

CENTRE OF TESTING SERVICE INTERNATIONAL

OPERATE ACCORDING TO ISO/IEC 17025

FCC ID TEST REPORT

TEST REPORT NUMBER: CGZ3160612-00869-EF



CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway, Tianhe District, Guangzhou, China







TEST REPORT For FCC ID	
TEST KET SKIT OF IS	
47 CFR PART 15 OCT, 2016	
Report Reference No CGZ3160612-00869-EF	
Date of issue	
Testing Laboratory Name CENTRE OF TESTING SERVICE CO., LTD.	
Address	Guangzhou, China
Testing location/ procedure Full application of Harmonised standards ■	
Partial application of Harmonised standards \square	
Other standard testing method \square	
Applicant's nameZONDA HOBBY TECHNOLOGIES ELECTRON	IC LIMITED
Address Room404, 4/F, Block A, Hoplite Industrial	
Centre 3-5 Wang Tai Road, Kowloon Bay, Hong	Kong
Test specification	
Standard	
ANSI C63.10:2013	
Test Report Form No CTSEMC-1.0	
TRF Originator CENTRE OF TESTING SERVICE CO., LTD.	
Master TRF Dated 2009-01	
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Test item description 5.8GHz Transmitter Module	
Trade Mark GWY	
Manufacturer ZONDA HOBBY TECHNOLOGIES ELECTRON	IC LIMITED
Model/Type reference 006828	
Ratings DC 5V	
Operating Frequency5745.0MHz ~5865.0MHz	
ResultPositive	

Compiled by:

Supervised by:

Approved by:

Kate zhang / Fileadministrators

Duke yang / Technique principal

Vincent yao / Manager

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FCCID-TEST REPORT

Test Report No. : CGZ3160612-00869-EF

| 12 November 2016 | Date of issue

Type / Model	006828
EUT	5.8GHz Transmitter Module
Applicant	ZONDA HOBBY TECHNOLOGIES ELECTRONIC LIMITED
Address	Room404, 4/F, Block A, Hoplite Industrial Centre 3-5 Wang Tai Road,Kowloon Bay, Hong Kong
Telephone	+852-31608886
Fax	+852-31608884
Contact	LAM Man Kit
Manufacturer	ZONDA HOBBY TECHNOLOGIES ELECTRONIC LIMITED
Address	Room404, 4/F, Block A, Hoplite Industrial Centre 3-5 Wang Tai Road,Kowloon Bay, Hong Kong
Telephone	+852-31608886
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Contact	LAM Man Kit
Factory	ZONDA HOBBY TECHNOLOGIES ELECTRONIC LIMITED
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Audi 635	Centre 3-5 Wang Tai Road, Kowloon Bay, Hong Kong
Telephone	+852-31608886
Fax	+852-31608884
Contact	LAM Man Kit

Test Result according to the standards on page 1: PASSED

The test report merely corresponds to the test sample.

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1.TEST STANDARDS

The tests were performed according to following standards:

- 47 CFR PART 15 OCT, 2016
- ANSI C63.10:2013

2.SUMMARY

2.1 GENERAL REMARKS

Date of receipt of test sample	12 June 2016
Testing commenced on	12 June~12 November 2016
Testing concluded on	12 November 2016

2.2 FINAL ASSESSMENT

The FCC/IC requirements pertaining to the technical standards and tested operation modes are

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	- 1	ш	HIII	ıμα

□ - **not** fulfilled.

The equipment under test

- fulfils the FCC requirements cited on page 1.
- does not fulfil the FCC requirements cited on page 1.

3.EQUIPMENT UNDER TEST

3.1 Power supply system utilised

Power supply voltage : ■ DC 5V

3.2 Short description of the Equipment under Test (EUT)

Number of tested samples: 1

Serial number: Prototype

3.3 EUT operation mode

The equipment under test was operated during the measurement under the following conditions:

- $\ \ \square$ TX- Y position
- ☐ TX- Zposition
- TX- X position

Operation mode 1:TX-X Position Low (5745MHz) , TX-X Position Middle (5805MHz), TX-X Position High (5865MHz)

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Note:Operation mode 1 TX -X position of EUT is the radiated test worst case; so only these test results be recorded in the test report.

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3.4 EUT configuration

3.4.1. Description of configuration (EUT)

Description	:	5.8GHz Transmitter Module
Model Number	:	006828
Operation frequency	:	5745~ 5865 MHz ISM Band
Modulation Technology		FM Modulation
Antenna	:	External antenna, met requirement of FCC 15.203; 2dBi

3.4.2. Tested Supporting System Details

N/A

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4.TEST ENVIRONMENT

4.1 Address of the test laboratory

A101, No.65, Zhuji Highway, Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

4.2 Test facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L3394

CENTRE OF TESTING SERVICE CO., LTD has been assessed and proved to be in compliance with CNAS-CL01: 2006 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

IC-Registration No.: 8374A

The 3m Alternate Test Site of CENTRE OF TESTING SERVICE CO., LTD has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 8374A on June 6, 2011.

FCC-Registration No.: 971995

CENTRE OF TESTING SERVICE CO., LTD, EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration No.791995, July 13,2012.

4.3 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35 ° C
Humidity:	25~75 %
Atmospheric pressure:	86~106 kPa

4.4 Definitions of symbols used in this test report

- - The black square indicates that the listed condition, standard or equipment is applicable for this report.
- □ The empty square indicates that the listed condition, standard or equipment is **not** applicable for this report.

4.5 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the CTS quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

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4.6 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Conduction disturbance	150kHz~30MHz	±1.22dB	(1)
Power disturbance	30MHz~300MHz	±1.38dB	(1)
	30MHz~300MHz	±3.14dB	(1)
Radiation emission (3m)	300MHz~1000MHz	±3.18dB	(1)
	1GHz~26.5GHz	±3.54dB	(1)

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

5. Summary of standards and results

5.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION				
Description of Test Item	Standard	Results		
Conducted Emission Test	FCC Part 15 § 15.207 ANSI C63.10:2013	N/A		
Radiated Emission Test	FCC Part 15 C § 15.249 FCC Part 15 § 209 ANSI C63.10:2013	PASSED		
Band Edge Compliance Test	FCC Part 15 C § 15.249 ANSI C63.10:2013	PASSED		
20 Bandwidth	FCC Part 15 C § 15.215 ANSI C63.10:2013	PASSED		
N/A is an abbreviation for Not Applicable.				

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6. Power Line Conducted Emission Test

6.1.Test Equipment

Conduc	ted Disturbance				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Receiver	ROHDE & SCHWARZ	ESHS10	842884/012	2016/10
2	Artificial Mains	ROHDE & SCHWARZ	ESH3-Z5	832479/025	2016/10
3	Artificial Mains	ROHDE & SCHWARZ	ESH3-Z5	832479/026	2016/10
4	Pulse Limiter	ROHDE & SCHWARZ	ESHSZ2	100301	2016/10
5	EMI Test Software	ROHDE & SCHWARZ	ESK1	N/A	2016/10

6.2. Block Diagram of Test Setup

EUT

(EUT: 5.8GHz Transmitter Module)

6.3. Power Line Conducted Emission Test Limits

Standard: FCC Part 15: 15.207, ANSI C63.10:2013

		ine Voltage	
Frequency		Quasi-Peak Level	Average Level
requeriey		$dB(\mu V)$ $dB(\mu V)$	
150kHz	~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz	~ 5MHz	56	46
5MHz	~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

6.4.Test Procedure

The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). This provides a 50 ohm coupling impedance for the EUT. Please refer the block diagram of the test setup and photographs. The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#1). Power on the PC and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC Part 15C on Conducted Emission Test.

6.5. Power Line Conducted Emission Test Results

N/A

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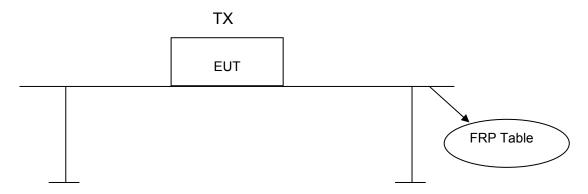
7. Radiated disturbance (electric field)

7.1.Test Equipment

Radiated disturbance (electric field)								
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.			
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100868	2016/10			
2	Biconical Antenna	ROHDE & SCHWARZ	HK116	100221	2016/03			
3	Log per Antenna	ROHDE & SCHWARZ	HL223	100226	2016/03			
4	Log per Antenna	ROHDE & SCHWARZ	HL050	100186	2016/03			
5	Signal analyzer	ROHDE & SCHWARZ	FSIQ26	100311	2016/03			
6	Spectrum analyzer	Keysight	N9020A	MY52090123	2016/10			
7	Loop Antenna	A.R.A	PLA-1030/B	1030	2016/10			

7.2.Block Diagram of Test Setup

7.2.1 Block Diagram of connection between EUT and simulators



(EUT: 5.8GHz Transmitter Module)

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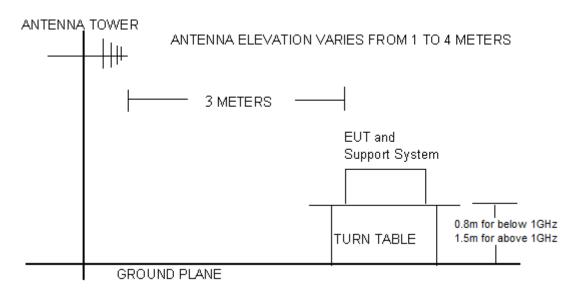
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7.2.2 Anechoic Chamber Setup Diagram



7.3. Radiated Emission Limit:

Standard: FCC 15.249, FCC 15.209

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field Strength of	Field Strength of Harmonics		
(MHz)	Fundamental (mV/m)	(μV/m)		
902-928	50	500		
2400-2483.5	50	500		
5725-5875	50	500		
24000-24250	250	2500		

FRE	QUEN	CY	DISTANCE	FIELD STRENGTHS LIMIT	
	MHz		Meters	μV/m	dB(μV)/m
0.009	~	0.490	300	2400/F(kHz)	
0.490	~	1.705	30	24000/F(kHz)	
1.705	~	30	30	30	
30	~	88	3	100	40.0
88	~	216	3	150	43.5
216	~	960	3	200	46.0
960	~	1000	3	500	54.0
Al	bove 1	000	3	Other:74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark: (1) Emission level $dB\mu V$ = 20 log Emission level $\mu V/m$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

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7.4.Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter for below 1GHz and 1.5m for Above 1GHz high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated emission Test.

The frequency range from 30MHz to 1000MHz and above 1GHz. is investigated. Please see the following pages.

All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 120kHz RBW below 1GHz and a Peak and Average detector with 2MHz RBW above 1GHz,

All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 300kHz VBW below 1GHz and a Peak detector with1MHz VBW above 1GHz, A average detector with 10Hz VBW above 1GHz

Pretest x, y, z position of EUT, final, select the worst case x position test and record the test results in the report.

The test modes (TX Mode) is tested in Anechoic Chamber and all the scanning waveforms are reported on section 7.5

7.5. Radiated Emission Test Results

PASSED.

The frequency range from 9KHz~30MHz,30MHz to 230MHz, 230MHz to 1000MHz and above 1GHz. is investigated. Please see the following pages.

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Test Mode:	TX –X Position Mode	Result:	- passed
Frequency range:	9KHz~30MHz		□ - not passed

No.	, , , , , , , , , , , , , , , , , , , ,		_	Level	Limit	Margin	Det.
	(MHz)	(dB)	(dBuV)	(abuv/m)	(dBuV/m)	(dB)	
Remark: The test result reading value is to low, margin all > 20dB of the limit.							

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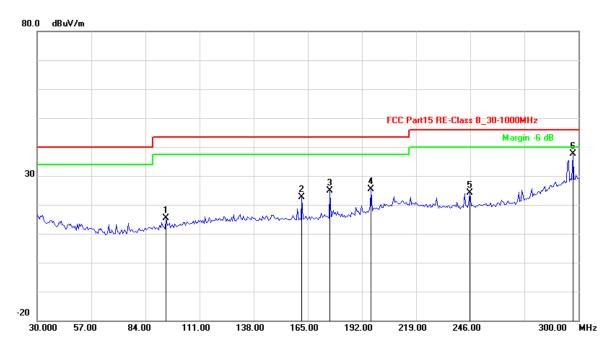






Channel:	TX –X Position	Result:	■ - passed
Test point:	Horizontal		□ - not passed
Frequency range:	30MHz-1GHz		

EUT	5.8GHz Transmitter Module
Test Condition	Ambient Temperature: 25°C Humidity: 56%
Test distance	3 Meter
Test Date:	12 June~12 November 2016
Operator	Duke
MODEL NO	006828



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.			
1	94.3887	-18.74	34.10	15.36	43.50	-28.14	QP			
2	162.0240	-15.97	38.56	22.59	43.50	-20.91	QP			
3	176.0921	-15.49	40.35	24.86	43.50	-18.64	QP			
4	196.6533	-12.99	38.26	25.27	43.50	-18.23	QP			
5	245.8917	-11.51	35.67	24.16	46.00	-21.84	QP			
6	297.2945	-2.14	39.71	37.57	46.00	-8.43	QP			
Remark	Remark: Other frequency mini margin all >6 dB of Limit									

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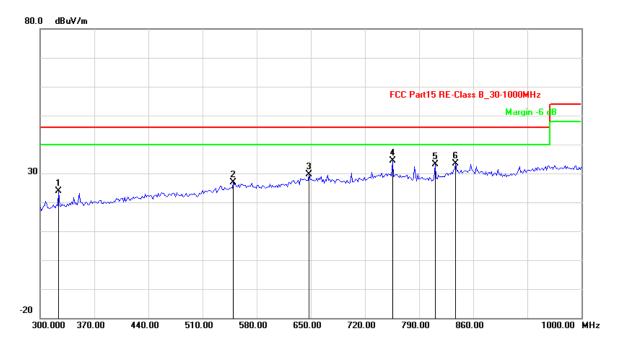
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No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	323.8477	-12.54	36.35	23.81	46.00	-22.19	QP
2	549.6994	-5.69	32.53	26.84	46.00	-19.16	QP
3	647.8958	-3.33	32.96	29.63	46.00	-16.37	QP
4	755.9118	-1.80	36.27	34.47	46.00	-11.53	QP
5	810.6212	-2.64	35.74	33.10	46.00	-12.90	QP
6	837.2745	-1.05	34.34	33.29	46.00	-12.71	QP
Remark	: Other frequen	cv mini ma	rgin all >6 dB o	of Limit			

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Channel:	TX –X Position Low CH	Result:	■ - passed
Test point:	Horizontal		☐ - not passed
Frequency range:	1GHz-26.5GHz		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type			
5745.013	94.21	4.42	98.63	114	-15.37	peak			
5745.013	86.11	4.42	90.53	94	-3.47	AVG			
11490.026	48.57	9.42	57.99	74	-16.01	peak			
11490.026	40.26	9.42	49.68	54	-4.32	AVG			
17235.039	44.16	10.51	54.67	74	-19.33	peak			
17235.039	17235.039 37.95 10.51 48.46 54 -5.54 AVG								
Remark:									
Factor = Antenna Factor + Cable Loss – Pre-amplifier.									

Channel:	TX –X Position Middle CH	Result:	■ - passed
Test point:	Horizontal		□ - not passed
Frequency range:	1GHz-26.5GHz		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
5805.016	95.31	4.67	99.98	114	-14.02	peak	
5805.016	87.25	4.67	91.92	94	-2.08	AVG	
11610.032	48.94	9.46	58.4	74	-15.6	peak	
11610.032	40.38	9.46	49.84	54	-4.16	AVG	
17415.048	45.68	10.68	56.36	74	-17.64	peak	
17415.048	38.15	10.68	48.83	54	-5.17	AVG	
Remark:							
Factor = Ante	nna Factor + Ca	able Loss – Pr	e-amplifier.	_			

Channel:	TX –X Position High CH	Result:	■ - passed
Test point:	Horizontal		_ '
			☐ - not passed
Frequency range:	1GHz-26.5GHz		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
5865.021	94.51	4.72	99.23	114	-14.77	peak	
5865.021	86.85	4.72	91.57	94	-2.43	AVG	
11730.042	48.25	9.68	57.93	74	-16.07	peak	
11730.042	40.12	9.68	49.8	54	-4.2	AVG	
17595.063	44.36	10.87	55.23	74	-18.77	peak	
17595.063	37.96	10.87	48.83	54	-5.17	AVG	
Remark:							
Factor = Ante	nna Factor + Ca	able Loss – Pi	e-amplifier.				

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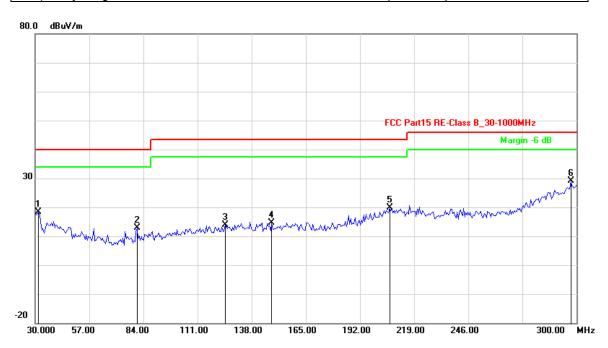




Channel: TX –X Position Result: □ - passed

Test point: Vertical □ - not passed

Frequency range: 30MHz-1GHz



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	31.6232	-16.25	34.55	18.30	40.00	-21.70	QP
2	80.8617	-19.88	32.77	12.89	40.00	-27.11	QP
3	124.6894	-16.45	30.42	13.97	43.50	-29.53	QP
4	147.9559	-15.98	30.60	14.62	43.50	-28.88	QP
5	206.9339	-10.83	30.72	19.89	43.50	-23.61	QP
6	297.2946	-2.14	31.19	29.05	46.00	-16.95	QP
Remark:	Other frequen	cy mini ma	rgin all >6 dB o	of Limit			

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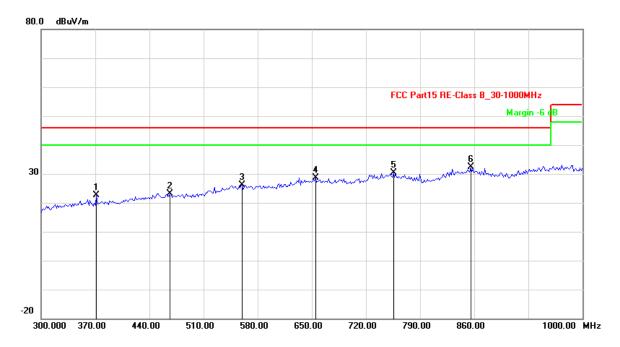
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No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.						
1	371.5430	-10.99	33.58	22.59	46.00	-23.41	QP						
2	466.9338	-8.34	31.57	23.23	46.00	-22.77	QP						
3	559.5190	-5.66	31.81	26.15	46.00	-19.85	QP						
4	654.9098	-3.28	31.89	28.61	46.00	-17.39	QP						
5	755.9118	-1.80	32.12	30.32	46.00	-15.68	QP						
6	855.5110	-0.46	32.79	32.33	46.00	-13.67	QP						
Remark	Other frequen	icy mini ma	rgin all >6 dB o	of Limit		Remark: Other frequency mini margin all >6 dB of Limit							

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Channel: TX –X Position Low CH
Test point: Vertical □ - not passed
Frequency range: 1GHz-26.5GHz

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
5745.013	93.24	4.42	97.66	114	-16.34	peak
5745.013	84.69	4.42	89.11	94	-4.89	AVG
11490.026	48.15	9.42	57.57	74	-16.43	peak
11490.026	39.85	9.42	49.27	54	-4.73	AVG
17235.039	44.38	10.51	54.89	74	-19.11	peak
17235.039	38.13	10.51	48.64	54	-5.36	AVG
Remark:						

 Channel:
 TX –X Position Middle CH
 Result:
 ■ - passed

 Test point:
 Vertical
 □ - not passed

 Frequency range:
 1GHz-26.5GHz

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type		
5805.016	94.25	4.67	98.92	114	-15.08	peak		
5805.016	85.31	4.67	89.98	94	-4.02	AVG		
11610.032	47.15	9.46	56.61	74	-17.39	peak		
11610.032	38.95	9.46	48.41	54	-5.59	AVG		
17415.048	44.66	10.68	55.34	74	-18.66	peak		
17415.048	37.01	10.68	47.69	54	-6.31	AVG		
Remark:	Remark:							
Factor = Ante	nna Factor + C	able Loss – Pi	re-amplifier.		_			

Channel:	TX –X Position High CH	Result:	■ - passed
Test point:	Vertical		☐ - not passed
Frequency range:	1GHz-26.5GHz		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
5865.021	93.35	4.72	98.07	114	-15.93	peak
5865.021	87.64	4.72	92.36	94	-1.64	AVG
11730.042	47.11	9.68	56.79	74	-17.21	peak
11730.042	38.95	9.68	48.63	54	-5.37	AVG
17595.063	42.06	10.87	52.93	74	-21.07	peak
17595.063	35.85	10.87	46.72	54	-7.28	AVG
Remark:						
Factor = Ante	enna Factor + Ca	able Loss – F	Pre-amplifier.			

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8. Band Edge Compliance test

8.1. Test Equipment

Band Edge Compliance test							
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	Spectrum analyzer	Keysight	N9020A	MY52090123	2016/10		
2	Log per Antenna	ROHDE & SCHWARZ	HL050	100186	2016/03		

8.2. Test Information

EUT	5.8GHz Transmitter Module
Test Condition	Ambient Temperature: 25°C Humidity: 56%
Test distance	3 Meter
Test Date:	12 June~12 November 2016
Operator	Duke
MODEL NO	006828

8.3. Test procedure

- 1. The EUT operates at hopping-off test mode. The lowest or highest channels are tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.
- 2. Max hold the trace of the setp 1,and the EUT operates at hopping-on test mode to verify the largest spurious emissions power.
- 3. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz; VBW=10Hz / Sweep=AUTO

8.4. Test Results

PASSED.

The EUT operates at hopping-off test mode. The lowest and highest channels are tested to verify the band edge emissions.

Test Mode	Channel Marked Frequency	Test Result Highest Emission (dBuv/m)			
		Horizontal		Vertical	
		Peak	Average	Peak	Average
Low Channel	5725MHz	39.68	27.26	37.63	27.24
High Channel	5875.00	71.16	28.78	67.71	28.08

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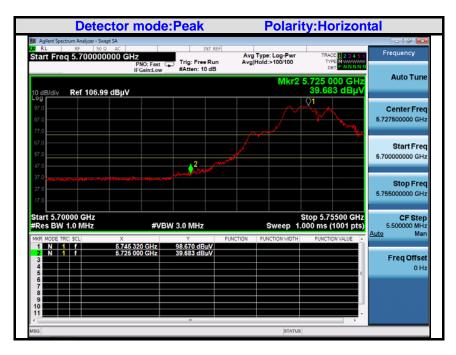
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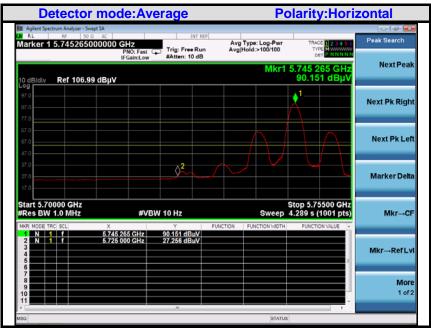
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Band Edges (Low)





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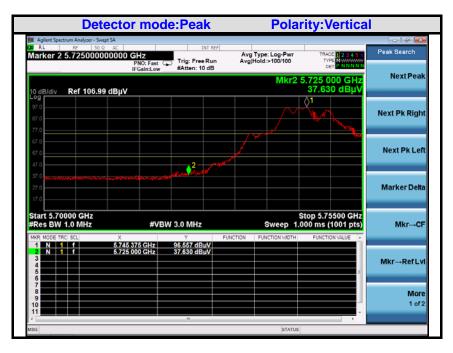
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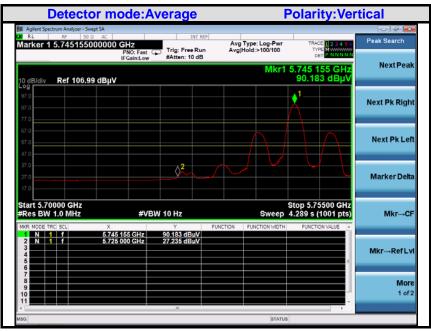
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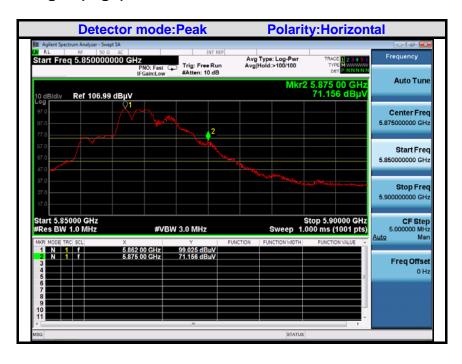
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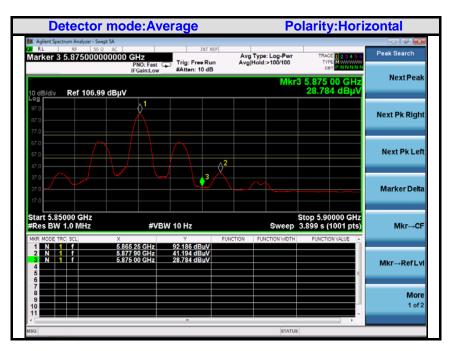
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Band Edges (High)





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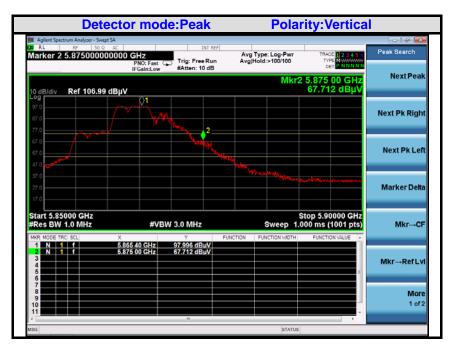
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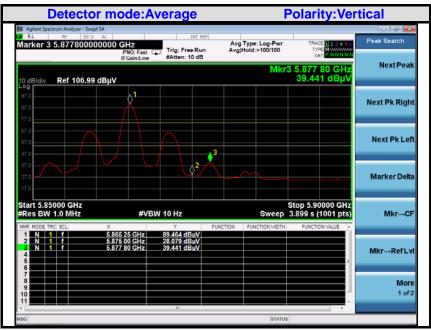
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9. 20 dB Bandwidth test

9.1. Test Equipment

20 dB Bandwidth test							
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	Spectrum analyzer	Keysight	N9020A	MY52090123	2016/10		
2	Log per Antenna	ROHDE & SCHWARZ	HL050	100186	2016/03		
3	Signal analyzer	ROHDE & SCHWARZ	FSIQ26	100311	2016/03		

9.2. Test Information

EUT	5.8GHz Transmitter Module	
Test Condition	Ambient Temperature: 25°C Humidity: 56%	
Test distance	3 Meter	
Test Date:	12 June~12 November 2016	
Operator	Duke	
MODEL NO	006828	

8.3. Test Results

PASSED.

The testing data was attached in the next pages.

Channel (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Test Result
5745	8.10		PASSED
5805	8.45		PASSED
5865	8.35		PASSED

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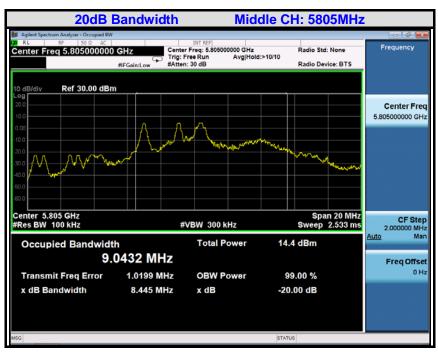
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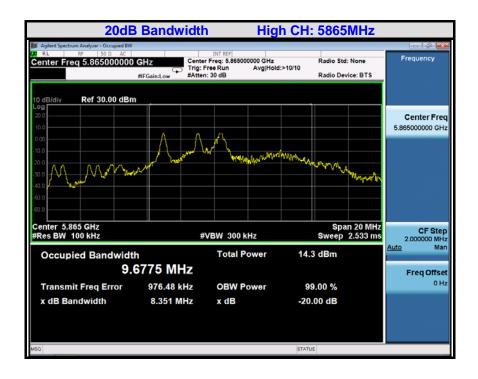
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10 Antenna Requirements

10.1 Standard Applicable

The external antenna of EUT uses reversed SMA connectors, which is unique coupling and it fulfills the requirement. (You can see the External photo for the antenna port.), according to FCC 47 CFR Section 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.

10.2 Antenna Construction and Directional Gain

Antenna type: External antenna

Antenna Gain: 2dBi

11. Deviation to test specifications

The following identical model(s):

N/A

Belong to the tested device:

Product description: 5.8GHz Transmitter Module
Model name: 006828

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