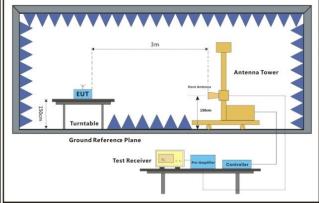
d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode.

e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode.

The worst case d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode. e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode.

### 7.3.2 Test Setup Diagram





Above 1GHz

30MHz-1GHz



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#### 7.3.3 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

#### 7.3.4 Measurement Procedure and Data

The detailed test data see: Appendix 15.249



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### 7.4 Restricted Band Around Fundamental Frequency

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.249(d) & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4&6.5&6.6

Measurement Distance: 3m

Limit:

Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
Above 1GHz	74.0	Peak Value

Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.



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### 7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 24.5 °C Humidity: 55.5 % RH Atmospheric Pressure: 1005 mbar

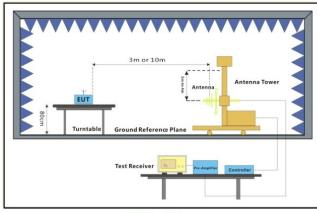
Pretest these modes to find the worst case:

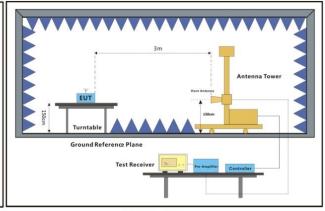
d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode.

e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode.

The worst case d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode. e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode.

### 7.4.2 Test Setup Diagram





30MHz-1GHz Above 1GHz



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#### 7.4.3 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

#### 7.4.4 Measurement Procedure and Data

The detailed test data see: Appendix 15.249



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### 7.5 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)

Test Method: ANSI C63.10 (2013) Section 6.4&6.5&6.6

Limit:

Frequency(MHz)	Field strength (microvolts/meter)	Limit (dBuV/m)	Detector	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	-	-	300
0.490-1.705	24000/F(kHz)	-	-	30
1.705-30	30	-	-	30
30-88	100	40.0	QP	3
88-216	150	43.5	QP	3
216-960	200	46.0	QP	3
960-1000	500	54.0	QP	3
Above 1000	500	54.0	AV	3



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### 7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22.4 °C Humidity: 61.9 % RH Atmospheric Pressure: 1005 mbar

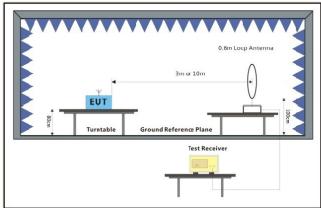
Pretest these modes to find the worst case:

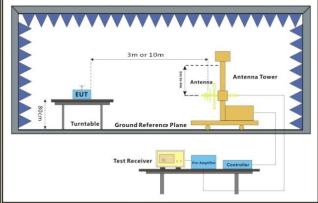
d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode.

e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode.

The worst case d:TX mode(Module A)\_Keep the EUT in transmitting with modulation mode. e:TX mode(Module B)\_Keep the EUT in transmitting with modulation mode.

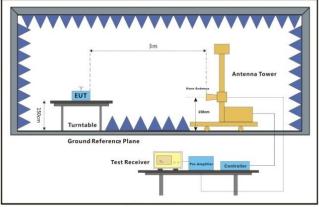
### 7.5.2 Test Setup Diagram





Below 30MHz

30MHz-1GHz



Above 1GHz

#### 7.5.3 Measurement Procedure and Data

For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.



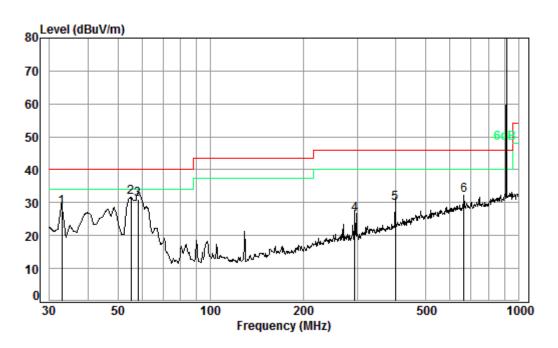
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### **Radiated Emission below 1GHz**

30MHz~1GHz (QP)

Worst mode: d, Polarization:Horizontal;



Condition: 3m HORIZONTAL

Job No. : 05356CR

Test mode: d

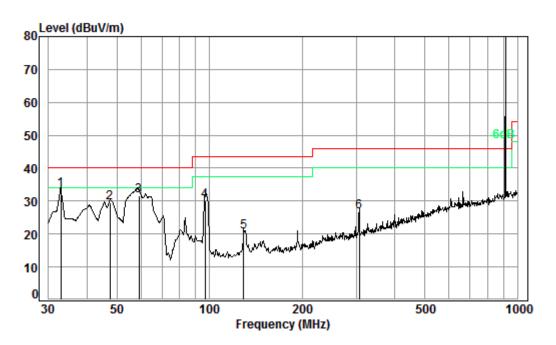
	Гпол			Preamp				0ver
	Freq	LOSS	Factor	Factor	revei	rever	Line	LIMIC
_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	32.86	0.60	20.92	27.45	34.40	28.47	40.00	-11.53
2 pp	55.22	0.80	13.66	27.40	44.51	31.57	40.00	-8.43
3	58.20	0.80	13.37	27.40	44.32	31.09	40.00	-8.91
4	294.11	1.87	19.37	26.65	31.96	26.55	46.00	-19.45
5	399.03	2.20	22.38	27.18	32.31	29.71	46.00	-16.29
6	665.80	2.84	27.48	27.84	29.72	32.20	46.00	-13.80



Report No.: SZEM180600535604

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Polarization:Vertical;



Condition: 3m VERTICAL

Job No. : 05356CR

Test mode: d

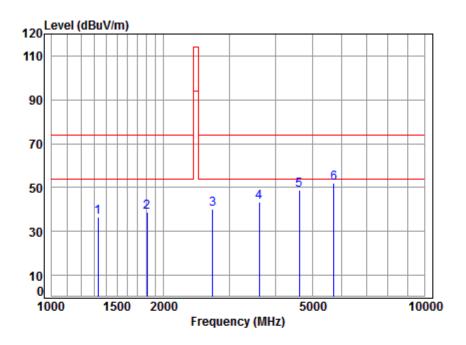
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
_								
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	32.86	0.60	20.92	27.45	39.50	33.57	40.00	-6.43
2	47.49	0.75	14.96	27.41	41.14	29.44	40.00	-10.56
3	59.03	0.80	13.29	27.40	44.81	31.50	40.00	-8.50
4	96.77	1.17	13.72	27.35	42.62	30.16	43.50	-13.34
5	129.01	1.27	13.38	27.19	33.15	20.61	43.50	-22.89
6	306.75	1.92	19.82	26.68	31.80	26.86	46.00	-19.14



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Mode: d; Polarization:Horizontal; ; Channel:Low



Condition: 3m HORIZONTAL

Job No : 05356CR

Mode : 902.3 TX RSE Note : ANT1 P=10

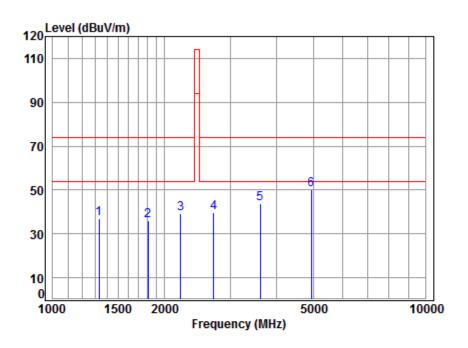
ore	: ANI	T L=10	,							
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	1333.521	4.92	25.16	41.29	47.87	36.66	74.00	-37.34	Peak	
2	1804.600	5.11	27.08	41.59	48.19	38.79	74.00	-35.21	Peak	
3	2706.900	5.77	29.65	42.00	46.81	40.23	74.00	-33.77	Peak	
4	3609.200	6.58	31.92	42.24	47.05	43.31	74.00	-30.69	Peak	
5	4613.176	7.68	33.74	42.44	49.72	48.70	74.00	-25.30	Peak	
6 1	on 5714.786	9.61	34.82	41.85	49.28	51.86	74.00	-22.14	Peak	



Report No.: SZEM180600535604

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Mode: d; Polarization: Vertical; ; Channel: Low



Condition: 3m VERTICAL

Job No : 05356CR

Mode : 902.3 TX RSE Note : ANT1 P=10

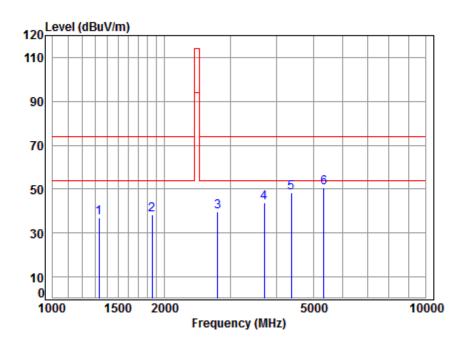
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1333.521	4.92	25.16	41.29	48.16	36.95	74.00	-37.05	Peak
2	1804.600	5.11	27.08	41.59	45.54	36.14	74.00	-37.86	Peak
3	2202.927	5.21	28.19	41.79	47.56	39.17	74.00	-34.83	Peak
4	2706.900	5.77	29.65	42.00	46.23	39.65	74.00	-34.35	Peak
5	3609.200	6.58	31.92	42.24	47.42	43.68	74.00	-30.32	Peak
6 r	op 4943.107	8.03	34.13	42.49	50.33	50.00	74.00	-24.00	Peak



Report No.: SZEM180600535604

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Mode: d; Polarization:Horizontal; ; Channel:Middle



Condition: 3m HORIZONTAL

Job No : 05356CR

Mode : 923.3 TX RSE Note : ANT1 P=10

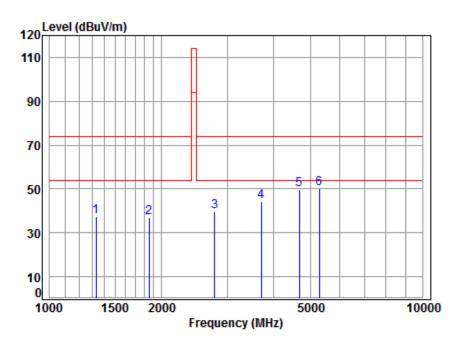
Cable Ant Preamp Read Limit 0ver Loss Factor Factor Limit Remark Freq Level Level Line dBuV dBuV/m dBuV/m MHz dB/m dB dB dB 1 1333.521 4.92 25.16 41.29 48.13 36.92 74.00 -37.08 Peak 2 5.06 27.24 47.58 38.27 74.00 -35.73 Peak 1846.600 41.61 3 5.82 29.92 42.02 46.12 39.84 74.00 -34.16 Peak 2769.900 4 3693.200 32.10 42.26 47.17 43.68 74.00 -30.32 Peak 6.67 5 50.17 48.58 74.00 -25.42 Peak 4375.221 7.42 33.39 42.40 6 pp 5345.644 8.62 34.48 42.17 49.59 50.52 74.00 -23.48 Peak



Report No.: SZEM180600535604

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Mode: d; Polarization: Vertical; ; Channel: Middle



Condition: 3m VERTICAL

Job No : 05356CR

Mode : 923.3 TX RSE Note : ANT1 P=10

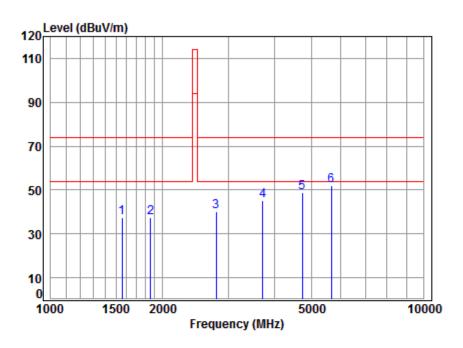
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1333.521	4.92	25.16	41.29	48.58	37.37	74.00	-36.63	Peak
2	1846.600	5.06	27.24	41.61	46.11	36.80	74.00	-37.20	Peak
3	2769.900	5.82	29.92	42.02	46.01	39.73	74.00	-34.27	Peak
4	3693.200	6.67	32.10	42.26	47.85	44.36	74.00	-29.64	Peak
5	4677.352	7.75	33.82	42.45	50.75	49.87	74.00	-24.13	Peak
6	pp 5296.634	8.55	34.44	42.22	49.53	50.30	74.00	-23.70	Peak



Report No.: SZEM180600535604

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Mode: d; Polarization:Horizontal; ; Channel:High



Condition: 3m HORIZONTAL

Job No : 05356CR

Mode : 927.5 TX RSE Note : ANT1 P=10

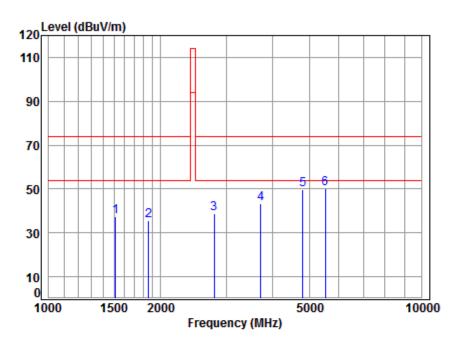
		Freq			Preamp Factor					Remark
	-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		1555.966	5.41	26.05	41.44	47.24	37.26	74.00	-36.74	Peak
2		1855.000	5.05	27.27	41.62	46.52	37.22	74.00	-36.78	Peak
3		2782.500	5.83	29.98	42.02	46.25	40.04	74.00	-33.96	Peak
4		3710.000	6.68	32.13	42.27	48.45	44.99	74.00	-29.01	Peak
5		4731.513	7.81	33.89	42.46	49.75	48.99	74.00	-25.01	Peak
6	nn	5662, 393	9.43	34.77	41.89	49.80	52.11	74.00	-21.89	Peak



Report No.: SZEM180600535604

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Mode: d; Polarization: Vertical; ; Channel: High



Condition: 3m VERTICAL

Job No : 05356CR

Mode : 927.5 TX RSE Note : ANT1 P=10

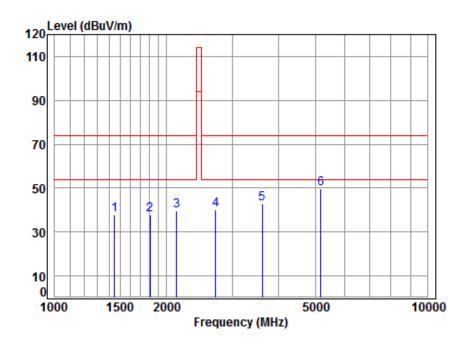
	_									
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	-									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		1510.080	5 /17	25 85	41.41	<i>1</i> 7 57	37 /18	7/ 00	-36 52	Peak
_										
2		1855.000	5.05	27.27	41.62	45.10	35.80	74.00	-38.20	Peak
3		2782.500	5.83	29.98	42.02	45.08	38.87	74.00	-35.13	Peak
4		3710.000	6.68	32.13	42.27	46.65	43.19	74.00	-30.81	Peak
5		4808.394	7.89	33.98	42.47	50.15	49.55	74.00	-24.45	Peak
6	pp	5520.774	8.92	34.62	42.02	48.89	50.41	74.00	-23.59	Peak



Report No.: SZEM180600535604

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Mode: e; Polarization:Horizontal; ; Channel:Low



Condition: 3m HORIZONTAL

Job No : 05356CR

Mode : 902.3 TX RSE Note : ANT2 P=10

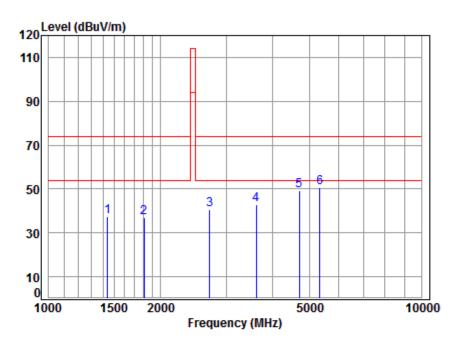
VOLE	· ANI	2 1-10								
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	1448.772	5.31	25.61	41.37	48.10	37.65	74.00	-36.35	Peak	
2	1804.600	5.11	27.08	41.59	47.15	37.75	74.00	-36.25	Peak	
3	2123.244	5.09	28.04	41.75	48.20	39.58	74.00	-34.42	Peak	
4	2706.900	5.77	29.65	42.00	46.87	40.29	74.00	-33.71	Peak	
5	3609.200	6.58	31.92	42.24	46.84	43.10	74.00	-30.90	Peak	
6 pr	5176.068	8.37	34.35	42.33	49.31	49.70	74.00	-24.30	Peak	



Report No.: SZEM180600535604

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Mode: e; Polarization: Vertical; ; Channel: Low



Condition: 3m VERTICAL

Job No : 05356CR

Mode : 902.3 TX RSE Note : ANT2 P=10

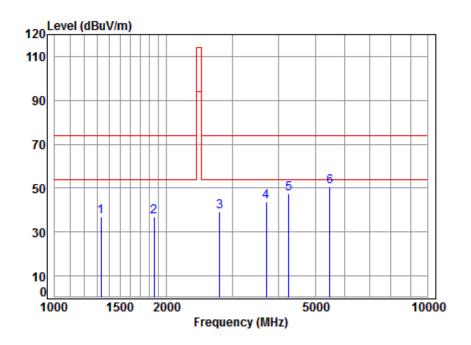
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1438.799	5.28	25.57	41.36	47.91	37.40	74.00	-36.60	Peak
2	1804.600			41.59					
3	2706.900	5.77	29.65	42.00	47.02	40.44	74.00	-33.56	Peak
4	3609.200	6.58	31.92	42.24	46.48	42.74	74.00	-31.26	Peak
5	4698.941	7.78	33.85	42.45	49.88	49.06	74.00	-24.94	Peak
6	pp 5345.644	8.62	34.48	42.17	49.72	50.65	74.00	-23.35	Peak



Report No.: SZEM180600535604

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Mode: e; Polarization:Horizontal; ; Channel:Middle



Condition: 3m HORIZONTAL

Job No : 05356CR

Mode : 923.3 TX RSE Note : ANT2 P=10

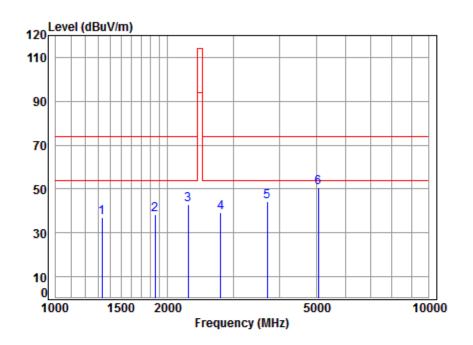
VOCE	· AIVI	2 1-10							
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	——dB	dBuV	dBuV/m	dBuV/m	——dB	
			,			,			
1	1333.521	4.92	25.16	41.29	48.01	36.80	74.00	-37.20	Peak
2	1846.600	5.06	27.24	41.61	46.26	36.95	74.00	-37.05	Peak
3	2769.900	5.82	29.92	42.02	45.69	39.41	74.00	-34.59	Peak
4	3693.200	6.67	32.10	42.26	47.41	43.92	74.00	-30.08	Peak
5	4246.196	7.27	33.16	42.37	49.57	47.63	74.00	-26.37	Peak
6 pr	5470.160	8.81	34.58	42.06	49.37	50.70	74.00	-23.30	Peak



Report No.: SZEM180600535604

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Mode: e; Polarization: Vertical; ; Channel: Middle



Condition: 3m VERTICAL

Job No : 05356CR

Mode : 923.3 TX RSE Note : ANT2 P=10

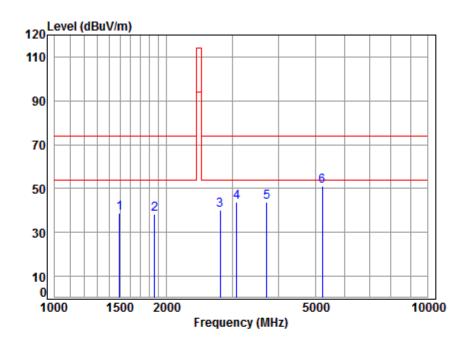
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1333.521	4.92	25.16	41.29	47.99	36.78	74.00	-37.22	Peak
2	1846.600	5.06	27.24	41.61	47.63	38.32	74.00	-35.68	Peak
3	2269.865	5.31	28.31	41.82	51.16	42.96	74.00	-31.04	Peak
4	2769.900	5.82	29.92	42.02	45.47	39.19	74.00	-34.81	Peak
5	3693.200	6.67	32.10	42.26	47.55	44.06	74.00	-29.94	Peak
6 r	p 5069.907	8.20	34.26	42.43	50.84	50.87	74.00	-23.13	Peak



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Mode: e; Polarization:Horizontal; ; Channel:High



Condition: 3m HORIZONTAL

Job No : 05356CR

Mode : 927.5 TX RSE Note : ANT2 P=10

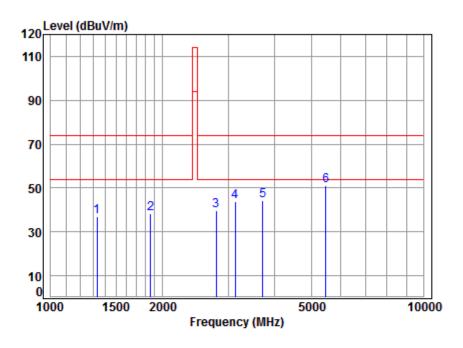
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1492.794	5.46	25.77	41.40	48.89	38.72	74.00	-35.28	Peak
2	1855.000	5.05	27.27	41.62	47.54	38.24	74.00	-35.76	Peak
3	2782.500	5.83	29.98	42.02	46.22	40.01	74.00	-33.99	Peak
4	3076.097	6.06	31.03	42.12	48.83	43.80	74.00	-30.20	Peak
5	3710.000	6.68	32.13	42.27	47.48	44.02	74.00	-29.98	Peak
6 p	p 5236.004	8.46	34.39	42.27	50.54	51.12	74.00	-22.88	Peak



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Mode: e; Polarization: Vertical; ; Channel: High



Condition: 3m VERTICAL

Job No : 05356CR

Mode : 927.5 TX RSE Note : ANT2 P=10

		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	1333.521	4.92	25.16	41.29	48.06	36.85	74.00	-37.15	Peak
2	1855.000	5.05	27.27	41.62	47.40	38.10	74.00	-35.90	Peak
3	2782.500	5.83	29.98	42.02	45.78	39.57	74.00	-34.43	Peak
4	3126.079	6.11	31.11	42.13	48.67	43.76	74.00	-30.24	Peak
5	3710.000	6.68	32.13	42.27	47.78	44.32	74.00	-29.68	Peak
6 1	pp 5482.770	8.82	34.59	42.05	49.55	50.91	74.00	-23.09	Peak



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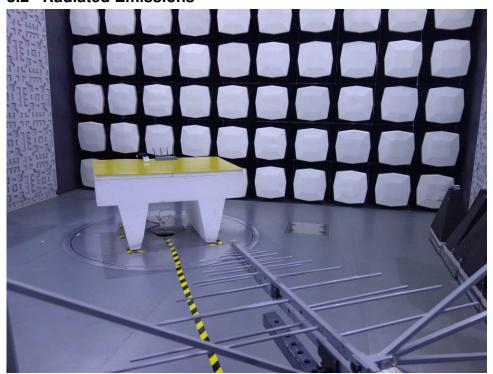
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### 8 Photographs

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



#### 8.2 Radiated Emissions

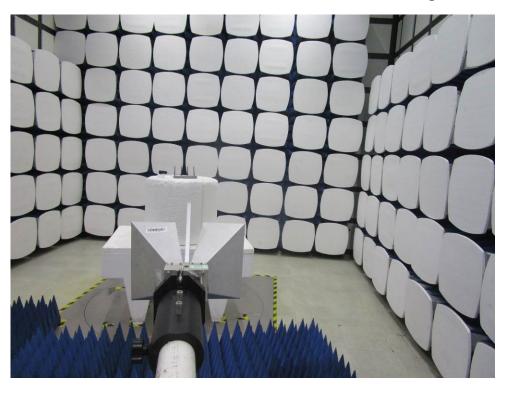


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### 8.3 EUT Constructional Details (EUT Photos)

Refer to external and internal photos.



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### 9 Appendix

### 9.1 Appendix 15.249

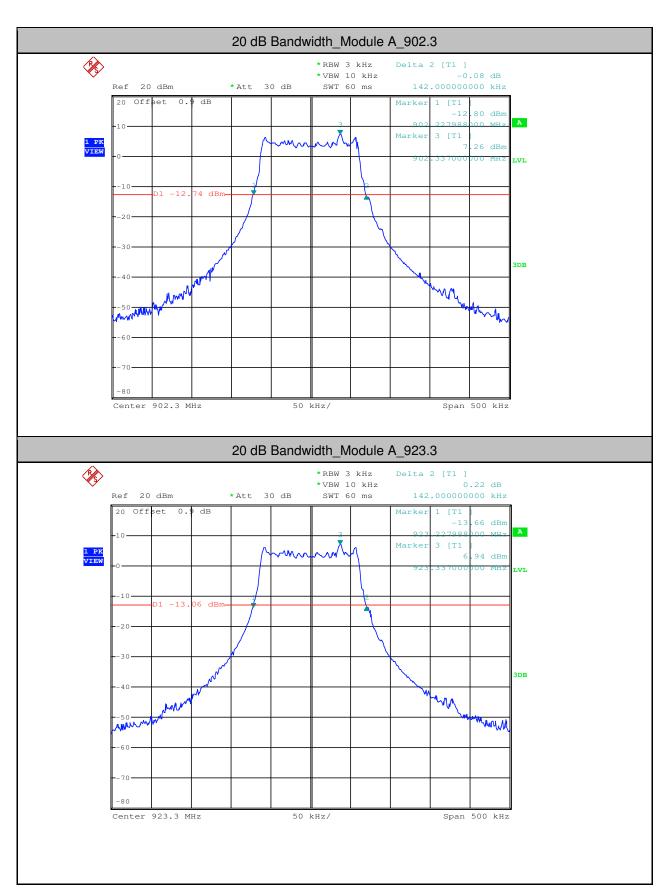
#### 1.20 dB Bandwidth

Test Module	Test Channel	EBW[MHz]	Limit[MHz]	Verdict
А	902.3	0.142		PASS
Α	923.3	0.142		PASS
Α	927.5	0.142		PASS
В	902.3	0.154		PASS
В	923.3	0.153		PASS
В	927.5	0.153		PASS



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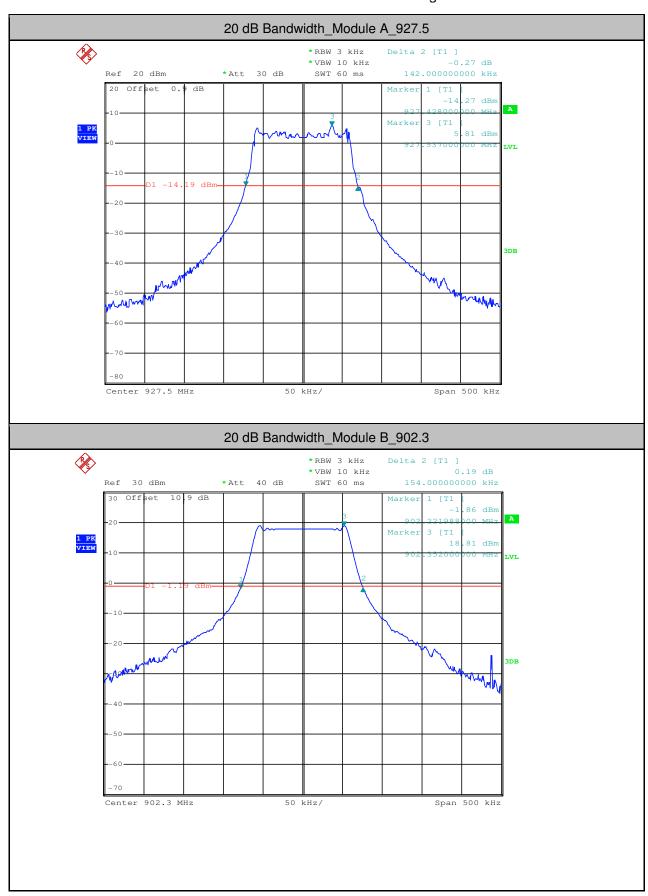
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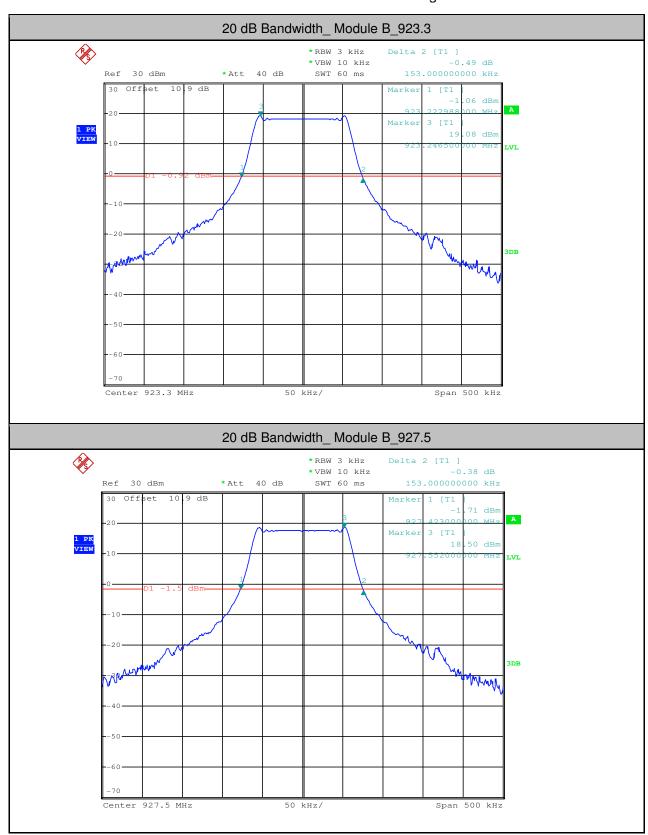
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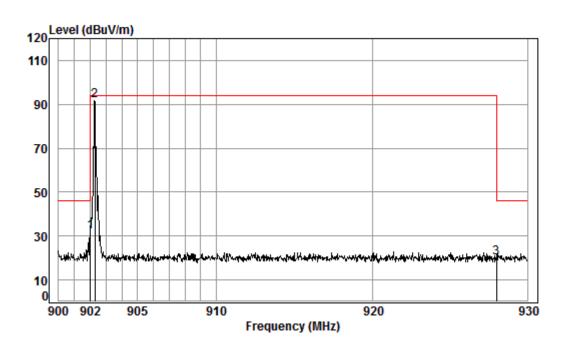


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#### 2. Field Strength of the Fundamental Signal and Restricted Band Around Fundamental Frequency

Module A 902.3MHz



Condition: 3m HORIZONTAL

Job No. : 05356CR

Test mode: TX

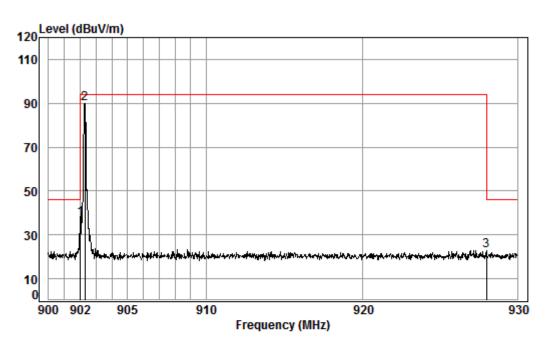
: 902.3M&Module A

	Freq			Preamp Factor				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	25.46	31.83	46.00	-14.17
2 pp	902.30	3.60	29.81	27.04	85.31	91.68	94.00	-2.32
3	928.00	3.63	29.95	26.90	13.50	20.18	46.00	-25.82



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Condition: 3m VERTICAL Job No. : 05356CR

Test mode: TX

: 902.3M&Module A

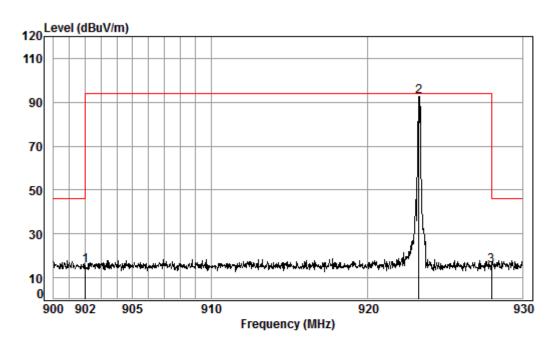
			Cable	Ant	Preamp	Read		Limit	0ver
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1		902.00	3.60	29.81	27.04	31.10	37.47	46.00	-8.53
2	pp	902.30	3.60	29.81	27.04	83.63	90.00	94.00	-4.00
3		928.00	3.63	29.95	26.90	16.01	22.69	46.00	-23.31



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923.3MHz



Condition: 3m HORIZONTAL

Job No. : 05356CR

Test mode: TX

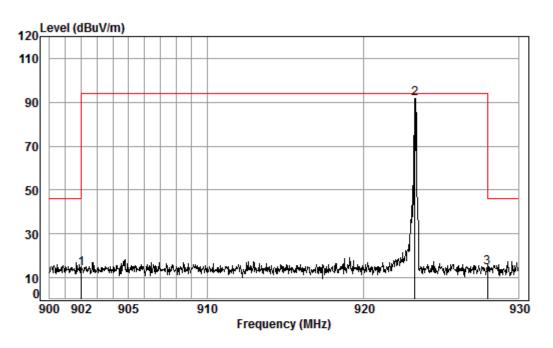
: 923.3M&Module A

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	9.00	15.37	46.00	-30.63
2 p	p 923.30	3.62	29.92	26.93	85.89	92.50	94.00	-1.50
3 q	928.00	3.63	29.95	26.90	8.70	15.38	46.00	-30.62



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Condition: 3m VERTICAL Job No. : 05356CR

Test mode: TX

: 923.3M&Module A

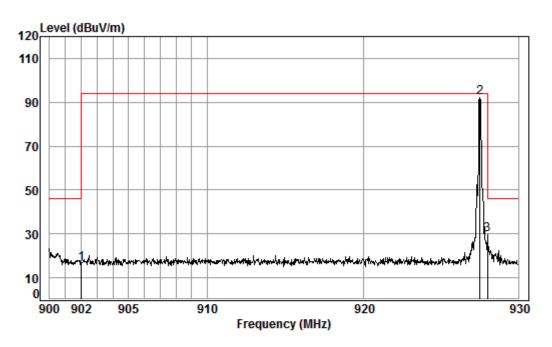
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	7.78	14.15	46.00	-31.85
2 pp	923.30	3.62	29.92	26.93	85.13	91.74	94.00	-2.26
3 qp	928.00	3.63	29.95	26.90	8.00	14.68	46.00	-31.32



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927.5MHz



Condition: 3m HORIZONTAL

Job No. : 05356CR

Test mode: TX

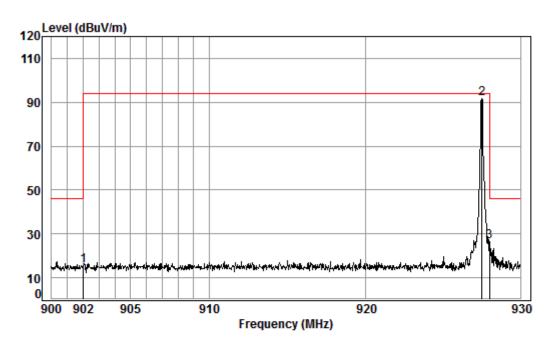
: 927.5M&Module A

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	10.11	16.48	46.00	-29.52
2 pp	927.50	3.63	29.94	26.90	85.37	92.04	94.00	-1.96
3 qp	928.00	3.63	29.95	26.90	22.91	29.59	46.00	-16.41



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Condition: 3m VERTICAL

Job No. : 05356CR

Test mode: TX

: 927.5M&Module A

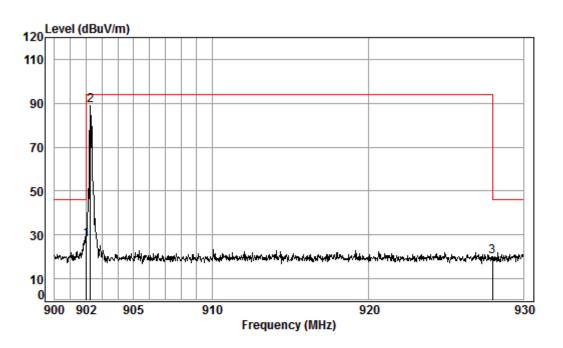
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	9.26	15.63	46.00	-30.37
2 pp	927.50	3.63	29.94	26.90	85.20	91.87	94.00	-2.13
3 qp	928.00	3.63	29.95	26.90	19.67	26.35	46.00	-19.65



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Module B 902.3MHz



Condition: 3m HORIZONTAL

Job No. : 05356CR

Test mode: TX

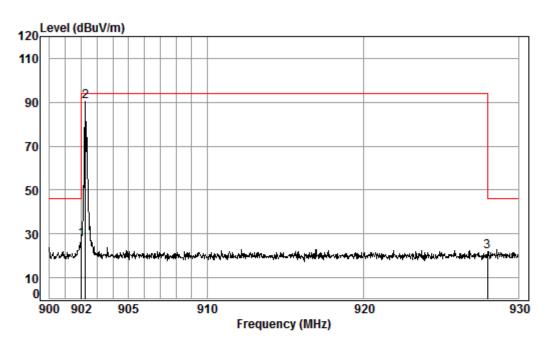
1 2 3 : 902.3M&Module B

	Freq			Preamp Factor				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
	902.01							
. pp	902.28	3.60	29.81	27.04	82.72	89.09	94.00	-4.91
	928 00	3 63	29 95	26 90	13 50	20 18	46 00	-25 82



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Condition: 3m VERTICAL Job No. : 05356CR

Test mode: TX

: 902.3M&Module B

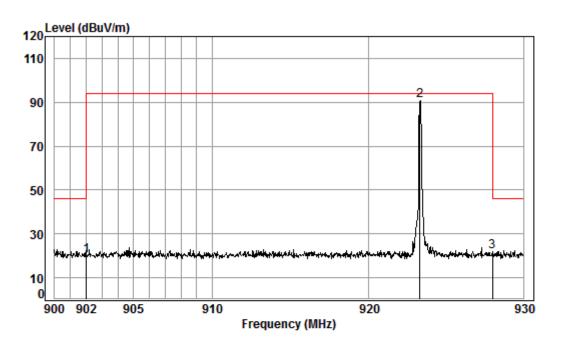
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	20.91	27.28	46.00	-18.72
2 pp	902.28	3.60	29.81	27.04	84.20	90.57	94.00	-3.43
3	928.00	3.63	29.95	26.90	15.04	21.72	46.00	-24.28



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923.3MHz



Condition: 3m HORIZONTAL

Job No. : 05356CR

Test mode: TX

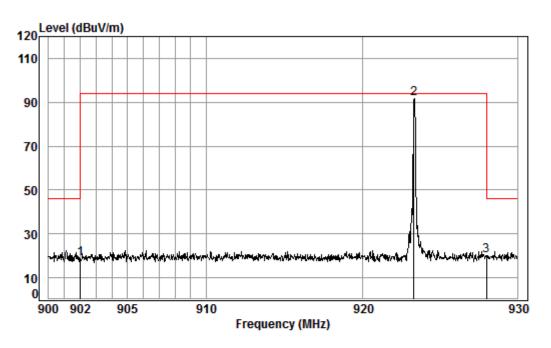
: 923.3M&Module B

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	13.93	20.30	46.00	-25.70
2 pp	923.30	3.62	29.92	26.93	84.36	90.97	94.00	-3.03
3 qp	928.00	3.63	29.95	26.90	15.01	21.69	46.00	-24.31



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Condition: 3m VERTICAL Job No. : 05356CR

Test mode: TX

: 923.3M&Module B

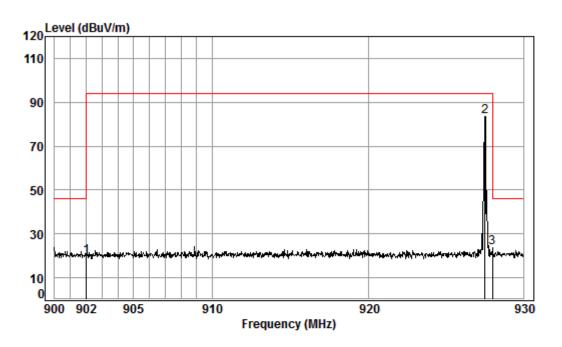
	Freq			Preamp Factor				
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 pp 3 qp	902.00 923.30 928.00	3.62	29.92		85.23	91.84	94.00	-2.16



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927.5MHz



Condition: 3m HORIZONTAL

Job No. : 05356CR

Test mode: TX

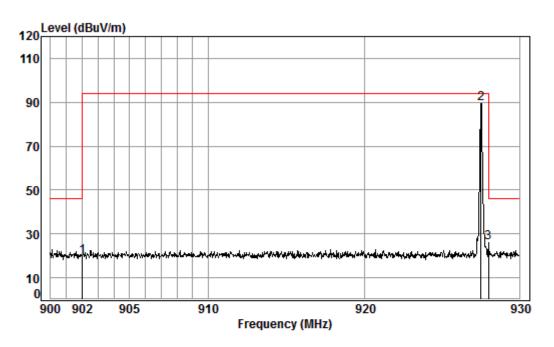
: 927.5M&Module B

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
_								
1	902.00	3.60	29.81	27.04	13.24	19.61	46.00	-26.39
2 pp	927.50	3.63	29.94	26.90	76.74	83.41	94.00	-10.59
3 qp	928.00	3.63	29.95	26.90	17.03	23.71	46.00	-22.29



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Condition: 3m VERTICAL

Job No. : 05356CR

Test mode: TX

: 927.5M&Module B

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
_								
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	902.00	3.60	29.81	27.04	13.44	19.81	46.00	-26.19
2 pp	927.50	3.63	29.94	26.90	82.60	89.27	94.00	-4.73
3 qp	928.00	3.63	29.95	26.90	19.15	25.83	46.00	-20.17