

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	23.05
				1	5	23.03
				3	2	21.96
				6	0	22.02
	1882.5	26365		1	0	23.07
				1	5	23.09
				3	2	22.09
				6	0	21.93
	1914.3	26683		1	0	23.14
				1	5	22.92
				3	2	22.10
				6	0	22.05
16QAM	1850.7	26047	1.4	1	0	21.72
				1	5	21.74
				3	2	21.16
				6	0	21.16
	1882.5	26365		1	0	21.90
				1	5	21.86
				3	2	21.14
				6	0	21.11
	1914.3	26683		1	0	21.73
				1	5	21.79
				3	2	21.06
				6	0	21.10
64QAM	1850.7	26047	1.4	1	0	21.89
				1	5	21.69
				3	2	21.12
				6	0	21.10
	1882.5	26365		1	0	21.79
				1	5	21.78
				3	2	21.02
				6	0	21.09
	1914.3	26683		1	0	21.70
				1	5	21.77
				3	2	21.13
				6	0	20.89

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1851.5	26055	3	1	0	22.91
				1	14	22.85
				8	4	21.85
				15	0	22.02
	1882.5	26365		1	0	23.06
				1	14	22.89
				8	4	22.06
				15	0	21.95
	1913.5	26675		1	0	23.02
				1	14	22.85
				8	4	22.04
				15	0	22.08
16QAM	1851.5	26055	3	1	0	21.86
				1	14	21.91
				8	4	21.05
				15	0	21.08
	1882.5	26365		1	0	21.87
				1	14	21.95
				8	4	21.10
				15	0	21.11
	1913.5	26675		1	0	21.90
				1	14	21.85
				8	4	21.09
				15	0	21.05
64QAM	1851.5	26055	3	1	0	21.85
				1	14	21.84
				8	4	21.06
				15	0	21.05
	1882.5	26365		1	0	21.87
				1	14	21.87
				8	4	21.03
				15	0	21.06
	1913.5	26675		1	0	21.66
				1	14	21.70
				8	4	21.20
				15	0	21.13

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1852.5	26065	5	1	0	22.88
				1	24	22.79
				12	6	22.08
				25	0	21.91
	1882.5	26365		1	0	23.02
				1	24	23.16
				12	6	21.91
				25	0	22.14
	1912.5	26665		1	0	22.96
				1	24	22.85
				12	6	22.05
				25	0	22.01
16QAM	1852.5	26065	5	1	0	21.76
				1	24	21.79
				12	6	21.25
				25	0	20.98
	1882.5	26365		1	0	21.75
				1	24	21.97
				12	6	21.30
				25	0	21.22
	1912.5	26665		1	0	21.66
				1	24	21.71
				12	6	20.97
				25	0	20.91
64QAM	1852.5	26065	5	1	0	21.74
				1	24	21.86
				12	6	21.12
				25	0	21.07
	1882.5	26365		1	0	21.74
				1	24	21.71
				12	6	21.05
				25	0	21.12
	1912.5	26665		1	0	21.63
				1	24	21.68
				12	6	20.99
				25	0	20.99

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1855	26090	10	1	0	22.85
				1	49	23.03
				24	12	22.13
				50	0	21.99
	1882.5	26365		1	0	22.99
				1	49	22.91
				24	12	22.12
				50	0	22.07
	1910	26640		1	0	23.08
				1	49	22.98
				24	12	22.06
				50	0	22.15
16QAM	1855	26090	10	1	0	21.82
				1	49	21.77
				24	12	21.08
				50	0	21.04
	1882.5	26365		1	0	21.98
				1	49	21.75
				24	12	21.14
				50	0	21.11
	1910	26640		1	0	21.64
				1	49	21.80
				24	12	21.20
				50	0	21.15
64QAM	1855	26090	10	1	0	21.94
				1	49	21.79
				24	12	21.11
				50	0	21.00
	1882.5	26365		1	0	21.86
				1	49	21.67
				24	12	21.14
				50	0	20.97
	1910	26640		1	0	21.88
				1	49	21.57
				24	12	21.25
				50	0	21.13

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1857.5	26115	15	1	0	22.89
				1	74	22.90
				40	18	22.00
				75	0	22.03
	1882.5	26365		1	0	23.15
				1	74	23.17
				40	18	21.90
				75	0	21.90
	1907.5	26615		1	0	23.04
				1	74	22.94
				40	18	22.00
				75	0	21.93
16QAM	1857.5	26115	15	1	0	21.81
				1	74	21.67
				40	18	21.21
				75	0	21.00
	1882.5	26365		1	0	21.82
				1	74	21.78
				40	18	21.08
				75	0	20.98
	1907.5	26615		1	0	21.78
				1	74	21.86
				40	18	21.09
				75	0	21.10
64QAM	1857.5	26115	15	1	0	21.84
				1	74	21.85
				40	18	21.15
				75	0	21.04
	1882.5	26365		1	0	21.78
				1	74	21.76
				40	18	21.26
				75	0	21.12
	1907.5	26615		1	0	21.82
				1	74	21.78
				40	18	21.28
				75	0	20.83

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1860	26140	20	1	0	23.16
				1	99	23.16
				50	25	22.10
				100	0	22.07
	1882.5	26365		1	0	23.18
				1	99	23.18
				50	25	22.18
				100	0	22.17
	1905	26590		1	0	23.13
				1	99	23.13
				50	25	22.15
				100	0	22.17
16QAM	1860	26140	20	1	0	21.95
				1	99	21.93
				50	25	21.34
				100	0	21.20
	1882.5	26365		1	0	22.01
				1	99	22.01
				50	25	21.36
				100	0	21.26
	1905	26590		1	0	21.96
				1	99	21.94
				50	25	21.30
				100	0	21.17
64QAM	1860	26140	20	1	0	21.94
				1	99	21.89
				50	25	21.28
				100	0	21.16
	1882.5	26365		1	0	21.94
				1	99	21.94
				50	25	21.35
				100	0	21.21
	1905	26590		1	0	21.93
				1	99	21.87
				50	25	21.33
				100	0	21.13

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	
25	1850.7	26047	1.4	6	0	1.1	Fig.1	1.1	Fig.2	1.1	Fig.3
	1882.5	26365		6	0	1.1	Fig.4	1.1	Fig.5	1.1	Fig.6
	1914.3	26683		6	0	1.1	Fig.7	1.1	Fig.8	1.1	Fig.9
	1851.5	26055	3	15	0	2.7	Fig.10	2.7	Fig.11	2.7	Fig.12
	1882.5	26365		15	0	2.7	Fig.13	2.7	Fig.14	2.7	Fig.15
	1913.5	26675		15	0	2.7	Fig.16	2.7	Fig.17	2.7	Fig.18
	1852.5	26065	5	25	0	4.5	Fig.19	4.5	Fig.20	4.5	Fig.21
	1882.5	26365		25	0	4.5	Fig.22	4.5	Fig.23	4.5	Fig.24
	1912.5	26665		25	0	4.5	Fig.25	4.5	Fig.26	4.5	Fig.27
	1855	26090	10	50	0	9.0	Fig.28	9.0	Fig.29	9.0	Fig.30
	1882.5	26365		50	0	9.0	Fig.31	9.0	Fig.32	9.0	Fig.33
	1910	26640		50	0	9.0	Fig.34	9.0	Fig.35	9.0	Fig.36
	1857.5	26115	15	75	0	13.4	Fig.37	13.3	Fig.38	13.4	Fig.39
	1882.5	26365		75	0	13.4	Fig.40	13.3	Fig.41	13.4	Fig.42
	1907.5	26615		75	0	13.4	Fig.43	13.3	Fig.44	13.3	Fig.45
	1860	26140	20	100	0	17.8	Fig.46	17.8	Fig.47	17.8	Fig.48
	1882.5	26365		100	0	17.8	Fig.49	17.8	Fig.50	17.8	Fig.51
	1905	26590		100	0	17.8	Fig.52	17.7	Fig.53	17.8	Fig.54

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
25	1850.7	26047	1.4	6	0	1.3	Fig.1	1.3	Fig.2	1.3	Fig.3
	1882.5	26365		6	0	1.3	Fig.4	1.3	Fig.5	1.2	Fig.6
	1914.3	26683		6	0	1.3	Fig.7	1.3	Fig.8	1.2	Fig.9
	1851.5	26055	3	15	0	3.0	Fig.10	3.0	Fig.11	2.9	Fig.12
	1882.5	26365		15	0	3.0	Fig.13	2.9	Fig.14	3.0	Fig.15
	1913.5	26675		15	0	3.0	Fig.16	3.0	Fig.17	2.9	Fig.18
	1852.5	26065	5	25	0	4.9	Fig.19	4.9	Fig.20	4.9	Fig.21
	1882.5	26365		25	0	4.9	Fig.22	4.9	Fig.23	4.9	Fig.24
	1912.5	26665		25	0	4.9	Fig.25	4.8	Fig.26	4.9	Fig.27
	1855	26090	10	50	0	9.9	Fig.28	9.8	Fig.29	9.9	Fig.30
	1882.5	26365		50	0	9.7	Fig.31	9.9	Fig.32	9.8	Fig.33
	1910	26640		50	0	10.0	Fig.34	9.9	Fig.35	9.7	Fig.36
	1857.5	26115	15	75	0	14.0	Fig.37	14.2	Fig.38	14.2	Fig.39
	1882.5	26365		75	0	14.4	Fig.40	14.0	Fig.41	14.2	Fig.42
	1907.5	26615		75	0	14.1	Fig.43	13.9	Fig.44	14.3	Fig.45
	1860	26140	20	100	0	19.1	Fig.46	19.0	Fig.47	18.8	Fig.48
	1882.5	26365		100	0	18.9	Fig.49	19.0	Fig.50	18.7	Fig.51
	1905	26590		100	0	19.0	Fig.52	18.9	Fig.53	18.9	Fig.54

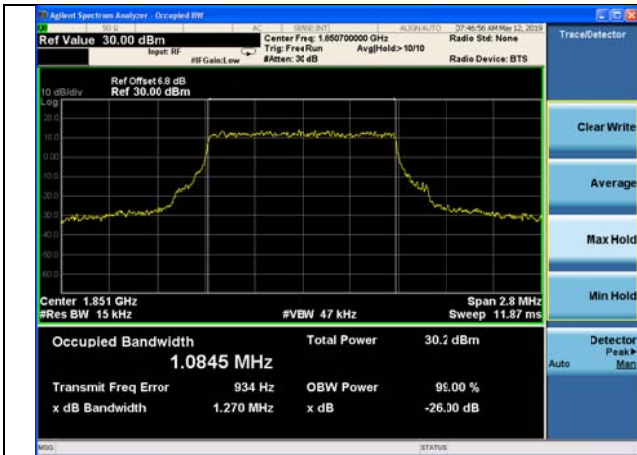


Fig.1

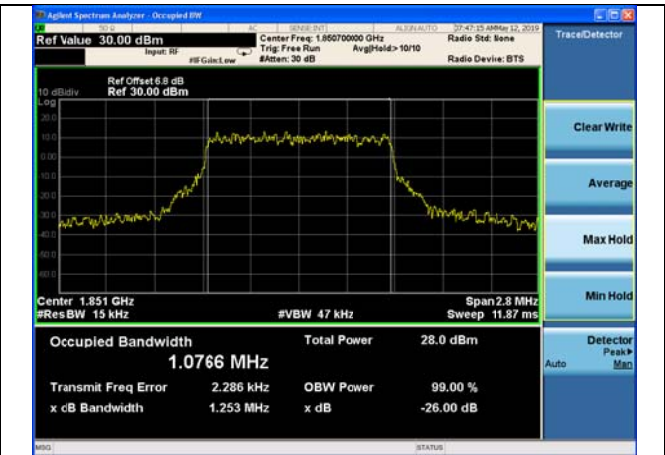


Fig.2

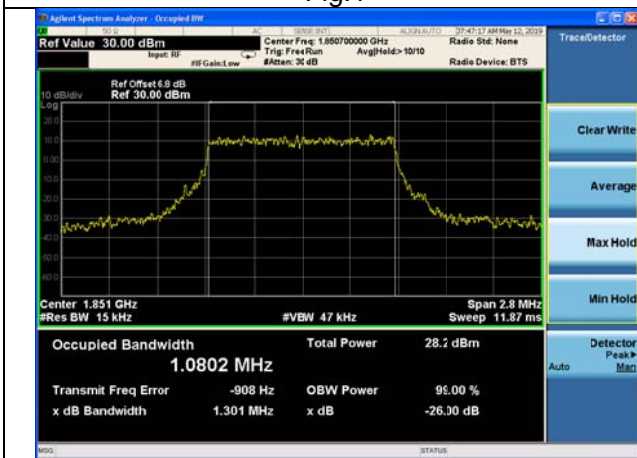


Fig.3

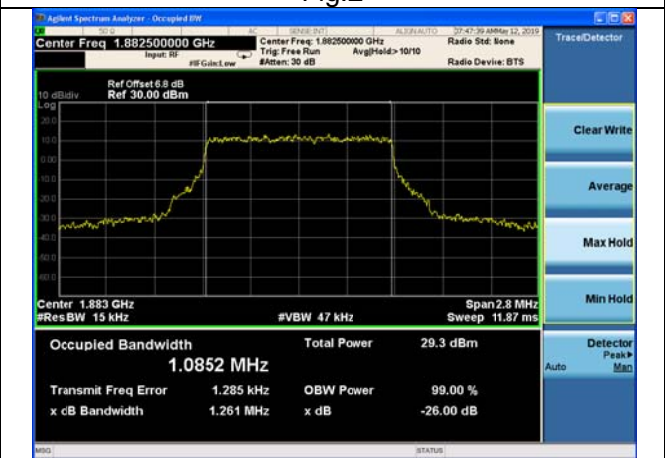


Fig.4

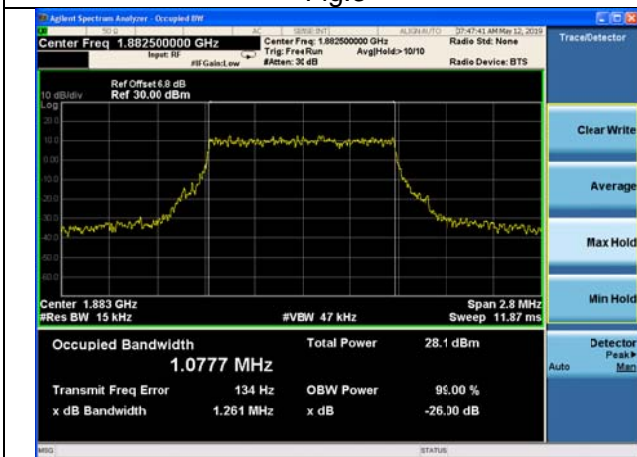


Fig.5

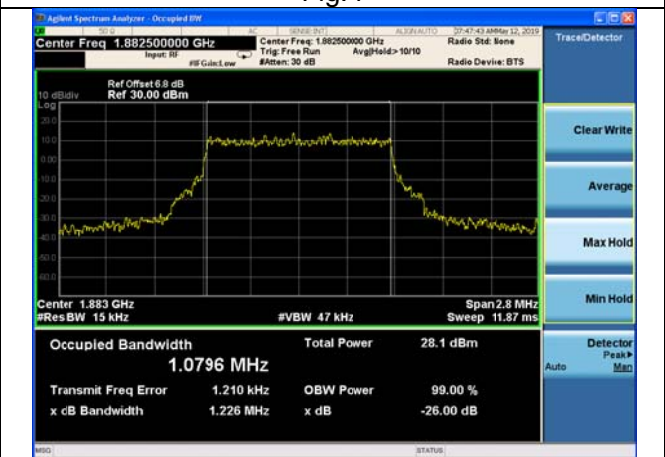


Fig.6

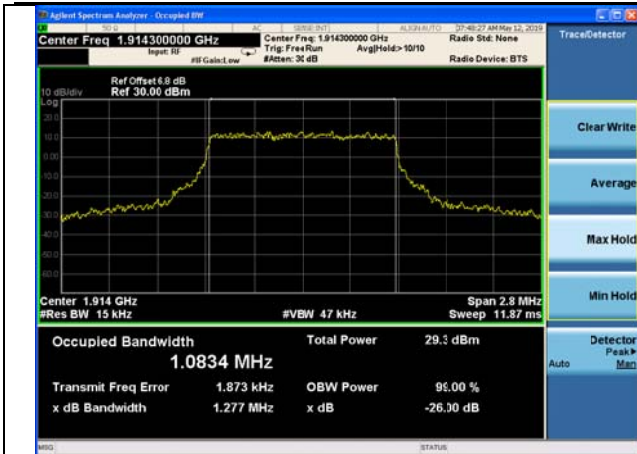


Fig.7

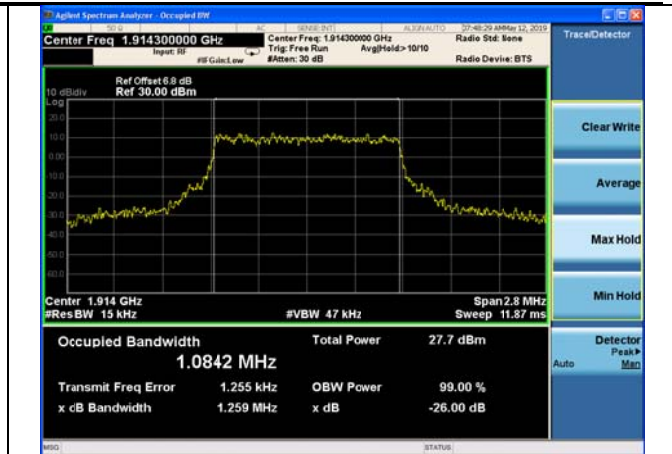


Fig.8



Fig.9



Fig.10

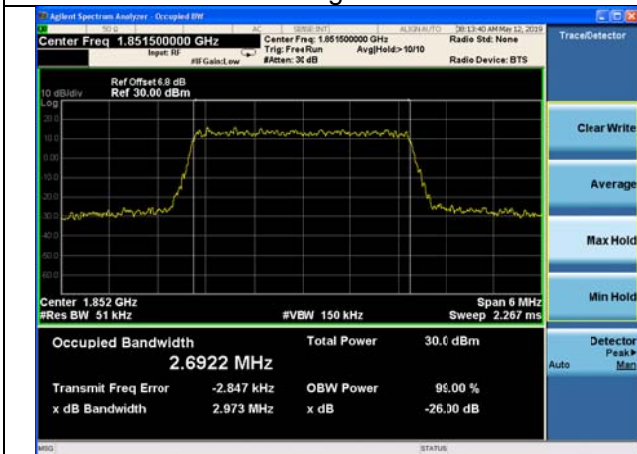


Fig.11

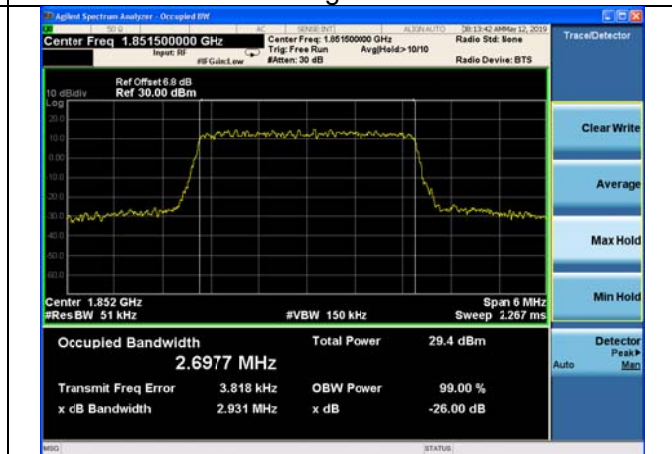


Fig.12

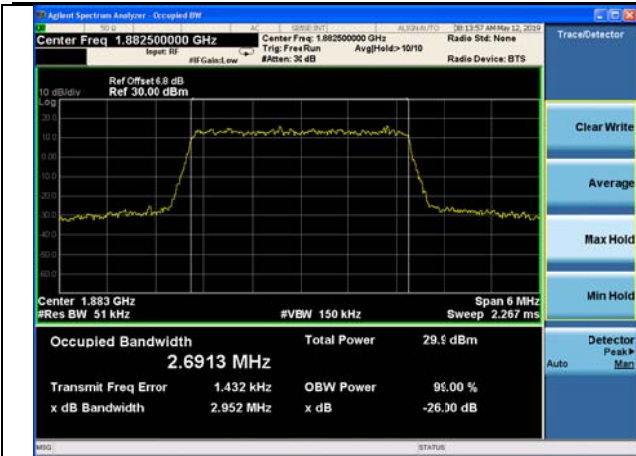


Fig.13

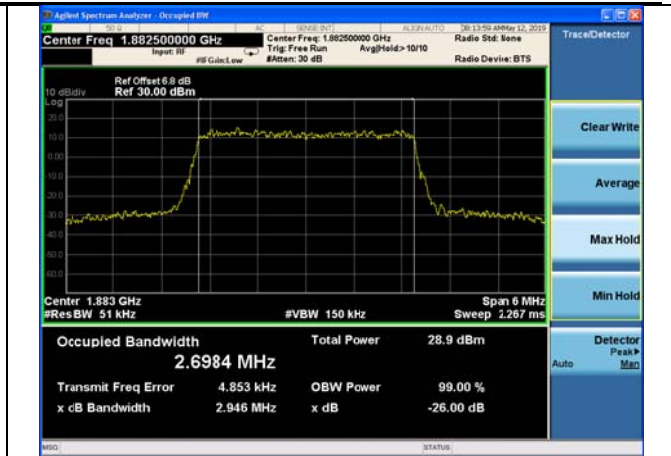


Fig.14

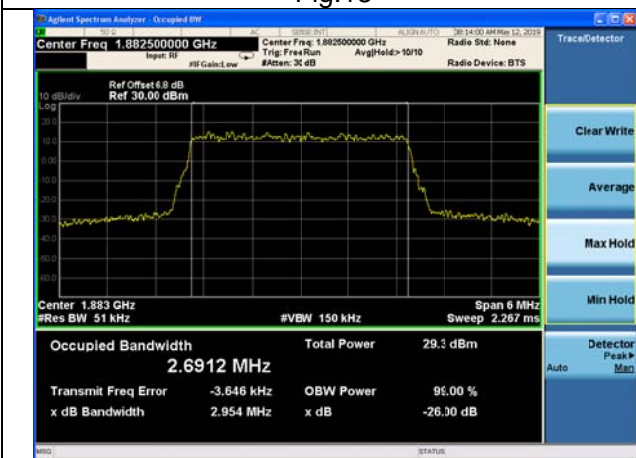


Fig.15

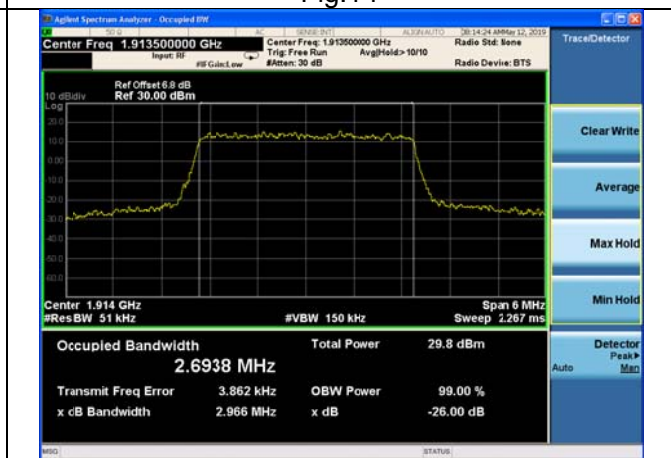


Fig.16

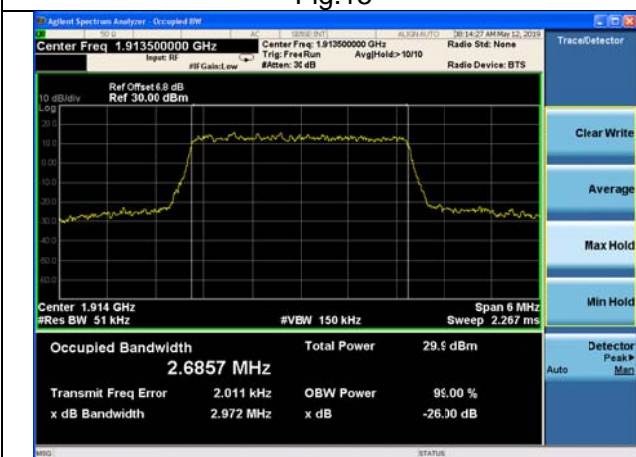


Fig.17

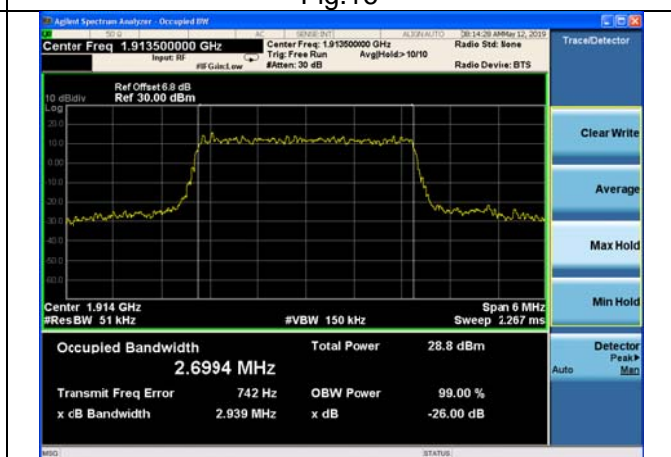


Fig.18

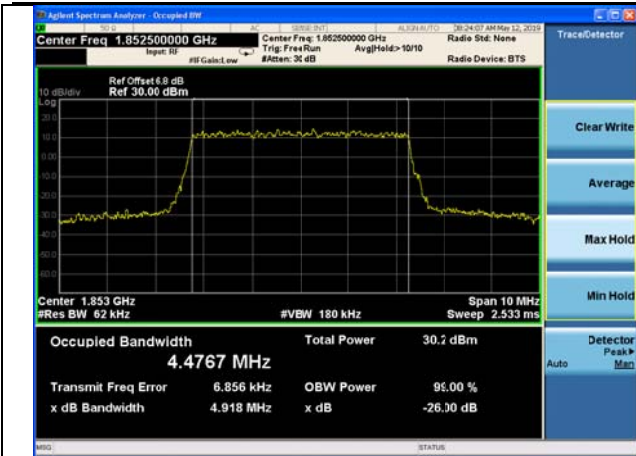


Fig.19

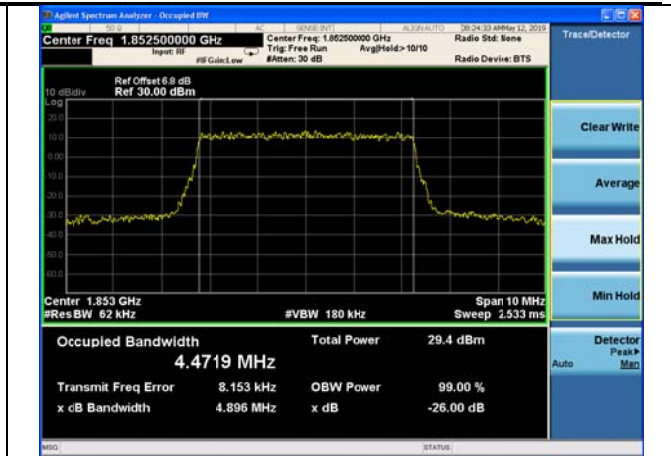


Fig.20

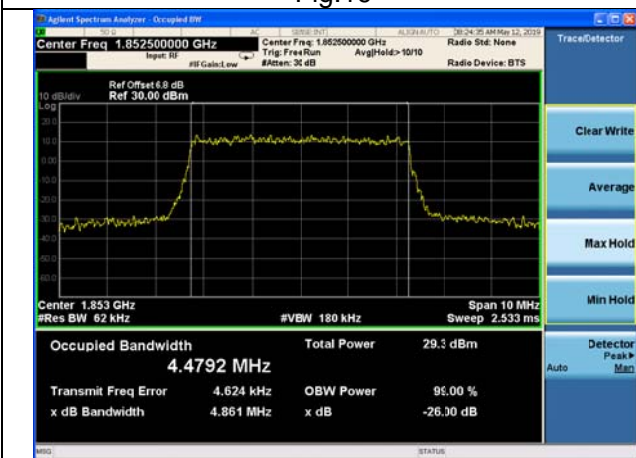


Fig.21

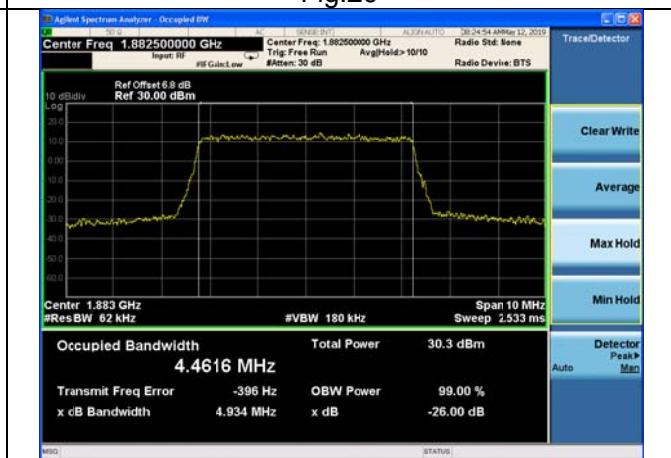


Fig.22

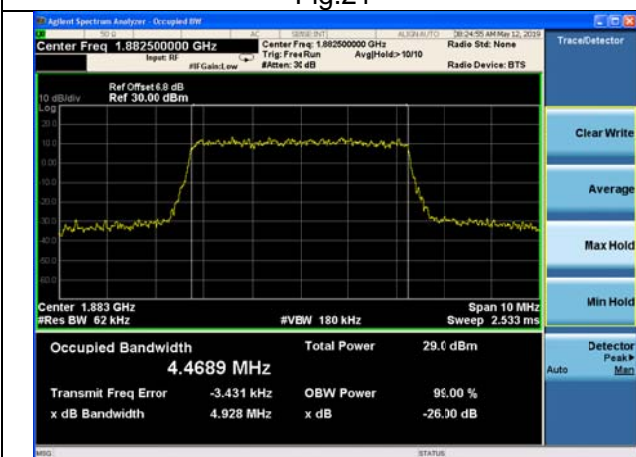


Fig.23

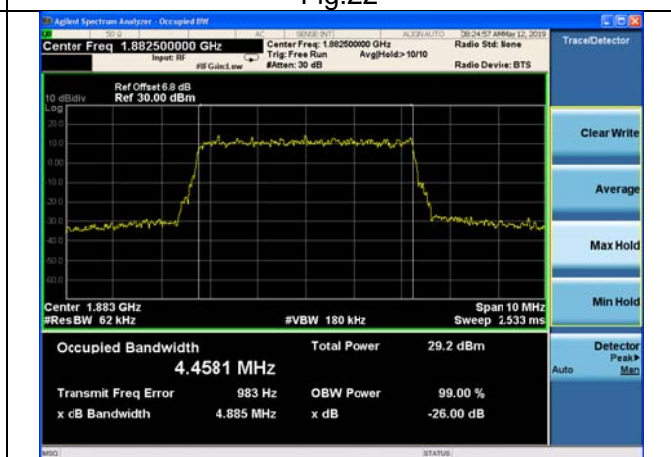


Fig.24

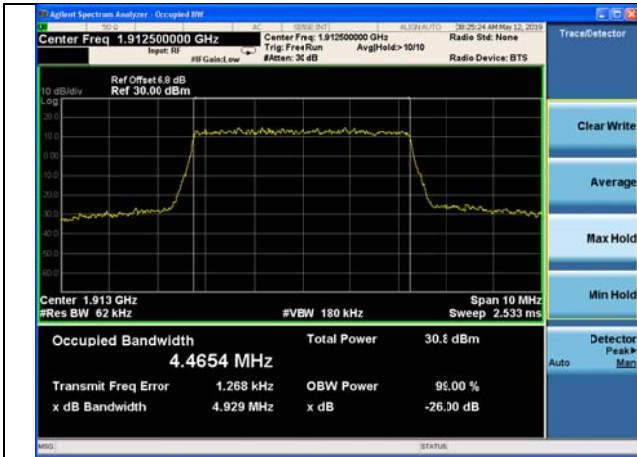


Fig.25

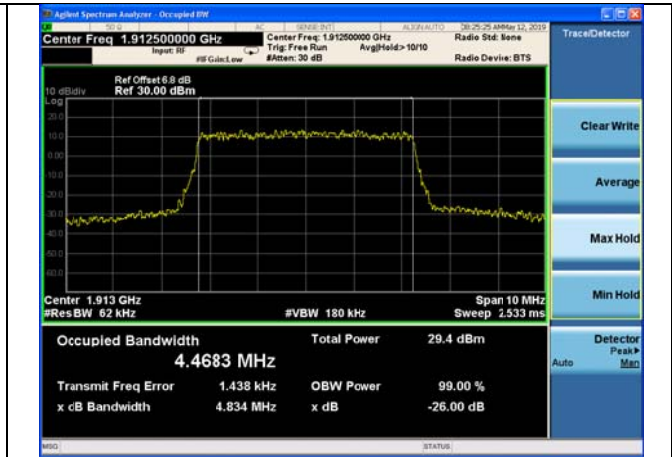


Fig.26

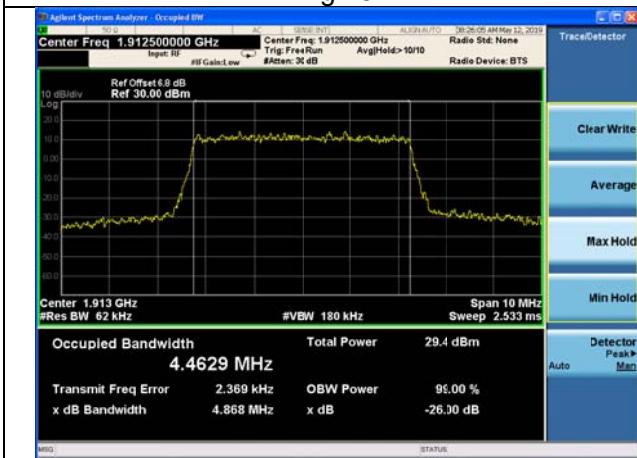


Fig.27

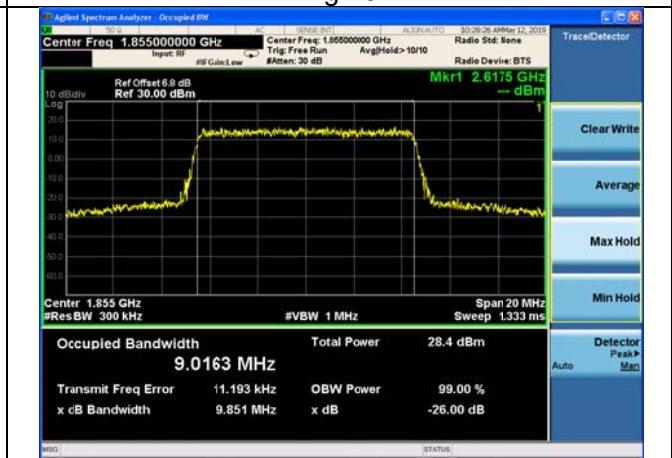


Fig.28

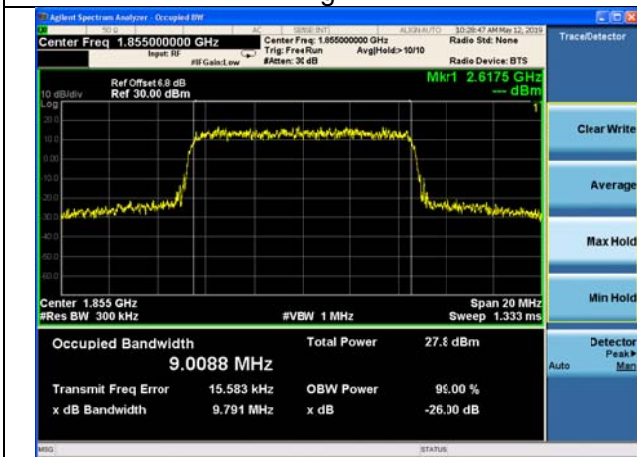


Fig.29

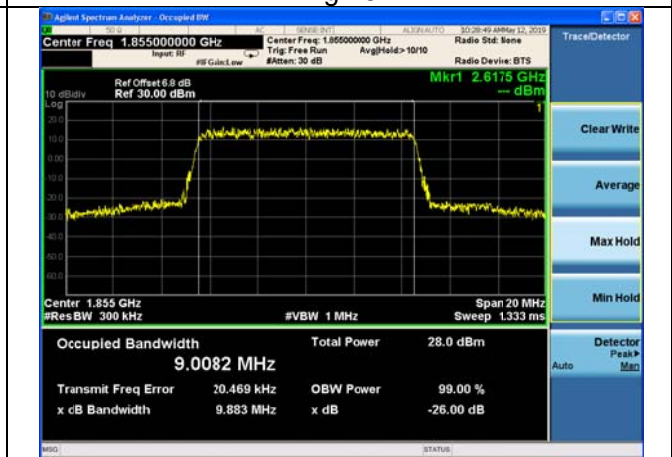


Fig.30

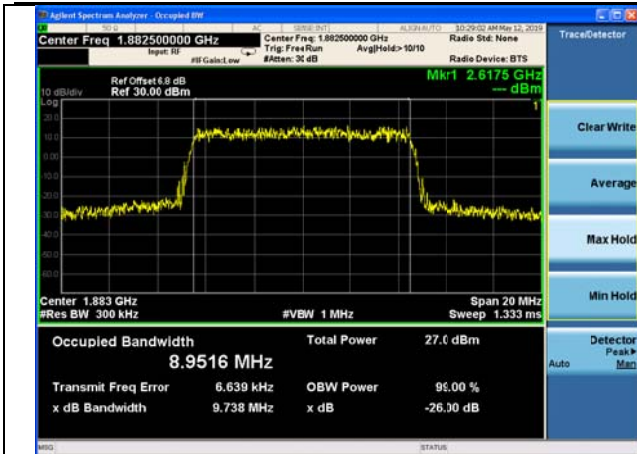


Fig.31

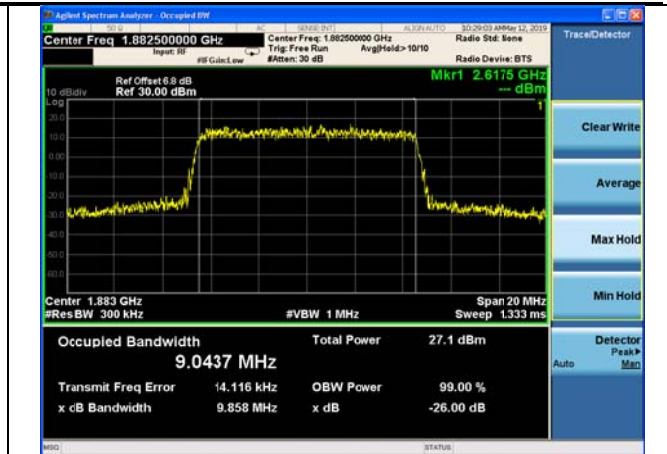


Fig.32

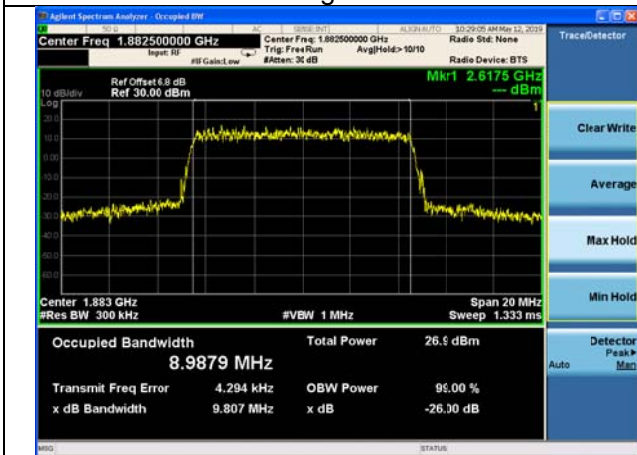


Fig.33

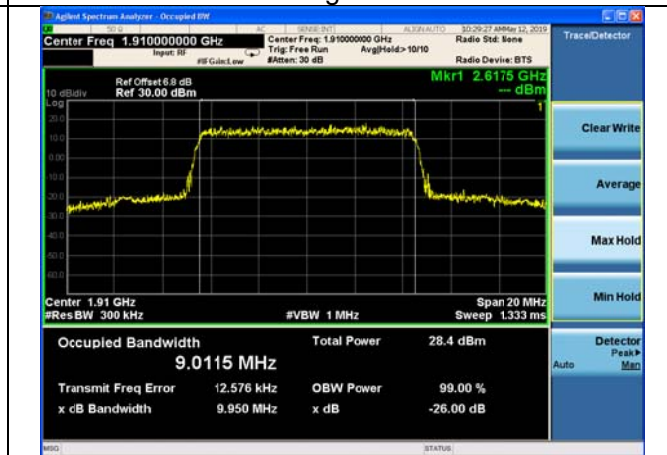


Fig.34

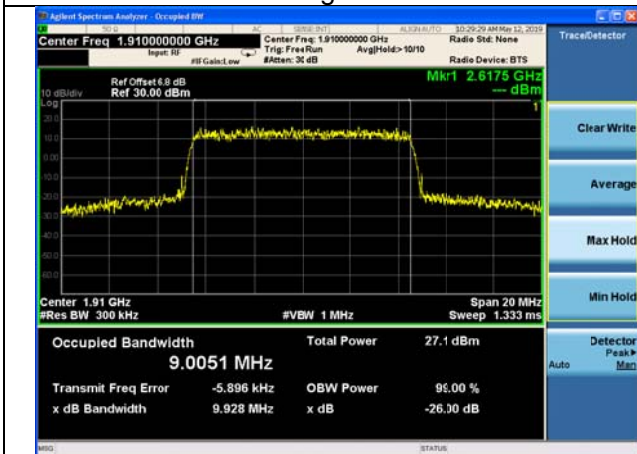


Fig.35

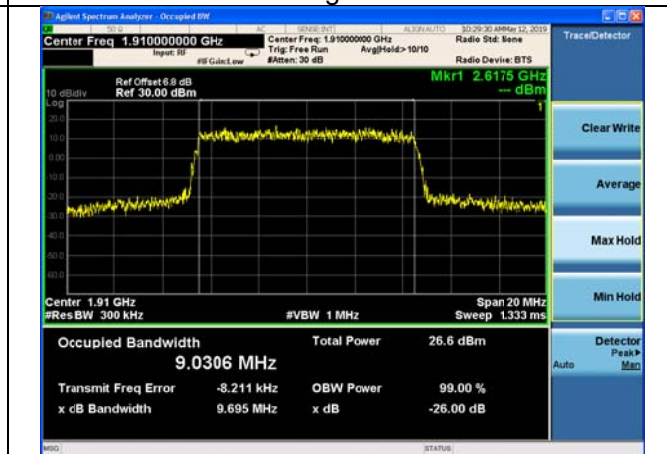


Fig.36

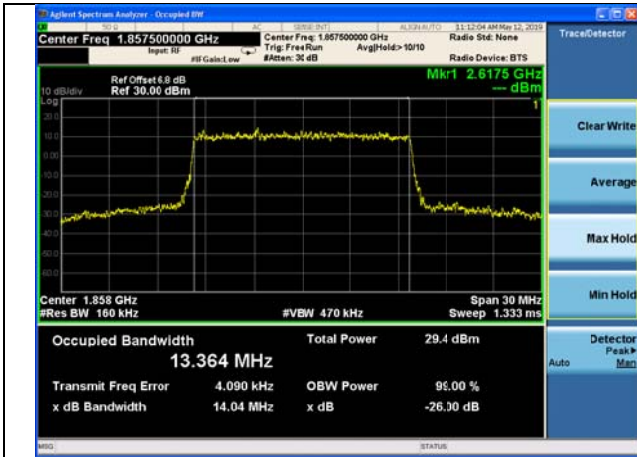


Fig.37

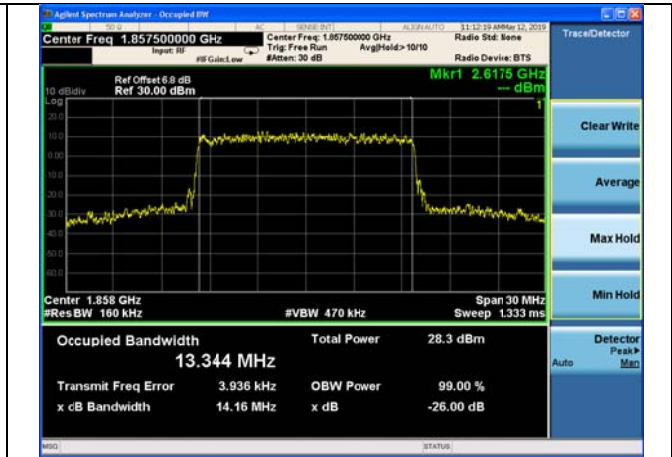


Fig.38

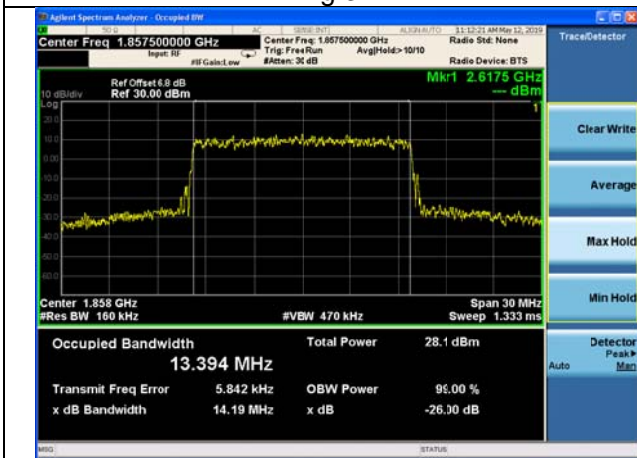


Fig.39

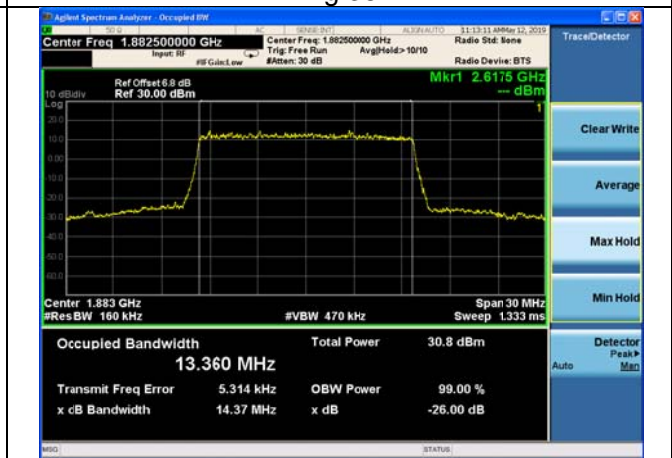


Fig.40

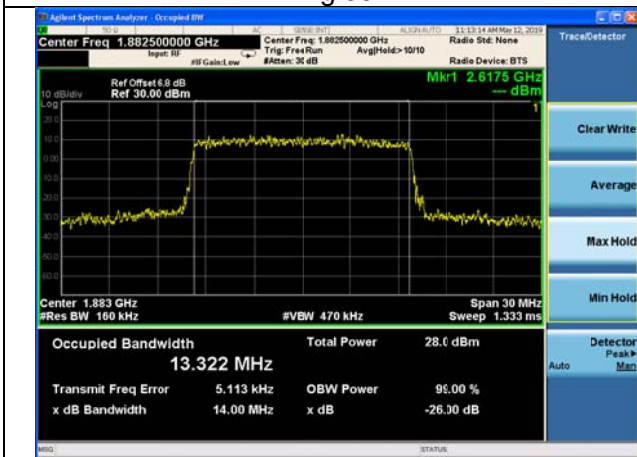


Fig.41

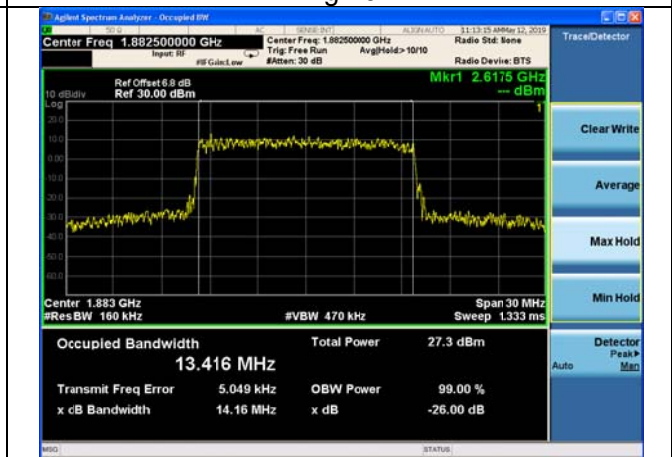


Fig.42

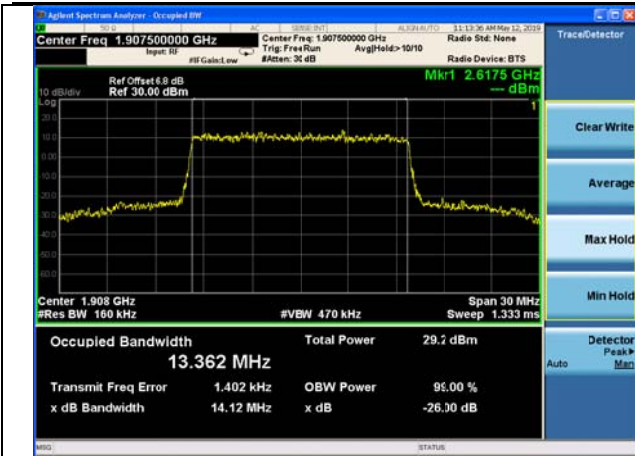


Fig.43

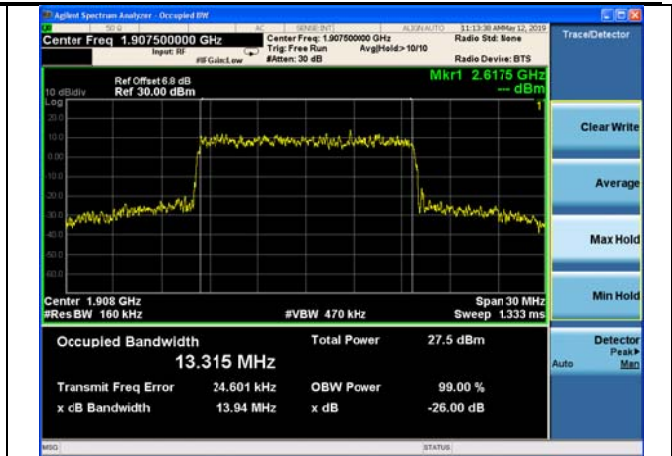


Fig.44

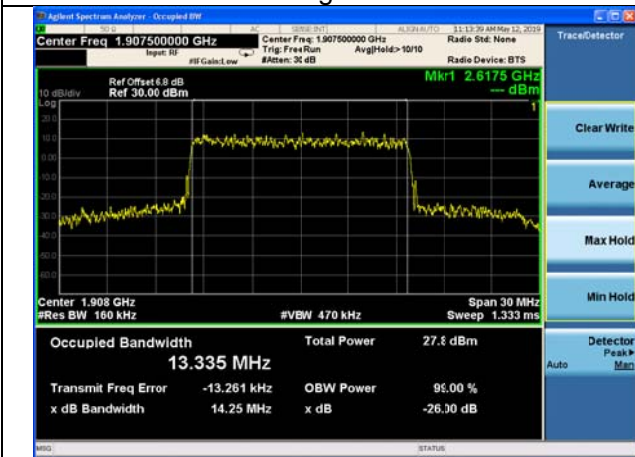


Fig.45

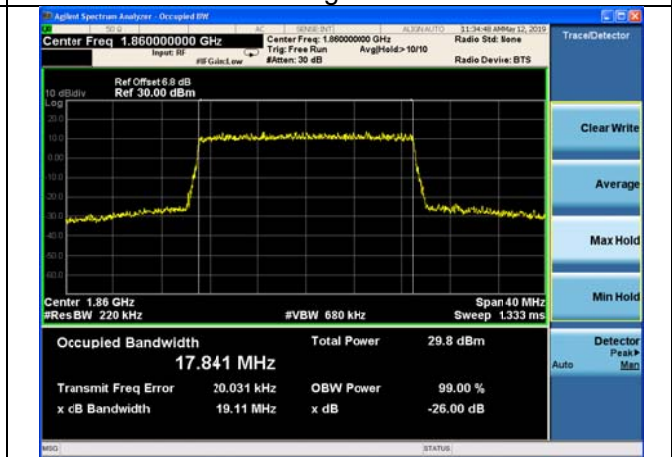


Fig.46

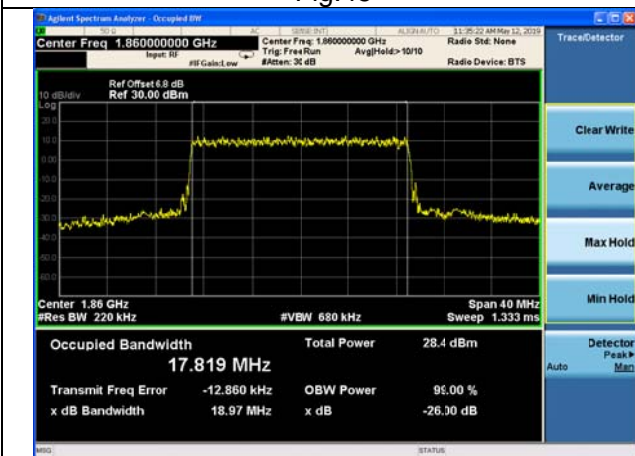


Fig.47

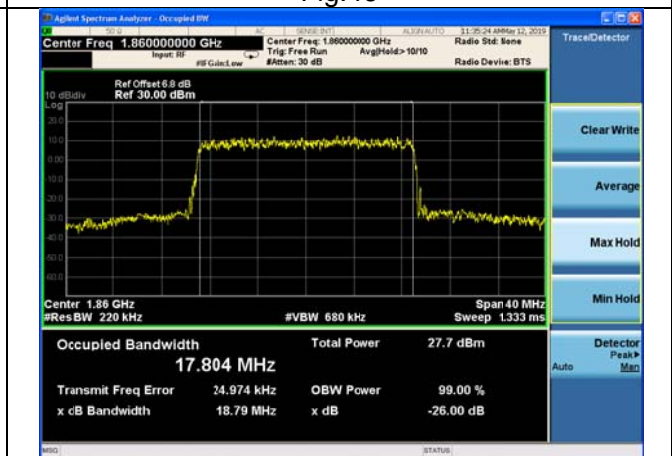


Fig.48



Fig.49

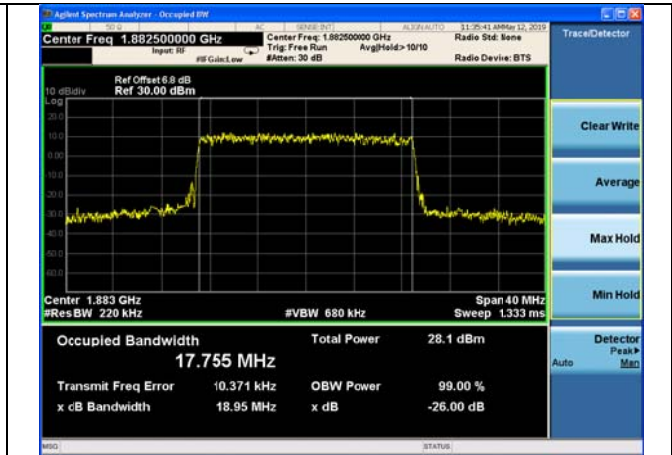


Fig.50

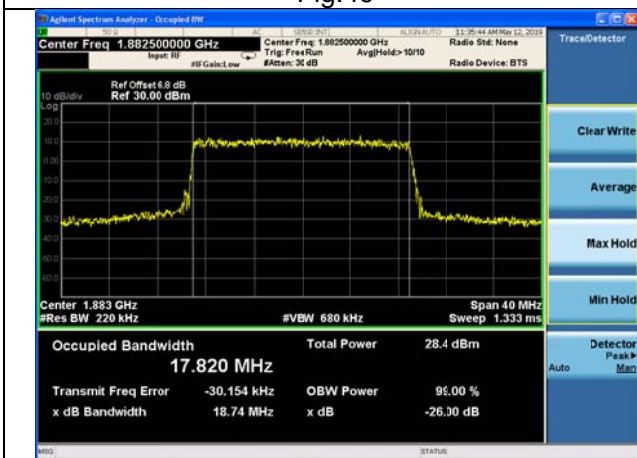


Fig.51

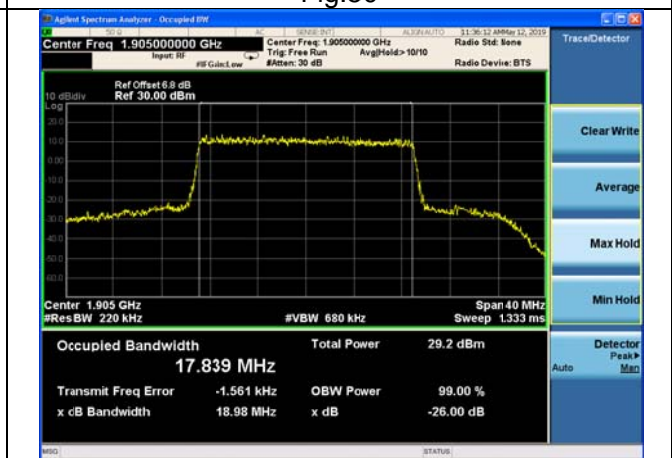


Fig.52

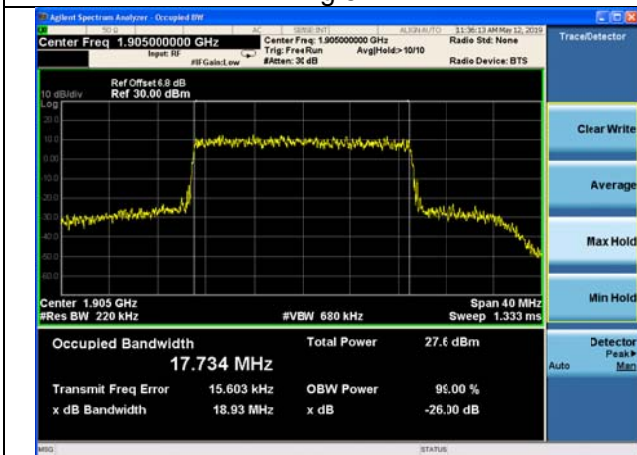


Fig.53

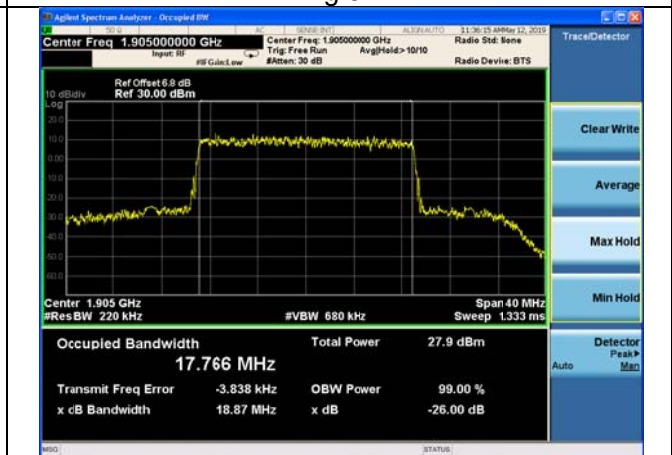


Fig.54

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
25	1882.5	26365	1.4	1	0	Fig.1	Fig.2	Fig.3
			3	1	0	Fig.4	Fig.5	Fig.6
			5	1	0	Fig.7	Fig.8	Fig.9
			10	1	0	Fig.10	Fig.11	Fig.12
			15	1	0	Fig.13	Fig.14	Fig.15
			20	1	0	Fig.16	Fig.17	Fig.18

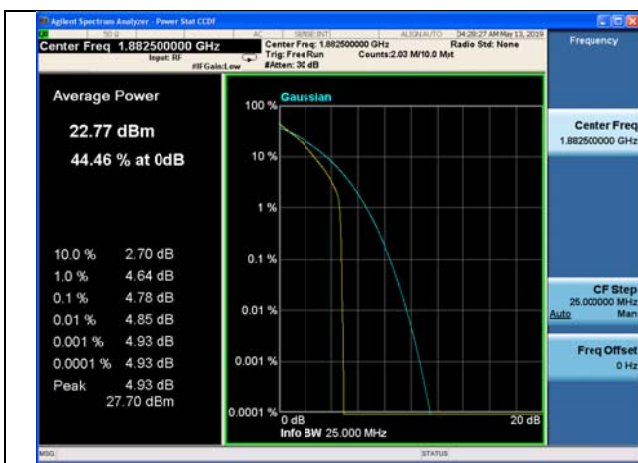


Fig.1

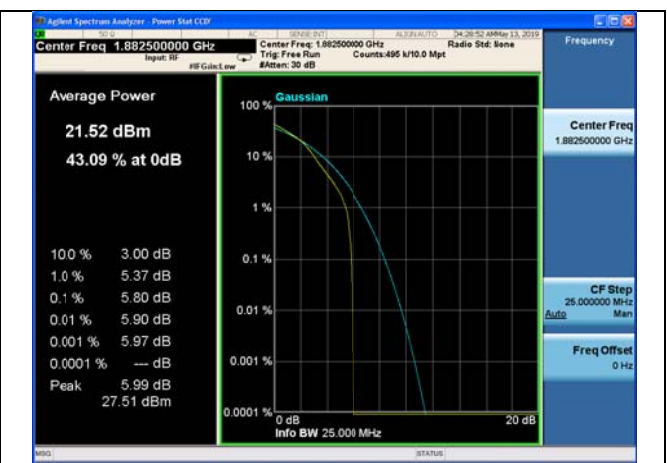


Fig.2

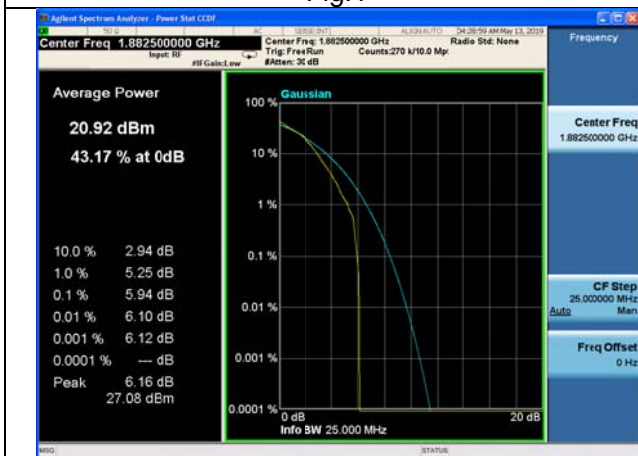


Fig.3

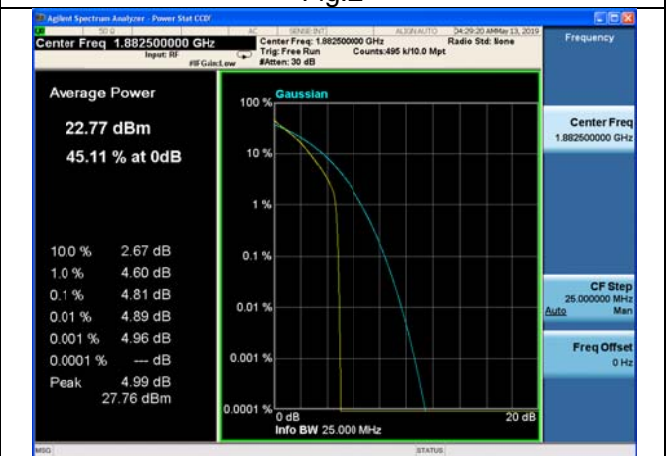


Fig.4

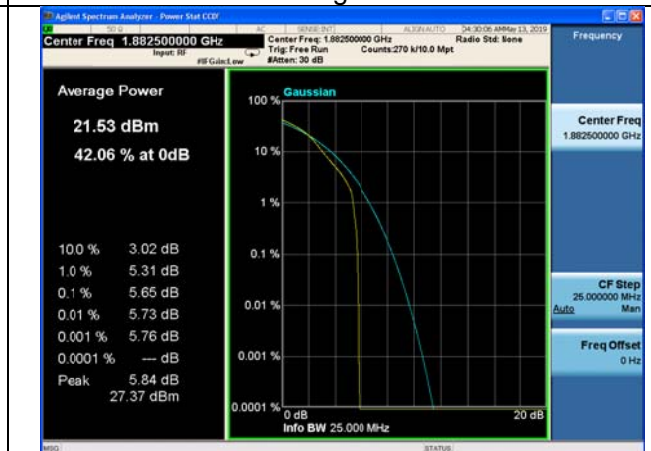
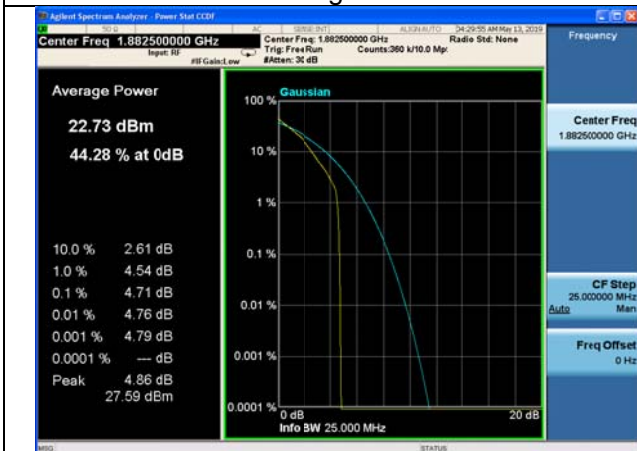




Fig.11



Fig.12



Fig.13



Fig.14

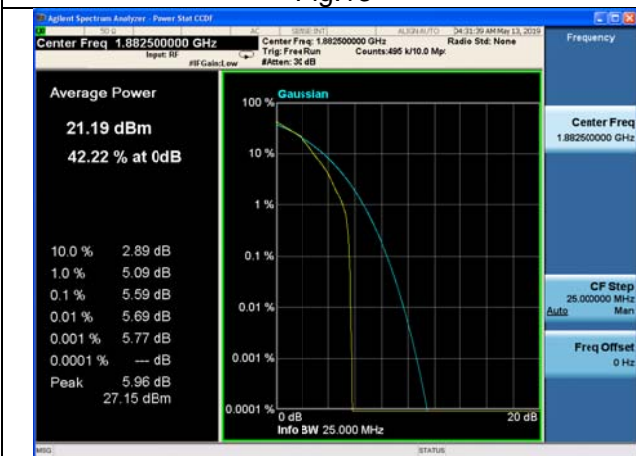


Fig.15



Fig.16



Fig.17



Fig.18

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
	1882.5	26365	20	1	0	Fig.2
	1905	26590	20	1	0	Fig.3

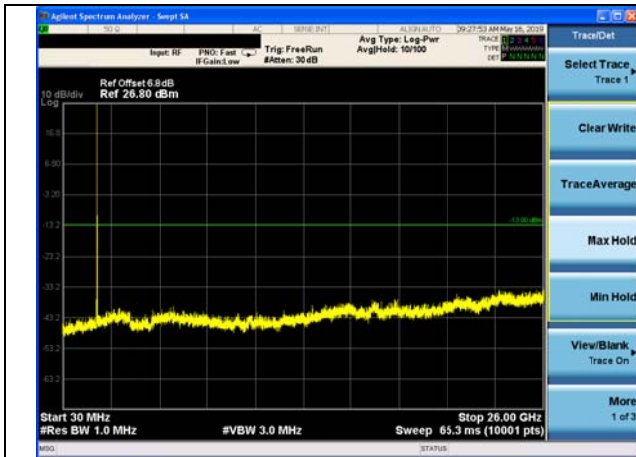


Fig.1

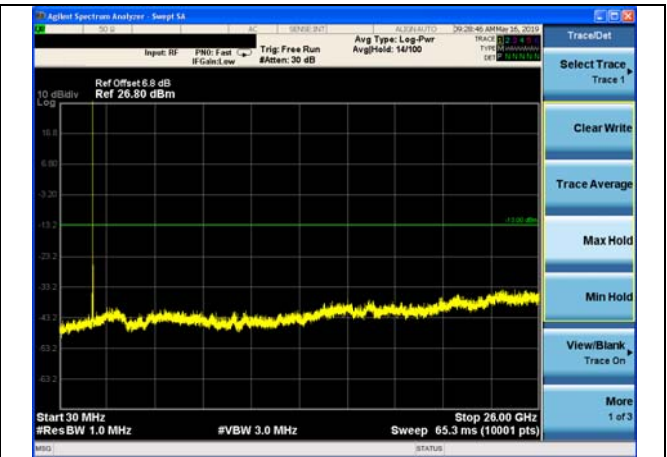


Fig.2

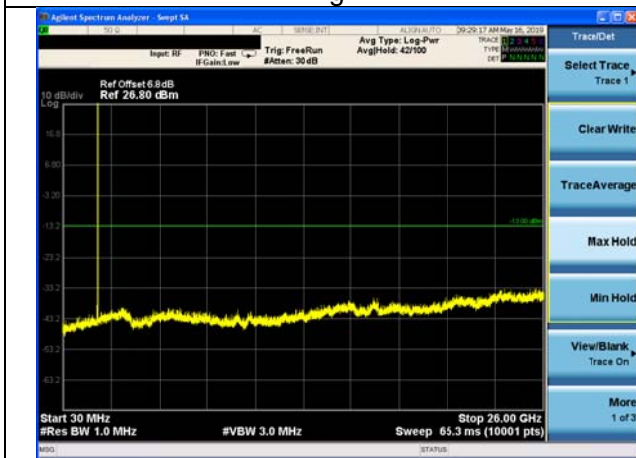


Fig3

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
	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
	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	

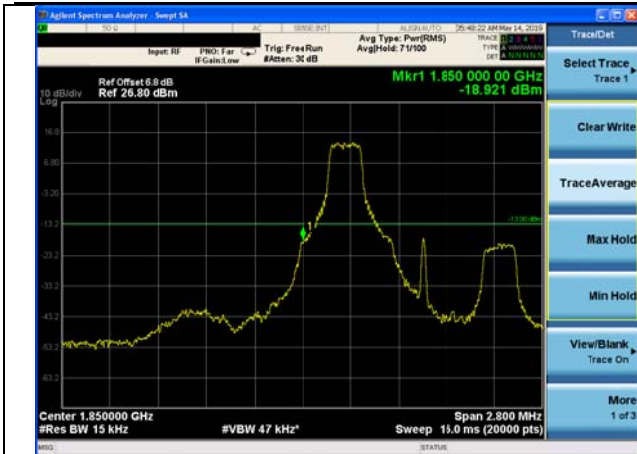


Fig.1



Fig.2

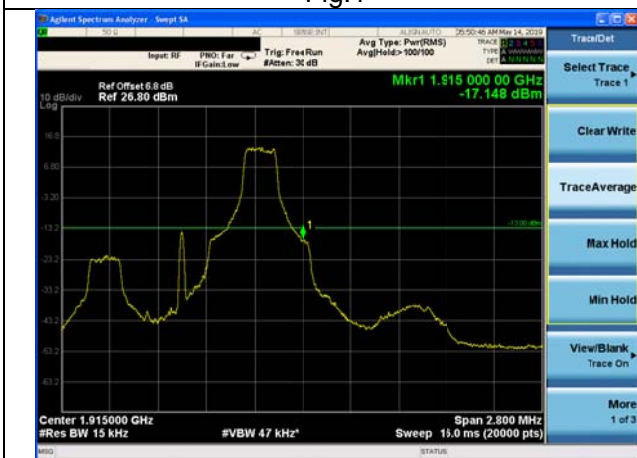


Fig.3



Fig.4

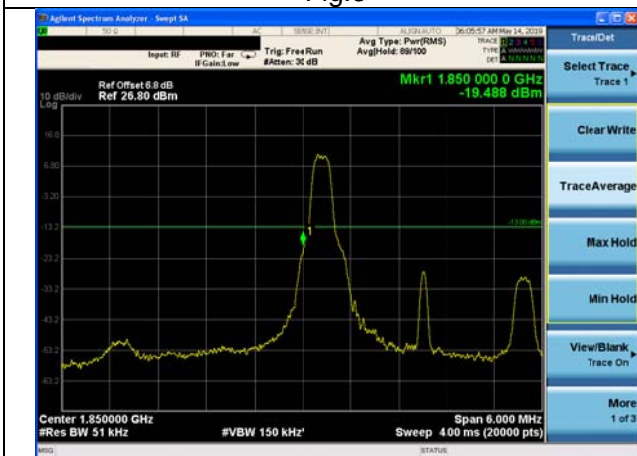


Fig.5

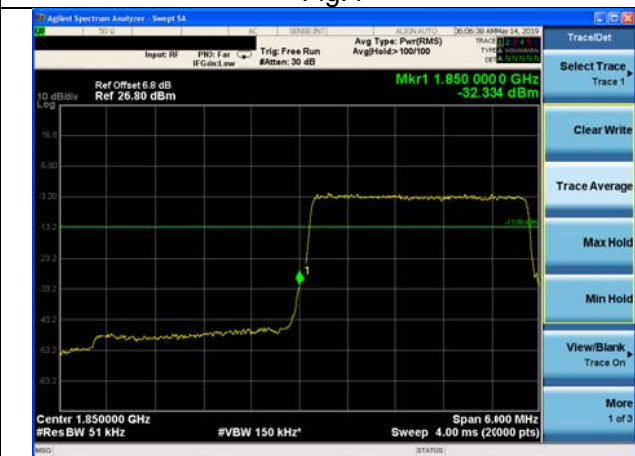


Fig.6

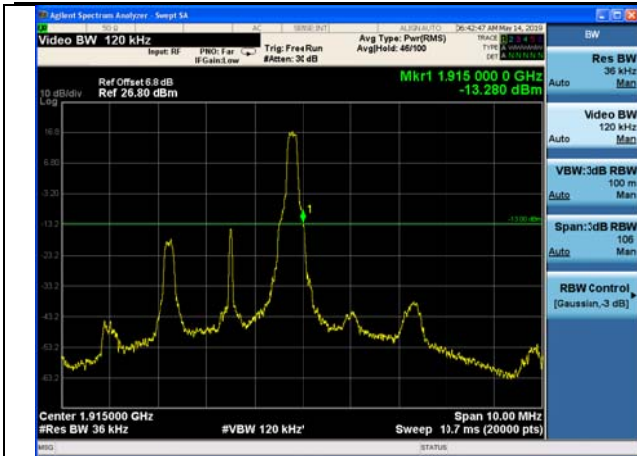


Fig.7

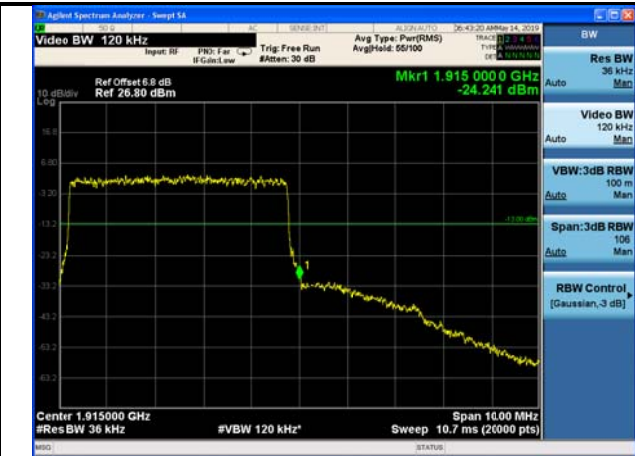


Fig.8

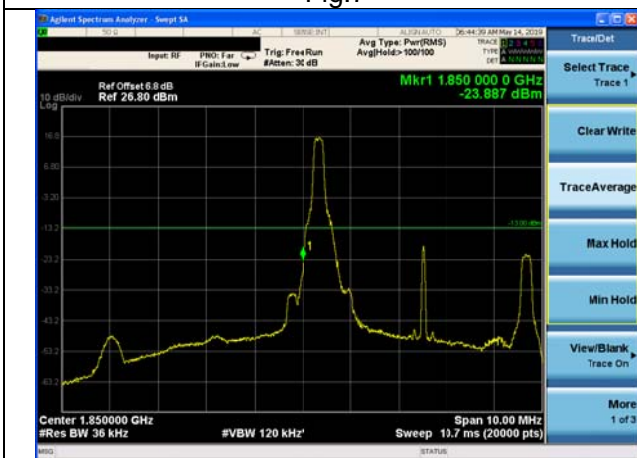


Fig.9

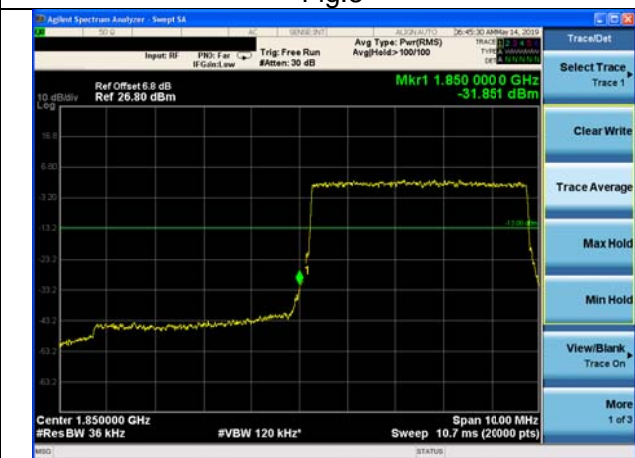


Fig.10

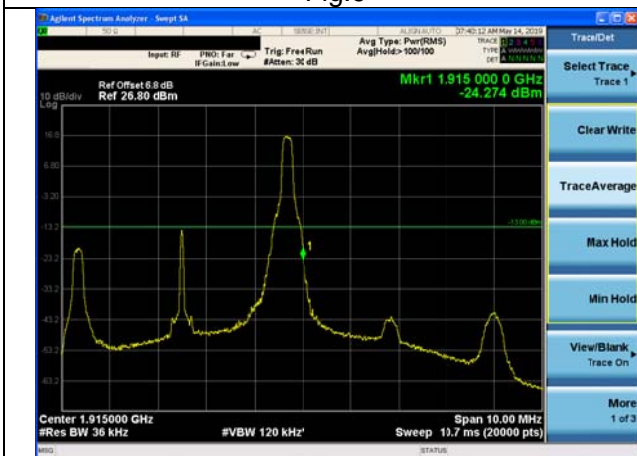


Fig.11



Fig.12

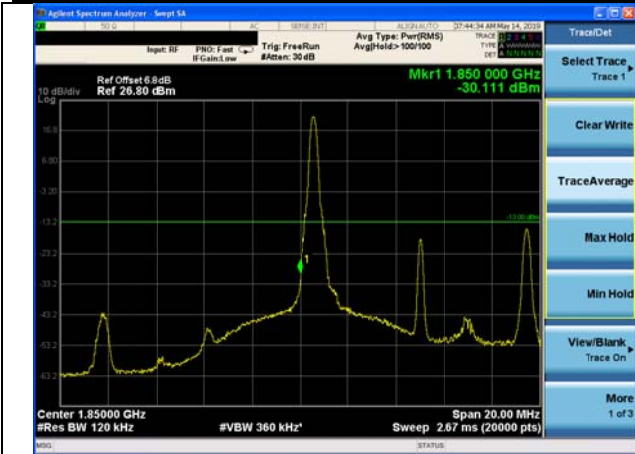


Fig.13



Fig.14

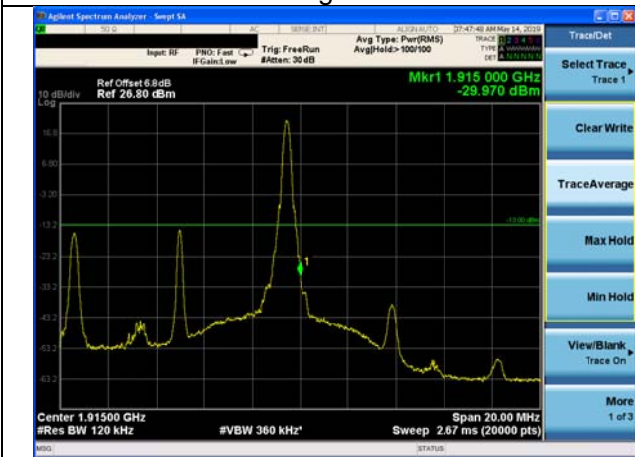


Fig.15



Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band25 Low Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.125	0.006	0.090	0.095	0.017	0.154
0	NV	0.143	0.093	0.006	0.036	0.102	0.101
+10	NV	0.086	0.043	0.073	0.079	0.086	0.074
+20	NV	0.042	0.017	0.141	0.053	0.076	0.084
+30	NV	0.033	0.025	0.117	0.033	0.007	0.017
+40	NV	0.125	0.053	0.065	0.107	0.066	0.094
+50	NV	0.066	0.076	0.042	0.053	0.089	0.075
+20	LV	0.046	0.044	0.030	0.011	0.008	0.056
+20	HV	0.060	0.084	0.052	0.062	0.036	0.103

Temperature(°C)	Voltage	Test Result (ppm) Band25 High Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.134	0.089	0.008	0.073	0.030	0.151
0	NV	0.051	0.096	0.125	0.119	0.138	0.126
+10	NV	0.097	0.107	0.074	0.079	0.073	0.038
+20	NV	0.016	0.090	0.069	0.106	0.113	0.111
+30	NV	0.125	0.017	0.127	0.046	0.023	0.156
+40	NV	0.028	0.037	0.141	0.070	0.012	0.053
+50	NV	0.085	0.045	0.053	0.078	0.033	0.086
+20	LV	0.070	0.046	0.047	0.095	0.104	0.151
+20	HV	0.018	0.069	0.145	0.043	0.006	0.007