

FCC REPORT

(5G NR)

Applicant: HMD global Oy
Address of Applicant: Bertel Jungin aukio 9, 02600 Espoo, Finland
Equipment Under Test (EUT)
Product Name: Smart Phone
Model No.: TA-1361
Trade mark: NOKIA
FCC ID: 2AJOTTA-1361
Applicable standards: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part 22 Subpart H
FCC CFR Title 47 Part 24 Subpart E
FCC CFR Title 47 Part 27
Date of sample receipt: 19 Aug., 2021
Date of Test: 20 Aug., to 28 Aug., 2021
Date of report issued: 30 Aug., 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 JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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2. Version

Version No.	Date	Description
00	30 Aug., 2021	Original

This application for FCC ID: 2AJOTTA-1361 is reusing data from the application for a variant of device 2AJOTTA-1370. The two devices have identical internal printed circuit board layouts, have a common design and components, where 2AJOTTA-1361 differ only in the depopulation of components for the purposes of removing some frequency bands. Therefore in this report only the radiated spurious emissions was spot check.

Tested by:

Mike Ou
Test Engineer

Date:

30 Aug., 2021

Reviewed by:

Winner Zhang
Project Engineer

Date:

30 Aug., 2021

3. Contents

	Page
1. COVER PAGE	1
2. VERSION.....	2
3. CONTENTS.....	3
4. TEST SUMMARY	4
5. GENERAL INFORMATION	5
5.1 CLIENT INFORMATION.....	5
5.2 GENERAL DESCRIPTION OF E.U.T.....	5
5.3 TEST ENVIRONMENT AND MODE, AND TEST SAMPLES PLANS	10
5.4 DESCRIPTION OF SUPPORT UNITS.....	10
5.5 MEASUREMENT UNCERTAINTY.....	10
5.6 RELATED SUBMITTAL(S) / GRANT (S)	10
5.7 ADDITIONS TO, DEVIATIONS, OR EXCLUSIONS FROM THE METHOD	10
5.8 LABORATORY FACILITY	11
5.9 LABORATORY LOCATION	11
5.10 TEST INSTRUMENTS LIST	11
6. TEST RESULTS.....	12
6.1 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT.....	12
7. TEST SETUP PHOTO.....	18
8. EUT CONSTRUCTIONAL DETAILS	18

4. Test Summary

Test Items	Section in CFR 47	Result
RF Output Power Effective Radiated Power and Effective Isotropic Radiated Power	Part 2.1046 Part 22.913 (a)(5) Part 27.50 (h)(2) Part 27.50 (k)(3)	Refer to the report: SRTC2021-9004(F)-21082803(N)
Peak-to-Average Ratio	Part 22.913 (d) Part 27.50 (k)(4)	Refer to the report: SRTC2021-9004(F)-21082803(N)
Occupied Bandwidth	Part 2.1049	Refer to the report: SRTC2021-9004(F)-21082803(N)
Emission Bandwidth	Part 2.1049	Refer to the report: SRTC2021-9004(F)-21082803(N)
Spurious Emissions at antenna Terminals & Band Edges Compliance	Part 2.1051 Part 22.917(a) Part 27.53(m) Part 27.53(n)	Refer to the report: SRTC2021-9004(F)-21082803(N)
Field strength of spurious radiation	Part 2.1053 Part 22.917(a) Part 27.53(m) Part 27.53(n)	Pass
Frequency stability	Part 22.355 Part 27.54 Part 2.1055(d)(2)	Refer to the report: SRTC2021-9004(F)-21082803(N)
Remark: 1. Pass: The EUT complies with the essential requirements in the standard. 2. The report: SRTC2021-9004(F)-21082803(N), issued by The State Radio_monitoring_center Testing Center.		
Test Method:	ANSI/TIA-603-E-2016 ANSI C63.26-2015	

5. General Information

5.1 Client Information

Applicant:	HMD global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland
Manufacturer:	HMD global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland

5.2 General Description of E.U.T.

Product Name:	Smart Phone
Model No.:	TA-1361
Operation Frequency range:	FDD n5: TX: 824MHz~849MHz RX: 869MHz~894MHz FDD n7: TX: 2500MHz~2570MHz RX: 2620MHz~2690MHz TDD n38: TX: 2570MHz~2620MHz RX: 2570MHz~2620MHz TDD n41: TX: 2496MHz~2690MHz RX: 2496MHz~2690MHz TDD n78: TX: 3450MHz~3550MHz RX: 3450MHz~3550MHz
Modulation type:	DFT_BPSK, DFT_QPSK, DFT_16-QAM, DFT_64QAM, DFT_256-QAM cp_QPSK, cp_16-QAM, cp_64QAM, cp_256-QAM
SCS support:	n5, n7: 15KHz n38, n41, n78: 30KHz
5G NR Network mode:	SA: NR n5, n7, n38, n41, n78 NSA(EN-DC): DC_7A_n5A, DC_7A_n78A
Channel Bandwidths:	n5: 5MHz, 10MHz, 15MHz, 20MHz n7: 5MHz, 10MHz, 15MHz, 20MHz n38: 20MHz, 30MHz, 40MHz n41: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz n78: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz
Antenna type:	Internal Antenna
Antenna gain:	n5: -3.5 dBi(declare by Applicant) n7: -2.0 dBi(declare by Applicant) n38: -2.0 dBi(declare by Applicant) n41: -2.0 dBi(declare by Applicant) n78: -2.0 dBi(declare by Applicant)
Power supply:	Rechargeable Lithium ion Polymer Battery DC3.85V, 4.85Ah
AC adapter:	Adapter 1: Model: TN-050200U3, TN-050200E3, TN-050200C3A Input: AC100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A 10.0W Note: Only the pins are different between different models Adapter 2: Model: TN-050200U3, TN-050200A3, TN-050200C3A Input: AC100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A 10.0W Note: Only the pins are different between different models Adapter 3: Model: AD-010A, AD-010X

	Input: AC100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A 10.0W Note: Only the pins are different between different models
Test Sample Condition:	The applicant provided engineering samples for staying in continuously transmitting for testing.

Operation Frequency List:

Test frequencies for NR operating band n5 and SCS 15 kHz

Band width [MHz]	carrier Bandwidth [PRBs]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	point A [MHz]	absolute FrequencyPoint A [ARFCN]	offsetTo Carrier [Carrier PRBs]	SS block SCS [kHz]	GSCN	absolute FrequencySSB [ARFCN]
5	25	Downlink	Low	871.5	174300	869.25	173850	0	15	2178	174270
			Mid	881.5	176300	860.89	172178	102		2203	176210
			High	891.5	178300	798.53	159706	504		2228	178330
		Uplink	Low	826.5	165300	824.25	164850	0	-	-	-
			Mid	836.5	167300	743.53	148706	504		-	-
			High	846.5	169300	843.17	168634	6		-	-
10	52	Downlink	Low	874	174800	869.32	173864	0	15	2179	174290
			Mid	881.5	176300	858.46	171692	102		2197	175730
			High	889	177800	793.6	158720	504		2218	177410
		Uplink	Low	829	165800	824.32	164864	0	-	-	-
			Mid	836.5	167300	741.1	148220	504		-	-
			High	844	168800	838.24	167648	6		-	-
15	79	Downlink	Low	876.5	175300	869.39	173878	0	15	2177	174250
			Mid	881.5	176300	856.03	171206	102		2191	175250
			High	886.5	177300	788.67	157734	504		2205	176430
		Uplink	Low	831.5	166300	824.39	164878	0	-	-	-
			Mid	836.5	167300	738.67	147734	504		-	-
			High	841.5	168300	833.31	166662	6		-	-
20	106	Downlink	Low	879	175800	869.46	173892	0	15	2178	174270
			Mid	881.5	176300	853.6	170720	102		2185	174770
			High	884	176800	783.74	156748	504		2192	175450
		Uplink	Low	834	166800	824.46	164892	0	-	-	-
			Mid	836.5	167300	736.24	147248	504		-	-
			High	839	167800	828.38	165676	6		-	-

Test frequencies for NR operating band n7 and SCS 15 kHz

Band width [MHz]	carrier Bandwidth [PRBs]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	point A [MHz]	absolute FrequencyPoint A [ARFCN]	offsetTo Carrier [Carrier PRBs]	SS block SCS [kHz]	GSCN	absolute FrequencySSB [ARFCN]
5	25	Downlink	Low	2622.5	524500	2620.25	524050	0	15	6554	524410
			Mid	2655	531000	2634.39	526878	102		6636	530910
			High	2687.5	537500	2594.53	518906	504		6718	537410
		Uplink	Low	2502.5	500500	2500.25	500050	0	-	-	-
			Mid	2535	507000	2442.03	488406	504		-	-
			High	2567.5	513500	2564.17	512834	6		-	-
10	52	Downlink	Low	2625	525000	2620.32	524064	0	15	6555	524430
			Mid	2655	531000	2631.96	526392	102		6630	530430
			High	2685	537000	2589.6	517920	504		6705	536430
		Uplink	Low	2505	501000	2500.32	500064	0	-	-	-
			Mid	2535	507000	2439.6	487920	504		-	-
			High	2565	513000	2559.24	511848	6		-	-
15	79	Downlink	Low	2627.5	525500	2620.39	524078	0	15	6556	524450
			Mid	2655	531000	2629.53	525906	102		6624	529950
			High	2682.5	536500	2584.67	516934	504		6692	535450
		Uplink	Low	2507.5	501500	2500.39	500078	0	-	-	-
			Mid	2535	507000	2437.17	487434	504		-	-
			High	2562.5	512500	2554.31	510862	6		-	-
20	106	Downlink	Low	2630	526000	2620.46	524092	0	15	6557	524650
			Mid	2655	531000	2627.1	525420	102		6618	529470
			High	2680	536000	2579.74	515948	504		6682	534530
		Uplink	Low	2510	502000	2500.46	500092	0	-	-	-
			Mid	2535	507000	2434.74	486948	504		-	-
			High	2560	512000	2549.38	509876	6		-	-

Test frequencies for NR operating band n38 and SCS 30 kHz

Band width [MHz]	carrier Bandwidth [PRBs]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	point A [MHz]	absoluteF requency PointA [ARFCN]	offsetTo Carrier [PRBs]	SS block SCS [kHz]	GSCN	absoluteFre quencySSB [ARFCN]
20	51	Downlink & Uplink	Low	2580	516000	2570.82	514164	0	30	6438	515070
			Mid	2595	519000	2549.1	509820	102		6474	517950
			High	2610	522000	2419.38	483876	504		6513	521070
30	78	Downlink & Uplink	Low	2585	517000	2570.92	514184	0	30	6439	515090
			Mid	2595	519000	2539.2	507840	102		6450	516030
			High	2605	521000	2399.48	479896	504		6461	516970
40	106	Downlink & Uplink	Low	2590	518000	2570.92	514184	0	30	6439	515090
			Mid	2595	519000	2539.2	507840	102		6450	516030
			High	2600	520000	2399.48	479896	504		6461	516970

Test frequencies for NR operating band n41 and SCS 30 kHz

Band width [MHz]	carrier Bandwidth [PRBs]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	point A [MHz]	absoluteF requency Point A [ARFCN]	offsetTo Carrier [PRBs]	SS block SCS [kHz]	GSCN	absoluteF requencySSB [ARFCN]
10	24	Downlink & Uplink	Low	2501.01	500202	2496.69	499338	0	30	6252	500190
			Mid	2592.99	518598	2551.95	510390	102		6483	518670
			High	2685	537000	2499.24	499848	504		6711	536910
15	38	Downlink & Uplink	Low	2503.5	500700	2496.66	499332	0	30	6252	500190
			Mid	2592.99	518598	2549.43	509886	102		6474	517950
			High	2682.48	536496	2494.2	498840	504		6699	535950
20	51	Downlink & Uplink	Low	2506.02	501204	2496.84	499368	0	30	6252	500190
			Mid	2592.99	518598	2547.09	509418	102		6471	517710
			High	2679.99	535998	2489.37	497874	504		6687	534990
40	106	Downlink & Uplink	Low	2516.01	503202	2496.93	499386	0	30	6252	500190
			Mid	2592.99	518598	2537.19	507438	102		6444	515550
			High	2670	534000	2469.48	493896	504		6636	530910
50	133	Downlink & Uplink	Low	2521.02	504204	2497.08	499416	0	30	6252	500190
			Mid	2592.99	518598	2532.33	506466	102		6432	514590
			High	2664.99	532998	2459.61	491922	504		6612	528990
60	162	Downlink & Uplink	Low	2526	505200	2496.84	499368	0	30	6252	500190
			Mid	2592.99	518598	2527.11	505422	102		6420	513630
			High	2659.98	531996	2449.38	489876	504		6588	527070
80	217	Downlink & Uplink	Low	2536.02	507204	2496.96	499392	0	30	6252	500190
			Mid	2592.99	518598	2517.21	503442	102		6396	511710
			High	2649.99	529998	2429.49	485898	504		6537	522990
90	245	Downlink & Uplink	Low	2541	508200	2496.9	499380	0	30	6252	500190
			Mid	2592.99	518598	2512.17	502434	102		6381	510510
			High	2644.98	528996	2419.44	483888	504		6513	521070
100	273	Downlink & Uplink	Low	2546.01	509202	2496.87	499374	0	30	6252	500190
			Mid	2592.99	518598	2507.13	501426	102		6369	509550
			High	2640	528000	2409.42	481884	504		6486	518910

Test frequencies for NR operating band n78 and SCS 30 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
20	Downlink & Uplink	Low	3459.99	630666	30
		Mid	3500.01	633334	
		High	3540	636000	
30	Downlink & Uplink	Low	3465	631000	30
		Mid	3500.01	633334	
		High	3534.99	635666	
40	Downlink & Uplink	Low	3470.01	631334	30
		Mid	3500.01	633334	
		High	3530.01	635334	
50	Downlink & Uplink	Low	3474.99	631666	30
		Mid	3500.01	633334	
		High	3525	635000	
60	Downlink & Uplink	Low	3480	632000	30
		Mid	3500.01	633334	
		High	3519.99	634666	
70	Downlink & Uplink	Low	3484.995	632333	30
		Mid	3500.01	633334	
		High	3514.995	634333	
80	Downlink & Uplink	Low	3489.99	632666	30
		Mid	3500.01	633334	
		High	3510	634000	
90	Downlink & Uplink	Low	3495	633000	30
		Mid	3500.01	633334	
		High	3504.99	633666	
100	Downlink & Uplink	Low	\	\	30
		Mid	3500.01	633334	
		High	\	\	

5.3 Test environment and mode, and test samples plans

Operating Environment:	
Temperature:	Normal: 15°C ~ 35°C, Extreme: -30°C ~ +50°C
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.85Vdc, Extreme: Low 3.4Vdc, High 4.4Vdc
Test mode:	
TM1	DFT-s-Pi/2-BPSK modulation
TM2	DFT-s-QPSK modulation
TM3	DFT-s-16QAM modulation
TM4	DFT-s-64QAM modulation
TM5	DFT-s-256QAM modulation
TM6	CP-QPSK modulation
TM7	CP-16QAM modulation
TM8	CP-64QAM modulation
TM9	CP-256QAM modulation
Remark: 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. Just the worst case position (H mode) shown in report.	

5.4 Description of Support Units

Test Equipment	Manufacturer	Model No.	Serial No.
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY60192444

5.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Radiated Emission (9kHz ~ 30MHz) (3m SAC)	±3.13 dB
Radiated Emission (30MHz ~ 1000MHz) (3m SAC)	±4.45 dB
Radiated Emission (1GHz ~ 18GHz) (3m SAC)	±5.34 dB
Radiated Emission (18GHz ~ 40GHz) (3m SAC)	±5.34 dB
Note: The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.26-2015. All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.	

5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.
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5.7 Additions to, deviations, or exclusions from the method

No

5.8 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 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.

● **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>

5.9 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

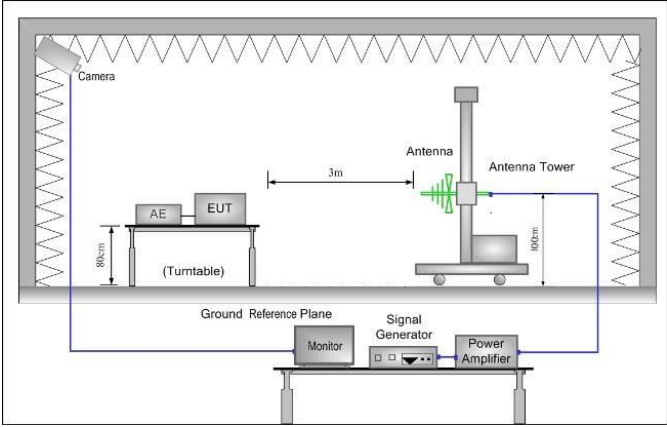
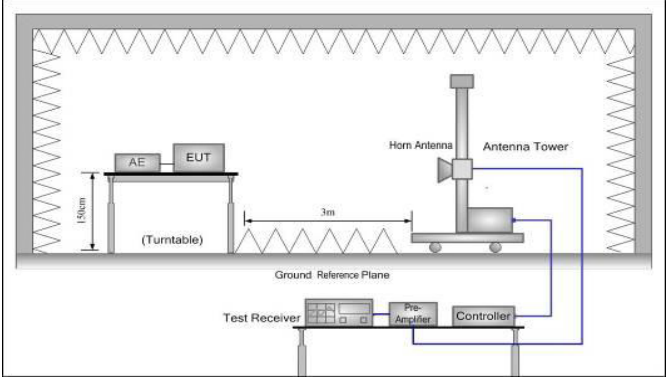
Email: info-JYTee@lets.com, Website: <http://www.ccis-cb.com>

5.10 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Management Number	Cal.Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	SAEMC	9m*6m*6m	WXJ001-1	01-19-2021	01-18-2024
BiConiLog Antenna	SCHWARZBECK	VULB9163	WXJ002	03-03-2021	03-02-2022
Biconical Antenna	SCHWARZBECK	VUBA9117	WXJ002-1	06-20-2021	06-19-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	WXJ002-2	03-03-2021	03-02-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	WXJ002-3	06-18-2021	06-17-2022
Loop Antenna	SCHWARZBECK	FMZB 1519 B	WXJ002-4	03-07-2021	03-06-2022
Pre-amplifier (30MHz ~ 1GHz)	HP	8447D	WXG001-2	03-07-2021	03-06-2022
Pre-amplifier (1GHz ~ 18GHz)	SKET	LNPA_0118G-50	WXG001-3	03-07-2021	03-06-2022
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXG001-9	03-07-2021	03-06-2022
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	WXJ004	03-03-2021	03-02-2022
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ004-2	11-27-2020	11-26-2021
Signal Generator	Agilent	N5173B	WXJ006-7	03-25-2021	03-24-2022
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY60192444	11-27-2020	11-26-2021
Coaxial Cable (30MHz ~ 1GHz)	JYT	JYT3M-1G-NN-8M	WXG001-4	03-07-2021	03-06-2022
Coaxial Cable (1GHz ~ 18GHz)	JYT	JYT3M-18G-NN-8M	WXG001-5	03-07-2021	03-06-2022
Coaxial Cable (9kHz ~ 30MHz)	JYT	JYT3M-1G-BB-5M	WXG001-6	03-07-2021	03-06-2022
Coaxial Cable (1GHz ~ 18GHz)	JYT	JYT3M-40G-SS-8M	WXG001-7	03-07-2021	03-06-2022
RF Switch Unit	Tonscend	JS0806-F	WXJ089	N/A	
Test Software	Tonscend	TS+	Version: 3.0.0.1		

6. Test results

6.1 Field strength of spurious radiation measurement

Test Requirement:	Part 2.1053, Part 22.917(a), Part 27.53(m), Part 27.53(n)
Limit:	5G NR n5, n78: -13dBm 5G NR n7, n38, n41: For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz.
Test setup:	Below 1GHz  Above 1GHz 
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. 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. $ERP / EIRP = S.G. \text{ output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed
Remark:	Pre-Scan all modulation and all Bandwidth, And the report only reflects the worst mode

Measurement Data:

N5_TM1					
Test Channel = High Channel					
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1324.0405	20.77	-50.57	-13.00	37.57	Horizontal
2738.9674	20.95	-47.01	-13.00	34.01	Horizontal
4145.3073	51.36	-64.55	-13.00	51.55	Horizontal
8833.0417	48.31	-53.01	-13.00	40.01	Horizontal
14543.0772	45.56	-45.34	-13.00	32.34	Horizontal
16406.9203	48.53	-41.96	-13.00	28.96	Horizontal
1460.8076	20.48	-50.30	-13.00	37.30	Vertical
2342.4178	20.85	-47.97	-13.00	34.97	Vertical
4366.5683	52.00	-63.38	-13.00	50.38	Vertical
7378.7189	49.61	-55.19	-13.00	42.19	Vertical
11525.6763	46.27	-49.04	-13.00	36.04	Vertical
16408.4204	48.56	-41.96	-13.00	28.96	Vertical
Remark: 1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. 2. Quoting the FCC ID: 2AJOTTA-1370 report, it is found that this channel is the worst mode, retest the data.					

N7_TM1					
Test Channel = Middle Channel					
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1639.0799	20.42	-49.82	-13.00	36.82	Horizontal
5051.3526	56.35	-56.57	-13.00	43.57	Horizontal
7576.7288	58.83	-45.10	-13.00	32.10	Horizontal
10687.8844	47.97	-49.68	-13.00	36.68	Horizontal
14030.8015	46.90	-44.90	-13.00	31.90	Horizontal
17997.7499	50.31	-43.19	-13.00	30.19	Horizontal
1697.0871	20.61	-49.32	-13.00	36.32	Vertical
4139.3070	51.98	-64.04	-13.00	51.04	Vertical
7576.7288	55.22	-48.71	-13.00	35.71	Vertical
10021.8511	48.46	-50.27	-13.00	37.27	Vertical
15034.3517	46.72	-43.65	-13.00	30.65	Vertical
17998.4999	50.28	-43.23	-13.00	30.23	Vertical
Remark: 1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. 2. Quoting the FCC ID: 2AJOTTA-1370 report, it is found that this channel is the worst mode, retest the data.					

N38_TM1					
Test Channel = High Channel					
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1596.5746	20.69	-49.88	-25.00	24.88	Horizontal
5202.1101	52.22	-59.41	-25.00	34.41	Horizontal
7802.4901	60.05	-43.32	-25.00	18.32	Horizontal
10617.3809	46.84	-50.49	-25.00	25.49	Horizontal
14593.3297	44.83	-46.71	-25.00	21.71	Horizontal
16419.6710	47.45	-43.28	-25.00	18.28	Horizontal
1452.0565	20.77	-50.12	-25.00	25.12	Vertical
4520.3260	51.49	-63.00	-25.00	38.00	Vertical
7002.9501	48.76	-57.21	-25.00	32.21	Vertical
10033.1017	46.86	-51.79	-25.00	26.79	Vertical
13355.7678	45.41	-46.84	-25.00	21.84	Vertical
16396.4198	46.47	-43.96	-25.00	18.96	Vertical
Remark: 1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. 2. Quoting the FCC ID: 2AJOTTA-1370 report, it is found that this channel is the worst mode, retest the data.					

N41_TM1					
Test Channel = Middle Channel					
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1676.3345	21.08	-49.08	-25.00	24.08	Horizontal
4380.8190	52.67	-62.59	-25.00	37.59	Horizontal
7632.2316	55.72	-48.08	-25.00	23.08	Horizontal
11822.6911	47.16	-47.35	-25.00	22.35	Horizontal
16013.1507	46.72	-43.57	-25.00	18.57	Horizontal
17991.7496	50.10	-43.25	-25.00	18.25	Horizontal
1526.5658	20.62	-49.76	-25.00	24.76	Vertical
1526.5658	20.62	-49.76	-25.00	24.76	Vertical
4215.0608	52.01	-63.67	-25.00	38.67	Vertical
7632.2316	57.06	-46.74	-25.00	21.74	Vertical
11314.1657	48.16	-47.72	-25.00	22.72	Vertical
16424.1712	48.57	-42.24	-25.00	17.24	Vertical
Remark: 1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. 2. Quoting the FCC ID: 2AJOTTA-1370 report, it is found that this channel is the worst mode, retest the data.					

N78_TM1					
Test Channel = Middle Channel					
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1679.0340	21.69	-48.34	-13.00	35.34	Horizontal
4809.9405	20.12	-41.99	-13.00	28.99	Horizontal
7475.7738	49.19	-55.04	-13.00	42.04	Horizontal
9345.3173	47.55	-52.37	-13.00	39.37	Horizontal
11930.4465	45.62	-48.39	-13.00	35.39	Horizontal
16912.0456	46.29	-44.41	-13.00	31.41	Horizontal
1466.7733	21.72	-48.98	-13.00	35.98	Vertical
2319.5660	21.93	-46.88	-13.00	33.88	Vertical
5115.7058	21.09	-40.42	-13.00	27.42	Vertical
9051.0526	47.66	-52.54	-13.00	39.54	Vertical
12955.1478	45.28	-46.95	-13.00	33.95	Vertical
17323.4662	47.75	-44.46	-13.00	31.46	Vertical
Remark: 1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. 2. Quoting the FCC ID: 2AJOTTA-1370 report, it is found that this channel is the worst mode, retest the data.					

DC_7A_n5A_TM1					
Test Channel = Low Channel					
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1556.5696	20.83	-49.84	-13.00	36.84	Horizontal
4413.0707	51.34	-63.65	-13.00	50.65	Horizontal
6882.9441	49.36	-57.45	-13.00	44.45	Horizontal
9376.8188	46.80	-53.07	-13.00	40.07	Horizontal
13362.5181	45.18	-47.01	-13.00	34.01	Horizontal
16395.6698	46.58	-43.87	-13.00	30.87	Horizontal
1528.3160	20.37	-49.94	-13.00	36.94	Vertical
4240.5620	51.26	-64.33	-13.00	51.33	Vertical
5622.1311	49.92	-60.05	-13.00	47.05	Vertical
6966.9483	48.50	-57.59	-13.00	44.59	Vertical
11909.6955	45.10	-48.43	-13.00	35.43	Vertical
16383.6692	47.27	-43.43	-13.00	30.43	Vertical
Remark: 1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. 2. Quoting the FCC ID: 2AJOTTA-1370 report, it is found that this channel is the worst mode, retest the data.					

DC 7A n78A TM1					
Test Channel = Middle Channel					
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1523.5262	22.16	-48.34	-13.00	35.34	Horizontal
4792.6896	20.35	-41.72	-13.00	28.72	Horizontal
7937.2469	48.44	-54.88	-13.00	41.88	Horizontal
10020.2010	47.67	-51.18	-13.00	38.18	Horizontal
15127.2064	45.24	-46.28	-13.00	33.28	Horizontal
17361.4181	47.46	-44.44	-13.00	31.44	Horizontal
1371.7686	21.55	-49.45	-13.00	36.45	Vertical
2137.3069	21.61	-47.49	-13.00	34.49	Vertical
4408.6704	20.27	-42.94	-13.00	29.94	Vertical
6866.4433	50.36	-55.27	-13.00	42.27	Vertical
9032.9016	47.66	-52.84	-13.00	39.84	Vertical
16398.8699	47.11	-44.29	-13.00	31.29	Vertical
Remark: 1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. 2. Quoting the FCC ID: 2AJOTTA-1370 report, it is found that this channel is the worst mode, retest the data.					

7 Test Setup Photo

Reference to the test setup photos: PCE-Test Setup Photo

8 EUT Constructional Details

Reference to the External photo and Internal photo.

-----End of report-----