

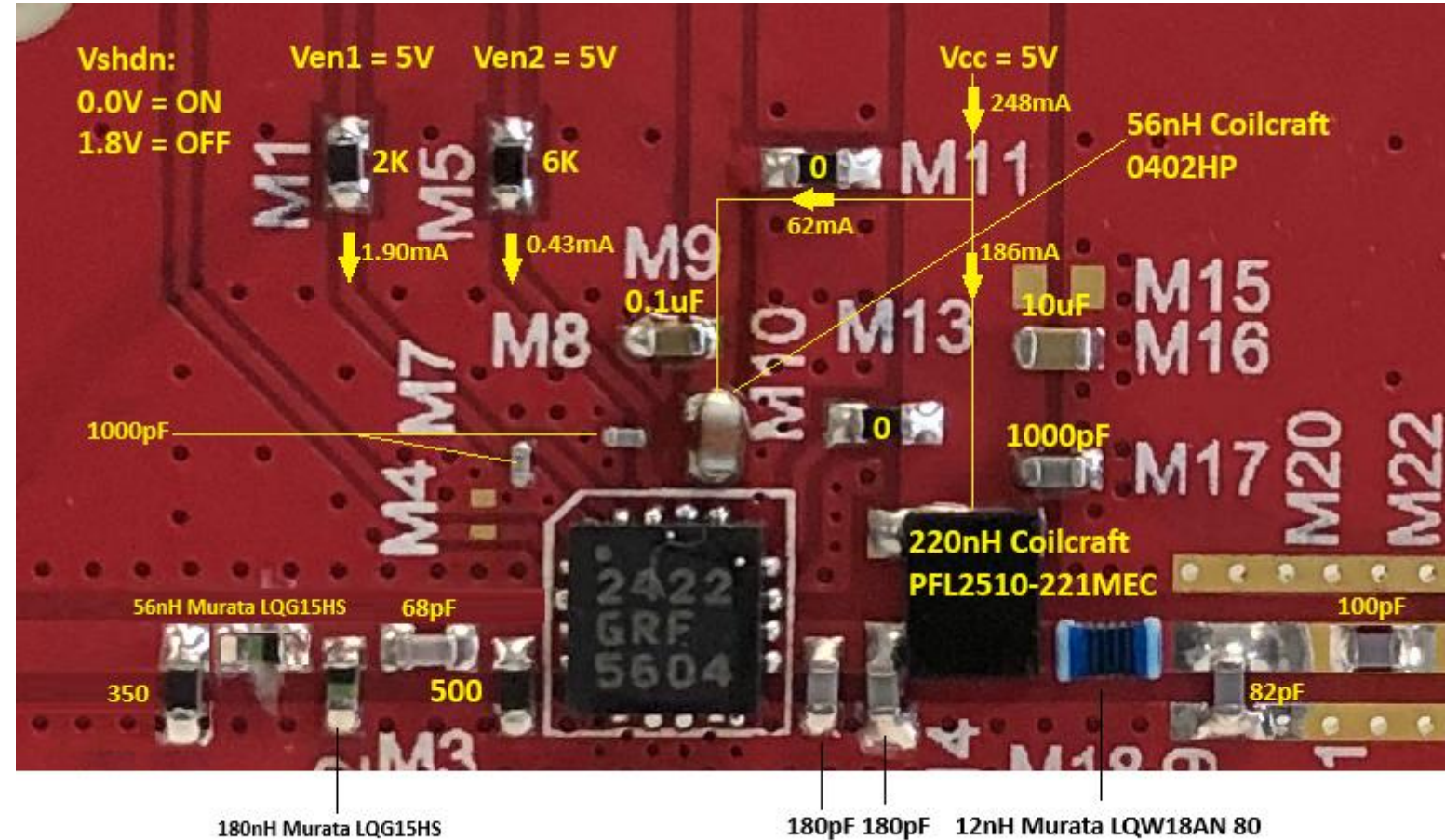


GRF5604
156-162 MHz

Schematic:

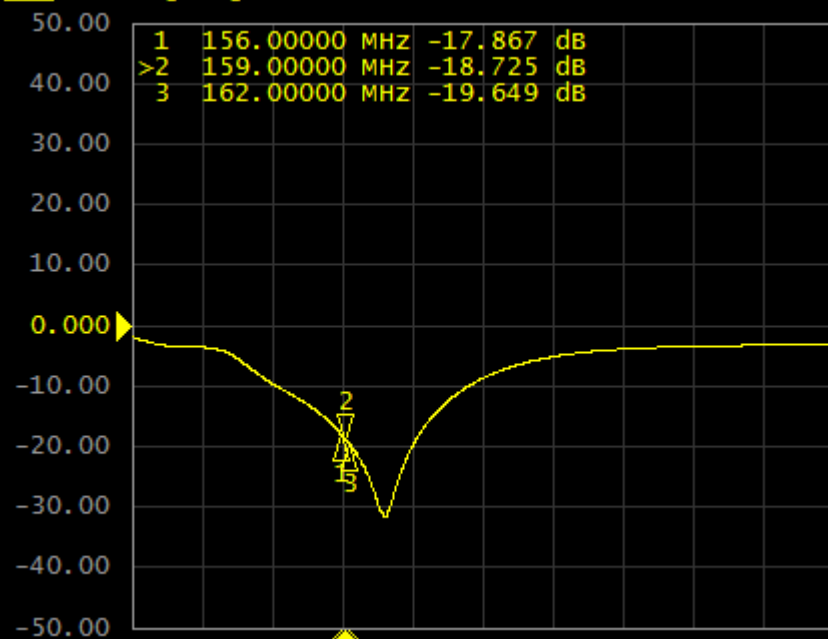
GRF5604 configured for general purpose PA application covering 156-162 MHz.

Maritime Tracking band.

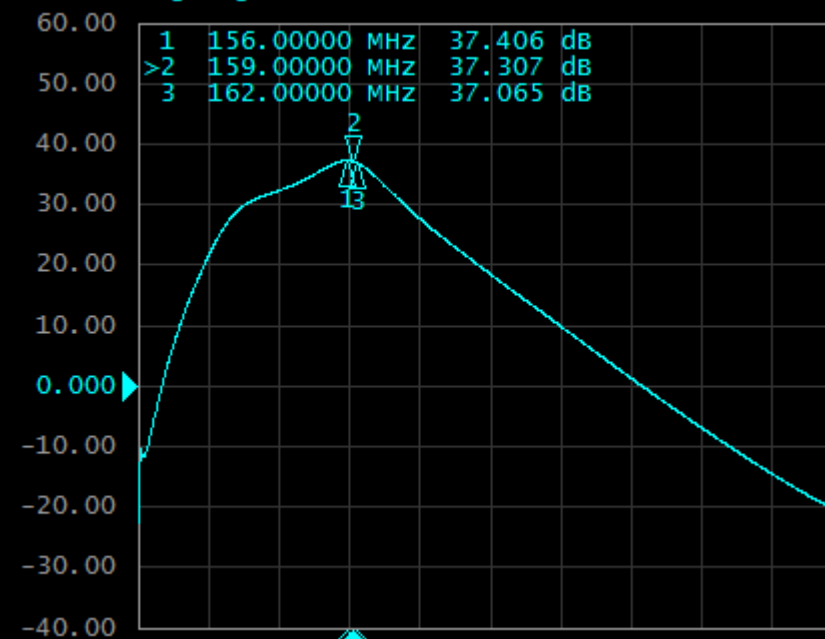


Response:

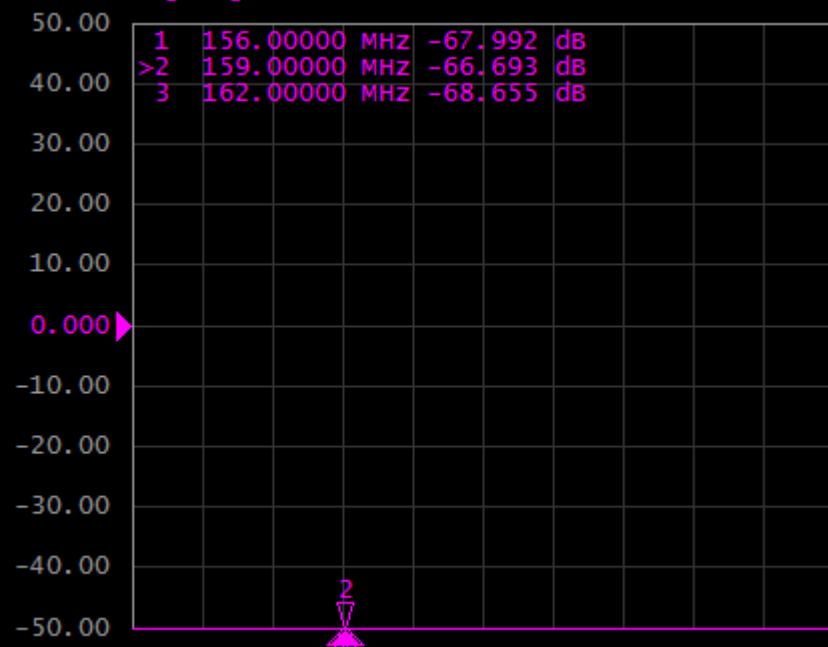
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F2]



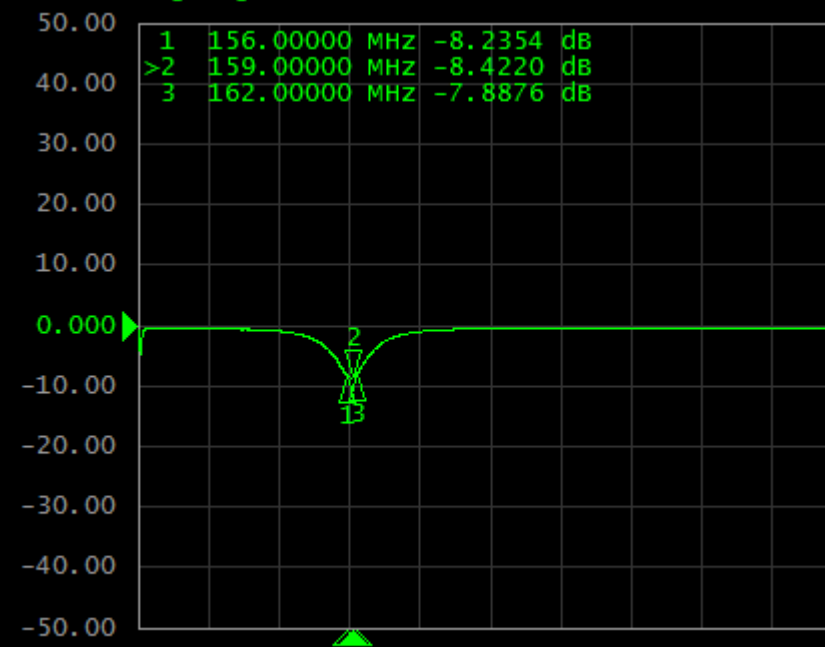
Tr2 S21 Log Mag 10.00dB/ Ref 0.000dB [F2]



Tr3 S12 Log Mag 10.00dB/ Ref 0.000dB [F2]



Tr4 S22 Log Mag 10.00dB/ Ref 0.000dB [F2]



1 Start 10 MHz

IFBW 10 kHz

Stop 500 MHz



Standard Data vs. Temperature:

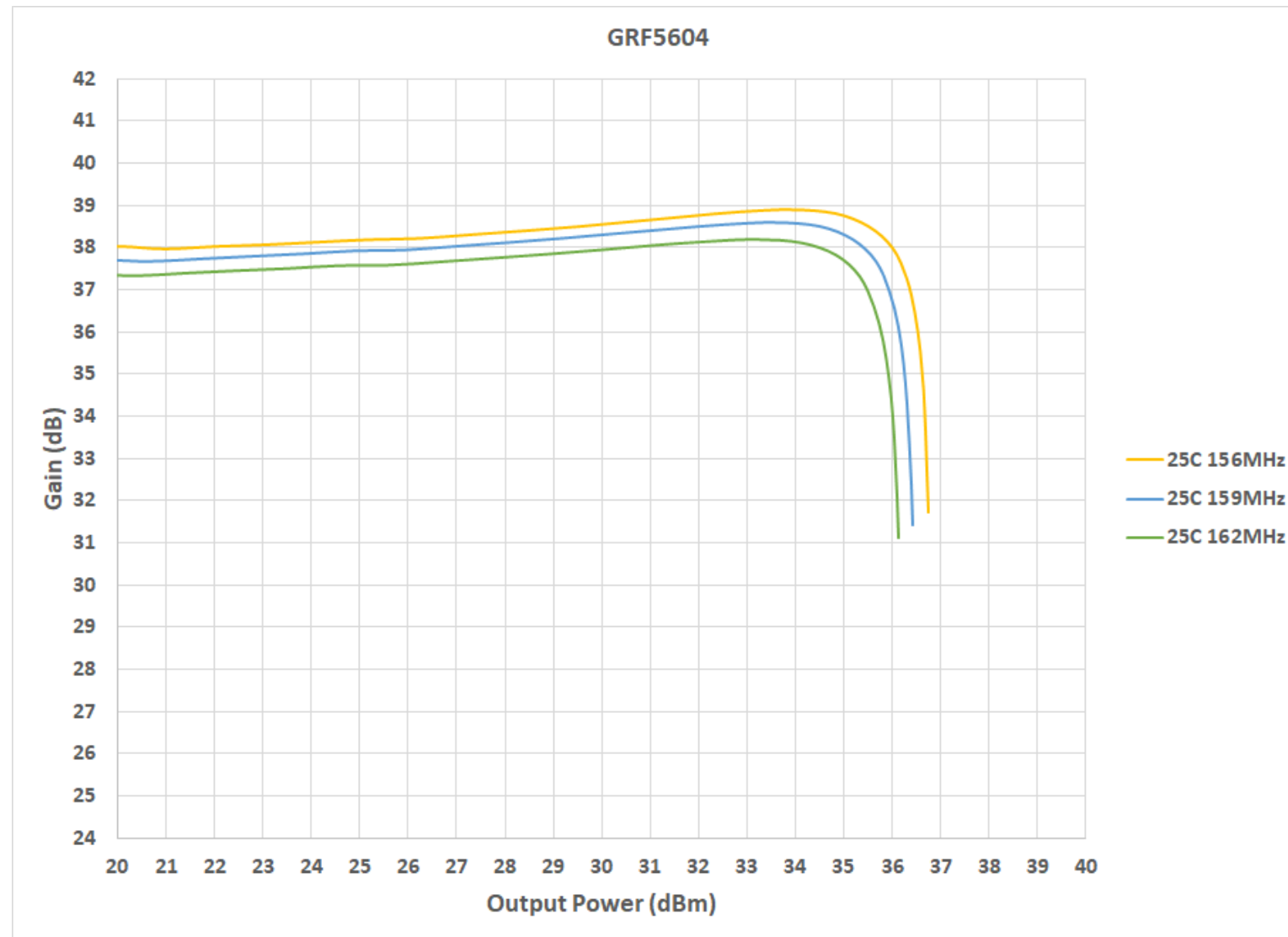
Temp Deg C	Freq MHz	Vcc V	Iccq mA	Ven1 V	Ien1 mA	Ven2 V	Ien2 mA	Vshdn V	Ishdn mA	IP3 Tone Power dBm	IP3 Tone Spacing MHz	Gain dB	OIP3 dBm	OP1dB dBm	PAE %	EVN NF dB
-40	156	5	239.3	5	1.8	5	0.4	0	0	22	0.6	39	37.4	36.8	62.1	x
-40	159	5	239.3	5	1.8	5	0.4	0	0	22	0.6	38.8	37.6	36.4	60.4	x
-40	162	5	239.3	5	1.8	5	0.4	0	0	22	0.6	38.6	37.8	36	57.8	x
25	156	5	247	5	1.9	5	0.4	0	0	22	0.6	38.2	37.7	36.5	59.7	8.7
25	159	5	247	5	1.9	5	0.4	0	0	22	0.6	37.8	37.9	36.2	58.9	8.5
25	162	5	247	5	1.9	5	0.4	0	0	22	0.6	37.5	38	35.9	57.2	8.3
85	156	5	256.8	5	1.9	5	0.4	0	0	22	0.6	37.1	37.8	36.1	56.6	x
85	159	5	256.8	5	1.9	5	0.4	0	0	22	0.6	36.8	38	35.8	55.5	x
85	162	5	256.8	5	1.9	5	0.4	0	0	22	0.6	36.6	38	35.4	52.2	x

Gain vs. Output Power at 25C:

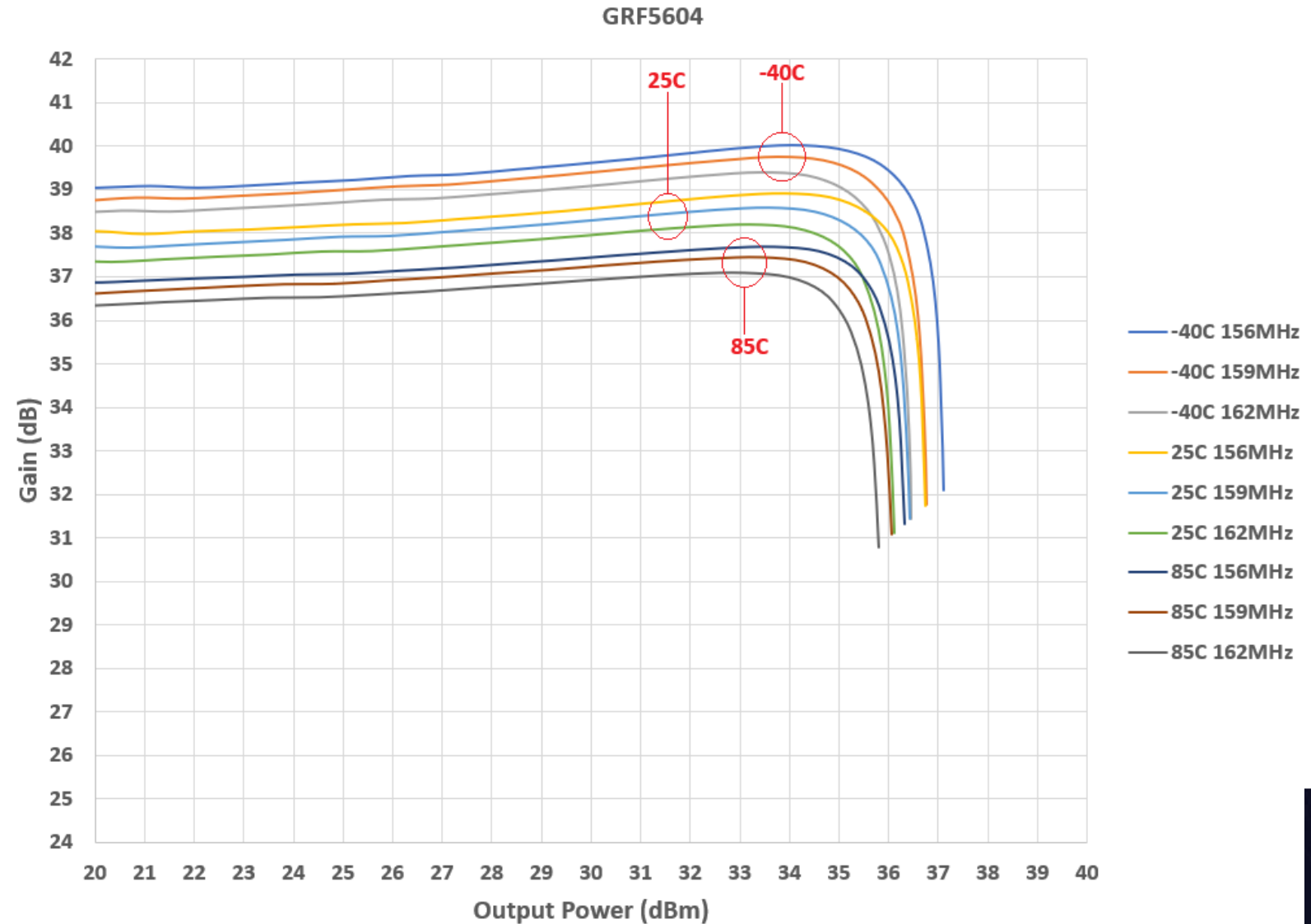
Note significant gain expansion vs. output power. A non-issue for general-purpose application with no IP3/IMD3/modulated ACLR requirement. This type of configuration can be “linearized” with bias adjust and matching/termination hooks.

Linear custom tunes to that end will developed/posted over time.

Saturated output power (Psat) falls between 36 – 37 dBm.



Gain vs. Output Power over temperature shows Psat range 35.7 – 37.1 dBm.





Contact Us

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