

FCC Test Report

Applicant : Shenzhen Greenpower Co.,Ltd

Address : Room B403, Building B, West Silicon Valley,
Bao'an District, Shenzhen City, Guangdong,
China

Product Name : 3 IN 1 Wireless Travel Charger

Report Date : Aug. 21, 2024

Shenzhen Anbotek Compliance Laboratory Limited



Contents

1. General Information	5
1.1. Client Information	5
1.2. Description of Device (EUT)	5
1.3. Auxiliary Equipment Used During Test	6
1.4. Description of Test Modes	6
1.5. Description Of Test Setup	9
1.6. Test Equipment List	10
1.7. Measurement Uncertainty	11
1.8. Description of Test Facility	11
1.9. Disclaimer	11
2. Summary of Test Results	12
3. Conducted Emission Test	13
3.1. Test Standard and Limit	13
3.2. Test Setup	13
3.3. Test Procedure	13
3.4. Test Data	13
4. Radiation Spurious Emission	16
4.1. Test Standard and Limit	16
4.2. Test Setup	16
4.3. Test Procedure	17
4.4. Test Data	18
5. Antenna Requirement	37
5.1. Test Standard and Requirement	37
5.2. Antenna Connected Construction	37
APPENDIX I -- TEST SETUP PHOTOGRAPH	38
APPENDIX II -- EXTERNAL PHOTOGRAPH	38
APPENDIX III -- INTERNAL PHOTOGRAPH	38



TEST REPORT

Applicant : Shenzhen Greenpower Co.,Ltd
Manufacturer : Shenzhen Greenpower Co.,Ltd
Product Name : 3 IN 1 Wireless Travel Charger
Test Model No. : GW39, STG-7069-KB
Trade Mark : GPO SMARTGEAR
Input: 5V $\overline{\text{m}}$ 3A, 9V $\overline{\text{m}}$ 3A
Rating(s) : Output: Apple iphone:5W, 7.5W, 10W, 15W;
Apple AirPods: 5W
Apple Watch: 2.5W MAX
Test Standard(s) : 47 CFR Part 15 Subpart C
Test Method(s) : ANSI C63.10: 2020

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the 47 CFR Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt

Jun. 07, 2024

Date of Test

Jun. 07~ Jun. 20, 2024

Prepared By

Ella Liang

(Ella Liang)

Approved & Authorized Signer

Edward Pan

(Edward Pan)



Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Aug. 21, 2024



1. General Information

1.1. Client Information

Applicant	:	Shenzhen Greenpower Co.,Ltd
Address	:	Room B403, Building B, West Silicon Valley, Bao'an District, Shenzhen City, Guangdong, China
Manufacturer	:	Shenzhen Greenpower Co.,Ltd
Address	:	Room B403, Building B, West Silicon Valley, Bao'an District, Shenzhen City, Guangdong, China
Factory	:	Shenzhen Greenpower Co.,Ltd
Address	:	Room B403, Building B, West Silicon Valley, Bao'an District, Shenzhen City, Guangdong, China

1.2. Description of Device (EUT)

Product Name	:	3 IN 1 Wireless Travel Charger
Test Model No.	:	GW39, STG-7069-KB (Note: All samples are the same except the model number, so we prepare "GW39" for test only.)
Trade Mark	:	GPO SMARTGEAR
Test Power Supply	:	AC 120V/60Hz for Adapter
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A
RF Specification		
Operation Frequency	:	110-205KHz
Modulation Type	:	MSK
Antenna Type	:	Inductive loop coil Antenna
Remark: 1) All of the RF specification are provided by customer. 2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		



1.3. Auxiliary Equipment Used During Test

Description	Rating(s)
Apple Watch:	M/N: WR-50M
Apple AirPods:	M/N: AirPods Pro
Apple Phone	M/N: iPhone 12 SN: DNPDJC7T0DYF
Adapter	M/N: MDY-11-EX SN: SA62210G907929G

1.4. Description of Test Modes

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 1% Load)
Mode 2	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 50% Load)
Mode 3	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 99% Load)
Mode 4	Wireless Charging Mode (iPhone12) (15W 1% Load)
Mode 5	Wireless Charging Mode (iPhone12) (15W 50% Load)
Mode 6	Wireless Charging Mode (iPhone12) (15W 99% Load)
Mode 7	Wireless Charging Mode (iWatch Load) (3W 1% Load)
Mode 8	Wireless Charging Mode (iWatch Load) (3W 50% Load)
Mode 9	Wireless Charging Mode (iWatch Load) (3W 99% Load)
Mode 10	Wireless Charging Mode (airpods) (5W 1% Load)
Mode 11	Wireless Charging Mode (airpods) (5W 50% Load)
Mode 12	Wireless Charging Mode (airpods) (5W 99% Load)
Mode 13	Standby Mode



Folding Mode	Description
Mode 1	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 1% Load)
Mode 2	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 50% Load)
Mode 3	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 99% Load)
Mode 4	Wireless Charging Mode (iPhone12) (15W 1% Load)
Mode 5	Wireless Charging Mode (iPhone12) (15W 50% Load)
Mode 6	Wireless Charging Mode (iPhone12) (15W 99% Load)
Mode 7	Wireless Charging Mode (iWatch Load) (3W 1% Load)
Mode 8	Wireless Charging Mode (iWatch Load) (3W 50% Load)
Mode 9	Wireless Charging Mode (iWatch Load) (3W 99% Load)
Mode 10	Wireless Charging Mode (airpods) (5W 1% Load)
Mode 11	Wireless Charging Mode (airpods) (5W 50% Load)
Mode 12	Wireless Charging Mode (airpods) (5W 99% Load)
Mode 13	Standby Mode

For Conducted Emission	
Final Test Mode	Description
Mode 1	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 1% Load)
Mode 2	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 50% Load)
Mode 3	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 99% Load)
Mode 4	Wireless Charging Mode (iPhone12) (15W 1% Load)
Mode 5	Wireless Charging Mode (iPhone12) (15W 50% Load)
Mode 6	Wireless Charging Mode (iPhone12) (15W 99% Load)
Mode 7	Wireless Charging Mode (iWatch Load) (3W 1% Load)
Mode 8	Wireless Charging Mode (iWatch Load) (3W 50% Load)
Mode 9	Wireless Charging Mode (iWatch Load) (3W 99% Load)
Mode 10	Wireless Charging Mode (airpods) (5W 1% Load)
Mode 11	Wireless Charging Mode (airpods) (5W 50% Load)
Mode 12	Wireless Charging Mode (airpods) (5W 99% Load)
Mode 13	Standby Mode



For Radiated Emission	
Final Test Mode	Description
Mode 1	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 1% Load)
Mode 2	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 50% Load)
Mode 3	Wireless Charging Mode (iPhone12+airpods+iWatch) (20W 99% Load)
Mode 4	Wireless Charging Mode (iPhone12) (15W 1% Load)
Mode 5	Wireless Charging Mode (iPhone12) (15W 50% Load)
Mode 6	Wireless Charging Mode (iPhone12) (15W 99% Load)
Mode 7	Wireless Charging Mode (iWatch Load) (3W 1% Load)
Mode 8	Wireless Charging Mode (iWatch Load) (3W 50% Load)
Mode 9	Wireless Charging Mode (iWatch Load) (3W 99% Load)
Mode 10	Wireless Charging Mode (airpods) (5W 1% Load)
Mode 11	Wireless Charging Mode (airpods) (5W 50% Load)
Mode 12	Wireless Charging Mode (airpods) (5W 99% Load)
Mode 13	Standby Mode

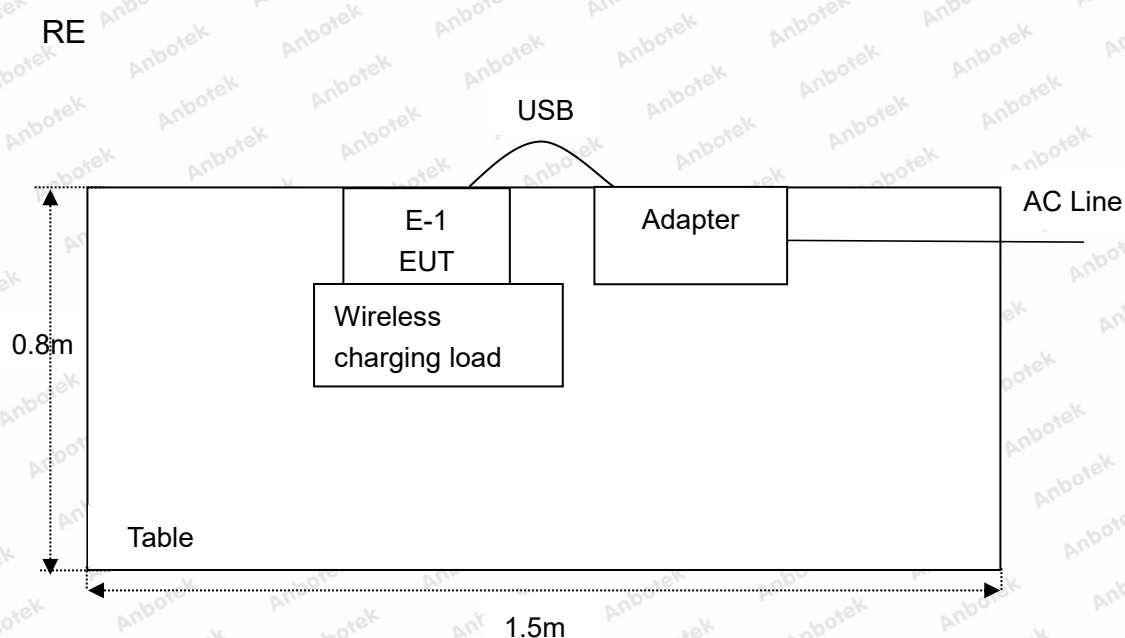
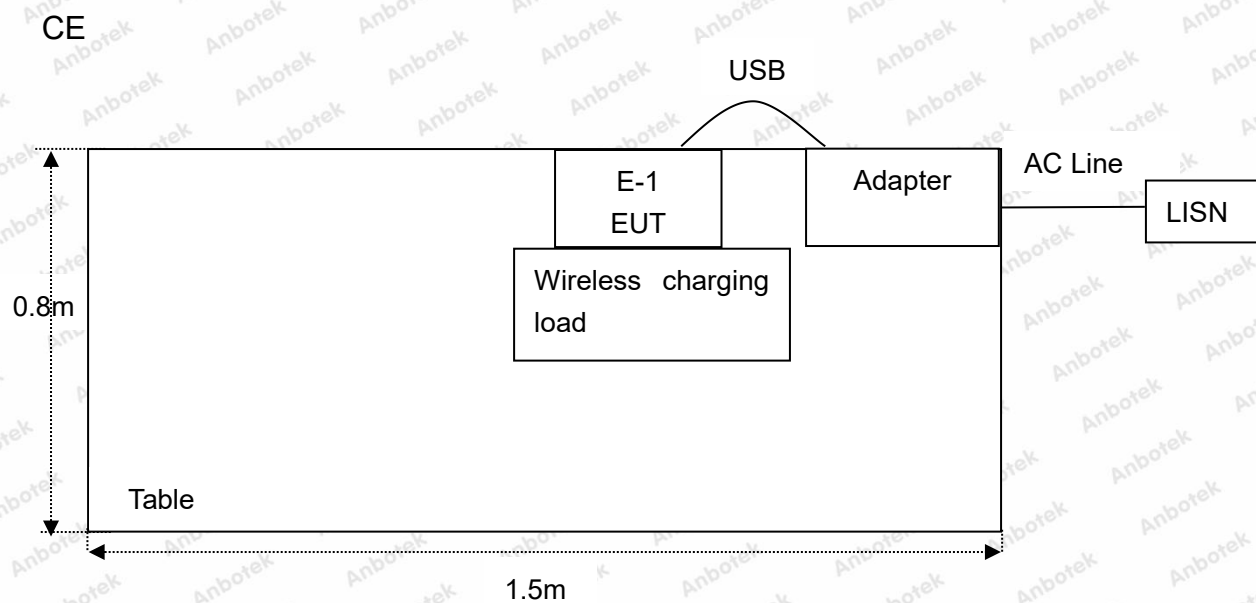
Note:

(1) Test channel is 0.1275MHz.

(2) All the situation(full load-99%, half load-50% and empty load-1%) has been tested,only the worst situation (full load-99% 15W) was recorded in the report.



1.5. Description Of Test Setup



1.6. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Jan. 18, 2024	1 Year
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040DT001	Jan. 18, 2024	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 12, 2023	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	Jan. 23, 2024	1 Year
5.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Oct. 12, 2023	1 Year
6.	EMI Preamplifier	SKET Electronic	LNPA-0118G -45	SKET-PA-002	Jan. 17, 2024	1 Year
7.	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	Oct. 16, 2022	3 Year
8.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	Oct. 23, 2022	3 Year
9.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	Oct. 12, 2023	1 Year
10.	Horn Antenna	A-INFO	LB-180400- KF	J211060628	Oct. 12, 2023	1 Year
11.	Pre-amplifier	SONOMA	310N	186860	Jan. 17, 2024	1 Year
12.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
13.	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY53280032	Oct. 12, 2023	1 Year
14.	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Oct. 12, 2023	1 Year
15.	Signal Generator	Agilent	E4421B	MY41000743	Oct. 12, 2023	1 Year
16.	DC Power Supply	IVYTECH	IV3605	1804D360510	Oct. 20, 2023	1 Year
17.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80 B	N/A	Oct. 16, 2023	1 Year
18.	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102150	May. 06, 2024	1 Year
19.	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	104209	Oct. 12, 2023	1 Year



1.7. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.8dB
Radiated spurious emissions (Below 30MHz)	3.53dB
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.92dB; Vertical: 4.52dB
The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

1.8. Description of Test Facility

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

FCC-Registration No.: 434132

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

ISED-Registration No.: 8058A

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

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

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

1.9. Disclaimer

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

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



2. Summary of Test Results

Standard Section	Test Item	Result
15.203	Antenna Requirement	PASS
15.207	Conducted Emission Test	PASS
15.205/15.209	Spurious Emission	PASS



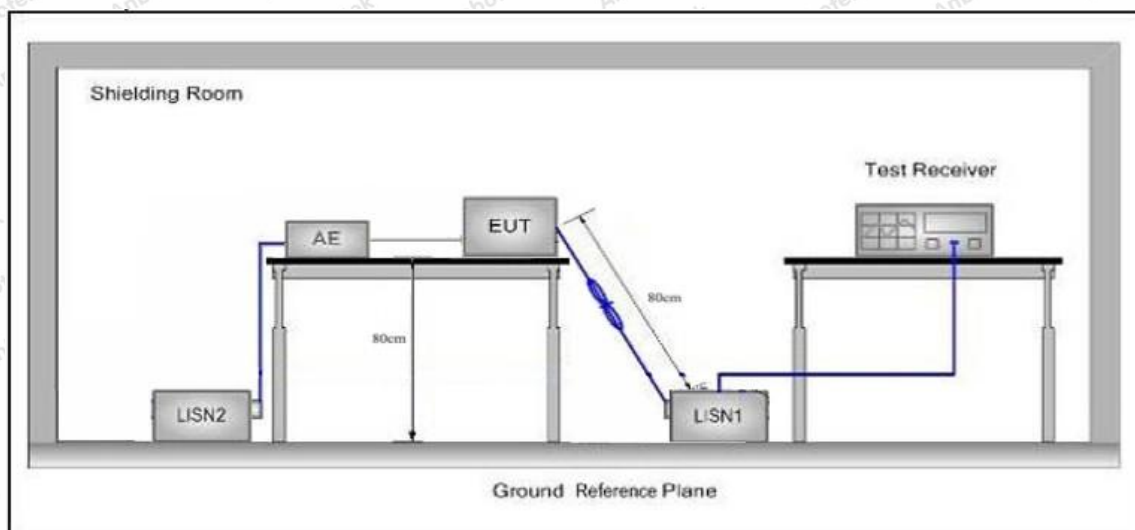
3. Conducted Emission Test

3.1. Test Standard and Limit

Test Standard	FCC Part15 Section 15.207		
Test Limit	Frequency	Maximum RF Line Voltage (dBuV)	
		Quasi-peak Level	Average Level
	150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
	500kHz~5MHz	56	46
	5MHz~30MHz	60	50

Remark: (1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequency.

3.2. Test Setup



3.3. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.10: 2020 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.4. Test Data

Only the worst case data was showed in the report, please to see the following pages.



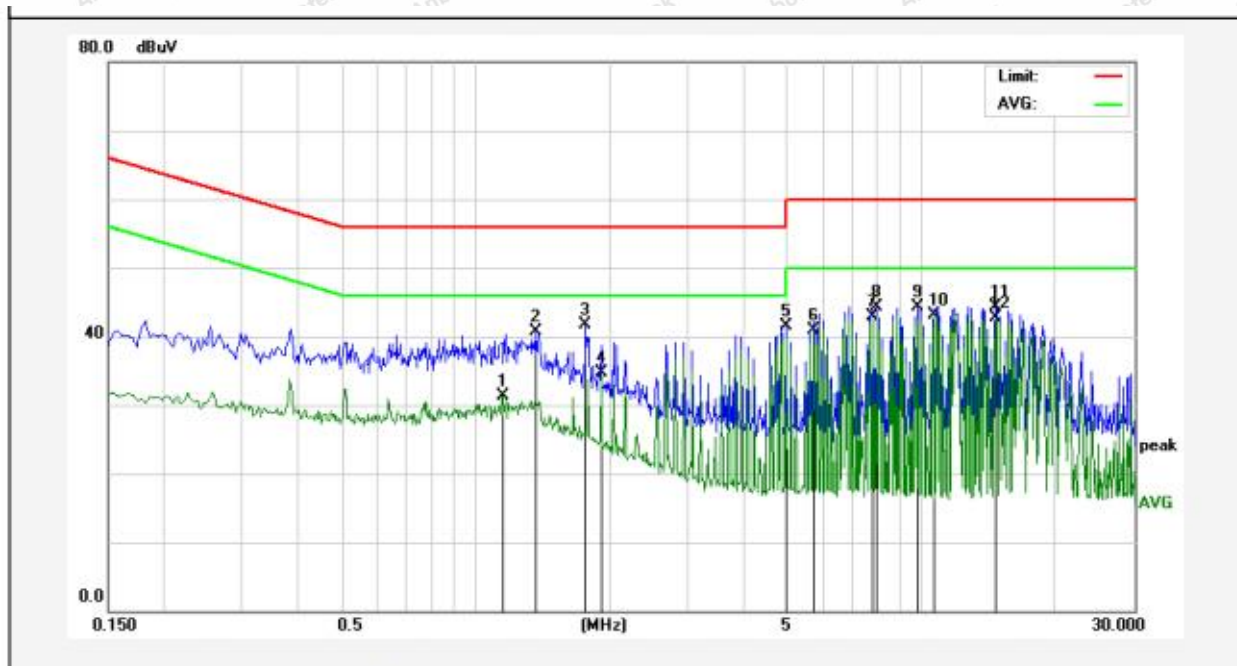
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 14 of 38

Conducted Emission Test Data

Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: AC 120V, 60Hz for adapter
Comment: Live Line
Temp.(°C)/Hum.(%RH): 23.5°C/57%RH

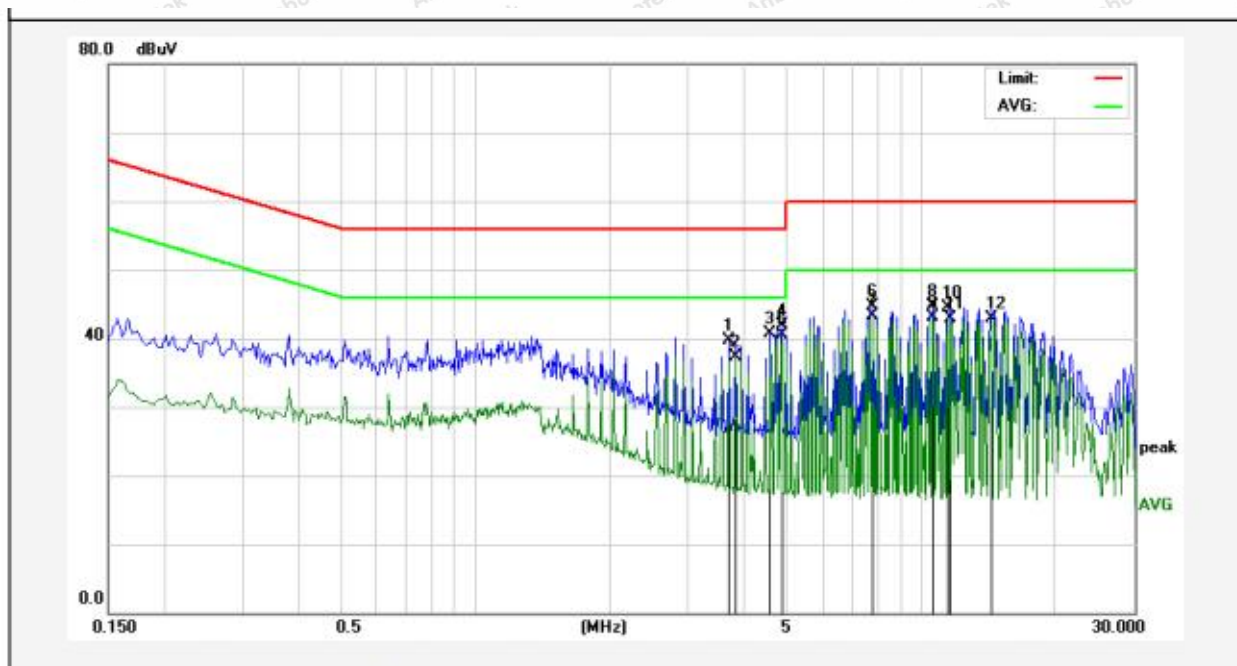


No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	1.1500	13.43	17.86	31.29	46.00	-14.71	AVG	
2	1.3660	22.90	17.86	40.76	56.00	-15.24	QP	
3	1.7700	23.78	17.86	41.64	56.00	-14.36	QP	
4	1.9140	16.90	17.85	34.75	46.00	-11.25	AVG	
5	4.9740	23.57	17.86	41.43	56.00	-14.57	QP	
6	5.7420	23.11	17.87	40.98	50.00	-9.02	AVG	
7	7.7860	25.05	17.93	42.98	50.00	-7.02	AVG	
8	7.9140	26.37	17.93	44.30	60.00	-15.70	QP	
9	9.8260	26.39	17.97	44.36	60.00	-15.64	QP	
10	10.7140	25.20	18.00	43.20	50.00	-6.80	AVG	
11	14.6780	26.09	18.14	44.23	60.00	-15.77	QP	
12	14.6780	24.51	18.14	42.65	50.00	-7.35	AVG	



Conducted Emission Test Data

Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: AC 120V, 60Hz for adapter
Comment: Neutral Line
Temp.(°C)/Hum.(%RH): 23.5°C/57%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	3.7020	21.76	17.86	39.62	56.00	-16.38	QP	
2	3.8260	19.43	17.86	37.29	46.00	-8.71	AVG	
3	4.5939	22.94	17.86	40.80	56.00	-15.20	QP	
4	4.8500	23.95	17.86	41.81	56.00	-14.19	QP	
5	4.8500	22.72	17.86	40.58	46.00	-5.42	AVG	
6	7.7820	26.77	17.93	44.70	60.00	-15.30	QP	
7	7.7820	25.28	17.93	43.21	50.00	-6.79	AVG	
8	10.5900	26.76	18.00	44.76	60.00	-15.24	QP	
9	10.5900	25.04	18.00	43.04	50.00	-6.96	AVG	
10	11.4860	26.45	18.02	44.47	60.00	-15.53	QP	
11	11.6100	24.89	18.03	42.92	50.00	-7.08	AVG	
12	14.4180	24.85	18.12	42.97	50.00	-7.03	AVG	



4. Radiation Spurious Emission

4.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.209 and 15.205				
Test Limit	Frequency (MHz)	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz~0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz~88MHz	100	40.0	Quasi-peak	3
	88MHz~216MHz	150	43.5	Quasi-peak	3
	216MHz~960MHz	200	46.0	Quasi-peak	3
	960MHz~1000MHz	500	54.0	Quasi-peak	3
	Above 1000MHz	500	54.0	Average	3
		-	74.0	Peak	3

Remark:

(1)The lower limit shall apply at the transition frequency.

(2) 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

4.2. Test Setup

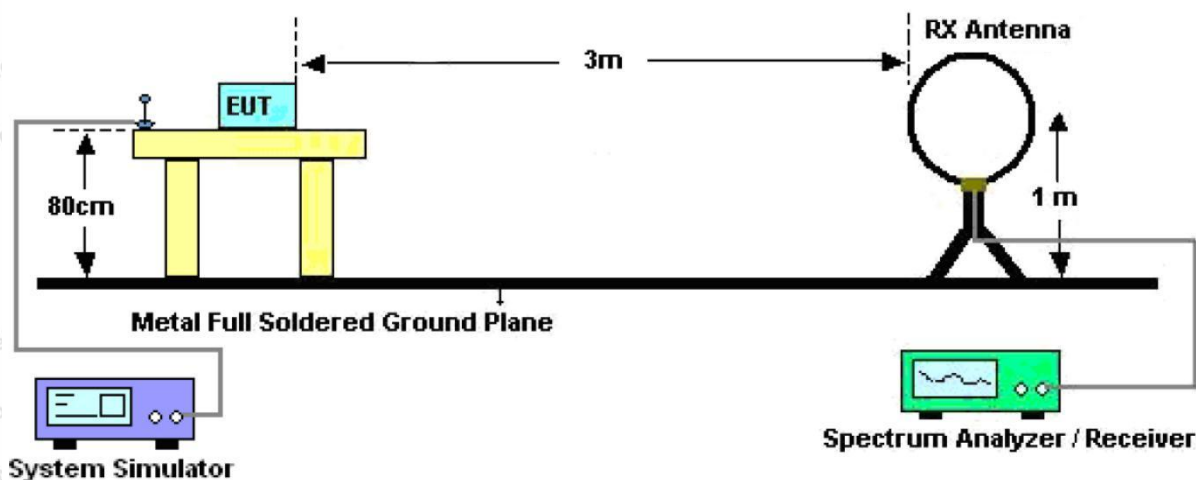


Figure 1. Below 30MHz



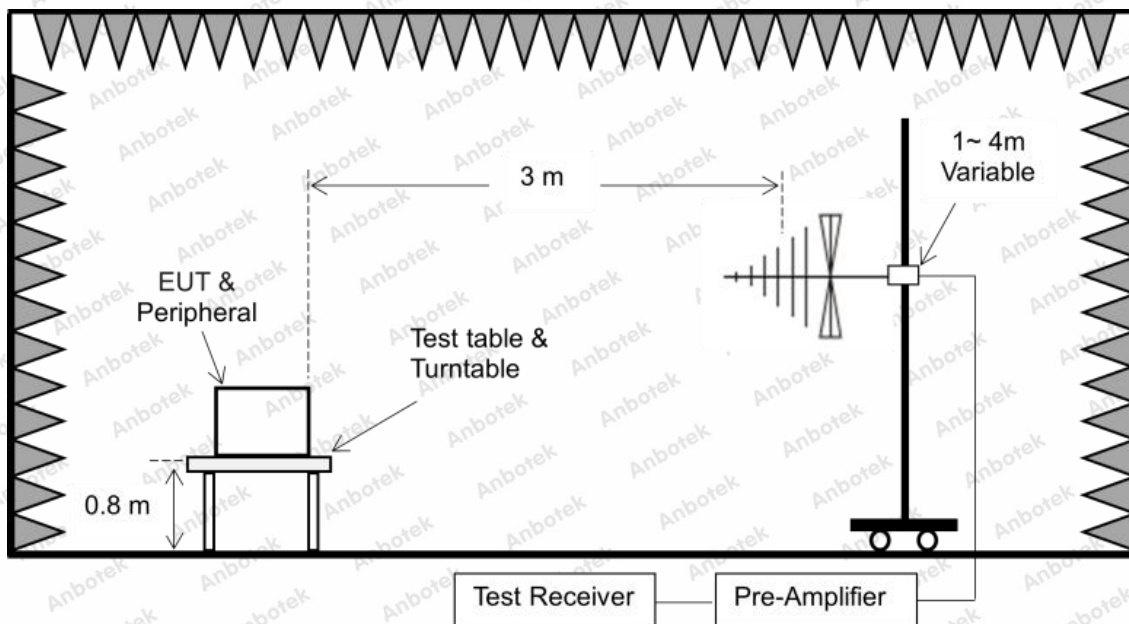


Figure 2. 30MHz to 1GHz

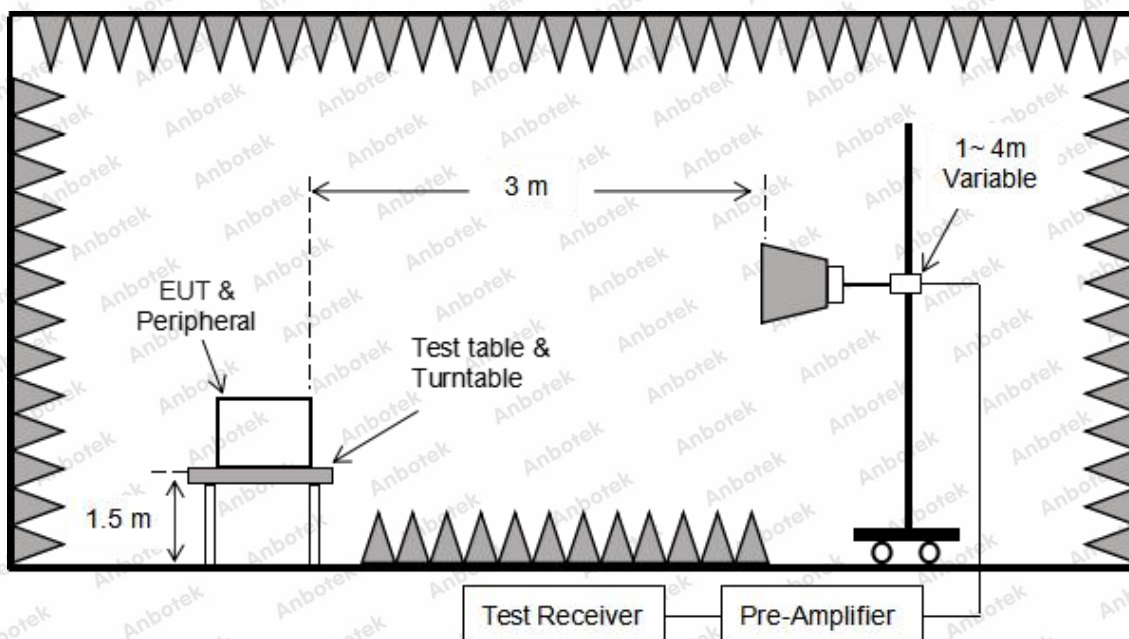


Figure 3. Above 1 GHz

4.3. Test Procedure

For below 1GHz: The EUT is placed on a turntable, which is 0.8m above the ground plane.

The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Rotated the EUT through three orthogonal axes to determine the maximum emissions, both horizontal



Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 18 of 38

and vertical polarization of the antenna are set on test. The EUT is tested in 9*6*6 Chamber. The device is evaluated in xyz orientation.

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.

4.4. Test Data

PASS

During the test, Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the X-axis is the worst case.

Please to see the following pages.



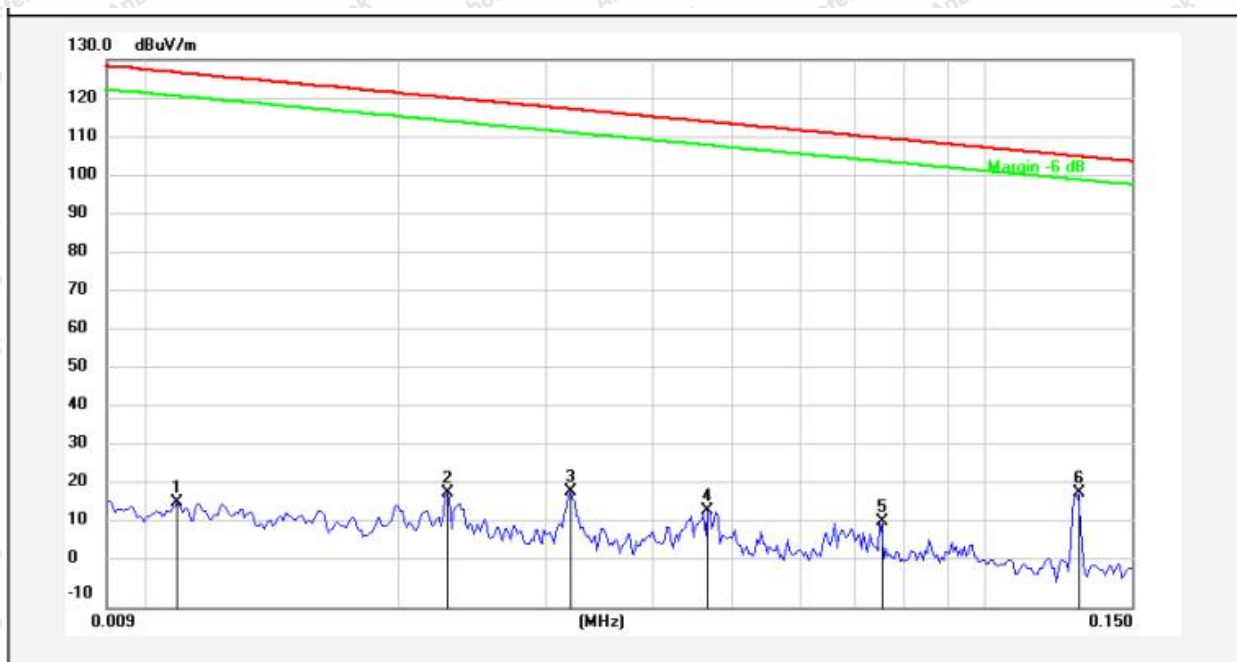
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 19 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 1
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0109	-3.16	20.06	16.90	126.65	-109.75	QP			
2	0.0229	-1.22	20.36	19.14	120.24	-101.10	QP			
3	0.0321	-0.94	20.56	19.62	117.33	-97.71	QP			
4	0.0468	-5.93	20.44	14.51	114.07	-99.56	QP			
5	0.0751	-8.43	20.37	11.94	109.99	-98.05	QP			
6	0.1289	-1.26	20.34	19.08	105.33	-86.25	QP			



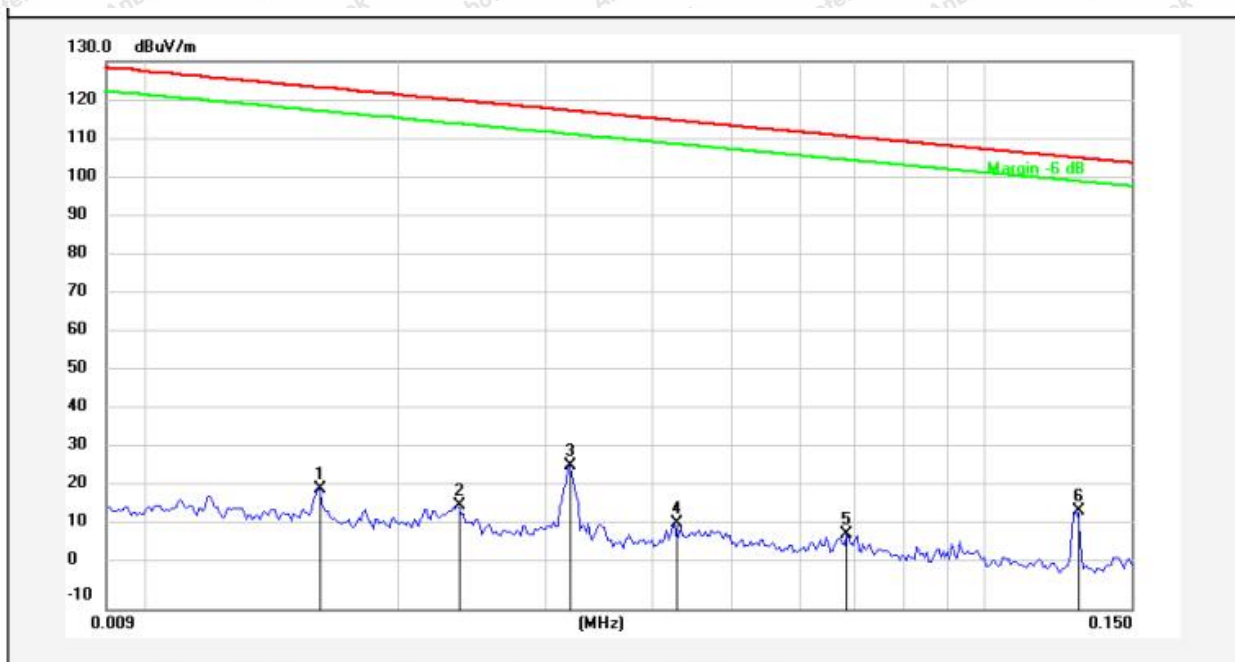
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 20 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 1
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0161	0.31	20.28	20.59	123.29	-102.70	QP			
2	0.0236	-4.11	20.37	16.26	119.98	-103.72	QP			
3	0.0321	6.01	20.56	26.57	117.33	-90.76	QP			
4	0.0428	-8.47	20.44	11.97	114.85	-102.88	QP			
5	0.0686	-11.44	20.37	8.93	110.77	-101.84	QP			
6	0.1289	-5.38	20.34	14.96	105.33	-90.37	QP			



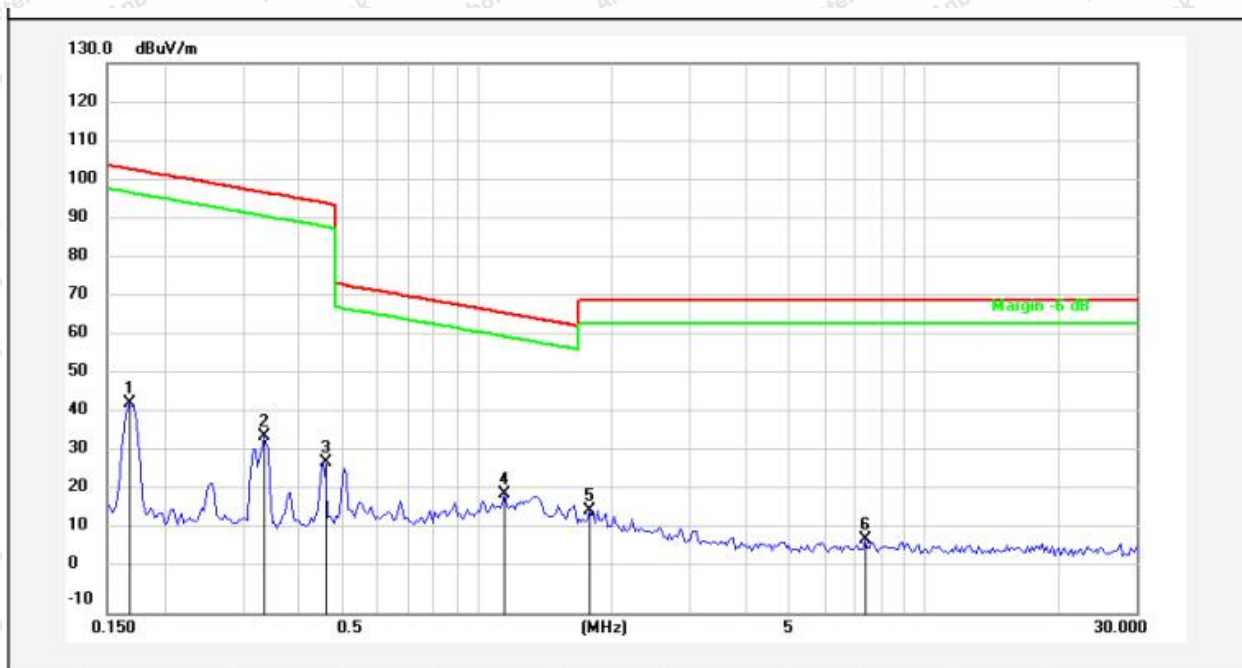
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 21 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 1
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1685	23.20	20.32	43.52	103.01	-59.49	QP			
2	0.3356	14.63	20.29	34.92	97.07	-62.15	QP			
3	0.4564	8.07	20.27	28.34	94.41	-66.07	QP			
4	1.1595	0.09	20.26	20.35	66.34	-45.99	QP			
5	1.7905	-4.12	20.27	16.15	69.50	-53.35	QP			
6	7.4071	-11.72	20.48	8.76	69.50	-60.74	QP			



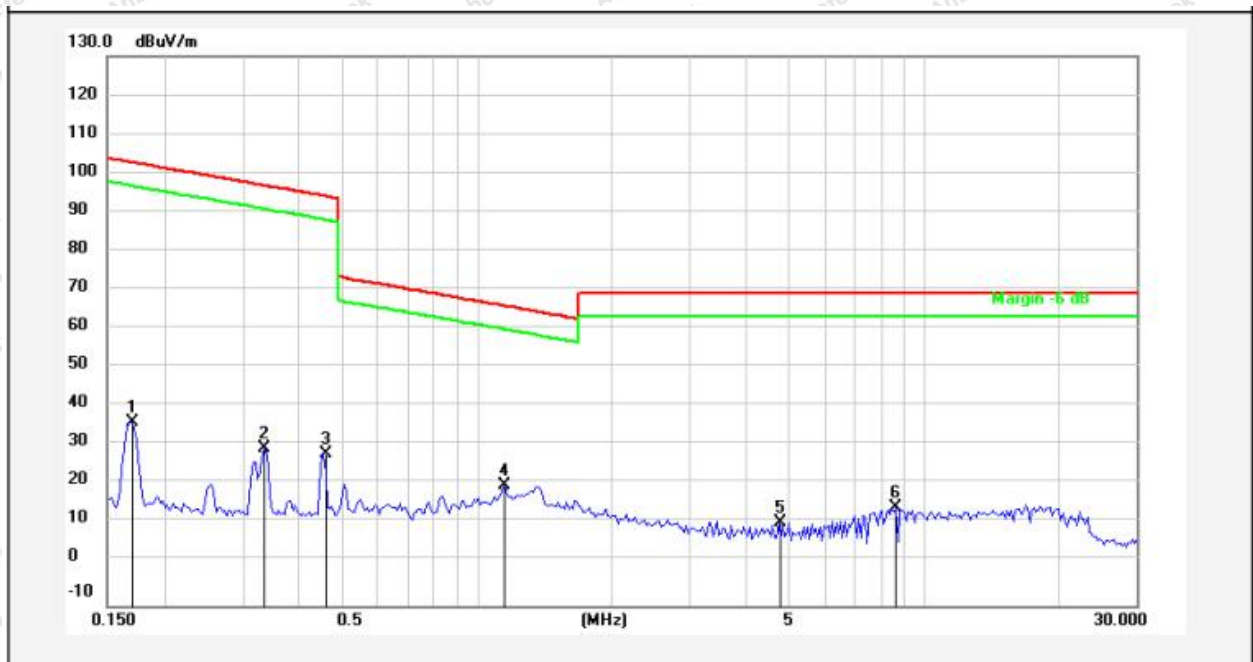
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 22 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 1
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1703	16.46	20.32	36.78	102.92	-66.14	QP			
2	0.3356	9.90	20.29	30.19	97.07	-66.88	QP			
3	0.4564	8.45	20.27	28.72	94.41	-65.69	QP			
4	1.1595	0.48	20.26	20.74	66.34	-45.60	QP			
5	4.7464	-9.22	20.41	11.19	69.50	-58.31	QP			
6	8.6832	-5.44	20.51	15.07	69.50	-54.43	QP			



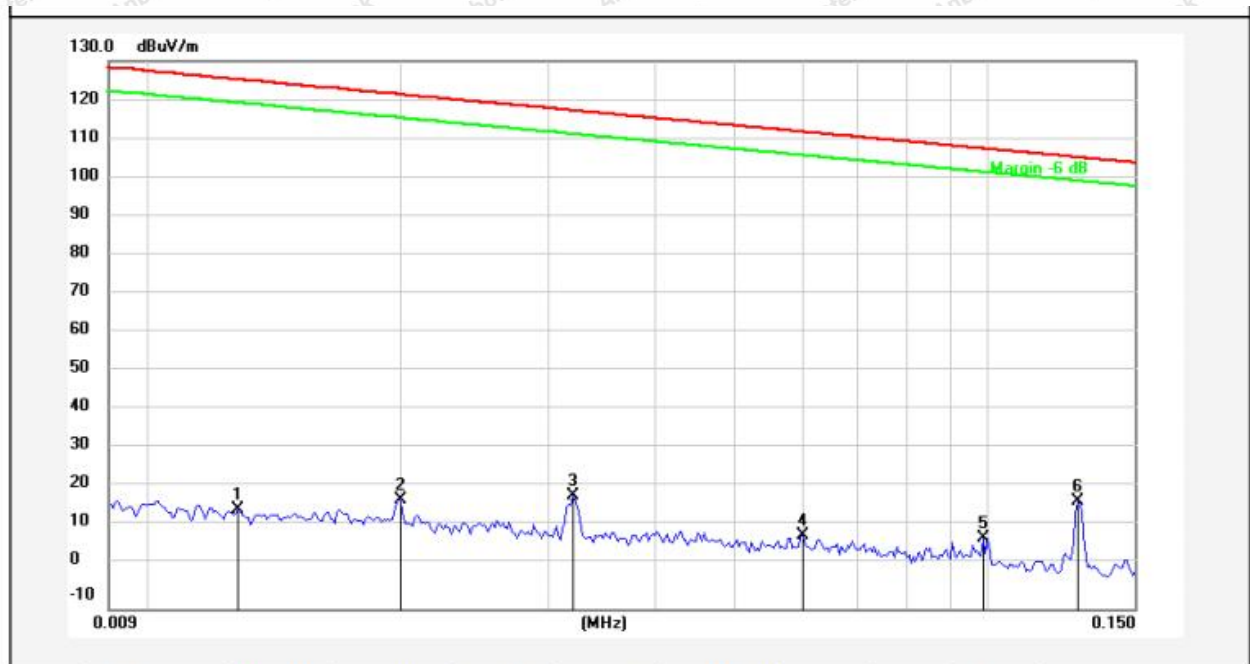
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 23 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 4
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0128	-4.75	20.15	15.40	125.27	-109.87	QP			
2	0.0200	-2.61	20.29	17.68	121.41	-103.73	QP			
3	0.0320	-1.64	20.56	18.92	117.36	-98.44	QP			
4	0.0602	-11.49	20.37	8.88	111.90	-103.02	QP			
5	0.0989	-12.36	20.29	7.93	107.61	-99.68	QP			
6	0.1280	-2.73	20.34	17.61	105.39	-87.78	QP			



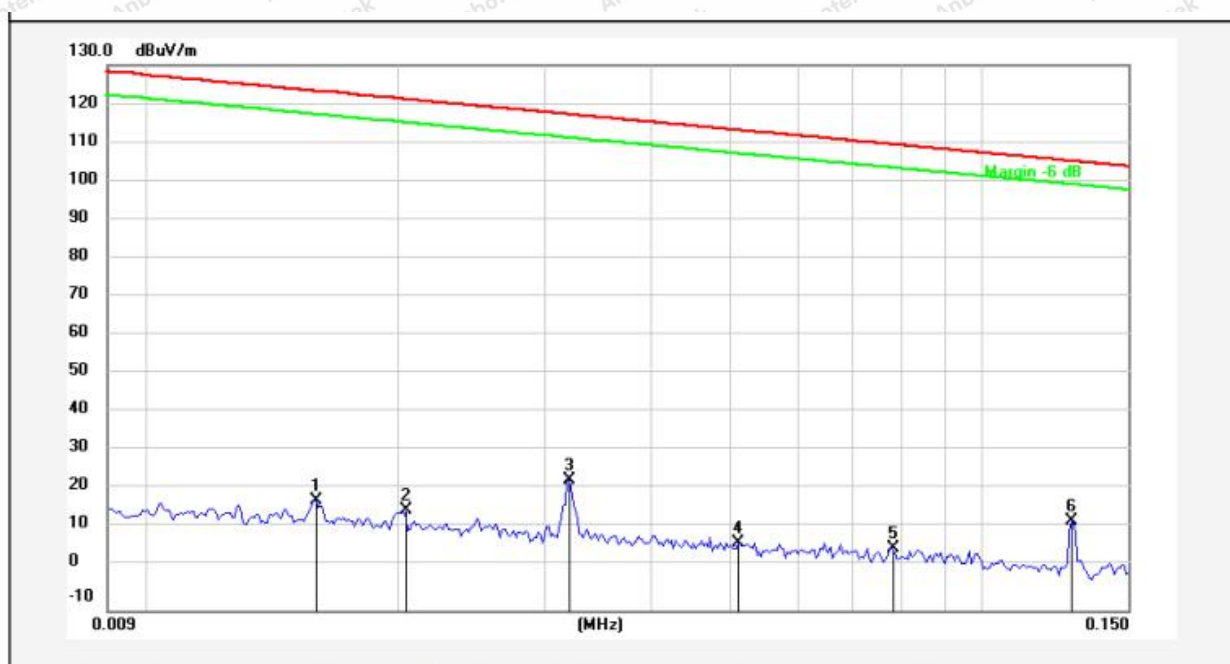
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 24 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 4
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0159	-1.99	20.30	18.31	123.39	-105.08	QP			
2	0.0204	-4.61	20.30	15.69	121.24	-105.55	QP			
3	0.0321	2.83	20.56	23.39	117.33	-93.94	QP			
4	0.0512	-12.93	20.40	7.47	113.30	-105.83	QP			
5	0.0781	-14.44	20.36	5.92	109.65	-103.73	QP			
6	0.1281	-7.50	20.34	12.84	105.38	-92.54	QP			



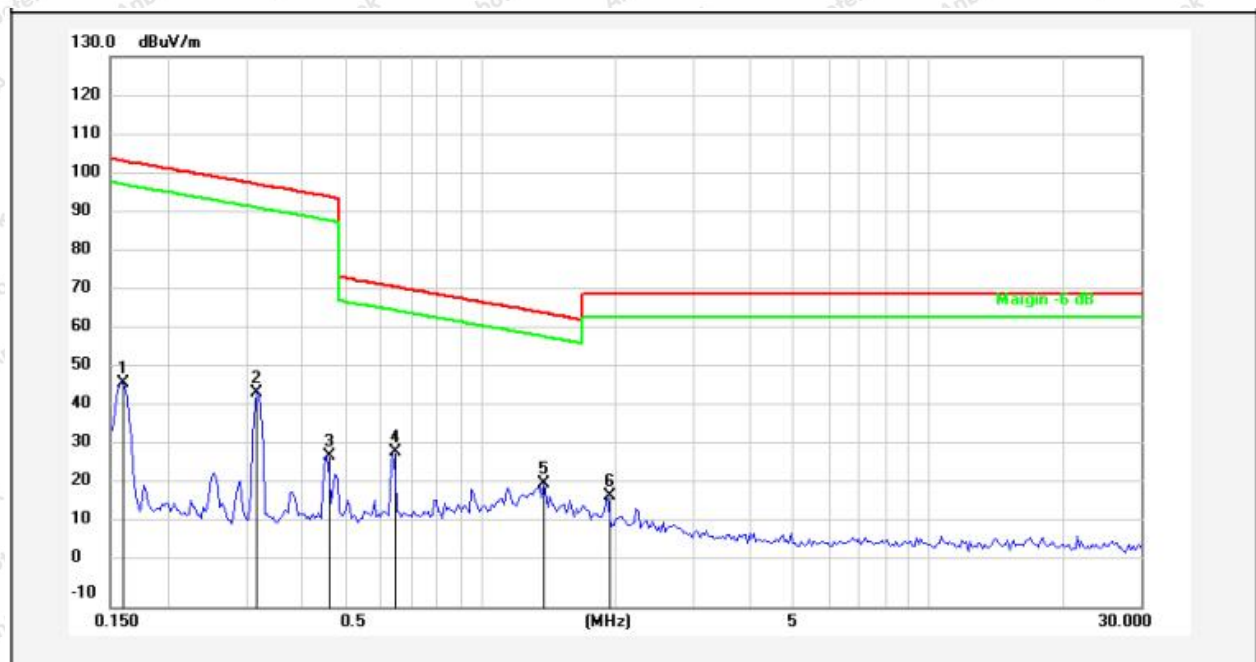
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 25 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 4
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1582	26.65	20.33	46.98	103.56	-56.58	QP			
2	0.3183	24.03	20.29	44.32	97.52	-53.20	QP			
3	0.4564	8.20	20.27	28.47	94.41	-65.94	QP			
4	0.6406	8.97	20.27	29.24	71.48	-42.24	QP			
5	1.3884	1.00	20.27	21.27	64.78	-43.51	QP			
6	1.9284	-2.05	20.28	18.23	69.50	-51.27	QP			



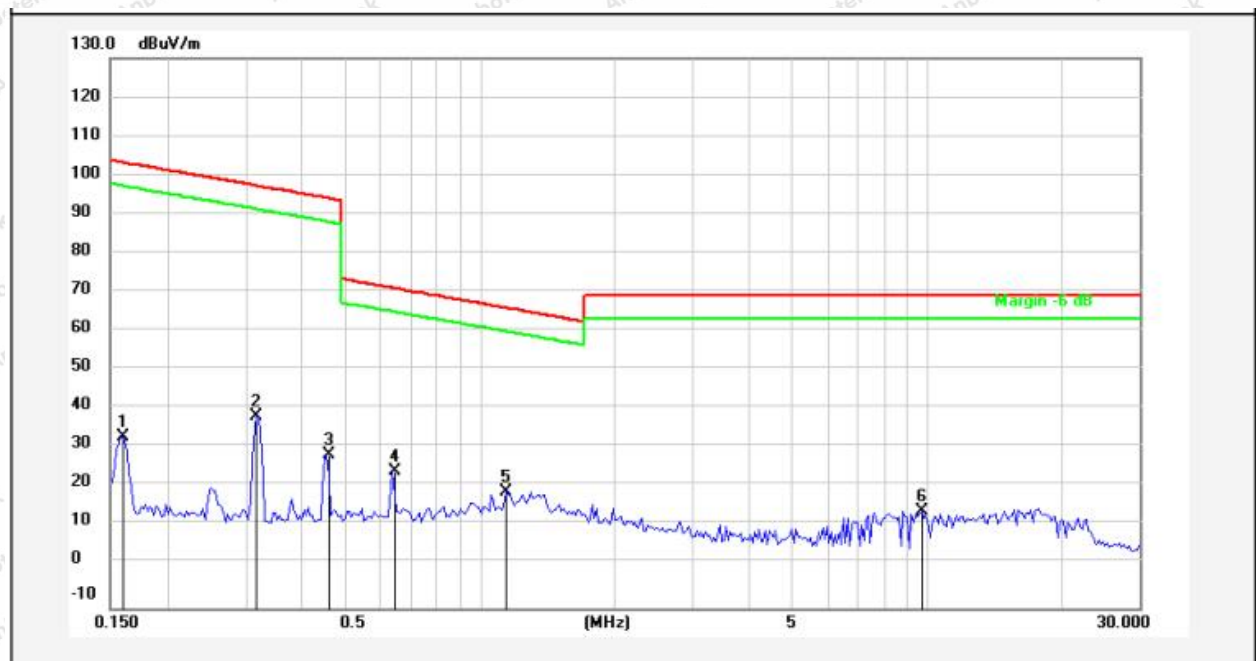
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 26 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 4
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1598	13.31	20.33	33.64	103.47	-69.83	QP			
2	0.3183	18.59	20.29	38.88	97.52	-58.64	QP			
3	0.4564	8.64	20.27	28.91	94.41	-65.50	QP			
4	0.6406	4.51	20.27	24.78	71.48	-46.70	QP			
5	1.1473	-0.74	20.26	19.52	66.43	-46.91	QP			
6	9.7567	-5.78	20.51	14.73	69.50	-54.77	QP			



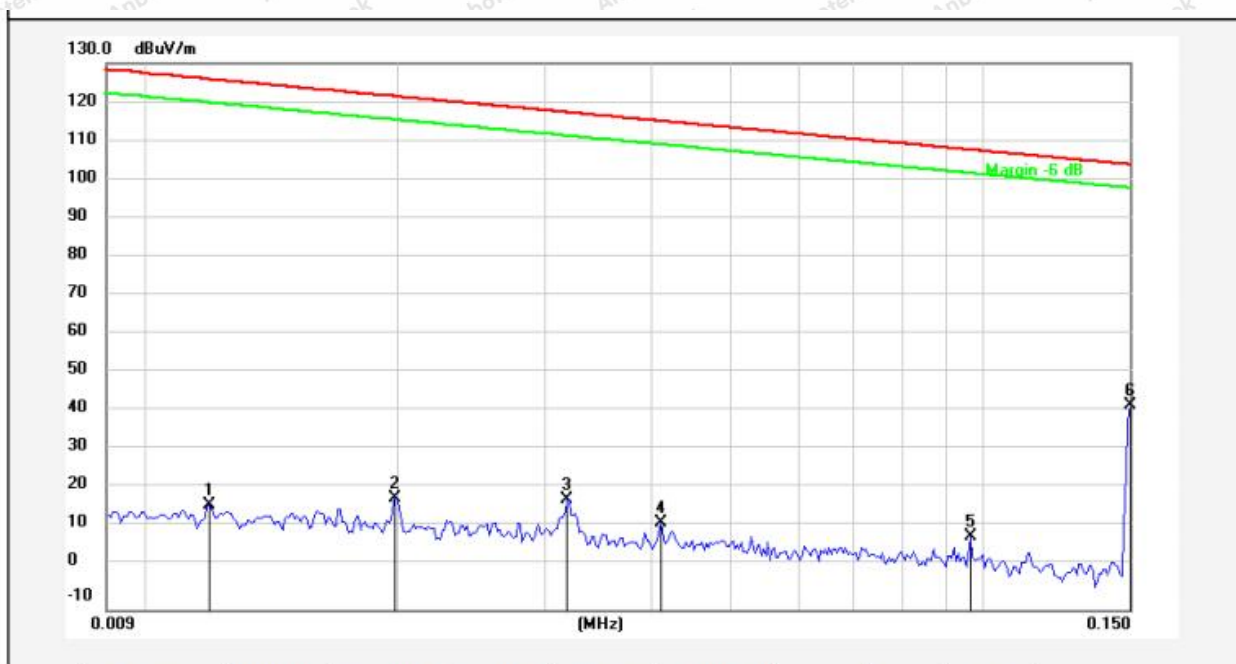
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 27 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 7
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0119	-3.42	20.11	16.69	125.89	-109.20	QP			
2	0.0199	-1.66	20.29	18.63	121.46	-102.83	QP			
3	0.0319	-2.36	20.56	18.20	117.38	-99.18	QP			
4	0.0413	-8.06	20.43	12.37	115.15	-102.78	QP			
5	0.0967	-11.68	20.29	8.61	107.81	-99.20	QP			
6	0.1500	22.08	20.33	42.41	104.02	-61.61	QP			



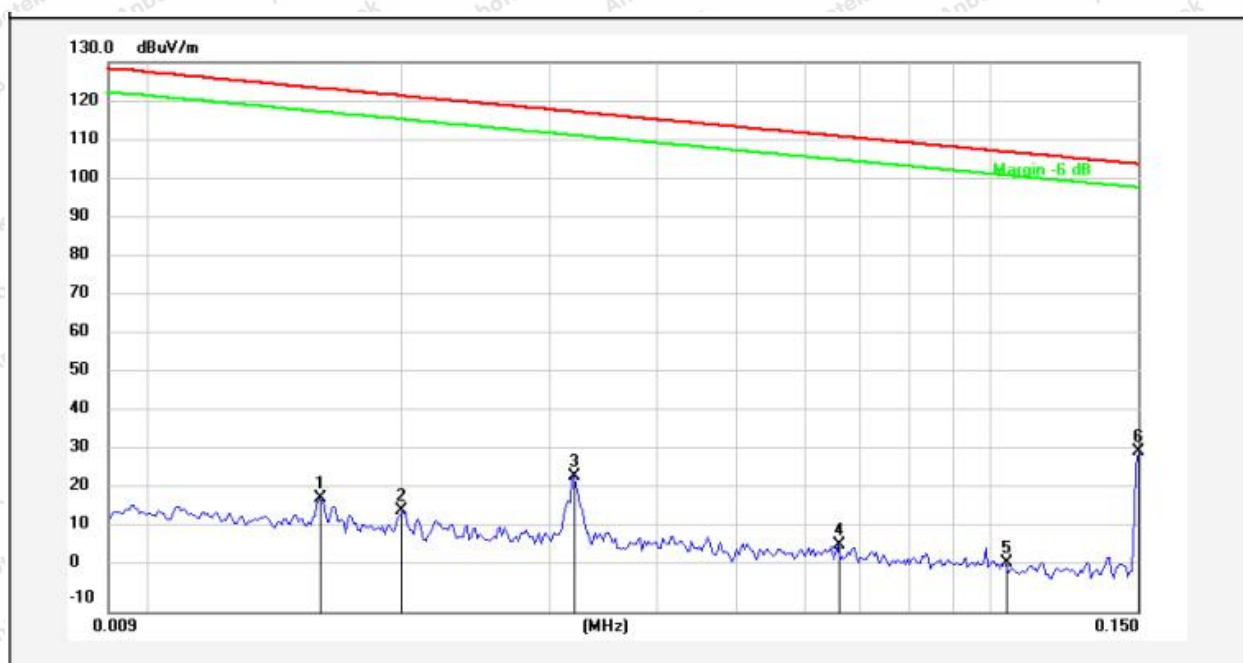
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 28 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 7
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0160	-1.44	20.30	18.86	123.34	-104.48	QP			
2	0.0200	-4.71	20.29	15.58	121.41	-105.83	QP			
3	0.0321	3.75	20.56	24.31	117.33	-93.02	QP			
4	0.0660	-13.38	20.38	7.00	111.11	-104.11	QP			
5	0.1041	-17.79	20.29	2.50	107.17	-104.67	QP			
6	0.1500	10.45	20.33	30.78	104.02	-73.24	QP			



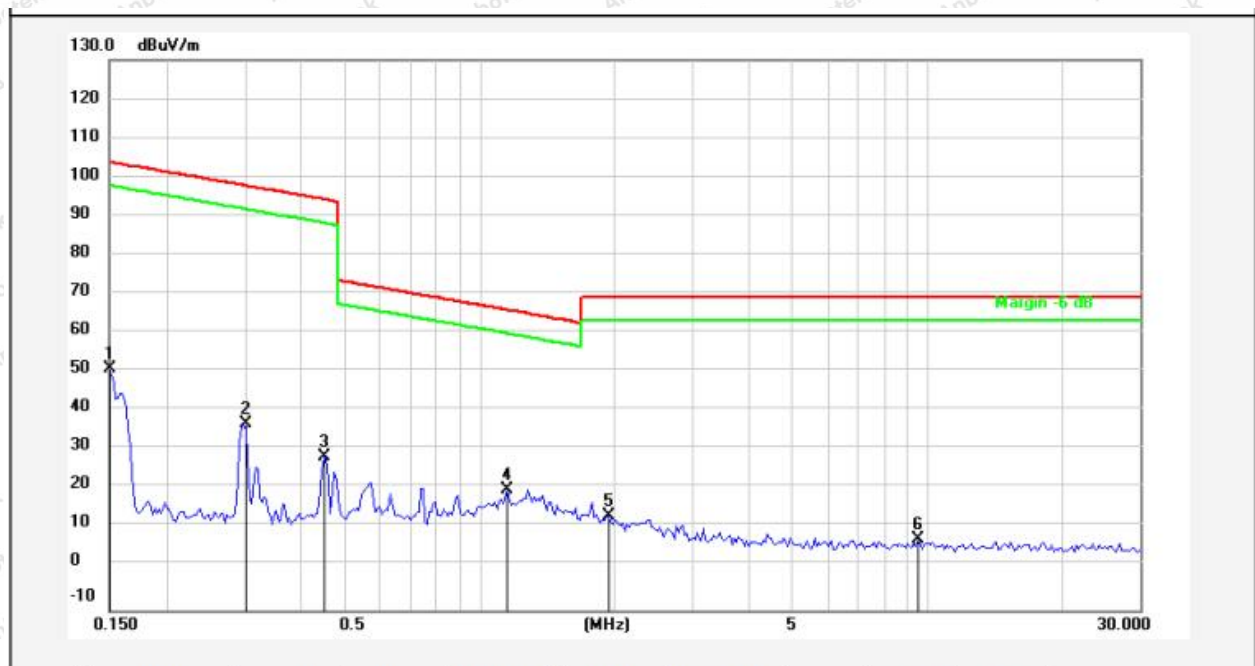
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 29 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 7
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1500	30.99	20.33	51.32	104.02	-52.70	QP			
2	0.2987	16.96	20.30	37.26	98.07	-60.81	QP			
3	0.4515	8.81	20.27	29.08	94.51	-65.43	QP			
4	1.1595	0.42	20.26	20.68	66.34	-45.66	QP			
5	1.9489	-6.37	20.28	13.91	69.50	-55.59	QP			
6	9.5520	-12.39	20.51	8.12	69.50	-61.38	QP			



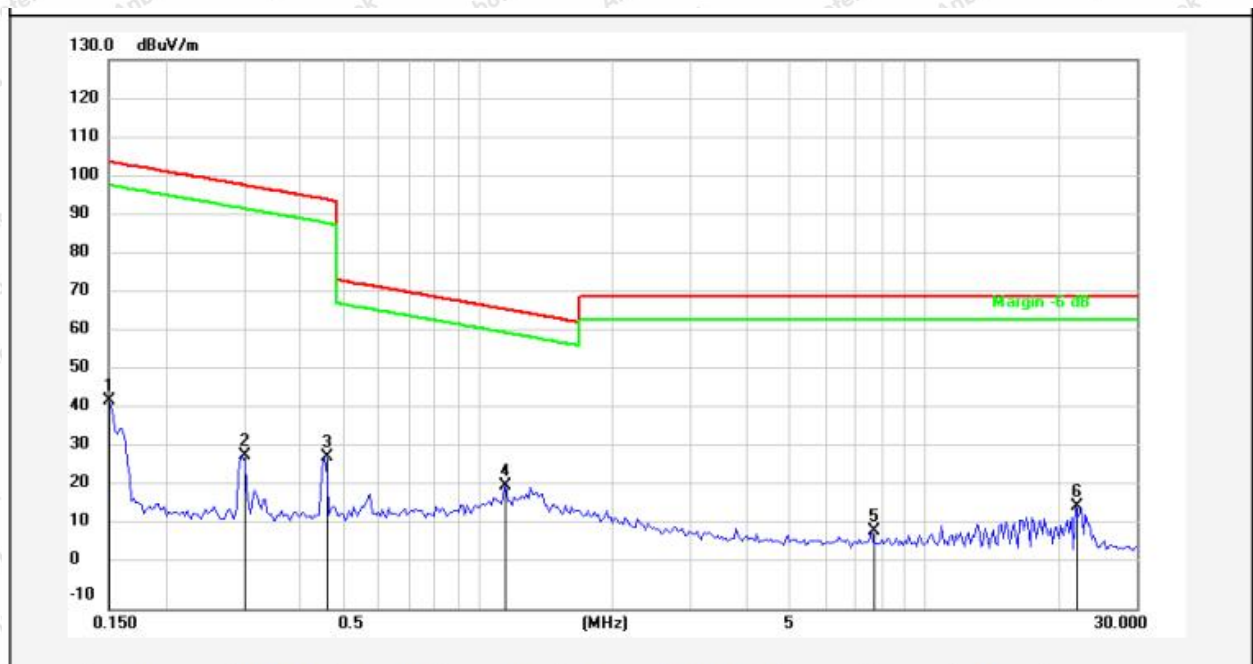
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 30 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 7
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1500	22.68	20.33	43.01	104.02	-61.01	QP			
2	0.2987	8.75	20.30	29.05	98.07	-69.02	QP			
3	0.4564	8.39	20.27	28.66	94.41	-65.75	QP			
4	1.1595	0.96	20.26	21.22	66.34	-45.12	QP			
5	7.6464	-10.82	20.48	9.66	69.50	-59.84	QP			
6	21.8303	-4.45	20.60	16.15	69.50	-53.35	QP			



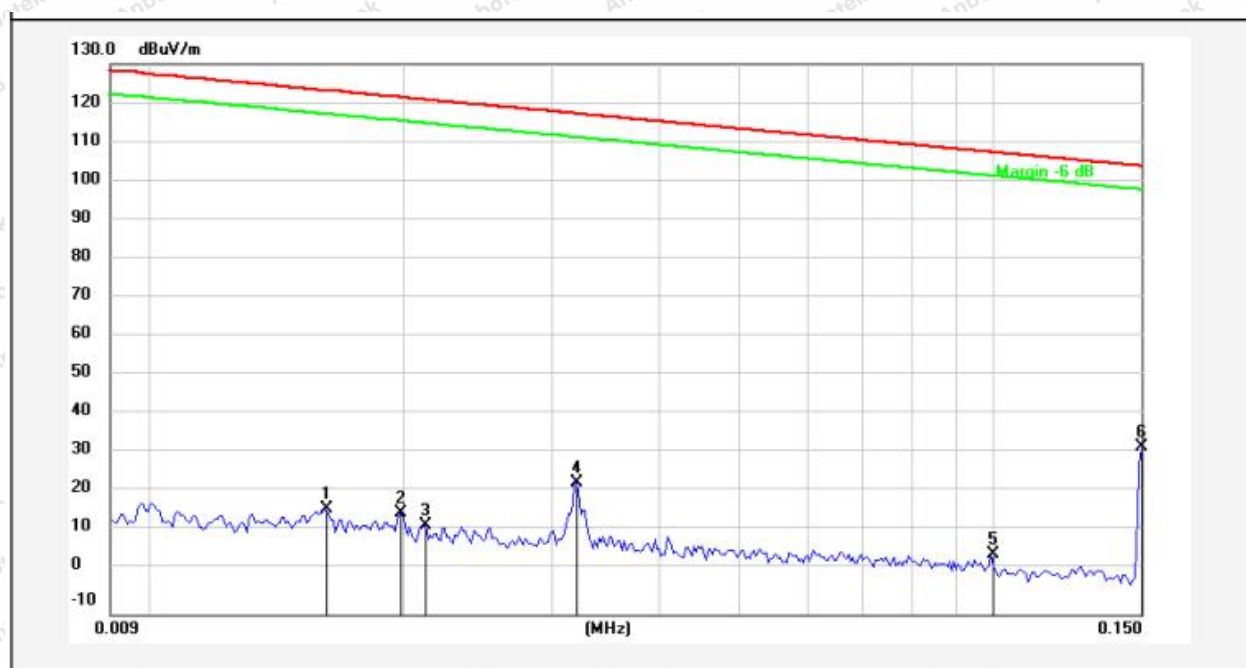
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 31 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 10
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0162	-3.52	20.27	16.75	123.23	-106.48	QP			
2	0.0198	-4.60	20.29	15.69	121.50	-105.81	QP			
3	0.0212	-7.86	20.32	12.46	120.91	-108.45	QP			
4	0.0321	3.01	20.56	23.57	117.33	-93.76	QP			
5	0.0995	-15.23	20.29	5.06	107.56	-102.50	QP			
6	0.1500	12.06	20.33	32.39	104.02	-71.63	QP			



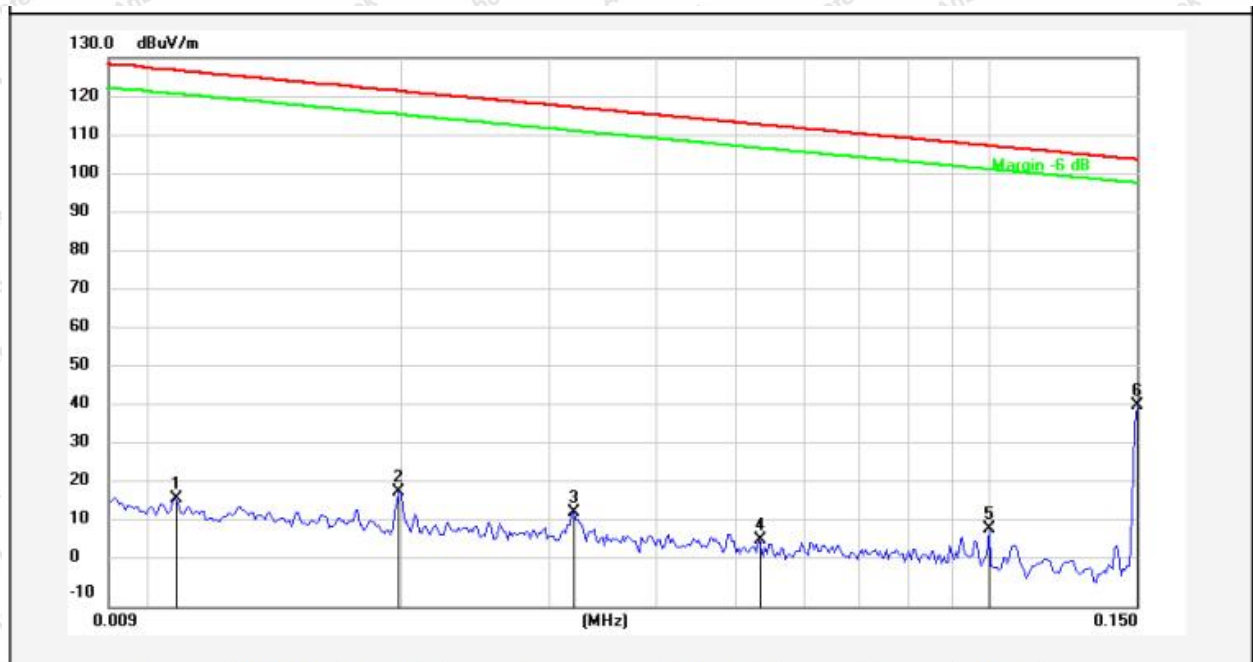
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 32 of 38

Test Results (Between 9KHz – 150KHz)

Test Mode: Mode 10
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0108	-2.74	20.06	17.32	126.73	-109.41	QP			
2	0.0199	-0.94	20.29	19.35	121.46	-102.11	QP			
3	0.0321	-6.48	20.56	14.08	117.33	-103.25	QP			
4	0.0533	-13.37	20.37	7.00	112.95	-105.95	QP			
5	0.1000	-10.56	20.29	9.73	107.52	-97.79	QP			
6	0.1500	20.88	20.33	41.21	104.02	-62.81	QP			



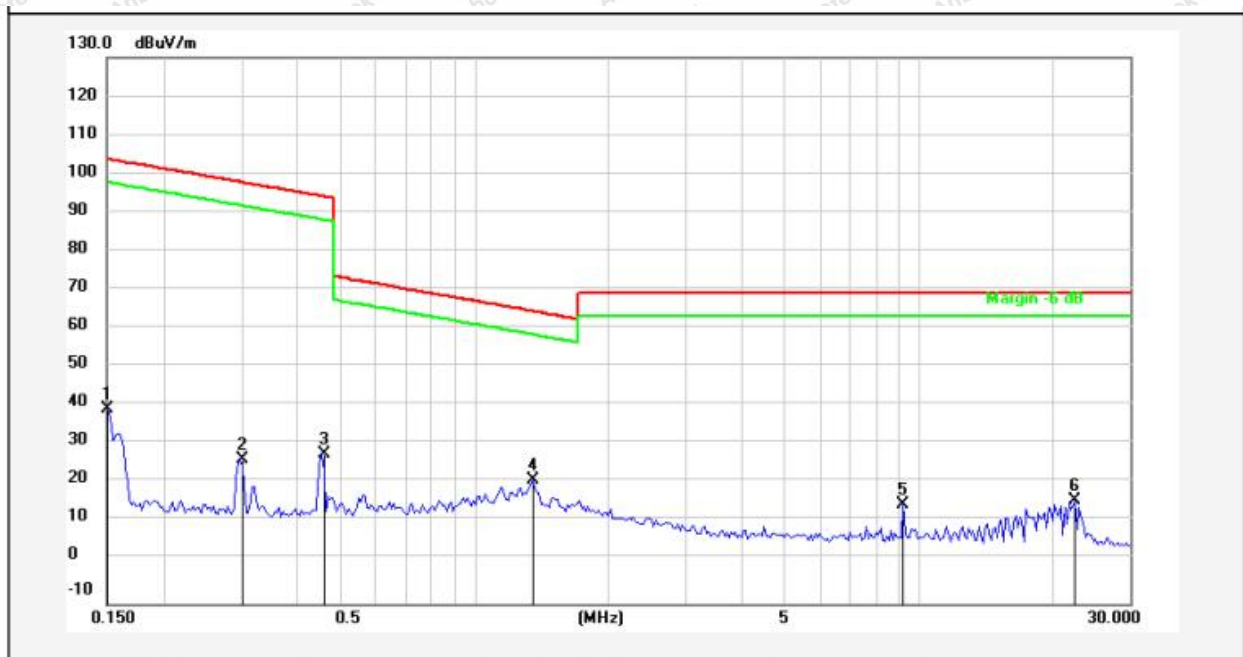
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 33 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 10
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1500	19.55	20.33	39.88	104.02	-64.14	QP			
2	0.2987	6.56	20.30	26.86	98.07	-71.21	QP			
3	0.4564	8.17	20.27	28.44	94.41	-65.97	QP			
4	1.3593	1.56	20.26	21.82	64.96	-43.14	QP			
5	9.2532	-4.95	20.50	15.55	69.50	-53.95	QP			
6	22.5353	-4.34	20.62	16.28	69.50	-53.22	QP			



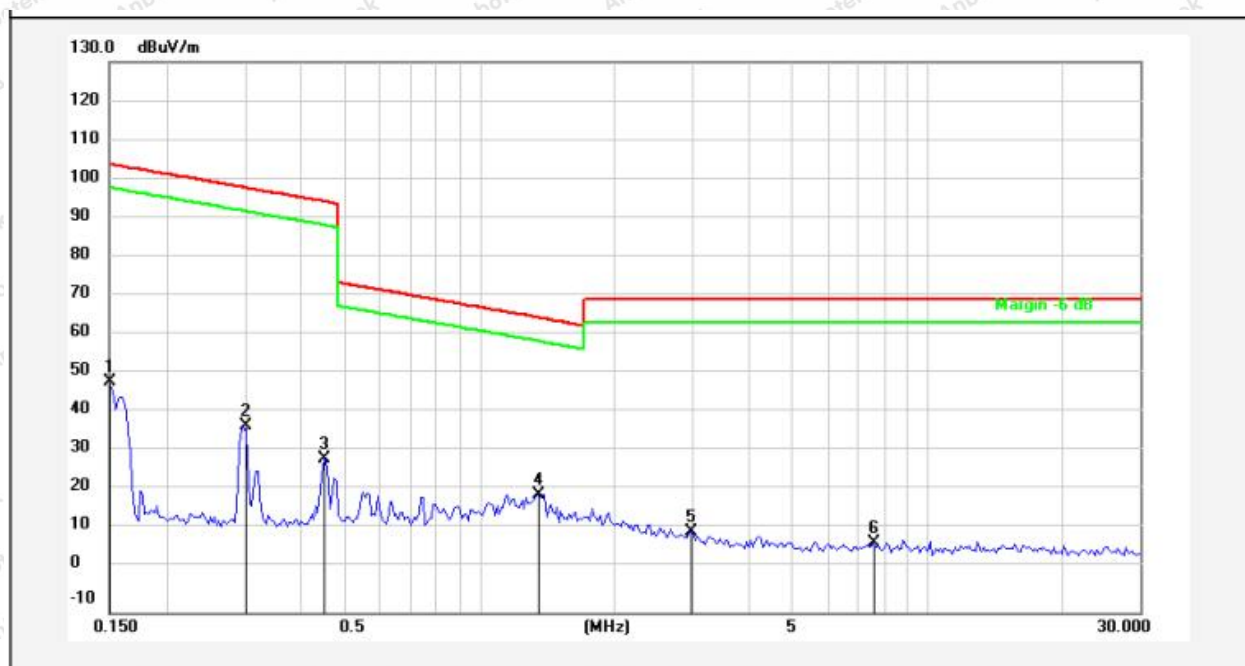
Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 34 of 38

Test Results (Between 0.15MHz – 30MHz)

Test Mode: Mode 10
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH
Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.1500	28.18	20.33	48.51	104.02	-55.51	QP			
2	0.2987	17.12	20.30	37.42	98.07	-60.65	QP			
3	0.4515	8.61	20.27	28.88	94.51	-65.63	QP			
4	1.3593	-0.19	20.26	20.07	64.96	-44.89	QP			
5	2.9776	-9.81	20.31	10.50	69.50	-59.00	QP			
6	7.5658	-12.74	20.48	7.74	69.50	-61.76	QP			

Remark: According to FCC PART 15.209 (d), the emission limits for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, Radiated emission limits in these three bands are based on measurements employing an average detector.



Report No.: 182512C400170101

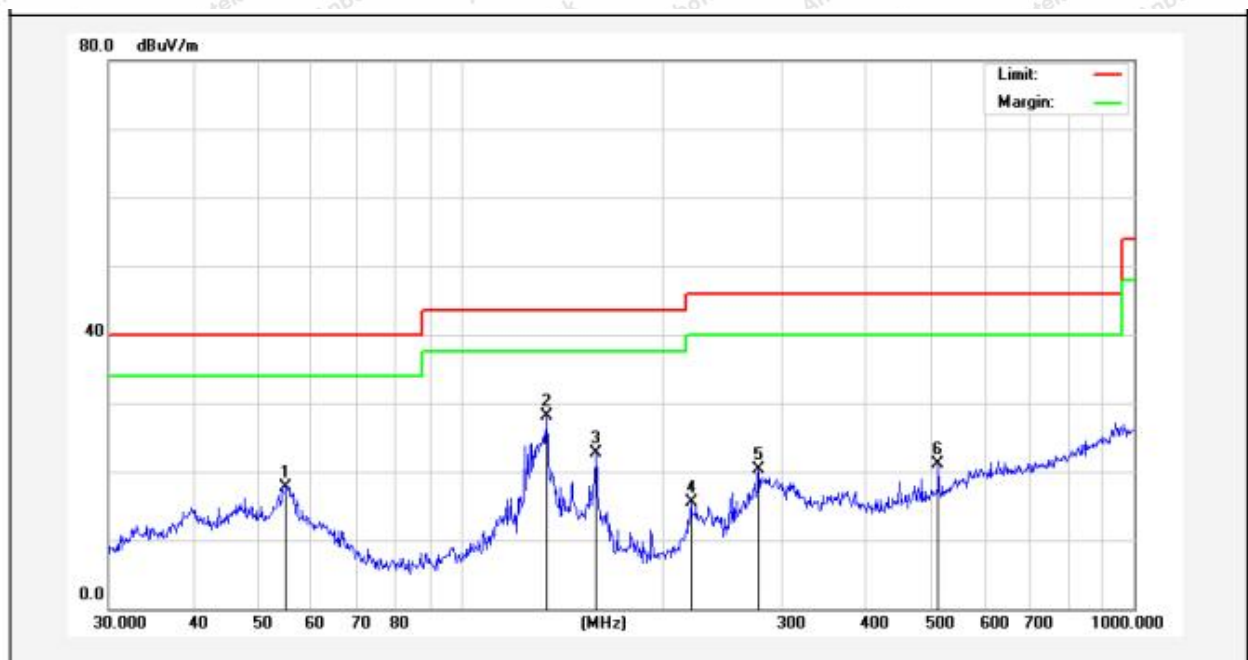
FCC ID: 2BGZD-GW39

Page 35 of 38

Test Results (Between 30MHz –1000 MHz)

Only the worst mode data was showed in the report.

Test Mode: Mode 1
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Polarization: Horizontal
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector			
1	55.0274	35.40	-17.63	17.77	40.00	-22.23	QP			
2	134.0882	50.78	-22.74	28.04	43.50	-15.46	QP			
3	158.6676	46.58	-23.86	22.72	43.50	-20.78	QP			
4	219.8448	37.53	-22.00	15.53	46.00	-30.47	QP			
5	277.0935	39.45	-19.14	20.31	46.00	-25.69	QP			
6	511.8351	34.41	-13.28	21.13	46.00	-24.87	QP			

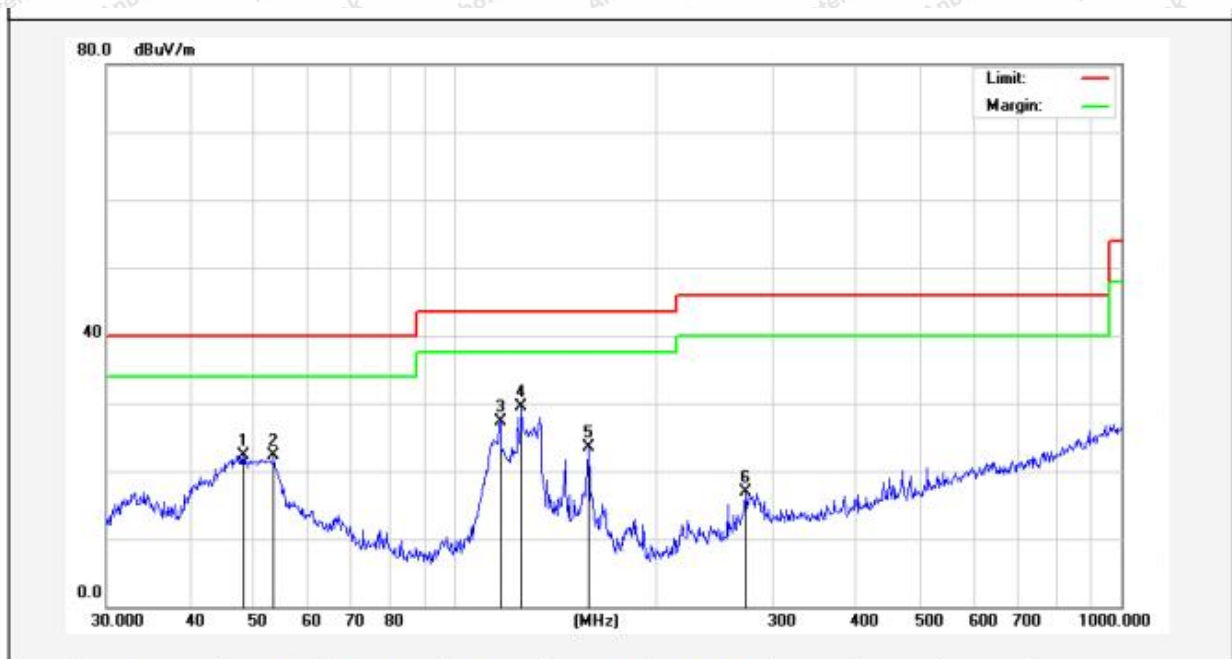


Report No.: 182512C400170101

FCC ID: 2BGZD-GW39

Page 36 of 38

Test Mode: Mode 1
Distance: 3m
Power Source: AC 120V, 60Hz for adapter
Polarization: Vertical
Temp.(°C)/Hum.(%RH): 23.5°C/49%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector			
1	48.1626	37.82	-15.51	22.31	40.00	-17.69	QP			
2	53.5052	39.32	-17.07	22.25	40.00	-17.75	QP			
3	116.9495	46.70	-19.40	27.30	43.50	-16.20	QP			
4	125.8864	50.26	-20.84	29.42	43.50	-14.08	QP			
5	158.6677	45.14	-21.70	23.44	43.50	-20.06	QP			
6	273.2341	33.98	-17.16	16.82	46.00	-29.18	QP			



5. Antenna Requirement

5.1. Test Standard and Requirement

Test Standard	FCC Part15 Section 15.203
Requirement	1) 15.203 requirement: 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, 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.

5.2. Antenna Connected Construction

The antenna is a Inductive loop coil Antenna which permanently attached. It complies with the standard requirement.



APPENDIX I -- TEST SETUP PHOTOGRAPH

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

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

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

