TEST REPORT

Report No.: CHTEW21100075 Report Verification:

Project No...... SHT2109065202EW

FCC ID.....: 2AZYA-AS8W

Applicant's name: Senwa Global International, S.A. de C.V.

Cuajimalpa de Morelos, C.P. 05320 Ciudad de Mexico, Mexico

Test item description: Tablet

Trade Mark ACER

Model/Type reference...... SOSPIRO-AS8W

Listed Model(s) -

Standard: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of receipt of test sample.......... Sept.24, 2021

Date of testing...... Sept.24, 2021- Oct.18, 2021

Date of issue...... Oct.19, 2021

Result...... PASS

Compiled by

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Approved by

(Position+Printed name+Signature): RF Manager Hans Hu

Testing Laboratory Name: Shenzhen Huatongwei International Inspection Co., Ltd.

Tianliao, Gongming, Shenzhen, China

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The test report merely correspond to the test sample.

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

- FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz
- ANSI C63.10:2013: American National Standard for Testing Unlicensed Wireless Devices
- KDB 558074 D01 15.247 Meas Guidance v05r02: Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under Section 15.247 of The FCC Rules

1.2. Report version

Revision No.	Date of issue	Description
N/A	2021-10-19	Original

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2. TEST DESCRIPTION

Report clause	Test Items	Standard Requirement	Result
5.1	Antenna Requirement	15.203/15.247(c)	PASS
5.2	AC Conducted Emission	15.207	PASS
5.3	Peak Output Power	15.247(b)(3)	PASS
5.4	Power Spectral Density	15.247(e)	PASS
5.5	6dB Bandwidth	15.247(a)(2)	PASS
5.6	99% Occupied Bandwidth	-	PASS ^{*1}
5.7	Duty cycle	-	PASS ^{*1}
5.8	Conducted Band Edge and Spurious Emission	15.247(d)/15.205	PASS
5.9	Radiated Band Edge Emission	15.205/15.209	PASS
5.10	Radiated Spurious Emission	15.247(d)/15.205/15.209	PASS

Note:

The measurement uncertainty is not included in the test result.

 ^{*1:} No requirement on standard, only report these test data.

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3. **SUMMARY**

3.1. Client Information

Applicant:	Senwa Global International, S.A. de C.V.
Address:	Carretera Mexico-Toluca No. 5324 PB, Colonia El Yaqui Del. Cuajimalpa de Morelos, C.P. 05320 Ciudad de Mexico, Mexico
Manufacturer:	Q2 COMMUNICATION TECHNOLOGY LIMITED
Address:	Room 401, Building A, Baihui Creative Park, No. 5185, Yiyuan Road, Xin 'an Street, Bao 'an District, Shenzhen, Guangdong
Factory:	Q2 COMMUNICATION TECHNOLOGY LIMITED
Address:	Room 401, Building A, Baihui Creative Park, No. 5185, Yiyuan Road, Xin 'an Street, Bao 'an District, Shenzhen, Guangdong

3.2. Product Description

Name of EUT:	Tablet
Trade Mark:	ACER
Model No.:	SOSPIRO-AS8W
Listed Model(s):	-
Power supply:	DC 3.7V
Battery Information:	3.7V 4000mAh 14.8Wh
Adapter Information:	Model: JK050200-S86USU Input: 100-240Va.c.,50/60Hz 0.5A Output: 5.0Vd.c.,2A 10W
Hardware version:	ACER_AS8W_Ver 01
Software version:	ACER_AS8W_Ver 01

3.3. Radio Specification Description

Support type*2:	802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40)
Modulation:	DSSS for 802.11b OFDM for 802.11g/802.11n(HT20)/802.11n(HT40)
Operation frequency:	2412MHz~2462MHz for 802.11b/802.11g/802.11n(HT20) 2422MHz~2452MHz for 802.11n(HT40)
Channel number:	11 for 802.11b/802.11g/802.11n(HT20) 7 for 802.11n(HT40)
Channel separation:	5MHz
Antenna type:	PIFA
Antenna gain:	0.73dBi

Note:

^{*2:} only show the RF function associated with this report.

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3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.		
Laboratory Location	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China		
Connect information:	Phone: 86-755-26715499 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn		
Qualifications	Type Accreditation Number		
Qualifications	FCC	762235	

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4. TEST CONFIGURATION

4.1. Test frequency list

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channels which were tested. The Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the below blue front.

802.11b/802.11g/802.11n(HT20)		802.11n(HT40)	
Channel	Channel Frequency (MHz)		Frequency (MHz)
01	2412	03	2422
02	2417	04	2427
· :	· :	· :	. :
06	2437	06	2437
· :	· :	· :	. :
10	2457	08	2447
11	2462	09	2452

4.2. Descriptions of Test mode

Preliminary tests were performed in different data rates, final test modes are considering the modulation and worse data rates as below table.

Modulation	Data rate
802.11b	1Mbps
802.11g	6Mbps
802.11n(HT20)	MCS0
802.11n(HT40)	MCS0

4.3. Test mode

For RF test items

The engineering test program was provided and enabled to make EUT continuous transmit.

For AC power line conducted emissions:

The EUT was set to connect with the WLAN AP under large package sizes transmission.

For Radiated spurious emissions test item:

The engineering test program was provided and enabled to make EUT continuous transmit.

The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data Recorded in the report.

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4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Wheth	Whether support unit is used?				
✓	✓ No				
Item	Equipement	Trade Name	Model No.	FCC ID	Power cord
1					
2					

4.5. Testing environmental condition

Туре	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar

4.6. Measurement uncertainty

Test Item	Measurement Uncertainty
AC Conducted Emission (150kHz~30MHz)	3.02 dB
Radiated Emission (30MHz~1000MHz	4.90 dB
Radiated Emissions (1GHz~25GHz)	4.96 dB
Peak Output Power	0.51 dB
Power Spectral Density	0.51 dB
Conducted Spurious Emission	0.51 dB
6dB Bandwidth	70 Hz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

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4.7. Equipment Used during the Test

•	Conducted E	mission					
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Shielded Room	Albatross projects	HTWE0114	N/A	N/A	2018/09/28	2023/09/27
•	EMI Test Receiver	R&S	HTWE0111	ESCI	101247	2021/9/14	2022/9/13
•	Artificial Mains	SCHWARZBECK	HTWE0113	NNLK 8121	573	2021/9/17	2022/9/16
•	Pulse Limiter	R&S	HTWE0033	ESH3-Z2	100499	2021/9/13	2022/9/12
•	RF Connection Cable	HUBER+SUHNER	HTWE0113-02	ENVIROFLE X_142	EF-NM- BNCM-2M	2021/9/17	2022/9/16
•	Test Software	R&S	N/A	ES-K1	N/A	N/A	N/A

•	Radiated emi	ssion-6th test sit	te				
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Semi-Anechoic Chamber	Albatross projects	HTWE0127	SAC-3m-02	C11121	2018/09/30	2022/09/29
•	EMI Test Receiver	R&S	HTWE0099	ESCI	100900	2021/9/14	2022/9/13
•	Loop Antenna	R&S	HTWE0170	HFH2-Z2	100020	2021/04/06	2022/04/05
•	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0123	VULB9163	538	2021/04/06	2022/04/05
•	Pre-Amplifer	SCHWARZBECK	HTWE0295	BBV 9742	N/A	2020/11/13	2021/11/12
•	RF Connection Cable	HUBER+SUHNER	HTWE0062-01	N/A	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0062-02	SUCOFLEX104	501184/4	2021/02/26	2022/02/25
•	Test Software	R&S	N/A	ES-K1	N/A	N/A	N/A

•	Radiated em	ission-7th test s	ite				
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Semi-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	N/A	2018/09/27	2022/09/26
•	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2021/9/13	2022/9/12
•	Horn Antenna	SCHWARZBECK	HTWE0126	9120D	1011	2020/04/01	2023/03/31
•	Broadband Horn Antenna	SCHWARZBECK	HTWE0103	BBHA9170	BBHA9170472	2020/4/27	2023/4/27
•	Pre-amplifier	CD	HTWE0071	PAP-0102	12004	2020/11/13	2021/11/12
•	Broadband Pre- amplifier	SCHWARZBECK	HTWE0201	BBV 9718	9718-248	2021/03/05	2022/03/04
•	RF Connection Cable	HUBER+SUHNER	HTWE0120-01	6m 18GHz S Serisa	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0120-02	6m 3GHz RG Serisa	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0119-05	6m 3GHz RG Serisa	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0120-04	6m 3GHz RG Serisa	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0121-01	6m 18GHz S Serisa	N/A	2021/02/26	2022/02/25
•	Test Software	Audix	N/A	E3	N/A	N/A	N/A

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•	RF Conducted Method					
Used	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Signal and spectrum Analyzer	R&S	FSV40	100048	2021/9/13	2022/9/12
•	Spectrum Analyzer	Agilent	N9020A	MY50510187	2021/9/13	2022/9/12
•	Power Meter	Anritsu	ML249A	N/A	2021/9/13	2022/9/12
0	Radio communication tester	R&S	CMW500	137688-Lv	2021/9/13	2022/9/12

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5. TEST CONDITIONS AND RESULTS

5.1. Antenna Requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C Section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responseble 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, 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.

FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i):

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

TEST RESULT

The antenna type is a PIFA antenna, the directional gain of the antenna less than 6 dBi, please refer to the below antenna photo.



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5.2. AC Conducted Emission

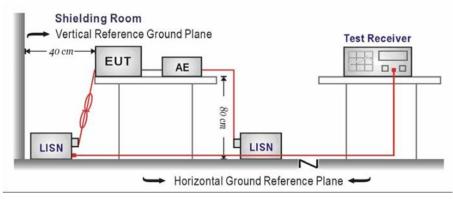
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Fragues ou range (MHz)	Limit (dBuV)					
Frequency range (MHz)	Quasi-peak	Average				
0.15-0.5	66 to 56*	56 to 46*				
0.5-5	56	46				
5-30	60	50				

^{*} Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

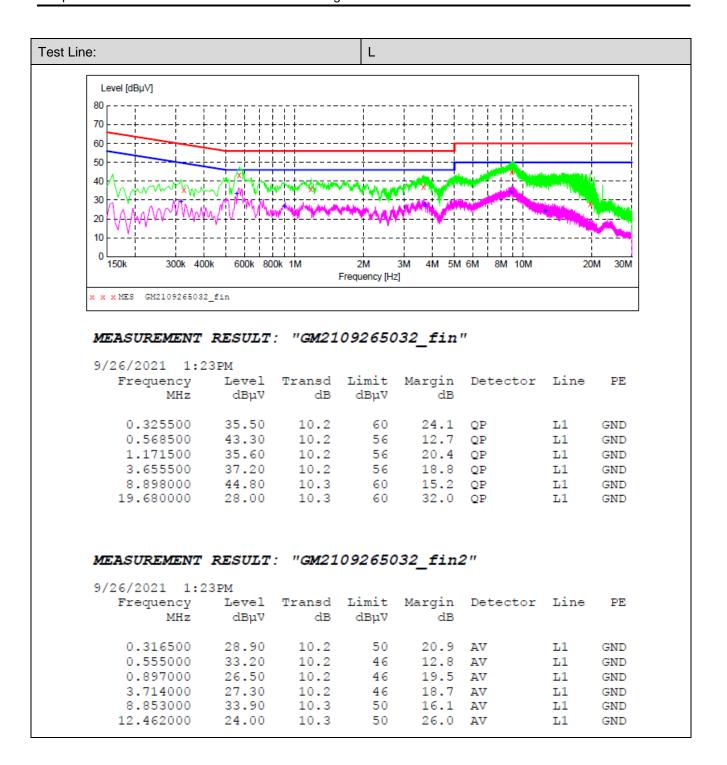
- 1. The EUT was setup according to ANSI C63.10 requirements.
- The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
- The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
- 4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE:

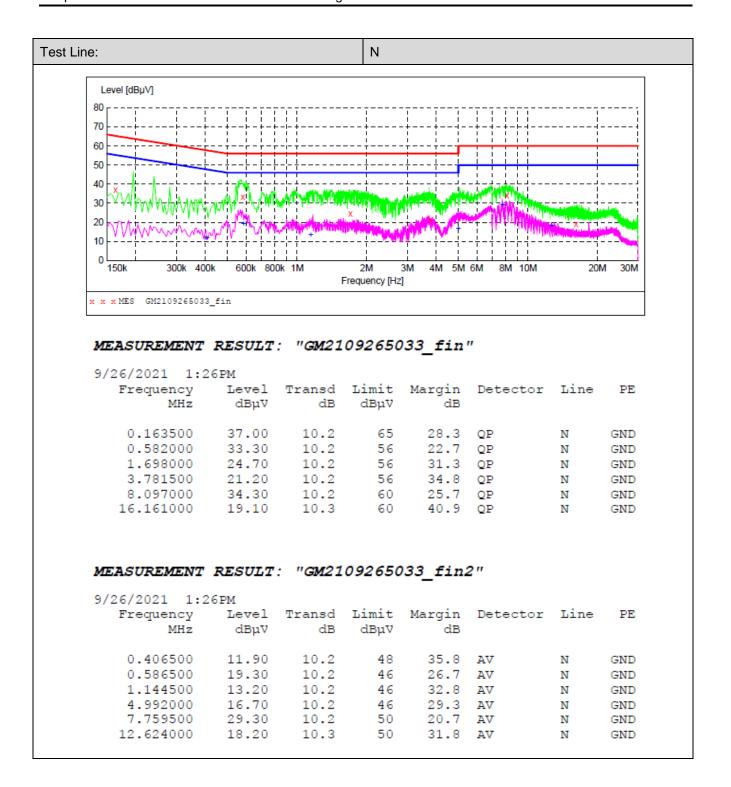
Please refer to the clause 4.2

TEST RESULT

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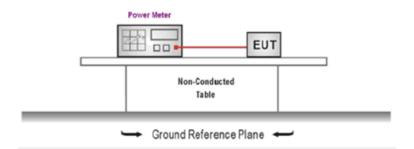
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5.3. Peak Output Power

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3): 30dBm

TEST CONFIGURATION



TEST PROCEDURE

- 1. The EUT was tested according to ANSI C63.10 and KDB 558074 D01 requirements.
- 2. The maximum peak conducted output power may be measured using a broadband peak RF power meter.
- 3. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.
- 4. Record the measurement data.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

TEST Data

Please refer to appendix A on the appendix report

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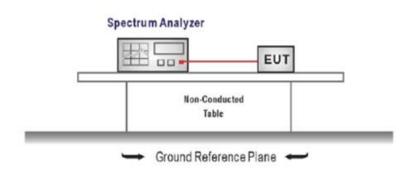
5.4. Power Spectral Density

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e):

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

TEST CONFIGURATION



TEST PROCEDURE

- 1. Connect the antenna port(s) to the spectrum analyzer input,
- Configure the spectrum analyzer as shown below:

Center frequency=DTS channel center frequency

Span =1.5 times the DTS bandwidth

RBW = $3 \text{ kHz} \le \text{RBW} \le 100 \text{ kHz}$, VBW $\ge 3 \times \text{RBW}$

Sweep time = auto couple

Detector = peak

Trace mode = max hold

- 3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
- 4. Use the peak marker function to determine the maximum amplitude level within the RBW.
- 5. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

TEST Data

Please refer to appendix B on the appendix report

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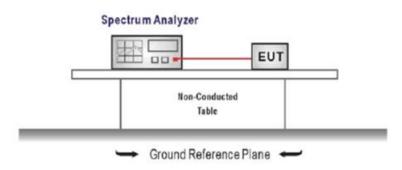
5.5. 6dB bandwidth

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2):

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

TEST CONFIGURATION



TEST PROCEDURE

- 1. Connect the antenna port(s) to the spectrum analyzer input.
- Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).

Center Frequency =DTS channel center frequency

Span=2 x DTS bandwidth

RBW = 100 kHz, VBW ≥ 3 × RBW

Sweep time= auto couple

Detector = Peak

Trace mode = max hold

- 3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
- 4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission, and record the pertinent measurements.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

TEST Data

Please refer to appendix C on the appendix report

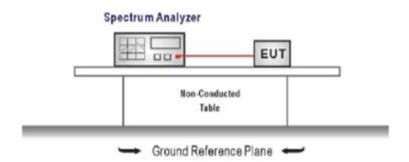
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5.6. 99% Occupied Bandwidth

<u>LIMIT</u>

N/A

TEST CONFIGURATION



TEST PROCEDURE

- 1. Connect the antenna port(s) to the spectrum analyzer input.
- Configure the spectrum analyzer as shown below (enter all losses between the transmitter output andthe spectrum analyzer).

Center Frequency =channel center frequency

Span≥1.5 x OBW

RBW = 1%~5%OBW

VBW ≥ 3 × RBW

Sweep time= auto couple

Detector = Peak

Trace mode = max hold

Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

TEST Data

Please refer to appendix D on the appendix report

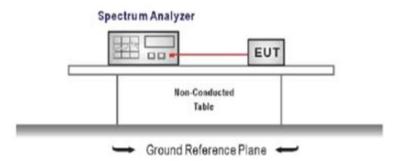
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5.7. Duty Cycle

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

- 1. The transmitter output was connected to the spectrum analyzer through an attenuator, 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. Use the following spectrum analyzer settings:
 - Span=zero span, Frequency=centered channel, RBW= 1 MHz, VBW \geq RBW
 - Sweep=as necessary to capture the entire dwell time,
 - Detector function = peak, Trigger mode
- 4. Measure and record the duty cycle data

TEST MODE:

Please refer to the clause 4.2

TEST Data

Please refer to appendix E on the appendix report

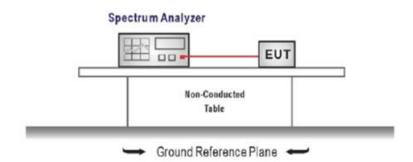
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5.8. Conducted Band edge and Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section15.247 (d):In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

TEST CONFIGURATION



TEST PROCEDURE

- 1. Connect the antenna port(s) to the spectrum analyzer input.
- 2. Establish a reference level by using the following procedure

Center frequency=DTS channel center frequency

The span = 1.5 times the DTS bandwidth.

RBW = 100 kHz, VBW \geq 3 x 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 PSD level

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

3. Emission level measurement

Set the center frequency and span to encompass frequency range to be measured

RBW = 100 kHz, VBW ≥ 3 x 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.

- 4. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
- Ensure that the amplitude of all unwanted emission outside of the authorized frequency band excluding restricted frequency bands) are attenuated by at least the minimum requirements specified (at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz). Report the three highest emission relative to the limit.

TEST MODE:

Please refer to the clause 4.2

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TEST	RESUL	Γ
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 $oxed{oxed}$ Passed $oxed{oxed}$ Not Applicable

TEST Data

Please refer to appendix F on the appendix report

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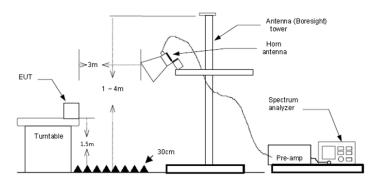
5.9. Radiated Band edge Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, Radiated Emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the Radiated Emissions limits specified in §15.209(a) (see §15.205(c)).

TEST CONFIGURATION



TEST PROCEDURE

- 1. The EUT was setup and tested according to ANSI C63.10.
- 2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. Thisis repeated for both horizontal and vertical polarization of the antenna. In order to find themaximum emission, all of the interface cables were manipulated according to ANSI C63.10 on radiated measurement.
- Use the following spectrum analyzer settings:
 - a) Span shall wide enough to fully capture the emission being measured
 - b) Set RBW=100kHz for <1GHz, VBW=3*RBW, Sweep time=auto, Detector=peak, Trace=max hold
 - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

For average measurement:

- VBW=10Hz, When duty cycle is no less than 98 percent
- VBW≥1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clasue 5.6 duty cycle.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

Note:

- Level= Reading + Factor; Factor = Antenna Factor + Cable Loss- Preamp Factor
- 2) Over Limit = Level- Limit
- Average measurement was not performed if peak level is lower than average limit(54 dBuV/m).

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Туре		802.1	1b Test channel			CH	101	F	Polarity		Horizontal
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/n	Over limi	
	1	2310.00	37.02	27.96	5.43	37.56	20.00	52.85	74.00	-21.15	Peak
	2	2390.01	36.68	27.72	5.53	37.45	20.00	52.48	74.00	-21.52	Peak
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2310.00	25.48	27.96	5.43	37.56	20.00	41.33	1 54.00	-12.69	Average
	2	2390.01	25.47	27.72	5.53	37.45	20.00	41.27	7 54.00	-12.73	Average
Туре		802.1	1b	Test cl	hannel	CH	101	F	Polarity		Vertical
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2310.00	36.68	27.96	5.43	37.56	20.00	52.51	74.00	-21.49	Peak
	2	2390.01	37.09	27.72	5.53	37.45	20.00	52.89	74.00	-21.11	Peak
	Mark		Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2310.00	25.59	27.96	5.43	37.56	20.00	41.42	54.00	12.58	Average
	2	2390.01	25.51	27.72	5.53	37.45	20.00	41.31	54.00 -	12.69	Average

Туре		802.11	lb	Test cl	hannel	CI	- 111	P	olarity		Horizontal
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2483.49	36.63	27.43	5.64	37.26	20.00	52.44	74.00	-21.56	Peak
	2	2500.00	37.46	27.40	5.66	37.26	20.00	53.26	74.00	-20.74	Peak
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2483.49	25.63	27.43	5.64	37.26	20.00	41.44	54.00	-12.56	Average
	2	2500.00	25.09	27.40	5.66	37.26	20.00	40.89	54.00	-13.11	Average
Туре		802.11	lb	Test cl	hannel	CI	- 111	P	olarity		Vertical
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Pream	ıp Aux dB	Level dBuV/m	Limit dBuV/		Remark t
	1	2483.49	36.74	27.43	5.64	37.26	20.00	52.55	74.00	-21.45	Peak
	2	2500.00	35.95	27.40	5.66	37.26	20.00	51.75	74.00	-22.25	Peak
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux	Level dBuV/m	Limit dBuV/m	Over	Remark
	1	2483.49	25.26	27.43	5.64	37.26	20.00	41.07	54.00	-12.93	Average
	2	2500.00	25.03	27.40	5.66	37.26	20.00	40.83	54.00	-13.17	Average

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Туре		802.1	1g	Test c	hannel	CH	101	F	olarity		Horizontal
	Mark		Reading	Antenna	Cable			Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/n	limit	
	1	2310.00	36.21	27.96	5.43	37.56	20.00	52.04	74.00	-21.96	Peak
	2	2390.01	37.78	27.72	5.53	37.45	20.00	53.58	74.00	-20.42	Peak
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	0ver	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2310.00	25.57	27.96	5.43	37.56	20.00	41.40	54.00	-12.60	Average
	2	2390.01	26.86	27.72	5.53	37.45	20.00	42.66	54.00	-11.34	Average
Туре		802.1	1g	Test c	hannel	CH	101	F	Polarity		Vertical
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/n	ı limit	
	1	2310.00	36.88	27.96	5.43	37.56	20.00	52.71	74.00	-21.29	Peak
	2	2390.01	41.91	27.72	5.53	37.45	20.00	57.71	74.00	-16.29	Peak
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2310.00	25.51	27.96	5.43	37.56	20.00	41.34	54.00	-12.66	Average
	2	2390.01	26.50	27.72	5.53	37.45	20.00	40.00	54.00	-11.70	Average

Туре		802.1	1g	Test c	hannel	CH	1 11	P	olarity		Horizontal
	Mark	Frequency	Reading	Antenna	Cable			Level	Limit		
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/		
	1	2483.49	37.47	27.43	5.64	37.26	20.00	53.28	74.00		
	2	2500.00	37.22	27.40	5.66	37.26	20.00	53.02	74.00	-20.98	Peak
	Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2483.49	25.95	27.43	5.64	37.26	20.00	41.76	54.00	-12.24	Average
	2	2500.00	25.04	27.40	5.66	37.26	20.00	40.84	54.00	-13.16	Average
Туре		802.1	1g	Test c	hannel	CH	H11	P	olarity		Vertical
	Mari	k Frequency	Reading	Antenna	Cable	Pream	o Aux	Level	Limit	Over	Remark
		MHZ	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2483.49	37.57	27.43	5.64	37.26	20.00	53.38	74.00	-20.62	Peak
	2	2500.00	36.21	27.40	5.66	37.26	20.00	52.01	74.00	-21.99	Peak
	Mark		Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2483.49	25.41	27.43	5.64	37.26	20.00			-12.78	Average
	2	2500.00	25.07	27.40	5.66	37.26	20.00	40.87	54.00	-13.13	Average

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Туре		8	02.11	n(HT20)	Test cl	hannel	CH	H01	F	Polarity		Horizontal
	Mark	Freque	ency	Reading dBuV/m	Antenna dB	Cable dB	Pream; dB	Aux dB	Level dBuV/m	Limit dBuV/n	Over limi	
	1	2310.0	0	38.60	27.96	5.43	37.56	20.00	54.43	74.00	-19.57	Peak
	2	2390.0	1	38.77	27.72	5.53	37.45	20.00	54.57	74.00	-19.43	Peak
	Mark	Freque MHz	-	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2310.00	9	25.38	27.96	5.43	37.56	20.00	41.21	54.00	-12.79	Average
	2	2390.03	L	26.77	27.72	5.53	37.45	20.00	42.57	54.00	-11.43	Average
Туре		8	02.11	n(HT20)	Test cl	nannel	CH	H01	F	olarity		Vertical
	Mark	Frequ	iency	Reading	Antenna	Cable	Pream	p Aux	Level	Limit	Over	Remark
		MHz		dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	ı limi	t
	1	2310.0	10	36.77	27.96	5.43	37.56	20.00	52.60	74.00	-21.40	Peak
	2	2390.0	1	38.85	27.72	5.53	37.45	20.00	54.65	74.00	-19.35	Peak
	Mark	Frequ	•	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2310.0		25.52	27.96		37.56	20.00			11m1t	Average
	2	2390.0		26.38	27.72		37.45	20.00			-11.82	Average

Туре		802.11n(HT2		n(HT20)	Test channel			111	F	Polarity	Horizontal
	Mark	Freq	uency z	Reading dBuV/m	Antenna dB	Cable dB	Pream;	Aux dB	Level dBuV/m	Limit Ov dBuV/m li	er Remark mit
	1	2483.	49	37.51	27.43	5.64	37.26	20.00	53.32	74.00 -20.	68 Peak
	2	2500.	00	37.84	27.40	5.66	37.26	20.00	53.64	74.00 -20.	36 Peak
	Mark	Freq MH	uency z	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit Over dBuV/m limit	Remark
	1	2483.	49	26.53	27.43	5.64	37.26	20.00	42.34	54.00 -11.66	Average
	2	2500.	00	25.06	27.40	5.66	37.26	20.00	40.86	54.00 -13.14	Average
Туре			802.11	n(HT20)	Test c	hannel	CH	111	F	Polarity	Vertical
	Mark	Freq	uency z	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit Ove	er Remark mit
	1	2483.	49	36.95	27.43	5.64	37.26	20.00	52.76	74.00 -21.	24 Peak
	2	2500.	00	37.76	27.40	5.66	37.26	20.00	53.56	74.00 -20.	44 Peak
	Mark	Frequ MH:	uency	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit Over	Remark t
	1	2483.4	49	25.90	27.43	5.64	37.26	20.00	41.71	54.00 -12.29	Average
	2	2500.0	30	25.01	27.40	5.66	37.26	20.00	40.81	54.00 -13.19	Average

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Туре		802.11	In(HT40)	Test cl	nannel	CH	103	P	olarity		Horizontal
	Mark	Frequency	Reading	Antenna	Cable	7 1/ 1		Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/n	limi	t
	1	2310.00	36.22	27.96	5.43	37.56	20.00	52.05	74.00	-21.95	Peak
	2	2389.99	43.57	27.72	5.53	37.45	20.00	59.37	74.00	-14.63	Peak
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2310.00	25.38	27.96	5.43	37.56	20.00	41.21	54.00	-12.79	Average
	2	2389.99	30.14	27.72	5.53	37.45	20.00	45.94	54.00	-8.06	Average
Туре		802.11	In(HT40)	Test cl	nannel	CH	103	P	olarity		Vertical
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2310.00	36.87	27.96	5.43	37.56	20.00	52.70	74.00	-21.30	Peak
	2	2389.99	40.52	27.72	5.53	37.45	20.00	56.32	74.00	-17.68	Peak
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2310.00	25.44	27.96	5.43	37.56	20.00	41.27	54.00	-12.73	Average
	2	2389.99	29.44	27.72	5.53	37.45	20.00	45 04	54.00	-8.76	Average

Туре		8	02.11	n(HT40)	Test cl	hannel	CH	109	P	olarity		Horizontal
	Mark	Freque		Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/n	Over limi	
	1	2483.50	0	42.15	27.43	5.64	37.26	20.00	57.96	74.00	-16.04	Peak
	2	2500.00	0	37.19	27.40	5.66	37.26	20.00	52.99	74.00	-21.01	Peak
	Mark	Freque	ency	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
	1	2483.50	9	30.66	27.43	5.64	37.26	20.00	46.47	54.00	-7.53	Average
	2	2500.00	9	25.52	27.40	5.66	37.26	20.00	41.32	54.00	-12.68	Average
Туре		8	02.11	n(HT40)	Test cl	nannel	CH	109	Р	olarity		Vertical
	Mark	Frequ MHz		Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over	Remark t
	1	2483.5	0	40.87	27.43	5.64	37.26	20.00	56.68	74.00	-17.32	Peak
	2	2500.0	0	36.90	27.40	5.66	37.26	20.00	52.70	74.00	-21.30	Peak
	Mark	Freque	ency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
		MHz		dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
	1	2483.50	9	29.22	27.43	5.64	37.26	20.00	45.03	54.00	-8.97	Average
	2	2500.00	9	25.49	27.40	5.66	37.26	20.00	41.29	54.00	12.71	Average

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5.10. Radiated Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

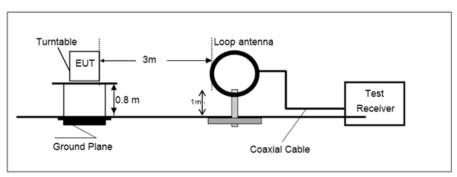
Frequency	Limit (dBuV/m)	Value
0.009 MHz ~0.49 MHz	2400/F(kHz) @300m	Quasi-peak
0.49 MHz ~ 1.705 MHz	24000/F(kHz) @30m	Quasi-peak
1.705 MHz ~30 MHz	30 @30m	Quasi-peak

Note: Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3) = Limit dBuV/m @300m +80, Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3) = Limit dBuV/m @30m + 40.

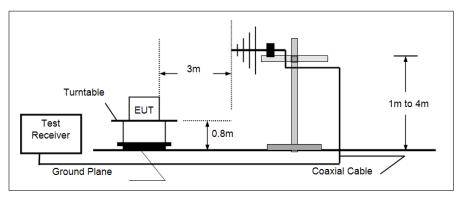
Frequency	Limit (dBuV/m @3m)	Value
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz~1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
Above IGHZ	74.00	Peak

TEST CONFIGURATION

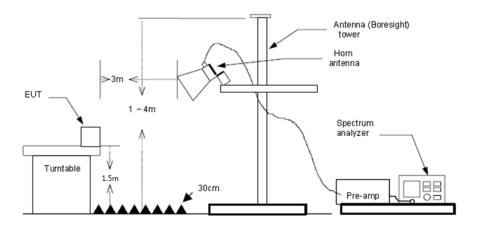
→ 9 kHz ~ 30 MHz



> 30 MHz ~ 1 GHz



Above 1 GHz



TEST PROCEDURE

- The EUT was setup and tested according to ANSI C63.10.
- 2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
- 4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- 5. Set to the maximum power setting and enable the EUT transmit continuously.
- Use the following spectrum analyzer settings
 - a) Span shall wide enough to fully capture the emission being measured;
 - b) Below 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold; If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit,

the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

For average measurement:

- VBW=10Hz, When duty cycle is no less than 98 percent
- VBW≥1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clasue 5.6 duty cycle.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

Note:

- 1) Level= Reading + Factor/Transd; Factor/Transd = Antenna Factor+ Cable Loss- Preamp Factor
- 2) Over Limit = Level- Limit
- 3) Average measurement was not performed if peak level is lower than average limit(54 dBuV/m) for above 1GHz.

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TEST DATA FOR 9 kHz ~ 30 MHz

The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

TEST DATA FOR 30 MHz ~ 1000 MHz

Have pre-scan all test channel, found CH06 of 802.11B which it was worst case, so only show the worst case's data on this report.

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Polarization: Horizontal Level [dBµV/m] 40 30 20 10 30M 40M 50M 60M 70M 100M 200M 300M 400M 500M 600M 800M Frequency [Hz] x x x MES GM2109276124_red MEASUREMENT RESULT: "GM2109276124 red" 9/27/2021 11:24PM Level Transd Limit Margin Det. Height Azimuth Polarization Frequency dBµV/m dB dBµV/m MHz dB cm deq 43.580000 33.70 -9.2 40.0 6.3 QP 100.0 360.00 HORIZONTAL 146.400000 100.0 167.00 HORIZONTAL 32.10 -14.1 43.5 11.4 QP 400.540000 38.00 -3.8 46.0 100.0 306.00 8.0 QP HORIZONTAL 38.30 7.7 QP 204.00 HORIZONTAL 594.540000 1.4 46.0 100.0 5.1 38.00 792.420000 46.0 8.0 QP 100.0 127.00 HORIZONTAL 891.360000 43.50 7.1 46.0 2.5 QP 100.0 232.00 HORIZONTAL Vertical Polarization: Level [dBµV/m] 50 40 30 20 10 30M 40M 50M 60M 70M 100M 200M 300M 400M 500M 600M 800M Frequency [Hz] x x x MES GM2109276112_red MEASUREMENT RESULT: "GM2109276112 red" 9/27/2021 10:18PM Level Transd Limit Margin Det. Height Azimuth Polarization Frequency MHz dBµV/m dB dBµV/m dB cm deg 30.000000 33.90 -12.4 40.0 6.1 QP 100.0 257.00 VERTICAL 30.90 9.1 QP 13.6 QP -8.8 0.00 45.520000 40.0 100.0 VERTICAL -14.0 187.00 86.260000 26.40 40.0 100.0 VERTICAL 27.20 109.00 VERTICAL 100.0 177.440000 -12.5 43.5 16.3 QP -3.8 400.540000 43.10 46.0 2.9 QP 100.0 121.00 VERTICAL 910.760000 35.20 7.5 46.0 10.8 QP 100.0 44.00 VERTICAL

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TEST DATA FOR 1 GHz ~ 25 GHz

Type		802.11b		Test channe	el	CH01		Polarity		Horizontal
	Mark	Frequency MHz	Reading dBm	g Antenna dB	Cable dB	e Preamp dB	Level dBm	Limit dBm	Over limit	Remark
	1	1333.28	52.90	26.20	4.08	36.38	46.80	74.00	-27.20	
	2	2281.32	52.68	28.04	5.40	37.50	48.62	74.00	-25.38	
	3	4821.76	44.93	31.40	8.50	35.24	49.59	74.00	-24.41	
	4	7227.39	35.86	36.45	10.01	34.03	48.29	74.00	-25.71	Peak
Туре		802.11b		Test channe	el	CH01		Polarity		Vertical
	Mark	Frequency	Reading		Cable		Level		Over	Remark
	1	MHz	dBm	dB 26.13	dB	dB	dBm	dBm	limit	
	1 2	1392.25 2275.52	50.77 53.02	28.05	4.16 5.39	36.55 37.48	44.51 48.98	74.00 74.00	-29.49 -25.02	
	3	4809.50	44.91	31.40	8.47	35.28	49.50	74.00	-24.50	
	4	7245.81	36.68	36.41	10.01	34.06	49.04	74.00	-24.96	
		7243.01	30.00	30.41	10.01	34.00	49.04	74.00	-24.90	reak
Туре		802.11b		Test channe	el	CH06		Polarity		Horizontal
	Mark	Frequency	Reading		Cable		Level		Over	Remark
	4	MHz	dBm	dB	dB	dB	dBm	dBm	limit	
	1	1333.28	52.90	26.20	4.08	36.38	46.80	74.00	-27.20	
	2	2281.32	52.68	28.04	5.40	37.50 35.18	48.62 48.90	74.00	-25.38	
	4	4883.52 8083.96	44.01	31.40 37.20	8.67	33.32	47.80	74.00	-25.10 -26.20	
		0003.90	32.77	37.20	11.15	33.32	47.00	74.00	-20.20	reak
Туре		802.11b		Test channe	el	CH06		Polarity		Vertical
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark
		MHz	dBm	dB	dB	dB	dBm	dBm	limit	
	1	1392.25	50.77	26.13	4.16	36.55	44.51	74.00	-29.49	Peak
	2			28.05	5.39	37.48	48.98	74.00	-25.02	Peak
	-	2275.52	53.02	20.00	2.22					
	3	4871.10	53.02	31.40	8.63	35.16	49.15	74.00	-24.85	
							49.15 49.62	74.00 74.00	-24.85 -24.38	Peak
Туре	3	4871.10	44.28	31.40	8.63 10.06	35.16				Peak
Туре	3	4871.10 7319.96 802.11b Frequency	44.28 37.22 Readin	31.40 36.44 Test channe	8.63 10.06 el	35.16 34.10 CH11	49.62 Level	74.00 Polarity Limit	-24.38 Over	Peak Peak Horizontal
Туре	3 4 Mark	4871.10 7319.96 802.11b Frequency MHz	44.28 37.22 Reading	31.40 36.44 Test channe g Antenna dB	8.63 10.06 el Cable	35.16 34.10 CH11 Preamp dB	49.62 Level	74.00 Polarity Limit dBm	-24.38 Over limit	Peak Peak Horizontal
Туре	3 4 Mark 1	4871.10 7319.96 802.11b Frequency MHz 1333.28	44.28 37.22 Readin dBm 52.90	31.40 36.44 Test channe g Antenna dB 26.20	8.63 10.06 el Cable dB 4.08	35.16 34.10 CH11 e Preamp dB 36.38	Level dBm 46.80	74.00 Polarity Limit dBm 74.00	Over limit -27.20	Peak Peak Horizontal Remark Peak
Туре	3 4 Mark	4871.10 7319.96 802.11b Frequency MHz 1333.28 2281.32	Readin dBm 52.90 52.68	31.40 36.44 Test channe g Antenna dB 26.20 28.04	8.63 10.06 Cable dB 4.08 5.40	35.16 34.10 CH11 e Preamp dB 36.38 37.50	49.62 Level dBm 46.80 48.62	Polarity Limit dBm 74.00 74.00	-24.38 Over limit -27.20 -25.38	Peak Peak Horizontal Remark Peak Peak
Туре	3 4 Mark 1 2	4871.10 7319.96 802.11b Frequency MHz 1333.28	44.28 37.22 Readin dBm 52.90	31.40 36.44 Test channe g Antenna dB 26.20	8.63 10.06 el Cable dB 4.08	35.16 34.10 CH11 e Preamp dB 36.38	Level dBm 46.80	74.00 Polarity Limit dBm 74.00	Over limit -27.20	Peak Peak Horizontal Remark Peak Peak Peak Peak
	3 4 Mark 1 2 3	4871.10 7319.96 802.11b Frequency MHz 1333.28 2281.32 4933.50	Reading dBm 52.90 52.68 44.07	31.40 36.44 Test channe g Antenna dB 26.20 28.04 31.47	8.63 10.06 el Cable dB 4.08 5.40 8.75 10.25	35.16 34.10 CH11 e Preamp dB 36.38 37.50 35.20	Level dBm 46.80 48.62 49.09	74.00 Polarity Limit dBm 74.00 74.00 74.00	Over limit -27.20 -25.38 -24.91	Peak Peak Horizontal Remark Peak Peak Peak Peak
Туре	3 4 Mark 1 2 3 4	4871.10 7319.96 802.11b Frequency MHz 1333.28 2281.32 4933.50 7394.88	Reading dBm 52.90 52.68 44.07 36.05	31.40 36.44 Test channe g Antenna dB 26.20 28.04 31.47 36.59 Test channe	8.63 10.06 el Cable dB 4.08 5.40 8.75 10.25	35.16 34.10 CH11 e Preamp dB 36.38 37.50 35.20 34.02 CH11	Level dBm 46.80 48.62 49.09 48.87	74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 74.00 Polarity	Over limit -27.20 -25.38 -24.91 -25.13	Peak Peak Horizontal Remark Peak Peak Peak Peak Peak Peak
	3 4 Mark 1 2 3	4871.10 7319.96 802.11b Frequency MHz 1333.28 2281.32 4933.50 7394.88 802.11b Frequency	Reading dBm 52.90 52.68 44.07 36.05	31.40 36.44 Test channe g Antenna dB 26.20 28.04 31.47 36.59 Test channe	8.63 10.06 el Cable dB 4.08 5.40 8.75 10.25	35.16 34.10 CH11 e Preamp dB 36.38 37.50 35.20 34.02 CH11	Level 48.62 49.09 48.87	Polarity Limit dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit	Over limit -27.20 -25.38 -24.91 -25.13	Peak Peak Horizontal Remark Peak Peak Peak Peak Peak Peak Peak
	3 4 Mark 1 2 3 4	4871.10 7319.96 802.11b Frequency MHz 1333.28 2281.32 4933.50 7394.88 802.11b Frequency MHz	Reading dBm 52.90 52.68 44.07 36.05	31.40 36.44 Test channe g Antenna dB 26.20 28.04 31.47 36.59 Test channe g Antenna dB	8.63 10.06 el Cable dB 4.08 5.40 8.75 10.25	35.16 34.10 CH11 e Preamp dB 36.38 37.50 35.20 34.02 CH11	Level dBm 46.80 48.62 49.09 48.87 Level dBm	Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm	Over limit -27.20 -25.38 -24.91 -25.13	Peak Peak Horizontal Remark Peak Peak Peak Peak Peak Peak Peak Pe
	3 4 Mark 1 2 3 4	4871.10 7319.96 802.11b Frequency MHz 1333.28 2281.32 4933.50 7394.88 802.11b Frequency MHz 1392.25	Reading dBm 52.90 52.68 44.07 36.05	31.40 36.44 Test channe g Antenna dB 26.20 28.04 31.47 36.59 Test channe g Antenna dB 26.13	8.63 10.06 el Cable dB 4.08 5.40 8.75 10.25 el	35.16 34.10 CH11 e Preamp dB 36.38 37.50 35.20 34.02 CH11 e Preamp dB 36.55	Level dBm 46.80 48.62 49.09 48.87 Level dBm 44.51	74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00	Over limit -27.20 -25.38 -24.91 -25.13 Over limit -29.49	Peak Peak Horizontal Remark Peak Peak Peak Peak Peak Peak Peak Pe
	3 4 Mark 1 2 3 4	4871.10 7319.96 802.11b Frequency MHz 1333.28 2281.32 4933.50 7394.88 802.11b Frequency MHz	Reading dBm 52.90 52.68 44.07 36.05	31.40 36.44 Test channe g Antenna dB 26.20 28.04 31.47 36.59 Test channe g Antenna dB	8.63 10.06 el Cable dB 4.08 5.40 8.75 10.25	35.16 34.10 CH11 e Preamp dB 36.38 37.50 35.20 34.02 CH11 e Preamp dB 36.55 37.48	Level dBm 46.80 48.62 49.09 48.87 Level dBm	Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm	Over limit -27.20 -25.38 -24.91 -25.13	Peak Peak Horizontal Remark Peak Peak Peak Peak Peak Peak Peak Pe

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Туре		802.11g		Test channe	el le	CH01		Polarity		Horizontal
	Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over	Remark
	1	1333.28	53.87	26.20	4.08	36.38	47.77	74.00	-26.23	
	2	2275.52	49.98	28.05	5.39	37.48	45.94	74.00	-28.06	Peak
	3	4846.37	45.45	31.40	8.57	35.17	50.25	74.00	-23.75	
	4	9834.41	34.00	39.53	11.65	36.42	48.76	74.00	-25.24	Peak
Туре		802.11g		Test channe	el le	CH01		Polarity		Vertical
	Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limi	Remark
	1	1333.28	50.22	26.20	4.08	36.38	44.12	74.00	-29.8	8 Peak
	2	2287.13	49.50	28.03	5.40	37.52	45.41	74.00	-28.5	9 Peak
	3	4834.05	45.28	31.40	8.53	35.20	50.01	74.00	-23.9	9 Peak
	4	8022.46	32.33	37.14	10.95	33.31	47.11	74.00	-26.8	9 Peak
Туре		802.11g		Test channe	el le	CH06		Polarity		Horizontal
	Mark	Frequency	Reading		Cable		Level		Over	Remark
	0.993	MHz	dBm	dB	dB	dB	dBm	dBm	limi	
	1	1333.28	53.87	26.20	4.08	36.38	47.77	74.00	-26.2	
	2	2275.52	49.98	28.05	5.39	37.48	45.94	74.00	-28.0	
	3	4858.72	44.81	31.40	8.60	35.13	49.68	74.00	-24.3	
	4	8083,96	32.76	37.20	11.15	33.32	47.79	74.00	-26.2	1 Peak
Туре		802.11g		Test channe	əl	CH06		Polarity		Vertical
	Mark	Frequency	Readin	g Antenna	Cable	e Preamp	Level	Limit	Over	Remark
		MHz	dBm	dB	dB	dB	dBm	dBm	limit	t
	1	1333.28	50.22	26.20	4.08	36.38	44.12	74.00	-29.88	
	2	2287.13	49.50	28.03	5.40	37.52	45.41	74.00	-28.59	
	3	4883.52	44.31	31.40	8.67	35.18	49.20	74.00	-24.80	
	4	7921.00	32.85	36.84	10.83	33.33	47.19	74.00	-26.81	l Peak
Туре		802.11g		Test channe	əl	CH11		Polarity		Horizontal
Туре	Mark	Frequency	Reading	g Antenna	Cable	Preamp	Level	Limit	Over	Remark
Туре		Frequency MHz	dBm	g Antenna dB	Cable dB	Preamp dB	dBm	Limit dBm	limit	Remark
Туре	1	Frequency MHz 1333.28	dBm 53.87	Antenna dB 26.20	Cable dB 4.08	Preamp dB 36.38	dBm 47.77	Limit dBm 74.00	limi:	Remark t 3 Peak
Type	1 2	Frequency MHz 1333.28 2275.52	dBm 53.87 49.98	Antenna dB 26.20 28.05	Cable dB 4.08 5.39	Preamp dB 36.38 37.48	dBm 47.77 45.94	Limit dBm 74.00 74.00	limit -26.23 -28.00	Remark t 3 Peak 5 Peak
Туре	1	Frequency MHz 1333.28	dBm 53.87	Antenna dB 26.20	Cable dB 4.08	Preamp dB 36.38	dBm 47.77	Limit dBm 74.00	limi:	Remark t 3 Peak 5 Peak 1 Peak
Туре	1 2 3	Frequency MHz 1333.28 2275.52 4933.50	dBm 53.87 49.98 43.57 34.80	Antenna dB 26.20 28.05 31.47	Cable dB 4.08 5.39 8.75 10.46	Preamp dB 36.38 37.48 35.20	dBm 47.77 45.94 48.59	Limit dBm 74.00 74.00 74.00	limit -26.23 -28.00 -25.43 -26.03	Remark t 3 Peak 5 Peak 1 Peak
	1 2 3	Frequency MHz 1333.28 2275.52 4933.50 7508.69	dBm 53.87 49.98 43.57 34.80	Antenna dB 26.20 28.05 31.47 36.58	Cable dB 4.08 5.39 8.75 10.46	Preamp dB 36.38 37.48 35.20 33.87	dBm 47.77 45.94 48.59 47.97	Limit dBm 74.00 74.00 74.00 74.00 Polarity	limit -26.23 -28.00 -25.43 -26.03	Remark Peak Peak Peak Peak Vertical
	1 2 3 4	Frequency MHz 1333.28 2275.52 4933.50 7508.69	dBm 53.87 49.98 43.57 34.80	Antenna dB 26.20 28.05 31.47 36.58	Cable dB 4.08 5.39 8.75 10.46	Preamp dB 36.38 37.48 35.20 33.87	dBm 47.77 45.94 48.59 47.97	Limit dBm 74.00 74.00 74.00 74.00 Polarity	limit -26.23 -28.00 -25.43 -26.03	Remark Peak Peak Peak Peak Vertical
	1 2 3 4	Frequency MHz 1333.28 2275.52 4933.50 7508.69 802.11g Frequency	dBm 53.87 49.98 43.57 34.80	Antenna dB 26.20 28.05 31.47 36.58 Test channe	Cable dB 4.08 5.39 8.75 10.46	Preamp dB 36.38 37.48 35.20 33.87 CH11	dBm 47.77 45.94 48.59 47.97	Limit dBm 74.00 74.00 74.00 74.00 Polarity	limit -26.23 -28.00 -25.43 -26.03	Remark Peak Peak Peak Peak Remark
	1 2 3 4 Mark	Frequency MHz 1333.28 2275.52 4933.50 7508.69 802.11g Frequency MHz	dBm 53.87 49.98 43.57 34.80 Reading dBm 50.22 49.50	Antenna dB 26.20 28.05 31.47 36.58 Test channe	Cable dB 4.08 5.39 8.75 10.46	Preamp dB 36.38 37.48 35.20 33.87 CH11 Preamp dB 36.38	dBm 47.77 45.94 48.59 47.97 Level	Limit dBm 74.00 74.00 74.00 74.00 Polarity	limit -26.2: -28.00 -25.4: -26.0: Over limi	Remark Peak Peak Peak Peak Remark Remark Remark Remark
	1 2 3 4 Mark	Frequency MHz 1333.28 2275.52 4933.50 7508.69 802.11g Frequency MHz 1333.28	dBm 53.87 49.98 43.57 34.80 Reading dBm 50.22	Antenna dB 26.20 28.05 31.47 36.58 Test channe dB 26.20	Cable dB 4.08 5.39 8.75 10.46 Cable dB 4.08	Preamp dB 36.38 37.48 35.20 33.87 CH11 Preamp dB 36.38 37.52	dBm 47.77 45.94 48.59 47.97 Level dBm 44.12	Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00	1imit -26.2: -28.00 -25.4: -26.0: Over limit -29.8	Remark Peak Peak Peak Peak Remark Remark Remark Peak Peak Peak

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Type		802.11n(l	HT20)	Test channe	el (CH01		Polarity		Horizontal	
	Mark	Frequency MHz	Reading dBm	g Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark	
	1	1329.89	52.92	26.18	4.07	36.37	46.80	74.00	-27.20		
	2	2281.32	50.67	28.04	5.40	37.50	46.61	74.00	-27.39	Peak	
	3	3983.75	48.45	29.90	7.38	36.40	49.33	74.00	-24.67	Peak	
	4	4821.76	44.60	31.40	8.50	35.24	49.26	74.00	-24.74	Peak	
Туре		802.11n(l	HT20)	Test channe	el (CH01		Polarity		Vertical	
	Mark	Frequency MHz	Readin dBm	g Antenna dB	Cable dB	Preamp dB	Leve: dBm	l Limit dBm	Over		
	1	1529.75	50.76	25.66	4.37	36.94	43.85	74.00	-30.1	5 Peak	
	2	2287.13	50.52	28.03	5.40	37.52	46.43	74.00	-27.5	7 Peak	
	3	4834.05	45.39	31.40	8.53	35.20	50.12	74.00	-23.8	8 Peak	
	4	8083.96	32.43	37.20	11.15	33.32	47.46	74.00	-26.5	4 Peak	
Туре		802.11n(l	HT20)	Test channe	el (CH06		Polarity		Horizontal	
	Mark	Frequency	Reading		Cable	Preamp	Level		Over	Remark	
		MHz	dBm	dB	dB	dB	dBm	dBm	limi		
	1	1329.89	52.92	26.18	4.07	36.37	46.80	74.00	-27.2		
	2	2281.32	50.67	28.04	5.40	37.50	46.61	74.00	-27.3		
	3	4871.10	44.04	31.40	8.63	35.16	48.91	74.00	-25.0		
	4	8104.56	32.14	37.18	11.21	33.33	47.20	74.00	-26.8	0 Peak	
Туре		802.11n(l	HT20)	Test channe	el (CH06		Polarity		Vertical	
	Mark		- 100							Barrello I	
	1	Frequency	Readin		Cable	Preamp	Level		Over	Remark	
		MHz	dBm	dB	dB	dB	dBm	dBm	limit		
	1	MHz 1529.75	dBm 50.76	dB 25.66	dB 4.37	dB 36.94	dBm 43.85	dBm 74.00	limit -30.15	Peak	
	1 2	MHz 1529.75 2287.13	dBm 50.76 50.52	dB 25.66 28.03	dB 4.37 5.40	dB 36.94 37.52	dBm 43.85 46.43	dBm 74.00 74.00	limit -30.15 -27.57	Peak Peak	
	1 2 3	MHz 1529.75 2287.13 3993.90	dBm 50.76 50.52 48.20	dB 25.66 28.03 29.90	dB 4.37 5.40 7.38	dB 36.94 37.52 36.37	dBm 43.85 46.43 49.11	dBm 74.00 74.00 74.00	limit -30.15 -27.57 -24.89	Peak Peak Peak	
	1 2	MHz 1529.75 2287.13	dBm 50.76 50.52	dB 25.66 28.03	dB 4.37 5.40	dB 36.94 37.52	dBm 43.85 46.43	dBm 74.00 74.00	limit -30.15 -27.57	Peak Peak Peak	
Type	1 2 3	MHz 1529.75 2287.13 3993.90	dBm 50.76 50.52 48.20 45.02	dB 25.66 28.03 29.90	dB 4.37 5.40 7.38 8.60	dB 36.94 37.52 36.37	dBm 43.85 46.43 49.11	dBm 74.00 74.00 74.00	limit -30.15 -27.57 -24.89	Peak Peak Peak	
Туре	1 2 3	MHz 1529.75 2287.13 3993.90 4858.72	dBm 50.76 50.52 48.20 45.02 HT20)	dB 25.66 28.03 29.90 31.40 Test channe	dB 4.37 5.40 7.38 8.60	dB 36.94 37.52 36.37 35.13	dBm 43.85 46.43 49.11	dBm 74.00 74.00 74.00 74.00 Polarity	limit -30.15 -27.57 -24.89 -24.11	Peak Peak Peak Peak Peak Horizontal	
Туре	1 2 3 4	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(h	dBm 50.76 50.52 48.20 45.02	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB	dB 4.37 5.40 7.38 8.60	dB 36.94 37.52 36.37 35.13	dBm 43.85 46.43 49.11 49.89	dBm 74.00 74.00 74.00 74.00 Polarity	limit -30.15 -27.57 -24.89 -24.11	Peak Peak Peak Peak Peak Horizontal	
Туре	1 2 3 4 Mark	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18	dB 4.37 5.40 7.38 8.60 Cable dB 4.07	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00	limit -30.15 -27.57 -24.89 -24.11 Over limi -27.2	Peak Peak Peak Peak Peak Horizontal Remark Peak	
Туре	1 2 3 4 Mark	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80 46.61	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00	1imit -30.15 -27.57 -24.89 -24.11 Over 1imi -27.2 -27.3	Peak Peak Peak Peak Peak Horizontal Remark t Peak Peak	
Туре	1 2 3 4 Mark 1 2 3	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32 4920.96	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67 43.48	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04 31.44	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40 8.73	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50 35.21	dBm 43.85 46.43 49.11 49.89 Leve: dBm 46.80 46.61 48.44	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00	1imit -30.19 -27.57 -24.89 -24.11 Over limi -27.2 -27.3 -25.5	Peak Peak Peak Peak Peak Horizontal Remark t Peak Peak Peak Peak	
Туре	1 2 3 4 Mark	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80 46.61	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00	1imit -30.15 -27.57 -24.89 -24.11 Over 1imi -27.2 -27.3	Peak Peak Peak Peak Peak Horizontal Remark t Peak Peak Peak Peak	
Type	1 2 3 4 Mark 1 2 3	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32 4920.96	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67 43.48 33.28	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04 31.44	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40 8.73 10.95	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50 35.21	dBm 43.85 46.43 49.11 49.89 Leve: dBm 46.80 46.61 48.44	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00	1imit -30.19 -27.57 -24.89 -24.11 Over limi -27.2 -27.3 -25.5	Peak Peak Peak Peak Peak Horizontal Remark t Peak Peak Peak Peak	
	1 2 3 4 Mark 1 2 3	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32 4920.96 8022.46 802.11n(H	dBm 50.76 50.52 48.20 45.02 HT20) Readin 52.92 50.67 43.48 33.28 HT20)	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04 31.44 37.14 Test channe	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40 8.73 10.95	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50 35.21 33.31 CH11	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80 46.61 48.44 48.06	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit Limit	limit -30.15 -27.55 -24.89 -24.11 Over limi -27.2 -27.3 -25.5 -25.9	Peak Peak Peak Peak Peak Horizontal Remark t Peak Peak Peak Vertical Remark	
	1 2 3 4 Mark 1 2 3 4	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32 4920.96 8022.46 802.11n(H Frequency MHz	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67 43.48 33.28 HT20)	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04 31.44 37.14 Test channe	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40 8.73 10.95	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50 35.21 33.31 CH11 Preamp dB	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80 46.61 48.44 48.06	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm Adm Adm Adm Adm Adm Adm Adm Adm Adm Ad	limit -30.15 -27.55 -24.89 -24.11 Over limi -27.2 -27.3 -25.5 -25.9	Peak Peak Peak Peak Peak Peak Peak Peak	
	1 2 3 4 Mark 1 2 3 4	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32 4920.96 8022.46 802.11n(H Frequency MHz 1529.75	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67 43.48 33.28 HT20)	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04 31.44 37.14 Test channe	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40 8.73 10.95 Cable dB 4.37	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50 35.21 33.31 CH11 Preamp dB 36.94	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80 46.61 48.44 48.06	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00	limit -30.15 -27.57 -24.89 -24.11 Over limi -27.2 -27.3 -25.5 -25.9 Over limi -30.1	Peak Peak Peak Peak Peak Peak Peak Peak	
	1 2 3 4 Mark 1 2 3 4	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32 4920.96 8022.46 802.11n(H Frequency MHz 1529.75 2287.13	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67 43.48 33.28 HT20) Readin dBm 50.76 50.52	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04 31.44 37.14 Test channe g Antenna dB 25.66 28.03	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40 8.73 10.95 Cable dB 4.37 5.40	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50 35.21 33.31 CH11 Preamp dB 36.94 37.52	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80 46.61 48.44 48.06 Level dBm 43.85 46.43	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00	limit -30.19 -27.57 -24.89 -24.11 Over limi -27.2 -27.3 -25.5 -25.9 Over limi -30.1 -27.5	Peak Peak Peak Peak Peak Peak Peak Peak	
	1 2 3 4 Mark 1 2 3 4	MHz 1529.75 2287.13 3993.90 4858.72 802.11n(H Frequency MHz 1329.89 2281.32 4920.96 8022.46 802.11n(H Frequency MHz 1529.75	dBm 50.76 50.52 48.20 45.02 HT20) Readin dBm 52.92 50.67 43.48 33.28 HT20)	dB 25.66 28.03 29.90 31.40 Test channe g Antenna dB 26.18 28.04 31.44 37.14 Test channe	dB 4.37 5.40 7.38 8.60 Cable dB 4.07 5.40 8.73 10.95 Cable dB 4.37	dB 36.94 37.52 36.37 35.13 CH11 Preamp dB 36.37 37.50 35.21 33.31 CH11 Preamp dB 36.94	dBm 43.85 46.43 49.11 49.89 Level dBm 46.80 46.61 48.44 48.06	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00	limit -30.15 -27.57 -24.89 -24.11 Over limi -27.2 -27.3 -25.5 -25.9 Over limi -30.1	Peak Peak Peak Peak Peak Peak Peak Peak	

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Type		802.11n(H	IT40)	Test channe	el (CH03		Polarity		Horizontal
	Mark	Frequency MHz	Reading	g Antenna dB	Cable dB	Preamp	Level dBm	Limit dBm	Over limi	Remark
	1	1326.23	53.05	26.16	4.07	36.36	46.92	74.00	-27.0	
	2	1670.38	51.95	25.10	4.57	37.17	44.45	74.00	-29.5	
	3	4846.27	44.95	31.40	8.57	35.17	49.75	74.00	-24.2	5 Peak
	4	11469.17	31.54	40.81	12.72	36.39	48.68	74.00	-25.3	2 Peak
Туре		802.11n(F	IT40)	Test channe	el (CH03		Polarity		Vertical
	Mark	Frequency MHz	Readin dBm	g Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
	1	1135.73	50.78	25.40	3.76	36.82	43.12	74.00	-30.88	Peak
	2	1525.86	53.83	25.69	4.36	36.92	46.96	74.00	-27.04	Peak
	3	4846.37	44.34	31.40	8.57	35.17	49.14	74.00	-24.86	Peak
	4	8104.56	32.62	37.18	11.21	33.33	47.68	74.00	-26.32	Peak
Туре		802.11n(H	IT40)	Test channe	el (CH06		Polarity		Horizontal
	Mark	Frequency MHz	Readin dBm	g Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limi	Remark
	1	1326.51	53.05	26.16	4.07	36.36	46.92	74.00	-27.0	T
	2	2671.33	48.15	27.83	5.87	37.05	44.80	74.00	-29.2	
	3	3993.90	47.48	29.90	7.38	36.37	48.39	74.00	-25.6	1 Peak
	4	4871.10	43.66	31.40	8.63	35.16	48.53	74.00	-25.4	7 Peak
Туре		802.11n(H	HT40)	Test channe	el (CH06		Polarity		Vertical
	Mark								_	
		Frequency MHz	Readin dBm		Cable dB	Preamp	Level		Over	Remark
	1	Frequency MHz 1135.73	Readin dBm 50.78	g Antenna dB 25.40			dBm 43.12	dBm 74.00	limit -30.88	
		MHz	dBm	dB	dB	dB	dBm	dBm	limit	B Peak
	1	MHz 1135.73	dBm 50.78	dB 25.40	dB 3.76	dB 36.82	dBm 43.12	dBm 74.00	limit -30.88	r 3 Peak 4 Peak
	1 2	MHz 1135.73 1525.86	dBm 50.78 53.83	dB 25.40 25.69	dB 3.76 4.36	dB 36.82 36.92	dBm 43.12 46.96	dBm 74.00 74.00	limit -30.88 -27.04	r B Peak I Peak 2 Peak
Туре	1 2 3	MHz 1135.73 1525.86 4871.10	dBm 50.78 53.83 45.71 32.67	dB 25.40 25.69 31.40	dB 3.76 4.36 8.63 11.08	dB 36.82 36.92 35.16	dBm 43.12 46.96 50.58	dBm 74.00 74.00 74.00	limit -30.88 -27.04 -23.42	r B Peak I Peak 2 Peak
Туре	1 2 3	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H	dBm 50.78 53.83 45.71 32.67 HT40)	dB 25.40 25.69 31.40 37.20 Test channe	dB 3.76 4.36 8.63 11.08	dB 36.82 36.92 35.16 33.32 CH09	dBm 43.12 46.96 50.58 47.63	dBm 74.00 74.00 74.00 74.00 Polarity	limit -30.88 -27.04 -23.42 -26.37	Peak Peak Peak Peak Peak Peak Horizontal
Туре	1 2 3 4 Mark	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(F	dBm 50.78 53.83 45.71 32.67 HT40)	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB	dB 3.76 4.36 8.63 11.08	dB 36.82 36.92 35.16 33.32 CH09	dBm 43.12 46.96 50.58 47.63	dBm 74.00 74.00 74.00 74.00 Polarity	limit -30.88 -27.04 -23.42 -26.37 Over limit	Peak Peak Peak Peak Peak Peak Peak Remark
Туре	1 2 3 4 Mark	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H Frequency MHz 1326.23	dBm 50.78 53.83 45.71 32.67 HT40) Readin dBm 53.05	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16	dB 3.76 4.36 8.63 11.08 El (Cable dB 4.07	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00	limit -30.88 -27.04 -23.42 -26.37 Over limit -27.08	Peak Peak Peak Peak Peak Peak Horizontal Remark Peak
Туре	1 2 3 4 Mark	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H Frequency MHz 1326.23 1670.38	dBm 50.78 53.83 45.71 32.67 HT40) Readin dBm 53.05 51.95	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10	dB 3.76 4.36 8.63 11.08 El (Cable dB 4.07 4.57	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55	Peak Peak Peak Peak Peak Peak Horizontal Remark Peak Peak
Туре	1 2 3 4 Mark	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H Frequency MHz 1326.23 1670.38 4902.82	dBm 50.78 53.83 45.71 32.67 HT40) Readin dBm 53.05 51.95 45.13	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45 50.03	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55 -23.97	Peak Peak Peak Peak Peak Peak Horizontal Remark Peak Peak Peak
	1 2 3 4 Mark 1 2 3	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H Frequency MHz 1326.23 1670.38 4902.82 11519.18	dBm 50.78 53.83 45.71 32.67 HT40) Readin dBm 53.05 51.95 45.13 31.94	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41 40.84	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71 12.74	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22 36.37	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 74.00	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55	Peak Peak Peak Peak Peak Peak Peak Peak
Туре	1 2 3 4 Mark 1 2 3	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H Frequency MHz 1326.23 1670.38 4902.82	dBm 50.78 53.83 45.71 32.67 HT40) Readin dBm 53.05 51.95 45.13 31.94	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71 12.74	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45 50.03	dBm 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55 -23.97	Peak Peak Peak Peak Peak Peak Horizontal Remark Peak Peak Peak
	1 2 3 4 Mark 1 2 3	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H Frequency MHz 1326.23 1670.38 4902.82 11519.18	dBm 50.78 53.83 45.71 32.67 HT40) Readin dBm 53.05 51.95 45.13 31.94	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41 40.84 Test channe	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71 12.74	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22 36.37	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45 50.03 49.15	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00 Polarity	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55 -23.97	Peak Peak Peak Peak Peak Peak Peak Peak
	1 2 3 4 Mark 1 2 3 4	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(H Frequency MHz 1326.23 1670.38 4902.82 11519.18 802.11n(H Frequency MHz	dBm 50.78 53.83 45.71 32.67 IT40) Readin dBm 53.05 51.95 45.13 31.94 IT40) Readin dBm	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41 40.84 Test channe g Antenna dB	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71 12.74	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22 36.37 CH09 Preamp dB	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45 50.03 49.15	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 Polarity Limit dBm	limit -30.88 -27.04 -23.42 -26.37 Over limit -27.08 -29.55 -23.97 -24.85	Peak Peak Peak Peak Peak Peak Peak Peak
	1 2 3 4 Mark 1 2 3 4	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(F Frequency MHz 1326.23 1670.38 4902.82 11519.18 802.11n(F Frequency MHz 1525.86	dBm 50.78 53.83 45.71 32.67 IT40) Readin dBm 53.05 51.95 45.13 31.94 IT40) Readin dBm 53.83	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41 40.84 Test channe g Antenna dB 25.69	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71 12.74 Cable dB 4.36	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22 36.37 CH09 Preamp dB	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45 50.03 49.15 Level dBm 46.96	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55 -23.97 -24.85	Peak Peak Peak Peak Peak Peak Peak Peak
	1 2 3 4 Mark 1 2 3 4	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(F Frequency MHz 1326.23 1670.38 4902.82 11519.18 802.11n(F Frequency MHz 1525.86 2287.13	dBm 50.78 53.83 45.71 32.67 IT40) Readin dBm 53.05 51.95 45.13 31.94 IT40) Readin dBm 53.83 47.75	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41 40.84 Test channe g Antenna dB 25.69 28.03	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71 12.74 Cable dB 4.36 5.40	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22 36.37 CH09 Preamp dB 36.92 37.52	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45 50.03 49.15 Level dBm 46.96 43.66	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 74.00	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55 -23.97 -24.85 Over 1imi -27.00 -30.33	Peak Peak Peak Peak Peak Peak Peak Peak
	1 2 3 4 Mark 1 2 3 4	MHz 1135.73 1525.86 4871.10 8063.40 802.11n(F Frequency MHz 1326.23 1670.38 4902.82 11519.18 802.11n(F Frequency MHz 1525.86	dBm 50.78 53.83 45.71 32.67 IT40) Readin dBm 53.05 51.95 45.13 31.94 IT40) Readin dBm 53.83	dB 25.40 25.69 31.40 37.20 Test channe g Antenna dB 26.16 25.10 31.41 40.84 Test channe g Antenna dB 25.69	dB 3.76 4.36 8.63 11.08 Cable dB 4.07 4.57 8.71 12.74 Cable dB 4.36	dB 36.82 36.92 35.16 33.32 CH09 Preamp dB 36.36 37.17 35.22 36.37 CH09 Preamp dB	dBm 43.12 46.96 50.58 47.63 Level dBm 46.92 44.45 50.03 49.15 Level dBm 46.96	dBm 74.00 74.00 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00 74.00 Polarity Limit dBm 74.00 74.00	1imit -30.88 -27.04 -23.42 -26.37 Over 1imit -27.08 -29.55 -23.97 -24.85	Peak Peak Peak Peak Peak Peak Peak Peak

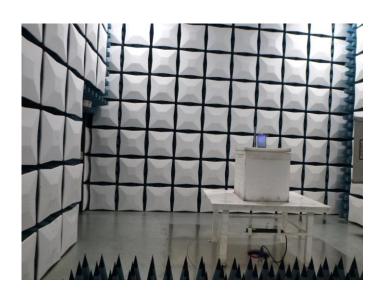
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6. TEST SETUP PHOTOS

Radiated Emission







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AC Conducted Emission



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7. EXTERANAL AND INTERNAL PHOTOS

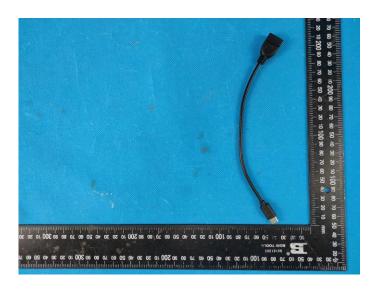
External Photos

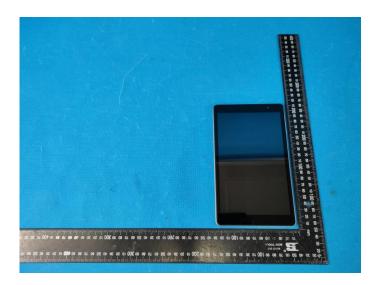


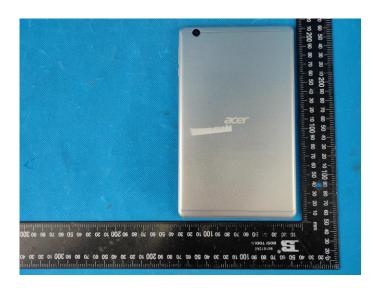




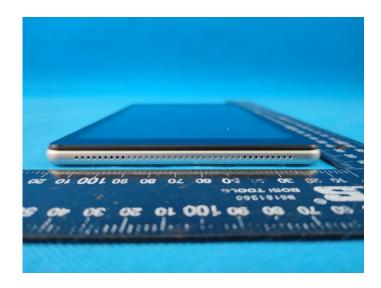
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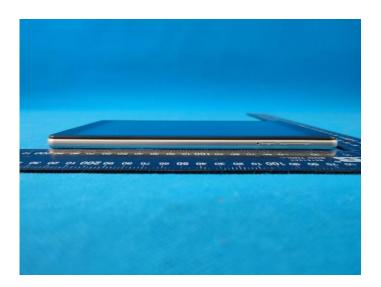


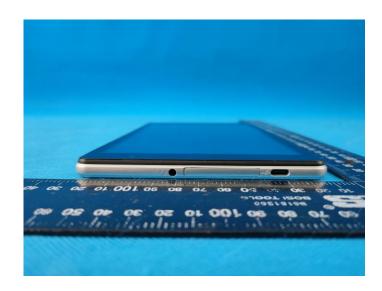




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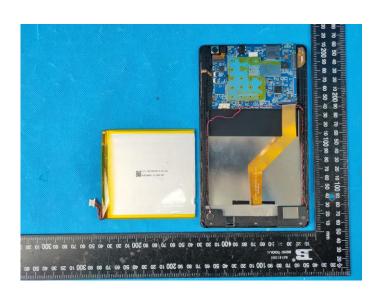


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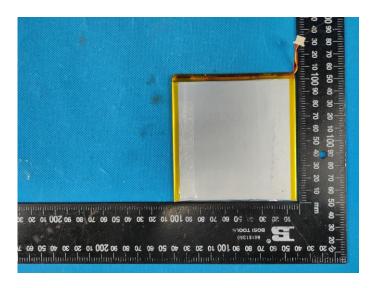
Internal Photos

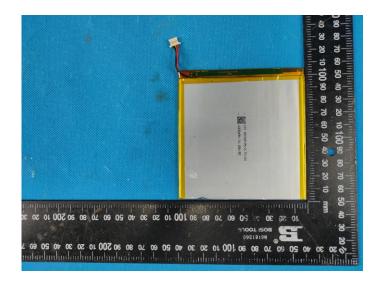


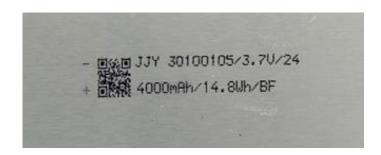




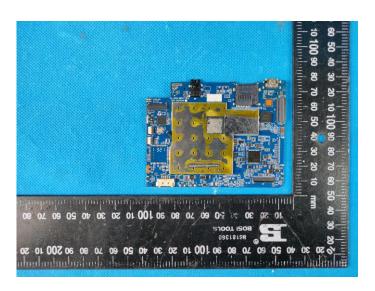
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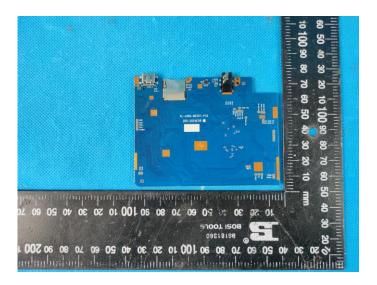






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8. APPENDIX REPORT