

# **TEST REPORT**

Report No.:	8235EU012906W2			
Applicant:	Shenzhen Qianyan Technology LTD			
Address:	No. 3301, Block C, Section 1, Chuangzhi Yuncheng Building, Liuxian Avenue,Xili Community, Xili Street, Nanshan District, Shenzhen, China			
Product Name:	Govee Strip Light with Skyline Kit			
Model No.:	H61B9 (refer to clause 2.4)			
Trademark:	Govee			
FCC ID:	2A7VD-H61B8			
Test Standard(s):	47 CFR Part 15 Subpart C			
Date of Receipt:	Nov. 29, 2024			
Test Date:	Nov. 29, 2024 – Jan. 23, 2025			
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ISSUED BY: SHENZHEN EU TESTING LABORATORY LIMITED

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## **Revision Record**

Report Version	Issued Date	Description	Status	
V0	Apr. 16, 2025	Original	Valid	



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## 2 General Information

## 2.1 Applicant 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, China

## 2.2 Manufacturer Information

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

## 2.3 Factory Information

Factory	N/A
Address	N/A

## 2.4 General Description of E.U.T.

Product Name	Govee Strip Light with Skyline Kit				
Model No. Under Test	H61B9				
List Model No.	H61B8				
Description of Model differentiation	All samples are the same, only the input current, adapter, lengths of light are different. The model differentiations will not affect RF parameters, so we prepare all models for Conducted Emission, Radiated Emission tests with their own adapters. And prepare "H61B9" for RF test only.				
Rating(s)	Refer to the following detailed table.				
Product Type	Mobile Portable Fix Location				
Test Sample No.	-1/2(Normal Sample), -2/2(Engineering Sample)				
Hardware Version	V0.5				
Software Version	6.5.0				
Remark	For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.				

#### Detailed table:

Model No.	Length of Light	Rating	Adapter Information	
H61B9	6m	24V=== 2.0A	Model No.: BI48G-240200-AdU Input: 100-240V~, 50/60Hz 1.4A Max Output: 24.0V 2.0A Manufacturer: Dong Guan Royal Intelligent Co., Ltd	
H61B8	4m	24V=== 1.5A	Model No.: YXTG36US-2401500 Input: 100-240V~, 50/60Hz 1.0A Max Output: 24.0V=== 1.5A 36.0W Manufacturer: SHENZHEN LINKSOONER TECHNOLOGY CO., LTD	

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### 2.5 Technical Information of E.U.T.

Network and	Bluetooth (BLE)
Wireless Connectivity	WiFi 2.4G: 802.11b, 802.11g, 802.11n(HT20)

The requirement for the following technical information of the EUT was tested in this report:

Technology	WiFi 2.4G				
On and the Marks	⊠ b	⊠ g	🛛 n(HT20)	🗌 n(HT40)	
Operation Mode	ac(VHT20)	ac(VHT40)	☐ ax(HEW20)	☐ ax(HEW40)	
Operating Frequency	802.11b/g/n(HT20	0): 2412MHz to 246	2MHz		
Number of Channels	802.11b/g/n(HT20	0): 11 Channels			
Modulation Technology	DSSS, OFDM				
Modulation Type	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g: OFDM(BPSK, QPSK, 16QAM, 64QAM) 802.11n(HT20): OFDM (BPSK, QPSK, 16QAM, 64QAM)				
Antenna Type	PCB Antenna				
Antenna Gain(Peak)	1.54 dBi				
Remark	The above information are declared by the applicant, EU-LAB is not responsible for the information accuracy provided by the applicant.				

All channels were listed on the following table:

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

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Modulation technology	Modulation Type	Transfer Rate (Mbps)(Single RF path)	
	DBPSK	1	
DSSS (802.11b)	DQPSK	2	
	CCK	5.5/11	
	BPSK	6/9	
	QPSK	12/18	
OFDM (802.11g)	16QAM	24/36	
	64QAM	48/54	
	BPSK	6.5/7.2	
OFDM	QPSK	13/19.5/14.4/21.7	
(802.11n-20 MHz)	16QAM	26/39/28.9/43.3	
	64QAM	52/58.5/65/57.8/65/72.2	

Note: Preliminary tests were performed in different data rate in above table to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel		
Conducted Emission at AC Power Line	11b/11g/11n20	1/6/6.5Mbps	1/6/11		
DTS Bandwidth	11b/11g/11n20	1/6/6.5Mbps	1/6/11		
Maximum Conducted Output Power	11b/11g/11n20	1/6/6.5Mbps	1/6/11		
Power spectral density (PSD)	11b/11g/11n20	1/6/6.5Mbps	1/6/11		
Emission in non-restricted frequency bands (Conducted)	11b/11g/11n20	1/6/6.5Mbps	1/6/11		
Band Edge Emissions (Restricted frequency bands)	11b/11g/11n20	1/6/6.5Mbps	1/6/11		
Radiated Spurious Emission	11b/11g/11n20	1/6/6.5Mbps	1/6/11		

Note: The above EUT information in section 2.4 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

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## 3 Test Summary

## 3.1 Test Standard

The tests were performed according to following standards:

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Intentional radiators of radio frequency equipment
2	ANSI C63.10-2020	American National Standard for Testing Unlicensed Wireless Devices
3	KDB Publication 558074 D01v05r02	Guidance for compliance measurements on digital transmission system, frequency hopping spread spectrum system, and hybrid system devices operating under section 15.247 of the FCC rules

#### Remark:

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

### 3.2 Test Verdict

No.	Description	FCC Part No.	Verdict	Remark	
1	Antenna Requirement	15.203	Pass	Note <sup>1</sup>	
2	Conducted Emission at AC Power Line	15.207	Pass		
3	DTS Bandwidth	15.247(a)(2)	Pass		
4	Maximum Conducted Output Power	15.247(b)(3)	Pass		
5	Power spectral density (PSD)	15.247(e)	Pass		
6	Emission in non-restricted frequency bands (Conducted)	15.247(d)	Pass		
7	Band Edge Emissions (Restricted frequency bands)	15.247(d)	Pass		
8	Radiated Spurious Emission	15.247(d)	Pass		
	Note <sup>1</sup> : The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.				

### 3.3 Test Laboratory

Test Laboratory	Shenzhen EU Testing Laboratory Limited
Address	101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Designation Number	CN1368
Test Firm Registration Number	952583

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## 4 Test Configuration

## 4.1 Test Environment

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	30% to 60%		
Atmospheric Pressure	86 kPa to 106 kPa		
Temperature	NT (Normal Temperature)	+15℃ to +35℃	
Working Voltage of the EUT	NV (Normal Voltage)	120VAC, 60Hz for adapter	

## 4.2 Test Equipment

Conducted Emission at AC power line					
Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	EE-004	2025/01/08	2026/01/07
EMI Test Receiver	Rohde & Schwarz	ESCI	EE-005	2025/01/08	2026/01/07
Test Software	Farad	EZ-EMC	EE-014	N.C.R	N.C.R

Radiated Emission and RF Test					
Equipment	Manufacturer	Model No	Serial No	Cal Date	Cal Due Date
EMI Test Receiver	ROHDE & SCHWARZ	ESPI	EE-006	2025/01/08	2026/01/07
Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	EE-007	2023/01/14	2026/01/09
Double Ridged Horn Antenna	A-INFOMW	LB-10180-NF	EE-008	2023/01/12	2026/01/09
Pre-amplifier	Agilent	8447D	EE-009	2025/01/08	2026/01/07
Pre-amplifier	Agilent	8449B	EE-010	2025/01/08	2026/01/07
MXA Signal Analyzer	Agilent	N9020A	EE-011	2025/01/08	2026/01/07
MXG RF Vector Signal Generator	Agilent	N5182A	EE-012	2025/01/08	2026/01/07
Test Software	Farad	EZ-EMC	EE-015	N.C.R	N.C.R
MIMO Power Measurement Module	TSTPASS	TSPS 2023R	EE-016	2025/01/08	2026/01/07
RF Test Software	TSTPASS	TS32893 V2.0	EE-017	N.C.R	N.C.R
Antenna Mast	TOP Precision	TPBAM-4	EE-306	N.C.R	N.C.R
Wideband Radio Communication Tester	ROHDE & SCHWARZ	CMW500	EE-402	2024/02/15	2025/02/14
Loop Antenna	TESEQ	HLA6121	EE-403	2024/02/15	2025/02/14
MXG RF Analog Signal Generator	Agilent	N5181A	EE-406	2024/02/15	2025/02/14
DRG Horn Antenna	SCHWARZBECK	BBHA 9170	EE-410	2024/02/15	2025/02/14
Pre-amplifier	SKET	LNPA-1840-50	EE-411	2024/02/15	2025/02/14
Power Meter	Anritsu	ML2495A	EE-416	2024/02/15	2025/02/14
Constant Temperature Humidity Chamber	Guangxin	GXP-401	ES-002	2024/07/30	2025/07/29

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#### TRF No.: FCC Part 15 Subpart C\_WiFi (A01)

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#### 4.3 Description of Support Unit

No.	Title	Manufacturer	Model No.	Serial No.
1	Adapter	refer to clause 2.4	refer to clause 2.4	N/A
2	Strip Light	Same as applicant	H61B9	N/A
3	Strip Light	Same as applicant	H61B8	N/A

#### 4.4 Test Mode

No.	Test Modes	Description
TM1	802.11b mode	Keep the EUT in 802.11b transmitting mode.
TM2	802.11g mode	Keep the EUT in 802.11g transmitting mode.
TM3	802.11n(HT20) mode	Keep the EUT in 802.11n(HT20) transmitting mode.

## 4.5 Description of Calculation

#### 4.5.1. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

#### FS (dBuV/m) = RA (dBuV) + AF (dB/m) + CL (dB) - AG (dB)

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

#### 4.5.2. Disturbance Calculation

The AC mains conducted disturbance is calculated by adding the 10dB Pulse Limiter and Cable Factor and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

#### CD (dBuV) = RA (dBuV) + PL (dB) + CL (dB)

Where CD = Conducted Disturbance	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	PL = 10 dB Pulse Limiter Factor

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#### 4.6 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

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

Test Item	Measurement Uncertainty						
Conducted Emission	2.64 dB						
Occupied Channel Bandwidth	2.8 %						
RF output power, conducted	0.68 dB						
Power Spectral Density, conducted	1.37 dB						
Unwanted Emissions, conducted	1.84 dB						
Radiated Emission (9kHz- 30MHz)	Ur = 2.50 dB						
Radiated Emission	Ur = 2.70 dB (Horizontal)						
(30MHz- 1GHz)	Ur = 2.70 dB (Vertical)						
Radiated Emission	Ur = 3.50 dB (Horizontal)						
(1GHz- 18GHz)	Ur = 3.50 dB (Vertical)						
Radiated Emission	Ur = 5.15 dB (Horizontal)						
(18GHz- 40GHz)	Ur = 5.24 dB (Vertical)						
Temperature	0.8°C						
Humidity	4%						

## 4.7 Deviation from Standards

None.

### 4.8 Abnormalities from Standard Condition

None.

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## 5 Test Items

### 5.1 Antenna requirement

#### 5.1.1 Test Requirement

	antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.
Test Requirement	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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded. If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. For the fixed point- to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached
	According to FCC §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

#### 5.1.2 Antenna Anti-Replacement Construction

#### The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is embedded in the product.	An embedded-in antenna design is used.

Reference Documents	Item
Photo	Please refer to the EUT Photo documents.

#### 5.1.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

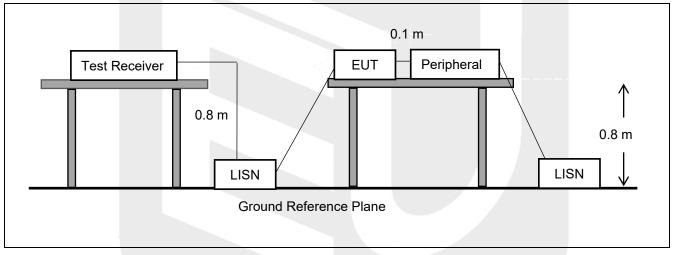
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## 5.2 Conducted Emission at AC Power Line

#### 5.2.1 Test Requirement

Test Requirement	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 $\mu$ H/50 ohms line impedance stabilization network (LISN).							
	Frequency of emission (MHz)	Conducted limit (dBµV)						
		Quasi-peak	Average					
	0.15-0.5	66 to 56*	56 to 46*					
Test Limit	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							

#### 5.2.2 Test Setup Diagram



#### 5.2.3 Test Procedure

The EUT is put on the plane 0.8 m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipment. Both sides of AC line are investigated to find out the maximum conducted emission according to the test standard regulations during conducted emission measurement.

The bandwidth of the field strength meter (R&S Test Receiver ESCI) is set at 9kHz in 150kHz~30MHz. The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

#### 5.2.4 Test Data

#### PASS.

All modes have been tested and PASS. Only the worst case data was showed in the report, please to see the following pages.

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est Sit	e:		Sh	ielded R	oom #1				
est Mo	ode:	: TM1/ CH Middle							
omme	ents:	Live Line							
lodel N	No.:	H61B9							
80.	0 dBuV								
70									
10									
60								FCC	Part15 CE-Class B_QP
50		3						FCC	Part15 CE-Class B_AVG
40	M M		murr	ymmunt	WW	ny manager	why	×۴۸ ۱	
30	My Mr			and a superior	man for the second fo	Annalytics	-the second second	41	1
20	ΙΥľ	'W W	www.	Making and Anal	r				Name Manuthan
20									Will al Mahama M
10									T AVG
0.									20.000
	0.150	0.5	600		(MHz)		5.000		30.000
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2714	39.65	9.99	49.64	61.07	-11.43	QP	Р	
2	0.2714	27.52	9.99	37.51	51.07	-13.56	AVG	Р	
3 *	0.3975	37.27	10.02	47.29	57.91	-10.62	QP	Р	
4	0.3975	26.82	10.02	36.84	47.91	-11.07	AVG	Р	
5	1.9050	31.66	10.02	41.68	56.00	-14.32	QP	Р	
6	1.9050	19.71	10.02	29.73	46.00	-16.27	AVG	Ρ	
7	7.4985	35.70	10.00	45.70	60.00	-14.30	QP	Р	
8	7.4985	25.40	10.00	35.40	50.00	-14.60	AVG	Р	
9	10.9995	22.88	9.96	32.84	60.00	-27.16	QP	Ρ	
10	10.9995	13.86	9.96	23.82	50.00	-26.18	AVG	Р	
11	22.0020	17.65	10.11	27.76	60.00	-32.24	QP	Р	
12	22.0020	7.15	10.11	17.26	50.00	-32.74	AVG	Р	

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#### Conducted Emission Test Data

est Sit	te:		Sh	ielded R	oom #1				
est Mo	ode:		TN	TM1/ CH Middle					
omme	ents:		Ne	utral Line	•				
odel N	No.:		He	51B9					
80.	.0 dBuV								· · · · · · · · · · · · · · · · · · ·
70									
60								FCC	Part15 CE-Class B_QP
50	Hann	3						FCC	Pa(t15 CE-Class B_AVG
40		WAT	man and a		5 The white and the	Z	- 0		9 11
30	HUM			Were for the weeks	s	WINNALAN		p M	10 hours
20		W. Y . W	- MANN	wert 4/1/4/10/1/11/11	Marian Ir .			M	www.www.h.m.m.
10 0.1									V W AVG
	.0 0.150	0.	.500		(MHz)		5.000		30.000
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark

No.	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	Detector	P/F	Remark
1 *	0.1680	43.86	9.98	53.84	65.06	-11.22	QP	Р	
2	0.1680	24.80	9.98	34.78	55.06	-20.28	AVG	Р	
3	0.3840	33.64	10.04	43.68	58.19	-14.51	QP	Р	
4	0.3840	22.93	10.04	32.97	48.19	-15.22	AVG	Р	
5	1.6080	25.99	10.07	36.06	56.00	-19.94	QP	Р	
6	1.6080	14.14	10.07	24.21	46.00	-21.79	AVG	Р	
7	3.1605	27.89	10.04	37.93	56.00	-18.07	QP	Р	
8	3.1605	10.09	10.04	20.13	46.00	-25.87	AVG	Р	
9	9.5010	28.60	10.02	38.62	60.00	-21.38	QP	Р	
10	9.5010	18.59	10.02	28.61	50.00	-21.39	AVG	Р	
11	14.0010	24.71	9.99	34.70	60.00	-25.30	QP	Р	
12	14.0010	14.61	9.99	24.60	50.00	-25.40	AVG	Р	
ote: L	evel = Read	ing + Fact	or Mai	gin = Lev	el - Limit		-		

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10

11

12

4.2540

16.6875

16.6875

	cted Emiss	ion Test I		<del></del>					
est Site									
est Mo	de:	TM1/ CH Middle							
comme	nts:	: Live Line							
lodel N	lo.:		H6	1B8					
80.0	) dBuV								
70									
60								FCC	Part15 CE-Class B_QP
50								FCC	Pat15 CE-Class B_AVG
40	M		AM	Munum	kyheense takonnyheet	where different the		A AND AND AND AND AND AND AND AND AND AN	12 11
30				MWVV	portheres	Nannad	\$~~~~	"and Wall week	A Comment of the second
20 10									MM A peak
0.0									AVG
0	0.150	0.5	500		(MHz)		5.000		30.000
No.	Frequency (MHz)	Reading (dBu∀)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2175	33.02	9.97	42.99	62.91	-19.92	QP	Р	
2	0.2175	25.17	9.97	35.14	52.91	-17.77	AVG	Р	
3	0.4065	33.34	10.02	43.36	57.72	-14.36	QP	Ρ	
4 *	0.4065	29.11	10.02	39.13	47.72	-8.59	AVG	Ρ	
5	0.7260	30.80	10.04	40.84	<u>56.00</u>	-15.16	QP	Ρ	
6	0.7260	21.33	10.04	31.37	46.00	-14.63	AVG	Ρ	
7	1.5315	29.92	10.03	39.95	56.00	-16.05	QP	Р	
-									
8	1.5315 4.2540	20.64 32.67	10.03 10.04	30.67 42.71	46.00 56.00	-15.33 -13.29	AVG QP	P P	

Note: Level = Reading + Factor	Margin = Level - Limit

10.04

10.00

10.00

32.94

41.91

32.86

46.00

60.00

50.00

-13.06

-18.09

-17.14

AVG

QP

AVG

Ρ

Ρ

Ρ

22.90

31.91

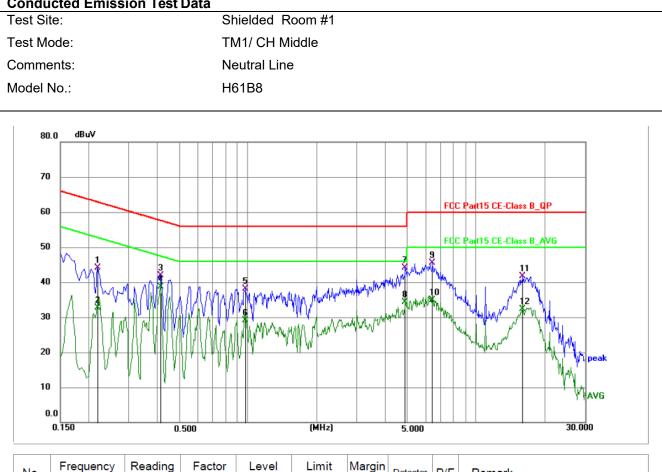
22.86

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#### **Conducted Emission Test Data**



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2175	34.19	9.99	44.18	62.91	-18.73	QP	Р	
2	0.2175	22.70	9.99	32.69	52.91	-20.22	AVG	Р	
3	0.4110	31.95	10.04	41.99	57.63	-15.64	QP	Р	
4 *	0.4110	28.76	10.04	38.80	47.63	-8.83	AVG	Р	
5	0.9690	28.07	10.06	38.13	56.00	-17.87	QP	Р	
6	0.9690	19.04	10.06	29.10	46.00	-16.90	AVG	Р	
7	4.8975	34.13	10.05	44.18	56.00	-11.82	QP	Р	
8	4.8975	24.25	10.05	34.30	46.00	-11.70	AVG	Р	
9	6.4455	35.55	10.04	45.59	60.00	-14.41	QP	Р	
10	6.4455	24.87	10.04	34.91	50.00	-15.09	AVG	Р	
11	16.0035	31.67	10.01	41.68	60.00	-18.32	QP	Р	
12	16.0035	22.28	10.01	32.29	50.00	-17.71	AVG	Р	
ote: L	evel = Read	ing + Fact	or Mai	rgin = Lev	el - Limit				

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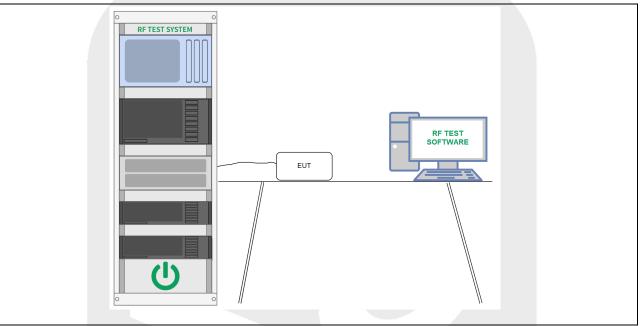


## 5.3 DTS Bandwidth

#### 5.3.1 Test Requirement

Test Requirement	Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Limit	Section (a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method	ANSI C63.10-2020 section 11.8

#### 5.3.2 Test Setup Diagram



#### 5.3.3 Test Procedure

a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.

- b) Set the VBW >= [3 × RBW].
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### 5.3.4 Test Data

PASS.

Please refer to Annex E for details.

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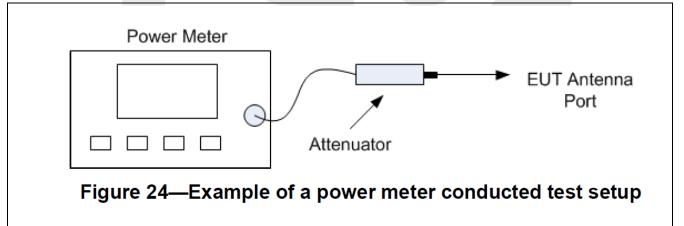


## 5.4 Maximum Conducted Output Power

#### 5.4.1 Test Requirement

Test Requirement	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 Limit	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

#### 5.4.2 Test Setup Diagram



#### 5.4.3 Test Procedure

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast responding diode detector.

## 5.4.4 Test Data

**PASS.** Please refer to Annex E for details.

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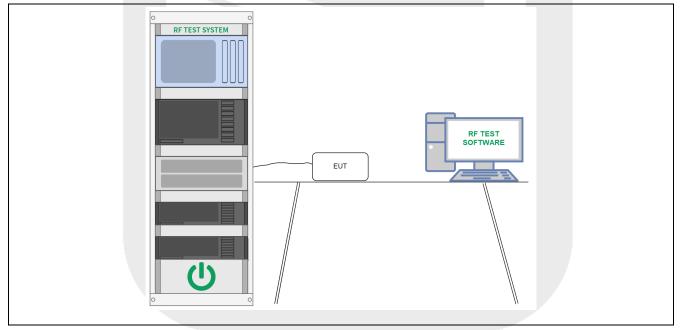


## 5.5 **Power Spectral Density**

#### 5.5.1 Test Requirement

Test Requirement	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Limit	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method	ANSI C63.10-2020 section 11.10

#### 5.5.2 Test Setup Diagram



#### 5.5.3 Test Procedure

 Set analyzer center frequency to DTS channel center frequency.

 Set the span to 1.5 times the DTS bandwidth.

 Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.

 Set the VBW ≥ 3 RBW.

 Detector = peak.

 Sweep time = auto couple.

 Trace mode = max hold.

 Allow trace to fully stabilize.

 Use the peak marker function to determine the maximum amplitude level within the RBW.

 If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

## 5.5.4 Test Data

**PASS.** Please refer to Annex E for details.

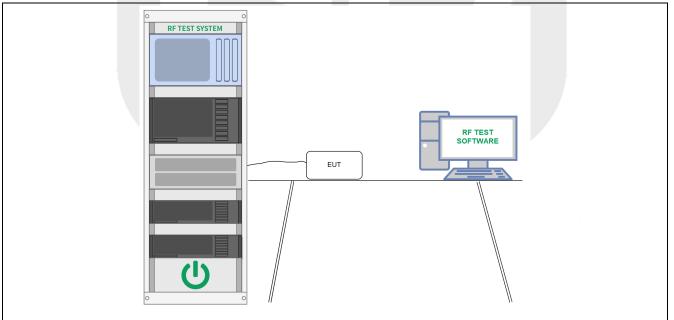
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## 5.6 Emissions in Non-restricted Frequency Bands (Conducted)

#### 5.6.1 Test Requirement

· · · · · · · · · · · · · · · · · · ·	
Test Requirement	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Limit	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method	ANSI C63.10-2020 section 11.11

#### 5.6.2 Test Setup Diagram



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#### 5.6.3 Test Procedure

The following procedures may be used to determine the peak or average field strength or power of an unwanted emission that is within 2 MHz of the authorized band edge. If a peak detector is utilized, use the procedure described in 13.2.1. Use the procedure described in 13.2.2 when using an average detector and the EUT can be configured to transmit continuously (i.e., duty cycle  $\ge$  98%). Use the procedure described in 13.2.3 when using an average detector and the EUT cannot be configured to transmit continuously but the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent). Use the procedure described in 13.2.4 when using an average detector for those cases where the EUT cannot be configured to transmit continuously and the duty cycle is not constant (duty cycle variations equal or exceed 2 percent). When using a peak detector to measure unwanted emissions at or near the band edge (within 2 MHz of the authorized band), the following integration procedure can be used. Set instrument center frequency to the frequency of the emission to be measured (must be within 2 MHz of the authorized band edge). Set span to 2 MHz RBW = 100 kHz. VBW  $\geq$  3 x RBW. Detector = peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweep to continue until the trace stabilizes (required measurement time may increase for low duty cycle applications)

Compute the power by integrating the spectrum over 1 MHz using the analyzer's band power measurement function with band limits set equal to the emission frequency (femission)  $\pm$  0.5 MHz. If the instrument does not have a band power function, then sum the amplitude levels (in power units) at 100 kHz intervals extending across the 1 MHz spectrum defined by femission  $\pm$  0.5 MHz.

Standard method(The 99% OBW of the fundamental emission is without 2 MHz of the authorized band):

Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation.

Reference level: As required to keep the signal from exceeding the maximum instrument input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

Attenuation: Auto (at least 10 dB preferred).

Sweep time: Coupled.

Resolution bandwidth: 100 kHz.

Video bandwidth: 300 kHz.

Detector: Peak. Trace: Max hold.

### 5.6.4 Test Data

PASS.

Please refer to Annex E for details.

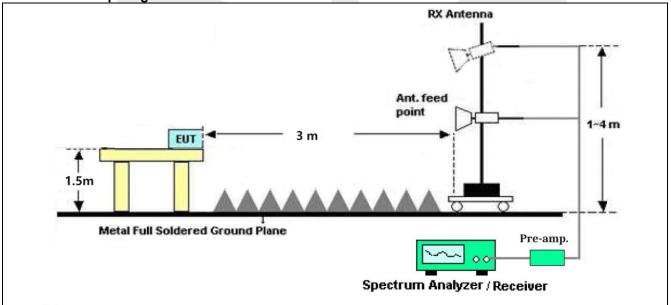
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## 5.7 Band edge Emissions (Restricted frequency bands)

#### 5.7.1 Test Requirement

	In addition, radiated emissio	ns which fall in the restricted band	ls, as defined in §			
Test Requirement	15.205(a), must also comply with the radiated emission limits specified in §					
·	15.209(a)(see § 15.205(c)).					
	Frequency (MHz)	Field strength	Measurement			
		(microvolts/meter)	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					
Test Limit	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.					
	Note:					
	1) Field Strength (dBµV/m) =	= 20*log[Field Strength (μV/m)].				
	2) In the emission tables above, the tighter limit applies at the band edges.					
	3) For Above 1000 MHz, the emission limit in this paragraph is based on					
	measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the					
	maximum permitted average limit.					
		it field strength of harmonics:				
	54dBuV/m@3m (AV) and 74	-				
Test Method	ANSI C63.10-2020 section					

#### 5.7.2 Test Setup Diagram



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#### 5.7.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented. The power of the EUT transmitting frequency should be ignored. All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for  $f \ge 1$  GHz, 100 kHz for f < 1 GHz

 $\mathsf{VBW} \geq \mathsf{RBW}$ 

Sweep = auto

Detector function = peak Trace = max hold.

#### 5.7.4 Test Data

#### PASS.

Please refer to the following pages.

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#### Band Edge Emissions (Restricted frequency bands):

Test M	Test Mode: 802.11b					CH Low: 2412 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result	
Н	2310.00	43.62	-2.81	40.81	74.00	-33.19	PK	PASS	
Н	2390.00	47.38	-2.69	44.69	74.00	-29.31	PK	PASS	
Н	**2400.00	62.22	-2.68	59.54	74.00	-14.46	PK	PASS	
V	2310.00	45.45	-2.81	42.64	74.00	-31.36	PK	PASS	
V	2390.00	49.00	-2.69	46.31	74.00	-27.69	PK	PASS	
V	**2400.00	62.76	-2.68	60.08	74.00	-13.92	PK	PASS	
Н	2310.00	33.66	-2.81	30.85	54.00	-23.15	AV	PASS	
Н	2390.00	36.59	-2.69	33.90	54.00	-20.10	AV	PASS	
Н	**2400.00	46.62	-2.68	43.94	54.00	-10.06	AV	PASS	
V	2310.00	31.83	-2.81	29.02	54.00	-24.98	AV	PASS	
V	2390.00	36.14	-2.69	33.45	54.00	-20.55	AV	PASS	
V	**2400.00	47.80	-2.68	45.12	54.00	-8.88	AV	PASS	

Test N	/lode: 802.11k	)		CH High: 2462 MHz				
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
Н	**2483.50	47.66	-2.56	45.10	74.00	-28.90	PK	PASS
Н	2500.00	50.07	-2.54	47.53	74.00	-26.47	PK	PASS
V	**2483.50	49.49	-2.56	46.93	74.00	-27.07	PK	PASS
V	2500.00	52.34	-2.54	49.80	74.00	-24.20	PK	PASS
Н	**2483.50	39.60	-2.56	37.04	54.00	-16.96	AV	PASS
Н	2500.00	41.70	-2.54	39.16	54.00	-14.84	AV	PASS
V	**2483.50	37.58	-2.56	35.02	54.00	-18.98	AV	PASS
V	2500.00	42.21	-2.54	39.67	54.00	-14.33	AV	PASS

#### Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.

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#### Band Edge Emissions (Restricted frequency bands):

Test M	Test Mode: 802.11g					CH Low: 2412 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result	
н	2310.00	45.10	-2.81	42.29	74.00	-31.71	PK	PASS	
Н	2390.00	47.41	-2.69	44.72	74.00	-29.28	PK	PASS	
Н	**2400.00	63.49	-2.68	60.81	74.00	-13.19	PK	PASS	
V	2310.00	46.49	-2.81	43.68	74.00	-30.32	PK	PASS	
V	2390.00	49.48	-2.69	46.79	74.00	-27.21	PK	PASS	
V	**2400.00	63.35	-2.68	60.67	74.00	-13.33	PK	PASS	
Н	2310.00	31.78	-2.81	28.97	54.00	-25.03	AV	PASS	
Н	2390.00	35.47	-2.69	32.78	54.00	-21.22	AV	PASS	
Н	**2400.00	49.54	-2.68	46.86	54.00	-7.14	AV	PASS	
V	2310.00	33.00	-2.81	30.19	54.00	-23.81	AV	PASS	
V	2390.00	36.71	-2.69	34.02	54.00	-19.98	AV	PASS	
V	**2400.00	47.86	-2.68	45.18	54.00	-8.82	AV	PASS	

Test N	/lode: 802.11g	9		CH High: 2462 MHz				
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
Н	**2483.50	46.19	-2.56	43.63	74.00	-30.37	PK	PASS
Н	2500.00	49.83	-2.54	47.29	74.00	-26.71	PK	PASS
V	**2483.50	48.68	-2.56	46.12	74.00	-27.88	PK	PASS
V	2500.00	50.32	-2.54	47.78	74.00	-26.22	PK	PASS
Н	**2483.50	38.93	-2.56	36.37	54.00	-17.63	AV	PASS
Н	2500.00	39.44	-2.54	36.90	54.00	-17.10	AV	PASS
V	**2483.50	38.07	-2.56	35.51	54.00	-18.49	AV	PASS
V	2500.00	40.00	-2.54	37.46	54.00	-16.54	AV	PASS

#### Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.

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#### Band Edge Emissions (Restricted frequency bands):

Test N	Test Mode: 802.11n(HT20)					12 MHz		
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
Н	2310.00	43.29	-2.81	40.48	74.00	-33.52	PK	PASS
Н	2390.00	46.02	-2.69	43.33	74.00	-30.67	PK	PASS
Н	**2400.00	64.88	-2.68	62.20	74.00	-11.80	PK	PASS
V	2310.00	44.16	-2.81	41.35	74.00	-32.65	PK	PASS
V	2390.00	49.58	-2.69	46.89	74.00	-27.11	PK	PASS
V	**2400.00	62.28	-2.68	59.60	74.00	-14.40	PK	PASS
Н	2310.00	34.90	-2.81	32.09	54.00	-21.91	AV	PASS
Н	2390.00	38.62	-2.69	35.93	54.00	-18.07	AV	PASS
Н	**2400.00	47.55	-2.68	44.87	54.00	-9.13	AV	PASS
V	2310.00	34.63	-2.81	31.82	54.00	-22.18	AV	PASS
V	2390.00	38.31	-2.69	35.62	54.00	-18.38	AV	PASS
V	**2400.00	46.70	-2.68	44.02	54.00	-9.98	AV	PASS

Test N	Test Mode: 802.11n(HT20)					CH High: 2462 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result	
Н	**2483.50	46.49	-2.56	43.93	74.00	-30.07	PK	PASS	
Н	2500.00	51.50	-2.54	48.96	74.00	-25.04	PK	PASS	
V	**2483.50	46.62	-2.56	44.06	74.00	-29.94	PK	PASS	
V	2500.00	48.68	-2.54	46.14	74.00	-27.86	PK	PASS	
Н	**2483.50	39.06	-2.56	36.50	54.00	-17.50	AV	PASS	
Н	2500.00	39.91	-2.54	37.37	54.00	-16.63	AV	PASS	
V	**2483.50	36.40	-2.56	33.84	54.00	-20.16	AV	PASS	
V	2500.00	39.51	-2.54	36.97	54.00	-17.03	AV	PASS	

#### Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.

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## 5.8 Radiated Spurious Emissions

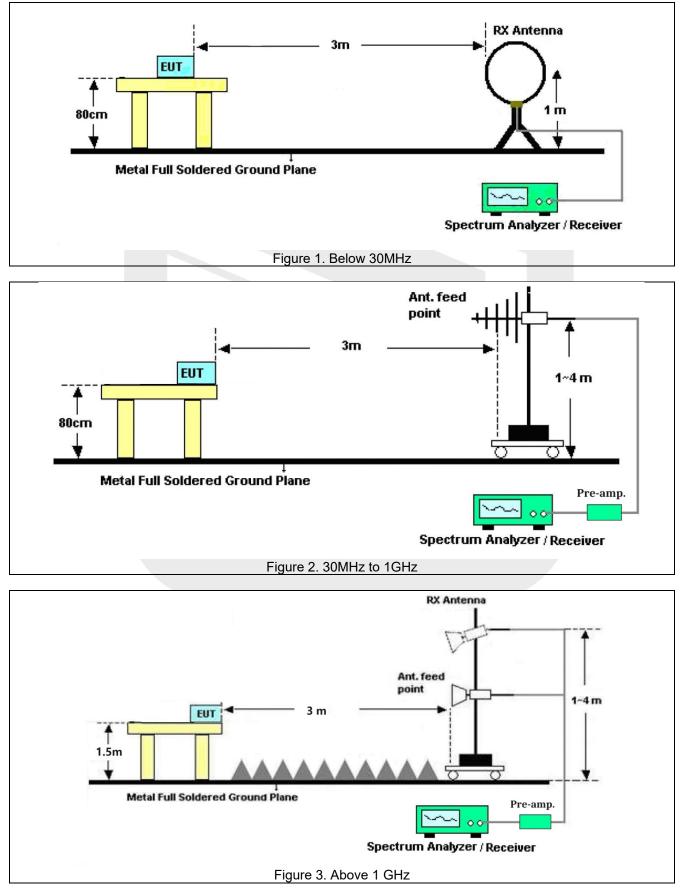
#### 5.8.1 Test Requirement

Test Deguirement		ns which fall in the restricted band	÷			
Test Requirement	15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).					
	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					
Test Limit		-216 MHz or 470-806 MHz. Howe				
	these frequency bands is permitted under other sections of this part, e.g.,					
	§§ 15.231 and 15.241.					
	Note:					
	1) Field Strength (dBµV/m)	= 20*log[Field Strength (μV/m)].				
	2) In the emission tables ab	ove, the tighter limit applies at the	band edges.			
	3) For Above 1000 MHz, the	e emission limit in this paragraph i	s based on			
	measurement instrumentation	on employing an average detector	, measurement using			
	instrumentation with a peak	detector function, corresponding	to 20dB above the			
	maximum permitted average limit.					
		it field strength of harmonics:				
	54dBuV/m@3m (AV) and 74	-				
Test Method	ANSI C63.10-2020 section 6	5.6.4				

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#### 5.8.2 Test Setup Diagram



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#### 5.8.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power.

Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

For 9kHz to 150kHz, Set the spectrum analyzer as:

RBW = 200Hz, VBW =1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as: RBW = 9KHz, VBW =30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 30MHz to 1000MHz, Set the spectrum analyzer as: RBW = 100kHz, VBW =300kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For above 1GHz, Set the spectrum analyzer as: RBW =1MHz, VBW =1MHz, Detector= Peak, Trace mode= Max hold, Sweep- auto couple. RBW =1MHz, VBW =10Hz, Detector= Average, Trace mode= Max hold, Sweep- auto couple.

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

#### 5.8.4 Test Data

PASS.

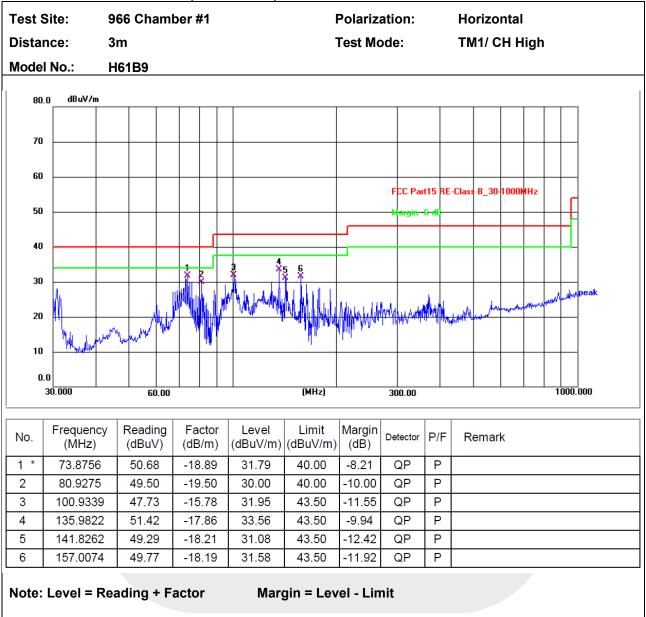
Please to see the following pages.

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

For test of 30MHz-1GHz, during the test, pre-scan all modes, only the worst case is recorded in the report. For test of 1GHz-25GHz, during the test, pre-scan all modes, and found the 802.11n(HT20) is worse case, the report only record this mode.

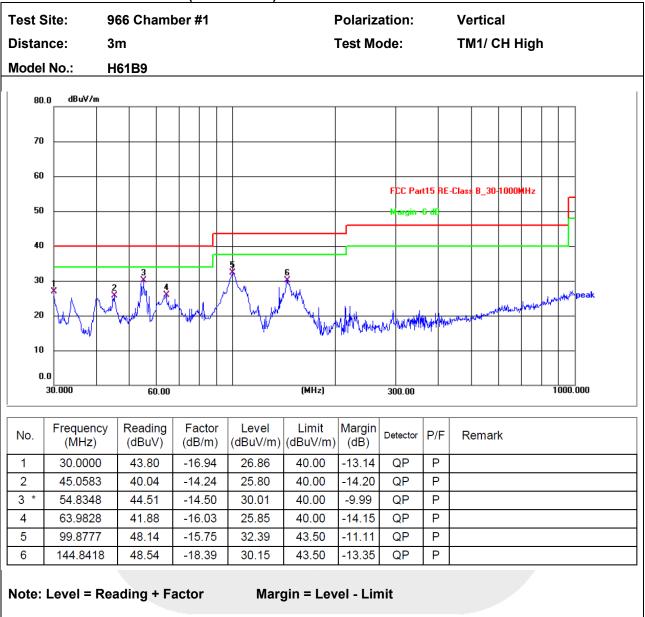
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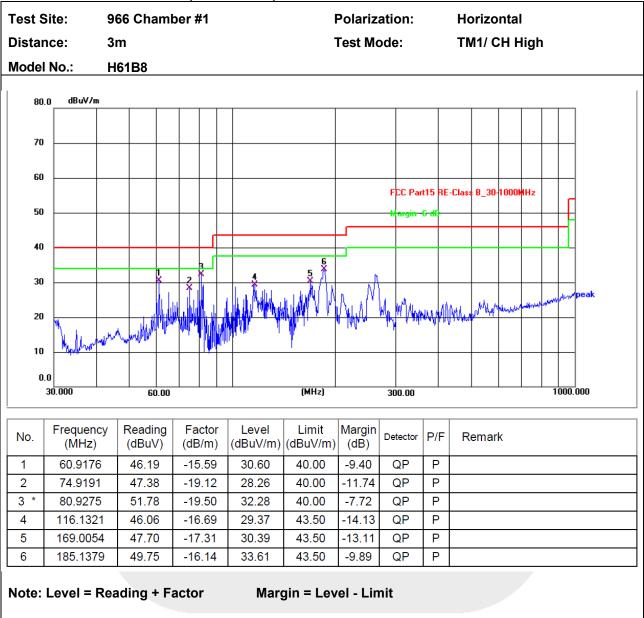
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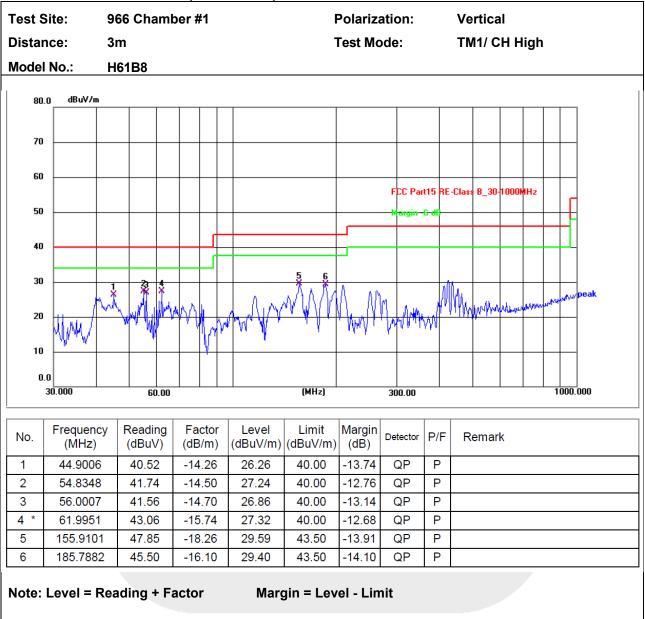
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#### Radiated Spurious Emission (1GHz-25GHz)

	Node: 802.11r	n(HT20)	,		CH Low: 2412 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4824.56	40.71	4.74	45.45	74.00	-28.56	PK	PASS
V	7236.31	35.20	9.84	45.04	74.00	-28.97	PK	PASS
V	9648.80	29.61	13.18	42.79	74.00	-31.21	PK	PASS
V	12060.70	*	*	*	74.00	*	PK	PASS
V	14472.50	*	*	*	74.00	*	PK	PASS
V	16884.73	*	*	*	74.00	*	PK	PASS
Н	4824.33	41.44	4.74	46.18	74.00	-27.82	PK	PASS
Н	7236.99	35.50	9.84	45.34	74.00	-28.67	PK	PASS
Н	9648.89	29.05	13.18	42.23	74.00	-31.77	PK	PASS
Н	12060.33	*	*	*	74.00	*	PK	PASS
Н	14472.42	*	*	*	74.00	*	PK	PASS
Н	16884.05	*	*	*	74.00	*	PK	PASS
V	4824.38	32.97	4.74	37.71	54.00	-16.30	AV	PASS
V	7236.95	23.96	9.84	33.80	54.00	-20.21	AV	PASS
V	9648.74	18.35	13.18	31.53	54.00	-22.48	AV	PASS
V	12060.30	*	*	*	54.00	*	AV	PASS
V	14472.34	*	*	*	54.00	*	AV	PASS
V	16884.39	*	*	*	54.00	*	AV	PASS
Н	4824.51	32.35	4.74	37.09	54.00	-16.91	AV	PASS
Н	7236.99	23.33	9.84	33.17	54.00	-20.84	AV	PASS
Н	9648.89	17.62	13.18	30.80	54.00	-23.20	AV	PASS
Н	12060.33	*	*	*	54.00	*	AV	PASS
Н	14472.42	*	*	*	54.00	*	AV	PASS
Н	16884.05	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.

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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#### Radiated Spurious Emission (1GHz-25GHz)

Test N	/lode: 802.11r	n(HT20)	· · · · · · · · · · · · · · · · · · ·	CH Middle: 2437 MHz				
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4874.18	42.60	4.90	47.50	74.00	-26.50	PK	PASS
V	7311.54	33.31	9.83	43.14	74.00	-30.86	PK	PASS
V	9748.46	30.30	13.21	43.51	74.00	-30.50	PK	PASS
V	12185.94	*	*	*	74.00	*	PK	PASS
V	14622.22	*	*	*	74.00	*	PK	PASS
V	17059.16	*	*	*	74.00	*	PK	PASS
Н	4874.65	42.16	4.90	47.06	74.00	-26.94	PK	PASS
Н	7311.08	35.17	9.83	45.00	74.00	-29.01	PK	PASS
Н	9748.01	29.73	13.21	42.94	74.00	-31.07	PK	PASS
Н	12185.79	*	*	*	74.00	*	PK	PASS
Н	14622.89	*	*	*	74.00	*	PK	PASS
Н	17059.51	*	*	*	74.00	*	PK	PASS
V	4874.77	30.59	4.90	35.49	54.00	-18.52	AV	PASS
V	7311.63	24.54	9.83	34.37	54.00	-19.63	AV	PASS
V	9748.32	18.27	13.21	31.48	54.00	-22.52	AV	PASS
V	12185.51	*	*	*	54.00	*	AV	PASS
V	14622.99	*	*	*	54.00	*	AV	PASS
V	17059.68	*	*	*	54.00	*	AV	PASS
Н	4874.65	31.67	4.90	36.57	54.00	-17.43	AV	PASS
Н	7311.08	24.75	9.83	34.58	54.00	-19.42	AV	PASS
Н	9748.01	18.92	13.21	32.13	54.00	-21.87	AV	PASS
Н	12185.79	*	*	*	54.00	*	AV	PASS
Н	14622.89	*	*	*	54.00	*	AV	PASS
Н	17059.51	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.

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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#### Radiated Spurious Emission (1GHz-25GHz)

Test N	/lode: 802.11r	(HT20)	· · · · · · · · · · · · · · · · · · ·	CH High: 2462 MHz				
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4924.39	42.22	5.05	47.27	74.00	-26.74	PK	PASS
V	7386.80	33.38	9.83	43.21	74.00	-30.80	PK	PASS
V	9848.09	28.69	13.24	41.93	74.00	-32.08	PK	PASS
V	12310.96	*	*	*	74.00	*	PK	PASS
V	14772.17	*	*	*	74.00	*	PK	PASS
V	17234.66	*	*	*	74.00	*	PK	PASS
Н	4924.68	41.74	5.05	46.79	74.00	-27.22	PK	PASS
Н	7386.55	34.62	9.83	44.45	74.00	-29.55	PK	PASS
Н	9848.15	30.83	13.24	44.07	74.00	-29.93	PK	PASS
Н	12310.35	*	*	*	74.00	*	PK	PASS
Н	14772.34	*	*	*	74.00	*	PK	PASS
Н	17234.49	*	*	*	74.00	*	PK	PASS
V	4924.93	32.74	5.05	37.79	54.00	-16.21	AV	PASS
V	7386.70	24.42	9.83	34.25	54.00	-19.76	AV	PASS
V	9848.80	19.13	13.24	32.37	54.00	-21.63	AV	PASS
V	12310.78	*	*	*	54.00	*	AV	PASS
V	14772.96	*	*	*	54.00	*	AV	PASS
V	17234.98	*	*	*	54.00	*	AV	PASS
Н	4924.68	31.36	5.05	36.41	54.00	-17.60	AV	PASS
Н	7386.55	23.69	9.83	33.52	54.00	-20.48	AV	PASS
Н	9848.15	18.28	13.24	31.52	54.00	-22.48	AV	PASS
Н	12310.35	*	*	*	54.00	*	AV	PASS
Н	14772.34	*	*	*	54.00	*	AV	PASS
Н	17234.49	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.

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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## ANNEX A TEST SETUP PHOTOS

Please refer to the document "8235EU012906W-AA.PDF"

## ANNEX B EXTERNAL PHOTOS

Please refer to the document "8235EU012906W-AB.PDF"

## ANNEX C INTERNAL PHOTOS

Please refer to the document "8235EU012906W-AC.PDF"

## ANNEX D TEST DATA

Please refer to the document "8235EU012906W-AE.PDF"

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