

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 2

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1850.7	18607	1.4	1	0	20.00
				1	3	20.00
				1	5	20.00
				3	0	20.20
				3	1	20.20
				3	3	20.20
				6	0	19.50
	1880	18900		1	0	19.70
				1	3	19.70
				1	5	19.70
				3	0	19.70
				3	1	19.70
				3	3	19.70
				6	0	19.00
	1909.3	19193		1	0	19.10
				1	3	19.10
				1	5	19.10
				3	0	19.40
				3	1	19.50
				3	3	19.30
				6	0	18.70
16QAM	1850.7	18607	1	0	19.30	
			1	3	19.30	
			1	5	19.30	
			3	0	19.20	
			3	1	19.20	
			3	3	19.10	
			6	0	18.50	
	1880	18900	1	0	19.20	

				1	3	19.20	
				1	5	19.20	
				3	0	18.80	
				3	1	18.80	
				3	3	18.80	
				6	0	18.10	
	1909.3	19193			1	0	18.70
					1	3	18.80
					1	5	18.80
					3	0	18.30
					3	1	18.40
					3	3	18.40
					6	0	17.70

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1850.7	18607	1.4	1	0	18.50
				1	3	18.50
				1	5	18.50
				3	0	18.50
				3	1	18.50
				3	3	18.50
				6	0	18.50
	1880	18900		1	0	18.10
				1	3	18.20
				1	5	18.10
				3	0	18.10
				3	1	18.10
				3	3	18.10
				6	0	18.10
	1909.3	19193		1	0	17.70
				1	3	17.70
				1	5	17.70
				3	0	17.70
				3	1	17.70
				3	3	17.70
				6	0	17.70

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1851.5	18615	3	1	0	20.00
				1	8	19.90
				1	14	19.90
				8	0	19.30
				8	4	19.30
				8	7	19.30
				15	0	19.30
	1880	18900		1	0	19.70
				1	8	19.70
				1	14	19.60
				8	0	18.90
				8	4	18.90
				8	7	18.90
				15	0	18.80
	1908.5	19185		1	0	19.10
				1	8	19.10
				1	14	19.20
				8	0	18.40
				8	4	18.40
				8	7	18.40
				15	0	18.30
16QAM	1851.5	18615	1	0	19.70	
			1	8	19.70	
			1	14	19.70	
			8	0	18.70	
			8	4	18.70	
			8	7	18.70	
			15	0	18.60	
	1880	18900	1	0	19.20	
			1	8	19.20	
			1	14	19.20	

				8	0	18.00
				8	4	18.00
				8	7	18.00
				15	0	17.90
				1	0	18.40
				1	8	18.70
				1	14	18.70
	1908.5	19185		8	0	17.60
				8	4	17.70
				8	7	17.70
				15	0	17.50

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1851.5	18615	3	1	0	18.50
				1	8	18.40
				1	14	18.50
				8	0	18.60
				8	4	18.30
				8	7	18.30
				15	0	18.50
	1880	18900		1	0	17.90
				1	8	17.90
				1	14	17.90
				8	0	17.90
				8	4	17.90
				8	7	17.90
				15	0	17.90
	1908.5	19185		1	0	17.50
				1	8	17.50
				1	14	17.50
				8	0	17.50
				8	4	17.50
				8	7	17.50
				15	0	17.50

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1852.5	18625	5	1	0	19.80
				1	12	19.40
				1	24	19.60
				12	0	18.80
				12	7	18.80
				12	13	18.70
				25	0	18.50
	1880	18900		1	0	19.90
				1	12	19.70
				1	24	19.70
				12	0	18.90
				12	7	18.90
				12	13	18.90
				25	0	18.80
	1907.5	19175		1	0	19.00
				1	12	19.10
				1	24	19.10
				12	0	18.30
				12	7	18.40
				12	13	18.40
				25	0	18.30
16QAM	1852.5	18625	1	0	19.10	
			1	12	19.10	
			1	24	19.00	
			12	0	17.80	
			12	7	17.80	
			12	13	17.90	
			25	0	17.80	
	1880	18900	1	0	19.30	
			1	12	19.10	
			1	24	19.10	

			12	0	18.00	
			12	7	17.90	
			12	13	17.90	
			25	0	17.90	
	1907.5	19175		1	0	17.90
				1	12	18.20
				1	24	18.10
				12	0	17.30
				12	7	17.40
				12	13	17.40
				25	0	17.40

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1852.5	18625	5	1	0	20.00
				1	12	20.10
				1	24	20.10
				12	0	19.90
				12	7	20.00
				12	13	20.00
				25	0	19.90
	1880	18900		1	0	17.90
				1	12	17.90
				1	24	17.90
				12	0	17.90
				12	7	17.90
				12	13	17.90
				25	0	17.90
	1907.5	19175		1	0	17.40
				1	12	17.40
				1	24	17.40
				12	0	17.40
				12	7	17.40
				12	13	17.40
				25	0	17.40

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1855	18650	10	1	0	19.50	
				1	25	19.40	
				1	49	19.30	
				25	0	18.50	
				25	12	18.60	
				25	25	18.50	
				50	0	18.60	
	1880	18900		1	0	19.60	
				1	25	19.50	
				1	49	19.50	
				25	0	18.80	
				25	12	18.80	
				25	25	18.80	
				50	0	18.80	
	1905	19150		1	0	18.80	
				1	25	19.10	
				1	49	19.10	
				25	0	18.10	
				25	12	18.20	
				25	25	18.20	
				50	0	18.10	
	16QAM	1855		18650	1	0	19.60
					1	25	19.50
					1	49	19.40
					25	0	18.30
					25	12	18.20
					25	25	18.20
50			0		18.20		
1880		18900	1	0	19.30		
			1	25	19.20		
			1	49	19.20		

			25	0	18.00	
			25	12	17.90	
			25	25	17.90	
			50	0	17.90	
	1905	19150		1	0	18.10
				1	25	18.40
				1	49	18.40
				25	0	17.40
				25	12	17.50
				25	25	17.50
				50	0	17.30

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1855	18650	10	1	0	18.20
				1	25	18.20
				1	49	18.30
				25	0	18.30
				25	12	18.20
				25	25	18.30
				50	0	18.30
	1880	18900		1	0	17.90
				1	25	18.00
				1	49	18.00
				25	0	17.90
				25	12	18.00
				25	25	17.90
				50	0	18.00
	1905	19150		1	0	17.30
				1	25	17.30
				1	49	17.30
				25	0	17.30
				25	12	17.30
				25	25	17.30
				50	0	17.30

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1857.5	18675	15	1	0	19.30
				1	37	19.30
				1	74	19.50
				36	0	18.70
				36	29	18.70
				36	30	18.80
				75	0	18.70
	1880	18900		1	0	19.60
				1	37	19.50
				1	74	19.60
				36	0	18.90
				36	29	18.90
				36	30	18.80
				75	0	18.90
	1902.5	19125		1	0	18.90
				1	37	19.10
				1	74	19.10
				36	0	18.10
				36	29	18.20
				36	30	18.20
				75	0	18.20
16QAM	1857.5	18675	1	0	19.60	
			1	37	19.40	
			1	74	19.50	
			36	0	18.30	
			36	29	18.10	
			36	30	18.10	
			75	0	18.20	
	1880	18900	1	0	19.20	
			1	37	19.20	
			1	74	19.20	

			36	0	18.00	
			36	29	17.90	
			36	30	18.00	
			75	0	18.00	
	1902.5	19125		1	0	18.80
				1	37	18.70
				1	74	18.70
				36	0	17.10
				36	29	17.30
				36	30	17.20
				75	0	17.10

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1857.5	18675	15	1	0	18.20
				1	37	18.20
				1	74	18.20
				36	0	18.20
				36	29	18.20
				36	30	18.20
				75	0	18.20
	1880	18900		1	0	18.00
				1	37	18.00
				1	74	18.00
				36	0	18.00
				36	29	18.00
				36	30	18.10
				75	0	18.00
	1902.5	19125		1	0	17.20
				1	37	17.10
				1	74	17.10
				36	0	17.20
				36	29	17.20
				36	30	17.20
				75	0	17.20

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1860	18700	20	1	0	19.80
				1	49	19.50
				1	99	19.50
				50	0	18.50
				50	24	18.50
				50	50	18.60
				100	0	18.70
	1880	18900		1	0	19.90
				1	49	19.70
				1	99	19.60
				50	0	18.80
				50	24	18.70
				50	50	18.70
				100	0	18.80
	1900	19100		1	0	19.00
				1	49	18.70
				1	99	18.80
				50	0	18.00
				50	24	18.00
				50	50	18.00
				100	0	17.90
16QAM	1860	18700	1	0	19.10	
			1	49	19.00	
			1	99	18.70	
			50	0	17.70	
			50	24	17.50	
			50	50	17.80	
			100	0	17.70	
	1880	18900	1	0	19.10	
			1	49	19.10	
			1	99	18.80	

			50	0	17.90
			50	24	17.80
			50	50	17.80
			100	0	17.90
	1900	19100	1	0	18.80
			1	49	18.80
			1	99	18.80
			50	0	17.10
			50	24	17.20
			50	50	17.10
			100	0	17.10

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1860	18700	20	1	0	20.00
				1	49	19.80
				1	99	19.70
				50	0	20.00
				50	24	20.00
				50	50	20.00
				100	0	20.00
	1880	18900		1	0	17.90
				1	49	17.90
				1	99	17.90
				50	0	17.90
				50	24	17.90
				50	50	17.90
				100	0	17.90
	1900	19100		1	0	17.10
				1	49	17.10
				1	99	17.10
				50	0	17.10
				50	24	17.10
				50	50	17.10
				100	0	17.10

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	
2	1850.7	18607	1.4	6	0	1.124	Fig.1	1.131	Fig.2	1.124	Fig.3
	1880	18900		6	0	1.118	Fig.4	1.143	Fig.5	1.137	Fig.6
	1909.3	19193		6	0	1.118	Fig.7	1.112	Fig.8	1.118	Fig.9
	1851.5	18615	3	15	0	2.787	Fig.10	2.800	Fig.11	2.787	Fig.12
	1880	18900		15	0	2.787	Fig.13	2.800	Fig.14	2.800	Fig.15
	1908.5	19185		15	0	2.800	Fig.16	2.800	Fig.17	2.813	Fig.18
	1852.5	18625	5	25	0	4.515	Fig.19	4.515	Fig.20	4.515	Fig.21
	1880	18900		25	0	4.515	Fig.22	4.537	Fig.23	4.515	Fig.24
	1907.5	19175		25	0	4.515	Fig.25	4.515	Fig.26	4.515	Fig.27
	1855	18650	10	50	0	9.074	Fig.28	9.074	Fig.29	9.074	Fig.30
	1880	18900		50	0	9.074	Fig.31	9.074	Fig.32	9.074	Fig.33
	1905	19150		50	0	9.074	Fig.34	9.074	Fig.35	9.074	Fig.36
	1857.5	18675	15	75	0	13.546	Fig.37	13.546	Fig.38	13.546	Fig.39
	1880	18900		75	0	13.480	Fig.40	13.546	Fig.41	13.546	Fig.42
	1902.5	19125		75	0	13.480	Fig.43	13.480	Fig.44	13.480	Fig.45
	1860	18700	20	100	0	17.887	Fig.46	17.887	Fig.47	17.887	Fig.48
	1880	18900		100	0	17.887	Fig.49	17.974	Fig.50	17.974	Fig.51
	1900	19100		100	0	17.974	Fig.52	17.974	Fig.53	17.887	Fig.54

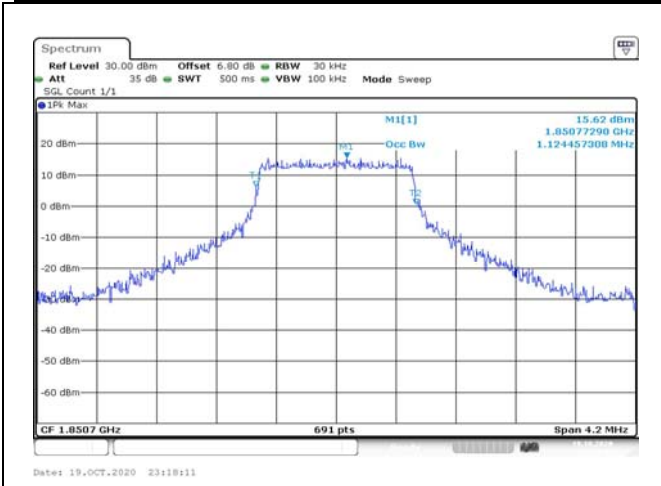


Fig.1

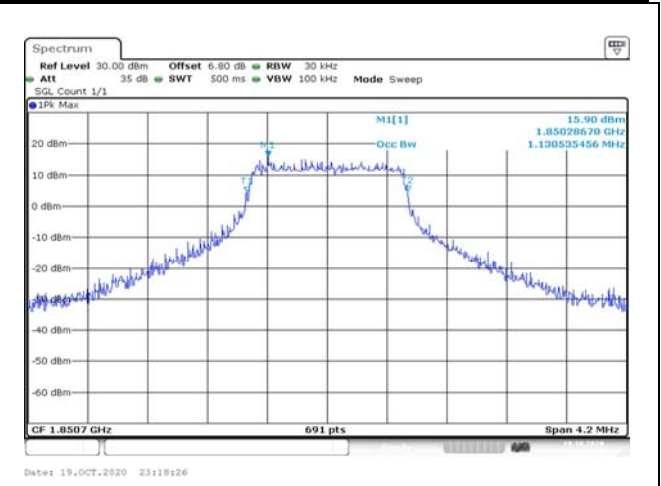


Fig.2

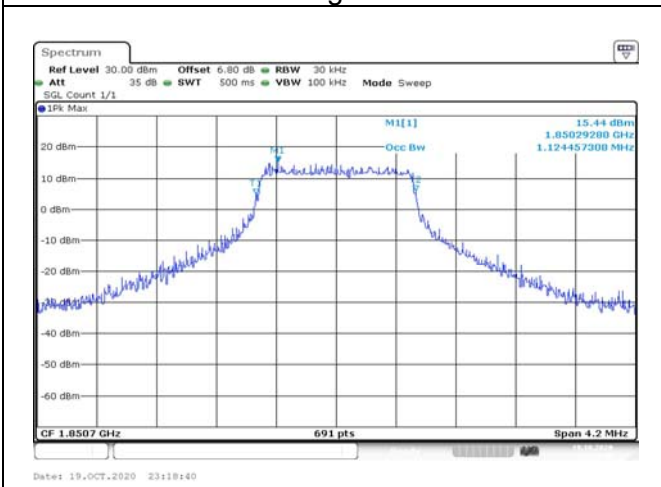


Fig.3

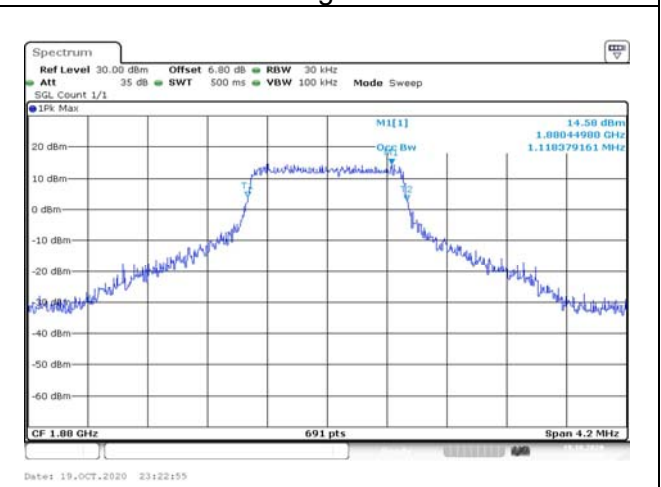


Fig.4

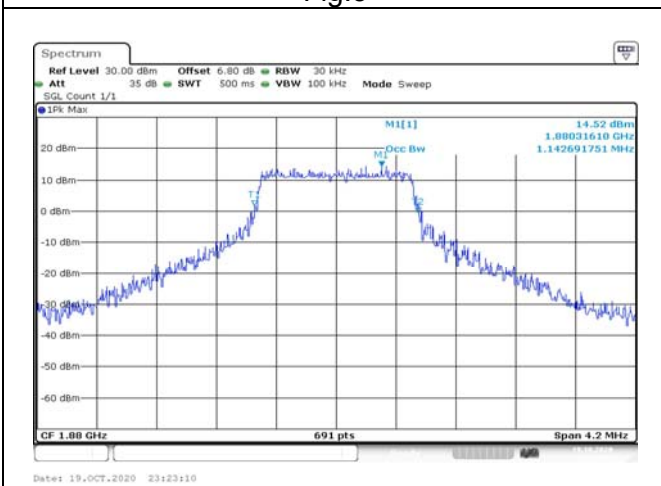


Fig.5

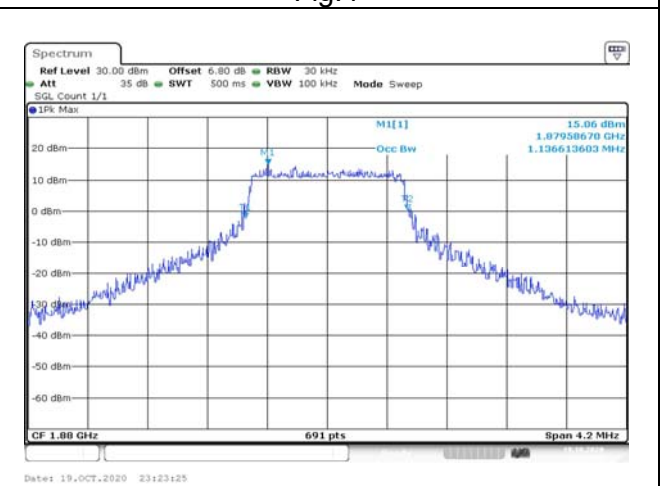


Fig.6

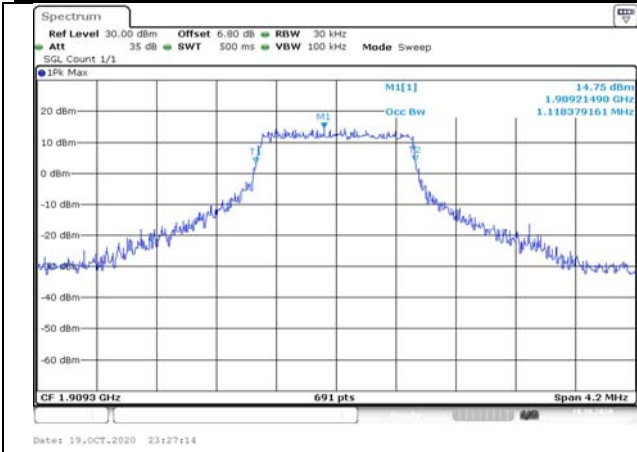


Fig.7

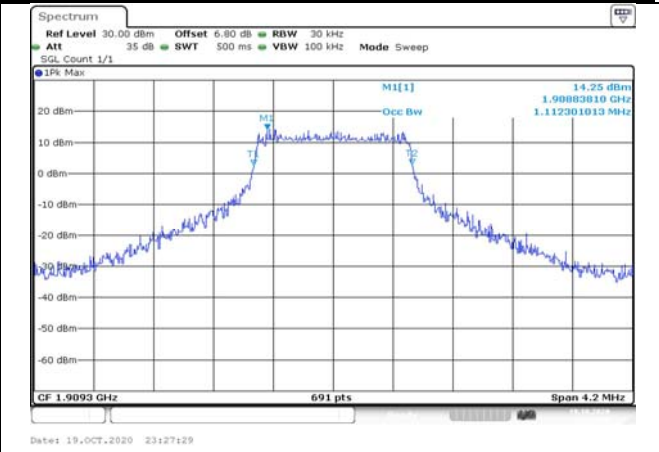


Fig.8

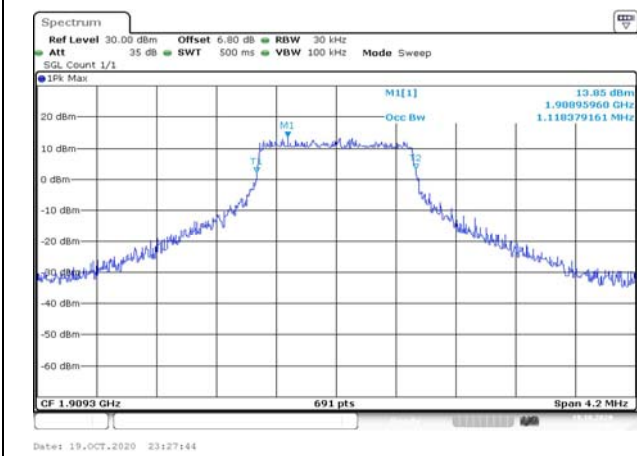


Fig.9

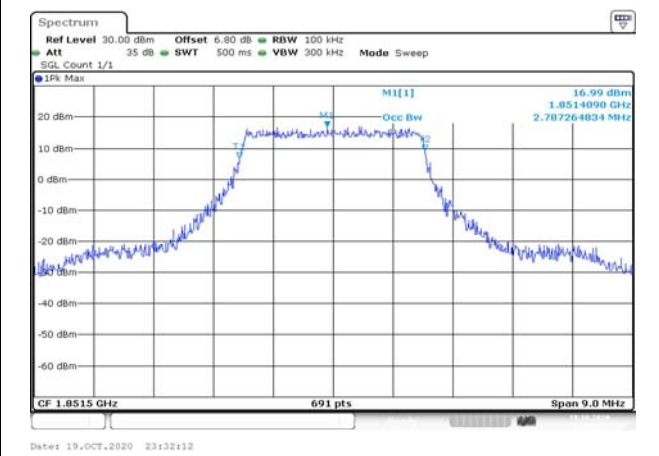


Fig.10

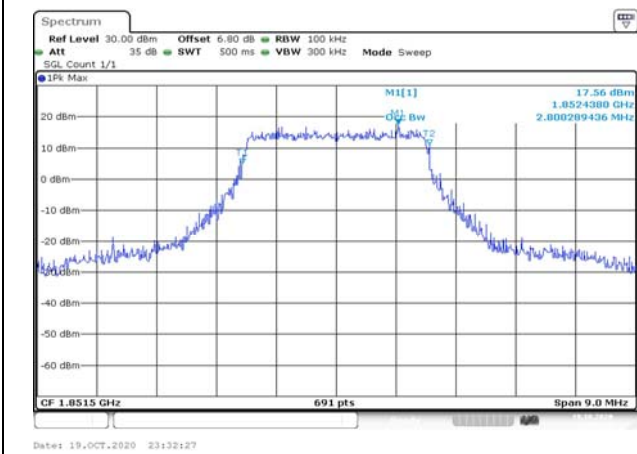


Fig.11

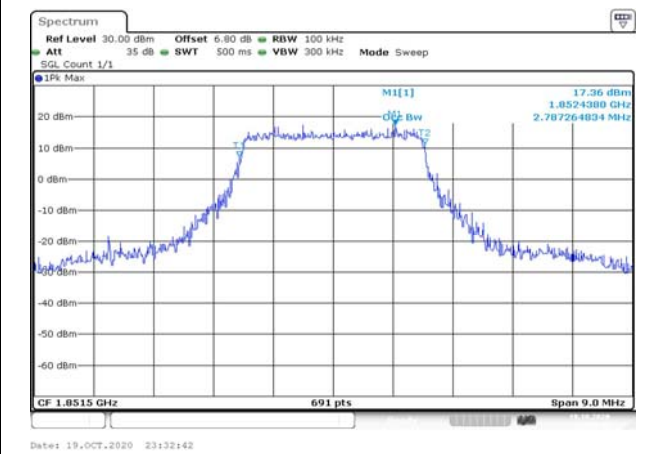


Fig.12

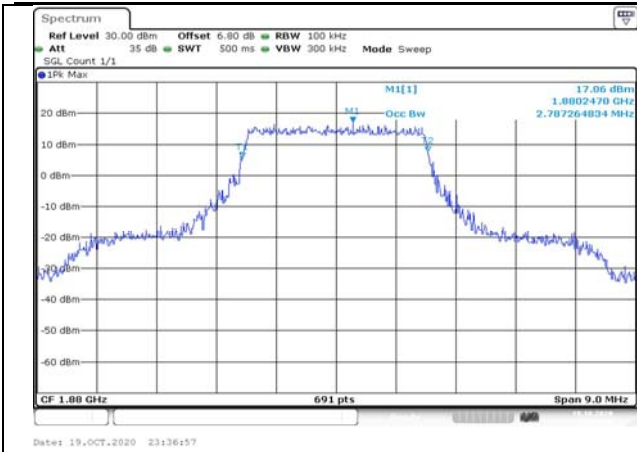


Fig.13

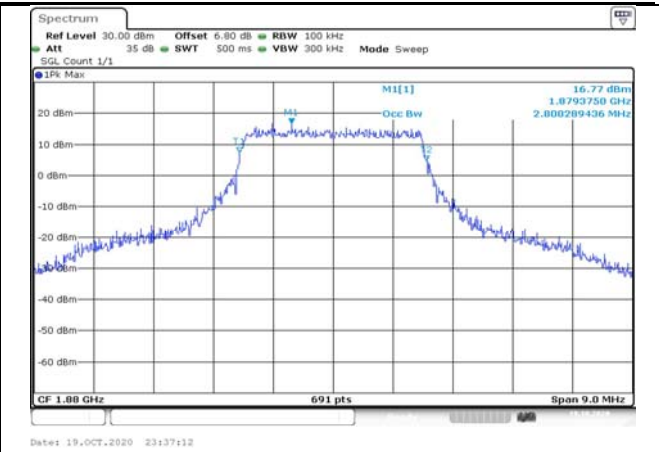


Fig.14

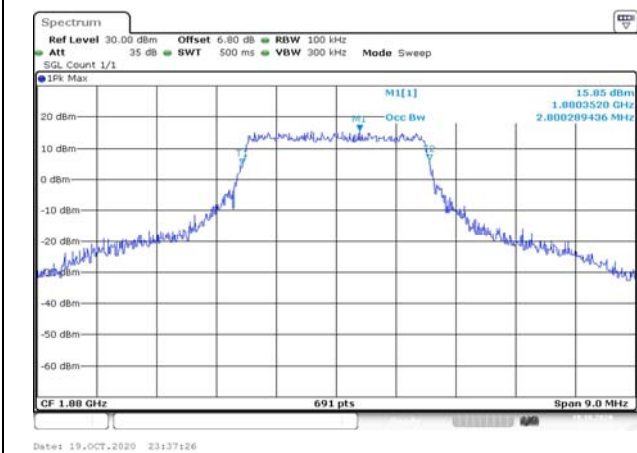


Fig.15

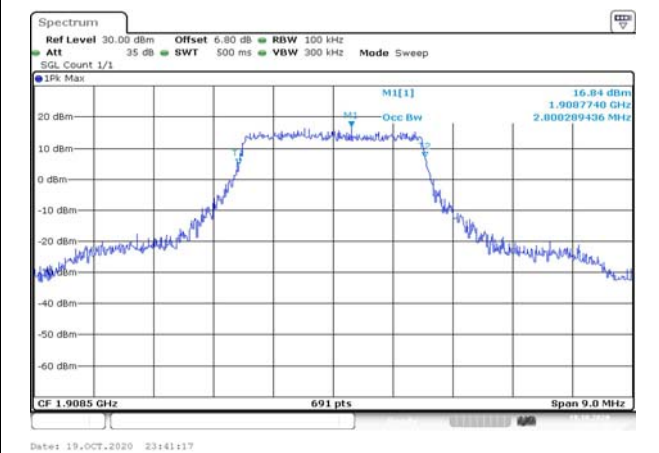


Fig.16

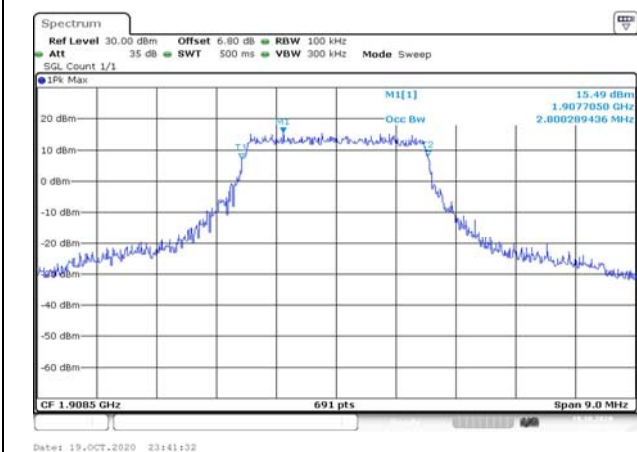


Fig.17

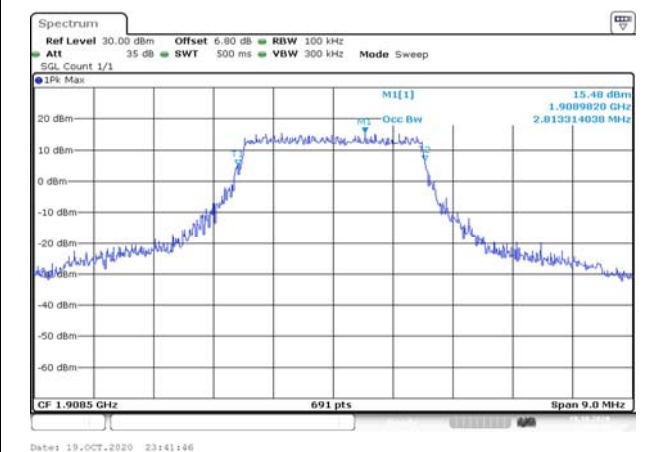


Fig.18

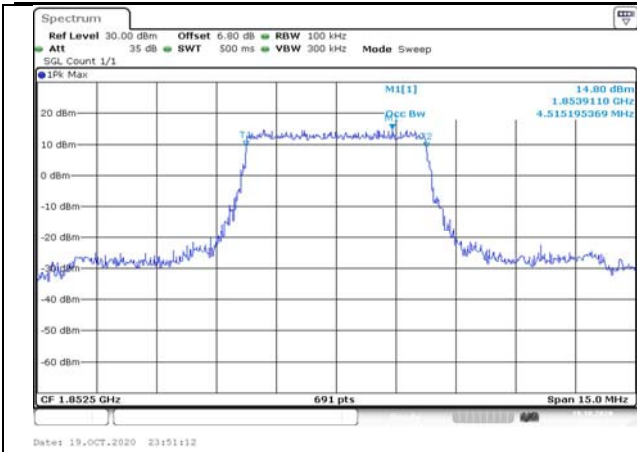


Fig.19

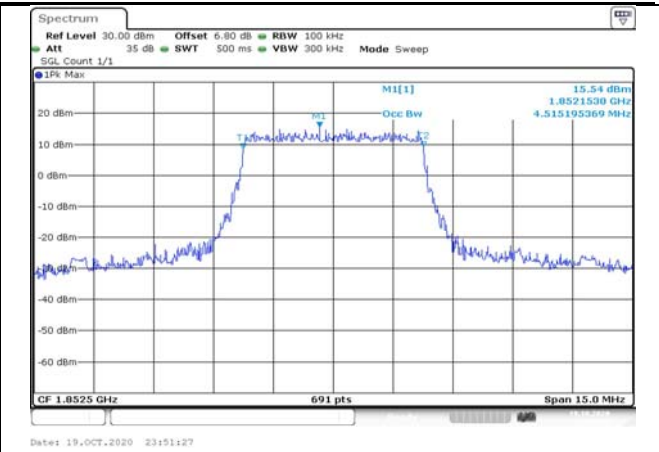


Fig.20

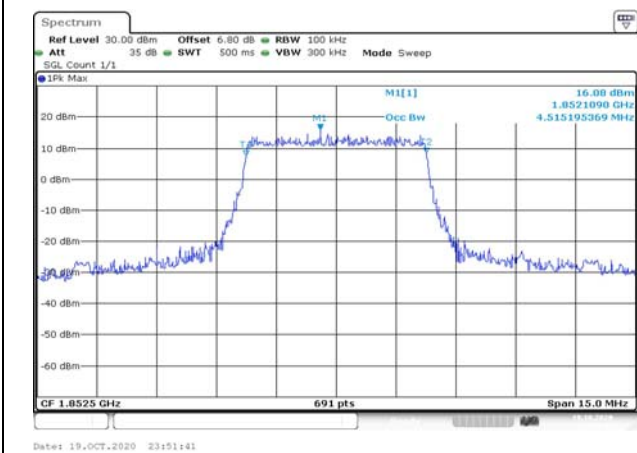


Fig.21

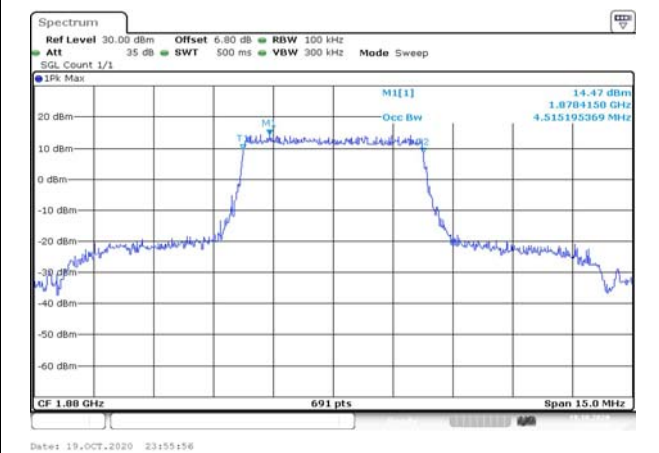


Fig.22

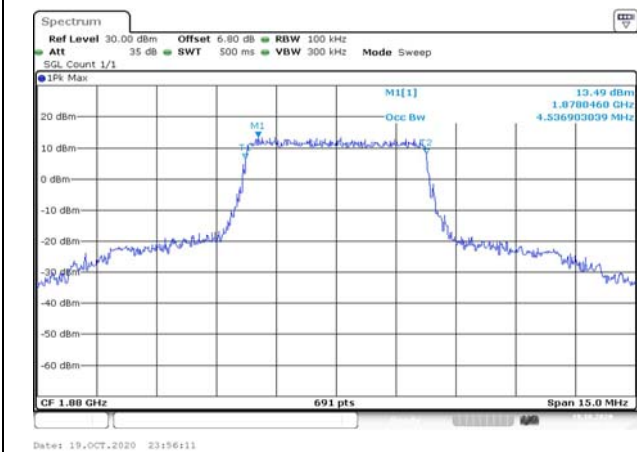


Fig.23

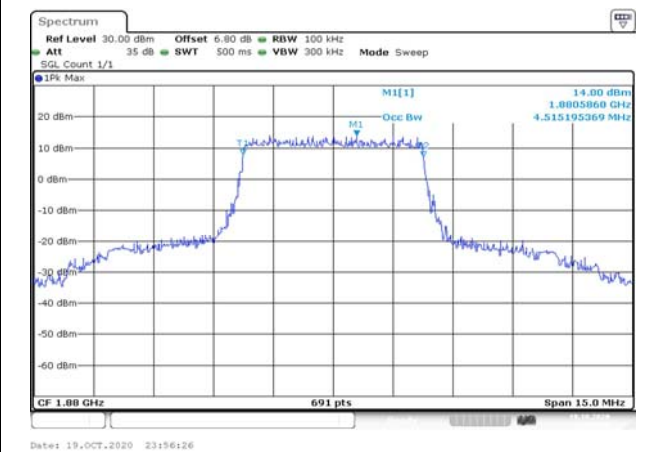


Fig.24

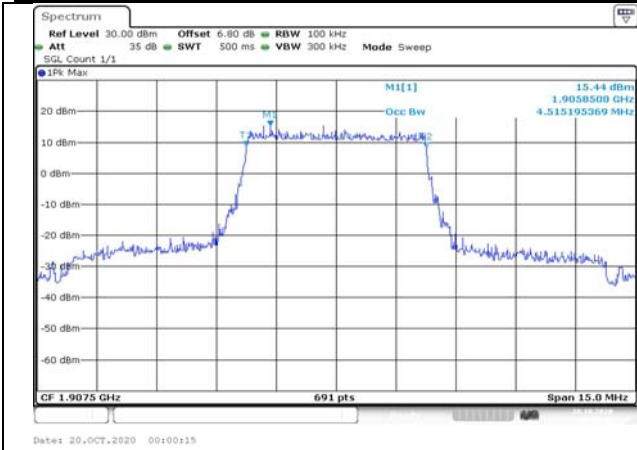


Fig.25



Fig.26

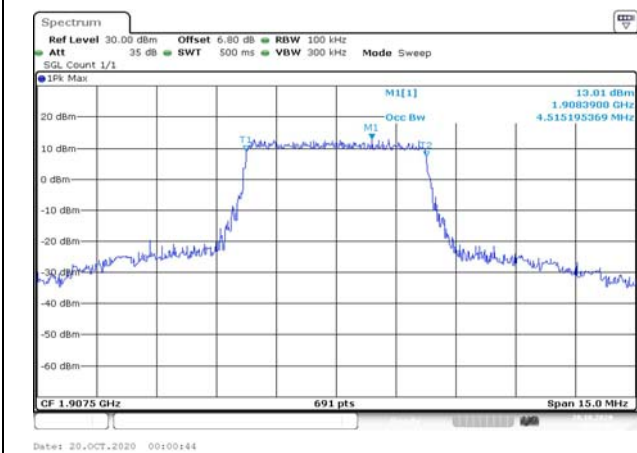


Fig.27

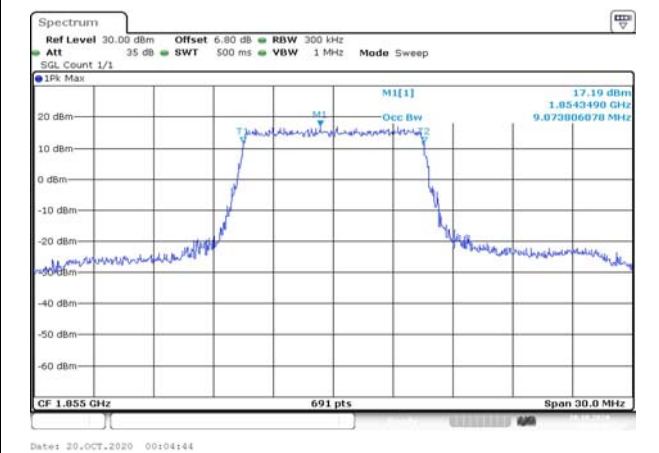


Fig.28

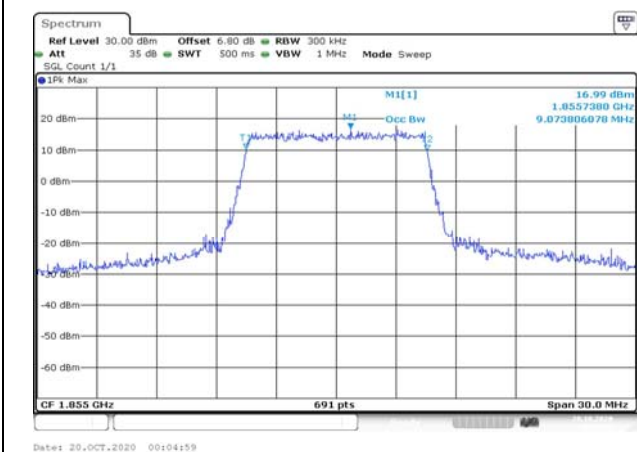


Fig.29

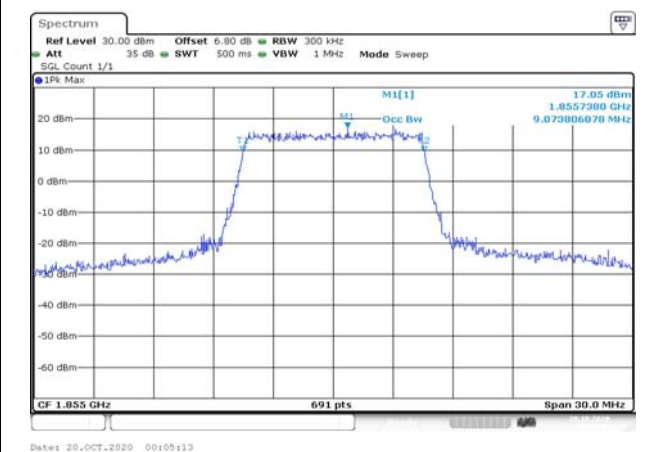


Fig.30

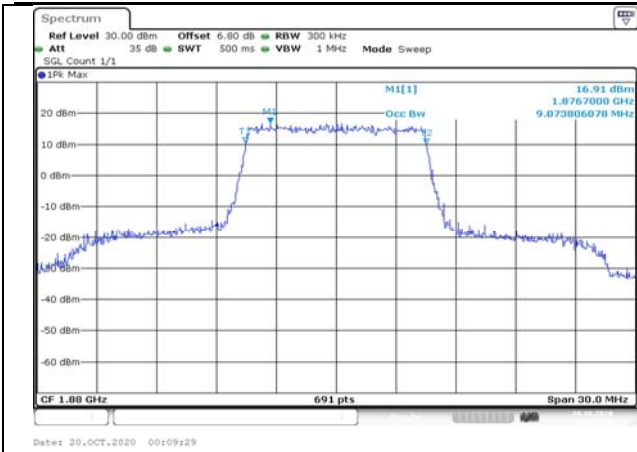


Fig.31

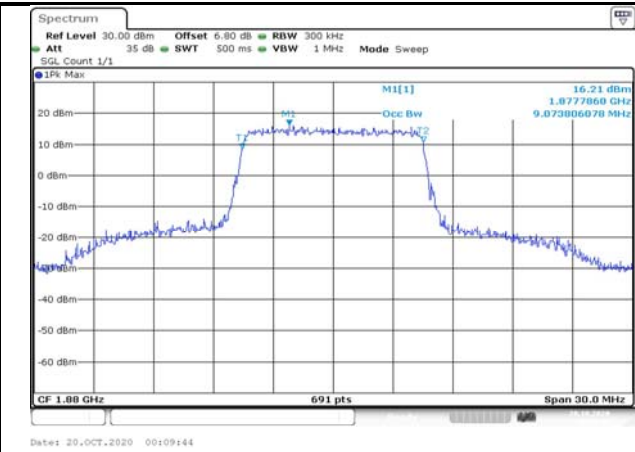


Fig.32

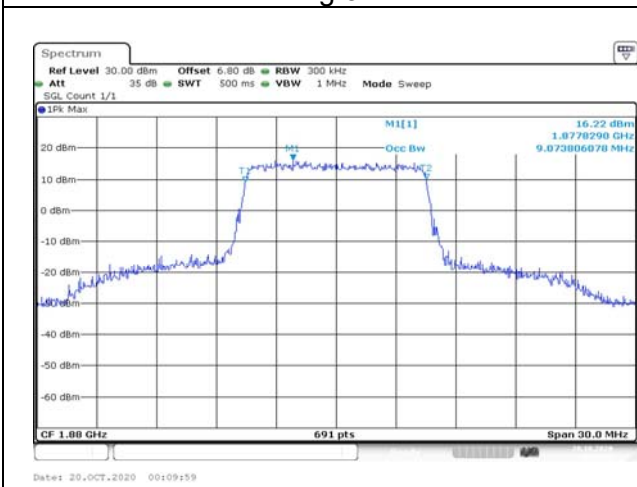


Fig.33

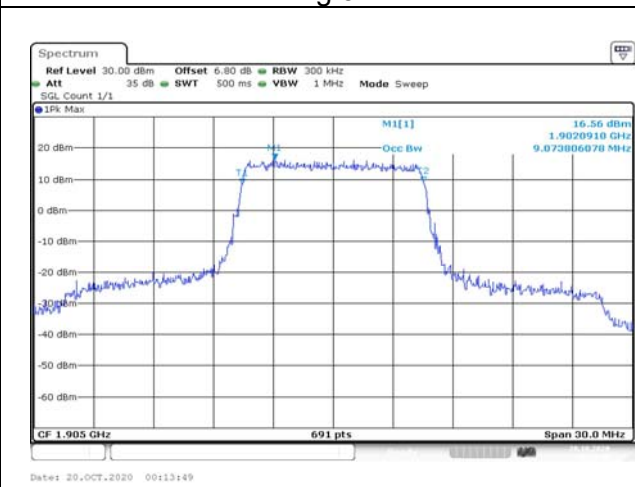


Fig.34

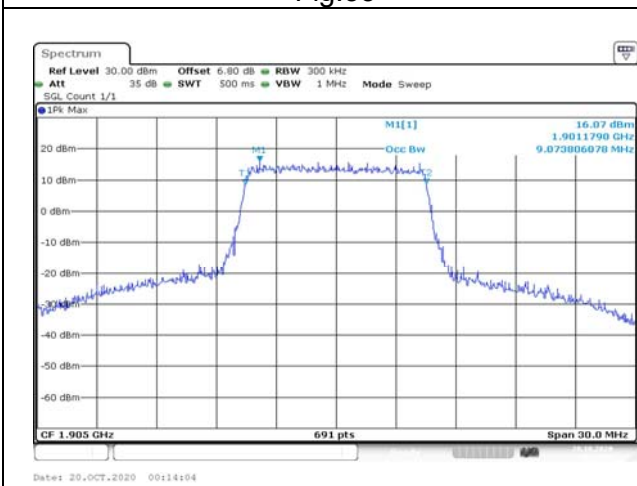


Fig.35

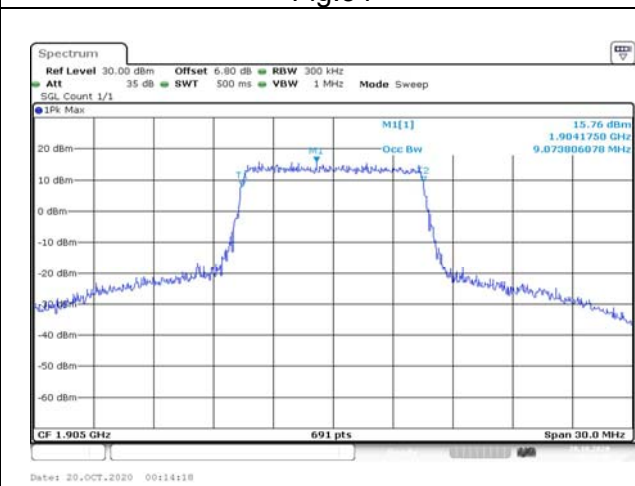


Fig.36

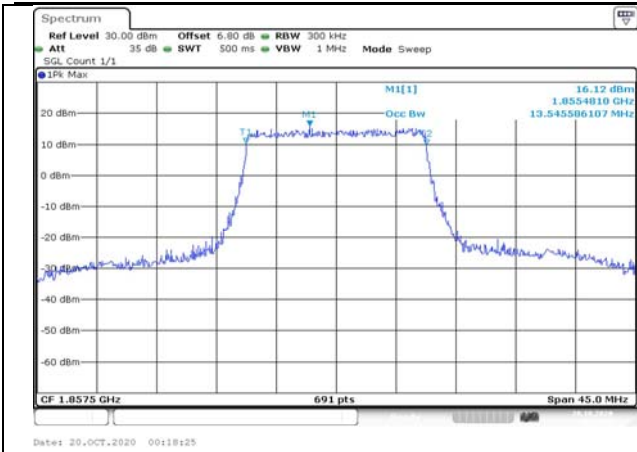


Fig.37

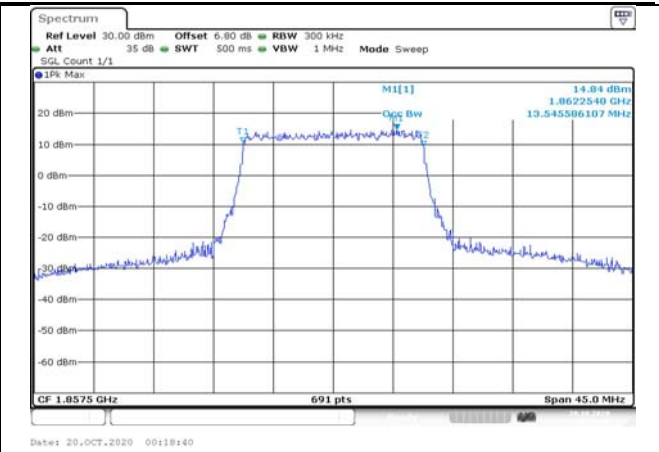


Fig.38

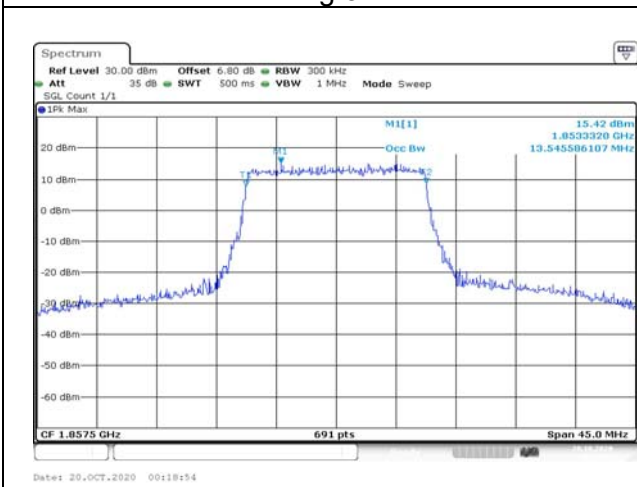


Fig.39

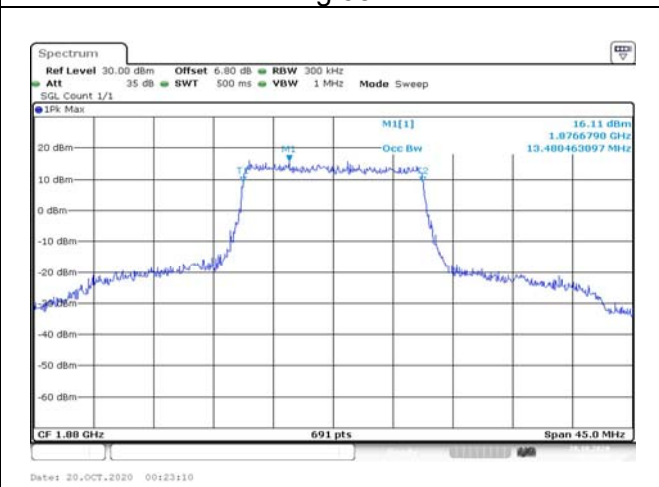


Fig.40

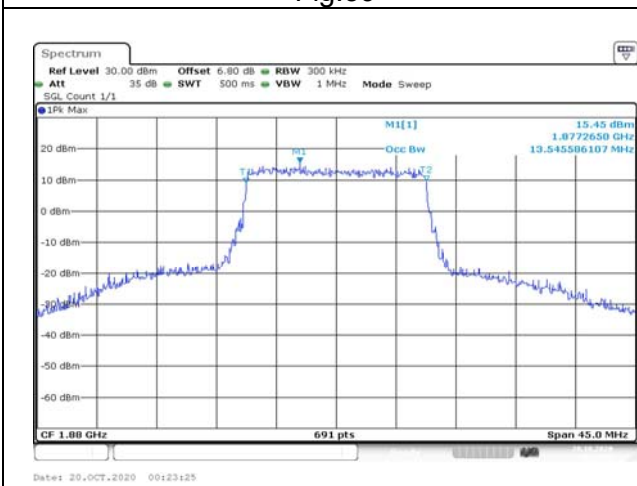


Fig.41

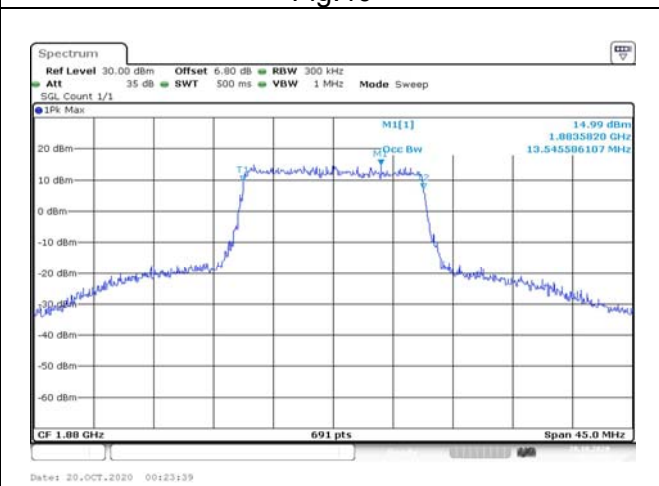


Fig.42



Fig.43



Fig.44

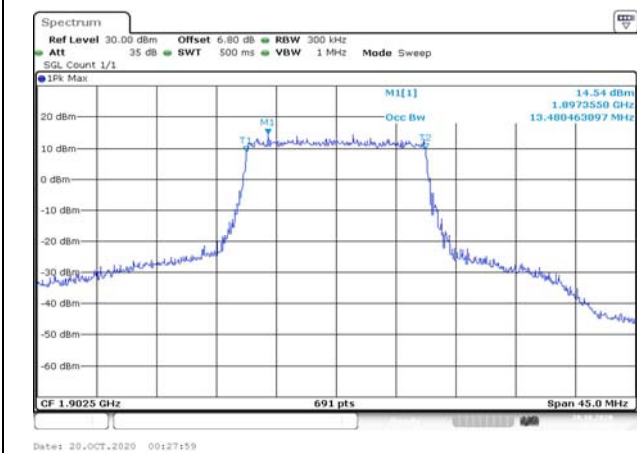


Fig.45

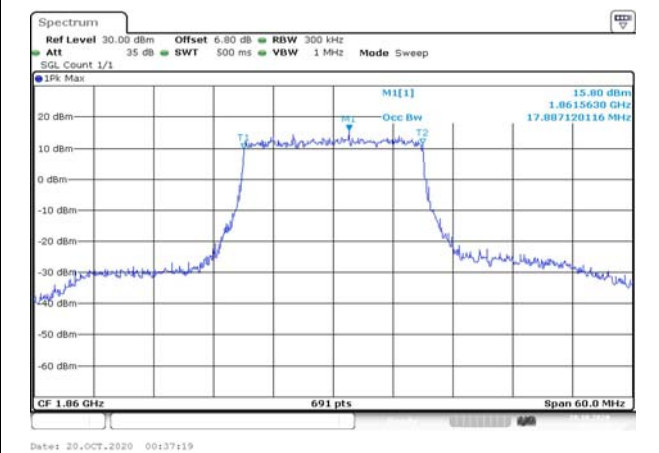


Fig.46

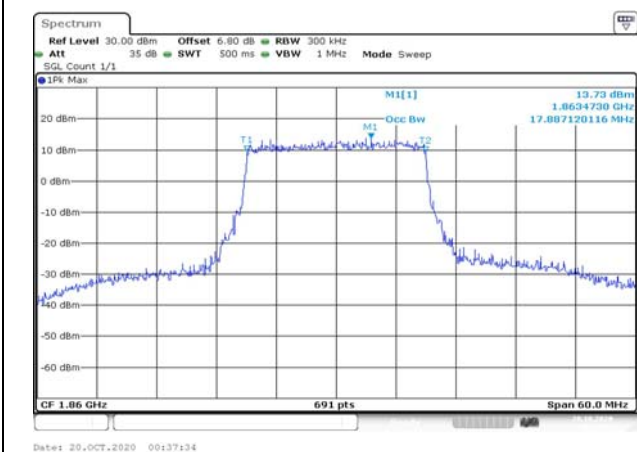


Fig.47

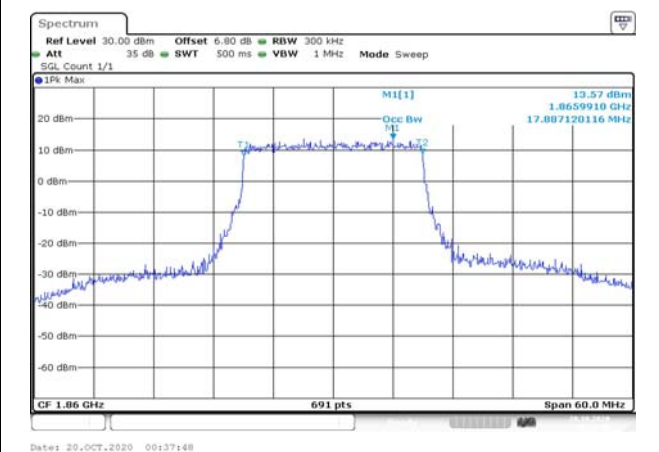


Fig.48

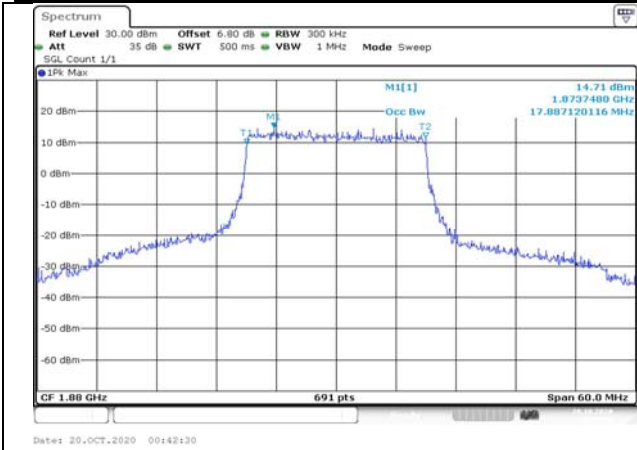


Fig.49

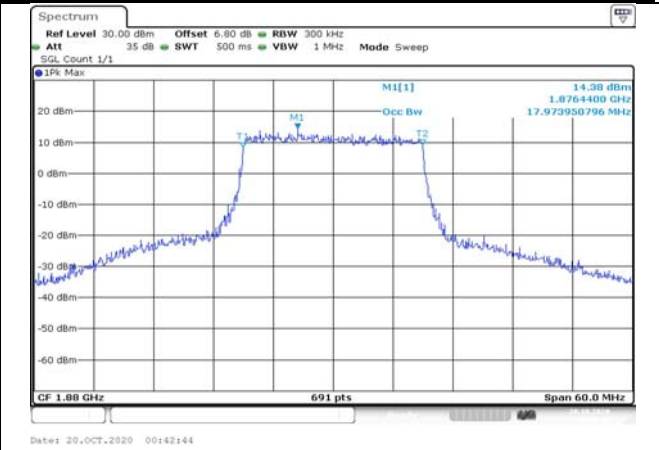


Fig.50

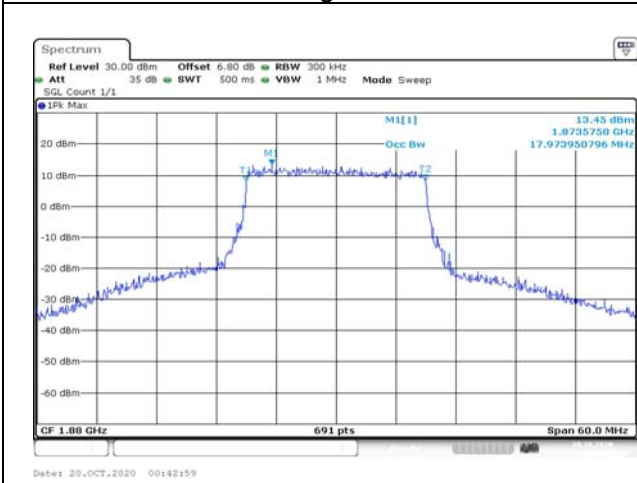


Fig.51

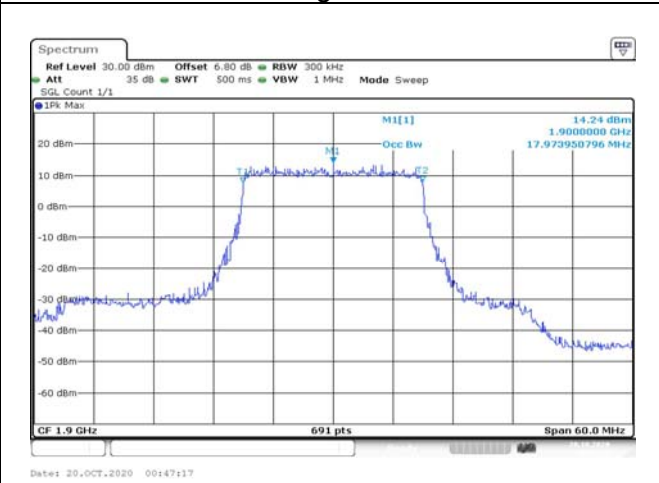


Fig.52

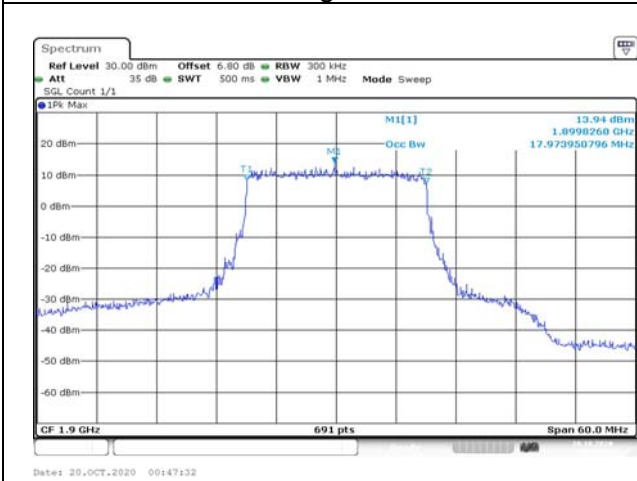


Fig.53

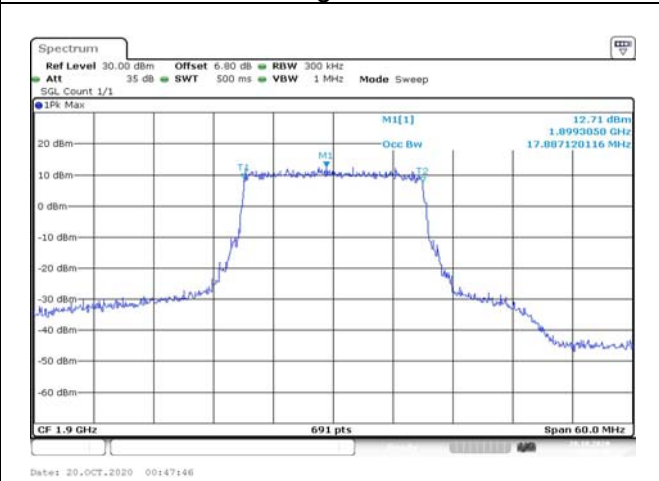


Fig.54

3 Emission Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
2	1850.7	18607	1.4	6	0	1.483	Fig.1	1.483	Fig.2	1.447	Fig.3
	1880	18900		6	0	1.471	Fig.4	1.428	Fig.5	1.507	Fig.6
	1909.3	19193		6	0	1.477	Fig.7	1.507	Fig.8	1.416	Fig.9
	1851.5	18615	3	15	0	3.491	Fig.10	3.465	Fig.11	3.399	Fig.12
	1880	18900		15	0	3.478	Fig.13	3.412	Fig.14	3.504	Fig.15
	1908.5	19185		15	0	3.465	Fig.16	3.504	Fig.17	3.465	Fig.18
	1852.5	18625	5	25	0	5.123	Fig.19	5.145	Fig.20	5.123	Fig.21
	1880	18900		25	0	5.210	Fig.22	5.232	Fig.23	5.253	Fig.24
	1907.5	19175		25	0	5.080	Fig.25	5.080	Fig.26	5.210	Fig.27
	1855	18650	10	50	0	10.333	Fig.28	10.333	Fig.29	10.203	Fig.30
	1880	18900		50	0	10.289	Fig.31	10.333	Fig.32	10.333	Fig.33
	1905	19150		50	0	10.246	Fig.34	10.029	Fig.35	10.376	Fig.36
	1857.5	18675	15	75	0	15.304	Fig.37	15.239	Fig.38	15.564	Fig.39
	1880	18900		75	0	15.434	Fig.40	15.043	Fig.41	15.499	Fig.42
	1902.5	19125		75	0	15.304	Fig.43	15.174	Fig.44	15.239	Fig.45
	1860	18700	20	100	0	19.711	Fig.46	20.405	Fig.47	20.318	Fig.48
	1880	18900		100	0	19.884	Fig.49	20.058	Fig.50	20.318	Fig.51
	1900	19100		100	0	20.058	Fig.52	19.971	Fig.53	19.884	Fig.54

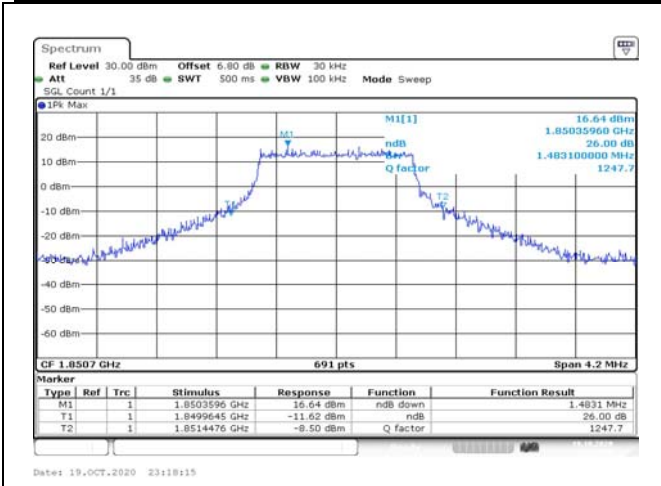


Fig.1

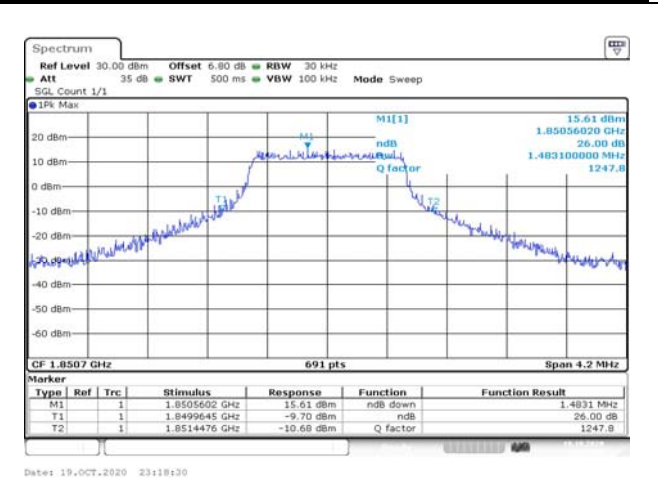


Fig.2

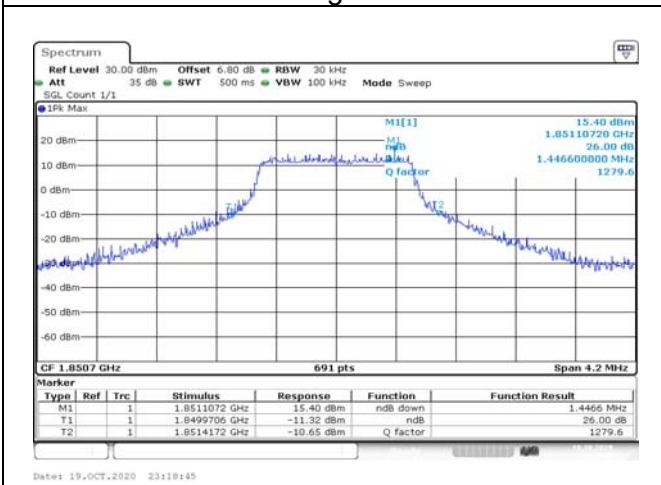


Fig.3

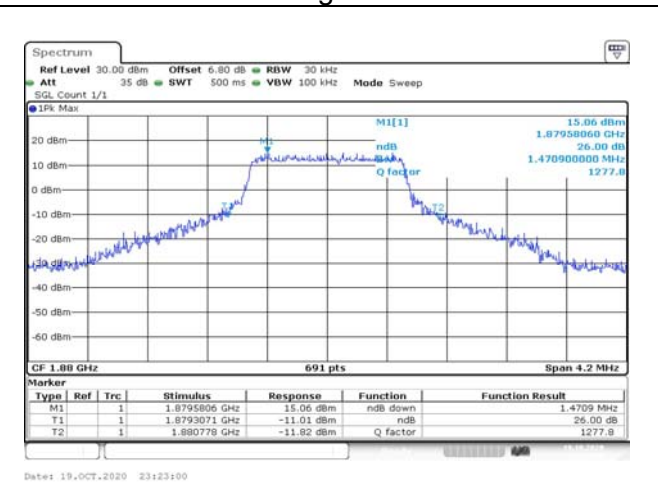


Fig.4

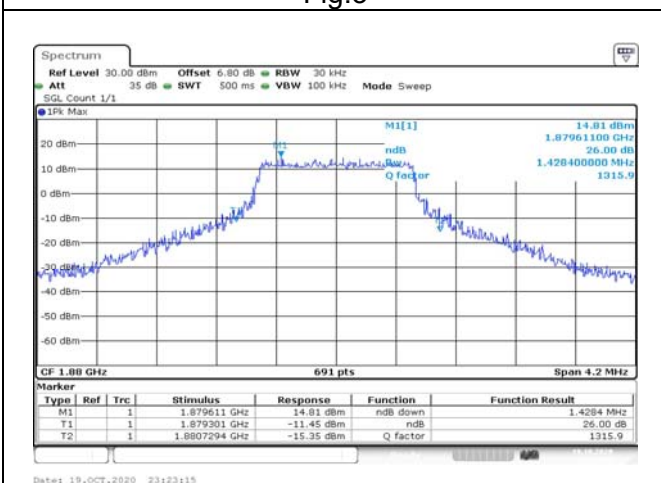


Fig.5

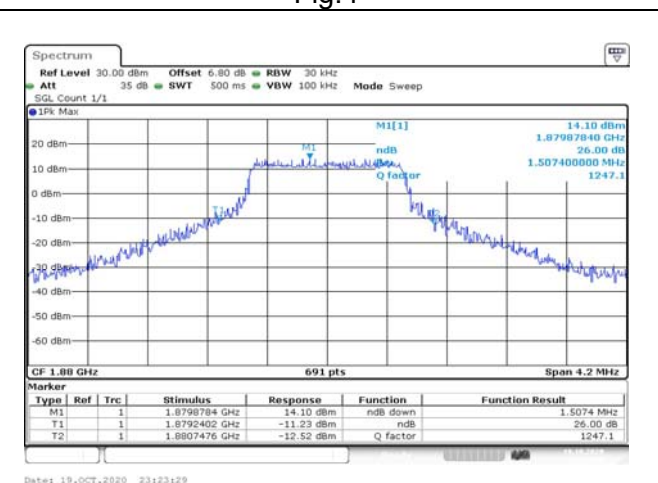


Fig.6

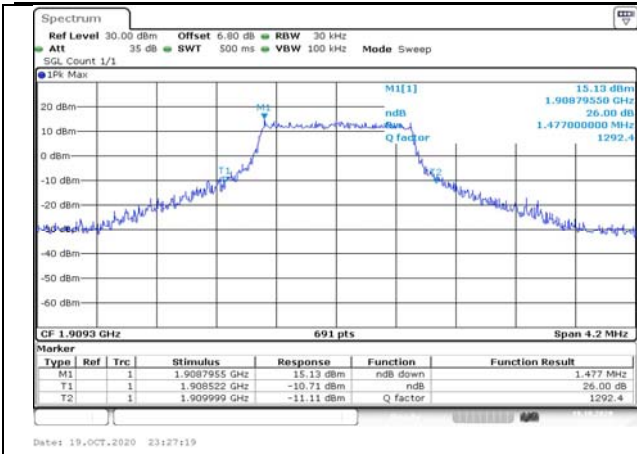


Fig.7

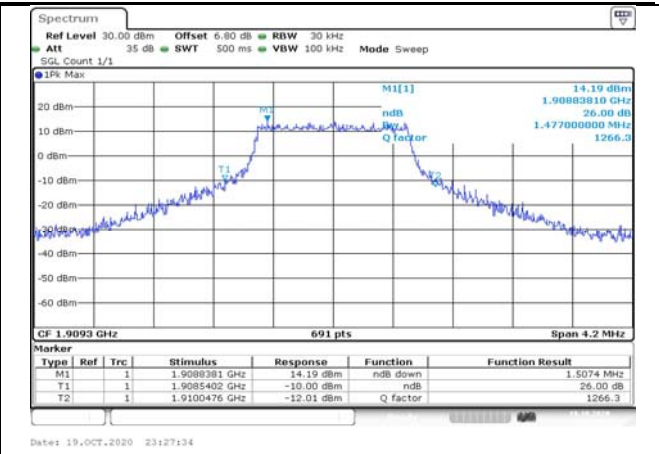


Fig.8

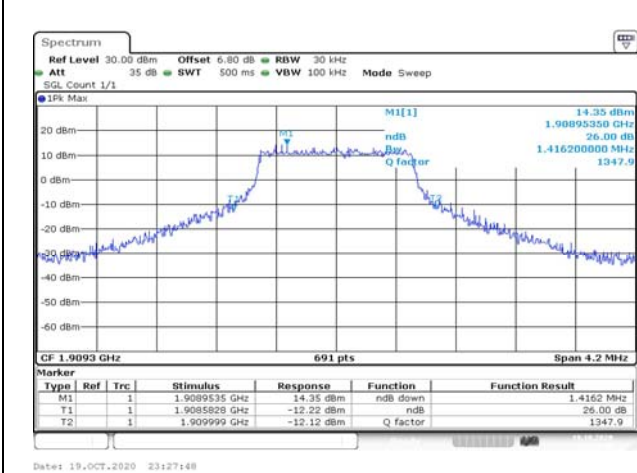


Fig.9

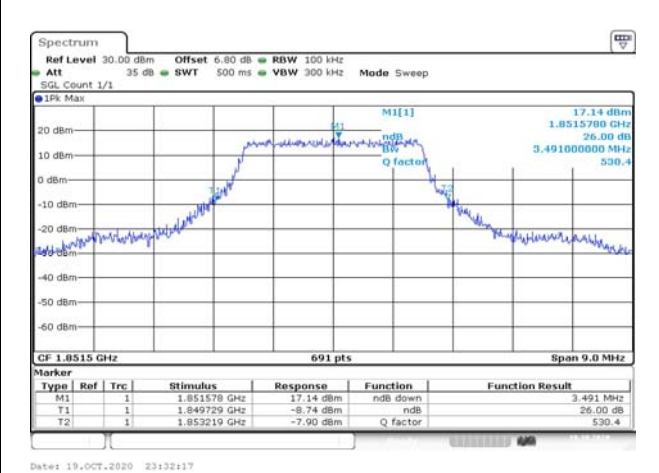


Fig.10

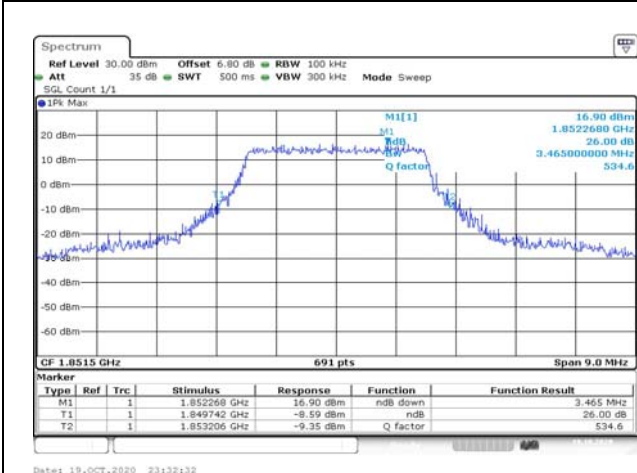


Fig.11

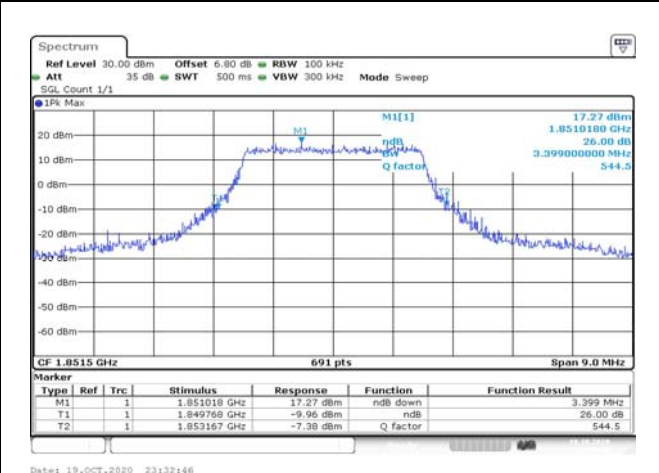


Fig.12

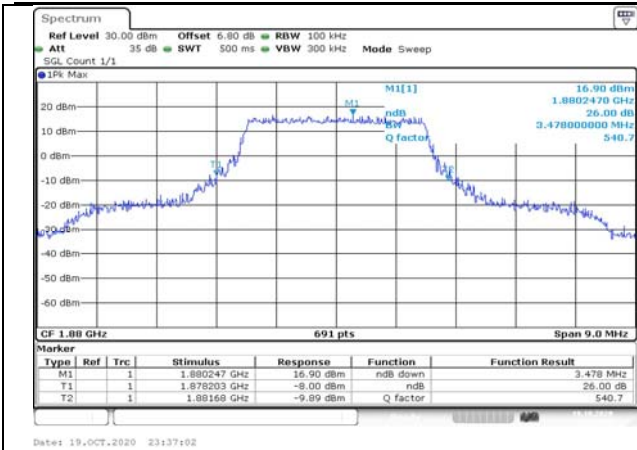


Fig.13

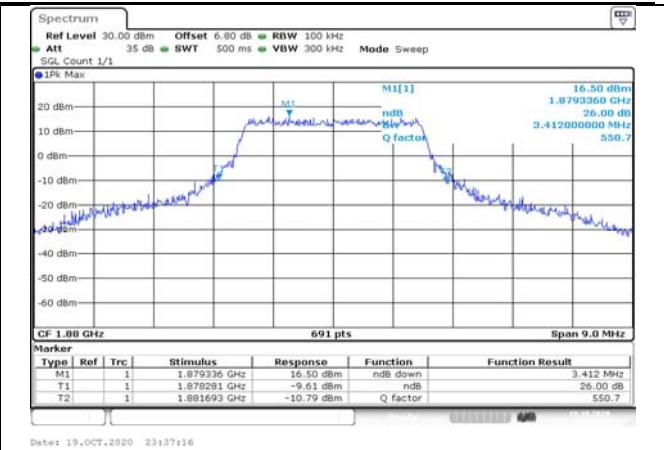


Fig.14

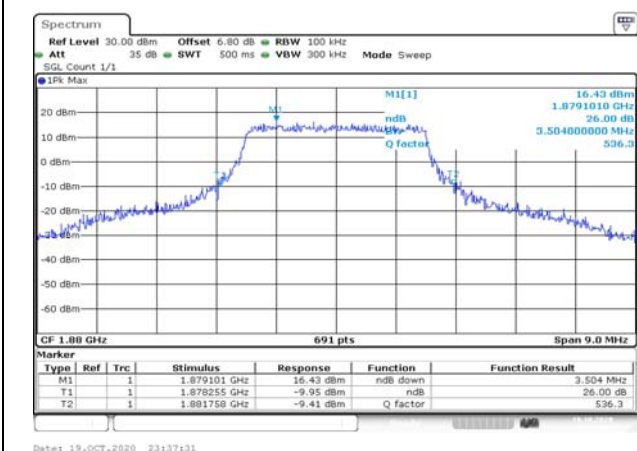


Fig.15

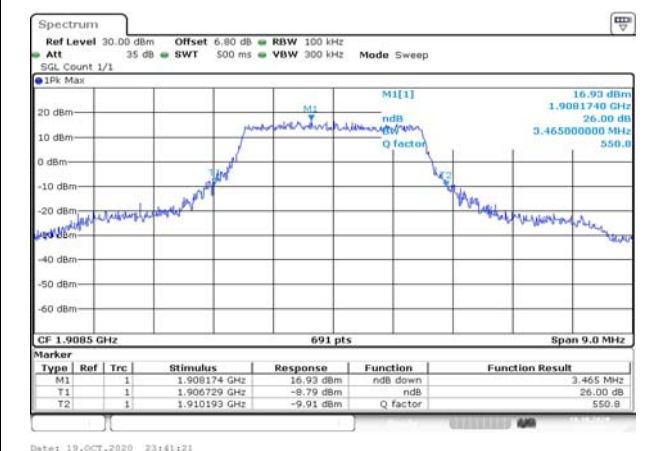


Fig.16

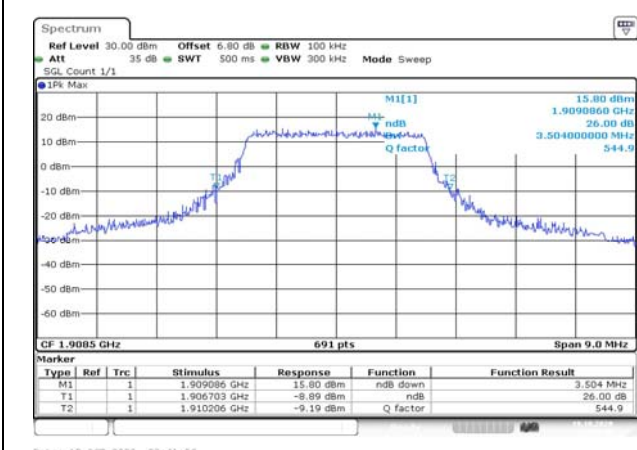


Fig.17

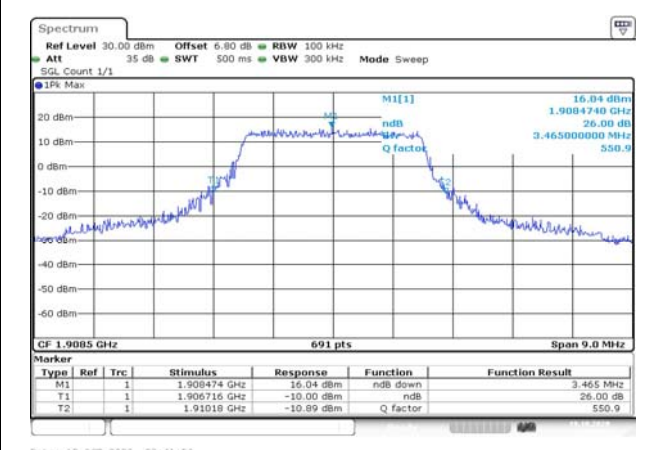


Fig.18

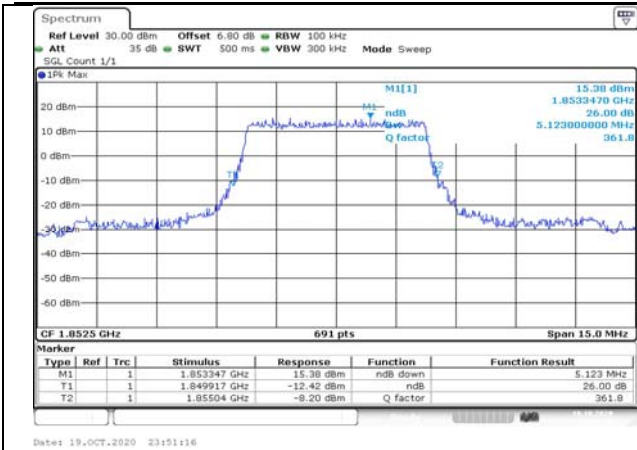


Fig.19

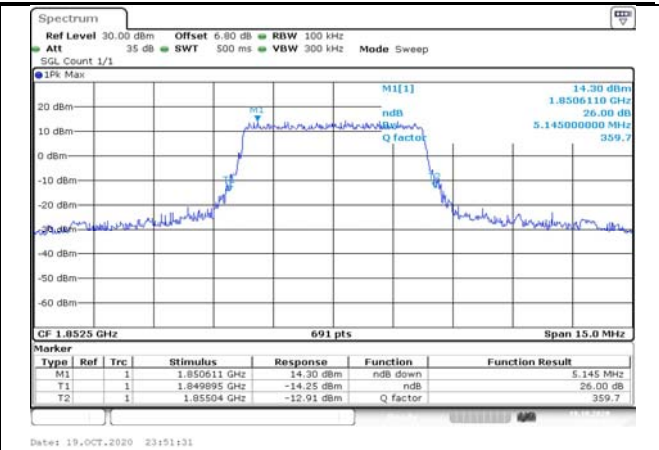


Fig.20

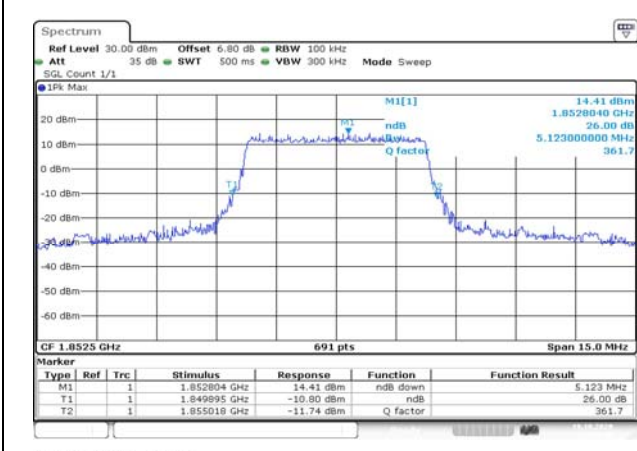


Fig.21

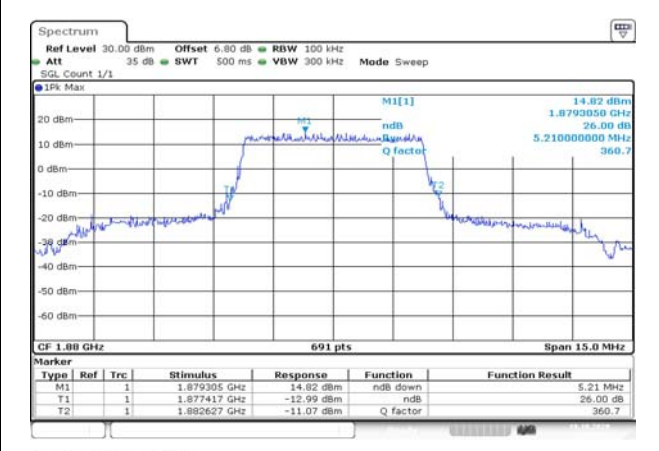


Fig.22

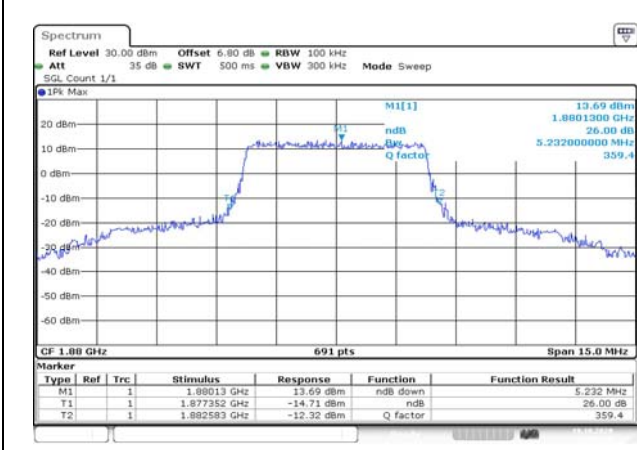


Fig.23

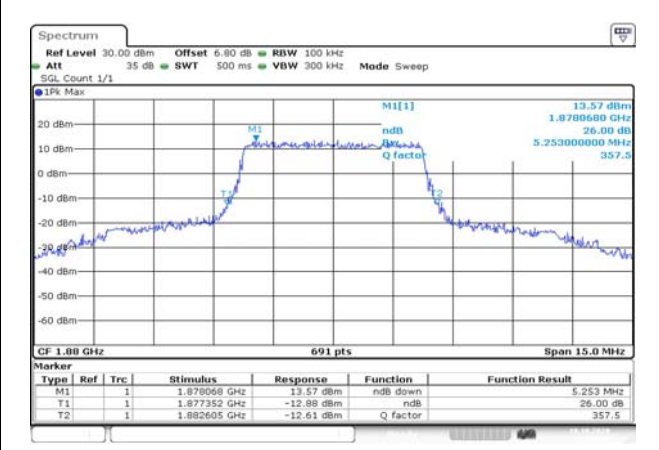


Fig.24

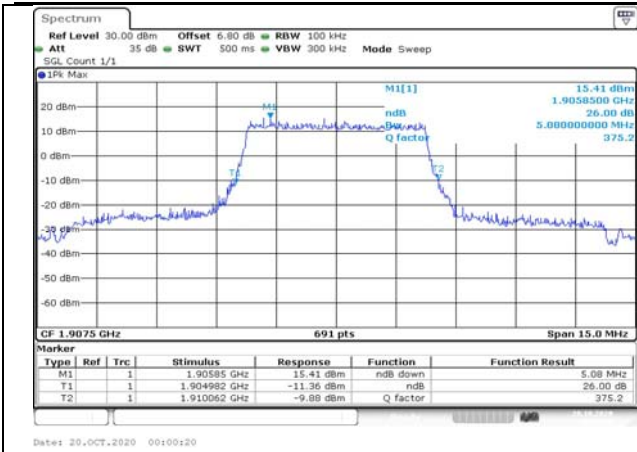


Fig.25

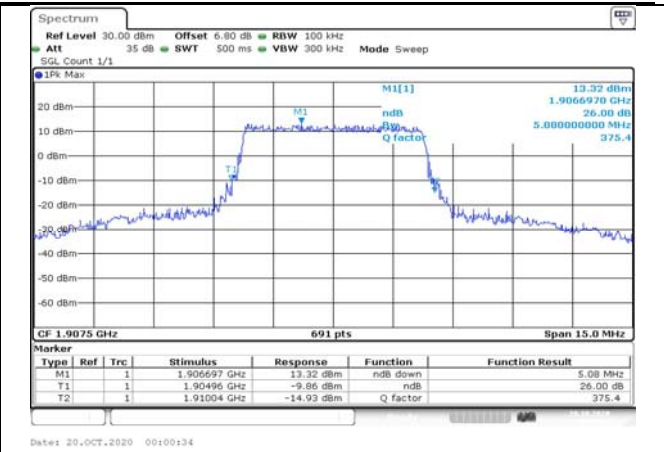


Fig.26

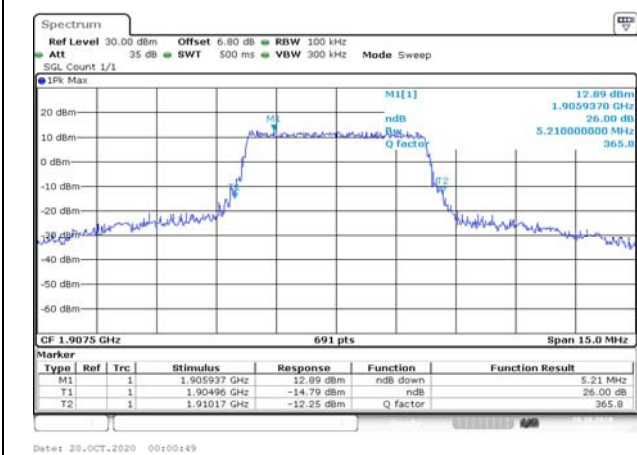


Fig.27

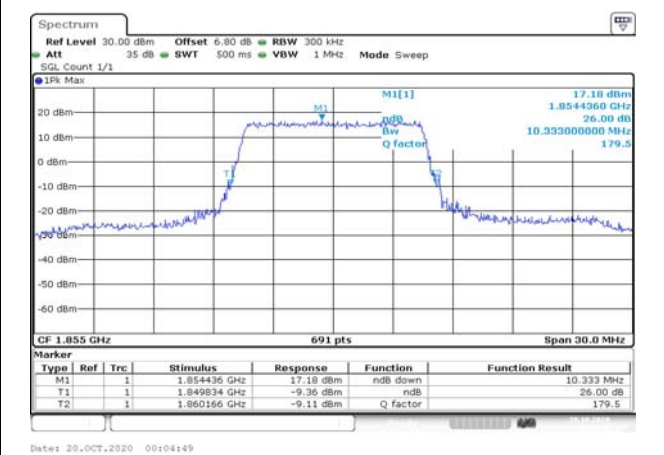


Fig.28



Fig.29

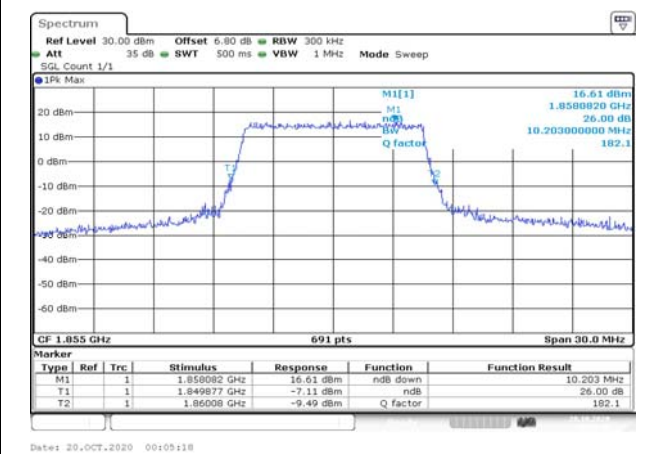


Fig.30

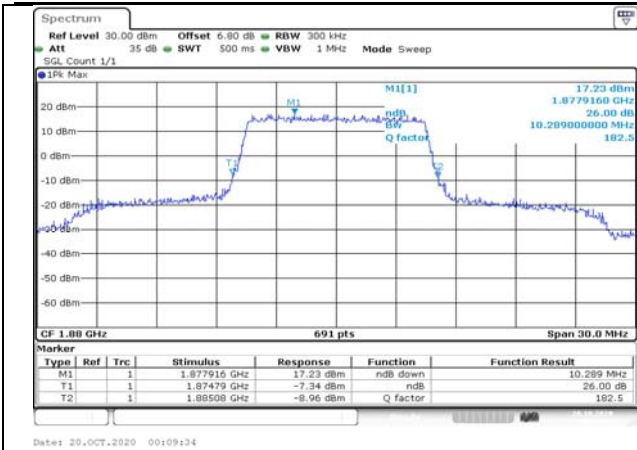


Fig.31

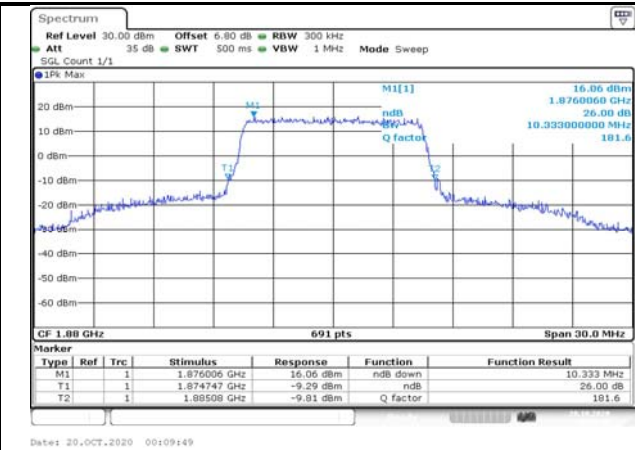


Fig.32

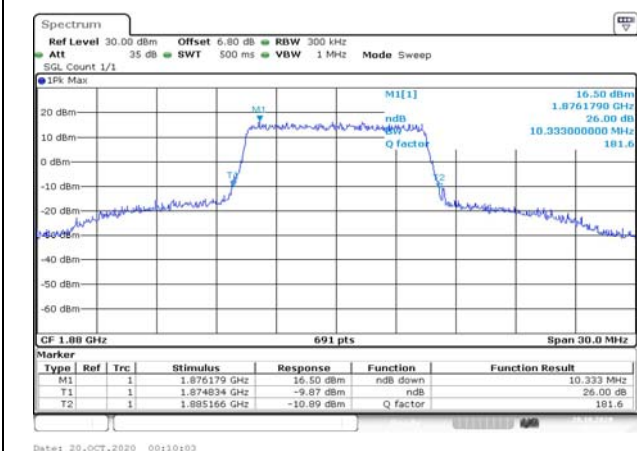


Fig.33

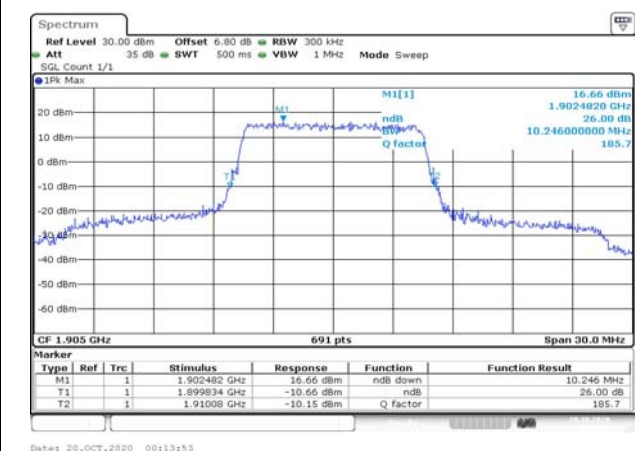


Fig.34

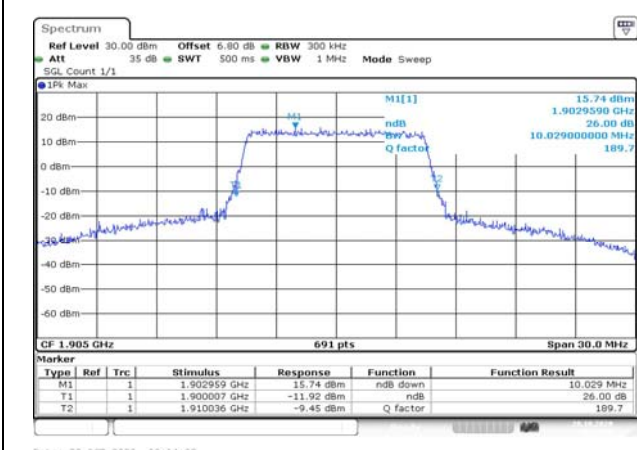


Fig.35

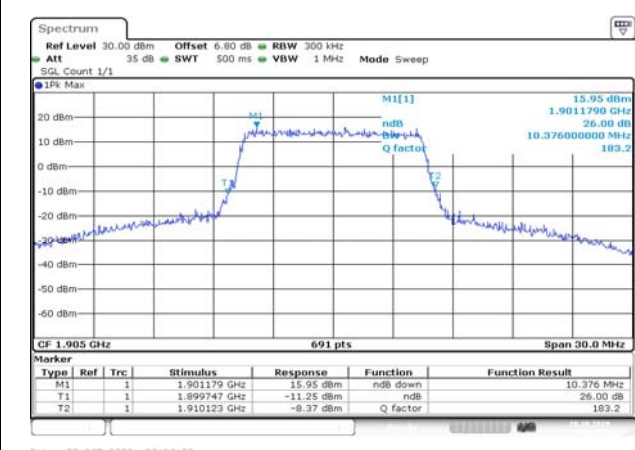


Fig.36

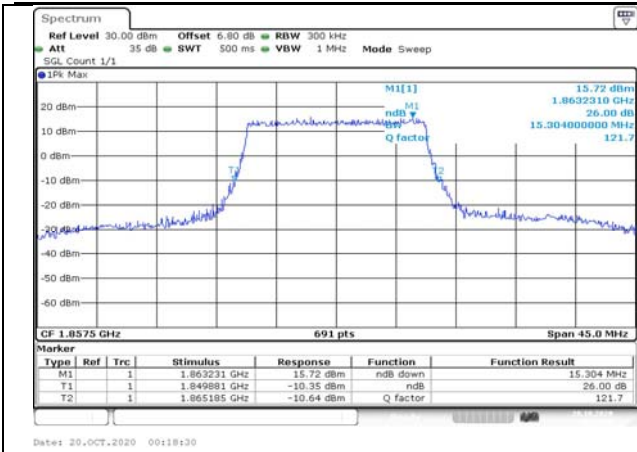


Fig.37

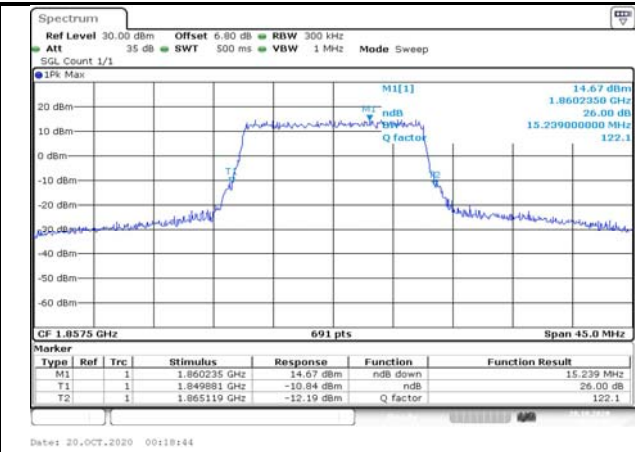


Fig.38

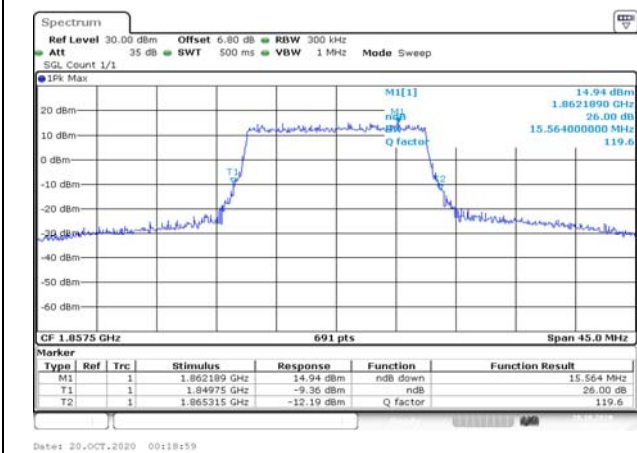


Fig.39

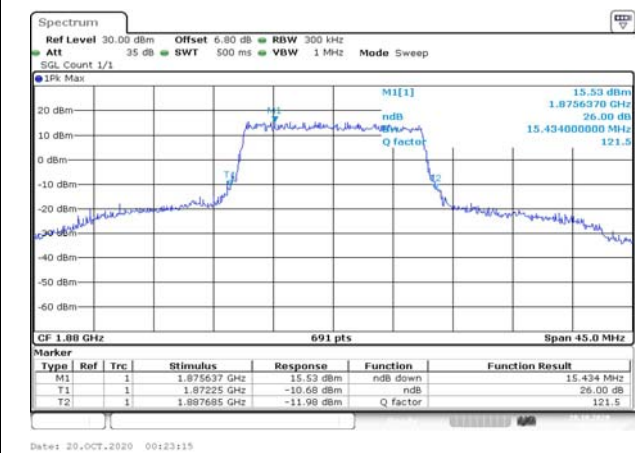


Fig.40

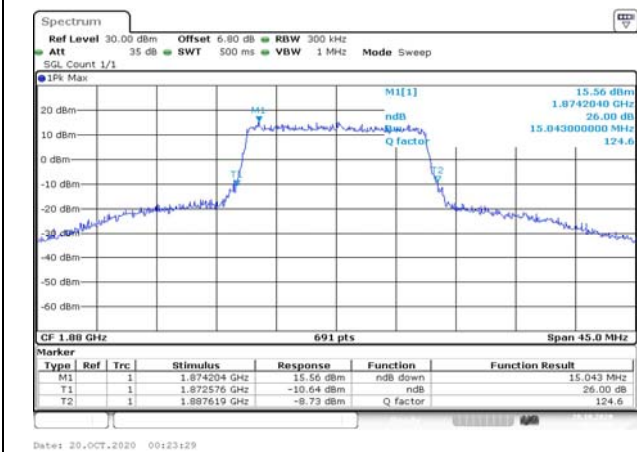


Fig.41

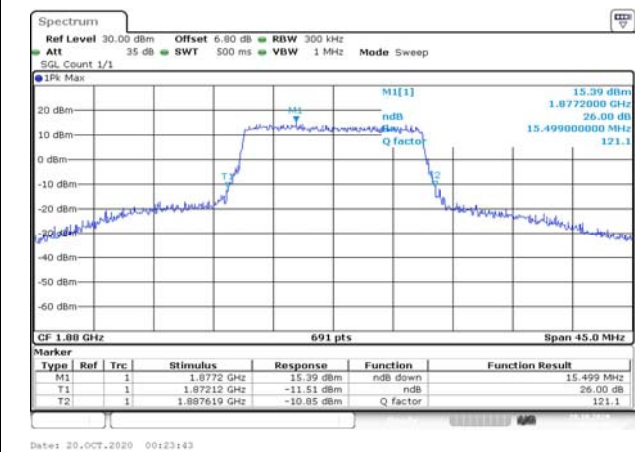


Fig.42

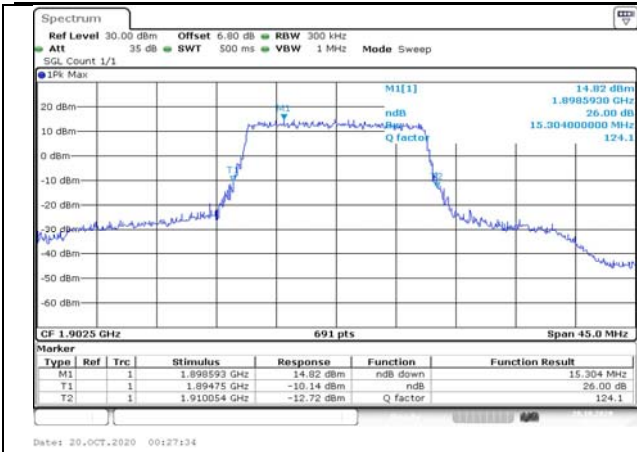


Fig.43

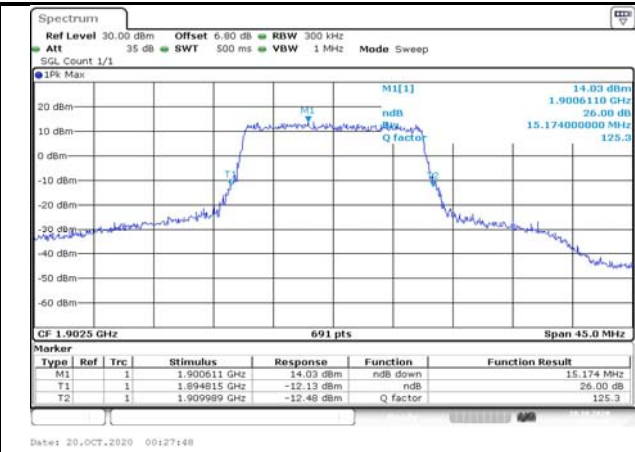


Fig.44

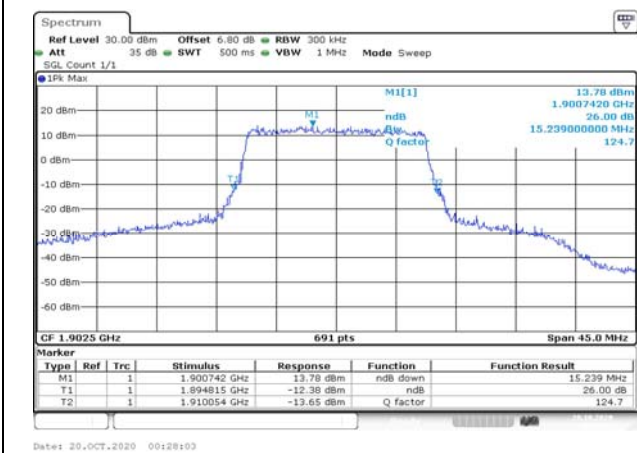


Fig.45

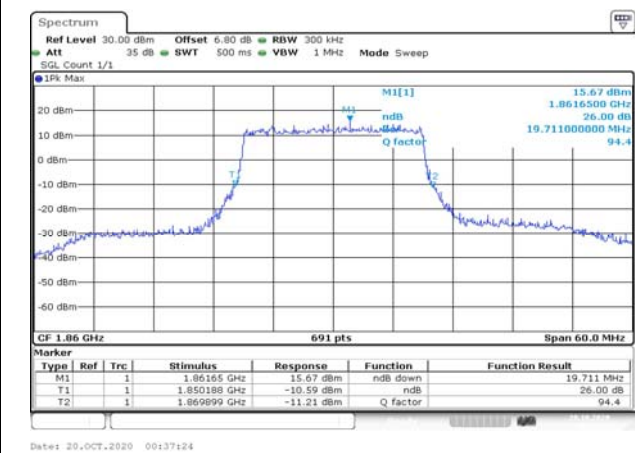


Fig.46

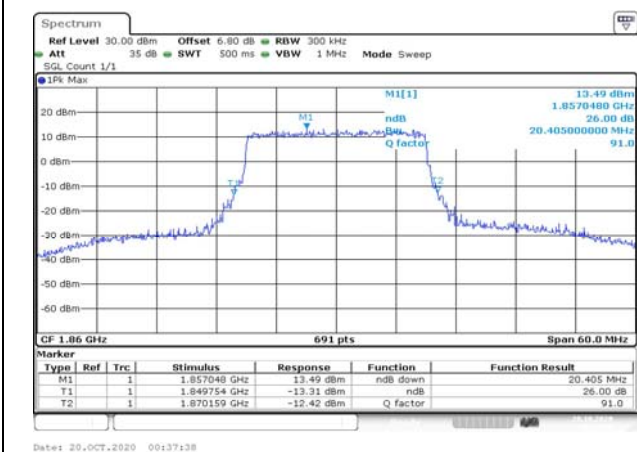


Fig.47

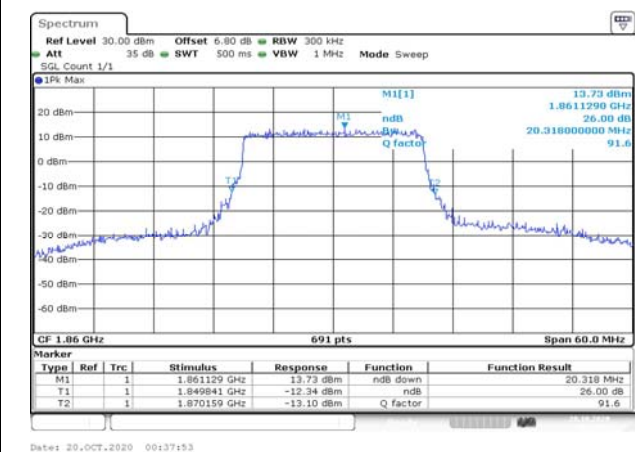


Fig.48



Fig.49

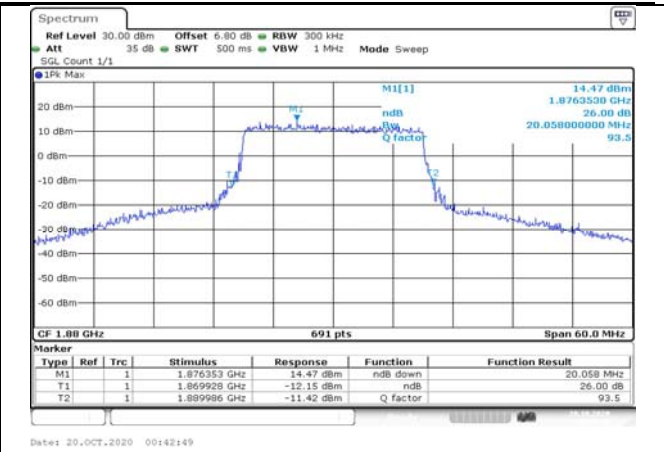


Fig.50

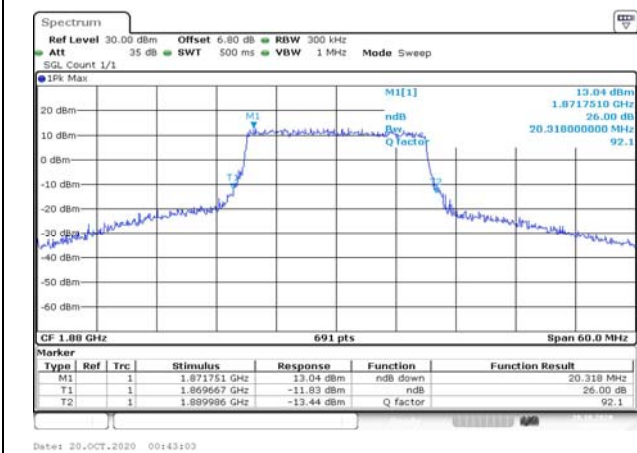


Fig.51

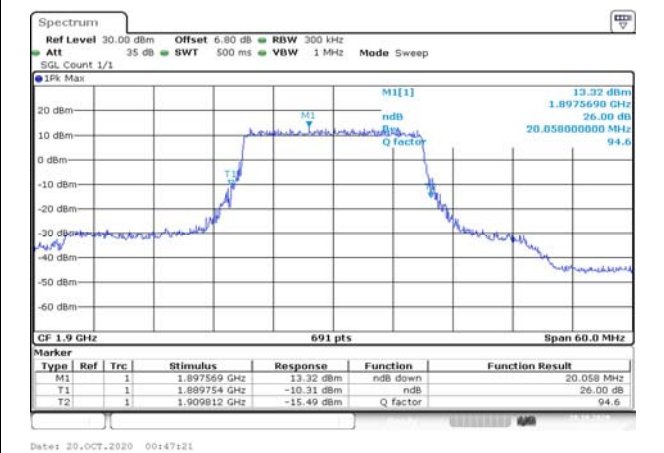


Fig.52

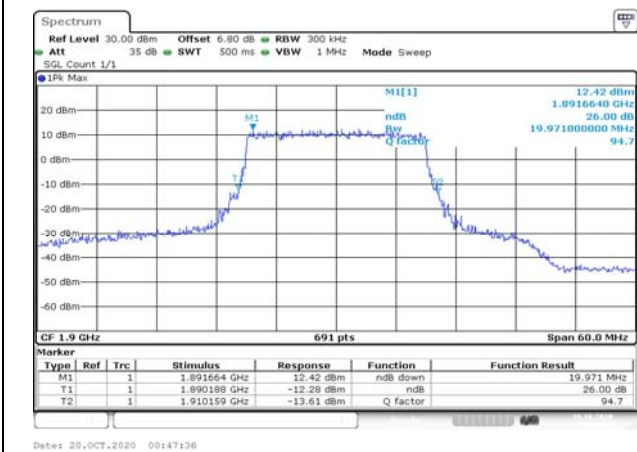


Fig.53

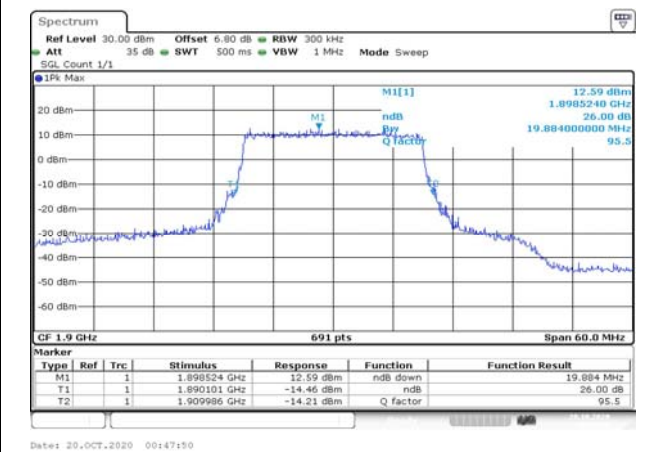


Fig.54

4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
2	1850.7	18607	1.4	1	5	Fig.1	Fig.2	Fig.3
	1850.7	18607		6	0	Fig.4	Fig.5	Fig.6
	1880	18900		1	5	Fig.7	Fig.8	Fig.9
	1880	18900		6	0	Fig.10	Fig.11	Fig.12
	1909.3	19193		1	5	Fig.13	Fig.14	Fig.15
	1909.3	19193		6	0	Fig.16	Fig.17	Fig.18
	1851.5	18615	3	1	14	Fig.19	Fig.20	Fig.21
	1851.5	18615		15	0	Fig.22	Fig.23	Fig.24
	1880	18900		1	14	Fig.25	Fig.26	Fig.27
	1880	18900		15	0	Fig.28	Fig.29	Fig.30
	1908.5	19185		1	14	Fig.31	Fig.32	Fig.33
	1908.5	19185		15	0	Fig.34	Fig.35	Fig.36
	1852.5	18625	5	1	24	Fig.37	Fig.38	Fig.39
	1852.5	18625		25	0	Fig.40	Fig.41	Fig.42
	1880	18900		1	24	Fig.43	Fig.44	Fig.45
	1880	18900		25	0	Fig.46	Fig.47	Fig.48
	1907.5	19175		1	24	Fig.49	Fig.50	Fig.51
	1907.5	19175		25	0	Fig.52	Fig.53	Fig.54
	1855	18650	10	1	49	Fig.55	Fig.56	Fig.57
	1855	18650		50	0	Fig.58	Fig.59	Fig.60
	1880	18900		1	49	Fig.61	Fig.62	Fig.63
	1880	18900		50	0	Fig.64	Fig.65	Fig.66
	1905	19150		1	49	Fig.67	Fig.68	Fig.69
	1905	19150		50	0	Fig.70	Fig.71	Fig.72
	1857.5	18675	15	1	74	Fig.73	Fig.74	Fig.75
	1857.5	18675		75	0	Fig.76	Fig.77	Fig.78
	1880	18900		1	74	Fig.79	Fig.80	Fig.81
	1880	18900		75	0	Fig.82	Fig.83	Fig.84
	1902.5	19125		1	74	Fig.85	Fig.86	Fig.87

	1902.5	19125		75	0	Fig.88	Fig.89	Fig.90
	1860	18700	20	1	99	Fig.91	Fig.92	Fig.93
	1860	18700		100	0	Fig.94	Fig.95	Fig.96
	1880	18900		1	99	Fig.97	Fig.98	Fig.99
	1880	18900		100	0	Fig.100	Fig.101	Fig.102
	1900	19100		1	99	Fig.103	Fig.104	Fig.105
	1900	19100		100	0	Fig.106	Fig.107	Fig.108

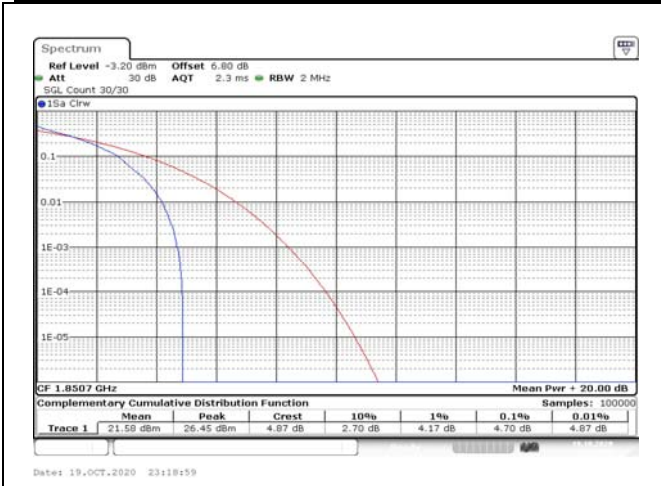


Fig.1

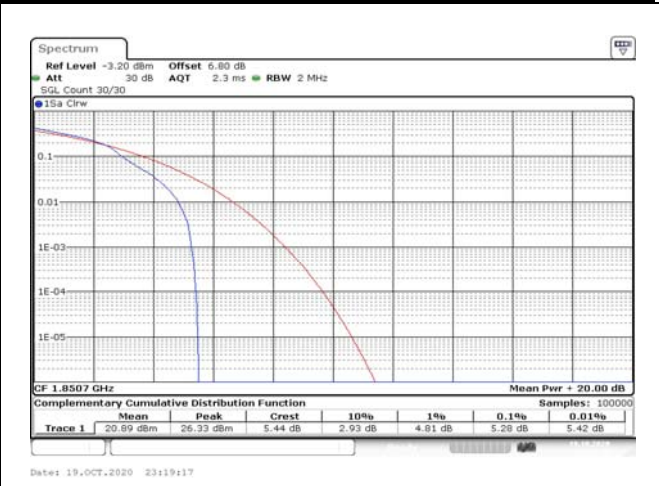


Fig.2

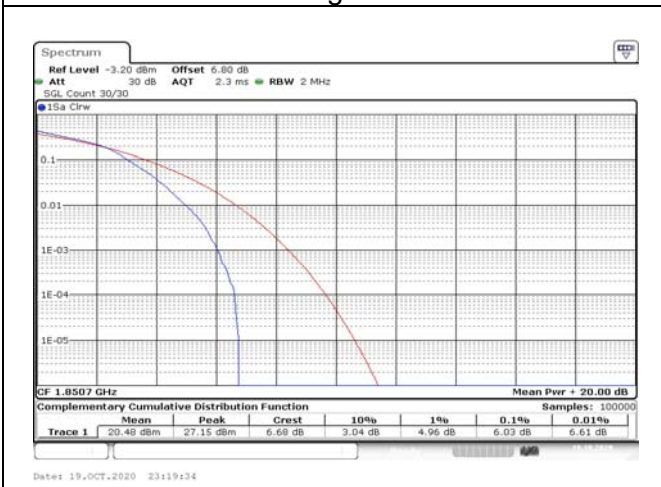


Fig.3

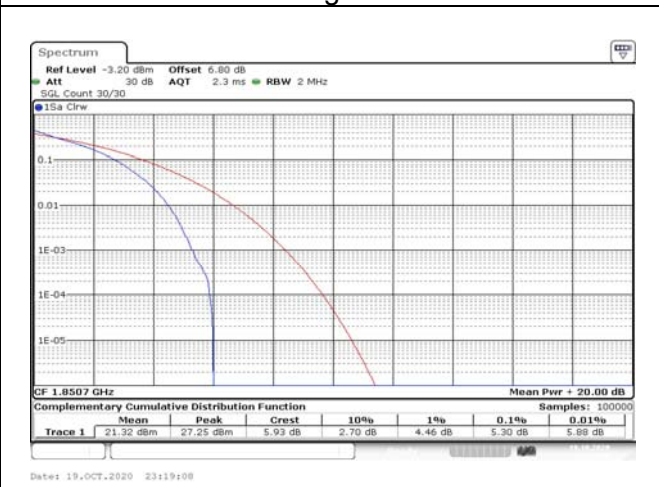


Fig.4



Fig.5

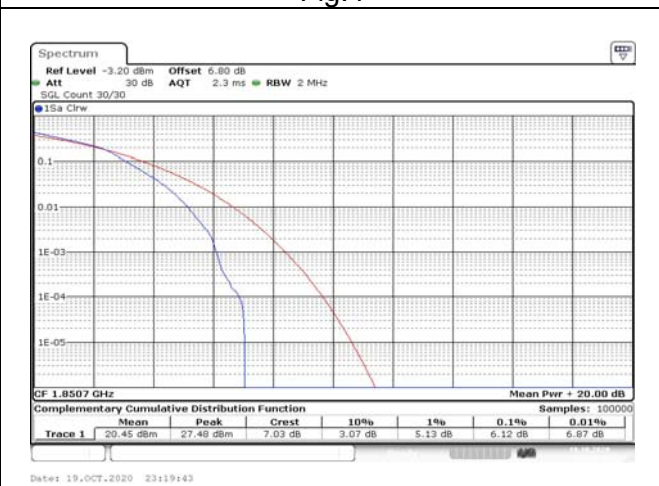


Fig.6



Fig.7

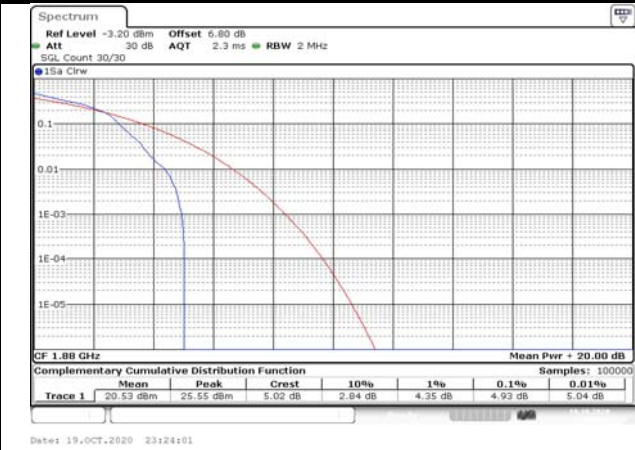


Fig.8

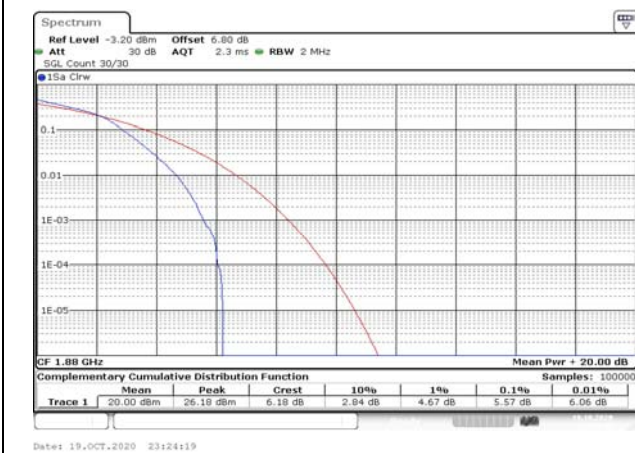


Fig.9

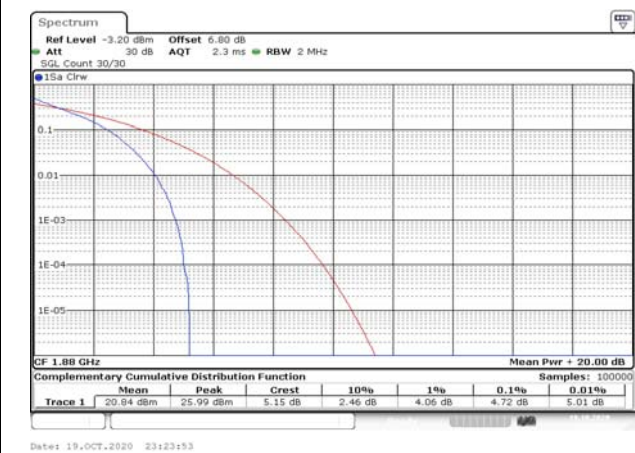


Fig.10

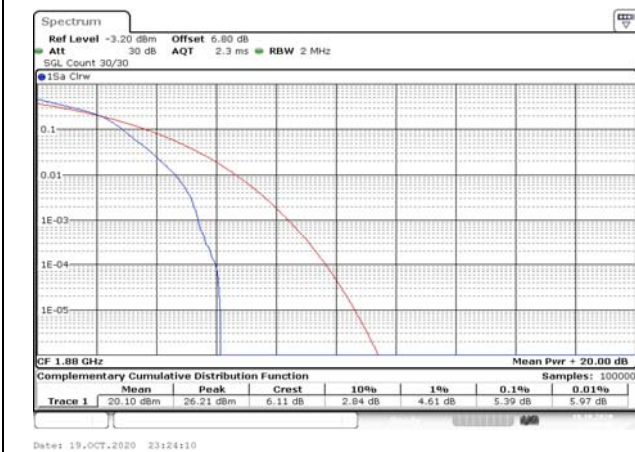


Fig.11

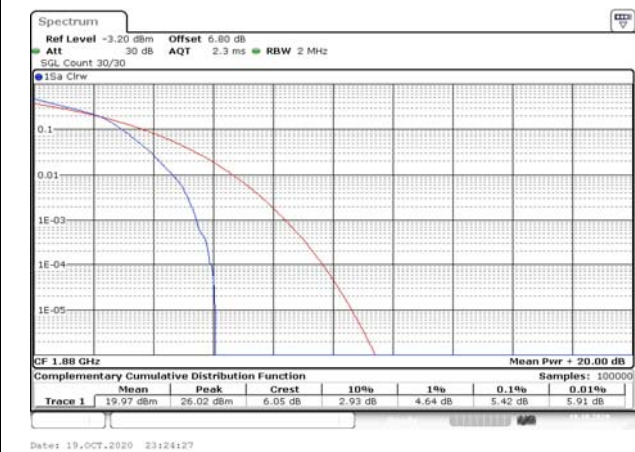


Fig.12



Fig.13

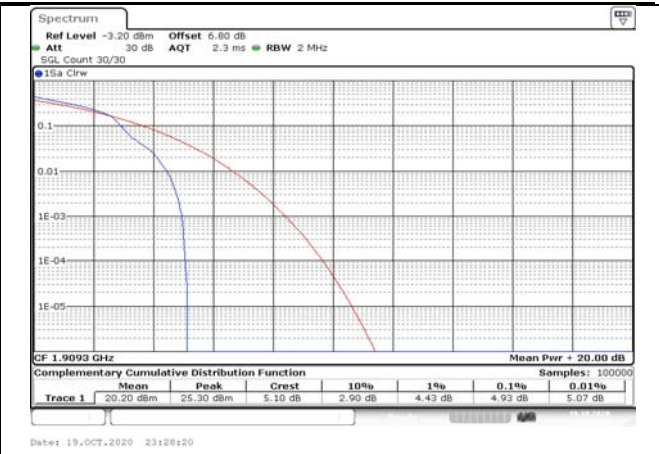


Fig.14

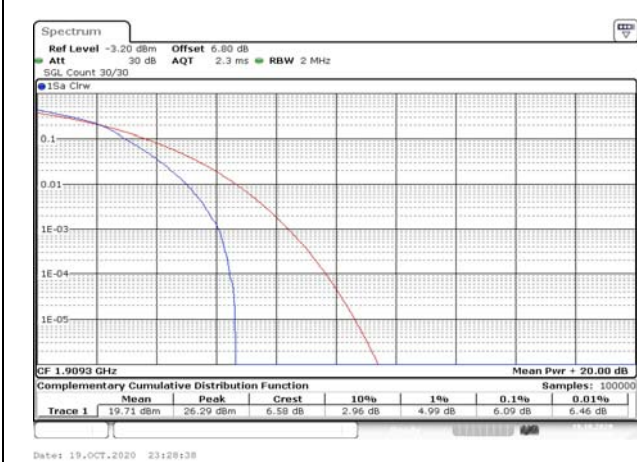


Fig.15

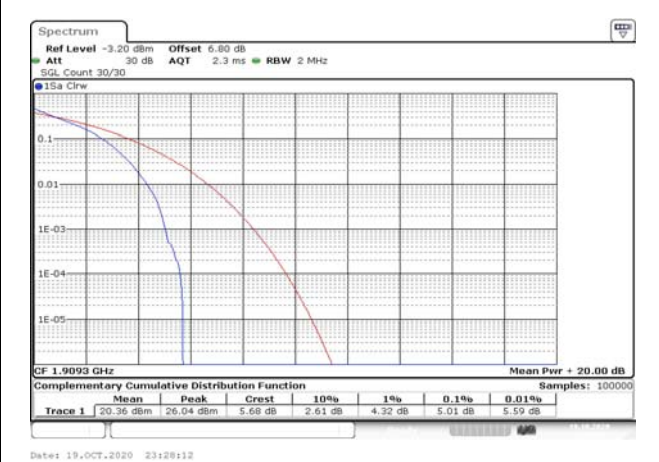


Fig.16

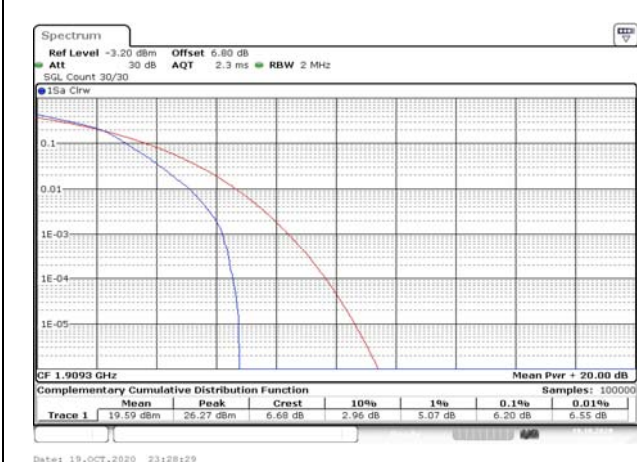


Fig.17

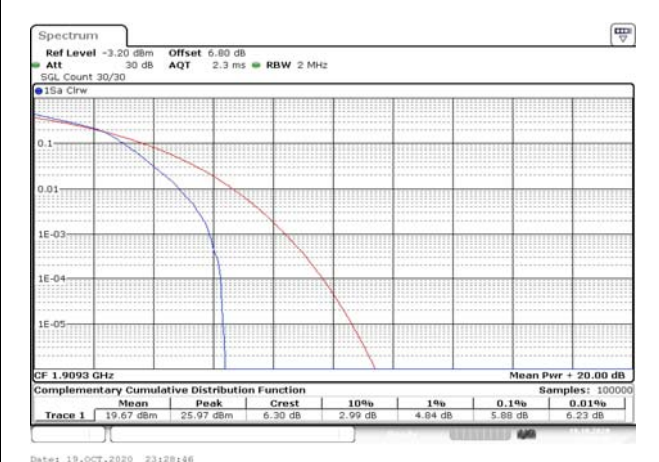


Fig.18

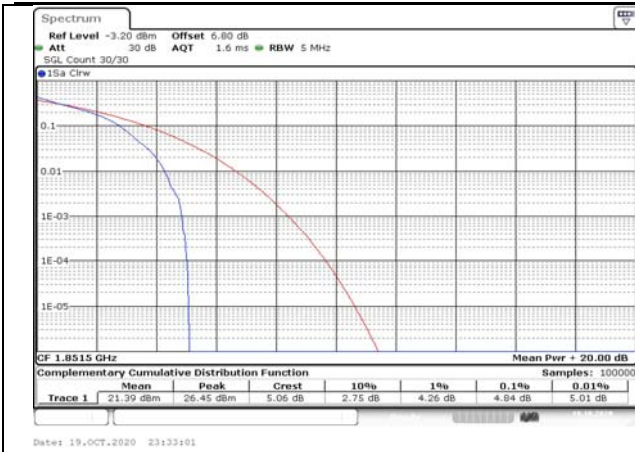


Fig.19

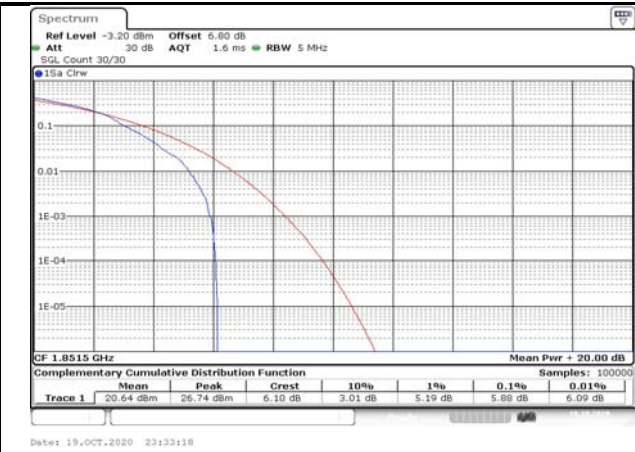


Fig.20

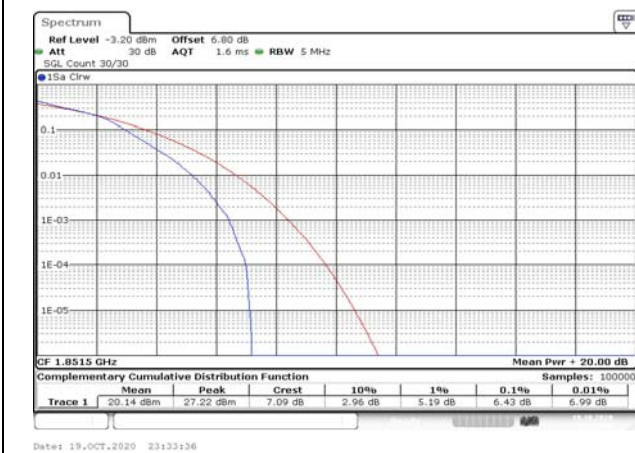


Fig.21

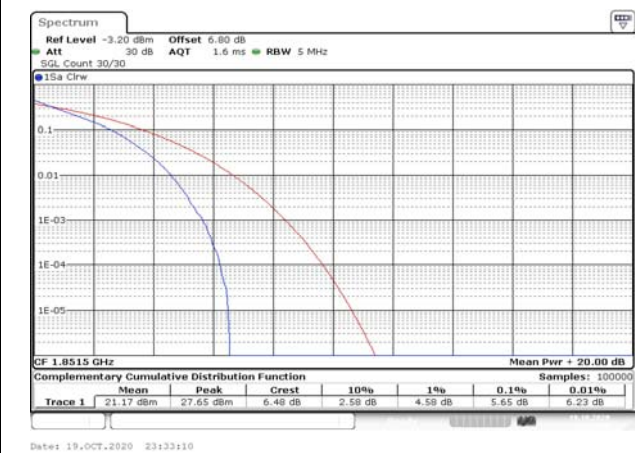


Fig.22

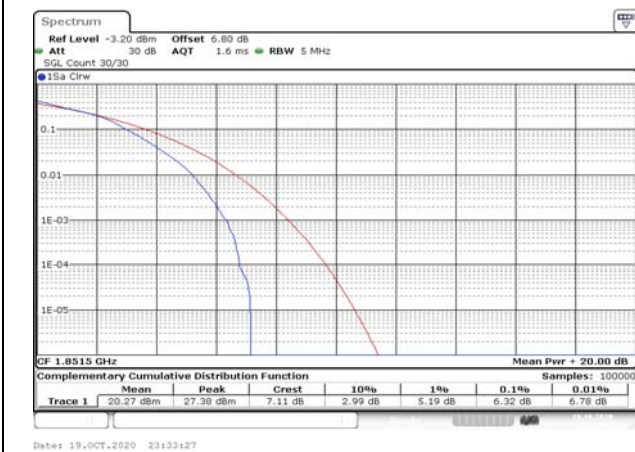


Fig.23

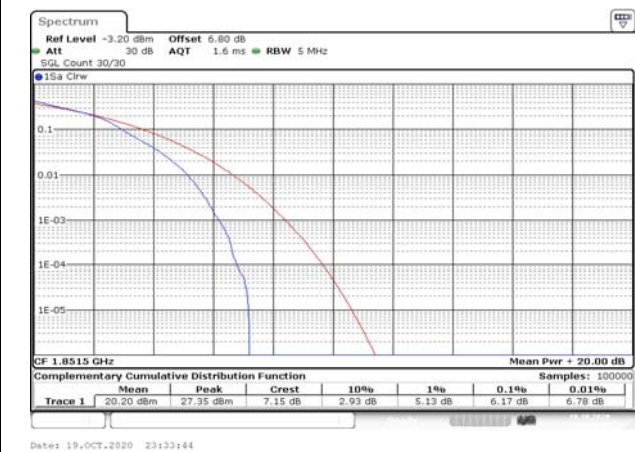


Fig.24



Fig.25



Fig.26

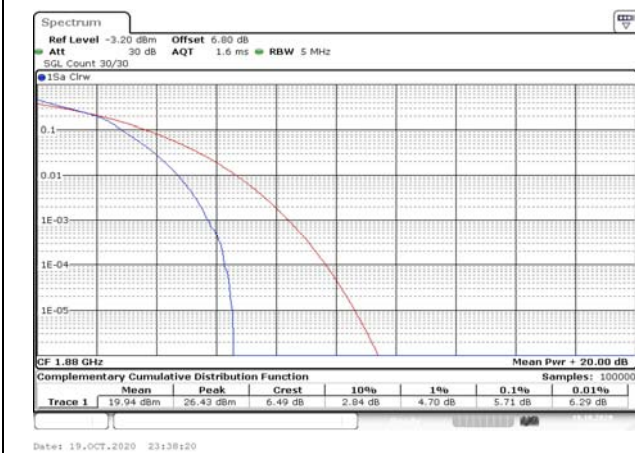


Fig.27

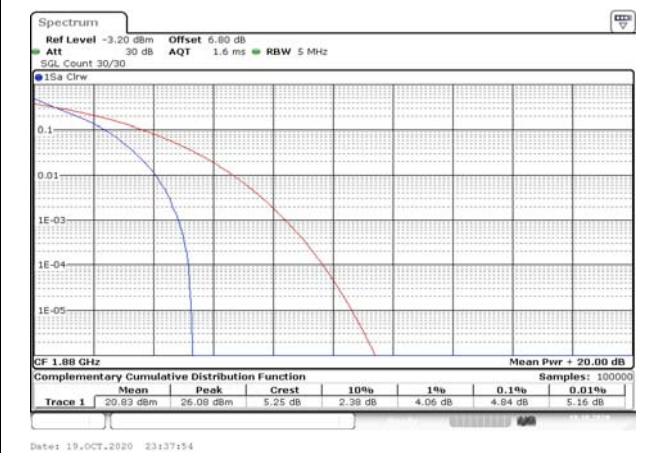


Fig.28

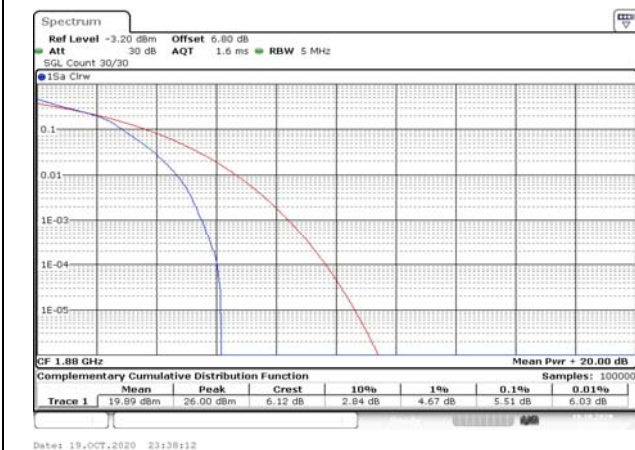


Fig.29

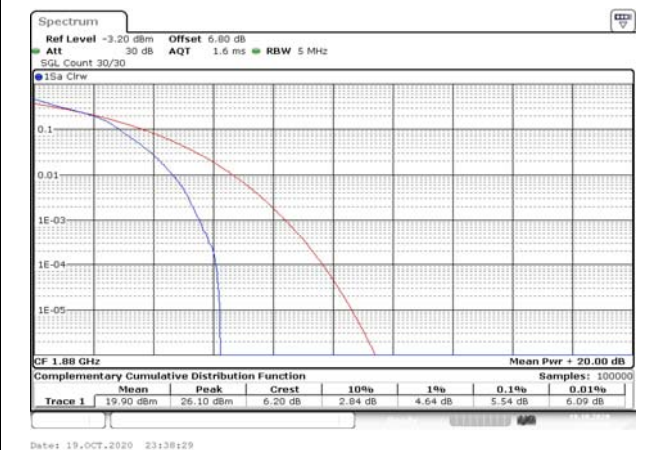


Fig.30

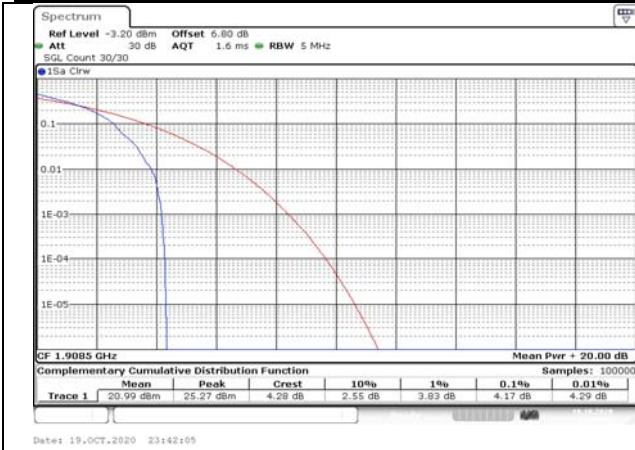


Fig.31

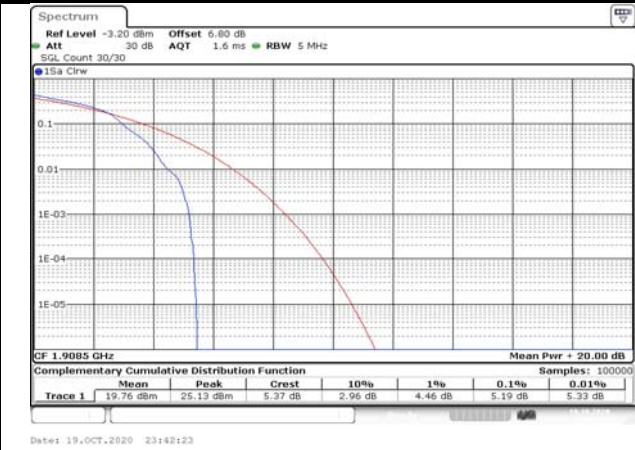


Fig.32

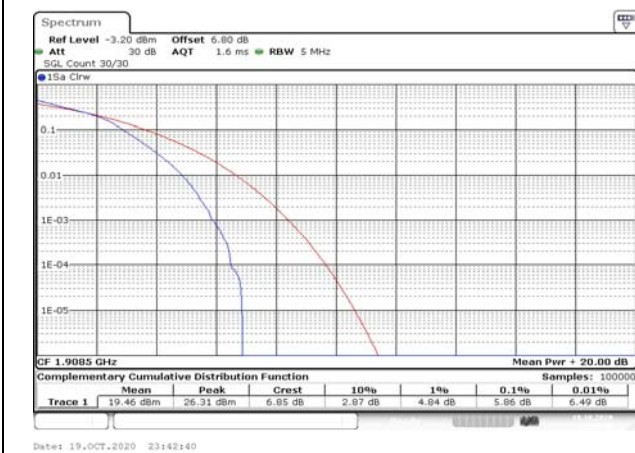


Fig.33

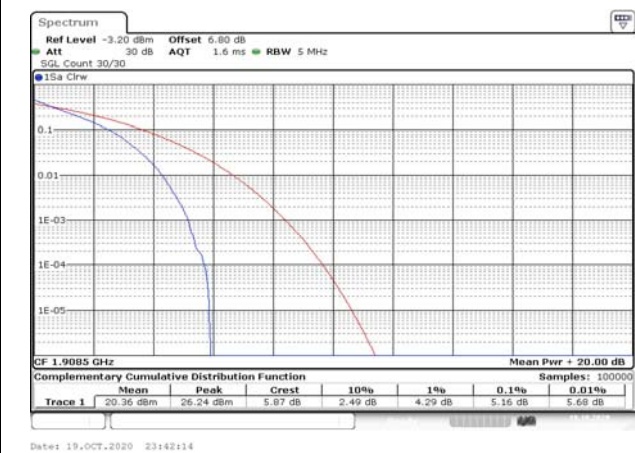


Fig.34

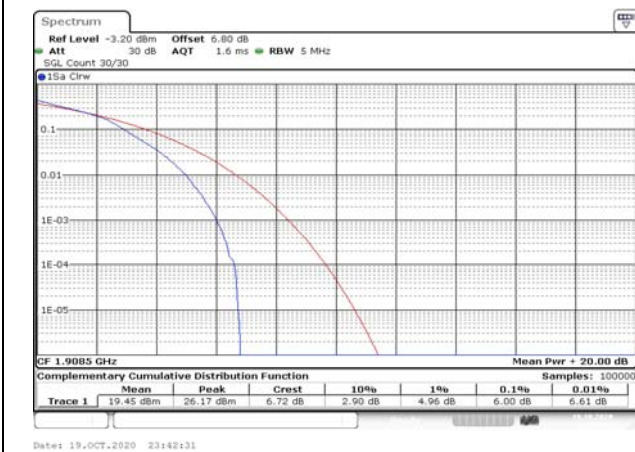


Fig.35

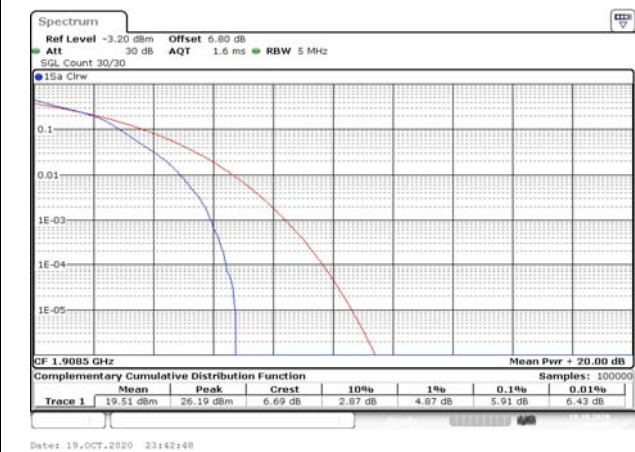


Fig.36

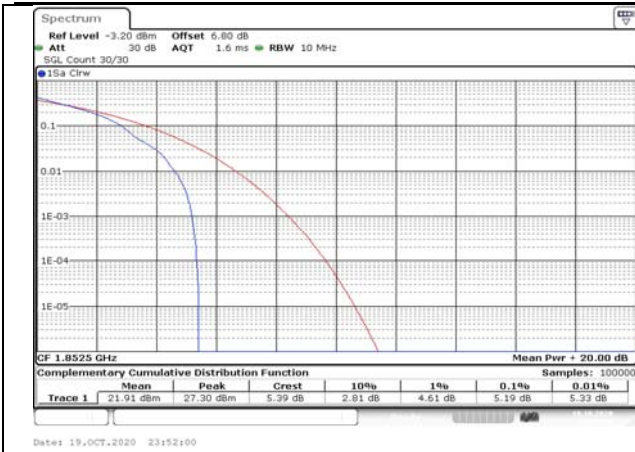


Fig.37

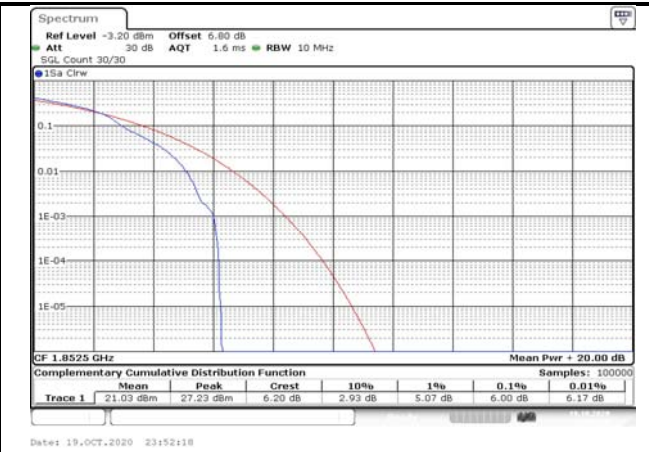


Fig.38

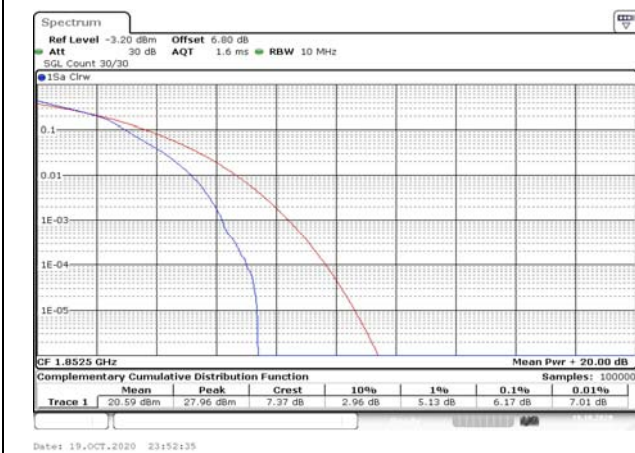


Fig.39

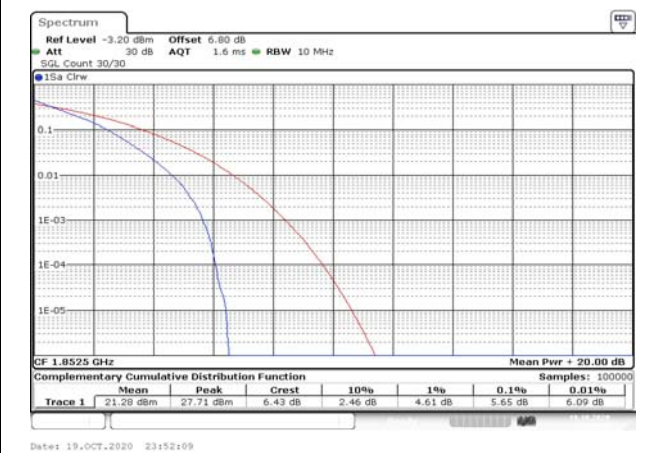


Fig.40

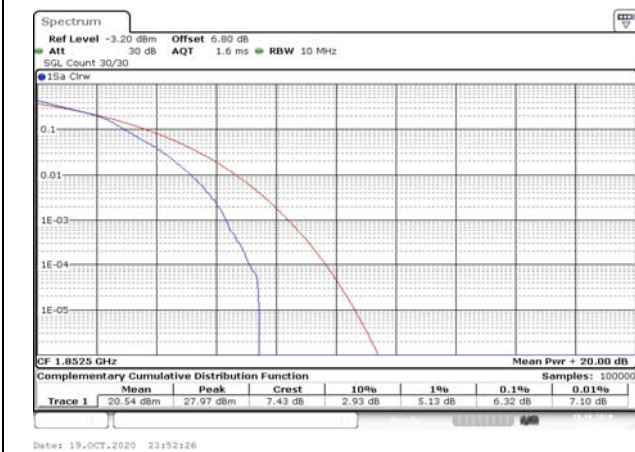


Fig.41

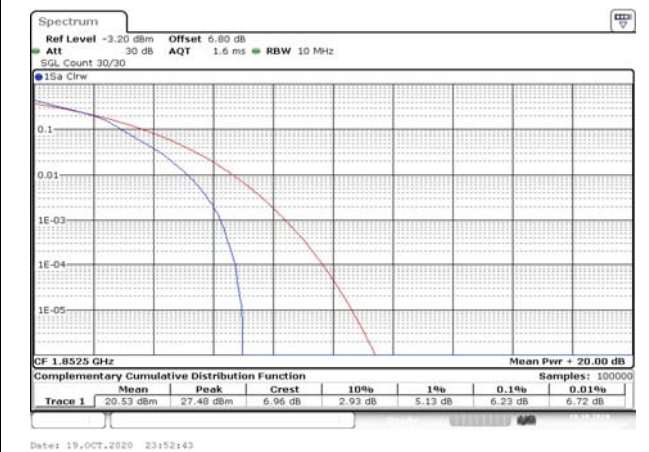


Fig.42



Fig.43

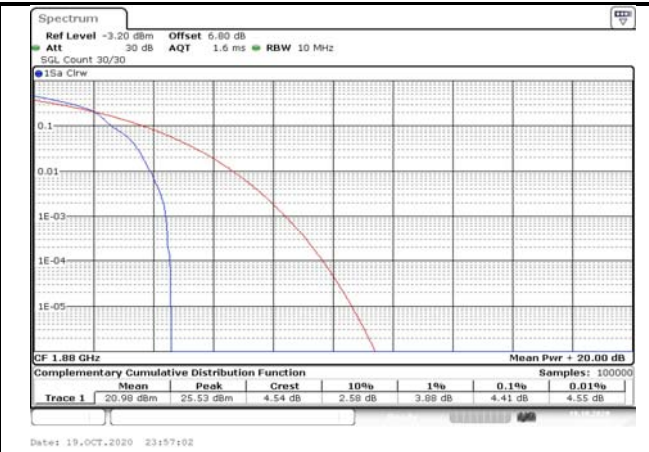


Fig.44

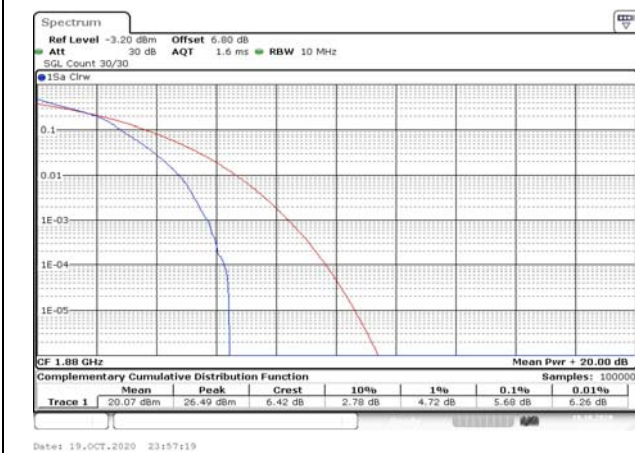


Fig.45

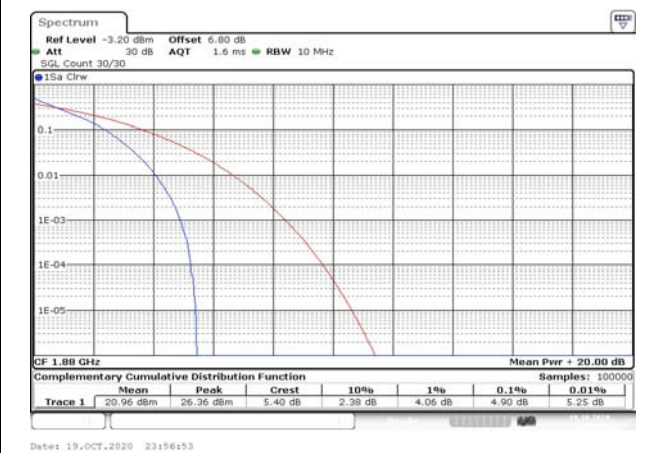


Fig.46

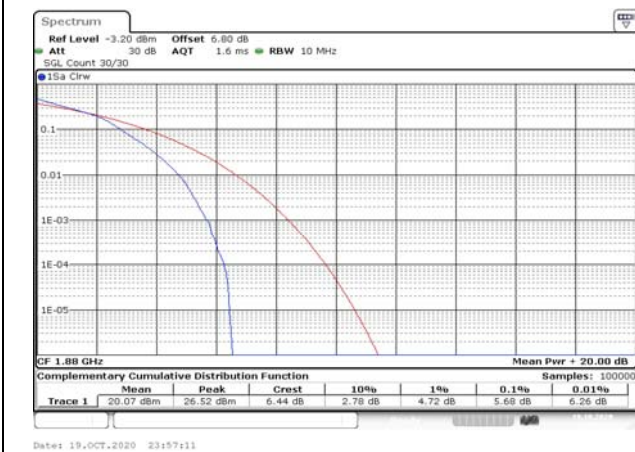


Fig.47

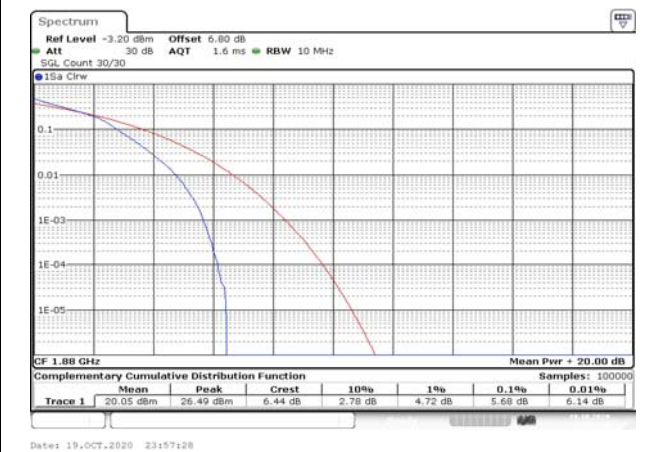


Fig.48

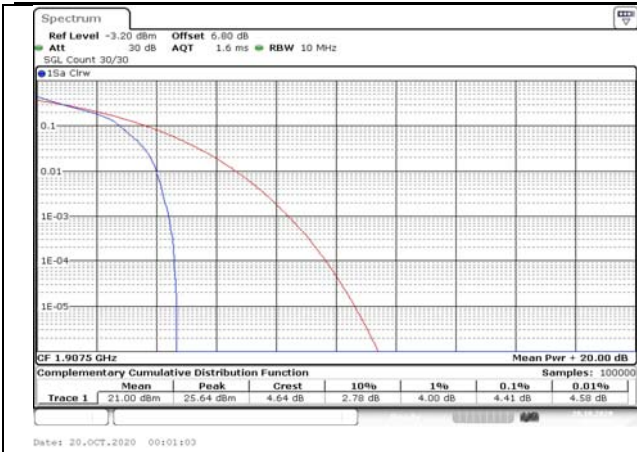


Fig.49

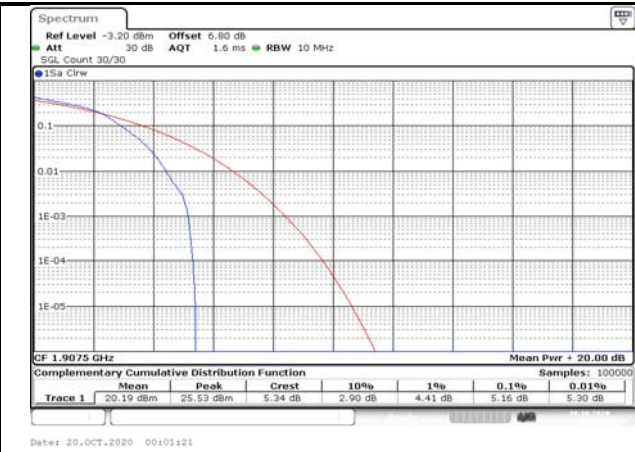


Fig.50

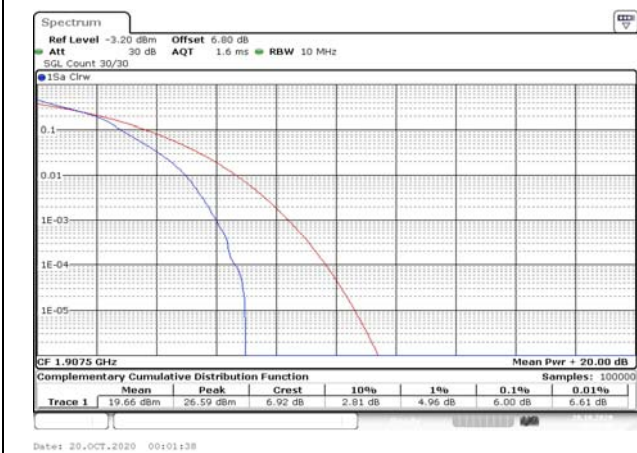


Fig.51

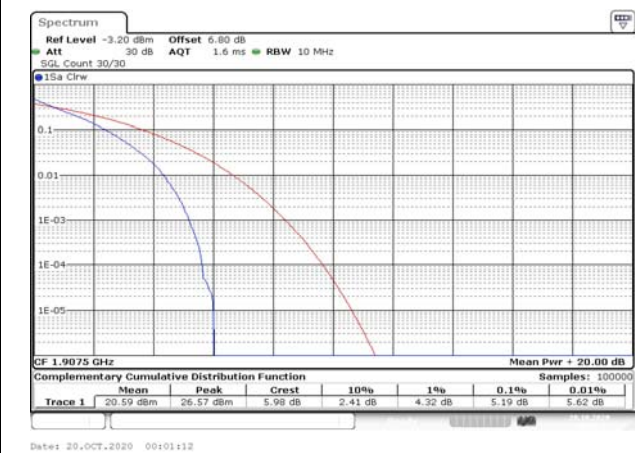


Fig.52

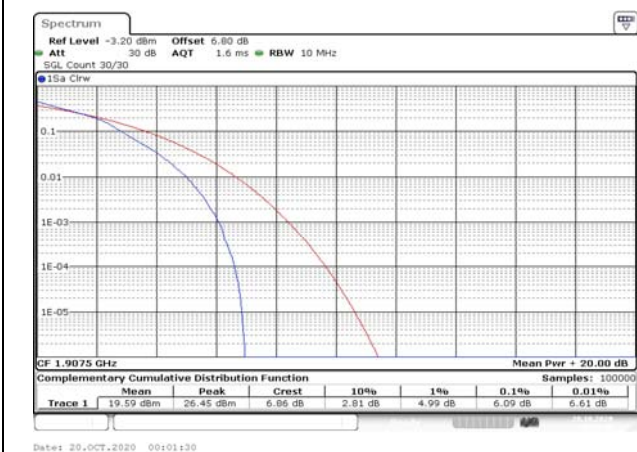


Fig.53

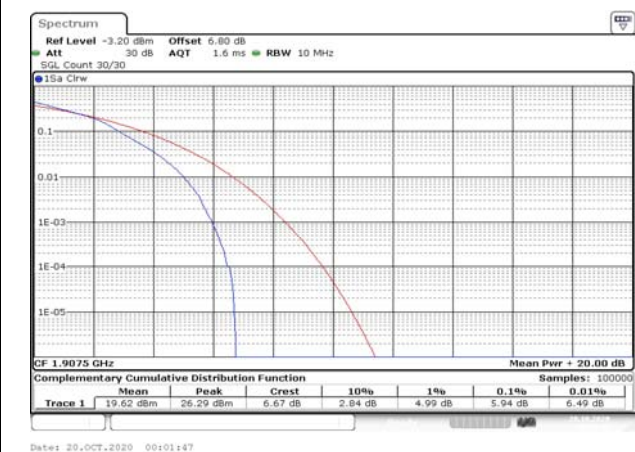


Fig.54