

Report No.: ZR/2020/B003606

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## 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 PhoneModel No.:CPH2173Trade 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:** 2021/1/4

Test Result: Pass\*

Authorized Signature:

Derek Yang

Derele yang

### Wireless Laboratory Manager

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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	Revision Record								
Version Chapter Date Modifier Remark									
01		2021/1/4		Original					

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### **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

Checked By Test By

David Chen Reviewer

David Chen

**Daniel Wang** Project Engineer

Samil

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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								
	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						
Frequency Bands:	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						
	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/Gal ileo/BDS/SBAS)	1559~16 <sup>2</sup>	10						

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### Accessory:

	Model:	BLP831
Battery Information:	Normal Voltage:	7.74V
	Rated capacity:	2200mAh/17.41Wh
	Model:	VCA7JAUH
Adapter Information 1:	Power Rating	1.I/P:100-130VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,5.0A MAX
Adapter information 1.	rowel Rating	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
	Model:	VCA7JDUH
Adoptor Information 2	Power Rating	1.I/P:100-130VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,5.0A MAX
Adapter Information 2:	Power Rating	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
	Model:	VCA7HAUH
Adoptor Information 2	Power Rating	1.I/P:100-130VAC 50/60Hz 1.8A O/P:5VDC 2.0A or 10VDC,5.0A MAX
Adapter Information 3:	Power Rating	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.
LICE Coble Information	Model:	DL129
USB Cable Information :	Signal Line	1m
Headset Information:	Model:	MH147

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### 1.1 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	T430u	REF. No.SEA1800
Mouse	Lenovo	M-U0025-O	REF. No.:SEA2400
Router	NETGEAR	DGN2200	REF. No.SEA2200

### 1.2 Test Location

All tests were performed at:

Company:	SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD.
Address:	Single floor D, building 1, Kanghong orange square science and technology park, No.137 keyuan 3rd road, fengdong new town, Xi 'an city, Shaanxi China
Post code:	710000

No tests were sub-contracted.

### 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.

Test Site No.:	SG	S Xian Site No.	FCC Designation No.
	CO01-XA	03CH01-XA	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( $\mu$ V)-56dB( $\mu$ V) quasi-peak, 56dB( $\mu$ V)-46dB( $\mu$ V) average

0.5M-5MHz 56dB( $\mu$ V) quasi-peak, 46dB( $\mu$ V) average 5M-30MHz 60dB( $\mu$ V) quasi-peak, 50dB( $\mu$ V) 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 a: GSM850 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD

modes to find card) +EUT+USB cable1+ adapter1

the worst case: b: GSM1900 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD

card) +EUT+USB cable1+ adapter2

c: WCDMA B2 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD

card) +EUT+USB cable1+ adapter3

d: WCDMA VI Link down ant+NFC+BT+WLAN2.4G+GNSS Rx +camera (Back)

+EUT+USB cable2+adapter(worst)

e: WCDMA V Link down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Front)

+EUT+USB cable3+adapter(worst)

f: LTE band 2 Link down ant+NFC+BT+WLAN5G+GNSS Rx +camera (Back)

+EUT+USB cable4+adapter(worst)

g: LTE band 4 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx + camera

(Front)+EUT+USB cable5+ adapter(worst)

h: LTE band 5 Link down ant +NFC+BT+WLAN5G+GNSS Rx+ playing MP4 (SD

card) +EUT+USB cable6+ adapter(worst)

i: LTE band 7 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4

(Phone) +EUT+USB cable(worst)+ adapter(worst)

j: LTE band 12 Link down ant+NFC+BT+WLAN5G+GNSS Rx+ playing MP4

(Phone) +EUT+USB cable(worst)+ adapter(worst)

k: LTE band 13 Link down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB

cable(worst)+ adapter(worst)

I: LTE band 17 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT+USB

cable(worst)+ adapter(worst)

m: LTE band 38 Link down ant+NFC+BT+WLAN5G+GNSS Rx+EUT+USB

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cable(worst)+ adapter(worst)

n: LTE band 41 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx+EUT+USB cable(worst)+ adapter(worst)

o: LTE band 66 Link down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)

p: Transfer data between the EUT and the PC+USB cable(worst)

q: GSM850 Link down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT1+Earphone

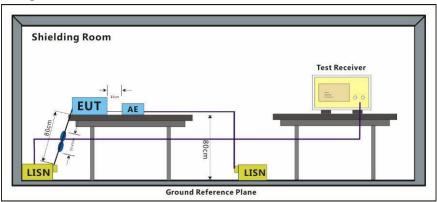
r: GSM850 Link down ant(ESIM)+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1

s: 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.

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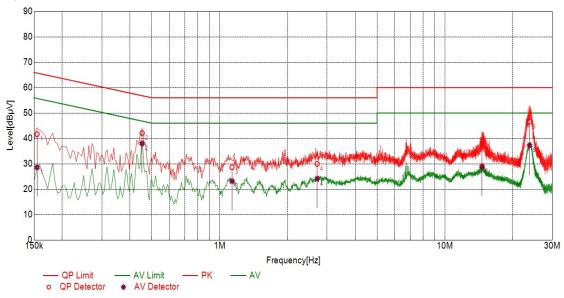
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### Mode:d; Line:Live Line



### **Test Graph**

Final	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]	Туре	
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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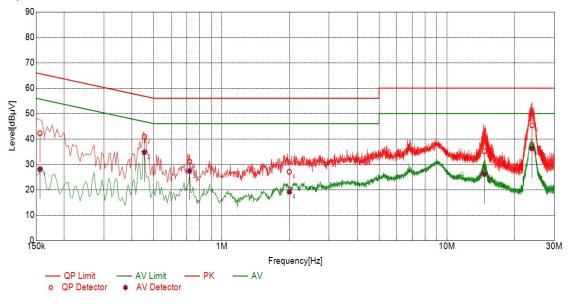
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#### Mode:d: Line:Neutral Line



### **Test Graph**

Final	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]	Туре
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:

30 MHz - 88 MHz  $40.0 (\text{dB}\mu\text{V/m})$  quasi-peak 88 MHz - 216 MHz  $43.5 (\text{dB}\mu\text{V/m})$  quasi-peak  $46.0 (\text{dB}\mu\text{V/m})$  quasi-peak 960 MHz - 1000 MHz  $54.0 (\text{dB}\mu\text{V/m})$  quasi-peak

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

### 2.1.4 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 cable2c: 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)

I: 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

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(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)

u: LTE band 66 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)

v: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT1+Earphone

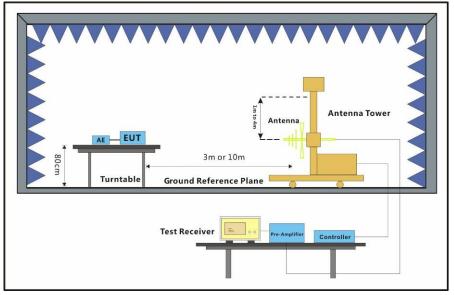
w: GSM850 Idle down ant(ESIM)+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1

x: 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

### 2.1.5 Test Setup Diagram



### 2.1.6 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.

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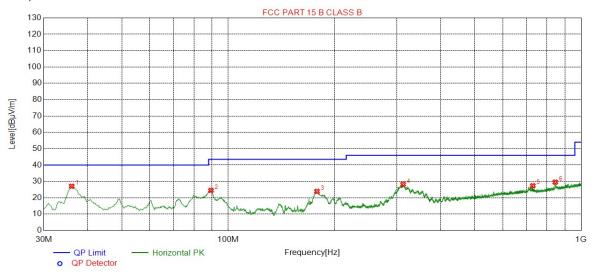
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### Mode:a; Polarization:Horizontal



### **Suspected List**

Suspe	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	200	242	Horizontal			
2	89.3759	24.54	43.50	18.96	200	239	Horizontal			
3	178.4397	23.93	43.50	19.57	200	217	Horizontal			
4	313.1026	28.21	46.00	17.79	100	120	Horizontal			
5	729.7039	27.38	46.00	18.62	200	67	Horizontal			
6	844.9630	29.58	46.00	16.42	200	332	Horizontal			

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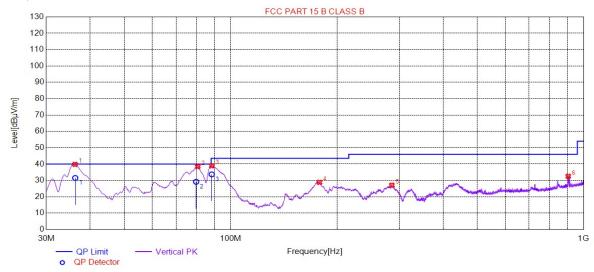
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### Mode:a; Polarization:Vertical



### **Suspected List**

Suspe	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	100	346	Vertical	
2	80.6441	38.47	40.00	1.53	200	43	Vertical	
3	88.4057	38.97	43.50	4.53	100	242	Vertical	
4	178.4397	28.84	43.50	14.66	100	341	Vertical	
5	286.1312	27.11	46.00	18.89	100	120	Vertical	
6	904.5329	32.55	46.00	13.45	100	46	Vertical	

### **Final Data List**

Final	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

### 2.1.7 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)

I: 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)

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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)

u: LTE band 66 Idle down ant+NFC+BT+WLAN5G+GNSS Rx +EUT+USB cable(worst)+ adapter(worst)

v: GSM850 Idle down ant+NFC+BT+WLAN2.4G+GNSS Rx +EUT1+Earphone

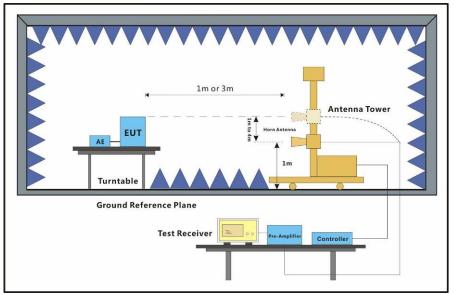
w: GSM850 Idle down ant(ESIM)+NFC+BT+WLAN2.4G+GNSS Rx+ playing MP4 (SD card) +EUT+USB cable(worst)+ adapter1

x: 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

### 2.1.8 Test Setup Diagram



### 2.1.9 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.

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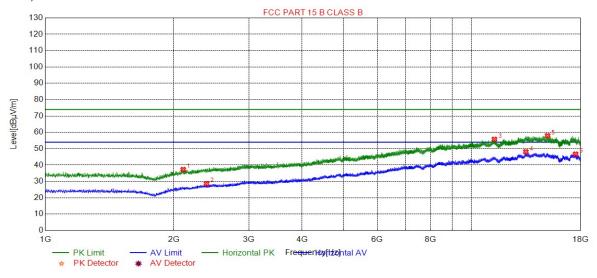
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### Mode:d; Polarization:Horizontal



### **Suspected List**

Suspe	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	200	360	Horizontal	
2	2388.119	28.62	54.00	25.38	100	0	Horizontal	
3	11296.56	55.77	74.00	18.23	100	170	Horizontal	
4	13386.81	48.14	54.00	5.86	100	301	Horizontal	
5	15048.65	57.96	74.00	16.04	200	257	Horizontal	
6	17505.27	46.70	54.00	7.30	200	344	Horizontal	

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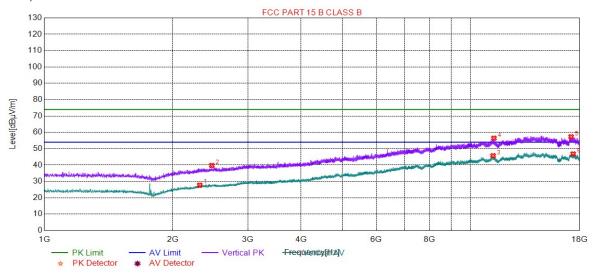
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### Mode:d; Polarization:Vertical



### Suspected List

	aspessou I.o.							
Suspe	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	100	105	Vertical	
2	2469.723	39.78	74.00	34.22	100	127	Vertical	
3	11273.61	45.73	54.00	8.27	100	148	Vertical	
4	11326.31	56.44	74.00	17.56	100	322	Vertical	
5	17183.10	57.32	74.00	16.68	200	83	Vertical	
6	17376.91	46.79	54.00	7.21	200	323	Vertical	

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### 3 Equipment List

Chamber							
Took Favringsont	Manufactura	MadalNa	Inventory No	Cal. date	Cal.Due date		
Test Equipment	Manufacturer	Model No.	Inventory No.	(yyyy-mm-dd)	(yyyy-mm-dd)		
Semi-Anechoic Chamber	Brilliant-emc	966	XAW03-35-01	NCR	NCR		
MXA signal analyzer	Keysight	N9020A	XAW01-06-01	2020/4/2	2021/4/2		
Radio communication analyzer	ROHDE&SCHWARZ	CMW 500	XAW01-03-02	2020/4/2	2021/4/2		
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2020/9/7	2021/9/6		
Receiving antenna	Rosenberger	VULB 9163	XAW01-09-01	2019/10/13	2021/10/12		
Receiving antenna	Rosenberger	BBHA 9120D	XAW01-09-02	2019/10/13	2021/10/12		
Receiving antenna	Rosenberger	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		
Filter bank	Tonscend	JS0806-F	XAW03-05-01	NCR	NCR		
Filter bank	Tonscend	JS0806s	XAW03-05-02	NCR	NCR		
Amplifier	Tonscend	TAP00903040	XAW01-41-01	2020/11/18	2021/11/18		
Amplifier	Tonscend	TAP01018048	XAW01-41-02	2020/11/18	2021/11/18		
Amplifier	Tonscend	TAP18040048	XAW01-41-03	2020/12/3	2021/12/3		
Amplifier	Brilliant-emc	YX28980930	XAW01-41-06	2020/11/18	2021/11/18		
Artificial network	ROHDE&SCHWARZ	ENV216	XAW01-19-02	2020/9/16	2021/9/15		

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#### **Measurement Uncertainty** 4

No.	Item	Measurement Uncertainty
1	Conduction Emission	± 3.4dB (150kHz to 30MHz)
		± 4.8dB (30MHz-1GHz)
	Radiated Emission	± 5.2dB (1GHz-6GHz)
2		± 5.5dB (6GHz-18GHz)
		± 5.02dB (18GHz-40GHz)

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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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