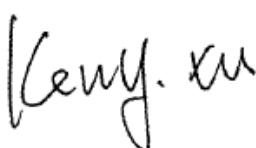


**TEST REPORT**

**Application No.:** SZEM2008007542CR  
**Applicant:** NZS Inc.  
**Address of Applicant:** 8168 Miramar Road San Diego, California 92126 United States  
**Manufacturer:** Shenzhen Smart Device Technology Co., LTD  
**Address of Manufacturer:** 17th-18th floor, Guoshi Mansion, Shahe West Road 1801, Nanshan, Shenzhen, China  
**Equipment Under Test (EUT):**  
**EUT Name:** Smart Pass Management Module  
**Model No.:** GS-1(Q)  
**FCC ID:** 2AXDQ-GS-1Q  
**Standard(s) :** 47 CFR Part 15, Subpart C 15.225  
**Date of Receipt:** 2020-08-05  
**Date of Test:** 2020-08-06 to 2020-08-24  
**Date of Issue:** 2020-08-26

<b>Test Result:</b>	<b>Pass*</b>
---------------------	--------------

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



Keny. xu  
EMC Laboratory Manager



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<b>Revision Record</b>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2020-08-26		Original

<b>Authorized for issue by:</b>			
		<b>Leo Lai/Project Engineer</b>	
		<b>Eric Fu/Reviewer</b>	

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## 2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.225	N/A	47 CFR Part 15, Subpart C 15.203	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.225	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
20dB Bandwidth	47 CFR Part 15, Subpart C 15.225	ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass
Emission Mask	47 CFR Part 15, Subpart C 15.225	ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.225(a)&(b)&(C )	Pass
Frequency tolerance	47 CFR Part 15, Subpart C 15.225	ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.225(e)	Pass
Radiated Emissions (9kHz-30MHz)	47 CFR Part 15, Subpart C 15.225	ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart C 15.225	ANSI C63.10 (2013) Section 6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass



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## 4 General Information

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

Power adapter:	DC 12V Power by AC adapter Model: TEKA036-1203000XX
Test voltage:	120V~60Hz of the adapter
Operation Frequency:	13.56MHz
Modulation Type:	ASK
Antenna Type:	Loop antenna

### 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	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	Conduction emission	$\pm 3.0\text{dB}$ (150kHz to 30MHz)
5	Radiated Spurious emission test	$\pm 4.5\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (Above 1GHz)
6	Temperature test	$\pm 1^\circ\text{C}$
7	Humidity test	$\pm 3\%$
8	Supply voltages	$\pm 1.5\%$
9	Time	$\pm 3\%$



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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	2019-06-13	2022-06-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2020-07-10	2021-07-09
LISN	Rohde & Schwarz	ENV216	SEM007-01	2019-09-24	2020-09-23
LISN	ETS-LINDGREN	3816/2	SEM007-02	2020-04-01	2021-03-31
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2020-03-24	2021-03-23

20dB Bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	SAEMC	MSR733	SEM001-09	2019-06-13	2022-06-12
DC Power Supply	Zhao Xin	KXN-6020D	SEM011-08	2019-09-24	2020-09-23
Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2019-09-24	2020-09-23
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-02	2020-07-10	2021-07-09

Emission Mask					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2018-03-31	2021-03-30
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM029-01	2020-07-10	2021-07-09
MXE EMI receiver	KEYSIGHT	N9038A	SEM004-16	2019-12-16	2020-12-15
Pre-amplifier	Sonoma Instrument Co	310N	SEM005-04	2020-04-09	2021-04-08
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22 2020-08-14	2020-08-21 2023-08-13

Frequency tolerance					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	SAEMC	MSR733	SEM001-09	2019-06-13	2022-06-12
DC Power Supply	Zhao Xin	KXN-6020D	SEM011-08	2019-09-24	2020-09-23
Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2019-09-24	2020-09-23

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Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-02	2020-07-10	2021-07-09

<b>Radiated Emissions(9kHz-30MHz)</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2018-03-31	2021-03-30
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM029-01	2020-07-10	2021-07-09
MXE EMI receiver	KEYSIGHT	N9038A	SEM004-16	2019-12-16	2020-12-15
Pre-amplifier	Sonoma Instrument Co	310N	SEM005-04	2020-04-09	2021-04-08
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
				2020-08-14	2023-08-13

<b>Radiated Emissions (30MHz-1GHz)</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2020-07-19	2023-07-18
MXE EMI Receiver	Agilent Technologies	N9038A	SEM004-15	2019-12-16	2020-12-15
BiConiLog Antenna	ETS-LINDGREN	3142C	SEM003-02	2019-05-24	2022-05-23
Pre-Amplifier	Agilent Technologies	8447D	SEM005-01	2020-04-01	2021-03-31
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2020-07-10	2021-07-09

<b>General used equipment</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2019-09-26	2020-09-25
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2020-04-07	2021-04-06

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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

#### 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.

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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:

Frequency range (MHz)	Limit (dBuV)	
	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.

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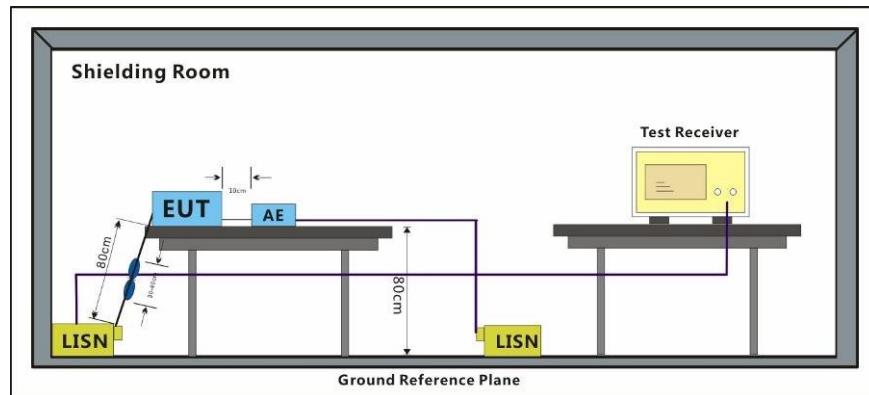
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### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C      Humidity: 55.9 % RH      Atmospheric Pressure: 1015 mbar  
Test mode 07:TX mode\_Keep the EUT in transmitting with modulation mode.

### 7.1.2 Test Setup Diagram



### 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 50ohm/50µH + 5ohm 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



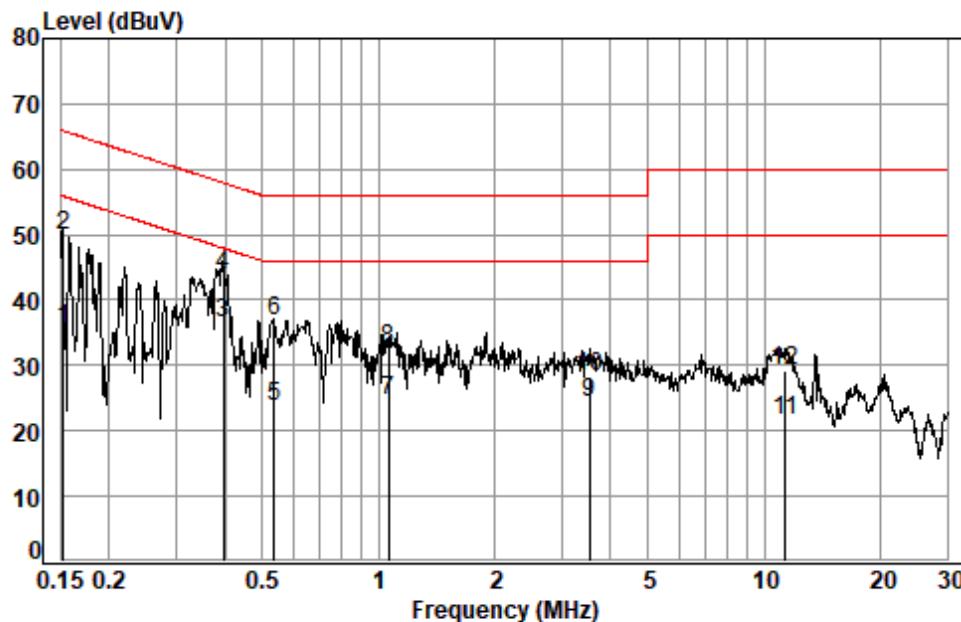
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Mode:07; Line:Live Line



Site : Shielding Room  
Condition: Line  
Job No. : 07542CR  
Test mode: 07

Freq	Cable	LISN	Read	Limit	Over	Remark	
	MHz	Loss	Factor	Level	Level	Line	Limit
1	0.1521	0.01	9.68	25.85	35.54	55.89	-20.35 Average
2	0.1521	0.01	9.68	40.20	49.89	65.89	-16.00 QP
3	0.3960	0.05	9.68	26.83	36.56	47.94	-11.38 Average
4	0.3960	0.05	9.68	34.15	43.88	57.94	-14.06 QP
5	0.5381	0.06	9.69	13.94	23.69	46.00	-22.31 Average
6	0.5381	0.06	9.69	27.02	36.77	56.00	-19.23 QP
7	1.0597	0.10	9.70	14.95	24.75	46.00	-21.25 Average
8	1.0597	0.10	9.70	22.74	32.54	56.00	-23.46 QP
9	3.5300	0.16	9.78	14.27	24.21	46.00	-21.79 Average
10	3.5300	0.16	9.78	18.44	28.38	56.00	-27.62 QP
11	11.3771	0.18	10.26	11.24	21.68	50.00	-28.32 Average
12	11.3771	0.18	10.26	18.76	29.20	60.00	-30.80 QP

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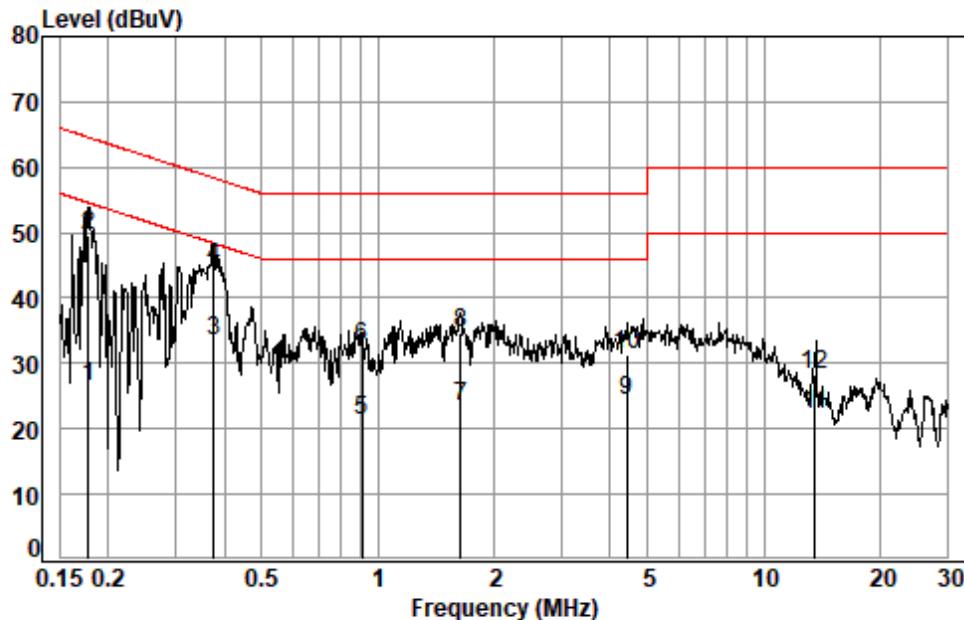
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Mode:07; Line:Neutral Line



Site : Shielding Room  
Condition: Neutral  
Job No. : 07542CR  
Test mode: 07

Freq	Cable	LISN	Read	Limit	Over	Remark	
	MHz	Loss	Factor	Level	Level	Line	Limit
	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1777	0.02	9.66	16.83	26.51	54.59	-28.08 Average
2	0.1777	0.02	9.66	39.79	49.47	64.59	-15.12 QP
3	0.3749	0.05	9.67	23.60	33.32	48.39	-15.07 Average
4	0.3749	0.05	9.67	35.09	44.81	58.39	-13.58 QP
5	0.9105	0.09	9.69	11.58	21.36	46.00	-24.64 Average
6	0.9105	0.09	9.69	22.68	32.46	56.00	-23.54 QP
7	1.6363	0.14	9.72	13.57	23.43	46.00	-22.57 Average
8	1.6363	0.14	9.72	24.67	34.53	56.00	-21.47 QP
9	4.4133	0.16	9.82	14.45	24.43	46.00	-21.57 Average
10	4.4133	0.16	9.82	21.44	31.42	56.00	-24.58 QP
11	13.6050	0.20	10.51	11.47	22.18	50.00	-27.82 Average
12	13.6050	0.20	10.51	17.45	28.16	60.00	-31.84 QP

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## 7.2 20dB Bandwidth

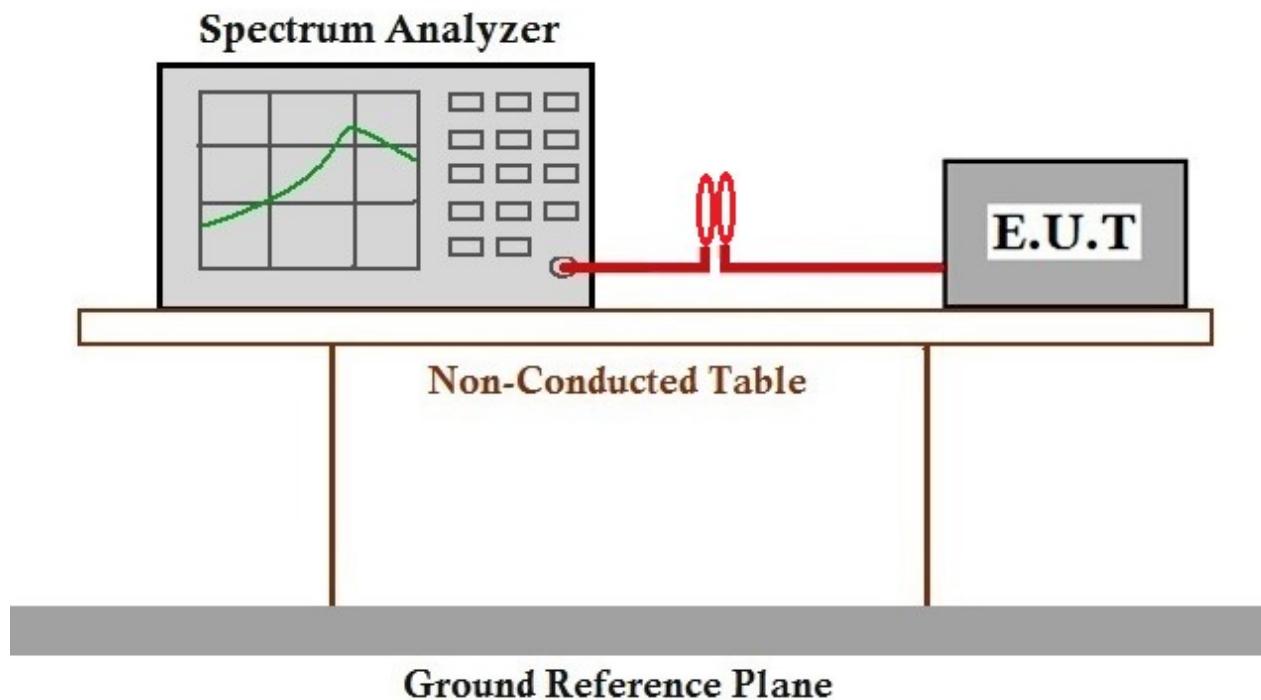
Test Requirement 47 CFR Part 15, Subpart C 15.215  
Test Method: ANSI C63.10 (2013) Section 6.9  
Limit: N/A

### 7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C      Humidity: 54 % RH      Atmospheric Pressure: 1015 mbar  
Test mode 07:TX mode\_Keep the EUT in transmitting with modulation mode.

### 7.2.2 Test Setup Diagram

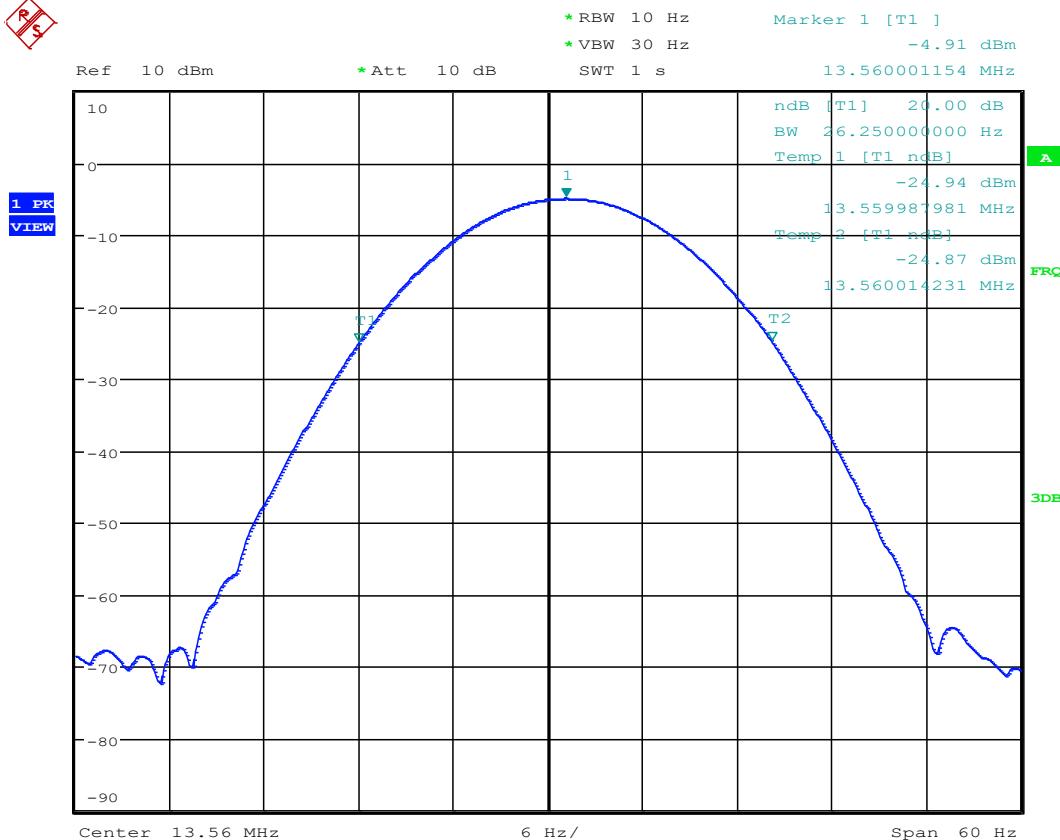


### 7.2.3 Measurement Procedure and Data

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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### 7.3 Emission Mask

Test Requirement 47 CFR Part 15, Subpart C 15.225(a)&(b)&(C )

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

Measurement Distance: 10m

Limit:

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

#### Below 30MHz

The test was performed at a 10m test site.

The factor calculated by the following equation:

$$FS_{\text{limit}} = FS_{\text{max}} - 40 \log \left( \frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

where

$FS_{\text{limit}}$  is the calculation of field strength at the limit distance, expressed in dB $\mu$ V/m  
 $FS_{\text{max}}$  is the measured field strength, expressed in dB $\mu$ V/m  
 $d_{\text{measure}}$  is the distance of the measurement point from the EUT  
 $d_{\text{limit}}$  is the reference distance or the distance of the  $\lambda/2\pi$  point

The limit at 10m test distance is below:

The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 103.08 dB $\mu$ V/m at 10 meters.



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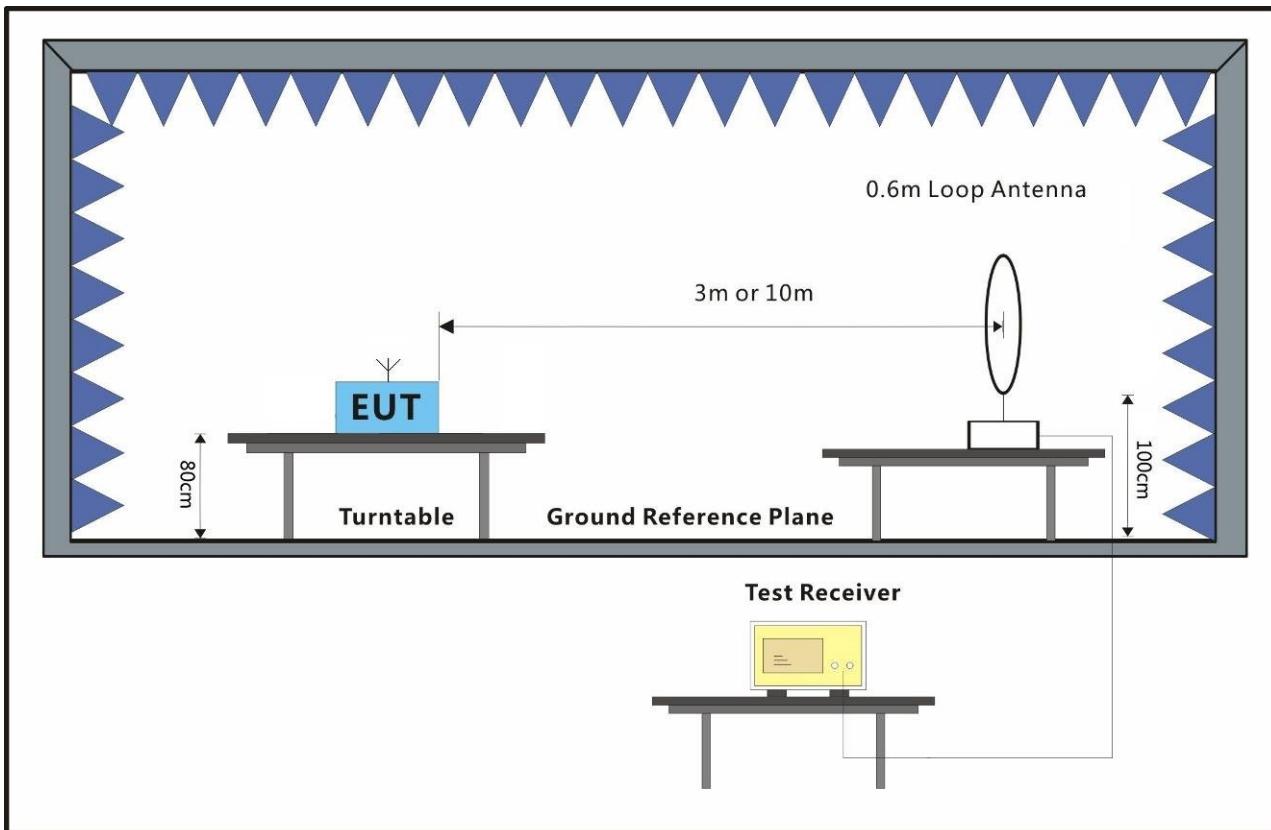
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### 7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C      Humidity: 51 % RH      Atmospheric Pressure: 1015 mbar  
Test mode      07:TX mode\_Keep the EUT in transmitting with modulation mode.

### 7.3.2 Test Setup Diagram



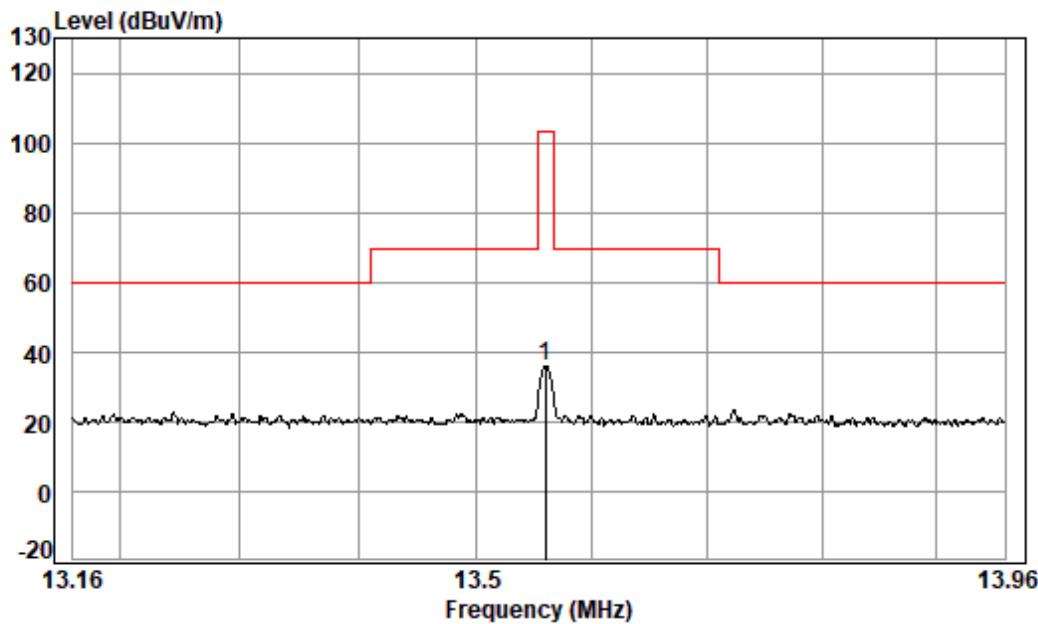
### 7.3.3 Measurement Procedure and Data

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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Mode:07 (Detector: QP)



Condition: 10m  
Job No. : 07542CR  
Test Mode: 07

	Ant Freq	Preamp Factor	Cable Loss	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	13.560	13.30	32.35	0.00	54.89	35.84	103.08	-67.24 QP



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**Below 30MHz**

The test was performed at a 10m test site.

The level at 30m test distance is below:

The factor calculated by the following equation:

$$FS_{\text{limit}} = FS_{\text{max}} - 40 \log \left( \frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

where

$FS_{\text{limit}}$	is the calculation of field strength at the limit distance, expressed in dB $\mu$ V/m
$FS_{\text{max}}$	is the measured field strength, expressed in dB $\mu$ V/m
$d_{\text{measure}}$	is the distance of the measurement point from the EUT
$d_{\text{limit}}$	is the reference distance or the distance of the $\lambda/2\pi$ point

Frequency (MHz)	Cable loss (dB)	ANT Factor (dB)	Preamp Factor (dB)	Read Level @ 10m	Level @ 10m (dB $\mu$ V/m)	Level @ 30m (dB $\mu$ V/m)	Limit @ 30m (dB $\mu$ V/m)	Margin (dB)
13.56	0	13.3	32.35	54.89	35.84	16.76	84.00	-67.24



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## 7.4 Frequency tolerance

Test Requirement 47 CFR Part 15, Subpart C 15.225(e)

Test Method: ANSI C63.10 (2013) Section 6.8

Limit:  $\pm 1.356\text{kHz}(\pm 0.01\%)$ 

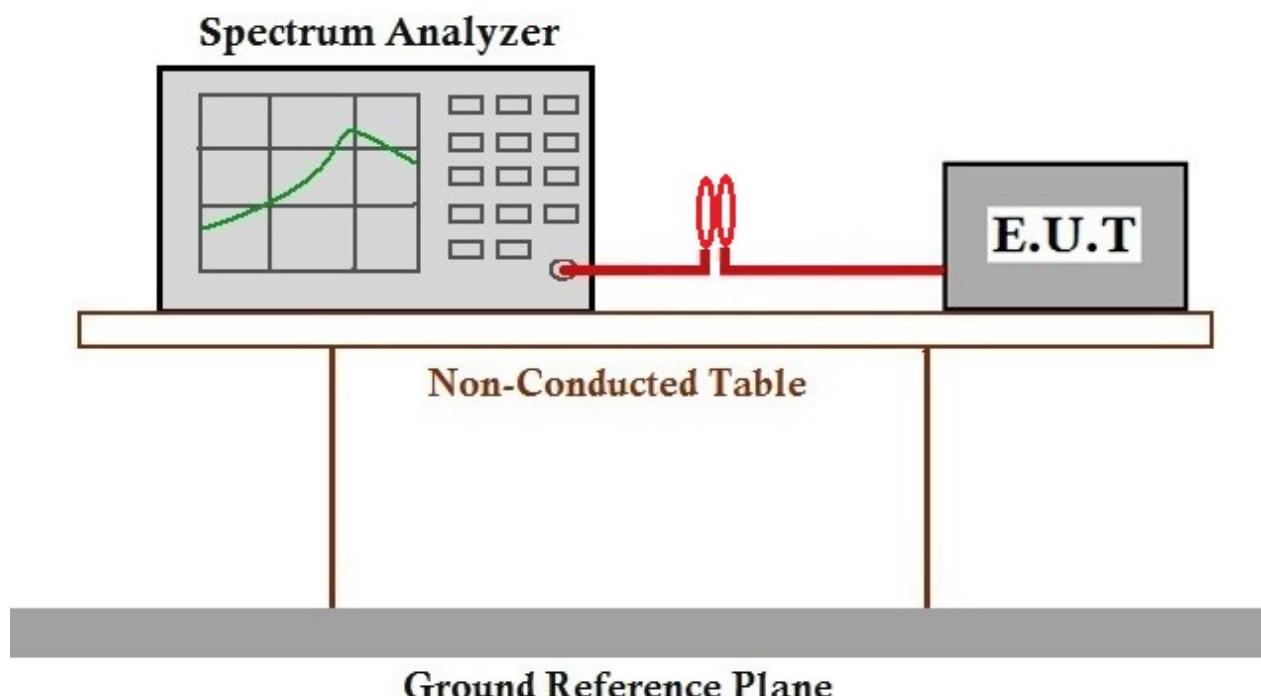
### 7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 51 % RH Atmospheric Pressure: 1015 mbar

Test mode 07:TX mode\_ Keep the EUT in transmitting with modulation mode.

### 7.4.2 Test Setup Diagram



### 7.4.3 Measurement Procedure and Data



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Declared Frequency (MHz)	13.56MHz	@10 minutes
--------------------------	----------	-------------

Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result
50	120	13.5601	0.0007	±0.01	Pass
40		13.5602	0.0015		Pass
30		13.5601	0.0007		Pass
20		13.5602	0.0015		Pass
10		13.5601	0.0007		Pass
0		13.5602	0.0015		Pass
-10		13.5602	0.0015		Pass
-20		13.5602	0.0015		Pass
20	138	13.5601	0.0007		Pass
	102	13.5601	0.0007		Pass

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**7.5 Radiated Emissions(9kHz-30MHz)**

Test Requirement 47 CFR Part 15, Subpart C 15.205 &amp; 15.209

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

Measurement Distance: 3m

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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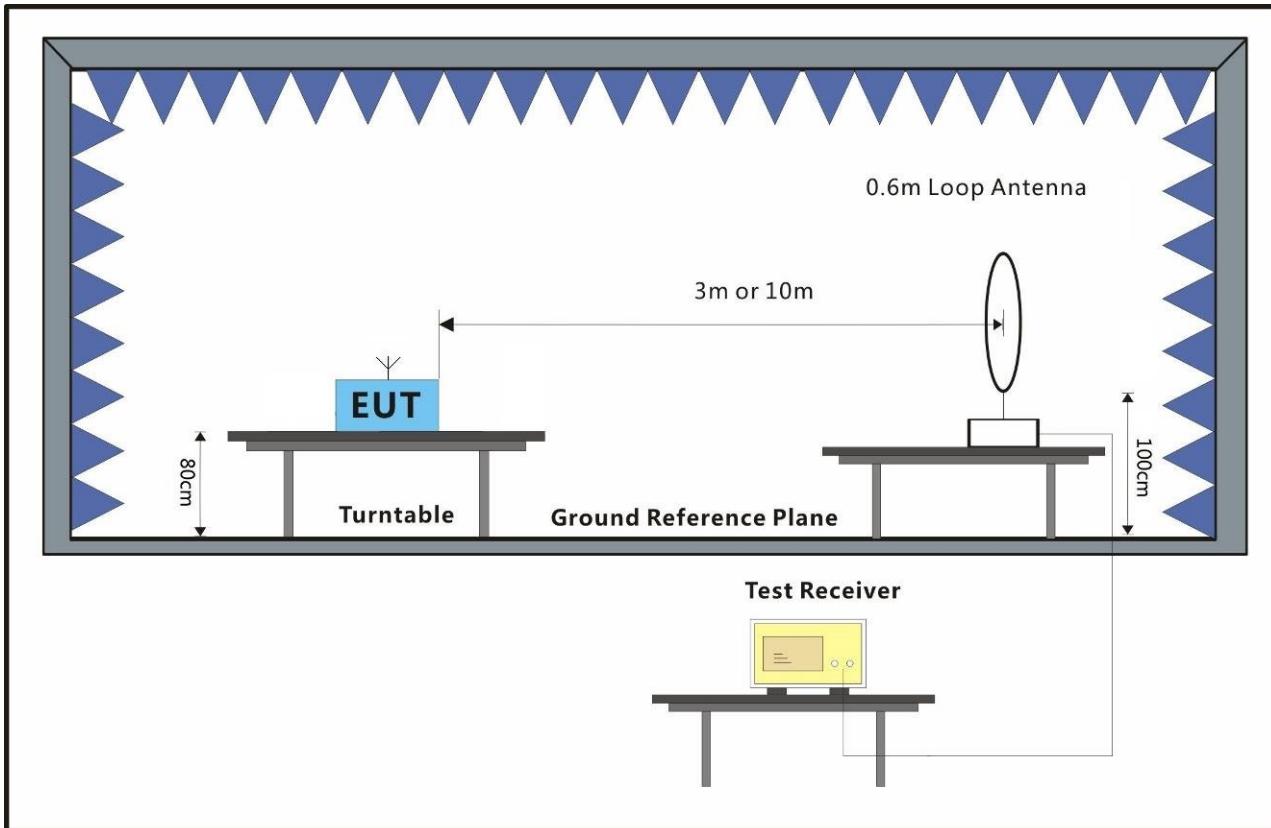
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### 7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C      Humidity: 51 % RH      Atmospheric Pressure: 1015 mbar  
Test mode      07:TX mode\_Keep the EUT in transmitting with modulation mode.

### 7.5.2 Test Setup Diagram



### 7.5.3 Measurement Procedure and Data

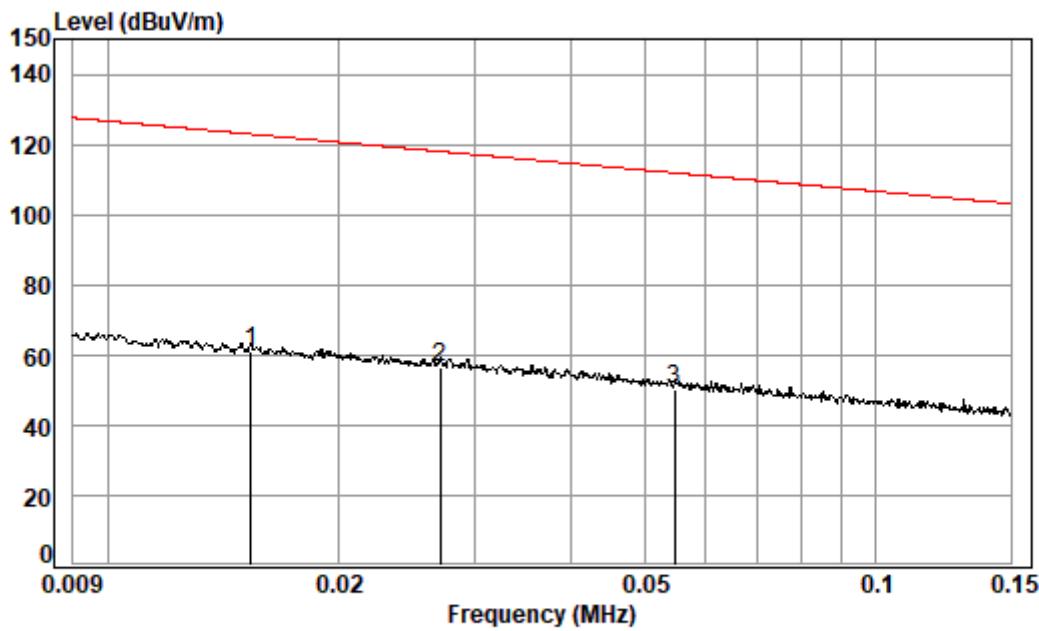
For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated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

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**9kHz-150kHz**

Mode:07



Condition: 3m  
Job No. : 07542CR  
Test Mode: 07



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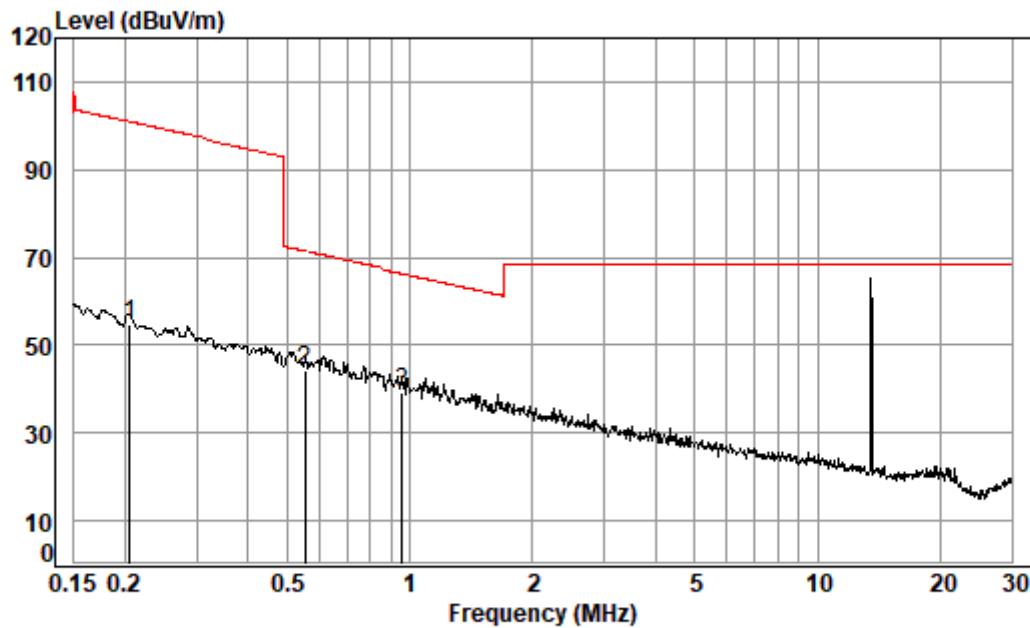
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**150kHz-30MHz**

Mode:07



Condition: 3m  
Job No. : 07542CR  
Test Mode: 07

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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

Frequency (MHz)	Level @ 3m (dBuV/m)	Limit @ 300m (dBuV/m)	Limit @ 30m (dBuV/m)	Factor (dB)	Level @ 300m (dBuV/m)	Level @ 30m (dBuV/m)	Margin (dB)
0.01536	61.29	43.88	-	80.00	-18.71	-	-62.59
0.02711	56.50	38.94	-	80.00	-23.50	-	-62.44
0.05479	50.24	32.83	-	80.00	-29.76	-	-62.59
0.20614	54.92	21.32	-	80.00	-25.08	-	-46.40
0.55226	44.29		32.76	40.00	-	4.29	-28.47
0.95819	39.41		27.98	40.00	-	-0.59	-28.57



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**7.6 Radiated Emissions(30MHz-1GHz)**

Test Requirement 47 CFR Part 15, Subpart C 15.205 &amp; 15.209

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

Measurement Distance: 3m

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3

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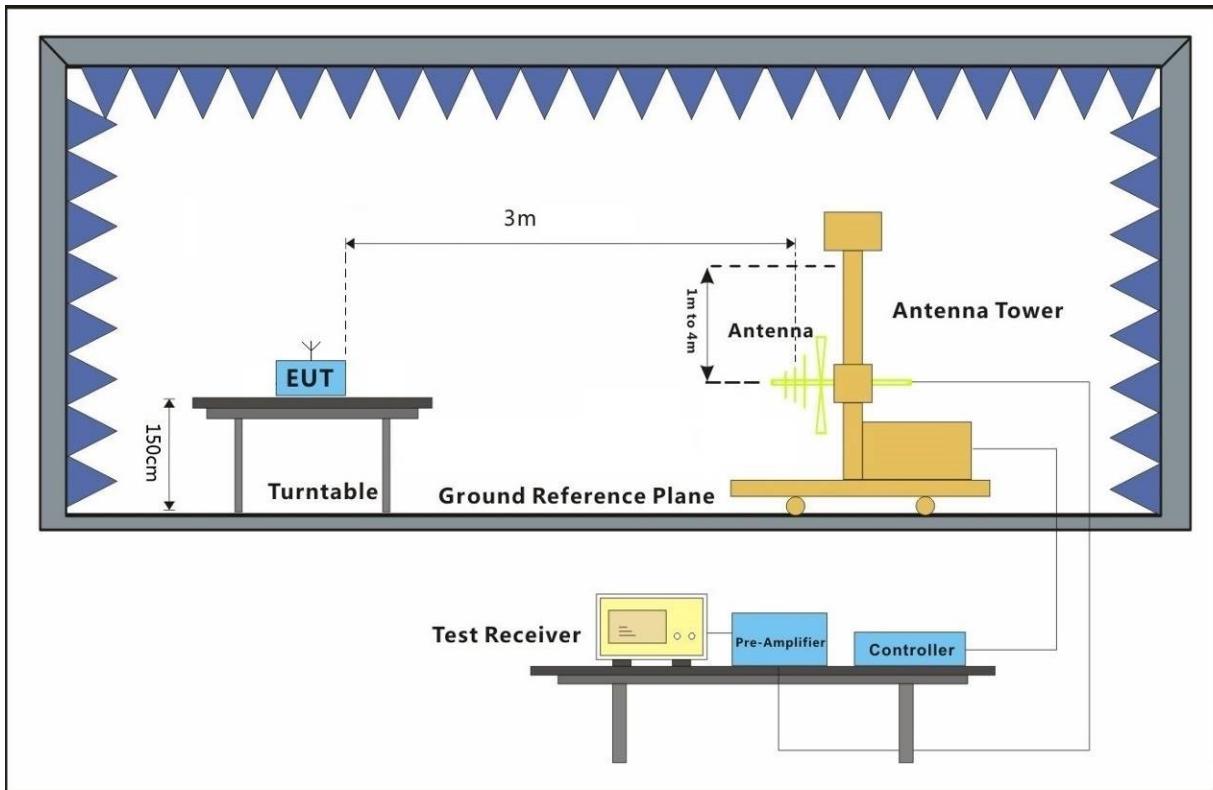
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### 7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C      Humidity: 51 % RH      Atmospheric Pressure: 1015 mbar  
Test mode      07:TX mode\_Keep the EUT in transmitting with modulation mode.

### 7.6.2 Test Setup Diagram



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**7.6.3 Measurement Procedure and Data**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.

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

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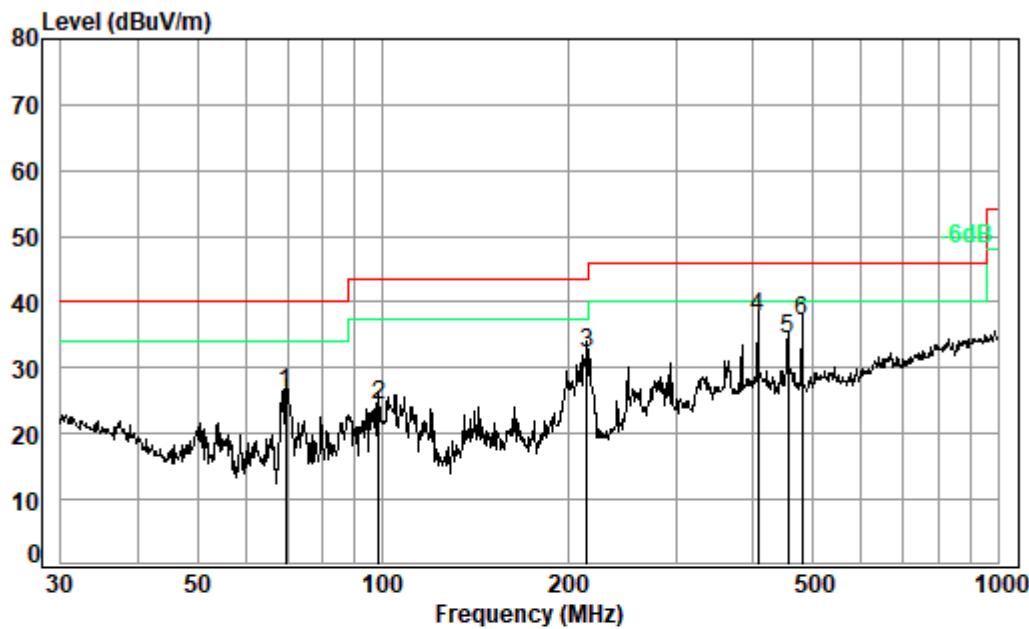
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Mode:07; Polarization:Horizontal



Condition: 3m HORIZONTAL

Job No. : 07542CR

Test Mode: 07

Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit Remark	
							dBuV	dBuV/m
1	69.60	0.80	12.68	27.65	40.35	26.18	40.00	-13.82 QP
2	98.49	1.13	13.85	27.61	36.86	24.23	43.50	-19.27 QP
3	214.51	1.34	15.99	27.10	41.91	32.14	43.50	-11.36 QP
4 pp	407.51	2.32	21.62	27.43	41.07	37.58	46.00	-8.42 QP
5	455.91	2.42	22.86	27.63	36.85	34.50	46.00	-11.50 QP
6	480.53	2.46	24.30	27.73	37.96	36.99	46.00	-9.01 QP

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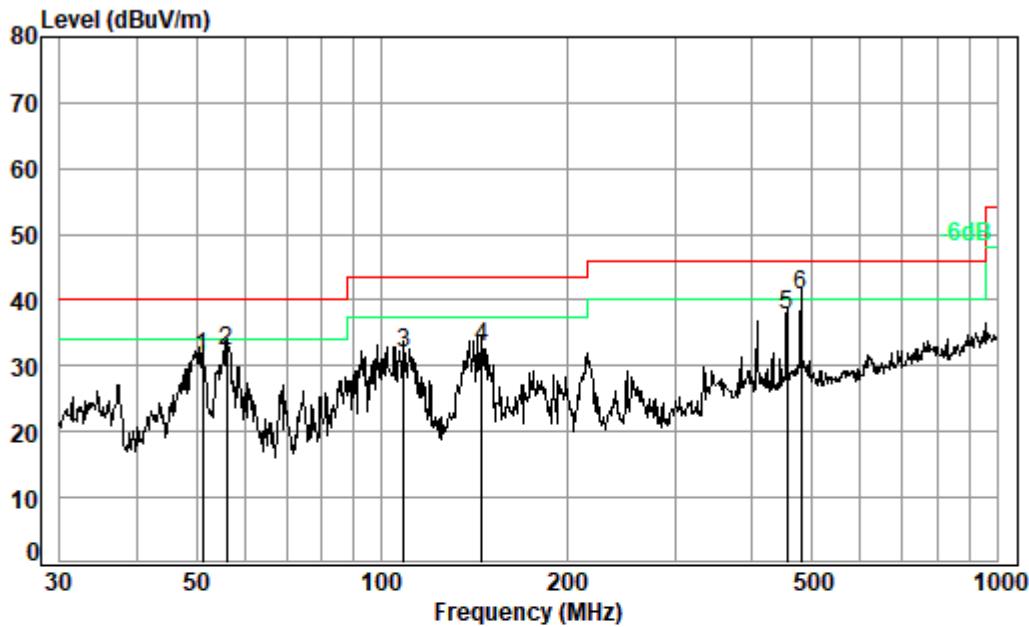
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Mode:07; Polarization:Vertical



Condition: 3m VERTICAL

Job No. : 07542CR

Test Mode: 07

Freq	Cable	Ant	Preamp	Read	Limit	Over	Remark	
	Freq	Loss	Factor	Level				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	51.12	0.71	13.76	27.68	44.50	31.29	40.00	-8.71 QP
2	56.00	0.76	12.90	27.67	46.17	32.16	40.00	-7.84 QP
3	108.65	1.11	13.74	27.55	44.52	31.82	43.50	-11.68 QP
4	145.35	1.15	14.11	27.36	44.87	32.77	43.50	-10.73 QP
5	455.91	2.42	22.86	27.63	40.10	37.75	46.00	-8.25 QP
6 pp	480.53	2.46	24.30	27.73	41.72	40.75	46.00	-5.25 QP

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## 8 Photographs

## 8.1 Test Setup

Refer to setup photos.

## 8.2 EUT Constructional Details (EUT Photos)

Refer to external and internal photos.

- End of the Report -



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