

TEST REPORT

Application No.: KSCR2606001361AU
FCC ID: SY4-A02080
Applicant: Shanghai Huace Navigation Technology Ltd.
Address of Applicant: 577 Songying Road, Qingpu District, 201706 Shanghai, China
Manufacturer: Shanghai Huace Navigation Technology Ltd.
Address of Manufacturer: 577 Songying Road, Qingpu District, 201706 Shanghai, China
Factory: Shanghai Huace Navigation Technology Ltd.
Address of Factory: 577 Songying Road, Qingpu District, 201706 Shanghai, China
Equipment Under Test (EUT):
EUT Name: Vision-Fused Multi-Point Deformation Monitoring System
Model No.: Z8
Trade Mark: 
Standard(s) : 47 CFR Part 2
47 CFR Part 90
Date of Receipt: 2026-06-09
Date of Test: 2026-07-20 to 2026-10-12
Date of Issue: 2026-10-12

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



Revision Record			
Version	Description	Date	Remark
00	Original	2026-10-12	/

Authorized for issue by:				
Tested By		Maker Qi		
		Maker_Qi /Project Engineer		
Approved By		Terry Hou		
		Terry Hou /Reviewer		



2 Test Summary

Test Item	FCC Rule No.	Result
RF power output	§2.1046; §90.205(r)	Pass
Occupied Bandwidth	§ 2.1049; §90.209	Pass
Emission mask	§2.1051; §90.210(b)(n)	Pass
Spurious Emission at Antenna Terminals	§2.1051; §90.210(b)(n)	Pass
Filed Strength and Radiation Spurious Emission	§2.1053; §90.210(b)(n)	Pass
Frequency Stability	§90.213; §2.1055	Pass



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4 General Information

4.1 Details of E.U.T.

Power supply:	AC/DC Adapter: Model: XLG-100-12-A Input: 100~240V~,50-60Hz,1.1A Output: 12V/8A 96W
Test Voltage:	AC 120V/60Hz
Operation Frequency Range:	17100MHz-17300MHz
Operating Frequency:	17200MHz
Number of Channels:	1
Modulation:	FMCW
Antenna type:	PCB Trace Antenna
Antenna Gain:	25.4dBi (Provided by the manufacturer)

4.2 Power level setting using in test:

Channel	Power Setting
1	Default

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	K27	EB24537645

4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Radiated Power	5.2dB (Below 1GHz) 5.9dB (Above 1GHz)
6	Radiated Spurious Emission Test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-18GHz) 5.4dB (Above 18GHz)
7	Temperature Test	1°C
8	Humidity Test	3%
9	Supply Voltages	1.5%
10	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

4.5 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.6 Test Facility

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

• **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA).

• **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

• **ISED (CAB Identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

• **VCCI (Member No:1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None



5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	07/07/2026	07/06/2027
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	07/07/2026	07/06/2027
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	12/17/2025	12/16/2026
4	Signal Generator	R&S	SMBV100B	KSEM032	12/17/2025	12/16/2026
5	Signal Generator	R&S	SMW200A	KSEM020-1	07/07/2026	07/06/2027
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	07/07/2026	07/06/2027
7	Signal Generator	Agilent	E8257C	KS301066	07/07/2026	07/06/2027
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	07/07/2026	07/06/2027
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	12/17/2025	12/16/2026
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	07/07/2026	07/06/2027
11	Switcher	TST	FY562	KUS2001M001-4	12/17/2025	12/16/2026
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	12/17/2025	12/16/2026
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	07/07/2026	07/06/2027
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	12/30/2025	12/29/2026
15	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	07/06/2026	07/05/2027
2	PXA Spectrum Analyzer	KEYSIGHT	N9030B	KSEM021-1	12/17/2025	12/16/2026
3	Signal Generator	Agilent	E8257C	KS301066	07/07/2026	07/06/2027
4	Loop Antenna	COM-POWER	AL-130R	KUS1806E001	07/07/2026	07/06/2027
5	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E005	07/07/2026	07/06/2027
6	Amplifier(1GHz~18GHz)	Tonscend	TAP01018048	KSEM077	07/07/2026	07/06/2027
8	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	01/11/2026	01/10/2028
9	Amplifier(18~40GHz)	PANSHAN TECHNOLOGY	LNA180400G40	KSEM038	07/07/2026	07/06/2027
10	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/11/2026	01/10/2028
11	Horn-antenna(40-60GHz)	ERAVANT	SAZ-2410-19-S1	KSEM003-1	02/02/2021*	02/01/2031**
12	Horn-antenna(50-75GHz)	ERAVANT	SAZ-2410-15-S1	KSEM003-2	02/02/2021*	02/01/2031**
13	Horn-antenna(50-75GHz)	ERAVANT	SAZ-2410-15-S1	KSEM003-7	12/14/2022*	12/13/2032**
14	Horn-antenna(60-90GHz)	ERAVANT	SAZ-2410-12-S1	KSEM003-8	12/14/2022*	12/13/2032**
15	Horn-antenna(75-110GHz)	ERAVANT	SAZ-2410-10-S1	KSEM003-3	02/02/2021*	02/01/2031**
16	Horn-antenna(90-140GHz)	ERAVANT	SAZ-2410-08-S1	KSEM003-9	12/14/2022*	12/13/2032**
17	Horn-antenna(110-170GHz)	ERAVANT	SAZ-2410-06-S1	KSEM003-4	02/02/2021*	02/01/2031**
18	Horn-antenna(140-220GHz)	ERAVANT	SAZ-2410-05-S1	KSEM003-5	02/02/2021*	02/01/2031**
19	Horn-antenna(140-220GHz)	ERAVANT	SAZ-2410-05-S1	KSEM003-10	12/14/2022*	12/13/2032**
20	Horn-antenna(220-325GHz)	ERAVANT	SAR-2309-03-S2	KSEM003-6	02/02/2021*	02/01/2031**
21	Extended waveguide(40-60GHz)	ERAVANT	SWG-19025-FB	KSEM004-1	02/02/2021*	02/01/2031**

22	Extended waveguide(50-75GHz)	ERAVANT	SWG-15025-FB	KSEM004-2	02/02/2021*	02/01/2031**
23	Extended waveguide(50-75GHz)	ERAVANT	SWG-15025-FB	KSEM004-7	12/14/2022*	12/13/2032**
24	Extended waveguide(60-90GHz)	ERAVANT	SWG-12025-FB	KSEM004-8	12/14/2022*	12/13/2032**
25	Extended waveguide(75-110GHz)	ERAVANT	SWG-10025-FB	KSEM004-3	02/02/2021*	02/01/2031**
26	Extended waveguide(90-140GHz)	ERAVANT	SWG-08025-FB	KSEM004-9	12/14/2022*	12/13/2032**
27	Extended waveguide(110-170GHz)	ERAVANT	SWG-06025-FB	KSEM004-4	02/02/2021*	02/01/2031**
28	Extended waveguide(140-220GHz)	ERAVANT	SWG-05025-FB	KSEM004-5	02/02/2021*	02/01/2031**
29	Extended waveguide(140-220GHz)	ERAVANT	SWG-05025-FB	KSEM004-10	12/14/2022*	12/13/2032**
30	Extended waveguide(220-325GHz)	ERAVANT	SWG-03025-FB	KSEM004-6	02/02/2021*	02/01/2031**
31	Harmonic mixer(40-60GHz)	ERAVANT	STH-19SF-S1	KSEM005-2	10/01/2020*	09/30/2030**
32	Harmonic Mixer(50-75GHz)	VDI	SAX WR15	KSEM007-1	08/23/2023*	08/23/2033**
33	Harmonic Mixer(60-90GHz)	VDI	SAX WR12	KSEM007-2	08/23/2023*	08/23/2033**
34	Harmonic mixer(90-140GHz)	VDI	SAX WR8.0	KSEM007-3	08/23/2023*	08/23/2033**
35	Harmonic mixer(140-220GHz)	VDI	SAX WR5.1	KSEM007-4	08/23/2023*	08/23/2033**
36	Harmonic mixer(220-325GHz)	ERAVANT	HM 220-325	KSEM005-4	04/20/2021*	04/19/2031**
37	Upconverter	Talent	TMAM-060090-0612-12-AC	KSEM043	01/18/2022*	01/17/2032**
39	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	12/30/2025	12/29/2026
40	Measurement Software	Tonscend	JS32-RE V5.0.0.1	/	NCR	NCR
41	Measurement Software	Tonscend	JS32-RSE V5.0.0.0	/	NCR	NCR
42	Software	ESE	E3_V 6.111221a	/	NCR	NCR

*Calibration date provided by the equipment manufacturer.

**Calibration every ten years. During this period, there will be daily check files for the equipment and the requirements for operators will be clearly defined through SOP.

6 Radio Spectrum Matter Test Results

6.1 RF power output

Test Requirement §2.1046; §90.205(r)
Test Method: ANSI C63.26-2015 Section 5.2.3.3
Limit:

Applicants for licenses must request and use no more power than the actual power necessary for satisfactory operation. Except where otherwise specifically provided for, the maximum power that will be authorized to applicants whose license applications for new stations are filed after August 18, 1995 is as follows:

(r) All other frequency bands. Requested transmitter power will be considered and authorized on a case by case basis.

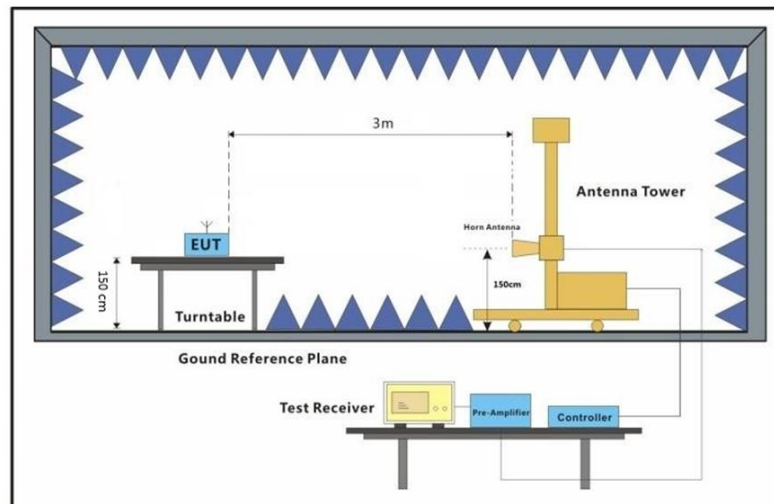
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.3 °C Humidity: 47.5 % RH Atmospheric Pressure: 1010 mbar

Test Mode: TX mode _ Keep the EUT in continuously transmitting mode.

6.1.2 Test Setup Diagram



6.1.3 Measurement Procedure and Data

This procedure can be used to measure the peak power in either a CW-like or noise-like narrowband RF signal. The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

- 1.Set the RBW $\geq$ OBW.
- 2.Set VBW $\geq 3 \times$ RBW.
- 3.Set span $\geq 2 \times$ OBW.
- 4.Sweep time $\geq 10 \times$ (number of points in sweep) $\times$ (transmission symbol period).
- 5.Detector = peak.
- 6.Trace mode = max hold.
- 7.Allow trace to fully stabilize.
- 8.Use the peak marker function to determine the peak amplitude level.

Remark:

- 1) All modes of operation were investigated and the worst-case emissions are reported.
- 2) Level= Read Level + Aux Factor - Preamp Factor

Frequency [MHz]	Reading [dBm]	Aux Factor [dB]	Preamp Factor [dB]	Level [dBm]	Verdict
17200	7.97	63.72	51.84	19.85	Pass

6.2 Occupied Bandwidth

Test Requirement § 2.1049; §90.209

Test Method: ANSI C63.26-2015 Section 5.3

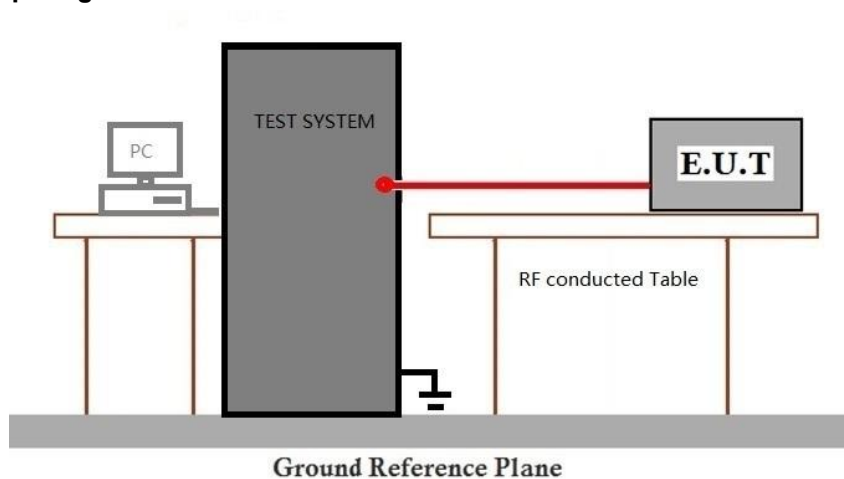
6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.3 °C Humidity: 47.5 % RH Atmospheric Pressure: 1010 mbar

Test Mode: TX mode _ Keep the EUT in continuously transmitting mode.

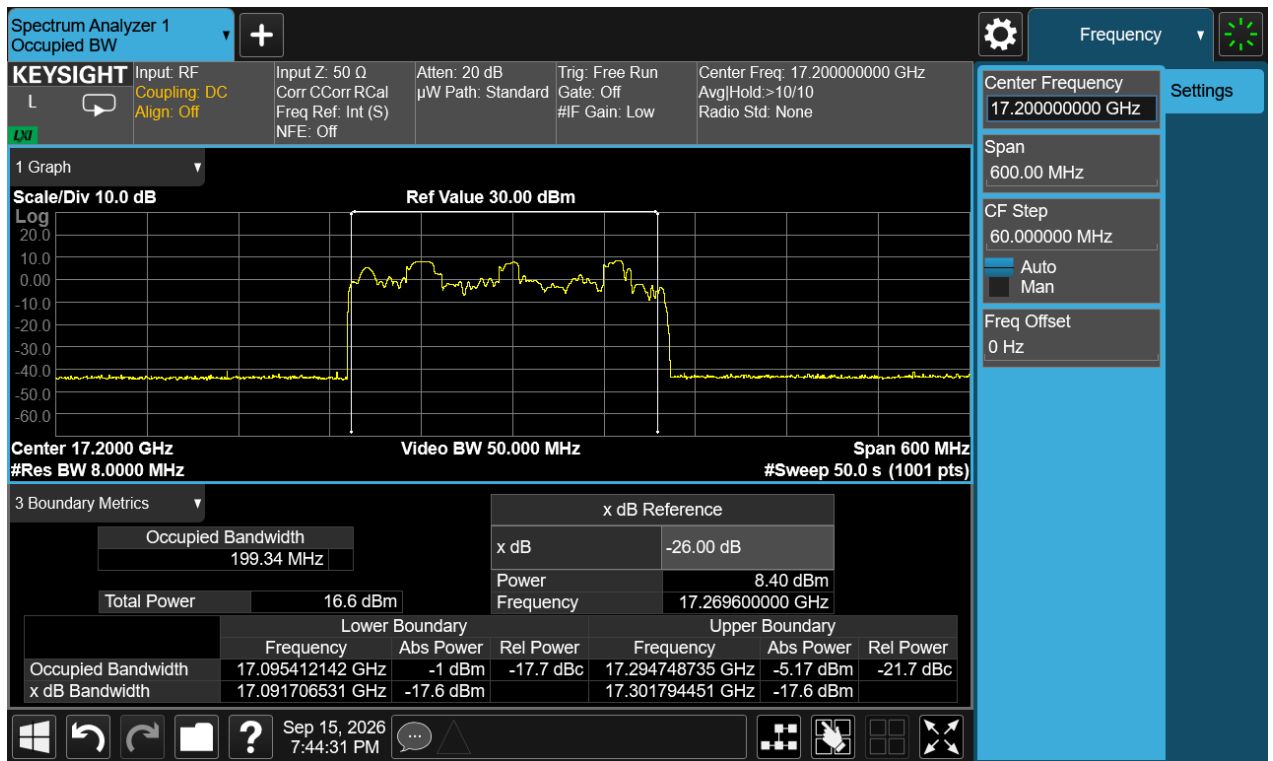
6.2.2 Test Setup Diagram



6.2.3 Measurement Procedure and Data

- 1) Place the EUT on the table and set it in the transmitting mode
- 2) SA set RBW=1%~5% OBW, VBW=3RBW and Detector=Peak
- 3) Measure and record the result of 99% bandwidth

Frequency band (MHz)	Test Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
		Result	Limit	
17100-17300	17200	199.34	/	Pass



6.3 Emission mask

Test Requirement §2.1051; §90.210(b)(n)
 Test Method: ANSI C63.26-2015 Section 5.5
 Limit:

(b) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

- (1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.
- (2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.
- (3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB.

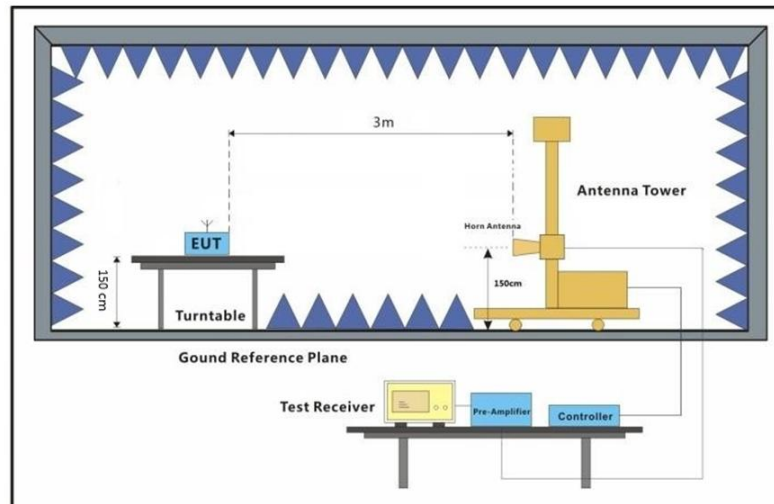
6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 24.3 °C Humidity: 47.5% RH Atmospheric Pressure: 1010 mbar

Test Mode: TX mode _ Keep the EUT in continuously transmitting mode.

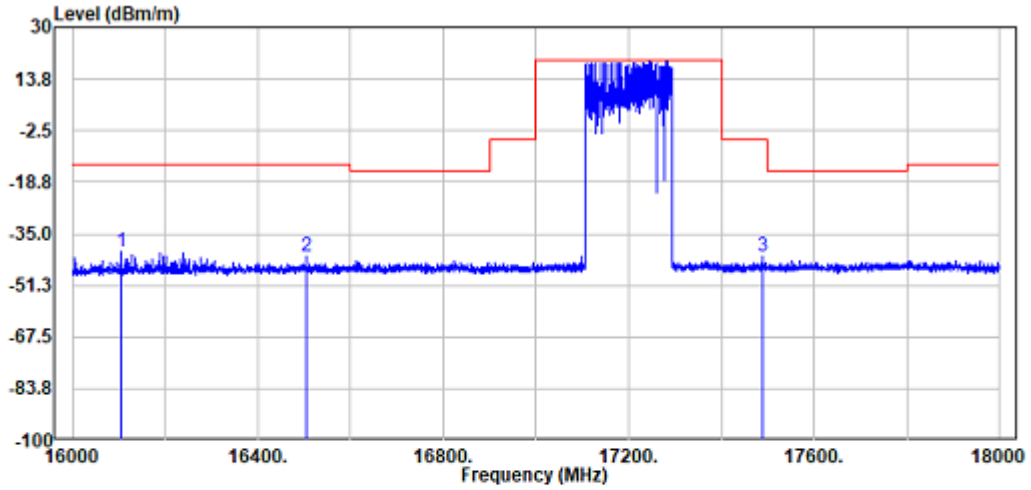
6.3.2 Test Setup Diagram



6.3.3 Measurement Procedure and Data

Emission Mask B:

Polarity: Horizontal

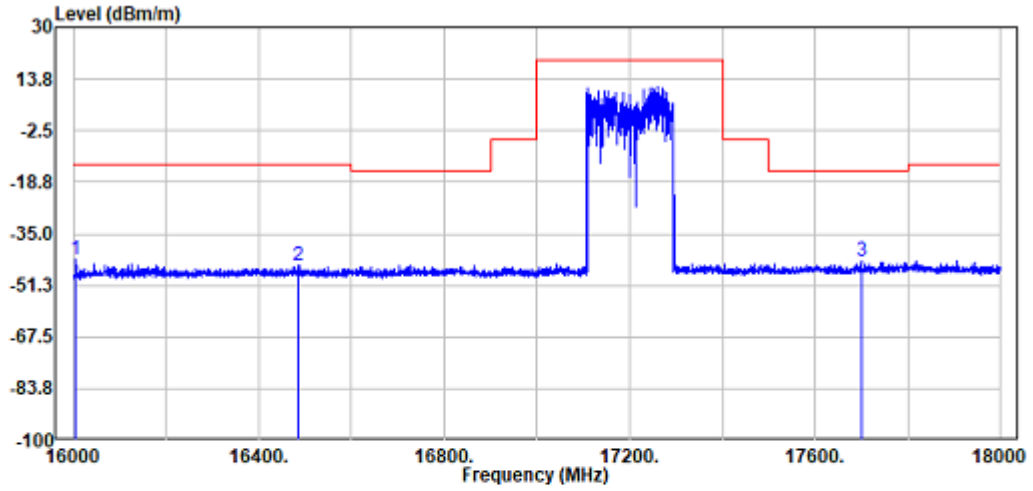


Antenna Polarity :Horizontal

No.	Freq	Read	Aux	Preamp	Emission	Limit	Over	Remark
	-----	level	Factor	Factor	Level	Line	Limit	-----
	MHz	dBm	dB	dB	dBm/m	dBm/m	dB	
	16105.12	-51.13	62.76	52.16	-40.53	-13.00	-27.53	Peak
	16504.70	-53.25	63.24	52.00	-42.01	-13.00	-29.01	Peak
	17487.40	-54.23	63.90	51.99	-42.32	-5.15	-37.17	Peak

Notes: Emission Level=Read Level+Aux Factor-Preamp Factor

Polarity: Vertical



Antenna Polarity :Vertical

No.	Freq	Read level	Aux Factor	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	-----	-----	-----	-----	-----	-----	-----	-----
	MHz	dBm	dB	dB	dBm/m	dBm/m	dB	
16005.10		-52.89	61.82	52.20	-43.27	-13.00	-30.27	Peak
16484.20		-54.98	62.17	52.01	-44.82	-13.00	-31.82	Peak
17701.44		-54.33	63.05	52.32	-43.60	-15.15	-28.45	Peak

Notes: Emission Level=Read Level+Aux Factor-Preamp Factor

6.4 Spurious Emission at Antenna Terminals

Test Requirement §2.1051; §90.210(b)(n)
 Test Method: ANSI C63.26-2015 Section 5.5
 Limit:

(b) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

(1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.

(2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB.

(n) Other frequency bands. Transmitters designed for operation under this part on frequencies other than listed in this section must meet the emission mask requirements of Emission Mask B. Equipment operating under this part on frequencies allocated to but shared with the Federal Government, must meet the applicable Federal Government technical standards.

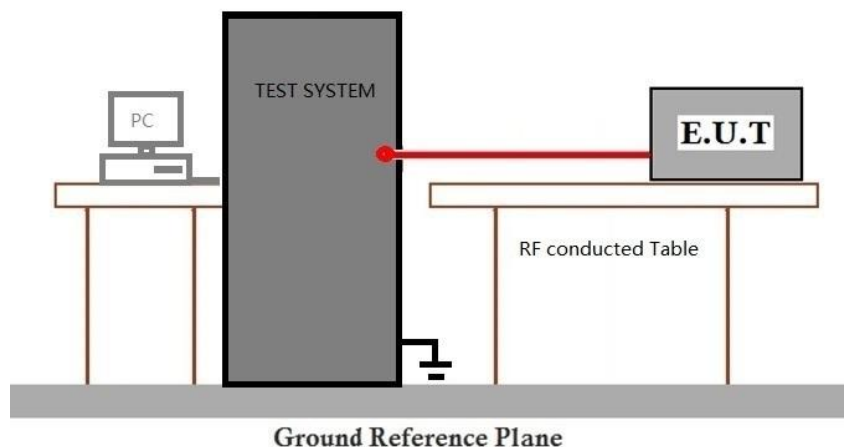
6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 24.3 °C Humidity: 47.5% RH Atmospheric Pressure: 1010 mbar

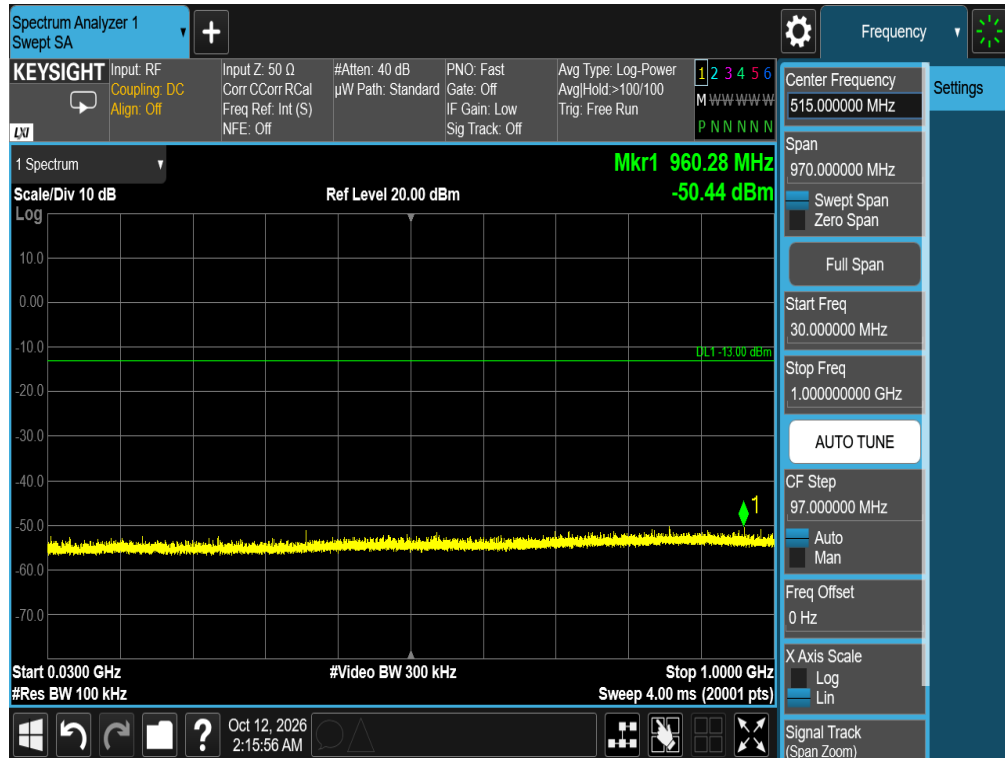
Test Mode: TX mode _ Keep the EUT in continuously transmitting mode.

6.4.2 Test Setup Diagram

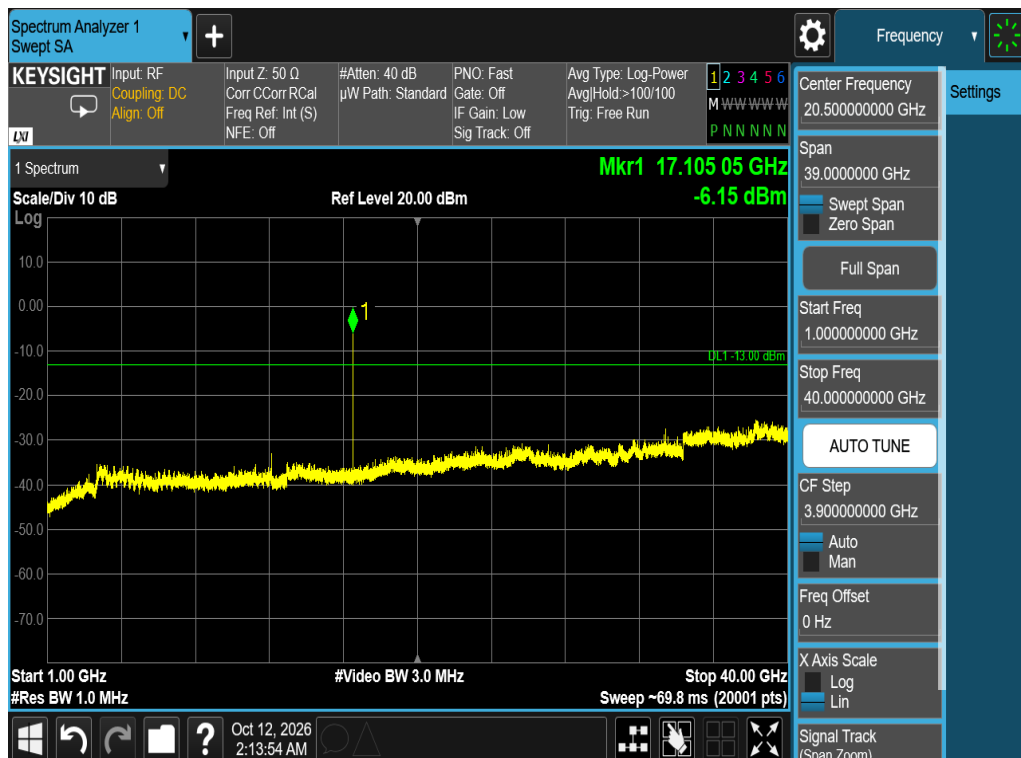


6.4.3 Measurement Procedure and Data

Below 1GHz:



1GHz-18GHz:



Remark: Conducted spurious emissions were measured up to 40 GHz. Frequencies above 40 GHz were evaluated by radiated spurious emission measurements.

6.5 Filed Strength and Radiation Spurious Emission

Test Requirement §2.1053; §90.210(b)(n)
Test Method: ANSI C63.26-2015 Section 5.5
Limit:

Except as indicated elsewhere in this part, transmitters used in the radio services governed by this part must comply with the emission masks outlined in this section. Unless otherwise stated, per paragraphs (d)(4), (e)(4), and (o) of this section, measurements of emission power can be expressed in either peak or average values provided that emission powers are expressed with the same parameters used to specify the unmodulated transmitter carrier power. For transmitters that do not produce a full power unmodulated carrier, reference to the unmodulated transmitter carrier power refers to the total power contained in the channel bandwidth. Unless indicated elsewhere in this part, the table in this section specifies the emission masks for equipment operating under this part.:

(b) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

- (1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.
- (2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.
- (3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB.

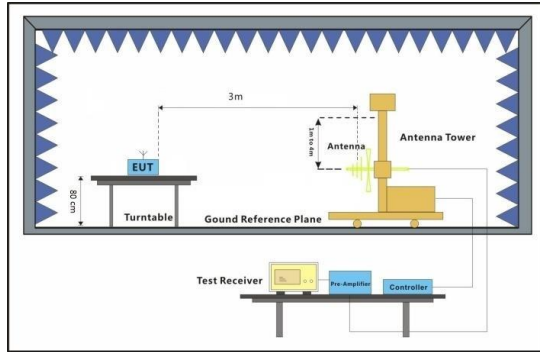
6.5.1 E.U.T. Operation

Operating Environment:

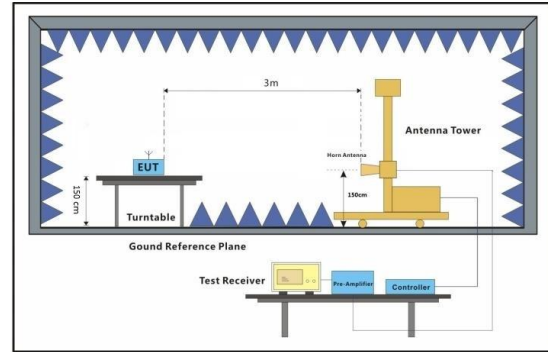
Temperature: 24.3 °C Humidity: 47.5% RH Atmospheric Pressure: 1010 mbar

Test Mode: TX mode _ Keep the EUT in continuously transmitting mode.

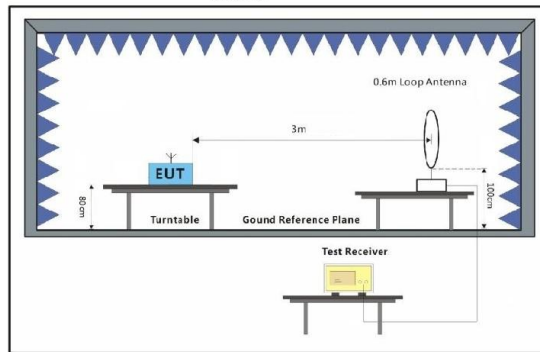
6.5.2 Test Setup Diagram



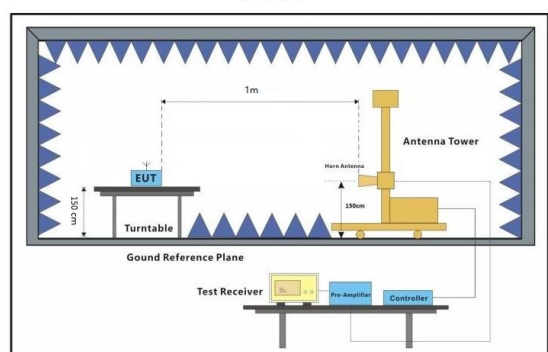
30MHz-1GHz



1GHz-40GHz



Below 30MHz



Above 40GHz

6.5.3 Measurement Procedure and Data

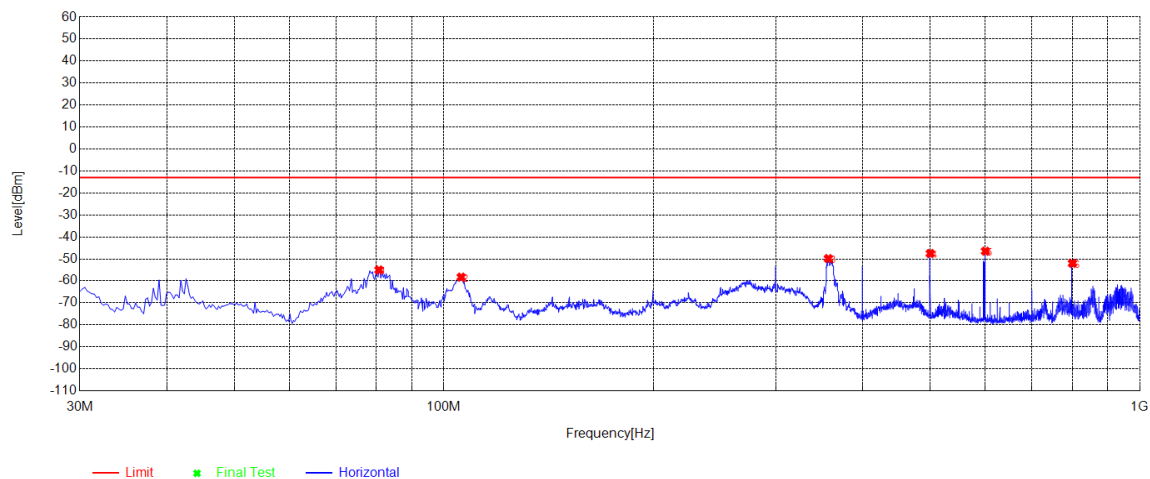
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For 1-18GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. For 18-40GHz, 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.
- d. For above 40GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 1 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- e. 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.
- f. 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.
- g. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- h. 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.
- 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 1: Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only below 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.

Remark 2: 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.

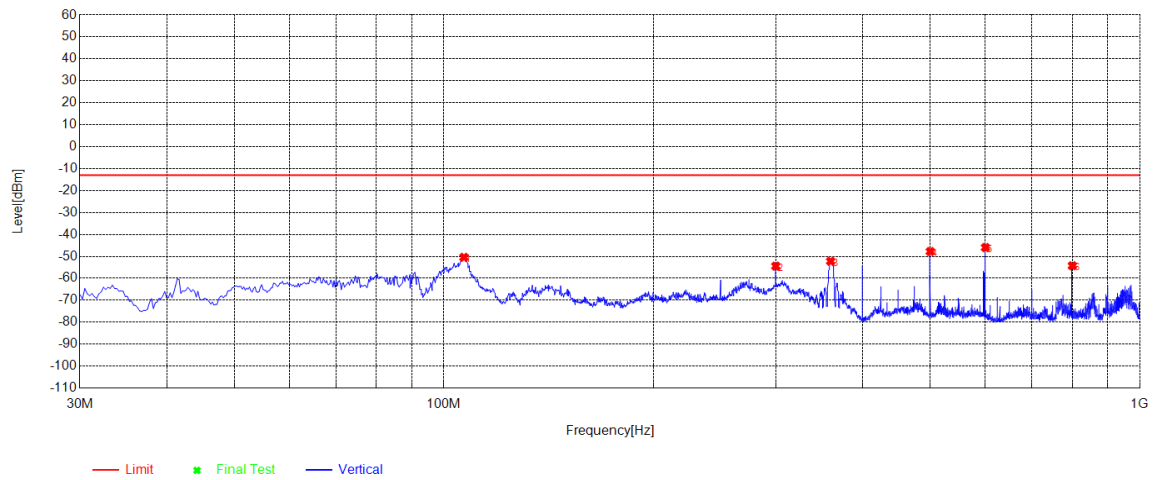
Below 1GHz:

Polarity: Horizontal



Final Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	80.6825	-55.03	-13.00	42.03	Horizontal
2	105.9025	-58.31	-13.00	45.31	Horizontal
3	356.89	-49.86	-13.00	36.86	Horizontal
4	499.965	-47.54	-13.00	34.54	Horizontal
5	600.1175	-46.50	-13.00	33.50	Horizontal
6	800.18	-52.01	-13.00	39.01	Horizontal

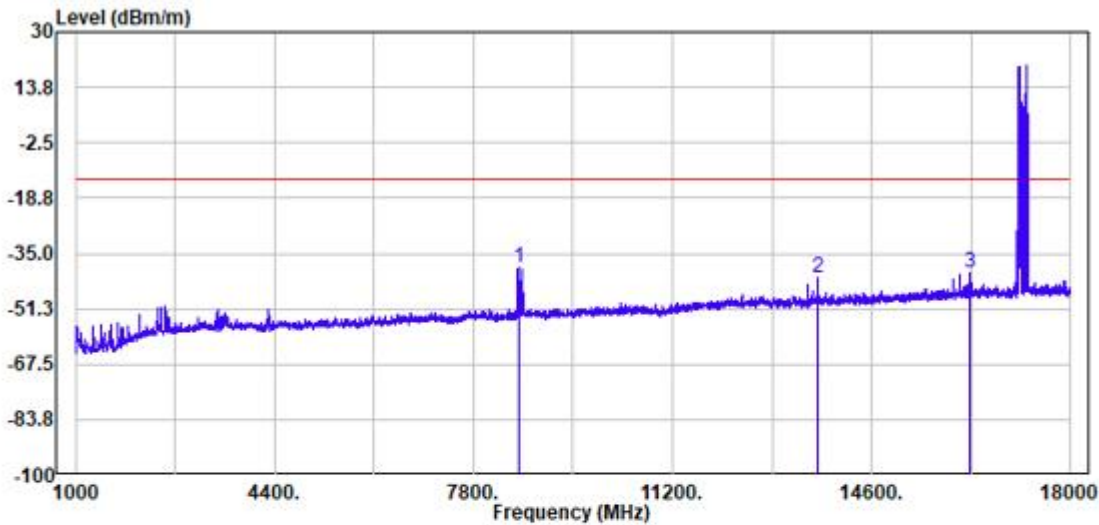
Polarity: Vertical



Final Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	106.8725	-50.41	-13.00	37.41	Vertical
2	299.9025	-54.43	-13.00	41.43	Vertical
3	359.5575	-52.22	-13.00	39.22	Vertical
4	499.965	-47.76	-13.00	34.76	Vertical
5	600.1175	-45.96	-13.00	32.96	Vertical
6	800.18	-54.26	-13.00	41.26	Vertical

1GHz-18GHz:

Polarity: Horizontal

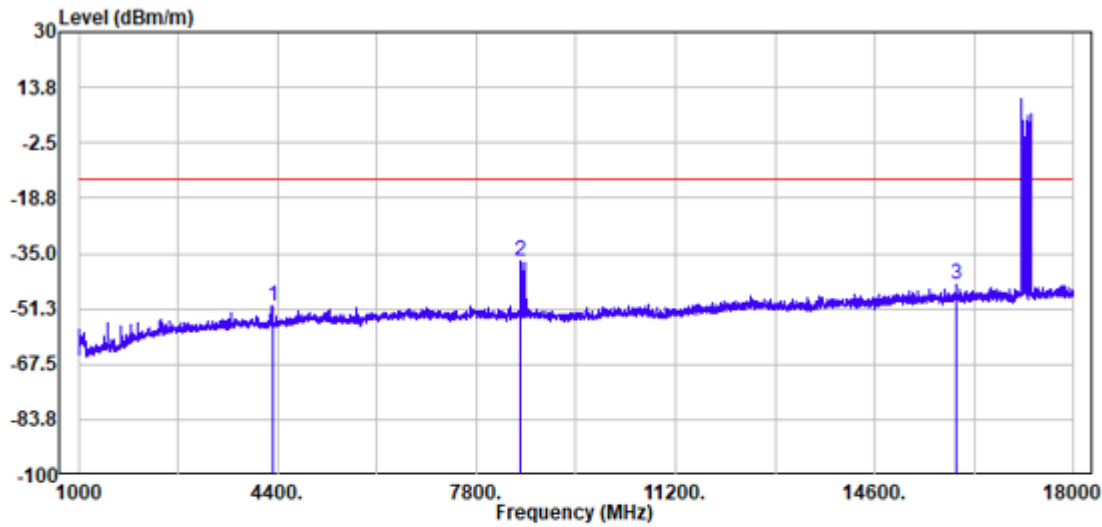


Antenna Polarity :Horizontal

No.	Freq	Read level	Aux Factor	Preamplifier Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBm	dB	dB	dBm/m	dBm/m	dB	
	8573.31	-41.48	55.63	53.49	-39.34	-13.00	-26.34	Peak
	13687.94	-49.64	60.72	53.32	-42.24	-13.00	-29.24	Peak
	16286.06	-51.58	62.98	52.09	-40.69	-13.00	-27.69	Peak

Notes: Emission Level=Read Level+Aux Factor-Preamplifier Factor

Polarity: Vertical



Antenna Polarity :Vertical

No.	Freq	Read level	Aux Factor	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	-----	-----	-----	-----	-----	-----	-----	-----
	MHz	dBm	dB	dB	dBm/m	dBm/m	dB	
	4312.26	-47.06	51.40	54.59	-50.25	-13.00	-37.25	Peak
	8552.91	-39.45	55.71	53.49	-37.23	-13.00	-24.23	Peak
	16003.80	-53.56	61.82	52.20	-43.94	-13.00	-30.94	Peak

Notes: Emission Level=Read Level+Aux Factor-Preamp Factor



18GHz-90GHz:

Final Data List								
NO.	Freq (MHz)	Read Level (dBm)	Aux Factor (dB)	Preamp Factor (dB)	Emission Level (dBm/m)	Limit Line (dBm/m)	Over Limit (dB)	Polarity
1	19685.54	-49.50	62.15	57.12	-44.47	-13.00	-31.47	Horizontal
2	25657.53	-50.26	62.98	54.92	-42.20	-13.00	-29.20	Horizontal
3	38318.86	-56.37	68.51	54.89	-42.75	-13.00	-29.75	Horizontal

Final Data List								
NO.	Freq (MHz)	Read Level (dBm)	Aux Factor (dB)	Preamp Factor (dB)	Emission Level (dBm/m)	Limit Line (dBm/m)	Over Limit (dB)	Polarity
1	19254.25	-47.89	63.42	57.6	-42.07	-13.00	-29.07	Vertical
2	25657.53	-47.08	64.13	54.92	-37.87	-13.00	-24.87	Vertical
3	37891.98	-52.06	69.16	54.17	-37.07	-13.00	-24.07	Vertical

6.6 Frequency stability

Test Requirement §90.213; §2.1055

Test Method: ANSI C63.26-2015 Section 5.6

Limit:

(a) Unless noted elsewhere, transmitters used in the services governed by this part must have a minimum frequency stability as specified in the following table.

TABLE 1 TO § 90.213(a)—MINIMUM FREQUENCY STABILITY
[PARTS PER MILLION (PPM)]

Frequency range (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	2 watts or less output power
Below 25	^{1 2 3} 100	100	200
25-50	20	20	50
72-76	5		50
150-174	^{5 11} 5	⁶ 5	^{4 6} 50
216-220	1.0		1.0
220-222 ¹²	0.1	1.5	1.5
421-512	^{7 11 14} 2.5	⁸ 5	⁸ 5
806-809	¹⁴ 1.0	1.5	1.5
809-824	¹⁴ 1.5	2.5	2.5
851-854	1.0	1.5	1.5
854-869	1.5	2.5	2.5
896-901	¹⁴ 0.1	1.5	1.5
902-928	2.5	2.5	2.5
902-928 ¹³	2.5	2.5	2.5
929-930	1.5		
935-940	0.1	1.5	1.5
1427-1435	⁹ 300	300	300
Above 2450 ¹⁰			

1 Fixed and base stations with over 200 watts transmitter power must have a frequency stability of 50 ppm except for equipment used in the Public Safety Pool where the frequency stability is 100 ppm.

2 For single sideband operations below 25 MHz, the carrier frequency must be maintained within 50 Hz of the authorized carrier frequency.

3 Travelers information station transmitters operating from 530-1700 kHz and transmitters exceeding 200 watts peak envelope power used for disaster communications and long distance circuit operations pursuant to §§ 90.242 and 90.264 must maintain the carrier frequency to within 20 Hz of the authorized frequency.

4 Stations operating in the 154.45 to 154.49 MHz or the 173.2 to 173.4 MHz bands must have a frequency stability of 5 ppm.

5 In the 150-174 MHz band, fixed and base stations with a 12.5 kHz channel bandwidth must have a frequency stability of 2.5 ppm. Fixed and base stations with a 6.25 kHz channel bandwidth must have a frequency stability of 1.0 ppm.

6 In the 150-174 MHz band, mobile stations designed to operate with a 12.5 kHz channel bandwidth or designed to operate on a frequency specifically designated for itinerant use or designed for low-power

operation of two watts or less, must have a frequency stability of 5.0 ppm. Mobile stations designed to operate with a 6.25 kHz channel bandwidth must have a frequency stability of 2.0 ppm.

7 In the 421-512 MHz band, fixed and base stations with a 12.5 kHz channel bandwidth must have a frequency stability of 1.5 ppm. Fixed and base stations with a 6.25 kHz channel bandwidth must have a frequency stability of 0.5 ppm.

8 In the 421-512 MHz band, mobile stations designed to operate with a 12.5 kHz channel bandwidth must have a frequency stability of 2.5 ppm. Mobile stations designed to operate with a 6.25 kHz channel bandwidth must have a frequency stability of 1.0 ppm.

9 Fixed stations with output powers above 120 watts and necessary bandwidth less than 3 kHz must operate with a frequency stability of 100 ppm. Fixed stations with output powers less than 120 watts and using time-division multiplex, must operate with a frequency stability of 500 ppm.

10 Frequency stability for DSRCS equipment in the 5895-5925 MHz band is specified in subpart M of this part. For all other equipment, frequency stability is to be specified in the station authorization.

11 Paging transmitters operating on paging-only frequencies must operate with frequency stability of 5 ppm in the 150-174 MHz band and 2.5 ppm in the 421-512 MHz band.

12 Mobile units may utilize synchronizing signals from associated base stations to achieve the specified carrier stability.

13 Fixed non-multilateration transmitters with an authorized bandwidth that is more than 40 kHz from the band edge, intermittently operated hand-held readers, and mobile transponders are not subject to frequency tolerance restrictions.

14 Control stations may operate with the frequency tolerance specified for associated mobile frequencies.

(b) For the purpose of determining the frequency stability limits, the power of a transmitter is considered to be the maximum rated output power as specified by the manufacturer.

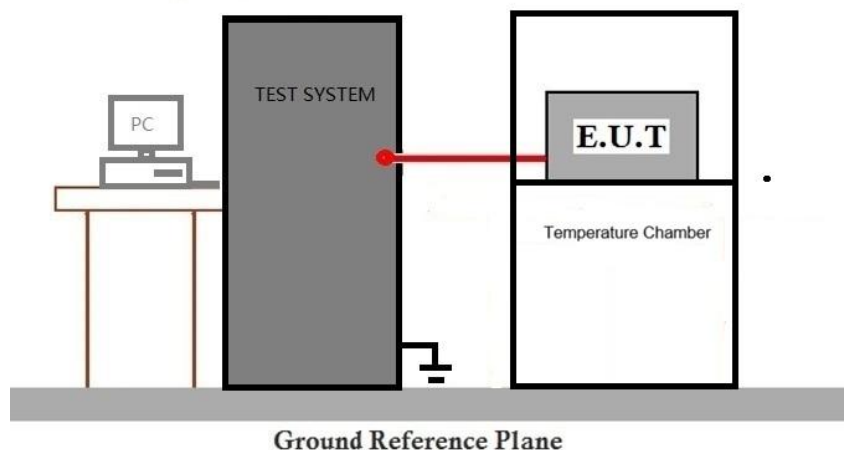
6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 24.3 °C Humidity: 47.5% RH Atmospheric Pressure: 1010 mbar

Test Mode: TX mode _ Keep the EUT in continuously transmitting mode.

6.6.2 Test Setup Diagram



6.6.3 Measurement Procedure and Data

Voltage (%)	Power (VAC)	Temp (°C)	Measured Frequency (Hz)	Frequency offset (Hz)	Drift (ppm)
100%	120V	-20	17197446918	55638	3.24
		-10	17197436469	45189	2.63
		0	17197442972	51692	3.01
		+10	17197448764	57484	3.34
		+20	17197391280	0	Reference
		+30	17197444934	53654	3.12
		+40	17197470467	79187	4.60
		+50	17197461137	69857	4.06
115%	138V	+20	17197448053	56773	3.30
85%	102V	+20	17197438555	47275	2.75

Note: Fundamental emissions were contained within the frequency bands



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7 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2606001361AU

8 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2606001361AU

- End of the Report -