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TESTING
CNAS L0446



Page 1 of 50

Test Report

Verified code: 565243

Report No.: E202111246805-3

Customer: Chengdu Vantron Technology Co., Ltd.

Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China

Sample Name: Tablet

Sample Model: VT-TAB55-RK68-DB8

Receive Sample Date: Dec.02,2021

Test Date: Dec.10,2021 ~ Apr.14,2022

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

Test Result: Pass

Prepared by: Yang Zhaoyun

Reviewed by: Jiang Tao

Approved by: Xiao Liang

GUANGZHOU GRG METROLOGY & TEST CO., LTD

Issued Date: 2022-06-01

GUANGZHOU GRG METROLOGY & TEST CO., LTD.

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5. Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.

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REPORT ISSUED HISTORY

Report Version	Report No.	Description	Compile Date
1.0	E202111246805-3	Original Issue	2022-05-26

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1. TEST RESULT SUMMARY

Technical Requirements		
FCC 47 CFR Part 15 Subpart C 15.247 ANSI C63.10-2013 KDB 558074 D01 15.247 measurement guidance v05r02		
Limit / Severity	Item	Result
§15.203	Antenna Requirement	Pass
§15.207(a)	Conducted Emission	Pass
§15.247(d) & 15.205 & 15.209	Radiated Spurious Emission	Pass
§15.247(b)(3)	Maximum Peak Output Power	Pass
§15.247(e)	Power Spectral Density	Pass
§15.247(a)(2)	6dB bandwidth	Pass
§15.247(d)	Conducted band edges and Spurious Emission	Pass
§15.247 (d) & 15.205 & 15.209	Restricted bands of operation	Pass

The antenna is FPC antenna. The max gain of antenna is -0.41dBi, which accordance 15.203 is considered sufficient to comply with the provisions of this section.

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2. GENERAL DESCRIPTION OF EUT

2.1 APPLICANT

Name: Chengdu Vantron Technology Co., Ltd.
Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China



2.2 MANUFACTURER

Name: Dolby Laboratories, Inc.
Address: 1275 Market Street, San Francisco CA 94103, USA

2.3 FACTORY

Name: Chengdu Vantron Technology Co., Ltd.
Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China

2.4 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment: Tablet
Model No.: VT-TAB55-RK68-DB8
Adding Model: /
Models discrepancy: /
Trade Name: 
FCC ID: 2AAGETAB55
Power Supply: 5Vdc power supplied by adapter
3.8Vdc power supplied by Rechargeable Lithium-ion battery
Model:FJ-SW1260502000UN
Adapter Specification: Input:100-240V~ 50/60Hz 0.4A Max
Output:5.0V  2.0A 10.0W
Model:496867-2P1S
Battery Specification: Voltage:3.8V
Capacity:7200mAh 27.36Wh
Frequency Range: 2402-2480MHz
Transmit Power: GFSK for 1Mbps: 8.40dBm
Modulation type: GFSK for 1Mbps
Channel space: 2MHz
Antenna Specification: FPC antenna -0.41dBi gain (Max.)
Temperature Range: 0°C~40°C
Hardware Version: V3.0
Software Version: Android 7
Sample No: E202111246805-0001
E202111246805-0002
Note: /

2.5 CHANNELLIST

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	10	2422	20	2442	30	2462
01	2404	11	2424	21	2444	31	2464
02	2406	12	2426	22	2446	32	2466
03	2408	13	2428	23	2448	33	2468
04	2410	14	2430	24	2450	34	2470
05	2412	15	2432	25	2452	35	2472
06	2414	16	2434	26	2454	36	2474
07	2416	17	2436	27	2456	37	2476
08	2418	18	2438	28	2458	38	2478
09	2420	19	2440	29	2460	39	2480

2.6 TEST OPERATION MODE

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

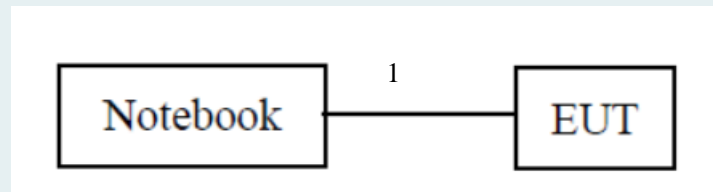
2.7 LOCAL SUPPORTIVE

Name of Equipment	Manufacturer	Model	Serial Number	Note
Adapter	/	/	/	/
Notebook	Dell	Latitude3490	2095LR2	/

No.	Cable Type	Qty.	Shielded Type	Ferrite Core(Qty.)	Length
1	USB Cable	1	No	0	0.5m (unshielded)

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2.8 CONFIGURATION OF SYSTEM UNDER TEST



Test software:

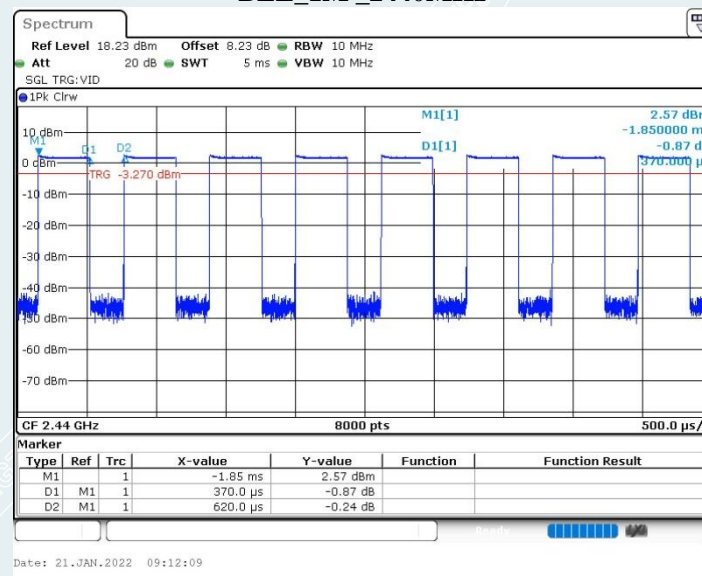
Software version	Test level
ADB	Default

2.9 DUTY CYCLE

EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.5°C/48%RH	Test Voltage	DC 3.8V
Tested By	Lu Wei	Tested Date	2022-01-21

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	DC [%]	T [s]
BLE_1M	Ant1	2440	0.37	0.62	59.68	0.00037

BLE_1M_2440MHz



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 Guanguang 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.

USA A2LA(Certificate #2861.01)

China CNAS(L0446)

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~1000MHz	4.30dB
		1GHz~18GHz	5.60dB
		18GHz~26.5GHz	3.65dB
	Vertical	9kHz~30MHz	4.46dB
		30MHz~1000MHz	4.30dB
		1GHz~18GHz	5.60dB
		18GHz~26.5GHz	3.65dB
Conduction Emission		9kHz~150kHz	2.80dB
		150kHz~10MHz	2.80dB
		10MHz~30MHz	2.20dB

Measurement	Uncertainty
RF frequency	6.0×10^{-6}
RF power conducted	0.78 dB
Occupied channel bandwidth	0.4 dB
Unwanted emission, conducted	0.68 dB
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
Conducted Emissions				
EMI TEST RECEIVER	R&S	ESCI	100783	2022-09-13
LISN(EUT)	R&S	ENV216	101543	2022-09-14
Test S/W	EZ	CCS-3A1-CE		
Radiated Spurious Emission&Restricted bands of operation				
Test S/W	EZ	CCS-03A1	/	/
Test Receiver	R&S	ESR7	102444	2022-09-21
Preamplifier	EMEC	EM330	I00426	2022-03-21
Loop Antenna	TESEQ	HLA6121	52599	2022-04-21
Bi-log Antenna	Schwarzbeck	VULB9160	VULB9160-3401	2022-10-27
Spectrum Analyzer	Agilent	N9020B	MY57120179	2022-08-08
Horn Antenna	Schwarzbeck	BBHA9120D (1201)	02143	2022-10-22
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170-497	2022-10-16
Amplifier	Tonscend	TAP01018048	AP20E8060075	2022-05-09
Amplifier	Tonscend	TAP184050	AP20E806071	2022-05-17
Test S/W	Tonscend	JS36-RE/2.5.1.5		
6dB Bandwidth				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10
Maximum Peak Output Power				
Pulse power sensor	Anritsu	MA2411B	1126150	2023-03-01
Power meter	Anritsu	ML2495A	1204003	2023-02-28
Conducted band edges and Spurious Emission				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10
Power Spectral Density				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10

Note: The calibration interval of the above test instruments is 12 months.

5. CONDUCTED EMISSION MEASUREMENT

5.1 LIMITS

Frequency range	Limits (dB μ V)	
	Quasi-peak	Average
150kHz~0.5MHz	66~56	56~46
0.5MHz~5MHz	56	46
5MHz~30MHz	60	50

NOTE: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases in line with the logarithm of the frequency in the range of 150kHz to 0.5MHz.

5.2 TEST PROCEDURES

Procedure of Preliminary Test

Test procedures follow ANSI C63.10:2013.

For measurement of the disturbance voltage the equipment under test (EUT) is connected to the power supply mains and any other extended network via one or more artificial network(s). An EUT, whether intended to be grounded or not, and which is to be used on a table is configured as follows:

– Either the bottom or the rear of the EUT shall be at a controlled distance of 40 cm from a reference ground plane. This ground plane is normally the wall or floor of a shielded room. It may also be a grounded metal plane of at least 2 m by 2 m. This is physically accomplished as follows:

1) place the EUT on a table of non-conducting material which is at least 80 cm high. Place the EUT so that it is 40 cm from the wall of the shielded room, or

2) place the EUT on a table of non-conducting material which is 40 cm high so that the bottom of the EUT is 40 cm above the ground plane;

– All other conductive surfaces of the EUT shall be at least 80 cm from the reference ground plane;

– The EUT are placed on the floor that one side of the housings is 40 cm from the vertical reference ground plane and other metallic parts;

– Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 cm to 40 cm long, hanging approximately in the middle between the ground plane and the table.

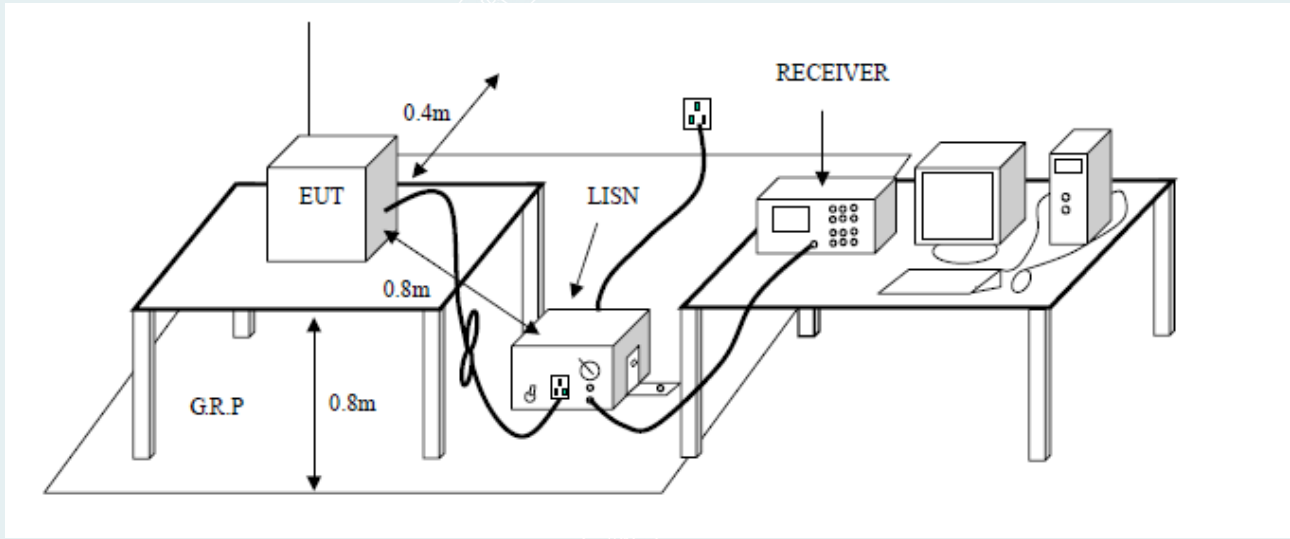
– I/O cables that are connected to a peripheral shall be bundled in the centre. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1 m.

The test mode(s) described in Item 2.6 were scanned during the preliminary test. After the preliminary scan, we found the test mode described in Item 2.6 producing the highest emission level. The EUT configuration and cable configuration of the above highest emission levels were recorded for reference of the final test.

Procedure of 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, 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.

5.3 TEST SETUP



5.4 DATA SAMPLE

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	Pass

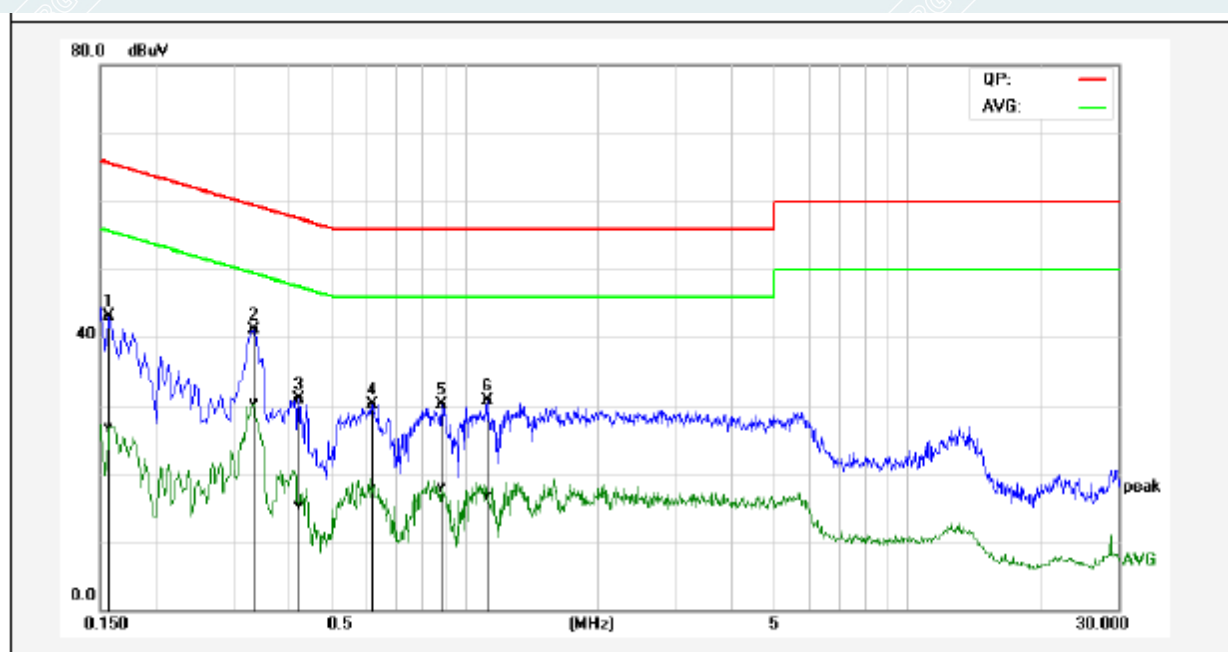
Factor = Insertion loss of LISN + Cable Loss
Result = Quasi-peak Reading/ Average Reading + Factor
Limit =Limit stated in standard
Margin = Result (dBuV) – Limit (dBuV)

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5.5 TEST RESULTS

EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.2°C/59%RH	Test Mode	BLE 1M 2402MHz
Tested By	Wang Xinyuan	Line	L
Tested Date	2022-04-14	Test Voltage	AC 120V/60Hz

(The chart below shows the highest readings taken from the final data.)



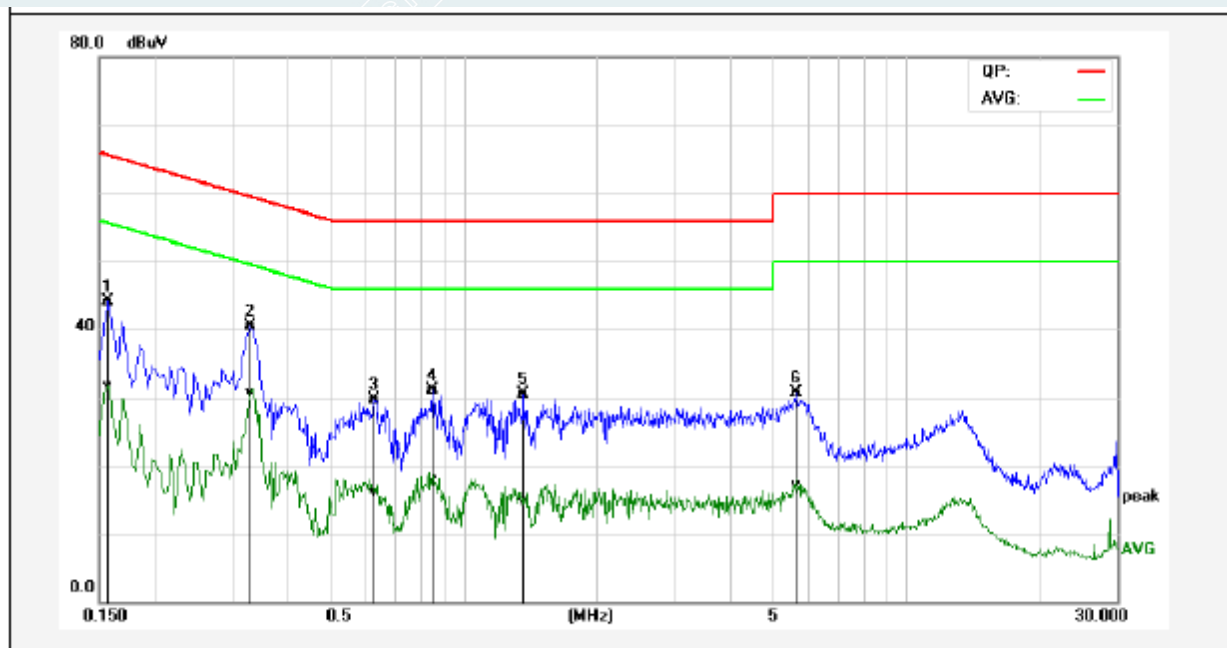
No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1	0.1580	33.53	17.16	9.53	43.06	26.69	65.56	55.57	-22.50	-28.88	Pass
2*	0.3339	31.54	20.67	9.56	41.10	30.23	59.35	49.35	-18.25	-19.12	Pass
3	0.4220	21.36	5.83	9.57	30.93	15.40	57.41	47.41	-26.48	-32.01	Pass
4	0.6180	20.52	8.19	9.57	30.09	17.76	56.00	46.00	-25.91	-28.24	Pass
5	0.8860	20.53	8.39	9.59	30.12	17.98	56.00	46.00	-25.88	-28.02	Pass
6	1.1260	21.10	7.14	9.59	30.69	16.73	56.00	46.00	-25.31	-29.27	Pass

REMARKS: L = Live Line

Pre-scan all mode and recorded the worst case results in this report (TX-Low Channel(1Mbps))

EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.2°C/59%RH	Test Mode	BLE 1M 2402MHz
Tested By	Wang Xinyuan	Line	N
Tested Date	2022-04-14	Test Voltage	AC 120V/60Hz

(The chart below shows the highest readings taken from the final data.)



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1	0.1580	34.67	22.20	9.53	44.20	31.73	65.56	55.57	-21.36	-23.84	Pass
2*	0.3300	30.92	21.06	9.56	40.48	30.62	59.45	49.45	-18.97	-18.83	Pass
3	0.6300	20.14	6.59	9.57	29.71	16.16	56.00	46.00	-26.29	-29.84	Pass
4	0.8500	21.59	8.33	9.59	31.18	17.92	56.00	46.00	-24.82	-28.08	Pass
5	1.3700	20.89	5.02	9.59	30.48	14.61	56.00	46.00	-25.52	-31.39	Pass
6	5.6740	20.93	7.33	9.69	30.62	17.02	60.00	50.00	-29.38	-32.98	Pass

REMARKS: N = Neutral Line.

Pre-scan all mode and recorded the worst case results in this report (TX-Low Channel(1Mbps))

6. RADIATED SPURIOUS EMISSIONS

6.1 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($\mu\text{V/m}$)	Measurement distance(m)	Quasi-peak(dB $\mu\text{V/m}$)@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 9-90kHz and 110-490kHz 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 (dB $\mu\text{V/m}$).
The Avg Limit=54+20*log(3/1)=63.54 (dB $\mu\text{V/m}$).

6.2 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 0.8m 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 3meter.
- The EUT was set into operation.

Pre measurement:

- The turntable rotates from 0 ° to 360 °.
- The antenna height is 1.0meter.
- 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 ° to 360 °) and by rotating the elevation axes (0 ° to 360 °).
- 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 0.8m 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 ° to 360 °.
- 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 ° to 360 ° 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 1.5m 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 antenna is moved spherical over the EUT in different polarisations of the antenna.

Final measurement:

- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement 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 10 Hz. if the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$, Where T is defined in section 2.9.

6.3 TEST SETUP

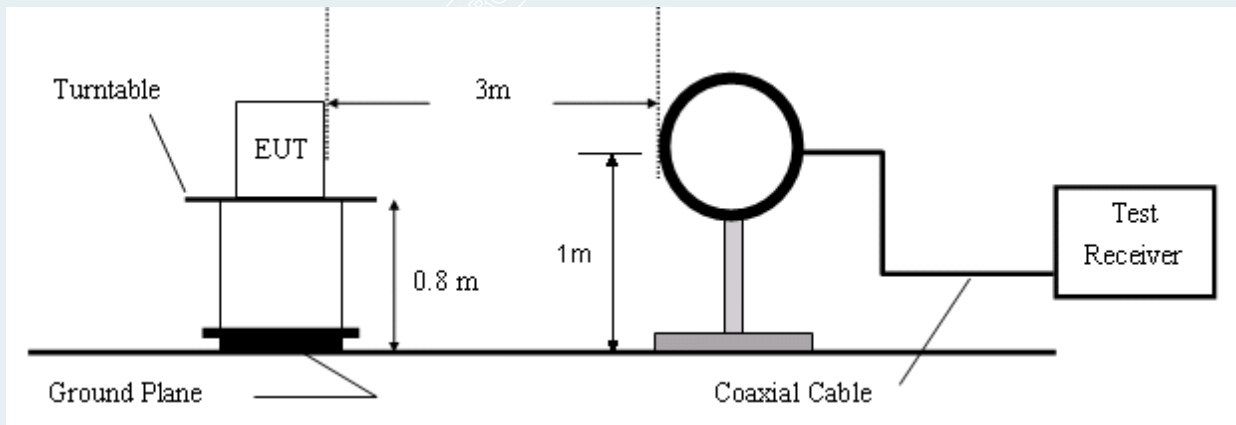


Figure 1. 9kHz to 30MHz radiated emissions test configuration

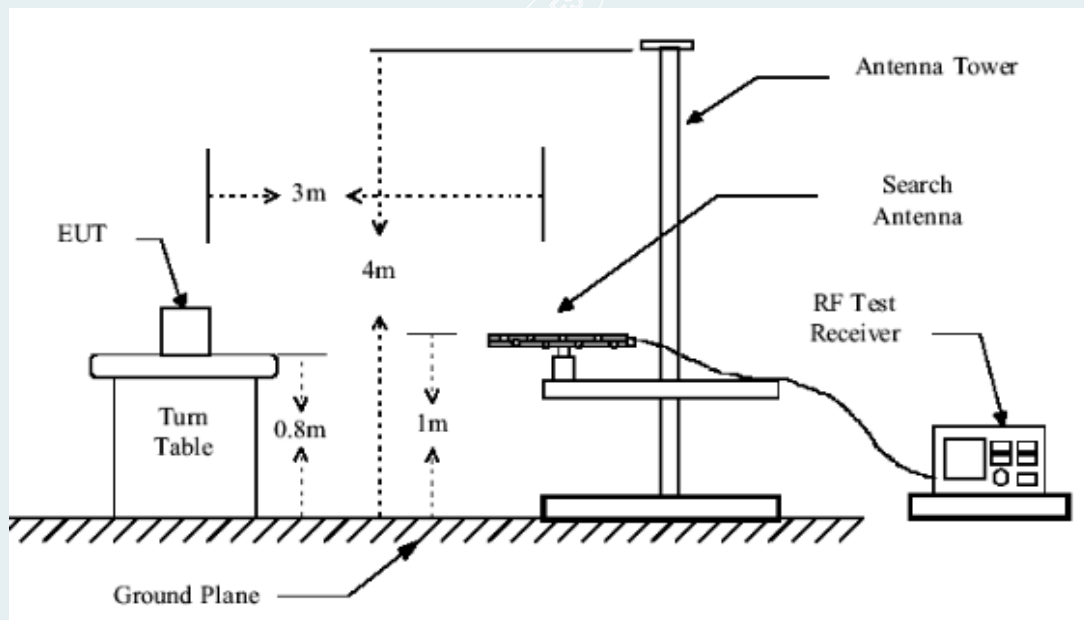


Figure 2. 30MHz to 1GHz radiated emissions test configuration

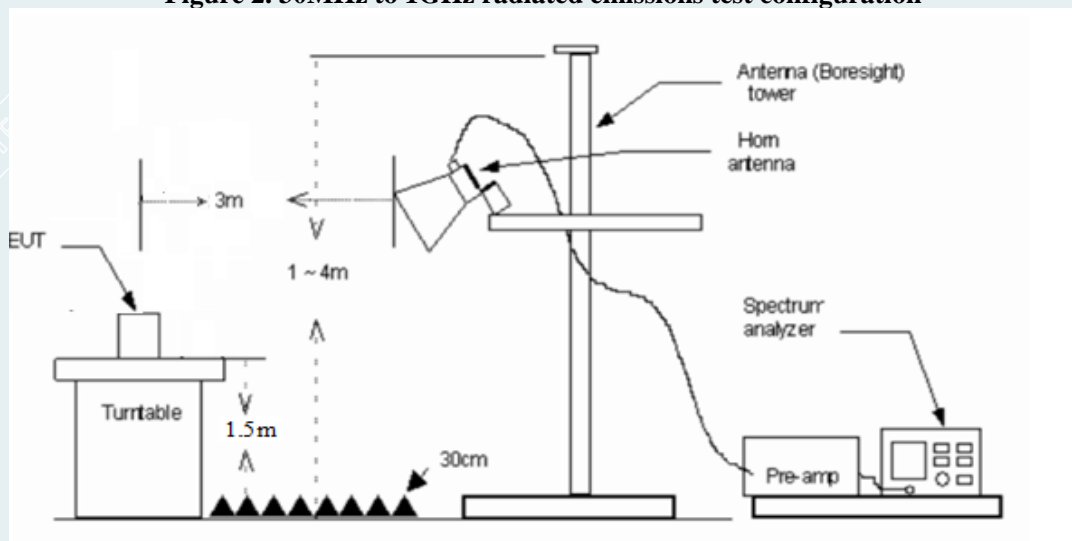


Figure 3. 1GHz to 18GHz radiated emissions test configuration

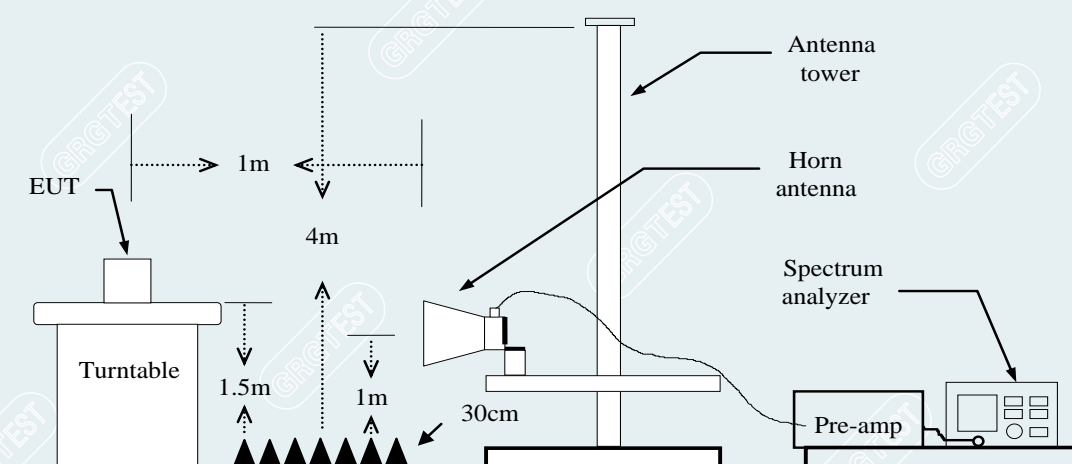


Figure 4. 18GHz to 26.5GHz radiated emissions test configuration

6.4 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 to 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

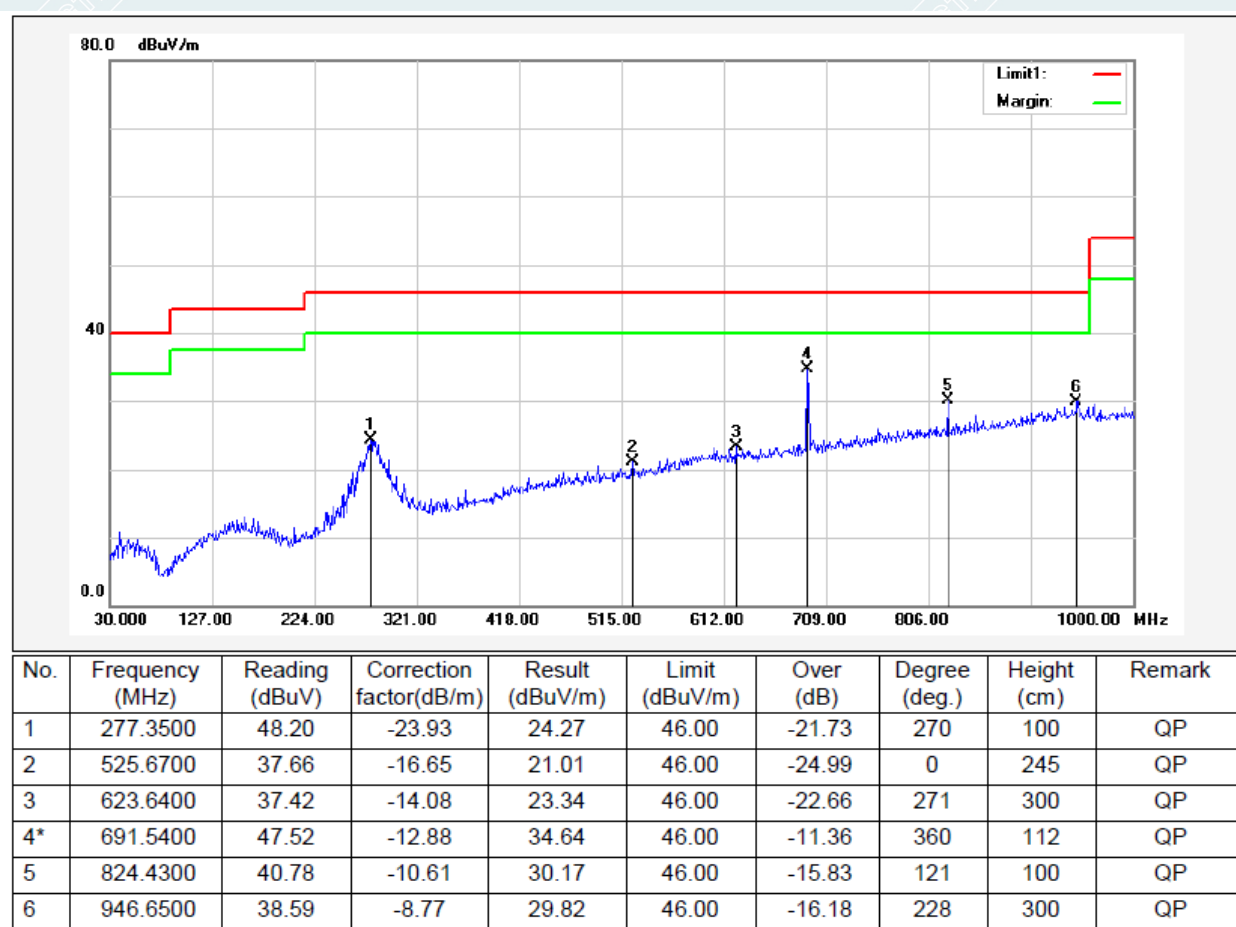
AVG = Average Reading

6.5 TEST RESULTS

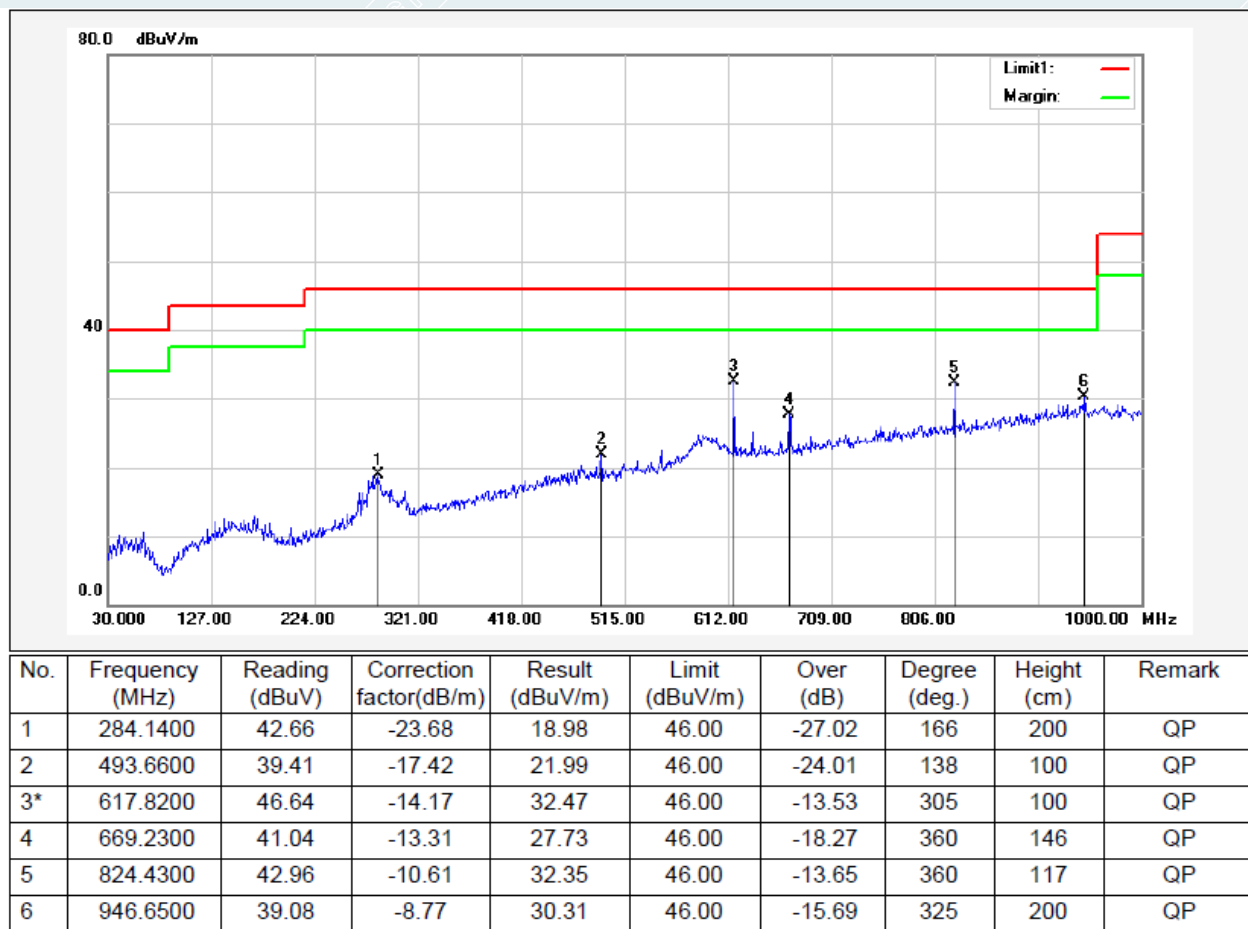
Below 1GHz

Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.8℃/50%RH	Test Voltage	AC 120V/60Hz
Test Mode	TX/1Mbps (2402MHz)	Polarity	Vertical
Tested By	Zeng Xianglong	Tested Date	2022-03-03



EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.8°C/50%RH	Test Voltage	AC 120V/60Hz
Test Mode	TX/1Mbps (2402MHz)	Polarity	Horizontal
Tested By	Zeng Xianglong	Tested Date	2022-03-03

**Remark:**

- 1 No emission found between lowest internal used/generated frequency to 30MHz.
- 2 Pre-scan all channels and recorded the worst case results in this report (TX-Low Channel(1Mbps))
- 3 Data of measurement within this frequency range in the table above the reading of PK detector are more 6dB than QP limit, therefore it's unnecessary to performed QP scan.
- 4 The IF bandwidth of Receiver between 30MHz to 1GHz was 120kHz.

Above 1GHz:

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.

Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

Mode: TX/1Mbps

Lowest Frequency (2402MHz)

Environment: 25°C/60%RH

Tested By:Lu Qiang

Date: 2021-12-28

Voltage: AC 120V/60Hz

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1030.5038	56.51	31.40	-25.11	74.00	42.60	100	320	Horizontal
2	1854.1068	59.75	37.88	-21.87	74.00	36.12	100	110	Horizontal
3	3296.2870	64.71	48.83	-15.88	74.00	25.17	200	142	Horizontal
4	4335.1669	52.00	39.43	-12.57	74.00	34.57	200	44	Horizontal
5	7689.9612	47.16	44.36	-2.80	74.00	29.64	100	160	Horizontal
6	10178.3973	43.00	45.74	2.74	74.00	28.26	100	330	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1058.0073	57.19	32.15	-25.04	74.00	41.85	200	250	Vertical
2	1390.5488	58.03	34.49	-23.54	74.00	39.51	200	169	Vertical
3	1763.8455	56.56	34.23	-22.33	74.00	39.77	100	185	Vertical
4	3300.0375	57.23	41.41	-15.82	74.00	32.59	100	102	Vertical
5	7751.8440	46.14	44.19	-1.95	74.00	29.81	100	297	Vertical
6	9400.1750	43.91	45.69	1.78	74.00	28.31	200	331	Vertical

Mode: TX/1Mbps
Middle Frequency (2440MHz)
Environment: 25°C/60%RH
Tested By: Lu Qiang

Date: 2021-12-28
Voltage: AC 120V/60Hz

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1094.2618	57.21	32.31	-24.90	74.00	41.69	100	46	Horizontal
2	1757.8447	64.46	42.08	-22.38	74.00	31.92	200	282	Horizontal
3	3301.9127	53.90	38.06	-15.84	74.00	35.94	200	150	Horizontal
4	6154.1443	48.08	41.49	-6.59	74.00	32.51	100	177	Horizontal
5	8942.6178	44.65	44.58	-0.07	74.00	29.42	200	215	Horizontal
6	10802.8504	42.53	46.37	3.84	74.00	27.63	200	289	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1050.2563	56.96	31.89	-25.07	74.00	42.11	200	70	Vertical
2	1762.3453	62.14	39.79	-22.35	74.00	34.21	100	103	Vertical
3	1854.1068	62.77	40.90	-21.87	74.00	33.10	100	315	Vertical
4	3300.0375	57.47	41.65	-15.82	74.00	32.35	200	56	Vertical
5	7714.3393	46.79	44.21	-2.58	74.00	29.79	200	194	Vertical
6	13889.4862	36.99	45.90	8.91	74.00	28.10	200	352	Vertical

Mode: TX/1Mbps
 Highest Frequency (2480MHz)
 Environment: 25°C/60%RH
 Tested By: Lu Qiang

Date: 2021-12-28
 Voltage: AC 120V/60Hz

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1004.7506	56.43	31.28	-25.15	74.00	42.72	100	70	Horizontal
2	1854.1068	60.21	38.34	-21.87	74.00	35.66	100	54	Horizontal
3	3300.0375	63.52	47.70	-15.82	74.00	26.30	200	143	Horizontal
4	4653.9567	49.27	39.00	-10.27	74.00	35.00	200	338	Horizontal
5	7198.6498	47.99	44.87	-3.12	74.00	29.13	200	14	Horizontal
6	10802.8504	42.22	46.06	3.84	74.00	27.94	200	232	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1000.0000	57.16	32.00	-25.16	74.00	42.00	200	241	Vertical
2	1854.1068	62.78	40.91	-21.87	74.00	33.09	100	332	Vertical
3	3301.9127	56.80	40.96	-15.84	74.00	33.04	200	110	Vertical
4	4697.0871	48.61	38.95	-9.66	74.00	35.05	200	7	Vertical
5	7196.7746	46.79	43.66	-3.13	74.00	30.34	200	94	Vertical
6	9503.3129	45.11	46.12	1.01	74.00	27.88	100	199	Vertical

Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3 Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4 Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, 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.

Above 18GHz:

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.

Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

Mode: TX/1Mbps

Lowest Frequency (2402MHz)

Environment: 25°C/60%RH

Tested By: Lu Qiang

Date: 2022-03-26

Voltage: AC 120V/60Hz

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18246.0750	56.38	44.80	-11.58	83.54	38.74	150	53	Horizontal
2	18844.9000	57.16	45.91	-11.25	83.54	37.63	150	310	Horizontal
3	19955.4250	55.16	44.30	-10.86	83.54	39.24	150	188	Horizontal
4	21744.6750	54.65	44.71	-9.94	83.54	38.83	150	72	Horizontal
5	23435.7500	54.28	45.54	-8.74	83.54	38.00	150	278	Horizontal
6	25944.1000	53.86	45.56	-8.30	83.54	37.98	150	85	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18129.6250	57.22	45.60	-11.62	83.54	37.94	150	307	Vertical
2	19226.9750	55.76	44.69	-11.07	83.54	38.85	150	360	Vertical
3	20403.8000	54.63	44.08	-10.55	83.54	39.46	150	120	Vertical
4	21644.8000	54.88	44.95	-9.93	83.54	38.59	150	198	Vertical
5	24113.2000	54.71	46.48	-8.23	83.54	37.06	150	224	Vertical
6	26189.7500	54.18	46.24	-7.94	83.54	37.30	150	244	Vertical

Mode: TX/1Mbps
Middle Frequency (2440MHz)
Environment: 25°C/60%RH
Tested By: Lu Qiang

Date: 2022-03-26
Voltage: AC 120V/60Hz

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18314.9250	56.79	45.23	-11.56	83.54	38.31	150	354	Vertical
2	20520.2500	54.71	44.23	-10.48	83.54	39.31	150	228	Vertical
3	21662.2250	54.31	44.38	-9.93	83.54	39.16	150	274	Vertical
4	22869.2250	53.80	44.78	-9.02	83.54	38.76	150	241	Vertical
5	24151.4500	53.55	45.33	-8.22	83.54	38.21	150	347	Vertical
6	26148.9500	54.10	46.07	-8.03	83.54	37.47	150	12	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18332.3500	57.01	45.46	-11.55	83.54	38.08	150	309	Horizontal
2	19407.1750	55.79	44.82	-10.97	83.54	38.72	150	263	Horizontal
3	21639.2750	55.05	45.13	-9.92	83.54	38.41	150	6	Horizontal
4	22958.4750	54.53	45.57	-8.96	83.54	37.97	150	134	Horizontal
5	25302.3500	53.63	45.93	-7.70	83.54	37.61	150	13	Horizontal
6	26208.8750	53.42	45.52	-7.90	83.54	38.02	150	231	Horizontal

Mode: TX/1Mbps
Highest Frequency (2480MHz)
Environment: 25°C/60%RH
Tested By: Lu Qiang

Date: 2022-03-26
Voltage: AC 120V/60Hz

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18087.9750	56.70	45.07	-11.63	83.54	38.47	150	161	Horizontal
2	19374.4500	56.67	45.68	-10.99	83.54	37.86	150	238	Horizontal
3	20256.7500	55.73	45.07	-10.66	83.54	38.47	150	142	Horizontal
4	22910.8750	54.00	45.00	-9.00	83.54	38.54	150	277	Horizontal
5	24728.6000	53.75	45.66	-8.09	83.54	37.88	150	122	Horizontal
6	26232.2500	54.06	46.21	-7.85	83.54	37.33	150	348	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18311.1000	56.95	45.39	-11.56	83.54	38.15	150	7	Vertical
2	19992.8250	55.14	44.28	-10.86	83.54	39.26	150	354	Vertical
3	21455.6750	54.46	44.41	-10.05	83.54	39.13	150	213	Vertical
4	22221.1000	54.72	45.02	-9.70	83.54	38.52	150	239	Vertical
5	23458.7000	54.04	45.31	-8.73	83.54	38.23	150	7	Vertical
6	26263.2750	53.93	46.15	-7.78	83.54	37.39	150	168	Vertical

7. 6dB BANDWIDTH

7.1 LIMITS

Systems using digital modulation techniques may operate in the 902–928MHz, 2400–2483.5MHz, and 5725–5850MHz bands. The minimum 6 dB bandwidth shall be at least 500kHz.

7.2 TEST PROCEDURES

- 1) Remove the antenna from the EUT, and then connect a low loss RF cable from antenna port to the spectrum analyzer.
- 2) Set resolution bandwidth (RBW) = 100kHz. Set the video bandwidth (VBW) $\geq 3 \times$ RBW. Detector = Peak. Trace mode = max hold. Sweep = auto couple. Allow the trace to stabilize, record 6dB bandwidth value.
- 3) Repeat above procedures until all frequencies measured were complete.

7.3 TEST SETUP



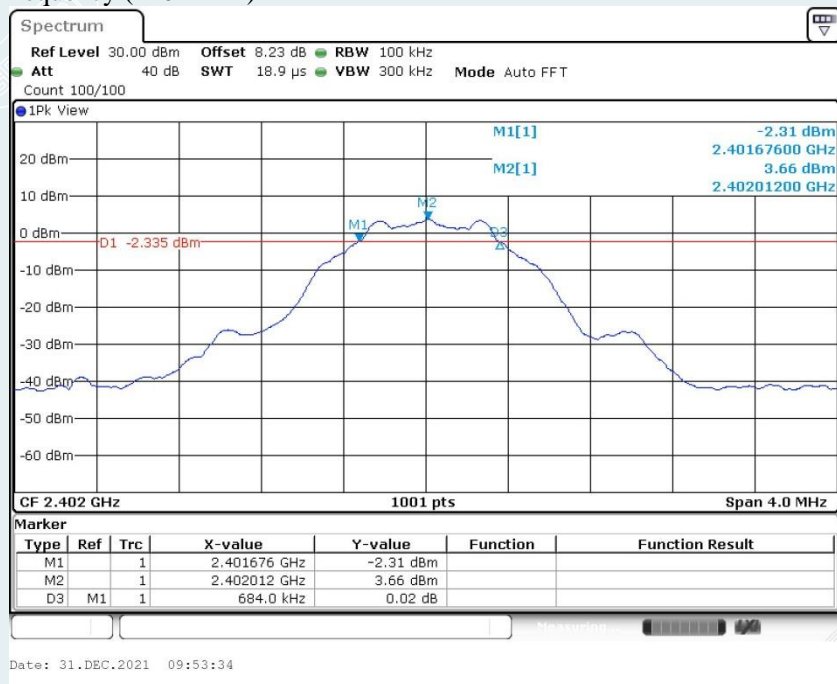
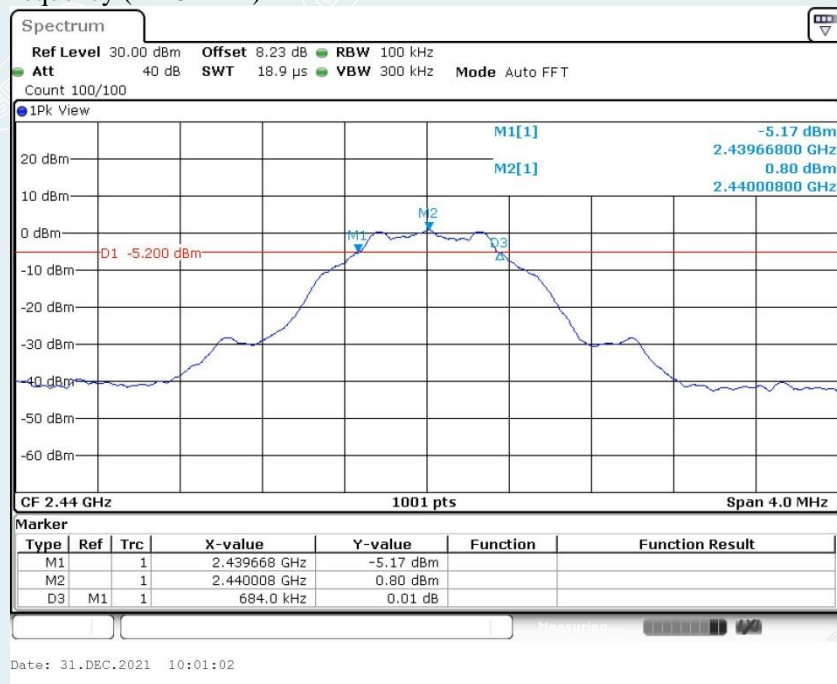
7.4 TEST RESULTS

Environment: 24.1°C/49%RH
Tested By: Lu Wei

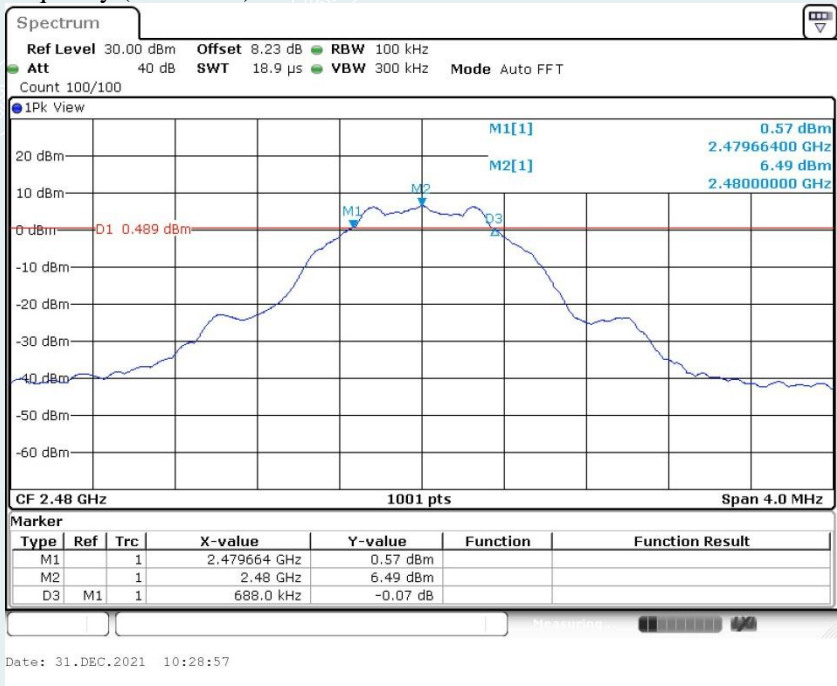
Voltage: DC 3.8V
Date: 2021-12-31

For 1Mbps

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Lowest	2402	684	≥ 500	PASS
Middle	2440	684		PASS
Highest	2480	688		PASS

For 1Mbps**Lowest Frequency (2402MHz)****Middle Frequency (2440 MHz)**

Highest Frequency (2480MHz)



----- The following blanks -----

8. MAXIMUM PEAK OUTPUT POWER

8.1 LIMITS

The maximum Peak output power measurement is 1W

8.2 TEST PROCEDURES

- 1) RF output of EUT was connected to the broad band peak RF power meter by RF cable. The path loss was compensated to the results for each measurement.
- 2) Set to the maximum power setting and enable the EUT transmit continuously.
- 3) Measure the conducted output power and record the results in the test report.

8.3 TEST SETUP



8.4 TEST RESULTS

Environment: 24.1°C/49%RH
Tested By:Lu Wei

Voltage:DC 3.8V
Date: 2021-12-31

For 1Mbps

Channel	Frequency (MHz)	Measured Channel Power (dBm)	Limit	Peak/Average	Result
Lowest	2402	7.12	1W (30dBm)	Peak	Pass
Middle	2440	7.59			Pass
Highest	2480	8.40			Pass

9. POWER SPECTRAL DENSITY

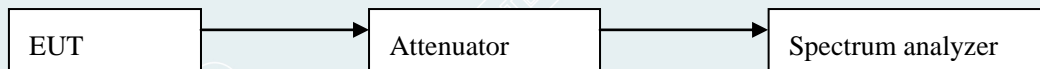
9.1 LIMITS

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

9.2 TEST PROCEDURES

- 1) Remove the antenna from the EUT, and then connect a low loss RF cable from antenna port to the spectrum analyzer.
- 2) Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3) Set the analyzer span to 1.5 times the DTS bandwidth. Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$. Set the VBW $\geq [3 \times \text{RBW}]$. Detector = peak. Sweep time = auto couple. Trace mode = max hold. Allow trace to fully stabilize. Use the peak marker function to determine the maximum amplitude level within the RBW. If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.
- 4) Repeat above procedures until all frequencies measured were complete.

9.3 TEST SETUP



9.4 TEST RESULTS

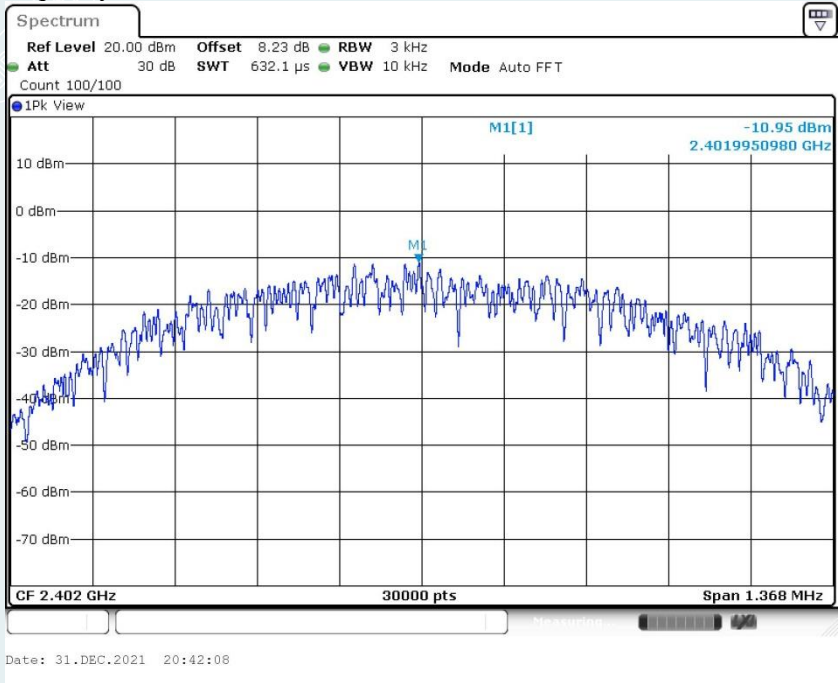
Environment: 24.1°C/49%RH
 Tested By: Lu Wei

Voltage: DC 3.8V
 Date: 2021-12-31

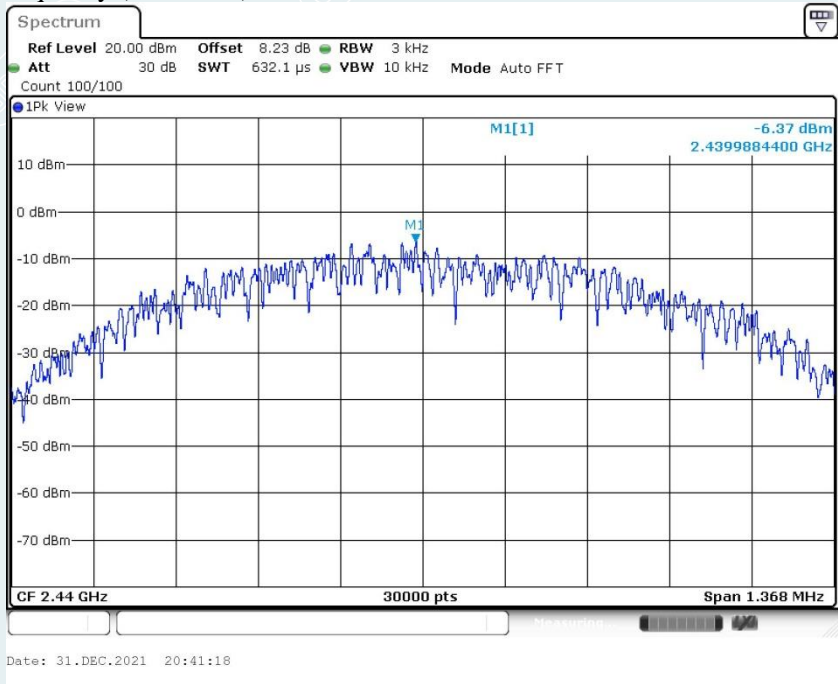
For 1Mbps

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Test Result
Lowest	2402	-10.95	8.00	PASS
Middle	2440	-6.37		PASS
Highest	2480	-7.16		PASS

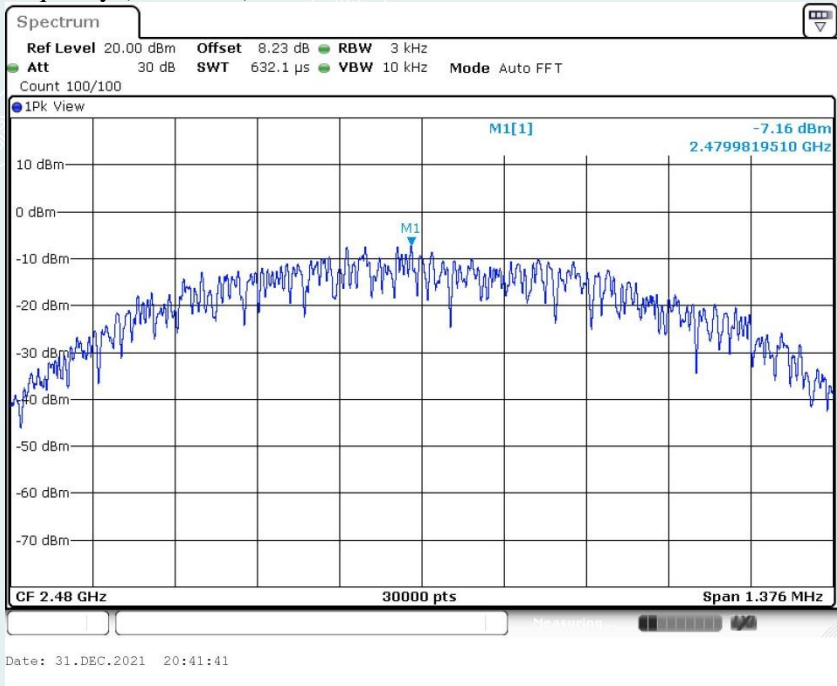
For 1Mbps
Lowest Frequency (2402MHz)



Middle Frequency (2440MHz)



Highest Frequency (2480MHz)



----- The following blanks -----

10. CONDUCTED BAND EDGES AND SPURIOUS EMISSIONS

10.1 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.

10.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 15.247 Measurement Guidance v05r02.

Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.

- 1) Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.
- 2) Set the spectrum analyzer: RBW =100kHz; VBW =300kHz, Frequency range = 30MHz to 26.5GHz; Sweep = auto; Detector Function = Peak. Trace = Max, hold.
- 3) Measure and record the results in the test report.
- 4) The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

10.3 TEST SETUP



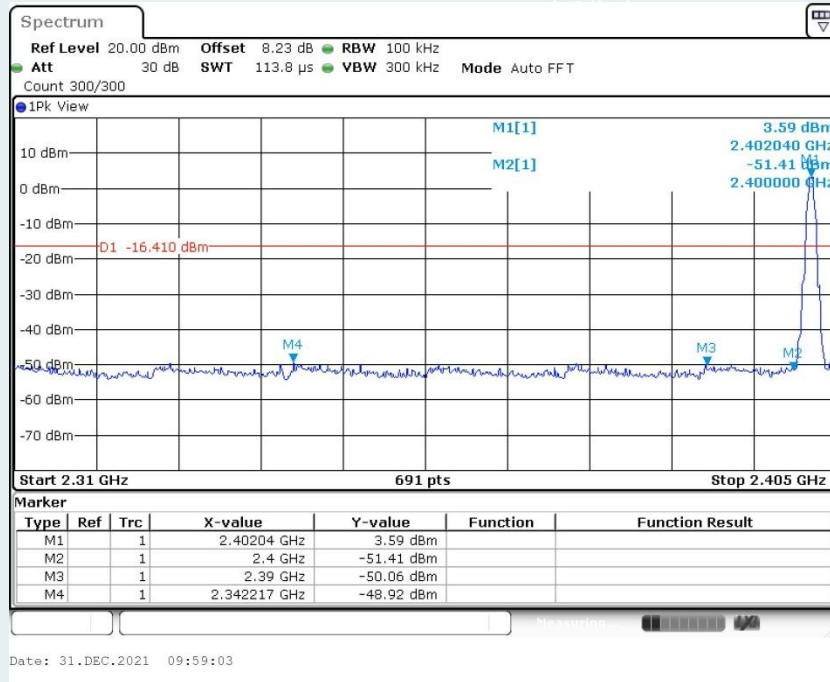
10.4 TEST RESULTS

Environment: 24.1°C/49%RH
Tested By:Lu Wei

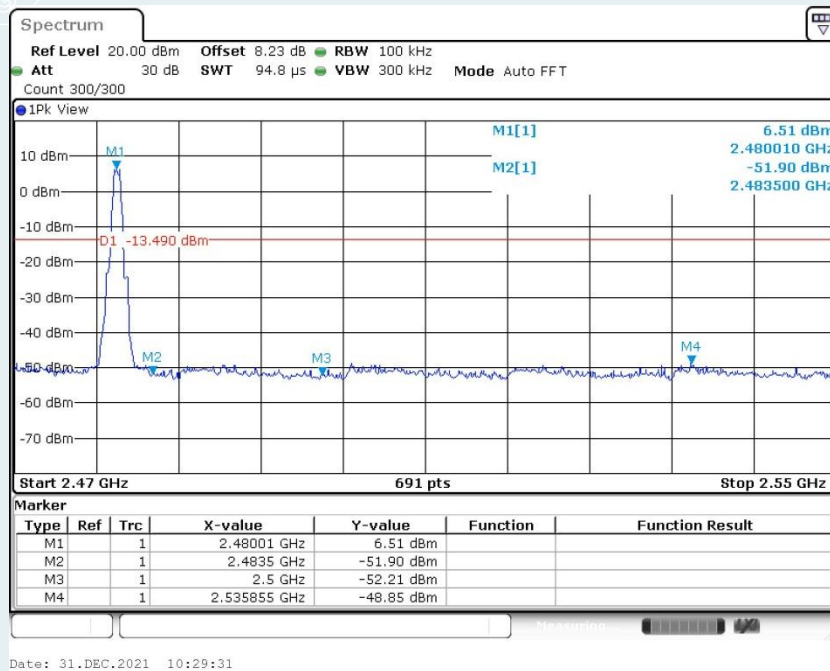
Voltage:DC 3.8V
Date: 2021-12-31

For 1Mbps

Lowest Frequency (2402MHz)
2.31GHz-2.405GHz



Highest Frequency (2480MHz)
2.47GHz-2.55GHz

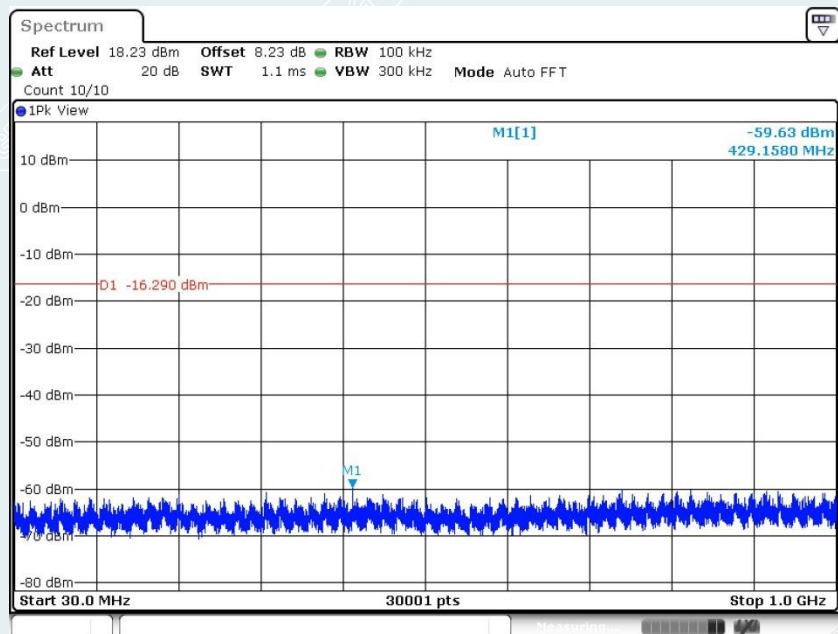


SPURIOUS EMISSIONS:**For 1Mbps**

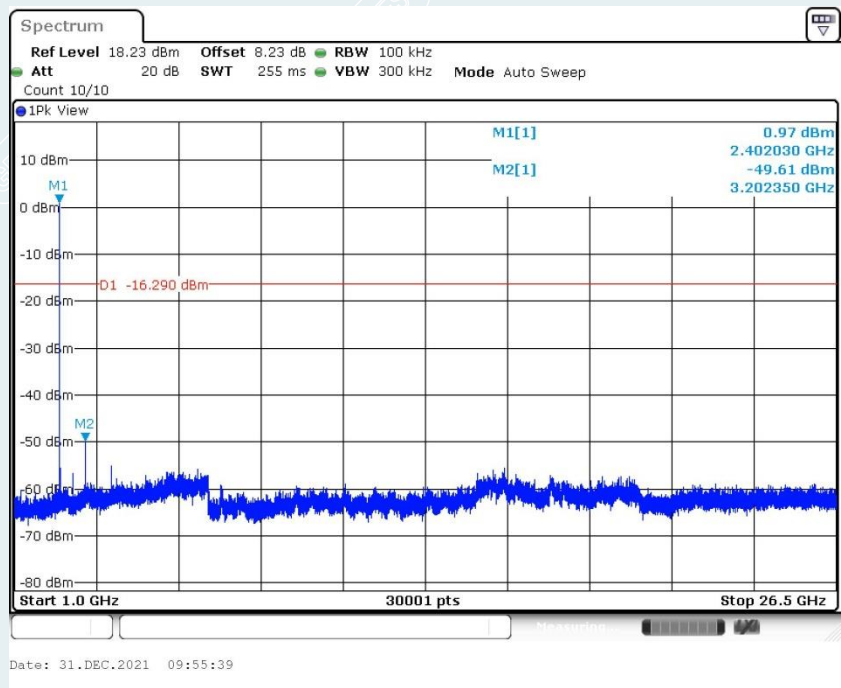
Lowest Frequency (2402MHz)



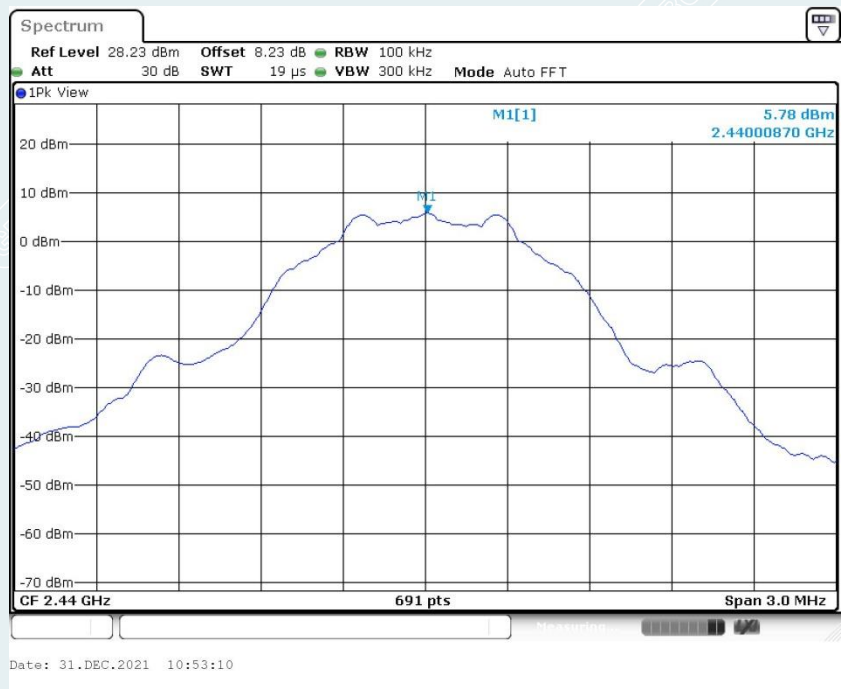
Date: 31.DEC.2021 09:55:10

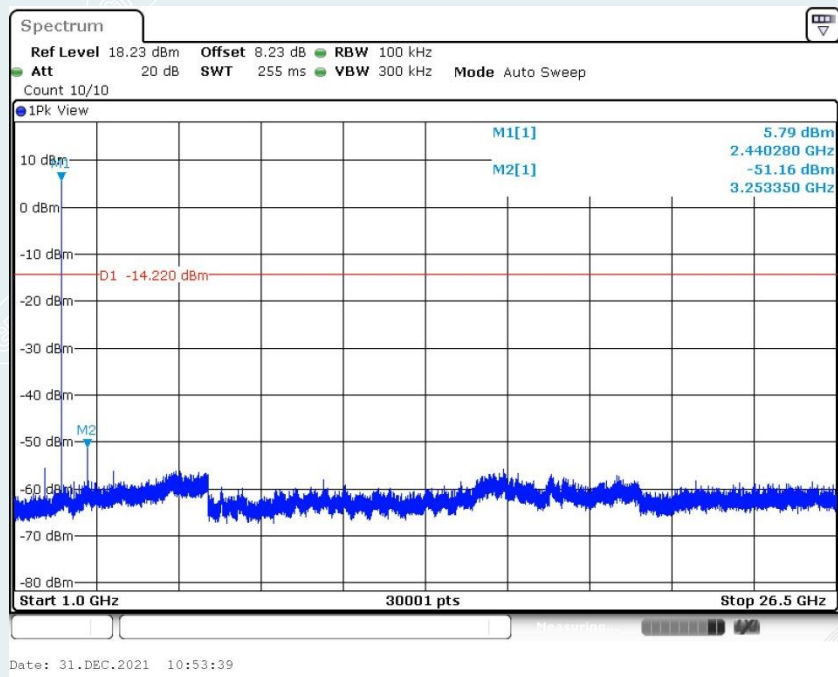
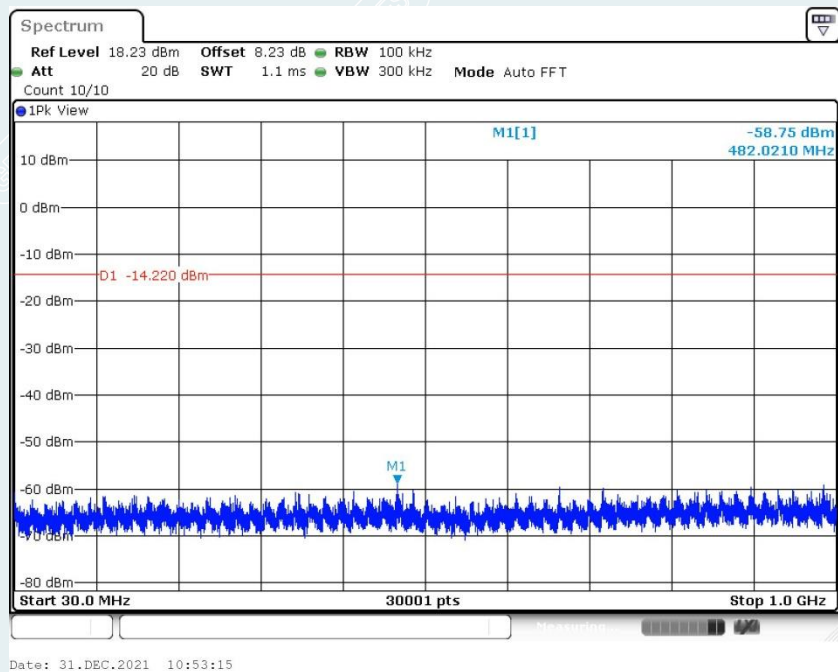


Date: 31.DEC.2021 09:55:15

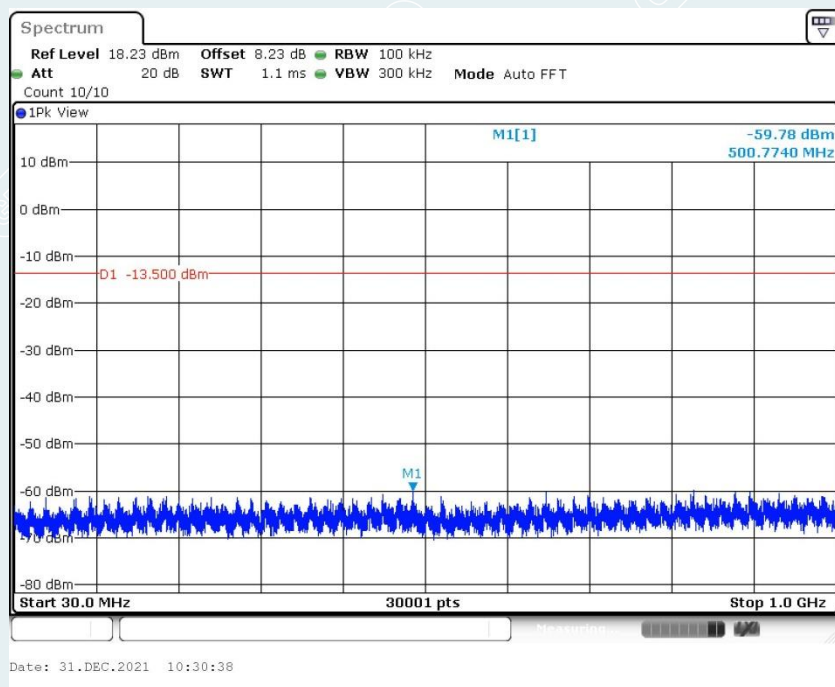
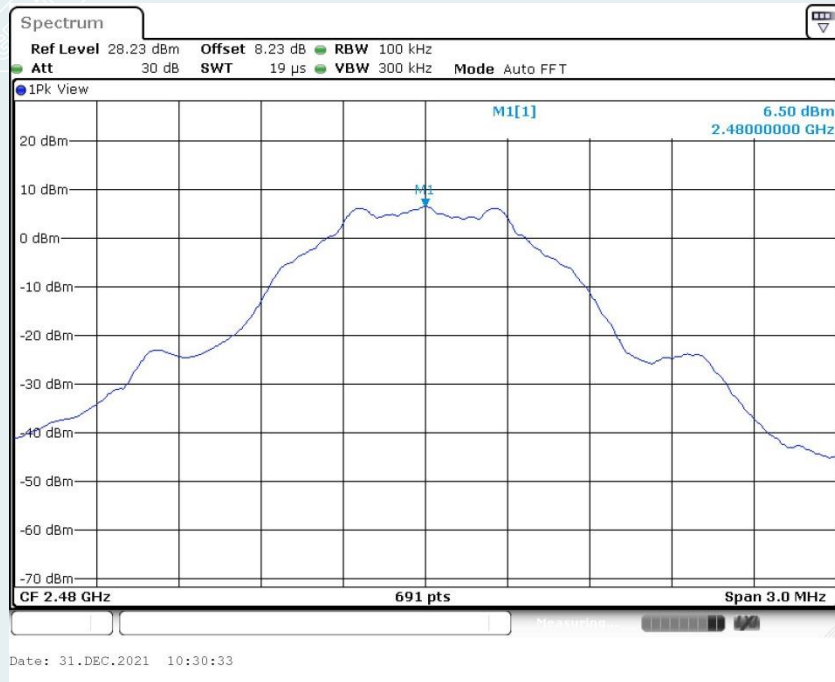


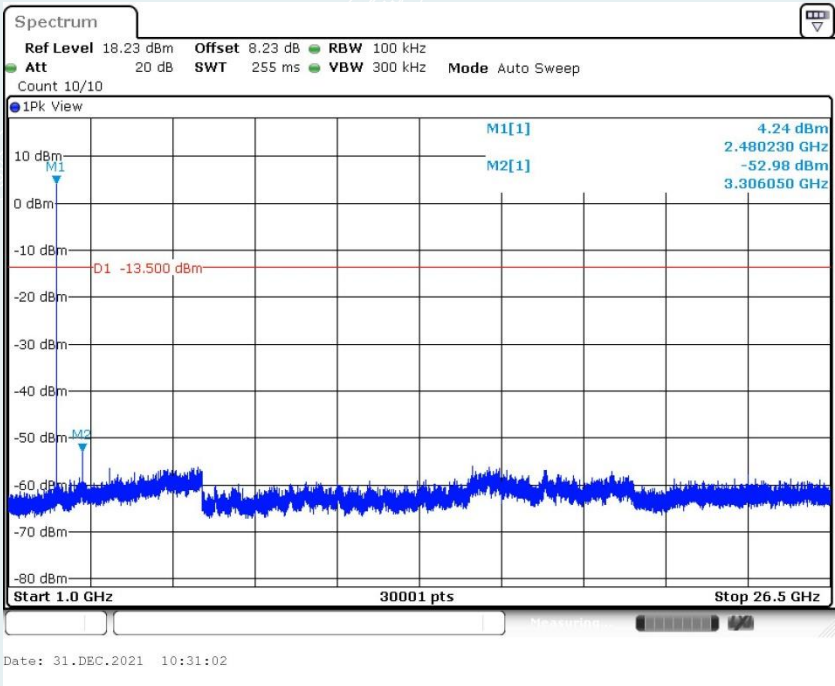
Middle Frequency (2440MHz)





Highest Frequency (2480MHz)





----- The following blanks -----

11. RESTRICTED BANDS OF OPERATION

11.1 LIMITS

Section 15.247(d) In addition, Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	
13.36 - 13.41			

Frequency (MHz)	Quasi-peak(μV/m)	Measurement distance(m)	Quasi-peak(dBμV/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

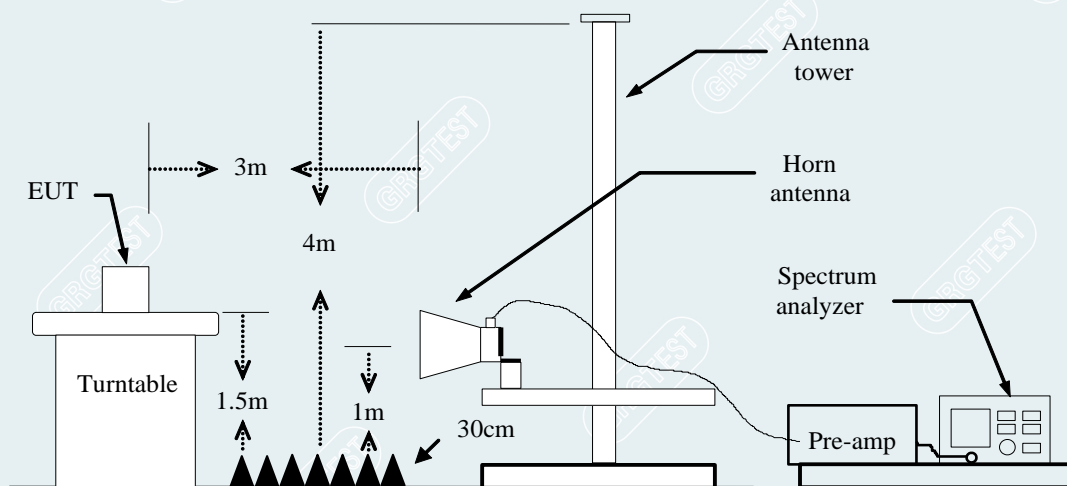
11.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 15.247 Meas Guidance v05r02.

- 1) The EUT is placed on a turntable, which is 1.5m above the ground plane.
- 2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4) Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - a) PEAK: RBW=1MHz / VBW=1MHz / Sweep=AUTO.
 - b) AVERAGE: RBW=1MHz / VBW=1/T / Sweep=AUTO.

If the EUT is configured to transmit with duty cycle $\geq 98\%$, set $VBW \leq RBW/100$ (i.e., 10kHz) but not less than 10 Hz. if the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$, Where T is defined in section 2.9.
- 5) Repeat the procedures until all the PEAK and AVERAGE versus polarization are measured.

11.3 TEST SETUP



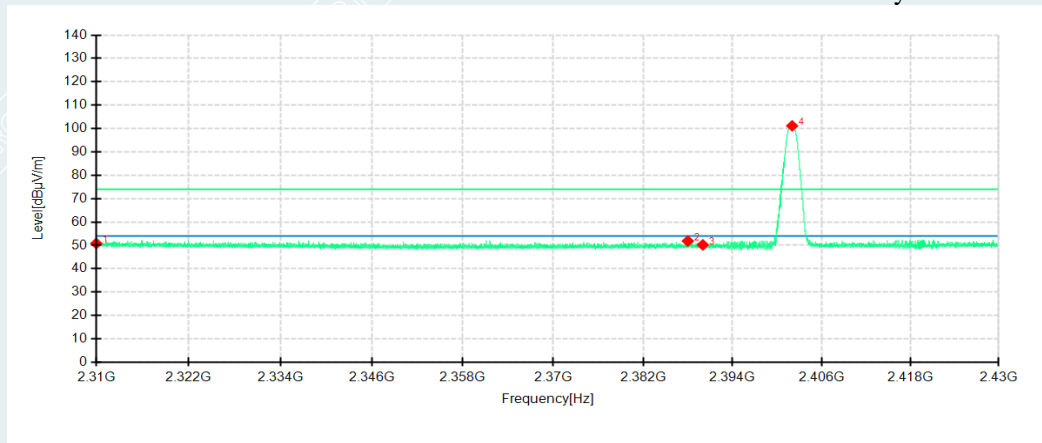
11.4 TEST RESULTS

Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

For 1Mbps

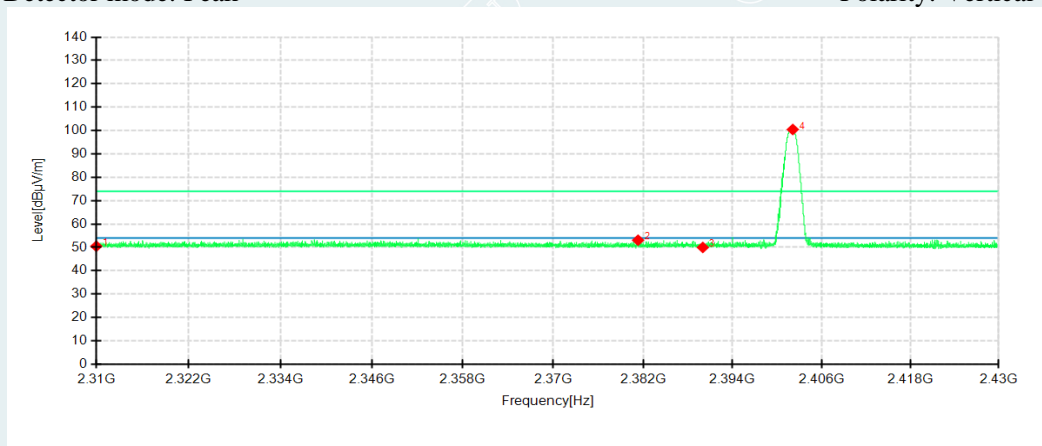
Lowest Frequency
Frequency 2402MHz
Environment: 25℃/60%RH
Tested By: Lu Qiang
Detector mode: Peak

Voltage: AC 120V/60Hz
Date: 2022-04-14
Polarity: Horizontal



Detector mode: Peak

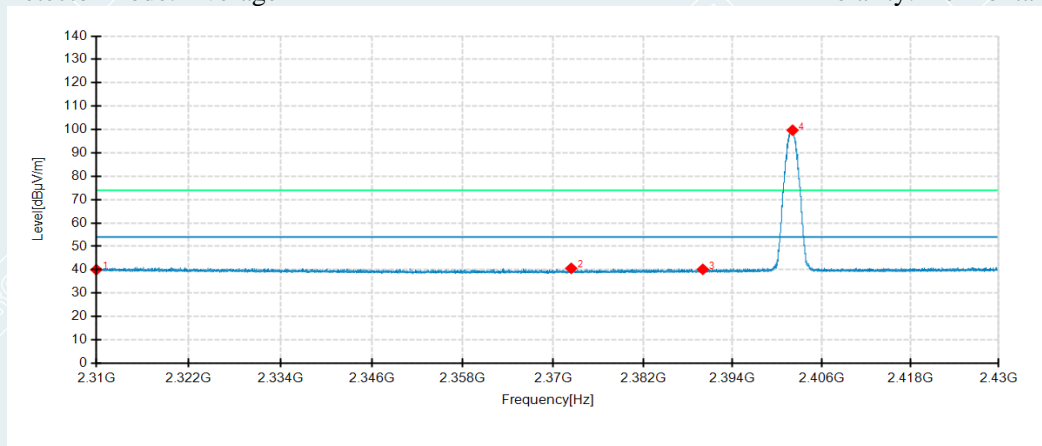
Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2310.0000	46.87	50.80	3.93	74.00	23.20	100	24	Horizontal	/
2	2387.9880	48.74	51.86	3.12	74.00	22.14	100	203	Horizontal	/
3	2390.0000	47.07	50.20	3.13	74.00	23.80	100	34	Horizontal	/
4	2402.0160	97.96	101.16	3.20	74.00	-27.16	100	222	Horizontal	No limit
1	2310.0000	45.97	50.48	4.51	74.00	23.52	200	205	Vertical	/
2	2381.3280	48.70	53.06	4.36	74.00	20.94	100	95	Vertical	/
3	2390.0000	45.70	49.97	4.27	74.00	24.03	200	212	Vertical	/
4	2402.1000	96.30	100.45	4.15	74.00	-26.45	100	122	Vertical	No limit

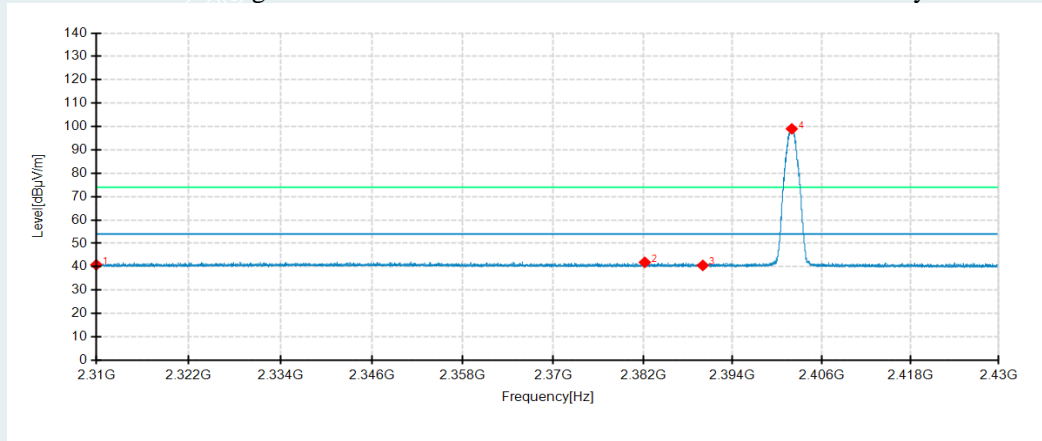
Lowest Frequency
 Frequency 2402MHz
 Environment: 25°C/60%RH
 Tested By: Lu Qiang
 Detector mode: Average

Voltage: AC 120V/60Hz
 Date: 2022-04-14
 Polarity: Horizontal



Detector mode: Average

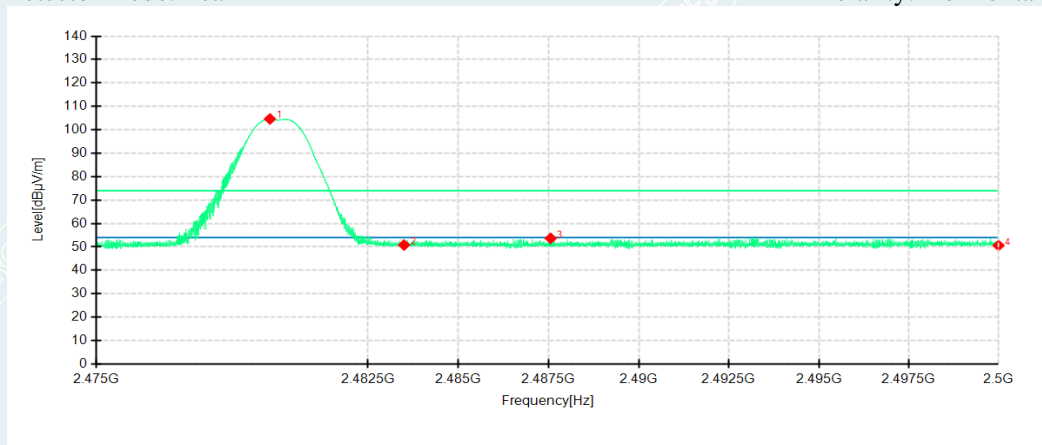
Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2310.0000	36.07	40.00	3.93	54.00	14.00	100	146	Horizontal	/
2	2372.4120	37.55	40.60	3.05	54.00	13.40	100	129	Horizontal	/
3	2390.0000	37.04	40.17	3.13	54.00	13.83	200	95	Horizontal	/
4	2402.0760	96.49	99.69	3.20	54.00	-45.69	100	219	Horizontal	No limit
1	2310.0000	36.32	40.83	4.51	54.00	13.17	100	111	Vertical	/
2	2382.2280	37.53	41.88	4.35	54.00	12.12	100	275	Vertical	/
3	2390.0000	36.30	40.57	4.27	54.00	13.43	100	259	Vertical	/
4	2401.9680	94.83	98.99	4.16	54.00	-44.99	100	122	Vertical	No limit

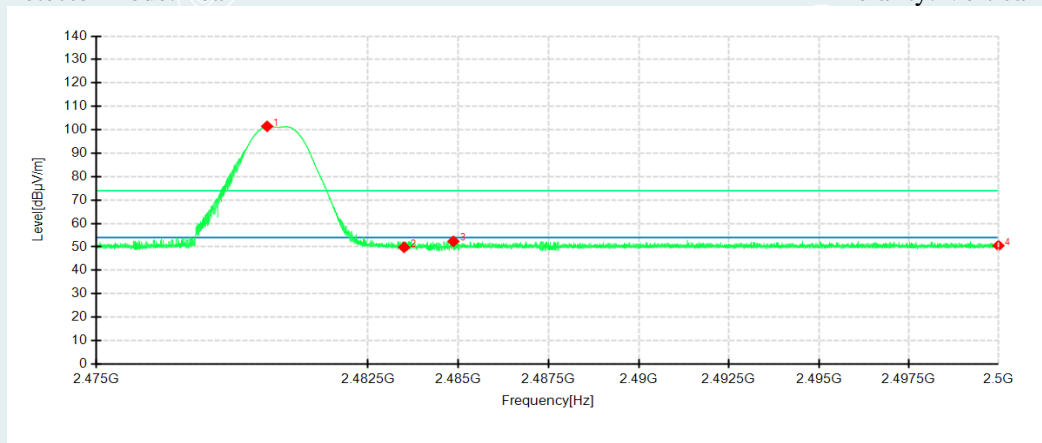
Highest Frequency
 Frequency 2480MHz
 Environment: 25°C/60%RH
 Tested By: Lu Qiang
 Detector mode: Peak

Voltage: AC 120V/60Hz
 Date: 2022-04-14
 Polarity: Horizontal



Detector mode: Peak

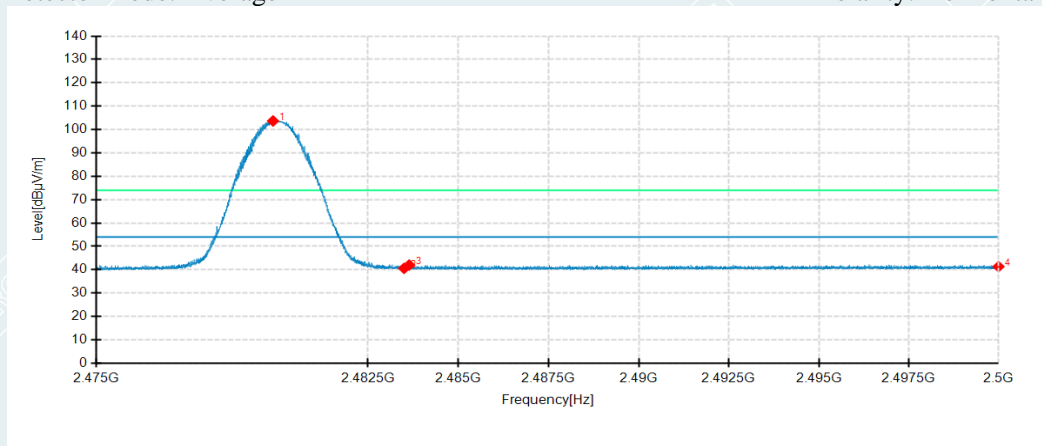
Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2479.7925	100.38	104.63	4.25	74.00	-30.63	100	213	Horizontal	No limit
2	2483.5000	46.48	50.81	4.33	74.00	23.19	100	134	Horizontal	/
3	2487.5575	49.25	53.66	4.41	74.00	20.34	200	95	Horizontal	/
4	2500.0000	45.95	50.60	4.65	74.00	23.40	200	268	Horizontal	/
1	2479.7150	97.80	101.48	3.68	74.00	-27.48	100	120	Vertical	No limit
2	2483.5000	46.14	49.83	3.69	74.00	24.17	100	95	Vertical	/
3	2484.8650	48.68	52.38	3.70	74.00	21.62	200	11	Vertical	/
4	2500.0000	46.79	50.54	3.75	74.00	23.46	200	158	Vertical	/

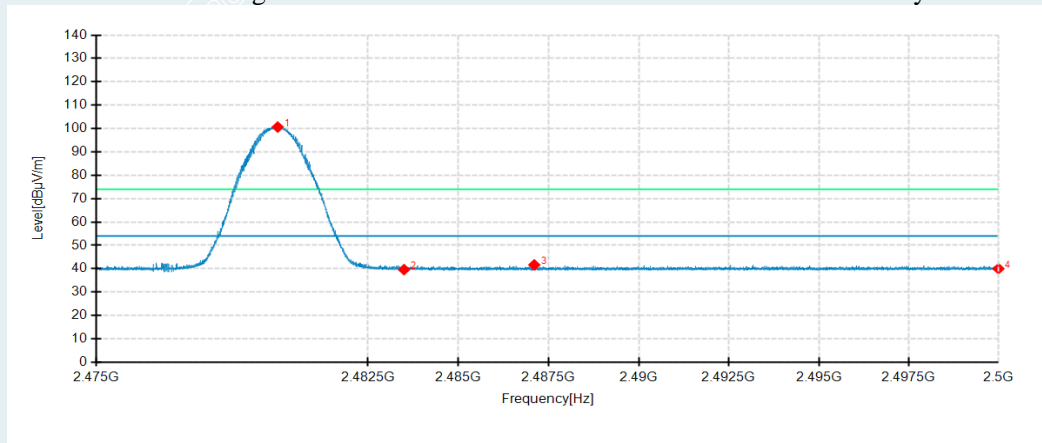
Highest Frequency
Frequency 2480MHz
Environment: 25°C/60%RH
Tested By: Lu Qiang
Detector mode: Average

Voltage: AC 120V/60Hz
Date: 2022-04-14
Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2479.8775	99.39	103.65	4.26	54.00	-49.65	100	217	Horizontal	No limit
2	2483.5000	36.27	40.60	4.33	54.00	13.40	100	135	Horizontal	/
3	2483.6400	37.69	42.02	4.33	54.00	11.98	100	233	Horizontal	/
4	2500.0000	36.68	41.33	4.65	54.00	12.67	200	346	Horizontal	/
1	2480.0075	96.95	100.63	3.68	54.00	-46.63	100	119	Vertical	No limit
2	2483.5000	35.93	39.62	3.69	54.00	14.38	100	277	Vertical	/
3	2487.1050	37.95	41.65	3.70	54.00	12.35	200	138	Vertical	/
4	2500.0000	36.26	40.01	3.75	54.00	13.99	100	167	Vertical	/

Remark: Max field strength in 3m distance. No any other emission which falls in restricted bands can be detected and be reported.

APPENDIX A. PHOTOGRAPH OF THE TEST CONNECTION DIAGRAM

Please refer to the attached document E202112291004-20-Test photo.

APPENDIX B. PHOTOGRAPH OF THE EUT

Please refer to the attached document E202112291004-21-EUT photo.

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