





# TEST REPORT FOR LTE TESTING

Report No.: PBJ-NQN2412130113RF01

Product Name: Industrial Cellular Router

Product Model: IR624 Series Model: IR654, IR694

HVIN:NRQ3-WLAN-S Brand Name: inhand

Applicant: Beijing InHand Networks Technology Co., Ltd.

Manufacturer: Beijing InHand Networks Technology Co., Ltd.

Specification: FCC Part 2, Part 24E, Part 22H, Part 27, Part 90S,

Part 96, Part 96.47(2023)

FCC ID: 2AANY-IR624

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
Simon Wang	luke lu
Date: Dec. 02, 2024	Date: Dec. 02, 2024

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## 1. GENERAL INFORMATION

## 1.1 Notes of the test report

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## 1.2 Information about the testing laboratory

Company:	BV 7Layers Communications Technology (Shenzhen) Co., Ltd
	Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang
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#### 1.3 Applicant's details

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#### 1.4 Manufacturer's details

Company:	Beijing InHand Networks Technology Co., Ltd.				
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## 1.5 Test Environment

Date of Receipt of test sample:	2024/11/11
Testing Start Date:	2024/11/12
Testing End Date:	2024/12/6

Environmental Data:	Temperature (°C)	Humidity (%)	
Ambient	25	40	
Maximum Extreme	70		
Minimum Extreme	-20		

Normal Supply Voltage (V d.c.):	12
Maximum Extreme Supply Voltage (V d.c.):	36
Minimum Extreme Supply Voltage (V d.c.):	9

# 2. DESCRIPTION OF THE EQUIPMENT UNDER TEST

# 2.1 Final Equipment Build Status

Frequency Range:	LTE Band 2: Tx:1850~1910MHz Rx:1930~1990MHz LTE Band 4: Tx: 1710~1755MHz Rx: 2110~2155MHz LTE Band 5: Tx: 824~849MHz Rx: 869~894MHz LTE Band 7: Tx: 2500~2570MHz Rx: 2620~2690MHz LTE Band 12: Tx:699~716MHz Rx: 729~746MHz LTE Band 13: Tx: 777~787MHz Rx: 746~756MHz LTE Band 14: Tx: 788 ~798 MHz Rx: 758 ~768 MHz LTE Band 17: Tx: 704 ~ 716 MHz Rx: 734 ~ 746 MHz LTE Band 25: Tx: 1850 ~ 1915 MHz Rx: 1930 ~ 1995 MHz LTE Band 26: Tx: 814~849MHz Rx: 859~894MHz LTE Band 30: Tx: 2305 ~ 2315 MHz Rx: 2350 ~ 2360 MHz LTE Band 38: Tx:2570~2620MHz Rx:2570~2620MHz LTE Band 41: Tx: 2496~2690MHz Rx: 2496~2690MHz LTE Band 42: Tx: 3400 ~ 3600 MHz Rx: 3400 ~ 3600 MHz LTE Band 43: Tx: 3600 ~ 3800 MHz Rx: 3600 ~ 3800 MHz LTE Band 48: Tx:3550~3700MHz Rx: 2110~2200MHz LTE Band 66: Tx: 1710~1780MHz Rx: 2110~2200MHz LTE Band 71: Tx: 663 ~698 MHz Rx: 617 ~652 MHz
Frequency Range:(CA)	ULCA:CA_2C, CA_5B, CA_7C, CA_38C, CA_41C, CA_42C, CA_43C, CA_48C, CA_66B, CA_66C (See note1)
Modulation Type(Uplink):	QPSK/16QAM/64QAM/256QAM
Antenna Type:	External Antenna

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	LTE B2: 0.8dBi	LTE B4:0.0dBi(Max)	LTE B5:-2.5dBi				
Antenna Gain:	LTE B7:0.4dBi(Max)	LTE B12:-0.7dBi	LTE B13:-0.7dBi (Max)				
	LTE B14: :-0.7dBi (Max)	LTE B17: -0.7dBi (Max)	LTE B25:0.8dBi				
	LTE B26:-2.5dBi	LTE B30:-0.6dBi (Max)	LTE B38:-0.1dBi				
	LTE B41:-0.1dBi	LTE B42:-0.7dBi	LTE B43:-0.7dBi				
	LTE B48:-0.7dBi	LTE B66:0dBi(Max)	LTE B71:-3.5dBi				
	ERP = EIRP(Power+Gain) - 2.15 (dB)						
Power Supply:	DC supply						
Software Revision:	V3.0						
Hardware Revision:	V1.1						
IMEI:	866407060011582						

Note1: Supported frequency inter-bands

CA 2A-4A	CA 2A-5A	CA 2A-7A	2A-12A
CA 2A-13A	CA 2A-30A	CA 2A-66A	CA 4A-5A
CA 4A-7A	CA 4A-12A	CA 4A-13A	CA 4A-30A
CA 5A-7A	CA 5A-30A	CA 5A-66A	CA 12A-30A
CA 12A-66A	CA 13A-66A	CA 14A-30A	

Note2: Test Model No.: IR624 Series Model: IR654, IR694

These models are the same in these: appearance, PCB layout and basic software function; The only difference is that the products are used in different markets.

#### 2.2 Support Equipment

The following support equipment was used to exercise the DUT during testing:N/A

**Note3:** This product uses the module model RM520N-GL and supports LTE frequency bands 2/4/5/7/12/13/14/17/25/26/30/38/41/42/43/48/66/71. Therefore, for this product, we referred to the test data reported by the RM520N-GL module and revaluated the spectrum of radiated emissions and EIRP.

For module RM520N-GL: Report No.: SEWM2304000122RG01

FCC ID: XMR2023RM520NGL

**Note4:** The manufacturer asks to reverify the manufacturer B48, Therefore, we tested the B48 frequency band of the entire machine, and the data for other frequency bands came from the module report. But Part96.47 refers to module data.



## 2.3 Test Frequencies for CA Band

## Reference test frequencies for LTE operating band CA\_2C

Table 4.3.1.1.2A-2: Test frequencies for CA\_2C

Range	CC-Combo /					CC2 Note1					
·		BW [RB]	NuL	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	BW [RB]	NuL	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]
Low	25+100	25	18633	1853.3	633	1933.3	100	18750	1865	750	1945
		100	18700	1860	700	1940	25	18817	1871.7	817	1951.7
	50+75	50	18653	1855.3	653	1935.3	75	18773	1867.3	773	1947.3
		75	18675	1857.5	675	1937.5	50	18795	1869.5	795	1949.5
	50+100	50	18655	1855.5	655	1935.5	100	18799	1869.9	799	1949.9
		100	18700	1860	700	1940	50	18844	1874.4	844	1954.4
	75+75	75	18675	1857.5	675	1937.5	75	18825	1872.5	825	1952.5
	75+100	75	18678	1857.8	678	1937.8	100	18849	1874.9	849	1954.9
		100	18700	1860	700	1940	75	18871	1877.1	871	1957.1
	100+100	100	18700	1860	700	1940	100	18898	1879.8	898	1959.8
Mid	25+100	25	18808	1870.8	808	1950.8	100	18925	1882.5	925	1962.5
		100	18875	1877.5	875	1957.5	25	18992	1889.2	992	1969.2
	50+75	50	18829	1872.9	829	1952.9	75	18949	1884.9	949	1964.9
		75	18851	1875.1	851	1955.1	50	18971	1887.1	971	1967.1
	50+100	50	18806	1870.6	806	1950.6	100	18950	1885	950	1965
		100	18851	1875.1	851	1955.1	50	18995	1889.5	995	1969.5
	75+75	75	18825	1872.5	825	1952.5	75	18975	1887.5	975	1967.5
	75+100	75	18803	1870.3	803	1950.3	100	18974	1887.4	974	1967.4
		100	18826	1872.6	826	1952.6	75	18997	1889.7	997	1969.7
	100+100	100	18801	1870.1	801	1950.1	100	18999	1889.9	999	1969.9
High	25+100	25	18983	1888.3	983	1968.3	100	19100	1900	1100	1980
		100	19050	1895	1050	1975	25	19167	1906.7	1167	1986.7
	50+75	50	19005	1890.5	1005	1970.5	75	19125	1902.5	1125	1982.5
		75	19027	1892.7	1027	1972.7	50	19147	1904.7	1147	1984.7
	50+100	50	18956	1885.6	956	1965.6	100	19100	1900	1100	1980
		100	19001	1890.1	1001	1970.1	50	19145	1904.5	1145	1984.5
	75+75	75	18975	1887.5	975	1967.5	75	19125	1902.5	1125	1982.5
	75+100	75	18929	1882.9	929	1962.9	100	19100	1900	1100	1980
		100	18951	1885.1	951	1965.1	75	19122	1902.2	1122	1982.2
	100+100	100	18902	1880.2	902	1960.2	100	19100	1900	1100	1980
Note 1:	Carriers in inc	reasing f	requency	order.						·	



## Reference test frequencies for LTE operating band CA\_5B

Table 4.3.1.1.5A-1: Test frequencies for CA\_5B

Range	CC-Combo / NRB_agg [RB]		CC1 Note1					CC2 Note1					
		BW [RB]	NuL	ful [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	BW [RB]	NuL	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]		
Low	15+25	15	20416	825.6	2416	870.6	25	20455	829.5	2455	874.5		
		25	20425	826.5	2425	871.5	15	20464	830.4	2464	875.4		
	25+50	25	20428	826.8	2428	871.8	50	20500	834	2500	879		
	50+25	50	20450	829	2450	874	25	20522	836.2	2522	881.2		
	50+50	50	20450	829	2450	874	50	20549	838.9	2549	883.9		
Mid	15+25	15	20501	834.1	2501	879.1	25	20540	838.0	2540	883.0		
		25	20510	835.0	2510	880.0	15	20549	838.9	2549	883.9		
	25+50	25	20478	831.8	2478	876.8	50	20550	839	2550	884		
	50+25	50	20500	834	2500	879	25	20572	841.2	2572	886.2		
	50+50	50	20476	831.6	2476	876.6	50	20575	841.5	2575	886.5		
High	15+25	15	20586	842.6	2586	887.6	25	20625	846.5	2625	891.5		
		25	20595	843.5	2595	888.5	15	20634	847.4	2634	892.4		
	25+50	25	20528	836.8	2528	881.8	50	20600	844	2600	889		
	50+25	50	20550	839	2550	884	25	20622	846.2	2622	891.2		
	50+50	50	20501	834.1	2501	879.1	50	20600	844	2600	889		

## Reference test frequencies for LTE operating band CA\_7C

Table 4.3.1.1.7A-1: Test frequencies for CA\_7C

Range	CC-Combo / N <sub>RB_agg</sub> [RB]		CC1 Note1					CC2 Note1				
	5.5355-51	BW [RB]	NuL	fuL [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	BW [RB]	NuL	fuL [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	
Low	50+100	50	20805	2505.5	2805	2625.5	100	20949	2519.9	2949	2639.9	
		100	20850	2510	2850	2630	50	20994	2524.4	2994	2644.4	
	75+50	75	20825	2507.5	2825	2627.5	50	20945	2519.5	2945	2639.5	
	75+75	75	20825	2507.5	2825	2627.5	75	20975	2522.5	2975	2642.5	
	75+100	75	20828	2507.8	2828	2627.8	100	20999	2524.9	2999	2644.9	
		100	20850	2510	2850	2630	75	21021	2527.1	3021	2647.1	
	100+100	100	20850	2510	2850	2630	100	21048	2529.8	3048	2649.8	
Mid	50+100	50	21006	2525.6	3006	2645.6	100	21150	2540	3150	2660	
		100	21051	2530.1	3051	2650.1	50	21195	2544.5	3195	2664.5	
	75+50	75	21051	2530.1	3051	2650.1	50	21171	2542.1	3171	2662.1	
	75+75	75	21025	2527.5	3025	2647.5	75	21175	2542.5	3175	2662.5	
	75+100	75	21003	2525.3	3003	2645.3	100	21174	2542.4	3174	2662.4	
		100	21026	2527.6	3026	2647.6	75	21197	2544.7	3197	2664.7	
	100+100	100	21001	2525.1	3001	2645.1	100	21199	2544.9	3199	2664.9	
High	50+100	50	21206	2545.6	3206	2665.6	100	21350	2560	3350	2680	
68		100	21251	2550.1	3251	2670.1	50	21395	2564.5	3395	2684.5	
	75+50	75	21277	2552.7	3277	2672.7	50	21397	2564.7	3397	2684.7	
	75+75	75	21225	2547.5	3225	2667.5	75	21375	2562.5	3375	2682.5	
	75+100	75	21179	2542.9	3179	2662.9	100	21350	2560	3350	2680	
		100	21201	2545.1	3201	2665.1	75	21372	2562.2	3372	2682.2	
	100+100	100	21152	2540.2	3152	2660.2	100	21350	2560	3350	2680	



## Reference test frequencies for LTE operating band CA\_38C

# Table 4.3.1.2.6A-1: Test frequencies for CA\_38C

Range	CC- Combo / NRB_agg [RB]		CC1 Note1			CC2 Note1	
		BW [RB]	N <sub>UL/DL</sub>	ful/DL [MHz]	BW [RB]	N <sub>UL/DL</sub>	ful/bl [MHz]
Low	75+75	75	37825	2577.5	75	37975	2592.5
	100+100	100	37850	2580	100	38048	2599.8
Mid	75+75	75	37925	2587.5	75	38075	2602.5
	100+100	100	37901	2585.1	100	38099	2604.9
High	75+75	75	38025	2597.5	75	38175	2612.5
140000 <del>0</del> 000	100+100	100	37952	2590.2	100	38150	2610

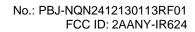
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## Reference test frequencies for LTE operating band CA\_41C

Table 4.3.1.2.9A-1: Test frequencies for CA\_41C

Range	CC- Combo / N <sub>RB_agg</sub> [RB]		CC1 Note1	<u> </u>	CC2 Note1				
		BW [RB]	N <sub>UL/DL</sub>	ful/DL [MHz]	BW [RB]	N <sub>UL/DL</sub>	ful/DL [MHz]		
Low	25+100	25	39683	2499.3	100	39800	2511		
		100	39750	2506	25	39867	2517.7		
	50+75	50	39703	2501.3	75	39823	2513.3		
		75	39725	2503.5	50	39845	2515.5		
	50+100	50	39705	2501.5	100	39849	2515.9		
		100	39750	2506	50	39894	2520.4		
	75+75	75	39725	2503.5	75	39875	2518.5		
	75+100	75	39728	2503.8	100	39899	2520.9		
	20200 20200 2	100	39750	2506	75	39921	2523.1		
	100+100	100	39750	2506	100	39948	2525.8		
Mid	25+100	25	40528	2583.8	100	40645	2595.5		
		100	40595	2590.5	25	40712	2602.2		
	50+75	50	40549	2585.9	75	40669	2597.9		
		75	40571	2588.1	50	40691	2600.1		
	50+100	50	40526	2583.6	100	40670	2598.0		
	SUSTAGE DISEASE N	100	40571	2588.1	50	40715	2602.5		
	75+75	75	40545	2585.5	75	40695	2600.5		
	75+100	75	40523	2583.3	100	40694	2600.4		
		100	40546	2585.6	75	40717	2602.7		
	100+100	100	40521	2583.1	100	40719	2602.9		
High	25+100	25	41373	2668.3	100	41490	2680		
955		100	41440	2675	25	41557	2686.7		
	50+75	50	41395	2670.5	75	41515	2682.5		
		75	41417	2672.7	50	41537	2684.7		
	50+100	50	41346	2665.6	100	41490	2680		
		100	41391	2670.1	50	41535	2684.5		
	75+75	75	41365	2667.5	75	41515	2682.5		
	75+100	75	41319	2662.9	100	41490	2680		
		100	41341	2665.1	75	41512	2682.2		
	100+100	100	41292	2660.2	100	41490	2680		





# Reference test frequencies for LTE operating band CA\_42C(3450-3550):

Range	CC- Combo /		CC1 Note1		CC2 Note1			
Kange	NRB_agg [RB]	BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]	BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]	
	05.400	25	42123	3453.3	100	42240	3465	
	25+100	100	42190	3460	25	42307	3471.7	
	50.400	50	42145	3455.5	100	42289	3469.9	
Low	50+100	100	42190	3460	50	42334	3474.4	
		75	42168	3457.8	100	42339	3474.9	
	75+100	100	42190	3460	75	42361	3477.1	
	100+100	100	42190	3460	100	42388	3479.8	
	25+100	25	42498	3490.8	100	42615	3502.5	
		100	42565	3497.5	25	42682	3509.2	
	50+100	50	42496	3490.6	100	42640	3505	
Mid		100	42541	3495.1	50	42685	3509.5	
		75	42493	3490.3	100	42664	3507.4	
	75+100	100	42516	3492.6	75	42687	3509.7	
	100+100	100	42491	3490.1	100	42689	3509.9	
		25	42873	3528.3	100	42990	3540	
	25+100	100	42940	3535	25	43057	3546.7	
		50	42846	3525.6	100	42990	3540	
High	50+100	100	42891	3530.1	50	43035	3544.5	
		75	42819	3522.9	100	42990	3540	
	75+100	100	42841	3525.1	75	43012	3542.2	
	100+100	100	42792	3520.2	100	42990	3540	
Note 1:	Carriers in incr	easing freque	ncy order.					



# Reference test frequencies for LTE operating band CA\_43C(3700-3800):

	CC-Combo /		CC1			CC2	
Range	NRB_agg		Note1			Note1	
	[RB]						
		BW	N	f <sub>UL/DL</sub>	BW	N	f <sub>UL/DL</sub>
		[RB]	N <sub>UL/DL</sub>	[MHz]	[RB]	N <sub>UL/DL</sub>	[MHz]
	25+100	25	44623	3703.3	100	44740	3715
		100	44690	3710	25	44807	3721.7
	50+100	50	44645	3705.5	100	44789	3719.9
Low	50+100	100	44690	3710	50	44834	3724.4
	75+100	75	44668	3707.8	100	44839	3724.9
		100	44690	3710	75	44861	3727.1
	100+100	100	44690	3710	100	44888	3729.8
	25+100	25	44998	3740.8	100	45115	3752.5
		100	45065	3747.5	25	45182	3759.2
	50.400	50	44996	3740.6	100	45140	3755
Mid	50+100	100	45041	3745.1	50	45185	3759.5
	75+100	75	44993	3740.3	100	45164	3757.4
		100	45016	3742.6	75	45187	3759.7
	100+100	100	44991	3740.1	100	45189	3759.9
	25+100	25	45373	3778.3	100	45490	3790
		100	45440	3785	25	45557	3796.7
	50.400	50	45346	3775.6	100	45490	3790
High	50+100	100	45391	3780.1	50	45535	3794.5
	75+100	75	45319	3772.9	100	45490	3790
		100	45341	3775.1	75	45512	3792.2
	100+100	100	45292	3770.2	100	45490	3790
Note 1: Car	riers in increasin	a frequency o	rder			•	



# Reference test frequencies for LTE operating band CA\_48C(3550-3700):

D	CC-Combo/		CC1 Note1			CC2 Note1	
Range	NRB_agg [RB]	BW [RB]	NUL/DL	fUL/DL [MHz]	BW [RB]	NUL/DL	fUL/DL [MHz]
	25.400	25	55273	3553.3	100	55390	3565
	25+100	100	55340	3560	25	55457	3571.7
	50,100	50	55295	3555.5	100	55439	3569.9
Low	50+100	100	55340	3560	50	55484	3574.4
	75+100	75	55318	3557.8	100	55489	3574.9
	75+100	100	55340	3560	75	55511	3577.1
	100+100	100	55340	3560	100	55538	3579.8
	25,100	25	55898	3615.8	100	56015	3627.5
	25+100	100	55965	3622.5	25	56082	3634.2
	50+100	50	55896	3615.6	100	56040	3630
Mid		100	55941	3620.1	50	56085	3634.5
	75+100	75	55893	3615.3	100	56064	3632.4
	75+100	100	55916	3617.6	75	56087	3634.7
	100+100	100	55891	3615.1	100	56089	3634.9
	25+100	25	56523	3678.3	100	56640	3690
	25+100	100	56590	3685	25	56707	3696.7
	50+100	50	56496	3675.6	100	56640	3690
High	50+100	100	56541	3680.1	50	56685	3694.5
	75+100	75	56469	3672.9	100	56640	3690
	75+100	100	56491	3675.1	75	56662	3692.2
	100+100	100	56442	3670.2	100	56640	3690



## Reference test frequencies for LTE operating band CA\_66B

Table 4.3.1.1.66A-1: Test frequencies for CA\_66B

Range	CC-Combo / NRB_agg [RB]	CC1 Note1							CC2 Note1		
		BW [RB]	NuL	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	BW [RB]	NuL	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]
	25+25	25	131997	1712.5	66461	2112.5	25	132045	1717.3	66509	2117.3
	25+50	25	132000	1712.8	66464	2112.8	50	132072	1720	66536	2120
Low	]	50	132022	1715	66486	2115	25	132094	1722.2	66558	2122.2
Low	25+75	25	132002	1713	66466	2113	75	132095	1722.3	66559	2122.3
	]	75	132047	1717.5	66511	2117.5	25	132140	1726.8	66604	2126.8
	50+50	50	132022	1715	66486	2115	50	132121	1724.9	66585	2124.9
	25+25	25	132398	1752.6	66862	2152.6	25	132446	1757.4	66910	2157.4
	25+50	25	132375	1750.3	66839	2150.3	50	132447	1757.5	66911	2157.5
Mid		50	132397	1752.5	66861	2152.5	25	132469	1759.7	66933	2159.7
IVIIG	25+75	25	132353	1748.1	66817	2148.1	75	132446	1757.4	66910	2157.4
		75	132398	1752.6	66862	2152.6	25	132491	1761.9	66955	2161.9
	50+50	50	132373	1750.1	66837	2150.1	50	132472	1760	66936	2160
	25+25	25	132647	1777.5	67111	2177.5	25	NA	NA	67159	2182.3
	25+50	25	132647	1777.5	67111	2177.5	50	NA	NA	67183	2184.7
High <sup>2</sup>		50	132622	1775	67086	2175	25	NA	NA	67158	2182.2
High	25+75	25	132647	1777.5	67111	2177.5	75	NA	NA	67204	2186.8
		75	132597	1772.5	67061	2172.5	25	NA	NA	67154	2181.8
	50+50	50	132622	1775	67086	2175	50	NA	NA	67185	2184.9
	25+25	25	132599	1772.7	67063	2172.7	25	132647	1777.5	67111	2177.5
	25+50	25	132550	1767.8	67014	2167.8	50	132622	1775.	67086	2175
High <sup>3</sup>		50	132572	1770	67036	2170	25	132644	1777.2	67108	2177.2
nigii	25+75	25	132504	1763.2	66968	2163.2	75	132597	1772.5	67061	2172.5
		75	132549	1767.7	67013	2167.7	25	132642	1777	67106	2177
	50+50	50	132523	1765.1	66987	2165.1	50	132622	1775	67086	2175

Note 1:

Carriers in increasing frequency order.

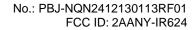
Applicable for intra-band contiguous CA without UL CA.

Applicable for intra-band contiguous CA with UL CA. Note 2:

Note 3:

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## Reference test frequencies for LTE operating band CA\_66C

Range	CC-Combo / NRB_agg [RB]			CC1 Note1					CC2 Note1		
		BW [RB]	Nul	f∪∟ [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	BW [RB]	NuL	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub>
	50+75	50	132025	1715.3	66489	2115.3	75	132145	1727.3	66609	2127.3
		75	132047	1717.5	66511	2117.5	50	132167	1729.5	66631	2129.
	50+100	50	132027	1715.5	66491	2115.5	100	132171	1729.9	66635	2129.
		100	132072	1720	66536	2120	50	132216	1734.4	66680	2134.
Low	75+75	75	132047	1717.5	66511	2117.5	75	132197	1732.5	66661	2132.
Low	75+100	75	132050	1717.8	66514	2117.8	100	132221	1734.9	66685	2134.
		100	132072	1720	66536	2120	75	132243	1737.1	66707	2137.
	100+25	100	132072	1720	66536	2120	25	132189	1731.7	66653	2131.
		25	132005	1713.3	66469	2113.3	100	132122	1725.0	66586	2125.
	100+100	100	132072	1720	66536	2120	100	132270	1739.8	66734	2139.
	50+75	50	132351	1747.9	66815	2147.9	75	132471	1759.9	66935	2159.
		75	132373	1750.1	66837	2150.1	50	132493	1762.1	66957	2162.
	50+100	50	132328	1745.6	66792	2145.6	100	132472	1760	66936	2160
		100	132373	1750.1	66837	2150.1	50	132517	1764.5	66981	2164.
Mid	75+75	75	132347	1747.5	66811	2147.5	75	132497	1762.5	66961	2162.
	75+100	75	132325	1745.3	66789	2145.3	100	132496	1762.4	66960	2162.
		100	132348	1747.6	66812	2147.6	75	132519	1764.7	66983	2164.
	100+25	100	132397	1752.5	66861	2152.5	25	132514	1764.2	66978	2164.
		25	132330	1745.8	66794	2145.8	100	132447	1757.5	66911	2157.
	100+100	100	132323	1745.1	66787	2145.1	100	132521	1764.9	66985	2164.
	50+75	50	132622	1775	67086	2175	75	NA	NA	67206	2187
		75	132597	1772.5	67061	2172.5	50	NA	NA	67181	2184.
	50+100	50	132622	1775	67086	2175	100	NA	NA	67230	2189.
		100	132572	1770	67036	2170	50	NA	NA	67180	2184.
High <sup>2</sup>	75+75	75	132597	1772.5	67061	2172.5	75	NA	NA	67211	2187.
	75+100	75	132597	1772.5	67061	2172.5	100	NA	NA	67232	2189.
	400.05	100	132572	1770	67036	2170	75	NA	NA	67207	2187.
	100+25	100 25	132572 132647	1770 1777.5	67036 67111	2170 2177.5	25 100	NA NA	NA NA	67153 67228	2181. 2189.
	100+100	100	132572	1777.5	67036	2177.3	100	NA NA	NA NA	67234	2189.
	50+75	50	132477	1760.5	66941	2160.5	75	132597	1772.5	67061	2172
	30.73	75	132477	1762.7	66963	2162.7	50	132619	1774.7	67083	2174.
	50+100	50	132428	1755.6	66892	2155.6	100	132572	1770	67036	2174
High <sup>3</sup>	30.100	100	132428	1760.1	66937	2160.1	50	132572	1774.5	67030	2174
riigii	75+75	75	132473	1757.5	66911	2157.5	75	132597	1774.5	67061	2174.
	75+100	75	132447	1757.5	66885	2157.5	100	132597	1772.5	67036	2172
	75+100	100	132401	1752.9	66887	2152.9	75	132572	1772.2	67058	2172
	100.25	100	132423		66986	: .	25	132594	: .	67103	
	100+25	25	132522	1765 1758.3	66919	2165 2158.3	100	132539	1776.7 1770.0	67036	2176. 2170.
	100+100	100	132374	1750.2	66838	2150.3	100	132572	1770.0	67036	2170

Note 1:

Carriers in increasing frequency order.

Applicable for intra-band contiguous CA without UL CA.

Applicable for intra-band contiguous CA with UL CA. Note 2: Note 3:



# 3. REFERENCE SPECIFICATION

Specification	Version	Title
FCC Part 2	2023	Frequency allocations and radio treaty matters; general rules and regulations
FCC Part 22	2023	Public mobile services
FCC Part 24	2023	Personal communications services
FCC Part 27	2023	Miscellaneous wireless communications services
FCC Part 90	2023	Private Land Mobile Radio Services
FCC Part 96	2023	Citizens Broadband Radio Service
FCC Part 96.47	2023	End user device additional requirements
ANSI C63.26	2015	American national standard for compliance testing of transmitters used in licensed radio services
KDB 971168	April 9,	Measurement guidance for certification of licensed digital
D01	2018	transmitters
TIA-603-E-2016	March	Land Mobile FM or PM Communications Equipment
11/4-003-L-2010	2016	Measurement and Performance Standards

# 4. KEY TO NOTES AND RESULT CODES The following are the definition of the test result.

Code	Meaning
PASS	Test result shows that the requirements of the relevant specification have been met.
FAIL	Test result shows that the requirements of the relevant specification have not been met.
NT	Normal Temperature
NV	Nominal voltage
HV	High voltage
LV	Low voltage



## **5.RESULT SUMMARY**

No.	Test case	FCC reference	Verdict	Test Lab
1	RF Power Output	2.1046	Pass	Α
2	Effective Radiated Power and Effective Isotropic Radiated Power	22.913(a)(5), 24.232(c) 27.50(b)(10), 27.50(c)(10), 27.50(h)(2), 27.50(d)(4), 27.50(a)(3),27.50(j)(3),27.50(k)(3) ,90.542(a),90.635(b),96.41(b)	Pass	А
3	Occupied Bandwidth	2.1049	Pass	Α
4	Peak-Average Ratio	22.913(d), 24.232(d) 27.50(d) (5),27.50(k)(4),96.41(g)	Pass	А
5	Emission Bandwidth	2.1049	Pass	Α
6	Spurious Emissions at antenna terminals	2.1051, 22.917(a), 24.238(a)(b) 27.53(c), 27.53(g), 27.53(h), 27.53(m), 27.53(a), 27.53(l)(2), 27.50(n)(2), 90.543(e)(f),90.691(a),96.41(e)	Pass	А
7	Band Edges Compliance	2.1051, 22.917(a), 24.238(a)(b) 27.53(c), 27.53(g), 27.53(h), 27.53(m), 27.53(a),27.53(l)(2), 27.50(n)(2), 90.543(e)(f), 90.691(a), 96.41(e)	Pass	А
8	Frequency Stability	2.1055	Pass	Α
9	End user device additional requirements	WINNF-18-IN-00178	Pass	А
10	Radiated Spurious Emissions	2.1053, 22.917(a), 24.238(a), 27.53(c), 27.53(g), 27.53(h), 27.53(f), 27.53(a), 27.53(m), 27.53(l)(2),27.50(n)(2) ,90.543(e)(f),90.691(a), 96.41(e)	Pass	А

#### Lab A:

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Lab Address:

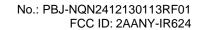
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Accredited Test Lab Cert 3939.01

The FCC Site Registration No. is 525120; The Designation No. is CN1171.

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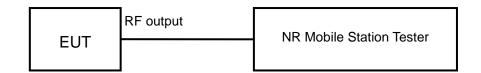




## 6. TEST RESULT 6.1 RF Power Output

Rule Part(s) FCC: 2.1046

Test Setup:



## Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. Then the test data can be read at the tester screen. The loss between RF output port of the EUT and the input port of the tester will be taken into consideration.

Limits: No RF Power Output requirements in part 2.1046.

#### Test result:

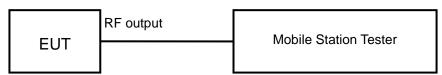
The test results are shown in Appendix A.

## 6.2 Effective Radiated Power and Effective Isotropic Radiated Power

Rule Part(s)

FCC: 22.913(a) (5), 24.232(c), 27.50(b) (10), 27.50(c) (10), 27.50(h) (2), 27.50(d) (4), 27.50(a) (3), ,27.50(j)(3),27.50(k)(3),90.542(a),90.635(b),96.41(b)

Test setup:



Test procedure:

KDB 971168 D01 v03r01 - Section 5.6

**Test Settings** 

Subclause 5.2.5.5 of ANSI C63.26-2015 is applicable, along with the following provisions. For personal/portable radios utilizing an integral antenna, the factor LC is typically negligible. However, in a fixed station transmit system that utilizes a long cable run between the transmitter and the transmitting antenna, this factor can be significant. The minimum cable loss should be used in this equation.

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured is:

ERP/EIRP = PMeas - LC + GT

Where:

ERP/EIRP = effective or equivalen radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm)

PMeas = measured transmitter output power or PSD, in dBW or dBm

LC = signal attenuation in the connecting cable between the transmitter and antenna in dB GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

#### **ERP/EIRP LIMIT**

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts. 24.232(c)

Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications. 27.50(b) (10)

Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

27.50(c) (10)

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP. 27.50(h) (2)

Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

27.50(d) (4)

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

27.50(a) (3)

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Mobile and portable stations (i) For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP NR standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

## 27.50(j)(3)

Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

#### 27.50(k)(3)

According to the specific rule Part 27.50 (k)(3) Mobile devices are limited to 1Watt (30 dBm) EIRP, Mobile devices operating inl these bands must employ a means for limiting power to the minimum necessary for successful communications.

#### 90.542(a)

47 CFR 90.542(a)(6)

Control stations and mobile stations transmitting in the 758–768 MHz band and the 788–798 MHz band are limited to 30 watts ERP.

47 CFR 90.542(a)(7)

Portable stations (hand-held devices) transmitting in the 758–768 MHz band and the 788–798 MHz band are limited to 3 watts ERP.

#### 90.635(a)(b)

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

#### 96.41(b)

The maximum effective isotropic radiated power (EIRP) and maximum Power Spectral Density (PSD) of any CBSD and End User Device must comply with the limits shown in the table in this paragraph (b):

Device Maximum	EIRP(dBm/10megahertz)	Maximum PSD(dBm/MHz)
End User Device	23	n/a
Category A CBSD	30	20
Category B CBSD	47	37

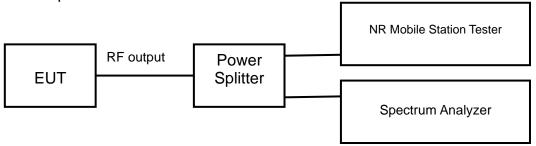
#### Test result:

The test results are shown in Appendix A.

## 6.3 Occupied Bandwidth

Rule Part(s) FCC: 2.1049

Test Setup:



Test procedure:

KDB 971168 D01 v03r01 - Section 4.2

## Test Setting:

- 1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
- 2. RBW = 1 5% of the expected OBW
- 3. VBW  $\geq$  3 x RBW
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. The trace was allowed to stabilize
- 8. If necessary, steps 2-7 were repeated after changing the RBW such that it would be within 1-5% of the 99% occupied bandwidth observed in Step 7

Limits: No specific occupied bandwidth requirements in part 2.1049

#### Test result:

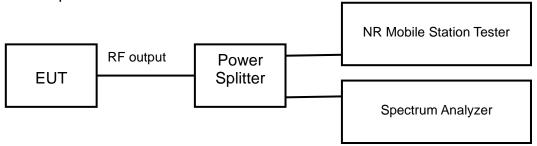
The test results are shown in Appendix A.



#### 6.4 Emission Bandwidth

Rule Part(s) FCC: 2.1049

Test Setup:



Test procedure:

KDB 971168 D01 v03r01 - Section 4.2

#### Test Setting:

- 1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
- 2. RBW = 1 5% of the expected OBW
- 3. VBW  $\geq$  3 x RBW
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. The trace was allowed to stabilize
- 8. If necessary, steps 2-7 were repeated after changing the RBW such that it would be within 1-5% of 26dB bandwidth observed in Step 7

Limits: No specific emission bandwidth requirements in part 2.1049.

#### Test result:

The test results are shown in Appendix A.

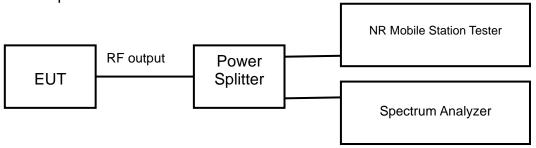


## 6.5 Peak-Average Ratio

Rule Part(s)

FCC: 22.913(d), 24.232(d), 27.50(d) (5), 96.41(g)

Test Setup:



Test procedure:

KDB 971168 D01 v03r01 - Section 5.7.1

#### Test Setting:

- 1. The signal analyzer's CCDF measurement profile is enabled
- 2. Frequency = carrier center frequency
- 3. Measurement BW ≥ OBW or specified reference bandwidth
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

## Limits

24.232(d), 27.50(d) (5)

In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

96.41(g)

The peak-to-average power ratio (PAPR) of any CBSD transmitter output power must not exceed 13 dB

#### Test result:

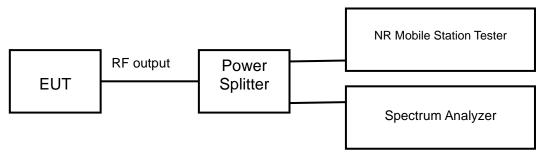
The test results are shown in Appendix A.

## 6.6 Spurious Emissions at antenna terminal

Rule Part(s)

FCC: 2.1051, 22.917(a), 24.238(a), 27.53(c), 27.53(g), 27.53(h), 27.53(m), 27.53(a), 27.53(l)(2), 27.50(n)(2), 90.543(e)(f), 90.691(a), 96.41(e)

Test Setup:



Test procedure:

KDB 971168 D01 v03r01 - Section 6.0

#### Test Setting:

- 1. Start frequency was set to 30MHz and stop frequency was set to at least 10 \* the fundamental frequency
- 2. Detector = RMS
- 3. RBW=1MHz
- 4. VBW=3MHz
- 5. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 6. Sweep time = auto couple
- 7. The trace was allowed to stabilize

#### Limits

for channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission shall not exceed -13 dBm/MHz within 0 to B megahertz above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed -25 dBm/MHz. the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

for CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

#### Test result:

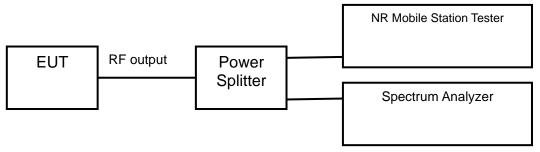
The test results are shown in Appendix A.

## 6.7 Band Edges Compliance

#### Rule Part(s)

FCC: 2.1051, 22.917(a), 24.238(a), 27.53(c), 27.53(g), 27.53(h), 27.53(m), 27.53(a), 27.53(l)(2), 27.50(n)(2), 90.543(e)(f), 90.691(a), 96.41(e)

## Test Setup:



#### Test procedure:

KDB 971168 D01 v03r01 - Section 6.0

#### **Test Setting:**

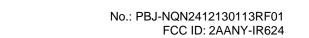
- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW > 1% of the emission bandwidth
- 4.  $VBW > 3 \times RBW$
- 5. Detector = RMS
- 6. Number of sweep points ≥ 2 x Span/RBW
- 7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 8. Sweep time = auto couple
- 9. The trace was allowed to stabilize

#### Limits

for channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission shall not exceed –13 dBm/MHz within 0 to B megahertz above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed –25 dBm/MHz. the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

#### Test result:

The test results are shown in Appendix A.

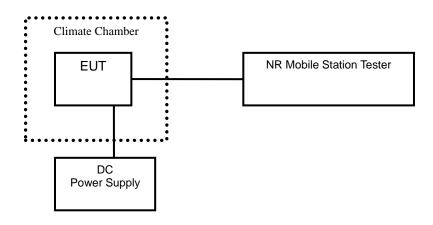




## 6.8 Frequency Stability

Rule Part(s) FCC: 2.1055

#### Test setup:



Test Procedure: ANSI/TIA-603-E-2016

## **Test Settings**

- 1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
- 2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
- 3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C (The temperature range can be declared by the manufacturer). A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Limits: For Part 24, Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

#### Test result:

The test results are shown in Appendix A.

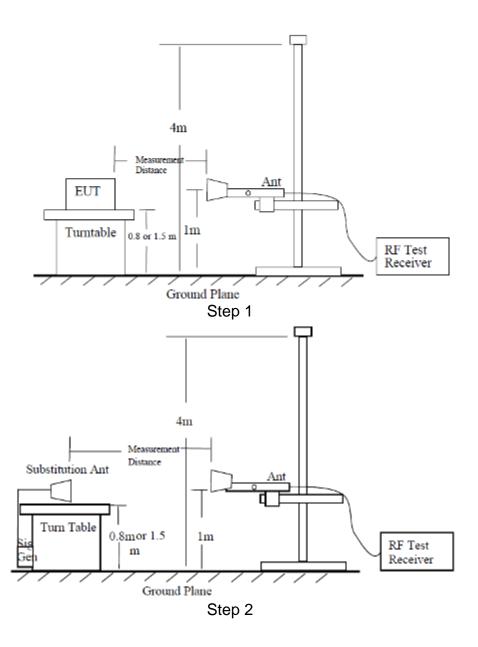


## 6.9 Radiated Spurious Emissions

Rule Part(s)

FCC: 2.1053, 22.917(a), 24.238(a), 27.53(c), 27.53(g), 27.53(h), 27.53(f), 27.53(a), 27.53(m), 27.53(l)(2), 27.50(n)(2), 90.543(e)(f), 90.691(a), 96.41(e)

## Test Setup:



Fax: +86 755 8869 6577



Test procedure:

The measurements procedures in TIA-603-E-2016 are used.

The spectrum was scanned from 30MHz to the 10th harmonic of the highest frequency generated within the equipment.

Step 1:

The measurement is carried out in the chamber. EUT was placed on a 0.8m (f<1GHz)/ 1.5m (f>1GHz) high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. The height of receiving antenna from 1m to 4m and varies in certain range to find the maximum power value. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used and RBW is set to 100 kHz (f<1GHz)/1MHz (f>1GHz). The antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum power value on spectrum analyzer or receiver. The spectrum analyzer scans from 30MHz to 10th harmonic of the carrier. A notch filter is necessary in the band near to the carrier frequency. A high pass filter is needed to avoid the distortion of the testing equipment in the band above the carrier frequency.

Step 2:

A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

A power (Pmea) is applied to the input of the substitution antenna, and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (Pmea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

A "reference path loss" should be calculated after test. The attenuation of "reference path loss" is the cable loss between the Signal Source with the Substitution Antenna (Pca) and the Substitution Antenna Gain (Ga).

Calculation procedure:

The data of cable loss and antenna gain has been calibrated in full testing frequency range before the testing.

The power of the Radiated Spurious Emissions is calculated by adding the cable loss and antenna gain. The basic equation with a sample calculation is as followed:

Power (EIRP) = Pmea+ Pca + Ga

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP – 2.15 (dB).

Assumed the power of signal source record is -20dBm. A cable loss of -30dB, and an antenna gain of 11dB are added.

P=Pmea+Pca+Ga=(-20dBm)+(-30dB)+(11dB)=-39dBm

Note: We tested both horizontal and vertical polarization, but only the largest numerical polarity of the two polarities was recorded in the final report.

Test result:

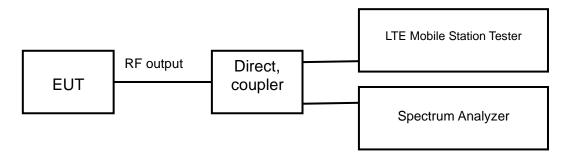
The test results are shown in Appendix B.

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## 6.10 End user device additional requirements

Rule Part(s) Part96.47 Test Setup:



Test Procedure: WINNF-18-IN-00178

#### Test Setting:

- 1. Setup with frequency and power level 20dBm/MHz
- 2. Enable AP service from Ruckus Cloud managementCheck
- 3. Check EUD Tx Frequency and power
- 4. Disable AP service from Ruckus Cloud management
- 5. Check EUD stops transmission within 10seconds.
- 6. Setup with frequency and power level 8dBm/MHz
- 7. Enable AP service from Ruckus Cloud management
- 8. Check EUD Tx Frequency and power
- 9. Disable AP service from Ruckus Cloud management
- 10. Check EUD stops transmission within 10seconds.

#### Test result:

The test results are shown in Appendix A.



## 7. MEASUREMENT UNCERTAINTIES

Items	Uncertainty			
RF Power Output	0.6 dB			
Effective Radiated Power and Effective Isotropic Radiated Power	0.6 dB			
Occupied Bandwidth	3kHz			
Emission Bandwidth	3kHz			
Peak-Average Ratio	0.8dB			
Frequency Stability	48Hz			
Band Edges Compliance	1.2dB			
	9kHz~2GHz	1.2dB		
Spurious Emissions at antenna terminal	2G~3.6GHz	1.4dB		
	3.6G~8GHz	2.2dB		
	8G~12.75GHz	2.7dB		
	30MHz∼200MHz	4.88dB		
Dadiated Emission Massurament	200MHz∼1GHz	4.87dB		
Radiated Emission Measurement	1GHz∼18GHz	4.58dB		
	18GHz~40GHz	4.35dB		

Note 1: According to the test specification limit (The test results fully compliance with the test standard limit requirements)

Note 2: According to test specification limits plus uncertainties (The test results exceed the standard limit requirements and meet the standard requirements after adding the system uncertainty)

Note 3: Test operation mode is Note 1



## **8. TEST EQUIPMENTS**

No.	Name/Model	Manufacturer	S/N	Calibration Date	Calibration Due Date
1	Mobile Station Tester / MT8820C	Anritsu	6201300660	2024.06.21	2025.06.20
2	Radio Communication Station / CMW500	R&S	161702	2024.06.21	2025.06.20
3	Spectrum Analyzer / FSV40	R&S	101065	2024.06.21	2025.06.20
4	Spectrum Analyzer / N9020A	Agilent	MY48010771	2024.03.06	2025.03.05
5	Power Divider / 11667A	HP	19632	2024.06.21	2025.06.20
6	Switching box/CBOX-FULL	TSTPASS	SN5308466	2024.07.21	2025.07.20
7	DC Power Supply / E3645A	Agilent	MY40000741	2024.03.06	2025.03.05
8	Temperature chamber / SH241	ESPEC	92013758	2024.06.21	2025.06.20
9	Fully-Anechoic Chamber / 12.65m×8.03m×7.50m	FRANKONIA			
10	Semi-Anechoic/Chamber / 23.18m×16.88m×9.60m	FRANKONIA			
11	Turn table Diameter:1m	FRANKONIA			
12	Turn table Diameter:5m	FRANKONIA			
13	Antenna master FAC(MA4.0)	MATURO			
14	Antenna master SAC(MA4.0)	MATURO			
15	Shielding room / 9.080m×5.255m×3.525m	FRANKONIA			
16	Double-Ridged Waveguide Horn Antenna / HF 907	R&S	100512	2024.06.21	2025.06.20
17	Double-Ridged Waveguide Horn Antenna / HF 907	R&S	100513	2024.06.21	2025.06.20
18	Ultra log antenna / HL562	R&S	100016	2024.06.21	2025.06.20
19	Receive antenna /3160-09	SCHWARZ-BECK	002058-002	2024.06.21	2025.06.20
20	EMI test receiver / ESI 40	R&S	100015	2024.06.21	2025.06.20
21	EMI test receiver / ESCS30	R&S	100029	2024.06.21	2025.06.20
22	Receive antenna / HL562	R&S	100167	2024.06.21	2025.06.20
23	AMN / ENV216	R&S	3560.6550.12	2024.06.21	2025.06.20
24	FCC auto test system / RT9100L-2	Radiosky	V1.0	/	/
25	EMI test software / EMC32	R&S	V10.20.01	/	/

# <u>APPENDIX A – TEST DATA OF CONDUCTED EMISSION</u> The worst channel results are reflected in the report, Please refer to the attachment.

## APPENDIX B - TEST DATA OF RADIATED EMISSION

The worst channel results are reflected in the report, Please refer to the attachment.

---End of Test Report---