APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 4

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1710.7	19957	1.4	1	0	21.95
				1	3	21.92
				1	5	21.93
				3	0	21.98
				3	1	21.95
				3	3	21.94
				6	0	21.05
	1732.5	20175		1	0	21.86
				1	3	21.83
				1	5	21.82
				3	0	21.85
				3	1	21.83
				3	3	21.83
				6	0	20.94
	1754.3	20393		1	0	21.84
				1	3	22.03
				1	5	22.01
				3	0	22.01
				3	1	21.97
				3	3	21.96
				6	0	21.08
16QAM	1710.7	19957		1	0	21.13
				1	3	21.09
				1	5	21.14
				3	0	21.24
				3	1	21.25
				3	3	21.23
				6	0	20.07
	1732.5	20175		1	0	21.02
				1	3	21.05
				1	5	21.05
				3	0	20.84
				3	1	20.88
				3	3	20.86
				6	0	19.95
	1754.3	20393		1	0	21.16
				1	3	21.18
				1	5	21.12
				3	0	20.97
				3	1	20.96
				3	3	21.01
				6	0	20.19

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	19957	1.4	1	0	20.07
				1	3	20.06
				1	5	20.12
				3	0	20.09
				3	1	20.11
				3	3	20.08
				6	0	20.10
	1732.5	20175		1	0	19.98
				1	3	19.98
				1	5	19.95
				3	0	19.94
				3	1	19.95
				3	3	19.94
				6	0	19.94
	1754.3	20393		1	0	20.14
				1	3	20.16
				1	5	20.10
				3	0	20.15
				3	1	20.16
				3	3	20.13
				6	0	20.16

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	22.20
				1	8	22.11
				1	14	22.12
				8	0	21.23
				8	4	21.31
				8	7	21.26
				15	0	21.21
	1732.5	20175		1	0	21.99
				1	8	22.02
				1	14	22.01
				8	0	21.03
				8	4	21.12
				8	7	21.07
				15	0	21.07
	1753.5	20385		1	0	22.19
				1	8	22.18
				1	14	22.18
				8	0	21.34
				8	4	21.29
				8	7	21.28
				15	0	21.28
16QAM	1711.5	19965		1	0	21.84
				1	8	21.86
				1	14	21.76
				8	0	20.47
				8	4	20.39
				8	7	20.39
				15	0	20.34
	1732.5	20175		1	0	21.18
				1	8	21.23
				1	14	21.16
				8	0	20.03
				8	4	20.07
				8	7	20.07
				15	0	19.98
	1753.5	20385		1	0	21.38
				1	8	21.40
				1	14	21.40
				8	0	20.34
				8	4	20.30
				8	7	20.29
				15	0	20.38

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	19965	3	1	0	20.34
				1	8	20.35
				1	14	20.35
				8	0	20.30
				8	4	20.34
				8	7	20.34
				15	0	20.34
	1732.5	20175		1	0	19.99
				1	8	19.99
				1	14	20.08
				8	0	20.02
				8	4	19.98
				8	7	19.99
				15	0	19.99
	1753.5	20385		1	0	20.35
				1	8	20.34
				1	14	20.35
				8	0	20.34
				8	4	20.38
				8	7	20.41
				15	0	20.35

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	19975	5	1	0	22.26
				1	12	22.09
				1	24	22.16
				12	0	21.31
				12	7	21.20
				12	13	21.20
				25	0	21.23
	1732.5	20175		1	0	21.95
				1	12	21.97
				1	24	22.06
				12	0	21.04
				12	7	21.09
				12	13	21.09
				25	0	21.08
	1752.5	20375		1	0	22.20
				1	12	22.20
				1	24	22.20
				12	0	21.29
				12	7	21.28
				12	13	21.29
				25	0	21.28
16QAM	1712.5	19975		1	0	21.23
				1	12	21.30
				1	24	21.18
				12	0	20.24
				12	7	20.27
				12	13	20.26
				25	0	20.28
	1732.5	20175		1	0	21.01
				1	12	21.03
				1	24	21.14
				12	0	20.05
				12	7	20.09
				12	13	20.18
				25	0	20.11
	1752.5	20375		1	0	21.55
				1	12	21.60
				1	24	21.61
				12	0	20.38
				12	7	20.34
				12	13	20.34
				25	0	20.36

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	19975	5	1	0	20.29
				1	12	20.28
				1	24	20.39
				12	0	20.34
				12	7	20.34
				12	13	20.27
				25	0	20.34
	1732.5	20175		1	0	20.16
				1	12	20.14
				1	24	20.11
				12	0	20.11
				12	7	20.17
				12	13	20.13
				25	0	20.14
	1752.5	20375		1	0	20.31
				1	12	20.33
				1	24	20.31
				12	0	20.32
				12	7	20.33
				12	13	20.29
				25	0	20.31

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	20000	10	1	0	22.21
				1	25	22.02
				1	49	22.18
				25	0	21.29
				25	12	21.27
				25	25	21.24
				50	0	21.23
	1732.5	20175		1	0	22.04
				1	25	22.03
				1	49	22.06
				25	0	21.08
				25	12	21.19
				25	25	21.13
				50	0	21.14
	1750	20350		1	0	22.06
				1	25	22.13
				1	49	22.19
				25	0	21.17
				25	12	21.26
				25	25	21.31
				50	0	21.20
16QAM	1715	20000		1	0	21.80
				1	25	21.63
				1	49	21.66
				25	0	20.37
				25	12	20.22
				25	25	20.28
				50	0	20.27
	1732.5	20175		1	0	21.29
				1	25	21.21
				1	49	21.22
				25	0	20.11
				25	12	20.14
				25	25	20.16
				50	0	20.11
	1750	20350		1	0	21.21
				1	25	21.32
				1	49	21.29
				25	0	20.27
				25	12	20.45
				25	25	20.43
				50	0	20.28

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	20000	10	1	0	20.29
				1	25	20.27
				1	49	20.23
				25	0	20.26
				25	12	20.34
				25	25	20.36
				50	0	20.30
	1732.5	20175		1	0	20.04
				1	25	20.02
				1	49	20.08
				25	0	20.00
				25	12	20.08
				25	25	20.11
				50	0	20.11
	1750	20350		1	0	20.26
				1	25	20.24
				1	49	20.30
				25	0	20.20
				25	12	20.27
				25	25	20.22
				50	0	20.27

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	22.10
				1	37	21.99
				1	74	22.02
				36	0	21.23
				36	29	21.12
				36	30	21.06
				75	0	21.03
	1732.5	20175		1	0	22.01
				1	37	21.95
				1	74	21.95
				36	0	20.97
				36	29	21.07
				36	30	21.07
				75	0	20.98
	1747.5	20325		1	0	22.02
				1	37	22.11
				1	74	22.16
				36	0	21.05
				36	29	21.19
				36	30	21.14
				75	0	21.05
16QAM	1717.5	20025		1	0	21.84
				1	37	21.68
				1	74	21.55
				36	0	20.27
				36	29	20.08
				36	30	20.14
				75	0	20.10
	1732.5	20175		1	0	21.23
				1	37	21.21
				1	74	21.12
				36	0	20.02
				36	29	20.06
				36	30	20.04
				75	0	19.99
	1747.5	20325		1	0	21.54
				1	37	21.70
				1	74	21.49
				36	0	20.09
				36	29	20.16
				36	30	20.21
				75	0	20.07

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	20025	15	1	0	20.06
				1	37	20.12
				1	74	20.13
				36	0	20.12
				36	29	20.13
				36	30	20.02
				75	0	20.12
	1732.5	20175		1	0	20.02
				1	37	19.97
				1	74	20.05
				36	0	20.00
				36	29	20.01
				36	30	20.06
				75	0	19.90
	1747.5	20325		1	0	20.02
				1	37	20.01
				1	74	20.13
				36	0	20.09
				36	29	20.01
				36	30	20.02
				75	0	20.10

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	22.09
				1	49	21.90
				1	99	21.98
				50	0	21.06
				50	24	21.06
				50	50	21.14
				100	0	21.09
	1732.5	20175		1	0	22.00
				1	49	22.15
				1	99	21.99
				50	0	21.01
				50	24	21.06
				50	50	21.06
				100	0	20.96
	1745	20300		1	0	21.94
				1	49	22.02
				1	99	22.09
				50	0	21.03
				50	24	21.18
				50	50	21.22
				100	0	21.19
16QAM	1720	20050		1	0	21.37
				1	49	21.35
				1	99	21.19
				50	0	20.04
				50	24	19.95
				50	50	20.04
				100	0	20.12
	1732.5	20175		1	0	21.31
				1	49	21.30
				1	99	21.30
				50	0	20.03
				50	24	20.03
				50	50	20.06
				100	0	20.02
	1745	20300		1	0	21.67
				1	49	21.74
				1	99	21.71
				50	0	20.04
				50	24	20.14
				50	50	20.16
				100	0	20.08

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	20050	20	1	0	20.08
				1	49	20.11
				1	99	20.11
				50	0	20.12
				50	24	20.11
				50	50	20.12
				100	0	20.14
	1732.5	20175		1	0	20.04
				1	49	20.00
				1	99	20.00
				50	0	19.96
				50	24	20.00
				50	50	20.00
				100	0	20.03
	1745	20300		1	0	20.08
				1	49	20.14
				1	99	20.13
				50	0	20.09
				50	24	20.08
				50	50	20.19
				100	0	20.18

2 Occupied Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
4	1710.7	19957	1.4	6	0	1.082	Fig.1	1.082	Fig.2	1.082	Fig.3
	1732.5	20175		6	0	1.082	Fig.4	1.082	Fig.5	1.082	Fig.6
	1754.3	20393		6	0	1.088	Fig.7	1.082	Fig.8	1.082	Fig.9
	1711.5	19965	3	15	0	2.683	Fig.10	2.683	Fig.11	2.683	Fig.12
	1732.5	20175		15	0	2.683	Fig.13	2.683	Fig.14	2.683	Fig.15
	1753.5	20385		15	0	2.683	Fig.16	2.683	Fig.17	2.696	Fig.18
	1712.5	19975	5	25	0	4.472	Fig.19	4.472	Fig.20	4.472	Fig.21
	1732.5	20175		25	0	4.472	Fig.22	4.472	Fig.23	4.472	Fig.24
	1752.5	20375		25	0	4.472	Fig.25	4.472	Fig.26	4.472	Fig.27
	1715	20000	10	50	0	8.944	Fig.28	8.944	Fig.29	8.944	Fig.30
	1732.5	20175		50	0	8.944	Fig.31	8.944	Fig.32	8.944	Fig.33
	1750	20350		50	0	8.944	Fig.34	8.944	Fig.35	8.944	Fig.36
	1717.5	20025	15	75	0	13.480	Fig.37	13.415	Fig.38	13.415	Fig.39
	1732.5	20175		75	0	13.415	Fig.40	13.415	Fig.41	13.415	Fig.42
	1747.5	20325		75	0	13.480	Fig.43	13.480	Fig.44	13.415	Fig.45
	1720	20050	20	100	0	17.887	Fig.46	17.887	Fig.47	17.974	Fig.48
	1732.5	20175		100	0	17.887	Fig.49	17.887	Fig.50	17.887	Fig.51
	1745	20300		100	0	17.887	Fig.52	17.887	Fig.53	17.887	Fig.54

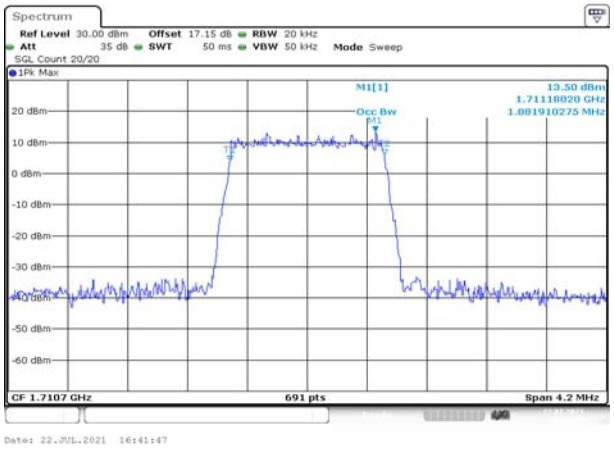


Fig.1

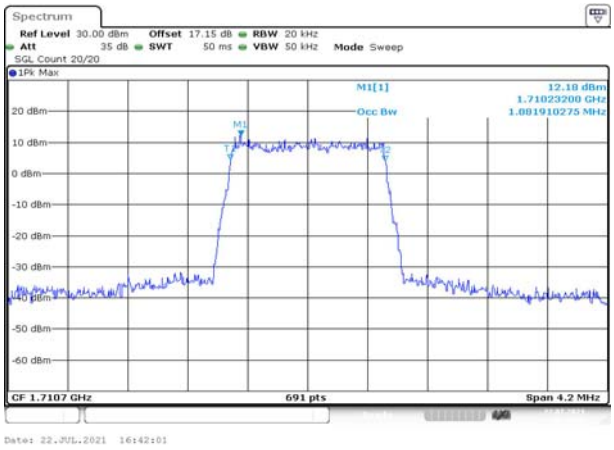


Fig.2

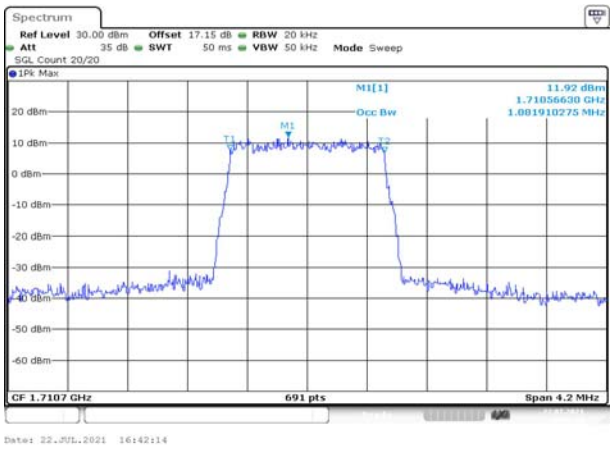


Fig.3

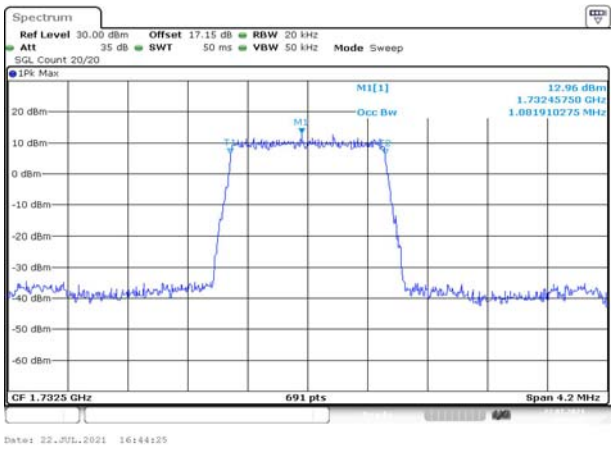


Fig.4

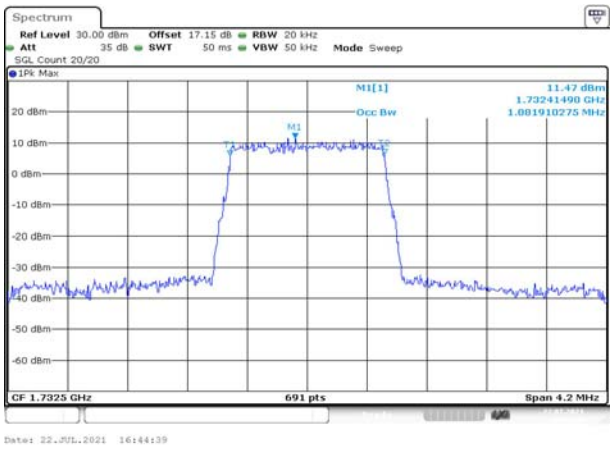


Fig.5

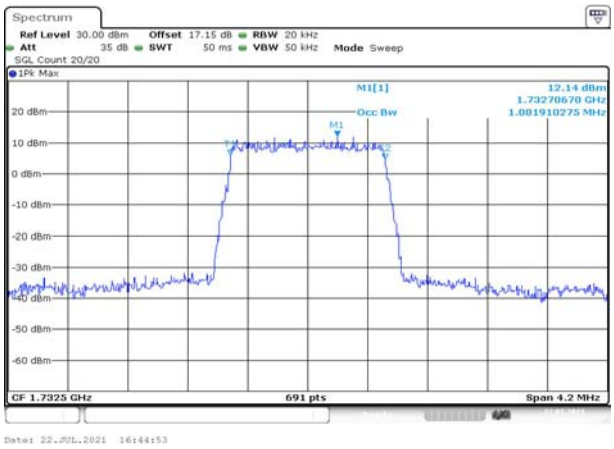


Fig.6

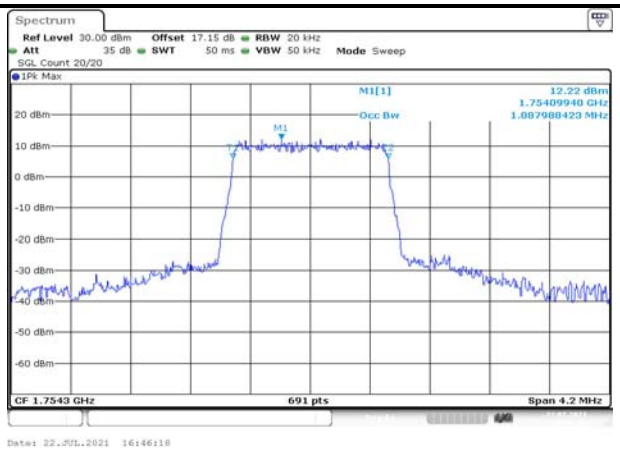


Fig.7

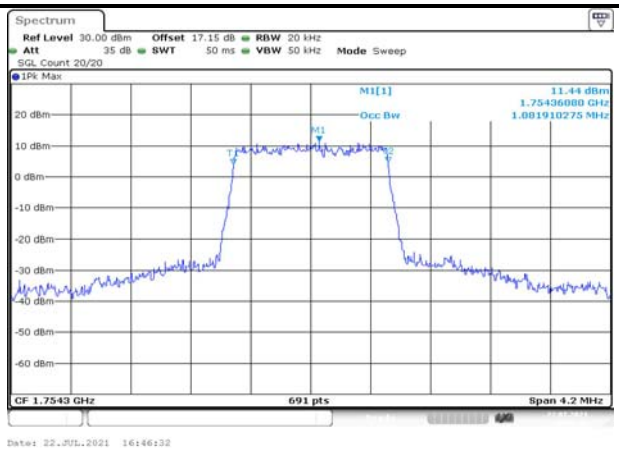


Fig.8

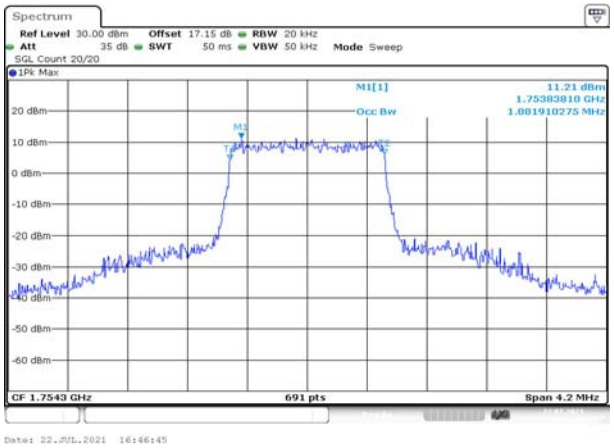


Fig.9

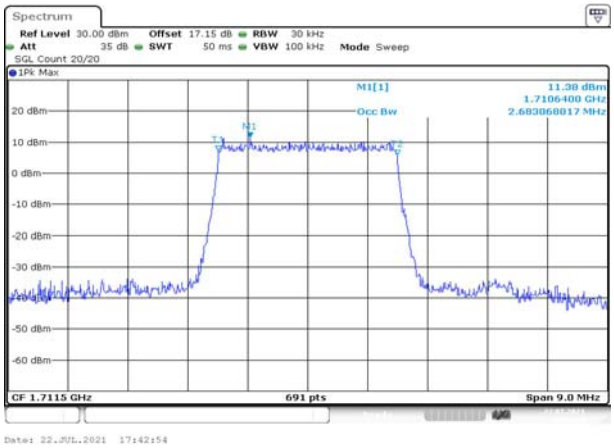


Fig.10

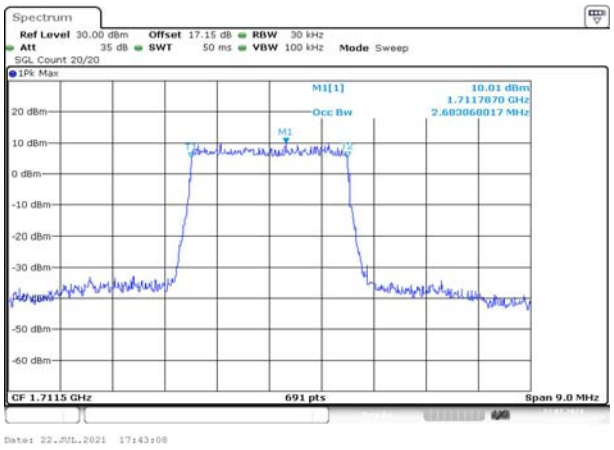


Fig.11

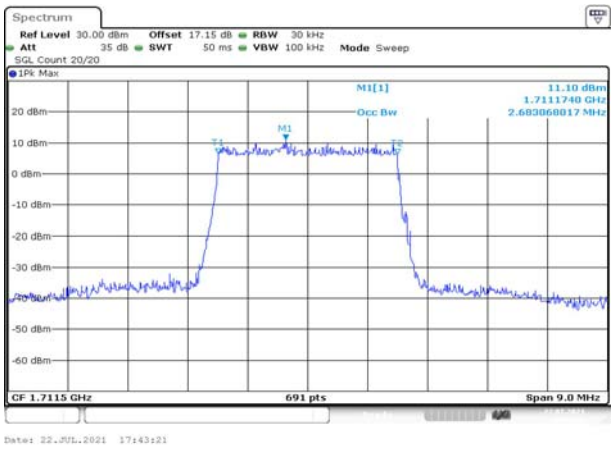


Fig.12

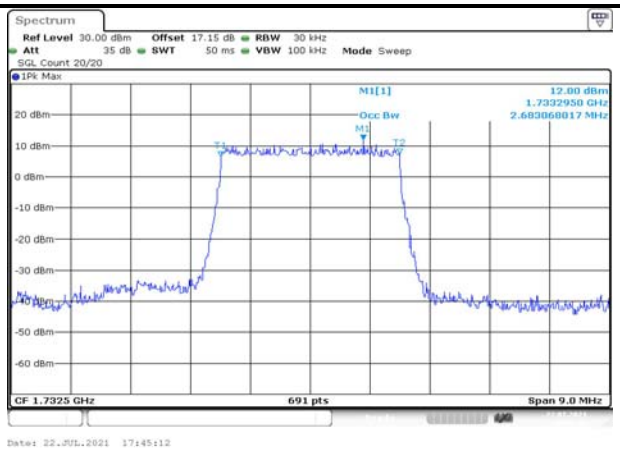


Fig.13

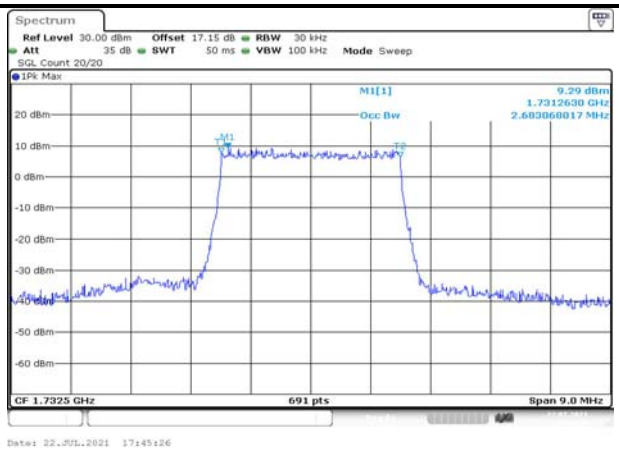


Fig.14

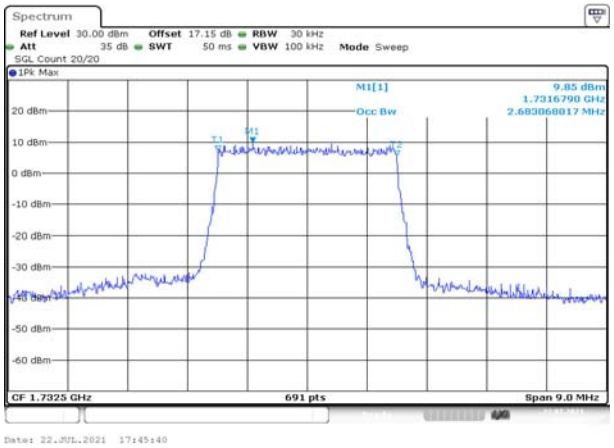


Fig.15

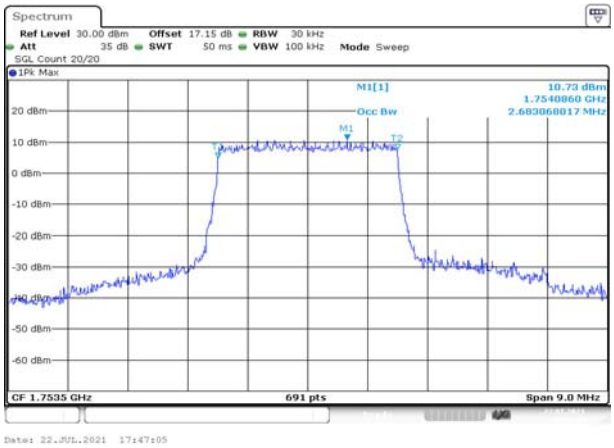
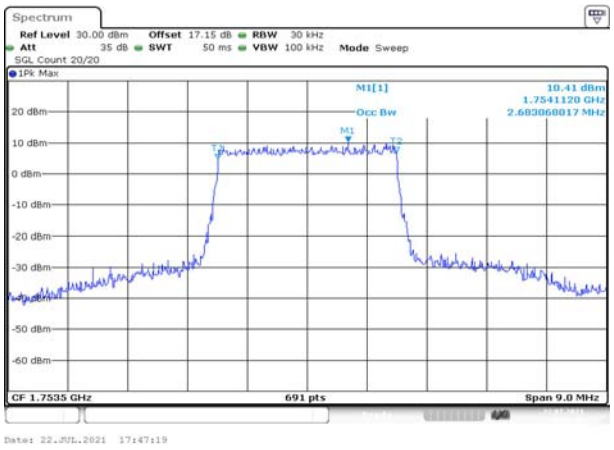


Fig.16



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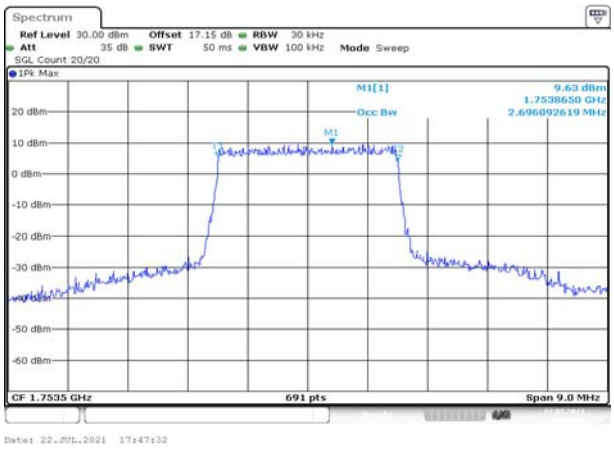

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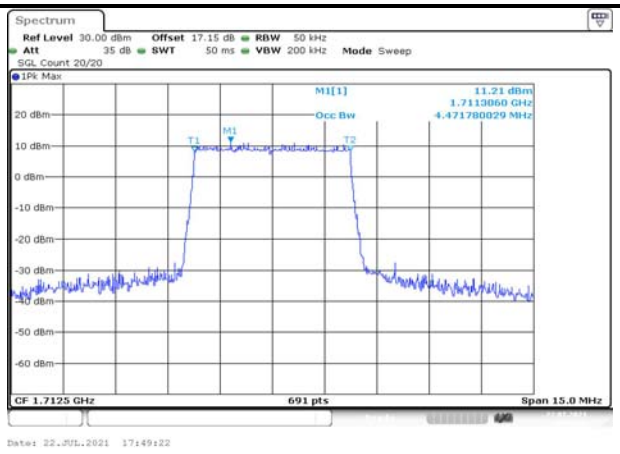

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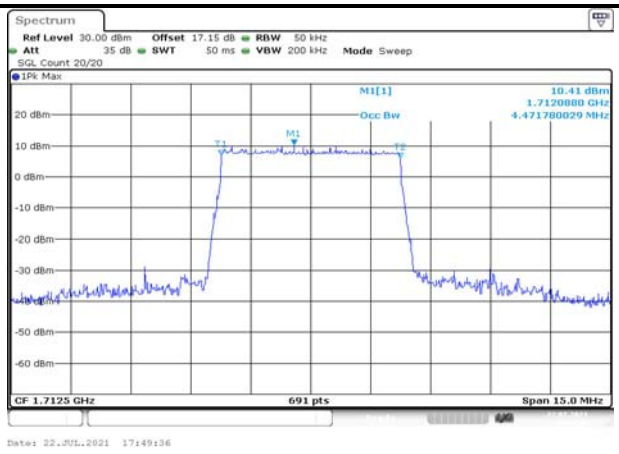

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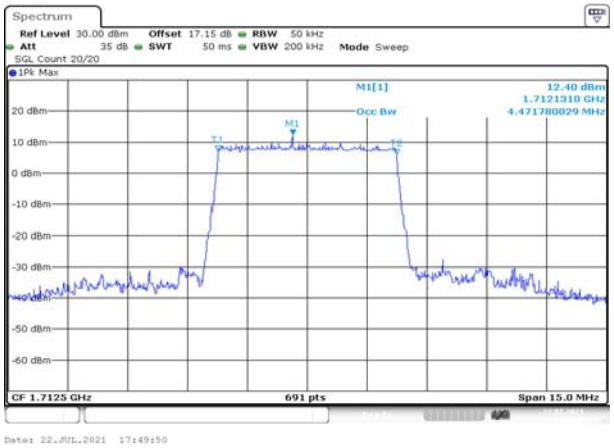

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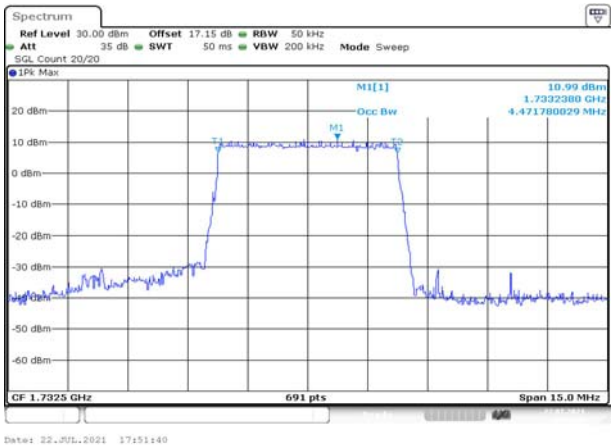

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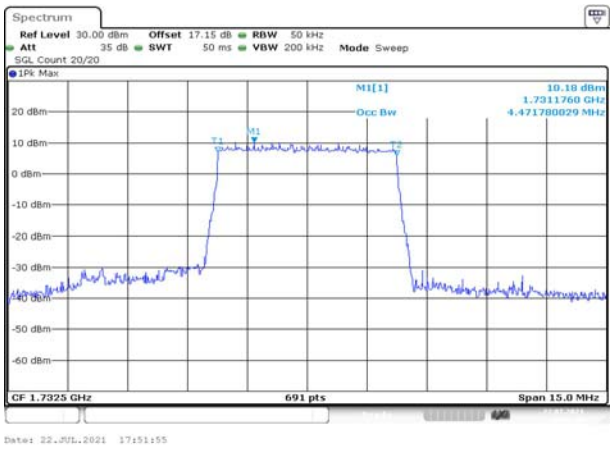

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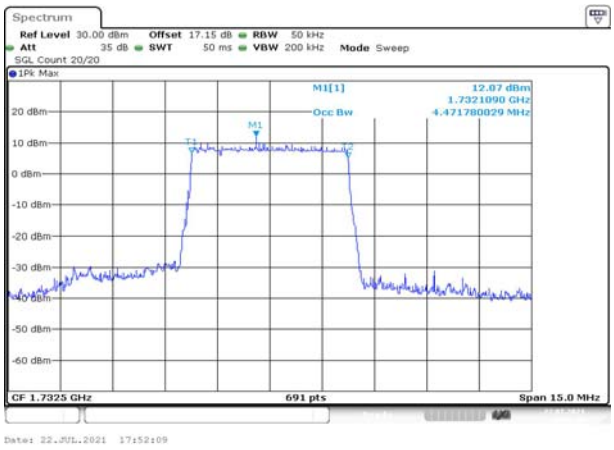

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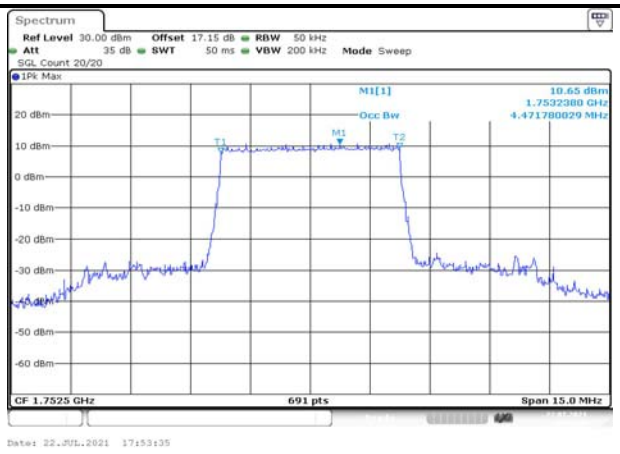

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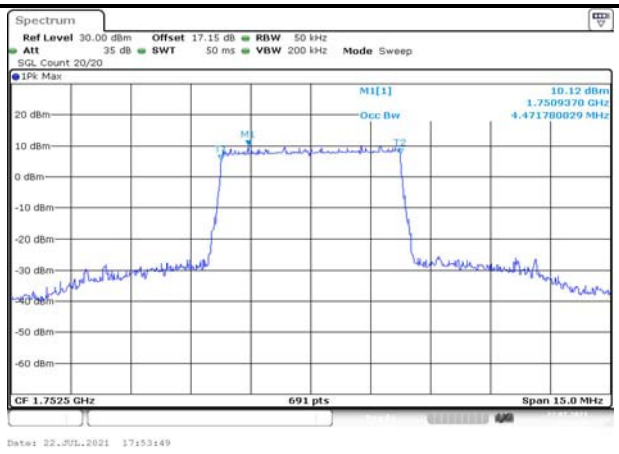

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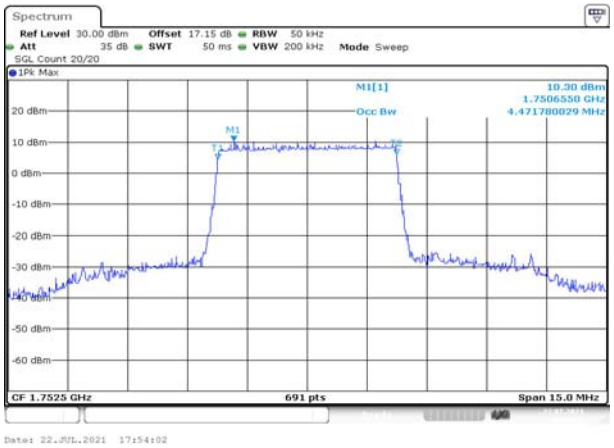

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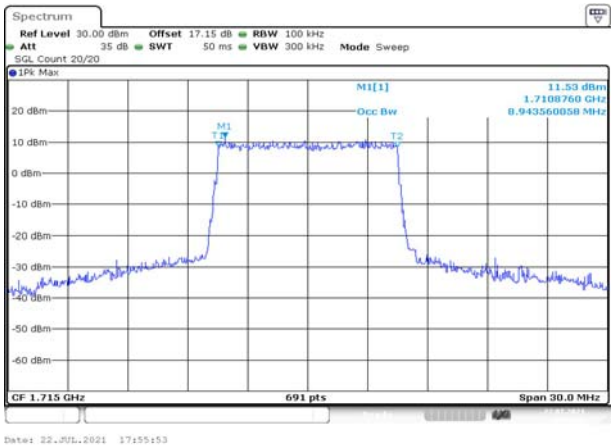

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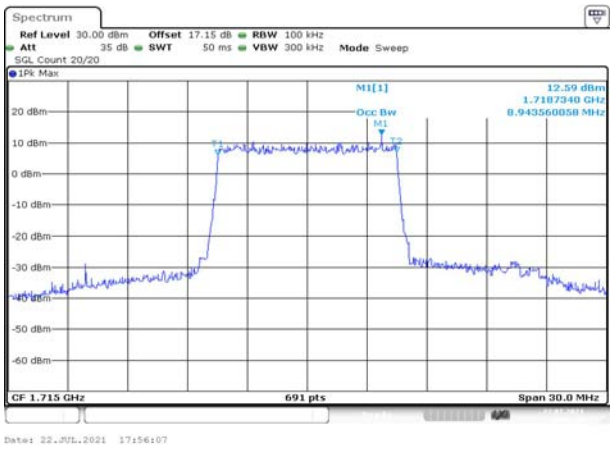

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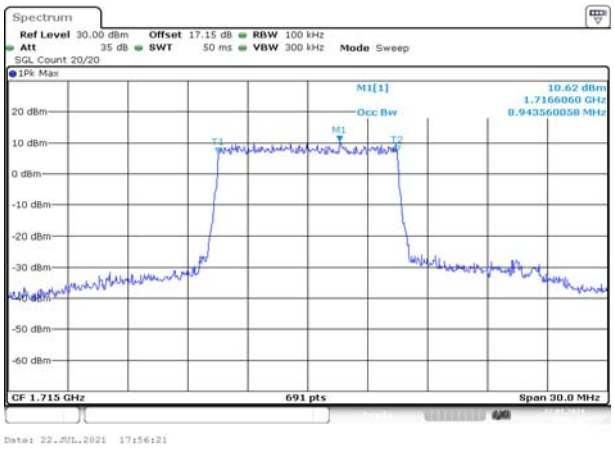

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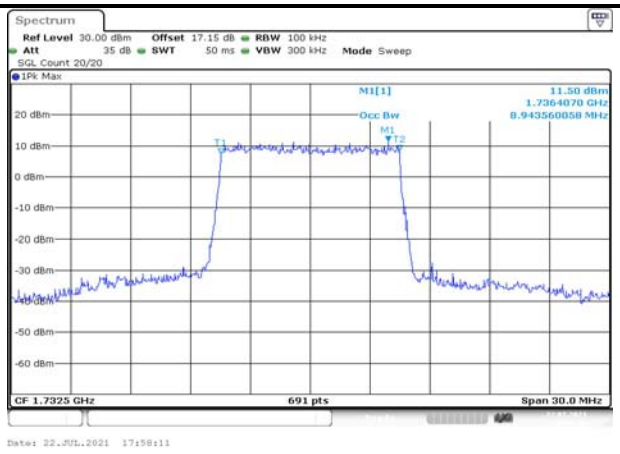
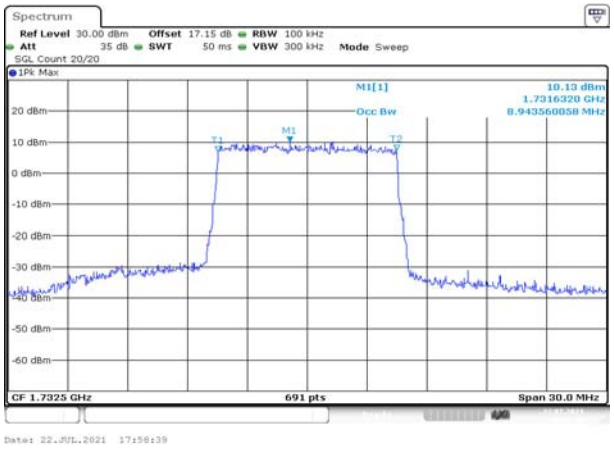


Fig.31

Fig.32



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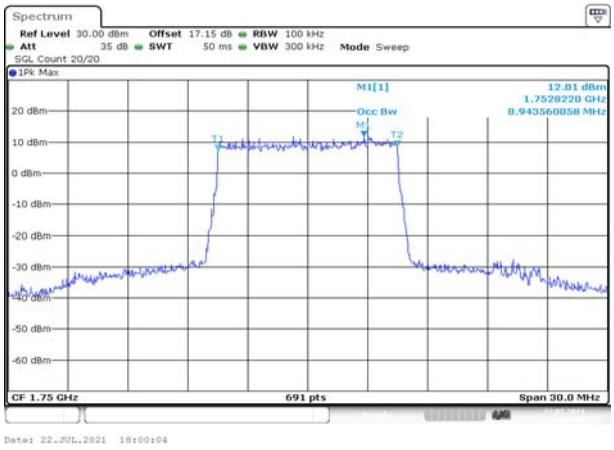

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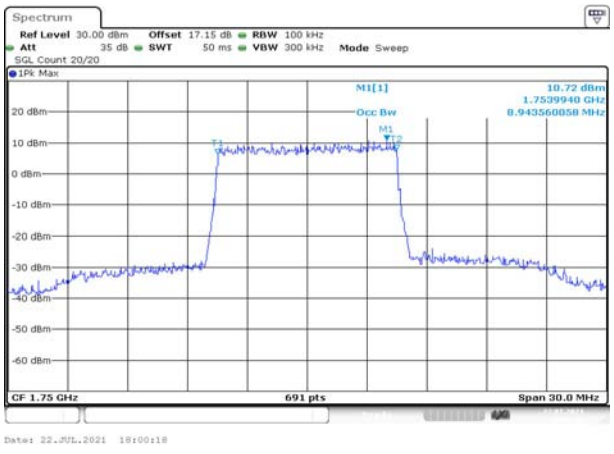

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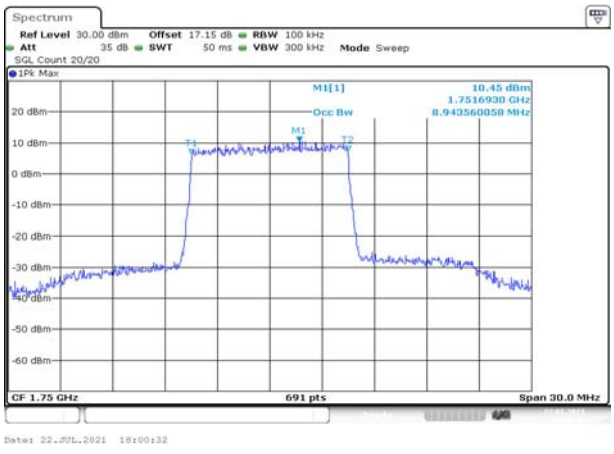

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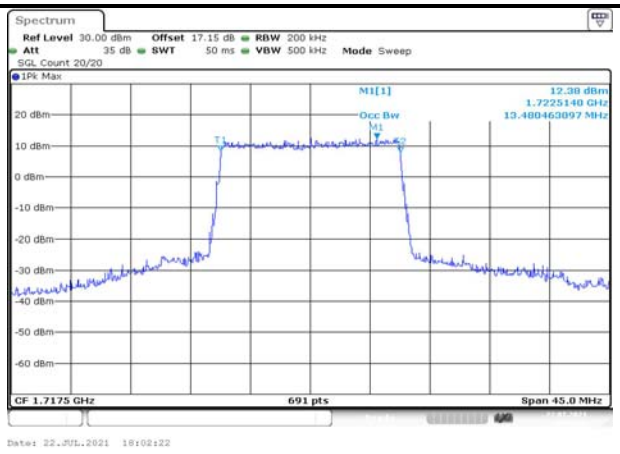

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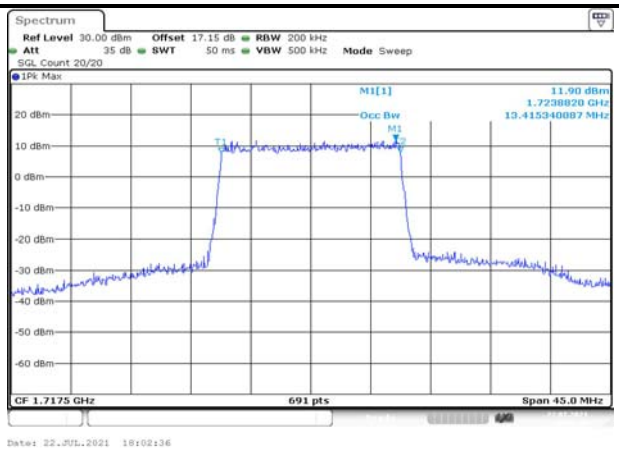

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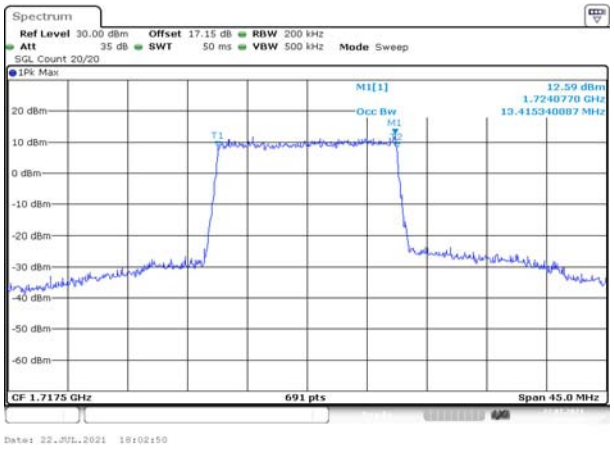

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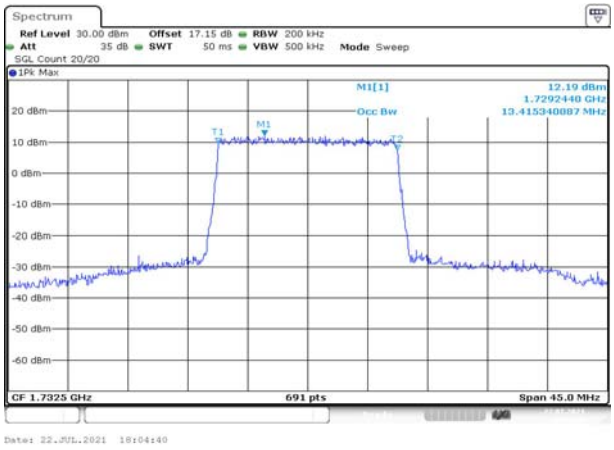

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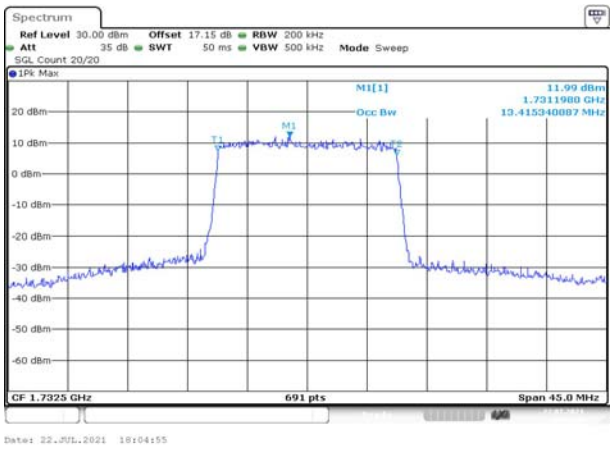

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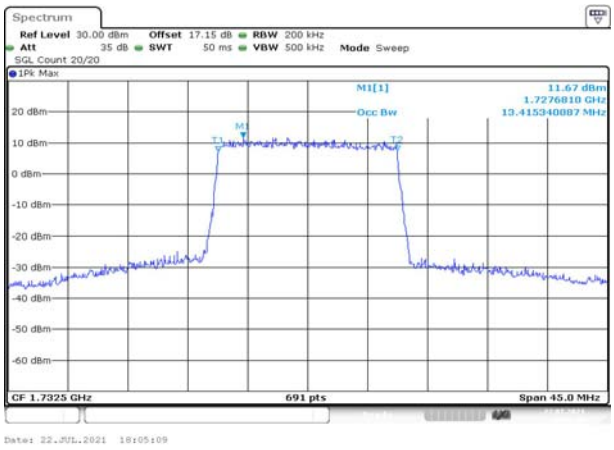

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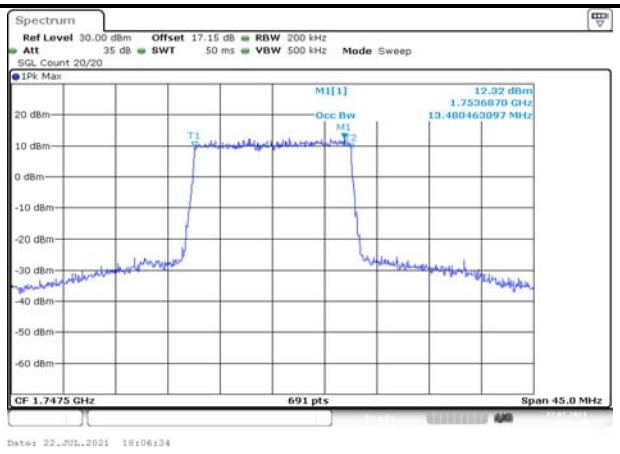

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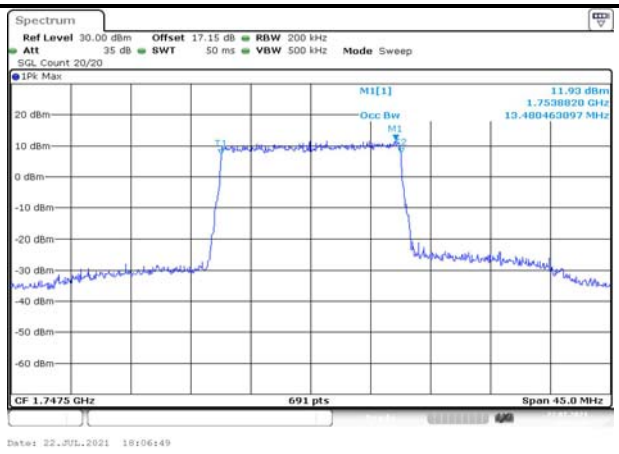

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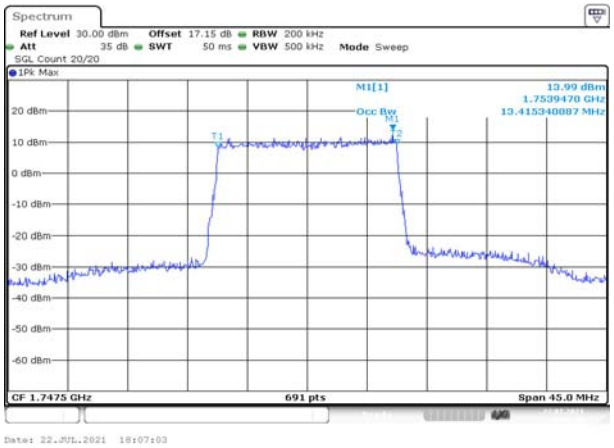

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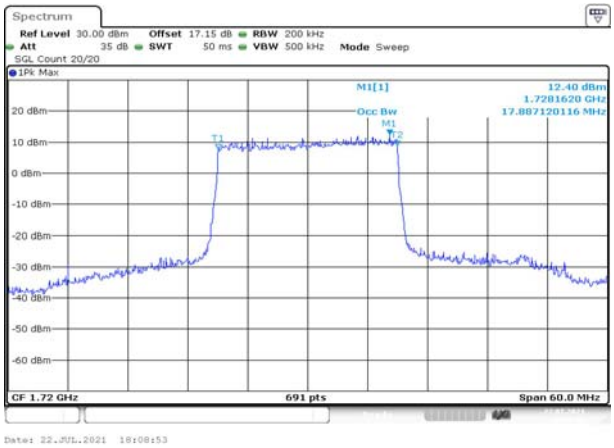

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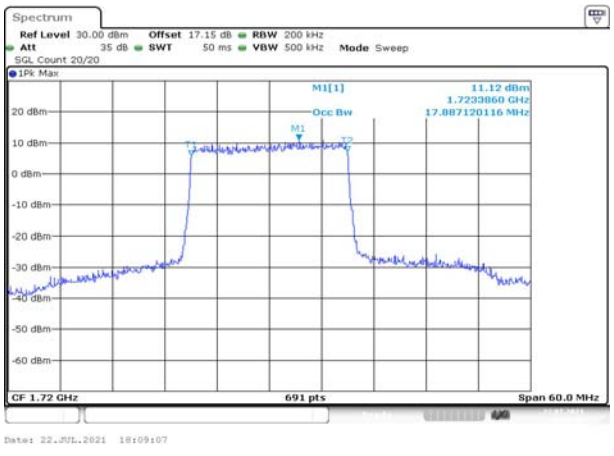

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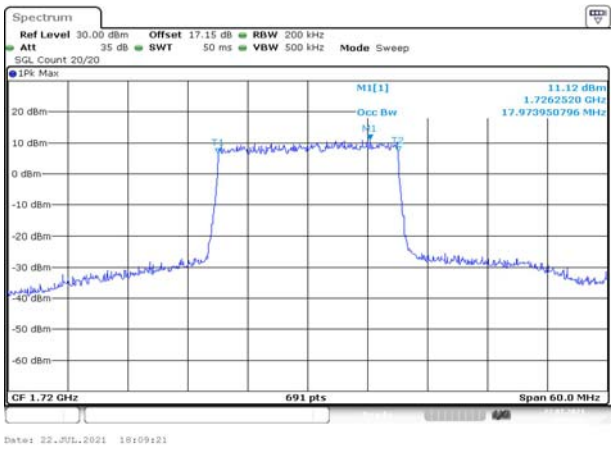

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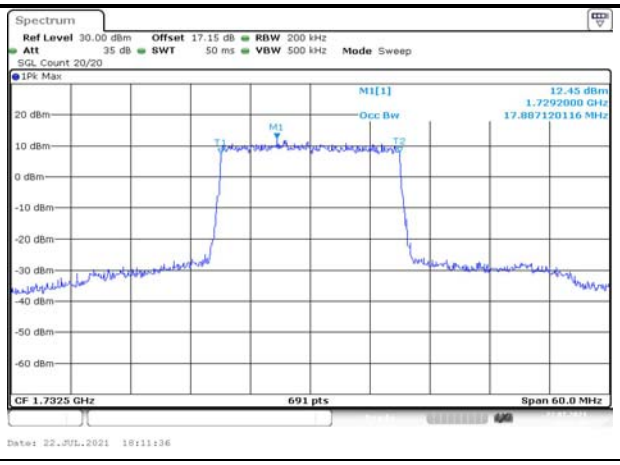

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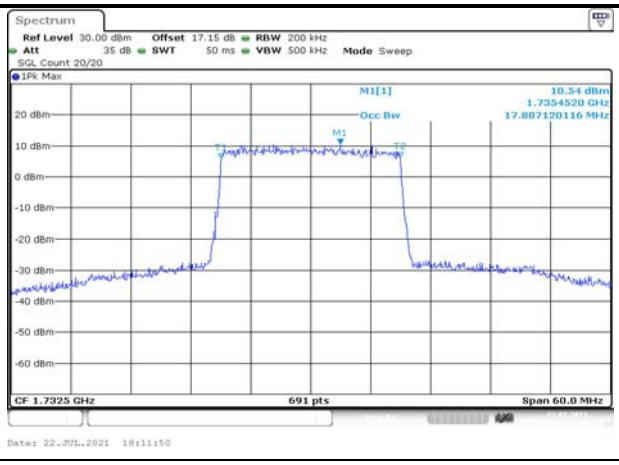
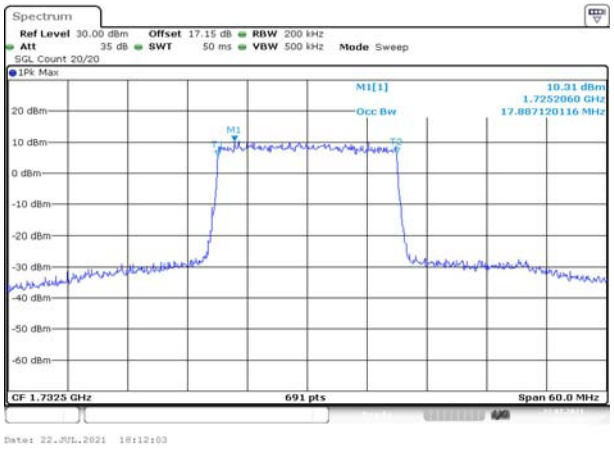


Fig.50



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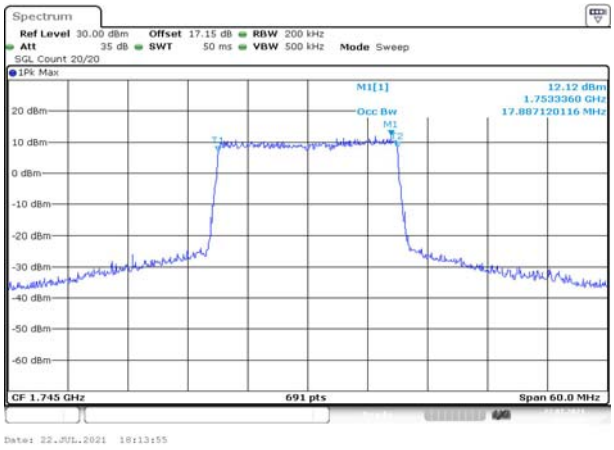


Fig.52

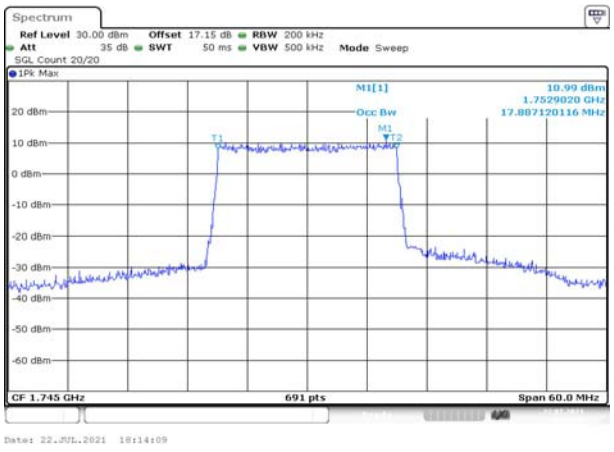


Fig.53

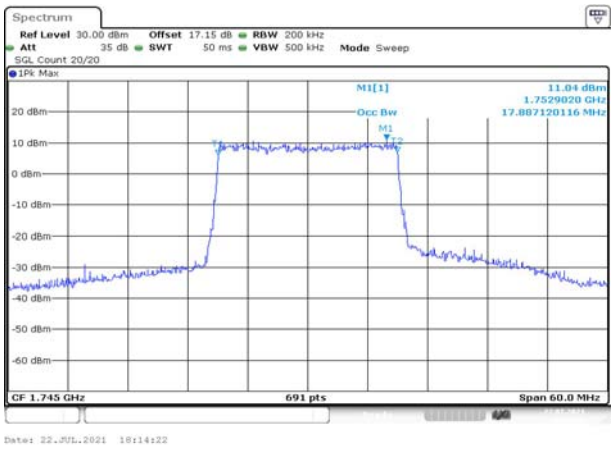


Fig.54

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	
4	1710.7	19957	1.4	6	0	1.197	Fig.1	1.216	Fig.2	1.228	Fig.3
	1732.5	20175		6	0	1.204	Fig.4	1.222	Fig.5	1.210	Fig.6
	1754.3	20393		6	0	1.228	Fig.7	1.216	Fig.8	1.210	Fig.9
	1711.5	19965	3	15	0	2.904	Fig.10	2.904	Fig.11	2.904	Fig.12
	1732.5	20175		15	0	2.904	Fig.13	2.944	Fig.14	2.918	Fig.15
	1753.5	20385		15	0	2.931	Fig.16	2.918	Fig.17	2.904	Fig.18
	1712.5	19975	5	25	0	4.841	Fig.19	4.863	Fig.20	4.863	Fig.21
	1732.5	20175		25	0	4.884	Fig.22	4.841	Fig.23	4.841	Fig.24
	1752.5	20375		25	0	4.863	Fig.25	4.863	Fig.26	4.863	Fig.27
	1715	20000	10	50	0	9.595	Fig.28	9.551	Fig.29	9.638	Fig.30
	1732.5	20175		50	0	9.508	Fig.31	9.595	Fig.32	9.595	Fig.33
	1750	20350		50	0	9.595	Fig.34	9.595	Fig.35	9.682	Fig.36
	1717.5	20025	15	75	0	14.522	Fig.37	14.457	Fig.38	14.522	Fig.39
	1732.5	20175		75	0	14.457	Fig.40	14.457	Fig.41	14.392	Fig.42
	1747.5	20325		75	0	14.588	Fig.43	14.392	Fig.44	14.653	Fig.45
	1720	20050	20	100	0	19.016	Fig.46	19.016	Fig.47	19.190	Fig.48
	1732.5	20175		100	0	19.016	Fig.49	19.276	Fig.50	19.016	Fig.51
	1745	20300		100	0	19.276	Fig.52	19.363	Fig.53	19.190	Fig.54

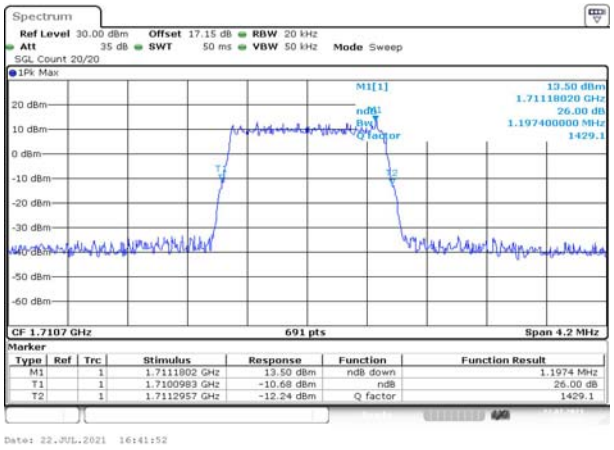


Fig.1

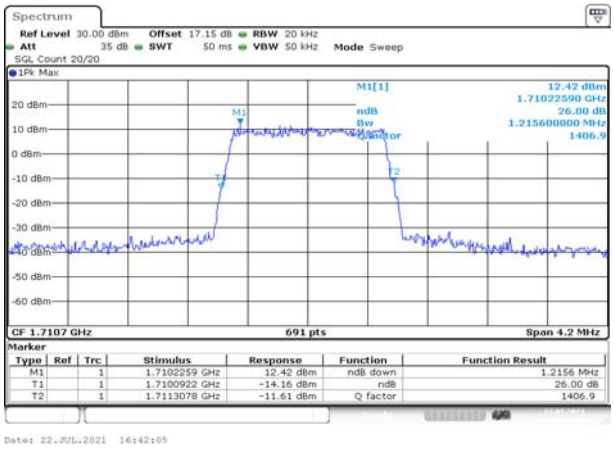


Fig.2

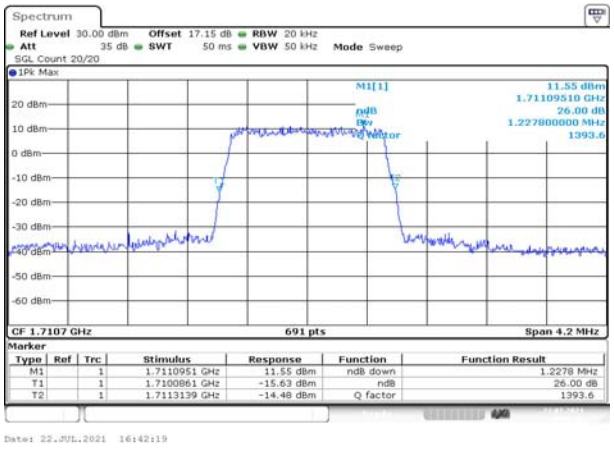


Fig.3

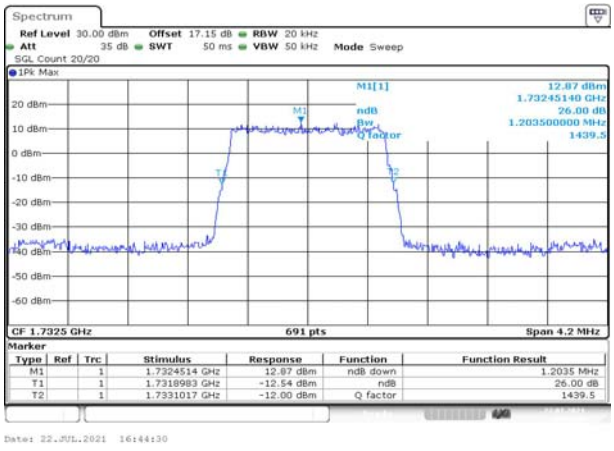


Fig.4

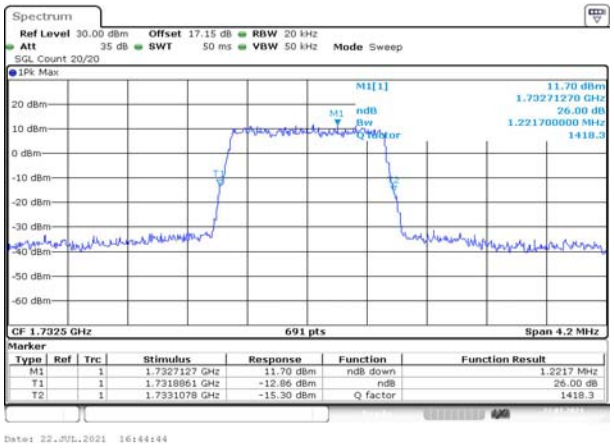


Fig.5

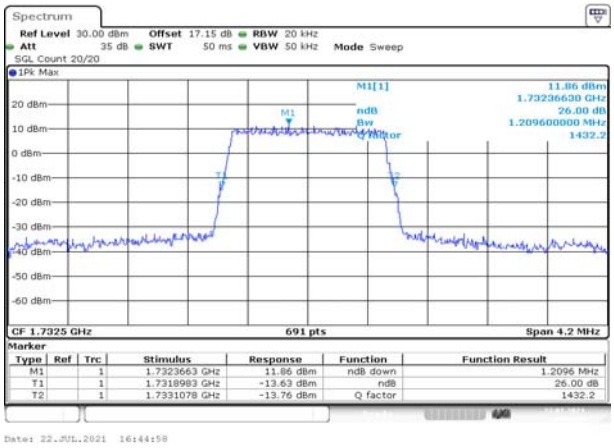


Fig.6

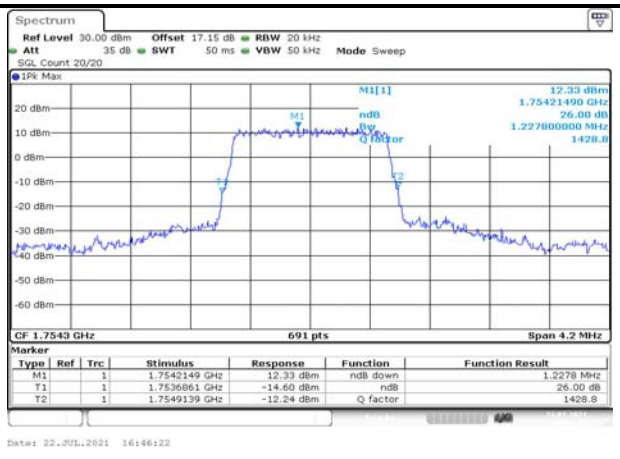


Fig.7

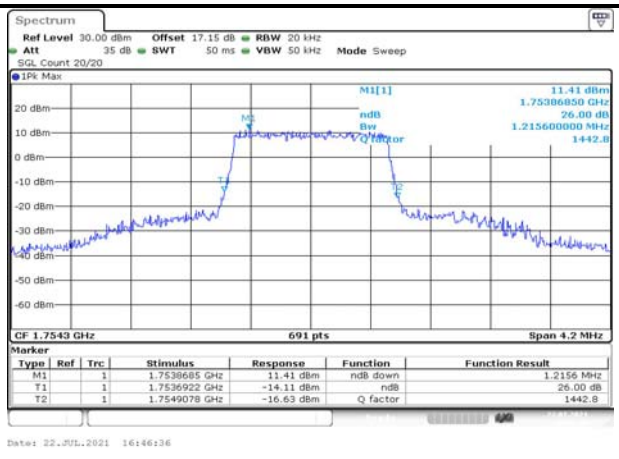


Fig.8

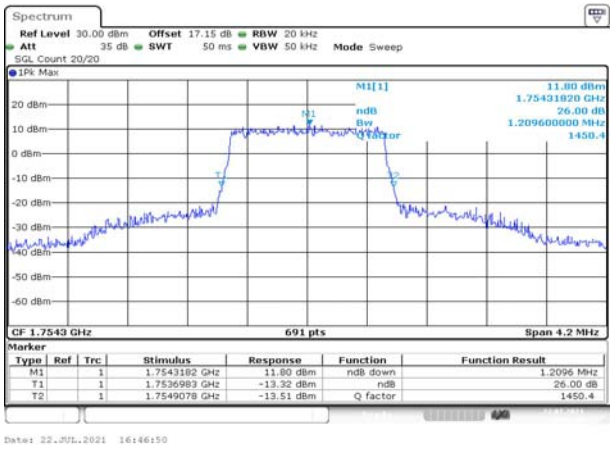
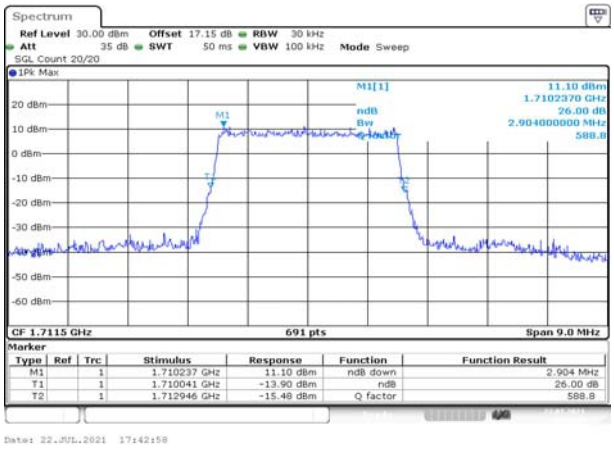


Fig.9



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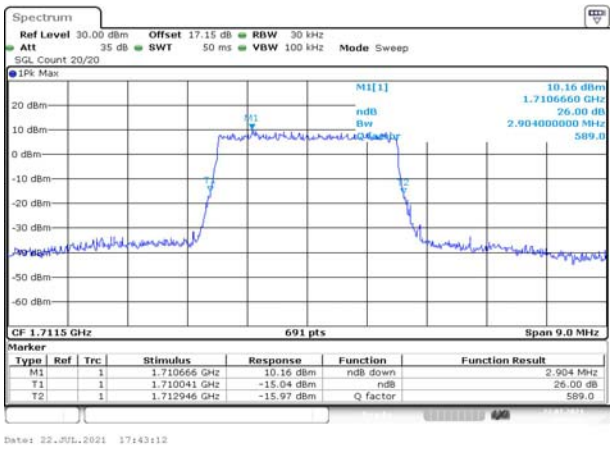


Fig.11

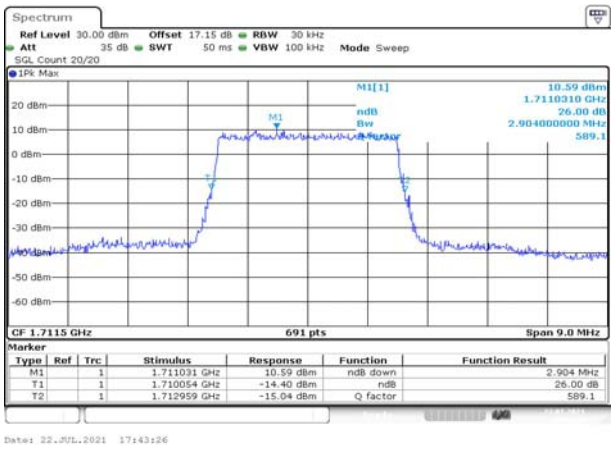
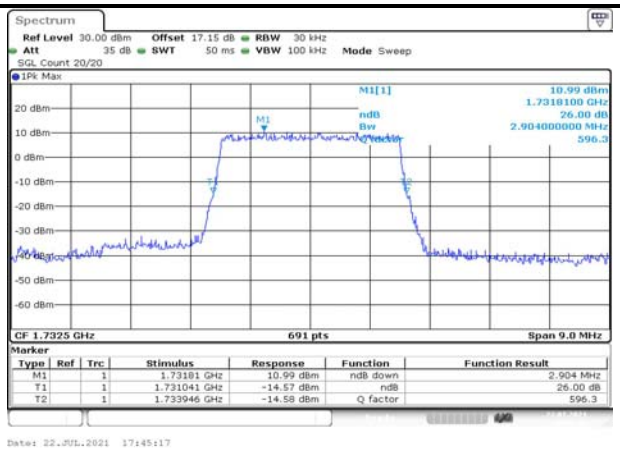


Fig.12



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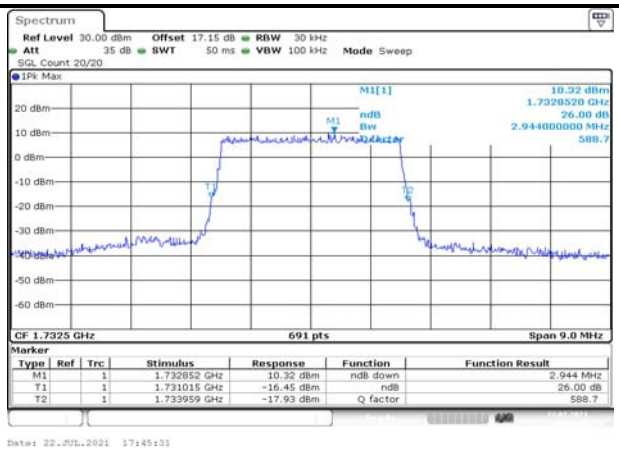

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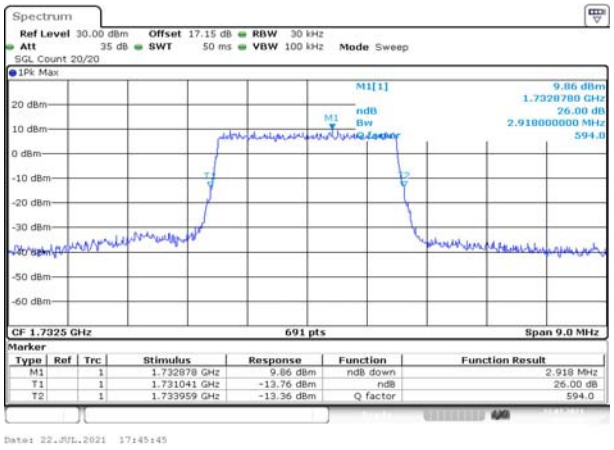

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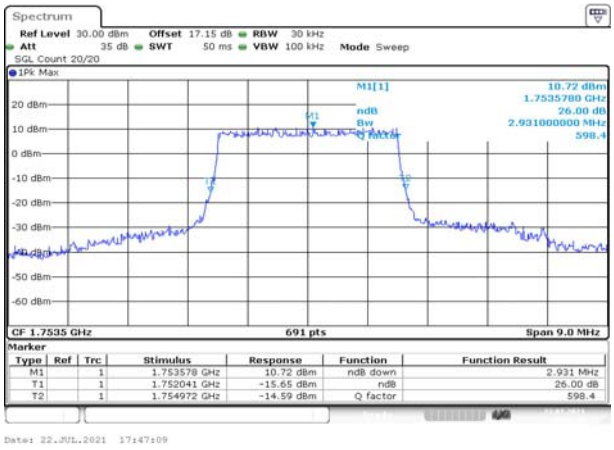

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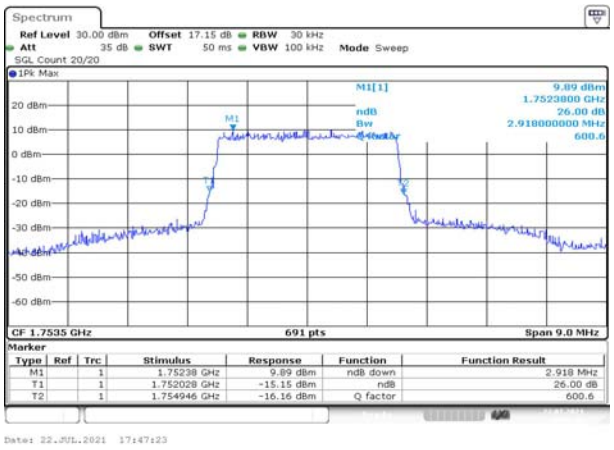

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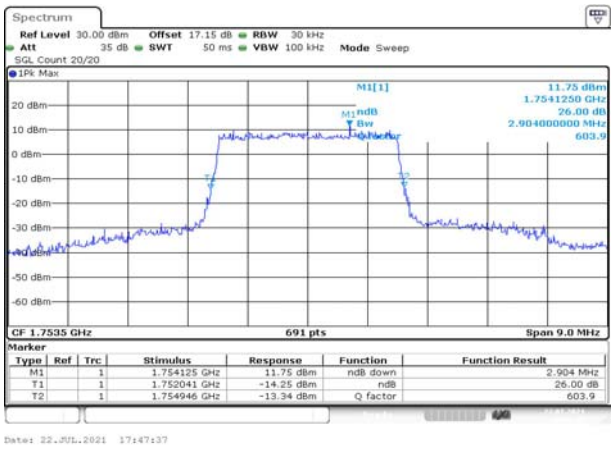

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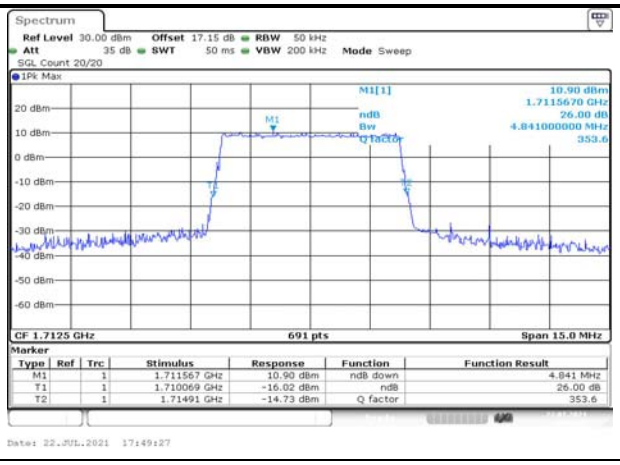


Fig.19

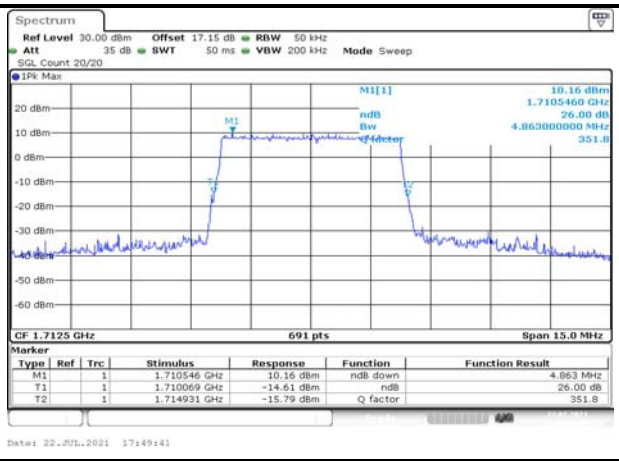
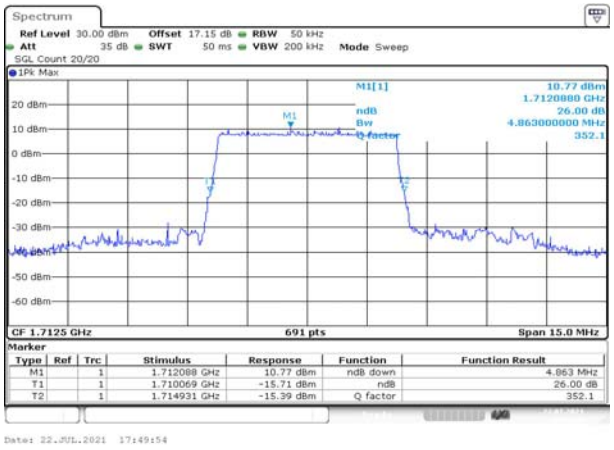


Fig.20



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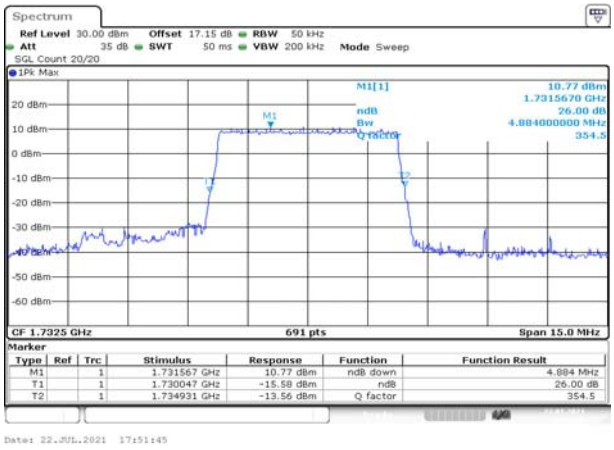

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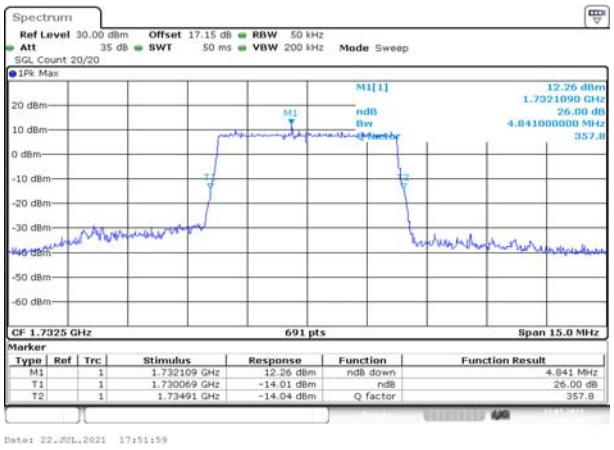
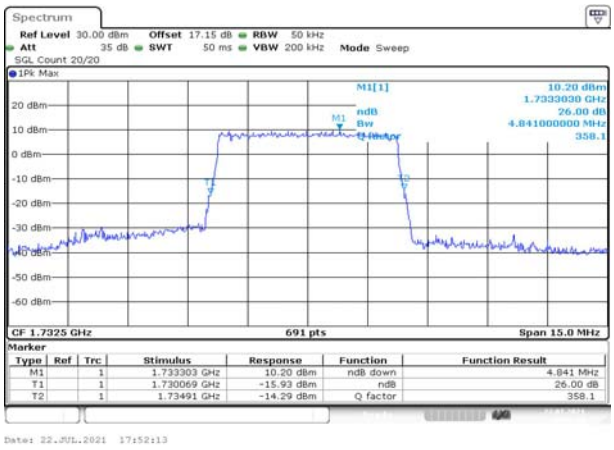


Fig.23



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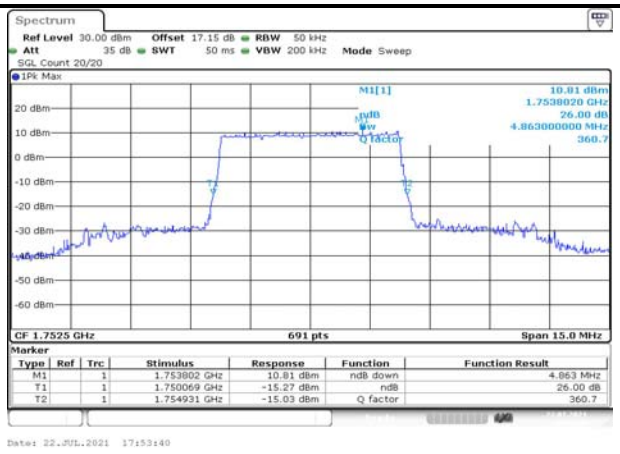

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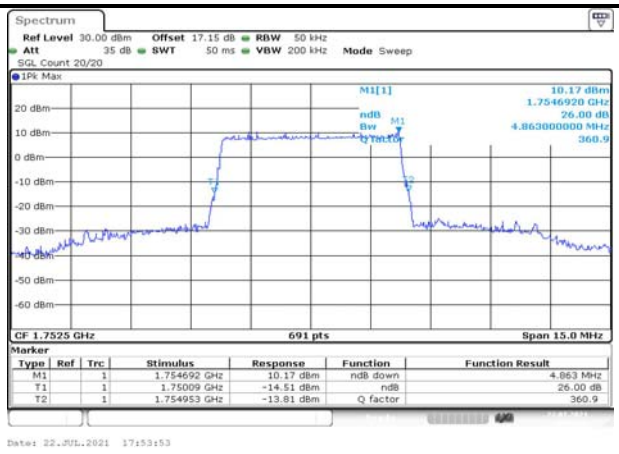

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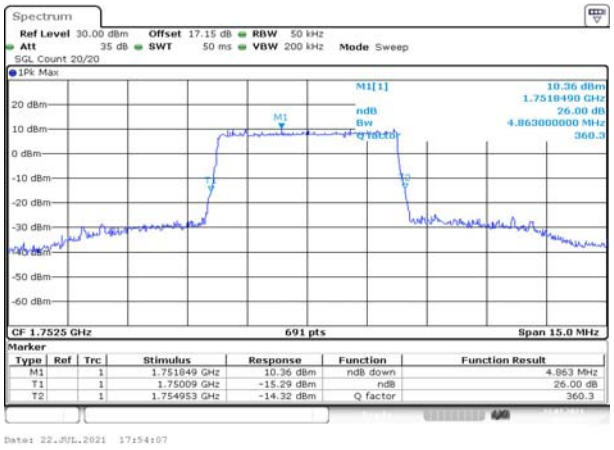

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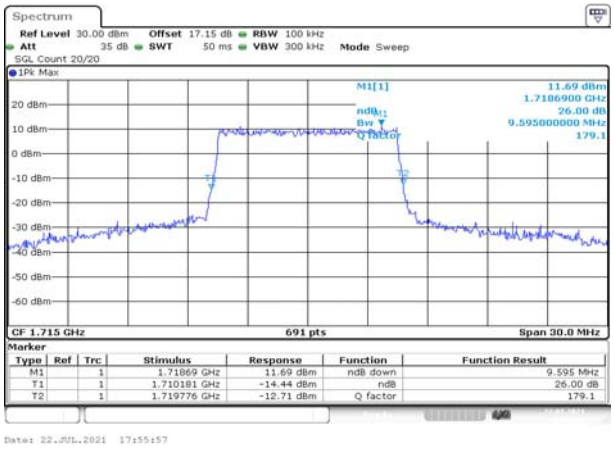

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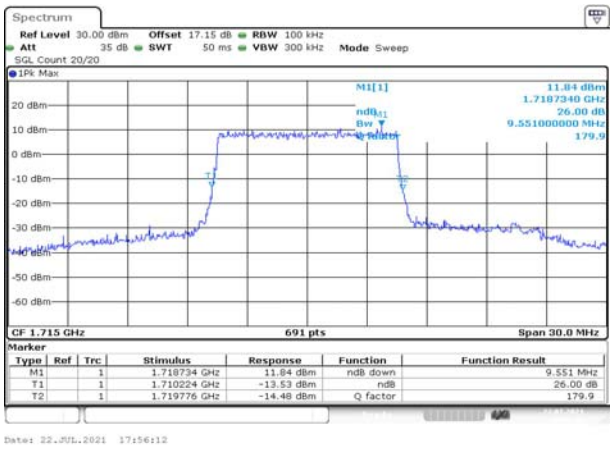

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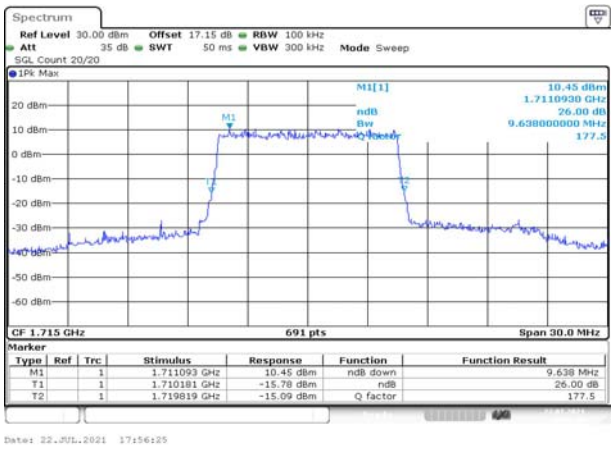
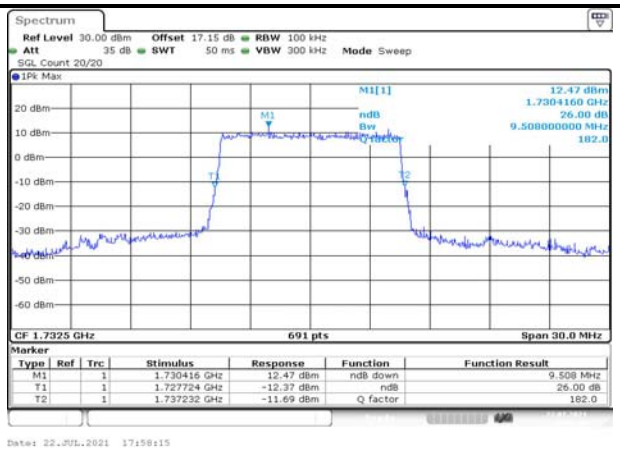


Fig.30



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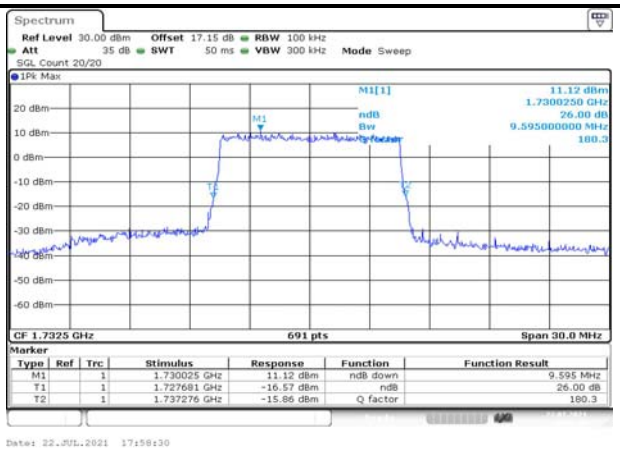

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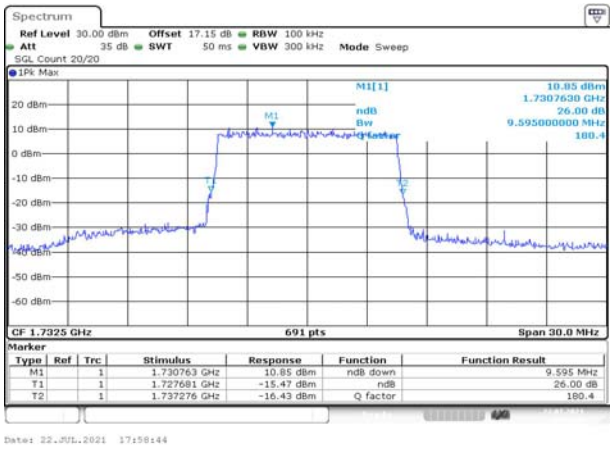

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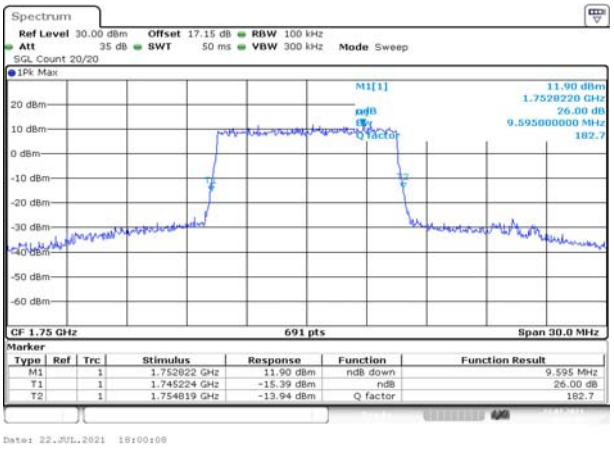

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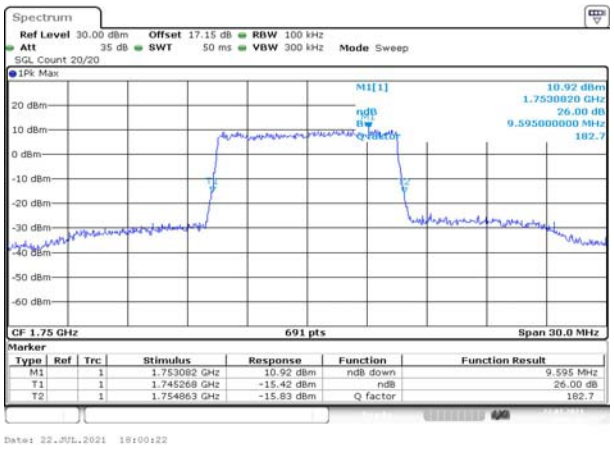

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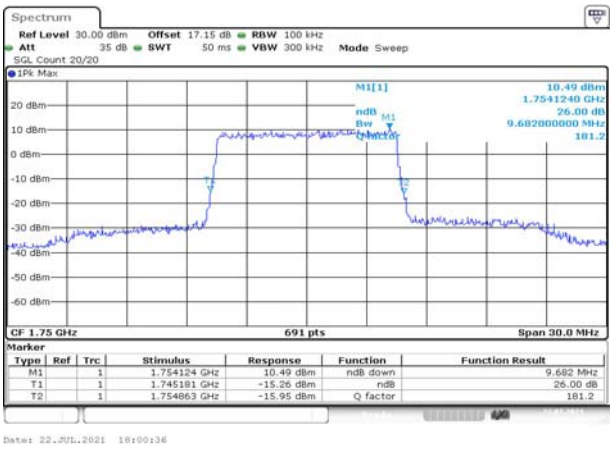

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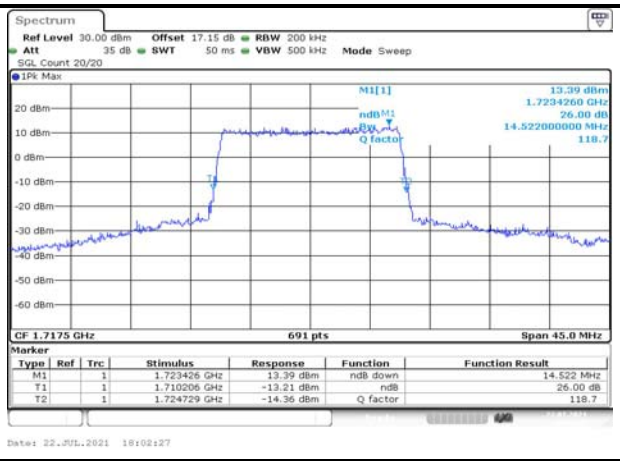

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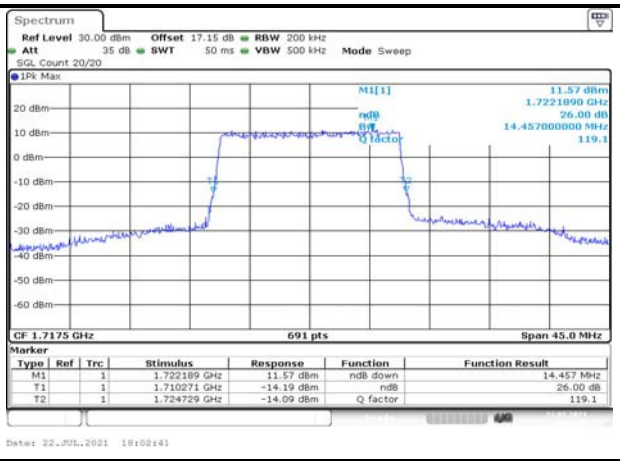
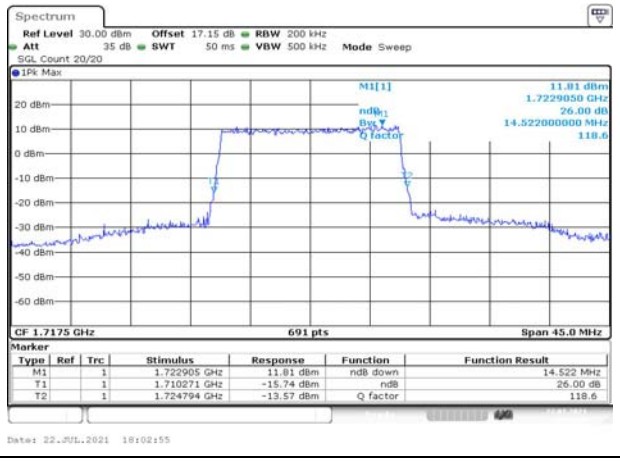


Fig.38



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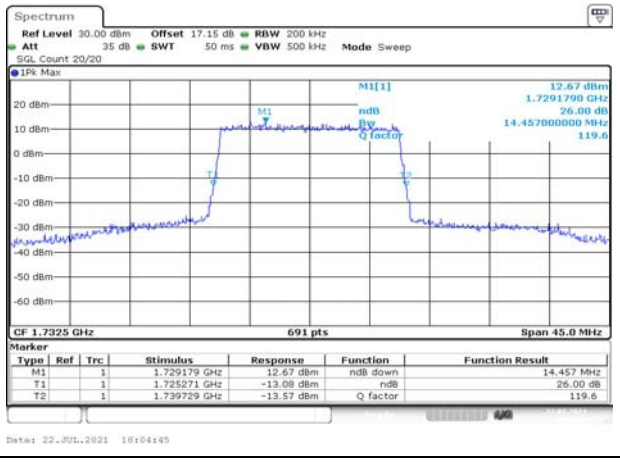

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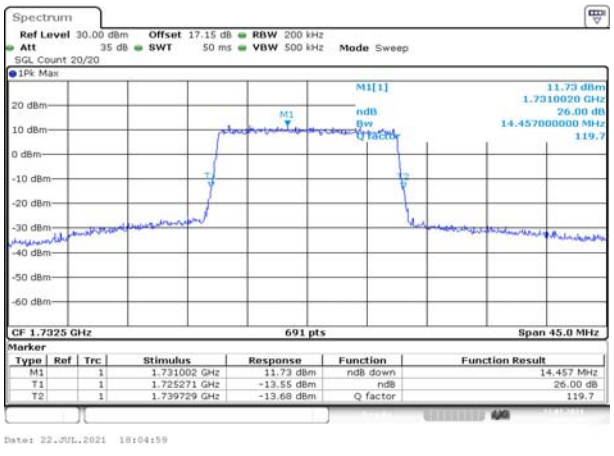

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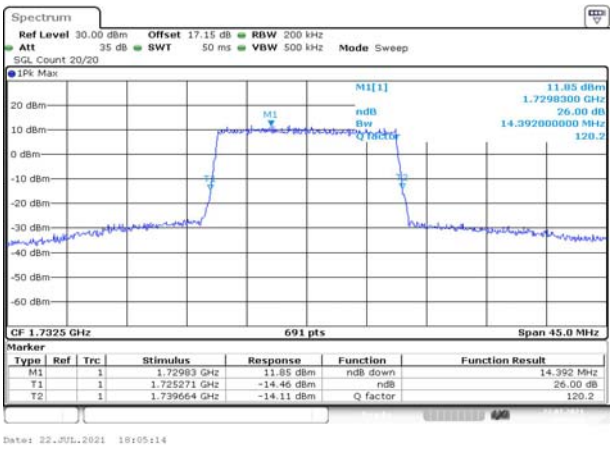

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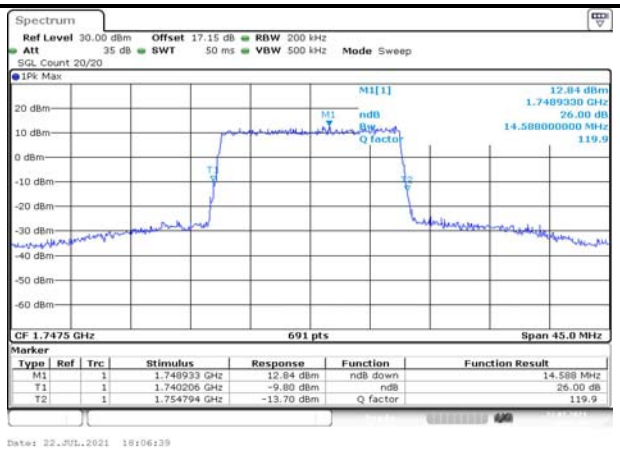

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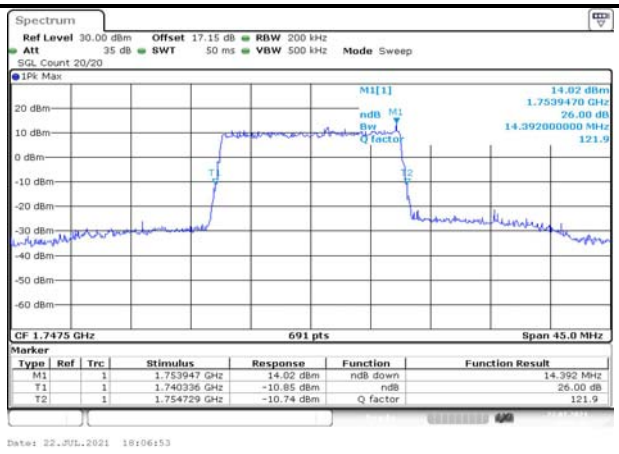


Fig.44

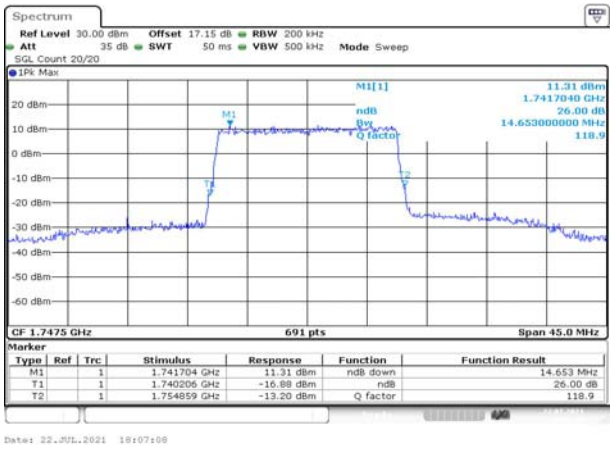


Fig.45

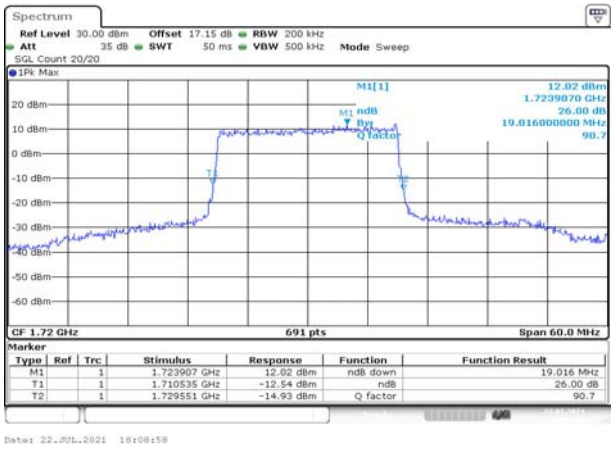


Fig.46

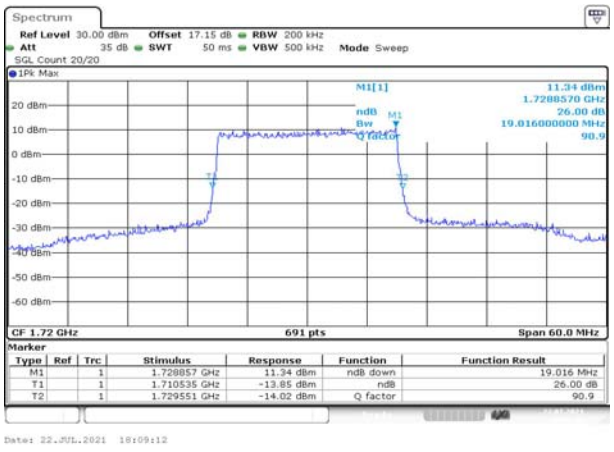


Fig.47

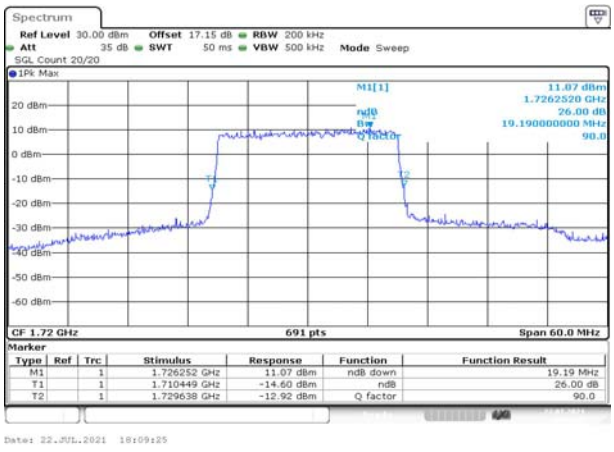


Fig.48

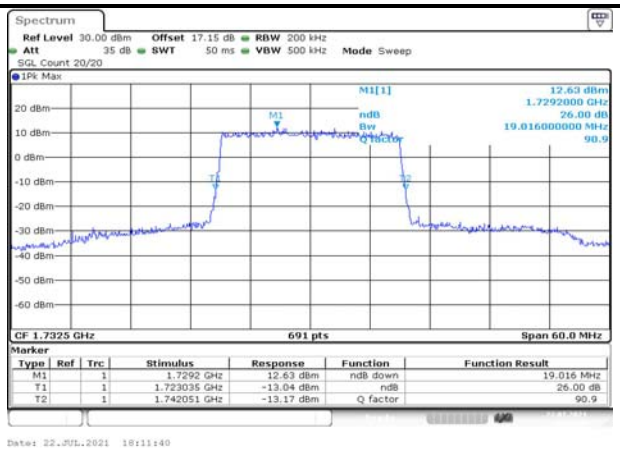


Fig.49

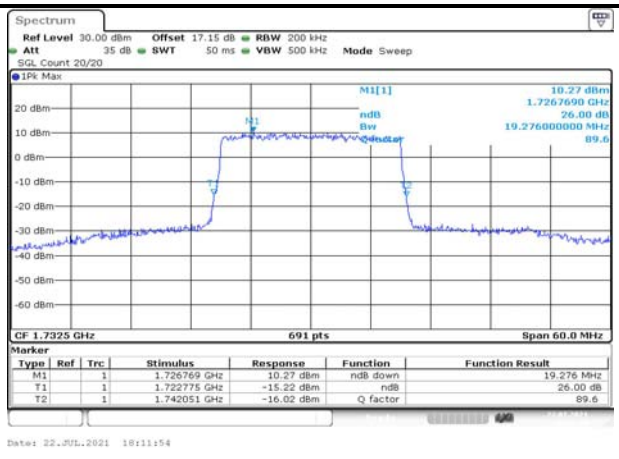
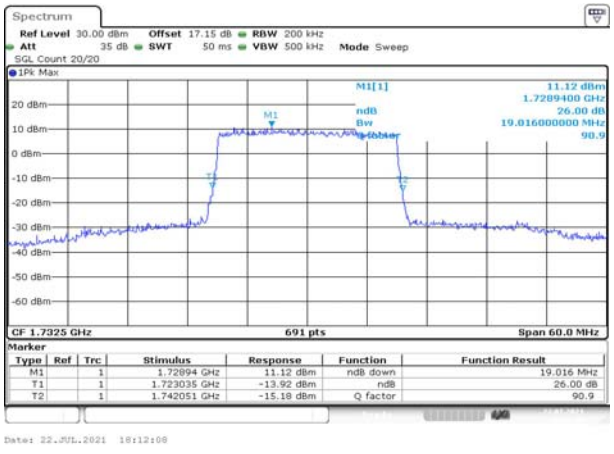


Fig.50



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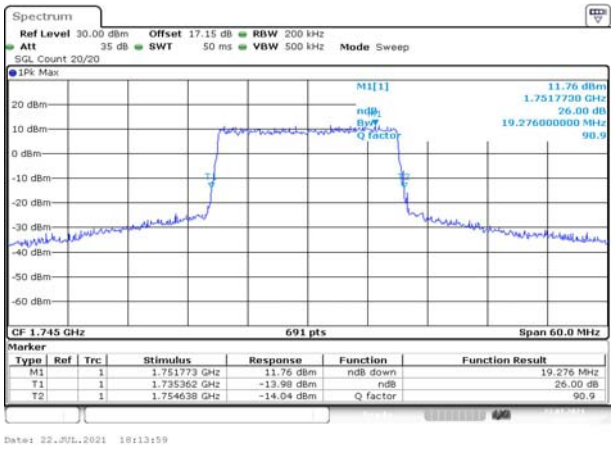

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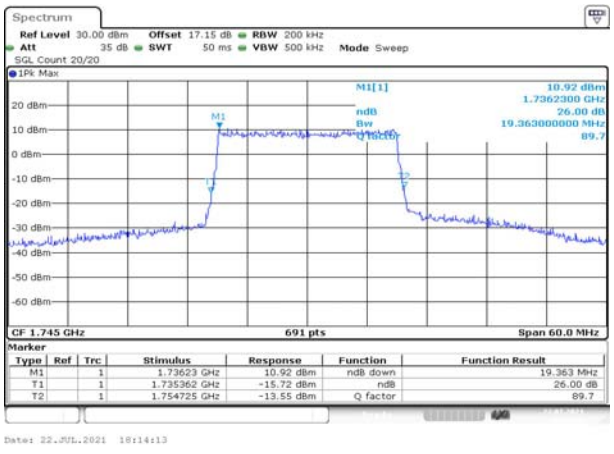

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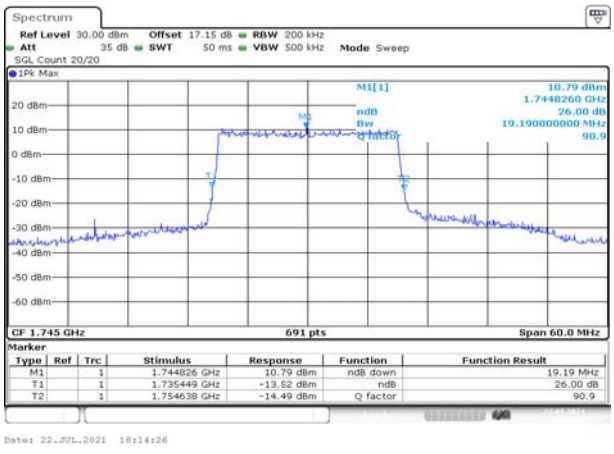


Fig.54

4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
4	1710.7	19957	1.4	1	5	Fig.1	Fig.2	Fig.3
	1710.7	19957		6	0	Fig.4	Fig.5	Fig.6
	1732.5	20175		1	5	Fig.7	Fig.8	Fig.9
	1732.5	20175		6	0	Fig.10	Fig.11	Fig.12
	1754.3	20393		1	5	Fig.13	Fig.14	Fig.15
	1754.3	20393		6	0	Fig.16	Fig.17	Fig.18
	1711.5	19965	3	1	14	Fig.19	Fig.20	Fig.21
	1711.5	19965		15	0	Fig.22	Fig.23	Fig.24
	1732.5	20175		1	14	Fig.25	Fig.26	Fig.27
	1732.5	20175		15	0	Fig.28	Fig.29	Fig.30
	1753.5	20385		1	14	Fig.31	Fig.32	Fig.33
	1753.5	20385		15	0	Fig.34	Fig.35	Fig.36
	1712.5	19975	5	1	24	Fig.37	Fig.38	Fig.39
	1712.5	19975		25	0	Fig.40	Fig.41	Fig.42
	1732.5	20175		1	24	Fig.43	Fig.44	Fig.45
	1732.5	20175		25	0	Fig.46	Fig.47	Fig.48
	1752.5	20375		1	24	Fig.49	Fig.50	Fig.51
	1752.5	20375		25	0	Fig.52	Fig.53	Fig.54
	1715	20000	10	1	49	Fig.55	Fig.56	Fig.57
	1715	20000		50	0	Fig.58	Fig.59	Fig.60
	1732.5	20175		1	49	Fig.61	Fig.62	Fig.63
	1732.5	20175		50	0	Fig.64	Fig.65	Fig.66
	1750	20350		1	49	Fig.67	Fig.68	Fig.69
	1750	20350		50	0	Fig.70	Fig.71	Fig.72
	1717.5	20025	15	1	74	Fig.73	Fig.74	Fig.75
	1717.5	20025		75	0	Fig.76	Fig.77	Fig.78
	1732.5	20175		1	74	Fig.79	Fig.80	Fig.81
	1732.5	20175		75	0	Fig.82	Fig.83	Fig.84
	1747.5	20325		1	74	Fig.85	Fig.86	Fig.87
	1747.5	20325		75	0	Fig.88	Fig.89	Fig.90
	1720	20050	20	1	99	Fig.91	Fig.92	Fig.93
	1720	20050		100	0	Fig.94	Fig.95	Fig.96
	1732.5	20175		1	99	Fig.97	Fig.98	Fig.99
	1732.5	20175		100	0	Fig.100	Fig.101	Fig.102
	1745	20300		1	99	Fig.103	Fig.104	Fig.105
	1745	20300		100	0	Fig.106	Fig.107	Fig.108

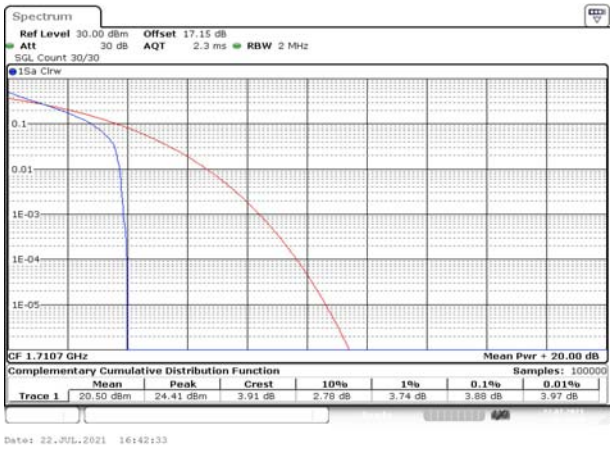


Fig.1

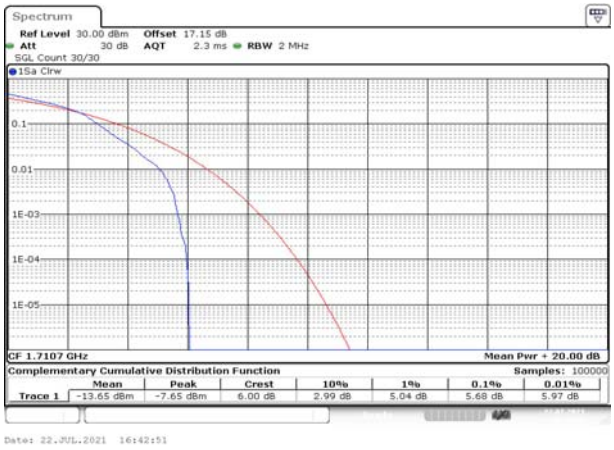


Fig.2

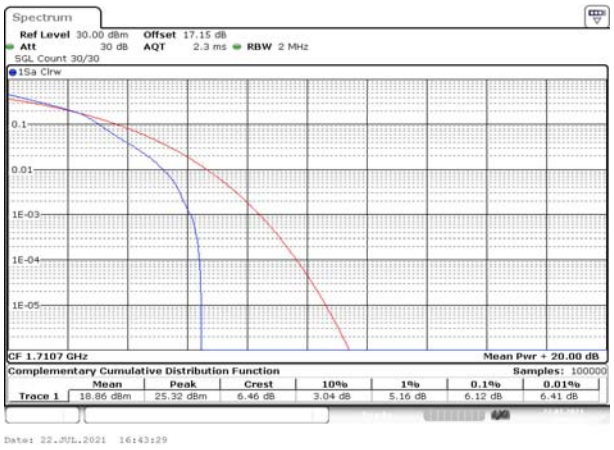


Fig.3

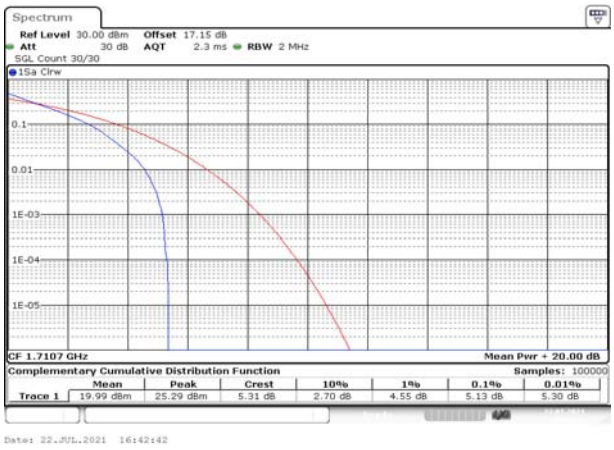


Fig.4

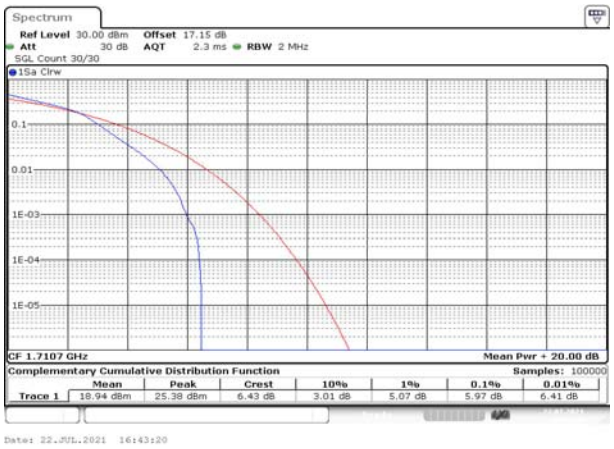


Fig.5

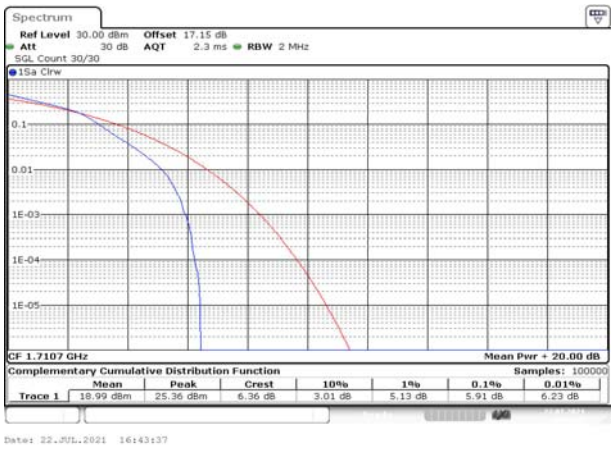
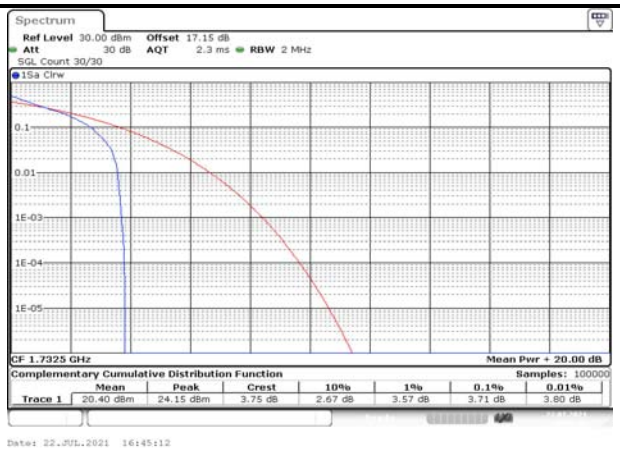


Fig.6



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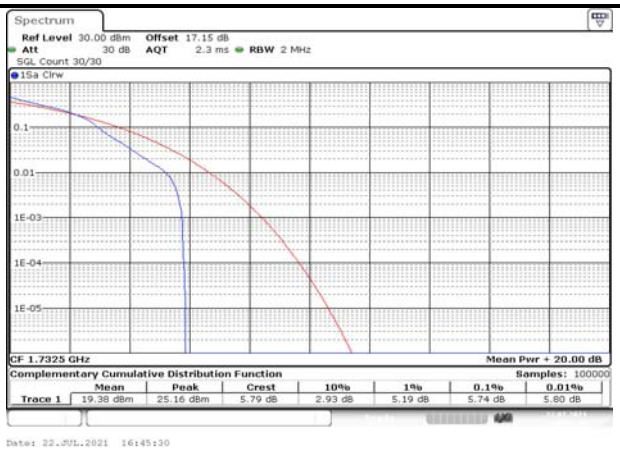

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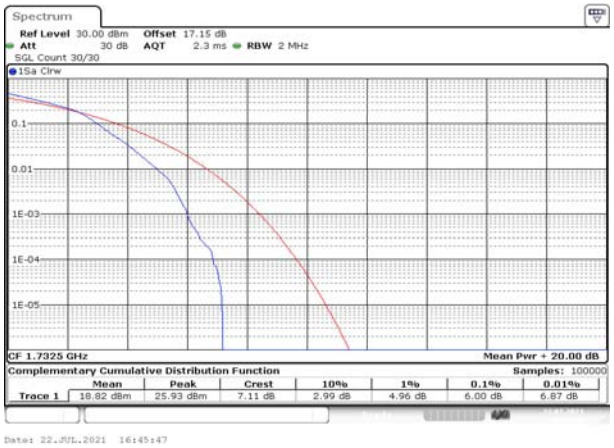

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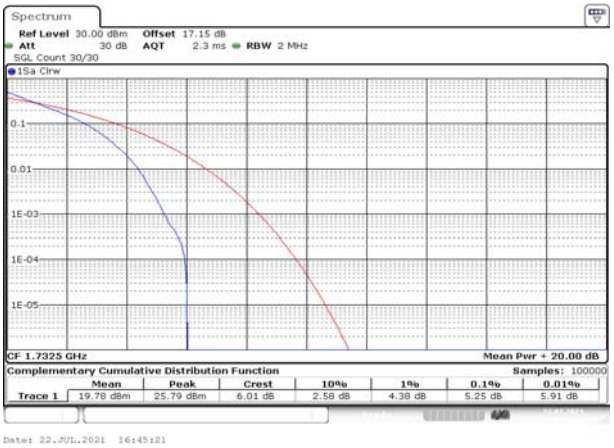

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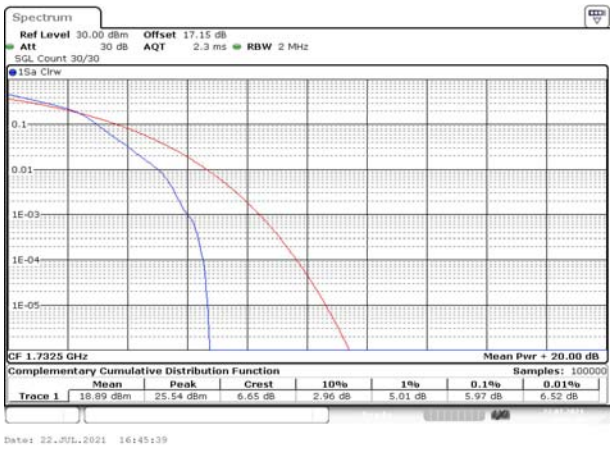

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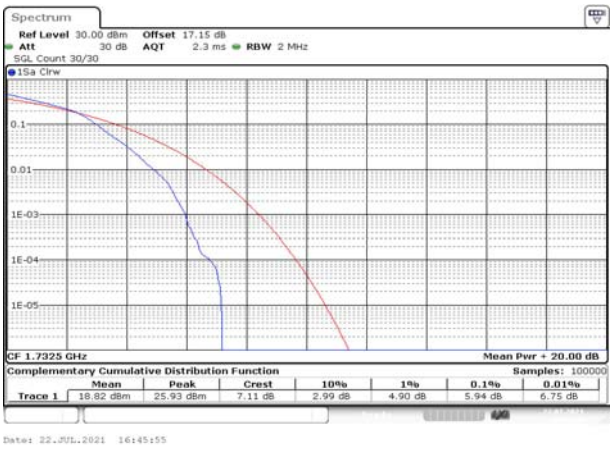

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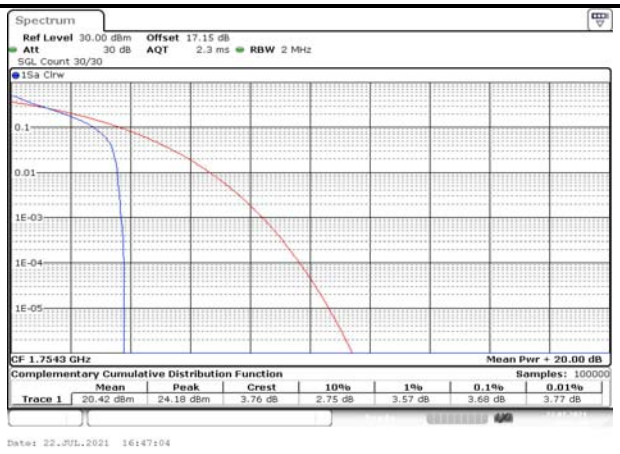

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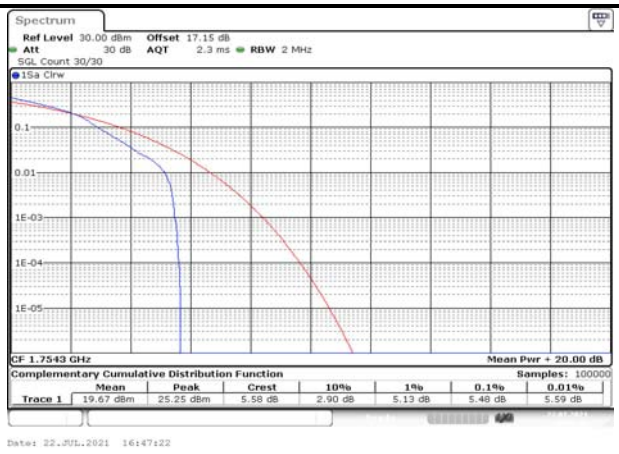

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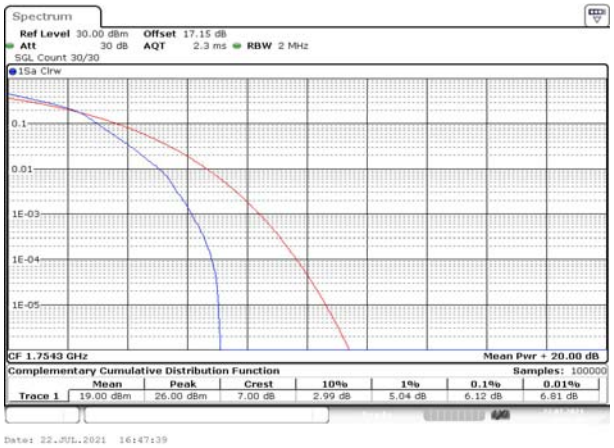

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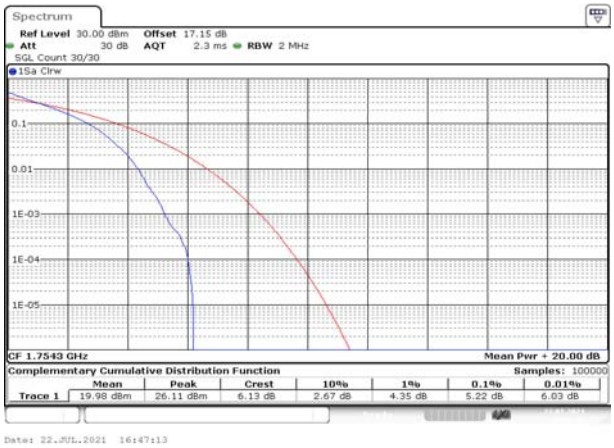

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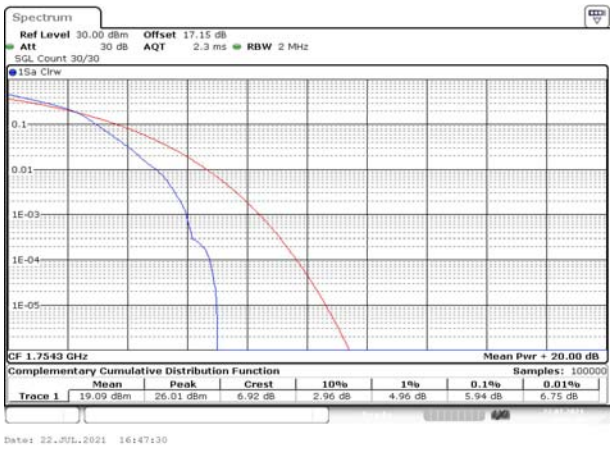

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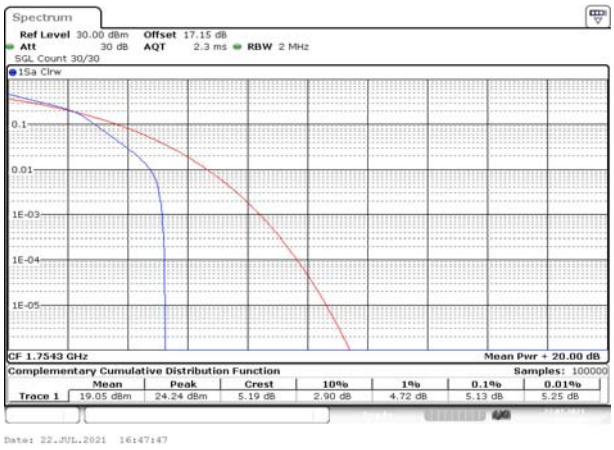

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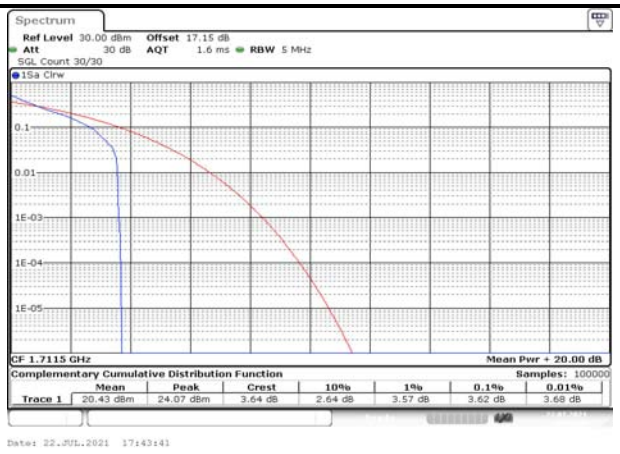

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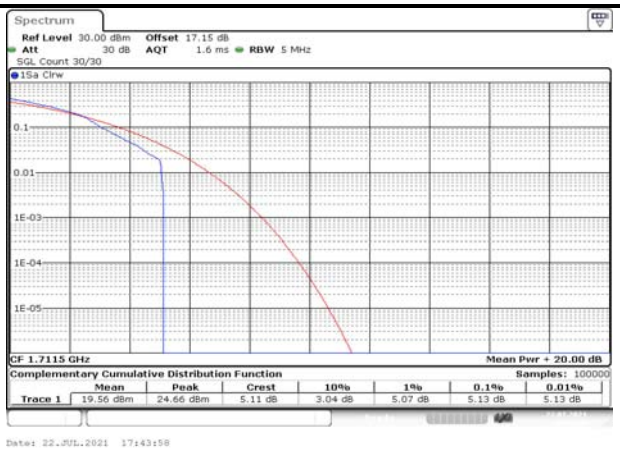

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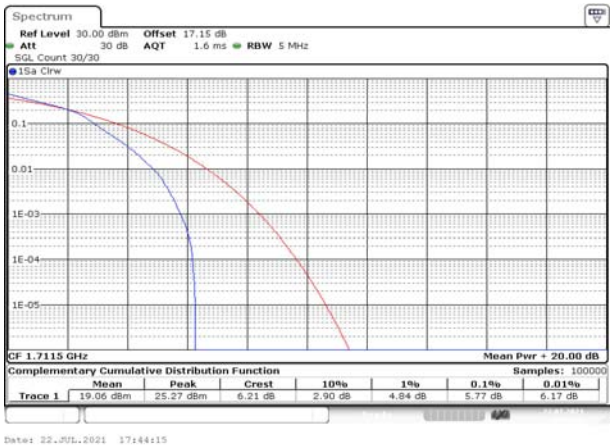

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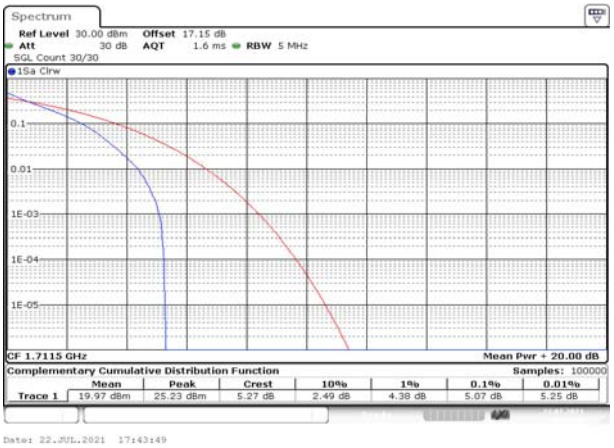

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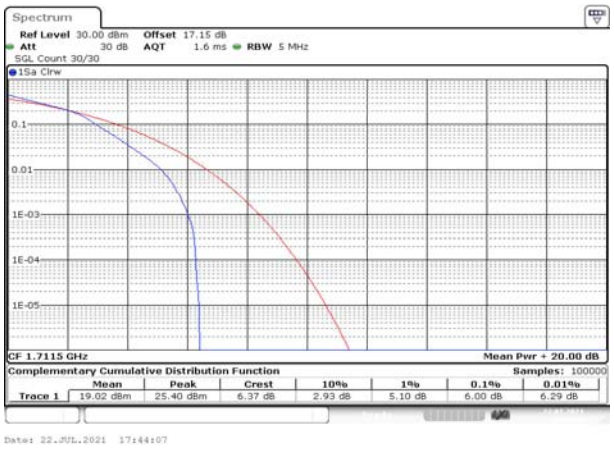

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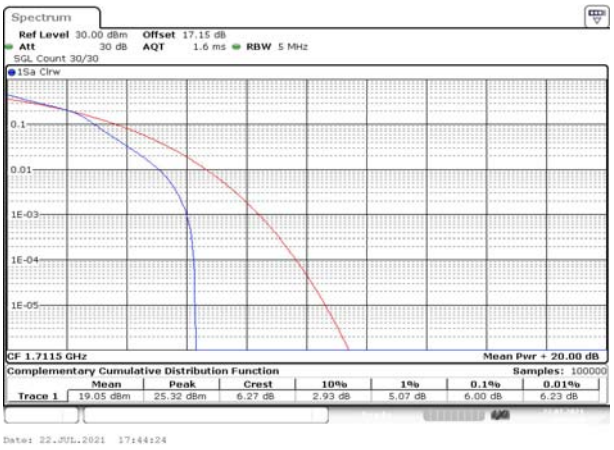

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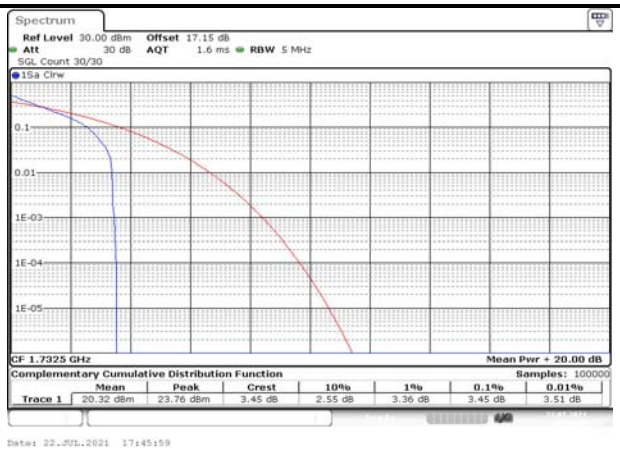

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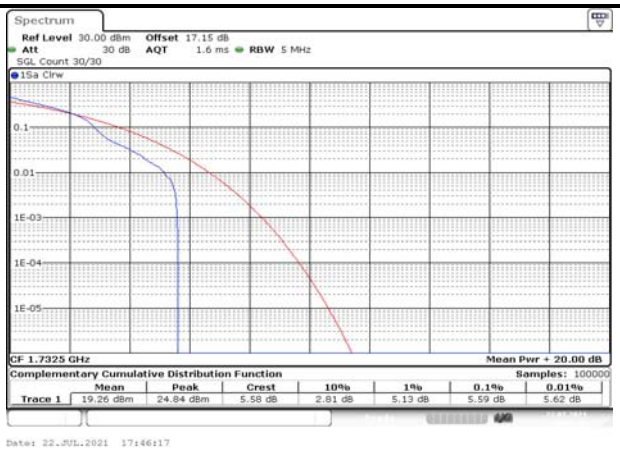

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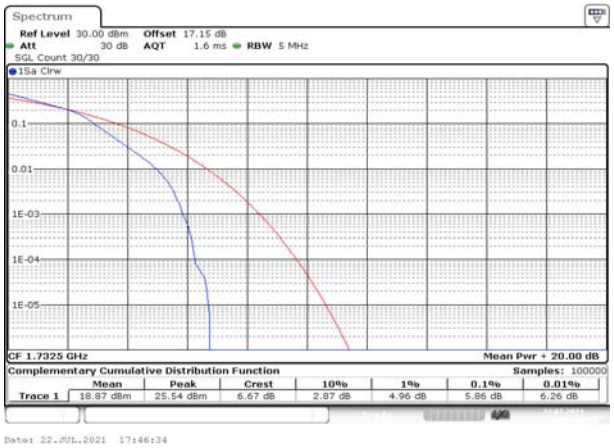

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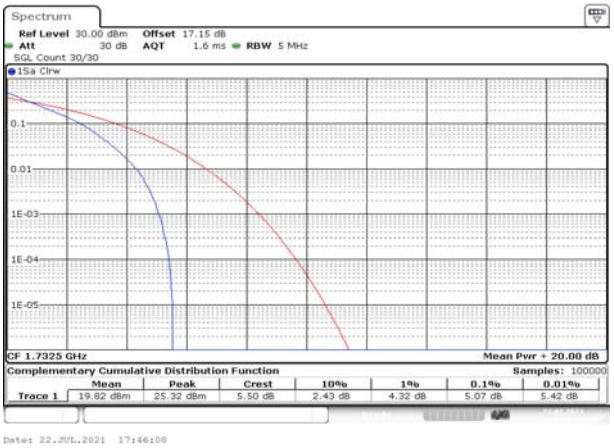

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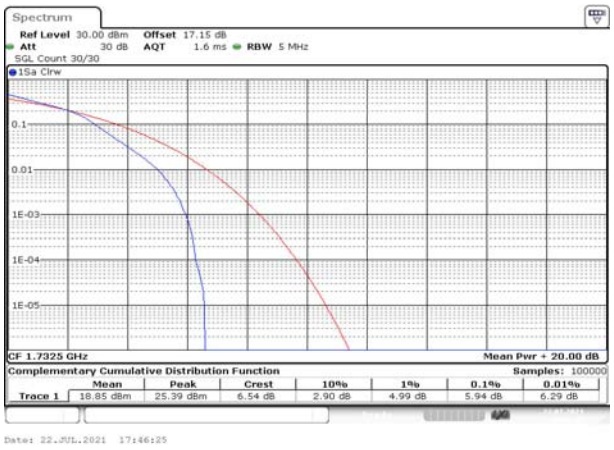

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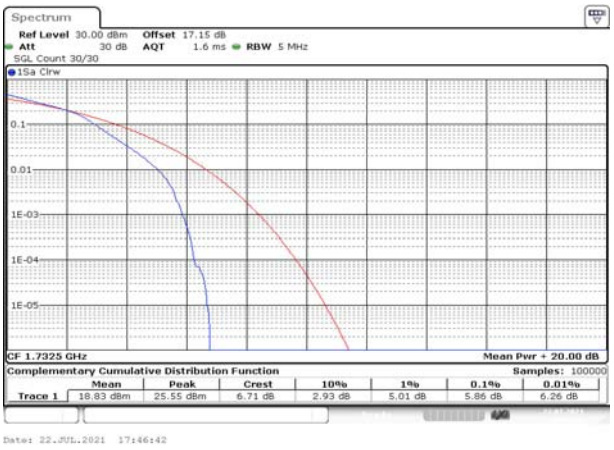


Fig.30

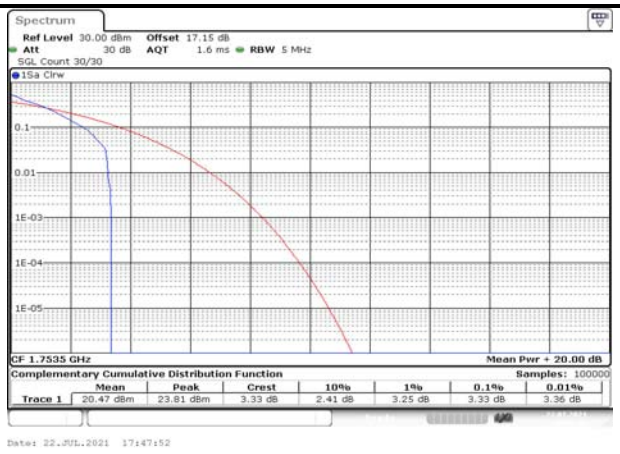
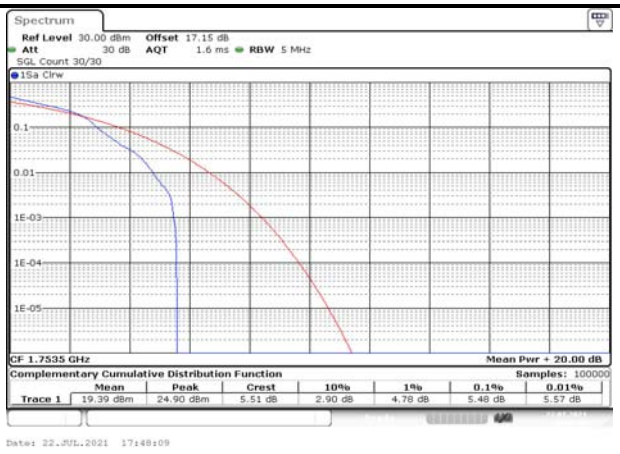


Fig.31



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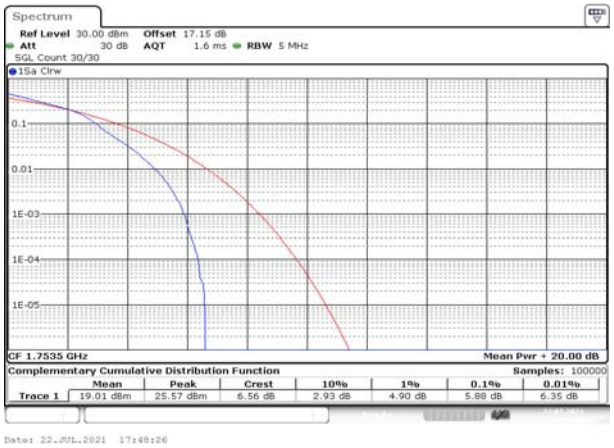

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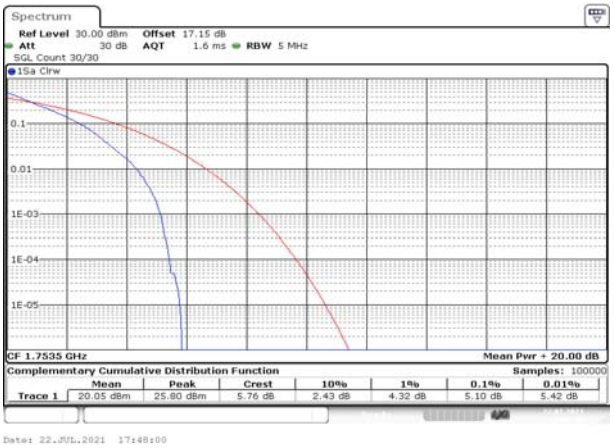

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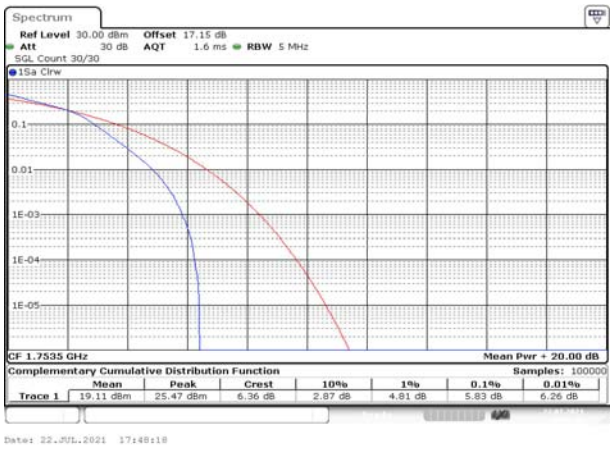

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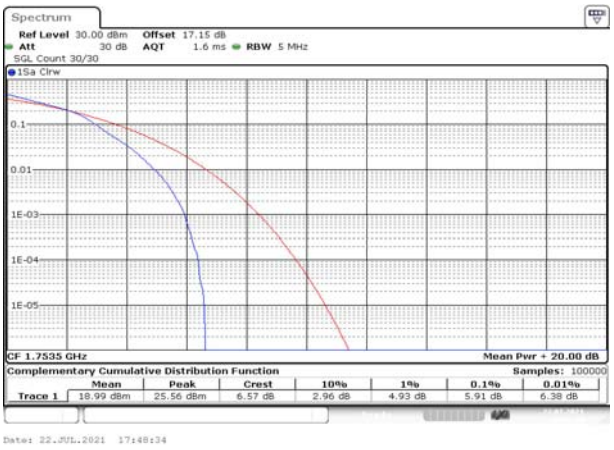


Fig.36

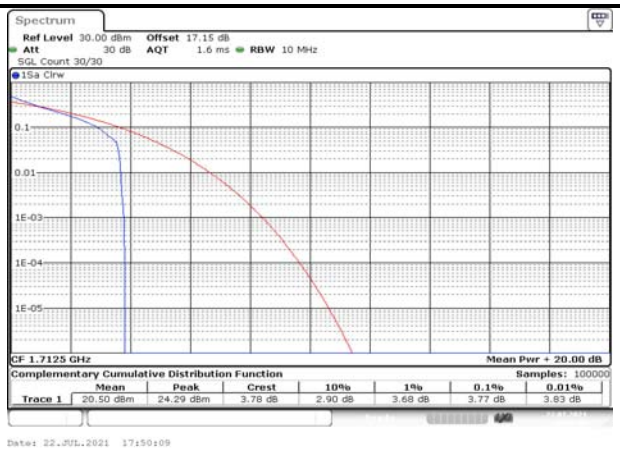


Fig.37

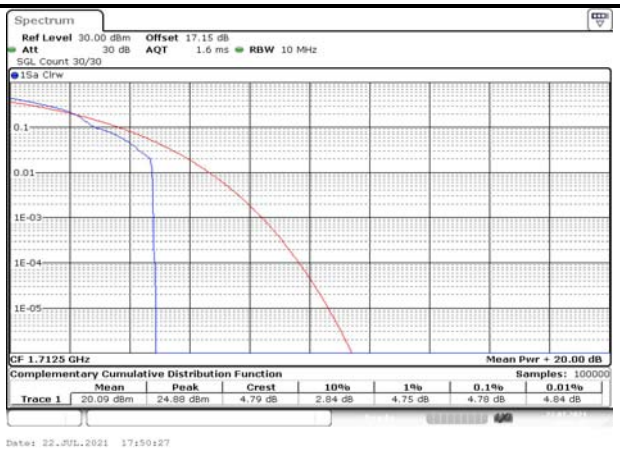


Fig.38

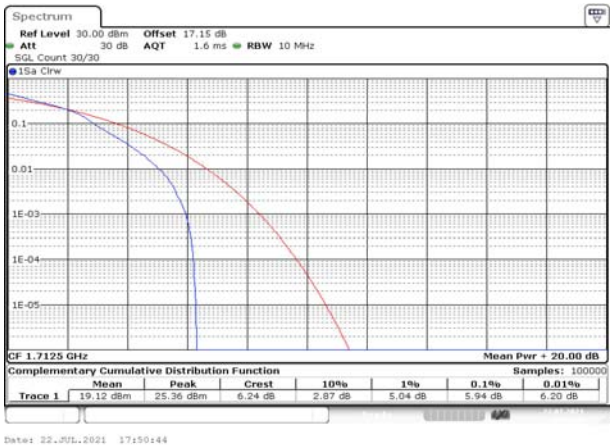


Fig.39

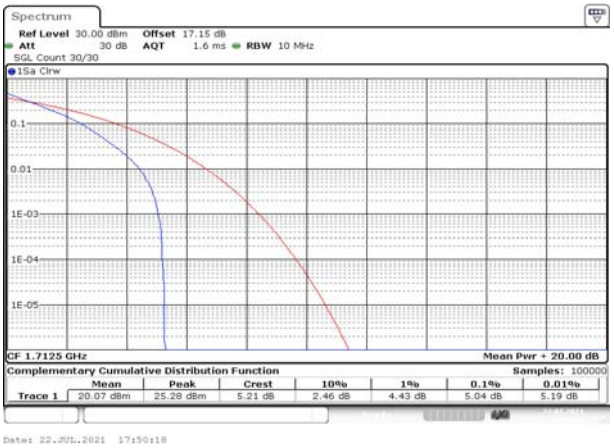


Fig.40

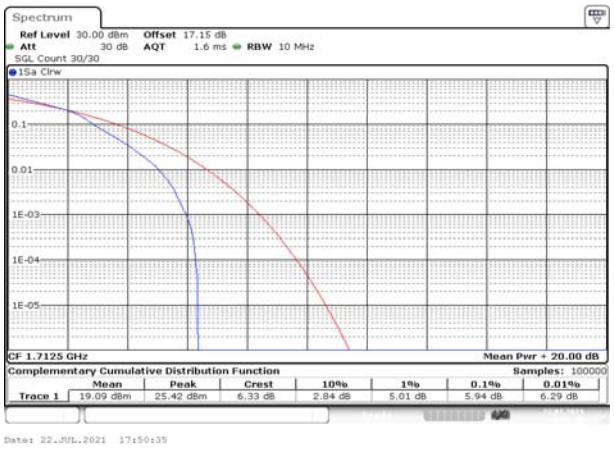


Fig.41

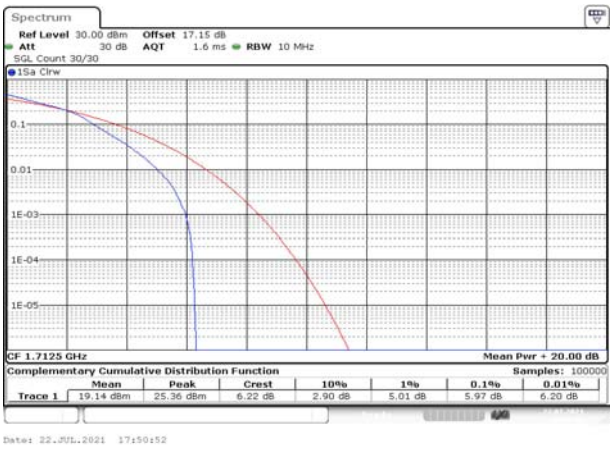


Fig.42

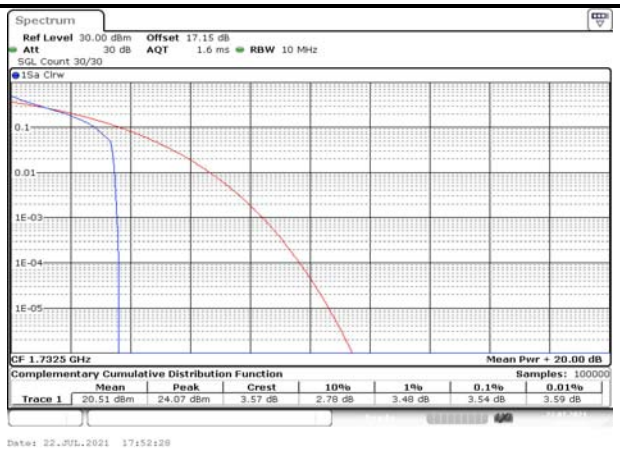


Fig.43

Fig.44

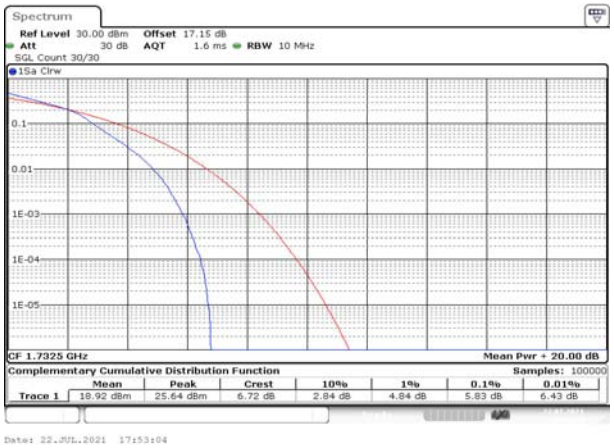


Fig.45

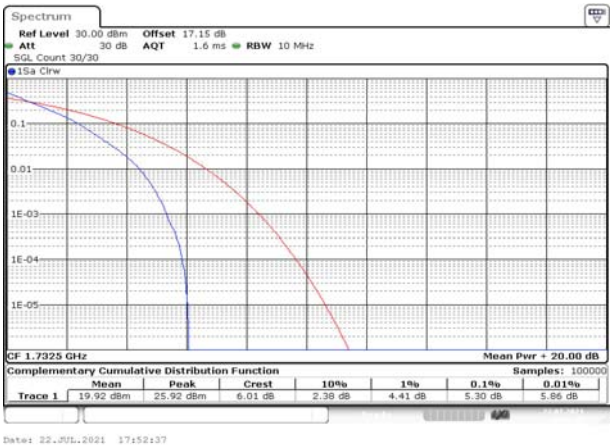
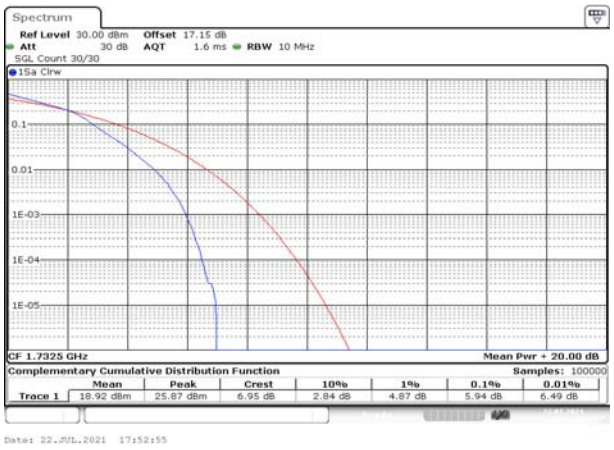


Fig.46



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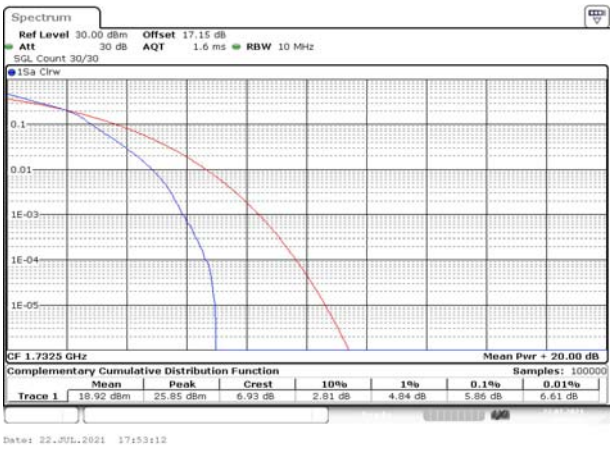

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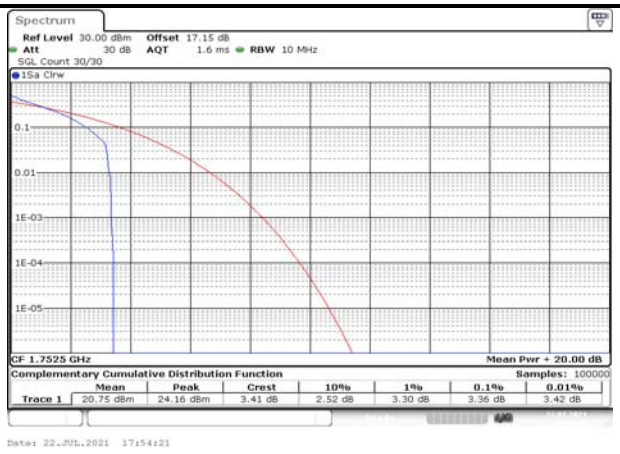


Fig.49

Fig.50

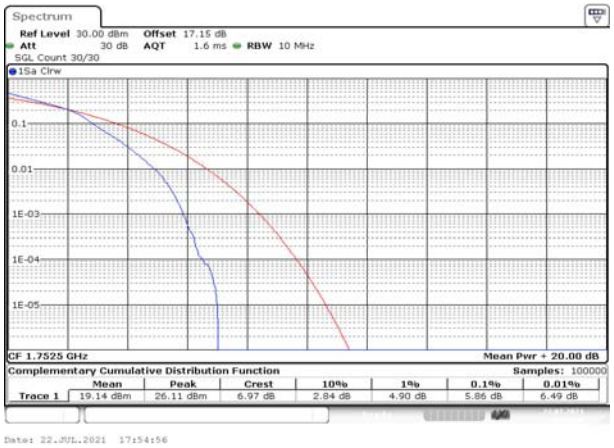


Fig.51

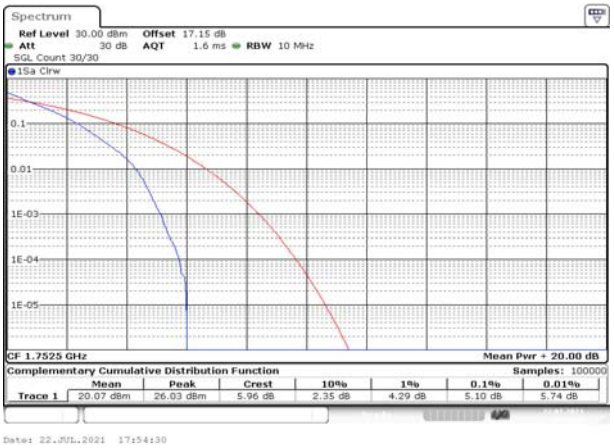
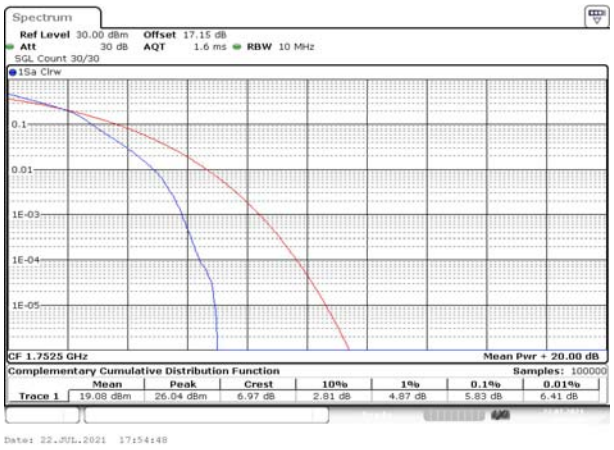


Fig.52



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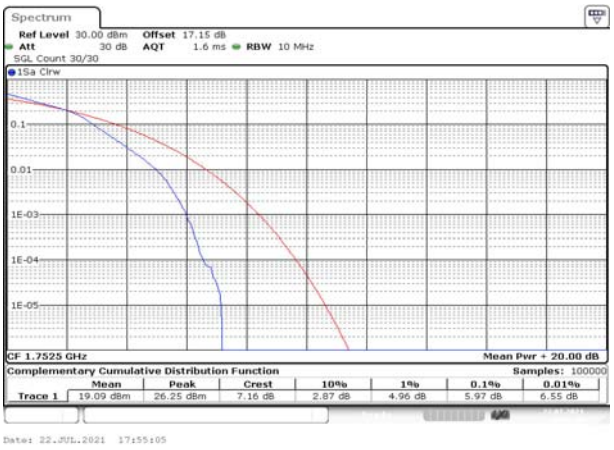
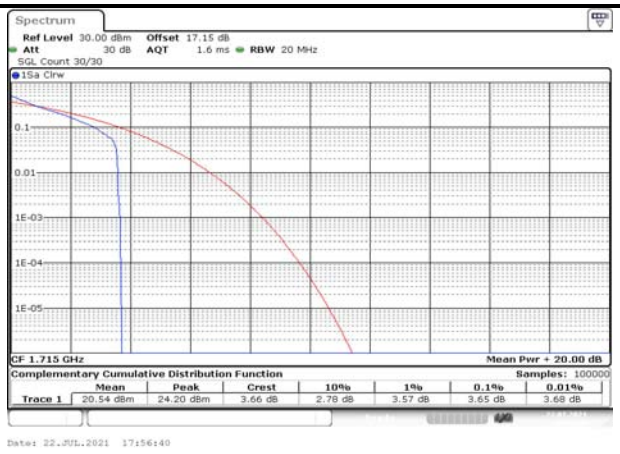


Fig.54



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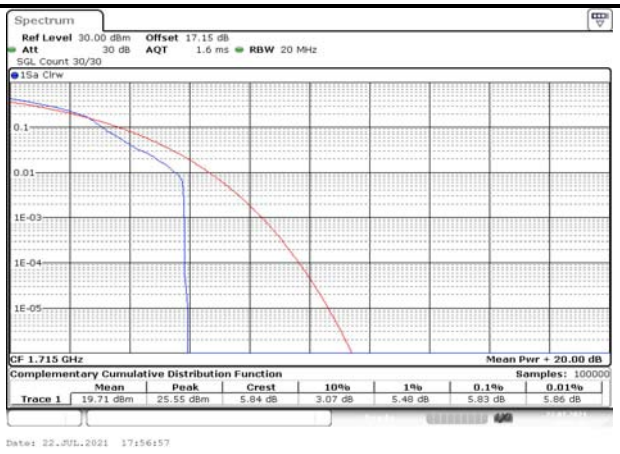
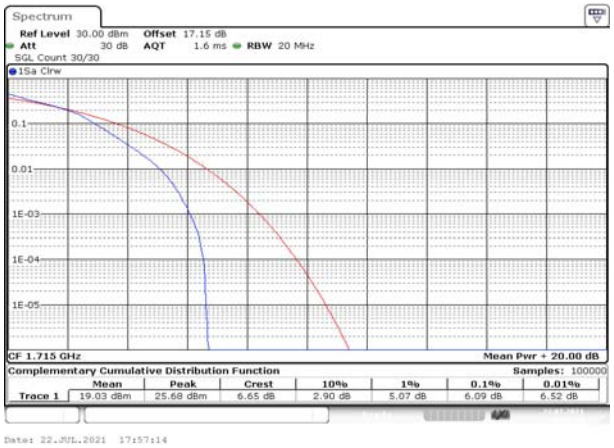


Fig.56



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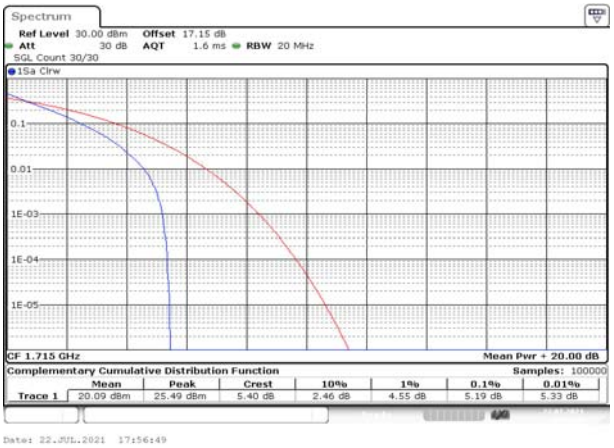

Fig.58

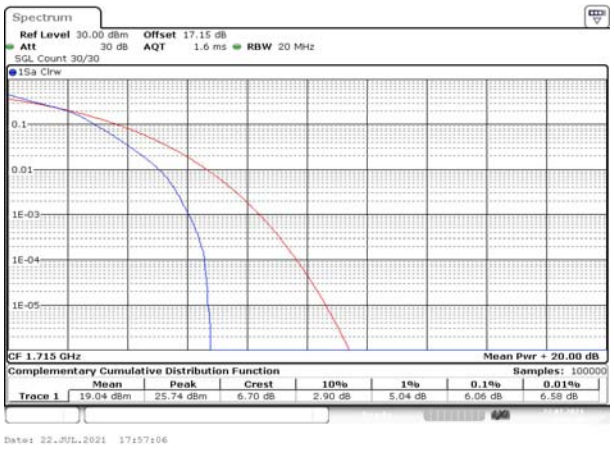

Fig.59

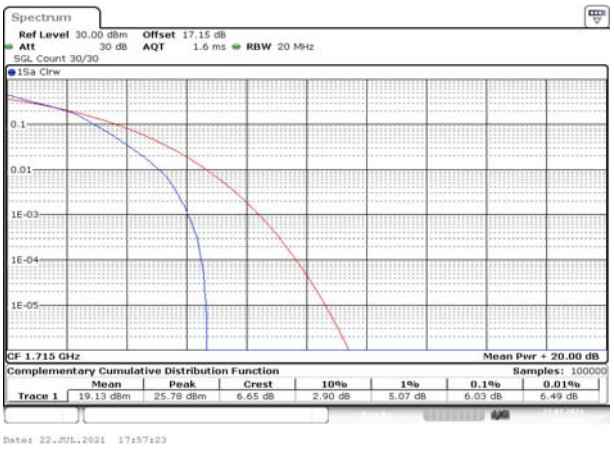

Fig.60