



## Test Report

Date : 2025-06-11  
No. : HMD25050004

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**Applicant** : GUANGDONG HUINA MODEL CO., LTD.  
No.9 Xin Xing Five Road, Xin Ning, Chenghai District, Shantou City

**Supplier / Manufacturer** : GUANGDONG HUINA MODEL CO., LTD.  
No.9 Xin Xing Five Road, Xin Ning, Chenghai District, Shantou City

**Description of Sample(s)** : Submitted sample(s) said to be  
Product: shop truck  
Brand Name: N/A  
Model No.: 1318  
FCC ID: 2AT93HUIINA-1318

**Date Samples Received** : 2025-04-30

**Date Tested** : 2025-04-30 to 2025-05-13

**Investigation Requested** : Perform ElectroMagnetic Interference measurement in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15 and ANSI C63.10: 2013 for FCC Certification.

**Conclusions** : The submitted product COMPLIED with the requirements of Federal Communications Commission [FCC] Rules and Regulations Part 15. The tests were performed in accordance with the standards described above and on Section 2.2 in this Test Report.

**Remarks** : For additional model(s) details, see page 3

**Test by** Susu

  
Dr.CHAN Kwok Hung, Brian  
Authorized Signatory



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### 1.0 General Details

#### 1.1 Equipment Under Test [EUT]

##### Description of Sample(s)

Product: shop truck  
Manufacturer: GUANGDONG HUINA MODEL CO., LTD.  
No.9 Xin Xing Five Road, Xin Ning, Chenghai District, Shantou City  
Brand Name: N/A  
Model Number: 1318  
Additional Model Number:  
13500, 13501, 13502, 13503, 13504, 13505, 13506, 13507, 13508, 13509, 13510A, 13510, 13511, 13512, 13513, 13514, 13515, 13516, 13517, 13518, 13519, 13520, 13521, 13522, 13523, 13524, 13525, 13526, 13527, 13528, 13529, 13550, 13551, 13552, 13553, 13554, 13555, 13556, 13557, 13558, 13559, 13560, 13561, 13562, 13563, 13564, 13565, 13566, 13567, 13568, 13569, 13570, 13571, 13572, 13573, 13574, 13575, 13576, 13577, 13578, 13579, 1310, 1312, 1313, 1316, 1317, 1318, 1319, 1331, 1332, 1333, 1337, 1338, 1334, 1335, 1337, 1350, 1361, 1362, 1363, 1364, 1365, 1381, 1382, 1383, 1384, 1385, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1510, 1515, 1516, 1517, 1518, 1520, 1522, 1523, 1524, 1525, 1526, 1527, 1530, 1531, 1532, 1533, 1534, 1535, 1535-1, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1577H, 1579, 1580, 1581, 1582, 1583, 1585, 1586, 1587, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1661, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960  
Rating: REMOTE CONTROL: 3Vd.c.("AA" size battery x2)

#### 1.1.1 Description of EUT Operation

The Equipment Under Test (EUT) is a shop truck. It is a transceiver operating at 2405Hz~2475MHz and the RF signal was modulated by IC.

#### 1.2 RF Module Details

Module Model Number: N/A  
Module FCC ID: N/A  
Modulation: GFSK  
Frequency Range: 2405-2475MHz

#### 1.3 Antenna Details

Antenna Type: Integral antenna  
Antenna Gain: 0dBi

#### 1.4 Date of Order

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2025-04-22

**Submitted Sample(s):**

**1.5**

1 Sample

**1.6 Test Duration**

2025-04-30 to 2025-05-13

**1.7 Country of Origin**

China

**1.8 Channel List**

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2405	21	2471
2	2407	22	2472
3	2408	23	2473
4	2410	24	2474
5	2411	25	2475
6	2414		
7	2418		
8	2422		
9	2425		
10	2427		
11	2428		
12	2435		
13	2445		
14	2451		
15	2452		
16	2453		
17	2454		
18	2462		
19	2469		
20	2470		

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### **2.0 Technical Details**

#### **2.1 Investigations Requested**

Perform Electromagnetic Interference measurements in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15 Regulations and ANSI C63.10: 2013 for FCC Certification. The device was realized with below steps.

Enter testing mode:

Press and hold the forward and right turn buttons, then turn on the power and the IC enters test mode; After entering the testing mode, press the right turn button briefly to switch modes and frequencies.

Mode 1: Modulation wave mode, frequency 2.405 GHz

Mode 2: Modulation wave mode, frequency 2.445 GHz

Mode 3: Modulation wave mode, frequency 2.475 GHz

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### 2.2 Test Standards and Results Summary Tables

EMISSION Results Summary						
Test Condition	Test Requirement	Test Method	Class / Severity	Test Result		
				Pass	Failed	N/A
Field Strength of Fundamental & Harmonics Emissions	FCC 47CFR 15.249	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiated Emissions	FCC 47CFR 15.209 FCC 47CFR 15.205	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AC Mains Conducted Emissions	FCC 47CFR 15.207	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antenna requirement	FCC 47CFR 15.203	N/A	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20dB Emission bandwidth	FCC 47CFR 15.215(c)	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: N/A - Not Applicable

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### **3.0 Test Results**

#### **3.1 Emission**

##### **3.1.1 Radiated Emissions**

Ambient temperature 25°C

Relative humidity 57%

Test Requirement:

FCC 47CFR 15.249 & FCC 47CFR 15.209

Test Method:

ANSI C63.10:2013

Test Date:

2025-05-06 to 2025-05-07

Mode of Operation:

Tx mode

#### **Test Method:**

For emission measurements at or below 1 GHz, the sample was placed 0.8m above the ground plane of semi-anechoic Chamber\*. For emission measurements above 1 GHz, the sample was placed 1.5m above the ground plane of semi-anechoic Chamber\*. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

- \* Semi-Anechoic chamber located on the G/F of The Hong Kong Standards and Testing Centre Ltd. with Registration Number: HK0001  
Test Firm Registration Number: 367672

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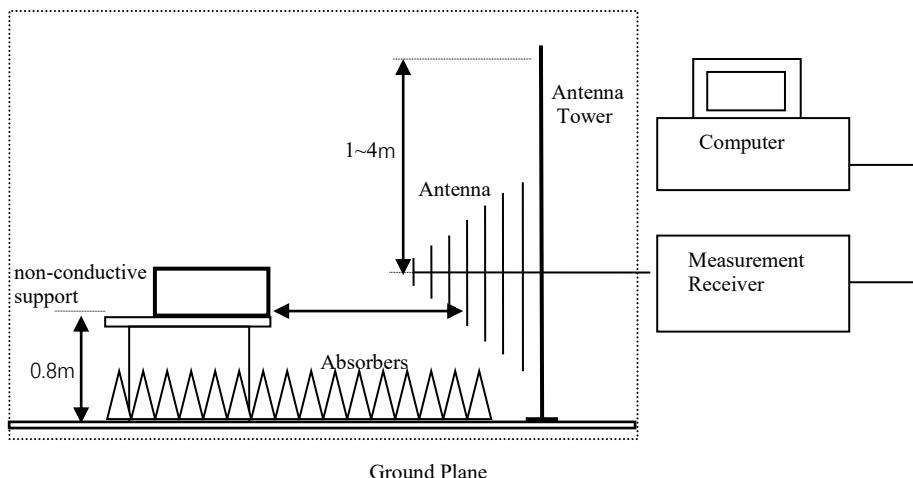
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### Spectrum Analyzer Setting:

9KHz – 30MHz (Pk & Av)	RBW: 10kHz VBW: 30kHz Sweep: Auto Span: Fully capture the emissions being measured Trace: Max. hold
30MHz – 1GHz (QP)	RBW: 120kHz VBW: 120kHz Sweep: Auto Span: Fully capture the emissions being measured Trace: Max. hold
Above 1GHz (Pk & Av) (Other than Fundamental Emissions)	RBW: 1MHz VBW: 1MHz Sweep: Auto Span: Fully capture the emissions being measured Trace: Max. hold

### Test Setup:



- Absorbers placed on top of the ground plane are for measurements above 1000MHz only.
- Measurements between 30MHz to 1000MHz made with Bi-log antennas, above 1000MHz horn antennas are used.



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### Limits for Field Strength of Fundamental & Harmonics Emissions [FCC 47CFR 15.249]:

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [microvolts/meter]	Field Strength of Harmonics Emission [microvolts/meter]
902-928	50,000 [Quasi-Peak]	500 [Average]
2400-2483.5	50,000 [Average]	500 [Average]

#### Remarks:

No additional spurious emissions found between lowest internal used/generated frequency and 30 MHz

Calculated measurement uncertainty  
(9kHz-30MHz): 2.0dB  
(30MHz -1GHz): 4.9dB  
(1GHz -6GHz): 4.02dB  
(6GHz -26.5GHz): 4.03dB

Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

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**Results of Tx mode (Lowest Frequency Channel-2405 MHz): Pass**

Field Strength of Fundamental Emissions						
Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2405.00	98.8	-4.8	94.0	49,831.0	500,000	Vertical
2405.00	97.3	-4.7	92.6	42,756.3	500,000	Horizontal

Field Strength of Fundamental Emissions						
Average Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2405.00	91.2	-4.8	86.4	20,773.0	50,000	Vertical
2405.00	89.1	-4.7	84.4	16,634.1	50,000	Horizontal

Field Strength of Harmonics Emission						
Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4810.0	55.1	0.8	55.9	623.7	5,000	Vertical
4810.0	55.7	0.5	56.2	645.7	5,000	Horizontal
7215.0	48.5	7.0	55.5	595.7	5,000	Vertical
7215.0	49.2	6.5	55.7	609.5	5,000	Horizontal
9620.0	46.9	8.5	55.4	588.8	5,000	Vertical
9620.0	47.0	8.3	55.3	582.1	5,000	Horizontal
12025.0	45.2	10.9	56.1	638.3	5,000	Vertical
12025.0	45.0	10.8	55.8	616.6	5,000	Horizontal

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Field Strength of Harmonics Emission						
Average Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4810.0	40.5	0.8	41.3	116.1	500	Vertical
4810.0	41.3	0.5	41.8	123.0	500	Horizontal
7215.0	34.6	7.0	41.6	120.2	500	Vertical
7215.0	35.4	6.5	41.9	124.5	500	Horizontal
9620.0	33.2	8.5	41.7	121.6	500	Vertical
9620.0	33.3	8.3	41.6	120.2	500	Horizontal
12025.0	30.4	10.9	41.3	116.1	500	Vertical
12025.0	30.7	10.8	41.5	118.9	500	Horizontal

Results of Tx mode (Middle Frequency Channel- 2445MHz): Pass

Field Strength of Fundamental Emissions						
Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2445.00	96.9	-4.8	92.1	40,364.5	500,000	Vertical
2445.00	96.6	-4.7	91.9	39,174.2	500,000	Horizontal

Field Strength of Fundamental Emissions						
Average Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2445.00	90.8	-4.8	86.0	20,044.7	50,000	Vertical
2445.00	89.6	-4.7	84.9	17,559.0	50,000	Horizontal

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Field Strength of Harmonics Emission Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4890.0	55.1	0.8	55.9	625.2	5,000	Vertical
4890.0	56.2	0.5	56.7	683.9	5,000	Horizontal
7335.0	48.4	7.0	55.4	588.8	5,000	Vertical
7335.0	50.1	6.5	56.6	676.1	5,000	Horizontal
9780.0	46.9	8.5	55.4	588.8	5,000	Vertical
9780.0	47.5	8.3	55.8	616.6	5,000	Horizontal
12225.0	45.2	10.9	56.1	638.3	5,000	Vertical
12225.0	44.9	10.8	55.7	609.5	5,000	Horizontal

Field Strength of Harmonics Emission Avarage Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4890.0	41.3	0.8	42.1	127.6	500	Vertical
4890.0	41.4	0.5	41.9	124.5	500	Horizontal
7335.0	34.3	7.0	41.3	116.1	500	Vertical
7335.0	35.1	6.5	41.6	120.2	500	Horizontal
9780.0	33.2	8.5	41.7	121.6	500	Vertical
9780.0	33.2	8.3	41.5	118.9	500	Horizontal
12225.0	30.8	10.9	41.7	121.6	500	Vertical
12225.0	29.4	10.8	40.2	102.3	500	Horizontal

Results of Tx mode (Highest Frequency Channel – 2475MHz): Pass

Field Strength of Fundamental Emissions Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2475.00	97.4	-4.8	92.6	42,608.9	500,000	Vertical
2475.00	93.4	-4.7	88.7	27,227.0	500,000	Horizontal

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Field Strength of Fundamental Emissions Average Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
2475.00	90.9	-4.8	86.1	20,160.4	50,000	Vertical
2475.00	87.2	-4.7	82.5	13,396.8	50,000	Horizontal

Field Strength of Harmonics Emission Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4950.0	55.1	0.8	55.9	625.2	5,000	Vertical
4950.0	55.7	0.5	56.2	645.7	5,000	Horizontal
7425.0	49.0	7.0	56.0	631.0	5,000	Vertical
7425.0	49.2	6.5	55.7	609.5	5,000	Horizontal
9900.0	47.3	8.5	55.8	616.6	5,000	Vertical
9900.0	47.0	8.3	55.3	582.1	5,000	Horizontal
12375.0	45.1	10.9	56.0	631.0	5,000	Vertical
12375.0	45.3	10.8	56.1	638.3	5,000	Horizontal

Field Strength of Harmonics Emission Avarage Value						
Frequency MHz	Measured Level @3m dB $\mu$ V/m	Correction Factor dB $\mu$ V/m	Field Strength dB $\mu$ V/m	Field Strength $\mu$ V/m	Limit @3m $\mu$ V/m	E-Field Polarity
4950.0	40.6	0.8	41.4	117.8	500	Vertical
4950.0	41.7	0.5	42.2	128.8	500	Horizontal
7425.0	34.5	7.0	41.5	118.9	500	Vertical
7425.0	35.3	6.5	41.8	123.0	500	Horizontal
9900.0	33.1	8.5	41.6	120.2	500	Vertical
9900.0	33.5	8.3	41.8	123.0	500	Horizontal
12285.0	30.6	10.9	41.5	118.9	500	Vertical
12375.0	30.3	10.8	41.1	113.5	500	Horizontal

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### Radiated Emissions Measurement:

#### Limit :

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

**Result: RF Radiated Emissions (1GHz-26GHz) (Lowest)**

Field Strength of Band-edge Compliance Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2400.0	67.3	-4.8	62.5	74.0	11.5	Vertical
2400.0	67.1	-4.7	62.4	74.0	11.6	Horizontal

Field Strength of Band-edge Compliance Average Value						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2400.0	53.4	-4.8	48.6	54.0	5.4	Vertical
2400.0	53.6	-4.7	48.9	54.0	5.1	Horizontal

**Result: RF Radiated Emissions (1GHz-26GHz) (Highest)**

Field Strength of Band-edge Compliance Peak Value						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2483.5	61.2	-4.8	56.4	74.0	17.6	Vertical
2483.5	62.3	-4.7	57.6	74.0	16.4	Horizontal

Field Strength of Band-edge Compliance Average Value						
Frequency MHz	Measured Level @3m dB $\mu$ V	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB $\mu$ V/m	E-Field Polarity
2483.5	49.9	-4.8	45.1	54.0	8.9	Vertical
2483.5	50.5	-4.7	45.8	54.0	8.2	Horizontal

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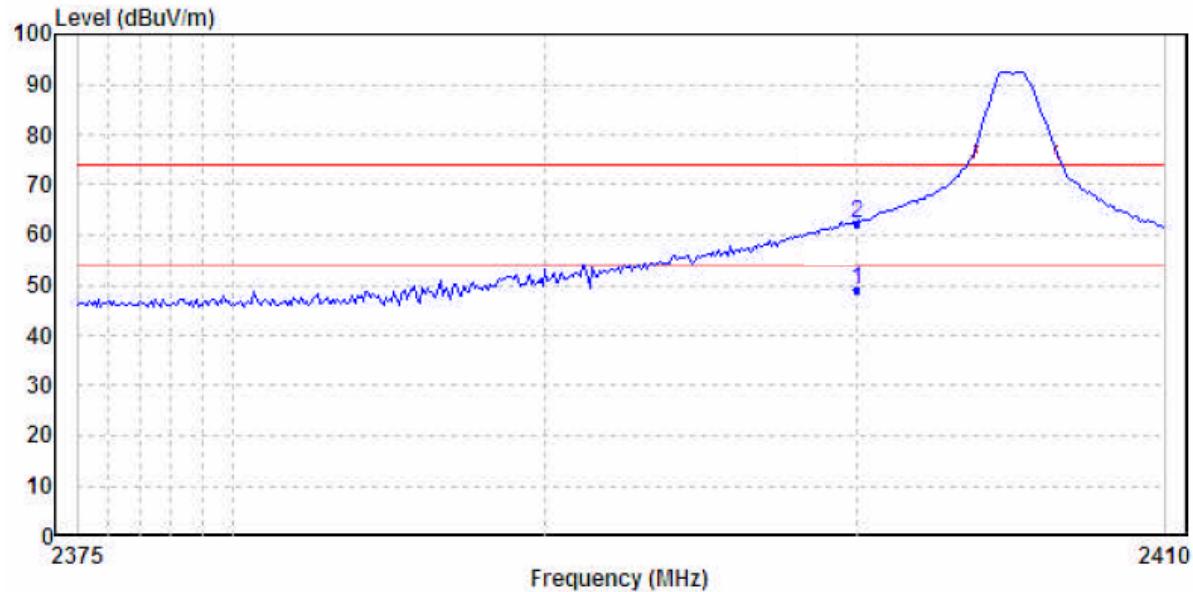
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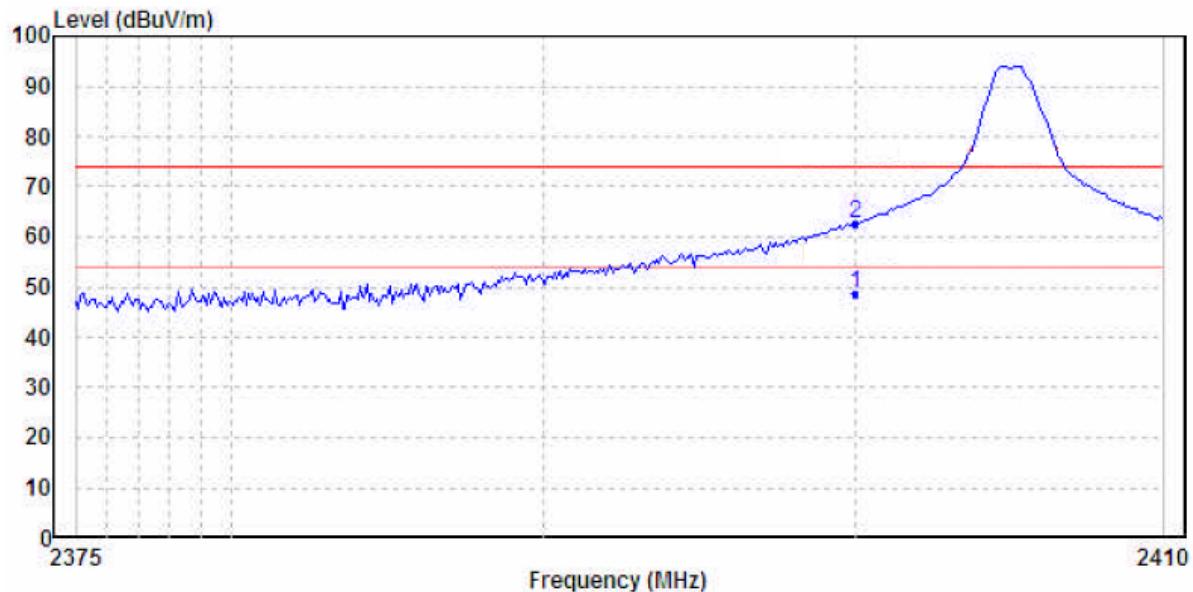
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### **Emissions radiated outside of the specified frequency bands (Lowest)**

Horizontal



Vertical



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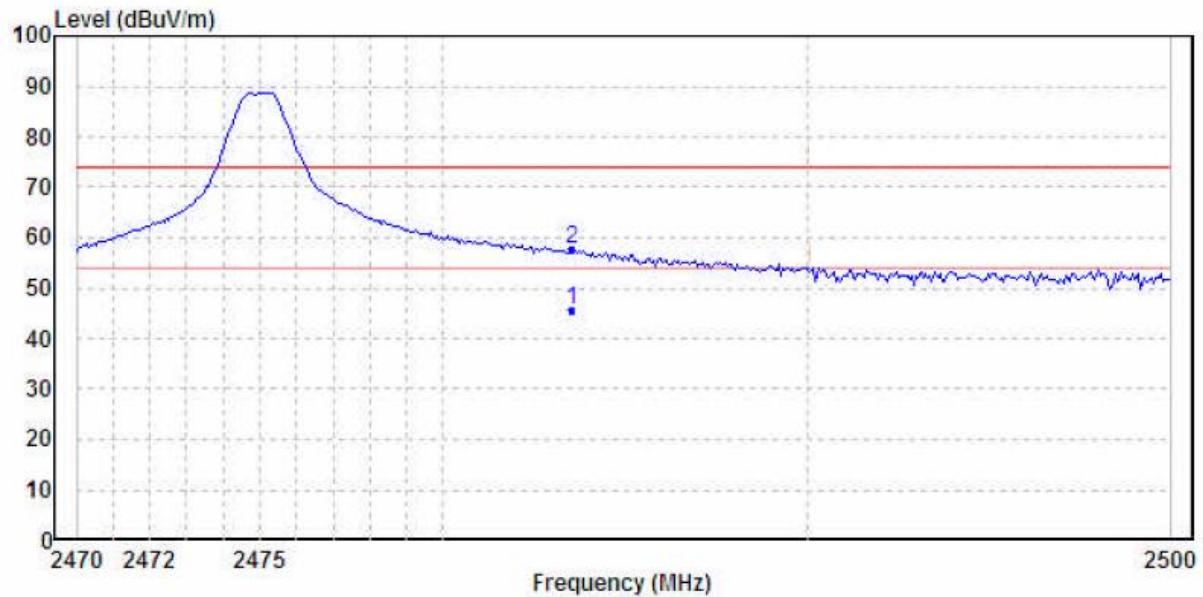
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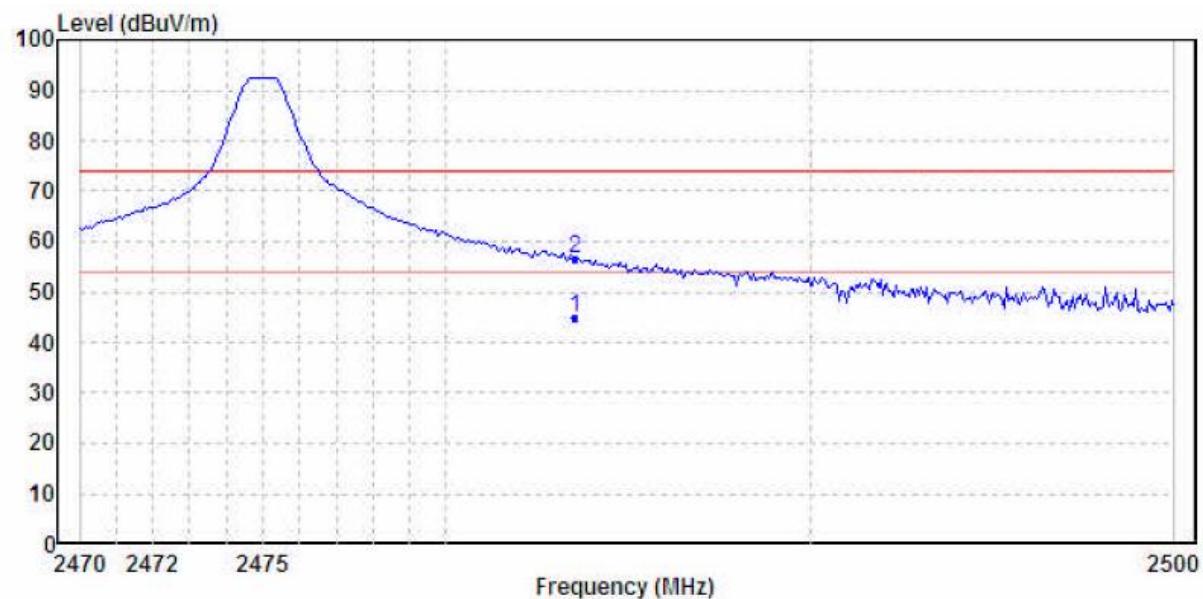
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### Emissions radiated outside of the specified frequency bands (Highest)

Horizontal



Vertical



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### Limits for Radiated Emissions [FCC 47 CFR 15.209 Class B]:

Frequency Range [MHz]	Quasi-Peak Limits [ $\mu$ V/m]
0.009-0.490	2400/F (kHz)
0.490-1.705	24000/F (kHz)
1.705-30	30
30-88	100
88-216	150
216-960	200
Above960	500

The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

#### Remarks:

Calculated measurement uncertainty (9kHz-30MHz): 2.0dB /(30MHz – 1GHz): 4.9dB

Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

### Results of TX mode (9kHz – 30MHz): PASS

Emissions detected are more than 20 dB below the FCC Limits

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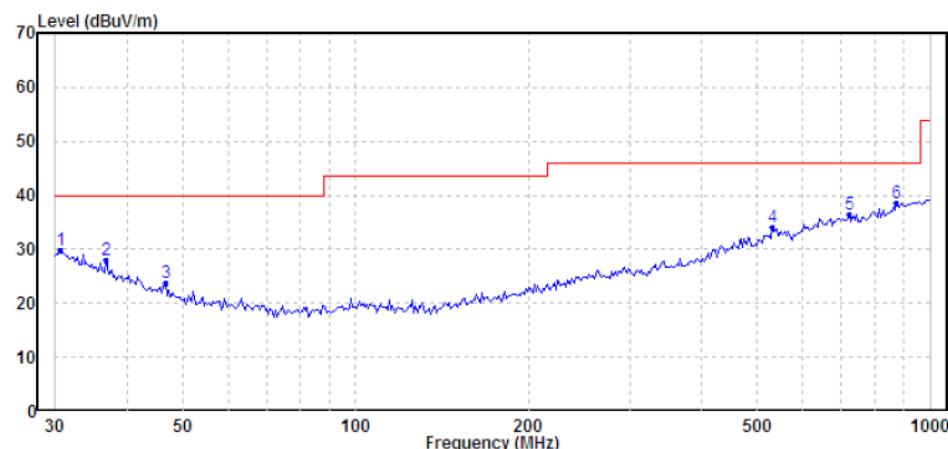
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Results of TX mode (30MHz – 1GHz)(2405MHz worst case): PASS

Horizontal



Ambient Temperature: 25°C

Relative Humidity : 50%

	Freq	Limit	Over			
	Level	Line	Limit	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB		
1	30.638	29.93	40.00	-10.07	QP	Horizontal
2	36.766	28.11	40.00	-11.89	QP	Horizontal
3	46.666	23.75	40.00	-16.25	QP	Horizontal
4	531.964	33.96	46.00	-12.04	QP	Horizontal
5	724.261	36.49	46.00	-9.51	QP	Horizontal
6	875.247	38.56	46.00	-7.44	QP	Horizontal

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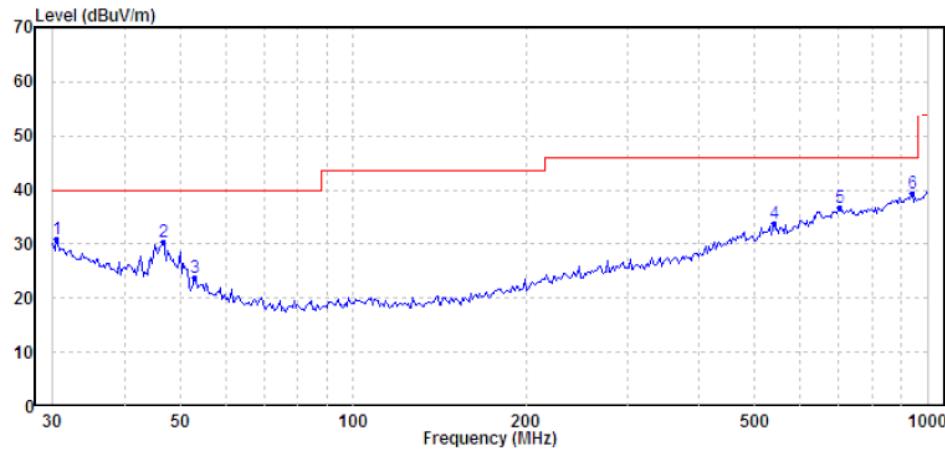
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**Results of TX mode (30MHz – 1GHz) (2405MHz worst case): PASS**

Vertical



Ambient Temperature: 25°C

Relative Humidity : 50%

Freq	Level	Limit	Over	Remark	Pol/Phase
		Line	Limit		
1	30.424	30.84	40.00	-9.16 QP	Vertical
2	46.666	30.43	40.00	-9.57 QP	Vertical
3	52.945	23.88	40.00	-16.12 QP	Vertical
4	539.478	33.74	46.00	-12.26 QP	Vertical
5	704.226	36.72	46.00	-9.28 QP	Vertical
6	938.833	39.27	46.00	-6.73 QP	Vertical

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### 3.1.2 AC Mains Conducted Emissions (0.15MHz to 30MHz)

Test Requirement: FCC 47CFR 15.207  
Test Method: ANSI C63.10:2013  
Test Date: N/A  
Mode of Operation: TX mode  
Test Voltage: 120V a.c. 60Hz

Ambient Temperature: 25°C      Relative Humidity: 51%      Atmospheric Pressure: 101 kPa

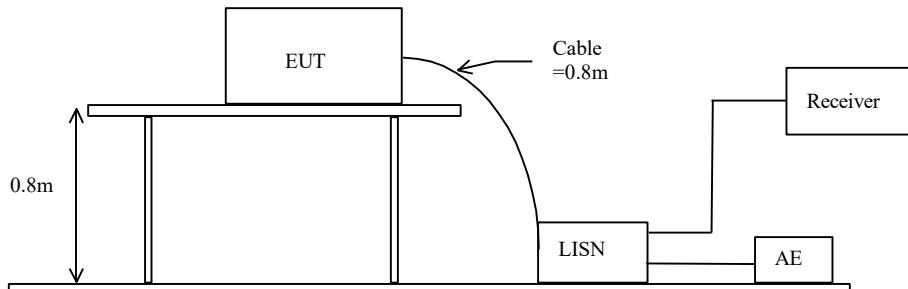
#### Test Method:

The test was performed in accordance with ANSI C63.10:2013, with the following: an initial measurement was performed in peak and average detection mode on the live line, any emissions recorded within 30dB of the relevant limit line were re-measured using quasi-peak and average detection on the live and neutral lines with the worst case recorded in the table of results.

#### Receiver Setting:

Bandw. = 9 kHz, Meas. Time= 10.0 ms, Step Width = 5.0kHz  
Detector = MaxPeak and CISPR AV

#### Test Setup:



#### Limits for Conducted Emissions (FCC 47 CFR 15.207):

Frequency Range [MHz]	Quasi-Peak Limits [dB $\mu$ V]	Average [dB $\mu$ V]
0.15-0.5	66 to 56*	56 to 46*
0.5-5.0	56	46
5.0-30.0	60	50

\* Decreases with the logarithm of the frequency.

Remarks:

Calculated measurement uncertainty (0.15MHz – 30MHz): 3.25dB

Results: N/A

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### 3.1.3 Antenna Requirement

Ambient temperature 25°C

Relative humidity 57%

## Test Requirements: § 15.203

## Test Specification:

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

## Test Results:

This is Integral antenna. There is no external antenna, the antennal gain =0dBi. User is unable to remove or changed the Antenna.



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### 3.1.4 20dB Bandwidth of Fundamental Emission

Ambient temperature 25°C

Relative humidity 57%

Test Requirement: FCC 47 CFR 15.249  
Test Method: ANSI C63.10:2013  
Test Date: 2025-05-08  
Mode of Operation: Tx mode

### Test Method:

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

The measurement bandwidth settings are **RBW = 30 kHz** and **VBW = 100 kHz**.

## Test Setup:

As Test Setup of clause 3.1.1 in this test report.

## Test Report

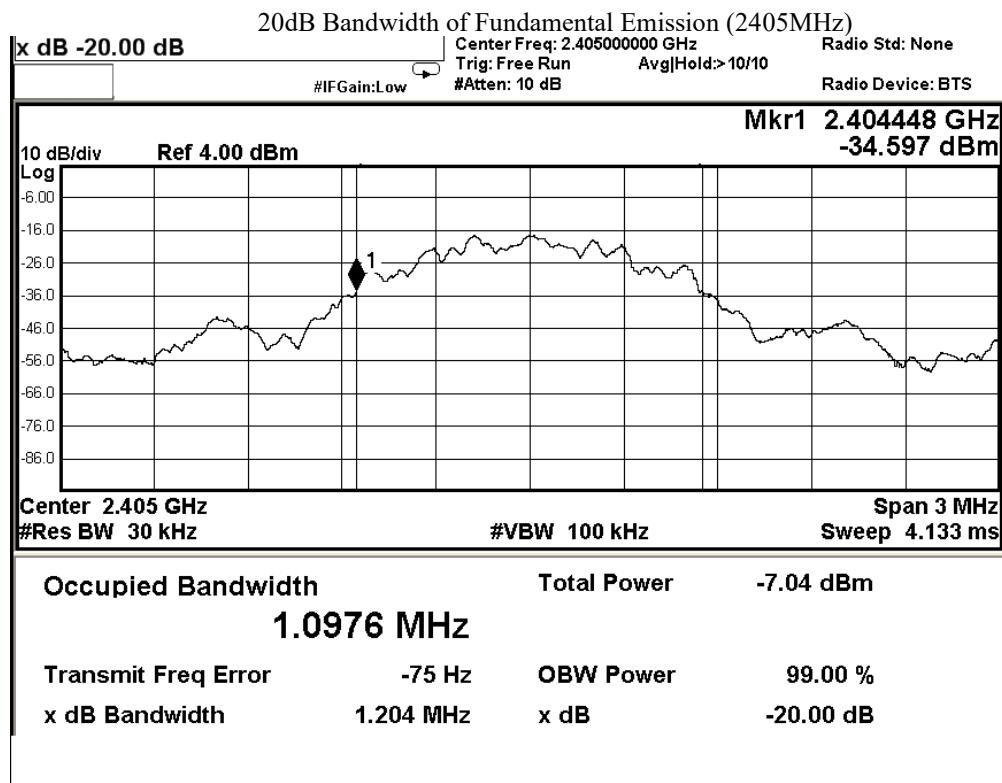
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### Limits for 20dB Bandwidth of Fundamental Emission (Low Frequency Channel):

Ant 1

Frequency Range [MHz]	20dB Bandwidth [MHz]
2405.0	1.204



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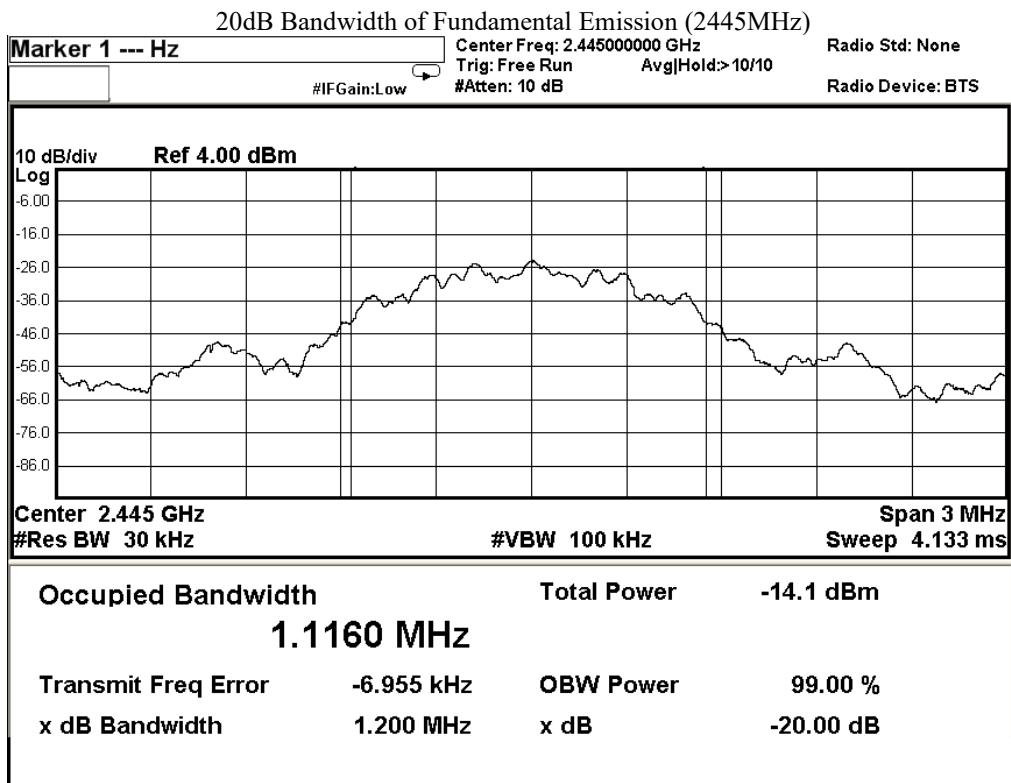
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### Limits for 20dB Bandwidth of Fundamental Emission (Middle Frequency Channel):

Frequency Range [MHz]	20dB Bandwidth [MHz]
2445.0	1.200



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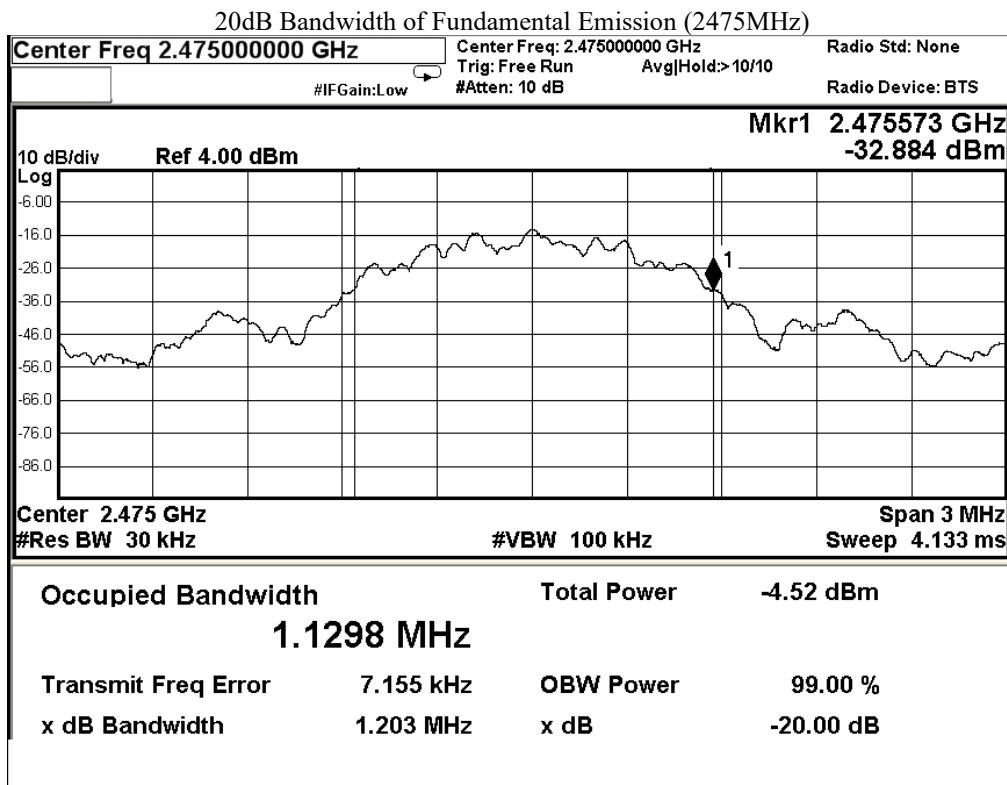
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### Limits for 20dB Bandwidth of Fundamental Emission (High Frequency Channel):

Frequency Range [MHz]	20dB Bandwidth [MHz]
2475.0	1.203



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### Appendix A

#### List of Measurement Equipment

##### Radiated Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM215	MULTIDEVICE CONTROLLER	EMCO	2090	00024676	N/A	N/A
EM217	ELECTRIC POWERED TURNTABLE	EMCO	2088	00029144	N/A	N/A
EM218	ANECHOIC CHAMBER	ETS-LINDGREN	FACT-3	--	2024-04-18	2029-04-18
EM356	ANTENNA POSITIONING TOWER	ETS-LINDGREN	2171B	00150346	N/A	N/A
EM293	SPECTRUM ANALYZER	AGILENT TECHNOLOGIES	N9020A	MY50510152	2024-11-07	2025-11-07
EM363	SIGNAL ANALYZER(10HZ-40GHZ)	R & S	FSV40	101231	2024-01-17	2026-01-17
EM299	BROADBAND HORN ANTENNA	ETS-LINDGREN	3115	00114120	2023-01-25	2026-01-25
EM300	PYRAMIDAL STANDARD GAIN HORN ANTENNA	ETS-LINDGREN	3160-09	00130130	2023-01-16	2026-01-16
EM301	PYRAMIDAL STANDARD GAIN HORN ANTENNA	ETS-LINDGREN	3160-10	00130988	2023-02-15	2026-02-15
EM353	LOOP ANTENNA	ETS_LINDGREN	6502	00206533	2022-09-26	2025-09-26
EM355	BICONILOG ANTENNA	ETS-LINDGREN	3143B	00094856	2022-08-26	2025-08-26
EM200	DUAL CHANNEL POWER METER	R & S	NRVD	100592	2023-08-02	2025-08-02

##### Line Conducted

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM191	LISN	R & S	ESH3-Z5	0831.5518.52	2025-03-20	2026-03-20
EM181	EMI TEST RECEIVER	R & S	ESIB7	100072	2025-04-24	2026-04-24
EM179	IMPULSE LIMITER	R & S	ESH3-Z2	357.8810.52/54	2025-03-17	2027-03-17
EM154	SHIELDING ROOM	SIEMENS MATSUSHITA COMPONENTS	N/A	803-740-057-99A	2022-02-06	2027-02-06
N/A	MEASUREMENT AND EVALUATION SOFTWARE	ROHDE & SCHWARZ	BSIB-K1	V1.20	N/A	N/A

Remarks:-

N/A Not Applicable or Not Available

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### Appendix B

#### Photographs of EUT

View of the product



View of the product



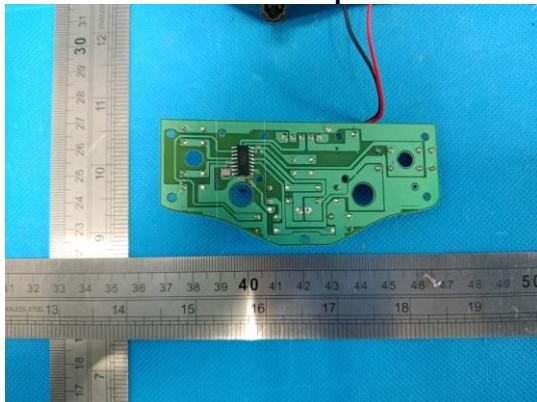
View of the product



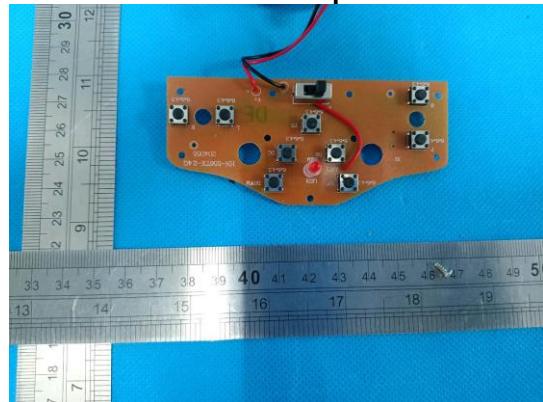
View of the product



Inside View of the product



Inner Circuit Top View



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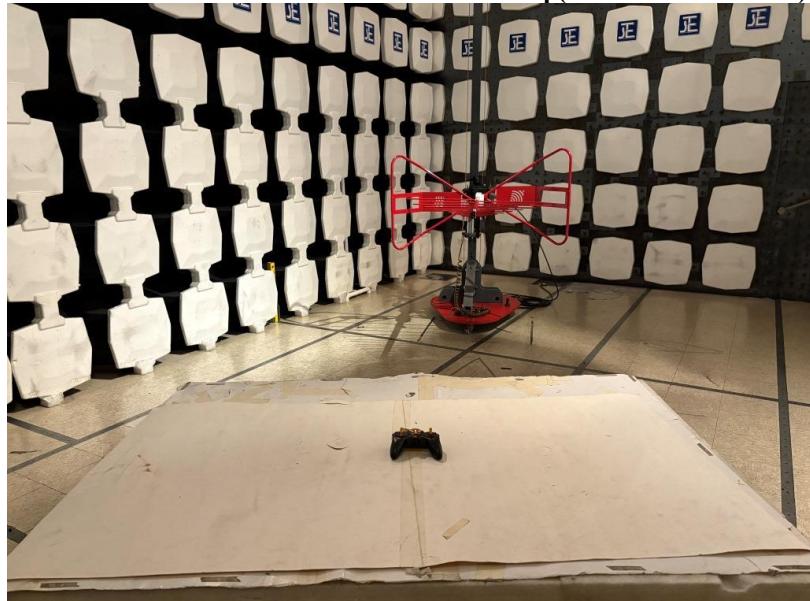
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### Photographs of EUT

**Measurement of Radiated Emission Test Set Up(9kHz – 30MHz)**



**Measurement of Radiated Emission Test Set Up(30MHz to 1000MHz)**



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### Photographs of EUT

Measurement of Radiated Emission Test Set Up(Above 1000MHz)



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