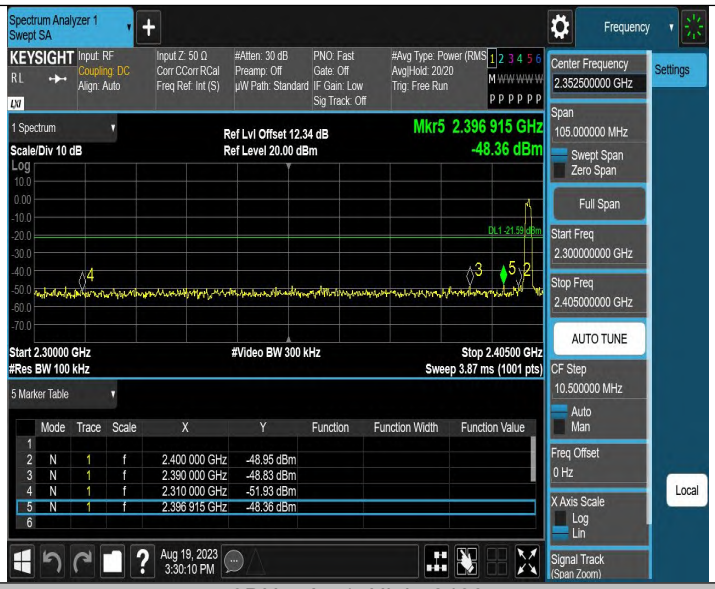


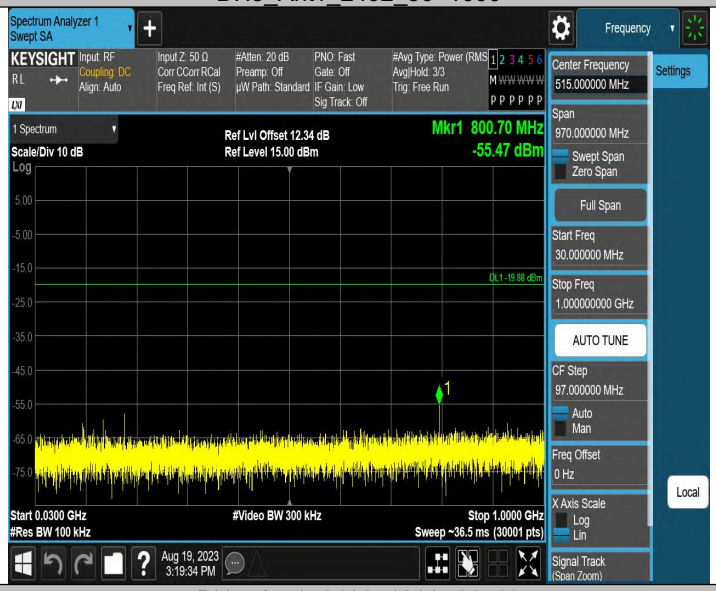
3DH5_Ant1_High_2480

3DH5_Ant1_Low_Hop_2402

3DH5_Ant1_High_Hop_2480

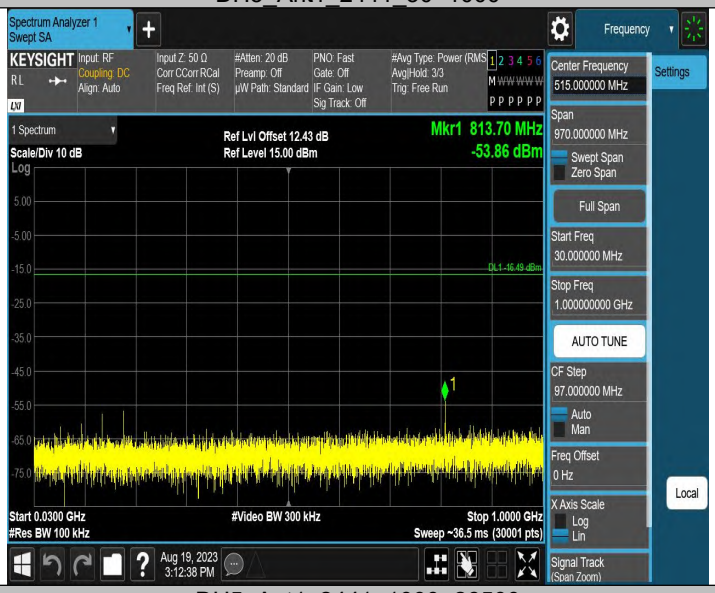
Spurious Emission:

DH5_Ant1_2402_30~1000



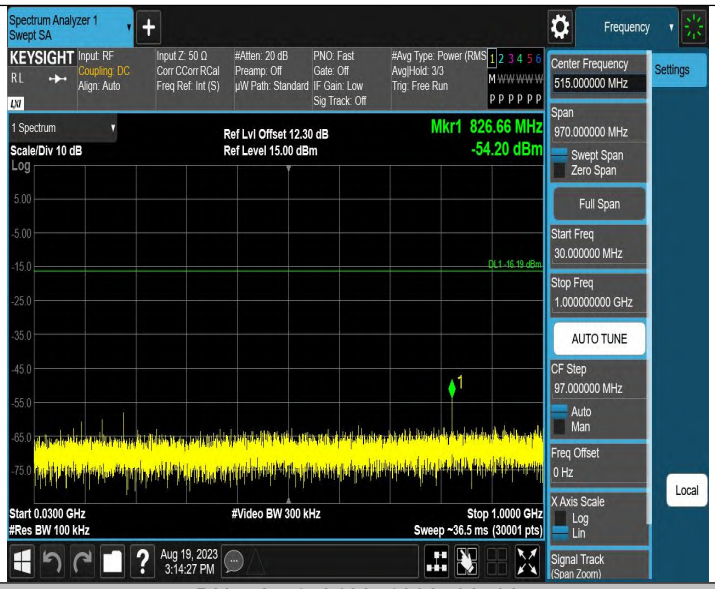
DH5_Ant1_2402_1000~26500

DH5_Ant1_2441_30~1000



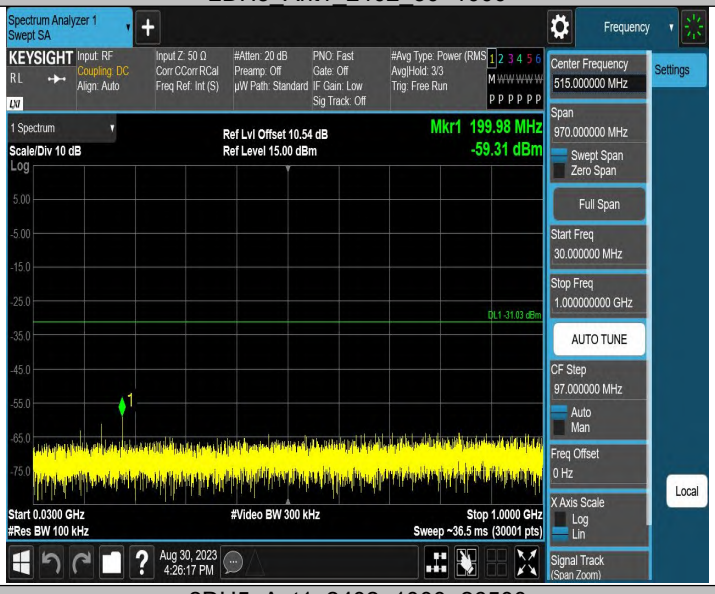
DH5_Ant1_2441_1000~26500

DH5_Ant1_2480_30~1000



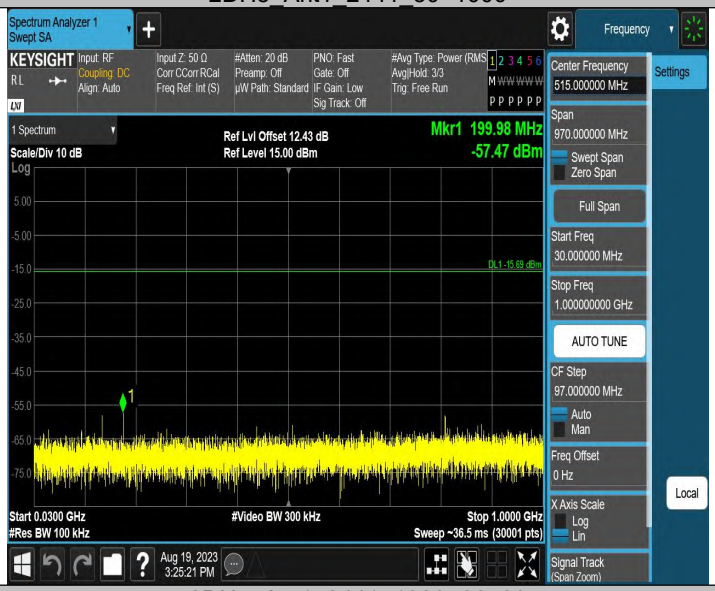
DH5_Ant1_2480_1000~26500

2DH5_Ant1_2402_30~1000



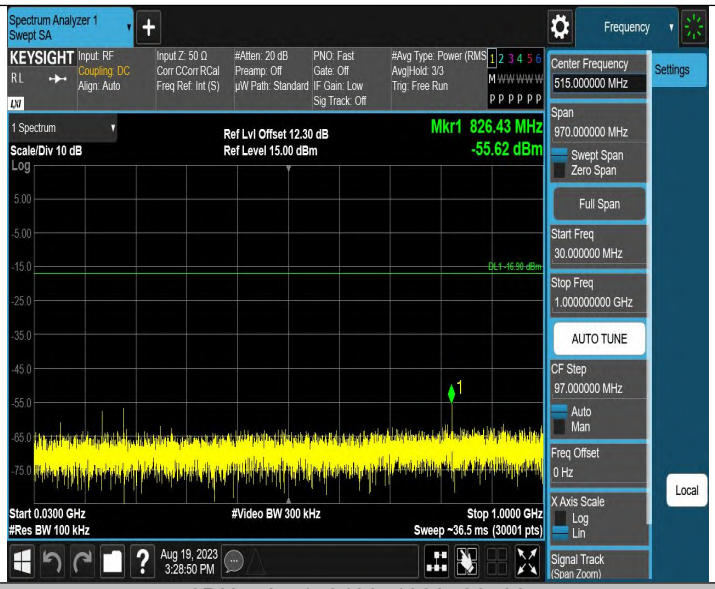
2DH5_Ant1_2402_1000~26500

2DH5_Ant1_2441_30~1000



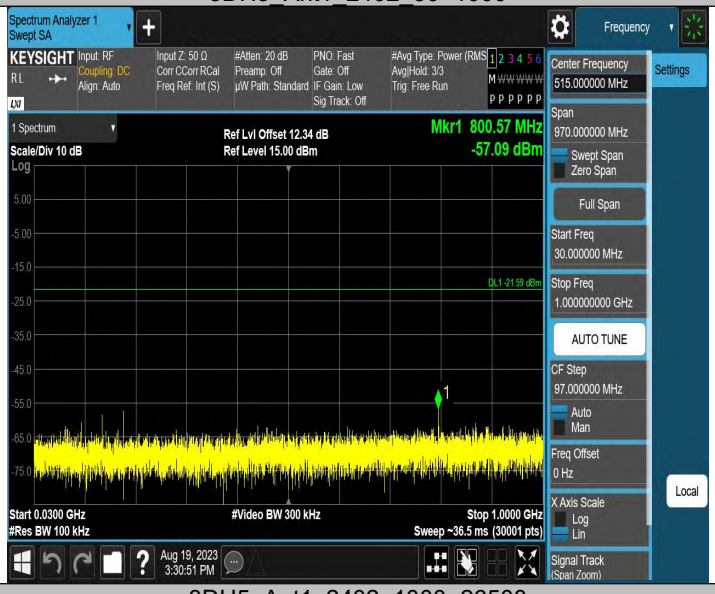
2DH5_Ant1_2441_1000~26500

2DH5_Ant1_2480_30~1000



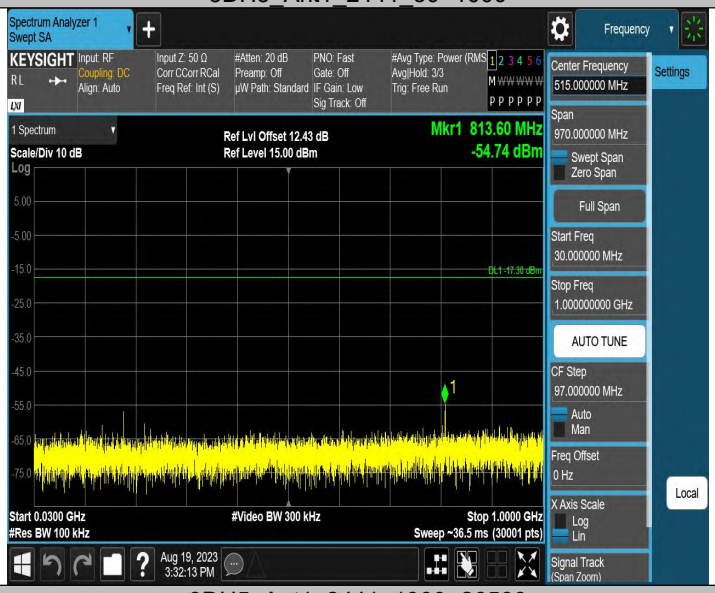
2DH5_Ant1_2480_1000~26500

3DH5_Ant1_2402_30~1000



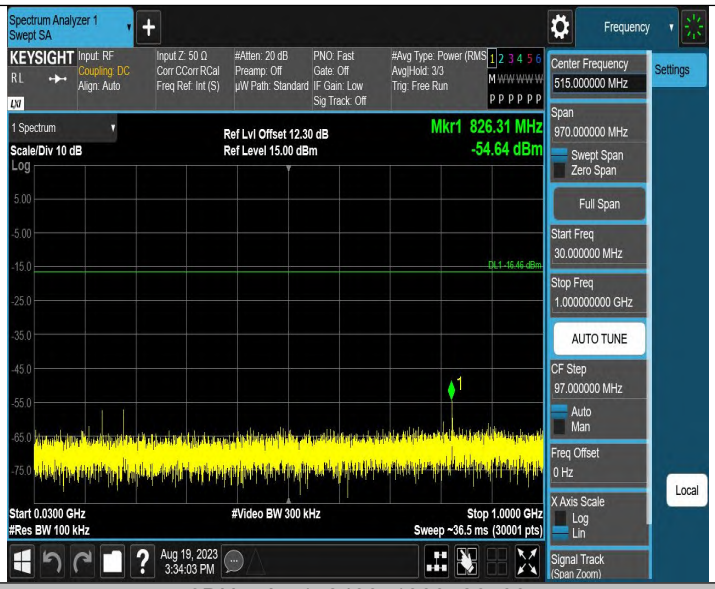
3DH5_Ant1_2402_1000~26500

3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500

3DH5_Ant1_2480_30~1000

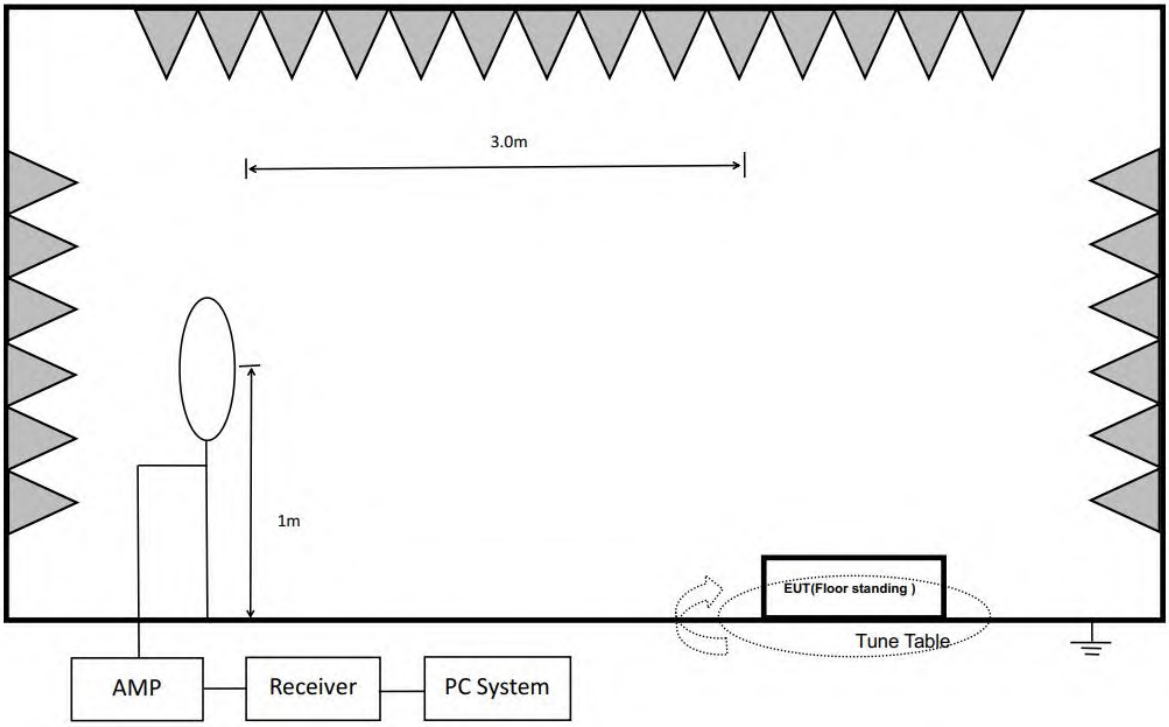


3DH5_Ant1_2480_1000~26500

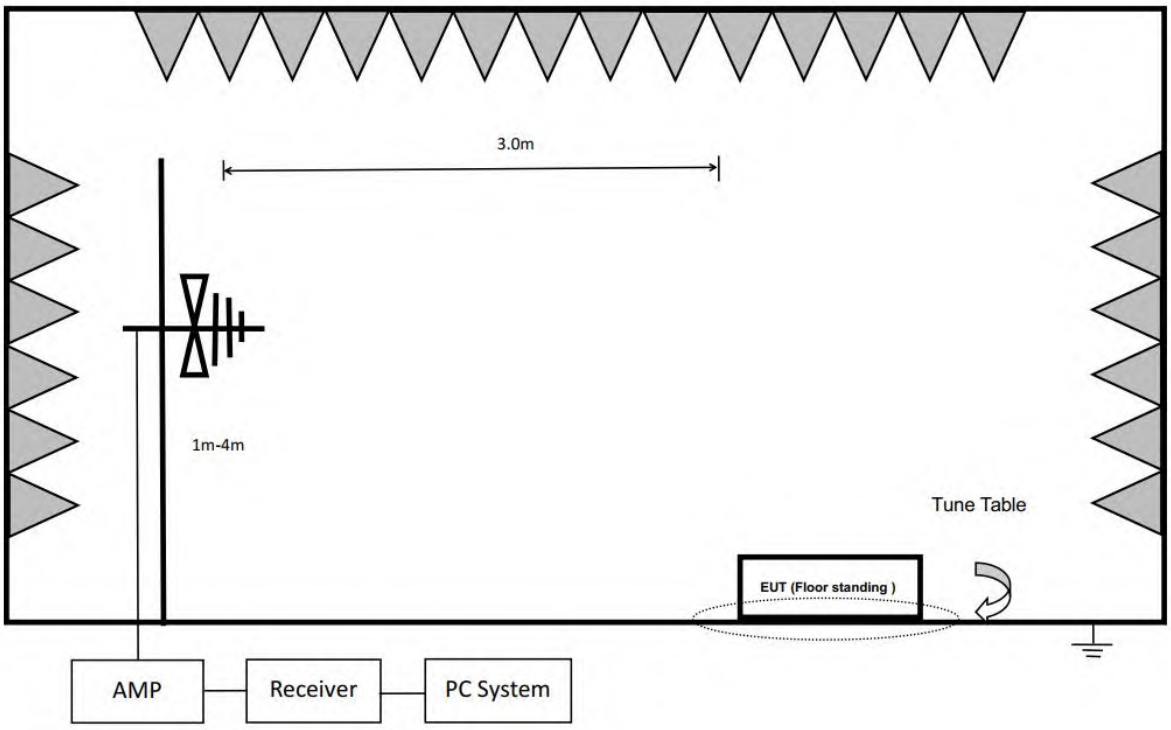
15. Radiated Emission

15.1. Block diagram of test setup

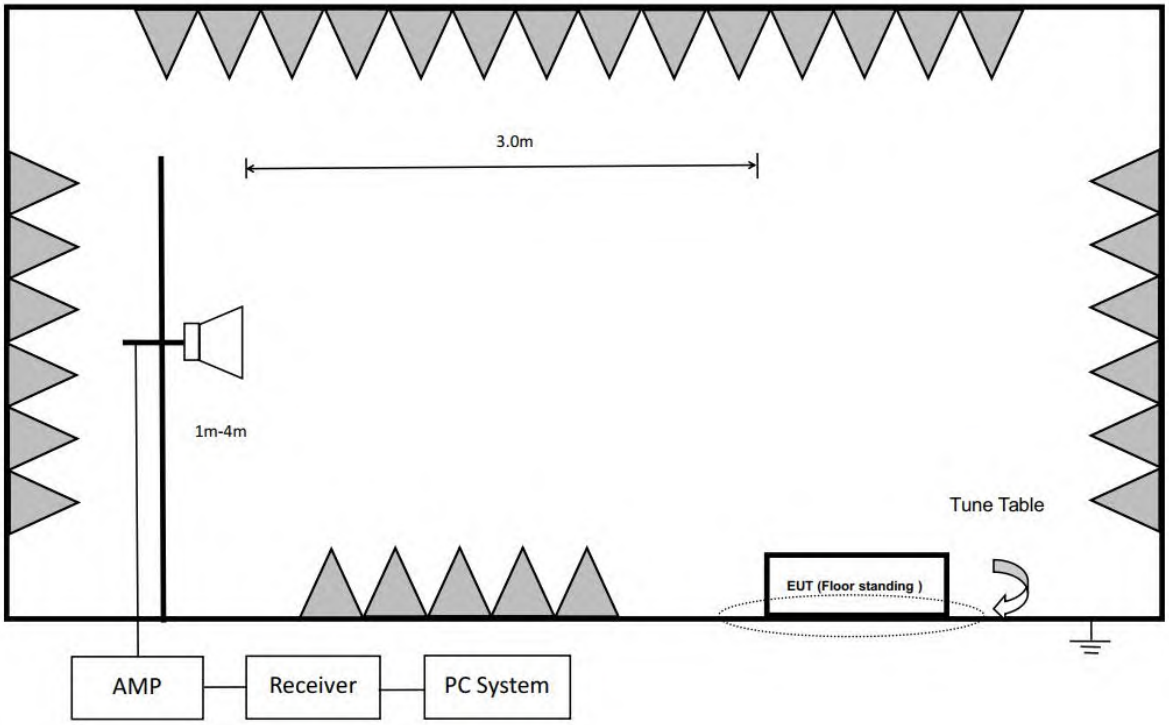
In 3m Anechoic Chamber, test setup diagram for 9kHz - 30MHz:



In 3m Anechoic Chamber, test setup diagram for 30 MHz - 1 GHz:



In 3m Anechoic Chamber, test setup diagram for frequency above 1 GHz:



Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

15.2. Limit

(1) FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]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
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&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	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

[2]Above 38.6

(2) FCC 15.209 Limit.

Frequency MHz	Distance Meters	Field Strengths Limit	
		μV/m	dB(μV)/m
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.

About Restricted bands of operation please refer to FCC § 15.205 (a),

15.3. Test Procedure

Below 30 MHz：

The setting of the spectrum Analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT and all cables shall be insulated, if required, from the ground plane by up to 12mm of insulating meterial.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of 1 meter height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. 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.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

Below 1 GHz and above 30 MHz：

The setting of the spectrum Analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT and all cables shall be insulated, if required, from the ground plane by up to 12mm of insulating meterial.

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

5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. 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.

Above 1 GHz：

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5m above ground.

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

5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for AVG measurements. For the Duty Cycle please refer to clause 7.1.On Time And Duty Cycle.

7. Restriction band: Investigated frequency range from 2310 MHz to 2410 MHz and 2470MHz to 2500 MHz.

All restriction band should comply with 15.209, other emission should be at least 20 dB below the fundamental.

Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note 2: The EUT does not support simultaneous transmission.

Note 3: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

15.4. Results

Pass. (See below detailed test result)

All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limits.

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz, so the final test was performed with frequency range from 30 MHz to 26 GHz and recorded in below.

Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in 8DPSK, TX 2402 MHz mode.

Note3: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

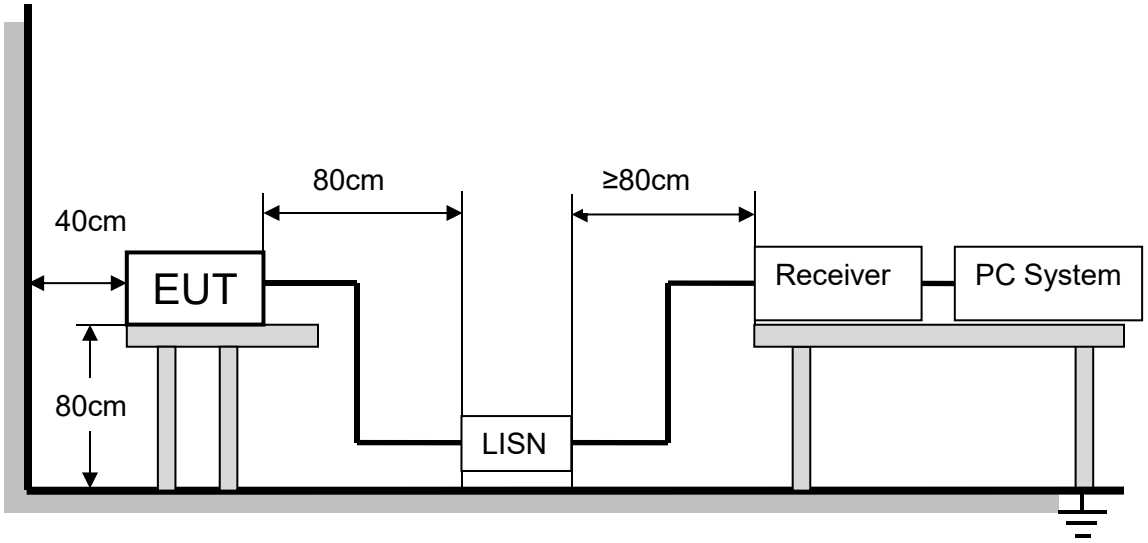
15.5. Original test data

Below 1 GHz and above 30 MHz test data Refer to appendix A

Above 1 GHz test data Refer to appendix B

16. AC Power Line Conducted Emissions

16.1. Block diagram of test setup



The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

16.2. Limits

Please refer to CFR 47 FCC § 15.207 (a).

Frequency (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

16.3. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

16.4. Test result

Pass. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded worse case.

16.5. Original test data

Refer to appendix C

17. Antenna Requirements

17.1. Limits

Please refer 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.

Please refer to FCC § 15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

17.2. Result

The antenna used for this product is FPC antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 2.71 dBi

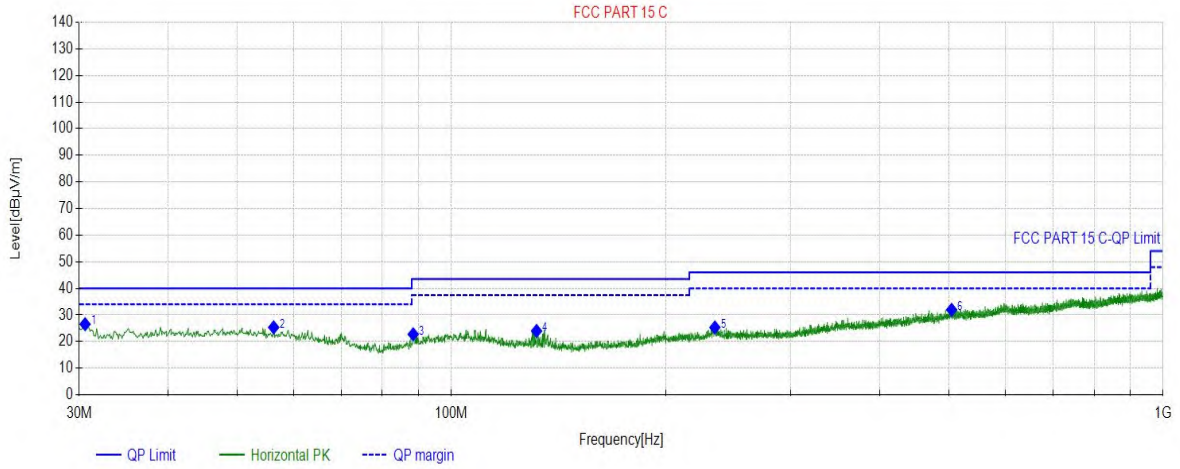
APPENDIX A – Radiated Emission Below 1GHz Test Data

Test Report

Project Information			
EUT:	Travel ApoII Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:			

Start of Test: 2023-08-25 11:04:24

Test Graph



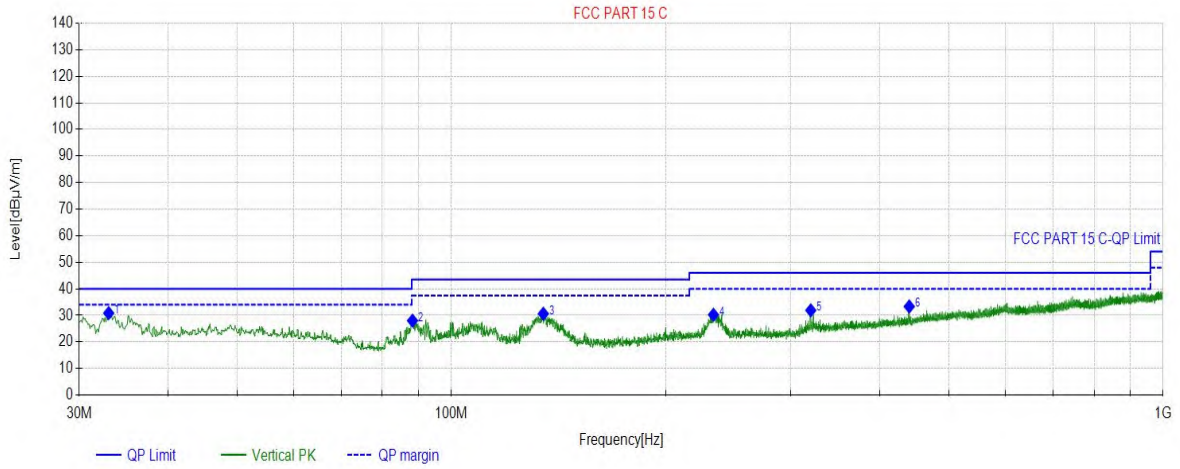
Final Data List								
NO.	Freq. (MHz)	Factor (dB)	QP Value (dBµV/m)	QP Limit (dBµV/m)	QP Margin (dB)	Height (cm)	Angle (°)	Polarity
1	30.5821	18.96	26.57	40.00	13.43	100	260	Horizontal
2	56.2896	21.73	25.37	40.00	14.63	100	168	Horizontal
3	88.3998	17.98	22.77	43.50	20.73	100	210	Horizontal
4	131.7632	17.43	24.02	43.50	19.48	100	26	Horizontal
5	234.5935	21.17	25.34	46.00	20.66	100	163	Horizontal
6	504.5715	27.78	31.98	46.00	14.02	100	112	Horizontal

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:			

Start of Test: 2023-08-25 11:05:08

Test Graph



Final Data List								
NO.	Freq. (MHz)	Factor (dB)	QP Value (dBµV/m)	QP Limit (dBµV/m)	QP Margin (dB)	Height (cm)	Angle (°)	Polarity
1	33.0073	19.54	30.86	40.00	9.14	100	140	Vertical
2	88.2058	17.93	28.02	43.50	15.48	100	136	Vertical
3	134.6735	17.31	30.63	43.50	12.87	100	101	Vertical
4	233.5264	21.14	30.25	46.00	15.75	100	78	Vertical
5	319.9620	22.91	31.91	46.00	14.09	100	150	Vertical
6	439.9630	26.39	33.34	46.00	12.66	100	0	Vertical

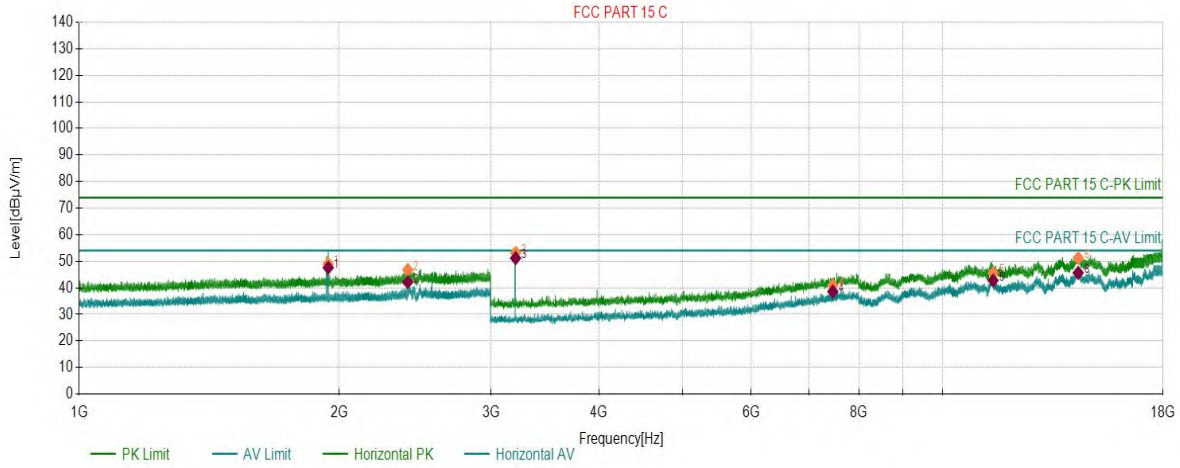
APPENDIX B – Radiated Emission Above 1GHz Test Data

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 16:22:47

Test Graph



PK Final Data List								
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1943.0472	4.67	48.95	74.00	25.05	150	68	Horizontal
2	2401.7701	7.11	46.79	74.00	27.21	150	89	Horizontal
3	3202.5101	-17.04	53.22	74.00	20.78	150	7	Horizontal
4	7461.9731	-1.39	40.96	74.00	33.04	150	175	Horizontal
5	11441.6721	6.86	45.59	74.00	28.41	150	21	Horizontal
6	14357.8179	12.85	51.24	74.00	22.76	150	31	Horizontal

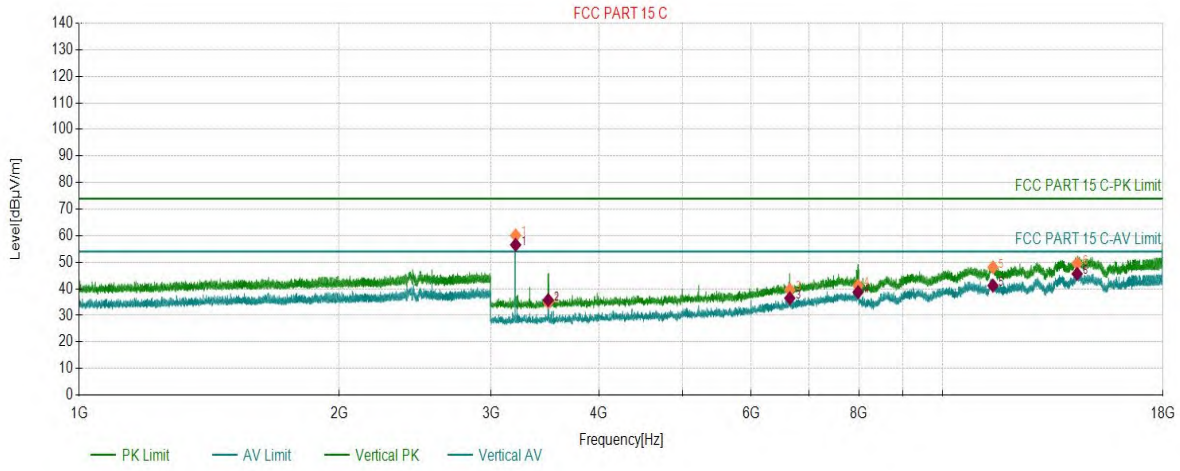
AV Final Data List								
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1943.0472	4.67	47.59	54.00	6.41	150	68	Horizontal
2	2401.7701	7.11	42.13	54.00	11.87	150	89	Horizontal
3	3202.5101	-17.04	51.19	--	--	150	7	Horizontal
4	7461.9731	-1.39	38.60	54.00	15.40	150	175	Horizontal
5	11441.6721	6.86	42.80	54.00	11.20	150	21	Horizontal
6	14357.8179	12.85	45.68	54.00	8.32	150	31	Horizontal

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 16:24:18

Test Graph



PK Final Data List								
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	3202.5101	-17.04	60.11	74.00	13.89	150	78	Vertical
2	3493.5247	-15.78	34.91	74.00	39.09	150	78	Vertical
3	6653.4327	-4.83	39.67	74.00	34.33	150	100	Vertical
4	7980.9991	-0.61	41.16	74.00	32.84	150	88	Vertical
5	11436.4218	6.90	48.13	74.00	25.87	150	43	Vertical
6	14315.0658	12.69	49.50	74.00	24.50	150	302	Vertical

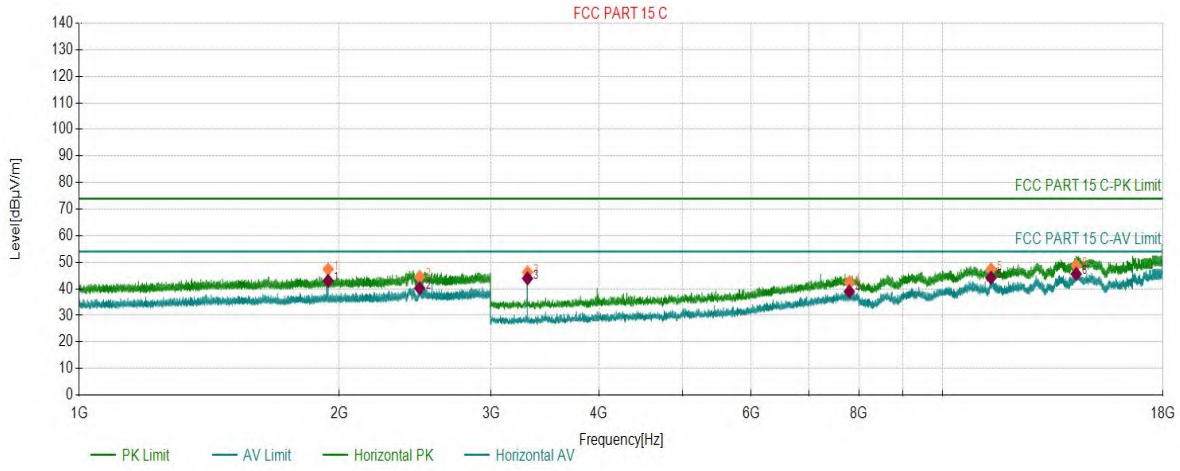
AV Final Data List								
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	3202.5101	-17.04	56.56	--	--	150	78	Vertical
2	3493.5247	-15.78	35.78	54.00	18.22	150	78	Vertical
3	6653.4327	-4.83	36.47	54.00	17.53	150	100	Vertical
4	7980.9991	-0.61	38.75	54.00	15.25	150	88	Vertical
5	11436.4218	6.90	41.20	54.00	12.80	150	43	Vertical
6	14315.0658	12.69	45.66	54.00	8.34	150	302	Vertical

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2441	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 16:27:57

Test Graph



PK Final Data List								
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1942.3471	4.67	47.36	74.00	26.64	150	46	Horizontal
2	2479.8740	7.43	44.54	74.00	29.46	150	82	Horizontal
3	3306.0153	-16.83	46.25	74.00	27.75	150	26	Horizontal
4	7797.9899	-0.95	42.48	74.00	31.52	150	72	Horizontal
5	11379.4190	6.85	47.39	74.00	26.61	150	137	Horizontal
6	14279.8140	12.50	48.76	74.00	25.24	150	72	Horizontal

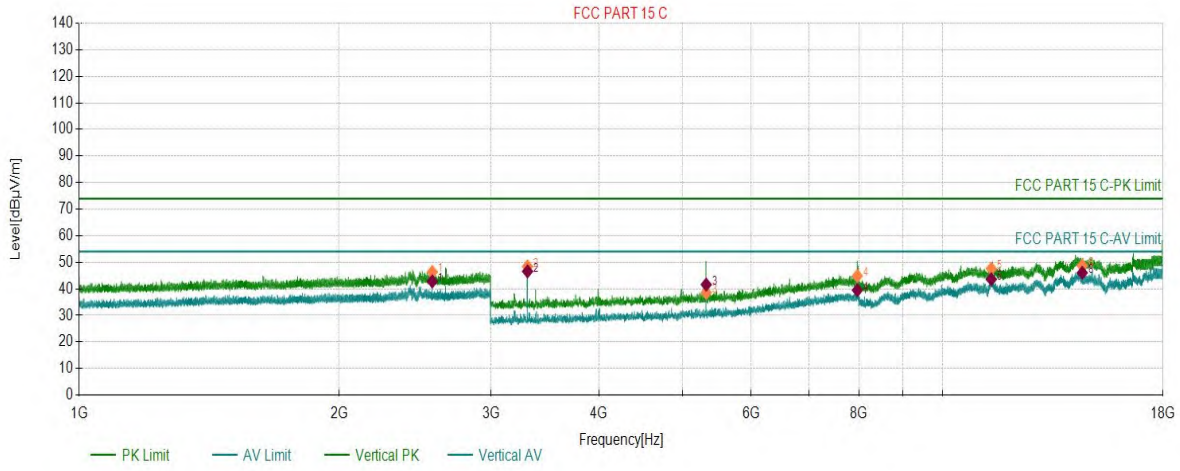
AV Final Data List								
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1942.3471	4.67	43.01	54.00	10.99	150	46	Horizontal
2	2479.8740	7.43	40.23	54.00	13.77	150	82	Horizontal
3	3306.0153	-16.83	43.95	54.00	10.05	150	26	Horizontal
4	7797.9899	-0.95	38.99	54.00	15.01	150	72	Horizontal
5	11379.4190	6.85	44.19	54.00	9.81	150	137	Horizontal
6	14279.8140	12.50	45.61	54.00	8.39	150	72	Horizontal

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2441	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 16:29:27

Test Graph



PK Final Data List								
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	2564.3782	6.99	46.36	74.00	27.64	150	47	Vertical
2	3306.0153	-16.83	48.43	74.00	25.57	150	8	Vertical
3	5323.6162	-9.54	38.57	74.00	35.43	150	66	Vertical
4	7965.9983	-0.55	44.84	74.00	29.16	150	280	Vertical
5	11388.4194	6.98	47.59	74.00	26.41	150	225	Vertical
6	14511.5756	13.31	48.68	74.00	25.32	150	22	Vertical

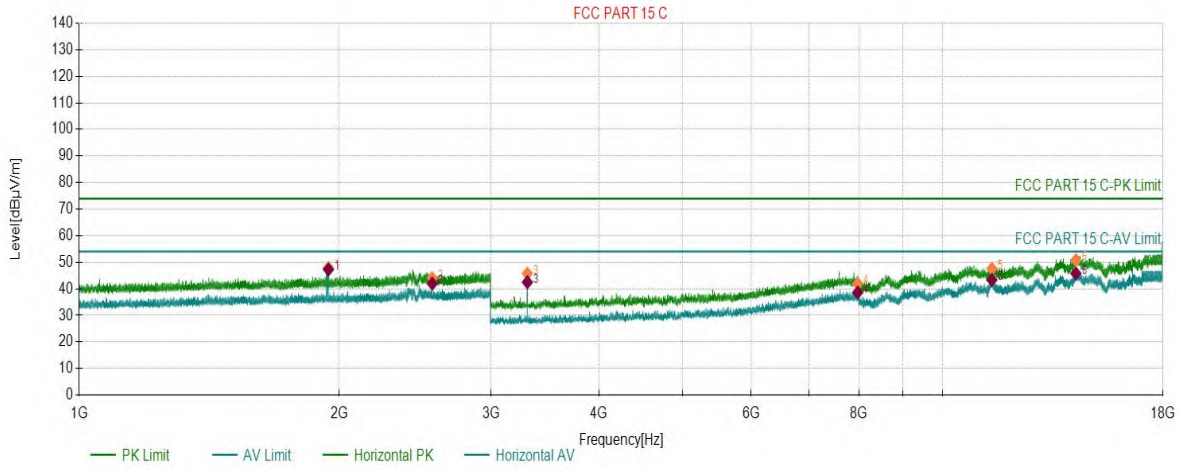
AV Final Data List								
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	2564.3782	6.99	42.83	54.00	11.17	150	47	Vertical
2	3306.0153	-16.83	46.57	54.00	7.43	150	8	Vertical
3	5323.6162	-9.54	41.59	54.00	12.41	150	66	Vertical
4	7965.9983	-0.55	39.48	54.00	14.52	150	280	Vertical
5	11388.4194	6.98	43.63	54.00	10.37	150	225	Vertical
6	14511.5756	13.31	46.06	54.00	7.94	150	22	Vertical

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 16:38:58

Test Graph



PK Final Data List								
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1944.0472	4.67	47.89	74.00	26.11	150	235	Horizontal
2	2564.3782	6.99	44.06	74.00	29.94	150	360	Horizontal
3	3304.5152	-16.84	45.79	74.00	28.21	150	358	Horizontal
4	7974.9988	-0.58	41.86	74.00	32.14	150	134	Horizontal
5	11403.4202	7.13	47.62	74.00	26.38	150	76	Horizontal
6	14266.3133	12.42	50.80	74.00	23.20	150	156	Horizontal

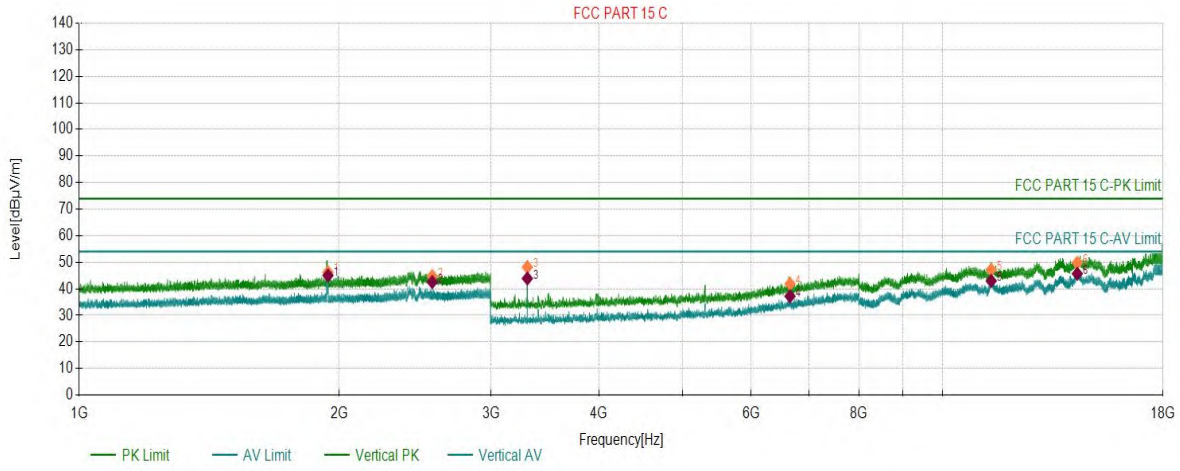
AV Final Data List								
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1944.0472	4.67	47.25	54.00	6.75	150	235	Horizontal
2	2564.3782	6.99	41.96	54.00	12.04	150	360	Horizontal
3	3304.5152	-16.84	42.52	54.00	11.48	150	358	Horizontal
4	7974.9988	-0.58	38.65	54.00	15.35	150	134	Horizontal
5	11403.4202	7.13	43.39	54.00	10.61	150	76	Horizontal
6	14266.3133	12.42	45.81	54.00	8.19	150	156	Horizontal

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 16:40:28

Test Graph



PK Final Data List								
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1941.7471	4.67	46.31	74.00	27.69	150	47	Vertical
2	2564.2782	6.99	44.80	74.00	29.20	150	35	Vertical
3	3304.5152	-16.84	48.18	74.00	25.82	150	56	Vertical
4	6657.1829	-4.82	41.89	74.00	32.11	150	102	Vertical
5	11383.9192	6.92	47.18	74.00	26.82	150	7	Vertical
6	14321.8161	12.71	49.84	74.00	24.16	150	353	Vertical

AV Final Data List								
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1941.7471	4.67	45.06	54.00	8.94	150	47	Vertical
2	2564.2782	6.99	42.55	54.00	11.45	150	35	Vertical
3	3304.5152	-16.84	43.91	54.00	10.09	150	56	Vertical
4	6657.1829	-4.82	37.20	54.00	16.80	150	102	Vertical
5	11383.9192	6.92	42.99	54.00	11.01	150	7	Vertical
6	14321.8161	12.71	45.71	54.00	8.29	150	353	Vertical

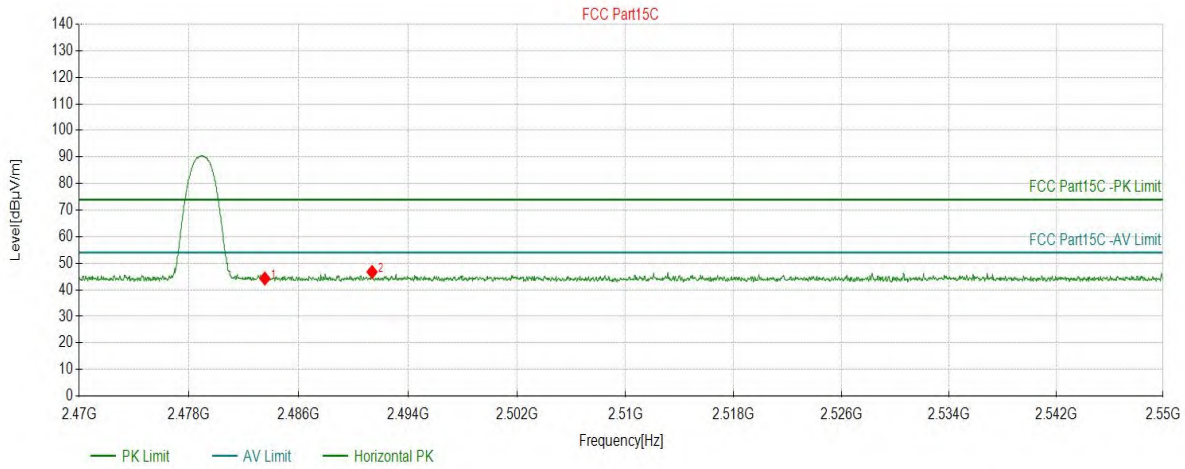
Restriction Band Emission

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 17:33:19

Test Graph



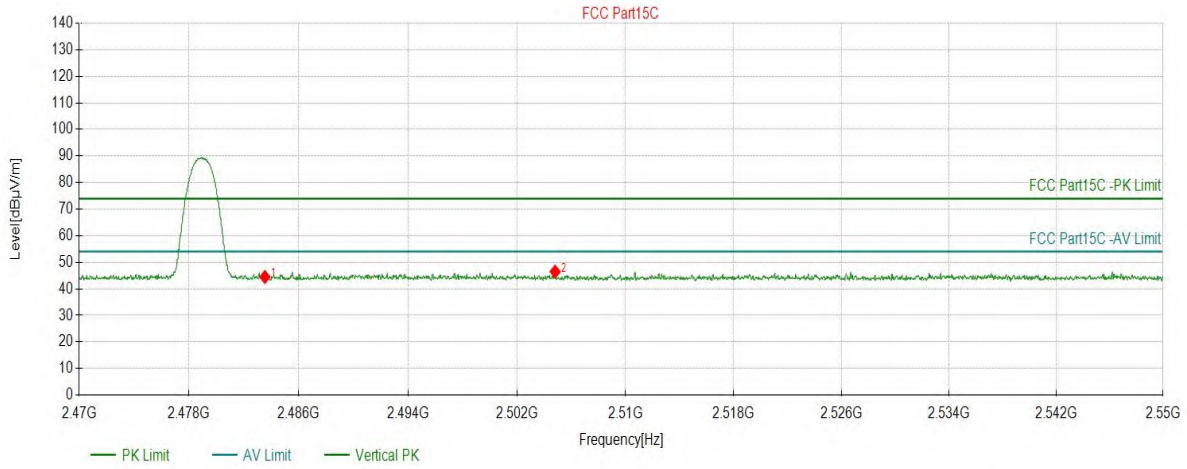
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2483.5268	44.27	6.07	74.00	29.73	150	130	PK	Horizont
2	2491.3707	46.73	6.11	74.00	27.27	150	332	PK	Horizont

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-22 17:34:11

Test Graph



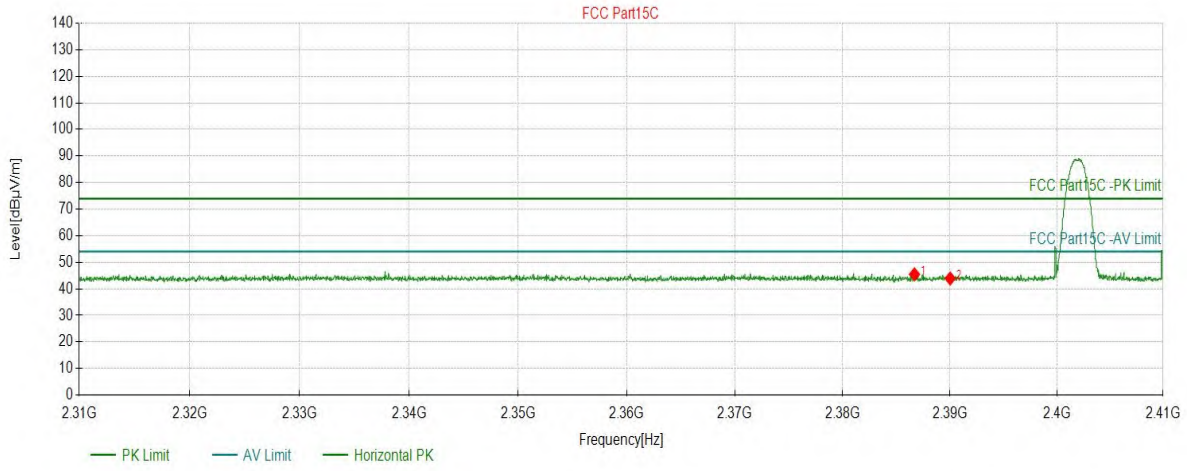
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2483.5268	44.46	6.07	74.00	29.54	150	305	PK	Vertical
2	2504.8174	46.48	6.16	74.00	27.52	150	1	PK	Vertical

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：60		

Start of Test: 2023-08-24 21:44:01

Test Graph



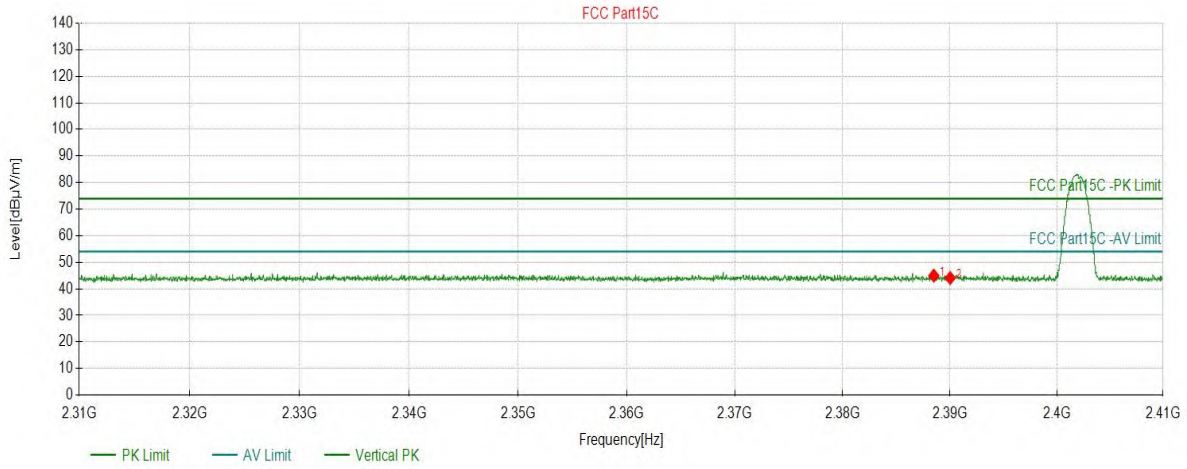
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2386.6922	45.46	5.60	74.00	28.54	150	353	PK	Horizont
2	2390.0267	43.92	5.61	74.00	30.08	150	178	PK	Horizont

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	3DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:44:38

Test Graph



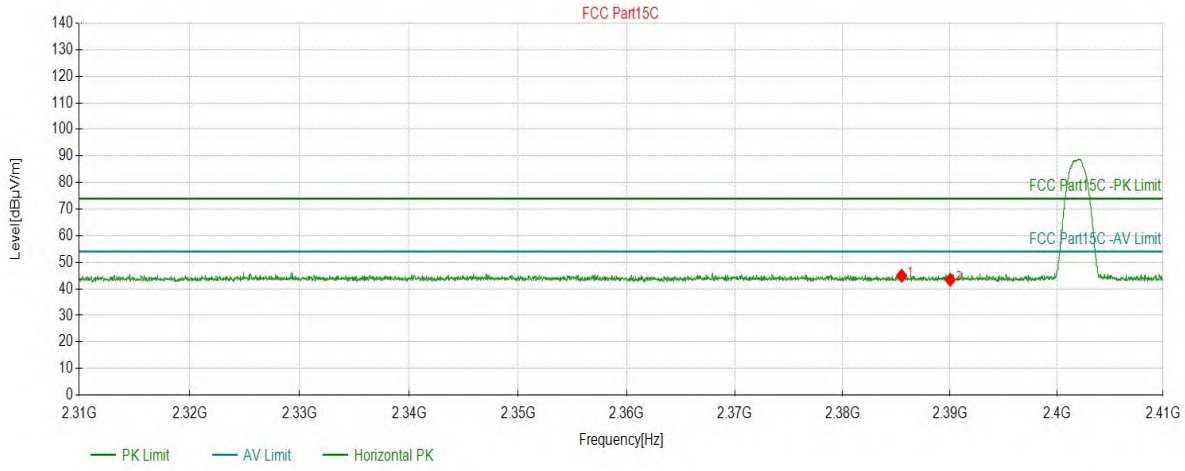
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2388.4928	44.98	5.61	74.00	29.02	150	0	PK	Vertical
2	2390.0267	44.09	5.61	74.00	29.91	150	330	PK	Vertical

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	2DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:46:30

Test Graph



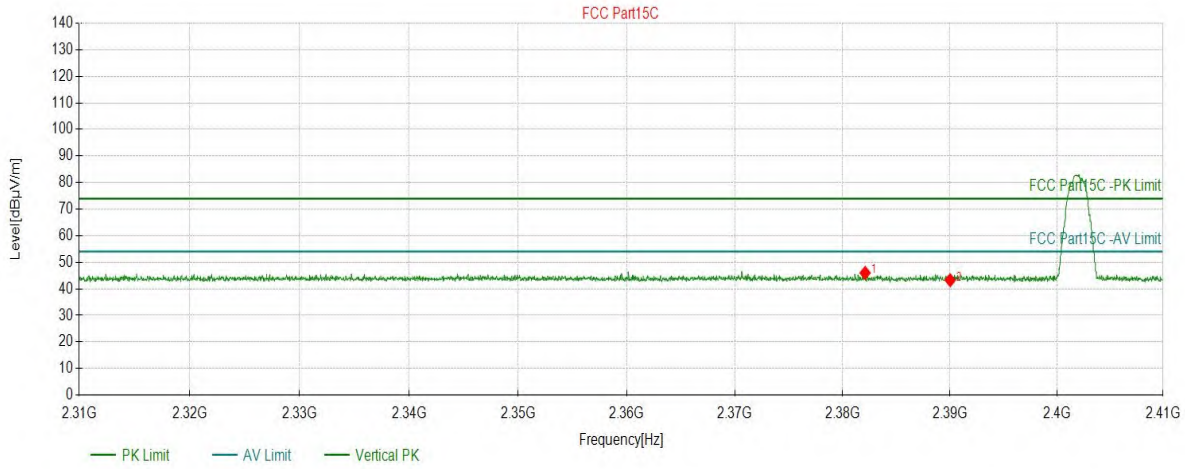
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2385.4918	44.94	5.60	74.00	29.06	150	193	PK	Horizont
2	2390.0267	43.41	5.61	74.00	30.59	150	54	PK	Horizont

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	2DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:47:15

Test Graph



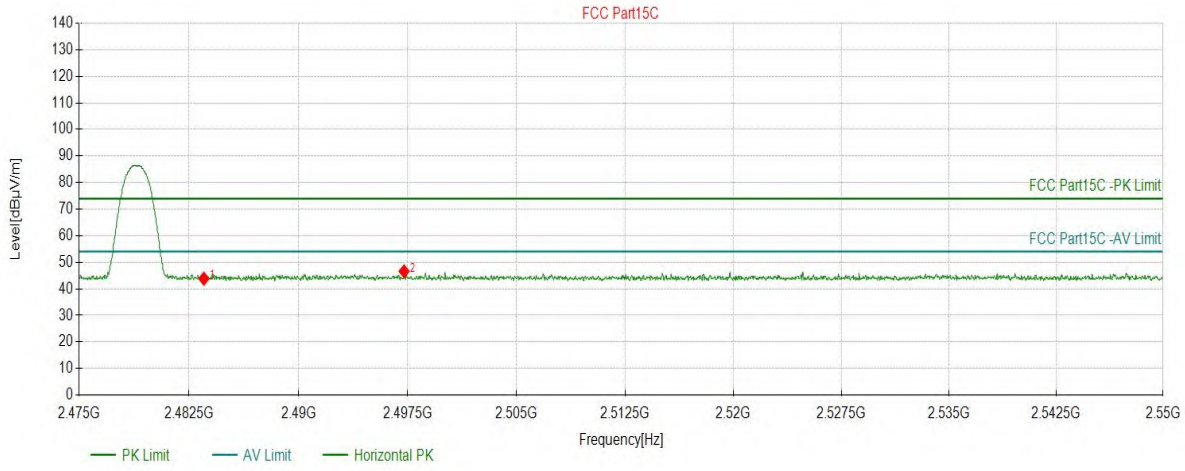
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2382.0907	46.01	5.60	74.00	27.99	150	215	PK	Vertical
2	2390.0267	43.27	5.61	74.00	30.73	150	200	PK	Vertical

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	2DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:50:28

Test Graph



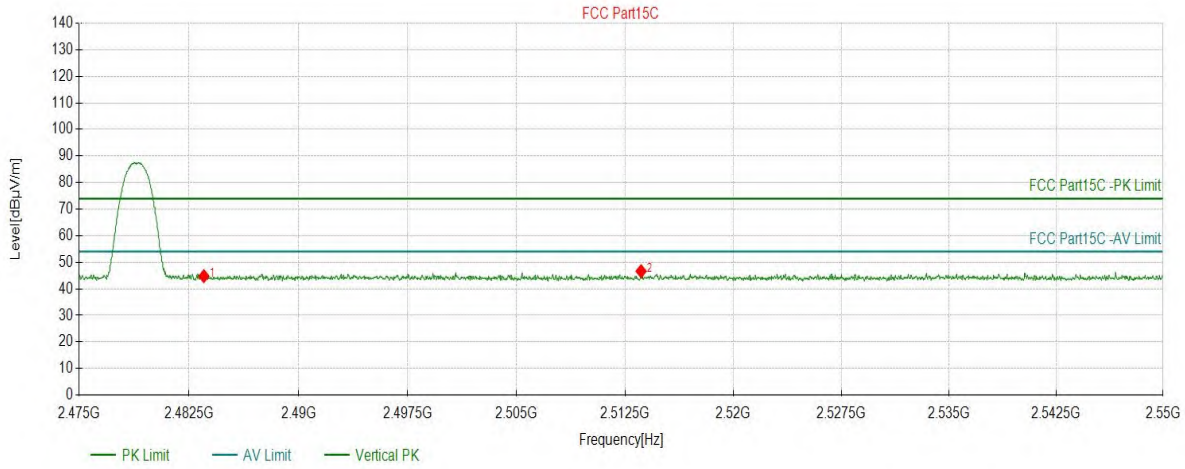
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2483.5168	43.85	6.07	74.00	30.15	150	85	PK	Horizont
2	2497.2486	46.60	6.15	74.00	27.40	150	166	PK	Horizont

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	2DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:51:20

Test Graph



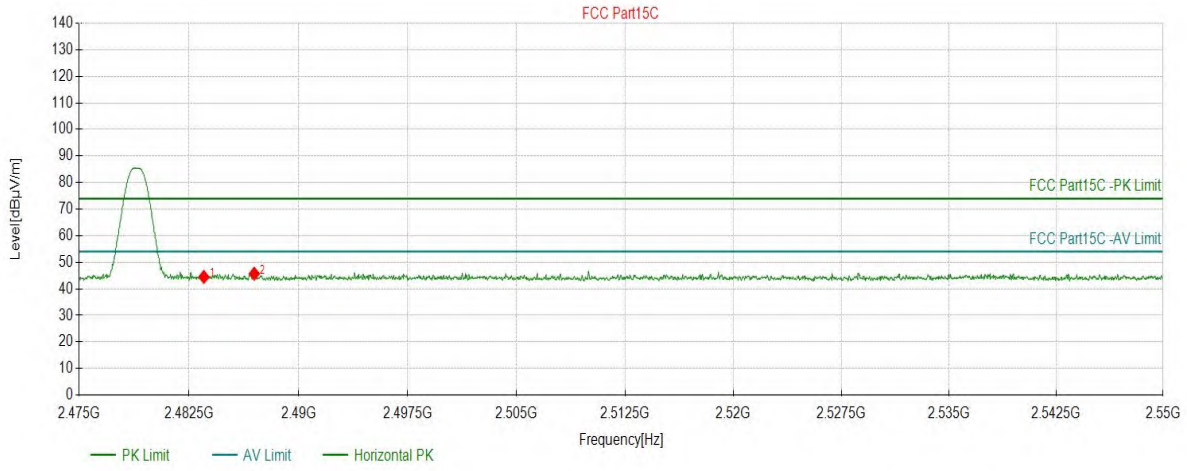
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2483.5168	44.79	6.07	74.00	29.21	150	83	PK	Vertical
2	2513.6068	46.64	6.17	74.00	27.36	150	67	PK	Vertical

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:53:28

Test Graph



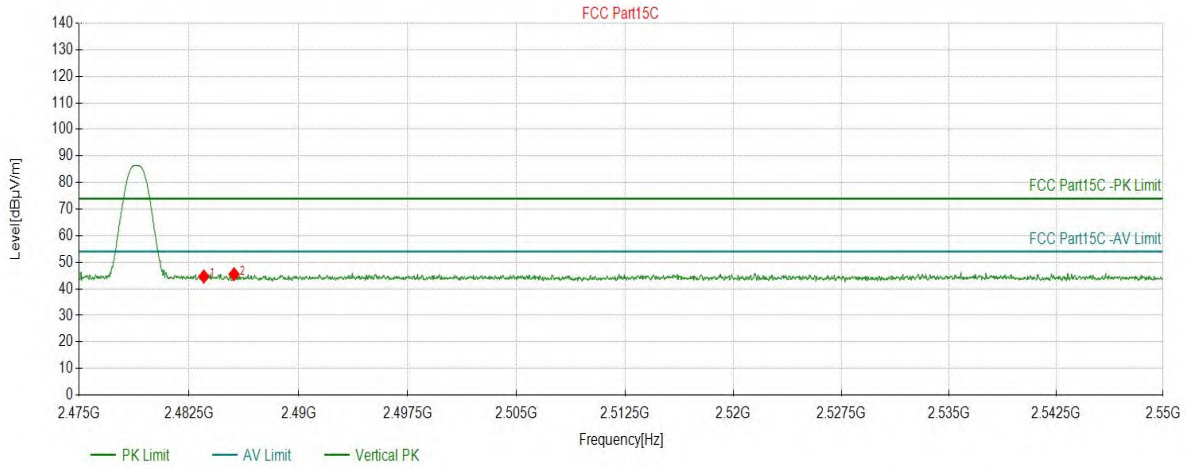
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2483.5168	44.49	6.07	74.00	29.51	150	168	PK	Horizont
2	2486.9685	45.72	6.09	74.00	28.28	150	201	PK	Horizont

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	DH5_2480	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:54:20

Test Graph



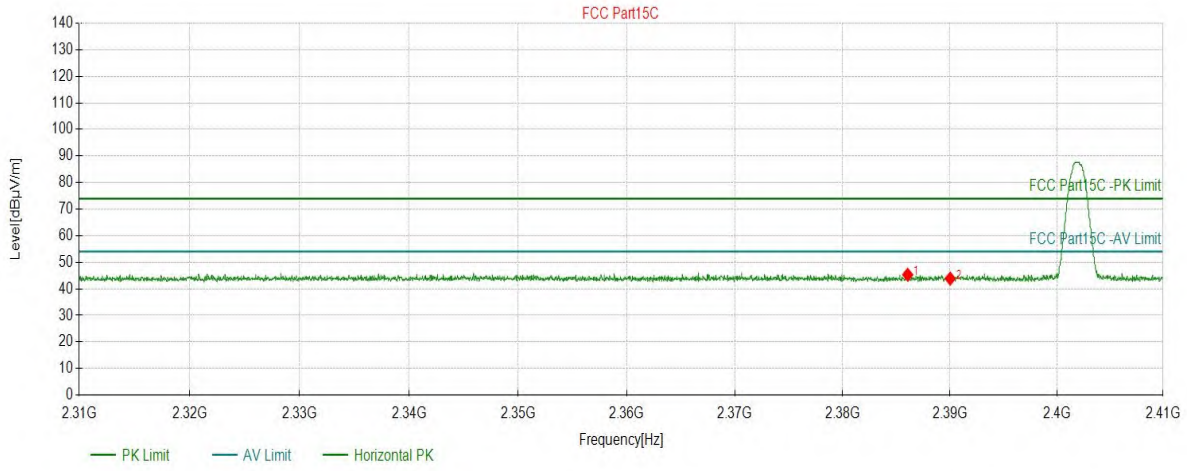
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2483.5168	44.65	6.07	74.00	29.35	150	295	PK	Vertical
2	2485.5803	45.50	6.08	74.00	28.50	150	263	PK	Vertical

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

Start of Test: 2023-08-24 21:56:39

Test Graph



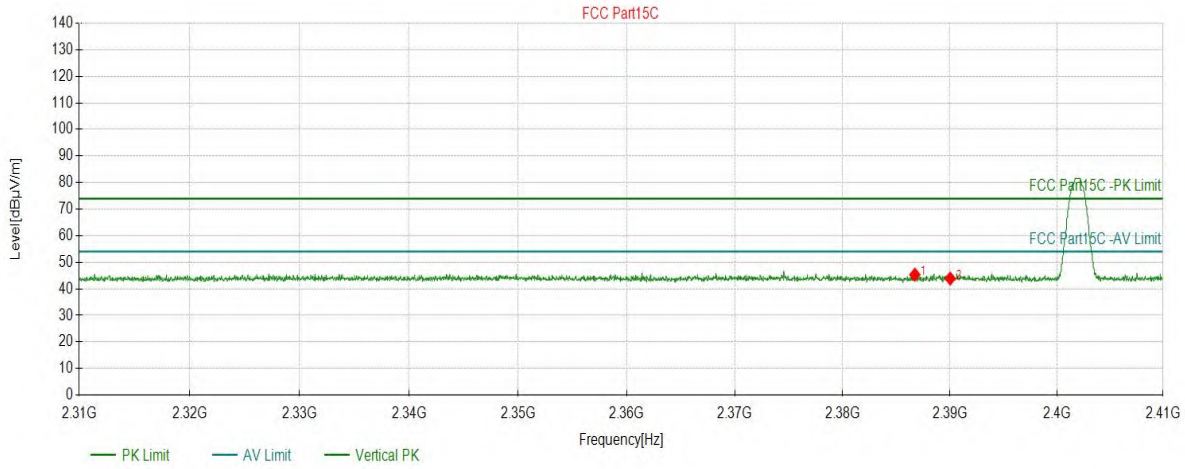
Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2386.0587	45.31	5.60	74.00	28.69	150	293	PK	Horizont
2	2390.0267	43.86	5.61	74.00	30.14	150	111	PK	Horizont

Test Report

Project Information			
EUT:	Travel Apoll Fitness Board	Environment:	23℃ 56%
Model:	SQUAPLLO-TRVOR	SN:	
Mode:	DH5_2402	Voltage:	AC 120V/60Hz
Customer:		Engineer:	Roger
Remark:	Power Set：2		

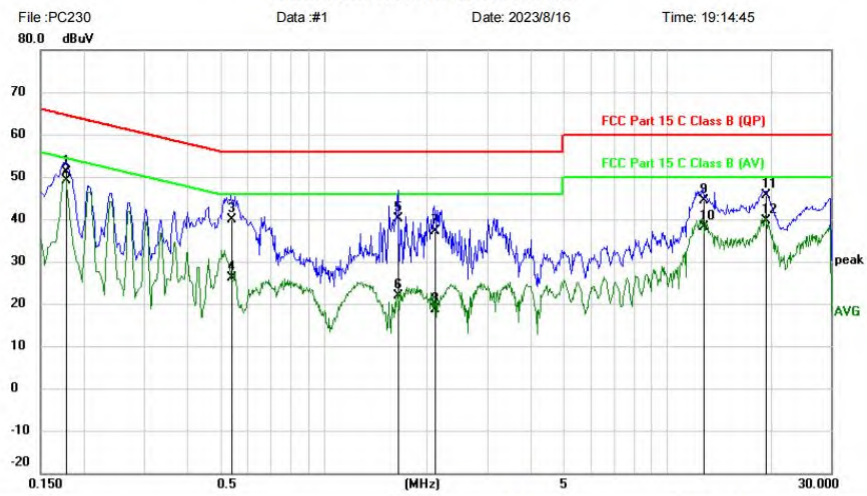
Start of Test: 2023-08-24 21:57:24

Test Graph



Suspected Data List									
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detector	Polarity
1	2386.7256	45.33	5.60	74.00	28.67	150	19	PK	Vertical
2	2390.0267	43.89	5.61	74.00	30.11	150	19	PK	Vertical

APPENDIX C – AC Power Line Conducted Emission Test Data

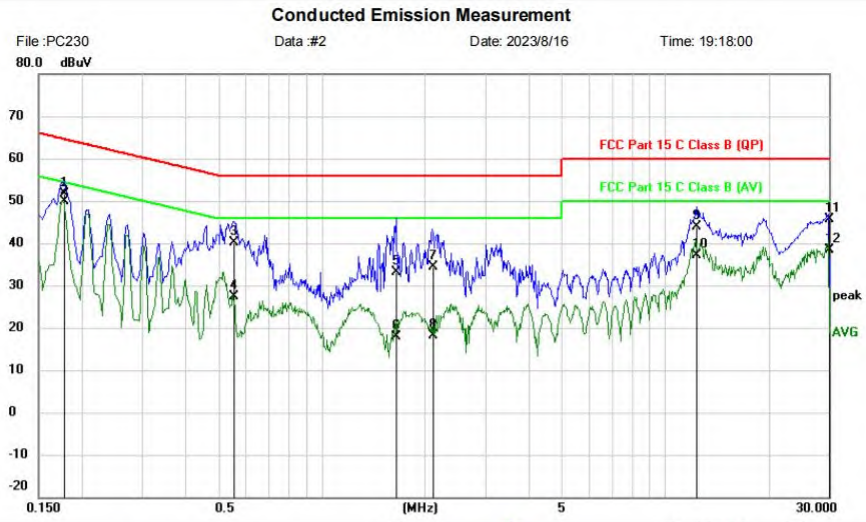


Site
Limit: FCC Part 15 C Class B (QP)
EUT: Travel Apoll Fitness Board
M/N: SQUALLO-TRVOR
Mode: BT Mode
Note:

Phase: *L1*
Power: AC 120V/60Hz

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1780	41.51	9.65	51.16	64.58	-13.42	QP	
2	*	0.1780	39.57	9.65	49.22	54.58	-5.36	AVG	
3		0.5380	30.20	9.77	39.97	56.00	-16.03	QP	
4		0.5380	16.27	9.77	26.04	46.00	-19.96	AVG	
5		1.6460	30.25	9.76	40.01	56.00	-15.99	QP	
6		1.6460	12.15	9.76	21.91	46.00	-24.09	AVG	
7		2.1060	27.27	9.75	37.02	56.00	-18.98	QP	
8		2.1060	8.99	9.75	18.74	46.00	-27.26	AVG	
9		12.7540	34.33	10.01	44.34	60.00	-15.66	QP	
10		12.7540	28.05	10.01	38.06	50.00	-11.94	AVG	
11		19.3580	35.46	10.28	45.74	60.00	-14.26	QP	
12		19.3580	29.46	10.28	39.74	50.00	-10.26	AVG	



Site
Limit: FCC Part 15 C Class B (QP)
EUT: Travel Apoll Fitness Board
M/N: SQUALLO-TRVOR
Mode: BT Mode
Note:

Phase: N
Power: AC 120V/60Hz

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1780	41.98	9.66	51.64	64.58	-12.94	QP	
2	*	0.1780	40.10	9.66	49.76	54.58	-4.82	AVG	
3		0.5540	30.25	9.76	40.01	56.00	-15.99	QP	
4		0.5540	17.58	9.76	27.34	46.00	-18.66	AVG	
5		1.6460	23.43	9.75	33.18	56.00	-22.82	QP	
6		1.6460	8.15	9.75	17.90	46.00	-28.10	AVG	
7		2.1020	24.54	9.74	34.28	56.00	-21.72	QP	
8		2.1020	8.33	9.74	18.07	46.00	-27.93	AVG	
9		12.3620	33.88	10.08	43.96	60.00	-16.04	QP	
10		12.3620	26.98	10.08	37.06	50.00	-12.94	AVG	
11		29.8860	35.12	10.54	45.66	60.00	-14.34	QP	
12		29.8860	27.86	10.54	38.40	50.00	-11.60	AVG	

END OF REPORT