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Report No.: 1706TW0113-U2 Report Version: V02 Issue Date: 10-29-2017

MEASUREMENT REPORT FCC PART 15 Subpart C / RSS-247 BLE **Radiated Spurious Emission**

FCC ID:	N6C-SDMAN
IC:	4908B-SDMAN
APPLICANT:	Silex Technology, Inc.
Application Type:	Class II Permissive Change
Product:	SDIO Wireless Module
Model No.:	SX-SDMAN
Brand Name:	SIEX
Brand Name: FCC Classification:	
	technology
FCC Classification:	Digital Transmission System (DTS)
FCC Classification: FCC Rule Part(s):	Digital Transmission System (DTS) Part 15 Subpart C (Section 15.247)
FCC Classification: FCC Rule Part(s): IC Rule(s):	Digital Transmission System (DTS) Part 15 Subpart C (Section 15.247) RSS-247 Issue 2, RSS-Gen Issue 4

Reviewed By

: Paddy Chen (Paddy Chen) : Amy ker (Chenz Ker)



Approved By

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 558074 D01v04. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Taiwan) Co., Ltd.



Revision History

Report No.	Version	Description	Issue Date	Note
1706TW0113-U2	Rev. 01	Initial report	08-10-2017	Invalid
1706TW0113-U2	Rev. 02	Add the conducted power	10-29-2017	Valid



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Applicant:	Silex Technology, Inc.		
Applicant Address:	2-3-1 Hikaridai, Seika-cho Sourakugun, Kyoto 619-0237, Japan		
Manufacturer:	Silex Technology, Inc.		
Manufacturer Address:	2-3-1 Hikaridai, Seika-cho Sourakugun, Kyoto 619-0237, Japan		
Test Site:	MRT Technology (Taiwan) Co., Ltd		
Test Site Address:	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333,		
	Taiwan (R.O.C)		
FCC MRT Registration No.:	153292		
IC MRT Registration No.:	21723-1		
FCC Rule Part(s):	Part 15.247		
IC Rule(s):	RSS-247 Issue 2, RSS-Gen Issue 4		
Model No.:	SX-SDMAN		
Test Device Serial No.:	Production Pre-Production Engineering		

§2.1033 General Information

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Fuxing Rd., Taoyuan, Taiwan (R.O.C)

- MRT facility is a FCC registered (MRT Reg. No. 153292) test facility with the site description report on file and is designated by the FCC as an Accredited Test Film.
- MRT facility is an IC registered (MRT Reg. No. 21723-1) test laboratory with the site description on file at Industry Canada.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (TAF) under the American Association for Laboratory Accreditation Program (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC,

Industry Canada, Taiwan, EU and TELEC Rules.

TAF certificate here





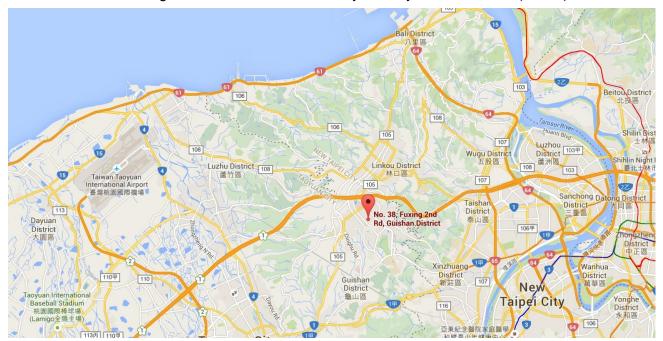
1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).





2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name:	SDIO Wireless Module
Model No.:	SX-SDMAN
Brand Name:	siex technology
Wi-Fi Specification:	802.11a/b/g/n
Bluetooth Specification:	v4.0 dual mode

2.2. Host Description

Applicant:	Honeywell International Inc
Applicant.	Honeywell Sensing & Productivity Solutions
Applicant Address:	9680 Old Bailes Rd. Fort Mill, SC 29707 United States
Product Name:	Thermal Printer
Model No.:	RP2D, RP4D
Brand Name:	Honeywell

Note: The difference between two models is different product shell dimensions, any others are same as before.

2.3. Product Specification Subjective to this Report

Bluetooth Frequency	2402~2480MHz
Type of modulation	GFSK
Data Rate	1Mbps(GFSK)

Note: For other features of this EUT, test report will be issued separately.

2.4. Description of Available Antennas

Antenna Type	Manufacturer	Part No.	Max Peak Gain (dBi)
PCB Embedded	Ethertronics, Inc.	1004075	2.4GHz: 3.3, 5GHz: 5.1
Antenna		1004078	2.4GHz: 3.4, 5GHz: 4.2



Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz
03	2408 MHz	04	2410 MHz	05	2412 MHz
06	2414 MHz	07	2416 MHz	08	2418 MHz
09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz
15	2432 MHz	16	2434 MHz	17	2436 MHz
18	2438 MHz	19	2440 MHz	20	2442 MHz
21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz
27	2456 MHz	28	2458 MHz	29	2460 MHz
30	2462 MHz	31	2464 MHz	32	2466 MHz
33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz
39	2480 MHz				

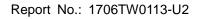
2.5. Operating Frequency and Channel List

2.6. Test Configuration

The **SDIO Wireless Module** was tested per the guidance of KDB 558074 D01v04. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.7. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.





3. DESCRIPTION of TEST

Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable. For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, which produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.



4. TEST EQUIPMENT CALIBRATION DATE

Conducted Test Equipment - SR1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	2018/07/11
X-Series USB Peak and Average Power Sensor	KEYSIGHT	U2021XA	MRTTWA00014	2018/03/18
Programmable Temperature & Humidity Chamber	TEN BILLION	TTH-B3UP	MRTTWA00036	2018/05/11
Temperature/Humidity Meter	TFA	35.1078.10.IT	MRTTWA00033	2018/06/09

Radiated Spurious Emission and Radiated Restricted Band Edge - AC1

Instrument	Manufacturer	Туре No.	Asset No.	Cali. Due Date
Acitve Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	2018.04.06
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	2018.04.06
Broadband Hornantenna	SCHWARZBECK	BBHA 9120D	MRTTWA00003	2018.04.06
Breitband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	2018.04.06
Broadband Preamplifier	SCHWARZBECK	BBV 9718	MRTTWA00005	2018.04.06
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	2018.04.06
Signal Analyzer	R&S	FSV40	MRTTWA00007	2018.03.02
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	2018.07.11
Antenna Cable	HUBERSUHNER	SF106	MRTTWE00010	2018.05.20

Software	Version	Function	
e3	V 8.3.5	EMI Test Software	



5. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Radiated Emission Measurement - AC1
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):
9kHz ~ 1GHz: 4.18dB
1GHz ~ 40GHz: 4.76dB
Output Power - SR1
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):
1.13dB
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):



6. TEST RESULT

6.1. Summary

Product Name: SDIO Wireless Module

FCC Classification: Digital Transmission System (DTS)

Rule(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(b) (3)	Output Power	Conducted Output Power ≤ 30dBm	Conducted	Pass	Section 6.2
RSS-247[5.4(d)]		E.I.R.P ≤ 36dBm	Conducted		
FCC 15.205,	General Field	Emissions in			
FCC 15.209	Strength Limits	restricted bands			Section
	(Restricted Bands	must meet the	Radiated	Pass	6.3 & 6.4
RSS-247[5.5]	and Radiated	radiated limits			0.3 α 0.4
	Emission Limits)	detailed in 15.209			



6.2. Output Power Measurement

6.2.1.Test Limit

The maximum conducted output power shall be exceed 1 Watt (30dBm) and the E.I.R.P shall not exceed 4 Watt (36dBm)

6.2.2.Test Procedure Used

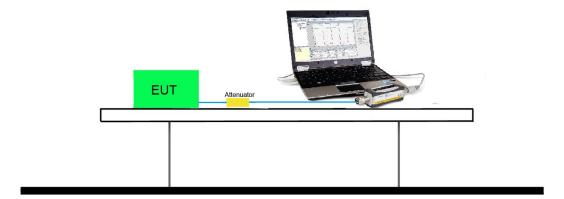
ANSI C63.10 Section 11.9.2.3

6.2.3.Test Setting

Average Power Measurement

Average power measurements were perform only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

6.2.4.Test Setup





6.2.5.Test Result of Output Power

Product	SDIO Wireless Module	Temperature	25°C	
Test Engineer	Kevin Ker	Relative Humidity	52%	
Test Site	SR1	Test Date	2017/07/19	

Peak Power _ Ant 0 Port

Test Mode	Channel	Freq.	Conducted Power	Limit	E.I.R.P.	E.I.R.P. Limit	Result
	No.	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	
BLE	01	2402	0.32	≤ 30.00	3.62	≤ 36.00	Pass
BLE	19	2440	0.23	≤ 30.00	3.53	≤ 36.00	Pass
BLE	39	2480	0.24	≤ 30.00	3.54	≤ 36.00	Pass

Note: E.I.R.P. (dBm) = Conducted Power (dBm) + Antenna Gain (dBi), Antenna Gain = 3.3 dBi.

Average Power _ Ant 0 Port

Test Mode	Channel	Freq.	Conducted Power	Limit	E.I.R.P.	E.I.R.P. Limit	Result
	No.	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	
BLE	01	2402	-0.12	≤ 30.00	3.18	≤ 36.00	Pass
BLE	19	2441	-0.28	≤ 30.00	3.02	≤ 36.00	Pass
BLE	39	2480	-0.26	≤ 30.00	3.04	≤ 36.00	Pass

Note: E.I.R.P. (dBm) = Conducted Power (dBm) + Antenna Gain (dBi), Antenna Gain = 3.3 dBi.



6.3. Radiated Spurious Emission Measurement

6.3.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209							
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]					
0.009 - 0.490	2400/F (kHz)	300					
0.490 - 1.705	24000/F (kHz)	30					
1.705 - 30	30	30					
30 - 88	100	3					
88 - 216	150	3					
216 - 960	200	3					
Above 960	500	3					

6.3.2. Test Procedure Used

KDB 558074 D01v04 - Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v04 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v04 - Section 12.2.5 (average power measurements)

6.3.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

- 2.RBW = as specified in Table 1
- 3.VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple



6. Trace mode = max hold

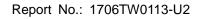
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

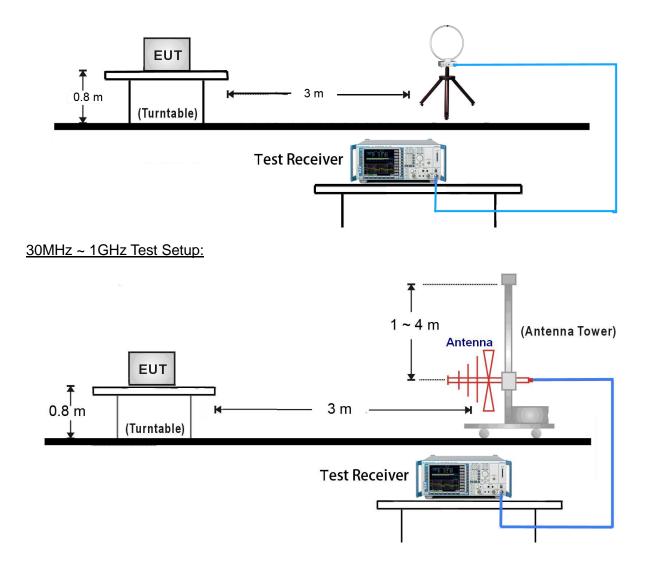
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2.RBW = 1MHz
- $3.VBW \ge 1/T$
- 4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
- 5. Detector = Peak
- 6. Sweep time = auto
- 7. Trace mode = max hold
- 8. Allow max hold to run for at least 50 times (1/duty cycle) traces





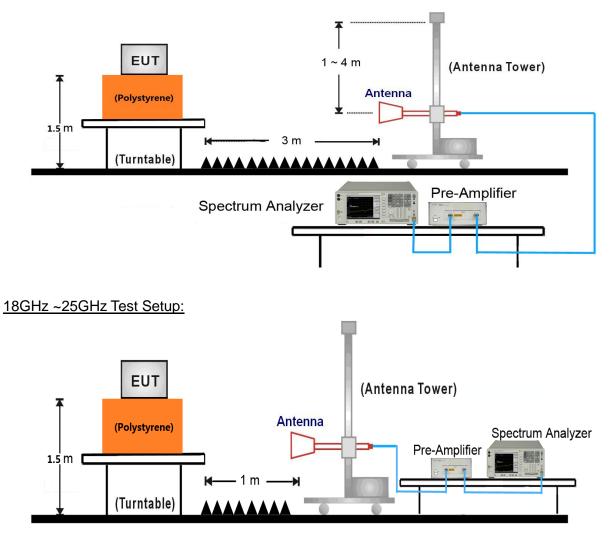
6.3.4. Test Setup

9kHz ~ 30MHz Test Setup:





1GHz ~ 18GHz Test Setup:





6.3.5. Test Result

For Model: RP2D

Test Mode:	BLE	Test Site:	AC1			
Test Channel:	00	Test Engineer:	Kevin Ker			
Remark:	1. Average measurement was not performed if peak level lower than average					
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8191.0	43.8	12.0	31.8	74.0	-30.2	Peak	Horizontal
	11064.0	48.0	18.5	29.5	74.0	-26.0	Peak	Horizontal
*	14081.5	50.2	22.8	27.4	74.0	-23.8	Peak	Horizontal
*	16818.5	52.3	23.8	28.5	74.0	-21.7	Peak	Horizontal
	9134.5	45.7	14.6	31.1	74.0	-28.3	Peak	Vertical
	11225.5	47.3	18.8	28.5	74.0	-26.7	Peak	Vertical
*	13733.0	50.1	22.0	28.1	74.0	-23.9	Peak	Vertical
*	16691.0	51.5	23.0	28.5	74.0	-22.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (93.4dBµV/m) or FCC 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Mode:	BLE	Test Site:	AC1			
Test Channel:	19	Test Engineer:	Kevin Ker			
Remark:	1. Average measurement was not performed if peak level lower than average					
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8191.0	43.9	12.0	31.9	74.0	-30.1	Peak	Horizontal
	11013.0	47.7	18.5	29.2	74.0	-26.3	Peak	Horizontal
*	13928.5	50.1	22.4	27.7	75.1	-25.0	Peak	Horizontal
*	16835.5	52.7	23.9	28.8	75.1	-22.4	Peak	Horizontal
	9117.5	44.1	14.5	29.6	74.0	-29.9	Peak	Vertical
	11030.0	48.3	18.5	29.8	74.0	-25.7	Peak	Vertical
*	14183.5	51.0	23.1	27.9	75.1	-24.1	Peak	Vertical
*	16852.5	52.4	24.0	28.4	75.1	-22.7	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is 20dBc of th	ne fundamental	emissior	n level (95	.1dBµV/m)

or FCC 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Mode:	BLE	Test Site:	AC1					
Test Channel:	39	Test Engineer:	Kevin Ker					
Remark:	1. Average measurement was not performed if peak level lower than average							
	limit.							
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9168.5	44.7	14.7	30.0	74.0	-29.3	Peak	Horizontal
	11361.5	47.6	19.0	28.6	74.0	-26.4	Peak	Horizontal
*	13580.0	50.5	21.8	28.7	76.3	-25.8	Peak	Horizontal
*	16869.5	52.4	24.1	28.3	76.3	-23.9	Peak	Horizontal
	8080.5	44.3	12.4	31.9	74.0	-29.7	Peak	Vertical
	11149.0	48.4	18.7	29.7	74.0	-25.6	Peak	Vertical
*	13903.0	50.0	22.3	27.7	76.3	-26.3	Peak	Vertical
*	16818.5	52.0	23.8	28.2	76.3	-24.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is 20dBc of th	ne fundamental	emissior	level (96	.3dBµV/m)

or FCC 15.209 which is higher.

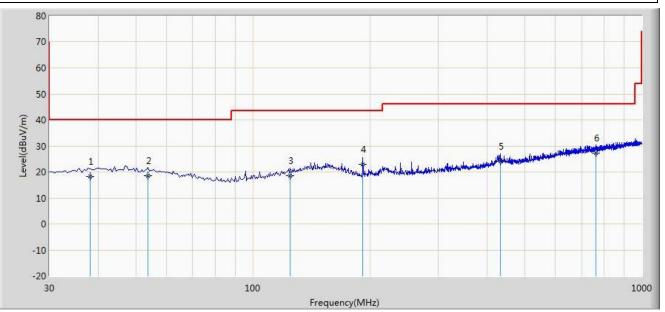
Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2017/07/20 - 00:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB9162_0.03GHz_8GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: AC 120V/60Hz

Worst Mode: Transmit by BLE at Channel 2402MHz



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			38.245	18.190	4.652	-21.810	40.000	13.537	QP
2			53.765	18.552	3.650	-21.448	40.000	14.902	QP
3			124.575	18.483	7.784	-25.017	43.500	10.699	QP
4			191.990	22.988	10.954	-20.512	43.500	12.034	QP
5			432.065	24.072	6.684	-21.928	46.000	17.388	QP
6		*	762.835	27.311	4.628	-18.689	46.000	22.683	QP

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.



Site	ite: AC1					Time: 2017/07/20 - 00:06				
Limi	it: FCC	_Part15	.209_RE(3m))		Engineer: Kevin Ker				
Prob	be: VUI	LB9162	_0.03GHz_80	GHz		Polarity: Vertic	al			
EUT	: Therr	nal Prin	ter			Power: AC 120	0V/60Hz			
Wor	rst Moo	de: Trar	smit by BLE	at Channel 2	402MHz					
	80									
	70									
	60									
	50									f
(E	40									
Level(dBuV/m)	30					4		5	6	
Level	20~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	man 2	manna	multiplication and and and and and and and and and an	weine the manual and	white the desired	and and the second of the second s		
	10									
	0									_
	-10									
	-20									
	30			100	Freq	uency(MHz)				1000
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Type	

No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			38.245	18.163	4.625	-21.837	40.000	13.537	QP
2			56.675	18.343	3.890	-21.657	40.000	14.454	QP
3			125.060	17.784	7.158	-25.716	43.500	10.627	QP
4			191.990	24.688	12.654	-18.812	43.500	12.034	QP
5			443.705	22.729	5.180	-23.271	46.000	17.549	QP
6		*	723.550	27.473	5.265	-18.527	46.000	22.208	QP

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.



For Model: RP4D

Test Mode:	BLE	Test Site:	AC1					
Test Channel:	00	Test Engineer:	Kevin Ker					
Remark:	1. Average measurement was not performed if peak level lower than average							
	limit.	limit.						
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8046.5	44.1	12.5	31.6	74.0	-29.9	Peak	Horizontal
	10945.0	47.6	18.4	29.2	74.0	-26.4	Peak	Horizontal
*	13707.5	49.6	22.0	27.6	74.0	-24.4	Peak	Horizontal
*	16827.0	51.7	23.9	27.8	74.0	-22.3	Peak	Horizontal
	8174.0	43.2	12.0	31.2	74.0	-30.8	Peak	Vertical
	11310.5	47.8	18.9	28.9	74.0	-26.2	Peak	Vertical
*	13673.5	49.5	21.9	27.6	74.0	-24.5	Peak	Vertical
*	16682.5	52.0	22.9	29.1	74.0	-22.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (92.6dBµV/m) or FCC 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Mode:	BLE	Test Site:	AC1					
Test Channel:	19	Test Engineer:	Kevin Ker					
Remark:	1. Average measurement was not performed if peak level lower than average							
	limit.							
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9177.0	45.2	14.7	30.5	74.0	-28.8	Peak	Horizontal
	11625.0	47.4	19.4	28.0	74.0	-26.6	Peak	Horizontal
*	14200.5	51.5	23.1	28.4	75.0	-23.5	Peak	Horizontal
*	16546.5	50.1	22.1	28.0	75.0	-24.9	Peak	Horizontal
	8114.5	43.9	12.2	31.7	74.0	-30.1	Peak	Vertical
	11030.0	48.2	18.5	29.7	74.0	-25.8	Peak	Vertical
*	13733.0	50.2	22.0	28.2	75.0	-24.8	Peak	Vertical
*	16453.0	51.1	21.6	29.5	75.0	-23.9	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is 20dBc of th	ne fundamental	emissior	n level (95	.0dBµV/m)

or FCC 15.209 which is higher.

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Mode:	BLE	Test Site:	AC1					
Test Channel:	39	Test Engineer:	Kevin Ker					
Remark:	1. Average measurement was not performed if peak level lower than average							
	limit.							
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8157.0	43.3	12.1	31.2	74.0	-30.7	Peak	Horizontal
	11395.5	47.8	19.1	28.7	74.0	-26.2	Peak	Horizontal
*	14183.5	50.8	23.1	27.7	76.1	-25.3	Peak	Horizontal
*	16852.5	52.1	24.0	28.1	76.1	-24.0	Peak	Horizontal
	8216.5	43.6	11.9	31.7	74.0	-30.4	Peak	Vertical
	11081.0	48.1	18.6	29.5	74.0	-25.9	Peak	Vertical
*	14141.0	50.2	23.0	27.2	76.1	-25.9	Peak	Vertical
*	17082.0	52.7	24.8	27.9	76.1	-23.4	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is 20dBc of th	ne fundamental	emissior	level (96	.1dBµV/m)

or FCC 15.209 which is higher.

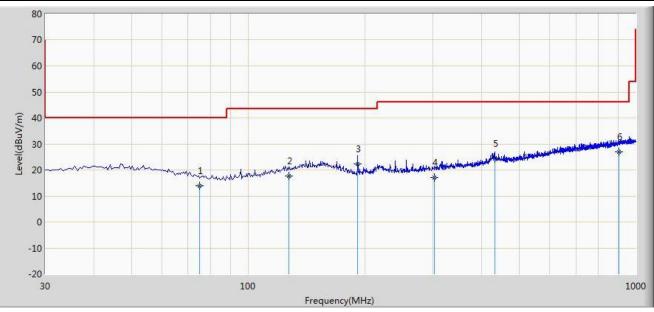
Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2017/07/28 - 17:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB9162_0.03GHz_8GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: AC 120V/60Hz

Worst Mode: Transmit by BLE at Channel 2402MHz



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			75.020	14.040	4.256	-25.960	40.000	9.784	QP
2			127.250	17.590	7.185	-25.910	43.500	10.405	QP
3			191.990	22.359	10.325	-21.141	43.500	12.034	QP
4			301.950	17.056	2.248	-28.944	46.000	14.808	QP
5			432.065	24.344	6.956	-21.656	46.000	17.388	QP
6		*	902.300	27.007	2.562	-18.993	46.000	24.445	QP

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.



Site:	AC1		Time: 2017/07/28 - 17:04						
Limit	t: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker						
Prob	e: VULB9162_0.03GHz	2_8GHz	Polarity: Vertical						
EUT:	: Thermal Printer		Power: AC 120V/60Hz						
Wor	st Mode: Transmit by B	LE at Channel 2402MHz							
	80								
	70								
	60								
	50								
(m)	40								
Level(dBuV/m)	30		3						
Level	20 Marine Marine	menny white and the second	wanter Prostation and and and and and and and and and an						
	10								
	0								
	-10								
	-20								
	30	100	10						

Frequency(MHz)

No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			125.100	17.168	6.548	-26.332	43.500	10.620	QP
2			172.320	17.658	7.161	-25.842	43.500	10.497	QP
3		*	191.900	24.178	12.150	-19.322	43.500	12.029	QP
4			240.005	20.251	6.684	-25.749	46.000	13.567	QP
5			315.650	18.486	3.333	-27.514	46.000	15.153	QP
6			902.500	26.500	2.054	-19.500	46.000	24.446	QP

Note 1: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.



6.4. Radiated Restricted Band Edge Measurement

6.4.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 – 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits per Section FCC 15.209.

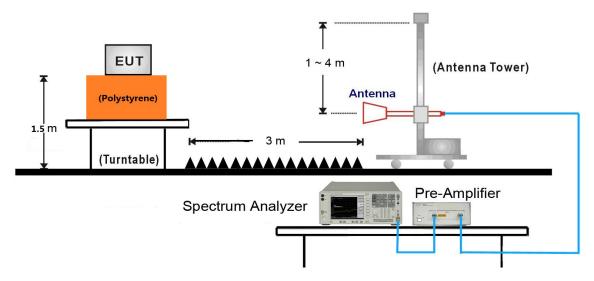


6.4.2. Test Procedure Used

KDB 558074 D01v04 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v04 - Section 12.2.5 (average power measurements)

6.4.3. Test Setup





6.4.4. Test Result

For Model: RP2D

Site	: AC1				-	Time: 2017/07	/18 - 22:17				
Limi	t: FCC	_Part15	.209_RE(3m))	I	Engineer: Kevin Ker					
Prob	be: BBH	HA9120	D_1GHz_180	GHz		Polarity: Horiz	ontal				
EUT	: Thern	nal Prin	ter			Power: AC 120	0V/60Hz				
Test	Mode:	Transn	nit by BLE at	Channel 240	2MHz						
Level(dBuV/m)	120 80 70 60 with 50 40 30 20 2310	2315 23	1	2335 2340 25	345 2350 235	5 2360 2365 2 ency(MHz)	они м. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	2	3		
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре		
	5		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
				(dBuV/m)	(dBuV)						
1			2322.113	60.122	27.395	-13.878	74.000	32.727	РК		
2			2390.000	58.271	25.717	-15.729	74.000	32.554	PK		
3		*	2402.103	93.429	60.891	N/A	N/A	32.538	РК		

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)



Site:	AC1				-	Time: 2017/07	/18 - 22:28				
Limi	t: FCC	_Part15	.209_RE(3m))		Engineer: Kevin Ker					
Prob	e: BBH	HA9120	D_1GHz_180	GHz		Polarity: Horiz	ontal				
EUT	Thern	nal Prin	ter			Power: AC 120	0V/60Hz				
Test	Mode:	Transn	nit by BLE at	Channel 240	2MHz						
Level(dBuV/m)	120 80 70 60 50 40 30 20 2310	2315 23	320 2325 2330	2335 2340 23	345 2350 235 Frequ	5 2360 2365 2 ency(MHz)	370 2375 2380	1	2		
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре		
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
				(dBuV/m)	(dBuV)						
1			2390.000	46.295	13.741	-7.705	54.000	32.554	AV		
2		*	2401.913	91.966	59.427	N/A	N/A	32.538	AV		



Site:	AC1				Т	Time: 2017/07/18 - 22:28						
Limi	t: FCC	_Part15	.209_RE(3m))	E	Engineer: Kevin Ker						
Prob	e: BBH	HA9120	D_1GHz_180	GHz	P	Polarity: Vertical						
EUT	Therr	nal Prin	ter		Р	ower: AC 120)V/60Hz					
Test	Mode:	Transn	nit by BLE at	Channel 240	2MHz							
Level(dBuV/m)	120 80 70 60 40 30 20 2310	2315 23	20 2325 2330	2335 2340 23	345 2350 2355 Freque	2360 2365 2 ncy(MHz)	1 ************************************	2 2 2385 2390 2	3			
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре			
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)				
				(dBuV/m)	(dBuV)							
1			2377.925	60.005	27.434	-13.995	74.000	32.571	PK			
2			2390.000	59.196	26.642	-14.804	74.000	32.554	PK			
~												



Site	AC1				-	Time: 2017/07/18 - 22:31					
Limi	t: FCC	_Part15	.209_RE(3m)		Engineer: Kevin Ker					
Prob	e: BBH	HA9120	D_1GHz_180	GHz		Polarity: Vertic	al				
EUT	Thern	nal Prin	ter			Power: AC 120	0V/60Hz				
Test	Mode:	Transm	nit by BLE at	Channel 240	2MHz						
Level(dBuV/m)	120 80 70 60 50 40 30 20 2310	2315 23	20 2325 2330	2335 2340 23	345 2350 235 Freque	5 2360 2365 2 ency(MHz)	370 2375 2380	1	2		
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре		
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	76-		
			、 /	(dBuV/m)	(dBuV)						
1			2390.000	46.307	13.753	-7.693	54.000	32.554	AV		
2		*	2402.008	89.185	56.646	N/A	N/A	32.538	AV		



Site:	AC1					Time	2017/0)7/ [,]	18 - 23:11			
Limi	t: FCC_	_Part15	.209_RE(3m))		Engineer: Kevin Ker						
Prob	be: BBH	HA9120	D_1GHz_180	GHz		Polarity: Horizontal						
EUT	: Thern	nal Prin	ter			Powe	er: AC 1	20'	V/60Hz			
Test	Mode:	Transn	nit by BLE at	Channel 248	0MHz							
Level(dBuV/m)	50 40 30 20	2479 2480		2		2489 ; uency(M		1 24	492 2493 2494	3	24498 2499 2500	
No	Flag	Mark	Frequency	Measure	Reading	0\	er Limi	t	Limit	Factor	Туре	
			(MHz)	Level	Level	(dl	3)		(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)							
1		*	2480.167	96.297	63.727	N/.	A		N/A	32.570	PK	
2			2483.500	57.602	25.021	-10	6.398		74.000	32.580	PK	
3		2496.766 60.939 28.319				-1:	3.061		74.000	32.620	PK	



Site	AC1					Time: 2017/07	/18 - 23:13				
Limi	t: FCC_	_Part15	.209_RE(3m))		Engineer: Kev	in Ker				
Prob	e: BBH	HA9120	D_1GHz_180	GHz		Polarity: Horizontal					
EUT	Thern	nal Prin	ter			Power: AC 120	0V/60Hz				
Test	Mode:	Transn	nit by BLE at	Channel 248	0MHz						
Level(dBuV/m)			0 2481 2482 248		Freq	2489 2490 2491 . uency(MHz)	1	2495 2496 2493			
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре		
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
				(dBuV/m)	(dBuV)						
1		*	2480.112	95.549	62.979	N/A	N/A	32.570	AV		
2	2 2483.500 46.610 14.029				14.029	-7.390	54.000	32.580	AV		



Site:	AC1					Time: 2017/07	/18 - 23:14				
Limi	t: FCC_	_Part15	.209_RE(3m)		Engineer: Kevin Ker					
Prob	be: BBH	HA9120	D_1GHz_180	GHz		Polarity: Vertic	al				
EUT	: Thern	nal Prin	ter			Power: AC 120	0V/60Hz				
Test	Mode:	Transn	nit by BLE at	Channel 248	0MHz						
Level(dBuV/m)	50 40 30 20 2478		0 2481 2482 248		Frequ	3 		2495 2496 2497			
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре		
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
				(dBuV/m)	(dBuV)						
1		*	2480.178	91.350	58.780	N/A	N/A	32.570	PK		
2			2483.500	58.357	25.776	-15.643	74.000	32.580	PK		
3			2491.123	60.241	27.638	-13.759	74.000	32.603	PK		



Site	AC1					Time: 2017/07/18 - 23:17				
Limi	t: FCC	_Part15	.209_RE(3m))		Engineer: Kevin Ker				
Prob	e: BBH	HA9120	D_1GHz_180	GHz		Polarity: Vertic	al			
EUT	Thern	nal Prin	ter			Power: AC 12	0V/60Hz			
Test	Mode:	Transn	nit by BLE at	Channel 248	0MHz					
Level(dBuV/m)	120 80 70 60 50 40 30 20 2478	2479 2480	0 2481 2482 248	2		2489 2490 2491 . uency(MHz)	2492 2493 2494	2495 2496 2497	7 2498 2499 2500	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1		*	2480.068	90.305	57.735	N/A	N/A	32.570	AV	
2			2483.500	46.380	13.799	-7.620	54.000	32.580	AV	



For Model: RP4D

Site	AC1					Time: 2017/07	/18 - 23:18			
Limi	t: FCC	_Part15	.209_RE(3m))		Engineer: Kevin Ker				
Prob	be: BBH	HA9120	D_1GHz_180	GHz		Polarity: Horiz	ontal			
EUT	: Therr	nal Prin	ter			Power: AC 120)V/60Hz			
Test	Mode:	Transn	nit by BLE at	Channel 240	2MHz					
Level(dBuV/m)	120 80 70 60 50 40 30 20 2310	2315 23	20 2325 2330	2335 2340 23		1 	и ме користи и селото и селот 370 2375 2380	2	2395 2400 2405	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			2364.577	59.928	27.338	-14.072	74.000	32.590	PK	
2			2390.000	57.714	25.160	-16.286	74.000	32.554	PK	
3		*	2402.008	92.634	60.095	N/A	N/A	32.538	PK	

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)



Site	AC1				-	Time: 2017/07/18 - 23:19				
Limi	t: FCC	_Part15	.209_RE(3m)	I	Engineer: Kevin Ker				
Prob	e: BBH	HA9120	D_1GHz_180	GHz	ł	Polarity: Horiz	ontal			
EUT	Therr	nal Prin	ter		I	Power: AC 120	0V/60Hz			
Test	Mode:	Transn	nit by BLE at	Channel 240	2MHz					
Level(dBuV/m)	120 80 70 60 50 40 30 20 2310	2315 23	20 2325 2330	2335 2340 23	345 2350 235 Freque	5 2360 2365 2 ency(MHz)	370 2375 2380	1	2	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			2390.000	46.146	13.592	-7.854	54.000	32.554	AV	
2		*	2402.150	91.614	59.076	N/A	N/A	32.538	AV	



Site:	AC1					Time: 2017/07/18 - 23:19				
Limi	t: FCC_	_Part15	.209_RE(3m))		Engineer: Kevin Ker				
Prob	e: BBH	HA9120	D_1GHz_180	GHz		Polarity: Vertic	al			
EUT	Thern	nal Prin	ter			Power: AC 120)V/60Hz			
Test	Mode:	Transm	nit by BLE at	Channel 240	2MHz					
Level(dBuV/m)	120 80 70 60 40 30 20 2310	2315 23	20 2325 2330	2335 2340 23	1 1 1 345 2350 233 Freq	55 2360 2365 2	370 2375 2380	2	3	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
	Ŭ		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			2350.042	59.950	27.328	-14.050	74.000	32.621	PK	
2			2390.000	58.285	25.731	-15.715	74.000	32.554	РК	
3		*	2402.292	89.870	57.332	N/A	N/A	32.539	РК	



Site:	AC1					Time: 2017/07/18 - 23:21				
Limi	t: FCC	_Part15	.209_RE(3m))		Engineer: Kev	in Ker			
Prob	e: BBH	HA9120	D_1GHz_180	GHz		Polarity: Vertic	al			
EUT	Therr	nal Prin	ter			Power: AC 120	0V/60Hz			
Test	Mode:	Transn	nit by BLE at	Channel 240	2MHz					
Level(dBuV/m)	120 80 70 60 50 40 30 20 2310	2315 23	320 2325 2330	2335 2340 23	345 2350 235 Frequ	5 2360 2365 2 ency(MHz)	370 2375 2380	1	2	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			2390.000	46.486	13.932	-7.514	54.000	32.554	AV	
2		*	2401.960	89.137	56.598	N/A	N/A	32.538	AV	



Site	AC1					Time: 2017/07/18 - 23:21 Engineer: Kevin Ker				
Limi	t: FCC	_Part15	.209_RE(3m))						
Prob	be: BBH	HA9120	D_1GHz_180	GHz		Polarity: Horiz	ontal			
EUT	: Thern	nal Prin	ter			Power: AC 120	0V/60Hz			
Test	Mode:	Transn	nit by BLE at							
Level(dBuV/m)		2479 2480			Frequ	3 		1		
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1		*	2480.255	96.127	63.556	N/A	N/A	32.570	PK	
2			2483.500	58.112	25.531	-15.888	74.000	32.580	PK	
3			2490.474	59.594	26.993	-14.406	74.000	32.602	PK	



Site:	AC1				٦	Time: 2017/07/18 - 23:23				
Limi	t: FCC_	_Part15	.209_RE(3m)	E	Engineer: Kevi	in Ker			
Prob	e: BBH	HA9120	D_1GHz_180	GHz	F	Polarity: Horizo	ontal			
EUT	Thern	nal Prin	ter		F	Power: AC 120)V/60Hz			
Test	Mode:	Transn	nit by BLE at	Channel 248	0MHz					
Level(dBuV/m)	50 40 30 20 2478				Freque	ency(MHz)			2498 2499 2500	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1		*	2480.046	95.474	62.904	N/A	N/A	32.570	AV	
2			2483.500	46.520	13.939	-7.480	54.000	32.580	AV	



Site:	AC1					Time: 2017/07/18 - 23:24					
Limi	t: FCC_	_Part15	.209_RE(3m))		Engineer: Kevin Ker					
Prob	be: BBH	HA9120	D_1GHz_180	GHz		Polarity: Vertic	al				
EUT	: Thern	nal Prin	ter			Power: AC 120)V/60Hz				
Test	Mode:	Transn	nit by BLE at	Channel 248	0MHz						
Level(dBuV/m)	50 40 30 20			2		2489 2490 2491 : ency(MHz)		2495 2496 2497	2498 2499 2500		
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре		
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
				(dBuV/m)	(dBuV)						
1		*	2480.145	91.205	58.635	N/A	N/A	32.570	PK		
2			2483.500	59.132	26.551	-14.868	74.000	32.580	PK		
3			2494.049	61.151	28.539	-12.849	74.000	32.612	PK		



Site:	AC1					Time: 2017/07/18 - 23:25				
Limi	t: FCC_	_Part15	.209_RE(3m))		Engineer: Kevin Ker				
Prob	e: BBH	IA9120	D_1GHz_180	GHz		Polarity: Vertic	al			
EUT	Thern	nal Prin	ter			Power: AC 120	0V/60Hz			
Test	Mode:	Transn	nit by BLE at	Channel 248	0MHz					
Level(dBuV/m)	120 80 70 60 50 40 30 20 2478	2479 2480	0 2481 2482 248	2		2489 2490 2491 . uency(MHz)	2492 2493 2494	2495 2496 2497	7 2498 2499 2500	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1		*	2480.046	90.460	57.890	N/A	N/A	32.570	AV	
2			2483.500	46.750	14.169	-7.250	54.000	32.580	AV	



7. CONCLUSION

The data collected relate only the item(s) tested and show that the **SDIO Wireless Module FCC ID**:

N6C-SDMAN is in compliance with Part 15C of the FCC Rules.

The End