

FCC RADIO TEST REPORT

FCC ID: OKUSB75WUJ1

Product : 37"Bluetooth Soundbar with Wireless Subwoofer

Trade Name : SYLVANIA, PROSCAN

Model Name : PSB378W

Serial Model : SBB-55391, SB-75WUJ1, PSB378X,
SBXXXXXXX (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. : UNIA21052422ER-02

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's name..... : SHENZHEN JUNLAN ELECTRONIC LTD

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

Manufacture's Name..... : SHENZHEN JUNLAN ELECTRONIC LTD

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

Product description

Product name..... : 37"Bluetooth Soundbar with Wireless Subwoofer

Trade Mark..... : SYLVANIA, PROSCAN

Model and/or type reference : PSB378W, SBB-55391, SB-75WUJ1, PSB378X, SBXXXXXXX (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)

Standards..... : FCC Rules and Regulations Part 15 Subpart C Section 15.249
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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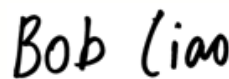
Date of Test..... :

Date (s) of performance of tests : April 19 ~ May 20, 2021

Date of Issue..... : May 20, 2021

Test Result..... : Pass

Prepared by:



Bob liao/Editor

Reviewer:



Kahn yang/Supervisor

Approved & Authorized Signer:



Liuze/Manager

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1 TEST SUMMARY

1.1 TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.215(c)	20dB Bandwidth	Compliant
Section 15.249(d)	Band Edge Compliance Test	Compliant
Section 15.205(a), Section 15.209(a), Section 15.249(d), Section 15.35	Radiated Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

1.2 TEST FACILITY

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:

The Designation Number is CN1227

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.

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.

1.3 MEASUREMENT UNCERTAINTY

Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty(9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty(30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty(Above 1GHz)	=	4.06dB, k=2

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	37"Bluetooth Soundbar with Wireless Subwoofer
Trade Mark	SYLVANIA, PROSCAN
Main Model:	PSB378W
Additional Model:	SBB-55391, SB-75WUJ1, PSB378X, SBXXXXXXX (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 PSB378W is for tests.
FCC ID	OKUSB75WUJ1
Antenna Type	Spring Antenna
Antenna Gain	0dBi
Hardware Version:	V1.0
Software Version:	V1.0
Operation frequency	910-919.5MHz
Number of Channels	20CH
Modulation Type	LORA/FSK
Adapter Model	<p>Adapter 1:</p> <p>Model: GKYZD0150160US</p> <p>Input: AC100-240V 50/60Hz 0.8A Max</p> <p>Output: DC 16V/1.5A</p> <p>Adapter 2:</p> <p>Model: JY024160150AA-UL</p> <p>Input: 100-240V 50/60Hz 1.0A Max</p> <p>Output: DC 16V/1.5A</p>

2.2 Description Test modes

The mode is used: Transmitting mode

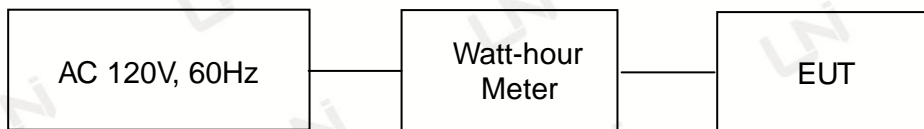
Channel	Frequency
CH01	910MHz
CH11	915MHz
CH20	919.5MHz

2.3 List of channels

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	910	11	915
02	910.5	12	915.5
03	911	13	916
04	911.5	14	916.5
05	912	15	917
06	912.5	16	917.5
07	913	17	918
08	913.5	18	918.5
09	914	19	919
10	914.5	20	919.5

2.4 DESCRIPTION OF TEST SETUP

Operation of EUT during testing:



Setup: Transmission mode

Table for auxiliary equipment:

Adapter	<p>Adapter 1:</p> <p>Model: GKYZD0150160US</p> <p>Input: AC100-240V 50/60Hz 0.8A Max</p> <p>Output: DC 16V/1.5A</p> <p>Adapter 2:</p> <p>Model: JY024160150AA-UL</p> <p>Input: 100-240V 50/60Hz 1.0A Max</p> <p>Output: DC 16V/1.5A</p>
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2.5 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until	Calibration Due Date
CONDUCTED EMISSIONS TEST						
1	AMN	Schwarzbeck	NNLK8121	8121370	2020.10.13	1 year
2	AMN	ETS	3810/2	00020199	2020.10.13	1 year
3	EMI TEST RECEIVER	Rohde&Schwarz	ESCI	101210	2020.10.13	1 year
4	AAN	TESEQ	T8-Cat6	38888	2020.10.13	1 year
RADIATED EMISSION TEST						
1	Horn Antenna	Sunol	DRH-118	A101415	2020.10.19	1 year
2	BicoNLog Antenna	Sunol	JB1 Antenna	A090215	2021.03.02	1 year
3	PREAMP	HP	8449B	3008A00160	2020.10.13	1 year
4	PREAMP	HP	8447D	2944A07999	2021.05.19	1 year
5	EMI TEST RECEIVER	Rohde&Schwarz	ESR3	101891	2020.10.13	1 year
6	VECTOR Signal Generator	Rohde&Schwarz	SMU200A	101521	2021.10.13	1 year
7	Signal Generator	Agilent	E4421B	MY4335105	2020.11.12	1 year
8	MXA Signal Analyzer	Agilent	N9020A	MY50510140	2020.10.13	1 year
9	MXA Signal Analyzer	Agilent	N9020A	MY51110104	2020.10.13	1 year
10	ANT Tower&Turn table Controller	Champro	EM 1000	60764	2020.10.13	1 year
11	Anechoic Chamber	Taihe Maorui	9m*6m*6m	966A0001	2021.05.19	1 year
12	Shielding Room	Taihe Maorui	6.4m*4m*3m	643A0001	2020.10.13	1 year
13	RF Power sensor	DARE	RPR3006W	15I00041SNO88	2021.05.19	1 year
14	RF Power sensor	DARE	RPR3006W	15I00041SNO89	2021.05.19	1 year
15	RF power divider	Anritsu	K241B	992289	2021.10.13	1 year
16	Wideband radio communication tester	Rohde&Schwarz	CMW500	154987	2020.10.13	1 year
17	Biconical antenna	Schwarzbeck	VHA 9103	91032360	2020.11.04	1 year
18	Biconical antenna	Schwarzbeck	VHA 9103	91032361	2020.10.13	1 year
19	Broadband Hybrid Antennas	Schwarzbeck	VULB9163	VULB9163#958	2021.05.19	1 year
20	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1680	2021.05.19	1 year
21	Active Receive Loop Antenna	Schwarzbeck	FMZB 1919B	00023	2020.10.13	1 year
22	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170651	2020.10.13	1 year
23	Microwave Broadband Preamplifier	Schwarzbeck	BBV 9721	100472	2020.10.13	1 year
24	Active Loop Antenna	Com-Power	AL-130R	10160009	2020.10.13	1 year
25	Power Meter	KEYSIGHT	N1911A	MY50520168	2020.10.13	1 year

3 CONDUCTED EMISSION TEST

3.1 Test Limit

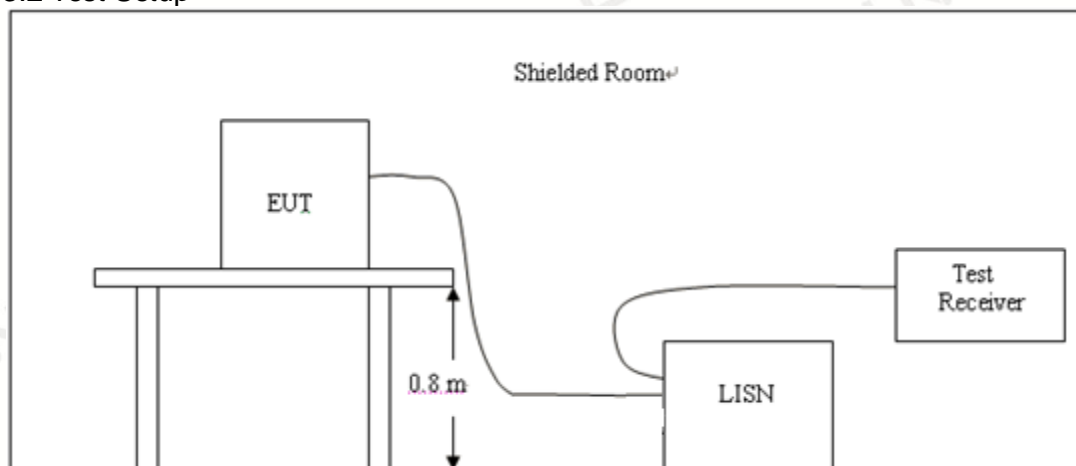
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

Frequency (MHz)	Maximum RF Line Voltage(dB μ V)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15~0.50	79	66	66~56*	56~46*
0.50~5.00	73	60	56	46
5.00~30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

3.2 Test Setup



3.3 Test Procedure

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. A wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
2. Support equipment, if needed, was placed as per ANSI C63.10.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
4. If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer/Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.

3.4 Test Result

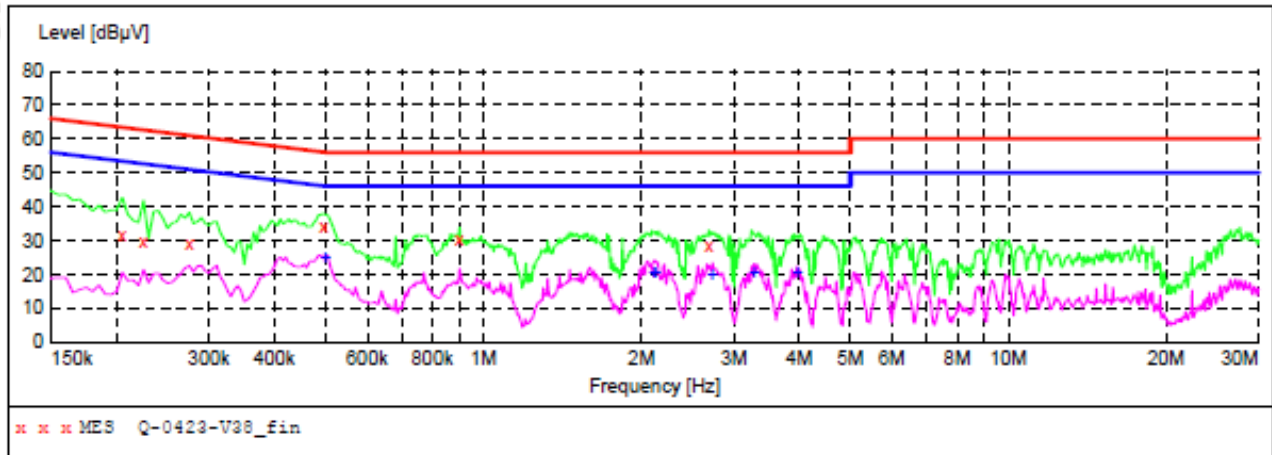
PSSS

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.

Temperature:	26°C	Relative Humidity:	40%
Test Date:	April 23, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Phase:	Line
Test Mode:	Transmitting mode		
Adapter:	GKYZD0150160US		

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "Q-0423-V38_fin"

2021-4-23 16:55

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.205000	31.80	8.1	63	31.6	QP	L1	GND
0.225000	29.90	8.2	63	32.7	QP	L1	GND
0.275000	28.90	8.3	61	32.1	QP	L1	GND
0.495000	33.90	8.6	56	22.2	QP	L1	GND
0.900000	30.60	8.7	56	25.4	QP	L1	GND
2.687353	28.40	8.9	56	27.6	QP	L1	GND

MEASUREMENT RESULT: "Q-0423-V38_fin2"

2021-4-23 16:55

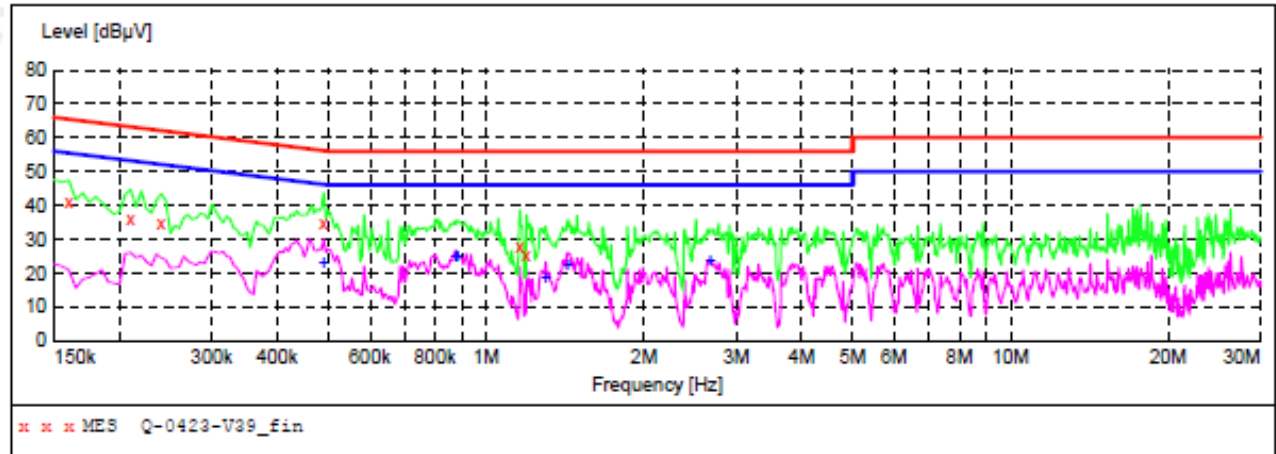
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.500000	25.40	8.6	46	20.6	AV	L1	GND
2.114959	20.80	8.8	46	25.2	AV	L1	GND
2.123419	20.90	8.8	46	25.1	AV	L1	GND
2.730609	20.60	8.9	46	25.4	AV	L1	GND
3.281031	20.90	9.0	46	25.1	AV	L1	GND
3.958174	21.00	9.1	46	25.0	AV	L1	GND

Remark: Factor = Insertion Loss + Cable Loss, Result = Reading + Factor, Margin = Result - Limit.

Temperature:	26°C	Relative Humidity:	40%
Test Date:	April 23, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Phase:	Neutral
Test Mode:	Transmitting mode		
Adapter:	GKYZD0150160US		

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "Q-0423-V39_fin"

2021-4-23 16:58

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.160000	41.20	8.1	66	24.3	QP	N	GND
0.210000	36.10	8.2	63	27.1	QP	N	GND
0.240000	34.60	8.2	62	27.5	QP	N	GND
0.490000	35.00	8.6	56	21.2	QP	N	GND
1.160000	28.10	8.8	56	27.9	QP	N	GND
1.195000	25.30	8.8	56	30.7	QP	N	GND

MEASUREMENT RESULT: "Q-0423-V39_fin2"

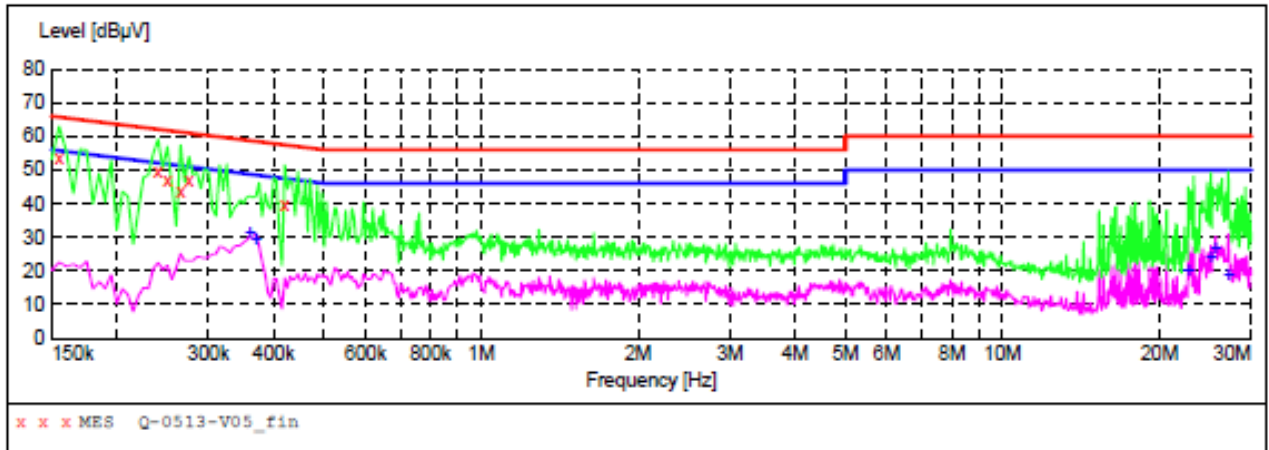
2021-4-23 16:58

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.490000	23.70	8.6	46	22.5	AV	N	GND
0.875000	25.60	8.7	46	20.4	AV	N	GND
0.880000	25.60	8.7	46	20.4	AV	N	GND
1.300000	19.30	8.8	46	26.7	AV	N	GND
1.430000	22.80	8.8	46	23.2	AV	N	GND
2.676647	23.90	8.9	46	22.1	AV	N	GND

Remark: Factor = Insertion Loss + Cable Loss, Result = Reading + Factor, Margin = Result – Limit.

Temperature:	26°C	Relative Humidity:	40%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Phase:	Line
Test Mode:	Transmitting mode		
Adapter:	JY024160150AA-UL		

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



MEASUREMENT RESULT: "Q-0513-V05_fin"

2021-5-14 14:56

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.155000	53.80	8.1	66	11.9	QP	L1	GND
0.240000	49.70	8.2	62	12.4	QP	L1	GND
0.250000	47.20	8.3	62	14.6	QP	L1	GND
0.265000	43.60	8.3	61	17.7	QP	L1	GND
0.275000	46.90	8.3	61	14.1	QP	L1	GND
0.420000	40.00	8.5	57	17.4	QP	L1	GND

MEASUREMENT RESULT: "Q-0513-V05_fin2"

2021-5-14 14:56

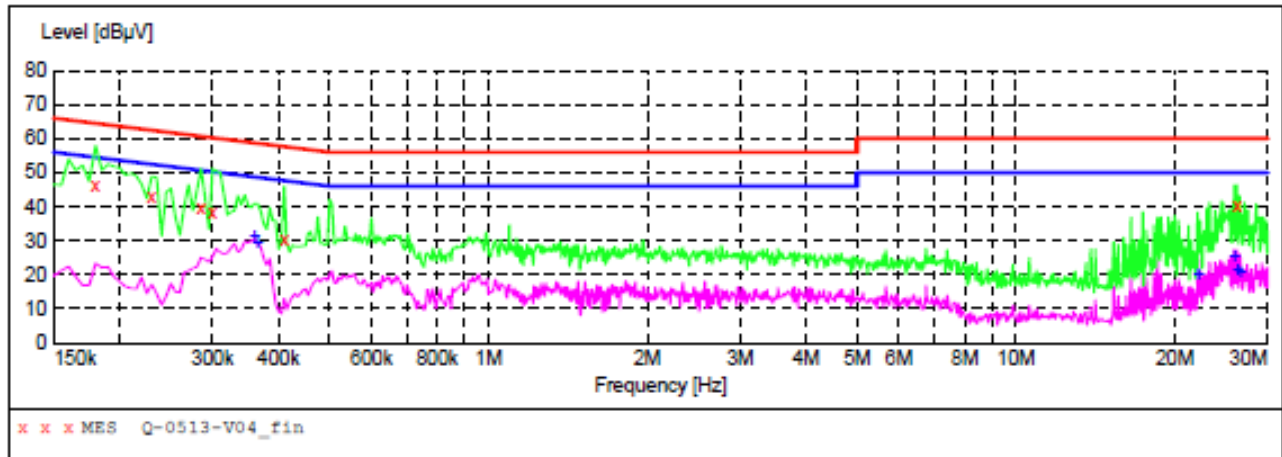
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.360000	31.90	8.4	49	16.8	AV	L1	GND
0.370000	29.70	8.5	49	18.8	AV	L1	GND
22.743699	20.80	10.5	50	29.2	AV	L1	GND
25.130661	24.20	10.8	50	25.8	AV	L1	GND
25.637312	26.90	10.8	50	23.1	AV	L1	GND
27.110933	19.40	10.9	50	30.6	AV	L1	GND

Remark: Factor = Insertion Loss + Cable Loss, Result = Reading + Factor, Margin = Result – Limit.

Temperature:	26°C	Relative Humidity:	40%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Phase:	Neutral
Test Mode:	Transmitting mode		
Adapter:	JY024160150AA-UL		

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "Q-0513-V04_fin"

2021-5-14 14:52

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.180000	46.20	8.1	65	18.3	QP	N	GND
0.230000	42.90	8.2	62	19.5	QP	N	GND
0.285000	40.00	8.3	61	20.7	QP	N	GND
0.300000	38.40	8.4	60	21.8	QP	N	GND
0.410000	30.70	8.5	58	26.9	QP	N	GND
26.258793	40.20	10.8	60	19.8	QP	N	GND

MEASUREMENT RESULT: "Q-0513-V04_fin2"

2021-5-14 14:52

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.360000	31.50	8.4	49	17.2	AV	N	GND
0.365000	29.90	8.5	49	18.7	AV	N	GND
22.116943	20.60	10.5	50	29.4	AV	N	GND
25.946191	25.80	10.8	50	24.2	AV	N	GND
26.258793	21.90	10.8	50	28.1	AV	N	GND
26.575160	21.10	10.9	50	28.9	AV	N	GND

Remark: Factor = Insertion Loss + Cable Loss, Result = Reading + Factor, Margin = Result – Limit.

4 RADIATED EMISSION TEST

4.1 Test Limit

1. Limit (Field strength of the fundamental signal):

Frequency	Limit(dBuV/m@3m)	Remark
902MHz-928MHz	94.00	Quasi-peak Value
	114.00	peak Value

2. Limit (Spurious Emissions):

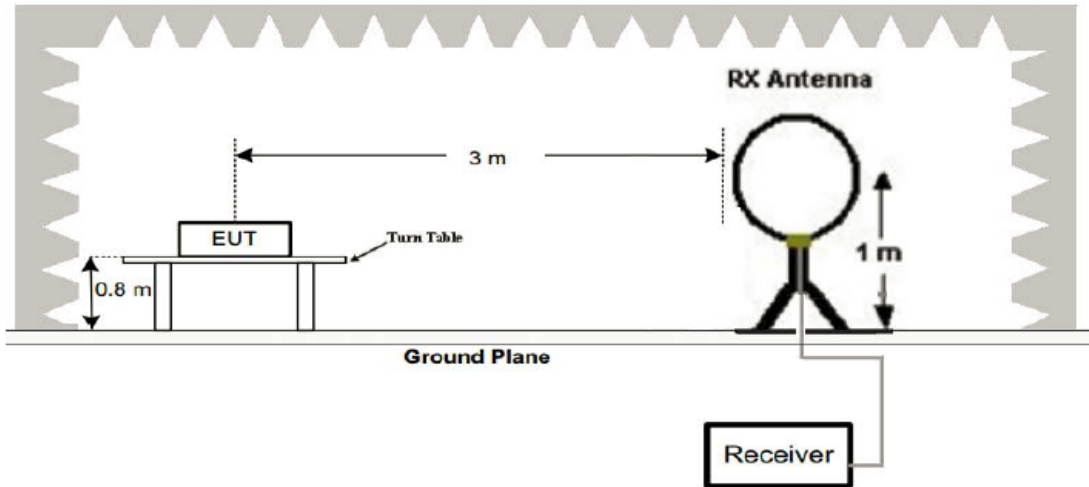
Frequency	Limit(dBuV/m@3m)	Remark
0.009-0.490	2400/F(KHz)	Quasi-peak Value
0.490-1.705	24000/F(KHz)	Quasi-peak Value
1.705-30	30	Quasi-peak Value
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

3. Limit (Band edge):

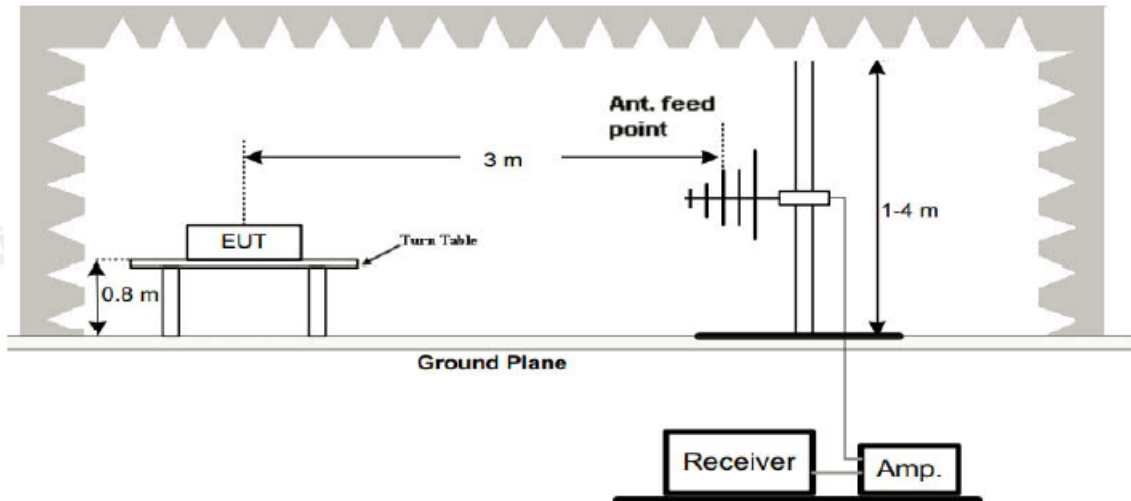
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

4.2 Test Setup

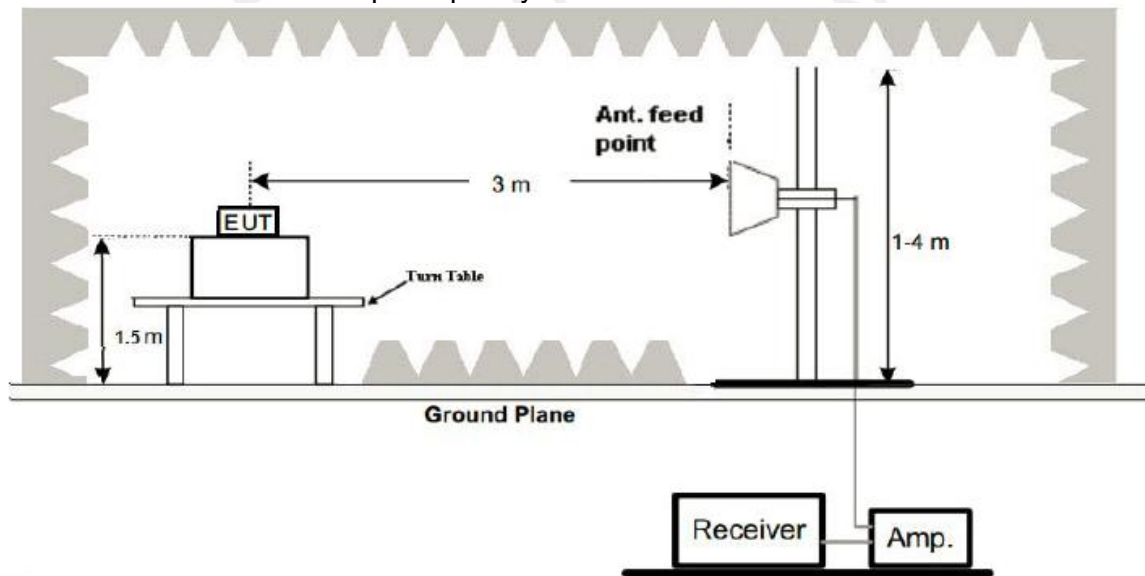
1. Radiated Emission Test-Up Frequency Below 30MHz



2. Radiated Emission Test-Up Frequency 30MHz~1GHz



3. Radiated Emission Test-Up Frequency Above 1GHz



4. Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	Peak	1MHz	10Hz	Average Value

4.3 Test Procedure

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber in below 1GHz, 1.5m above the ground in above 1GHz. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height 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.
4. 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.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
7. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

4.4 Test Result

Pass

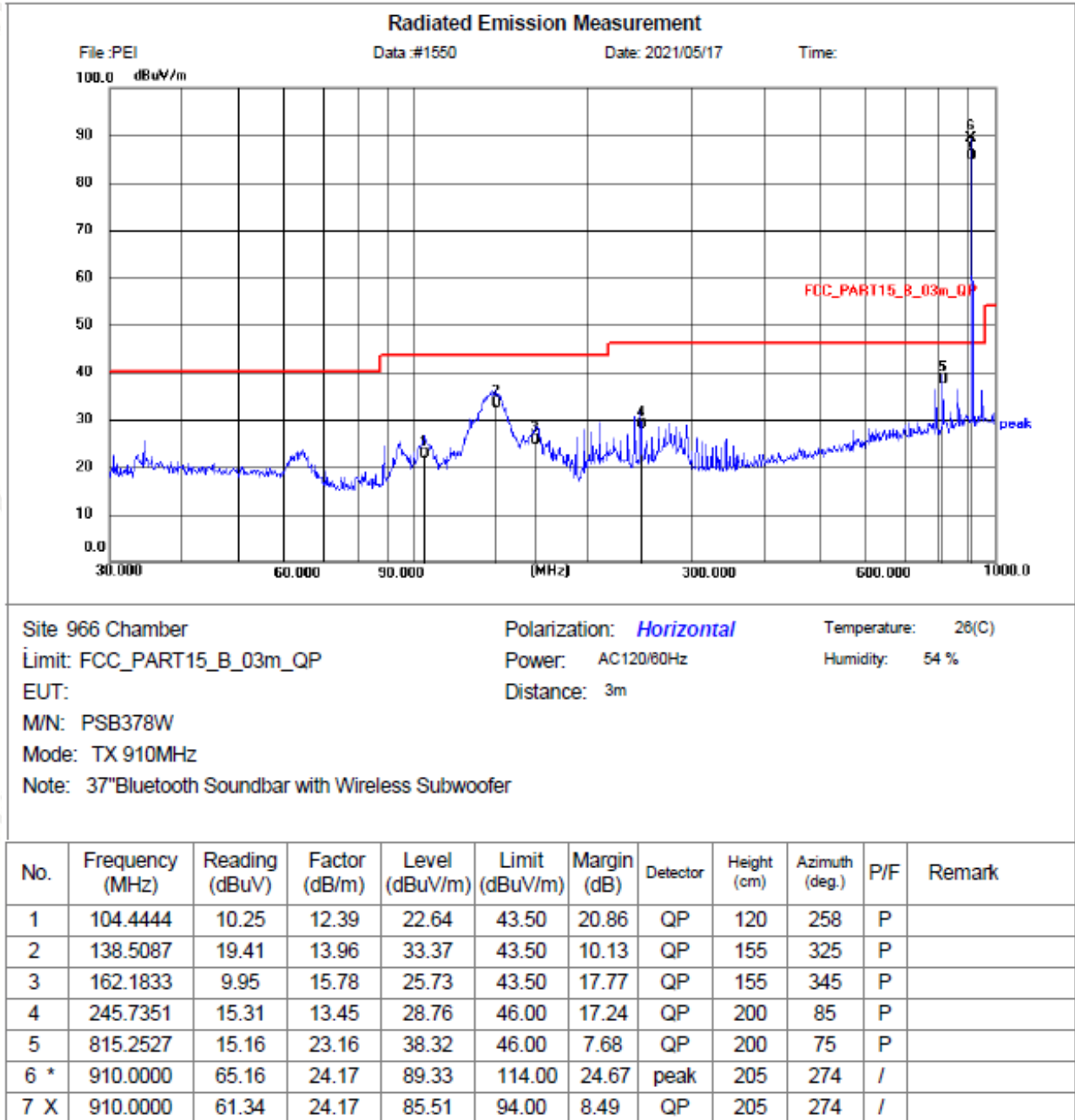
Spurious Emissions:

For 9 kHz-30MHz Test Results:

Note: The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement.

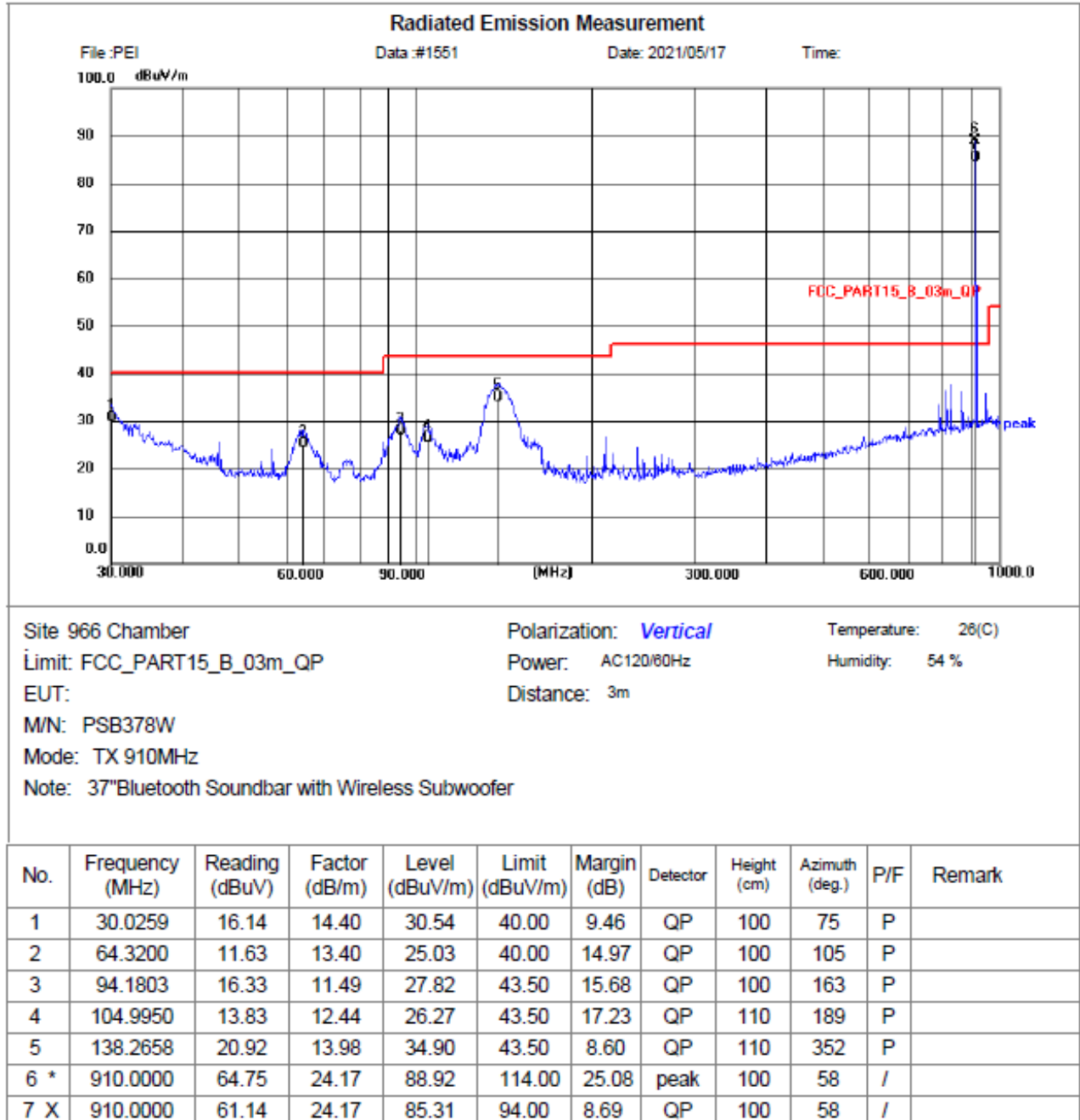
For 30MHz-1GHz Test Results:

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 910MHz		
Adapter:	GKYZD0150160US		



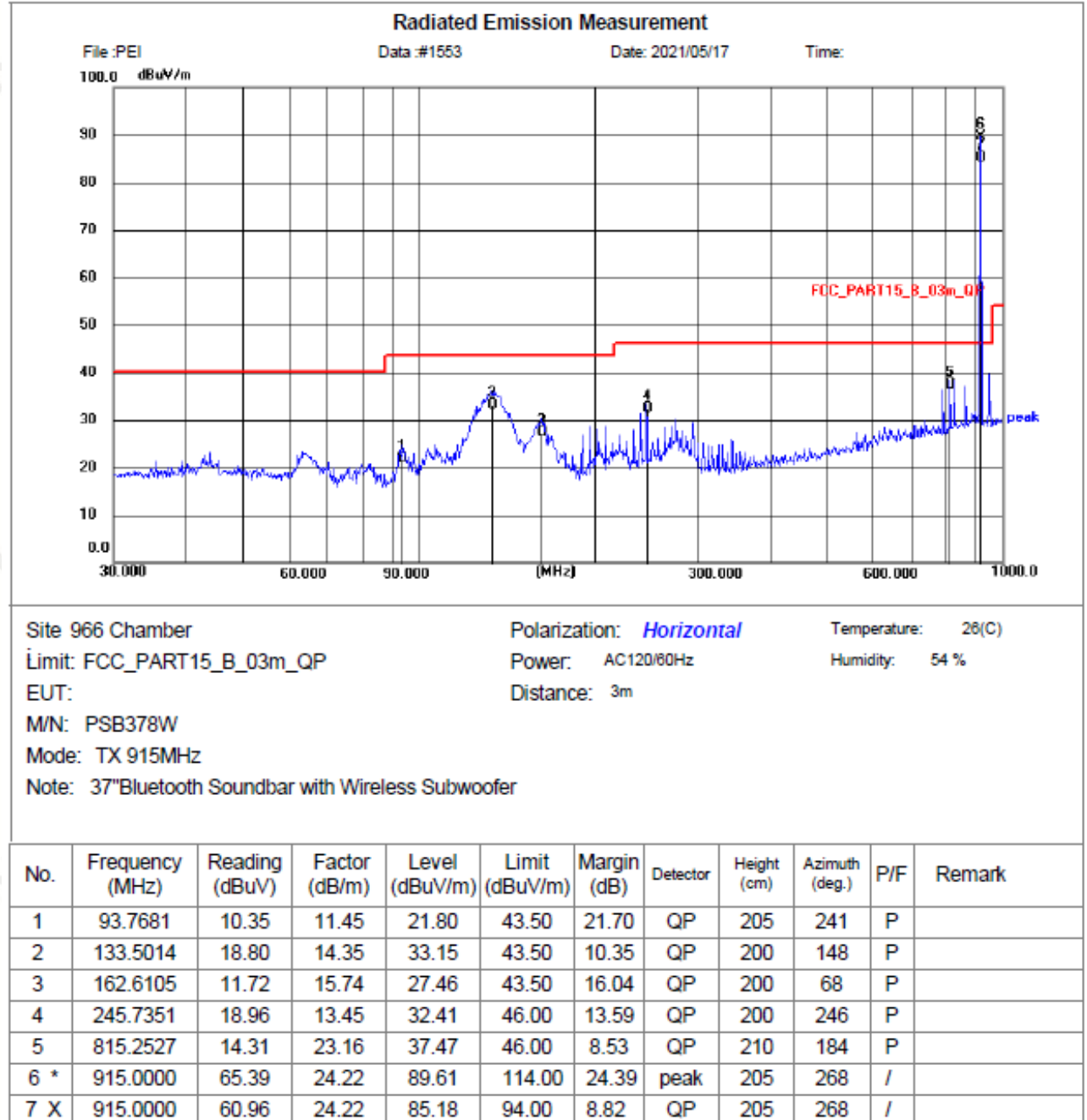
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 910MHz		
Adapter:	GKYZD0150160US		



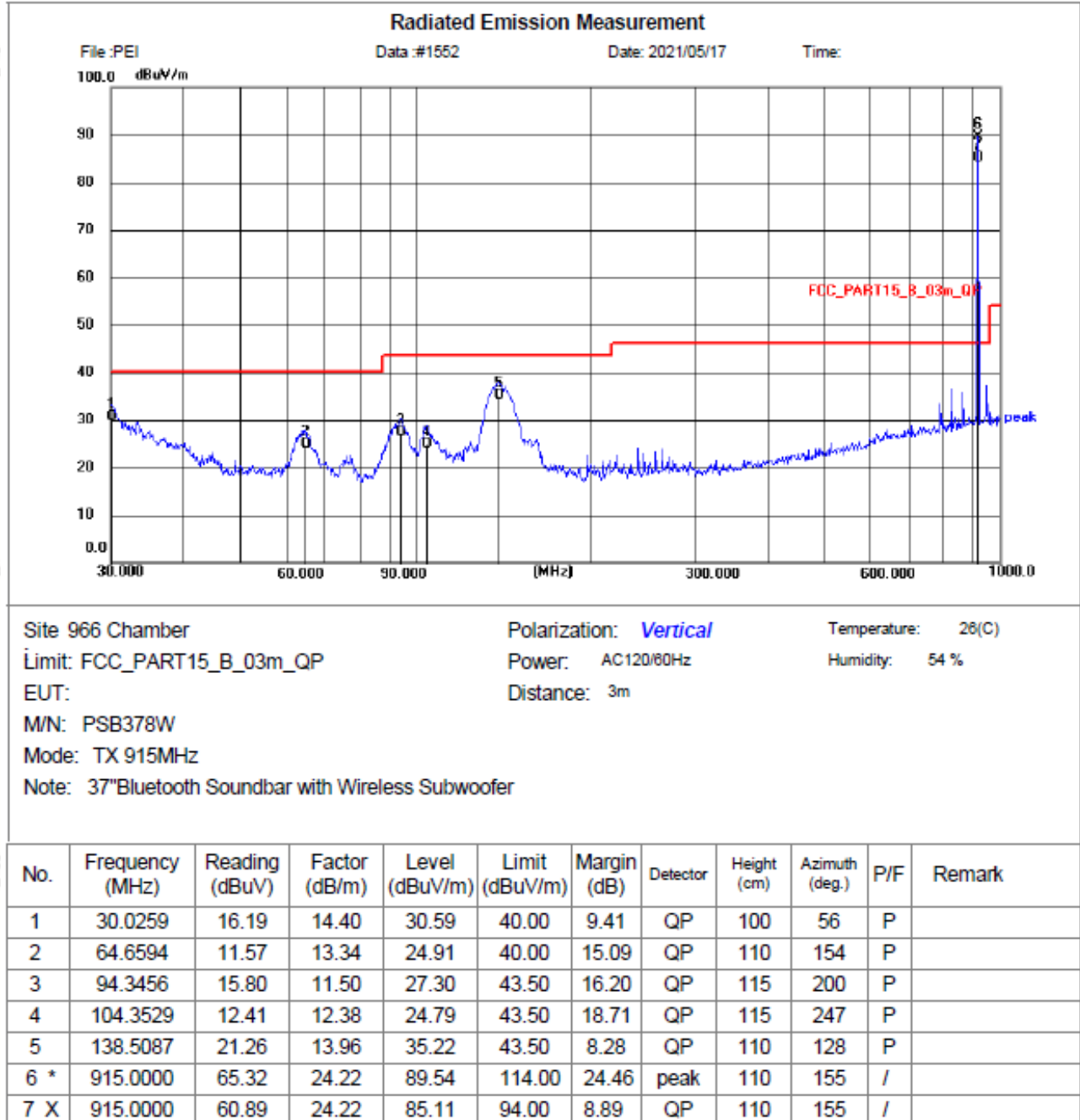
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 915MHz		
Adapter:	GKYZD0150160US		



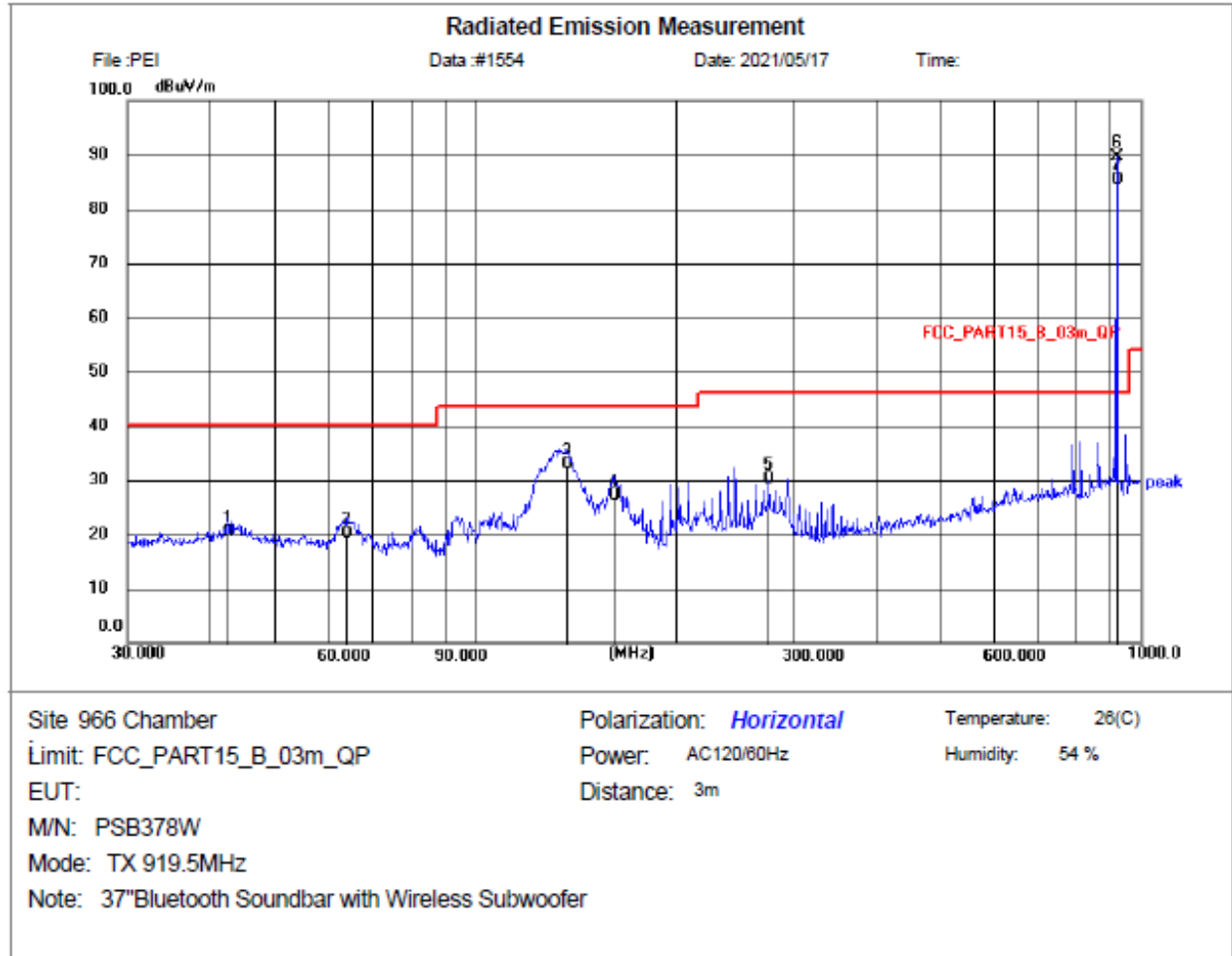
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 915MHz		
Adapter:	GKYZD0150160US		



Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

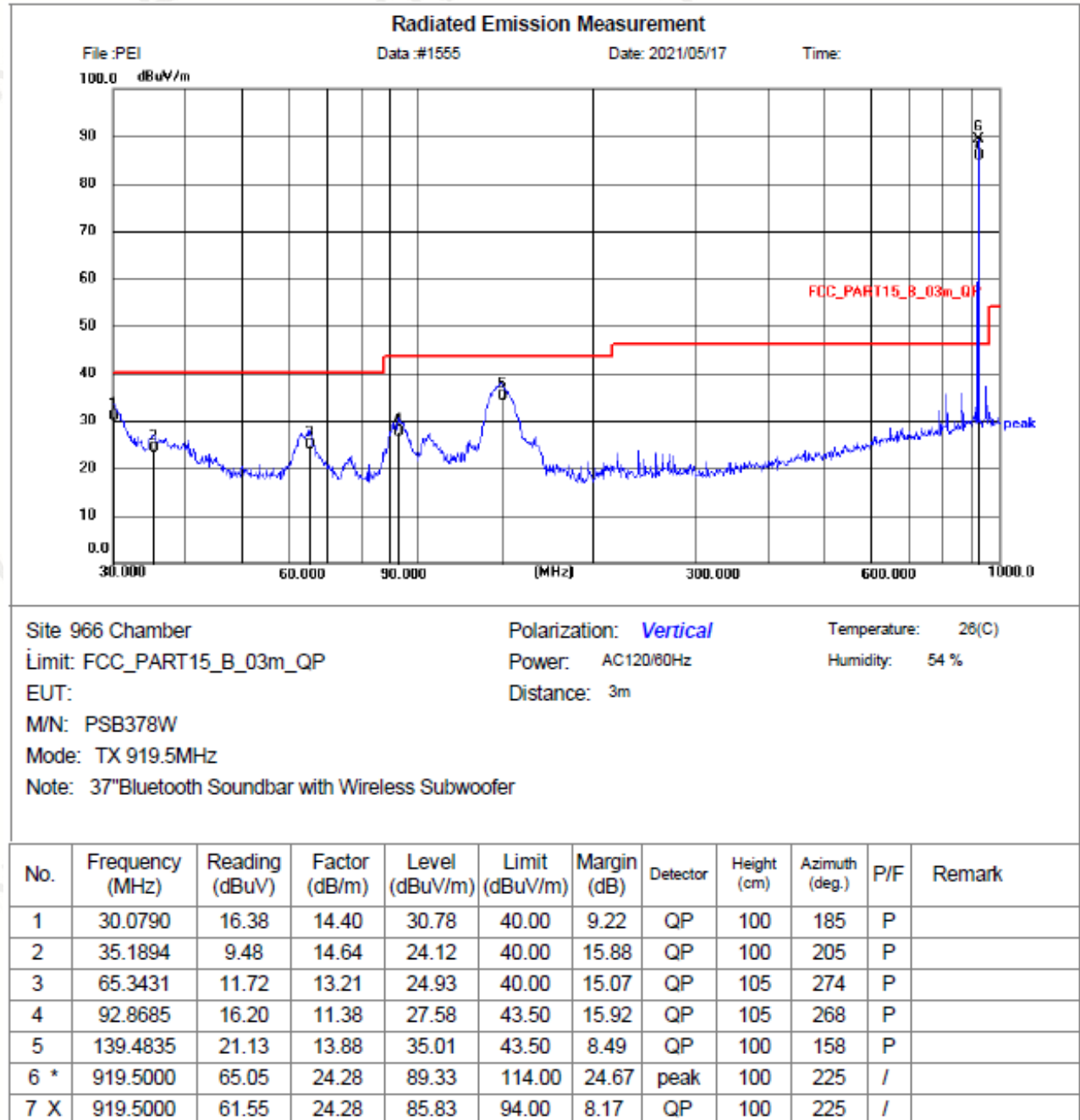
Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 919.5MHz		
Adapter:	GKYZD0150160US		



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	42.4508	5.22	15.15	20.37	40.00	19.63	QP	185	274	P	
2	64.2074	6.71	13.42	20.13	40.00	19.87	QP	185	195	P	
3	136.9388	18.78	14.08	32.86	43.50	10.64	QP	200	106	P	
4	161.7572	11.36	15.82	27.18	43.50	16.32	QP	200	258	P	
5	276.6080	16.02	14.21	30.23	46.00	15.77	QP	205	58	P	
6 *	919.5000	65.42	24.28	89.70	114.00	24.30	peak	185	285	/	
7 X	919.5000	61.08	24.28	85.36	94.00	8.64	QP	185	285	/	

Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

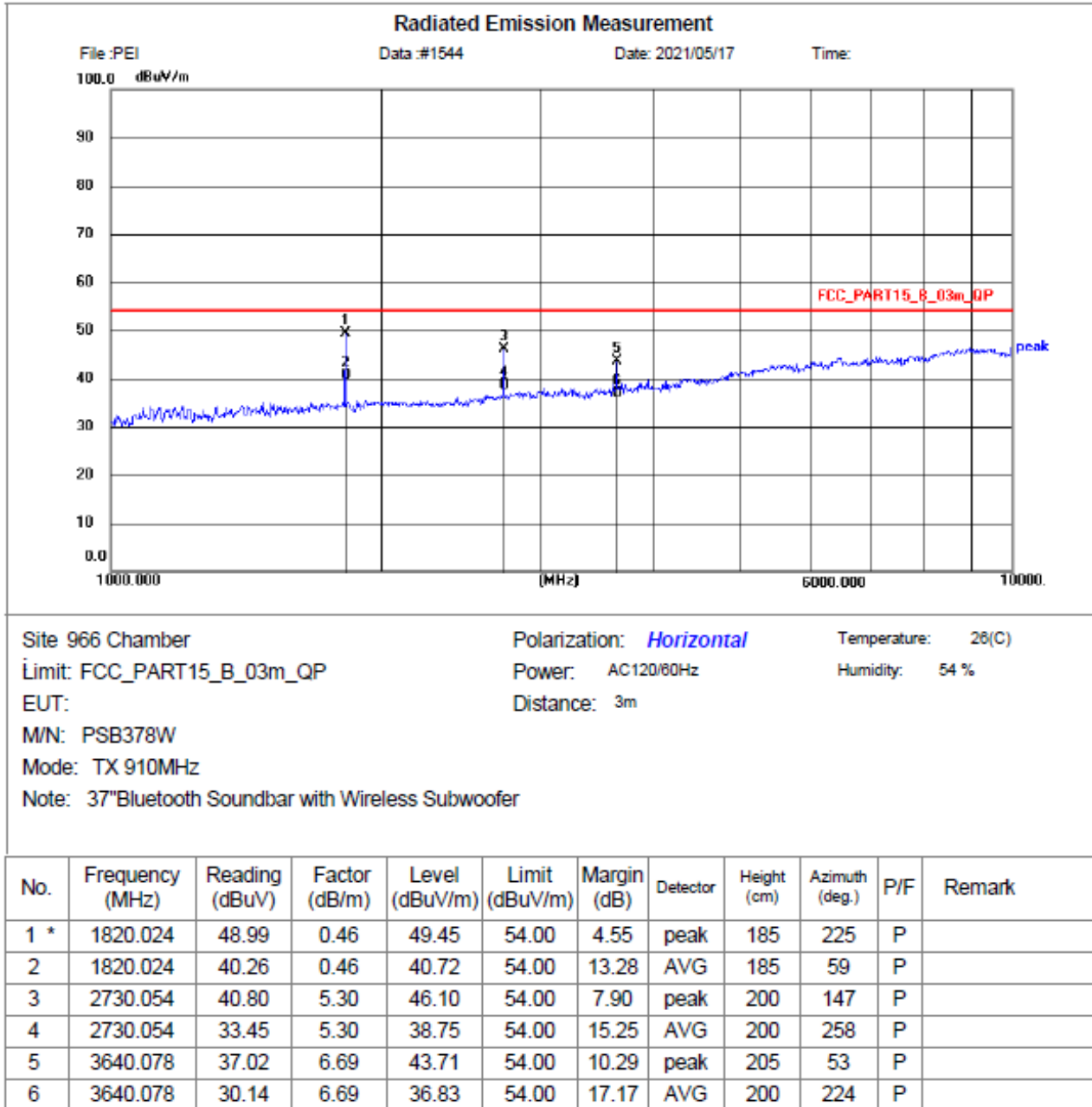
Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 919.5MHz		
Adapter:	GKYZD0150160US		



Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

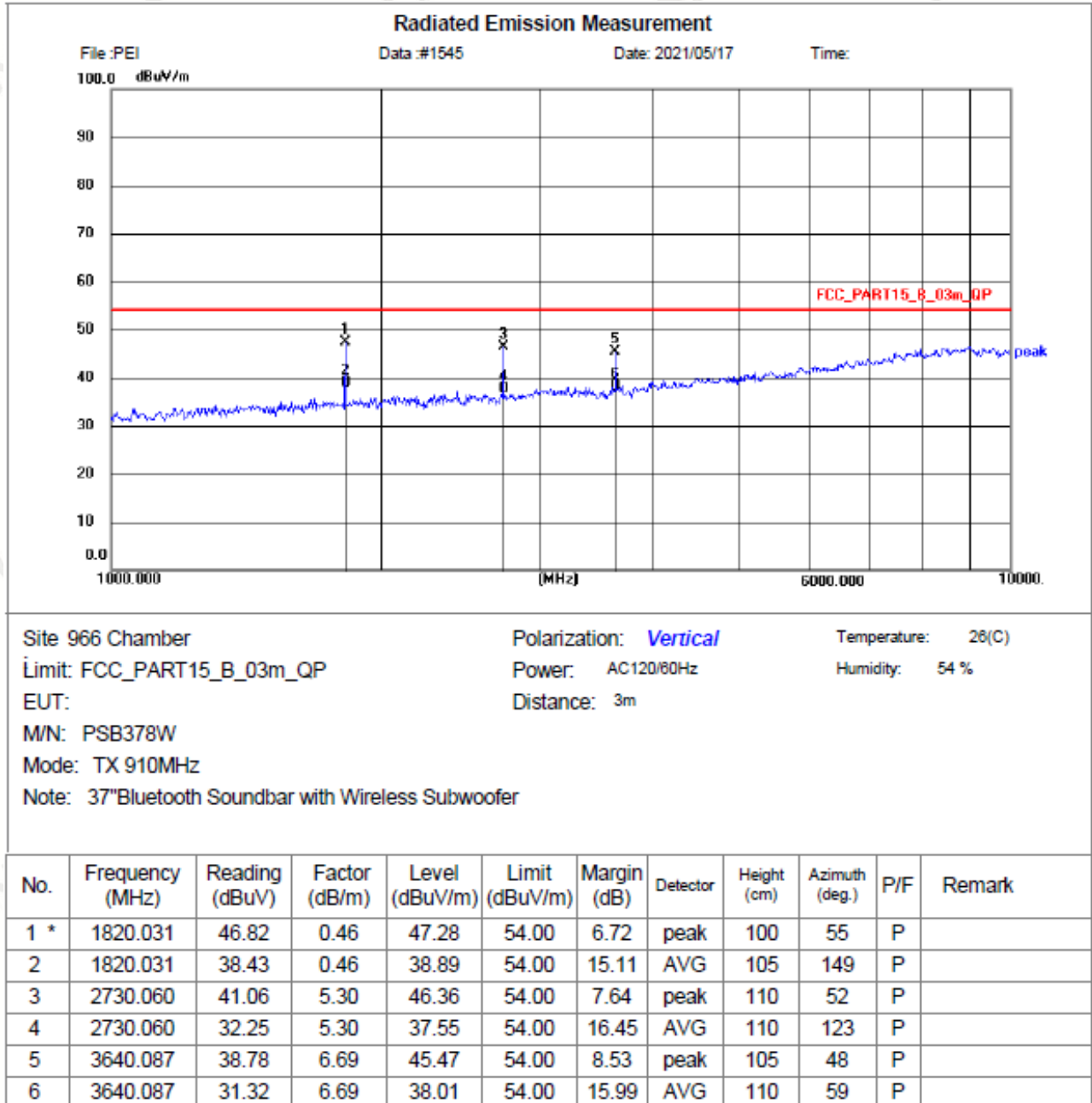
For 1GHz-10GHz Test Results:

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 910MHz		
Adapter:	GKYZD0150160US		



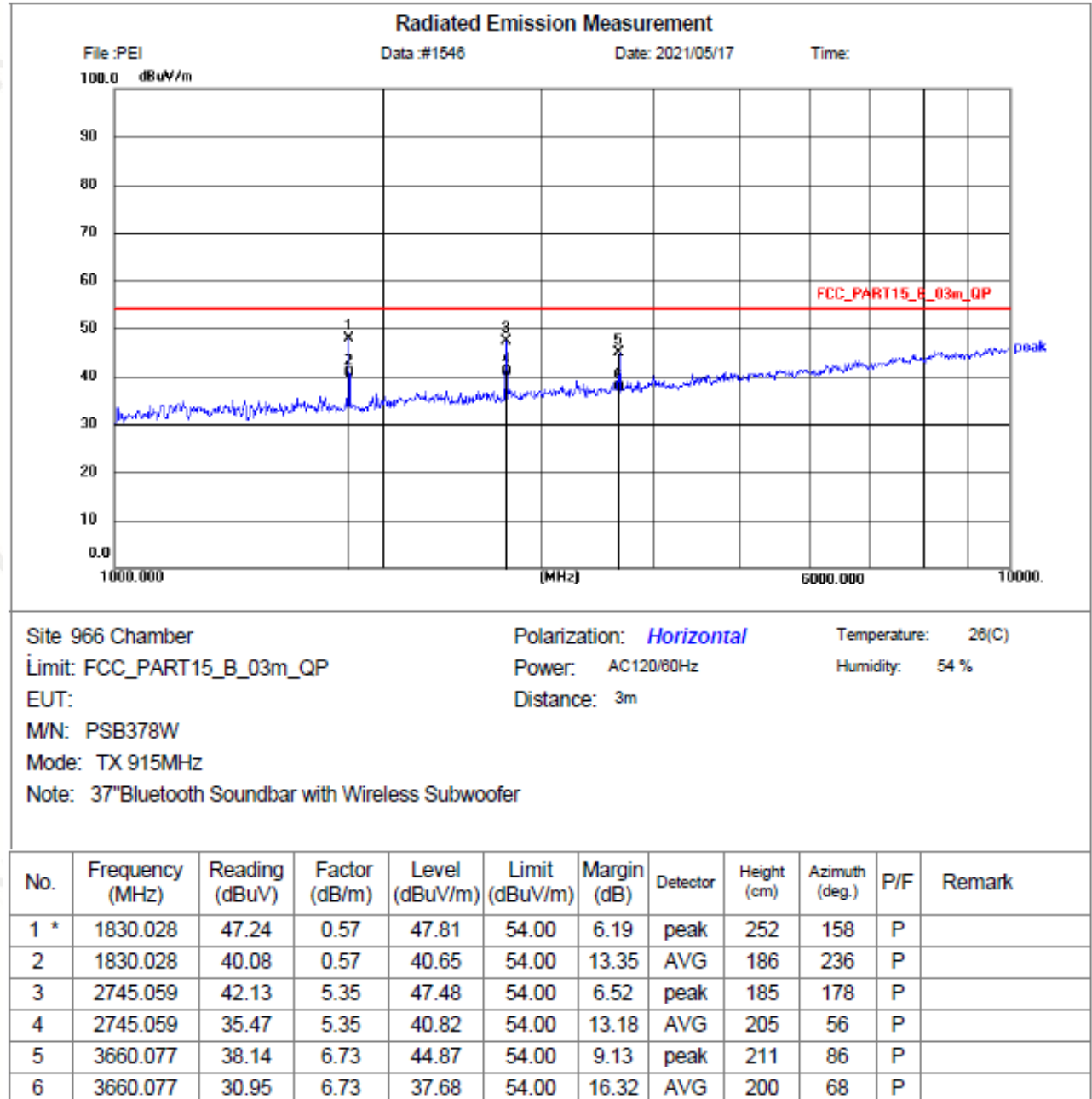
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 910MHz		
Adapter:	GKYZD0150160US		



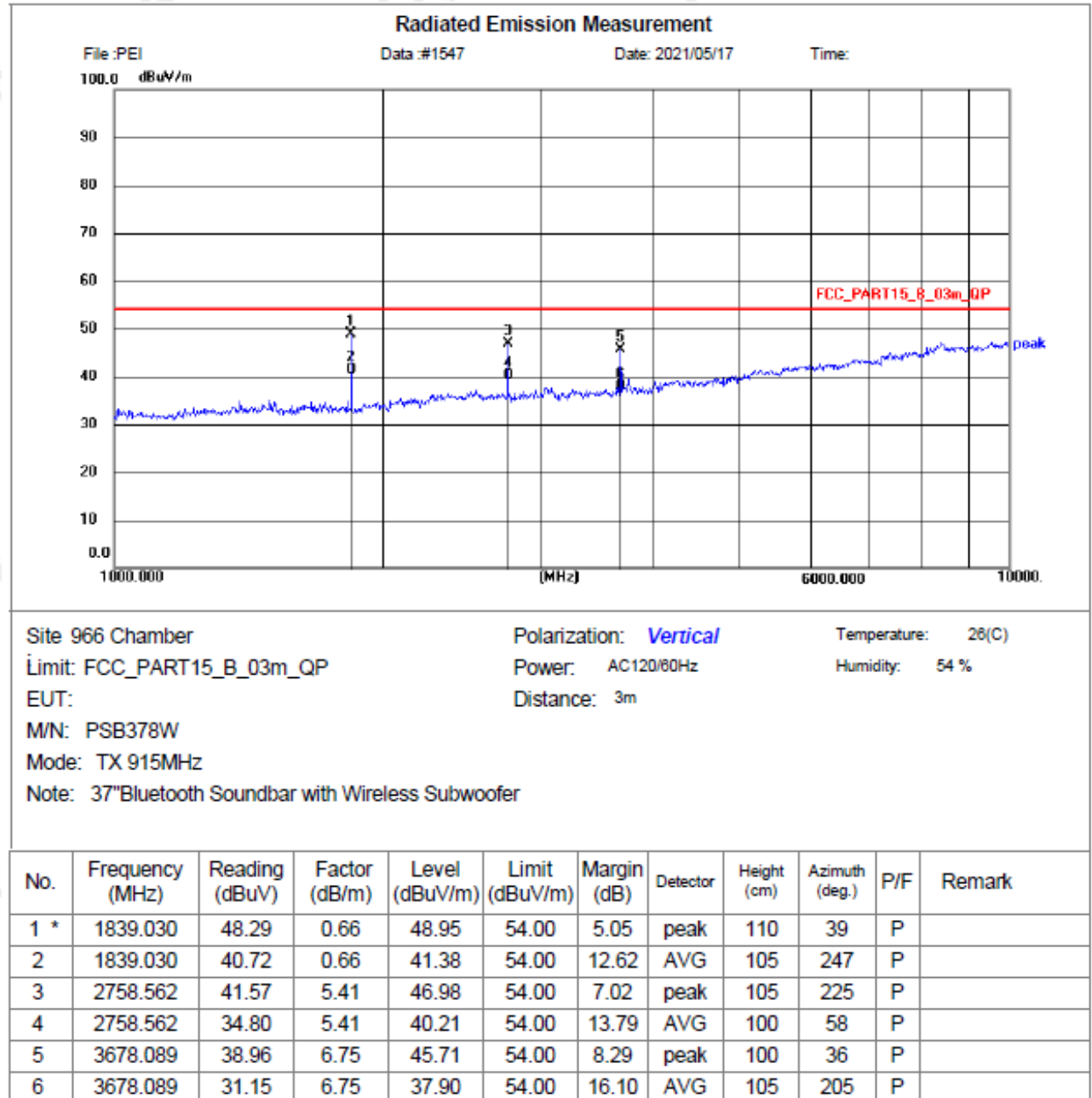
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 915MHz		
Adapter:	GKYZD0150160US		



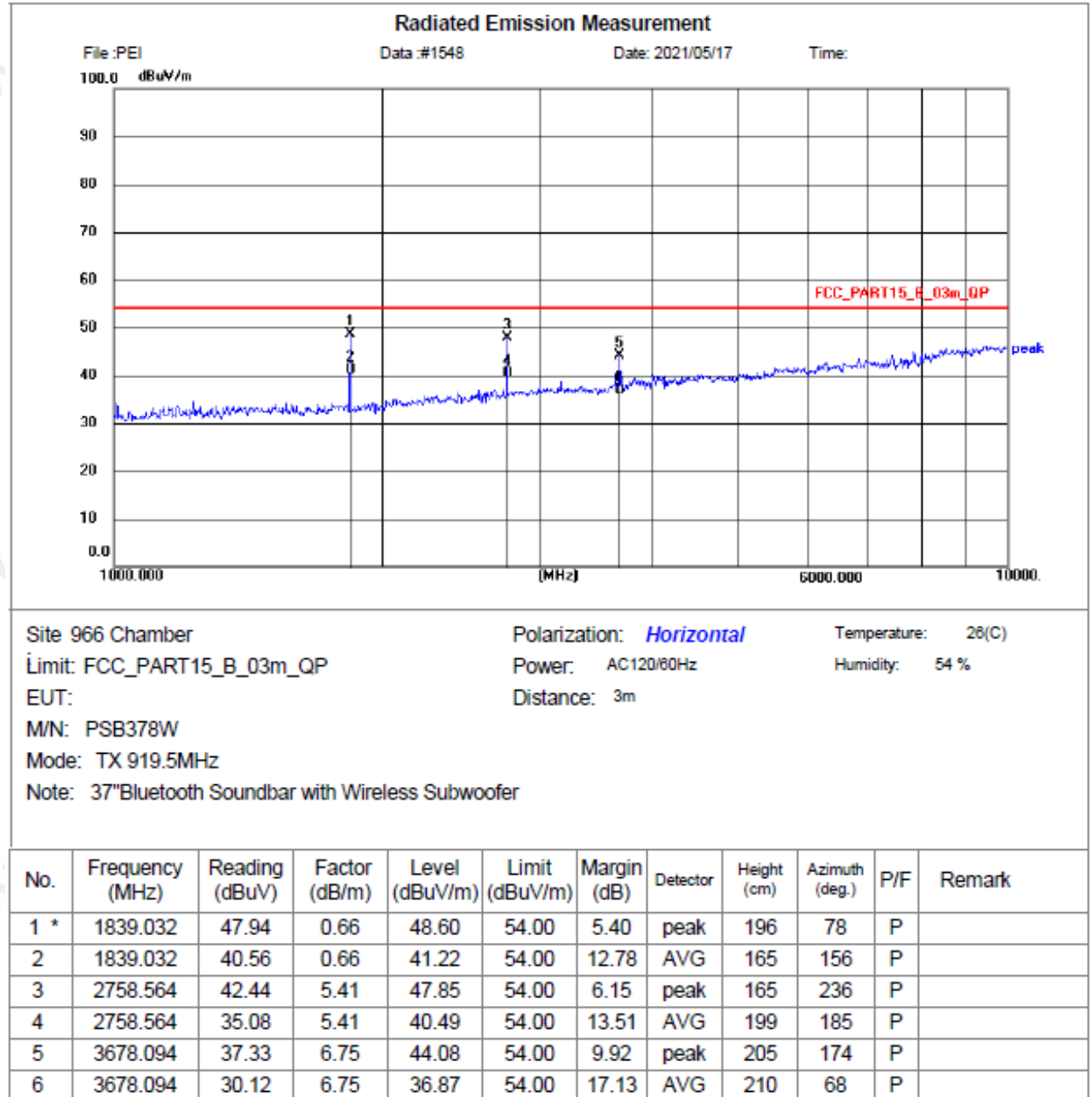
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 915MHz		
Adapter:	GKYZD0150160US		



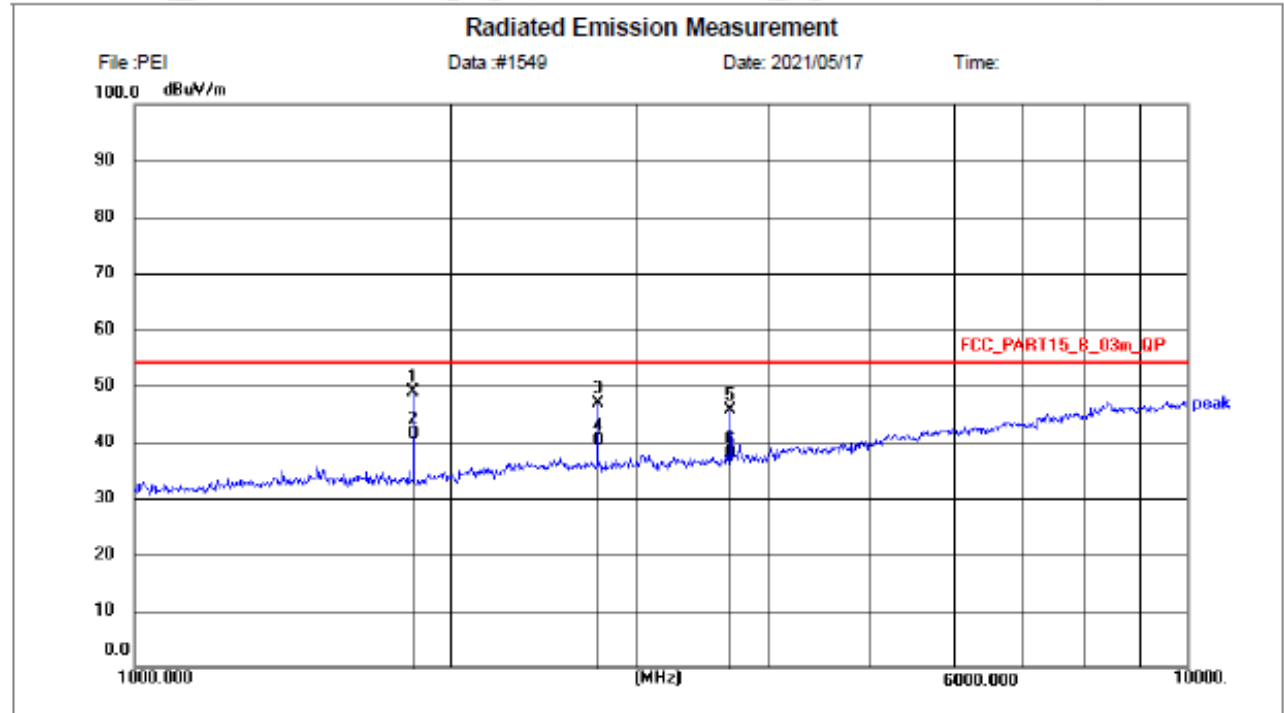
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 919.5MHz		
Adapter:	GKYZD0150160US		



Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 919.5MHz		
Adapter:	GKYZD0150160US		

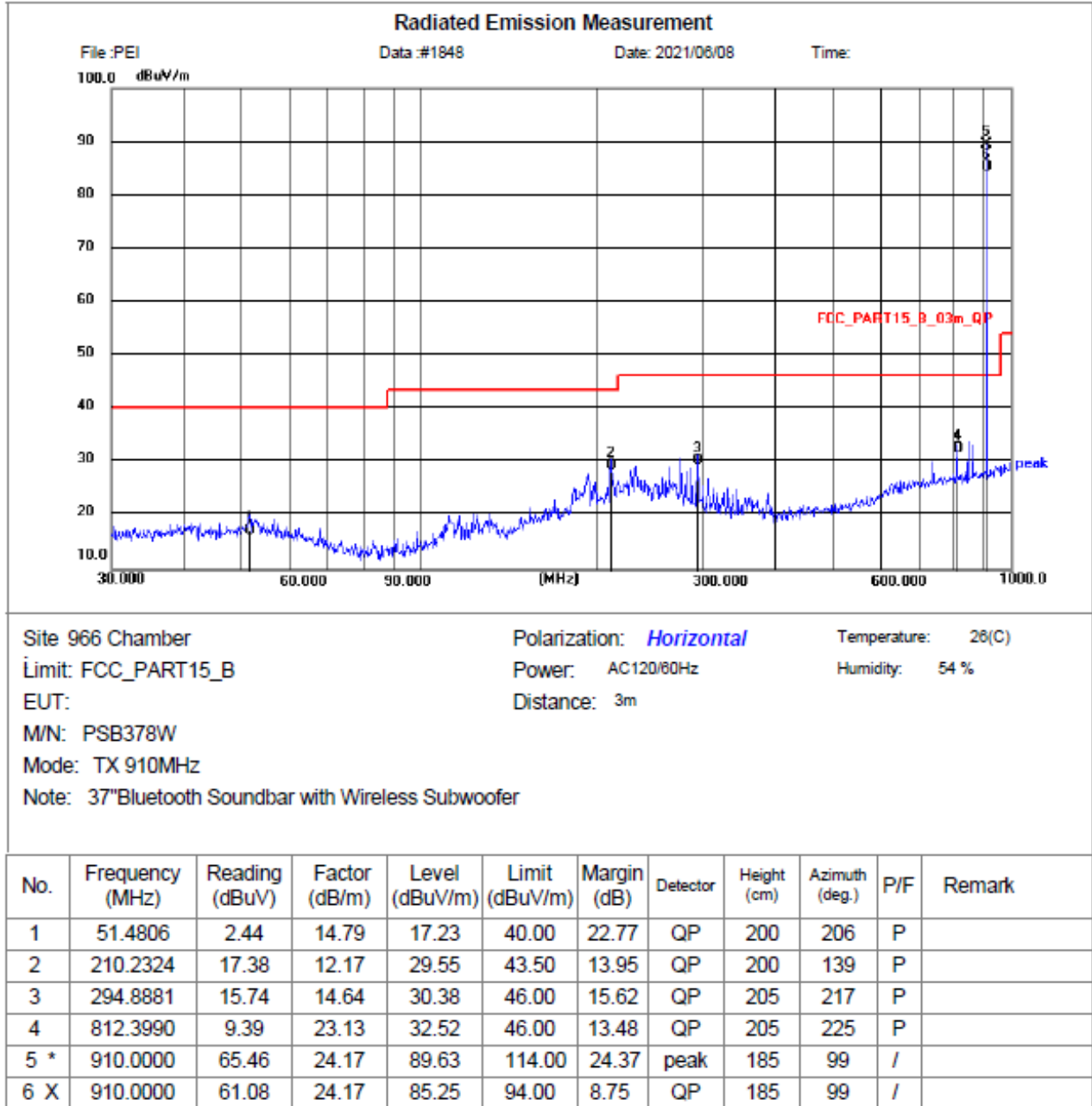


Site: 966 Chamber Polarization: **Vertical** Temperature: 26(C)
Limit: FCC_PART15_B_03m_QP Power: AC120/60Hz Humidity: 54 %
EUT: Distance: 3m
M/N: PSB378W
Mode: TX 919.5MHz
Note: 37"Bluetooth Soundbar with Wireless Subwoofer

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 *	1839.030	48.29	0.66	48.95	54.00	5.05	peak	100	256	P	
2	1839.030	40.72	0.66	41.38	54.00	12.62	AVG	100	247	P	
3	2758.562	41.57	5.41	46.98	54.00	7.02	peak	105	178	P	
4	2758.562	34.80	5.41	40.21	54.00	13.79	AVG	105	210	P	
5	3678.089	38.96	6.75	45.71	54.00	8.29	peak	110	285	P	
6	3678.089	31.15	6.75	37.90	54.00	16.10	AVG	105	185	P	

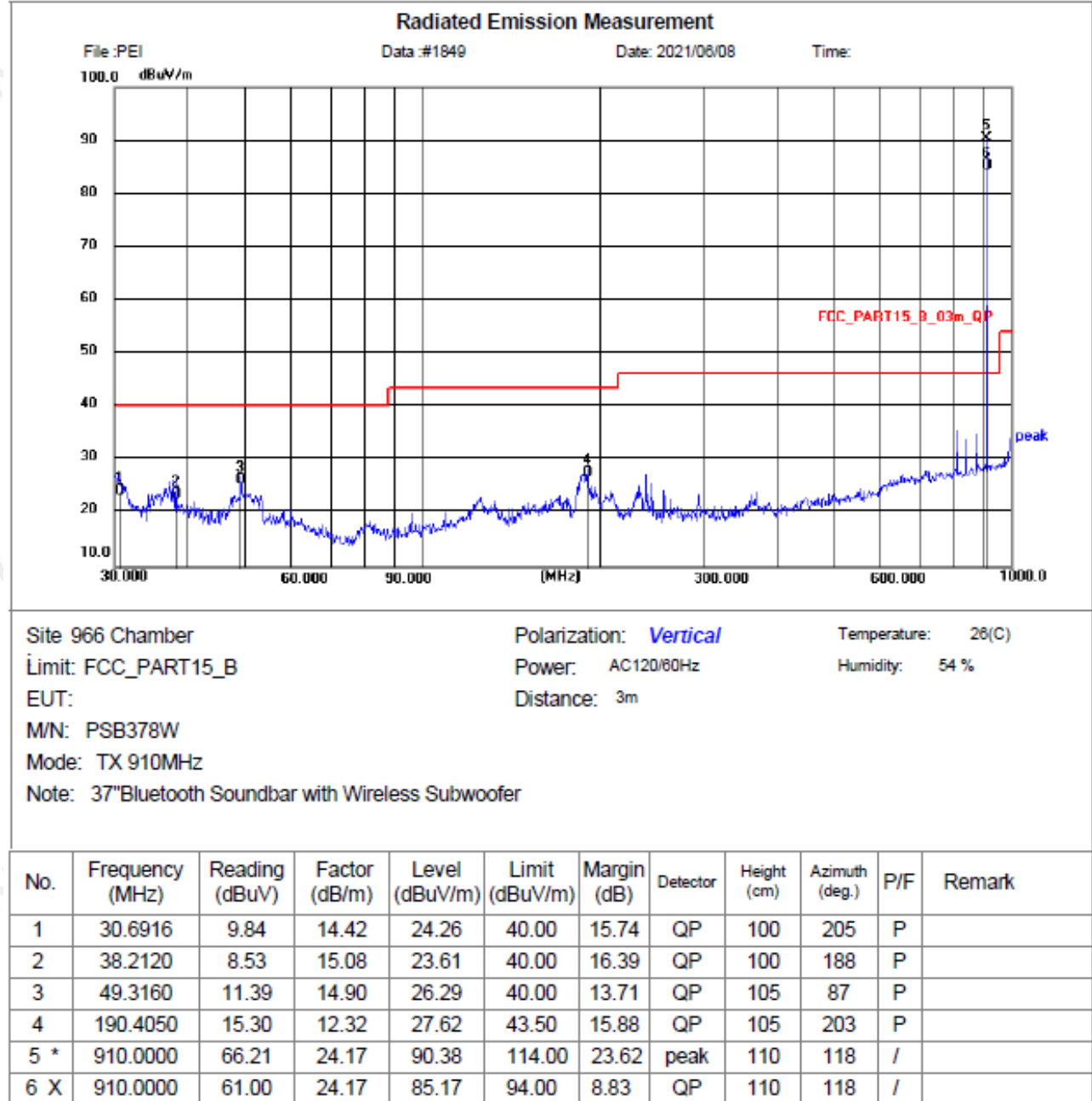
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 910MHz		
Adapter:	JY024160150AA-UL		



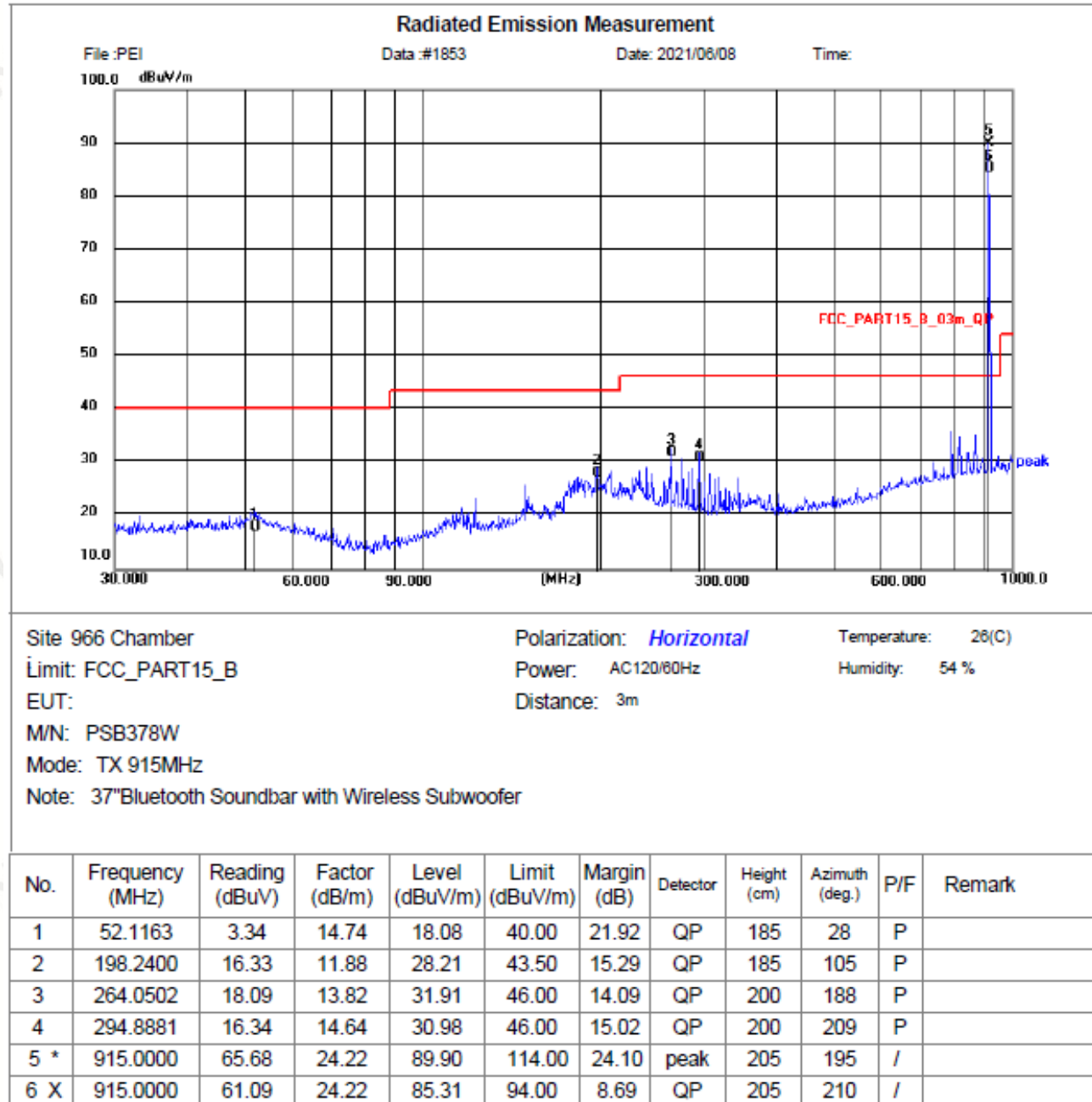
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 910MHz		
Adapter:	JY024160150AA-UL		



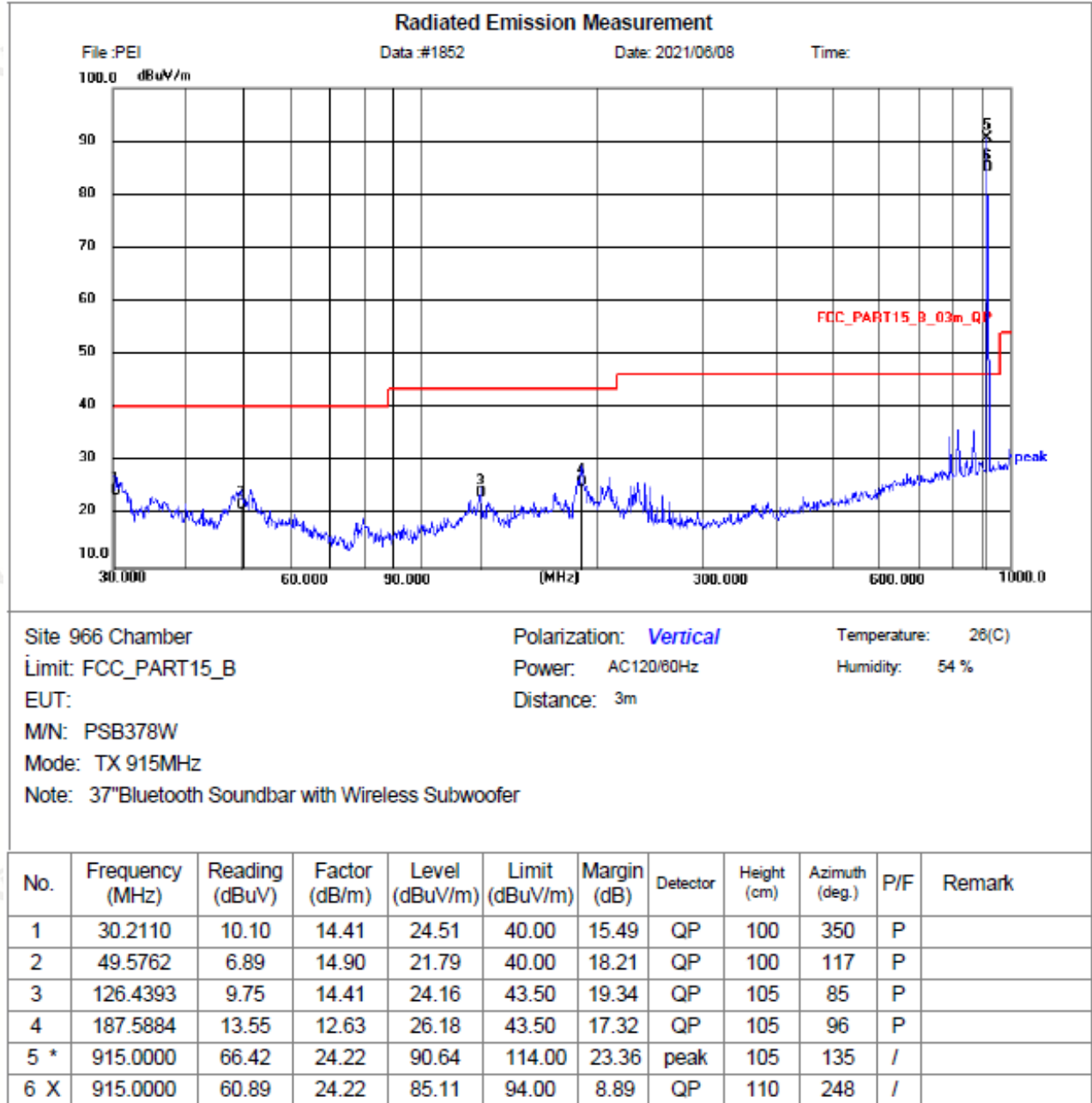
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 915MHz		
Adapter:	JY024160150AA-UL		



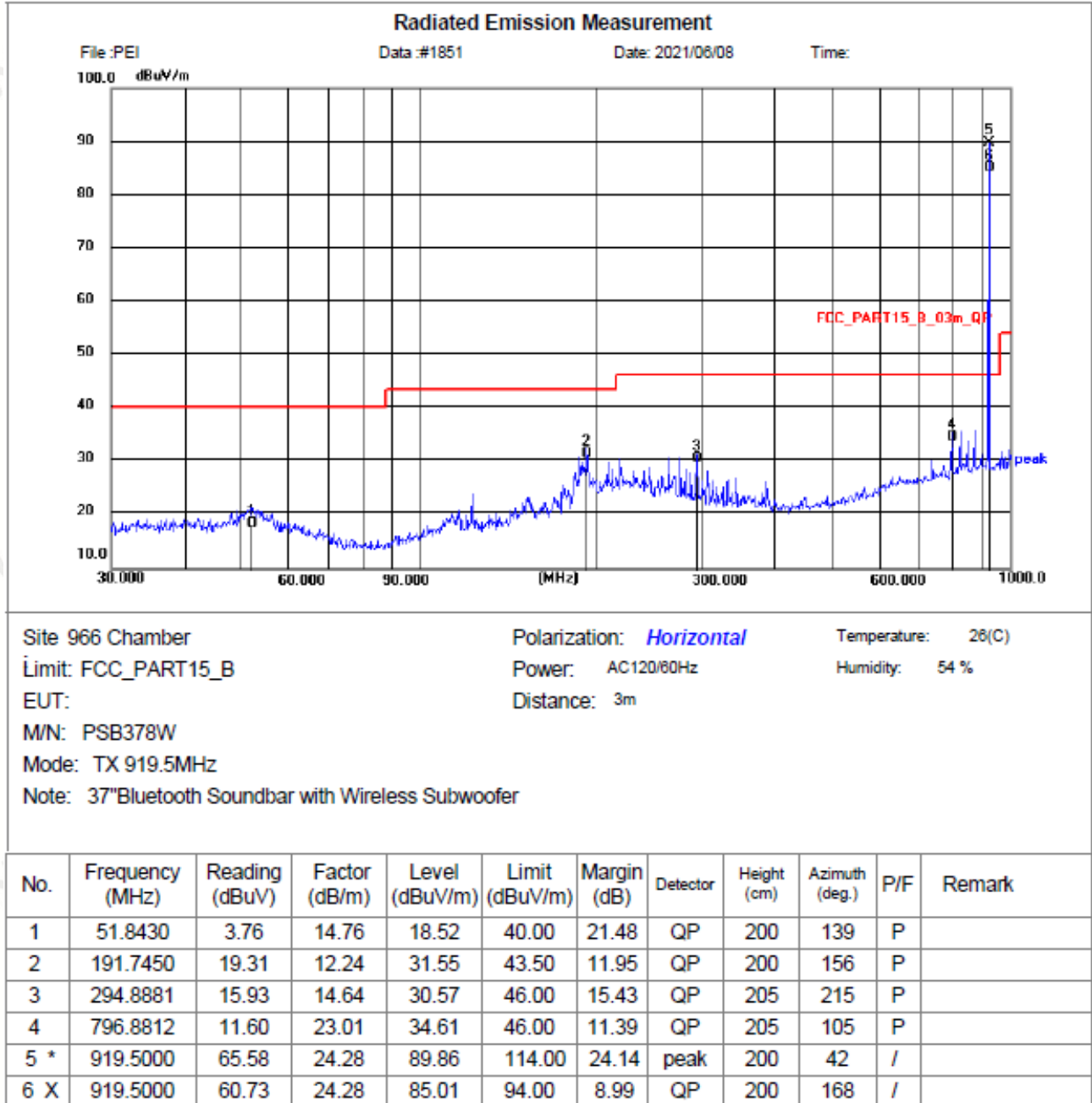
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 915MHz		
Adapter:	JY024160150AA-UL		



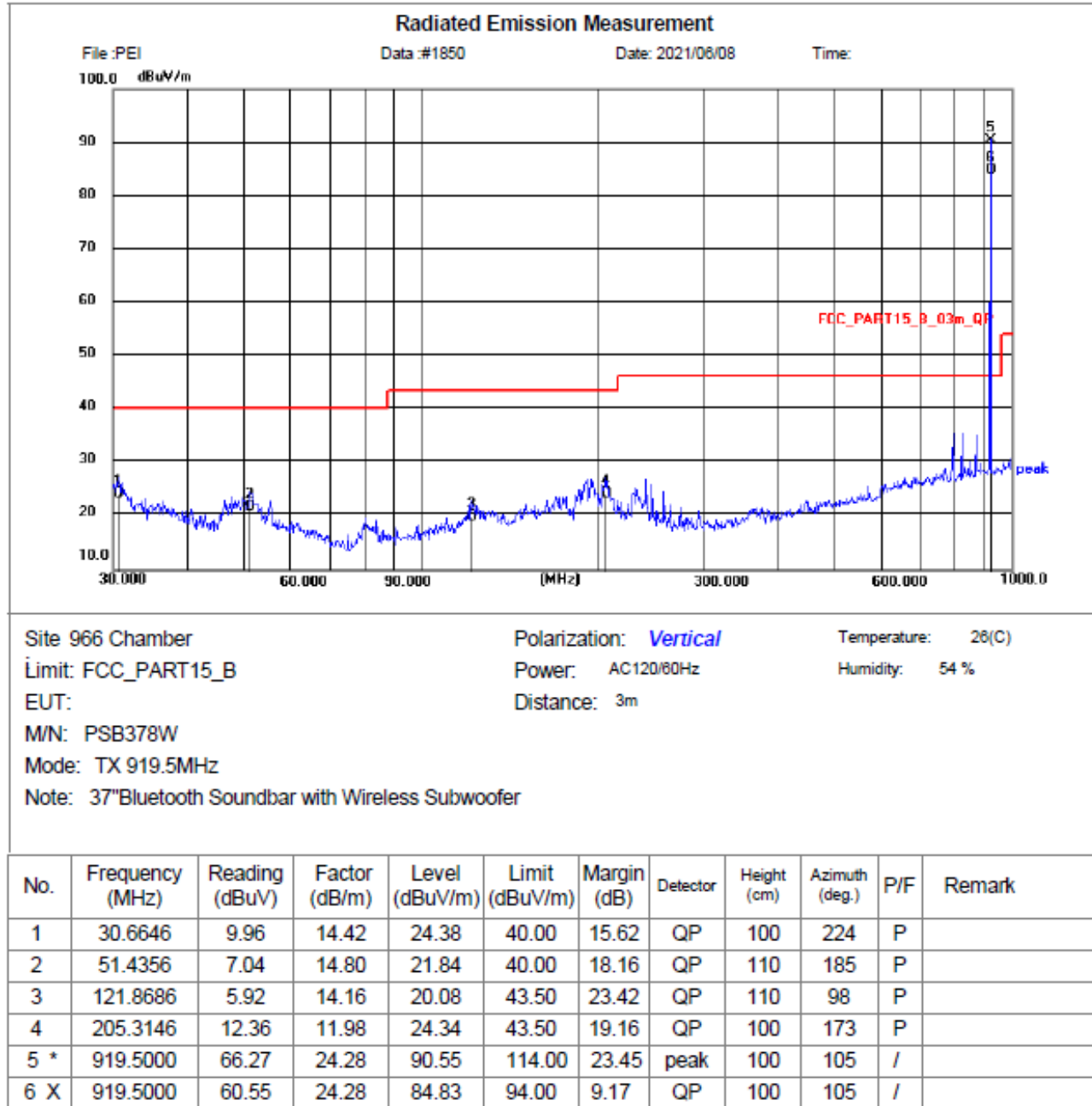
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 919.5MHz		
Adapter:	JY024160150AA-UL		



Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 919.5MHz		
Adapter:	JY024160150AA-UL		



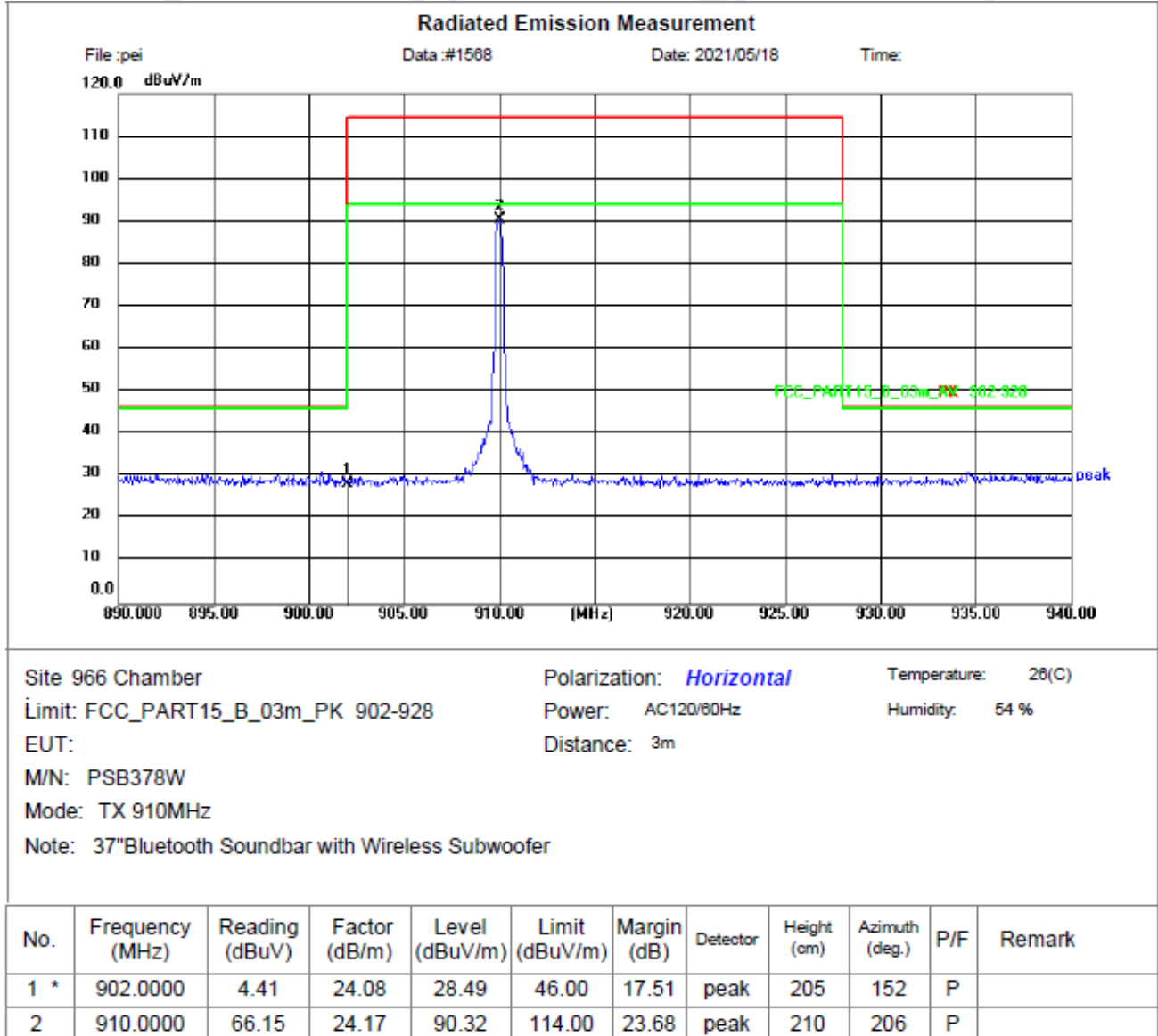
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Note:

1. Emission Level = Peak Reading + Correction Factor; Correction Factor = Antenna Factor + Cable loss – Pre-amplifier
2. Margin = Emission - Limit
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.
5. Data of measurement shown "---" in the above table mean that the reading of emissions is attenuated more than 20dB below the limits or the field strength is too small to be measured.

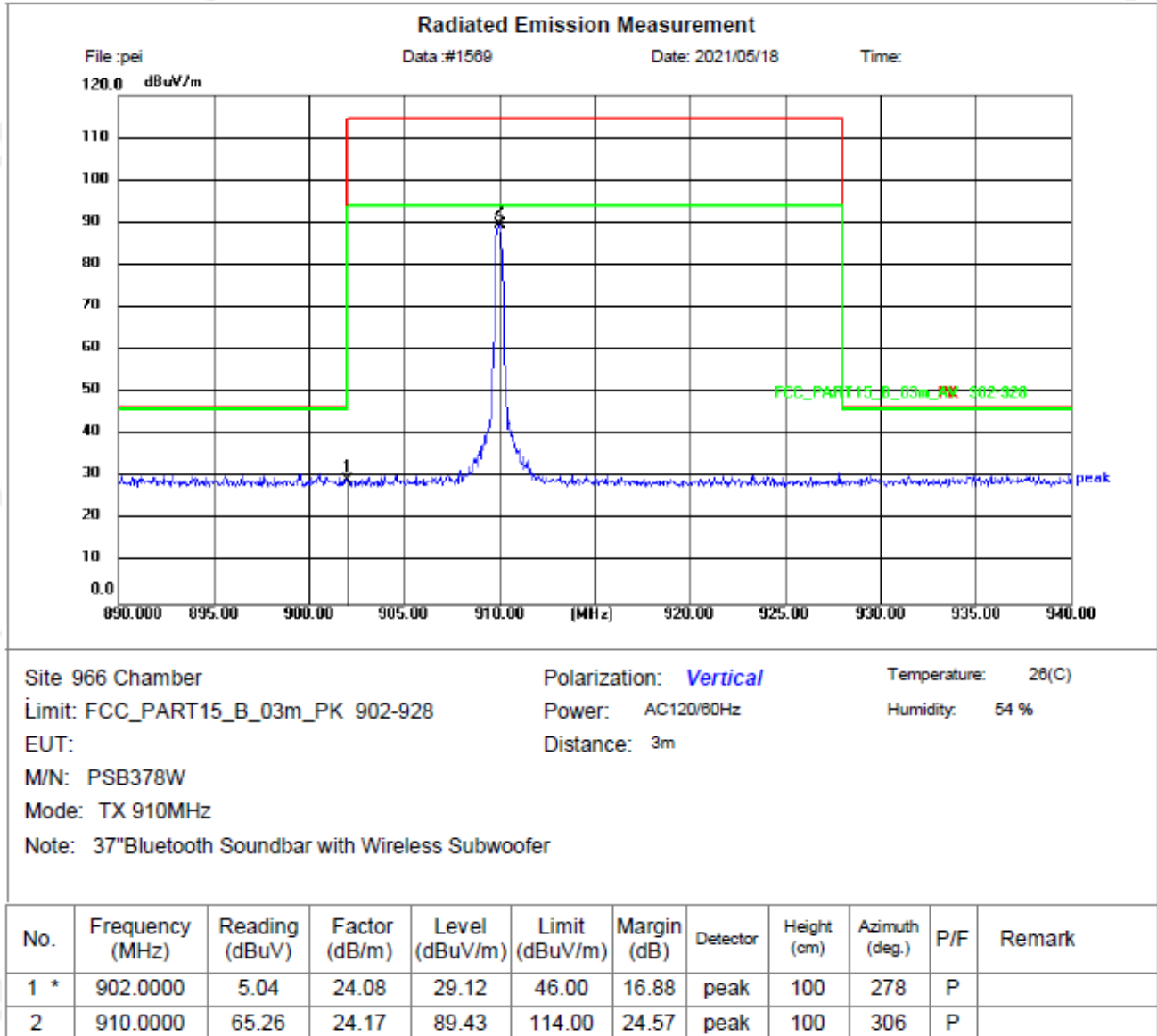
Band Edge Requirement:

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 910MHz		



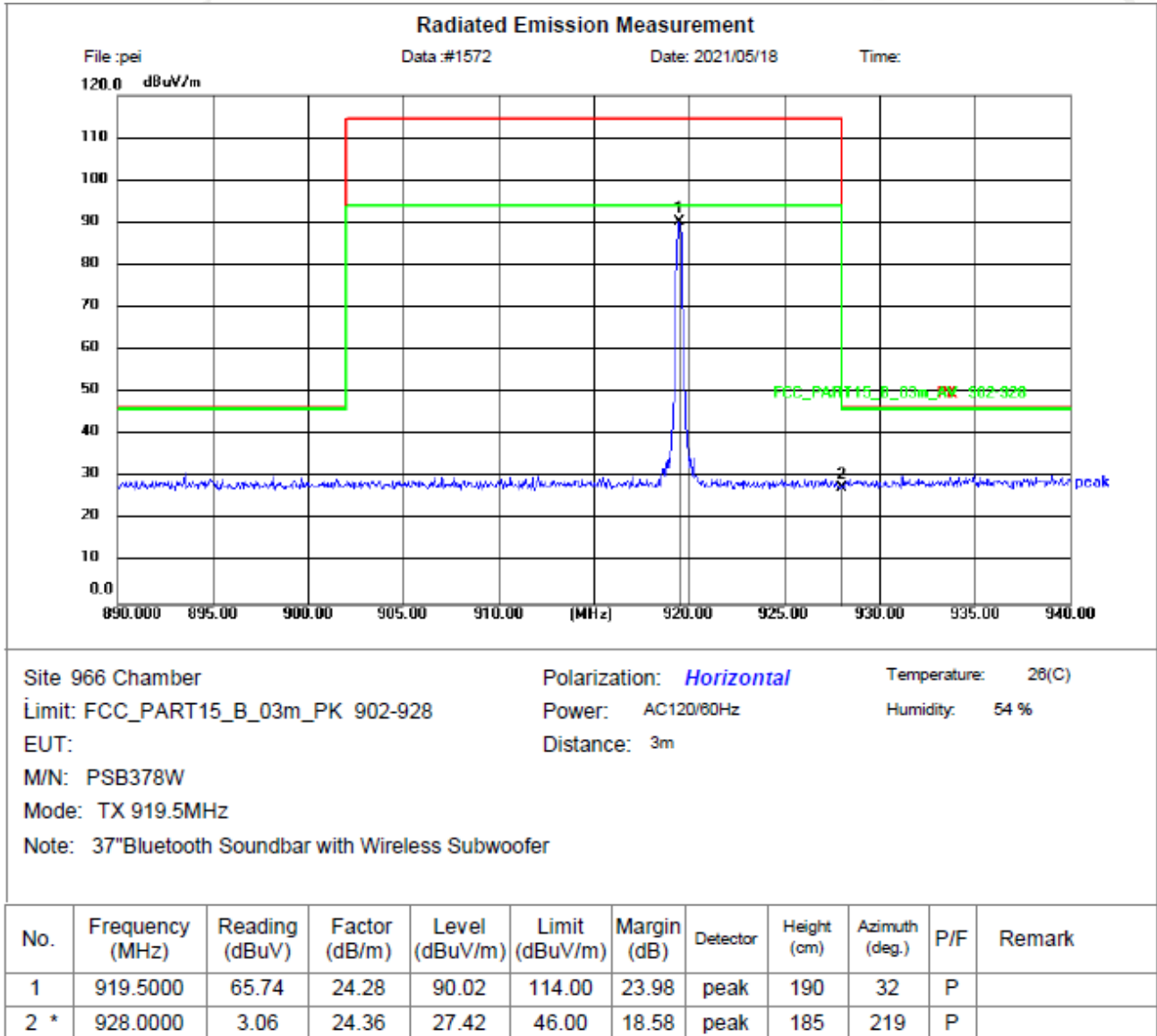
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 910MHz		



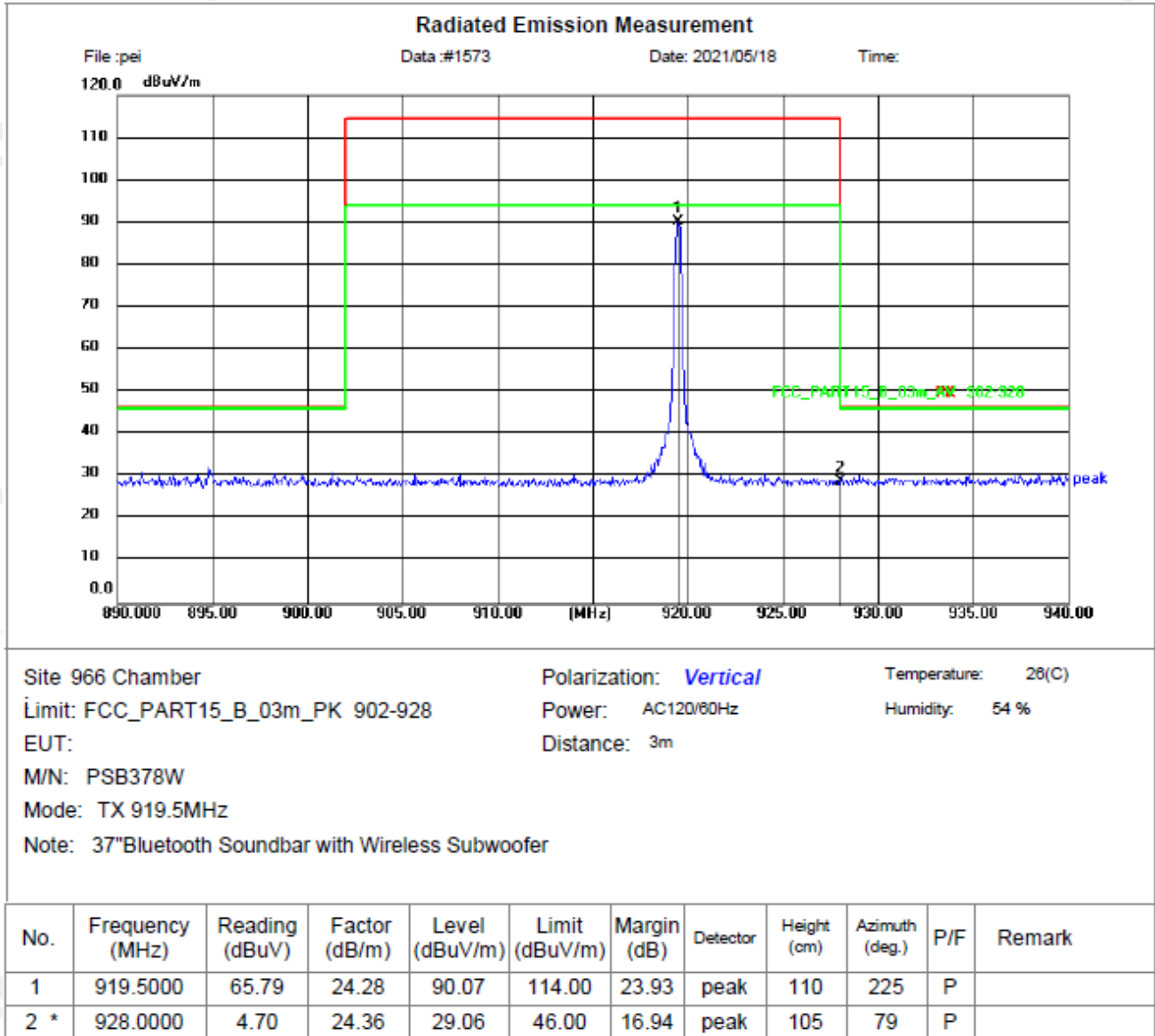
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Horizontal
Test Mode:	TX 919.5MHz		



Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Temperature:	26°C	Relative Humidity:	54%
Test Date:	May 14, 2021	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Polarization:	Vertical
Test Mode:	TX 919.5MHz		



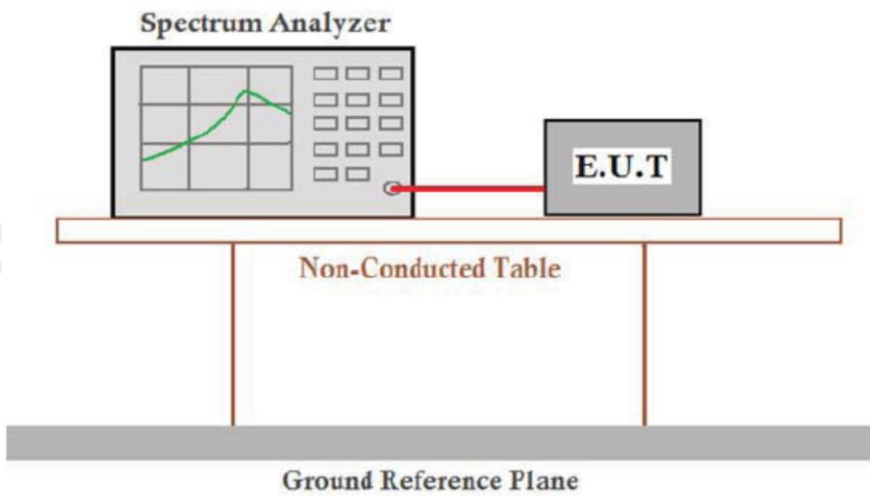
Remark: Absolute Level = Reading Level + Factor, Margin = Absolute Level – Limit
Factor = Ant. Factor + Cable Loss – Pre-amplifier

Note:

1. Emission Level = Peak Reading + Correction Factor; Correction Factor = Antenna Factor + Cable loss – Pre-amplifier
2. Margin = Emission - Limit
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.
5. Data of measurement shown “-” in the above table mean that the reading of emissions is attenuated more than 20dB below the limits or the field strength is too small to be measured.

5 20DB BANDWIDTH TEST

5.1 Test Setup



5.2 Rules and specifications

CFR 47 Part 15.215(c)

ANSI C63.10: 2013

5.3 Test Procedure

1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings for 20dB Bandwidth measurement.
Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel; RBW \geq 1% of the 20dB bandwidth; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold.
4. Measure and record the results in the test report.

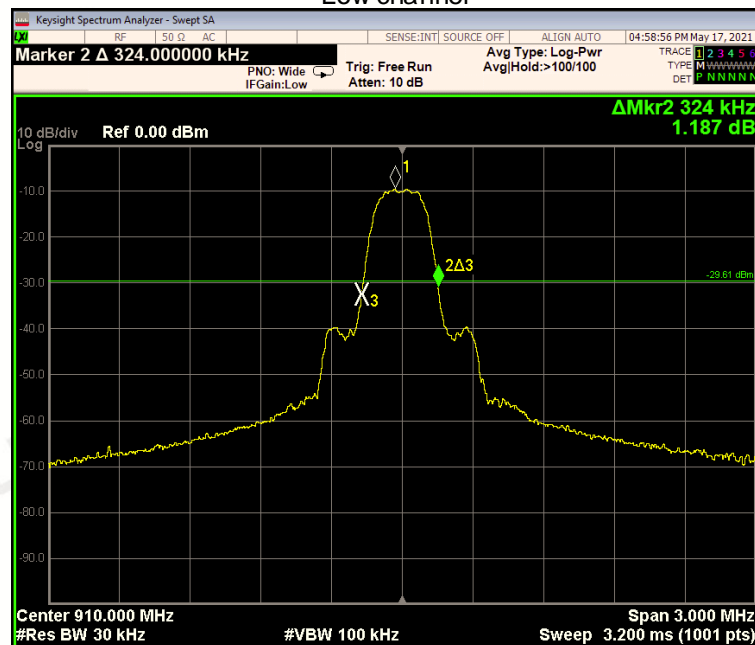
5.4 Test Result

PASS

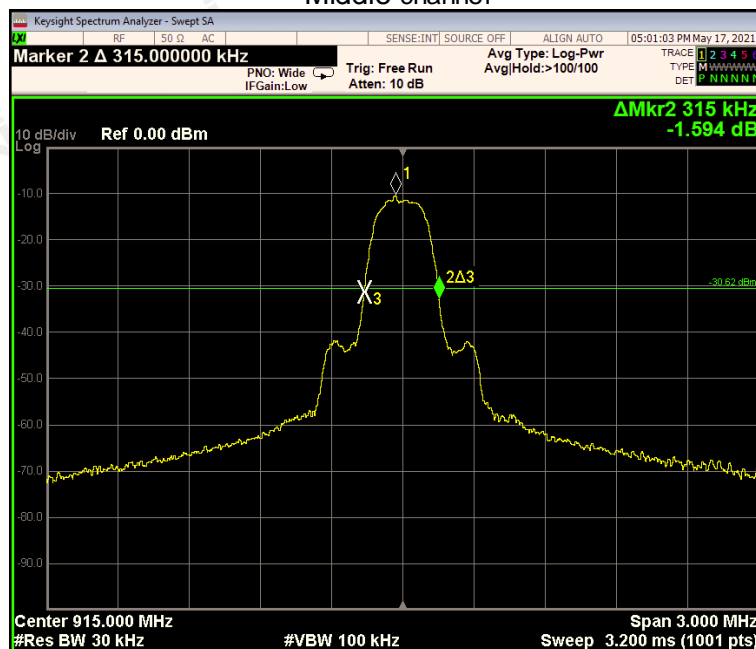
Channel	Frequency(MHz)	20dB Bandwidth (KHz)	Limit (kHz)	Conclusion
CH01	910	324	/	PASS
CH11	915	315	/	PASS
CH20	919.5	318	/	PASS

The spectrum analyzer plots are attached as below.

Low channel



Middle channel



[illegible]

6 ANTENNA REQUIREMENT

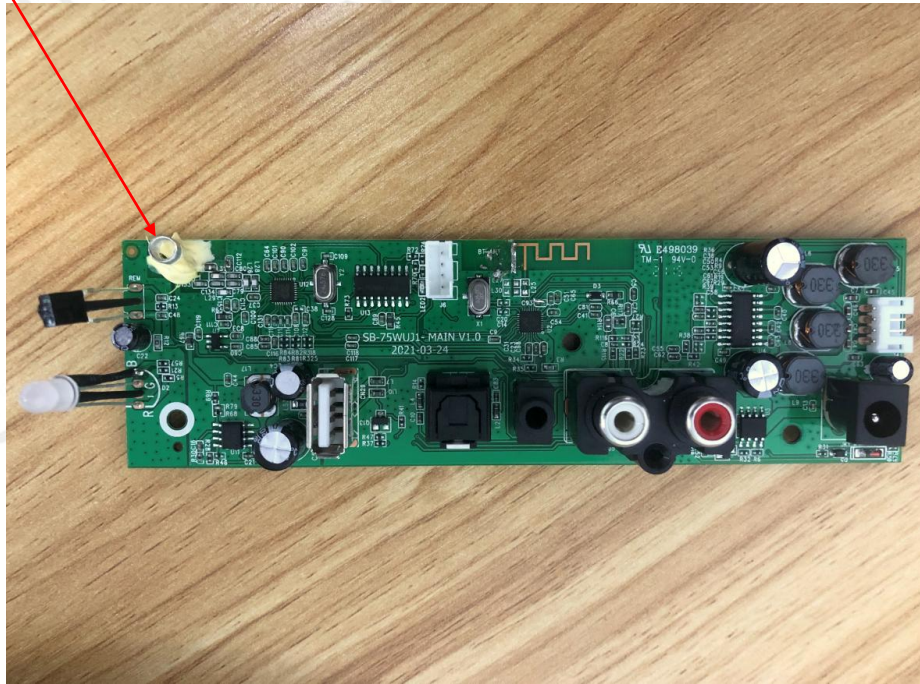
Standard Applicable:

For intentional device, according to FCC 47 CFR Section 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.

Antenna Connected Construction

The antenna used in this product is a Spring Antenna, The directional gains of antenna used for transmitting is 0dBi.

ANTENNA



APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

End of Report