

FCC Test Report

Applicant : Shenzhen Qianyan Technology LTD

Address : No. 3301, Block C, Section 1, Chuangzhi
Yuncheng Building, Liuxian Avenue, Xili
Community, Xili Street, Nanshan District,
Shenzhen, 518000, China

Product Name : Govee Strip Light with Cover

Report Date : Aug. 05, 2024

Shenzhen Anbotek Compliance Laboratory Limited



Shenzhen Anbotek Compliance Laboratory Limited

Address: 1/F., Building D, Sogood Science and Technology Park, Sanwei Community,
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Report No.: 18220WC40084901

FCC ID: 2A7VD-H61D5

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TEST REPORT

Applicant : Shenzhen Qianyan Technology LTD

Manufacturer : Shenzhen Qianyan Technology LTD

Product Name : Govee Strip Light with Cover

Model No. : H61B6, H61B3

Trade Mark : Govee

Rating(s) : H61B6 Input: 24V $\Rightarrow$ 3A
H61B3 Input: 24V $\Rightarrow$ 2A

Test Standard(s) : 47 CFR Part 15.247

ANSI C63.10-2020

KDB 558074 D01 15.247 Meas Guidance v05r02

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with above listed standard(s) requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt

Apr. 25, 2024

Date of Test

Apr. 25 ~ May 23, 2024

Prepared By

Nian xiu Chen

(Nianxiu Chen)

Approved & Authorized Signer

Edward Pan

(Edward Pan)

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Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Aug. 05, 2024

Note 1:

This is a Class II application which was based on the original report 18220WC30239101. The difference between the original device and current one described as following:

1. Change the product name to: Govee Strip Light with Cover.
2. Add models: H61B6 with adapter(BI72G-240300-E2) and 10m(5m*2) of light;
H61B3" with adapter(BI48G-240200-AdU) and 10m(3m*1+1m*7) of light strip.

The changes are not related with the other RF parameters, only conducted emission and radiation spurious emission testing for "H61B6" and "H61B3".



1. General Information

1.1. Client Information

Applicant	:	Shenzhen Qianyan Technology LTD
Address	:	No. 3301, Block C, Section 1, Chuangzhi Yuncheng Building, Liuxian Avenue, Xili Community, Xili Street, Nanshan District, Shenzhen, 518000, China
Manufacturer	:	Shenzhen Qianyan Technology LTD
Address	:	No. 3301, Block C, Section 1, Chuangzhi Yuncheng Building, Liuxian Avenue, Xili Community, Xili Street, Nanshan District, Shenzhen, 518000, China

1.2. Description of Device (EUT)

Product Name	:	Govee Strip Light with Cover
Model No.	:	H61B6, H61B3 (Note: According to the model differences on page 6.)
Trade Mark	:	Govee
Test Power Supply	:	DC 24V from adapter input AC 120V/60Hz
Test Sample No.	:	H61B6: 1-2-1(Normal Sample), H61B3: 1-2-2(Normal Sample)
RF Specification		
Operation Frequency	:	2402MHz to 2480MHz
Number of Channel	:	40
Modulation Type	:	GFSK
Antenna Type	:	PCB Antenna
Antenna Gain(Peak)	:	2.45dBi
Remark: (1) All of the RF specification are provided by customer. (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		



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Model differences:

Model No.	Light strip length (m)	Adapter
H61B6	10	Model: BI72G-240300-E2 Input: 100-240V~ 50/60Hz 1.8A Output: 24V= 3A
H61B3	10	Model: BI48G-240200-AdU Input: 100-240V~, 50/60Hz, 1.4A Output: 24V= 2A
	3	Model: BI48G-240200-AdU Input: 100-240V~, 50/60Hz, 1.4A Output: 24V= 2A

1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
/	/	/	/

1.4. Operation channel list

Operation Band:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

1.5. Description of Test Modes

Pretest Modes	Descriptions
TM1	Keep the EUT in continuously transmitting mode with GFSK modulation.



1.6. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.4dB
Occupied Bandwidth	925Hz
Conducted Output Power	0.76dB
Power Spectral Density	0.76dB
Conducted Spurious Emission	1.24dB
Radiated spurious emissions (above 1GHz)	1G-6GHz: 4.78dB; 6G-18GHz: 4.88dB 18G-40GHz: 5.68dB
Radiated emissions (Below 30MHz)	3.53dB
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.92dB; Vertical: 4.52dB
The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

1.7. Test Summary

Test Items	Test Modes	Status
Antenna requirement	/	P
Conducted Emission at AC power line	Mode1	P
Maximum Conducted Output Power	Mode1	P
Emissions in frequency bands (below 1GHz)	Mode1	P
Emissions in frequency bands (above 1GHz)	Mode1	P
Note: P: Pass N: N/A, not applicable		



1.8. Description of Test Facility

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

FCC-Registration No.: 434132

Shenzhen Anbotech Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 434132.

ISED-Registration No.: 8058A

Shenzhen Anbotech Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotech Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.

1.9. Disclaimer

1. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
2. The test report is invalid if there is any evidence and/or falsification.
3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
4. This document may not be altered or revised in any way unless done so by Anbotech and all revisions are duly noted in the revisions section.
5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.



1.10. Test Equipment List**Conducted Emission at AC power line**

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2024-01-18	2025-01-17
2	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	2024-01-17	2025-01-16
3	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	/	/
4	EMI Test Receiver	Rohde & Schwarz	ESPI3	100926	2023-10-12	2024-10-11

Maximum Conducted Output Power

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80B	N/A	2023-10-16	2024-10-15
2	DC Power Supply	IVYTECH	IV3605	1804D360 510	2023-10-20	2024-10-19
3	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	2023-05-26	2024-05-25
4	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY505318 23	2024-02-22	2025-02-21
5	Oscilloscope	Tektronix	MDO3012	C020298	2023-10-12	2024-10-11
6	MXG RF Vector Signal Generator	Agilent	N5182A	MY474206 47	2024-02-04	2025-02-03

Emissions in frequency bands (above 1GHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
2	EMI Preamplifier	SKET Electronic	LNPA-0118G-45	SKET-PA-002	2024-01-17	2025-01-16
3	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	2022-10-16	2025-10-15
4	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	/	/
5	Horn Antenna	A-INFO	LB-180400-KF	J21106062 8	2023-10-12	2024-10-11
6	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	2023-05-26	2024-05-25
7	Amplifier	Talent Microwave	TLLA18G40 G-50-30	23022802	2023-05-25	2024-05-24

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Emissions in frequency bands (below 1GHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
2	Pre-amplifier	SONOMA	310N	186860	2024-01-17	2025-01-16
3	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	2022-10-23	2025-10-22
4	Loop Antenna (9K-30M)	Schwarzbeck	FMZB1519 B	00053	2023-10-12	2024-10-11
5	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	/	/

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2. Antenna requirement

Test Requirement:

Refer to 47 CFR Part 15.203, 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 shall be considered sufficient to comply with the provisions of this section.

2.1. Conclusion

The antenna is a PCB Antenna which permanently attached, and the best case gain of the antenna is 2.45dBi. It complies with the standard requirement.



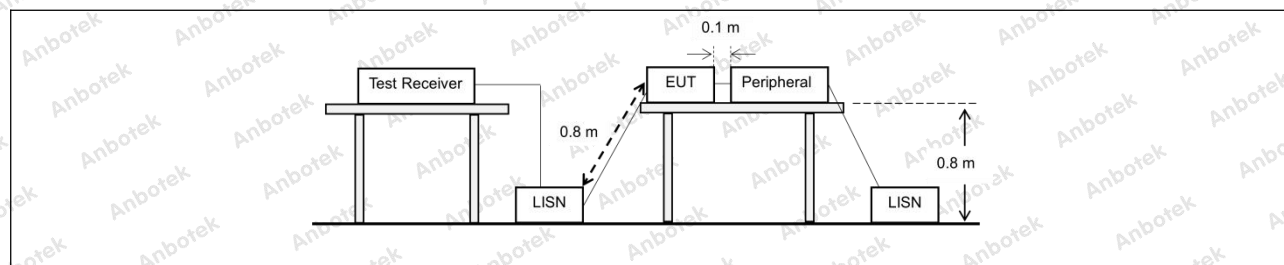
3. Conducted Emission at AC power line

Test Requirement:	Refer to 47 CFR 15.207(a), Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dB μ V)	
		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.		
Test Method:	ANSI C63.10-2020 section 6.2		
Procedure:	Refer to ANSI C63.10-2020 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

3.1. EUT Operation

Operating Environment:	
Test mode:	1: TX mode: Keep the EUT in continuously transmitting mode with GFSK modulation.

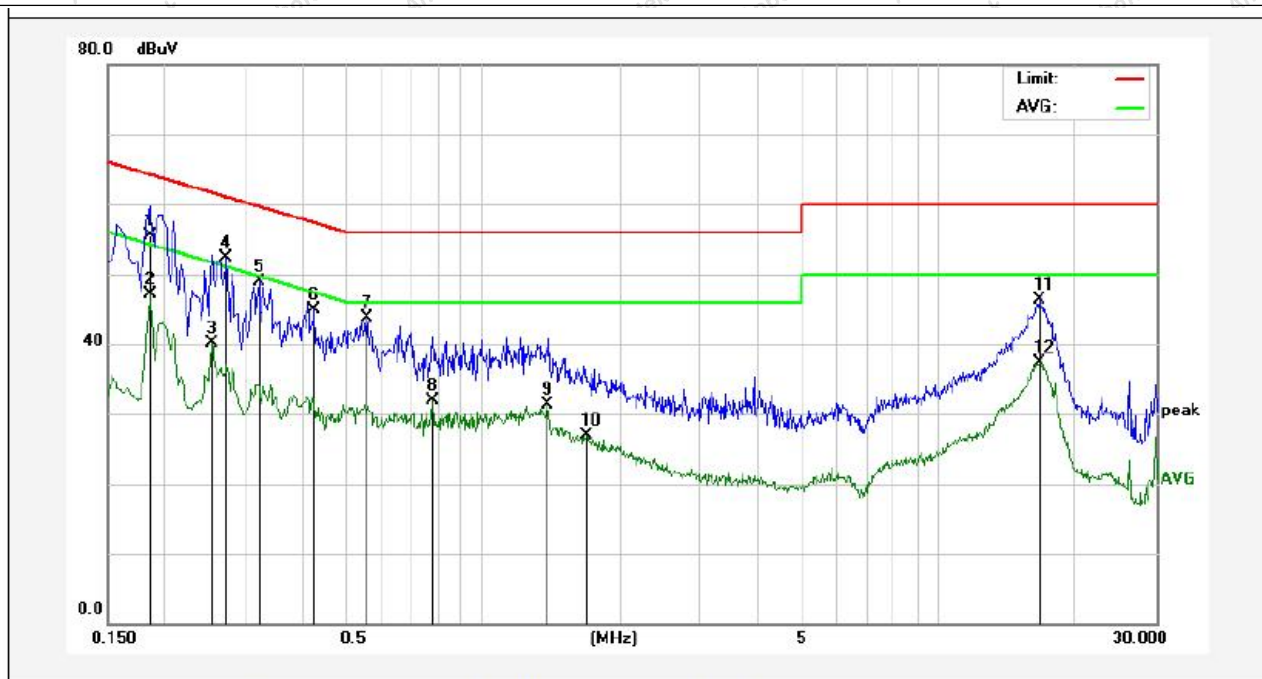
3.2. Test Setup



3.3. Test Data

Temperature:	21.2 °C	Humidity:	52 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B6				

TM1 / Line: Line / Band: 2400-2483.5 MHz / BW: 1 / CH: L



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1860	37.71	17.82	55.53	64.21	-8.68	QP	
2	0.1860	29.25	17.82	47.07	54.21	-7.14	AVG	
3	0.2540	22.36	17.84	40.20	51.62	-11.42	AVG	
4	0.2740	34.48	17.84	52.32	60.99	-8.67	QP	
5	0.3220	31.16	17.84	49.00	59.65	-10.65	QP	
6	0.4260	27.02	17.82	44.84	57.33	-12.49	QP	
7	0.5580	25.78	17.86	43.64	56.00	-12.36	QP	
8	0.7780	13.94	17.87	31.81	46.00	-14.19	AVG	
9	1.3820	13.52	17.86	31.38	46.00	-14.62	AVG	
10	1.6900	9.03	17.85	26.88	46.00	-19.12	AVG	
11	16.6259	28.17	18.19	46.36	60.00	-13.64	QP	
12	16.6259	19.15	18.19	37.34	50.00	-12.66	AVG	



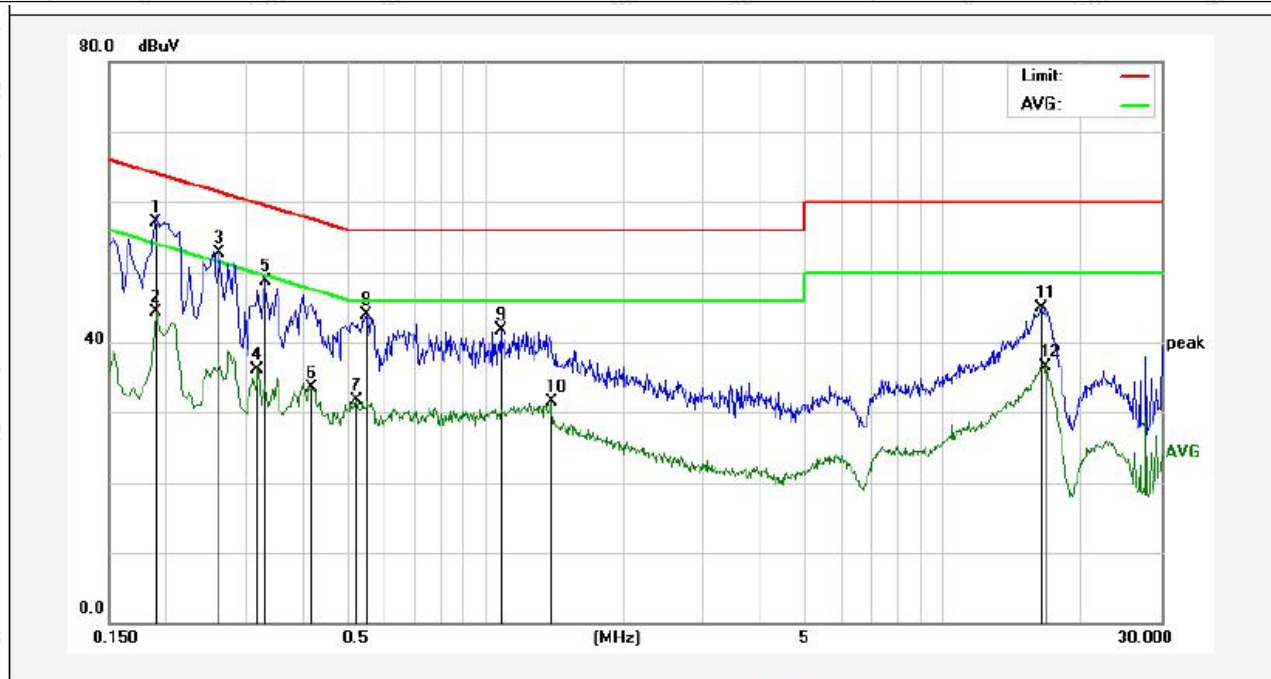
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Temperature:	21.2 °C	Humidity:	52 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B6				

TM1 / Line: Neutral / Band: 2400-2483.5 MHz / BW: 1 / CH: L



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1900	39.32	17.82	57.14	64.03	-6.89	QP	
2	0.1900	26.42	17.82	44.24	54.03	-9.79	AVG	
3	0.2620	34.89	17.84	52.73	61.36	-8.63	QP	
4	0.3180	18.36	17.84	36.20	49.76	-13.56	AVG	
5	0.3300	30.97	17.83	48.80	59.45	-10.65	QP	
6	0.4180	15.60	17.82	33.42	47.49	-14.07	AVG	
7	0.5220	13.88	17.86	31.74	46.00	-14.26	AVG	
8	0.5500	26.11	17.86	43.97	56.00	-12.03	QP	
9	1.0780	23.76	17.86	41.62	56.00	-14.38	QP	
10	1.3940	13.72	17.86	31.58	46.00	-14.42	AVG	
11	16.4580	26.72	18.19	44.91	60.00	-15.09	QP	
12	16.7860	18.35	18.20	36.55	50.00	-13.45	AVG	

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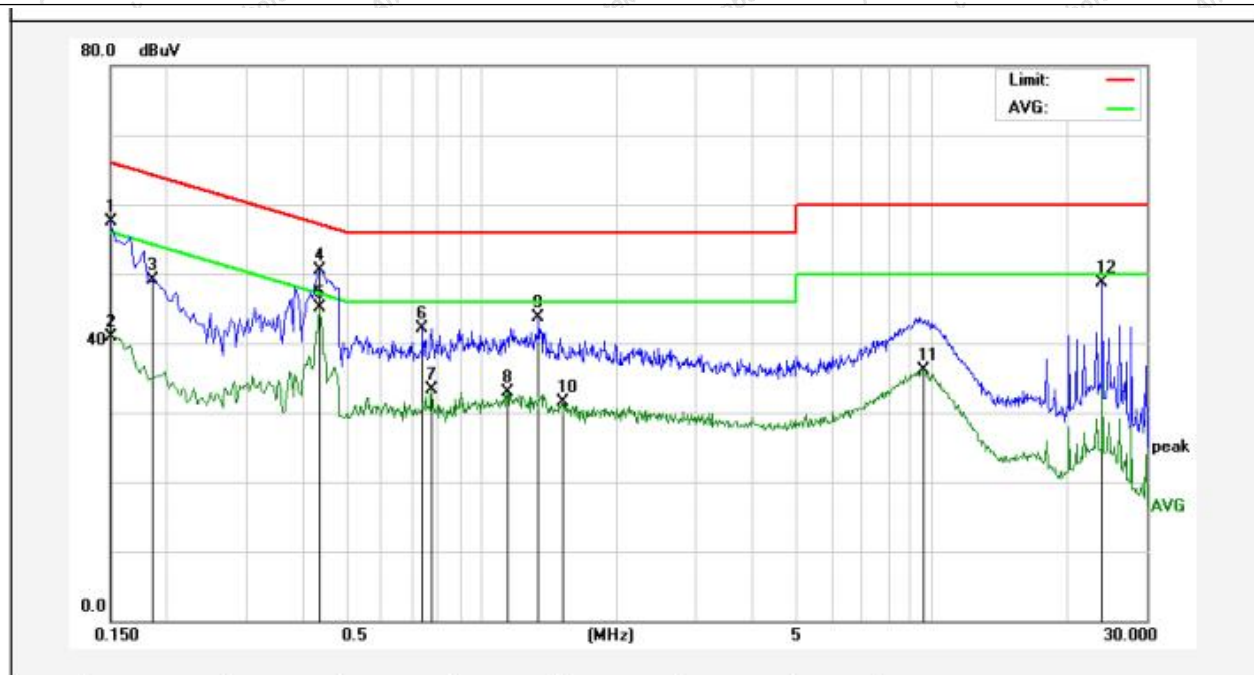
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Temperature:	21.2 °C	Humidity:	52 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B3				

TM1 / Line: Line / Band: 2400-2483.5 MHz / BW: 1 / CH: M



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1500	39.59	17.82	57.41	65.99	-8.58	QP	
2	0.1500	23.13	17.82	40.95	55.99	-15.04	AVG	
3	0.1860	31.23	17.83	49.06	64.21	-15.15	QP	
4	0.4380	32.63	17.83	50.46	57.10	-6.64	QP	
5	0.4380	27.35	17.83	45.18	47.10	-1.92	AVG	
6	0.7420	24.29	17.87	42.16	56.00	-13.84	QP	
7	0.7780	15.40	17.86	33.26	46.00	-12.74	AVG	
8	1.1420	14.97	17.85	32.82	46.00	-13.18	AVG	
9	1.3420	25.77	17.84	43.61	56.00	-12.39	QP	
10	1.5339	13.68	17.84	31.52	46.00	-14.48	AVG	
11	9.5620	18.13	17.96	36.09	50.00	-13.91	AVG	
12	24.0020	29.69	18.97	48.66	60.00	-11.34	QP	

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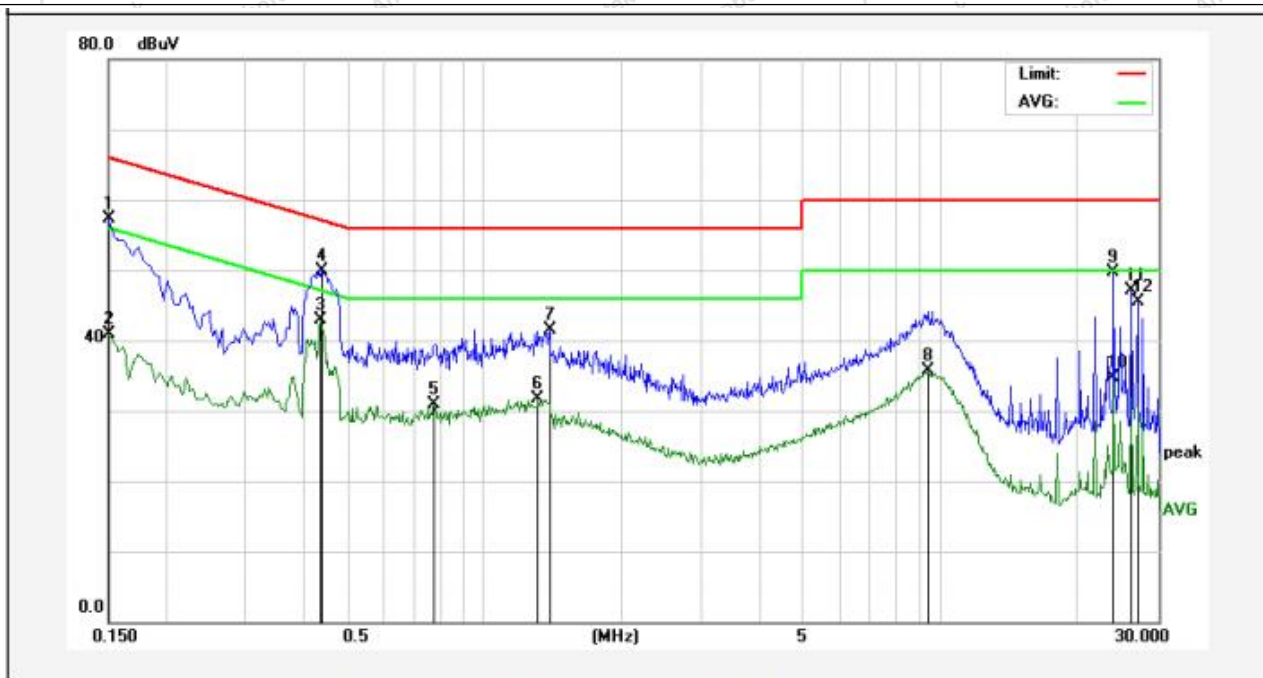
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Temperature:	21.2 °C	Humidity:	52 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B3				

TM1 / Line: Neutral / Band: 2400-2483.5 MHz / BW: 1 / CH: M



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1500	39.55	17.82	57.37	65.99	-8.62	QP	
2	0.1500	23.18	17.82	41.00	55.99	-14.99	AVG	
3	0.4380	24.98	17.83	42.81	47.10	-4.29	AVG	
4	0.4420	32.17	17.83	50.00	57.02	-7.02	QP	
5	0.7780	13.00	17.86	30.86	46.00	-15.14	AVG	
6	1.3099	13.84	17.84	31.68	46.00	-14.32	AVG	
7	1.3900	23.67	17.84	41.51	56.00	-14.49	QP	
8	9.3740	17.79	17.96	35.75	50.00	-14.25	AVG	
9	23.9980	30.65	18.97	49.62	60.00	-10.38	QP	
10	23.9980	15.76	18.97	34.73	50.00	-15.27	AVG	
11	26.2500	28.00	19.07	47.07	60.00	-12.93	QP	
12	26.9980	26.51	19.03	45.54	60.00	-14.46	QP	

Note: Only record the worst data in the report.



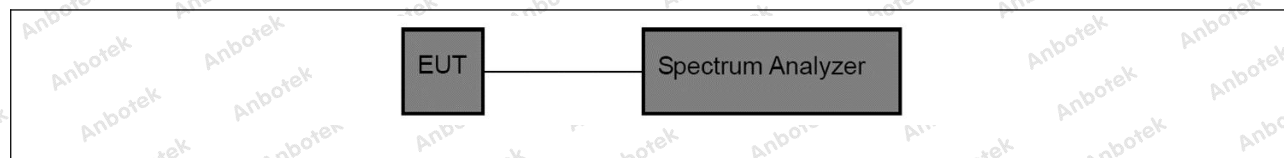
4. Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Test Limit:	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	ANSI C63.10-2020 section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2020, section 11.9.1 Maximum peak conducted output power

4.1. EUT Operation

Operating Environment:	
Test mode:	1: TX mode: Keep the EUT in continuously transmitting mode with GFSK modulation.

4.2. Test Setup



4.3. Test Data

Note: For pre-scan, the result is equal to original, so the original data is referenced.

Temperature:	26.2 °C	Humidity:	44 %	Atmospheric Pressure:	101 kPa
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TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.16	≤30	PASS
		2440	-3.17	≤30	PASS
		2480	-3.31	≤30	PASS



5. Emissions in frequency bands (below 1GHz)

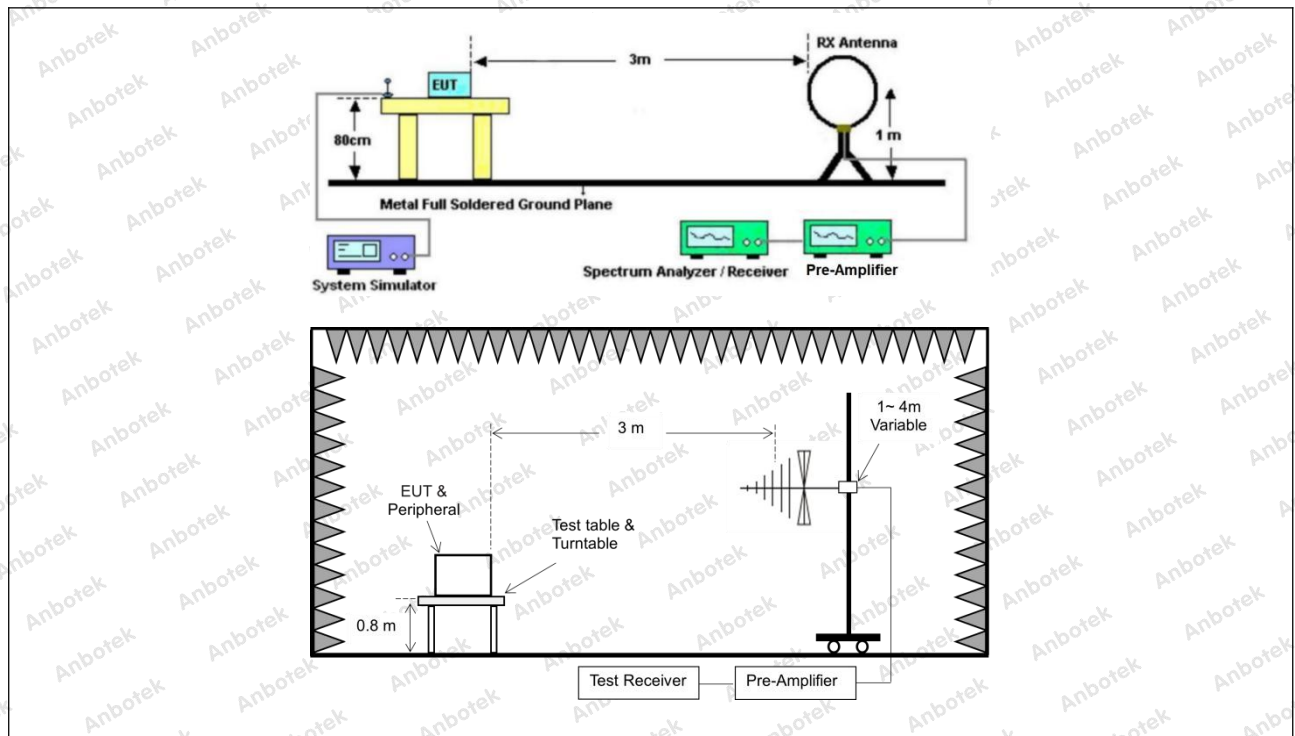
Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.			
Test Method:	ANSI C63.10-2020 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2020 section 6.6.4		

5.1. EUT Operation

Operating Environment:	
Test mode:	1: TX mode: Keep the EUT in continuously transmitting mode with GFSK modulation.



5.2. Test Setup

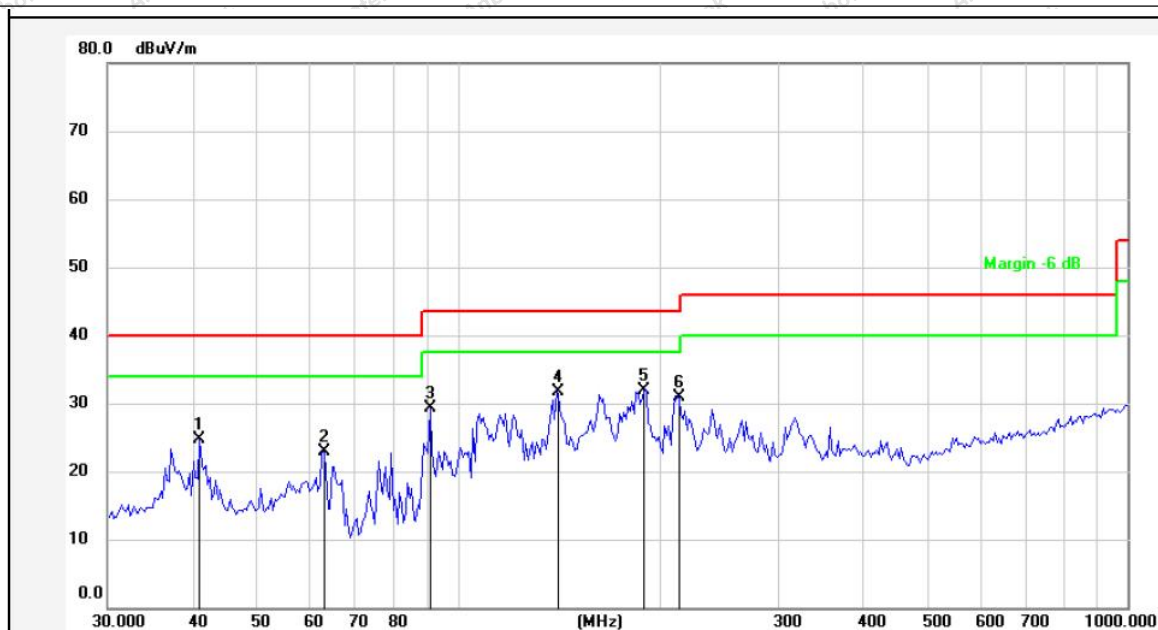


5.3. Test Data

The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Temperature:	23.5 °C	Humidity:	49 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B6				

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: M



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector			
1	41.1320	41.58	-16.88	24.70	40.00	-15.30	QP			
2	63.0916	41.83	-18.92	22.91	40.00	-17.09	QP			
3	90.8554	47.44	-18.20	29.24	43.50	-14.26	QP			
4	140.3421	52.96	-21.35	31.61	43.50	-11.89	QP			
5	189.7385	50.67	-18.78	31.89	43.50	-11.61	QP			
6	213.7634	48.56	-17.60	30.96	43.50	-12.54	QP			



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Temperature:	23.5 °C	Humidity:	49 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B6				

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: M



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector			
1	41.1320	47.93	-16.88	31.05	40.00	-8.95	QP			
2	56.0007	43.60	-17.49	26.11	40.00	-13.89	QP			
3	136.4598	51.81	-21.17	30.64	43.50	-12.86	QP			
4	158.1123	47.39	-20.64	26.75	43.50	-16.75	QP			
5	221.3921	42.70	-17.26	25.44	46.00	-20.56	QP			
6	517.2480	33.51	-10.17	23.34	46.00	-22.66	QP			

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Temperature:	23.5 °C	Humidity:	49 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B3				

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: M



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	72.0843	56.54	-21.66	34.88	40.00	-5.12	QP			
2	91.4949	51.43	-18.12	33.31	43.50	-10.19	QP			
3	138.3873	44.77	-21.27	23.50	43.50	-20.00	QP			
4	168.4138	42.27	-20.04	22.23	43.50	-21.27	QP			
5	286.9823	36.91	-15.16	21.75	46.00	-24.25	QP			
6	558.7302	33.33	-9.21	24.12	46.00	-21.88	QP			



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Temperature:	20.1 °C	Humidity:	49 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B3				

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: M



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	30.0000	53.74	-18.04	35.70	40.00	-4.30	QP			
2	65.8031	55.06	-19.99	35.07	40.00	-4.93	QP			
3	91.4949	50.68	-18.12	32.56	43.50	-10.94	QP			
4	138.3873	44.08	-21.27	22.81	43.50	-20.69	QP			
5	390.7226	33.58	-12.64	20.94	46.00	-25.06	QP			
6	744.8661	32.83	-6.73	26.10	46.00	-19.90	QP			

Note: Only record the worst data in the report.



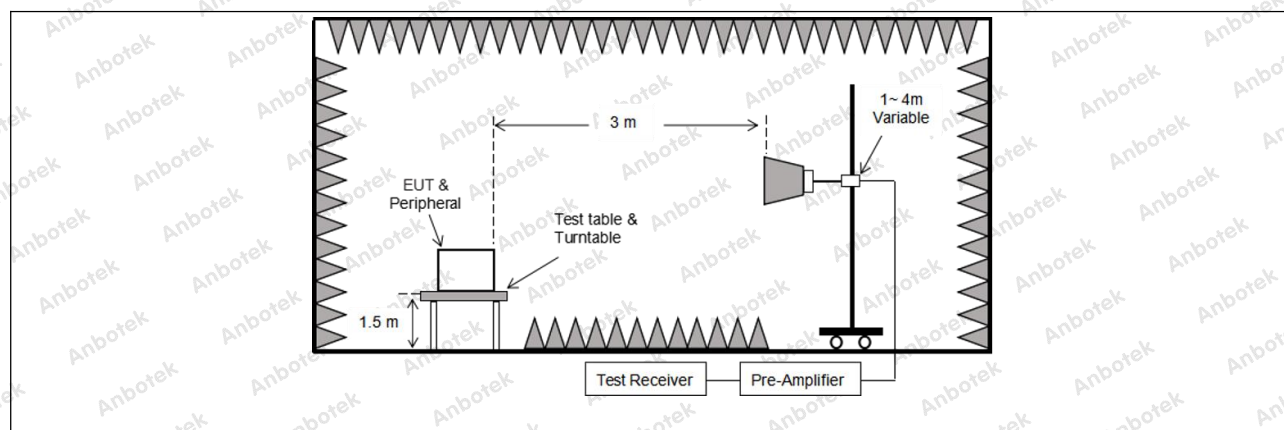
6. Emissions in frequency bands (above 1GHz)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.			
Test Method:	ANSI C63.10-2020 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2020 section 6.6.4		

6.1. EUT Operation

Operating Environment:	
Test mode:	1: TX mode: Keep the EUT in continuously transmitting mode with GFSK modulation.

6.2. Test Setup



6.3. Test Data

Temperature:	20.1 °C	Humidity:	49 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B6				

TM1 / CH: L						
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4804.00	29.33	15.27	44.60	74.00	-29.40	Vertical
7206.00	29.25	18.09	47.34	74.00	-26.66	Vertical
9608.00	30.40	23.76	54.16	74.00	-19.84	Vertical
12010.00	*			74.00		Vertical
14412.00	*			74.00		Vertical
4804.00	28.93	15.27	44.20	74.00	-29.80	Horizontal
7206.00	30.10	18.09	48.19	74.00	-25.81	Horizontal
9608.00	28.49	23.76	52.25	74.00	-21.75	Horizontal
12010.00	*			74.00		Horizontal
14412.00	*			74.00		Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4804.00	17.60	15.27	32.87	54.00	-21.13	Vertical
7206.00	18.30	18.09	36.39	54.00	-17.61	Vertical
9608.00	19.87	23.76	43.63	54.00	-10.37	Vertical
12010.00	*			54.00		Vertical
14412.00	*			54.00		Vertical
4804.00	17.26	15.27	32.53	54.00	-21.47	Horizontal
7206.00	19.13	18.09	37.22	54.00	-16.78	Horizontal
9608.00	18.00	23.76	41.76	54.00	-12.24	Horizontal
12010.00	*			54.00		Horizontal
14412.00	*			54.00		Horizontal



TM1 / CH: M						
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4880.00	29.83	15.42	45.25	74.00	-28.75	Vertical
7320.00	30.00	18.02	48.02	74.00	-25.98	Vertical
9760.00	31.01	23.80	54.81	74.00	-19.19	Vertical
12200.00	*			74.00		Vertical
14640.00	*			74.00		Vertical
4880.00	29.60	15.42	45.02	74.00	-28.98	Horizontal
7320.00	31.10	18.02	49.12	74.00	-24.88	Horizontal
9760.00	28.61	23.80	52.41	74.00	-21.59	Horizontal
12200.00	*			74.00		Horizontal
14640.00	*			74.00		Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4880.00	18.64	15.42	34.06	54.00	-19.94	Vertical
7320.00	18.94	18.02	36.96	54.00	-17.04	Vertical
9760.00	20.83	23.80	44.63	54.00	-9.37	Vertical
12200.00	*			54.00		Vertical
14640.00	*			54.00		Vertical
4880.00	18.23	15.42	33.65	54.00	-20.35	Horizontal
7320.00	20.61	18.02	38.63	54.00	-15.37	Horizontal
9760.00	18.70	23.80	42.50	54.00	-11.50	Horizontal



TM1 / CH: H						
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4960.00	29.96	15.58	45.54	74.00	-28.46	Vertical
7440.00	30.16	17.93	48.09	74.00	-25.91	Vertical
9920.00	31.71	23.83	55.54	74.00	-18.46	Vertical
12400.00	*			74.00		Vertical
14880.00	*			74.00		Vertical
4960.00	29.74	15.58	45.32	74.00	-28.68	Horizontal
7440.00	31.31	17.93	49.24	74.00	-24.76	Horizontal
9920.00	28.99	23.83	52.82	74.00	-21.18	Horizontal
12400.00	*			74.00		Horizontal
14880.00	*			74.00		Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4960.00	19.76	15.58	35.34	54.00	-18.66	Vertical
7440.00	20.21	17.93	38.14	54.00	-15.86	Vertical
9920.00	21.48	23.83	45.31	54.00	-8.69	Vertical
12400.00	*			54.00		Vertical
14880.00	*			54.00		Vertical
4960.00	19.41	15.58	34.99	54.00	-19.01	Horizontal
7440.00	21.41	17.93	39.34	54.00	-14.66	Horizontal
9920.00	18.85	23.83	42.68	54.00	-11.32	Horizontal

Remark:

1. Result = Reading + Factor
2. "*" means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.



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Temperature:	20.1 °C	Humidity:	49 %	Atmospheric Pressure:	101 kPa
Test Model:	H61B3				

TM1 / CH: L

Peak value:

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4804.00	28.00	15.27	43.27	74.00	-30.73	Vertical
7206.00	28.14	18.09	46.23	74.00	-27.77	Vertical
9608.00	28.84	23.76	52.60	74.00	-21.40	Vertical
12010.00	*			74.00		Vertical
14412.00	*			74.00		Vertical
4804.00	27.71	15.27	42.98	74.00	-31.02	Horizontal
7206.00	28.50	18.09	46.59	74.00	-27.41	Horizontal
9608.00	27.92	23.76	51.68	74.00	-22.32	Horizontal
12010.00	*			74.00		Horizontal
14412.00	*			74.00		Horizontal

Average value:

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4804.00	16.27	15.27	31.54	54.00	-22.46	Vertical
7206.00	17.19	18.09	35.28	54.00	-18.72	Vertical
9608.00	18.31	23.76	42.07	54.00	-11.93	Vertical
12010.00	*			54.00		Vertical
14412.00	*			54.00		Vertical
4804.00	16.04	15.27	31.31	54.00	-22.69	Horizontal
7206.00	17.53	18.09	35.62	54.00	-18.38	Horizontal
9608.00	17.43	23.76	41.19	54.00	-12.81	Horizontal
12010.00	*			54.00		Horizontal
14412.00	*			54.00		Horizontal

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TM1 / CH: M						
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.00	27.55	15.42	42.97	74.00	-31.03	Vertical
7320.00	28.11	18.02	46.13	74.00	-27.87	Vertical
9760.00	28.34	23.80	52.14	74.00	-21.86	Vertical
12200.00	*			74.00		Vertical
14640.00	*			74.00		Vertical
4880.00	27.52	15.42	42.94	74.00	-31.06	Horizontal
7320.00	28.37	18.02	46.39	74.00	-27.61	Horizontal
9760.00	27.64	23.80	51.44	74.00	-22.56	Horizontal
12200.00	*			74.00		Horizontal
14640.00	*			74.00		Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4880.00	16.36	15.42	31.78	54.00	-22.22	Vertical
7320.00	17.05	18.02	35.07	54.00	-18.93	Vertical
9760.00	18.16	23.80	41.96	54.00	-12.04	Vertical
12200.00	*			54.00		Vertical
14640.00	*			54.00		Vertical
4880.00	16.15	15.42	31.57	54.00	-22.43	Horizontal
7320.00	17.88	18.02	35.90	54.00	-18.10	Horizontal
9760.00	17.73	23.80	41.53	54.00	-12.47	Horizontal
12200.00	*			54.00		Horizontal
14640.00	*			54.00		Horizontal

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TM1 / CH: H						
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	27.68	15.58	43.26	74.00	-30.74	Vertical
7440.00	28.27	17.93	46.20	74.00	-27.80	Vertical
9920.00	29.04	23.83	52.87	74.00	-21.13	Vertical
12400.00	*			74.00		Vertical
14880.00	*			74.00		Vertical
4960.00	27.66	15.58	43.24	74.00	-30.76	Horizontal
7440.00	28.58	17.93	46.51	74.00	-27.49	Horizontal
9920.00	28.02	23.83	51.85	74.00	-22.15	Horizontal
12400.00	*			74.00		Horizontal
14880.00	*			74.00		Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4960.00	17.48	15.58	33.06	54.00	-20.94	Vertical
7440.00	18.32	17.93	36.25	54.00	-17.75	Vertical
9920.00	18.81	23.83	42.64	54.00	-11.36	Vertical
12400.00	*			54.00		Vertical
14880.00	*			54.00		Vertical
4960.00	17.33	15.58	32.91	54.00	-21.09	Horizontal
7440.00	18.68	17.93	36.61	54.00	-17.39	Horizontal
9920.00	17.88	23.83	41.71	54.00	-12.29	Horizontal
12400.00	*			54.00		Horizontal
14880.00	*			54.00		Horizontal

Remark:

1. Result = Reading + Factor
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.



APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_RF

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----

