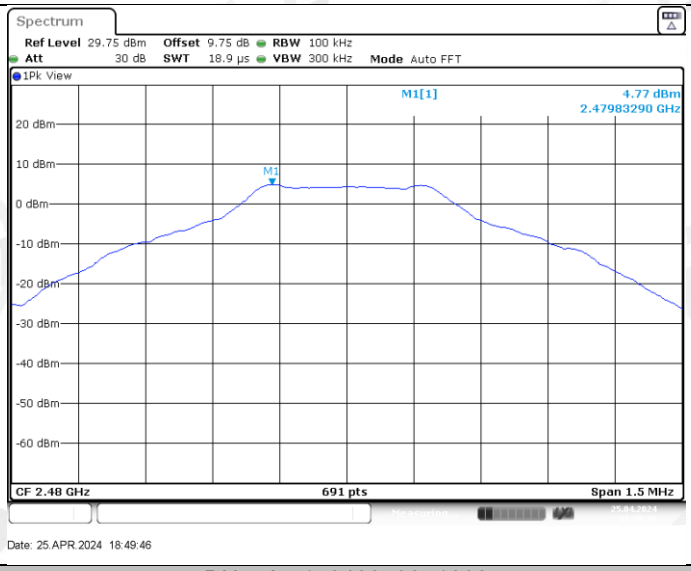
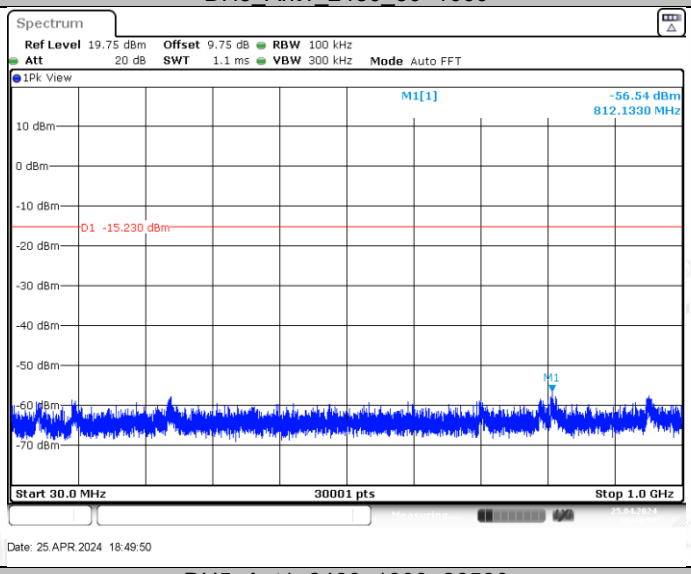
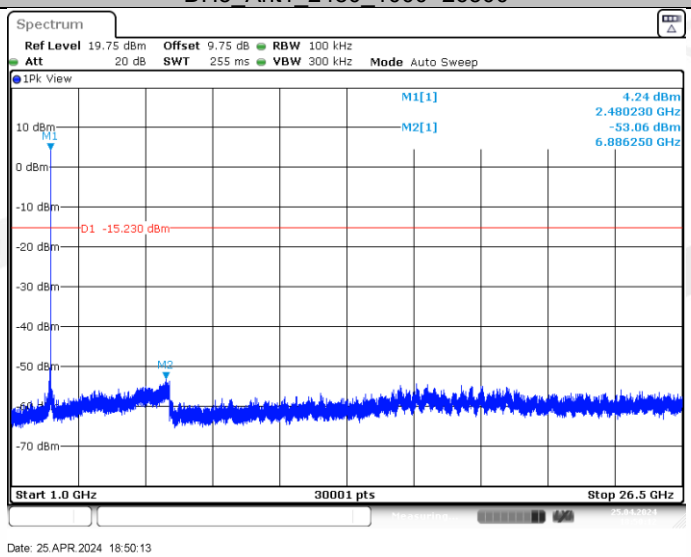


DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



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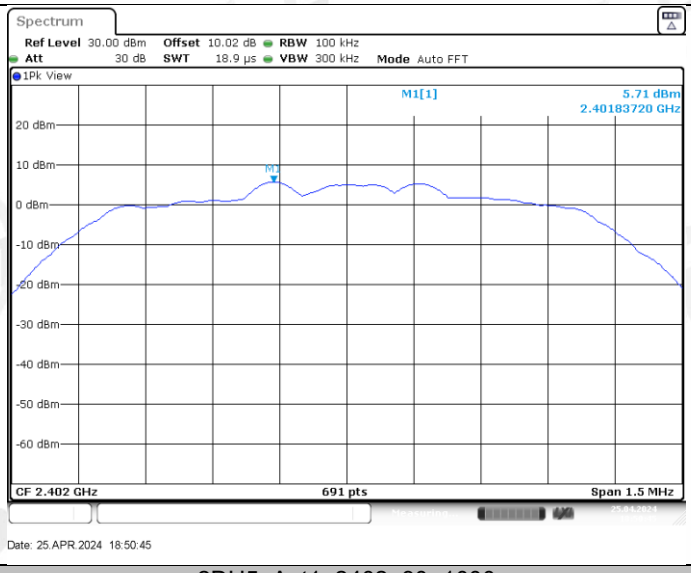

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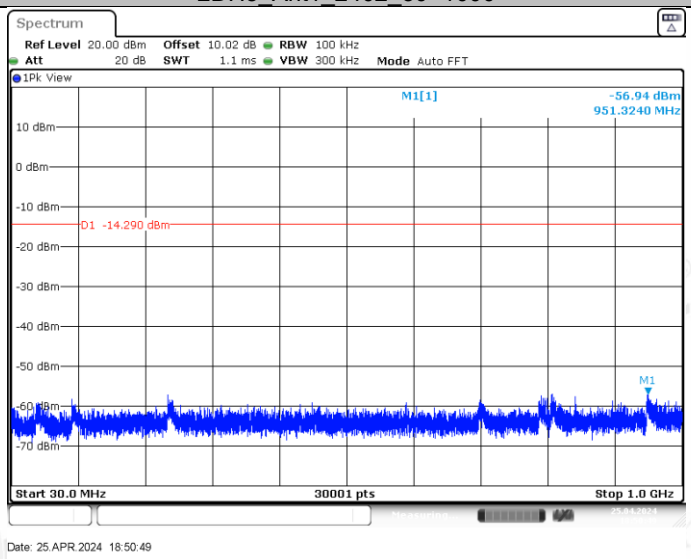

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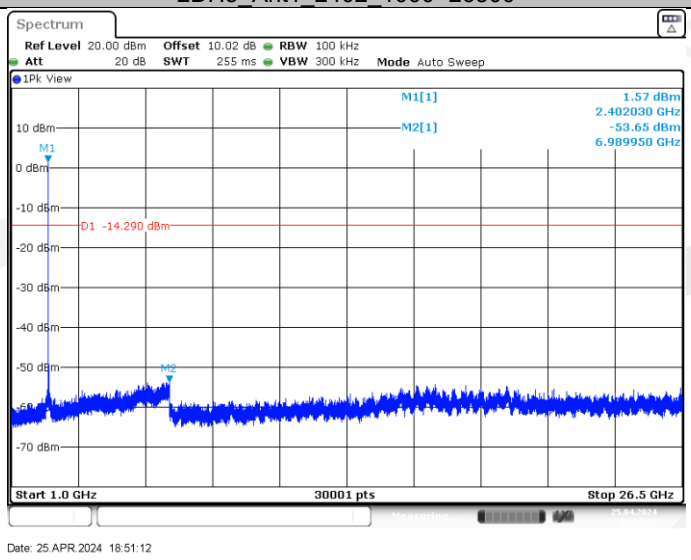

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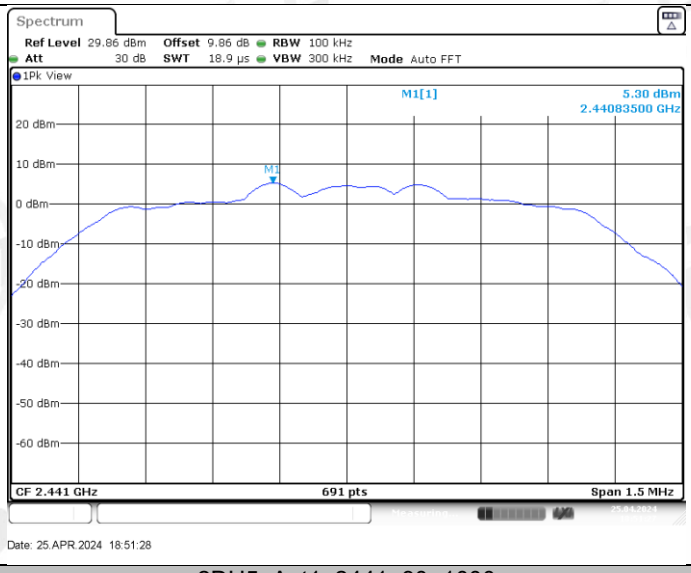

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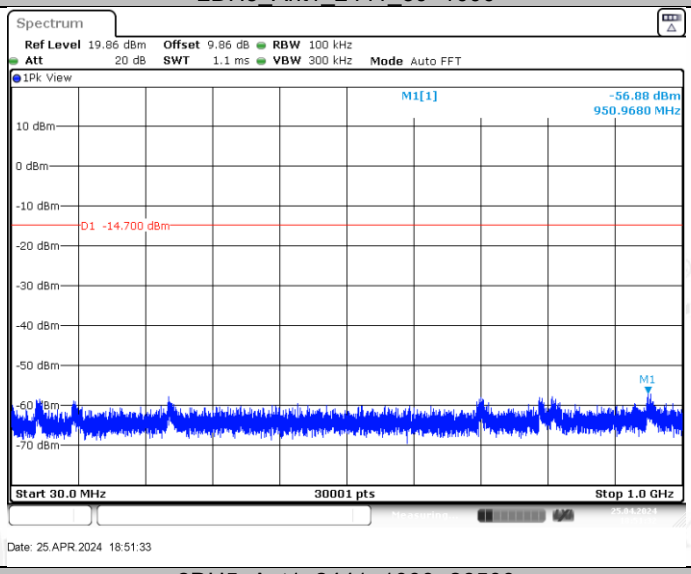

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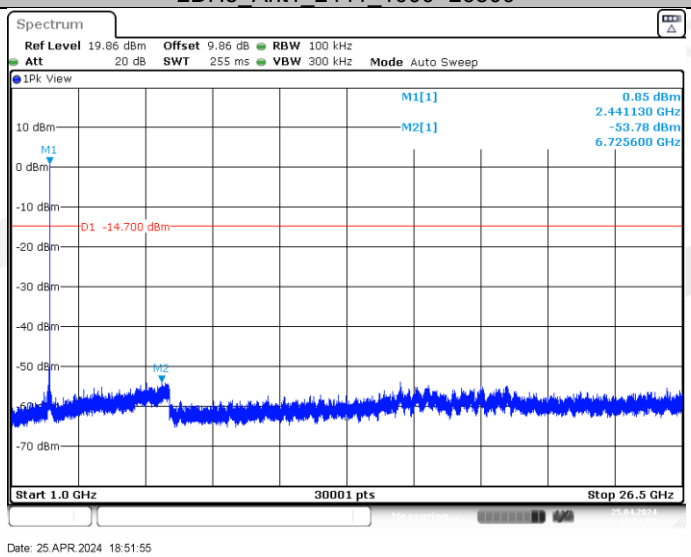

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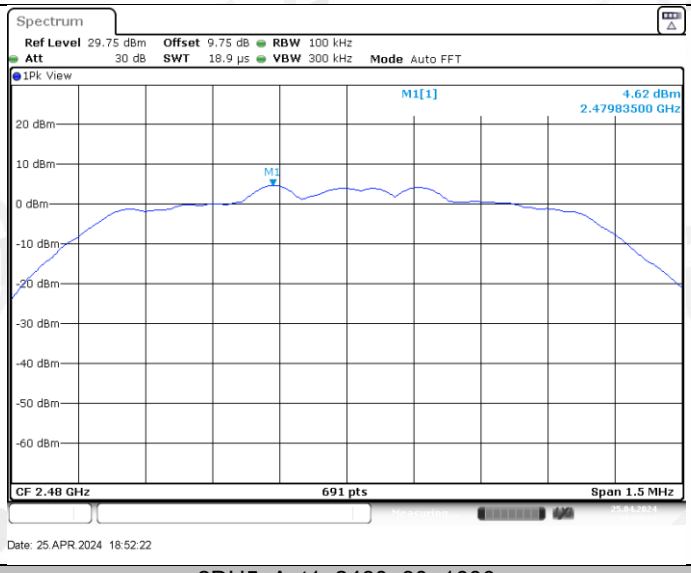

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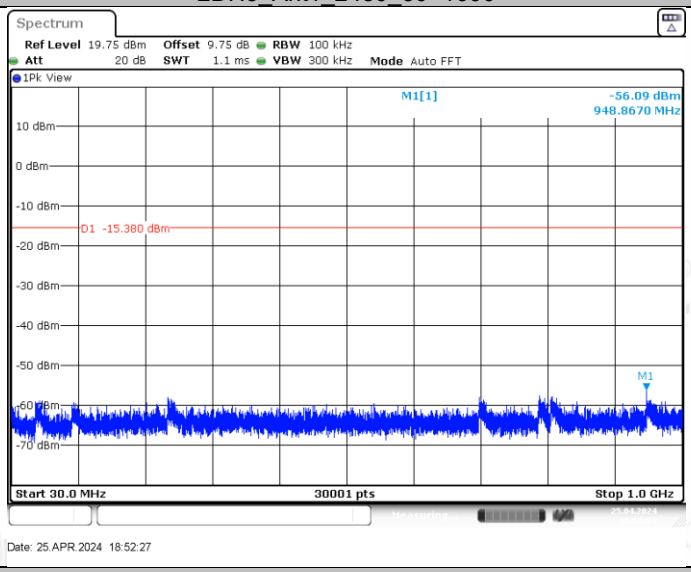
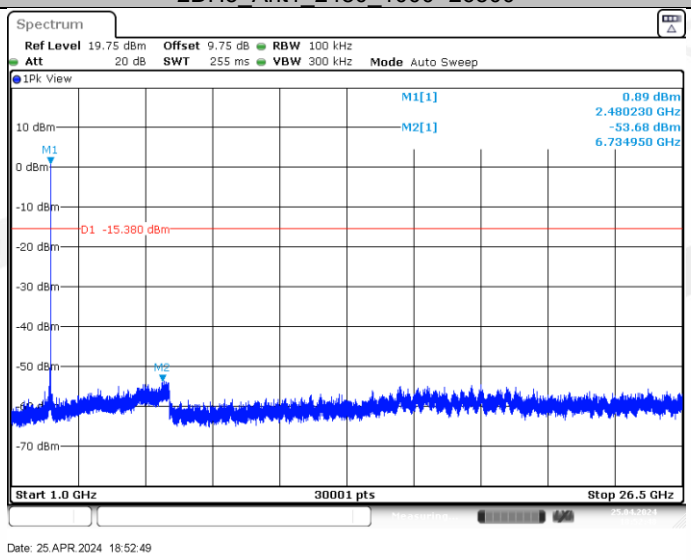
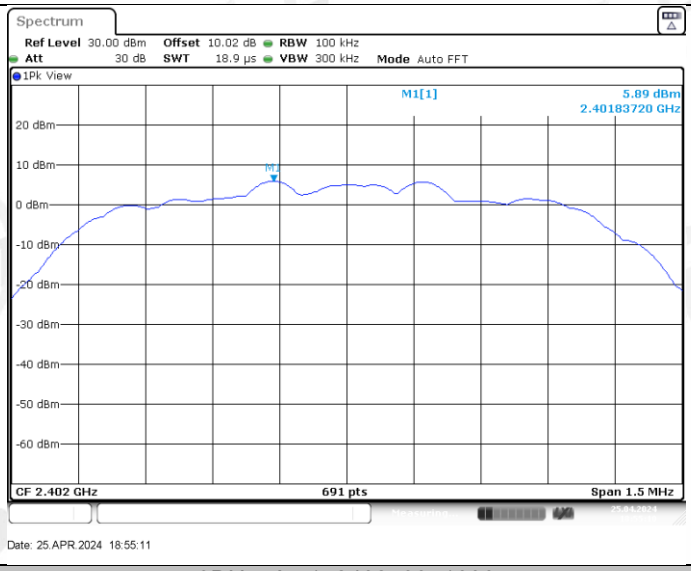


2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference



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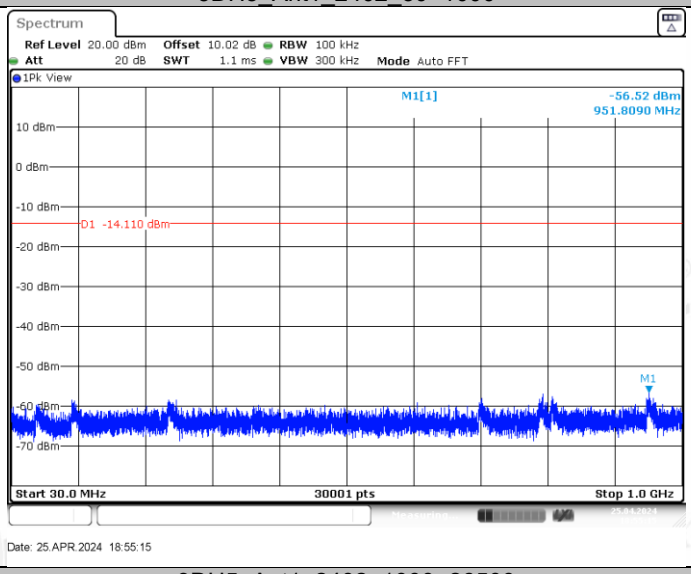
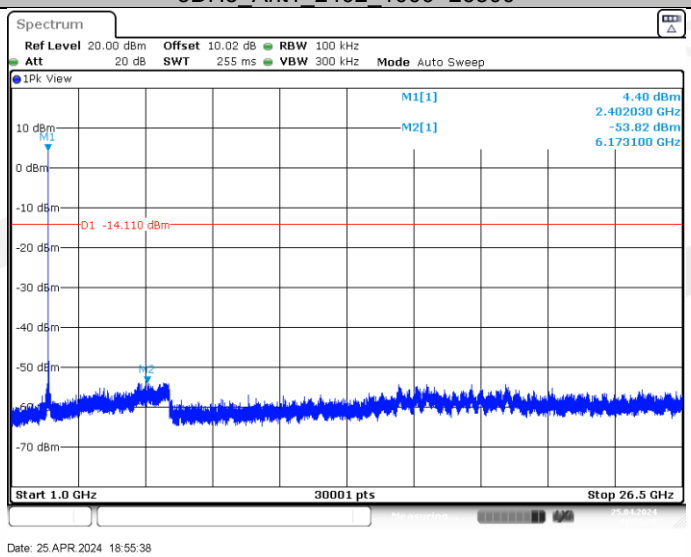


3DH5_Ant1_2402_1000~26500



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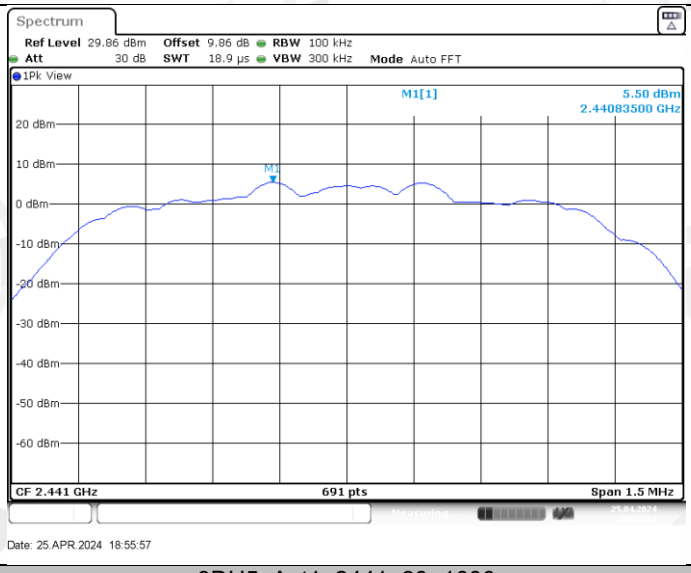

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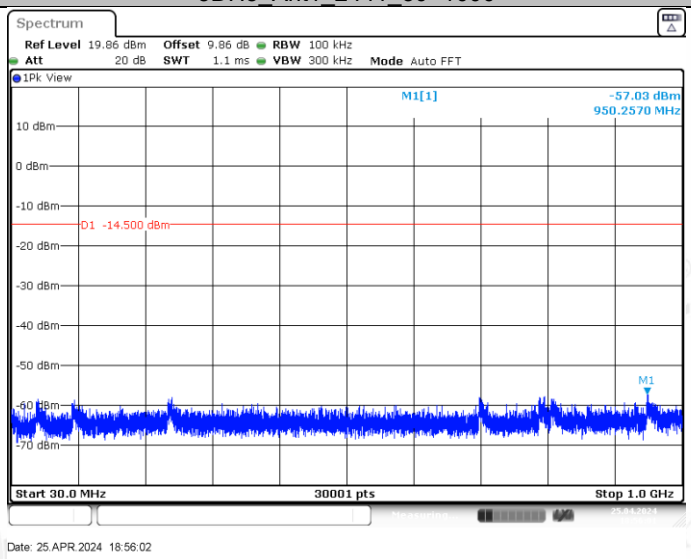
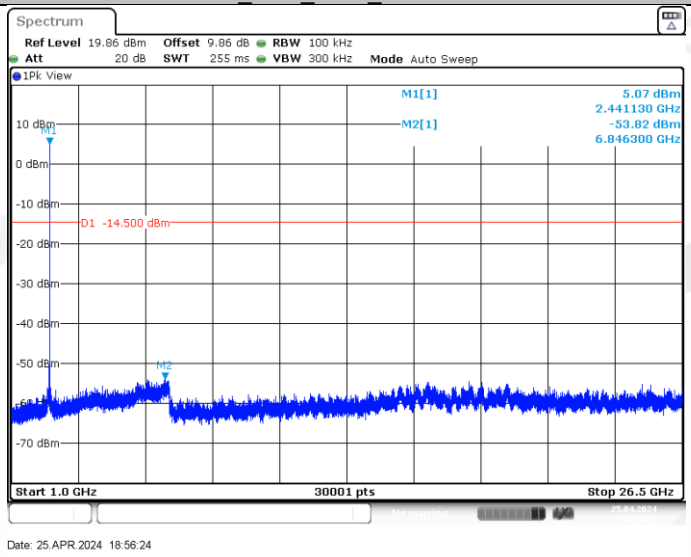


3DH5_Ant1_2441_1000~26500



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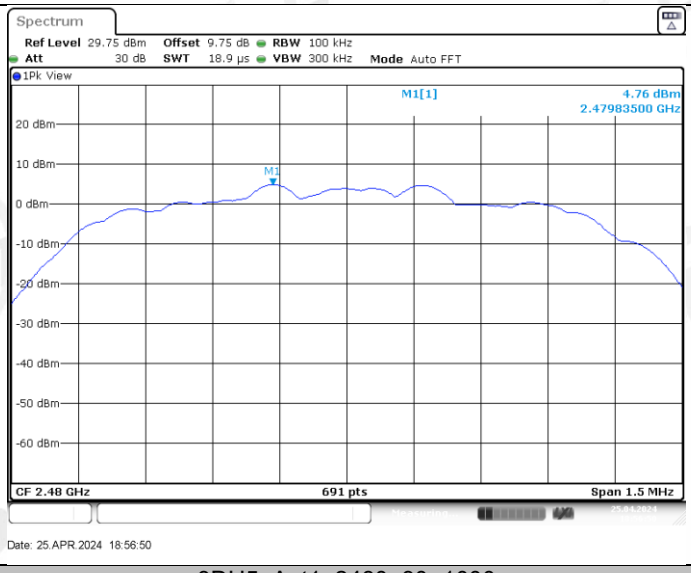
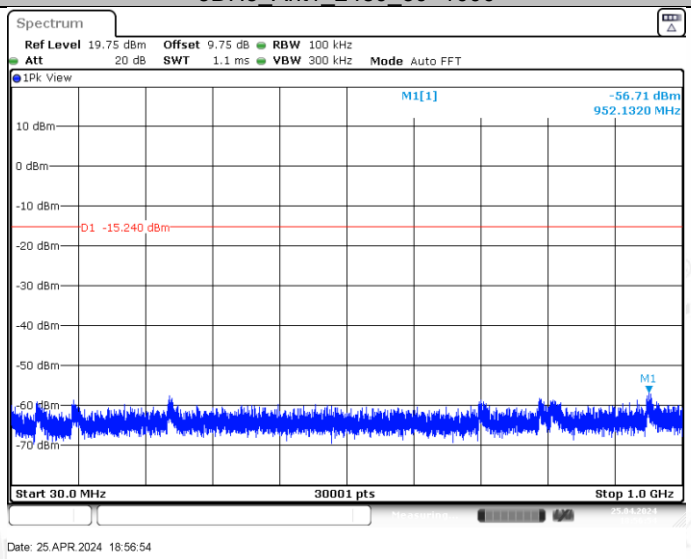
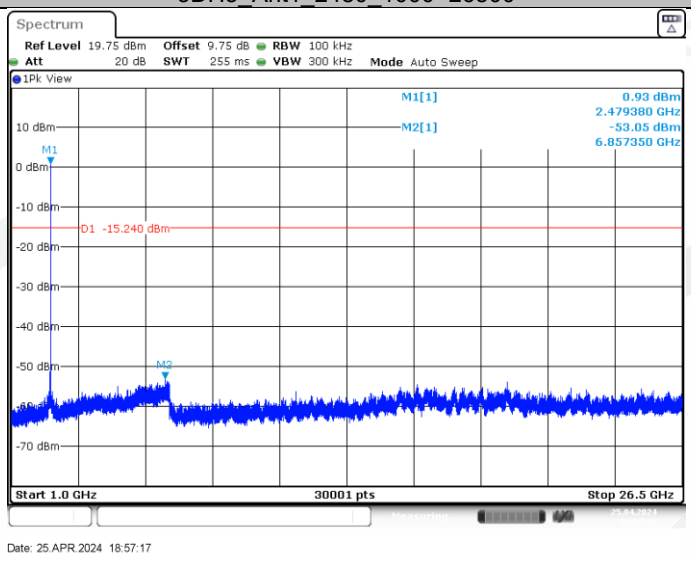


3DH5_Ant1_2480_30~1000

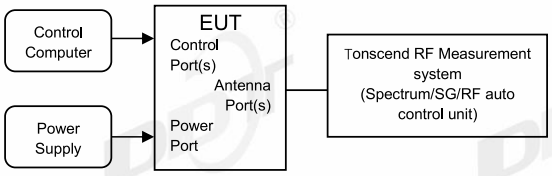


3DH5_Ant1_2480_1000~26500



11. Duty cycle

11.1. Block diagram of test setup



11.2. Limit

Just for Report.

11.3. Test procedure

(1) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, The cable loss and attenuator loss have been put into spectrum analyzer as amplitude offset.
set the Spectrum Analyzer as below:
Centre Frequency: The centre frequency of the middle hopping channel.
Resolution BW: 10 MHz.
Video BW: 10 MHz.
Span: Zero span.
Detector: Peak.
Trace Mode: Clear Write.
Sweep: Video Trigger

(2) When the trace is complete, measure the sending time of 1 burst and the duty cycle of 1 burst cycle.

(3) Calculate dwell time follow below formula:
Duty cycle= Pulse's on time / Burst cycle

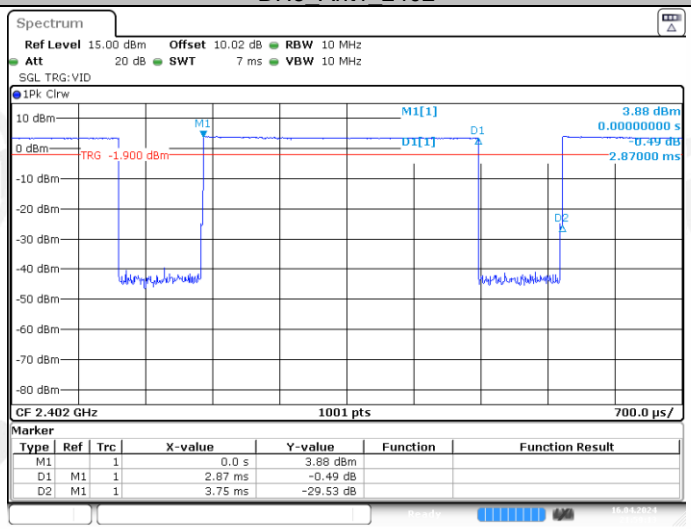
11.4. Test result

Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	23.8℃,44.5%RH	Test Date:	2024.04.16
Test Power Supply:	Battery	Sample Number:	S24040749-013

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.87	3.75	76.53	1.16
		2441	2.87	3.75	76.53	1.16
		2480	2.87	3.75	76.53	1.16
2DH5	Ant1	2402	2.89	3.76	76.86	1.14
		2441	2.89	3.75	77.07	1.13
		2480	2.89	3.76	76.86	1.14
3DH5	Ant1	2402	2.89	3.75	77.07	1.13
		2441	2.88	3.75	76.80	1.15
		2480	2.88	3.75	76.80	1.15

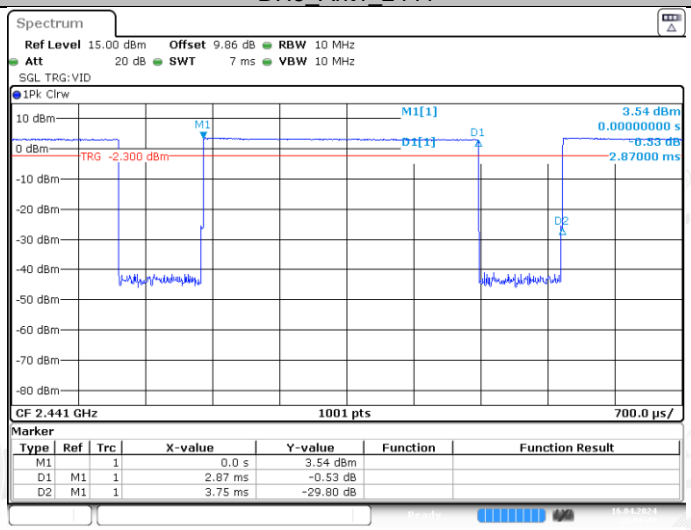
11.5. Test graphs

DH5_Ant1_2402



Date: 16.APR.2024 21:59:13

DH5_Ant1_2441



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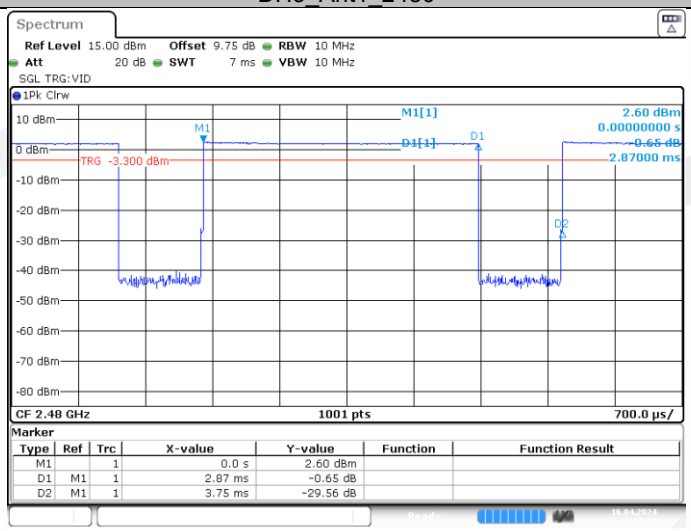
DH5_Ant1_2480



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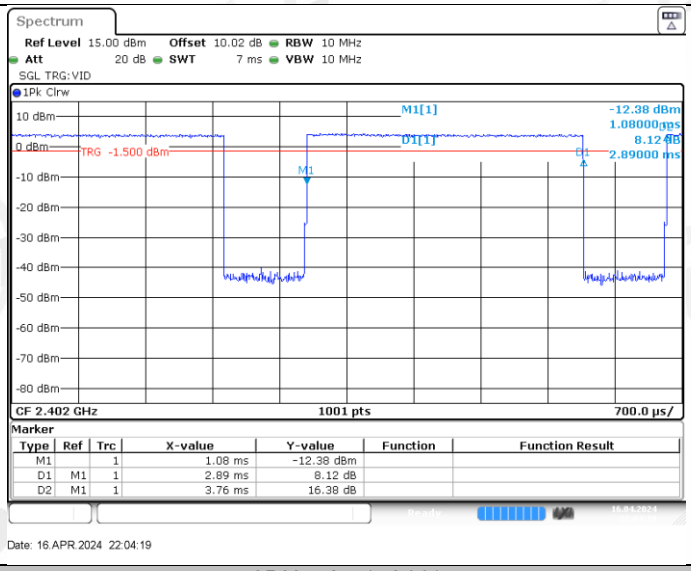

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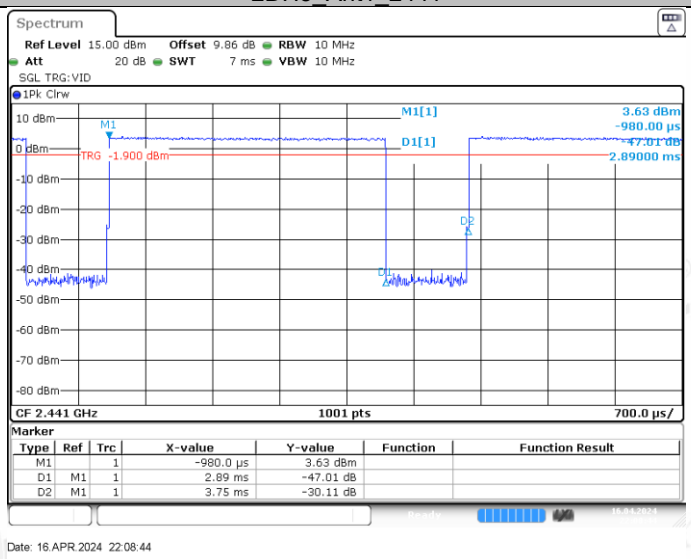

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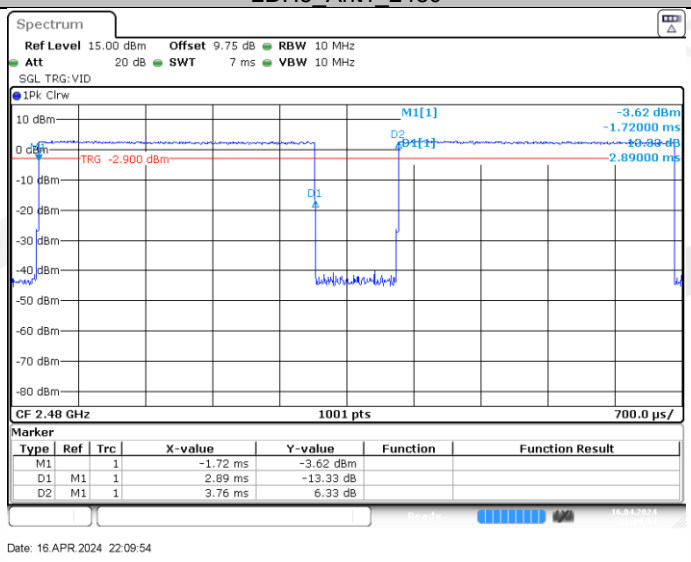
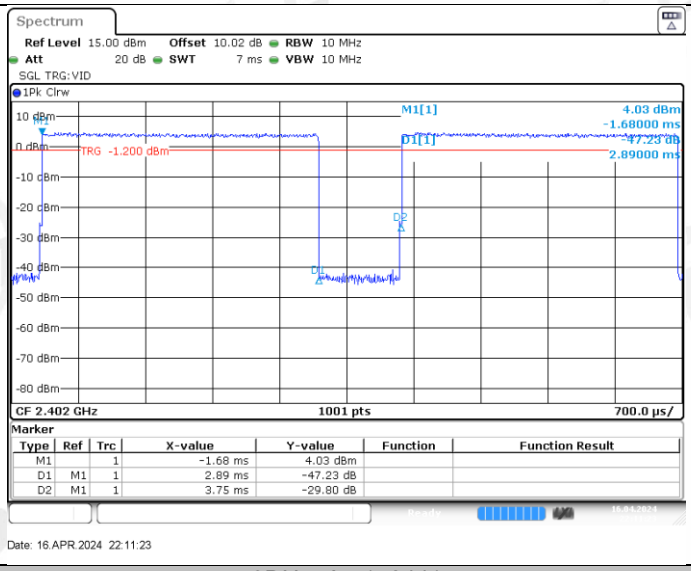
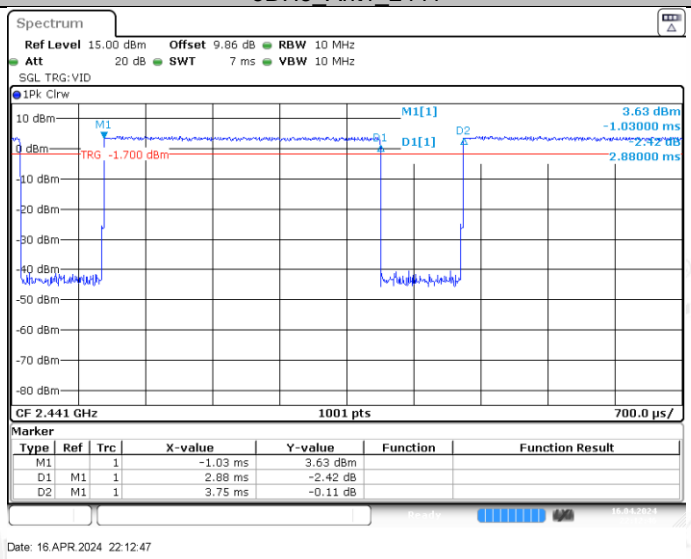


3DH5_Ant1_2402



3DH5_Ant1_2441



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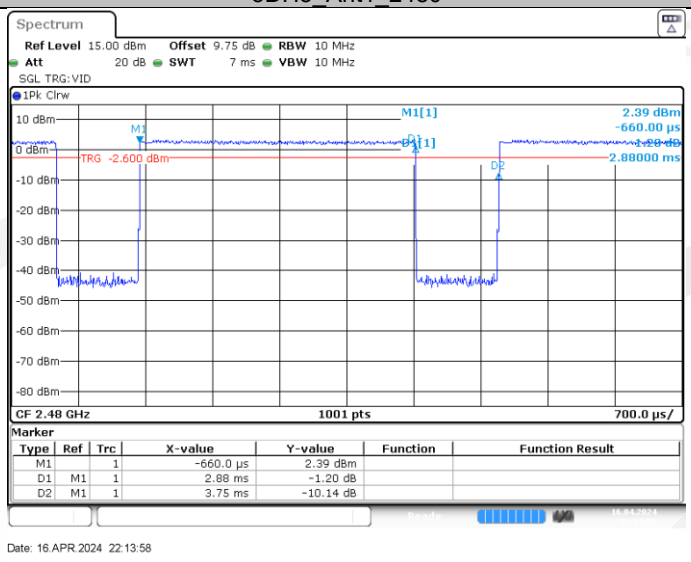


12. Antenna Requirements

12.1. 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 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

12.2. Result

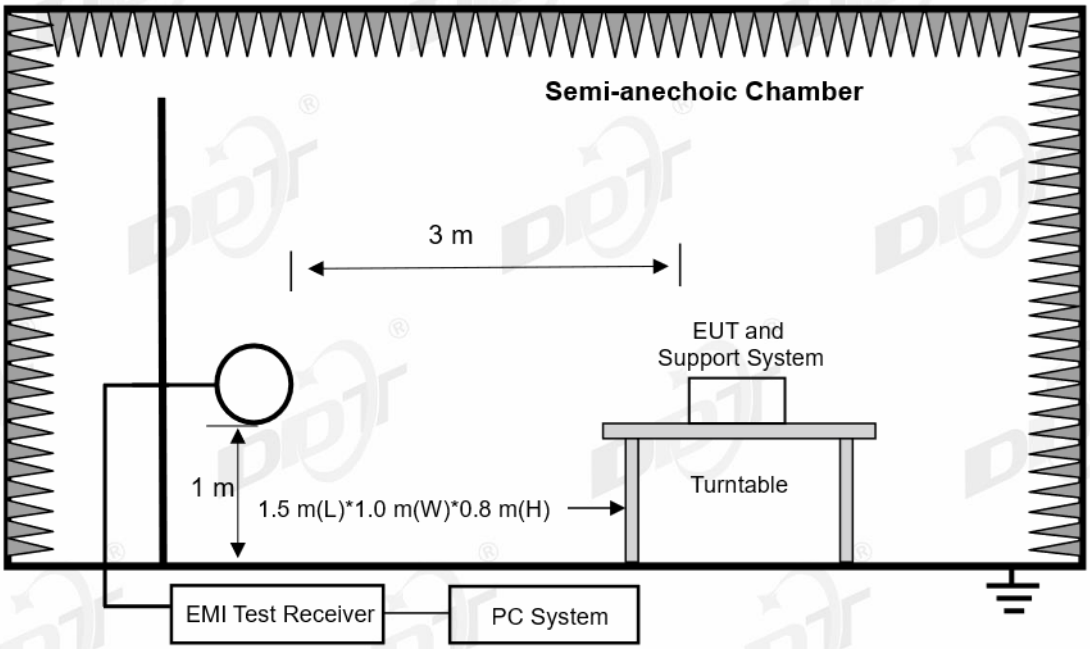
The antenna used for this product as Antenna information described in section 2.1 of the report, and there is no other antenna than that furnished by the responsible party shall be used with the device.

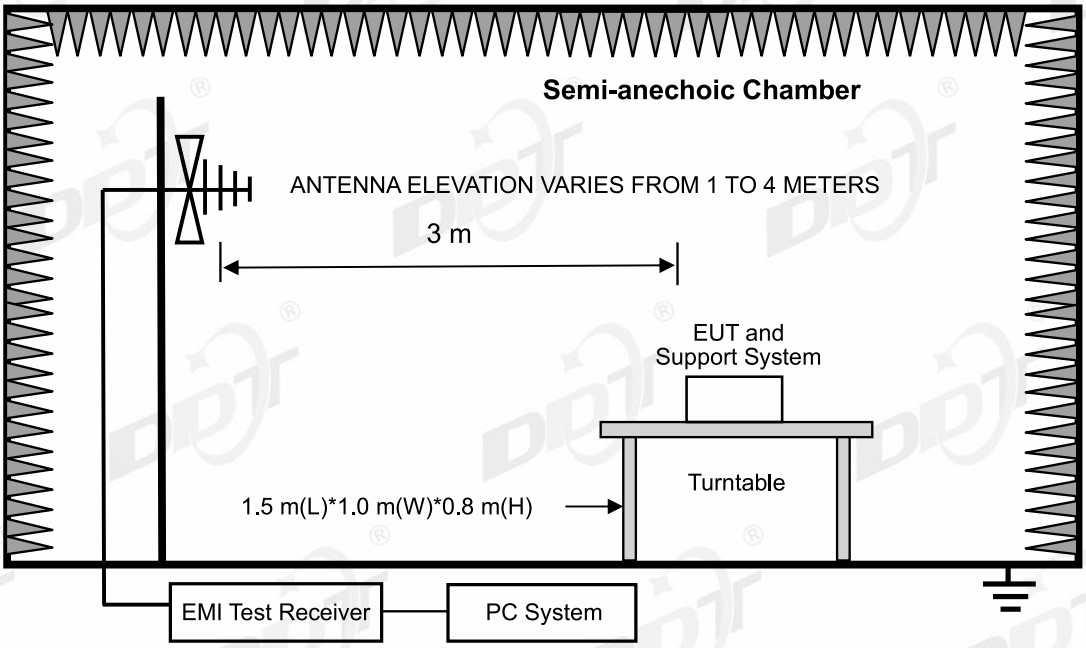
13.Radiated Emission

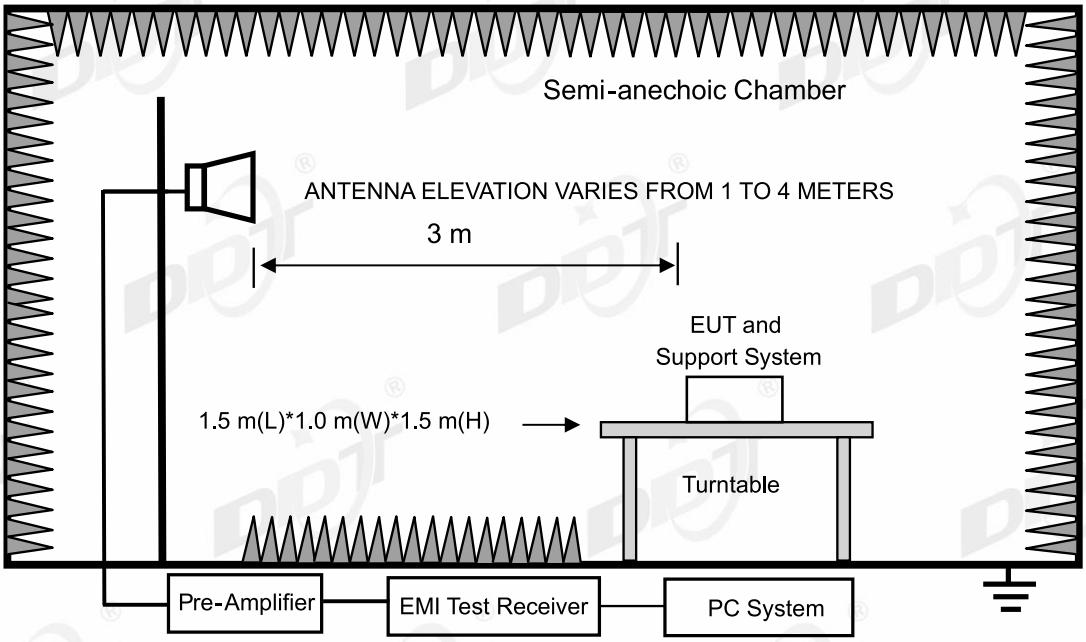
13.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
EMI TEST RECEIVER	R&S	ESU26	100472	2025/03/31
PSA Series Spectrum Analyzer	Agilent	E4447A	MY50180031	2025/03/31
Active Loop Antenna	Schwarzbeck	FMZB-1519	1519-038	2025/09/10
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	01429	2025/07/11
Double Ridged Horn Antenna	Schwarzbeck	BBHA 9120 D	02468	2024/09/17
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	2025/04/25
Pre-amplifier	COM-POWER	PAM-118A	18040084	2024/07/14
Pre-amplifier	COM-POWER	PAM-840A	461369	2025/03/31
RE Cable	N/A	W23.02 CP1-X2 + W23.09 AP1-X8+ JCT26S-NJ-NJ-1.5M	4.5M+8M+1.5M	2025/03/31
RF Cable	Yuhu	JCTB810-NJ-NJ-9M+ ZT26S-SMAJ-SMAJ-1M	21123964	2025/03/31
Band Reject Filter(2400-2500 MHz)	REBES	BRM50702	G555	N/A
Band Reject Filter(5150-5880 MHz)	REBES	BRM50716	G392	N/A
High Pass Filter(8000-25000 MHz)	XB	XBLBQ-GTA67	210820-2-3	N/A
Test Software	Tonscend	JS32-RE	V 5.0.0.1	N/A
RF cable	Zhongke Junchuang	JCT26S-NJ-NJ-1.5M	DDT-ZC02762	2025/04/01
Micro-Tronics filters	REBES	BRM50716	DDT-ZC03240	/
High pass filter	Micro-Tronics	HPM50108	DDT-ZC00560	2024/05/14

13.2. Block diagram of test setup







13.3. Limits

(1) FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

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

2Above 38.6

(2) FCC 15.209 Limit

FREQUENCY MHz			DISTANCE Meters	FIELD STRENGTHS LIMIT	
				mV/m	dB(mV)/m
0.009 ~ 0.490			300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705			30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0			30	30	29.54
30	~	88	3	100	40.0
88	~	216	3	150	43.5
216	~	960	3	200	46.0
960	~	1000	3	500	54.0
Above		1000	3	74.0 dB(mV)/m (Peak) 54.0 dB(mV)/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 - 90 kHz, 110 - 490 kHz and above 1000 MHz, radiated emissions limits in these three bands are based on measurements employing an average detector.

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

$$Limit_{3m}(dBuV/m)= Limit_{30m}(dBuV/m) + 40Log(30m/3m)$$

(3) Limit for this EUT

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 20 dB below the fundamental emissions or comply with 15.209 limits.

13.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
/	/	/	/	/

13.5. Test procedure

(1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1G and 150 cm above the ground plane inside a fully-anechoic chamber for above 1G.

(2) Test antenna was located 3 m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test antenna 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(1 GHz-18 GHz)	3 m

18 GHz - 40 GHz	Horn Antenna(18 GHz-40 GHz)	1 m

According ANSI C63.10:2013 clause 6.4.6 and 6.5.3, for measurements below 30 MHz, Antenna was located 3 m from EUT, the loop antenna was positioned in three antenna orientations (parallel, perpendicular, and round-parallel), for each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable, and the lowest height of the magnetic antenna shall be 1 m above the ground. For measurement above 30MHz, 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.

(3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 25 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 1 m 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 25 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18 GHz to 25 GHz, so below final test was performed with frequency range from 9 kHz to 18 GHz.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m 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 equipment and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.

(5) 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 - 90 kHz,110 kHz - 490 kHz and above 1 GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.

(6) 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

(7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3 MHz for Peak measure; According ANSI C63.10:2013 clause 4.1.4.2.2 procedure for average measure.

(8) For portable device, X axis, Y axis, Z axis are tested, and worse setup is reported.

13.6. Test result

PASS. (See below detailed test result)

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

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz and 18 GHz to 25 GHz, so the final test was performed with frequency range from 30 MHz to 18 GHz and recorded in below.

Note2: 30 MHz ~ 25 GHz: (Scan with GFSK, π/4-DQPSK and 8DPSK, the worst case is 8DPSK Mode)

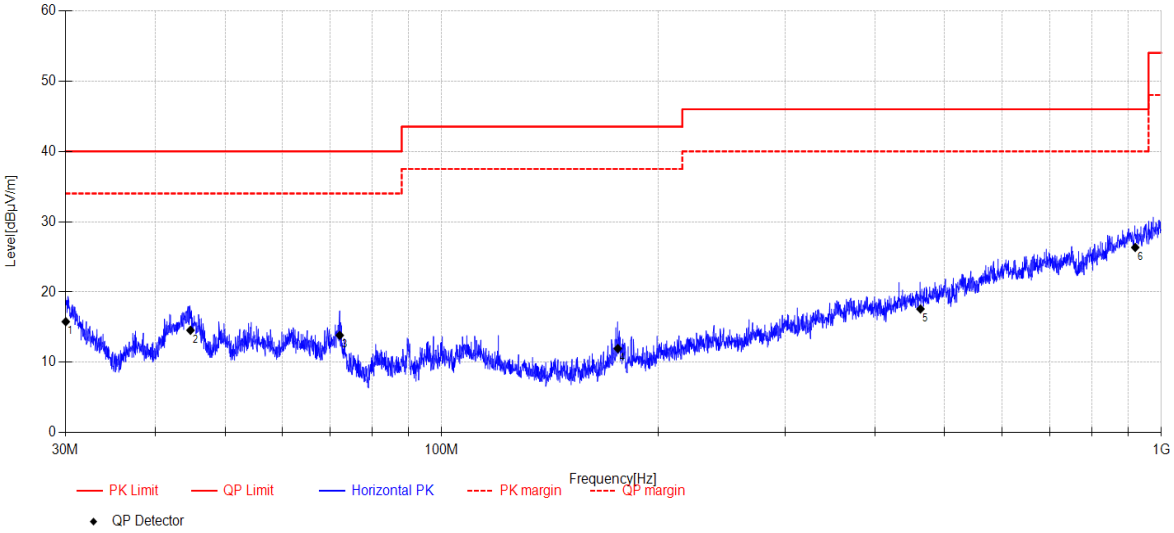
Note3: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in 8DPSK, Tx 2402 MHz mode.

Note4: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

13.7. Test data

TR-4-E-009 Radiated Emission Test Result

Test Date:	2024-04-24	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	Tx mode	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC BELOW 1G\20240424-212118_H		
Memo:	Sample Number: S24040749-005		

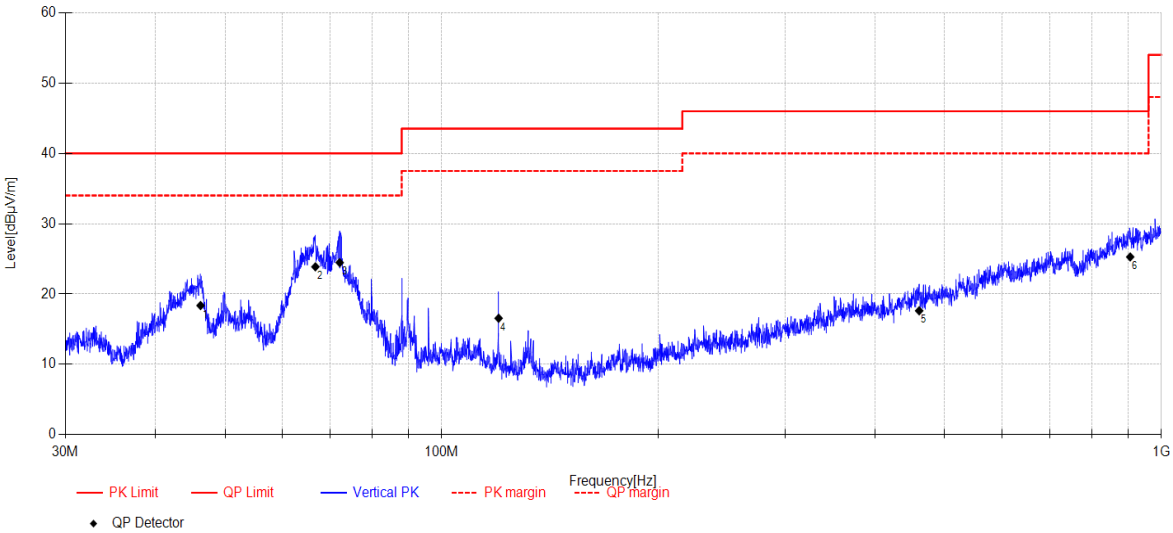


Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable Loss [dB]**	**AMP [dB]**	**Result [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	30.042	32.02	10.30	4.47	-31.00	15.79	40.00	24.21	QP	Horizontal
2	44.771	27.54	13.15	4.66	-30.78	14.57	40.00	25.43	QP	Horizontal
3	72.173	30.07	9.53	4.80	-30.55	13.85	40.00	26.15	QP	Horizontal
4	175.713	27.48	9.63	5.53	-30.67	11.97	43.50	31.53	QP	Horizontal
5	462.741	24.83	15.90	6.84	-29.97	17.60	46.00	28.40	QP	Horizontal
6	919.947	24.86	21.89	8.41	-28.82	26.34	46.00	19.66	QP	Horizontal

Note:
1. Result Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-24	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	Tx mode	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC BELOW 1G\20240424-212200_V		
Memo:	Sample Number: S24040749-005		



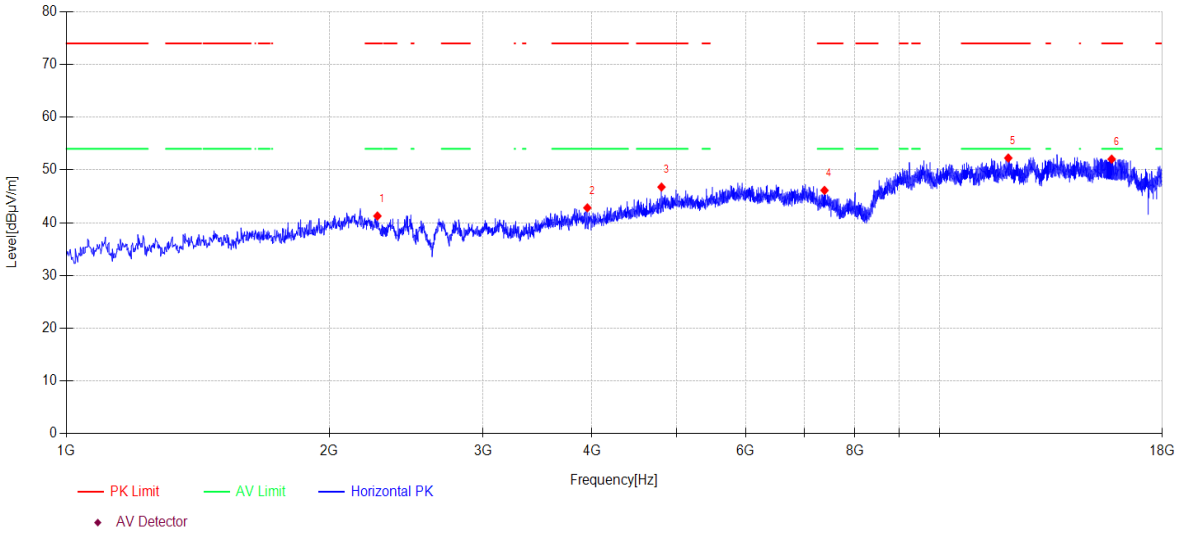
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable Loss [dB]**	**AMP [dB]**	**Result [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	46.239	31.98	12.47	4.68	-30.76	18.37	40.00	21.63	QP	Vertical
2	66.769	39.29	10.40	4.78	-30.59	23.88	40.00	16.12	QP	Vertical
3	72.173	40.69	9.53	4.80	-30.55	24.47	40.00	15.53	QP	Vertical
4	119.991	32.23	10.00	5.17	-30.84	16.56	43.50	26.94	QP	Vertical
5	460.799	24.87	15.90	6.84	-29.98	17.63	46.00	28.37	QP	Vertical
6	905.230	23.99	21.88	8.36	-28.95	25.28	46.00	20.72	QP	Vertical

Note:
1. Result Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\39		
Memo:	Sample Number: S24040749-005		

Test Graph



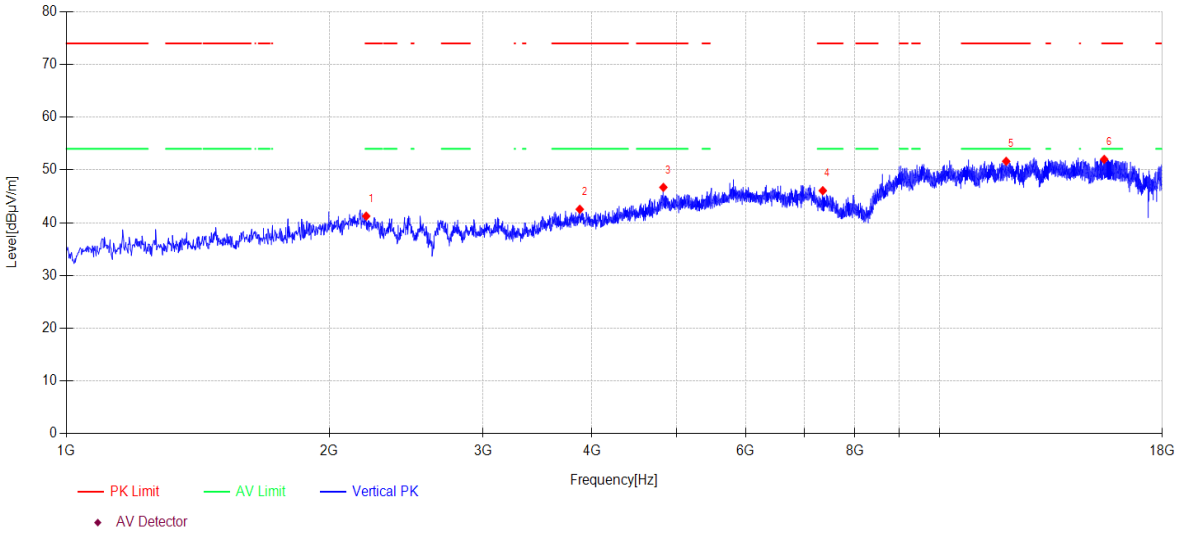
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2271.600	46.02	27.08	5.95	-37.78	41.27	74.00	32.73	PK	Horizontal
2	3951.200	46.30	31.10	5.84	-40.42	42.82	74.00	31.18	PK	Horizontal
3	4804.600	46.81	32.62	7.48	-40.15	46.76	74.00	27.24	PK	Horizontal
4	7385.200	43.42	36.73	7.64	-41.66	46.13	74.00	27.87	PK	Horizontal
5	11990.500	42.12	39.17	10.53	-39.56	52.26	74.00	21.74	PK	Horizontal
6	15747.500	38.11	38.41	14.74	-39.21	52.05	74.00	21.95	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\40		
Memo:	Sample Number: S24040749-005		

Test Graph



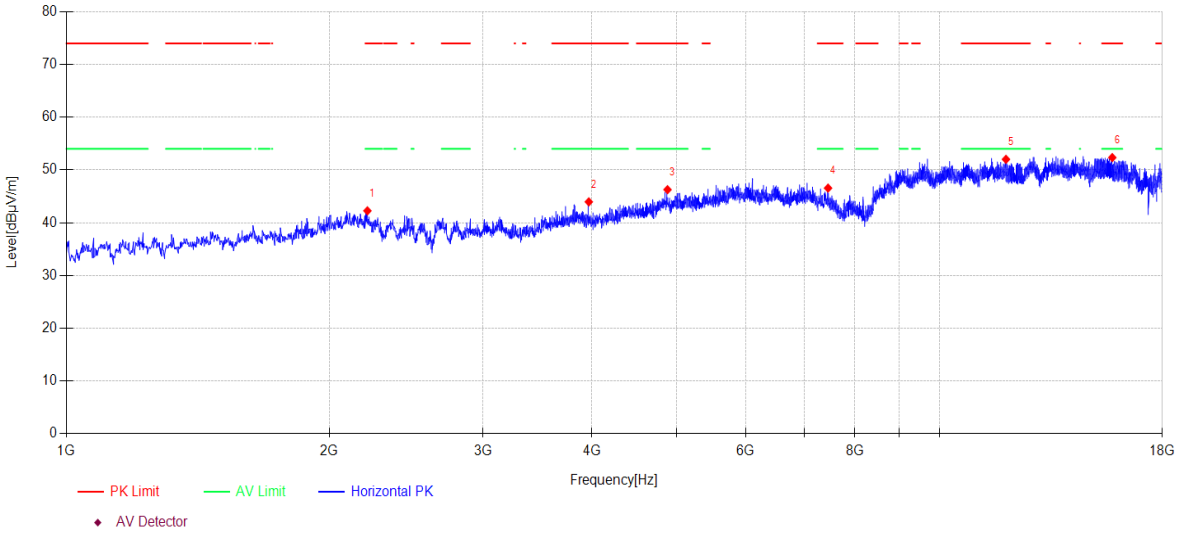
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2205.300	45.11	27.75	5.98	-37.59	41.25	74.00	32.75	PK	Vertical
2	3873.000	46.06	31.04	5.82	-40.37	42.55	74.00	31.45	PK	Vertical
3	4828.400	46.08	33.24	7.52	-40.14	46.70	74.00	27.30	PK	Vertical
4	7351.200	43.22	36.80	7.63	-41.58	46.07	74.00	27.93	PK	Vertical
5	11924.200	41.72	38.97	10.47	-39.52	51.64	74.00	22.36	PK	Vertical
6	15441.500	38.76	38.92	13.35	-39.02	52.01	74.00	21.99	PK	Vertical

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2441MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\41		
Memo:	Sample Number: S24040749-005		

Test Graph



Data List

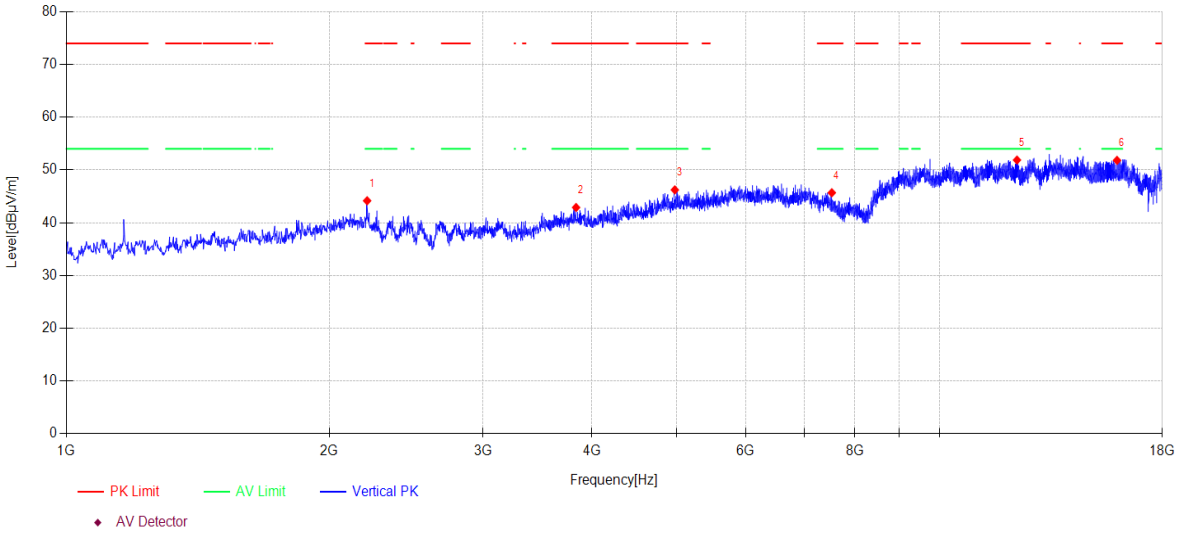
NO.	Freq. [MHz]	Reading [dBµV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity
1	2212.100	46.21	27.68	5.98	-37.61	42.26	74.00	31.74	PK	Horizontal
2	3966.500	47.52	31.03	5.84	-40.43	43.96	74.00	30.04	PK	Horizontal
3	4881.100	45.46	33.30	7.63	-40.12	46.27	74.00	27.73	PK	Horizontal
4	7454.900	44.17	36.59	7.64	-41.84	46.56	74.00	27.44	PK	Horizontal
5	11917.400	42.12	38.95	10.47	-39.52	52.02	74.00	21.98	PK	Horizontal
6	15774.700	38.36	38.35	14.86	-39.22	52.35	74.00	21.65	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2441MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\42		
Memo:	Sample Number: S24040749-005		

Test Graph



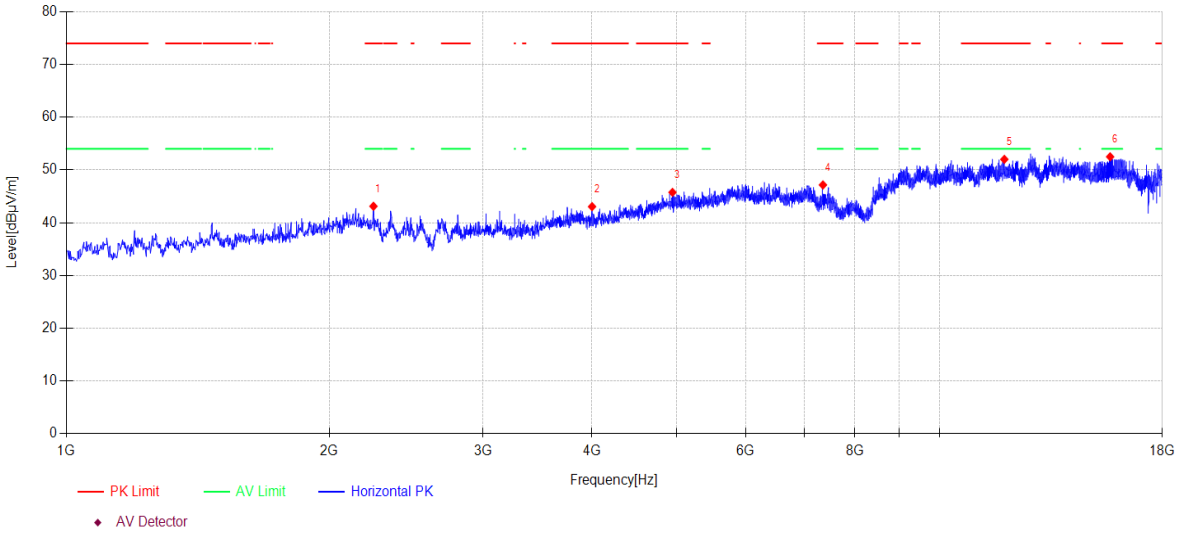
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2210.400	48.09	27.70	5.98	-37.61	44.16	74.00	29.84	PK	Vertical
2	3835.600	46.59	30.84	5.81	-40.35	42.89	74.00	31.11	PK	Vertical
3	4976.300	45.35	33.15	7.82	-40.09	46.23	74.00	27.77	PK	Vertical
4	7528.000	43.61	36.44	7.65	-42.02	45.68	74.00	28.32	PK	Vertical
5	12269.300	41.71	39.30	10.54	-39.67	51.88	74.00	22.12	PK	Vertical
6	15973.600	37.37	38.03	15.76	-39.34	51.82	74.00	22.18	PK	Vertical

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\43		
Memo:	Sample Number: S24040749-005		

Test Graph



Data List

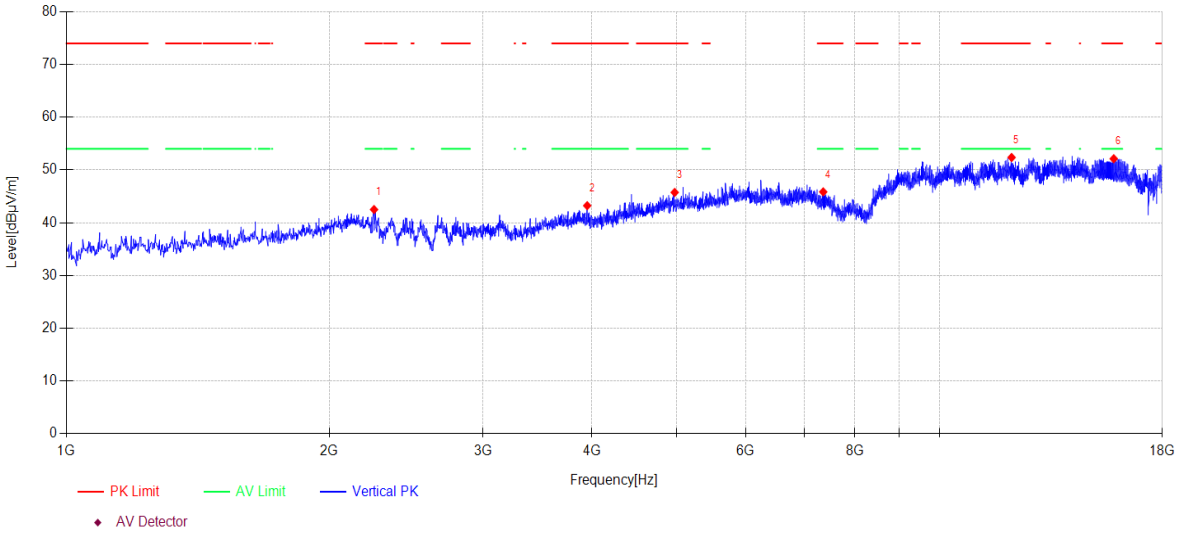
NO.	Freq. [MHz]	Reading [dBµV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity
1	2247.800	47.55	27.32	5.96	-37.71	43.12	74.00	30.88	PK	Horizontal
2	4000.500	46.75	30.90	5.85	-40.45	43.05	74.00	30.95	PK	Horizontal
3	4945.700	45.01	33.09	7.76	-40.10	45.76	74.00	28.24	PK	Horizontal
4	7354.600	44.33	36.79	7.63	-41.59	47.16	74.00	26.84	PK	Horizontal
5	11866.400	42.19	38.90	10.42	-39.50	52.01	74.00	21.99	PK	Horizontal
6	15684.600	38.70	38.52	14.45	-39.17	52.50	74.00	21.50	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\44		
Memo:	Sample Number: S24040749-005		

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBµV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity
1	2251.200	46.97	27.29	5.96	-37.72	42.50	74.00	31.50	PK	Vertical
2	3949.500	46.71	31.10	5.84	-40.42	43.23	74.00	30.77	PK	Vertical
3	4974.600	44.87	33.15	7.82	-40.09	45.75	74.00	28.25	PK	Vertical
4	7359.700	43.03	36.78	7.64	-41.60	45.85	74.00	28.15	PK	Vertical
5	12095.900	42.13	39.30	10.54	-39.60	52.37	74.00	21.63	PK	Vertical
6	15834.200	38.03	38.23	15.13	-39.26	52.13	74.00	21.87	PK	Vertical

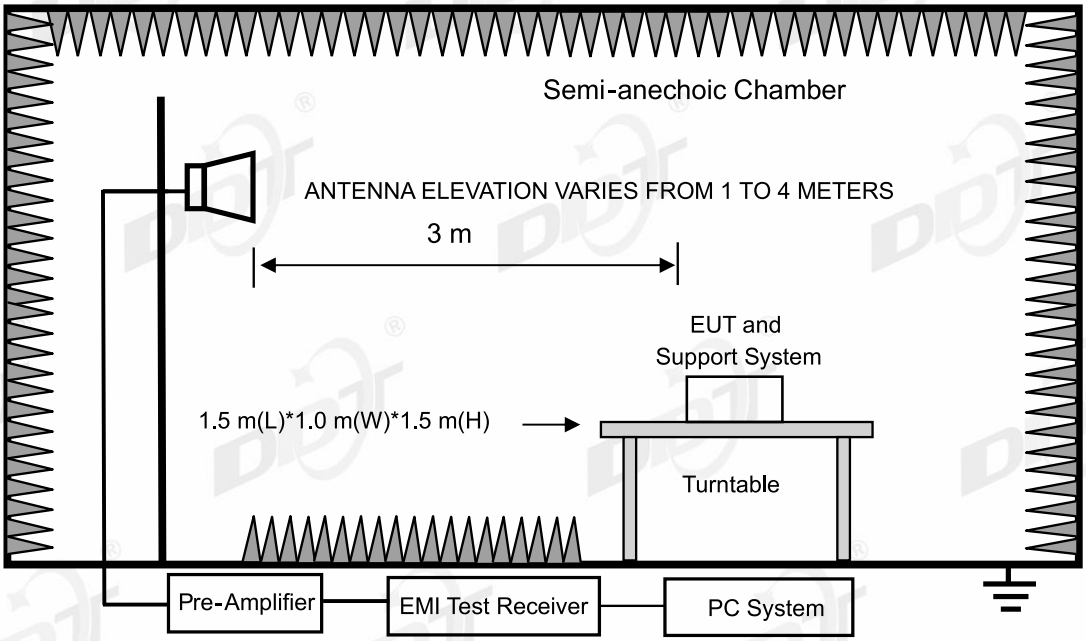
Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

14.Band Edge Compliance

14.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
EMI TEST RECEIVER	R&S	ESU26	100472	2025/03/31
PSA Series Spectrum Analyzer	Agilent	E4447A	MY50180031	2025/03/31
Active Loop Antenna	Schwarzbeck	FMZB-1519	1519-038	2025/09/10
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	01429	2025/07/11
Double Ridged Horn Antenna	Schwarzbeck	BBHA 9120 D	02468	2024/09/17
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	2025/04/25
Pre-amplifier	COM-POWER	PAM-118A	18040084	2024/07/14
Pre-amplifier	COM-POWER	PAM-840A	461369	2025/03/31
RE Cable	N/A	W23.02 CP1-X2 + W23.09 AP1-X8+ JCT26S-NJ-NJ-1.5M	4.5M+8M+1.5M	2025/03/31
RF Cable	Yuhu	JCTB810-NJ-NJ-9M+ ZT26S-SMAJ-SMAJ-1M	21123964	2025/03/31
Band Reject Filter(2400-2500 MHz)	REBES	BRM50702	G555	N/A
Band Reject Filter(5150-5880 MHz)	REBES	BRM50716	G392	N/A
High Pass Filter(8000-25000 MHz)	XB	XBLBQ-GTA67	210820-2-3	N/A
Test Software	Tonscend	JS32-RE	V 5.0.0.1	N/A
RF cable	Zhongke Junchuang	JCT26S-NJ-NJ-1.5M	DDT-ZC02762	2025/04/01
Micro-Tronics filters	REBES	BRM50716	DDT-ZC03240	/
High pass filter	Micro-Tronics	HPM50108	DDT-ZC00560	2024/05/14

14.2. Block diagram of test setup



14.3. Limits

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

14.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
/	/	/	/	/

14.5. Test procedure

Same with Radiated Emission except change investigated frequency range.
Remark: All restriction band have been tested, and only the worst case is shown in report.

14.6. Test result

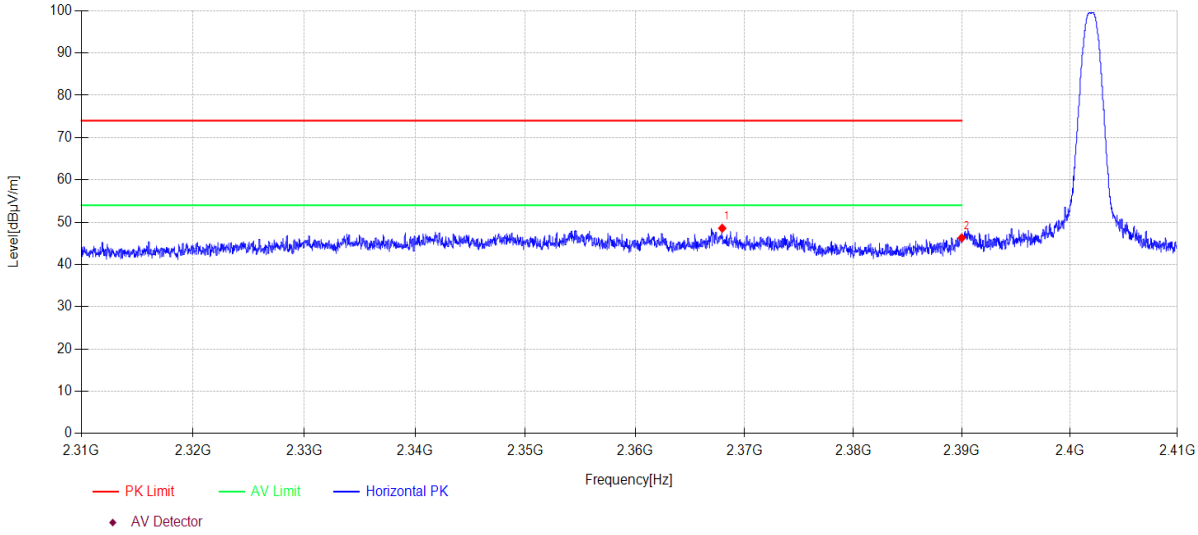
PASS. (See below detailed test result)

14.7. Test data

TR-4-E-009 Radiated Emission Test Result

Test Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\45		
Memo:	Sample Number: S24040749-005		

Test Graph



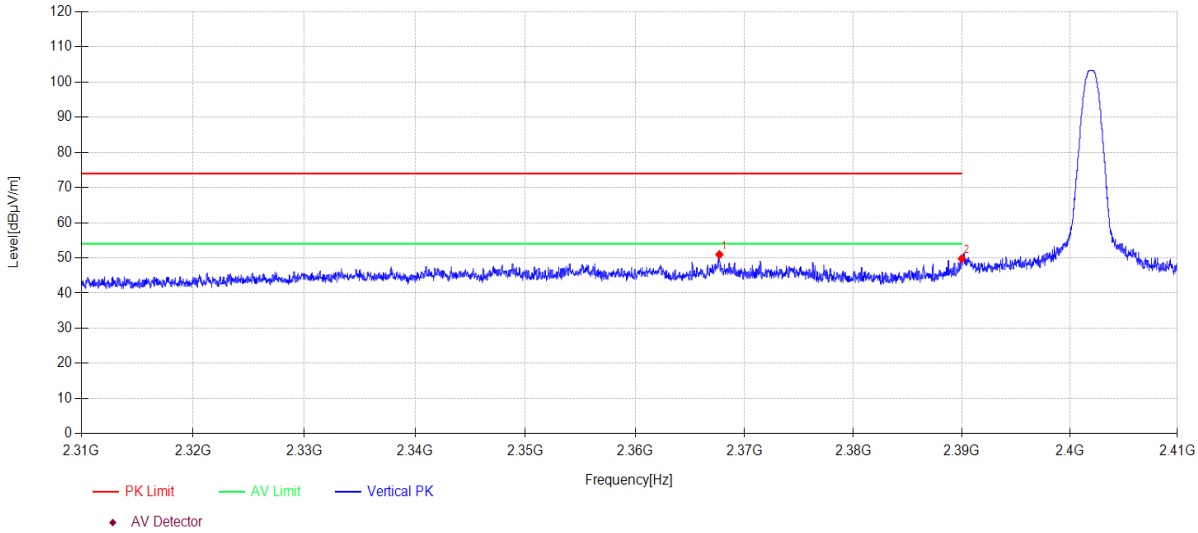
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2367.960	17.54	27.17	3.85	0.00	48.56	74.00	25.44	PK	Horizontal
2	2390.000	15.17	27.26	3.87	0.00	46.30	74.00	27.70	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\46		
Memo:	Sample Number: S24040749-005		

Test Graph



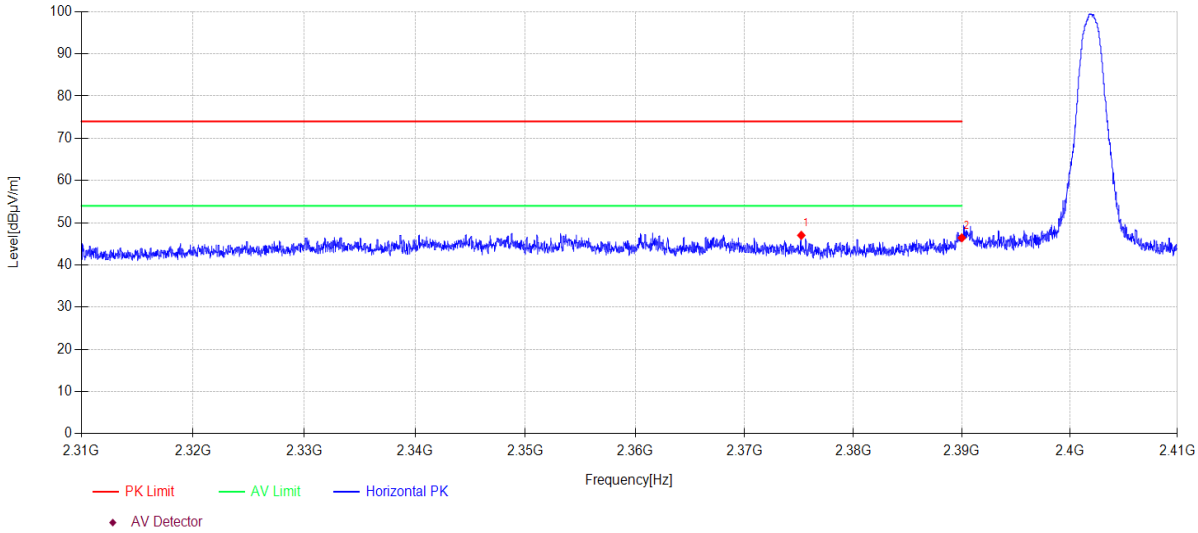
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2367.700	19.92	27.17	3.85	0.00	50.94	74.00	23.06	PK	Vertical
2	2390.000	18.66	27.26	3.87	0.00	49.79	74.00	24.21	PK	Vertical

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	2DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\47		
Memo:	Sample Number: S24040749-005		

Test Graph



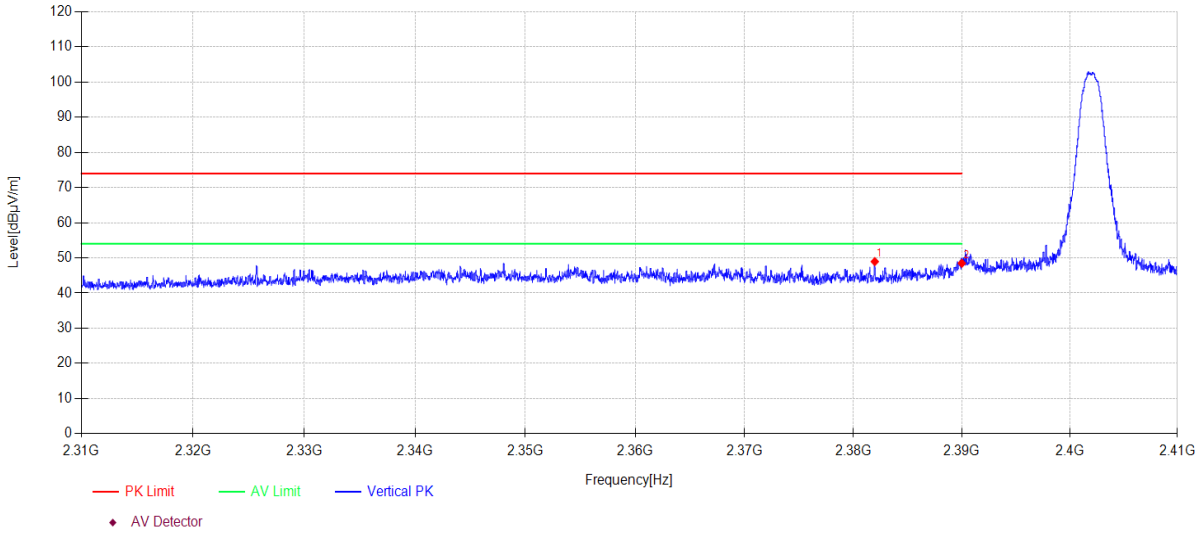
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2375.210	15.95	27.20	3.86	0.00	47.01	74.00	26.99	PK	Horizontal
2	2390.000	15.28	27.26	3.87	0.00	46.41	74.00	27.59	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	2DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\48		
Memo:	Sample Number: S24040749-005		

Test Graph



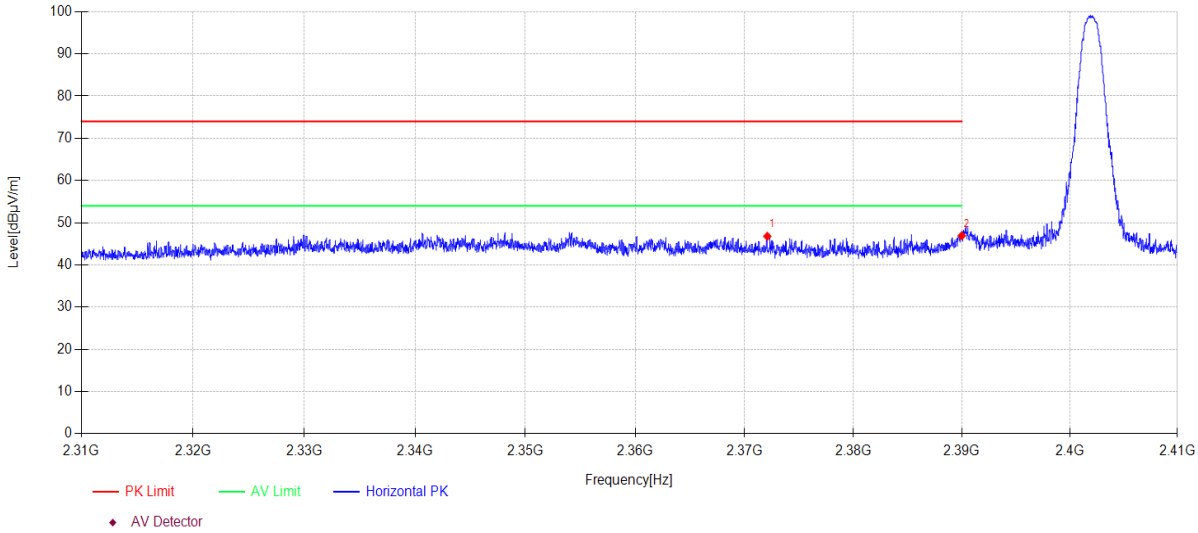
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2381.970	17.87	27.23	3.86	0.00	48.96	74.00	25.04	PK	Vertical
2	2390.000	17.35	27.26	3.87	0.00	48.48	74.00	25.52	PK	Vertical

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\49		
Memo:	Sample Number: S24040749-005		

Test Graph



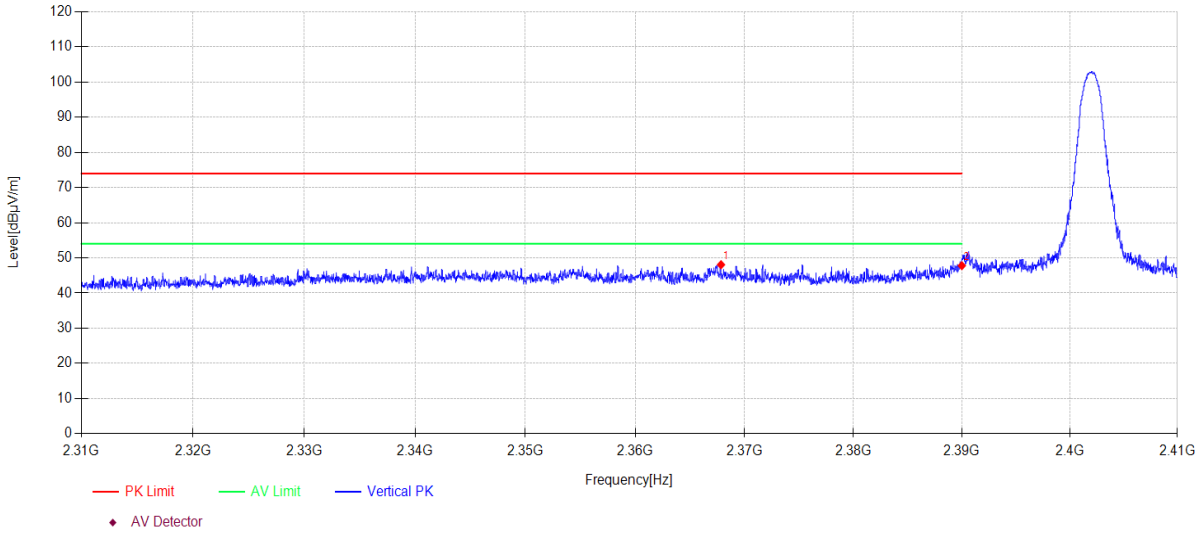
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2372.090	15.74	27.19	3.85	0.00	46.78	74.00	27.22	PK	Horizontal
2	2390.000	15.80	27.26	3.87	0.00	46.93	74.00	27.07	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2402MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\50		
Memo:	Sample Number: S24040749-005		

Test Graph



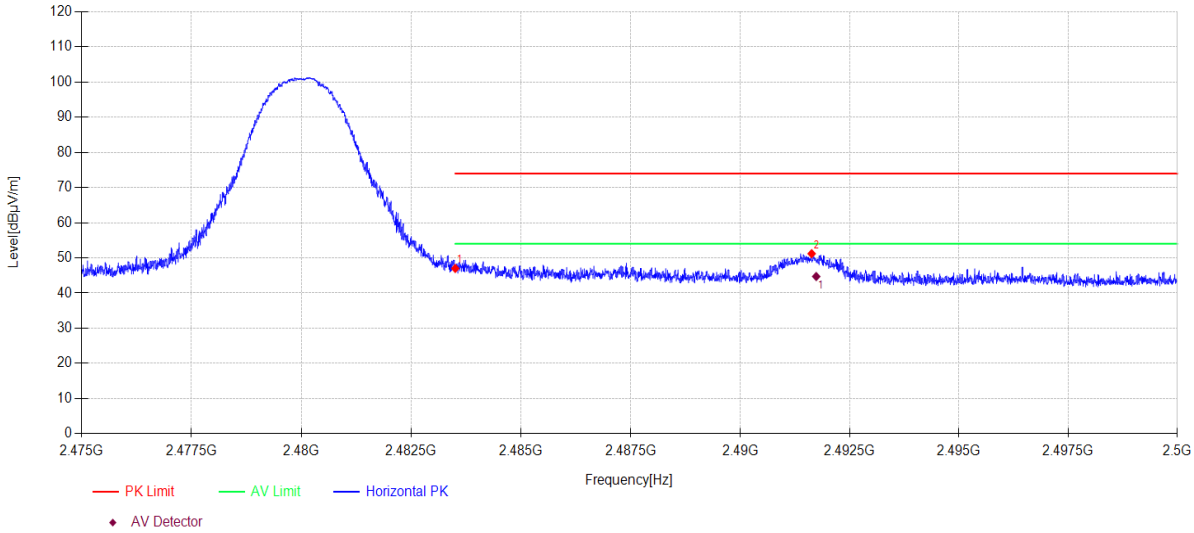
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2367.850	17.04	27.17	3.85	0.00	48.06	74.00	25.94	PK	Vertical
2	2390.000	16.67	27.26	3.87	0.00	47.80	74.00	26.20	PK	Vertical

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\51		
Memo:	Sample Number: S24040749-005		

Test Graph



Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2483.500	15.54	27.53	3.94	0.00	47.01	74.00	26.99	PK	Horizontal
2	2491.630	19.69	27.57	3.94	0.00	51.20	74.00	22.80	PK	Horizontal

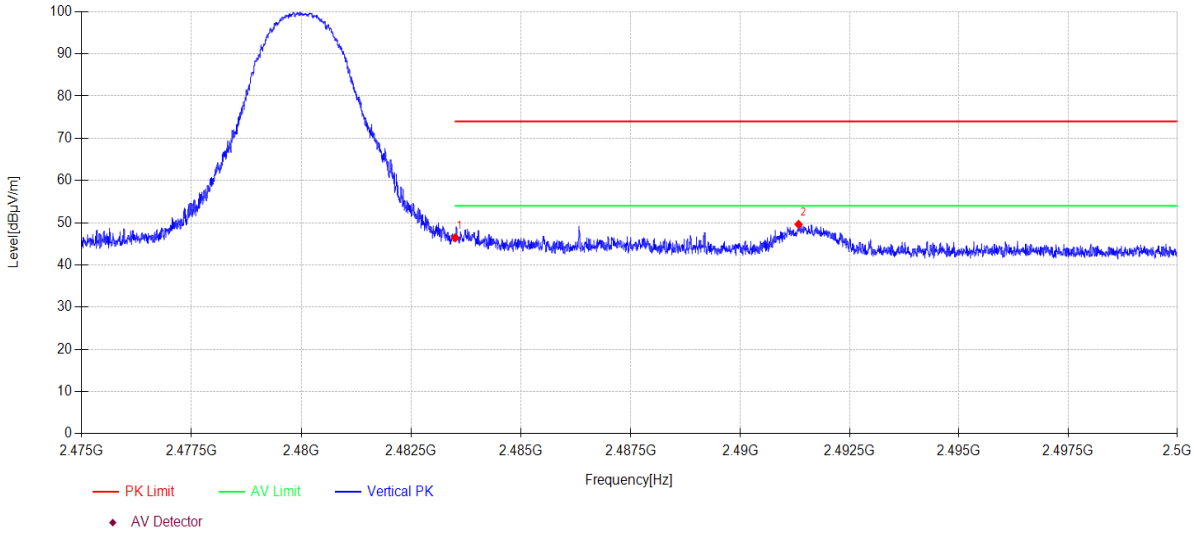
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2491.735	13.21	27.57	3.94	0.00	44.72	54.0	9.28	AV	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-26	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	3DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\52		
Memo:	Sample Number: S24040749-005		

Test Graph



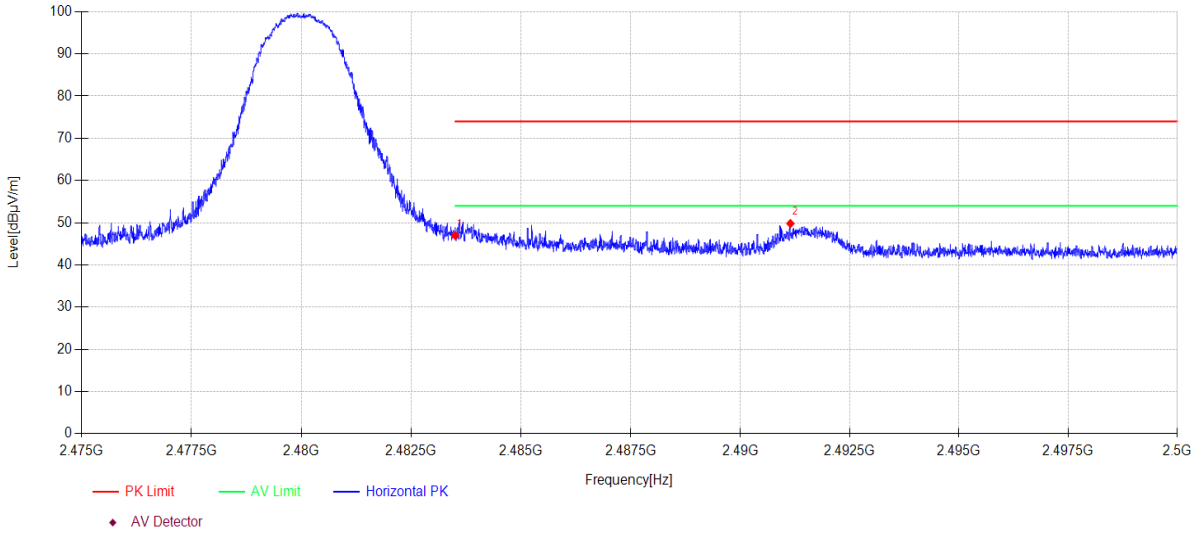
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2483.500	14.97	27.53	3.94	0.00	46.44	74.00	27.56	PK	Vertical
2	2491.333	18.11	27.57	3.94	0.00	49.62	74.00	24.38	PK	Vertical

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-27	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	2DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\53		
Memo:	Sample Number: S24040749-005		

Test Graph



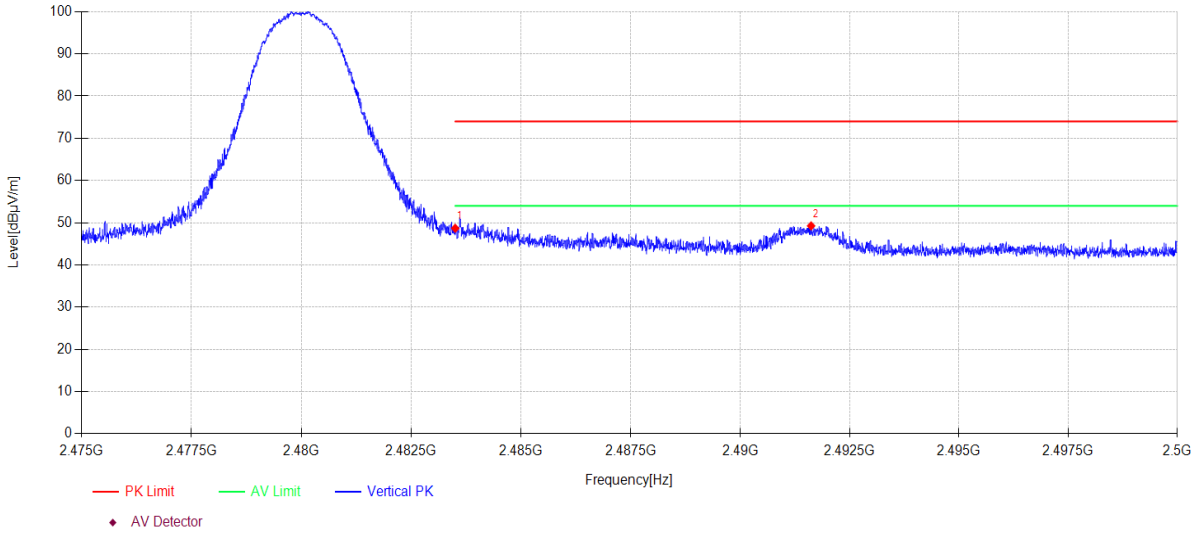
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2483.500	15.49	27.53	3.94	0.00	46.96	74.00	27.04	PK	Horizontal
2	2491.145	18.31	27.56	3.94	0.00	49.81	74.00	24.19	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-27	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	2DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\54		
Memo:	Sample Number: S24040749-005		

Test Graph



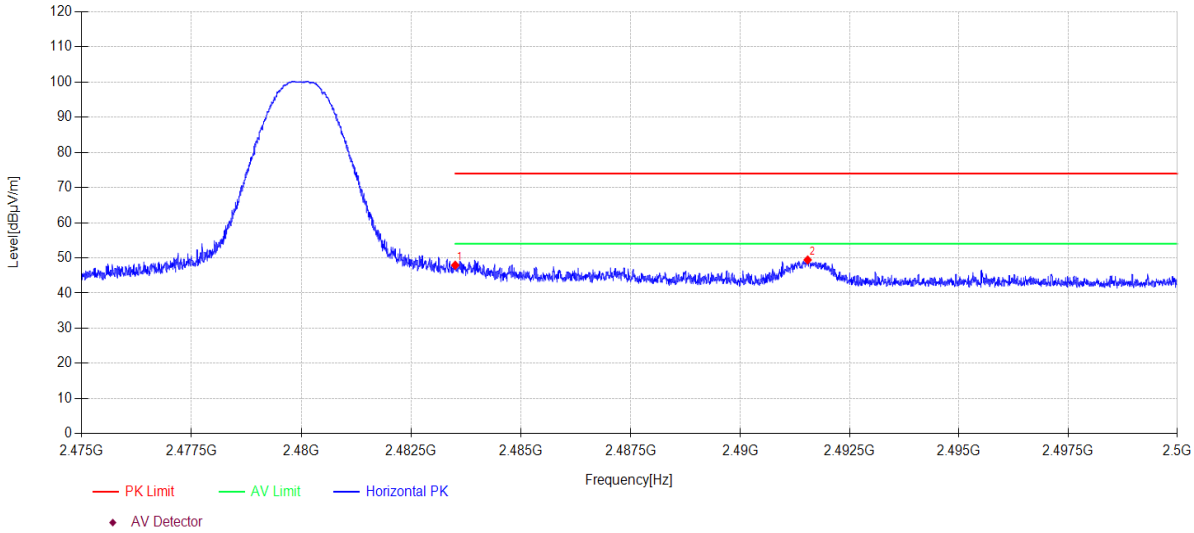
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2483.500	17.22	27.53	3.94	0.00	48.69	74.00	25.31	PK	Vertical
2	2491.618	17.74	27.57	3.94	0.00	49.25	74.00	24.75	PK	Vertical

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-27	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\55		
Memo:	Sample Number: S24040749-005		

Test Graph



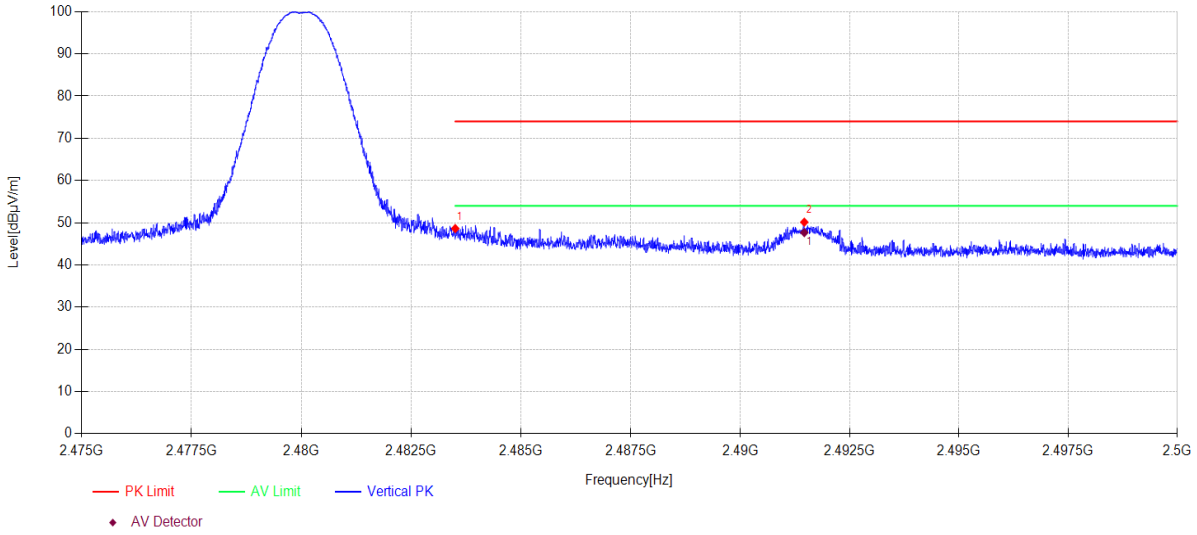
Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2483.500	16.46	27.53	3.94	0.00	47.93	74.00	26.07	PK	Horizontal
2	2491.540	17.91	27.57	3.94	0.00	49.42	74.00	24.58	PK	Horizontal

Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
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 Date:	2024-04-27	**Tested By**:	Juchang Du
EUT:	Portable Bluetooth Speaker	**Model Number**:	Vega Mini
Test Mode:	DH5 TX 2480MHz	**Power Supply**:	Battery
Condition:	Temp:23.5°C;Humi:59.7%	**Test Site**:	DDT 3# Chamber
File Path:	d:\ts\2024 report data\Q24040749-2E\FCC ABOVE 1G\56		
Memo:	Sample Number: S24040749-005		

Test Graph



Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2483.500	17.15	27.53	3.94	0.00	48.62	74.00	25.38	PK	Vertical
2	2491.463	18.63	27.57	3.94	0.00	50.14	74.00	23.86	PK	Vertical

Data List										
NO.	**Freq. [MHz]**	**Reading [dBµV/m]**	**Antenna Factor [dB]**	**Cable loss [dB]**	**AMP [dB]**	**Level [dBµV/m]**	**Limit [dBµV/m]**	**Margin [dB]**	**Detector**	**Polarity**
1	2491.463	16.16	27.57	3.94	0.00	47.67	54.0	6.33	AV	Vertical

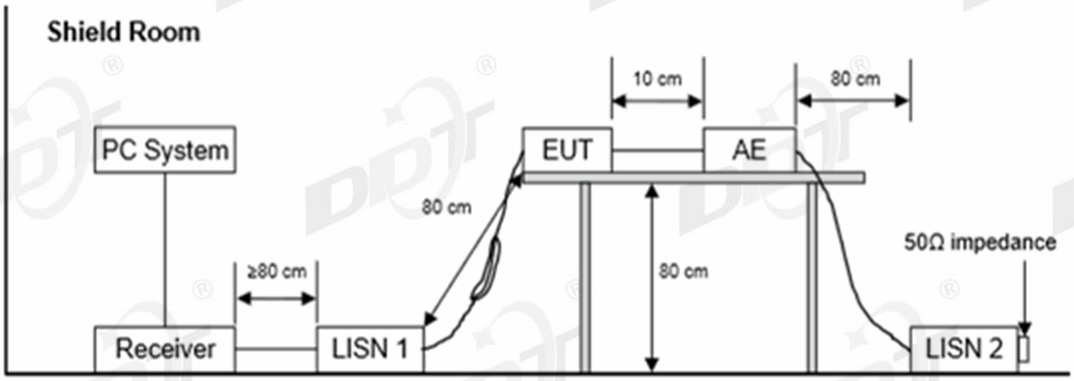
Note:
1. Level = Reading + Cable loss + Antenna Factor + AMP
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

15.Power Line Conducted Emissions

15.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
Test Receiver	R&S	ESCI	101032	2025/04/23
LISN 1	R&S	ENV216	101170	2024/07/12
LISN 2	R&S	ENV216	101059	2024/07/12
Pulse Limiter	R&S	KH43101	431011801568-12#	2025/04/23
CE Cable 2	HUBSER	RG214-5	N/A	2025/04/01
Test software	Audix	E3	V 6.11111b	/

15.2. Block diagram of test setup



15.3. Limits

Frequency	Quasi-Peak Level dB(mV)	Average Level dB(mV)
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.

15.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Adapter	HUAWEI	HW-100400C01	Huawei Fast Charge 2 #	Input: 100-240V~ 50/60Hz, Output: 5V/2A or 9V/2A or 10V/4A MAX

15.5. Test procedure

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

All support equipment power received from a second LISN.

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

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

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

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

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

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

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

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

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

The test data of the worst-case condition(s) was recorded.
The bandwidth of test receiver is set at 9 kHz.

15.6. 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.

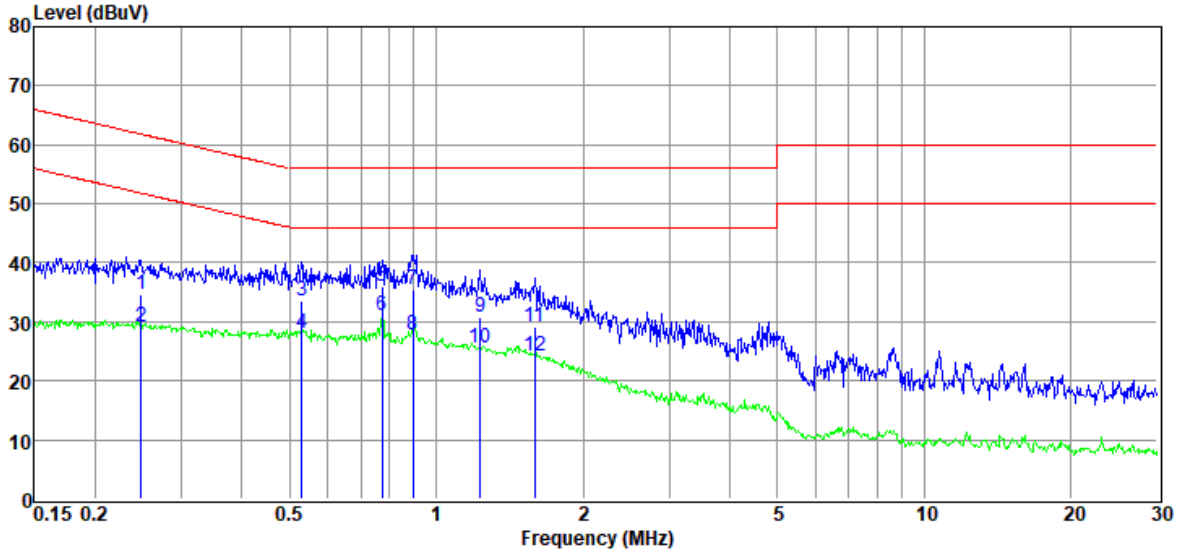
Note3: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded the worst case.

15.7. Test data

TR-4-E-010 Conducted Emission Test Result

Test Site	: DDT 5# Shield Room	D:\2024 report data\Q24040749\CE.EM6	
Test Date	: 2024-04-30	**Tested By**	: Heai Zhao
EUT	: Portable Bluetooth Speaker	**Model Number**	: Vega Mini
Power Supply	: AC 120V/60Hz	**Test Mode**	: Tx mode
Condition	: Temp:23.7°C,Humi:66.6%	**LISN**	: 2023 ENV216 2#/LINE
Memo	:		

Data: 2



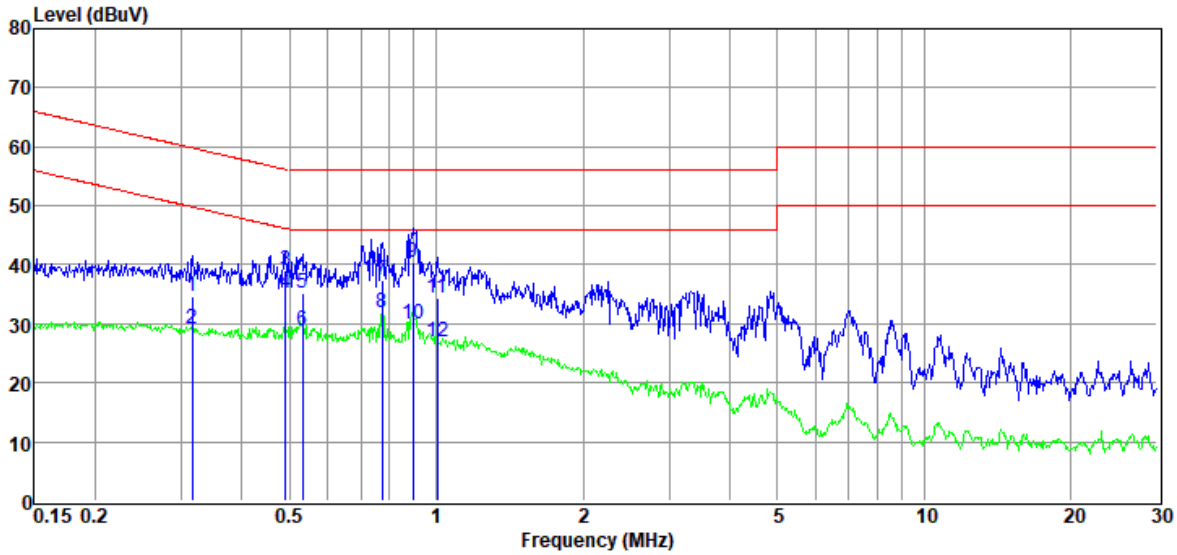
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBµV)	Limit Line (dBµV)	Over Limit (dB)	Detector	Phase
1	0.25	14.24	10.01	0.22	10.13	34.60	61.82	-27.22	QP	LINE
2	0.25	8.73	10.01	0.22	10.13	29.09	51.82	-22.73	Average	LINE
3	0.53	13.40	9.97	0.25	10.04	33.66	56.00	-22.34	QP	LINE
4	0.53	7.80	9.97	0.25	10.04	28.06	46.00	-17.94	Average	LINE
5	0.78	15.69	9.97	0.28	9.94	35.88	56.00	-20.12	QP	LINE
6	0.78	10.99	9.97	0.28	9.94	31.18	46.00	-14.82	Average	LINE
7	0.89	15.34	9.90	0.31	9.91	35.46	56.00	-20.54	QP	LINE
8	0.89	7.71	9.90	0.31	9.91	27.83	46.00	-18.17	Average	LINE
9	1.23	10.72	10.02	0.34	9.84	30.92	56.00	-25.08	QP	LINE
10	1.23	5.40	10.02	0.34	9.84	25.60	46.00	-20.40	Average	LINE
11	1.59	9.10	9.99	0.35	9.78	29.22	56.00	-26.78	QP	LINE
12	1.59	4.20	9.99	0.35	9.78	24.32	46.00	-21.68	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 5# Shield Room	D:\2024 report data\Q24040749\CE.EM6	
Test Date	: 2024-04-30	**Tested By**	: Heai Zhao
EUT	: Portable Bluetooth Speaker	**Model Number**	: Vega Mini
Power Supply	: AC 120V/60Hz	**Test Mode**	: Tx mode
Condition	: Temp:23.7°C,Humi:66.6%	**LISN**	: 2023 ENV216 2#/NEUTRAL
Memo	:		

Data: 4



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBµV)	Limit Line (dBµV)	Over Limit (dB)	Detector	Phase
1	0.32	14.14	10.03	0.24	10.10	34.51	59.80	-25.29	QP	NEUTRAL
2	0.32	8.67	10.03	0.24	10.10	29.04	49.80	-20.76	Average	NEUTRAL
3	0.49	18.70	9.97	0.25	10.05	38.97	56.14	-17.17	QP	NEUTRAL
4	0.49	14.96	9.97	0.25	10.05	35.23	46.14	-10.91	Average	NEUTRAL
5	0.53	15.02	9.98	0.25	10.03	35.28	56.00	-20.72	QP	NEUTRAL
6	0.53	8.56	9.98	0.25	10.03	28.82	46.00	-17.18	Average	NEUTRAL
7	0.78	17.24	9.97	0.28	9.94	37.43	56.00	-18.57	QP	NEUTRAL
8	0.78	11.78	9.97	0.28	9.94	31.97	46.00	-14.03	Average	NEUTRAL
9	0.89	20.16	9.98	0.31	9.91	40.36	56.00	-15.64	QP	NEUTRAL
10	0.89	9.69	9.98	0.31	9.91	29.89	46.00	-16.11	Average	NEUTRAL
11	1.01	14.14	9.89	0.34	9.88	34.25	56.00	-21.75	QP	NEUTRAL
12	1.01	6.96	9.89	0.34	9.88	27.07	46.00	-18.93	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.

17. Photos of the EUT

Please refer to DDT-Q24040749-1E appendix I

----------End Report----------