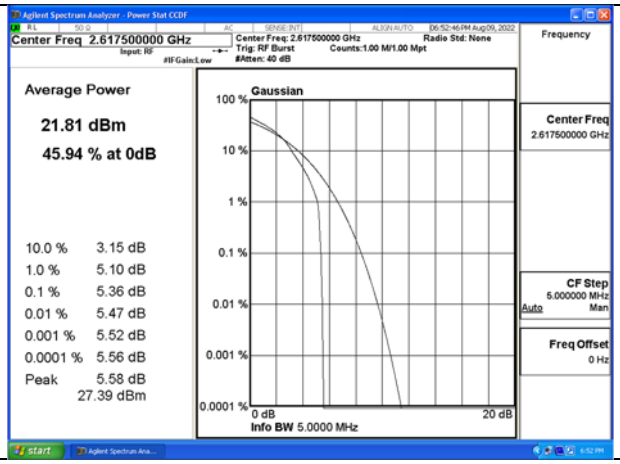

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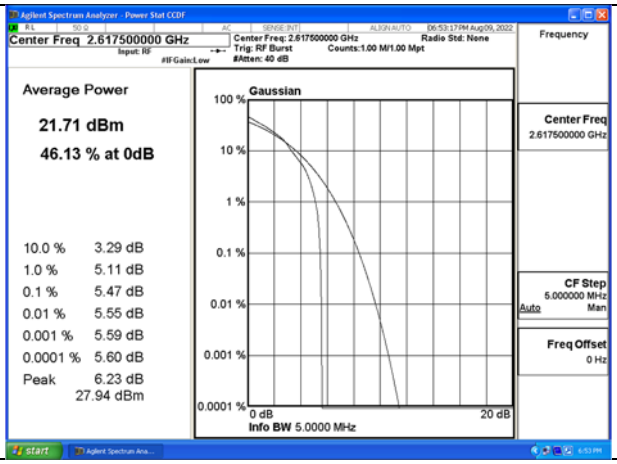

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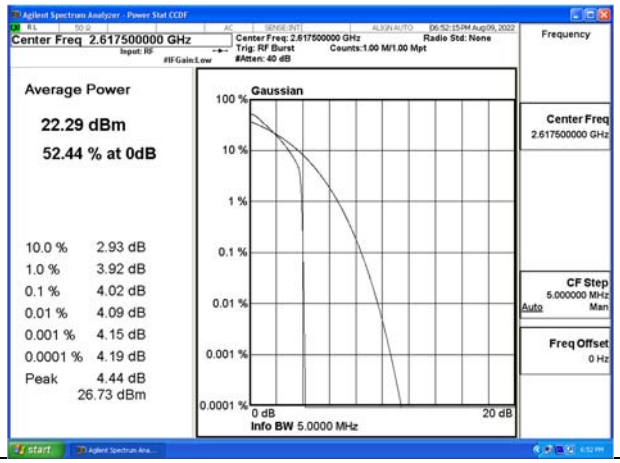

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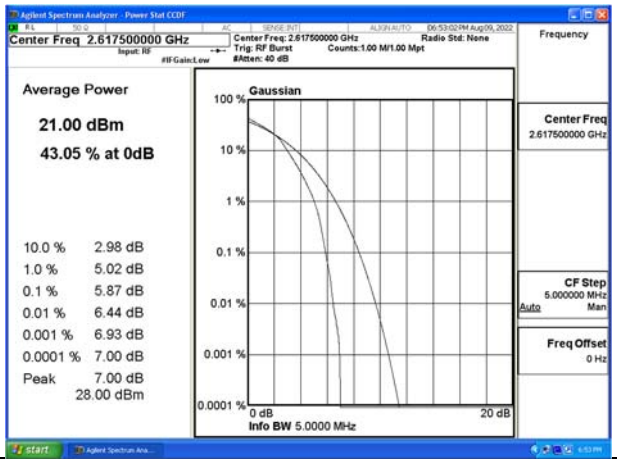

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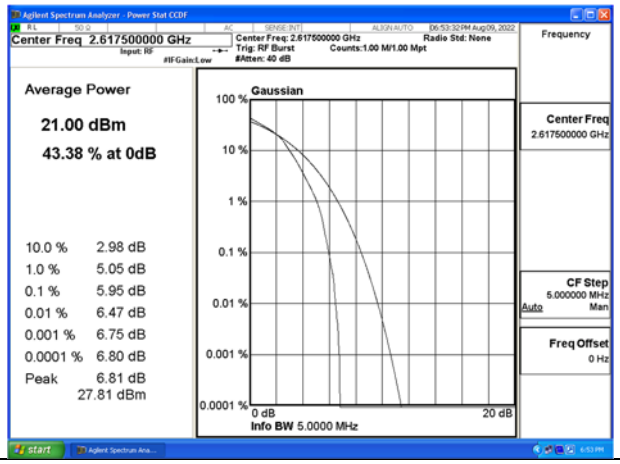

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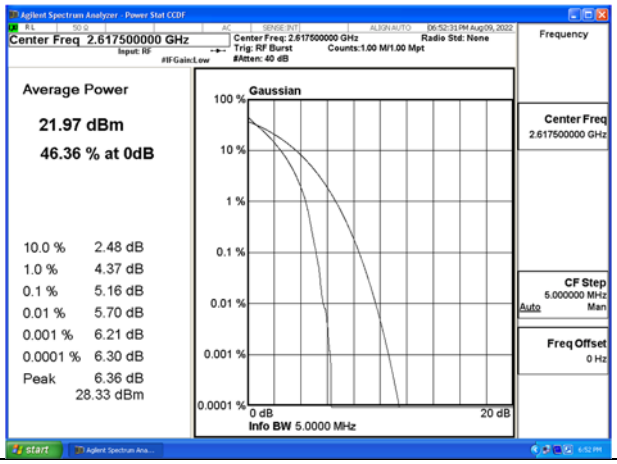

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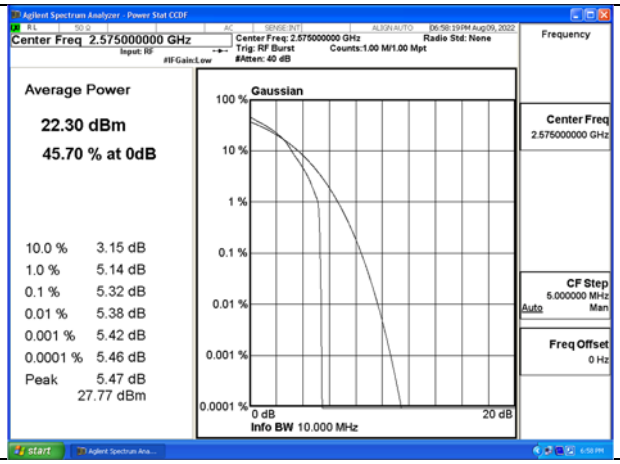

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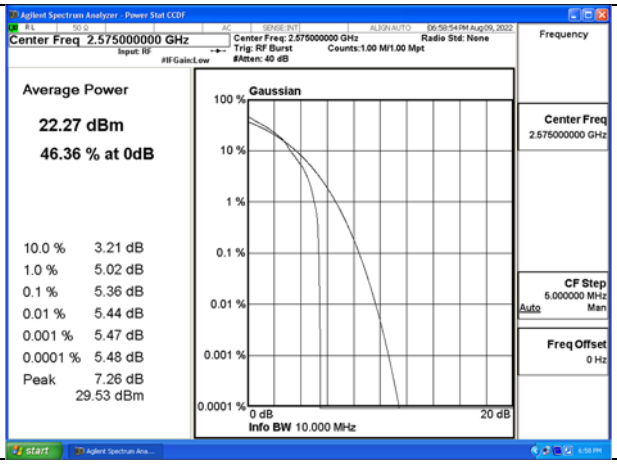

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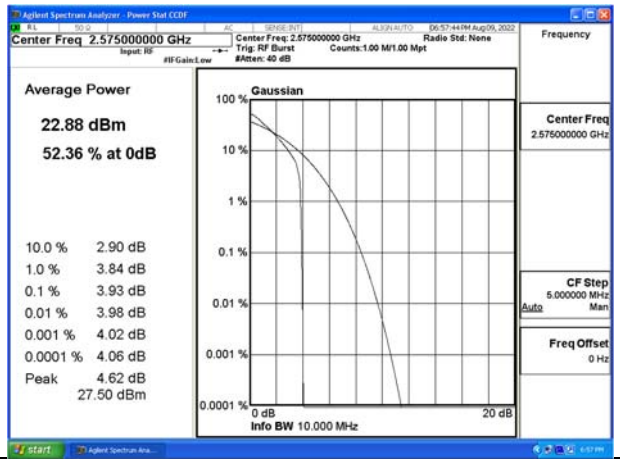

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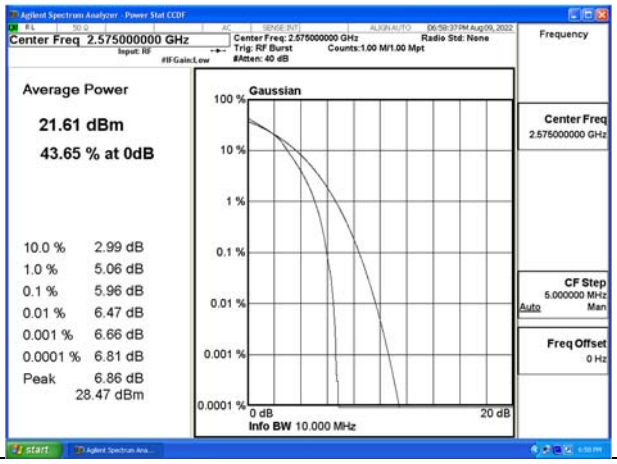

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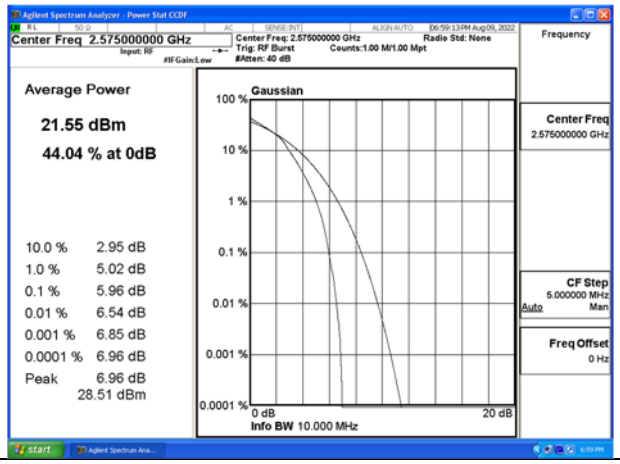

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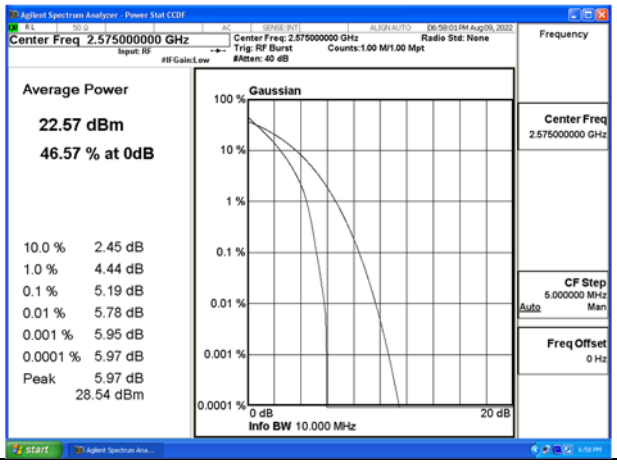

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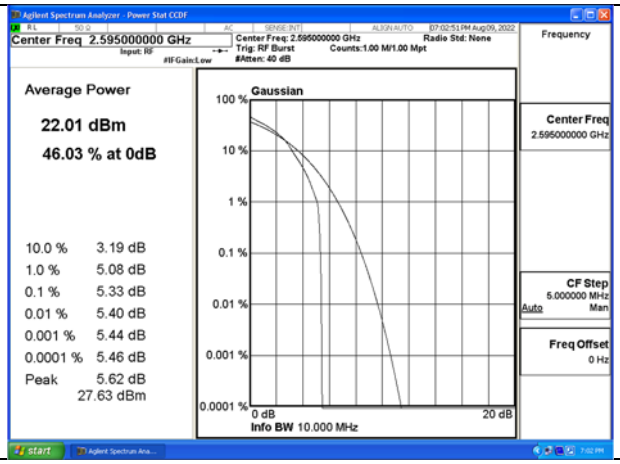

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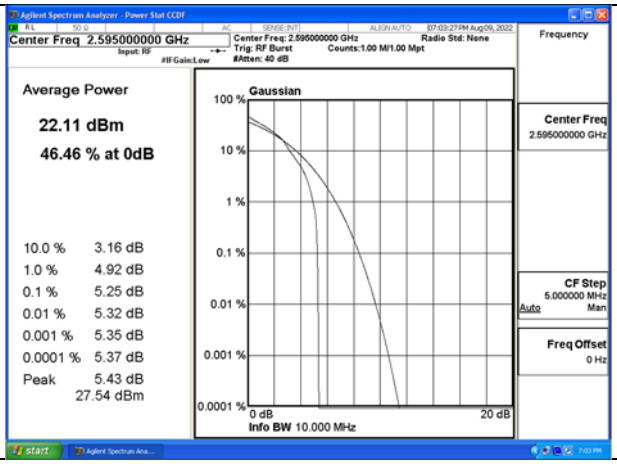

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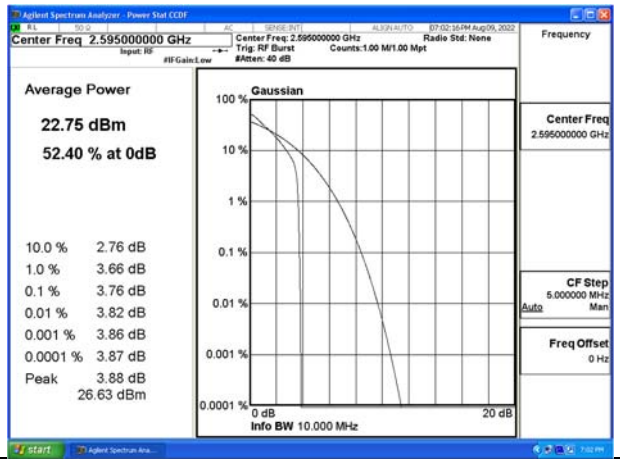

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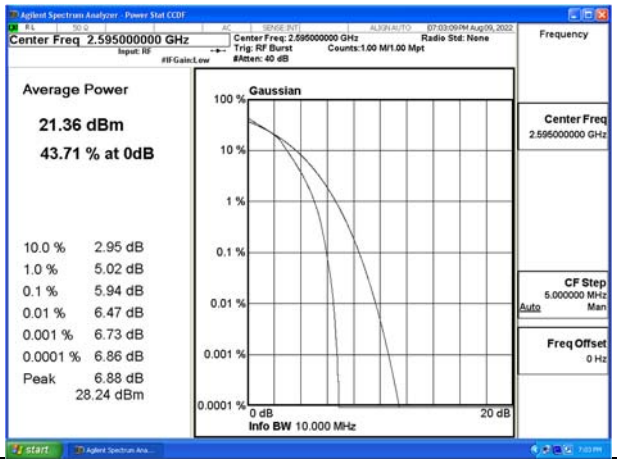

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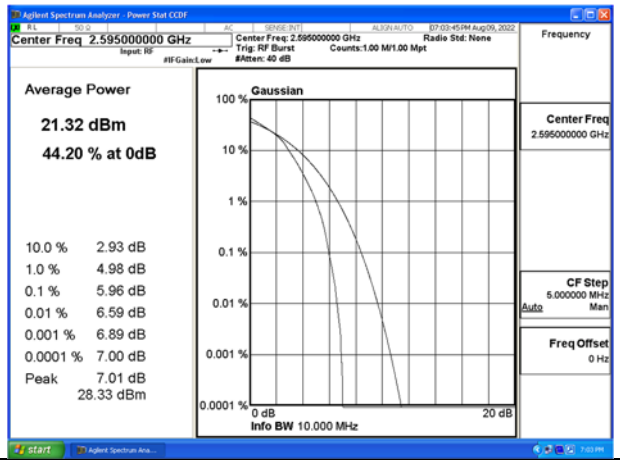

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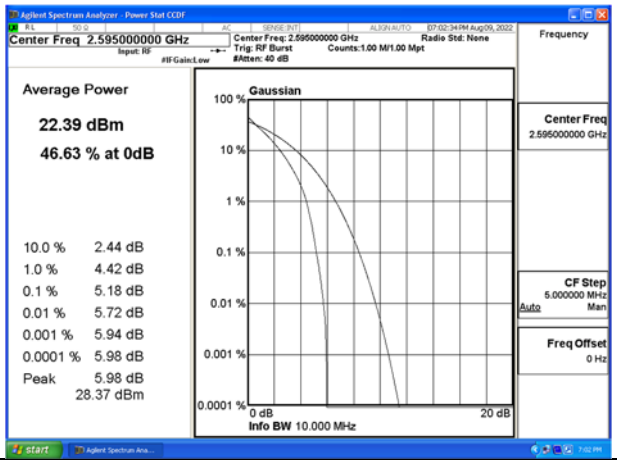
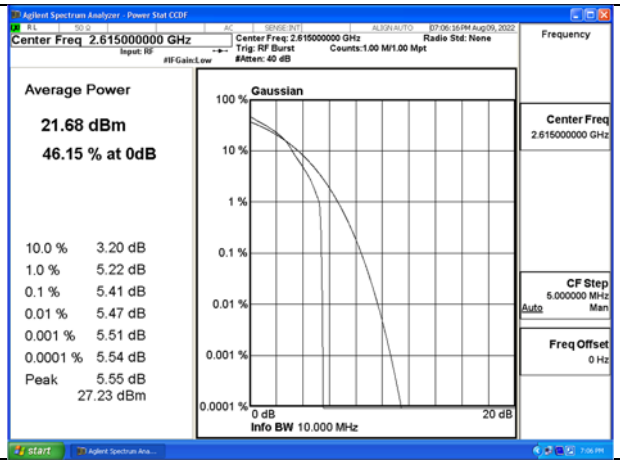


Fig.30



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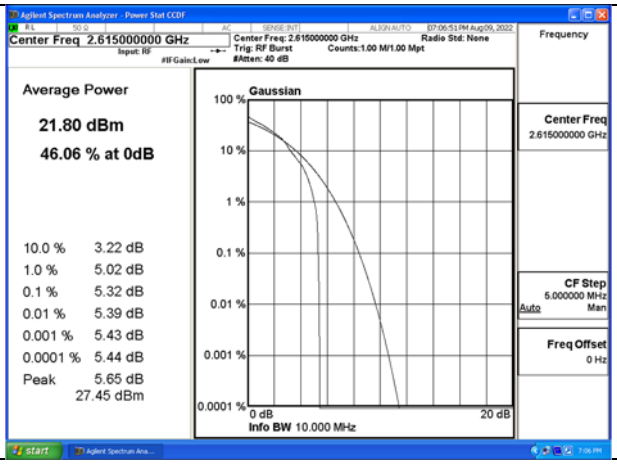

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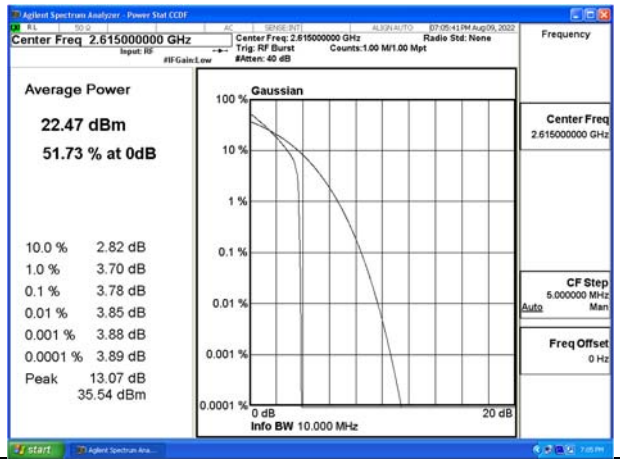

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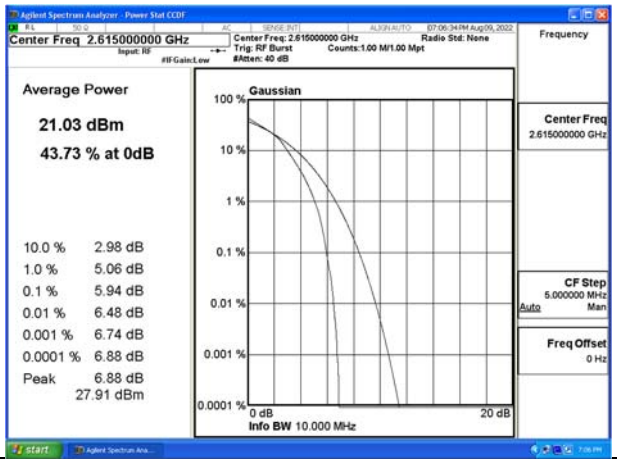

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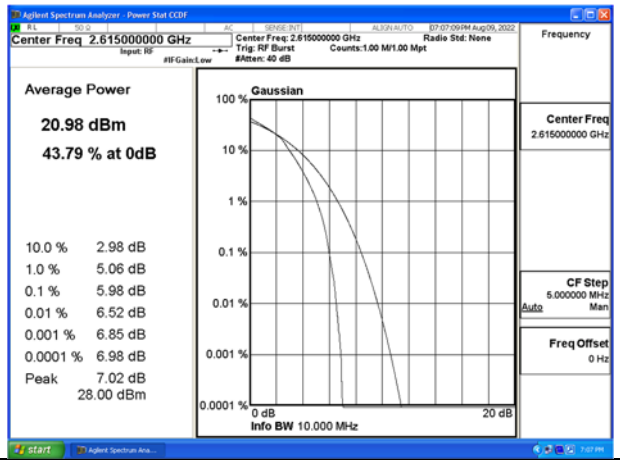

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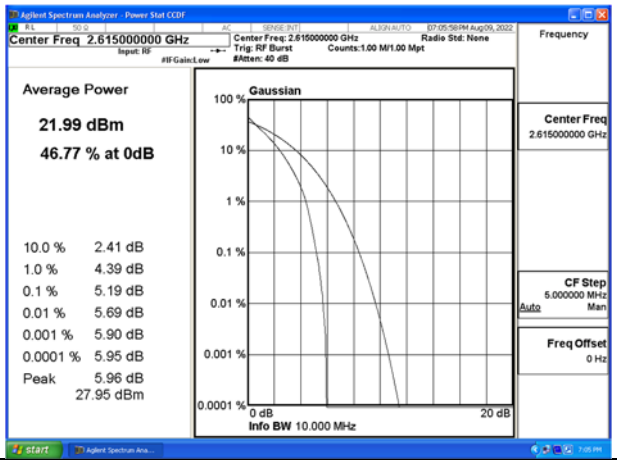

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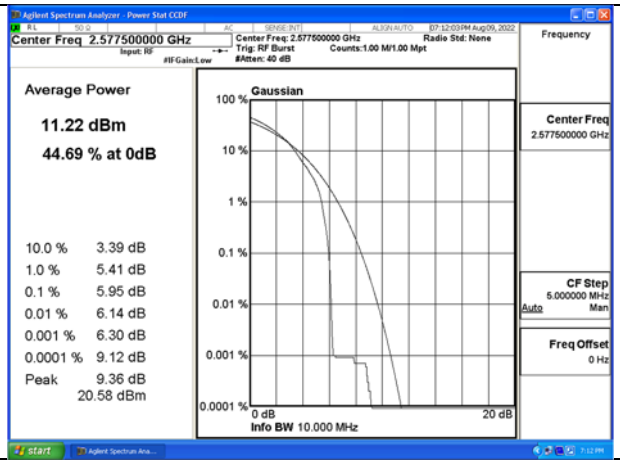

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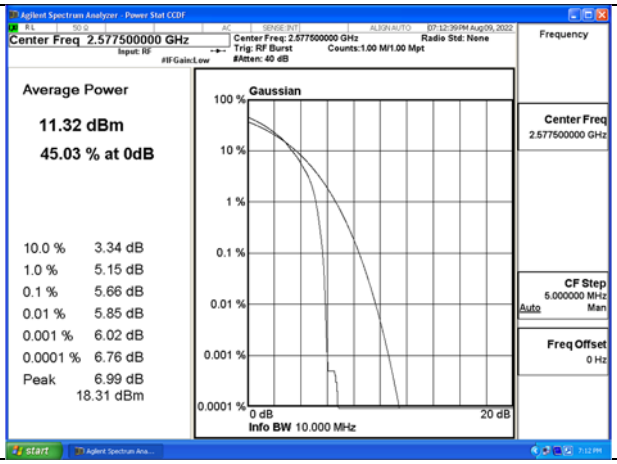

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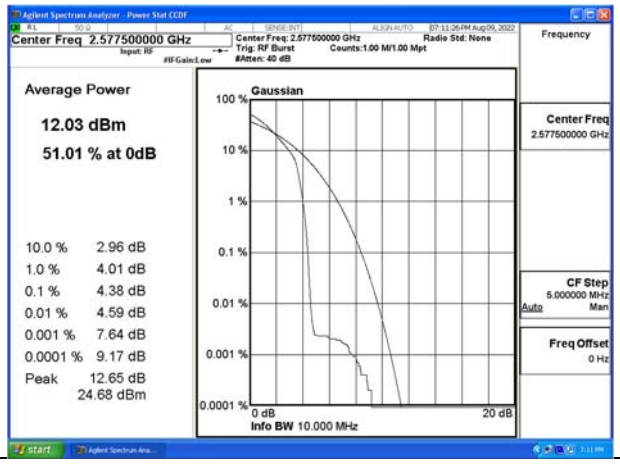

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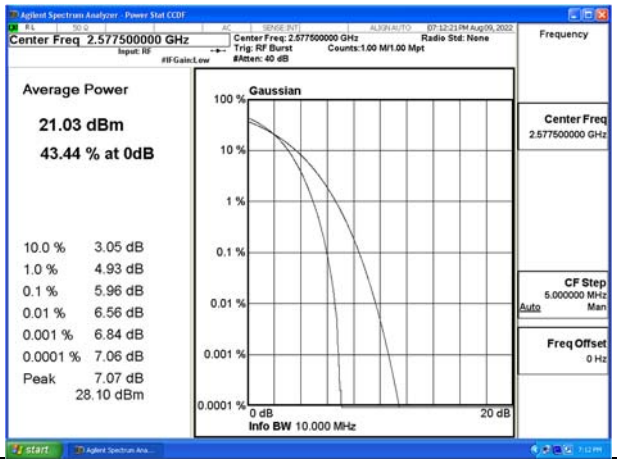

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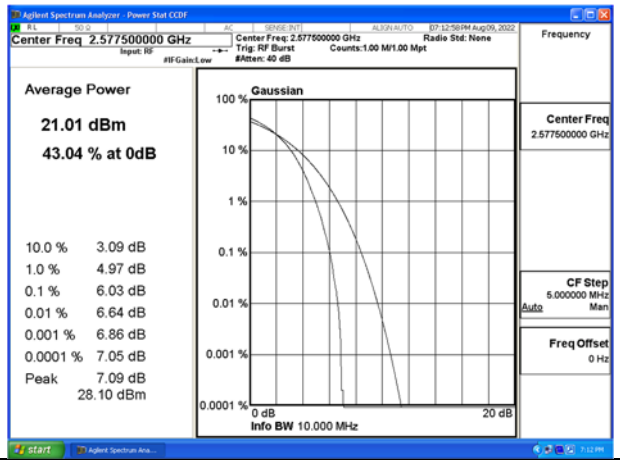

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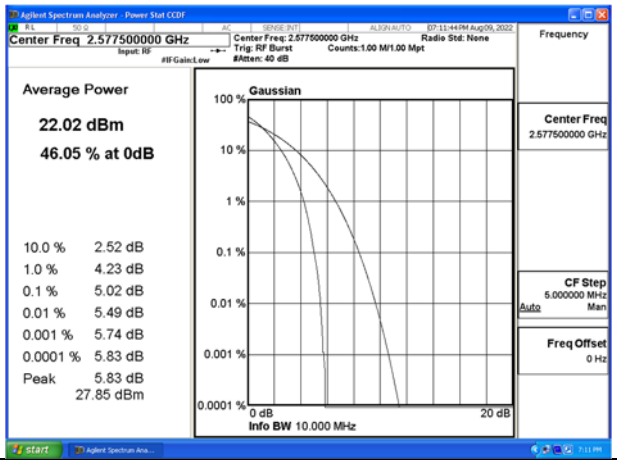

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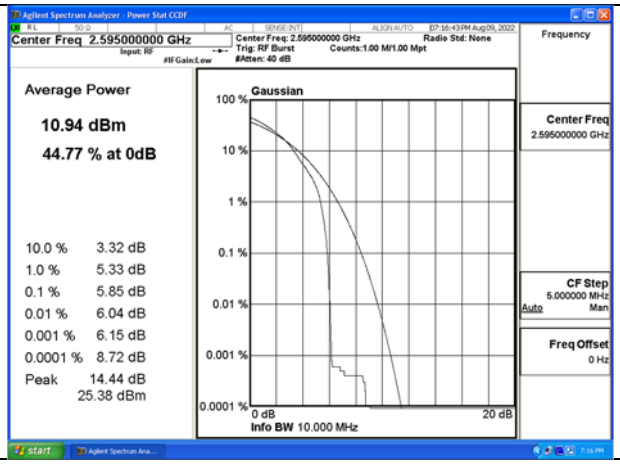

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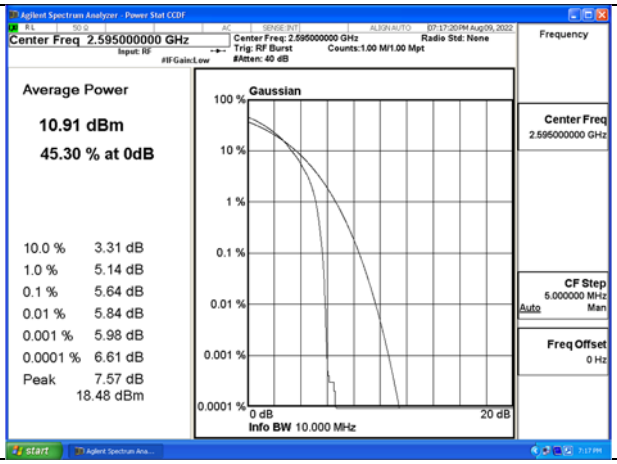

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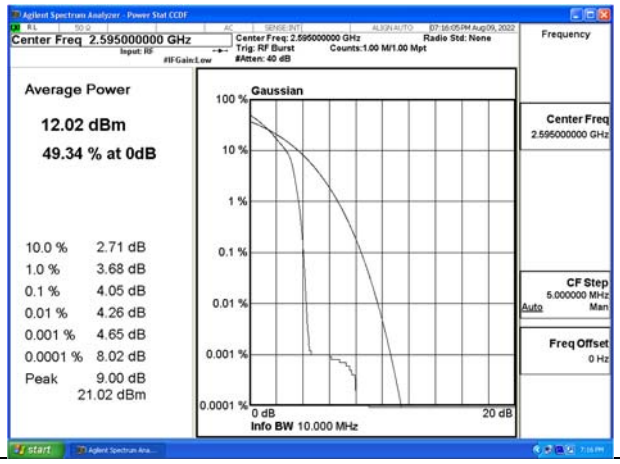

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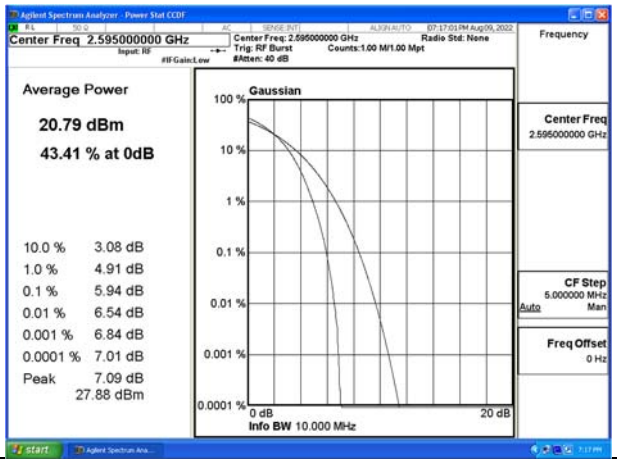

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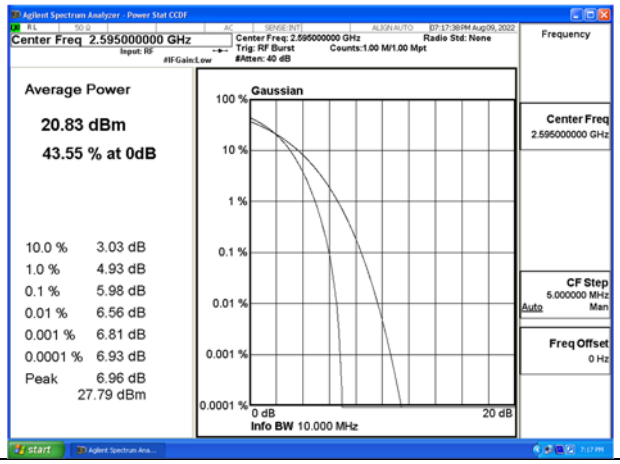

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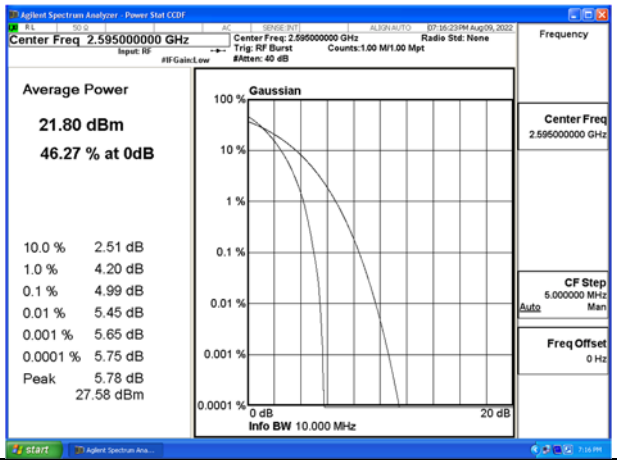

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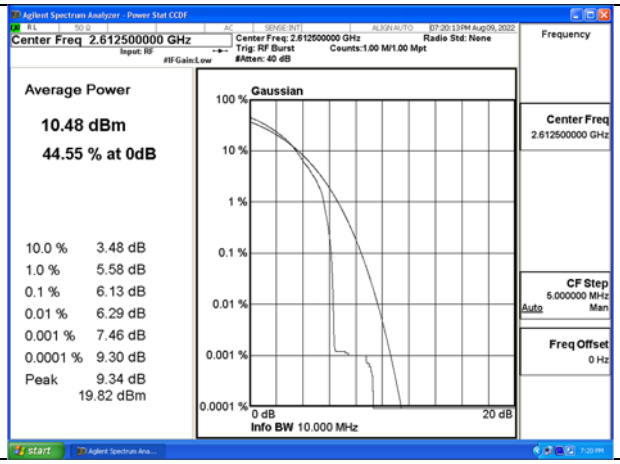


Fig.49

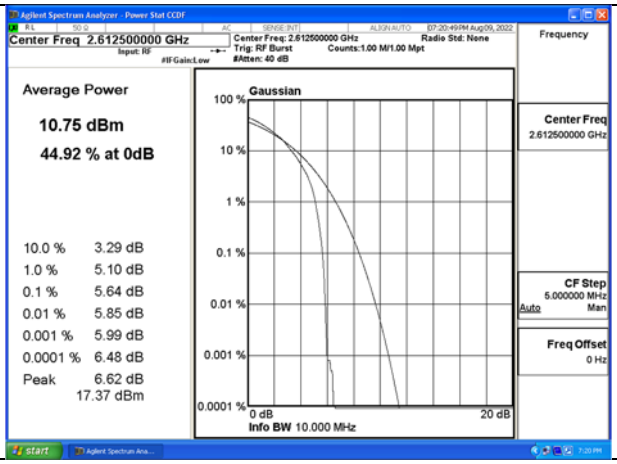
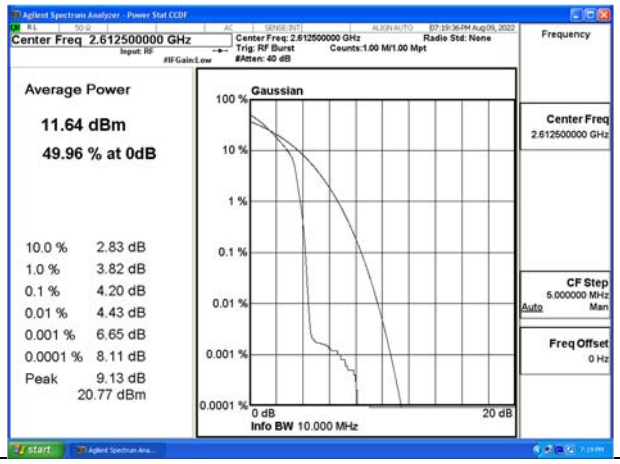


Fig.50



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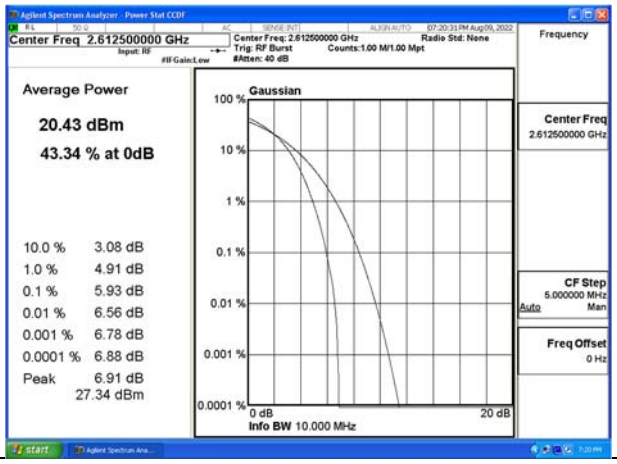

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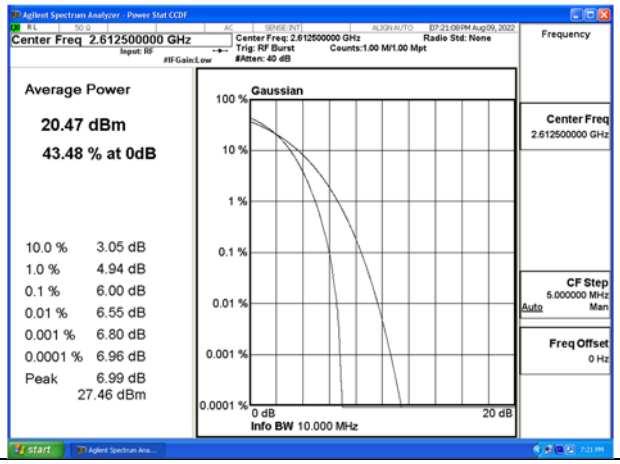

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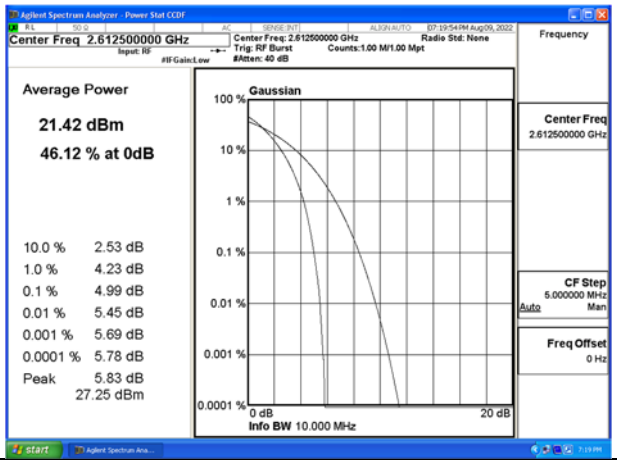

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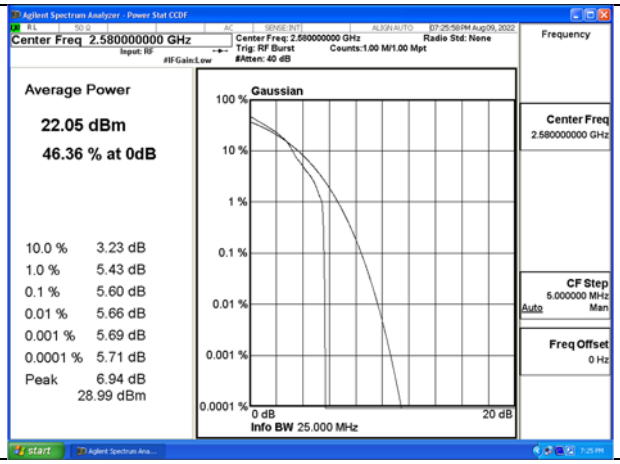

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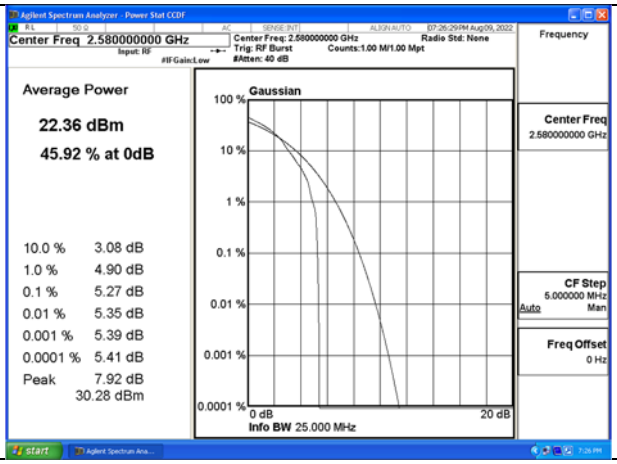

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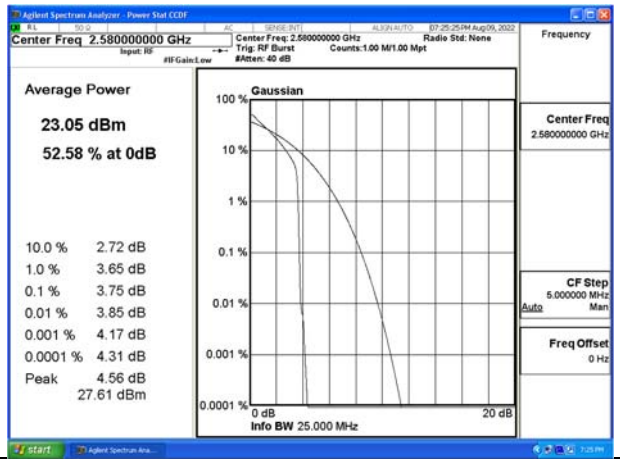

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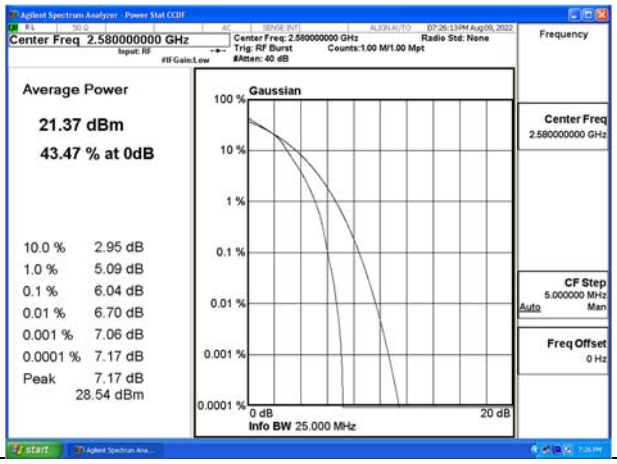

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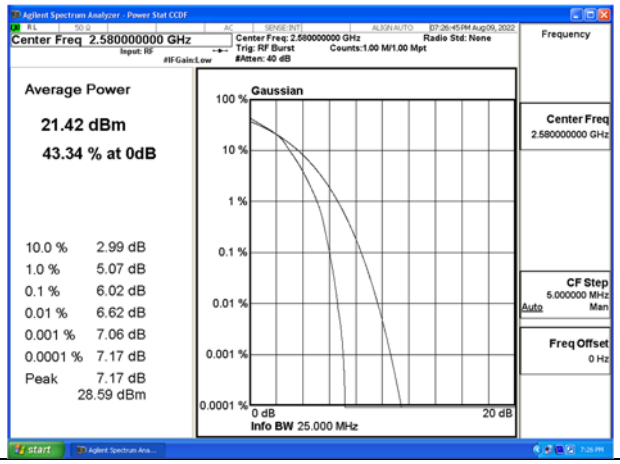


Fig.59

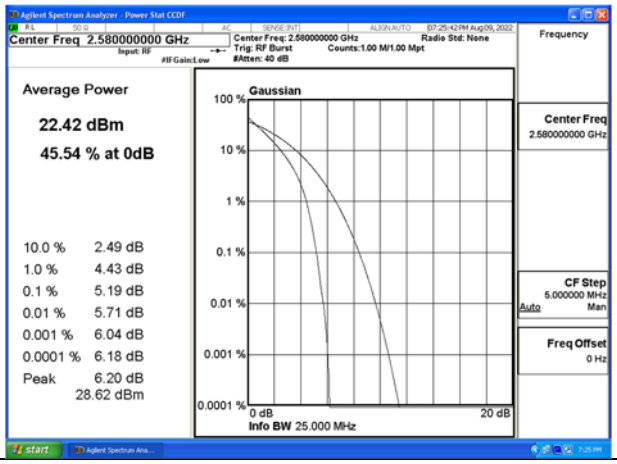


Fig.60

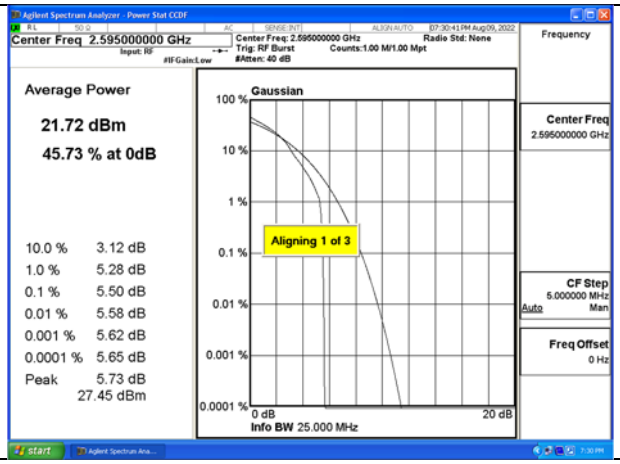


Fig.61

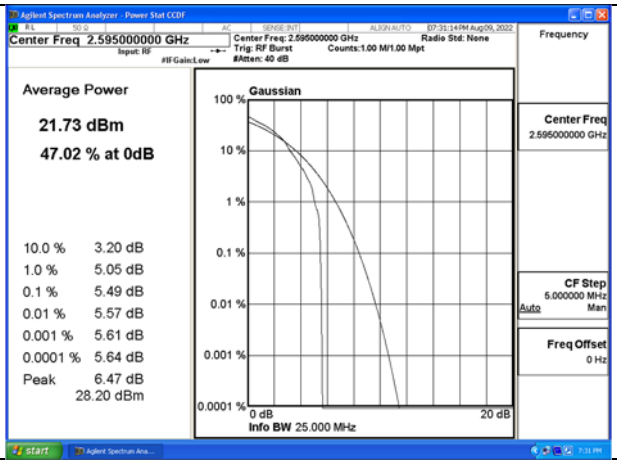
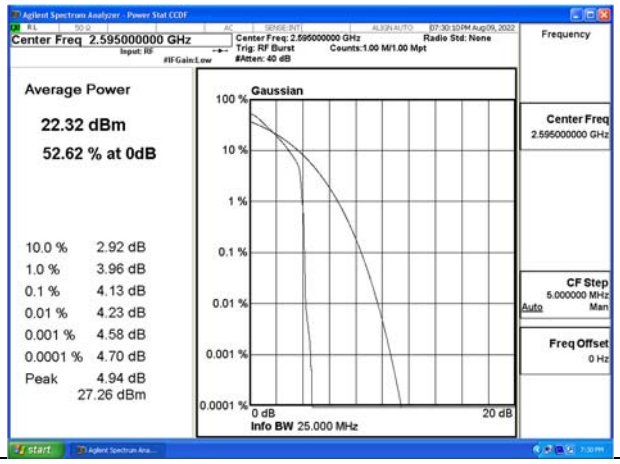


Fig.62



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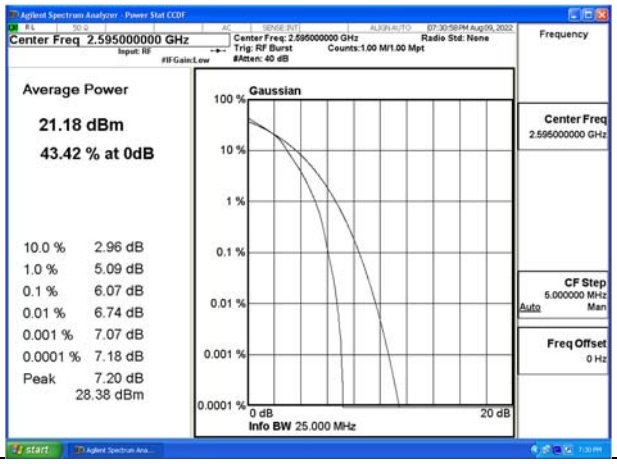

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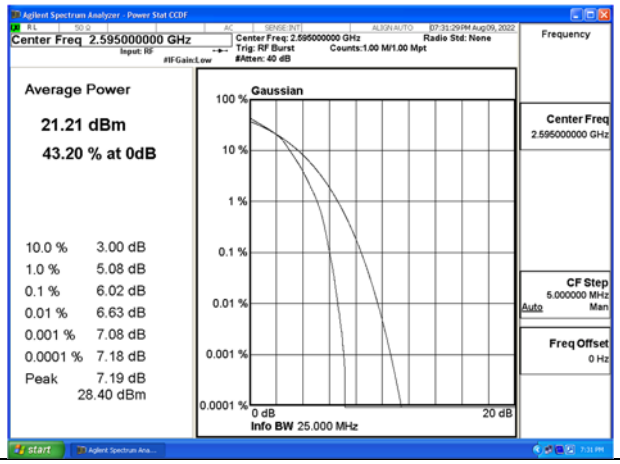
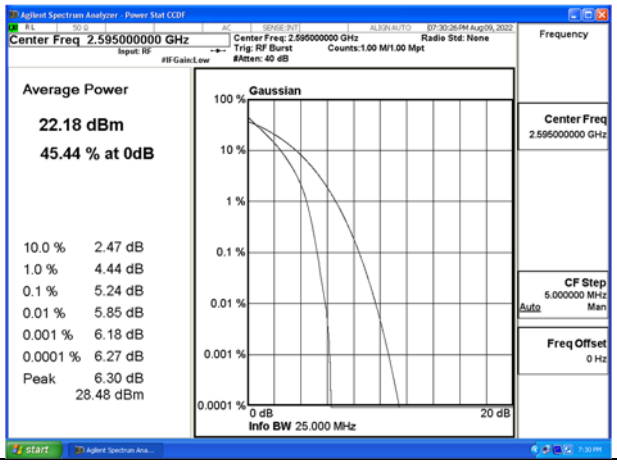


Fig.65



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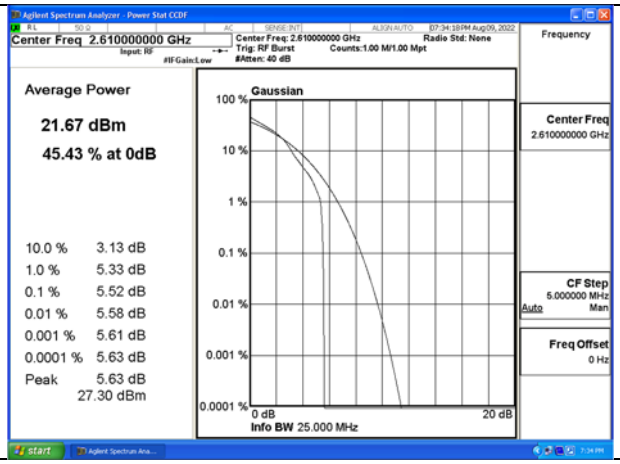

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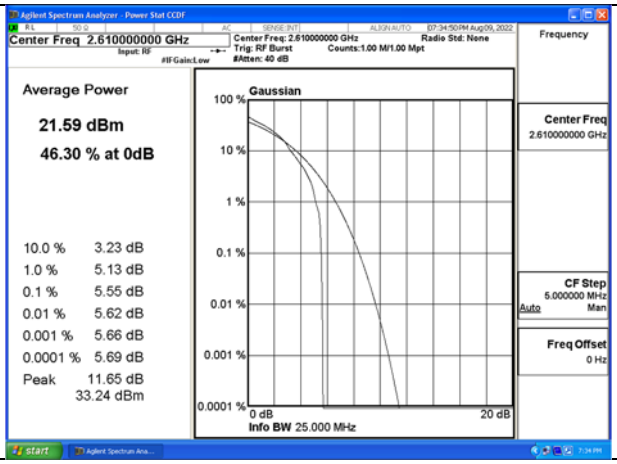

Fig.68

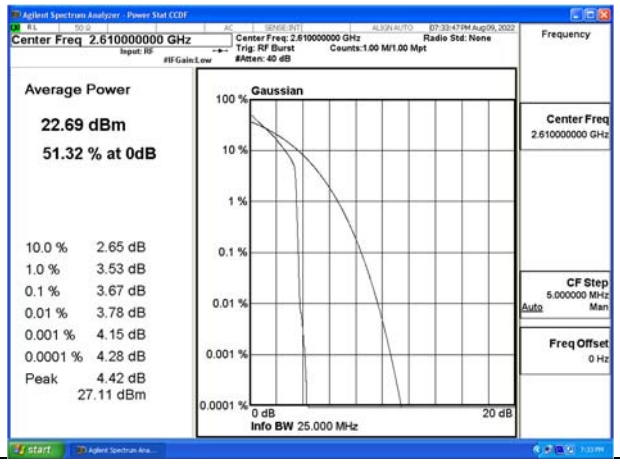

Fig.69

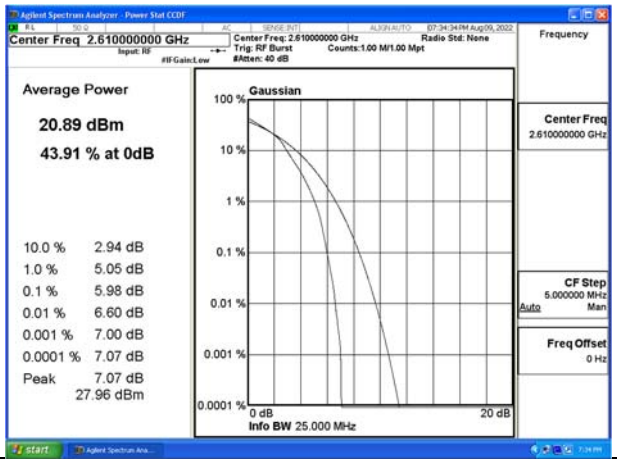

Fig.70

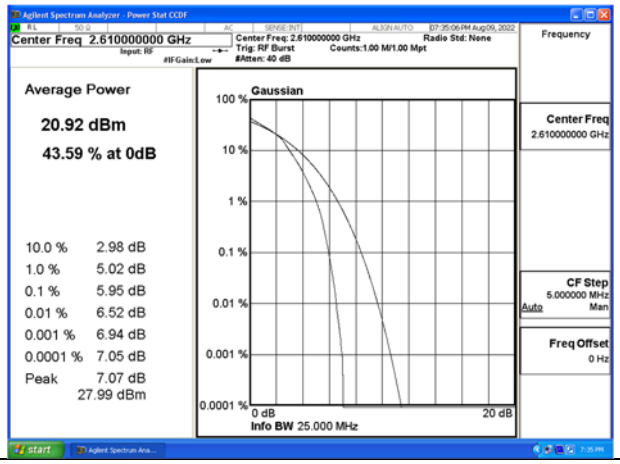

Fig.71

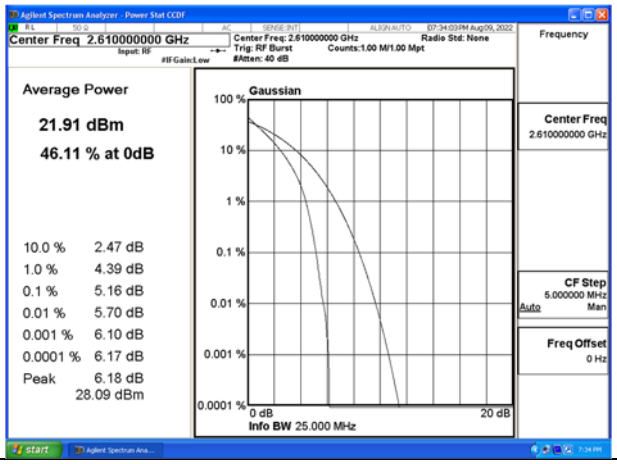

Fig.72

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
38	2580	37850	20	1	0	Fig.1
38	2595	38000	20	1	0	Fig.2
38	2610	38150	20	1	0	Fig.3

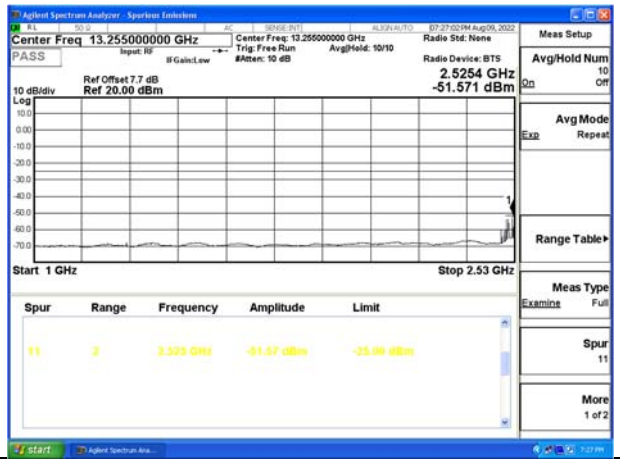

Fig.1

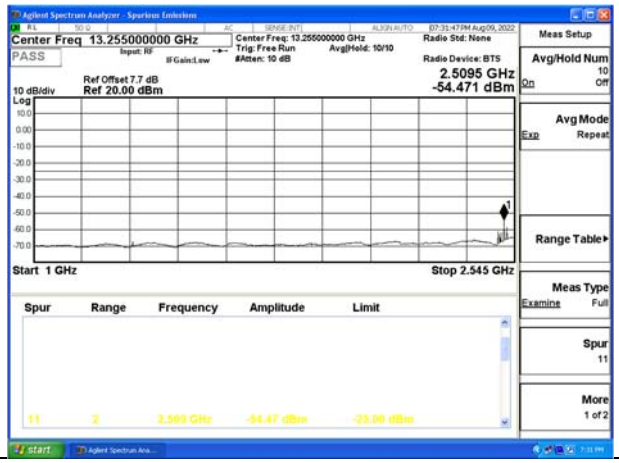

Fig.2

Fig.3

6 Band Edges Compliance

Band	Mode	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
38	QPSK	2617.5	38225	5	1	24	Fig.1
38	QPSK	2617.5	38225	5	25	0	Fig.2
38	QPSK	2615	38200	10	1	49	Fig.3
38	QPSK	2612.5	38175	15	1	74	Fig.4
38	QPSK	2612.5	38175	15	75	0	Fig.5
38	QPSK	2610	38150	20	1	99	Fig.6
38	QPSK	2610	38150	20	100	0	Fig.7

Test Mode: QPSK

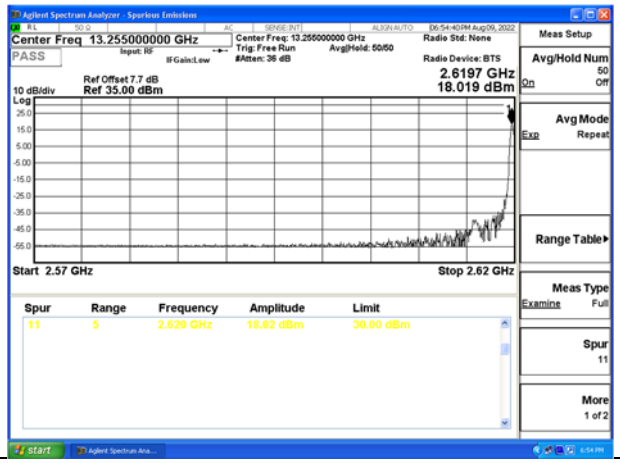

Fig.1

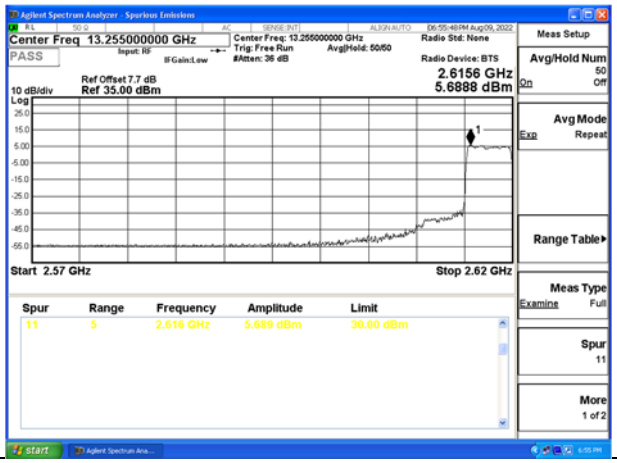

Fig.2

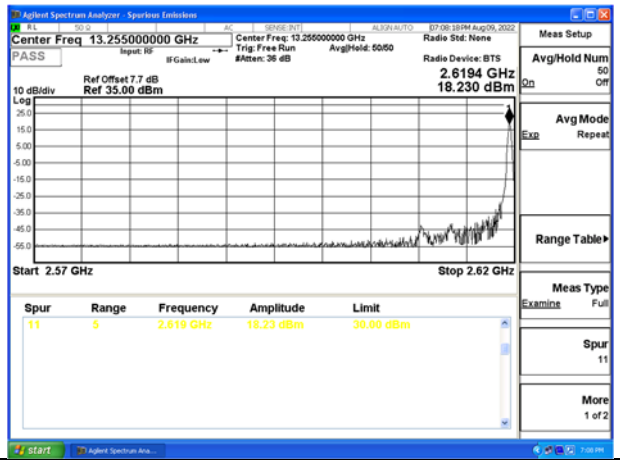

Fig.3

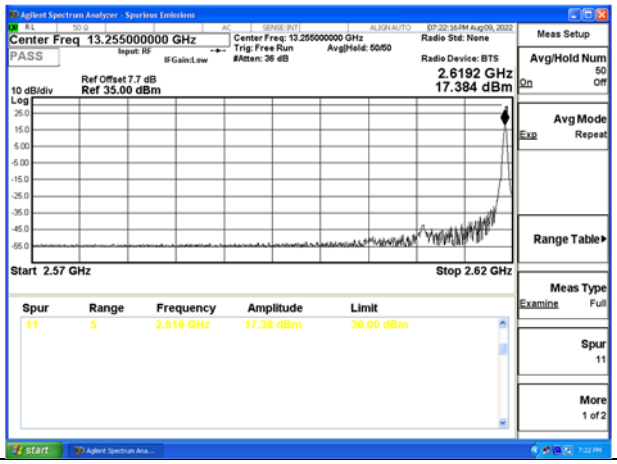

Fig.4

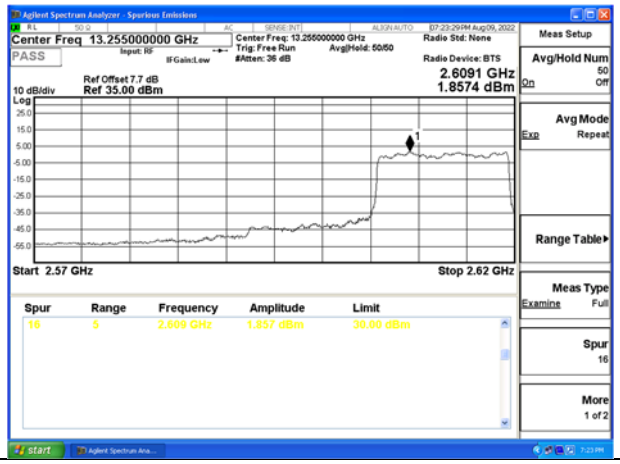

Fig.5

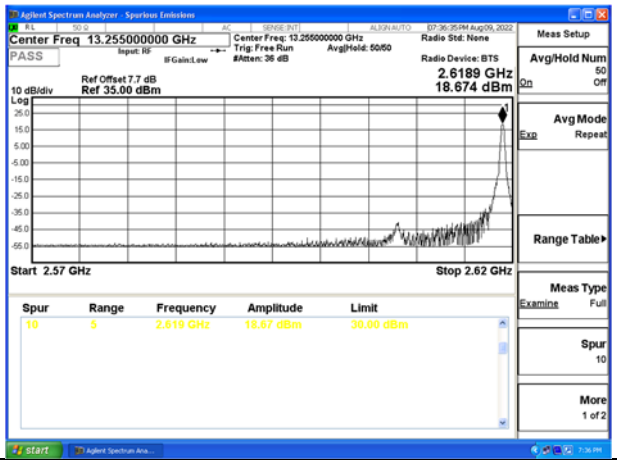

Fig.6

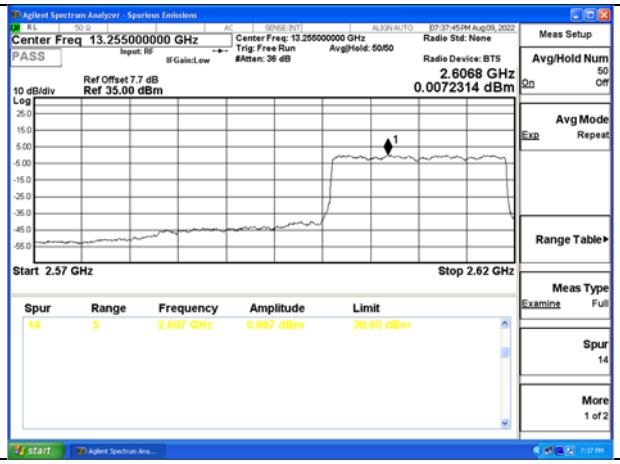
Agilent Spectrum Analyzer - Spurious Emissions
Center Freq 13.255000000 GHz
PASS
Ref Offset 7.7 dB
10 dB/div
Ref 35.00 dBm
2.6068 GHz
0.0072314 dBm
Start 2.57 GHz
Stop 2.62 GHz
Spur Range Frequency Amplitude Limit
14 5 2.607 GHz 0.007 dBm 30.00 dBm
Meas Setup
Avg/Hold Num
Avg Mode
Range Table
Meas Type
Spur
More

Fig.7

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 38 Low Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	0.004	0.002	0.002	0.000
0	NV	0.008	0.001	0.004	-0.002
+10	NV	0.002	0.005	-0.001	0.000
+20	NV	-0.005	0.008	0.000	0.004
+30	NV	0.007	0.006	0.001	0.000
+40	NV	0.000	0.005	0.007	0.004
+50	NV	0.005	0.008	-0.002	0.008
+55	NV	0.003	-0.002	-0.004	-0.004
+20	LV	0.007	-0.001	0.003	-0.007
+20	HV	-0.002	0.001	0.000	-0.004

Temperature(°C)	Voltage	Test Result (ppm) Band 38 High Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	0.003	0.006	-0.002	-0.003
0	NV	0.004	0.001	0.007	0.001
+10	NV	-0.003	0.001	-0.001	-0.007
+20	NV	-0.002	0.000	0.007	-0.001
+30	NV	-0.005	-0.003	0.000	0.004
+40	NV	0.001	0.004	0.005	-0.005
+50	NV	0.007	0.001	-0.004	0.007
+55	NV	-0.005	0.000	0.004	0.007
+20	LV	-0.007	0.004	-0.006	0.002
+20	HV	0.007	0.000	-0.001	0.002

8 Effective Radiated Power and Effective Isotropic Radiated Power

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2572.5	37775	5	1	0	23.04	20.84	0.121
QPSK	2572.5	37775	5	1	12	23.01	20.81	0.121
QPSK	2572.5	37775	5	1	24	23.09	20.89	0.123
QPSK	2572.5	37775	5	12	0	22.08	19.88	0.097
QPSK	2572.5	37775	5	12	7	22.18	19.98	0.100
QPSK	2572.5	37775	5	12	13	22.19	19.99	0.100
QPSK	2572.5	37775	5	25	0	22.12	19.92	0.098
QPSK	2595	38000	5	1	0	23.06	20.86	0.122
QPSK	2595	38000	5	1	12	23.08	20.88	0.122
QPSK	2595	38000	5	1	24	23.16	20.96	0.125
QPSK	2595	38000	5	12	0	22.06	19.86	0.097
QPSK	2595	38000	5	12	7	22.12	19.92	0.098
QPSK	2595	38000	5	12	13	22.16	19.96	0.099
QPSK	2595	38000	5	25	0	22.05	19.85	0.097
QPSK	2617.5	38225	5	1	0	22.95	20.75	0.119
QPSK	2617.5	38225	5	1	12	22.95	20.75	0.119
QPSK	2617.5	38225	5	1	24	22.88	20.68	0.117
QPSK	2617.5	38225	5	12	0	22.00	19.80	0.095
QPSK	2617.5	38225	5	12	7	22.01	19.81	0.096
QPSK	2617.5	38225	5	12	13	22.04	19.84	0.096
QPSK	2617.5	38225	5	25	0	22.01	19.81	0.096

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2572.5	37775	5	1	0	22.25	20.05	0.101
16QAM	2572.5	37775	5	1	12	22.28	20.08	0.102
16QAM	2572.5	37775	5	1	24	22.30	20.10	0.102
16QAM	2572.5	37775	5	12	0	21.20	19.00	0.079
16QAM	2572.5	37775	5	12	7	21.25	19.05	0.080
16QAM	2572.5	37775	5	12	13	21.24	19.04	0.080
16QAM	2572.5	37775	5	25	0	21.11	18.91	0.078
16QAM	2595	38000	5	1	0	22.19	19.99	0.100
16QAM	2595	38000	5	1	12	22.21	20.01	0.100
16QAM	2595	38000	5	1	24	22.19	19.99	0.100
16QAM	2595	38000	5	12	0	21.09	18.89	0.077
16QAM	2595	38000	5	12	7	21.27	19.07	0.081
16QAM	2595	38000	5	12	13	21.20	19.00	0.079
16QAM	2595	38000	5	25	0	21.10	18.90	0.078
16QAM	2617.5	38225	5	1	0	22.13	19.93	0.098
16QAM	2617.5	38225	5	1	12	22.16	19.96	0.099
16QAM	2617.5	38225	5	1	24	22.13	19.93	0.098
16QAM	2617.5	38225	5	12	0	21.12	18.92	0.078
16QAM	2617.5	38225	5	12	7	21.09	18.89	0.077
16QAM	2617.5	38225	5	12	13	21.09	18.89	0.077
16QAM	2617.5	38225	5	25	0	21.04	18.84	0.077
64QAM	2572.5	37775	5	1	0	21.39	19.19	0.083
64QAM	2572.5	37775	5	1	12	21.23	19.03	0.080
64QAM	2572.5	37775	5	1	24	21.35	19.15	0.082
64QAM	2572.5	37775	5	12	0	20.17	17.97	0.063
64QAM	2572.5	37775	5	12	7	20.22	18.02	0.063
64QAM	2572.5	37775	5	12	13	20.13	17.93	0.062
64QAM	2572.5	37775	5	25	0	20.13	17.93	0.062
64QAM	2595	38000	5	1	0	21.24	19.04	0.080
64QAM	2595	38000	5	1	12	21.21	19.01	0.080
64QAM	2595	38000	5	1	24	21.27	19.07	0.081
64QAM	2595	38000	5	12	0	20.10	17.90	0.062
64QAM	2595	38000	5	12	7	20.31	18.11	0.065
64QAM	2595	38000	5	12	13	20.23	18.03	0.064
64QAM	2595	38000	5	25	0	20.06	17.86	0.061
64QAM	2617.5	38225	5	1	0	21.09	18.89	0.077
64QAM	2617.5	38225	5	1	12	21.15	18.95	0.079
64QAM	2617.5	38225	5	1	24	21.11	18.91	0.078
64QAM	2617.5	38225	5	12	0	19.95	17.75	0.060
64QAM	2617.5	38225	5	12	7	20.05	17.85	0.061
64QAM	2617.5	38225	5	12	13	20.11	17.91	0.062
64QAM	2617.5	38225	5	25	0	20.04	17.84	0.061

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2575	37800	10	1	0	23.14	20.94	0.124
QPSK	2575	37800	10	1	25	23.07	20.87	0.122
QPSK	2575	37800	10	1	49	23.07	20.87	0.122
QPSK	2575	37800	10	25	0	22.28	20.08	0.102
QPSK	2575	37800	10	25	12	22.32	20.12	0.103
QPSK	2575	37800	10	25	25	22.32	20.12	0.103
QPSK	2575	37800	10	50	0	22.27	20.07	0.102
QPSK	2595	38000	10	1	0	22.95	20.75	0.119
QPSK	2595	38000	10	1	25	23.10	20.90	0.123
QPSK	2595	38000	10	1	49	23.05	20.85	0.122
QPSK	2595	38000	10	25	0	22.24	20.04	0.101
QPSK	2595	38000	10	25	12	22.21	20.01	0.100
QPSK	2595	38000	10	25	25	22.18	19.98	0.100
QPSK	2595	38000	10	50	0	22.19	19.99	0.100
QPSK	2615	38200	10	1	0	23.07	20.87	0.122
QPSK	2615	38200	10	1	25	23.03	20.83	0.121
QPSK	2615	38200	10	1	49	23.05	20.85	0.122
QPSK	2615	38200	10	25	0	22.16	19.96	0.099
QPSK	2615	38200	10	25	12	22.13	19.93	0.098
QPSK	2615	38200	10	25	25	22.13	19.93	0.098
QPSK	2615	38200	10	50	0	22.14	19.94	0.099

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2575	37800	10	1	0	22.33	20.13	0.103
16QAM	2575	37800	10	1	25	22.23	20.03	0.101
16QAM	2575	37800	10	1	49	22.32	20.12	0.103
16QAM	2575	37800	10	25	0	21.32	19.12	0.082
16QAM	2575	37800	10	25	12	21.34	19.14	0.082
16QAM	2575	37800	10	25	25	21.27	19.07	0.081
16QAM	2575	37800	10	50	0	21.38	19.18	0.083
16QAM	2595	38000	10	1	0	22.30	20.10	0.102
16QAM	2595	38000	10	1	25	22.25	20.05	0.101
16QAM	2595	38000	10	1	49	22.25	20.05	0.101
16QAM	2595	38000	10	25	0	21.13	18.93	0.078
16QAM	2595	38000	10	25	12	21.16	18.96	0.079
16QAM	2595	38000	10	25	25	21.16	18.96	0.079
16QAM	2595	38000	10	50	0	21.13	18.93	0.078
16QAM	2615	38200	10	1	0	22.17	19.97	0.099
16QAM	2615	38200	10	1	25	22.20	20.00	0.100
16QAM	2615	38200	10	1	49	22.09	19.89	0.097
16QAM	2615	38200	10	25	0	21.11	18.91	0.078
16QAM	2615	38200	10	25	12	21.07	18.87	0.077
16QAM	2615	38200	10	25	25	21.12	18.92	0.078
16QAM	2615	38200	10	50	0	21.12	18.92	0.078
64QAM	2575	37800	10	1	0	21.38	19.18	0.083
64QAM	2575	37800	10	1	25	21.30	19.10	0.081
64QAM	2575	37800	10	1	49	21.22	19.02	0.080
64QAM	2575	37800	10	25	0	20.21	18.01	0.063
64QAM	2575	37800	10	25	12	20.33	18.13	0.065
64QAM	2575	37800	10	25	25	20.27	18.07	0.064
64QAM	2575	37800	10	50	0	20.33	18.13	0.065
64QAM	2595	38000	10	1	0	21.20	19.00	0.079
64QAM	2595	38000	10	1	25	21.26	19.06	0.081
64QAM	2595	38000	10	1	49	21.11	18.91	0.078
64QAM	2595	38000	10	25	0	20.15	17.95	0.062
64QAM	2595	38000	10	25	12	20.06	17.86	0.061
64QAM	2595	38000	10	25	25	20.11	17.91	0.062
64QAM	2595	38000	10	50	0	20.17	17.97	0.063
64QAM	2615	38200	10	1	0	21.43	19.23	0.084
64QAM	2615	38200	10	1	25	21.26	19.06	0.081
64QAM	2615	38200	10	1	49	21.33	19.13	0.082
64QAM	2615	38200	10	25	0	20.12	17.92	0.062
64QAM	2615	38200	10	25	12	20.23	18.03	0.064
64QAM	2615	38200	10	25	25	20.05	17.85	0.061
64QAM	2615	38200	10	50	0	20.09	17.89	0.062

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2577.5	37825	15	1	0	23.10	20.90	0.123
QPSK	2577.5	37825	15	1	37	23.15	20.95	0.124
QPSK	2577.5	37825	15	1	74	23.14	20.94	0.124
QPSK	2577.5	37825	15	36	0	22.21	20.01	0.100
QPSK	2577.5	37825	15	36	29	22.18	19.98	0.100
QPSK	2577.5	37825	15	36	30	22.24	20.04	0.101
QPSK	2577.5	37825	15	75	0	22.34	20.14	0.103
QPSK	2595	38000	15	1	0	23.06	20.86	0.122
QPSK	2595	38000	15	1	37	23.09	20.89	0.123
QPSK	2595	38000	15	1	74	23.12	20.92	0.124
QPSK	2595	38000	15	36	0	22.11	19.91	0.098
QPSK	2595	38000	15	36	29	22.02	19.82	0.096
QPSK	2595	38000	15	36	30	22.20	20.00	0.100
QPSK	2595	38000	15	75	0	22.03	19.83	0.096
QPSK	2612.5	38175	15	1	0	23.12	20.92	0.124
QPSK	2612.5	38175	15	1	37	23.09	20.89	0.123
QPSK	2612.5	38175	15	1	74	23.12	20.92	0.124
QPSK	2612.5	38175	15	36	0	22.21	20.01	0.100
QPSK	2612.5	38175	15	36	29	22.24	20.04	0.101
QPSK	2612.5	38175	15	36	30	22.25	20.05	0.101
QPSK	2612.5	38175	15	75	0	22.09	19.89	0.097

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2577.5	37825	15	1	0	22.31	20.11	0.103
16QAM	2577.5	37825	15	1	37	22.28	20.08	0.102
16QAM	2577.5	37825	15	1	74	22.26	20.06	0.101
16QAM	2577.5	37825	15	36	0	21.35	19.15	0.082
16QAM	2577.5	37825	15	36	29	21.34	19.14	0.082
16QAM	2577.5	37825	15	36	30	21.16	18.96	0.079
16QAM	2577.5	37825	15	75	0	21.26	19.06	0.081
16QAM	2595	38000	15	1	0	22.17	19.97	0.099
16QAM	2595	38000	15	1	37	22.04	19.84	0.096
16QAM	2595	38000	15	1	74	22.08	19.88	0.097
16QAM	2595	38000	15	36	0	21.05	18.85	0.077
16QAM	2595	38000	15	36	29	21.14	18.94	0.078
16QAM	2595	38000	15	36	30	21.19	18.99	0.079
16QAM	2595	38000	15	75	0	21.02	18.82	0.076
16QAM	2612.5	38175	15	1	0	22.14	19.94	0.099
16QAM	2612.5	38175	15	1	37	22.11	19.91	0.098
16QAM	2612.5	38175	15	1	74	22.11	19.91	0.098
16QAM	2612.5	38175	15	36	0	21.15	18.95	0.079
16QAM	2612.5	38175	15	36	29	21.10	18.90	0.078
16QAM	2612.5	38175	15	36	30	21.21	19.01	0.080
16QAM	2612.5	38175	15	75	0	21.26	19.06	0.081
64QAM	2577.5	37825	15	1	0	21.17	18.97	0.079
64QAM	2577.5	37825	15	1	37	21.31	19.11	0.081
64QAM	2577.5	37825	15	1	74	21.18	18.98	0.079
64QAM	2577.5	37825	15	36	0	20.16	17.96	0.063
64QAM	2577.5	37825	15	36	29	20.27	18.07	0.064
64QAM	2577.5	37825	15	36	30	20.20	18.00	0.063
64QAM	2577.5	37825	15	75	0	20.31	18.11	0.065
64QAM	2595	38000	15	1	0	21.10	18.90	0.078
64QAM	2595	38000	15	1	37	21.01	18.81	0.076
64QAM	2595	38000	15	1	74	21.08	18.88	0.077
64QAM	2595	38000	15	36	0	20.03	17.83	0.061
64QAM	2595	38000	15	36	29	20.15	17.95	0.062
64QAM	2595	38000	15	36	30	20.06	17.86	0.061
64QAM	2595	38000	15	75	0	20.02	17.82	0.061
64QAM	2612.5	38175	15	1	0	21.28	19.08	0.081
64QAM	2612.5	38175	15	1	37	21.08	18.88	0.077
64QAM	2612.5	38175	15	1	74	21.12	18.92	0.078
64QAM	2612.5	38175	15	36	0	20.14	17.94	0.062
64QAM	2612.5	38175	15	36	29	20.22	18.02	0.063
64QAM	2612.5	38175	15	36	30	20.13	17.93	0.062
64QAM	2612.5	38175	15	75	0	20.27	18.07	0.064

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2580	37850	20	1	0	23.20	21.00	0.126
QPSK	2580	37850	20	1	49	23.16	20.96	0.125
QPSK	2580	37850	20	1	99	23.12	20.92	0.124
QPSK	2580	37850	20	50	0	22.27	20.07	0.102
QPSK	2580	37850	20	50	24	22.25	20.05	0.101
QPSK	2580	37850	20	50	50	22.31	20.11	0.103
QPSK	2580	37850	20	100	0	22.23	20.03	0.101
QPSK	2595	38000	20	1	0	23.19	20.99	0.126
QPSK	2595	38000	20	1	49	23.20	21.00	0.126
QPSK	2595	38000	20	1	99	23.17	20.97	0.125
QPSK	2595	38000	20	50	0	22.14	19.94	0.099
QPSK	2595	38000	20	50	24	22.21	20.01	0.100
QPSK	2595	38000	20	50	50	22.19	19.99	0.100
QPSK	2595	38000	20	100	0	22.19	19.99	0.100
QPSK	2610	38150	20	1	0	23.15	20.95	0.124
QPSK	2610	38150	20	1	49	23.09	20.89	0.123
QPSK	2610	38150	20	1	99	23.01	20.81	0.121
QPSK	2610	38150	20	50	0	22.18	19.98	0.100
QPSK	2610	38150	20	50	24	22.22	20.02	0.100
QPSK	2610	38150	20	50	50	22.17	19.97	0.099
QPSK	2610	38150	20	100	0	22.16	19.96	0.099

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2580	37850	20	1	0	22.43	20.23	0.105
16QAM	2580	37850	20	1	49	22.41	20.21	0.105
16QAM	2580	37850	20	1	99	22.40	20.20	0.105
16QAM	2580	37850	20	50	0	21.32	19.12	0.082
16QAM	2580	37850	20	50	24	21.29	19.09	0.081
16QAM	2580	37850	20	50	50	21.26	19.06	0.081
16QAM	2580	37850	20	100	0	21.27	19.07	0.081
16QAM	2595	38000	20	1	0	22.38	20.18	0.104
16QAM	2595	38000	20	1	49	22.39	20.19	0.104
16QAM	2595	38000	20	1	99	22.30	20.10	0.102
16QAM	2595	38000	20	50	0	21.21	19.01	0.080
16QAM	2595	38000	20	50	24	21.19	18.99	0.079
16QAM	2595	38000	20	50	50	21.15	18.95	0.079
16QAM	2595	38000	20	100	0	21.19	18.99	0.079
16QAM	2610	38150	20	1	0	22.38	20.18	0.104
16QAM	2610	38150	20	1	49	22.32	20.12	0.103
16QAM	2610	38150	20	1	99	22.17	19.97	0.099
16QAM	2610	38150	20	50	0	21.29	19.09	0.081
16QAM	2610	38150	20	50	24	21.23	19.03	0.080
16QAM	2610	38150	20	50	50	21.21	19.01	0.080
16QAM	2610	38150	20	100	0	21.12	18.92	0.078
64QAM	2580	37850	20	1	0	21.33	19.13	0.082
64QAM	2580	37850	20	1	49	21.30	19.10	0.081
64QAM	2580	37850	20	1	99	21.26	19.06	0.081
64QAM	2580	37850	20	50	0	20.29	18.09	0.064
64QAM	2580	37850	20	50	24	20.32	18.12	0.065
64QAM	2580	37850	20	50	50	20.25	18.05	0.064
64QAM	2580	37850	20	100	0	20.30	18.10	0.065
64QAM	2595	38000	20	1	0	21.20	19.00	0.079
64QAM	2595	38000	20	1	49	21.26	19.06	0.081
64QAM	2595	38000	20	1	99	21.14	18.94	0.078
64QAM	2595	38000	20	50	0	20.21	18.01	0.063
64QAM	2595	38000	20	50	24	20.23	18.03	0.064
64QAM	2595	38000	20	50	50	20.16	17.96	0.063
64QAM	2595	38000	20	100	0	20.19	17.99	0.063
64QAM	2610	38150	20	1	0	21.56	19.36	0.086
64QAM	2610	38150	20	1	49	21.47	19.27	0.085
64QAM	2610	38150	20	1	99	21.40	19.20	0.083
64QAM	2610	38150	20	50	0	20.21	18.01	0.063
64QAM	2610	38150	20	50	24	20.26	18.06	0.064
64QAM	2610	38150	20	50	50	20.28	18.08	0.064
64QAM	2610	38150	20	100	0	20.25	18.05	0.064