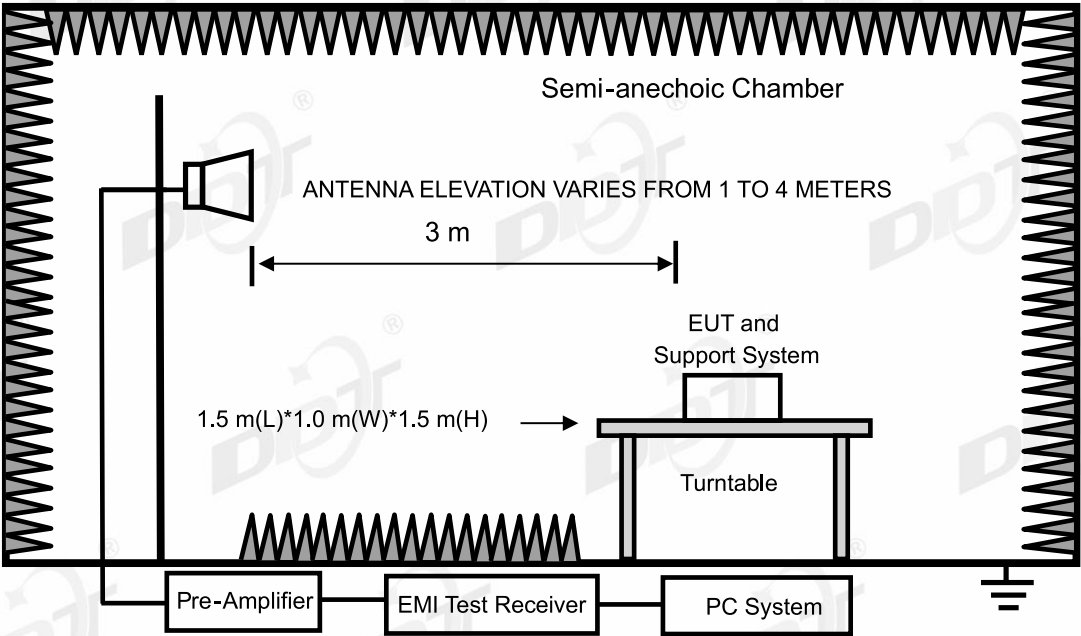


15.2. Block diagram of test setup



15.3. Limits

All restriction band should comply with 15.209 and RSS-Gen section 8.9 limits, other emission should be at least 20 dB below the fundamental.

15.4. Assistant equipment used for test

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

15.5. 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.

15.6. Test result

PASS. (See below detailed test result)

15.7. Test data

TR-4-E-009 Radiated Emission Test Result

Test Date:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

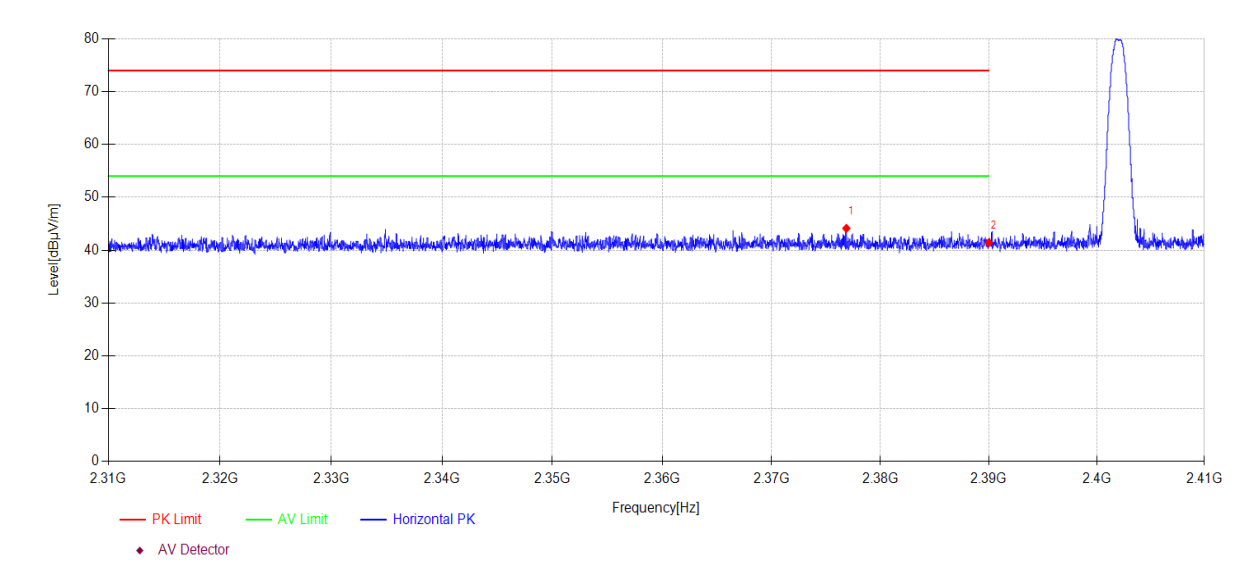
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\7

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	2376.870	13.36	27.21	3.56	0.00	44.13	74.00	29.87	PK	Horizontal
2	2390.000	10.58	27.26	3.57	0.00	41.41	74.00	32.59	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

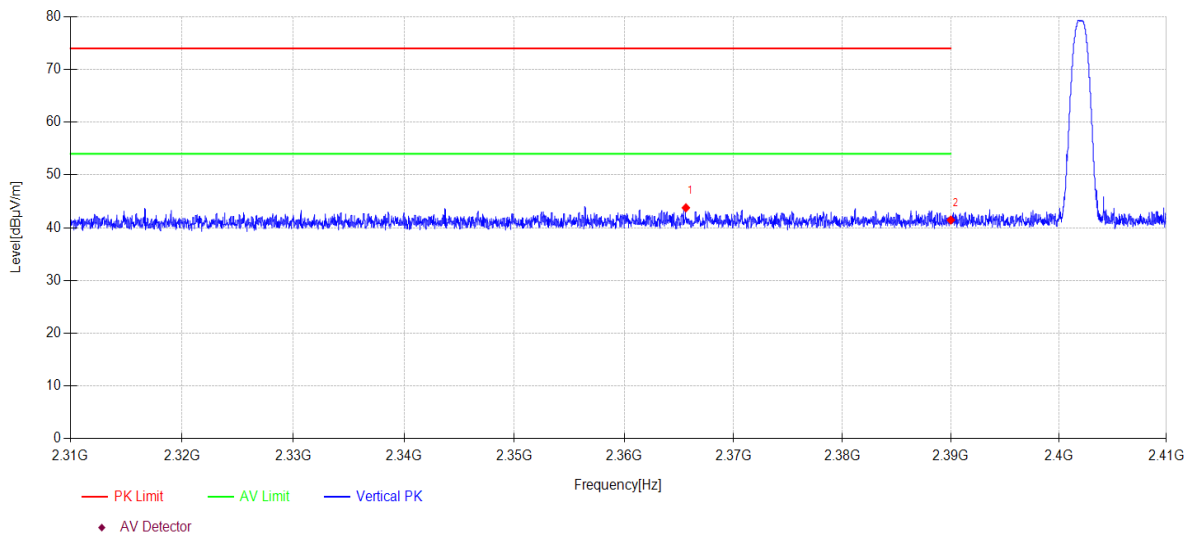
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\8

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	2365.640	13.07	27.16	3.55	0.00	43.78	74.00	30.22	PK	Vertical
2	2390.000	10.63	27.26	3.57	0.00	41.46	74.00	32.54	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

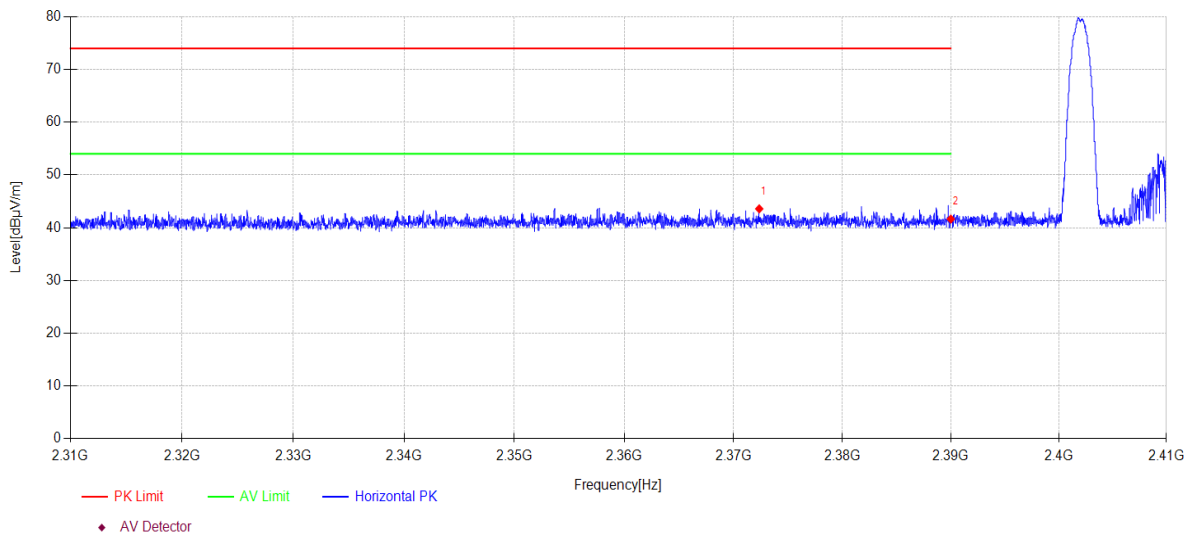
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\9

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	2372.360	12.83	27.19	3.56	0.00	43.58	74.00	30.42	PK	Horizontal
2	2390.000	10.81	27.26	3.57	0.00	41.64	74.00	32.36	PK	Horizontal

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- 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 Date:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

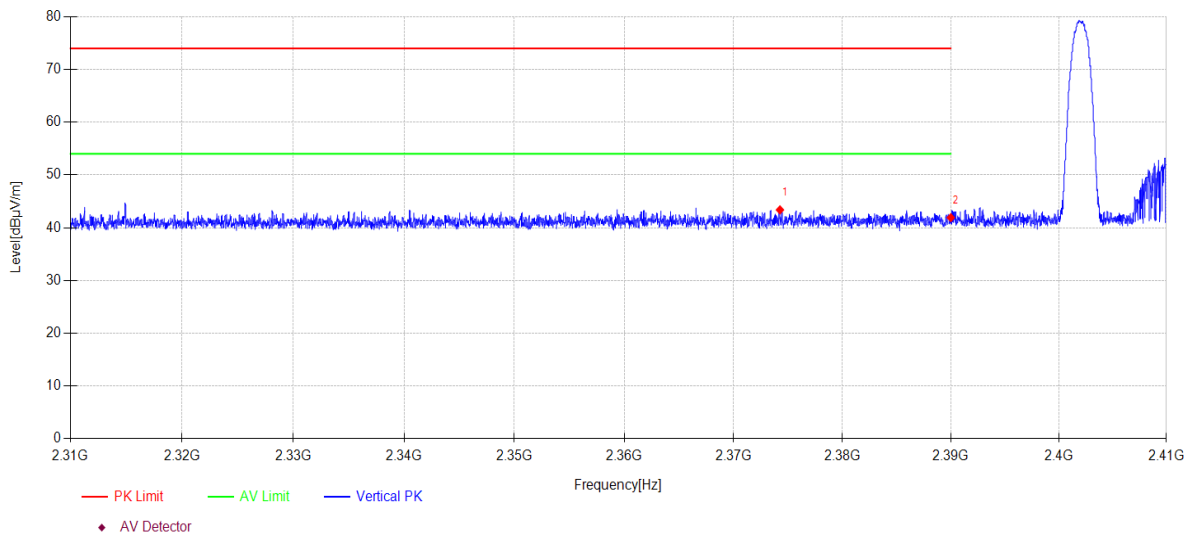
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\10

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	2374.260	12.62	27.20	3.56	0.00	43.38	74.00	30.62	PK	Vertical
2	2390.000	11.09	27.26	3.57	0.00	41.92	74.00	32.08	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

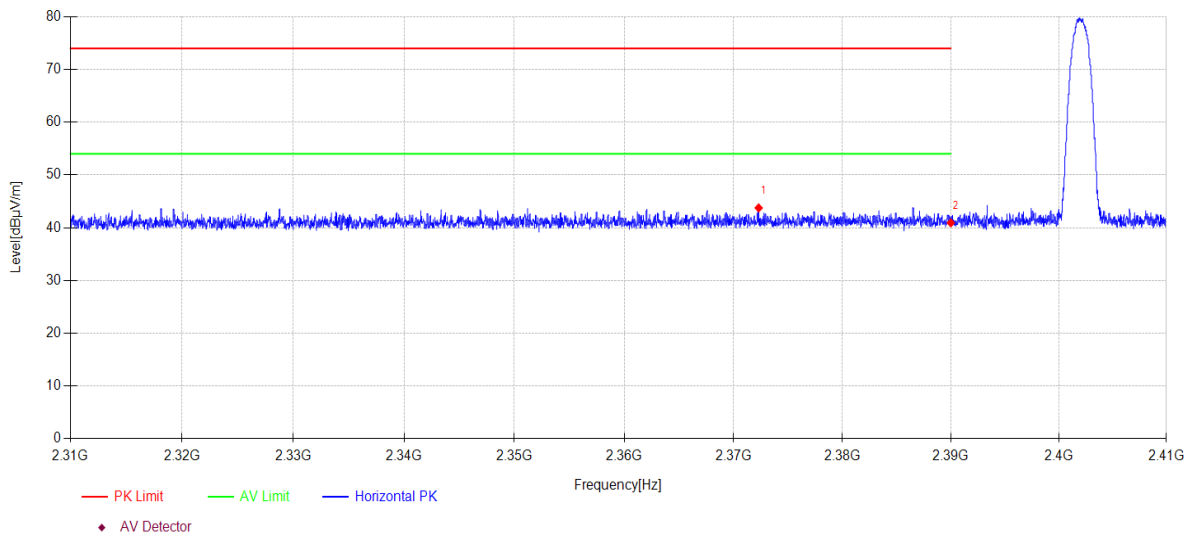
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\11

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	2372.310	13.01	27.19	3.56	0.00	43.76	74.00	30.24	PK	Horizontal
2	2390.000	10.09	27.26	3.57	0.00	40.92	74.00	33.08	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

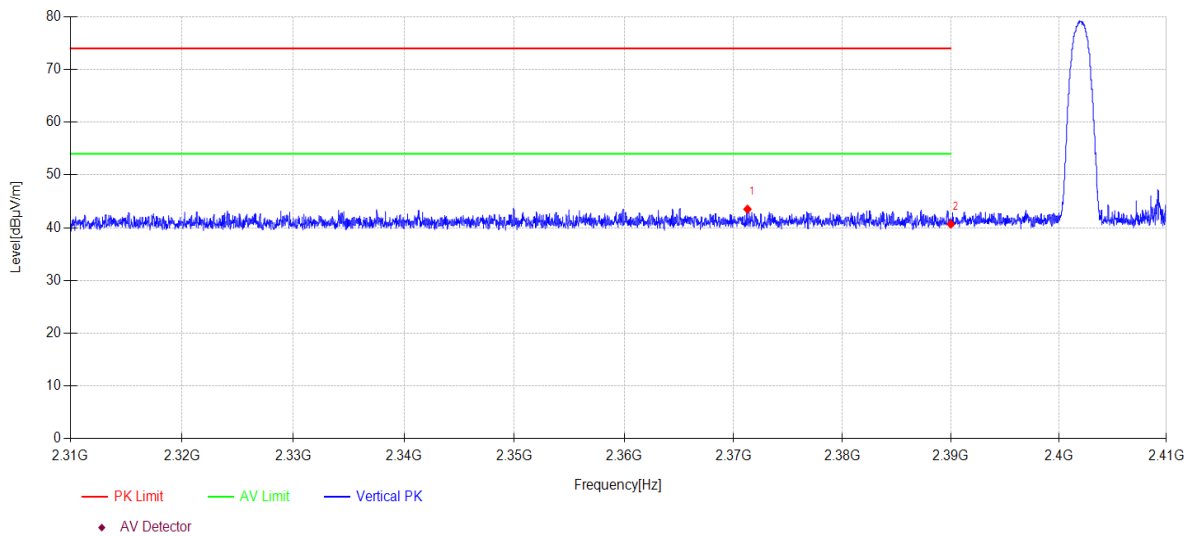
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\12

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	2371.280	12.76	27.19	3.56	0.00	43.51	74.00	30.49	PK	Vertical
2	2390.000	9.86	27.26	3.57	0.00	40.69	74.00	33.31	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

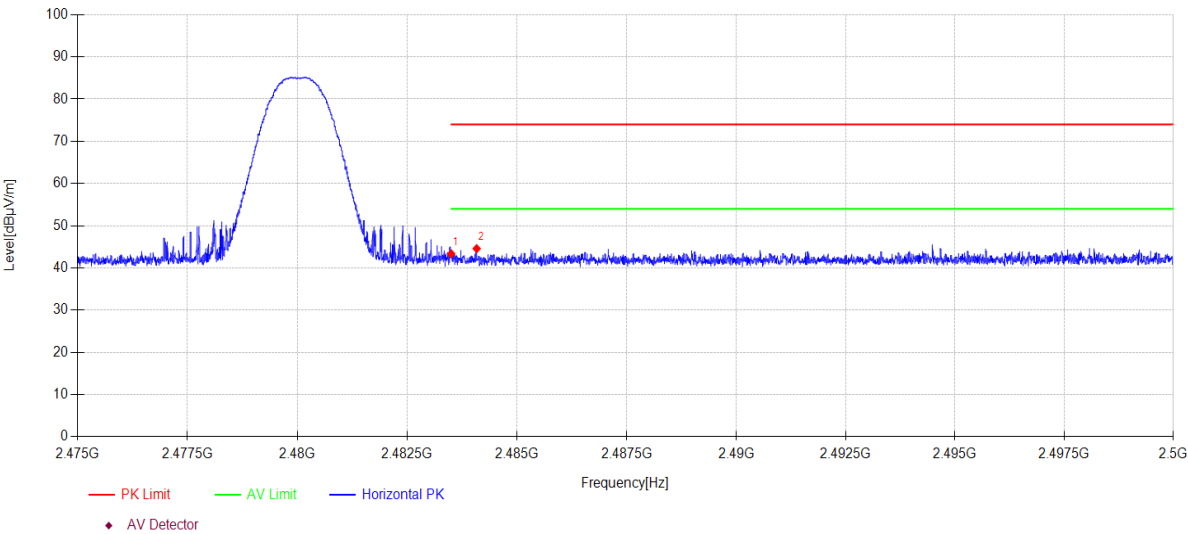
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\13

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	12.19	27.53	3.62	0.00	43.34	74.00	30.66	PK	Horizontal
2	2484.080	13.41	27.54	3.62	0.00	44.57	74.00	29.43	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

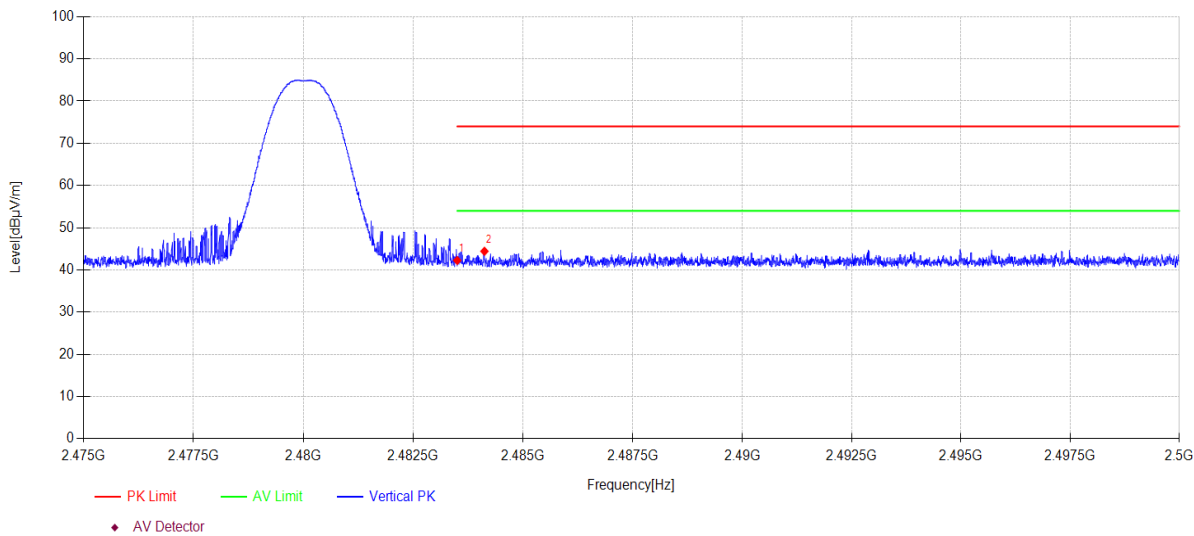
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\14

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	11.10	27.53	3.62	0.00	42.25	74.00	31.75	PK	Vertical
2	2484.120	13.26	27.54	3.62	0.00	44.42	74.00	29.58	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

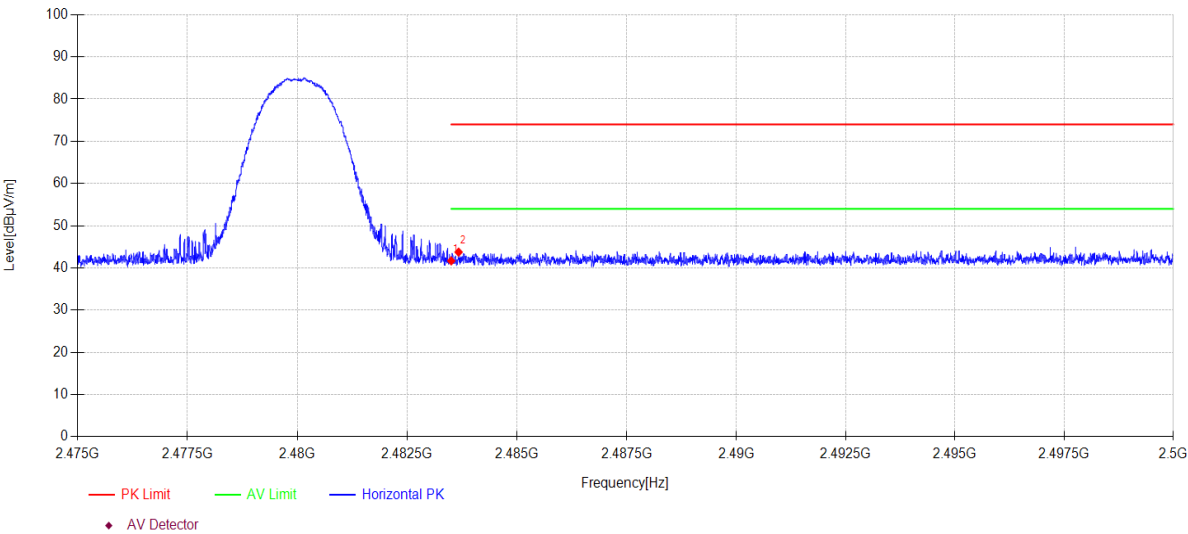
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\15

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	10.52	27.53	3.62	0.00	41.67	74.00	32.33	PK	Horizontal
2	2483.668	12.60	27.53	3.62	0.00	43.75	74.00	30.25	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

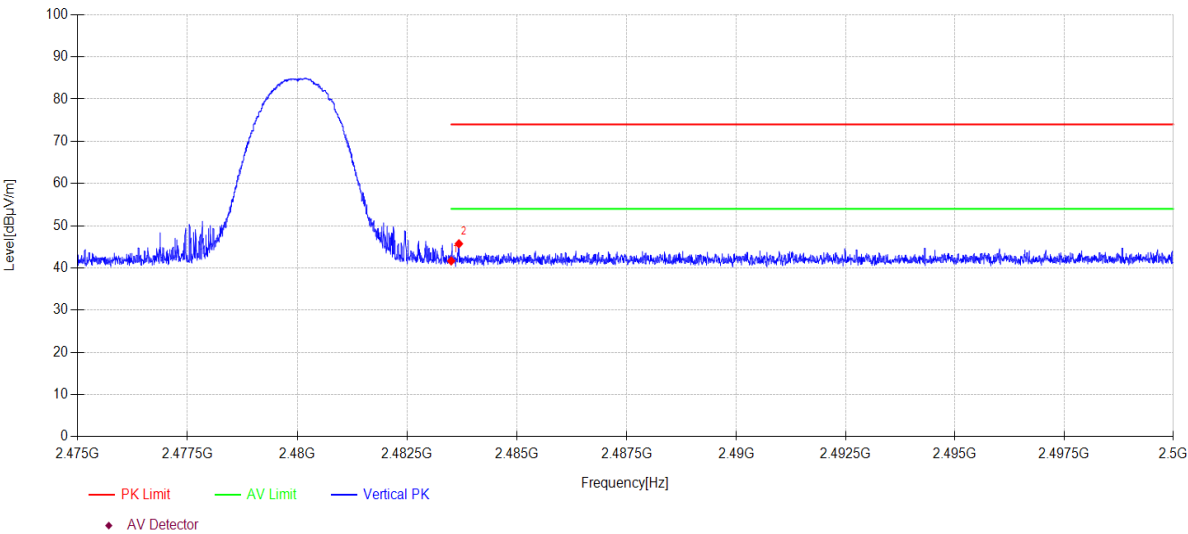
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\16

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	10.51	27.53	3.62	0.00	41.66	74.00	32.34	PK	Vertical
2	2483.675	14.58	27.53	3.62	0.00	45.73	74.00	28.27	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

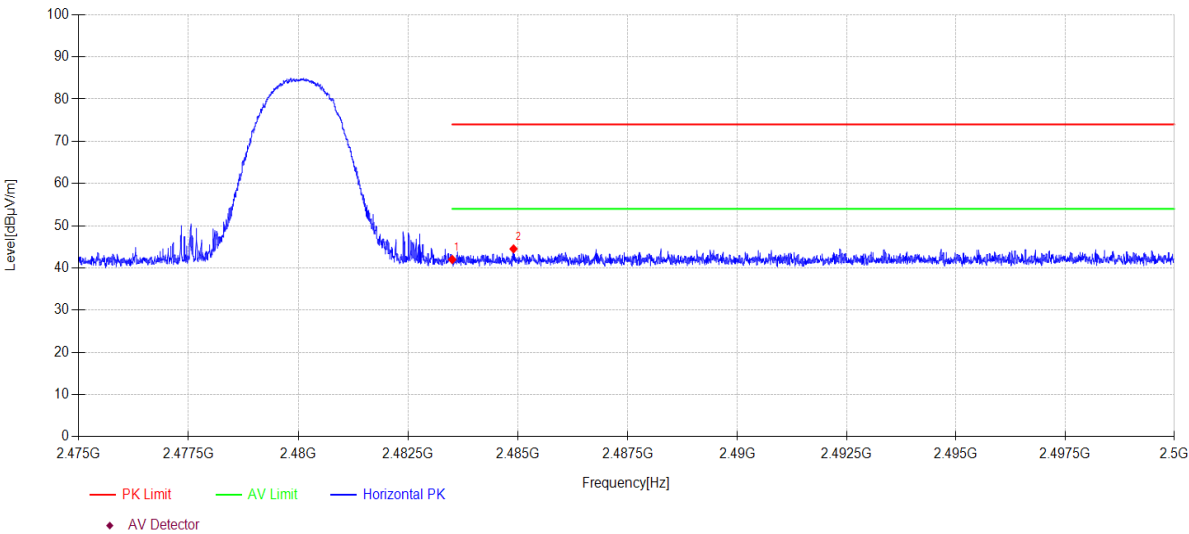
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\17

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	10.84	27.53	3.62	0.00	41.99	74.00	32.01	PK	Horizontal
2	2484.898	13.36	27.54	3.62	0.00	44.52	74.00	29.48	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

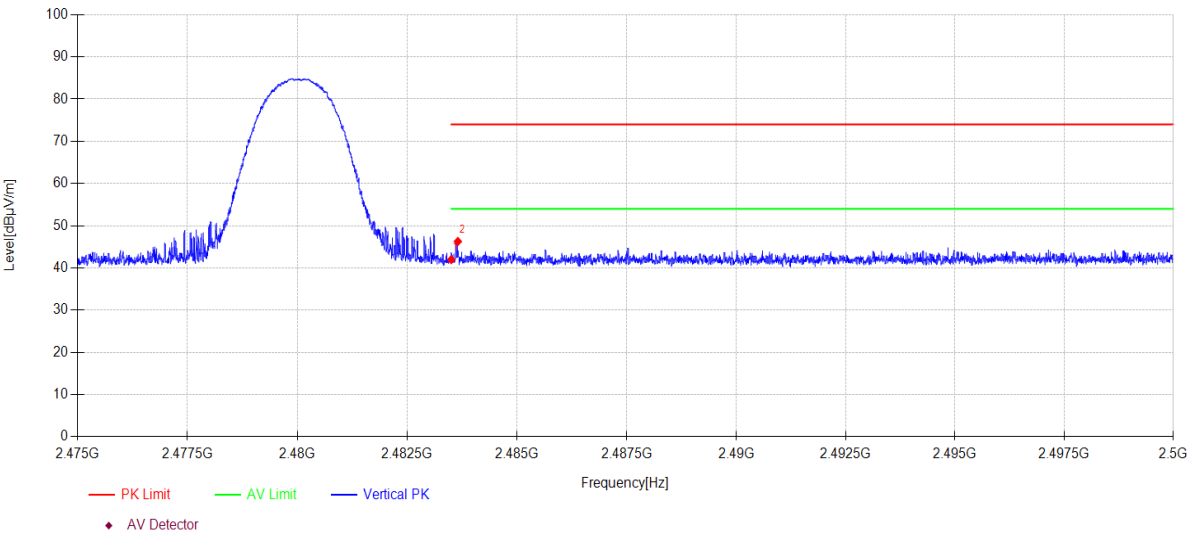
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\18

Memo:

L Sample Number:S24050810-011 Power Setting:10

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	10.82	27.53	3.62	0.00	41.97	74.00	32.03	PK	Vertical
2	2483.650	15.12	27.53	3.62	0.00	46.27	74.00	27.73	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

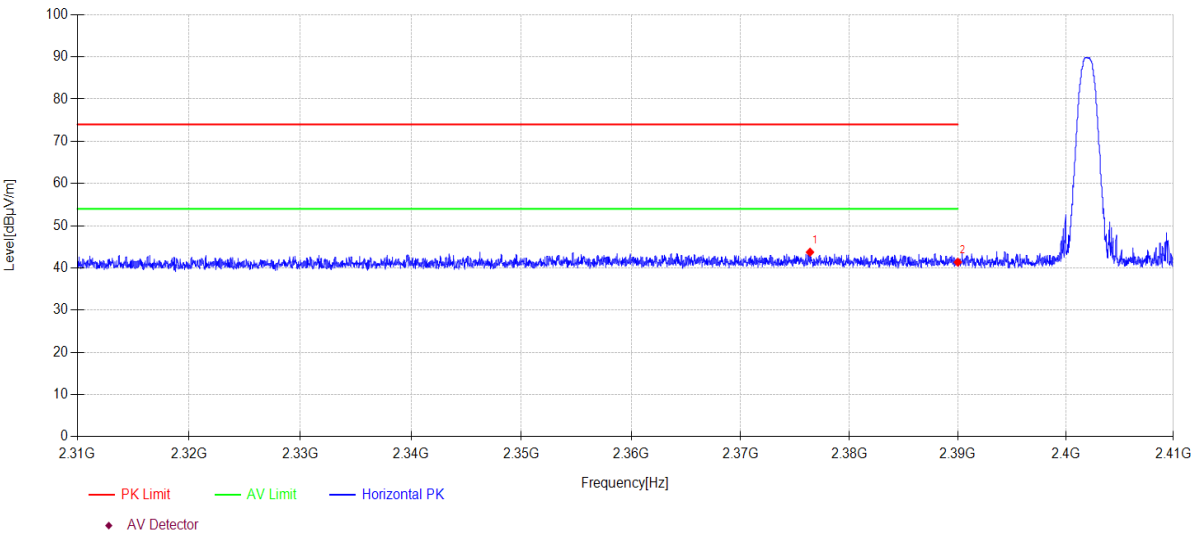
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\25

Memo:

R Sample Number:S24050810-011 Power Setting:10

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	2376.380	12.96	27.21	3.56	0.00	43.73	74.00	30.27	PK	Horizontal
2	2390.000	10.53	27.26	3.57	0.00	41.36	74.00	32.64	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

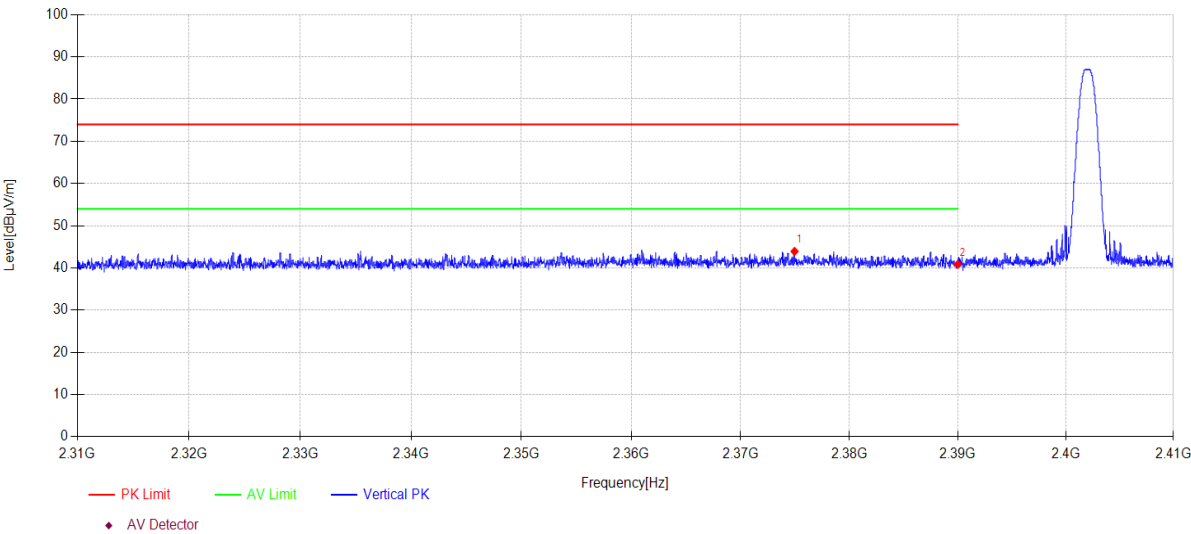
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\26

Memo:

R Sample Number:S24050810-011 Power Setting:10

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	2374.960	13.16	27.20	3.56	0.00	43.92	74.00	30.08	PK	Vertical
2	2390.000	10.01	27.26	3.57	0.00	40.84	74.00	33.16	PK	Vertical

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- 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 Date:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

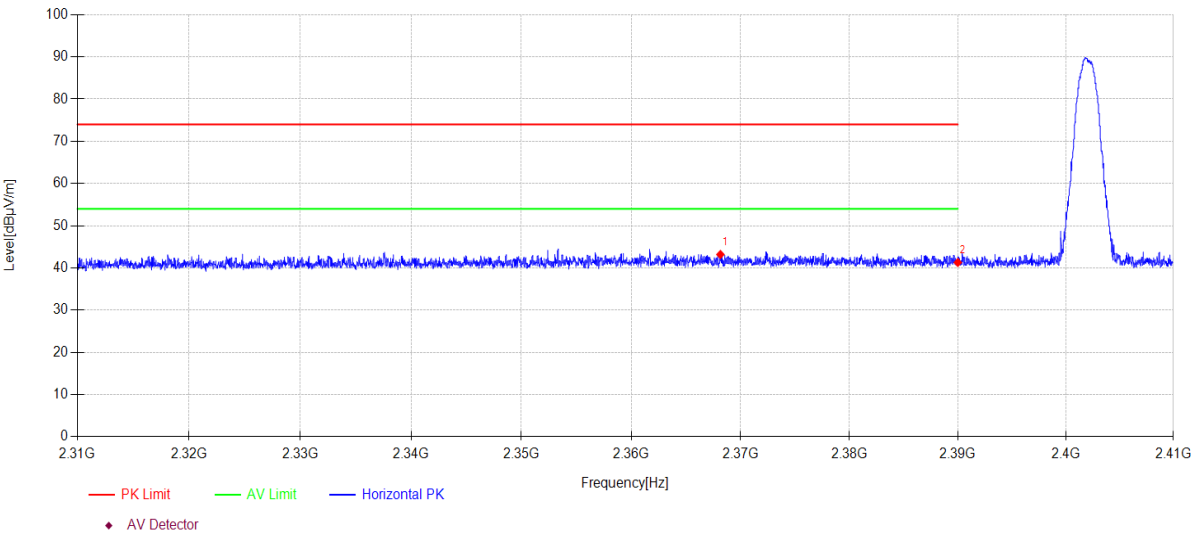
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\27

Memo:

R Sample Number:S24050810-011 Power Setting:10

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	2368.160	12.46	27.17	3.56	0.00	43.19	74.00	30.81	PK	Horizontal
2	2390.000	10.47	27.26	3.57	0.00	41.30	74.00	32.70	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

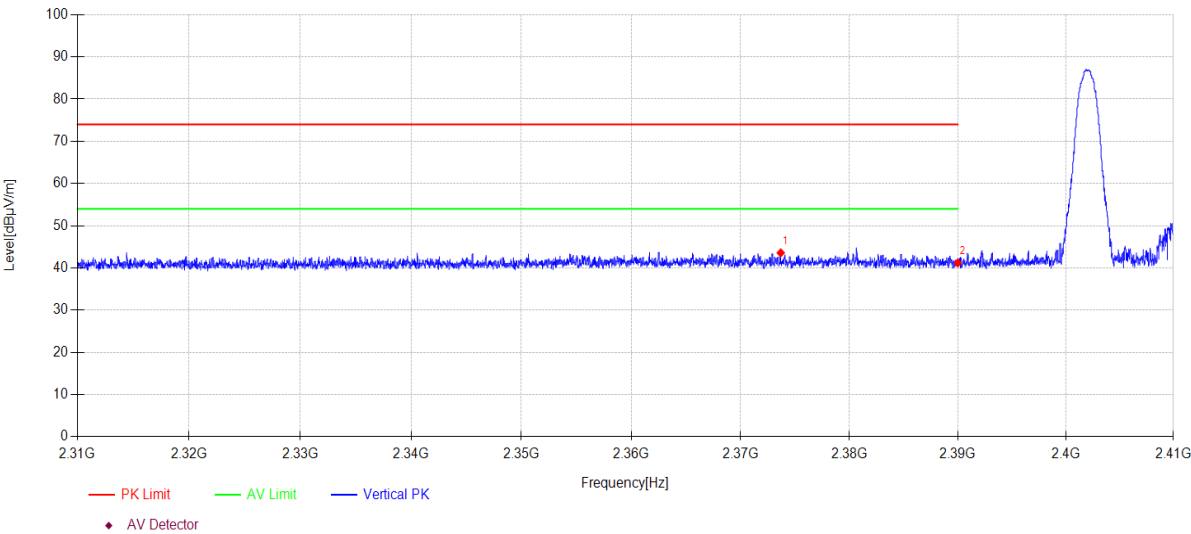
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\28

Memo:

R Sample Number:S24050810-011 Power Setting:10

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	2373.690	12.82	27.19	3.56	0.00	43.57	74.00	30.43	PK	Vertical
2	2390.000	10.36	27.26	3.57	0.00	41.19	74.00	32.81	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

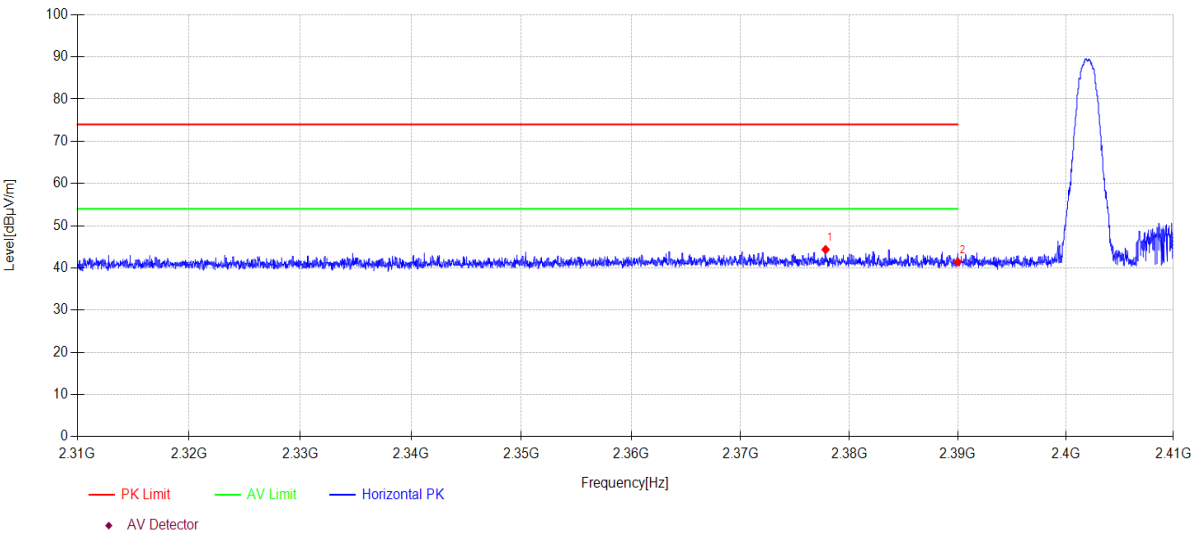
File Path:

d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\29

Memo:

R Sample Number:S24050810-011 Power Setting:10

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	2377.810	13.59	27.21	3.56	0.00	44.36	74.00	29.64	PK	Horizontal
2	2390.000	10.56	27.26	3.57	0.00	41.39	74.00	32.61	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2402MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

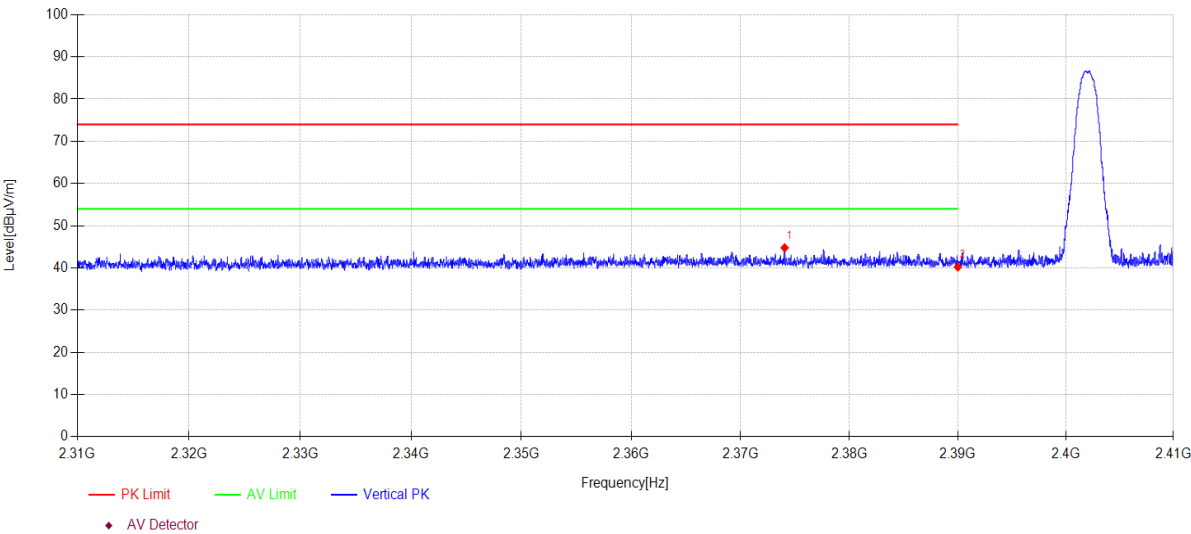
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Memo:

R Sample Number:S24050810-011 Power Setting:10

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	2374.050	14.02	27.20	3.56	0.00	44.78	74.00	29.22	PK	Vertical
2	2390.000	9.38	27.26	3.57	0.00	40.21	74.00	33.79	PK	Vertical

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- 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 Date:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

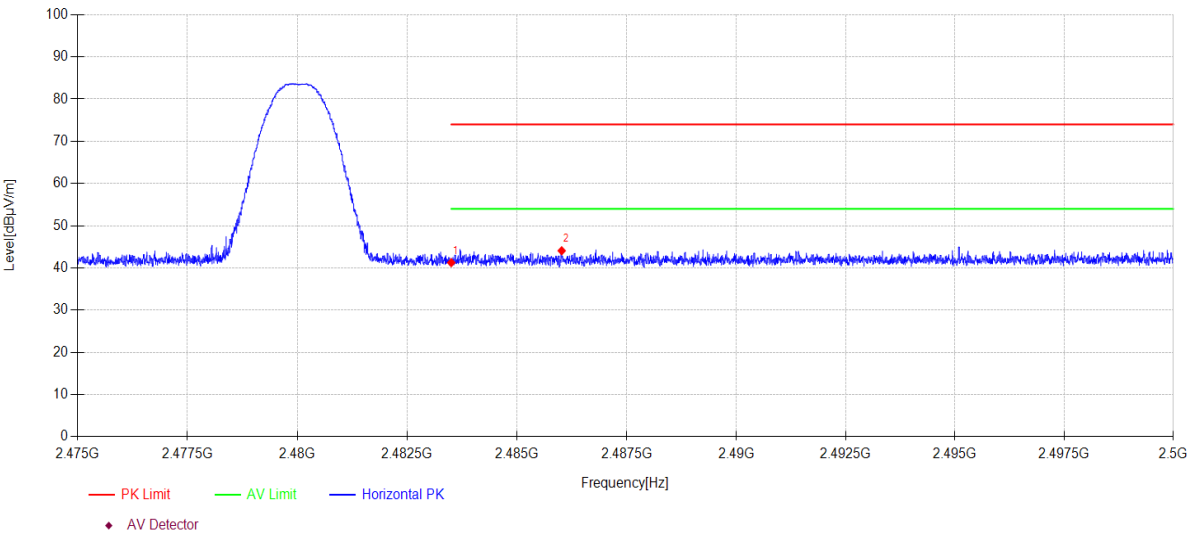
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Memo:

R Sample Number:S24050810-011 Power Setting:10

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	10.11	27.53	3.62	0.00	41.26	74.00	32.74	PK	Horizontal
2	2486.018	12.91	27.54	3.62	0.00	44.07	74.00	29.93	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

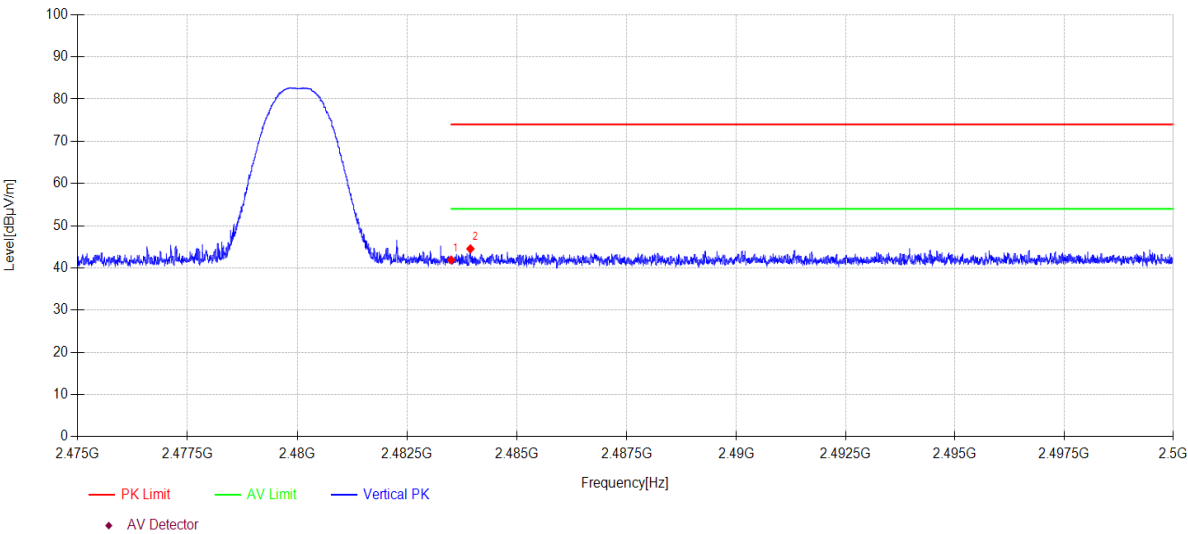
File Path:

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Memo:

R Sample Number:S24050810-011 Power Setting:10

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	10.73	27.53	3.62	0.00	41.88	74.00	32.12	PK	Vertical
2	2483.938	13.37	27.54	3.62	0.00	44.53	74.00	29.47	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

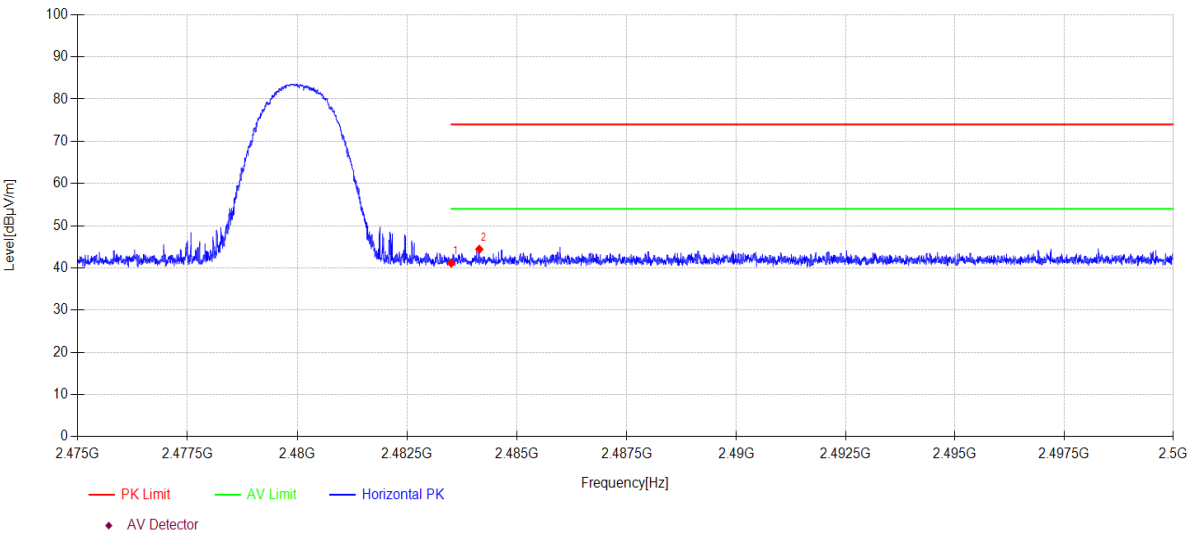
File Path:

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Memo:

R Sample Number:S24050810-011 Power Setting:10

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	10.00	27.53	3.62	0.00	41.15	74.00	32.85	PK	Horizontal
2	2484.140	13.26	27.54	3.62	0.00	44.42	74.00	29.58	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

2DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

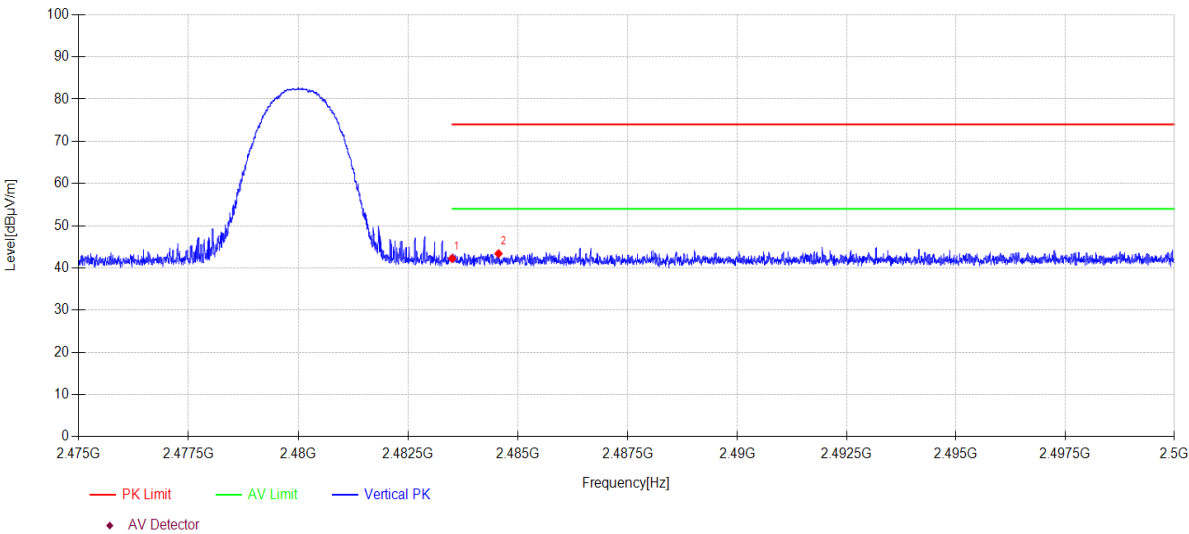
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d:\ts\2024 report data\Q24050810-1E\FCC ABOVE 1G\34

Memo:

R Sample Number:S24050810-011 Power Setting:10

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	11.08	27.53	3.62	0.00	42.23	74.00	31.77	PK	Vertical
2	2484.555	12.23	27.54	3.62	0.00	43.39	74.00	30.61	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:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

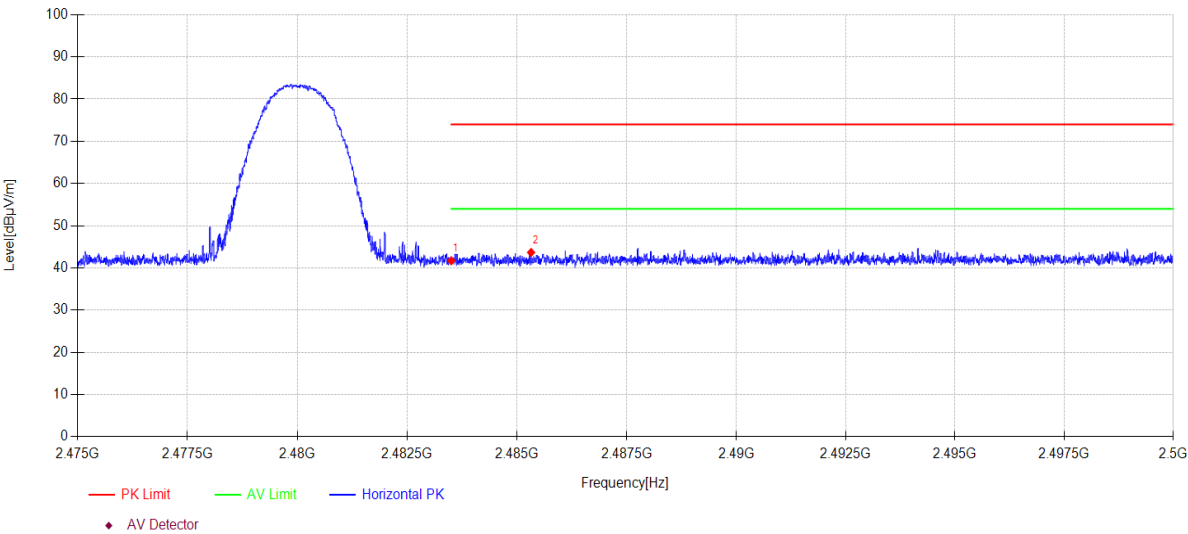
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Memo:

R Sample Number:S24050810-011 Power Setting:10

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	10.56	27.53	3.62	0.00	41.71	74.00	32.29	PK	Horizontal
2	2485.320	12.51	27.54	3.62	0.00	43.67	74.00	30.33	PK	Horizontal

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- 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 Date:

2024-06-07

Tested By:

Junchang Du

EUT:

WIRELESS HEADPHONES

Model Number:

HA-NP40T

Test Mode:

3DH5 TX 2480MHz

Power Supply:

Battery

Condition:

Temp:22.9°C;Humi:60.0%

Test Site:

DDT 3# Chamber

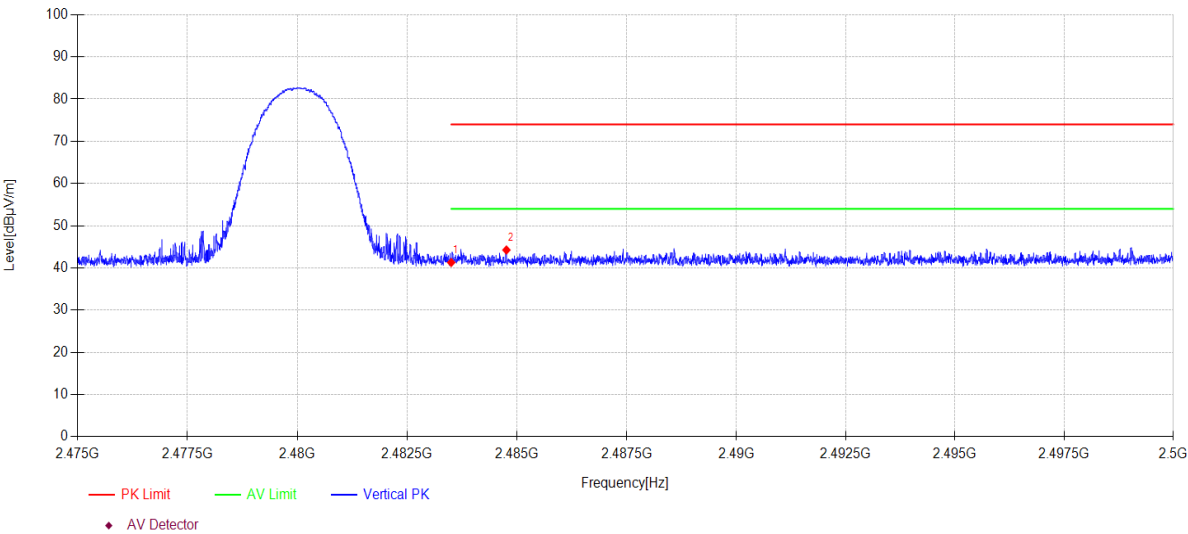
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Memo:

R Sample Number:S24050810-011 Power Setting:10

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	10.14	27.53	3.62	0.00	41.29	74.00	32.71	PK	Vertical
2	2484.758	13.09	27.54	3.62	0.00	44.25	74.00	29.75	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.

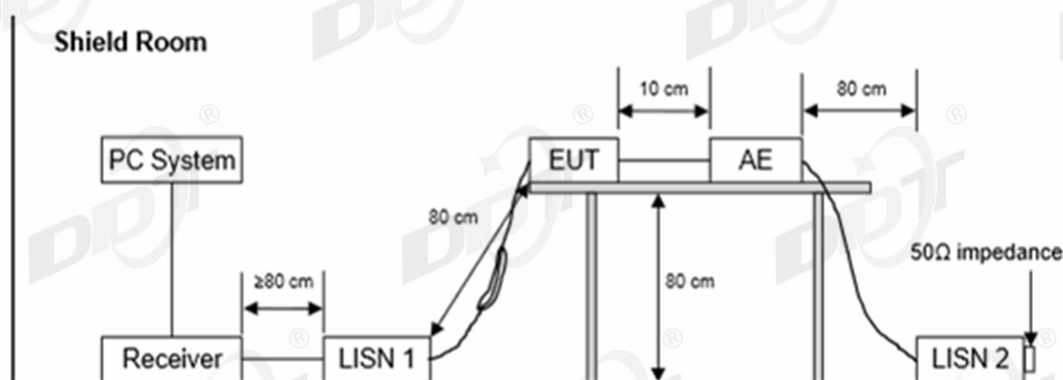
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

16.Power Line Conducted Emissions

16.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
Two Line V-Network	R&S	ENV216	DDT-ZC02059	2024/07/11
EMI Test Receiver	R&S	ESCI/E3	DDT-ZC01297	2024/07/11
RF Cable	Yuhu Technology	Z806-NJ-NJ-6M	DDT-ZC02004	2024/07/14
Conducted Radiated Software	Audix	E3	DDT-ZC00562	/
Pulse Limiter	SCHWARZBEC K	VTSD 9561	DDT-ZC02128	2024/07/14
Three-phase artificial power network	SCHWARZBEC K	NSLK 8163	DDT-ZC01572	2024/07/11
Δ -shaped artificial power network	SCHWARZBEC K	PVDC 8301	DDT-ZC03939	2025/03/31
Two Line V-Network	R&S	ENV216	DDT-ZC02056	2024/07/11

16.2. Block diagram of test setup



16.3. 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.

16.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Adapter	HUAWEI	HW-050450C00	Huawei fast charging	Input: 100-240V~ 50/60Hz, Output: 5V/2A or 9V/2A or 10V/4A

16.5. 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.

16.6. 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.

16.7. Test data

TR-4-E-010 Conducted Emission Test Result

Test Site

: DDT 6# Shield Room

Test Date

: 2024-06-27

EUT

: WIRELESS HEADPHONES

Power Supply

: AC 120V/60Hz

Condition

: Temp:21.9°C,Humi:56.2%

Memo

:

D:\2024 Report Date\Q24050810-1E\CE.EM6

Tested By

: Antony Zeng

Model Number

: HA-NP40T

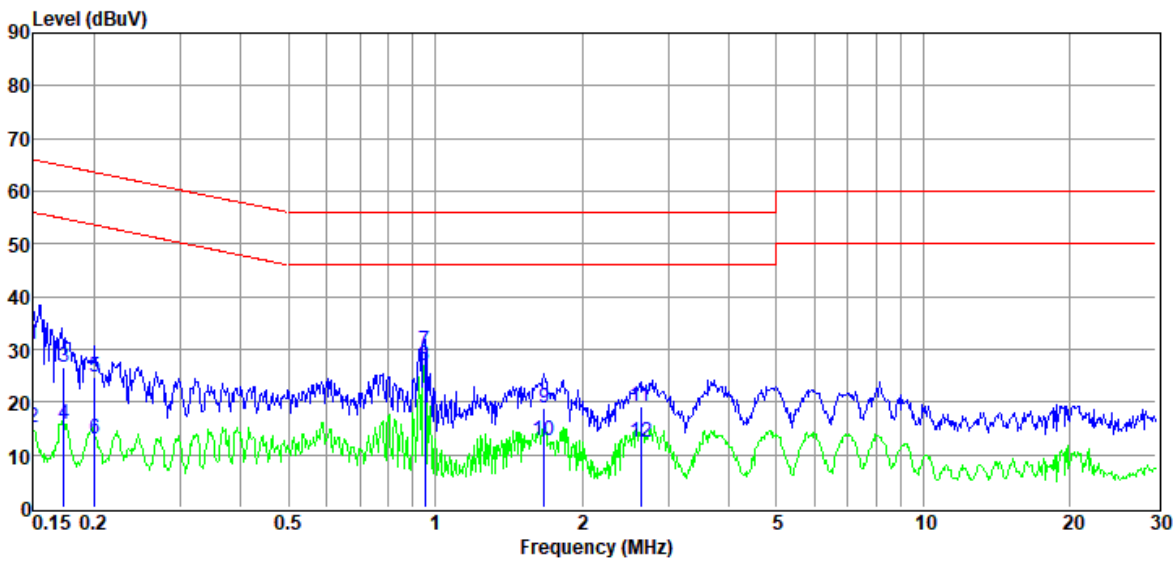
Test Mode

: Bluetooth mode

LISN

: 2023 ENV 216 3#/LINE

Data: 2



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	0.15	11.11	9.90	0.10	9.94	31.05	66.00	-34.95	QP	LINE
2	0.15	-4.92	9.90	0.10	9.94	15.02	56.00	-40.98	Average	LINE
3	0.17	6.91	9.55	0.11	9.94	26.51	64.81	-38.30	QP	LINE
4	0.17	-3.79	9.55	0.11	9.94	15.81	54.81	-39.00	Average	LINE
5	0.20	4.75	9.86	0.11	9.94	24.66	63.58	-38.92	QP	LINE
6	0.20	-6.79	9.86	0.11	9.94	13.12	53.58	-40.46	Average	LINE
7	0.95	9.81	9.69	0.24	9.97	29.71	56.00	-26.29	QP	LINE
8	0.95	6.85	9.69	0.24	9.97	26.75	46.00	-19.25	Average	LINE
9	1.67	-1.03	9.62	0.26	9.99	18.84	56.00	-37.16	QP	LINE
10	1.67	-7.04	9.62	0.26	9.99	12.83	46.00	-33.17	Average	LINE
11	2.64	-0.75	9.69	0.26	10.00	19.20	56.00	-36.80	QP	LINE
12	2.64	-7.43	9.69	0.26	10.00	12.52	46.00	-33.48	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 6# Shield Room

Test Date

: 2024-06-27

EUT

: WIRELESS HEADPHONES

Power Supply

: AC 120V/60Hz

Condition

: Temp:21.9°C,Humi:56.2%

Memo

:

D:\2024 Report Date\Q24050810-1E\CE.EM6

Tested By

: Antony Zeng

Model Number

: HA-NP40T

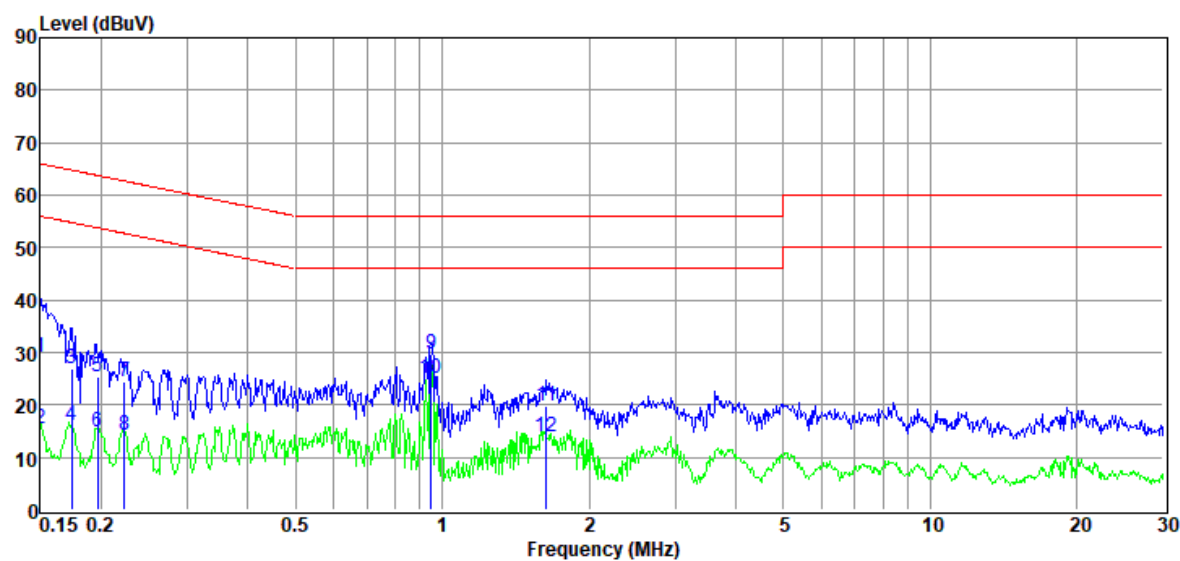
Test Mode

: Bluetooth mode

LISN

: 2023 ENV 216 3#/NEUTRAL

Data: 4



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	0.15	9.31	9.81	0.10	9.94	29.16	66.00	-36.84	QP	NEUTRAL
2	0.15	-4.30	9.81	0.10	9.94	15.55	56.00	-40.45	Average	NEUTRAL
3	0.17	6.99	9.79	0.11	9.94	26.83	64.77	-37.94	QP	NEUTRAL
4	0.17	-3.63	9.79	0.11	9.94	16.21	54.77	-38.56	Average	NEUTRAL
5	0.20	5.40	9.94	0.11	9.94	25.39	63.76	-38.37	QP	NEUTRAL
6	0.20	-5.18	9.94	0.11	9.94	14.81	53.76	-38.95	Average	NEUTRAL
7	0.22	4.35	9.89	0.11	9.94	24.29	62.70	-38.41	QP	NEUTRAL
8	0.22	-5.84	9.89	0.11	9.94	14.10	52.70	-38.60	Average	NEUTRAL
9	0.95	9.48	9.89	0.23	9.97	29.57	56.00	-26.43	QP	NEUTRAL
10	0.95	5.07	9.89	0.23	9.97	25.16	46.00	-20.84	Average	NEUTRAL
11	1.64	-0.39	10.02	0.26	9.98	19.87	56.00	-36.13	QP	NEUTRAL
12	1.64	-6.48	10.02	0.26	9.98	13.78	46.00	-32.22	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.

18. Photos of the EUT

Please refer to DDT-Q24050810-2E appendix I

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