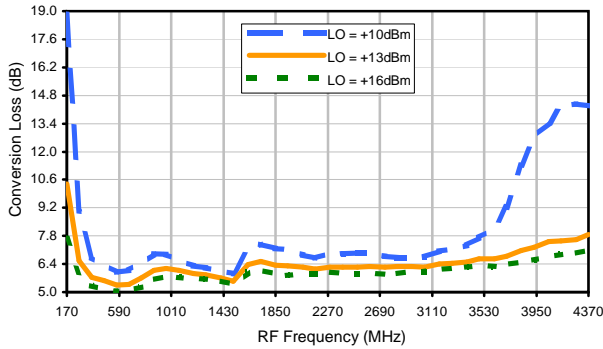


Frequency Mixer

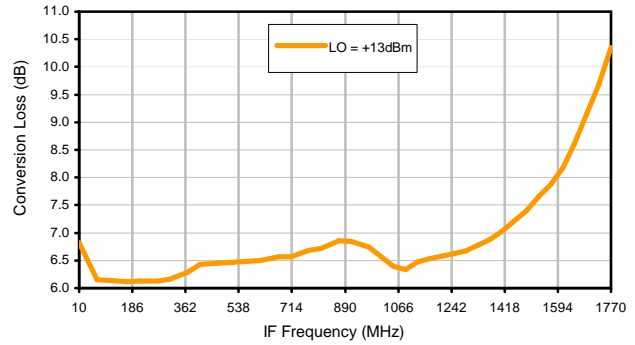
ZEM-4300MH+

Typical Performance Curves

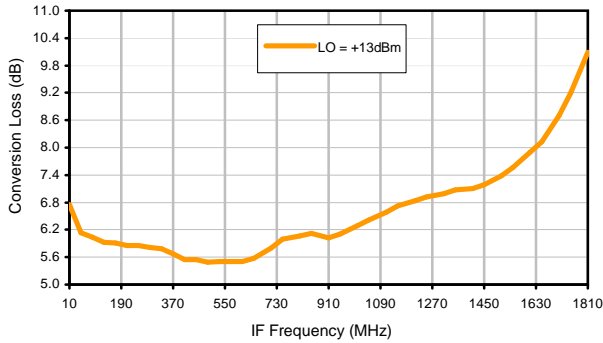
Conversion Loss @ IF=30MHz



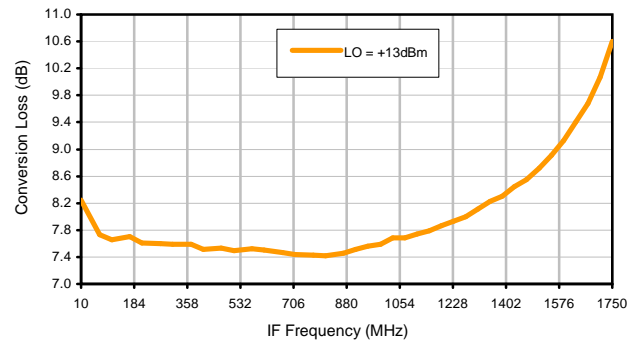
Conversion Loss vs. IF @ RF=2160.1MHz



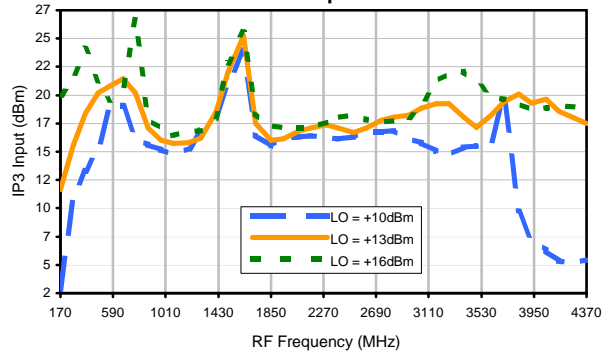
Conversion Loss vs. IF @ RF=289.9MHz



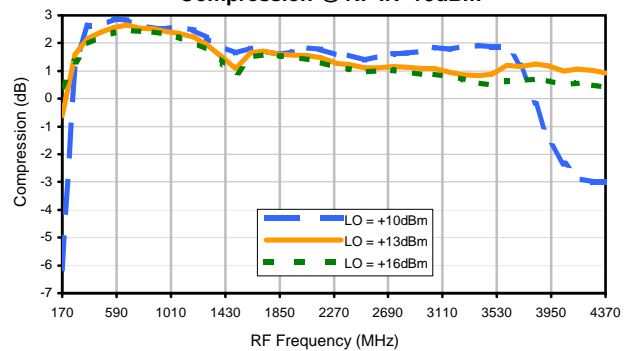
Conversion Loss vs. IF @ RF=4310.1MHz



IP3 Input

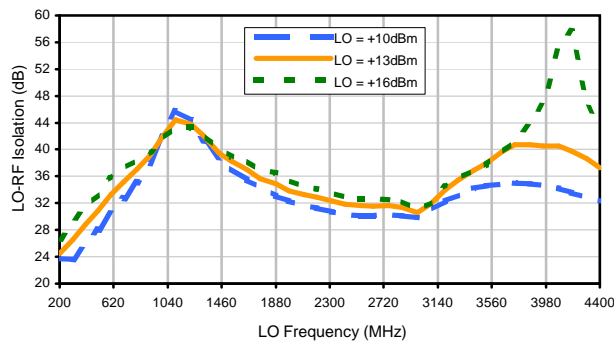


Compression @ RF IN=+9dBm

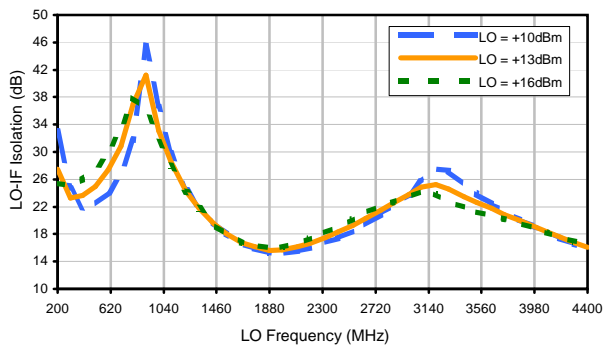


Typical Performance Curves

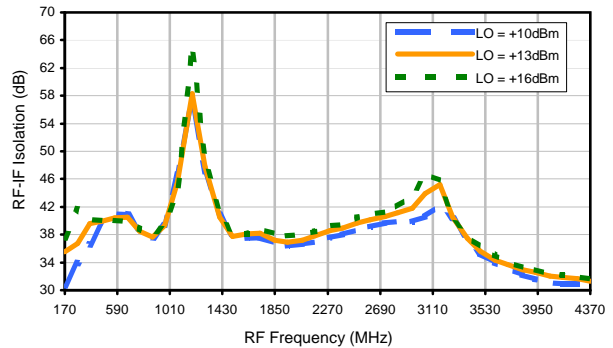
LO-RF Isolation



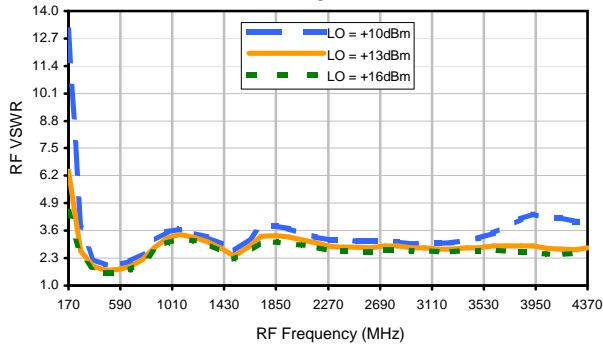
LO-IF Isolation



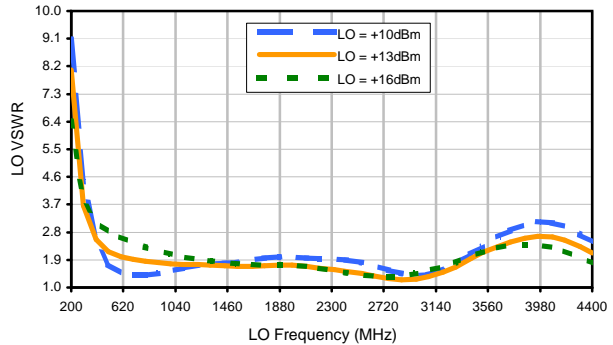
RF-IF Isolation



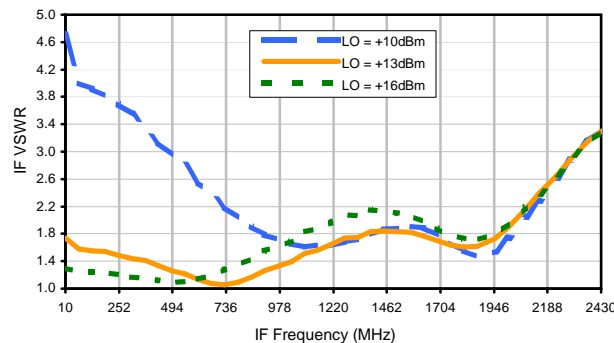
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	+8	36	12	43	29	50	36	62	53	58
1	-	32	+0	46	30	41	44	65	42	58	62	64
2	72	>78	54	49	55	74	51	67	54	>78	55	77
3	>90	70	67	>78	58	>78	75	76	72	>78	69	>78
4	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
5	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
6	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
7	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
8	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
9	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
10	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 2300 MHz; -6.00 dBm.
 LO IN: 2330 MHz; +13.00 dBm
 IF OUT: 30 MHz; -12.44 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	2	47	23	58	50	72	47	87	71	78
1	-	33	+0	49	30	46	51	72	53	69	76	83
2	52	70	44	42	47	69	46	67	56	78	61	>88
3	85	49	47	64	38	65	58	59	57	81	59	79
4	>90	79	65	81	64	63	63	>88	61	74	64	81
5	>90	>88	69	76	70	77	50	84	66	73	66	>88
6	>90	>88	86	>88	76	>88	75	73	77	>88	72	82
7	>90	>88	>88	>88	81	>88	83	83	61	>88	78	83
8	>90	>88	>88	>88	>88	>88	>88	>88	84	80	>88	>88
9	>90	>88	>88	>88	>88	>88	>88	>88	>88	>88	72	>88
10	>90	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 2300 MHz; 4.00 dBm.
 LO IN: 2330 MHz; +13.00 dBm
 IF OUT: 30 MHz; -2.45 dBm

- Notes: 1. All Harmonics are in (dBc) relative to IF OUTPUT.
 2. + entry denotes harmonics are in (dBc) above IF OUTPUT.
 3. RF Cal represent the Harmonics level of the RF input signal to the mixer.