1	V1.0		DAC	Report No.: DACE250327007RL001
	F	SI	F TEST REPORT	
	. 6		For	
			enzhen Buzz Tech CO.,LTD oduct Name: Smart watch Test Model(s): S81 Pro	
	Report Reference No.	:	DACE250327007RL001	
	FCC ID	:	2AGFW-S81	
	Applicant's Name	:	Shenzhen Buzz Tech CO.,LTD	
	Address	:	10th Floor, Guang Chang Bldg,74#,BaoMin	1st Rd, Bao An Shenzhen,
	Testing Laboratory	:	Shenzhen DACE Testing Technology Co., Lt	d.
	Address	:	102, Building H1, & 1/F., Building H, Hongfa Tangtou Community, Shiyan Subdistrict, Bao Guangdong, China	
	Test Specification Standard	:	47 CFR Part 15.247	
	Date of Receipt	:	March 27, 2025	
	Date of Test	:	March 27, 2025 to April 10, 2025	
	Data of Issue	è	April 10, 2025	
	Result	:	Pass	

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Apply for company information

Applicant's Name	:	Shenzhen Buzz Tech CO.,LTD
Address	:	10th Floor, Guang Chang Bldg,74#,BaoMin 1st Rd, Bao An Shenzhen,
Product Name	:	Smart watch
Test Model(s)	:	S81 Pro
Series Model(s)	Series Model(s) : \$96,\$97,\$98,\$99,P145,P146,P147,P150,P151,P152,Y10,Y11,Y1	
	2	Y13,Y14,Y15,Y16,Y17,Y18,Y19,
Test Specification Standard(s)	:	47 CFR Part 15.247

NOTE1:

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The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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Compiled by:

Keren Huang

Keren Huang / Test Engineer April 10, 2025

Supervised by:

Ben Tang

April 10, 2025

Ben Tang / Project Engineer

Approved by:

Machael KNJ

Machael Mo / Manager April 10, 2025

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TEST SUMMARY 1

1.1 Test Standards

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The tests were performed according to following standards:

47 CFR Part 15.247: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

1.2 Summary of Test Result

Item	Standard	Method	Requirement	Result
Antenna requirement	47 CFR Part 15.247		47 CFR 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15.247	ANSI C63.10-2013 section 6.2	47 CFR 15.207(a)	Pass
6dB Bandwidth	47 CFR Part 15.247	ANSI C63.10-2013, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(a)(2)	Pass
Maximum Conducted Output Power	47 CFR Part 15.247	ANSI C63.10-2013, section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(b)(3)	Pass
Power Spectral Density	47 CFR Part 15.247	ANSI C63.10-2013, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(e)	Pass
Emissions in non-restricted frequency bands	47 CFR Part 15.247	ANSI C63.10-2013 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d), 15.209, 15.205	Pass
Band edge emissions (Radiated)	47 CFR Part 15.247	ANSI C63.10-2013 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d), 15.209, 15.205	Pass
Emissions in frequency bands (below 1GHz)	47 CFR Part 15.247	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d), 15.209, 15.205	Pass
Emissions in frequency bands (above 1GHz)	47 CFR Part 15.247	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d), 15.209, 15.205	Pass

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GENERAL INFORMATION 2

V1.0

2.1 Client Information

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Applicant's Name	:	Shenzhen Buzz Tech CO.,LTD
Address	:	10th Floor, Guang Chang Bldg,74#,BaoMin 1st Rd, Bao An Shenzhen,
Manufacturer	:	Shenzhen Buzz Tech CO.,LTD
Address	:	10th Floor, Guang Chang Bldg,74#,BaoMin 1st Rd, Bao An Shenzhen,

2.2 Description of Device (EUT)

Product Name:	Smart watch		
Model/Type reference:	S81 Pro		
Series Model:	S96,S97,S98,S99,P145,P146,P147,P150,P151,P152,Y10,Y11,Y12,Y13,Y14, Y15,Y16,Y17,Y18,Y19,		
Model Difference: The product has many models, only the model name, Appearance and co different, and the other parts such as the circuit principle, pcb and electrica structure are the same.			
Trade Mark: N/A			
Power Supply:	DC 5V/1A from adapter Battery:DC3.7V 300mAh		
Operation Frequency: 2402MHz to 2480MHz			
Number of Channels:	40		
Modulation Type:	GFSK		
Antenna Type:	Internal antenna		
Antenna Gain:	-5.09dBi		
Hardware Version:	V1.0		
Software Version:	V1.0		

(Remark: The Antenna Gain is supplied by the customer. DACE is not responsible for This data and the related calculations associated with it)

Operation Frequency each of channel								
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
1	2402 MHz	11	2422 MHz	21	2442 MHz	31	2462 MHz	
2	2404 MHz	12	2424 MHz	22	2444 MHz	32	2464 MHz	
3	2406 MHz	13	2426 MHz	23	2446 MHz	33	2466 MHz	
4	2408 MHz	14	2428 MHz	24	2448 MHz	34	2468 MHz	
5	2410 MHz	15	2430 MHz	25	2450 MHz	35	2470 MHz	
6	2412 MHz	16	2432 MHz	26	2452 MHz	36	2472 MHz	
7	2414 MHz	17	2434 MHz	27	2454 MHz	37	2474 MHz	
8	2416 MHz	18	2436 MHz	28	2456 MHz	38	2476 MHz	
9	2418 MHz	19	2438 MHz	29	2458 MHz	39	2478 MHz	
10	2420 MHz	20	2440 MHz	30	2460 MHz	40	2480 MHz	

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Note:

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In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)	
Test channel	BLE	
Lowest channel	2402MHz	
Middle channel	2440MHz	6
Highest channel	2480MHz	
Remark:Only the data of the worst mo	de would be recorded in this report.	J

Description of Test Modes 2.3

No	Title	Description	
TM1	Lowest channel	Keep the EUT connect to AC power line and works in continuously transmitting mode with GFSK modulation.	
TM2	Middle channel	Keep the EUT connect to AC power line and works in continuously transmitting mode with GFSK modulation.	
TM3 Highest channel		Keep the EUT connect to AC power line and works in continuously transmitting mode with GFSK modulation.	

Description of Support Units 2.4

Title	Manufacturer	Model No.	Serial No.
AC-DC adapter	HUAWEI TECHNOLOGY	HW100400C01	

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2.5 Equipments Used During The Test

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Conducted Emission	at AC power line	200			6
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Power absorbing clamp	SCHWARZ BECK	MESS- ELEKTRONIK	/	2024-05-20	2025-05-19
Electric Network	SCHWARZ BECK	CAT5 8158	CAT5 8158#207	/	1
Cable	SCHWARZ BECK		1	2024-05-20	2025-05-19
Pulse Limiter	SCHWARZ BECK	VTSD 9561-F Pulse limiter 10dB Attenuation	561-G071	2024-12-06	2025-12-05
50ΩCoaxial Switch	Anritsu	MP59B	MP59B M20531		/
Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K 03-102109- MH	2024-06-12	2025-06-11
L.I.S.N	R&S	ESH3-Z5	831.5518.52	2023-12-12	2025-12-11
L.I.S.N	SCHWARZ BECK	NSLK 8126	05055	2024-06-14	2025-06-13
Pulse Limiter	CYBERTEK	EM5010A	/ 🥏	2024-09-27	2025-09-26
EMI test software	EZ -EMC	EZ	V1.1.42	1	/

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Emissions in non-restricted frequency bands 6dB Bandwidth Maximum Conducted Output Power

Power Spectral Density

Power Spectral Density								
Equipment	Manufacturer Model No Inventory		Inventory No	Cal Date	Cal Due Date			
RF Test Software	Tachoy Information Technology(she nzhen) Co.,Ltd.	RTS-01	V1.0.0	/	1			
Power divider	MIDEWEST	PWD-2533	SMA-79	2023-05-11	2026-05-10			
RF Sensor Unit	Tachoy Information Technology(she nzhen) Co.,Ltd.	TR1029-2	000001	/	1			
Wideband radio communication tester	R&S	CMW500	113410	2024-06-12	2025-06-11			
Vector Signal Generator	Keysight	N5181A	MY50143455	2024-12-06	2025-12-05			
Signal Generator	Keysight	N5182A	MY48180415	2024-12-06	2025-12-05			
Spectrum Analyzer	Keysight	N9020A	MY53420323	2024-12-06	2025-12-05			

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Band edge emissions (Radiated)							
Emissions in frequence Emissions in frequence	•			20			
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
EMI Test software	Farad	EZ -EMC	V1.1.42	/	/		
Positioning Controller	S MF	MF-7802	<u> </u>	/	1		
Amplifier(18-40G)	COM-POWER	AH-1840	10100008-1	2023-05-19	2025-05-18		
Horn antenna	COM-POWER	AH-1840 (18-40G)	10100008	2023-05-19	2025-05-18		
Loop antenna	ZHINAN	ZN30900C	ZN30900C	2024-06-14	2026-06-13		
Cable(LF)#2	Schwarzbeck	/	/	2024-12-19	2025-12-18		
Cable(LF)#1	Schwarzbeck	/	/	2024-12-19	2025-12-18		
Cable(HF)#2	Schwarzbeck	AK9515E	96250	2024-05-20	2025-05-19		
Cable(HF)#1	Schwarzbeck	SYV-50-3-1		2024-05-20	2025-05-19		
Power amplifier(LF)	Schwarzbeck	BBV9743	9743-151	2024-06-12	2025-06-11		
Power amplifier(HF)	Schwarzbeck	BBV9718	9718-282	2024-06-12	2025-06-11		
Wideband radio communication tester	R&S	CMW500	113410	2024-06-12	2025-06-11		
Spectrum Analyzer	R&S	FSP30	1321.3008K40 -101729-jR	2024-06-12	2025-06-11		
Test Receiver	R&S	ESCI 3	1166.5950K03 -101431-Jq	2024-06-13	2025-06-12		
Horn Antenna	Sunol Sciences	DRH-118	A091114	2023-05-13	2025-05-12		
Broadband Antenna	Sunol Sciences	JB6 Antenna	A090414	2024-09-28	2026-09-27		

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Statement Of The Measurement Uncertainty 2.6

Test Item	Measurement Uncertainty
Conducted Disturbance (0.15~30MHz)	±3.41dB
Occupied Bandwidth	±3.63%
RF conducted power	±0.733dB
RF power density	±0.234%
Conducted Spurious emissions	±1.98dB
Radiated Emission (Above 1GHz)	±5.46dB
Radiated Emission (Below 1GHz)	±5.79dB
Noto: (1) This upcortainty represents an expanded u	upportainty overcoood at approximately the 0.5%

Note: (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2.7 Identification of Testing Laboratory

Company Name:	Shenzhen DACE Testing Technology Co., Ltd.					
Address:	102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park, Tangtou Connunity, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China					
Phone Number:	+86-13267178997					
Fax Number:	86-755-29113252					
Identification of the Respons	ible Testing Location					
Company Name:	Shenzhen DACE Testing Technology Co., Ltd.					
Address:	102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park, Tangtou Connunity, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China					
Phone Number:	+86-13267178997					
Fax Number:	86-755-29113252					
Designation Number:	CN1342					
Test Firm Registration Number:	778666					
A2LA Certificate Number:	6270.01					

2.8 Announcement

(1) The test report reference to the report template version v0.

(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.

(3) The test report is invalid if there is any evidence and/or falsification.

(4) This document may not be altered or revised in any way unless done so by DACE and all revisions are duly noted in the revisions section.

(5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

(6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

Report No.: DACE250327007RL001

Evaluation Results (Evaluation) 3

3.1 Antenna requirement

Refer to 47 CFR Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.1.1 Conclusion:

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Test Requirement:

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Report No.: DACE250327007RL001

Radio Spectrum Matter Test Results (RF) 4

4.1 Conducted Emission at AC power line

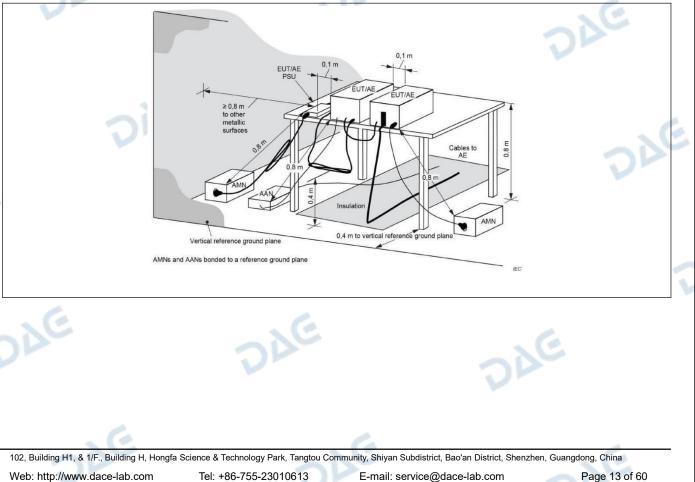
Test Requirement:	Refer to 47 CFR 15.207(a), Except as shown in paragraphs (b)and (c)of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).						
Test Limit:	Frequency of emission (MHz) Conducted limit (dBµV)						
		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 Method:	ANSI C63.10-2013 section 6.2	V	4				
Procedure:	: Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices						
4.1.1 E.U.T. Operation:	.e						

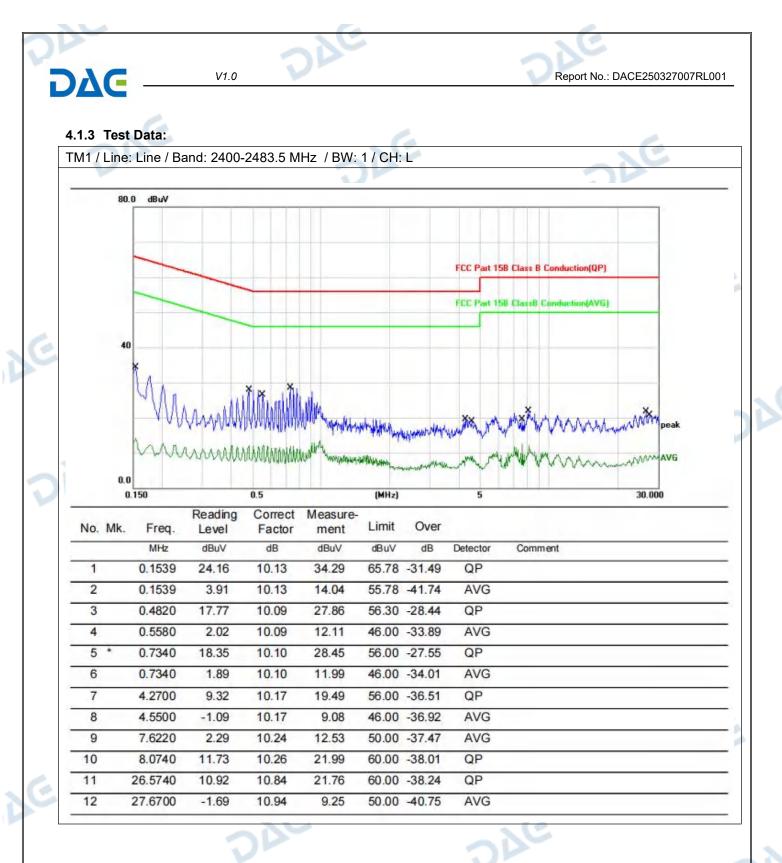
4.1.1 E.U.T. Operation:

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Operating Environment:								
Temperature:	23.5 °C		Humidity:	47 %	Atmo	spheric Pressure:	101 kPa	
Pretest mode:		TM1				V		
Final test mode:		TM1						

4.1.2 Test Setup Diagram:





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DAG V1.0 Report No.: DACE250327007RL001 TM1 / Line: Neutral / Band: 2400-2483.5 MHz / BW: 1 / CH: L 80.0 dBuV FCC Part 15B Class B Conduction(QP) FCC P AVG) of 158 CI 40 NWAN AVG 0.0 0.150 0.5 (MHz) 5 30.000 Correct Reading Measure-Limit Over No. Mk. Freq. Level Factor ment MHz dBuV dB dBuV dB dBuV Detector Comment 0.1500 23.39 10.13 33.52 65.99 -32.47 QP 1 10.13 AVG 2 0.1500 4.07 14.20 55.99 -41.79

3	0.4540	17.46	10.09	27.55	56.80 -29.25	QP	
4	0.4540	1.95	10.09	12.04	46.80 -34.76	AVG	
5 *	0.9100	19.24	10.10	29.34	56.00 -26.66	QP	
6	0.9820	3.98	10.11	14.09	46.00 -31.91	AVG	
7	1.7700	11.26	10.02	21.28	56.00 -34.72	QP	
8	1.7700	-1.32	10.02	8.70	46.00 -37.30	AVG	
9	7.6220	2.62	10.24	12.86	50.00 -37.14	AVG	
10	8.1899	12.51	10.26	22.77	60.00 -37.23	QP	
11	24.0620	-2.27	10.71	8.44	50.00 -41.56	AVG	
12	25.4220	9.59	10.77	20.36	60.00 -39.64	QP	

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4.2 6dB Bandwidth

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Test Requirement:	47 CFR 15.247(a)(2)
Test Limit:	Refer to 47 CFR 15.247(a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	ANSI C63.10-2013, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	 a) Set RBW = 100 kHz. b) Set the VBW >= [3 × RBW]. c) Detector = peak. d) Trace mode = max hold. e) Sweep = auto couple. f) Allow the trace to stabilize. g) 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.

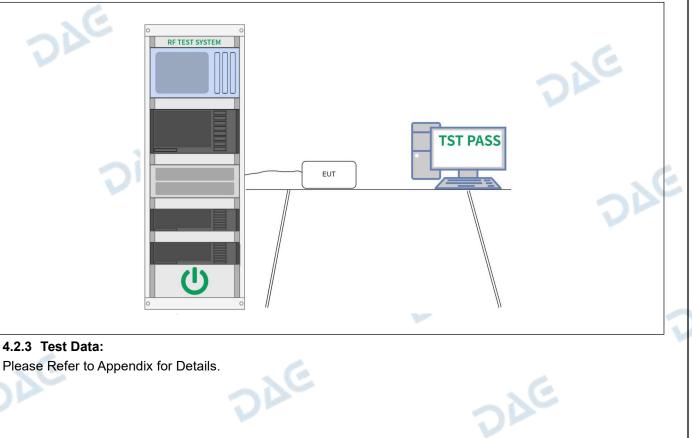
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4.2.1 E.U.T. Operation:

Operating Envir	onment:					
Temperature:	23.5 °C	_	Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode:		TM1,	TM2, TM3			6
Final test mode:		TM1,	TM2, TM3			
4.0.0 To 1.0.1						

4.2.2 Test Setup Diagram:

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Report No.: DACE250327007RL001

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4.3 Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Test Limit:	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	ANSI C63.10-2013, section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013, section 11.9.1 Maximum peak conducted output power
de 1	Note: Per ANSI C63.10-2013, if there are two or more antnnas, the conducted powers at Core 0, Core 1,, Core i were first measured separately, as shown in the section above(this product olny have one antenna). The measured values were then summed in linear power units then converted back to dBm. Per ANSI C63.10-2013 Section 14.4.3.2.3, the directional gain is calculated using the following formula, where GN is the gain of the nth antenna and NANT, the total number of antennas used.
DAG	For correlated unequal antenna gain Directional gain = 10*log[(10G1/20 + 10G2/20 + + 10GN/20)2 / NANT] dBi For completely uncorrelated unequal antenna gain Directional gain = 10*log[(10G1/10 + 10G2/10 + + 10GN/10)/ NANT] dBi Sample Multiple antennas Calculation: Core 0 + Core 1 +Core i. = MIMO/CDD (i is the number of antennas) (#VALUE! mW + mW) = #VALUE! mW = dBm Sample e.i.r.p. Calculation: e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

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4.3.1 E.U.T. Operation:

Operating Envir	onment:							
Temperature:	23.5 °C		Humidity:	47 %	-	Atmospheric Pressure:	101 kPa	
Pretest mode:		TM1,	TM2, TM3					2P
Final test mode	1	TM1,	TM2, TM3					

4.3.2 Test Setup Diagram:

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DAC -	V1.0	Report No.: DACE250327007RL001
DAG	RF TEST SYSTEM	DAG
2		EUT
4.3.3 Test Data : Please Refer to Ap	pendix for Details.	
		Tangtou Community, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China

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Report No.: DACE250327007RL001

4.4 Power Spectral Density

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47 CFR 15.247(e)
Refer to 47 CFR 15.247(e), 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.
ANSI C63.10-2013, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02
ANSI C63.10-2013, section 11.10, Maximum power spectral density level in the fundamental emission

4.4.1 E.U.T. Operation:

Operating Envir	onment:	ער			. 6	
Temperature:	23.5 °C		Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode: TM1, TM2, TM3			TM2, TM3			
Final test mode:		TM1,	TM2, TM3			

4.4.2 Test Setup Diagram:

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Subdistrict, Bao'an District, Shenzhen, Guangdong, China
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Report No.: DACE250327007RL001

4.5 Emissions in non-restricted frequency bands

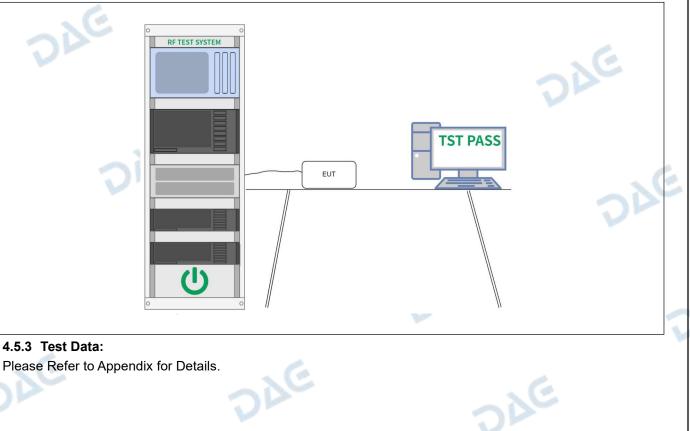
Test Requirement:	47 CFR 15.247(d), 15.209, 15.205
Test Limit:	Refer to 47 CFR 15.247(d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 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, 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 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method:	ANSI C63.10-2013 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013 Section 11.11.1, Section 11.11.2, Section 11.11.3

4.5.1 E.U.T. Operation:

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Operating Envir	onment:					
Temperature:	23.5 °C		Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode:		TM1,	TM2, TM3			6
Final test mode:	1	TM1,	TM2, TM3			
1 5 0 To 1 0 1						

4.5.2 Test Setup Diagram:



Report No.: DACE250327007RL001

4.6 Band edge emissions (Radiated)

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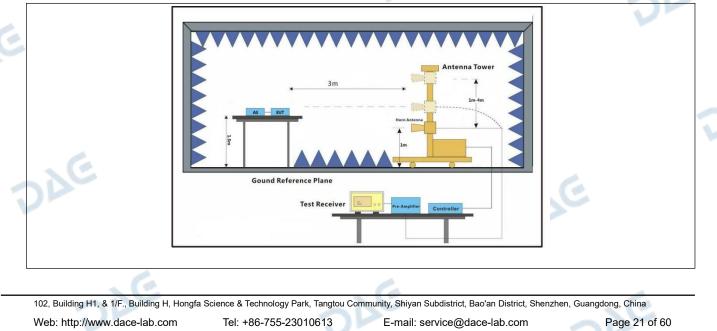
Test Requirement:	restricted bands, as defi	(d), In addition, radiated emission ned in § 15.205(a), must also co l in § 15.209(a)(see § 15.205(c))	omply with the radiated
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
20	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
AE	radiators operating under 54-72 MHz, 76-88 MHz, these frequency bands i and 15.241. In the emission table ab The emission limits show employing a CISPR qua 110–490 kHz and above	paragraph (g), fundamental emer this section shall not be locate 174-216 MHz or 470-806 MHz. s permitted under other sections ove, the tighter limit applies at th wn in the above table are based si-peak detector except for the f e 1000 MHz. Radiated emission ments employing an average det	ed in the frequency bands However, operation within s of this part, e.g., §§ 15.231 he band edges. on measurements frequency bands 9–90 kHz, limits in these three bands
Test Method:	ANSI C63.10-2013 sect KDB 558074 D01 15.24	ion 6.10 7 Meas Guidance v05r02	
Procedure:	ANSI C63.10-2013 sect	ion 6.10.5.2	S.C.
4.6.1 E.U.T. Operation:			~~~

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4.6.1 E.U.T. Operation:

Operating Enviro	onment:					
Temperature:	23.5 °C		Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode:		TM1,	TM2, TM3		. 6	
Final test mode:	DP	TM1,	TM2, TM3			

4.6.2 Test Setup Diagram:



DAG V1.0 Report No.: DACE250327007RL001 4.6.3 Test Data: TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: L 110.0 dBuV/m 100 90 80 FCC Part 15C (Pe 70 60 FCC Part 15C AV) 50 40 30 AVG 20 10 0.0 2310.000 2320.000 2330.000 2340.000 2350.000 2370.000 2380.000 2390.000 2400.000 2410.000 (MHz) Reading Factor Frequency Level Limit Margin Height Azimuth Detector No. P/F Remark (deg.) (dBuV/m) (dBuV/m) (cm) (MHz) (dBuV) (dB/m)(dB) 2310.000 40.71 -6.63 34.08 P 1 74.00 -39.92 peak 149 P 2 2310.000 29.26 -6.63 22.63 54.00 -31.37 AVG 149 2390.000 41.31 34.89 74.00 P 3 -6.42 -39.11 149 peak 2390.000 30.39 23.97 54.00 -30.03 P 4 * -6.42 AVG 149

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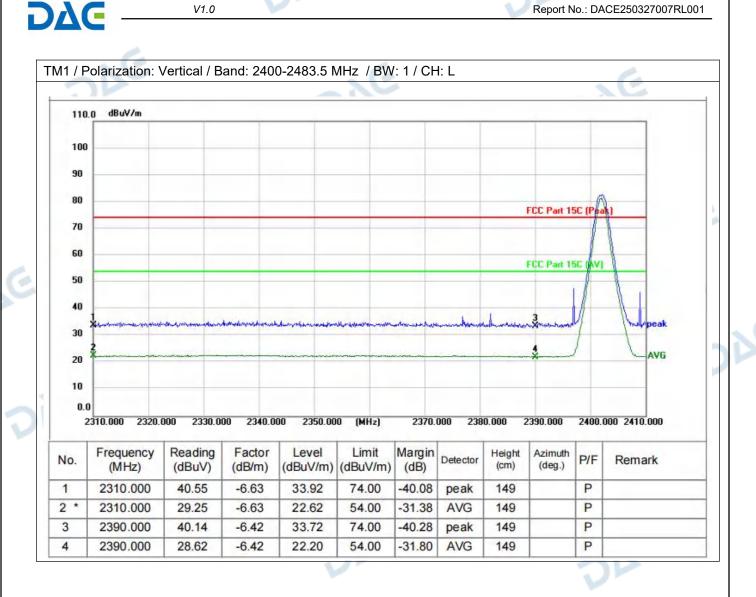
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DΔC V1.0 Report No.: DACE250327007RL001 TM3 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: H dBuV/m 110.0 100 90 80 FCC Part 15C (Peak) 70 60 FEC Part 15C (AV) 50 40 30 XAVG 20 10 0.0 2475.000 2477.500 2480.000 2482.500 2485.000 (MHz) 2490.000 2492.500 2495.000 2497.500 2500.000 Frequency Reading Factor Level Limit Margin Height Azimuth P/F No. Detector Remark (MHz) (dBuV) (dB/m)(dBuV/m) (dBuV/m) (dB)(cm) (deg.) 2483.500 60.53 -6.17 54.36 74.00 -19.64 P 1 peak 149 2483.500 56.86 54.00 P 2 * -6.17 50.69 -3.31 AVG 149 3 2500.000 40.94 -6.13 34.81 74.00 -39.19 peak 149 P 4 2500.000 29.60 -6.13 23.47 54.00 -30.53 AVG 149 P

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DΔC V1.0 Report No.: DACE250327007RL001 TM3 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: H dBuV/m 110.0 100 90 80 FCC Part 15C (Peak) 70 60 FCC Part 15C (AV) 50 40 30 XAVG 20 10 0.0 2475.000 2477.500 2480.000 2482.500 2485.000 (MHz) 2490.000 2492.500 2495.000 2497.500 2500.000 Frequency Reading Factor Level Limit Margin Height Azimuth P/F No. Detector Remark (MHz) (dBuV) (dB/m)(dBuV/m) (dBuV/m) (dB) (cm) (deg.) 2483.500 51.65 P -6.17 45.48 74.00 -28.52 149 1 peak 2483.500 47.78 -6.17 41.61 54.00 -12.39 AVG P 2 * 149

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40.48

28.89

-6.13

-6.13

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2500.000

2500.000

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-39.65

-31.24

peak

AVG

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149

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4.7 Emissions in frequency bands (below 1GHz)

Test Requirement:	Refer to 47 CFR 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)).`					
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)			
20	0.009-0.490	2400/F(kHz)	300			
	0.490-1.705	24000/F(kHz)	30			
	1.705-30.0	30	30			
	30-88	100 **	3			
	88-216	150 **	3			
	216-960	200 **	3			
1	Above 960	500	3			
Test Method:	these frequency bands is per and 15.241. In the emission table above, The emission limits shown in employing a CISPR quasi-per 110–490 kHz and above 100	1-216 MHz or 470-806 MHz. How ermitted under other sections of the tighter limit applies at the b in the above table are based on eak detector except for the frequence 00 MHz. Radiated emission limit is employing an average detector 5.6.4	this part, e.g., §§ 15.23 and edges. measurements uency bands 9–90 kHz, ts in these three bands			
lost method.	KDB 558074 D01 15.247 Meas Guidance v05r02					
Procedure:	above the ground at a 3 or 1 360 degrees to determine th b. For above 1GHz, the EUT above the ground at a 3 met degrees to determine the po c. The EUT was set 3 or 10 which was mounted on the t d. The antenna height is var determine the maximum vali- polarizations of the antenna e. For each suspected emiss the antenna was tuned to he below 30MHz, the antenna v was turned from 0 degrees t f. The test-receiver system v Bandwidth with Maximum H g. If the emission level of the specified, then testing could reported. Otherwise the emi- tested one by one using pea- reported in a data sheet. h. Test the EUT in the lowes i. The radiation measuremen Transmitting mode, and four j. Repeat above procedures	was placed on the top of a rota 0 meter semi-anechoic chamber is position of the highest radiation was placed on the top of a rota ter fully-anechoic chamber. The osition of the highest radiation. meters away from the interferent op of a variable-height antenna ied from one meter to four meter ue of the field strength. Both how are set to make the measurement sion, the EUT was arranged to it oights from 1 meter to 4 meters was tuned to heights 1 meter) and to 360 degrees to find the maxim vas set to Peak Detect Function old Mode. the EUT in peak mode was 10dB is be stopped and the peak value ssions that did not have 10dB mak, quasi-peak or average method the x axis positioning which it until all frequencies measured to the assured to height of the x axis positioning which it until all frequencies measured to the top of the x axis position is measured to the top of the x axis position is the x axis position	er. The table was rotated on. ating table 1.5 meters table was rotated 360 ace-receiving antenna, tower. ars above the ground to rizontal and vertical ent. ts worst case and then (for the test frequency of nd the rotatable table num reading. and Specified lower than the limit s of the EUT would be hargin would be re- od as specified and ther he Highest channel. positioning for t is the worst case.			
.C		z, through pre-scan found the we	-			

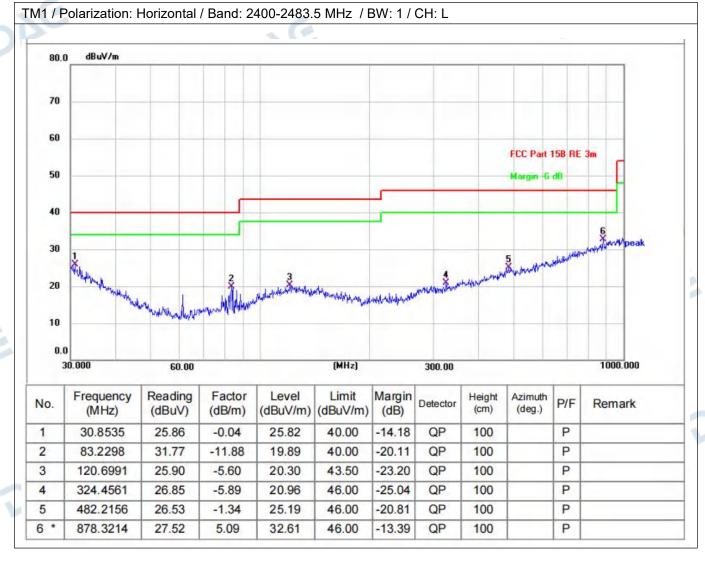
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	V1.0	Report No.: DACE250327007RL
D76 —		
DAC	Preamplifier. The basic equat Final Test Level =Receiver Re Preamplifier Factor 3) Scan from 9kHz to 25GHz, was very low. The points mark found when testing, so only a spurious emissions from the r	is recorded in the report. ated by adding the Antenna Factor, Cable Factor & ion with a sample calculation is as follows: eading + Antenna Factor + Cable Factor "C the disturbance above 12.75GHz and below 30MHz ked on above plots are the highest emissions could be bove points had been displayed. The amplitude of adiator which are attenuated more than 20dB below . Fundamental frequency is blocked by filter, and only

4.7.1 E.U.T. Operation:

Operating Enviro	onment:					
Temperature:	23.5 °C		Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode:		TM1			. 6	
Final test mode:		TM1			200	

4.7.2 Test Data:



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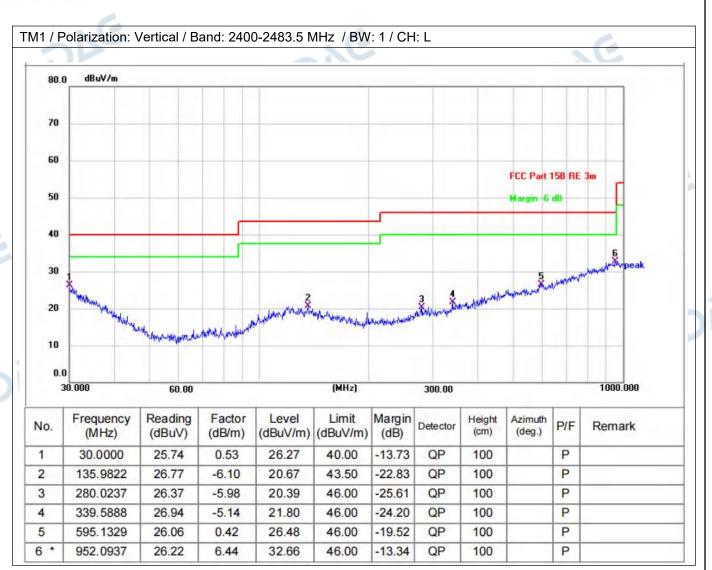
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Report No.: DACE250327007RL001



Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

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Report No.: DACE250327007RL001

4.8 Emissions in frequency bands (above 1GHz)

Test Requirement:	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)).`					
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)			
	0.009-0.490	2400/F(kHz)	300			
	0.490-1.705	24000/F(kHz)	30			
	1.705-30.0	30	30			
	30-88	100 **	3			
	88-216	150 **	3			
	216-960	200 **	3			
	Above 960	500	3			
	 these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector. 					
Test Method:	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02					
Procedure:	above the ground at a 3 360 degrees to determine b. For above 1GHz, the above the ground at a 3 degrees to determine the c. The EUT was set 3 or which was mounted on to d. The antenna height is determine the maximum polarizations of the anter e. For each suspected et the antenna was tuned to below 30MHz, the antern was turned from 0 degree f. The test-receiver syste Bandwidth with Maximum g. If the emission level of specified, then testing cor reported. Otherwise the tested one by one using reported in a data sheet. h. Test the EUT in the loo i. The radiation measure Transmitting mode, and j. Repeat above procedu Remark:	f the EUT in peak mode was 10d buld be stopped and the peak val emissions that did not have 10dE peak, quasi-peak or average me west channel, the middle channe ments are performed in X, Y, Z a found the X axis positioning whic irres until all frequencies measure	hber. The table was rotated ation. rotating table 1.5 meters he table was rotated 360 h. rence-receiving antenna, na tower. eters above the ground to horizontal and vertical ement. to its worst case and then rs (for the test frequency of) and the rotatable table eximum reading. ion and Specified IB lower than the limit lues of the EUT would be 3 margin would be re- ethod as specified and then d, the Highest channel. xis positioning for th it is the worst case. ed was complete.			
		GHz, through pre-scan found the				

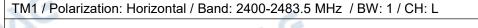
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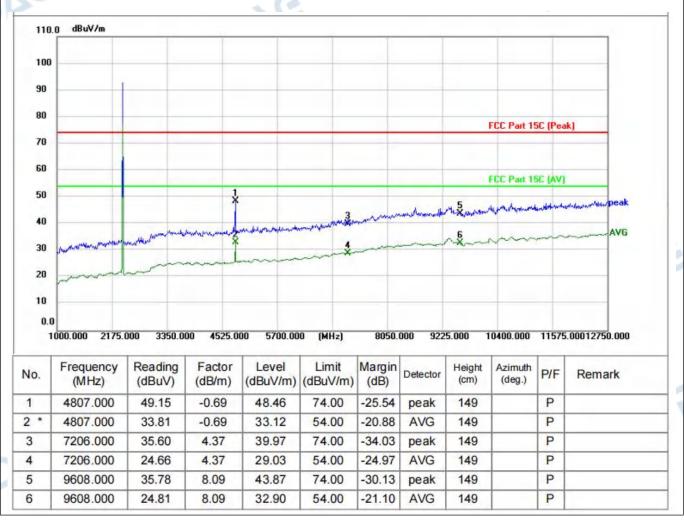
DAG —	V1.0	Report No.: DACE250327007RL0
DAC	Preamplifier. The basic equation Final Test Level =Receiver Rea Preamplifier Factor 3) Scan from 9kHz to 25GHz, to was very low. The points market found when testing, so only about spurious emissions from the ra	s recorded in the report. The d by adding the Antenna Factor, Cable Factor & on with a sample calculation is as follows: ading + Antenna Factor + Cable Factor "C the disturbance above 12.75GHz and below 30MHz ed on above plots are the highest emissions could be ove points had been displayed. The amplitude of indiator which are attenuated more than 20dB below Fundamental frequency is blocked by filter, and only

4.8.1 E.U.T. Operation:

Operating Environment:							
Temperature:	23.5 °C		Humidity:	47 %	Atmospheric Pressure:	101 kPa	
Pretest mode: TM1, TM2, TM3							
Final test mode: TM1, TM2, TM3							

4.8.2 Test Data:



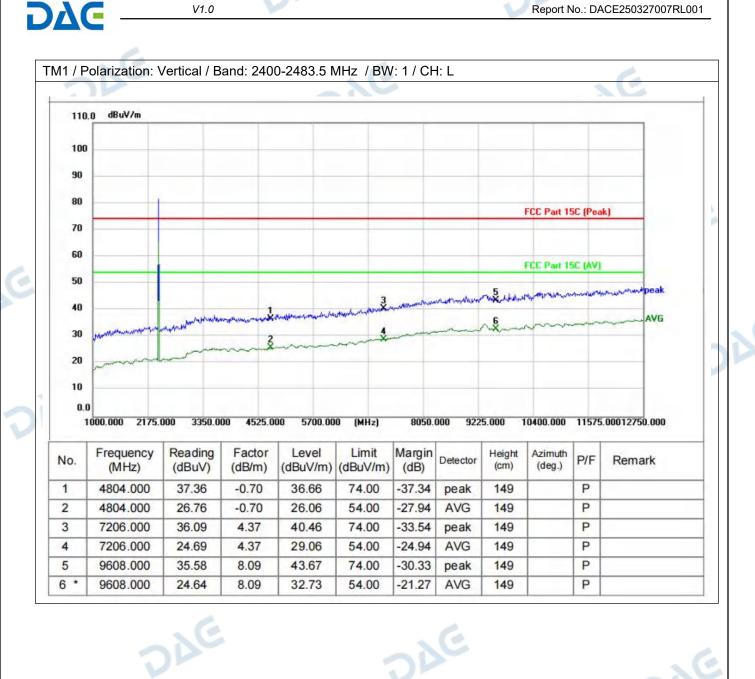


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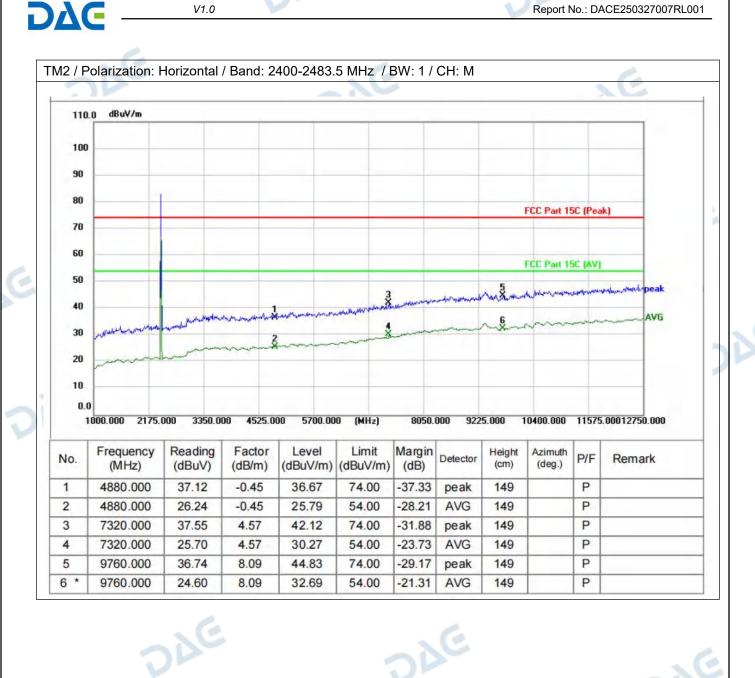
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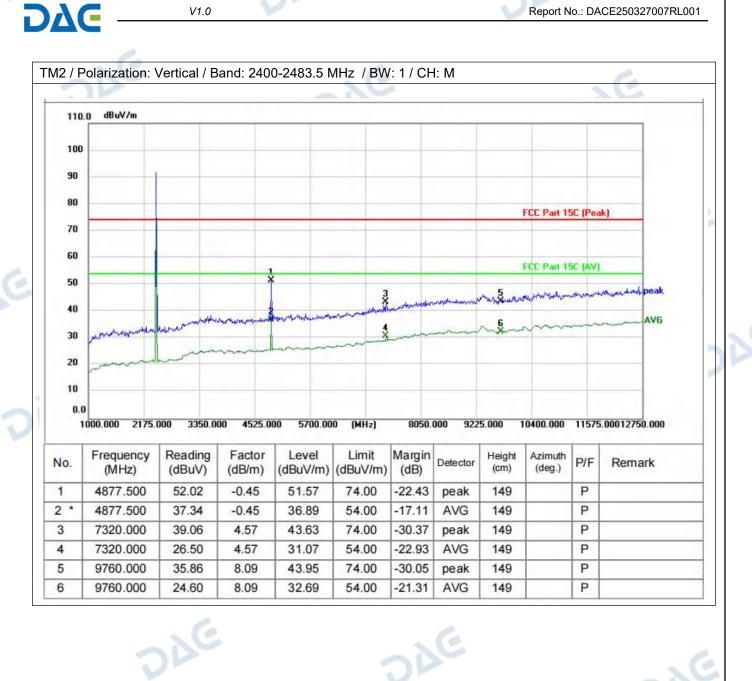
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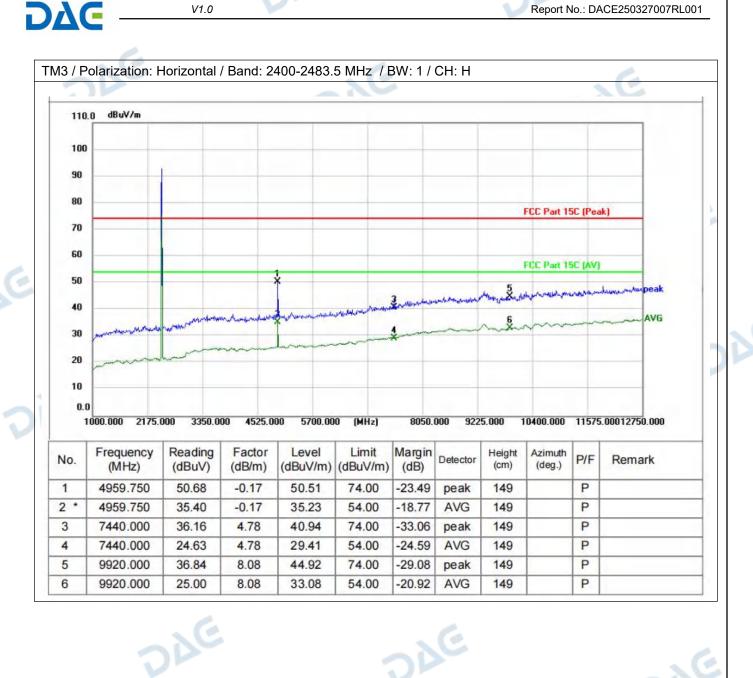
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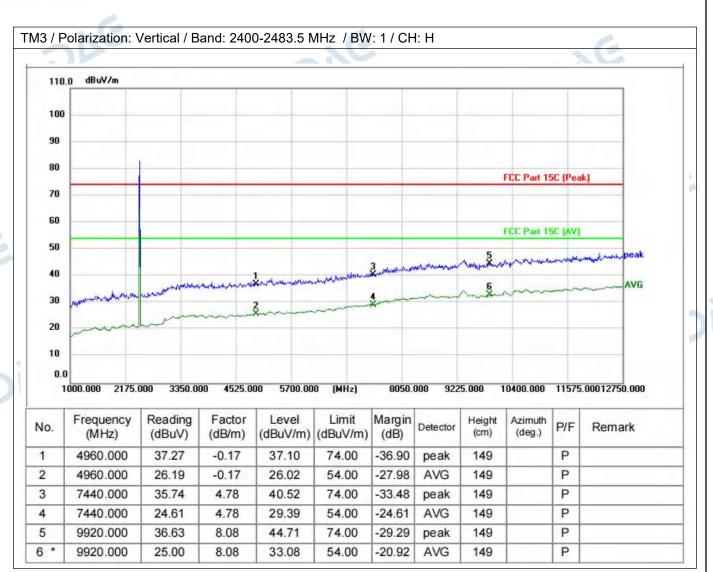
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Report No.: DACE250327007RL001



Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

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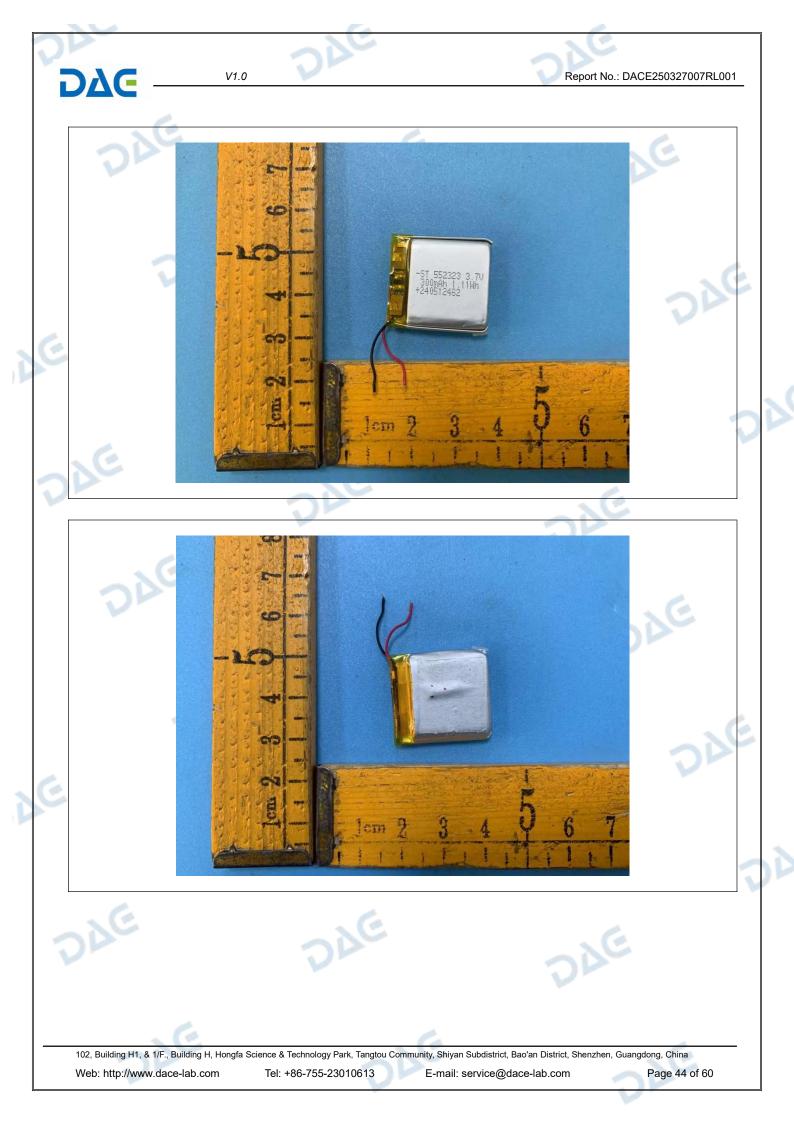














Report No.: DACE250327007RL001

FCC_BLE (Part15.247) Test Data

1. -6dB Bandwidth

V1.0

DAC

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	658.01	500	Pass
NVNT	ANT1	1Mbps	2440.00	661.52	500	Pass
NVNT	ANT1	1Mbps	2480.00	660.67	500	Pass



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)AC	-6dB_Ba	andwidth_NVNT_AI	NT1_1Mbps_2480		.e
	LXI RL	trum Analyzer - Occupied BW RF 50 Ω AC eq 2.480000000 GHz #IFGain:Low	SENSE:INT Center Freq: 2.48000000000 → Trig: Free Run Avg #Atten: 30 dB			
	10 dB/div Log	Ref Offset 3.85 dB Ref 10.70 dBm			2.48000000 GH	
	-19.3 -29.3 -39.3 -49.3	~~~			Warden .	DAC
E	-69.3 -79.3 Center 2 .	48 GHz		Sp	an 3 MHz	
	#Res BW	^{100 kHz} bied Bandwidth 1.0433 N	#VBW 300 kHz Total Powe	Swe	eep 1 ms CF Step 300.000 kH Auto Mar Freq Offse	
6		nit Freq Error 38.044 andwidth 660.7	kHz % of OBW F	Power 99.00 % -6.00 dB	0 H	
2	MSG			STATUS		-
		V			DAC	
		E				

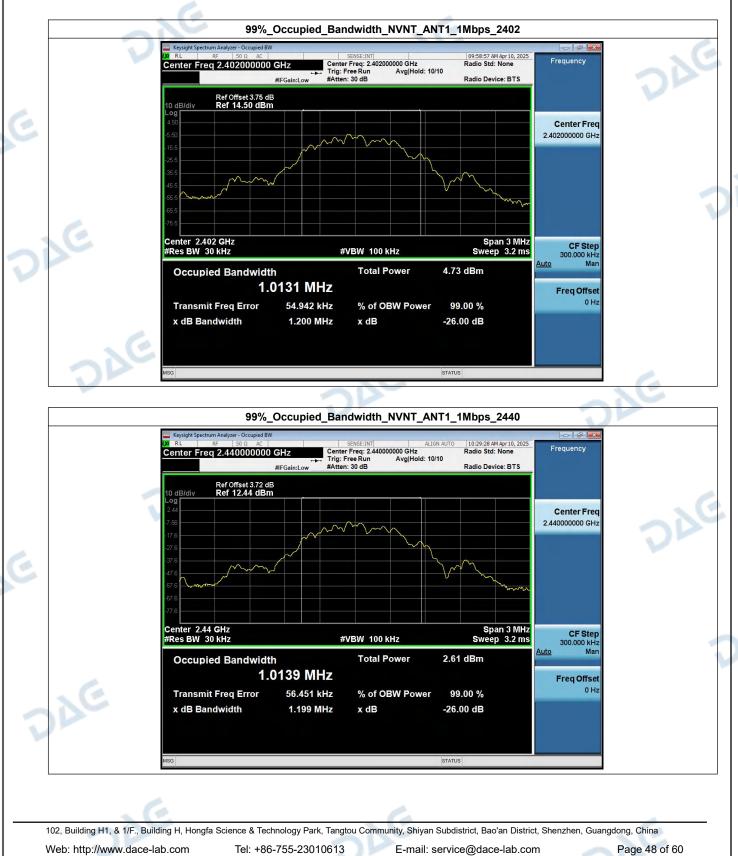
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Report No.: DACE250327007RL001

2. 99% Occupied Bandwidth

DΔC

Condition	Condition Antenna		Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	1Mbps	2402.00	1.013
NVNT	ANT1	1Mbps	2440.00	1.014
NVNT	ANT1	1Mbps	2480.00	1.014



DAC —	V1.0		Re	port No.: DACE2503270	007RL001
	00% 0		IT4 4Mbma 2400		
DAC	Keysight Spectrum Analyzer - Occupied BW		N AUTO 10:32:22 AM Apr10, 2025	Frequency	
	Center Freq 2.480000000 GHz #FGain:Lov	Center Freq: 2.48000000 GHz Trig: Free Run Avg Hold: 10 W #Atten: 30 dB	Tradio Sta. Home		
2	Ref Offset 3.85 dB 10 dB/div Ref 6.70 dBm 		2.	Center Freq 480000000 GHz	
E	Center 2.48 GHz #Res BW 30 kHz	#VBW 100 kHz	Span 3 MHz Sweep 3.2 ms	CF Step 300.000 kHz	
	Occupied Bandwidth 1.0141	Total Power	1.78 dBm	<u>o</u> Man	
	Transmit Freq Error 56.74	49 kHz % of OBW Power	99.00 %	Freq Offset 0 Hz	
6	x dB Bandwidth 1.19	9 MHz x dB	-26.00 dB		
-ile	MSG		STATUS		
	26			1e	

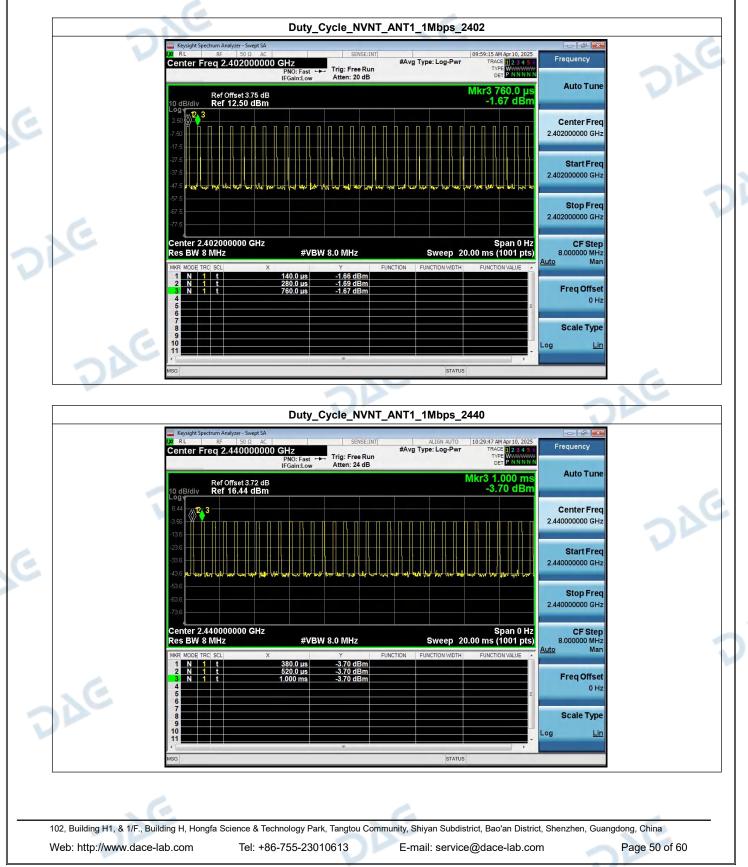
D

Report No.: DACE250327007RL001

3. Duty Cycle

DΔC

sally system					
Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1Mbps	2402.00	22.58	6.46
NVNT	ANT1	1Mbps	2440.00	22.58	6.46
NVNT	ANT1	1Mbps	2480.00	22.58	6.46



1E	Duty_0	Cycle_NVNT_ANT1_1Mbp	s_2480	
DA	Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω AC Center Freq 2.480000000 GHz	SENSE:INT #Avg Type: Log	09:55:26 AM Apr 10, 2025	iency
	PNO: Fast H IFGain:Low Ref Offset 3.85 dB 10 dB/div Ref 16.70 dBm	Atten: 24 dB		ito Tune
	- 09 6.70 3.30			iter Freq 0000 GHz
2	-133			tart Freq 0000 GHz
	-433 J (n.) (t.) (n.) (n.) (n.) (t.) (t.) (n.) (t.) -533 -633	and not over and have been and not lost have be	o bud had had had hui hya hu S	top Freq
	733 Center 2.480000000 GHz		Span 0 Hz	CF Step
	Res BW 8 MHz #VBv MKR MODE TRC SCL X 1 N 1 t 240.0 µs 2 N 1 t 380.0 µs N 1 t 380.0 µs	V 8.0 MHz Sweet Y FUNCTION FUNCTION -3.40 dBm -3.43 dBm -3.43 dBm	IDTH FUNCTION VALUE	0000 MHz Man
	λ 1 t 0000 μs 4 4 860.0 μs 5 5 6 6 7	-3.40 dBm	Free states and states	0 Hz
.6	9 10 11		Log	ale Type Lin
	sg		TATUS	6
	VE			

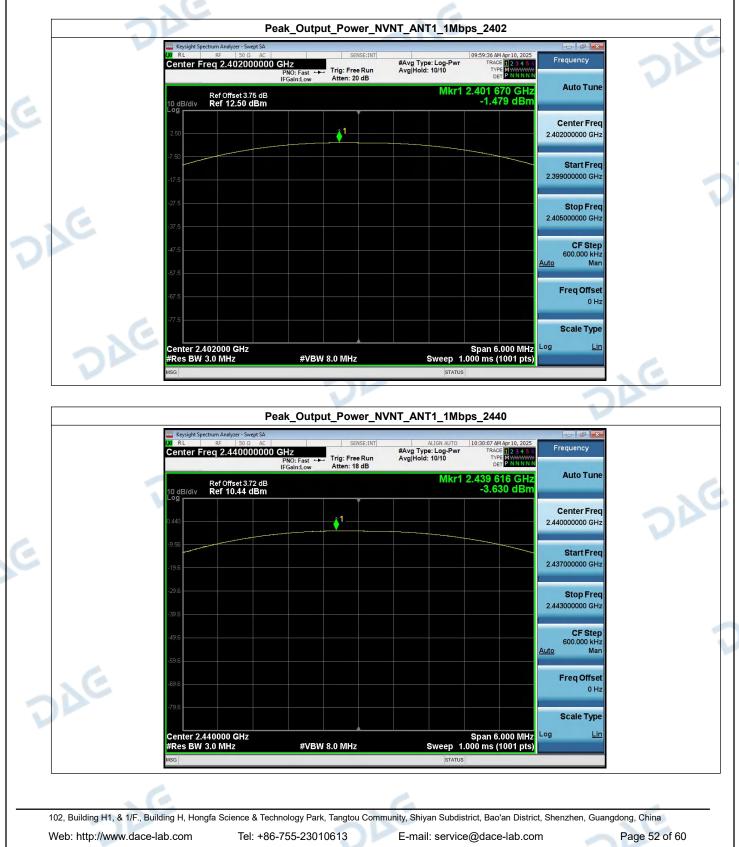
Report No.: DACE250327007RL001

V1.0

4. Peak Output Power

DΔG

Condition	Antenna	Rate	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1Mbps	2402.00	-1.48	0.71	1000	Pass
NVNT	ANT1	1Mbps	2440.00	-3.63	0.43	1000	Pass
NVNT	ANT1	1Mbps	2480.00	-3.41	0.46	1000	Pass



DVC	6	Peak_Output_Power_NVN	T ANT1 1Mbns 2400		
26	Keysight Spectrum Analyzer - Swept (λ) RL RF 50 Ω Center Freq 2.480000	SA AC SENSE:INT	09:55:47 AM Apr 1(0, 2025 Frequency	-
	Ref Offset 3.85	PNO: Fast ++- Trig: Free Run IFGain:Low Atten: 18 dB	Avg Hold: 10/10 TYPE MW Det P N Mkr1 2.479 724	GHZ Auto Tune	
	10 dB/div Ref 10.70 dB	m	-3.413 c	Center Freq	
	-9.30			2.48000000 GHz Start Freq	
	-19.3			2.477000000 GHz	200
	-39.3			Stop Freq 2.483000000 GHz	
-	-49.3			CF Step 600.000 kHz <u>Auto</u> Man	
	-69.3			FreqOffset	
	-79.3			0 Hz Scale Type	1
1C	Center 2.480000 GHz #Res BW 3.0 MHz	#VBW 8.0 MHz	Span 6.000 Sweep 1.000 ms (1001	MHz Log Lin	
	MSG		STATUS	. 6	
				240	

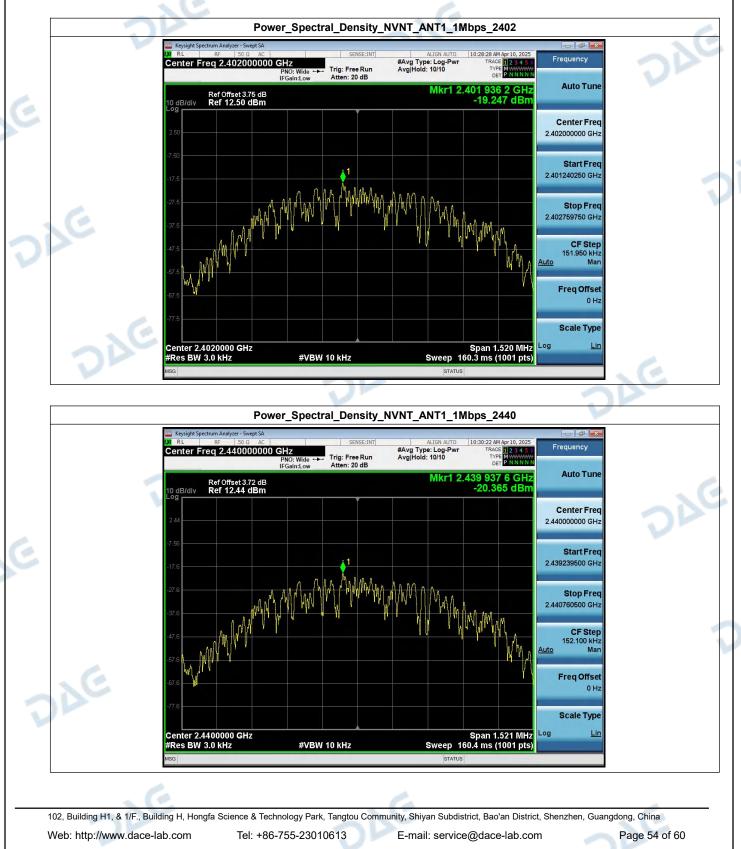
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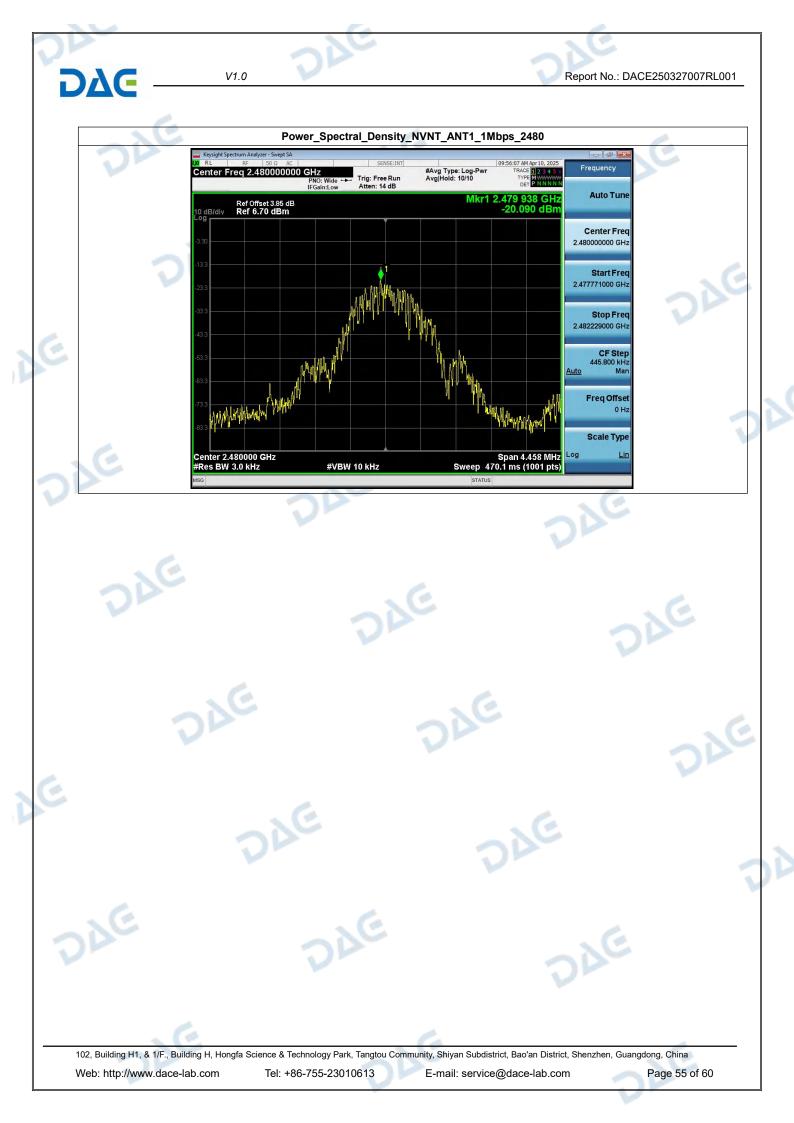
Report No.: DACE250327007RL001

5. Power Spectral Density

DΔG

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm/3kHz)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-19.25	8	Pass
NVNT	ANT1	1Mbps	2440.00	-20.36	8	Pass
NVNT	ANT1	1Mbps	2480.00	-20.09	8	Pass





Report No.: DACE250327007RL001

V1.0

6. Bandedge

DΔG

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	2399.300	-2.882	-43.885	-22.882	Pass
NVNT	ANT1	1Mbps	2480.00	2483.800	-3.674	-49.600	-23.674	Pass



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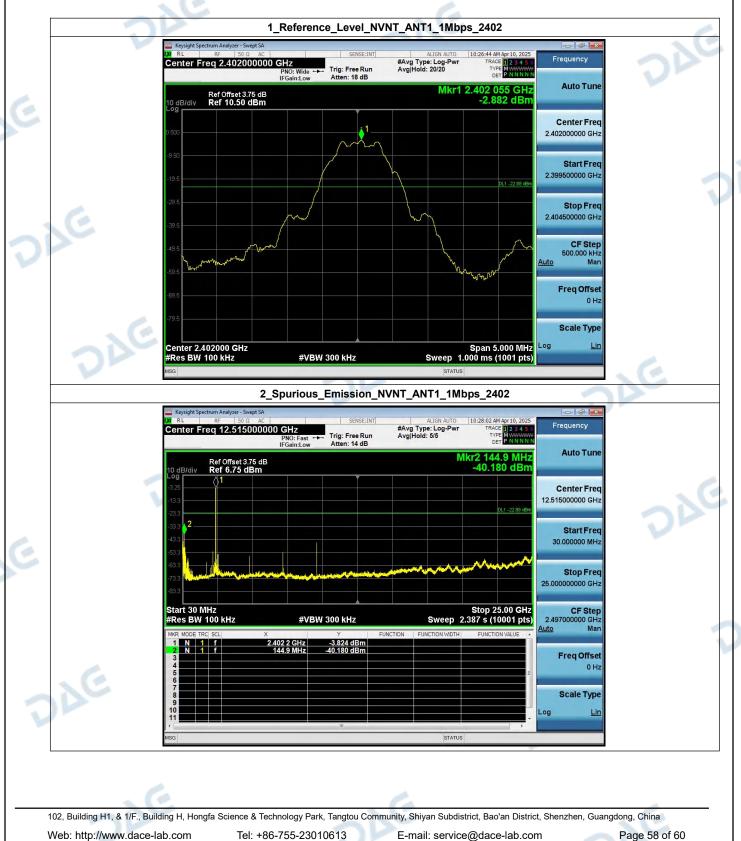
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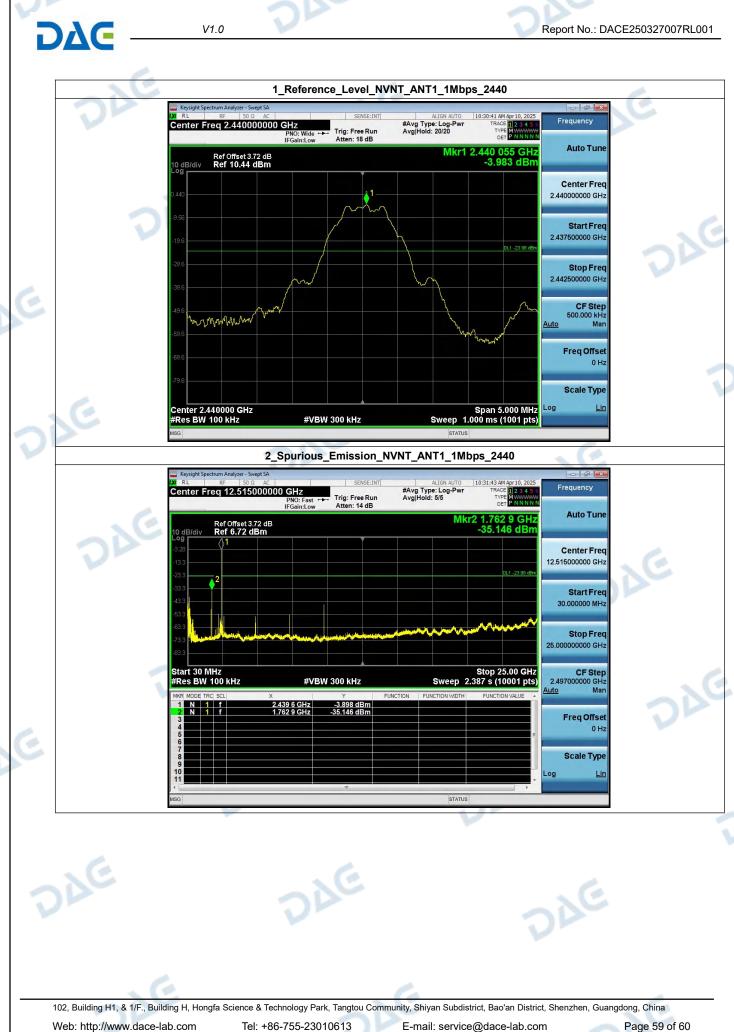
Report No.: DACE250327007RL001

7. Spurious Emission

DΔG

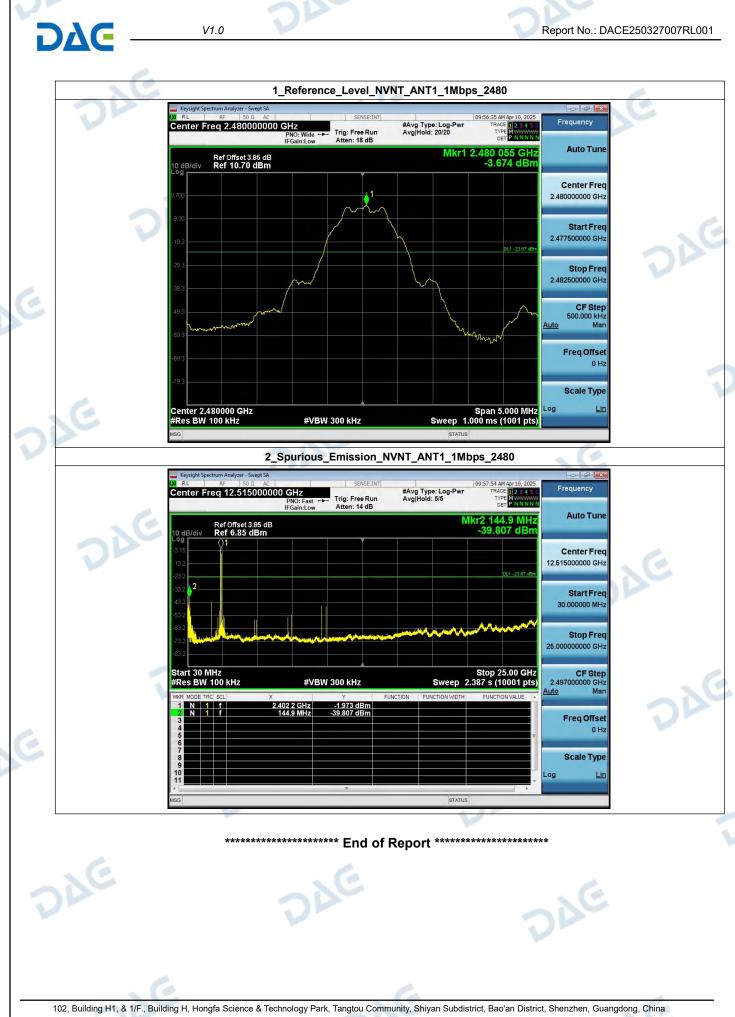
Condition	Antenna	Modulation	TX_Frequency (MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	-2.882	-40.180	-22.882	Pass
NVNT	ANT1	1Mbps	2440.00	-3.983	-35.146	-23.983	Pass
NVNT	ANT1	1Mbps	2480.00	-3.674	-39.807	-23.674	Pass





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