

1 Cover Page

TEST REPORT

Application No.: KSCR2508001807AT
Applicant: Whst Co., Ltd.
Address of Applicant: Factory 1, West of Qingshuihe Road, East District of Economic & Technological Development Zone, Wuhu City, Anhui Province, China
Manufacturer: Whst Co., Ltd.
Address of Manufacturer: Factory 1, West of Qingshuihe Road, East District of Economic & Technological Development Zone, Wuhu City, Anhui Province, China
Factor: Whst Co., Ltd.
Address of Factor: Factory 1, West of Qingshuihe Road, East District of Economic & Technological Development Zone, Wuhu City, Anhui Province, China
Equipment Under Test (EUT):
EUT Name: Long Range Radar
Model No.: STA77-5S-A
Trade Mark WHST
Standard(s) : Item 8 of Article 2-1
Test Method MIC notification.No.88 of 2004, Annex 22-14
Date of Receipt: 2025-08-18
Date of Test: 2025-08-19 to 2025-09-11
Date of Issue: 2025-09-12

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.

Compliance Certification Services (Kunshan) Inc.
程智电子科技（昆山）有限公司

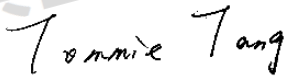
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Revision Record			
Version	Description	Date	Remark
00	Original	2025-09-12	/

Authorized for issue by:			
Tested By			
		<u>Tommie_Tang/Project Engineer</u>	
Approved By			
		<u>Terry Hou /Reviewer</u>	

2 Test Summary

Test	Test Requirement	Limit/Severity	Result
Antenna Requirement	Item 8 of Article 2-1	Antenna Gain: 40dBi or less	PASS
Assigned Frequency Tolerance of Frequency		76.0GHz-77.0GHz	PASS
Occupied bandwidth		1GHz	PASS
Antenna Power		0.01W or less	PASS
Spurious Emission Strength, Outband area		100uW or less	PASS
Unwanted Emission Strength, Spurious area		50uW or less	PASS
Secondary Radiated Emission Strength		100uW or less	PASS
RF accessibility		/	PASS

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 9-16V
Operation Frequency Range:	76-77G
Modulation:	FMCW
Antenna Type:	Waveguide Antenna
Antenna Gain:	TX Antenna: 20.44dBi (Provided by manufacturer) RX Antenna: 14.42dBi (Provided by manufacturer)

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	T14	/
USB to CAN(FD)-bus Interface	/	/	/
DC Power Supply	Agilent	E3632A	/

4.3 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 Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz) 5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-18GHz) 5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

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

4.4 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.

4.5 Test Facility

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

- **A2LA**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

- **ISED**

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**

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.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Serial No.	Cal Date	Cal. Due Date	Cal body	Certifier
1	Spectrum Analyzer	Keysight	N9020A	MY55370209	07/09/2025	07/08/2026	SGS	(c)
2	Spectrum Analyzer	Keysight	N9020A	MY53420174	07/09/2025	07/08/2026	SGS	(c)
3	Spectrum Analyzer	Keysight	N9030B	MY61330164	01/15/2025	01/14/2026	SGS	(c)
4	Signal Generator	R&S	SMBV100B	103571	02/19/2025	02/18/2026	SGS	(c)
5	Signal Generator	R&S	SMW200A	110074	07/09/2025	07/08/2026	SGS	(c)
6	Signal Generator	Agilent	N5182A	MY50142015	07/08/2025	07/07/2026	SGS	(c)
7	Radio Communication Test Station	Anritsu	MT8000A	6262012849	07/09/2025	07/08/2026	SGS	(c)
8	Radio Communication Analyzer	Anritsu	MT8821C	6201692222	02/19/2025	02/18/2026	SGS	(c)
9	Universal Radio Communication Tester	R&S	CMW500	159275	07/08/2025	07/07/2026	LISAI	(c)
10	Switcher	TST	FY562	N/A	01/15/2025	01/14/2026	SGS	(c)
11	Conducted Test Cable	Thermax	RF01-RF04	N/A	01/14/2025	01/13/2026	SGS	(c)
12	Temp. / Humidity Chamber	TERCHY	MHK-120AK	X30109	07/15/2025	07/14/2026	SGS	(c)
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	1032844	02/26/2025	02/25/2026	SGS	(c)
14	Software	BST	TST-PASS	N/A	NCR	NCR	N/A	/

Remark:

(a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.

(b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992) .

(c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

(d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to (c).

From JRL Article 24-2, paragraph 4, Item 2

Notice: Calibration duration for above equipments is 1 year.

6 Test Results

6.1 Radio Technical Requirements Specification

Table 1: Radio Technical Requirements Specification for 76-77GHzband specific low-power system (Item 8 of Article 2-1)

Items		Technical standard
Assigned frequency (Frequency range)		76.5GHz (76.0GHz-77.0GHz)
Tolerance of frequency		76GHz-77GHz
Tolerance of occupied bandwidth		1GHz
Sprurious Emission Strength, Outband area		100uW or less
Unwanted Emission Strength, Spurious area		50uW or less
Antenna power		0.01W or less Tolerance:+50%,-70%
Secondary Radiated Emission Strength		100uW or less
Antenna Gain		40dBi or less
Radio waves exposed		Incident power density: 2mW/cm ² or less In the case of having a function to emit multiple radio waves at the same time: The total radiation ratio is 1 or less *Requirement is not applied to the equipment of the following. • Body;"Average power:2mW or less(*Note.1)", or "Equipment that the separation distance between the human body and the transmission antenna (except head and both hand) is used in at least 20cm." (*Note.1):In the case of having a function to emit multiple radio waves at the same time: The total radiation ratio to threshold is 1 or less
Condition for Frequency Stabilization	Voltage fluctuation	A transmitter shall be so constructed that the oscillation frequency will be as free from influence by changes in its power supply voltage or load as possible in order to maintain its frequency within the tolerance
	Environment	The oscillation circuit of a transmitter shall be based on an oscillation method that is as resistant to influence by changes in the ambient temperature or humidity as possible in order to maintain its oscillation frequency within the tolerance.
	Vibration	The transmitter of a mobile station (including a mobile amateur radio station) shall be able to maintain its frequency within the tolerance against any vibration or shock that can practically occur.

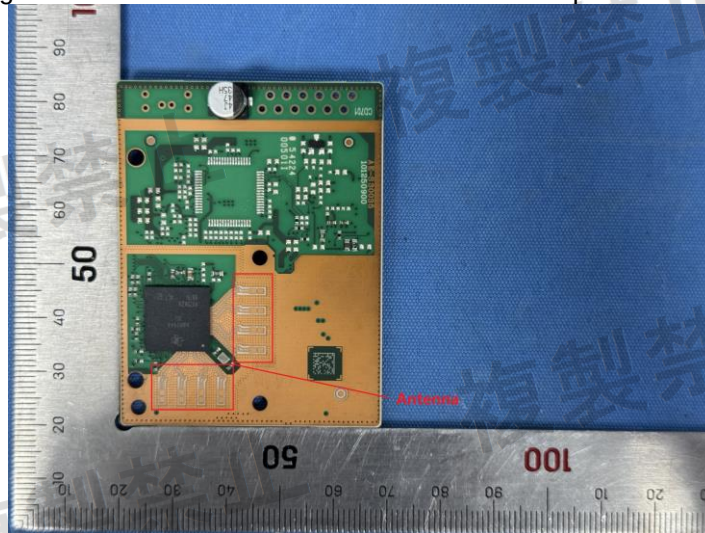
6.3 Antenna Requirement

Standard requirement

Applicable for equipment with an antenna terminal, including testing terminals) If an antenna connector is available, all relevant tests will be carried out conducted. If not, tests will be carried out in an anechoic room or with a suitable test-fixture.

EUT Antenna

The antenna is Integrated Patch Antenna and no consideration of replacement.



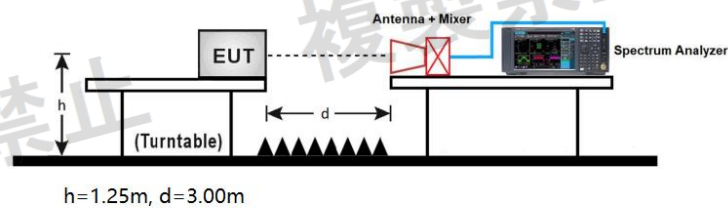
6.4 Assigned Frequency and Tolerance of Frequency

Test Requirement: Item 8 of Article 2-1

Text Method: MIC notification.No.88 of 2004,Annex 22-14

Test Status: Test the EUT in transmitting mode with modulation.

Test Configuration:



Test Procedure:

1) Test Conditions:

Spectrum Analyzer is used for measurement.

2) EUT Conditions:

FMCW Tx

3) Spectrum Analyzer conditions:

Frequency: Test Frequency

Span: 2GHz

RBW: 3MHz

VBW: 3MHz

Sweep Time: Auto

Detector mode: Positive Peak

Sweep mode: Max Hold

Test Data:

Test Frequency (GHz)	Test Frequency(GHz)			Limit	Result
	TM 1	TM 2	TM 3		
76.5	76.2170-76.7520	/	/	76-77GHz	Pass

Test Frequency (GHz)	Error(ppm)			Limit (ppm)	Result
	TM 1	TM 2	TM 3		
76.5	-202.6*10 ⁻⁶	/	/	±500*10 ⁻⁶	Pass

Test plots as below:

Test mode: TM 1



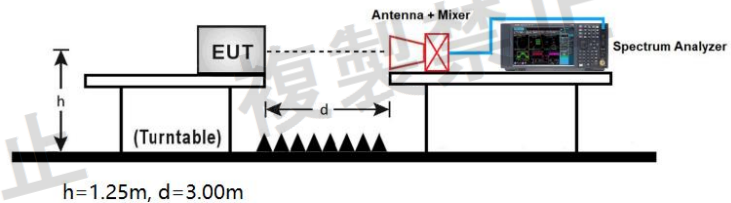
6.5 Condition for Frequency Stabilization

Test Requirement: Item 8 of Article 2-1

Text Method: MIC notification.No.88 of 2004,Annex 22-14

Test Status: Test the EUT in transmitting mode with modulation.

Test Configuration:



Test Procedure:

Test Conditions:

Spectrum Analyzer is used for measurement.,EUT setup at different condition

EUT Conditions:

FMCW Tx

Spectrum Analyzer conditions:

Frequency: Test Frequency

Span: 2GHz

RBW: 3MHz

VBW: 3MHz

Sweep Time: Auto

Detector mode: Positive Peak

Sweep mode: Max Hold

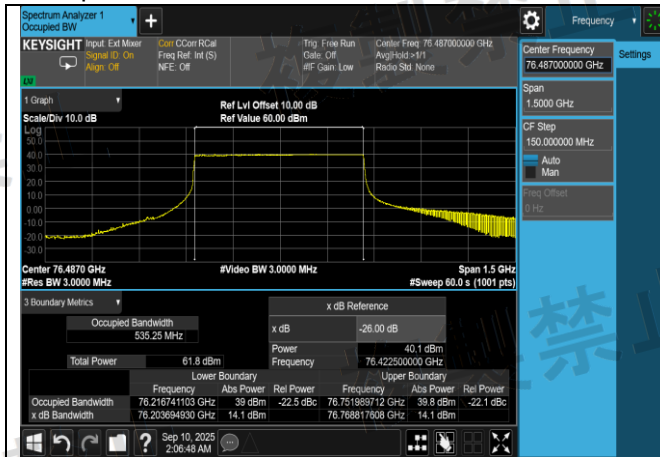
Temperature Test Data:

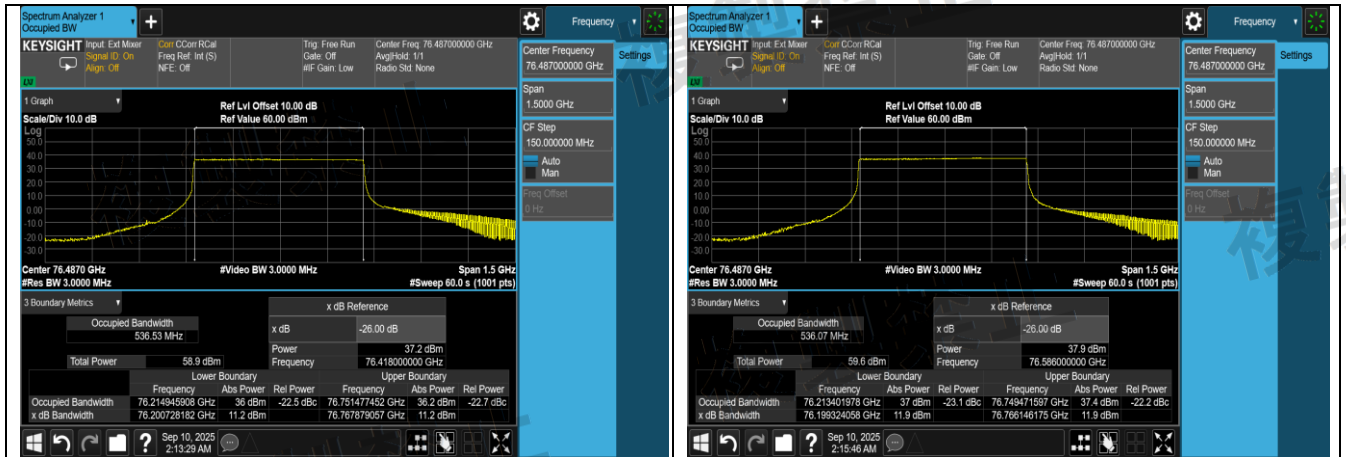
Test Frequency (GHz)	Temperature (°C)	Humidity (%)	Lowest frequency (GHz)	Highest frequency (GHz)	Limit	Result
76.5	0	65	76.2167	76.7519	76.0-77.0GHz	Pass
	-10	65	76.2174	76.7515		Pass
	-20	65	76.2149	76.7514		Pass
	40	65	76.2134	76.7494		Pass
	50	65	76.2142	76.7491		Pass
	60	65	76.2142	76.7487		Pass

Humidity Test Data:

Test Frequency (GHz)	Humidity (%)	Temperature (°C)	Lowest frequency (GHz)	Highest frequency (GHz)	Limit	Result
76.56	95	35	76.2138	76.7488	76.0-77.0GHz	Pass

Test plots as below:





-20°C _Lowest frequency+ Highest frequency

40°C _Lowest frequency+ Highest frequency



50°C _Lowest frequency+ Highest frequency

60°C _Lowest frequency+ Highest frequency



Humidity 95% _Lowest frequency+ Highest frequency

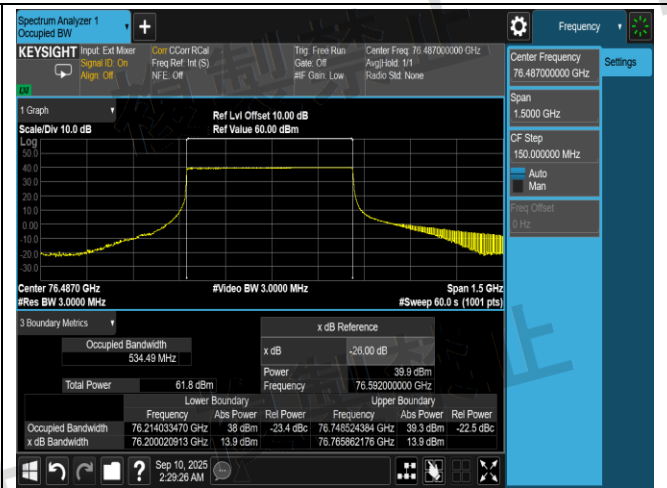
Vibration Test Data:

Test Frequency (GHz)	Amplitude of vibration	Vibration direction	Vibrations Number	Lowest frequency (GHz)	Highest frequency (GHz)	Limit	Result
76.5	3	Up and down	500	76.2135	76.7486	76.0-77.0GHz	Pass
	3	Left and right	500	76.2140	76.7485		Pass
	3	Front and rear	500	76.2137	76.7484		Pass
	1	Up and down	500	76.2136	76.7484		Pass
	1	Left and right	500	76.2136	76.7469		Pass
	1	Front and rear	500	76.2136	76.7497		Pass
	1	Up and down	1800	76.2141	76.7495		Pass
	1	Left and right	1800	76.2136	76.7486		Pass
	1	Front and rear	1800	76.2144	76.7500		Pass

Test plots as below:



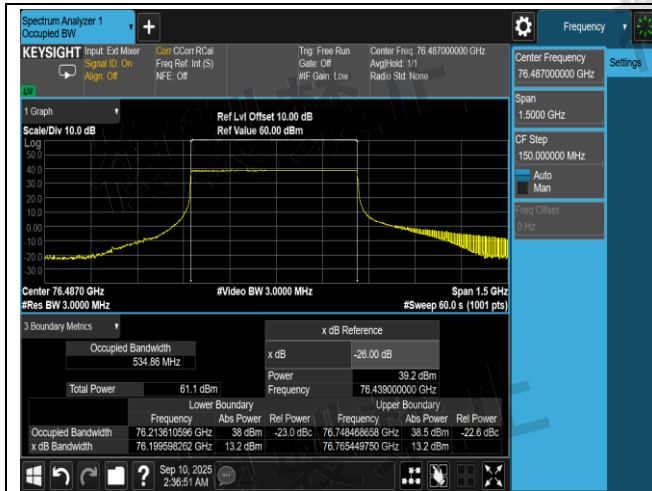
Up+down_ Lowest frequency+ Highest frequency



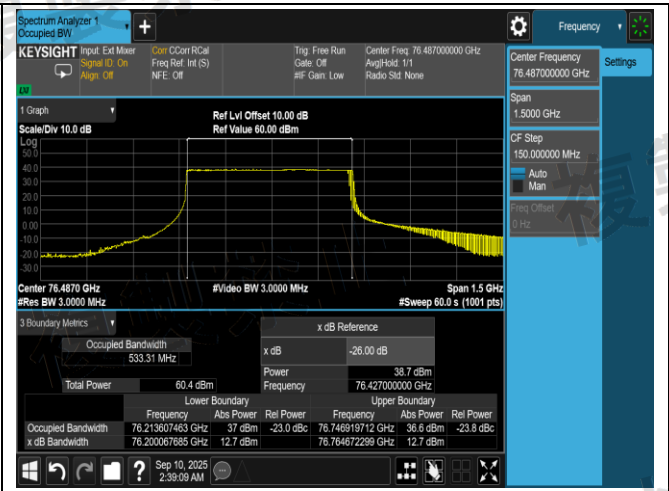
Left+right_ Lowest frequency+ Highest frequency



Front+rear_ Lowest frequency+ Highest frequency



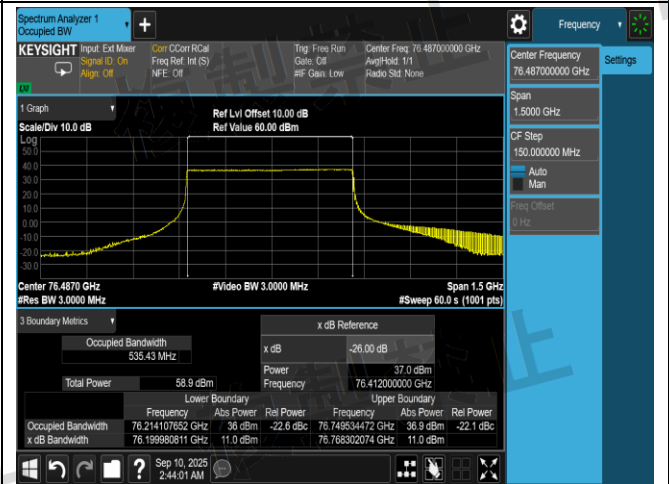
Up+down_Lowest frequency+ Highest frequency



Left+right_Lowest frequency+ Highest frequency



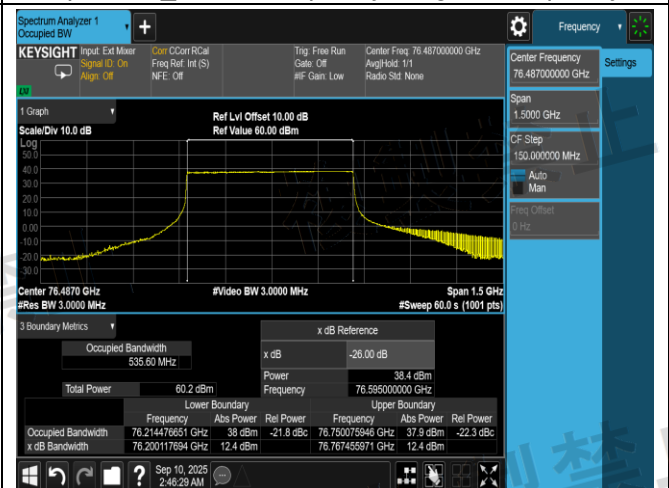
Front+rear_Lowest frequency+ Highest frequency



Up+down_Lowest frequency+ Highest frequency



Left+right_Lowest frequency+ Highest frequency



Left+right_Lowest frequency+ Highest frequency

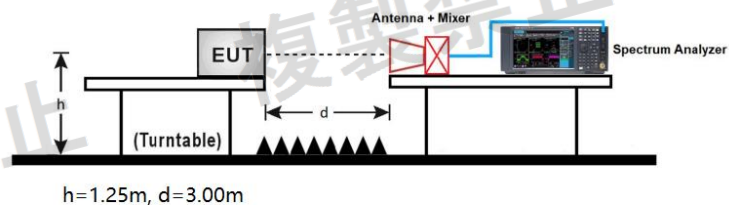
6.6 Occupied Bandwidth (99%)

Test Requirement: Item 8 of Article 2-1

Text Method: MIC notification.No.88 of 2004,Annex 22-14

Test Status: Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.

Test Configuration:



Test Procedure:

1) Test Conditions:

Spectrum Analyzer Occupied BW is used for measurement.

2) EUT conditions:

FMCW Tx

3) Spectrum Analyzer conditions:

Frequency: Test Frequency

Span: 2GHz

RBW: 3MHz

VBW: 3MHz

Sweep Time: Auto

Detector mode: Positive Peak

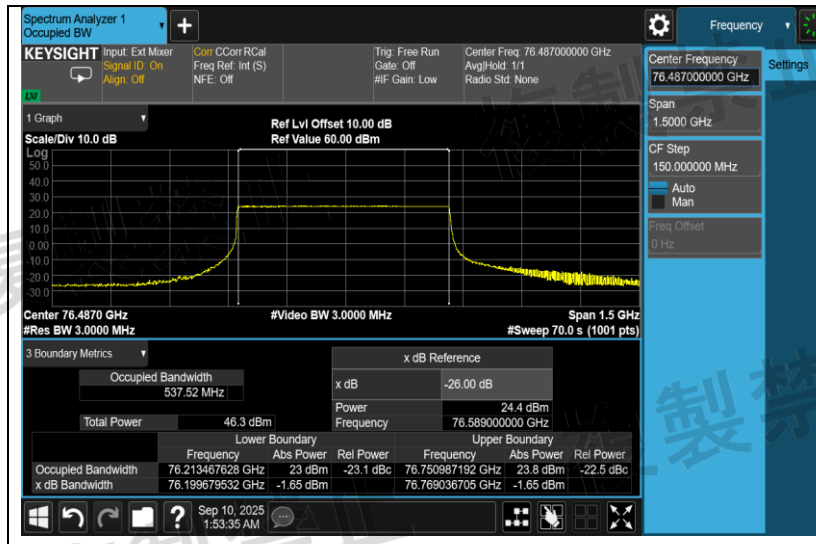
Sweep mode: Max Hold

Test Data:

Test Frequency (GHz)	OBW(GHz)			Limit	Result
	TM 1	TM 2	TM 3		
76.5	0.537	/	/	1GHz	Pass

Test plots as below:

Test mode: TM 1



6.7 Antenna Power

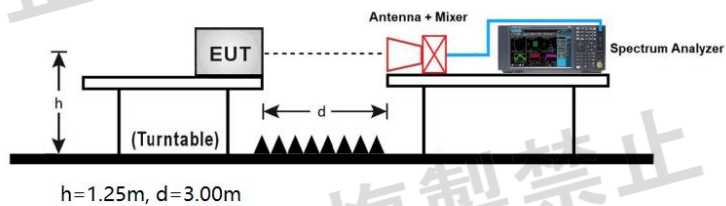
Test Requirement: Item 8 of Article 2-1

0.01W or less

Text Method: MIC notification.No.88 of 2004,Annex 22-14

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Following channel(s) was (were) selected for the final test as listed below.

Test Configuration:



Test Procedure:

1) Test Conditions:

Spectrum Analyzer is used for measurement.

2) EUT conditions:

FMCW Tx

3) Spectrum Analyzer conditions:

Searching the frequency the frequency that gives maximum antenna power

Frequency: Test Frequency

Measure the Peak power of the transmitter.

6.8 Spurious Emission Strength, Outband area and Unwanted Emission Strength, Spurious area

Item 8 of Article 2-1

Test Requirement: Spurious Emission Strength, Outband area: 100uW or less
Unwanted Emission Strength, Spurious area: 50uW or less

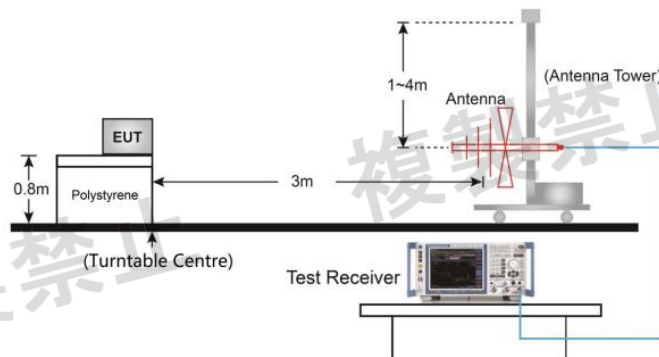
Text Method: MIC notification.No.88 of 2004,Annex 22-14

Test Status: Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

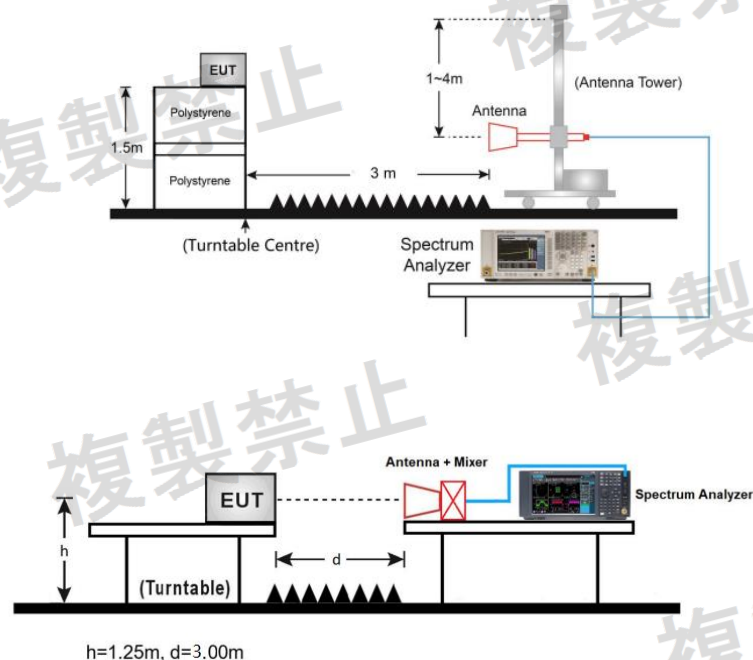
Following channel(s) was (were) selected for the final test as listed below.

Test Configuration:

Below 1GHz Test Setup:



1GHz ~ 40GHz Test Setup:



Test Procedure:

1) Test Conditions:

Spectrum Analyzer is used for measurement.

2) EUT conditions:

FMCW Tx

3) Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 140 GHz by peak mode.

Step 2

IF the value measured by Step1 is 2 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30MHz–1GHz , 1GHz–140GHz

RBW 100 kHz (30–1GHz) , 1 MHz (over 1GHz)

VBW 100 kHz (30–1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

RBW 100 kHz (30–1GHz) , 1 MHz (over 1GHz)

VBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

detector mode RMS

Indication mode Max hold

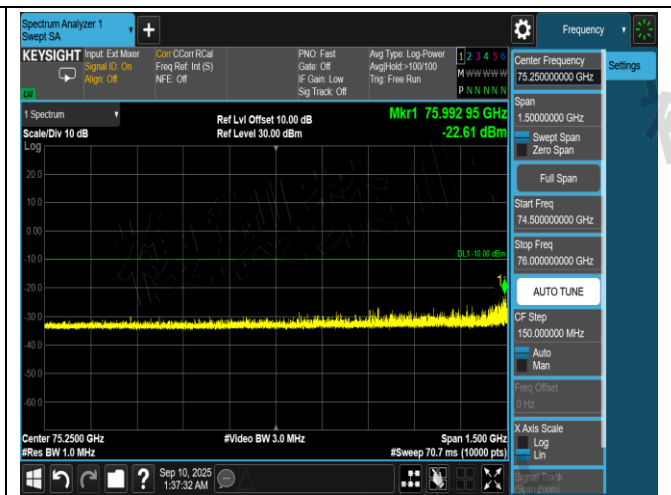
Test Data:

Spurious Emission Strength, Outband area:

Frequency range (GHz)	Frequency (GHz)	Level (dBm)	Level (μ W)	Limit (μ W)	Result
74.5-76	75.93114	-30.40	0.91	100	Pass
74.5-76	75.99295	-22.61	5.48	100	Pass
77-78.5	77.24617	-30.19	0.96	100	Pass
77-78.5	77.00225	-12.63	54.58	100	Pass



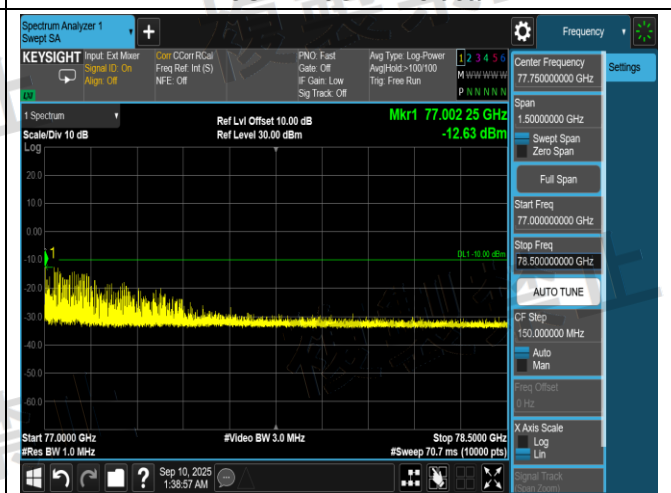
74.5GHz-76GHz-Horizontal



74.5GHz-76GHz-Vertical



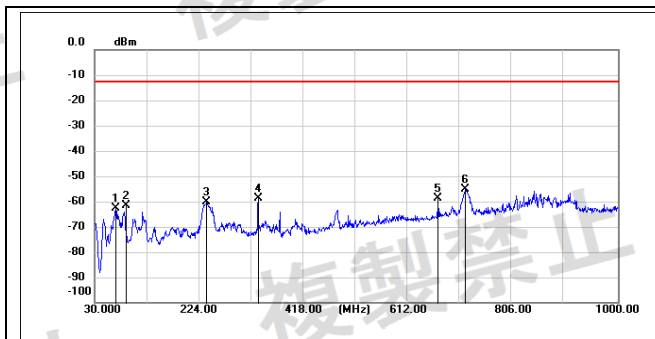
77GHz-78.5GHz-Horizontal



77GHz-78.5GHz-Vertical

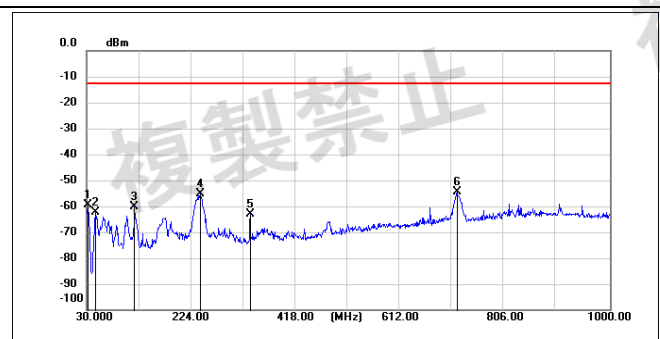
Unwanted Emission Strength, Spurious area:

Frequency range (GHz)	Frequency (GHz)	Level (dBm)	Level (μW)	Limit (μW)	Result
0.03-1	0.7167	-54.63	0.003	50	Pass
1-18	17.5750	-45.68	0.03	50	Pass
18-40	37.8858	-36.77	0.21	50	Pass
40-60	42.5703	-35.72	0.27	50	Pass
60-74.5	70.4619	-29.72	1.07	50	Pass
78.5-90	83.6789	-20.10	9.77	50	Pass
90-140	105.1570	-22.66	5.42	50	Pass



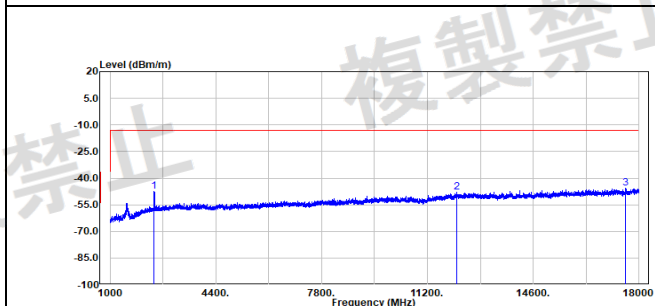
No.	Frequency (MHz)	Reading (dBm)	Correction factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	68.8000	-49.21	-13.31	-62.52	-13.00	-49.52	peak
2	88.2000	-52.47	-9.02	-61.49	-13.00	-48.49	peak
3	237.5800	-53.35	-6.78	-60.13	-13.00	-47.13	peak
4	333.6100	-54.69	-4.08	-58.77	-13.00	-45.77	peak
5	667.2900	-62.07	3.47	-58.60	-13.00	-45.60	peak
6	717.7300	-59.44	4.16	-55.28	-13.00	-42.28	peak

30MHz-1GHz-Horizontal



No.	Frequency (MHz)	Reading (dBm)	Correction factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	31.9400	-56.35	-3.01	-59.36	-13.00	-46.36	peak
2	47.4600	-49.42	-12.98	-62.40	-13.00	-49.40	peak
3	119.2400	-53.78	-6.31	-60.09	-13.00	-47.09	peak
4	240.4900	-48.60	-6.60	-55.20	-13.00	-42.20	peak
5	333.6100	-59.04	-4.08	-63.12	-13.00	-50.12	peak
6	716.7600	-58.78	4.15	-54.63	-13.00	-41.63	peak

30MHz-1GHz-Vertical

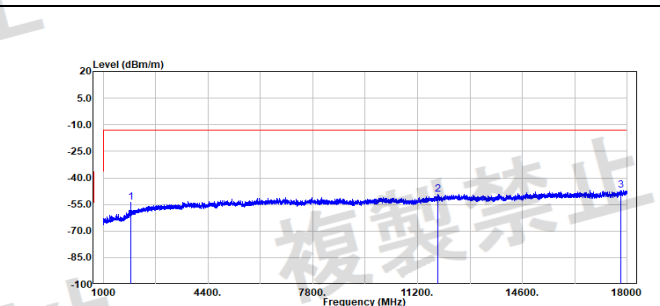


Antenna Polarity :Horizontal

No.	Freq (MHz)	Read level (dBm)	Aux Factor (dB)	Preamp Factor (dB)	Emission Level (dBm/m)	Limit Line (dBm/m)	Over Limit (dB)	Remark
2416.10		-40.90	48.22	54.91	-47.59	-13.00	-34.59	Peak
12140.10		-54.57	59.87	53.25	-47.95	-13.00	-34.95	Peak
17575.00		-58.33	63.95	51.30	-45.68	-13.00	-32.68	Peak

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

1GHz-18GHz-Horizontal

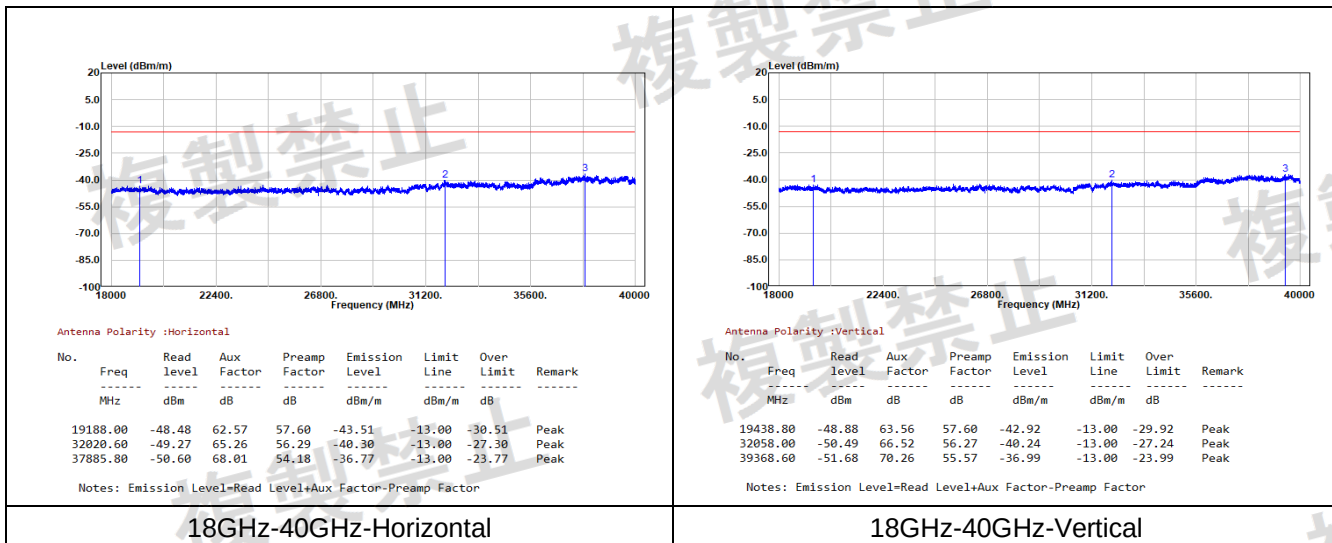


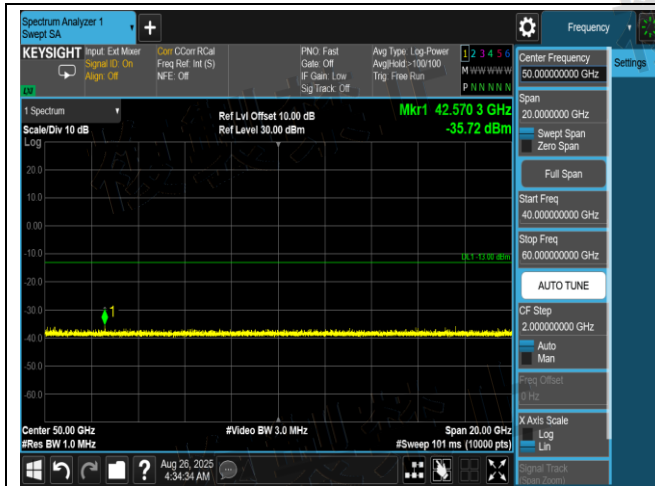
Antenna Polarity :Vertical

No.	Freq (MHz)	Read level (dBm)	Aux Factor (dB)	Preamp Factor (dB)	Emission Level (dBm/m)	Limit Line (dBm/m)	Over Limit (dB)	Remark
1895.90		-43.91	45.09	54.85	-53.67	-13.00	-40.67	Peak
11869.80		-54.75	58.51	53.25	-49.49	-13.00	-36.49	Peak
17789.20		-58.81	63.17	51.32	-46.96	-13.00	-33.96	Peak

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

1GHz-18GHz-Vertical





40GHz-60GHz-Horizontal



40GHz-60GHz-Vertical



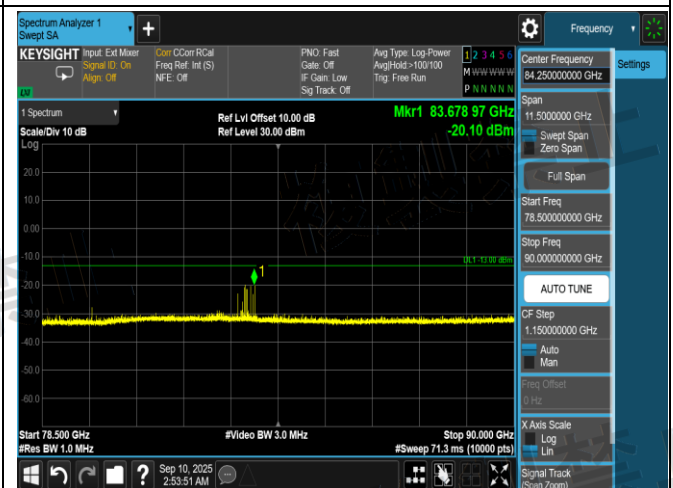
60GHz-74.5GHz-Horizontal



60GHz-74.5GHz-Vertical



78.5GHz-90GHz-Horizontal



78.5GHz-90GHz-Vertical



90GHz-140GHz-Horizontal



90GHz-140GHz-Vertical

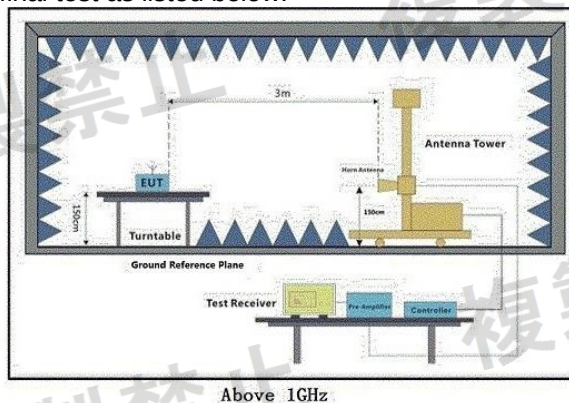
6.9 Secondary Radiated Emission Strength

Test Requirement: Item 8 of Article 2-1
100uW or less

Text Method: MIC notification.No.88 of 2004,Annex 22-14

Test Status: Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.

Test Configuration:



Test Procedure:

1) Test Conditions:

Spectrum Analyzer is used for measurement.

2) EUT conditions:

FMCW Tx

3) Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 140 GHz by peak mode.

Step 2

IF the value measured by Step1 is 2 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30MHz – 1GHz , 1GHz –140GHz

RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

RBW 100kHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 100kHz (30 – 1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

detector mode RMS

Indication mode Max hold

Test Data:

Frequency range (GHz)	Frequency (GHz)	Level (dBm)	Level (μ W)	Limit (μ W)	Result
74.5-76	75.09241	-32.01	0.63	100	Pass
74.5-76	75.21032	-32.09	0.62	100	Pass
77-78.5	77.00285	-31.60	0.69	100	Pass
77-78.5	77.59571	-30.96	0.80	100	Pass



74.5GHz-76GHz-Horizontal



74.5GHz-76GHz-Vertical

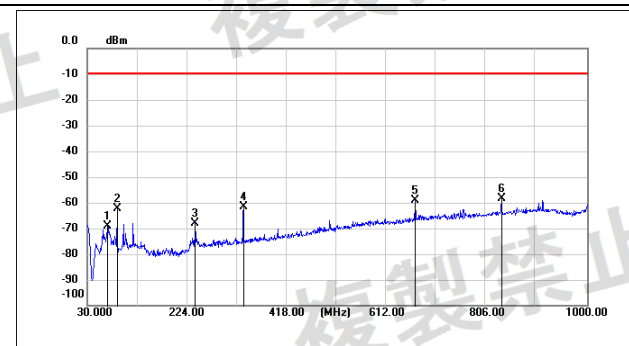


77GHz-78.5GHz-Horizontal



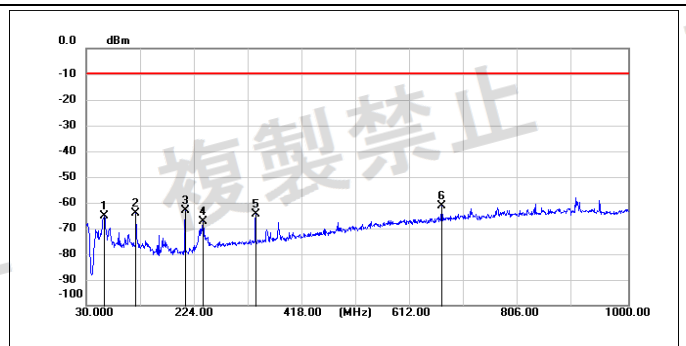
77GHz-78.5GHz-Vertical

Frequency range (GHz)	Frequency (GHz)	Level (dBm)	Level (μ W)	Limit (μ W)	Result
0.03-1	0.8341	-58.56	0.001	100	Pass
1-18	17.7314	-46.07	0.02	100	Pass
18-40	37.4986	-37.41	0.18	100	Pass
40-60	43.3543	-36.15	0.24	100	Pass
60-74.5	73.1195	-30.85	0.82	100	Pass
78.5-90	81.0762	-29.94	1.01	100	Pass
90-140	105.2670	-22.09	6.18	100	Pass



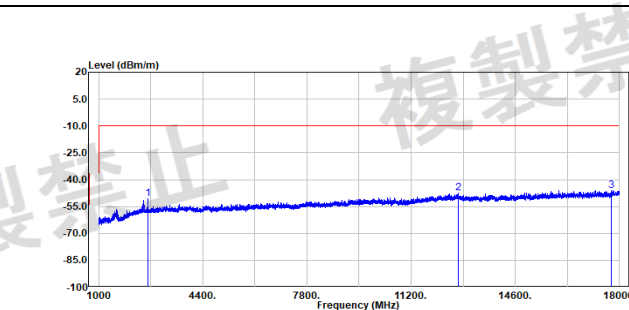
No.	Frequency (MHz)	Reading (dBm)	Correction factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	69.7700	-56.04	-13.12	-69.16	-10.00	-59.16	peak
2	88.2000	-53.23	-9.02	-62.25	-10.00	-52.25	peak
3	239.5200	-61.55	-6.65	-68.20	-10.00	-58.20	peak
4	333.6100	-57.61	-4.08	-61.69	-10.00	-51.69	peak
5	667.2900	-62.53	3.47	-59.06	-10.00	-49.06	peak
6	834.1300	-64.00	5.44	-58.56	-10.00	-48.56	peak

30MHz-1GHz-Horizontal



No.	Frequency (MHz)	Reading (dBm)	Correction factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	62.0100	-50.44	-14.69	-65.13	-10.00	-55.13	peak
2	119.2400	-57.67	-6.31	-63.98	-10.00	-53.98	peak
3	207.5100	-54.26	-8.60	-62.86	-10.00	-52.86	peak
4	239.5200	-60.67	-6.65	-67.32	-10.00	-57.32	peak
5	333.6100	-60.42	-4.08	-64.50	-10.00	-54.50	peak
6	667.2900	-64.56	3.47	-61.09	-10.00	-51.09	peak

30MHz-1GHz-Vertical

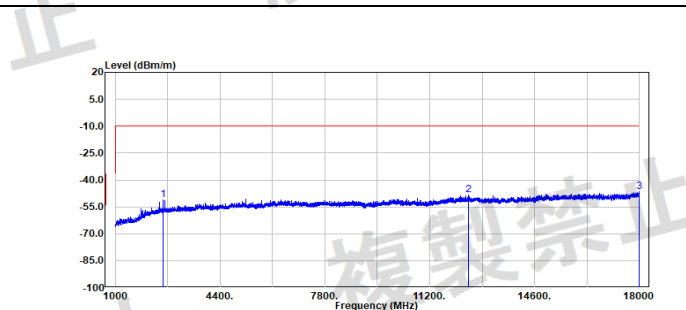


Antenna Polarity :Horizontal

No.	Freq (MHz)	Read level (dBm)	Aux Factor (dB)	Preamp Factor (dB)	Emission Level (dBm/m)	Limit Line (dBm/m)	Over Limit (dB)	Remark
	2611.60	-44.17	48.50	54.94	-50.61	-10.00	-40.61	Peak
	12748.70	-54.92	60.59	53.32	-47.65	-10.00	-37.65	Peak
	17731.40	-58.79	64.03	51.31	-46.07	-10.00	-36.07	Peak

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

1GHz-18GHz-Horizontal

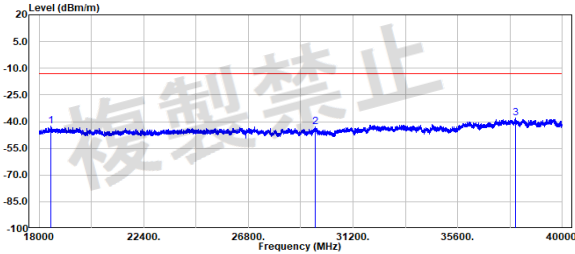


Antenna Polarity :Vertical

No.	Freq (MHz)	Read level (dBm)	Aux Factor (dB)	Preamp Factor (dB)	Emission Level (dBm/m)	Limit Line (dBm/m)	Over Limit (dB)	Remark
	2533.40	-44.66	48.35	54.93	-51.24	-10.00	-41.24	Peak
	12469.90	-54.47	59.50	53.29	-48.26	-10.00	-38.26	Peak
	17994.90	-59.76	63.66	50.68	-46.78	-10.00	-36.78	Peak

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

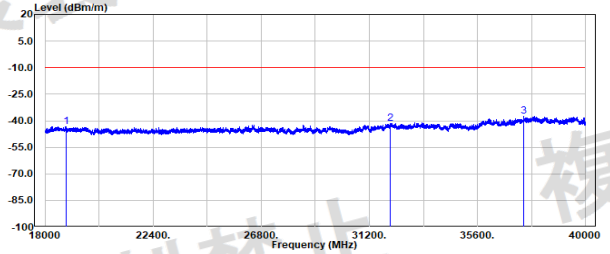
1GHz-18GHz-Vertical



Antenna Polarity :Horizontal

No.	Freq MHz	Read Level dBm	Aux Factor dB	Preamp Factor dB	Emission Level dBm/m	Limit Line dBm/m	Over Limit dB	Remark
18468.60	-46.62	61.67	57.49	-42.44	-13.00	-29.44	Peak	
29605.00	-51.64	64.21	55.60	-43.03	-13.00	-30.03	Peak	
38048.60	-52.02	68.13	54.14	-38.03	-13.00	-25.03	Peak	

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

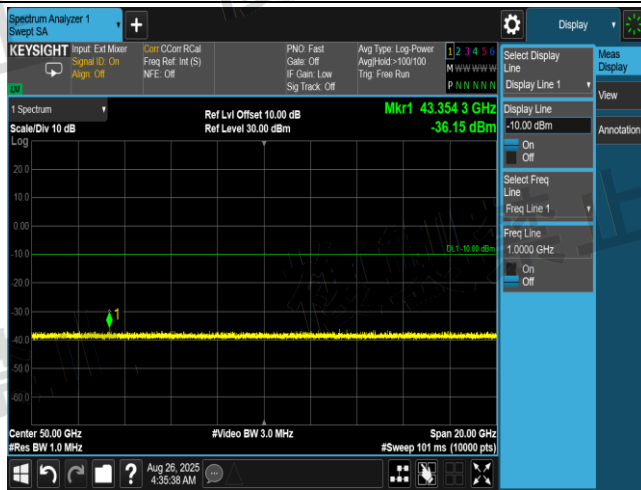


Antenna Polarity :Vertical

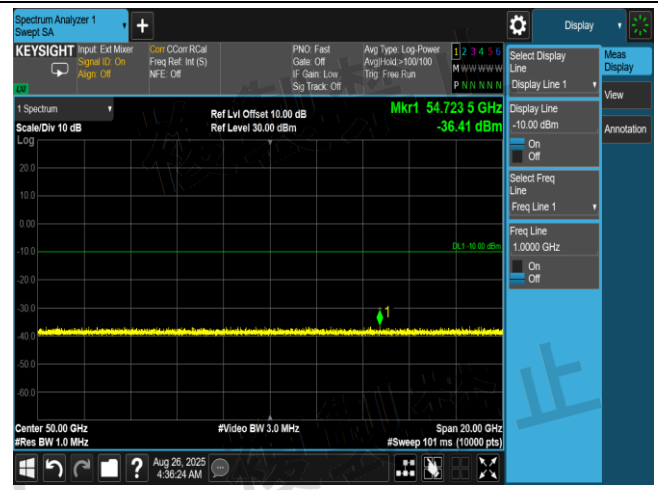
No.	Freq MHz	Read Level dBm	Aux Factor dB	Preamp Factor dB	Emission Level dBm/m	Limit Line dBm/m	Over Limit dB	Remark
18851.40	-49.13	63.34	57.57	-43.36	-10.00	-33.36	Peak	
32060.20	-51.69	66.51	56.26	-41.44	-10.00	-31.44	Peak	
37498.60	-51.58	68.97	54.80	-37.41	-10.00	-27.41	Peak	

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

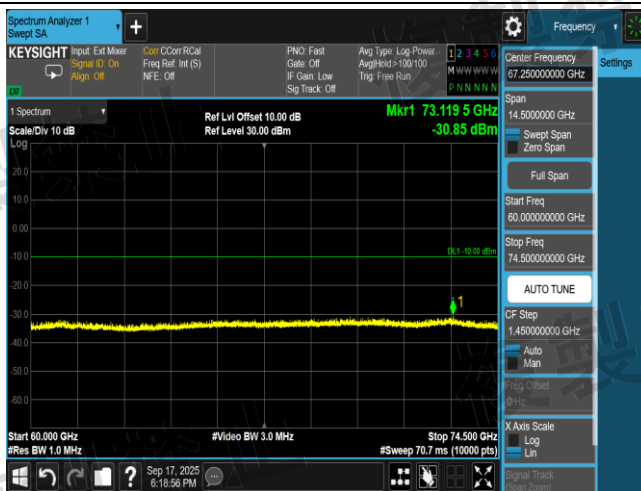
18GHz-40GHz-Horizontal



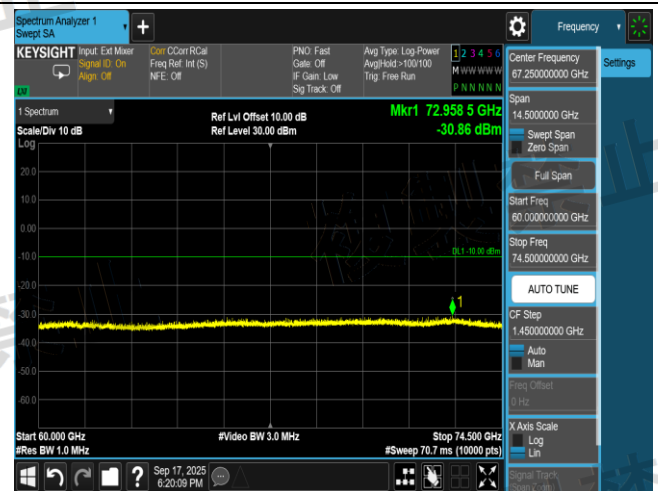
18GHz-40GHz-Vertical



40GHz-60GHz-Horizontal



40GHz-60GHz-Vertical

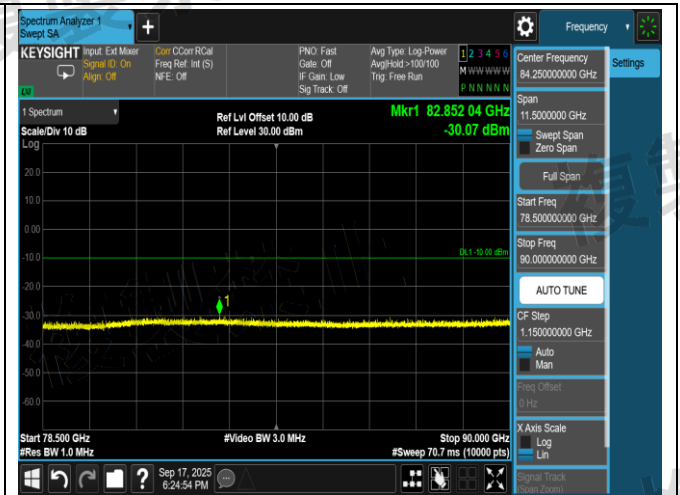


60GHz-74.5GHz-Horizontal

60GHz-74.5GHz-Vertical



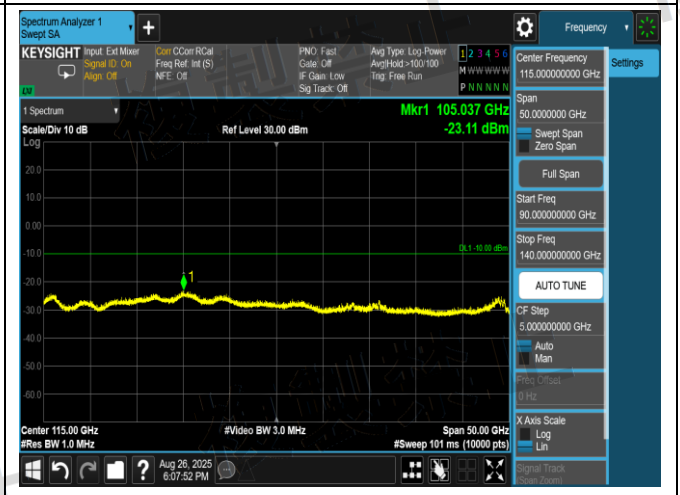
78.5GHz-90GHz-Horizontal



78.5GHz-90GHz-Vertical



90GHz-140GHz-Horizontal



90GHz-140GHz-Vertical

6.10 Radion waves exposed to the human

Test Requirement: Item 8 of Article 2-1

Text Method: MIC notification.No.88 of 2004,Annex 22-14
2mW/cm² or less

6.10.1 Calculation Formula

$$P_d = (P_{out} * G) / 4\pi R^2$$

Where:

P_d = Power density in mW/cm²

P_{out} = Output power to antenna in mW

G = Antenna Gain in linear scale

π = 3.14

R = distance to the center of radiation of antenna (in meter) = 20cm

NOTE: P_d limit = 2mW/cm².

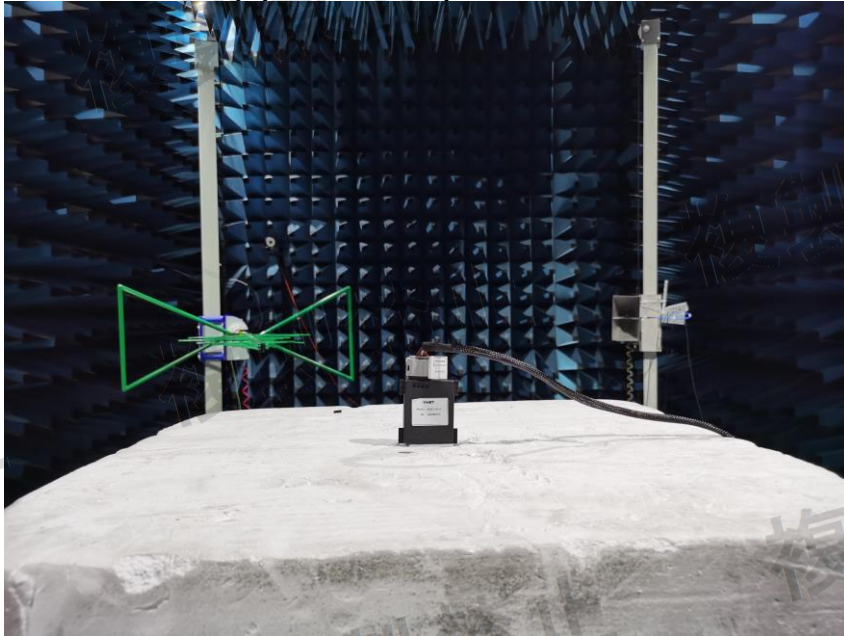
6.10.2 Test Results

Max. Conducted Power P (mW)	Gain in Linear Scale G	Operation Distance R (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
7.67	110.660	20	0.16886	2	Pass

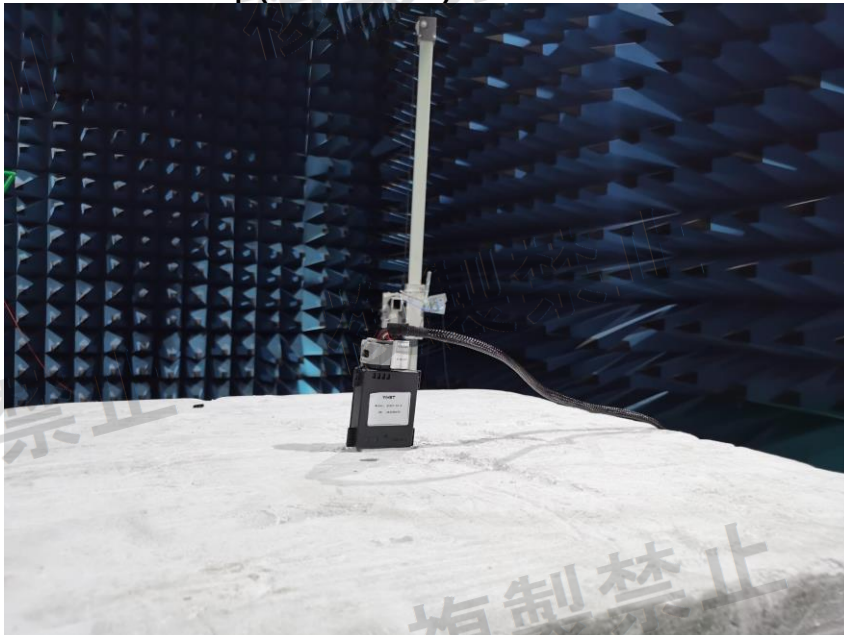
Which is below the max permitted sending level of 2mW/m².

7 Test Setup Photo

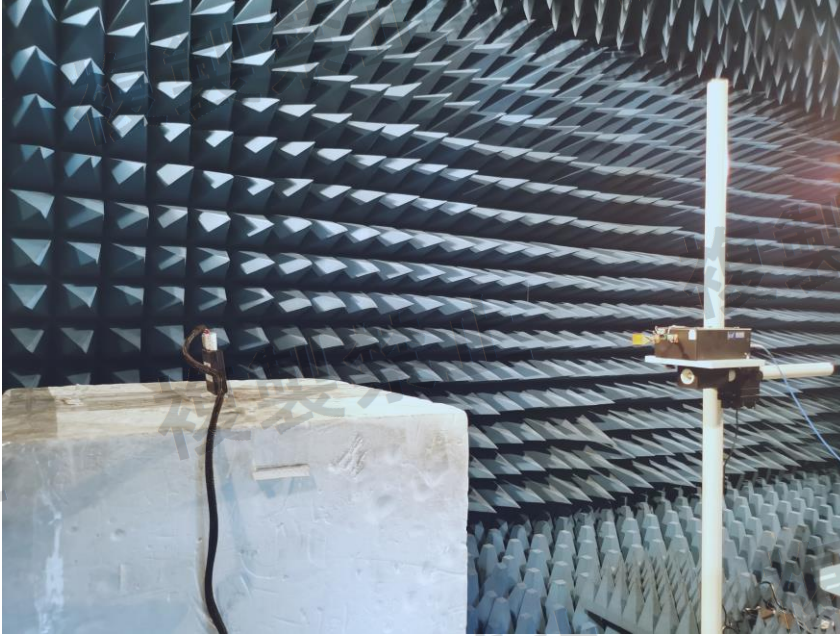
Radiated test setup (30MHz-18GHz)



Radiated test setup (18GHz-40GHz)



Radiated test setup (Above 40GHz)



8 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2508001807AT

--End of the Report--