

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	22.25
				1	3	22.31
				1	5	22.18
				3	0	22.23
				3	1	22.26
				3	3	22.19
				6	0	21.31
	1880	18900		1	0	21.96
				1	3	21.87
				1	5	21.83
				3	0	21.85
				3	1	21.89
				3	3	21.86
				6	0	20.87
	1909.3	19193		1	0	22.15
				1	3	22.09
				1	5	22.06
				3	0	22.10
				3	1	22.09
				3	3	22.05
6				0	21.09	
16QAM	1850.7	18607		1	0	21.36
				1	3	21.34
				1	5	21.28
				3	0	21.38
				3	1	21.38
				3	3	21.33
				6	0	20.49
	1880	18900		1	0	20.90
				1	3	21.07
			1	5	21.01	
			3	0	20.99	
			3	1	21.08	
			3	3	21.01	
			6	0	20.02	
	1909.3	19193	1	0	21.33	
			1	3	21.40	
			1	5	21.30	
			3	0	21.14	
			3	1	21.19	
			3	3	21.07	
			6	0	20.18	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1850.7	18607	1.4	1	0	20.72
				1	3	20.73
				1	5	20.62
				3	0	20.51
				3	1	20.55
				3	3	20.52
				6	0	19.32
	1880	18900		1	0	20.49
				1	3	20.41
				1	5	20.32
				3	0	20.19
				3	1	20.25
				3	3	20.17
				6	0	19.02
	1909.3	19193		1	0	19.93
				1	3	19.97
				1	5	19.88
				3	0	20.28
				3	1	20.29
				3	3	20.21
				6	0	19.25

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1851.5	18615	3	1	0	22.39
				1	8	22.26
				1	14	22.22
				8	0	21.41
				8	4	21.36
				8	7	21.29
				15	0	21.36
	1880	18900		1	0	22.07
				1	8	22.05
				1	14	21.91
				8	0	21.06
				8	4	20.95
				8	7	20.86
				15	0	20.90
	1908.5	19185		1	0	22.30
				1	8	22.18
				1	14	22.10
				8	0	21.24
				8	4	21.23
				8	7	21.18
				15	0	21.25
16QAM	1851.5	18615	1	0	22.06	
			1	8	21.94	
			1	14	21.87	
			8	0	20.51	
			8	4	20.47	
			8	7	20.39	
			15	0	20.42	
	1880	18900	1	0	21.49	
			1	8	21.30	
			1	14	21.16	
			8	0	20.02	
			8	4	19.83	
			8	7	19.76	
			15	0	19.95	
	1908.5	19185	1	0	21.55	
			1	8	21.53	
			1	14	21.39	
			8	0	20.16	
			8	4	20.25	
			8	7	20.13	
			15	0	20.18	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1851.5	18615	3	1	0	20.82
				1	8	20.75
				1	14	20.62
				8	0	19.58
				8	4	19.56
				8	7	19.56
				15	0	19.34
	1880	18900		1	0	19.84
				1	8	19.88
				1	14	19.66
				8	0	19.02
				8	4	18.97
				8	7	18.89
				15	0	19.09
	1908.5	19185		1	0	20.15
				1	8	20.13
				1	14	19.88
				8	0	19.26
				8	4	19.26
				8	7	19.17
				15	0	19.20

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1852.5	18625	5	1	0	22.33	
				1	12	22.21	
				1	24	22.17	
				12	0	21.46	
				12	7	21.38	
				12	13	21.30	
				25	0	21.40	
	1880	18900		1	0	21.98	
				1	12	21.95	
				1	24	21.84	
				12	0	21.06	
				12	7	20.93	
				12	13	20.91	
				25	0	20.85	
	1907.5	19175		1	0	22.15	
				1	12	22.09	
				1	24	22.10	
				12	0	21.27	
				12	7	21.21	
				12	13	21.16	
				25	0	21.20	
	16QAM	1852.5		18625	1	0	21.68
					1	12	21.46
					1	24	21.50
12					0	20.44	
12					7	20.39	
12					13	20.24	
25					0	20.29	
1880		18900		1	0	21.38	
				1	12	21.36	
			1	24	21.32		
			12	0	19.96		
			12	7	19.90		
			12	13	19.94		
			25	0	19.98		
1907.5		19175	1	0	21.56		
			1	12	21.51		
			1	24	21.49		
			12	0	20.15		
			12	7	20.17		
			12	13	20.06		
			25	0	20.18		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1852.5	18625	5	1	0	20.33
				1	12	20.22
				1	24	20.21
				12	0	19.40
				12	7	19.41
				12	13	19.24
				25	0	19.34
	1880	18900		1	0	20.29
				1	12	20.32
				1	24	20.16
				12	0	19.14
				12	7	19.05
				12	13	19.00
				25	0	19.03
	1907.5	19175		1	0	20.46
				1	12	20.43
				1	24	20.51
				12	0	19.33
				12	7	19.28
				12	13	19.25
				25	0	19.22

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1855	18650	10	1	0	22.35	
				1	25	22.19	
				1	49	22.15	
				25	0	21.47	
				25	12	21.29	
				25	25	21.23	
				50	0	21.35	
	1880	18900		1	0	22.07	
				1	25	21.83	
				1	49	22.18	
				25	0	21.11	
				25	12	21.02	
				25	25	21.01	
				50	0	21.05	
	1905	19150		1	0	22.00	
				1	25	22.11	
				1	49	22.23	
				25	0	21.22	
				25	12	21.27	
				25	25	21.24	
				50	0	21.18	
	16QAM	1855		18650	1	0	22.38
					1	25	22.35
					1	49	21.90
25					0	20.43	
25					12	20.34	
25					25	20.30	
50					0	20.41	
1880		18900		1	0	21.67	
				1	25	21.40	
			1	49	21.55		
			25	0	20.10		
			25	12	20.14		
			25	25	20.07		
			50	0	20.01		
1905		19150	1	0	21.34		
			1	25	21.37		
			1	49	21.47		
			25	0	20.25		
			25	12	20.24		
			25	25	20.28		
			50	0	20.25		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1855	18650	10	1	0	21.06
				1	25	20.57
				1	49	20.43
				25	0	19.41
				25	12	19.40
				25	25	19.12
				50	0	19.32
	1880	18900		1	0	20.11
				1	25	19.88
				1	49	19.93
				25	0	19.21
				25	12	19.15
				25	25	19.07
				50	0	19.10
	1905	19150		1	0	19.81
				1	25	19.95
				1	49	19.95
				25	0	19.22
				25	12	19.34
				25	25	19.30
				50	0	19.26

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1857.5	18675	15	1	0	22.21	
				1	37	22.06	
				1	74	21.94	
				36	0	21.27	
				36	29	21.04	
				36	30	21.16	
				75	0	21.12	
	1880	18900		1	0	21.86	
				1	37	21.83	
				1	74	21.74	
				36	0	20.95	
				36	29	20.88	
				36	30	20.74	
				75	0	20.92	
	1902.5	19125		1	0	21.88	
				1	37	21.96	
				1	74	21.98	
				36	0	20.98	
				36	29	20.98	
				36	30	21.01	
				75	0	21.13	
	16QAM	1857.5		18675	1	0	21.94
					1	37	21.68
					1	74	21.62
36					0	20.33	
36					29	20.16	
36					30	20.04	
75					0	20.14	
1880		18900	1	0	21.42		
			1	37	21.41		
			1	74	21.35		
			36	0	19.99		
			36	29	19.79		
			36	30	19.95		
			75	0	19.90		
1902.5		19125	1	0	21.12		
			1	37	21.23		
			1	74	21.28		
			36	0	20.01		
			36	29	19.96		
			36	30	19.99		
75	0	20.11					

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1857.5	18675	15	1	0	20.62
				1	37	20.37
				1	74	20.29
				36	0	19.28
				36	29	19.23
				36	30	19.21
				75	0	19.19
	1880	18900		1	0	20.16
				1	37	20.17
				1	74	20.11
				36	0	19.01
				36	29	18.88
				36	30	18.98
				75	0	18.92
	1902.5	19125		1	0	19.86
				1	37	19.91
				1	74	19.80
				36	0	19.06
				36	29	19.14
				36	30	19.12
				75	0	19.12

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1860	18700	20	1	0	22.10
				1	49	21.92
				1	99	21.82
				50	0	21.21
				50	24	21.21
				50	50	20.98
				100	0	21.20
	1880	18900		1	0	21.81
				1	49	21.60
				1	99	21.83
				50	0	20.95
				50	24	20.86
				50	50	20.86
				100	0	20.96
	1900	19100		1	0	21.79
				1	49	21.88
				1	99	21.87
				50	0	21.02
				50	24	21.09
				50	50	21.00
				100	0	21.05
16QAM	1860	18700	1	0	21.69	
			1	49	21.71	
			1	99	21.69	
			50	0	20.31	
			50	24	20.23	
			50	50	20.07	
			100	0	20.25	
	1880	18900	1	0	21.26	
			1	49	21.16	
			1	99	21.08	
			50	0	19.97	
			50	24	19.90	
			50	50	19.87	
			100	0	19.89	
	1900	19100	1	0	21.42	
			1	49	21.48	
			1	99	21.46	
			50	0	20.05	
			50	24	20.13	
			50	50	20.01	
			100	0	19.99	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1860	18700	20	1	0	20.51
				1	49	20.26
				1	99	20.12
				50	0	19.27
				50	24	19.29
				50	50	19.07
				100	0	19.17
	1880	18900		1	0	20.34
				1	49	20.32
				1	99	20.22
				50	0	18.95
				50	24	18.84
				50	50	18.92
				100	0	18.98
	1900	19100		1	0	20.11
				1	49	20.10
				1	99	20.13
				50	0	19.07
				50	24	19.09
				50	50	19.12
				100	0	19.20

2 Occupied Bandwidth

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	1.082	Fig.1	1.082	Fig.2	1.076	Fig.3
	1880	18900		6	0	1.082	Fig.4	1.082	Fig.5	1.082	Fig.6
	1909.3	19193		6	0	1.082	Fig.7	1.082	Fig.8	1.088	Fig.9
	1851.5	18615	3	15	0	2.683	Fig.10	2.683	Fig.11	2.683	Fig.12
	1880	18900		15	0	2.683	Fig.13	2.696	Fig.14	2.696	Fig.15
	1908.5	19185		15	0	2.683	Fig.16	2.683	Fig.17	2.696	Fig.18
	1852.5	18625	5	25	0	4.472	Fig.19	4.472	Fig.20	4.472	Fig.21
	1880	18900		25	0	4.472	Fig.22	4.472	Fig.23	4.472	Fig.24
	1907.5	19175		25	0	4.472	Fig.25	4.472	Fig.26	4.472	Fig.27
	1855	18650	10	50	0	8.944	Fig.28	8.944	Fig.29	8.944	Fig.30
	1880	18900		50	0	8.987	Fig.31	8.900	Fig.32	8.987	Fig.33
	1905	19150		50	0	8.944	Fig.34	8.944	Fig.35	8.944	Fig.36
	1857.5	18675	15	75	0	13.480	Fig.37	13.415	Fig.38	13.480	Fig.39
	1880	18900		75	0	13.480	Fig.40	13.480	Fig.41	13.480	Fig.42
	1902.5	19125		75	0	13.480	Fig.43	13.415	Fig.44	13.415	Fig.45
	1860	18700	20	100	0	17.974	Fig.46	17.887	Fig.47	17.887	Fig.48
	1880	18900		100	0	17.887	Fig.49	17.887	Fig.50	17.887	Fig.51
	1900	19100		100	0	17.974	Fig.52	17.974	Fig.53	17.974	Fig.54

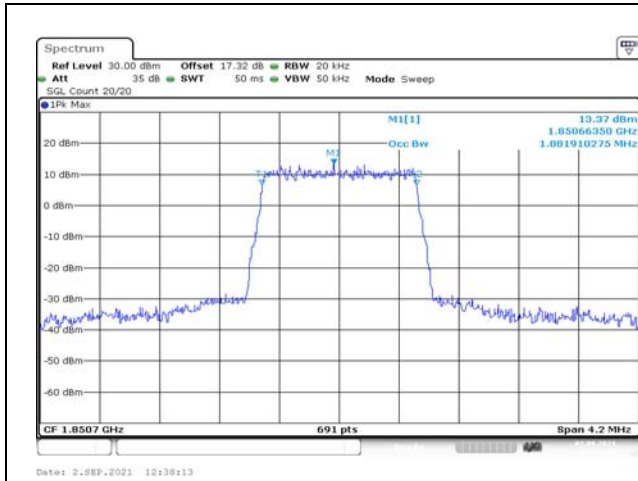


Fig.1

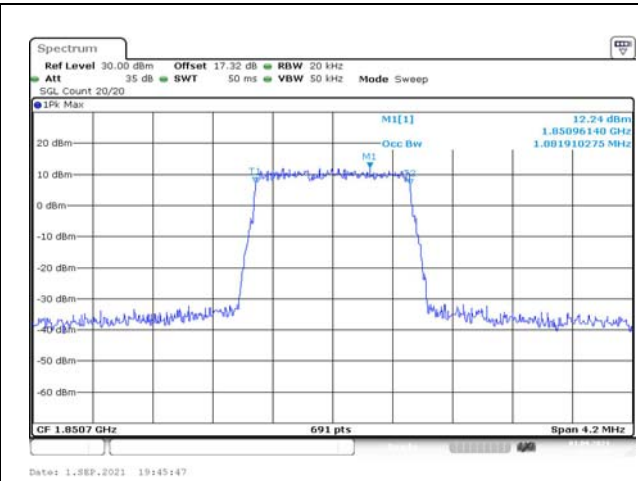


Fig.2

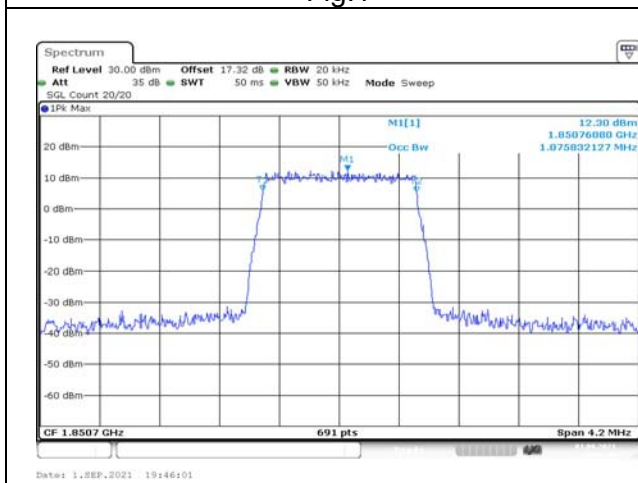


Fig.3

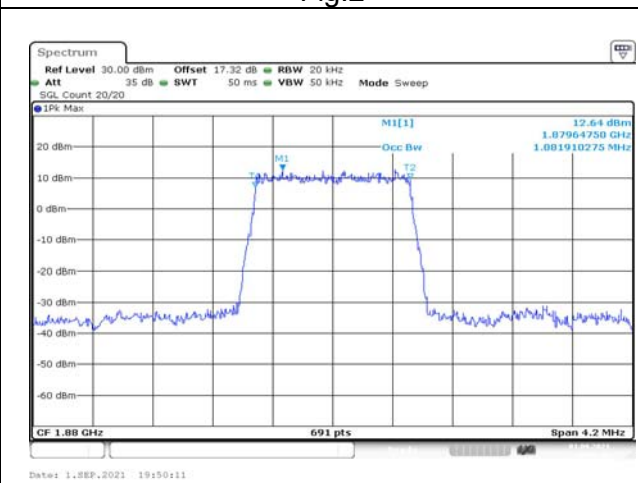


Fig.4

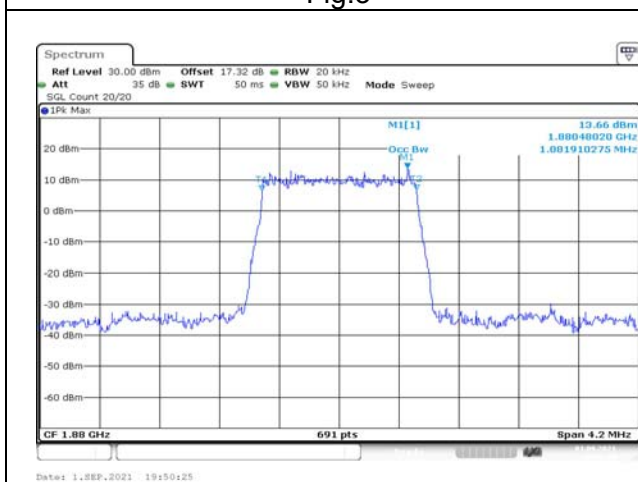


Fig.5

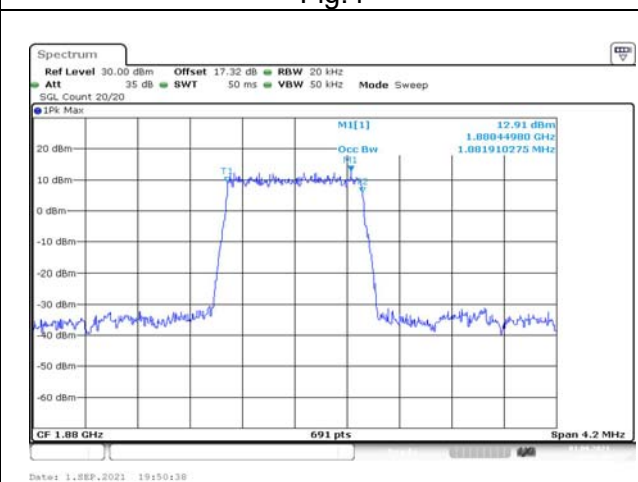


Fig.6

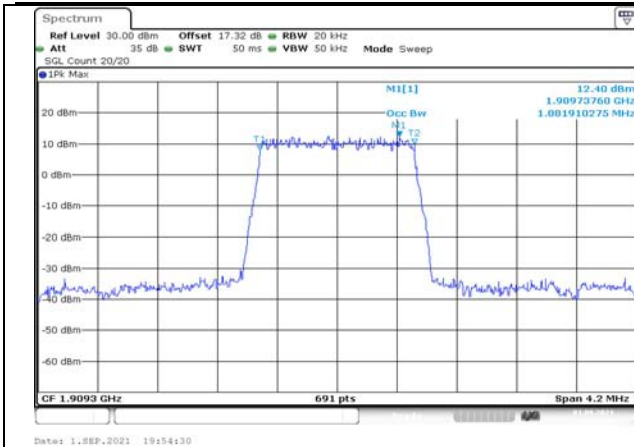


Fig.7

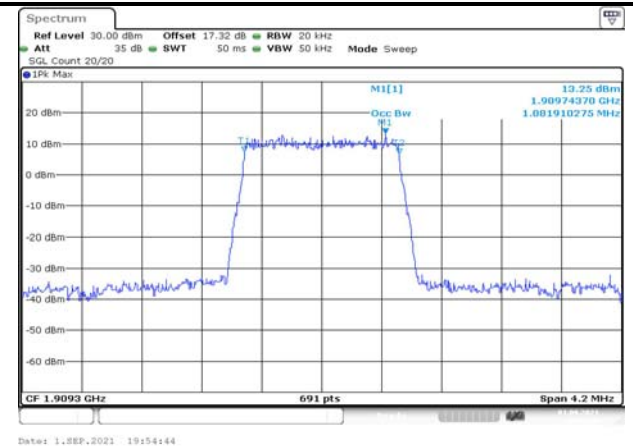


Fig.8

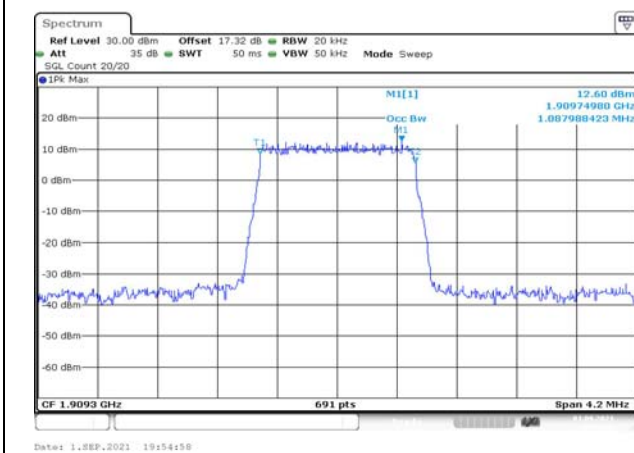


Fig.9

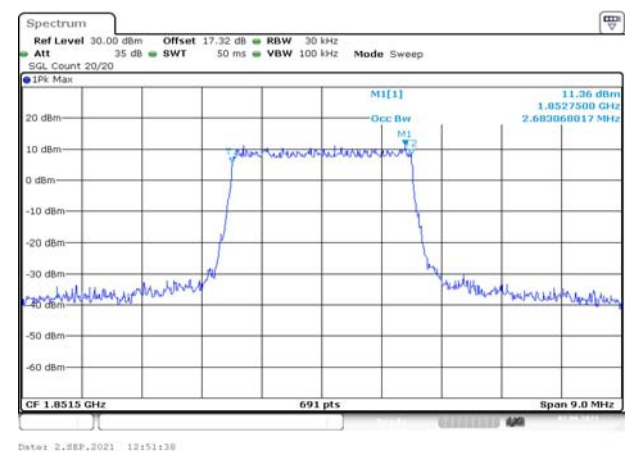


Fig.10

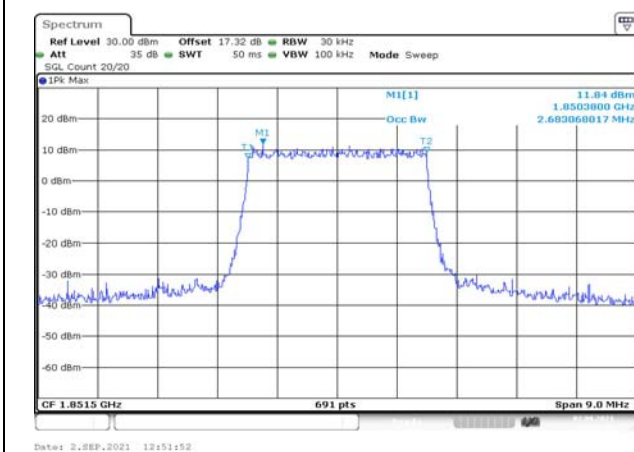


Fig.11

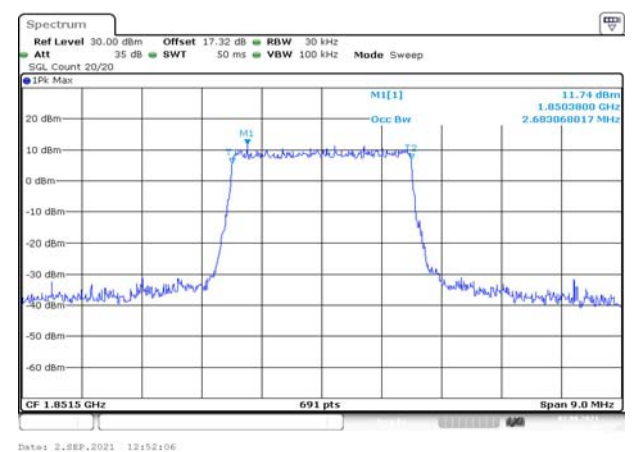
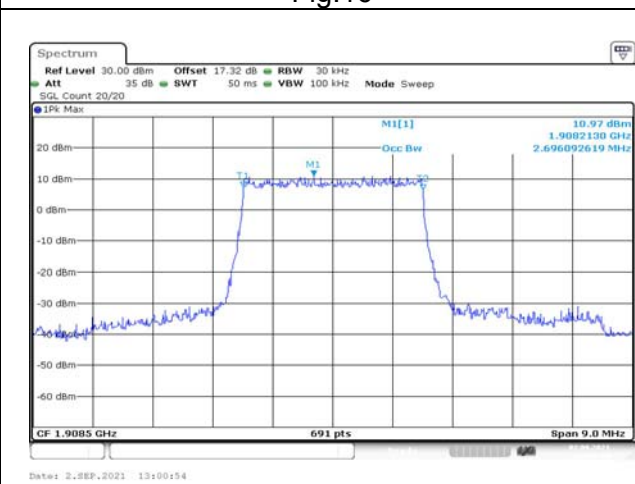
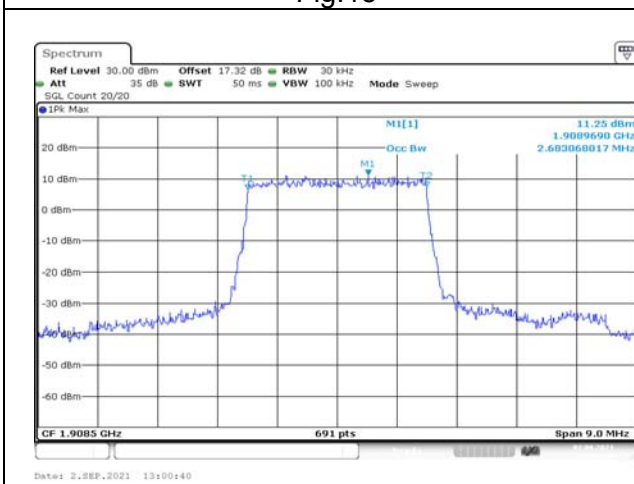
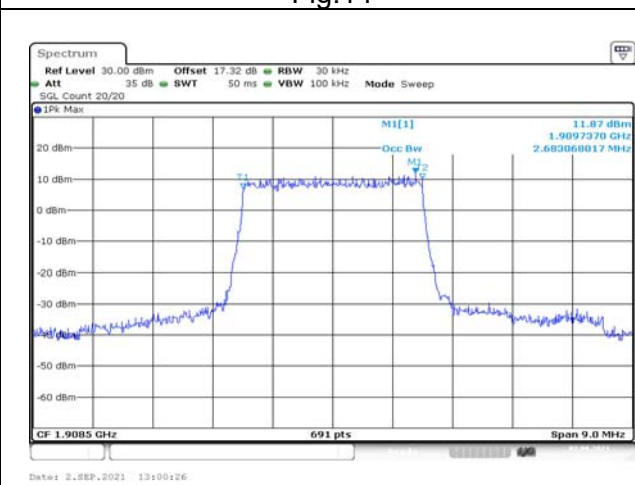
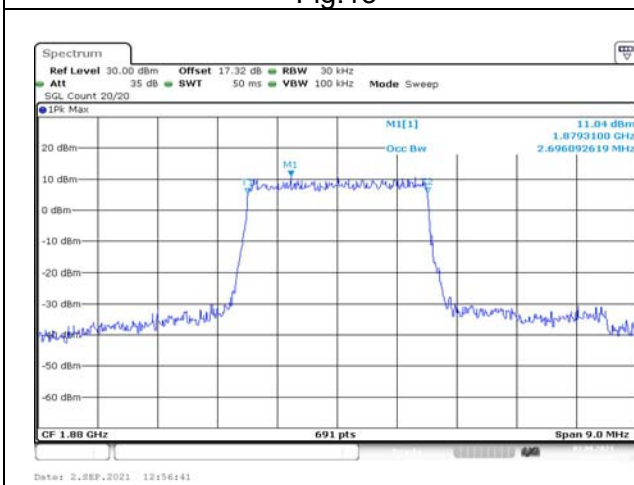
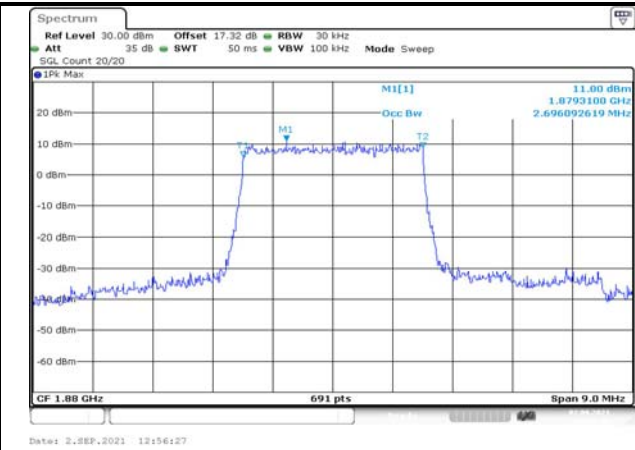
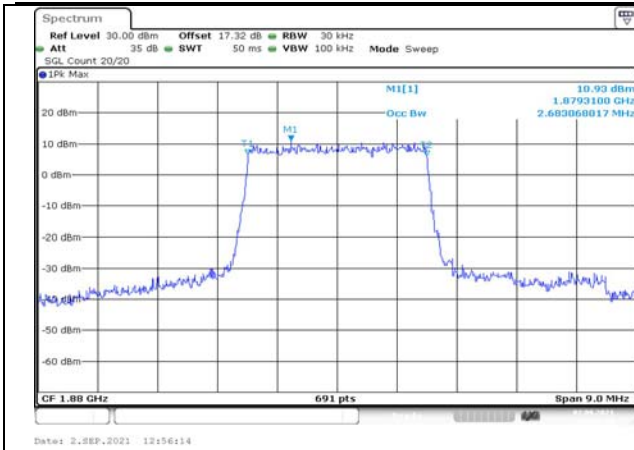
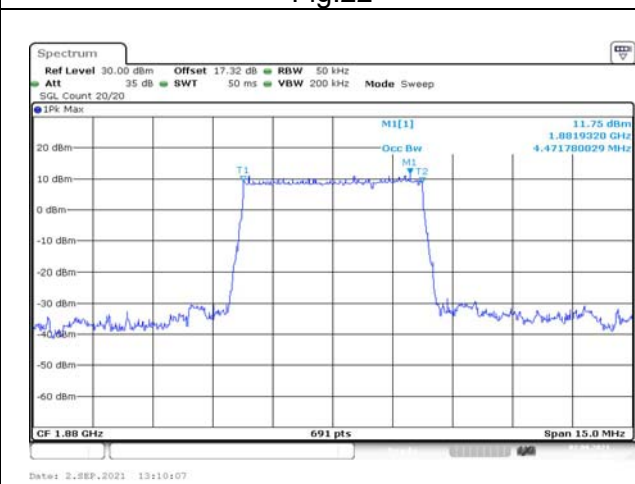
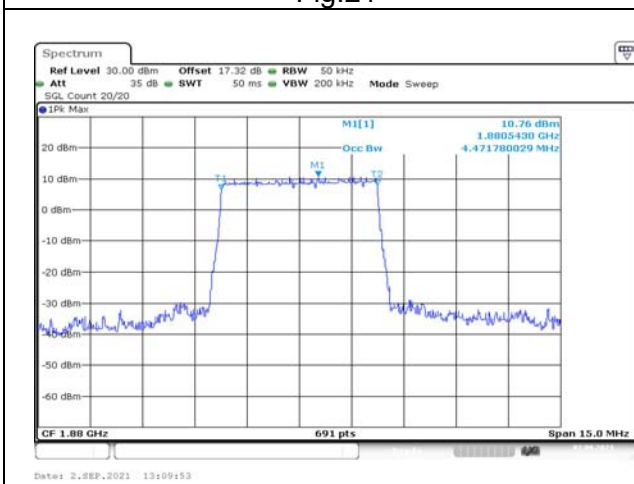
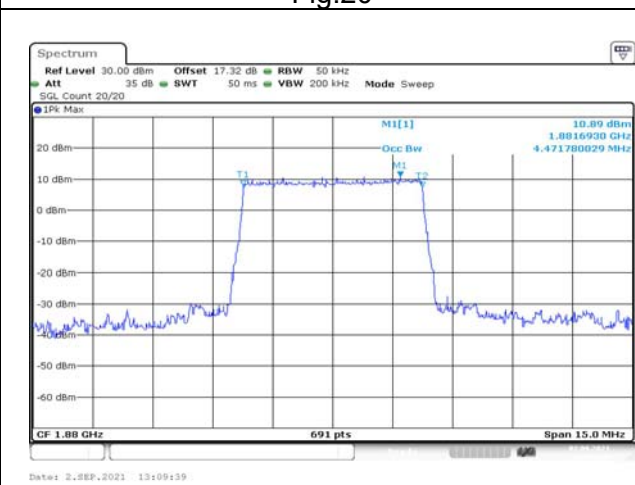
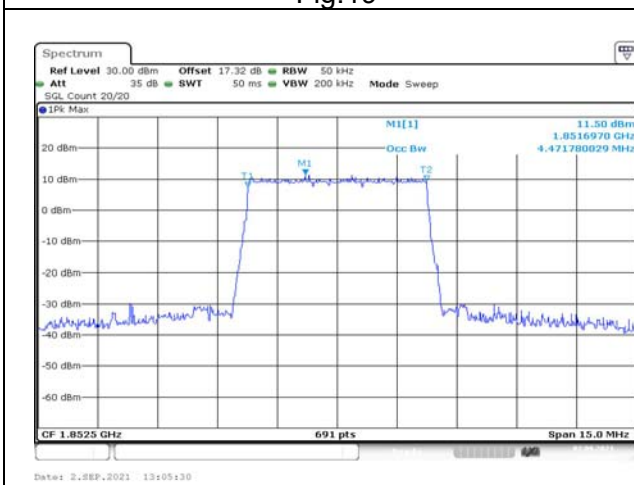
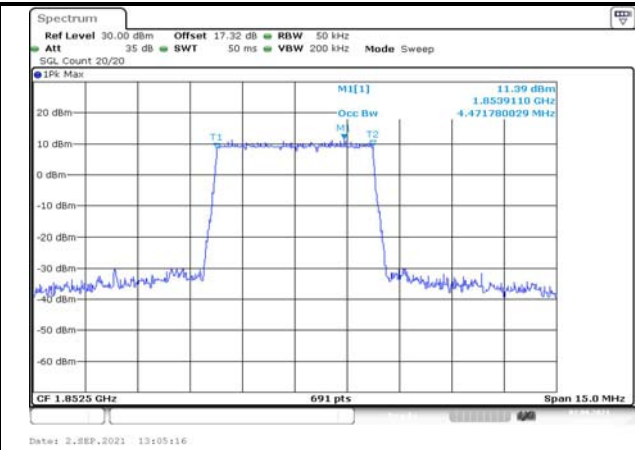
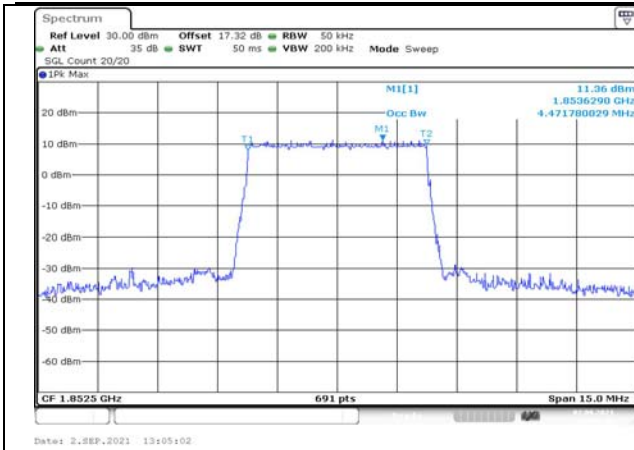
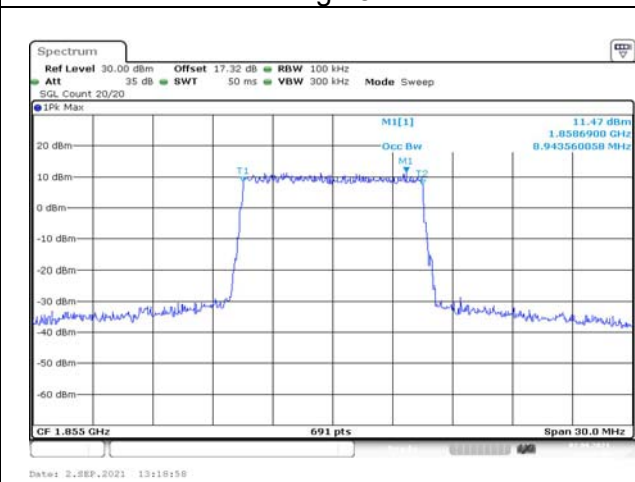
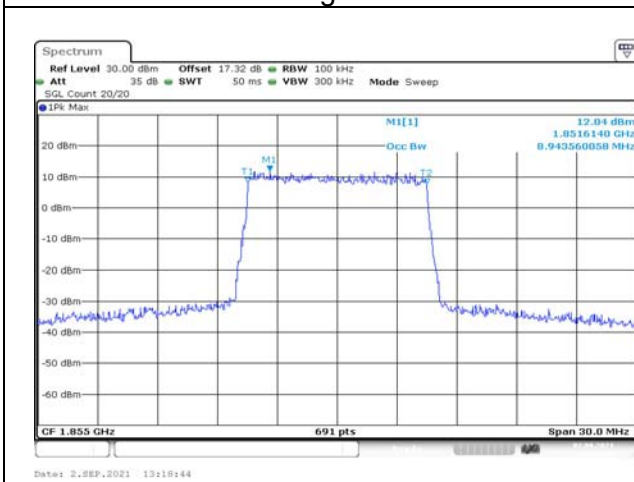
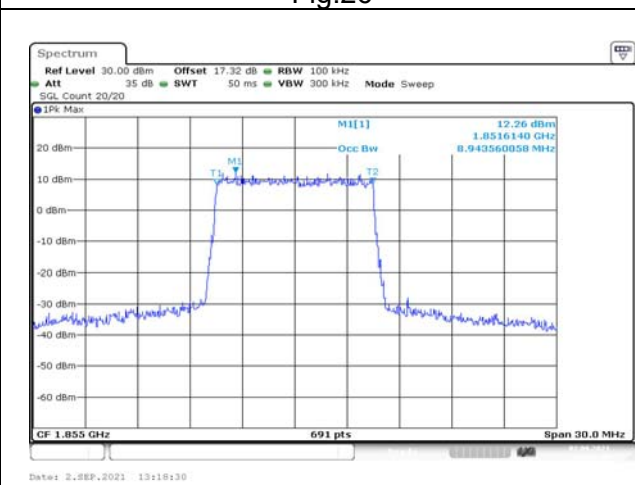
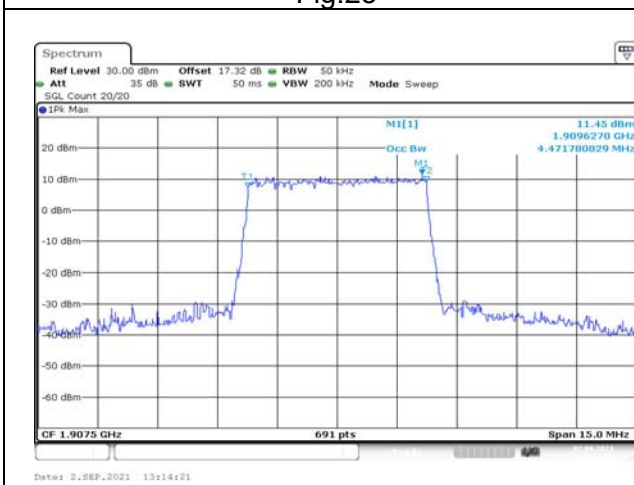
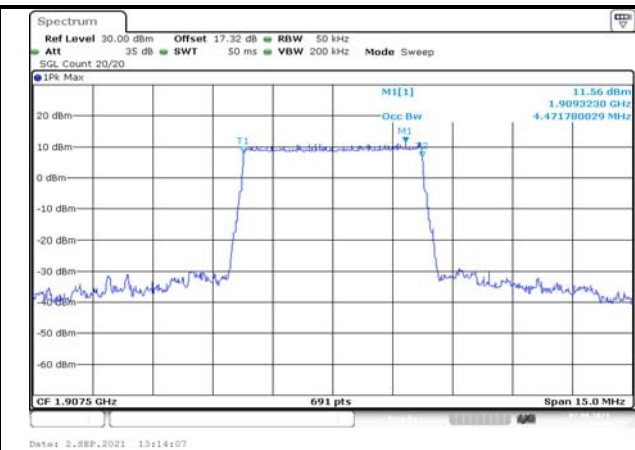
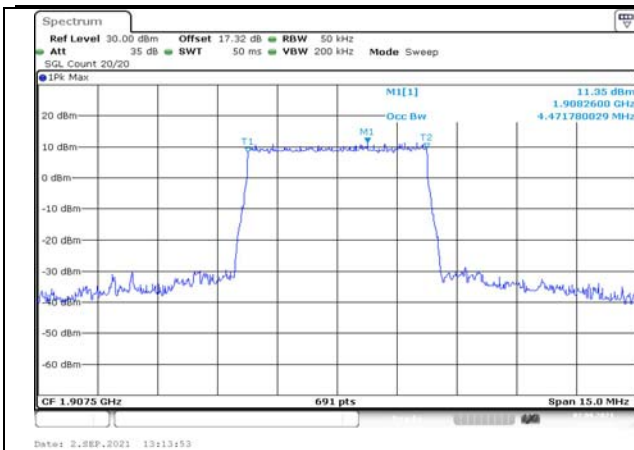
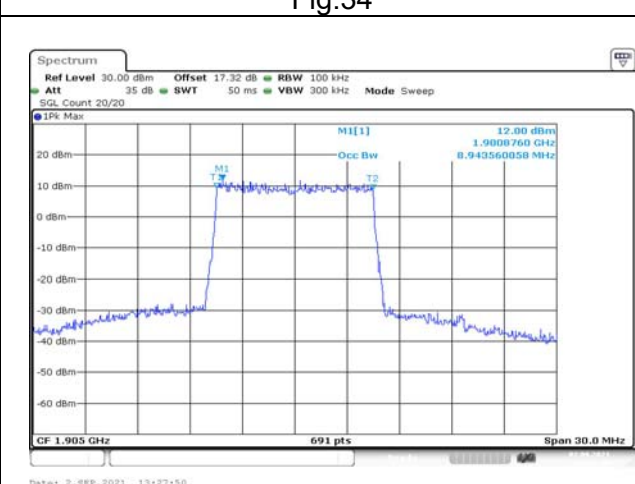
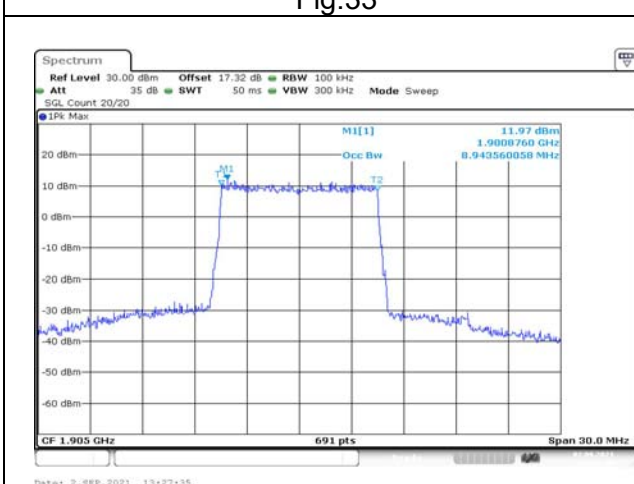
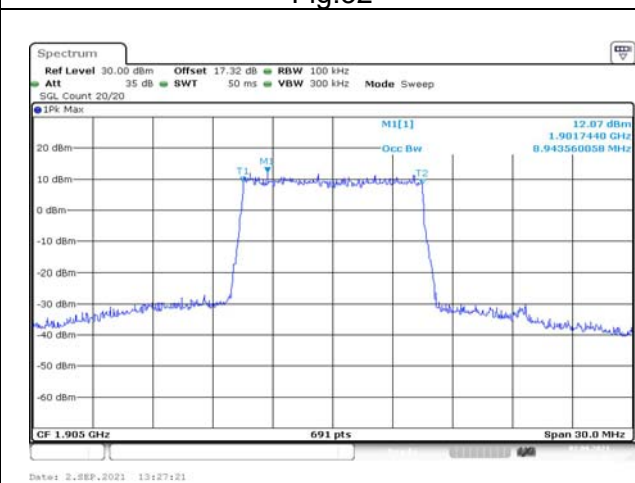
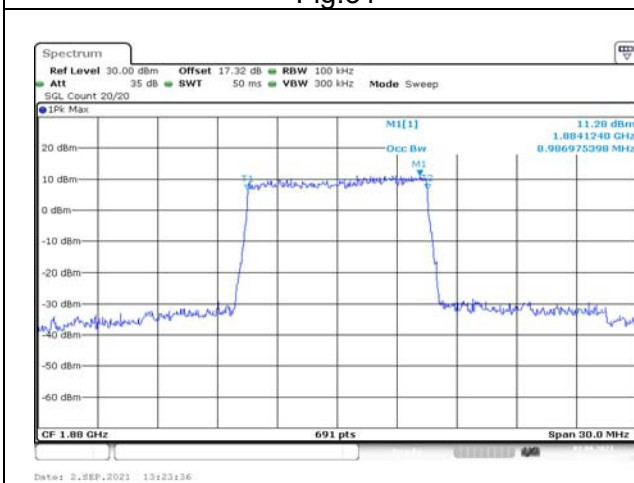
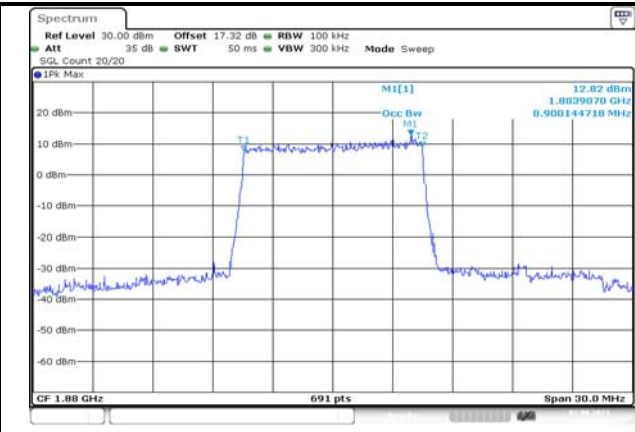
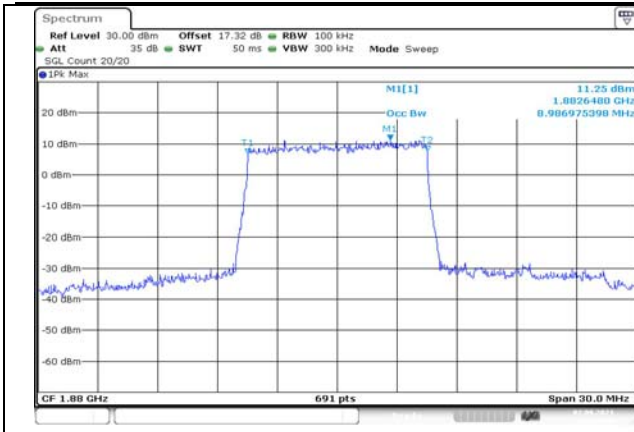


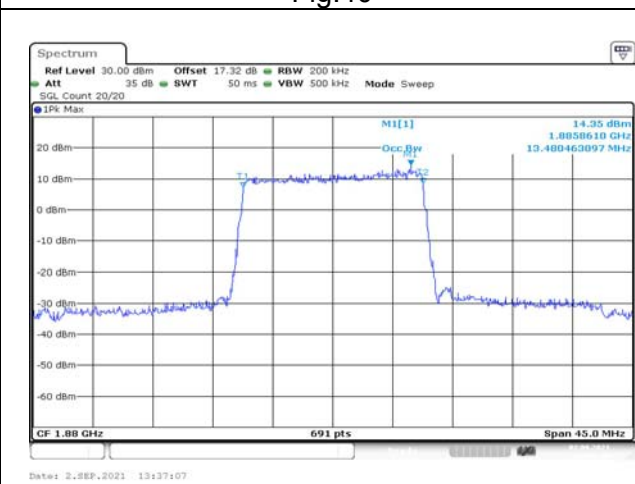
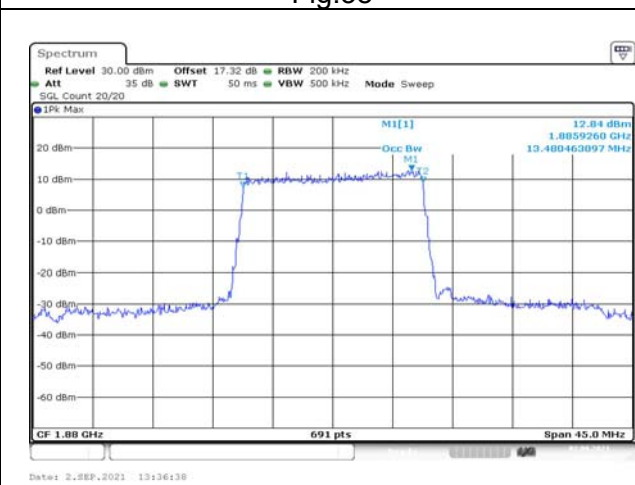
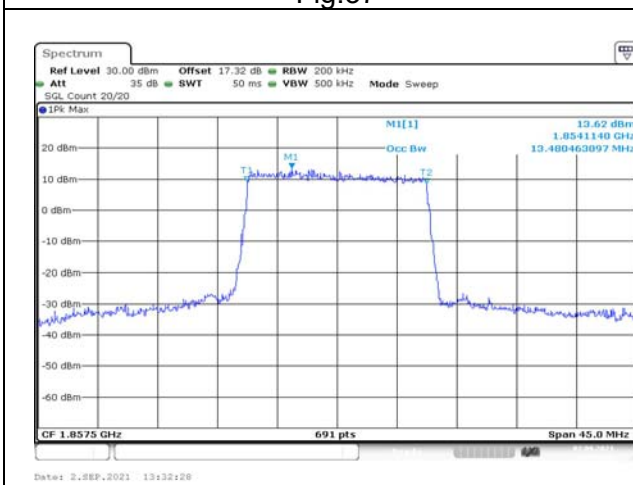
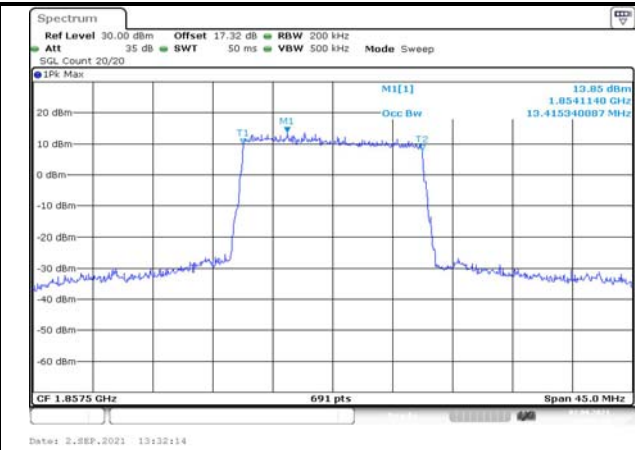
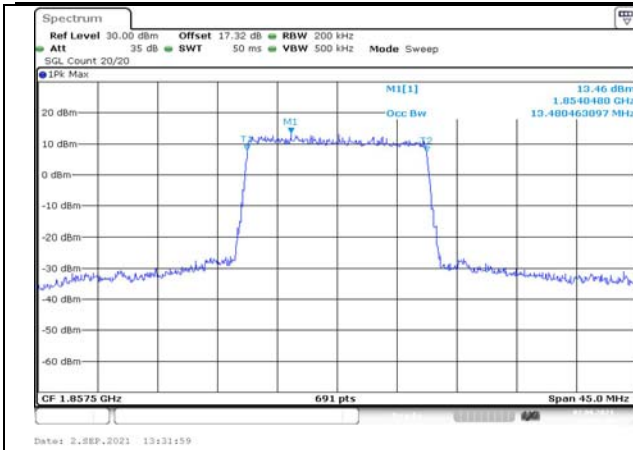
Fig.12

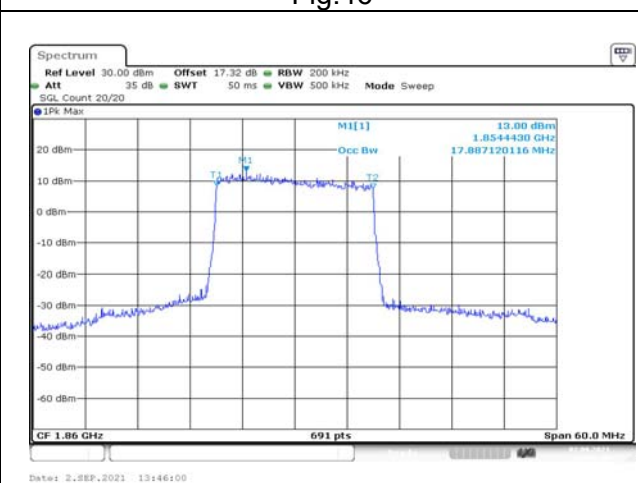
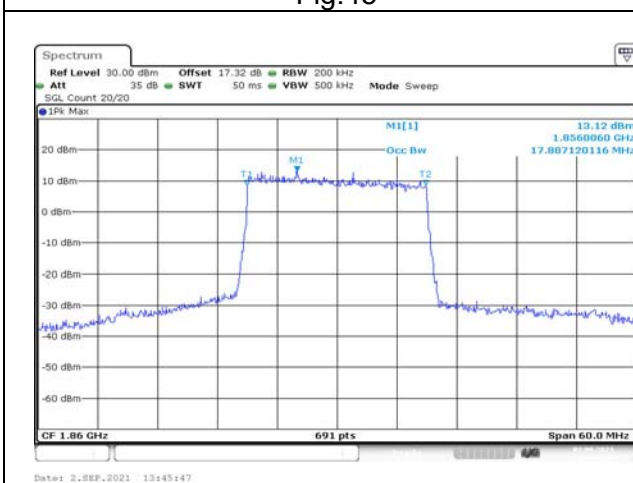
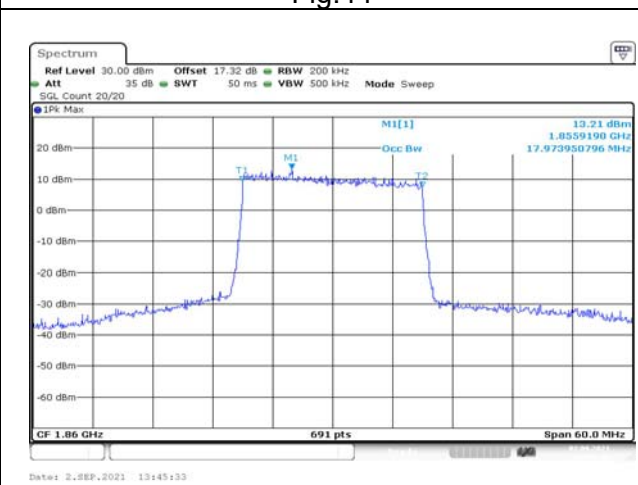
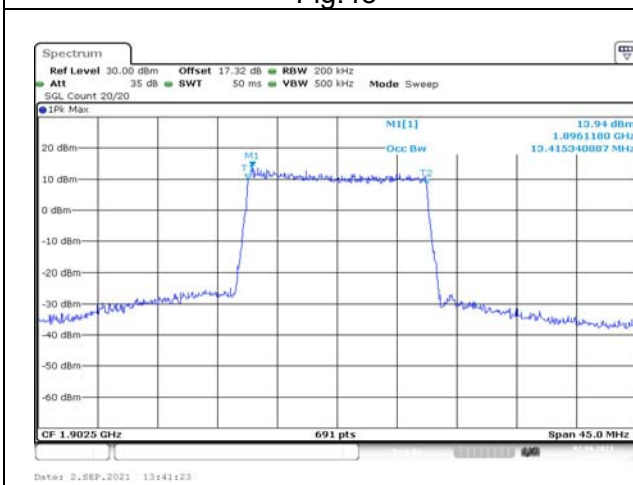
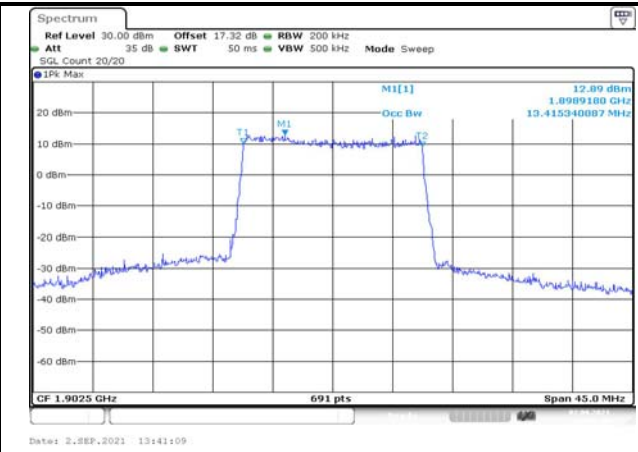
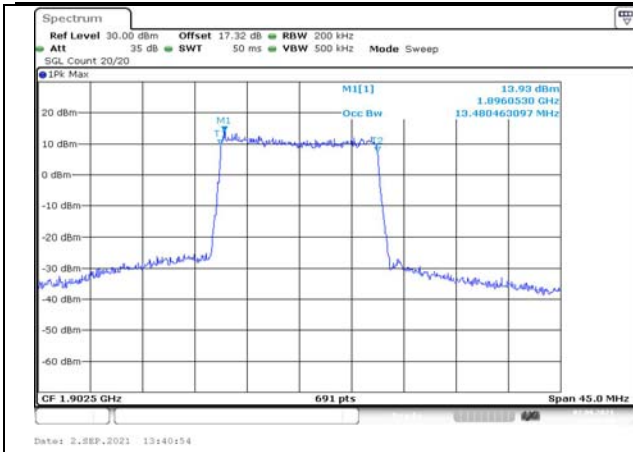


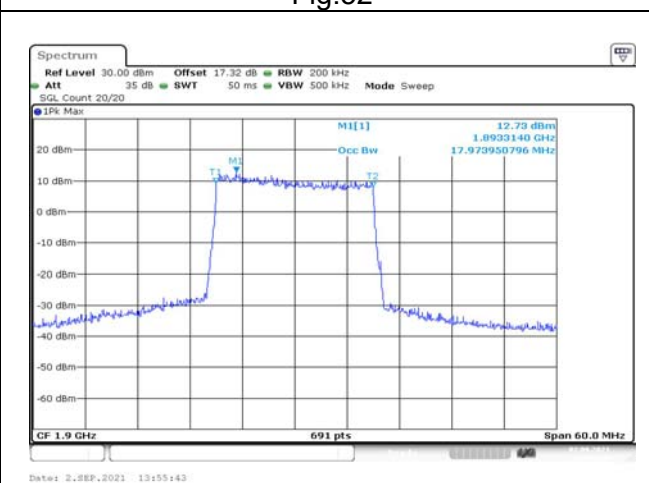
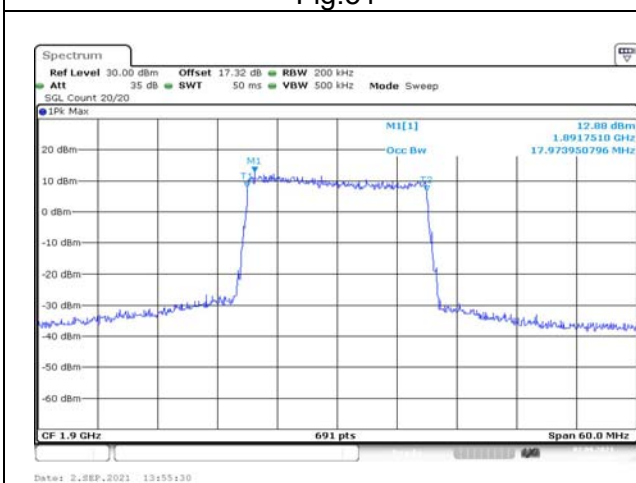
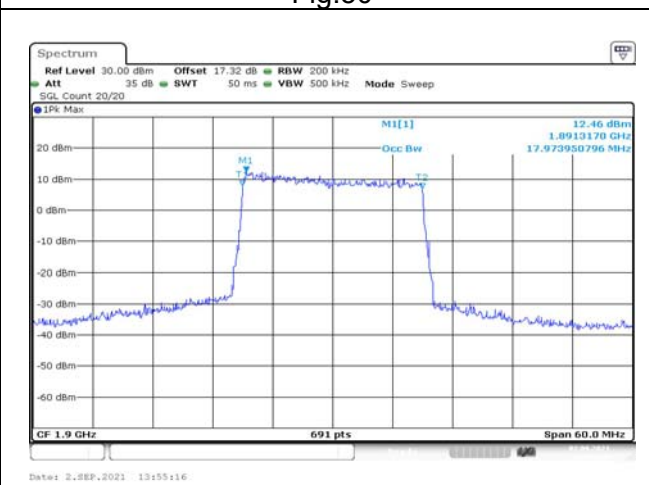
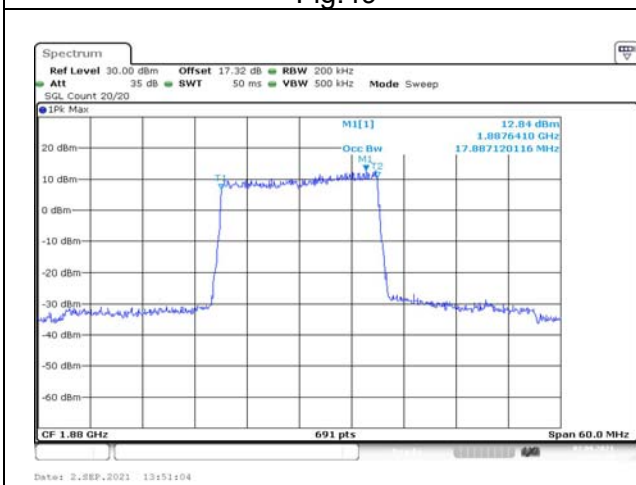
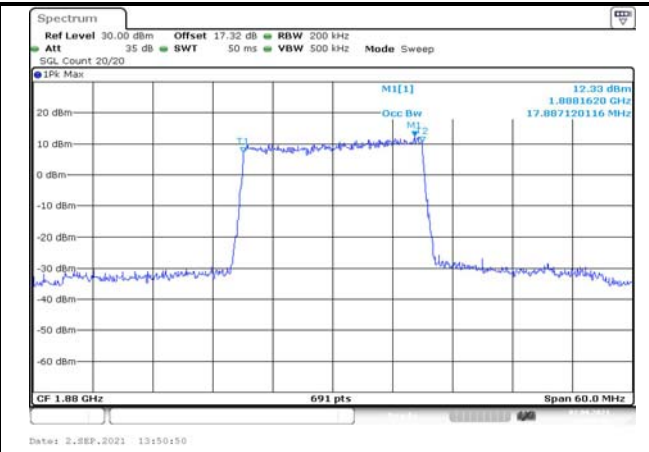
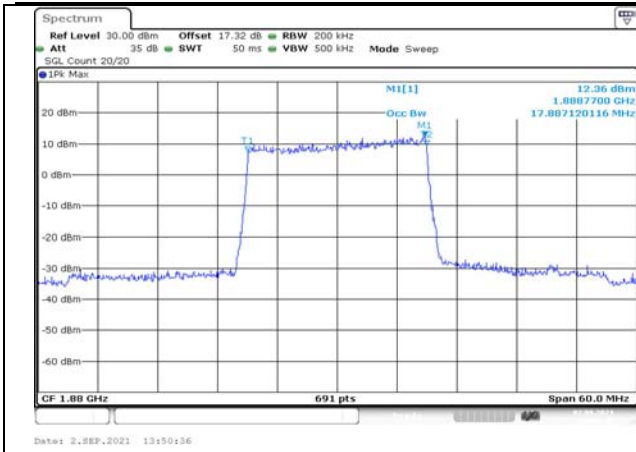












3 Emission Bandwidth

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	1.210	Fig.1	1.210	Fig.2	1.216	Fig.3
	1880	18900		6	0	1.216	Fig.4	1.216	Fig.5	1.216	Fig.6
	1909.3	19193		6	0	1.210	Fig.7	1.210	Fig.8	1.222	Fig.9
	1851.5	18615	3	15	0	2.931	Fig.10	2.918	Fig.11	2.891	Fig.12
	1880	18900		15	0	2.944	Fig.13	2.944	Fig.14	2.918	Fig.15
	1908.5	19185		15	0	2.944	Fig.16	2.944	Fig.17	2.918	Fig.18
	1852.5	18625	5	25	0	4.863	Fig.19	4.863	Fig.20	4.906	Fig.21
	1880	18900		25	0	4.884	Fig.22	4.819	Fig.23	4.884	Fig.24
	1907.5	19175		25	0	4.819	Fig.25	4.884	Fig.26	4.863	Fig.27
	1855	18650	10	50	0	9.638	Fig.28	9.682	Fig.29	9.682	Fig.30
	1880	18900		50	0	9.595	Fig.31	9.551	Fig.32	9.638	Fig.33
	1905	19150		50	0	9.638	Fig.34	9.595	Fig.35	9.725	Fig.36
	1857.5	18675	15	75	0	14.392	Fig.37	14.457	Fig.38	14.327	Fig.39
	1880	18900		75	0	14.457	Fig.40	14.457	Fig.41	14.522	Fig.42
	1902.5	19125		75	0	14.457	Fig.43	14.392	Fig.44	14.392	Fig.45
	1860	18700	20	100	0	18.929	Fig.46	19.016	Fig.47	19.016	Fig.48
	1880	18900		100	0	19.103	Fig.49	19.016	Fig.50	19.103	Fig.51
	1900	19100		100	0	19.103	Fig.52	19.190	Fig.53	19.276	Fig.54

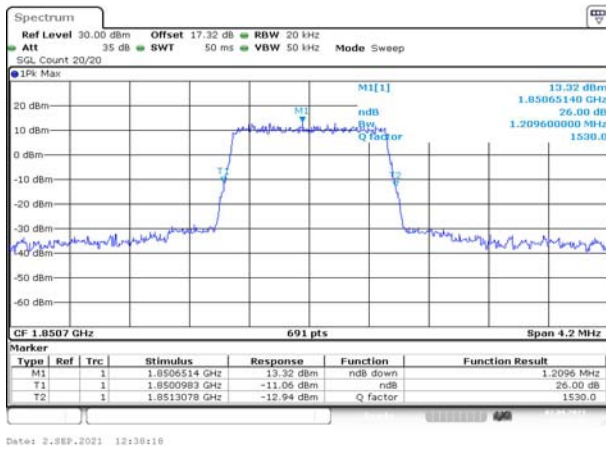


Fig.1

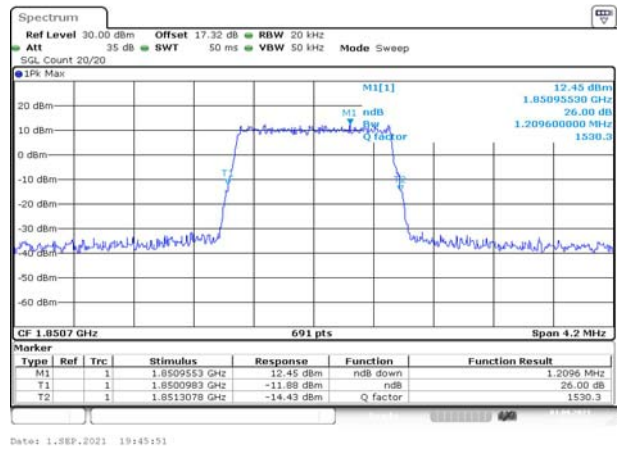


Fig.2

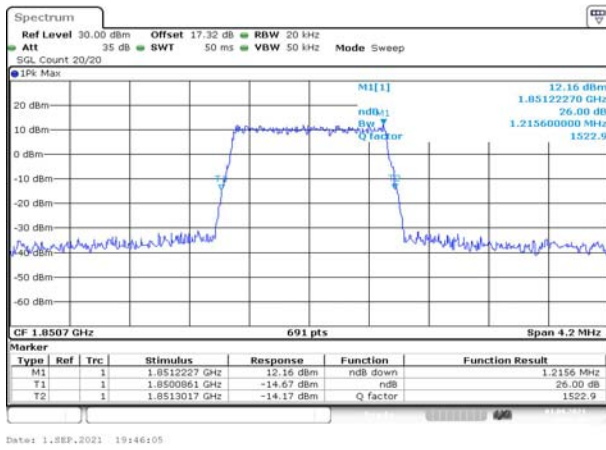


Fig.3

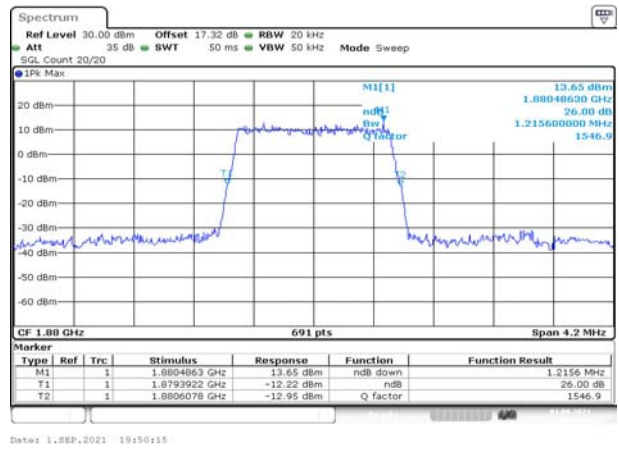


Fig.4

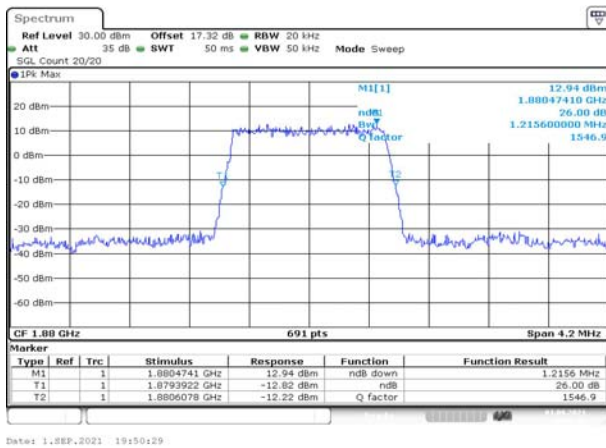


Fig.5

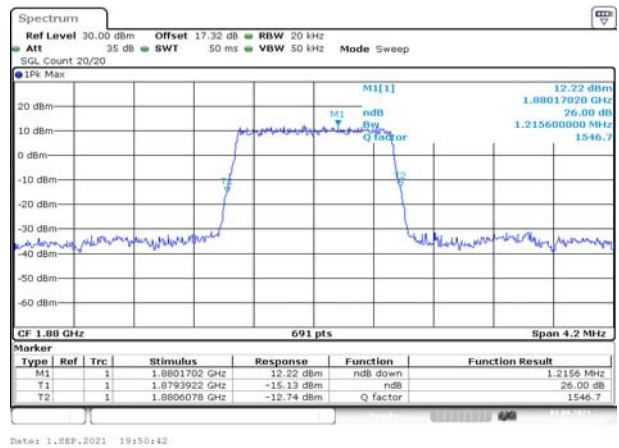


Fig.6

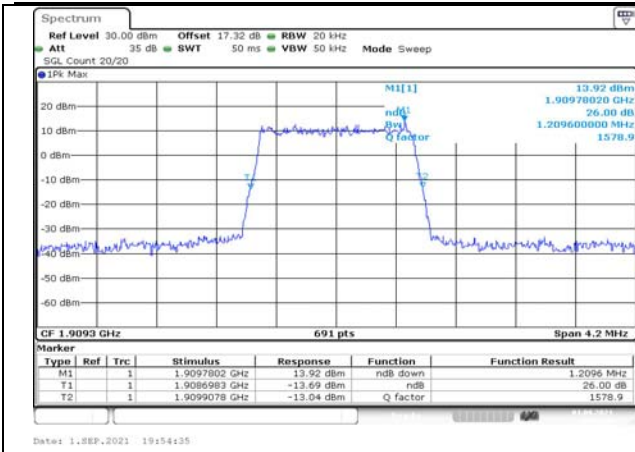


Fig.7

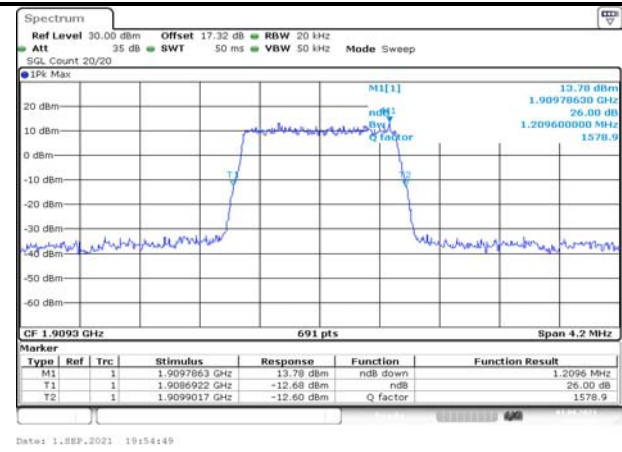


Fig.8

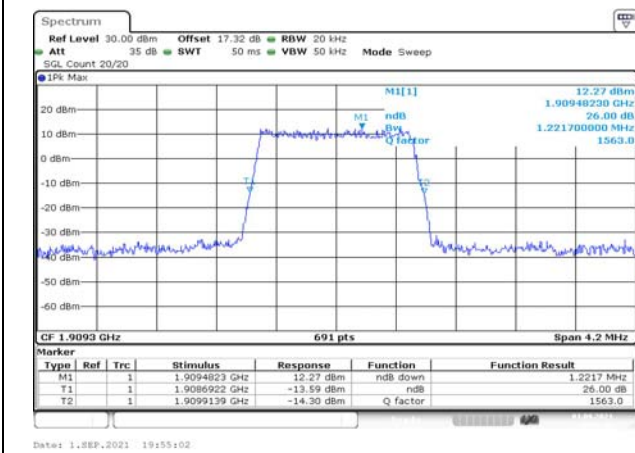


Fig.9

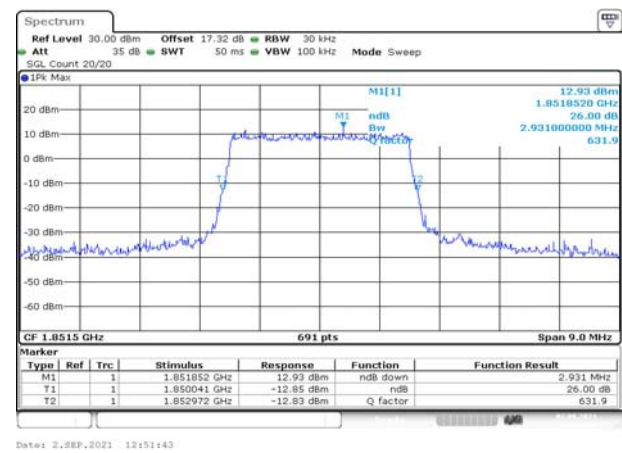


Fig.10

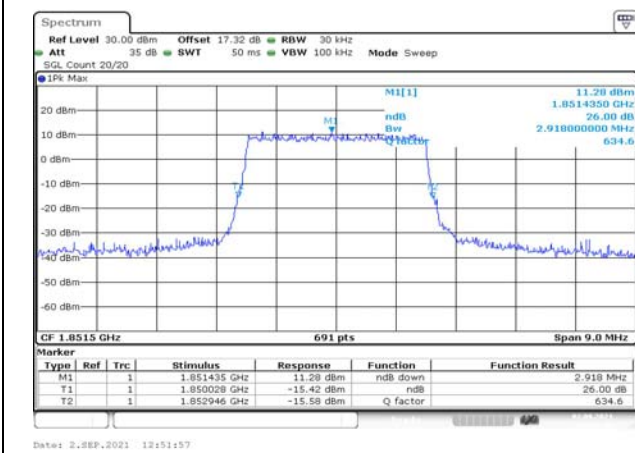


Fig.11

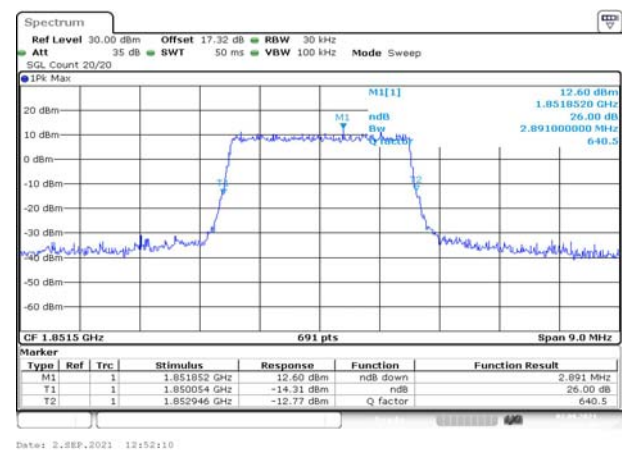


Fig.12

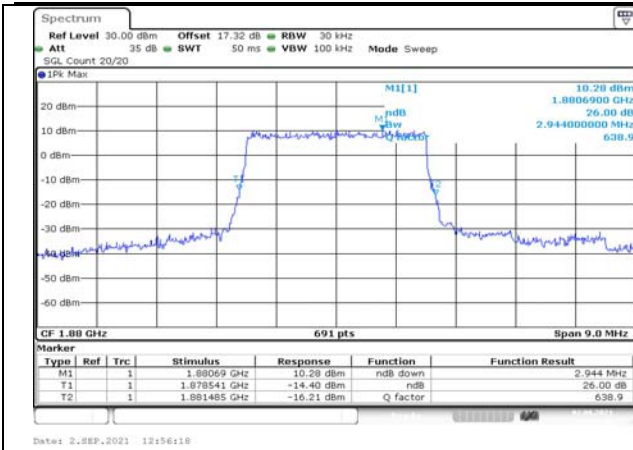


Fig.13

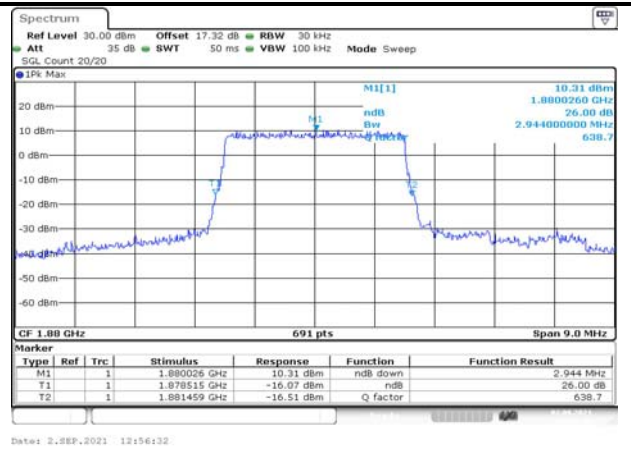


Fig.14

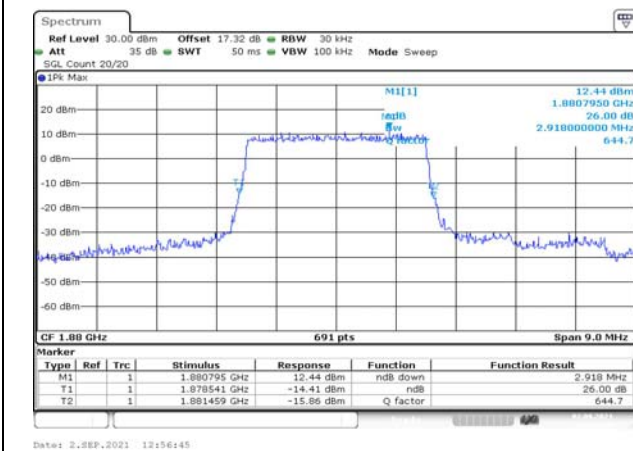


Fig.15

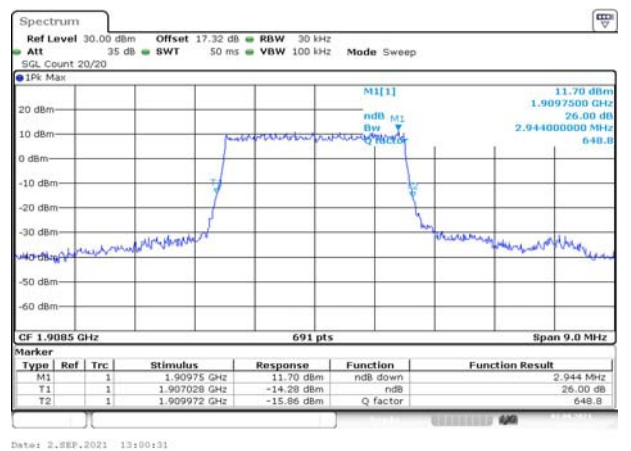


Fig.16

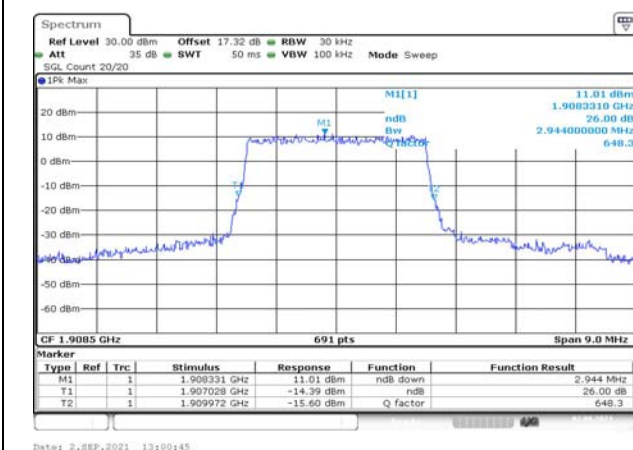


Fig.17

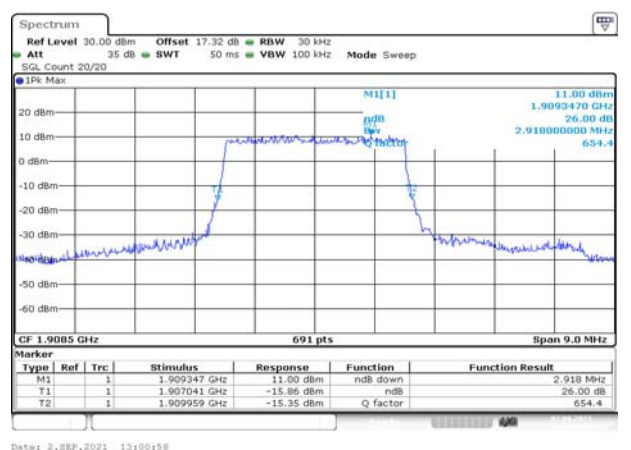


Fig.18

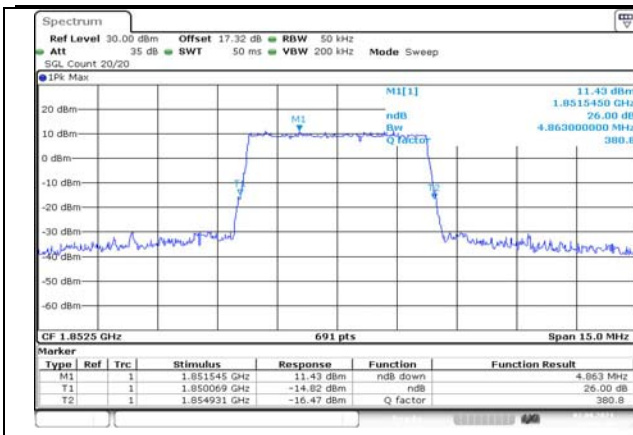


Fig.19

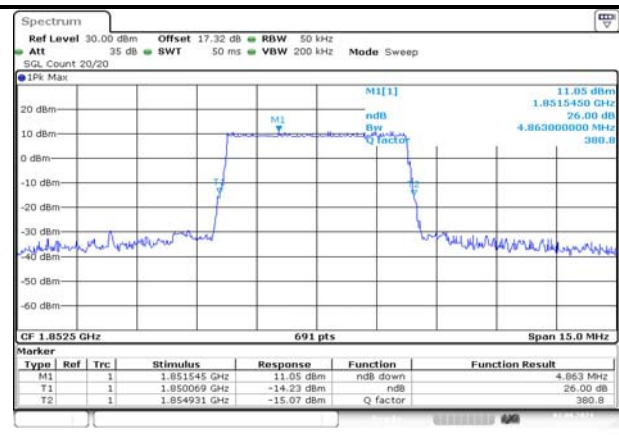


Fig.20

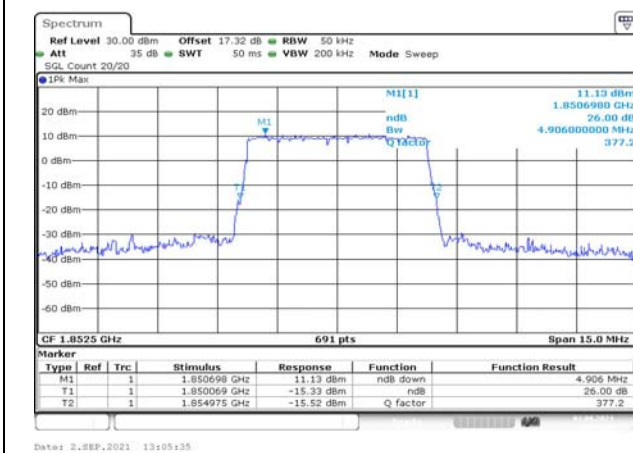


Fig.21

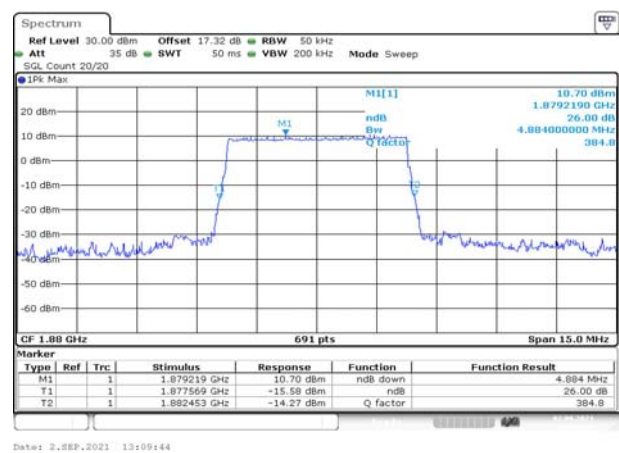


Fig.22

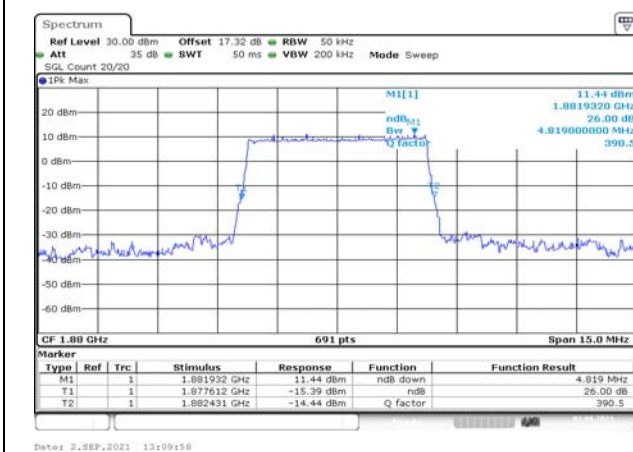


Fig.23

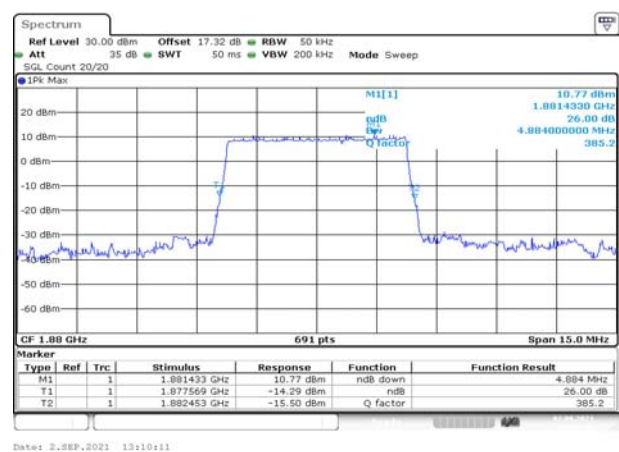


Fig.24

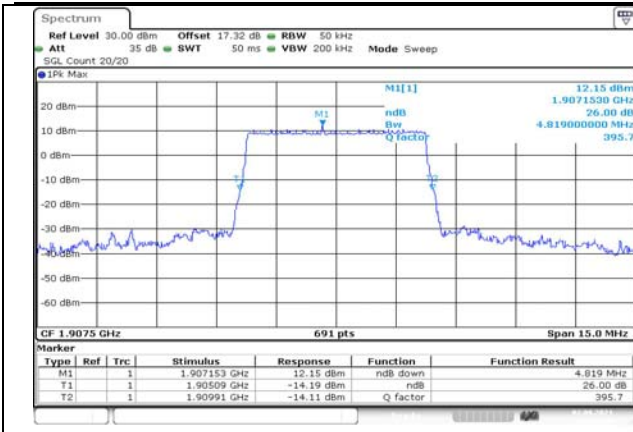


Fig.25

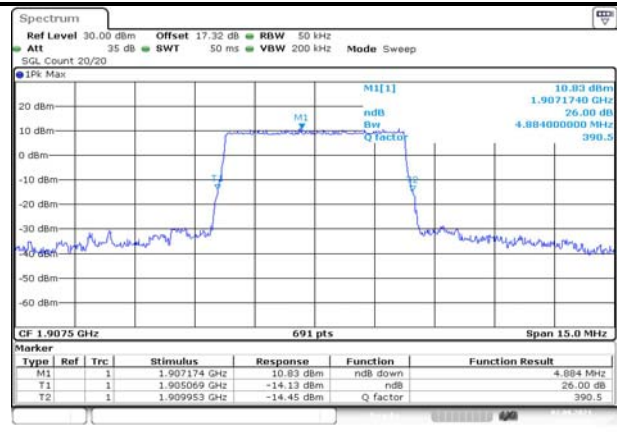


Fig.26

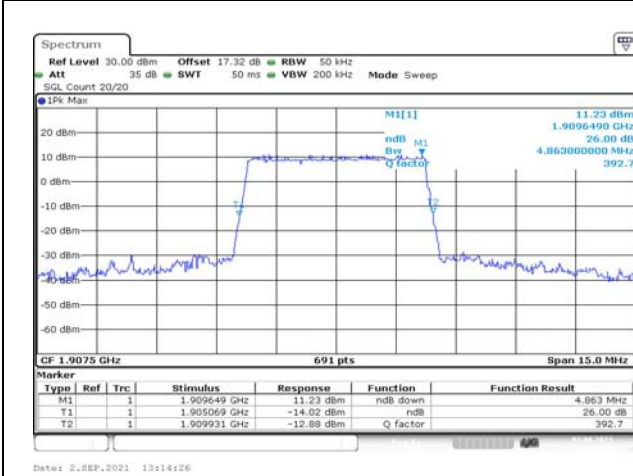


Fig.27

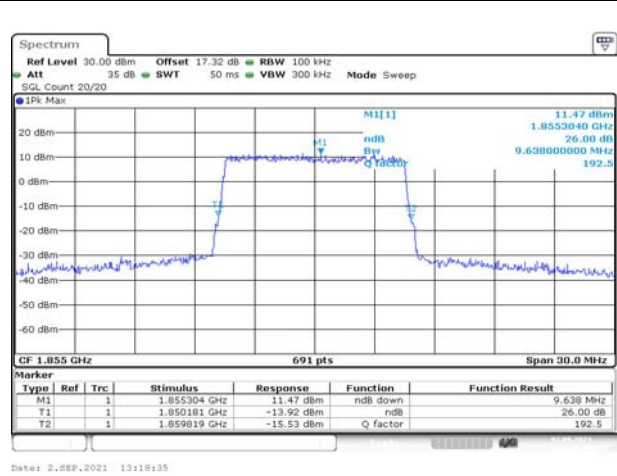


Fig.28

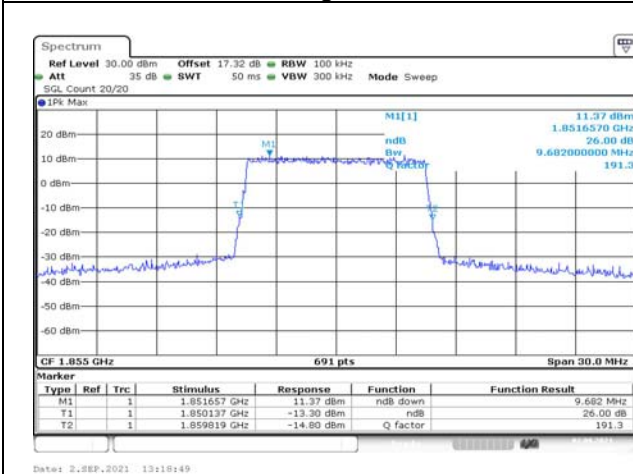


Fig.29

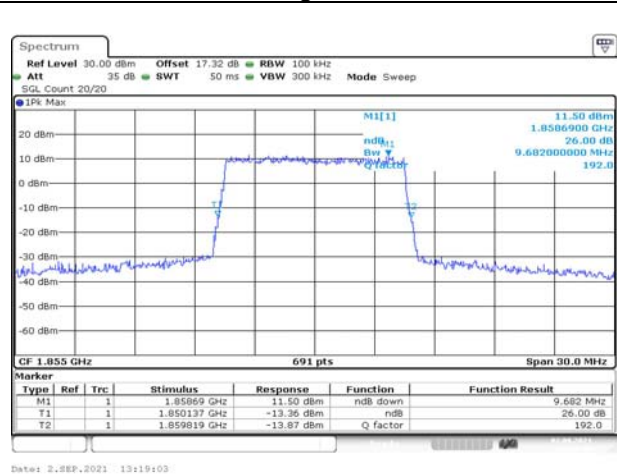


Fig.30

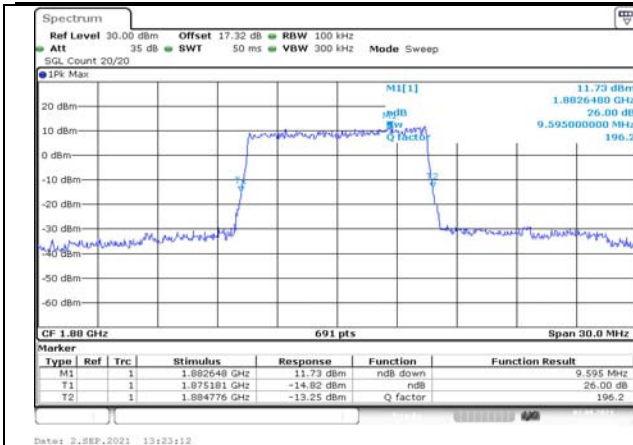


Fig.31



Fig.32

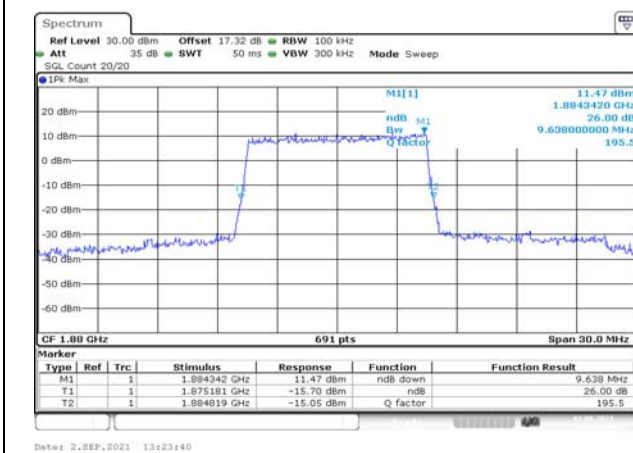


Fig.33

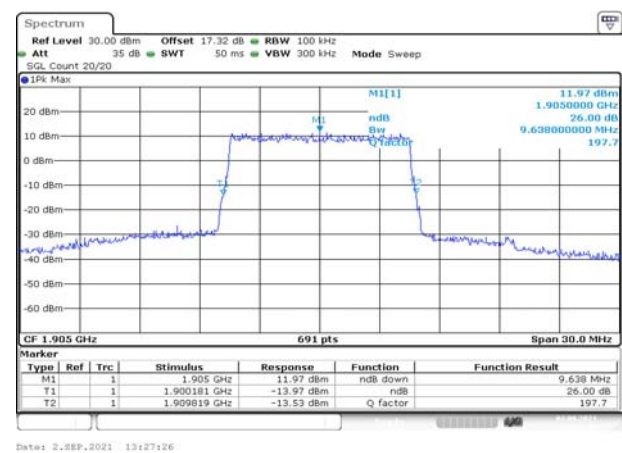


Fig.34

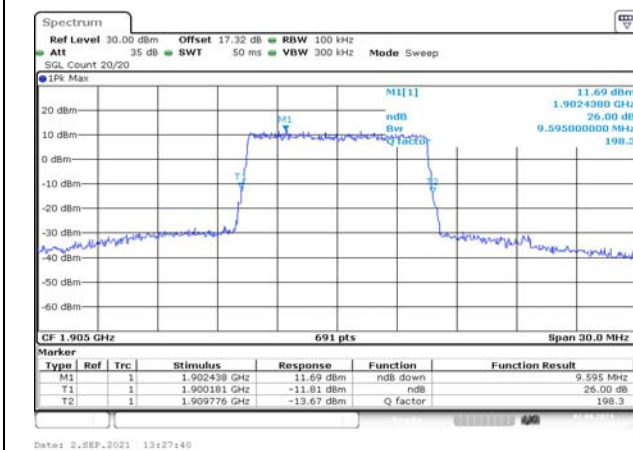


Fig.35

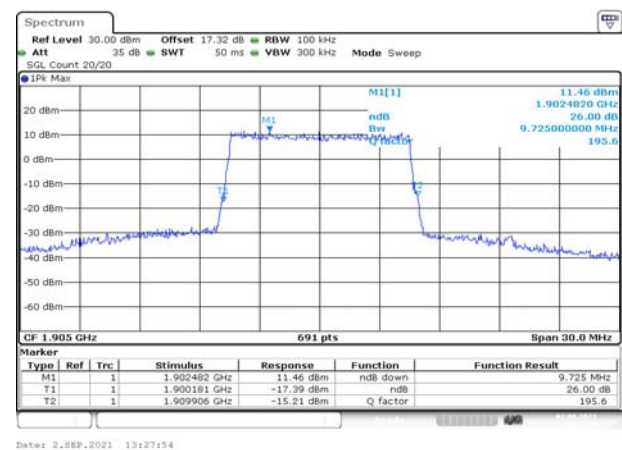


Fig.36

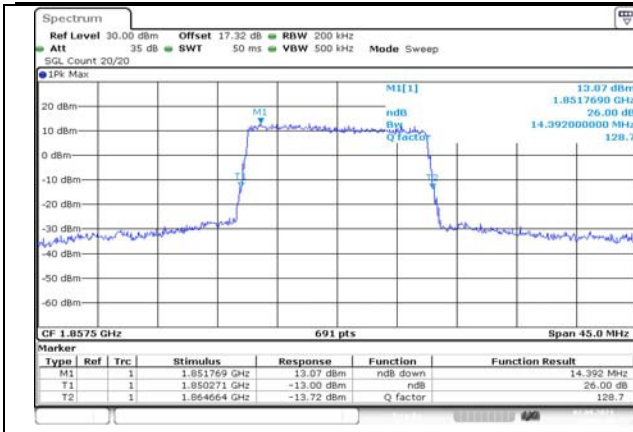


Fig.37

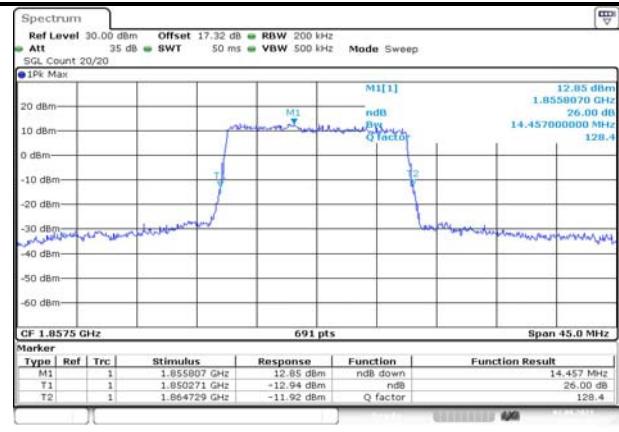


Fig.38

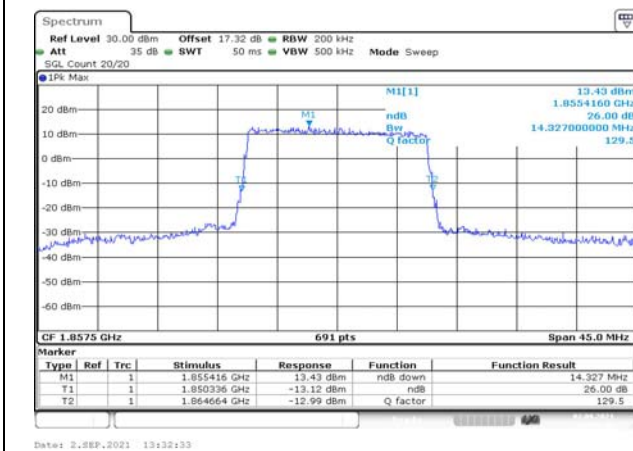


Fig.39

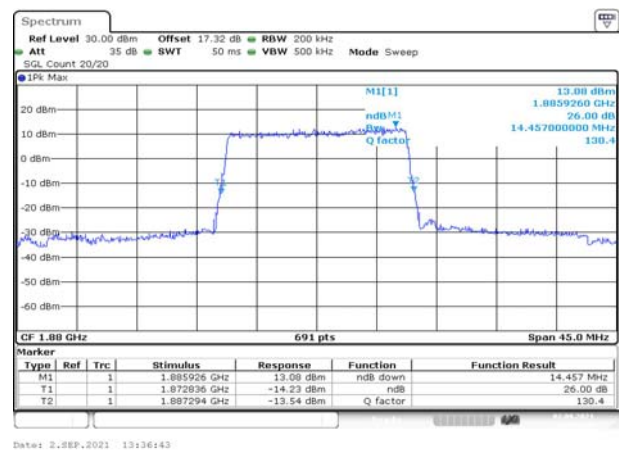


Fig.40

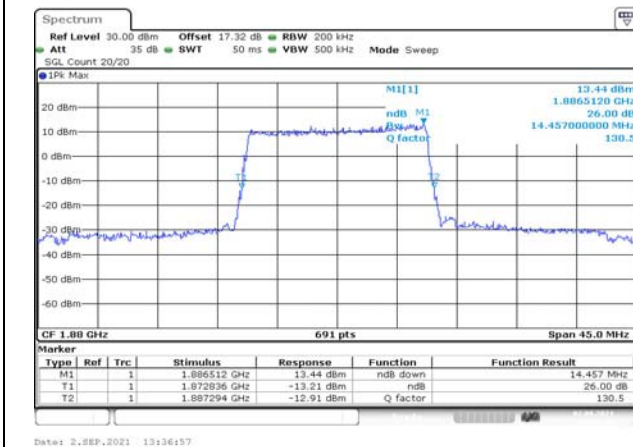


Fig.41

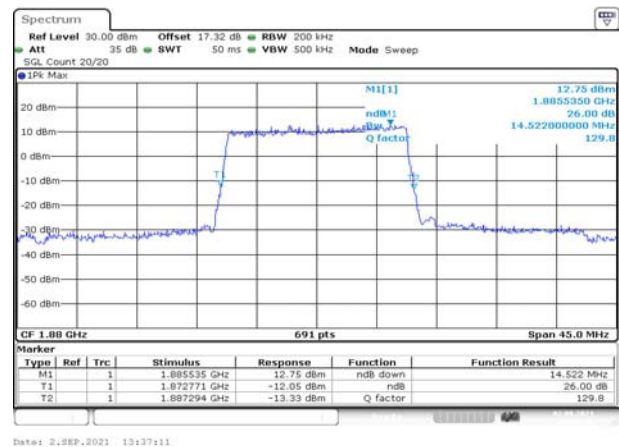


Fig.42

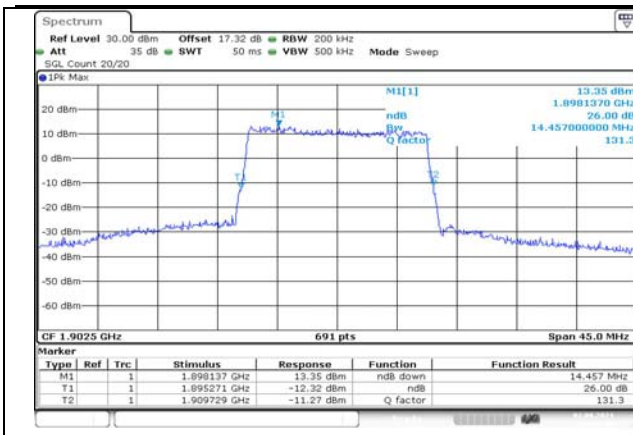


Fig.43

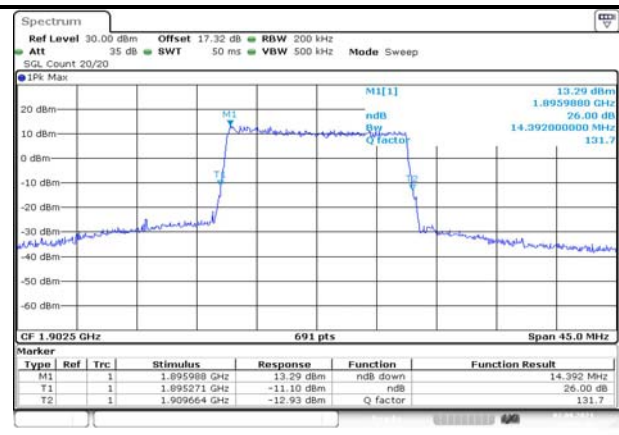


Fig.44

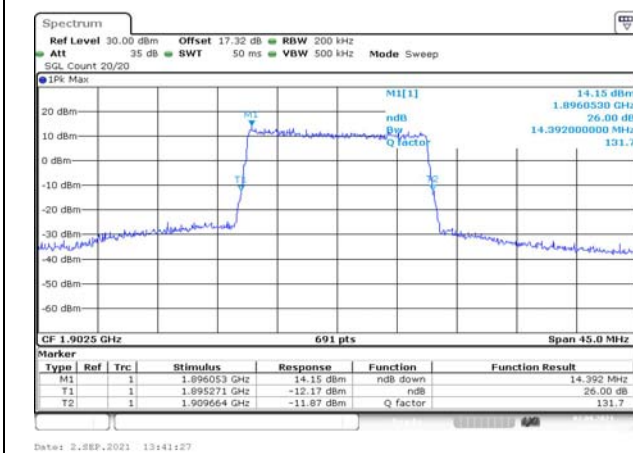


Fig.45

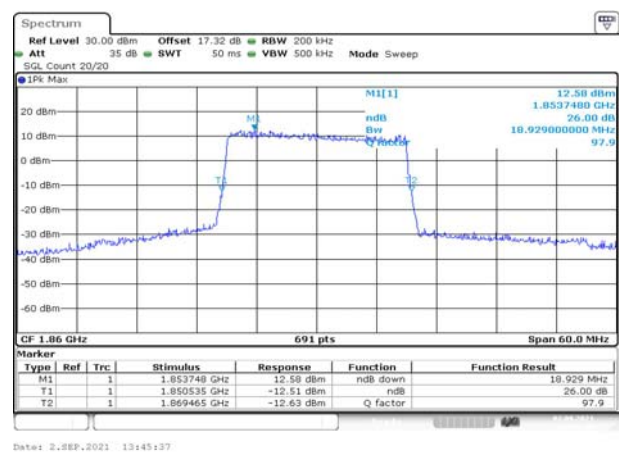


Fig.46

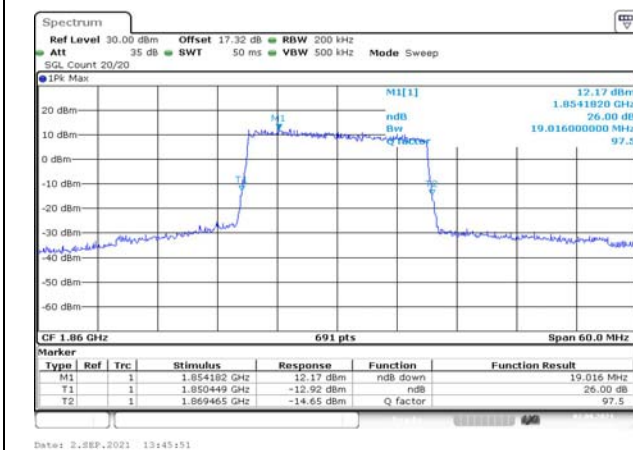


Fig.47

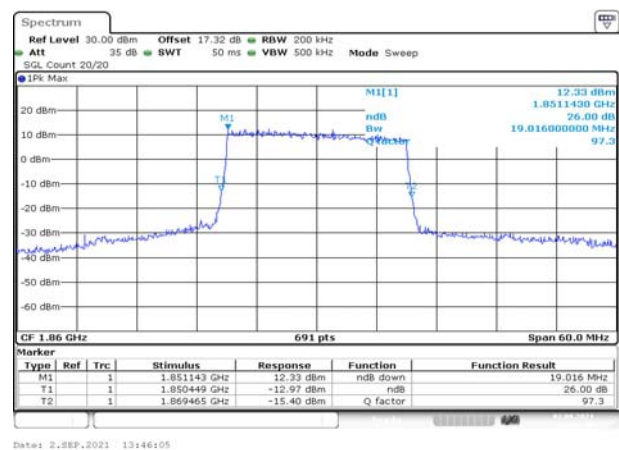


Fig.48

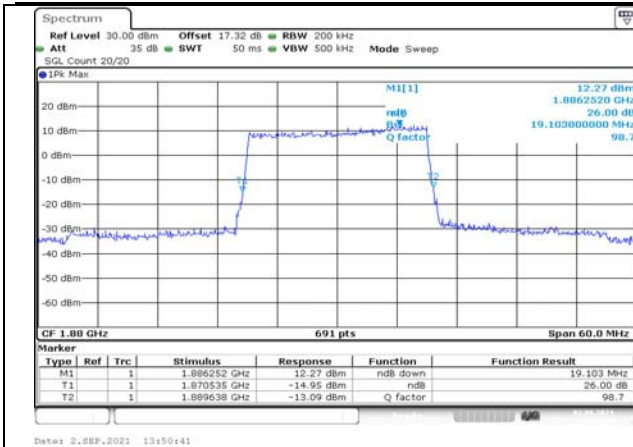


Fig.49



Fig.50

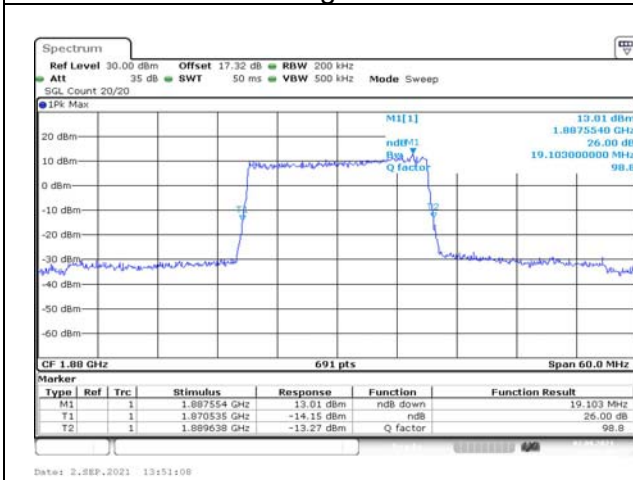


Fig.51



Fig.52

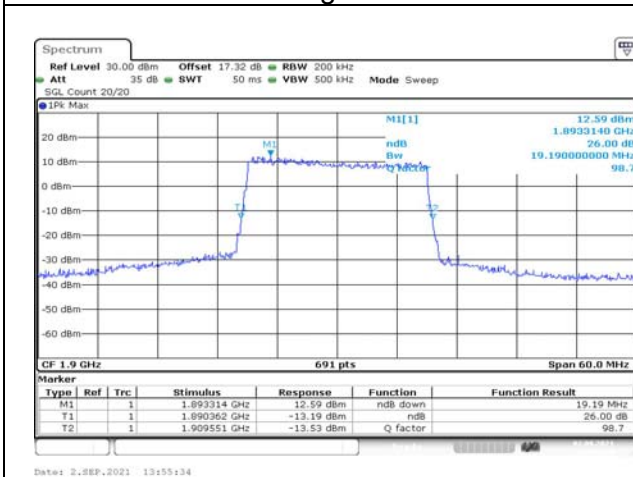


Fig.53



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

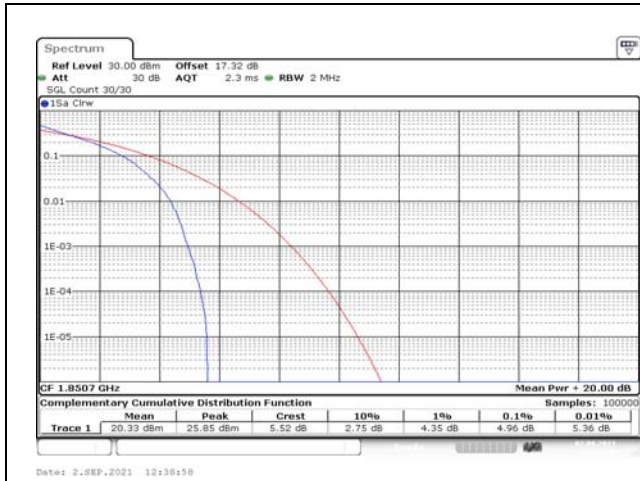


Fig.1

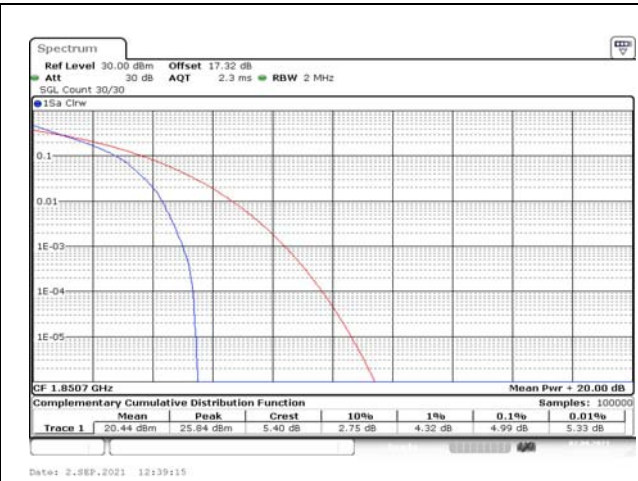


Fig.2

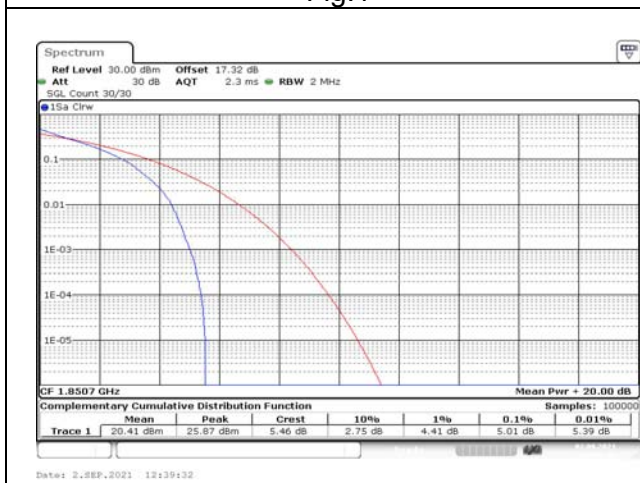


Fig.3



Fig.4

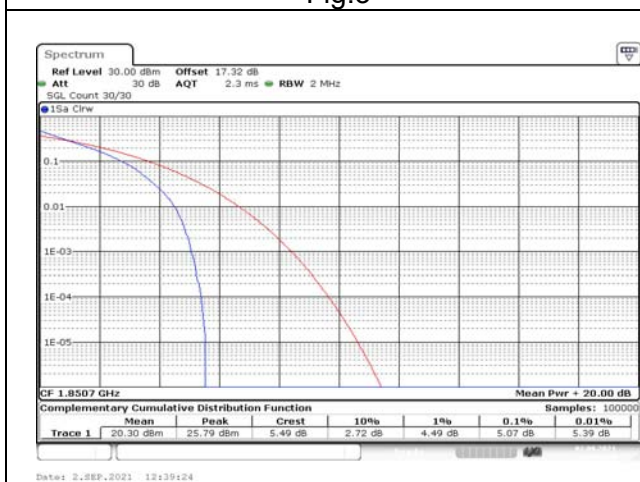


Fig.5

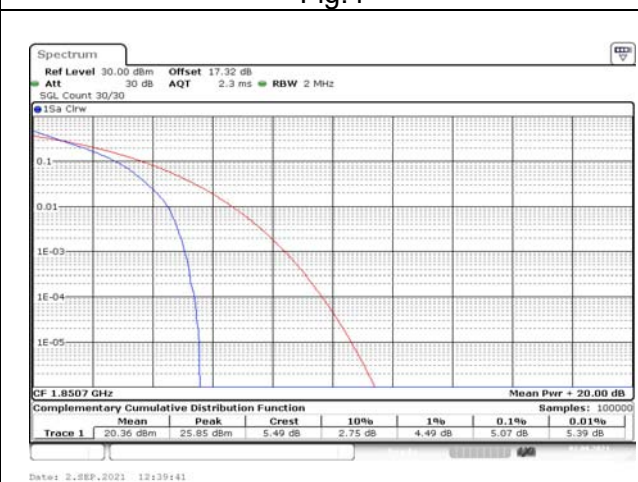


Fig.6

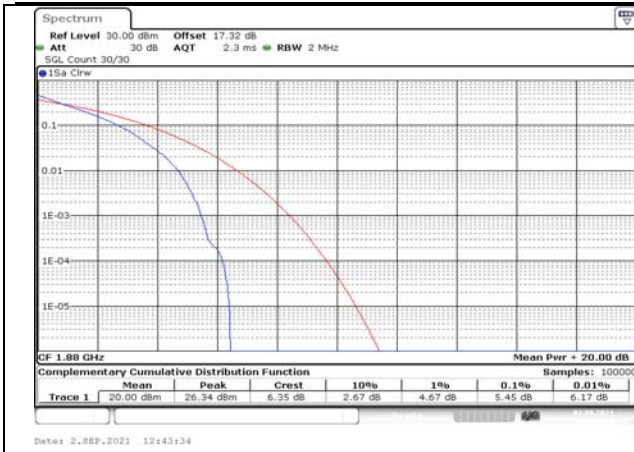


Fig.7

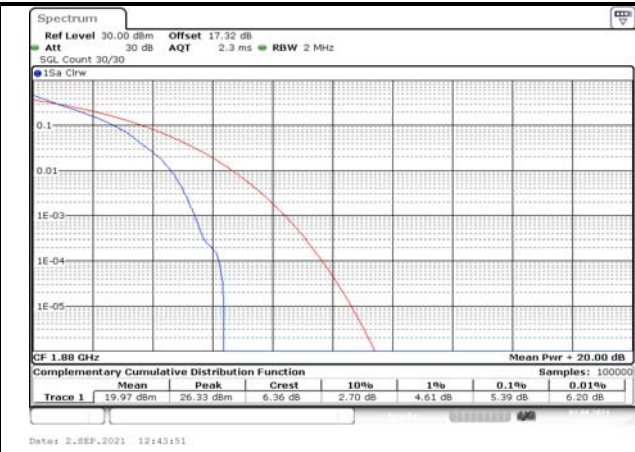


Fig.8

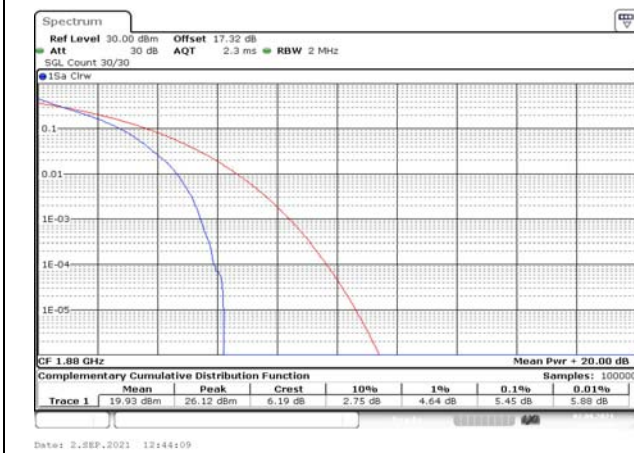


Fig.9

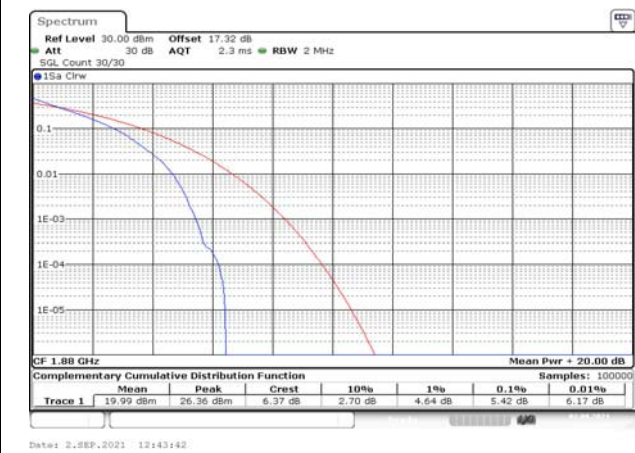


Fig.10

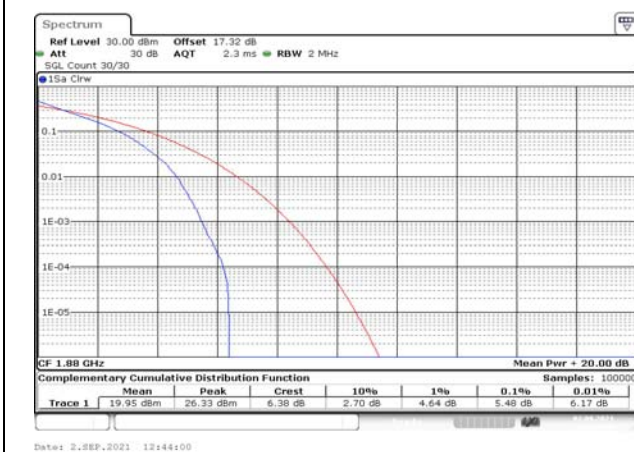


Fig.11

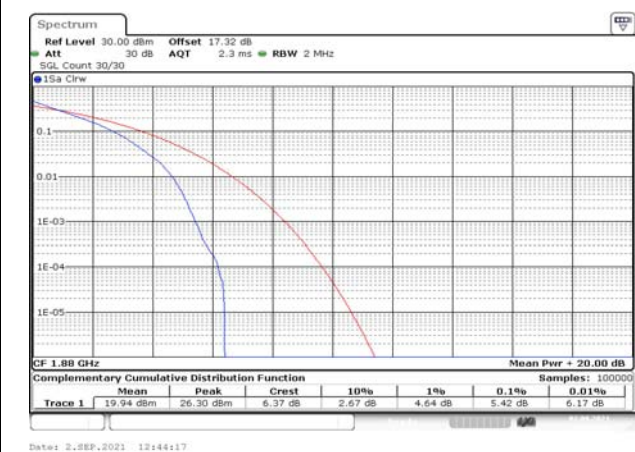


Fig.12

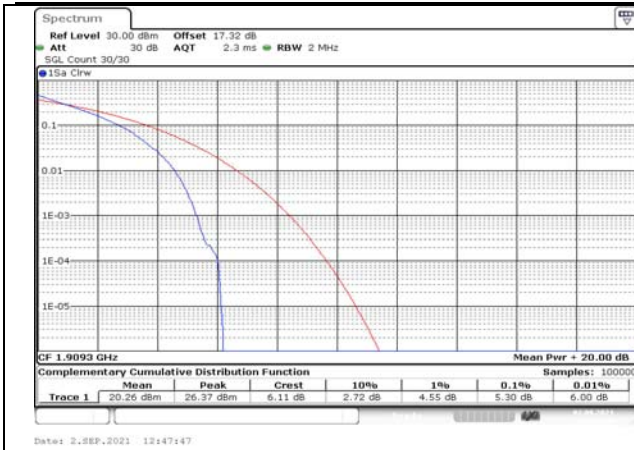


Fig.13

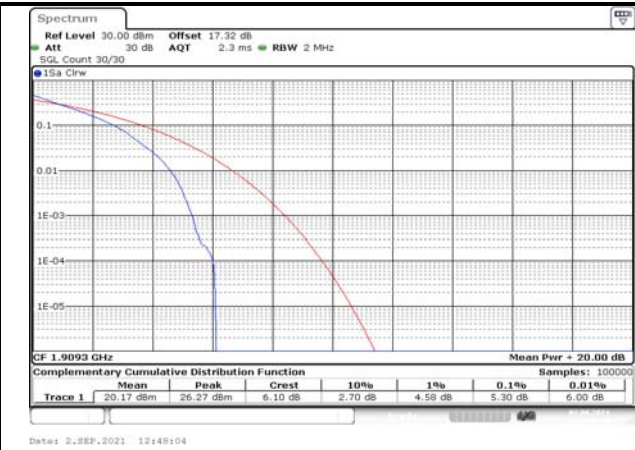


Fig.14

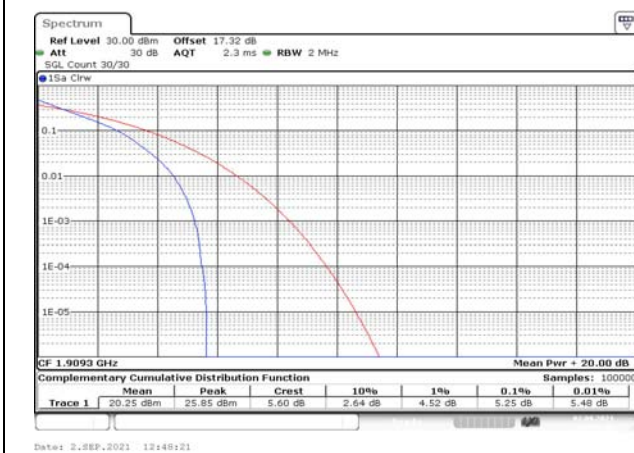


Fig.15

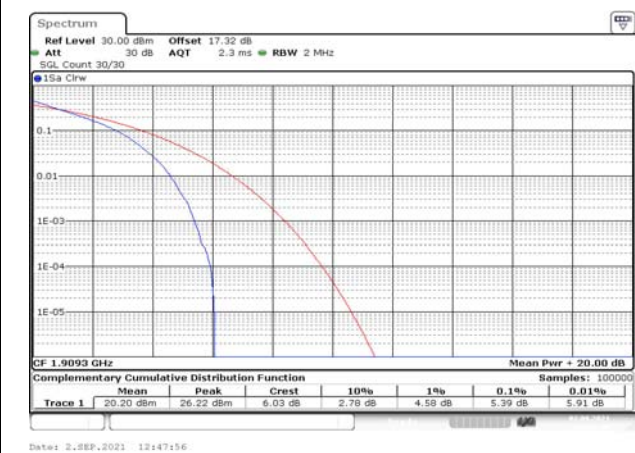


Fig.16

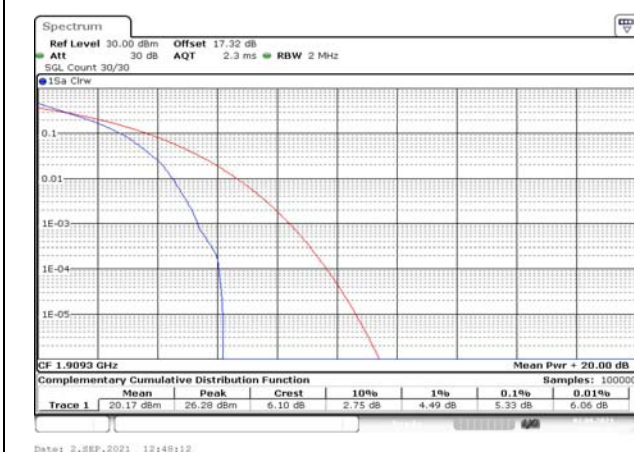


Fig.17

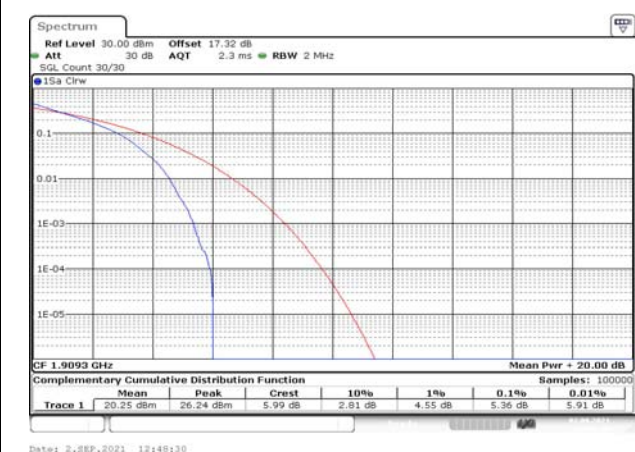


Fig.18

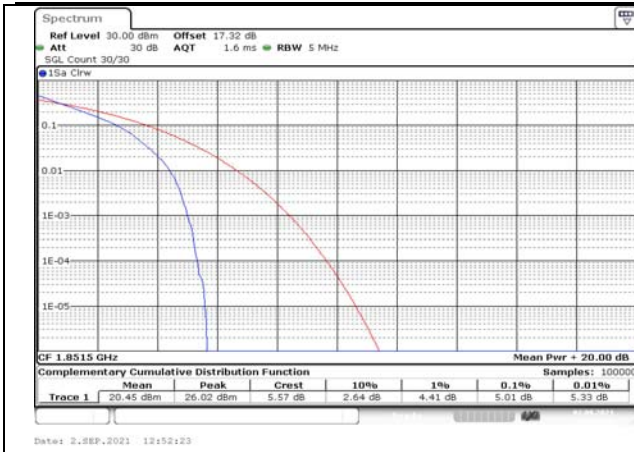


Fig.19

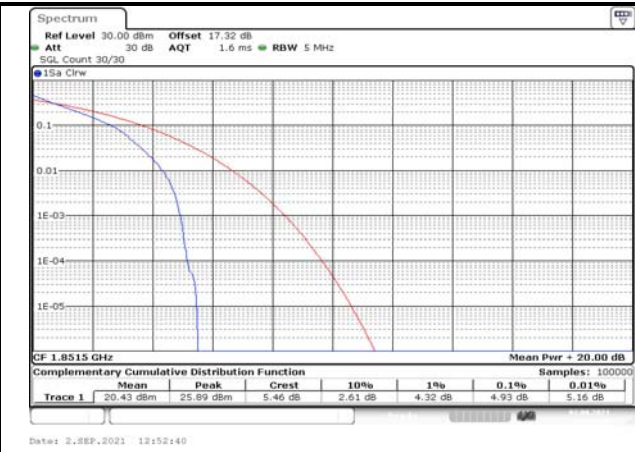


Fig.20

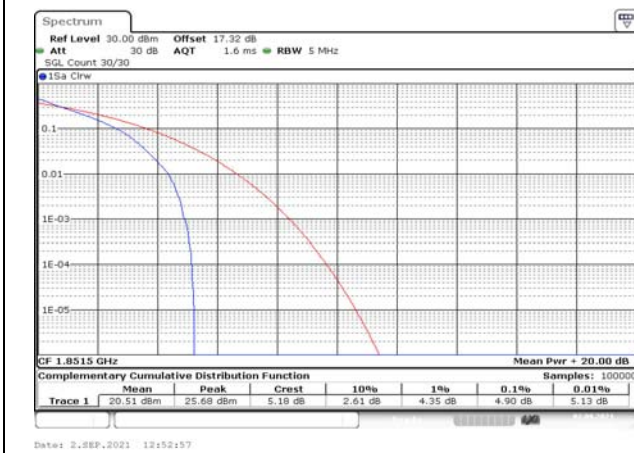


Fig.21

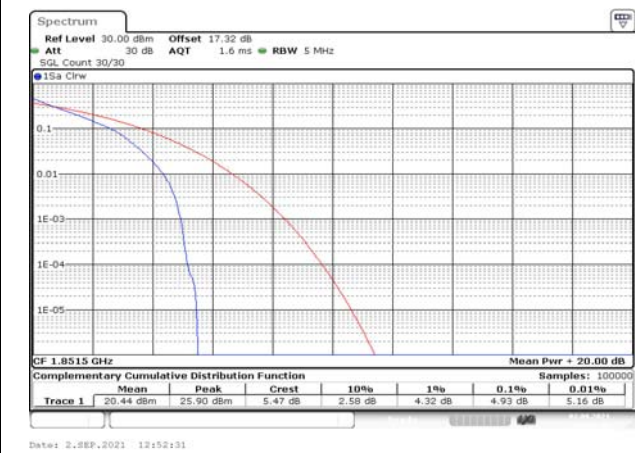


Fig.22

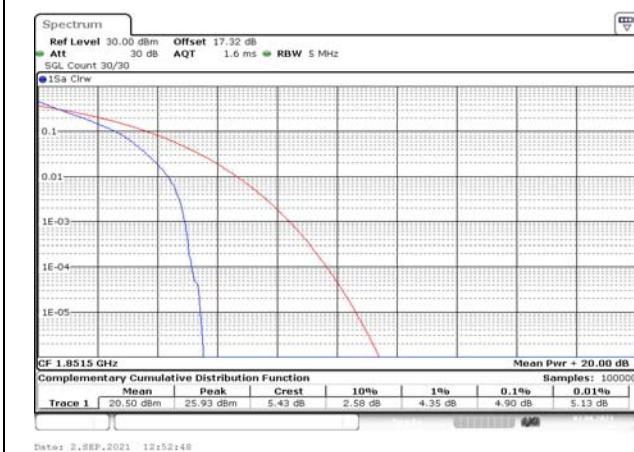


Fig.23

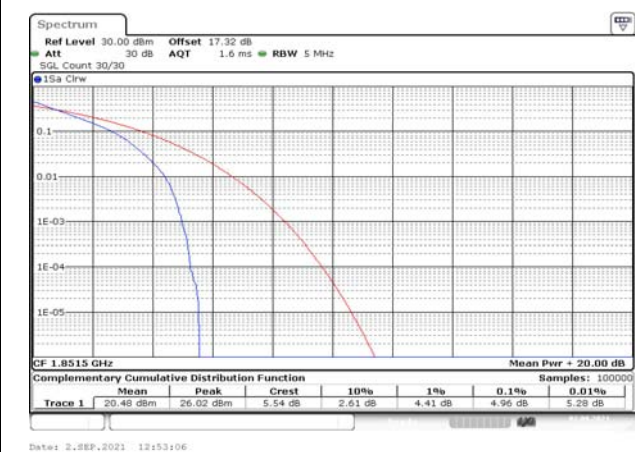


Fig.24

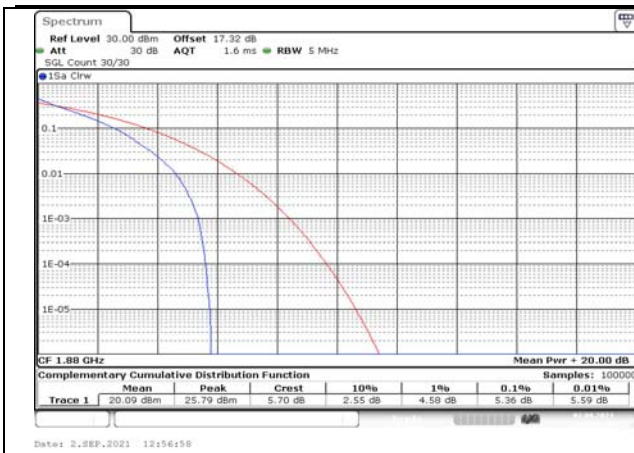


Fig.25

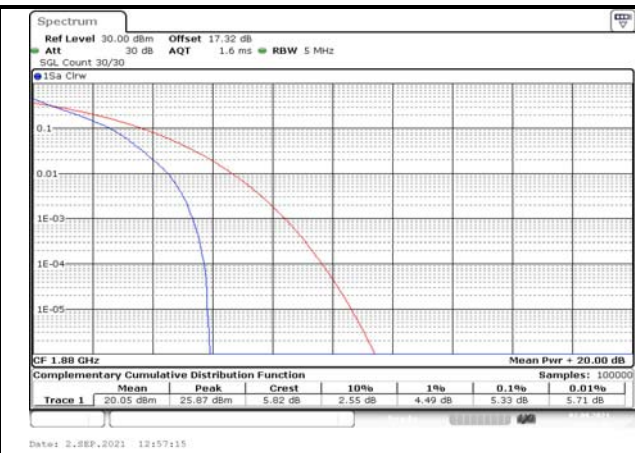


Fig.26

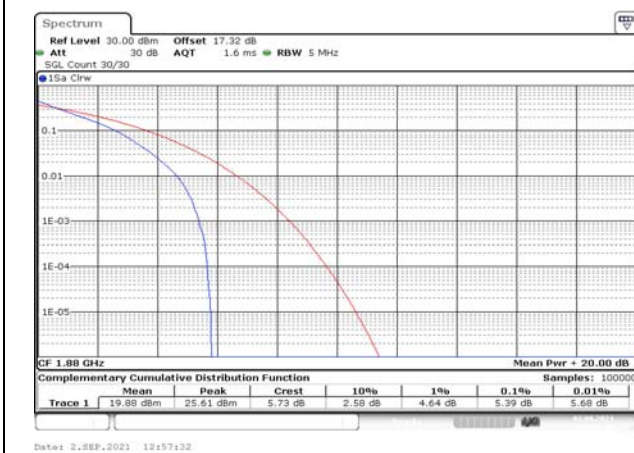


Fig.27

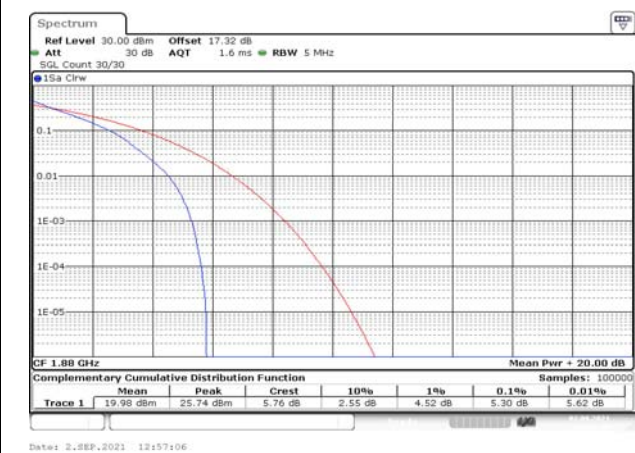


Fig.28

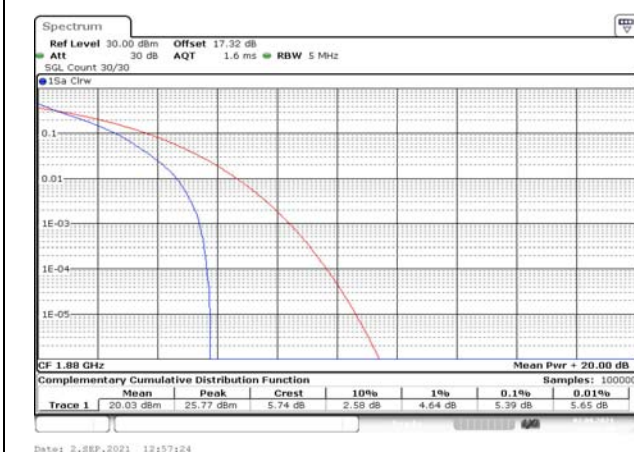


Fig.29

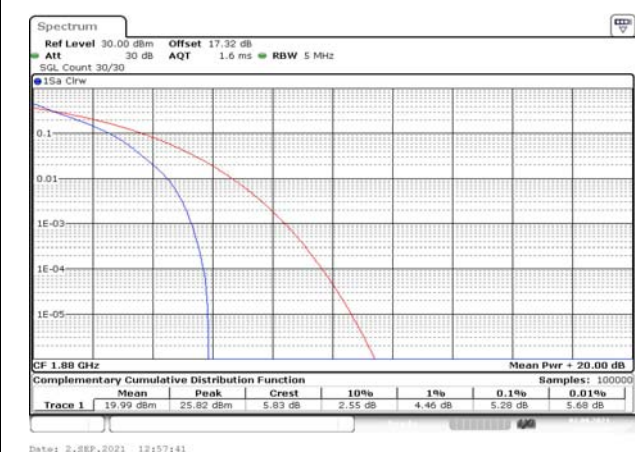


Fig.30

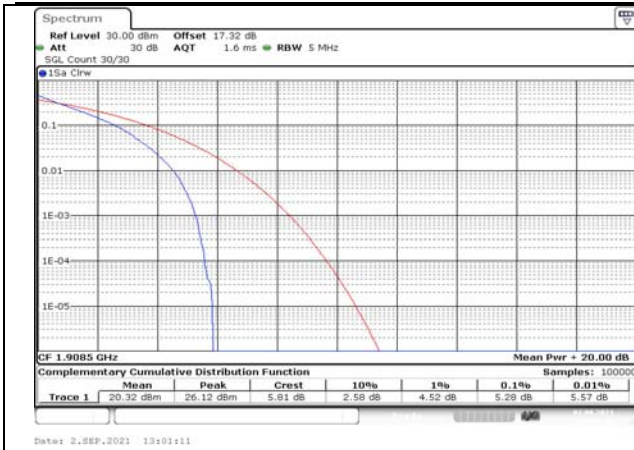


Fig.31

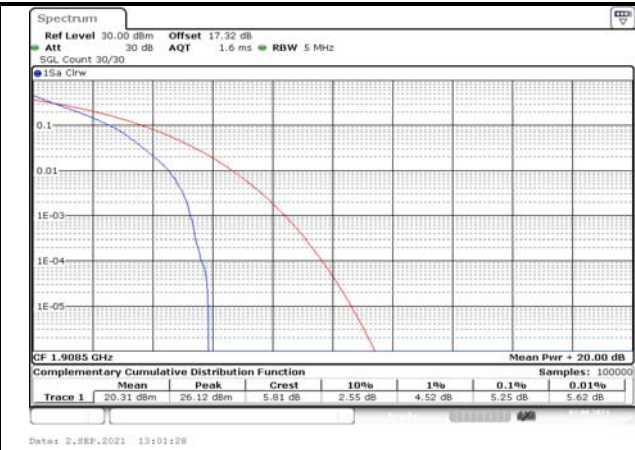


Fig.32

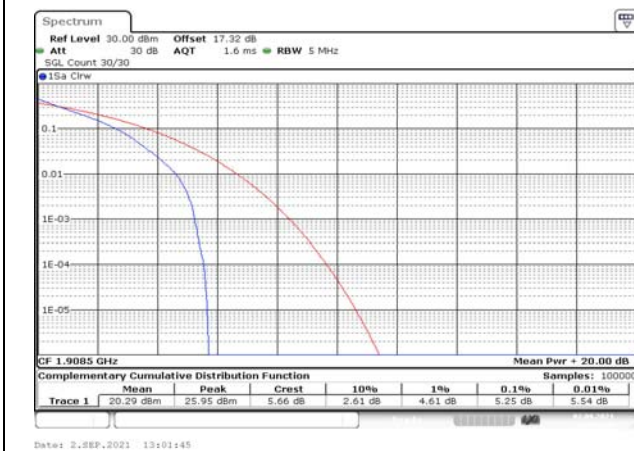


Fig.33

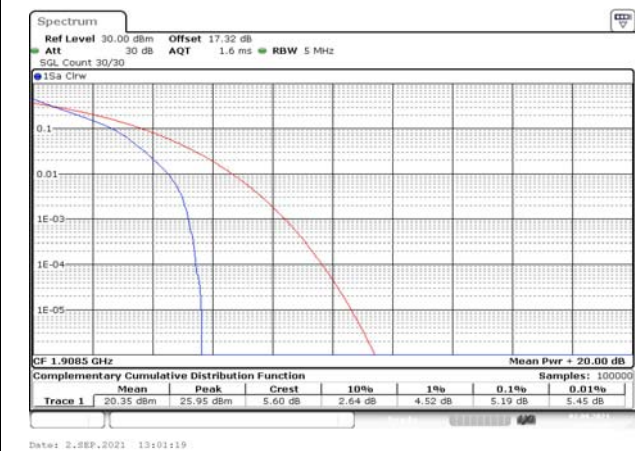


Fig.34

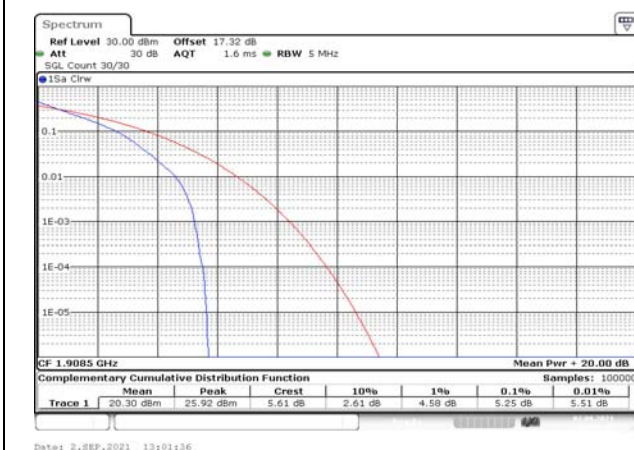


Fig.35

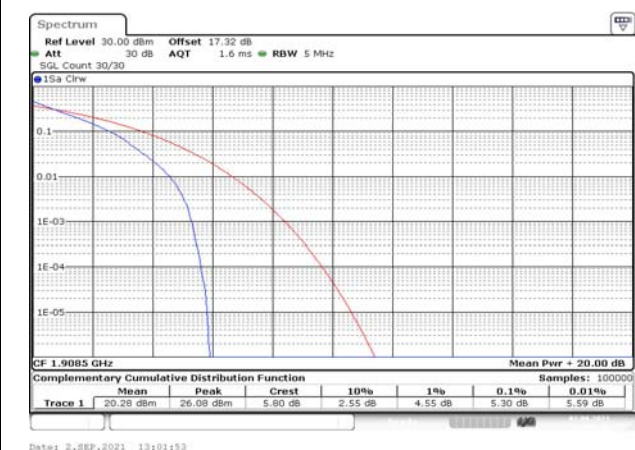


Fig.36



Fig.37

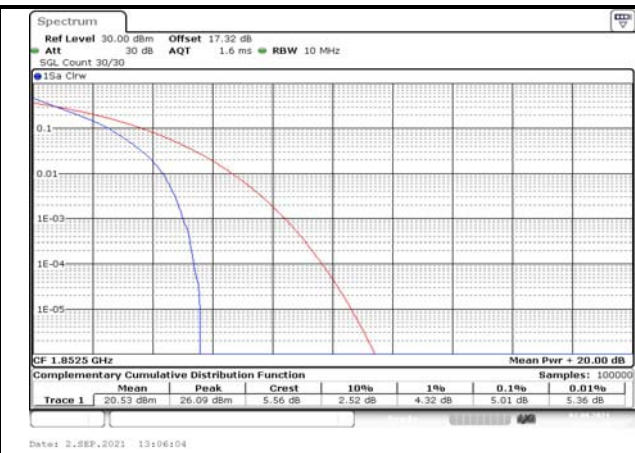


Fig.38

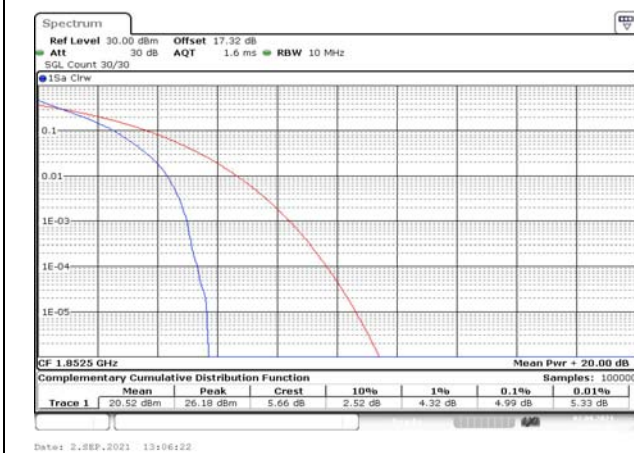


Fig.39

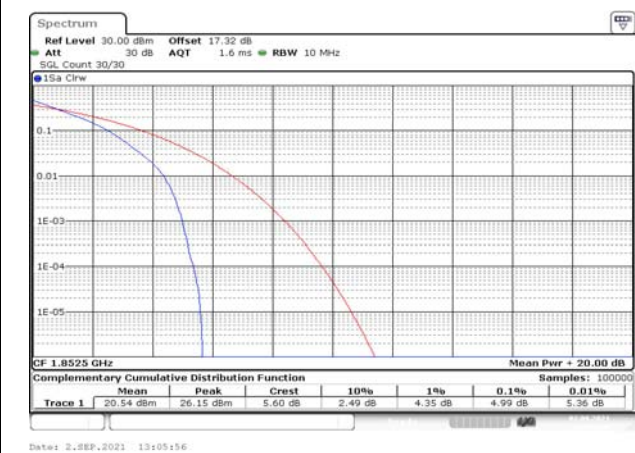


Fig.40

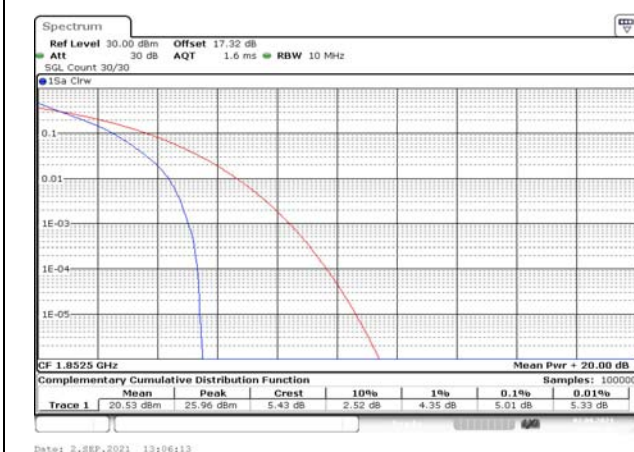


Fig.41

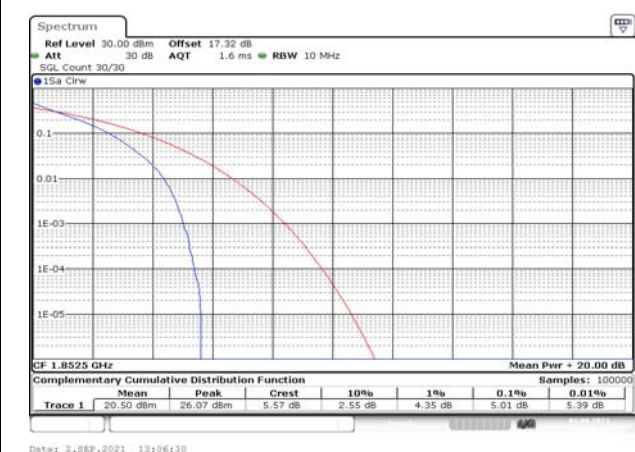


Fig.42

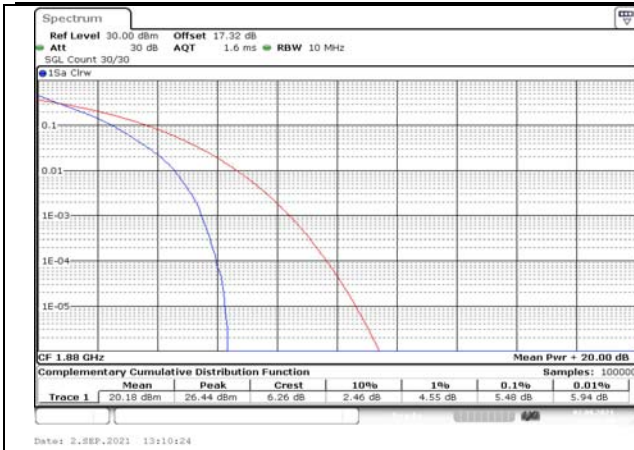


Fig.43

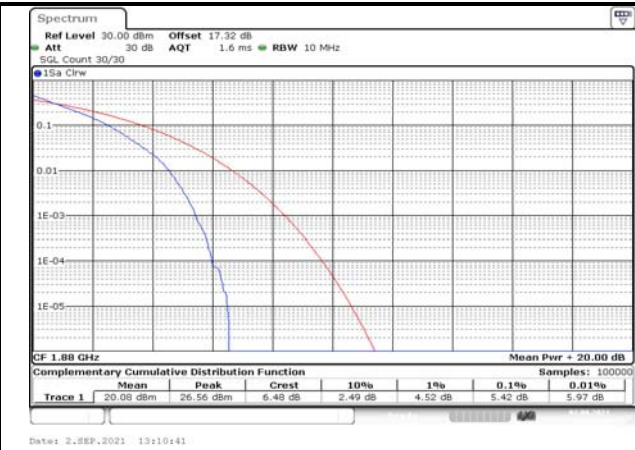


Fig.44

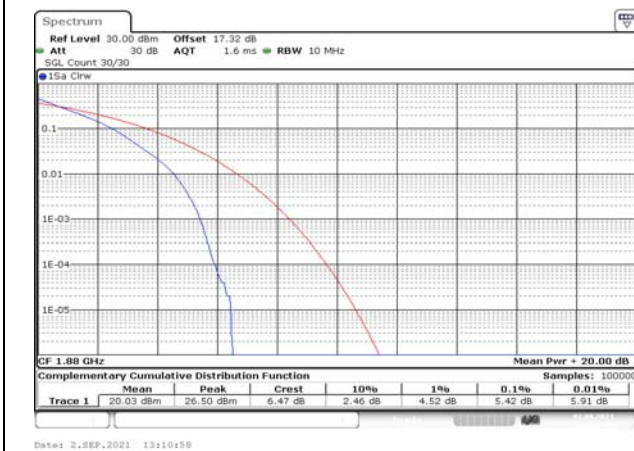


Fig.45

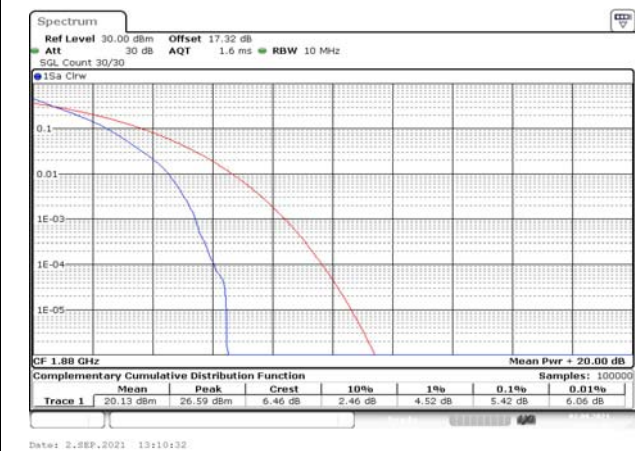


Fig.46

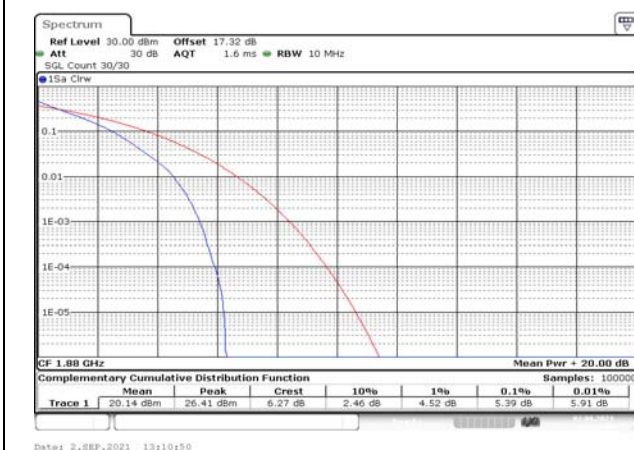


Fig.47

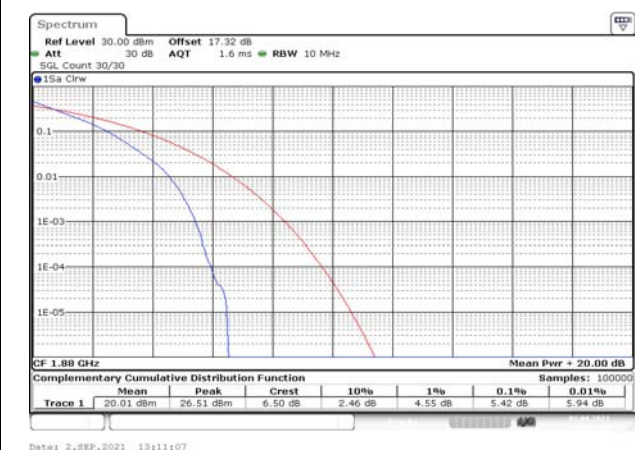


Fig.48



Fig.49

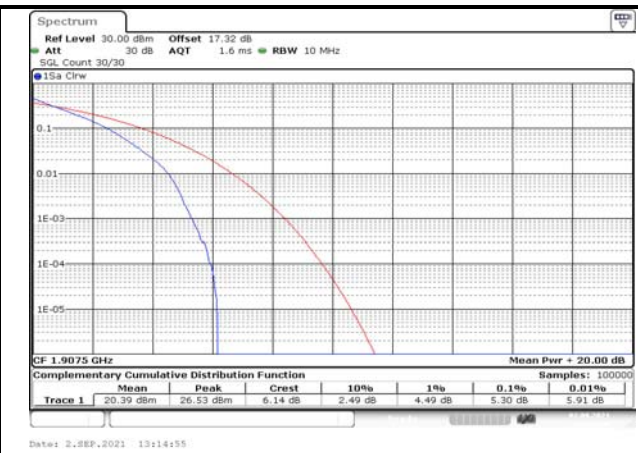


Fig.50

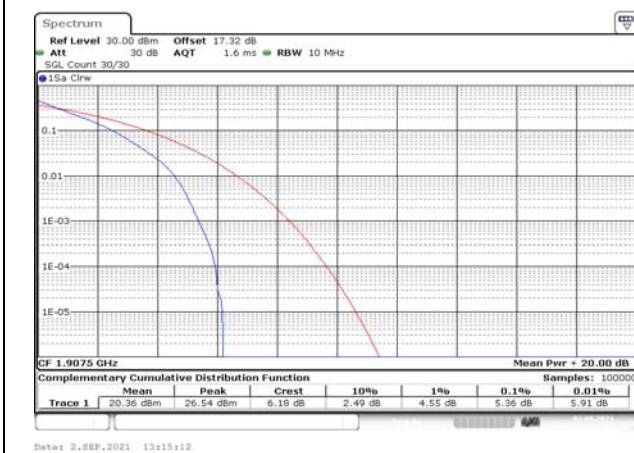


Fig.51

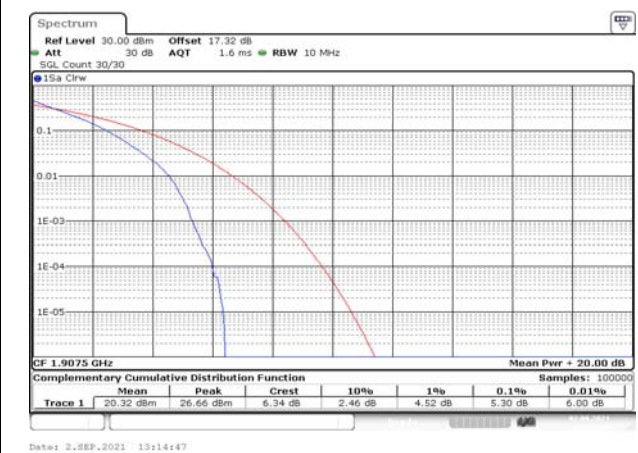


Fig.52

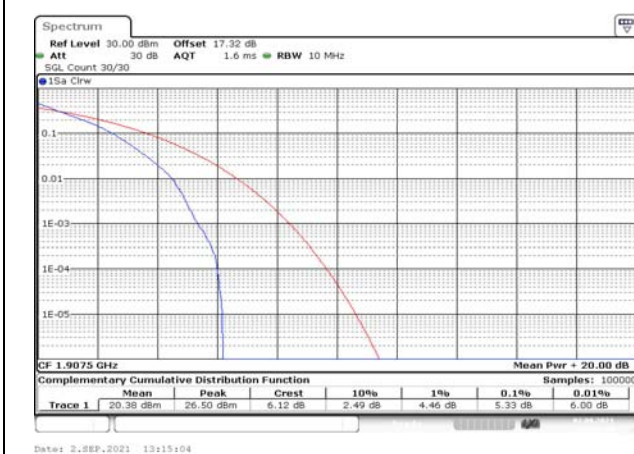


Fig.53

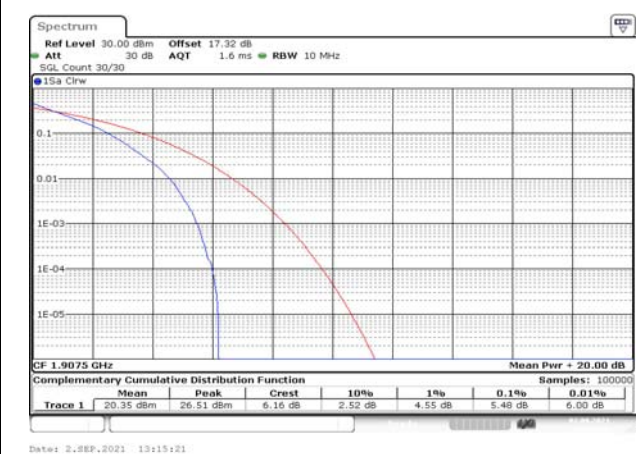


Fig.54



Fig.55

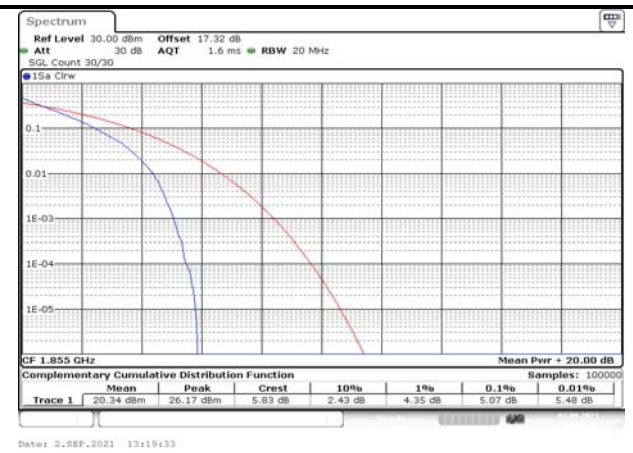


Fig.56

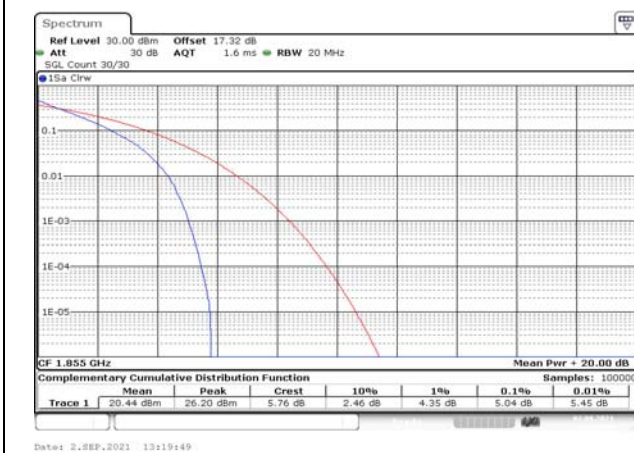


Fig.57

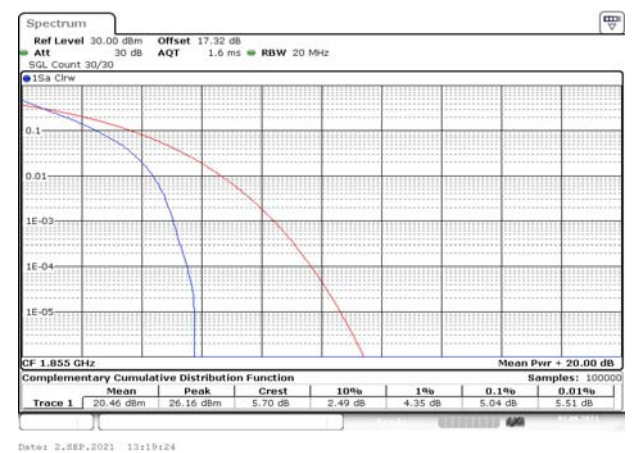


Fig.58

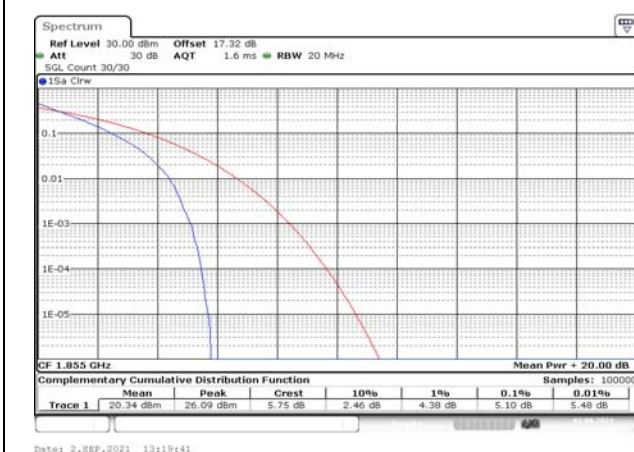


Fig.59

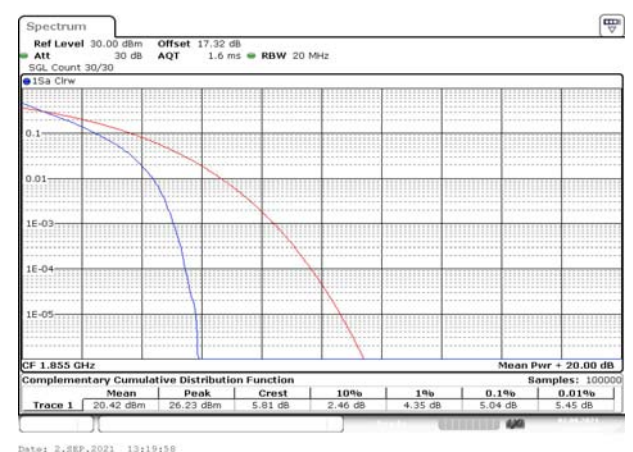


Fig.60