

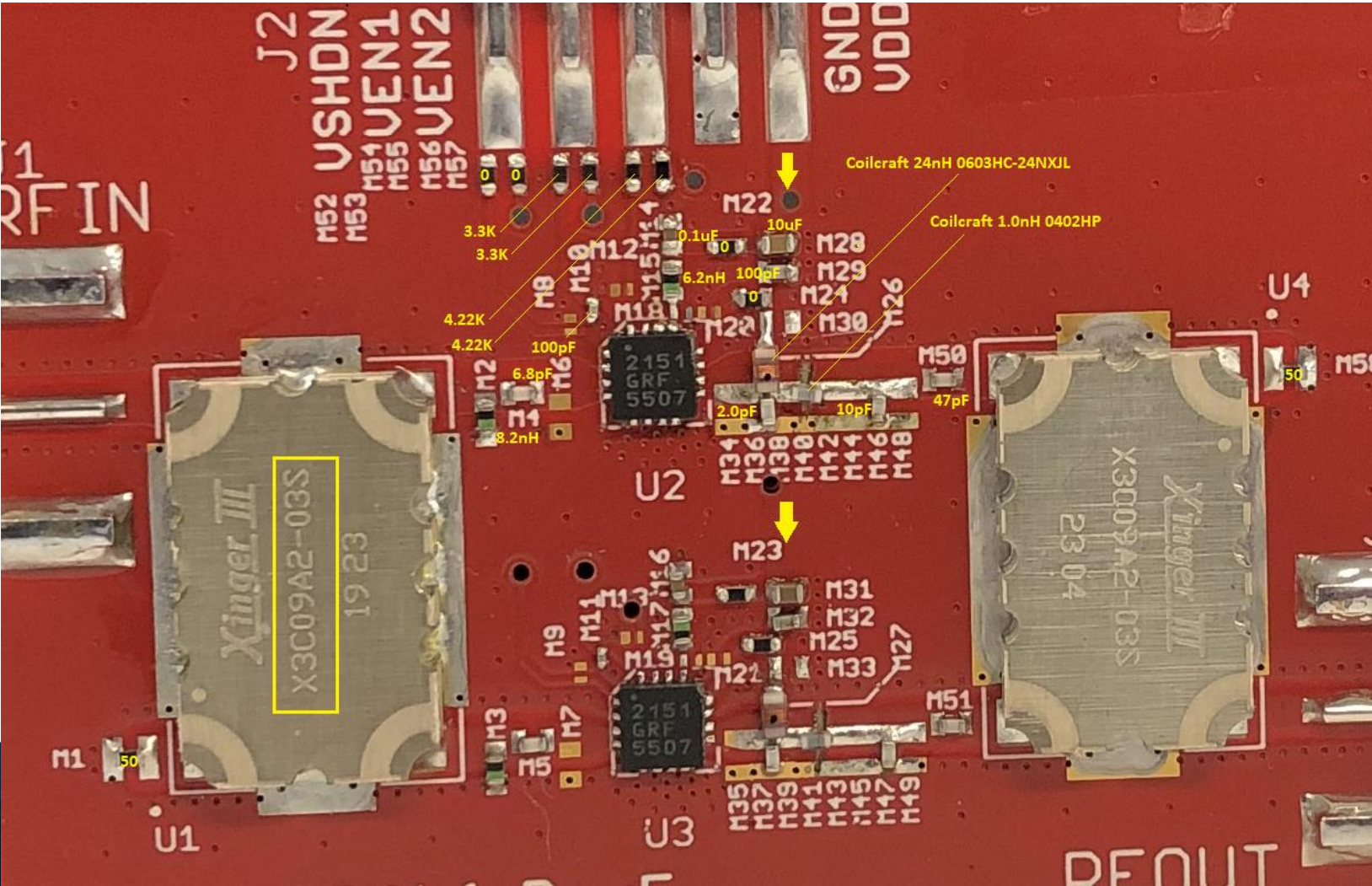


GRF5507x2 (Hybrid Coupled) 699-849 MHz

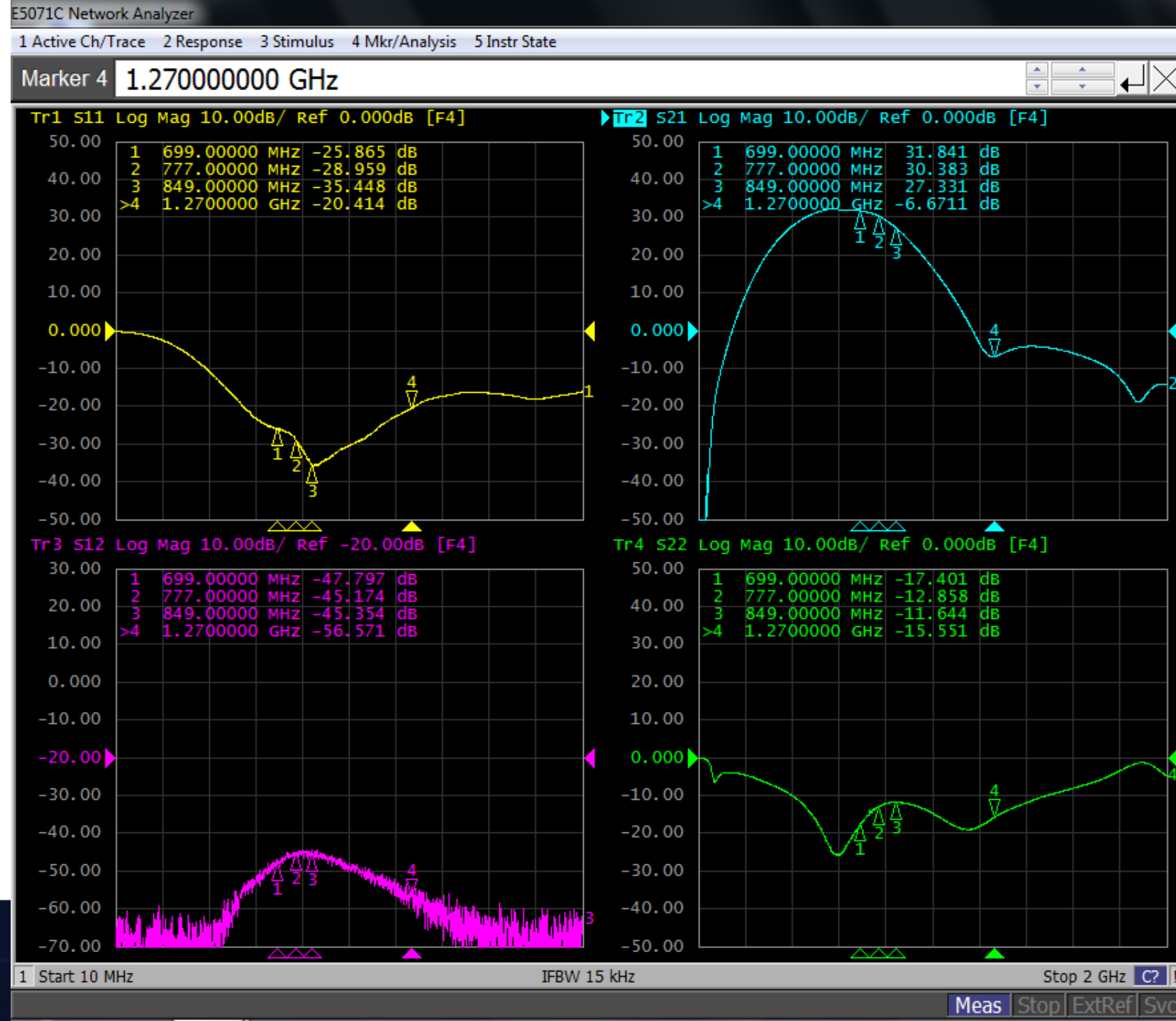
12/21/22

Schematic: GRF5507 combined to obtain -45dBc ACLR @ Pout > 26dBm (LTE TM1.1) vs. temperature while covering 699-849 MHz = 19% bandwidth (BW). Thus, we achieve GRF560X performance over extended BW.

GRF5507	Vcc V	Ven1 V	Ven2 V	Vshdn V	Iddq stage1 (Q1) mA	Iddq stage2 (Q2) mA	Iddq Q1 + Q2 mA
#1	5	5	5	0	67	104	171
#2	5	5	5	0	67	104	171
Combined	---	---	---	---	134	208	342



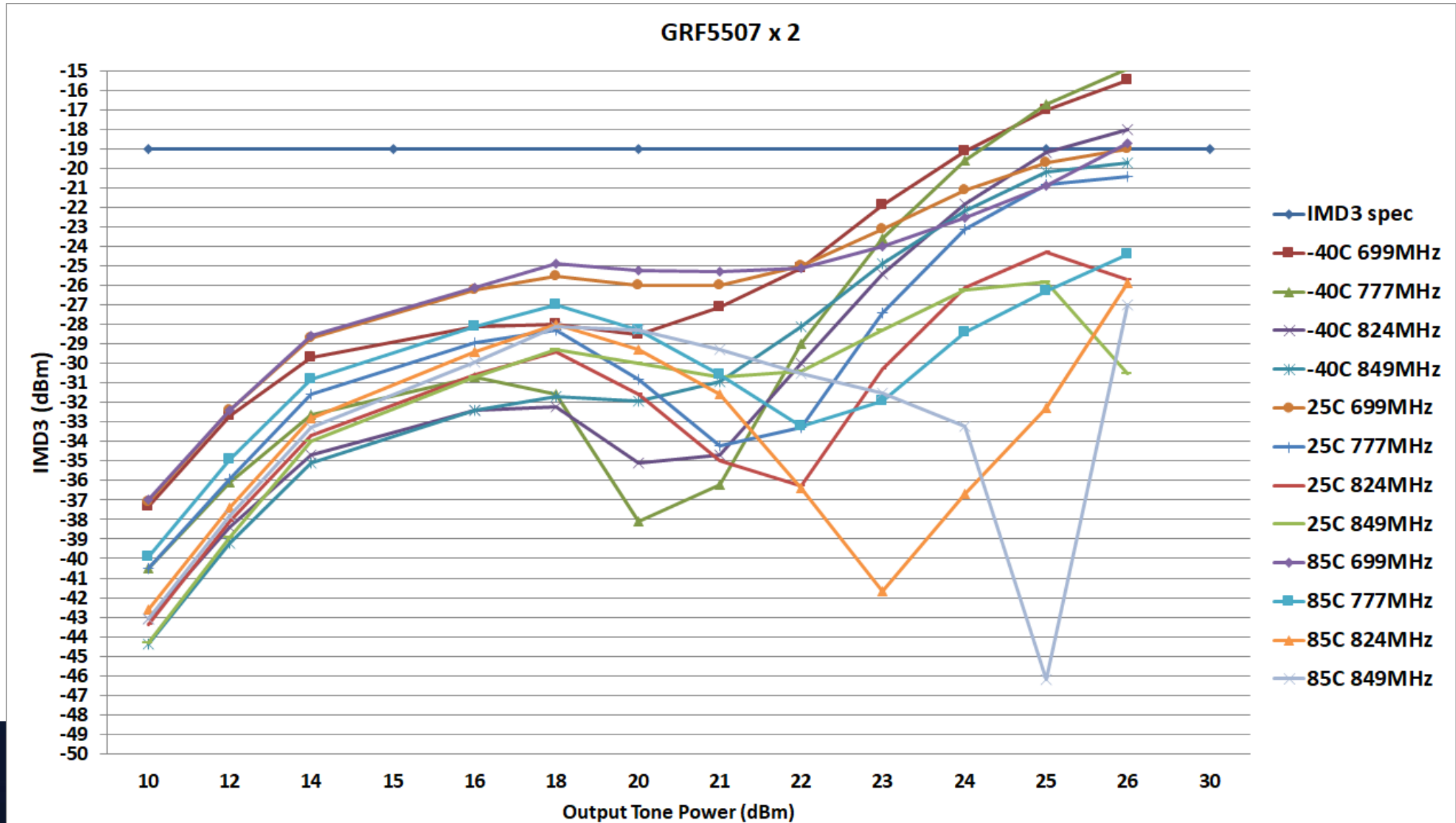
Response:



Standard Data:

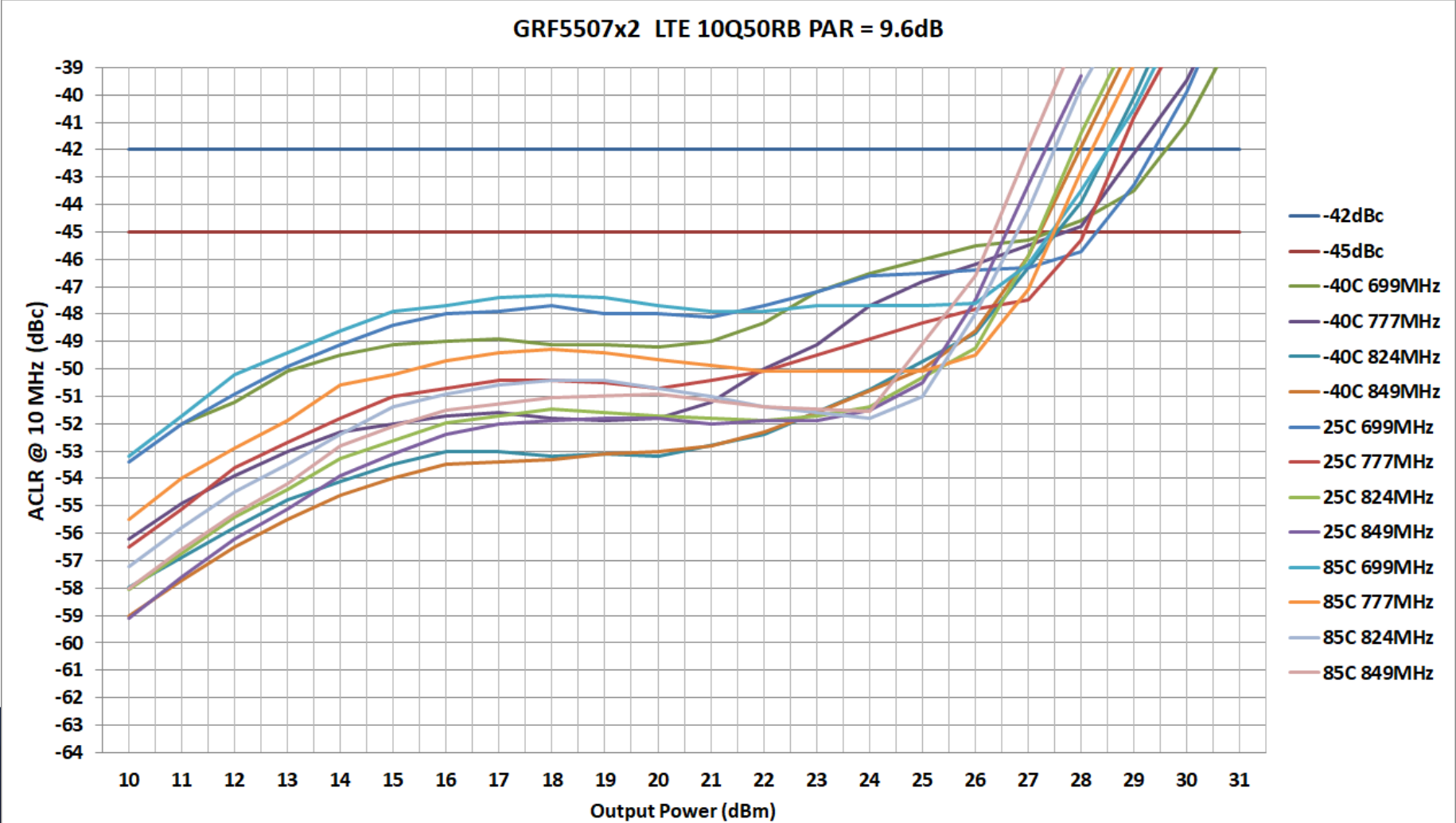
Temp Deg C	Freq MHz	Vcc V	Ven1 V	Ven2 V	Vshdn V	Iccq mA	Pout/Ptone dBm	gain dB	tone spacing MHz	OIP3 dBm	IMD3 dBm	OP1dB dBm	Eff %	EVB NF dB
-40	699	5	5	5	0	308.9	25	32.7	0.6	46	-16.9	37.9	54.1	x
-40	777	5	5	5	0	308.9	25	31.2	0.6	46	-16.6	37.2	50.2	x
-40	824	5	5	5	0	308.9	25	29.4	0.6	47.4	-19.2	36.1	47.7	x
-40	849	5	5	5	0	308.9	25	28	0.6	47.8	-20.3	35.7	47.4	x
25	699	5	5	5	0	342.9	25	31.7	0.6	47	-19.4	36.5	50.2	4.6
25	777	5	5	5	0	342.9	25	30.2	0.6	47.7	-20.4	36.1	45.8	4
25	824	5	5	5	0	342.9	25	28.4	0.6	49.8	-23.9	35.4	43.5	4
25	849	5	5	5	0	342.9	25	27.1	0.6	50.3	-25.6	34.9	41.7	4
85	699	5	5	5	0	348.3	25	31.1	0.6	47.8	-21	34.8	42.8	x
85	777	5	5	5	0	348.3	25	29.6	0.6	50.2	-25.7	35.1	42.8	x
85	824	5	5	5	0	348.3	25	27.8	0.6	53.6	-31.9	34.8	40.5	x
85	849	5	5	5	0	348.3	25	26.5	0.6	57.5	-40.1	34.4	39	x

IMD3: "Output Tone Power" = that for single tone. Composite power = Output Tone Power x 2.

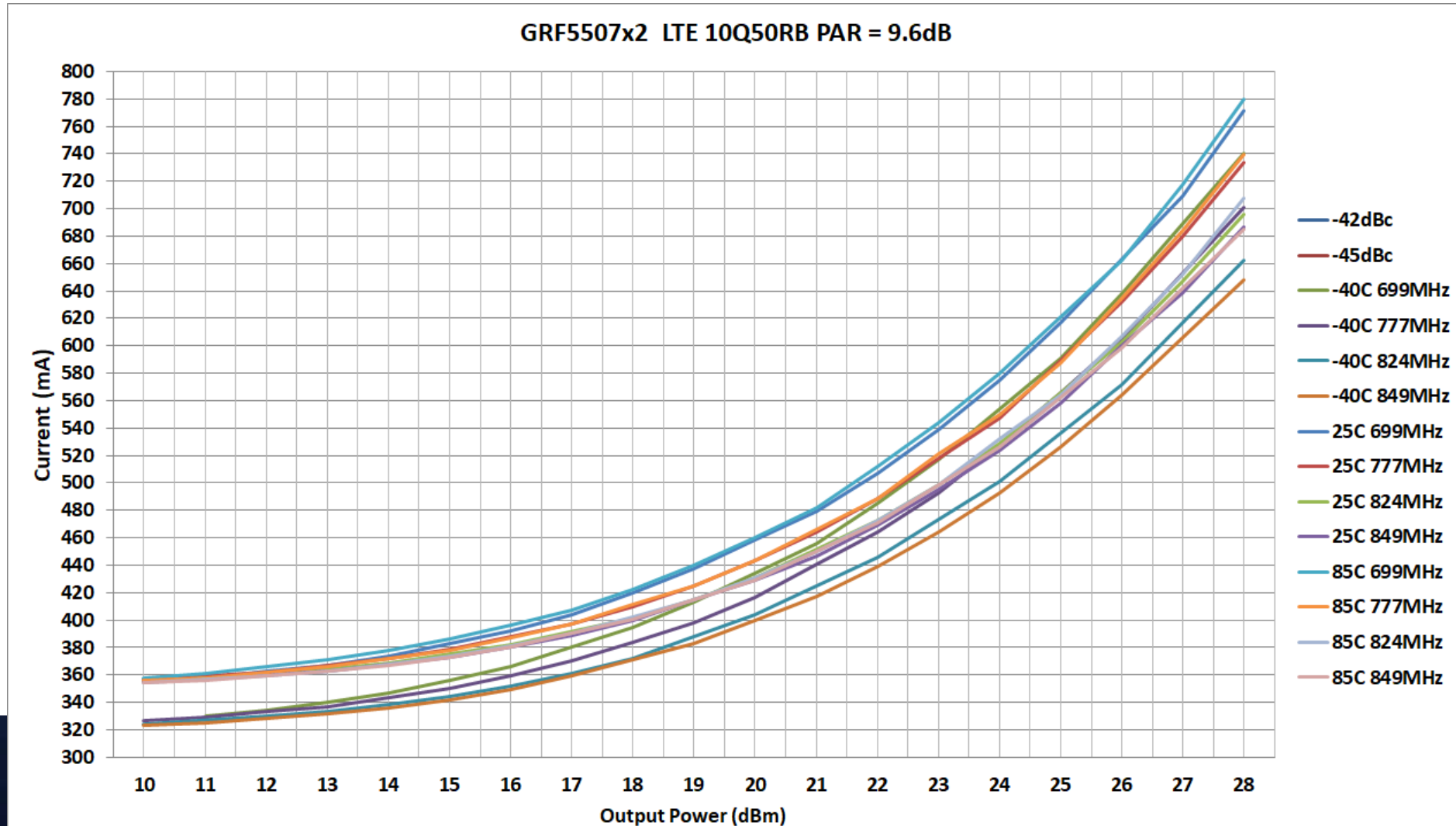


LTE 10Q50RB TM1.1 (PAR = 9.6dB) ACLR:

-42dBc Power (dBm)	-45dBc Power (dBm)
27	26.4



LTE Current:





Contact Us

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