

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-01-20

Tested By:

Zhong Nan

EUT:

In-vehicle Multimedia Host

Model Number:

MTCJ06-A03

Test Mode:

ANT1 RU0 AX20 TX 5745MHz Mode

Power Supply:

DC 12V

Condition:

Temp:23°C;Humi:59.5%

Test Site:

DDT 3# Chamber

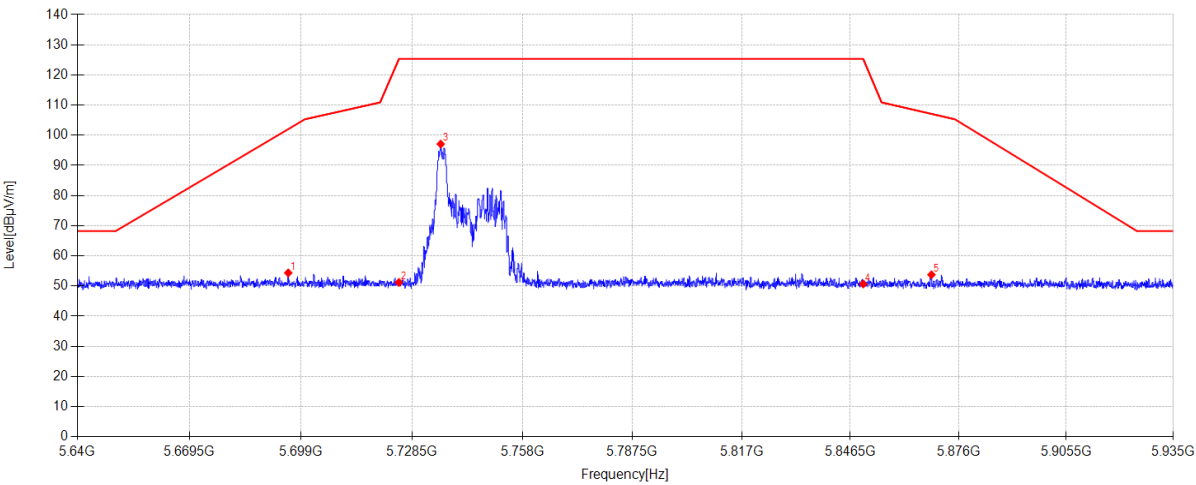
File Path:

d:\ts\2024 report data\Q24122405-5E\FCC ABOVE1G RU\24

Memo:

Sample Number:S24122405-001 Power Setting:9

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	5695.608	44.74	33.58	5.64	-29.60	54.36	102.04	47.68	PK	Vertical
2	5725.000	41.39	33.75	5.66	-29.60	51.20	125.30	74.10	PK	Vertical
3	5736.141	87.21	33.82	5.67	-29.60	97.10	125.30	28.20	PK	Vertical
4	5850.000	40.53	34.00	5.74	-29.60	50.67	125.30	74.63	PK	Vertical
5	5868.596	43.56	34.04	5.75	-29.60	53.75	107.09	53.34	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:

2025-01-20

Tested By:

Zhong Nan

EUT:

In-vehicle Multimedia Host

Model Number:

MTCJ06-A03

Test Mode:

ANT1 RU8 AX20 TX 5825MHz Mode

Power Supply:

DC 12V

Condition:

Temp:23°C;Humi:59.5%

Test Site:

DDT 3# Chamber

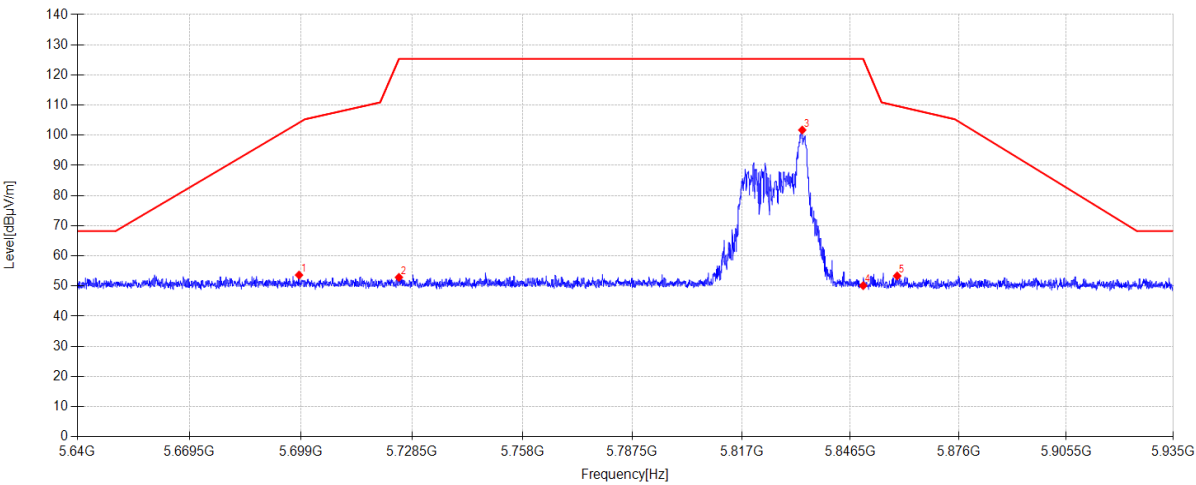
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Memo:

Sample Number:S24122405-001 Power Setting:9

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	5698.469	44.01	33.59	5.64	-29.60	53.64	104.16	50.52	PK	Horizontal
2	5725.000	43.07	33.75	5.66	-29.60	52.88	125.30	72.42	PK	Horizontal
3	5833.432	91.53	34.07	5.73	-29.60	101.73	125.30	23.57	PK	Horizontal
4	5850.000	39.99	34.00	5.74	-29.60	50.13	125.30	75.17	PK	Horizontal
5	5859.244	43.18	34.02	5.75	-29.60	53.35	109.71	56.36	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:2025-01-20

Tested By:Zhong Nan

EUT:In-vehicle Multimedia Host

Model Number:MTCJ06-A03

Test Mode:ANT1 RU8 AX20 TX 5825MHz Mode

Power Supply:DC 12V

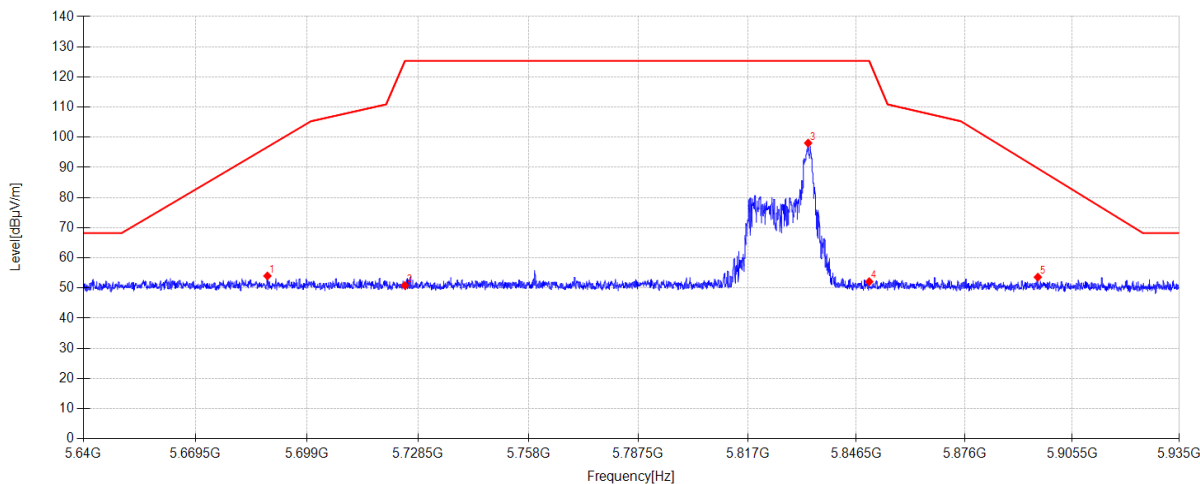
Condition:Temp:23°C;Humi:59.5%

Test Site:DDT 3# Chamber

File Path:d:\ts\2024 report data\Q24122405-5E\FCC ABOVE1G RU\26

Memo:Sample Number:S24122405-001 Power Setting:9

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	5688.498	44.42	33.55	5.63	-29.60	54.00	96.77	42.77	PK	Vertical
2	5725.000	41.02	33.75	5.66	-29.60	50.83	125.30	74.47	PK	Vertical
3	5833.402	87.88	34.07	5.73	-29.60	98.08	125.30	27.22	PK	Vertical
4	5850.000	41.98	34.00	5.74	-29.60	52.12	125.30	73.18	PK	Vertical
5	5896.060	43.34	34.09	5.77	-29.60	53.60	89.67	36.07	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:

2025-01-20

Tested By:

Zhong Nan

EUT:

In-vehicle Multimedia Host

Model Number:

MTCJ06-A03

Test Mode:

ANT2 RU8 AX20 TX 5825MHz Mode

Power Supply:

DC 12V

Condition:

Temp:23°C;Humi:59.5%

Test Site:

DDT 3# Chamber

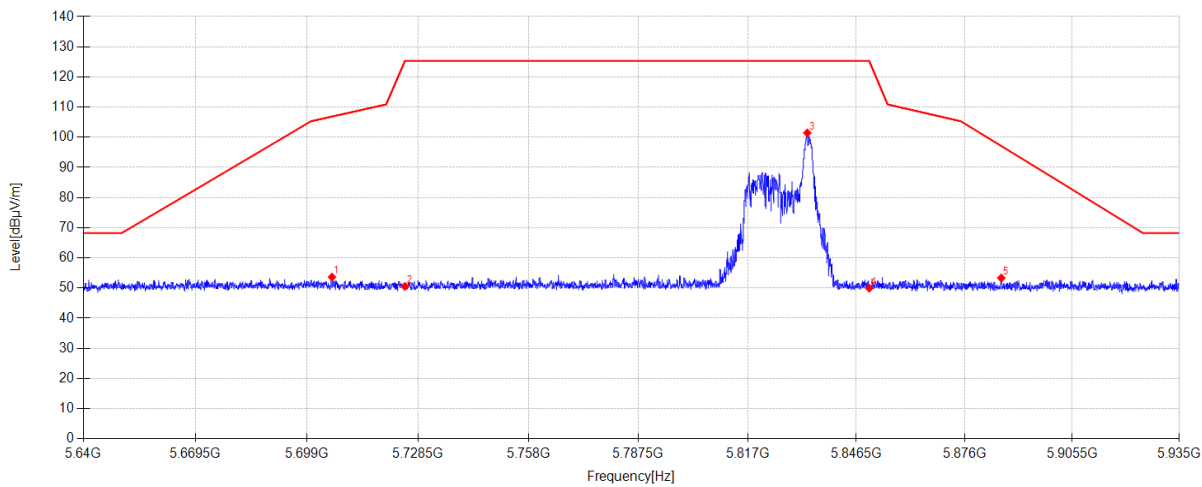
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Memo:

Sample Number:S24122405-001 Power Setting:9

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	5705.608	43.96	33.63	5.65	-29.60	53.64	106.87	53.23	PK	Horizontal
2	5725.000	40.73	33.75	5.66	-29.60	50.54	125.30	74.76	PK	Horizontal
3	5833.166	91.24	34.07	5.73	-29.60	101.44	125.30	23.86	PK	Horizontal
4	5850.000	39.81	34.00	5.74	-29.60	49.95	125.30	75.35	PK	Horizontal
5	5886.060	43.10	34.07	5.76	-29.60	53.33	97.09	43.76	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:

2025-01-20

Tested By:

Zhong Nan

EUT:

In-vehicle Multimedia Host

Model Number:

MTCJ06-A03

Test Mode:

ANT2 RU8 AX20 TX 5825MHz Mode

Power Supply:

DC 12V

Condition:

Temp:23°C;Humi:59.5%

Test Site:

DDT 3# Chamber

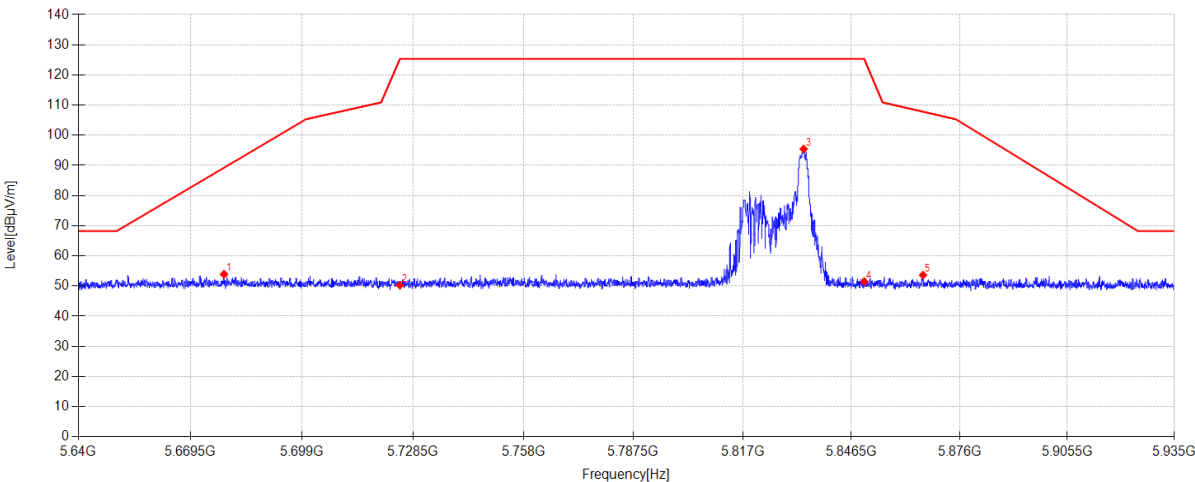
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Memo:

Sample Number:S24122405-001 Power Setting:9

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	5678.350	44.36	33.51	5.63	-29.60	53.90	89.24	35.34	PK	Vertical
2	5725.000	40.46	33.75	5.66	-29.60	50.27	125.30	75.03	PK	Vertical
3	5833.550	85.24	34.07	5.73	-29.60	95.44	125.30	29.86	PK	Vertical
4	5850.000	41.34	34.00	5.74	-29.60	51.48	125.30	73.82	PK	Vertical
5	5866.029	43.46	34.03	5.75	-29.60	53.64	107.81	54.17	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.

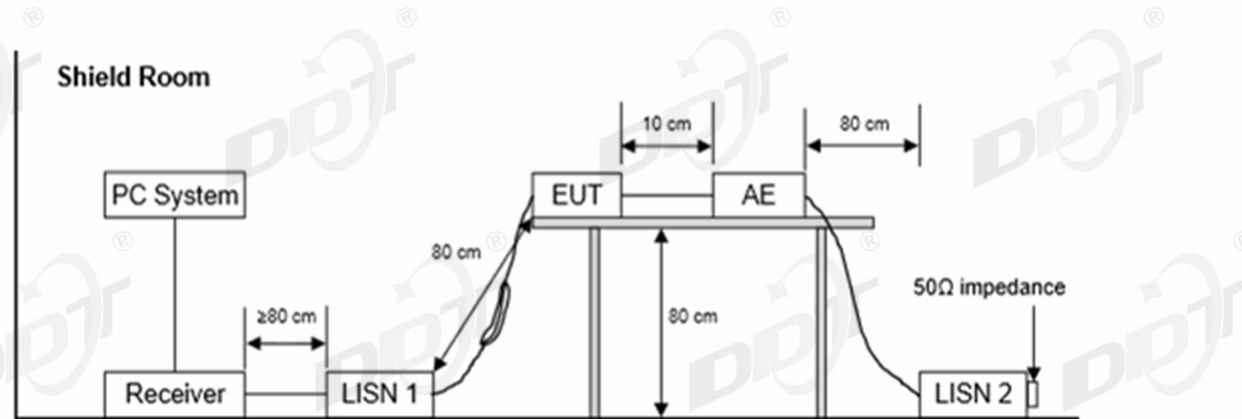
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

14.Power Line Conducted Emissions

14.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
/	/	/	/	/

14.2. Block diagram of test setup



14.3. Limits

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

14.4. Assistant equipment used for test

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



#### 14.5. 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.

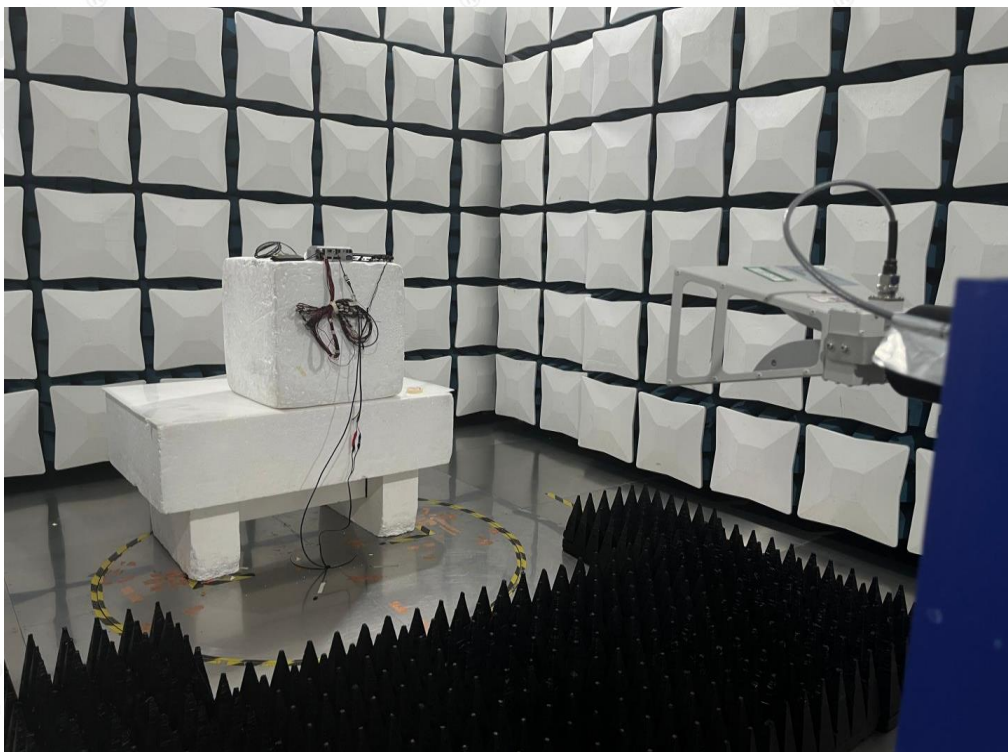
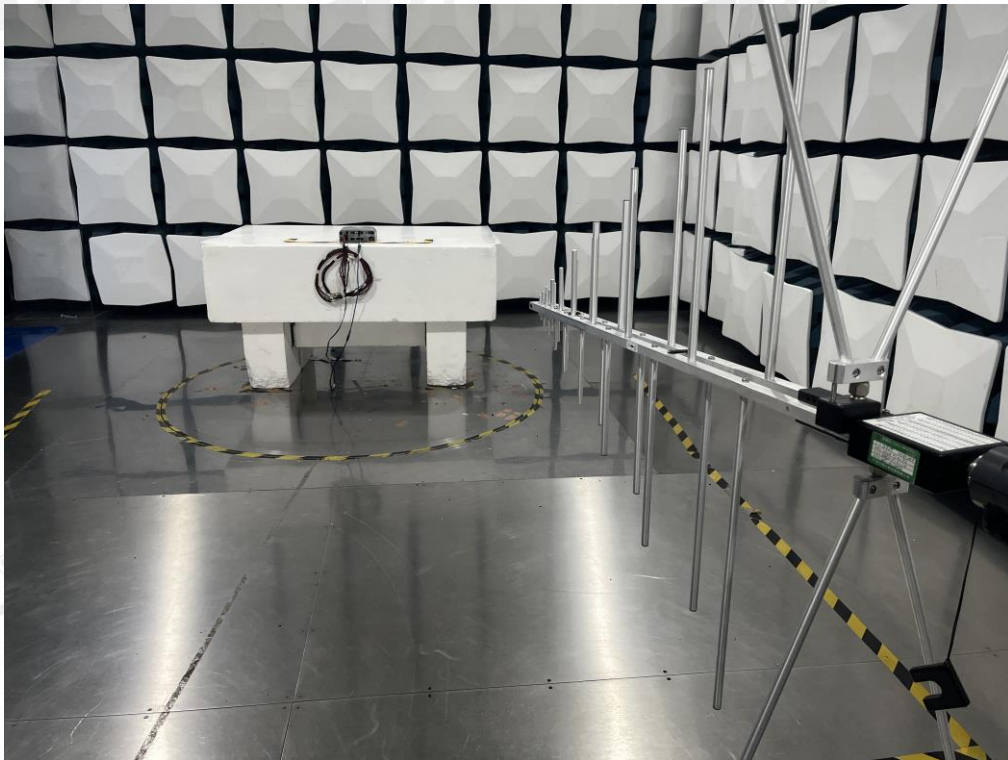
The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

#### 14.6. Test result

Not applicable. EUT is DC powered.

## 15. Test Setup Photograph







## 16. Photos of the EUT

Please refer to DDT-Q24122405-2E appendix I

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