

# **FCC/IC - TEST REPORT**

Report Number	:	68.850.15.007.	02F	Date of Issue:	June 1, 2015
Model	:	MBP662CONN	ECTPU		
Product Type	:	Digital Video Ba	aby Monito	r (Parent Unit)	
Applicant	:	Binatone Electr	onics Inter	national Limited	
Address	:	Floor 23A, 9 De	s Voeux R	load West, Sheur	ng Wan
Production Facility	:	Alford Industria	Ltd.		
Address	:	Unit 02, 6 <sup>th</sup> Floo			oi Yuen Road, Kwun
			riong rec	.9	
Test Result	:	■ Positive	□ Negati	ve	
Total pages including Appendices		39			
Appendices		33			

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# 2 Details about the Test Laboratory

# **Details about the Test Laboratory**

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch

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Nantou Checkpoint Road 2, Nanshan District,

Shenzhen City, 518052,

P. R. China

Telephone: 86 755 8828 6998 Fax: 86 755 8828 5299



# 3 Description of the Equipment Under Test

Product: Digital Video Baby Monitor (Parent Unit)

Model no.: MBP662CONNECTPU

FCC ID: VLJ-MBP662PU

IC: 4522A-MBP662PU

Options and accessories: Adapter

Rating: DC5V, 600mA powered by AC/DC power adaptor

OR

DC 3.6V, 900mAh (Ni-MH package rechargeable battery)

RF Transmission Frequency: 2402MHz – 2479MHz

No. of Operated Channel: 23

Modulation: GFSK

Antenna Type: Integral

Antenna Gain: 0 dBi

Description of the EUT: The Equipment Under Test (EUT) is a Monitor of Wireless

Monitoring System, which include of a FHSS Module

Channel list (MHz)				
CH 1 = 2402	CH 2 = 2404	CH 3 = 2406	CH 4 = 2408	CH 5 = 2410
CH 6 = 2415	CH 7 = 2420	CH 8 = 2425	CH 9 = 2430	CH 10 = 2435
CH 11 = 2440	CH 12 = 2445	CH 13 = 2450	CH 14 = 2455	CH 15 = 2460
CH 16 = 2465	CH 17 = 2467	CH 18 = 2469	CH 19 = 2471	CH 20 = 2473
CH 21 = 2475	CH 22 = 2477	CH 23 = 2479		



# 4 Summary of Test Standards

Test Standards				
FCC Part 15 Subpart C 10-1-2014 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators			
RSS-Gen Issue 4 November 2014	General Requirements for the Certification of Radio Apparatus			
RSS-247 Issue 1 May 2015	RSS-247 – Digital Transmission Systems (DTSs), Frequency Hopping systems (FHSs) and License-exempt Local Area Network (LE-LAN) Devices			

All the test methods were according to Public Notice DA 00-705 -Frequency Hopper Spread Spectrum Test Procedure released by FCC on March 30, 2000 and C63.10 (2013).



# 5 Summary of Test Results

		Technical Requirements			
FCC Part 15 Subj	oart C, RSS-Gen, R	SS-247, RSS-102			
	Test Condi	tion	Pages	Test Site	Test Result
§15.207	RSS-Gen Section 8.8	Conducted emission AC power port	10	Site 1	Pass
§15.247(b)(1)	RSS-247 Section 5.4(2)	Conducted peak output power	13	Site 1	Pass
§15.247(a)(2)	RSS-247 Section 5.2(1)	6dB bandwidth			N/A
§15.247(a)(1)	RSS-247 Section 5.1(1)	20dB bandwidth	16	Site 1	Pass
§15.247(a)(1)	RSS-247 Section 5.1(2)	Carrier frequency separation	19	Site 1	Pass
§15.247(a)(1)(iii)	RSS-247 Section 5.1(4)	Number of hopping frequencies	22	Site 1	Pass
§15.247(a)(1)(iii)	RSS-247 Section 5.1(4)	Dwell Time	24	Site 1	Pass
§15.247(e)	RSS-247 Section 5.2(2)	Power spectral density*			N/A
§15.247(d)	RSS-247 Section 5.5	Spurious RF conducted emissions	27	Site 1	Pass
§15.247(d)	RSS-247 Section 5	Band edge	30	Site 1	Pass
§15.247(d) & §15.209 &	RSS-247 Section 5.5 & RSS-Gen 6.13	Spurious radiated emissions for transmitter	32	Site 1	Pass
§15.203	RSS-Gen 8.3	Antenna requirement	See	note 1	Pass

Note 1: N/A=Not Applicable.

Note 2: The EUT uses a patch antenna, which gain is 0 dBi. In accordance to §15.203 and RSS-Gen 8.3, It is considered sufficiently to comply with the provisions of this section.



# 6 General Remarks

## Remarks

This submittal(s) (test report) is intended for FCC ID: VLJ-MBP662PU, IC: 4522A-MBP662PU complies with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules and RSS-247.

## **SUMMARY:**

All tests according to the regulations cited on page 5 were

■ - Performed
 □ - Not Performed
 The Equipment Under Test
 ■ - Fulfills the general approval requirements.
 □ - Does not fulfill the general approval requirements.
 Sample Received Date: April 28, 2015
 Testing Start Date: April 29, 2015
 Testing End Date: May 29, 2015

Reviewed by:

TÜV SÜD HONG KONG LTD.

Ray Cheung

Project Engineer

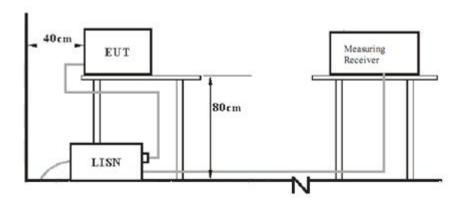
Prepared by:

Nicolas Cheng Project Manager

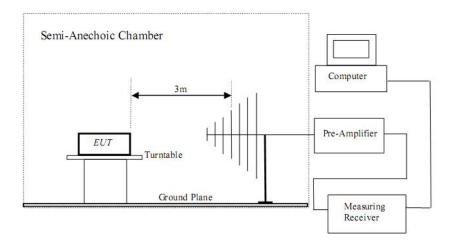


# 7 Test Setups

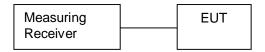
# 7.1 AC Power Line Conducted Emission test setups



# 7.2 Radiated test setups



# 7.3 Conducted RF test setups





# 8 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
Digital Video Baby	Alford Industrial Ltd.	MBP662CONNECTBU	
Monitor			

The system was configured to hopping mode and non-hopping mode.

Hopping mode: typical working mode (normal hopping status)

Non-hopping mode: The system was configured to operate at a signal channel transmitting. The test software allows the configuration and operation at the worst-case duty and the highest transmit power



# 9 Technical Requirement

# 9.1 Conducted Emission

#### **Test Method**

- 1. The EUT was placed on a table, which is 0.8m above ground plane
- 2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
- 3. Maximum procedure was performed to ensure EUT compliance
- 4. A EMI test receiver is used to test the emissions from both sides of AC line

#### Limit

Frequency		QP Limit	AV Limit
	MHz	dΒμV	dΒμV
	0.150-0.500	66-56*	56-46*
	0.500-5	56	46
	5-30	60	50

Decreasing linearly with logarithm of the frequency



# **Conducted Emission**

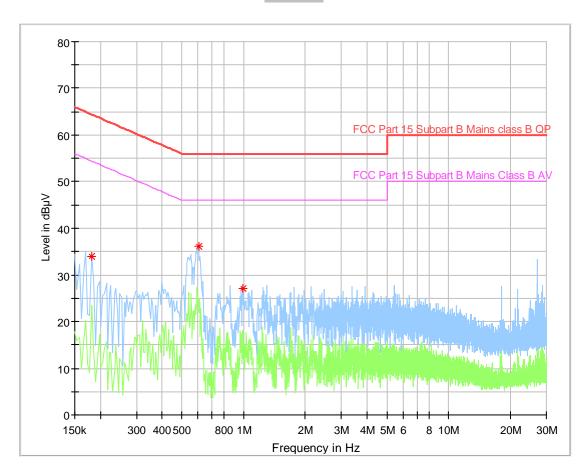
Product Type Digital Video Baby Monitor MBP662CONNECTPU M/N

**Operating Condition** 

Transmitting mode
FCC part 15 Section 15.207 Class B
RSS-GEN Issue 4 section 8.8 Test Specification

Comment

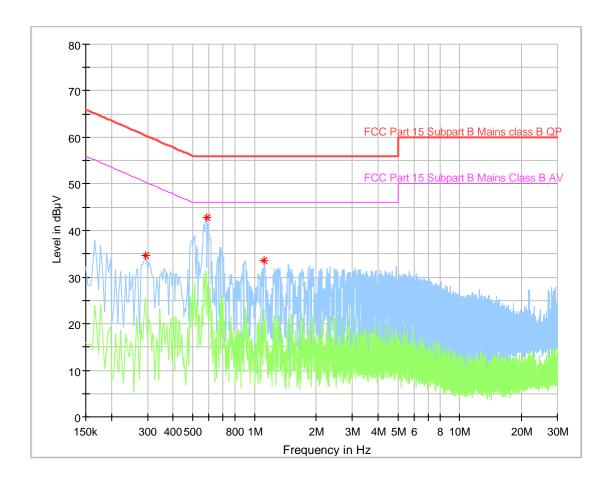
# Phase L



	Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margi n	Line	Corr
Ī	0.174000	35.74	64.77	29.03	L1	9.6
	0.582000	40.18	56.00	15.82	L1	10.0
	2.010000	29.02	56.00	26.98	L1	9.8



# Phase N



Frequency	QuasiPeak	Limit	Margi	Line	Corr.
(MHz)	(dBµV)	(dBµV)	n		(dB)
0.294000	34.66	60.41	25.75	N	10.1
0.582000	42.71	56.00	13.29	N	10.0
1.110000	33.55	56.00	22.45	N	9.8



# 9.2 Conducted peak output power

#### **Test Method**

- Use the following spectrum analyzer settings:
   Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel RBW > the 20 dB bandwidth of the emission being measured, VBW≥RBW,
   Sweep = auto, Detector function = peak, Trace = max hold
- 2. Add a correction factor to the display.
- 3. Allow the 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

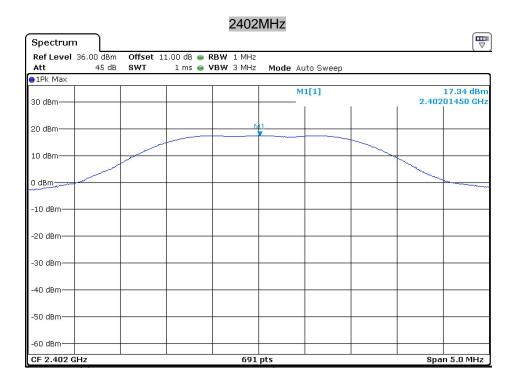
#### Limits

Frequency Range	Limit	Limit
MHz	W	dBm
2400-2483.5	≤0.125	≤21

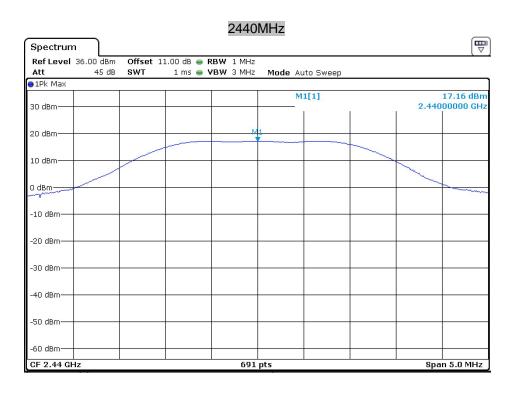


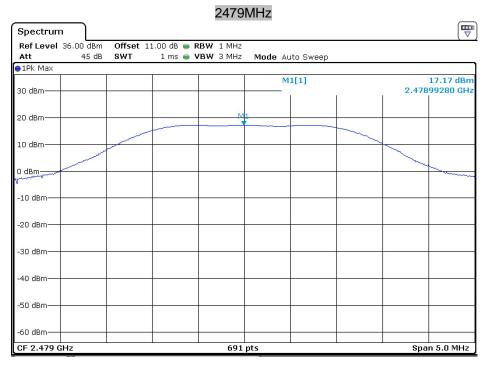
# Conducted peak output power

#### **Test Result Conducted Peak** Frequency **Output Power** Result MHz dBm 17.34 Pass Low channel 2402MHz Middle channel 2440MHz 17.16 Pass High channel 2479MHz Pass 17.17











## 9.3 20 dB bandwidth

#### **Test Method**

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- 3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
- 4. Repeat above procedures until all frequencies measured were complete.

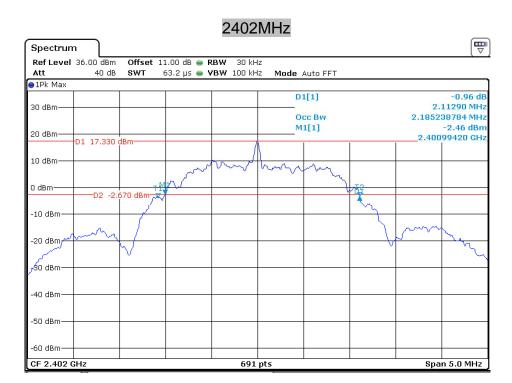
Limit [kHz]
N/A



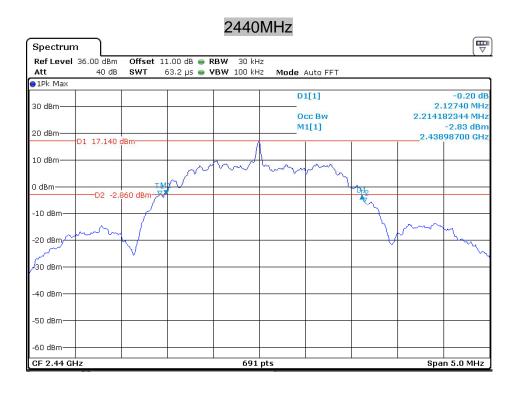
# 20 dB bandwidth and 99% Occupied Bandwidth

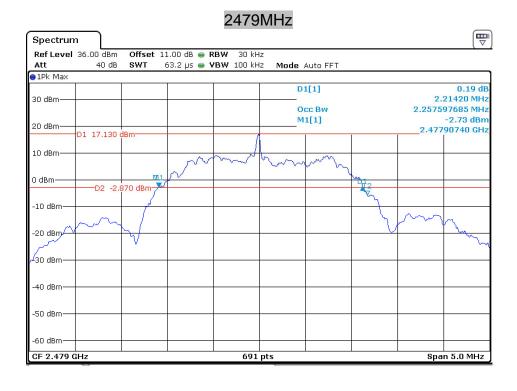
Bluetooth Mode GFSK Modulation test result

Frequency	20 dB Bandwidth	Result
MHz	MHz	
2402	2.113	Pass
2440	2.127	Pass
2479	2.214	Pass











# 9.4 Carrier Frequency Separation

#### **Test Method**

- Use the following spectrum analyzer settings: Span = wide enough to capture the peaks of two adjacent channels, RBW ≥ 1% of the span, VBW) ≥RBW, Sweep = auto, Detector function = peak
- 2. By using the Max-Hold function record the separation of two adjacent channels.
- 3. Measure the frequency difference of these two adjacent channels by spectrum analyzer marker function.
- 4. Repeat above procedures until all frequencies measured were complete.

#### Limit

Limit	
kHz	
≥25KHz or 2/3 of the 20 dB bandwidth which is greater	



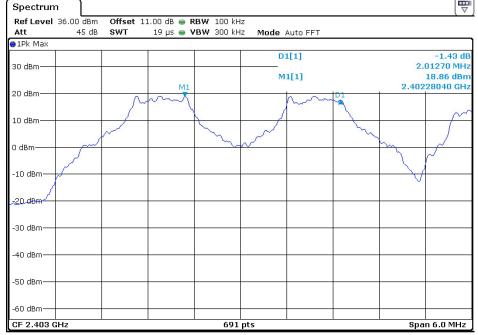
# **Carrier Frequency Separation**

Test result: The measurement was performed with the typical configuration (normal hopping status), here GFSK modulation mode was used to show compliance.

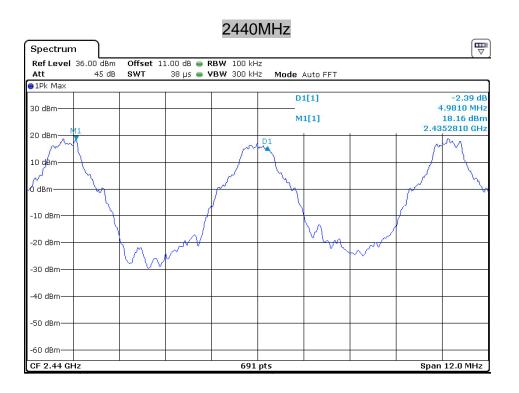
#### **GFSK Modulation test result**

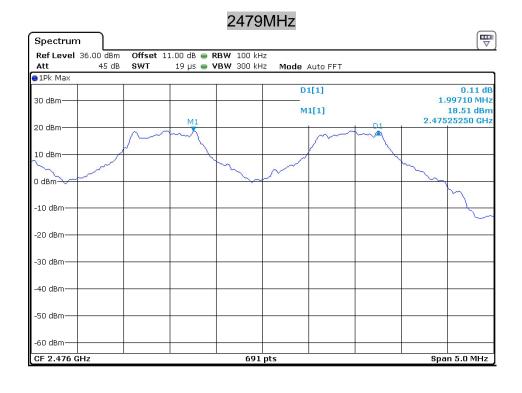
Frequency	Frequency Carrier Frequency Separation	
MHz	MHz	
2402	2.01	Pass
2440	4.98	Pass
2479	2.00	Pass

# 2402MHz











# 9.5 Number of hopping frequencies

#### **Test Method**

- Use the following spectrum analyzer settings:
   Span = wide enough to capture the peaks of two adjacent channels, RBW ≥ 1% of the span, VBW) ≥RBW, Sweep = auto, Detector function = peak
- 2. Set the spectrum analyzer on Max-Hold Mode, and then keep the EUT in hopping mode.
- 3. Record all the signals from each channel until each one has been recorded.
- 4. Repeat above procedures until all frequencies measured were complete.

#### Limit

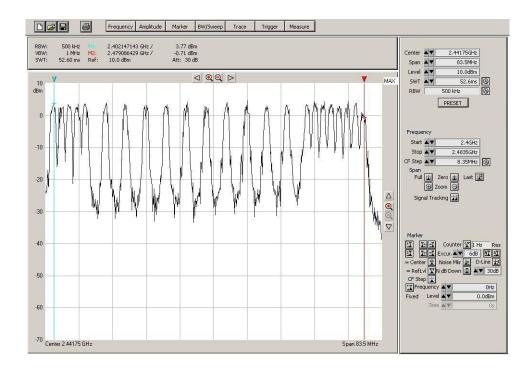
	Limit
	number
-	≥ 15



# Number of hopping frequencies

Test result: The measurement was performed with the typical configuration (normal hopping status, here GFSK modulation mode was used to show compliance.

Number of hopping frequencies	Result
23	Pass





# 9.6 Dwell Time

## **Test Method**

- Connect EUT antenna terminal to the spectrum analyzer with a low loss cable.
   Equipment mode: Spectrum analyzer
- 2. RBW: 1MHz; VBW: 1MHz; SPAN: Zero Span
- 3. Adjust the center frequency of spectrum analyzer on any frequency be measured.
- 4. Measure the Dwell Time by spectrum analyzer Marker function.
- 5. Repeat above procedures until all frequencies measured were complete.

#### Limit

The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.



#### **Dwell Time**

#### **Dwell time**

Each transmission only 23 channels will be used.

Observe time = 23 channels  $\times$  0.4s = 9.2s

There are 4 pulses within 200.1ms

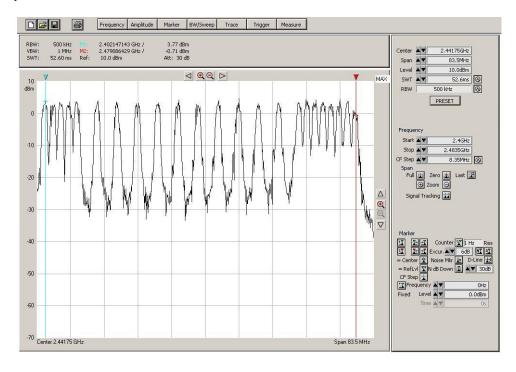
And one set of pulses = 131.7us

Therefore, the average channel occupancy times (ms)

= 131.7us x 4 x 9.2s/200.1ms

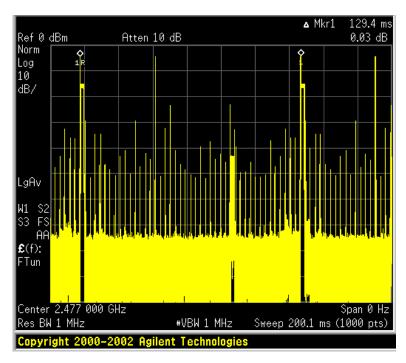
So, total transmitting time is 0.024s. (<0.4s).

#### Result data graph shows total 23 channels are used.

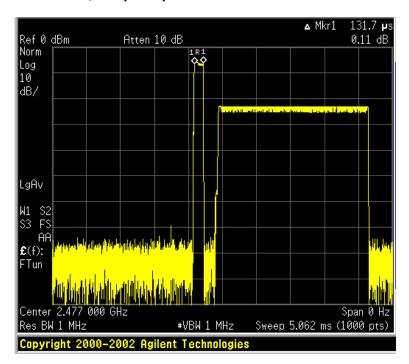




## Result data graph shows total 4 pulses with 200.1ms.



## Result data graph zooms into detail, one pulse period is 131.7us.





# 9.7 Spurious RF conducted emissions

#### **Test Method**

- Use the following spectrum analyzer settings: Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10<sup>th</sup> harmonic. Typically, several plots are required to cover this entire span. RBW = 100 kHz, VBW≥RBW, Sweep = auto, Detector function = peak, Trace = max hold
- 2. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.
- 3. The level displayed must comply with the limit specified in this Section. Submit these plots.
- 4. Repeat above procedures until all frequencies measured were complete.

#### Limit

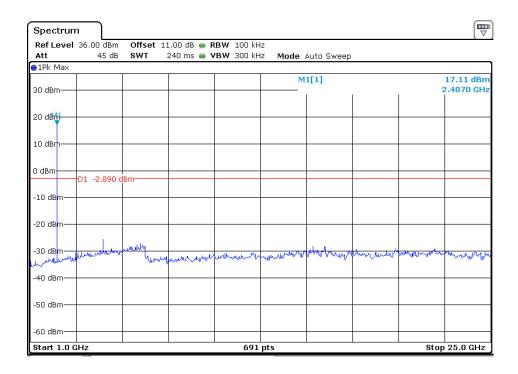
Frequency Range MHz	Limit (dBc)
30-25000	-20



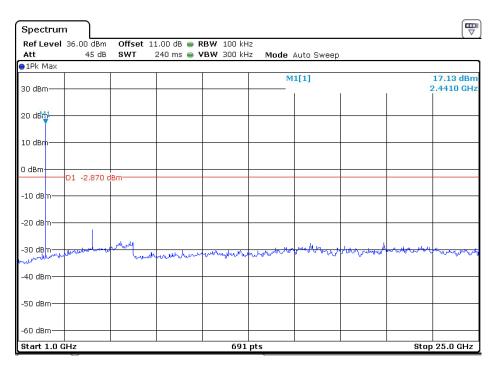
## **Spurious RF conducted emissions**

Only the worse case (which is subject to the maximum EIRP, GFSK mode) test result is listed in the report.

#### 2402MHz

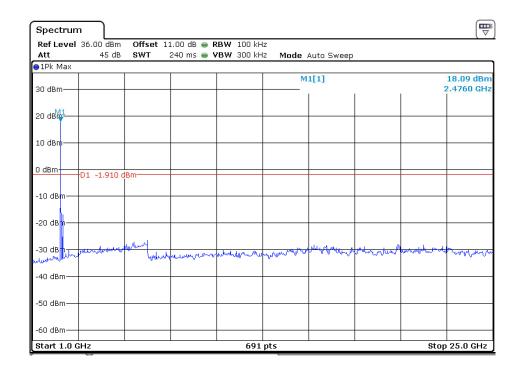


## 2440MHz





#### 2479MHz





# 9.8 Band edge testing

#### **Test Method**

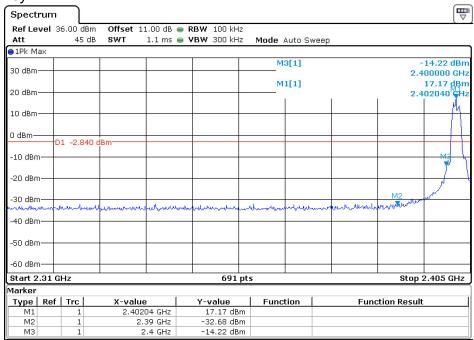
- 1 Use the following spectrum analyzer settings: Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 100 kHz, VBW ≥ RBW, Sweep = auto, Detector function = peak, Trace = max hold
- 2 Allow the trace to stabilize, use the peak and delta measurement to record the result.
- 3 The level displayed must comply with the limit specified in this Section. .
- 4 Repeat the test at the hopping off and hopping on mode, submit all the plots.



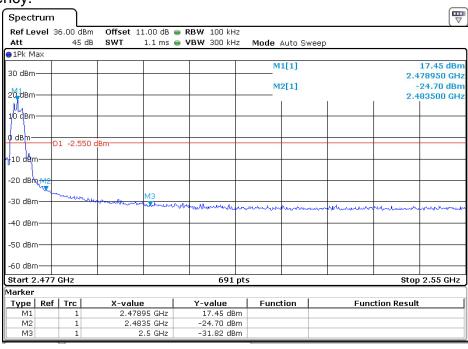
## **Band edge testing**

#### Test Result:

## Lowest Frequency:



# **Highest Frequency:**





# 9.9 Spurious radiated emissions for transmitter

#### **Test Method**

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 3. Use the following spectrum analyzer settings: Span = wide enough to fully capture the emission being measured, RBW = 1 MHz for f ≥ 1GHz, 100 kHz for f < 1 GHz, VBW ≥ RBW, Sweep = auto, Detector function = peak, Trace = max hold
- 4. Follow the guidelines in ANSI C63.4-2009 with respect to maximizing the emission by rotating the EUT, adjusting the measurement antenna height and polarization, etc. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, submit this data. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 5. Set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the duty cycle per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a "duty cycle correction factor", derived from 20log(duty cycle/100 ms), in an effort to demonstrate compliance with the 15.209 limit. Submit this data.

#### Limit

The radio emission outside the operating frequency band 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. Radiated emissions which fall in the restricted bands, as defined in section15.205, must comply with the radiated emission limits specified in section 15.209.

Frequency	Field Strength	Field Strength	Detector	
MHz	uV/m	dBμV/m		
30-88	100	40	QP	
88-216	150	43.5	QP	
216-960	200	46	QP	
960-1000	500	54	QP	
Above 1000	500	54	AV	
Above 1000	5000	74	PK	



## Spurious radiated emissions for transmitter

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

The only worse case (which is subject to the maximum EIRP, GFSK mode) test result is listed in the report.

# Transmitting spurious emission test result as below:

#### Remark:

- (1) AV Emission Level= PK Emission Level+20log(dutycycle)
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
- (3) "\*" means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

Frequency (Vertical - 30MHz to 3GHz)

rioquonoy	( V OI LIOUI						
Frequency	MaxPeak	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB)
43.337500	34.13	40.00	5.87	100.0	V	0.0	15.2
59.948750	25.31	40.00	14.69	100.0	V	94.0	13.9
134.941875	32.34	43.50	11.16	100.0	V	344.0	10.4
161.980625	33.76	43.50	9.74	100.0	V	0.0	10.3

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
2376.500000	64.54		74.00	9.46	100.0	٧	275.0	-8.7
2402.000000	105.19		74.00	-31.19	100.0	٧	338.0	-8.5
2484.000000	60.78		74.00	13.22	100.0	٧	320.0	-8.5

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
2376.500000	49.97	54.00	4.03	100.0	٧	275.0	-8.7
2484.000000	47.37	54.00	6.63	100.0	٧	320.0	-8.5

Frequency (Horizontal – 30MHz to 3GHz)

	1		<u> </u>						
Frequency	MaxPeak	Limit	Margin	Height	Pol	Azimuth	Corr.		
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB)		
43.216250	22.96	40.00	17.04	100.0	Н	0.0	15.1		
161.980625	28.45	43.50	15.05	200.0	Н	77.0	10.3		
480.019375	32.11	46.00	13.89	200.0	Н	3.0	19.1		

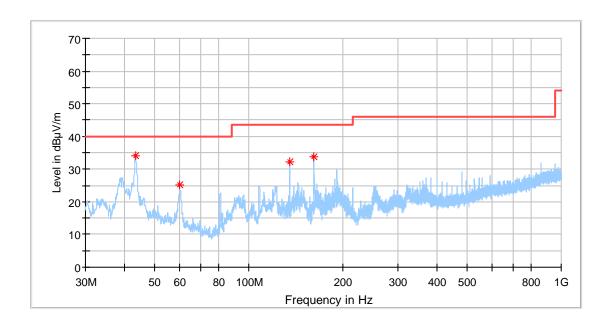
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
2379.000000	65.35		74.00	8.65	100.0	Н	44.0	-8.7
2402.000000	105.19		74.00	-31.19	100.0	Н	0.0	-8.5
2495.500000	57.84		74.00	16.16	100.0	Н	0.0	-8.3

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
2379.000000	50.03	54.00	3.97	100.0	Н	44.0	-8.7
2495.000000	50.70	54.00	3.30	100.0	Н	0.0	-8.3

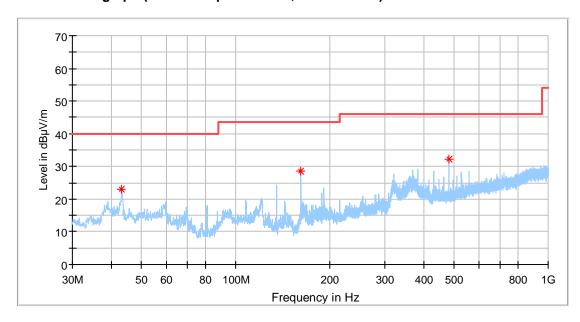


# Spurious radiated emissions for transmitter

# Radiated emission data graph (Vertical polarization, 30MHz-1GHz)

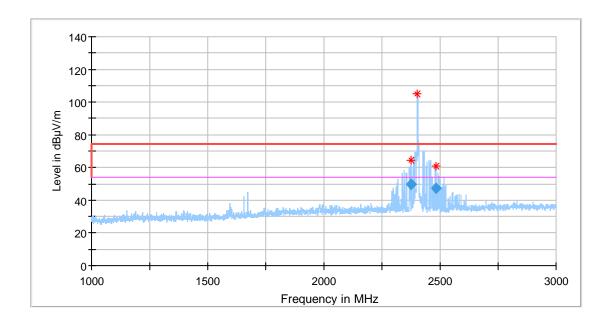


## Radiated emission data graph (Horizontal polarization, 30MHz-1GHz)

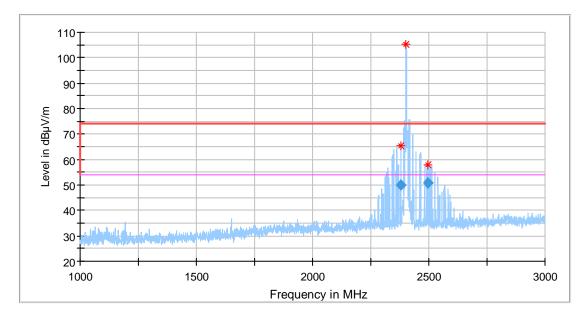




## Radiated emission data graph (Vertical polarization, 1GHz-3GHz)

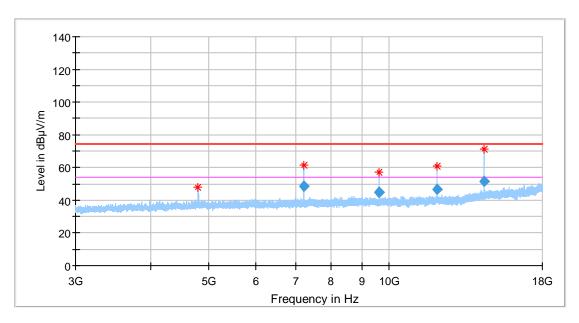


## Radiated emission data graph (Horizontal polarization, 1GHz-3GHz)





## Radiated emission data graph (Vertical polarization, 3GHz-18GHz)



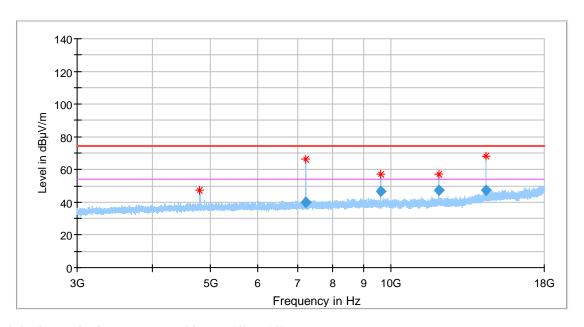
Remark: Only background noise was measured from 18GHz-26GHz.

Frequency	MaxPeak	Average	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB)
4803.750000	47.94		74.00	26.06	100.0	٧	178.0	-0.3
7206.250000	61.47		74.00	12.53	100.0	V	0.0	2.5
9610.625000	57.27		74.00	16.73	100.0	٧	0.0	5.5
12010.000000	60.97		74.00	13.03	100.0	V	299.0	8.2
14409.375000	71.42		74.00	2.58	100.0	V	0.0	13.3

Frequency	Average	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB)
7206.250000	48.24	54.00	5.76	100.0	٧	0.0	2.5
9610.625000	45.04	54.00	8.96	100.0	٧	0.0	5.5
12010.000000	46.55	54.00	7.45	100.0	٧	299.0	8.2
14409.375000	51.82	54.00	2.18	100.0	٧	0.0	13.3



## Radiated emission data graph (Horizontal polarization, 3GHz-18GHz)



Remark: Only background noise was measured from 18GHz-26GHz.

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
4803.125000	47.42	(		26.58	100.0	н		•
4603.125000	47.42		74.00	20.36	100.0	П	0.0	-0.3
7206.250000	66.28		74.00	7.72	100.0	Н	349.0	2.5
9610.625000	56.98		74.00	17.02	100.0	Н	107.0	5.5
12007.500000	57.13		74.00	16.87	100.0	Н	16.0	8.2
14412.500000	67.92		74.00	6.08	100.0	Н	294.0	13.3

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
7206.250000	39.86	54.00	14.14	100.0	Н	349.0	2.5
9610.625000	46.53	54.00	8.47	100.0	Н	107.0	5.5
12007.500000	46.98	54.00	8.02	100.0	Н	16.0	8.2
14412.500000	47.45	54.00	16.55	100.0	Н	294.0	13.3



# 10 Test Equipment List

#### **List of Test Instruments**

	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
	EMI Test Receiver	Rohde & Schwarz	ESR 3	101782	2015-8-17
	LISN	Rohde & Schwarz	ENV4200	100249	2015-8-17
	LISN	Rohde & Schwarz	ENV216	100326	2015-8-17
	ISN	Rohde & Schwarz	ENY81	100177	2015-8-17
CE	ISN	Rohde & Schwarz	ENY81- CAT6	101664	2015-8-17
	High Voltage Proble	Rohde & Schwarz	TK9420(VT9 420)	9420-58	2015-8-17
	RF Current probe	Rohde & Schwarz	EZ-17	100816	2015-8-17
С	Signal Generator	Rohde & Schwarz	SMB100A	108272	2015-8-17
	Signal Analyzer	Rohde & Schwarz	FSV40	101030	2015-8-17
	Vector Signal Generator	Rohde & Schwarz	SMU 200A	105324	2015-8-17
	RF Switch Module	Rohde & Schwarz	OSP120/OS P-B157	101226/10085 1	2015-8-17
	EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	2015-8-17
RE	Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	2017-8-17
KE	Horn Antenna	Rohde & Schwarz	HF907	102294	2017-8-17
	Pre-amplifier	Rohde & Schwarz	SCU 18	102230	2015-8-17
	3m Semi-anechoic chamber	TDK	9X6X6		2019-5-29

#### C - Conducted RF tests

- Conducted peak output power
- 6dB bandwidth
- 20dB bandwidth and 99% Occupied Bandwidth
- Carrier frequency separation
- Number of hopping frequencies
- Dwell Time
- Power spectral density\*
- Spurious RF conducted emissions
- Band edge



# 11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty							
Test Items	Extended Uncertainty						
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.83dB; Vertical: 4.91dB;						
Uncertainty for Radiated Emission in 3m chamber 1000MHz- 18000MHz	Horizontal: 4.89dB; Vertical: 4.88dB;						
Uncertainty for Conducted Emission 9kHz-150KHz	3.88dB						