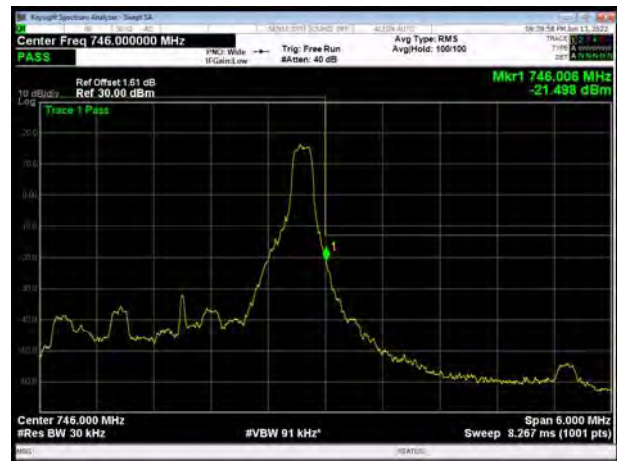
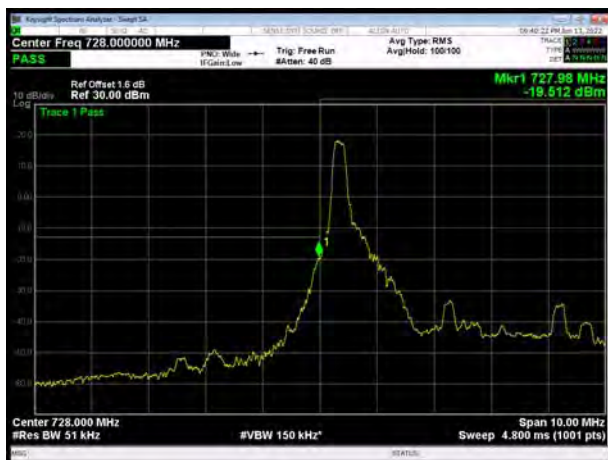
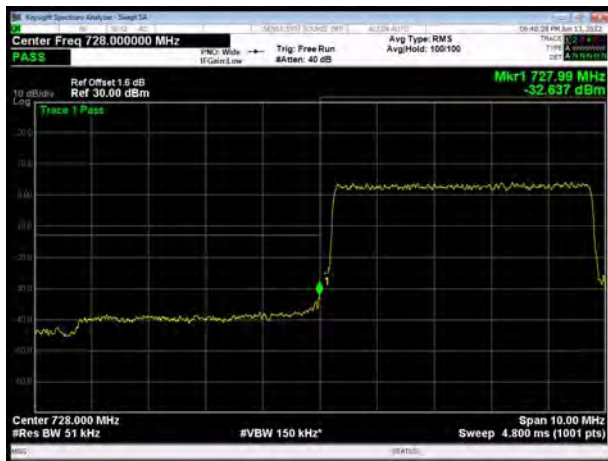
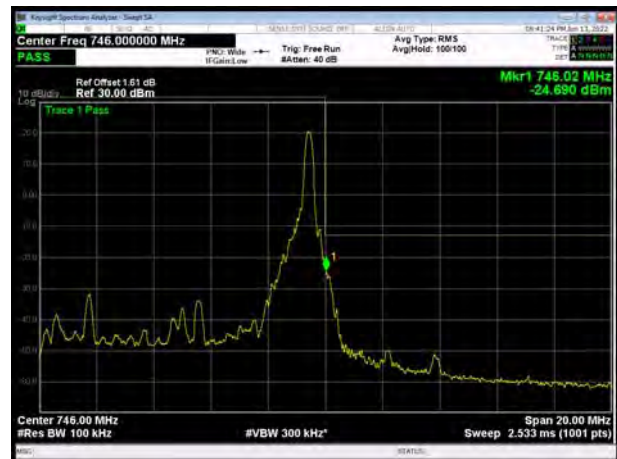
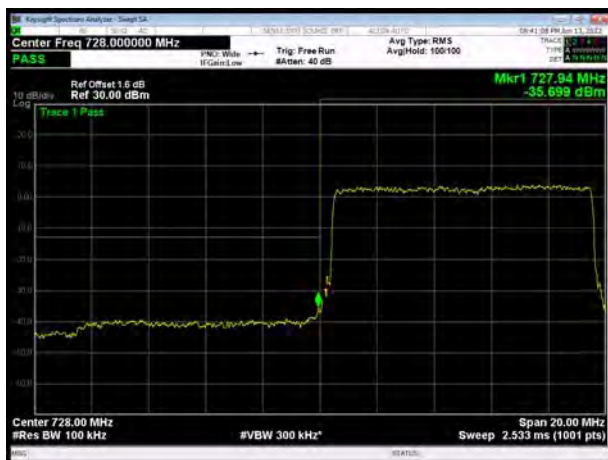


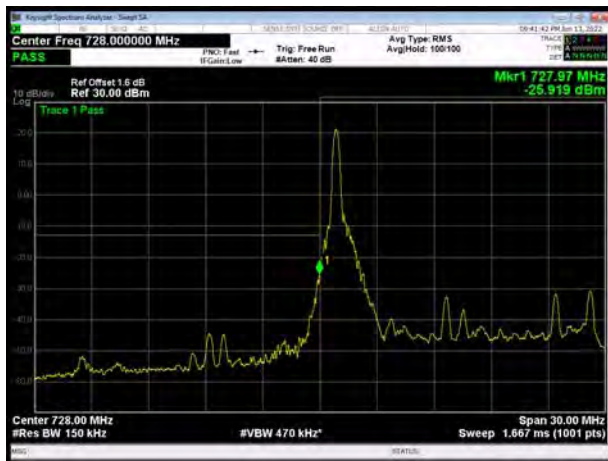
LTE band 28 Subset 1 64QAM 5MHz CH-Low,
100%RBLTE band 28 Subset 1 64QAM 5MHz CH-High,
100%RBLTE band 28 Subset 1 64QAM 10MHz CH-Low, 1
RBLTE band 28 Subset 1 64QAM 10MHz CH-High, 1
RBLTE band 28 Subset 1 64QAM 10MHz CH-Low,
100%RBLTE band 28 Subset 1 64QAM 10MHz CH-High,
100%RB

LTE band 28 Subset 2 QPSK 3MHz CH-Low, 1
RBLTE band 28 Subset 2 QPSK 3MHz CH-High, 1
RBLTE band 28 Subset 2 QPSK 3MHz CH-Low,
100%RBLTE band 28 Subset 2 QPSK 3MHz CH-High,
100%RBLTE band 28 Subset 2 QPSK 5MHz CH-Low, 1
RBLTE band 28 Subset 2 QPSK 5MHz CH-High, 1
RB

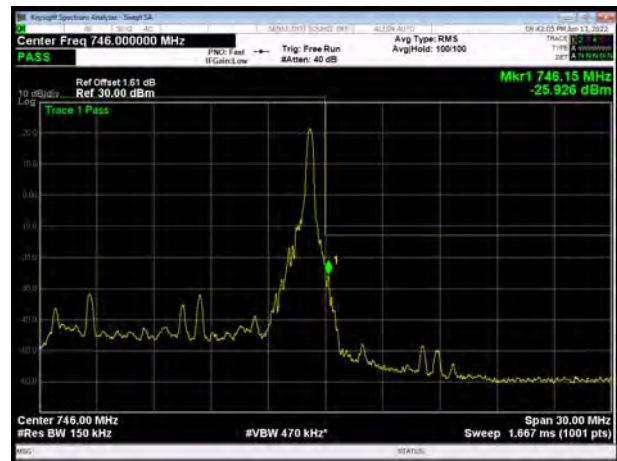
LTE band 28 Subset 2 QPSK 5MHz CH-Low,
100%RBLTE band 28 Subset 2 QPSK 5MHz CH-High,
100%RBLTE band 28 Subset 2 QPSK 10MHz CH-Low, 1
RBLTE band 28 Subset 2 QPSK 10MHz CH-High, 1
RBLTE band 28 Subset 2 QPSK 10MHz CH-Low,
100%RBLTE band 28 Subset 2 QPSK 10MHz CH-High,
100%RB



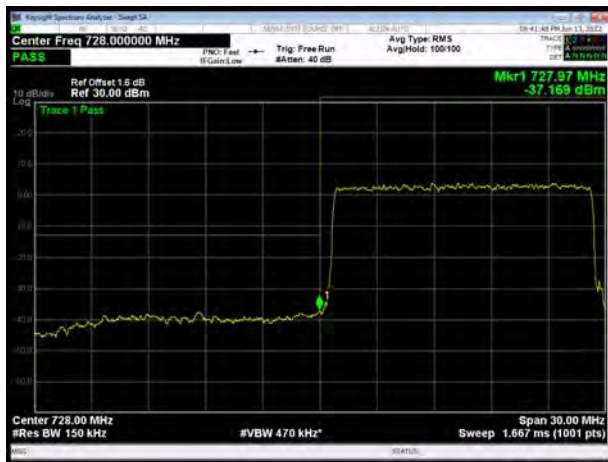
LTE band 28 Subset 2 QPSK 15MHz CH-Low, 1 RB



LTE band 28 Subset 2 QPSK 15MHz CH-High, 1 RB

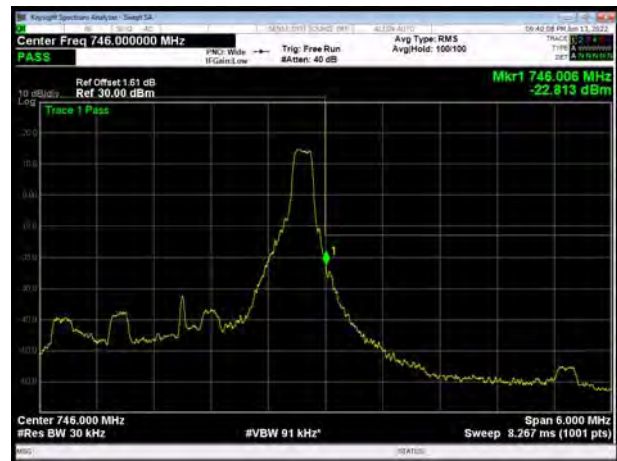
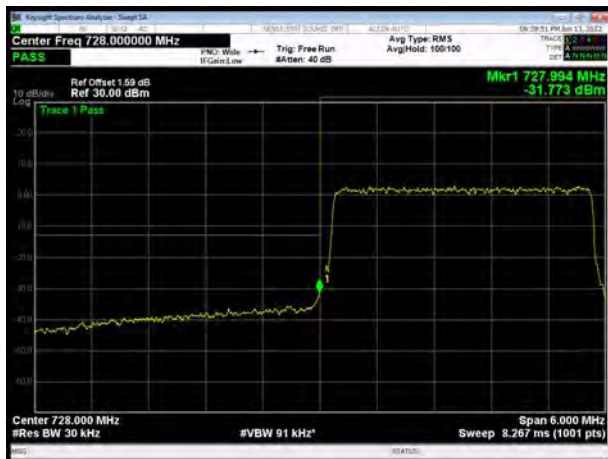
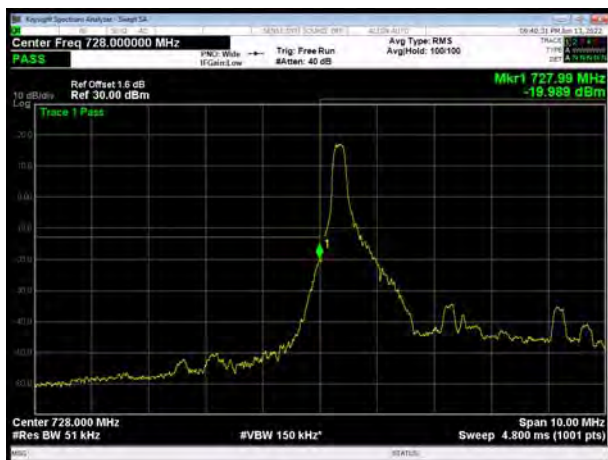


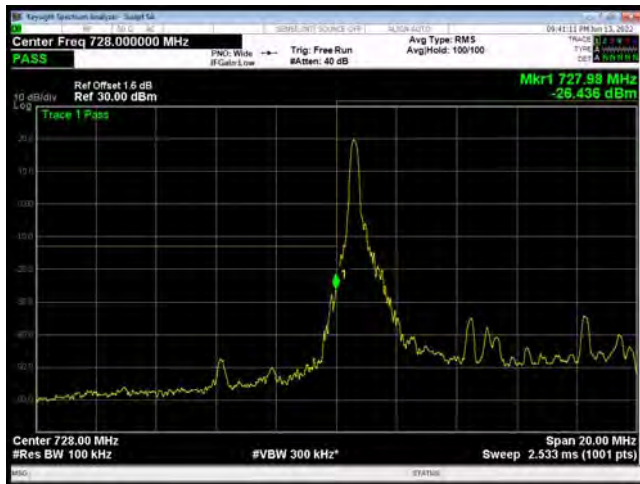
LTE band 28 Subset 2 QPSK 15MHz CH-Low, 100%RB

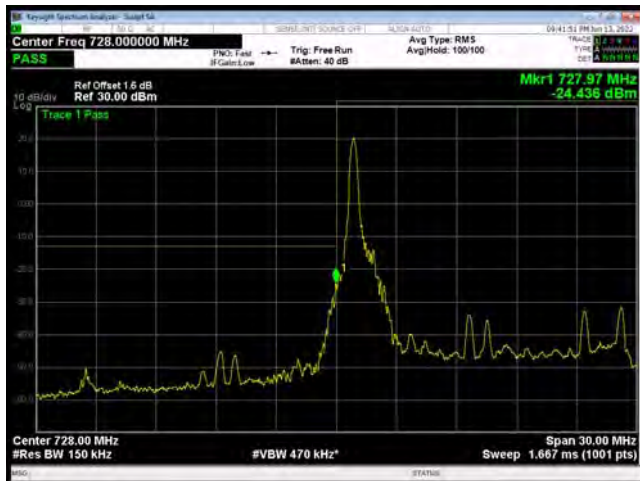
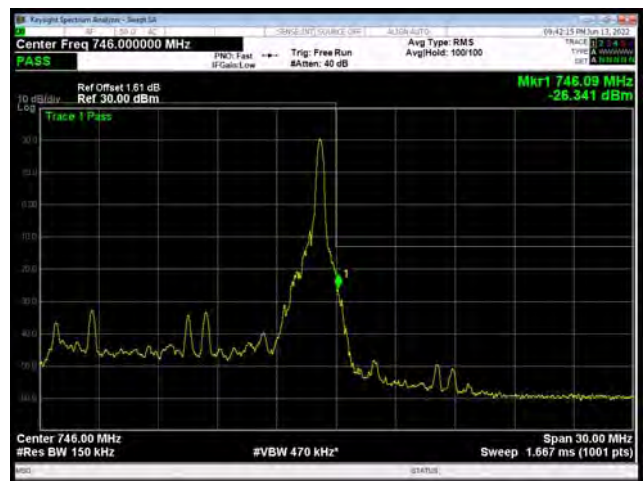


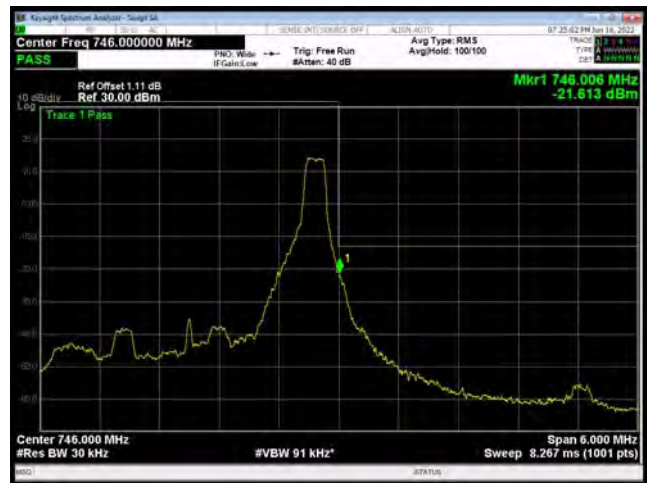
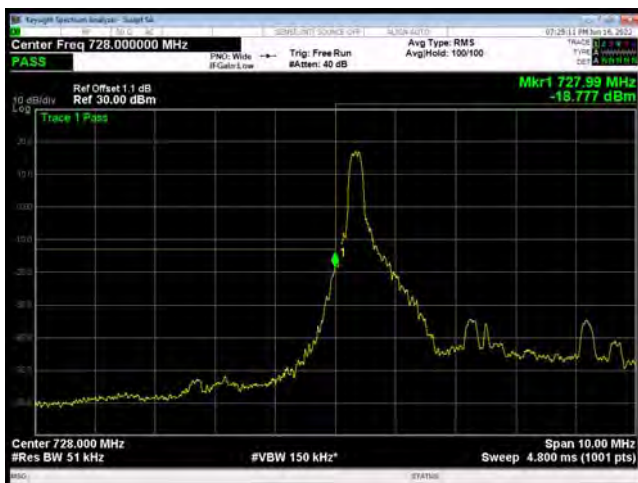
LTE band 28 Subset 2 QPSK 15MHz CH-High, 100%RB

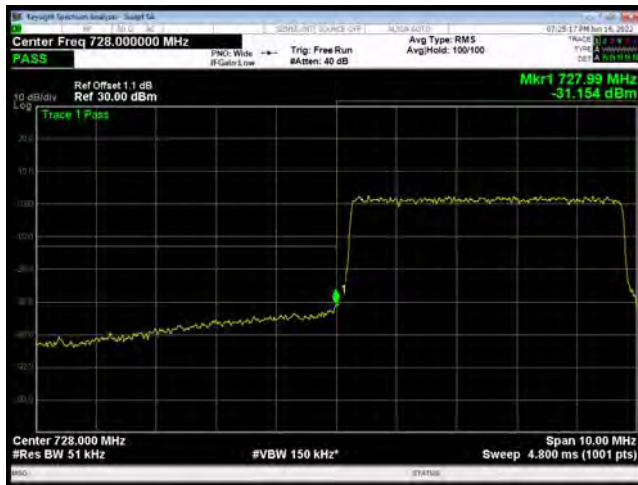
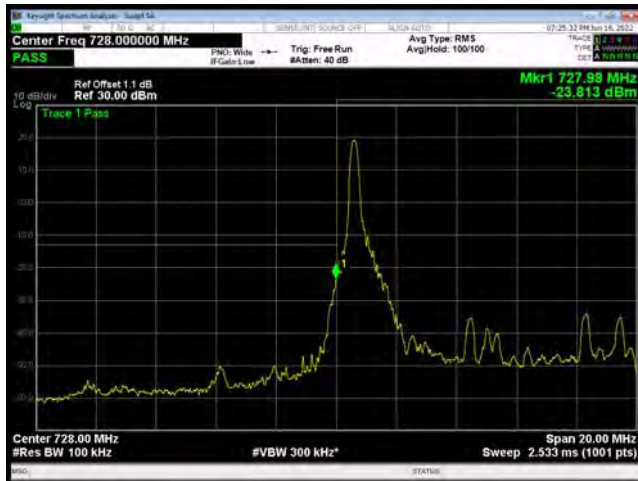
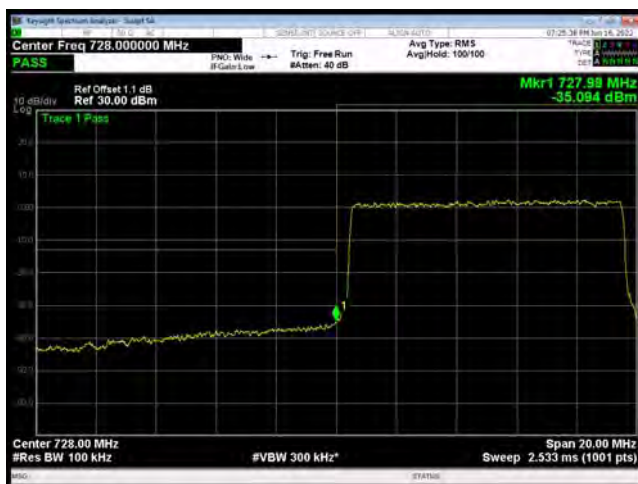


LTE band 28 Subset 2 16QAM 3MHz CH-Low, 1
RBLTE band 28 Subset 2 16QAM 3MHz CH-High, 1
RBLTE band 28 Subset 2 16QAM 3MHz CH-Low,
100%RBLTE band 28 Subset 2 16QAM 3MHz CH-High,
100%RBLTE band 28 Subset 2 16QAM 5MHz CH-Low, 1
RBLTE band 28 Subset 2 16QAM 5MHz CH-High, 1
RB

LTE band 28 Subset 2 16QAM 5MHz CH-Low,
100%RBLTE band 28 Subset 2 16QAM 5MHz CH-High,
100%RBLTE band 28 Subset 2 16QAM 10MHz CH-Low, 1
RBLTE band 28 Subset 2 16QAM 10MHz CH-High, 1
RBLTE band 28 Subset 2 16QAM 10MHz CH-Low,
100%RBLTE band 28 Subset 2 16QAM 10MHz CH-High,
100%RB

LTE band 28 Subset 2 16QAM 15MHz CH-Low, 1
RBLTE band 28 Subset 2 16QAM 15MHz CH-High, 1
RBLTE band 28 Subset 2 16QAM 15MHz CH-Low,
100%RBLTE band 28 Subset 2 16QAM 15MHz CH-High,
100%RB

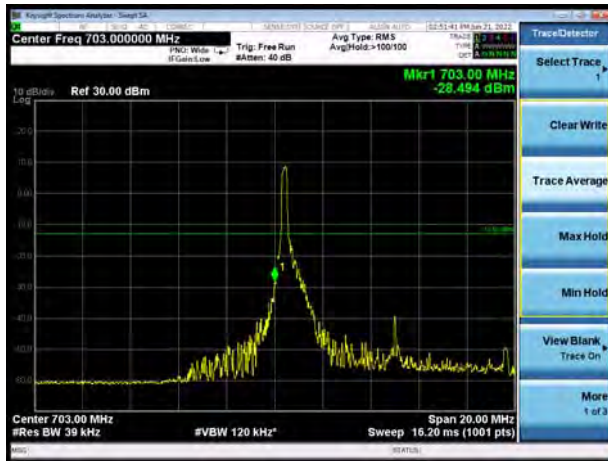
LTE band 28 Subset 2 64QAM 3MHz CH-Low,
1 RBLTE band 28 Subset 2 64QAM 3MHz CH-High,
1 RBLTE band 28 Subset 2 64QAM 3MHz CH-Low,
100%RBLTE band 28 Subset 2 64QAM 3MHz CH-High,
100%RBLTE band 28 Subset 2 64QAM 5MHz CH-Low,
1 RBLTE band 28 Subset 2 64QAM 5MHz CH-High, 1
RB

LTE band 28 Subset 2 64QAM 5MHz CH-Low,
100%RBLTE band 28 Subset 2 64QAM 5MHz CH-High,
100%RBLTE band 28 Subset 2 64QAM 10MHz CH-Low, 1
RBLTE band 28 Subset 2 64QAM 10MHz CH-High, 1
RBLTE band 28 Subset 2 64QAM 10MHz CH-Low,
100%RBLTE band 28 Subset 2 64QAM 10MHz CH-High,
100%RB

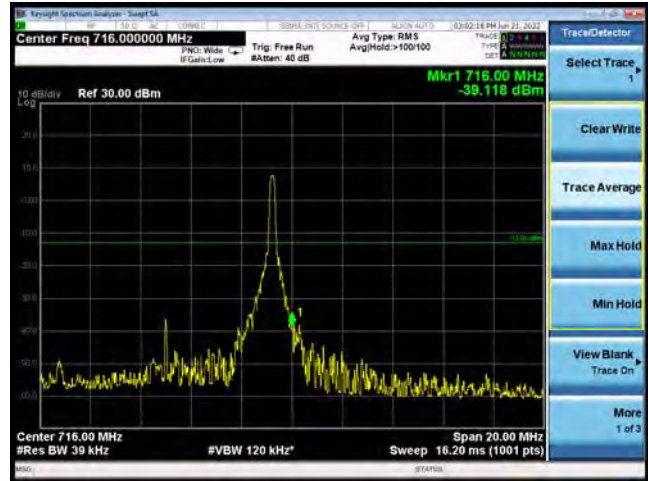
LTE band 28 Subset 2 64QAM 15MHz CH-Low, 1
RBLTE band 28 Subset 2 64QAM 15MHz CH-High, 1
RBLTE band 28 Subset 2 64QAM 15MHz CH-Low,
100%RBLTE band 28 Subset 2 64QAM 15MHz CH-High,
100%RB



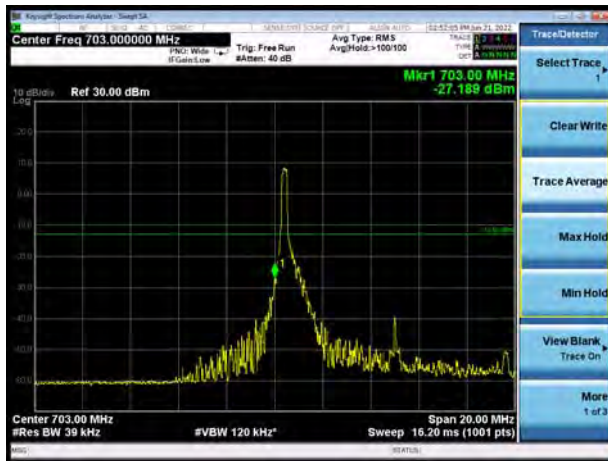
NR n28 Subset 1 BPSK 10MHz CH-Low, 1 RB



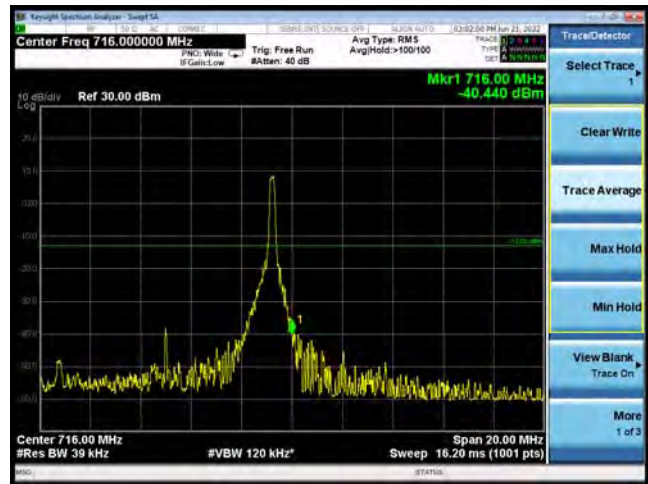
NR n28 Subset 1 BPSK 10MHz CH-High, 1 RB



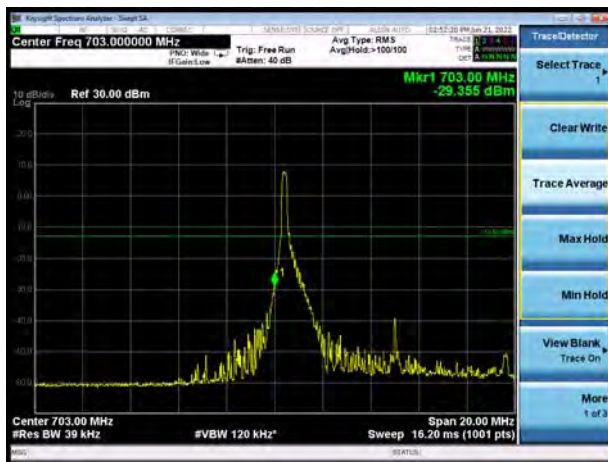
NR n28 Subset 1 QPSK 10MHz CH-Low, 1 RB



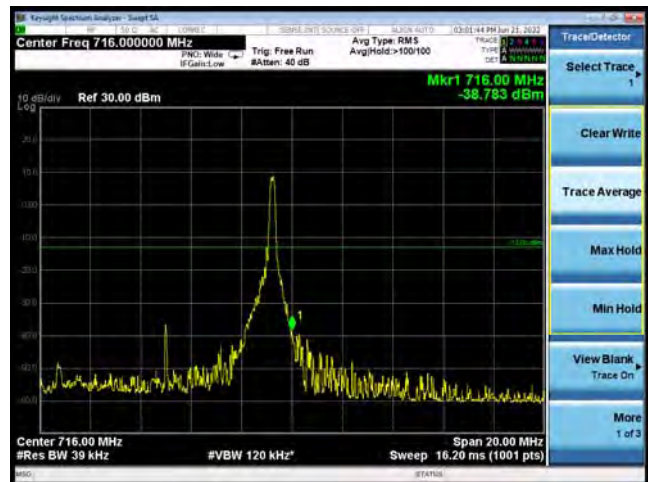
NR n28 Subset 1 QPSK 10MHz CH-High, 1 RB



NR n28 Subset 1 16QAM 10MHz CH-Low, 1 RB

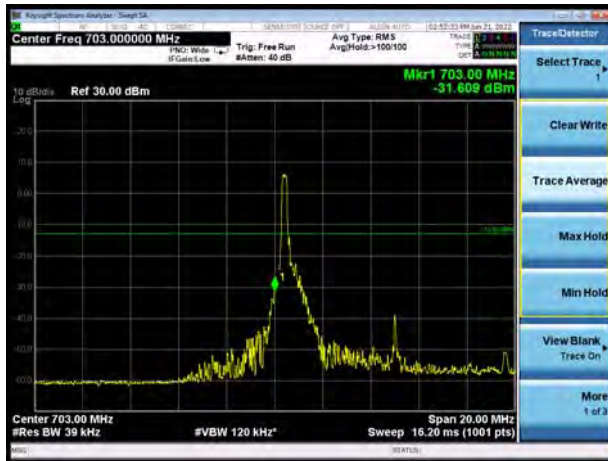


NR n28 Subset 1 16QAM 10MHz CH-High, 1 RB

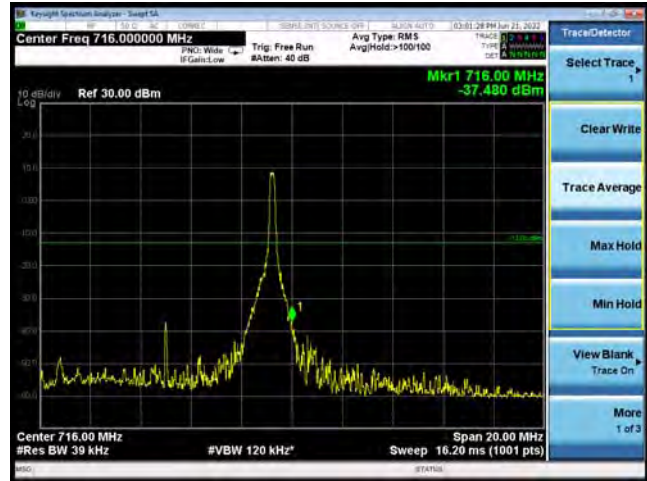




NR n28 Subset 1 64QAM 10MHz CH-Low, 1 RB



NR n28 Subset 1 64QAM 10MHz CH-High, 1 RB



NR n28 Subset 1 256QAM 10MHz CH-Low, 1 RB

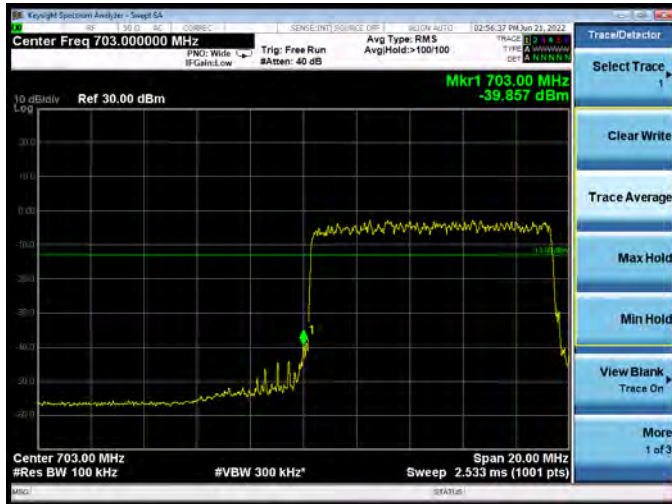


NR n28 Subset 1 256QAM 10MHz CH-High, 1 RB





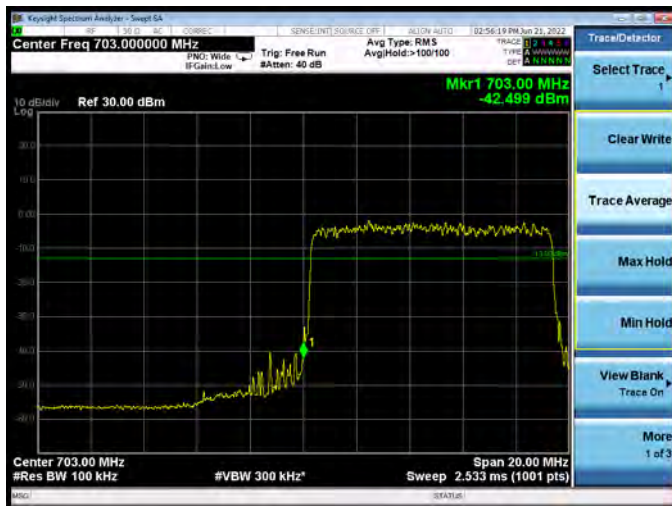
NR n28 Subset 1 BPSK 10MHz CH-Low, 100% RB



NR n28 Subset 1 BPSK 10MHz CH-High, 100% RB



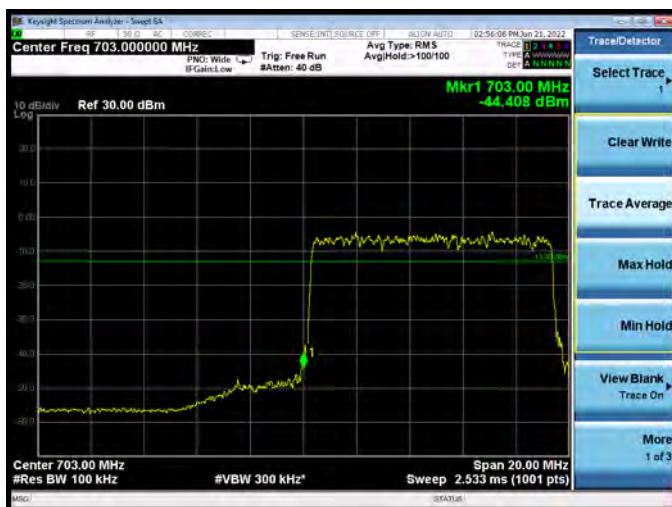
NR n28 Subset 1 QPSK 10MHz CH-Low, 100% RB



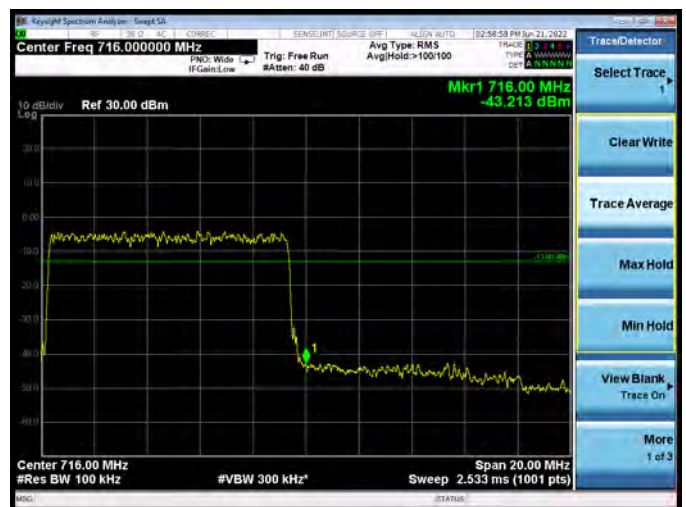
NR n28 Subset 1 QPSK 10MHz CH-High, 100% RB



NR n28 Subset 1 16QAM 10MHz CH-Low, 100% RB



NR n28 Subset 1 16QAM 10MHz CH-High, 100% RB

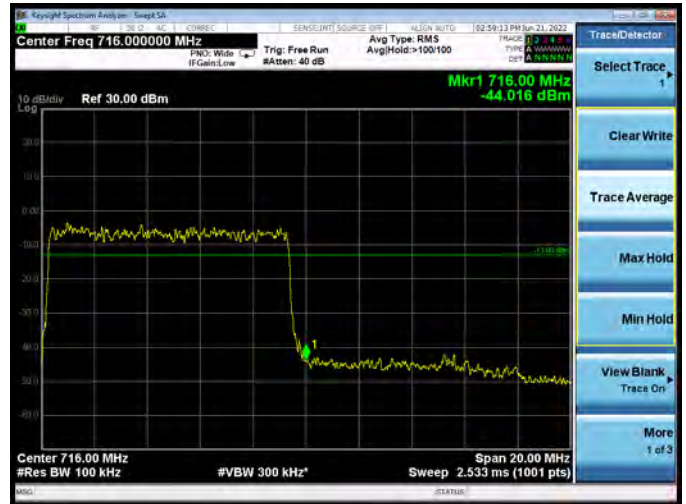




NR n28 Subset 1 64QAM 10MHz CH-Low, 100% RB



NR n28 Subset 1 64QAM 10MHz CH-High, 100% RB



NR n28 Subset 1 256QAM 10MHz CH-Low, 100% RB

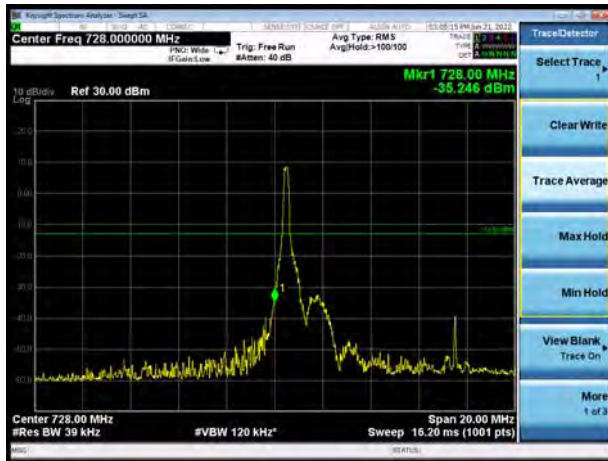


NR n28 Subset 1 256QAM 10MHz CH-High, 100% RB

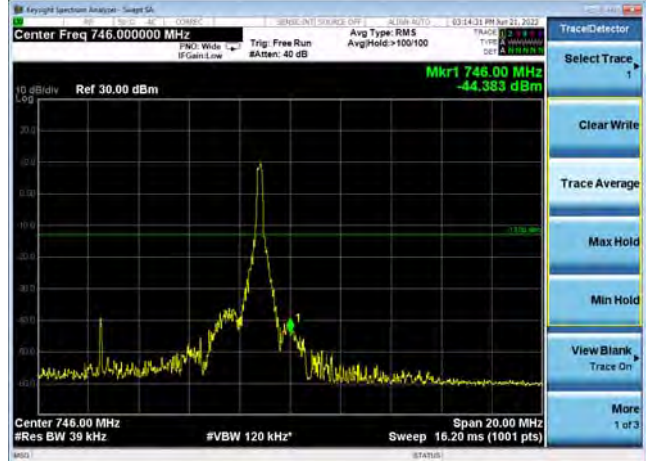




NR n28 Subset 2 BPSK 15MHz CH-Low, 1 RB



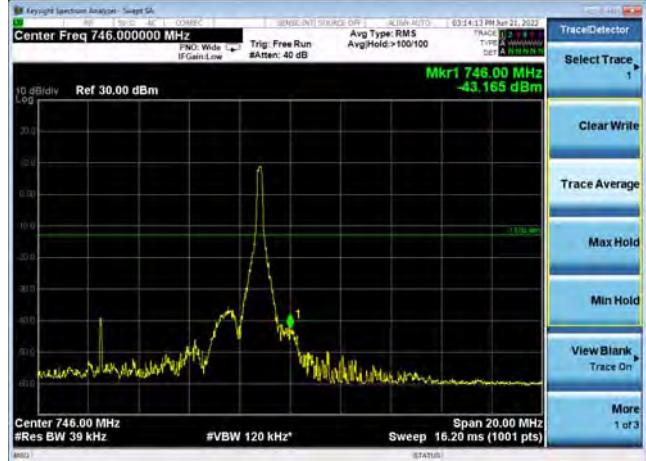
NR n28 Subset 2 BPSK 15MHz CH-High, 1 RB



NR n28 Subset 2 QPSK 15MHz CH-Low, 1 RB



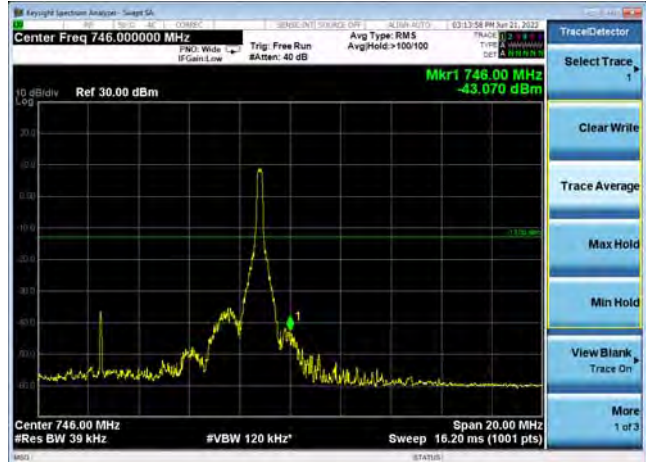
NR n28 Subset 2 QPSK 15MHz CH-High, 1 RB



NR n28 Subset 2 16QAM 15MHz CH-Low, 1 RB

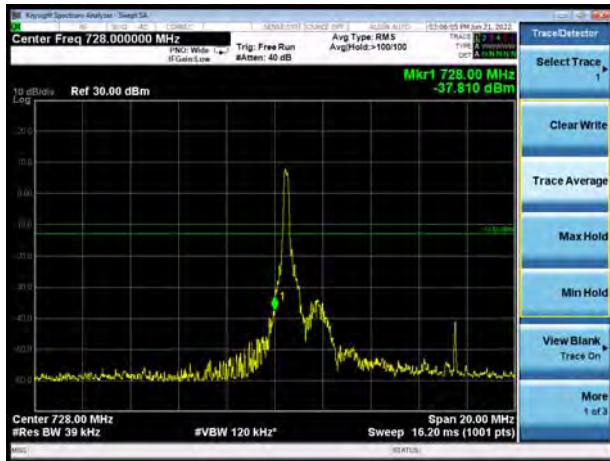


NR n28 Subset 2 16QAM 15MHz CH-High, 1 RB

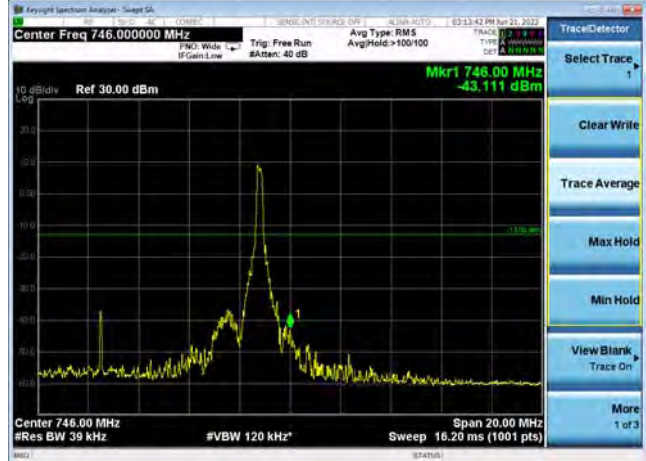




NR n28 Subset 2 64QAM 15MHz CH-Low, 1 RB



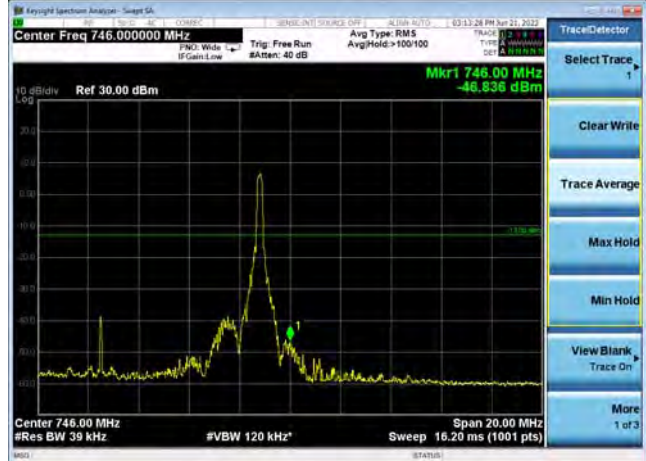
NR n28 Subset 2 64QAM 15MHz CH-High, 1 RB



NR n28 Subset 2 256QAM 15MHz CH-Low, 1 RB



NR n28 Subset 2 256QAM 15MHz CH-High, 1 RB





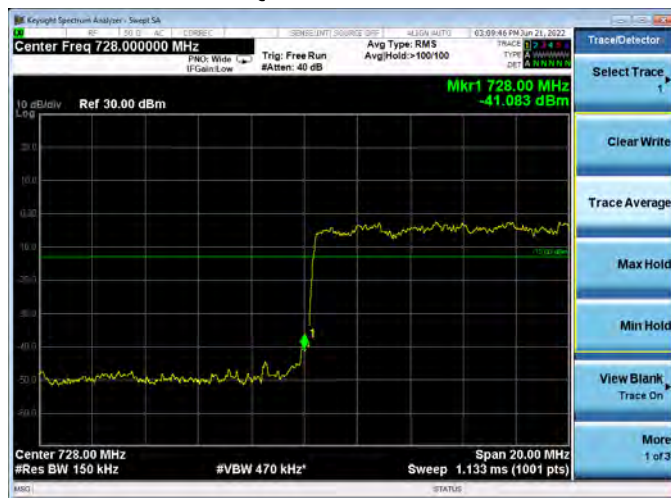
NR n28 Subset 2 BPSK 15MHz CH-Low, 100% RB



NR n28 Subset 2 BPSK 15MHz CH-High, 100% RB



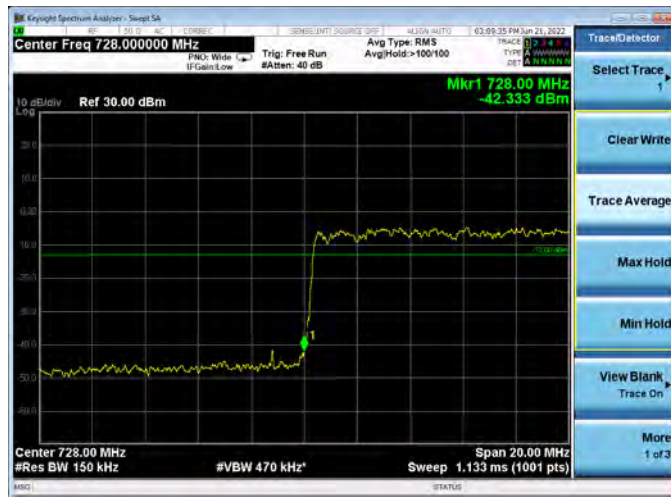
NR n28 Subset 2 QPSK 15MHz CH-Low, 100% RB



NR n28 Subset 2 QPSK 15MHz CH-High, 100% RB



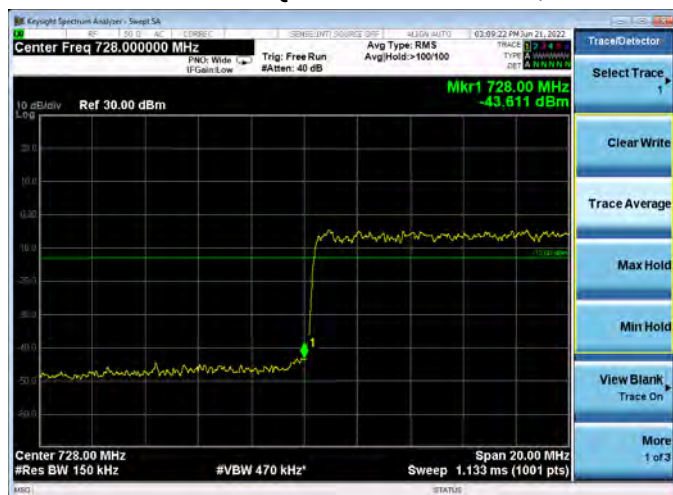
NR n28 Subset 2 16QAM 15MHz CH-Low, 100% RB



NR n28 Subset 2 16QAM 15MHz CH-High, 100% RB



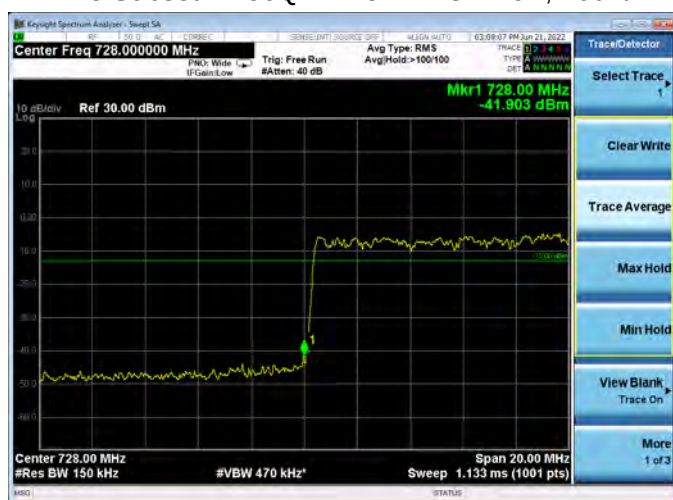
NR n28 Subset 2 64QAM 15MHz CH-Low, 100% RB



NR n28 Subset 2 64QAM 15MHz CH-High, 100% RB

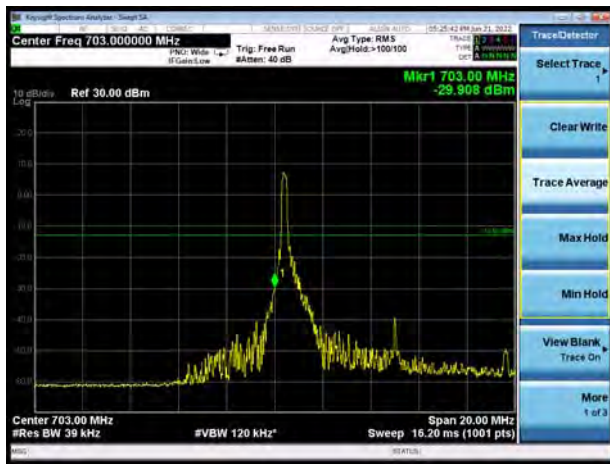
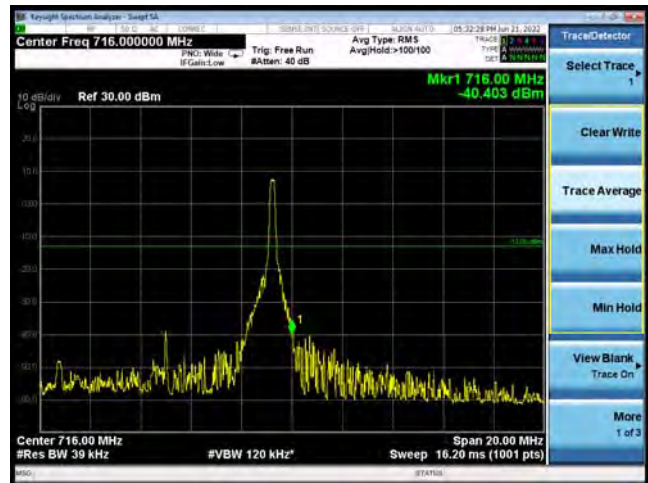
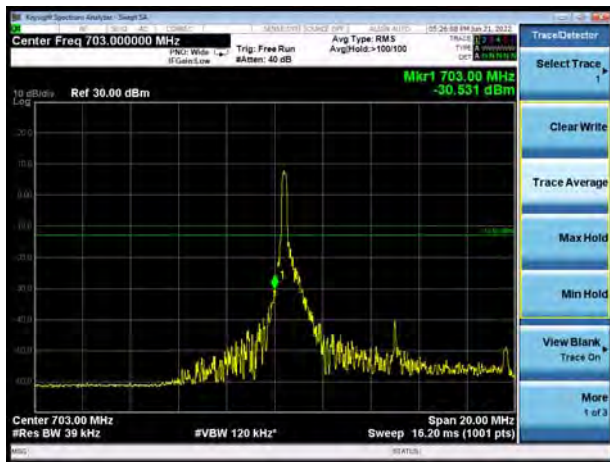
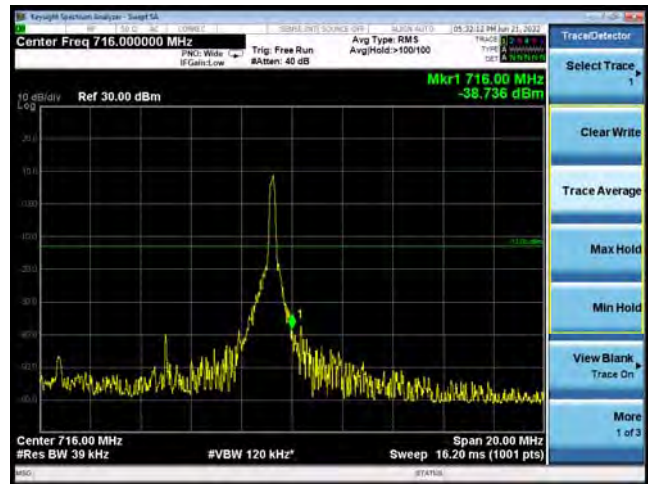
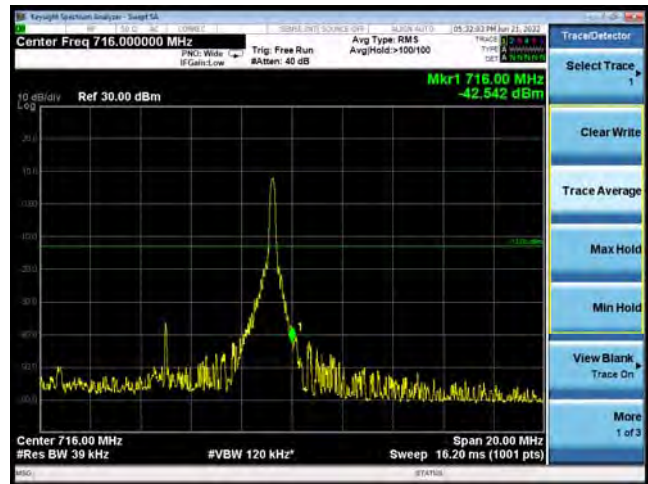


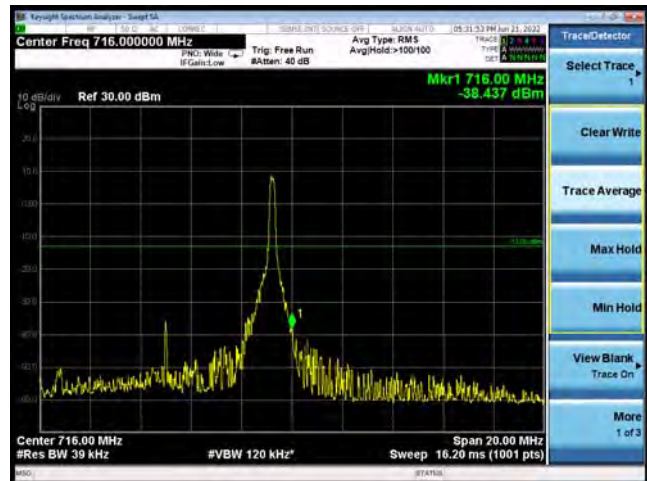
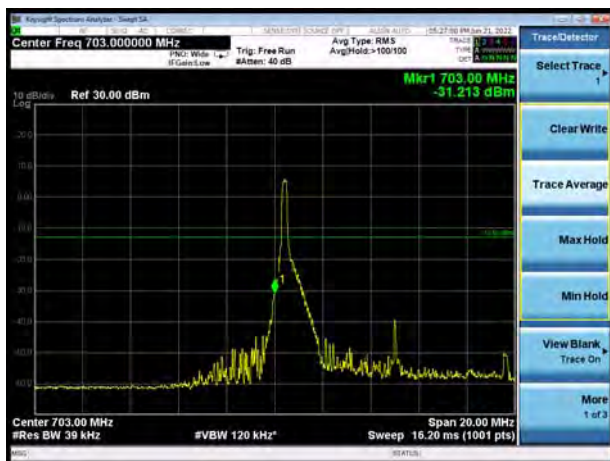
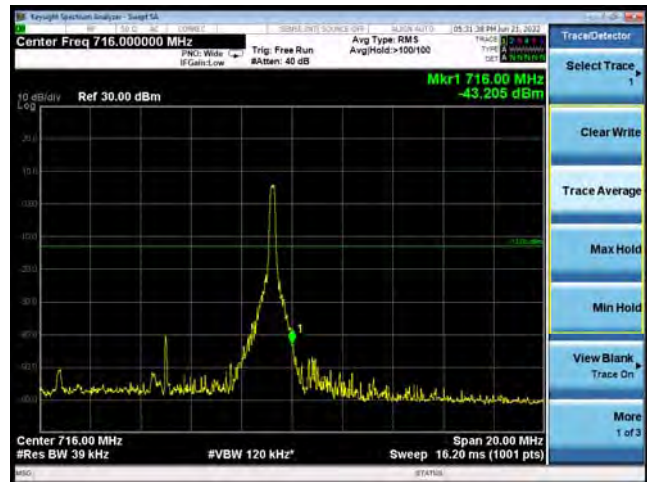
NR n28 Subset 2 256QAM 15MHz CH-Low, 100% RB

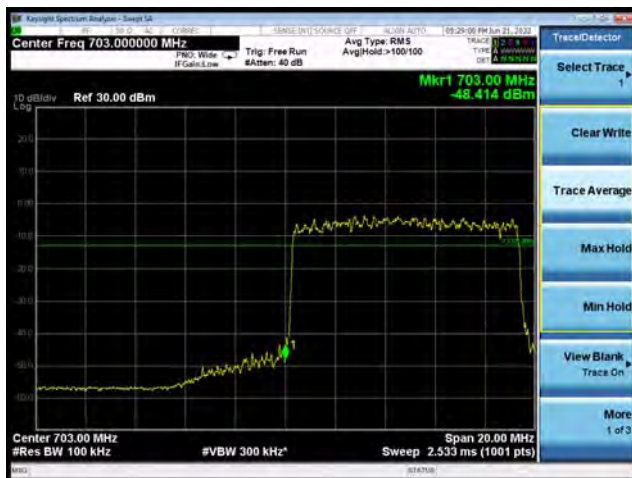


NR n28 Subset 2 256QAM 15MHz CH-High, 100% RB



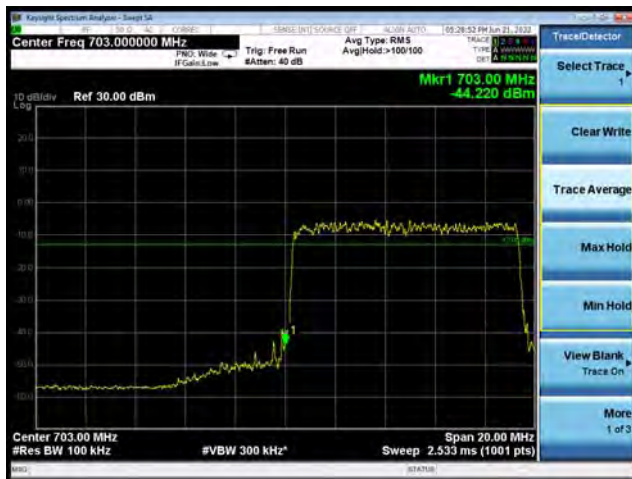
DC_7A-n28A (Subset 1) BPSK 10MHz CH-Low,
1 RBDC_7A-n28A (Subset 1) BPSK 10MHz CH-High,
1 RBDC_7A-n28A (Subset 1) QPSK 10MHz CH-Low,
1 RBDC_7A-n28A (Subset 1) QPSK 10MHz CH-High,
1 RBDC_7A-n28A (Subset 1) 16QAM 10MHz
CH-Low, 1 RBDC_7A-n28A (Subset 1) 16QAM 10MHz CH-High,
1 RB

DC_7A-n28A (Subset 1) 64QAM 10MHz
CH-Low, 1 RBDC_7A-n28A (Subset 1) 64QAM 10MHz CH-High,
1 RBDC_7A-n28A (Subset 1) 256QAM 10MHz
CH-Low, 1 RBDC_7A-n28A (Subset 1) 256QAM 10MHz CH-High,
1 RB

DC_7A-n28A (Subset 1) BPSK 10MHz CH-Low,
100% RBDC_7A-n28A (Subset 1) BPSK 10MHz CH-High,
100% RBDC_7A-n28A (Subset 1) QPSK 10MHz CH-Low,
100% RBDC_7A-n28A (Subset 1) QPSK 10MHz CH-High,
100% RBDC_7A-n28A (Subset 1) 16QAM 10MHz CH-Low,
100% RBDC_7A-n28A (Subset 1) 16QAM 10MHz CH-High,
100% RB



DC_7A-n28A (Subset 1) 64QAM 10MHz CH-Low,
100% RB



DC_7A-n28A (Subset 1) 64QAM 10MHz CH-High,
100% RB

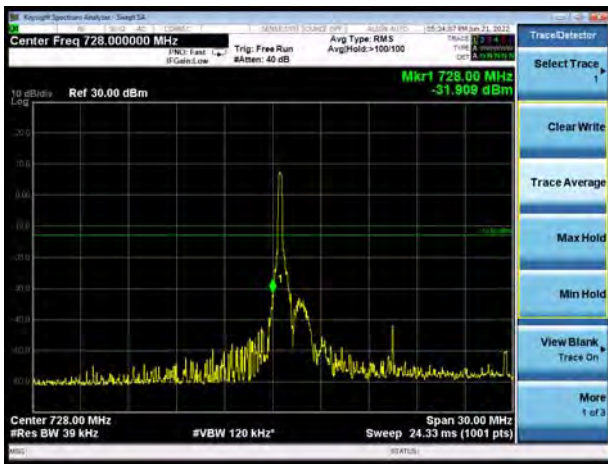


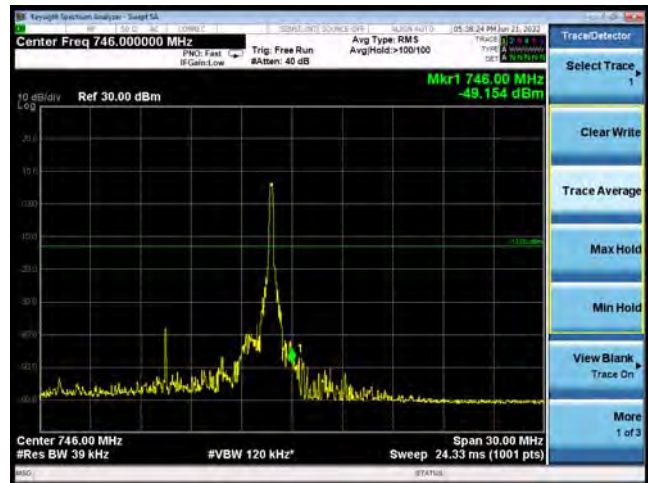
DC_7A-n28A (Subset 1) 256QAM 10MHz CH-Low,
100% RB



DC_7A-n28A (Subset 1) 256QAM 10MHz
CH-High, 100% RB



DC_7A-n28A (Subset 2) BPSK 15MHz CH-Low,
1 RBDC_7A-n28A (Subset 2) BPSK 15MHz CH-High, 1
RBDC_7A-n28A (Subset 2) QPSK 15MHz CH-Low,
1 RBDC_7A-n28A (Subset 2) QPSK 15MHz CH-High, 1
RBDC_7A-n28A (Subset 2) 16QAM 15MHz
CH-Low, 1 RBDC_7A-n28A (Subset 2) 16QAM 15MHz CH-High,
1 RB

DC_7A-n28A (Subset 2) 64QAM 15MHz
CH-Low, 1 RBDC_7A-n28A (Subset 2) 64QAM 15MHz CH-High,
1 RBDC_7A-n28A (Subset 2) 256QAM 15MHz
CH-Low, 1 RBDC_7A-n28A (Subset 2) 256QAM 15MHz CH-High,
1 RB

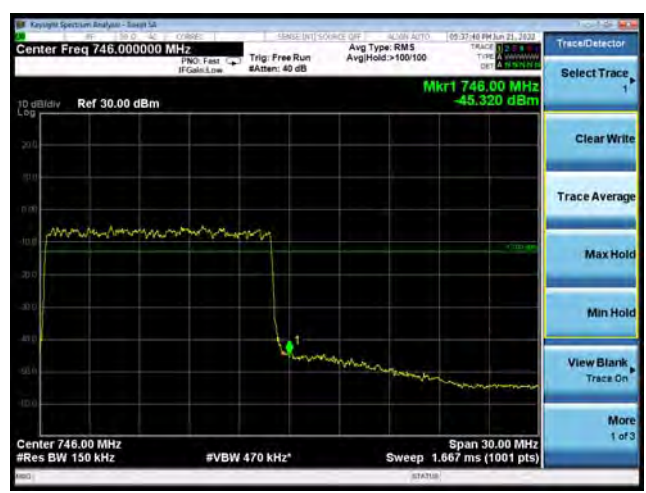
DC_7A-n28A (Subset 2) BPSK 15MHz CH-Low,
100% RBDC_7A-n28A (Subset 2) BPSK 15MHz CH-High,
100% RBDC_7A-n28A (Subset 2) QPSK 15MHz CH-Low,
100% RBDC_7A-n28A (Subset 2) QPSK 15MHz CH-High,
100% RBDC_7A-n28A (Subset 2) 16QAM 15MHz CH-Low,
100% RBDC_7A-n28A (Subset 2) 16QAM 15MHz CH-High,
100% RB



DC_7A-n28A (Subset 2) 64QAM 15MHz CH-Low,
100% RB



DC_7A-n28A (Subset 2) 64QAM 15MHz CH-High,
100% RB



DC_7A-n28A (Subset 2) 256QAM 15MHz CH-Low,
100% RB



DC_7A-n28A (Subset 2) 256QAM 15MHz
CH-High, 100% RB



6.4 Peak-to-Average Power Ratio (PAPR)

LTE Band 28 Subset 1							
Modulation	Bandwidth (MHz)	Channel	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	3M	L	27.23	21.80	5.43	≤13	PASS
		M	27.45	21.78	5.67	≤13	PASS
		H	28.22	21.79	6.43	≤13	PASS
	5M	L	27.19	21.74	5.45	≤13	PASS
		M	27.53	21.84	5.69	≤13	PASS
		H	28.45	21.89	6.56	≤13	PASS
	10M	L	27.48	21.84	5.64	≤13	PASS
		M	27.65	21.92	5.73	≤13	PASS
		H	27.76	21.93	5.83	≤13	PASS
16QAM	3M	L	27.11	20.82	6.29	≤13	PASS
		M	27.28	20.80	6.48	≤13	PASS
		H	27.95	20.79	7.16	≤13	PASS
	5M	L	26.89	20.75	6.14	≤13	PASS
		M	27.29	20.83	6.46	≤13	PASS
		H	28.15	20.86	7.29	≤13	PASS
	10M	L	27.14	20.79	6.35	≤13	PASS
		M	27.38	20.91	6.47	≤13	PASS
		H	27.55	20.90	6.65	≤13	PASS
64QAM	3M	L	26.87	20.45	6.42	≤13	PASS
		M	26.80	20.40	6.40	≤13	PASS
		H	27.85	20.37	7.48	≤13	PASS
	5M	L	26.60	20.31	6.29	≤13	PASS
		M	26.89	20.45	6.44	≤13	PASS
		H	27.78	20.46	7.32	≤13	PASS
	10M	L	26.80	20.33	6.47	≤13	PASS
		M	26.98	20.45	6.53	≤13	PASS
		H	27.12	20.50	6.62	≤13	PASS



LTE Band 28 Subset 2							
Modulation	Bandwidth (MHz)	Channel	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	3M	L	28.31	21.84	6.47	≤13	PASS
		M	27.61	21.81	5.80	≤13	PASS
		H	27.26	21.83	5.43	≤13	PASS
	5M	L	28.26	21.83	6.43	≤13	PASS
		M	27.64	21.81	5.83	≤13	PASS
		H	27.28	21.85	5.43	≤13	PASS
	10M	L	27.96	21.86	6.10	≤13	PASS
		M	27.52	21.82	5.70	≤13	PASS
		H	27.39	21.82	5.57	≤13	PASS
	15M	L	27.93	21.78	6.15	≤13	PASS
		M	27.80	21.73	6.07	≤13	PASS
		H	27.76	21.78	5.98	≤13	PASS
16QAM	3M	L	28.09	20.85	7.24	≤13	PASS
		M	27.38	20.77	6.61	≤13	PASS
		H	27.12	20.85	6.27	≤13	PASS
	5M	L	27.87	20.82	7.05	≤13	PASS
		M	27.37	20.81	6.56	≤13	PASS
		H	27.07	20.85	6.22	≤13	PASS
	10M	L	27.69	20.83	6.86	≤13	PASS
		M	27.29	20.77	6.52	≤13	PASS
		H	27.10	20.78	6.32	≤13	PASS
	15M	L	27.40	20.74	6.66	≤13	PASS
		M	27.27	20.72	6.55	≤13	PASS
		H	27.26	20.76	6.50	≤13	PASS
64QAM	3M	L	27.84	20.43	7.41	≤13	PASS
		M	27.12	20.42	6.70	≤13	PASS
		H	26.60	20.40	6.20	≤13	PASS
	5M	L	27.82	20.45	7.37	≤13	PASS
		M	27.05	20.42	6.63	≤13	PASS
		H	26.68	20.44	6.24	≤13	PASS
	10M	L	27.43	20.42	7.01	≤13	PASS
		M	27.01	20.38	6.63	≤13	PASS
		H	26.71	20.34	6.37	≤13	PASS
	15M	L	27.11	20.38	6.73	≤13	PASS
		M	26.98	20.36	6.62	≤13	PASS
		H	26.91	20.36	6.55	≤13	PASS



NR n28 Subset 1								
RB	Modulation	Bandwidth (MHz)	Channel	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
100%	BPSK	10M	L	25.79	21.46	4.33	≤13	PASS
			M	25.99	21.53	4.46	≤13	PASS
			H	26.54	21.04	5.50	≤13	PASS
	QPSK	10M	L	25.78	21.46	4.32	≤13	PASS
			M	25.98	21.53	4.45	≤13	PASS
			H	26.55	21.04	5.51	≤13	PASS
	16QAM	10M	L	26.24	19.96	6.28	≤13	PASS
			M	26.36	20.03	6.33	≤13	PASS
			H	26.21	20.01	6.20	≤13	PASS
	64QAM	10M	L	26.17	19.95	6.22	≤13	PASS
			M	26.29	20.03	6.26	≤13	PASS
			H	25.93	19.51	6.42	≤13	PASS
	256QAM	10M	L	25.77	19.40	6.37	≤13	PASS
			M	25.87	19.47	6.40	≤13	PASS
			H	23.85	17.64	6.21	≤13	PASS

NR n28 Subset 2								
RB	Modulation	Bandwidth (MHz)	Channel	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
100%	BPSK	15M	L	25.49	21.33	4.16	≤13	PASS
			M	26.16	20.83	5.33	≤13	PASS
			H	25.41	21.33	4.08	≤13	PASS
	QPSK	15M	L	25.50	21.33	4.17	≤13	PASS
			M	26.16	20.83	5.33	≤13	PASS
			H	25.42	21.33	4.09	≤13	PASS
	16QAM	15M	L	26.02	19.84	6.18	≤13	PASS
			M	25.87	19.82	6.05	≤13	PASS
			H	25.93	19.82	6.11	≤13	PASS
	64QAM	15M	L	26.00	19.82	6.18	≤13	PASS
			M	25.76	19.33	6.43	≤13	PASS
			H	25.93	19.82	6.11	≤13	PASS
	256QAM	15M	L	25.58	19.34	6.24	≤13	PASS
			M	23.63	17.44	6.19	≤13	PASS
			H	25.53	19.34	6.19	≤13	PASS



DC_7A-n28A (Subset 1)								
RB	Modulation	Bandwidth (MHz)	Channel	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
100%	BPSK	10M	L	25.84	21.70	4.14	≤13	PASS
			M	26.70	21.25	5.45	≤13	PASS
			H	26.19	21.75	4.44	≤13	PASS
	QPSK	10M	L	25.85	21.70	4.15	≤13	PASS
			M	26.68	21.24	5.44	≤13	PASS
			H	26.17	21.73	4.44	≤13	PASS
	16QAM	10M	L	26.22	20.16	6.06	≤13	PASS
			M	26.47	20.24	6.23	≤13	PASS
			H	26.51	20.27	6.24	≤13	PASS
	64QAM	10M	L	26.31	20.05	6.26	≤13	PASS
			M	26.07	19.71	6.36	≤13	PASS
			H	26.56	20.24	6.32	≤13	PASS
	256QAM	10M	L	25.99	19.56	6.43	≤13	PASS
			M	24.33	17.78	6.55	≤13	PASS
			H	26.22	19.74	6.48	≤13	PASS

DC_7A-n28A (Subset 2)								
RB	Modulation	Bandwidth (MHz)	Channel	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
100%	BPSK	15M	L	26.55	21.08	5.47	≤13	PASS
			M	25.77	21.58	4.19	≤13	PASS
			H	26.45	21.07	5.38	≤13	PASS
	QPSK	15M	L	26.48	21.01	5.47	≤13	PASS
			M	25.76	21.57	4.19	≤13	PASS
			H	26.45	21.08	5.37	≤13	PASS
	16QAM	15M	L	26.19	20.07	6.12	≤13	PASS
			M	26.17	20.04	6.13	≤13	PASS
			H	26.07	20.03	6.04	≤13	PASS
	64QAM	15M	L	25.86	19.49	6.37	≤13	PASS
			M	26.29	20.04	6.25	≤13	PASS
			H	25.92	19.58	6.34	≤13	PASS
	256QAM	15M	L	24.10	17.48	6.62	≤13	PASS
			M	25.94	19.58	6.36	≤13	PASS
			H	24.12	17.55	6.57	≤13	PASS



6.5 Frequency Stability

LTE Band 28 Subset 1								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	3MHz	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Temperature	Voltage							
Normal(25℃)	Normal	12.81	4.91	3.86	0.01806	0.00692	0.00544	PASS
Extreme(50℃)		2.04	9.01	17.99	0.00287	0.01269	0.02536	PASS
Extreme(40℃)		8.56	1.91	9.96	0.01206	0.00269	0.01404	PASS
Extreme(30℃)		1.12	3.04	13.90	0.00158	0.00429	0.01959	PASS
Extreme(20℃)		2.21	14.60	1.43	0.00312	0.02058	0.00202	PASS
Extreme(10℃)		7.98	3.21	9.74	0.01124	0.00452	0.01373	PASS
Extreme(0℃)		2.37	14.16	16.75	0.00334	0.01996	0.02360	PASS
Extreme(-10℃)		12.01	17.05	1.13	0.01693	0.02403	0.00160	PASS
Extreme(-20℃)		10.34	9.28	16.69	0.01457	0.01308	0.02352	PASS
Extreme(-30℃)		3.79	2.23	10.69	0.00534	0.00315	0.01506	PASS
25℃	LV	16.51	13.76	9.81	0.02326	0.01940	0.01383	PASS
	HV	9.56	13.68	2.97	0.01347	0.01928	0.00419	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	5MHz	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Temperature	Voltage							
Normal(25℃)	Normal	11.10	11.64	6.62	0.01564	0.01640	0.00934	PASS
Extreme(50℃)		12.75	14.95	11.00	0.01797	0.02107	0.01550	PASS
Extreme(40℃)		1.46	7.70	12.32	0.00206	0.01085	0.01736	PASS
Extreme(30℃)		3.54	11.22	15.47	0.00499	0.01582	0.02181	PASS
Extreme(20℃)		15.65	2.53	10.11	0.02206	0.00356	0.01425	PASS
Extreme(10℃)		12.65	8.26	1.04	0.01784	0.01164	0.00146	PASS
Extreme(0℃)		7.66	9.83	13.22	0.01080	0.01385	0.01863	PASS
Extreme(-10℃)		15.26	5.91	2.10	0.02151	0.00834	0.00295	PASS
Extreme(-20℃)		17.51	9.53	12.44	0.02469	0.01343	0.01753	PASS
Extreme(-30℃)		6.56	13.11	4.63	0.00924	0.01848	0.00653	PASS
25℃	LV	8.08	6.41	11.68	0.01139	0.00903	0.01647	PASS
	HV	1.09	12.34	6.14	0.00154	0.01739	0.00866	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	10MHz	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Temperature	Voltage							
Normal(25℃)	Normal	2.42	3.36	14.29	0.00341	0.00473	0.02014	PASS
Extreme(50℃)		12.43	13.33	8.65	0.01751	0.01879	0.01220	PASS
Extreme(40℃)		12.64	6.77	11.47	0.01781	0.00954	0.01616	PASS



Extreme(30℃)		8.13	3.69	1.67	0.01146	0.00520	0.00236	PASS
Extreme(20℃)		9.66	17.46	4.40	0.01361	0.02461	0.00620	PASS
Extreme(10℃)		3.12	10.98	15.83	0.00439	0.01547	0.02232	PASS
Extreme(0℃)		10.73	12.33	5.97	0.01512	0.01737	0.00842	PASS
Extreme(-10℃)		6.90	1.08	8.81	0.00973	0.00152	0.01242	PASS
Extreme(-20℃)		14.49	13.81	12.46	0.02042	0.01946	0.01757	PASS
Extreme(-30℃)		13.46	11.96	8.68	0.01896	0.01686	0.01223	PASS
25℃	LV	1.22	1.07	15.92	0.00173	0.00150	0.02244	PASS
	HV	16.11	17.40	6.90	0.02270	0.02452	0.00972	PASS

LTE Band 28 Subset 2								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	3MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	5.70	6.15	8.50	0.00773	0.00834	0.01154	PASS
Extreme(50℃)		2.85	11.90	7.41	0.00387	0.01615	0.01006	PASS
Extreme(40℃)		5.04	6.01	14.36	0.00684	0.00816	0.01949	PASS
Extreme(30℃)		1.09	9.60	12.30	0.00148	0.01303	0.01669	PASS
Extreme(20℃)		10.77	13.40	16.67	0.01461	0.01818	0.02262	PASS
Extreme(10℃)		6.25	9.00	1.58	0.00849	0.01221	0.00215	PASS
Extreme(0℃)		1.04	2.42	2.83	0.00141	0.00328	0.00384	PASS
Extreme(-10℃)		16.67	13.76	8.53	0.02261	0.01867	0.01158	PASS
Extreme(-20℃)		15.63	2.48	5.90	0.02120	0.00336	0.00800	PASS
Extreme(-30℃)		4.78	5.90	13.44	0.00649	0.00801	0.01823	PASS
25℃	LV	17.61	8.55	16.64	0.02389	0.01161	0.02257	PASS
	HV	4.91	2.44	7.63	0.00666	0.00331	0.01035	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	9.57	4.79	3.70	0.01298	0.00649	0.00503	PASS
Extreme(50℃)		11.07	13.35	3.26	0.01501	0.01812	0.00442	PASS
Extreme(40℃)		9.91	10.97	3.15	0.01345	0.01488	0.00427	PASS
Extreme(30℃)		17.09	16.46	8.71	0.02319	0.02233	0.01182	PASS
Extreme(20℃)		4.71	1.62	3.09	0.00639	0.00220	0.00420	PASS
Extreme(10℃)		8.37	11.99	15.52	0.01135	0.01627	0.02106	PASS
Extreme(0℃)		3.63	5.05	13.46	0.00493	0.00685	0.01827	PASS
Extreme(-10℃)		13.67	2.83	1.07	0.01855	0.00384	0.00145	PASS
Extreme(-20℃)		5.09	13.97	10.48	0.00691	0.01895	0.01422	PASS
Extreme(-30℃)		1.29	11.91	14.85	0.00176	0.01616	0.02015	PASS
25℃	LV	14.28	7.81	2.95	0.01938	0.01060	0.00401	PASS
	HV	13.08	5.40	2.52	0.01774	0.00733	0.00342	PASS



Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	17.57	2.72	11.83	0.02385	0.00369	0.01605	PASS
Extreme(50℃)		11.59	12.78	12.13	0.01573	0.01733	0.01646	PASS
Extreme(40℃)		16.08	13.94	6.20	0.02181	0.01891	0.00841	PASS
Extreme(30℃)		17.54	13.84	4.54	0.02380	0.01878	0.00616	PASS
Extreme(20℃)		15.97	2.61	6.00	0.02167	0.00354	0.00815	PASS
Extreme(10℃)		4.40	11.95	11.64	0.00596	0.01621	0.01580	PASS
Extreme(0℃)		16.43	6.56	7.41	0.02229	0.00890	0.01005	PASS
Extreme(-10℃)		14.19	12.78	3.52	0.01925	0.01734	0.00478	PASS
Extreme(-20℃)		15.52	10.06	11.13	0.02106	0.01365	0.01510	PASS
Extreme(-30℃)		3.00	17.79	14.48	0.00406	0.02414	0.01965	PASS
25℃	LV	10.74	17.80	15.18	0.01457	0.02415	0.02060	PASS
	HV	13.30	1.31	4.29	0.01805	0.00178	0.00582	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	15MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	7.29	16.98	11.96	0.00990	0.02304	0.01623	PASS
Extreme(50℃)		13.52	3.02	1.08	0.01834	0.00410	0.00146	PASS
Extreme(40℃)		15.38	1.73	4.54	0.02087	0.00235	0.00616	PASS
Extreme(30℃)		15.62	3.02	13.87	0.02120	0.00410	0.01882	PASS
Extreme(20℃)		4.57	7.03	6.97	0.00619	0.00954	0.00946	PASS
Extreme(10℃)		4.77	6.64	7.45	0.00647	0.00902	0.01010	PASS
Extreme(0℃)		10.68	12.56	17.98	0.01450	0.01704	0.02439	PASS
Extreme(-10℃)		10.58	12.48	8.68	0.01435	0.01694	0.01178	PASS
Extreme(-20℃)		8.87	14.11	1.37	0.01203	0.01915	0.00185	PASS
Extreme(-30℃)		12.17	11.87	3.32	0.01651	0.01610	0.00450	PASS
25℃	LV	16.02	2.38	1.64	0.02174	0.00323	0.00222	PASS
	HV	3.54	15.82	10.66	0.00480	0.02146	0.01447	PASS



NR n28 Subset 1												
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	5MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	13.54	10.55	11.16	3.54	5.55	0.01909	0.01487	0.01573	0.00499	0.00782	PASS
Extreme(50℃)		8.92	4.19	8.82	2.92	12.19	0.01257	0.00590	0.01243	0.00411	0.01718	PASS
Extreme(40℃)		16.33	12.29	9.52	9.33	9.29	0.02302	0.01732	0.01342	0.01315	0.01309	PASS
Extreme(30℃)		13.39	8.70	5.10	6.39	16.70	0.01887	0.01226	0.00718	0.00900	0.02354	PASS
Extreme(20℃)		10.17	8.92	9.41	16.17	15.92	0.01434	0.01257	0.01327	0.02279	0.02244	PASS
Extreme(10℃)		14.64	16.55	4.56	13.64	7.55	0.02063	0.02332	0.00642	0.01923	0.01064	PASS
Extreme(0℃)		14.51	7.35	17.29	15.51	14.35	0.02046	0.01035	0.02438	0.02187	0.02022	PASS
Extreme(-10℃)		7.51	9.79	11.40	8.51	10.79	0.01058	0.01379	0.01606	0.01199	0.01520	PASS
Extreme(-20℃)		1.75	14.78	9.20	17.75	16.78	0.00247	0.02083	0.01297	0.02502	0.02365	PASS
Extreme(-30℃)		17.37	17.63	7.46	9.37	12.63	0.02448	0.02485	0.01051	0.01320	0.01781	PASS
25℃	LV	11.74	10.81	4.74	4.74	2.81	0.01655	0.01523	0.00668	0.00668	0.00396	PASS
	HV	10.54	8.79	6.46	3.54	5.79	0.01486	0.01239	0.00911	0.00499	0.00817	PASS
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	10MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	3.47	13.04	6.06	13.47	8.04	0.00489	0.01838	0.00855	0.01898	0.01134	PASS
Extreme(50℃)		17.88	1.21	1.18	16.88	5.21	0.02520	0.00170	0.00167	0.02379	0.00734	PASS
Extreme(40℃)		9.88	7.46	10.61	7.88	13.46	0.01392	0.01052	0.01495	0.01111	0.01897	PASS
Extreme(30℃)		5.33	10.24	4.84	7.33	1.24	0.00752	0.01443	0.00683	0.01034	0.00174	PASS
Extreme(20℃)		1.72	11.83	4.78	8.72	12.83	0.00243	0.01668	0.00674	0.01230	0.01809	PASS
Extreme(10℃)		4.76	16.41	12.39	4.76	13.41	0.00670	0.02313	0.01747	0.00670	0.01890	PASS
Extreme(0℃)		6.37	2.94	7.09	8.37	13.94	0.00897	0.00414	0.01000	0.01179	0.01965	PASS
Extreme(-10℃)		16.94	8.17	9.63	3.94	2.17	0.02388	0.01151	0.01358	0.00555	0.00305	PASS
Extreme(-20℃)		7.30	9.64	16.10	4.30	12.64	0.01029	0.01359	0.02269	0.00607	0.01782	PASS
Extreme(-30℃)		6.72	4.05	6.97	2.72	16.05	0.00947	0.00570	0.00983	0.00383	0.02262	PASS
25℃	LV	11.95	8.59	7.84	10.95	8.59	0.01684	0.01210	0.01105	0.01543	0.01210	PASS
	HV	15.71	17.66	9.02	7.71	10.66	0.02214	0.02488	0.01272	0.01086	0.01502	PASS



NR n28 Subset 2												
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	5MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	11.07	7.19	2.74	2.07	2.19	0.01557	0.01012	0.00386	0.00291	0.00309	PASS
Extreme(50℃)		15.21	3.95	1.97	1.21	2.95	0.02140	0.00556	0.00277	0.00171	0.00416	PASS
Extreme(40℃)		11.11	15.25	12.27	17.11	3.25	0.01563	0.02144	0.01726	0.02407	0.00456	PASS
Extreme(30℃)		14.43	15.82	16.94	3.43	13.82	0.02030	0.02225	0.02382	0.00483	0.01944	PASS
Extreme(20℃)		2.10	15.16	11.88	1.10	8.16	0.00295	0.02132	0.01670	0.00154	0.01148	PASS
Extreme(10℃)		10.60	1.87	12.26	9.60	11.87	0.01491	0.00263	0.01724	0.01351	0.01669	PASS
Extreme(0℃)		16.52	5.31	6.90	5.52	3.31	0.02324	0.00747	0.00971	0.00777	0.00466	PASS
Extreme(-10℃)		1.08	5.89	5.88	9.08	3.89	0.00152	0.00828	0.00827	0.01278	0.00546	PASS
Extreme(-20℃)		8.93	9.23	8.53	16.93	10.23	0.01256	0.01298	0.01200	0.02381	0.01439	PASS
Extreme(-30℃)		5.94	1.14	12.23	6.94	5.14	0.00835	0.00161	0.01721	0.00976	0.00724	PASS
25℃	LV	9.68	13.94	11.92	14.68	6.94	0.01361	0.01960	0.01677	0.02065	0.00976	PASS
	HV	11.32	14.62	8.72	8.32	8.62	0.01592	0.02056	0.01226	0.01170	0.01212	PASS
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	10MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	2.02	15.55	4.20	16.02	5.55	0.00284	0.02187	0.00591	0.02253	0.00781	PASS
Extreme(50℃)		8.05	16.44	2.49	2.05	8.44	0.01133	0.02312	0.00350	0.00289	0.01187	PASS
Extreme(40℃)		11.21	9.68	17.01	1.21	3.68	0.01576	0.01362	0.02393	0.00170	0.00518	PASS
Extreme(30℃)		10.64	3.03	12.47	12.64	10.03	0.01496	0.00426	0.01753	0.01777	0.01411	PASS
Extreme(20℃)		7.25	11.19	7.36	16.25	4.19	0.01019	0.01574	0.01035	0.02285	0.00589	PASS
Extreme(10℃)		17.20	7.53	16.10	1.20	7.53	0.02419	0.01059	0.02264	0.00168	0.01059	PASS
Extreme(0℃)		17.93	4.25	4.15	6.93	7.25	0.02521	0.00598	0.00584	0.00974	0.01020	PASS
Extreme(-10℃)		5.42	5.15	9.73	4.42	2.15	0.00762	0.00724	0.01368	0.00621	0.00302	PASS
Extreme(-20℃)		8.77	6.92	14.36	12.77	9.92	0.01234	0.00973	0.02020	0.01796	0.01395	PASS
Extreme(-30℃)		8.42	16.47	4.18	1.42	17.47	0.01184	0.02317	0.00588	0.00199	0.02457	PASS
25℃	LV	12.89	13.40	5.60	2.89	5.40	0.01813	0.01885	0.00788	0.00406	0.00760	PASS
	HV	7.75	10.08	15.65	12.75	14.08	0.01090	0.01418	0.02201	0.01793	0.01981	PASS
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	15MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	3.71	10.38	6.94	5.71	16.38	0.00522	0.01460	0.00976	0.00803	0.02304	PASS
Extreme(50℃)		5.89	14.14	17.07	13.89	13.14	0.00829	0.01989	0.02400	0.01954	0.01848	PASS
Extreme(40℃)		7.30	14.84	8.84	16.30	8.84	0.01027	0.02087	0.01243	0.02292	0.01243	PASS



Extreme(30℃)		7.41	3.71	13.93	3.41	5.71	0.01042	0.00522	0.01959	0.00479	0.00804	PASS
Extreme(20℃)		15.74	6.61	2.18	4.74	15.61	0.02213	0.00930	0.00307	0.00666	0.02196	PASS
Extreme(10℃)		12.87	3.06	5.61	8.87	15.06	0.01810	0.00430	0.00789	0.01247	0.02118	PASS
Extreme(0℃)		6.41	9.56	12.01	6.41	16.56	0.00902	0.01344	0.01689	0.00902	0.02328	PASS
Extreme(-10℃)		4.21	2.00	15.21	1.21	5.00	0.00593	0.00281	0.02139	0.00171	0.00703	PASS
Extreme(-20℃)		15.84	12.99	13.08	14.84	1.99	0.02228	0.01827	0.01839	0.02087	0.00280	PASS
Extreme(-30℃)		7.20	8.73	5.91	12.20	13.73	0.01013	0.01229	0.00831	0.01716	0.01932	PASS
25℃	LV	14.85	8.87	11.57	14.85	9.87	0.02088	0.01247	0.01628	0.02088	0.01388	PASS
	HV	12.24	5.37	15.60	16.24	3.37	0.01721	0.00755	0.02194	0.02283	0.00474	PASS

DC_7A-n28A (Subset 1)												
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	5MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	14.34	7.27	8.47	3.34	5.27	0.02022	0.01025	0.01194	0.00471	0.00743	PASS
Extreme(50℃)		17.88	11.25	1.77	13.88	3.25	0.02519	0.01586	0.00250	0.01956	0.00459	PASS
Extreme(40℃)		1.35	3.64	15.70	16.35	4.64	0.00190	0.00514	0.02213	0.02304	0.00655	PASS
Extreme(30℃)		9.39	14.78	10.38	15.39	15.78	0.01323	0.02084	0.01463	0.02169	0.02225	PASS
Extreme(20℃)		2.50	17.13	11.05	15.50	2.13	0.00353	0.02414	0.01557	0.02185	0.00300	PASS
Extreme(10℃)		2.56	2.48	4.15	9.56	15.48	0.00361	0.00349	0.00585	0.01347	0.02182	PASS
Extreme(0℃)		9.37	5.79	13.72	16.37	3.79	0.01320	0.00816	0.01934	0.02307	0.00534	PASS
Extreme(-10℃)		13.00	15.57	8.00	16.00	11.57	0.01833	0.02195	0.01128	0.02256	0.01631	PASS
Extreme(-20℃)		10.15	16.10	2.49	12.15	11.10	0.01430	0.02269	0.00351	0.01712	0.01564	PASS
Extreme(-30℃)		13.76	8.09	12.98	4.76	11.09	0.01939	0.01141	0.01830	0.00671	0.01563	PASS
25℃	LV	8.80	16.36	17.61	15.80	2.36	0.01241	0.02306	0.02482	0.02227	0.00333	PASS
	HV	5.21	6.83	13.70	10.21	3.83	0.00734	0.00962	0.01931	0.01439	0.00539	PASS
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	10MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	7.16	2.43	1.07	2.16	17.43	0.01009	0.00342	0.00151	0.00304	0.02456	PASS
Extreme(50℃)		8.33	9.97	8.08	9.33	13.97	0.01174	0.01406	0.01139	0.01315	0.01969	PASS
Extreme(40℃)		8.06	11.60	14.46	10.06	11.60	0.01136	0.01634	0.02038	0.01418	0.01634	PASS
Extreme(30℃)		15.89	3.43	7.61	14.89	16.43	0.02240	0.00483	0.01072	0.02099	0.02316	PASS
Extreme(20℃)		1.25	15.99	14.26	9.25	8.99	0.00176	0.02253	0.02010	0.01304	0.01267	PASS
Extreme(10℃)		17.99	10.45	11.40	7.99	4.45	0.02535	0.01473	0.01606	0.01126	0.00627	PASS
Extreme(0℃)		11.73	10.81	14.25	15.73	17.81	0.01654	0.01523	0.02009	0.02217	0.02510	PASS
Extreme(-10℃)		15.30	2.03	10.12	17.30	1.03	0.02156	0.00286	0.01427	0.02438	0.00145	PASS



Extreme(-20℃)		11.41	2.53	14.71	3.41	10.53	0.01608	0.00356	0.02074	0.00480	0.01484	PASS
Extreme(-30℃)		1.30	2.65	1.39	16.30	2.65	0.00183	0.00374	0.00196	0.02298	0.00374	PASS
25℃	LV	4.97	6.31	6.07	6.97	9.31	0.00701	0.00890	0.00855	0.00983	0.01313	PASS
	HV	14.56	15.57	12.63	3.56	1.57	0.02053	0.02195	0.01781	0.00502	0.00222	PASS

DC_7A-n28A (Subset 2)												
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	5MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	6.33	3.28	4.58	8.33	4.28	0.00890	0.00461	0.00644	0.01172	0.00602	PASS
Extreme(50℃)		6.92	6.63	16.11	10.92	12.63	0.00974	0.00933	0.02265	0.01536	0.01777	PASS
Extreme(40℃)		7.15	3.84	5.61	15.15	8.84	0.01005	0.00540	0.00790	0.02130	0.01244	PASS
Extreme(30℃)		10.10	10.89	10.76	5.10	2.89	0.01421	0.01532	0.01513	0.00718	0.00407	PASS
Extreme(20℃)		14.91	16.19	14.75	13.91	3.19	0.02097	0.02277	0.02075	0.01956	0.00448	PASS
Extreme(10℃)		12.39	12.30	12.06	12.39	1.30	0.01743	0.01729	0.01696	0.01743	0.00182	PASS
Extreme(0℃)		3.95	1.64	7.88	12.95	14.64	0.00555	0.00231	0.01108	0.01821	0.02060	PASS
Extreme(-10℃)		2.26	13.34	3.97	15.26	12.34	0.00318	0.01877	0.00559	0.02147	0.01736	PASS
Extreme(-20℃)		10.83	17.36	11.25	4.83	1.36	0.01524	0.02441	0.01582	0.00680	0.00191	PASS
Extreme(-30℃)		17.81	15.78	11.59	6.81	6.78	0.02505	0.02219	0.01630	0.00958	0.00953	PASS
25℃	LV	3.43	11.23	2.56	12.43	1.23	0.00482	0.01579	0.00361	0.01748	0.00172	PASS
	HV	7.03	17.26	16.33	3.03	4.26	0.00989	0.02428	0.02297	0.00426	0.00599	PASS
Condition		Freq.Err or (Hz)	Freq.E rror (Hz)	Freq.Err or (Hz)	Freq.Err or (Hz)	Freq.E rror (Hz)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Frequency Stability(p pm)	Verdict
BANDWIDTH	10MHz											
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	8.24	15.01	3.07	16.24	1.01	0.01159	0.02111	0.00431	0.02284	0.00142	PASS
Extreme(50℃)		13.86	12.15	6.67	8.86	14.15	0.01950	0.01710	0.00938	0.01247	0.01991	PASS
Extreme(40℃)		13.48	13.78	13.36	2.48	3.78	0.01896	0.01938	0.01878	0.00349	0.00532	PASS
Extreme(30℃)		14.39	7.87	16.90	8.39	6.87	0.02023	0.01107	0.02377	0.01179	0.00966	PASS
Extreme(20℃)		1.19	15.62	1.05	12.19	9.62	0.00167	0.02197	0.00148	0.01714	0.01353	PASS
Extreme(10℃)		16.21	8.49	12.46	4.21	7.49	0.02280	0.01194	0.01753	0.00592	0.01053	PASS
Extreme(0℃)		6.06	2.85	12.30	9.06	11.85	0.00852	0.00400	0.01730	0.01274	0.01666	PASS
Extreme(-10℃)		7.37	10.99	4.08	12.37	5.99	0.01037	0.01545	0.00574	0.01740	0.00842	PASS
Extreme(-20℃)		7.58	4.20	2.95	12.58	2.20	0.01067	0.00590	0.00415	0.01770	0.00309	PASS
Extreme(-30℃)		11.56	10.91	4.68	13.56	3.91	0.01626	0.01535	0.00659	0.01907	0.00550	PASS
25℃	LV	1.76	9.66	10.92	1.76	4.66	0.00248	0.01359	0.01535	0.00248	0.00656	PASS
	HV	17.03	7.80	11.82	2.03	13.80	0.02396	0.01098	0.01662	0.00286	0.01942	PASS
Condition		Freq.Err or	Freq.E rror	Freq.Err or	Freq.Err or	Freq.E rror	Frequency Stability(p	Frequency Stability(p	Frequency Stability(p	Frequency Stability(p	Frequency Stability(p	Verdict



BANDWIDTH	15MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	pm	pm	pm	pm	pm	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal(25℃)	Normal	12.67	8.97	8.31	3.67	14.97	0.01782	0.01262	0.01168	0.00516	0.02106	PASS
Extreme(50℃)		5.34	5.46	7.84	5.34	16.46	0.00751	0.00768	0.01103	0.00751	0.02315	PASS
Extreme(40℃)		15.23	7.08	10.03	5.23	9.08	0.02141	0.00995	0.01411	0.00735	0.01277	PASS
Extreme(30℃)		13.57	8.40	17.53	14.57	9.40	0.01908	0.01182	0.02466	0.02049	0.01323	PASS
Extreme(20℃)		3.33	13.63	9.39	5.33	7.63	0.00469	0.01918	0.01321	0.00750	0.01074	PASS
Extreme(10℃)		9.68	16.78	12.57	16.68	9.78	0.01361	0.02360	0.01769	0.02346	0.01376	PASS
Extreme(0℃)		8.47	2.98	17.62	9.47	2.98	0.01192	0.00420	0.02478	0.01332	0.00420	PASS
Extreme(-10℃)		2.03	12.95	6.90	13.03	16.95	0.00285	0.01822	0.00970	0.01832	0.02384	PASS
Extreme(-20℃)		15.24	14.22	3.85	9.24	17.22	0.02143	0.02000	0.00542	0.01300	0.02422	PASS
Extreme(-30℃)		9.36	14.73	4.51	11.36	1.73	0.01317	0.02072	0.00635	0.01598	0.00243	PASS
25℃	LV	15.24	4.39	1.82	14.24	15.39	0.02143	0.00618	0.00257	0.02002	0.02165	PASS
	HV	14.99	5.49	6.74	1.99	13.49	0.02108	0.00773	0.00948	0.00280	0.01898	PASS

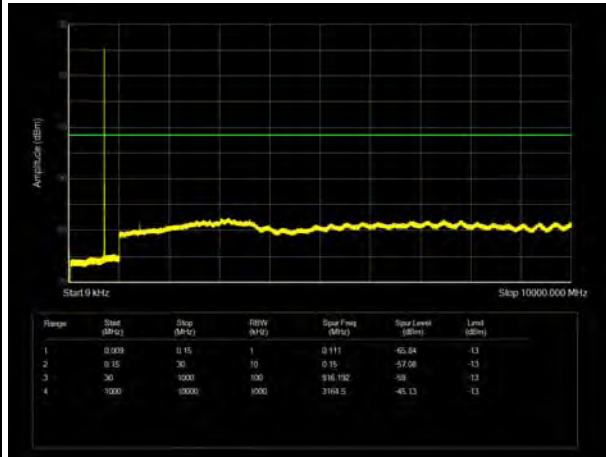


6.6 Spurious Emissions at Antenna Terminals

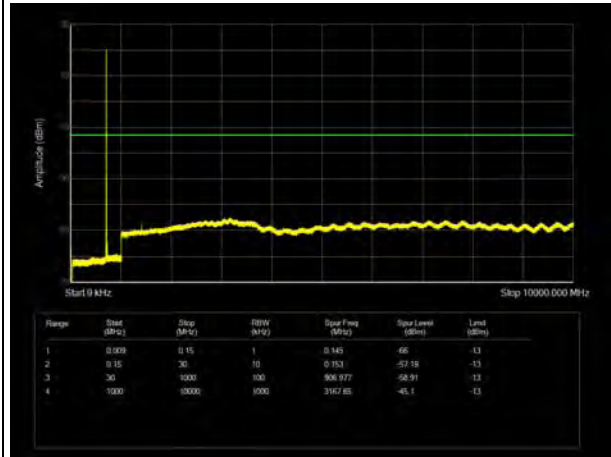
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

The signal beyond the limit is carrier.

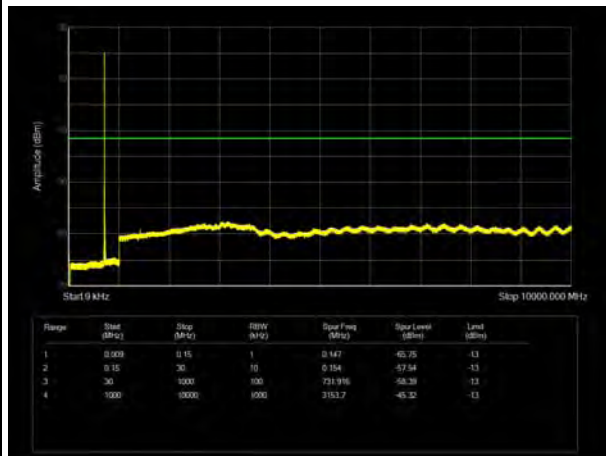
LTE Band 28 Subset 1 3MHz CH-Low
9kHz ~10GHz



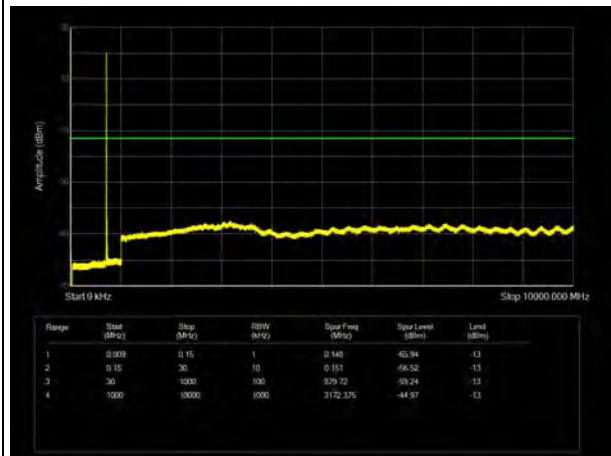
LTE Band 28 Subset 1 5MHz CH-Low
9kHz ~10GHz



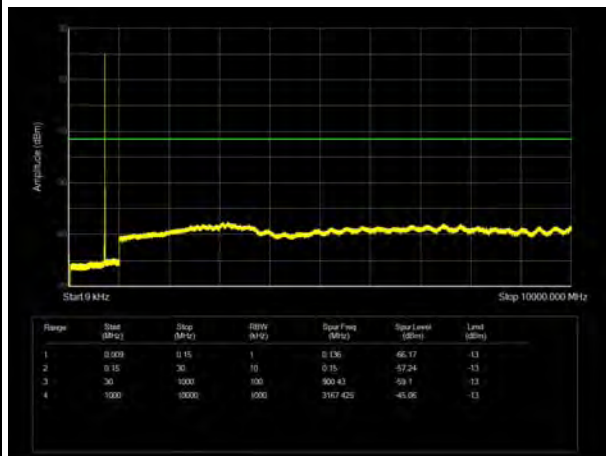
LTE Band 28 Subset 1 3MHz CH- Middle
9kHz ~10GHz



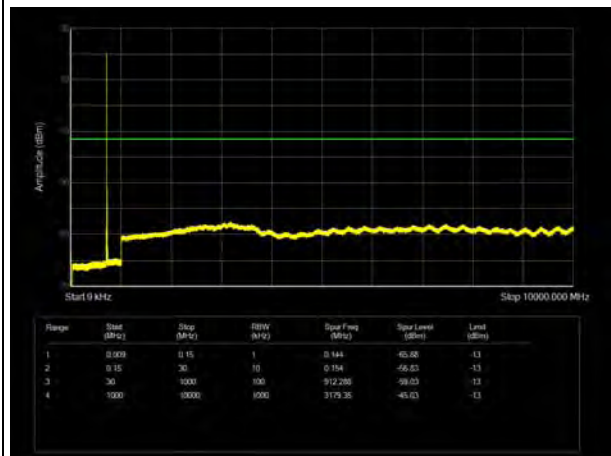
LTE Band 28 Subset 1 5MHz CH- Middle
9kHz ~10GHz



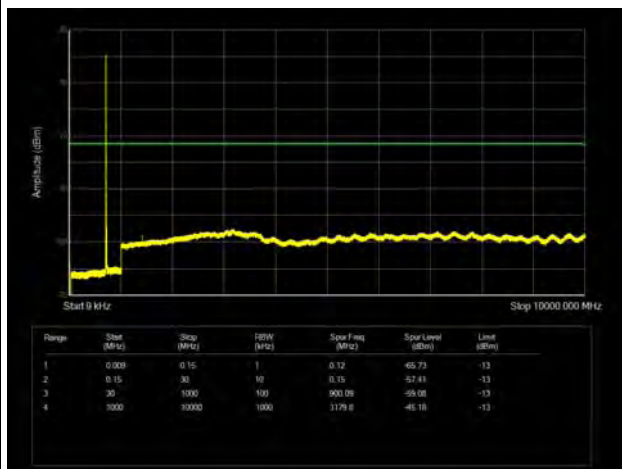
LTE Band 28 Subset 1 3MHz CH-High
9kHz ~10GHz



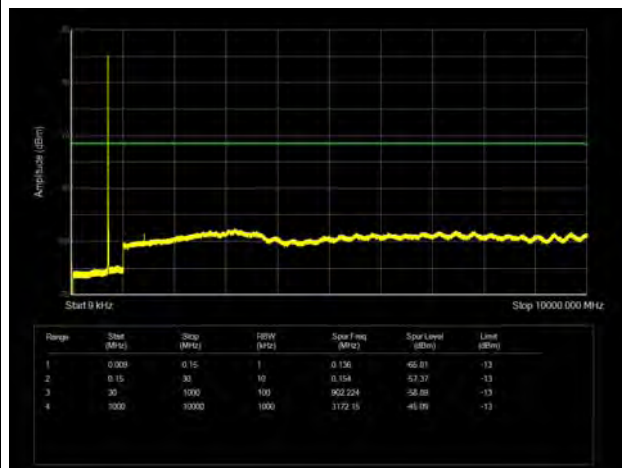
LTE Band 28 Subset 1 5MHz CH-High
9kHz ~10GHz



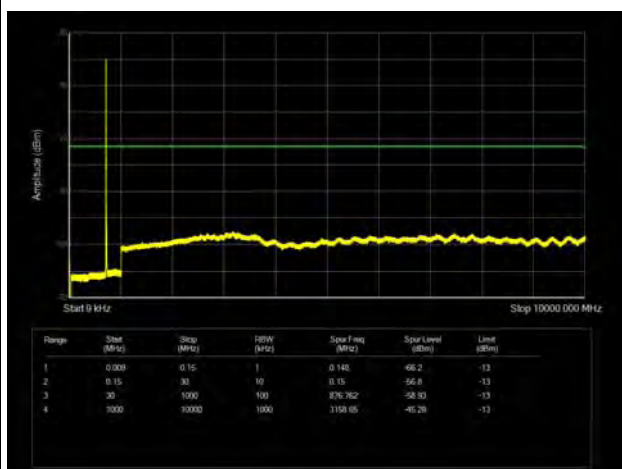
LTE Band 28 Subset 1 10MHz CH-Low 9kHz ~10GHz



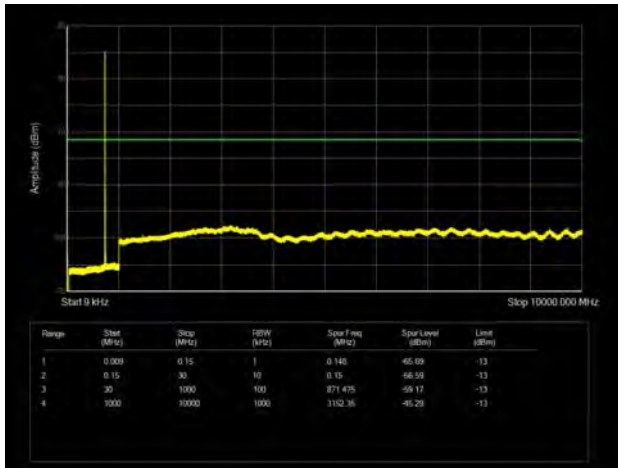
LTE Band 28 Subset 1 10MHz CH- Middle 9kHz ~10GHz



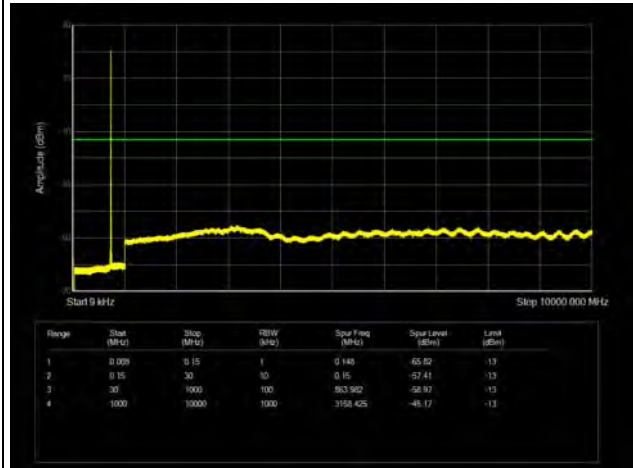
LTE Band 28 Subset 1 10MHz CH-High 9kHz ~10GHz



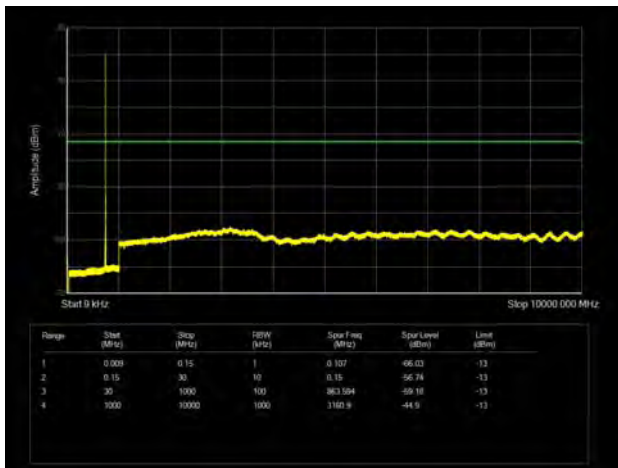
LTE Band 28 Subset 2 3MHz CH-Low 9kHz ~10GHz



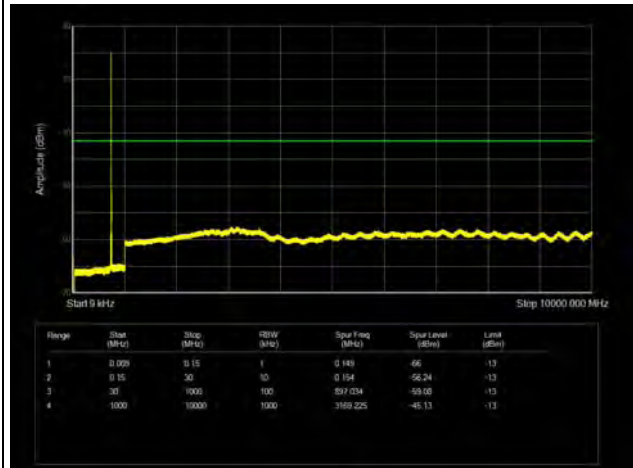
LTE Band 28 Subset 2 5MHz CH-Low 9kHz ~10GHz



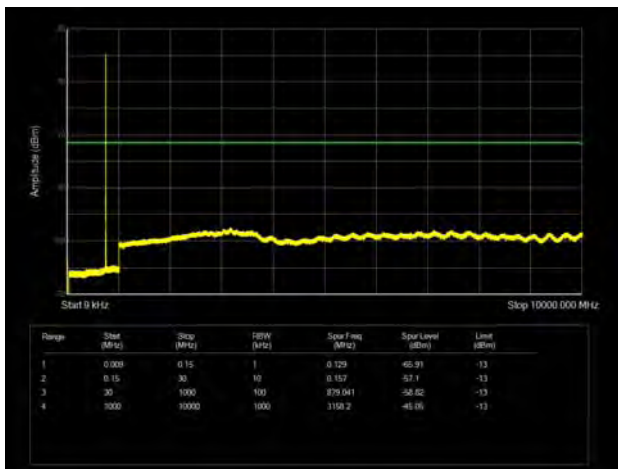
LTE Band 28 Subset 2 3MHz CH- Middle 9kHz ~10GHz



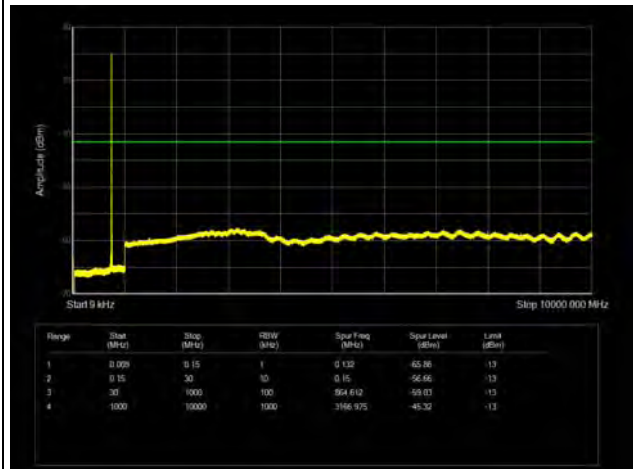
LTE Band 28 Subset 2 5MHz CH- Middle 9kHz ~10GHz



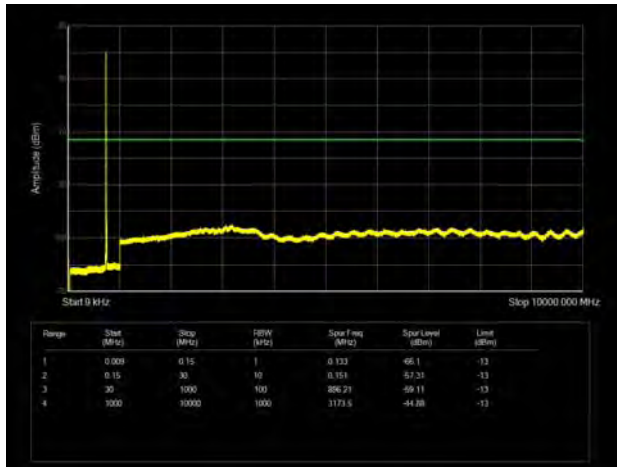
LTE Band 28 Subset 2 3MHz CH-High 9kHz ~10GHz



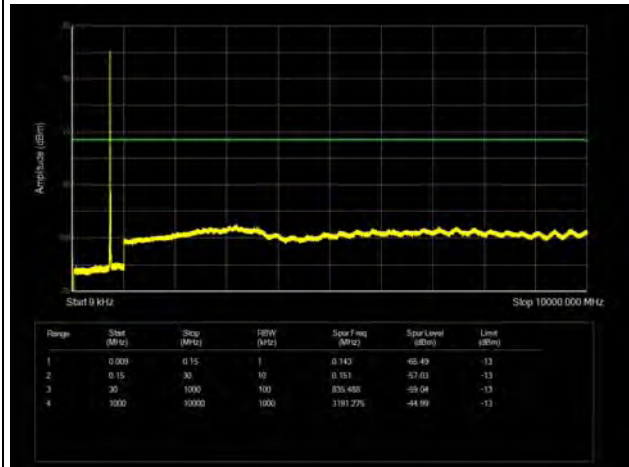
LTE Band 28 Subset 2 5MHz CH-High 9kHz ~10GHz



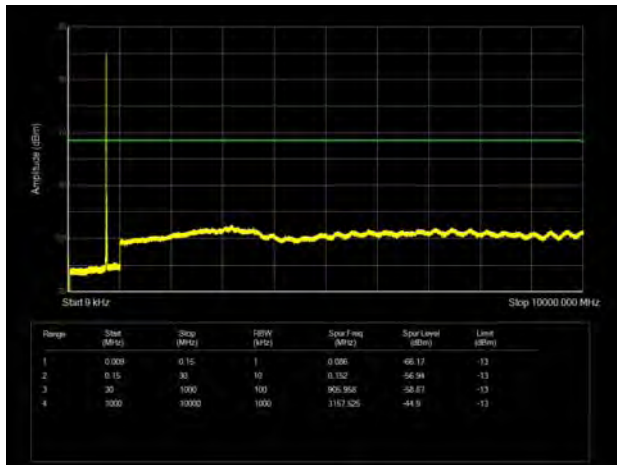
LTE Band 28 Subset 2 10MHz CH-Low
9kHz ~10GHz



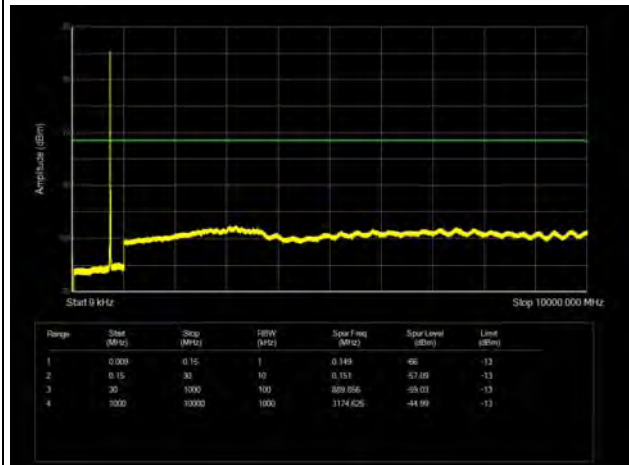
LTE Band 28 Subset 2 15MHz CH-Low
9kHz ~10GHz



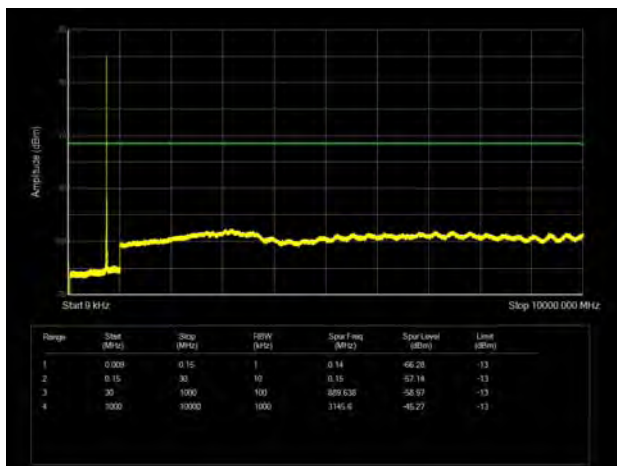
LTE Band 28 Subset 2 10MHz CH- Middle
9kHz ~10GHz



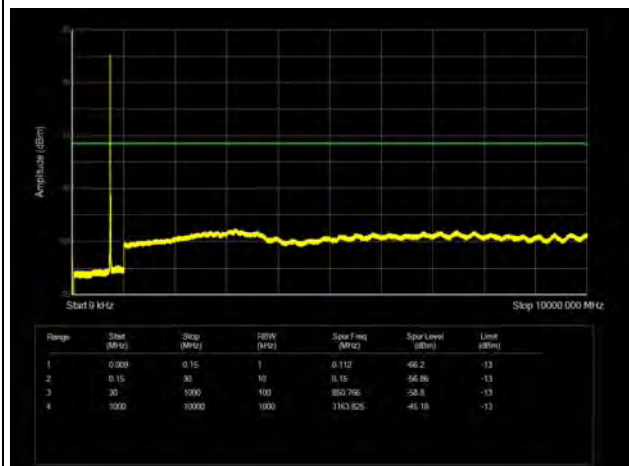
LTE Band 28 Subset 2 15MHz CH- Middle
9kHz ~10GHz



LTE Band 28 Subset 2 10MHz CH-High
9kHz ~10GHz



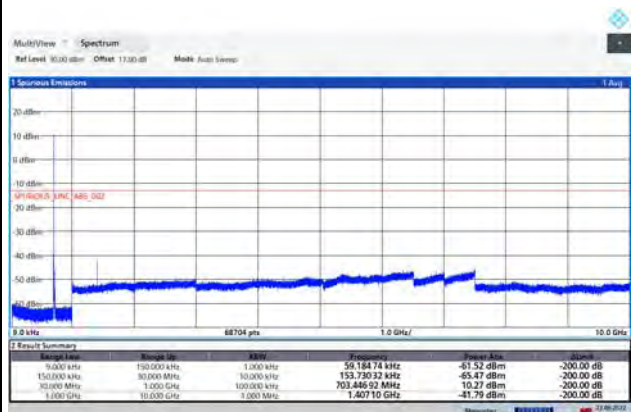
LTE Band 28 Subset 2 15MHz CH-High
9kHz ~10GHz



NR n28 Subset 1 10MHz CH-Low,BPSK
9kHz ~10GHzNR n28 Subset 1 10MHz CH-Low,QPSK
9kHz ~10GHzNR n28 Subset 1 10MHz CH- Middle, BPSK
9kHz ~10GHzNR n28 Subset 1 10MHz CH- Middle, QPSK
9kHz ~10GHzNR n28 Subset 1 10MHz CH-High, BPSK
9kHz ~10GHzNR n28 Subset 1 10MHz CH-High, QPSK
9kHz ~10GHz

NR n28 Subset 1 10MHz CH-Low,16QAM
9kHz ~10GHz

13:31:59 22-06-2022

NR n28 Subset 1 10MHz CH-Low,64QAM
9kHz ~10GHz

13:32:50 22-06-2022

NR n28 Subset 1 10MHz CH- Middle, 16QAM
9kHz ~10GHz

13:35:54 22-06-2022

NR n28 Subset 1 10MHz CH- Middle, 64QAM
9kHz ~10GHz

13:35:29 22-06-2022

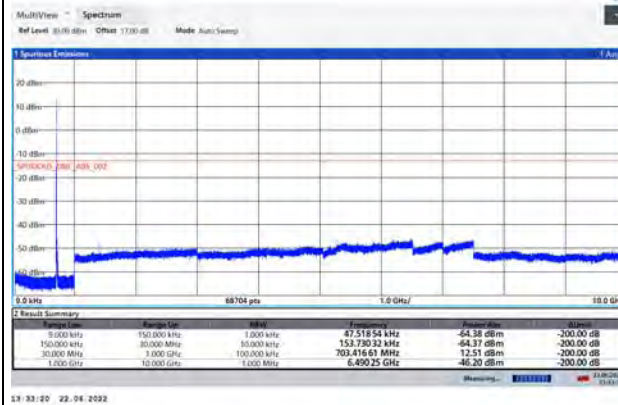
NR n28 Subset 1 10MHz CH-High, 16QAM
9kHz ~10GHz

13:39:38 22-06-2022

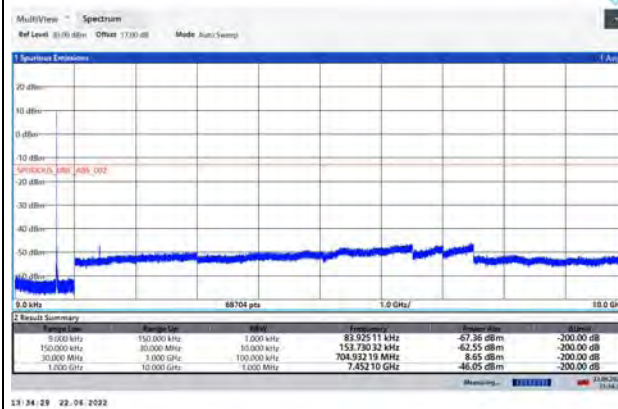
NR n28 Subset 1 10MHz CH-High, 64QAM
9kHz ~10GHz

13:40:19 22-06-2022

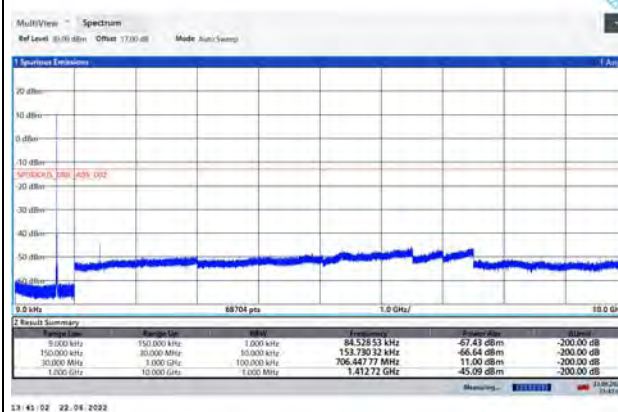
NR n28 Subset 1 10MHz CH-Low,256QAM 9kHz ~10GHz



NR n28 Subset 1 10MHz CH- Middle, 256QAM 9kHz ~10GHz



NR n28 Subset 1 10MHz CH-High, 256QAM 9kHz ~10GHz



NR n28 Subset 2 15MHz CH-Low,BPSK
9kHz ~10GHz

13:45:52 22-06-2022

NR n28 Subset 2 15MHz CH-Low,QPSK
9kHz ~10GHz

13:46:41 22-06-2022

NR n28 Subset 2 15MHz CH- Middle, BPSK
9kHz ~10GHz

13:58:48 22-06-2022

NR n28 Subset 2 15MHz CH- Middle, QPSK
9kHz ~10GHz

13:59:14 22-06-2022

NR n28 Subset 2 15MHz CH-High, BPSK
9kHz ~10GHz

14:00:10 22-06-2022

NR n28 Subset 2 15MHz CH-High, QPSK
9kHz ~10GHz

14:00:17 22-06-2022

NR n28 Subset 2 15MHz CH-Low,16QAM
9kHz ~10GHz

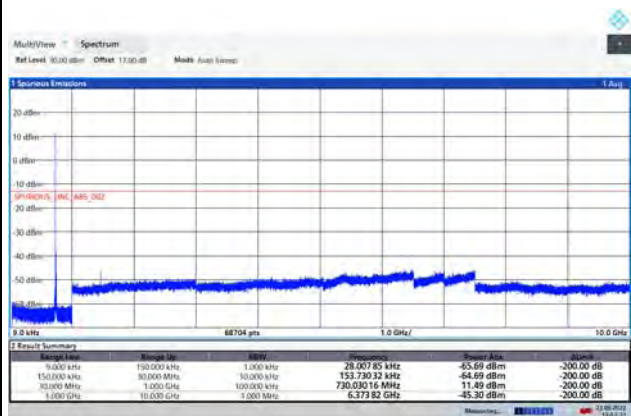
13:47:31 22-06-2022

NR n28 Subset 2 15MHz CH-Low,64QAM
9kHz ~10GHz

13:48:27 22-06-2022

NR n28 Subset 2 15MHz CH- Middle, 16QAM
9kHz ~10GHz

13:51:50 22-06-2022

NR n28 Subset 2 15MHz CH- Middle, 64QAM
9kHz ~10GHz

13:51:23 22-06-2022

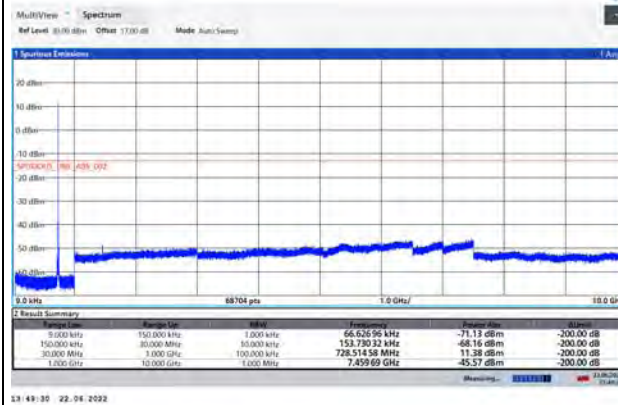
NR n28 Subset 2 15MHz CH-High, 16QAM
9kHz ~10GHz

14:01:46 22-06-2022

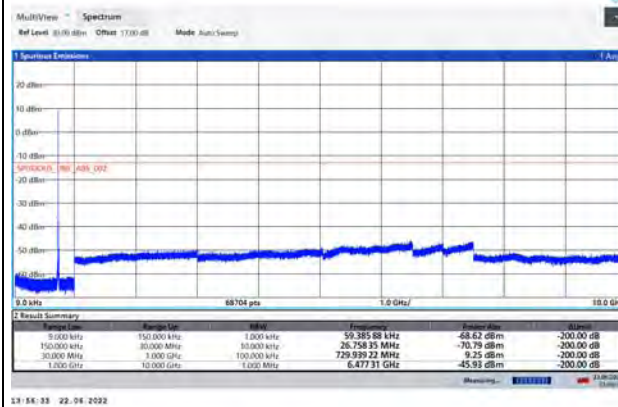
NR n28 Subset 2 15MHz CH-High, 64QAM
9kHz ~10GHz

14:02:13 22-06-2022

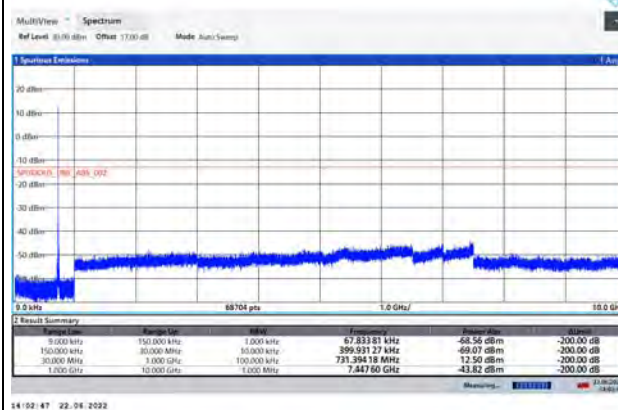
NR n28 Subset 2 15MHz CH-Low,256QAM 9kHz ~10GHz



NR n28 Subset 2 15MHz CH- Middle, 256QAM 9kHz ~10GHz



NR n28 Subset 2 15MHz CH-High, 256QAM 9kHz ~10GHz



DC_7A-n28A (Subset 1) 10MHz CH-Low,BPSK
9kHz ~10GHz

15:42:22 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH-Low,QPSK
9kHz ~10GHz

15:42:55 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH- Middle,
BPSK
9kHz ~10GHz

15:48:30 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH- Middle,
QPSK
9kHz ~10GHz

15:47:35 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH-High, BPSK
9kHz ~10GHz

15:50:08 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH-High, QPSK
9kHz ~10GHz

15:50:54 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH-Low,16QAM
9kHz ~10GHz

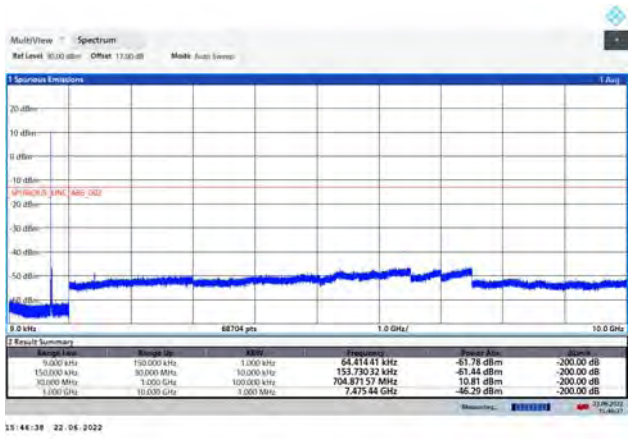
15:43:34 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH-Low,64QAM
9kHz ~10GHz

15:44:03 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH- Middle,
16QAM 9kHz ~10GHz

15:47:09 22-06-2022

DC_7A-n28A (Subset 1) 10MHz CH- Middle,
64QAM 9kHz ~10GHz

15:44:39 22-06-2022

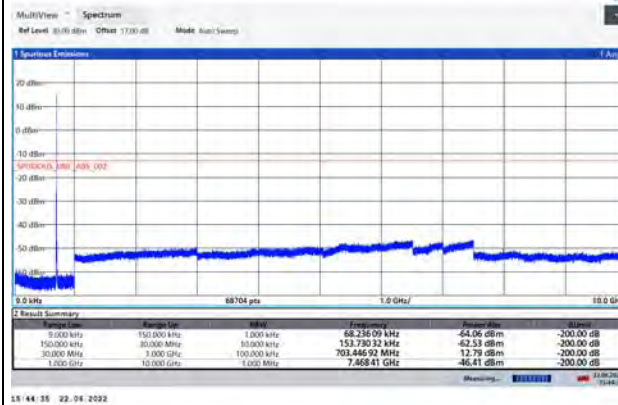
DC_7A-n28A (Subset 1) 10MHz CH-High, 16QAM
9kHz ~10GHz

15:51:22 22-06-2022

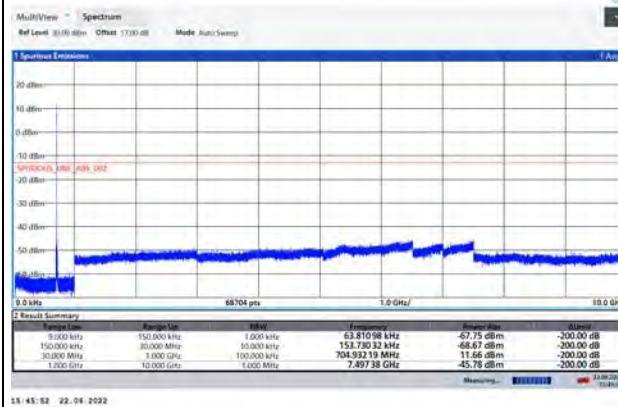
DC_7A-n28A (Subset 1) 10MHz CH-High, 64QAM
9kHz ~10GHz

15:51:48 22-06-2022

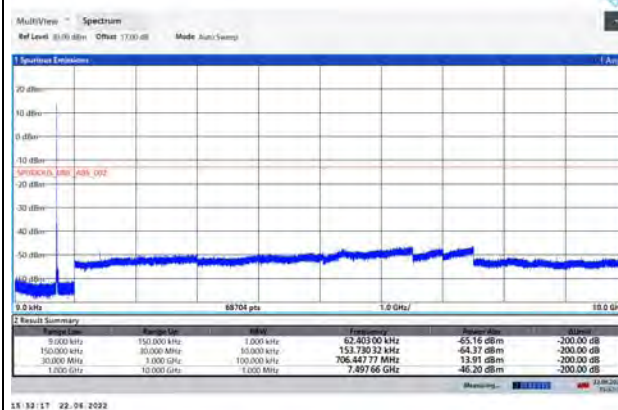
DC_7A-n28A (Subset 1) 10MHz CH-Low, 256QAM 9kHz ~10GHz



DC_7A-n28A (Subset 1) 10MHz CH- Middle, 256QAM 9kHz ~10GHz



DC_7A-n28A (Subset 1) 10MHz CH-High, 256QAM 9kHz ~10GHz



DC_7A-n28A (Subset 2) 15MHz CH-Low,BPSK
9kHz ~10GHz

15:54:39 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-Low,QPSK
9kHz ~10GHz

15:55:16 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH- Middle,
BPSK 9kHz ~10GHz

16:01:58 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH- Middle,
QPSK 9kHz ~10GHz

16:01:16 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-High, BPSK
9kHz ~10GHz

16:03:16 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-High, QPSK
9kHz ~10GHz

16:03:15 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-Low,16QAM
9kHz ~10GHz

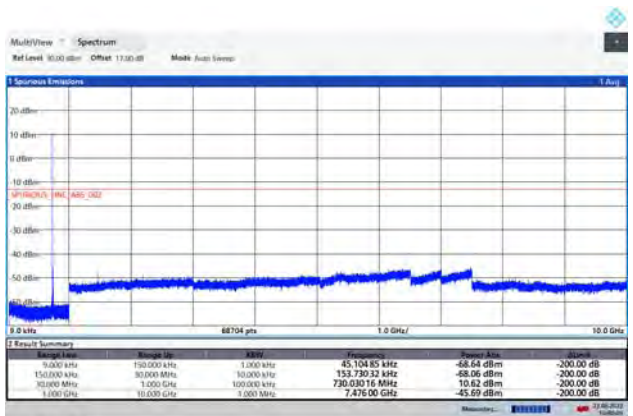
15:55:42 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-Low,64QAM
9kHz ~10GHz

15:56:26 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH- Middle,
16QAM 9kHz ~10GHz

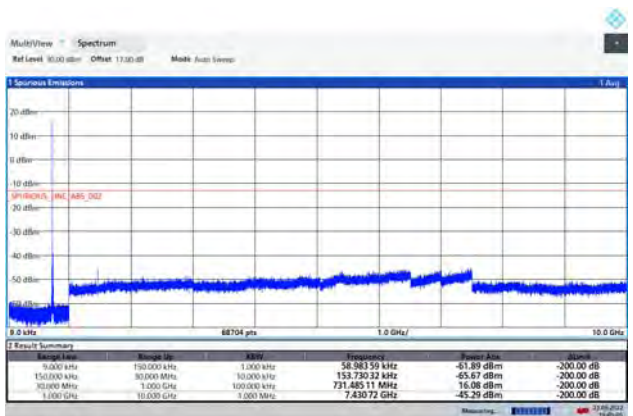
16:00:36 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH- Middle,
64QAM 9kHz ~10GHz

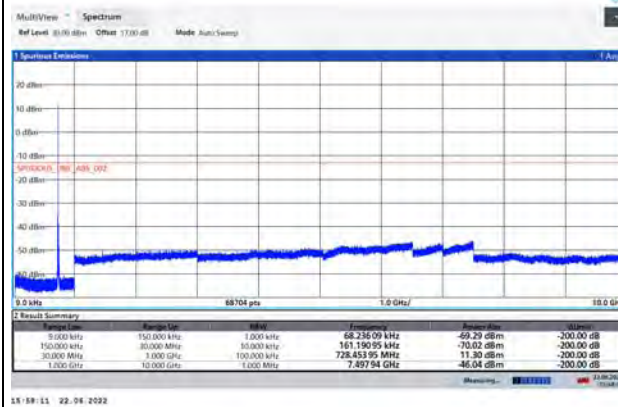
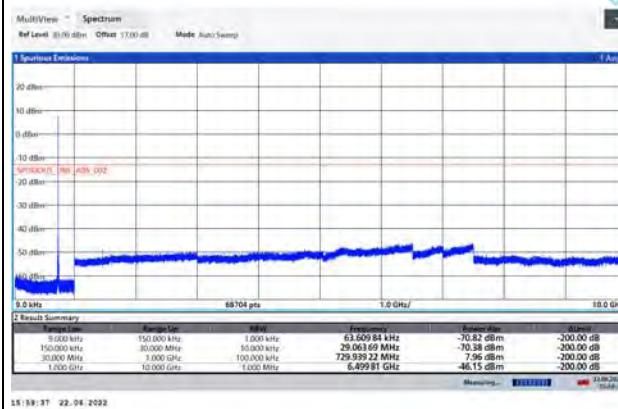
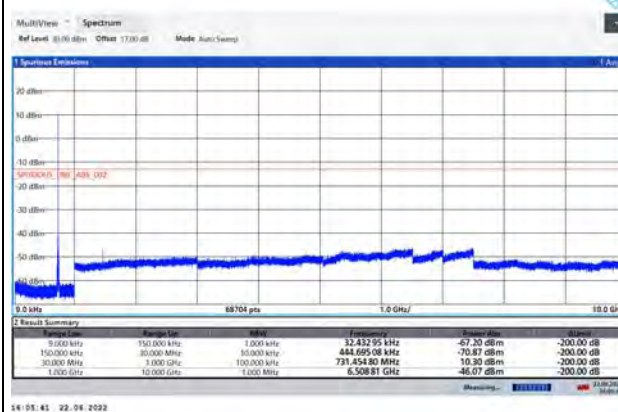
16:00:07 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-High, 16QAM
9kHz ~10GHz

16:04:17 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-High, 64QAM
9kHz ~10GHz

16:05:06 22-06-2022

DC_7A-n28A (Subset 2) 15MHz CH-Low,
256QAM 9kHz ~10GHzDC_7A-n28A (Subset 2) 15MHz CH- Middle,
256QAM 9kHz ~10GHzDC_7A-n28A (Subset 2) 15MHz CH-High,
256QAM 9kHz ~10GHz



6.7 Radiates Spurious Emission

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

LTE band 28 Subset 1 QPSK 3MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1416.00	-68.41	1.70	8.70	Vertical	-63.56	-13.00	50.56	315
3	2124.00	-64.64	2.10	11.10	Vertical	-57.79	-13.00	44.79	315
4	2832.00	-66.75	2.30	13.10	Vertical	-58.10	-13.00	45.10	45
5	3540.00	-66.30	2.60	12.70	Vertical	-58.35	-13.00	45.35	270
6	4248.00	-63.28	3.30	12.50	Vertical	-56.23	-13.00	43.23	270
7	4956.00	-61.27	3.40	12.50	Vertical	-54.32	-13.00	41.32	180
8	5664.00	-59.32	3.30	12.50	Vertical	-52.27	-13.00	39.27	90
9	6372.00	-58.77	3.80	11.50	Vertical	-53.22	-13.00	40.22	0
10	7080.00	-57.12	4.20	11.80	Vertical	-51.67	-13.00	38.67	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Vertical position.

LTE band 28 Subset 1 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1414.00	-67.34	1.70	8.70	Vertical	-62.49	-13.00	49.49	315
3	2121.00	-65.34	2.10	11.10	Vertical	-58.49	-13.00	45.49	315
4	2828.00	-66.71	2.30	13.10	Vertical	-58.06	-13.00	45.06	45
5	3535.00	-65.78	2.60	12.70	Vertical	-57.83	-13.00	44.83	270
6	4242.00	-63.23	3.30	12.50	Vertical	-56.18	-13.00	43.18	270
7	4949.00	-61.27	3.40	12.50	Vertical	-54.32	-13.00	41.32	180
8	5656.00	-59.22	3.30	12.50	Vertical	-52.17	-13.00	39.17	90
9	6363.00	-58.02	3.80	11.50	Vertical	-52.47	-13.00	39.47	0
10	7070.00	-57.72	4.20	11.80	Vertical	-52.27	-13.00	39.27	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Vertical position.



LTE band 28 Subset 1 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1409.00	-65.10	1.70	8.70	Vertical	-60.25	-13.00	47.25	135
3	2113.50	-61.11	2.10	11.10	Vertical	-54.26	-13.00	41.26	90
4	2818.00	-67.15	2.30	13.10	Vertical	-58.50	-13.00	45.50	225
5	3522.50	-66.13	2.60	12.70	Vertical	-58.18	-13.00	45.18	135
6	4227.00	-63.83	3.30	12.50	Vertical	-56.78	-13.00	43.78	90
7	4931.50	-61.55	3.40	12.50	Vertical	-54.60	-13.00	41.60	225
8	5636.00	-59.42	3.30	12.50	Vertical	-52.37	-13.00	39.37	45
9	6340.50	-58.69	3.80	11.50	Vertical	-53.14	-13.00	40.14	225
10	7045.00	-58.54	4.20	11.80	Vertical	-53.09	-13.00	40.09	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE band 28 Subset 2 QPSK 3MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1471.00	-63.63	1.70	8.70	Vertical	-58.78	-13.00	45.78	45
3	2206.50	-61.03	2.10	11.10	Vertical	-54.18	-13.00	41.18	315
4	2942.00	-66.90	2.30	13.10	Vertical	-58.25	-13.00	45.25	0
5	3677.50	-65.55	2.60	12.70	Vertical	-57.60	-13.00	44.60	0
6	4413.00	-62.12	3.30	12.50	Vertical	-55.07	-13.00	42.07	180
7	5148.50	-59.29	3.40	12.50	Vertical	-52.34	-13.00	39.34	45
8	5884.00	-59.62	3.30	12.50	Vertical	-52.57	-13.00	39.57	225
9	6619.50	-57.59	3.80	11.50	Vertical	-52.04	-13.00	39.04	315
10	7355.00	-56.48	4.20	11.80	Vertical	-51.03	-13.00	38.03	90

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.



LTE band 28 Subset 2 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1469.00	-61.84	1.70	8.70	Vertical	-56.99	-13.00	43.99	45
3	2203.50	-59.88	2.10	11.10	Vertical	-53.03	-13.00	40.03	315
4	2938.00	-67.51	2.30	13.10	Vertical	-58.86	-13.00	45.86	0
5	3672.50	-65.69	2.60	12.70	Vertical	-57.74	-13.00	44.74	0
6	4407.00	-62.34	3.30	12.50	Vertical	-55.29	-13.00	42.29	180
7	5141.50	-59.51	3.40	12.50	Vertical	-52.56	-13.00	39.56	45
8	5876.00	-59.83	3.30	12.50	Vertical	-52.78	-13.00	39.78	225
9	6610.50	-58.66	3.80	11.50	Vertical	-53.11	-13.00	40.11	315
10	7345.00	-56.64	4.20	11.80	Vertical	-51.19	-13.00	38.19	90
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

LTE band 28 Subset 2 QPSK 15MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1459.00	-63.91	1.70	8.70	Vertical	-59.06	-13.00	46.06	270
3	2188.50	-58.31	2.10	11.10	Vertical	-51.46	-13.00	38.46	0
4	2918.00	-66.70	2.30	13.10	Vertical	-58.05	-13.00	45.05	45
5	3647.50	-65.20	2.60	12.70	Vertical	-57.25	-13.00	44.25	90
6	4377.00	-63.04	3.30	12.50	Vertical	-55.99	-13.00	42.99	180
7	5106.50	-59.72	3.40	12.50	Vertical	-52.77	-13.00	39.77	135
8	5836.00	-59.70	3.30	12.50	Vertical	-52.65	-13.00	39.65	90
9	6565.50	-58.76	3.80	11.50	Vertical	-53.21	-13.00	40.21	135
10	7295.00	-56.27	4.20	11.80	Vertical	-50.82	-13.00	37.82	45
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									



NR n28 Subset 1 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1414.00	-52.97	1.70	8.70	Vertical	-48.12	-13.00	35.12	315
3	2121.00	-39.74	2.10	11.10	Vertical	-32.89	-13.00	19.89	225
4	2828.00	-50.55	2.30	13.10	Vertical	-41.90	-13.00	28.90	0
5	3535.00	-63.99	2.60	12.70	Vertical	-56.04	-13.00	43.04	180
6	4242.00	-62.58	3.30	12.50	Vertical	-55.53	-13.00	42.53	45
7	4949.00	-60.54	3.40	12.50	Vertical	-53.59	-13.00	40.59	315
8	5656.00	-58.82	3.30	12.50	Vertical	-51.77	-13.00	38.77	135
9	6363.00	-58.55	3.80	11.50	Vertical	-53.00	-13.00	40.00	45
10	7070.00	-56.18	4.20	11.80	Vertical	-50.73	-13.00	37.73	270
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

NR n28 Subset 1 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1409.00	-52.93	1.70	8.70	Vertical	-48.08	-13.00	35.08	135
3	2113.50	-38.42	2.10	11.10	Vertical	-31.57	-13.00	18.57	225
4	2818.00	-50.46	2.30	13.10	Vertical	-41.81	-13.00	28.81	45
5	3522.50	-64.18	2.60	12.70	Vertical	-56.23	-13.00	43.23	90
6	4227.00	-62.72	3.30	12.50	Vertical	-55.67	-13.00	42.67	135
7	4931.50	-60.25	3.40	12.50	Vertical	-53.30	-13.00	40.30	270
8	5636.00	-59.71	3.30	12.50	Vertical	-52.66	-13.00	39.66	0
9	6340.50	-57.58	3.80	11.50	Vertical	-52.03	-13.00	39.03	135
10	7045.00	-56.79	4.20	11.80	Vertical	-51.34	-13.00	38.34	135
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									



NR n28 Subset 2 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1469.00	-53.86	1.70	8.70	Vertical	-49.01	-13.00	36.01	225
3	2203.50	-36.89	2.10	11.10	Vertical	-30.04	-13.00	17.04	90
4	2938.00	-50.03	2.30	13.10	Vertical	-41.38	-13.00	28.38	225
5	3672.50	-64.26	2.60	12.70	Vertical	-56.31	-13.00	43.31	270
6	4407.00	-61.27	3.30	12.50	Vertical	-54.22	-13.00	41.22	135
7	5141.50	-59.44	3.40	12.50	Vertical	-52.49	-13.00	39.49	180
8	5876.00	-59.24	3.30	12.50	Vertical	-52.19	-13.00	39.19	45
9	6610.50	-58.28	3.80	11.50	Vertical	-52.73	-13.00	39.73	135
10	7345.00	-55.17	4.20	11.80	Vertical	-49.72	-13.00	36.72	225
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

NR n28 Subset 2 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1464.00	-54.41	1.70	8.70	Vertical	-49.56	-13.00	36.56	225
3	2196.00	-45.08	2.10	11.10	Vertical	-38.23	-13.00	25.23	225
4	2928.00	-50.42	2.30	13.10	Vertical	-41.77	-13.00	28.77	315
5	3660.00	-65.35	2.60	12.70	Vertical	-57.40	-13.00	44.40	135
6	4392.00	-62.50	3.30	12.50	Vertical	-55.45	-13.00	42.45	180
7	5124.00	-59.84	3.40	12.50	Vertical	-52.89	-13.00	39.89	45
8	5856.00	-59.64	3.30	12.50	Vertical	-52.59	-13.00	39.59	90
9	6588.00	-58.07	3.80	11.50	Vertical	-52.52	-13.00	39.52	180
10	7320.00	-56.80	4.20	11.80	Vertical	-51.35	-13.00	38.35	270
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									



NR n28 Subset 2 QPSK 15MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1459.00	-68.49	1.70	8.70	Vertical	-63.64	-13.00	50.64	225
3	2188.50	-37.68	2.10	11.10	Vertical	-30.83	-13.00	17.83	45
4	2918.00	-64.97	2.30	13.10	Vertical	-56.32	-13.00	43.32	135
5	3647.50	-61.20	2.60	12.70	Vertical	-53.25	-13.00	40.25	225
6	4377.00	-63.25	3.30	12.50	Vertical	-56.20	-13.00	43.20	45
7	5106.50	-60.02	3.40	12.50	Vertical	-53.07	-13.00	40.07	0
8	5836.00	-58.47	3.30	12.50	Vertical	-51.42	-13.00	38.42	90
9	6565.50	-57.93	3.80	11.50	Vertical	-52.38	-13.00	39.38	45
10	7295.00	-56.67	4.20	11.80	Vertical	-51.22	-13.00	38.22	0

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

DC_7A-n28 Subset 1 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1414.00	-67.06	1.70	8.70	Vertical	-62.21	-13.00	49.21	45
3	2121.00	-58.14	2.10	11.10	Vertical	-51.29	-13.00	38.29	225
4	2828.00	-60.53	2.30	13.10	Vertical	-51.88	-13.00	38.88	90
5	3535.00	-64.68	2.60	12.70	Vertical	-56.73	-13.00	43.73	45
6	4242.00	-64.48	3.30	12.50	Vertical	-57.43	-13.00	44.43	315
7	4949.00	-63.81	3.40	12.50	Vertical	-56.86	-13.00	43.86	90
8	5656.00	-64.00	3.30	12.50	Vertical	-56.95	-13.00	43.95	45
9	6363.00	-61.03	3.80	11.50	Vertical	-55.48	-13.00	42.48	225
10	7070.00	-56.28	4.20	11.80	Vertical	-50.83	-13.00	37.83	0

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.



DC_7A-n28 Subset 1 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1409.00	-63.46	1.70	8.70	Vertical	-58.61	-13.00	45.61	90
3	2113.50	-60.37	2.10	11.10	Vertical	-53.52	-13.00	40.52	45
4	2818.00	-60.32	2.30	13.10	Vertical	-51.67	-13.00	38.67	225
5	3522.50	-66.11	2.60	12.70	Vertical	-58.16	-13.00	45.16	90
6	4227.00	-63.77	3.30	12.50	Vertical	-56.72	-13.00	43.72	45
7	4931.50	-63.71	3.40	12.50	Vertical	-56.76	-13.00	43.76	315
8	5636.00	-63.91	3.30	12.50	Vertical	-56.86	-13.00	43.86	90
9	6340.50	-61.56	3.80	11.50	Vertical	-56.01	-13.00	43.01	45
10	7045.00	-55.68	4.20	11.80	Vertical	-50.23	-13.00	37.23	225

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

DC_7A-n28 Subset 2 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1469.00	-62.65	1.70	8.70	Vertical	-57.80	-13.00	44.80	45
3	2203.50	-58.34	2.10	11.10	Vertical	-51.49	-13.00	38.49	90
4	2938.00	-59.38	2.30	13.10	Vertical	-50.73	-13.00	37.73	135
5	3672.50	-65.33	2.60	12.70	Vertical	-57.38	-13.00	44.38	90
6	4407.00	-64.59	3.30	12.50	Vertical	-57.54	-13.00	44.54	45
7	5141.50	-62.97	3.40	12.50	Vertical	-56.02	-13.00	43.02	225
8	5876.00	-63.90	3.30	12.50	Vertical	-56.85	-13.00	43.85	90
9	6610.50	-59.88	3.80	11.50	Vertical	-54.33	-13.00	41.33	135
10	7345.00	-55.19	4.20	11.80	Vertical	-49.74	-13.00	36.74	270

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.



DC_7A-n28 Subset 2 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1464.00	-65.91	1.70	8.70	Vertical	-61.06	-13.00	48.06	90
3	2196.00	-55.23	2.10	11.10	Vertical	-48.38	-13.00	35.38	45
4	2928.00	-60.27	2.30	13.10	Vertical	-51.62	-13.00	38.62	180
5	3660.00	-64.92	2.60	12.70	Vertical	-56.97	-13.00	43.97	45
6	4392.00	-64.69	3.30	12.50	Vertical	-57.64	-13.00	44.64	225
7	5124.00	-63.58	3.40	12.50	Vertical	-56.63	-13.00	43.63	90
8	5856.00	-64.01	3.30	12.50	Vertical	-56.96	-13.00	43.96	45
9	6588.00	-61.13	3.80	11.50	Vertical	-55.58	-13.00	42.58	315
10	7320.00	-54.32	4.20	11.80	Vertical	-48.87	-13.00	35.87	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

DC_7A-n28 Subset 2 QPSK 15MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1459.00	-61.91	1.70	8.70	Vertical	-57.06	-13.00	44.06	45
3	2188.50	-53.78	2.10	11.10	Vertical	-46.93	-13.00	33.93	225
4	2918.00	-59.53	2.30	13.10	Vertical	-50.88	-13.00	37.88	135
5	3647.50	-62.96	2.60	12.70	Vertical	-55.01	-13.00	42.01	90
6	4377.00	-64.83	3.30	12.50	Vertical	-57.78	-13.00	44.78	45
7	5106.50	-63.64	3.40	12.50	Vertical	-56.69	-13.00	43.69	270
8	5836.00	-63.99	3.30	12.50	Vertical	-56.94	-13.00	43.94	90
9	6565.50	-61.12	3.80	11.50	Vertical	-55.57	-13.00	42.57	45
10	7295.00	-56.11	4.20	11.80	Vertical	-50.66	-13.00	37.66	315

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.



7 Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	150415	2022-05-14	2023-05-13
Spectrum Analyzer	Keysight	N9020A	MY50510203	2021-12-12	2022-12-11
Universal Radio Communication Tester	Agilent	E5515C	GB44400275	2021-12-12	2022-12-11
Universal Radio Communication Tester	StarPoint	SP9500	SP9500-20440	2022-05-14	2023-05-13
Signal Analyzer	R&S	FSV3030	101411	2021-12-12	2022-12-11
Signal Analyzer	R&S	FSV40	101298	2022-05-14	2023-05-13
Climatic Chamber	ESPEC	SU-242	93000506	2021-12-12	2022-12-11
Radiates Spurious Emission					
Signal Analyzer	R&S	FSV30	100815	2021-12-12	2022-12-11
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	01111	2019-09-12	2022-09-11
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2023-12-16
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Software	R&S	EMC32	10.35.10	/	/

*****END OF REPORT *****



ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.



ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.