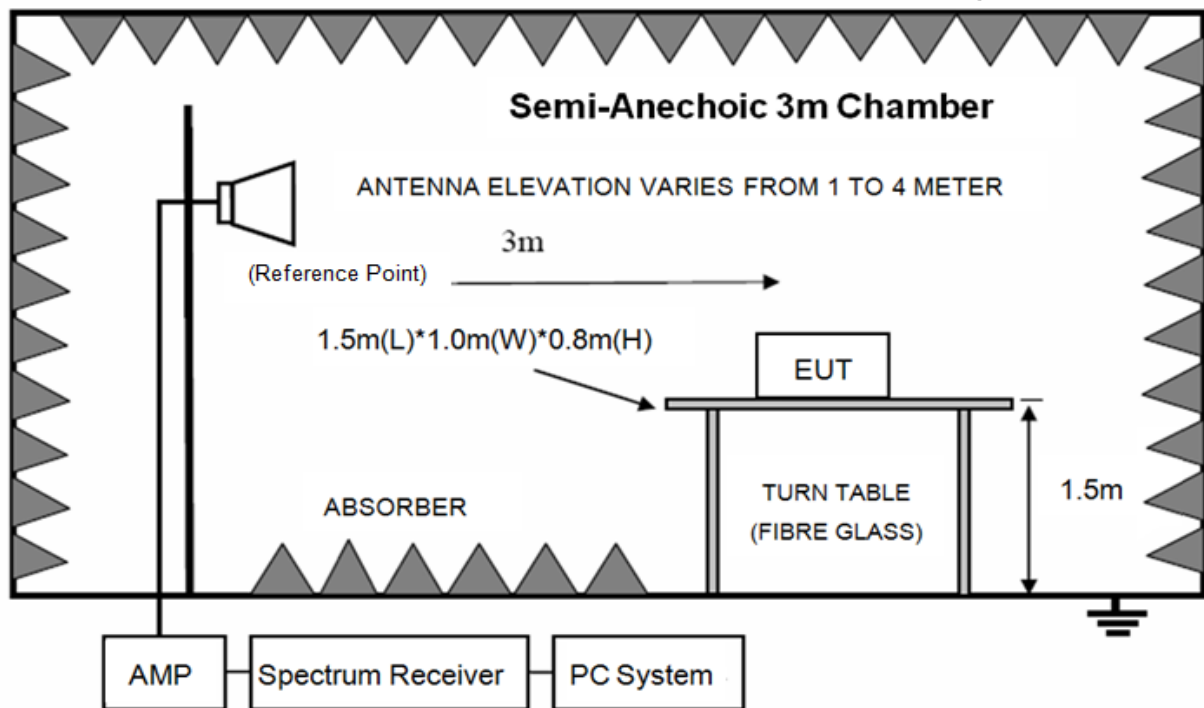


In 3 m Anechoic Chamber, test setup diagram for frequency above 1 GHz:



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

8.2. Limit

8.3.1 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&4.1775	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			

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

²Above 38.6

RSS-Gen section 8.10 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	12.51975-12.52025	240-285	3.5-4.4
0.495-0.505	12.57675-12.57725	322-335.4	4.5-5.15
2.1735-2.1905	13.36-13.41	399.9-410	5.35-5.46
3.020-3.026	16.42-16.423	608-614	7.25-7.75
4.125-4.128	16.69475-16.69525	960-1427	8.025-8.5
4.1772&4.17775	16.80425-16.80475	1435-1626.5	9.0-9.2
4.2072&4.20775	25.5-25.67	1645.5-1646.5	9.3-9.5
5.677-5.683	37.5-38.25	1660-1710	10.6-12.7
6.215-6.218	73-74.6	1718.8-1722.2	13.25-13.4
6.26775-6.26825	74.8-75.2	2200-2300	14.47-14.5
6.31175-6.31225	108-138	2310-2390	15.35-16.2
8.291-8.294	149.9-150.05	2483.5-2500	17.7-21.4
8.362-8.366	156.52475-156.52525	2655-2900	22.01-23.12
8.37625-8.38675	156.7-156.9	3260-3267	23.6-24.0
8.41425-8.41475	162.0125-167.17	3332-3339	31.2-31.8
12.29-12.293	167.72-173.2	3345.8-3358	36.43-36.5
			Above 38.6

Note: Certain frequency bands listed in above table and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

8.3.2 FCC 15.209 Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 ~ 0.490	300	$2400/F(\text{kHz})$	$67.6-20\log(F)$
0.490 ~ 1.705	30	$24000/F(\text{kHz})$	$87.6-20\log(F)$
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 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3\text{m}}(\text{dB}\mu\text{V}/\text{m}) = \text{Limit}_{30\text{m}}(\text{dB}\mu\text{V}/\text{m}) + 40\log(30\text{m}/3\text{m})$$

8.3.3 Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions or comply with 15.209 limits.

8.3. Test procedure

- (1) EUT height should be 0.8 m for below 1 GHz at a semi - anechoic chamber while EUT height should be 1.5 m for above 1GHz at full chamber or semi - anechoic chamber ground with absorbers
- (2) Setup EUT and assistant system according clause 2.3 and 8.2
- (3) Test antenna was located 3m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test distance
9 kHz-30 MHz	Active Loop antenna	3 m
30 MHz-1 GHz	Trilog Broadband Antenna	3 m
1 GHz-18 GHz	Double Ridged Horn Antenna(1GHz-18GHz)	3 m
18 GHz-40 GHz	Horn Antenna(18GHz-40GHz)	1 m

According ANSI C63.10:2013 clause 6.4.4.2 and 6.5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30 MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

- (4) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 40 GHz:

- (a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1m above ground.)

- (b) Change work frequency or channel of device if practicable.

- (c) Change modulation type of device if practicable.

- (d) Change power supply range from 85% to 115% of the rated supply voltage

- (e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 40 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9 kHz to 30 MHz and 18 GHz to 40 GHz, so below final test was performed with frequency range from 30 MHz to 18 GHz.

- (5) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.
- (6) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9-90 kHz, 110-490 kHz, for emissions from 9 kHz-90kHz, 110kHz-490kHz and above 1GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.
- (7) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW

Frequency band	RBW
9 kHz-150 kHz	200 Hz
150 kHz-30 MHz	9 kHz
30 MHz-1 GHz	120 kHz

- (8) For emissions above 1 GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3MHz for Peak measure, the RBW is set at 1 MHz, VBW is set at 10 Hz for AV value.

8.4. Test result

PASS. (See below detailed test result)

All the emissions except fundamental emission from 9kHz to 40GHz were comply with 15.209 limit.

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz and 18 GHz to 40 GHz, so the final test was performed with frequency range from 30 MHz to 18 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 11a mode.

Note3: For below test data, when the limit tabular marked “/” means this frequency point is the fundamental emission and no need comply with this limit.

Radiated Emission test (below 1GHz)

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21030302-2E MS50A\RF\FCC
BELOW1G.EM6

Test Date : 2021-03-23

Tested By : Kennys

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

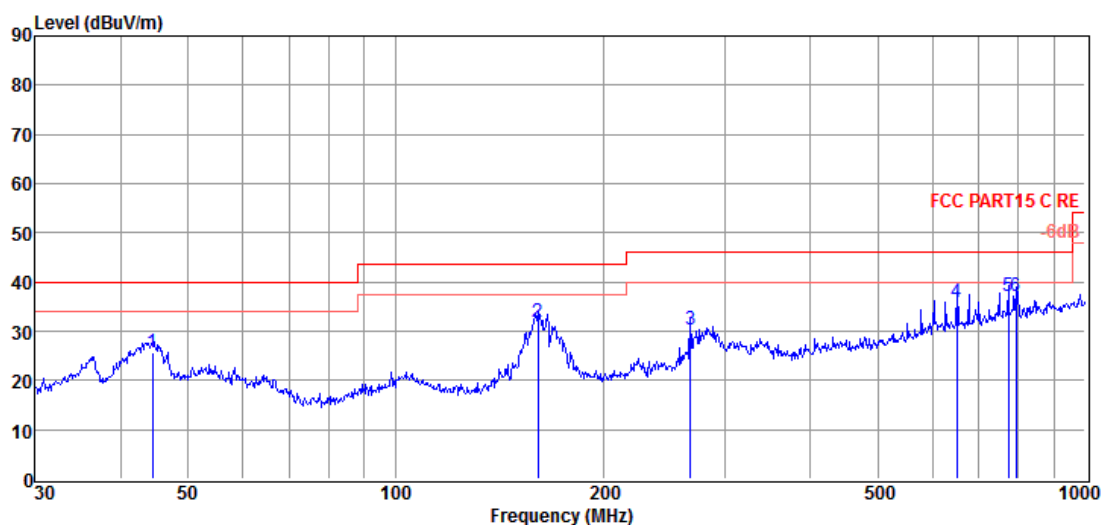
Power Supply : DC 120V60Hz

Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:55%,Press:100.1kPa

Antenna/Distance : 2020 VULB 9163 2#/3m/HORIZONTAL

Memo : WIFI 5G



Data: 7

Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	44.43	9.06	12.94	3.80	25.80	40.00	-14.20	QP	HORIZONTAL
2	160.91	18.77	8.32	4.82	31.91	43.50	-11.59	QP	HORIZONTAL
3	267.55	12.50	12.52	5.35	30.37	46.00	-15.63	QP	HORIZONTAL
4	651.94	9.66	19.32	6.91	35.89	46.00	-10.11	QP	HORIZONTAL
5	774.16	9.09	20.85	7.28	37.22	46.00	-8.78	QP	HORIZONTAL
6	793.40	8.76	20.89	7.33	36.98	46.00	-9.02	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21030302-2E MS50A\RF\FCC
BELOW1G.EM6

Test Date : 2021-03-24

Tested By : Kennys

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

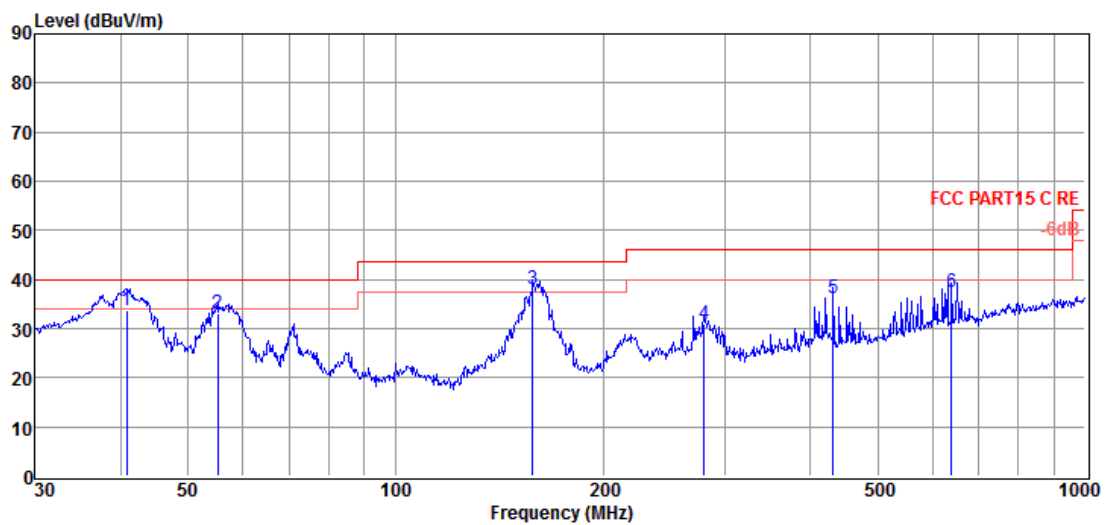
Power Supply : DC 120V60Hz

Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:55%,Press:100.1kPa

Antenna/Distance : 2020 VULB 9163 2#/3m/VERTICAL

Memo : WIFI 5G



Data: 8

Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	40.70	18.30	11.68	3.77	33.75	40.00	-6.25	QP	VERTICAL
2	55.22	16.42	12.86	3.91	33.19	40.00	-6.81	QP	VERTICAL
3	158.11	24.88	8.21	4.80	37.89	43.50	-5.61	QP	VERTICAL
4	280.02	12.68	12.70	5.40	30.78	46.00	-15.22	QP	VERTICAL
5	431.03	14.22	16.01	6.04	36.27	46.00	-9.73	QP	VERTICAL
6	640.61	11.23	19.28	6.87	37.38	46.00	-8.62	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

Radiated Emission test (above 1GHz)

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E
EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

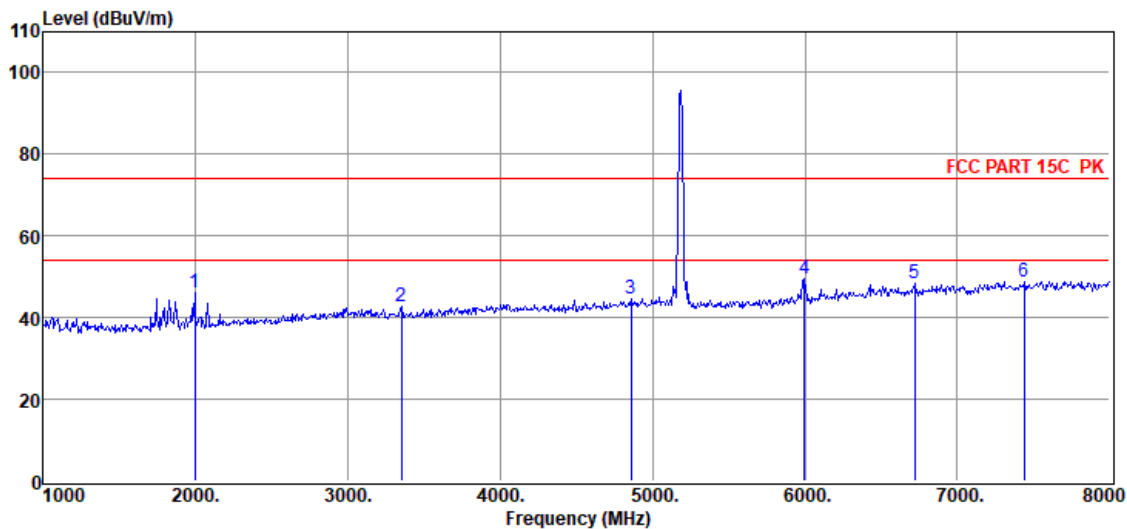
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5180

Data: 13



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1994.00	56.48	26.68	39.39	1.60	0.68	46.05	74.00	-27.95	Peak	HORIZONTAL
2	3352.00	50.86	29.43	40.01	1.74	0.81	42.83	74.00	-31.17	Peak	HORIZONTAL
3	4857.00	48.80	32.64	40.37	2.49	0.90	44.46	74.00	-29.54	Peak	HORIZONTAL
4	5998.00	51.92	34.00	40.50	3.03	1.14	49.59	74.00	-24.41	Peak	HORIZONTAL
5	6719.00	48.68	35.55	39.92	3.16	0.99	48.46	74.00	-25.54	Peak	HORIZONTAL
6	7440.00	48.04	36.35	39.74	3.13	1.04	48.82	74.00	-25.18	Peak	HORIZONTAL

Note:

1. 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)

2. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

3. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

4. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-13

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

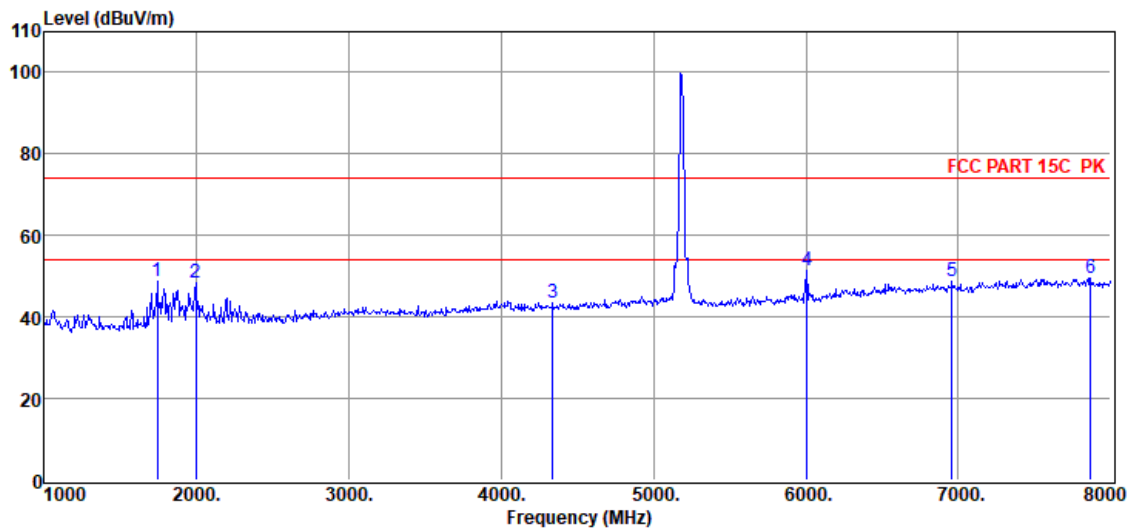
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5180

Data: 14



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1742.00	59.57	26.03	39.01	1.49	0.63	48.71	74.00	-25.29	Peak	VERTICAL
2	1994.00	58.89	26.68	39.39	1.60	0.68	48.46	74.00	-25.54	Peak	VERTICAL
3	4339.00	49.35	31.37	40.27	2.28	0.88	43.61	74.00	-30.39	Peak	VERTICAL
4	6005.00	53.79	34.01	40.50	3.03	1.14	51.47	74.00	-22.53	Peak	VERTICAL
5	6957.00	48.58	35.93	39.73	3.04	0.94	48.76	74.00	-25.24	Peak	VERTICAL
6	7867.00	48.32	36.84	39.79	3.18	1.15	49.70	74.00	-24.30	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

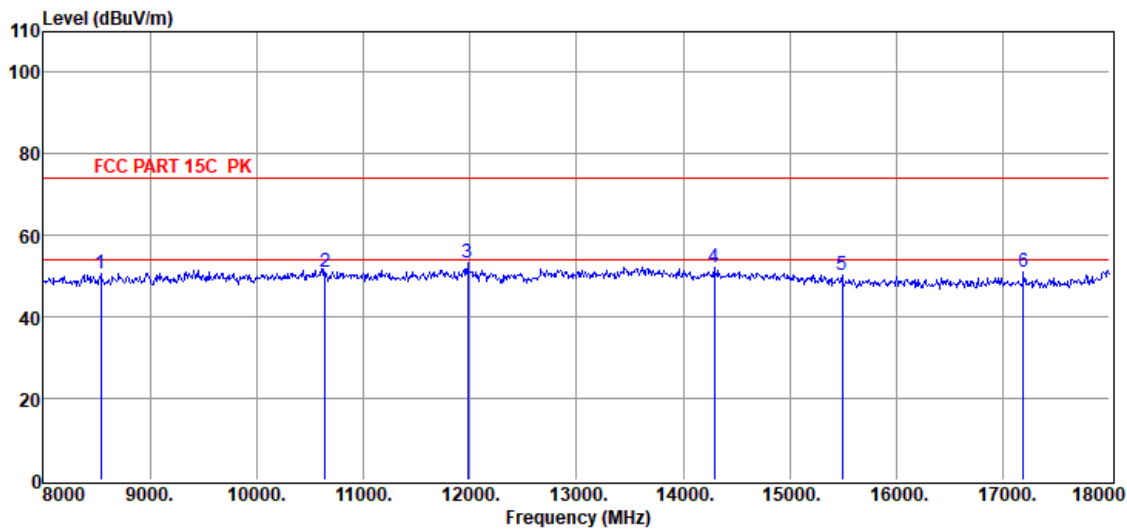
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5180

Data: 15



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8540.00	46.86	37.84	39.85	3.23	2.76	50.84	74.00	-23.16	Peak	HORIZONTAL
2	10640.00	45.94	39.08	40.34	3.71	2.77	51.16	74.00	-22.84	Peak	HORIZONTAL
3	11980.00	47.71	39.19	40.10	4.05	2.38	53.23	74.00	-20.77	Peak	HORIZONTAL
4	14290.00	44.77	39.90	39.67	4.43	2.60	52.03	74.00	-21.97	Peak	HORIZONTAL
5	15490.00	44.34	38.81	39.75	4.56	2.49	50.45	74.00	-23.55	Peak	HORIZONTAL
6	17190.00	44.32	38.84	40.21	4.75	3.24	50.94	74.00	-23.06	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-10

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

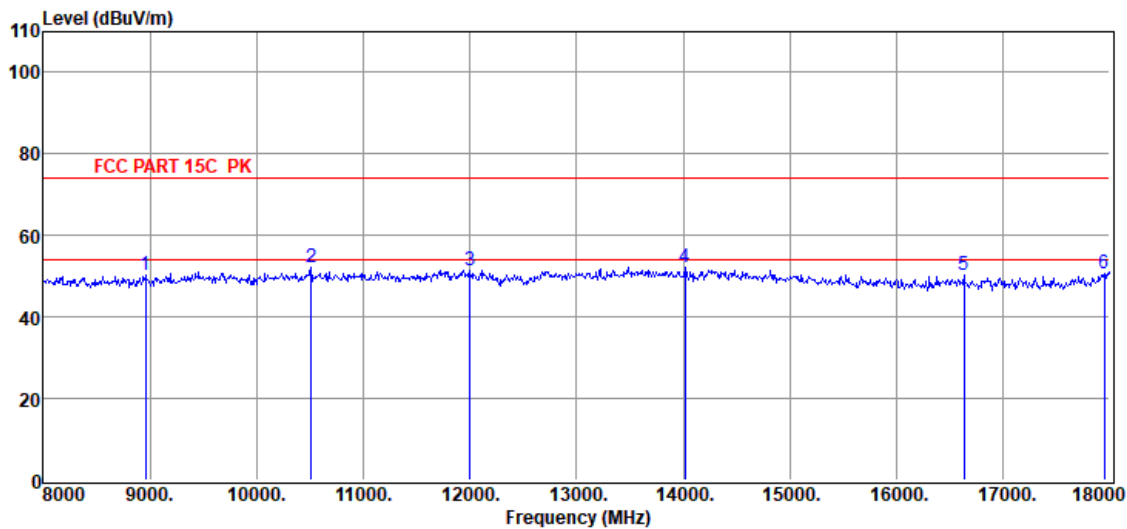
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5180

Data: 16



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8960.00	45.94	38.26	39.90	3.32	2.80	50.42	74.00	-23.58	Peak	VERTICAL
2	10510.00	47.17	39.01	40.40	3.67	2.83	52.28	74.00	-21.72	Peak	VERTICAL
3	12000.00	45.86	39.20	40.10	4.05	2.37	51.38	74.00	-22.62	Peak	VERTICAL
4	14020.00	44.87	39.90	39.70	4.52	2.68	52.27	74.00	-21.73	Peak	VERTICAL
5	16630.00	44.31	38.06	40.03	4.72	3.10	50.16	74.00	-23.84	Peak	VERTICAL
6	17950.00	41.48	42.19	40.67	4.95	2.65	50.60	74.00	-23.40	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

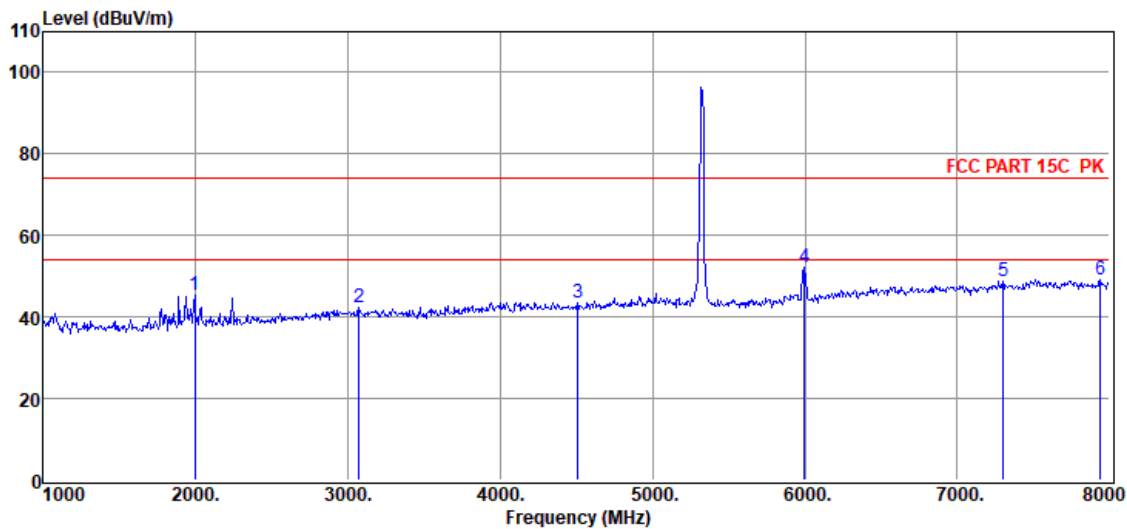
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5320

Data: 17



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1994.00	55.76	26.68	39.39	1.60	0.68	45.33	74.00	-28.67	Peak	HORIZONTAL
2	3072.00	50.22	29.49	39.92	1.84	0.80	42.43	74.00	-31.57	Peak	HORIZONTAL
3	4507.00	49.19	31.52	40.30	2.36	0.89	43.66	74.00	-30.34	Peak	HORIZONTAL
4	5998.00	54.53	34.00	40.50	3.03	1.14	52.20	74.00	-21.80	Peak	HORIZONTAL
5	7300.00	48.24	36.24	39.73	3.09	1.00	48.84	74.00	-25.16	Peak	HORIZONTAL
6	7937.00	47.66	36.92	39.79	3.18	1.16	49.13	74.00	-24.87	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

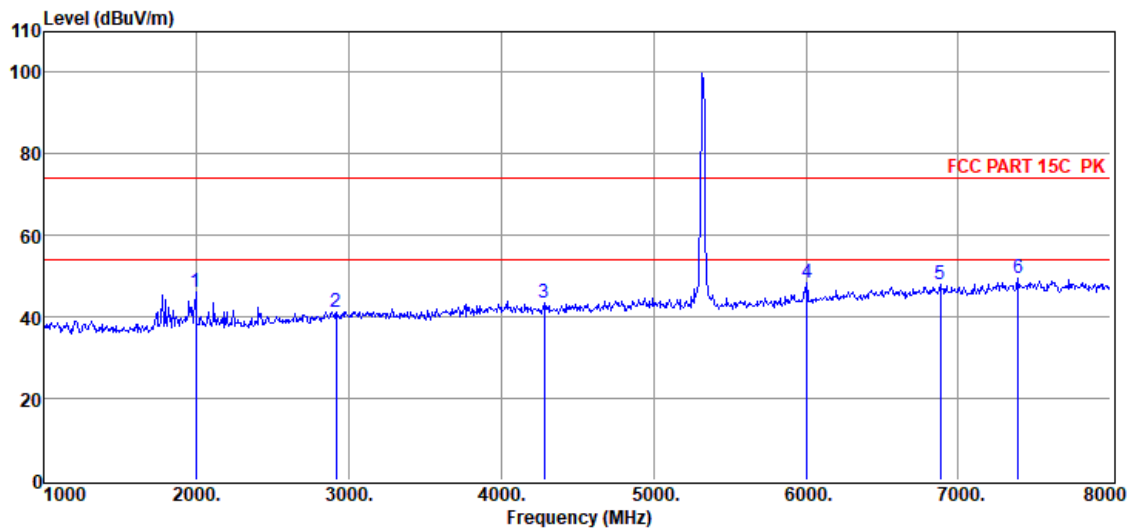
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5320

Data: 18



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1994.00	56.51	26.68	39.39	1.60	0.68	46.08	74.00	-27.92	Peak	VERTICAL
2	2918.00	49.34	29.19	39.86	1.85	0.78	41.30	74.00	-32.70	Peak	VERTICAL
3	4283.00	49.35	31.33	40.26	2.25	0.87	43.54	74.00	-30.46	Peak	VERTICAL
4	6005.00	50.62	34.01	40.50	3.03	1.14	48.30	74.00	-25.70	Peak	VERTICAL
5	6880.00	47.85	35.81	39.80	3.08	0.96	47.90	74.00	-26.10	Peak	VERTICAL
6	7391.00	48.75	36.31	39.74	3.11	1.03	49.46	74.00	-24.54	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

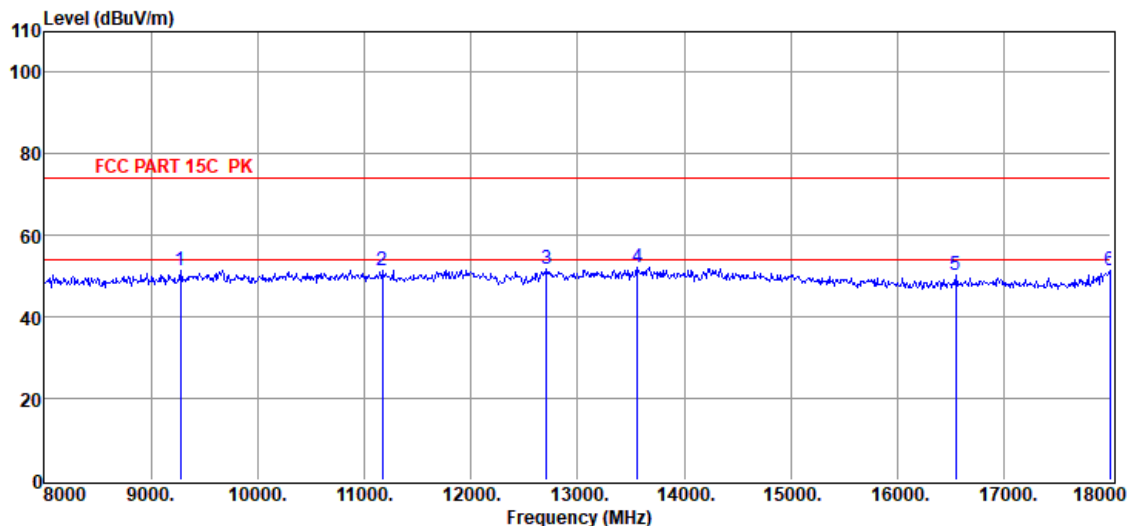
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5320

Data: 19



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	9280.00	46.63	38.52	40.10	3.49	2.87	51.41	74.00	-22.59	Peak	HORIZONTAL
2	11170.00	46.01	39.20	40.18	3.86	2.58	51.47	74.00	-22.53	Peak	HORIZONTAL
3	12710.00	46.12	39.25	40.31	4.00	2.57	51.63	74.00	-22.37	Peak	HORIZONTAL
4	13560.00	45.41	39.99	40.01	4.05	2.67	52.11	74.00	-21.89	Peak	HORIZONTAL
5	16550.00	44.50	37.96	40.01	4.73	3.03	50.21	74.00	-23.79	Peak	HORIZONTAL
6	17990.00	41.90	42.44	40.69	4.96	2.62	51.23	74.00	-22.77	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-10

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

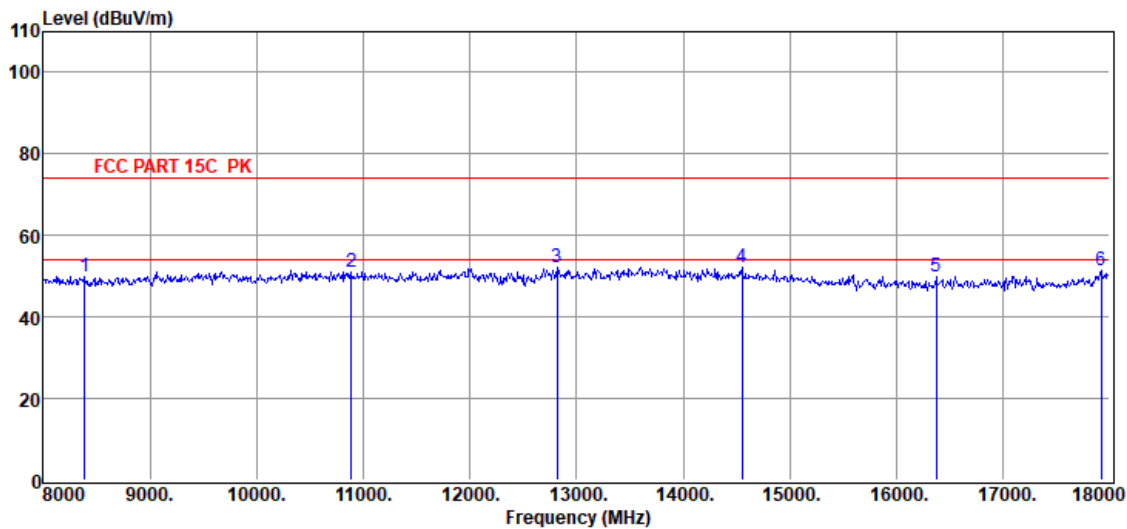
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5320

Data: 20



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8390.00	46.30	37.62	39.84	3.21	2.75	50.04	74.00	-23.96	Peak	VERTICAL
2	10890.00	45.62	39.23	40.24	3.77	2.67	51.05	74.00	-22.95	Peak	VERTICAL
3	12820.00	46.54	39.38	40.35	4.15	2.60	52.32	74.00	-21.68	Peak	VERTICAL
4	14550.00	44.93	39.86	39.65	4.36	2.53	52.03	74.00	-21.97	Peak	VERTICAL
5	16370.00	44.50	37.90	39.97	4.70	2.89	50.02	74.00	-23.98	Peak	VERTICAL
6	17920.00	42.27	42.00	40.65	4.94	2.67	51.23	74.00	-22.77	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

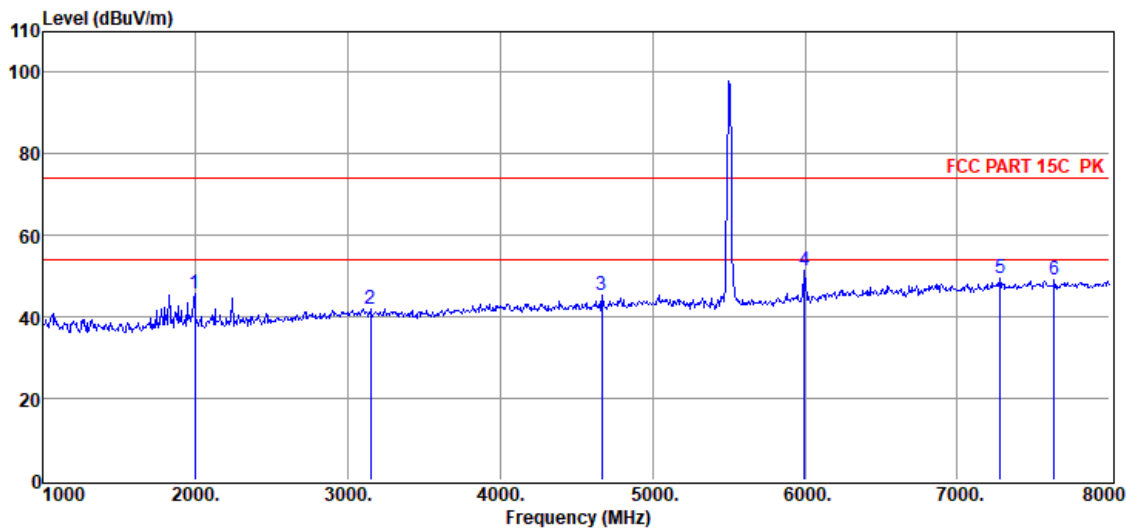
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5500

Data: 21



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1994.00	56.31	26.68	39.39	1.60	0.68	45.88	74.00	-28.12	Peak	HORIZONTAL
2	3149.00	49.86	29.47	39.94	1.82	0.80	42.01	74.00	-31.99	Peak	HORIZONTAL
3	4668.00	50.48	32.04	40.33	2.42	0.89	45.50	74.00	-28.50	Peak	HORIZONTAL
4	5998.00	53.62	34.00	40.50	3.03	1.14	51.29	74.00	-22.71	Peak	HORIZONTAL
5	7279.00	48.87	36.22	39.73	3.09	1.00	49.45	74.00	-24.55	Peak	HORIZONTAL
6	7636.00	48.01	36.56	39.76	3.15	1.09	49.05	74.00	-24.95	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-13

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

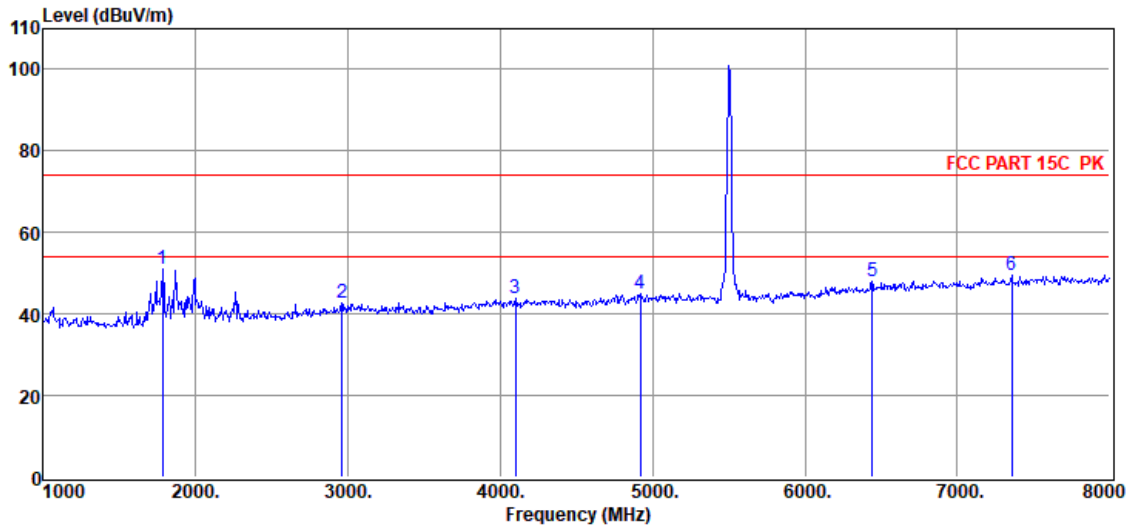
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5500

Data: 22



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1784.00	61.85	26.14	39.08	1.50	0.64	51.05	74.00	-22.95	Peak	VERTICAL
2	2960.00	50.62	29.35	39.88	1.86	0.79	42.74	74.00	-31.26	Peak	VERTICAL
3	4101.00	49.72	31.18	40.22	2.16	0.87	43.71	74.00	-30.29	Peak	VERTICAL
4	4920.00	49.01	32.84	40.38	2.51	0.91	44.89	74.00	-29.11	Peak	VERTICAL
5	6439.00	48.84	35.05	40.15	3.24	1.05	48.03	74.00	-25.97	Peak	VERTICAL
6	7356.00	48.83	36.28	39.74	3.11	1.02	49.50	74.00	-24.50	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

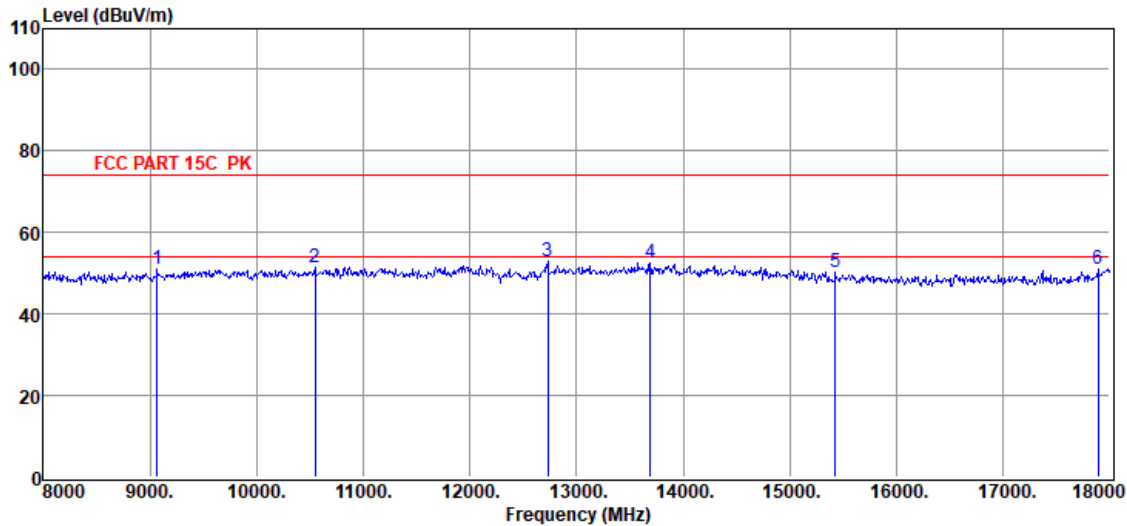
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5500

Data: 23



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	9070.00	46.55	38.36	39.95	3.37	2.82	51.15	74.00	-22.85	Peak	HORIZONTAL
2	10550.00	46.34	39.03	40.38	3.68	2.81	51.48	74.00	-22.52	Peak	HORIZONTAL
3	12730.00	47.41	39.28	40.32	4.03	2.57	52.97	74.00	-21.03	Peak	HORIZONTAL
4	13690.00	45.68	39.96	39.92	4.20	2.68	52.60	74.00	-21.40	Peak	HORIZONTAL
5	15430.00	44.02	38.90	39.73	4.55	2.48	50.22	74.00	-23.78	Peak	HORIZONTAL
6	17890.00	42.26	41.82	40.63	4.93	2.70	51.08	74.00	-22.92	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-10

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

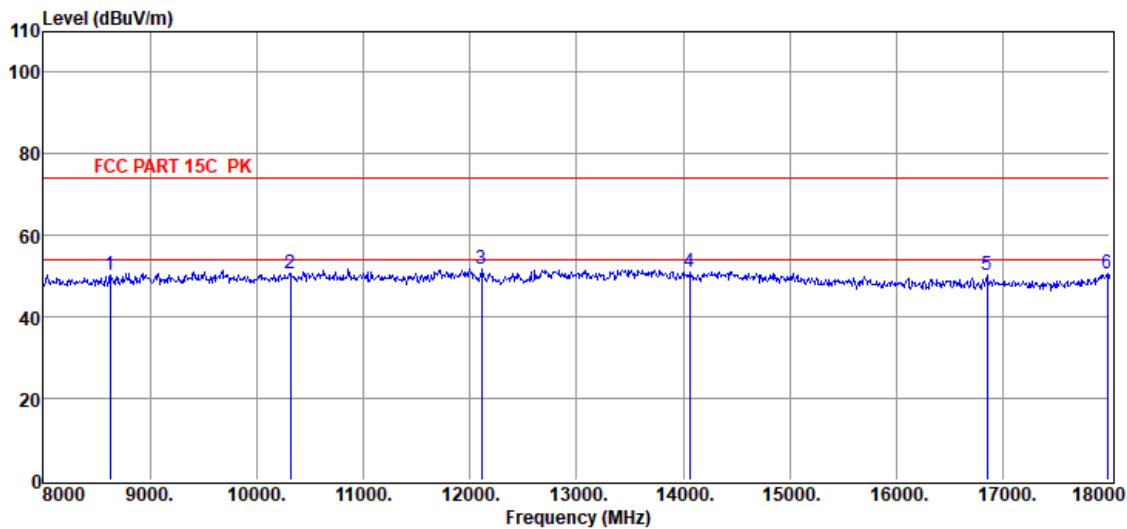
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5500

Data: 24



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8630.00	46.29	37.93	39.86	3.25	2.77	50.38	74.00	-23.62	Peak	VERTICAL
2	10320.00	45.95	38.78	40.47	3.67	2.91	50.84	74.00	-23.16	Peak	VERTICAL
3	12110.00	46.22	39.16	40.13	3.98	2.40	51.63	74.00	-22.37	Peak	VERTICAL
4	14060.00	43.74	39.90	39.69	4.51	2.67	51.13	74.00	-22.87	Peak	VERTICAL
5	16850.00	43.93	38.32	40.07	4.72	3.27	50.17	74.00	-23.83	Peak	VERTICAL
6	17980.00	41.31	42.38	40.69	4.95	2.63	50.58	74.00	-23.42	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

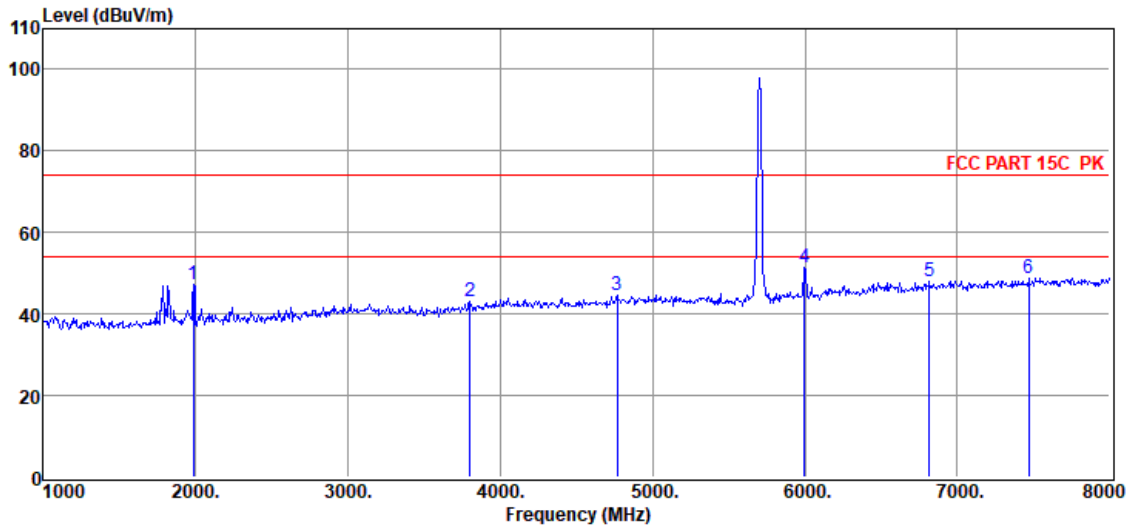
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5700

Data: 25



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1987.00	57.59	26.67	39.38	1.59	0.68	47.15	74.00	-26.85	Peak	HORIZONTAL
2	3800.00	50.02	30.42	40.14	1.94	0.85	43.09	74.00	-30.91	Peak	HORIZONTAL
3	4766.00	49.19	32.35	40.35	2.46	0.90	44.55	74.00	-29.45	Peak	HORIZONTAL
4	5998.00	53.90	34.00	40.50	3.03	1.14	51.57	74.00	-22.43	Peak	HORIZONTAL
5	6817.00	48.02	35.71	39.85	3.11	0.97	47.96	74.00	-26.04	Peak	HORIZONTAL
6	7468.00	48.09	36.37	39.75	3.13	1.05	48.89	74.00	-25.11	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

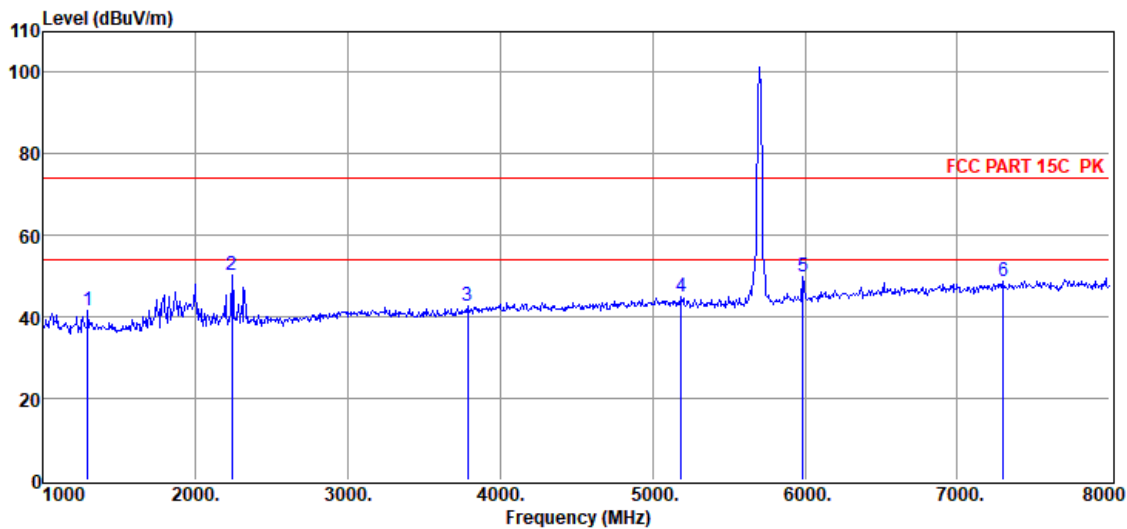
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5700

Data: 26



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1294.00	52.58	25.44	38.34	1.26	0.55	41.49	74.00	-32.51	Peak	VERTICAL
2	2239.00	60.17	27.13	39.52	1.67	0.71	50.16	74.00	-23.84	Peak	VERTICAL
3	3786.00	49.75	30.37	40.14	1.93	0.85	42.76	74.00	-31.24	Peak	VERTICAL
4	5186.00	48.79	32.99	40.42	2.55	0.95	44.86	74.00	-29.14	Peak	VERTICAL
5	5984.00	52.15	33.96	40.50	3.02	1.14	49.77	74.00	-24.23	Peak	VERTICAL
6	7300.00	48.24	36.24	39.73	3.09	1.00	48.84	74.00	-25.16	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-10

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

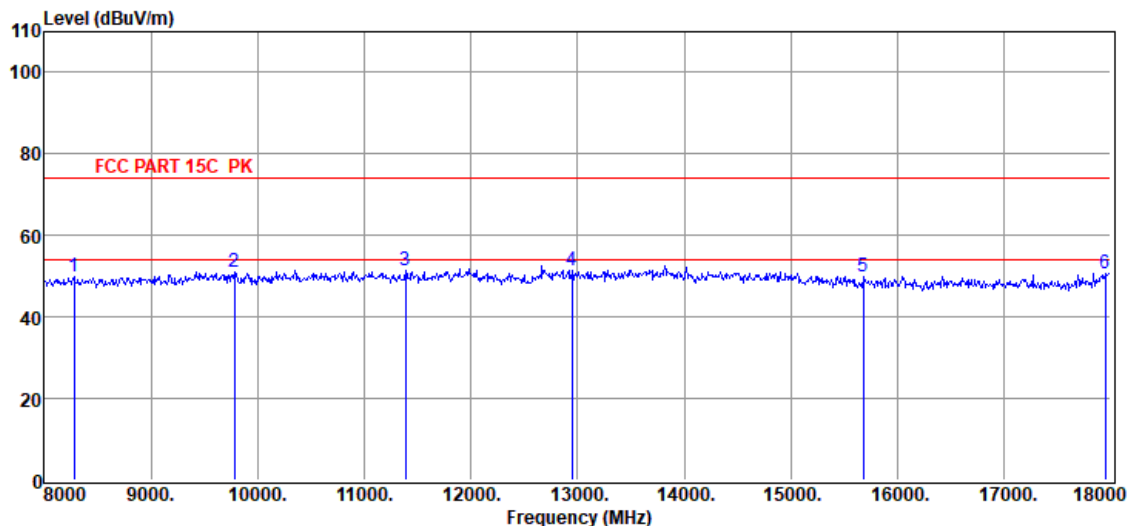
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5700

Data: 27



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8280.00	46.46	37.45	39.83	3.21	2.74	50.03	74.00	-23.97	Peak	HORIZONTAL
2	9780.00	46.37	38.53	40.45	3.65	2.99	51.09	74.00	-22.91	Peak	HORIZONTAL
3	11390.00	46.06	39.07	40.16	3.93	2.52	51.42	74.00	-22.58	Peak	HORIZONTAL
4	12950.00	45.44	39.54	40.39	4.33	2.64	51.56	74.00	-22.44	Peak	HORIZONTAL
5	15680.00	44.23	38.48	39.80	4.57	2.53	50.01	74.00	-23.99	Peak	HORIZONTAL
6	17950.00	41.56	42.19	40.67	4.95	2.65	50.68	74.00	-23.32	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-10

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

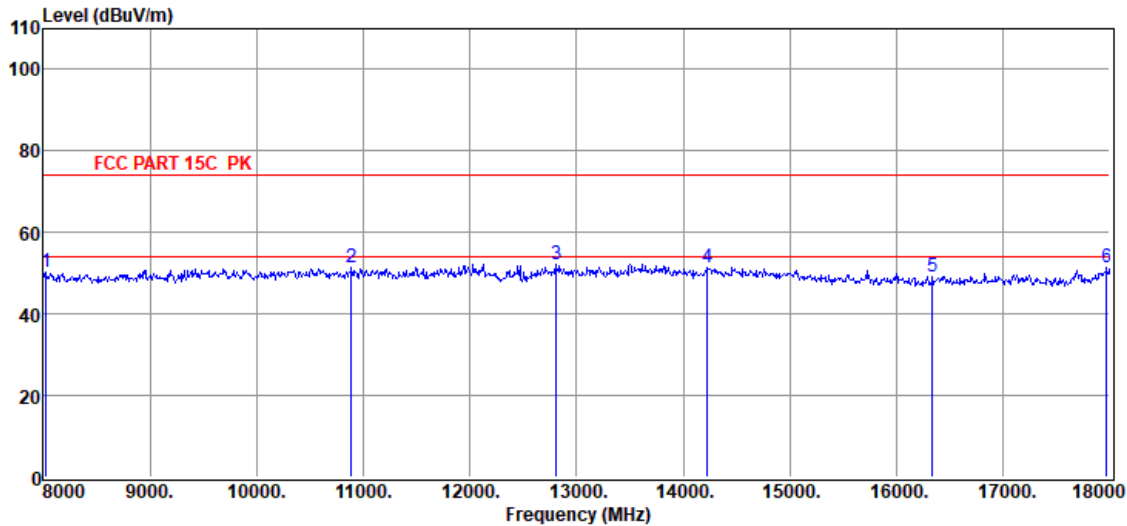
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5700

Data: 28



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8030.00	46.98	37.05	39.80	3.19	2.72	50.14	74.00	-23.86	Peak	VERTICAL
2	10890.00	46.02	39.23	40.24	3.77	2.67	51.45	74.00	-22.55	Peak	VERTICAL
3	12810.00	46.47	39.37	40.34	4.14	2.60	52.24	74.00	-21.76	Peak	VERTICAL
4	14230.00	44.06	39.90	39.68	4.45	2.62	51.35	74.00	-22.65	Peak	VERTICAL
5	16340.00	43.57	37.90	39.97	4.69	2.87	49.06	74.00	-24.94	Peak	VERTICAL
6	17970.00	42.16	42.31	40.68	4.95	2.63	51.37	74.00	-22.63	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

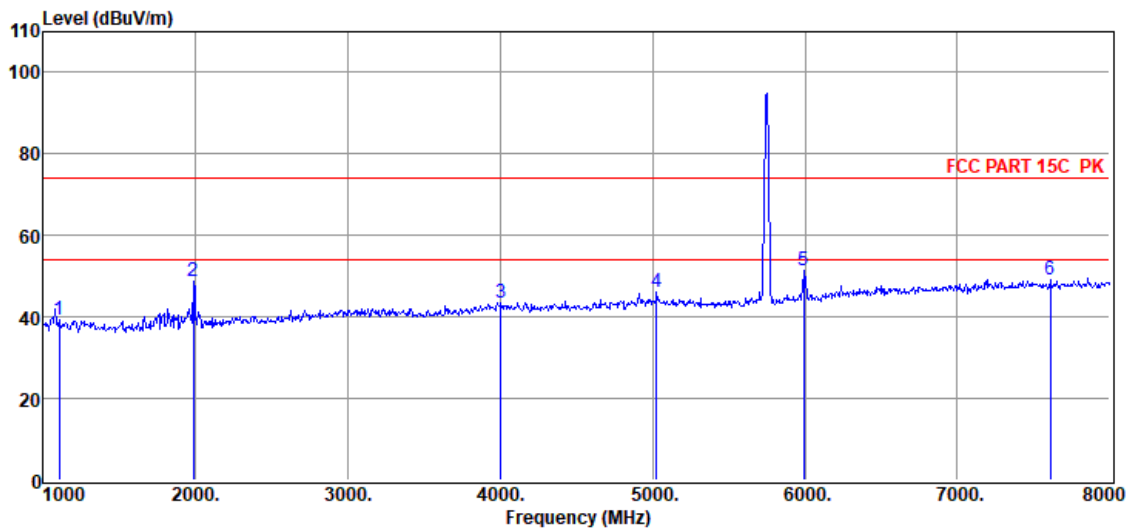
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5745

Data: 29



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1105.00	50.32	25.48	38.06	1.16	0.52	39.42	74.00	-34.58	Peak	HORIZONTAL
2	1987.00	59.30	26.67	39.38	1.59	0.68	48.86	74.00	-25.14	Peak	HORIZONTAL
3	4003.00	49.68	31.10	40.20	2.11	0.86	43.55	74.00	-30.45	Peak	HORIZONTAL
4	5025.00	49.80	33.08	40.40	2.54	0.92	45.94	74.00	-28.06	Peak	HORIZONTAL
5	5991.00	53.93	33.98	40.50	3.02	1.14	51.57	74.00	-22.43	Peak	HORIZONTAL
6	7608.00	48.14	36.53	39.76	3.15	1.08	49.14	74.00	-24.86	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-13

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

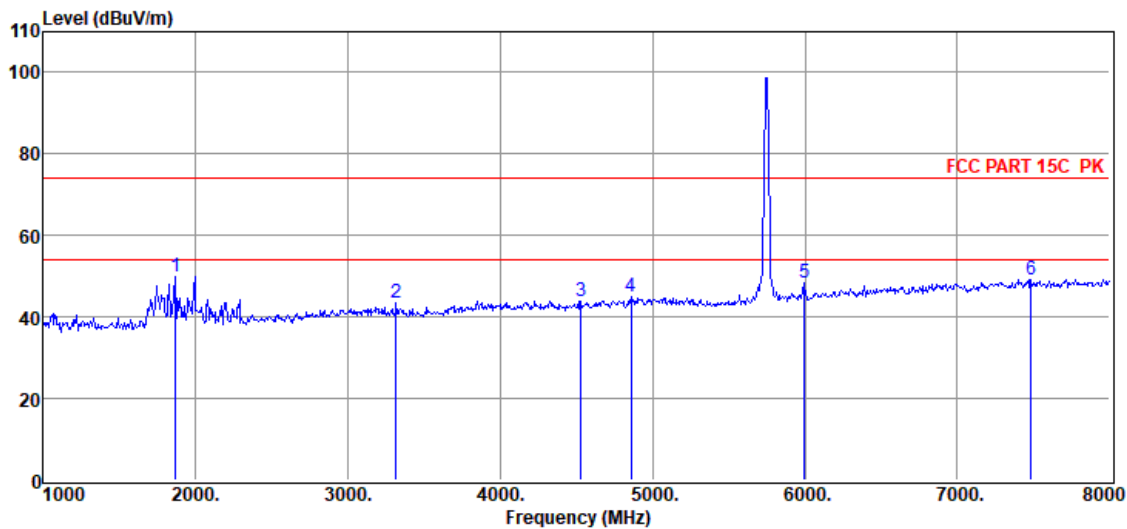
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5745

Data: 30



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1868.00	60.63	26.36	39.20	1.54	0.66	49.99	74.00	-24.01	Peak	VERTICAL
2	3317.00	51.57	29.44	40.00	1.76	0.81	43.58	74.00	-30.42	Peak	VERTICAL
3	4528.00	49.47	31.59	40.31	2.37	0.89	44.01	74.00	-29.99	Peak	VERTICAL
4	4857.00	49.38	32.64	40.37	2.49	0.90	45.04	74.00	-28.96	Peak	VERTICAL
5	5998.00	50.89	34.00	40.50	3.03	1.14	48.56	74.00	-25.44	Peak	VERTICAL
6	7482.00	48.30	36.39	39.75	3.14	1.05	49.13	74.00	-24.87	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

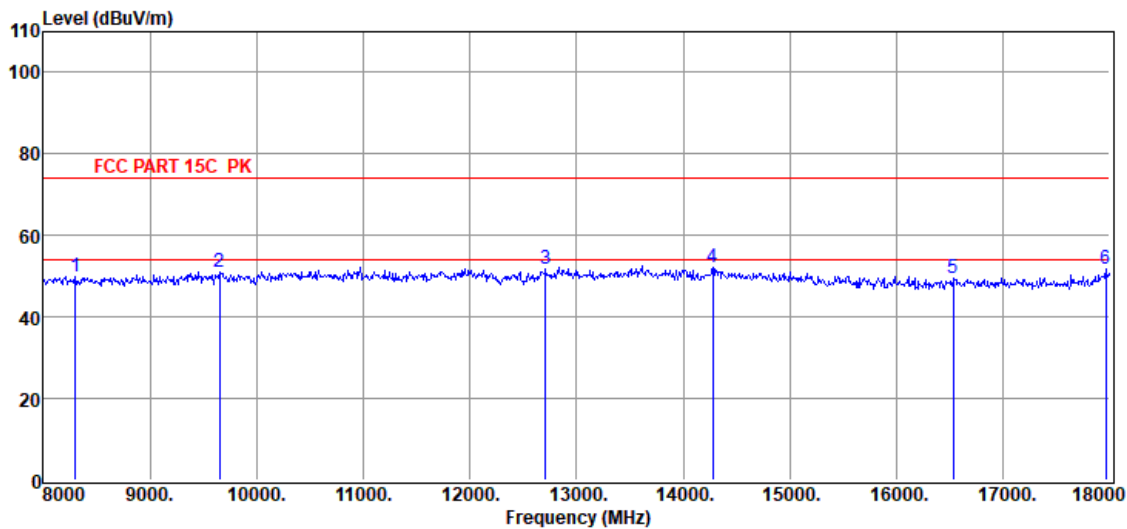
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5745

Data: 31



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8300.00	46.16	37.48	39.83	3.21	2.74	49.76	74.00	-24.24	Peak	HORIZONTAL
2	9650.00	46.31	38.61	40.35	3.63	2.96	51.16	74.00	-22.84	Peak	HORIZONTAL
3	12710.00	46.23	39.25	40.31	4.00	2.57	51.74	74.00	-22.26	Peak	HORIZONTAL
4	14280.00	44.86	39.90	39.67	4.43	2.61	52.13	74.00	-21.87	Peak	HORIZONTAL
5	16530.00	43.78	37.94	40.01	4.73	3.02	49.46	74.00	-24.54	Peak	HORIZONTAL
6	17960.00	42.48	42.25	40.68	4.95	2.64	51.64	74.00	-22.36	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

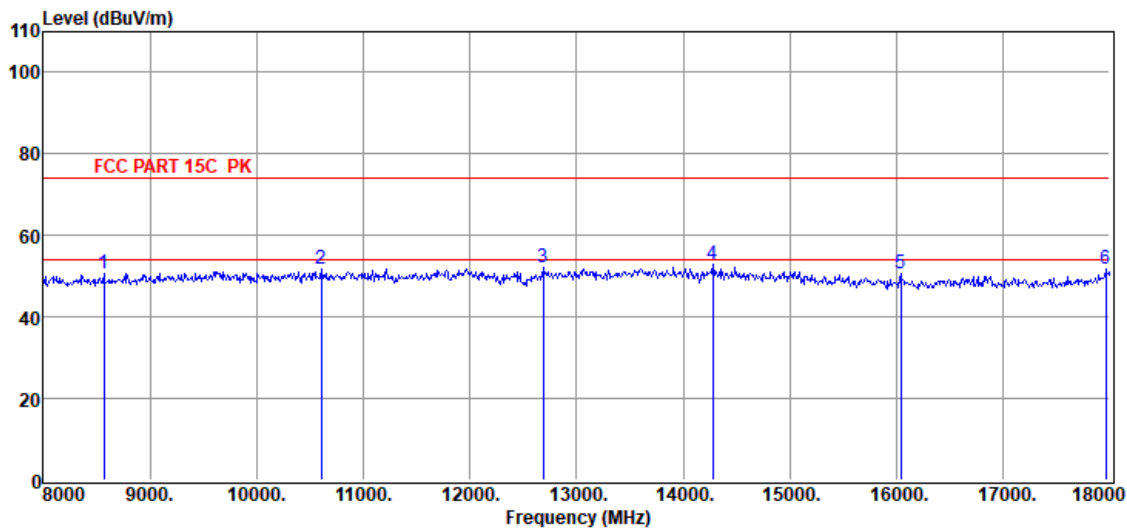
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5745

Data: 32



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8570.00	46.51	37.87	39.86	3.24	2.77	50.53	74.00	-23.47	Peak	VERTICAL
2	10610.00	46.44	39.07	40.36	3.70	2.78	51.63	74.00	-22.37	Peak	VERTICAL
3	12690.00	46.67	39.23	40.31	3.97	2.56	52.12	74.00	-21.88	Peak	VERTICAL
4	14280.00	45.71	39.90	39.67	4.43	2.61	52.98	74.00	-21.02	Peak	VERTICAL
5	16040.00	45.53	37.90	39.91	4.61	2.63	50.76	74.00	-23.24	Peak	VERTICAL
6	17960.00	42.62	42.25	40.68	4.95	2.64	51.78	74.00	-22.22	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

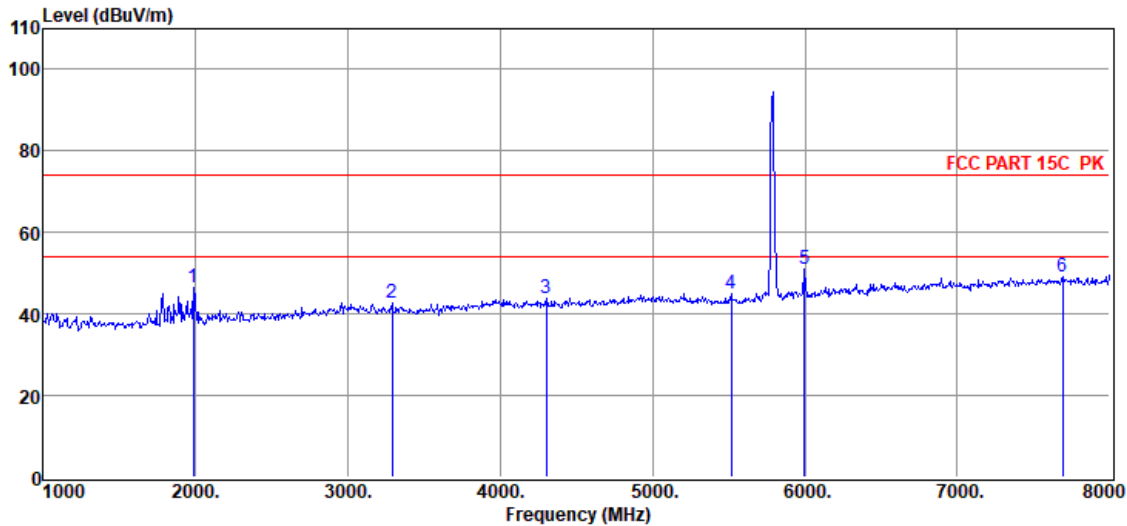
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5785

Data: 33



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1987.00	57.08	26.67	39.38	1.59	0.68	46.64	74.00	-27.36	Peak	HORIZONTAL
2	3289.00	50.79	29.44	39.99	1.77	0.81	42.82	74.00	-31.18	Peak	HORIZONTAL
3	4304.00	49.72	31.34	40.26	2.26	0.88	43.94	74.00	-30.06	Peak	HORIZONTAL
4	5515.00	49.00	32.84	40.45	2.58	1.03	45.00	74.00	-29.00	Peak	HORIZONTAL
5	5998.00	53.41	34.00	40.50	3.03	1.14	51.08	74.00	-22.92	Peak	HORIZONTAL
6	7692.00	48.18	36.63	39.77	3.16	1.10	49.30	74.00	-24.70	Peak	HORIZONTAL

Note:

1. 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)

2. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

3. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

4. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-13

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

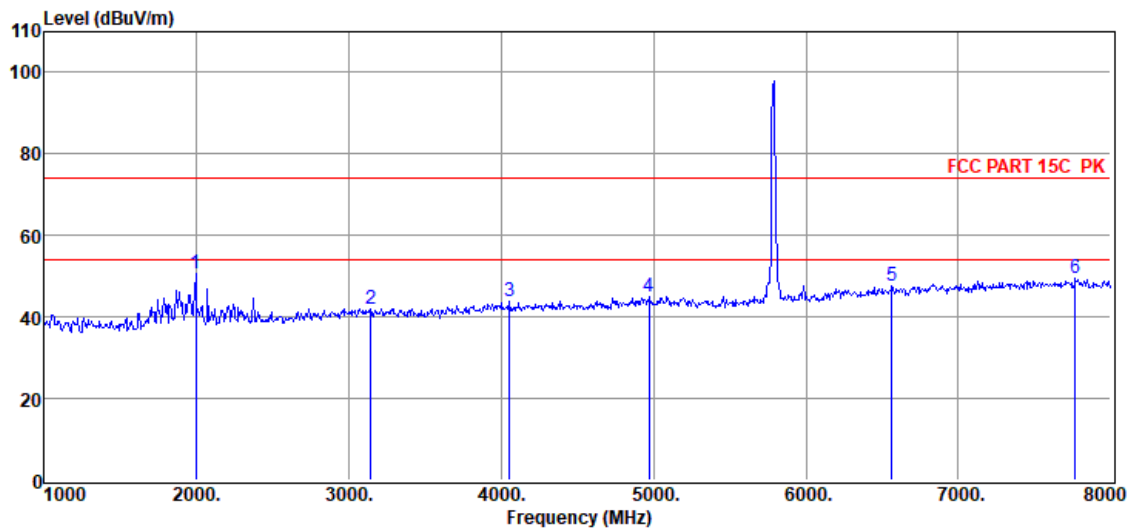
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5785

Data: 34



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1994.00	61.15	26.68	39.39	1.60	0.68	50.72	74.00	-23.28	Peak	VERTICAL
2	3142.00	49.97	29.47	39.94	1.82	0.80	42.12	74.00	-31.88	Peak	VERTICAL
3	4052.00	49.97	31.14	40.21	2.14	0.86	43.90	74.00	-30.10	Peak	VERTICAL
4	4969.00	48.82	33.00	40.39	2.53	0.91	44.87	74.00	-29.13	Peak	VERTICAL
5	6565.00	47.99	35.30	40.05	3.24	1.02	47.50	74.00	-26.50	Peak	VERTICAL
6	7769.00	48.19	36.72	39.78	3.17	1.12	49.42	74.00	-24.58	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

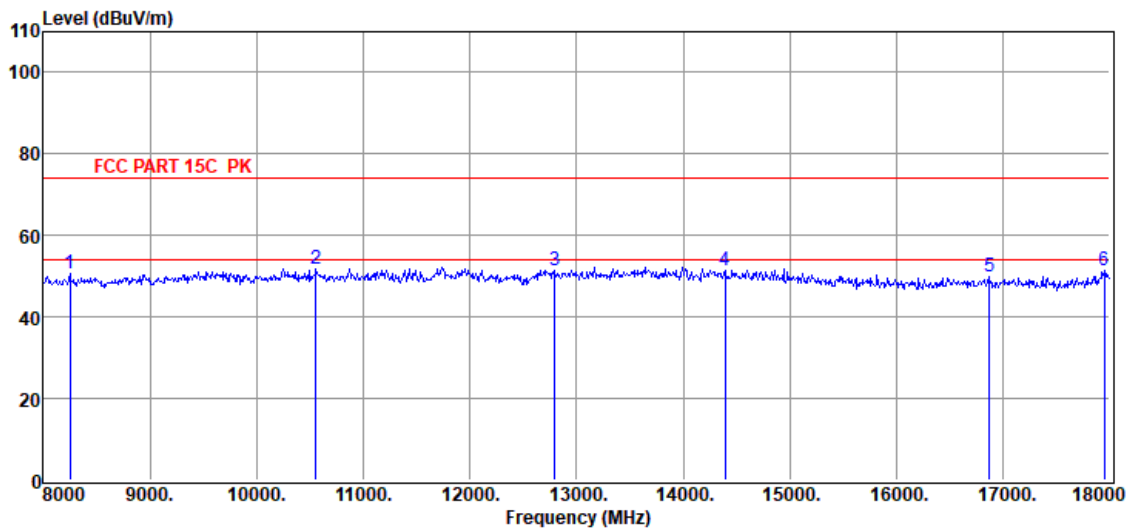
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5785

Data: 35



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8250.00	47.23	37.40	39.83	3.20	2.74	50.74	74.00	-23.26	Peak	HORIZONTAL
2	10560.00	46.51	39.04	40.38	3.69	2.80	51.66	74.00	-22.34	Peak	HORIZONTAL
3	12800.00	45.63	39.36	40.34	4.12	2.59	51.36	74.00	-22.64	Peak	HORIZONTAL
4	14390.00	44.19	39.90	39.66	4.39	2.57	51.39	74.00	-22.61	Peak	HORIZONTAL
5	16870.00	43.68	38.34	40.07	4.72	3.29	49.96	74.00	-24.04	Peak	HORIZONTAL
6	17950.00	42.27	42.19	40.67	4.95	2.65	51.39	74.00	-22.61	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

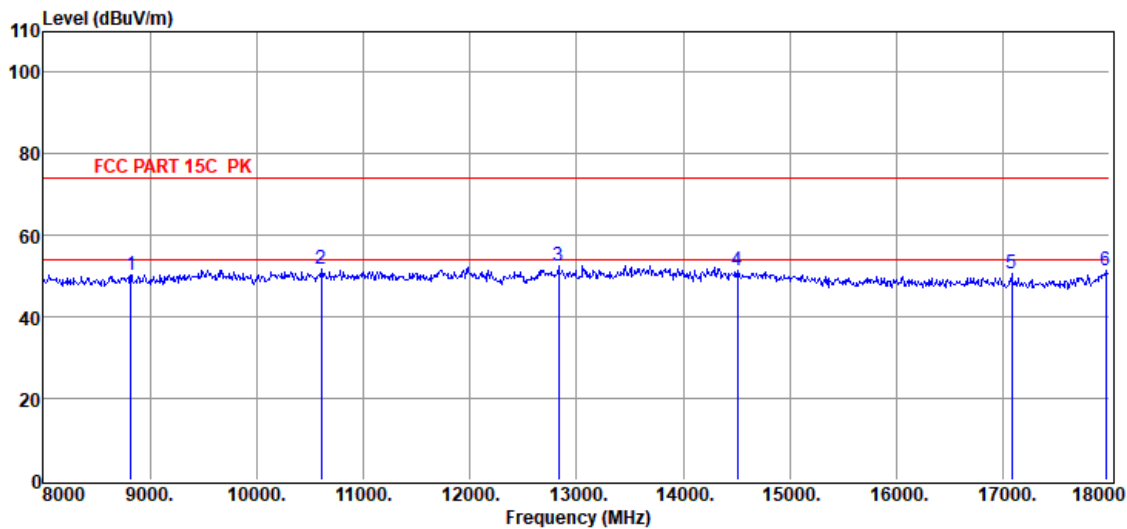
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5785

Data: 36



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8820.00	46.10	38.12	39.88	3.29	2.79	50.42	74.00	-23.58	Peak	VERTICAL
2	10610.00	46.55	39.07	40.36	3.70	2.78	51.74	74.00	-22.26	Peak	VERTICAL
3	12830.00	46.90	39.40	40.35	4.17	2.60	52.72	74.00	-21.28	Peak	VERTICAL
4	14510.00	44.39	39.89	39.65	4.35	2.54	51.52	74.00	-22.48	Peak	VERTICAL
5	17080.00	44.12	38.64	40.15	4.73	3.33	50.67	74.00	-23.33	Peak	VERTICAL
6	17960.00	42.13	42.25	40.68	4.95	2.64	51.29	74.00	-22.71	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

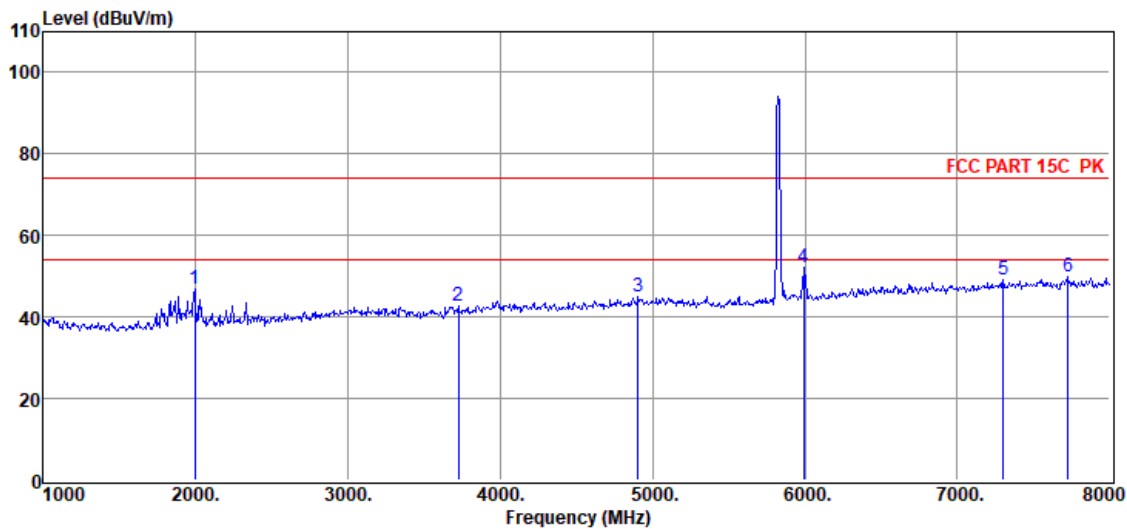
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5825

Data: 37



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1994.00	57.33	26.68	39.39	1.60	0.68	46.90	74.00	-27.10	Peak	HORIZONTAL
2	3723.00	49.79	30.16	40.12	1.88	0.84	42.55	74.00	-31.45	Peak	HORIZONTAL
3	4906.00	49.30	32.80	40.38	2.51	0.91	45.14	74.00	-28.86	Peak	HORIZONTAL
4	5991.00	54.67	33.98	40.50	3.02	1.14	52.31	74.00	-21.69	Peak	HORIZONTAL
5	7300.00	48.72	36.24	39.73	3.09	1.00	49.32	74.00	-24.68	Peak	HORIZONTAL
6	7727.00	48.69	36.67	39.77	3.16	1.11	49.86	74.00	-24.14	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-13

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

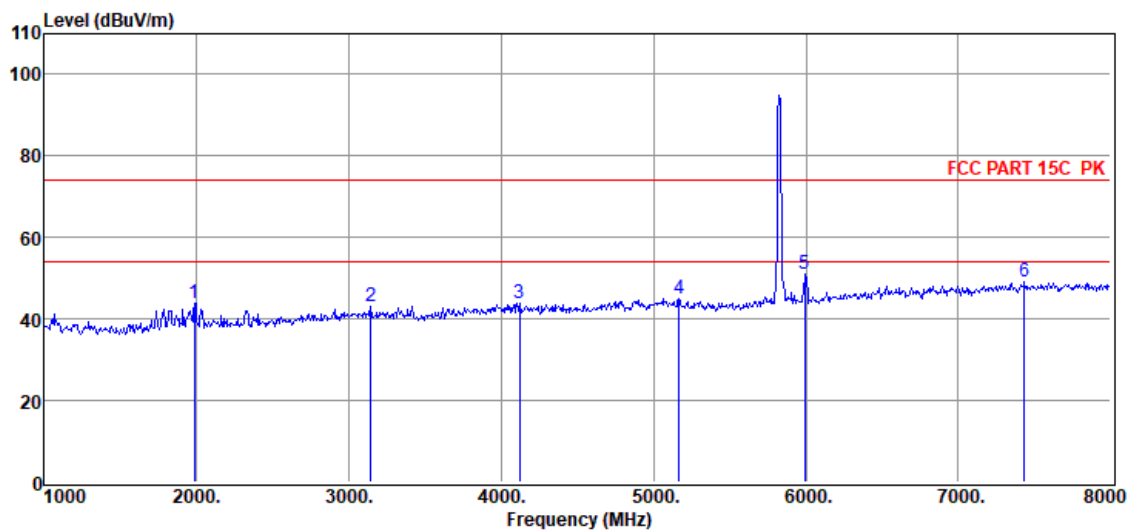
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5825

Data: 38



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1987.00	54.24	26.67	39.38	1.59	0.68	43.80	74.00	-30.20	Peak	VERTICAL
2	3142.00	50.78	29.47	39.94	1.82	0.80	42.93	74.00	-31.07	Peak	VERTICAL
3	4122.00	49.99	31.20	40.22	2.17	0.87	44.01	74.00	-29.99	Peak	VERTICAL
4	5165.00	49.02	33.00	40.42	2.55	0.95	45.10	74.00	-28.90	Peak	VERTICAL
5	5991.00	53.40	33.98	40.50	3.02	1.14	51.04	74.00	-22.96	Peak	VERTICAL
6	7433.00	48.23	36.35	39.74	3.12	1.04	49.00	74.00	-25.00	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E
EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

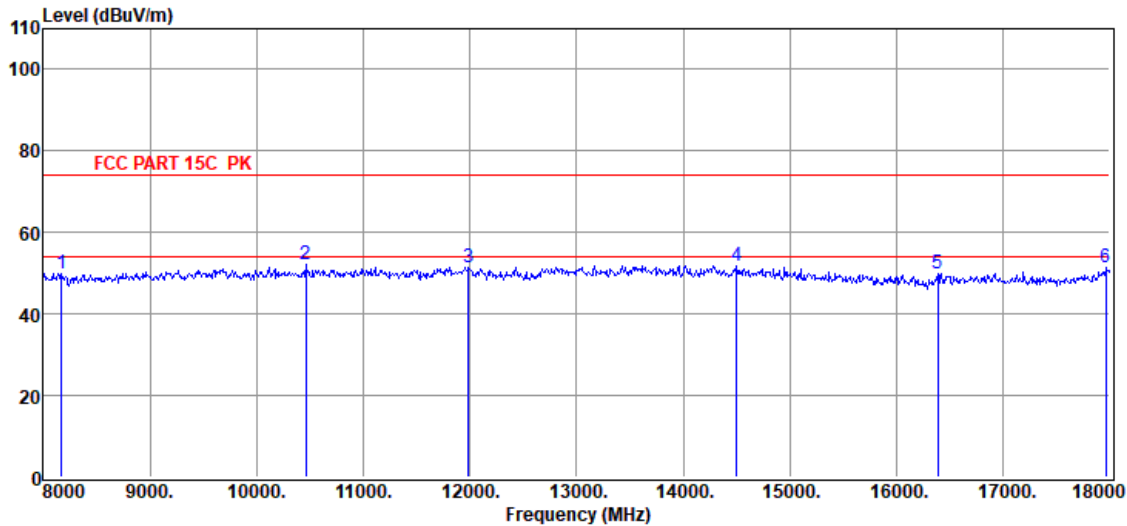
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11A 5825

Data: 39



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8170.00	46.70	37.27	39.82	3.20	2.73	50.08	74.00	-23.92	Peak	HORIZONTAL
2	10460.00	47.20	38.95	40.42	3.67	2.85	52.25	74.00	-21.75	Peak	HORIZONTAL
3	11990.00	45.96	39.20	40.10	4.05	2.37	51.48	74.00	-22.52	Peak	HORIZONTAL
4	14500.00	44.64	39.90	39.65	4.35	2.54	51.78	74.00	-22.22	Peak	HORIZONTAL
5	16390.00	44.42	37.90	39.98	4.70	2.91	49.95	74.00	-24.05	Peak	HORIZONTAL
6	17960.00	42.24	42.25	40.68	4.95	2.64	51.40	74.00	-22.60	Peak	HORIZONTAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G -1.EM6

Test Date : 2022-03-09

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

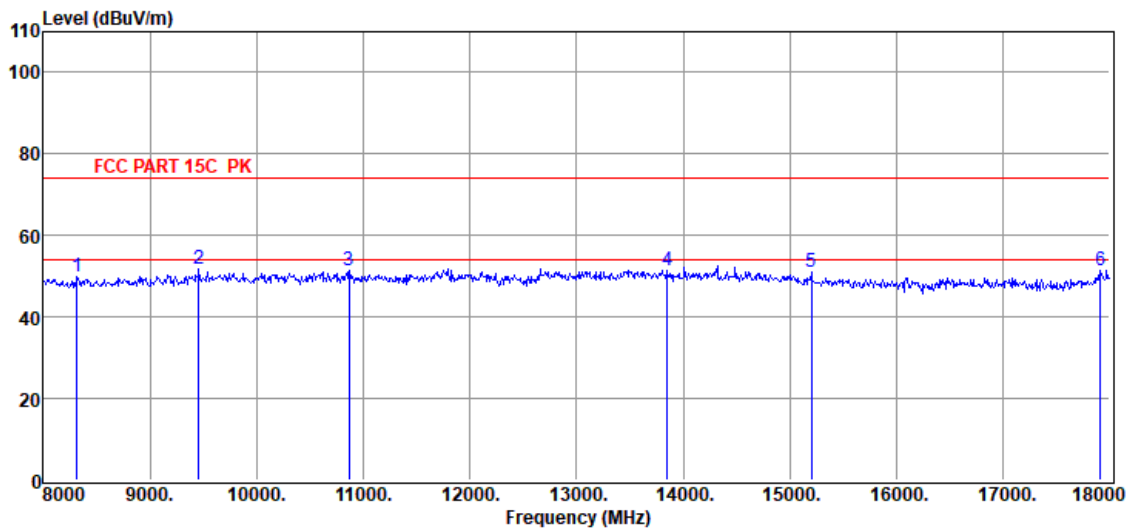
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11A 5825

Data: 40



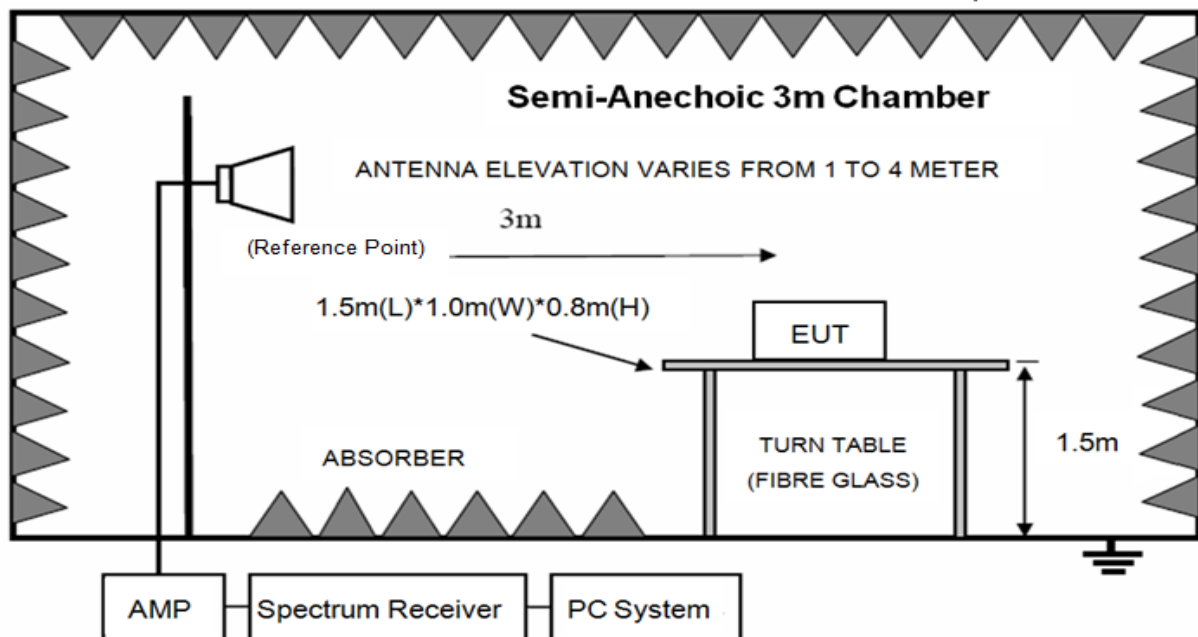
Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	8320.00	46.38	37.51	39.83	3.21	2.75	50.02	74.00	-23.98	Peak	VERTICAL
2	9460.00	46.92	38.67	40.22	3.60	2.91	51.88	74.00	-22.12	Peak	VERTICAL
3	10870.00	46.01	39.22	40.25	3.77	2.67	51.42	74.00	-22.58	Peak	VERTICAL
4	13850.00	44.26	39.93	39.81	4.37	2.68	51.43	74.00	-22.57	Peak	VERTICAL
5	15200.00	44.46	39.22	39.66	4.51	2.43	50.96	74.00	-23.04	Peak	VERTICAL
6	17910.00	42.48	41.94	40.65	4.93	2.68	51.38	74.00	-22.62	Peak	VERTICAL

Note:

- 30MHz~40GHz: (11a, 11n20, n40, 11ac20, 11ac40, 11ac80 mode all have been tested, only 11a mode is the worst case and reported.)
- Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

9. Band Edge Compliance

9.1. Block diagram of test setup



9.2. Limit

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm / MHz.
 - (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm / MHz.
 - (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm / MHz.
 - (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm / MHz.
 - (5) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
 - (6) The provisions of §15.205 apply to intentional radiators operating under this section.
- -27 dBm/MHz Limit = $95.2 + \text{EIRP [dBm]} = 95.2 - 27 = 68.2$ dBμV/m

9.3. Test procedure

Same with clause 8.3 except change investigated frequency range from 5.15-5.25 GHz, 5250-5350 GHz, 5470-5725 GHz, 5.725-5.85 GHz.

Remark: All restriction band have been tested, and only the worst case is shown in report.

9.4. Test result

Pass. (See below detailed test result)

Note: As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

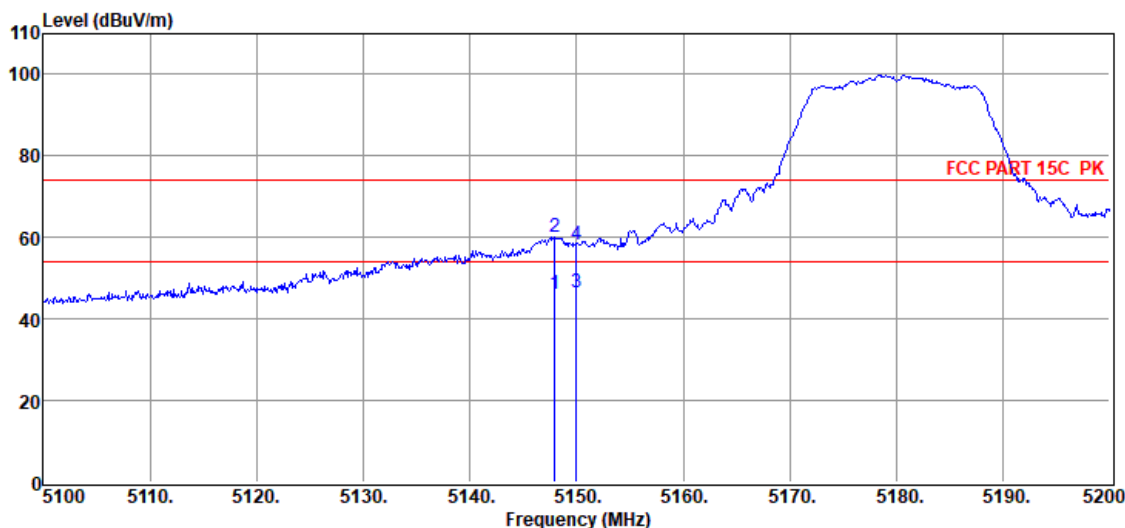
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11a 5180

Data: 26



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.00	49.88	33.01	40.41	2.55	0.94	45.97	54.00	-8.03	Average	VERTICAL
2	5148.00	64.13	33.01	40.41	2.55	0.94	60.22	68.20	-7.98	Peak	VERTICAL
3	5150.00	50.51	33.01	40.42	2.55	0.94	46.59	54.00	-7.41	Average	VERTICAL
4	5150.00	62.28	33.01	40.42	2.55	0.94	58.36	68.20	-9.84	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

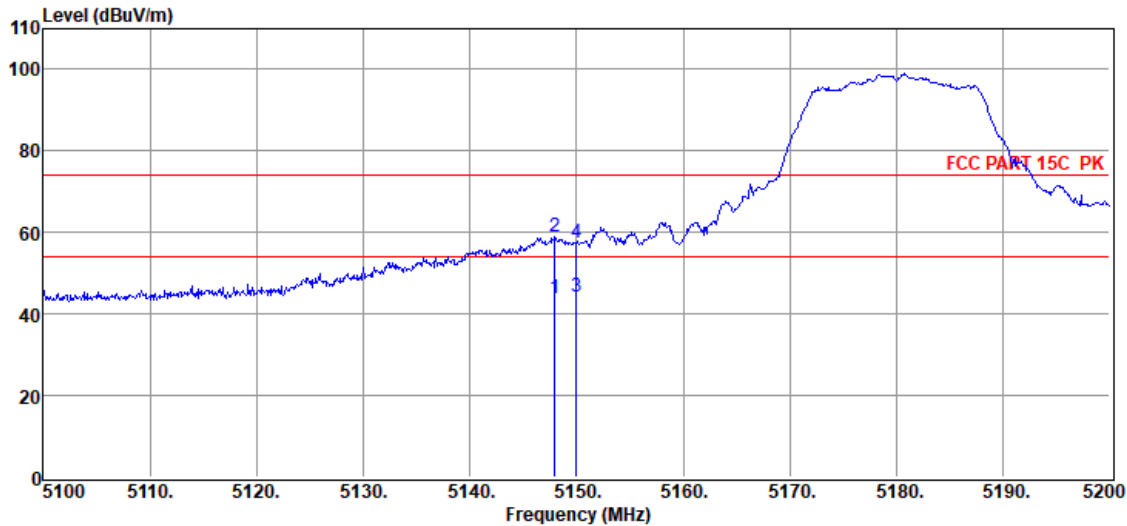
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11a 5180

Data: 27



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.00	47.66	33.01	40.41	2.55	0.94	43.75	54.00	-10.25	Average	HORIZONTAL
2	5148.00	62.79	33.01	40.41	2.55	0.94	58.88	68.20	-9.32	Peak	HORIZONTAL
3	5150.00	48.01	33.01	40.42	2.55	0.94	44.09	54.00	-9.91	Average	HORIZONTAL
4	5150.00	61.41	33.01	40.42	2.55	0.94	57.49	68.20	-10.71	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

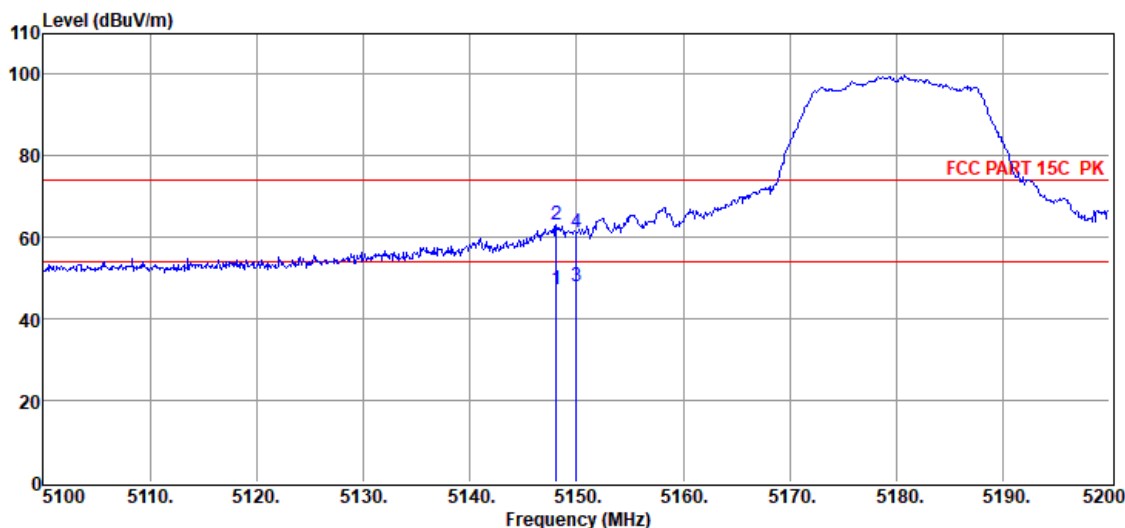
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11a 5180

Data: 28



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.10	41.00	33.01	40.41	2.55	0.94	47.09	54.00	-6.91	Average	VERTICAL
2	5148.10	57.19	33.01	40.41	2.55	0.94	63.28	68.20	-4.92	Peak	VERTICAL
3	5150.00	42.01	33.01	40.42	2.55	0.94	48.09	54.00	-5.91	Average	VERTICAL
4	5150.00	55.27	33.01	40.42	2.55	0.94	61.35	68.20	-6.85	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

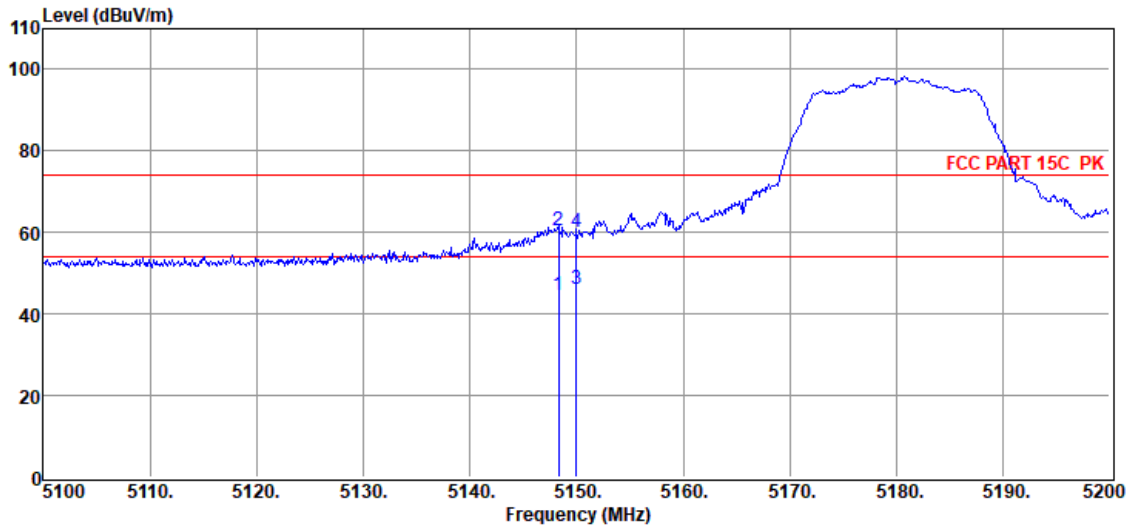
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11a 5180

Data: 29



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.30	38.44	33.01	40.41	2.55	0.94	44.53	54.00	-9.47	Average	HORIZONTAL
2	5148.30	54.39	33.01	40.41	2.55	0.94	60.48	68.20	-7.72	Peak	HORIZONTAL
3	5150.00	40.01	33.01	40.42	2.55	0.94	46.09	54.00	-7.91	Average	HORIZONTAL
4	5150.00	53.92	33.01	40.42	2.55	0.94	60.00	68.20	-8.20	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

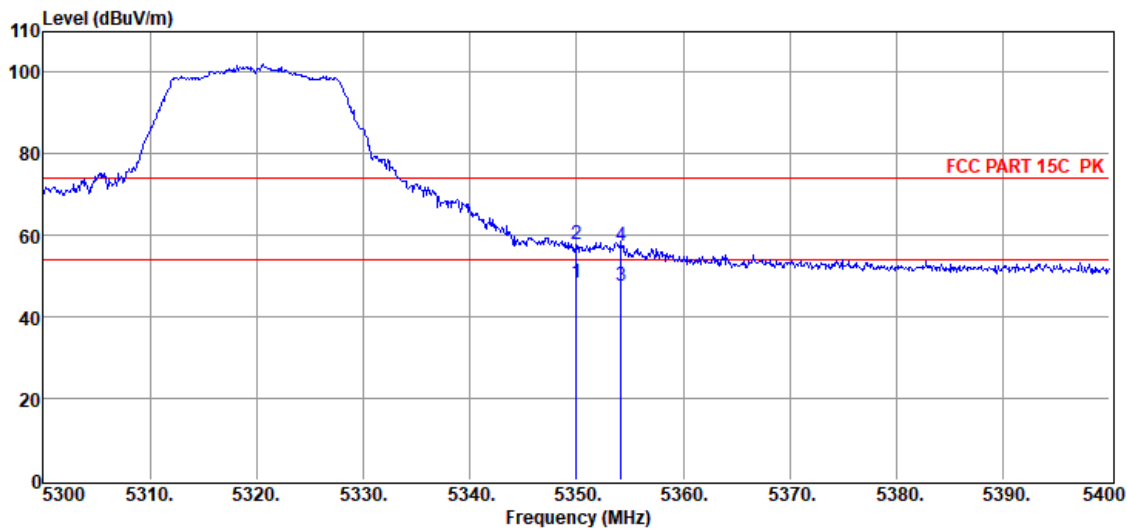
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11a 5320

Data: 30



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	42.31	32.89	40.44	2.56	0.99	48.31	54.00	-5.69	Average	VERTICAL
2	5350.00	51.86	32.89	40.44	2.56	0.99	57.86	68.20	-10.34	Peak	VERTICAL
3	5354.20	41.64	32.89	40.44	2.56	0.99	47.64	54.00	-6.36	Average	VERTICAL
4	5354.20	51.52	32.89	40.44	2.56	0.99	57.52	68.20	-10.68	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

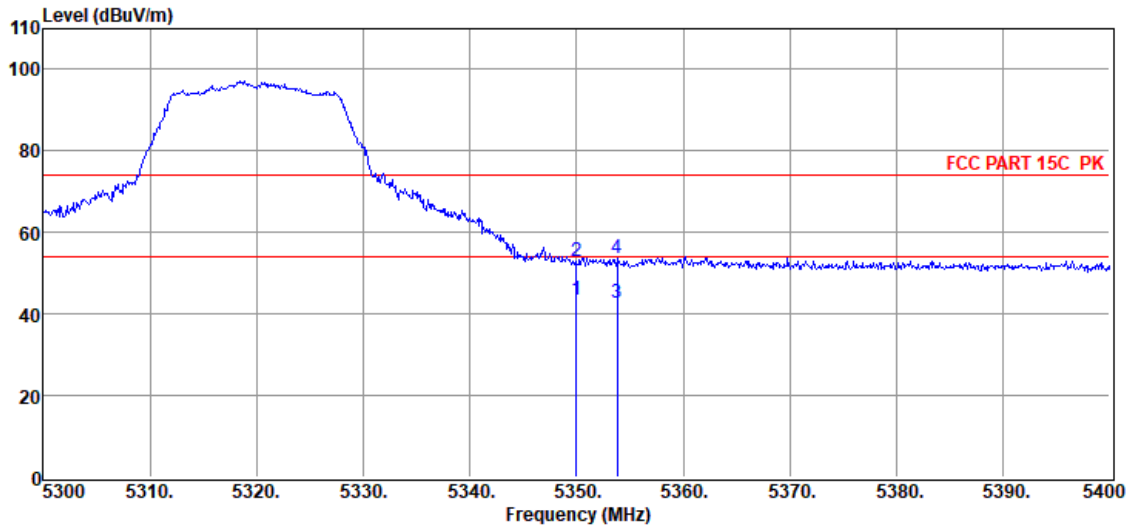
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11a 5320

Data: 31



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	37.31	32.89	40.44	2.56	0.99	43.31	54.00	-10.69	Average	HORIZONTAL
2	5350.00	46.75	32.89	40.44	2.56	0.99	52.75	68.20	-15.45	Peak	HORIZONTAL
3	5353.80	36.60	32.89	40.44	2.56	0.99	42.60	54.00	-11.40	Average	HORIZONTAL
4	5353.80	47.66	32.89	40.44	2.56	0.99	53.66	68.20	-14.54	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

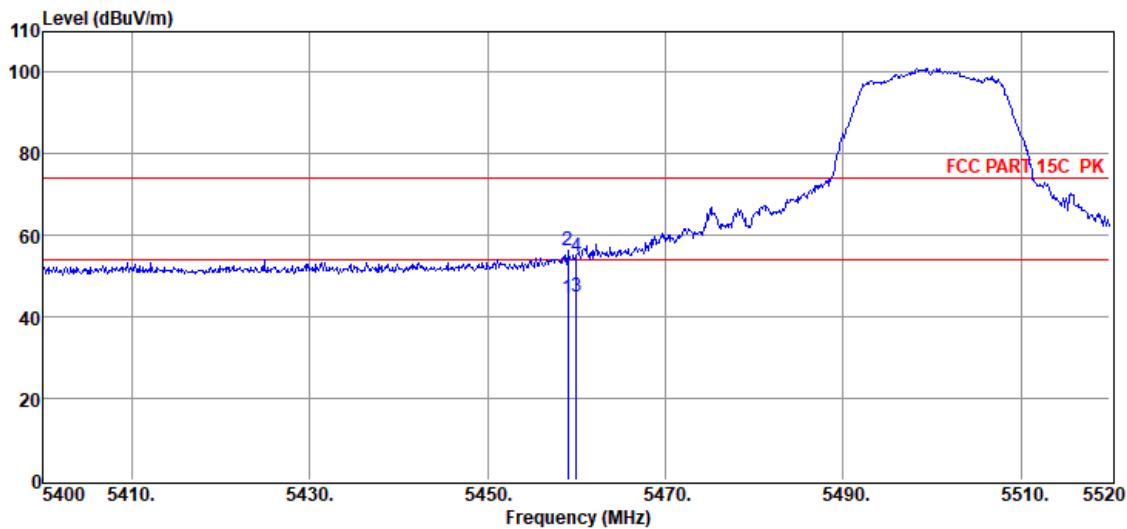
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11a 5500

Data: 32



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5459.04	38.74	32.82	40.45	2.57	1.02	44.70	54.00	-9.30	Average	VERTICAL
2	5459.04	50.39	32.82	40.45	2.57	1.02	56.35	68.20	-11.85	Peak	VERTICAL
3	5460.00	39.21	32.82	40.45	2.57	1.02	45.17	54.00	-8.83	Average	VERTICAL
4	5460.00	48.99	32.82	40.45	2.57	1.02	54.95	68.20	-13.35	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

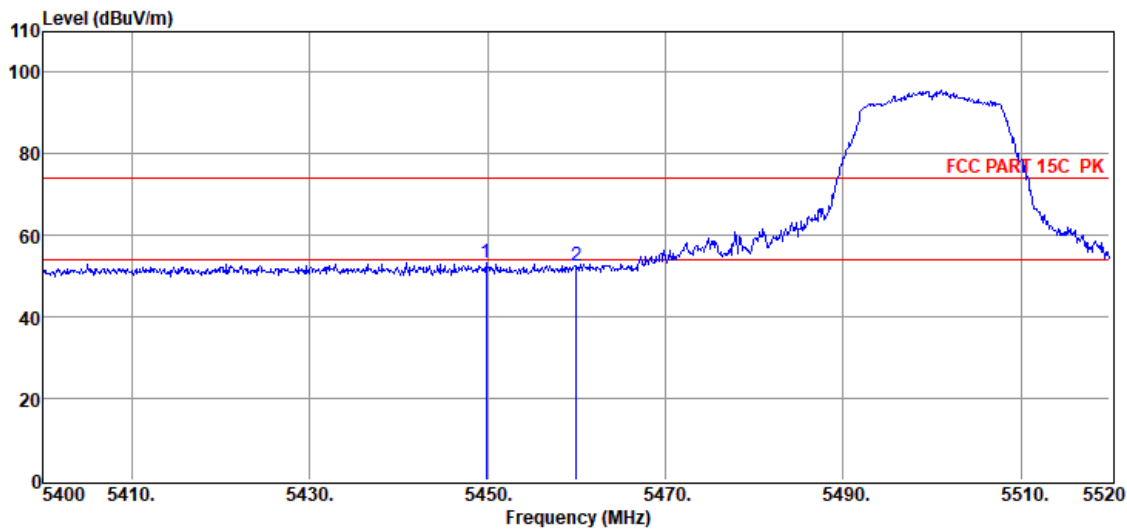
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11a 5500

Data: 33



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5449.80	47.34	32.83	40.44	2.57	1.01	53.31	68.20	-14.89	Peak	HORIZONTAL
2	5460.00	46.52	32.82	40.45	2.57	1.02	52.48	68.20	-15.72	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

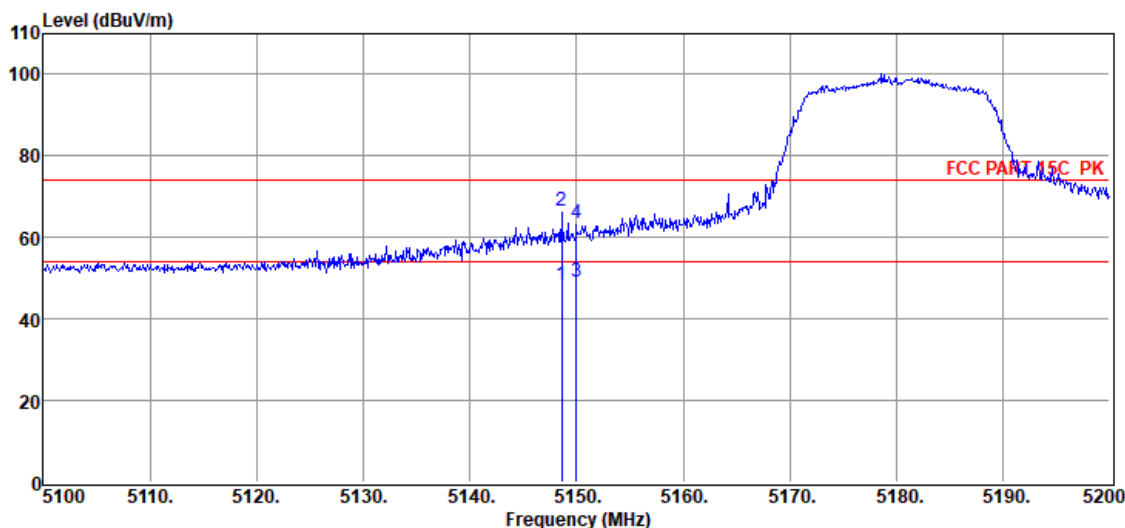
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11n20 5180

Data: 34



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5148.60	42.20	33.01	40.41	2.55	0.94	48.29	54.00	-5.71	Average	VERTICAL
2	5148.60	60.43	33.01	40.41	2.55	0.94	66.52	68.20	-1.68	Peak	VERTICAL
3	5150.00	43.01	33.01	40.42	2.55	0.94	49.09	54.00	-4.91	Average	VERTICAL
4	5150.00	57.33	33.01	40.42	2.55	0.94	63.41	68.20	-4.79	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

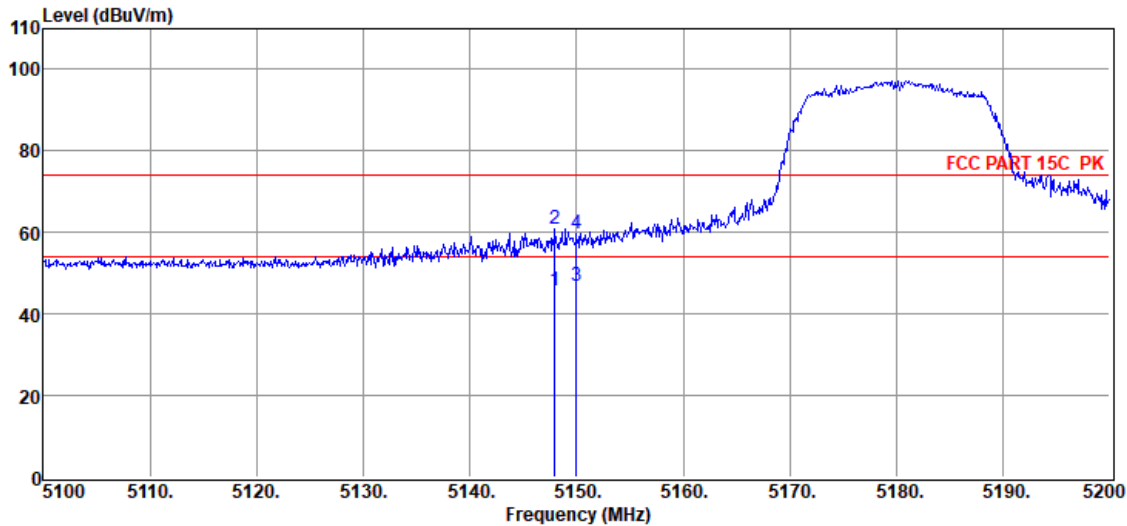
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11n20 5180

Data: 35



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.00	39.74	33.01	40.41	2.55	0.94	45.83	54.00	-8.17	Average	HORIZONTAL
2	5148.00	54.89	33.01	40.41	2.55	0.94	60.98	68.20	-7.22	Peak	HORIZONTAL
3	5150.00	40.69	33.01	40.42	2.55	0.94	46.77	54.00	-7.23	Average	HORIZONTAL
4	5150.00	53.67	33.01	40.42	2.55	0.94	59.75	68.20	-8.45	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

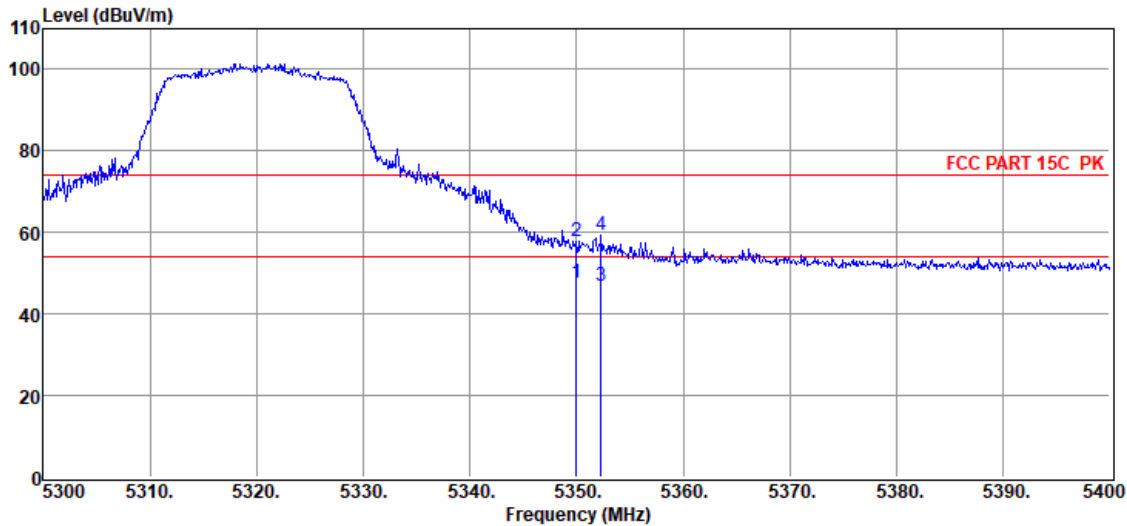
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11n20 5320

Data: 36



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	41.68	32.89	40.44	2.56	0.99	47.68	54.00	-6.32	Average	VERTICAL
2	5350.00	51.94	32.89	40.44	2.56	0.99	57.94	68.20	-10.26	Peak	VERTICAL
3	5352.30	40.76	32.89	40.44	2.56	0.99	46.76	54.00	-7.24	Average	VERTICAL
4	5352.30	53.16	32.89	40.44	2.56	0.99	59.16	68.20	-9.04	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

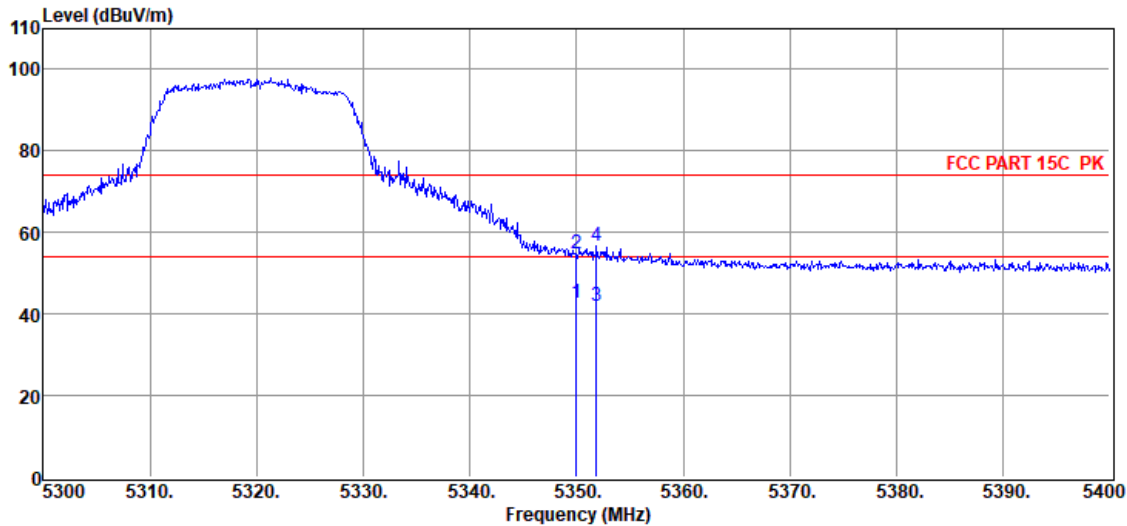
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11n20 5320

Data: 37



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	36.88	32.89	40.44	2.56	0.99	42.88	54.00	-11.12	Average	HORIZONTAL
2	5350.00	48.63	32.89	40.44	2.56	0.99	54.63	68.20	-13.57	Peak	HORIZONTAL
3	5351.90	36.12	32.89	40.44	2.56	0.99	42.12	54.00	-11.88	Average	HORIZONTAL
4	5351.90	50.75	32.89	40.44	2.56	0.99	56.75	68.20	-11.45	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

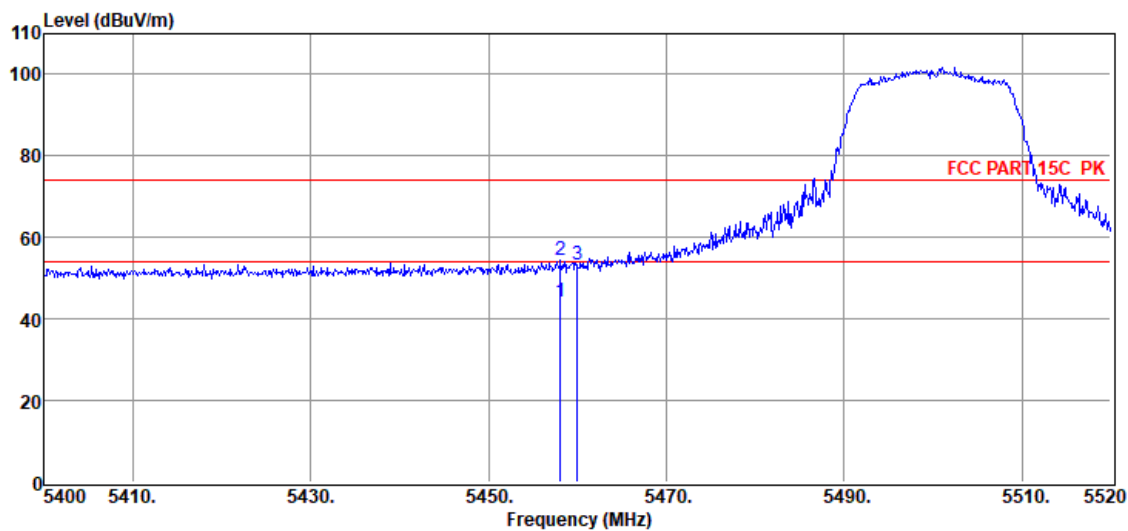
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11n20 5500

Data: 38



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5458.08	38.43	32.83	40.45	2.57	1.02	44.40	54.00	-9.60	Average	VERTICAL
2	5458.08	48.55	32.83	40.45	2.57	1.02	54.52	68.20	-13.68	Peak	VERTICAL
3	5460.00	47.15	32.82	40.45	2.57	1.02	53.11	68.20	-15.09	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

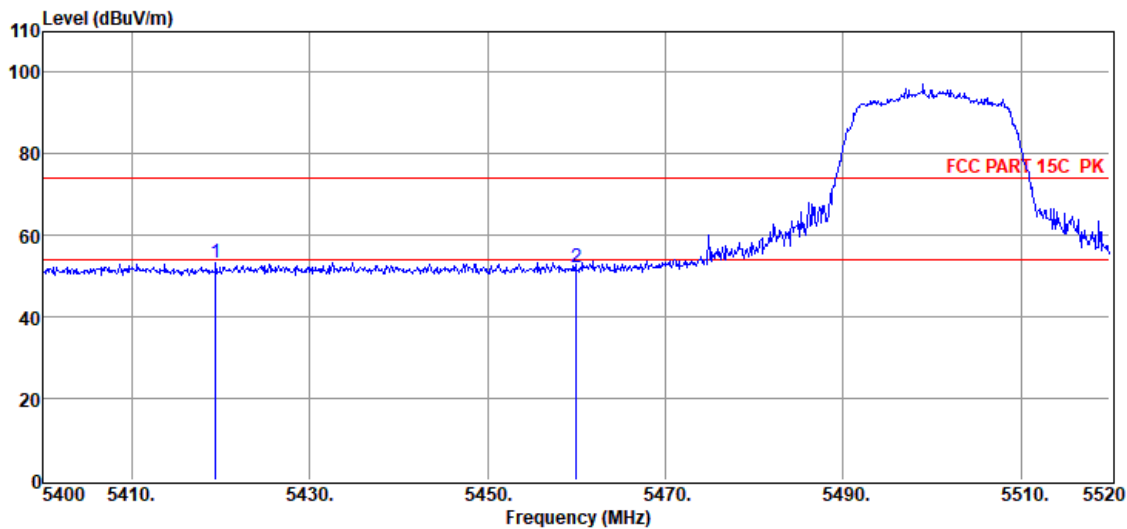
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11n20 5500

Data: 39



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5419.44	47.41	32.85	40.44	2.57	1.01	53.40	68.20	-14.80	Peak	HORIZONTAL
2	5460.00	46.34	32.82	40.45	2.57	1.02	52.30	68.20	-15.90	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

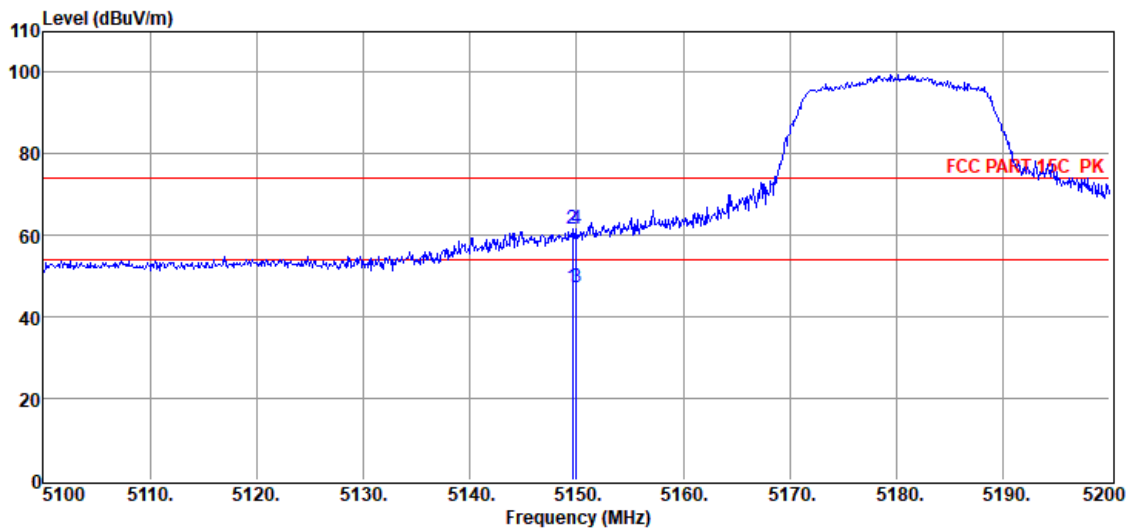
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11ac20 5180

Data: 40



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5149.60	41.00	33.01	40.41	2.55	0.94	47.09	54.00	-6.91	Average	VERTICAL
2	5149.60	55.57	33.01	40.41	2.55	0.94	61.66	68.20	-6.54	Peak	VERTICAL
3	5150.00	41.34	33.01	40.42	2.55	0.94	47.42	54.00	-6.58	Average	VERTICAL
4	5150.00	55.52	33.01	40.42	2.55	0.94	61.60	68.20	-6.60	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

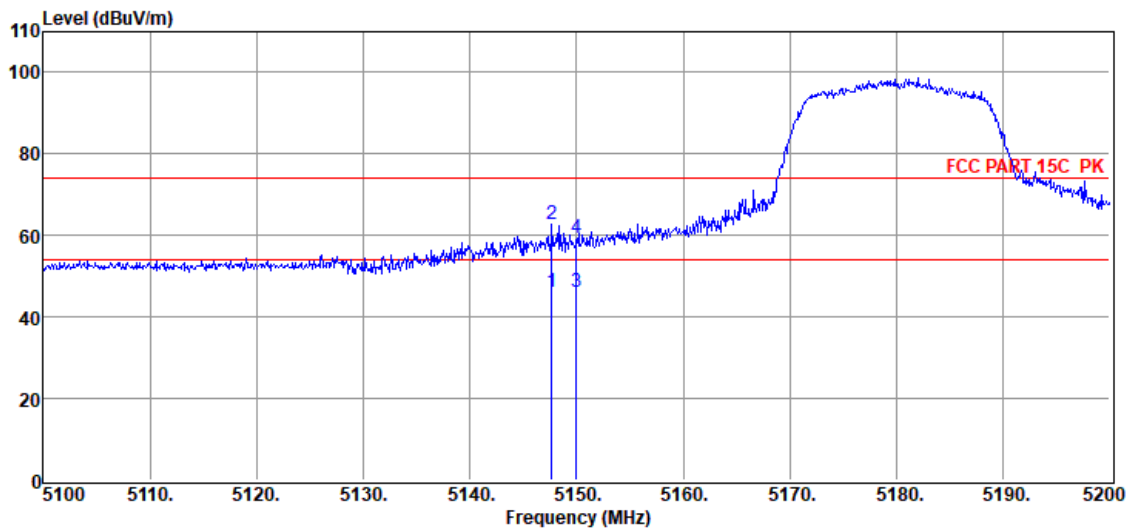
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11ac20 5180

Data: 41



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5147.70	39.89	33.01	40.41	2.55	0.94	45.98	54.00	-8.02	Average	HORIZONTAL
2	5147.70	56.58	33.01	40.41	2.55	0.94	62.67	68.20	-5.53	Peak	HORIZONTAL
3	5150.00	40.22	33.01	40.42	2.55	0.94	46.30	54.00	-7.70	Average	HORIZONTAL
4	5150.00	53.10	33.01	40.42	2.55	0.94	59.18	68.20	-9.02	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

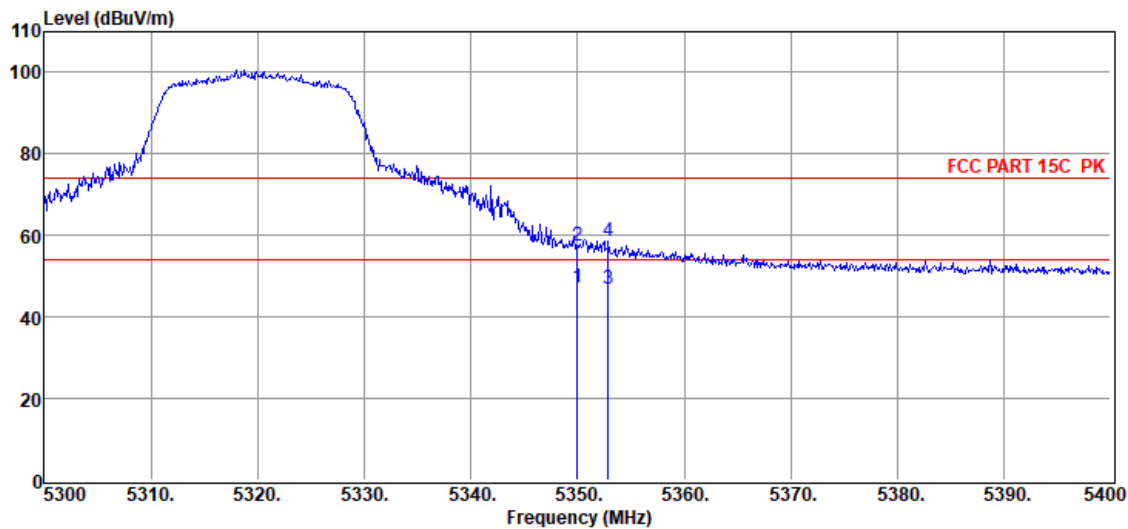
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11ac20 5320

Data: 42



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	41.34	32.89	40.44	2.56	0.99	47.34	54.00	-6.66	Average	VERTICAL
2	5350.00	51.55	32.89	40.44	2.56	0.99	57.55	68.20	-10.65	Peak	VERTICAL
3	5352.90	41.01	32.89	40.44	2.56	0.99	47.01	54.00	-6.99	Average	VERTICAL
4	5352.90	52.56	32.89	40.44	2.56	0.99	58.56	68.20	-9.64	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

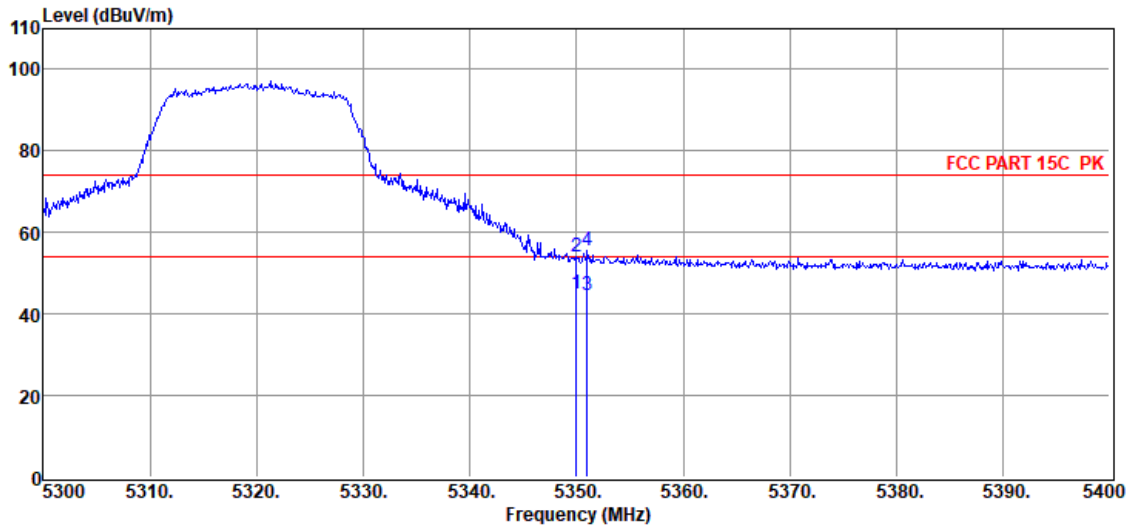
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11ac20 5320

Data: 43



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	38.89	32.89	40.44	2.56	0.99	44.89	54.00	-9.11	Average	HORIZONTAL
2	5350.00	48.03	32.89	40.44	2.56	0.99	54.03	68.20	-14.17	Peak	HORIZONTAL
3	5351.00	38.48	32.89	40.44	2.56	0.99	44.48	54.00	-9.52	Average	HORIZONTAL
4	5351.00	49.67	32.89	40.44	2.56	0.99	55.67	68.20	-12.53	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

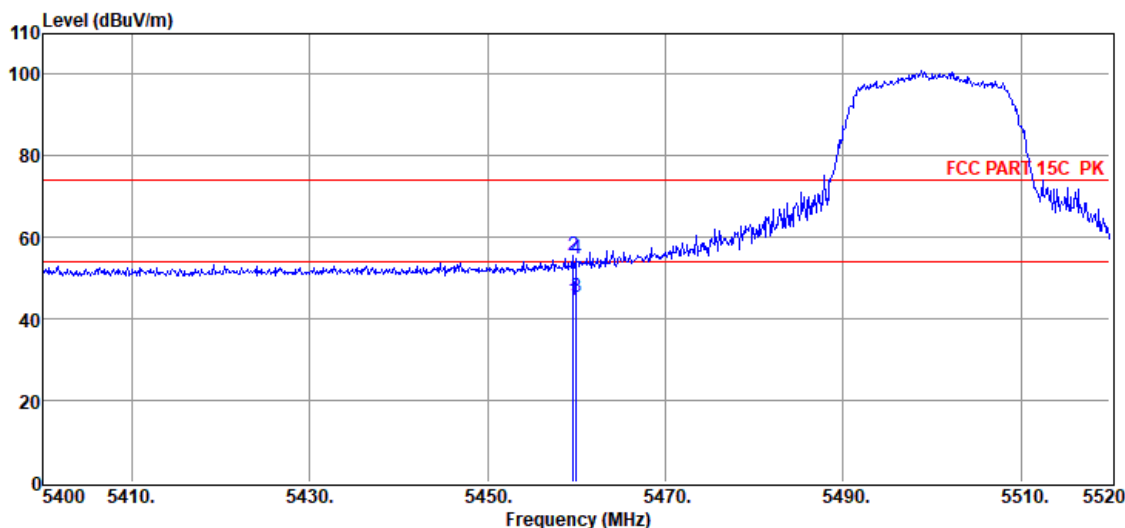
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11ac20 5500

Data: 44



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5459.64	38.77	32.82	40.45	2.57	1.02	44.73	54.00	-9.27	Average	VERTICAL
2	5459.64	49.71	32.82	40.45	2.57	1.02	55.67	68.20	-12.53	Peak	VERTICAL
3	5460.00	39.33	32.82	40.45	2.57	1.02	45.29	54.00	-8.71	Average	VERTICAL
4	5460.00	48.70	32.82	40.45	2.57	1.02	54.66	68.20	-13.54	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

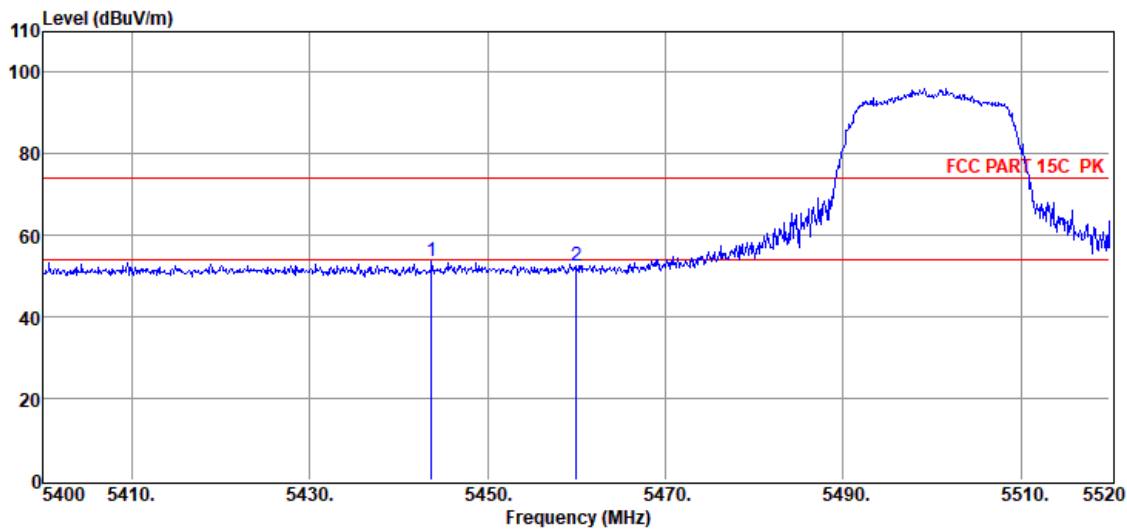
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11ac20 5500

Data: 45



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5443.68	47.72	32.83	40.44	2.57	1.01	53.69	68.20	-14.51	Peak	HORIZONTAL
2	5460.00	46.53	32.82	40.45	2.57	1.02	52.49	68.20	-15.71	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

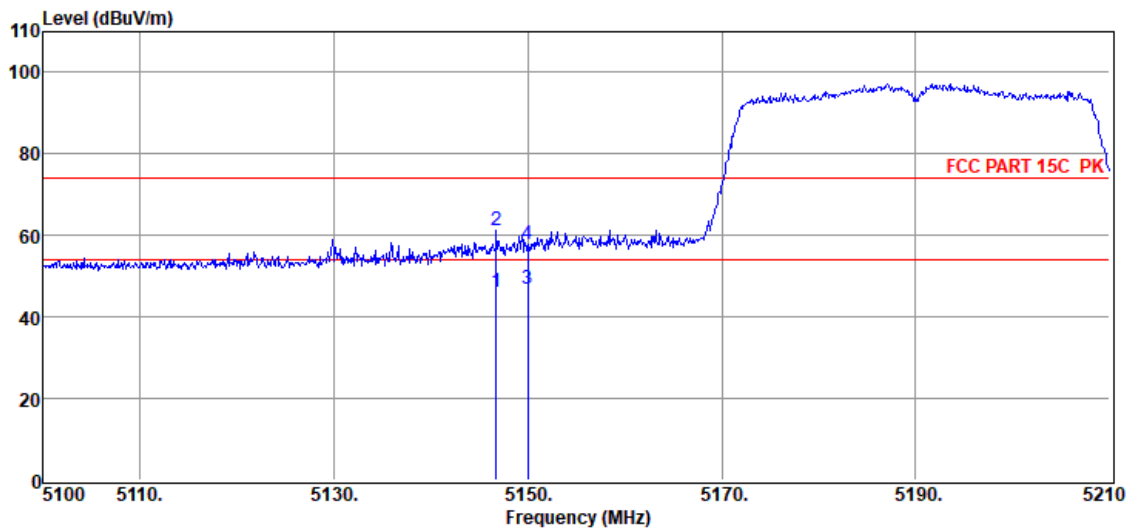
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11n40 5190

Data: 46



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5146.75	39.97	33.01	40.41	2.55	0.94	46.06	54.00	-7.94	Average	VERTICAL
2	5146.75	55.18	33.01	40.41	2.55	0.94	61.27	68.20	-6.93	Peak	VERTICAL
3	5150.00	40.90	33.01	40.42	2.55	0.94	46.98	54.00	-7.02	Average	VERTICAL
4	5150.00	51.80	33.01	40.42	2.55	0.94	57.88	68.20	-10.32	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

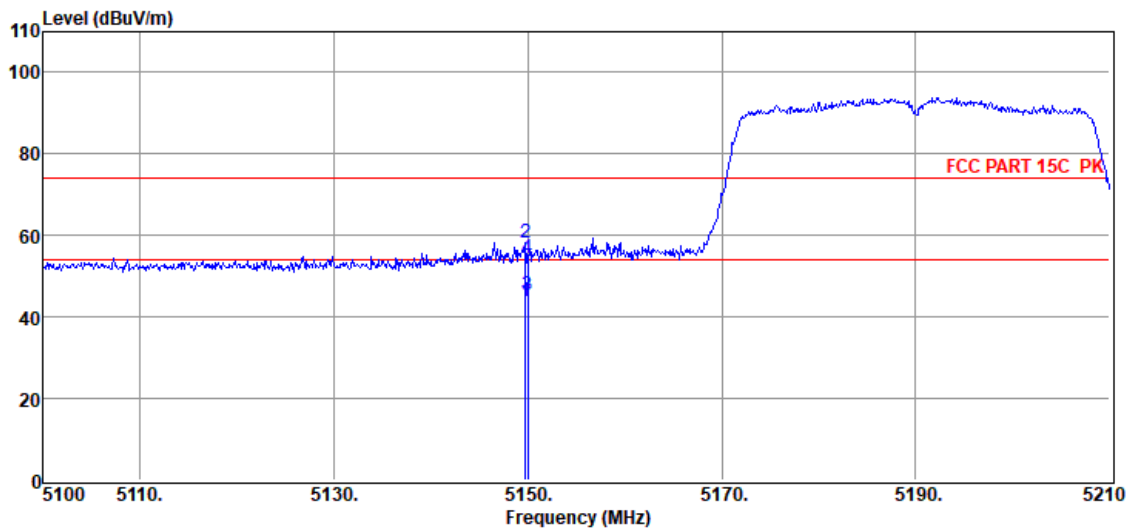
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11n40 5190

Data: 47



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5149.72	37.77	33.01	40.41	2.55	0.94	43.86	54.00	-10.14	Average	HORIZONTAL
2	5149.72	52.05	33.01	40.41	2.55	0.94	58.14	68.20	-10.06	Peak	HORIZONTAL
3	5150.00	39.21	33.01	40.42	2.55	0.94	45.29	54.00	-8.71	Average	HORIZONTAL
4	5150.00	48.24	33.01	40.42	2.55	0.94	54.32	68.20	-13.88	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

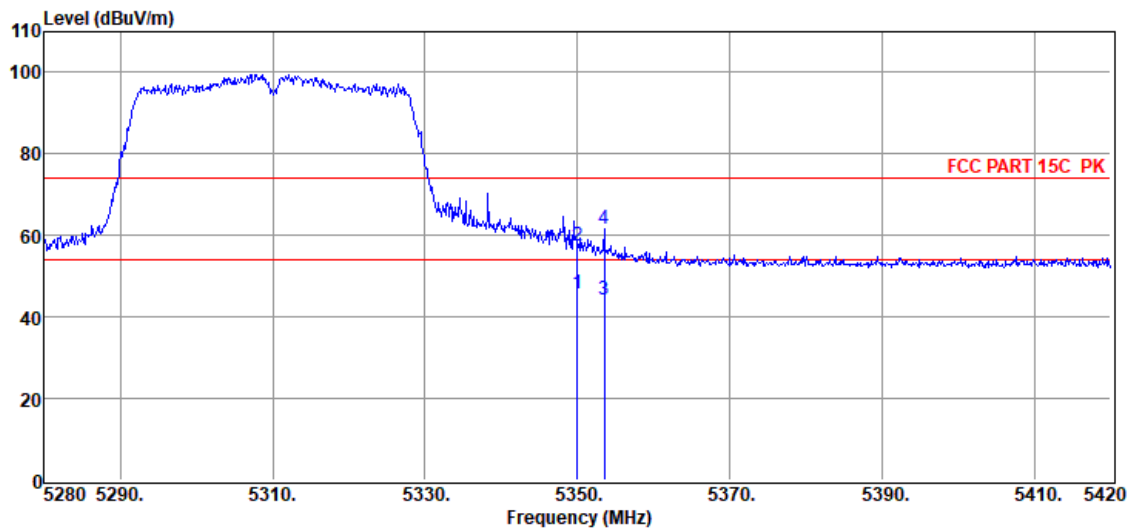
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11N40 5310

Data: 69



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	39.67	32.89	40.44	2.56	0.99	45.67	54.00	-8.33	Average	VERTICAL
2	5350.00	51.46	32.89	40.44	2.56	0.99	57.46	68.20	-10.74	Peak	VERTICAL
3	5353.50	38.14	32.89	40.44	2.56	0.99	44.14	54.00	-9.86	Average	VERTICAL
4	5353.50	55.43	32.89	40.44	2.56	0.99	61.43	68.20	-6.77	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

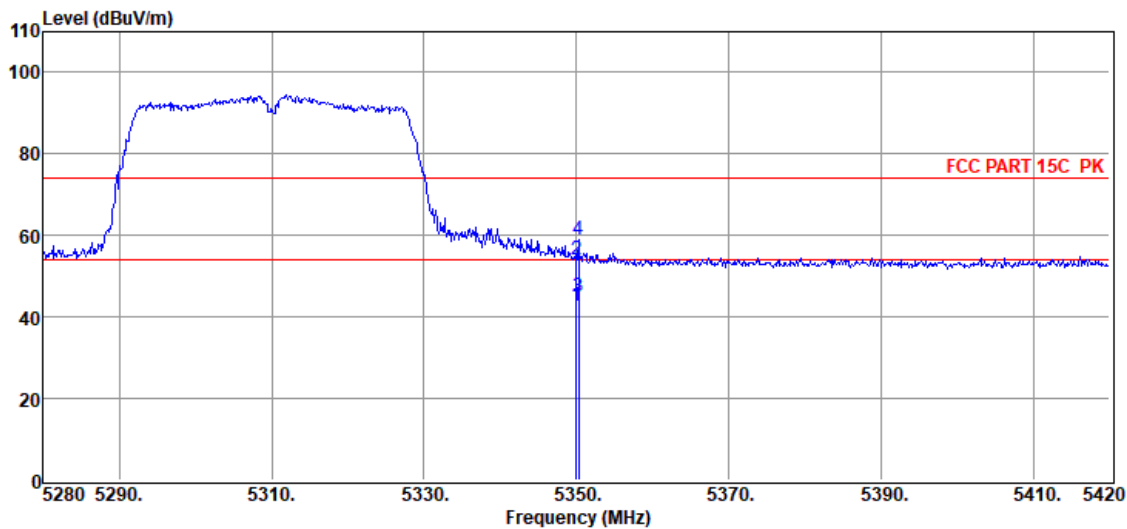
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11N40 5310

Data: 70



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	36.61	32.89	40.44	2.56	0.99	42.61	54.00	-11.39	Average	HORIZONTAL
2	5350.00	48.24	32.89	40.44	2.56	0.99	54.24	68.20	-13.96	Peak	HORIZONTAL
3	5350.28	38.91	32.89	40.44	2.56	0.99	44.91	54.00	-9.09	Average	HORIZONTAL
4	5350.28	52.81	32.89	40.44	2.56	0.99	58.81	68.20	-9.39	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

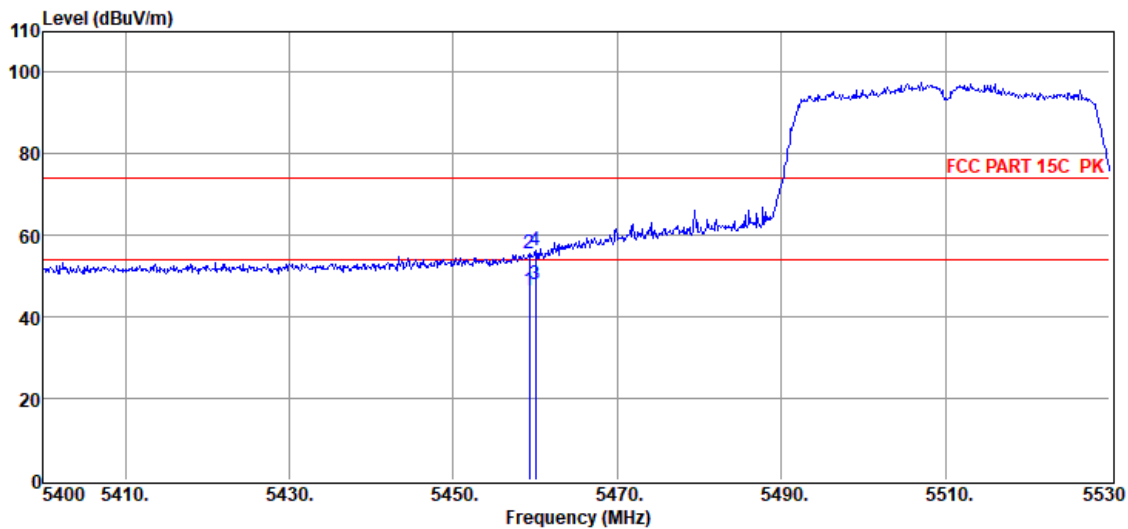
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11n40 5510

Data: 50



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5459.28	40.62	32.82	40.45	2.57	1.02	46.58	54.00	-7.42	Average	VERTICAL
2	5459.28	49.76	32.82	40.45	2.57	1.02	55.72	68.20	-12.48	Peak	VERTICAL
3	5460.00	42.11	32.82	40.45	2.57	1.02	48.07	54.00	-5.93	Average	VERTICAL
4	5460.00	50.37	32.82	40.45	2.57	1.02	56.33	68.20	-11.87	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E
EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

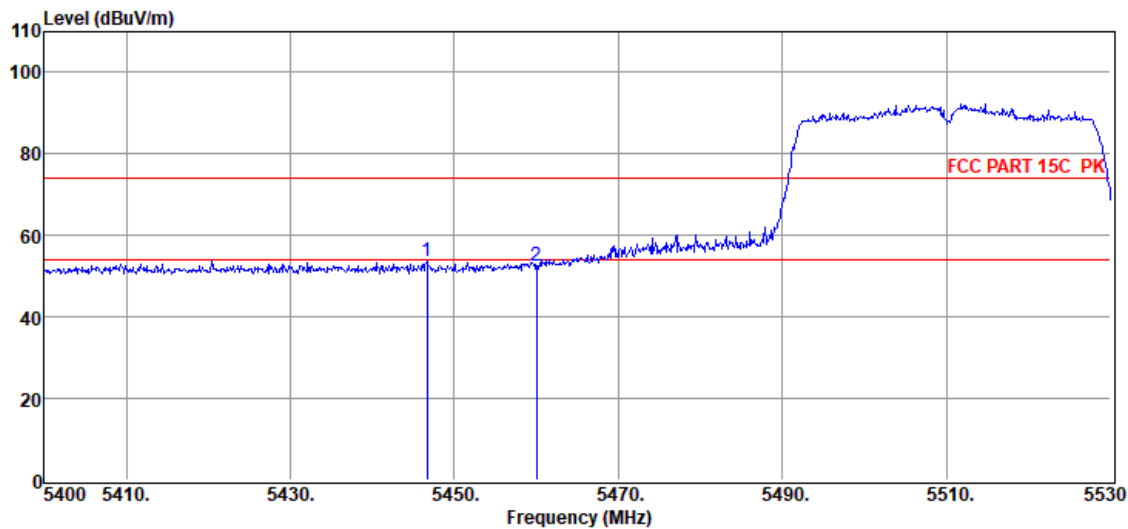
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11n40 5510

Data: 51



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5446.67	47.70	32.83	40.44	2.57	1.01	53.67	68.20	-14.53	Peak	HORIZONTAL
2	5460.00	46.53	32.82	40.45	2.57	1.02	52.49	68.20	-15.71	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

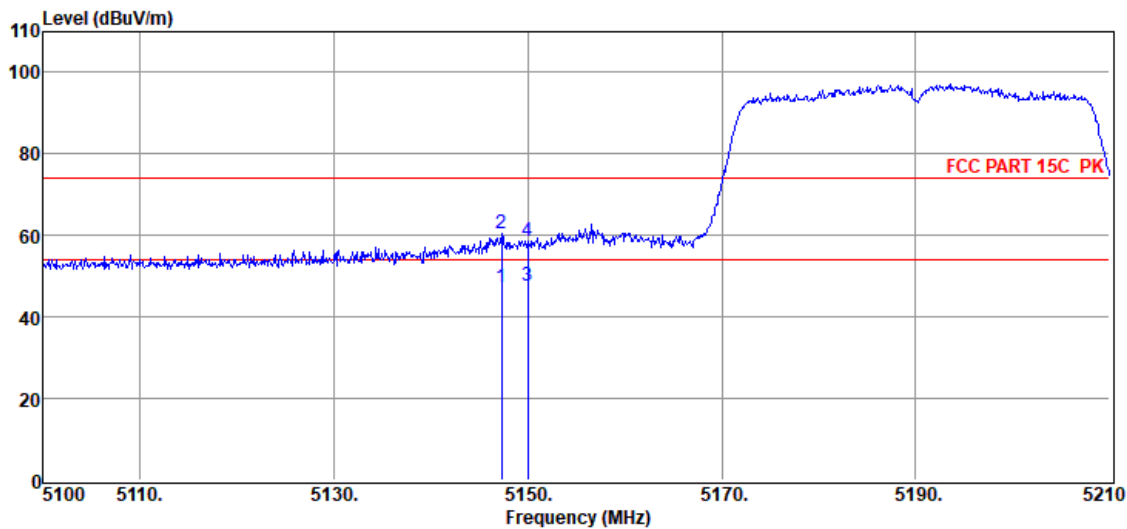
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11ac40 5190

Data: 52



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5147.30	40.98	33.01	40.41	2.55	0.94	47.07	54.00	-6.93	Average	VERTICAL
2	5147.30	54.41	33.01	40.41	2.55	0.94	60.50	68.20	-7.70	Peak	VERTICAL
3	5150.00	41.69	33.01	40.42	2.55	0.94	47.77	54.00	-6.23	Average	VERTICAL
4	5150.00	52.33	33.01	40.42	2.55	0.94	58.41	68.20	-9.79	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

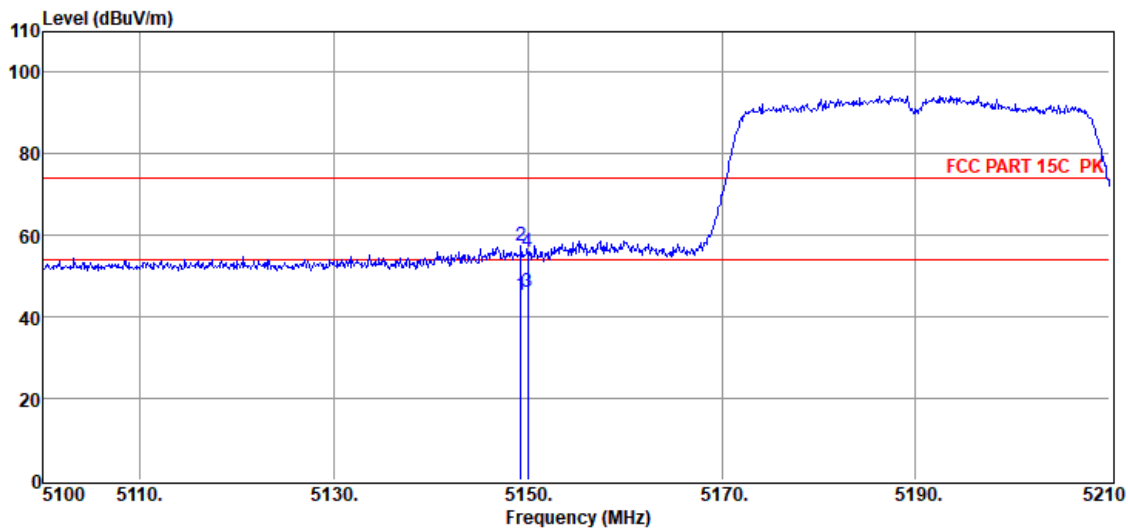
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11ac40 5190

Data: 53



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5149.28	39.44	33.01	40.41	2.55	0.94	45.53	54.00	-8.47	Average	HORIZONTAL
2	5149.28	51.43	33.01	40.41	2.55	0.94	57.52	68.20	-10.68	Peak	HORIZONTAL
3	5150.00	40.12	33.01	40.42	2.55	0.94	46.20	54.00	-7.80	Average	HORIZONTAL
4	5150.00	49.68	33.01	40.42	2.55	0.94	55.76	68.20	-12.44	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

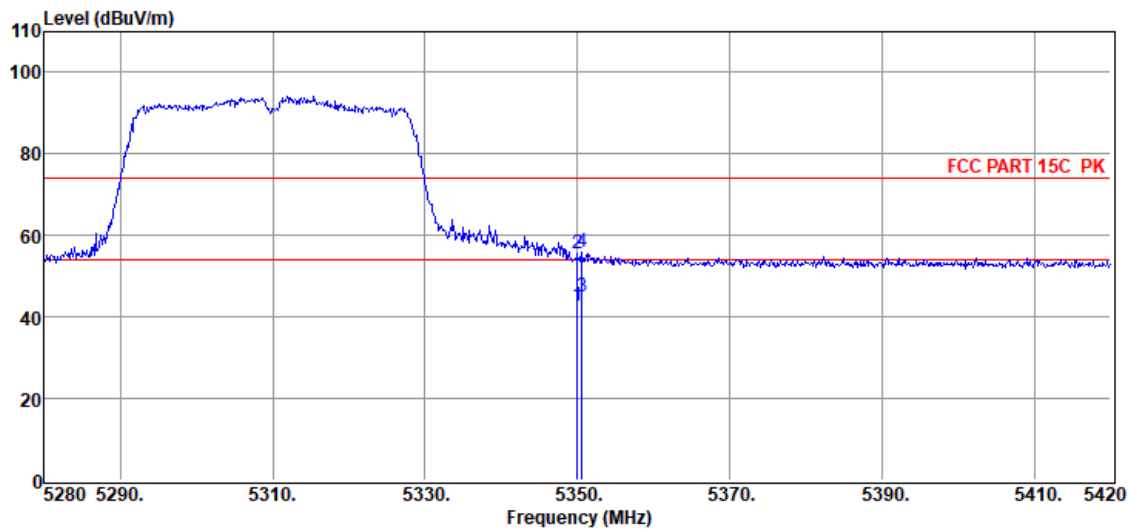
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11AC40 5310

Data: 71



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	36.87	32.89	40.44	2.56	0.99	42.87	54.00	-11.13	Average	HORIZONTAL
2	5350.00	49.44	32.89	40.44	2.56	0.99	55.44	68.20	-12.76	Peak	HORIZONTAL
3	5350.56	39.10	32.89	40.44	2.56	0.99	45.10	54.00	-8.90	Average	HORIZONTAL
4	5350.56	50.06	32.89	40.44	2.56	0.99	56.06	68.20	-12.14	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

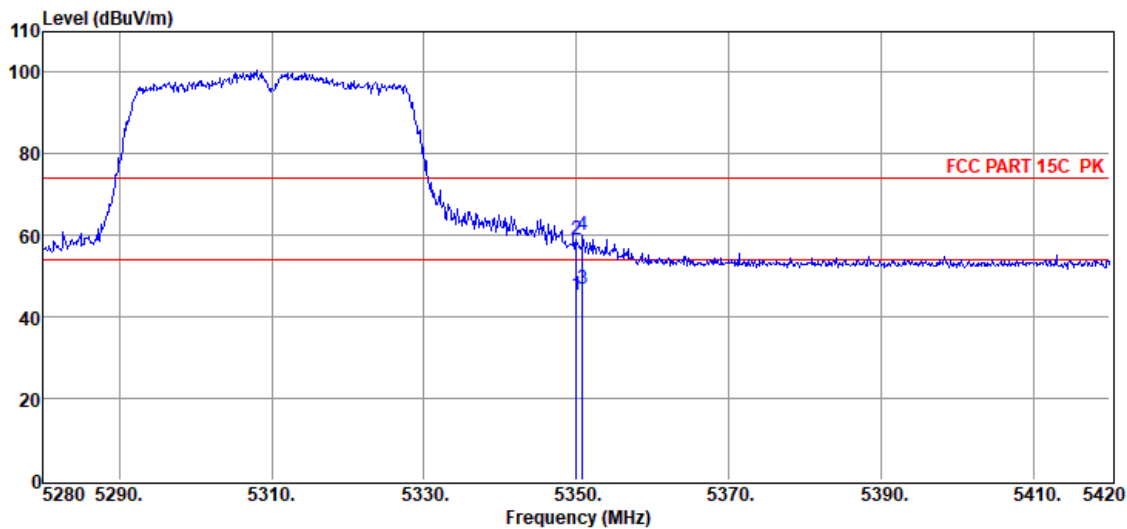
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11AC40 5310

Data: 72



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	39.48	32.89	40.44	2.56	0.99	45.48	54.00	-8.52	Average	VERTICAL
2	5350.00	52.91	32.89	40.44	2.56	0.99	58.91	68.20	-9.29	Peak	VERTICAL
3	5350.84	40.99	32.89	40.44	2.56	0.99	46.99	54.00	-7.01	Average	VERTICAL
4	5350.84	53.93	32.89	40.44	2.56	0.99	59.93	68.20	-8.27	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

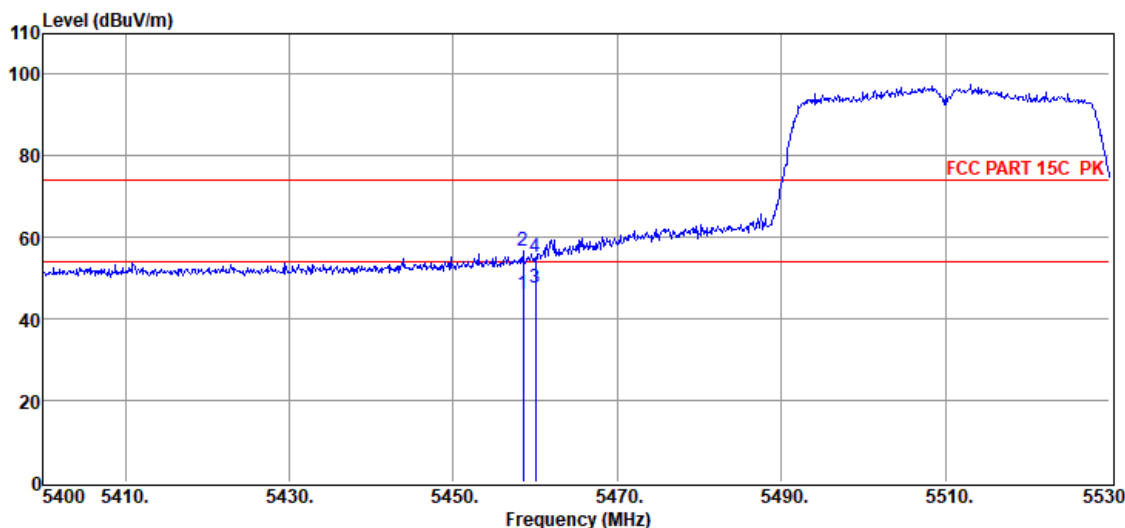
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11ac40 5510

Data: 56



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5458.50	40.11	32.82	40.45	2.57	1.02	46.07	54.00	-7.93	Average	VERTICAL
2	5458.50	50.83	32.82	40.45	2.57	1.02	56.79	68.20	-11.41	Peak	VERTICAL
3	5460.00	41.77	32.82	40.45	2.57	1.02	47.73	54.00	-6.27	Average	VERTICAL
4	5460.00	49.35	32.82	40.45	2.57	1.02	55.31	68.20	-12.89	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

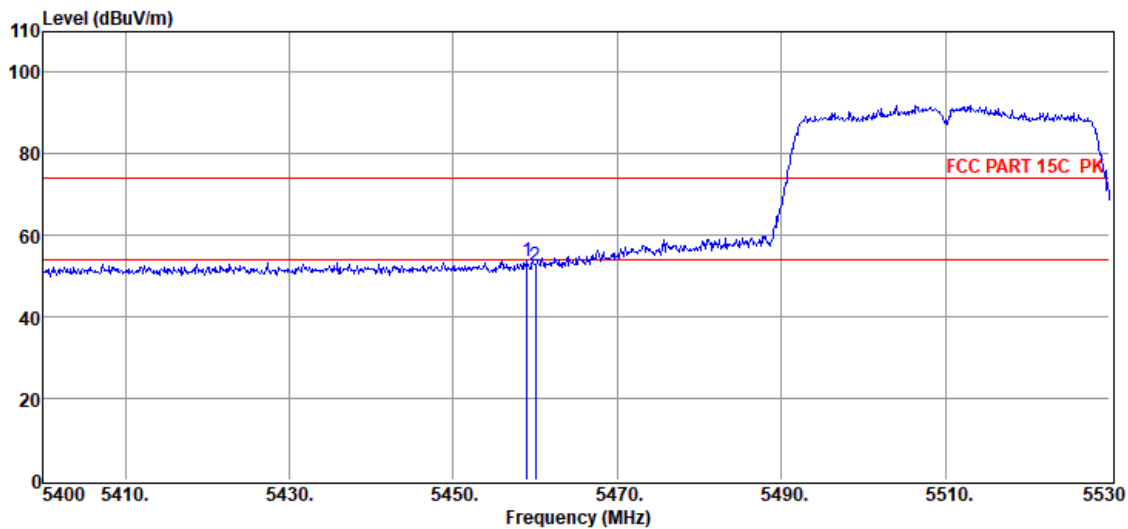
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11ac40 5510

Data: 57



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5459.02	47.70	32.82	40.45	2.57	1.02	53.66	68.20	-14.54	Peak	HORIZONTAL
2	5460.00	46.64	32.82	40.45	2.57	1.02	52.60	68.20	-15.60	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

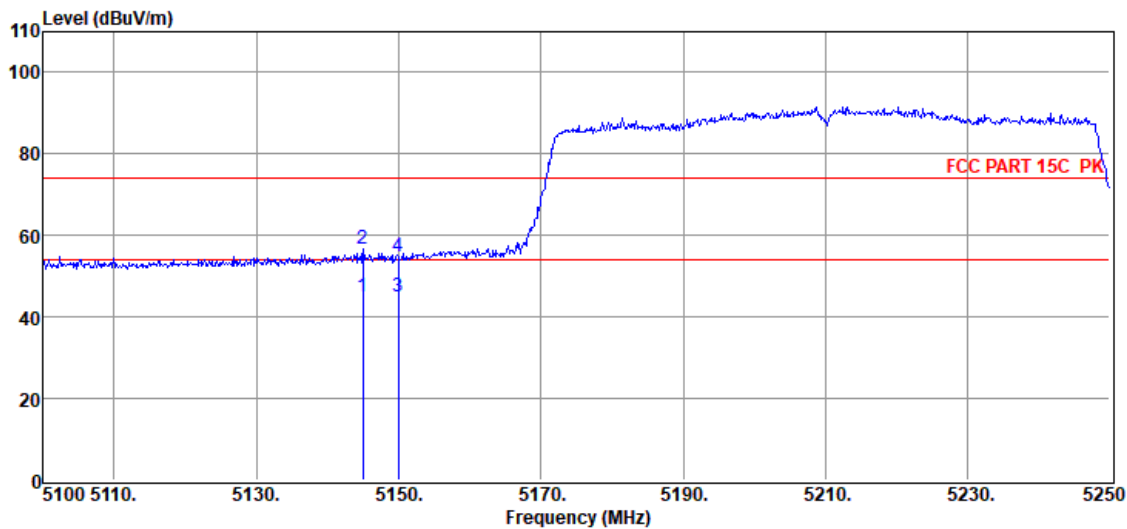
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11ac80 5210

Data: 58



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5145.00	38.94	33.01	40.41	2.55	0.94	45.03	54.00	-8.97	Average	VERTICAL
2	5145.00	50.54	33.01	40.41	2.55	0.94	56.63	68.20	-11.57	Peak	VERTICAL
3	5150.00	39.01	33.01	40.42	2.55	0.94	45.09	54.00	-8.91	Average	VERTICAL
4	5150.00	48.78	33.01	40.42	2.55	0.94	54.86	68.20	-13.34	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

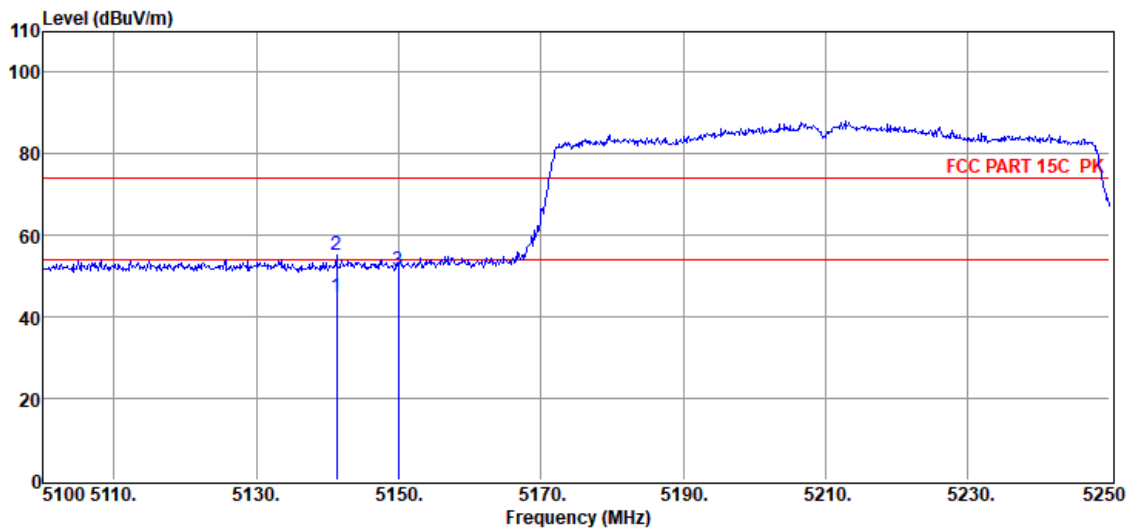
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11ac80 5210

Data: 59



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5141.25	38.87	33.02	40.41	2.55	0.94	44.97	54.00	-9.03	Average	HORIZONTAL
2	5141.25	49.14	33.02	40.41	2.55	0.94	55.24	68.20	-12.96	Peak	HORIZONTAL
3	5150.00	45.45	33.01	40.42	2.55	0.94	51.53	68.20	-16.67	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

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EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

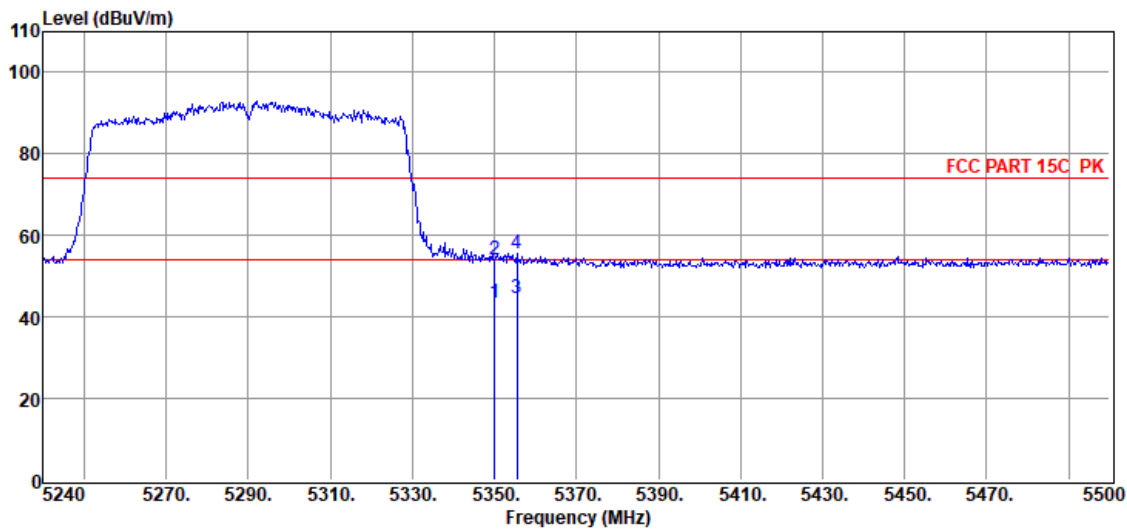
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11AC80 5290

Data: 73



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	37.41	32.89	40.43	2.56	0.99	43.42	54.00	-10.58	Average	VERTICAL
2	5350.00	48.14	32.89	40.43	2.56	0.99	54.15	68.20	-14.05	Peak	VERTICAL
3	5355.44	38.68	32.89	40.44	2.56	0.99	44.68	54.00	-9.32	Average	VERTICAL
4	5355.44	49.50	32.89	40.44	2.56	0.99	55.50	68.20	-12.70	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E

EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-03-12

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

Power Supply : AC 120V 60Hz

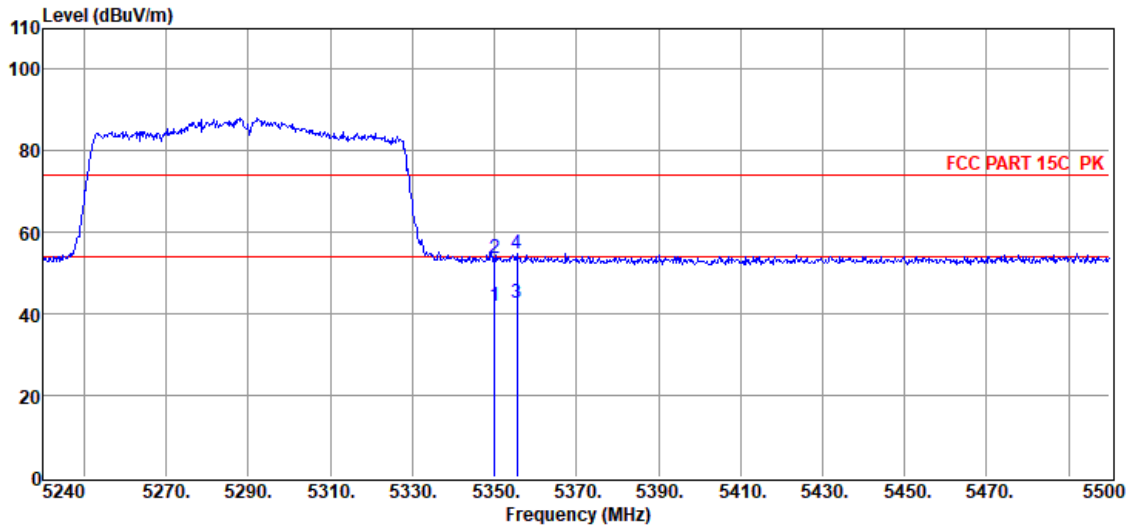
Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa

Antenna/Distance : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11AC80 5290

Data: 74



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	35.79	32.89	40.43	2.56	0.99	41.80	54.00	-12.20	Average	HORIZONTAL
2	5350.00	47.54	32.89	40.43	2.56	0.99	53.55	68.20	-14.65	Peak	HORIZONTAL
3	5355.44	36.86	32.89	40.44	2.56	0.99	42.86	54.00	-11.14	Average	HORIZONTAL
4	5355.44	48.70	32.89	40.44	2.56	0.99	54.70	68.20	-13.50	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E
EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

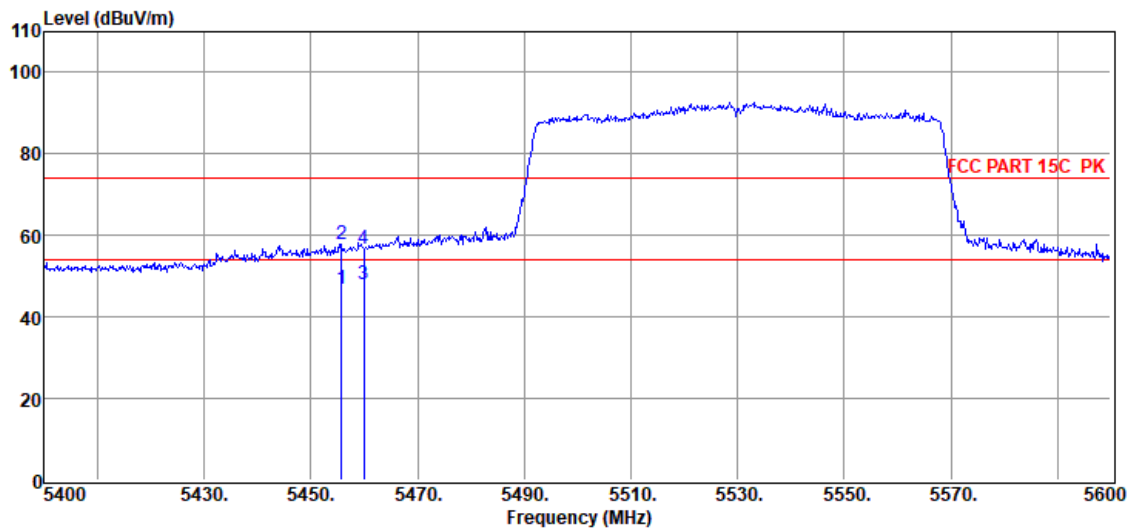
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : 11ac80 5530

Data: 62



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5455.80	41.00	32.83	40.45	2.57	1.01	46.96	54.00	-7.04	Average	VERTICAL
2	5455.80	51.72	32.83	40.45	2.57	1.01	57.68	68.20	-10.52	Peak	VERTICAL
3	5460.00	42.00	32.82	40.45	2.57	1.02	47.96	54.00	-6.04	Average	VERTICAL
4	5460.00	50.69	32.82	40.45	2.57	1.02	56.65	68.20	-11.55	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

C:\E3 6.111\2022 Report Data\Q21122304-2E
EDF100027\FCC ABOVE 1G .EM6

Test Date : 2022-02-27

Tested By : Jacky Huang

EUT : Wi-Fi Bookshelf Speaker

Model Number : EDF100027

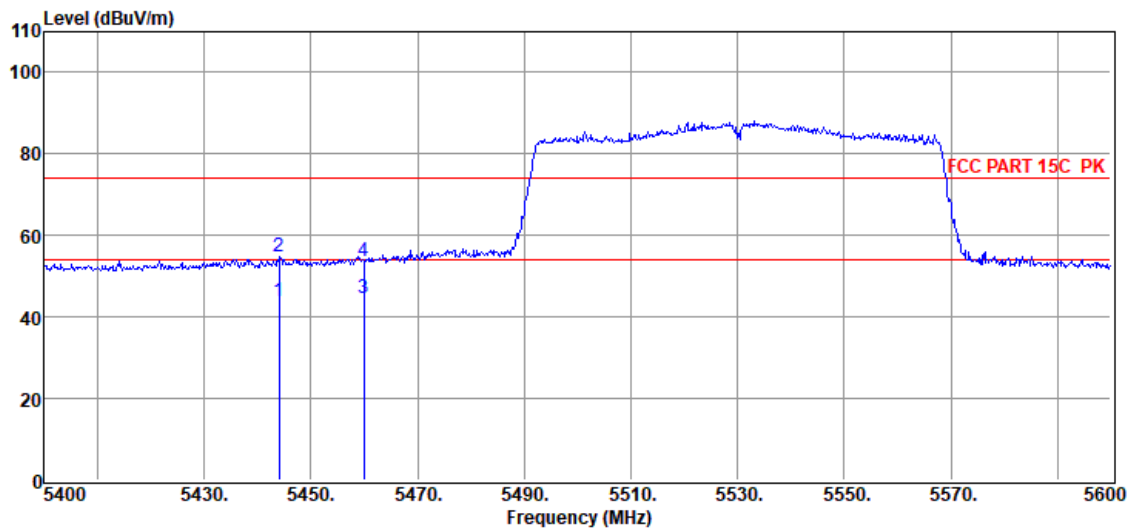
Power Supply : AC 120V 60Hz

Test Mode : Tx Mode

Condition : Temp:21.3°C,Humi:54.7%,Press:101.41kPa **Antenna/Distance** : 2021 BBHA 9120D
3#/3m/HORIZONTAL

Memo : 11ac80 5530

Data: 63



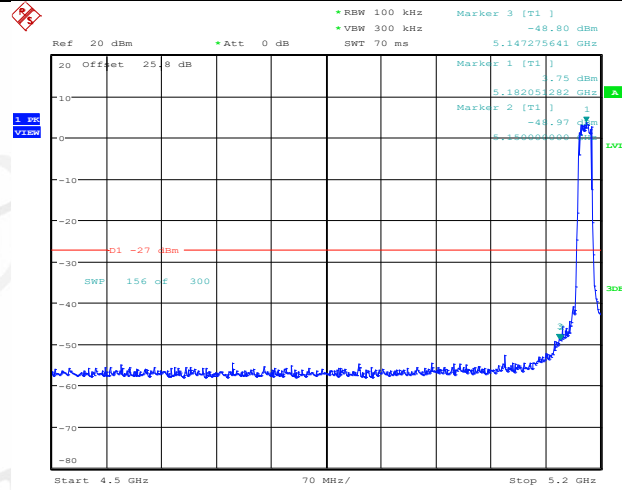
Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5444.00	38.00	32.83	40.44	2.57	1.01	43.97	54.00	-10.03	Average	HORIZONTAL
2	5444.00	48.83	32.83	40.44	2.57	1.01	54.80	68.20	-13.40	Peak	HORIZONTAL
3	5460.00	38.81	32.82	40.45	2.57	1.02	44.77	54.00	-9.23	Average	HORIZONTAL
4	5460.00	47.55	32.82	40.45	2.57	1.02	53.51	68.20	-14.69	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

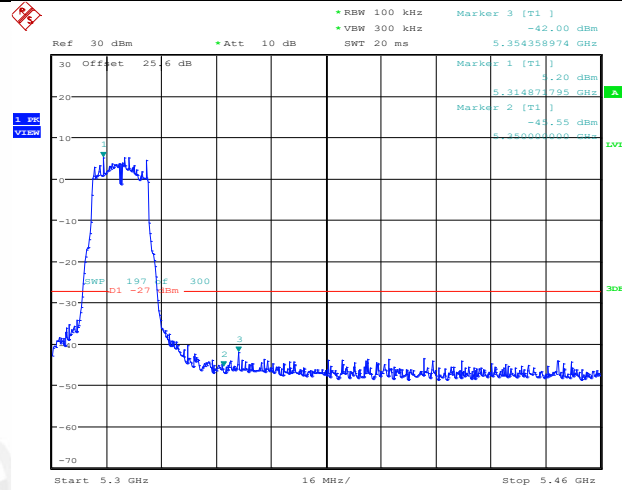
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

11A_Ant1_Low_5180



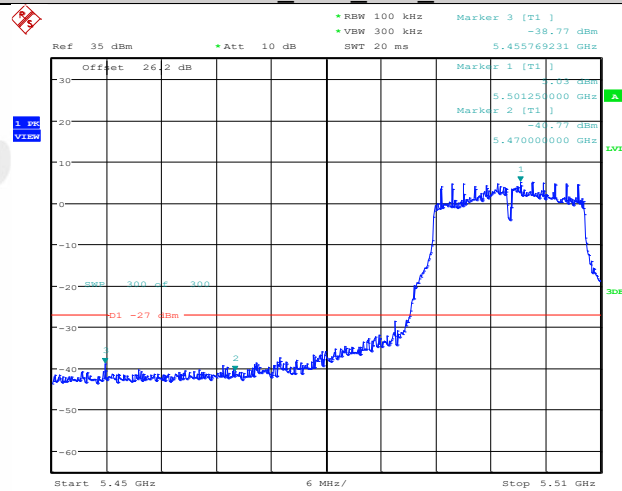
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11A_Ant1_High_5320



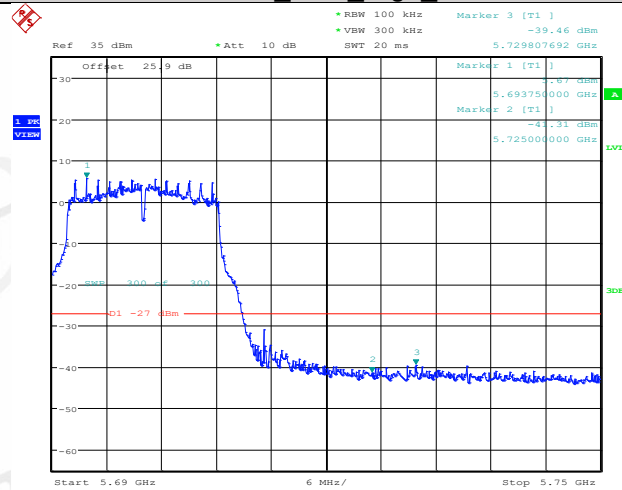
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11A_Ant1_Low_5500



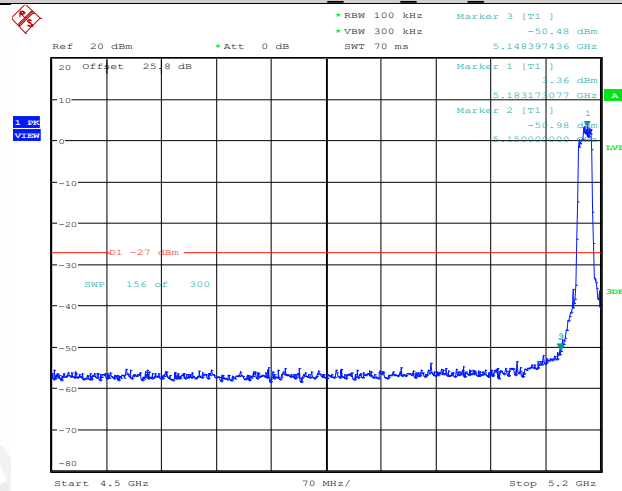
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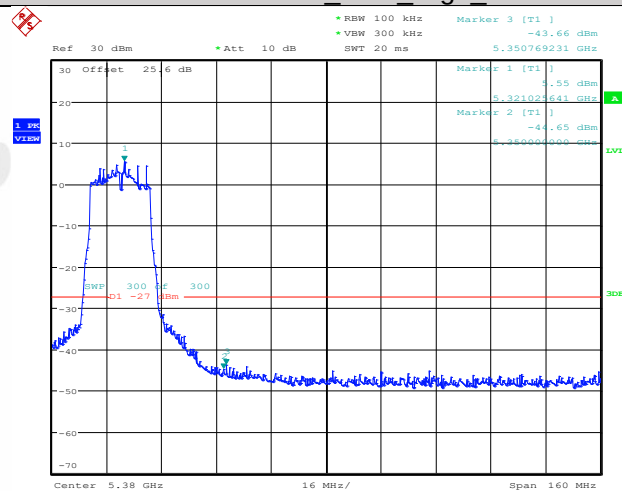
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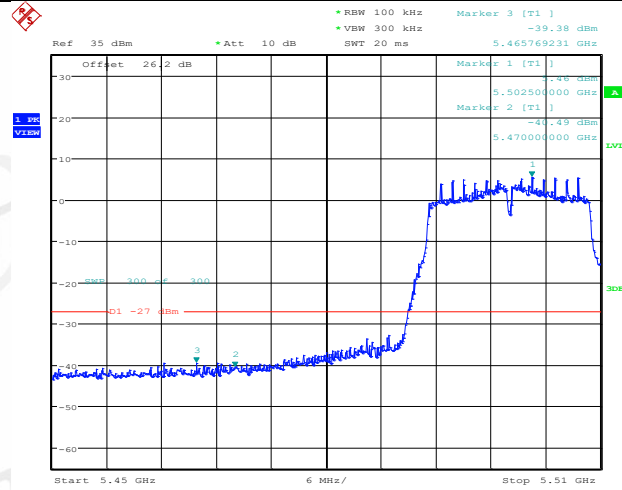
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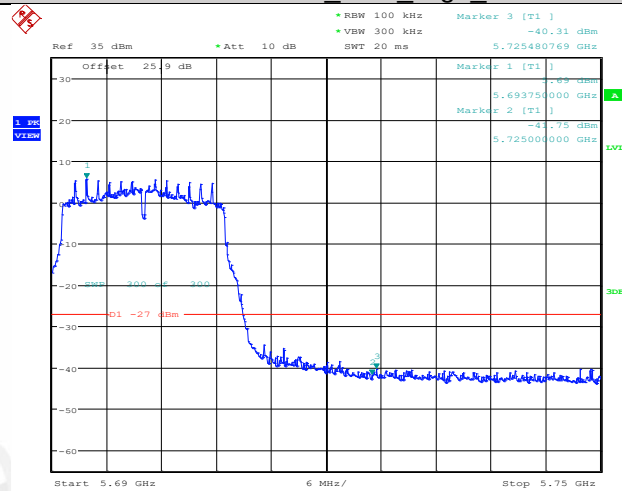
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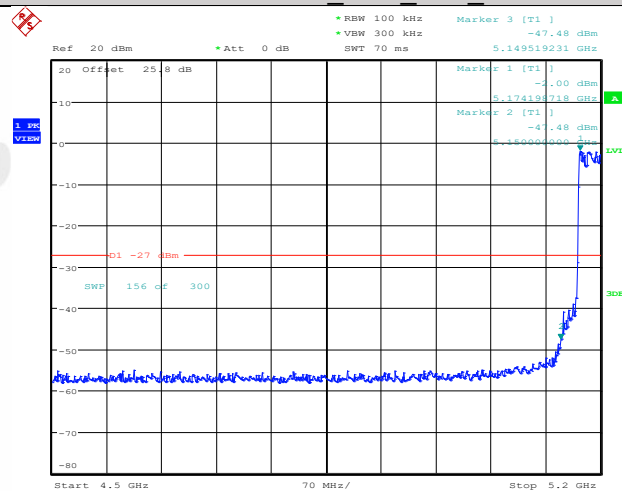
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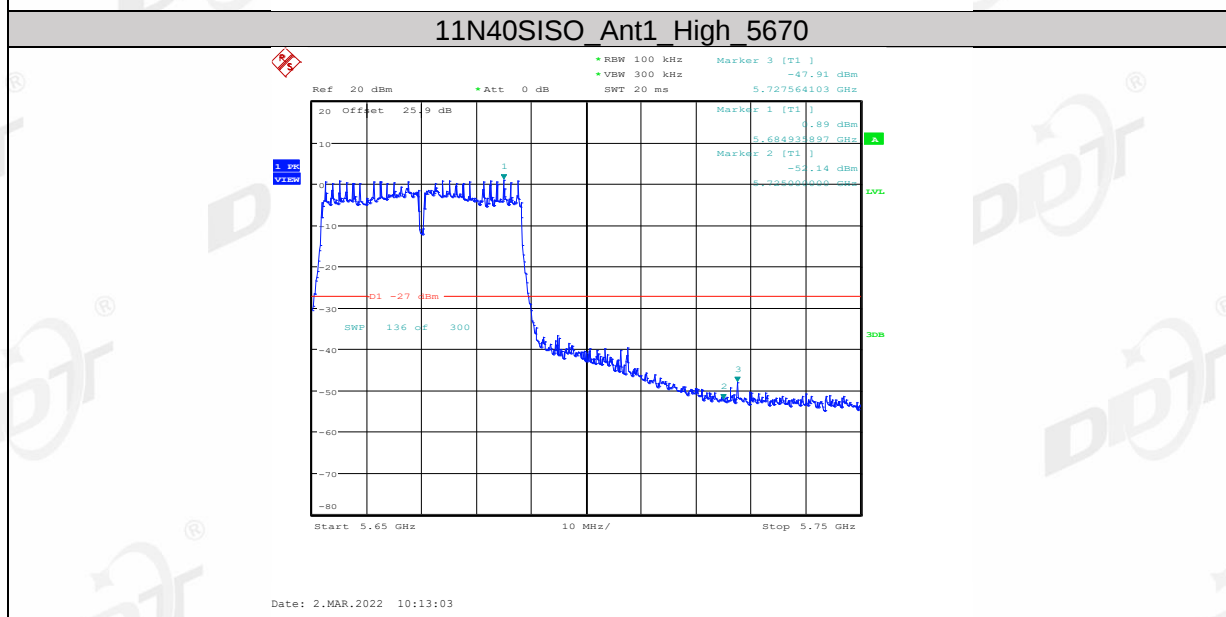


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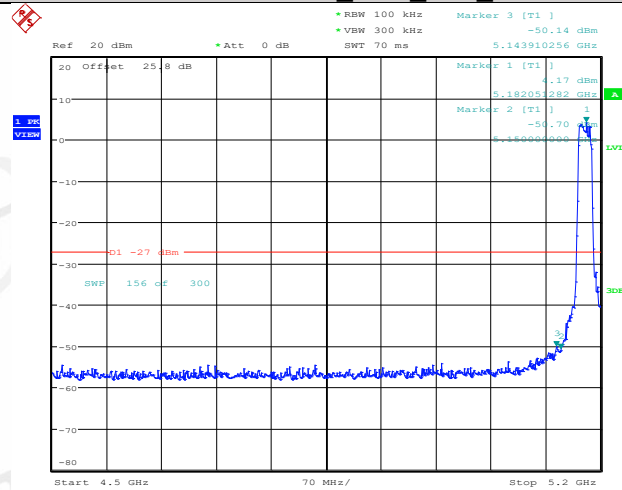
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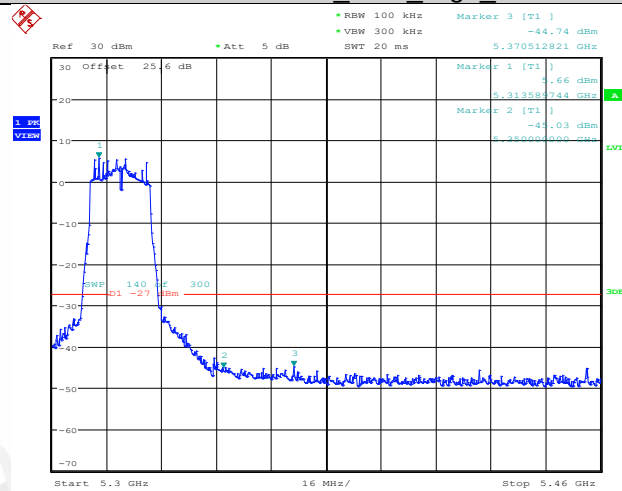
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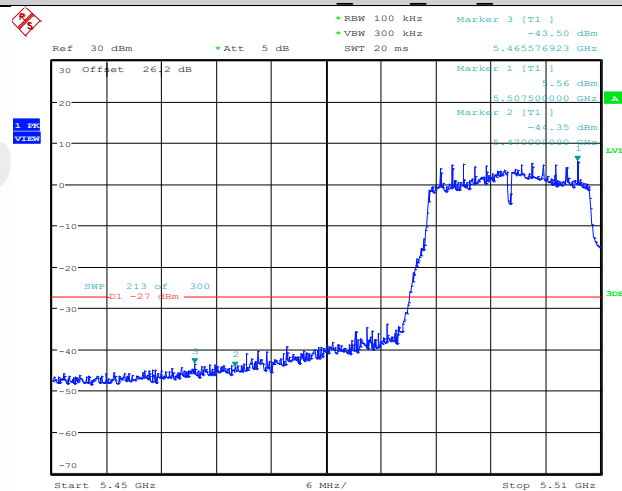
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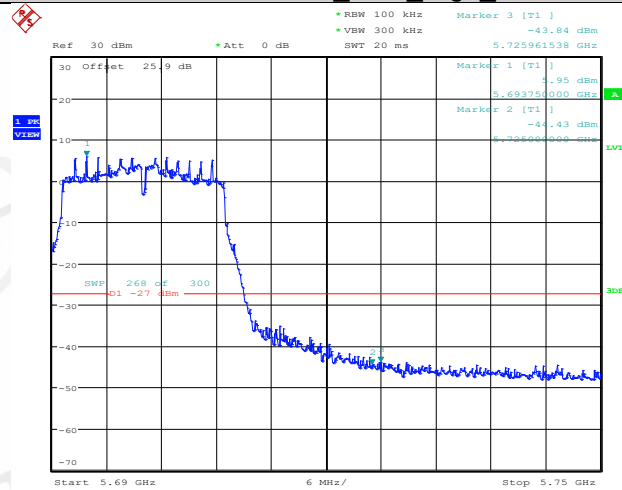
11AC20SISO_Ant1_High_5320



11AC20SISO_Ant1_Low_5500

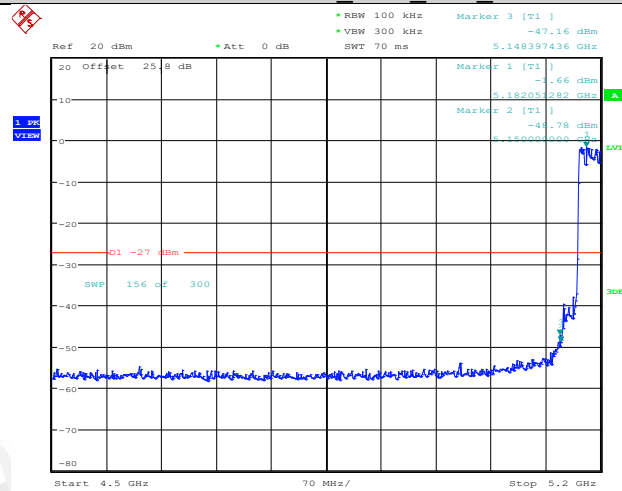


11AC20SISO_Ant1_High_5700



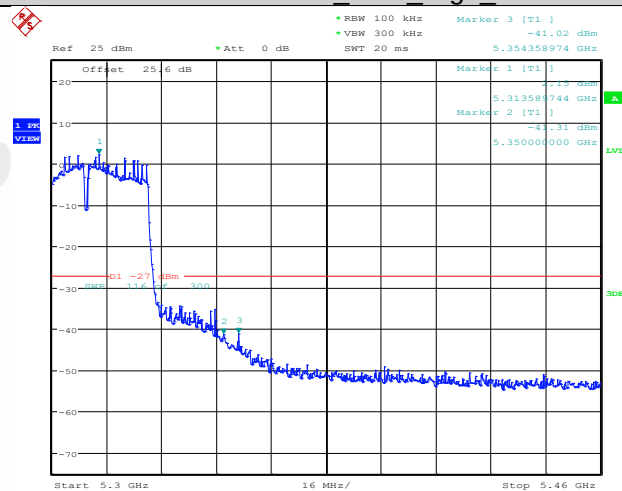
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11AC40SISO_Ant1_Low_5190



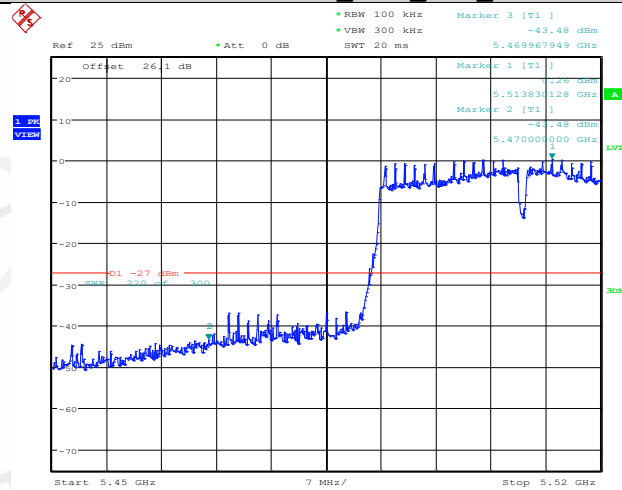
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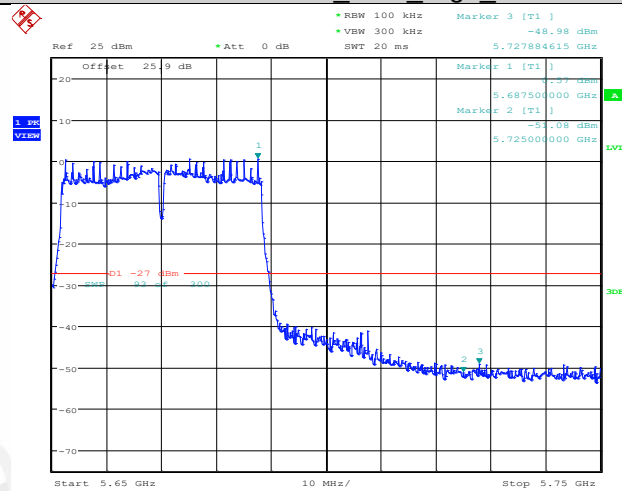
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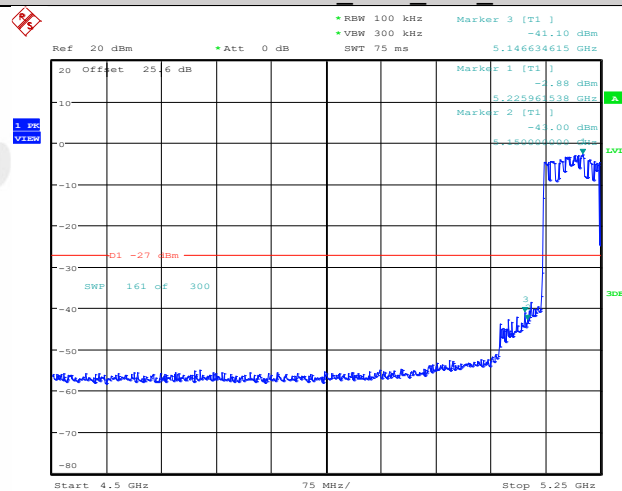
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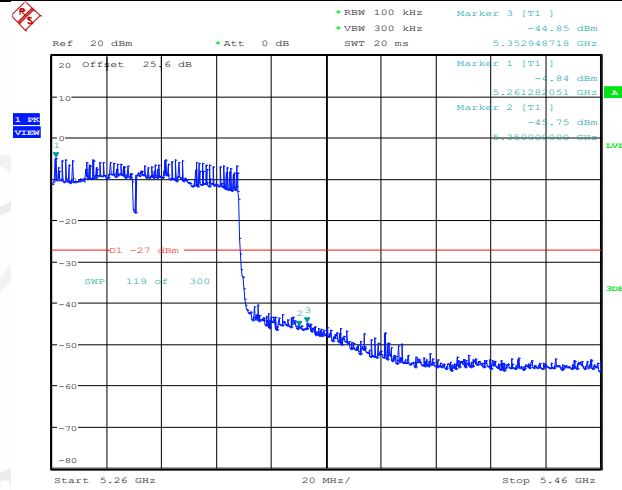
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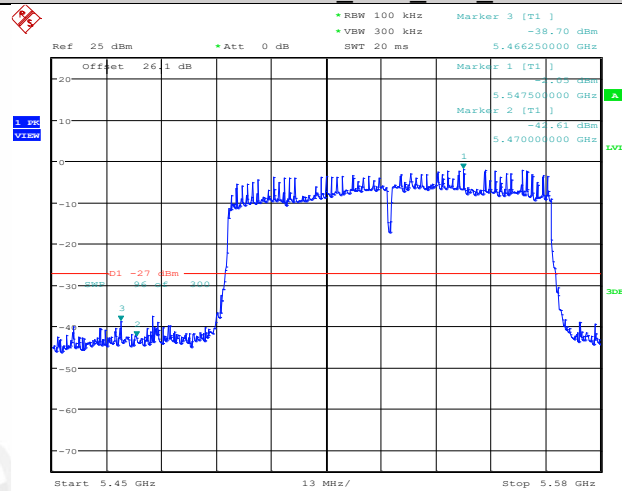
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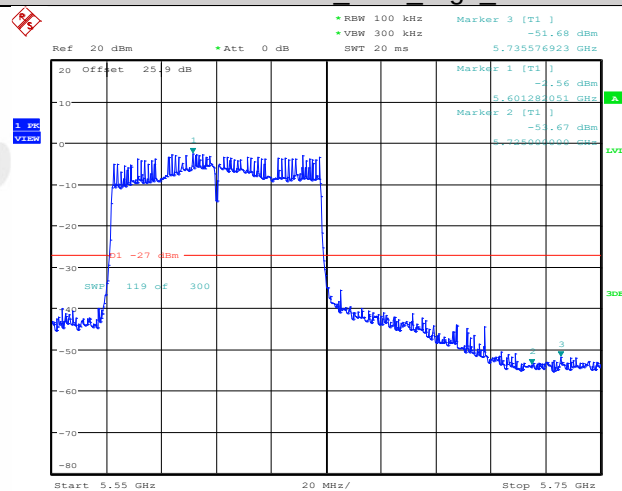
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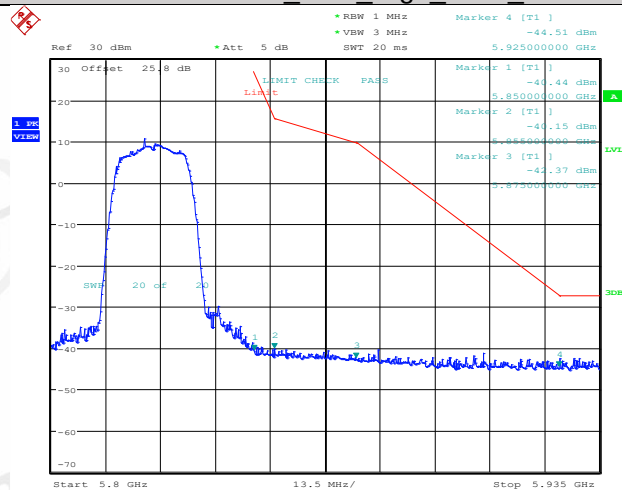
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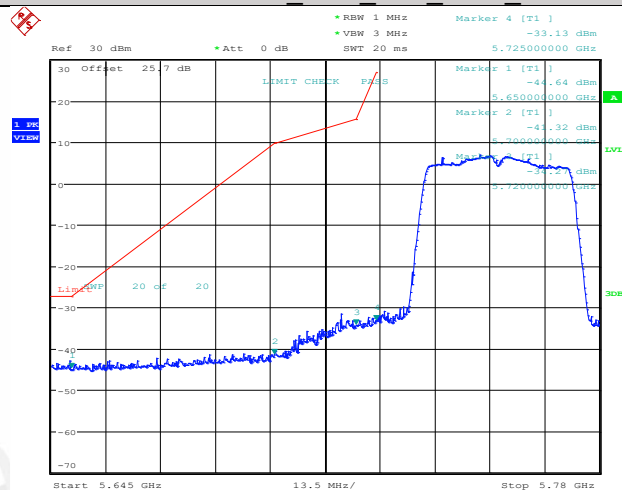


11N20SISO_Ant1_High_5825_Peak



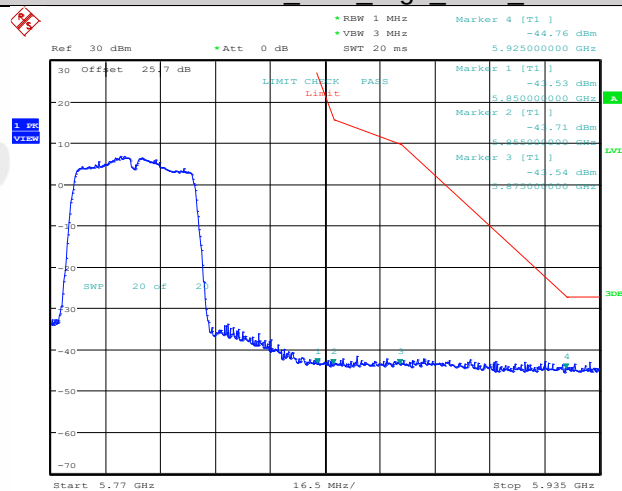
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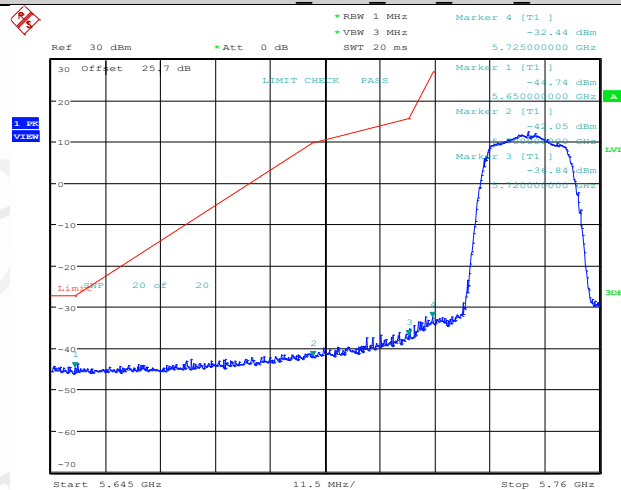
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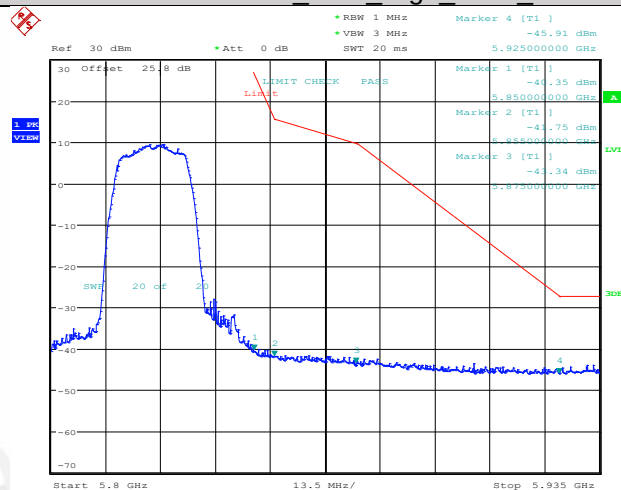
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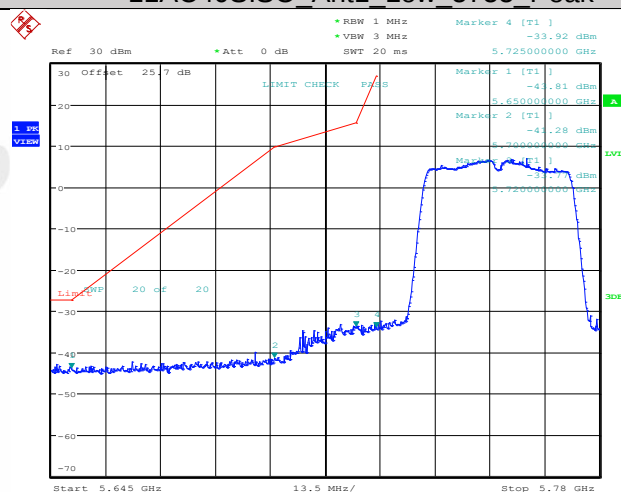
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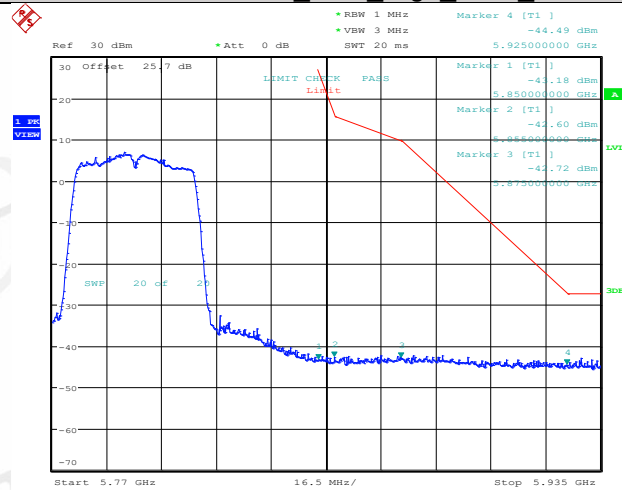
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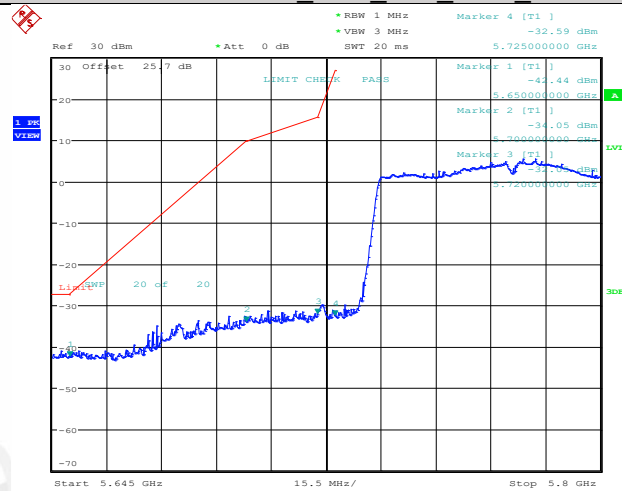
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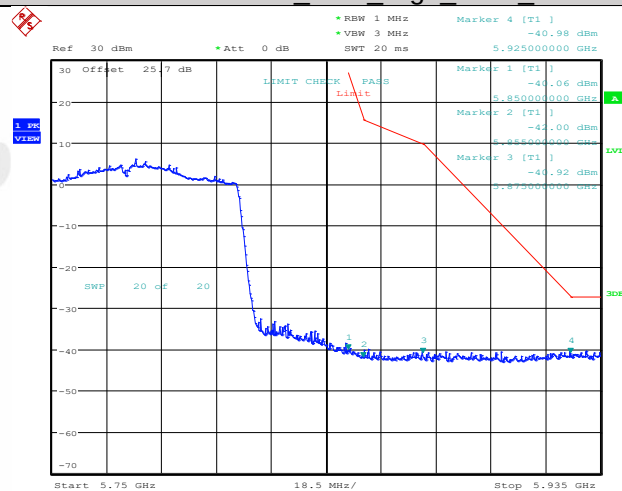
Date: 8.MAR.2022 23:16:09

11AC80SISO_Ant1_Low_5775_Peak



Date: 8.MAR.2022 23:30:37

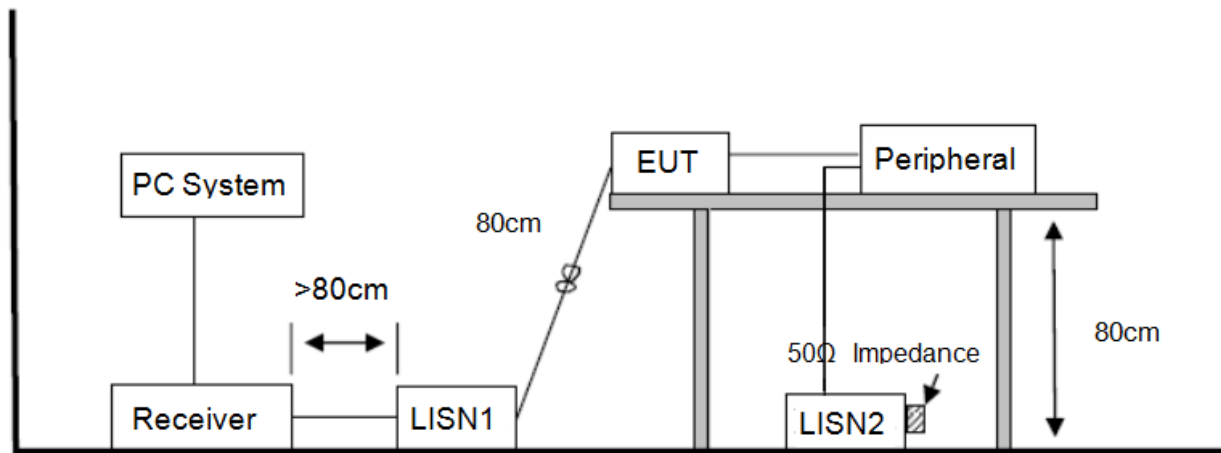
11AC80SISO_Ant1_High_5775_Peak



Date: 8.MAR.2022 23:31:32

10. Power Line Conducted Emission

10.1. Block diagram of test setup



10.2. Power Line Conducted Emission Limits (Class B)

Frequency	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150 kHz ~ 500 kHz	66 ~ 56*	56 ~ 46*
500 kHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

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

10.3. 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 2.3 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 C63.4.

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 30MHz 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 2.3 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.

10.4. Test Result

PASS. (See below detailed test result)

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

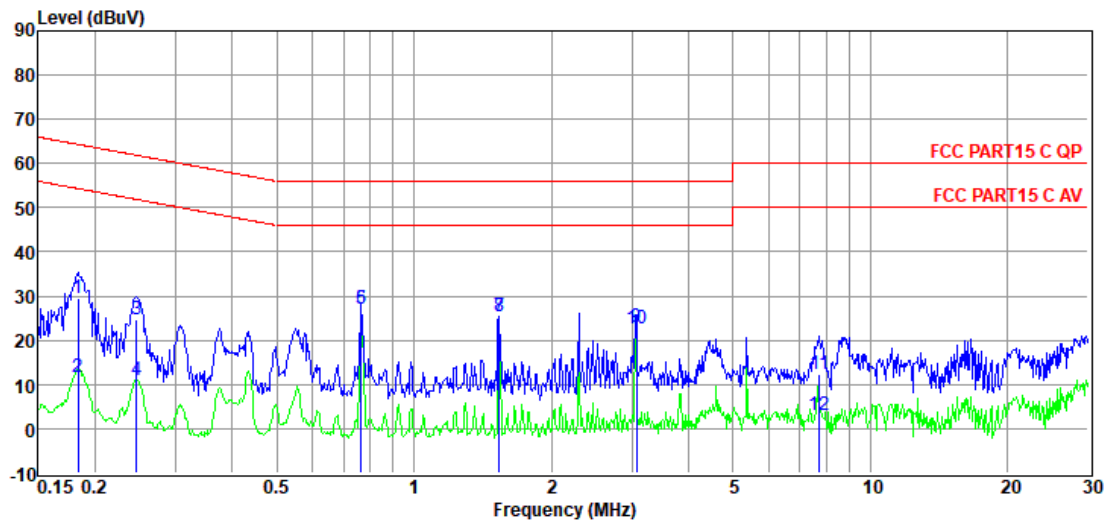
Note2: "----" means peak detection; "----" means average detection

Note3: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded worse case.

TR-4-E-010 Conducted Emission Test Result

Test Site : DDT 1# Shield Room **D:\2022 CE report date\Q21122304-2E\FCC.EM6**
Test Date : 2022-03-18 **Tested By** : Kennys Zhang
EUT : Wi-Fi Bookshelf Speaker **Model Number** : EDF100027
Power Supply : AC 120V/60Hz **Test Mode** : TX
Condition : TEMP:24.3°C, RH:53.0%, BP:101.0kPa **LISN** : 2021 1# ENV216/LINE
Memo : 5GWIFI

Data: 14



Item	Freq.	Read Level	LISN Factor	Cable Loss	Pulse Limiter Factor	Result Level	Limit Line	Over Limit	Detector	Phase
(Mark)	(MHz)	(dBμV)	(dB)	(dB)	(dB)	(dBμV)	(dBμV)	(dB)		
1	0.18	9.99	9.74	0.01	9.92	29.66	64.33	-34.67	QP	LINE
2	0.18	-7.96	9.74	0.01	9.92	11.71	54.33	-42.62	Average	LINE
3	0.25	5.18	9.75	0.02	9.92	24.87	61.86	-36.99	QP	LINE
4	0.25	-8.69	9.75	0.02	9.92	11.00	51.86	-40.86	Average	LINE
5	0.77	7.52	9.53	0.03	9.90	26.98	56.00	-29.02	QP	LINE
6	0.77	7.58	9.53	0.03	9.90	27.04	46.00	-18.96	Average	LINE
7	1.54	5.80	9.54	0.04	9.89	25.27	56.00	-30.73	QP	LINE
8	1.54	5.86	9.54	0.04	9.89	25.33	46.00	-20.67	Average	LINE
9	3.07	3.62	9.56	0.05	9.91	23.14	56.00	-32.86	QP	LINE
10	3.07	3.15	9.56	0.05	9.91	22.67	46.00	-23.33	Average	LINE
11	7.73	-7.12	9.50	0.09	9.94	12.41	60.00	-47.59	QP	LINE
12	7.73	-16.51	9.50	0.09	9.94	3.02	50.00	-46.98	Average	LINE

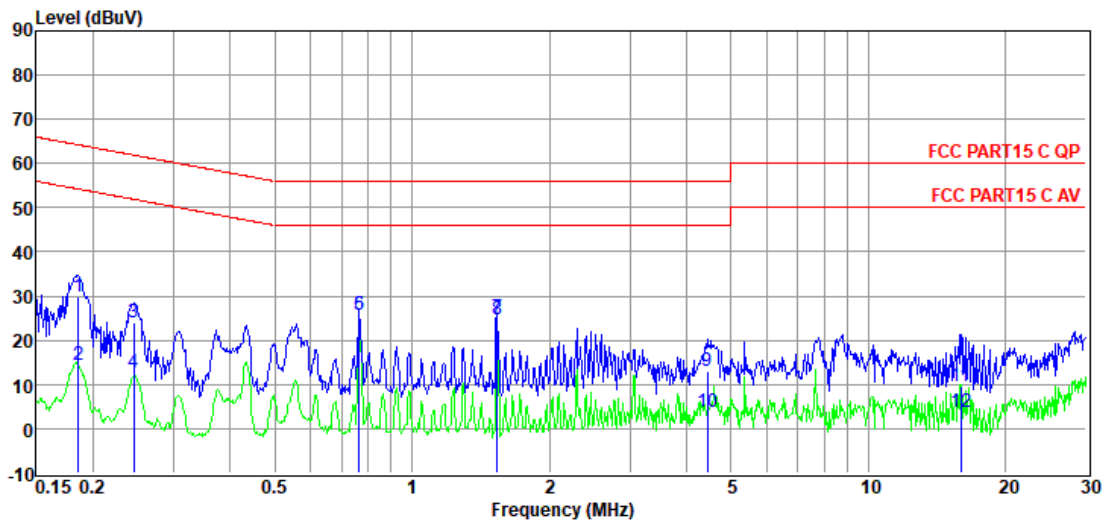
Note:

1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

TR-4-E-010 Conducted Emission Test Result

Test Site : DDT 1# Shield Room **D:\2022 CE report date\Q21122304-2E\FCC.EM6**
Test Date : 2022-03-18 **Tested By** : Kennys Zhang
EUT : Wi-Fi Bookshelf Speaker **Model Number** : EDF100027
Power Supply : AC 120V/60Hz **Test Mode** : TX
Condition : TEMP:24.3°C, RH:53.0%, BP:101.0kPa **LISN** : 2021 1# ENV216/NEUTRAL
Memo : 5GWIFI

Data: 16



Item	Freq.	Read Level	LISN Factor	Cable Loss	Pulse Limiter Factor	Result Level	Limit Line	Over Limit	Detector	Phase
(Mark)	(MHz)	(dBμV)	(dB)	(dB)	(dB)	(dBμV)	(dBμV)	(dB)		
1	0.19	10.08	9.80	0.01	9.92	29.81	64.24	-34.43	QP	NEUTRAL
2	0.19	-5.18	9.80	0.01	9.92	14.55	54.24	-39.69	Average	NEUTRAL
3	0.25	4.36	9.73	0.02	9.92	24.03	61.91	-37.88	QP	NEUTRAL
4	0.25	-6.85	9.73	0.02	9.92	12.82	51.91	-39.09	Average	NEUTRAL
5	0.77	6.12	9.77	0.03	9.90	25.82	56.00	-30.18	QP	NEUTRAL
6	0.77	6.11	9.77	0.03	9.90	25.81	46.00	-20.19	Average	NEUTRAL
7	1.54	5.37	9.64	0.04	9.89	24.94	56.00	-31.06	QP	NEUTRAL
8	1.54	5.29	9.64	0.04	9.89	24.86	46.00	-21.14	Average	NEUTRAL
9	4.43	-6.54	9.76	0.06	9.92	13.20	56.00	-42.80	QP	NEUTRAL
10	4.43	-15.94	9.76	0.06	9.92	3.80	46.00	-42.20	Average	NEUTRAL
11	15.97	-10.01	9.64	0.15	9.94	9.72	60.00	-50.28	QP	NEUTRAL
12	15.97	-16.05	9.64	0.15	9.94	3.68	50.00	-46.32	Average	NEUTRAL

Note:

1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

11. Antenna Requirements

11.1. Limit

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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2. Result

The device used dedicated FPC antennas and there is no antenna other than that furnished by the responsible party shall be used with the device, maximum antenna gain is 3.5 dBi.

12. Dynamic Frequency Selection Applicability of DFS requirements

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	☐ Master	☒ Client Without Radar Detection	☐ Client with Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	☐ Master Device or Client with Radar Detection	☒ Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	☐ Master Device or Client with Radar Detection	☒ Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

12.1. Limit

(1) DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP $<$ 200 milliwatt and power spectral density $<$ 10 dBm/MHz	-62 dBm
EIRP $<$ 200 milliwatt that do not meet the power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

(2) DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

12.2. Parameters of radar test waveforms

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 5 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests. Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A					

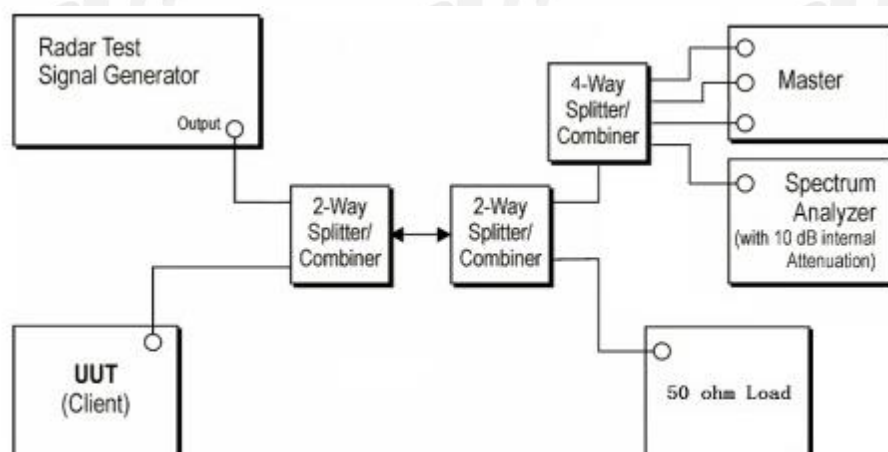
A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4

12.3. Calibration of radar waveform

Radar Waveform Calibration Procedure:

- (1) A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to place of the master
- (2) The interference Radar Detection Threshold Level is $-62\text{dBm} + 0\text{dBi} + 1\text{dB} = -61\text{dBm}$ that had been taken into account the output power range and antenna gain.
- (3) The following equipment setup was used to calibrate the conducted radar waveform. A vector signal generator was utilized to establish the test signal level for radar type 0. During this process there were no transmissions by either the master or client device. The spectrum analyzer was switched to the zero spans (time domain) at the frequency of the radar waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz. The spectrum analyzer had offset -1.0dB to compensate RF cable loss 1.0dB.
- (4) The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was $-62\text{dBm} + 0\text{dBi} + 1\text{dB} = -61\text{dBm}$. Capture the spectrum analyzer plots on short pulse radar waveform.

Conducted Calibration Setup:

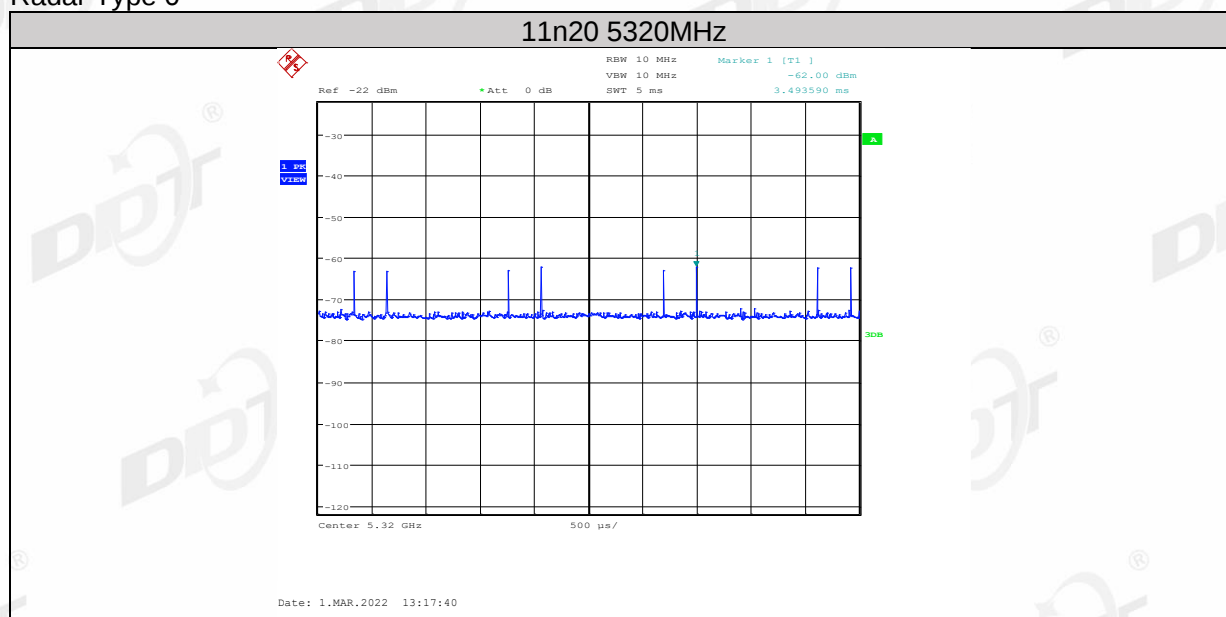


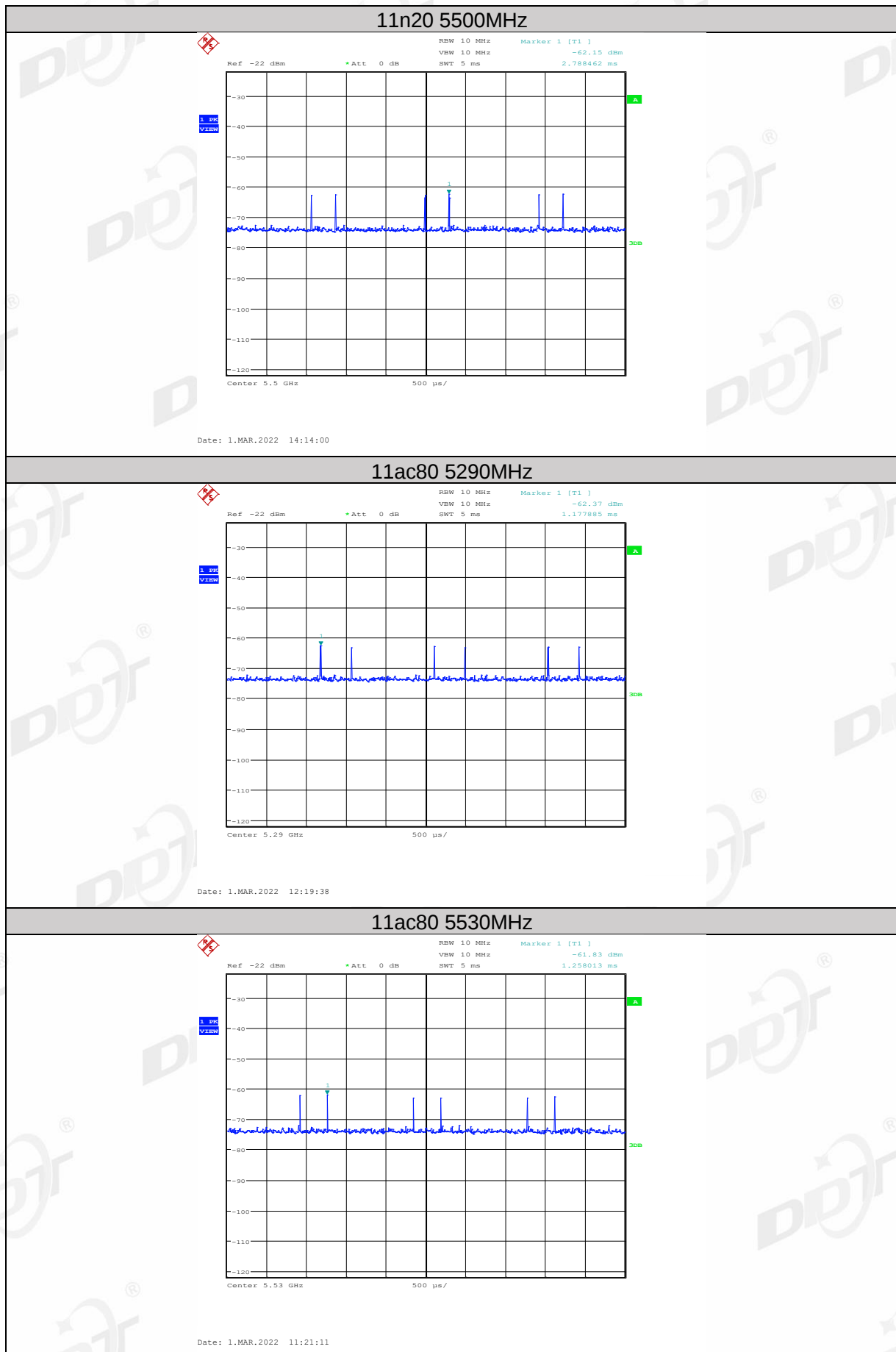
Note: 1. Use the software "Web" to set the frequency channel.

2. EUT is not support TPC and not with Radar detection.

Radar Waveform Calibration Result:

Radar Type 0





Trial List Table - FCC-13-22						
Save Load Trigger Download All						
Sample Rate 10 MHz						
Trial List						
	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
Download	0	Type 0	1.0	1428.0	18	25704.0
Download	1	Type 0	1.0	1428.0	18	25704.0
Download	2	Type 0	1.0	1428.0	18	25704.0
Download	3	Type 0	1.0	1428.0	18	25704.0
Download	4	Type 0	1.0	1428.0	18	25704.0
Download	5	Type 0	1.0	1428.0	18	25704.0
Download	6	Type 0	1.0	1428.0	18	25704.0
Download	7	Type 0	1.0	1428.0	18	25704.0
Download	8	Type 0	1.0	1428.0	18	25704.0
Download	9	Type 0	1.0	1428.0	18	25704.0
Download	10	Type 0	1.0	1428.0	18	25704.0
Download	11	Type 0	1.0	1428.0	18	25704.0
Download	12	Type 0	1.0	1428.0	18	25704.0
Download	13	Type 0	1.0	1428.0	18	25704.0
Download	14	Type 0	1.0	1428.0	18	25704.0
Download	15	Type 0	1.0	1428.0	18	25704.0
Download	16	Type 0	1.0	1428.0	18	25704.0
Download	17	Type 0	1.0	1428.0	18	25704.0
Download	18	Type 0	1.0	1428.0	18	25704.0
Download	19	Type 0	1.0	1428.0	18	25704.0
Download	20	Type 0	1.0	1428.0	18	25704.0
Download	21	Type 0	1.0	1428.0	18	25704.0
Download	22	Type 0	1.0	1428.0	18	25704.0
Download	23	Type 0	1.0	1428.0	18	25704.0
Download	24	Type 0	1.0	1428.0	18	25704.0
Download	25	Type 0	1.0	1428.0	18	25704.0
Download	26	Type 0	1.0	1428.0	18	25704.0
Download	27	Type 0	1.0	1428.0	18	25704.0

12.4. Channel closing transmission time, channel move time and non-occupancy period

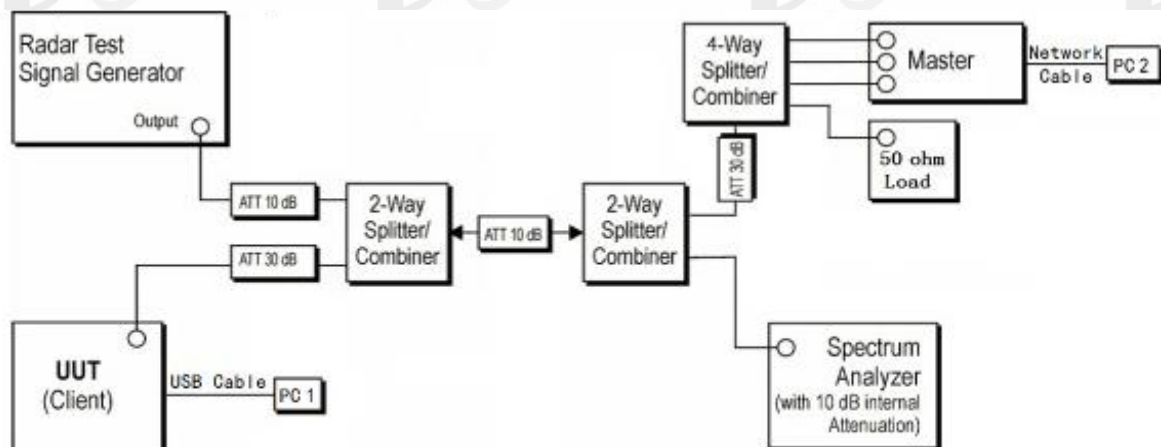
Block diagram of test setup Test Procedure:

- (1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- (2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- (3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- (4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Test Software in order to properly load the network for the entire period of the test.
- (5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- (6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- (7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the
- (8) spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

12.5. Test setup

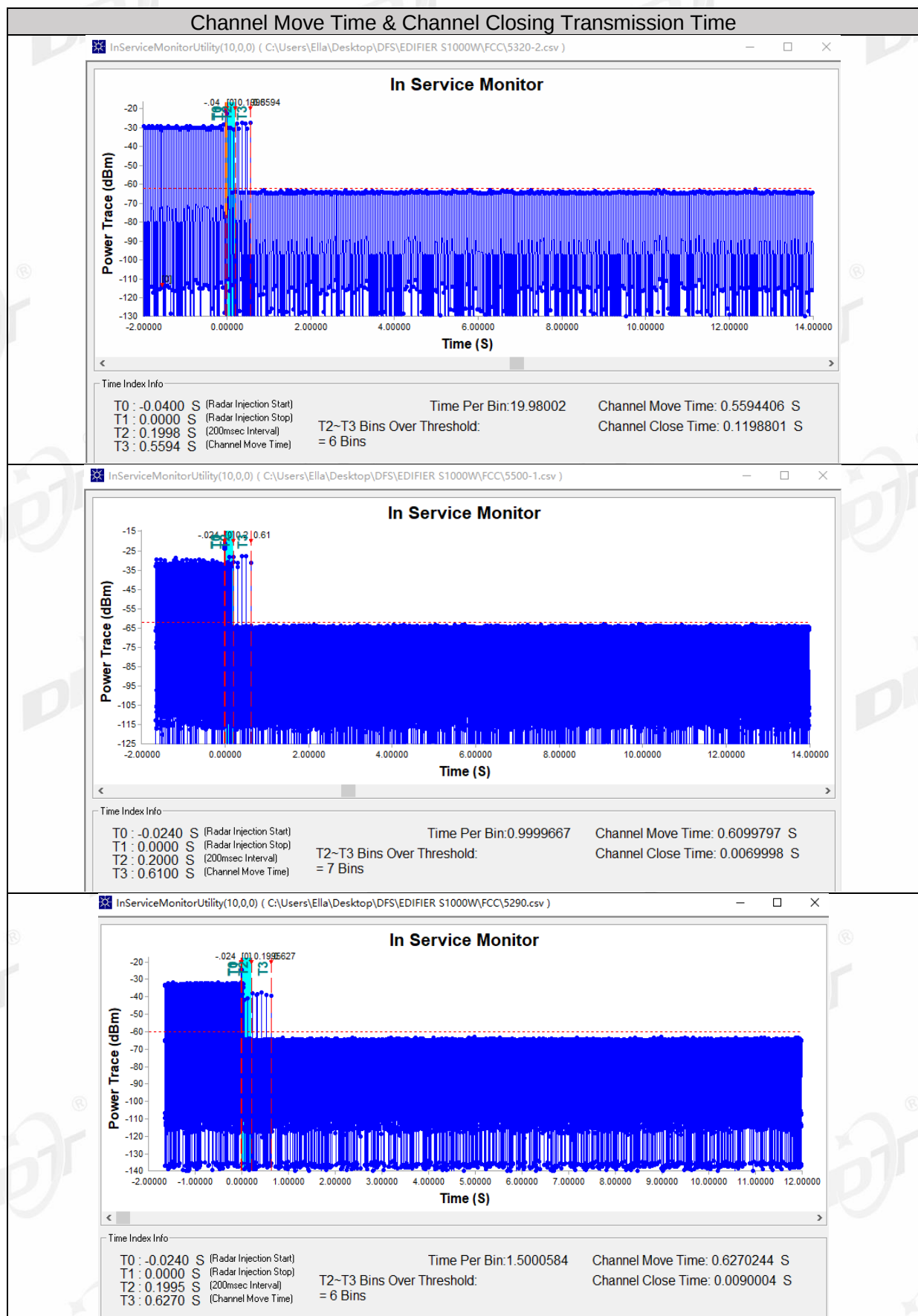
Setup for Client with injection at the Master

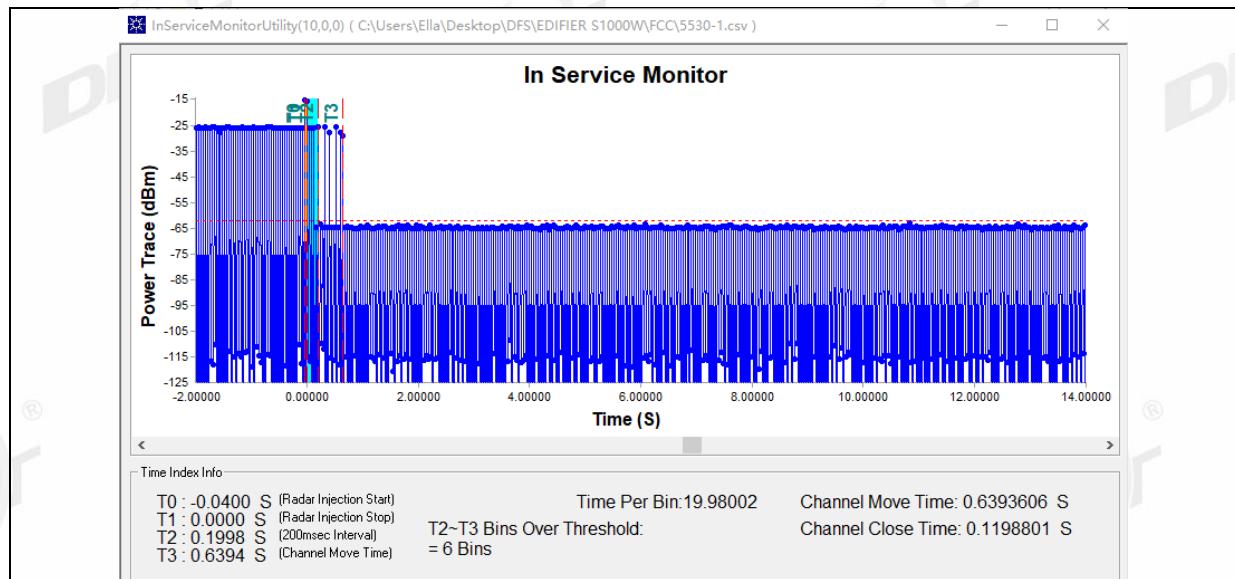


12.6. Test result

BW/Channel	Test Item	Test Result	Limit	Results
20M/5320MHz	Channel Move Time	0.559 s	<10s	pass
	Channel Closing Transmission Time	0.120 s	<0.26s	pass
20M/5500MHz	Channel Move Time	0.610 s	<10s	pass
	Channel Closing Transmission Time	0.007 s	<0.26s	pass
80M/5290MHz	Channel Move Time	0.627 s	<10s	pass
	Channel Closing Transmission Time	0.009 s	<0.26s	pass
80M/5530MHz	Channel Move Time	0.639 s	<10s	pass
	Channel Closing Transmission Time	0.120s	<0.26s	pass

Test plots as follows:





BW/Channel	Test Item	Test Result	Limit	Results
20M/5320MHz	Non-Occupancy Period	>30min	30min	pass
20M/5500MHz	Non-Occupancy Period	>30min	30min	pass
80M/5290MHz	Non-Occupancy Period	>30min	30min	pass
80M/5500MHz	Non-Occupancy Period	>30min	30min	pass

