



Annex A

Spurious Emissions



Note:

In the plots below when measurement is shown on spectrum analyzer as dBuV then the below corrections are added to it to convert it to an EIRP value.

Raw (dBuV) + receive antenna ACF + mixer correction factor + RBW correction factor = E Field (dBuV/m)

$EIRP(dBm) = E \text{ field}(dBuV/m) + 20 \log D - 104.77$

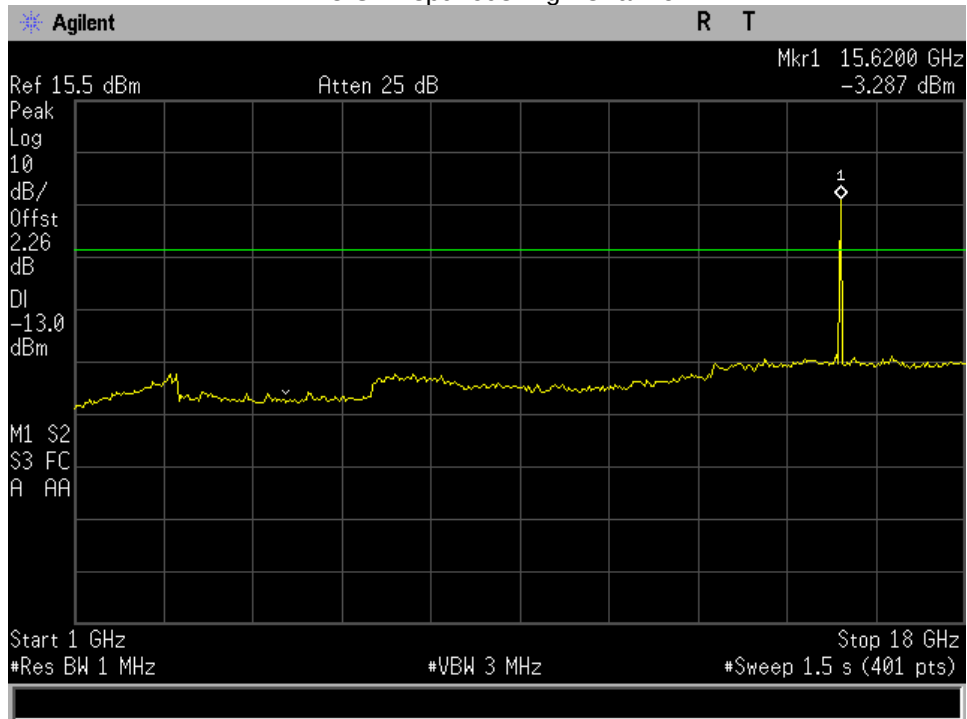
Table below shows the raw measured values versus the corrected EIRP Measurement.

SPAN (GHz)	FREQ (GHz)	Raw AMP (dBuV)	Measurement Distance (meter)	RBW (KHz)	RBW Correction Factor (dB)	Mixer correction factor (dB)	Receive antenna ACF (dB)	Field Strength Calculated (dBuV/m)	EIRP Calculated (radiated) (dBm)	Ant Gain (dBi)	EIRP Conducted (dBm)
30 MHz-1GHz	59.1 MHz	66.04	3	1000	-9.2	26.03 *	13.4	44.2	-51.03	12	-63.03
18-40	31.26	23.22	1	1000	0	22.7	46.89	92.82	-11.95	12	-23.95
40-50	39.12	27.66	1	1000	0	23.8	39.03	90.49	-14.28	12	-26.28
50-75	56.25	4.83	1	100	10	33.4	42.27	90.5	-14.27	12	-26.27
75-100	88.37	4.76	1	100	10	42.09	46	102.85	-1.92	12	-13.92

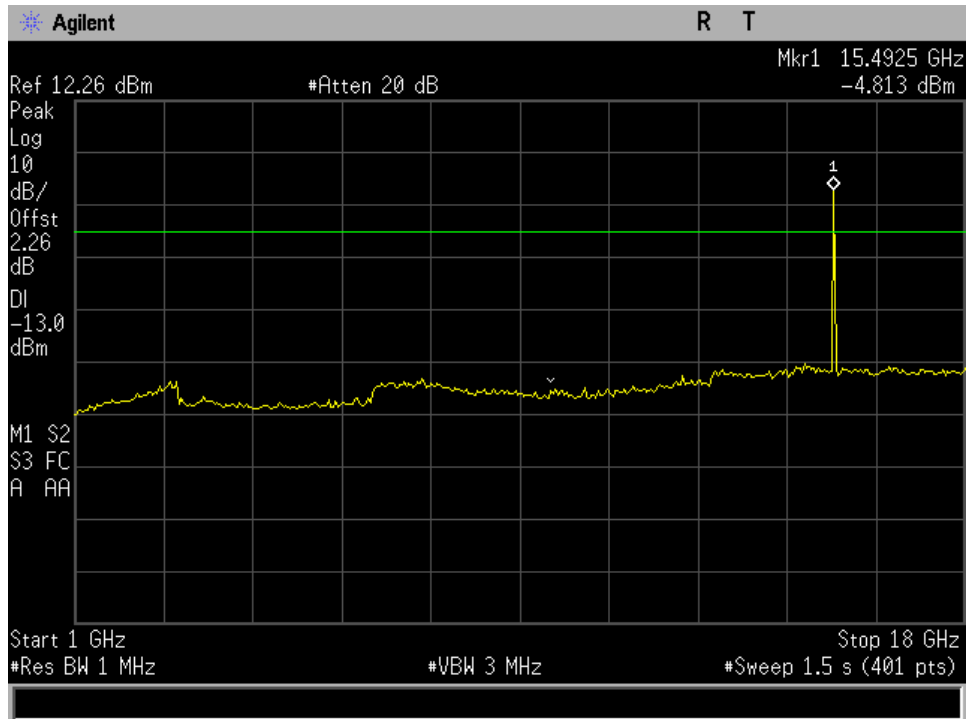
* This value is representing the external amplifier gain instead of the Mixer correction factor for 30MHz-1GHz range



1-18 GHz spurious High Channel

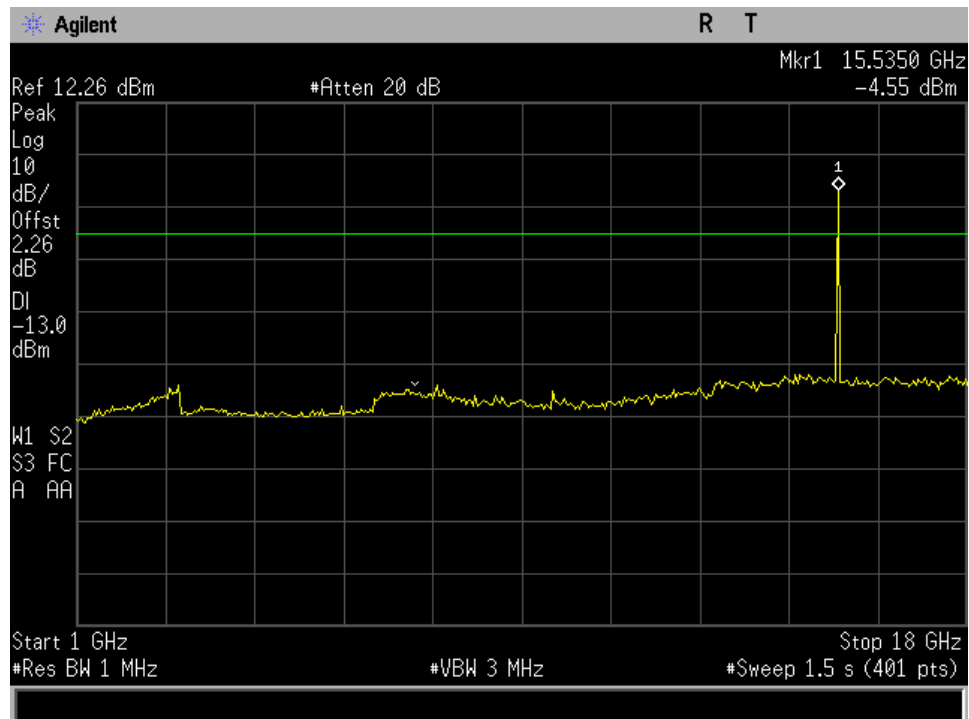


1-18 GHz spurious Low Channel

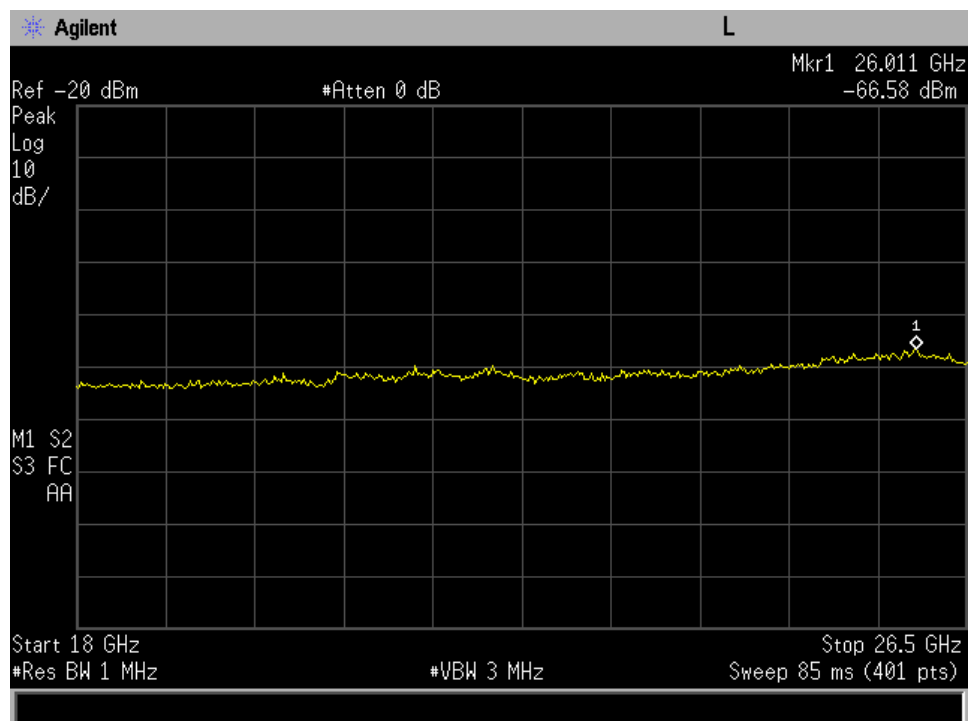




1-18 GHz spurious Mid Channel

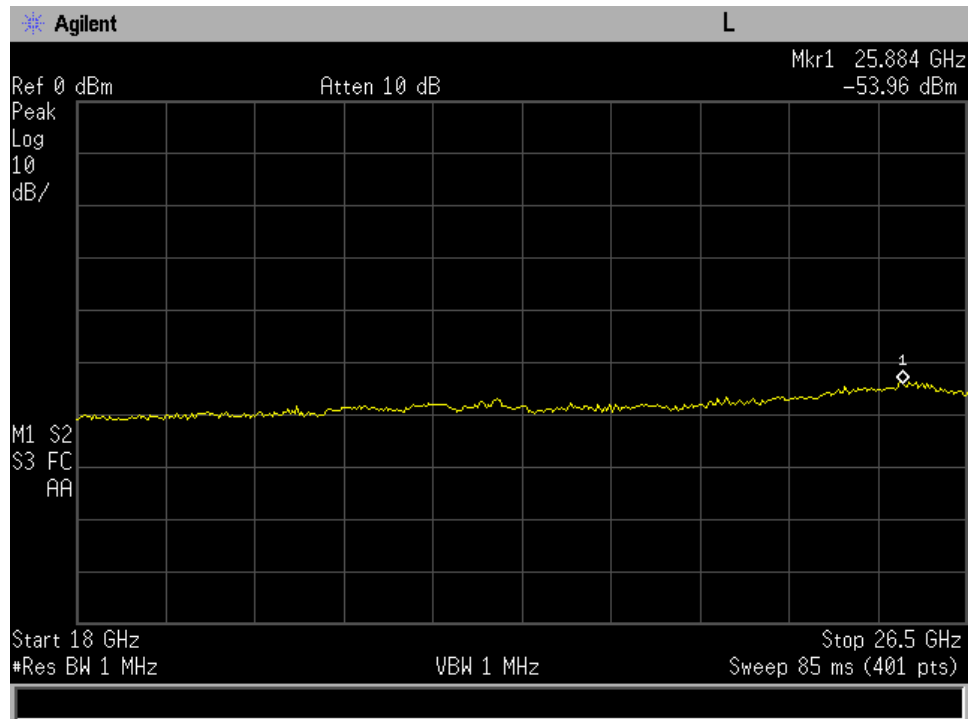


18-26.5 GHz Spurious High Channel

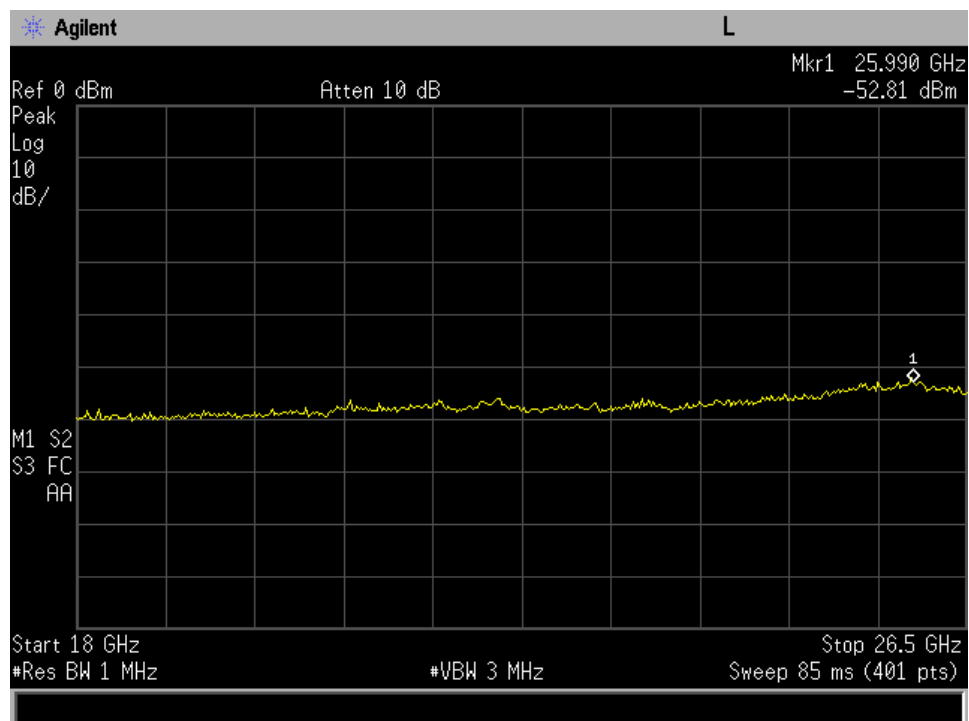




18-26.5 GHz Spurious Low Channel

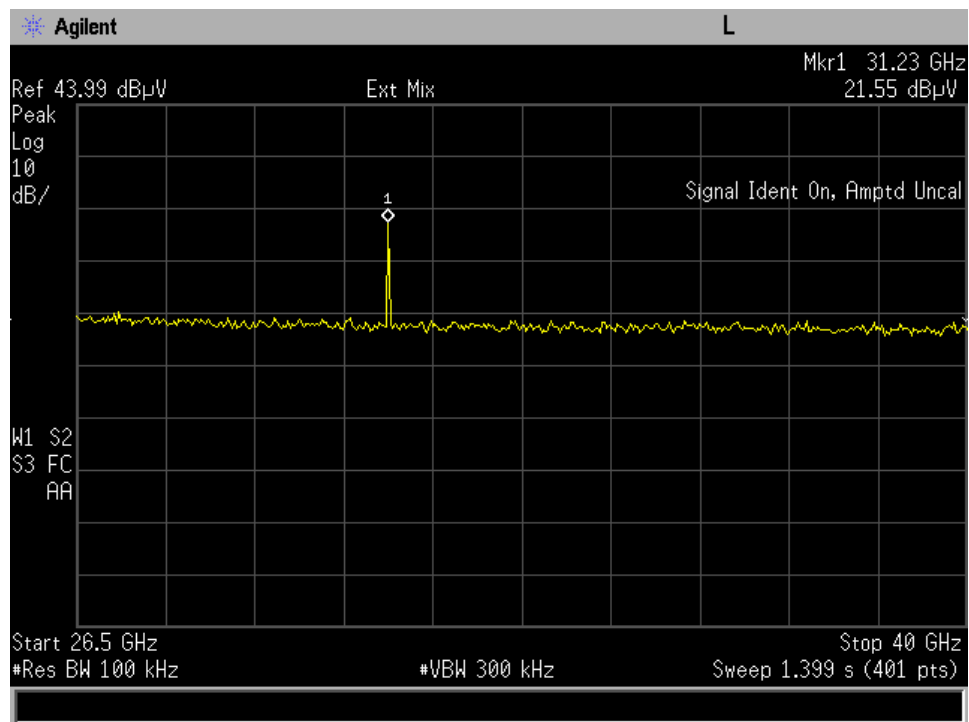


18-26.5 GHz Spurious Mid Channel

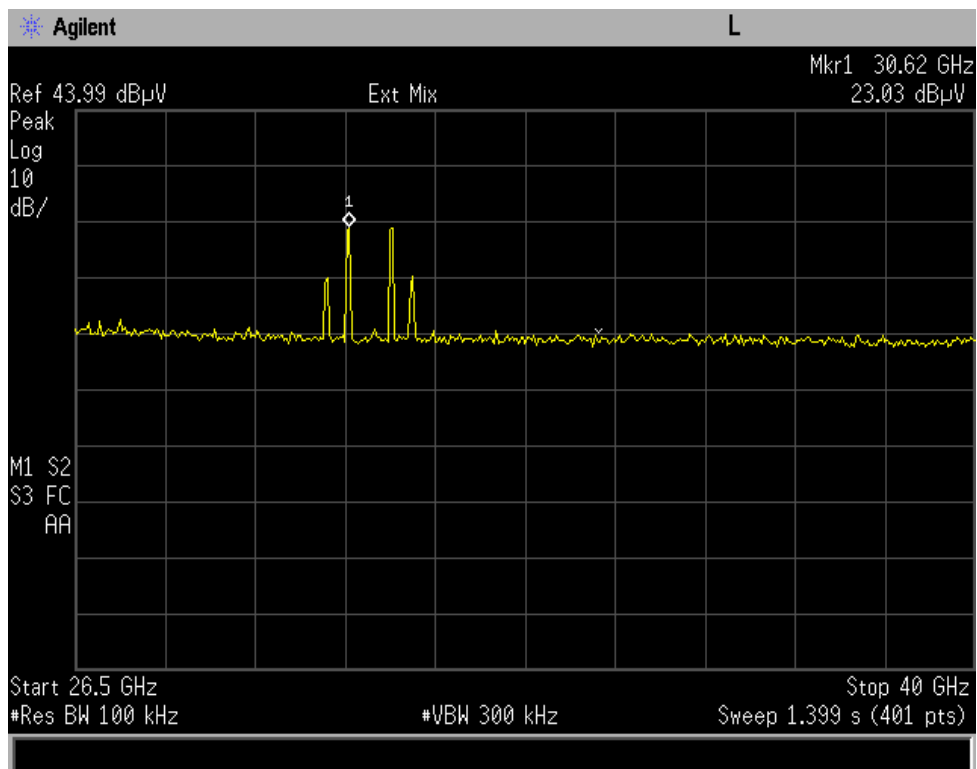




26.5-40 GHz Spurious High Channel Signal Iden On

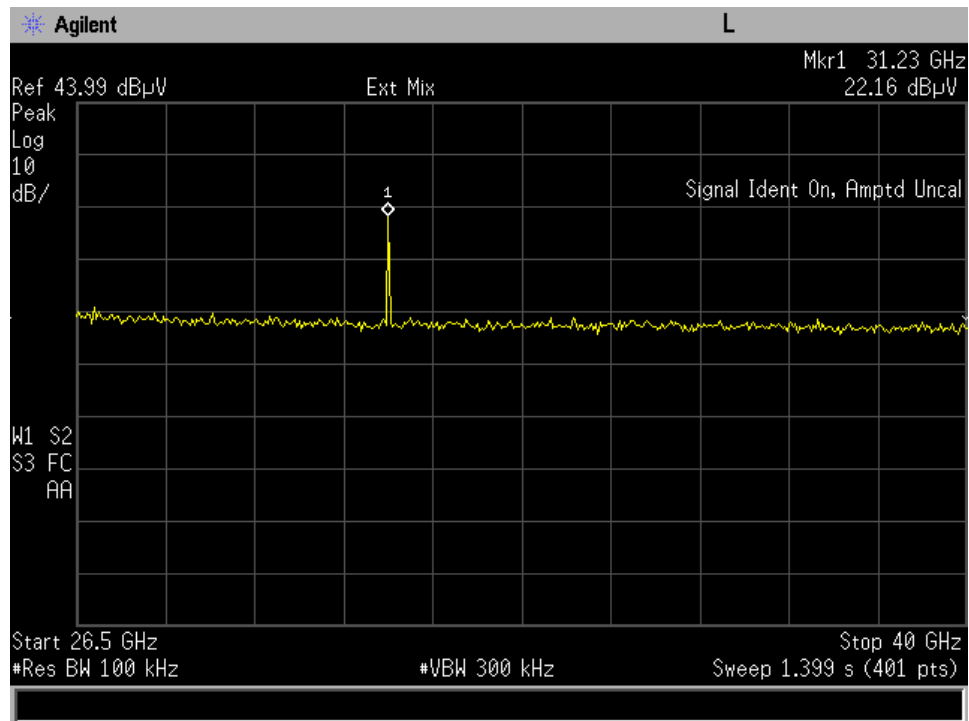


26.5-40 GHz Spurious High Channel Signal Iden off

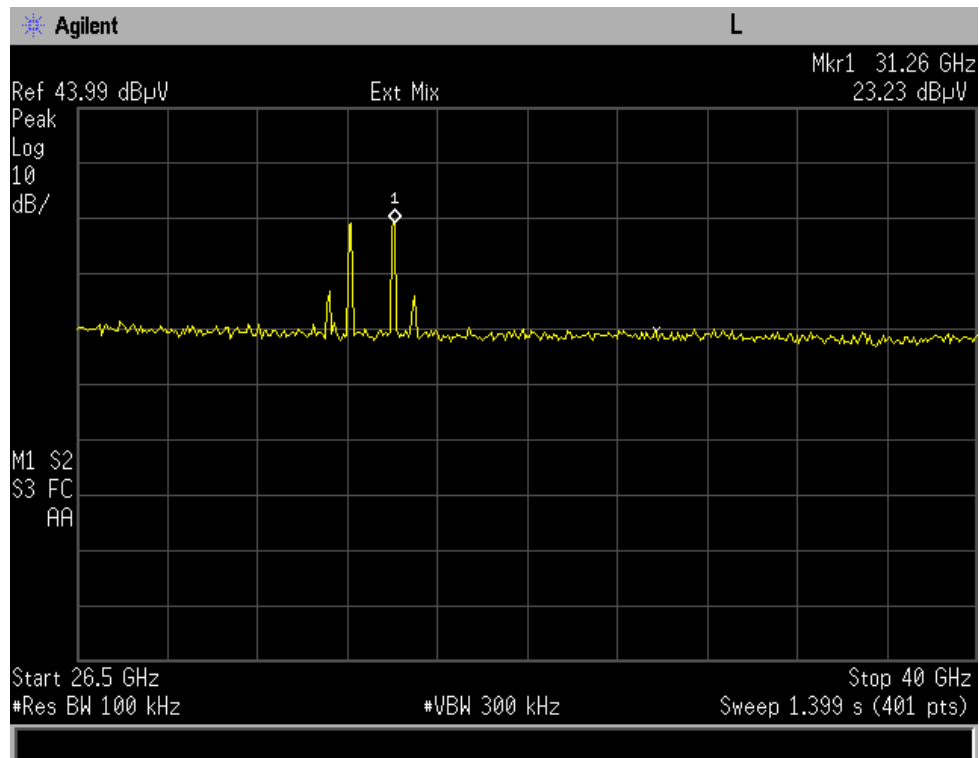




26.5-40 GHz Spurious Low Channel Signal Iden on

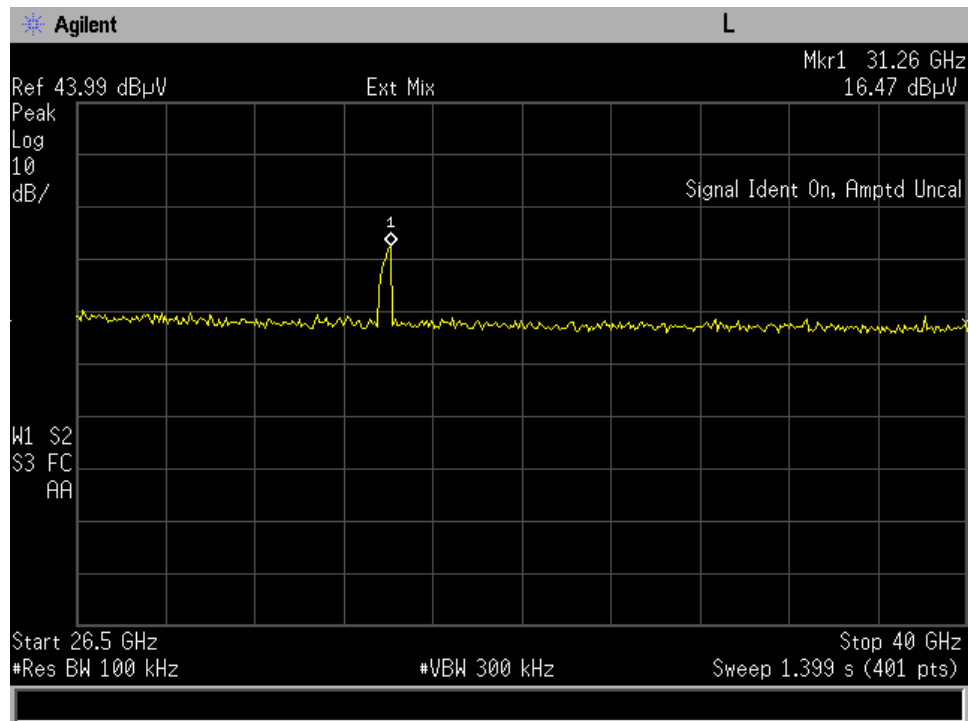


26.5-40 GHz Spurious Low Channel Signal Iden off

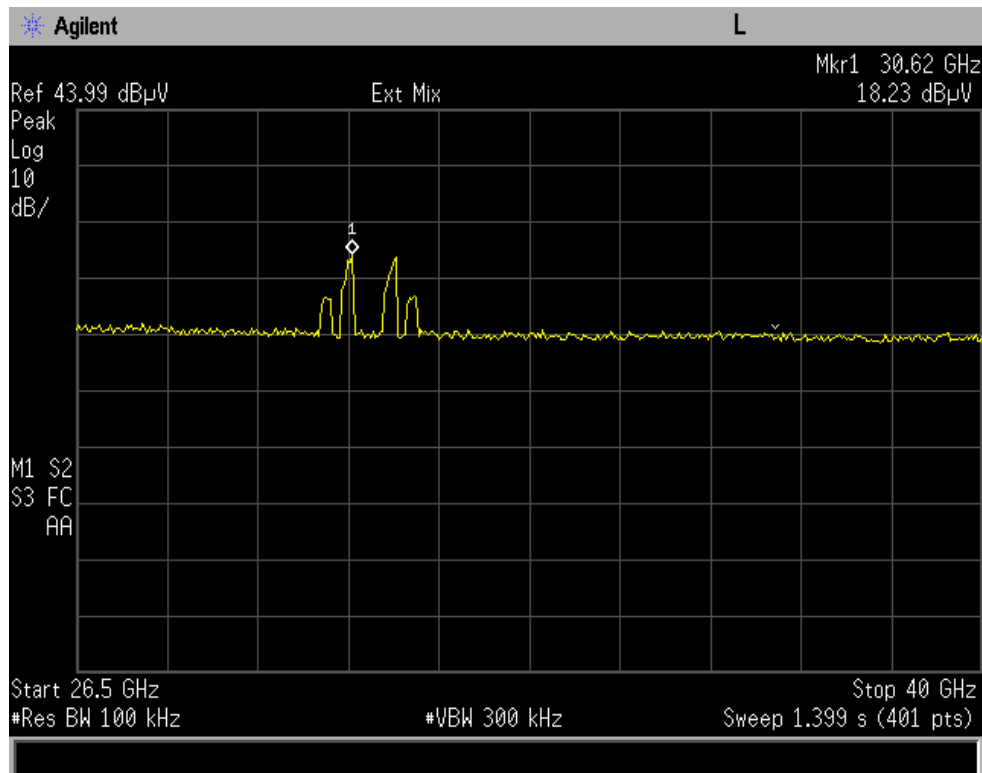




26.5-40 GHz Spurious Mid Channel Signal Iden on

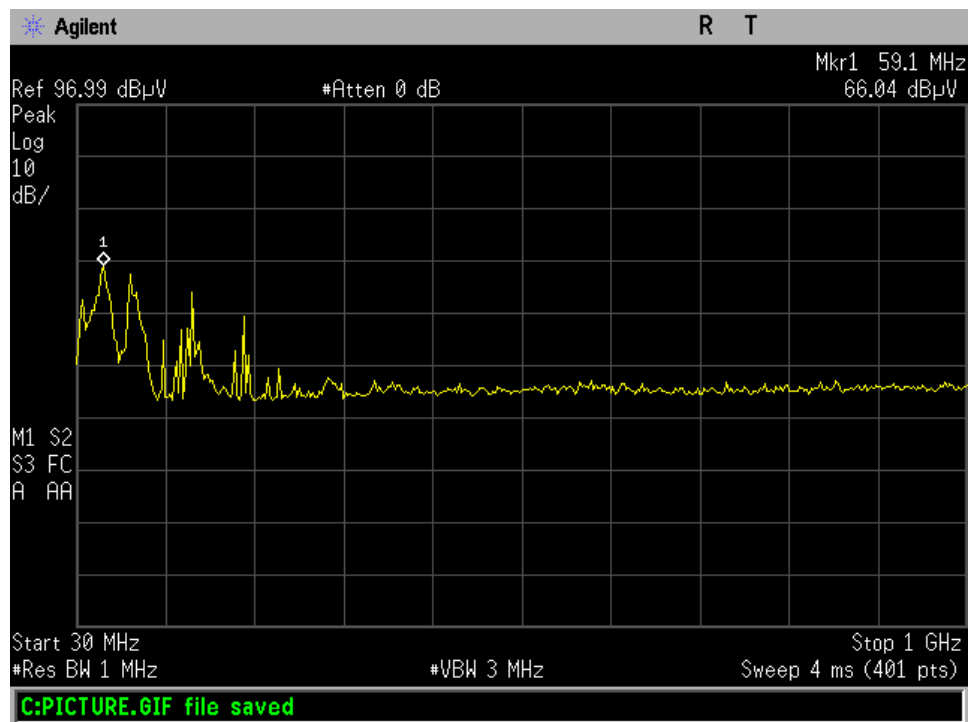


26.5-40 GHz Spurious Mid Channel Signal Iden off

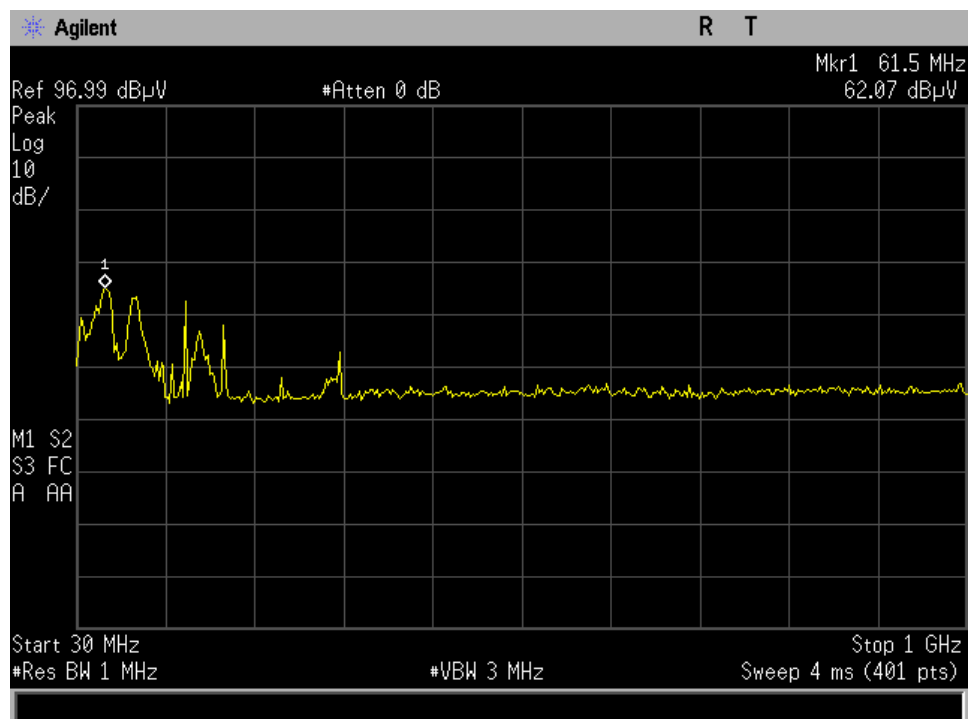




30 MHz-1GHz Spurious High Channel

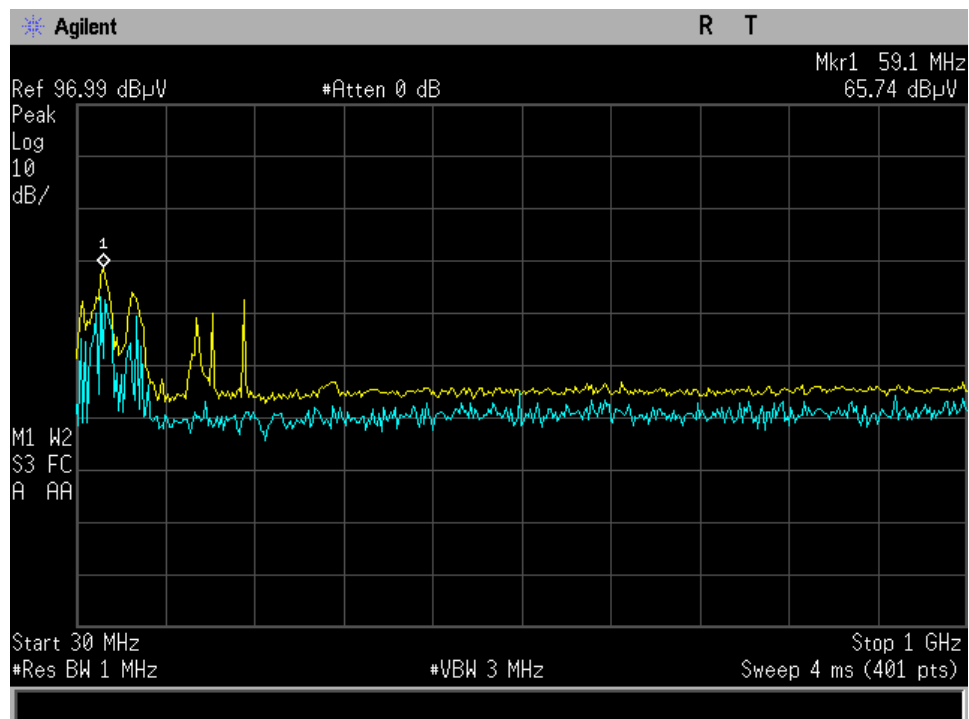


30 MHz-1GHz Spurious Low Channel

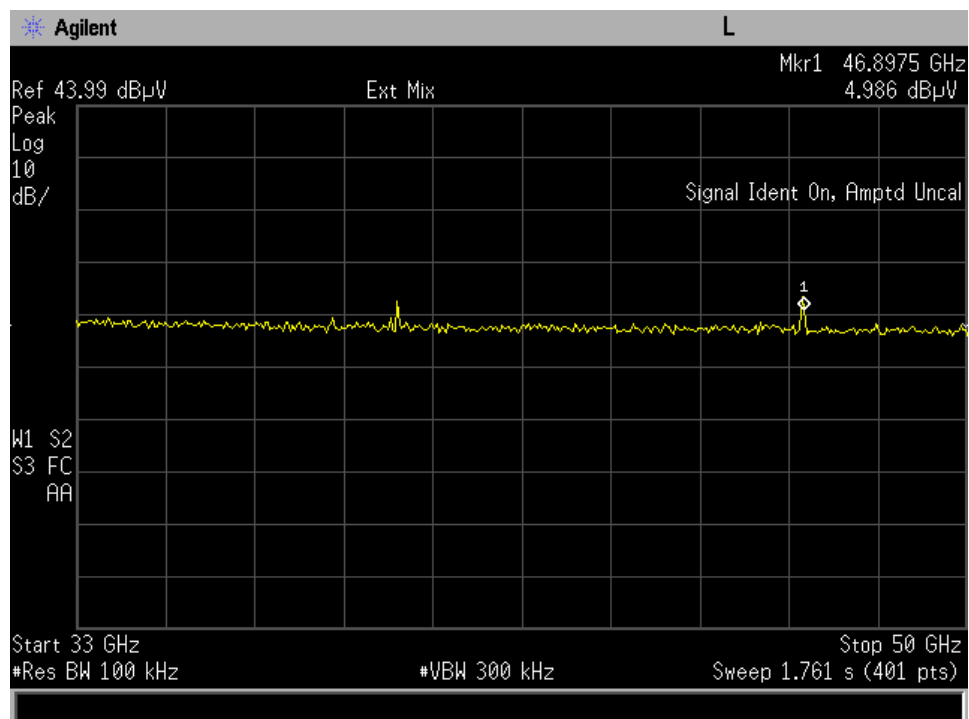




30 MHz-1GHz Spurious Mid Channel

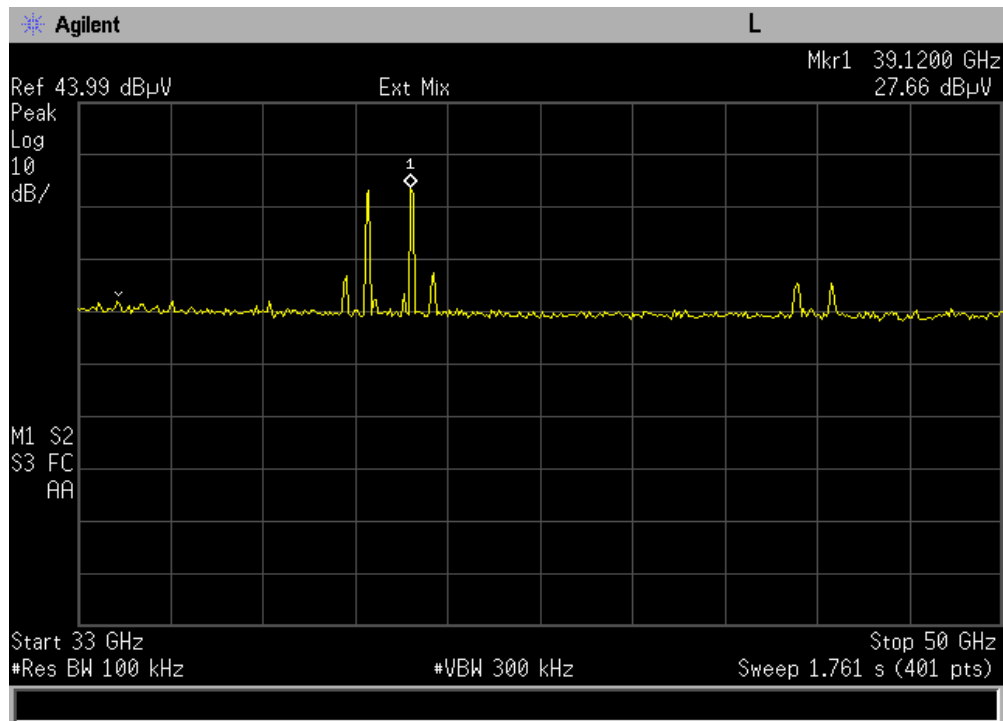


33-50 GHz Spurious High Channel Signal Ident on

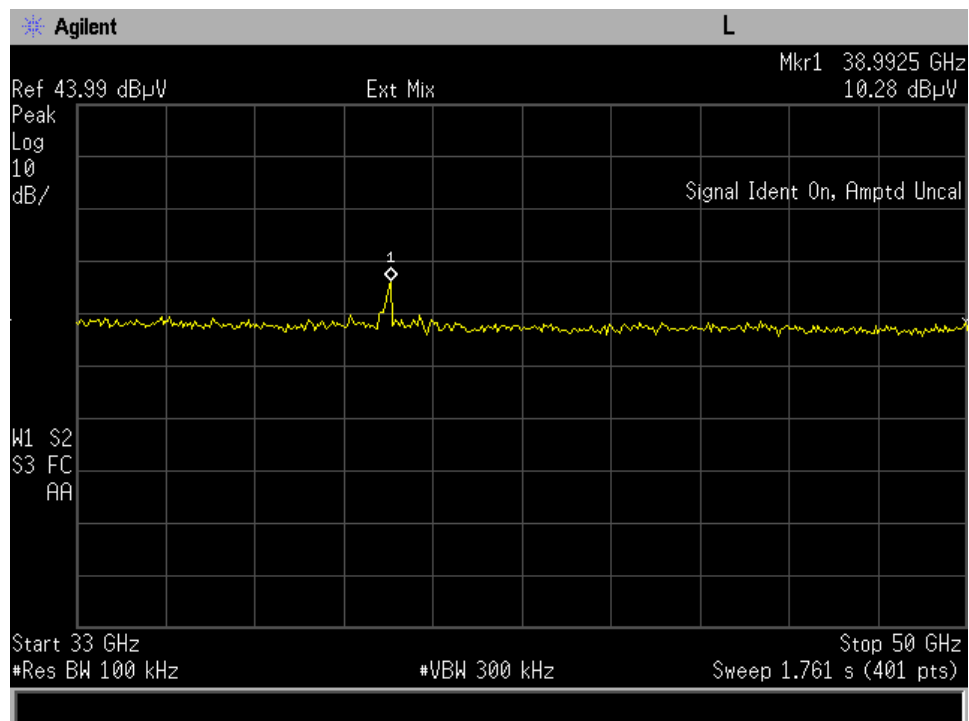




33-50 GHz Spurious High Channel Signal Iden off

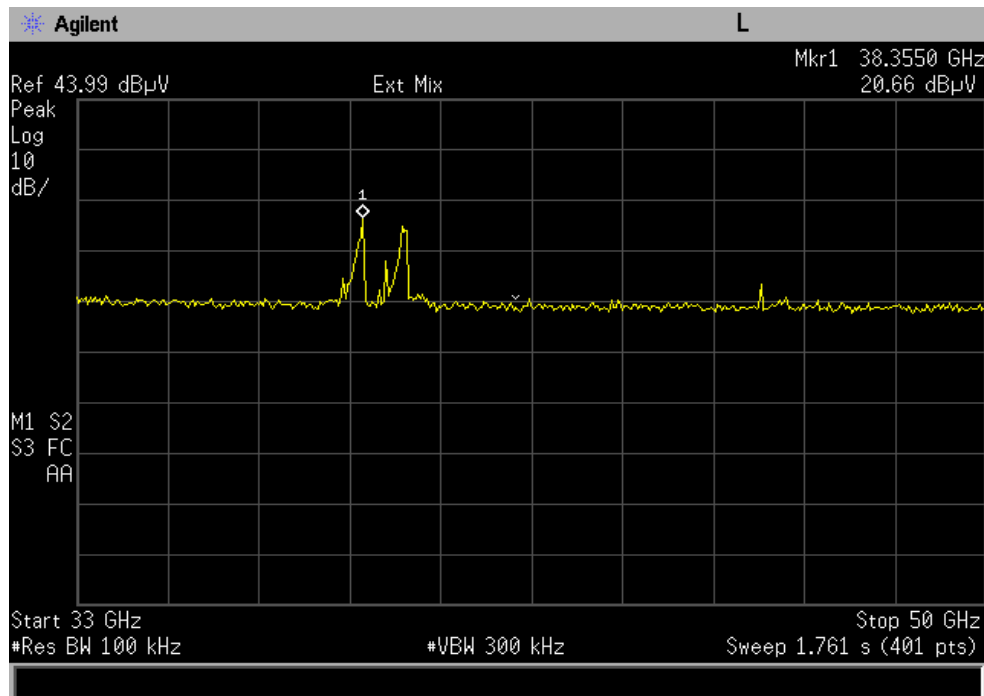


33-50 GHz Spurious Low Channel Signal Iden on

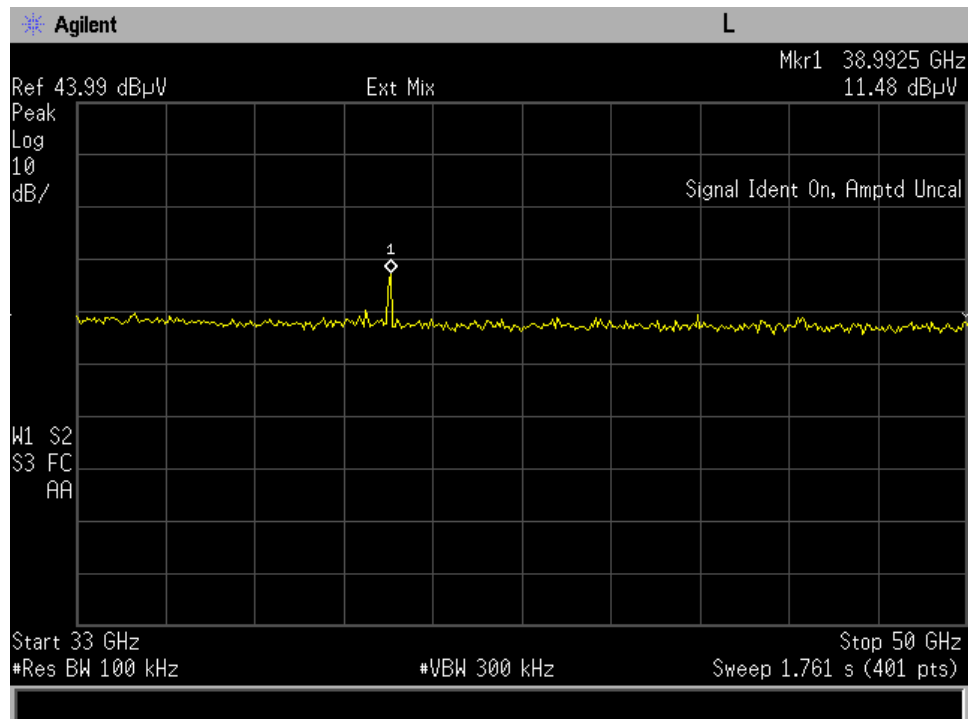




33-50 GHz Spurious Low Channel Signal Iden off

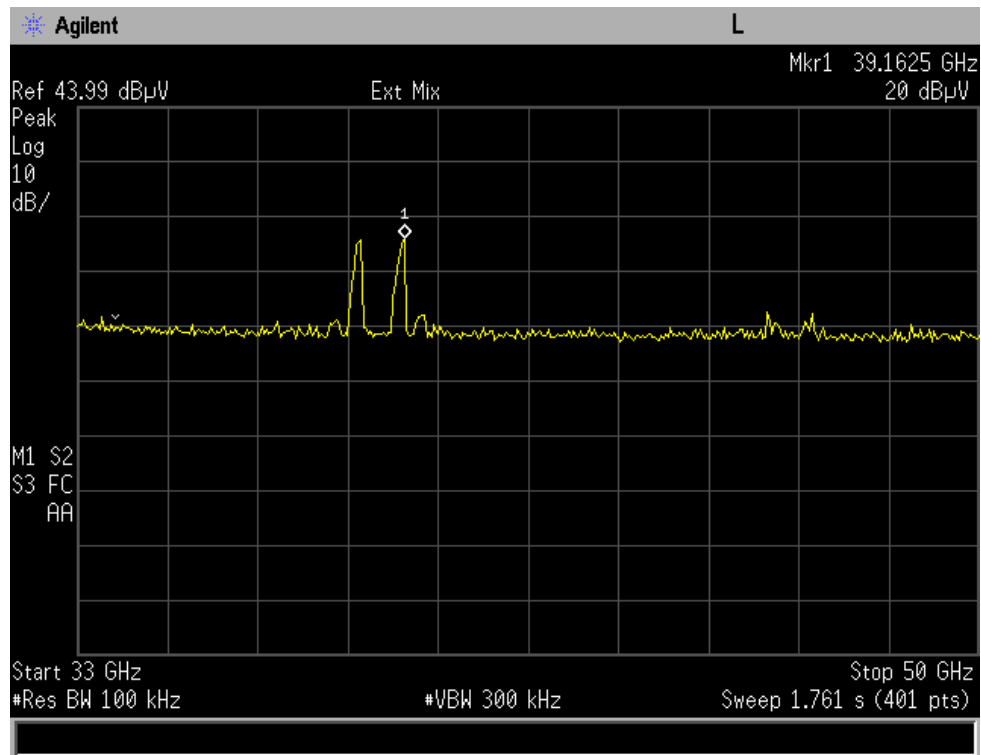


33-50 GHz Spurious Mid Channel Signal Iden on

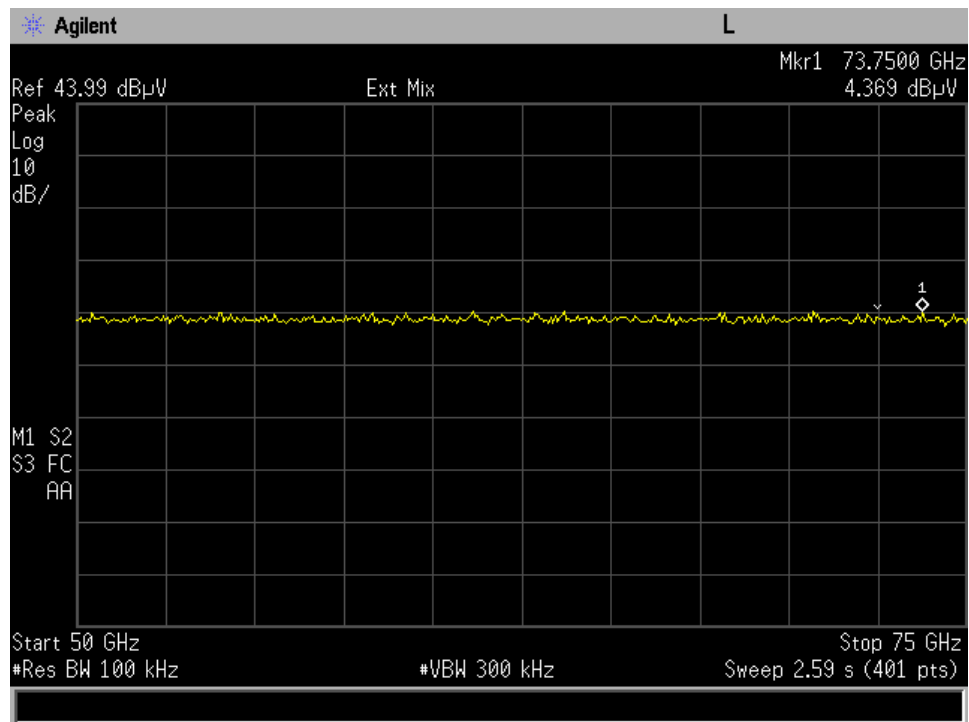




33-50 GHz Spurious Mid Channel Signal Iden off

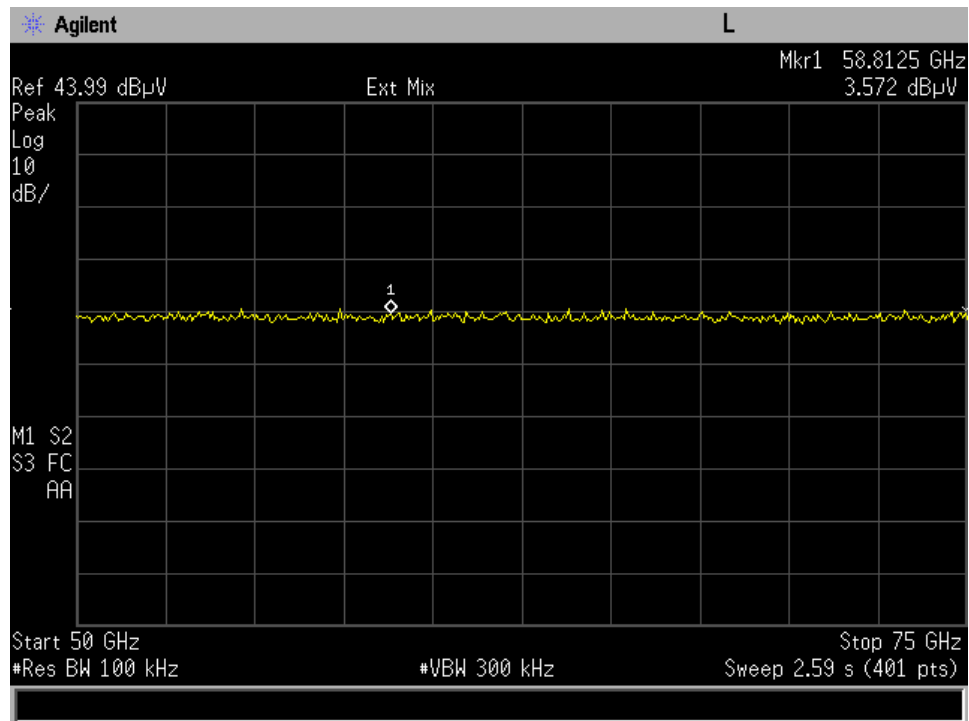


50-75 GHz Spurious High Channel Signal Iden off

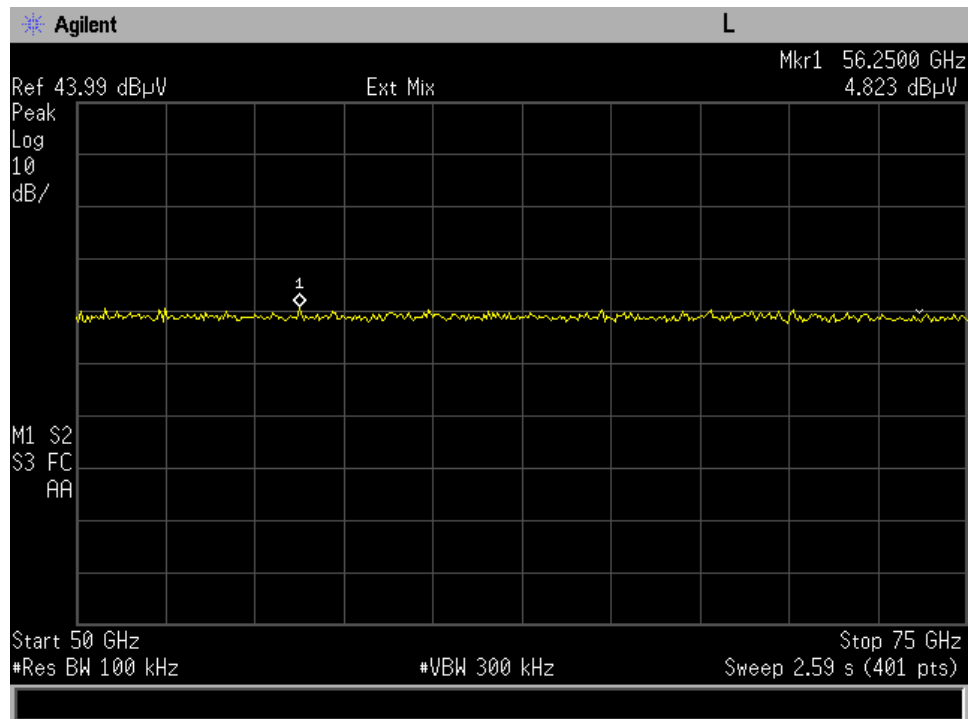




50-75 GHz Spurious Low Channel Signal Iden off

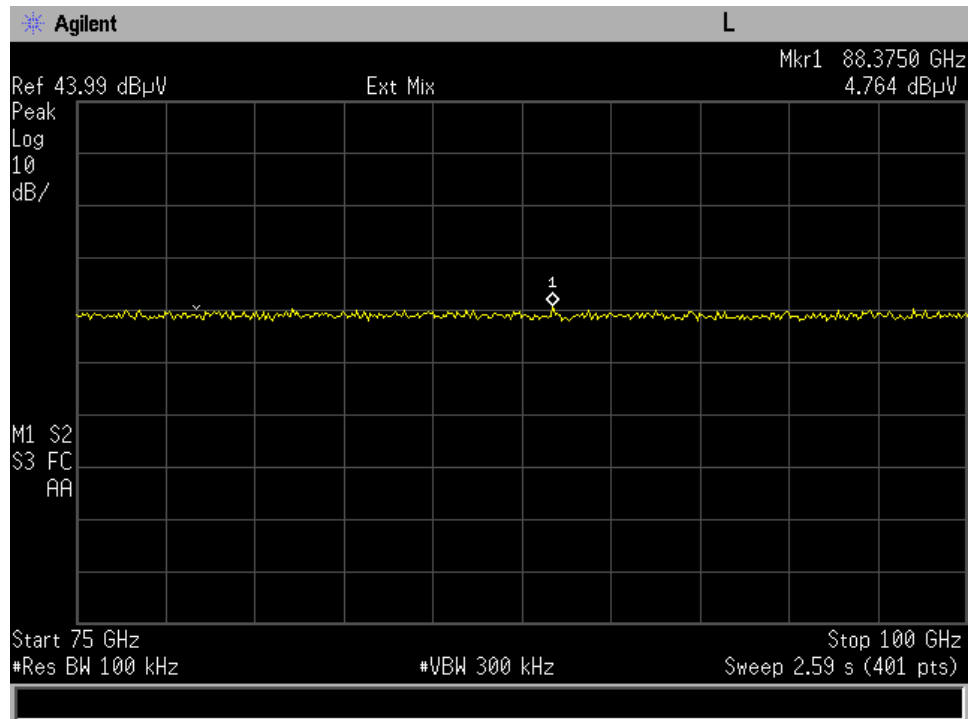


50-75 GHz Spurious Mid Channel Signal Iden off

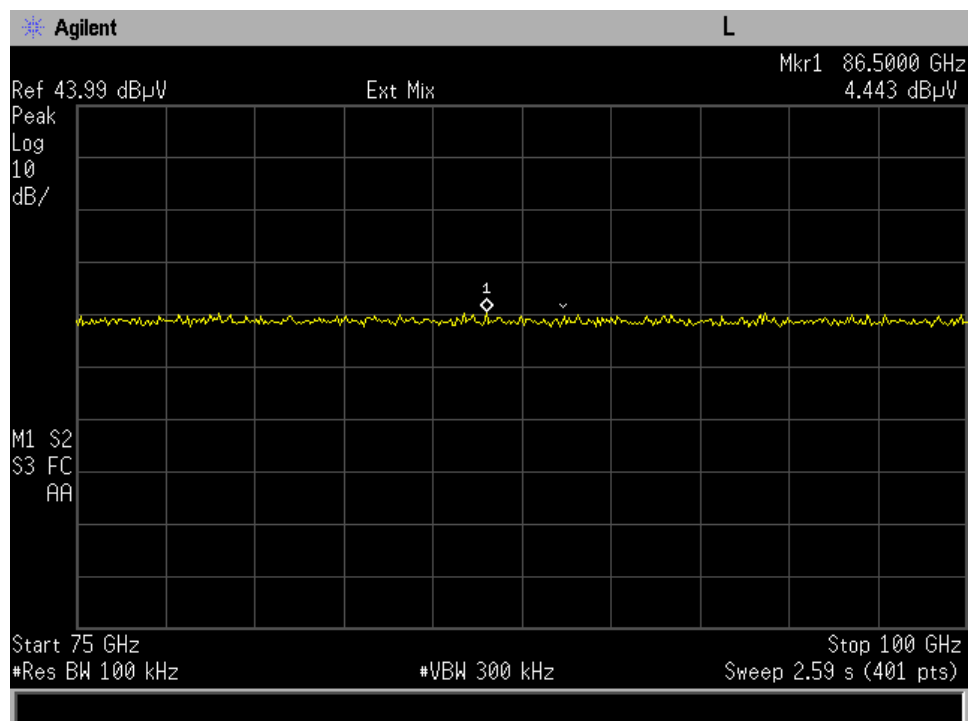




75-100 GHz Spurious High Channel Signal Iden off



75-100 GHz Spurious Low Channel Signal Iden off





75-100 GHz Spurious Mid Channel Signal Iden off

