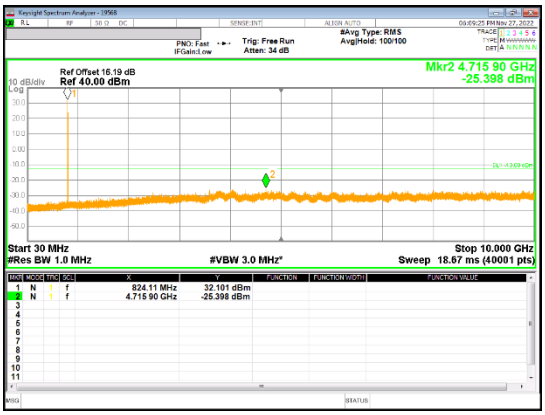
9.3.1. OUT OF BAND EMISSIONS RESULT

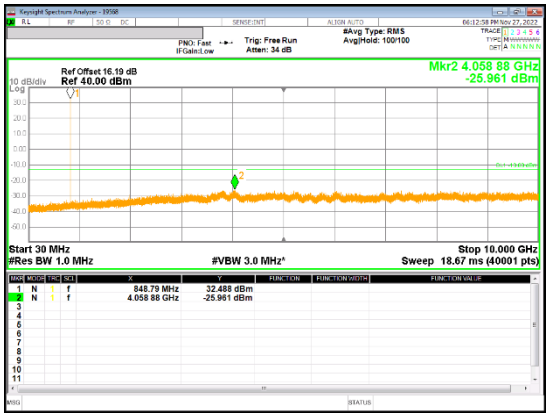
GSM 850

GSM 850



GPRS Low channel

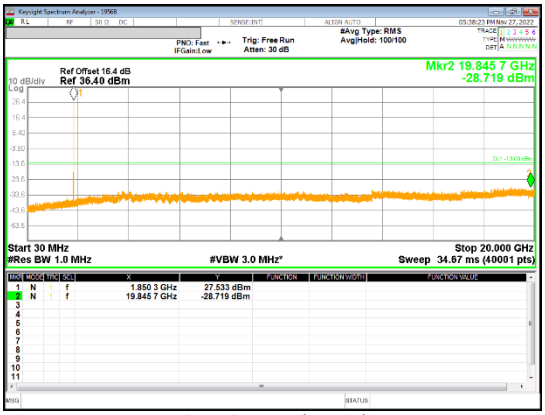
GPRS Mid channel



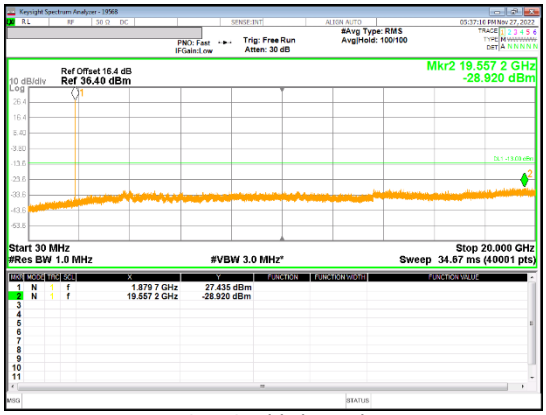
GPRS High channel

GSM 1900

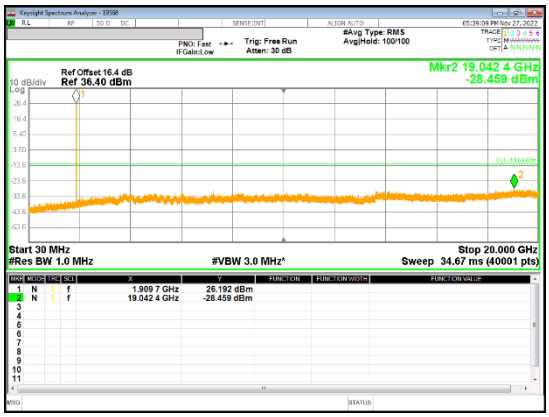
GSM 1900



GPRS Low channel

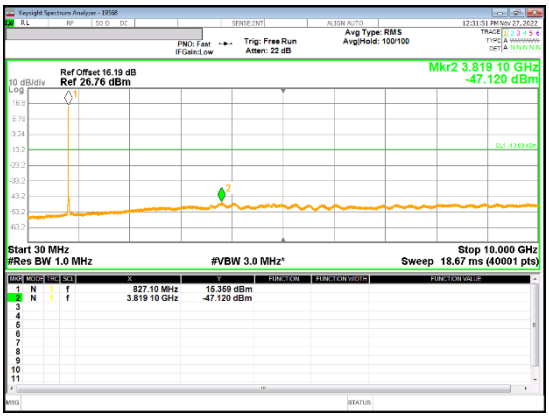
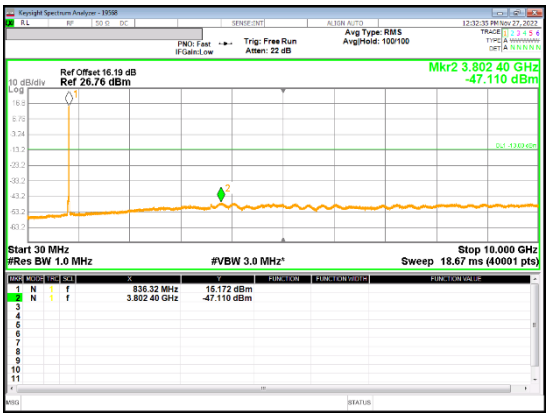


GPRS Mid channel



GPRS High channel

WCDMA Band 5

Band 5	 REL99 Low channel	 REL99 Mid channel
	 REL99 High channel	

WCDMA Band 4

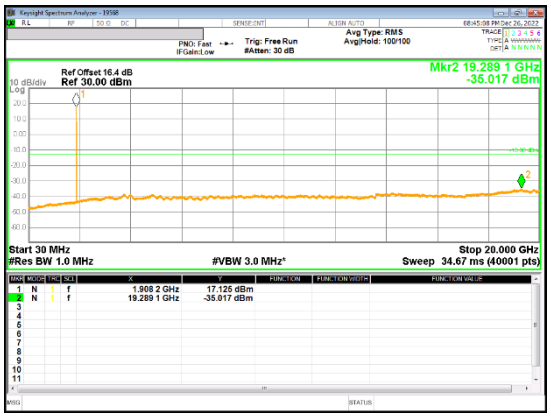
Band 4	 REL99 Low channel	 REL99 Mid channel
	 REL99 High channel	

WCDMA Band 2

Band 2

REL99 Low channel

REL99 Mid channel



REL99 High channel

LTE Band 7

<table>
<tr><td rowspan="2">15 MHz</td><td> 

QPSK Low channel</td><td> 

QPSK Mid channel</td></tr>
<tr><td colspan="2"> 

QPSK High channel</td></tr>
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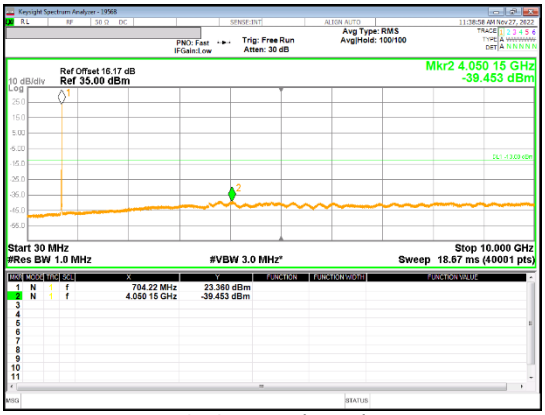
LTE Band 12

<table>
<tr><td rowspan="2">10 MHz</td><td> 

QPSK Low channel</td><td> 

QPSK Mid channel</td></tr>
<tr><td colspan="2"> 

QPSK High channel</td></tr>
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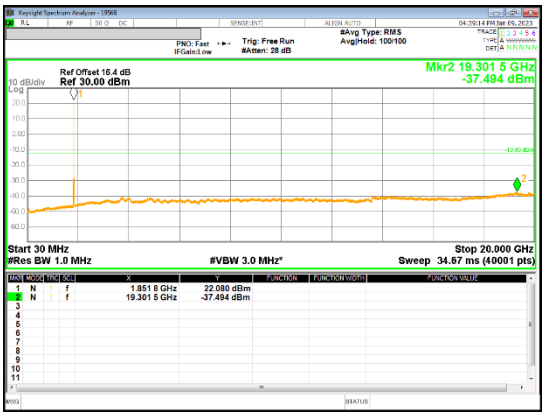
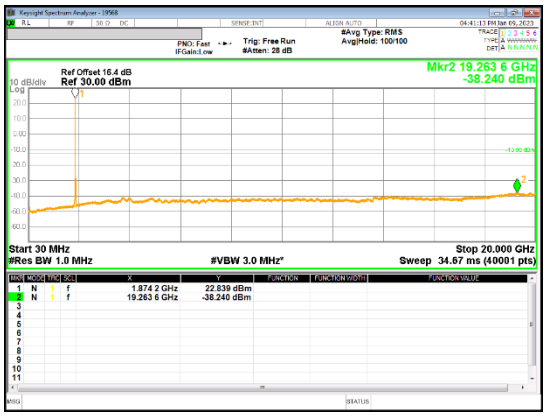
LTE Band 13

10 MHz	 QPSK Mid channel

LTE Band 14

5 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

LTE Band 25

20 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

LTE Band 26(Part 90)

1.4 MHz	 QPSK Low channel	 QPSK High channel

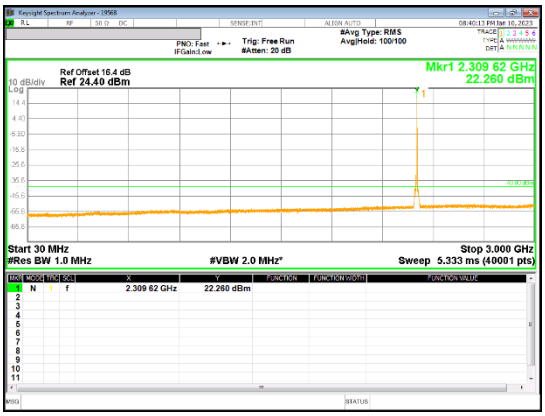
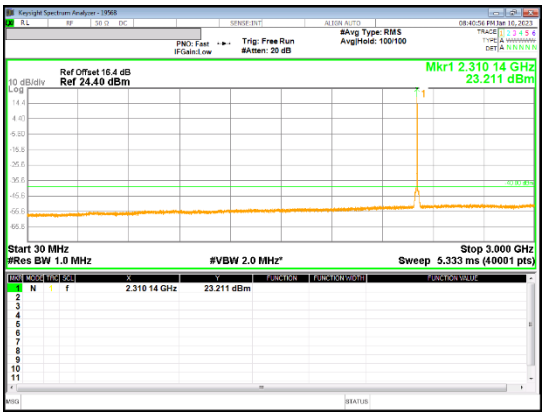
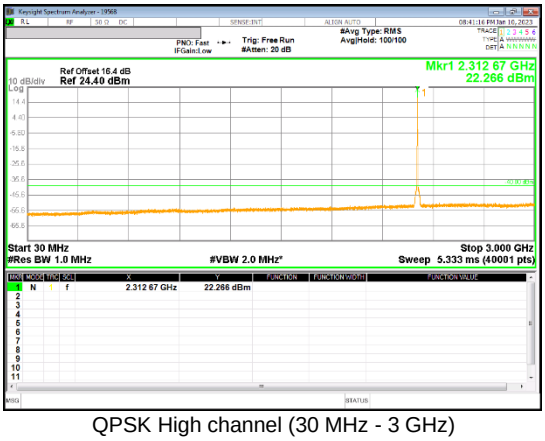
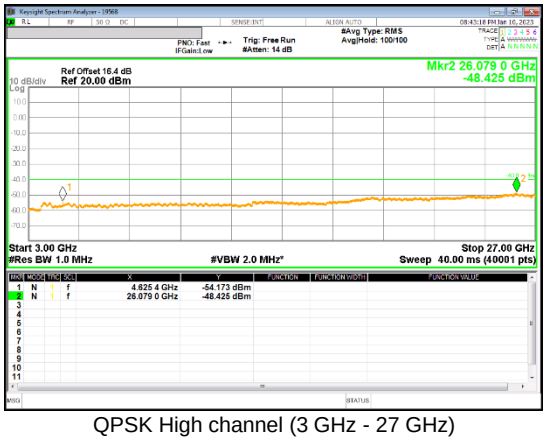
LTE Band 26 (Straddle)

5 MHz	 QPSK

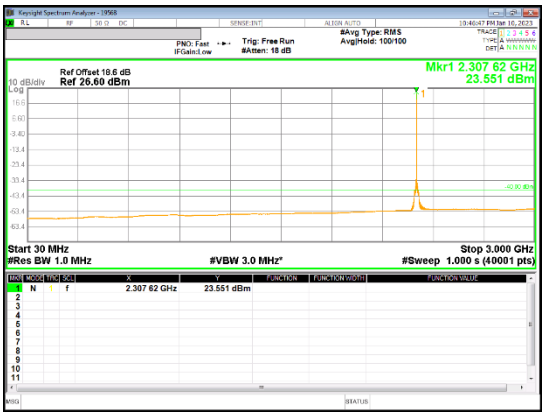
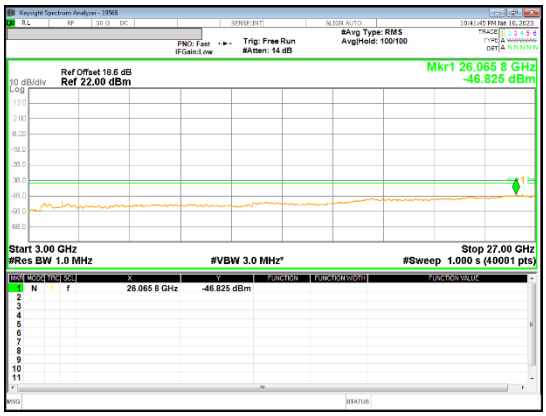
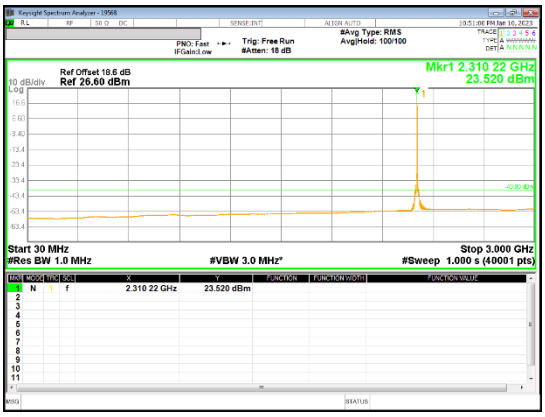
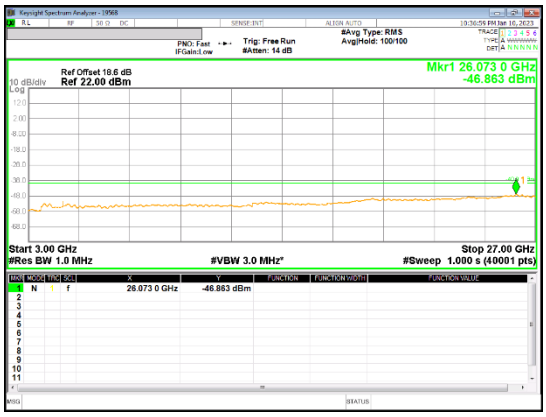
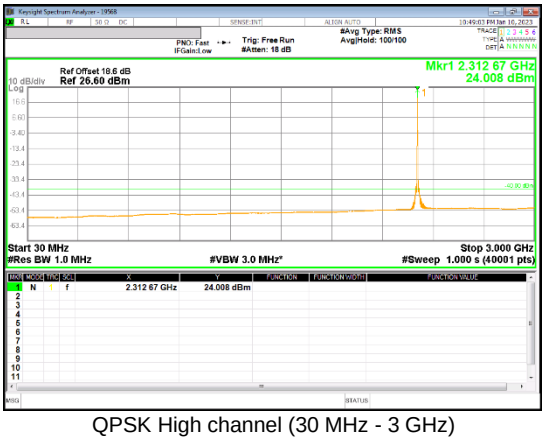
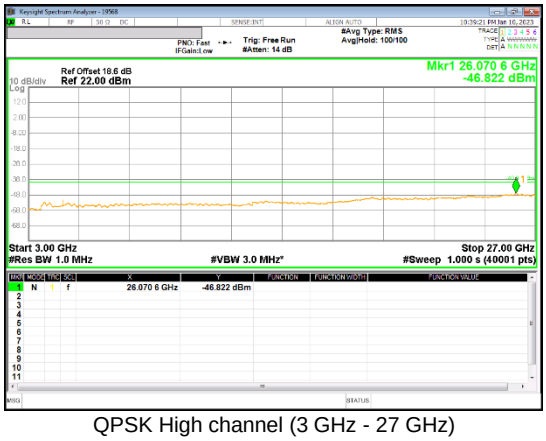
LTE Band 26 (Part 22)

5 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

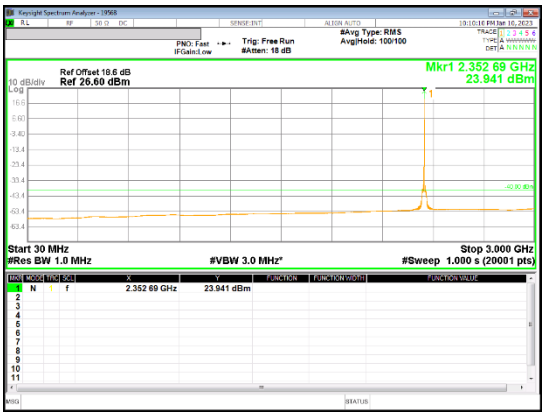
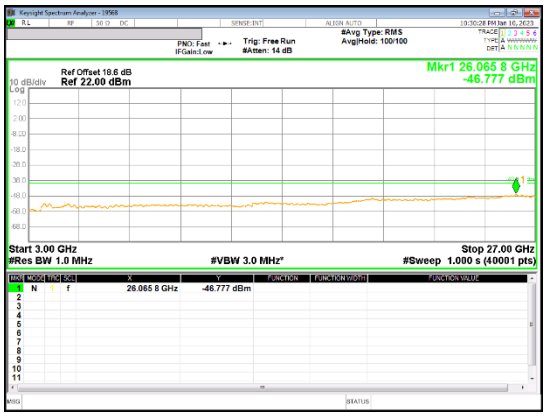
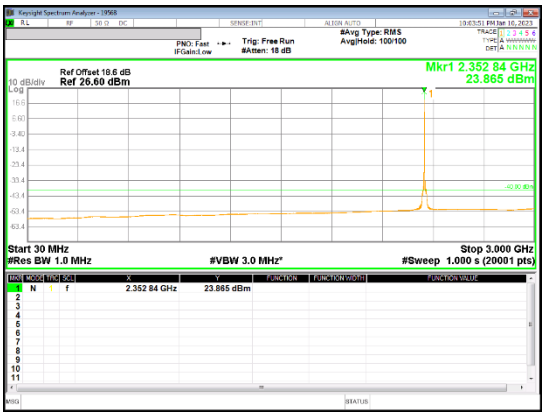
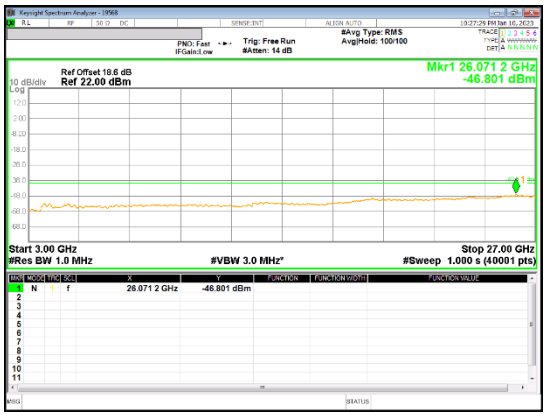
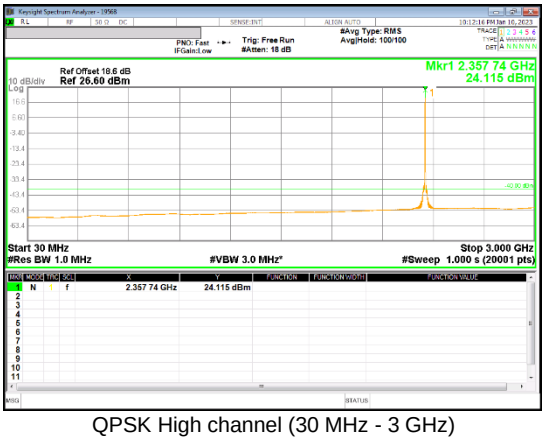
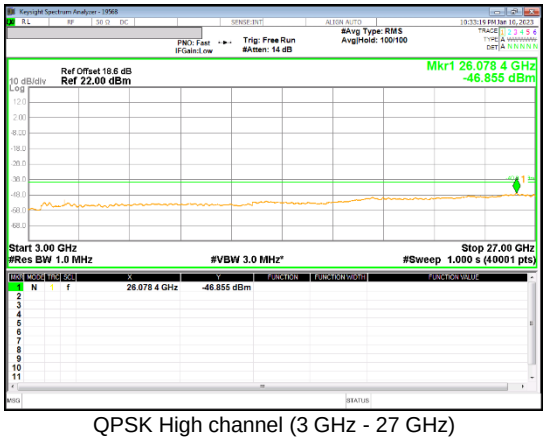
LTE Band 30

5 MHz	 QPSK Low channel (30 MHz - 3 GHz)	 QPSK Low channel (3 GHz - 27 GHz)
	 QPSK Mid channel (30 MHz - 3 GHz)	 QPSK Mid channel (3 GHz - 27 GHz)
	 QPSK High channel (30 MHz - 3 GHz)	 QPSK High channel (3 GHz - 27 GHz)

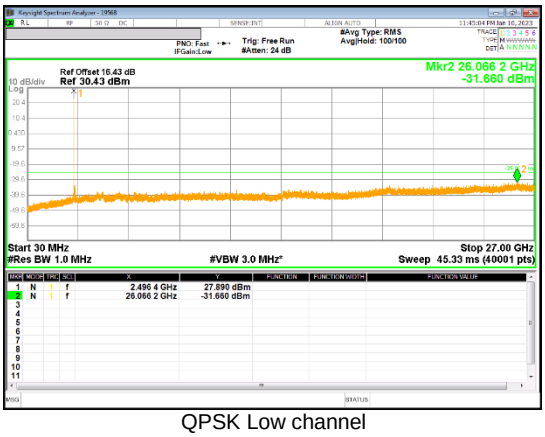
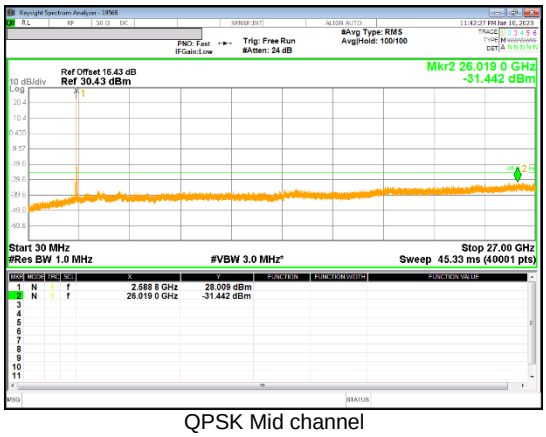
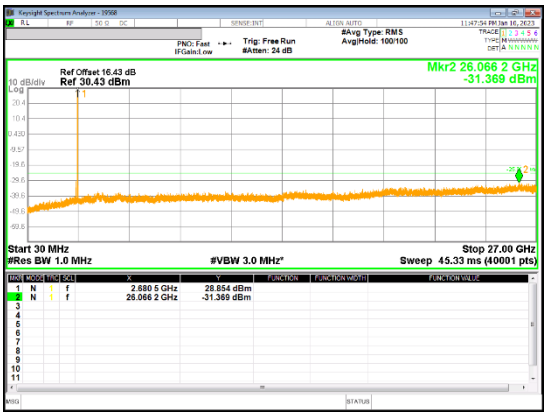
LTE Band 40 (2307.5 - 2312.5 MHz)

5 MHz	 QPSK Low channel (30 MHz - 3 GHz)	 QPSK Low channel (3 GHz - 27 GHz)
	 QPSK Mid channel (30 MHz - 3 GHz)	 QPSK Mid channel (3 GHz - 27 GHz)
	 QPSK High channel (30 MHz - 3 GHz)	 QPSK High channel (3 GHz - 27 GHz)

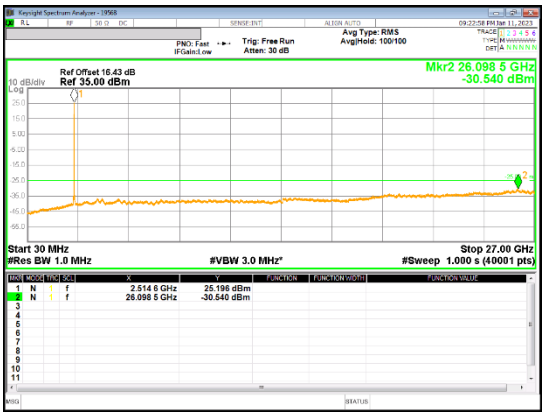
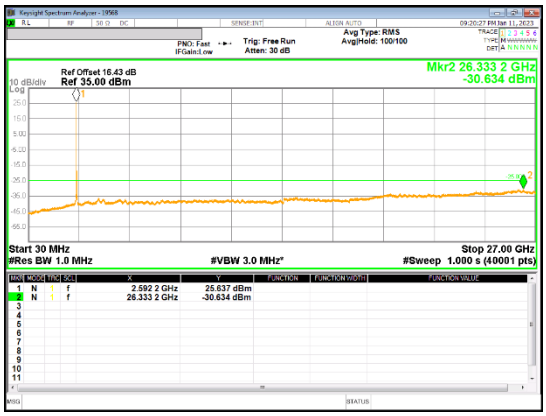
LTE Band 40 (2357.5 - 2357.5 MHz)

5 MHz	 QPSK Low channel (30 MHz - 3 GHz)	 QPSK Low channel (3 GHz - 27 GHz)
	 QPSK Mid channel (30 MHz - 3 GHz)	 QPSK Mid channel (3 GHz - 27 GHz)
	 QPSK High channel (30 MHz - 3 GHz)	 QPSK High channel (3 GHz - 27 GHz)

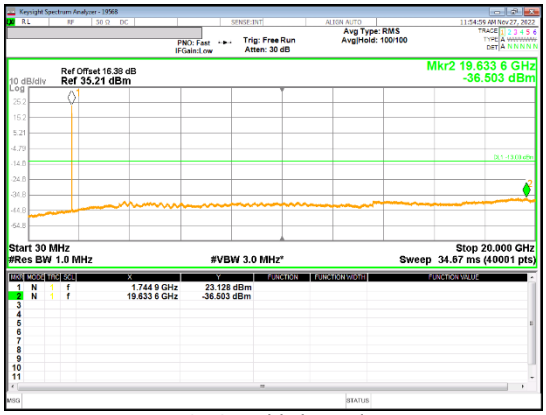
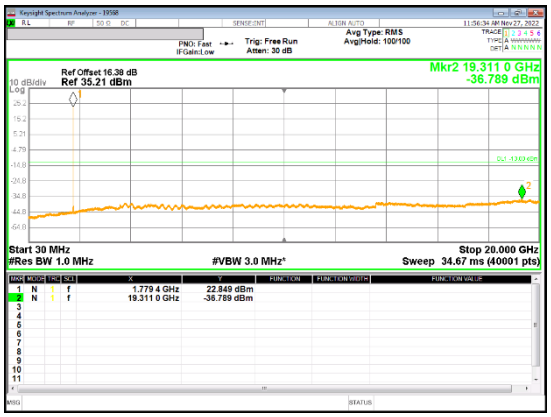
LTE Band 41(PC2)

10 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

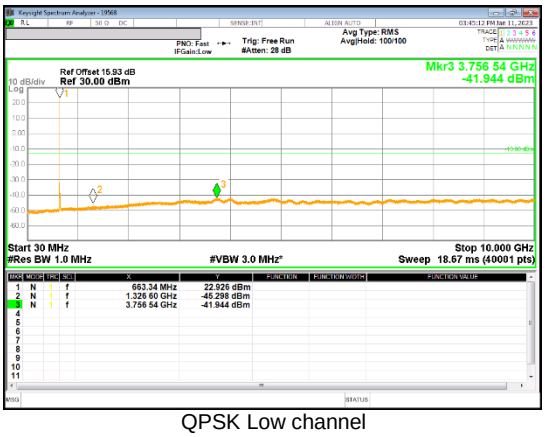
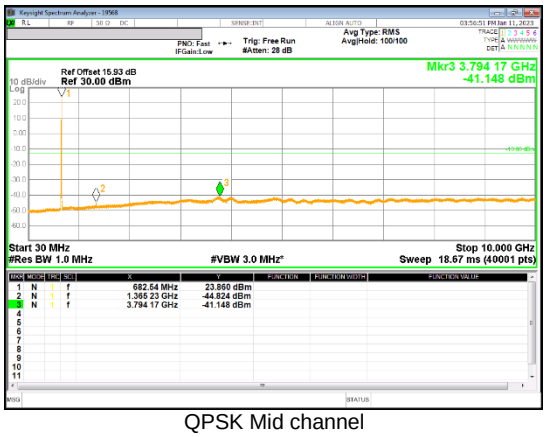
LTE Band 41C (ULCA)

20+20 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

LTE Band 66

5 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

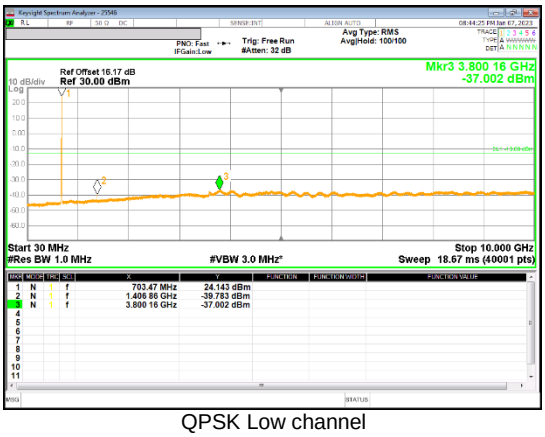
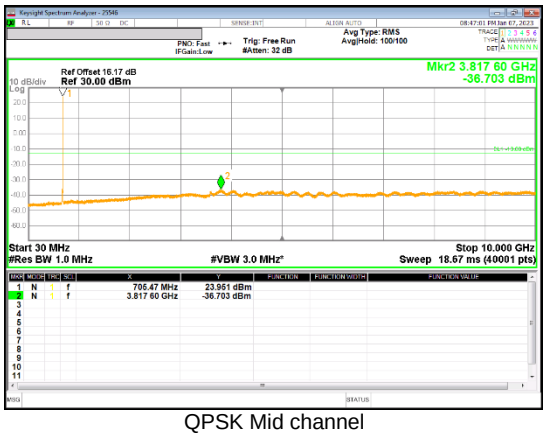
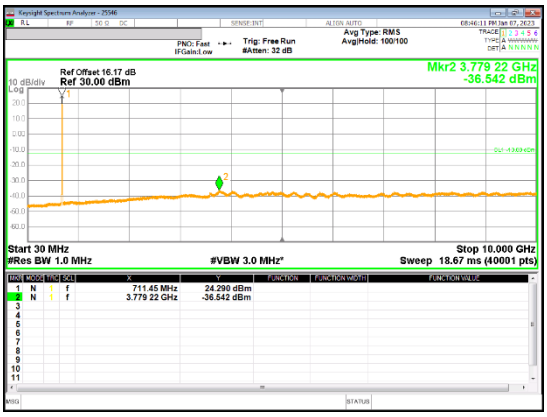
LTE Band 71

5 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

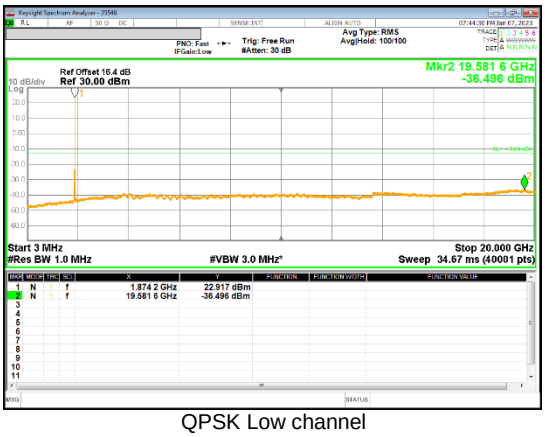
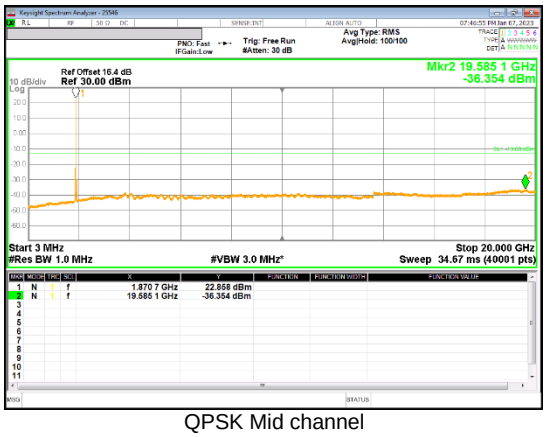
NR Band n5

20 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

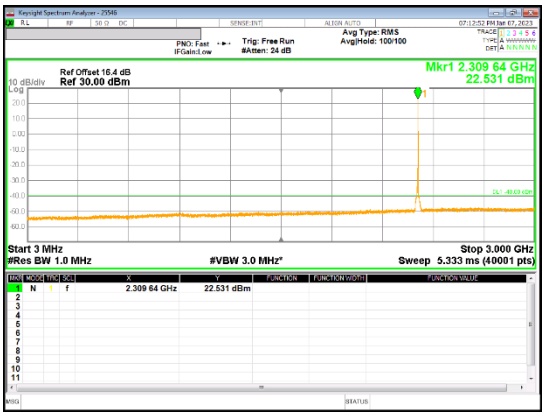
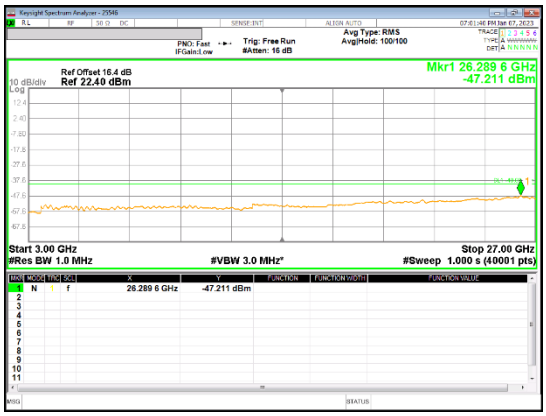
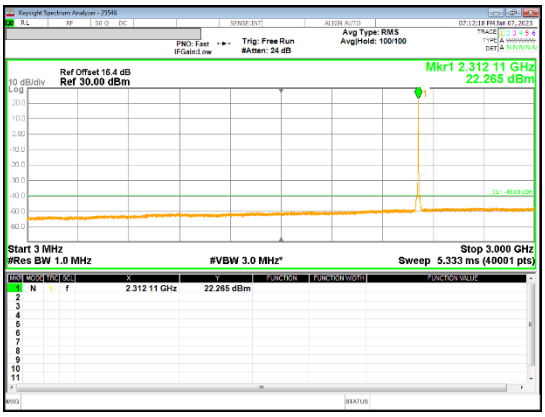
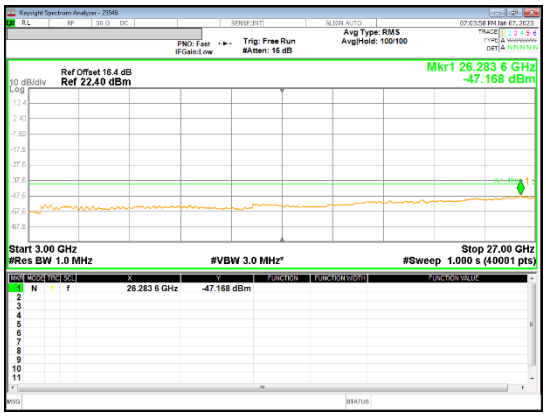
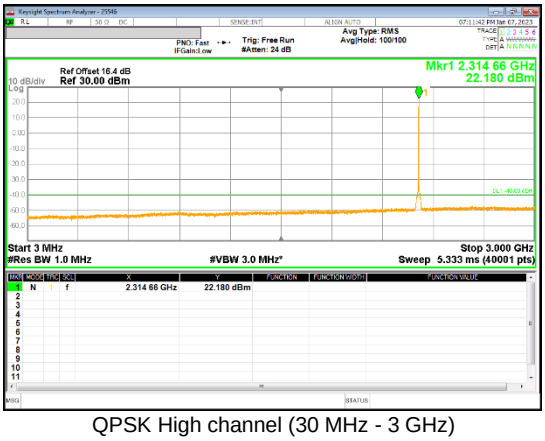
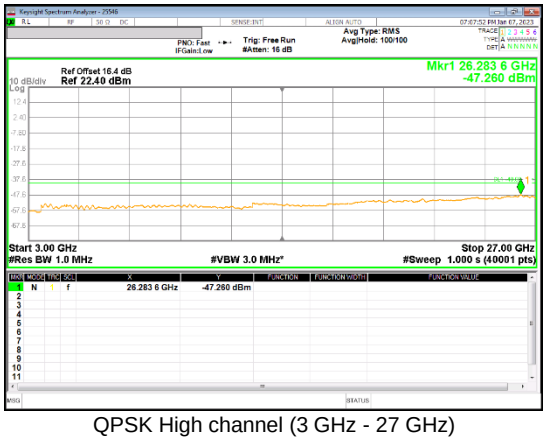
NR Band n12

5 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

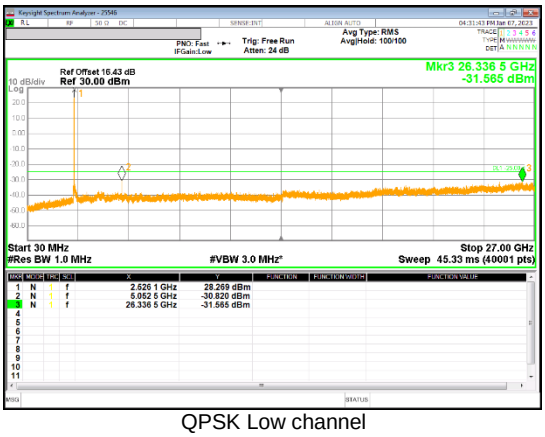
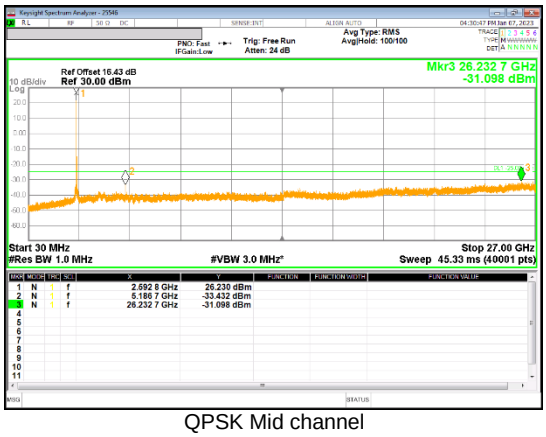
NR Band n25

25MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

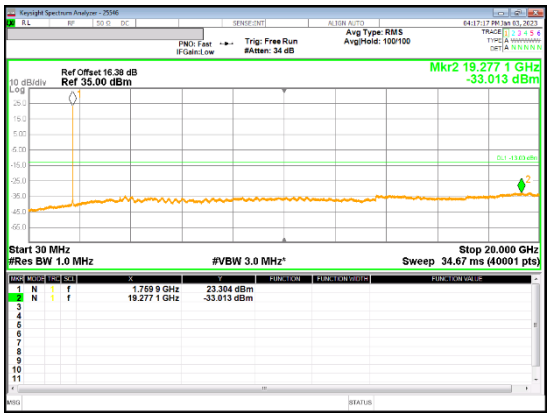
NR Band n30

5 MHz	 QPSK Low channel (30 MHz - 3 GHz)	 QPSK Low channel (3 GHz - 27 GHz)
	 QPSK Mid channel (30 MHz - 3 GHz)	 QPSK Mid channel (3 GHz - 27 GHz)
	 QPSK High channel (30 MHz - 3 GHz)	 QPSK High channel (3 GHz - 27 GHz)

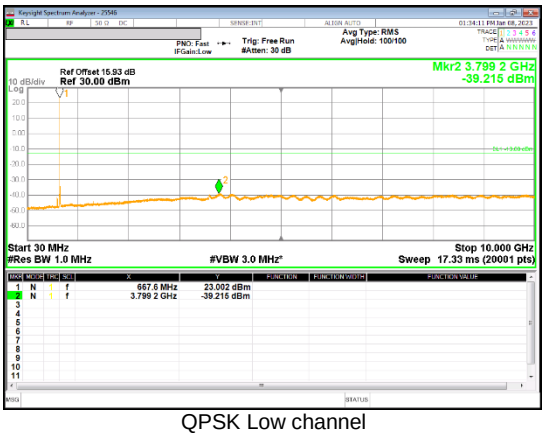
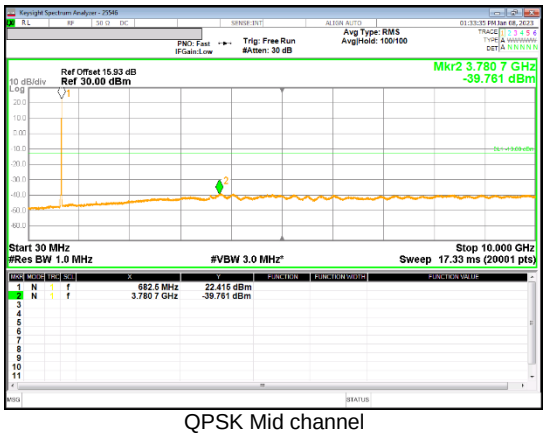
NR Band n41(PC2)

60MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

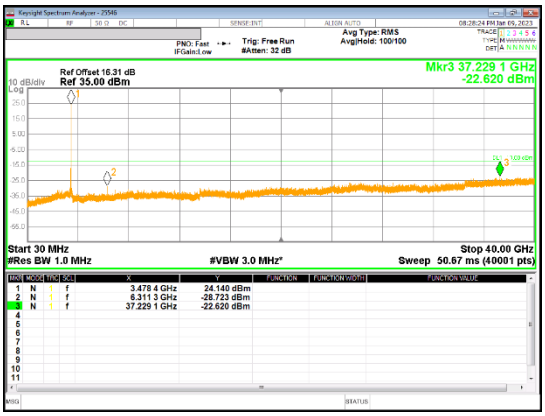
NR Band n66

40 MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

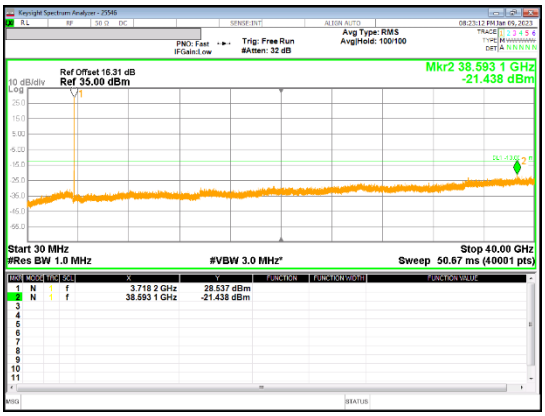
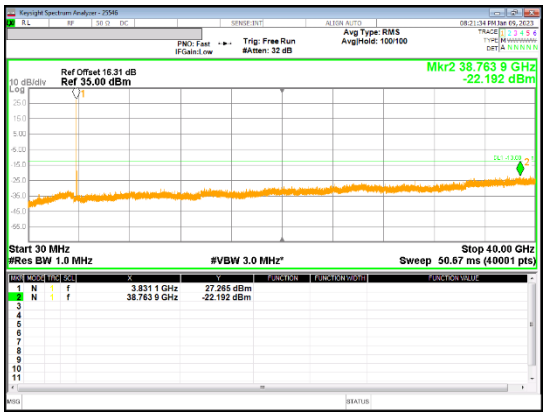
NR Band n71

5MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

NR Band n77(PC2) (3450 – 3550 MHz)

60MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

NR Band n77(PC2) (3700 – 3980 MHz)

30MHz	 QPSK Low channel	 QPSK Mid channel
	 QPSK High channel	

9.4. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235,§27.54 and §90.213

LIMITS

§22.355 - The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

§24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

§27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§90.213 - The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

TEST PROCEDURE

Per KDB 971168 D01 Power Meas License Digital Systems v03r01

RESULTS

See the following pages.

NOTE

Test were performed each lowest or highest frequency on the modulation condition of more wide bandwidth.(Please refer to section 9.1.1 OBW results)

9.4.1. FREQUENCY STABILITY RESULTS

GSM 850, Channel 128/251, Frequency 824.2/848.8 MHz

Test Date	2022-12-02
Test Engineer	19568

Reference Frequency : GSM850 Low Channel 824.2 MHz / High Channel 848.8 MHz @ 20ºC						
Limit: +- 2.5 ppm =	Low Channel	2060.500 Hz		High Channel	2122.000 Hz	
Power Supply [Vdc]	Environment Temperature [*C]	Frequency Deviation Measureed with Time Elapse				
		Low Channel		High Channel		Limit [ppm]
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.88	50	824.20002723	0.004	848.80002933	-0.002	2.5
3.88	40	824.20001787	0.015	848.80001811	0.011	2.5
3.88	30	824.20002059	0.012	848.80001932	0.009	2.5
3.88	***20***	***824.20003023***	***0.000***	***848.80002721***	***0.000***	***2.5***
3.88	10	824.20001140	0.023	848.80001274	0.017	2.5
3.88	0	824.20002329	0.008	848.80002134	0.007	2.5
3.88	-10	824.20002610	0.005	848.80002699	0.000	2.5
3.88	-20	824.20002847	0.002	848.80002801	-0.001	2.5
3.88	-30	824.20003340	-0.004	848.80003275	-0.007	2.5

Reference Frequency : GSM850 Low Channel 824.2 MHz / High Channel 848.8 MHz @ 20ºC						
Limit: +- 2.5 ppm =	Low Channel	2060.500 Hz		High Channel	2122.000 Hz	
Power Supply [Vdc]	Environment Temperature [*C]	Frequency Deviation Measureed with Time Elapse				
		Low Channel		High Channel		Limit [ppm]
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.86	***20***	**824.20003023**	***0***	**848.80002721**	***0***	***2.5***
4.20	20	824.20002239	0.010	848.80002318	0.005	2.5
3.75	20	824.20001711	0.016	848.80002034	0.008	2.5

GSM 1900, Channel 512/810, Frequency 1850.0/1910.0 MHz (Lowest Frequency:GPRS / Highest Frequency: EGPRS)

Test Date	2022-12-02
Test Engineer	19568

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1850.0783	1909.9245		
Extreme (50C)		1850.0784	1909.9246	17.2	0.009
Extreme (40C)		1850.0784	1909.9246	20.9	0.011
Extreme (30C)		1850.0784	1909.9246	21.4	0.011
Extreme (10C)		1850.0784	1909.9246	27.7	0.015
Extreme (0C)		1850.0784	1909.9246	19.3	0.010
Extreme (-10C)		1850.0784	1909.9246	13.2	0.007
Extreme (-20C)		1850.0784	1909.9246	12.0	0.006
Extreme (-30C)		1850.0784	1909.9246	19.5	0.010
20C	15%	1850.0784	1909.9246	22.2	0.012
	-15%	1850.0784	1909.9246	19.5	0.010
	End Point	1850.0784	1909.9246	19.1	0.010

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WCDMA Band 5

Test Date	2022-12-03
Test Engineer	19568

Limit: +- 2.5 ppm =	Reference Frequency : WCDMA Band 5 Low Channel 826.4 MHz / High Channel 846.6 MHz @ 20ºC Low Channel 2066.000 Hz		High Channel 2116.500 Hz		
Power Supply [Vdc]	Environment Temperature [*C]	Frequency Deviation Measureed with Time Elapse			
		Low Channel		High Channel		Limit [ppm]
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.88	50	826.40003329	-0.015	846.60003532	-0.019	2.5
3.88	40	826.40002032	0.000	846.60002248	-0.004	2.5
3.88	30	826.40001785	0.003	846.60001933	0.000	2.5
3.88	***20***	***826.40002059***	***0.000***	***846.60001949***	***0.000***	***2.5***
3.88	10	826.40001538	0.006	846.60001274	0.008	2.5
3.88	0	826.40002248	-0.002	846.60002035	-0.001	2.5
3.88	-10	826.40002765	-0.009	846.60002541	-0.007	2.5
3.88	-20	826.40003129	-0.013	846.60003041	-0.013	2.5
3.88	-30	826.40003236	-0.014	846.60003017	-0.013	2.5

Limit: +- 2.5 ppm =	Reference Frequency : WCDMA Band 5 Low Channel 826.4 MHz / High Channel 846.6 MHz @ 20ºC Low Channel 2066.000 Hz		High Channel 2116.500 Hz		
Power Supply [Vdc]	Environment Temperature [*C]	Frequency Deviation Measureed with Time Elapse			
		Low Channel		High Channel		Limit [ppm]
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.86	***20***	**826.40002059**	***0***	**846.60001949**	***0***	***2.5***
4.20	20	826.40001954	0.001	846.60002249	-0.004	2.5
3.75	20	826.40001842	0.003	846.60001941	0.000	2.5

WCDMA Band 4 (Lowest Frequency: HSDPA/ Highest Frequency: HSDPA)

Test Date	2022-12-19
Test Engineer	25546

Limit		1710	1755	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1710.3163	1754.6819		
Extreme (50C)		1710.3163	1754.6819	11.4	0.007
Extreme (40C)		1710.3163	1754.6819	16.4	0.009
Extreme (30C)		1710.3163	1754.6819	13.4	0.008
Extreme (10C)		1710.3163	1754.6819	20.6	0.012
Extreme (0C)		1710.3163	1754.6819	23.6	0.014
Extreme (-10C)		1710.3163	1754.6819	12.5	0.007
Extreme (-20C)		1710.3163	1754.6819	15.4	0.009
Extreme (-30C)		1710.3163	1754.6819	17.6	0.010
20C	15%	1710.3163	1754.6819	11.8	0.007
	-15%	1710.3163	1754.6819	14.3	0.008
	End Point	1710.3163	1754.6819	13.0	0.007

WCDMA Band 2 (Lowest Frequency: Rel99 / Highest Frequency: HSDPA)

Test Date	2022-12-03
Test Engineer	19568

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		1850.3135	1909.6889		
Extreme (50C)		1850.3135	1909.6889	16.2	0.009
Extreme (40C)		1850.3135	1909.6889	15.3	0.008
Extreme (30C)		1850.3135	1909.6889	20.3	0.011
Extreme (10C)	Normal	1850.3135	1909.6889	17.4	0.009
Extreme (0C)		1850.3135	1909.6889	21.3	0.011
Extreme (-10C)		1850.3135	1909.6889	23.5	0.012
Extreme (-20C)		1850.3135	1909.6889	20.1	0.011
Extreme (-30C)		1850.3135	1909.6889	17.3	0.009
	15%	1850.3135	1909.6889	16.5	0.009
20C	-15%	1850.3135	1909.6889	19.2	0.010
	End Point	1850.3135	1909.6889	20.4	0.011

LTE Band 7 (Lowest Frequency: 16QAM / Highest Frequency: QPSK)

Test Date	2022-12-06
Test Engineer	19568

Limit		2500	2570	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		2500.2483	2569.7502		
Extreme (50C)		2500.2483	2569.7502	11.3	0.004
Extreme (40C)		2500.2483	2569.7502	10.5	0.004
Extreme (30C)		2500.2483	2569.7502	15.4	0.006
Extreme (10C)	Normal	2500.2483	2569.7502	17.9	0.007
Extreme (0C)		2500.2483	2569.7502	20.4	0.008
Extreme (-10C)		2500.2483	2569.7502	21.5	0.008
Extreme (-20C)		2500.2483	2569.7502	14.7	0.006
Extreme (-30C)		2500.2483	2569.7502	13.2	0.005
	15%	2500.2483	2569.7502	11.3	0.004
20C	-15%	2500.2483	2569.7502	13.5	0.005
	End Point	2500.2483	2569.7502	9.4	0.004

LTE Band 12 (Lowest Frequency: 16QAM / Highest Frequency: QPSK)

Test Date	2022-12-06
Test Engineer	19568

Limit		699	716	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		699.1543	715.8442		
Extreme (50C)		699.1543	715.8442	11.3	0.016
Extreme (40C)		699.1543	715.8442	13.7	0.019
Extreme (30C)		699.1543	715.8442	19.5	0.028
Extreme (10C)	Normal	699.1543	715.8442	23.5	0.033
Extreme (0C)		699.1543	715.8442	22.1	0.031
Extreme (-10C)		699.1543	715.8442	10.4	0.015
Extreme (-20C)		699.1543	715.8442	11.8	0.017
Extreme (-30C)		699.1543	715.8442	16.3	0.023
	15%	699.1543	715.8442	9.5	0.013
20C	-15%	699.1543	715.8442	11.4	0.016
	End Point	699.1543	715.8442	15.2	0.022

LTE Band 13 (Lowest Frequency: 16QAM / Highest Frequency: QPSK)

Test Date	2022-12-07
Test Engineer	19568

Limit		777	787	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		777.2498	786.7501		
Extreme (50C)		777.2498	786.7501	27.4	0.035
Extreme (40C)		777.2498	786.7501	30.7	0.039
Extreme (30C)		777.2498	786.7501	21.6	0.028
Extreme (10C)	Normal	777.2498	786.7501	25.7	0.033
Extreme (0C)		777.2498	786.7501	19.5	0.025
Extreme (-10C)		777.2498	786.7501	22.4	0.029
Extreme (-20C)		777.2498	786.7501	26.8	0.034
Extreme (-30C)		777.2498	786.7501	30.3	0.039
	15%	777.2498	786.7501	31.3	0.040
20C	-15%	777.2498	786.7501	29.4	0.038
	End Point	777.2498	786.7501	30.5	0.039

LTE Band 14 (Lowest Frequency: 16QAM / Highest Frequency: QPSK)

Test Date	2022-12-19
Test Engineer	25546

Limit		788	798	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		788.2518	797.7526		
Extreme (50C)		788.2518	797.7526	22.1	0.028
Extreme (40C)		788.2518	797.7526	30.5	0.038
Extreme (30C)		788.2518	797.7526	19.0	0.024
Extreme (10C)	Normal	788.2518	797.7526	20.8	0.026
Extreme (0C)		788.2518	797.7526	22.5	0.028
Extreme (-10C)		788.2518	797.7526	21.5	0.027
Extreme (-20C)		788.2518	797.7526	17.3	0.022
Extreme (-30C)		788.2518	797.7526	15.4	0.019
	15%	788.2518	797.7526	13.9	0.018
20C	-15%	788.2518	797.7526	17.4	0.022
	End Point	788.2518	797.7526	16.4	0.021

LTE Band 25 (Lowest Frequency: QPSK / Highest Frequency: 16QAM)

Test Date	2022-12-20
Test Engineer	25546

Limit		1850	1915	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		1850.1559	1914.8436		
Extreme (50C)		1850.1559	1914.8436	35.0	0.019
Extreme (40C)		1850.1559	1914.8436	27.9	0.015
Extreme (30C)		1850.1559	1914.8436	26.4	0.014
Extreme (10C)	Normal	1850.1559	1914.8436	28.5	0.015
Extreme (0C)		1850.1559	1914.8436	22.4	0.012
Extreme (-10C)		1850.1559	1914.8436	20.7	0.011
Extreme (-20C)		1850.1559	1914.8436	23.7	0.013
Extreme (-30C)		1850.1559	1914.8436	28.4	0.015
	15%	1850.1559	1914.8436	30.4	0.016
20C	-15%	1850.1559	1914.8436	24.3	0.013
	End Point	1850.1559	1914.8436	20.0	0.011

LTE Band 26

Test Date	2022-12-20
Test Engineer	25546

Reference Frequency : LTE Band 26 Low Channel 814.7 MHz / High Channel 848.3 MHz @ 20ºC						
Limit: +- 2.5 ppm =	Low Channel	2036.750	Hz	High Channel	2120.750	Hz

Power Supply [Vdc]	Environment Temperature [*C]	Frequency Deviation Measureed with Time Elapse				Limit [ppm]
		Low Channel		High Channel		
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.86	50	814.70002230	0.000	848.30001902	0.010	2.5
3.86	40	814.70001749	0.006	848.30001639	0.013	2.5
3.86	30	814.70001894	0.004	848.30002044	0.008	2.5
3.86	***20***	***814.70002259***	***0.000***	***848.30002749***	***0.000***	***2.5***
3.86	10	814.70002026	0.003	848.30002654	0.001	2.5
3.86	0	814.70001522	0.009	848.30001849	0.011	2.5
3.86	-10	814.70001728	0.007	848.30001334	0.017	2.5
3.86	-20	814.70001933	0.004	848.30002249	0.006	2.5
3.86	-30	814.70002390	-0.002	848.30002059	0.008	2.5

Reference Frequency : LTE Band 26 Low Channel 814.7 MHz / High Channel 848.3 MHz @ 20ºC						
Limit: +- 2.5 ppm =	Low Channel	2036.750	Hz	High Channel	2120.750	Hz

Power Supply [Vdc]	Environment Temperature [*C]	Frequency Deviation Measureed with Time Elapse				Limit [ppm]
		Low Channel		High Channel		
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.86	***20***	**814.70002259**	***0***	**848.30002749**	***0***	***2.5***
4.20	20	814.70001638	0.008	848.30001933	0.010	2.5
3.75	20	814.70002059	0.002	848.30001740	0.012	2.5

LTE Band 30 (Lowest Frequency: 16QAM / Highest Frequency: 16QAM)

Test Date	2022-12-21
Test Engineer	25546

Limit		2305	2315		Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	2305.2451	2314.7492		
Extreme (50C)		2305.2451	2314.7492	22.8	0.010
Extreme (40C)		2305.2451	2314.7492	27.3	0.012
Extreme (30C)		2305.2451	2314.7492	28.5	0.012
Extreme (10C)		2305.2451	2314.7492	22.5	0.010
Extreme (0C)		2305.2451	2314.7492	27.1	0.012
Extreme (-10C)		2305.2451	2314.7492	19.4	0.008
Extreme (-20C)		2305.2451	2314.7492	21.4	0.009
Extreme (-30C)		2305.2451	2314.7492	23.7	0.010
20C	15%	2305.2451	2314.7492	20.2	0.009
	-15%	2305.2451	2314.7492	18.0	0.008
	End Point	2305.2451	2314.7492	23.9	0.010

LTE Band 40 (Lowest Frequency: QPSK / Highest Frequency: 16QAM)

Test Date	2022-12-21
Test Engineer	25546

Limit		2305	2315	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	2305.2657	2314.7451		
Extreme (50C)		2305.2657	2314.7451	16.3	0.007
Extreme (40C)		2305.2657	2314.7451	18.4	0.008
Extreme (30C)		2305.2657	2314.7451	20.7	0.009
Extreme (10C)		2305.2657	2314.7451	13.2	0.006
Extreme (0C)		2305.2657	2314.7451	11.1	0.005
Extreme (-10C)		2305.2657	2314.7451	13.6	0.006
Extreme (-20C)		2305.2657	2314.7451	16.5	0.007
Extreme (-30C)		2305.2657	2314.7451	18.2	0.008
20C	15%	2305.2657	2314.7451	11.6	0.005
	-15%	2305.2657	2314.7451	9.1	0.004
	End Point	2305.2657	2314.7451	10.9	0.005

LTE Band 40 (Lowest Frequency: 16QAM / Highest Frequency: 16QAM)

Test Date	2022-12-22
Test Engineer	25546

Limit		2350	2360	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	2350.2602	2359.7468		
Extreme (50C)		2350.2602	2359.7468	23.4	0.010
Extreme (40C)		2350.2602	2359.7468	21.7	0.009
Extreme (30C)		2350.2602	2359.7468	21.0	0.009
Extreme (10C)		2350.2602	2359.7468	17.5	0.007
Extreme (0C)		2350.2602	2359.7468	16.0	0.007
Extreme (-10C)		2350.2602	2359.7468	18.5	0.008
Extreme (-20C)		2350.2602	2359.7468	20.5	0.009
Extreme (-30C)		2350.2602	2359.7468	25.4	0.011
20C	15%	2350.2602	2359.7468	19.5	0.008
	-15%	2350.2602	2359.7468	23.7	0.010
	End Point	2350.2602	2359.7468	21.6	0.009

LTE Band 41(PC2) (Lowest Frequency: 16QAM / Highest Frequency: 16QAM)

Test Date	2022-12-22
Test Engineer	25546

Limit		2496	2690	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		2496.2531	2689.7460		
Extreme (50C)		2496.2531	2689.7460	11.7	0.004
Extreme (40C)		2496.2531	2689.7460	13.6	0.005
Extreme (30C)		2496.2531	2689.7460	9.4	0.004
Extreme (10C)	Normal	2496.2531	2689.7460	10.9	0.004
Extreme (0C)		2496.2531	2689.7460	15.7	0.006
Extreme (-10C)		2496.2531	2689.7460	13.9	0.005
Extreme (-20C)		2496.2531	2689.7460	17.7	0.007
Extreme (-30C)		2496.2531	2689.7460	12.4	0.005
	15%	2496.2531	2689.7460	10.4	0.004
20C	-15%	2496.2531	2689.7460	13.6	0.005
	End Point	2496.2531	2689.7460	10.8	0.004

LTE Band 66 (Lowest Frequency: 16QAM / Highest Frequency: QPSK)

Test Date	2022-12-08
Test Engineer	19568

Limit		1710	1780	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)		1710.1538	1779.8459		
Extreme (50C)		1710.1538	1779.8459	11.3	0.006
Extreme (40C)		1710.1538	1779.8459	15.7	0.009
Extreme (30C)		1710.1538	1779.8459	27.4	0.016
Extreme (10C)	Normal	1710.1538	1779.8459	21.0	0.012
Extreme (0C)		1710.1538	1779.8459	21.4	0.012
Extreme (-10C)		1710.1538	1779.8459	15.5	0.009
Extreme (-20C)		1710.1538	1779.8459	16.0	0.009
Extreme (-30C)		1710.1538	1779.8459	17.4	0.010
	15%	1710.1538	1779.8459	23.5	0.013
20C	-15%	1710.1538	1779.8459	20.8	0.012
	End Point	1710.1538	1779.8459	21.6	0.012

LTE Band 71 (Lowest Frequency: 16QAM / Highest Frequency: 16QAM)

Test Date	2022-12-23
Test Engineer	25546

Limit		663	698	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	663.2505	697.7495		
Extreme (50C)		663.2505	697.7495	23.5	0.035
Extreme (40C)		663.2505	697.7495	25.9	0.038
Extreme (30C)		663.2505	697.7495	33.4	0.049
Extreme (10C)		663.2505	697.7495	32.1	0.047
Extreme (0C)		663.2505	697.7495	20.4	0.030
Extreme (-10C)		663.2505	697.7495	19.4	0.029
Extreme (-20C)		663.2505	697.7495	15.5	0.023
Extreme (-30C)		663.2505	697.7495	27.7	0.041
20C	15%	663.2505	697.7495	23.7	0.035
	-15%	663.2505	697.7495	20.4	0.030
	End Point	663.2505	697.7495	25.2	0.037

5G NR Band n5

Test Date	2022-12-09
Test Engineer	19568

Limit: +- 2.5 ppm =	Reference Frequency : n5 Low Channel 826.5 MHz / High Channel 846.5 MHz @ 20ºC					
	Low Channel 2066.250 Hz			High Channel 2116.250 Hz		
Power Supply [Vdc]	Environment Temperature [ºC]	Frequency Deviation Measureed with Time Elapse				Limit [ppm]
		Low Channel		High Channel		
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.88	50	826.50002314	-0.004	846.50002571	-0.009	2.5
3.88	40	826.50002432	-0.005	846.50003248	-0.017	2.5
3.88	30	826.50001934	0.001	846.50002541	-0.009	2.5
3.88	***20***	***826.50002015***	***0.000***	***846.50001773***	***0.000***	***2.5***
3.88	10	826.50001663	0.004	846.50002243	-0.006	2.5
3.88	0	826.50001541	0.006	846.50002123	-0.004	2.5
3.88	-10	826.50002047	0.000	846.50002169	-0.005	2.5
3.88	-20	826.50002247	-0.003	846.50001665	0.001	2.5
3.88	-30	826.50002295	-0.003	846.50001965	-0.002	2.5

Limit: +- 2.5 ppm =	Reference Frequency : n5 Low Channel 826.5 MHz / High Channel 846.5 MHz @ 20ºC					
	Low Channel 2066.250 Hz			High Channel 2116.250 Hz		
Power Supply [Vdc]	Environment Temperature [ºC]	Frequency Deviation Measureed with Time Elapse				Limit [ppm]
		Low Channel		High Channel		
		[MHz]	Delta [ppm]	[MHz]	Delta [ppm]	
3.86	***20***	**826.50002015**	***0***	**846.50001773**	***0***	***2.5***
4.20	20	826.50001635	0.005	846.50002333	-0.007	2.5
3.75	20	826.50001957	0.001	846.50001765	0.000	2.5

5G NR Band n25 (Lowest Frequency:QPSK / Highest Frequency: 16QAM)

Test Date	2022-12-23
Test Engineer	25546

Limit		1850	1915	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1850.2489	1914.7543		
Extreme (50C)		1850.2489	1914.7543	13.5	0.007
Extreme (40C)		1850.2489	1914.7543	19.7	0.010
Extreme (30C)		1850.2489	1914.7543	21.7	0.012
Extreme (10C)		1850.2489	1914.7543	23.3	0.012
Extreme (0C)		1850.2489	1914.7543	30.5	0.016
Extreme (-10C)		1850.2489	1914.7543	24.4	0.013
Extreme (-20C)		1850.2489	1914.7543	26.7	0.014
Extreme (-30C)		1850.2489	1914.7543	27.9	0.015
20C	15%	1850.2489	1914.7543	19.7	0.010
	-15%	1850.2489	1914.7543	23.5	0.012
	End Point	1850.2489	1914.7543	20.7	0.011

5G NR Band n30 (Lowest Frequency:QPSK / Highest Frequency: QPSK)

Test Date	2022-12-26
Test Engineer	25546

Limit		2305	2315	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	2305.2544	2314.7461		
Extreme (50C)		2305.2544	2314.7461	17.7	0.008
Extreme (40C)		2305.2544	2314.7461	20.4	0.009
Extreme (30C)		2305.2544	2314.7461	23.7	0.010
Extreme (10C)		2305.2544	2314.7461	21.5	0.009
Extreme (0C)		2305.2544	2314.7461	31.4	0.014
Extreme (-10C)		2305.2544	2314.7461	27.7	0.012
Extreme (-20C)		2305.2544	2314.7461	26.5	0.011
Extreme (-30C)		2305.2544	2314.7461	20.5	0.009
20C	15%	2305.2544	2314.7461	28.0	0.012
	-15%	2305.2544	2314.7461	23.5	0.010
	End Point	2305.2544	2314.7461	31.0	0.013

5G NR Band n41(PC2) (Lowest Frequency: QPSK / Highest Frequency: 16QAM)

Test Date	2022-12-26
Test Engineer	25546

Normal (20C)		2496	2690	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	2496.5638	2689.3588		
Extreme (50C)		2496.5638	2689.3588	15.5	0.006
Extreme (40C)		2496.5638	2689.3588	17.7	0.007
Extreme (30C)		2496.5638	2689.3588	13.2	0.005
Extreme (10C)		2496.5638	2689.3588	23.0	0.009
Extreme (0C)		2496.5638	2689.3588	18.7	0.007
Extreme (-10C)		2496.5638	2689.3588	13.0	0.005
Extreme (-20C)		2496.5638	2689.3588	11.5	0.004
Extreme (-30C)		2496.5638	2689.3588	19.5	0.008
20C	15%	2496.5638	2689.3588	13.3	0.005
	-15%	2496.5638	2689.3588	19.4	0.007
	End Point	2496.5638	2689.3588	15.5	0.006

5G NR Band n66 (Lowest Frequency: QPSK / Highest Frequency: 16QAM)

Test Date	2022-12-12
Test Engineer	19568

Limit		1710	1780	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1710.2493	1779.7492		
Extreme (50C)		1710.2493	1779.7492	19.6	0.011
Extreme (40C)		1710.2493	1779.7492	20.7	0.012
Extreme (30C)		1710.2493	1779.7492	21.8	0.012
Extreme (10C)		1710.2493	1779.7492	24.0	0.014
Extreme (0C)		1710.2493	1779.7492	29.7	0.017
Extreme (-10C)		1710.2493	1779.7492	27.4	0.016
Extreme (-20C)		1710.2493	1779.7492	22.7	0.013
Extreme (-30C)		1710.2493	1779.7492	20.7	0.012
20C	15%	1710.2493	1779.7492	19.3	0.011
	-15%	1710.2493	1779.7492	20.7	0.012
	End Point	1710.2493	1779.7492	22.8	0.013

5G NR Band n71 (Lowest Frequency: QPSK / Highest Frequency: QPSK)

Test Date	2022-12-27
Test Engineer	25546

Limit		663	698	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	663.2574	697.7436		
Extreme (50C)		663.2574	697.7436	11.4	0.017
Extreme (40C)		663.2574	697.7436	10.7	0.016
Extreme (30C)		663.2574	697.7436	12.7	0.019
Extreme (10C)		663.2574	697.7436	17.5	0.026
Extreme (0C)		663.2574	697.7436	20.4	0.030
Extreme (-10C)		663.2574	697.7436	22.0	0.032
Extreme (-20C)		663.2574	697.7436	15.4	0.023
Extreme (-30C)		663.2574	697.7436	13.4	0.020
20C	15%	663.2574	697.7436	10.3	0.015
	-15%	663.2574	697.7436	13.7	0.020
	End Point	663.2574	697.7436	15.5	0.023

NR Band n77(PC2)_3450 – 3550 MHz (Lowest Frequency: QPSK / Highest Frequency: 16QAM)

Test Date	2022-12-12
Test Engineer	19568

Limit		3450	3550	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	3450.7040	3549.3124		
Extreme (50C)		3450.7040	3549.3124	15.7	0.004
Extreme (40C)		3450.7040	3549.3124	19.7	0.006
Extreme (30C)		3450.7040	3549.3124	20.4	0.006
Extreme (10C)		3450.7040	3549.3124	22.5	0.006
Extreme (0C)		3450.7040	3549.3124	17.2	0.005
Extreme (-10C)		3450.7040	3549.3124	15.5	0.004
Extreme (-20C)		3450.7040	3549.3124	13.7	0.004
Extreme (-30C)		3450.7040	3549.3124	11.9	0.003
20C	15%	3450.7040	3549.3124	20.4	0.006
	-15%	3450.7040	3549.3124	23.5	0.007
	End Point	3450.7040	3549.3124	24.7	0.007

NR Band n77(PC2)_3700 – 3980 MHz
(Lowest Frequency: 16QAM / Highest Frequency: 16QAM)

Test Date	2022-12-12
Test Engineer	19568

Limit		3700	3980	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	3700.6936	3979.3087		
Extreme (50C)		3700.6936	3979.3087	20.1	0.005
Extreme (40C)		3700.6936	3979.3087	19.7	0.005
Extreme (30C)		3700.6936	3979.3087	17.6	0.005
Extreme (10C)		3700.6936	3979.3087	23.5	0.006
Extreme (0C)		3700.6936	3979.3087	22.7	0.006
Extreme (-10C)		3700.6936	3979.3087	17.3	0.005
Extreme (-20C)		3700.6936	3979.3087	15.5	0.004
Extreme (-30C)		3700.6936	3979.3087	13.5	0.004
20C	15%	3700.6936	3979.3087	22.7	0.006
	-15%	3700.6936	3979.3087	25.4	0.007
	End Point	3700.6936	3979.3087	23.2	0.006

9.5. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913, §24.232, §27.50, §90.542 and §90.635

LIMITS

22.913(a) - The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(c) - Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

27.50:

(a)(3) 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 LTE 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. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

(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.

(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.

(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.

(h) The following power limits shall apply in the BRS and EBS:

(2) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

(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.

(k)(3) Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

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

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13dB.

TEST PROCEDURE

ANSI / TIA / EIA 603 E Clause 2.2.17; ESU40 setting reference to 971168 D01 v03r01

For radiated output power measurement with a ESU40:

a) Set the RBW ≥ OBW;
b) Set VBW ≥ 3 × RBW;
c) Set span ≥ 2 x RBW;
d) Sweep time = auto couple or 1 second;
e) Detector = rms;
f) Ensure that the number of measurement points ≥ span/RBW;
g) Trace mode = max hold(GSM, WCDMA), average(LTE, 5G NR);

TEST RESULTS

See the following pages.

NOTE1

LTE Band 30 A-MPR is implemented in this EUT when operating on the A-MPR specification in 3GPP TS 36.101 (Table 6.2.4-16). Also only Emission mask test item were performd A-MPR condition.

LTE Band 41(PC2) A-MPR is implemented in this EUT when operating on HPUE per the A-MPR specification in 3GPP TS 36.101 (Table 6.2.4-4a). Also only Emission mask test item were performd A-MPR condition.

LTE Band 41C(PC2) A-MPR is implemented in this EUT when operating on HPUE per the A-MPR specification in 3GPP TS 36.101 (Table 6.2.4A,10-1, Table 6.2.4A,10-2). Also only Emission mask test item were performd A-MPR condition.

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9.5.1. ERP/EIRP Results

GSM

Band	Mode	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)
GSM 850	GPRS	824.20	36.80	V	3.11	-0.82	32.87	1936.42	38.50	-5.63
		824.20	18.81	H	3.11	-0.82	14.89	30.83	38.50	-23.61
		836.60	36.42	V	3.13	-0.93	32.36	1721.87	38.50	-6.14
		836.60	20.30	H	3.13	-0.93	16.24	42.07	38.50	-22.26
		848.80	35.04	V	3.15	-1.04	30.85	1216.19	38.50	-7.65
		848.80	20.84	H	3.15	-1.04	16.65	46.24	38.50	-21.85
	EGPRS	824.20	31.30	V	3.11	-0.82	27.37	545.76	38.50	-11.13
		824.20	13.34	H	3.11	-0.82	9.42	8.75	38.50	-29.08
		836.60	31.28	V	3.13	-0.93	27.22	527.23	38.50	-11.28
		836.60	14.51	H	3.13	-0.93	10.45	11.09	38.50	-28.05
		848.80	29.95	V	3.15	-1.04	25.76	376.70	38.50	-12.74
		848.80	15.37	H	3.15	-1.04	11.18	13.12	38.50	-27.32

Band	Mode	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
GSM 1900	GPRS	1850.20	18.98	V	4.62	9.52	23.88	244.34	33.00	-9.12
		1850.20	24.61	H	4.62	9.52	29.51	893.31	33.00	-3.49
		1880.00	20.32	V	4.65	9.29	24.95	312.61	33.00	-8.05
		1880.00	26.19	H	4.65	9.29	30.83	1210.60	33.00	-2.17
		1909.80	20.27	V	4.68	9.00	24.59	287.74	33.00	-8.41
		1909.80	26.70	H	4.68	9.00	31.02	1264.74	33.00	-1.98
	EGPRS	1850.20	17.62	V	4.62	9.52	22.52	178.65	33.00	-10.48
		1850.20	22.71	H	4.62	9.52	27.61	576.77	33.00	-5.39
		1880.00	18.49	V	4.65	9.29	23.12	205.12	33.00	-9.88
		1880.00	24.31	H	4.65	9.29	28.95	785.24	33.00	-4.05
		1909.80	17.43	V	4.68	9.00	21.75	149.62	33.00	-11.25
		1909.80	25.32	H	4.68	9.00	29.64	920.45	33.00	-3.36

WCDMA

Band	Mode	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)
Band 5	REL99	826.40	23.44	V	3.11	-0.84	19.50	89.13	38.50	-19.00
		826.40	9.11	H	3.11	-0.84	5.17	3.29	38.50	-33.33
		836.60	23.96	V	3.13	-0.93	19.90	97.72	38.50	-18.60
		836.60	8.57	H	3.13	-0.93	4.51	2.82	38.50	-33.99
		846.60	25.25	V	3.14	-1.02	21.08	128.23	38.50	-17.42
		846.60	9.81	H	3.14	-1.02	5.65	3.67	38.50	-32.85
	HSDPA	826.40	22.84	V	3.11	-0.84	18.90	77.62	38.50	-19.60
		826.40	7.88	H	3.11	-0.84	3.94	2.48	38.50	-34.56
		836.60	23.38	V	3.13	-0.93	19.32	85.51	38.50	-19.18
		836.60	7.61	H	3.13	-0.93	3.55	2.26	38.50	-34.95
		846.60	22.84	V	3.14	-1.02	18.67	73.62	38.50	-19.83
		846.60	6.90	H	3.14	-1.02	2.74	1.88	38.50	-35.76

Band	Mode	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
Band 4	REL99	1712.40	17.95	V	4.44	9.51	23.02	200.52	30.00	-6.98
		1712.40	12.11	H	4.44	9.51	17.18	52.28	30.00	-12.82
		1732.60	19.69	V	4.46	9.60	24.84	304.64	30.00	-5.16
		1732.60	16.88	H	4.46	9.60	22.03	159.51	30.00	-7.97
		1752.60	18.36	V	4.48	9.68	23.56	226.76	30.00	-6.44
		1752.60	14.55	H	4.48	9.68	19.75	94.44	30.00	-10.25
	HSDPA	1712.40	18.05	V	4.44	9.51	23.12	205.19	30.00	-6.88
		1712.40	12.15	H	4.44	9.51	17.22	52.77	30.00	-12.78
		1732.60	20.23	V	4.46	9.60	25.38	344.97	30.00	-4.62
		1732.60	17.51	H	4.46	9.60	22.66	184.41	30.00	-7.34
		1752.60	18.71	V	4.48	9.68	23.91	245.80	30.00	-6.09
		1752.60	15.11	H	4.48	9.68	20.31	107.44	30.00	-9.69

Band	Mode	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
Band 2	REL99	1852.40	11.42	V	4.62	9.51	16.30	42.66	33.00	-16.70
		1852.40	17.66	H	4.62	9.51	22.55	179.89	33.00	-10.45
		1880.00	12.98	V	4.65	9.29	17.61	57.68	33.00	-15.39
		1880.00	19.40	H	4.65	9.29	24.04	253.51	33.00	-8.96
		1907.60	13.51	V	4.68	9.03	17.85	60.95	33.00	-15.15
		1907.60	20.37	H	4.68	9.03	24.71	295.80	33.00	-8.29
	HSDPA	1852.40	10.32	V	4.62	9.51	15.20	33.11	33.00	-17.80
		1852.40	16.23	H	4.62	9.51	21.12	129.42	33.00	-11.88
		1880.00	11.85	V	4.65	9.29	16.48	44.46	33.00	-16.52
		1880.00	18.51	H	4.65	9.29	23.15	206.54	33.00	-9.85
		1907.60	12.26	V	4.68	9.03	16.60	45.71	33.00	-16.40
		1907.60	19.62	H	4.68	9.03	23.96	248.89	33.00	-9.04

LTE Band 2 (Sub ANT)

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
1.4	QPSK										
	16-QAM										
3	QPSK										
	16-QAM										
5	QPSK										
	16-QAM										
10	QPSK										
	16-QAM										
15	QPSK										
	16-QAM										
20	QPSK	1860.00	15.80	H	4.63	9.27	20.45	110.88	33.00	-12.55	1/49
		1880.00	16.97	H	4.65	9.14	21.45	139.57	33.00	-11.55	1/49
		1900.00	17.19	H	4.67	9.00	21.52	141.93	33.00	-11.48	1/49
	16-QAM	1860.00	13.30	H	4.63	9.27	17.95	62.35	33.00	-15.05	1/49
		1880.00	16.66	H	4.65	9.14	21.14	129.95	33.00	-11.86	1/49
		1900.00	16.91	H	4.67	9.00	21.24	133.07	33.00	-11.76	1/49

LTE Band 7

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	2502.50	17.61	H	5.37	10.00	22.23	167.11	33.00	-10.77	1/12
		2535.00	18.06	H	5.41	9.93	22.58	181.13	33.00	-10.42	1/24
		2567.50	17.12	H	5.45	9.91	21.58	143.88	33.00	-11.42	1/12
	16-QAM	2502.50	16.64	H	5.37	10.00	21.26	133.66	33.00	-11.74	1/12
		2535.00	16.77	H	5.41	9.93	21.29	134.59	33.00	-11.71	1/12
		2567.50	16.20	H	5.45	9.91	20.66	116.41	33.00	-12.34	1/0
10	QPSK	2505.00	17.56	H	5.38	9.99	22.18	165.20	33.00	-10.82	1/25
		2535.00	17.77	H	5.41	9.93	22.29	169.43	33.00	-10.71	1/25
		2565.00	17.30	H	5.43	9.91	21.78	150.66	33.00	-11.22	1/25
	16-QAM	2505.00	16.44	H	5.38	9.99	21.06	127.64	33.00	-11.94	1/25
		2535.00	16.92	H	5.41	9.93	21.44	139.32	33.00	-11.56	1/25
		2565.00	16.31	H	5.43	9.91	20.79	119.95	33.00	-12.21	1/25
15	QPSK	2507.50	16.81	H	5.39	9.99	21.41	138.36	33.00	-11.59	1/0
		2535.00	18.08	H	5.41	9.93	22.60	181.97	33.00	-10.40	1/0
		2562.50	17.94	H	5.44	9.91	22.41	174.18	33.00	-10.59	1/0
	16-QAM	2507.50	15.94	H	5.39	9.99	20.54	113.24	33.00	-12.46	1/0
		2535.00	17.13	H	5.41	9.93	21.65	146.22	33.00	-11.35	1/0
		2562.50	16.99	H	5.44	9.91	21.46	139.96	33.00	-11.54	1/0
20	QPSK	2510.00	17.31	H	5.38	9.98	21.91	155.24	33.00	-11.09	1/0
		2535.00	17.67	H	5.41	9.93	22.19	165.58	33.00	-10.81	1/0
		2560.00	17.82	H	5.44	9.91	22.28	169.04	33.00	-10.72	1/0
	16-QAM	2510.00	16.56	H	5.38	9.98	21.16	130.62	33.00	-11.84	1/0
		2535.00	16.67	H	5.41	9.93	21.19	131.52	33.00	-11.81	1/49
		2560.00	16.93	H	5.44	9.91	21.39	137.72	33.00	-11.61	1/0

LTE Band 12

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
1.4	QPSK	699.70	21.04	V	2.87	-0.80	17.36	54.45	34.77	-17.41	1/5
		707.50	21.68	V	2.89	-0.79	18.01	63.24	34.77	-16.76	1/3
		715.30	22.56	V	2.90	-0.77	18.89	77.45	34.77	-15.88	1/0
	16-QAM	699.70	20.15	V	2.87	-0.80	16.47	44.36	34.77	-18.30	1/3
		707.50	20.94	V	2.89	-0.79	17.27	53.33	34.77	-17.50	1/5
		715.30	21.24	V	2.90	-0.77	17.57	57.15	34.77	-17.20	1/3
3	QPSK	700.50	23.62	V	2.88	-0.80	19.94	98.63	34.77	-14.83	1/8
		707.50	23.13	V	2.89	-0.79	19.46	88.31	34.77	-15.31	1/8
		714.50	23.27	V	2.90	-0.77	19.60	91.20	34.77	-15.17	1/14
	16-QAM	700.50	22.71	V	2.88	-0.80	19.03	79.98	34.77	-15.74	1/8
		707.50	22.14	V	2.89	-0.79	18.47	70.31	34.77	-16.30	1/8
		714.50	22.65	V	2.90	-0.77	18.98	79.07	34.77	-15.79	1/8
5	QPSK	701.50	23.70	V	2.88	-0.80	20.03	100.69	34.77	-14.74	1/12
		707.50	23.04	V	2.89	-0.79	19.37	86.50	34.77	-15.40	1/12
		713.50	23.14	V	2.90	-0.77	19.46	88.31	34.77	-15.31	1/12
	16-QAM	701.50	22.74	V	2.88	-0.80	19.07	80.72	34.77	-15.70	1/0
		707.50	21.99	V	2.89	-0.79	18.32	67.92	34.77	-16.45	1/0
		713.50	22.24	V	2.90	-0.77	18.56	71.78	34.77	-16.21	1/12
10	QPSK	704.00	23.85	V	2.88	-0.79	20.18	104.23	34.77	-14.59	1/25
		707.50	23.84	V	2.89	-0.79	20.17	103.99	34.77	-14.60	1/49
		711.00	23.28	V	2.89	-0.78	19.61	91.41	34.77	-15.16	1/0
	16-QAM	704.00	22.69	V	2.88	-0.79	19.02	79.80	34.77	-15.75	1/25
		707.50	21.89	V	2.89	-0.79	18.22	66.37	34.77	-16.55	1/25
		711.00	22.16	V	2.89	-0.78	18.49	70.63	34.77	-16.28	1/0

LTE Band 13

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	779.50	25.13	V	3.02	-0.64	21.47	140.28	34.77	-13.30	1/12
		782.00	25.00	V	3.02	-0.64	21.34	136.14	34.77	-13.43	1/12
		784.50	24.72	V	3.04	-0.63	21.05	127.35	34.77	-13.72	1/12
	16-QAM	779.50	24.09	V	3.02	-0.64	20.43	110.41	34.77	-14.34	1/12
		782.00	23.91	V	3.02	-0.64	20.25	105.93	34.77	-14.52	1/12
		784.50	23.73	V	3.04	-0.63	20.06	101.39	34.77	-14.71	1/12
10	QPSK	782.00	25.19	V	3.02	-0.64	21.53	142.23	34.77	-13.24	1/0
	16-QAM	782.00	23.84	V	3.02	-0.64	20.18	104.23	34.77	-14.59	1/25

LTE Band 14

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	790.50	24.15	V	3.04	-0.62	20.48	111.81	34.77	-14.29	1/12
		793.00	23.83	V	3.05	-0.61	20.17	104.06	34.77	-14.60	1/12
		795.50	23.69	V	3.05	-0.61	20.03	100.58	34.77	-14.74	1/12
	16-QAM	790.50	22.89	V	3.04	-0.62	19.22	83.65	34.77	-15.55	1/12
		793.00	22.35	V	3.05	-0.61	18.69	74.01	34.77	-16.08	1/12
		795.50	22.53	V	3.05	-0.61	18.87	77.01	34.77	-15.90	1/12
10	QPSK	793.00	24.01	V	3.05	-0.61	20.35	108.46	34.77	-14.42	1/0
	16-QAM	793.00	22.81	V	3.05	-0.61	19.15	82.28	34.77	-15.62	1/0

LTE Band 25

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
1.4	QPSK	1850.70	18.93	H	4.62	9.52	23.83	241.52	33.00	-9.17	1/5
		1882.50	21.48	H	4.65	9.27	26.09	406.61	33.00	-6.91	1/0
		1914.30	20.22	H	4.70	8.94	24.46	279.30	33.00	-8.54	1/3
	16-QAM	1850.70	18.32	H	4.62	9.52	23.22	209.87	33.00	-9.78	1/8
		1882.50	20.78	H	4.65	9.27	25.39	346.08	33.00	-7.61	1/3
		1914.30	19.66	H	4.70	8.94	23.90	245.51	33.00	-9.10	1/3
3	QPSK	1851.50	18.73	H	4.62	9.51	23.61	229.85	33.00	-9.39	1/8
		1882.50	21.08	H	4.65	9.27	25.69	370.83	33.00	-7.31	1/8
		1913.50	21.08	H	4.69	8.95	25.33	341.58	33.00	-7.67	1/8
	16-QAM	1851.50	18.05	H	4.62	9.51	22.93	196.53	33.00	-10.07	1/8
		1882.50	20.43	H	4.65	9.27	25.04	319.28	33.00	-7.96	1/8
		1913.50	20.40	H	4.69	8.95	24.65	292.07	33.00	-8.35	1/8
5	QPSK	1852.50	19.24	H	4.62	9.50	24.12	258.49	33.00	-8.88	1/24
		1882.50	21.52	H	4.65	9.27	26.13	410.37	33.00	-6.87	1/12
		1912.50	21.30	H	4.69	8.96	25.57	360.45	33.00	-7.43	1/12
	16-QAM	1852.50	18.48	H	4.62	9.50	23.36	216.99	33.00	-9.64	1/12
		1882.50	20.77	H	4.65	9.27	25.38	345.28	33.00	-7.62	1/12
		1912.50	20.84	H	4.69	8.96	25.11	324.23	33.00	-7.89	1/0
10	QPSK	1855.00	19.52	H	4.62	9.48	24.38	274.18	33.00	-8.62	1/25
		1882.50	21.72	H	4.65	9.27	26.33	429.71	33.00	-6.67	1/0
		1910.00	21.55	H	4.68	8.99	25.87	386.05	33.00	-7.13	1/25
	16-QAM	1855.00	18.55	H	4.62	9.48	23.41	219.30	33.00	-9.59	1/0
		1882.50	20.93	H	4.65	9.27	25.54	358.24	33.00	-7.46	1/0
		1910.00	20.98	H	4.68	8.99	25.30	338.57	33.00	-7.70	1/0
15	QPSK	1857.50	19.70	H	4.63	9.47	24.54	284.28	33.00	-8.46	1/37
		1882.50	21.17	H	4.65	9.27	25.79	379.21	33.00	-7.21	1/37
		1907.50	20.97	H	4.69	9.03	25.32	340.14	33.00	-7.68	1/37
	16-QAM	1857.50	19.02	H	4.63	9.47	23.86	243.14	33.00	-9.14	1/37
		1882.50	20.53	H	4.65	9.27	25.14	326.72	33.00	-7.86	1/37
		1907.50	20.29	H	4.69	9.03	24.64	290.78	33.00	-8.36	1/37
20	QPSK	1860.00	20.46	H	4.63	9.45	25.28	337.00	33.00	-7.72	1/0
		1882.50	21.64	H	4.65	9.27	26.25	421.87	33.00	-6.75	1/0
		1905.00	22.31	H	4.68	9.06	26.69	467.01	33.00	-6.31	1/0
	16-QAM	1860.00	19.42	H	4.63	9.45	24.24	265.24	33.00	-8.76	1/49
		1882.50	20.60	H	4.65	9.27	25.21	332.03	33.00	-7.79	1/49
		1905.00	21.33	H	4.68	9.06	25.71	372.67	33.00	-7.29	1/49

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LTE Band 26

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
1.4	QPSK	814.70	24.42	V	3.09	-0.73	20.61	114.97	50.00	-29.39	1/3
		823.30	24.25	V	3.10	-0.81	20.34	108.19	50.00	-29.66	1/3
		824.70	24.57	V	3.11	-0.82	20.64	115.91	38.50	-17.86	1/3
		831.50	24.42	V	3.11	-0.88	20.42	110.22	38.50	-18.08	1/3
		848.30	25.57	V	3.15	-1.03	21.39	137.77	38.50	-17.11	1/3
	16-QAM	814.70	23.13	V	3.09	-0.73	19.32	85.43	50.00	-30.68	1/3
		823.30	23.21	V	3.10	-0.81	19.30	85.15	50.00	-30.70	1/3
		824.70	23.47	V	3.11	-0.82	19.54	89.97	38.50	-18.96	1/3
		831.50	23.22	V	3.11	-0.88	19.22	83.61	38.50	-19.28	1/3
		848.30	24.41	V	3.15	-1.03	20.23	105.48	38.50	-18.27	1/3
3	QPSK	815.50	24.28	V	3.08	-0.74	20.45	110.98	50.00	-29.55	1/8
		822.50	24.31	V	3.10	-0.80	20.41	109.78	50.00	-29.59	1/8
		825.50	24.64	V	3.10	-0.83	20.71	117.76	38.50	-17.79	1/8
		831.50	24.30	V	3.11	-0.88	20.30	107.21	38.50	-18.20	1/8
		847.50	25.33	V	3.15	-1.03	21.16	130.58	38.50	-17.34	1/8
	16-QAM	815.50	23.13	V	3.08	-0.74	19.30	85.16	50.00	-30.70	1/8
		822.50	23.18	V	3.10	-0.80	19.28	84.63	50.00	-30.72	1/8
		825.50	23.45	V	3.10	-0.83	19.52	89.54	38.50	-18.98	1/8
		831.50	23.00	V	3.11	-0.88	19.00	79.48	38.50	-19.50	1/8
		847.50	24.05	V	3.15	-1.03	19.88	97.25	38.50	-18.62	1/8
5	QPSK	816.50	24.40	V	3.09	-0.75	20.56	113.84	50.00	-29.44	1/13
		821.50	24.18	V	3.10	-0.79	20.28	106.76	50.00	-29.72	1/13
		826.50	24.58	V	3.11	-0.84	20.63	115.64	38.50	-17.87	1/13
		831.50	24.78	V	3.11	-0.88	20.78	119.74	38.50	-17.72	1/13
		846.50	26.05	V	3.14	-1.02	21.89	154.35	38.50	-16.61	1/13
	16-QAM	816.50	23.19	V	3.09	-0.75	19.35	86.16	50.00	-30.65	1/13
		821.50	23.24	V	3.10	-0.79	19.34	85.98	50.00	-30.66	1/13
		826.50	23.54	V	3.11	-0.84	19.59	91.01	38.50	-18.91	1/13
		831.50	23.77	V	3.11	-0.88	19.77	94.90	38.50	-18.73	1/13
		846.50	24.88	V	3.14	-1.02	20.72	117.90	38.50	-17.78	1/13
10	QPSK	819.00	24.38	V	3.09	-0.77	20.51	112.51	50.00	-29.49	1/25
		829.00	24.26	V	3.11	-0.86	20.29	106.82	38.50	-18.21	1/25
		831.50	24.51	V	3.11	-0.88	20.51	112.52	38.50	-17.99	1/25
		844.00	25.77	V	3.14	-1.00	21.64	145.85	38.50	-16.86	1/25
	16-QAM	819.00	23.08	V	3.09	-0.77	19.21	83.41	50.00	-30.79	1/25
		829.00	23.23	V	3.11	-0.86	19.26	84.26	38.50	-19.24	1/25
		831.50	23.28	V	3.11	-0.88	19.28	84.77	38.50	-19.22	1/25
		844.00	24.64	V	3.14	-1.00	20.51	112.44	38.50	-17.99	1/25
15	QPSK	821.50	24.34	V	3.10	-0.79	20.44	110.76	50.00	-29.56	1/37
		831.50	24.76	V	3.11	-0.88	20.76	119.19	38.50	-17.74	1/0
		841.50	25.87	V	3.13	-0.97	21.76	150.10	38.50	-16.74	1/0
	16-QAM	821.50	23.38	V	3.10	-0.79	19.48	88.80	50.00	-30.52	1/37
		831.50	23.59	V	3.11	-0.88	19.59	91.04	38.50	-18.91	1/0
		841.50	25.17	V	3.13	-0.97	21.06	127.76	38.50	-17.44	1/37

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
1.4	QPSK	824.00	24.59	V	3.10	-0.82	20.68	116.86	38.50	-17.82	1/3
	16-QAM		23.54	V	3.10	-0.82	19.62	91.71	38.50	-18.88	1/3
3	QPSK		24.38	V	3.10	-0.82	20.47	111.34	38.50	-18.03	1/8
	16-QAM		23.24	V	3.10	-0.82	19.33	85.63	38.50	-19.17	1/8
5	QPSK		25.37	V	3.10	-0.82	21.46	139.85	38.50	-17.04	1/13
	16-QAM		24.38	V	3.10	-0.82	20.47	111.34	38.50	-18.03	1/13
10	QPSK		24.49	V	3.10	-0.82	20.58	114.20	38.50	-17.92	1/25
	16-QAM		23.48	V	3.10	-0.82	19.56	90.42	38.50	-18.94	1/25
15	QPSK		25.01	V	3.10	-0.82	21.10	128.72	38.50	-17.40	1/0
	16-QAM		23.79	V	3.10	-0.82	19.88	97.20	38.50	-18.62	1/0

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LTE Band 30

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	2307.50	17.65	H	5.15	9.75	22.24	167.58	24.00	-1.76	1/24
		2310.00	17.66	H	5.16	9.76	22.26	168.42	24.00	-1.74	1/12
		2312.50	16.14	H	5.15	9.77	20.76	119.01	24.00	-3.24	1/12
	16-QAM	2307.50	17.20	H	5.15	9.75	21.79	151.08	24.00	-2.21	1/12
		2310.00	16.79	H	5.16	9.76	21.39	137.85	24.00	-2.61	1/12
		2312.50	15.35	H	5.15	9.77	19.97	99.22	24.00	-4.03	1/0
10	QPSK	2310.00	17.63	H	5.16	9.76	22.23	167.26	24.00	-1.77	1/25
	16-QAM	2310.00	16.89	H	5.16	9.76	21.49	141.06	24.00	-2.51	1/25

LTE Band 40

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	2307.50	7.31	H	5.15	9.75	11.90	15.50	24.00	-12.10	1/12
		2310.00	7.88	H	5.16	9.76	12.48	17.72	24.00	-11.52	1/12
		2312.50	6.95	H	5.15	9.77	11.57	14.34	24.00	-12.43	1/12
		2352.50	8.35	H	5.20	9.98	13.12	20.50	24.00	-10.88	1/12
		2355.00	7.87	H	5.21	9.98	12.64	18.38	24.00	-11.36	1/0
		2357.50	8.55	H	5.20	9.99	13.33	21.54	24.00	-10.67	1/12
	16-QAM	2307.50	6.86	H	5.15	9.75	11.45	13.97	24.00	-12.55	1/12
		2310.00	7.28	H	5.16	9.76	11.88	15.43	24.00	-12.12	1/12
		2312.50	6.62	H	5.15	9.77	11.24	13.29	24.00	-12.76	1/12
		2352.50	7.97	H	5.20	9.98	12.74	18.78	24.00	-11.26	1/12
		2355.00	7.27	H	5.21	9.98	12.04	16.01	24.00	-11.96	1/12
		2357.50	8.12	H	5.20	9.99	12.90	19.51	24.00	-11.10	1/12
10	QPSK	2310.00	7.82	H	5.16	9.76	12.42	17.47	24.00	-11.58	1/0
		2355.00	8.14	H	5.21	9.98	12.91	19.56	24.00	-11.09	1/0
	16-QAM	2310.00	7.49	H	5.16	9.76	12.09	16.20	24.00	-11.91	1/0
		2355.00	7.66	H	5.21	9.98	12.43	17.51	24.00	-11.57	1/0

LTE Band 41 (PC2)

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	2498.50	17.71	H	5.36	10.00	22.35	171.79	33.00	-10.65	1/0
		2593.00	19.14	H	5.47	9.91	23.58	228.14	33.00	-9.42	1/0
		2687.50	17.30	H	5.57	9.87	21.61	144.79	33.00	-11.39	1/0
	16-QAM	2498.50	16.97	H	5.36	10.00	21.61	144.87	33.00	-11.39	1/24
		2593.00	18.28	H	5.47	9.91	22.72	187.15	33.00	-10.28	1/0
		2687.50	16.36	H	5.57	9.87	20.67	116.61	33.00	-12.33	1/0
10	QPSK	2501.00	19.49	H	5.38	10.00	24.11	257.50	33.00	-8.89	1/0
		2593.00	21.48	H	5.47	9.91	25.92	391.02	33.00	-7.08	1/0
		2685.00	19.01	H	5.56	9.87	23.33	215.26	33.00	-9.67	1/0
	16-QAM	2501.00	18.84	H	5.38	10.00	23.46	221.71	33.00	-9.54	1/49
		2593.00	20.52	H	5.47	9.91	24.96	313.47	33.00	-8.04	1/0
		2685.00	18.37	H	5.56	9.87	22.69	185.76	33.00	-10.31	1/0
15	QPSK	2503.50	18.31	H	5.37	9.99	22.93	196.53	33.00	-10.07	1/37
		2593.00	20.79	H	5.47	9.91	25.23	333.58	33.00	-7.77	1/0
		2682.50	18.90	H	5.56	9.87	23.21	209.37	33.00	-9.79	1/0
	16-QAM	2503.50	17.38	H	5.37	9.99	22.00	158.65	33.00	-11.00	1/37
		2593.00	19.66	H	5.47	9.91	24.10	257.15	33.00	-8.90	1/0
		2682.50	17.88	H	5.56	9.87	22.19	165.54	33.00	-10.81	1/0
20	QPSK	2506.00	19.29	H	5.37	9.99	23.91	245.86	33.00	-9.09	1/49
		2593.00	20.89	H	5.47	9.91	25.33	341.35	33.00	-7.67	1/49
		2680.00	19.00	H	5.56	9.87	23.31	214.53	33.00	-9.69	1/49
	16-QAM	2506.00	18.62	H	5.37	9.99	23.24	210.71	33.00	-9.76	1/49
		2593.00	19.60	H	5.47	9.91	24.04	253.63	33.00	-8.96	1/49
		2680.00	17.97	H	5.56	9.87	22.28	169.23	33.00	-10.72	1/49

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

LTE Band 41C (PC2)_ULCA

Part 27			
EIRP Limit (dBm)	33	ANT Gain (dBi)	-3.5

Frequency Range (MHz)	Bandwidth (MHz)	Modulation	Output Power				
			Conducted Average Power	Antenna Gain	EIRP Average Power		Margin
			(dBm)	dBi	dBm	mW	
2496 - 2690	40MHz (20+20)	QPSK	26.63	-3.50	23.13	205.59	-9.87
		16QAM	26.73		23.23	210.38	-9.77
	35MHz (15+20)	QPSK	26.71		23.21	209.41	-9.79
		16QAM	26.72		23.22	209.89	-9.78
	30MHz (15+15)	QPSK	26.69		23.19	208.45	-9.81
		16QAM	26.62		23.12	205.12	-9.88
	25MHz (5+20)	QPSK	26.43		22.93	196.34	-10.07
		16QAM	26.3		22.8	190.55	-10.2

LTE Band 66(Main ANT)

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
1.4	QPSK	1710.70	17.68	V	4.43	9.50	22.75	188.36	30.00	-7.25	1/5
		1745.00	18.96	V	4.47	9.66	24.14	259.42	30.00	-5.86	1/5
		1779.30	18.08	V	4.52	9.68	23.24	210.86	30.00	-6.76	1/3
	16-QAM	1710.70	16.90	V	4.43	9.50	21.97	157.40	30.00	-8.03	1/5
		1745.00	18.52	V	4.47	9.66	23.70	234.42	30.00	-6.30	1/0
		1779.30	17.69	V	4.52	9.68	22.85	192.75	30.00	-7.15	1/0
3	QPSK	1711.50	17.45	V	4.44	9.51	22.52	178.65	30.00	-7.48	1/8
		1745.00	19.02	V	4.47	9.66	24.20	263.03	30.00	-5.80	1/8
		1778.50	18.48	V	4.52	9.68	23.64	231.21	30.00	-6.36	1/8
	16-QAM	1711.50	17.07	V	4.44	9.51	22.14	163.68	30.00	-7.86	1/8
		1745.00	18.25	V	4.47	9.66	23.43	220.29	30.00	-6.57	1/8
		1778.50	17.68	V	4.52	9.68	22.84	192.31	30.00	-7.16	1/8
5	QPSK	1712.50	18.67	V	4.44	9.51	23.75	237.14	30.00	-6.25	1/24
		1745.00	19.45	V	4.47	9.66	24.63	290.40	30.00	-5.37	1/12
		1777.50	18.74	V	4.52	9.68	23.90	245.47	30.00	-6.10	1/24
	16-QAM	1712.50	17.21	V	4.44	9.51	22.29	169.43	30.00	-7.71	1/12
		1745.00	18.44	V	4.47	9.66	23.62	230.14	30.00	-6.38	1/12
		1777.50	17.62	V	4.52	9.68	22.78	189.67	30.00	-7.22	1/24
10	QPSK	1715.00	17.89	V	4.44	9.52	22.98	198.61	30.00	-7.02	1/25
		1745.00	19.32	V	4.47	9.66	24.50	281.84	30.00	-5.50	1/25
		1775.00	18.88	V	4.51	9.68	24.05	254.10	30.00	-5.95	1/25
	16-QAM	1715.00	16.91	V	4.44	9.52	22.00	158.49	30.00	-8.00	1/25
		1745.00	18.38	V	4.47	9.66	23.57	227.51	30.00	-6.43	1/25
		1775.00	18.32	V	4.51	9.68	23.48	222.84	30.00	-6.52	1/25
15	QPSK	1717.50	17.69	V	4.44	9.53	22.78	189.67	30.00	-7.22	1/37
		1745.00	18.79	V	4.47	9.66	23.97	249.46	30.00	-6.03	1/37
		1772.50	18.73	V	4.51	9.68	23.90	245.47	30.00	-6.10	1/37
	16-QAM	1717.50	17.06	V	4.44	9.53	22.15	164.06	30.00	-7.85	1/37
		1745.00	18.17	V	4.47	9.66	22.35	171.79	30.00	-6.65	1/74
		1772.50	18.12	V	4.51	9.68	23.29	213.30	30.00	-6.71	1/37
20	QPSK	1720.00	18.15	V	4.44	9.55	23.25	211.35	30.00	-6.75	1/99
		1745.00	19.20	V	4.47	9.66	24.38	274.16	30.00	-5.62	1/49
		1770.00	18.89	V	4.51	9.68	24.07	255.27	30.00	-5.93	1/49
	16-QAM	1720.00	17.57	V	4.44	9.55	22.67	184.93	30.00	-7.33	1/49
		1745.00	18.52	V	4.47	9.66	23.70	234.42	30.00	-6.30	1/99
		1770.00	17.83	V	4.51	9.68	23.01	199.99	30.00	-6.99	1/99

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

LTE Band 66 (Sub ANT)

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
1.4	QPSK	1710.70									
		1745.00									
		1779.30									
	16-QAM	1710.70									
		1745.00									
		1779.30									
3	QPSK	1711.50									
		1745.00									
		1778.50									
	16-QAM	1711.50									
		1745.00									
		1778.50									
5	QPSK	1712.50	15.27	H	4.44	9.51	20.34	108.26	30.00	-9.66	1/24
		1745.00	16.52	H	4.47	9.66	21.70	148.01	30.00	-8.30	1/12
		1777.50	15.85	H	4.52	9.68	21.01	126.08	30.00	-8.99	1/24
	16-QAM	1712.50	14.98	H	4.44	9.51	20.05	101.27	30.00	-9.95	1/24
		1745.00	16.22	H	4.47	9.66	21.40	138.13	30.00	-8.60	1/12
		1777.50	15.64	H	4.52	9.68	20.80	120.13	30.00	-9.20	1/24
10	QPSK	1715.00									
		1745.00									
		1775.00									
	16-QAM	1715.00									
		1745.00									
		1775.00									
15	QPSK	1717.50									
		1745.00									
		1772.50									
	16-QAM	1717.50									
		1745.00									
		1772.50									
20	QPSK	1720.00									
		1745.00									
		1770.00									
	16-QAM	1720.00									
		1745.00									
		1770.00									

LTE Band 71

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	665.50	24.03	H	2.79	-0.70	20.54	113.34	34.77	-14.23	1/0
		680.50	24.96	H	2.83	-0.74	21.39	137.58	34.77	-13.38	1/24
		695.50	24.73	H	2.86	-0.79	21.09	128.39	34.77	-13.68	1/12
	16-QAM	665.50	22.82	H	2.79	-0.70	19.33	85.78	34.77	-15.44	1/0
		680.50	23.77	H	2.83	-0.74	20.20	104.61	34.77	-14.57	1/0
		695.50	23.45	H	2.86	-0.79	19.81	95.62	34.77	-14.96	1/12
10	QPSK	668.00	23.48	H	2.81	-0.70	19.97	99.22	34.77	-14.80	1/0
		680.50	24.29	H	2.83	-0.74	20.72	117.91	34.77	-14.05	1/0
		693.00	24.44	H	2.86	-0.78	20.81	120.47	34.77	-13.96	1/0
	16-QAM	668.00	22.24	H	2.81	-0.70	18.73	74.57	34.77	-16.04	1/25
		680.50	23.36	H	2.83	-0.74	19.79	95.18	34.77	-14.98	1/25
		693.00	23.51	H	2.86	-0.78	19.88	97.25	34.77	-14.89	1/0
15	QPSK	670.50	23.90	H	2.81	-0.71	20.37	108.97	34.77	-14.40	1/0
		680.50	24.19	H	2.83	-0.74	20.62	115.23	34.77	-14.15	1/0
		690.50	24.02	H	2.85	-0.77	20.39	109.51	34.77	-14.38	1/0
	16-QAM	670.50	22.72	H	2.81	-0.71	19.19	83.04	34.77	-15.58	1/0
		680.50	23.15	H	2.83	-0.74	19.58	90.69	34.77	-15.19	1/0
		690.50	22.88	H	2.85	-0.77	19.25	84.23	34.77	-15.52	1/0
20	QPSK	673.00	23.97	H	2.81	-0.72	20.43	110.48	34.77	-14.34	1/0
		680.50	24.06	H	2.83	-0.74	20.49	111.83	34.77	-14.28	1/0
		688.00	23.68	H	2.85	-0.76	20.07	101.67	34.77	-14.70	1/0
	16-QAM	673.00	22.23	H	2.81	-0.72	18.69	74.01	34.77	-16.08	1/49
		680.50	23.08	H	2.83	-0.74	19.51	89.24	34.77	-15.26	1/49
		688.00	22.98	H	2.85	-0.76	19.37	86.53	34.77	-15.40	1/49

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

5G NR n5

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	826.50	23.06	V	3.11	-0.84	19.11	81.47	38.50	-19.39	1/23
		836.50	24.13	V	3.13	-0.93	20.08	101.86	38.50	-18.42	1/1
		846.50	24.28	V	3.14	-1.02	20.12	102.80	38.50	-18.38	1/1
	16-QAM	826.50	20.99	V	3.11	-0.84	17.04	50.58	38.50	-21.46	1/23
		836.50	22.56	V	3.13	-0.93	18.51	70.96	38.50	-19.99	1/1
		846.50	22.93	V	3.14	-1.02	18.77	75.34	38.50	-19.73	1/1
10	QPSK	829.00	23.39	V	3.11	-0.86	19.42	87.50	38.50	-19.08	1/26
		836.50	24.32	V	3.13	-0.93	20.27	106.41	38.50	-18.23	1/26
		844.00	24.41	V	3.14	-1.00	20.28	106.66	38.50	-18.22	1/26
	16-QAM	829.00	21.25	V	3.11	-0.86	17.28	53.46	38.50	-21.22	1/26
		836.50	22.86	V	3.13	-0.93	18.81	76.03	38.50	-19.69	1/26
		844.00	23.15	V	3.14	-1.00	19.02	79.80	38.50	-19.48	1/26
15	QPSK	831.50	23.17	V	3.11	-0.88	19.17	82.60	38.50	-19.33	1/77
		836.50	24.08	V	3.13	-0.93	20.03	100.69	38.50	-18.47	1/1
		841.50	24.38	V	3.13	-0.97	20.27	106.41	38.50	-18.23	1/1
	16-QAM	831.50	21.35	V	3.11	-0.88	17.35	54.33	38.50	-21.15	1/77
		836.50	22.55	V	3.13	-0.93	18.50	70.79	38.50	-20.00	1/1
		841.50	23.12	V	3.13	-0.97	19.01	79.62	38.50	-19.49	1/1
20	QPSK	834.00	23.28	V	3.12	-0.91	19.25	84.14	38.50	-19.25	1/53
		836.50	24.08	V	3.13	-0.93	20.03	100.69	38.50	-18.47	1/53
		839.00	24.63	V	3.13	-0.95	20.55	113.50	38.50	-17.95	1/53
	16-QAM	834.00	22.01	V	3.12	-0.91	17.98	62.81	38.50	-20.52	1/53
		836.50	22.78	V	3.13	-0.93	18.73	74.64	38.50	-19.77	1/53
		839.00	23.37	V	3.13	-0.95	19.29	84.92	38.50	-19.21	1/53

5G NR n12

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	701.50	23.49	H	2.88	-0.80	19.81	95.81	34.77	-14.96	1/23
		707.50	23.57	H	2.89	-0.79	19.90	97.78	34.77	-14.87	1/1
		713.50	23.08	H	2.90	-0.77	19.40	87.19	34.77	-15.37	1/1
	16-QAM	701.50	22.45	H	2.88	-0.80	18.77	75.41	34.77	-16.00	1/23
		707.50	22.26	H	2.89	-0.79	18.59	72.32	34.77	-16.18	1/1
		713.50	22.06	H	2.90	-0.77	18.38	68.94	34.77	-16.39	1/1
10	QPSK	704.00	23.36	H	2.88	-0.79	19.69	93.01	34.77	-15.08	1/26
		707.50	23.22	H	2.89	-0.79	19.55	90.21	34.77	-15.22	1/50
		711.00	23.25	H	2.89	-0.78	19.57	90.66	34.77	-15.20	1/26
	16-QAM	704.00	22.37	H	2.88	-0.79	18.70	74.05	34.77	-16.07	1/26
		707.50	22.27	H	2.89	-0.79	18.60	72.48	34.77	-16.17	1/50
		711.00	22.08	H	2.89	-0.78	18.40	69.25	34.77	-16.37	1/26
15	QPSK	706.50	22.99	H	2.88	-0.79	19.32	85.60	34.77	-15.45	1/77
		707.50	22.80	H	2.89	-0.79	19.13	81.89	34.77	-15.64	1/77
		708.50	21.74	H	2.89	-0.78	18.06	63.98	34.77	-16.71	1/77
	16-QAM	706.50	22.04	H	2.88	-0.79	18.37	68.78	34.77	-16.40	1/77
		707.50	21.66	H	2.89	-0.79	17.99	62.99	34.77	-16.78	1/77
		708.50	20.93	H	2.89	-0.78	17.25	53.09	34.77	-17.52	1/77

5G NR n25

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	1852.50	19.94	H	4.62	9.50	24.82	303.70	33.00	-8.18	1/23
		1882.50	21.73	H	4.65	9.27	26.34	430.70	33.00	-6.66	1/1
		1912.50	21.01	H	4.69	8.96	25.28	337.17	33.00	-7.72	1/13
	16-QAM	1852.50	19.16	H	4.62	9.50	24.04	253.77	33.00	-8.96	1/23
		1882.50	20.62	H	4.65	9.27	25.23	333.56	33.00	-7.77	1/1
		1912.50	20.54	H	4.69	8.96	24.81	302.59	33.00	-8.19	1/13
10	QPSK	1855.00	20.75	H	4.62	9.48	25.61	363.95	33.00	-7.39	1/50
		1882.50	21.60	H	4.65	9.27	26.21	418.00	33.00	-6.79	1/1
		1910.00	22.35	H	4.68	8.99	26.67	464.14	33.00	-6.33	1/1
	16-QAM	1855.00	20.19	H	4.62	9.48	25.05	319.92	33.00	-7.95	1/50
		1882.50	20.92	H	4.65	9.27	25.53	357.42	33.00	-7.47	1/1
		1910.00	21.83	H	4.68	8.99	26.15	411.76	33.00	-6.85	1/1
15	QPSK	1857.50	20.70	H	4.63	9.47	25.54	358.14	33.00	-7.46	1/77
		1882.50	20.98	H	4.65	9.27	25.59	362.39	33.00	-7.41	1/40
		1907.50	21.72	H	4.69	9.03	26.07	404.17	33.00	-6.93	1/1
	16-QAM	1857.50	19.69	H	4.63	9.47	24.53	283.82	33.00	-8.47	1/77
		1882.50	20.39	H	4.65	9.27	25.00	316.35	33.00	-8.00	1/40
		1907.50	20.97	H	4.69	9.03	25.32	340.07	33.00	-7.68	1/1
20	QPSK	1860.00	20.80	H	4.63	9.45	25.62	364.45	33.00	-7.38	1/104
		1882.50	21.25	H	4.65	9.27	25.86	385.63	33.00	-7.14	1/1
		1905.00	22.12	H	4.68	9.06	26.50	447.02	33.00	-6.50	1/1
	16-QAM	1860.00	19.82	H	4.63	9.45	24.64	290.83	33.00	-8.36	1/104
		1882.50	20.32	H	4.65	9.27	24.93	311.30	33.00	-8.07	1/1
		1905.00	21.05	H	4.68	9.06	25.43	349.40	33.00	-7.57	1/1
25	QPSK	1862.50	20.63	H	4.63	9.43	25.42	348.38	33.00	-7.58	1/131
		1882.50	21.61	H	4.65	9.27	26.22	418.96	33.00	-6.78	1/1
		1902.50	22.61	H	4.68	9.10	27.04	505.38	33.00	-5.96	1/1
	16-QAM	1862.50	19.37	H	4.63	9.43	24.16	260.65	33.00	-8.84	1/131
		1882.50	20.88	H	4.65	9.27	25.49	354.14	33.00	-7.51	1/1
		1902.50	21.78	H	4.68	9.10	26.21	417.46	33.00	-6.79	1/1
30	QPSK	1865.00	21.17	H	4.63	9.41	25.94	392.79	33.00	-7.06	1/80
		1882.50	21.07	H	4.65	9.27	25.68	369.98	33.00	-7.32	1/80
		1900.00	21.62	H	4.67	9.13	26.08	405.34	33.00	-6.92	1/80
	16-QAM	1865.00	20.33	H	4.63	9.41	25.10	323.72	33.00	-7.90	1/80
		1882.50	20.34	H	4.65	9.27	24.95	312.73	33.00	-8.05	1/80
		1900.00	21.04	H	4.67	9.13	25.50	354.66	33.00	-7.50	1/80
40	QPSK	1870.00	21.24	H	4.64	9.37	25.97	395.35	33.00	-7.03	1/108
		1882.50	21.51	H	4.65	9.27	26.12	409.43	33.00	-6.88	1/1
		1895.00	21.67	H	4.67	9.17	26.18	414.53	33.00	-6.82	1/1
	16-QAM	1870.00	20.43	H	4.64	9.37	25.16	328.08	33.00	-7.84	1/108
		1882.50	20.71	H	4.65	9.27	25.32	340.54	33.00	-7.68	1/1
		1895.00	21.00	H	4.67	9.17	25.51	355.27	33.00	-7.49	1/1

5G NR n30

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (dBm)	Delta (dB)	RB
5	QPSK	2307.50	18.24	H	5.15	9.75	22.84	192.25	24.00	-1.16	1/23
		2310.00	18.26	H	5.16	9.76	22.87	193.53	24.00	-1.13	1/23
		2312.50	17.61	H	5.15	9.77	22.23	167.17	24.00	-1.77	1/23
	16-QAM	2307.50	17.29	H	5.15	9.75	21.89	154.47	24.00	-2.11	1/23
		2310.00	15.59	H	5.16	9.76	20.20	104.65	24.00	-3.80	1/23
		2312.50	17.01	H	5.15	9.77	21.63	145.60	24.00	-2.37	1/23
10	QPSK	2310.00	17.01	H	5.16	9.76	21.62	145.12	24.00	-2.38	1/50
	16-QAM	2310.00	16.36	H	5.16	9.76	20.97	124.95	24.00	-3.03	1/50

5G NR n41(PC2)

BW (MHz)	Modulation	f (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
10	QPSK	2501.01	19.94	V	5.38	10.00	24.56	285.59	33.00	-8.44	1/22
		2592.99	19.89	V	5.47	9.91	24.34	271.48	33.00	-8.66	1/22
		2685.00	17.29	V	5.56	9.87	21.61	144.76	33.00	-11.39	1/22
	16-QAM	2501.01	19.01	V	5.38	10.00	23.63	230.54	33.00	-9.37	1/22
		2592.99	18.87	V	5.47	9.91	23.32	214.65	33.00	-9.68	1/22
		2685.00	16.60	V	5.56	9.87	20.92	123.49	33.00	-12.08	1/22
15	QPSK	2503.50	18.15	V	5.37	9.99	22.77	189.26	33.00	-10.23	1/1
		2592.99	17.96	V	5.47	9.91	22.41	174.07	33.00	-10.59	1/36
		2682.48	16.11	V	5.56	9.87	20.42	110.19	33.00	-12.58	1/36
	16-QAM	2503.50	17.79	V	5.37	9.99	22.41	174.20	33.00	-10.59	1/1
		2592.99	17.73	V	5.47	9.91	22.18	165.09	33.00	-10.82	1/36
		2682.48	15.85	V	5.56	9.87	20.16	103.79	33.00	-12.84	1/36
20	QPSK	2506.02	19.95	V	5.37	9.99	24.57	286.53	33.00	-8.43	1/49
		2592.99	20.11	V	5.47	9.91	24.56	285.58	33.00	-8.44	1/1
		2679.99	18.58	V	5.56	9.87	22.89	194.55	33.00	-10.11	1/26
	16-QAM	2506.02	18.93	V	5.37	9.99	23.55	226.55	33.00	-9.45	1/49
		2592.99	18.50	V	5.47	9.91	22.95	197.12	33.00	-10.05	1/1
		2679.99	17.55	V	5.56	9.87	21.86	153.47	33.00	-11.14	1/26
30	QPSK	2511.00	18.92	V	5.39	9.98	23.51	224.42	33.00	-9.49	1/76
		2592.99	19.64	V	5.47	9.91	24.09	256.29	33.00	-8.91	1/76
		2675.00	18.82	V	5.56	9.87	23.14	205.85	33.00	-9.86	1/76
	16-QAM	2511.00	17.81	V	5.39	9.98	22.40	173.81	33.00	-10.60	1/76
		2592.99	18.78	V	5.47	9.91	23.23	210.25	33.00	-9.77	1/76
		2675.00	18.05	V	5.56	9.87	22.37	172.40	33.00	-10.63	1/76
40	QPSK	2516.01	18.78	V	5.38	9.97	23.37	217.45	33.00	-9.63	1/104
		2592.99	19.36	V	5.47	9.91	23.81	240.29	33.00	-9.19	1/104
		2670.00	18.57	V	5.55	9.87	22.90	194.95	33.00	-10.10	1/104
	16-QAM	2516.01	17.75	V	5.38	9.97	22.34	171.54	33.00	-10.66	1/104
		2592.99	18.54	V	5.47	9.91	22.99	198.94	33.00	-10.01	1/104
		2670.00	17.71	V	5.55	9.87	22.04	159.93	33.00	-10.96	1/104
50	QPSK	2521.01	19.84	V	5.40	9.96	24.40	275.51	33.00	-8.60	1/67
		2592.99	19.42	V	5.47	9.91	23.87	243.63	33.00	-9.13	1/131
		2665.00	18.08	V	5.55	9.87	22.41	174.12	33.00	-10.59	1/131
	16-QAM	2521.01	18.82	V	5.40	9.96	23.38	217.84	33.00	-9.62	1/67
		2592.99	18.30	V	5.47	9.91	22.75	188.25	33.00	-10.25	1/131
		2665.00	17.35	V	5.55	9.87	21.68	147.18	33.00	-11.32	1/131
60	QPSK	2526.00	19.63	V	5.39	9.95	24.20	262.96	33.00	-8.80	1/81
		2592.99	20.55	V	5.47	9.91	25.00	316.03	33.00	-8.00	1/81
		2659.98	18.04	V	5.57	9.87	22.35	171.63	33.00	-10.65	1/160
	16-QAM	2526.00	18.66	V	5.39	9.95	23.23	210.32	33.00	-9.77	1/81
		2592.99	19.53	V	5.47	9.91	23.98	249.88	33.00	-9.02	1/81
		2659.98	17.10	V	5.57	9.87	21.41	138.23	33.00	-11.59	1/160
70	QPSK	2531.02	19.58	V	5.39	9.94	24.13	259.10	33.00	-8.87	1/95
		2593.99	20.45	V	5.47	9.91	24.90	308.84	33.00	-8.10	1/95
		2644.98	19.17	V	5.54	9.87	23.50	223.78	33.00	-9.50	1/95
	16-QAM	2531.02	18.61	V	5.39	9.94	23.16	207.24	33.00	-9.84	1/95
		2593.99	19.51	V	5.47	9.91	23.96	248.73	33.00	-9.04	1/95
		2644.98	18.08	V	5.54	9.87	22.41	174.11	33.00	-10.59	1/95
80	QPSK	2536.02	19.73	V	5.41	9.93	24.26	266.55	33.00	-8.74	1/215
		2592.99	18.63	V	5.47	9.91	23.08	203.11	33.00	-9.92	1/215
		2649.99	17.69	V	5.53	9.87	22.03	159.51	33.00	-10.97	1/215
	16-QAM	2536.02	18.71	V	5.41	9.93	23.24	210.75	33.00	-9.76	1/215
		2592.99	18.02	V	5.47	9.91	22.47	176.50	33.00	-10.53	1/215
		2649.99	16.88	V	5.53	9.87	21.22	132.37	33.00	-11.78	1/215
90	QPSK	2541.00	19.87	V	5.43	9.92	24.37	273.62	33.00	-8.63	1/243
		2592.99	18.49	V	5.47	9.91	22.94	196.67	33.00	-10.06	1/243
		2644.98	17.60	V	5.53	9.87	21.94	156.37	33.00	-11.06	1/243
	16-QAM	2541.00	18.86	V	5.43	9.92	23.36	216.85	33.00	-9.64	1/243
		2592.99	17.75	V	5.47	9.91	22.20	165.86	33.00	-10.80	1/243
		2644.98	16.79	V	5.53	9.87	21.13	129.77	33.00	-11.87	1/243
100	QPSK	2546.01	19.91	V	5.42	9.91	24.40	275.42	33.00	-8.60	1/271
		2592.99	18.58	V	5.47	9.91	23.03	200.79	33.00	-9.97	1/271
		2640.00	17.44	V	5.52	9.88	21.80	151.29	33.00	-11.20	1/271
	16-QAM	2546.01	18.82	V	5.42	9.91	23.31	214.29	33.00	-9.69	1/271
		2592.99	17.64	V	5.47	9.91	22.09	161.71	33.00	-10.91	1/271
		2640.00	16.81	V	5.52	9.88	21.17	130.86	33.00	-11.83	1/271