

FCC REPORT

(CDMA)

Applicant: Unimax communications

Address of Applicant: 18201 McDermott St. West Suite E, Irvine, CA 92614.

Equipment Under Test (EUT)

Product Name: Smartphone

Model No.: U683CL

Trade mark: UMX

FCC ID: P46-U683CL

Applicable standards: FCC CFR Title 47 Part 22 Subpart H
FCC CFR Title 47 Part 24 Subpart E
FCC CFR Title 47 Part 90 Subpart S

Date of sample receipt: 09 Dec., 2021

Date of Test: 10 Dec., to 29 Dec., 2021

Date of report issued: 31 Dec., 2021

Test Result: PASS*

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

Authorized Signature:



Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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2. Version

Version No.	Date	Description
00	31 Dec., 2021	Original

Prepared by: Mike.ou **Date:** 31 Dec., 2021
Report Clerk

Reviewed by: Winner Zhang **Date:** 31 Dec., 2021
Project Engineer

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4. Test Summary

Test Items	FCC Part Section(s)	Result
RF Output Power	Part 2.1046 Part 22.913 (a)(5) Part 24.232 (c) Part 90.635 (h)(b)	Pass ²
Peak-to-Average Power Ratio	Part 24.232 (d)	Pass ¹
Modulation Characteristics	Part 2.1047	Pass ¹
99% & -26 dB Occupied Bandwidth	Part 2.1049	Pass ¹
Out of band emission at antenna terminals	Part 2.1053 Part 22.917 (a) Part 24.238 (a) Part 90.691(a)	Pass ¹
Field strength of spurious radiation	Part 22.917 (a) Part 24.238 (a) Part 90.691(a)	Pass ²
Frequency stability vs. temperature	Part 22.355 Part 24.235 Part 90.213(a) Part 2.1055(a)(1)(b)	Pass ¹
Frequency stability vs. voltage	Part 22.355 Part 24.235 Part 90.213(a) Part 2.1055(d)(2)	Pass ¹
Remark: 1. Pass ¹ : Items data are refer from the original report issued by SGS-CSTC Standards Technical Services, Co., Ltd.Shenzhen Branch.(Date of Test: 2019/1/10-2019/1/24).The detailed data refer to Appendix B.1 - CDMA & EVDO. 2. Pass ² : These items are tested by JianYan Testing Group Shenzhen Co., Ltd. 3. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB(Fundamental Frequency below 1GHz)/1.0dB(Fundamental Frequency above 1GHz) (provided by the customer).		
Test Method:	ANSI/TIA-603-E-2016 ANSI C63.26-2015	

5. General Information

5.1 Client Information

Applicant:	Unimax communications
Address:	18201 McDermott St. West Suite E, Irvine, CA 92614.
Manufacturer/ Factory:	Unimax communications
Address:	18201 McDermott St. West Suite E, Irvine, CA 92614.

5.2 General Description of E.U.T.

Product Name:	Smartphone
Model No.:	U683CL
Operation Frequency range:	BC 0: 824.70MHz-848.31MHz BC 1: 1851.25MHz-1908.75MHz BC 10 : 817.00MHz-824.00MHz
Modulation type:	1×RTT: BPSK, QPSK, OQPSK, HPSK 1×EVDO: BPSK, QPSK, 8PSK, 16-QAM
Antenna type:	Integrated Antenna
Antenna gain:	BC 0: -0.5 dBi BC 1: 0.3 dBi BC 10: -0.5 dBi
Power supply:	Rechargeable Li-ion Battery DC3.85V, 2000mAh
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

Operation Frequency List:

BC 0		BC 1	
Channel:	Frequency (MHz)	Channel:	Frequency (MHz)
1013	824.70	25	1851.25
1014	824.73	26	1851.28
....			
383	836.49	599	1879.97
384	836.52	600	1880
385	836.55	601	1880.03
...	...	...	...
776	848.28	1174	1908.72
777	848.31	1175	1908.75
BC 10			
Channel:	Frequency (MHz)		
476	817.90		
477	824.93		
....			
579	820.47		
580	820.50		
581	820.53		
...	...		
683	823.07		
684	823.10		

Regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

BC 0			BC 1		
Channel No.	Frequency(MHz)		Channel No.	Frequency(MHz)	
Lowest channel	1013	824.70	Lowest channel	25	1851.25
Middle channel	384	836.52	Middle channel	600	1880.00
Highest channel	777	848.31	Highest channel	1175	1908.75
BC 10					
Channel No.	Frequency(MHz)				
Lowest channel	476	817.90			
Middle channel	580	820.50			
Highest channel	684	823.10			

5.3 Test environment and mod

Operating Environment:	
Temperature:	Normal: 15°C ~ 35°C
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.85Vdc
Test mode:	
Communicate mode (CDMA/TM1)	Keep the EUT in communicating mode on OQPSK modulation
Communicate mode (EVDO/TM1)	Keep the EUT in communicating mode on OQPSK modulation
Remark:	
1. The EUT has been tested under continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes with power adaptor, earphone and Data cable. Just the worst case position (H mode) shown in report.	

5.4 Description of Support Units

Test Equipment	Manufacturer	Model No.	Serial No.
Simulated Station	Rohde & Schwarz	CMW 200	1100.0008.02

5.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%)
Radiated Emission (30MHz ~ 1GHz) for 3m SAC	4.45 dB
Radiated Emission (1GHz ~ 18GHz) for 3m SAC	5.34 dB
Radiated Emission (18GHz ~ 40GHz) for 3m SAC	5.34 dB

5.6 Additions to, deviations, or exclusions from the method

No

5.7 Laboratory Facility

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

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

5.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://www.ccis-cb.com>

5.9 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
3m SAC	ETS	RFD-100	Q1984	04-14-2021	04-13-2024
BiConiLog Antenna	SCHWARZBECK	VULB9163	9163-1246	03-07-2021	03-06-2022
Biconical Antenna	SCHWARZBECK	VUBA 9117	9117#359	06-17-2021	06-17-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	912D-916	03-07-2021	03-06-2022
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1067	04-02-2021	04-01-2022
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1068	04-02-2021	04-01-2022
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-03-2021	03-02-2022
Spectrum analyzer	Keysight	N9010B	MY60240202	10-27-2021	10-26-2022
Simulated Station	Rohde & Schwarz	CMW500	140493	07-16-2021	07-15-2022
Simulated Station	Rohde & Schwarz	CMU200	116766	06-17-2021	06-16-2022
Band Reject Filter Group	Tonscend	JS0806	21B8060367	04-06-2021	04-05-2022
Low Pre-amplifier	SCHWARZBECK	BBV9743B	00305	03-07-2021	03-06-2022
High Pre-amplifier	SKET	LNPA 0118G-50	MF280208233	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-1G-NN-8M	JYT3M-1	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-18G-NN-8M	JYT3M-2	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-1G-BB-5M	JYT3M-3	03-07-2021	03-06-2022
Cable	Bost	JYT3M-40G-SS-8M	JYT3M-4	04-02-2021	04-01-2022
Temperature Humidity Chamber	HengPu	HPGDS-500	20140828008	11-01-2021	10-31-2022
EMI Test Software	Tonscend	TS+	Version:3.0.0.1		

Conducted method:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Simulated Station	Rohde & Schwarz	CMU200	116766	06-17-2021	06-16-2022

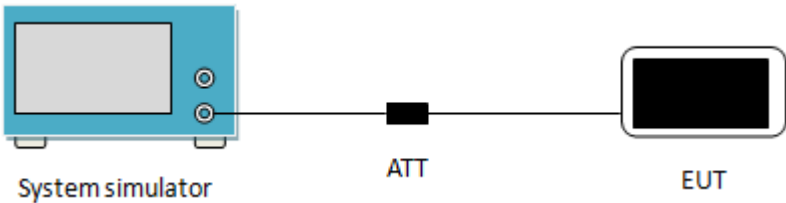
6. Test results

6.1 Conducted Output Power

6.1.1 Re-test statement

Re-test statement: The EUT is operating at the same power level with the original testing of SGS-CSTC Standards Technical Services, Co Ltd. Shenzhen Branch.

6.1.2 Test results

Test Requirement:	Part 22.913(a)(5), Part 24.232(c), Part 90.635 (h)(b)
Limit:	LT BC 0: 7W, BC 1: 2W, BC 1: 100W
Test Setup:	 The diagram illustrates the test setup. On the left is a blue box labeled 'System simulator'. A line connects it to a black box labeled 'ATT' (attenuator). Another line connects the 'ATT' box to a black box labeled 'EUT' (Equipment Under Test).
Test Procedure:	The transmitter output was connected to a calibrated attenuator, the other end of which was connected to the CMU200. Transmitter output power was read off in dBm.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

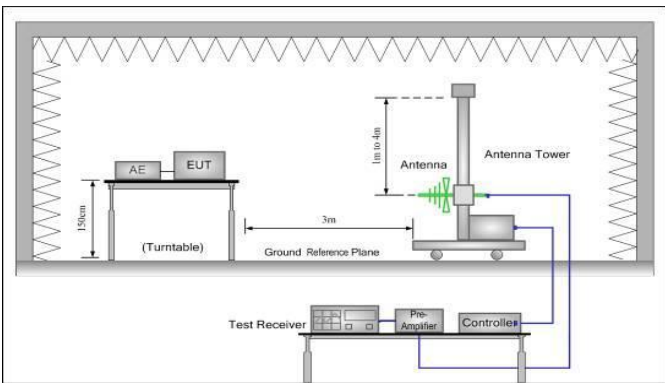
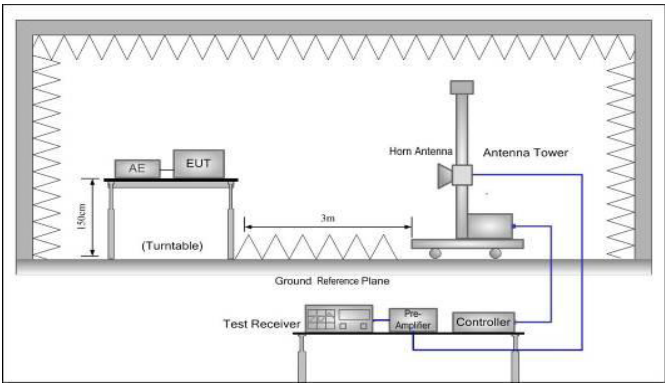
Measurement Data:

BAND	Modulation	Channel	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
CDMA BC1	CDMA /TM1	LCH	23.76	23.66
CDMA BC1	CDMA /TM1	MCH	23.78	23.58
CDMA BC1	CDMA /TM1	HCH	23.81	23.72
BAND	Modulation	Channel	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
CDMA BC0	CDMA /TM1	LCH	24.16	23.78
CDMA BC0	CDMA /TM1	MCH	24.07	23.79
CDMA BC0	CDMA /TM1	HCH	24.23	24.04
BAND	Modulation	Channel	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
CDMA BC10	CDMA /TM1	LCH	24.40	24.21
CDMA BC10	CDMA /TM1	MCH	24.31	24.38
CDMA BC10	CDMA /TM1	HCH	24.29	24.06
BAND	Modulation	Channel	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
EVDO BC1	EVDO /TM1	LCH	23.61	23.58
EVDO BC1	EVDO /TM1	MCH	23.45	23.55
EVDO BC1	EVDO /TM1	HCH	23.78	23.37
BAND	Modulation	Channel	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
EVDO BC0	EVDO /TM1	LCH	24.41	23.34
EVDO BC0	EVDO /TM1	MCH	24.57	23.42
EVDO BC0	EVDO /TM1	HCH	24.19	24.09
BAND	Modulation	Channel	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
EVDO BC10	EVDO /TM1	LCH	23.52	24.34
EVDO BC10	EVDO /TM1	MCH	24.58	24.46
EVDO BC10	EVDO /TM1	HCH	24.35	24.21

Remark:

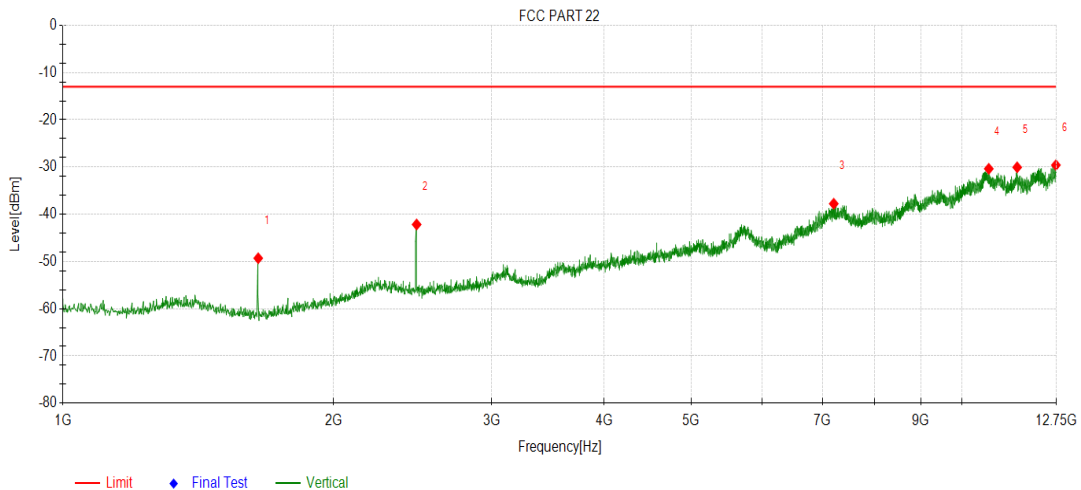
	The Original Reports	Re-Test Reports
File name:	test report CDMA	Test Report CDMA rev1
Test location:	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch	JianYan Testing Group Shenzhen Co., Ltd.
The output power is re-test at JianYan Testing Group Shenzhen Co., Ltd.		

6.2 Field strength of spurious radiation measurement

Test Requirement:	FCC part 22.917(a), FCC part 24.238(a), FCC part 90.691(a)
Limit:	-13dBm
Test setup:	Below 1GHz  Above 1GHz 
Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. $ERP / EIRP = S.G. \text{ output (dBm) + Antenna Gain(dB/dBi) - Cable Loss (dB)}$
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details.
Environment:	Temp: 23.4℃, Humi: 56%
Test results:	Passed

Measurement Data (worst case):
Remark: During the test, use Band Reject Filter Group to filter out fundamental signal

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 0 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

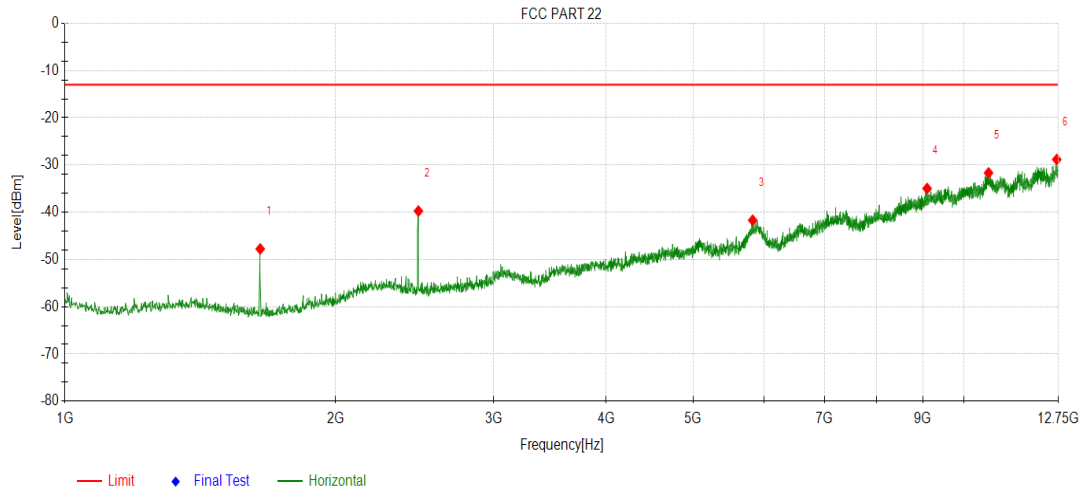


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1649.187	-38.20	-49.30	-13.00	36.30	-11.10	167	146	Vertical
2	2474.625	-35.96	-42.16	-13.00	29.16	-6.20	241	152	Vertical
3	7204.000	-50.88	-37.77	-13.00	24.77	13.11	189	134	Vertical
4	10717.25	-50.90	-30.37	-13.00	17.37	20.53	301	167	Vertical
5	11525.06	-50.91	-30.06	-13.00	17.06	20.85	348	150	Vertical
6	12727.96	-51.80	-29.59	-13.00	16.59	22.21	15	144	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 0 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

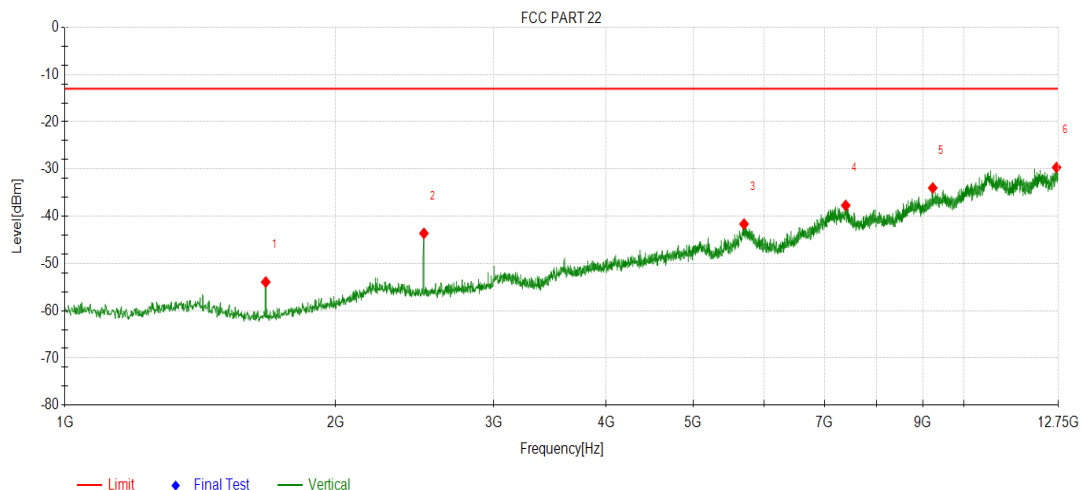


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1649.187	-36.76	-47.76	-13.00	34.76	-11.00	318	147	Horizontal
2	2473.156	-33.19	-39.73	-13.00	26.73	-6.54	207	135	Horizontal
3	5823.375	-50.11	-41.68	-13.00	28.68	8.43	159	142	Horizontal
4	9103.093	-50.17	-34.95	-13.00	21.95	15.22	134	158	Horizontal
5	10657.03	-50.93	-31.67	-13.00	18.67	19.26	15	156	Horizontal
6	12689.78	-50.97	-28.82	-13.00	15.82	22.15	79	164	Horizontal

Remark:

1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
2. The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 0 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

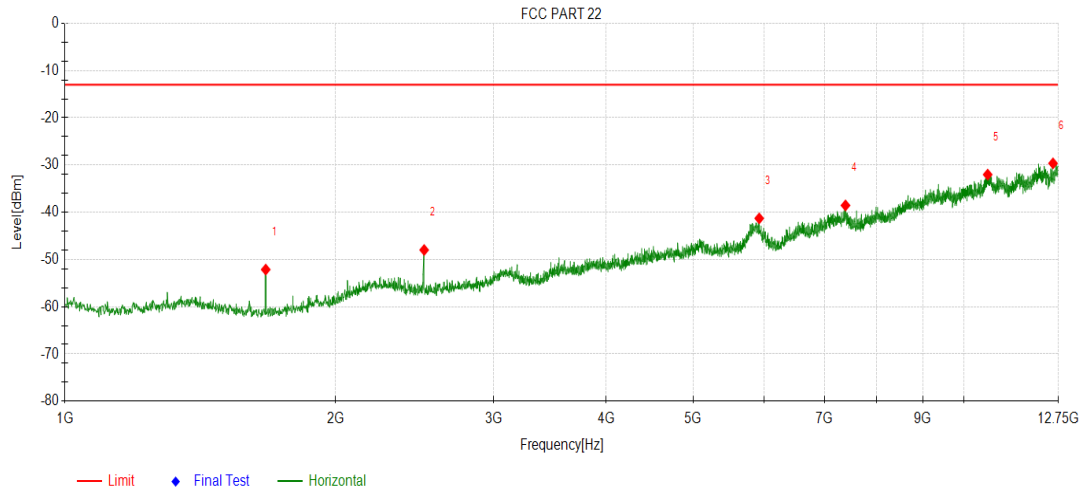


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1672.687	-42.79	-53.92	-13.00	40.92	-11.13	15	144	Vertical
2	2508.406	-37.40	-43.61	-13.00	30.61	-6.21	78	159	Vertical
3	5695.593	-50.23	-41.64	-13.00	28.64	8.59	135	133	Vertical
4	7390.531	-50.94	-37.71	-13.00	24.71	13.23	169	152	Vertical
5	9236.750	-49.65	-34.00	-13.00	21.00	15.65	218	167	Vertical
6	12683.90	-51.69	-29.66	-13.00	16.66	22.03	354	140	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 0 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

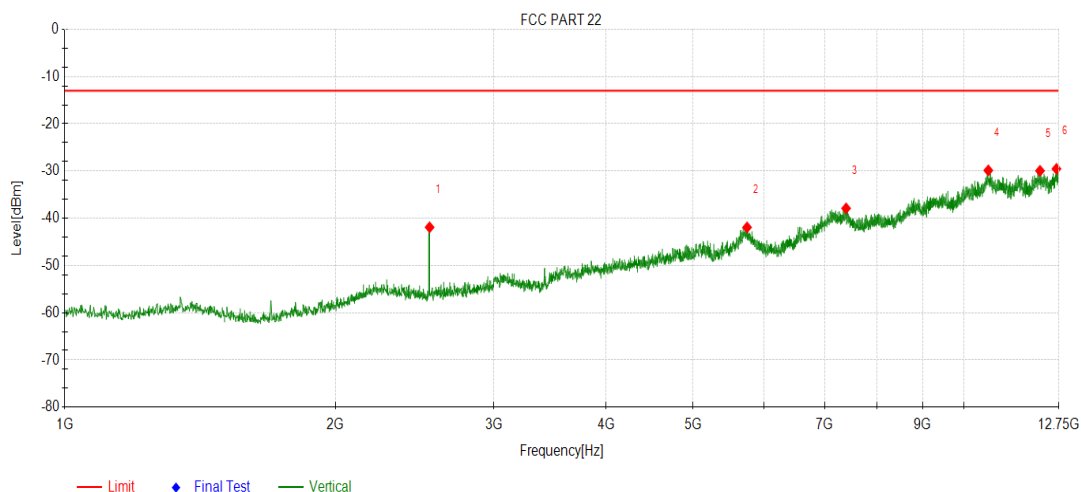


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1672.687	-41.09	-52.13	-13.00	39.13	-11.04	167	142	Horizontal
2	2509.875	-41.47	-47.98	-13.00	34.98	-6.51	76	137	Horizontal
3	5921.781	-49.87	-41.29	-13.00	28.29	8.58	315	164	Horizontal
4	7386.125	-50.05	-38.55	-13.00	25.55	11.50	248	152	Horizontal
5	10632.06	-51.15	-32.02	-13.00	19.02	19.13	307	159	Horizontal
6	12569.34	-50.94	-29.63	-13.00	16.63	21.31	16	167	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 0 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

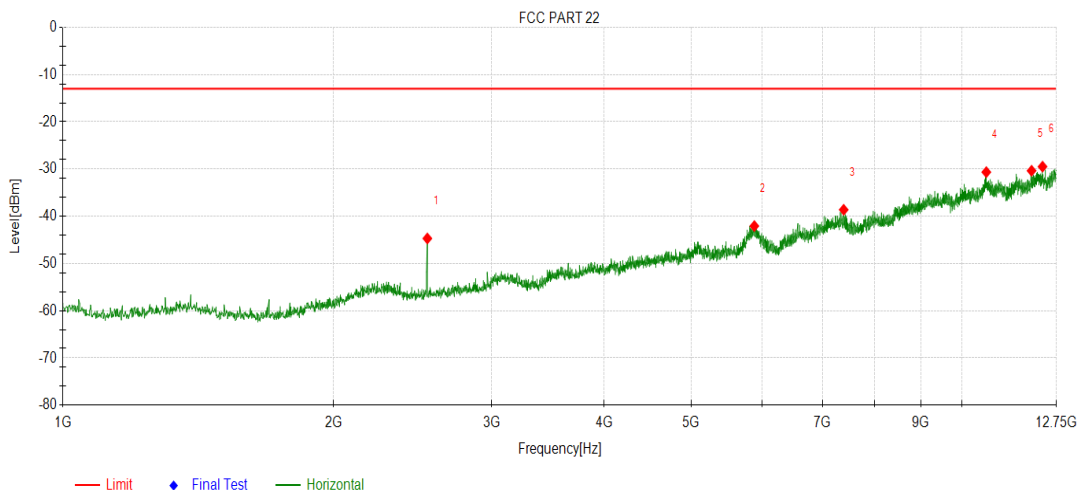


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	2545.125	-35.84	-41.91	-13.00	28.91	-6.07	31	150	Vertical
2	5739.656	-50.36	-41.93	-13.00	28.93	8.43	334	161	Vertical
3	7397.875	-51.19	-37.90	-13.00	24.90	13.29	24	140	Vertical
4	10649.68	-50.50	-29.86	-13.00	16.86	20.64	340	159	Vertical
5	12156.62	-51.14	-29.95	-13.00	16.95	21.19	351	132	Vertical
6	12680.96	-51.56	-29.54	-13.00	16.54	22.02	9	144	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 0 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

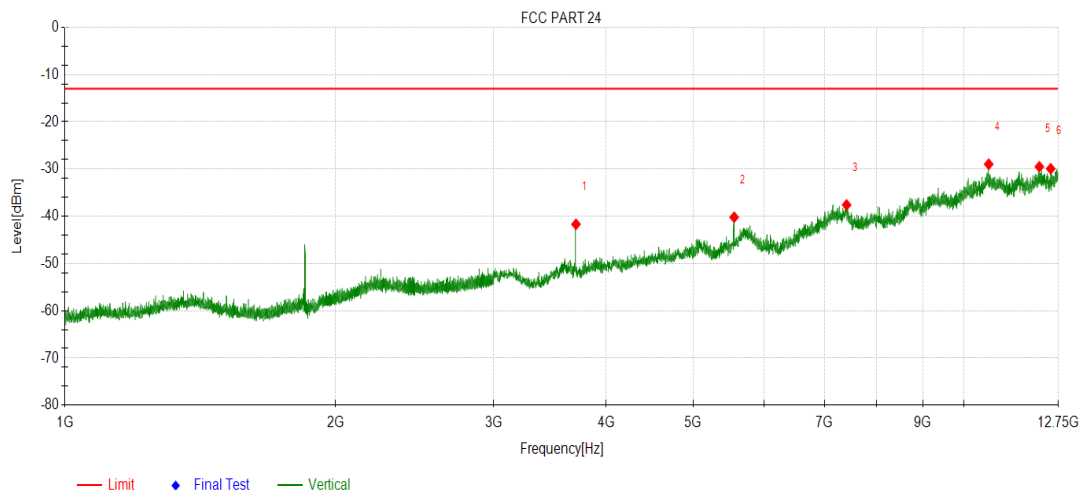


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	2543.656	-38.31	-44.70	-13.00	31.70	-6.39	12	143	Horizontal
2	5877.718	-50.93	-42.07	-13.00	29.07	8.86	358	159	Horizontal
3	7390.531	-50.15	-38.62	-13.00	25.62	11.53	104	140	Horizontal
4	10649.68	-49.87	-30.65	-13.00	17.65	19.22	246	134	Horizontal
5	11958.34	-50.60	-30.36	-13.00	17.36	20.24	278	167	Horizontal
6	12299.09	-50.67	-29.49	-13.00	16.49	21.18	348	155	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 1 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

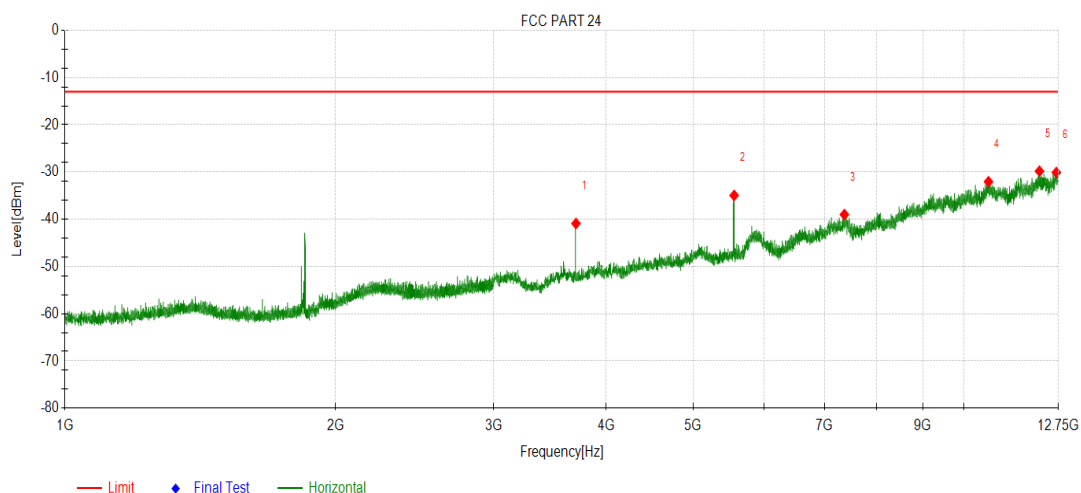


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3703.218	-40.10	-41.69	-13.00	28.69	-1.59	149	142	Vertical
2	5553.281	-45.63	-40.20	-13.00	27.20	5.43	180	133	Vertical
3	7407.000	-50.65	-37.59	-13.00	24.59	13.06	20	149	Vertical
4	10659.84	-49.17	-28.97	-13.00	15.97	20.20	213	152	Vertical
5	12136.96	-50.45	-29.51	-13.00	16.51	20.94	294	167	Vertical
6	12495.28	-50.09	-29.94	-13.00	16.94	20.15	316	160	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 1 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

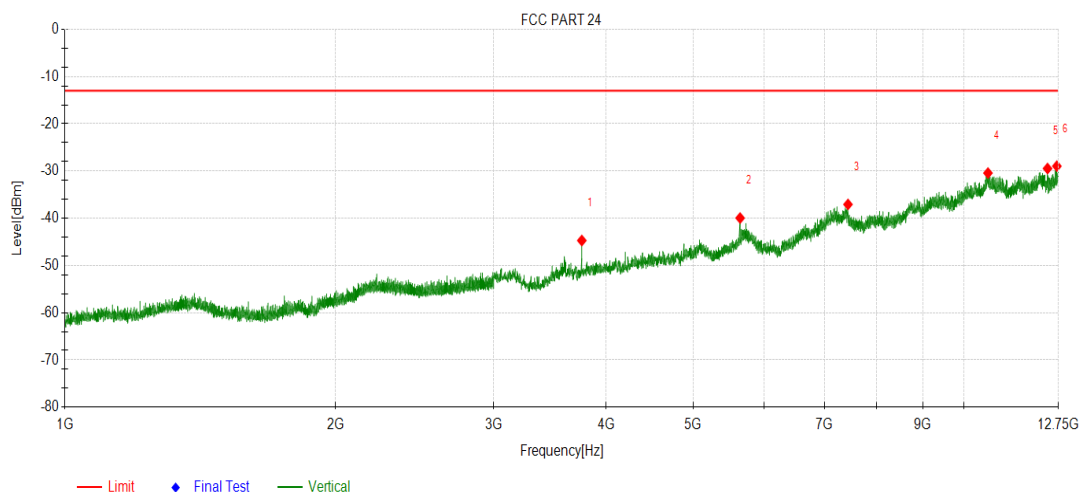


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3703.218	-38.81	-40.89	-13.00	27.89	-2.08	319	152	Horizontal
2	5553.281	-38.76	-34.95	-13.00	21.95	3.81	48	143	Horizontal
3	7365.562	-50.27	-39.00	-13.00	26.00	11.27	167	130	Horizontal
4	10654.96	-50.87	-32.05	-13.00	19.05	18.82	199	162	Horizontal
5	12140.62	-50.85	-29.82	-13.00	16.82	21.03	264	133	Horizontal
6	12678.09	-51.90	-30.09	-13.00	17.09	21.81	29	140	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 1 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

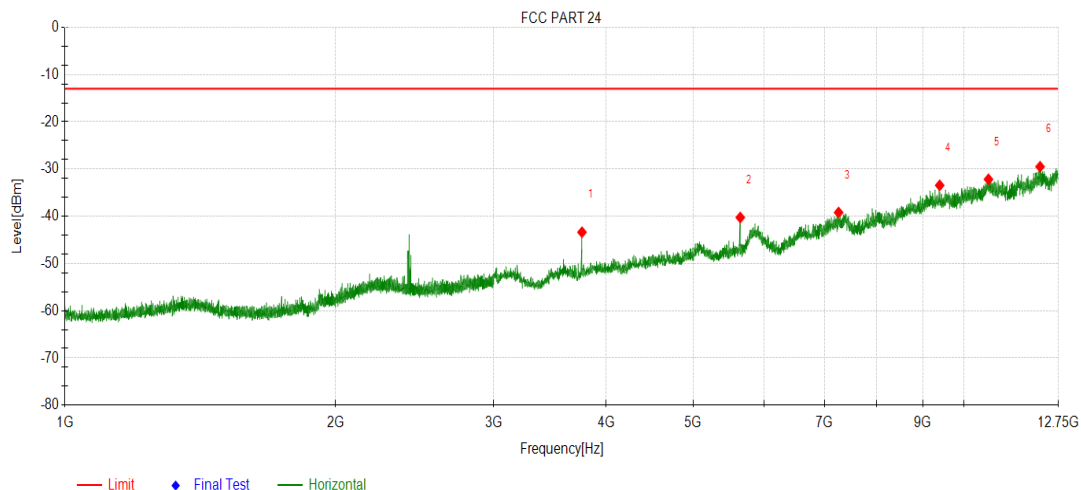


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3759.281	-43.40	-44.71	-13.00	31.71	-1.31	37	149	Vertical
2	5638.593	-46.88	-39.95	-13.00	26.95	6.93	97	131	Vertical
3	7433.812	-49.77	-37.07	-13.00	24.07	12.70	108	142	Vertical
4	10640.34	-50.68	-30.43	-13.00	17.43	20.25	246	150	Vertical
5	12394.12	-50.22	-29.47	-13.00	16.47	20.75	314	134	Vertical
6	12693.93	-50.76	-28.96	-13.00	15.96	21.80	337	161	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 1 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

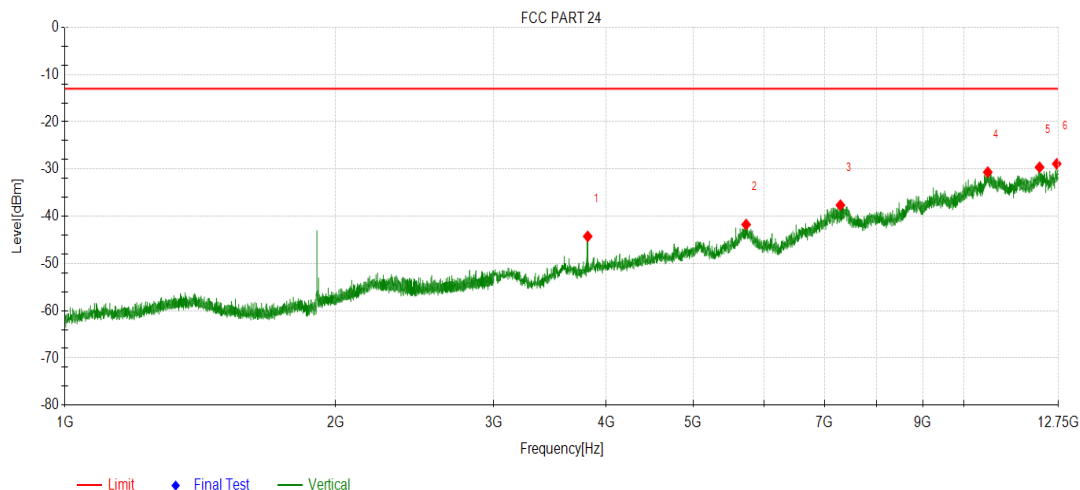


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3760.500	-41.57	-43.37	-13.00	30.37	-1.80	189	161	Horizontal
2	5641.031	-44.56	-40.26	-13.00	27.26	4.30	249	150	Horizontal
3	7257.093	-50.34	-39.20	-13.00	26.20	11.14	10	133	Horizontal
4	9402.093	-49.68	-33.45	-13.00	20.45	16.23	137	142	Horizontal
5	10652.53	-50.98	-32.17	-13.00	19.17	18.81	287	155	Horizontal
6	12158.90	-50.60	-29.50	-13.00	16.50	21.10	291	149	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 1 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

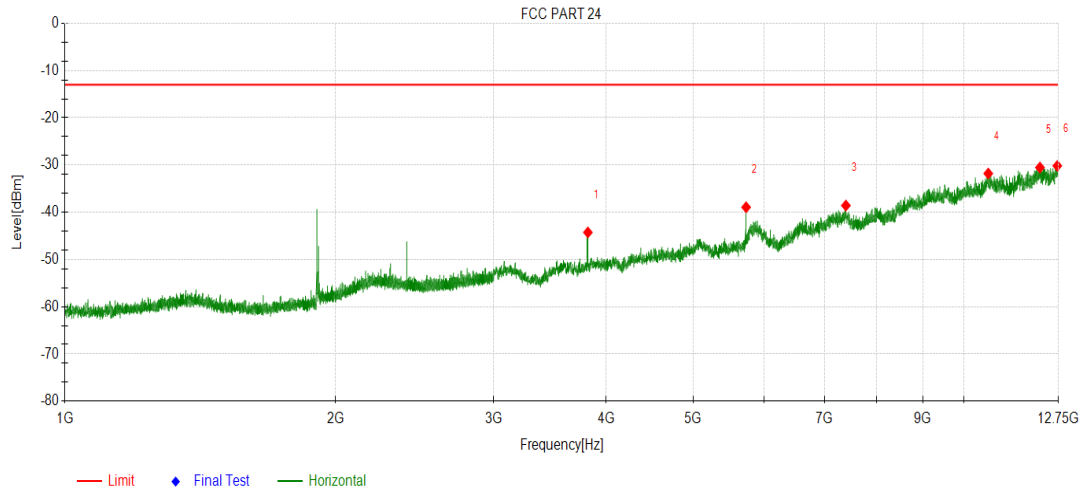


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3816.562	-43.23	-44.26	-13.00	31.26	-1.03	79	143	Vertical
2	5726.343	-49.96	-41.75	-13.00	28.75	8.21	340	153	Vertical
3	7291.218	-50.13	-37.66	-13.00	24.66	12.47	157	138	Vertical
4	10634.25	-50.92	-30.66	-13.00	17.66	20.26	189	162	Vertical
5	12143.06	-50.60	-29.62	-13.00	16.62	20.98	246	130	Vertical
6	12689.06	-50.66	-28.89	-13.00	15.89	21.77	287	144	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 1 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

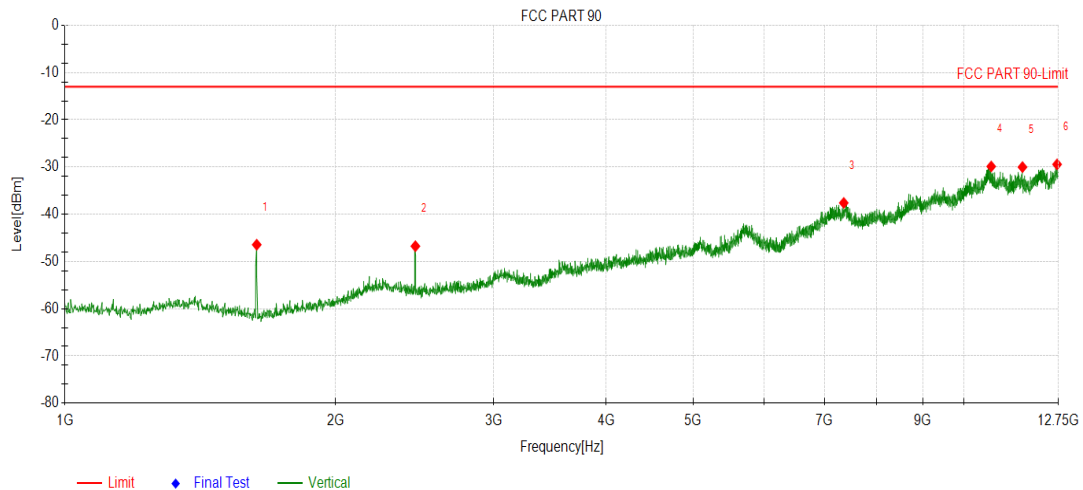


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3817.781	-42.77	-44.27	-13.00	31.27	-1.50	145	138	Horizontal
2	5726.343	-44.53	-38.94	-13.00	25.94	5.59	249	161	Horizontal
3	7393.593	-49.96	-38.57	-13.00	25.57	11.39	318	134	Horizontal
4	10647.65	-50.60	-31.80	-13.00	18.80	18.80	333	142	Horizontal
5	12155.25	-51.61	-30.53	-13.00	17.53	21.08	219	155	Horizontal
6	12708.56	-52.16	-30.17	-13.00	17.17	21.99	16	164	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 10 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

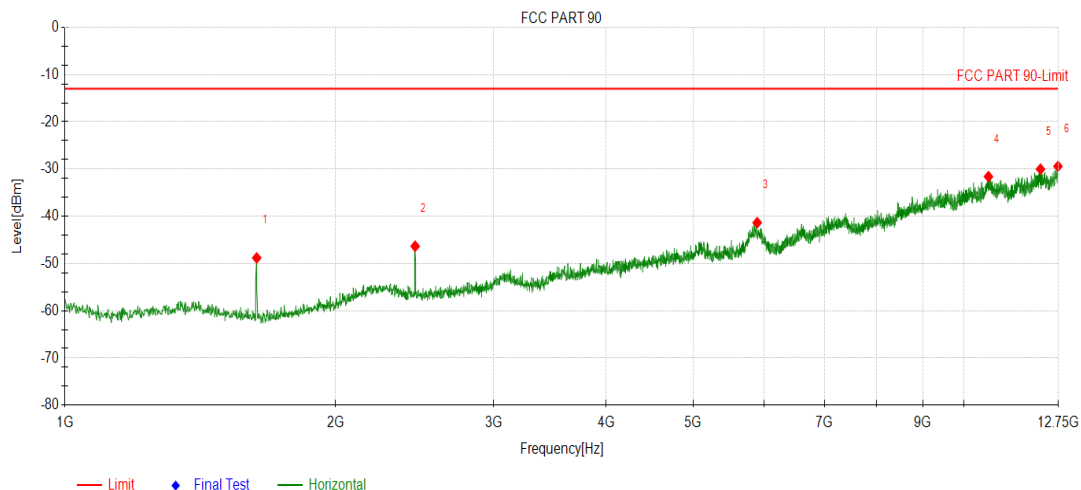


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1634.500	-35.35	-46.44	-13.00	33.44	-11.09	349	134	Vertical
2	2454.062	-40.60	-46.76	-13.00	33.76	-6.16	15	164	Vertical
3	7353.812	-50.49	-37.59	-13.00	24.59	12.90	160	150	Vertical
4	10729.00	-50.33	-29.88	-13.00	16.88	20.45	197	143	Vertical
5	11623.46	-50.23	-30.01	-13.00	17.01	20.22	114	158	Vertical
6	12701.53	-51.54	-29.44	-13.00	16.44	22.10	98	168	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 10 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

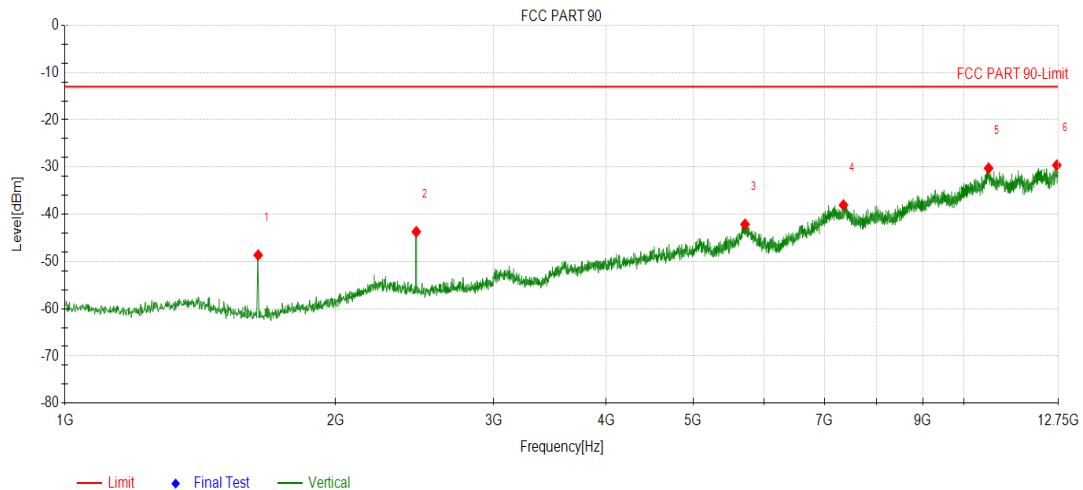


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1634.500	-37.83	-48.81	-13.00	35.81	-10.98	279	146	Horizontal
2	2452.593	-39.80	-46.34	-13.00	33.34	-6.54	246	157	Horizontal
3	5890.937	-50.33	-41.36	-13.00	28.36	8.97	350	134	Horizontal
4	10652.62	-50.83	-31.60	-13.00	18.60	19.23	19	155	Horizontal
5	12172.78	-51.31	-30.03	-13.00	17.03	21.28	104	167	Horizontal
6	12729.43	-51.74	-29.43	-13.00	16.43	22.31	128	160	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 10 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

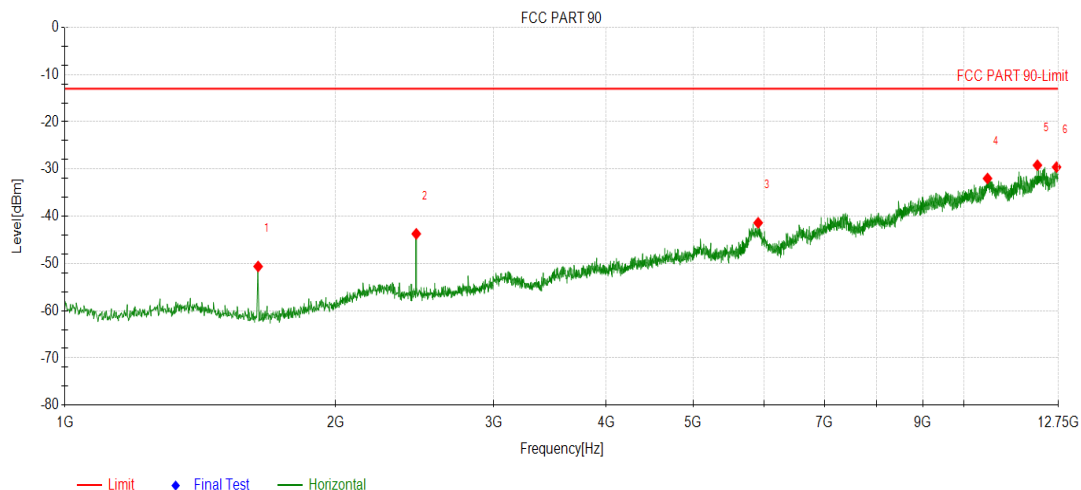


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1640.375	-37.54	-48.64	-13.00	35.64	-11.10	23	164	Vertical
2	2459.937	-37.54	-43.71	-13.00	30.71	-6.17	109	132	Vertical
3	5710.281	-50.77	-42.13	-13.00	29.13	8.64	167	150	Vertical
4	7347.937	-50.90	-38.05	-13.00	25.05	12.85	249	157	Vertical
5	10657.03	-50.89	-30.25	-13.00	17.25	20.64	298	134	Vertical
6	12691.25	-51.67	-29.61	-13.00	16.61	22.06	309	142	Vertical

Remark:

1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
2. The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 10 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

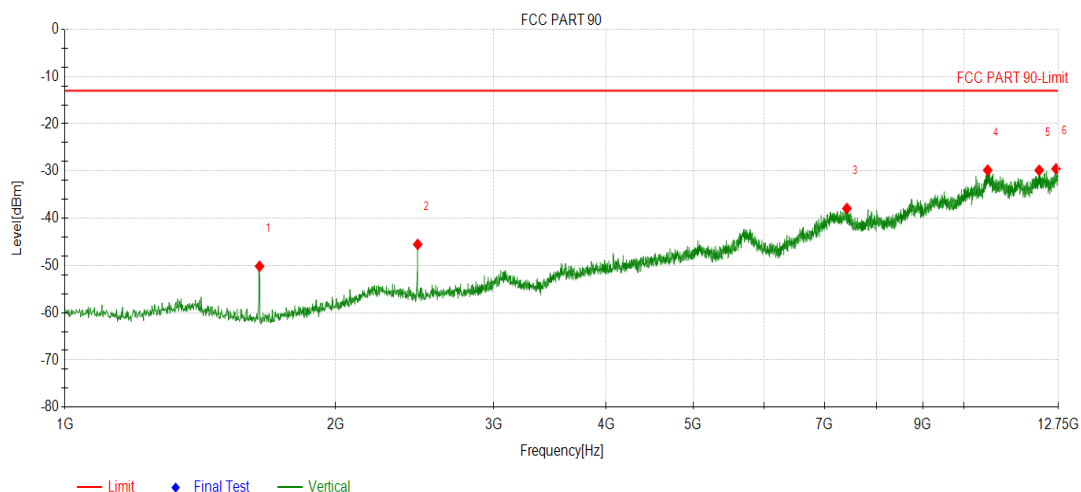


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1640.375	-39.64	-50.63	-13.00	37.63	-10.99	157	134	Horizontal
2	2459.937	-37.18	-43.72	-13.00	30.72	-6.54	68	157	Horizontal
3	5905.625	-50.30	-41.38	-13.00	28.38	8.92	107	143	Horizontal
4	10627.65	-51.11	-32.00	-13.00	19.00	19.11	315	162	Horizontal
5	12077.31	-50.15	-29.19	-13.00	16.19	20.96	248	167	Horizontal
6	12683.90	-51.72	-29.59	-13.00	16.59	22.13	109	159	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 10 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

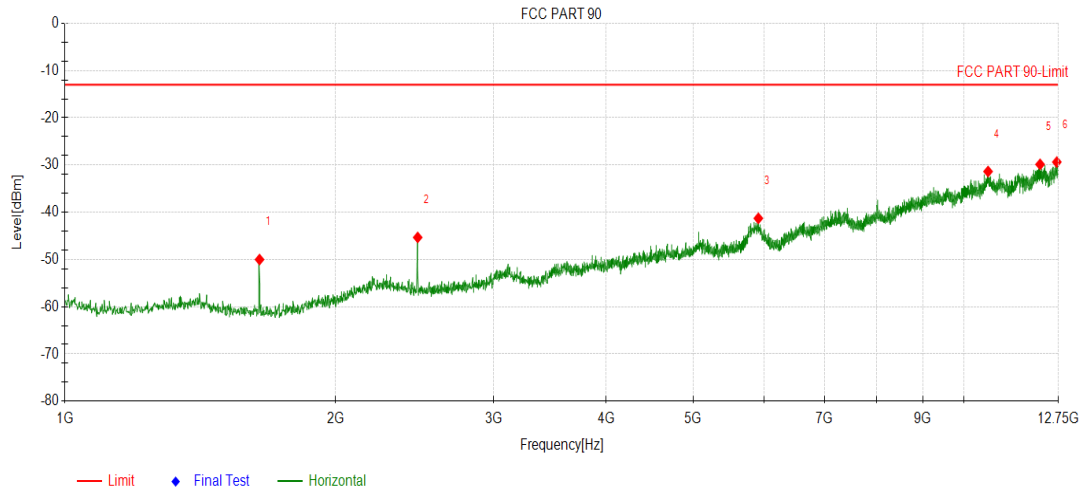


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1646.250	-39.06	-50.16	-13.00	37.16	-11.10	349	134	Vertical
2	2468.750	-39.34	-45.53	-13.00	32.53	-6.19	39	142	Vertical
3	7412.562	-51.09	-37.93	-13.00	24.93	13.16	108	155	Vertical
4	10632.06	-50.45	-29.81	-13.00	16.81	20.64	246	131	Vertical
5	12131.65	-50.88	-29.83	-13.00	16.83	21.05	35	158	Vertical
6	12664.81	-51.49	-29.53	-13.00	16.53	21.96	18	166	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	Smartphone	Product model:	U683CL
Test By:	Mike	Test mode:	BC 10 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1646.250	-39.01	-50.01	-13.00	37.01	-11.00	179	146	Horizontal
2	2468.750	-38.79	-45.33	-13.00	32.33	-6.54	219	132	Horizontal
3	5908.562	-50.15	-41.29	-13.00	28.29	8.86	45	140	Horizontal
4	10642.34	-50.55	-31.37	-13.00	18.37	19.18	139	157	Horizontal
5	12161.03	-51.10	-29.86	-13.00	16.86	21.24	311	161	Horizontal
6	12692.71	-51.54	-29.37	-13.00	16.37	22.17	346	150	Horizontal

Remark:

1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
2. The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

7. Appendix

The below Appendix was detail result tested by SGS-CSTC Standards Technical Services, Co., Ltd.Shenzhen Branch.

(Date of Test: 2019/1/10-2019/1/24).

Appendix	Item
Appendix B.1 - CDMA & EVDO	BC 0/ BC 1/ BC 10