

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 41(2555MHz-2655MHz)

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2557.5	40265	5	1	0	22.52
				1	24	22.55
				12	6	21.56
				25	0	21.56
	2605	40740		1	0	22.10
				1	24	22.04
				12	6	21.11
				25	0	21.12
	2652.5	41215		1	0	22.01
				1	24	21.96
				12	6	21.12
				25	0	21.18
16QAM	2557.5	40265	5	1	0	21.53
				1	24	21.50
				12	6	20.72
				25	0	20.70
	2605	40740		1	0	21.55
				1	24	21.44
				12	6	20.80
				25	0	20.76
	2652.5	41215		1	0	20.98
				1	24	21.02
				12	6	20.20
				25	0	20.17
64QAM	2557.5	40265	5	1	0	21.26
				1	24	21.19
				12	6	20.67
				25	0	20.66
	2605	40740		1	0	20.85
				1	24	20.80
				12	6	20.17
				25	0	20.20
	2652.5	41215		1	0	20.74
				1	24	20.72
				12	6	20.20
				25	0	20.13

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2560	40290	10	1	0	22.53
				1	49	22.47
				24	12	21.57
				50	0	21.61
	2605	40740		1	0	22.13
				1	49	22.07
				24	12	21.19
				50	0	21.17
	2650	41190		1	0	22.01
				1	49	21.99
				24	12	21.13
				50	0	21.17
16QAM	2560	40290	10	1	0	21.48
				1	49	21.43
				24	12	20.64
				50	0	20.67
	2605	40740		1	0	21.55
				1	49	21.53
				24	12	20.80
				50	0	20.78
	2650	41190		1	0	20.96
				1	49	21.04
				24	12	20.17
				50	0	20.15
64QAM	2560	40290	10	1	0	21.26
				1	49	21.16
				24	12	20.70
				50	0	20.73
	2605	40740		1	0	20.88
				1	49	20.88
				24	12	20.17
				50	0	20.17
	2650	41190		1	0	20.73
				1	49	20.72
				24	12	20.21
				50	0	20.15

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2562.5	40315	15	1	0	22.58
				1	74	22.53
				40	18	21.60
				75	0	21.60
	2605	40740		1	0	22.14
				1	74	22.05
				40	18	21.14
				75	0	21.14
	2647.5	41165		1	0	22.08
				1	74	21.96
				40	18	21.12
				75	0	21.20
16QAM	2562.5	40315	15	1	0	21.52
				1	74	21.53
				40	18	20.69
				75	0	20.67
	2605	40740		1	0	21.52
				1	74	21.46
				40	18	20.82
				75	0	20.72
	2647.5	41165		1	0	21.01
				1	74	21.02
				40	18	20.23
				75	0	20.16
64QAM	2562.5	40315	15	1	0	21.24
				1	74	21.25
				40	18	20.67
				75	0	20.68
	2605	40740		1	0	20.89
				1	74	20.83
				40	18	20.18
				75	0	20.13
	2647.5	41165		1	0	20.73
				1	74	20.74
				40	18	20.21
				75	0	20.10

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2565	40340	20	1	0	22.59
				1	99	22.56
				50	25	21.62
				100	0	21.61
	2605	40740		1	0	22.15
				1	99	22.12
				50	25	21.20
				100	0	21.19
	2645	41140		1	0	22.08
				1	99	22.04
				50	25	21.22
				100	0	21.20
16QAM	2565	40340	20	1	0	21.55
				1	99	21.53
				50	25	20.74
				100	0	20.71
	2605	40740		1	0	21.59
				1	99	21.54
				50	25	20.85
				100	0	20.81
	2645	41140		1	0	21.06
				1	99	21.05
				50	25	20.25
				100	0	20.23
64QAM	2565	40340	20	1	0	21.28
				1	99	21.26
				50	25	20.74
				100	0	20.73
	2605	40740		1	0	20.92
				1	99	20.90
				50	25	20.26
				100	0	20.22
	2645	41140		1	0	20.82
				1	99	20.79
				50	25	20.23
				100	0	20.18

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	
41	2557.5	40265	5	25	0	4.4793	Fig.1	4.4779	Fig.2	4.4714	Fig.3
	2605	40740		25	0	4.4758	Fig.4	4.4759	Fig.5	4.4817	Fig.6
	2652.5	41215		25	0	4.4816	Fig.7	4.4859	Fig.8	4.4601	Fig.9
	2560	40290	10	50	0	8.9564	Fig.10	8.9660	Fig.11	8.9404	Fig.12
	2605	40740		50	0	8.9533	Fig.13	8.9691	Fig.14	8.9564	Fig.15
	2650	41190		50	0	8.9682	Fig.16	8.9940	Fig.17	8.9397	Fig.18
	2562.5	40315	15	75	0	13.451	Fig.19	13.423	Fig.20	13.433	Fig.21
	2605	40740		75	0	13.429	Fig.22	13.461	Fig.23	13.411	Fig.24
	2647.5	41165		75	0	13.424	Fig.25	13.420	Fig.26	13.433	Fig.27
	2565	40340	20	100	0	17.903	Fig.28	17.887	Fig.29	17.906	Fig.30
	2605	40740		100	0	17.896	Fig.31	17.835	Fig.32	17.853	Fig.33
	2645	41140		100	0	17.880	Fig.34	17.878	Fig.35	17.857	Fig.36

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
41	2557.5	40265	5	25	0	5.147	Fig.1	5.064	Fig.2	5.007	Fig.3
	2605	40740		25	0	5.023	Fig.4	5.007	Fig.5	5.040	Fig.6
	2652.5	41215		25	0	5.043	Fig.7	4.927	Fig.8	5.053	Fig.9
	2560	40290	10	50	0	10.06	Fig.10	9.898	Fig.11	10.08	Fig.12
	2605	40740		50	0	10.00	Fig.13	10.02	Fig.14	9.864	Fig.15
	2650	41190		50	0	9.858	Fig.16	9.919	Fig.17	10.04	Fig.18
	2562.5	40315	15	75	0	14.98	Fig.19	14.70	Fig.20	14.84	Fig.21
	2605	40740		75	0	14.99	Fig.22	15.05	Fig.23	14.56	Fig.24
	2647.5	41165		75	0	15.09	Fig.25	14.76	Fig.26	14.76	Fig.27
	2565	40340	20	100	0	20.41	Fig.28	20.07	Fig.29	19.57	Fig.30
	2605	40740		100	0	20.23	Fig.31	19.87	Fig.32	20.09	Fig.33
	2645	41140		100	0	20.32	Fig.34	19.96	Fig.35	19.83	Fig.36

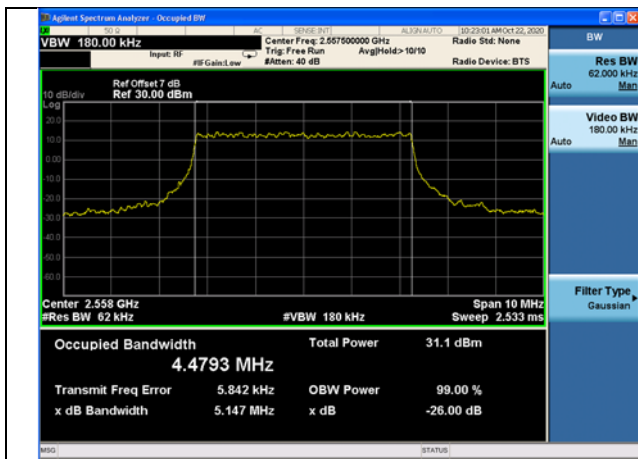


Fig.1

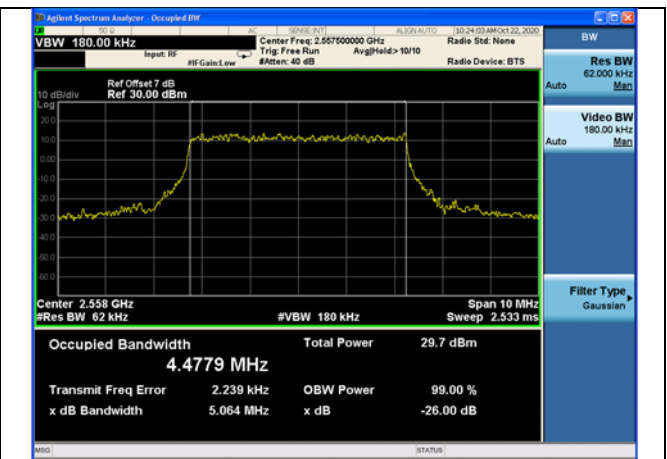


Fig.2

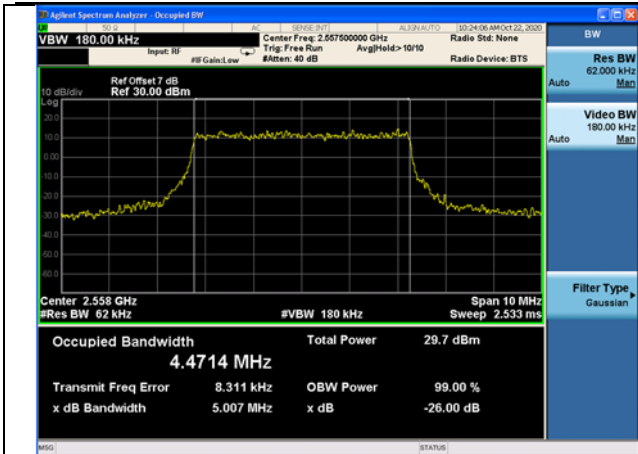


Fig.3

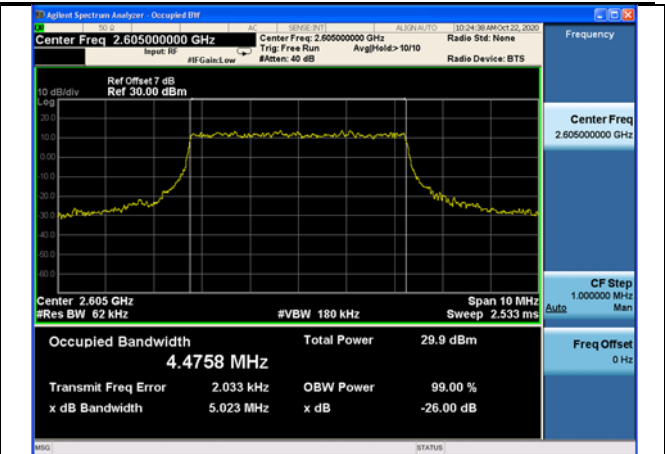


Fig.4

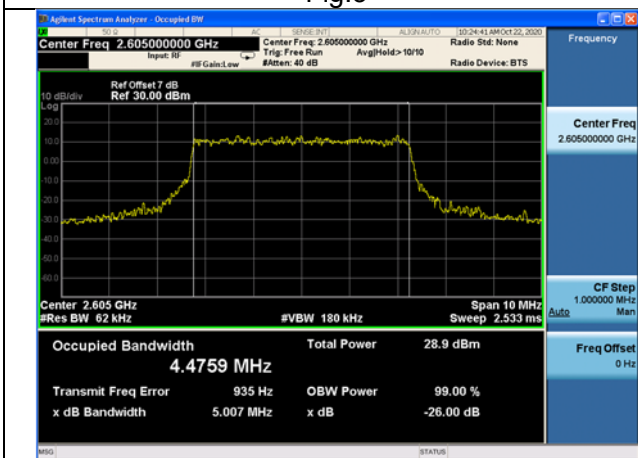


Fig.5

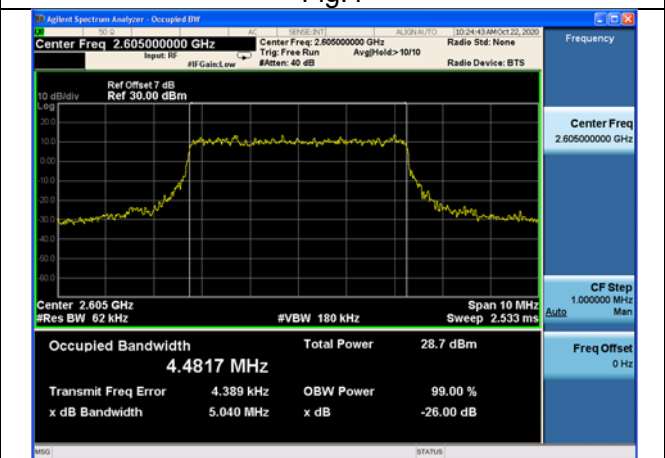


Fig.6

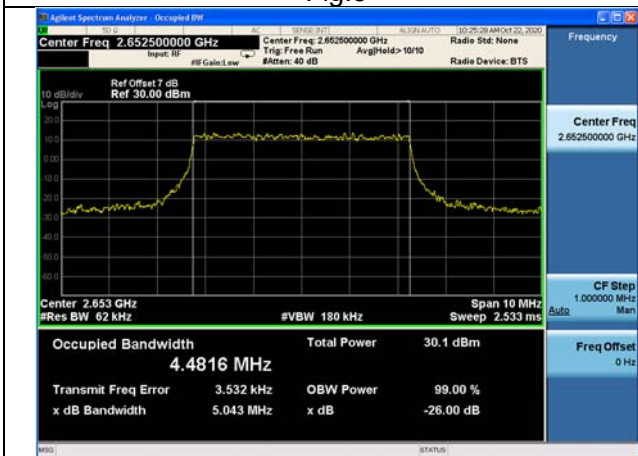


Fig.7

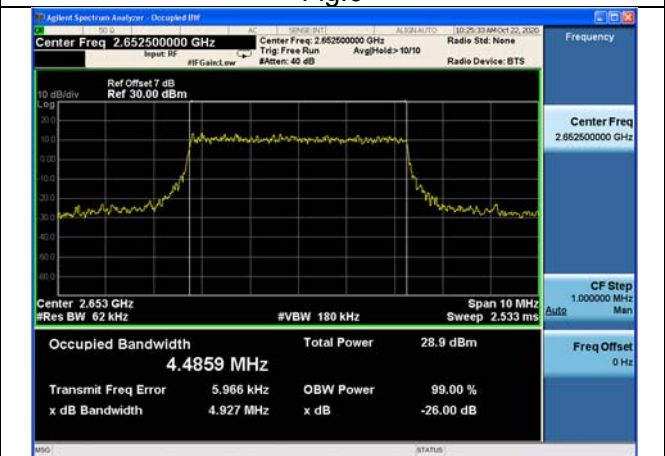


Fig.8

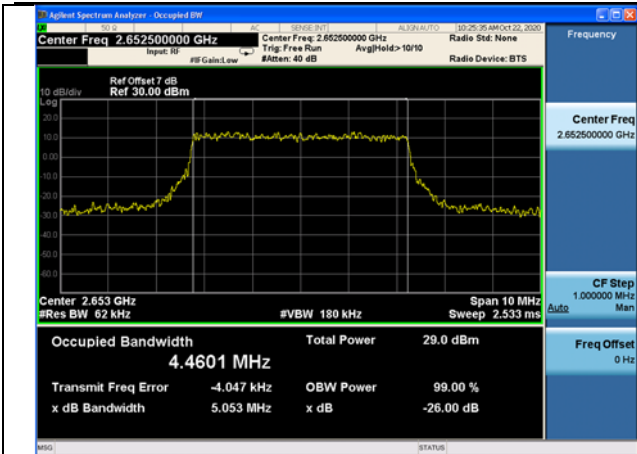


Fig.9

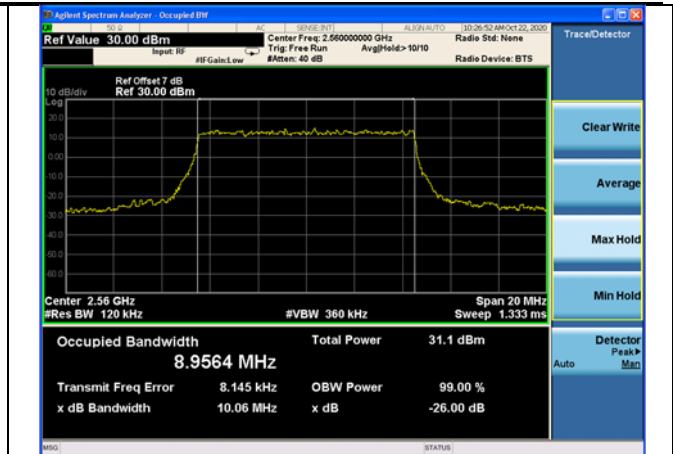


Fig.10

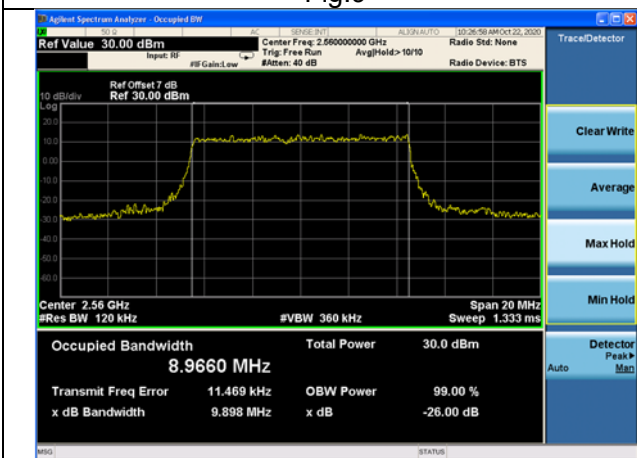


Fig.11

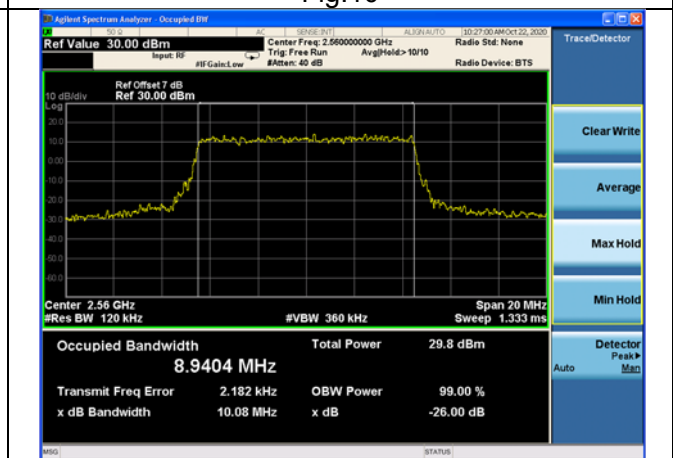


Fig.12

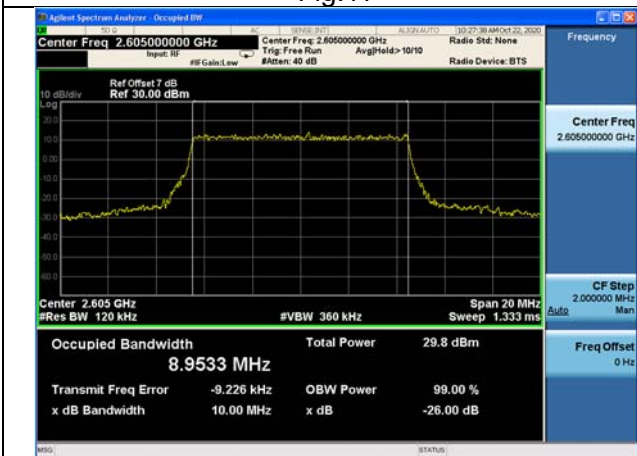


Fig.13

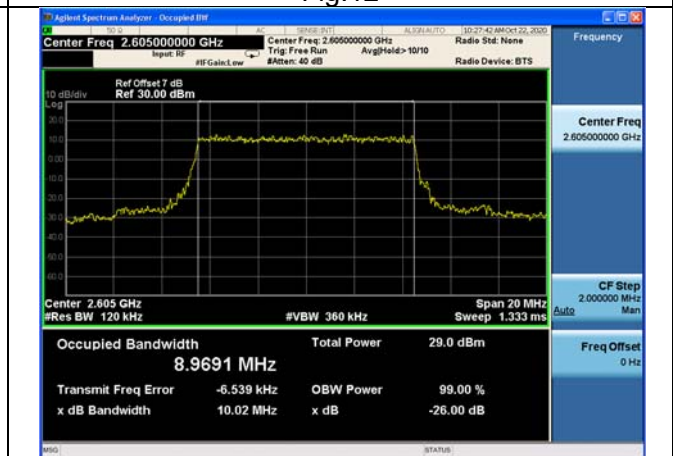


Fig.14

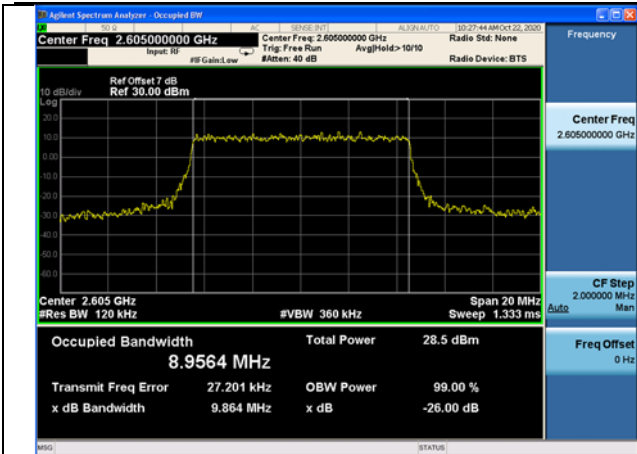


Fig.15

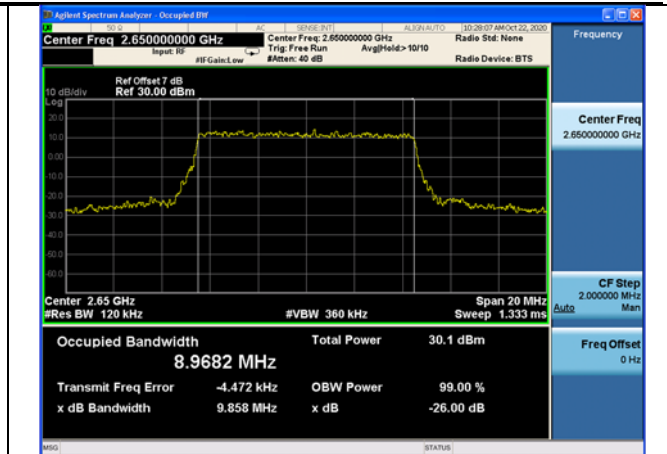


Fig.16

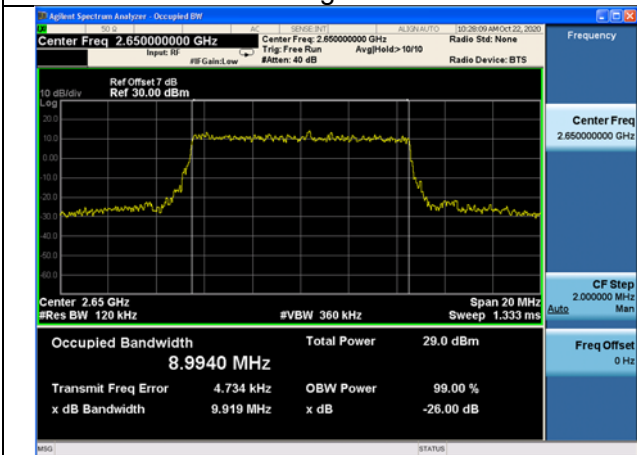


Fig.17

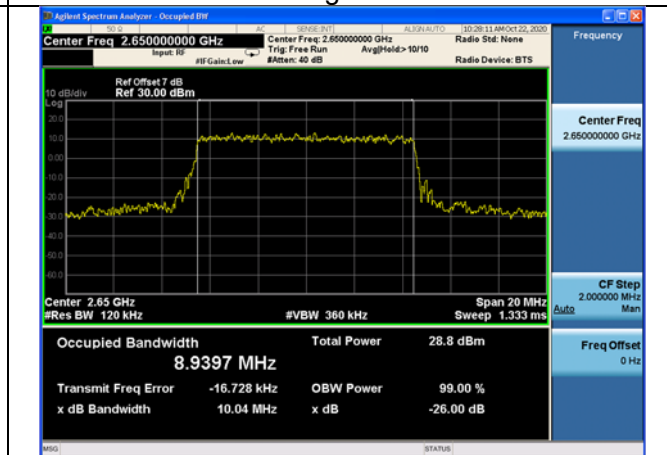


Fig.18

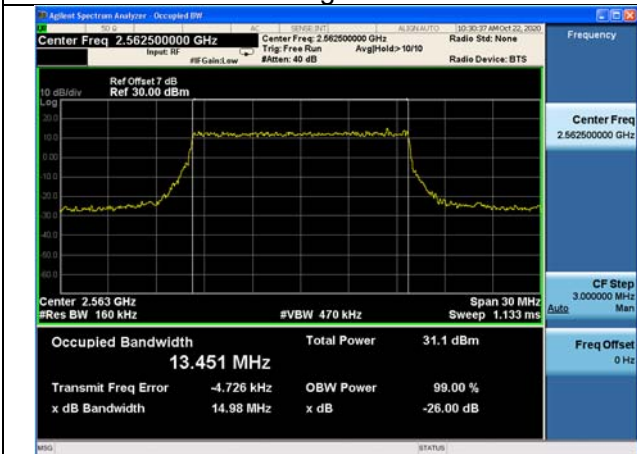


Fig.19

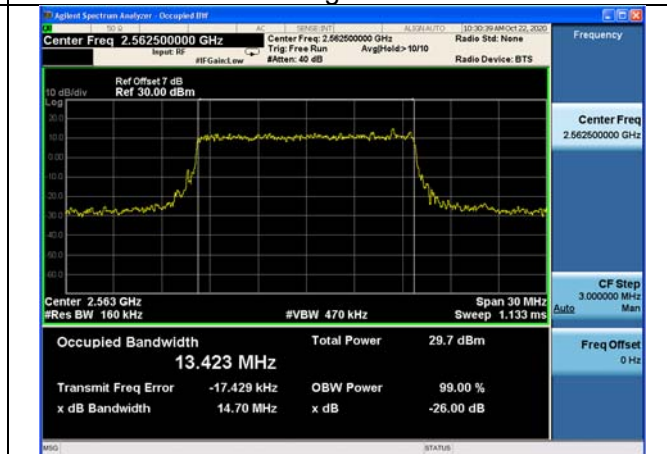


Fig.20

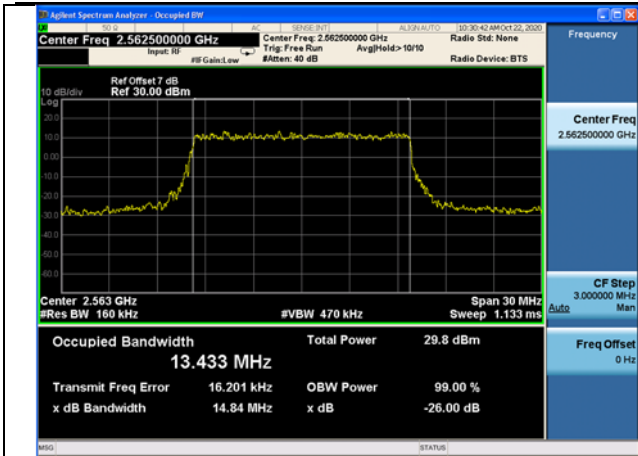


Fig.21

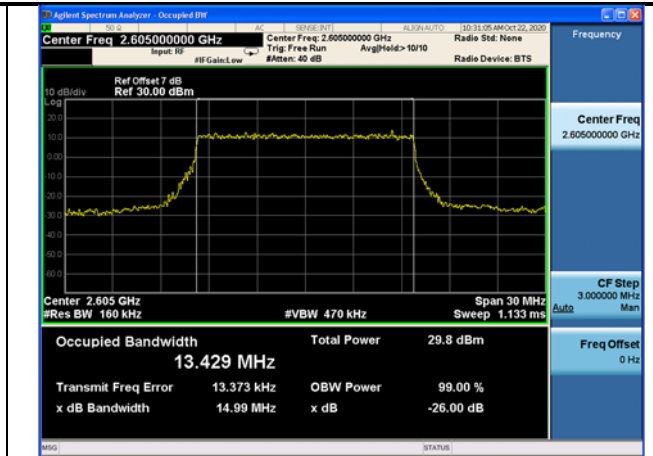


Fig.22

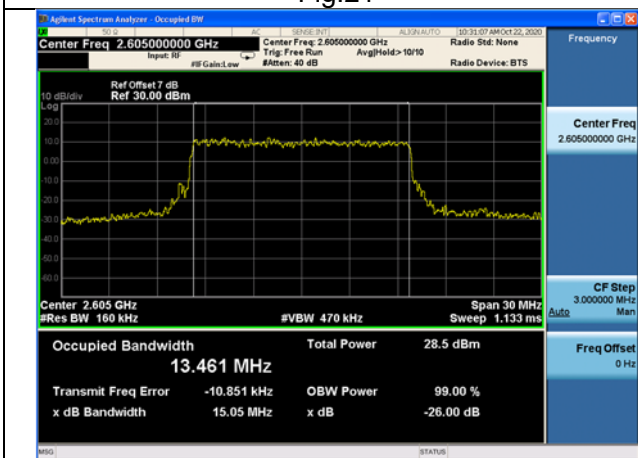


Fig.23

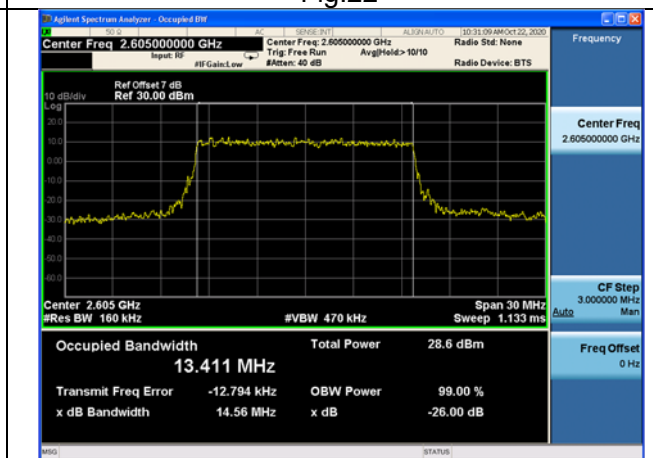


Fig.24

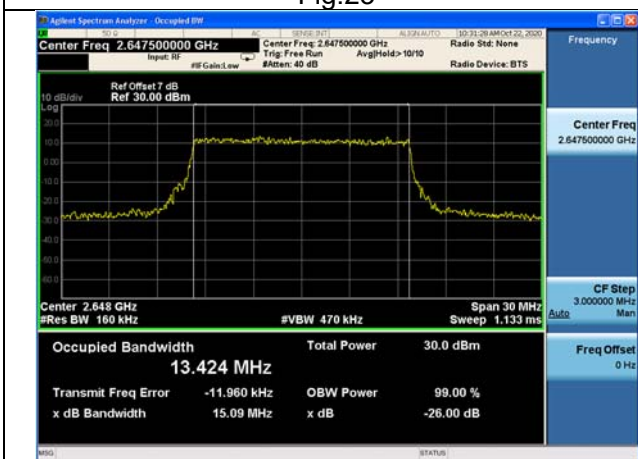


Fig.25

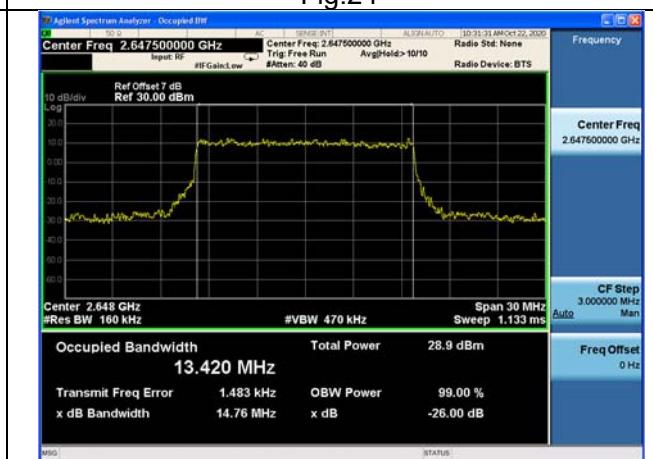


Fig.26

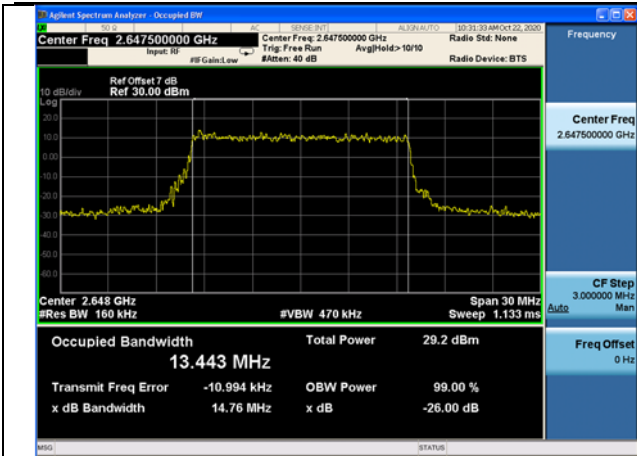


Fig.27



Fig.28

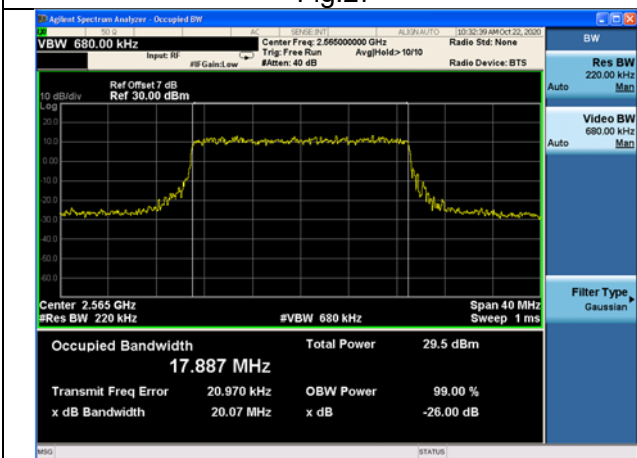


Fig.29

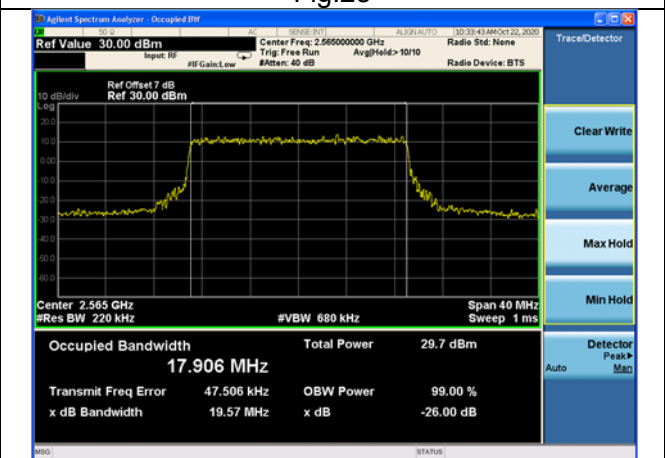


Fig.30

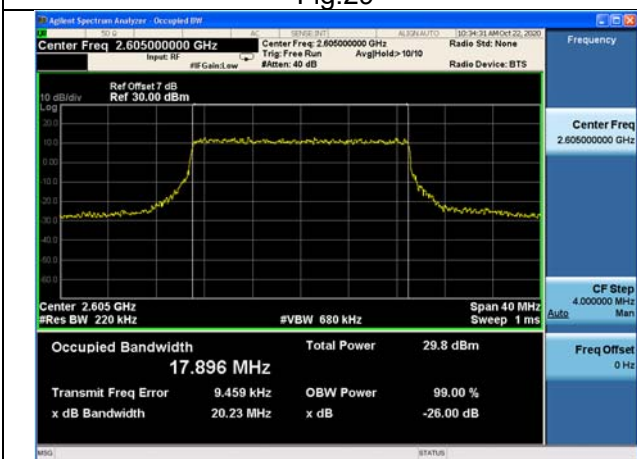


Fig.31

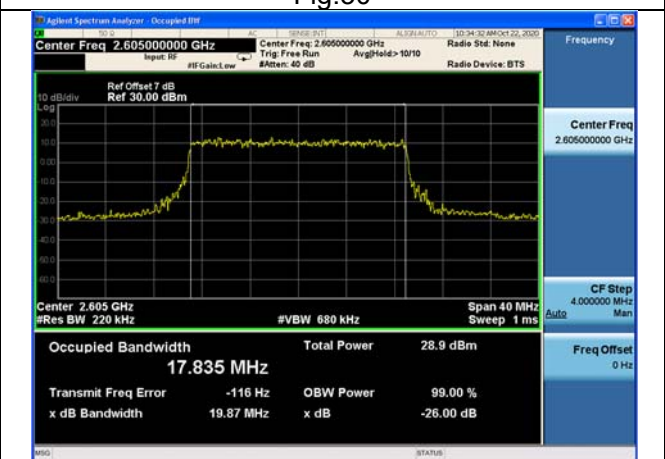


Fig.32

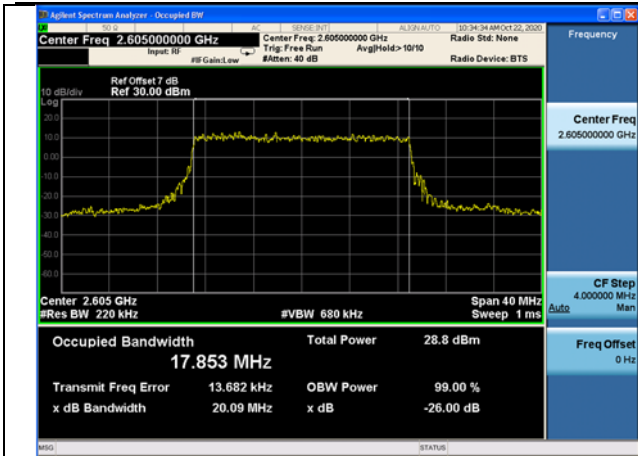


Fig.33

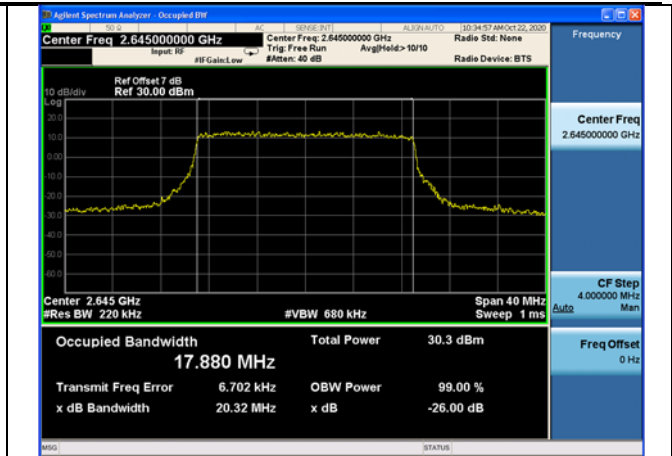


Fig.34

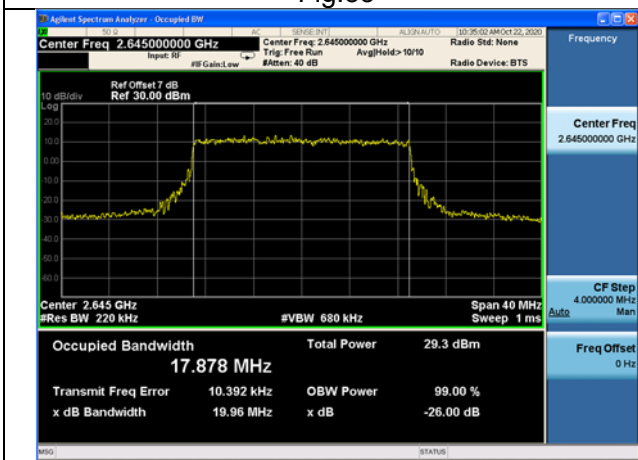


Fig.35

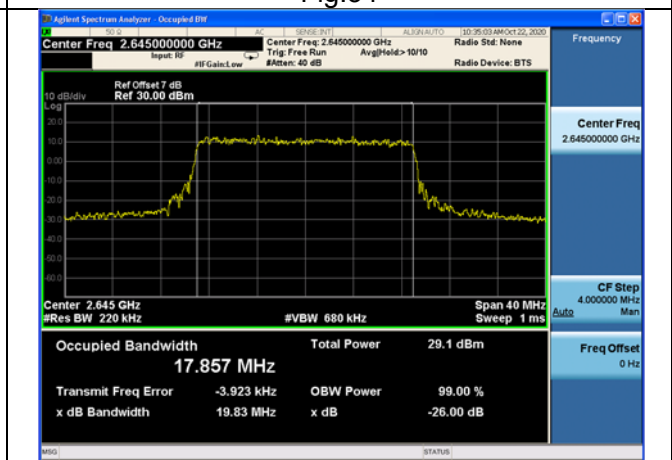


Fig.36

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
41	2605	40740	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
			20	1	0	Fig.10	Fig.11	Fig.12

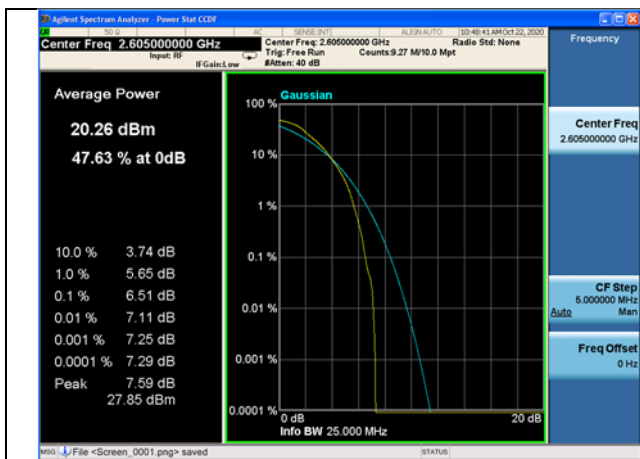


Fig.1

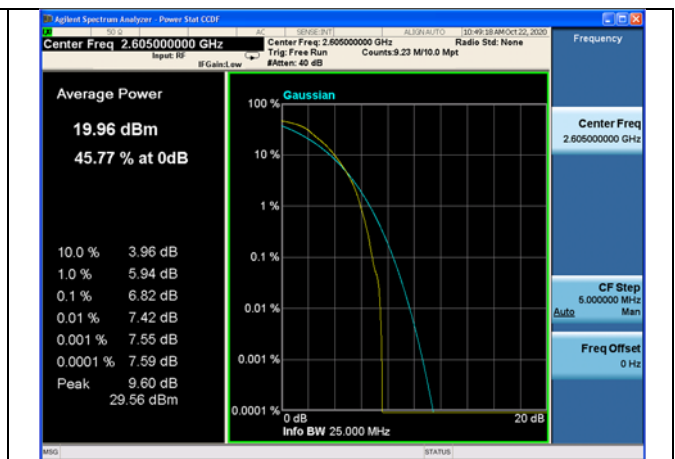


Fig.2

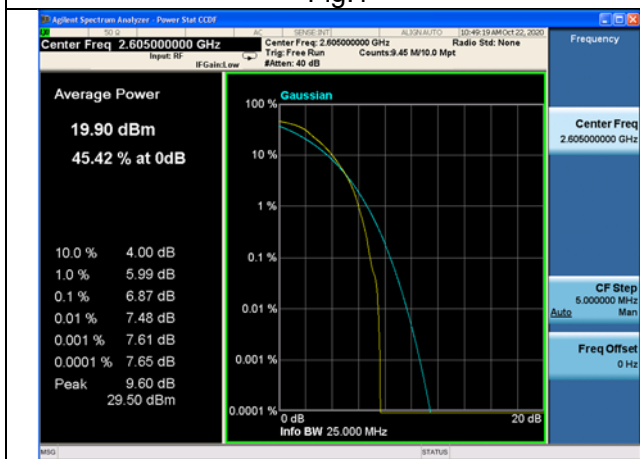


Fig.3

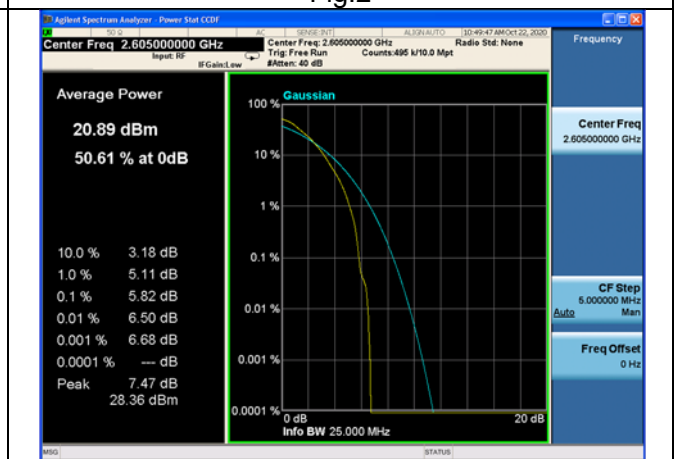


Fig.4

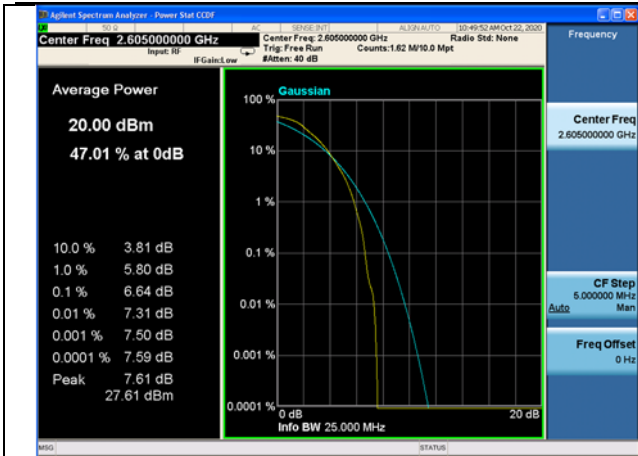


Fig.5

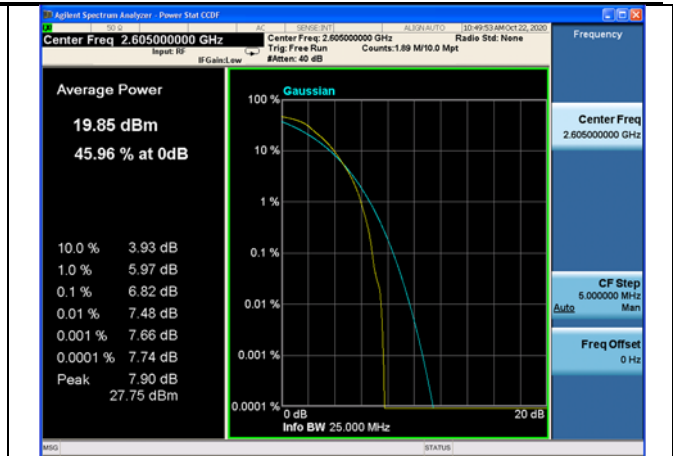


Fig.6

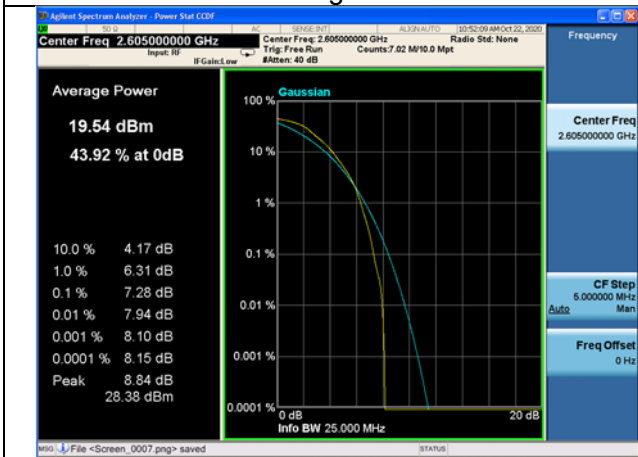


Fig.7

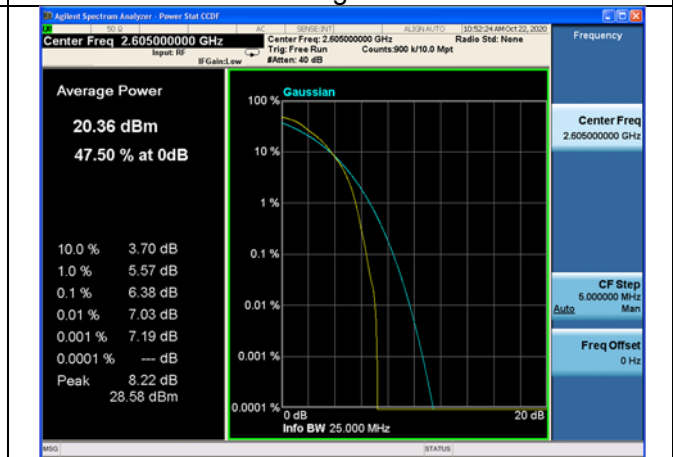


Fig.8

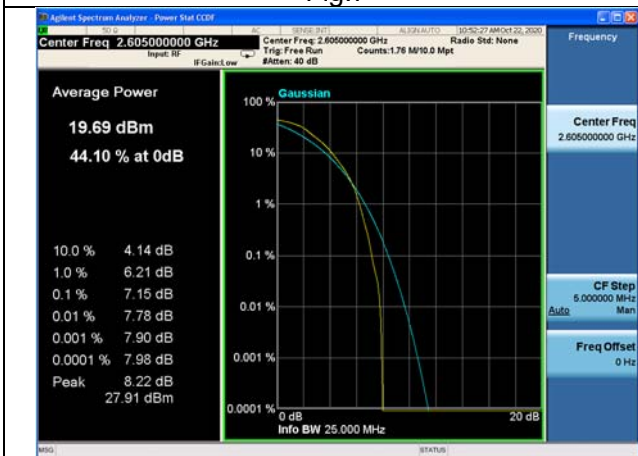


Fig.9



Fig.10

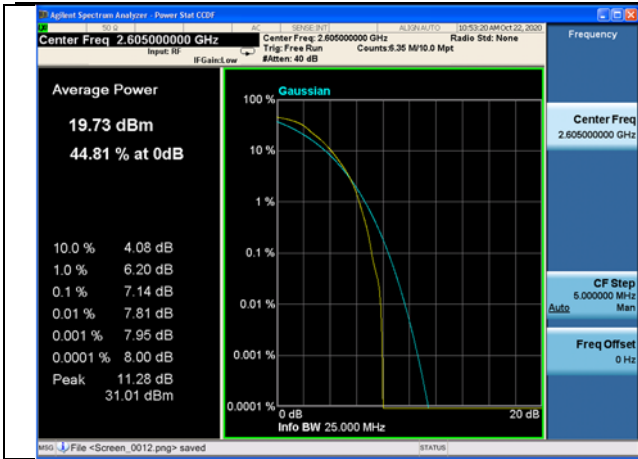


Fig.11

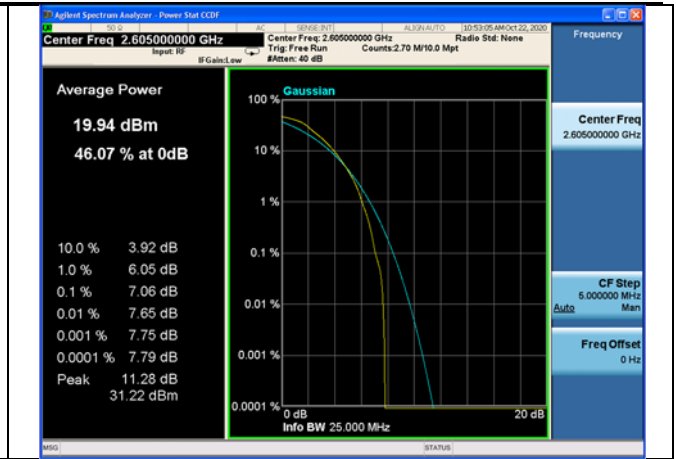


Fig.12

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
41	2565	40340	20	1	0	Fig.1
	2605	40740	20	1	0	Fig.2
	2645	41140	20	1	0	Fig.3

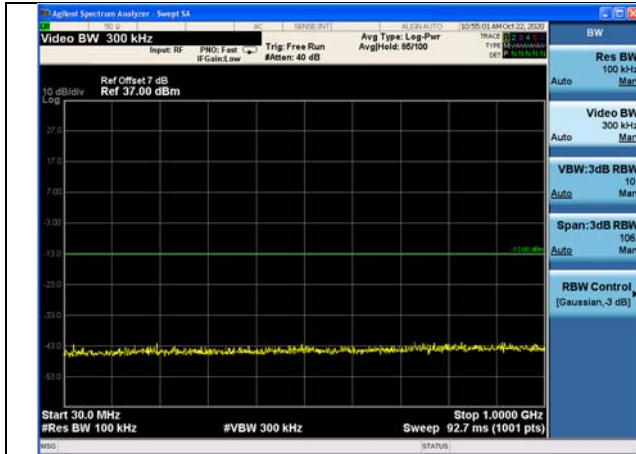


Fig.1



Fig.2

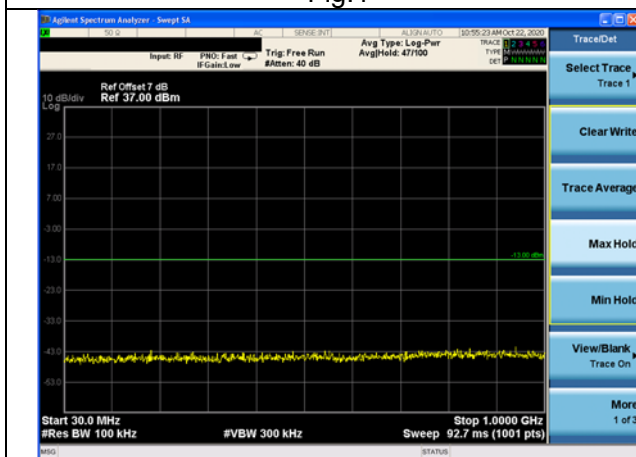


Fig3

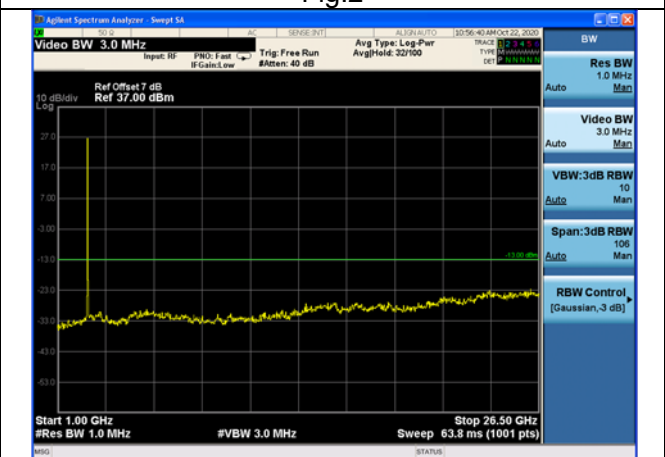


Fig.4

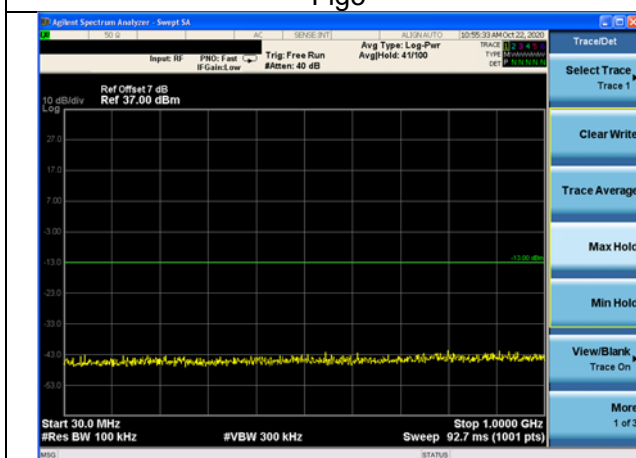


Fig.5

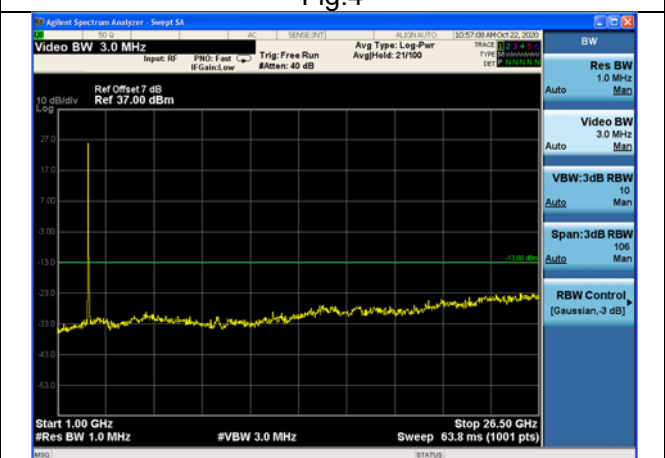


Fig.6

5 Band Edges Compliance
Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
41	2557.5	40265	5	1	0	Fig.1
				25	0	Fig.2
	1	24		1	24	Fig.3
				25	0	Fig.4
	2560	40290	10	1	0	Fig.5
				50	0	Fig.6
	1	49		1	49	Fig.7
				50	0	Fig.8
	2562.5	40315	15	1	0	Fig.09
				75	0	Fig.10
	1	74		1	74	Fig.11
				75	0	Fig.12
	2565	40340	20	1	0	Fig.13
				100	0	Fig.14
	1	99		1	99	Fig.15
				100	0	Fig.16

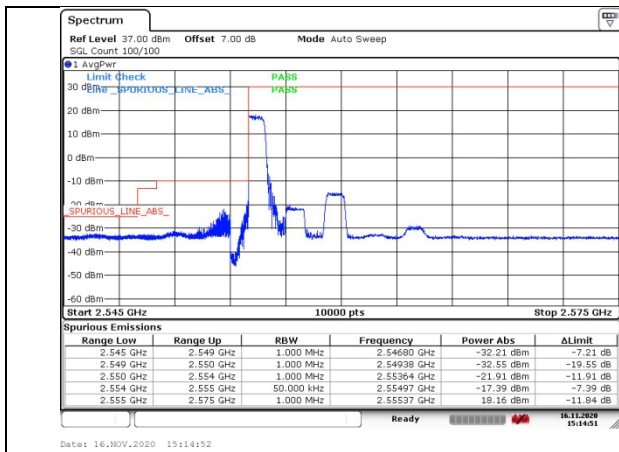


Fig.1

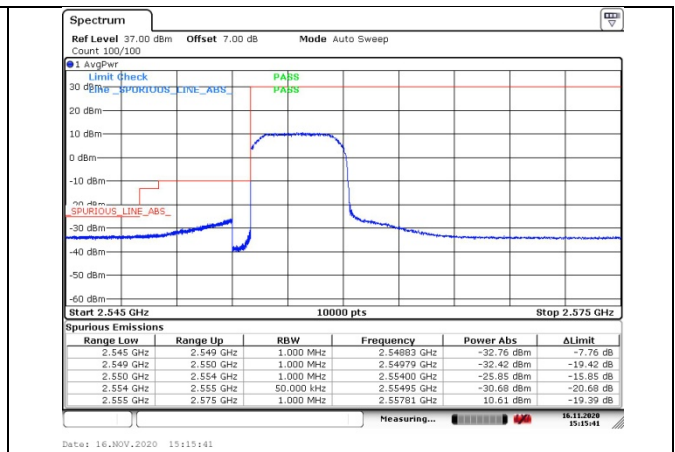


Fig.2

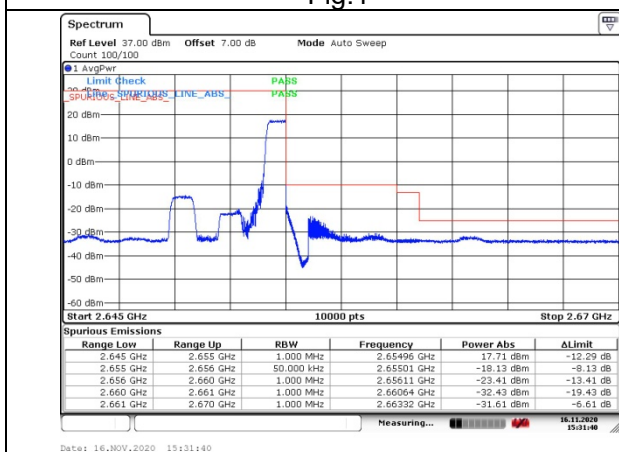


Fig.3

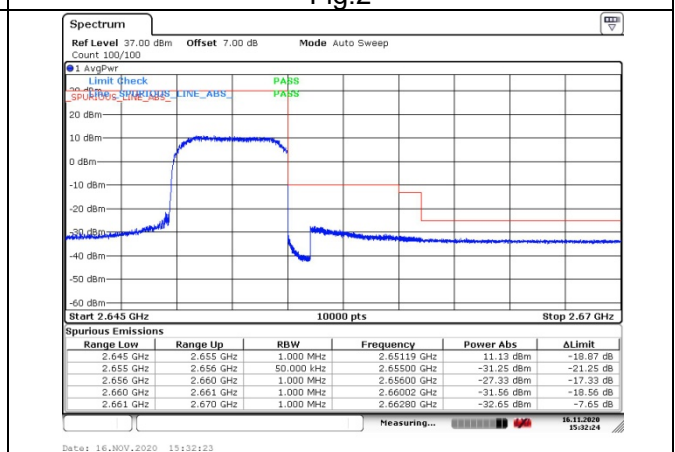


Fig.4

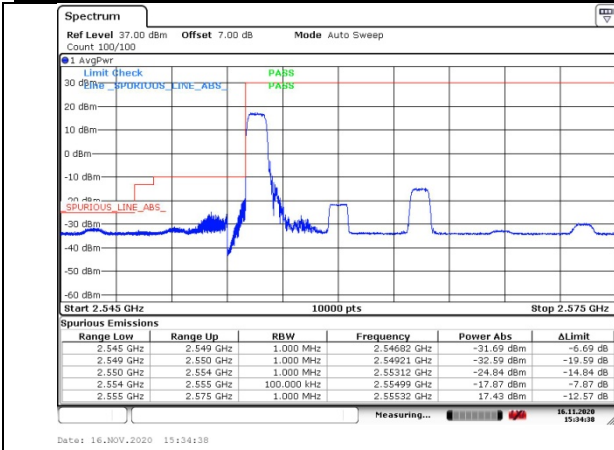


Fig.5

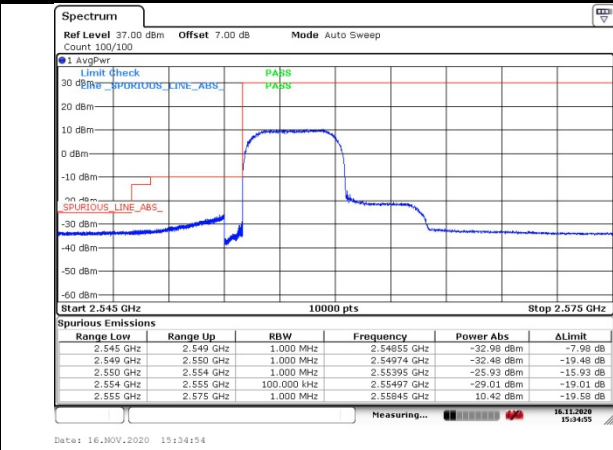


Fig.6

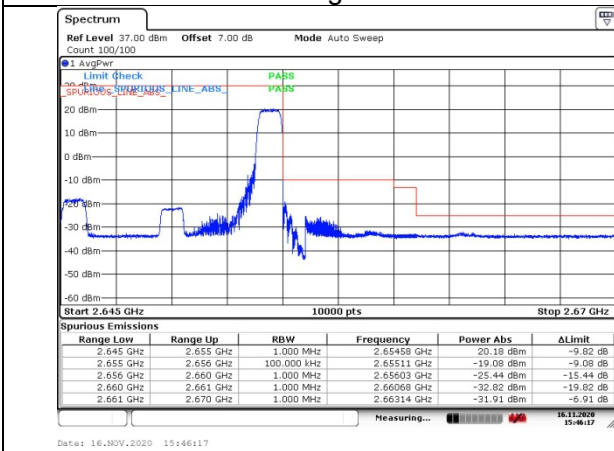


Fig.7

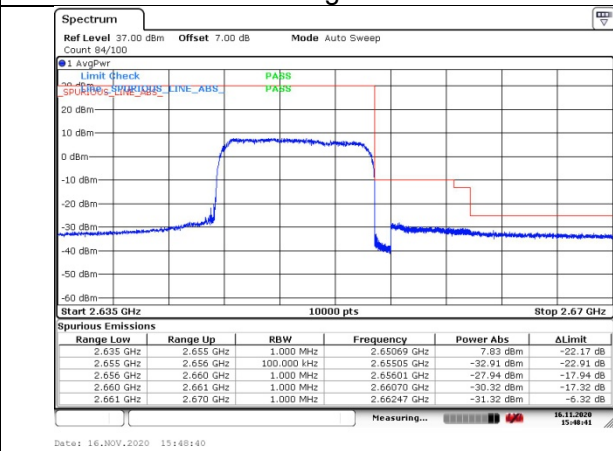


Fig.8

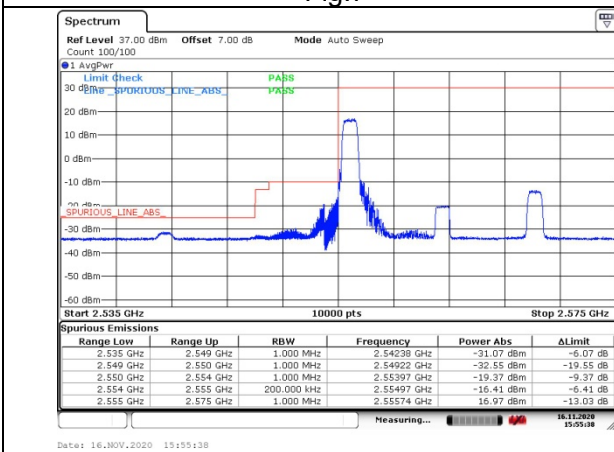


Fig.9

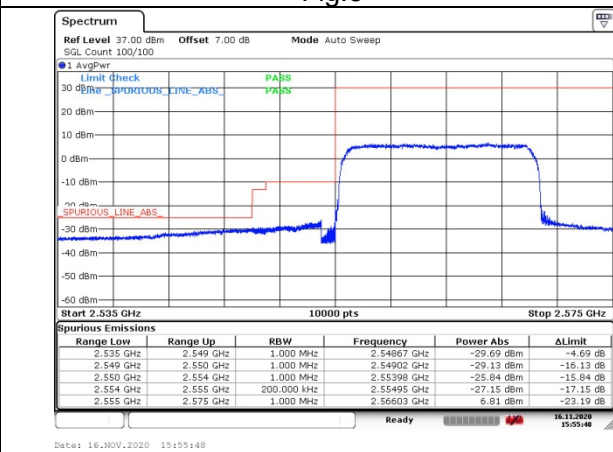


Fig.10

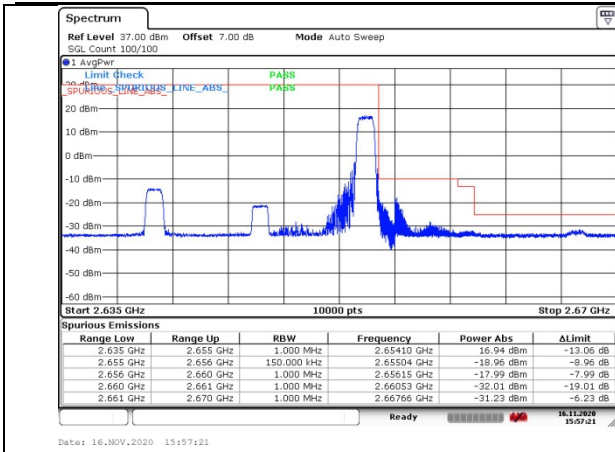


Fig. 11

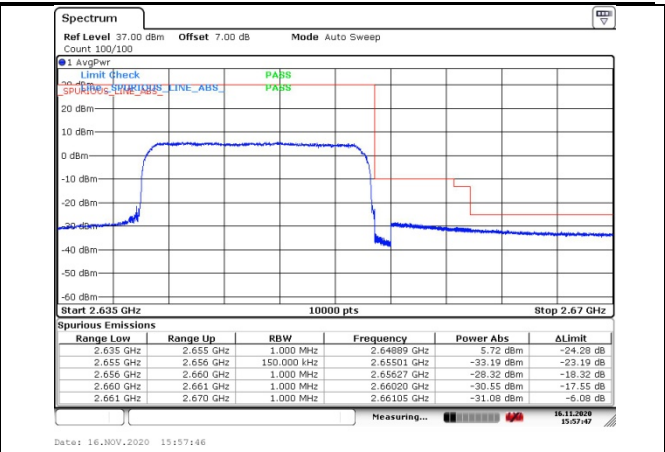


Fig. 12

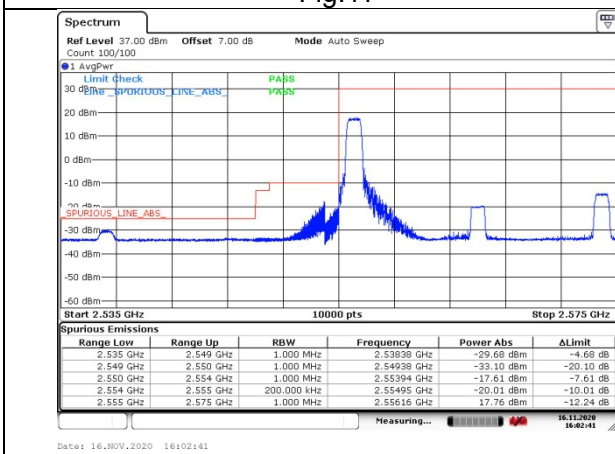


Fig. 13

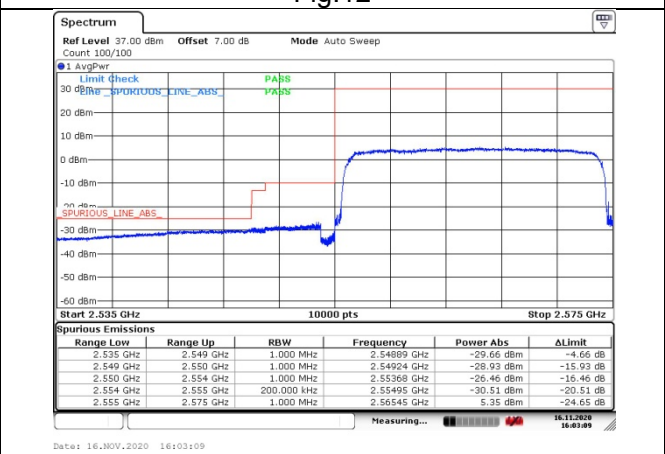


Fig. 14

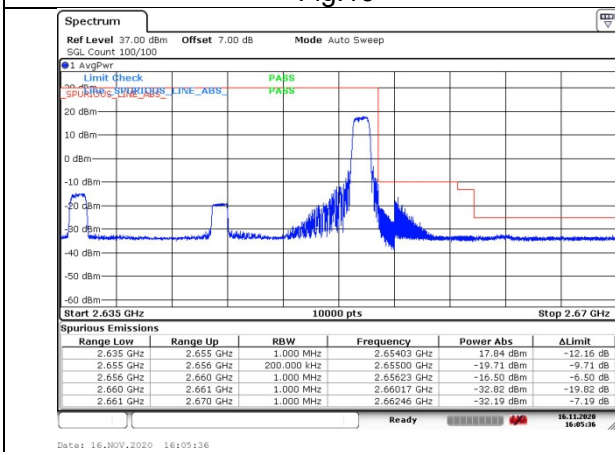


Fig. 15

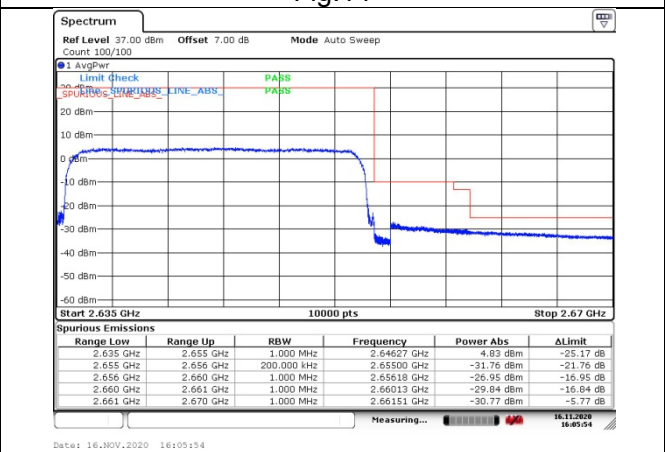


Fig. 16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band7 Low Channel			
		5M	10M	15M	20M
-10	NV	0.027	-0.057	0.034	-0.093
0	NV	-0.027	-0.042	-0.070	-0.105
+10	NV	-0.010	-0.079	-0.080	-0.001
+20	NV	0.000	0.000	0.000	0.000
+35	NV	-0.103	0.078	0.029	0.057
+20	LV	-0.077	0.008	-0.013	-0.089
+20	HV	0.042	0.082	0.040	-0.060

Temperature(°C)	Voltage	Test Result (ppm) Band7 High Channel			
		5M	10M	15M	20M
-10	NV	0.004	0.000	-0.052	0.030
0	NV	-0.050	0.084	-0.091	0.065
+10	NV	-0.033	-0.028	-0.004	-0.050
+20	NV	0.000	0.000	0.000	0.000
+35	NV	0.060	0.031	0.000	0.067
+20	LV	0.005	0.017	-0.023	-0.006
+20	HV	-0.010	-0.022	-0.035	-0.051

**Effective Radiated Power and Effective Isotropic Radiated Power
(2555MHz-2655MHz)**

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	ERP/EIRP(W)
QPSK	2557.5	40265	5	1	0	0.283
				1	24	0.285
				12	6	0.227
				25	0	0.227
	2605	40740		1	0	0.257
				1	24	0.254
				12	6	0.205
				25	0	0.205
	2652.5	41215		1	0	0.252
				1	24	0.249
				12	6	0.205
				25	0	0.208
16QAM	2557.5	40265	5	1	0	0.225
				1	24	0.224
				12	6	0.187
				25	0	0.186
	2605	40740		1	0	0.226
				1	24	0.221
				12	6	0.191
				25	0	0.189
	2652.5	41215		1	0	0.199
				1	24	0.200
				12	6	0.166
				25	0	0.165
64QAM	2557.5	40265	5	1	0	0.212
				1	24	0.208
				12	6	0.185
				25	0	0.185
	2605	40740		1	0	0.193
				1	24	0.191
				12	6	0.165
				25	0	0.166
	2652.5	41215		1	0	0.188
				1	24	0.187
				12	6	0.166
				25	0	0.163

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	ERP/EIRP(W)
QPSK	2560	40290	10	1	0	0.284
				1	49	0.280
				24	12	0.228
				50	0	0.230
	2605	40740		1	0	0.259
				1	49	0.255
				24	12	0.208
				50	0	0.207
	2650	41190		1	0	0.252
				1	49	0.251
				24	12	0.206
				50	0	0.207
16QAM	2560	40290	10	1	0	0.223
				1	49	0.220
				24	12	0.184
				50	0	0.185
	2605	40740		1	0	0.226
				1	49	0.225
				24	12	0.191
				50	0	0.190
	2650	41190		1	0	0.198
				1	49	0.201
				24	12	0.165
				50	0	0.164
64QAM	2560	40290	10	1	0	0.212
				1	49	0.207
				24	12	0.186
				50	0	0.187
	2605	40740		1	0	0.194
				1	49	0.194
				24	12	0.165
				50	0	0.165
	2650	41190		1	0	0.187
				1	49	0.187
				24	12	0.166
				50	0	0.164

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	ERP/EIRP(W)
QPSK	2562.5	40315	15	1	0	0.287
				1	74	0.284
				40	18	0.229
				75	0	0.229
	2605	40740		1	0	0.259
				1	74	0.254
				40	18	0.206
				75	0	0.206
	2647.5	41165		1	0	0.256
				1	74	0.249
				40	18	0.205
				75	0	0.209
16QAM	2562.5	40315	15	1	0	0.225
				1	74	0.225
				40	18	0.186
				75	0	0.185
	2605	40740		1	0	0.225
				1	74	0.222
				40	18	0.191
				75	0	0.187
	2647.5	41165		1	0	0.200
				1	74	0.200
				40	18	0.167
				75	0	0.164
64QAM	2562.5	40315	15	1	0	0.211
				1	74	0.211
				40	18	0.185
				75	0	0.185
	2605	40740		1	0	0.195
				1	74	0.192
				40	18	0.165
				75	0	0.163
	2647.5	41165		1	0	0.187
				1	74	0.188
				40	18	0.166
				75	0	0.162

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	ERP/EIRP(W)
QPSK	2565	40340	20	1	0	0.287
				1	99	0.284
				50	25	0.229
				100	0	0.229
	2605	40740		1	0	0.259
				1	99	0.254
				50	25	0.206
				100	0	0.206
	2645	41140		1	0	0.256
				1	99	0.249
				50	25	0.205
				100	0	0.209
16QAM	2565	40340	20	1	0	0.225
				1	99	0.225
				50	25	0.186
				100	0	0.185
	2605	40740		1	0	0.225
				1	99	0.222
				50	25	0.191
				100	0	0.187
	2645	41140		1	0	0.200
				1	99	0.200
				50	25	0.167
				100	0	0.164
64QAM	2565	40340	20	1	0	0.211
				1	99	0.211
				50	25	0.185
				100	0	0.185
	2605	40740		1	0	0.195
				1	99	0.192
				50	25	0.165
				100	0	0.163
	2645	41140		1	0	0.187
				1	99	0.188
				50	25	0.166
				100	0	0.162