FCC RADIO TEST REPORT

FCC ID: OKUTS126820

Product Name :	Water Dancing Bluetooth MINI Tower
Trade Mark :	SYLVANIA, NAXA
Main Model :	SP118-BLACK
Additional Model :	SP118-BLACK-FD, NHS-2009, TS-126820, SP118-XXXXXXXXX, NHSXXXXX, TS-XXXXXX (X means unit color and Buyer different, it can A to Z or N/A, the number of "X" can vary according to actual demand)
Report No. :	UNIA21053114ER-01

Prepared for

SHENZHEN JUNLAN ELECTRONIC LTD

No.277 PingKui Road, Shijing Community, Pingshan Street, Pingshan New District, Shenzhen, China

Prepared by

Shenzhen United Testing Technology Co., Ltd.

2F, Annex Bldg, Jiahuangyuan Tech Park, #365 Baotian 1 Rd, Tiegang Community, Xixiang Str, Bao'an District, Shenzhen, China

TEST RESULT CERTIFICATION

Applicant	:	SHENZHEN JUNLAN ELECTRONIC LTD
Address	:	No.277 PingKui Road, Shijing Community, Pingshan Street, Pingshan New District, Shenzhen, China
Manufacturer	:	SHENZHEN JUNLAN ELECTRONIC LTD
Address	:	No.277 PingKui Road, Shijing Community, Pingshan Street, Pingshan New District, Shenzhen, China

Product description

Product Name	:	Water Dancing Bluetooth MINI Tower
Trade Mark	:	SYLVANIA, NAXA
Model Name	:	SP118-BLACK, SP118-BLACK-FD, NHS-2009, TS-126820, SP118-XXXXXXXXX, NHSXXXXX, TS-XXXXXX (X means unit color and Buyer different, it can A to Z or N/A, the number of "X" can vary according to actual demand)
Test Methods	:	FCC Rules and Regulations Part 15 Subpart C Section 15.247, ANSI C63.10: 2013

This device described above has been tested by Shenzhen United Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
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Date of Test.....:

Date (s) of performance of tests	:	May 07 ~ June 01, 2021
Date of Issue	:	June 01, 2021
Test Result	:	Pass

Prepared by: Bob liao/Editor

Reviewer: Kahn yang/Supervisor

Approved & Authorized Signer: Liuze/Manager

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Revision History of This Test Report

Report Number	Description	Issued Date
UNIA21053114ER-01	Initial Issue	2021-6-1

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test

Product Name:	Water Dancing Bluetooth MINI Tower
Trade Mark:	SYLVANIA, NAXA
Main Model:	SP118-BLACK
Additional Model:	SP118-BLACK-FD, NHS-2009, TS-126820, SP118-XXXXXXXXX, NHSXXXXX, TS-XXXXXX (X means unit color and Buyer different, it can A to Z or N/A, the number of "X" can vary according to actual demand)
Model Difference:	All models are identical in interior structure, electrical circuits and components, only different in model name, Therefore, only model SP118-BLACK is for tests.
FCC ID:	OKUTS126820
Operation	2402MHz~2480MHz
Number of Channels:	79CH
Modulation Type:	GFSK, π/4 DQPSK, 8DPSK
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi
Hardware Version:	V1.0
Software Version:	V1.0
Adapter:	Adapter 1: Model: GKYZA0200058US Input: AC100-240V 50/60Hz 0.5A Max Output: DC 5.8V/2A Adapter 2: Model: JY012058200BA-UL Input: 100-240V 50/60Hz 0.5A Max Output: DC 5.8V/2A
Bluetooth Version:	5.0 BR+EDR

Bluetooth Channel List

Channel	Frequency MHz	Channel	Frequency MHz	Channel	Frequency MHz	Channel	Frequency MHz
1	2402	21	2422	41	2442	61	2462
2	2403	22	2423	42	2443	62	2463
3	2404	23	2424	43	2444	63	2464
4	2405	24	2425	44	2445	64	2465
5	2406	25	2426	45	2446	65	2466
6	2407	26	2427	46	2447	66	2467
7	2408	27	2428	47	2448	67	2468
8	2409	28	2429	48	2449	68	2469
9	2410	29	2430	49	2450	69	2470
10	2411	30	2431	50	2451	70	2471
11	2412	31	2432	51	2452	71	2472
12	2413	32	2433	52	2453	72	2473
13	2414	33	2434	53	2454	73	2474
14	2415	34	2435	54	2455	74	2475
15	2416	35	2436	55	2456	75	2476
16	2417	36	2437	56	2457	76	2477
17	2418	37	2438	57	2458	77	2478
18	2419	38	2439	58	2459	78	2479
19	2420	39	2440	59	2460	79	2480
20	2421	40	2441	60	2461		

Note: According to section 15.31(m), regards to the operating frequency range over 10MHz, the Lowest, middle, and the Highest frequency of channel were selected to perform the test. The selected frequency and test software see below:

Channel	Frequency (MHz)
1	2402
40	2441
79	2480

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: OKUTS126820 filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rule.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2013). Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters.

1.4 Equipment Modifications

Not available for this EUT intended for grant.

1.5 Support Device

Description	Manufacturer	Model	S/N
Mobile phone	Xiaomi	M1906G7E	25838/09WA04445

1.6 Test Facility and Location

Test Firm : Shenzhen United Testing Technology Co., Ltd.

Address : 2F, Annex Bldg, Jiahuangyuan Tech Park, #365 Baotian 1 Rd, Tiegang Community, Xixiang Str, Bao'an District, Shenzhen, China

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.The testing quality system of our laboratory meets with ISO/IEC-17025 requirements. This approval result is accepted by MRA of APLAC.

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

A2LA Certificate Number: 4747.01

The EMC Laboratory has been accredited by A2LA, and in compliance with ISO/IEC 17025:2017 General Requirements for testing Laboratories.

The Designation Number is CN1227

FCC Registration Number: 674885

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission.

IC Registration Number: 21947

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada.

1.7 Summary of Test Results

FCC Rules	Description Of Test	Uncertainty	Result
§15.207 (a)	AC Power Line Conducted Emission	±1.06dB	Compliant
§15.247(d),§15.209, §15.205	Radiated Emission	±3.70dB	Compliant
§15.247(a)(1)	Channel Separation	±1.42 x10^{-4}%	Compliant
§15.247(a)(1)	20dB Bandwidth	±1.42 x10^{-4}%	Compliant
§15.247(a)(1)(iii)	Hopping Channel Number	±1.42 x10^{-4}%	Compliant
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	±5%	Compliant
§15.247(b)	Max Peak Output Power	±1.06dB	Compliant
§15.247(d)	Band Edge	±1.70dB	Compliant
§15.203	Antenna Requirement	N/A	Compliant
§15.247(d)	Conducted Spurious Emission	±1.70dB	Compliant

2. SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 Special Accessories

Not available for this EUT intended for grant.

2.3 Description of test modes

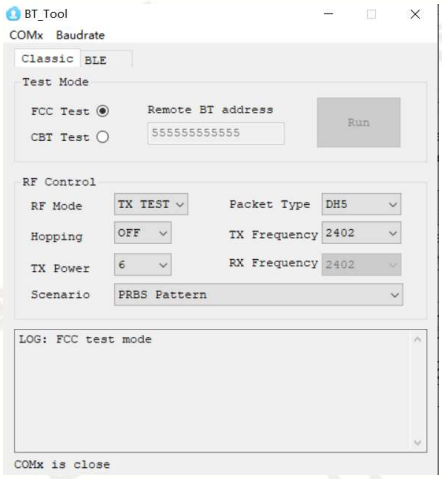
The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting and normal mode is programmed. The Lowest, middle and highest channel were chosen for testing, and all packets DH1, DH3, DH5, 2-DH1, 2-DH3, 2-DH5, 3-DH1, 3-DH3, 3-DH5 mode in all modulation type GFSK, π/4-DQPSK and 8DPSK were tested.

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements.

Test Item	Software	Description
Conducted RF Testing and Radiated testing	BT_Tool	Set the EUT to different modulation and channel

Output power setting table:

Test Mode	Set Tx Output Power	Data rate
GFSK	7dBm	DH1
π/4-DQPSK	7dBm	2-DH1
8DPSK	7dBm	3-DH1



3. FREQUENCY HOPPING SYSTEM REQUIREMENTS

3.1 Standard and Limit

According to FCC Part 15.247(a)(1), The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

(g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

(h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hop sets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

3.2 EUT Pseudorandom Frequency Hopping Sequence

Pseudorandom Frequency Hopping Sequence Table as below:
Channel: 08, 24, 40, 56, 34, 51, 72, 09, 01, 64, 22, 33, 41, 32, 47, 65, 73, 53, 69, 06, 17, 04, 20, 36, 52, 38, 66, 70, 78, 68, 76, 21, 29, 10, 26, 49, 00, 58, 44, 59, 75, 13, 03, 14, 11, 35, 43, 37, 50, 61, 77, 55, 71, 02, 23, 07, 27, 39, 54, 46, 48, 15, 63, 62, 67, 25, 31, 12, 28, 19, 60, 42, 57, 74, 16, 05, 18, 30, 45, etc.

The system receiving have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

3.3 Frequency Hopping System

This transmitter device is frequency hopping device, and complies with FCC part 15.247 rule.

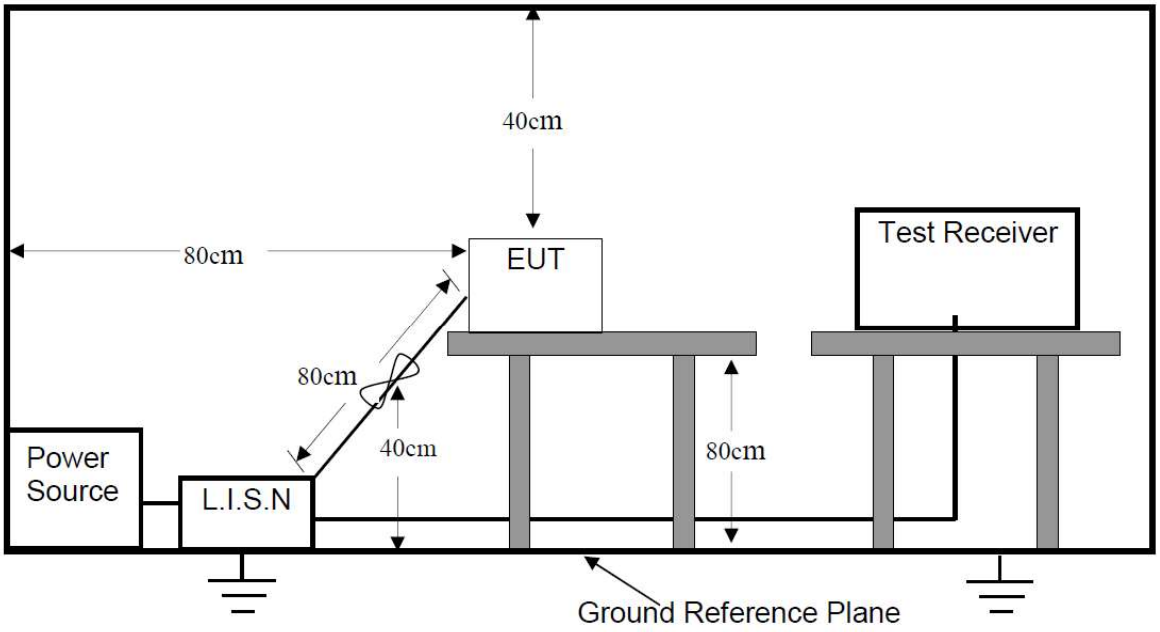
This device uses Bluetooth radio which operates in 2400-2483.5 MHz band. Bluetooth uses a radio technology called frequency-hopping spread spectrum, which chops up the data being sent and transmits chunks of it on up to 79 bands (1 MHz each; centred from 2402 to 2480 MHz) in the range 2,400-2,483.5MHz. The transmitter switches hop frequencies 1,600 times per second to assure a high degree of data security. All Bluetooth devices participating in a given piconet are synchronized to the frequency-hopping channel for the piconet. The frequency hopping sequence is determined by the master's device address and the phase of the hopping sequence (the frequency to hop at a specific time) is determined by the master's internal clock. Therefore, all slaves in a piconet must know the master's device address and must synchronize their clocks with the master's clock.

Adaptive Frequency Hopping (AFH) was introduced in the Bluetooth specification to provide an effective way for a Bluetooth radio to counteract normal interference. AFH identifies "bad" channels, where either other wireless devices are interfering with the Bluetooth signal or the Bluetooth signal is interfering with another device. The AFH-enabled Bluetooth device will then communicate with other devices within its piconet to share details of any identified bad channels. The devices will then switch to alternative available "good" channels, away from the areas of interference, thus having no impact on the bandwidth used.

This device was tested with a bluetooth system receiver to check that the device maintained hopping synchronization, and the device complied with these requirements FCC Part 15.247 rule.

4. AC POWER LINE CONDUCTED EMISSIONS

4.1 Test SET-UP (Block Diagram of Configuration)



4.2 Test Condition

Test Requirement: FCC Part 15.207

Frequency Range: 150kHz ~ 30MHz

Detector: QP, AVG

Operation Mode: BT Communication

4.3 Measurement Results

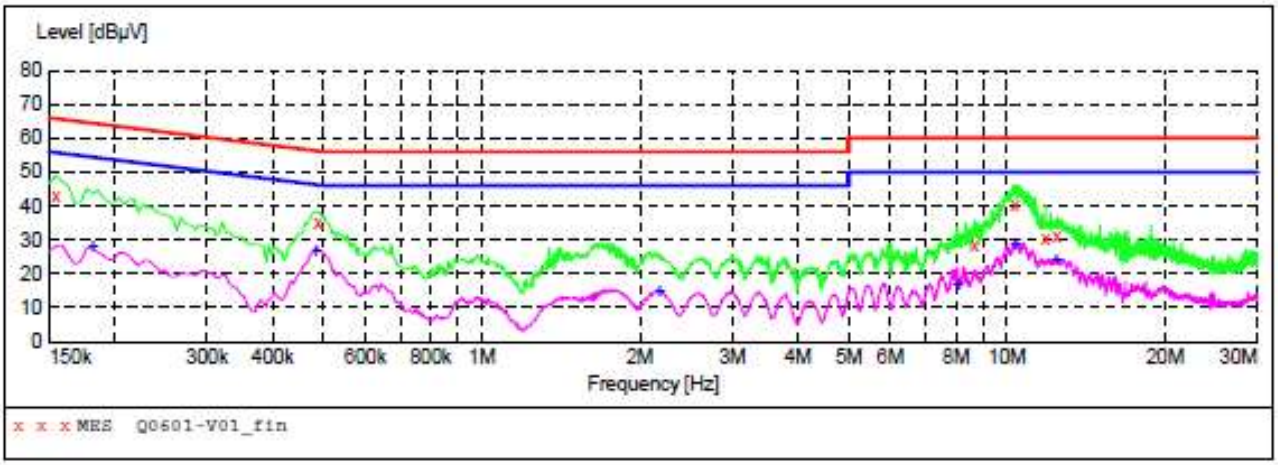
PASS

Please refer to the following pages of the worst case

We have be tested for all avaiable U.S. Voltage and frequencies (For 120V, 50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V/ 60Hz is shown in the report.

E.U.T:	Water Dancing Bluetooth MINI Tower	Phase:	Line
Model No.:	SP118-BLACK	Temperature:	25 ℃
Test Mode:	On with Bluetooth	Humidity:	50 %
Test Voltage:	AC 120V/60Hz	Test By:	PEI
Test Results:	PASS		
Adapter	GKYZA0200058US		

SCAN TABLE: "Voltage (9K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "Q0601-V01_fin"

2021-6-1 9:55

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154500	42.70	8.1	66	23.1	QP	L1	GND
0.487500	34.80	8.6	56	21.4	QP	L1	GND
8.670000	28.60	9.6	60	31.4	QP	L1	GND
10.350000	40.30	9.6	60	19.7	QP	L1	GND
11.850000	30.50	9.7	60	29.5	QP	L1	GND
12.440000	30.80	9.8	60	29.2	QP	L1	GND

MEASUREMENT RESULT: "Q0601-V01_fin2"

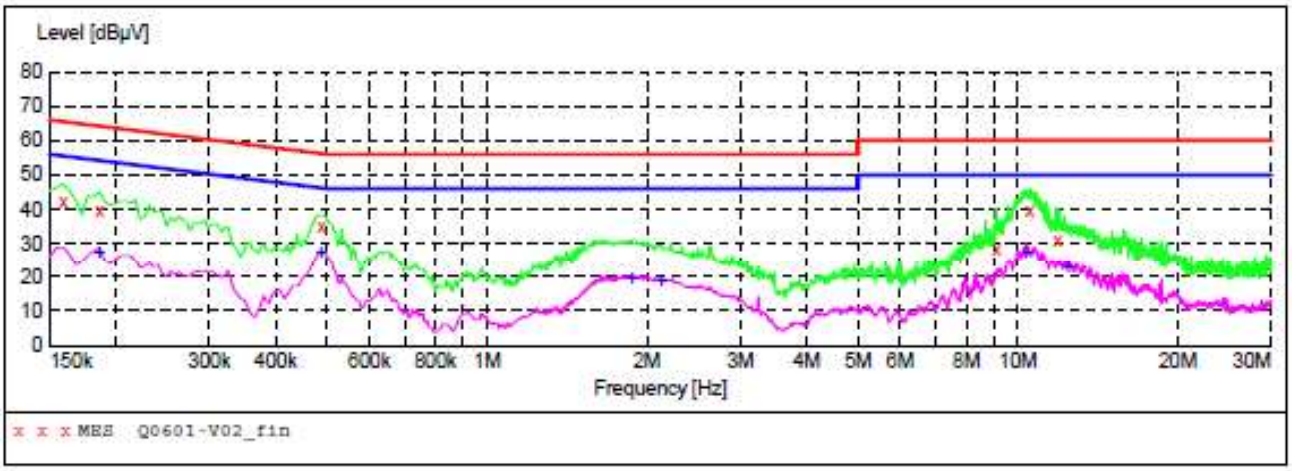
2021-6-1 9:55

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	28.20	8.1	54	26.2	AV	L1	GND
0.483000	27.50	8.6	46	18.8	AV	L1	GND
2.180000	15.00	8.8	46	31.0	AV	L1	GND
8.050000	16.90	9.5	50	33.1	AV	L1	GND
10.350000	29.40	9.6	50	20.6	AV	L1	GND
12.410000	24.20	9.8	50	25.8	AV	L1	GND

E.U.T:	Water Dancing Bluetooth MINI Tower	Phase:	Neutral
Model No.:	SP118-BLACK	Temperature:	25 ℃
Test Mode:	On with Bluetooth	Humidity:	50 %
Test Voltage:	AC 120V/60Hz	Test By:	PEI
Test Results:	PASS		
Adapter	GKYZA0200058US		

SCAN TABLE: "Voltage (9K-30M) FIN"

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "Q0601-V02_fin"

2021-6-1 10:01

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.159000	42.50	8.1	66	23.0	QP	N	GND
0.186000	39.70	8.1	64	24.5	QP	N	GND
0.487500	35.10	8.6	56	21.1	QP	N	GND
9.100000	28.50	9.6	60	31.5	QP	N	GND
10.540000	39.50	9.7	60	20.5	QP	N	GND
11.900000	31.10	9.7	60	28.9	QP	N	GND

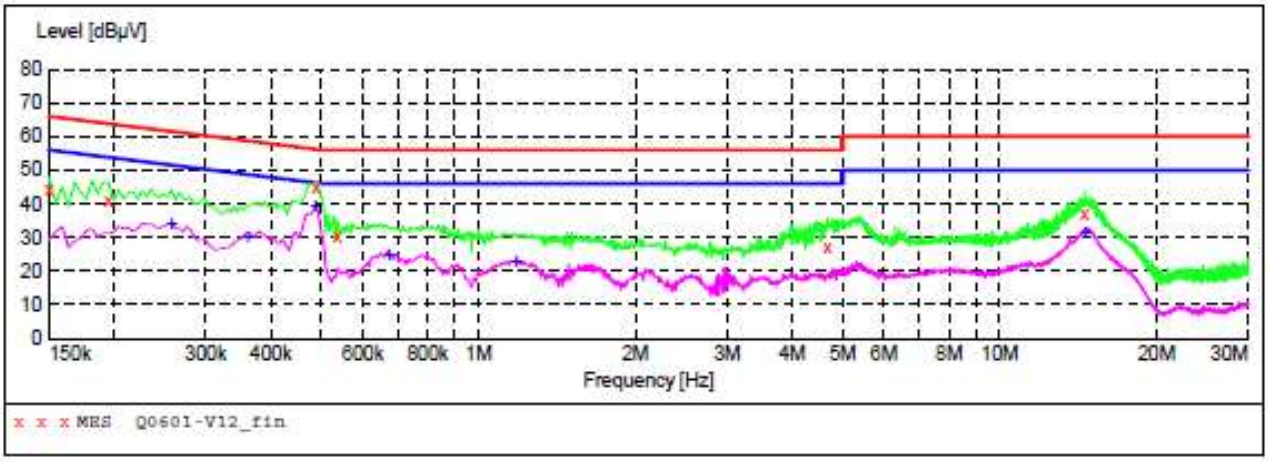
MEASUREMENT RESULT: "Q0601-V02_fin2"

2021-6-1 10:01

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	28.00	8.1	54	26.2	AV	N	GND
0.487500	27.80	8.6	46	18.4	AV	N	GND
1.873500	19.90	8.8	46	26.1	AV	N	GND
2.130000	19.20	8.8	46	26.8	AV	N	GND
10.360000	27.70	9.6	50	22.3	AV	N	GND
12.410000	23.10	9.8	50	26.9	AV	N	GND

E.U.T:	Water Dancing Bluetooth MINI Tower	Phase:	Line
Model No.:	SP118-BLACK	Temperature:	25 ℃
Test Mode:	On with Bluetooth	Humidity:	50 %
Test Voltage:	AC 120V/60Hz	Test By:	PEI
Test Results:	PASS		
Adapter	JY012058200BA-UL		

SCAN TABLE: "Voltage (9K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "Q0601-V12_fin"

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Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	44.30	8.1	66	21.7	QP	L1	GND
0.195000	41.30	8.1	64	22.5	QP	L1	GND
0.487500	44.70	8.6	56	11.5	QP	L1	GND
0.537000	30.60	8.6	56	25.4	QP	L1	GND
4.680000	27.00	9.2	56	29.0	QP	L1	GND
14.570000	36.90	9.9	60	23.1	QP	L1	GND

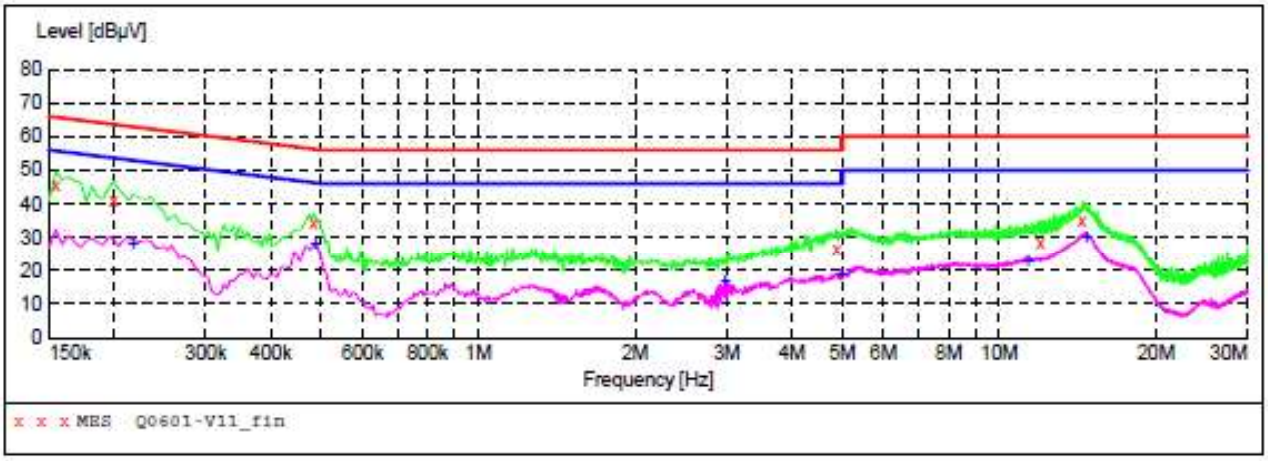
MEASUREMENT RESULT: "Q0601-V12_fin2"

2021-6-1 10:53

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.258000	34.60	8.3	52	16.9	AV	L1	GND
0.361500	30.50	8.5	49	18.2	AV	L1	GND
0.487500	39.40	8.6	46	6.8	AV	L1	GND
0.672000	25.30	8.6	46	20.7	AV	L1	GND
1.180500	23.20	8.8	46	22.8	AV	L1	GND
14.630000	32.00	9.9	50	18.0	AV	L1	GND

E.U.T:	Water Dancing Bluetooth MINI Tower	Phase:	Neutral
Model No.:	SP118-BLACK	Temperature:	25 ℃
Test Mode:	On with Bluetooth	Humidity:	50 %
Test Voltage:	AC 120V/60Hz	Test By:	PEI
Test Results:	PASS		
Adapter	JY012058200BA-UL		

SCAN TABLE: "Voltage (9K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "Q0601-V11_fin"

2021-6-1 10:48

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154500	45.80	8.1	66	20.0	QP	N	GND
0.199500	40.90	8.1	64	22.7	QP	N	GND
0.483000	34.40	8.6	56	21.9	QP	N	GND
4.870000	26.40	9.2	56	29.6	QP	N	GND
11.980000	28.80	9.8	60	31.2	QP	N	GND
14.440000	35.10	9.9	60	24.9	QP	N	GND

MEASUREMENT RESULT: "Q0601-V11_fin2"

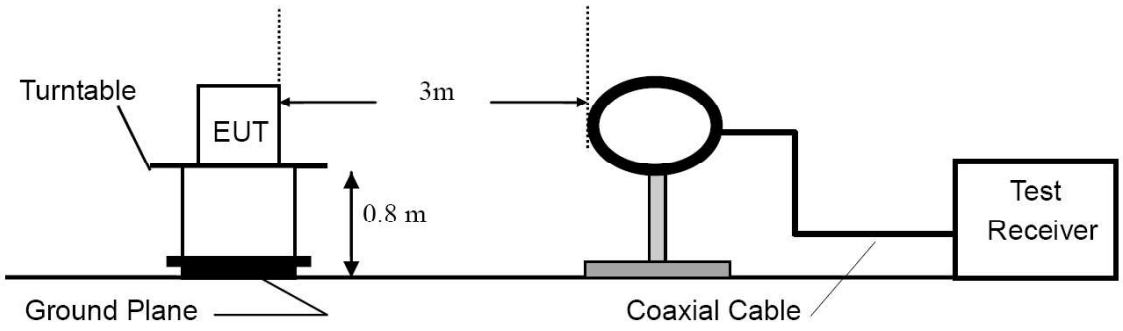
2021-6-1 10:48

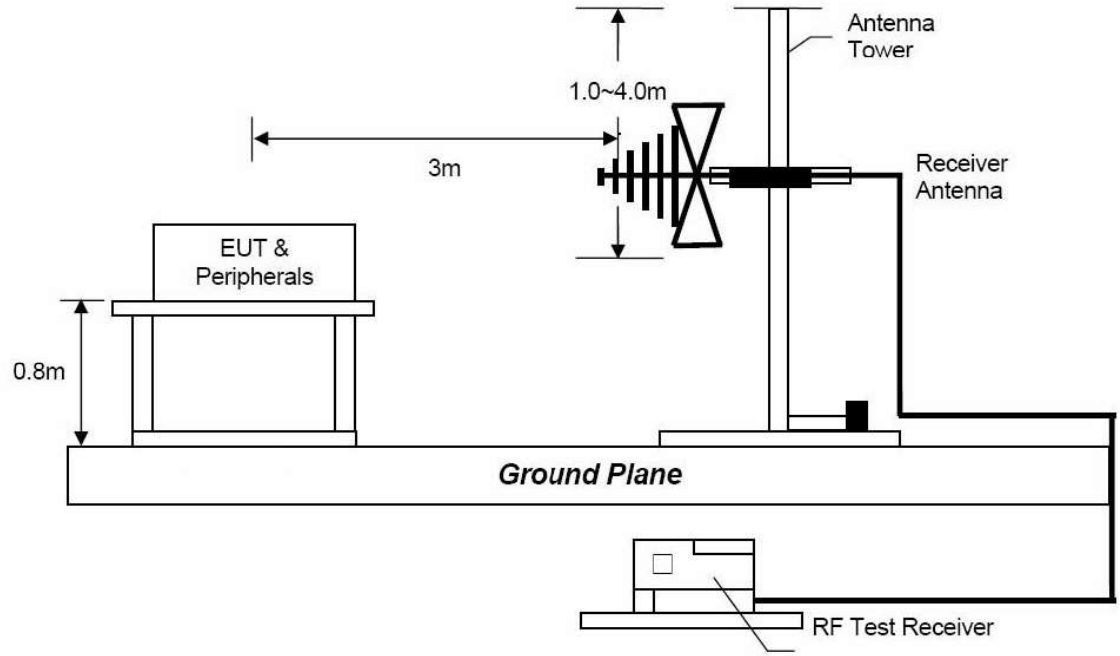
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.217500	28.80	8.2	53	24.1	AV	N	GND
0.487500	28.80	8.6	46	17.4	AV	N	GND
2.980000	17.20	9.0	46	28.8	AV	N	GND
4.980000	19.00	9.2	46	27.0	AV	N	GND
11.370000	23.50	9.7	50	26.5	AV	N	GND
14.700000	30.60	9.9	50	19.4	AV	N	GND

5. RADIATED EMISSION

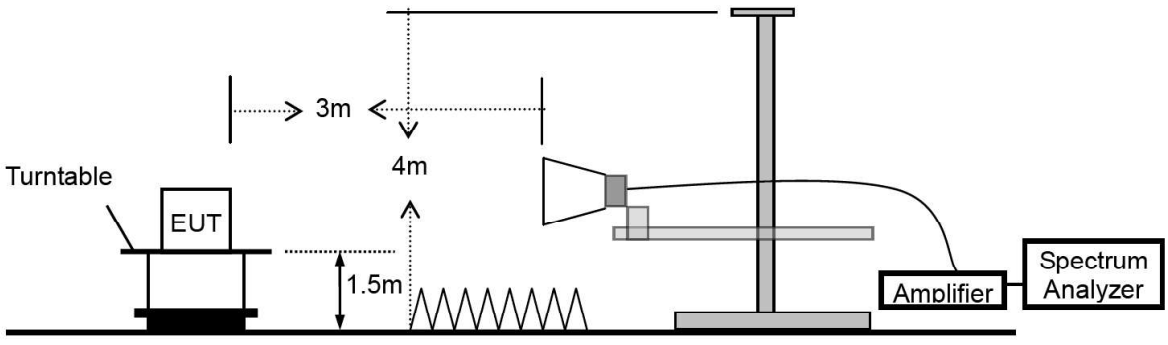
5.1 Test SET-UP (Block Diagram of Configuration)

5.1.1 Radiated Emission Test Set-Up, Frequency below 30MHz





5.1.2 Radiated Emission Test Set-Up, Frequency above 1GHz



5.2 Measurement Procedure

a. Blow 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic chamber room.

b. For the radiated emission test above 1GHz:
The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter full anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

d. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode.

f. A Quasi-peak measurement was then made for that frequency point for below 1GHz test. PK and AV for above 1GHz emission test.

g. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

Frequency Band (MHz)	Level	Resolution Bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	3 MHz
	Average	1 MHz	If D≥98 then VBW ≥ 3*RBW, If D≤98 then VBW ≥1/T

5.3 Limit

Frequency range MHz	Distance Meters	Field Strengths Limit (15.209) μV/m
0.009 ~ 0.490	300	2400/F(kHz)
0.490 ~ 1.705	30	24000/F(kHz)
1.705 ~ 30	30	30
30 ~ 88	3	100
88 ~ 216	3	150
216 ~ 960	3	200
Above 960	3	500

Remark：(1) Emission level (dB)μV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

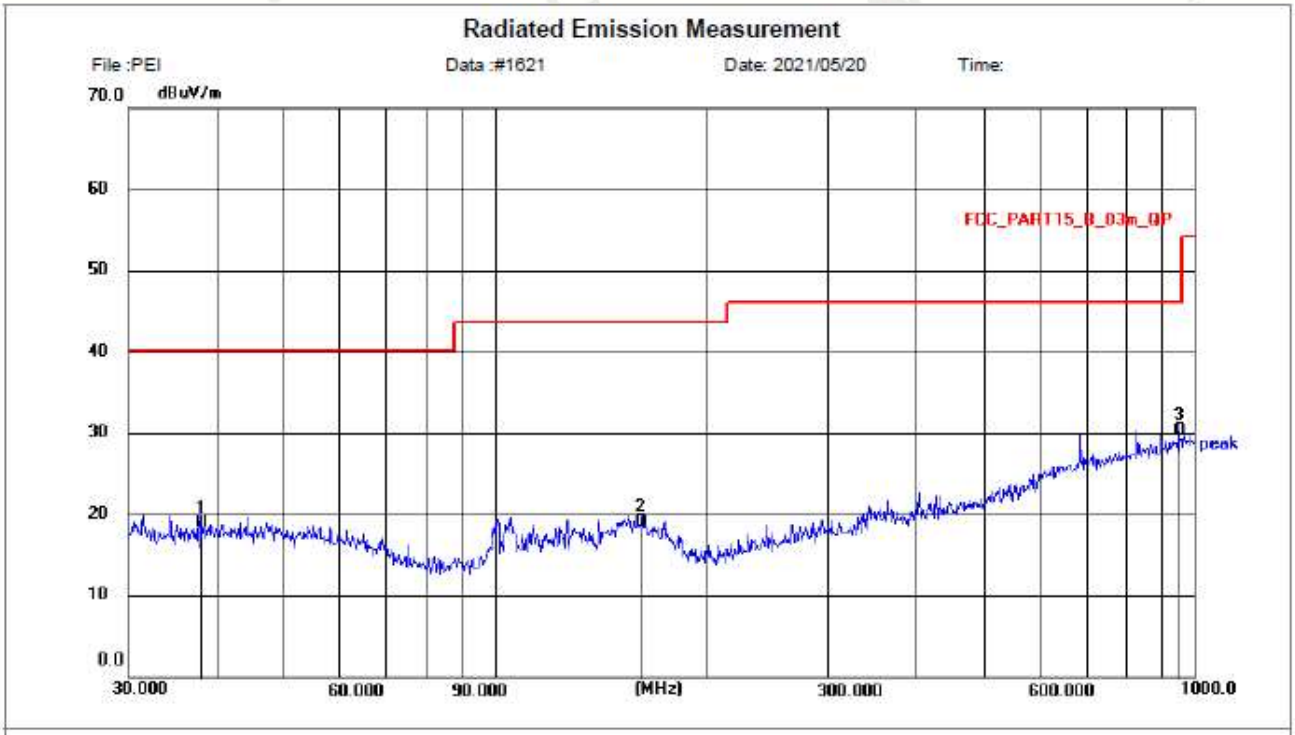
(4) The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.

5.4 Measurement Results

Please refer to following plots of the worst case: 8DPSK mode.

Note: Below 30MHz, the emissions are lower than 20dB below the allowable limit. Therefore, 9kHz-30MHz data were not recorded.

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2402MHz (8DPSK)	Humidity:	54 %
Frequency Range:	30MHz-1GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



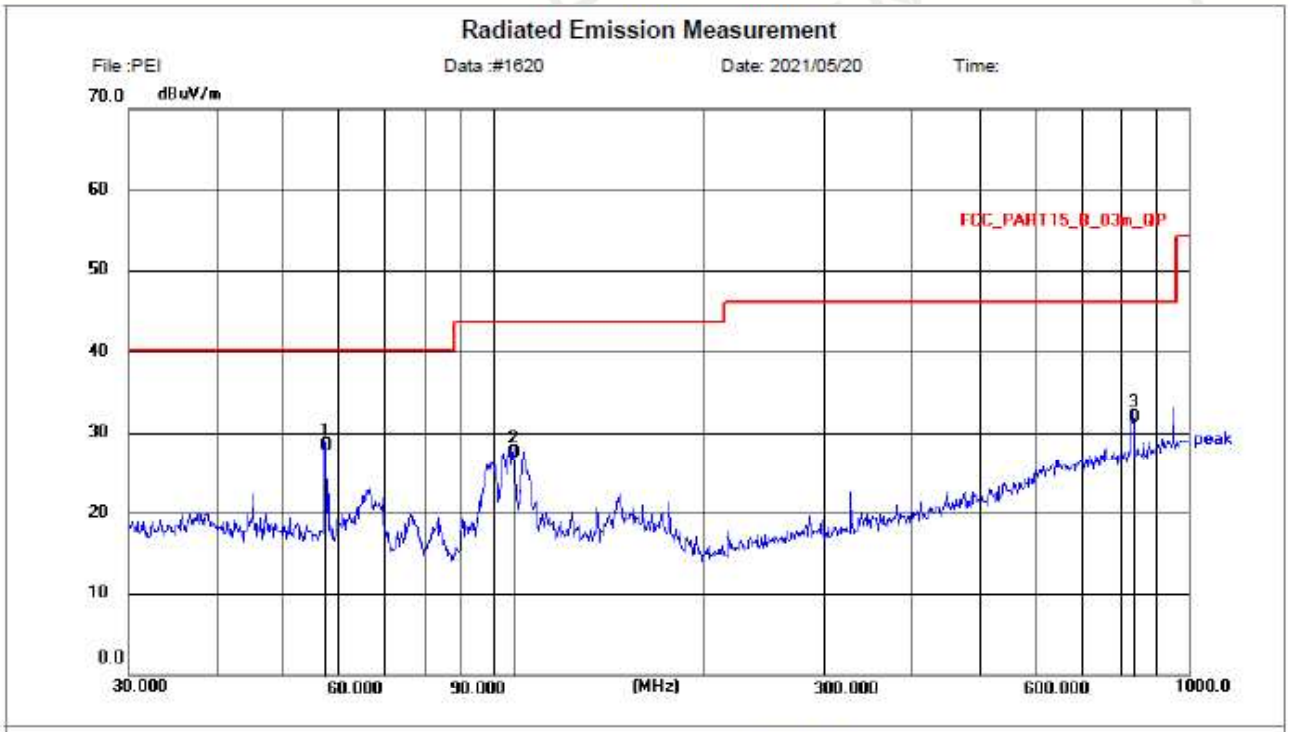
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2402MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	38.0782	4.01	15.06	19.07	40.00	20.93	QP	180	63	P	
2	162.0413	3.41	15.79	19.20	43.50	24.30	QP	180	76	P	
3 *	948.7609	5.70	24.59	30.29	46.00	15.71	QP	185	114	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2402MHz (8DPSK)	Humidity:	54 %
Frequency Range:	30MHz-1GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



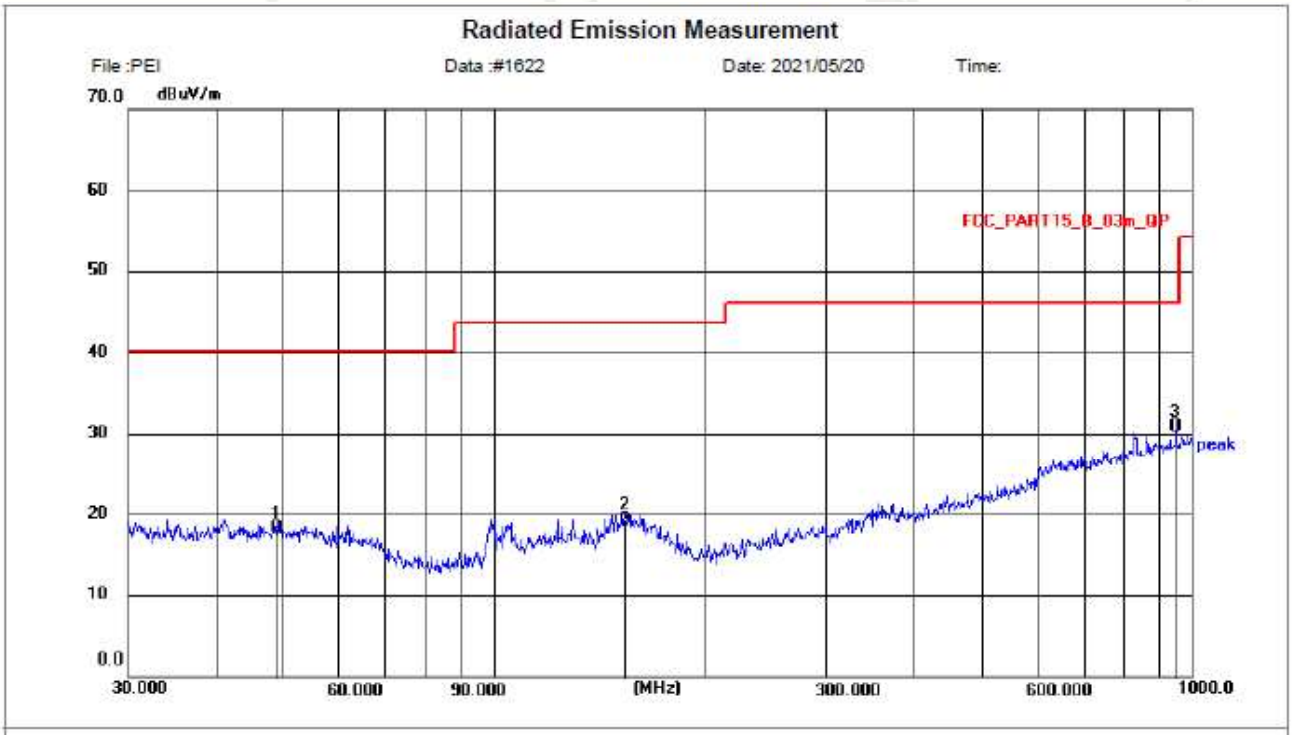
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2402MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	57.3923	14.03	14.38	28.41	40.00	11.59	QP	100	227	P	
2	107.1337	14.88	12.66	27.54	43.50	15.96	QP	100	247	P	
3	830.4001	8.61	23.28	31.89	46.00	14.11	QP	110	58	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2441MHz (8DPSK)	Humidity:	54 %
Frequency Range:	30MHz-1GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



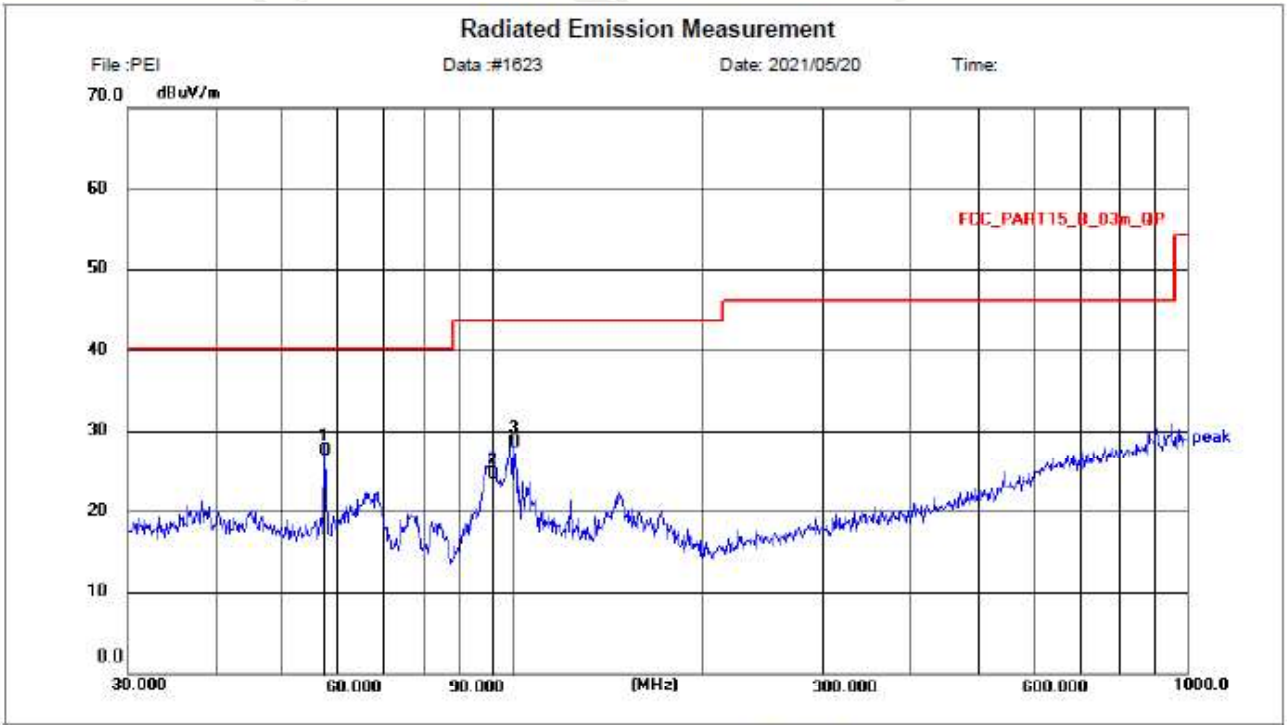
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2441MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	48.8427	3.29	14.92	18.21	40.00	21.79	QP	210	274	P	
2	154.2785	3.29	15.99	19.28	43.50	24.22	QP	205	153	P	
3 *	948.7608	6.22	24.59	30.81	46.00	15.19	QP	205	185	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2441MHz (8DPSK)	Humidity:	54 %
Frequency Range:	30MHz-1GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



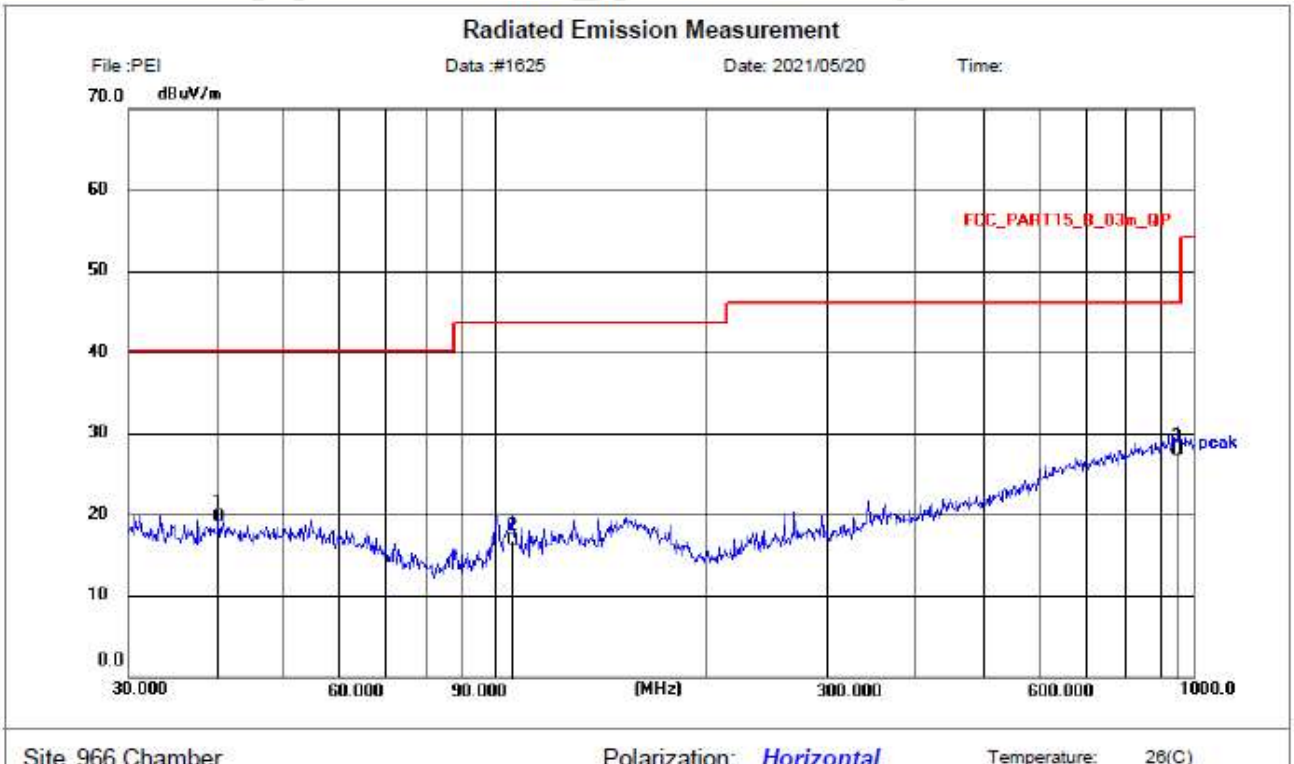
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2441MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	57.5938	13.27	14.36	27.63	40.00	12.37	QP	100	257	P	
2	100.2284	12.58	11.97	24.55	43.50	18.95	QP	100	328	P	
3	107.5100	15.83	12.70	28.53	43.50	14.97	QP	105	72	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2480MHz (8DPSK)	Humidity:	54 %
Frequency Range:	30MHz-1GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



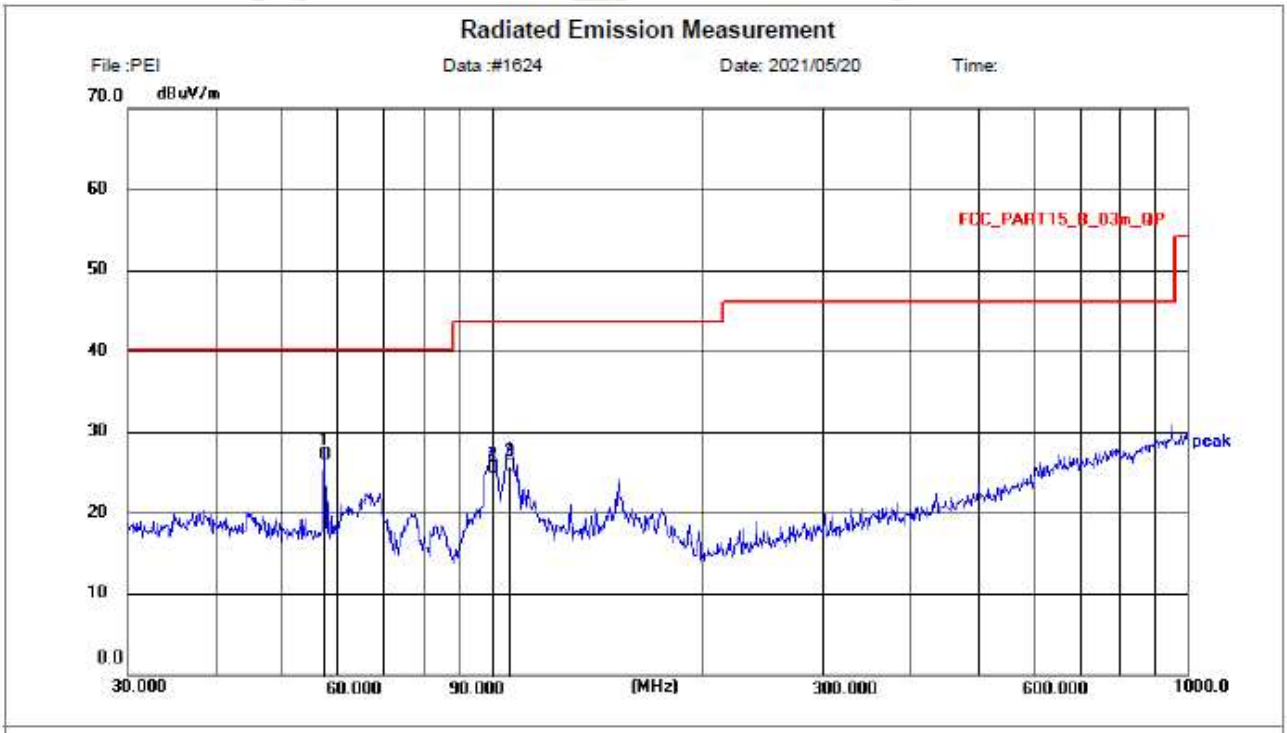
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2480MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	40.2754	4.37	15.32	19.69	40.00	20.31	QP	200	52	P	
2	106.0126	4.30	12.54	16.84	43.50	26.66	QP	185	185	P	
3 *	948.7608	3.32	24.59	27.91	46.00	18.09	QP	185	288	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2480MHz (8DPSK)	Humidity:	54 %
Frequency Range:	30MHz-1GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



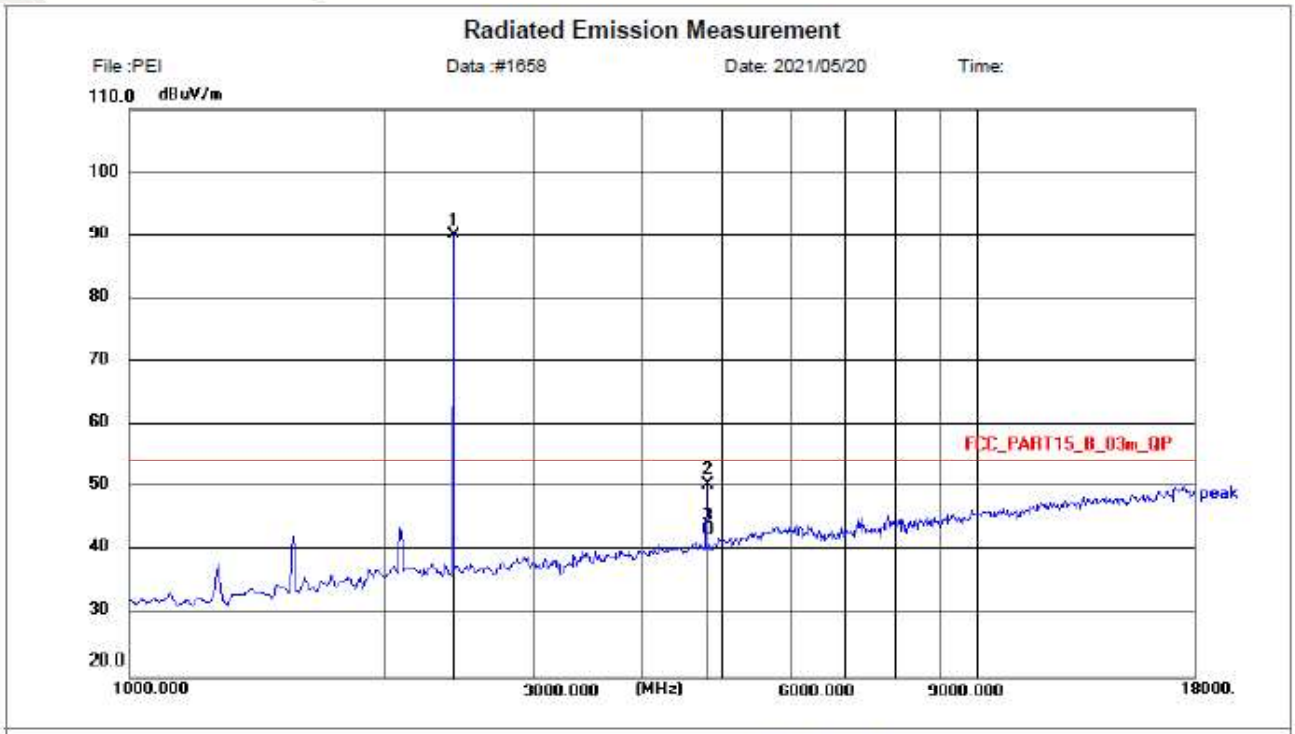
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2480MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	57.5938	12.77	14.36	27.13	40.00	12.87	QP	105	227	P	
2	100.2284	13.46	11.97	25.43	43.50	18.07	QP	105	269	P	
3	106.0126	13.25	12.54	25.79	43.50	17.71	QP	100	235	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2402MHz (8DPSK)	Humidity:	54 %
Frequency Range:	1GHz-18GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



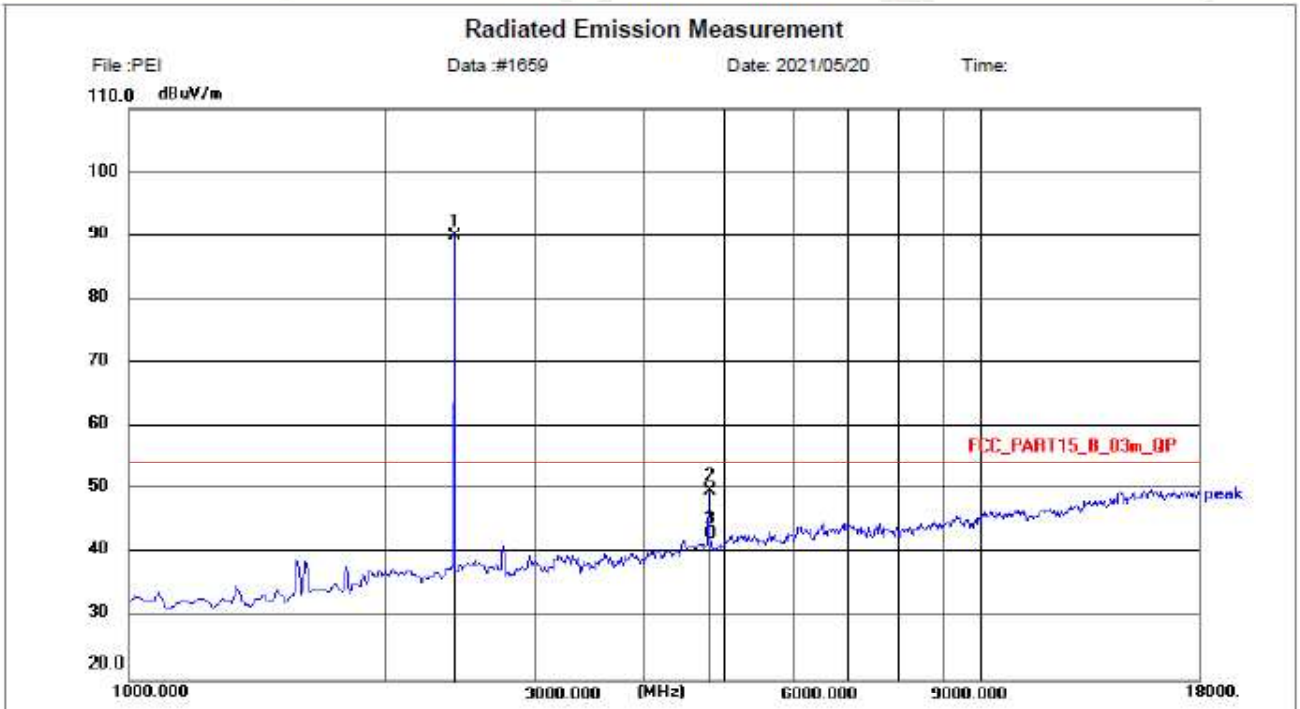
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2402MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2402.000	86.10	3.94	90.04	54.00	-36.04	peak	200	156	F	
2	4804.025	40.67	9.77	50.44	54.00	3.56	peak	205	165	P	
3	4804.025	33.47	9.77	43.24	54.00	10.76	AVG	205	165	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2402MHz (8DPSK)	Humidity:	54 %
Frequency Range:	1GHz-18GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



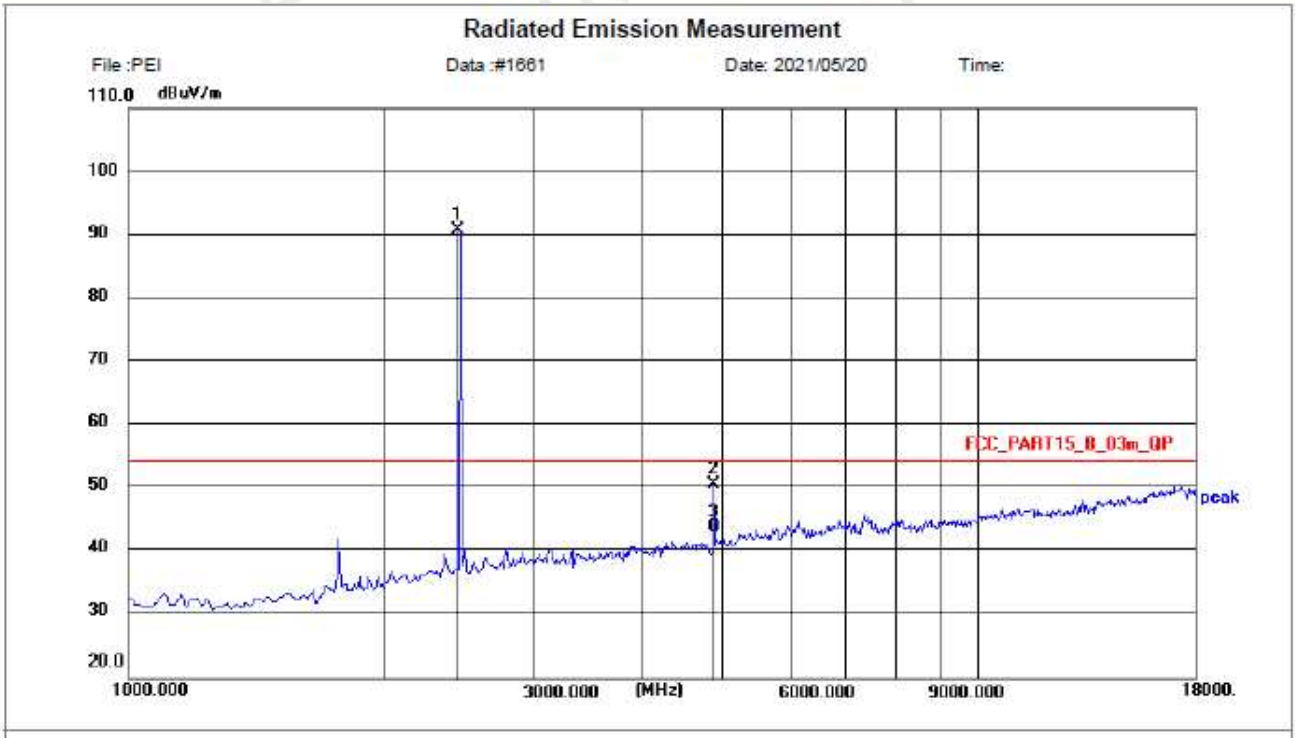
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2402MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2402.000	85.86	3.94	89.80	54.00	-35.80	peak	100	226	F	
2	4804.029	40.14	9.77	49.91	54.00	4.09	peak	105	174	P	
3	4804.029	33.18	9.77	42.95	54.00	11.05	AVG	105	174	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2441MHz (8DPSK)	Humidity:	54 %
Frequency Range:	1GHz-18GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



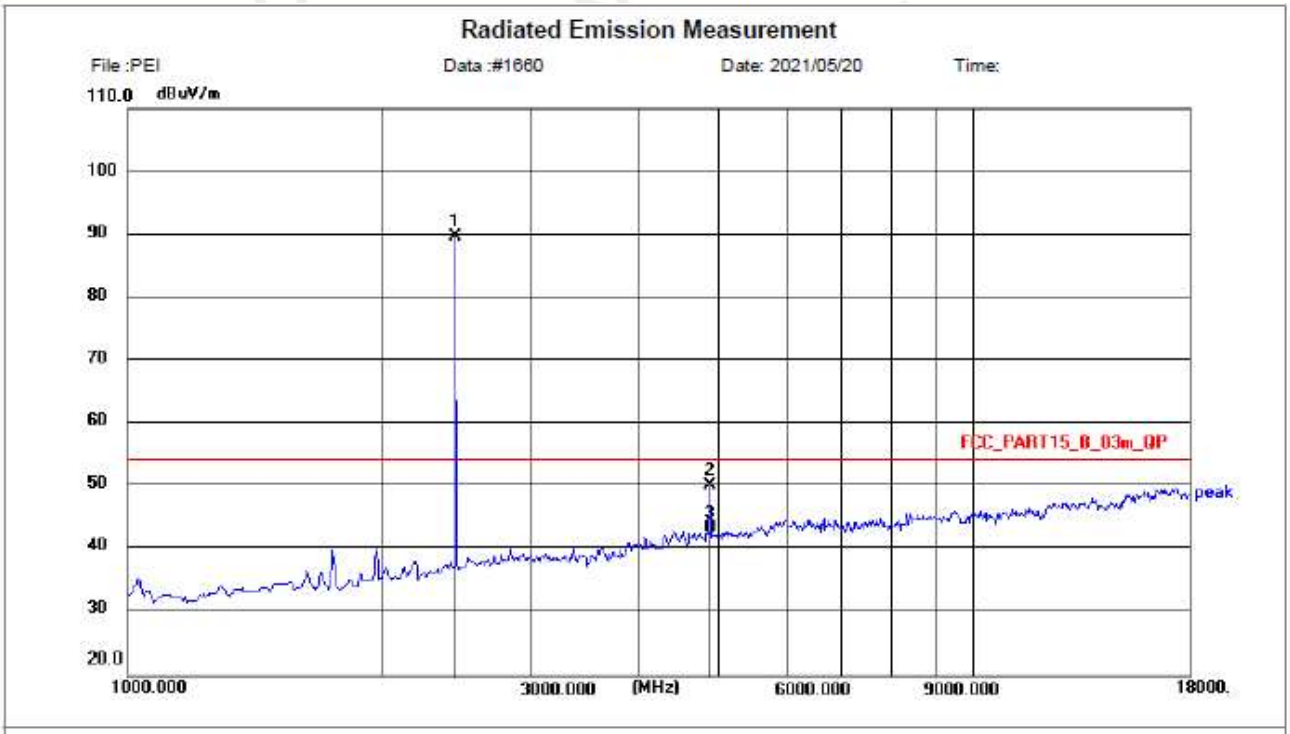
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2441MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2441.000	86.59	4.11	90.70	54.00	-36.70	peak	220	284	F	
2	4882.031	40.75	10.06	50.81	54.00	3.19	peak	200	196	P	
3	4882.031	33.97	10.06	44.03	54.00	9.97	AVG	200	196	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2441MHz (8DPSK)	Humidity:	54 %
Frequency Range:	1GHz-18GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



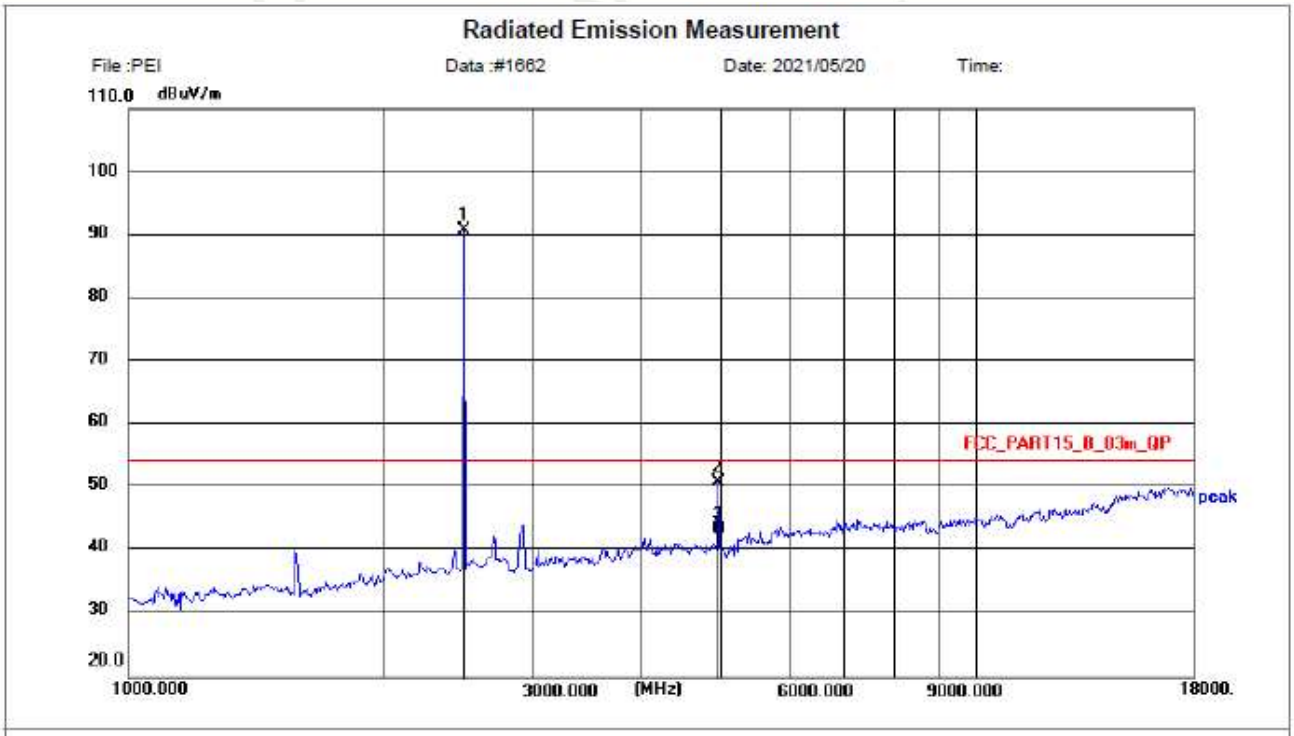
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2441MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2441.000	85.50	4.11	89.61	54.00	-35.61	peak	112	226	F	
2	4882.024	40.16	10.06	50.22	54.00	3.78	peak	100	71	P	
3	4882.024	33.38	10.06	43.44	54.00	10.56	AVG	100	71	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2480MHz (8DPSK)	Humidity:	54 %
Frequency Range:	1GHz-18GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



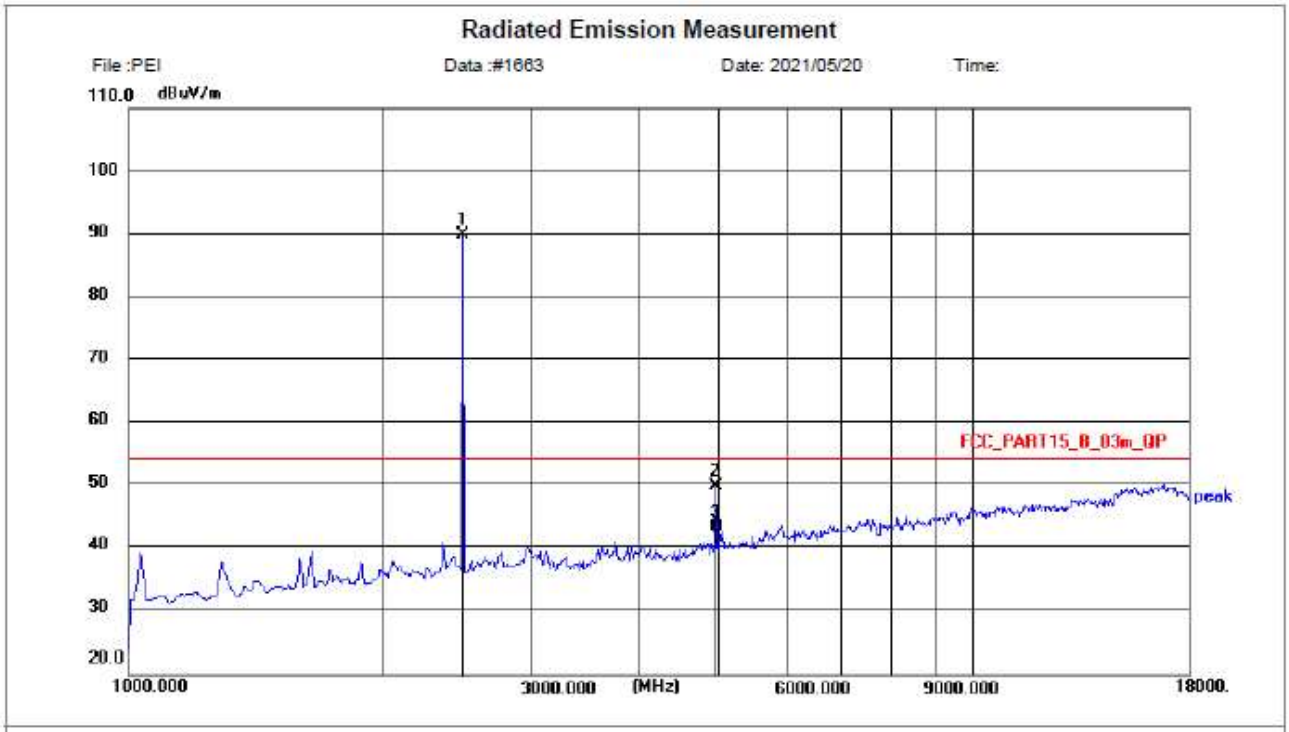
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2480MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2480.000	86.55	4.27	90.82	54.00	-36.82	peak	200	242	F	
2	4960.032	40.63	10.35	50.98	54.00	3.02	peak	205	275	P	
3	4960.032	33.08	10.35	43.43	54.00	10.57	AVG	205	275	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2480MHz (8DPSK)	Humidity:	54 %
Frequency Range:	1GHz-18GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



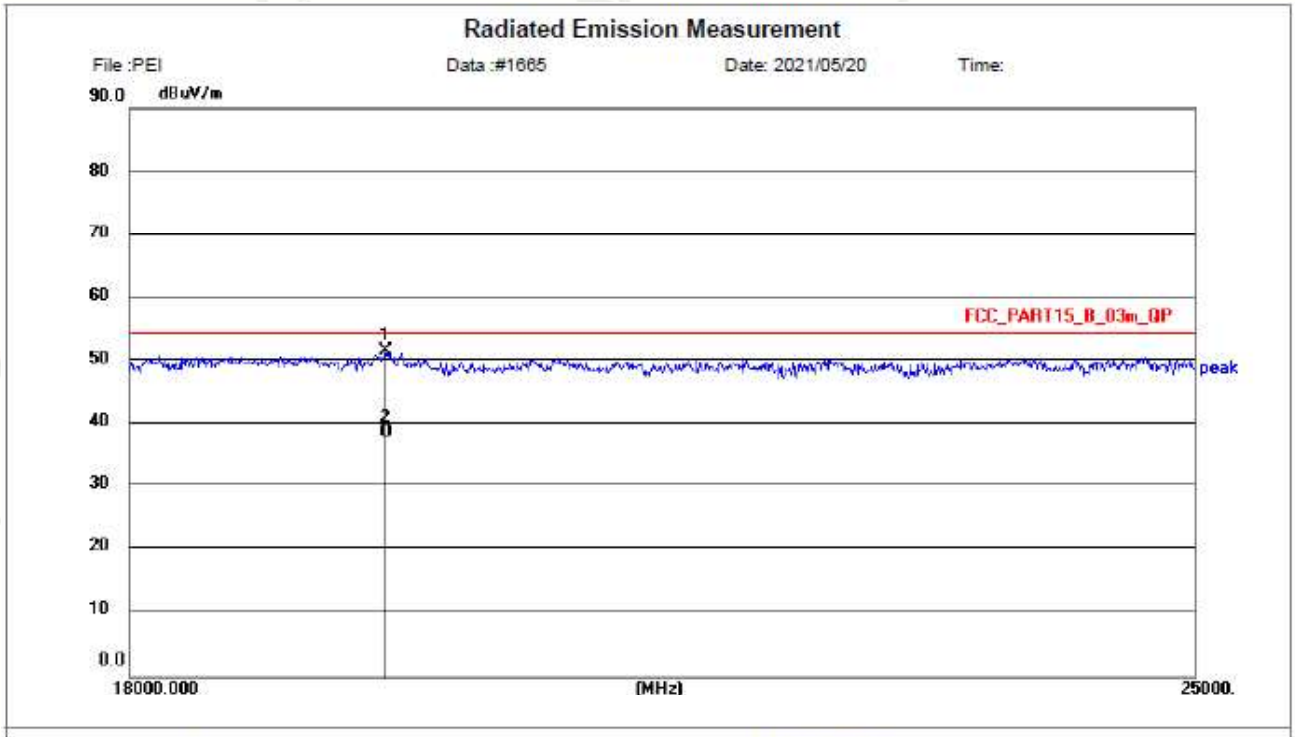
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2480MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2480.000	85.56	4.27	89.83	54.00	-35.83	peak	110	238	F	
2	4960.033	39.78	10.35	50.13	54.00	3.87	peak	120	287	P	
3	4960.033	33.24	10.35	43.59	54.00	10.41	AVG	120	287	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2402MHz (8DPSK)	Humidity:	54 %
Frequency Range:	18GHz-26.5GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



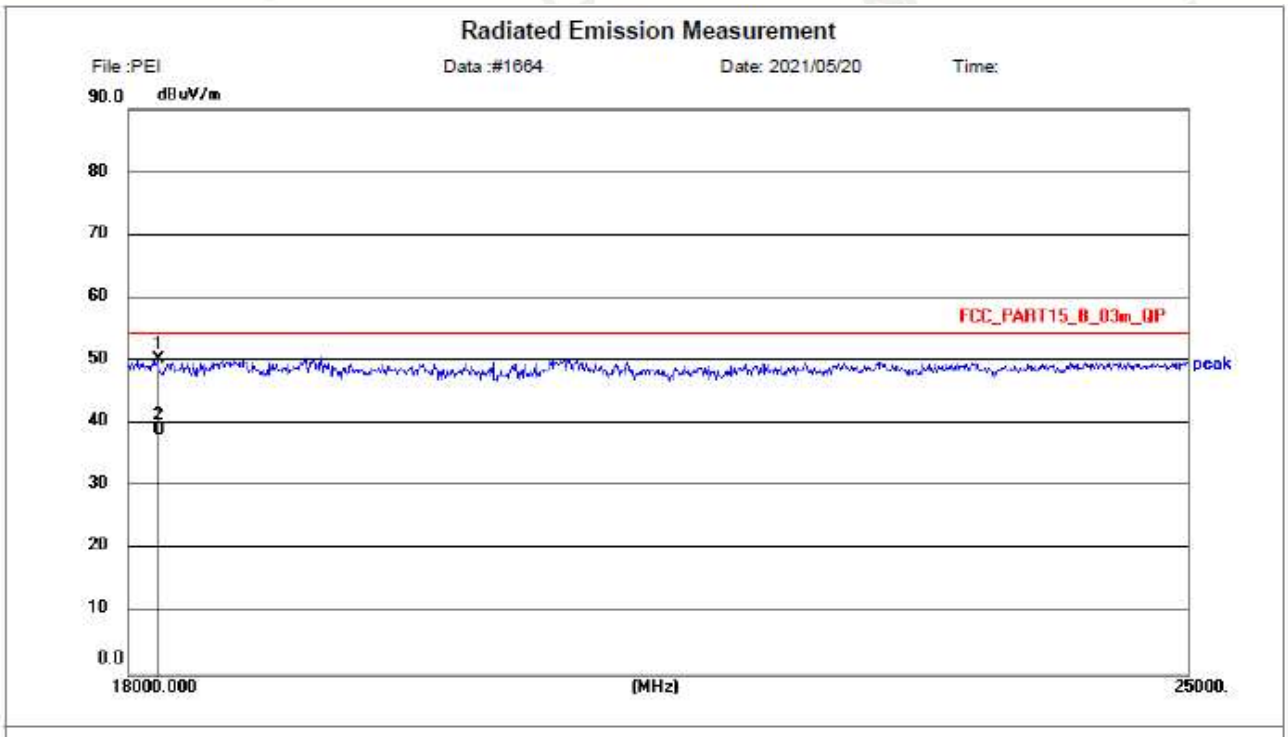
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2402MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	19477.000	28.04	23.58	51.62	54.00	2.38	peak	113	241	P	
2	19477.000	15.25	23.58	38.83	54.00	15.17	AVG	113	241	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2402MHz (8DPSK)	Humidity:	54 %
Frequency Range:	18GHz-26.5GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



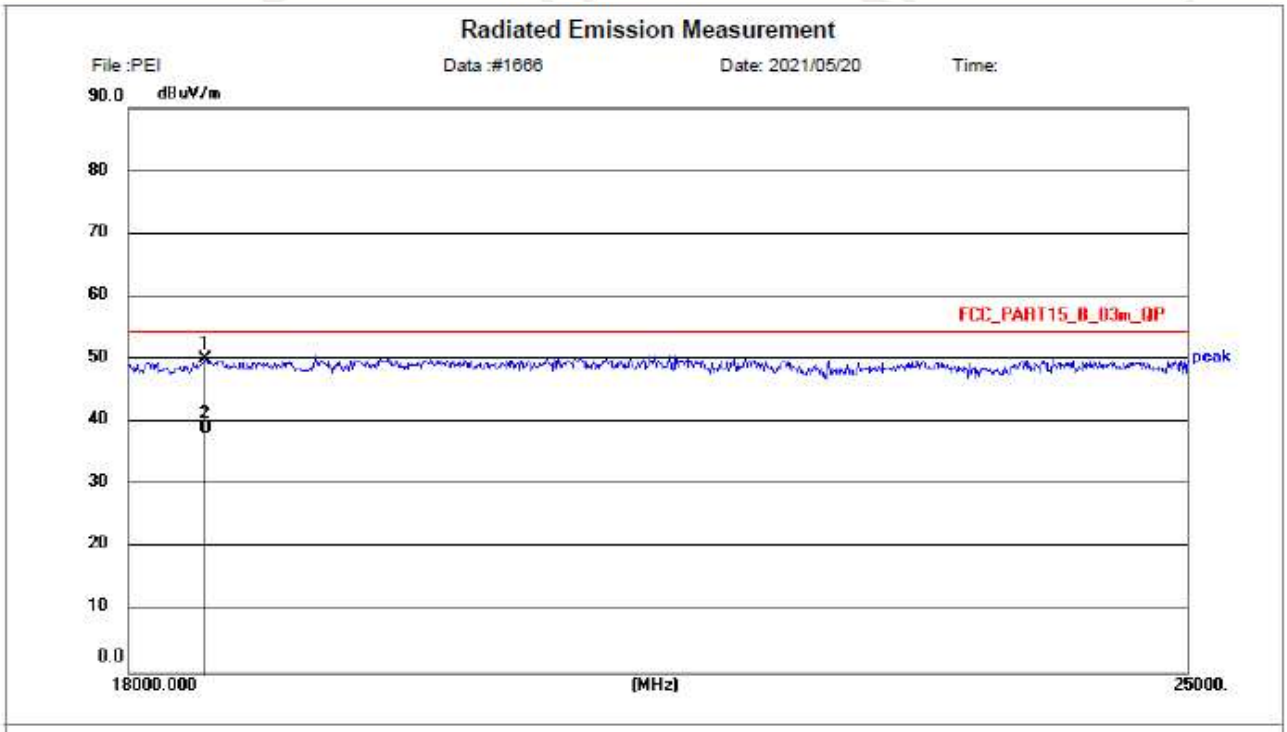
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2402MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	18168.000	29.82	20.45	50.27	54.00	3.73	peak	105	248	P	
2	18168.000	18.65	20.45	39.10	54.00	14.90	AVG	105	248	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2441MHz (8DPSK)	Humidity:	54 %
Frequency Range:	18GHz-26.5GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



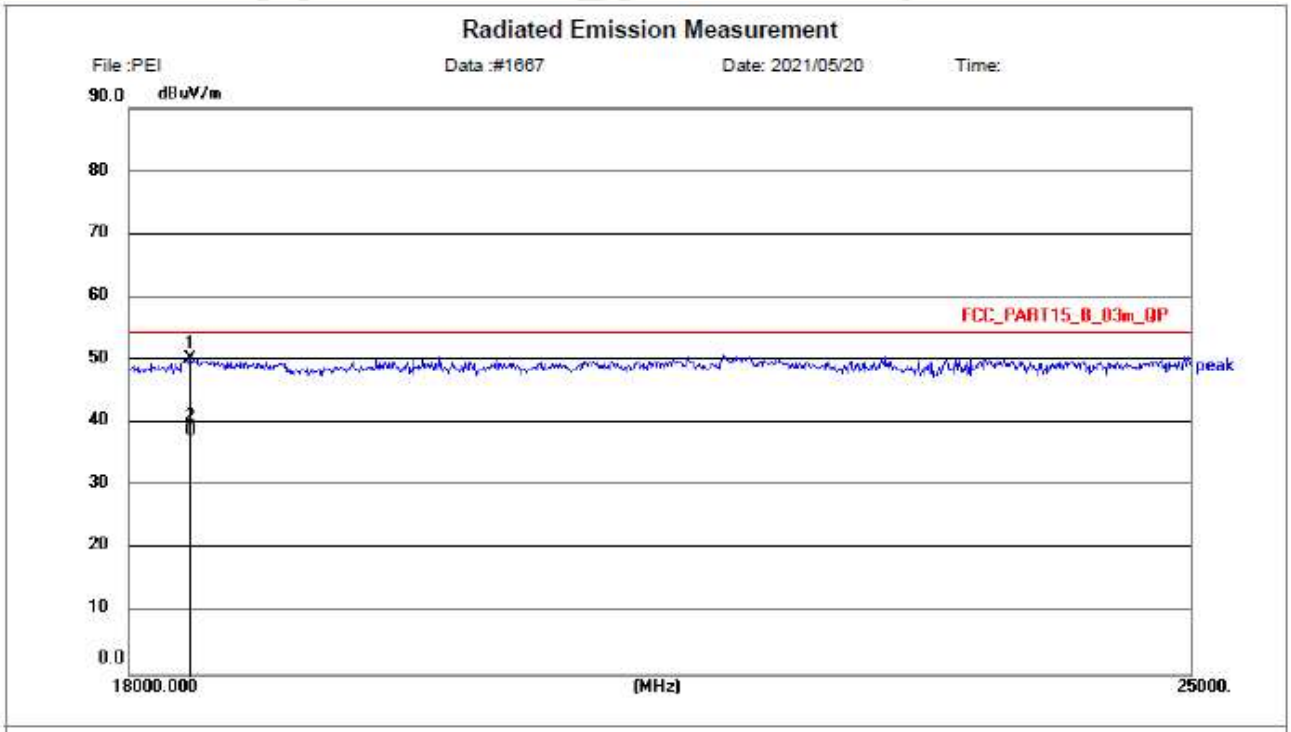
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2441MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	18434.000	28.80	21.15	49.95	54.00	4.05	peak	200	105	P	
2	18434.000	18.00	21.15	39.15	54.00	14.85	AVG	200	105	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2441MHz (8DPSK)	Humidity:	54 %
Frequency Range:	18GHz-26.5GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



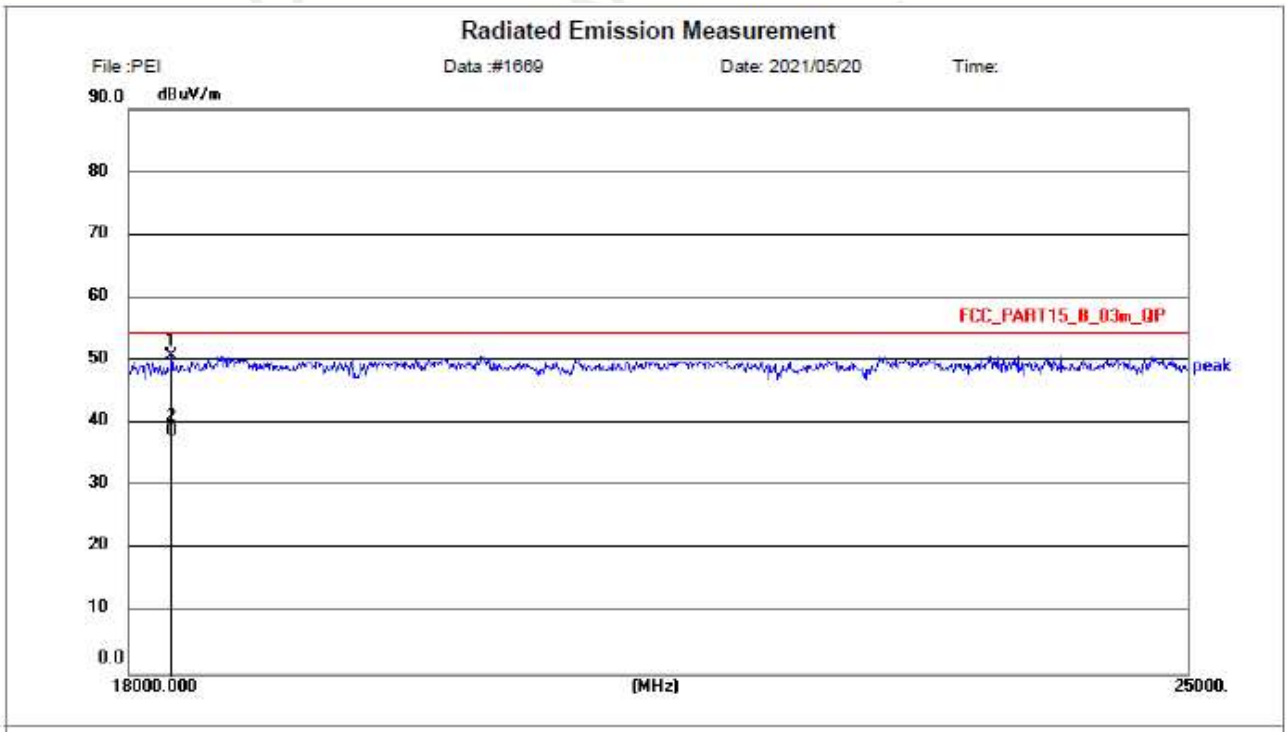
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2441MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	18350.000	29.26	20.93	50.19	54.00	3.81	peak	110	238	P	
2	18350.000	17.95	20.93	38.88	54.00	15.12	AVG	110	238	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2480MHz (8DPSK)	Humidity:	54 %
Frequency Range:	18GHz-26.5GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



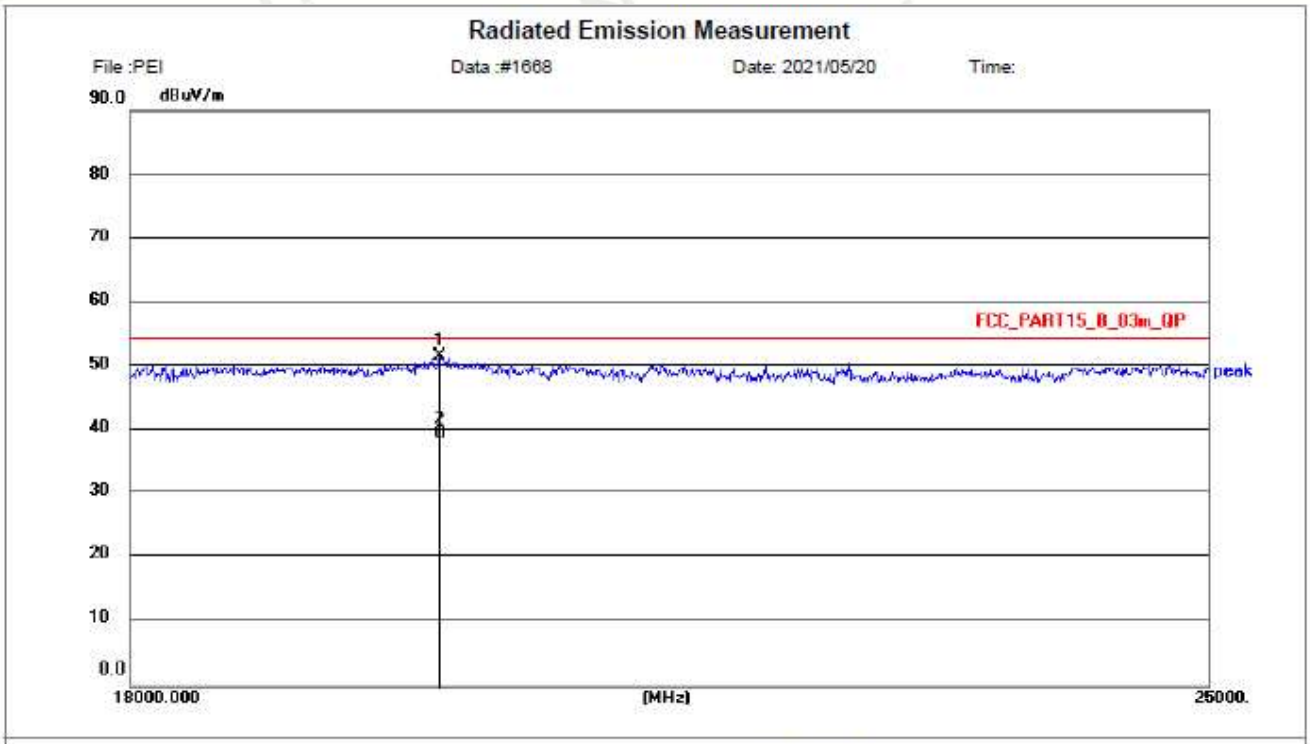
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2480MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	18245.000	30.16	20.65	50.81	54.00	3.19	peak	210	142	P	
2	18245.000	18.08	20.65	38.73	54.00	15.27	AVG	210	142	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Vertical
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2480MHz (8DPSK)	Humidity:	54 %
Frequency Range:	18GHz-26.5GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	GKYZA0200058US		



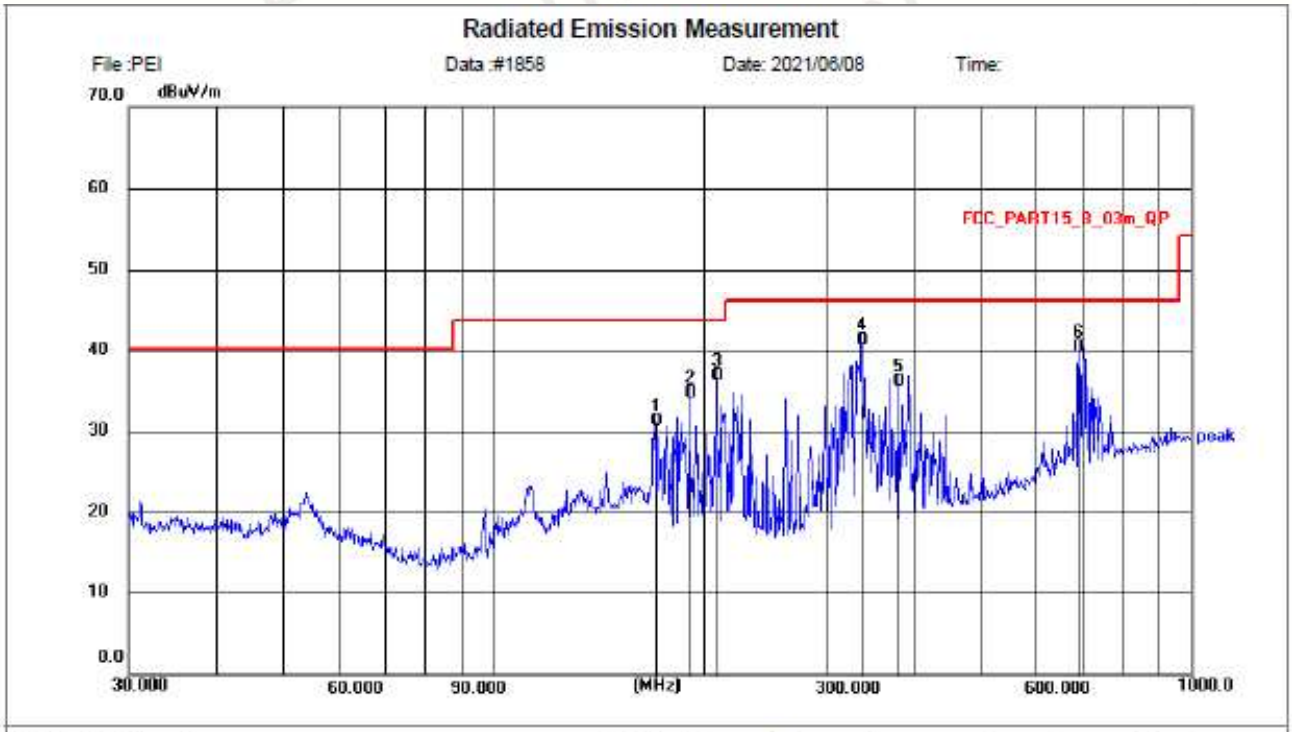
Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2480MHz
Note: Tester:PEI
JUNLAN

Polarization: *Vertical*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	19785.000	27.39	24.17	51.56	54.00	2.44	peak	105	27	P	
2	19785.000	15.41	24.17	39.58	54.00	14.42	AVG	105	27	P	

E.U.T:	Water Dancing Bluetooth MINI Tower	Polarization:	Horizontal
Model No.:	SP118-BLACK	Temperature:	26 ℃
Test Mode:	TX 2402MHz (8DPSK)	Humidity:	54 %
Frequency Range:	30MHz-1GHz	Test By:	PEI
Test Distance:	3m	Test Voltage	AC 120V/60Hz
Test Results:	PASS		
Adapter	JY012058200BA-UL		



Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Water Dancing Bluetooth MINI Tower
M/N: SP118-BLACK
Mode: TX 2402MHz
Note: Tester:PEI
JUNLAN

Polarization: *Horizontal*
Power: AC120/60Hz
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	170.6429	16.27	14.93	31.20	43.50	12.30	QP	202	174	P	
2	191.2414	22.49	12.27	34.76	43.50	8.74	QP	220	238	P	
3	208.5801	24.69	12.10	36.79	43.50	6.71	QP	200	49	P	
4 *	336.3298	25.54	15.59	41.13	46.00	4.87	QP	185	152	P	
5	380.5808	19.63	16.43	36.06	46.00	9.94	QP	205	186	P	
6	691.3803	18.42	21.86	40.28	46.00	5.72	QP	210	194	P	