

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 71

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	665.5	133147	5	1	0	22.84
				1	24	22.96
				12	6	21.87
				25	0	22.03
	680.5	133297		1	0	22.74
				1	24	22.85
				12	6	22.14
				25	0	22.25
	695.5	133447		1	0	22.79
				1	24	22.86
				12	6	22.05
				25	0	22.19
16QAM	665.5	133147	5	1	0	22.04
				1	24	21.92
				12	6	20.93
				25	0	21.24
	680.5	133297		1	0	22.34
				1	24	22.26
				12	6	21.17
				25	0	21.13
	695.5	133447		1	0	22.12
				1	24	22.24
				12	6	21.03
				25	0	21.14
64QAM	665.5	133147	5	1	0	21.70
				1	24	21.71
				12	6	20.72
				25	0	20.82
	680.5	133297		1	0	22.18
				1	24	22.01
				12	6	20.75
				25	0	20.93
	695.5	133447		1	0	21.81
				1	24	21.97
				12	6	21.03
				25	0	20.90

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	668	133172	10	1	0	22.86
				1	49	22.92
				24	12	21.99
				50	0	22.00
	680.5	133297		1	0	22.73
				1	49	22.83
				24	12	22.02
				50	0	22.21
	693	133422		1	0	22.81
				1	49	22.98
				24	12	22.05
				50	0	22.12
16QAM	668	133172	10	1	0	22.02
				1	49	21.89
				24	12	20.86
				50	0	21.09
	680.5	133297		1	0	22.36
				1	49	22.29
				24	12	21.14
				50	0	21.07
	693	133422		1	0	21.95
				1	49	22.16
				24	12	20.98
				50	0	21.18
64QAM	668	133172	10	1	0	21.66
				1	49	21.84
				24	12	20.70
				50	0	20.96
	680.5	133297		1	0	22.06
				1	49	22.12
				24	12	20.87
				50	0	21.04
	693	133422		1	0	21.72
				1	49	21.90
				24	12	20.86
				50	0	20.90

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	670.5	133197	15	1	0	22.99
				1	74	22.83
				40	18	21.97
				75	0	21.96
	680.5	133297		1	0	22.79
				1	74	22.94
				40	18	22.06
				75	0	22.25
	690.5	133397		1	0	22.85
				1	74	23.03
				40	18	22.06
				75	0	22.12
16QAM	670.5	133197	15	1	0	21.95
				1	74	22.01
				40	18	20.97
				75	0	21.19
	680.5	133297		1	0	22.30
				1	74	22.17
				40	18	21.05
				75	0	21.09
	690.5	133397		1	0	21.99
				1	74	22.20
				40	18	21.16
				75	0	21.01
64QAM	670.5	133197	15	1	0	21.77
				1	74	21.87
				40	18	20.84
				75	0	20.83
	680.5	133297		1	0	22.01
				1	74	22.14
				40	18	20.76
				75	0	20.91
	690.5	133397		1	0	21.73
				1	74	21.91
				40	18	20.90
				75	0	20.81

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	673	133222	20	1	0	23.10
				1	99	23.08
				50	25	22.13
				100	0	22.18
	683	133322		1	0	22.91
				1	99	23.07
				50	25	22.28
				100	0	22.36
	688	133372		1	0	23.06
				1	99	23.14
				50	25	22.29
				100	0	22.31
16QAM	673	133222	20	1	0	22.21
				1	99	22.17
				50	25	21.15
				100	0	21.36
	683	133322		1	0	22.47
				1	99	22.45
				50	25	21.28
				100	0	21.35
	688	133372		1	0	22.23
				1	99	22.38
				50	25	21.27
				100	0	21.29
64QAM	673	133222	20	1	0	21.94
				1	99	22.00
				50	25	20.96
				100	0	21.07
	683	133322		1	0	22.30
				1	99	22.28
				50	25	21.02
				100	0	21.16
	688	133372		1	0	21.94
				1	99	22.15
				50	25	21.15
				100	0	21.03

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
71	665.5	133147	5	25	0	4.4876	Fig.1	4.4864	Fig.2	4.4631	Fig.3
	680.5	133297		25	0	4.4696	Fig.4	4.4662	Fig.5	4.4758	Fig.6
	695.5	133447		25	0	4.4801	Fig.7	4.4714	Fig.8	4.4569	Fig.9
	668	133172	10	50	0	8.9741	Fig.10	8.9687	Fig.11	8.9521	Fig.12
	680.5	133297		50	0	8.9578	Fig.13	8.9629	Fig.14	8.9583	Fig.15
	693	133422		50	0	8.9513	Fig.16	8.9601	Fig.17	8.9437	Fig.18
	670.5	133197	15	75	0	13.433	Fig.19	13.420	Fig.20	13.401	Fig.21
	680.5	133297		75	0	13.443	Fig.22	13.438	Fig.23	13.405	Fig.24
	690.5	133397		75	0	13.365	Fig.25	13.396	Fig.26	13.396	Fig.27
	673	133222	20	100	0	17.858	Fig.28	17.889	Fig.29	17.881	Fig.30
	683	133322		100	0	17.924	Fig.31	17.896	Fig.32	17.884	Fig.33
	688	133372		100	0	17.880	Fig.34	17.862	Fig.35	17.856	Fig.36

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
71	665.5	133147	5	25	0	5.109	Fig.1	5.074	Fig.2	4.915	Fig.3
	680.5	133297		25	0	5.028	Fig.4	5.104	Fig.5	5.067	Fig.6
	695.5	133447		25	0	5.054	Fig.7	4.999	Fig.8	4.953	Fig.9
	668	133172	10	50	0	9.988	Fig.10	9.781	Fig.11	9.701	Fig.12
	680.5	133297		50	0	9.849	Fig.13	9.843	Fig.14	9.751	Fig.15
	693	133422		50	0	9.889	Fig.16	9.823	Fig.17	9.867	Fig.18
	670.5	133197	15	75	0	14.86	Fig.19	14.57	Fig.20	14.38	Fig.21
	680.5	133297		75	0	14.75	Fig.22	14.47	Fig.23	14.57	Fig.24
	690.5	133397		75	0	14.52	Fig.25	14.68	Fig.26	14.54	Fig.27
	673	133222	20	100	0	19.10	Fig.28	19.17	Fig.29	18.92	Fig.30
	683	133322		100	0	19.22	Fig.31	19.35	Fig.32	19.30	Fig.33
	688	133372		100	0	19.70	Fig.34	18.96	Fig.35	19.20	Fig.36

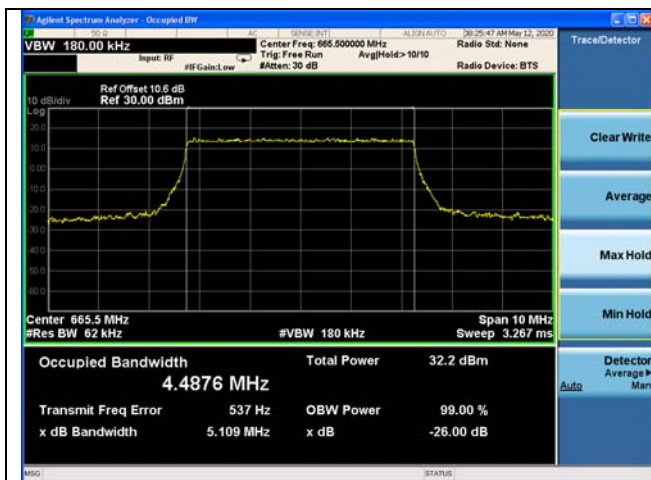


Fig.1

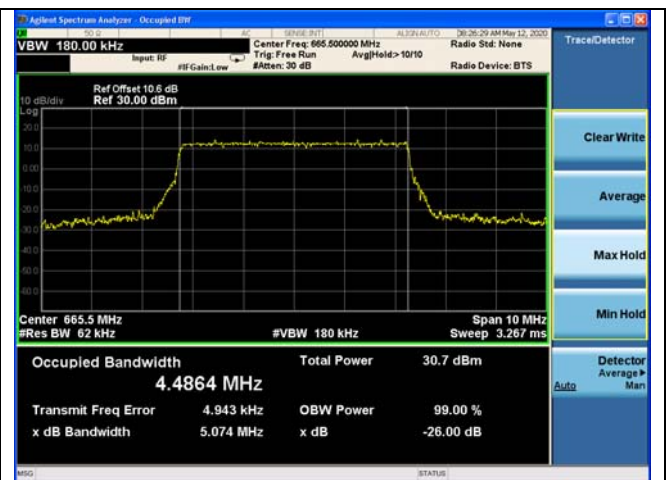


Fig.2

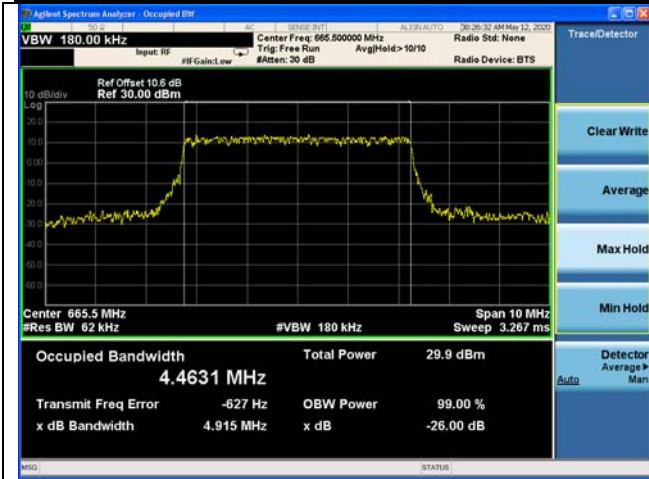


Fig.3



Fig.4

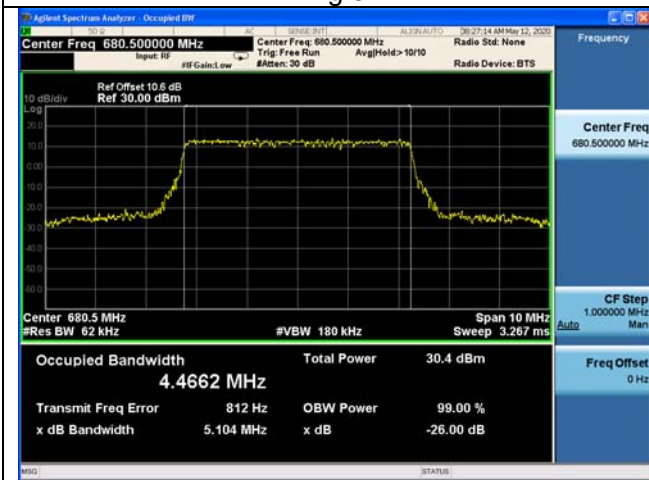


Fig.5

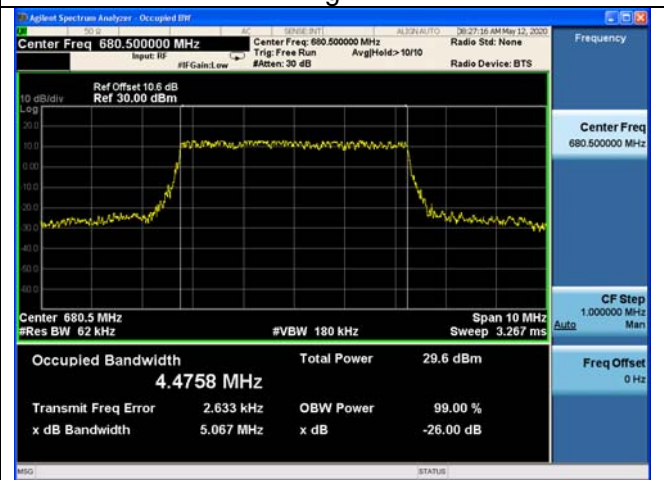


Fig.6

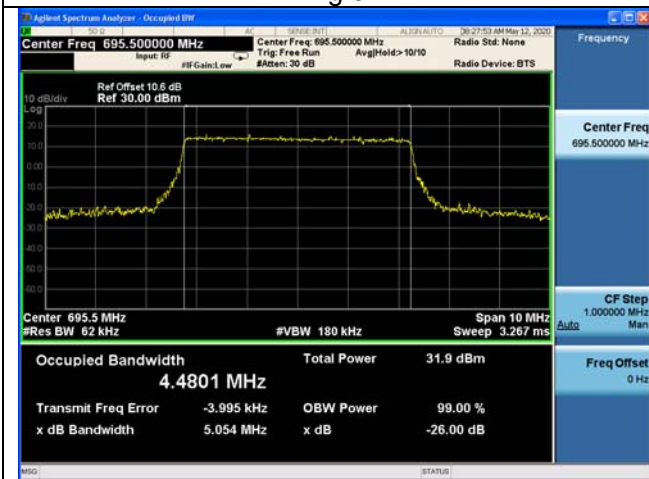


Fig.7

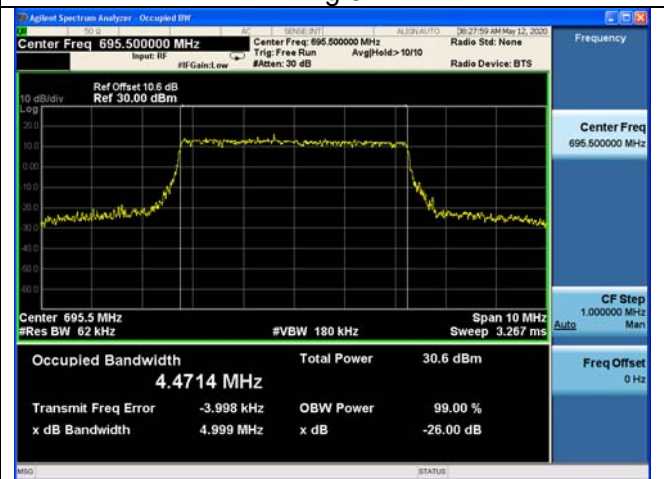


Fig.8

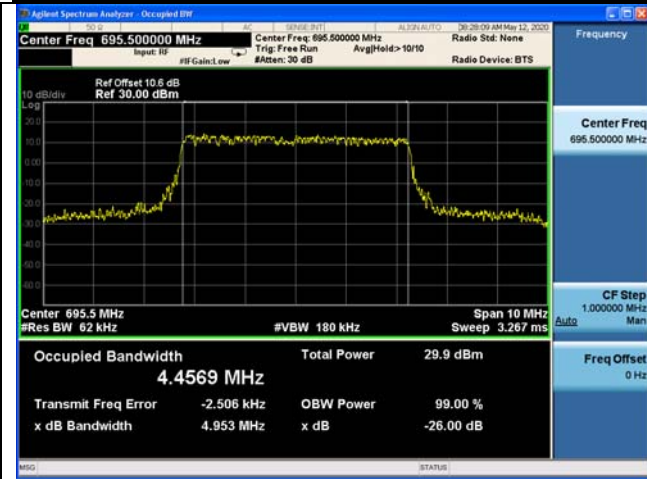


Fig.9



Fig.10

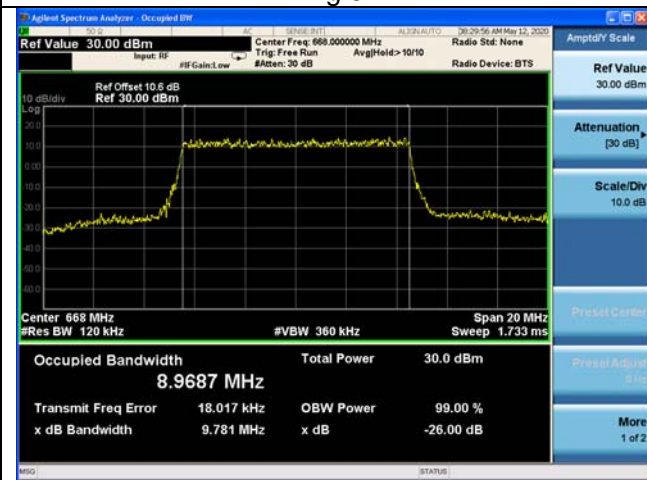


Fig.11

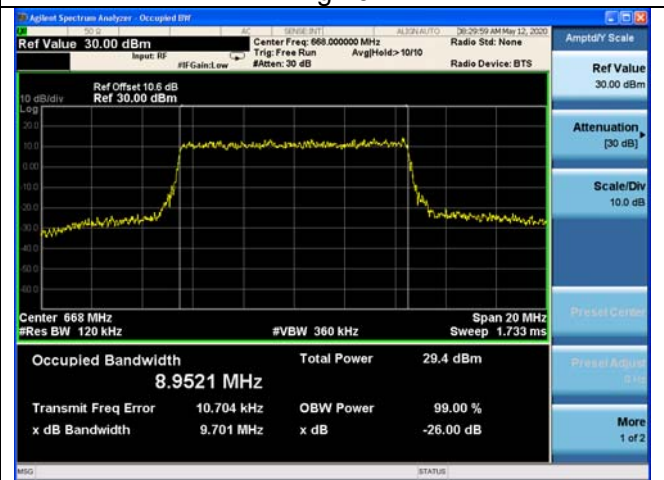


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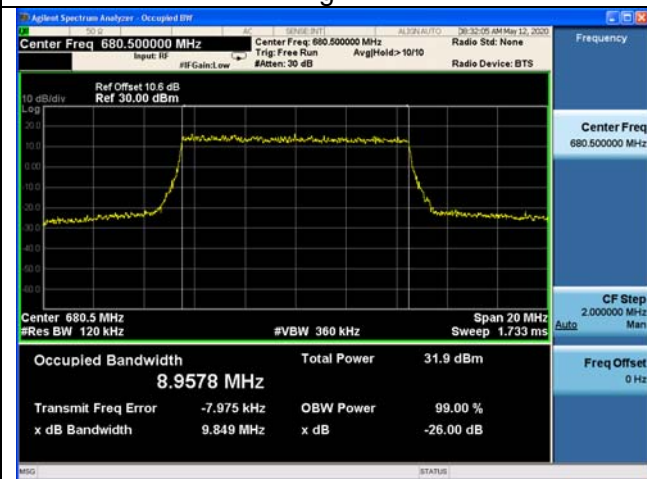


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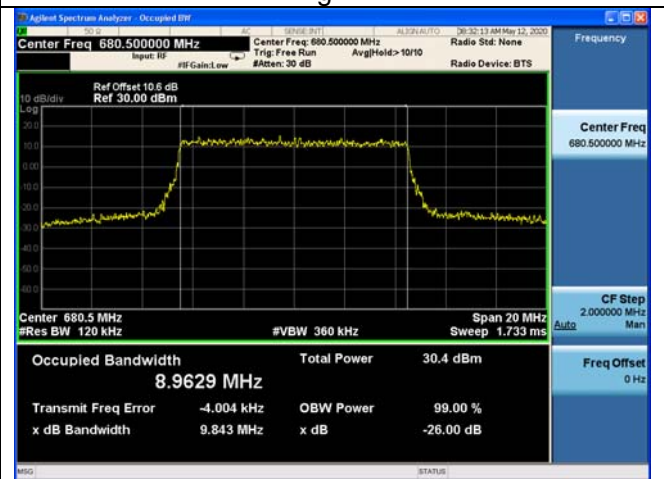


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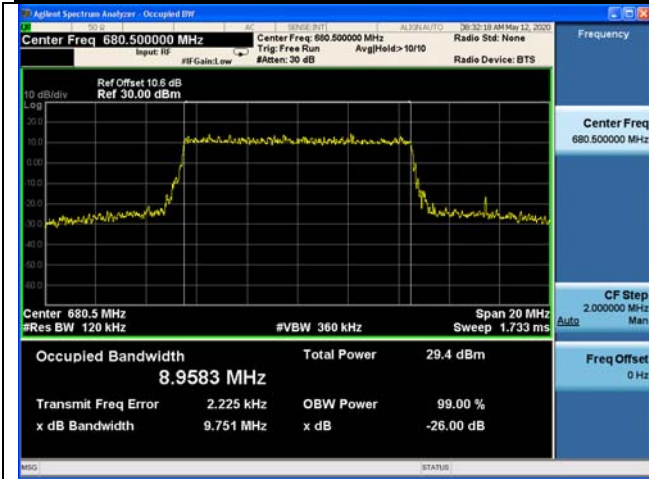


Fig.15



Fig.16

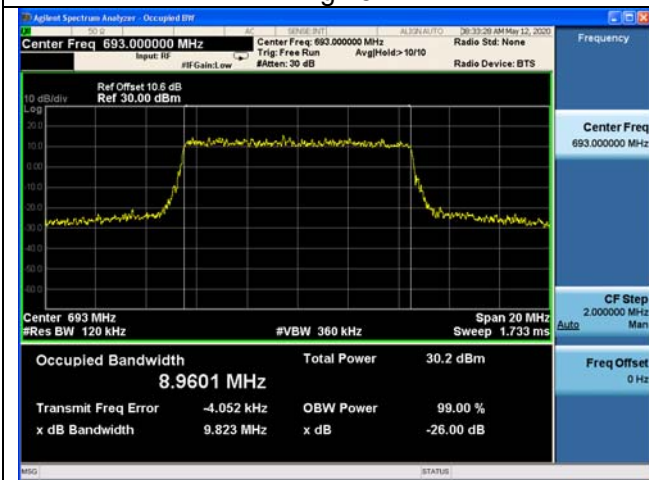


Fig.17

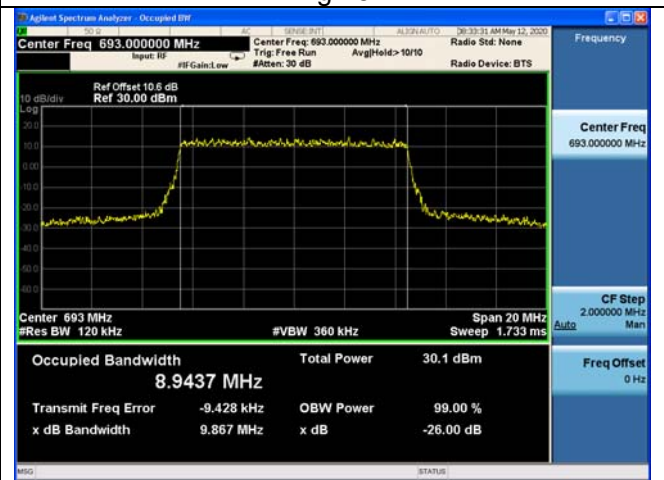


Fig.18

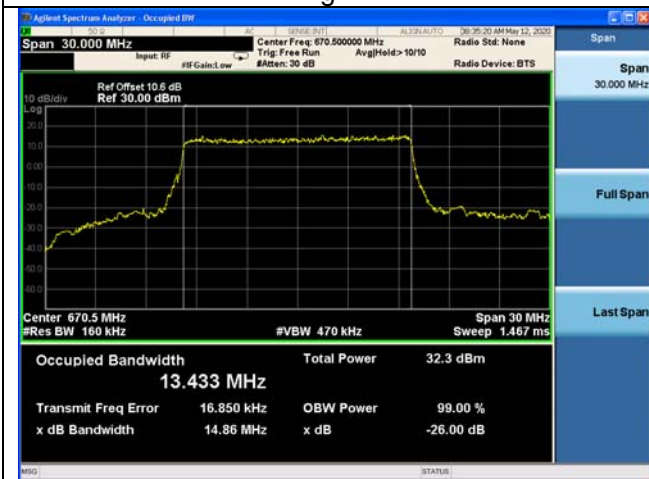


Fig.19

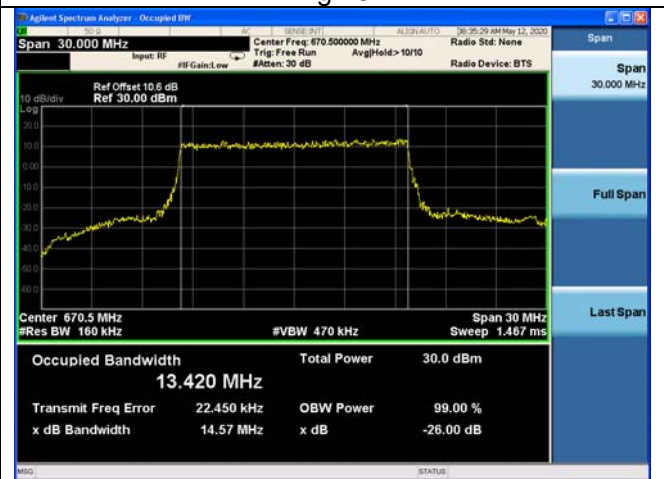


Fig.20

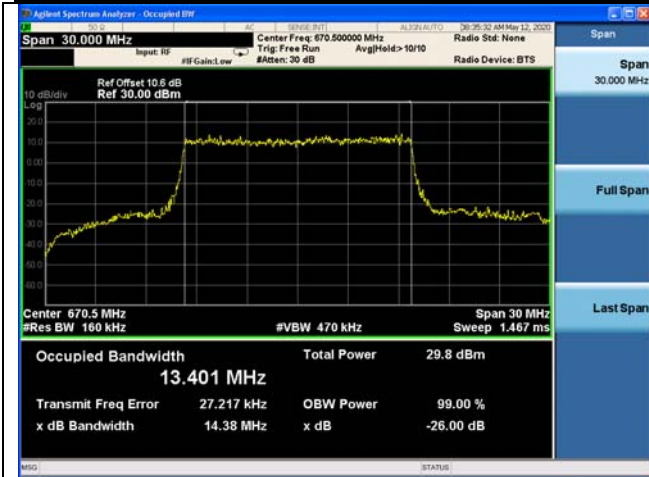


Fig.21



Fig.22

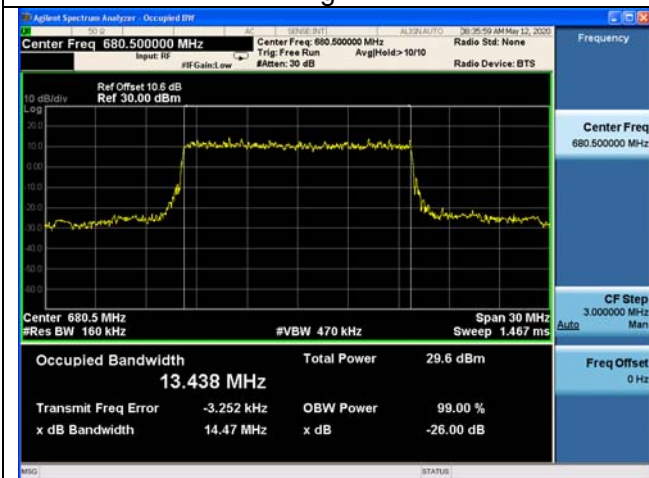


Fig.23

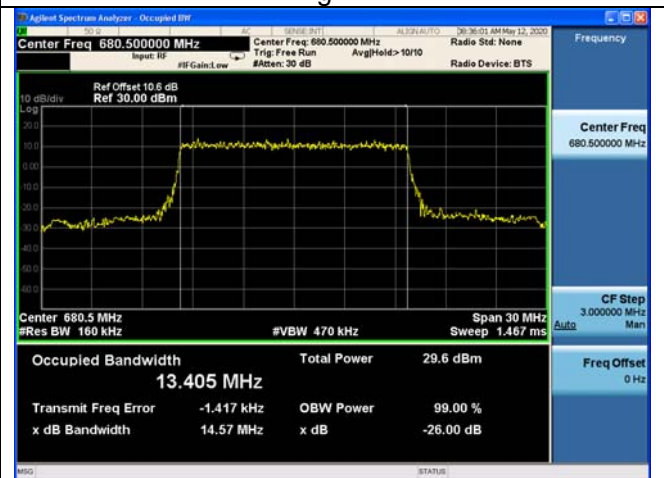


Fig.24

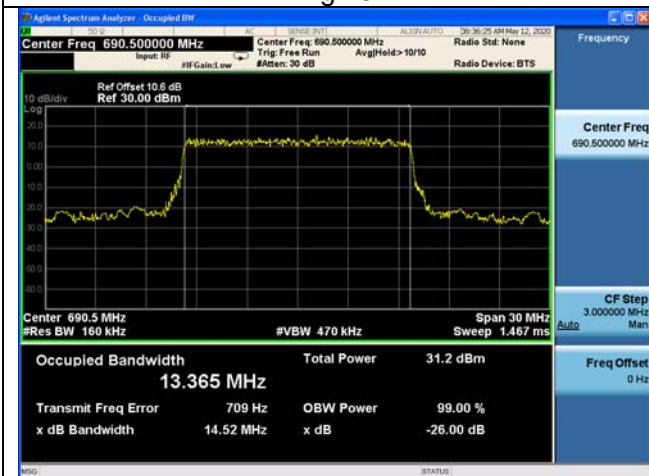


Fig.25

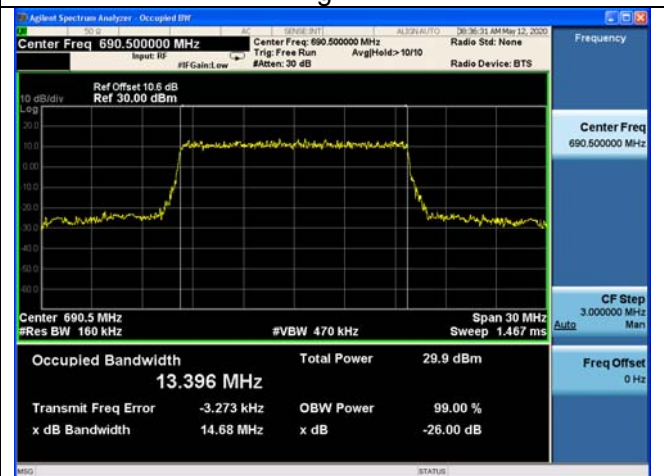


Fig.26

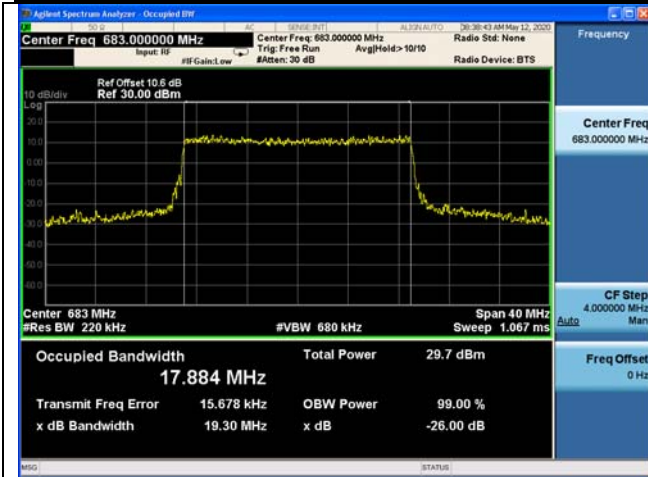


Fig.33



Fig.34

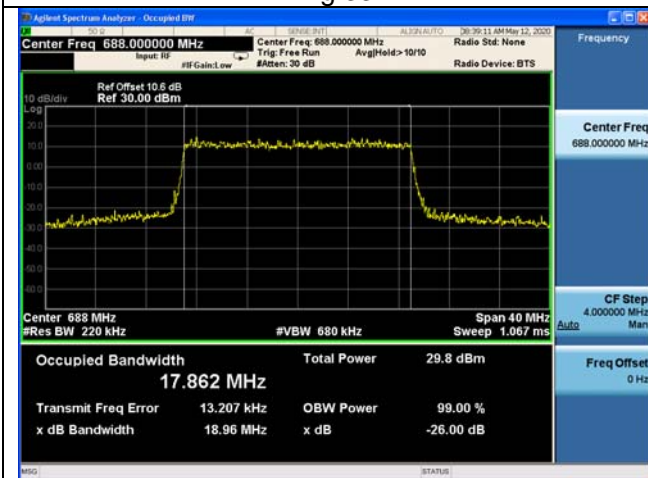


Fig.35

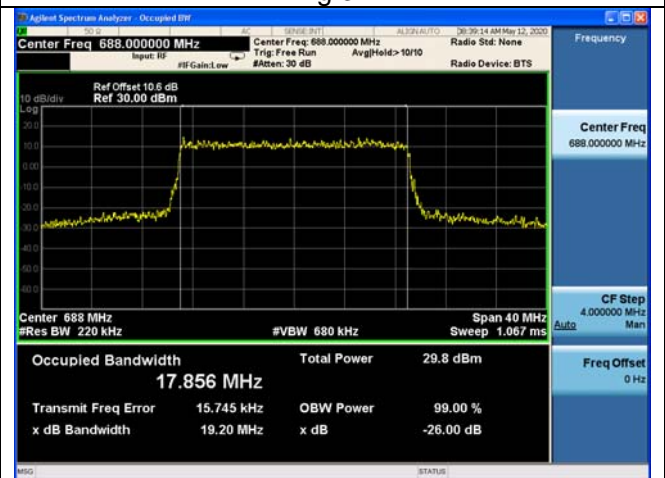


Fig.36

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
71	680.5	133297	5	1	0	Fig.1	Fig.2	Fig.3
			10	1	0	Fig.4	Fig.5	Fig.6
			15	1	0	Fig.7	Fig.8	Fig.9
	683	133322	20	1	0	Fig.10	Fig.11	Fig.12

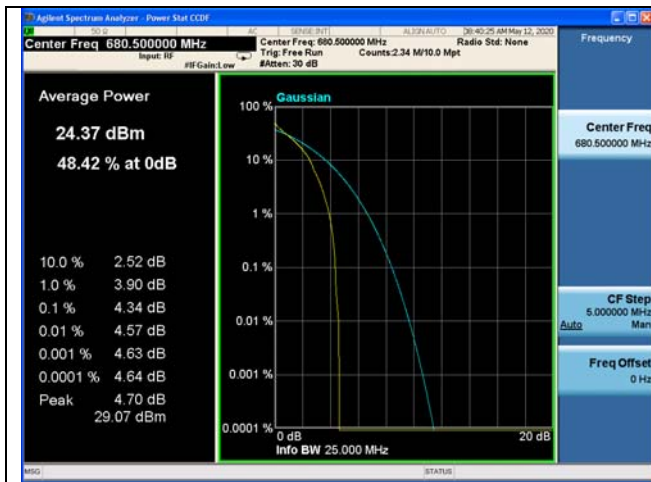


Fig.1

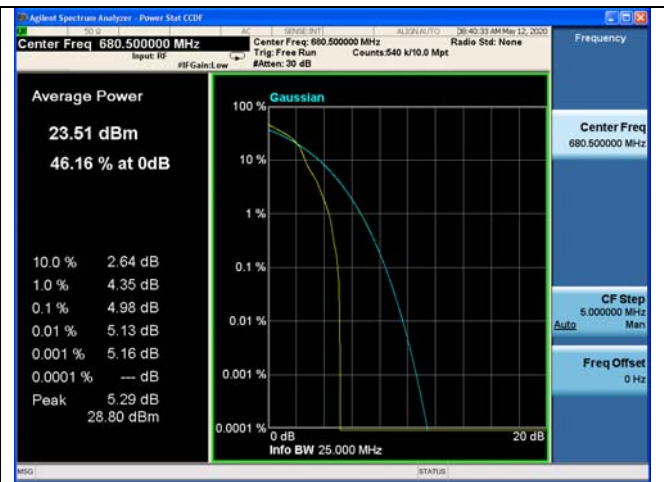


Fig.2

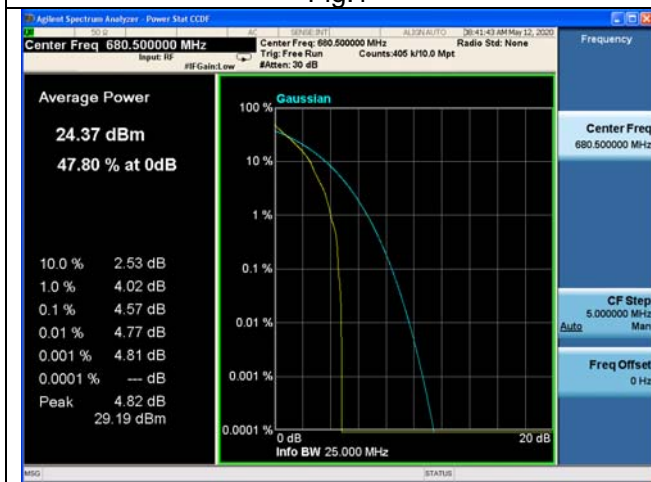


Fig.3

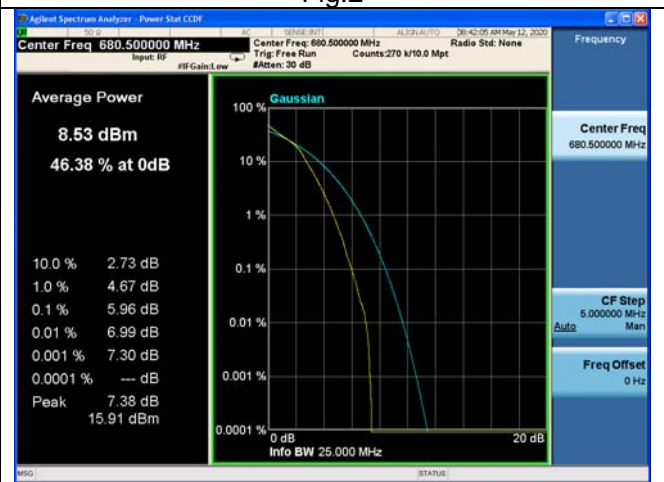


Fig.4



Fig.5



Fig.6

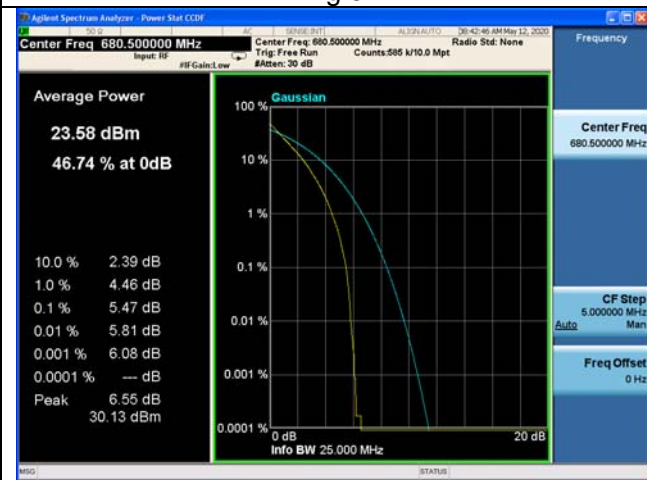


Fig.7



Fig.8



Fig.9



Fig.10



Fig.11

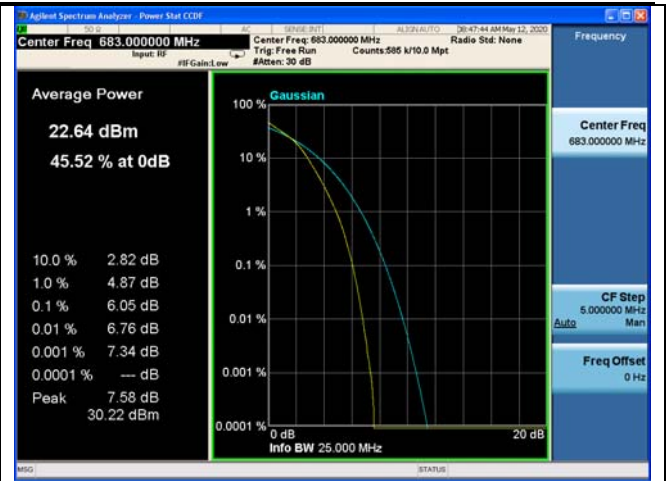


Fig.12

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
71	673	133222	20	1	0	Fig.1-2
	683	133322	20	1	0	Fig.3-4
	688	133372	20	1	0	Fig.5-6

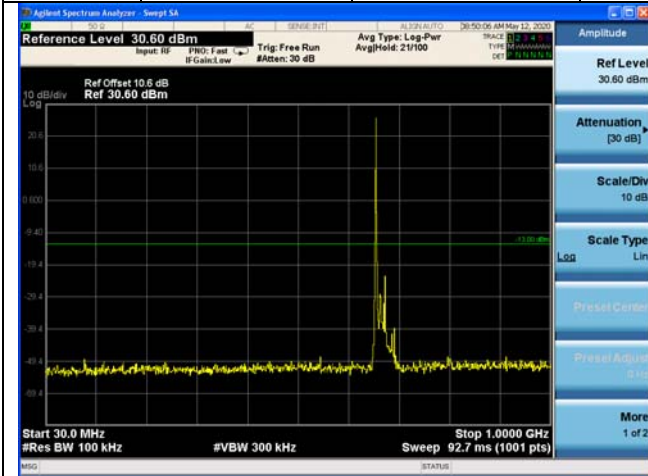


Fig.1

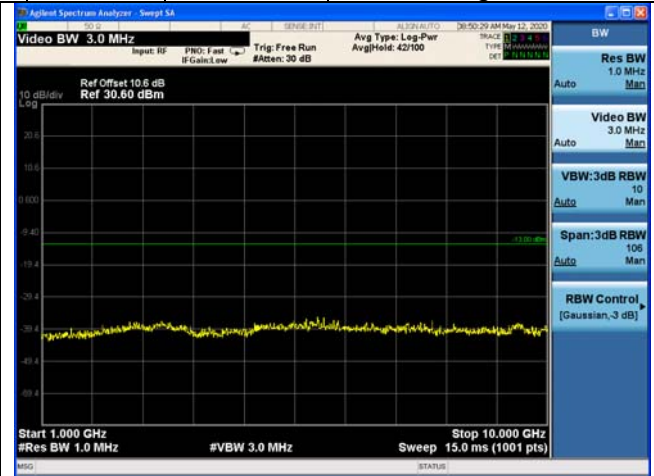


Fig.2

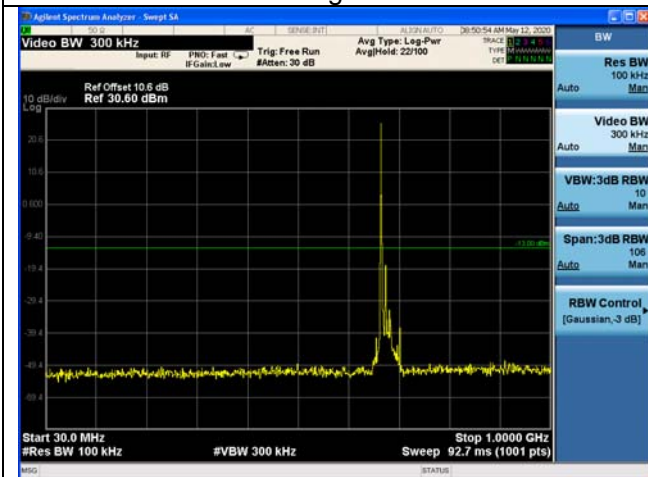


Fig.3



Fig.4

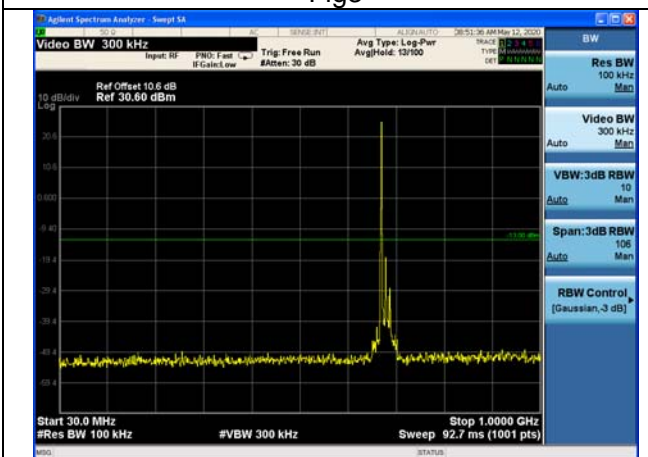


Fig.5

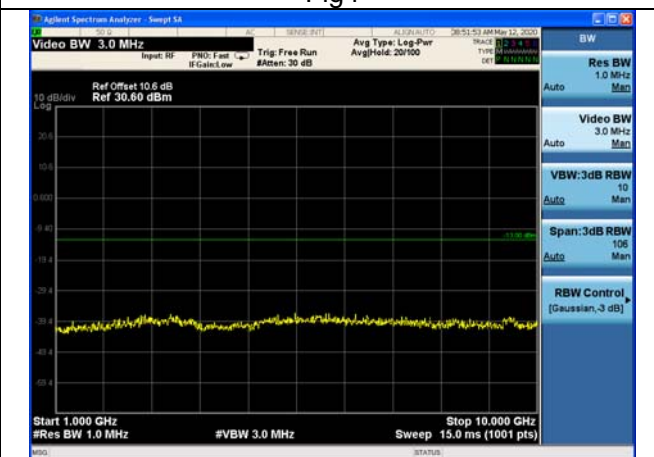


Fig.6

5 Band Edges Compliance
Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
71	665.5	133147	5	1	0	Fig.1
				25	0	Fig.2
	695.5	133447		1	24	Fig.3
				25	0	Fig.4
	668	133172	10	1	0	Fig.5
				50	0	Fig.6
	693	133422		1	49	Fig.7
				50	0	Fig.8
	670.5	133197	15	1	0	Fig.9
				75	0	Fig.10
	690.5	133397		1	74	Fig.11
				75	0	Fig.12
	673	133222	20	1	0	Fig.13
				100	0	Fig.14
	688	133372		1	99	Fig.15
				100	0	Fig.16



Fig.1



Fig.2

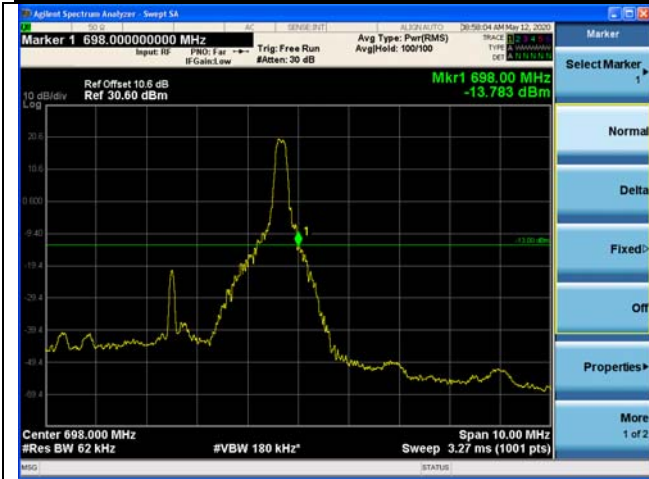


Fig.3



Fig.4

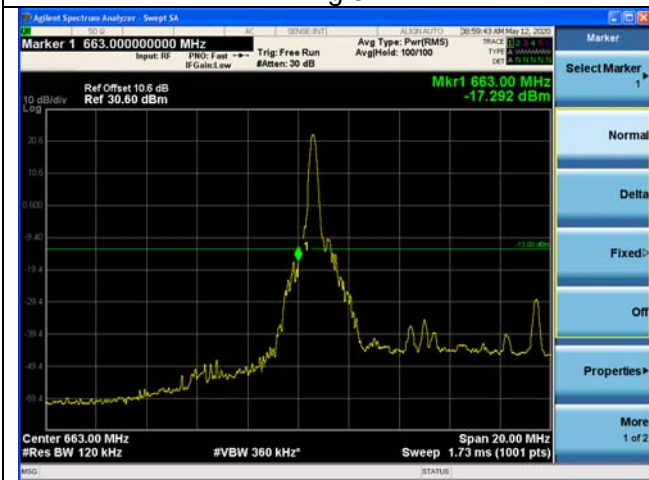


Fig.5

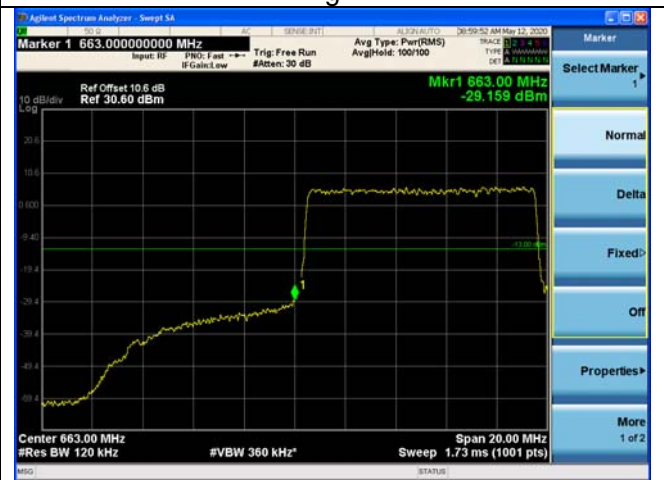


Fig.6



Fig.7



Fig.8

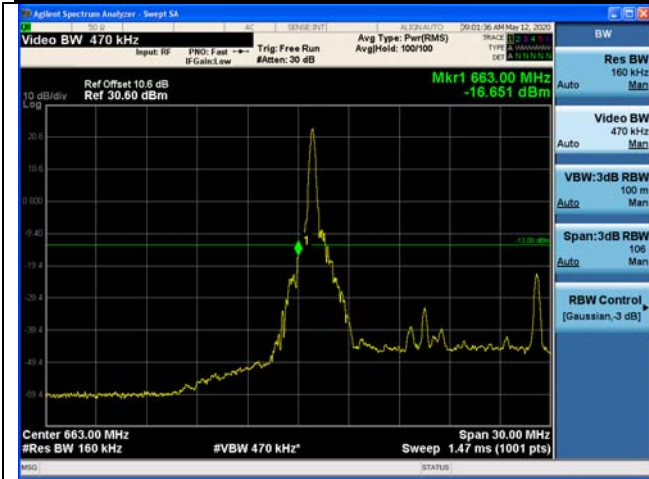


Fig.9



Fig.10



Fig.11



Fig.12

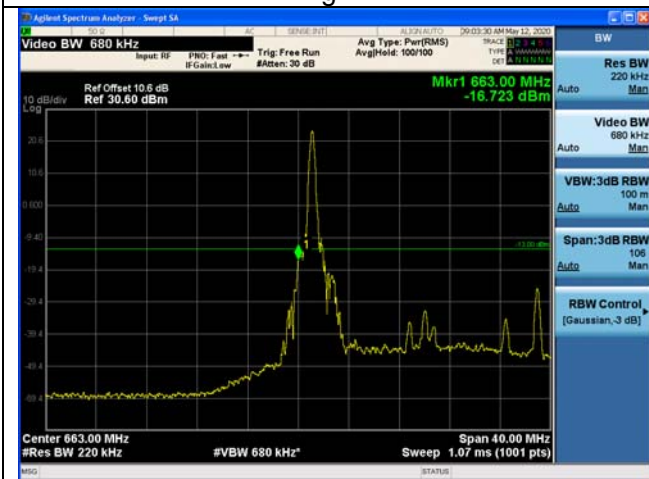


Fig.13

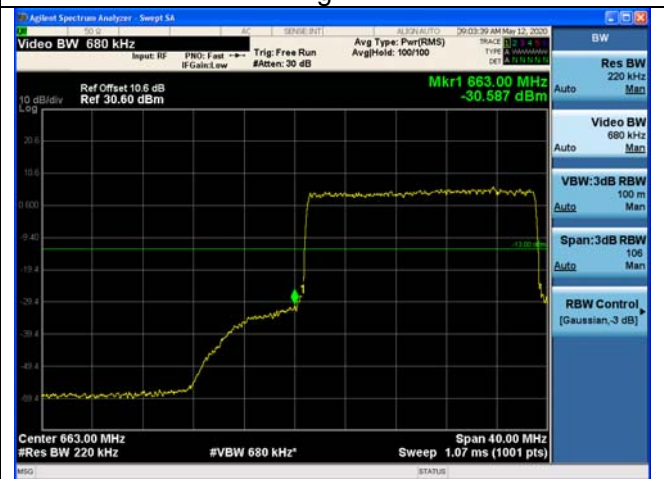


Fig.14



Fig.15



Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band71 Low Channel			
		5M	10M	15M	20M
-10	NV	0.029	0.055	-0.010	-0.024
0	NV	0.022	0.037	0.087	0.072
+10	NV	-0.020	-0.028	-0.039	-0.005
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.083	-0.055	-0.050	0.003
+40	NV	0.072	0.060	0.043	0.027
+50	NV	0.109	0.019	-0.005	-0.015
+55	NV	0.053	0.020	0.001	-0.018
+20	LV	-0.032	0.056	0.038	0.085
+20	HV	0.054	-0.026	0.028	-0.083

Temperature(°C)	Voltage	Test Result (ppm) Band71 High Channel			
		5M	10M	15M	20M
-10	NV	-0.037	-0.045	-0.049	0.064
0	NV	0.003	-0.016	-0.020	0.025
+10	NV	-0.013	0.005	0.049	0.059
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.047	-0.017	-0.043	0.071
+40	NV	-0.011	-0.048	-0.073	0.005
+50	NV	0.057	0.019	0.059	-0.052
+55	NV	-0.015	0.037	0.070	0.002
+20	LV	-0.047	-0.047	-0.049	0.049
+20	HV	0.016	0.007	0.001	-0.040