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FCC Test Report

Report No.: AGC00008180503FE03

: TW5GD8208
: Original Equipment
: 2.4GHz Digital Wireless Baby Monitor
: N/A
: GD8208
: Shenzhen Gospell Smarthome Electronic Co., Ltd.
: July 02, 2018
: FCC Part 15.247
: V1.2

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0		June 14, 2018	Invalid	Initial Release
V1.1	1 st	June 28, 2018	Invalid	Revise Report
V1.2	2 nd	July 02, 2018	Valid	Revise Report P7

REPORT REVISE RECORD

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Applicant	Shenzhen Gospell Smarthome Electronic Co., Ltd.			
Address	F/12 F518 Idea Land Baoyuan Road Baoan Central Area Shenzhen City P.R China			
Manufacturer	Shenzhen Gospell Smarthome Electronic Co., Ltd.			
Address	East of 01st-04st Floor,Block A,No.1 Industrial park,Fenghuanggang,South of No.1 Baotian Road,Xixiang street,Bao'an District,Shenzhen City,Guangdong Province 518126,P.R.China			
Product Designation	2.4GHz Digital Wireless Baby Monitor			
Brand Name	N/A			
Test Model	GD8208			
Date of test	May. 24, 2018~June 14, 2018			
Deviation	None			
Condition of Test Sample	Normal			
Test Result	Pass			
Report Template	AGCRT-US-BR/RF			

1. VERIFICATION OF CONFORMITY

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC PART 15.247.

donjon Tested By Juan Donjon Huang(Huang June 14, 2018 dongyang) BONG Nie **Reviewed By** Bart Xie(Xie Xiaobin) July 02, 2018 west in Approved By

Forrest Lei(Lei Yonggang) Authorized Officer

July 02, 2018

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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is "2.4GHz Digital Wireless Baby Monitor" designed as a "Communication Device". It is designed by way of utilizing the FHSS technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.410GHz to 2.477GHz
RF Output Power	14.49dBm(Max)
Modulation	GFSK(FHSS)
Number of channels	23
Hardware Version	GD8208M02
Software Version	V21
Antenna Designation	Integrated Antenna
Antenna Gain	2dBi
Power Supply	DC5V by adapter

2.2. TABLE OF CARRIER FREQUENCYS

Channel Number	Frequency(MHz)	Channel Number	Frequency(MHz)
0	2410	12	2447
- Francisco Company 1 6 Francisco Company	2414	13	2450
20	2417	14	2453
3	2420	15	2456
4	2423	16	2459
5	2426	17	2462
6	2429	18	2465
1 7 H	2432	19	2468
8	2435	20	2471
9	2438	21	2474
10	2441	22	2477
्र रू.्रेंगी ⊙ क्र	2444	GO SO	

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2.3. RECEIVER INPUT BANDWIDTH

The input bandwidth of the receiver is 5MHz.

2.4. EXAMPLE OF A HOPPING SEQUENCY IN DATA MODE

Example of a 23 hopping sequence in data mode: 21,02,00,15,22,05,17,03,19,06,10,20,01,18,07,11,09,16, 13, 04,12, 08,14; 18,04,22,11,03,20,15,14,01,07,19,05,21,16,08,17,09,02,00,06, 10,12,13

2.5. EQUALLY AVERAGE USE OF FREQUENCIES AND BEHAVIOUR

The first connection between the two devices is established, a hopping sequence was generated. For Transmitting the wanted data the complete hopping sequence was not used. The connection ended. The second connection will be established. Hereby each frequency is used equally on the average by each transmitter.

2.6. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: TW5GD8208** filing to comply with the FCC PART 15.247 requirements.

2.7. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

2.8. SPECIAL ACCESSORIES

Refer to section 5.2.

2.9. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

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3. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in

- measurement" (GUM) published by CISPR and ANSI.
- Uncertainty of Conducted Emission, $Uc = \pm 3.2 dB$
- Uncertainty of Radiated Emission below 1GHz, Uc = ± 3.9 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB

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4. DESCRIPTION OF TEST MODES

	NO.	TEST MODE DESCRIPTION			
X	5 th 1 5	Low channel TX	Sol		
00	2	Middle channel TX			
	603	High channel TX	C The ratio of Clobal Contract		

Note:

1. Only the result of the worst case was recorded in the report, if no other cases.

2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

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5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Radiated Emission Configure :

EUT

Conducted Emission Configure :



5.2 EQUIPMENT USED IN TESTED SYSTEM

ltem	Equipment	Model No.	ID or Specification	Remark
1	2.4GHz Digital Wireless	GD8208	TW5GD8208	EUT
2	Adapter	KT05W050100USU	DC 5V 1A	Support
3	Adapter	HA-19050100UU	DC 5V 1A	Support
4	Adapter	D31-05050100	DC 5V 1A	Support
6	USB	N/A	N/A	Support

5.3. SUMMARY OF TEST RESULTS

FCC RULES	CC RULES DESCRIPTION OF TEST	
15.247	Peak Output Power	Compliant
15.247	20 dB Bandwidth	Compliant
15.247	Spurious Emission	Compliant
15.209	Radiated Emission	Compliant
15.247	Number of Hopping Frequency	Compliant
15.247	Time of Occupancy	Compliant
15.247	Frequency Separation	Compliant
15.207	Conducted Emission	Compliant

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6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd			
Location 1-2F., Bldg.2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District B112-B113, Bldg.12, Baoan Bldg Materials Center, No.1 of Xixiar Inner Ring Road, Baoan District, Shenzhen 518012				
NVLAP LAB CODE	600153-0			
Designation Number	CN5028			
FCC Test Firm Registration Number	682566			
DescriptionAttestation of Global Compliance(Shenzhen) Co., Ltd is accredited by Nat Voluntary Laboratory Accreditation program, NVLAP Code 600153-0				

TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	second ESPI	101206	Jun.20, 2017	Jun.19, 2018
LISN	R&S	ESH2-Z5	100086	Aug.21, 2017	Aug.20, 2018

TEST EQUIPMENT OF RADIATED EMISSION TEST

			2001		(N) 4302	
Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due	
TEST RECEIVER	R&S	ESCI	10096	Jun.20, 2017	Jun.19, 2018	
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec.08, 2017	Dec.07, 2018	
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep.20, 2017	Sep.19, 2018	
preamplifier	ChengYi	EMC184045SE	980508	Sep.15, 2017	Sep.14, 2018	
Active loop antenna (9K-30MHz)	A.H.	SAS-562B	N/A	Mar.01, 2018	Feb.28, 2019	
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May 18, 2017	May 17, 2019	
Broadband Preamplifier	SCHWARZBECK	BBV 9718	9718-205	Jun.20, 2017	Jun.19, 2018	
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep.28, 2017	Sep.27, 2018	
			0			

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7. PEAK OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

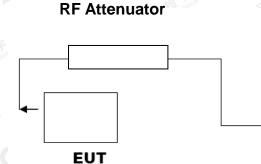
For peak power test:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- 3. RBW > 20 dB bandwidth of the emission being measured.
- 4. VBW ≥RBW.
- 5. Sweep: Auto.
- 6. Detector function: Peak.
- 7. Trace: Max hold.

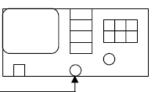
Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

PEAK POWER TEST SETUP



Spectrum Analyzer



RF Cable

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7.3. LIMITS AND MEASUREMENT RESULT

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION										
Frequency (GHz)	Applicable Limits (dBm)	Pass or Fail								
2.410	14.490	21	Pass							
2.441	13.857	21	Pass							
2.477	12.741	21	Pass							



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CH22



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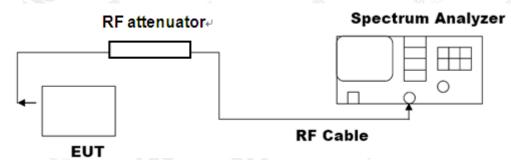
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8. 20DB BANDWIDTH

8.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a hoping channel The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW; Sweep = auto; Detector function = peak
- 4. Set SPA Trace 1 Max hold, then View.

8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



8.3. LIMITS AND MEASUREMENT RESULTS

MEASUREMENT RESULT FOR GFSK MOUDULATION								
Appliachta Limita	Measurement Result							
Applicable Limits	Test Da	Criteria						
The transformer of the transformer	Low Channel	4.115	PASS					
N/A	Middle Channel	4.121	PASS					
	High Channel	4.134	PASS					

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TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

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10:49:51 PM May 29, 2018 Center Freq: 2.441000000 GHz Trig: Free Run Avg|Ho Radio Std: None Frequency Center Freq 2.441000000 GHz Avg|Hold:>10/10 #IFGain:Low #Atten: 30 dB Radio Device: BTS Ref 20.00 dBm l0 dB/div **Center Freq** 2 441000000 GHz Center 2.441 GHz #Res BW 51 kHz Span 15 MHz Sweep 7.133 ms CF Step #VBW 150 kHz 1.500000 MH Auto Ma **Occupied Bandwidth** Total Power 19.2 dBm 4.4628 MHz **Freq Offset** 0 H; -9.215 kHz Transmit Freg Error **OBW Power** 99.00 % -20.00 dB x dB Bandwidth 4.121 MHz x dB

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

STATUS

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STATUS

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

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9. CONDUCTED SPURIOUS EMISSION

9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the Middle and the bottom operation frequency individually.
- Set the Span = wide enough to capture the peak level of the in-band emission and all spurious emissions from the lowest frequency generated in the EUT up through the 10th harmonic.
 RBW = 100 kHz; VBW= 300 kHz; Sweep = auto; Detector function = peak.
- 4. Set SPA Trace 1 Max hold, then View.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 8.2

9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6

9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEAS	SUREMENT RESULT	
Applieghte Limite	Measurement Res	sult
Applicable Limits	Test Data	Criteria
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency	At least -20dBc than the limit Specified on the BOTTOM Channel	PASS
power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. In addition, radiation 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))	At least -20dBc than the limit Specified on the TOP Channel	PASS

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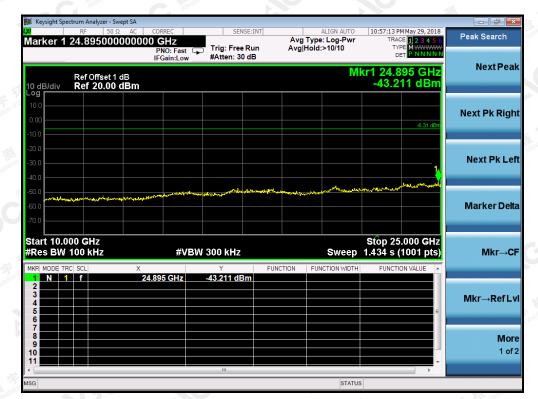
TEST RESULT FOR ENTIRE FREQUENCY RANGE TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF GFSK MODULATION IN LOW CHANNEL

:29 PM May 29, 2018 Ω AC T SE DOODO MHZ PNO: Fast C IFGain:Low Peak Search Avg Type: Log-Pwr Avg|Hold:>10/10 Trig: Free Run #Atten: 30 dB Next Peak Mkr1 907.85 MHz -56.325 dBm Ref Offset 1 dB Ref 20.00 dBm l0 dB/di Next Pk Right Next Pk Left Marker Delta Start 30.0 MHz #Res BW 100 kHz Stop 1.0000 GHz Sweep 92.73 ms (1001 pts) #VBW 300 kHz Mkr→CF 907.85 MHz -56.325 dBm N 1 f Mkr→RefLv More 1 of 2 10:56:16 PM Ma Avg Type: Log-Pwr Avg|Hold:>10/10 Display Displav L Trig: Free Run #Atten: 30 dB PNO: Fast IFGain:Low Annotation 1 2.413 GHz 13.694 dBm Ref Offset 1 dB **Ref 20.00 dBm** 0 dB/ Title Graticule On Of Display Line -6.31 dBm <u> 0n</u> Off Start 1.000 GHz #Res BW 100 kHz Stop 10.000 GHz Sweep 860.1 ms (1001 pts) #VBW 300 kHz 2.413 GHz 13.694 dBm System Display Settings STATUS

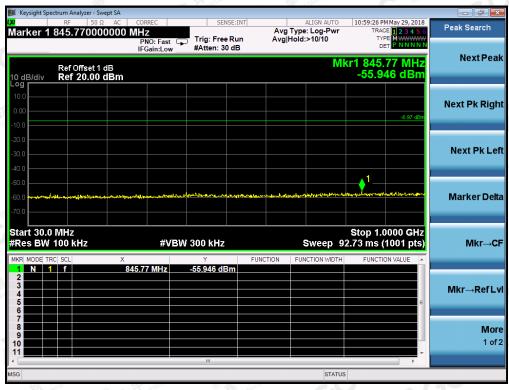
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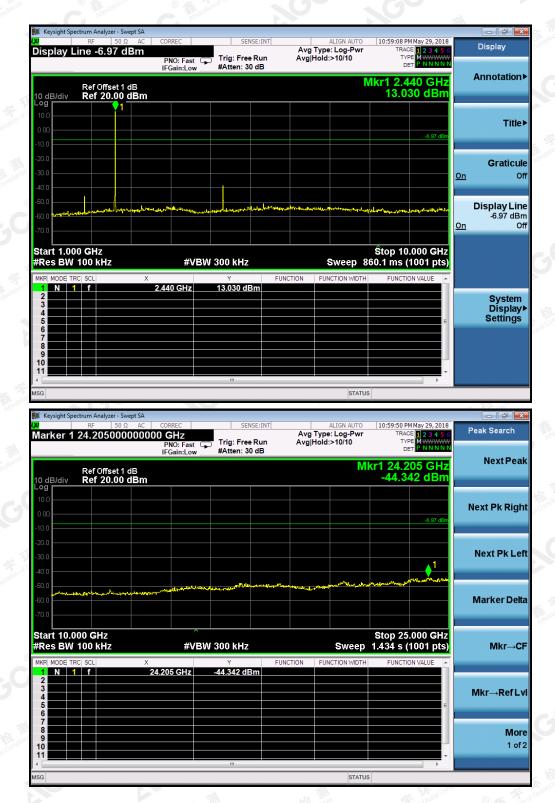
TEST PLOT OF OUT OF BAND EMISSIONS OF GFSK MODULATION IN MIDDLE CHANNEL



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11:20:24 PM May 29, 2018 TRACE 1 2 3 4 5 6 Peak Search Avg Type: Log-Pwi Avg|Hold:>10/10 947.62000000 MHz Trig: Free Run #Atten: 30 dB PNO: Fast IFGain:Low **Next Pea** Mkr1 947.62 MHz -57.204 dBm Ref Offset 1 dB **Ref 20.00 dBm** 0 dB/ Next Pk Right Next Pk Left Marker Delta Stop 1.0000 GHz Sweep 92.73 ms (1001 pts) Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Mkr→CF 947.62 MHz -57.204 dBm Mkr→RefLvi More 1 of 2 11:19:09 PM May 29, 2018 TRACE 1 2 3 4 5 6 Avg Type: Log-Pwr Avg|Hold:>10/10 Display Display Line -8.42 dBm Trig: Free Run #Atten: 30 dB PNO: Fast 🖵 IFGain:Low Annotation Mkr1 2.476 GHz 11.580 dBm Ref Offset 1 dB Ref 20.00 dBm 0 dB Title Graticule <u> On</u> Of Display Line -8.42 dBm <u>On</u> Off Start 1.000 GHz #Res BW 100 kHz Stop 10.000 GHz Sweep 860.1 ms (1001 pts) #VBW 300 kHz 2.476 GHz 11.580 dBm System Display Settings

TEST PLOT OF OUT OF BAND EMISSIONS OF GFSK MODULATION IN HIGH CHANNEL

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Keysight Spectrum Analyzer	- Swept SA 50 Ω AC CORREC	SENSE:I	NT	ALIGN AUTO	11:21:25 PM May 29, 2018	
larker 1 24.2650			Avg Typ	e: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE M *******	Peak Search
Ref Offse 0 dB/div Ref 20.1	IFGain:Lov		3	M	kr1 24.265 GHz -43.139 dBm	NextPe
og 10.0 0.00					-8.42 dBm	Next Pk Rig
20.0					1	Next Pk L
50.0 	and the foreign and the second s	r all statute	nden effektive and an and a state of the sta	and the second s	aling had a general and a second s	Marker De
tart 10.000 GHz Res BW 100 kHz	#\ ×	/BW 300 kHz Y	FUNCTION	Sweep	Stop 25.000 GHz 1.434 s (1001 pts)	Mkr→
1 N 1 f 2 3 3 4 5 6	24.265 GHz	-43.139 dBm			=	Mkr→Ref
7 8 9 0 1						M (1 c
G		III		STATUS	•	

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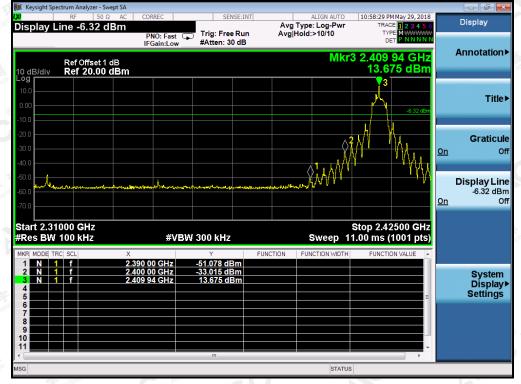
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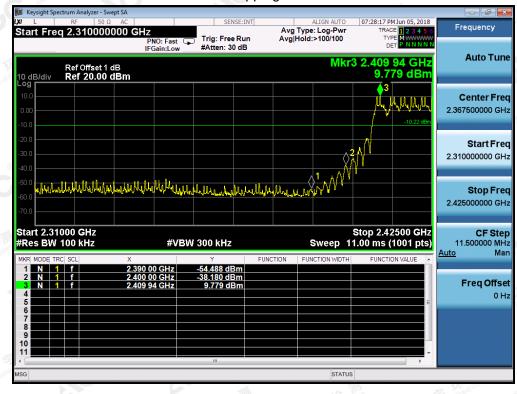
TEST RESULT FOR BAND EDGE

GFSK MODULATION IN LOW CHANNEL

Hopping off



Hopping on



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GFSK MODULATION IN HIGH CHANNEL Hopping off

Hopping on



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10. RADIATED EMISSION

10.1. MEASUREMENT PROCEDURE

- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

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The following table is the setting of spectrum analyzer and receiver.

	Spectrum Parameter	Setting
E manance	Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
© %	Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
-,C *	Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP
TA	Start ~Stop Frequency	1GHz~26.5GHz 1MHz/3MHz for Peak, 1MHz/10Hz for Average

	A5 (A)
Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

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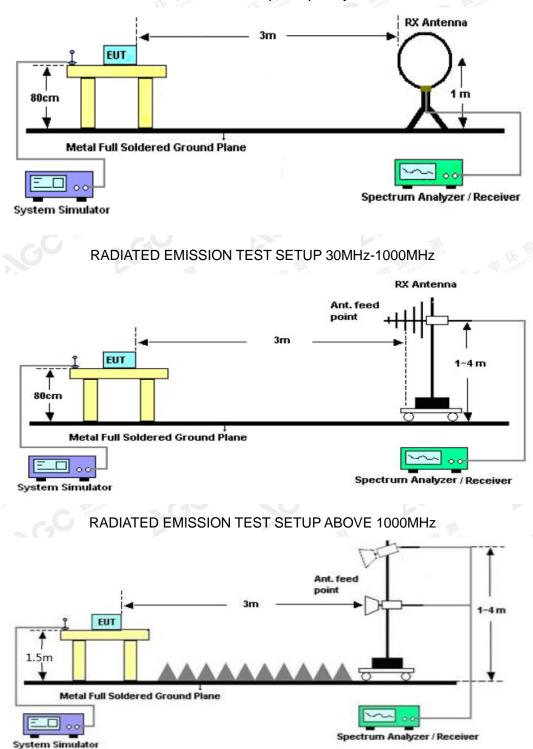


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10.2. TEST SETUP

Radiated Emission Test-Setup Frequency Below 30MHz



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10.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/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	and a stand of a				
216~960	200	3.0				
Above 960	500	3				

Note: All modes were tested For restricted band radiated emission,

the test records reported below are the worst result compared to other modes.

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10.4. TEST RESULT

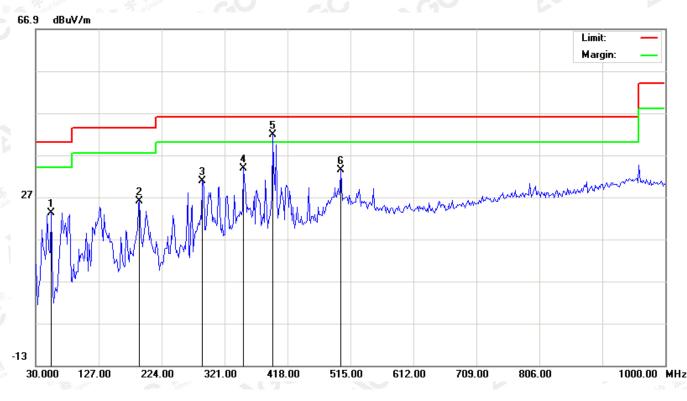
RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

The mode name of adapter-KT05W050100USU

RADIATED EMISSION BELOW 1GHZ

RADIATED EMISSION TEST- (30MHZ-1GHZ) -HORIZONTAL



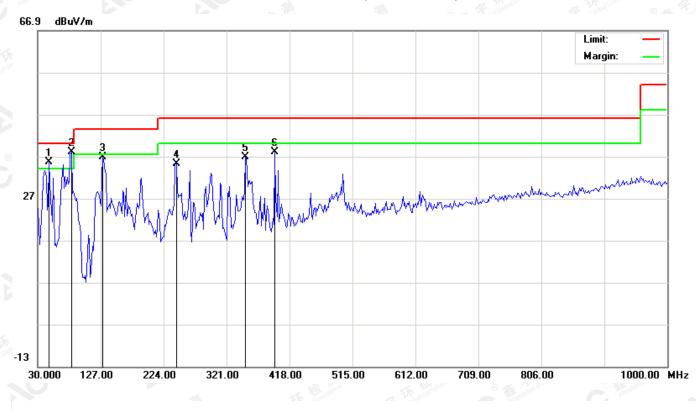
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		54.2500	16.62	6.68	23.30	40.00	-16.70	peak			
2		190.0500	14.49	11.54	26.03	43.50	-17.47	peak			
3		287.0500	17.53	13.21	30.74	46.00	-15.26	peak			
4		350.1000	15.00	18.74	33.74	46.00	-12.26	peak			
5	*	395.3667	22.72	19.04	41.76	46.00	-4.24	peak			
6		500.4500	12.35	21.14	33.49	46.00	-12.51	peak			

RESULT: PASS

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RADIATED EMISSION TEST- (30MHZ-1GHZ) -VERTICAL

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	İ	47.7833	27.24	8.39	35.63	40.00	-4.37	peak			
2	*	81.7333	35.62	2.42	38.04	40.00	-1.96	peak			
3		130.2332	25.64	11.13	36.77	43.50	-6.73	peak			
4		243.4000	21.98	13.25	35.23	46.00	-10.77	peak			
5		350.1000	18.06	18.74	36.80	46.00	-9.20	peak			
6		395.3667	18.97	19.04	38.01	46.00	-7.99	peak			

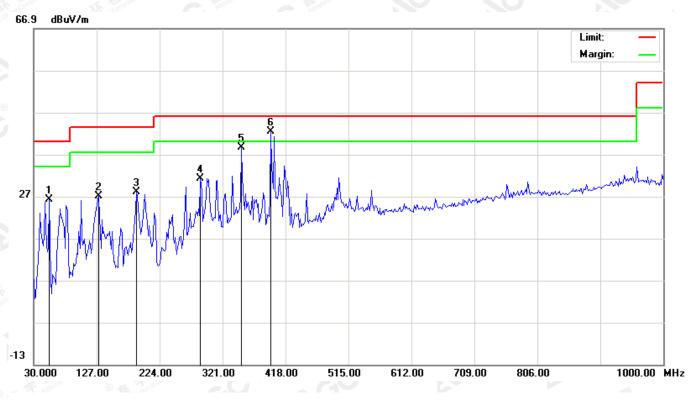
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The mode name of adapter-HA-19050100UU RADIATED EMISSION BELOW 1GHZ RADIATED EMISSION TEST- (30MHZ-1GHZ) -HORIZONTAL



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		54.2500	19.44	6.68	26.12	40.00	-13.88	peak			
2		130.2332	16.38	10.64	27.02	43.50	-16.48	peak			
3		188.4333	16.63	11.46	28.09	43.50	-15.41	peak			
4		287.0500	17.91	13.21	31.12	46.00	-14.88	peak			
5		350.1000	19.92	18.74	38.66	46.00	-7.34	peak			
6	*	395.3667	23.31	19.04	42.35	46.00	-3.65	peak			

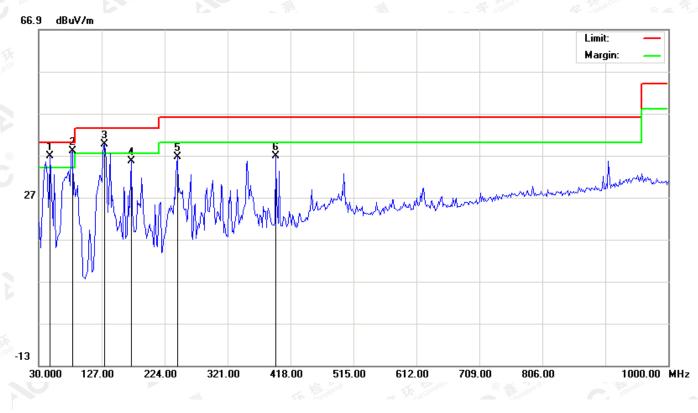
RESULT: PASS

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RADIATED EMISSION TEST- (30MHZ-1GHZ) -VERTICAL

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	•	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	İ	47.7833	28.37	8.39	36.76	40.00	-3.24	peak			
2	*	81.7333	35.49	2.42	37.91	40.00	-2.09	peak			
3	İ	131.8500	27.86	11.80	39.66	43.50	-3.84	peak			
4		172.2667	20.97	14.56	35.53	43.50	-7.97	peak			
5		243.4000	23.45	13.25	36.70	46.00	-9.30	peak			
6		395.3667	17.73	19.04	36.77	46.00	-9.23	peak			

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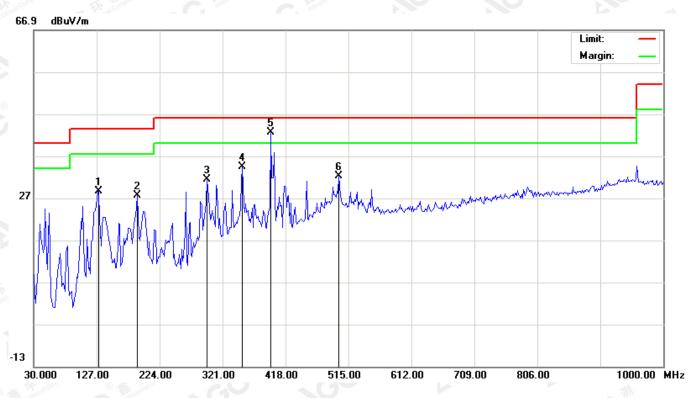




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The mode name of adapter-D31-05050100 RADIATED EMISSION BELOW 1GHZ

RADIATED EMISSION TEST- (30MHZ-1GHZ) -HORIZONTAL



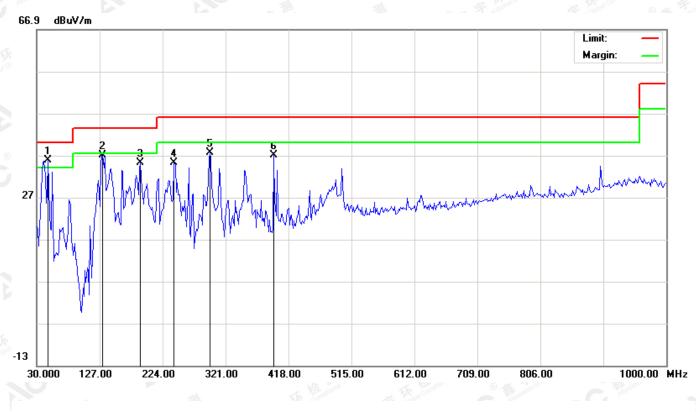
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over		Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		130.2332	17.88	10.64	28.52	43.50	-14.98	peak			
2		190.0500	16.09	11.54	27.63	43.50	-15.87	peak			
3		296.7500	16.48	14.86	31.34	46.00	-14.66	peak			
4		351.7167	15.57	18.75	34.32	46.00	-11.68	peak			
5	*	395.3667	23.49	19.04	42.53	46.00	-3.47	peak			
6		500.4500	11.08	21.14	32.22	46.00	-13.78	peak			

RESULT: PASS

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RADIATED EMISSION TEST- (30MHZ-1GHZ) -VERTICAL

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	•	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	47.7833	27.38	8.39	35.77	40.00	-4.23	peak			
2		131.8500	25.30	11.80	37.10	43.50	-6.40	peak			
3		190.0500	23.68	11.52	35.20	43.50	-8.30	peak			
4		241.7833	22.20	13.09	35.29	46.00	-10.71	peak			
5		296.7500	22.20	15.31	37.51	46.00	-8.49	peak			
6		395.3667	17.95	19.04	36.99	46.00	-9.01	peak			

RESULT: PASS

- Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
 - 2. The "Factor" value can be calculated automatically by software of measurement system.
- 3. All test channels for different EUT are pre-tested. The low channel for GFSK mode is the worst case and recorded in the report.

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RADIATED EMISSION TEST- (ABOVE 1GHZ)

Frequency	Emission Level	Limits	Margin	Detector	Commert	
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	Туре	Comment	
I Conte	Lo	w Channel (2410	MHz)			
4820	37.89	74	-36.11	Pk	Vertical	
4820	37.53	54	-16.47	AV	Vertical	
7230	40.52	74	-33.48	Pk	Vertical	
7230	38.49	54	-15.51	AV	Vertical	
4820	36.99	74	-37.01	Pk	Horizontal	
4820	38.70	54	-15.30	AV	Horizontal	
7230	52.45	74	-21.55	Pk	Horizontal	
7230	43.09	54	-10.91	AV	Horizontal	
	Mi	d Channel (2441	MHz)	The Completion	E The Compliance	
4882	38.70	74	-35.30	Pk	Vertical	
4882	40.52	54	-13.48	AV	Vertical	
7323	41.80	74	-32.20	Pk 👘	Vertical	
7323	42.70	54	-11.30	AV	Vertical	
4882	38.74	74	-35.26	Pk	Horizontal	
4882	40.14	54	-13.86	AV	Horizontal	
7323	52.08	74	-21.92	Pk	Horizontal	
7323	43.25	54	-10.75	AV	Horizontal	
A North	Hig	h Channel (2477	′ MHz)	C.C.	CO "	
4954	38.30	74	-35.70	Pk	Vertical	
4954	40.32	54	-13.68	AV	Vertical	
7431	41.53	74	-32.47	Pk	Vertical	
7431	42.40	54	-11.60	AV B	Vertical	
4954	39.20	74	-34.80	Pk	Horizontal	
4954	39.93	54	-14.07	AV	Horizontal	
7431	52.32	74	-21.68	Pk	Horizontal	
7431	43.21	54	-10.79	AV	Horizontal	

RESULT: PASS

Note: 1. 1GHz~25GHz:(No recording in the test report at least have 20dB margin)

2. Margin = Emission Level - Limit

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Frequency	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	Туре	
on F dela	ACONTRACT AND	GF	SK		
2399.9	45.33	74	-28.67	peak	Vertical
2399.9	41.06	54	-12.94	AVG	Vertical
2399.9	50.11	74	-23.89	peak	Horizontal
2399.9	36.28	54	-17.72	AVG	Horizontal
2483.6	53.16	74	-20.84	peak	Vertical
2483.6	32.16	54	-21.84	AVG	Vertical
2483.6	50.21	74	-23.79	peak	Horizontal
2483.6	38.45	54	-15.55	AVG	Horizontal

TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

RESULT: PASS

Note: Margin = Emission Level – Limit

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