

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 25

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1850.7	26047	1.4	1	0	21.12
				1	5	21.12
				3	2	20.10
				6	0	19.96
	1882.5	26365		1	0	21.16
				1	5	21.09
				3	2	20.13
				6	0	20.00
	1914.3	26683		1	0	21.15
				1	5	21.07
				3	2	20.15
				6	0	20.09
16QAM	1850.7	26047	1.4	1	0	20.11
				1	5	20.02
				3	2	19.12
				6	0	19.02
	1882.5	26365		1	0	20.07
				1	5	20.04
				3	2	19.13
				6	0	19.10
	1914.3	26683		1	0	20.12
				1	5	20.07
				3	2	19.15
				6	0	19.08

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1851.5	26055	3	1	0	21.24
				1	14	21.19
				8	4	20.20
				15	0	20.13
	1882.5	26365		1	0	21.28
				1	14	21.23
				8	4	20.21
				15	0	20.14
	1913.5	26675		1	0	21.25
				1	14	21.18
				8	4	20.25
				15	0	20.25
16QAM	1851.5	26055	3	1	0	20.16
				1	14	20.15
				8	4	19.20
				15	0	19.16
	1882.5	26365		1	0	20.29
				1	14	20.17
				8	4	19.30
				15	0	19.19
	1913.5	26675		1	0	20.27
				1	14	20.23
				8	4	19.26
				15	0	19.19

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1852.5	26065	5	1	0	21.15
				1	24	21.10
				12	6	20.04
				25	0	20.06
	1882.5	26365		1	0	21.22
				1	24	21.12
				12	6	20.10
				25	0	20.03
	1912.5	26665		1	0	21.14
				1	24	21.15
				12	6	20.14
				25	0	20.14
16QAM	1852.5	26065	5	1	0	20.10
				1	24	20.00
				12	6	19.08
				25	0	19.03
	1882.5	26365		1	0	20.09
				1	24	20.01
				12	6	19.17
				25	0	19.04
	1912.5	26665		1	0	20.20
				1	24	20.16
				12	6	19.17
				25	0	19.05

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1855	26090	10	1	0	21.22
				1	49	21.07
				24	12	20.07
				50	0	20.05
	1882.5	26365		1	0	21.29
				1	49	21.15
				24	12	20.16
				50	0	20.07
	1910	26640		1	0	21.17
				1	49	21.19
				24	12	20.23
				50	0	20.14
16QAM	1855	26090	10	1	0	20.06
				1	49	20.10
				24	12	19.15
				50	0	19.11
	1882.5	26365		1	0	20.21
				1	49	20.14
				24	12	19.24
				50	0	19.14
	1910	26640		1	0	20.17
				1	49	20.10
				24	12	19.20
				50	0	19.09

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1857.5	26115	15	1	0	21.29
				1	74	21.24
				40	18	20.23
				75	0	20.15
	1882.5	26365		1	0	21.32
				1	74	21.28
				40	18	20.26
				75	0	20.22
	1907.5	26615		1	0	21.30
				1	74	21.26
				40	18	20.27
				75	0	20.29
16QAM	1857.5	26115	15	1	0	20.25
				1	74	20.21
				40	18	19.29
				75	0	19.25
	1882.5	26365		1	0	20.27
				1	74	20.24
				40	18	19.34
				75	0	19.24
	1907.5	26615		1	0	20.29
				1	74	20.24
				40	18	19.25
				75	0	19.17

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1860	26140	20	1	0	21.37
				1	99	21.34
				50	25	20.32
				100	0	20.26
	1882.5	26365		1	0	21.43
				1	99	21.36
				50	25	20.37
				100	0	20.31
	1905	26590		1	0	21.40
				1	99	21.35
				50	25	20.38
				100	0	20.36
16QAM	1860	26140	20	1	0	20.33
				1	99	20.27
				50	25	19.34
				100	0	19.31
	1882.5	26365		1	0	20.37
				1	99	20.32
				50	25	19.41
				100	0	19.35
	1905	26590		1	0	20.41
				1	99	20.37
				50	25	19.38
				100	0	19.30

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
25	1850.7	26047	1.4	6	0	1.0837	Fig.1	1.0832	Fig.2
	1882.5	26365		6	0	1.0839	Fig.3	1.0849	Fig.4
	1914.3	26683		6	0	1.0877	Fig.5	1.0852	Fig.6
	1851.5	26055	3	15	0	2.6817	Fig.7	2.6802	Fig.8
	1882.5	26365		15	0	2.6822	Fig.9	2.6826	Fig.10
	1913.5	26675		15	0	2.6849	Fig.11	2.6837	Fig.12
	1852.5	26065	5	25	0	4.4755	Fig.13	4.4745	Fig.14
	1882.5	26365		25	0	4.4827	Fig.15	4.4785	Fig.16
	1912.5	26665		25	0	4.4780	Fig.17	4.4554	Fig.18
	1855	26090	10	50	0	8.9531	Fig.19	8.9404	Fig.20
	1882.5	26365		50	0	8.9431	Fig.21	8.9389	Fig.22
	1910	26640		50	0	8.9190	Fig.23	8.9051	Fig.24
	1857.5	26115	15	75	0	13.425	Fig.25	13.388	Fig.26
	1882.5	26365		75	0	13.416	Fig.27	13.420	Fig.28
	1907.5	26615		75	0	13.474	Fig.29	13.412	Fig.30
	1860	26140	20	100	0	17.832	Fig.31	17.816	Fig.32
	1882.5	26365		100	0	17.891	Fig.33	17.897	Fig.34
	1905	26590		100	0	17.805	Fig.35	17.773	Fig.36

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
25	1850.7	26047	1.4	6	0	1.264	Fig.1	1.262	Fig.2
	1882.5	26365		6	0	1.270	Fig.3	1.249	Fig.4
	1914.3	26683		6	0	1.369	Fig.5	1.341	Fig.6
	1851.5	26055	3	15	0	2.947	Fig.7	2.946	Fig.8
	1882.5	26365		15	0	2.942	Fig.9	2.923	Fig.10
	1913.5	26675		15	0	3.135	Fig.11	2.952	Fig.12
	1852.5	26065	5	25	0	4.960	Fig.13	4.943	Fig.14
	1882.5	26365		25	0	5.025	Fig.15	4.943	Fig.16
	1912.5	26665		25	0	4.915	Fig.17	5.033	Fig.18
	1855	26090	10	50	0	9.748	Fig.19	9.600	Fig.20
	1882.5	26365		50	0	9.693	Fig.21	9.707	Fig.22
	1910	26640		50	0	9.463	Fig.23	9.544	Fig.24
	1857.5	26115	15	75	0	14.50	Fig.25	14.42	Fig.26
	1882.5	26365		75	0	14.39	Fig.27	14.40	Fig.28
	1907.5	26615		75	0	14.65	Fig.29	14.65	Fig.30
	1860	26140	20	100	0	18.96	Fig.31	19.18	Fig.32
	1882.5	26365		100	0	19.46	Fig.33	19.02	Fig.34
	1905	26590		100	0	18.75	Fig.35	18.96	Fig.36

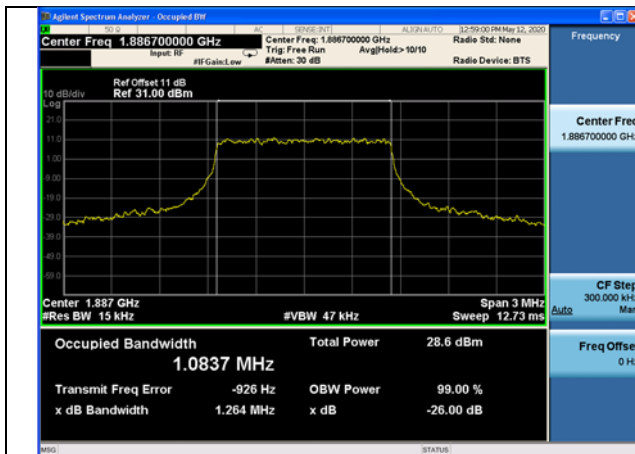


Fig.1

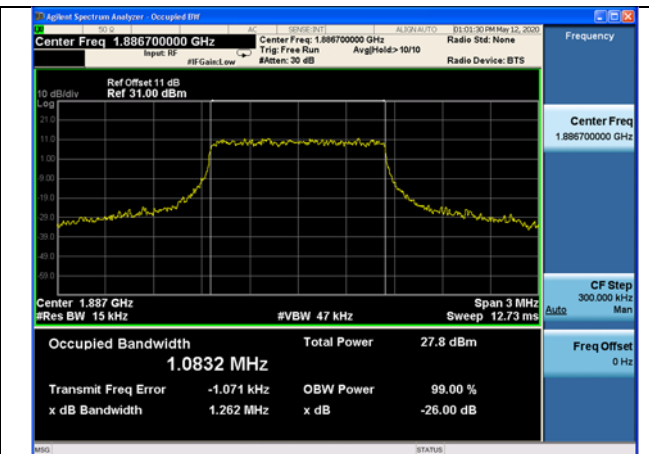


Fig.2

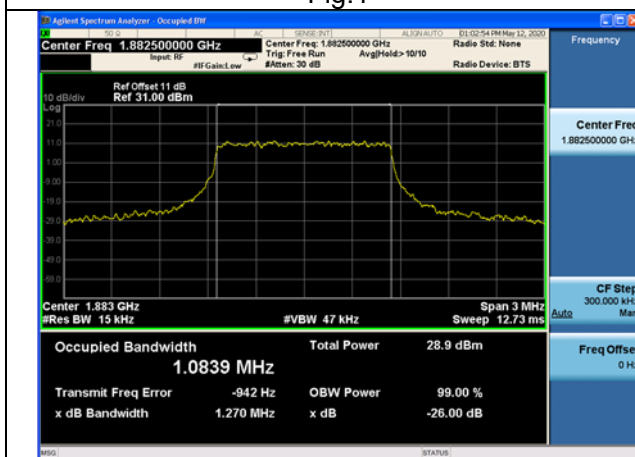


Fig.3

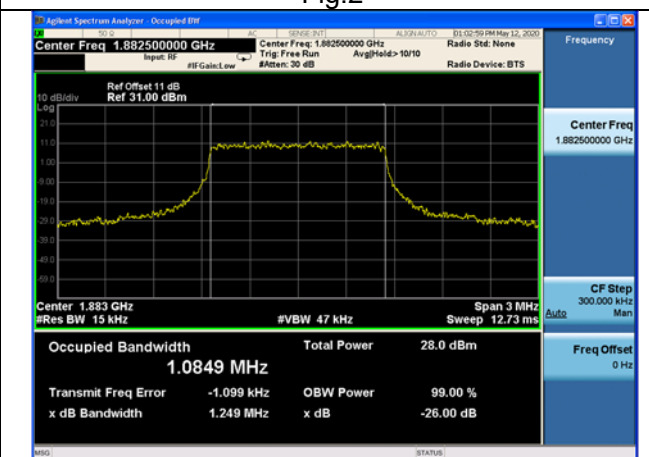


Fig.4

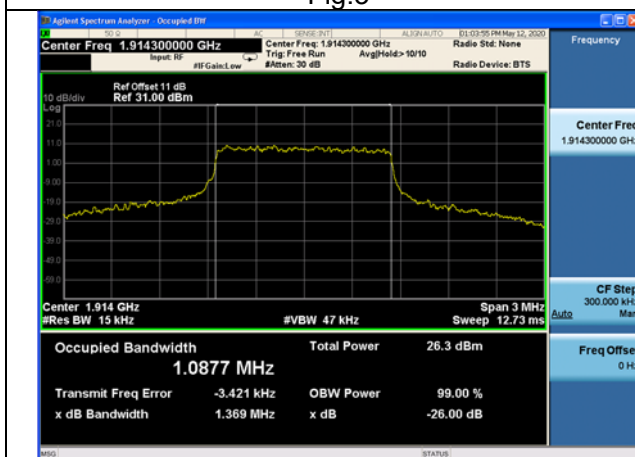


Fig.5

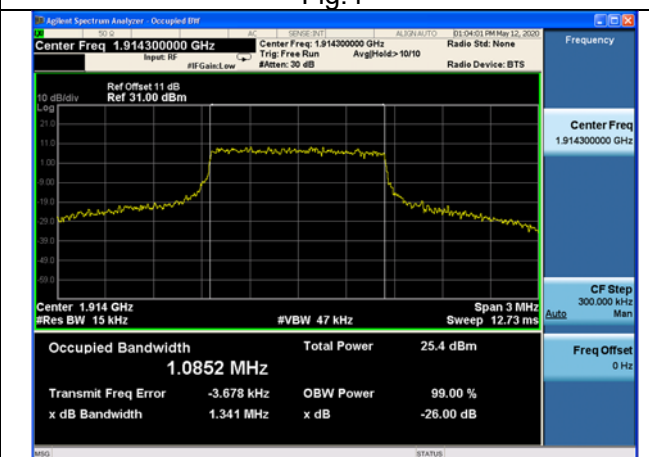


Fig.6

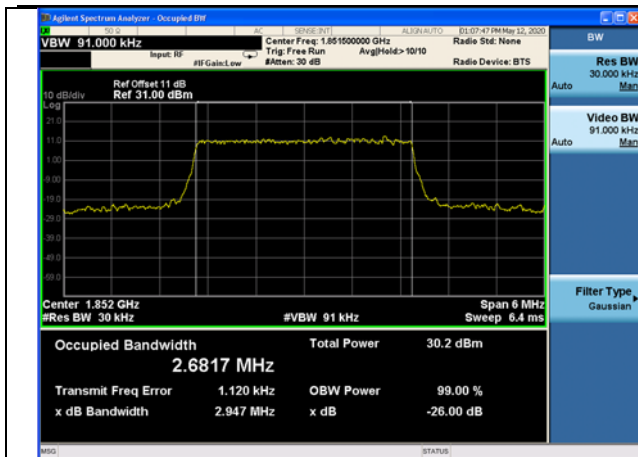


Fig.7

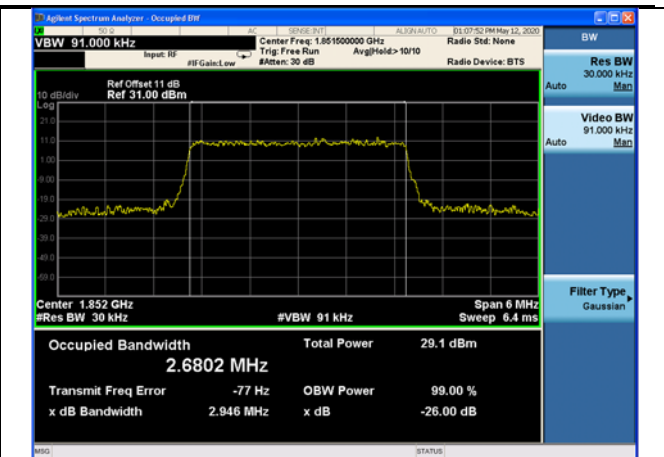


Fig.8

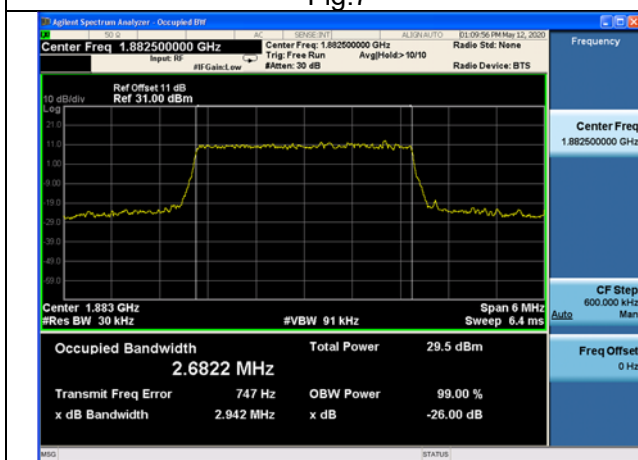


Fig.9

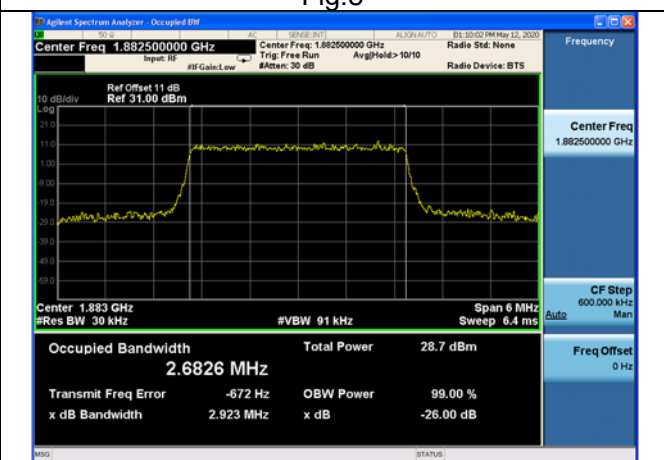


Fig.10

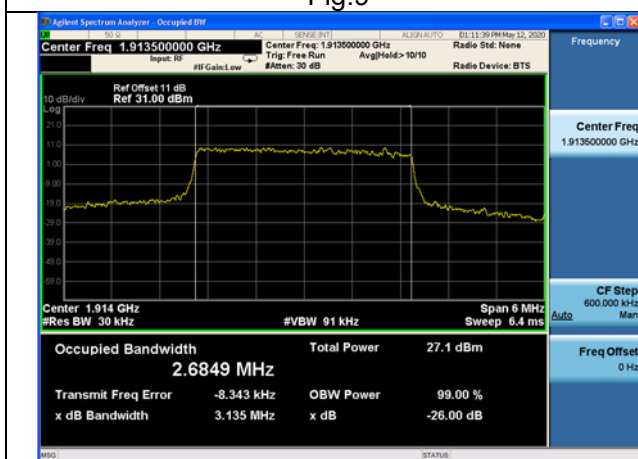


Fig.11

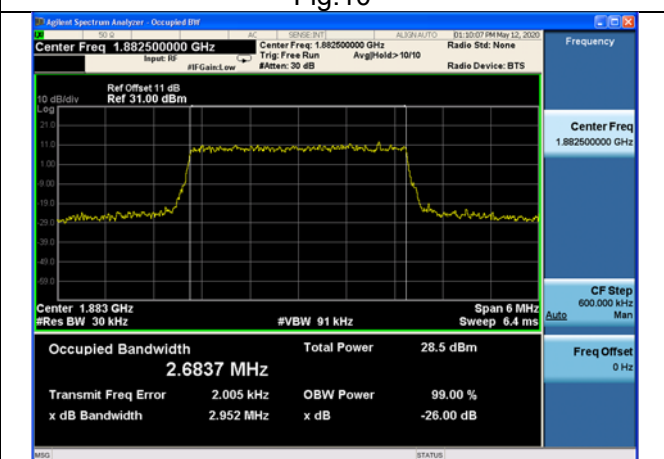


Fig.12

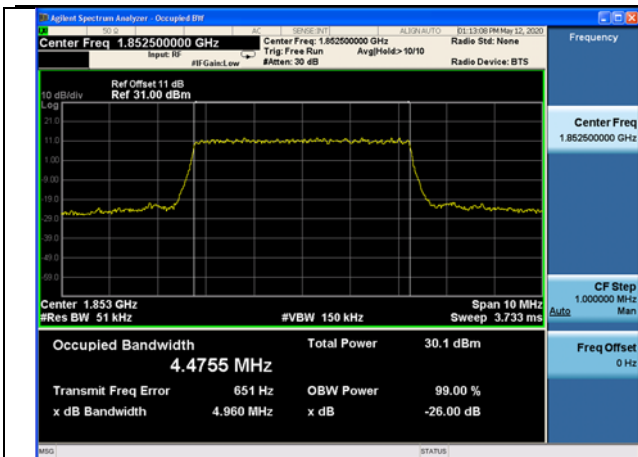


Fig.13

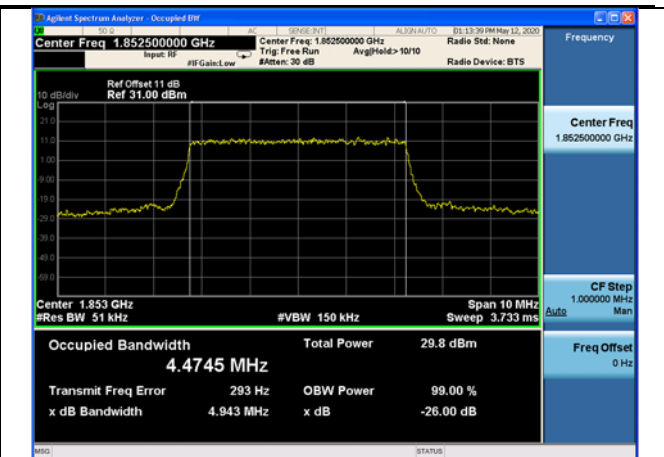


Fig.14

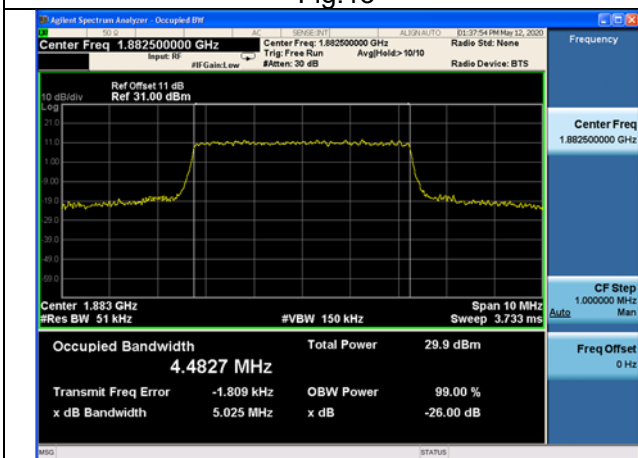


Fig.15

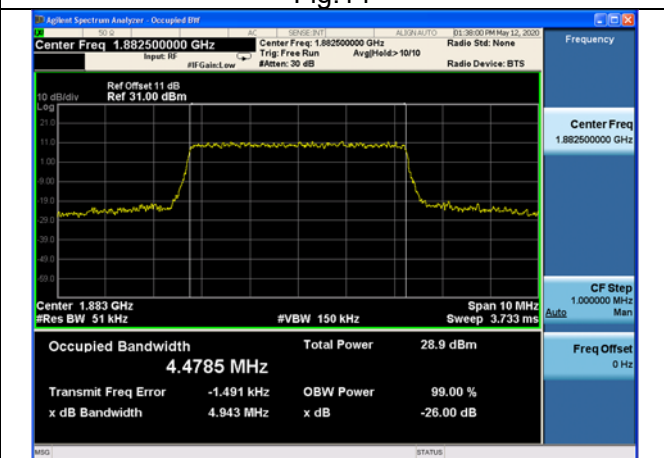


Fig.16

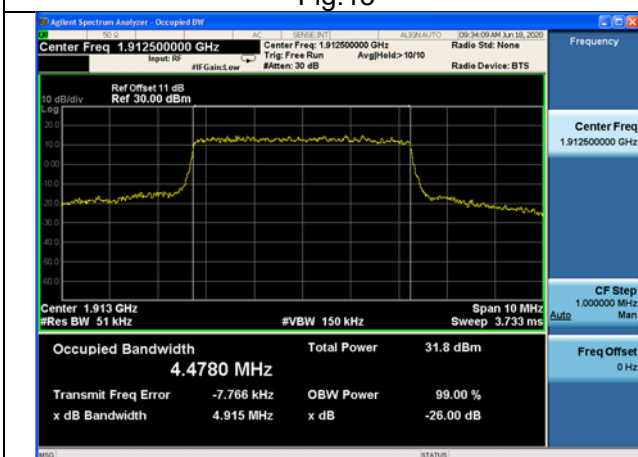


Fig.17

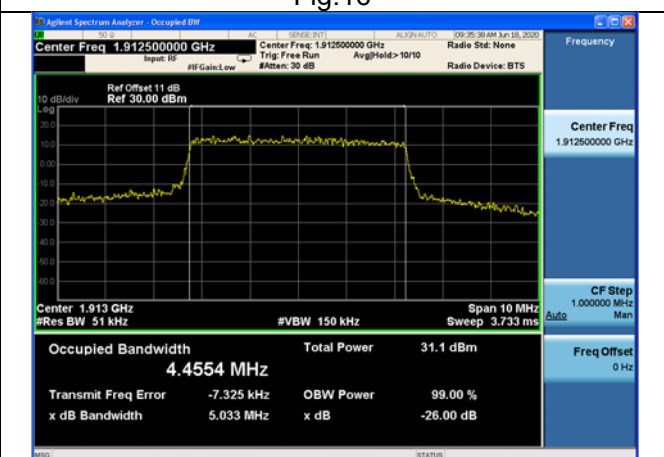


Fig.18

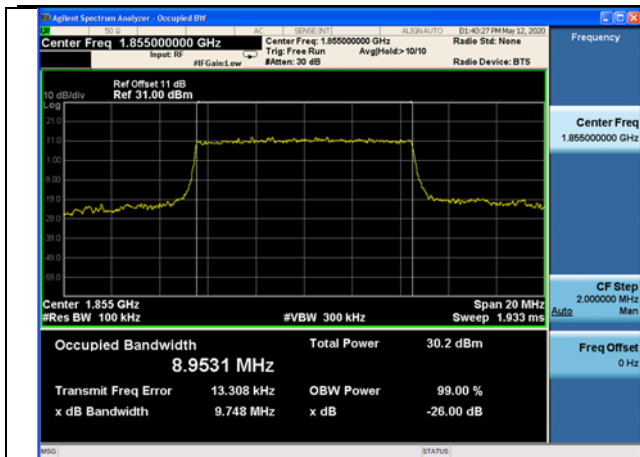


Fig.19

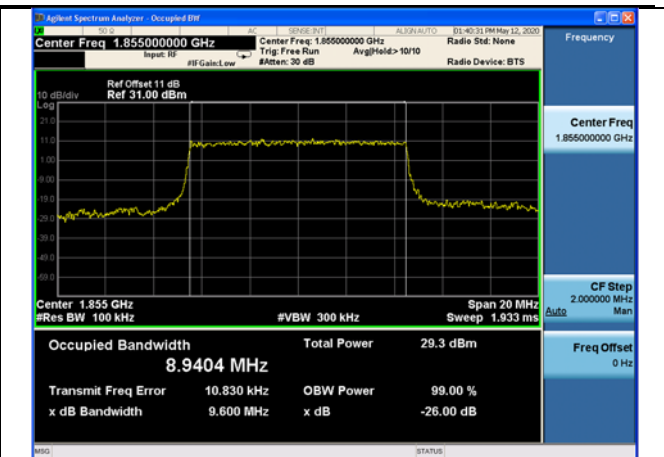


Fig.20

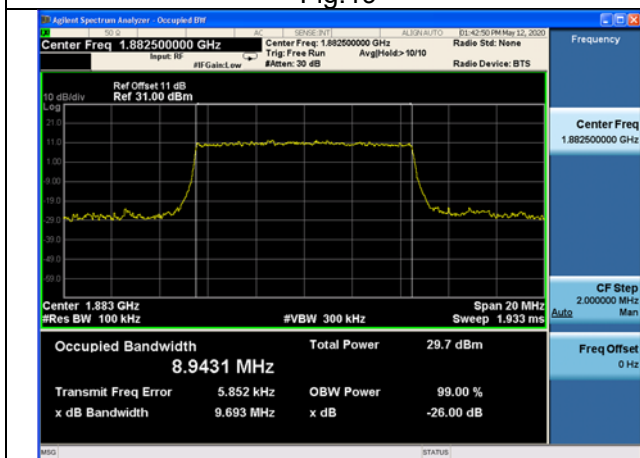


Fig.21

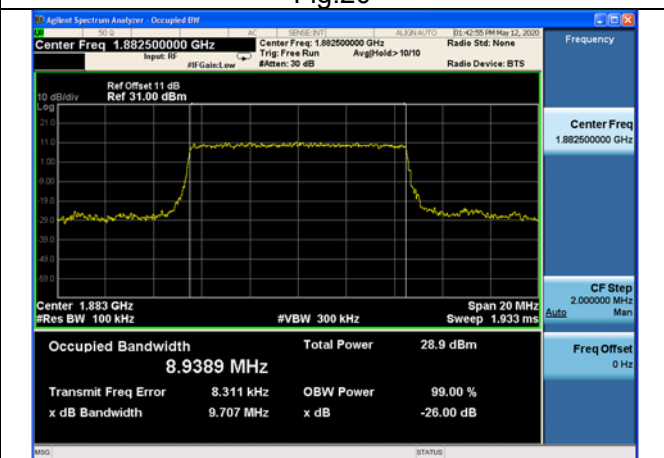


Fig.22

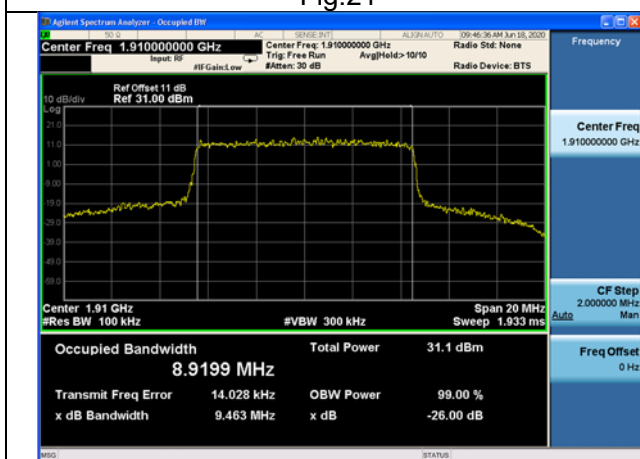


Fig.23

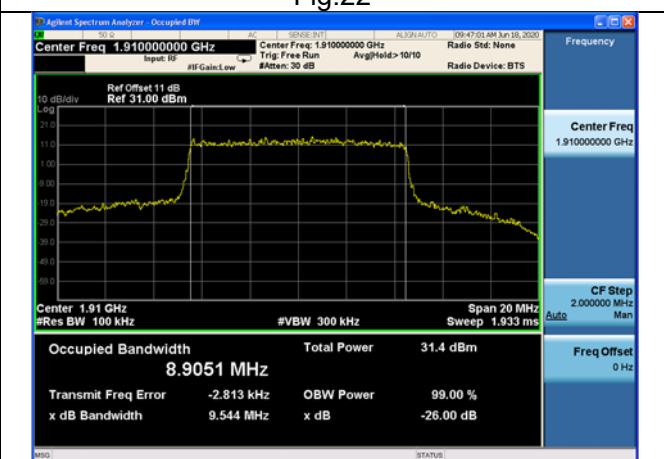


Fig.24

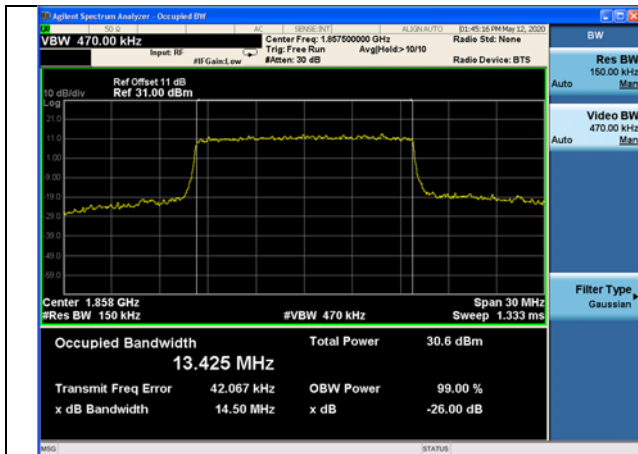


Fig.25

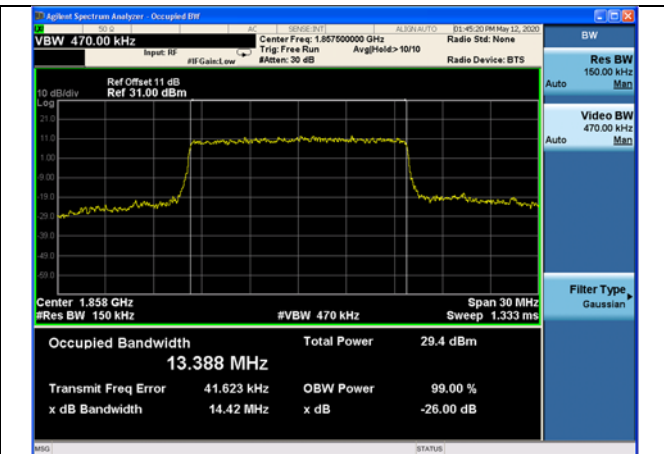


Fig.26

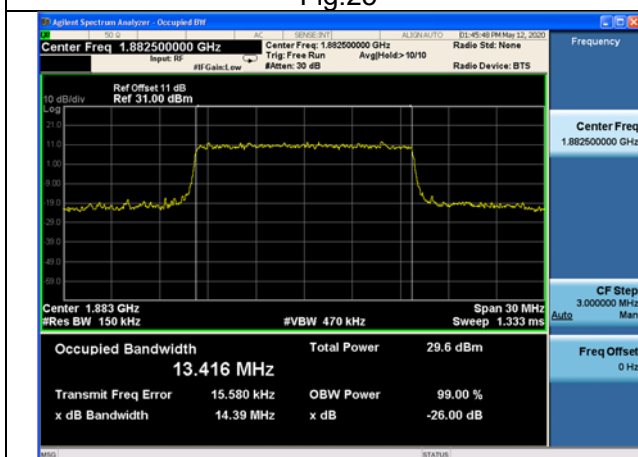


Fig.27

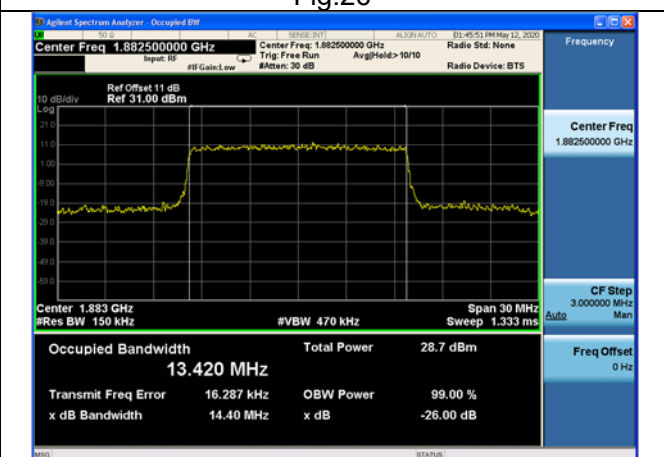


Fig.28

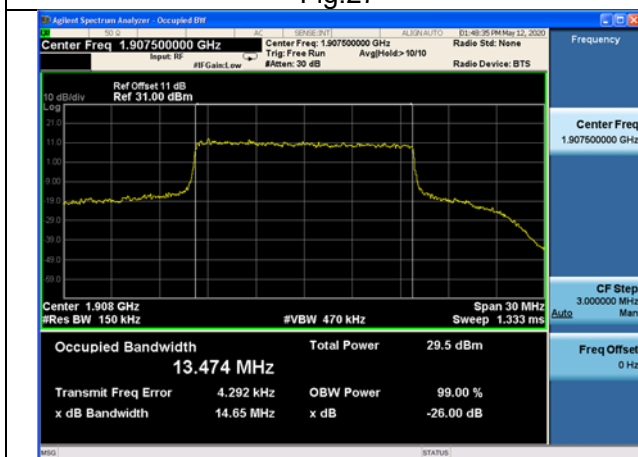


Fig.29

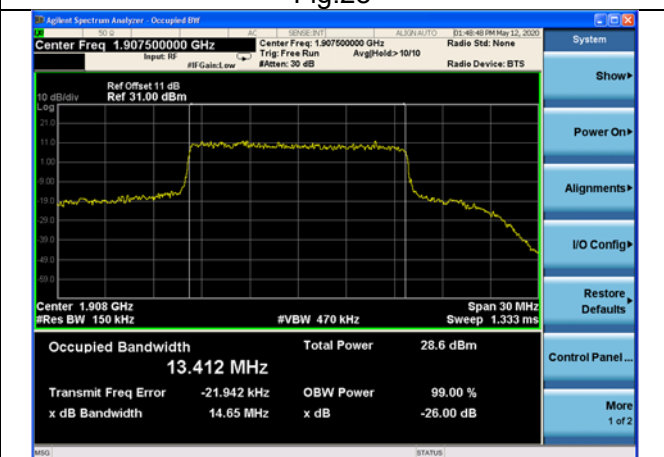


Fig.30

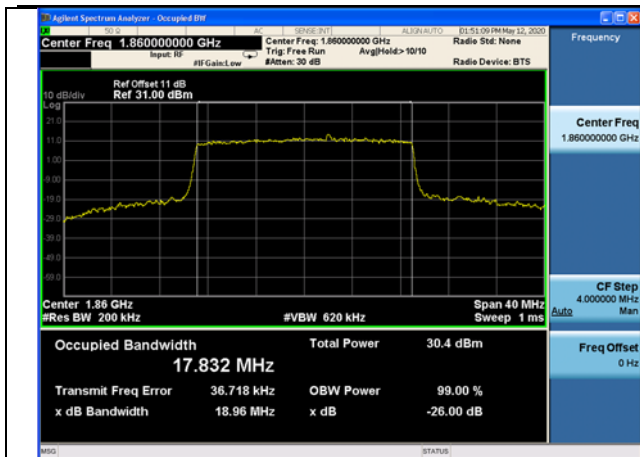


Fig.31

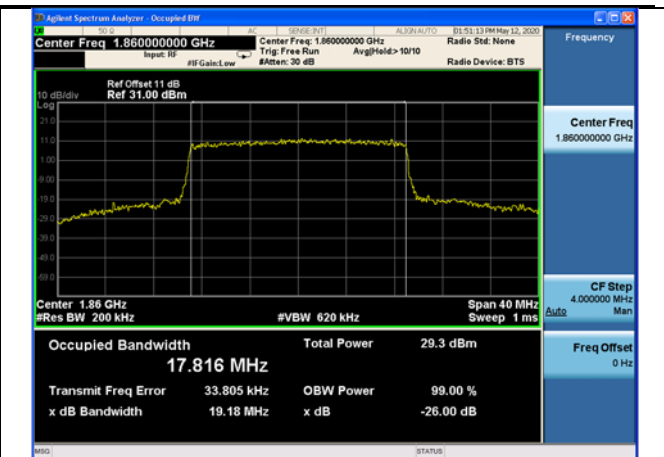


Fig.32

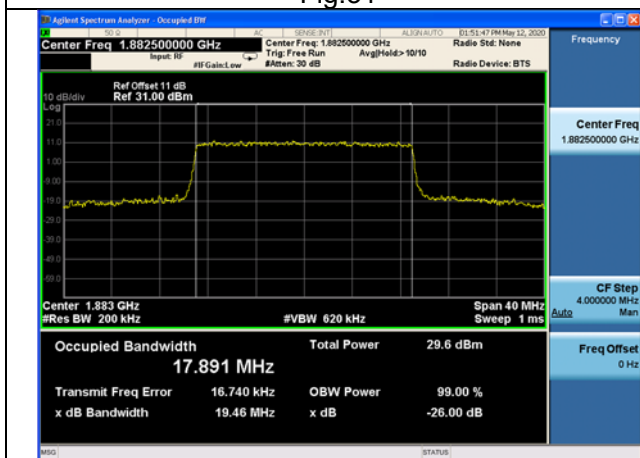


Fig.33

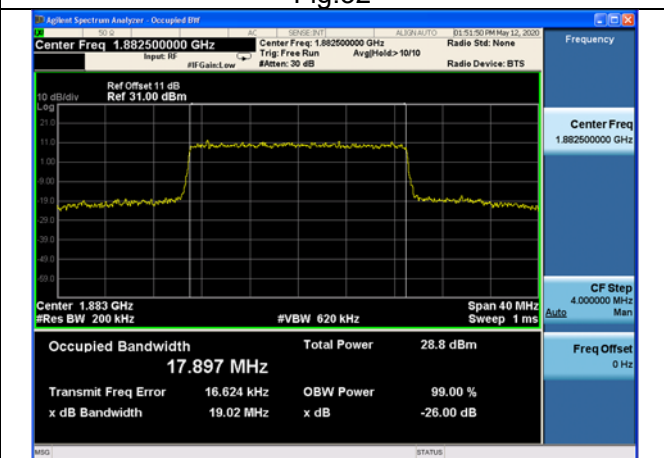


Fig.34

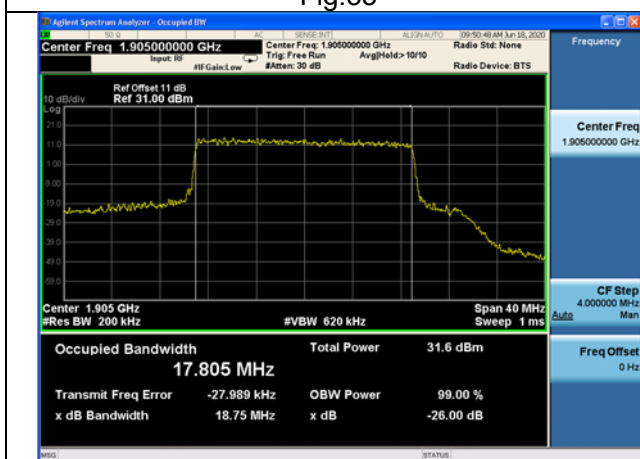


Fig.35

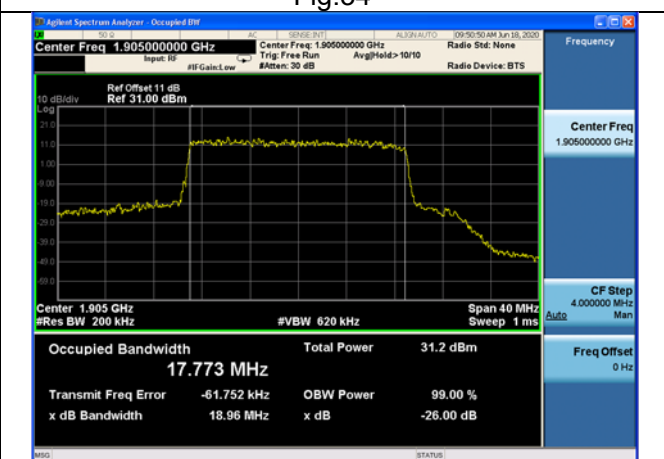


Fig.36

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM
25	1882.5	26365	1.4	1	0	Fig.1	Fig.2
			3	1	0	Fig.3	Fig.4
			5	1	0	Fig.5	Fig.6
			10	1	0	Fig.7	Fig.8
			15	1	0	Fig.9	Fig.10
			20	1	0	Fig.11	Fig.12



Fig.1

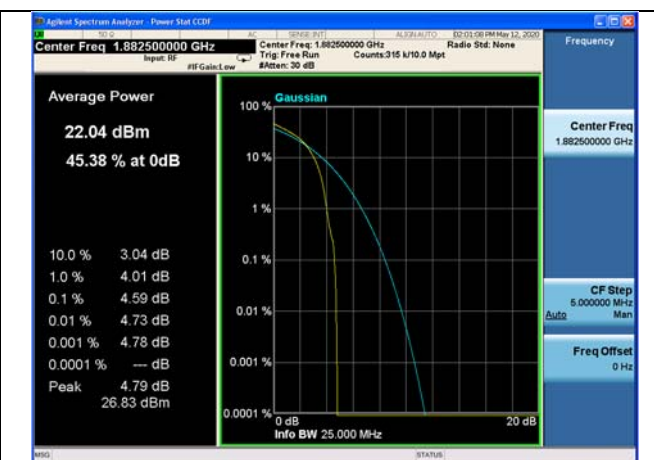


Fig.2

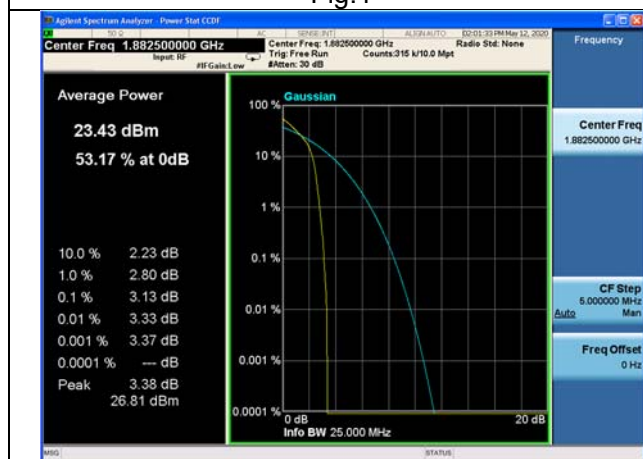


Fig.3



Fig.4

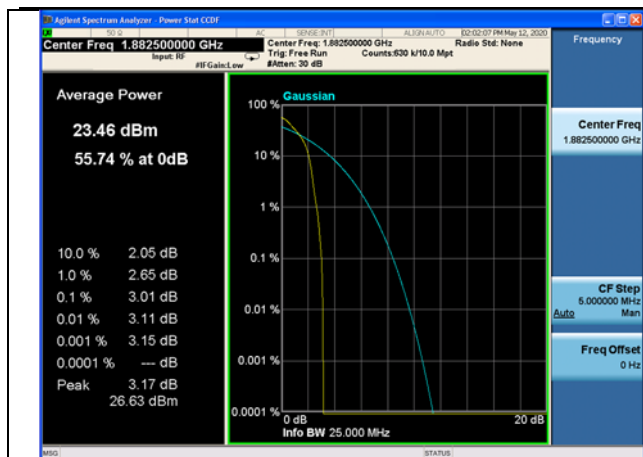


Fig.5

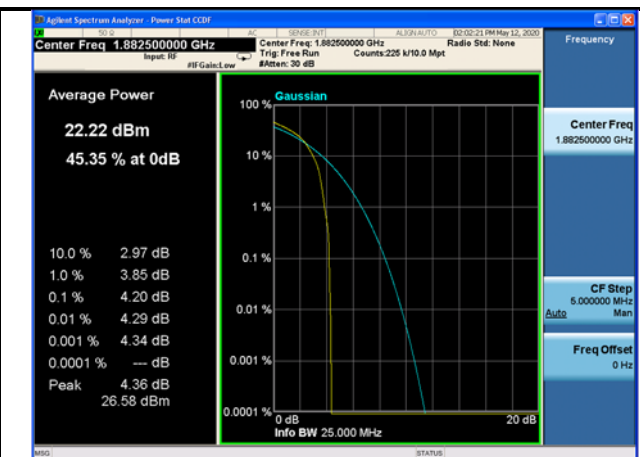


Fig.6

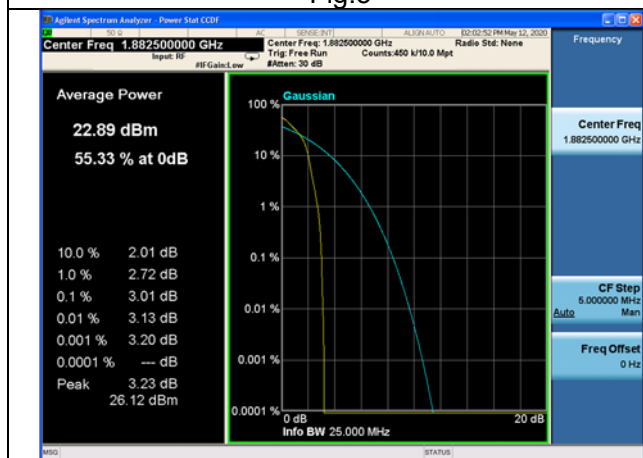


Fig.7

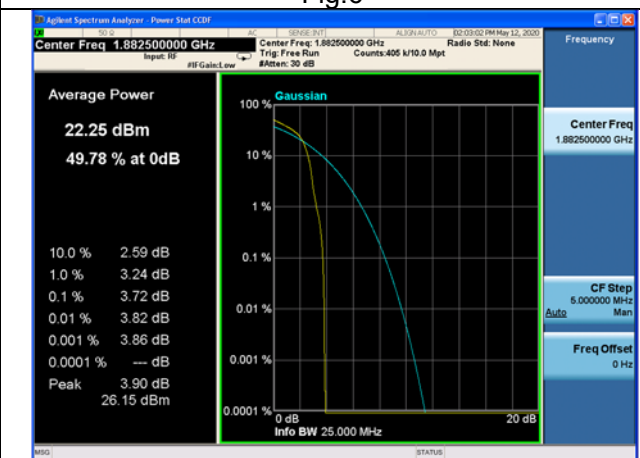


Fig.8

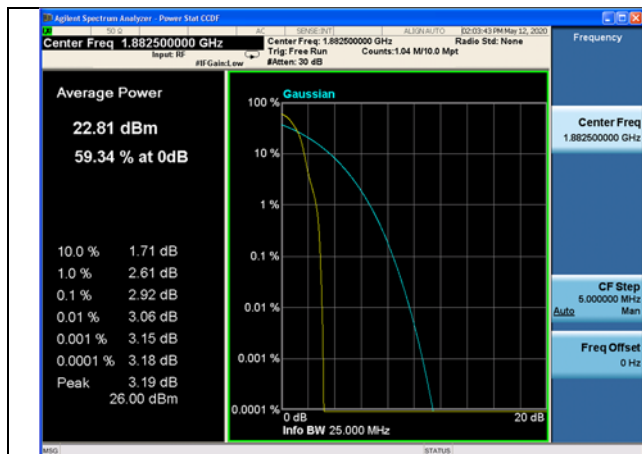


Fig.9

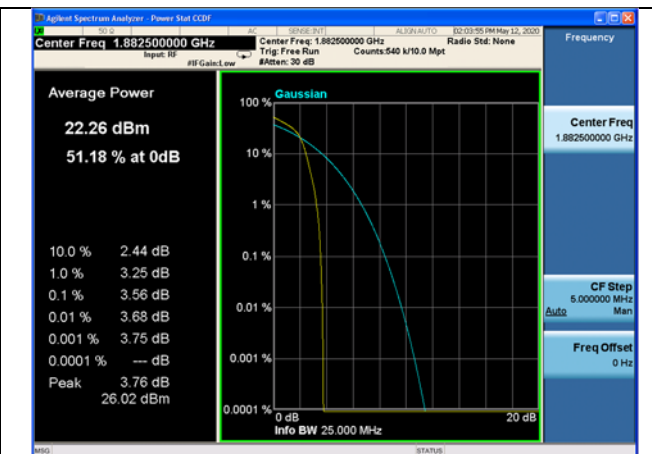


Fig.10

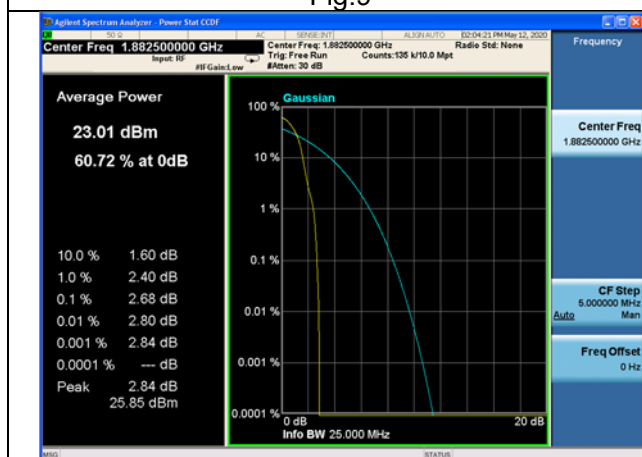


Fig.11

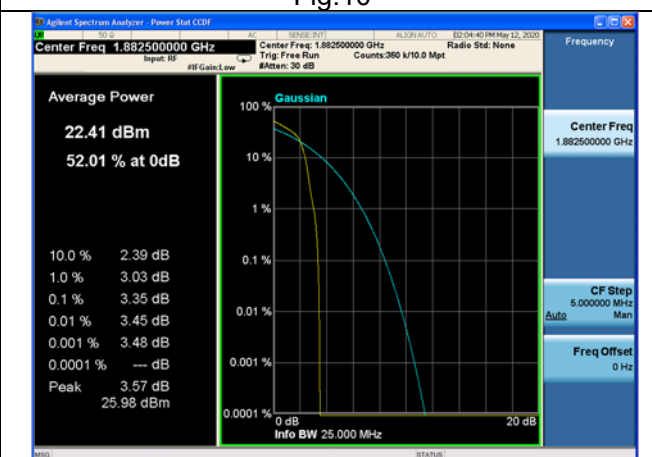


Fig.12

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
25	1860	26140	20	1	0	Fig.1-2
	1882.5	26365	20	1	0	Fig.3-4
	1905	26590	20	1	0	Fig.5-6

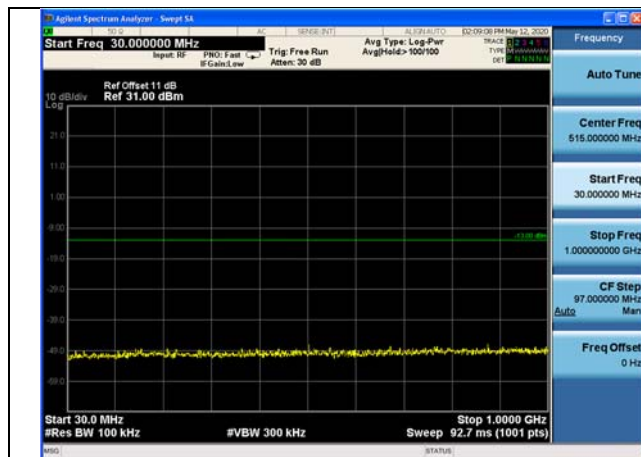


Fig.1

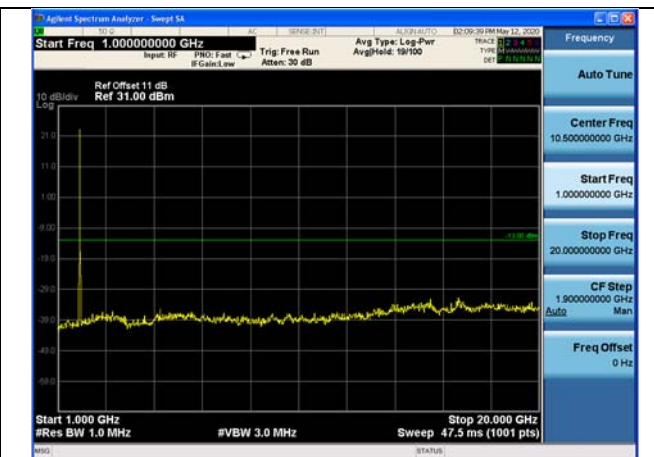


Fig.2

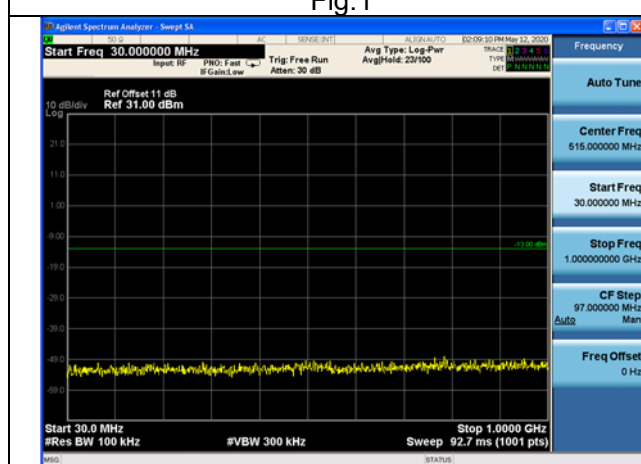


Fig3

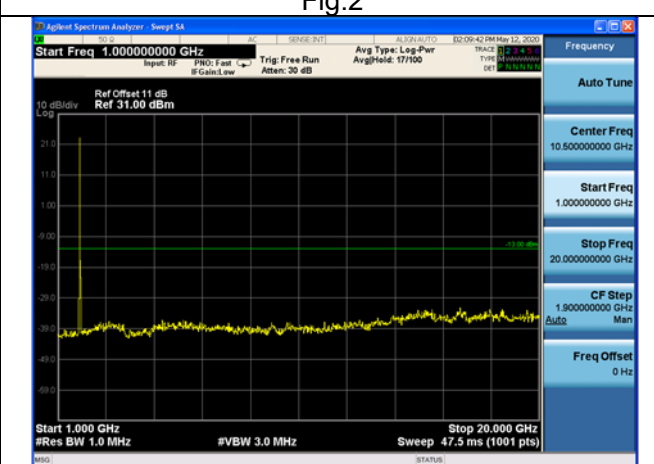


Fig4

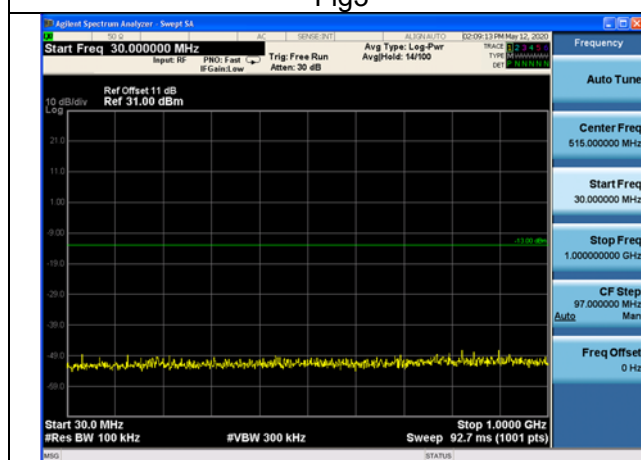


Fig.5

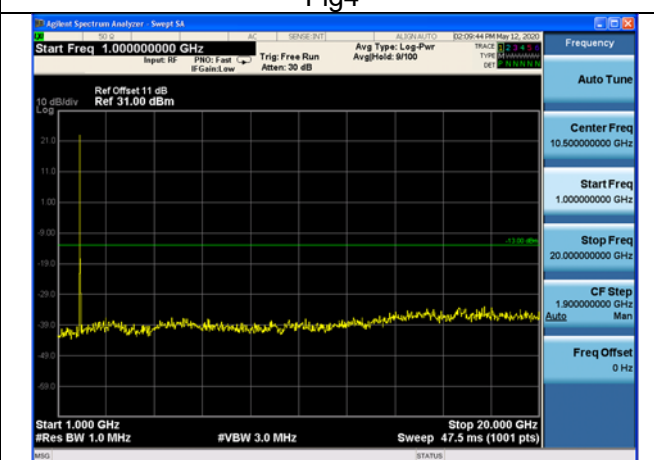


Fig.6

5 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
25	1850.7	26047	1.4	1	0	Fig.1
				6	0	Fig.2
	1914.3	26683		1	5	Fig.3
				6	0	Fig.4
	1851.5	26055	3	1	0	Fig.5
				15	0	Fig.6
	1913.5	26675		1	14	Fig.7
				15	0	Fig.8
	1852.5	26065	5	1	0	Fig.9
				25	0	Fig.10
	1912.5	26665		1	24	Fig.11
				25	0	Fig.12
	1855	26090	10	1	0	Fig.13
				50	0	Fig.14
	1910	26640		1	49	Fig.15
				50	0	Fig.16
	1857.5	26115	15	1	0	Fig.17
				75	0	Fig.18
	1907.5	26615		1	74	Fig.19
				75	0	Fig.20
	1860	26140	20	1	0	Fig.21
				100	0	Fig.22
	1905	26590		1	99	Fig.23
				100	0	Fig.24

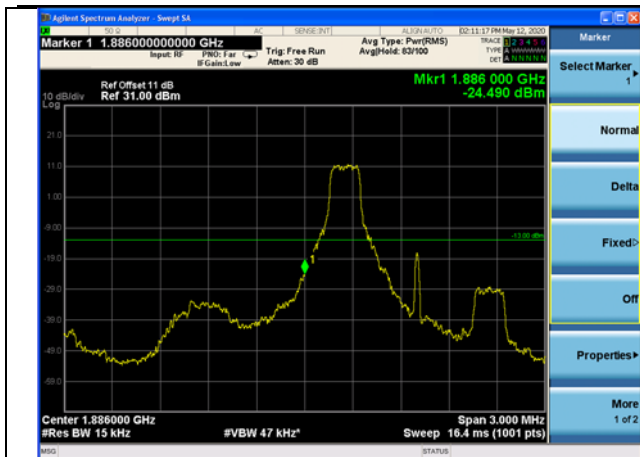


Fig.1

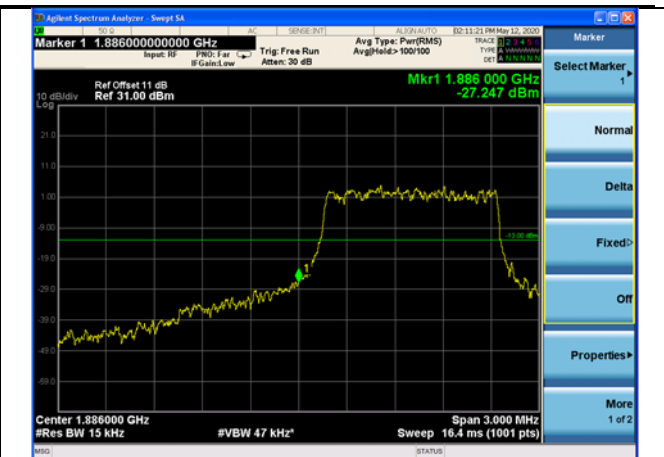


Fig.2

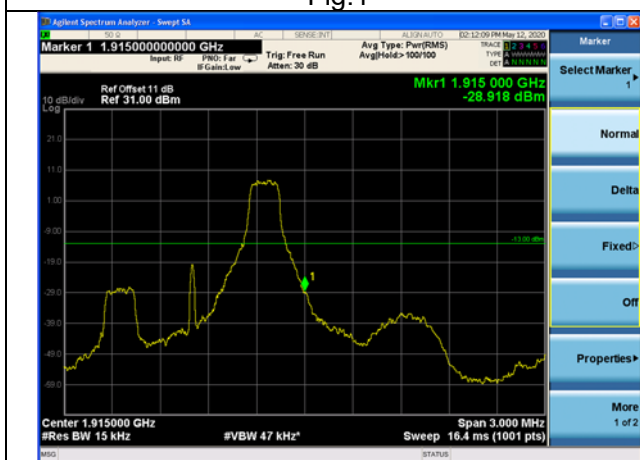


Fig.3

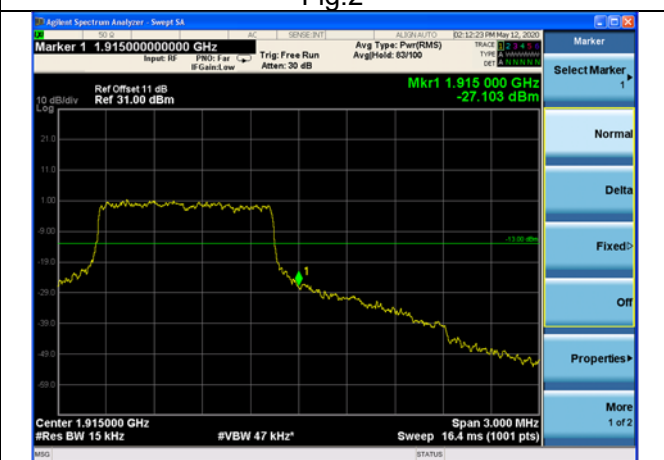


Fig.4

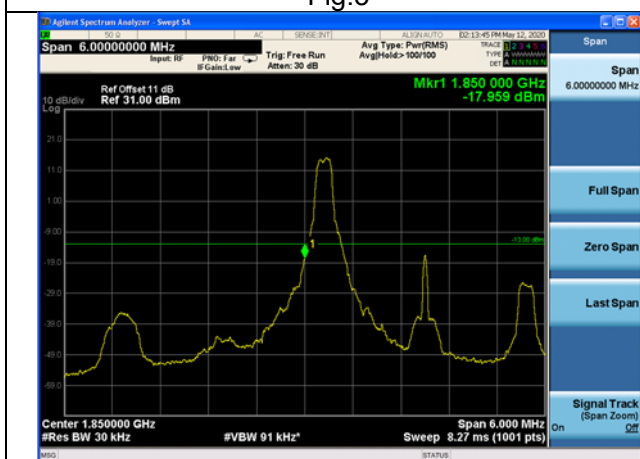


Fig.5

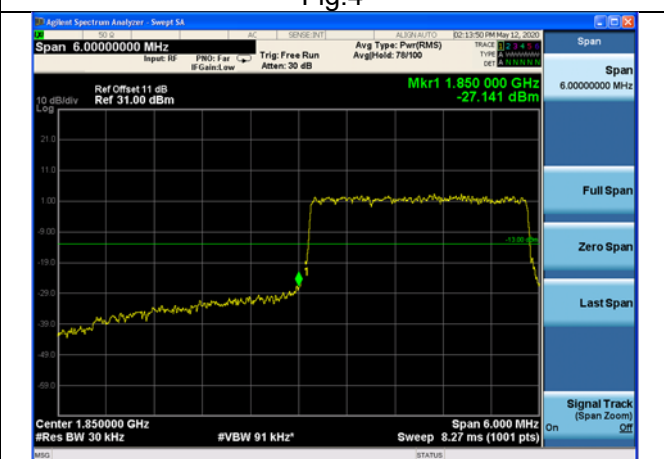


Fig.6

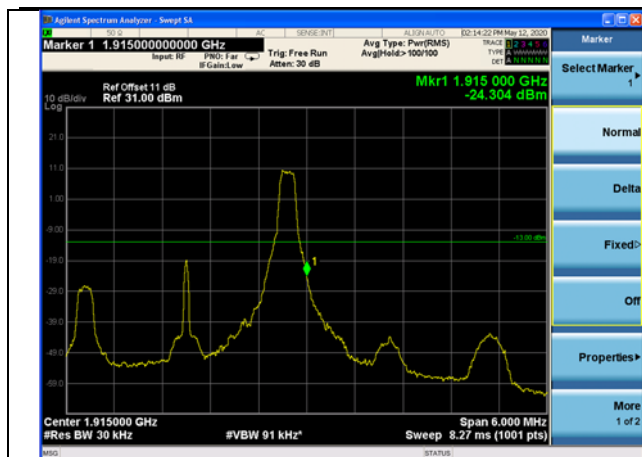


Fig.7

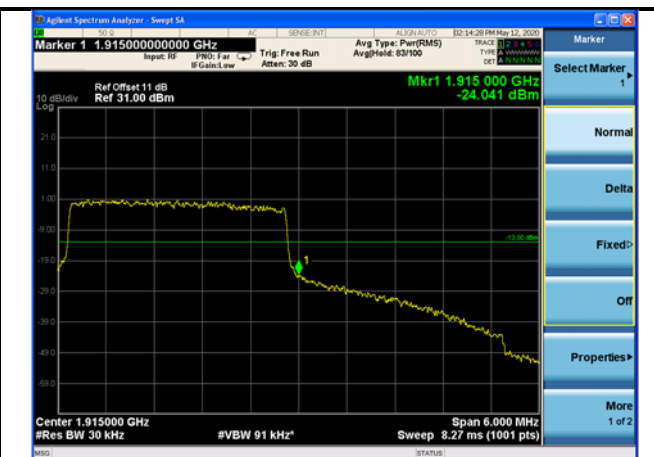


Fig.8

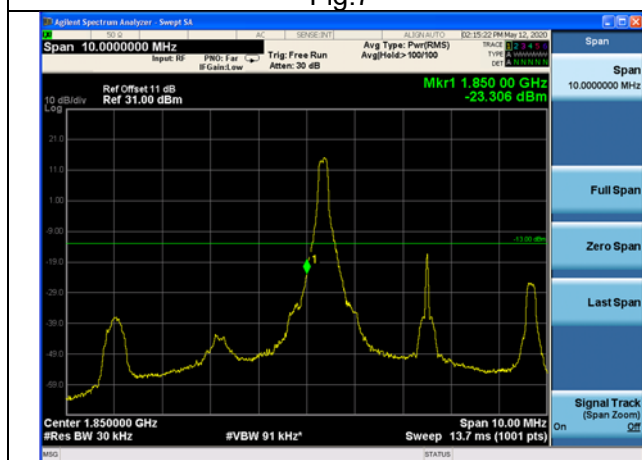


Fig.9

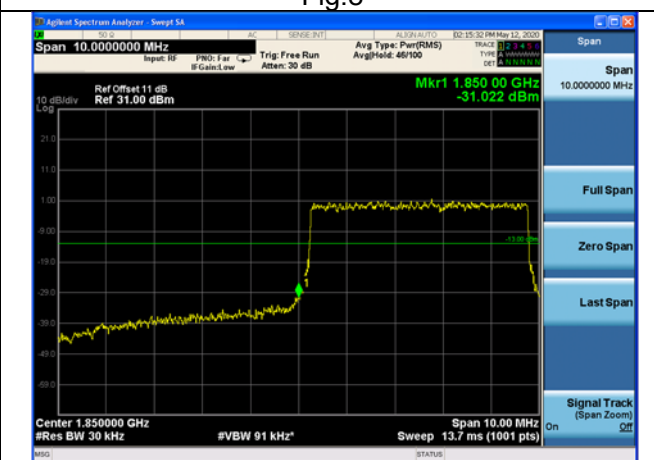


Fig.10

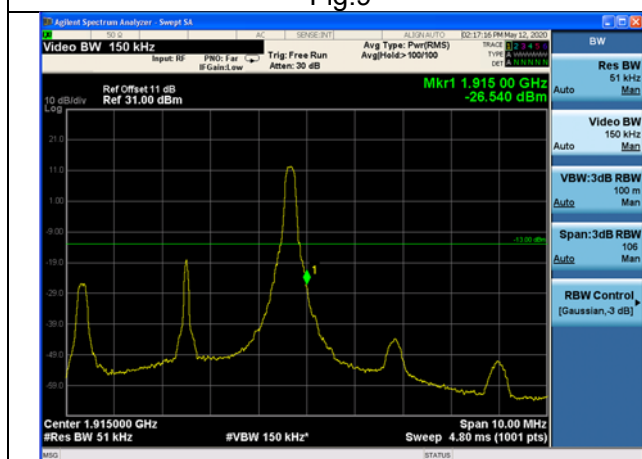


Fig.11



Fig.12

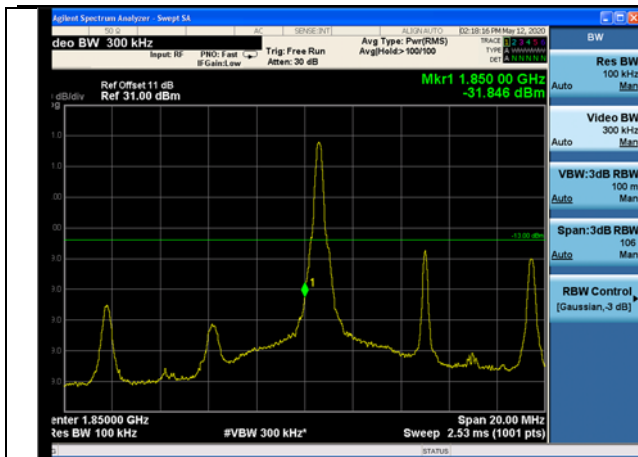


Fig.13



Fig.14

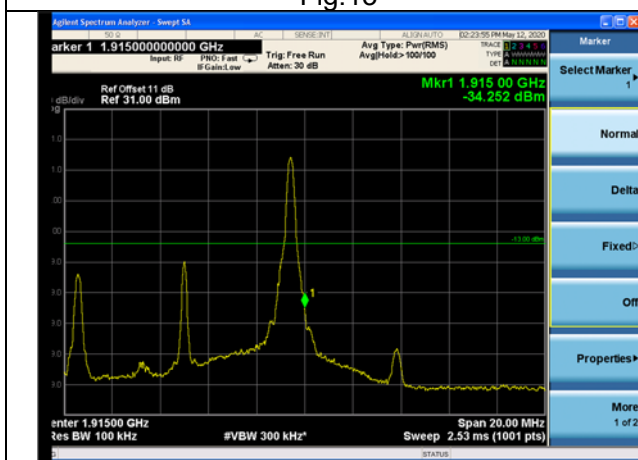


Fig.15



Fig.16

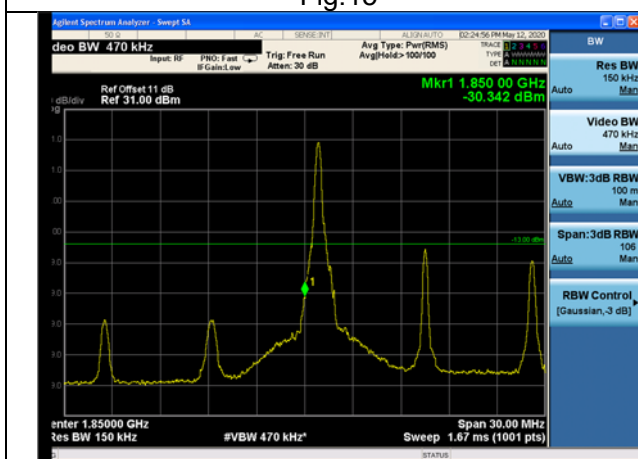


Fig.17

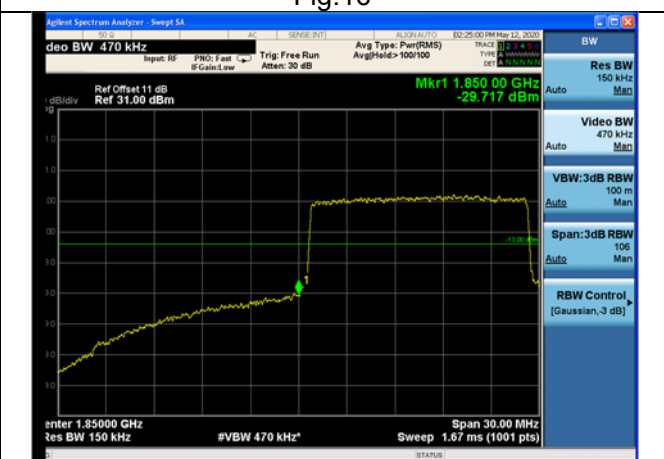


Fig.18

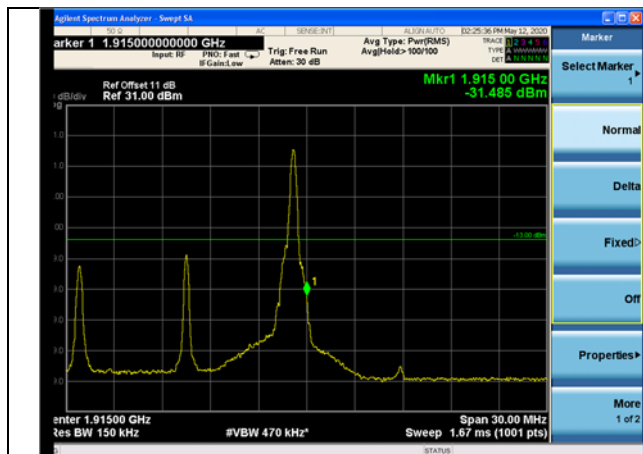


Fig.19

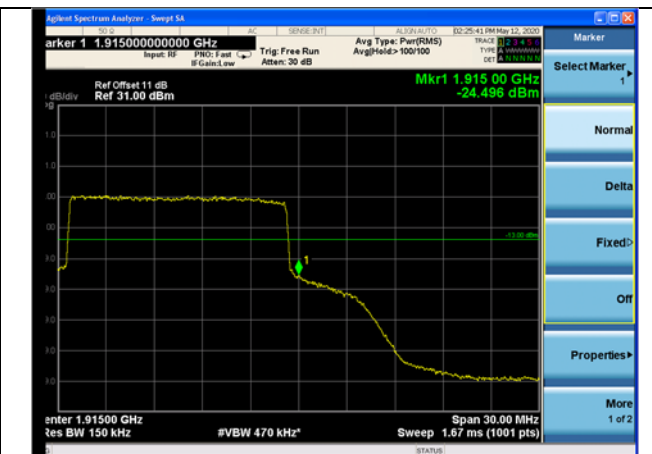


Fig.20

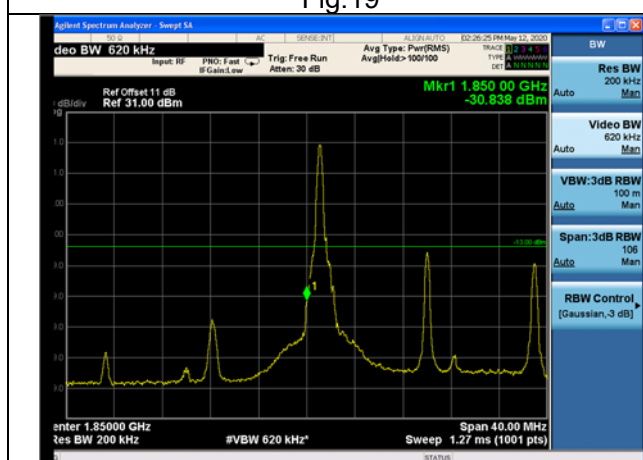


Fig.21



Fig.22

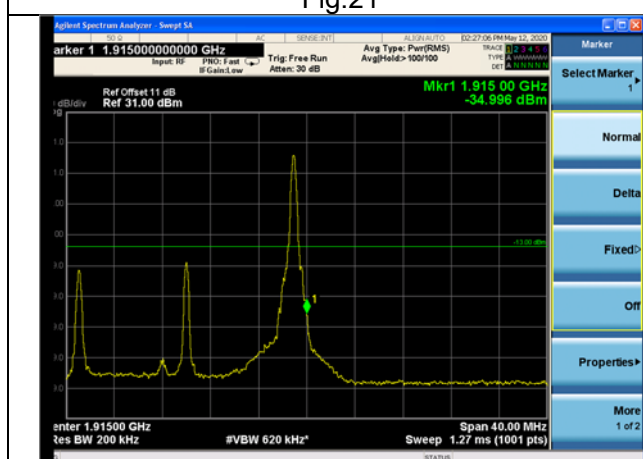


Fig.23



Fig.24

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band25 Low Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.013	-0.002	0.008	-0.015	-0.017	0.002
0	NV	-0.009	0.017	-0.013	0.006	-0.018	0.014
+10	NV	0.029	-0.006	0.022	-0.019	-0.017	-0.012
+20	NV	0.000	0.000	0.000	0.000	0.000	0.000
+30	NV	0.025	0.006	-0.029	-0.002	0.023	-0.002
+40	NV	0.007	-0.012	0.012	0.018	-0.002	0.028
+50	NV	-0.014	0.005	-0.015	0.005	-0.010	-0.007
+55	NV	-0.012	0.004	0.019	0.003	-0.016	0.026
+20	LV	0.002	0.012	-0.019	-0.011	-0.001	0.024
+20	HV	-0.001	-0.004	0.001	-0.006	0.023	-0.012

Temperature(°C)	Voltage	Test Result (ppm) Band25 High Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.019	0.015	0.025	-0.001	-0.002	-0.015
0	NV	0.032	-0.002	0.008	0.012	0.017	-0.010
+10	NV	-0.002	0.028	0.013	0.003	0.000	-0.003
+20	NV	0.000	0.000	0.000	0.000	0.000	0.000
+30	NV	-0.014	0.010	-0.022	0.003	0.024	0.002
+40	NV	-0.020	-0.002	0.002	0.017	0.021	-0.007
+50	NV	0.026	0.000	-0.003	-0.008	-0.021	-0.018
+55	NV	0.019	-0.021	0.000	0.012	0.019	-0.019
+20	LV	0.022	-0.002	0.026	-0.001	0.021	0.010
+20	HV	0.008	0.018	0.019	0.013	0.013	0.021