



Certificate # 2861.01

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Page 1 of 23

# Test Report

**Verified code:** 637620

**Report No.:** E202208232499-02-1

**Customer:** Huizhou Desay SV Automotive Co., Ltd.

**Address:** 103, Hechang 5th Road West, Zhongkai National Hi-tech Industrial Development Zone, Huizhou, Guangdong, P.R. China

**Sample Name:** Multimedia Player Assembly

**Sample Model:** TR6602/40

**Receive Sample Date:** Oct.13,2022

**Test Date:** Nov.10,2022 ~ Nov.14,2022

**Reference Document:** CFR 47, FCC Part 15 Subpart C  
RADIO FREQUENCY DEVICES:Subpart C—Intentional Radiators

**Test Result:** Pass

Prepared by: *Wen Wen*

Reviewed by: *Jiang Tao*

Approved by: *Xiao Liang*

GUANGZHOU GRG METROLOGY & TEST CO., LTD

Issued Date: 2023-01-11

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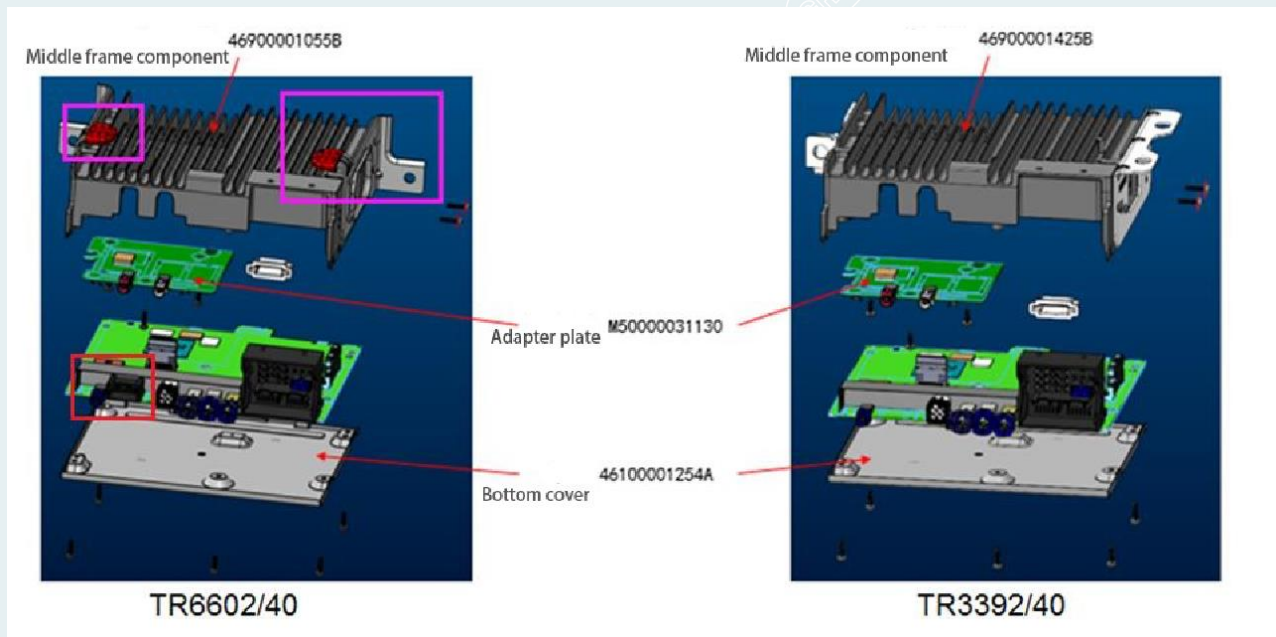
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**REPORT ISSUED HISTORY**

Report Version	Report No.	Description	Compile Date
1.0	E202208232499-02-1	Original Issue	2022-12-05

**Note:**

1. This report E202208232499-02-1 is based on E20220216738902-1 for added model TR6602/40.
2. Product: Multimedia Player Assembly, model: TR6602/40 is the same as TR3392/40 in DAB function, RAM, RF module, storage capacity, Bluetooth chip, GNSS chip, FM and AM chip and etc. Schematic, circuit design, layout, Hardware version, Software version are different as below:
  - A. The appearance designs of the sample are different as below picture.
  - B. The functions are different. TR6602/40 has the Ethernet function. The TR3392/40 does not.
  - C. LVDS chips are different. The TR6602/40 uses DS90UB949, and the TR3392/40 uses MAX96751.
  - D. Hardware version of TR3392/40 is HW001, Software version: S018A02XPS11001, and Hardware version of TR6602/40 is HW000, Software version: S018A04XST10001.



3. According to above model difference, Radiated Spurious Emission had been tested. The all other data is from E20220216738902-1 report.

**1. TEST RESULT SUMMARY**

<b>Standard</b>	<b>Item</b>	<b>Limit / Severity</b>	<b>Result</b>
FCC 47 CFR Part 15 Subpart C (15.247) ANSI C63.10-2013	Radiated Spurious Emission	Section 15.247(d) &15.205 &15.209	PASS

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## 2. GENERAL DESCRIPTION OF EUT

### 2.1 APPLICANT

Name: Huizhou Desay SV Automotive Co., Ltd.  
Address: 103, Hechang 5th Road West, Zhongkai National Hi-tech Industrial Development Zone, Huizhou, Guangdong, P.R. China


### 2.2 MANUFACTURER

Name: Huizhou Desay SV Automotive Co., Ltd.  
Address: 103, Hechang 5th Road West, Zhongkai National Hi-tech Industrial Development Zone, Huizhou, Guangdong, P.R. China

### 2.3 FACTORY

Name: Huizhou Desay SV Automotive Co., Ltd.  
Address: 103, Hechang 5th Road West, Zhongkai National Hi-tech Industrial Development Zone, Huizhou, Guangdong, P.R. China

### 2.4 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment: Multimedia Player Assembly  
Model No.: TR6602/40  
Adding Model: /  
Trade Name:   
FCC ID: 2AEQTNV101140  
Power supply: DC 12V  
Frequency Range: 2402MHz~2480MHz  
Transmit Power: GFSK: 10.97dBm  
 $\pi/4$ -DQPSK: 9.26dBm  
8DPSK: 9.55dBm  
Type of Modulation: GFSK for 1Mbps,  $\pi/4$ -DQPSK for 2Mbps, 8DPSK for 3Mbps  
Antenna Specification: PCB Printed antenna with 2dBi gain (Max)  
Temperature Range: -40°C ~ 85°C  
Hardware Version: HW000  
Software Version: S018A04XST10001  
Sample No: E202208232499-02-0001

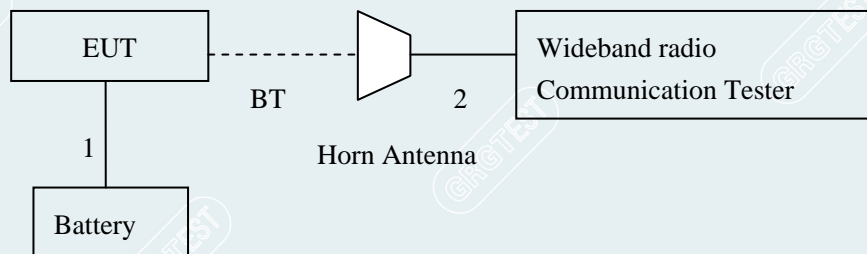
**2.5 TEST OPERATION MODE**

Mode No.	Description of the modes
1	Bluetooth(BT) fixed frequency transmitting

**2.6 LOCAL SUPPORTIVE**

Name of Equipment	Manufacturer	Model	Serial Number	Note
Battery	BOSCH	L2-400	D8J16H288-0610	/
Wideband radio Communication Tester	R&S	CMW500	144611-nC	/
Horn Antenna	Schwarzbeck	BBHA 9120D	286	/
<b>Cable</b>				
DC cable(No.1)	/	/	/	UnShielded, 1.60m
RF cable(No.2)	/	/	/	Unshielded 5.0m

**2.7 CONFIGURATION OF SYSTEM UNDER TEST**



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### 3. LABORATORY AND ACCREDITATIONS

#### 3.1 LABORATORY

The tests & measurements refer to this report were performed by Shenzhen EMC Laboratory of Guangzhou GRG Metrology & Test Co., Ltd.

Add : No.1301 Guangang Road Xinlan Community, Guanlan Street, Longhua District  
Shenzhen, 518110, People's Republic of China

P.C. : 518110

Tel : 0755-61180008

Fax : 0755-61180008

#### 3.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025:2017.

**USA** A2LA(Certificate #2861.01)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

**Canada** ISED (Company Number: 24897, CAB identifier:CN0069)

**USA** FCC (Registration Number: 759402, Designation Number:CN1198)

Copies of granted accreditation certificates are available for downloading from our web site, <http://www.grgtest.com>

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### 3.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	9kHz~30MHz	4.46dB
		30MHz~200MHz	4.30dB
		200MHz~1000MHz	4.50dB
		1GHz~18GHz	5.60dB
		18GHz~26.5GHz	3.65dB
	Vertical	9kHz~30MHz	4.46dB
		30MHz~200MHz	4.40dB
		200MHz~1000MHz	4.50dB
		1GHz~18GHz	5.60dB
		18GHz~26.5GHz	3.65dB

Measurement	Uncertainty
RF frequency	$6.0 \times 10^{-6}$
Humidity	6 %
Temperature	2 °C

This uncertainty represents an expanded uncertainty factor of  $k=2$ .

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**4. LIST OF USED TEST EQUIPMENT AT GRGT**

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
<b>Radiated Spurious Emission</b>				
Test S/W	EZ	CCS-03A1	/	/
Loop Antenna	TESEQ	HLA6121	52599	2023-04-02
Test Receiver	R&S	ESR7	102444	2023-09-02
Preamplifier	EMEC	EM330	I00426	2023-03-05
Bi-log Antenna	TESEQ	CBL6143A	I00268	2024-10-23
Spectrum Analyzer	Agilent	N9020B	MY59050667	2023-11-25
Horn Antenna	Schwarzbeck	BBHA9120D (1201)	02143	2023-09-11
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	BBHA 9170-497	2023-09-27
Amplifier	Tonscend	TAP01018048	AP20E8060075	2023-05-05
Amplifier	Tonscend	TAP184050	AP20E806071	2023-05-05
Test S/W	Tonscend	JS36-RE/2.5.1.5		

Note: The calibration interval of the above test instruments is 12 months. But the Bi-log Antenna is 24 months.

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## 5. TEST RESULTS

### 5.1 EUT TEST CONDITIONS

Type of antenna: PCB Printed

Test frequencies: According to the 15.31(m) Measurements on intentional radiators or receivers, other than TV broadcast receivers, shall be performed and, if required, reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table:

Frequency range over which device operates	Number of frequencies	Location in the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top 1 near middle and 1 near bottom

EUT channels and frequencies list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	14	2416	28	2430
1	2403	15	2417	29	2431
2	2404	16	2418	30	2432
3	2405	17	2419	31	2433
4	2406	18	2420	32	2434
5	2407	19	2421	33	2435
6	2408	20	2422	34	2436
7	2409	21	2423	35	2437
8	2410	22	2424	36	2438
9	2411	23	2425	37	2439
10	2412	24	2426	38	2440
11	2413	25	2427	39	2441
12	2414	26	2428	40	2442
13	2415	27	2429	41	2443

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	2444	55	2457	68	2470
43	2445	56	2458	69	2471
44	2446	57	2459	70	2472
45	2447	58	2460	71	2473
46	2448	59	2461	72	2474
47	2449	60	2462	73	2475
48	2450	61	2463	74	2476
49	2451	62	2464	75	2477
50	2452	63	2465	76	2478
51	2453	64	2466	77	2479
52	2454	65	2467	78	<b>2480</b>
53	2455	66	2468		
54	2456	67	2469		

Test frequency is the lowest channel: 0 frequency(2402MHz), middle channel: 39 frequency (2441MHz) and highest channel: 78 frequency(2480MHz)

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## 5.2 RADIATED SPURIOUS EMISSIONS

### 5.2.1 LIMITS

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30dB instead of 20dB. Attenuation below the general limits specified in §15.209(a) is not required.

Frequency (MHz)	Quasi-peak( $\mu\text{V}/\text{m}$ )	Measurement distance(m)	Quasi-peak( $\text{dB}\mu\text{V}/\text{m}$ )@distance 3m
0.009-0.490	2400/F(kHz)	300	128.5~93.8
0.490-1.705	24000/F(kHz)	30	73.8~63
1.705-30.0	30	30	69.5
30 ~ 88	100	3	40
88~216	150	3	43.5
216 ~ 960	200	3	46
Above 960	500	3	54

#### NOTE:

- (1) The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.
- (2) The lower limit shall apply at the transition frequencies.
- (3) Above 18GHz test distance is 1m, so the Peak Limit= $74+20*\log(3/1)=83.54$  ( $\text{dB}\mu\text{V}/\text{m}$ ).  
The Avg Limit= $54+20*\log(3/1)=63.54$  ( $\text{dB}\mu\text{V}/\text{m}$ ).

### 5.2.2 TEST PROCEDURES

#### 1) Sequence of testing 9kHz to 30MHz

##### Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
- If the EUT is a floor standing device, it is placed on the ground.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

##### Pre measurement:

- The turntable rotates from  $0^\circ$  to  $360^\circ$ .
- The antenna height is 1.0 meter.
- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

##### Final measurement:

--- Identified emissions during the pre measurement the software maximizes by rotating the turntable position ( $0^{\circ}$  to  $360^{\circ}$ ) and by rotating the elevation axes ( $0^{\circ}$  to  $360^{\circ}$ ).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QP detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

## 2) Sequence of testing 30MHz to 1GHz

### Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

### Pre measurement:

--- The turntable rotates from  $0^{\circ}$  to  $360^{\circ}$ .

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 4 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

### Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable rotates from  $0^{\circ}$  to  $360^{\circ}$  and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

## 3) Sequence of testing 1GHz to 18GHz

### Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

- The measurement distance is 3 meter.
- The EUT was set into operation.

**Pre measurement:**

- The turntable rotates from 0 ° to 360 °.
- The antenna is polarized vertical and horizontal.
- The antenna height scan range is 1 meter to 4 meter.
- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

**Final measurement:**

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable rotates from 0 ° to 360 ° and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

**4) Sequence of testing above 18GHz****Setup:**

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 1 meter.
- The EUT was set into operation.

**Pre measurement:**

- The turntable rotates from 0 ° to 360 °.
- The antenna is polarized vertical and horizontal.
- The antenna height scan range is 1 meter to 4 meter.
- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

**Final measurement:**

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable rotates from 0 ° to 360 ° and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
- The final measurement will be done in the position (turntable, EUT-table and antenna polarization)

causing the highest emissions with Peak and Average detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

NOTE:

(a). The frequency from 9kHz to 150kHz, Set RBW=300Hz (for Peak & AVG), VBW=300Hz (for Peak & AVG). The frequency from 150kHz to 30MHz, Set RBW=9kHz, VBW=9kHz, (for QP Detector).

(b). The frequency from 30MHz to 1GHz, Set RBW=120kHz, VBW=300kHz, (for QP Detector).

(c). The frequency above 1GHz, for Peak detector: Set RBW=1MHz, VBW=3MHz.

(d). The frequency above 1GHz, for Avg detector: Set RBW=1MHz, if the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set  $VBW \leq RBW/100$  (i.e., 10kHz) but not less than 10Hz.

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5.2.3 TEST SETUP

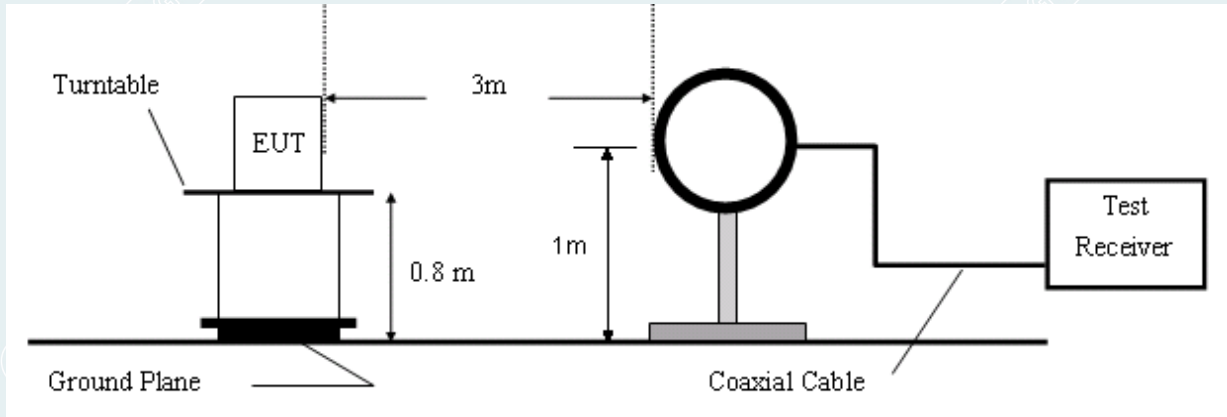


Figure 1. 9kHz to 30MHz radiated emissions test configuration

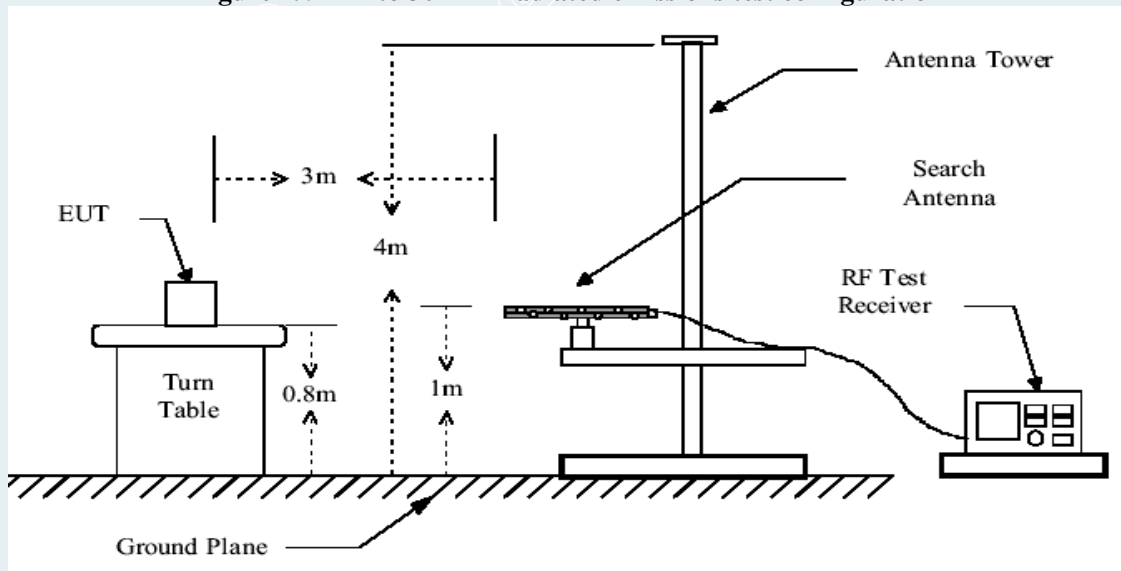


Figure 2. 30MHz to 1GHz radiated emissions test configuration

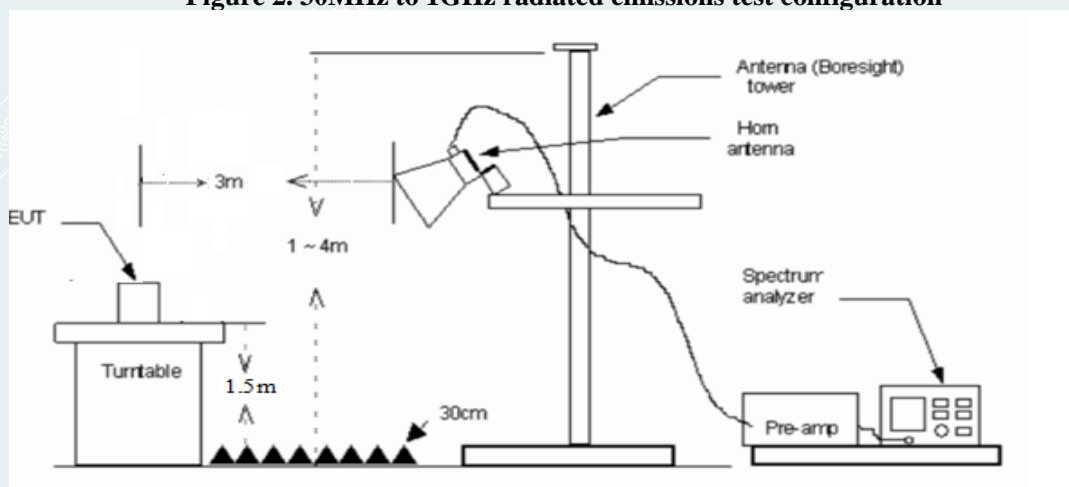


Figure 3. 1GHz to 18GHz radiated emissions test configuration

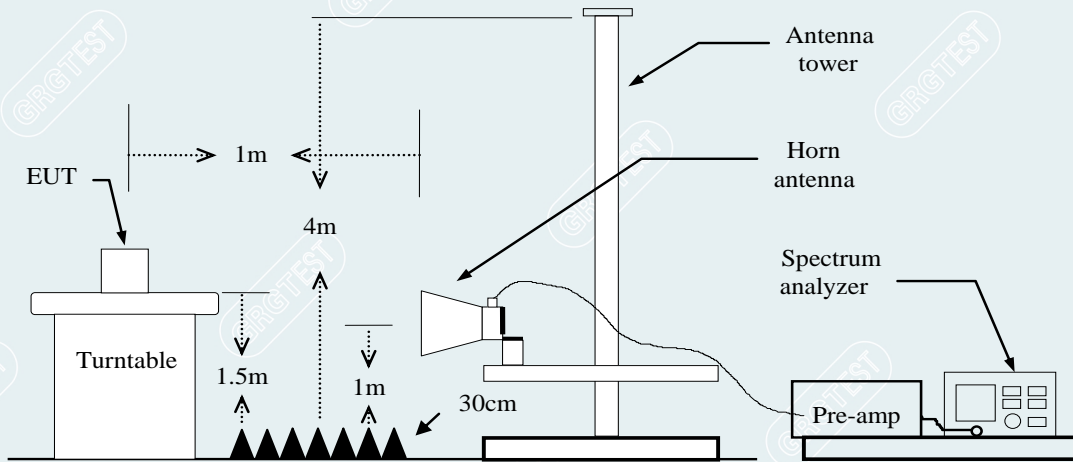


Figure 4. 18GHz to 26.5GHz radiated emissions test configuration

5.2.4 DATA SAMPLE

30MHz to 1GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	37.06	-15.48	21.58	40.00	-18.42	QP	Vertical

1GHz-18GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	65.45	-11.12	54.33	74.00	-19.67	peak	Vertical
xxx	xxx	63.00	-11.12	51.88	54.00	-2.12	AVG	Vertical

Above 18GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	68.86	57.66	-11.20	83.54	25.88	peak	Vertical
xxx	xxx	68.89	-11.20	57.69	63.54	5.85	AVG	Vertical

- Frequency (MHz) = Emission frequency in MHz
- Ant.Pol. (H/V) = Antenna polarization
- Reading (dBuV) = Uncorrected Analyzer / Receiver reading
- Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain
- Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)
- Limit (dBuV/m) = Limit stated in standard
- Margin (dB) = Remark Result (dBuV/m) – Limit (dBuV/m)
- Peak = Peak Reading
- QP = Quasi-peak Reading
- AVG = Average Reading

### 5.2.5 TEST RESULTS

#### Below 1GHz:

Pre-test all test mode and recorded the worst case test results DH5(2402MHz) mode in this report.

Mode: DH5

Low Frequency (2402MHz)

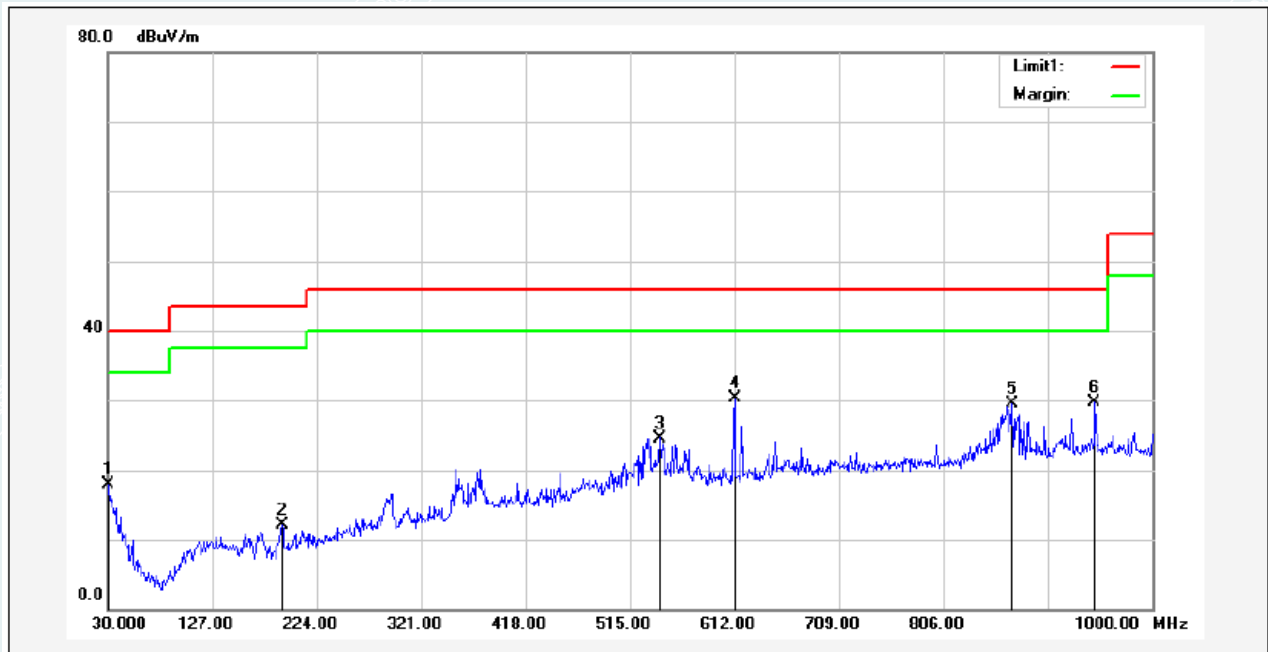
Environment: 24.5°C/57%RH/101.0kPa

Test Engineer: Tang Shenghui

Date: 2022-11-14

Test Voltage: DC 12V

Probe : Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over (dB)	Degree (deg.)	Height (cm)	Remark
1	30.0000	34.76	-16.85	17.91	40.00	-22.09	328	100	QP
2	191.9900	39.13	-27.02	12.11	43.50	-31.39	233	200	QP
3	542.1600	41.49	-16.89	24.60	46.00	-21.40	259	100	QP
4*	612.0000	46.55	-16.34	30.21	46.00	-15.79	330	100	QP
5	870.0200	42.93	-13.51	29.42	46.00	-16.58	229	100	QP
6	946.6500	42.49	-12.73	29.76	46.00	-16.24	332	100	QP

Mode: DH5

Low Frequency (2402MHz)

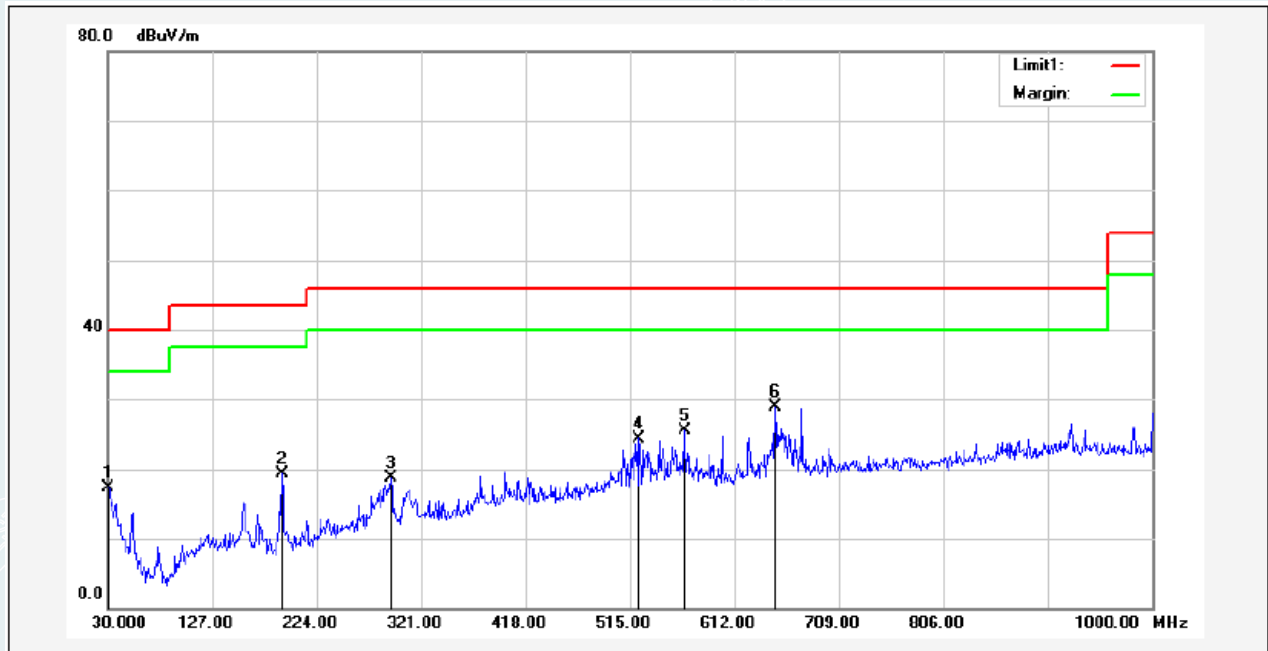
Environment: 24.5°C/57%RH/101.0kPa

Test Engineer: Tang Shenghui

Date: 2022-11-14

Test Voltage: DC 12V

Probe : Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over (dB)	Degree (deg.)	Height (cm)	Remark
1	30.9700	34.65	-17.31	17.34	40.00	-22.66	270	200	QP
2	191.9900	46.31	-27.02	19.29	43.50	-24.21	360	110	QP
3	292.8700	42.43	-23.81	18.62	46.00	-27.38	1	100	QP
4	522.7600	41.94	-17.54	24.40	46.00	-21.60	260	100	QP
5	565.4400	41.98	-16.57	25.41	46.00	-20.59	156	200	QP
6*	649.8300	44.94	-15.98	28.96	46.00	-17.04	196	100	QP

**Remark:**

- 1 No emission found between lowest internal used/generated frequency to 30MHz.
- 2 Pre-scan all mode and recorded the worst case results in this report (TX-Low Channel(1Mbps)).
- 3 Measuring frequencies from 9kHz to the 1GHz.
- 4 Radiated emissions measured in frequency range from 30MHz to 1GHz were made with an instrument using Peak/Quasi-peak detector mode.
- 5 Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 6 The IF bandwidth of SPA between 30MHz to 1GHz was 120kHz.

**1GHz – 18GHz**

According to report E20220216738902-1 recorded the worst case test results 2DH5 (2402MHz) mode in this report.

Mode: 2DH5

Lowest Frequency (2402MHz)

Environment: 25°C/60%RH/101.0kPa

Test Engineer: Zhang zishan

Date: 2022-11-10

Test Voltage: DC 12V

Suspected Data List									
NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1050.0063	69.14	44.33	-24.81	74.00	29.67	100	252	Horizontal
2	1217.5272	66.53	43.31	-23.22	74.00	30.69	100	293	Horizontal
3	2100.6376	63.14	42.10	-21.04	74.00	31.90	100	252	Horizontal
4	3202.5253	61.37	45.67	-15.70	74.00	28.33	100	15	Horizontal
5	4803.9755	65.37	52.77	-12.60	74.00	21.23	100	315	Horizontal
6	15095.2619	44.92	57.91	12.99	74.00	16.09	200	277	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dB $\mu$ V/m]	AV Value [dB $\mu$ V/m]	AV Limit [dB $\mu$ V/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4803.9275	-12.60	61.39	48.79	54.00	5.21	156	297	Horizontal
2	15095.2619	12.99	34.52	47.51	54.00	6.49	200	277	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1050.0063	67.07	44.06	-23.01	74.00	29.94	100	165	Vertical
2	1134.2668	68.43	45.03	-23.40	74.00	28.97	200	186	Vertical
3	1386.0483	62.55	40.90	-21.65	74.00	33.10	100	214	Vertical
4	2099.8875	61.24	40.69	-20.55	74.00	33.31	100	314	Vertical
5	4803.9755	62.85	49.96	-12.89	74.00	24.04	100	205	Vertical
6	15087.761	45.31	58.39	13.08	74.00	15.61	100	195	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dB $\mu$ V/m]	AV Value [dB $\mu$ V/m]	AV Limit [dB $\mu$ V/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4803.9275	-12.89	53.66	40.77	54.00	13.23	122	202.2	Vertical
2	15087.761	13.08	34.41	47.49	54.00	6.51	100	195	Vertical

**Remark:**

- 1 Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2 Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

**18GHz-26.5GHz**

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

According to report E20220216738902-1 recorded the worst case test results 2DH5 (2402MHz) mode in this report.

Mode: 2DH5

Lowest Frequency (2402MHz)

Environment: 25°C/60%RH/101.0kPa

Test Engineer: Zhang zishan

Date: 2022-11-10

Test Voltage: DC 12V

Suspected Data List									
NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18858.5	52.62	40.73	-11.89	83.54	42.81	150	15	Horizontal
2	20480.725	51.67	41.15	-10.52	83.54	42.39	150	199	Horizontal
3	21113.55	50.15	40.07	-10.08	83.54	43.47	150	214	Horizontal
4	22597.65	47.09	38.07	-9.02	83.54	45.47	150	49	Horizontal
5	23381.35	45.40	36.68	-8.72	83.54	46.86	150	135	Horizontal
6	24778.325	42.30	34.79	-7.51	83.54	48.75	150	280	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18654.925	52.54	40.53	-12.01	83.54	43.01	150	243	Vertical
2	19879.775	53.08	42.04	-11.04	83.54	41.50	150	291	Vertical
3	20736.15	50.22	40.11	-10.11	83.54	43.43	150	147	Vertical
4	21992.025	48.06	38.39	-9.67	83.54	45.15	150	340	Vertical
5	22584.475	47.28	38.24	-9.04	83.54	45.30	150	15	Vertical
6	24862.9	42.20	34.86	-7.34	83.54	48.68	150	96	Vertical

**APPENDIX A. PHOTOGRAPH OF THE TEST CONNECTION DIAGRAM**

Please refer to the report E202208232499-02-3-test setup photo.

**APPENDIX B. PHOTOGRAPH OF THE EUT**

Please refer to the report E202208232499-02-4-EUT photo.

----- End of Report -----