

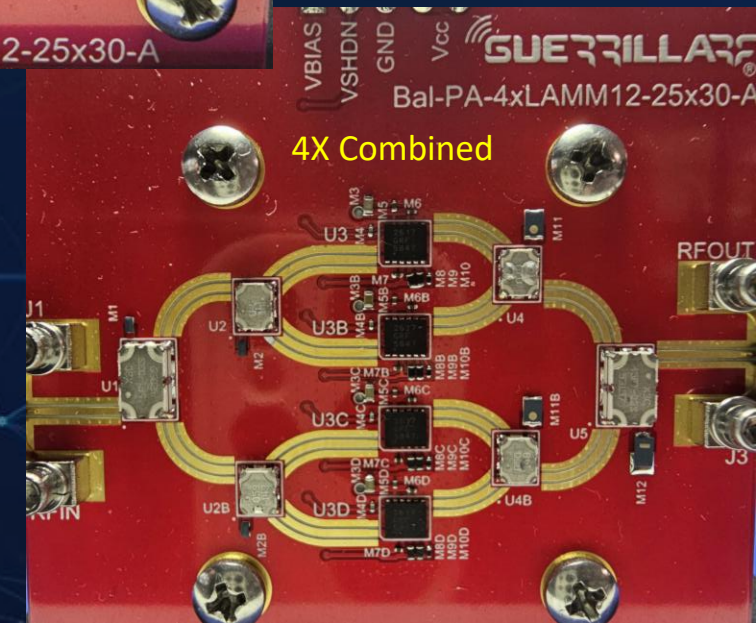
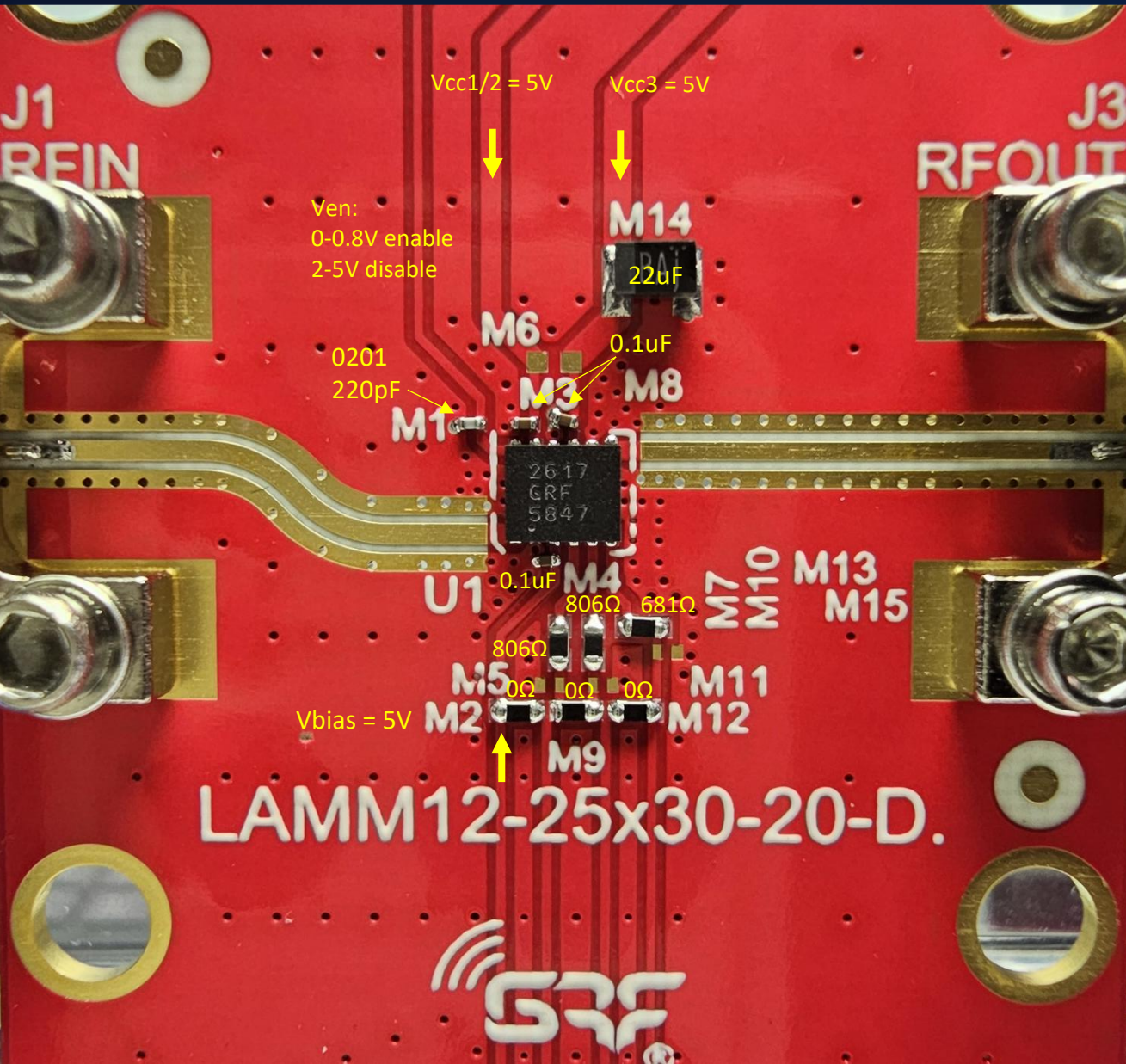


GRF5847B 4400-5200MHz

Hybrid Combined Comparison

SEPTEMBER 22, 2026

GRF5847B 4400-5200MHz 5V BOM



GRF5847B

2x combined evaluation board assembly

EVB: Bal-PA-2xLMM12-25x30-A
Heatsink: HS-A-F-1p2x1p2in-4-B

U1, U3: TTM/XINGER X4C45K1-03S
U2, 2B: GRF5847B

M1: TTM C05N50Z4

M2, 2B: 10 μ F 0402

M3, 3B: 220pF, 0201

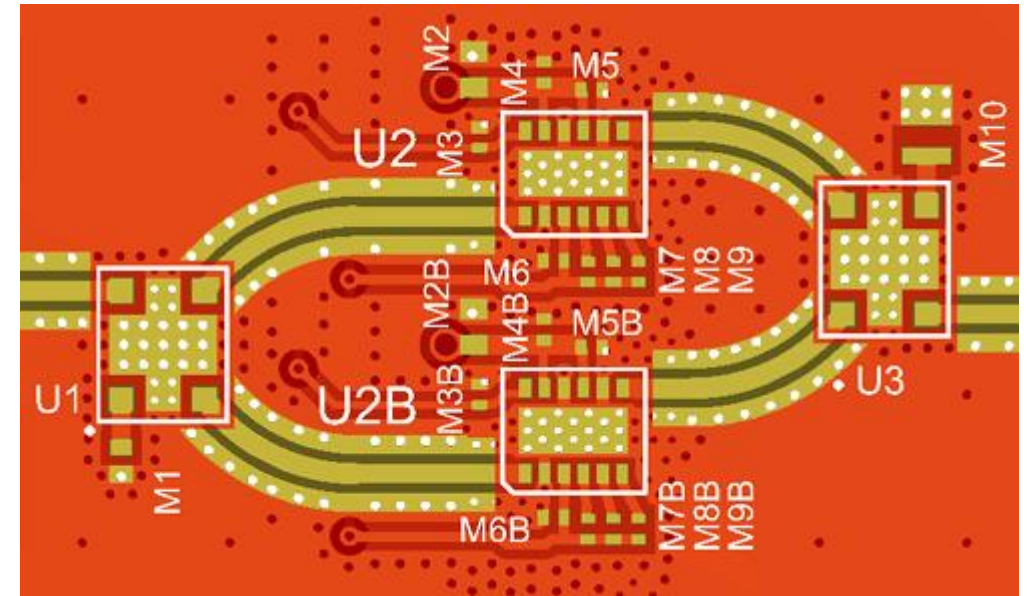
M4, 5, 6, 4B, 5B, 6B: 0.1 μ F 0201

M7, 7B: 806 Ω , 1% 0201

M8, 8B: 806 Ω , 1% 0201

M9, 9B: 681 Ω , 1% 0201

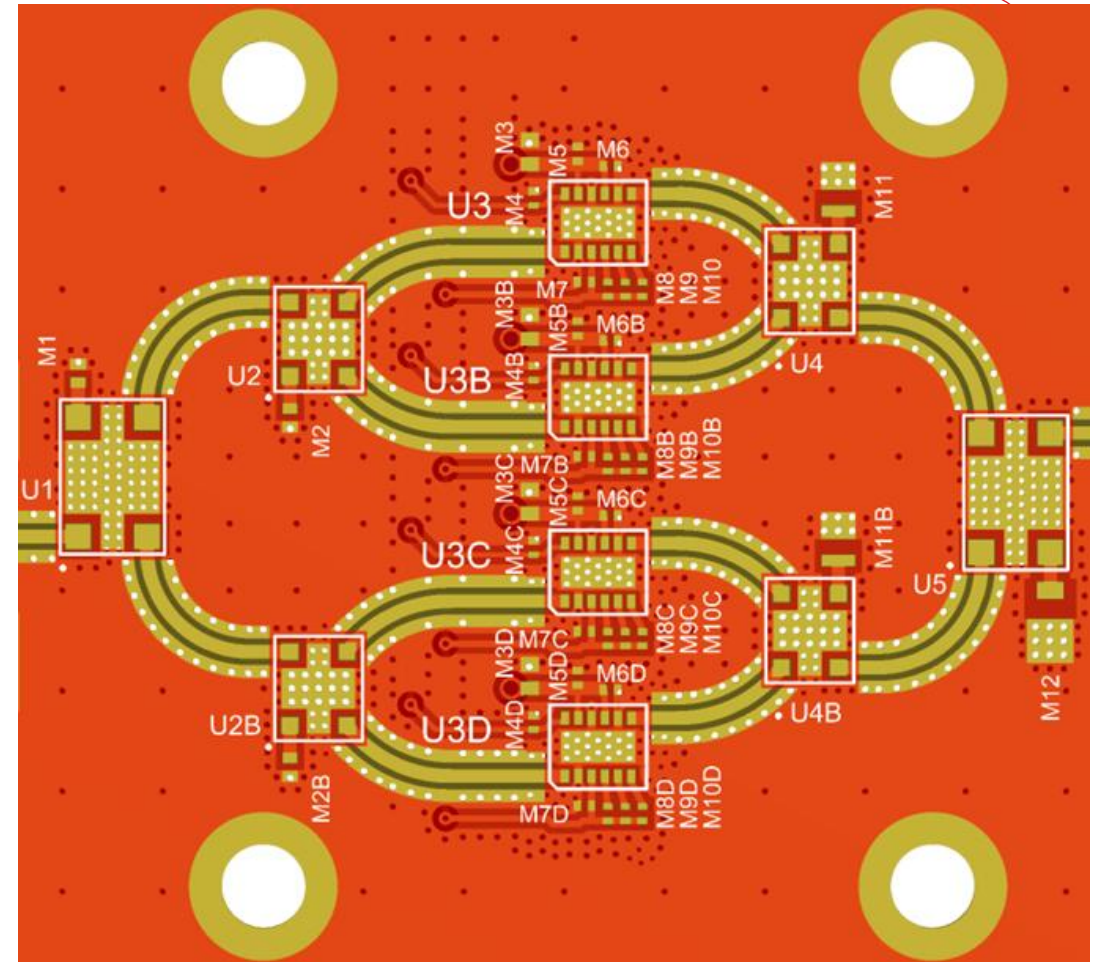
M10: TTM C3A50Z4



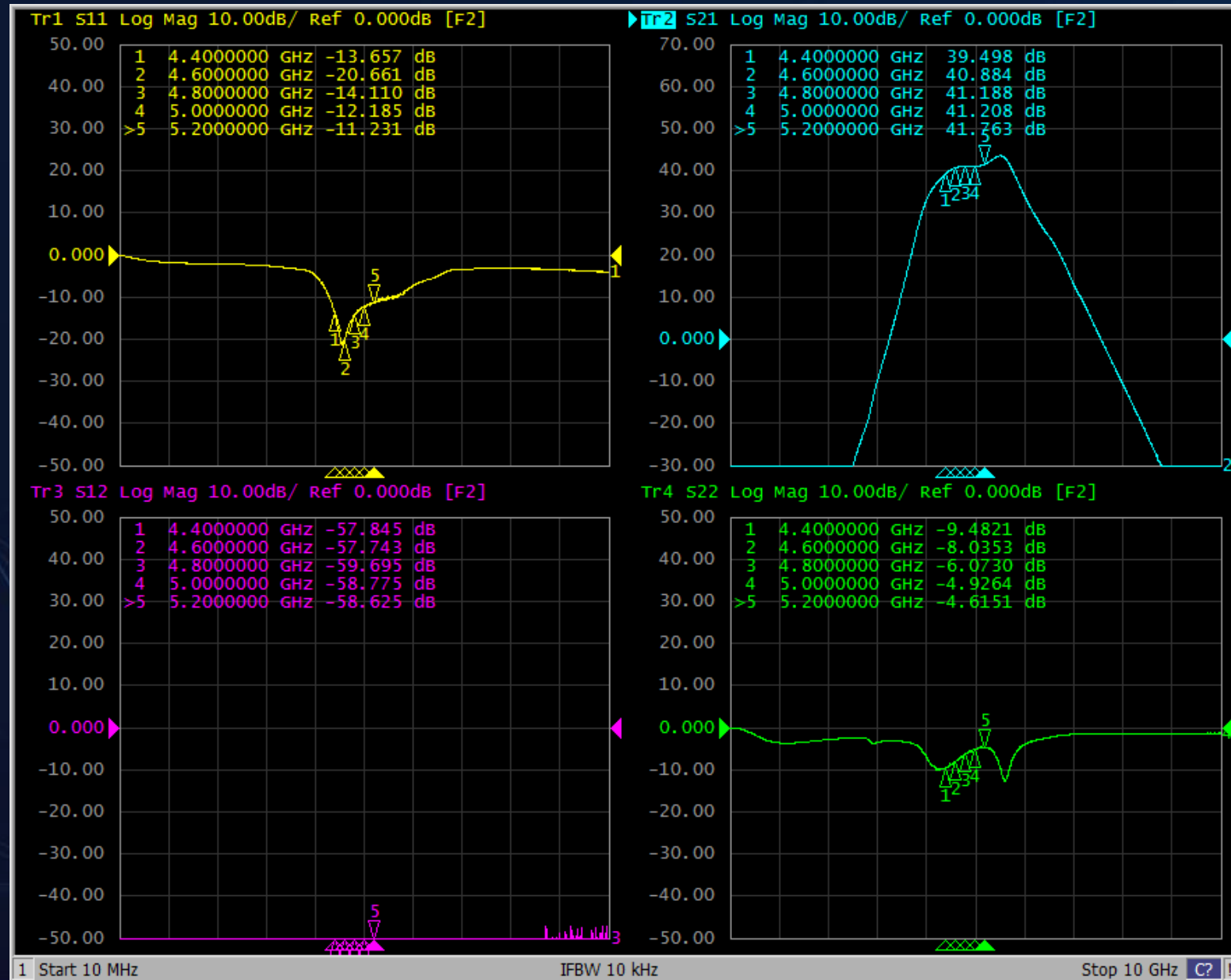
GRF5847B

4x combined evaluation board assembly

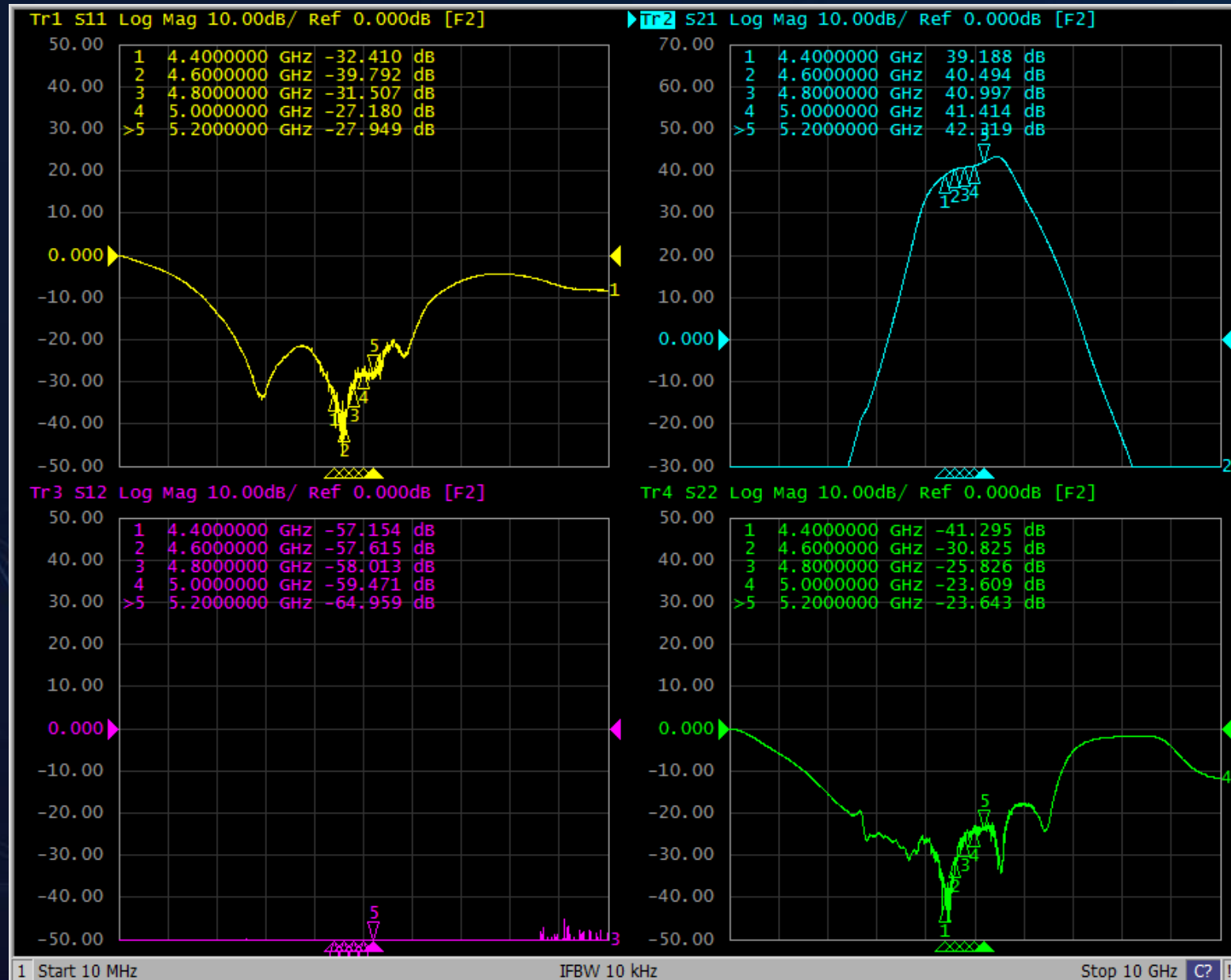
EVB:	Bal-PA-4xLAMM12-25x30-A
Heatsink:	HS-A-F-1p250x1p653in-4-A
U1, U5:	TTM/XINGER X3C45F1-03S
U2, 2B, 4, 4B:	TTM/XINGER X4C45K1-03S
U3, 3B,C,D:	GRF5847B
M1, 2, 2B:	TTM C05N50Z4
M3, 3B,C,D:	10 μ F 0402
M4, 4B,C,D:	220pF, 0201
M5, 6, 7, 5B,C,D, 6B,C,D, 7B,C,D:	0.1 μ F 0201
M8, 8B,C,D:	806 Ω , 1% 0201
M9, 9B,C,D:	806 Ω , 1% 0201
M10, 10B,C,D:	681 Ω , 1% 0201
M11, 11B:	TTM C3A50Z4
M12:	TTM C6N50Z4



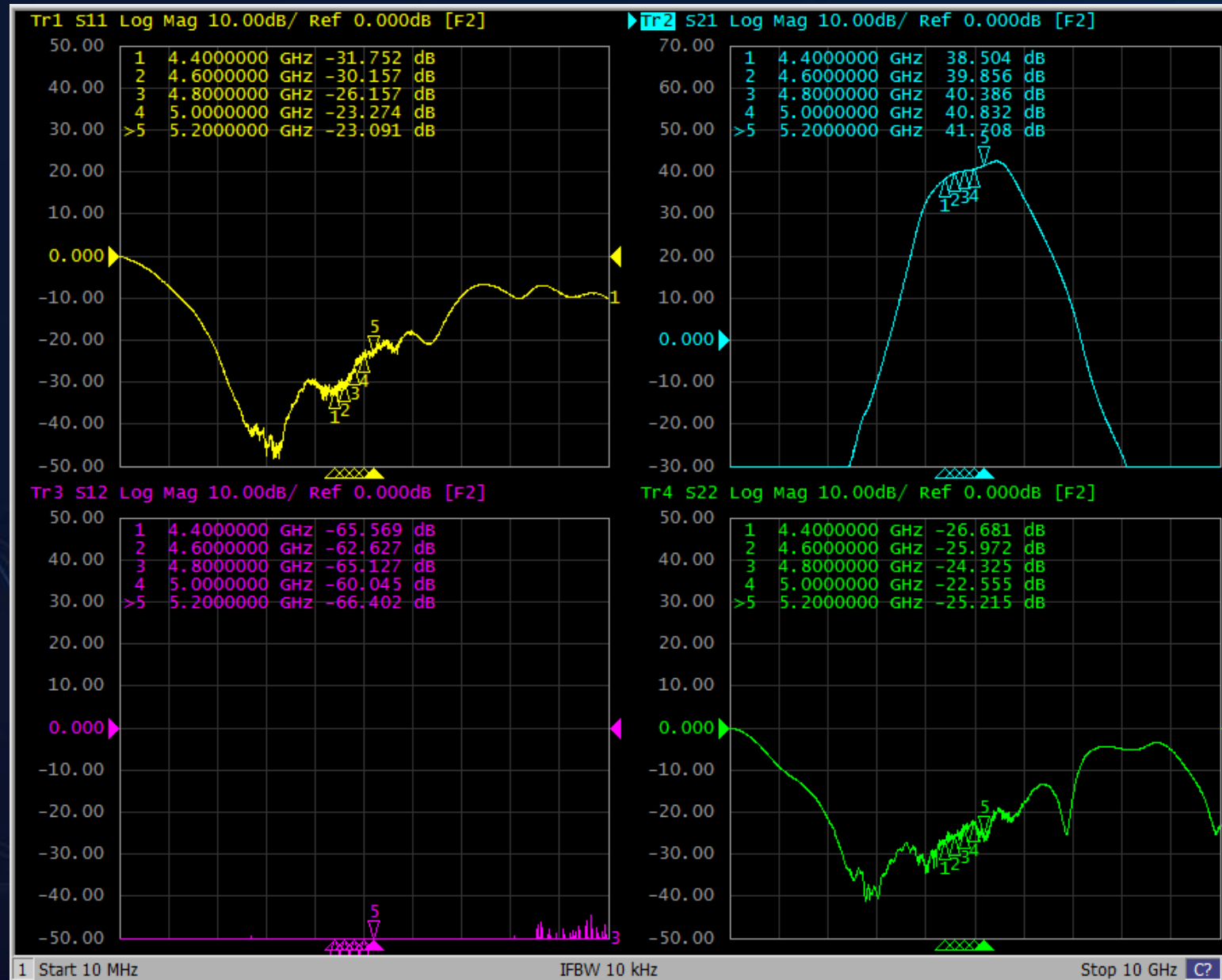
GRF5847B Single PA Small Signal Response



GRF5847B 2X Combined Small Signal Response



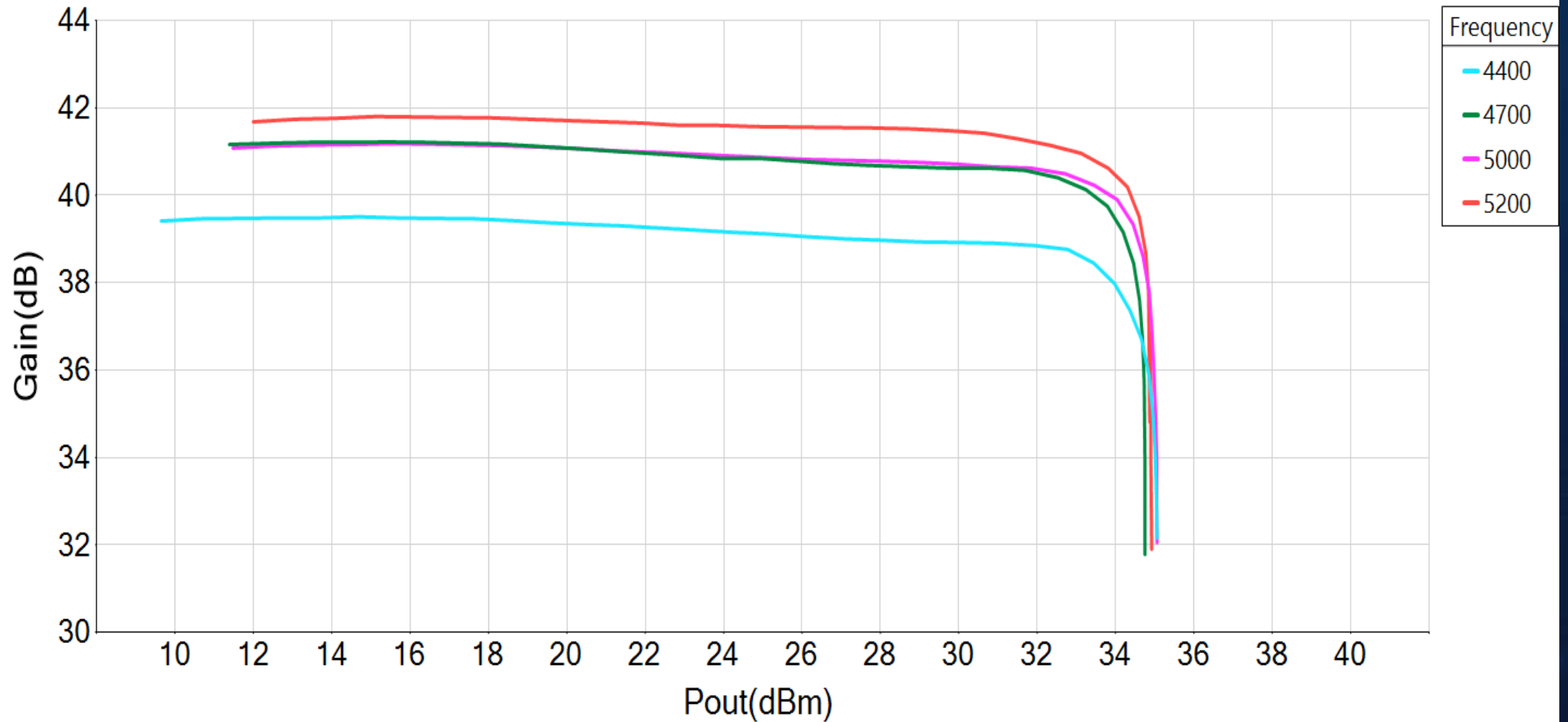
GRF5847B 4X Combined Small Signal Response



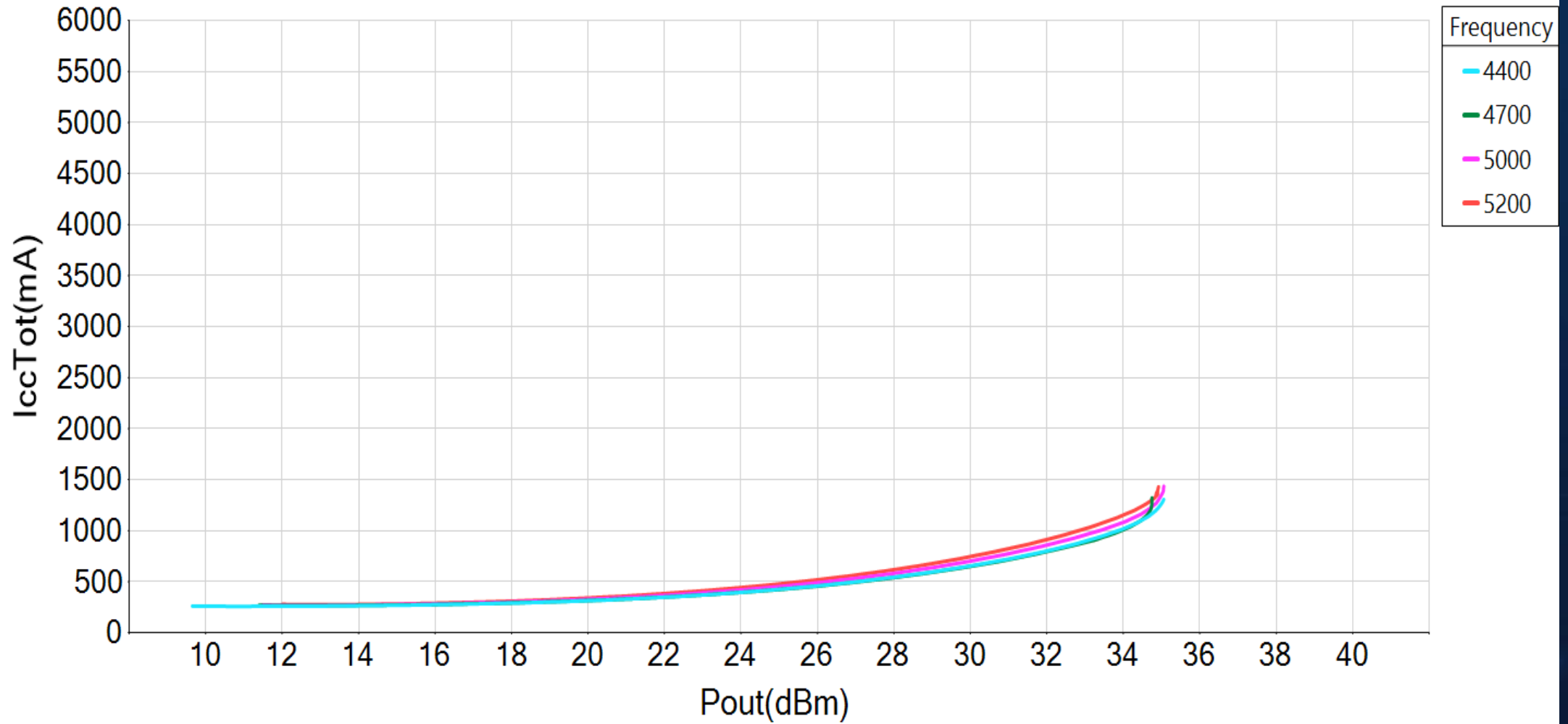
GRF5847B Standard Data Table

Configuration	Temp(°C)	Freq (MHz)	Vcc (V)	Vbias (V)	Ven (Vshdn)	IcqT (mA)	Pout/Ptone (dBm)	SS Gain (dB)	Tone Spacing (MHz)	OIP3 (dBm)	PSAT (dBm)
Single	Room	4400	5	5	0	239	26	39.4	0.6	46.3	35.1
Single	Room	4700	5	5	0	239	26	41.2	0.6	45.5	34.8
Single	Room	5000	5	5	0	239	26	41.1	0.6	45.6	35.1
Single	Room	5200	5	5	0	239	26	41.7	0.6	44.5	34.9
Configuration	Temp(°C)	Freq (MHz)	Vcc (V)	Vbias (V)	Ven (Vshdn)	IcqT (mA)	Pout/Ptone (dBm)	SS Gain (dB)	Tone Spacing (MHz)	OIP3 (dBm)	PSAT (dBm)
2X	Room	4400	5	5	0	511	26	39.8	0.6	46.6	38.5
2X	Room	4700	5	5	0	511	26	41.3	0.6	46.3	38.5
2X	Room	5000	5	5	0	511	26	42	0.6	47.5	38.4
2X	Room	5200	5	5	0	511	26	42.8	0.6	45.4	37.7
Configuration	Temp(°C)	Freq (MHz)	Vcc (V)	Vbias (V)	Ven (Vshdn)	IcqT (mA)	Pout/Ptone (dBm)	SS Gain (dB)	Tone Spacing (MHz)	OIP3 (dBm)	PSAT (dBm)
4X	Room	4400	5	5	0	1020	26	39	0.6	46	40.7
4X	Room	4700	5	5	0	1020	26	40.7	0.6	45.5	40.5
4X	Room	5000	5	5	0	1020	26	41.2	0.6	47.3	40.4
4X	Room	5200	5	5	0	1020	26	42	0.6	47.8	39.6

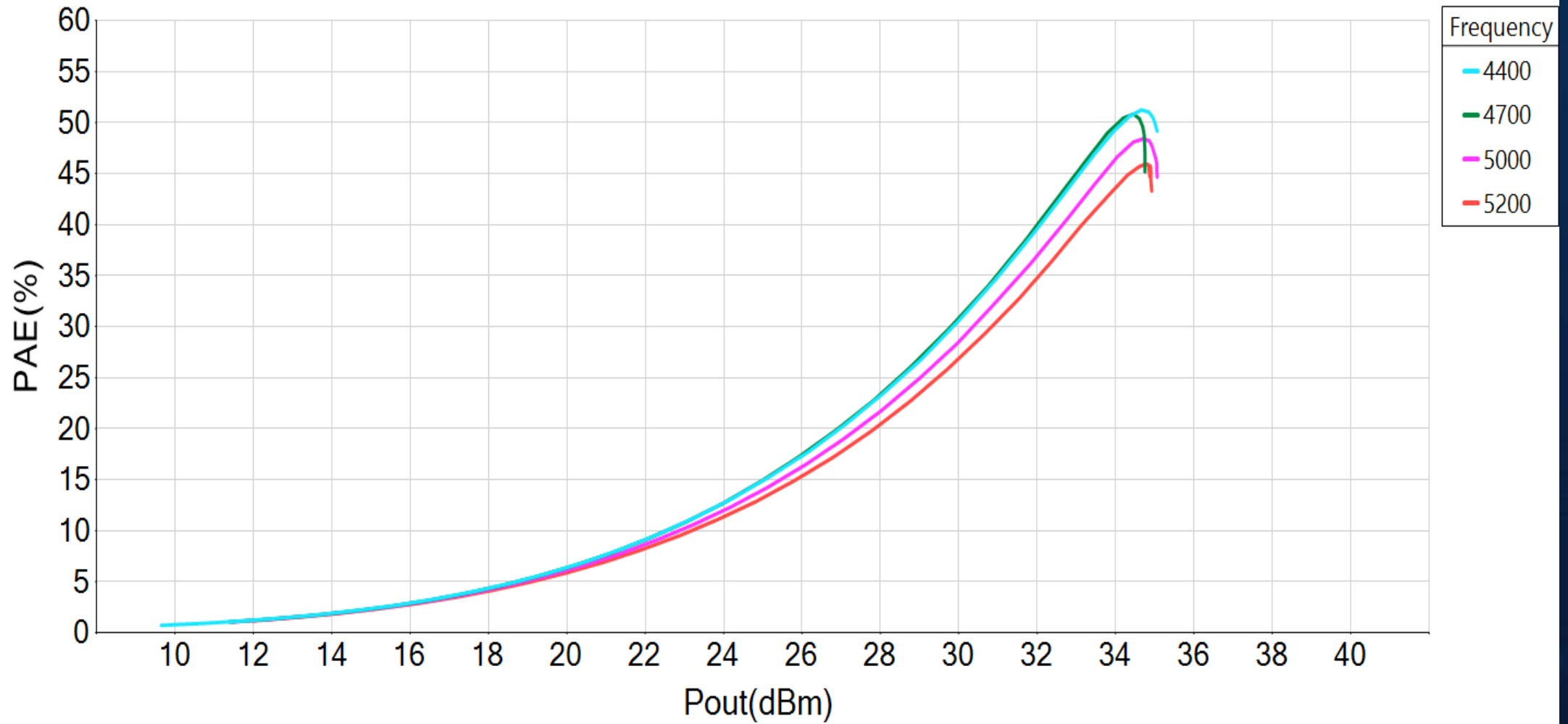
GRF5847B Gain vs Pout at SerNum = 188



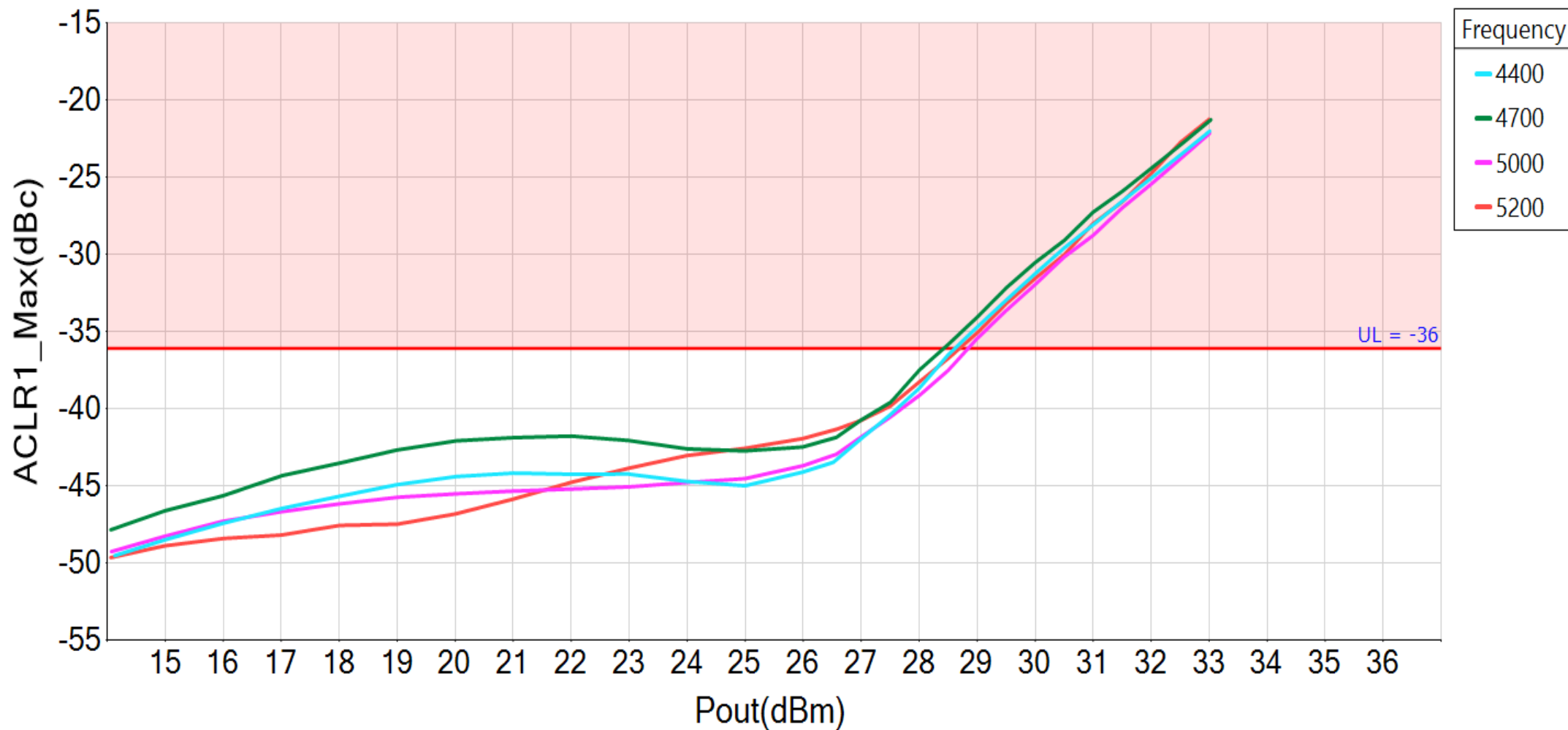
GRF5847B IccTot vs Pout at SerNum = 188



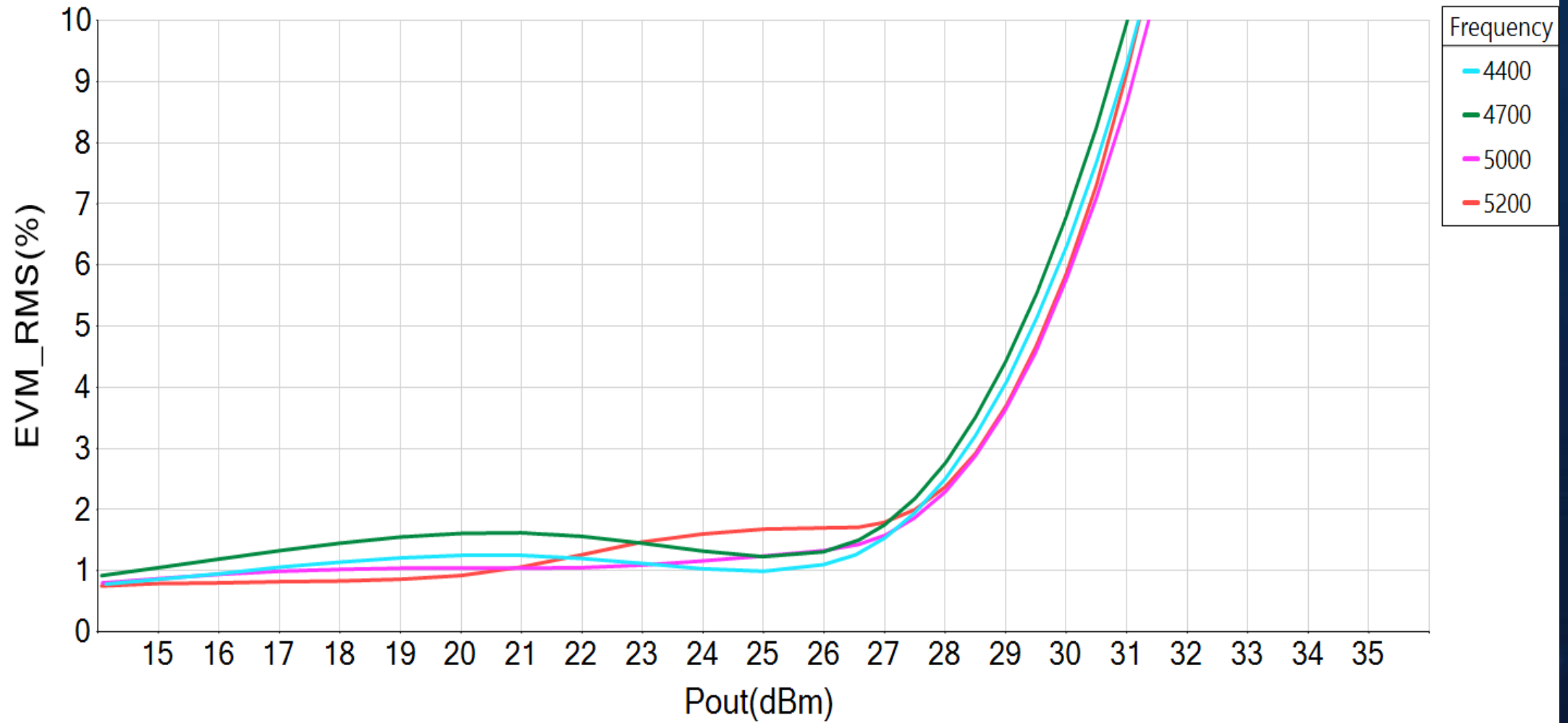
GRF5847B PAE(%) vs Pout at SerNum = 188



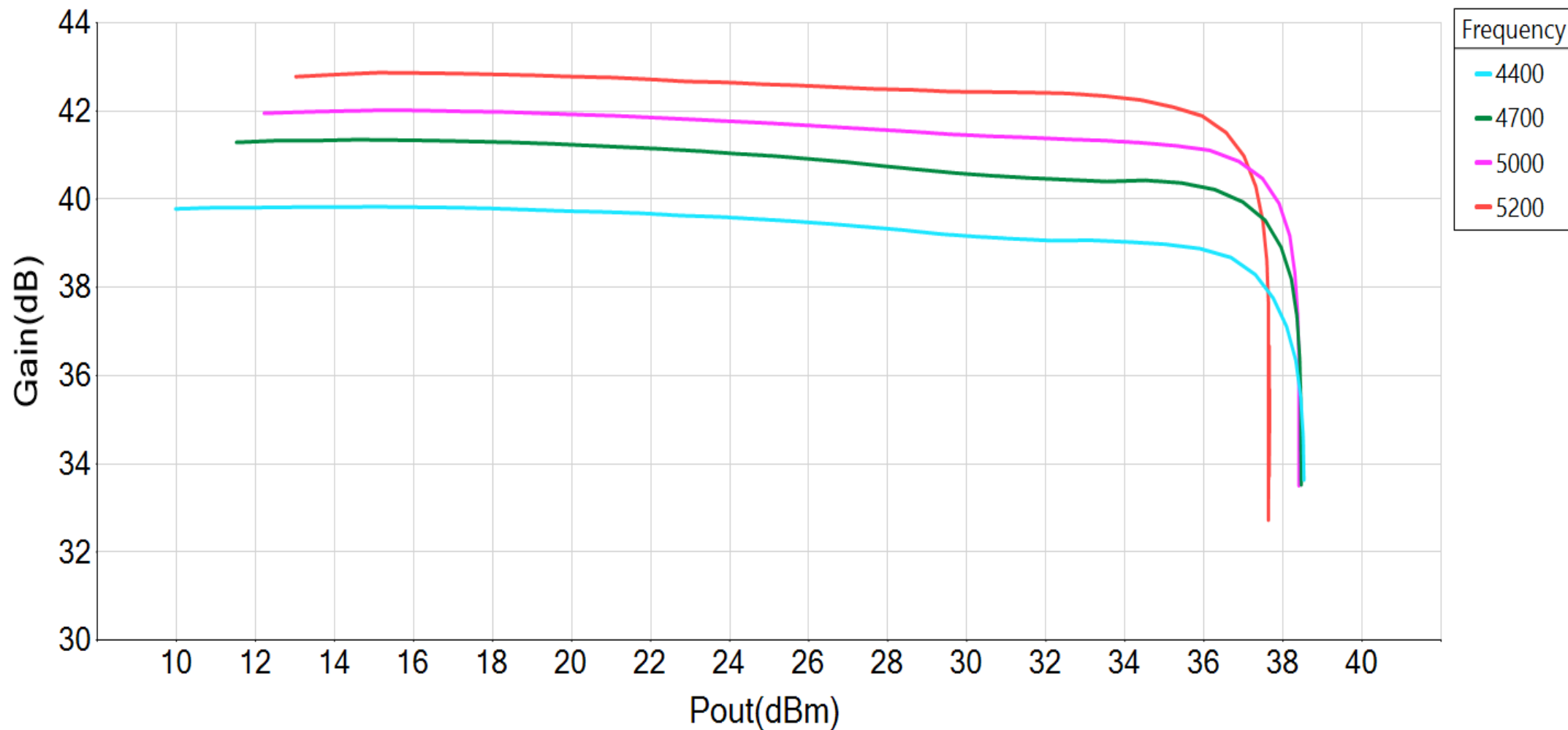
GRF5847B ACLR1 vs Pout at SerNum = 188



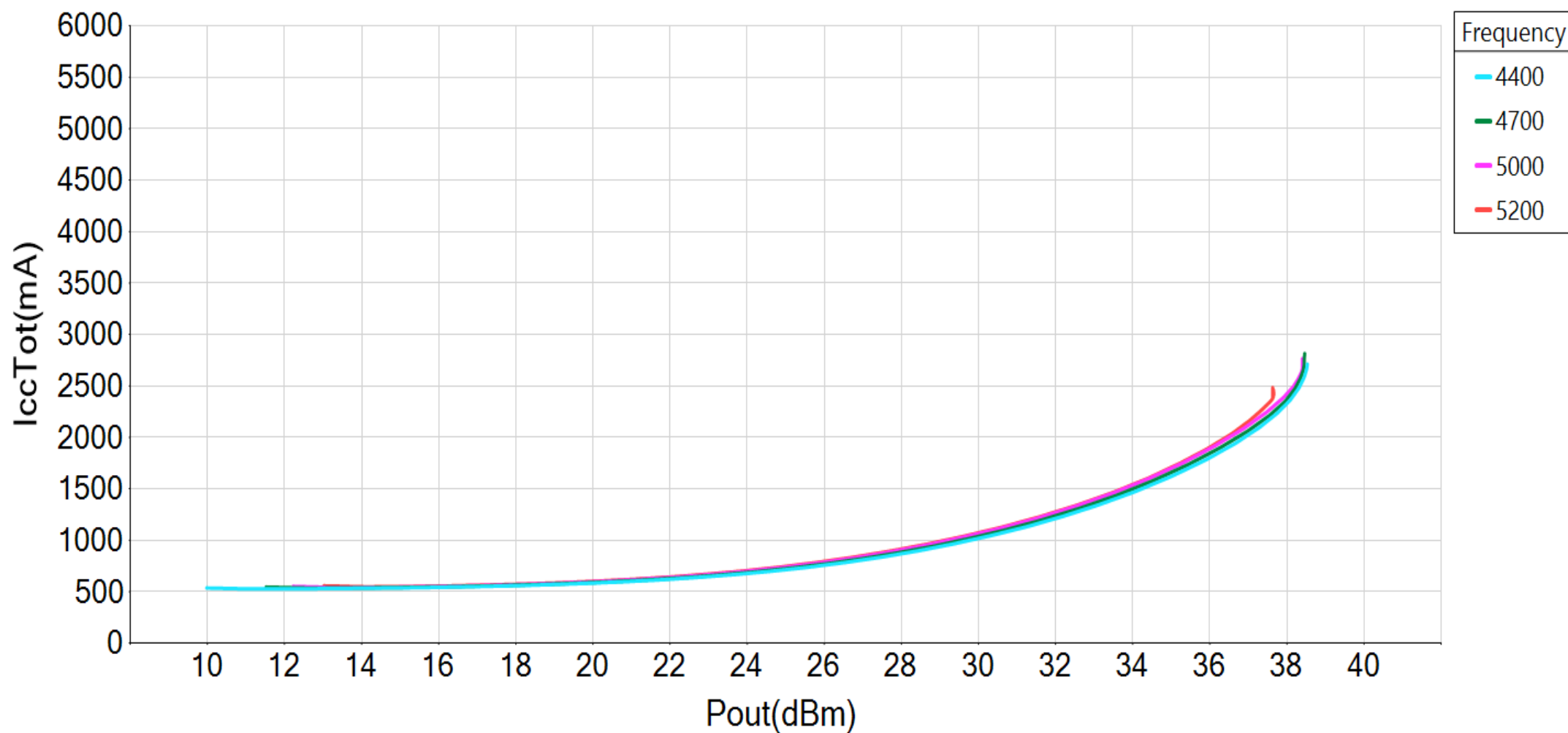
GRF5847B EVM_RMS vs Pout at SerNum = 188



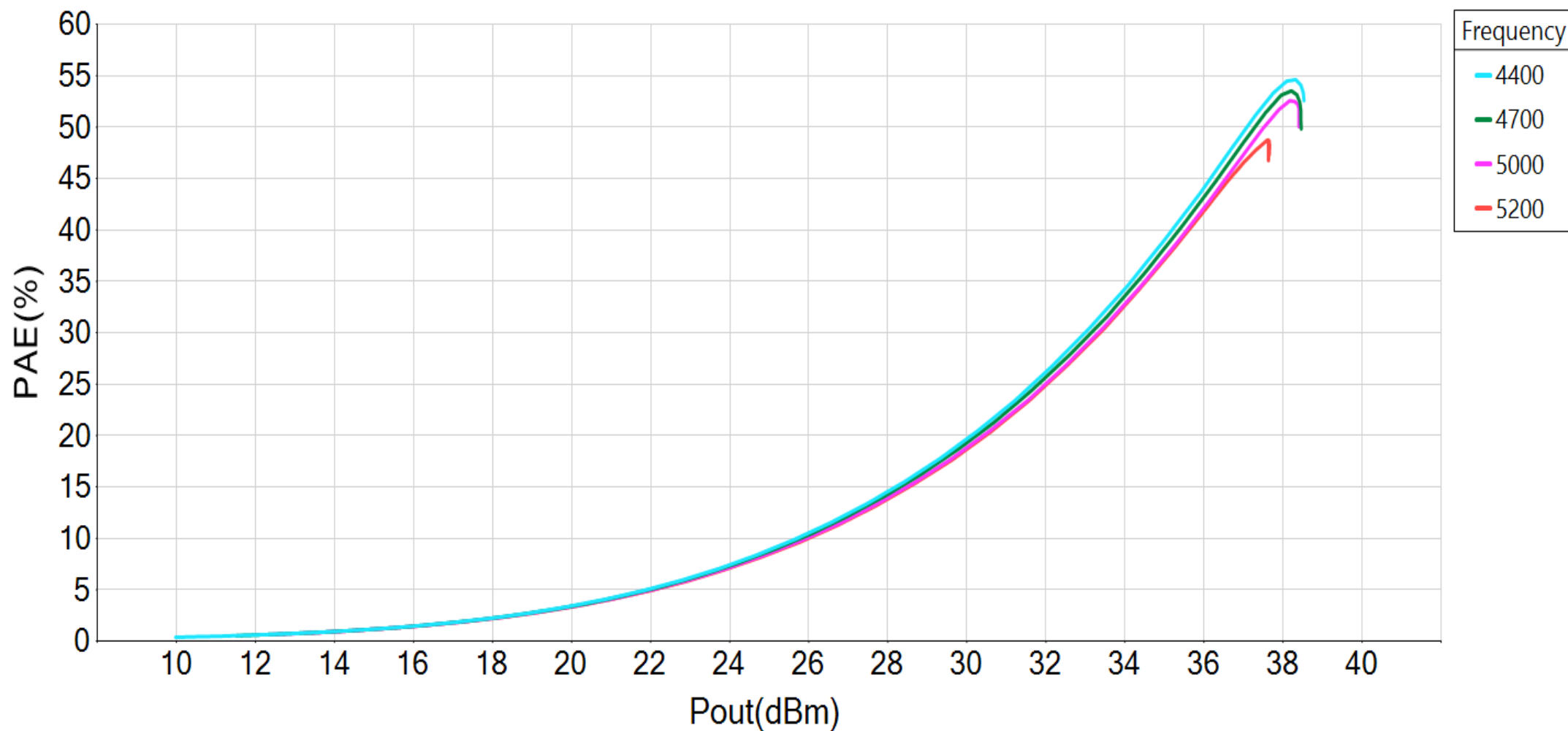
GRF5847B Gain vs Pout at SerNum = 2X



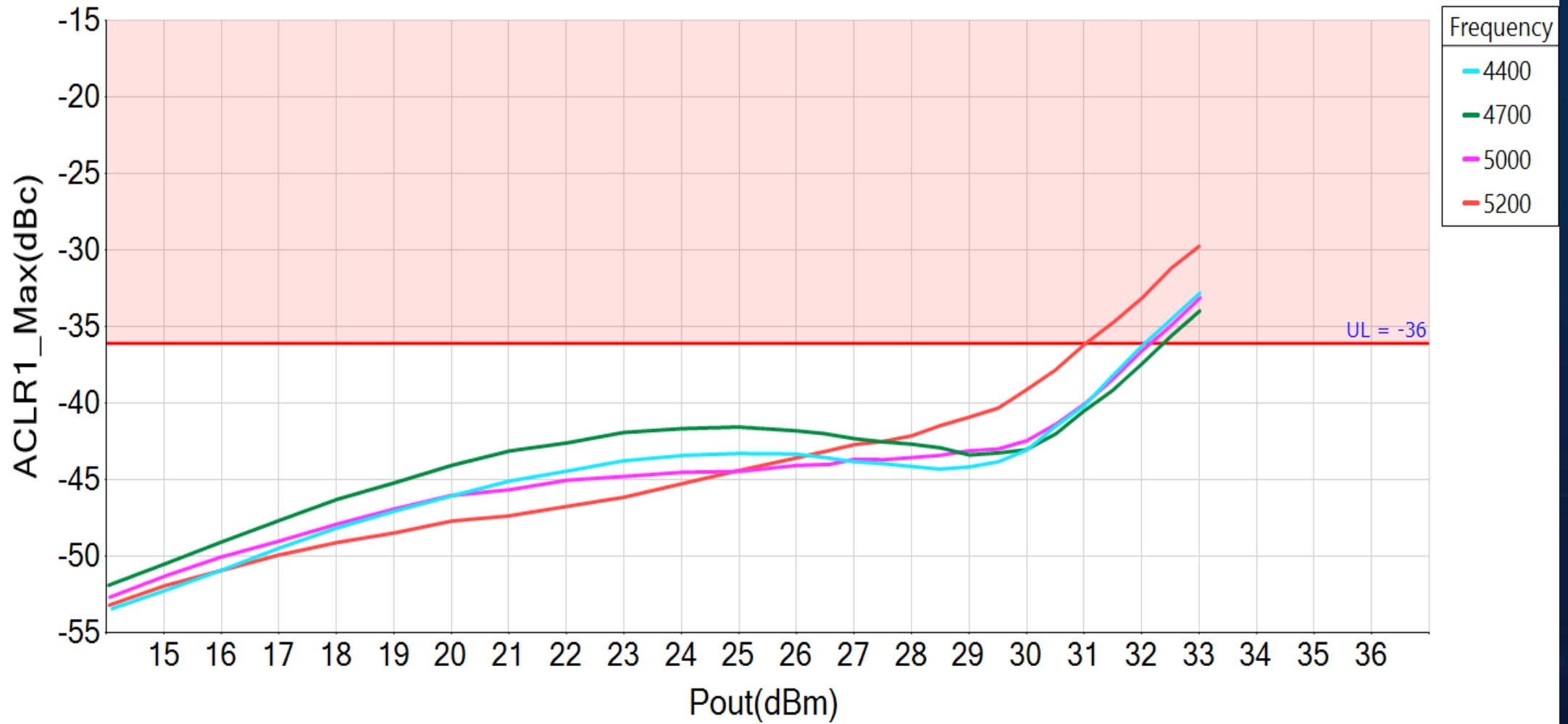
GRF5847B IccTot vs Pout at SerNum = 2X



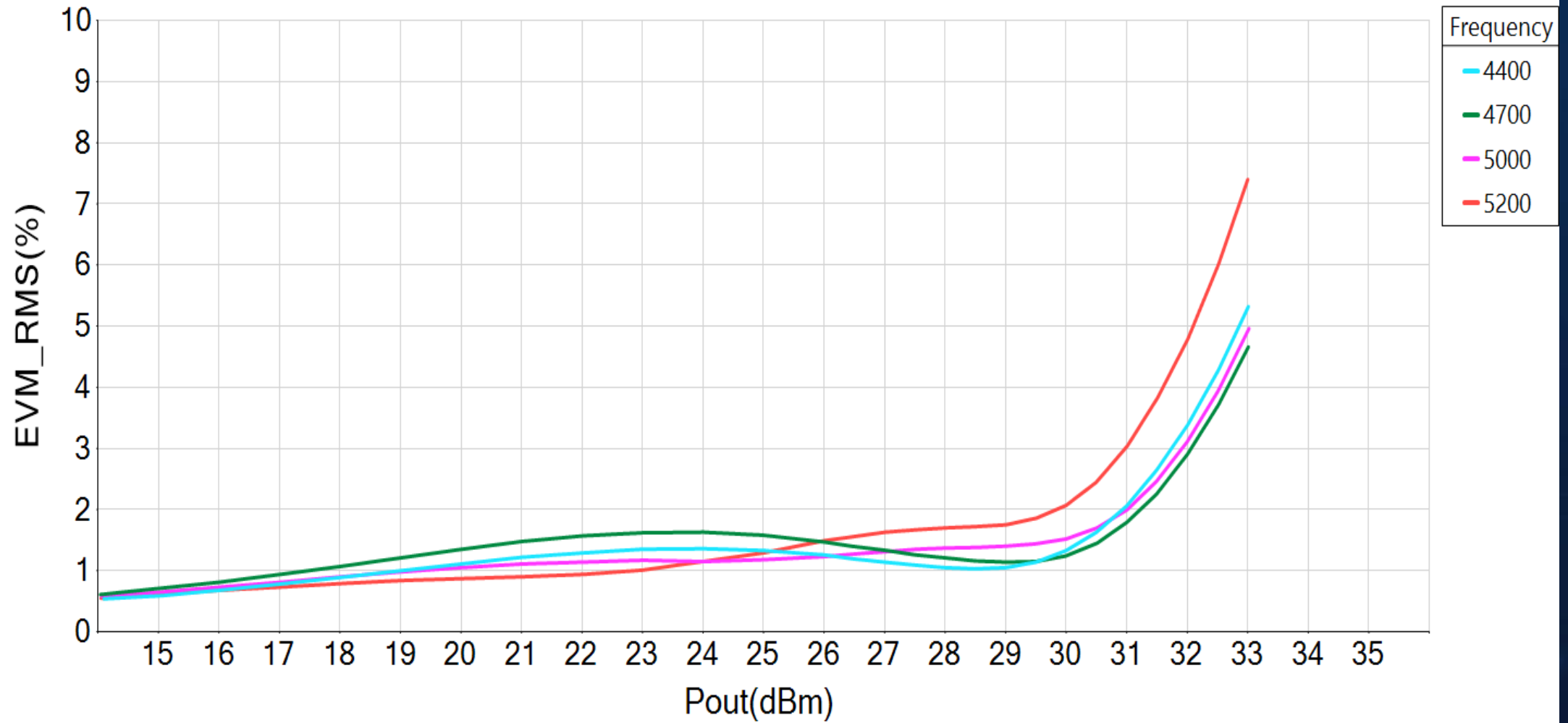
GRF5847B PAE(%) vs Pout at SerNum = 2X



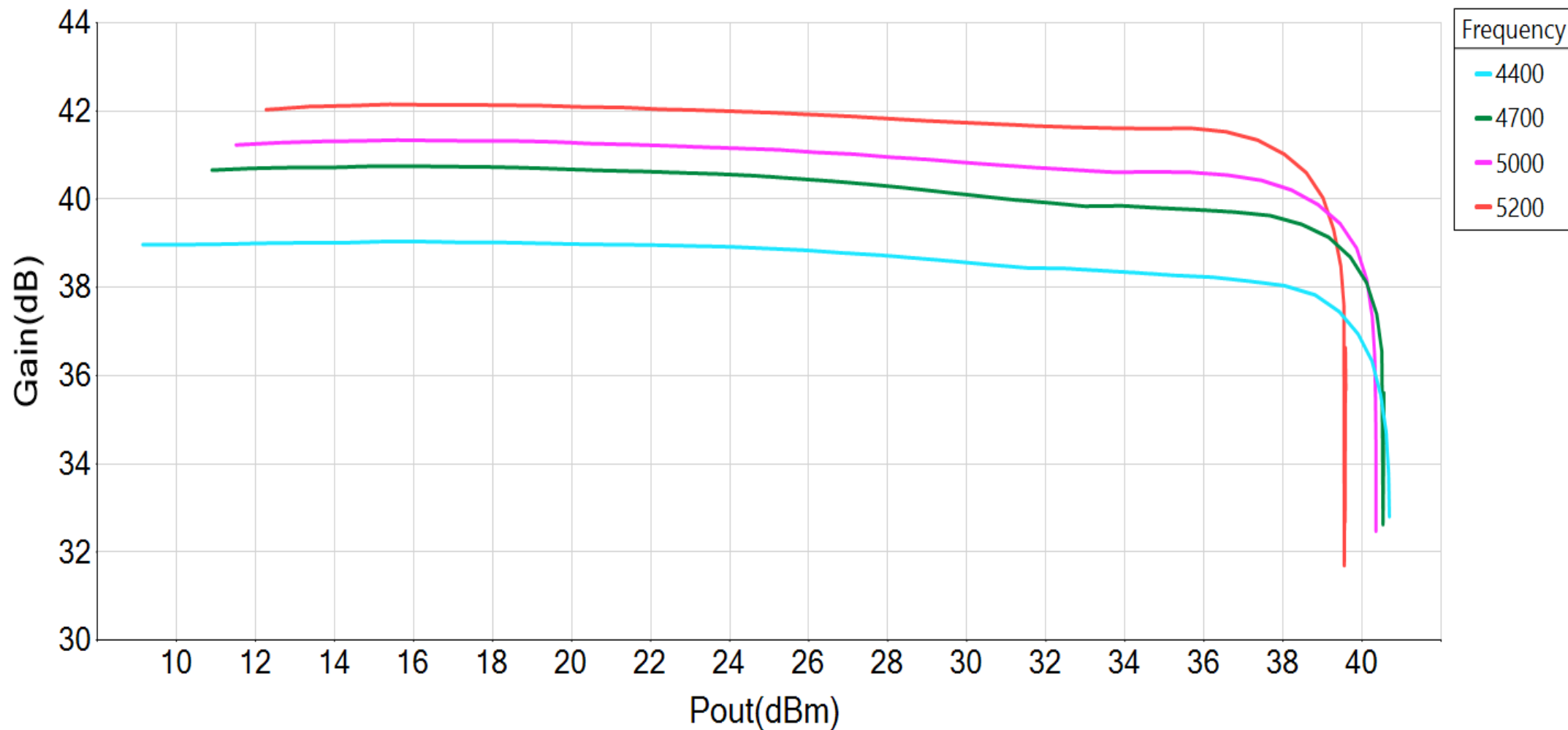
GRF5847B ACLR1 vs Pout at SerNum = 2X



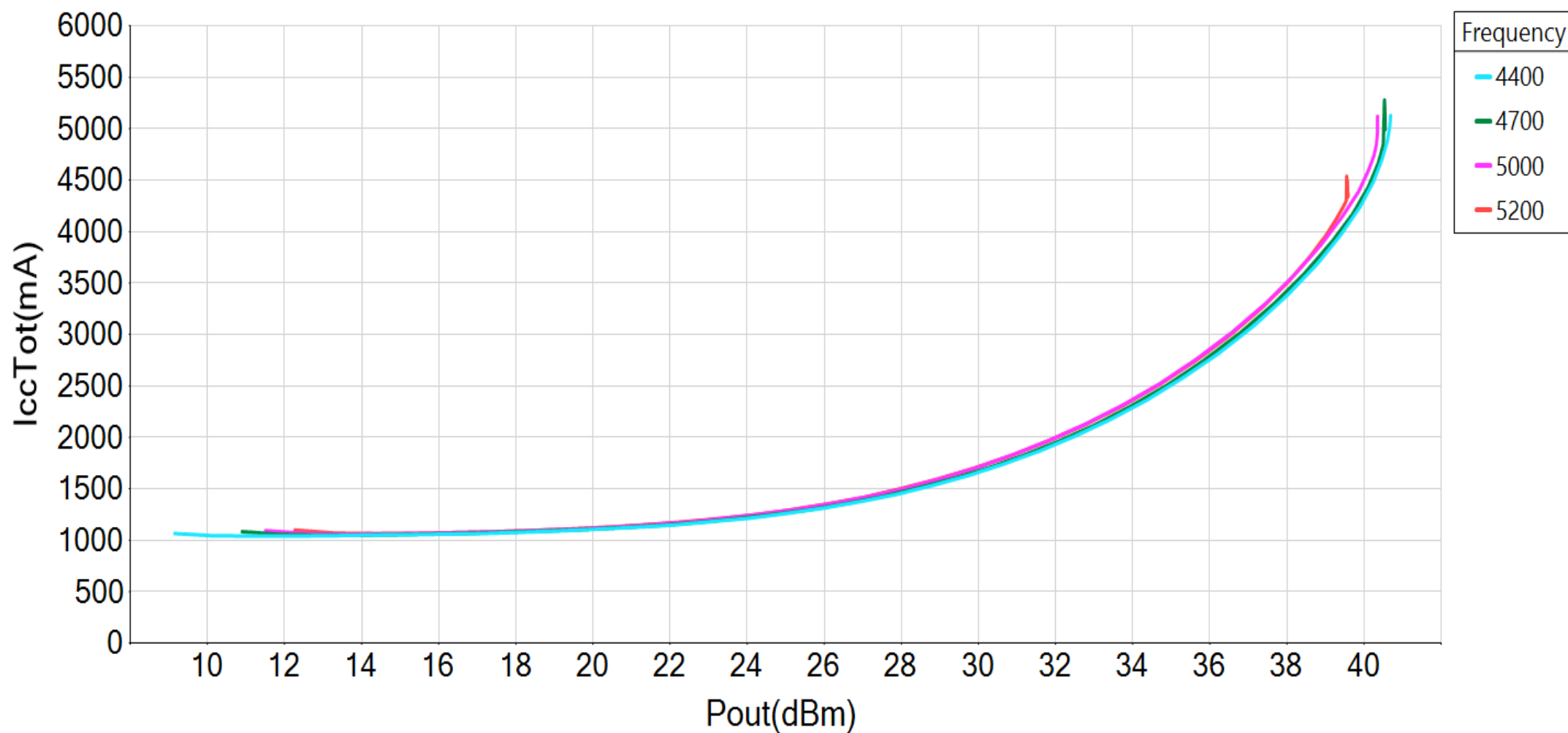
GRF5847B EVM_RMS vs Pout at SerNum = 2X



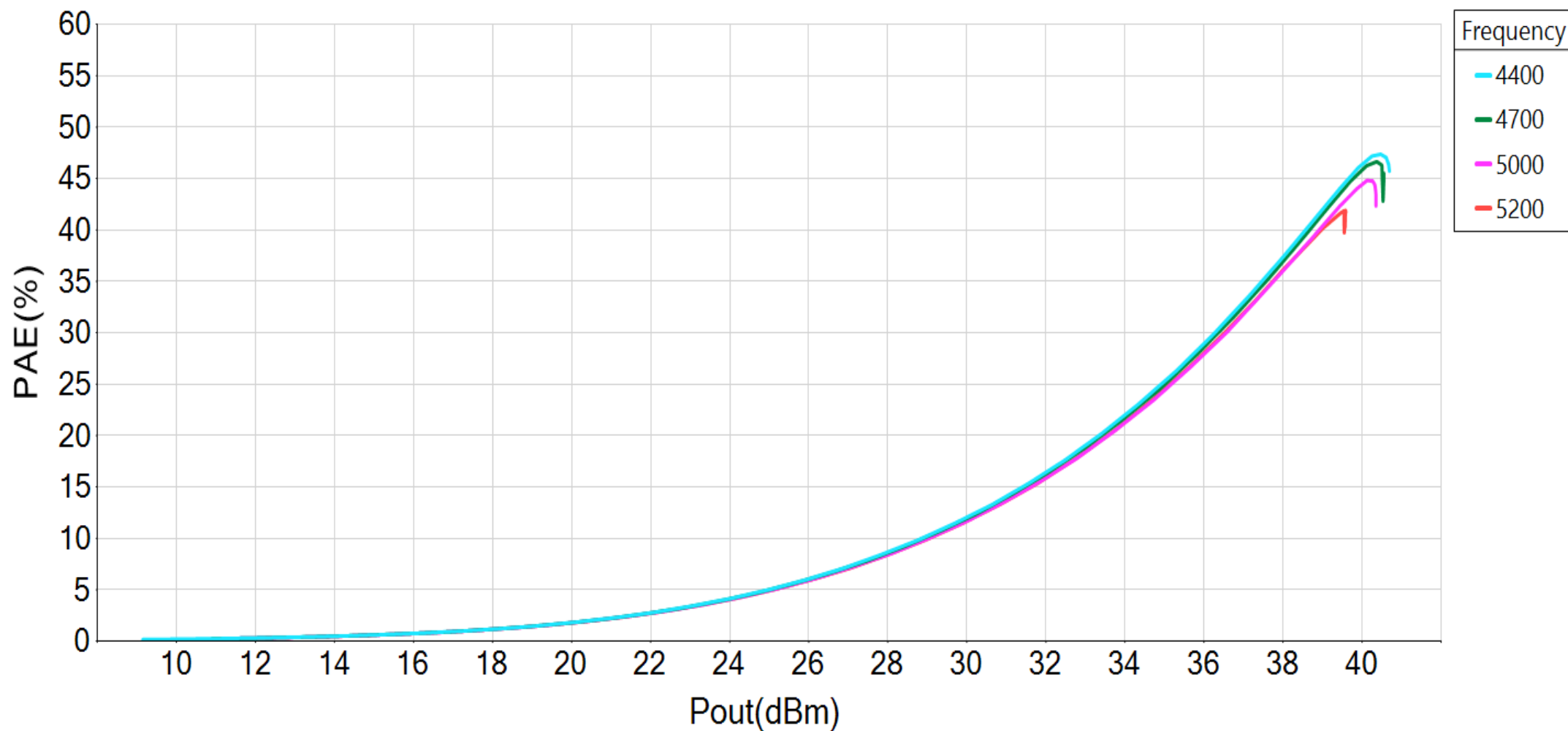
GRF5847B Gain vs Pout at SerNum = 4X



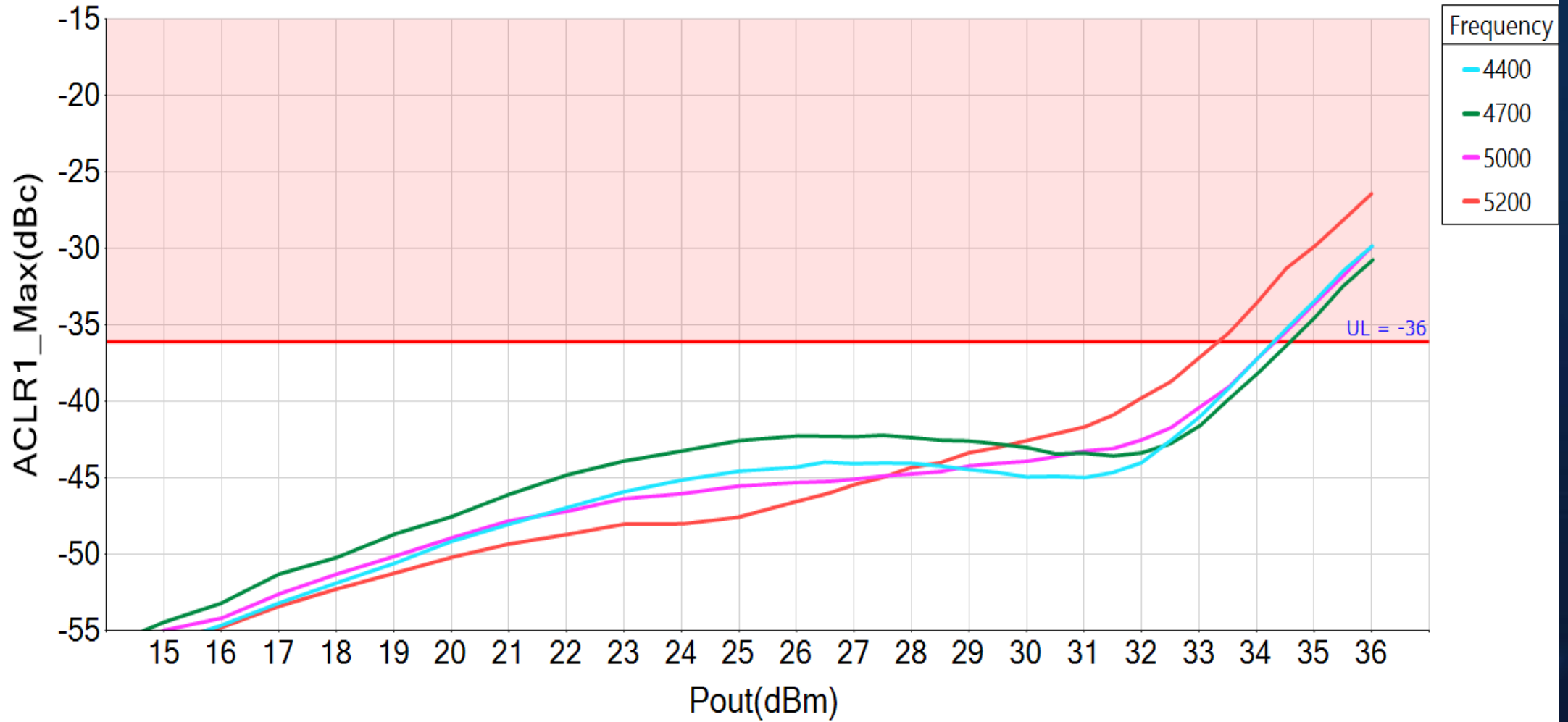
GRF5847B IccTot vs Pout at SerNum = 4X



GRF5847B PAE(%) vs Pout at SerNum = 4X



GRF5847B ACLR1 vs Pout at SerNum = 4X



GRF5847B EVM_RMS vs Pout at SerNum = 4X

