



TEST REPORT

Application No: ZR/2020/B0036
Applicant: Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address of Applicant: NO.18 HaiBin Road, Wusha village, Chang An Town, DongGuan City, Guangdong, China
Manufacturer: Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address of Manufacturer: NO.18 HaiBin Road, Wusha village, Chang An Town, DongGuan City, Guangdong, China
EUT Description: Mobile Phone
Model No.: CPH2173
Trade Mark: OPPO
FCC ID: R9C-CPH2173
Standard(s) : 47 CFR Part 15, Subpart B
Date of Receipt: 2020/11/19
Date of Test: 2020/11/19 to 2020/12/31
Date of Issue: 2021/8/11

Test Result:

Pass*

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Simon Ling

Wireless Laboratory Manager



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Wireless Laboratory

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2021/1/4		Original
02		2021/5/26	Leah Chen	1. Modify data conversion error of antenna height 2. Update equipment list
03		2021/8/11	Leah Chen	1. Update Support Units, Test facility and Test Location

*This report supersedes our previous report ZR/2020/B003606, issued on 2021/1/4, which is hereby deemed null and void.

Authorized for issue by:	
Prepared By	 (Leah Chen) /Engineer
Checked By	 (Daniel Wang) /Reviewer



Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (above 1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass

Internal Source	Upper Frequency
Below 1.705MHz	30MHz
1.705MHz to 108MHz	1GHz
108MHz to 500MHz	2GHz
500MHz to 1GHz	5GHz
Above 1GHz	5th harmonic of the highest frequency or 40GHz, whichever is lower



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1 General Information

Product Name:	Mobile Phone		
Model No.(EUT):	CPH2173		
Trade Mark:	OPPO		
Hardware Version:	11		
Software Version:	ColorOS V11.2		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	GSM850	824~849	869~894
	GSM1900	1850~1910	1930~1990
	WCDMA Band II	1850~1910	1930~1990
	WCDMA Band IV	1710~1755	2110~2155
	WCDMA Band V	824~849	869~894
	LTE Band 2	1850~1910	1930~1990
	LTE Band 4	1710~1755	2110~2155
	LTE Band 5	824~849	869~894
	LTE Band 7	2500~2570	2620~2690
	LTE Band 12	699~716	729~746
	LTE Band 13	777~787	746~756
	LTE Band 17	704~716	734~746
	LTE Band 25	1850~1915	1930~1995
	LTE Band 26	814~849	859~894
	LTE Band 38	2570~2620	2570~2620
	LTE Band 41	2496~2690	2496~2690
	LTE Band 66	1710~1780	2110~2200
	NR Band 5	824~849	869~894
	NR Band 7	2500~2570	2620~2690
	NR Band 38	2570~2620	2570~2620
	LTE Band CA_7C	2500~2570	2620~2690
	LTE Band CA_38C	2570~2620	2570~2620
	LTE Band CA_41C	2496~2690	2496~2690
	Wi-Fi 2.4G	2400~2483.5	2400~2483.5
	Bluetooth	2400~2483.5	2400~2483.5
	Wi-Fi 5G	5150~5850	5150~5850
	NFC	13.56	
	GNSS(GPS/GLonass/Galileo/BDS/SBAS)	1559~1610	



Accessory:

Battery Information:	Model:	BLP831
	Normal Voltage:	7.74V
	Rated capacity:	2200mAh/17.41Wh
Adapter Information 1:	Model:	VCA7JAUH
	Power Rating	1.I/P:100-130VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,5.0A MAX 2.I/P:200-240VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,6.5A MAX
	Manufacturer	HUIZHOU GOLDEN LAKE INDUSTRIAL CO., LTD
Adapter Information 2:	Model:	VCA7JDUH
	Power Rating	1.I/P:100-130VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,5.0A MAX 2.I/P:200-240VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,6.5A MAX
	Manufacturer	HUIZHOU GOLDEN LAKE INDUSTRIAL CO., LTD
Adapter Information 3:	Model:	VCA7HAUH
	Power Rating	1.I/P:100-130VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,5.0A MAX 2.I/P:200-240VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,6.5A MAX
	Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD.
USB Cable Information :	Model:	DL129
	Signal Line	1m
Headset Information:	Model:	MH147



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1.1 Description of Support Units

Description	Manufacturer	Model No.	Inventory No.
Router	NETGEAR	R6020	No.XA1401
Computer	Lenove	L480	No.XA1402
Mouse	A4TECH	OP-520NU USB	No.XA1403
Wireless Charging	OPPO	OAWV0101	XAW01-55-01

1.2 Test Location

Company:	SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD.
Address:	1/F, Unit D, Building 1, Kanghong Orange Technology Park, No.137, Keyuan 3rd Road, Fengdong New City, Xi'an, Shaanxi China
Post code:	710086
Test engineer:	Ben Huang, Leah Chen

1.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 4854.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

• FCC –Designation Number: CN1271.

1.4 Deviation from Standards

None

1.5 Abnormalities from Standard Conditions

None



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2 Emission Test Results

2.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	150kHz to 30MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

2.1.1 E.U.T. Operation

Operating Environment:

Temperature:	18.9 °C	Humidity:	55.1 % RH	Atmospheric Pressure:	1000 mbar
Pretest these modes to find the worst case:	<p>a: GSM850 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable1+ adapter1</p> <p>b: GSM1900 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable1+ adapter2</p> <p>c: WCDMA B2 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable1+ adapter3</p> <p>d: WCDMA VI Link down ant+NFC+BT+WLAN2.4G+GNSS Rx +camera (Back) +EUT+USB cable2+adapter(worst)</p> <p>e: WCDMA V Link down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Front) +EUT+USB cable3+adapter(worst)</p> <p>f: LTE band 2 Link down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Back) +EUT+USB cable4+adapter(worst)</p> <p>g: LTE band 4 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx + camera (Front)+EUT+USB cable5+ adapter(worst)</p> <p>h: LTE band 5 Link down ant +NFC+BT+WLAN5G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable6+ adapter(worst)</p> <p>i: LTE band 7 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (Phone) +EUT+USB cable(worst)+ adapter(worst)</p> <p>j: LTE band 12 Link down ant+NFC+BT+WLAN5G+GNSS Rx+ playing MP4 (Phone) +EUT+USB cable(worst)+ adapter(worst)</p> <p>k: LTE band 13 Link down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)</p> <p>l: LTE band 17 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)</p> <p>m: LTE band 38 Link down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)</p> <p>n: LTE band 41 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)</p> <p>o: LTE band 66 Link down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)</p>				



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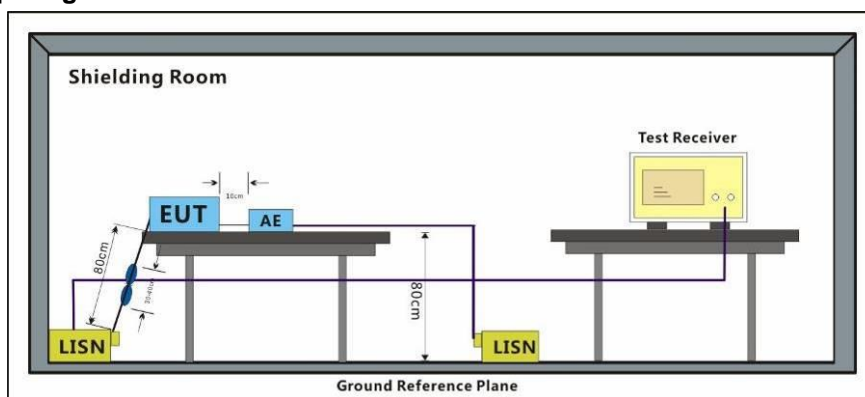
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- p: NR Band 5 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
- q: NR Band 7 Link down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
- r: NR Band 38 Link down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst) + Wireless Charging
- s: Transfer data between the EUT and the PC+USB cable(worst)
- t: GSM850 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT1+Earphone
- u: GSM850 Link down ant(ESIM)+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1
- v: GSM850 Link up ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter(worst)
- The worst case for final test: a: GSM850 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1

2.1.2 Test Setup Diagram

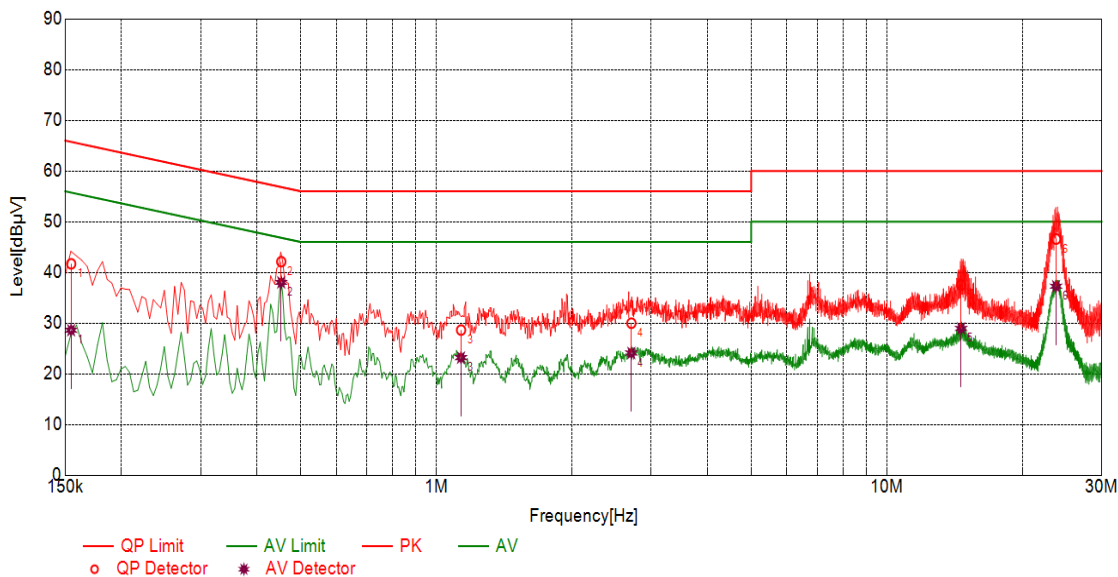


2.1.3 Measurement Data

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.



Mode:a; Line:Live Line



Test Graph

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Type
1	0.1547	10.10	41.69	65.74	24.05	28.60	55.74	27.14	L
2	0.4527	10.10	42.11	56.82	14.71	38.03	46.82	8.79	L
3	1.1347	10.10	28.63	56.00	27.37	23.19	46.00	22.81	L
4	2.7099	10.10	29.99	56.00	26.01	24.10	46.00	21.90	L
5	14.6173	10.11	37.53	60.00	22.47	28.95	50.00	21.05	L
6	23.7477	10.11	46.59	60.00	13.41	37.27	50.00	12.73	L



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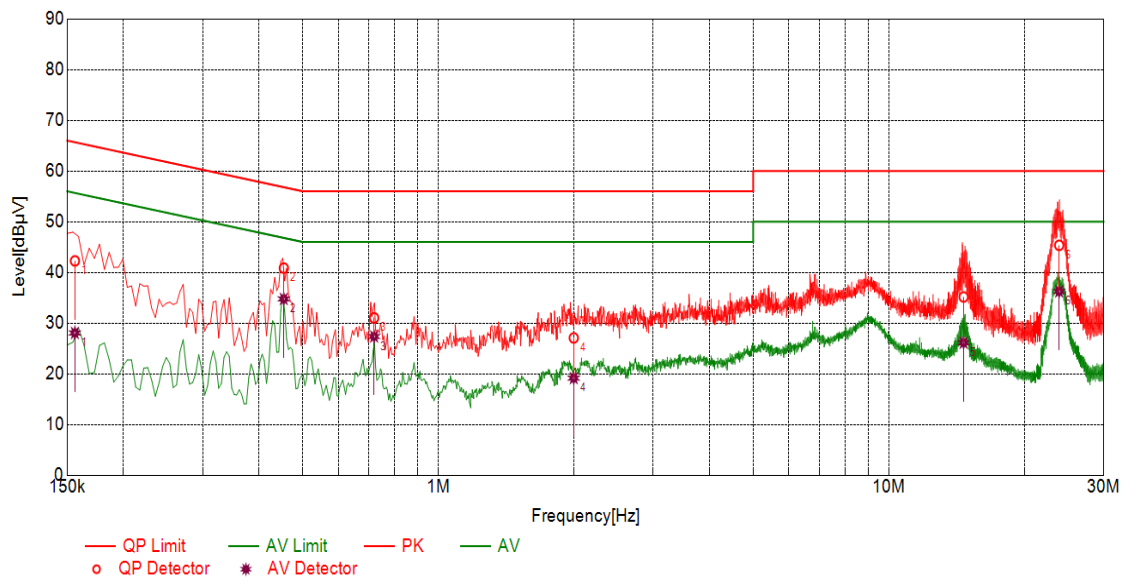
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Mode:a; Line:Neutral Line



Test Graph

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Type
1	0.1561	10.10	42.27	65.67	23.40	28.06	55.67	27.61	N
2	0.4540	10.10	40.85	56.80	15.95	34.77	46.80	12.03	N
3	0.7204	10.10	31.03	56.00	24.97	27.36	46.00	18.64	N
4	1.9982	10.10	27.08	56.00	28.92	19.15	46.00	26.85	N
5	14.6535	10.11	35.16	60.00	24.84	26.13	50.00	23.87	N
6	23.8770	10.11	45.35	60.00	14.65	36.25	50.00	13.75	N



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2.2 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 15, Subpart B
Test Method: ANSI C63.4:2014
Frequency Range: 30MHz to 1GHz
Measurement Distance: 3m
Limit:
30MHz -88MHz 40.0(dBμV/m) quasi-peak
88MHz-216MHz 43.5(dBμV/m) quasi-peak
216MHz-960MHz 46.0(dBμV/m) quasi-peak
960MHz-1000MHz 54.0(dBμV/m) quasi-peak
Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

2.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 66.5 % RH Atmospheric Pressure: 1010 mbar

Pretest these
modes to find
the worst case:

- a: Transfer data between the EUT and the PC+USB cable1
- b: Transfer data between the EUT and the PC+USB cable2
- c: Transfer data between the EUT and the PC+USB cable3
- d: Transfer data between the EUT and the PC+USB cable4
- e: Transfer data between the EUT and the PC+USB cable5
- f: Transfer data between the EUT and the PC+USB cable6
- g: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1
- h: GSM1900 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter2
- i: WCDMA B2 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter3
- j: WCDMA VI Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +camera (Back) +EUT+USB cable(worst)+adapter(worst)
- k: WCDMA V Idle down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Front) +EUT+USB cable(worst)+adapter(worst)
- l: LTE band 2 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Back) +EUT+USB cable(worst)+adapter(worst)
- m: LTE band 4 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx + camera (Front)+EUT+USB cable(worst)+ adapter(worst)
- n: LTE band 5 Idle down ant +NFC+BT+WLAN5G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter(worst)
- o: LTE band 7 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (Phone) +EUT+USB cable(worst)+ adapter(worst)
- p: LTE band 12 Idle down ant+NFC+BT+WLAN5G+GNSS Rx+ playing MP4 (Phone) +EUT+USB cable(worst)+ adapter(worst)
- q: LTE band 13 Idle down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)
- r: LTE band 17 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)



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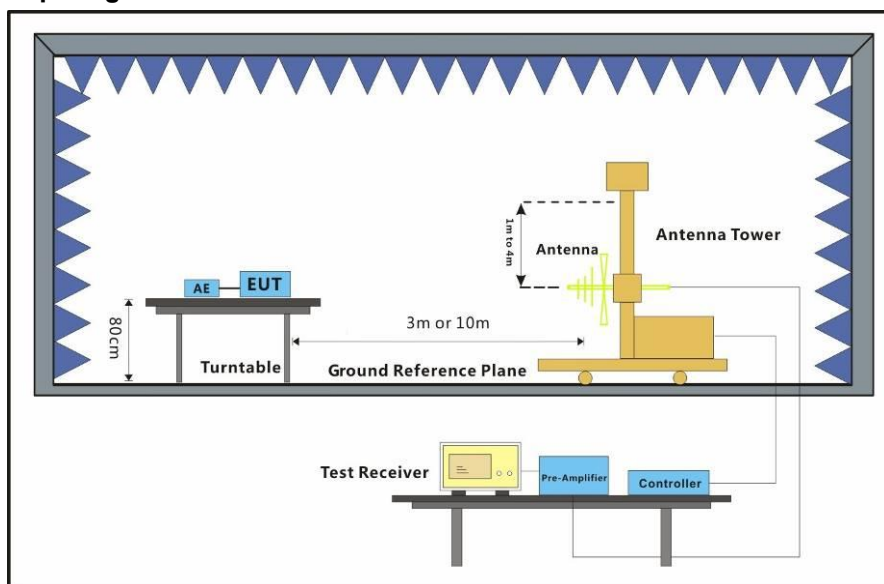
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Wireless Laboratory

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- s: LTE band 38 Idle down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)
t: LTE band 41 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)
u: LTE band 66 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)
v: NR Band 5 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
w: NR Band 7 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
x: NR Band 38 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
y: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT1+Earphone
z: GSM850 Idle down ant(ESIM)+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1
*: GSM850 Idle up ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter(worst)
The worst case for final test: g: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1

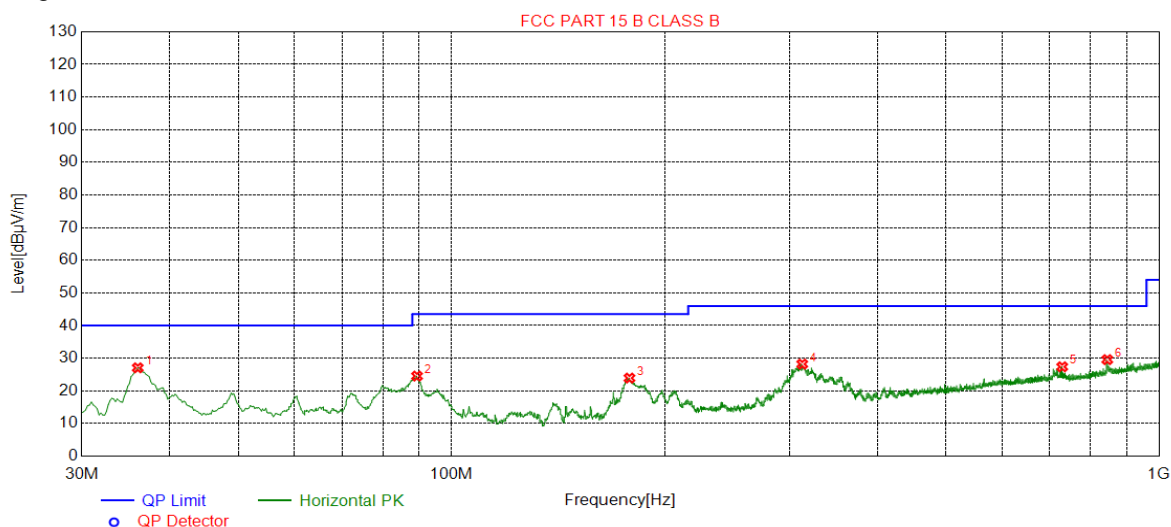
2.2.2 Test Setup Diagram



2.2.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

Mode:g; Polarization:Horizontal



Suspected List

Suspected List							
NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.0152	27.07	40.00	12.93	211	242	Horizontal
2	89.3759	24.54	43.50	18.96	244	239	Horizontal
3	178.4397	23.93	43.50	19.57	175	217	Horizontal
4	313.1026	28.21	46.00	17.79	107	120	Horizontal
5	729.7039	27.38	46.00	18.62	136	67	Horizontal
6	844.9630	29.58	46.00	16.42	189	332	Horizontal



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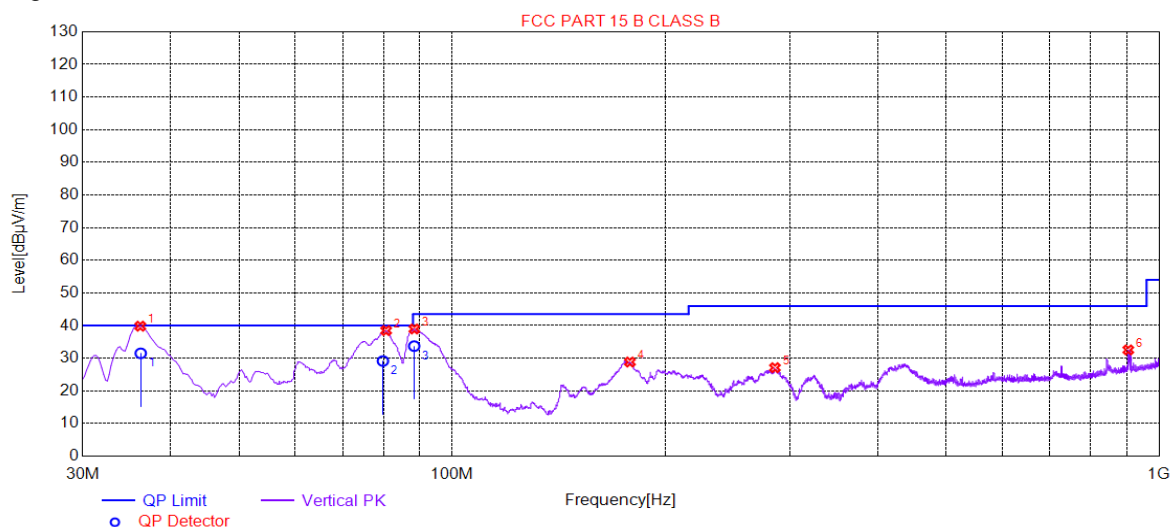
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Mode:g; Polarization:Vertical



Suspected List

Suspected List							
NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.2092	39.83	40.00	0.17	237	346	Vertical
2	80.6441	38.47	40.00	1.53	261	43	Vertical
3	88.4057	38.97	43.50	4.53	159	242	Vertical
4	178.4397	28.84	43.50	14.66	226	341	Vertical
5	286.1312	27.11	46.00	18.89	184	120	Vertical
6	904.5329	32.55	46.00	13.45	203	46	Vertical

Final Data List

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.2522	-29.55	31.52	40.00	8.48	101.4	323.5	Vertical
2	79.7901	-36.11	29.16	40.00	10.84	188.3	37.6	Vertical
3	88.3477	-34.12	33.73	43.50	9.77	106.1	246.3	Vertical



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2.3 Radiated Emissions (above 1GHz)

Test Requirement: 47 CFR Part 15, Subpart B
Test Method: ANSI C63.4:2014
Frequency Range: Above 1GHz
Measurement Distance: 3m
Limit:
Above 1GHz 74(dBμV/m) peak, 54(dBμV/m) average
Detector: Peak for pre-scan (1000kHz resolution bandwidth) 1000M to18000MHz

2.3.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C Humidity: 56.4 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

- a: Transfer data between the EUT and the PC+USB cable1
- b: Transfer data between the EUT and the PC+USB cable2
- c: Transfer data between the EUT and the PC+USB cable3
- d: Transfer data between the EUT and the PC+USB cable4
- e: Transfer data between the EUT and the PC+USB cable5
- f: Transfer data between the EUT and the PC+USB cable6
- g: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1
- h: GSM1900 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter2
- i: WCDMA B2 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter3
- j: WCDMA VI Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +camera (Back) +EUT+USB cable(worst)+adapter(worst)
- k: WCDMA V Idle down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Front) +EUT+USB cable(worst)+adapter(worst)
- l: LTE band 2 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Back) +EUT+USB cable(worst)+adapter(worst)
- m: LTE band 4 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx + camera (Front)+EUT+USB cable(worst)+ adapter(worst)
- n: LTE band 5 Idle down ant +NFC+BT+WLAN5G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter(worst)
- o: LTE band 7 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (Phone) +EUT+USB cable(worst)+ adapter(worst)
- p: LTE band 12 Idle down ant+NFC+BT+WLAN5G+GNSS Rx+ playing MP4 (Phone) +EUT+USB cable(worst)+ adapter(worst)
- q: LTE band 13 Idle down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)
- r: LTE band 17 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)
- s: LTE band 38 Idle down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)
- t: LTE band 41 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)



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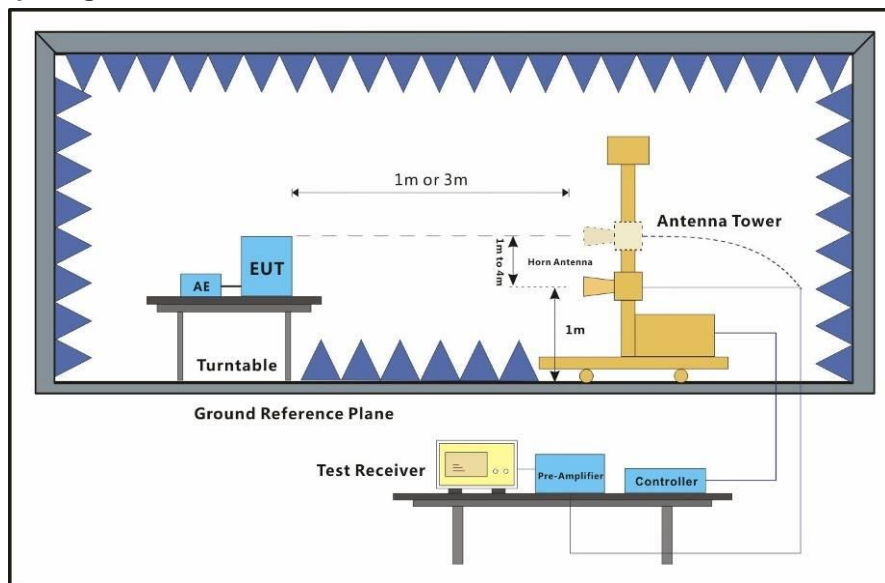
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- u: LTE band 66 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)
v: NR Band 5 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
w: NR Band 7 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
x: NR Band 38 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)+ Wireless Charging
y: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT1+Earphone
z: GSM850 Idle down ant(ESIM)+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1
*: GSM850 Idle up ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter(worst)
g: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1

The worst case
for final test:

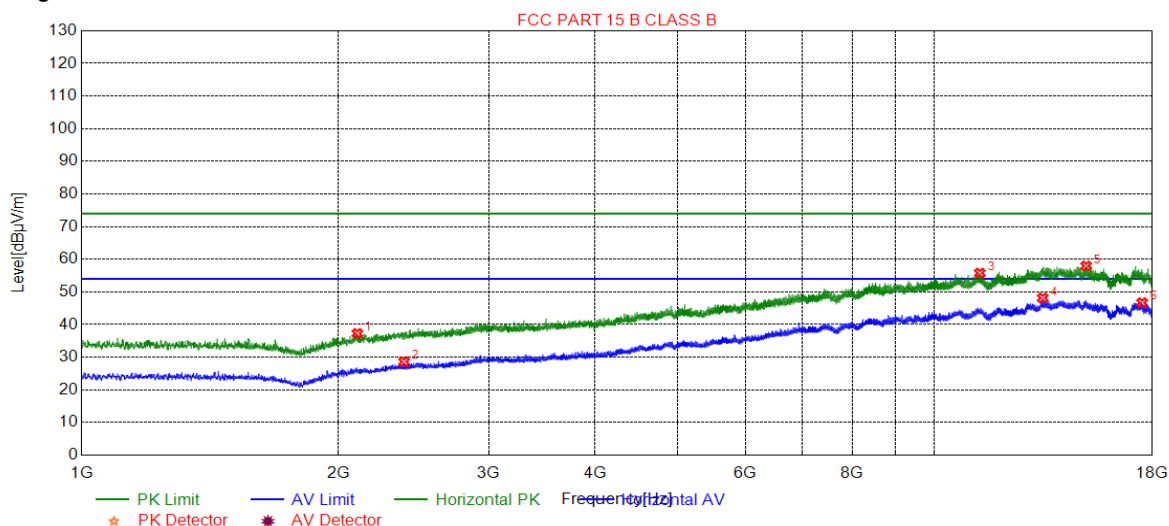
2.3.2 Test Setup Diagram



2.3.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

Mode:g; Polarization:Horizontal



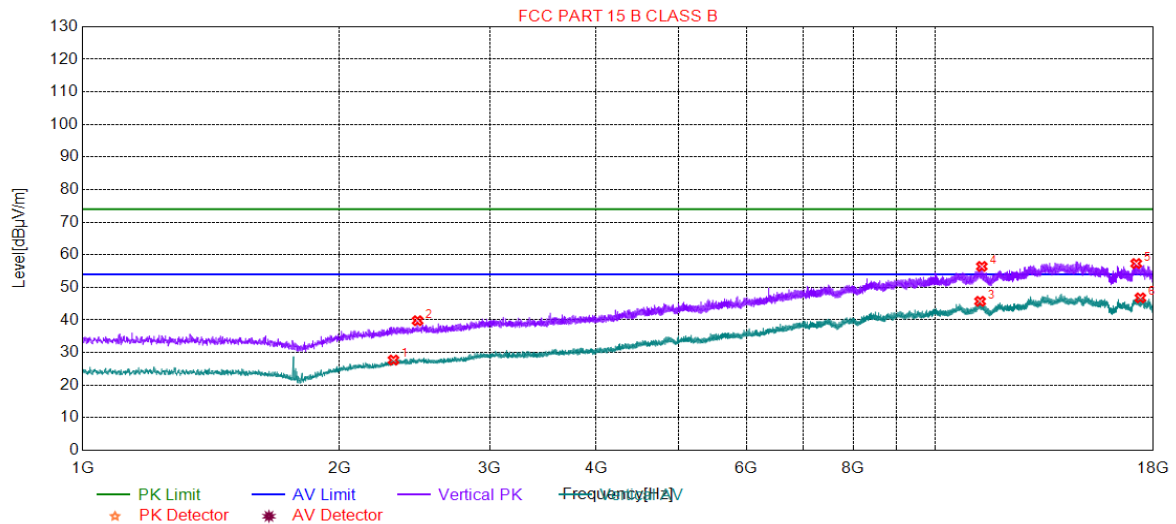
Suspected List

Suspected List							
NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2105.055	37.29	74.00	36.71	149	360	Horizontal
2	2388.119	28.62	54.00	25.38	186	0	Horizontal
3	11296.56	55.77	74.00	18.23	212	170	Horizontal
4	13386.81	48.14	54.00	5.86	100	301	Horizontal
5	15048.65	57.96	74.00	16.04	163	257	Horizontal
6	17505.27	46.70	54.00	7.30	206	344	Horizontal





Mode:g; Polarization:Vertical



Suspected List

Suspected List							
NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2314.165	27.71	54.00	26.29	157	105	Vertical
2	2469.723	39.78	74.00	34.22	206	127	Vertical
3	11273.61	45.73	54.00	8.27	298	148	Vertical
4	11326.31	56.44	74.00	17.56	184	322	Vertical
5	17183.10	57.32	74.00	16.68	198	83	Vertical
6	17376.91	46.79	54.00	7.21	206	323	Vertical



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3 Equipment List

CE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
Radio communication analyzer	ROHDE&SCHWARZ	CMW 500	XAW01-03-02	2020-04-02	2021-04-01
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2020-09-11	2021-09-10
Artificial network	ROHDE&SCHWARZ	ENV216	XAW01-04-01	2020-08-04	2021-08-03
5G UXM	Keysight	E7515B	XAW01-19-02	2020-09-11	2021-09-10
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2020-11-06	2021-11-05
Measurement Software	Tonscend	TS+ CE V2.5	XAW02-05-02	NCR	NCR



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RE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
MXA signal analyzer	Keysight	N9020A	XAW01-06-01	2020-04-02	2021-04-01
Radio communication analyzer	ROHDE&SCHWARZ	CMW 500	XAW01-03-02	2020-04-02	2021-04-01
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2020-09-11	2021-09-10
Receiving antenna (30MHz-3GHz)	Schwarzbeck	VULB 9163	XAW01-09-01	2019-10-13	2021-10-12
Receiving antenna (1GHz~18GHz)	Schwarzbeck	BBHA 9120D	XAW01-09-02	2019-10-13	2021-10-12
Receiving antenna (15GHz~40GHz)	Schwarzbeck	BBHA 9170	XAW01-09-03	2019-10-13	2021-10-12
Directional antenna rack controller	Max-Full	MF-7802BS	XAW03-03-01	NCR	NCR
High-speed antenna rack controller	Max-Full	MF-7802	XAW03-04-01	NCR	NCR
Amplifier	Tonscend	TAP00903040	XAW01-41-01	2020-10-26	2021-10-25
Amplifier	Tonscend	TAP01018048	XAW01-41-02	2020-10-26	2021-10-25
Amplifier	Tonscend	TAP18040048	XAW01-41-03	2020-10-27	2021-10-26
Amplifier	Shanghai Steed	YX28980930	XAW01-41-06	2020-10-26	2021-10-25
5G UXM	Keysight	E7515B	XAW01-04-01	2020-09-11	2021-09-10
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2020-11-06	2021-11-05
Measurement Software	Tonscend	TS+ RE V3.0.0.2	XAW02-05-01	NCR	NCR



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4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conduction Emission	$\pm 3.0\text{dB}$ (150kHz to 30MHz)
2	Radiated Emission	$\pm 4.8\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (1GHz to 6GHz)
		$\pm 4.5\text{dB}$ (6GHz to 18GHz)
		$\pm 5.02\text{dB}$ (Above 18GHz)



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5 Photographs

5.1 Test Setup

Refer to Appendix A - Photographs of Set-Up for ZR/2020/B0036.

5.2 EUT Constructional Details (EUT Photos)

Refer to Photographs of EUT Constructional Details

- End of the Report -



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