

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART E AND INDUSTRY CANADA RSS 247 REQUIREMENT

OF

Applicant:

Product Name: Wireless module

Brand Name: Brother

Model No.: WLS5060B-D250

Model Difference: N/A

FCC ID: B3Q-WLS5060B-D250

IC: 1112C-WLS5060B

Report No.: E2/2017/90132

FCC Rule Part: §15.407, Cat: NII

IC Rule Part: RSS-247 issue 2 Feb. 2017

Issue Date: Nov. 17, 2017

Date of Test: Sep. 26, 2017 ~ Nov. 13, 2017

Date of EUT Received: Sep. 26, 2017

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory. 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 conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Prepared By:

Karen Huang

Karen Huang / Clerk

Approved By:

Jim Chang

Jim Chang / Asst. Manager



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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SGS Taiwan Ltd.

No.134, WuKungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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1 GENERAL INFORMATION

1.1 Product Description

General:

Product Name:	Wireless module
Brand Name:	Brother
Model No.:	WLS5060B-D250
Model Difference:	N/A
Product SW/HW version:	N/A / N/A
Radio SW/HW version:	7.45.47.6 / Rev3
Test SW Version:	N/A
RF power setting in TEST SW:	N/A
Power Supply:	3.3Vdc from Test Kit.

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FCC WLAN 5GHz:

Wi-Fi	Frequency Range	Channels	Avg. Power (dBm)	Modulation Technology
11a	5150~5250	4	17.55	OFDM
	5250~5350	4	20.16	
	5470~5725	11	17.25	
	5725~5850	5	19.91	
11n_HT / ac_VHT 20M	5150~5250	4	HT: 17.43	OFDM
	5250~5350	4	HT: 19.64	
	5470~5725	11	HT: 15.84	
	5725~5850	5	HT: 18.85	
11n_HT / ac_VHT 40M	5150~5250	2	HT: 16.26	OFDM
	5250~5350	2	HT: 14.61	
	5470~5725	5	HT: 22.78	
	5725~5850	2	HT: 17.57	
11ac VHT80M	5150~5250	1	16.60	OFDM
	5250~5350	1	14.48	
	5470~5725	2	13.23	
	5725~5850	1	17.18	

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IC WLAN 5GHz:

Wi-Fi	Frequency Range	Channels	Avg. or EIRP	Rated Power(dBm)	Modulation Technology
11a	5180~5240	4	EIRP	19.83	OFDM
	5260~5320	4	Avg.	20.16	
	5500~5580	5	Avg.	17.25	
	5660~5700	3	Avg.	16.82	
	5745~5825	5	Avg.	19.91	
11n_HT / ac_VHT 20M	5180~5240	4	EIRP	HT: 19.71	OFDM
	5260~5320	4	Avg.	HT: 19.64	
	5500~5580	5	Avg.	HT: 15.84	
	5660~5700	3	Avg.	HT: 15.30	
	5745~5825	5	Avg.	HT: 18.85	
11n_HT / ac_VHT 40M	5190~5230	2	EIRP	HT: 18.54	OFDM
	5270~5310	2	Avg.	HT: 14.61	
	5510~5550	2	Avg.	HT: 14.65	
	5670~5670	1	Avg.	HT: 22.78	
	5755~5795	2	Avg.	HT: 17.57	
11ac VHT80M	5210~5210	1	EIRP	18.88	OFDM
	5290~5290	1	Avg.	14.48	
	5530~5530	1	Avg.	13.23	
	5775~5775	1	Avg.	17.18	
Modulation Type		64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 802.11ac only			
Transition Rate:		802.11 a: 6/9/12/18/24/36/48/54 Mbps 802.11 n_20MHz: 6.5 – 72.2Mbps 802.11 n_40MHz: 13.5 - 150.0Mbps 802.11 ac_20MHz: 6.5 –86.7Mbps 802.11 ac_40MHz: 13.5 -200.0Mbps 802.11 ac_80MHz: 29.3 – 433.3Mbps			
Antenna Designation:		PIFA Antenna, 5150~5250MHz Peak Gain: 2.28dBi 5250~5350MHz Peak Gain: 2.28dBi 5470~5725MHz Peak Gain: 3.46dBi 5725~5850MHz Peak Gain: 2.75dBi			

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4 DESCRIPTION OF TEST MODES

4.1 Operated in U-NII Bands

Operated band in 5150 MHz ~5250 MHz:

4 channels are provided for 802.11a, 802.11n_HT20, 802.11ac_VHT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n_HT40, 802.11ac_VHT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac_VHT80

CHANNEL	FREQUENCY
42	5210 MHz

Operated band in 5250 MHz ~5350 MHz:

4 channels are provided for 802.11a, 802.11n_HT20, 802.11ac_VHT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n_HT40, 802.11ac_VHT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac_VHT80

CHANNEL	FREQUENCY
58	5290 MHz

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Operated band in 5470 MHz ~5725 MHz:

11 channels are provided for 802.11a, 802.11n_HT20, 802.11ac_VHT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz		

5 channels are provided for 802.11n_HT40, 802.11ac_VHT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz		

2 channels are provided for 802.11ac_VHT80

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	122	5610 MHz

Operated band in 5725 MHz ~5850 MHz:

5 channels are provided for 802.11a, 802.11n_HT20, 802.11ac_VHT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n_HT40, 802.11ac_VHT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac_VHT80

CHANNEL	FREQUENCY
155	5775 MHz

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