



DYNAMIC FREQUENCY SELECTION

DFS Test Report

APPLICANT : Huawei Technologies Co., Ltd.
EQUIPMENT : Smart Phone
BRAND NAME : HUAWEI
MODEL NAME : LYA-L0C
FCC ID : QISLYA-L0C
STANDARD : FCC Part 15 Subpart E
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Aug. 17, 2018 We, Sporton International (Shenzhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown to be compliant with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International (Shenzhen) Inc., the test report shall not be reproduced except in full.

Approved by: Eric Shih / Manager



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APPENDIX A. ORIGINAL REPORT



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FZ881704	Rev. 01	Initial issue of report	Sep. 19, 2018



1 General Description

1.1 Applicant

Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.2 Manufacturer

Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	HUAWEI
Model Name	LYA-L0C
FCC ID	QISLYA-L0C
EUT supports Radios application	GSM/WCDMA/HSPA/LTE/NFC/GNSS/WPC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 Bluetooth BR/EDR/LE
HW Version	HL2LAYAM
SW Version	5.0.1.82(C792E4R1P9log)
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer.
2. This is a variant report which can be referred to the Table for Multiple Listing. Since the test result is not affected by the changes, all the test data were leveraged from FZ880204 (FCC ID: QISLYA-LX9).



Accessories Information				
AC Adapter 1	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-100400U00
	Manufacturer	Huawei Technologies Co., Ltd.		
	Power Rating	I/P: 100 - 240 Vac~50/60Hz, 1.2 A; O/P: 5V === 2A or 9V === 2A or 10V === 4A		
AC Adapter 2	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-100400E00
	Manufacturer	Huawei Technologies Co., Ltd.		
	Power Rating	I/P: 100 - 240 Vac~50/60Hz, 1.2 A; O/P: 5V === 2A or 9V === 2A or 10V === 4A		
AC Adapter 3	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-100400B00
	Manufacturer	Huawei Technologies Co., Ltd.		
	Power Rating	I/P: 100 - 240 Vac~50/60Hz, 1.2 A; O/P: 5V === 2A or 9V === 2A or 10V === 4A		
AC Adapter 4	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-100400A00
	Manufacturer	Huawei Technologies Co., Ltd.		
	Power Rating	I/P: 100 - 240 Vac~50/60Hz, 1.2 A; O/P: 5V === 2A or 9V === 2A or 10V === 4A		
Battery 1	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HB486486ECW
	Power Rating	Nominal Voltage: ===+3.82Vdc Charging Voltage: ===+4.4V Rated Capacity: 4100mAh	Type	Li-ion Polymer
Battery 2	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HB486486ECW
	Power Rating	Nominal Voltage: ===+3.82Vdc Charging Voltage: ===+4.4V Rated Capacity: 4100mAh	Type	Li-ion Polymer
Battery 3	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HB486486ECW
	Power Rating	Nominal Voltage: ===+3.82Vdc Charging Voltage: ===+4.4V Rated Capacity: 4100mAh	Type	Li-ion Polymer
Earphone 1	Brand Name	Jiangxi Lianchuang Hongsheng Electronic Co. ,LTD		
	Model Name	MEND1632B729003		
Earphone 2	Brand Name	GoerTek Inc.		
	Model Name	Windy-S		
Earphone 3	Brand Name	Boluo County Quancheng Electronic Co., ltd		
	Model Name	1331-3301-6001-TC-088		
Earphone 4	Brand Name	Foster Electric Co.,(GuangZhou)LTD.Sales Dep.		
	Model Name	630276		

Note: Regarding to more detail and other information, please refer to user manual.



1.4 Table for Multiple Listing

The brand/model names in the following table are all refer to the identical product.

Model	LYA-L29	LYA-L0C																						
PCB	The same	The same																						
Frequency-GSM	The same	The same																						
Frequency-WCDMA	The same	The same																						
Frequency-LTE	Different B2/4/5/7/12/17/38/40/41 (2545~2655MHz , support AXGP)	Different B2/4/5/7/12/17/38/40/41 (2545~2655MHz , support AXGP)/B66																						
4*4 Mimo	Different Support B3、B7、B1	Different Support B2、B7、B66(B4) Replace TRI SAW filters of B1/B3/B7 with SAW filters of B2/B66/B7. Replace																						
SIM Card	Dual	Single																						
RF NV parameters	Different	<p>Different</p> <p>The power of LYA-L0C is different from LYA-L29 by change RF NV parameters.</p> <ul style="list-style-type: none"> Down antenna (Primary) <ul style="list-style-type: none"> ① 0mm body Scenario <table border="1" style="margin-left: 20px;"> <tr> <td></td> <td>WB2</td> <td>WB4</td> <td>LTEB2</td> <td>LTEB4</td> </tr> <tr> <td>reduce</td> <td>0.5dB</td> <td>0.5dB</td> <td>0.5dB</td> <td>1.5dB</td> </tr> </table> ② 10mm hotspot Scenario <table border="1" style="margin-left: 20px;"> <tr> <td></td> <td>LTEB4</td> </tr> <tr> <td>reduce</td> <td>0.5dB</td> </tr> </table> Up antenna (Secondary) <p>Head Scenario</p> <table border="1" style="margin-left: 20px;"> <tr> <td></td> <td>WB2</td> <td>WB4</td> <td>LTEB2</td> </tr> <tr> <td>rise</td> <td>1dB</td> <td>1dB</td> <td>1dB</td> </tr> </table> 		WB2	WB4	LTEB2	LTEB4	reduce	0.5dB	0.5dB	0.5dB	1.5dB		LTEB4	reduce	0.5dB		WB2	WB4	LTEB2	rise	1dB	1dB	1dB
	WB2	WB4	LTEB2	LTEB4																				
reduce	0.5dB	0.5dB	0.5dB	1.5dB																				
	LTEB4																							
reduce	0.5dB																							
	WB2	WB4	LTEB2																					
rise	1dB	1dB	1dB																					



<p>Hardware</p>	<p>Different</p> <p>Location ID: Z4102, Z4302, Z4401</p> <p>Description: B1/3/7 Tri saw filter, 2140MHz.</p> <p>Location ID: Z4103</p> <p>Description: SAW filter -1960MHz</p>	<p>Different</p> <p>1) Replace TRI SAW filters of B1/B3/B7 with SAW filters of B2/B66/B7.</p> <p>Replace</p> <p>Location ID: Z4102, Z4302, Z4401</p> <p>Description: B2/B66/B7 Tri saw filter, 2655MHz.</p> <p>2) Delete some chip inductors in Peripheral RF Matching circuits of the diversity circuit, MIMO main circuit, and MIMO diversity circuit.</p> <p>Delete</p> <p>Location ID: L4126 L4127 L4130 L3506</p> <p>Description: Chip inductor</p> <p>0.018uH/0.001uH/0.0022uH/0.0039uH</p> <p>3) Delete The circuits related to the B32 frequency band.</p> <p>Delete:</p> <p>Location ID: Z3502, Z4104</p> <p>Description: B32 saw filter 1474MHz</p> <p>Location ID: C3512, C5401, C5405</p> <p>Description: Ceramic capacitor 0.033nF</p> <p>Location ID: Z5403</p> <p>Description: Ceramic filter -1710MHz</p> <p>Location ID: U3503, U4101</p> <p>Description: RF low noise amplifier -1559~1610MHz</p> <p>4) Replace B3 SAW filter with B2 SAW filter and slight change of Peripheral RF matching circuits.</p> <p>Replace:</p> <p>Location ID: Z4103</p> <p>Description: SAW filter -1842.5MHz</p> <p>Delete:</p> <p>Location ID: L3502 L3516 L4129</p> <p>Description: Chip inductor</p> <p>0.0056uH/0.002uH/0.0075uH</p> <p>Location ID: C3514, C4110</p> <p>Description: Ceramic capacitor 0.018nF</p>
<p>Software</p>	<p>Different</p>	<p>Different</p>
<p>Dimensions</p>	<p>The same</p>	<p>The same</p>



Appearance	The same	The same
main antenna	The same	The same
BT/Wi-Fi antenna	The same	The same
DIV antenna	The same	The same
Supported CA configurations for DL CA	<p>Different</p> <p>support:CA_1A-3A CA_1C-3A CA_1A-3C CA_1A-3A-3A CA_1C-3C CA_1A-3D CA_1C-3D CA_1A-7A-7A CA_1A-32A CA_1A-38A CA_1A-38C CA_1A-40A CA_1A-40C CA_1A-41A CA_1A-41C CA_3A-3A-7A CA_3A-7A-7A CA_3A-3A-7A-7A CA_3A-3A-8A CA_3A-32A CA_3C-32A CA_3A-38A CA_3C-38A CA_3A-38C CA_3C-38C CA_3A-40A CA_3A-40C CA_3A-40D CA_3A-41A CA_7A-7A-8A CA_7A-32A CA_8A-32A CA_20A-32A CA_1A-3A-5A CA_1A-3C-5A CA_1A-3A-7A CA_1C-3A-7A CA_1A-3C-7A CA_1A-3A-3A-7A CA_1A-3A-7C CA_1A-3A-7A-7A CA_1C-3C-7A CA_1A-3A-3A-7A-7A CA_1A-3A-8A CA_1A-3C-8A CA_1A-3A-19A CA_1A-3A-20A CA_1A-3C-20A CA_1A-3A-26A CA_1A-3A-28A CA_1A-3C-28A CA_1A-3A-32A CA_1A-3A-38A CA_1A-3C-38A CA_1A-3A-38C CA_1A-3C-38C CA_1A-28A-40C CA_3A-3A-7A-8A CA_3A-7A-7A-8A CA_3A-3A-7A-7A-8A CA_3A-3A-7A-20A CA_3A-7A-32A CA_3C-7A-32A CA_3A-8A-38A CA_3C-8A-38A CA_3A-20A-32A CA_3A-28A-40A CA_3A-28A-40C CA_3A-28A-40D CA_7A-8A-32A CA_7A-20A-32A CA_1A-3A-7A-8A CA_1A-3C-7A-8A CA_1A-3A-7A-20A CA_1A-3C-7A-20A CA_1A-3A-7A-28A CA_1A-3A-7C-28A CA_1A-3A-7A-32A CA_1A-3A-8A-38A CA_1A-3A-20A-32A CA_1A-3A-28A-40A CA_1A-3A-28A-40C CA_1A-7A-20A-32A CA_3A-7A-20A-32A CA_1A-3A-7A-20A-32A</p> <p>unsupport:CA_66B CA_66C CA_66D CA_2A-2A</p>	<p>Different</p> <p>unsupport:CA_1A-3A CA_1C-3A CA_1A-3C CA_1A-3A-3A CA_1C-3C CA_1A-3D CA_1C-3D CA_1A-7A-7A CA_1A-32A CA_1A-38A CA_1A-38C CA_1A-40A CA_1A-40C CA_1A-41A CA_1A-41C CA_3A-3A-7A CA_3A-7A-7A CA_3A-3A-7A-7A CA_3A-3A-8A CA_3A-32A CA_3C-32A CA_3A-38A CA_3C-38A CA_3A-38C CA_3C-38C CA_3A-40A CA_3A-40C CA_3A-40D CA_3A-41A CA_7A-7A-8A CA_7A-32A CA_8A-32A CA_20A-32A CA_1A-3A-5A CA_1A-3C-5A CA_1A-3A-7A CA_1C-3A-7A CA_1A-3C-7A CA_1A-3A-3A-7A CA_1A-3A-7C CA_1A-3A-7A-7A CA_1C-3C-7A CA_1A-3A-3A-7A-7A CA_1A-3A-8A CA_1A-3C-8A CA_1A-3A-19A CA_1A-3A-20A CA_1A-3C-20A CA_1A-3A-26A CA_1A-3A-28A CA_1A-3C-28A CA_1A-3A-32A CA_1A-3A-38A CA_1A-3C-38A CA_1A-3A-38C CA_1A-3C-38C CA_1A-28A-40C CA_3A-3A-7A-8A CA_3A-7A-7A-8A CA_3A-3A-7A-7A-8A CA_3A-3A-7A-20A CA_3A-7A-32A CA_3C-7A-32A CA_3A-8A-38A CA_3C-8A-38A CA_3A-20A-32A CA_3A-28A-40A CA_3A-28A-40C CA_3A-28A-40D CA_7A-8A-32A CA_7A-20A-32A CA_1A-3A-7A-8A CA_1A-3C-7A-8A CA_1A-3A-7A-20A CA_1A-3C-7A-20A CA_1A-3A-7A-28A CA_1A-3A-7C-28A CA_1A-3A-7A-32A CA_1A-3A-8A-38A CA_1A-3A-20A-32A CA_1A-3A-28A-40A CA_1A-3A-28A-40C CA_1A-7A-20A-32A CA_3A-7A-20A-32A CA_1A-3A-7A-20A-32A</p> <p>support:CA_66B CA_66C CA_66D CA_2A-2A CA_4A-4A CA_12A-12A CA_66A-66A CA_2A-4A</p>



	<p>CA_4A-4A CA_12A-12A CA_66A-66A CA_2A-4A CA_2C-4A CA_2A-4A-4A CA_2A-5A CA_2A-7A CA_2A-7C CA_2A-7A-7A CA_2A-12A CA_2A-2A-12A CA_2A-12B CA_2A-12A-12A CA_2A-17A CA_2A-28A CA_2A-66A CA_2A-2A-66A CA_4A-5A CA_4A-4A-5A CA_4A-7A CA_4A-4A-7A CA_4A-7C CA_4A-7A-7A CA_4A-12A CA_4A-4A-12A CA_4A-12B CA_4A-12A-12A CA_4A-17A CA_4A-28A CA_7A-12A CA_7A-12B CA_7A-12A-12A CA_7A-66A CA_7C-66A CA_7A-66A-66A CA_7C-66A-66A CA_12A-66A CA_12B-66A CA_12A-66A-66A CA_2A-4A-5A CA_2A-4A-7A CA_2A-4A-7C CA_2A-4A-7A-7A CA_2A-4A-12A CA_2A-4A-12A-12A CA_2A-4A-28A CA_2A-7A-12A CA_2A-7A-12B CA_2A-7A-12A-12A CA_2A-7A-66A CA_2A-12A-66A CA_2A-2A-12A-66A CA_2A-12B-66A CA_4A-5A-7A CA_4A-7A-12A CA_4A-7A-12B CA_4A-7A-12A-12A CA_7A-12A-66A CA_7A-12B-66A CA_2A-4A-7A-12A CA_2A-7A-12A-66A CA_2A-7A-12B-66A CA_2A-7A-7A-66A-66A CA_2A-7A-7A-66A CA_2A-7A-66A-66A CA_7A-7A-66A CA_7A-7A-66A-66A CA_2A-66A-66A</p>	<p>CA_2C-4A CA_2A-4A-4A CA_2A-5A CA_2A-7A CA_2A-7C CA_2A-7A-7A CA_2A-12A CA_2A-2A-12A CA_2A-12B CA_2A-12A-12A CA_2A-17A CA_2A-28A CA_2A-66A CA_2A-2A-66A CA_4A-5A CA_4A-4A-5A CA_4A-7A CA_4A-4A-7A CA_4A-7C CA_4A-7A-7A CA_4A-12A CA_4A-4A-12A CA_4A-12B CA_4A-12A-12A CA_4A-17A CA_4A-28A CA_7A-12A CA_7A-12B CA_7A-12A-12A CA_7A-66A CA_7C-66A CA_7A-66A-66A CA_7C-66A-66A CA_12A-66A CA_12B-66A CA_12A-66A-66A CA_2A-4A-5A CA_2A-4A-7A CA_2A-4A-7C CA_2A-4A-7A-7A CA_2A-4A-12A CA_2A-4A-12A-12A CA_2A-4A-28A CA_2A-7A-12A CA_2A-7A-12B CA_2A-7A-12A-12A CA_2A-7A-66A CA_2A-12A-66A CA_2A-2A-12A-66A CA_2A-12B-66A CA_4A-5A-7A CA_4A-7A-12A CA_4A-7A-12B CA_4A-7A-12A-12A CA_7A-12A-66A CA_7A-12B-66A CA_2A-4A-7A-12A CA_2A-7A-12A-66A CA_2A-7A-12B-66A CA_2A-7A-7A-66A-66A CA_2A-7A-7A-66A CA_2A-7A-66A-66A CA_7A-7A-66A CA_7A-7A-66A-66A CA_2A-66A-66A</p>
Supported CA configurations for UL CA	Different support:CA_3A-20A CA_7A-20A	Different Unsupport:CA_3A-20A CA_7A-20A
Others	NA	NA



Appendix A. Original Report

Please refer to Sporton report number FZ880204.