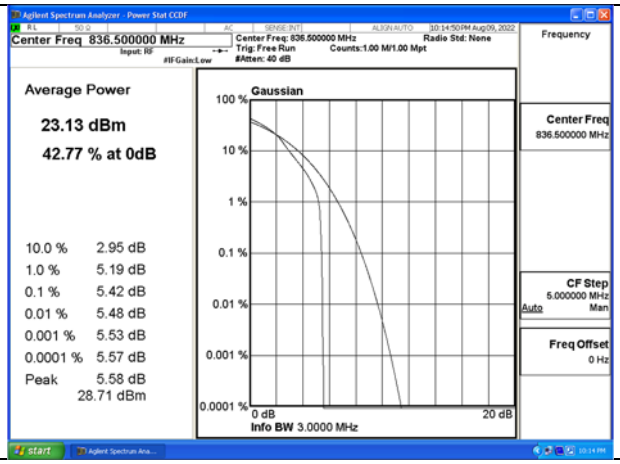

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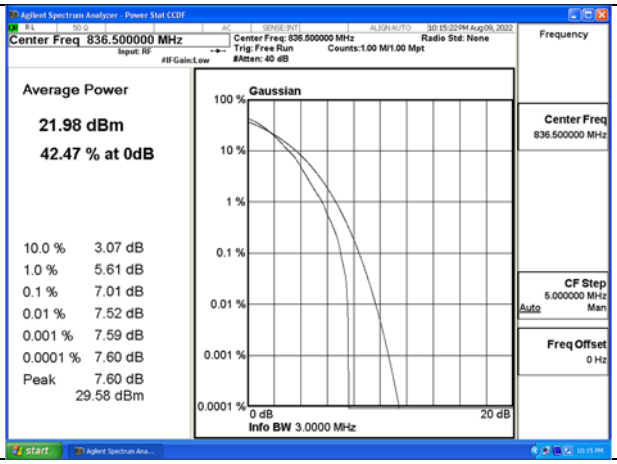

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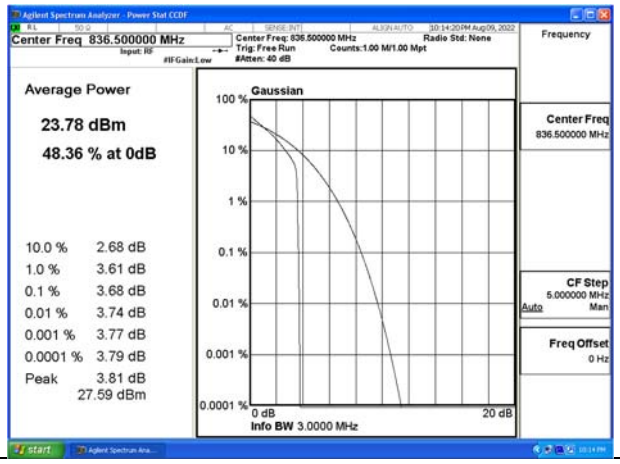

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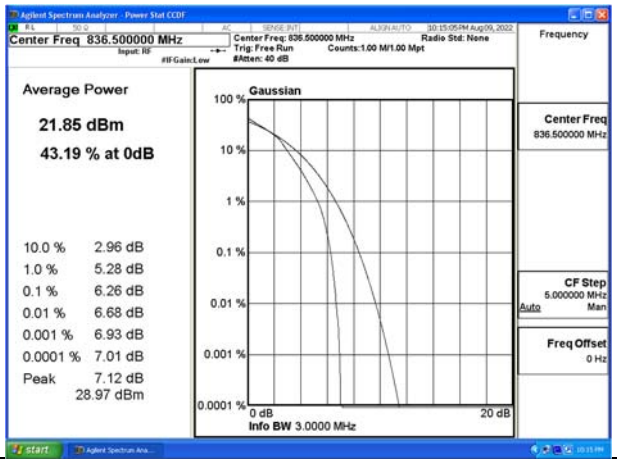

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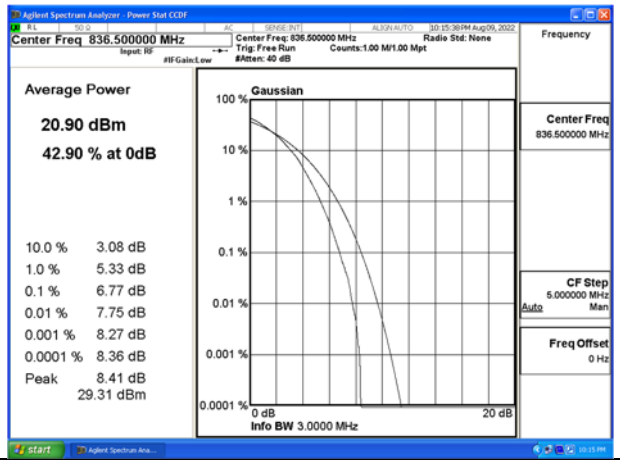

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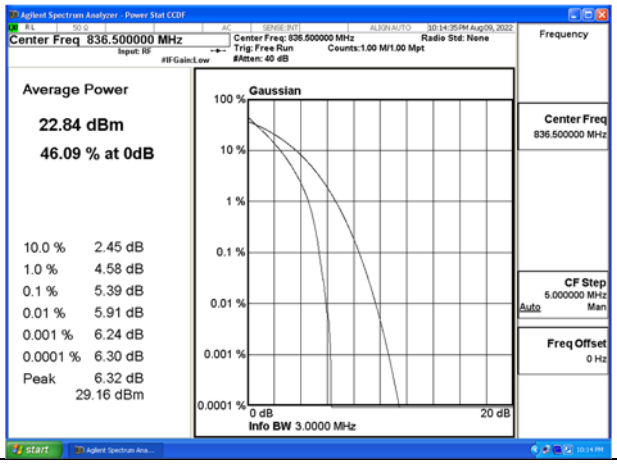

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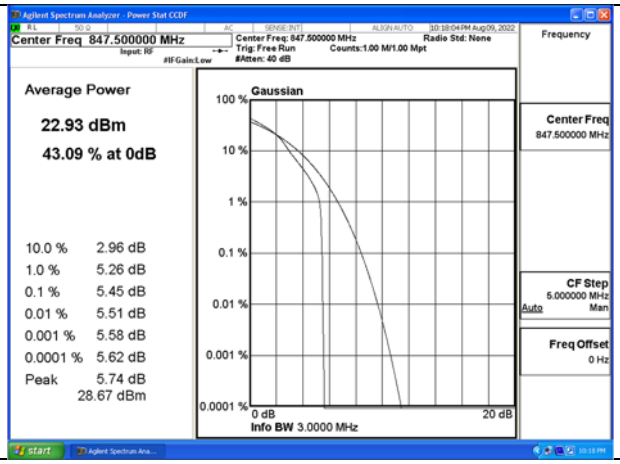

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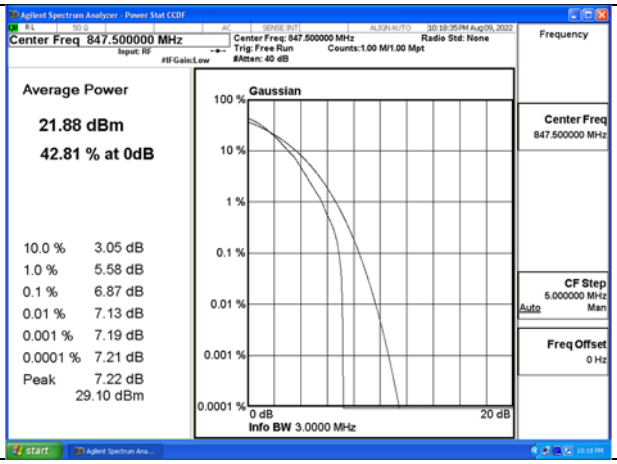

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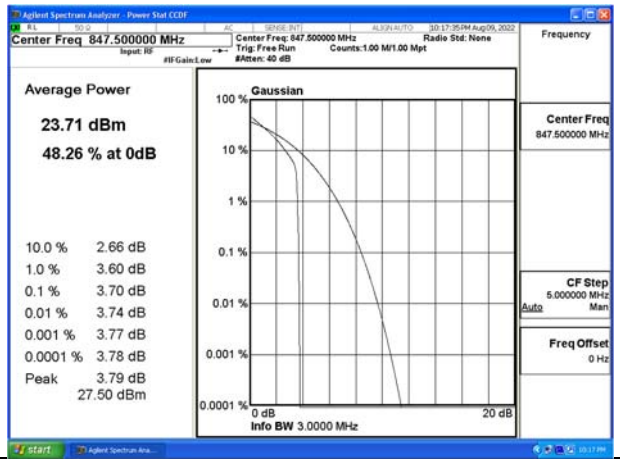

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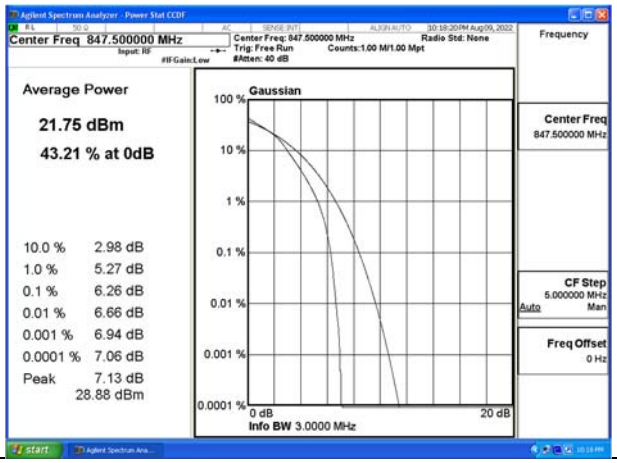

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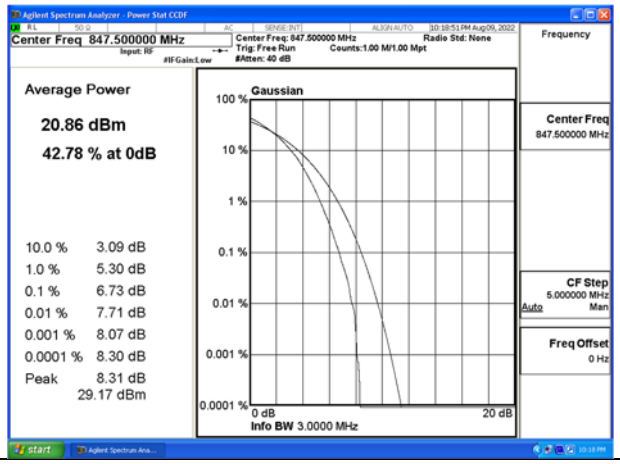

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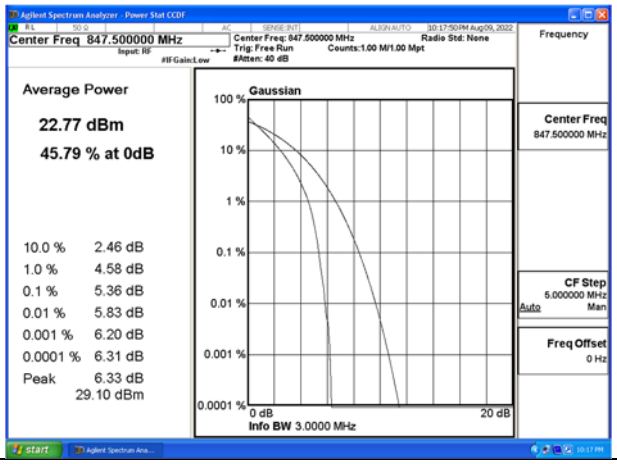

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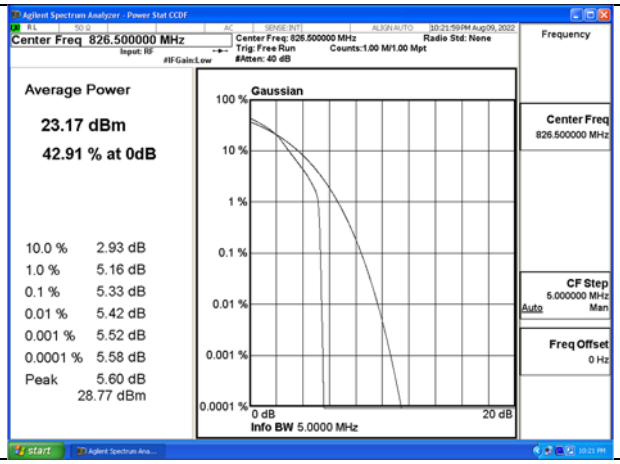

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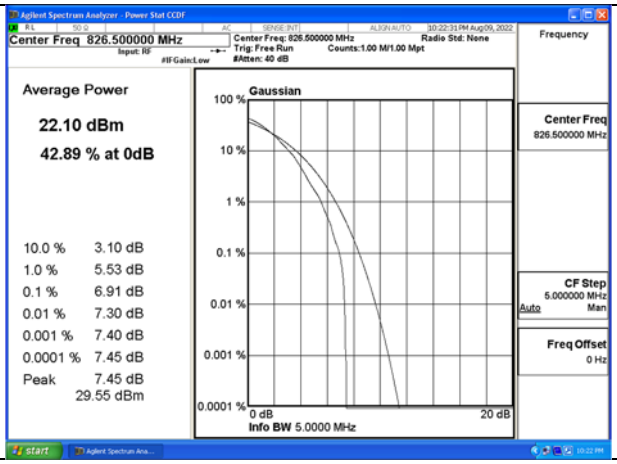

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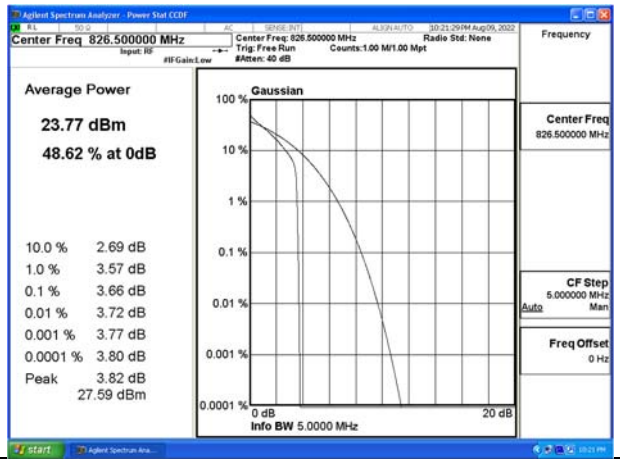

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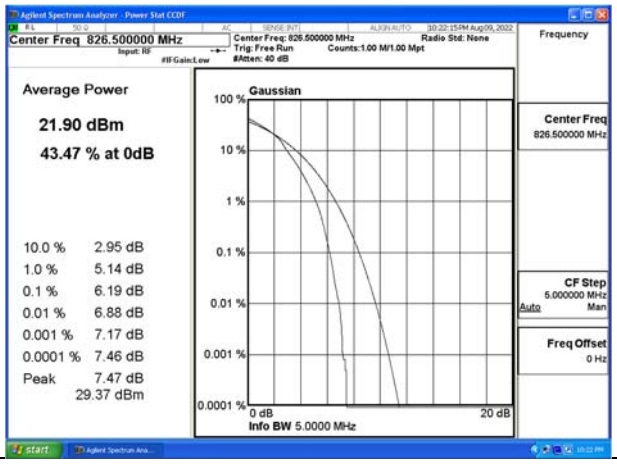

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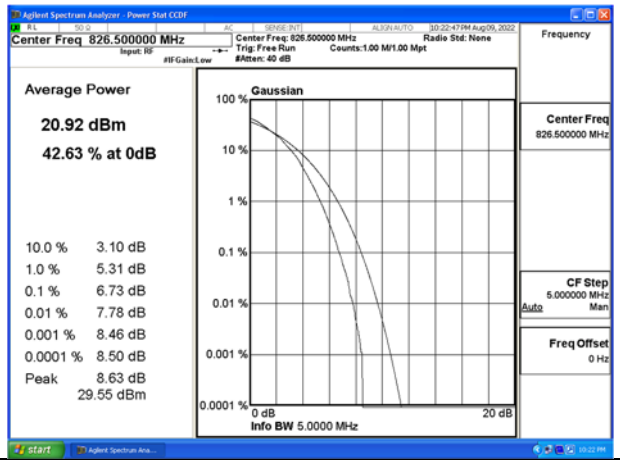

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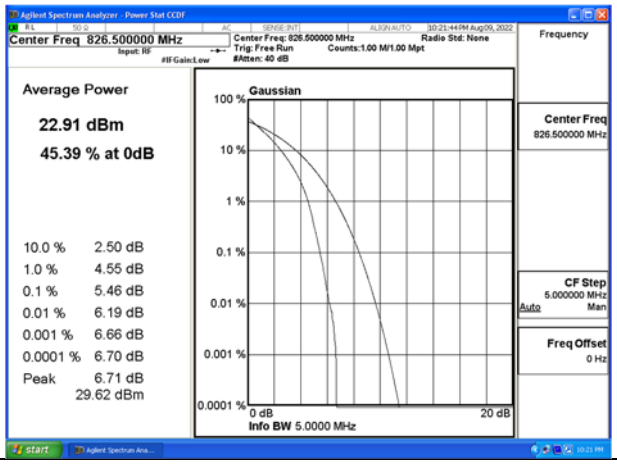

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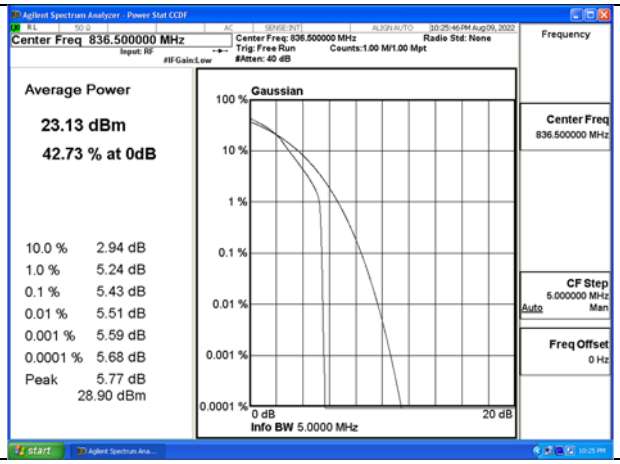

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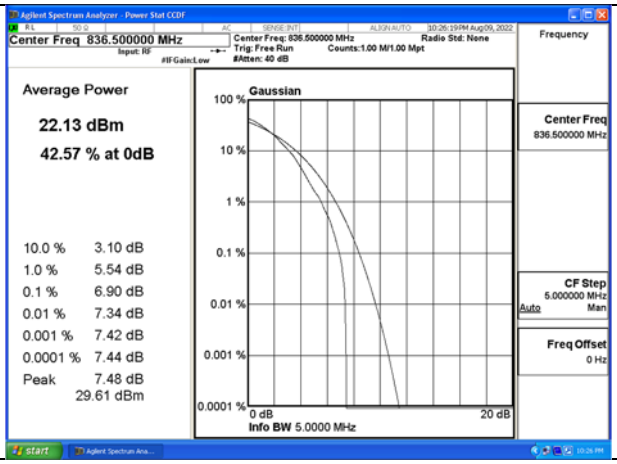

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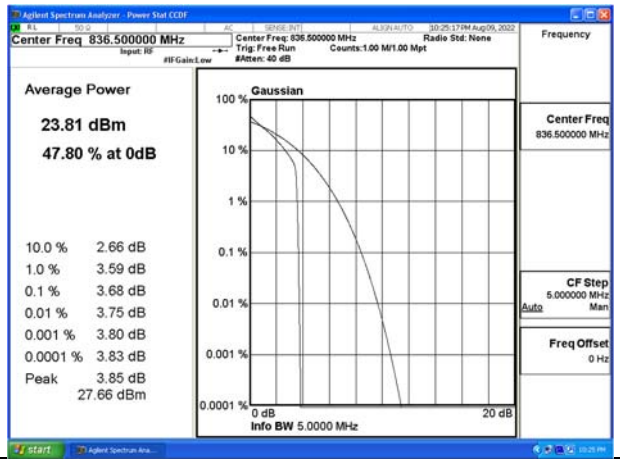

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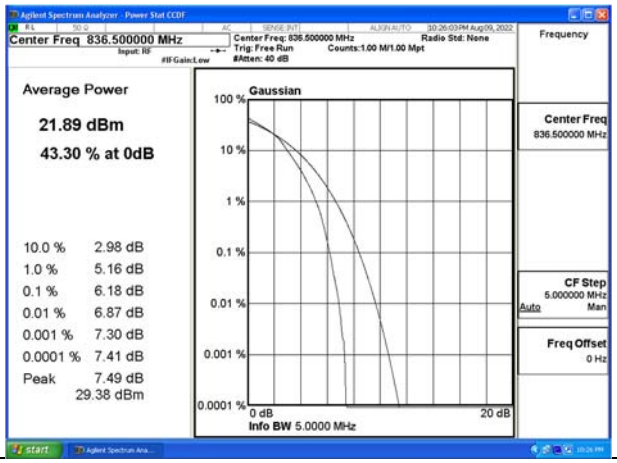

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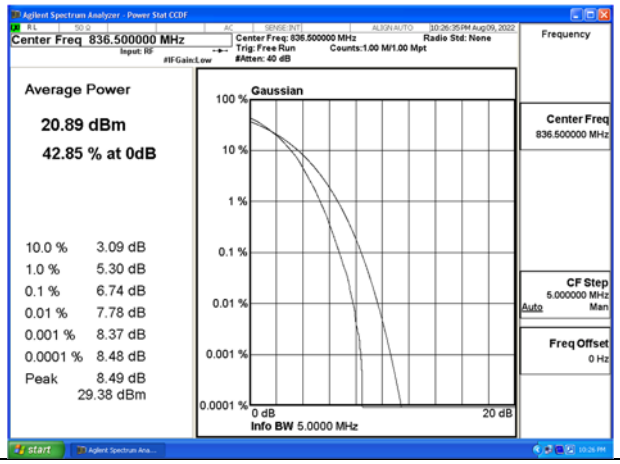

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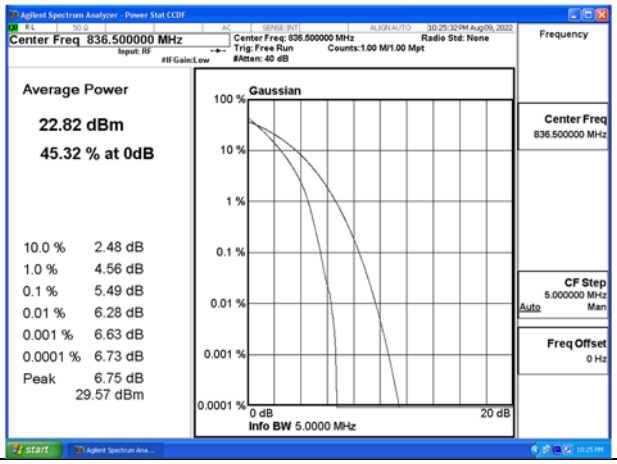

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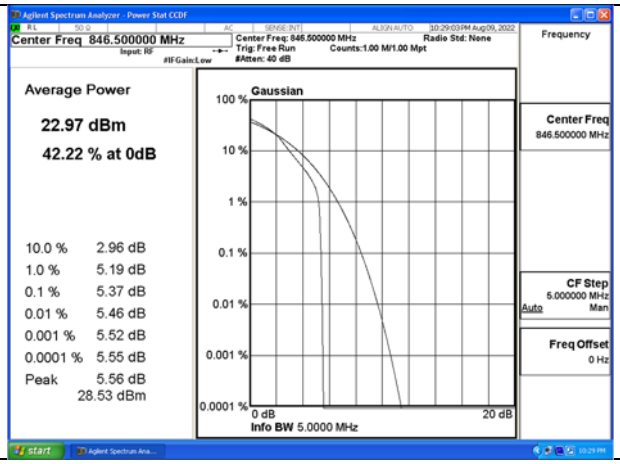

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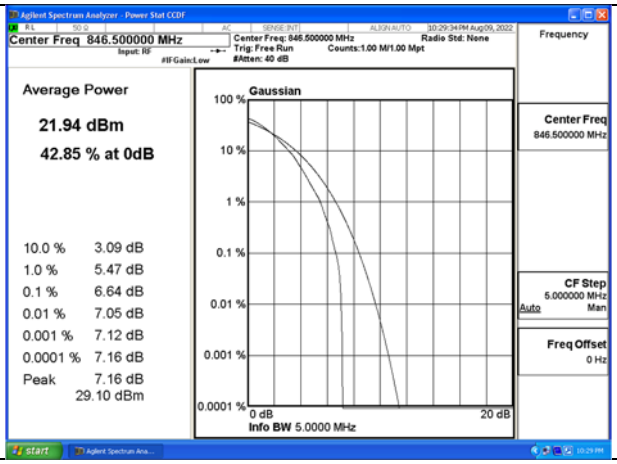

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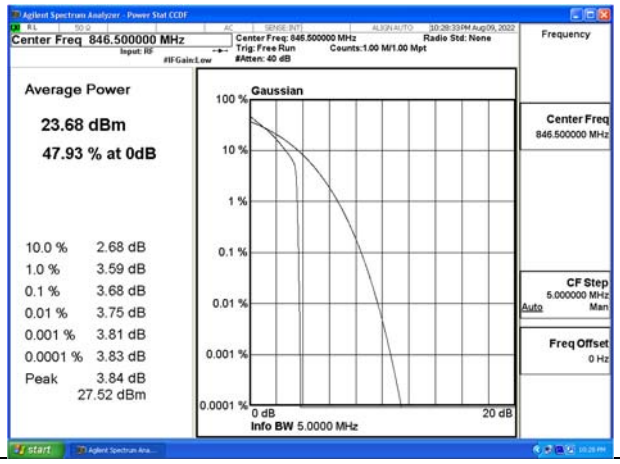

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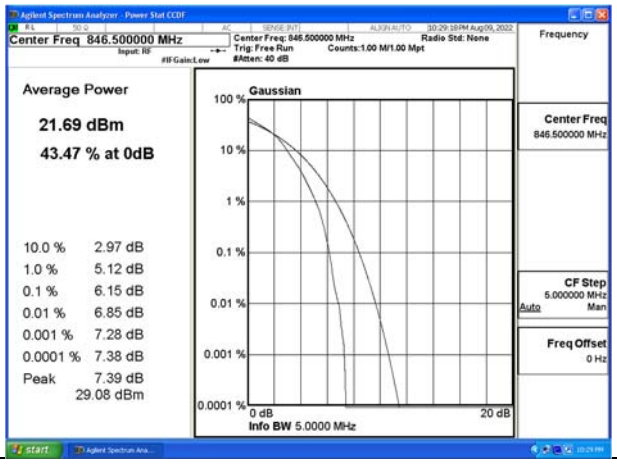

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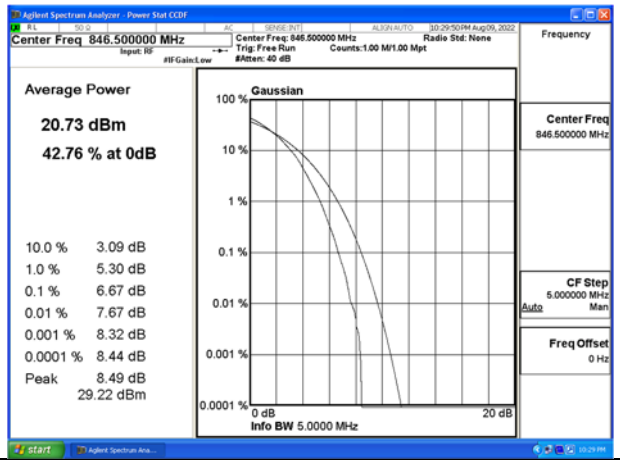

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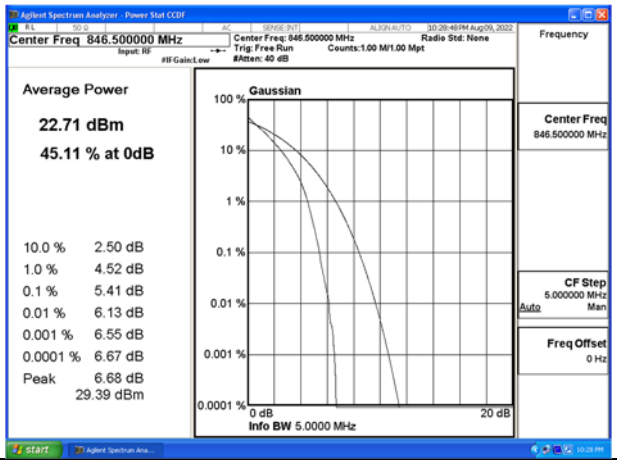

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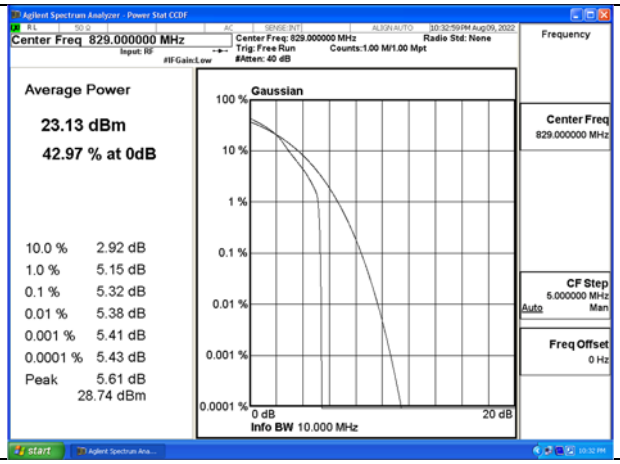

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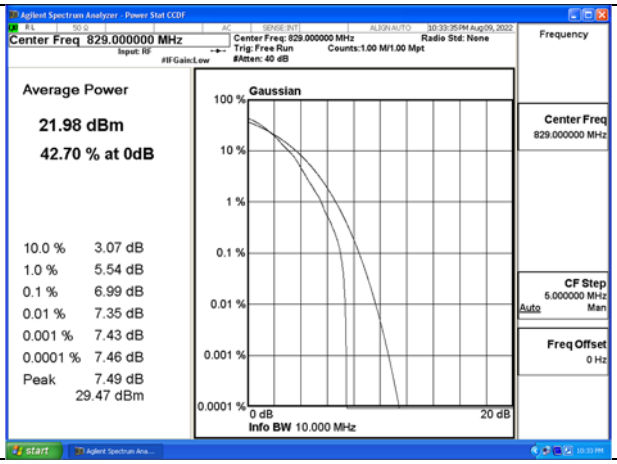

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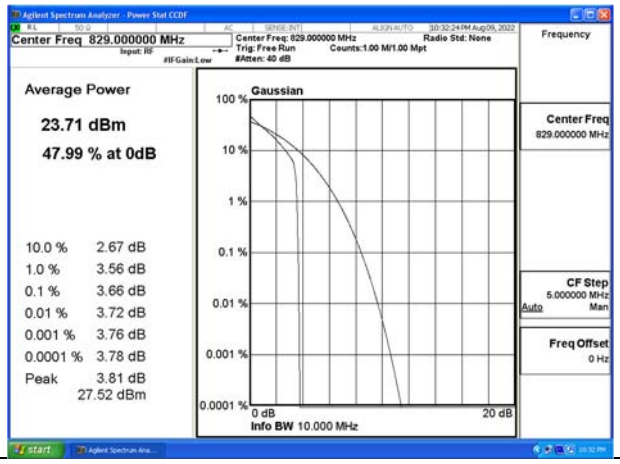

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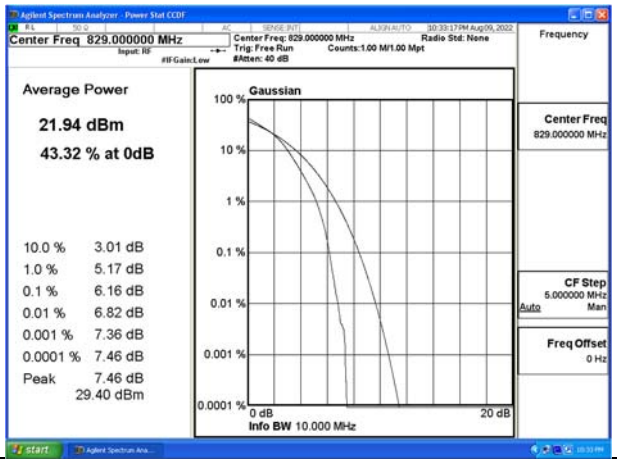

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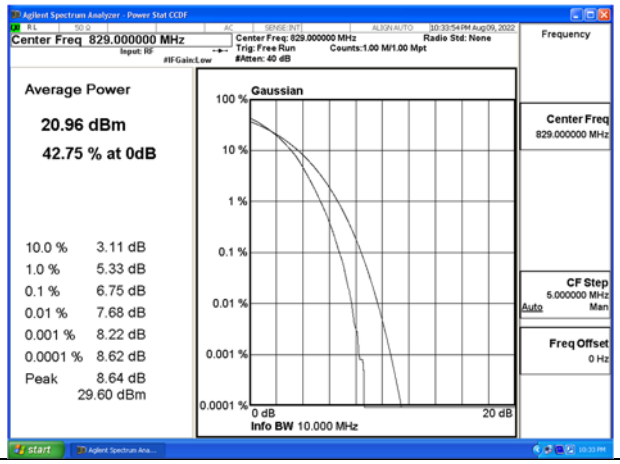

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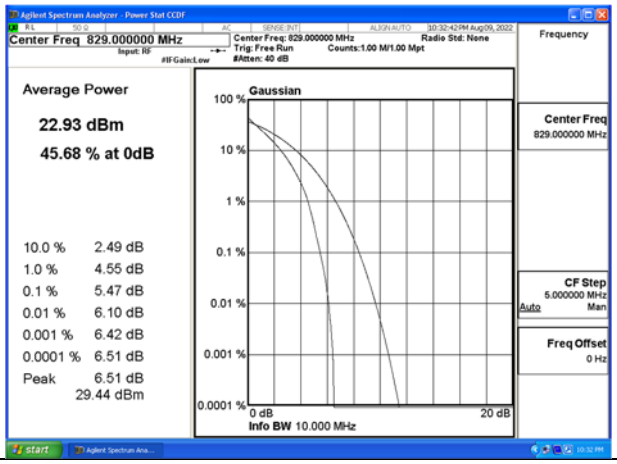

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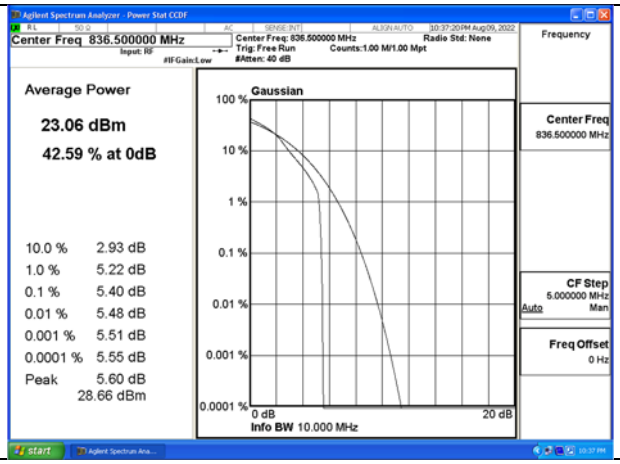

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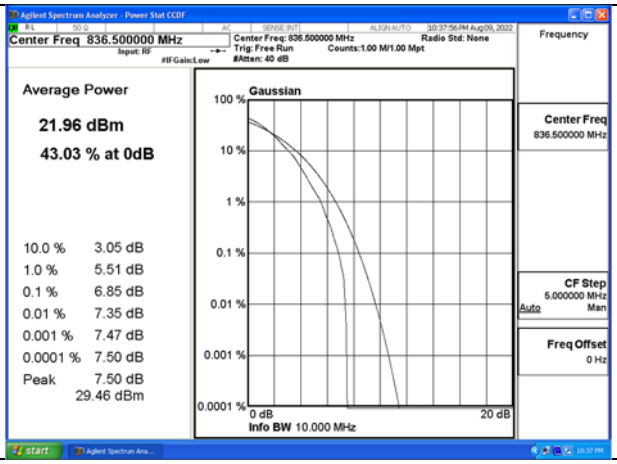

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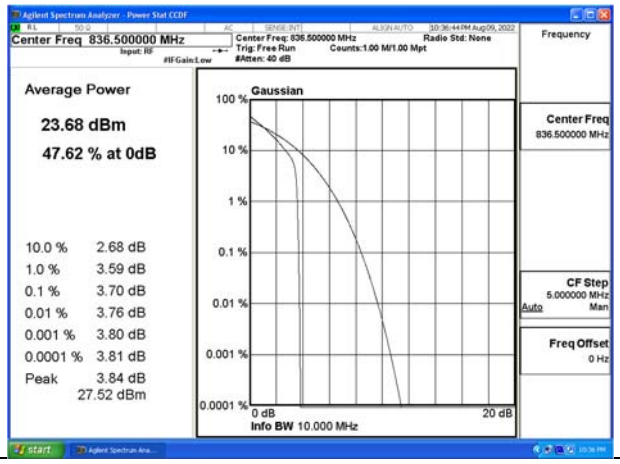

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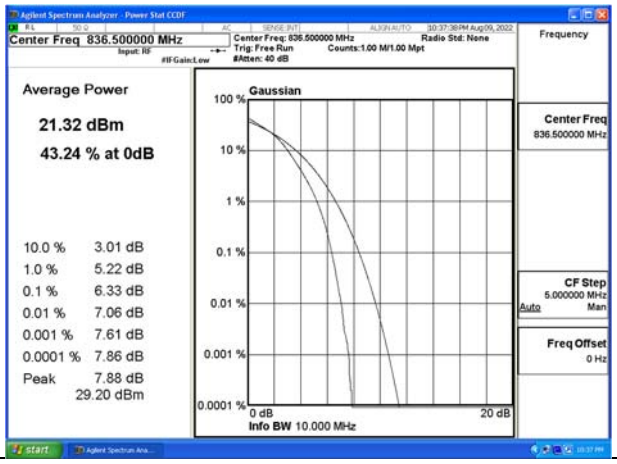

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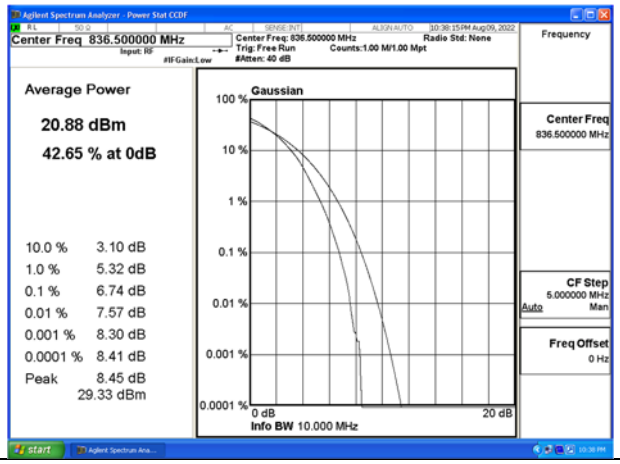

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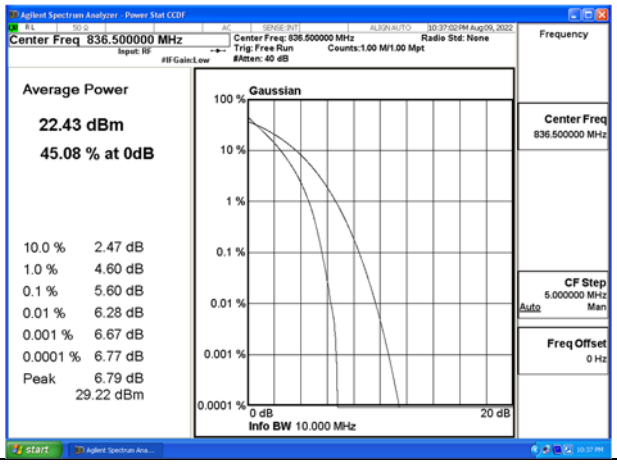

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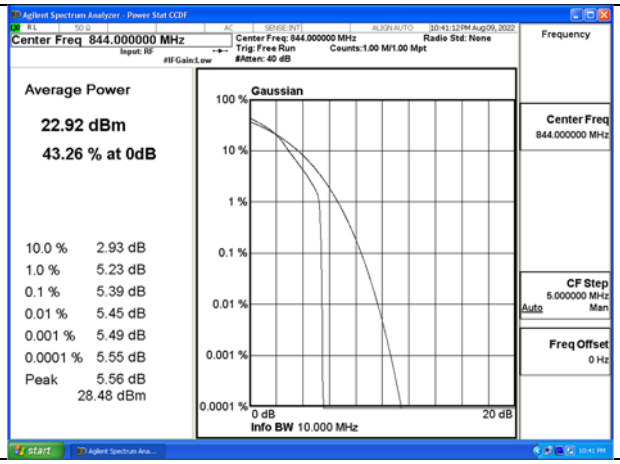

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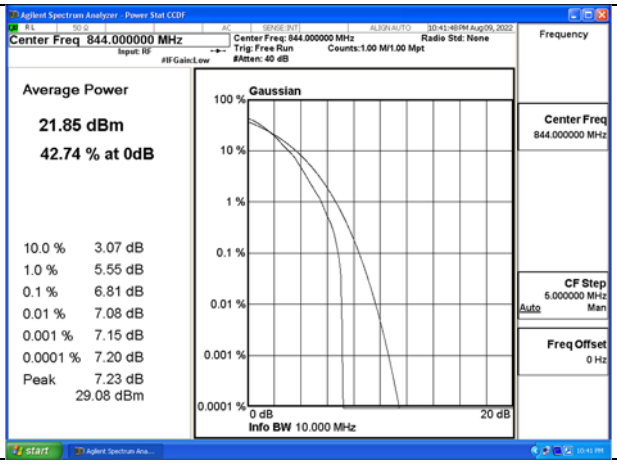

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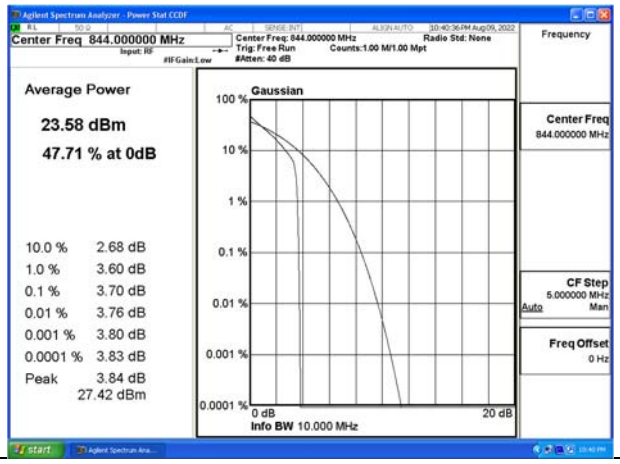

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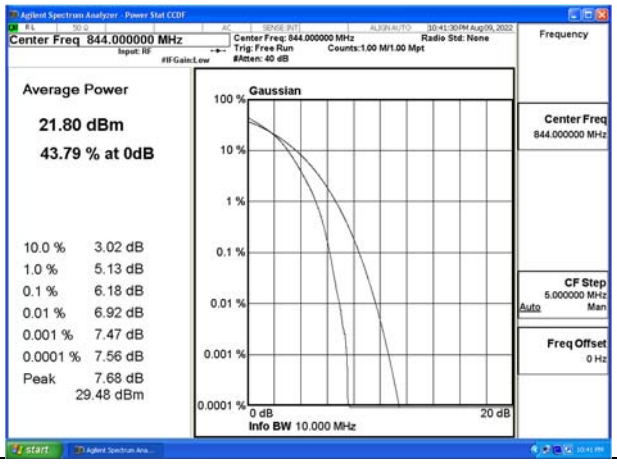

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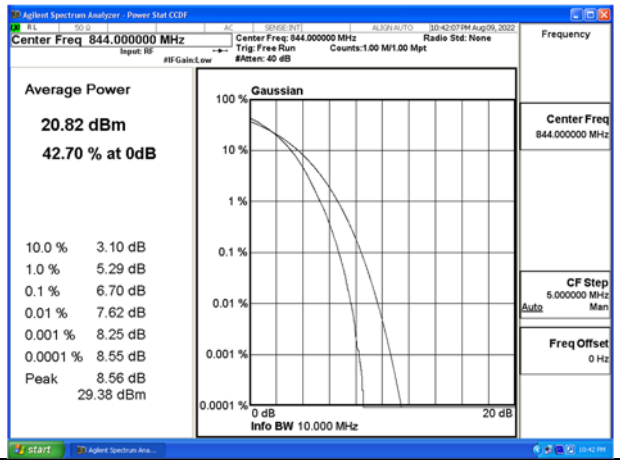

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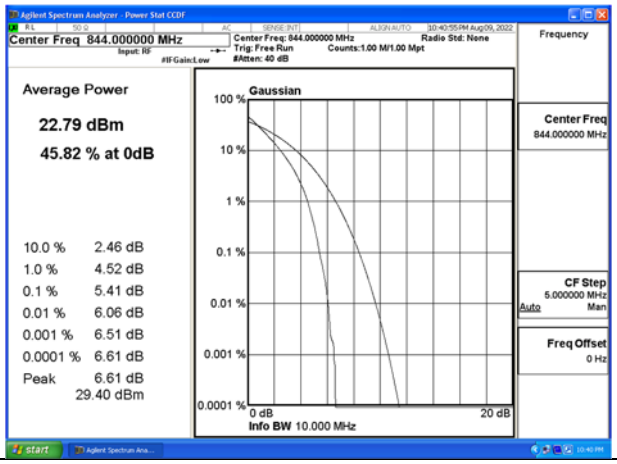
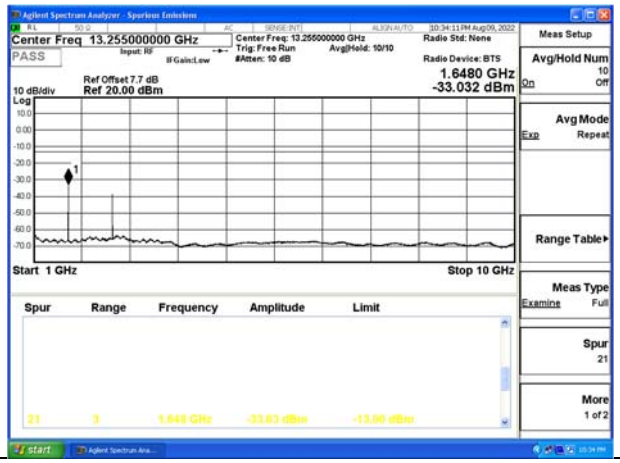


Fig.72

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
5	829	20450	10	1	0	Fig.1
5	836.5	20525	10	1	0	Fig.2
5	844	20600	10	1	0	Fig.3



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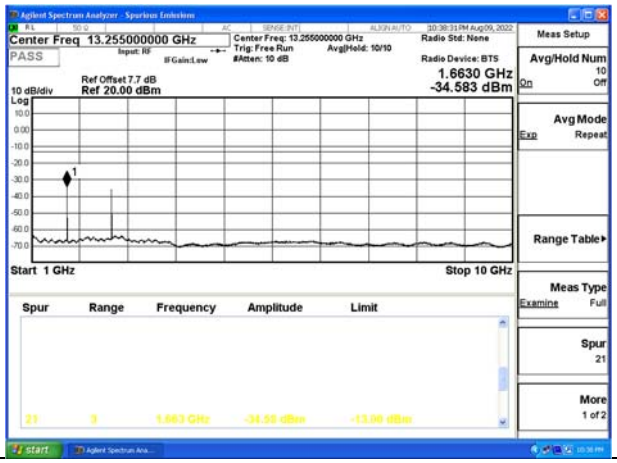

Fig.2

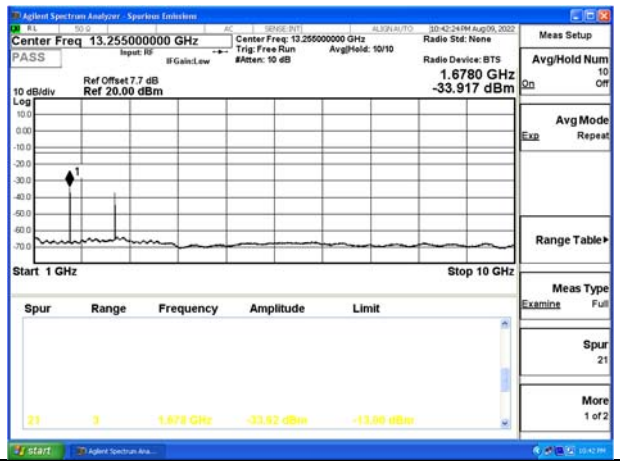

Fig.3

6 Band Edges Compliance

Band	Mode	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
5	QPSK	824.7	20407	1.4	1	0	Fig.1
5	QPSK	824.7	20407	1.4	6	0	Fig.2
5	QPSK	848.3	20643	1.4	1	5	Fig.3
5	QPSK	848.3	20643	1.4	6	0	Fig.4
5	QPSK	825.5	20415	3	1	0	Fig.5
5	QPSK	825.5	20415	3	15	0	Fig.6
5	QPSK	847.5	20635	3	1	14	Fig.7
5	QPSK	847.5	20635	3	15	0	Fig.8
5	QPSK	826.5	20425	5	1	0	Fig.9
5	QPSK	826.5	20425	5	25	0	Fig.10
5	QPSK	846.5	20625	5	1	24	Fig.11
5	QPSK	846.5	20625	5	25	0	Fig.12
5	QPSK	829	20450	10	1	0	Fig.13
5	QPSK	829	20450	10	50	0	Fig.14
5	QPSK	844	20600	10	1	49	Fig.15
5	QPSK	844	20600	10	50	0	Fig.16

Test Mode: QPSK

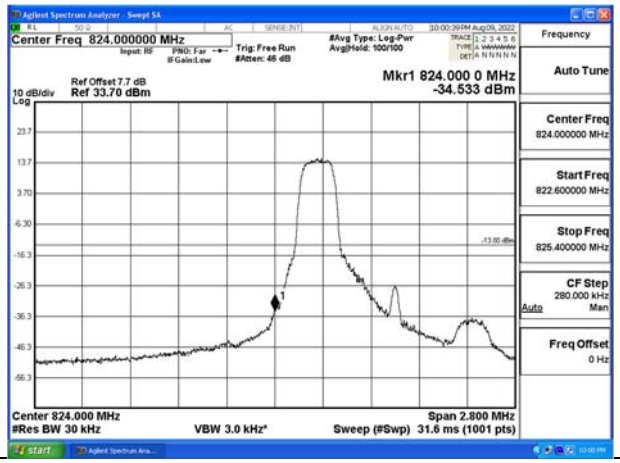

Fig.1

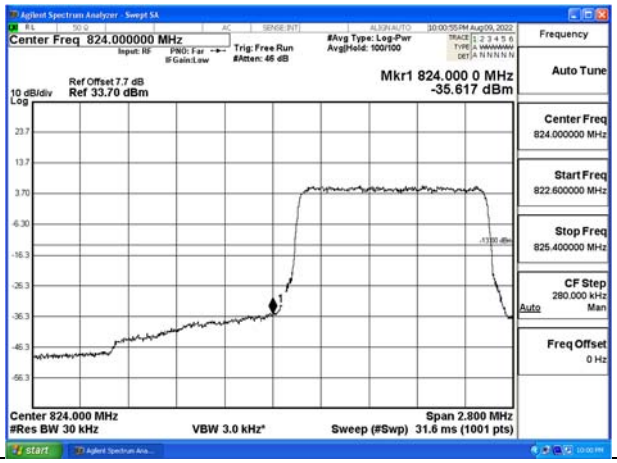

Fig.2

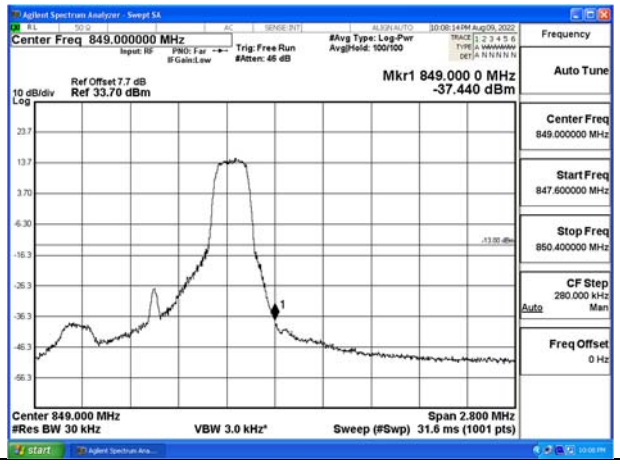

Fig.3

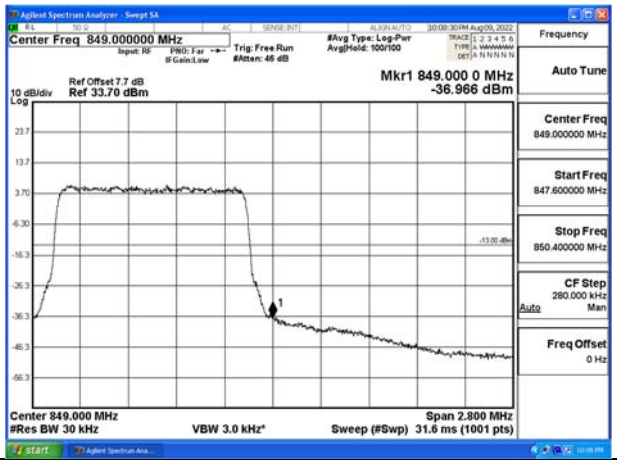

Fig.4

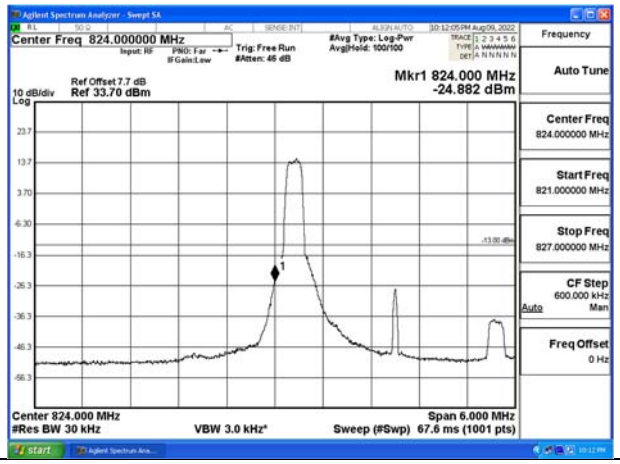

Fig.5

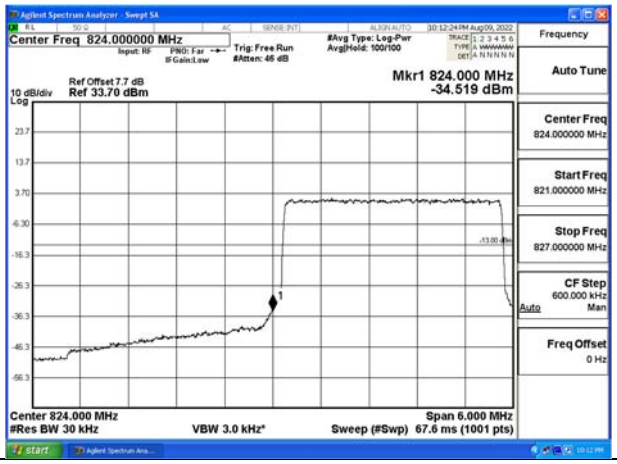

Fig.6

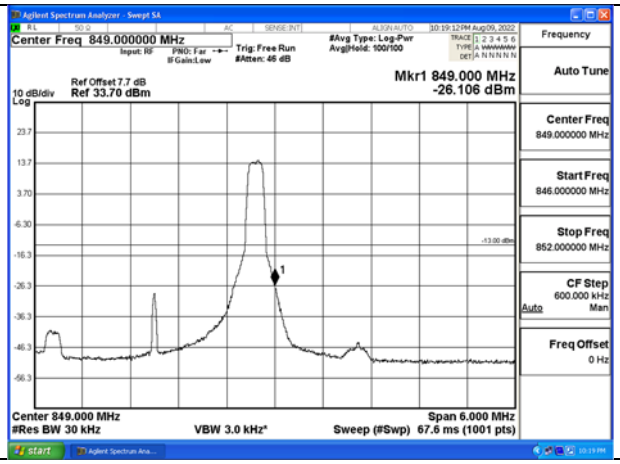

Fig.7

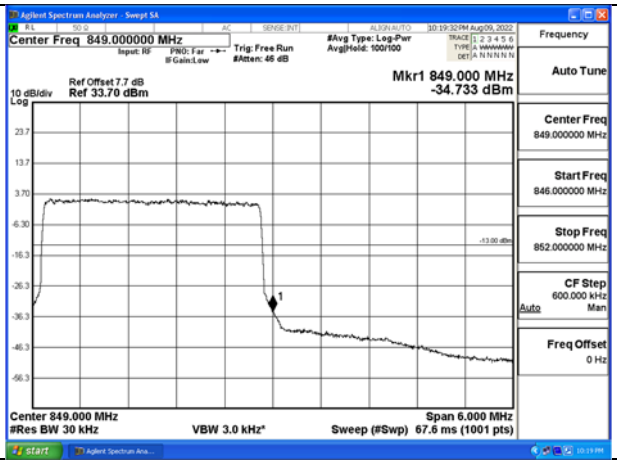

Fig.8

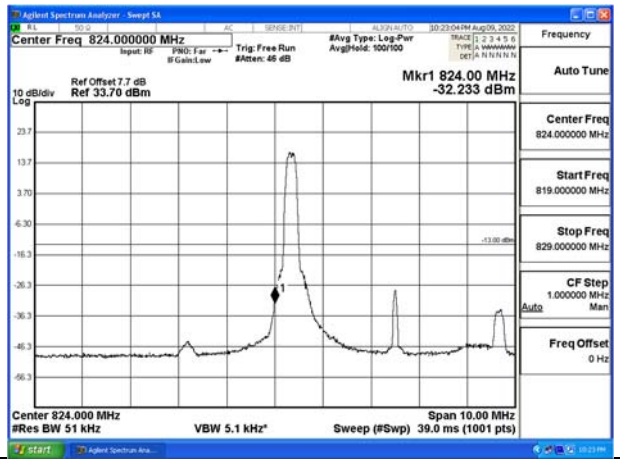

Fig.9

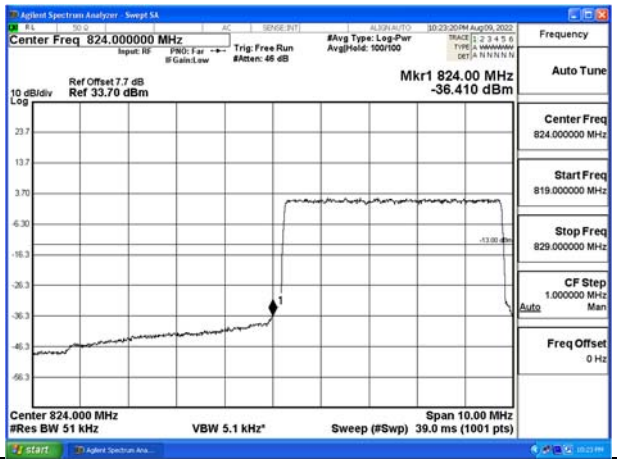

Fig.10

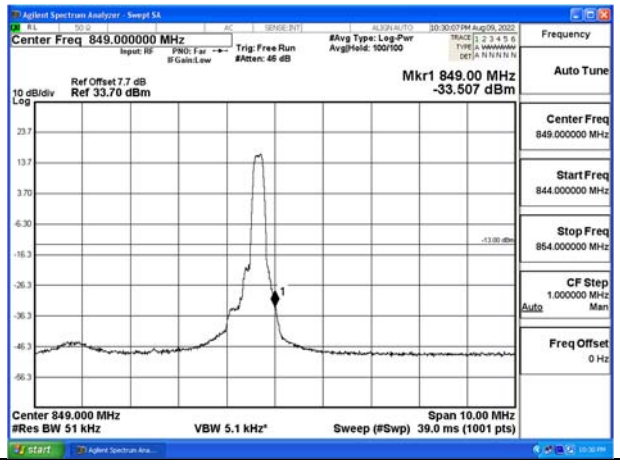

Fig.11

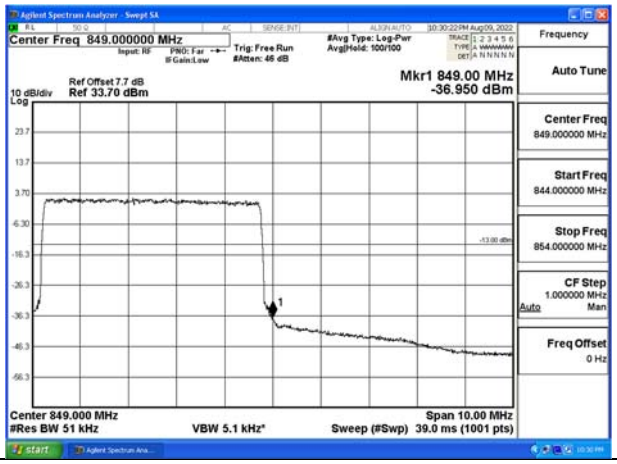

Fig.12

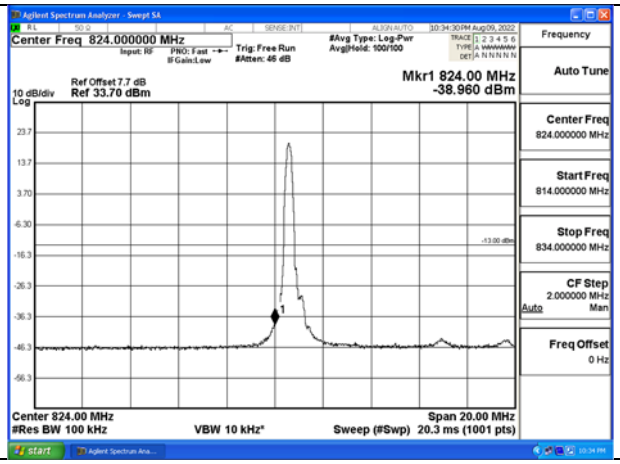

Fig.13

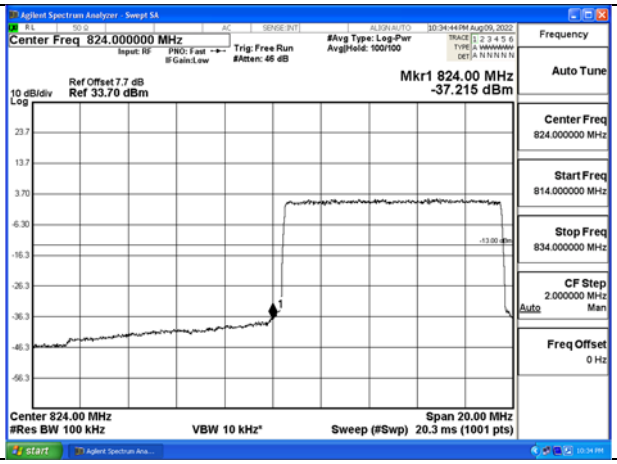

Fig.14

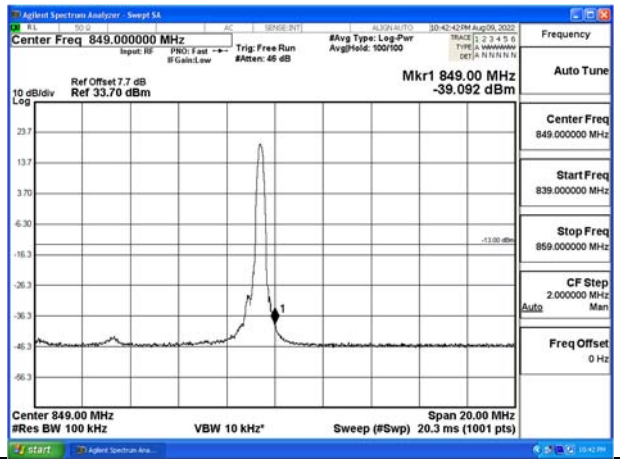

Fig.15

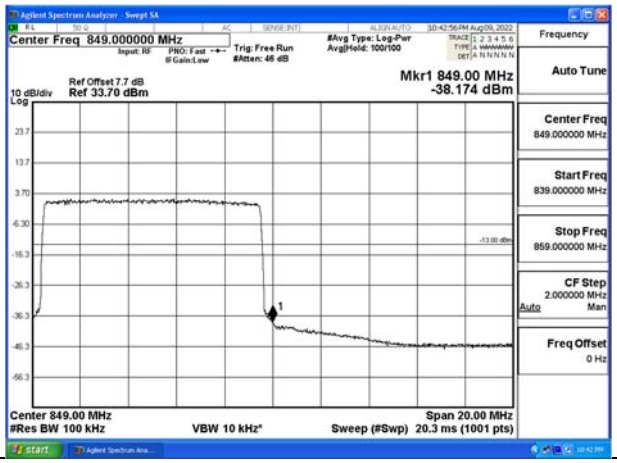

Fig.16

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 5 Low Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	-0.015	0.002	0.004	0.005
0	NV	0.024	0.006	0.003	0.005
+10	NV	-0.019	0.015	0.000	-0.004
+20	NV	-0.018	0.013	-0.001	0.007
+30	NV	0.006	-0.006	0.002	0.005
+40	NV	0.004	0.007	0.005	0.003
+50	NV	0.015	0.003	0.003	-0.007
+55	NV	0.015	0.005	0.003	-0.005
+20	LV	0.020	-0.005	-0.002	-0.008
+20	HV	-0.022	0.012	0.003	0.005

Temperature(°C)	Voltage	Test Result (ppm) Band 5 High Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	0.009	0.007	-0.005	-0.005
0	NV	-0.032	0.014	-0.007	-0.006
+10	NV	0.004	0.005	0.008	-0.007
+20	NV	-0.007	0.007	0.004	-0.005
+30	NV	-0.027	0.004	0.006	0.005
+40	NV	0.012	0.004	0.006	-0.005
+50	NV	0.017	0.003	0.004	0.004
+55	NV	-0.026	0.005	0.007	-0.005
+20	LV	0.012	0.010	0.006	0.005
+20	HV	0.016	0.003	0.006	0.005

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	824.7	20407	1.4	1	0	23.03	15.58	0.036
QPSK	824.7	20407	1.4	1	3	23.01	15.56	0.036
QPSK	824.7	20407	1.4	1	5	23.00	15.55	0.036
QPSK	824.7	20407	1.4	3	0	22.97	15.52	0.036
QPSK	824.7	20407	1.4	3	1	23.00	15.55	0.036
QPSK	824.7	20407	1.4	3	3	22.92	15.47	0.035
QPSK	824.7	20407	1.4	6	0	22.27	14.82	0.030
QPSK	836.5	20525	1.4	1	0	22.96	15.51	0.036
QPSK	836.5	20525	1.4	1	3	23.10	15.65	0.037
QPSK	836.5	20525	1.4	1	5	23.16	15.71	0.037
QPSK	836.5	20525	1.4	3	0	23.22	15.77	0.038
QPSK	836.5	20525	1.4	3	1	23.21	15.76	0.038
QPSK	836.5	20525	1.4	3	3	23.24	15.79	0.038
QPSK	836.5	20525	1.4	6	0	22.18	14.73	0.030
QPSK	848.3	20643	1.4	1	0	23.29	15.84	0.038
QPSK	848.3	20643	1.4	1	3	23.30	15.85	0.038
QPSK	848.3	20643	1.4	1	5	23.33	15.88	0.039
QPSK	848.3	20643	1.4	3	0	23.28	15.83	0.038
QPSK	848.3	20643	1.4	3	1	23.28	15.83	0.038
QPSK	848.3	20643	1.4	3	3	23.38	15.93	0.039
QPSK	848.3	20643	1.4	6	0	22.30	14.85	0.031

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	824.7	20407	1.4	1	0	22.85	15.40	0.035
16QAM	824.7	20407	1.4	1	3	22.16	14.71	0.030
16QAM	824.7	20407	1.4	1	5	22.55	15.10	0.032
16QAM	824.7	20407	1.4	3	0	22.16	14.71	0.030
16QAM	824.7	20407	1.4	3	1	22.18	14.73	0.030
16QAM	824.7	20407	1.4	3	3	21.94	14.49	0.028
16QAM	824.7	20407	1.4	6	0	21.09	13.64	0.023
16QAM	836.5	20525	1.4	1	0	22.20	14.75	0.030
16QAM	836.5	20525	1.4	1	3	22.40	14.95	0.031
16QAM	836.5	20525	1.4	1	5	22.86	15.41	0.035
16QAM	836.5	20525	1.4	3	0	22.27	14.82	0.030
16QAM	836.5	20525	1.4	3	1	22.39	14.94	0.031
16QAM	836.5	20525	1.4	3	3	22.16	14.71	0.030
16QAM	836.5	20525	1.4	6	0	21.02	13.57	0.023
16QAM	848.3	20643	1.4	1	0	22.54	15.09	0.032
16QAM	848.3	20643	1.4	1	3	22.74	15.29	0.034
16QAM	848.3	20643	1.4	1	5	22.31	14.86	0.031
16QAM	848.3	20643	1.4	3	0	22.61	15.16	0.033
16QAM	848.3	20643	1.4	3	1	22.35	14.90	0.031
16QAM	848.3	20643	1.4	3	3	22.33	14.88	0.031
16QAM	848.3	20643	1.4	6	0	21.53	14.08	0.026
64QAM	824.7	20407	1.4	1	0	21.55	14.10	0.026
64QAM	824.7	20407	1.4	1	3	20.94	13.49	0.022
64QAM	824.7	20407	1.4	1	5	21.47	14.02	0.025
64QAM	824.7	20407	1.4	3	0	21.39	13.94	0.025
64QAM	824.7	20407	1.4	3	1	21.34	13.89	0.024
64QAM	824.7	20407	1.4	3	3	21.24	13.79	0.024
64QAM	824.7	20407	1.4	6	0	20.11	12.66	0.018
64QAM	836.5	20525	1.4	1	0	21.69	14.24	0.027
64QAM	836.5	20525	1.4	1	3	21.49	14.04	0.025
64QAM	836.5	20525	1.4	1	5	21.49	14.04	0.025
64QAM	836.5	20525	1.4	3	0	21.45	14.00	0.025
64QAM	836.5	20525	1.4	3	1	21.17	13.72	0.024
64QAM	836.5	20525	1.4	3	3	21.62	14.17	0.026
64QAM	836.5	20525	1.4	6	0	20.28	12.83	0.019
64QAM	848.3	20643	1.4	1	0	21.41	13.96	0.025
64QAM	848.3	20643	1.4	1	3	21.60	14.15	0.026
64QAM	848.3	20643	1.4	1	5	21.92	14.47	0.028
64QAM	848.3	20643	1.4	3	0	21.61	14.16	0.026
64QAM	848.3	20643	1.4	3	1	21.38	13.93	0.025
64QAM	848.3	20643	1.4	3	3	21.72	14.27	0.027
64QAM	848.3	20643	1.4	6	0	20.28	12.83	0.019

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	825.5	20415	3	1	0	23.06	15.61	0.036
QPSK	825.5	20415	3	1	8	23.04	15.59	0.036
QPSK	825.5	20415	3	1	14	23.25	15.80	0.038
QPSK	825.5	20415	3	8	0	22.15	14.70	0.030
QPSK	825.5	20415	3	8	4	22.19	14.74	0.030
QPSK	825.5	20415	3	8	7	22.17	14.72	0.030
QPSK	825.5	20415	3	15	0	22.20	14.75	0.030
QPSK	836.5	20525	3	1	0	23.30	15.85	0.038
QPSK	836.5	20525	3	1	8	23.25	15.80	0.038
QPSK	836.5	20525	3	1	14	23.21	15.76	0.038
QPSK	836.5	20525	3	8	0	22.26	14.81	0.030
QPSK	836.5	20525	3	8	4	22.29	14.84	0.030
QPSK	836.5	20525	3	8	7	22.39	14.94	0.031
QPSK	836.5	20525	3	15	0	22.27	14.82	0.030
QPSK	847.5	20635	3	1	0	23.30	15.85	0.038
QPSK	847.5	20635	3	1	8	23.52	16.07	0.040
QPSK	847.5	20635	3	1	14	23.53	16.08	0.041
QPSK	847.5	20635	3	8	0	22.35	14.90	0.031
QPSK	847.5	20635	3	8	4	22.42	14.97	0.031
QPSK	847.5	20635	3	8	7	22.32	14.87	0.031
QPSK	847.5	20635	3	15	0	22.51	15.06	0.032

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	825.5	20415	3	1	0	22.36	14.91	0.031
16QAM	825.5	20415	3	1	8	22.37	14.92	0.031
16QAM	825.5	20415	3	1	14	22.03	14.58	0.029
16QAM	825.5	20415	3	8	0	21.25	13.80	0.024
16QAM	825.5	20415	3	8	4	21.25	13.80	0.024
16QAM	825.5	20415	3	8	7	21.12	13.67	0.023
16QAM	825.5	20415	3	15	0	21.22	13.77	0.024
16QAM	836.5	20525	3	1	0	22.48	15.03	0.032
16QAM	836.5	20525	3	1	8	22.51	15.06	0.032
16QAM	836.5	20525	3	1	14	22.67	15.22	0.033
16QAM	836.5	20525	3	8	0	21.23	13.78	0.024
16QAM	836.5	20525	3	8	4	21.39	13.94	0.025
16QAM	836.5	20525	3	8	7	21.40	13.95	0.025
16QAM	836.5	20525	3	15	0	21.35	13.90	0.025
16QAM	847.5	20635	3	1	0	22.69	15.24	0.033
16QAM	847.5	20635	3	1	8	23.09	15.64	0.037
16QAM	847.5	20635	3	1	14	22.43	14.98	0.031
16QAM	847.5	20635	3	8	0	21.29	13.84	0.024
16QAM	847.5	20635	3	8	4	21.61	14.16	0.026
16QAM	847.5	20635	3	8	7	21.34	13.89	0.024
16QAM	847.5	20635	3	15	0	21.48	14.03	0.025
64QAM	825.5	20415	3	1	0	21.19	13.74	0.024
64QAM	825.5	20415	3	1	8	21.57	14.12	0.026
64QAM	825.5	20415	3	1	14	21.62	14.17	0.026
64QAM	825.5	20415	3	8	0	20.11	12.66	0.018
64QAM	825.5	20415	3	8	4	20.15	12.70	0.019
64QAM	825.5	20415	3	8	7	20.07	12.62	0.018
64QAM	825.5	20415	3	15	0	20.23	12.78	0.019
64QAM	836.5	20525	3	1	0	21.54	14.09	0.026
64QAM	836.5	20525	3	1	8	21.20	13.75	0.024
64QAM	836.5	20525	3	1	14	21.90	14.45	0.028
64QAM	836.5	20525	3	8	0	20.25	12.80	0.019
64QAM	836.5	20525	3	8	4	20.47	13.02	0.020
64QAM	836.5	20525	3	8	7	20.26	12.81	0.019
64QAM	836.5	20525	3	15	0	20.34	12.89	0.019
64QAM	847.5	20635	3	1	0	21.57	14.12	0.026
64QAM	847.5	20635	3	1	8	21.85	14.40	0.028
64QAM	847.5	20635	3	1	14	21.79	14.34	0.027
64QAM	847.5	20635	3	8	0	20.57	13.12	0.021
64QAM	847.5	20635	3	8	4	20.62	13.17	0.021
64QAM	847.5	20635	3	8	7	20.32	12.87	0.019
64QAM	847.5	20635	3	15	0	20.36	12.91	0.020

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	826.5	20425	5	1	0	23.07	15.62	0.036
QPSK	826.5	20425	5	1	12	23.15	15.70	0.037
QPSK	826.5	20425	5	1	24	23.10	15.65	0.037
QPSK	826.5	20425	5	12	0	22.23	14.78	0.030
QPSK	826.5	20425	5	12	7	22.13	14.68	0.029
QPSK	826.5	20425	5	12	13	22.17	14.72	0.030
QPSK	826.5	20425	5	25	0	22.19	14.74	0.030
QPSK	836.5	20525	5	1	0	23.45	16.00	0.040
QPSK	836.5	20525	5	1	12	23.25	15.80	0.038
QPSK	836.5	20525	5	1	24	23.50	16.05	0.040
QPSK	836.5	20525	5	12	0	22.33	14.88	0.031
QPSK	836.5	20525	5	12	7	22.33	14.88	0.031
QPSK	836.5	20525	5	12	13	22.46	15.01	0.032
QPSK	836.5	20525	5	25	0	22.30	14.85	0.031
QPSK	846.5	20625	5	1	0	23.33	15.88	0.039
QPSK	846.5	20625	5	1	12	23.80	16.35	0.043
QPSK	846.5	20625	5	1	24	23.44	15.99	0.040
QPSK	846.5	20625	5	12	0	22.32	14.87	0.031
QPSK	846.5	20625	5	12	7	22.37	14.92	0.031
QPSK	846.5	20625	5	12	13	22.45	15.00	0.032
QPSK	846.5	20625	5	25	0	22.35	14.90	0.031

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	826.5	20425	5	1	0	22.21	14.76	0.030
16QAM	826.5	20425	5	1	12	22.55	15.10	0.032
16QAM	826.5	20425	5	1	24	22.53	15.08	0.032
16QAM	826.5	20425	5	12	0	21.15	13.70	0.023
16QAM	826.5	20425	5	12	7	21.13	13.68	0.023
16QAM	826.5	20425	5	12	13	21.18	13.73	0.024
16QAM	826.5	20425	5	25	0	21.22	13.77	0.024
16QAM	836.5	20525	5	1	0	22.90	15.45	0.035
16QAM	836.5	20525	5	1	12	22.97	15.52	0.036
16QAM	836.5	20525	5	1	24	23.09	15.64	0.037
16QAM	836.5	20525	5	12	0	21.41	13.96	0.025
16QAM	836.5	20525	5	12	7	21.25	13.80	0.024
16QAM	836.5	20525	5	12	13	21.51	14.06	0.025
16QAM	836.5	20525	5	25	0	21.37	13.92	0.025
16QAM	846.5	20625	5	1	0	22.27	14.82	0.030
16QAM	846.5	20625	5	1	12	22.85	15.40	0.035
16QAM	846.5	20625	5	1	24	22.67	15.22	0.033
16QAM	846.5	20625	5	12	0	21.50	14.05	0.025
16QAM	846.5	20625	5	12	7	21.32	13.87	0.024
16QAM	846.5	20625	5	12	13	21.52	14.07	0.026
16QAM	846.5	20625	5	25	0	21.38	13.93	0.025
64QAM	826.5	20425	5	1	0	21.12	13.67	0.023
64QAM	826.5	20425	5	1	12	21.30	13.85	0.024
64QAM	826.5	20425	5	1	24	21.29	13.84	0.024
64QAM	826.5	20425	5	12	0	20.33	12.88	0.019
64QAM	826.5	20425	5	12	7	20.19	12.74	0.019
64QAM	826.5	20425	5	12	13	20.27	12.82	0.019
64QAM	826.5	20425	5	25	0	20.14	12.69	0.019
64QAM	836.5	20525	5	1	0	21.39	13.94	0.025
64QAM	836.5	20525	5	1	12	21.61	14.16	0.026
64QAM	836.5	20525	5	1	24	21.56	14.11	0.026
64QAM	836.5	20525	5	12	0	20.48	13.03	0.020
64QAM	836.5	20525	5	12	7	20.38	12.93	0.020
64QAM	836.5	20525	5	12	13	20.38	12.93	0.020
64QAM	836.5	20525	5	25	0	20.31	12.86	0.019
64QAM	846.5	20625	5	1	0	21.35	13.90	0.025
64QAM	846.5	20625	5	1	12	21.59	14.14	0.026
64QAM	846.5	20625	5	1	24	21.32	13.87	0.024
64QAM	846.5	20625	5	12	0	20.33	12.88	0.019
64QAM	846.5	20625	5	12	7	20.46	13.01	0.020
64QAM	846.5	20625	5	12	13	20.24	12.79	0.019
64QAM	846.5	20625	5	25	0	20.33	12.88	0.019

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	829	20450	10	1	0	23.00	15.55	0.036
QPSK	829	20450	10	1	25	23.08	15.63	0.037
QPSK	829	20450	10	1	49	23.11	15.66	0.037
QPSK	829	20450	10	25	0	22.21	14.76	0.030
QPSK	829	20450	10	25	12	22.25	14.80	0.030
QPSK	829	20450	10	25	25	22.34	14.89	0.031
QPSK	829	20450	10	50	0	22.20	14.75	0.030
QPSK	836.5	20525	10	1	0	23.10	15.65	0.037
QPSK	836.5	20525	10	1	25	23.09	15.64	0.037
QPSK	836.5	20525	10	1	49	23.38	15.93	0.039
QPSK	836.5	20525	10	25	0	22.36	14.91	0.031
QPSK	836.5	20525	10	25	12	22.35	14.90	0.031
QPSK	836.5	20525	10	25	25	22.41	14.96	0.031
QPSK	836.5	20525	10	50	0	22.31	14.86	0.031
QPSK	844	20600	10	1	0	23.14	15.69	0.037
QPSK	844	20600	10	1	25	23.18	15.73	0.037
QPSK	844	20600	10	1	49	23.25	15.80	0.038
QPSK	844	20600	10	25	0	22.37	14.92	0.031
QPSK	844	20600	10	25	12	22.36	14.91	0.031
QPSK	844	20600	10	25	25	22.52	15.07	0.032
QPSK	844	20600	10	50	0	22.29	14.84	0.030

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	829	20450	10	1	0	22.27	14.82	0.030
16QAM	829	20450	10	1	25	22.22	14.77	0.030
16QAM	829	20450	10	1	49	22.14	14.69	0.029
16QAM	829	20450	10	25	0	21.27	13.82	0.024
16QAM	829	20450	10	25	12	21.20	13.75	0.024
16QAM	829	20450	10	25	25	21.32	13.87	0.024
16QAM	829	20450	10	50	0	21.30	13.85	0.024
16QAM	836.5	20525	10	1	0	22.02	14.57	0.029
16QAM	836.5	20525	10	1	25	22.88	15.43	0.035
16QAM	836.5	20525	10	1	49	22.25	14.80	0.030
16QAM	836.5	20525	10	25	0	21.38	13.93	0.025
16QAM	836.5	20525	10	25	12	21.43	13.98	0.025
16QAM	836.5	20525	10	25	25	21.54	14.09	0.026
16QAM	836.5	20525	10	50	0	21.36	13.91	0.025
16QAM	844	20600	10	1	0	22.52	15.07	0.032
16QAM	844	20600	10	1	25	22.31	14.86	0.031
16QAM	844	20600	10	1	49	22.48	15.03	0.032
16QAM	844	20600	10	25	0	21.43	13.98	0.025
16QAM	844	20600	10	25	12	21.41	13.96	0.025
16QAM	844	20600	10	25	25	21.36	13.91	0.025
16QAM	844	20600	10	50	0	21.40	13.95	0.025
64QAM	829	20450	10	1	0	21.36	13.91	0.025
64QAM	829	20450	10	1	25	21.15	13.70	0.023
64QAM	829	20450	10	1	49	21.38	13.93	0.025
64QAM	829	20450	10	25	0	20.23	12.78	0.019
64QAM	829	20450	10	25	12	20.28	12.83	0.019
64QAM	829	20450	10	25	25	20.28	12.83	0.019
64QAM	829	20450	10	50	0	20.28	12.83	0.019
64QAM	836.5	20525	10	1	0	21.06	13.61	0.023
64QAM	836.5	20525	10	1	25	21.41	13.96	0.025
64QAM	836.5	20525	10	1	49	21.69	14.24	0.027
64QAM	836.5	20525	10	25	0	20.34	12.89	0.019
64QAM	836.5	20525	10	25	12	20.32	12.87	0.019
64QAM	836.5	20525	10	25	25	20.78	13.33	0.022
64QAM	836.5	20525	10	50	0	20.40	12.95	0.020
64QAM	844	20600	10	1	0	21.69	14.24	0.027
64QAM	844	20600	10	1	25	21.70	14.25	0.027
64QAM	844	20600	10	1	49	21.32	13.87	0.024
64QAM	844	20600	10	25	0	20.45	13.00	0.020
64QAM	844	20600	10	25	12	20.44	12.99	0.020
64QAM	844	20600	10	25	25	20.50	13.05	0.020
64QAM	844	20600	10	50	0	20.24	12.79	0.019