TEST REPORT

Report No.:	8227EU010508W1
Applicant:	Shenzhen Intellirocks Tech. Co., Ltd.
Address:	No. 3301, Block C, Section 1, Chuangzhi Yuncheng Building, Liuxian Avenue,Xili Community, Xili Street, Nanshan District, Shenzhen, China
Product Name:	Govee RGBIC Led Strip Lights
Model No.:	H619E (refer to clause 2.4)
Trademark:	Govee
FCC ID:	2AQA6-H619EA
Test Standard(s):	47 CFR Part 15 Subpart C
Date of Receipt:	Mar. 05, 2024
Test Date:	Mar. 05, 2024 – Dec. 11, 2024
Date of Issue:	Mar. 12, 2025

ISSUED BY:

SHENZHEN EU TESTING LABORATORY LIMITED

SHENZHEN EU TESTING LABORATORY LIMITED APPROVED

Prepared by:	**Reviewed and Approved by:**
Mikey Zhu	Sally Zhang
Mikey Zhu/ Engineer	Sally Zhang/ Manager

Revision Record

Report Version	Issued Date	Description	Status
V0	Mar. 12, 2025	Original	Valid

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Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China

Website: www.eu-test.com

Tel: (86)-755-2357-9714 Email: Service@eu-test.com

2 General Information

2.1 Applicant Information

Applicant	Shenzhen Intellirocks Tech. Co., 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 Intellirocks Tech. Co., 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 RGBIC Led Strip Lights
Model No. Under Test	H619E
List Model No.	H619A, H619B, H619C, H619D, H619Z, H6168, H618A, H618C, H618E, H618F
Description of Model differentiation	All samples are the same, only the input current, adapter, lengths of light and appearance color 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 “H619E” for RF test only.
Rating(s)	Refer to the following detailed table.
Product Type	☒ Mobile ☐ Portable ☐ Fix Location
Test Sample No.	8227EU010508W-1/12(Normal Sample, H619E), 8227EU010508W-2/12(Normal Sample, H619A), 8227EU010508W-3/12(Normal Sample, H619B), 8227EU010508W-4/12(Normal Sample, H619C) 8227EU010508W-5/12(Normal Sample, H619D) 8227EU010508W-6/12(Normal Sample, H619Z) 8227EU010508W-7/12(Normal Sample, H6168) 8227EU010508W-8/12(Normal Sample, H618A) 8227EU010508W-9/12(Normal Sample, H618C) 8227EU010508W-10/12(Normal Sample, H618E) 8227EU010508W-11/12(Normal Sample, H618F) 8227EU010508W-12/12(Engineering Sample)
Hardware Version	V1.0
Software Version	6.5.1

Remark	1) The above information are declared by the applicant, EU-LAB is not responsible for the information accuracy provided by the applicant. 2) 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
H619E	2*10m	24V⎓ 3.0A	Model No.: BI72G-240300-E2 Input: 100-240V~, 50/60Hz 1.8A Output: 24.0V⎓ 3.0A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H619A	5m	24V⎓ 1.0A	Model No.: BI24GL-240100-AdU Input: 100-240V~, 50/60Hz 0.8A Output: 24.0V⎓ 1.0A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H619B	7.5m	24V⎓ 1.0A	Model No.: BI24GL-240100-AdU Input: 100-240V~, 50/60Hz 0.8A Output: 24.0V⎓ 1.0A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H619C	7.5m	24V⎓ 1.5A	Model No.: BI36GL-240150-AdU Input: 100-240V~, 50/60Hz 1.0A Output: 24.0V⎓ 1.5A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H619D	2*7.5m	24V⎓ 2.0A	Model No.: BI48G-240200-AdU Input: 100-240V~, 50/60Hz 1.4A Output: 24.0V⎓ 2.0A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H619Z	4m	24V⎓ 0.5A	Model No.: BI12G-240050-BdU Input: 100-240V~, 50/60Hz 0.5A Output: 24.0V⎓ 0.5A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H6168	2*1.9m	12V⎓ 1.5A	Model No.: BI18GL-120150-AdU Input: 100-240V~, 50/60Hz 0.8A Output: 12.0V⎓ 1.5A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H618A	5m	24V⎓ 0.5A	Model No.: BI12G-240050-BdU Input: 100-240V~, 50/60Hz 0.5A Output: 24.0V⎓ 0.5A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H618C	10m	24V⎓ 0.75A	Model No.: YXTG18US-2400750 Input: 100-240V~, 50/60Hz 0.8A Max Output: 24.0V⎓ 0.75A 18.0W Manufacturer: SHENZHEN LINKSOONER TECHNOLOGY CO., LTD
H618E	2*10m	24V⎓ 1.5A	Model No.: BI36GL-240150-AdU Input: 100-240V~, 50/60Hz 1.0A Output: 24V⎓ 1.5A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.
H618F	2*15m	24V⎓ 2.0A	Model No.: BI48G-240200-AdU Input: 100-240V~, 50/60Hz 1.4A Output: 24V⎓ 2A Manufacturer: Dong Guan Royal Intelligent Co., Ltd.

2.5 Technical Information of E.U.T.

Network and Wireless Connectivity	Bluetooth (BLE) 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	**Bluetooth**
Operation Mode	☒ BLE
Modulation Type	GFSK
Operating Frequency	2402-2480MHz
Transfer Rate	1 Mbps
Number of Channel	40
Antenna Type	PCB Antenna
Antenna Gain(Peak)	4.51 dBi
Remark	The above information are declared by the applicant, EU-LAB is not responsible for the information accuracy provided by the applicant.

All channel was listed on the following table:

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
00	**2402**	08	2418	16	2434	24	2450	32	2466
01	2404	09	2420	17	2436	25	2452	33	2468
02	2406	10	2422	18	2438	26	2454	34	2470
03	2408	11	2424	**19**	**2440**	27	2456	35	2472
04	2410	12	2426	20	2442	28	2458	36	2474
05	2412	13	2428	21	2444	29	2460	37	2476
06	2414	14	2430	22	2446	30	2462	38	2478
07	2416	15	2432	23	2448	31	2464	**39**	**2480**

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 558074 D01 15.247 Meas Guidance v05r02	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.	Channel	Verdict	Remark
1	Antenna Requirement	15.203	N/A	Pass	Note [1]
2	Conducted Emission at AC Power Line	15.207	Low/Middle/High	Pass	--
3	Occupied Bandwidth	15.247(a)(2)	Low/Middle/High	Pass	--
4	Maximum Conducted Output Power	15.247(b)(3)	Low/Middle/High	Pass	--
5	Power spectral density (PSD)	15.247(e)	Low/Middle/High	Pass	--
6	Emissions in Non-restricted Frequency Bands (Conducted)	15.247(d)	Low/Middle/High	Pass	--
7	Band Edge Emissions (Restricted frequency bands)	15.209 15.247(d)	Low/High	Pass	--
8	Radiated Spurious Emission	15.209 15.247(d)	Low/Middle/High	Pass	--
Note [1]: 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

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	2024/01/09	2025/01/08
EMI Test Receiver	Rohde & Schwarz	ESCI	EE-005	2024/01/09	2025/01/08
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	2024/01/09	2025/01/08
Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	EE-007	2023/01/14	2026/01/13
Double Ridged Horn Antenna	A-INFOMW	LB-10180-NF	EE-008	2023/01/12	2026/01/11
Pre-amplifier	Agilent	8447D	EE-009	2024/01/09	2025/01/08
Pre-amplifier	Agilent	8449B	EE-010	2024/01/09	2025/01/08
MXA Signal Analyzer	Agilent	N9020A	EE-011	2024/01/09	2025/01/08
MXG RF Vector Signal Generator	Agilent	N5182A	EE-012	2024/01/09	2025/01/08
Test Software	Farad	EZ-EMC	EE-015	N.C.R	N.C.R
MIMO Power Measurement Module	TSTPASS	TSPS 2023R	EE-016	2024/01/09	2025/01/08
RF Test Software	TSTPASS	TS32893 V2.0	EE-017	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
Constant Temperature Humidity Chamber	Guangxin	GXP-401	ES-002	2024/07/30	2025/07/29
Power Sensor	ROHDE&SCHWARZN	NRP18S	ES-052	2024/02/15	2025/02/14

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	Led Strip Lights	Same as applicant	H619E	N/A
3	Led Strip Lights	Same as applicant	H619A	N/A
4	Led Strip Lights	Same as applicant	H619B	N/A
5	Led Strip Lights	Same as applicant	H619C	N/A
6	Led Strip Lights	Same as applicant	H619D	N/A
7	Led Strip Lights	Same as applicant	H619Z	N/A
8	Led Strip Lights	Same as applicant	H6168	N/A
9	Led Strip Lights	Same as applicant	H618A	N/A
10	Led Strip Lights	Same as applicant	H618C	N/A
11	Led Strip Lights	Same as applicant	H618E	N/A
12	Led Strip Lights	Same as applicant	H618F	N/A

4.4 Test Mode

No.	Test Modes	Description
TM1	TX-GFSK	Keep the EUT connect to AC power line and works in continuously transmitting mode with GFSK modulation with 1 Mbps rate.

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

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 (30MHz- 1GHz)	Ur = 2.70 dB (Horizontal)
	Ur = 2.70 dB (Vertical)
Radiated Emission (1GHz- 18GHz)	Ur = 3.50 dB (Horizontal)
	Ur = 3.50 dB (Vertical)
Radiated Emission (18GHz- 40GHz)	Ur = 5.15 dB (Horizontal)
	Ur = 5.24 dB (Vertical)
Temperature	0.8°C
Humidity	4%

4.7 Deviation from Standards

None.

4.8 Abnormalities from Standard Condition

None.

5 Test Items

5.1 Antenna requirement

5.1.1 Test Requirement

Test Requirement	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 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 antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

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

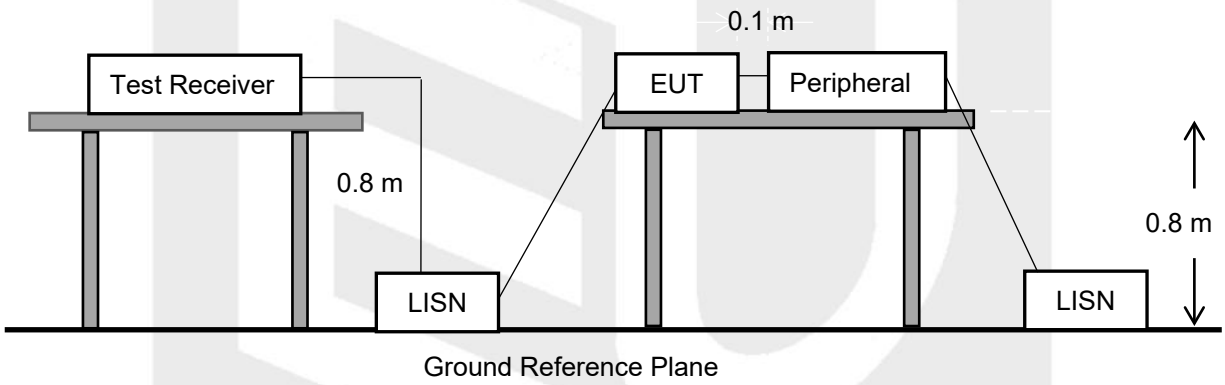
The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

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 μH/50 ohms line impedance stabilization network (LISN).
Test Limit	Frequency of emission (MHz) / Conducted limit (dBμV): 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

5.2.2 Test Setup Diagram



5.2.3 Test Procedure

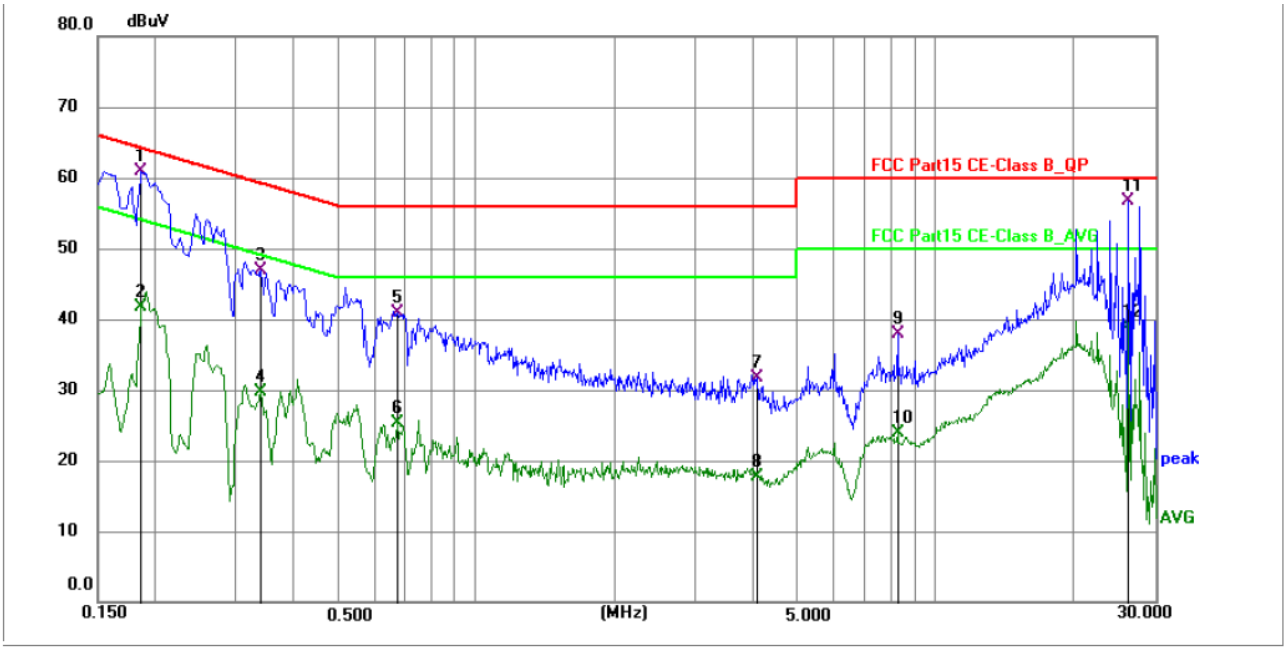
The EUT is put on the plane 0.8 m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipment. Both sides of AC line are investigated to find out the maximum conducted emission 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.
Only the worst case data was showed in the report, please to see the following pages.

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H619E

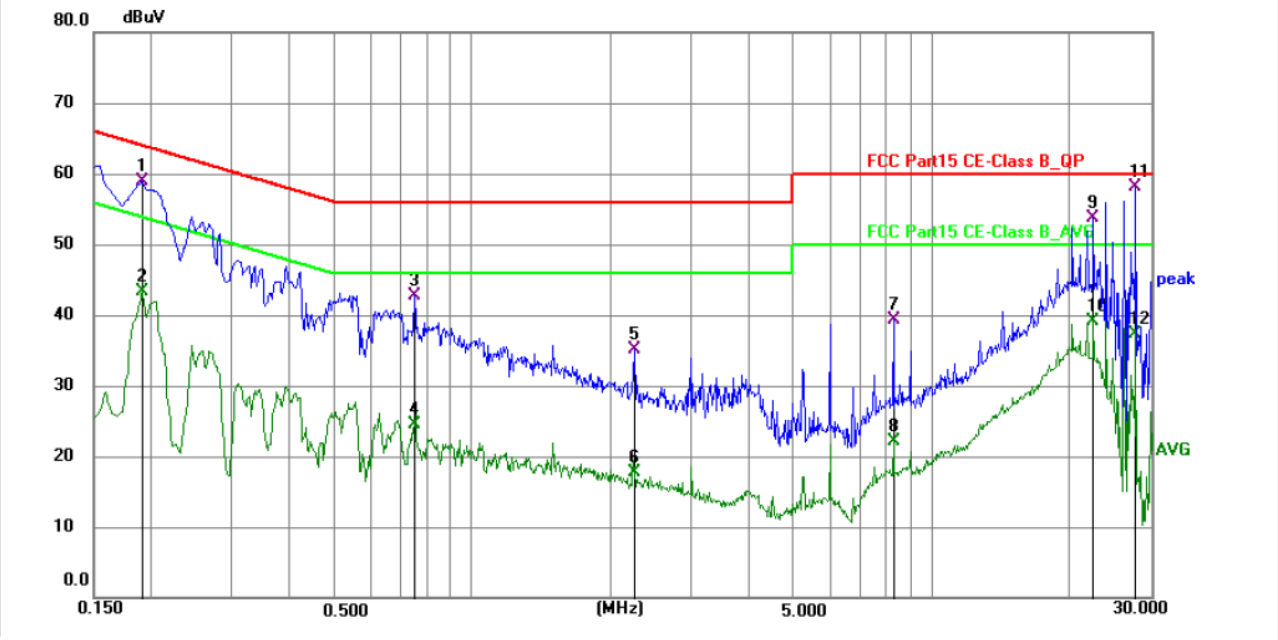


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1860	50.87	9.96	60.83	64.21	-3.38	QP	P	
2	0.1860	31.66	9.96	41.62	54.21	-12.59	AVG	P	
3	0.3390	36.88	10.00	46.88	59.23	-12.35	QP	P	
4	0.3390	19.62	10.00	29.62	49.23	-19.61	AVG	P	
5	0.6720	30.79	10.04	40.83	56.00	-15.17	QP	P	
6	0.6720	15.30	10.04	25.34	46.00	-20.66	AVG	P	
7	4.0830	21.57	10.04	31.61	56.00	-24.39	QP	P	
8	4.0830	7.76	10.04	17.80	46.00	-28.20	AVG	P	
9	8.2500	27.93	9.99	37.92	60.00	-22.08	QP	P	
10	8.2500	13.99	9.99	23.98	50.00	-26.02	AVG	P	
11 *	26.2500	46.54	10.20	56.74	60.00	-3.26	QP	P	
12	26.2500	28.76	10.20	38.96	50.00	-11.04	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H619E

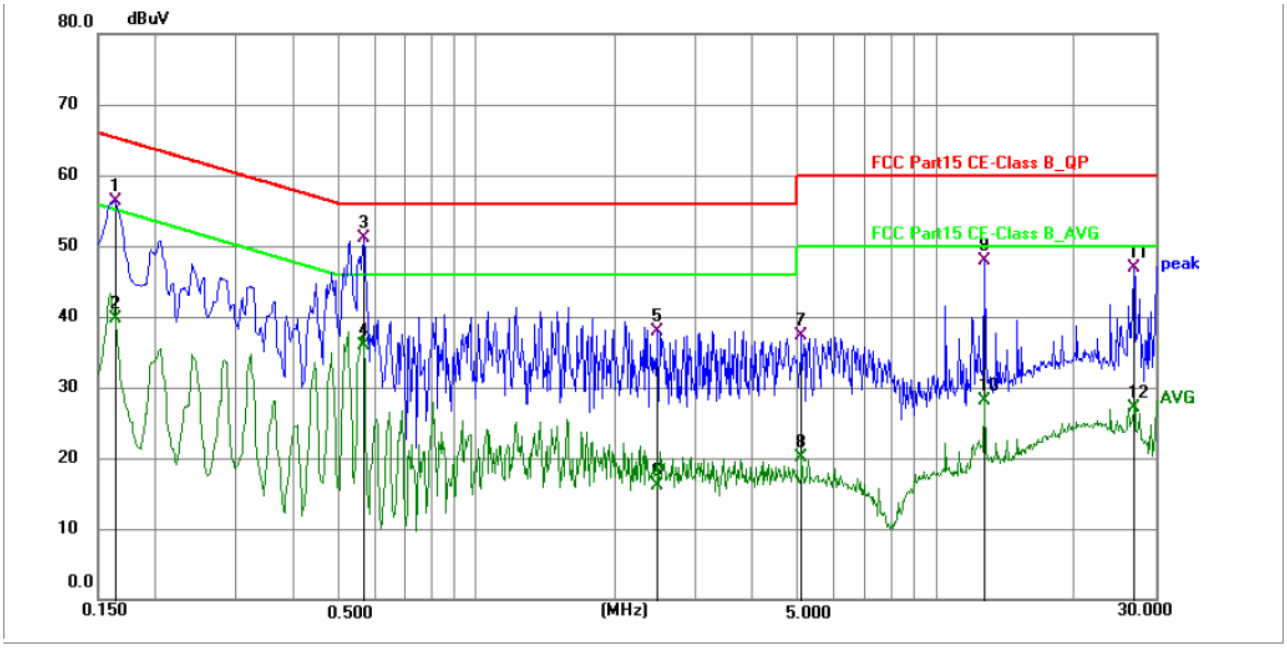


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1905	48.97	9.99	58.96	64.01	-5.05	QP	P	
2	0.1905	33.28	9.99	43.27	54.01	-10.74	AVG	P	
3	0.7485	32.67	10.06	42.73	56.00	-13.27	QP	P	
4	0.7485	14.46	10.06	24.52	46.00	-21.48	AVG	P	
5	2.2515	24.96	10.06	35.02	56.00	-20.98	QP	P	
6	2.2515	7.59	10.06	17.65	46.00	-28.35	AVG	P	
7	8.2500	29.21	10.02	39.23	60.00	-20.77	QP	P	
8	8.2500	12.00	10.02	22.02	50.00	-27.98	AVG	P	
9	22.5015	43.60	10.12	53.72	60.00	-6.28	QP	P	
10	22.5015	28.91	10.12	39.03	50.00	-10.97	AVG	P	
11 *	27.7530	47.89	10.20	58.09	60.00	-1.91	QP	P	
12	27.7530	27.14	10.20	37.34	50.00	-12.66	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H619A

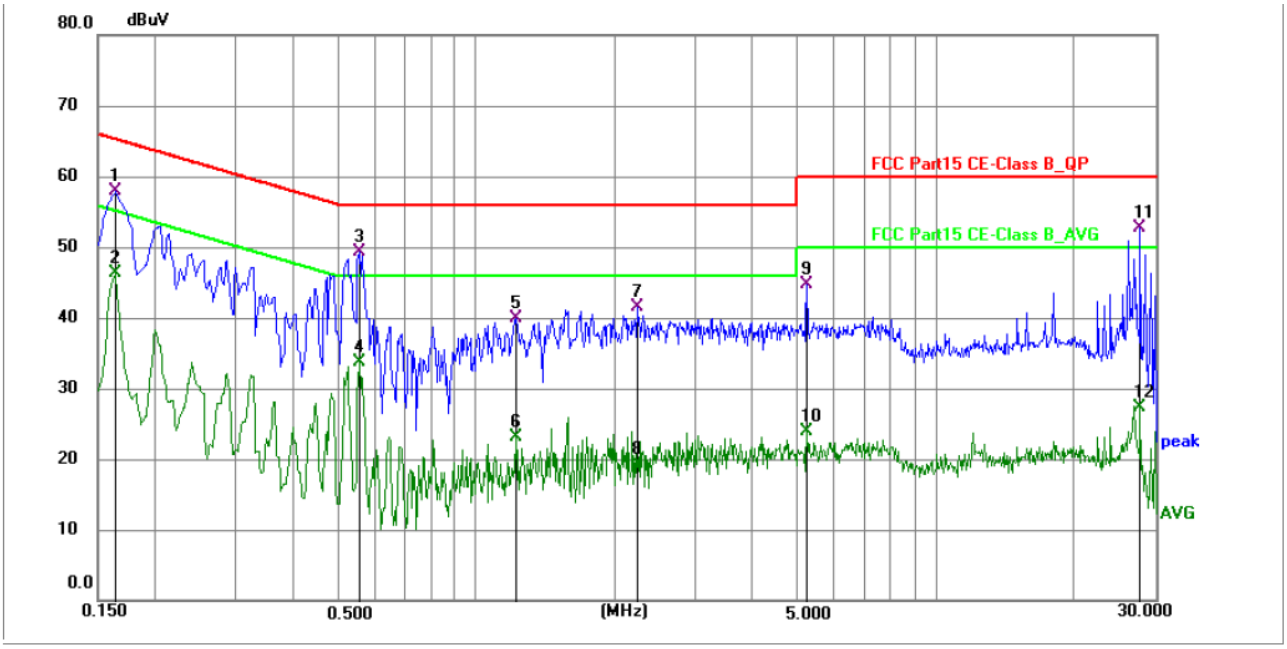


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1635	46.29	9.96	56.25	65.28	-9.03	QP	P	
2	0.1635	29.76	9.96	39.72	55.28	-15.56	AVG	P	
3 *	0.5685	41.16	10.04	51.20	56.00	-4.80	QP	P	
4	0.5685	25.88	10.04	35.92	46.00	-10.08	AVG	P	
5	2.4765	27.96	10.04	38.00	56.00	-18.00	QP	P	
6	2.4765	6.07	10.04	16.11	46.00	-29.89	AVG	P	
7	5.0954	27.33	10.04	37.37	60.00	-22.63	QP	P	
8	5.0954	10.03	10.04	20.07	50.00	-29.93	AVG	P	
9	12.7500	38.00	9.97	47.97	60.00	-12.03	QP	P	
10	12.7500	18.17	9.97	28.14	50.00	-21.86	AVG	P	
11	26.9655	36.75	10.21	46.96	60.00	-13.04	QP	P	
12	26.9655	16.92	10.21	27.13	50.00	-22.87	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H619A

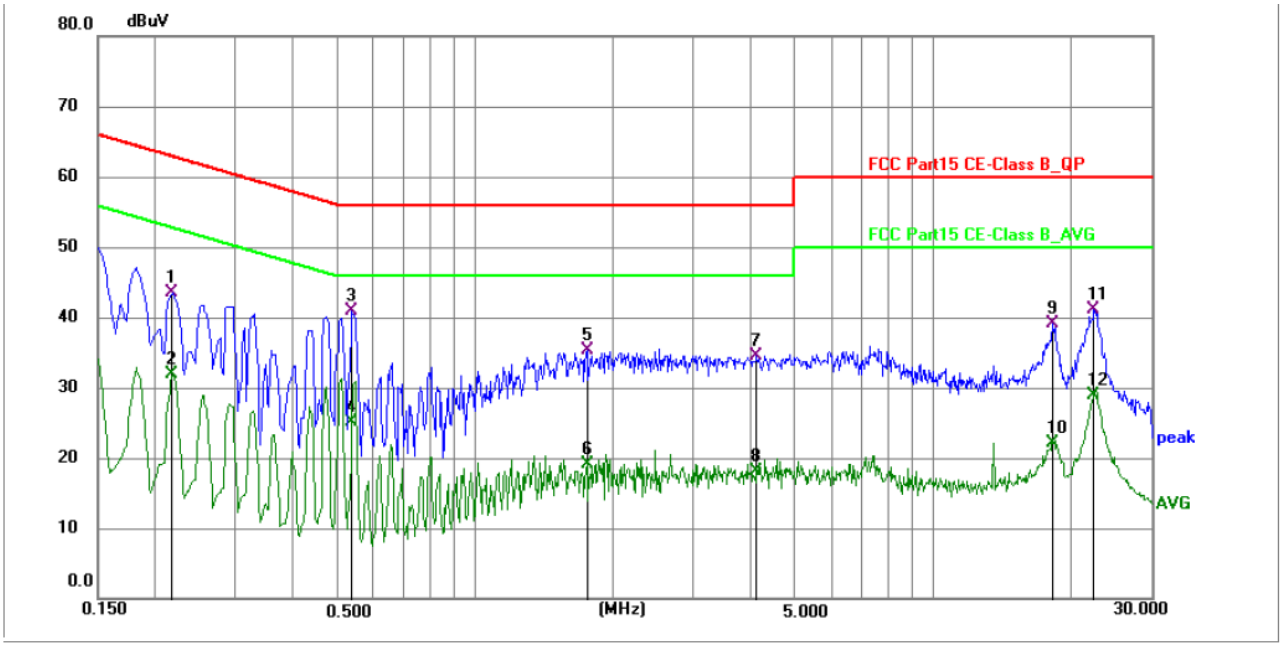


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1635	47.88	9.98	57.86	65.28	-7.42	QP	P	
2	0.1635	36.25	9.98	46.23	55.28	-9.05	AVG	P	
3 *	0.5550	39.24	10.07	49.31	56.00	-6.69	QP	P	
4	0.5550	23.73	10.07	33.80	46.00	-12.20	AVG	P	
5	1.2164	29.85	10.06	39.91	56.00	-16.09	QP	P	
6	1.2164	12.96	10.06	23.02	46.00	-22.98	AVG	P	
7	2.2470	31.49	10.07	41.56	56.00	-14.44	QP	P	
8	2.2470	9.21	10.07	19.28	46.00	-26.72	AVG	P	
9	5.2485	34.59	10.05	44.64	60.00	-15.36	QP	P	
10	5.2485	13.82	10.05	23.87	50.00	-26.13	AVG	P	
11	27.7485	42.56	10.20	52.76	60.00	-7.24	QP	P	
12	27.7485	17.11	10.20	27.31	50.00	-22.69	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H619B

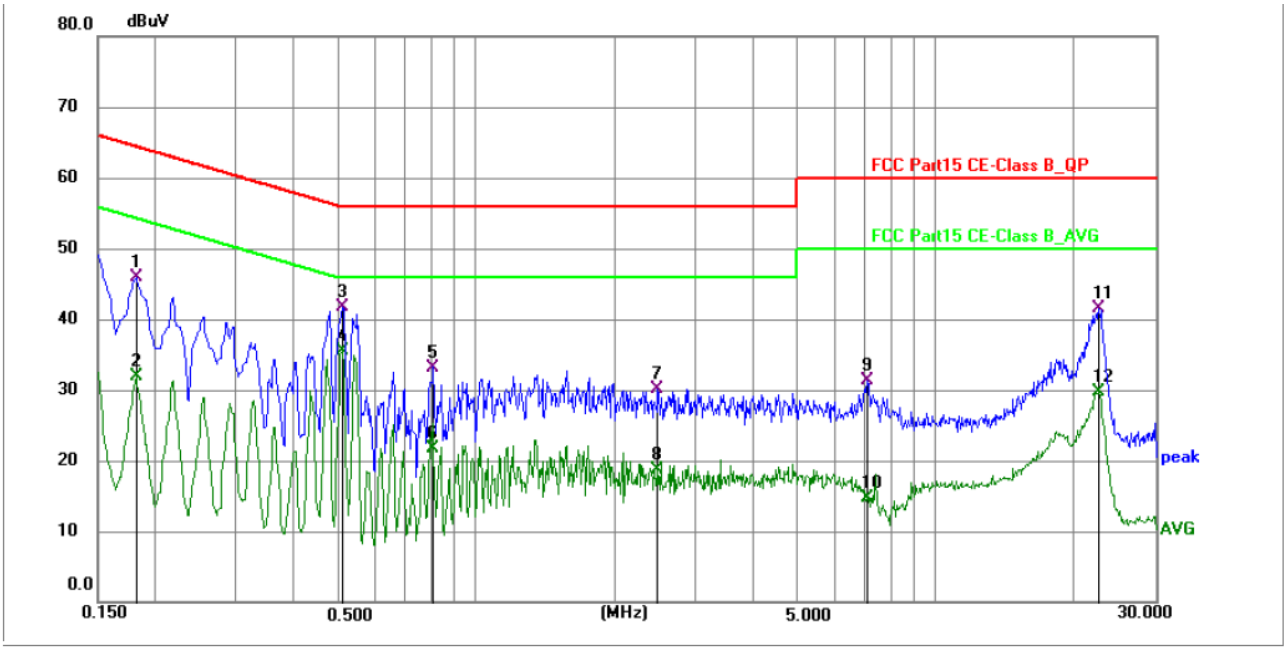


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2175	33.44	9.97	43.41	62.91	-19.50	QP	P	
2	0.2175	21.87	9.97	31.84	52.91	-21.07	AVG	P	
3 *	0.5370	30.85	10.04	40.89	56.00	-15.11	QP	P	
4	0.5370	15.12	10.04	25.16	46.00	-20.84	AVG	P	
5	1.7565	25.28	10.02	35.30	56.00	-20.70	QP	P	
6	1.7565	9.09	10.02	19.11	46.00	-26.89	AVG	P	
7	4.1235	24.52	10.04	34.56	56.00	-21.44	QP	P	
8	4.1235	8.12	10.04	18.16	46.00	-27.84	AVG	P	
9	18.2670	29.07	10.04	39.11	60.00	-20.89	QP	P	
10	18.2670	11.99	10.04	22.03	50.00	-27.97	AVG	P	
11	22.4970	30.95	10.12	41.07	60.00	-18.93	QP	P	
12	22.4970	18.76	10.12	28.88	50.00	-21.12	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H619B

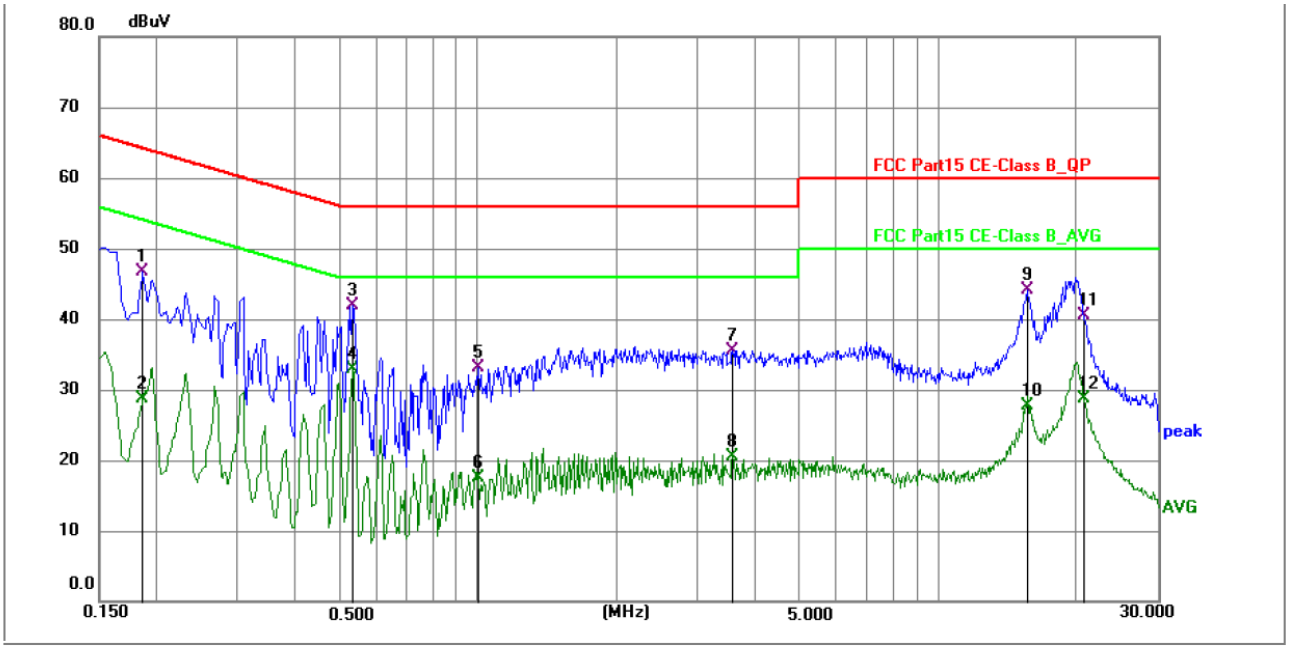


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1815	35.96	9.99	45.95	64.42	-18.47	QP	P	
2	0.1815	21.96	9.99	31.95	54.42	-22.47	AVG	P	
3	0.5100	31.65	10.07	41.72	56.00	-14.28	QP	P	
4 *	0.5100	25.37	10.07	35.44	46.00	-10.56	AVG	P	
5	0.8070	23.13	10.07	33.20	56.00	-22.80	QP	P	
6	0.8070	11.62	10.07	21.69	46.00	-24.31	AVG	P	
7	2.4855	19.97	10.06	30.03	56.00	-25.97	QP	P	
8	2.4855	8.60	10.06	18.66	46.00	-27.34	AVG	P	
9	7.0890	21.20	10.03	31.23	60.00	-28.77	QP	P	
10	7.0890	4.75	10.03	14.78	50.00	-35.22	AVG	P	
11	22.5465	31.36	10.12	41.48	60.00	-18.52	QP	P	
12	22.5465	19.61	10.12	29.73	50.00	-20.27	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H619C

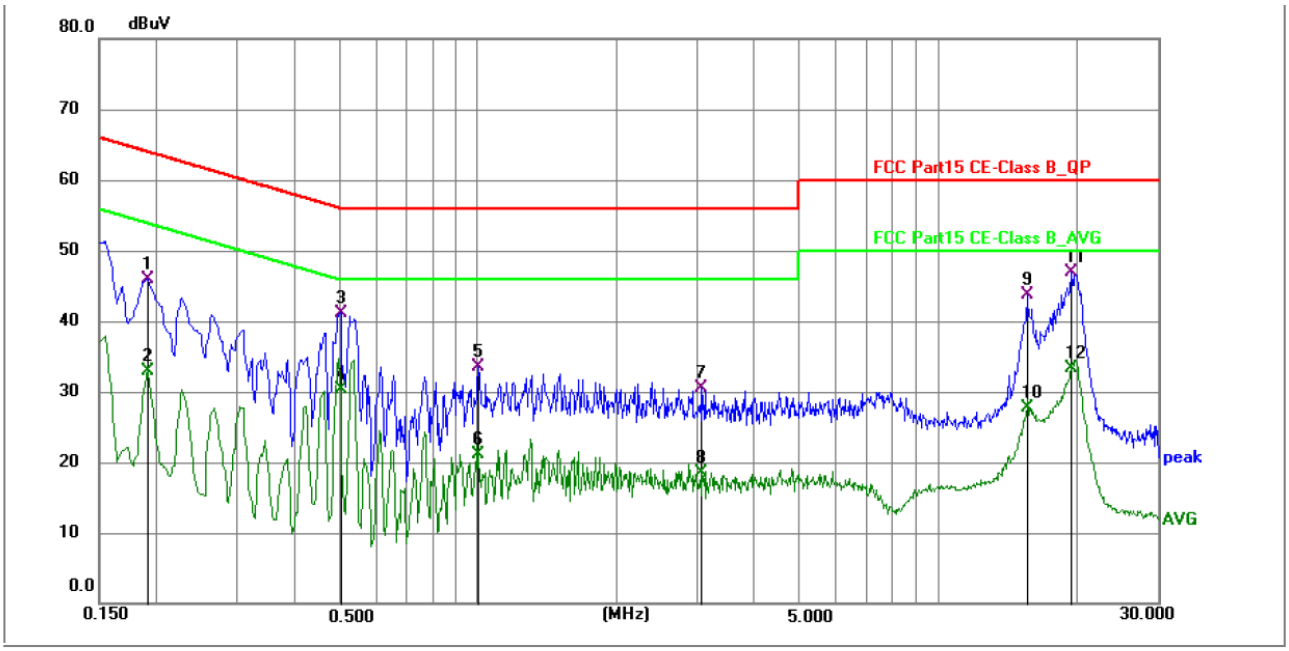


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1860	36.75	9.96	46.71	64.21	-17.50	QP	P	
2	0.1860	18.65	9.96	28.61	54.21	-25.60	AVG	P	
3	0.5325	31.95	10.04	41.99	56.00	-14.01	QP	P	
4 *	0.5325	22.96	10.04	33.00	46.00	-13.00	AVG	P	
5	1.0005	23.02	10.04	33.06	56.00	-22.94	QP	P	
6	1.0005	7.46	10.04	17.50	46.00	-28.50	AVG	P	
7	3.5655	25.50	10.05	35.55	56.00	-20.45	QP	P	
8	3.5655	10.51	10.05	20.56	46.00	-25.44	AVG	P	
9	15.6255	34.11	9.98	44.09	60.00	-15.91	QP	P	
10	15.6255	17.72	9.98	27.70	50.00	-22.30	AVG	P	
11	20.7330	30.44	10.09	40.53	60.00	-19.47	QP	P	
12	20.7330	18.69	10.09	28.78	50.00	-21.22	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H619C

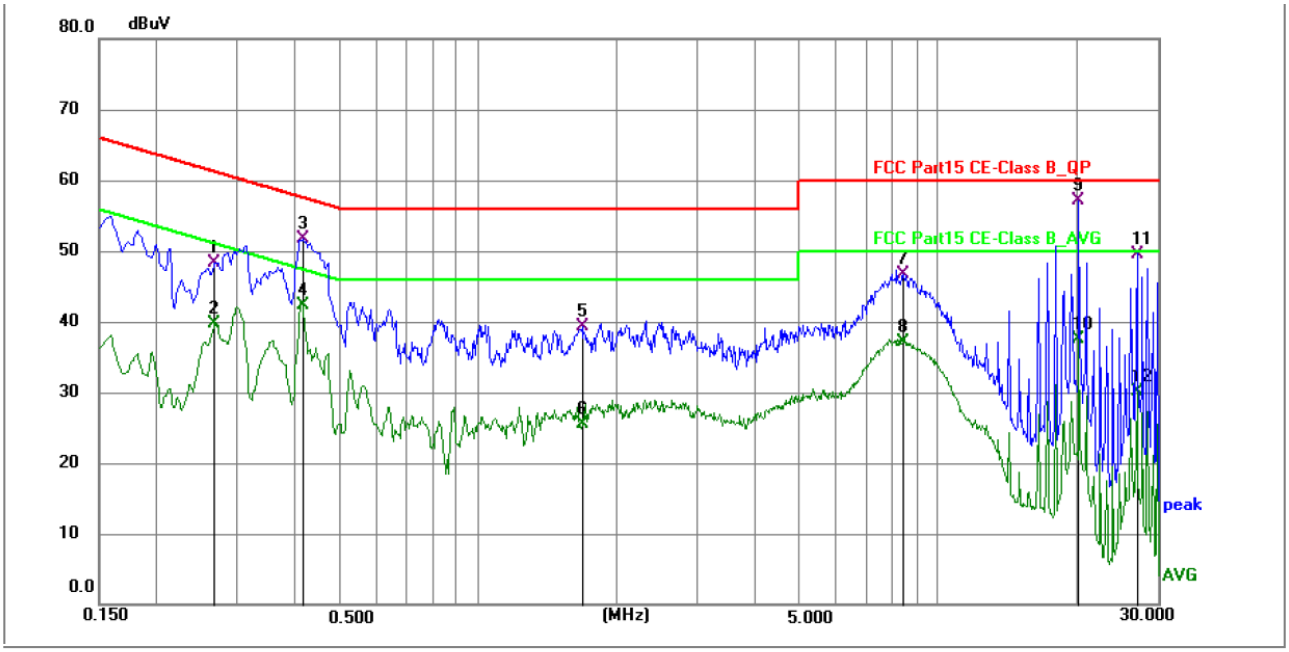


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1905	35.97	9.99	45.96	64.01	-18.05	QP	P	
2	0.1905	22.89	9.99	32.88	54.01	-21.13	AVG	P	
3	0.5010	31.13	10.07	41.20	56.00	-14.80	QP	P	
4	0.5010	20.29	10.07	30.36	46.00	-15.64	AVG	P	
5	1.0005	23.41	10.06	33.47	56.00	-22.53	QP	P	
6	1.0005	11.10	10.06	21.16	46.00	-24.84	AVG	P	
7	3.0705	20.41	10.04	30.45	56.00	-25.55	QP	P	
8	3.0705	8.51	10.04	18.55	46.00	-27.45	AVG	P	
9	15.6345	33.72	10.00	43.72	60.00	-16.28	QP	P	
10	15.6345	17.68	10.00	27.68	50.00	-22.32	AVG	P	
11 *	19.5180	36.86	10.07	46.93	60.00	-13.07	QP	P	
12	19.5180	23.18	10.07	33.25	50.00	-16.75	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H619D

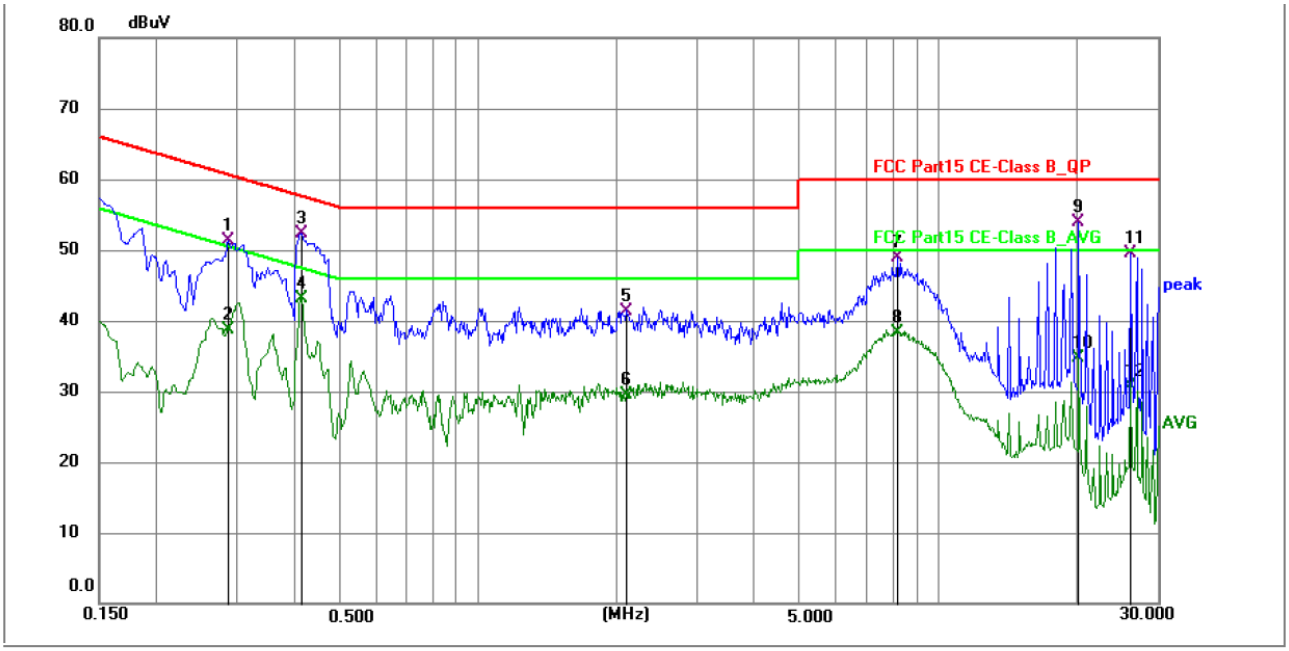


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2670	38.26	9.99	48.25	61.21	-12.96	QP	P	
2	0.2670	29.73	9.99	39.72	51.21	-11.49	AVG	P	
3	0.4155	41.64	10.02	51.66	57.54	-5.88	QP	P	
4	0.4155	32.32	10.02	42.34	47.54	-5.20	AVG	P	
5	1.6845	29.30	10.03	39.33	56.00	-16.67	QP	P	
6	1.6845	15.43	10.03	25.46	46.00	-20.54	AVG	P	
7	8.3895	36.71	9.99	46.70	60.00	-13.30	QP	P	
8	8.3895	27.06	9.99	37.05	50.00	-12.95	AVG	P	
9 *	20.2515	47.11	10.08	57.19	60.00	-2.81	QP	P	
10	20.2515	27.36	10.08	37.44	50.00	-12.56	AVG	P	
11	27.0015	39.39	10.21	49.60	60.00	-10.40	QP	P	
12	27.0015	19.86	10.21	30.07	50.00	-19.93	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H619D

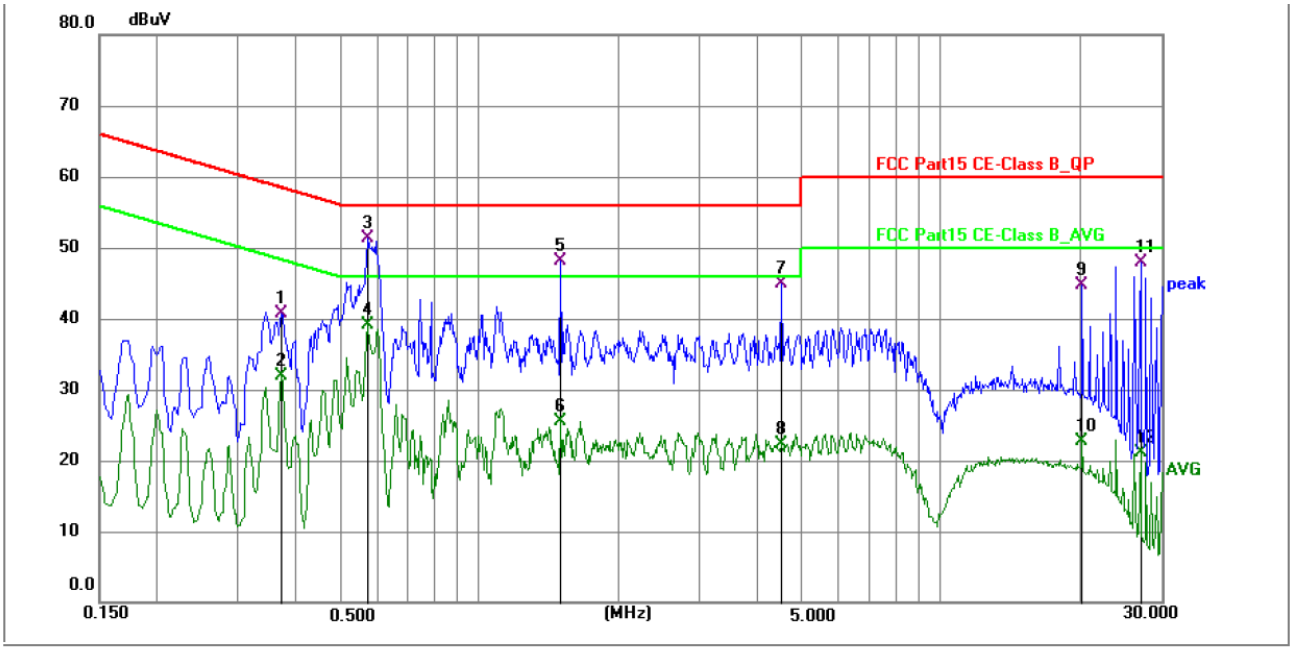


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2850	41.24	10.01	51.25	60.67	-9.42	QP	P	
2	0.2850	28.65	10.01	38.66	50.67	-12.01	AVG	P	
3	0.4110	42.30	10.04	52.34	57.63	-5.29	QP	P	
4 *	0.4110	33.12	10.04	43.16	47.63	-4.47	AVG	P	
5	2.1075	31.33	10.07	41.40	56.00	-14.60	QP	P	
6	2.1075	19.43	10.07	29.50	46.00	-16.50	AVG	P	
7	8.1555	38.88	10.02	48.90	60.00	-11.10	QP	P	
8	8.1555	28.31	10.02	38.33	50.00	-11.67	AVG	P	
9	20.2470	43.86	10.08	53.94	60.00	-6.06	QP	P	
10	20.2470	24.66	10.08	34.74	50.00	-15.26	AVG	P	
11	26.2500	39.31	10.18	49.49	60.00	-10.51	QP	P	
12	26.2500	20.53	10.18	30.71	50.00	-19.29	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H619Z

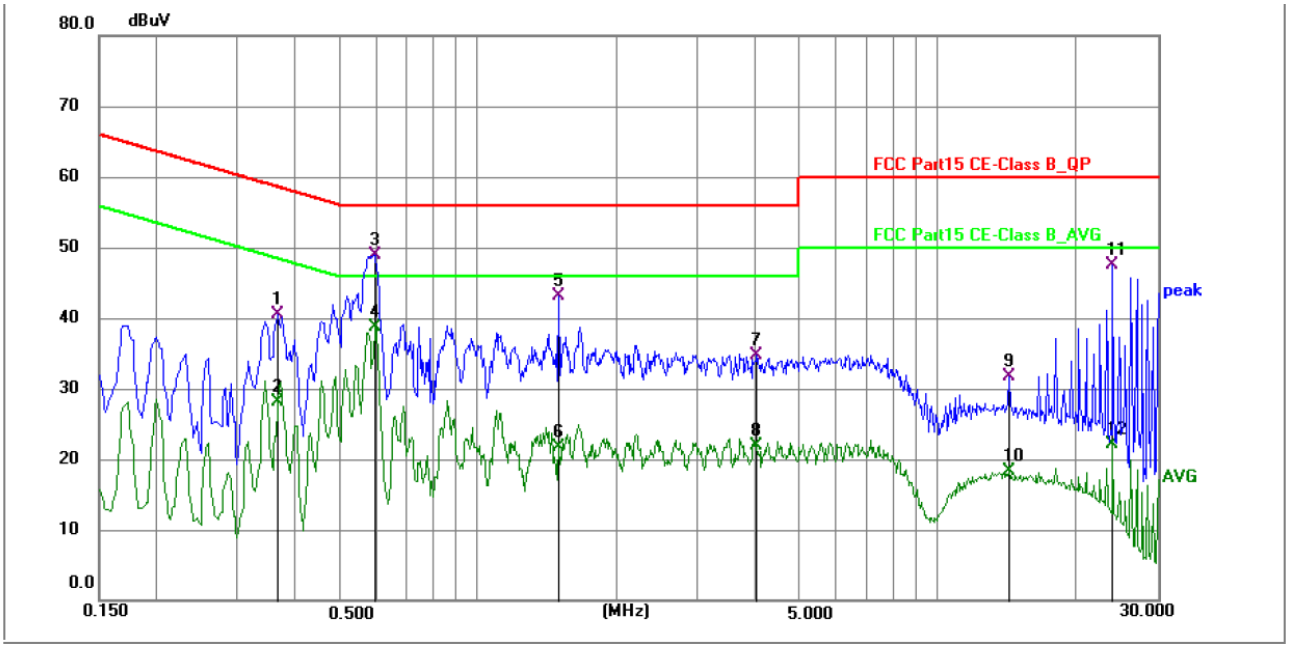


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.3704	30.60	10.01	40.61	58.49	-17.88	QP	P	
2	0.3704	21.80	10.01	31.81	48.49	-16.68	AVG	P	
3 *	0.5730	41.19	10.04	51.23	56.00	-4.77	QP	P	
4	0.5730	29.06	10.04	39.10	46.00	-6.90	AVG	P	
5	1.5000	38.04	10.03	48.07	56.00	-7.93	QP	P	
6	1.5000	15.50	10.03	25.53	46.00	-20.47	AVG	P	
7	4.5195	34.84	10.04	44.88	56.00	-11.12	QP	P	
8	4.5195	12.23	10.04	22.27	46.00	-23.73	AVG	P	
9	20.2515	34.60	10.08	44.68	60.00	-15.32	QP	P	
10	20.2515	12.65	10.08	22.73	50.00	-27.27	AVG	P	
11	27.0015	37.67	10.21	47.88	60.00	-12.12	QP	P	
12	27.0015	10.81	10.21	21.02	50.00	-28.98	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H619Z

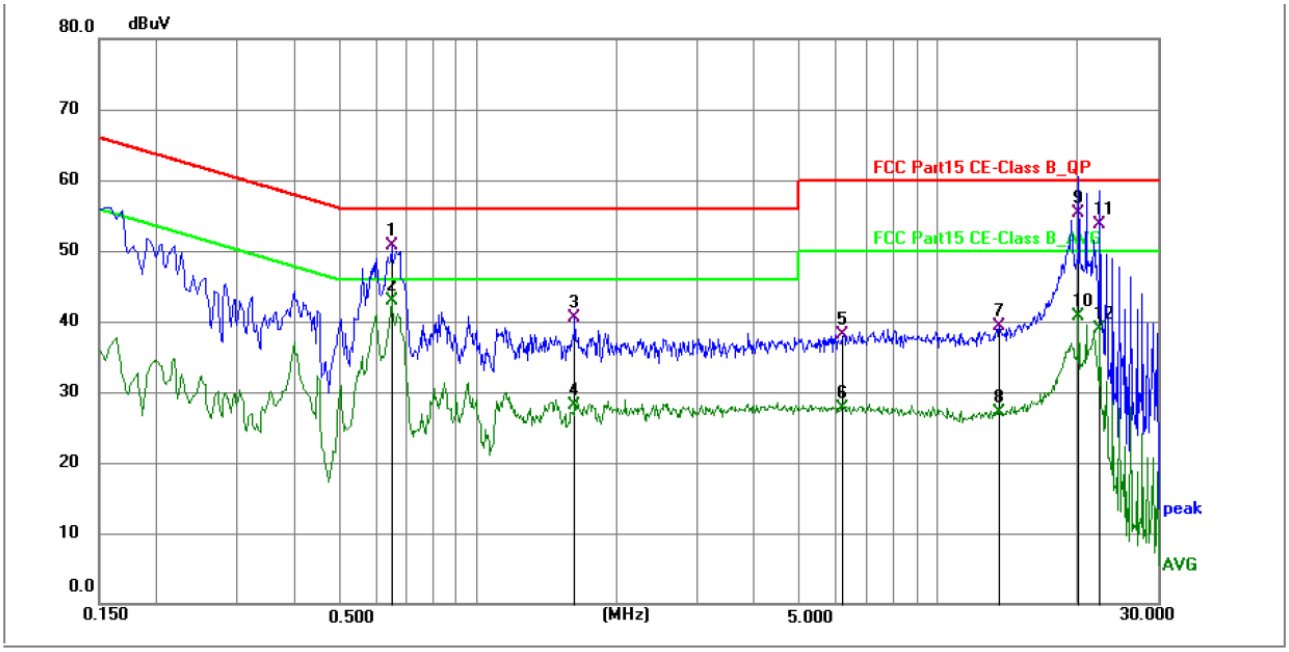


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.3660	30.45	10.04	40.49	58.59	-18.10	QP	P	
2	0.3660	18.02	10.04	28.06	48.59	-20.53	AVG	P	
3 *	0.5955	38.81	10.07	48.88	56.00	-7.12	QP	P	
4	0.5955	28.56	10.07	38.63	46.00	-7.37	AVG	P	
5	1.4955	33.08	10.06	43.14	56.00	-12.86	QP	P	
6	1.4955	11.70	10.06	21.76	46.00	-24.24	AVG	P	
7	4.0380	24.59	10.05	34.64	56.00	-21.36	QP	P	
8	4.0380	11.90	10.05	21.95	46.00	-24.05	AVG	P	
9	14.2485	21.79	9.99	31.78	60.00	-28.22	QP	P	
10	14.2485	8.38	9.99	18.37	50.00	-31.63	AVG	P	
11	24.0000	37.43	10.14	47.57	60.00	-12.43	QP	P	
12	24.0000	11.88	10.14	22.02	50.00	-27.98	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H6168

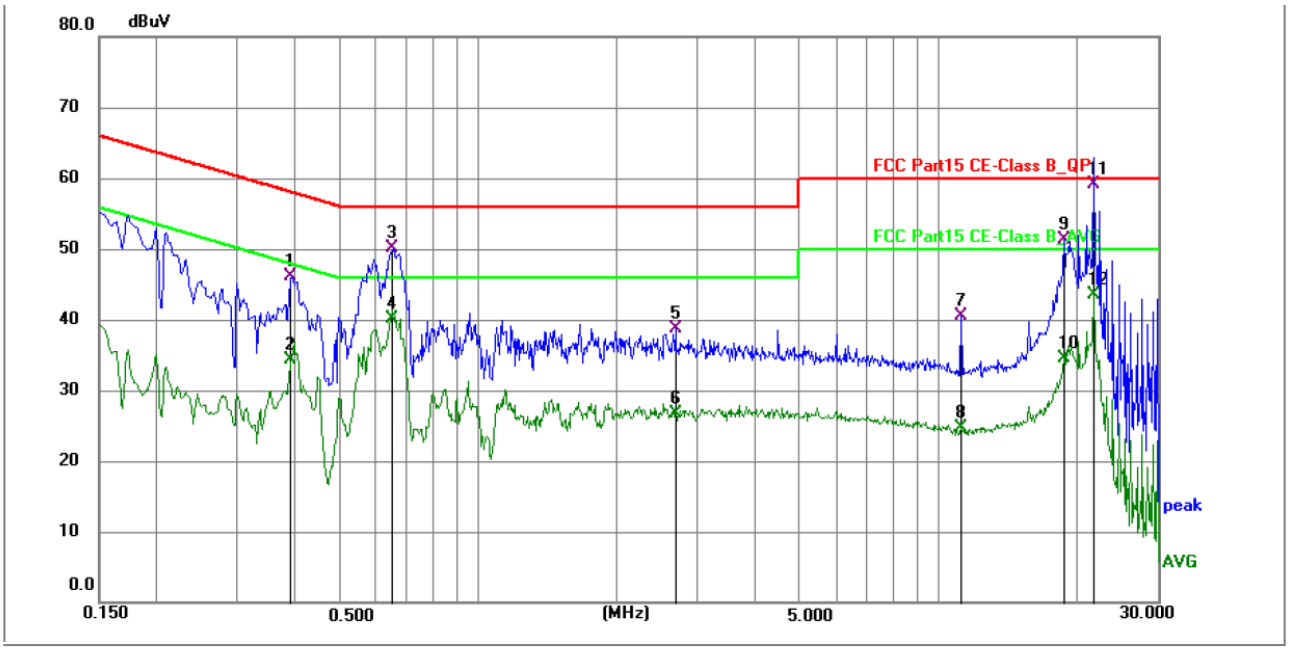


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.6495	40.66	10.04	50.70	56.00	-5.30	QP	P	
2 *	0.6495	32.79	10.04	42.83	46.00	-3.17	AVG	P	
3	1.6260	30.40	10.03	40.43	56.00	-15.57	QP	P	
4	1.6260	18.00	10.03	28.03	46.00	-17.97	AVG	P	
5	6.2204	28.18	10.02	38.20	60.00	-21.80	QP	P	
6	6.2204	17.67	10.02	27.69	50.00	-22.31	AVG	P	
7	13.6095	29.35	9.97	39.32	60.00	-20.68	QP	P	
8	13.6095	17.15	9.97	27.12	50.00	-22.88	AVG	P	
9	20.2515	45.32	10.08	55.40	60.00	-4.60	QP	P	
10	20.2515	30.67	10.08	40.75	50.00	-9.25	AVG	P	
11	22.4970	43.68	10.12	53.80	60.00	-6.20	QP	P	
12	22.4970	28.82	10.12	38.94	50.00	-11.06	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H6168

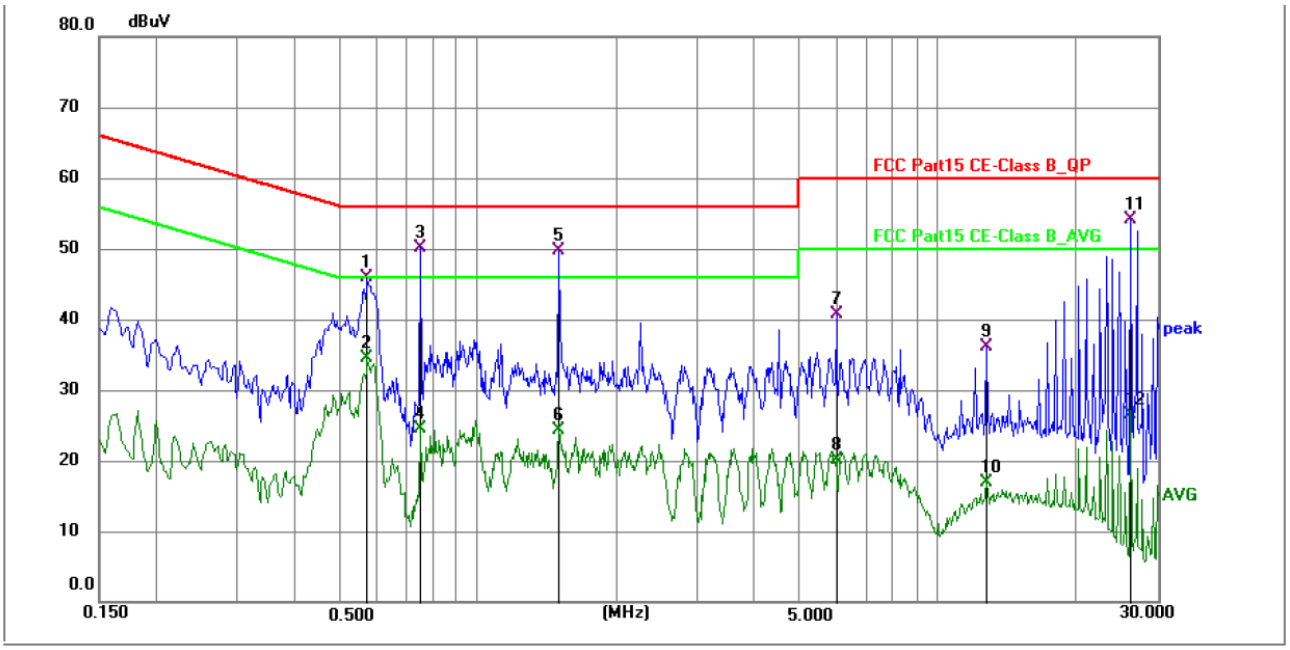


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.3930	36.16	10.04	46.20	58.00	-11.80	QP	P	
2	0.3930	24.24	10.04	34.28	48.00	-13.72	AVG	P	
3	0.6540	39.98	10.06	50.04	56.00	-5.96	QP	P	
4	0.6540	30.03	10.06	40.09	46.00	-5.91	AVG	P	
5	2.6880	28.69	10.06	38.75	56.00	-17.25	QP	P	
6	2.6880	16.62	10.06	26.68	46.00	-19.32	AVG	P	
7	11.2560	30.42	10.00	40.42	60.00	-19.58	QP	P	
8	11.2560	14.79	10.00	24.79	50.00	-25.21	AVG	P	
9	18.7529	41.32	10.06	51.38	60.00	-8.62	QP	P	
10	18.7529	24.49	10.06	34.55	50.00	-15.45	AVG	P	
11 *	21.7500	49.09	10.11	59.20	60.00	-0.80	QP	P	
12	21.7500	33.31	10.11	43.42	50.00	-6.58	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H618A

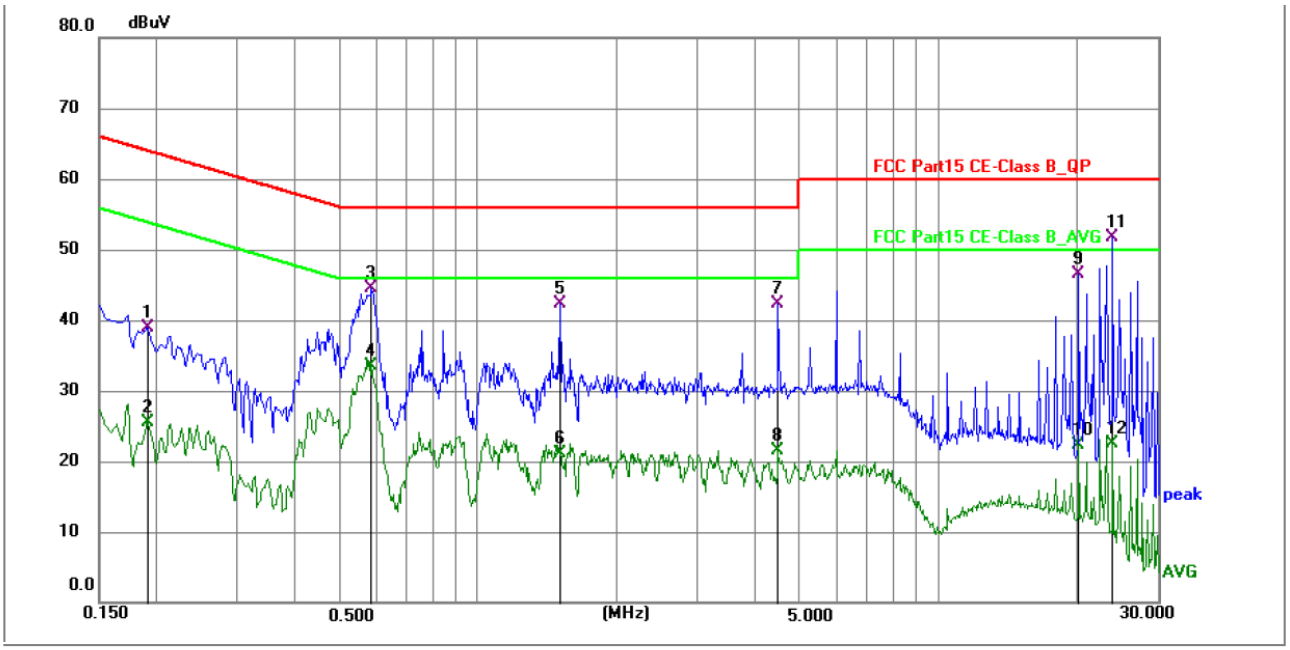


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.5730	35.77	10.04	45.81	56.00	-10.19	QP	P	
2	0.5730	24.51	10.04	34.55	46.00	-11.45	AVG	P	
3 *	0.7485	40.16	10.04	50.20	56.00	-5.80	QP	P	
4	0.7485	14.44	10.04	24.48	46.00	-21.52	AVG	P	
5	1.5000	39.62	10.03	49.65	56.00	-6.35	QP	P	
6	1.5000	14.23	10.03	24.26	46.00	-21.74	AVG	P	
7	6.0000	30.75	10.03	40.78	60.00	-19.22	QP	P	
8	6.0000	10.03	10.03	20.06	50.00	-29.94	AVG	P	
9	12.7500	26.16	9.97	36.13	60.00	-23.87	QP	P	
10	12.7500	6.94	9.97	16.91	50.00	-33.09	AVG	P	
11	26.2500	43.81	10.20	54.01	60.00	-5.99	QP	P	
12	26.2500	16.40	10.20	26.60	50.00	-23.40	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H618A

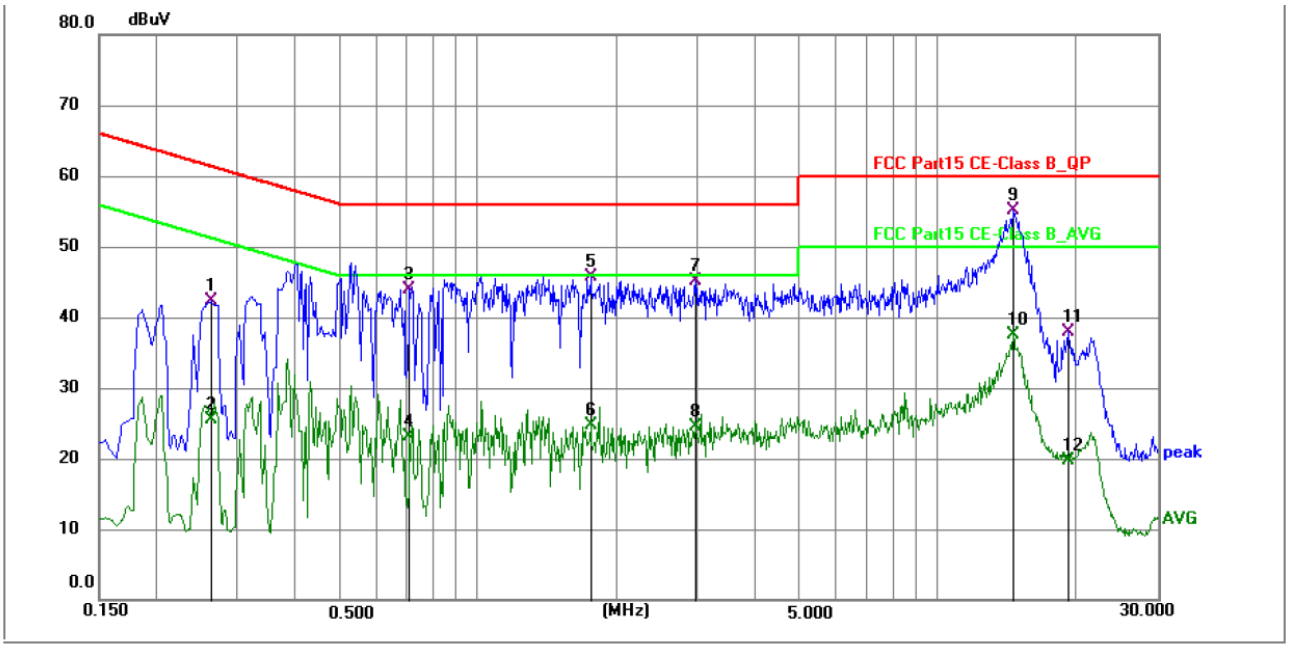


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1905	28.92	9.99	38.91	64.01	-25.10	QP	P	
2	0.1905	15.61	9.99	25.60	54.01	-28.41	AVG	P	
3	0.5865	34.48	10.07	44.55	56.00	-11.45	QP	P	
4	0.5865	23.51	10.07	33.58	46.00	-12.42	AVG	P	
5	1.5045	32.20	10.07	42.27	56.00	-13.73	QP	P	
6	1.5045	11.10	10.07	21.17	46.00	-24.83	AVG	P	
7	4.4970	32.31	10.05	42.36	56.00	-13.64	QP	P	
8	4.4970	11.52	10.05	21.57	46.00	-24.43	AVG	P	
9	20.2515	36.43	10.08	46.51	60.00	-13.49	QP	P	
10	20.2515	12.32	10.08	22.40	50.00	-27.60	AVG	P	
11 *	24.0045	41.49	10.14	51.63	60.00	-8.37	QP	P	
12	24.0045	12.44	10.14	22.58	50.00	-27.42	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H618C

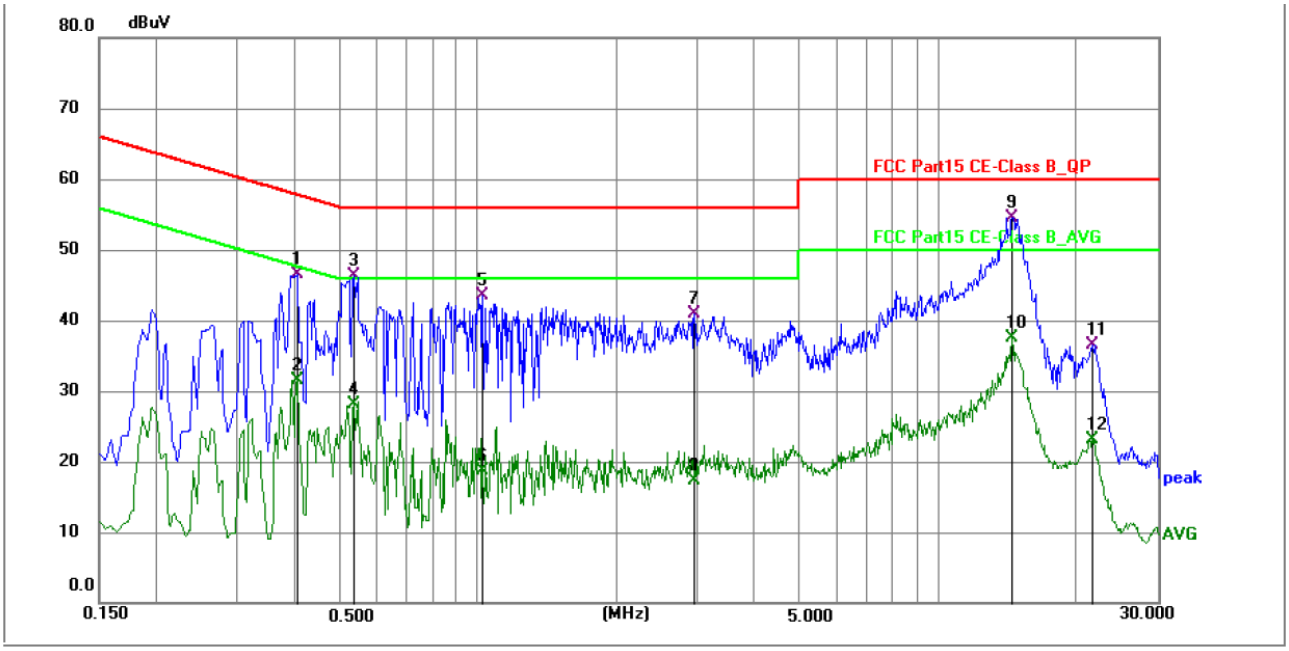


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2625	32.24	9.99	42.23	61.35	-19.12	QP	P	
2	0.2625	15.55	9.99	25.54	51.35	-25.81	AVG	P	
3	0.7080	33.79	10.04	43.83	56.00	-12.17	QP	P	
4	0.7080	13.00	10.04	23.04	46.00	-22.96	AVG	P	
5	1.7565	35.65	10.02	45.67	56.00	-10.33	QP	P	
6	1.7565	14.78	10.02	24.80	46.00	-21.20	AVG	P	
7	2.9625	35.03	10.05	45.08	56.00	-10.92	QP	P	
8	2.9625	14.49	10.05	24.54	46.00	-21.46	AVG	P	
9 *	14.5365	45.04	9.97	55.01	60.00	-4.99	QP	P	
10	14.5365	27.58	9.97	37.55	50.00	-12.45	AVG	P	
11	19.1760	27.93	10.05	37.98	60.00	-22.02	QP	P	
12	19.1760	9.62	10.05	19.67	50.00	-30.33	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H618C

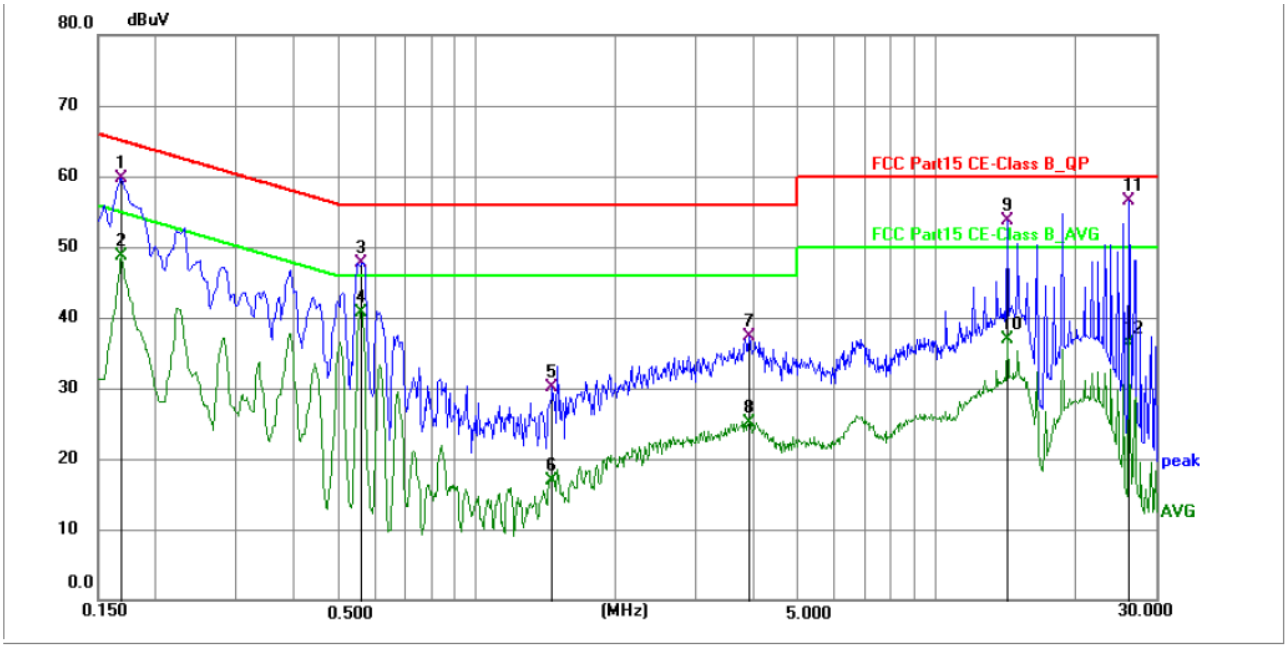


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.4020	36.37	10.04	46.41	57.81	-11.40	QP	P	
2	0.4020	21.40	10.04	31.44	47.81	-16.37	AVG	P	
3	0.5370	36.19	10.07	46.26	56.00	-9.74	QP	P	
4	0.5370	18.03	10.07	28.10	46.00	-17.90	AVG	P	
5	1.0230	33.40	10.06	43.46	56.00	-12.54	QP	P	
6	1.0230	8.60	10.06	18.66	46.00	-27.34	AVG	P	
7	2.9580	30.87	10.05	40.92	56.00	-15.08	QP	P	
8	2.9580	7.22	10.05	17.27	46.00	-28.73	AVG	P	
9 *	14.4915	44.55	9.99	54.54	60.00	-5.46	QP	P	
10	14.4915	27.48	9.99	37.47	50.00	-12.53	AVG	P	
11	21.6195	26.40	10.11	36.51	60.00	-23.49	QP	P	
12	21.6195	12.95	10.11	23.06	50.00	-26.94	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H618E

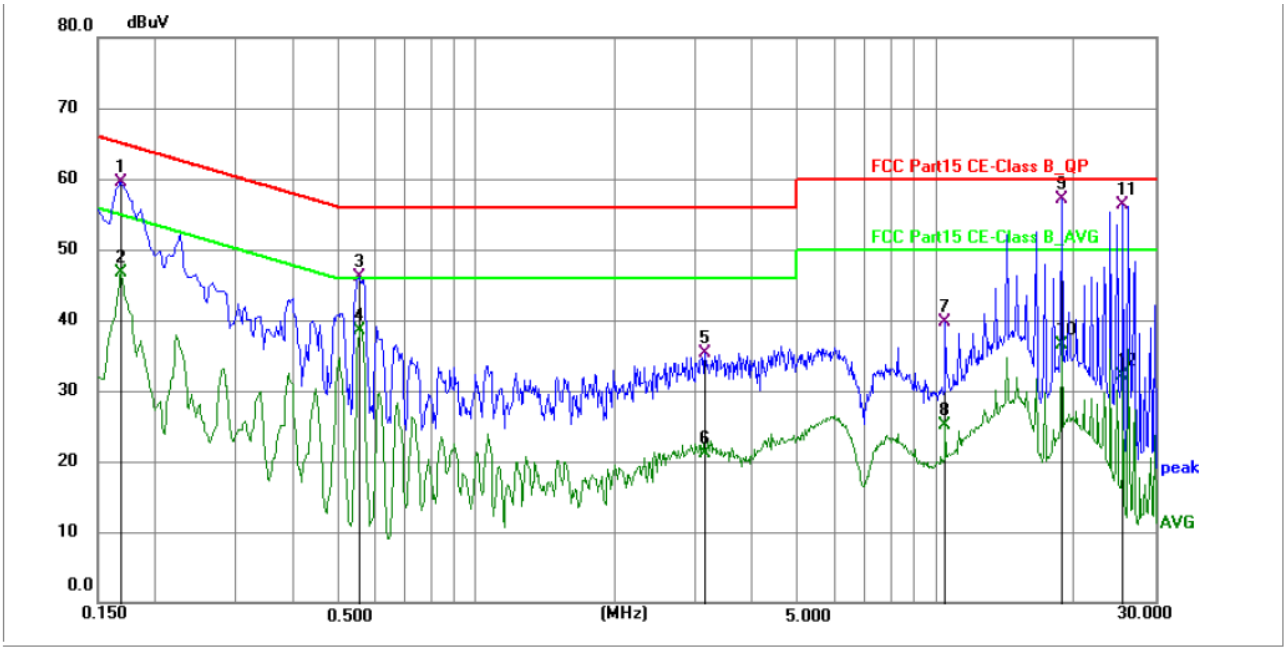


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1680	49.84	9.96	59.80	65.06	-5.26	QP	P	
2	0.1680	38.68	9.96	48.64	55.06	-6.42	AVG	P	
3	0.5639	37.72	10.04	47.76	56.00	-8.24	QP	P	
4	0.5639	30.67	10.04	40.71	46.00	-5.29	AVG	P	
5	1.4595	20.07	10.03	30.10	56.00	-25.90	QP	P	
6	1.4595	6.92	10.03	16.95	46.00	-29.05	AVG	P	
7	3.9075	27.30	10.05	37.35	56.00	-18.65	QP	P	
8	3.9075	15.00	10.05	25.05	46.00	-20.95	AVG	P	
9	14.2485	43.74	9.97	53.71	60.00	-6.29	QP	P	
10	14.2485	26.91	9.97	36.88	50.00	-13.12	AVG	P	
11 *	26.2500	46.21	10.20	56.41	60.00	-3.59	QP	P	
12	26.2500	26.03	10.20	36.23	50.00	-13.77	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H618E

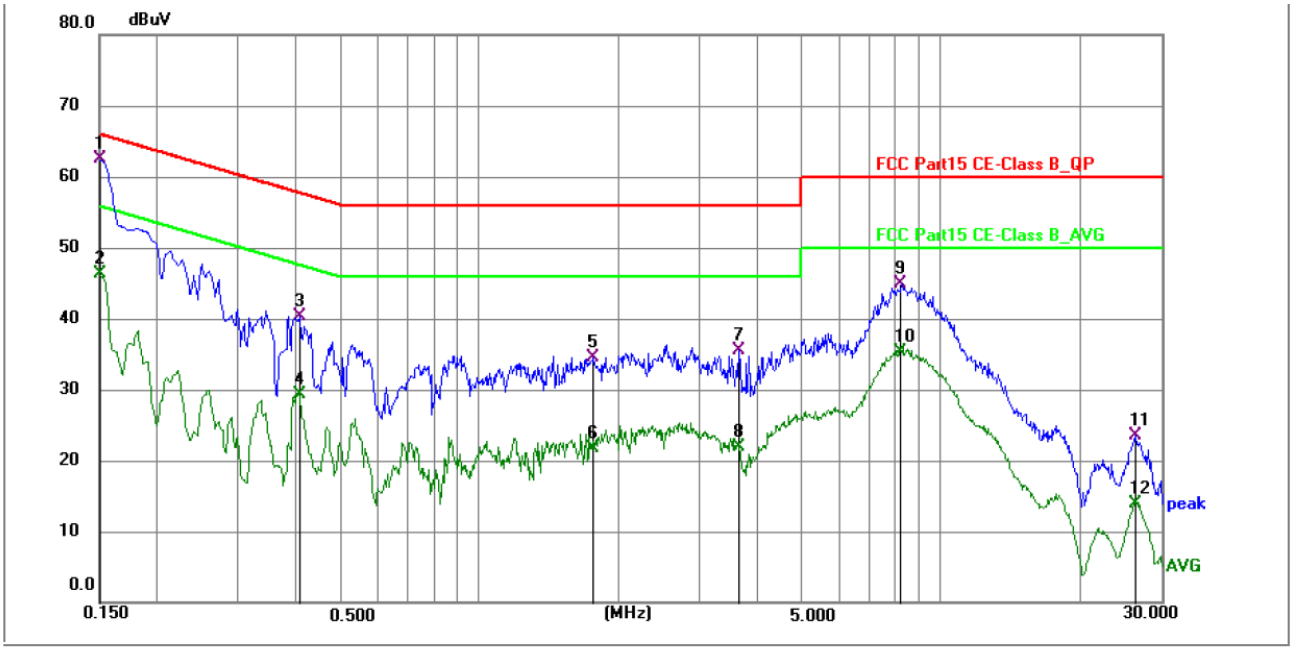


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1680	49.59	9.96	59.55	65.06	-5.51	QP	P	
2	0.1680	36.70	9.96	46.66	55.06	-8.40	AVG	P	
3	0.5550	36.02	10.04	46.06	56.00	-9.94	QP	P	
4	0.5550	28.39	10.04	38.43	46.00	-7.57	AVG	P	
5	3.1425	25.17	10.05	35.22	56.00	-20.78	QP	P	
6	3.1425	11.06	10.05	21.11	46.00	-24.89	AVG	P	
7	10.5000	29.82	9.96	39.78	60.00	-20.22	QP	P	
8	10.5000	15.17	9.96	25.13	50.00	-24.87	AVG	P	
9 *	18.7485	47.02	10.04	57.06	60.00	-2.94	QP	P	
10	18.7485	26.52	10.04	36.56	50.00	-13.44	AVG	P	
11	25.4985	46.09	10.19	56.28	60.00	-3.72	QP	P	
12	25.4985	21.84	10.19	32.03	50.00	-17.97	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Live Line
Model No.:	H618F

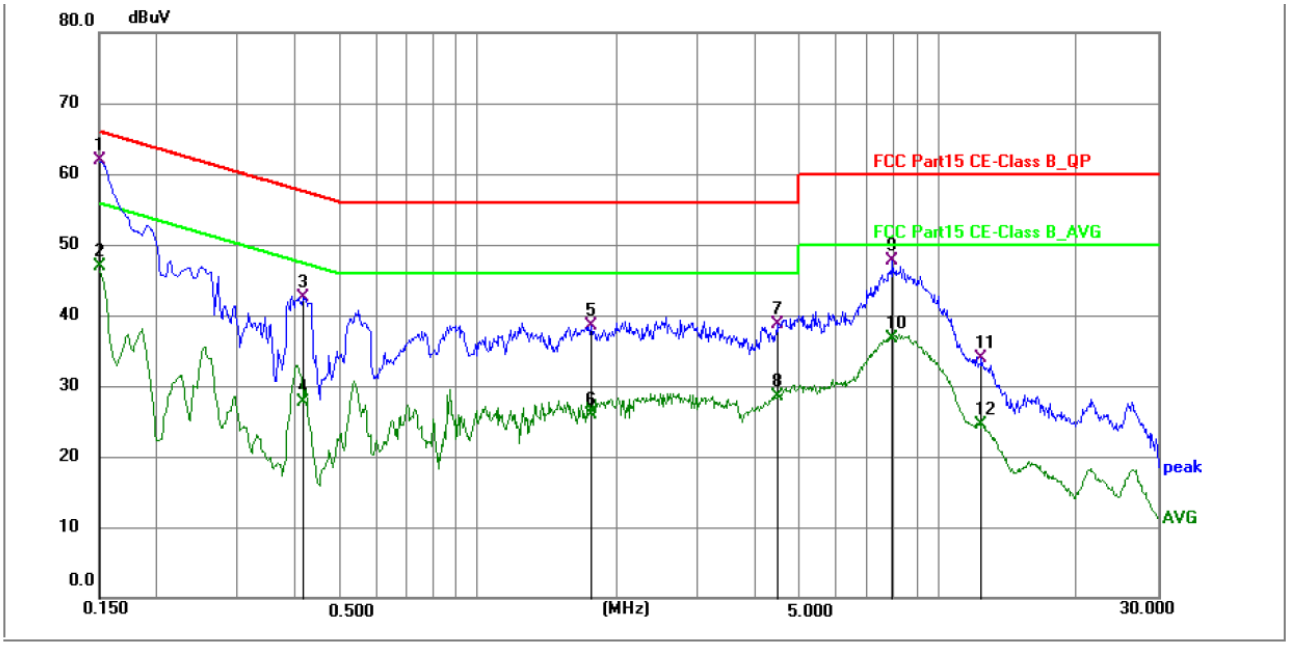


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1500	52.53	9.95	62.48	66.00	-3.52	QP	P	
2	0.1500	36.31	9.95	46.26	56.00	-9.74	AVG	P	
3	0.4065	30.35	10.02	40.37	57.72	-17.35	QP	P	
4	0.4065	19.30	10.02	29.32	47.72	-18.40	AVG	P	
5	1.7655	24.57	10.02	34.59	56.00	-21.41	QP	P	
6	1.7655	11.65	10.02	21.67	46.00	-24.33	AVG	P	
7	3.6465	25.47	10.05	35.52	56.00	-20.48	QP	P	
8	3.6465	11.88	10.05	21.93	46.00	-24.07	AVG	P	
9	8.2094	34.91	9.99	44.90	60.00	-15.10	QP	P	
10	8.2094	25.32	9.99	35.31	50.00	-14.69	AVG	P	
11	26.3760	13.34	10.20	23.54	60.00	-36.46	QP	P	
12	26.3760	3.66	10.20	13.86	50.00	-36.14	AVG	P	

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

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1/ CH Middle
Comments:	Neutral Line
Model No.:	H618F



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1500	51.92	9.97	61.89	66.00	-4.11	QP	P	
2	0.1500	36.99	9.97	46.96	56.00	-9.04	AVG	P	
3	0.4155	32.54	10.05	42.59	57.54	-14.95	QP	P	
4	0.4155	17.59	10.05	27.64	47.54	-19.90	AVG	P	
5	1.7565	28.45	10.07	38.52	56.00	-17.48	QP	P	
6	1.7565	15.93	10.07	26.00	46.00	-20.00	AVG	P	
7	4.4880	28.56	10.05	38.61	56.00	-17.39	QP	P	
8	4.4880	18.47	10.05	28.52	46.00	-17.48	AVG	P	
9	7.9485	37.66	10.02	47.68	60.00	-12.32	QP	P	
10	7.9485	26.72	10.02	36.74	50.00	-13.26	AVG	P	
11	12.4035	23.88	10.00	33.88	60.00	-26.12	QP	P	
12	12.4035	14.60	10.00	24.60	50.00	-25.40	AVG	P	

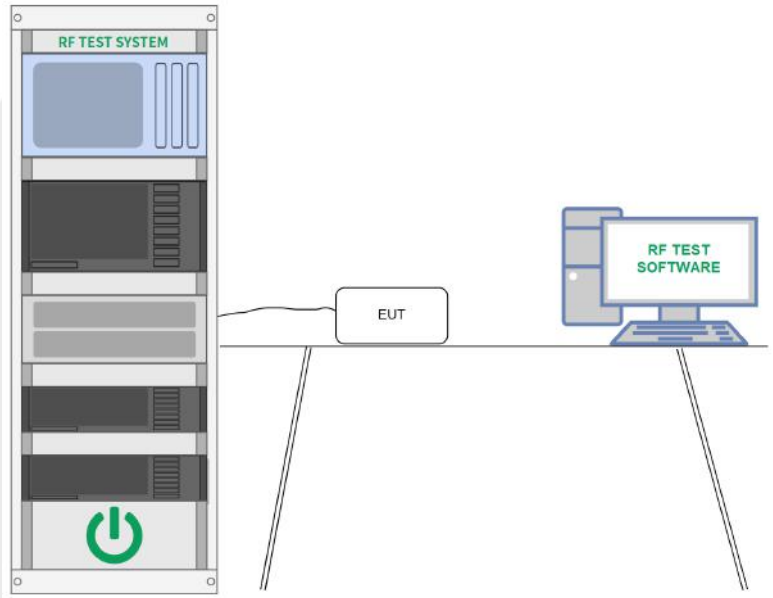
Note: Level = Reading + Factor Margin = Level - Limit

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 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 D for details.

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 Method	ANSI C63.10-2020 section 11.9

5.4.2 Test Setup Diagram

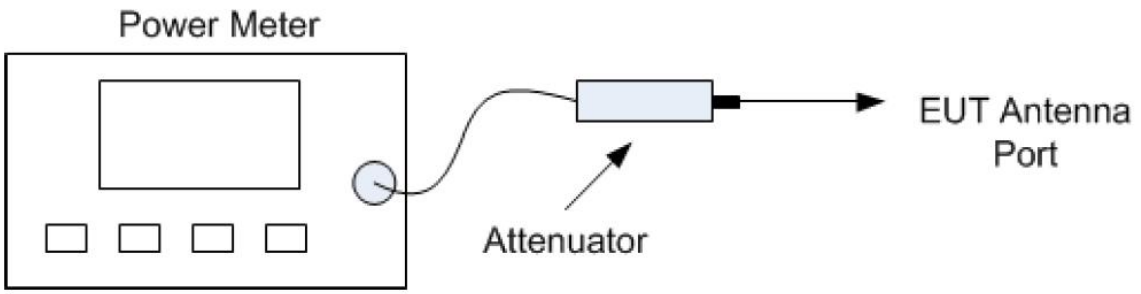


Figure 24—Example of a power meter conducted test setup

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.

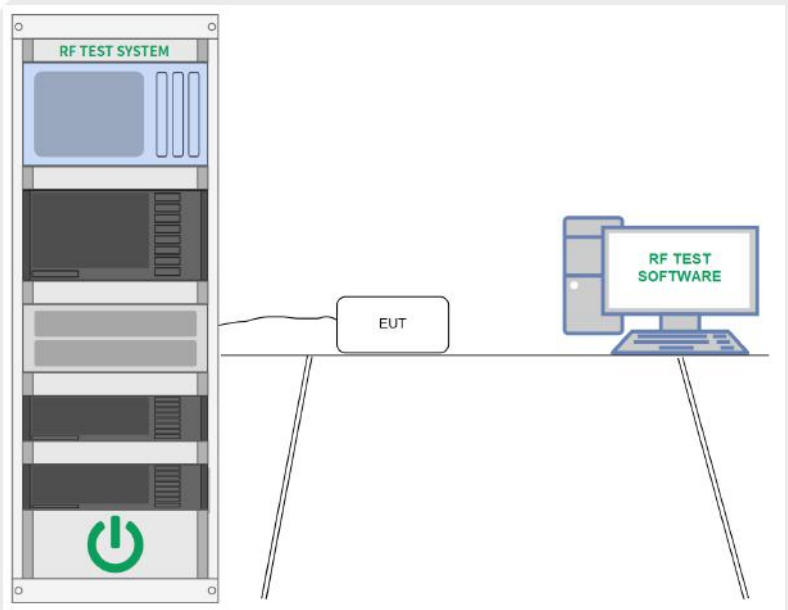
Please refer to Annex D for details.

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 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

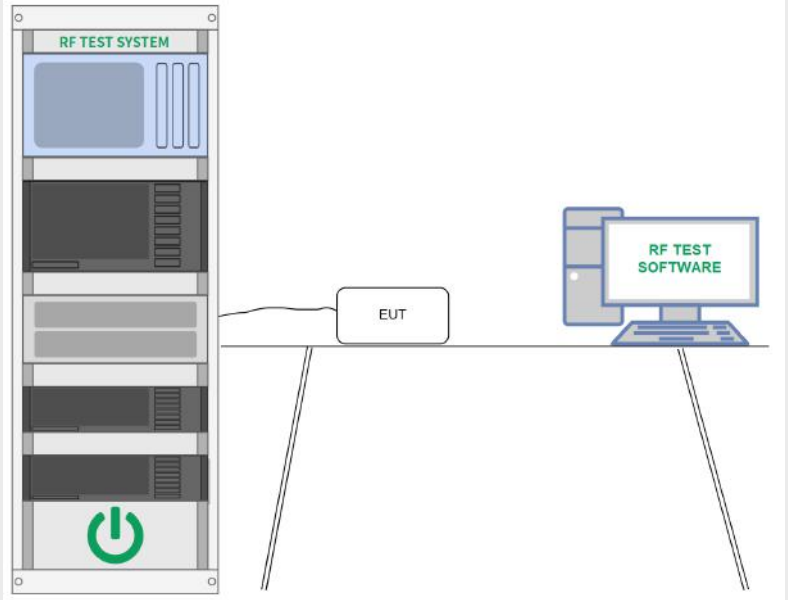
PASS.
Please refer to Annex D for details.

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 Method	ANSI C63.10-2020 section 11.11

5.6.2 Test Setup Diagram



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 ⩾ 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 ⩾ 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) ± 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 ± 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 D for details.

5.7 Band Edge Emissions (Restricted frequency bands)

5.7.1 Test Requirement

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.

Restricted frequency bands:

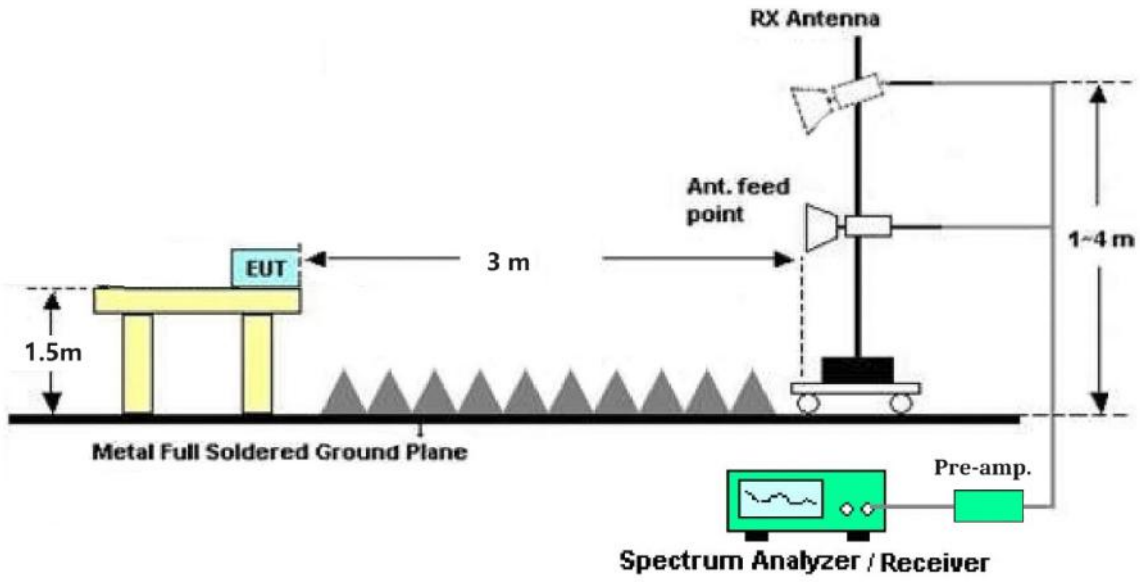
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	
13.36-13.41			

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.
4) For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

Test Method

ANSI C63.10-2020 section 6.6.4

5.7.2 Test Setup Diagram



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 ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold.

5.7.4 Test Data

PASS.

Please refer to the following pages.

Band Edge Emissions (Restricted frequency bands):

Test Mode: GFSK(1Mbps)					CH Low: 2402 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
H	2310.00	46.07	-2.81	43.26	74.00	-30.74	PK	PASS
H	2390.00	49.37	-2.69	46.68	74.00	-27.32	PK	PASS
H	**2400.00	61.37	-2.68	58.69	74.00	-15.31	PK	PASS
V	2310.00	43.76	-2.81	40.95	74.00	-33.05	PK	PASS
V	2390.00	47.36	-2.69	44.67	74.00	-29.33	PK	PASS
V	**2400.00	63.69	-2.68	61.01	74.00	-12.99	PK	PASS
H	2310.00	32.90	-2.81	30.09	54.00	-23.91	AV	PASS
H	2390.00	35.45	-2.69	32.76	54.00	-21.24	AV	PASS
H	**2400.00	48.70	-2.68	46.02	54.00	-7.98	AV	PASS
V	2310.00	33.70	-2.81	30.89	54.00	-23.11	AV	PASS
V	2390.00	37.75	-2.69	35.06	54.00	-18.94	AV	PASS
V	**2400.00	48.28	-2.68	45.60	54.00	-8.40	AV	PASS

Test Mode: GFSK(1Mbps)					CH High: 2480 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
H	**2483.50	46.67	-2.56	44.11	74.00	-29.89	PK	PASS
H	2500.00	48.69	-2.54	46.15	74.00	-27.85	PK	PASS
V	**2483.50	48.04	-2.56	45.48	74.00	-28.52	PK	PASS
V	2500.00	51.38	-2.54	48.84	74.00	-25.16	PK	PASS
H	**2483.50	38.24	-2.56	35.68	54.00	-18.32	AV	PASS
H	2500.00	41.78	-2.54	39.24	54.00	-14.76	AV	PASS
V	**2483.50	38.83	-2.56	36.27	54.00	-17.73	AV	PASS
V	2500.00	41.78	-2.54	39.24	54.00	-14.76	AV	PASS

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

5.8 Radiated Spurious Emission

5.8.1 Test Requirement

<table>
<tr><td>Test Requirement</td><td>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)).</td></tr>
<tr><td>Test Limit</td><td>
<table>
<tr><th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr>
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100 **</td><td>3</td></tr>
<tr><td>88-216</td><td>150 **</td><td>3</td></tr>
<tr><td>216-960</td><td>200 **</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
** 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.
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.
4) For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).
</td></tr>
<tr><td>Test Method</td><td>ANSI C63.10-2020 section 6.6.4</td></tr>
</table>

5.8.2 Test Setup Diagram

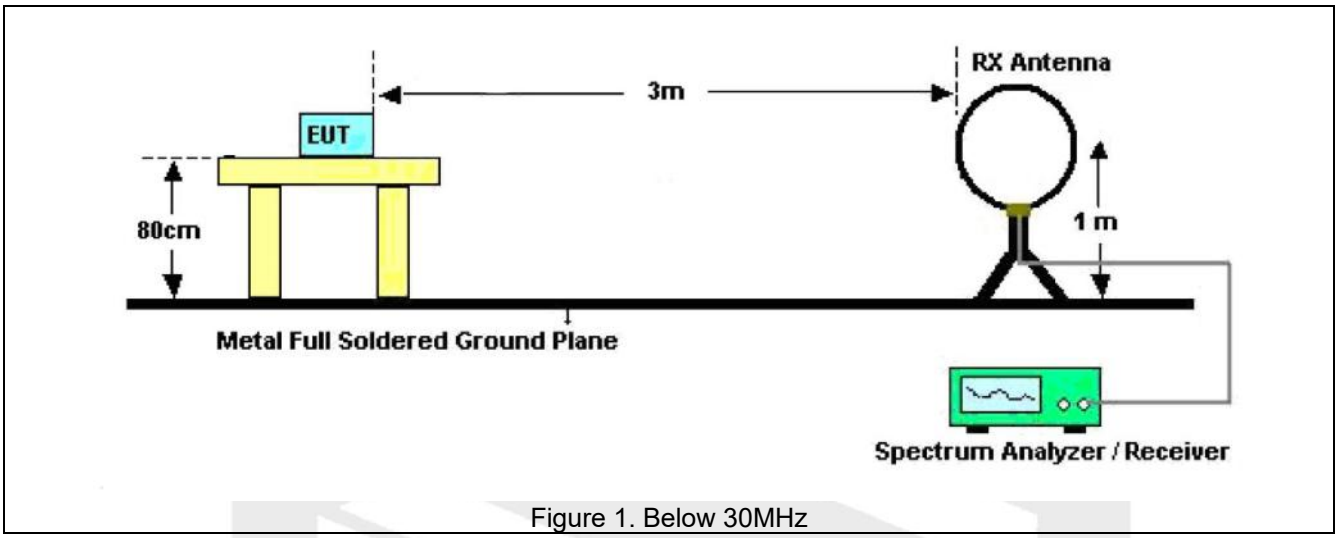


Figure 1. Below 30MHz

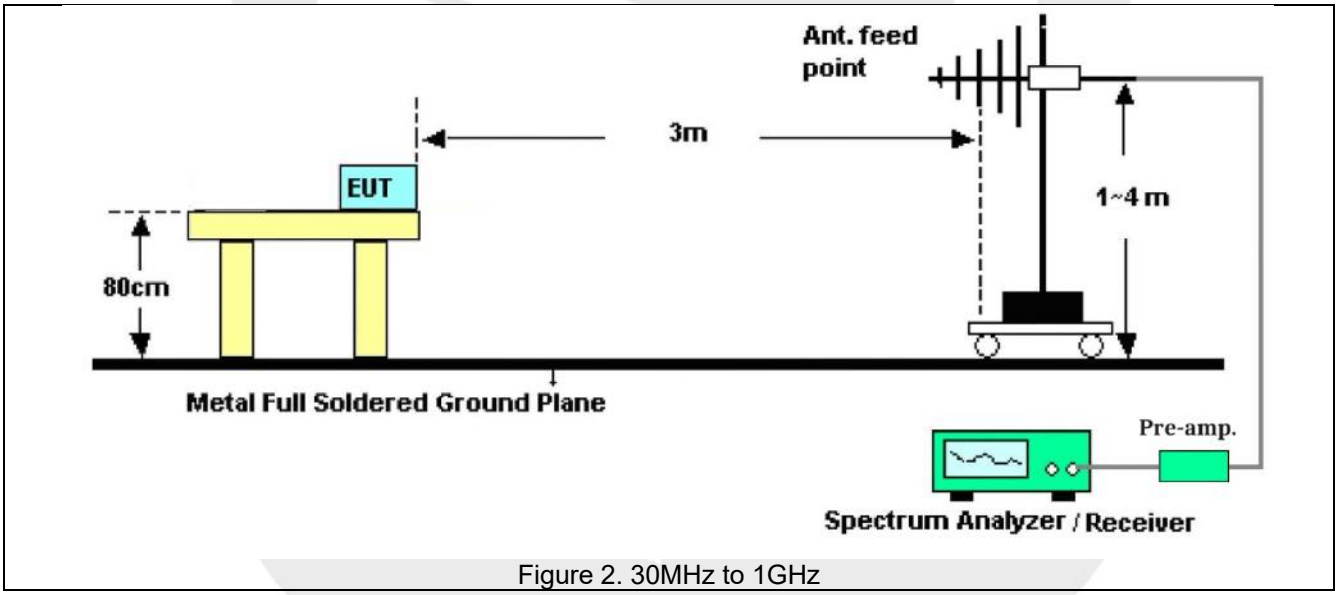


Figure 2. 30MHz to 1GHz

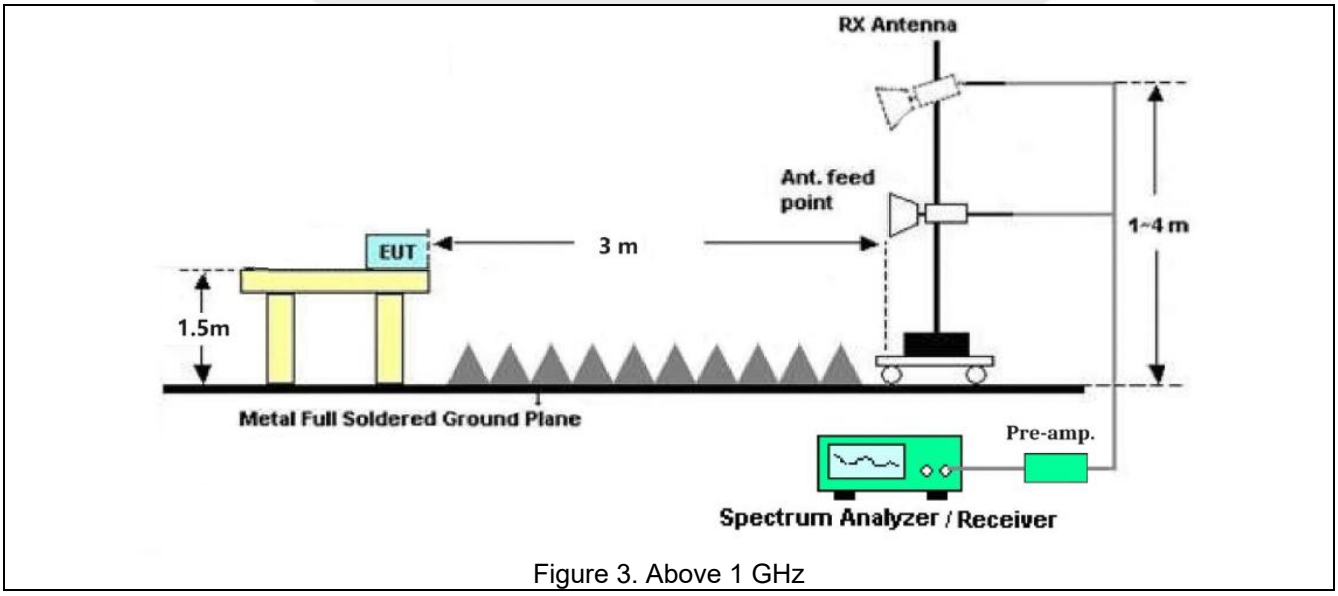


Figure 3. Above 1 GHz

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.

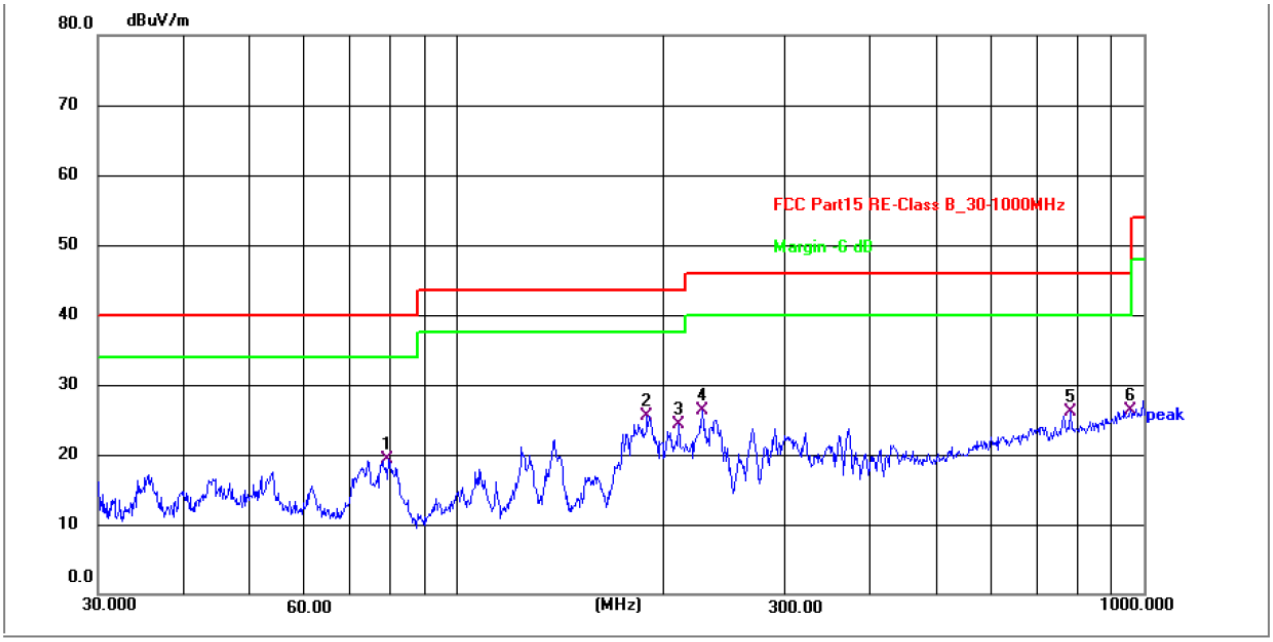
5.8.4 Test Data

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 test modes, and found the BLE 1M mode is worse case, the report only record this mode.

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619E**		

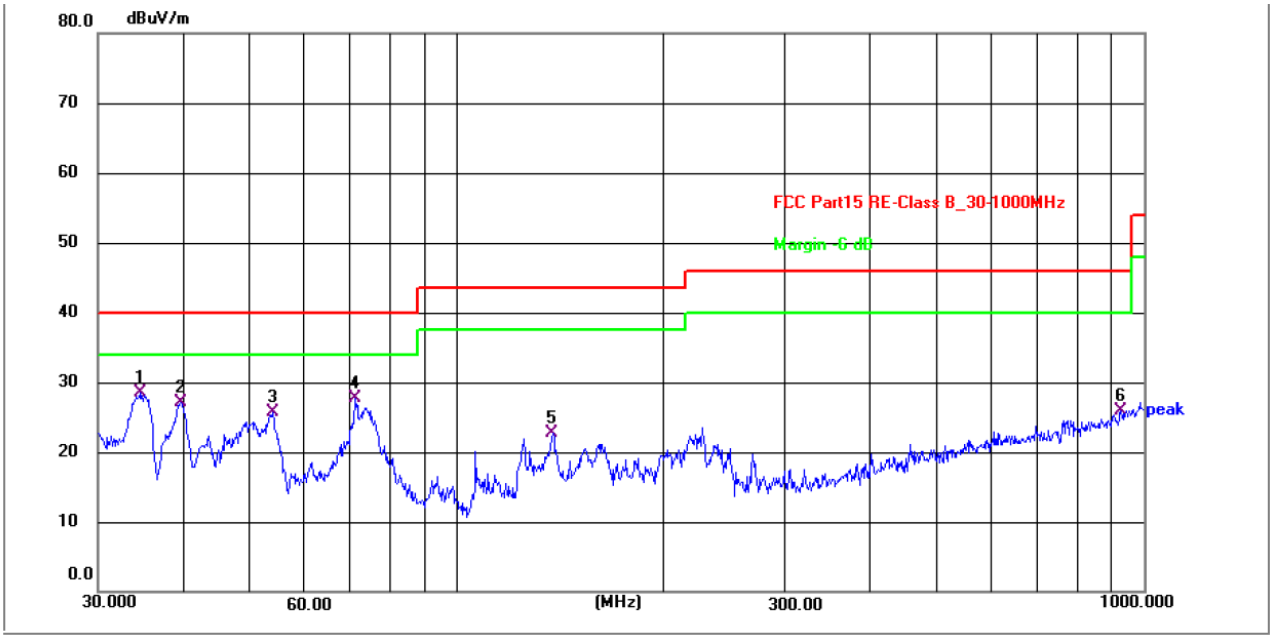


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	79.5209	38.86	-19.62	19.24	40.00	-20.76	QP	P	
2 *	189.0743	41.35	-15.86	25.49	43.50	-18.01	QP	P	
3	210.0482	39.02	-14.71	24.31	43.50	-19.19	QP	P	
4	227.6906	40.41	-14.10	26.31	46.00	-19.69	QP	P	
5	782.3453	30.35	-4.21	26.14	46.00	-19.86	QP	P	
6	955.4381	27.59	-1.21	26.38	46.00	-19.62	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619E**		

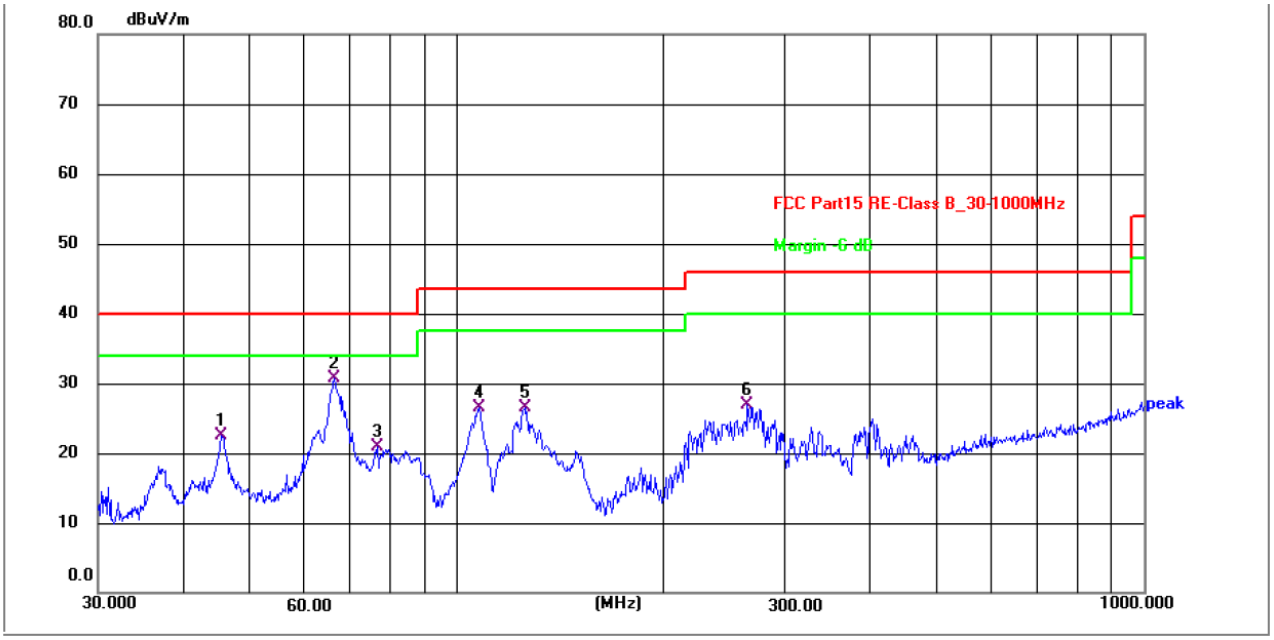


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	34.5173	45.30	-16.83	28.47	40.00	-11.53	QP	P	
2	39.5757	42.37	-15.34	27.03	40.00	-12.97	QP	P	
3	53.8818	40.12	-14.43	25.69	40.00	-14.31	QP	P	
4	71.0803	45.98	-18.26	27.72	40.00	-12.28	QP	P	
5	137.9028	40.65	-17.98	22.67	43.50	-20.83	QP	P	
6	925.7563	27.80	-1.92	25.88	46.00	-20.12	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619A**		

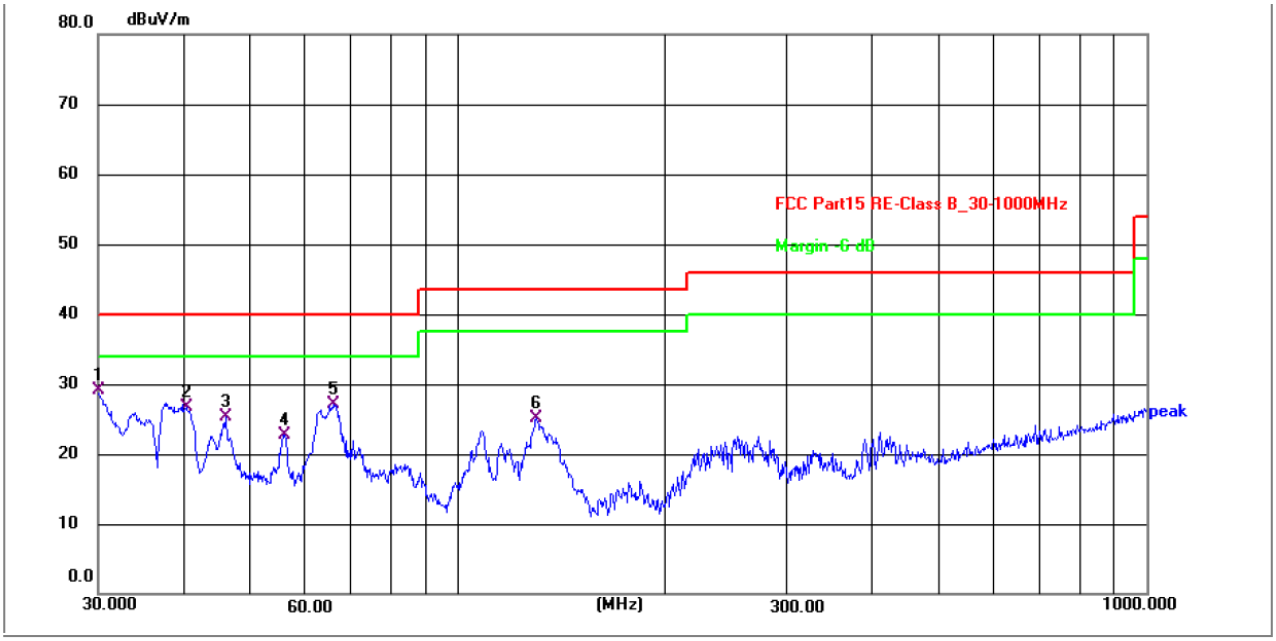


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	45.3755	36.67	-14.23	22.44	40.00	-17.56	QP	P	
2 *	66.2662	47.43	-16.64	30.79	40.00	-9.21	QP	P	
3	76.5121	40.12	-19.30	20.82	40.00	-19.18	QP	P	
4	107.8877	42.65	-16.20	26.45	43.50	-17.05	QP	P	
5	125.4457	43.77	-17.24	26.53	43.50	-16.97	QP	P	
6	264.7457	39.83	-12.93	26.90	46.00	-19.10	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619A**		

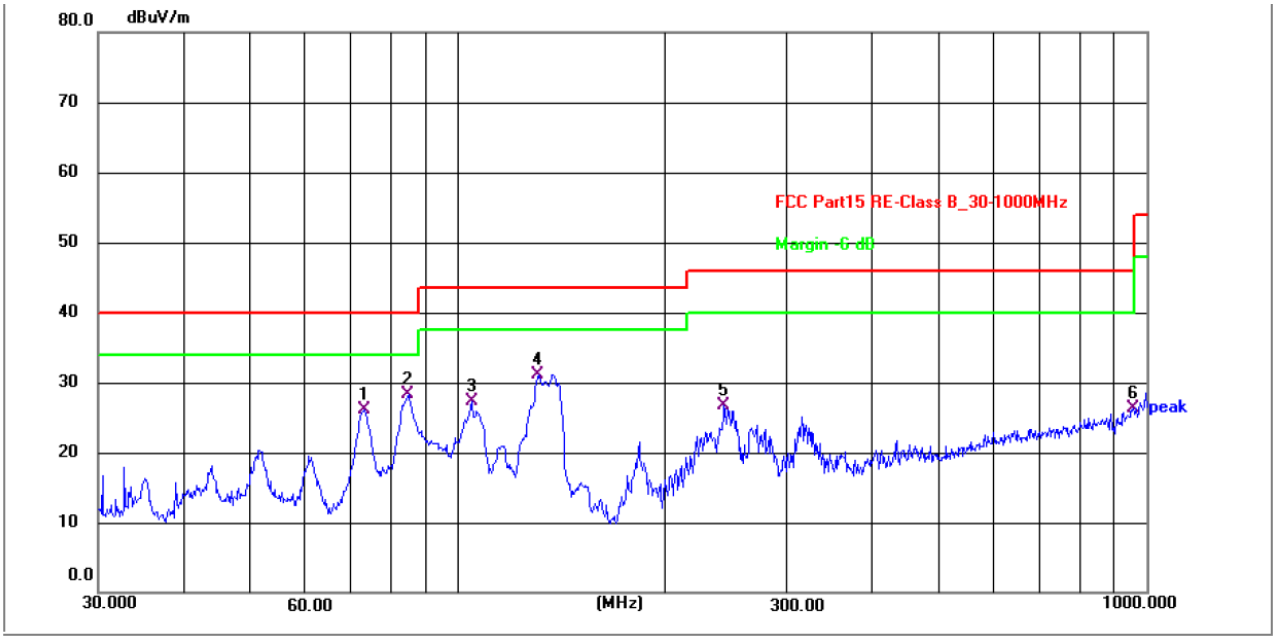


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	30.0000	46.03	-16.94	29.09	40.00	-10.91	QP	P	
2	40.2757	41.82	-15.16	26.66	40.00	-13.34	QP	P	
3	46.0164	39.44	-14.22	25.22	40.00	-14.78	QP	P	
4	56.0007	37.45	-14.70	22.75	40.00	-17.25	QP	P	
5	65.8031	43.56	-16.48	27.08	40.00	-12.92	QP	P	
6	129.9226	42.61	-17.50	25.11	43.50	-18.39	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619B**		

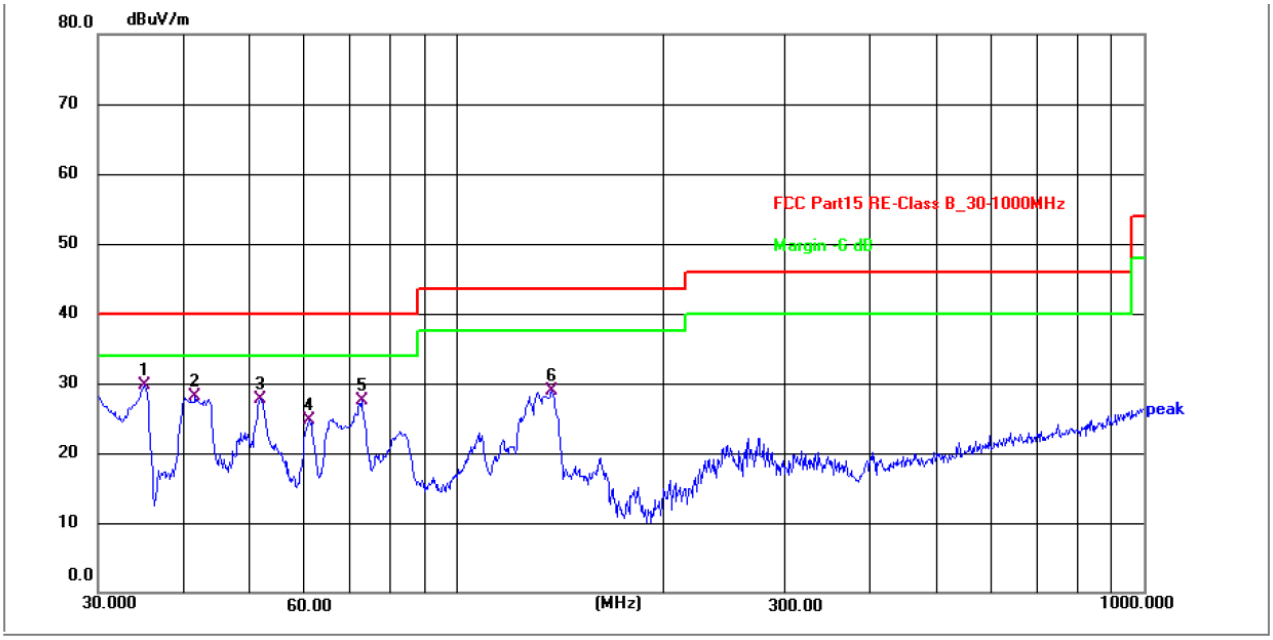


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	73.1025	44.83	-18.71	26.12	40.00	-13.88	QP	P	
2 *	84.7019	47.04	-18.79	28.25	40.00	-11.75	QP	P	
3	104.5361	43.35	-16.00	27.35	43.50	-16.15	QP	P	
4	130.8369	48.75	-17.56	31.19	43.50	-12.31	QP	P	
5	243.3772	40.30	-13.55	26.75	46.00	-19.25	QP	P	
6	955.4381	27.61	-1.21	26.40	46.00	-19.60	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619B**		

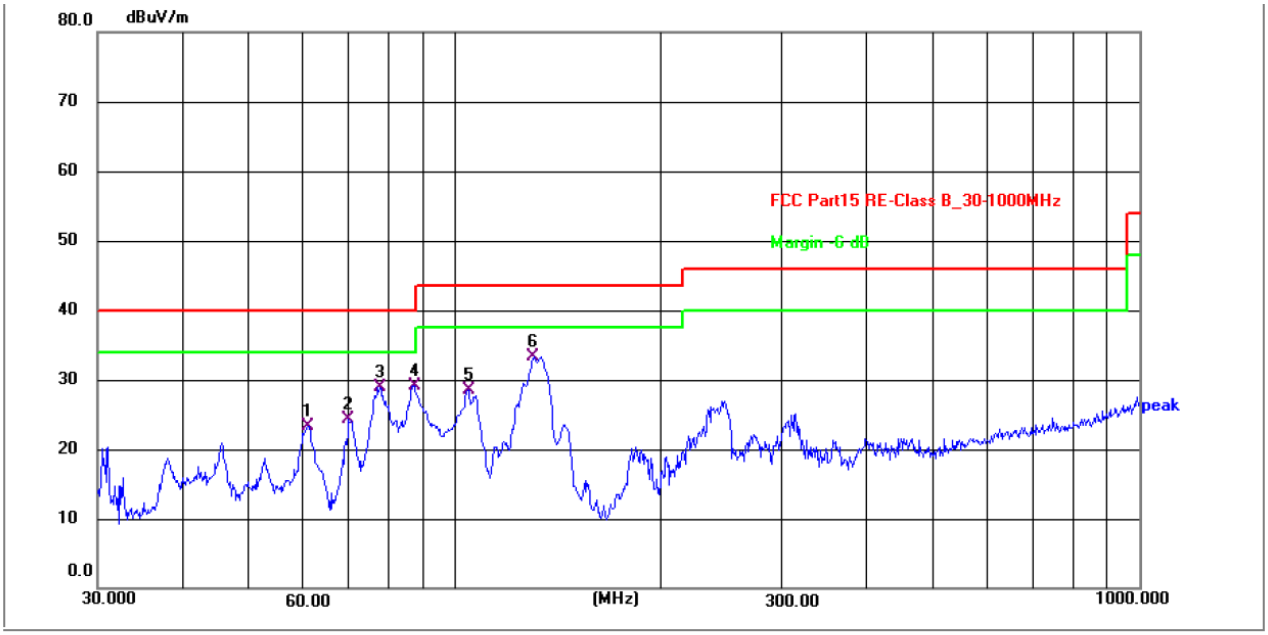


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	35.1278	46.56	-16.78	29.78	40.00	-10.22	QP	P	
2	41.5670	42.96	-14.90	28.06	40.00	-11.94	QP	P	
3	51.6616	42.04	-14.28	27.76	40.00	-12.24	QP	P	
4	60.9176	40.26	-15.59	24.67	40.00	-15.33	QP	P	
5	72.5916	46.03	-18.59	27.44	40.00	-12.56	QP	P	
6	137.4202	46.81	-17.95	28.86	43.50	-14.64	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619C**		

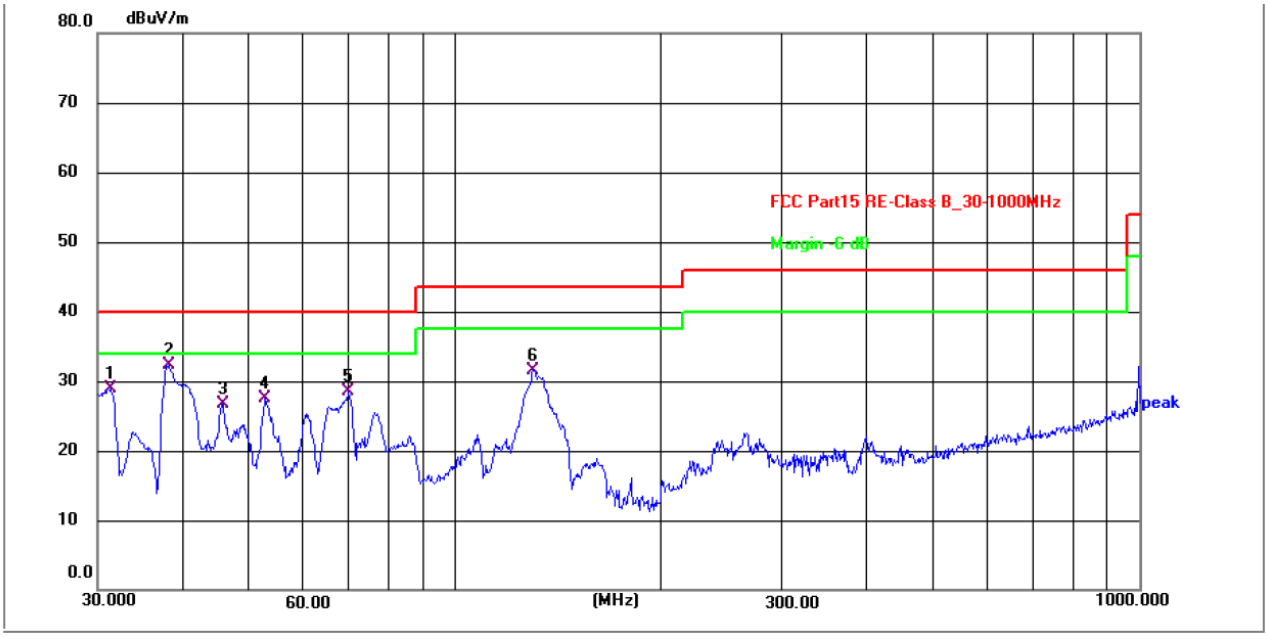


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	60.9176	38.85	-15.59	23.26	40.00	-16.74	QP	P	
2	69.8450	42.19	-17.95	24.24	40.00	-15.76	QP	P	
3	77.5928	48.40	-19.41	28.99	40.00	-11.01	QP	P	
4	87.1117	47.38	-18.18	29.20	40.00	-10.80	QP	P	
5	104.5361	44.58	-16.00	28.58	43.50	-14.92	QP	P	
6 *	130.3789	50.79	-17.54	33.25	43.50	-10.25	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619C**		

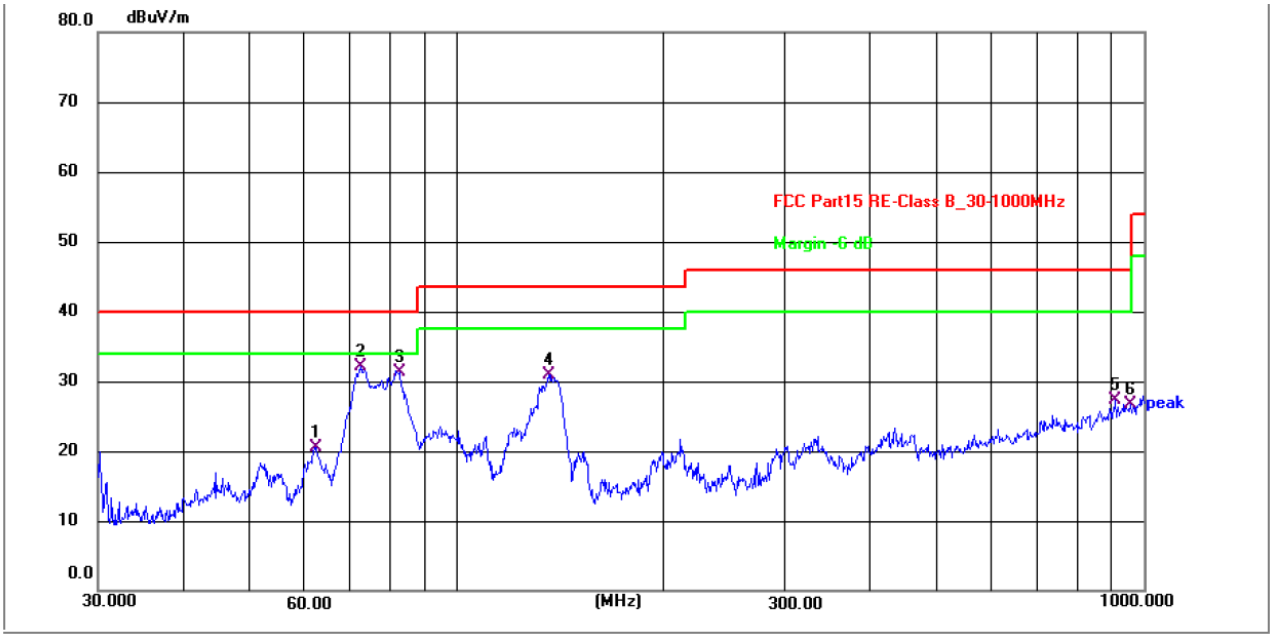


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	31.2893	45.75	-16.90	28.85	40.00	-11.15	QP	P	
2 *	38.0783	48.13	-15.83	32.30	40.00	-7.70	QP	P	
3	45.6948	40.86	-14.23	26.63	40.00	-13.37	QP	P	
4	52.7600	41.85	-14.36	27.49	40.00	-12.51	QP	P	
5	69.8450	46.41	-17.95	28.46	40.00	-11.54	QP	P	
6	130.3789	49.14	-17.54	31.60	43.50	-11.90	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619D**		

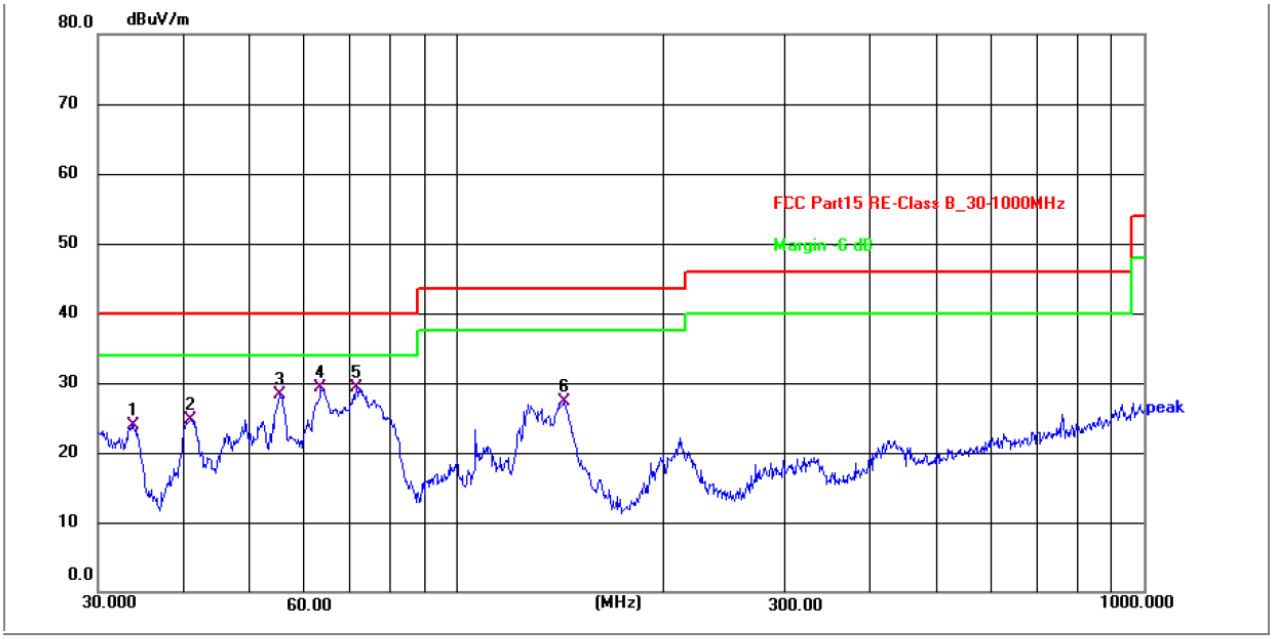


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	62.2128	36.32	-15.77	20.55	40.00	-19.45	QP	P	
2 *	72.3376	50.55	-18.54	32.01	40.00	-7.99	QP	P	
3	82.3588	50.54	-19.23	31.31	40.00	-8.69	QP	P	
4	135.9822	48.75	-17.86	30.89	43.50	-12.61	QP	P	
5	909.6667	29.28	-1.94	27.34	46.00	-18.66	QP	P	
6	955.4381	27.95	-1.21	26.74	46.00	-19.26	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619D**		

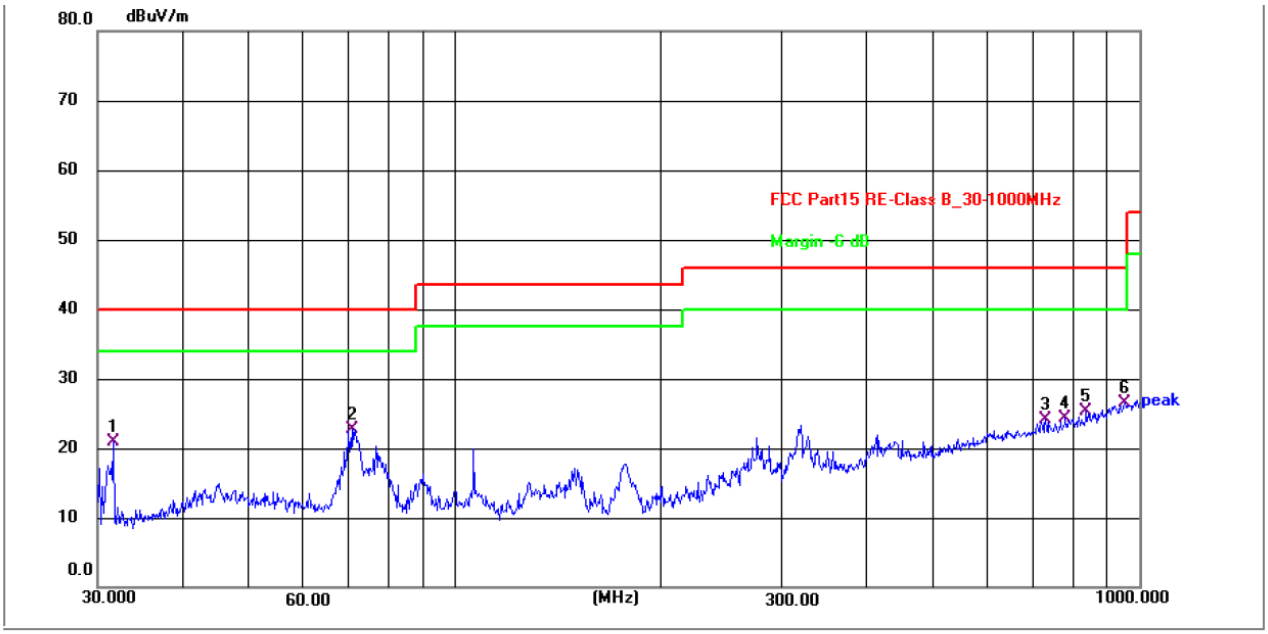


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	33.7986	40.69	-16.85	23.84	40.00	-16.16	QP	P	
2	40.8445	39.79	-15.05	24.74	40.00	-15.26	QP	P	
3	55.2207	42.81	-14.55	28.26	40.00	-11.74	QP	P	
4 *	63.3132	45.16	-15.93	29.23	40.00	-10.77	QP	P	
5	71.3300	47.53	-18.31	29.22	40.00	-10.78	QP	P	
6	143.3260	45.58	-18.30	27.28	43.50	-16.22	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619Z**		

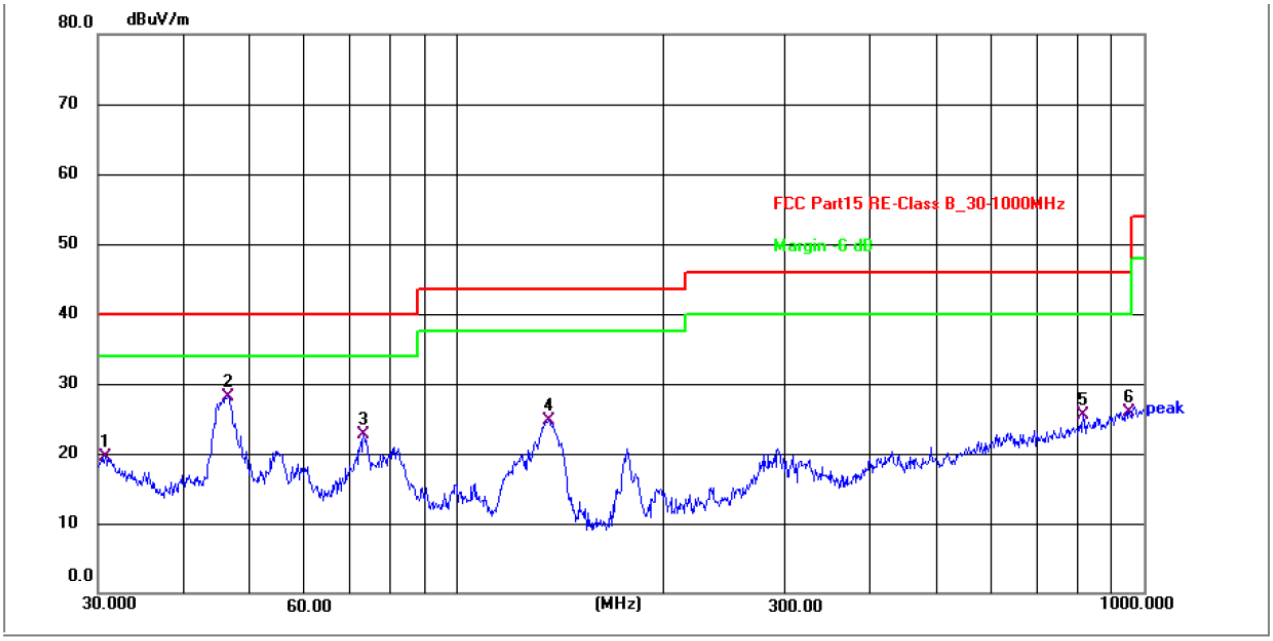


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	31.6201	37.87	-16.90	20.97	40.00	-19.03	QP	P	
2 *	70.5835	40.88	-18.14	22.74	40.00	-17.26	QP	P	
3	729.3582	28.99	-4.89	24.10	46.00	-21.90	QP	P	
4	779.6067	28.55	-4.25	24.30	46.00	-21.70	QP	P	
5	836.2443	28.47	-3.26	25.21	46.00	-20.79	QP	P	
6	952.0937	27.78	-1.25	26.53	46.00	-19.47	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H619Z**		

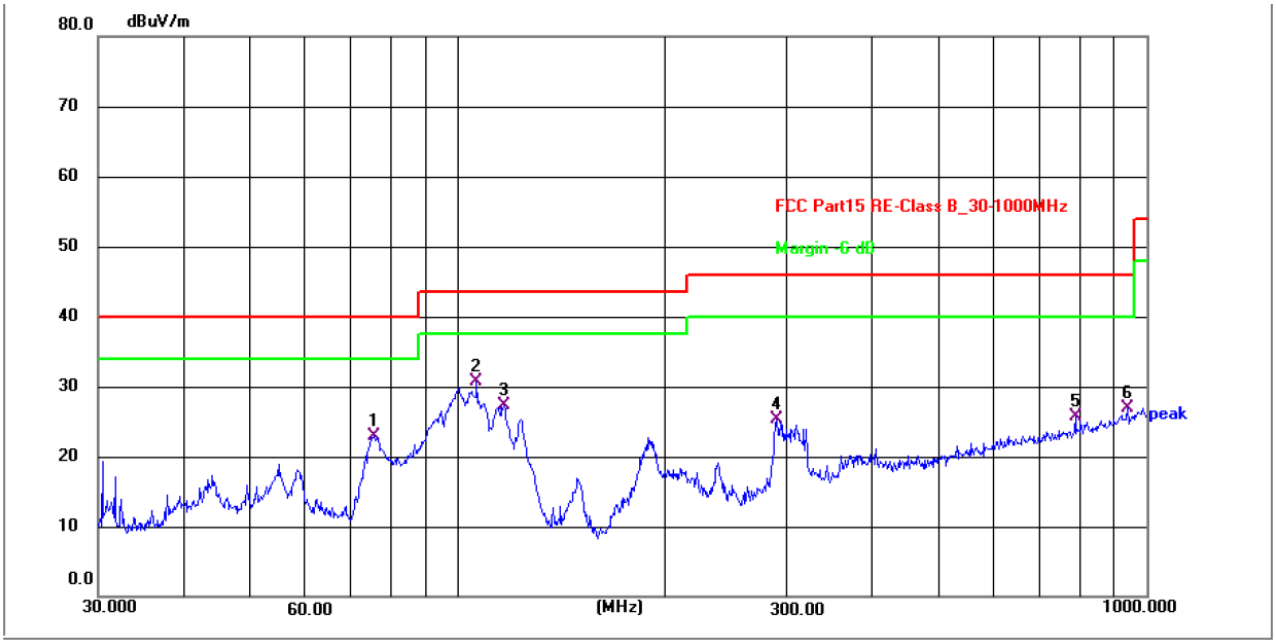


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	30.7455	36.39	-16.93	19.46	40.00	-20.54	QP	P	
2 *	46.3402	42.27	-14.22	28.05	40.00	-11.95	QP	P	
3	73.1025	41.33	-18.71	22.62	40.00	-17.38	QP	P	
4	135.9822	42.48	-17.86	24.62	43.50	-18.88	QP	P	
5	815.9678	29.19	-3.70	25.49	46.00	-20.51	QP	P	
6	952.0937	27.43	-1.47	25.96	46.00	-20.04	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H6168**		

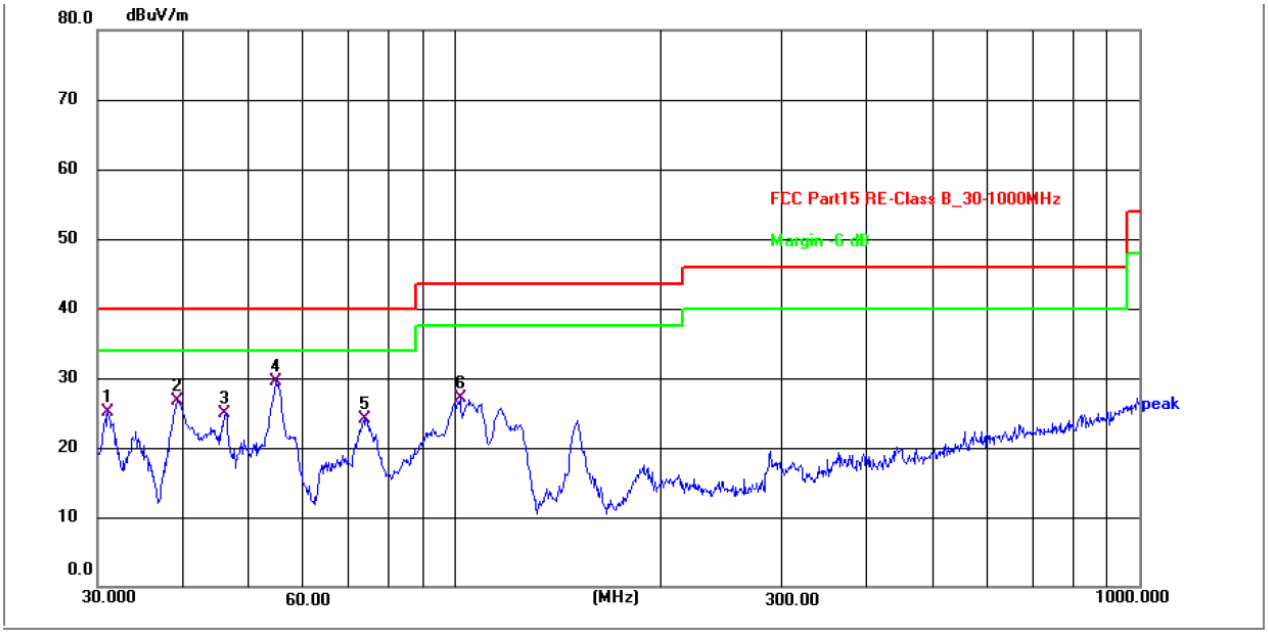


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	75.4464	42.14	-19.18	22.96	40.00	-17.04	QP	P	
2 *	106.3850	46.74	-16.10	30.64	43.50	-12.86	QP	P	
3	116.5401	43.95	-16.71	27.24	43.50	-16.26	QP	P	
4	290.0172	37.61	-12.26	25.35	46.00	-20.65	QP	P	
5	787.8513	29.87	-4.14	25.73	46.00	-20.27	QP	P	
6	938.8326	28.35	-1.47	26.88	46.00	-19.12	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H6168**		

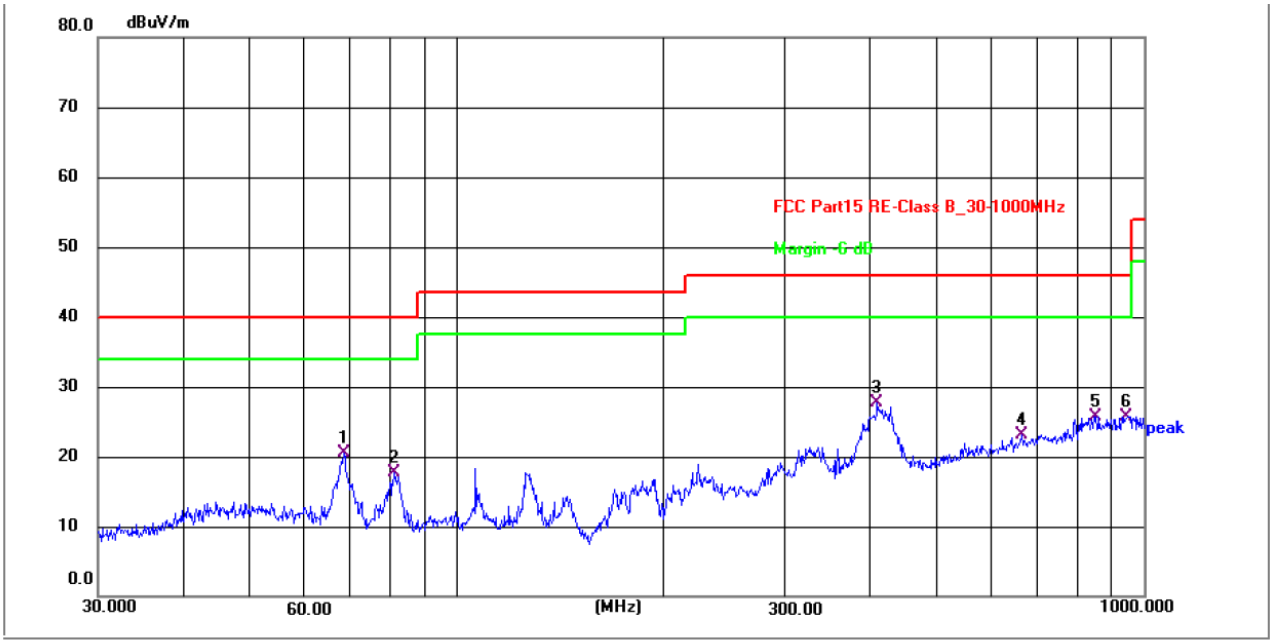


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	31.0706	42.00	-16.91	25.09	40.00	-14.91	QP	P	
2	39.2991	42.04	-15.42	26.62	40.00	-13.38	QP	P	
3	46.1779	39.05	-14.22	24.83	40.00	-15.17	QP	P	
4 *	54.6429	43.90	-14.48	29.42	40.00	-10.58	QP	P	
5	73.6170	43.01	-18.83	24.18	40.00	-15.82	QP	P	
6	101.6443	42.90	-15.83	27.07	43.50	-16.43	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618A**		

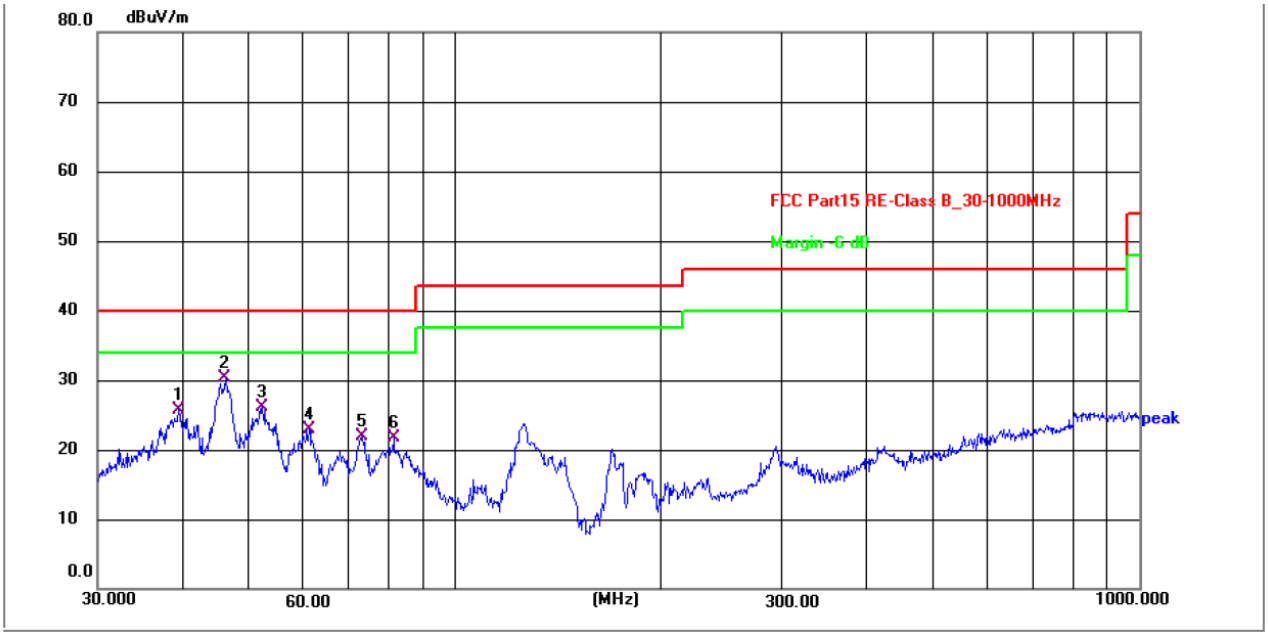


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	68.3908	37.95	-17.42	20.53	40.00	-19.47	QP	P	
2	80.9275	37.27	-19.50	17.77	40.00	-22.23	QP	P	
3 *	408.9460	37.45	-9.78	27.67	46.00	-18.33	QP	P	
4	663.4729	28.83	-5.63	23.20	46.00	-22.80	QP	P	
5	851.0353	28.73	-2.97	25.76	46.00	-20.24	QP	P	
6	945.4399	27.10	-1.36	25.74	46.00	-20.26	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618A**		

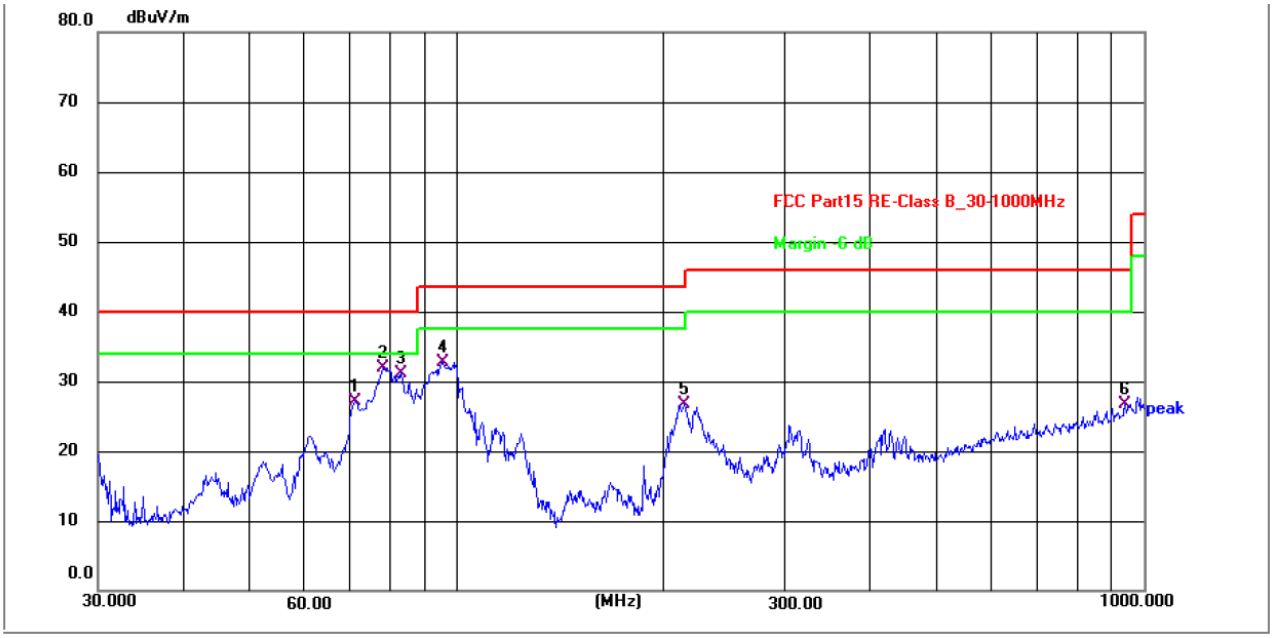


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	39.4371	41.05	-15.38	25.67	40.00	-14.33	QP	P	
2 *	46.1779	44.48	-14.22	30.26	40.00	-9.74	QP	P	
3	52.2079	40.33	-14.32	26.01	40.00	-13.99	QP	P	
4	61.1316	38.59	-15.61	22.98	40.00	-17.02	QP	P	
5	73.1025	40.55	-18.71	21.84	40.00	-18.16	QP	P	
6	81.2117	41.05	-19.44	21.61	40.00	-18.39	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618C**		

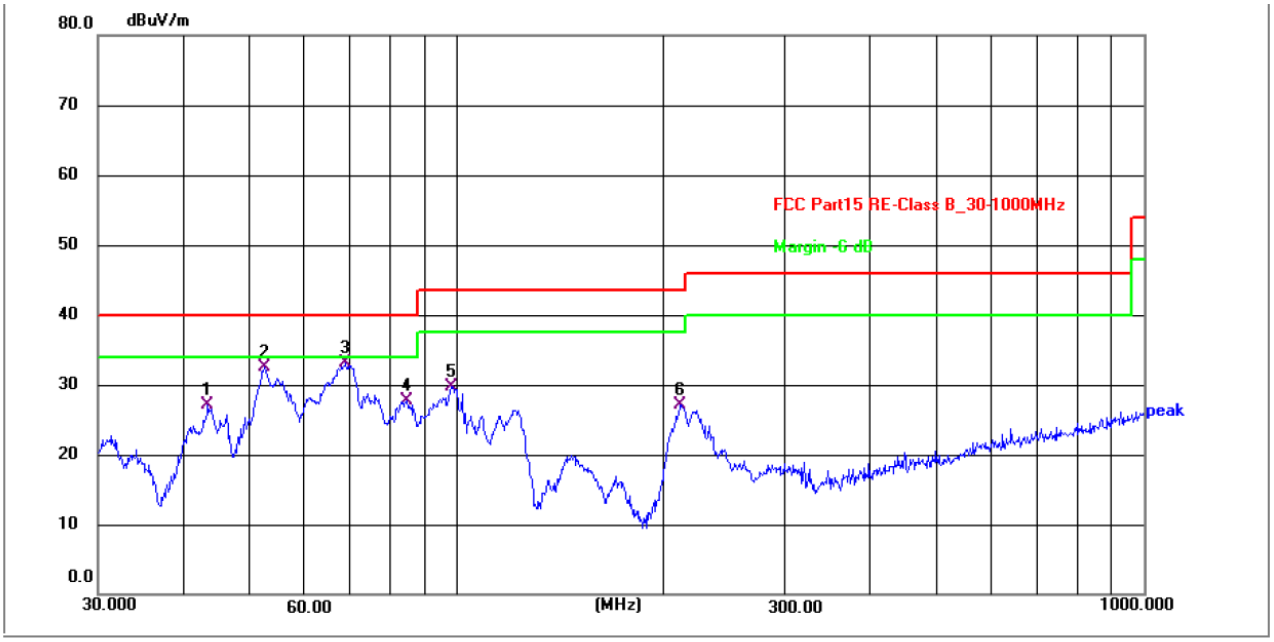


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	71.0803	45.36	-18.26	27.10	40.00	-12.90	QP	P	
2 *	78.1389	51.48	-19.48	32.00	40.00	-8.00	QP	P	
3	82.9385	50.28	-19.12	31.16	40.00	-8.84	QP	P	
4	95.4270	49.35	-16.63	32.72	43.50	-10.78	QP	P	
5	213.7634	41.28	-14.58	26.70	43.50	-16.80	QP	P	
6	938.8326	28.20	-1.47	26.73	46.00	-19.27	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618C**		

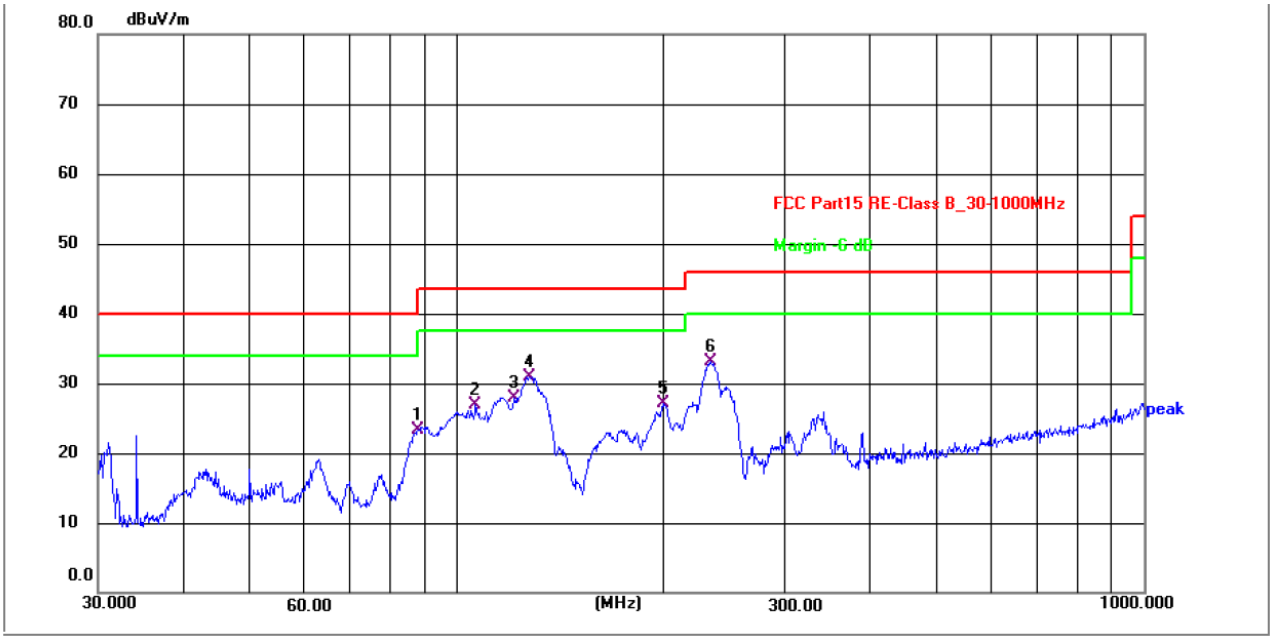


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	43.3534	41.61	-14.56	27.05	40.00	-12.95	QP	P	
2	52.3912	46.90	-14.33	32.57	40.00	-7.43	QP	P	
3 *	68.8721	50.67	-17.60	33.07	40.00	-6.93	QP	P	
4	84.4054	46.60	-18.85	27.75	40.00	-12.25	QP	P	
5	98.1419	45.87	-16.09	29.78	43.50	-13.72	QP	P	
6	211.5265	41.84	-14.70	27.14	43.50	-16.36	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618E**		

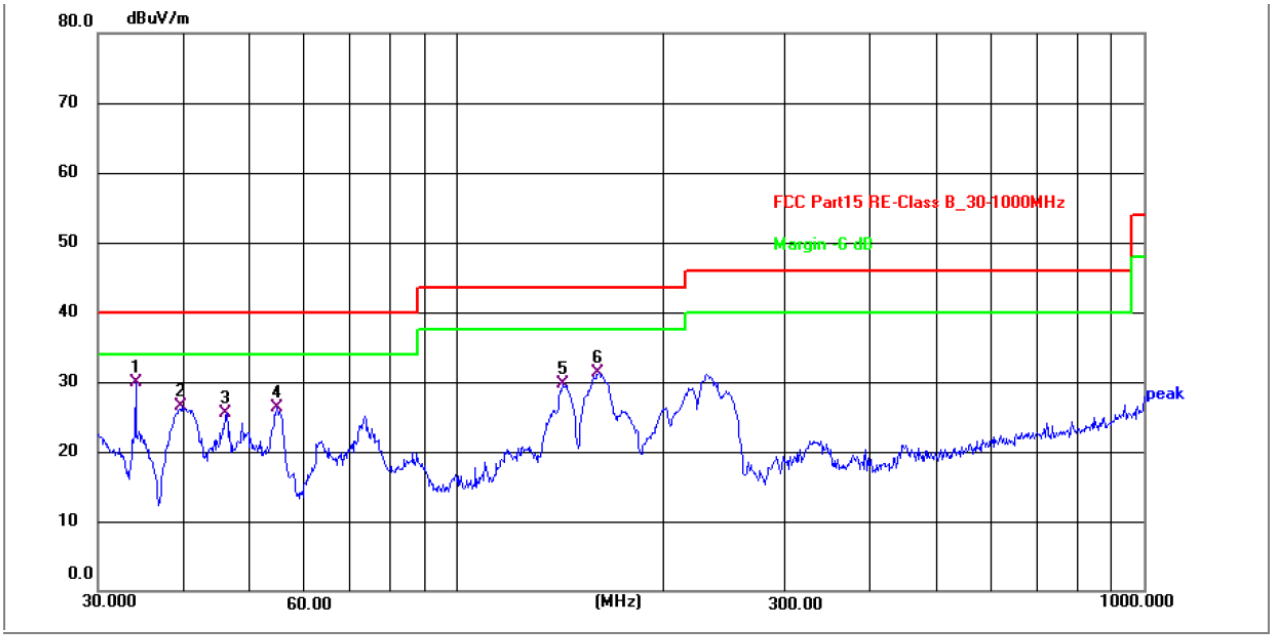


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	87.7248	41.25	-18.02	23.23	40.00	-16.77	QP	P	
2	106.3850	42.97	-16.10	26.87	43.50	-16.63	QP	P	
3	121.1231	44.83	-16.98	27.85	43.50	-15.65	QP	P	
4 *	127.2176	48.33	-17.35	30.98	43.50	-12.52	QP	P	
5	199.9856	42.10	-15.06	27.04	43.50	-16.46	QP	P	
6	234.1684	46.92	-13.87	33.05	46.00	-12.95	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618E**		

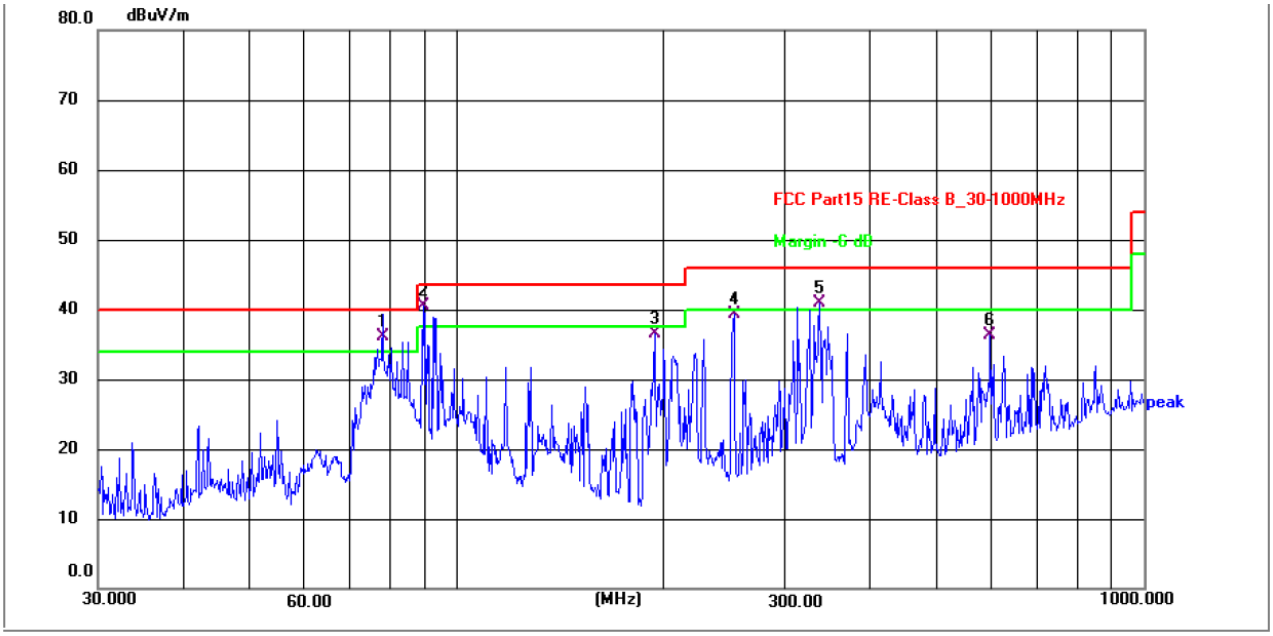


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	34.0365	46.68	-16.85	29.83	40.00	-10.17	QP	P	
2	39.7146	41.74	-15.29	26.45	40.00	-13.55	QP	P	
3	46.1779	39.67	-14.22	25.45	40.00	-14.55	QP	P	
4	54.6429	40.76	-14.48	26.28	40.00	-13.72	QP	P	
5	142.3243	47.99	-18.25	29.74	43.50	-13.76	QP	P	
6	160.9089	49.17	-17.90	31.27	43.50	-12.23	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618F**		

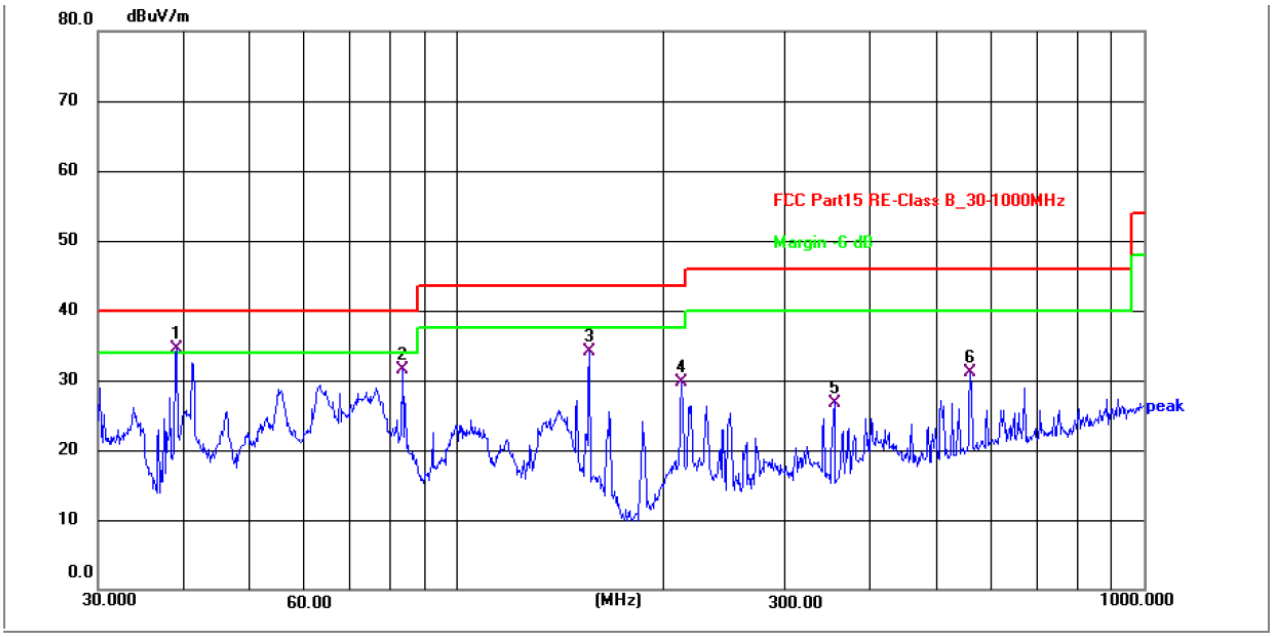


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 !	77.8654	55.64	-19.44	36.20	40.00	-3.80	QP	P	
2 *	89.2764	58.11	-17.60	40.51	43.50	-2.99	QP	P	
3	193.7728	52.03	-15.52	36.51	43.50	-6.99	QP	P	
4	252.9482	52.52	-13.25	39.27	46.00	-6.73	QP	P	
5 !	337.2155	52.18	-11.19	40.99	46.00	-5.01	QP	P	
6	597.2234	42.63	-6.27	36.36	46.00	-9.64	QP	P	

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

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1/ CH High**
Model No.:	**H618F**		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	39.0245	49.99	-15.52	34.47	40.00	-5.53	QP	P	
2	83.2298	50.61	-19.07	31.54	40.00	-8.46	QP	P	
3	155.9101	52.38	-18.26	34.12	43.50	-9.38	QP	P	
4	212.2695	44.45	-14.68	29.77	43.50	-13.73	QP	P	
5	354.1831	37.64	-10.84	26.80	46.00	-19.20	QP	P	
6	558.7302	38.26	-7.09	31.17	46.00	-14.83	QP	P	

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

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: TX-GFSK					CH Low: 2402 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4804.29	40.10	4.68	44.78	74.00	-29.22	PK	PASS
V	7206.37	33.39	9.84	43.23	74.00	-30.78	PK	PASS
V	9608.81	29.72	13.17	42.89	74.00	-31.11	PK	PASS
V	12010.28	*	*	*	74.00	*	PK	PASS
V	14412.82	*	*	*	74.00	*	PK	PASS
V	16814.71	*	*	*	74.00	*	PK	PASS
H	4804.45	41.21	4.68	45.89	74.00	-28.12	PK	PASS
H	7206.38	35.22	9.84	45.06	74.00	-28.95	PK	PASS
H	9608.88	28.82	13.17	41.99	74.00	-32.01	PK	PASS
H	12010.71	*	*	*	74.00	*	PK	PASS
H	14412.76	*	*	*	74.00	*	PK	PASS
H	16814.61	*	*	*	74.00	*	PK	PASS
V	4804.02	32.18	4.68	36.86	54.00	-17.15	AV	PASS
V	7206.88	23.32	9.84	33.16	54.00	-20.85	AV	PASS
V	9608.99	19.82	13.17	32.99	54.00	-21.01	AV	PASS
V	12010.99	*	*	*	54.00	*	AV	PASS
V	14412.44	*	*	*	54.00	*	AV	PASS
V	16814.93	*	*	*	54.00	*	AV	PASS
H	4804.95	31.42	4.68	36.10	54.00	-17.90	AV	PASS
H	7206.38	23.91	9.84	33.75	54.00	-20.26	AV	PASS
H	9608.88	18.21	13.17	31.38	54.00	-22.62	AV	PASS
H	12010.71	*	*	*	54.00	*	AV	PASS
H	14412.76	*	*	*	54.00	*	AV	PASS
H	16814.61	*	*	*	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.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: TX-GFSK					CH Middle: 2440 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4880.27	40.13	4.92	45.05	74.00	-28.96	PK	PASS
V	7320.35	34.92	9.83	44.75	74.00	-29.25	PK	PASS
V	9760.55	30.00	13.22	43.22	74.00	-30.78	PK	PASS
V	12200.78	*	*	*	74.00	*	PK	PASS
V	14640.95	*	*	*	74.00	*	PK	PASS
V	17080.80	*	*	*	74.00	*	PK	PASS
H	4880.45	42.97	4.92	47.89	74.00	-26.12	PK	PASS
H	7320.38	33.23	9.83	43.06	74.00	-30.94	PK	PASS
H	9760.19	29.85	13.22	43.07	74.00	-30.94	PK	PASS
H	12200.30	*	*	*	74.00	*	PK	PASS
H	14640.94	*	*	*	74.00	*	PK	PASS
H	17080.95	*	*	*	74.00	*	PK	PASS
V	4880.16	32.60	4.92	37.52	54.00	-16.49	AV	PASS
V	7320.05	22.61	9.83	32.44	54.00	-21.57	AV	PASS
V	9760.18	17.29	13.22	30.51	54.00	-23.50	AV	PASS
V	12200.39	*	*	*	54.00	*	AV	PASS
V	14640.02	*	*	*	54.00	*	AV	PASS
V	17080.46	*	*	*	54.00	*	AV	PASS
H	4880.45	31.93	4.92	36.85	54.00	-17.16	AV	PASS
H	7320.38	24.11	9.83	33.94	54.00	-20.07	AV	PASS
H	9760.19	17.12	13.22	30.34	54.00	-23.67	AV	PASS
H	12200.30	*	*	*	54.00	*	AV	PASS
H	14640.94	*	*	*	54.00	*	AV	PASS
H	17080.95	*	*	*	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.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: TX-GFSK					CH High: 2480 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4960.98	42.41	5.17	47.58	74.00	-26.42	PK	PASS
V	7440.88	33.79	9.83	43.62	74.00	-30.38	PK	PASS
V	9920.70	30.07	13.27	43.34	74.00	-30.66	PK	PASS
V	12400.72	*	*	*	74.00	*	PK	PASS
V	14880.33	*	*	*	74.00	*	PK	PASS
V	17360.50	*	*	*	74.00	*	PK	PASS
H	4960.83	40.76	5.17	45.93	74.00	-28.07	PK	PASS
H	7440.41	34.40	9.83	44.23	74.00	-29.78	PK	PASS
H	9920.93	28.99	13.27	42.26	74.00	-31.75	PK	PASS
H	12400.01	*	*	*	74.00	*	PK	PASS
H	14880.00	*	*	*	74.00	*	PK	PASS
H	17360.58	*	*	*	74.00	*	PK	PASS
V	4960.80	31.11	5.17	36.28	54.00	-17.73	AV	PASS
V	7440.87	22.14	9.83	31.97	54.00	-22.04	AV	PASS
V	9920.11	19.76	13.27	33.03	54.00	-20.97	AV	PASS
V	12400.63	*	*	*	54.00	*	AV	PASS
V	14880.41	*	*	*	54.00	*	AV	PASS
V	17360.77	*	*	*	54.00	*	AV	PASS
H	4960.83	30.37	5.17	35.54	54.00	-18.46	AV	PASS
H	7440.41	23.70	9.83	33.53	54.00	-20.48	AV	PASS
H	9920.93	19.86	13.27	33.13	54.00	-20.87	AV	PASS
H	12400.01	*	*	*	54.00	*	AV	PASS
H	14880.00	*	*	*	54.00	*	AV	PASS
H	17360.58	*	*	*	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.

ANNEX A TEST SETUP PHOTOS

Please refer to the document “8227EU010508W-AA.PDF”

ANNEX B EXTERNAL PHOTOS

Please refer to the document “8227EU010508W-AB.PDF”

ANNEX C INTERNAL PHOTOS

Please refer to the document “8227EU010508W-AC.PDF”

ANNEX D TEST DATA

Please refer to the document “8227EU010508W-AD.PDF”

STATEMENT

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