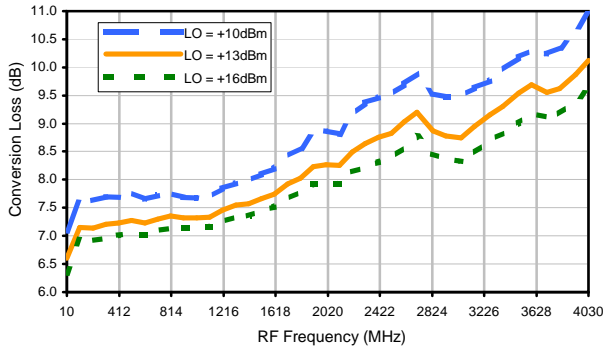


# Frequency Mixer

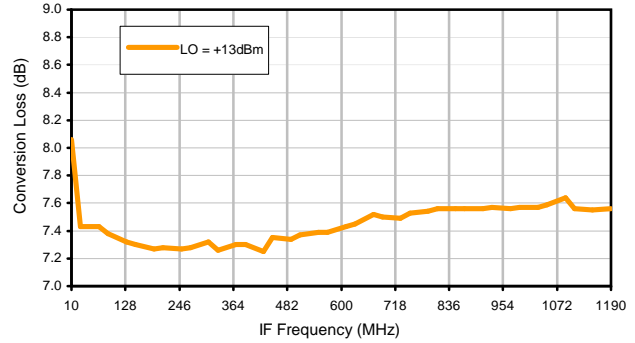
# ZEM-M2TMH+

## Typical Performance Curves

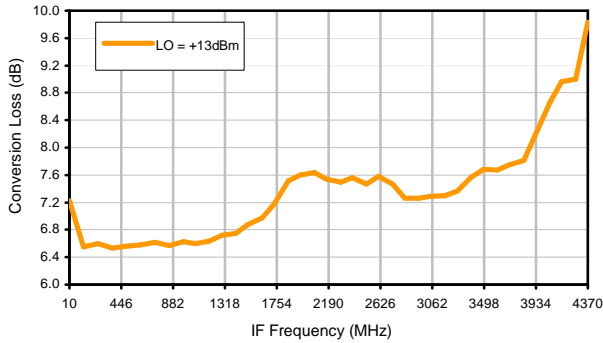
Conversion Loss @ IF=30MHz



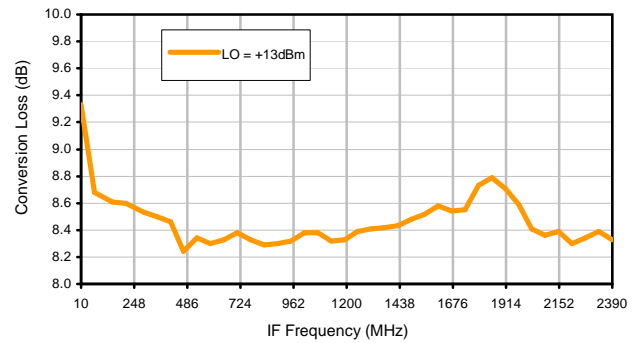
Conversion Loss vs. IF @ RF=1210.1MHz



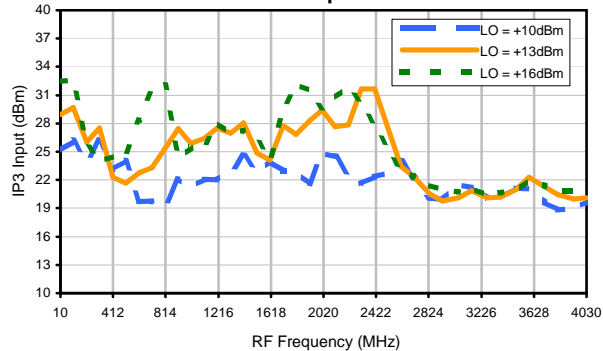
Conversion Loss vs. IF @ RF=10MHz



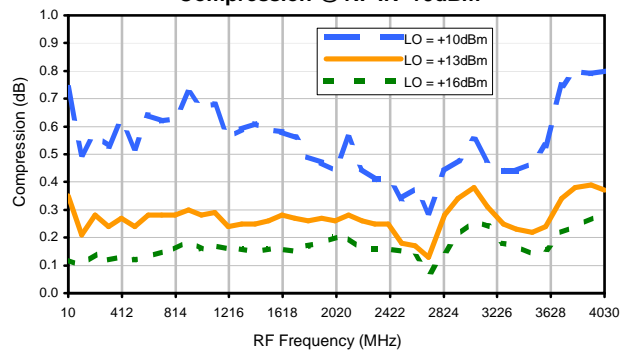
Conversion Loss vs. IF @ RF=2410.1001MHz



IP3 Input

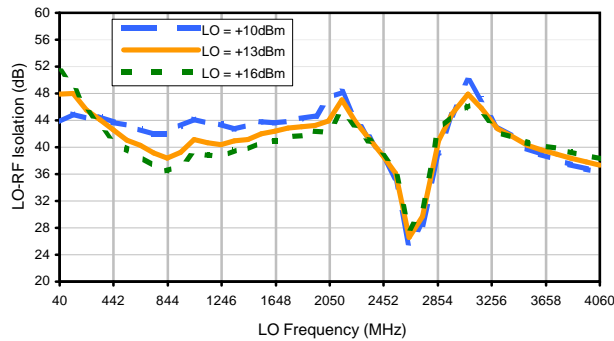


Compression @ RF IN=+9dBm

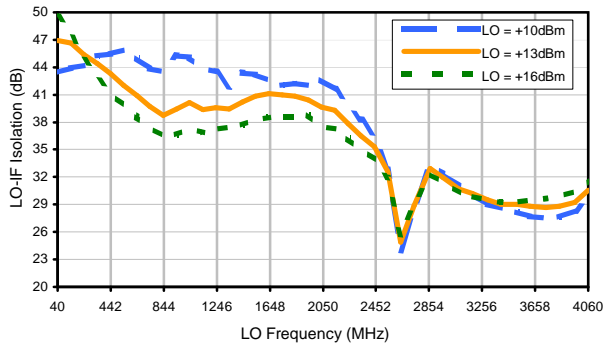


## Typical Performance Curves

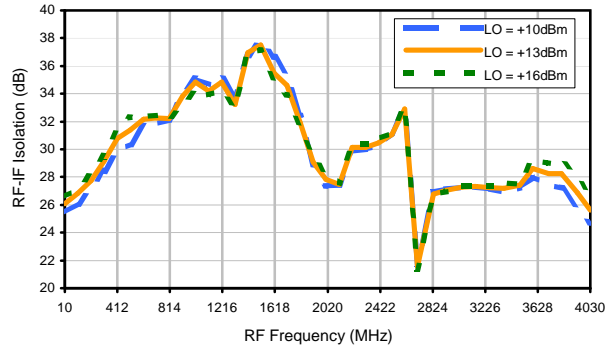
LO-RF Isolation



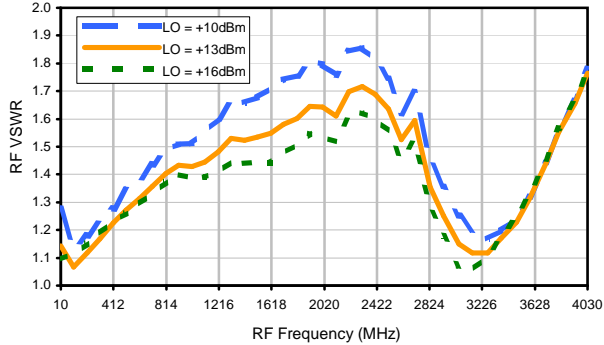
LO-IF Isolation



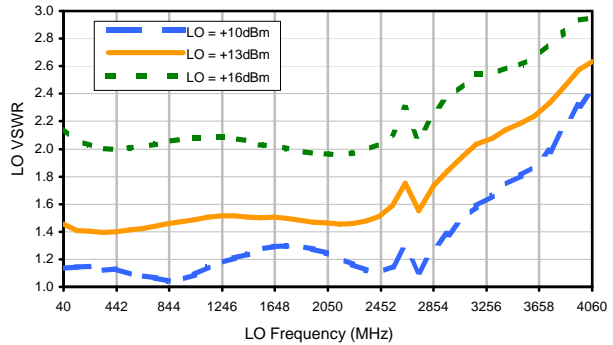
RF-IF Isolation



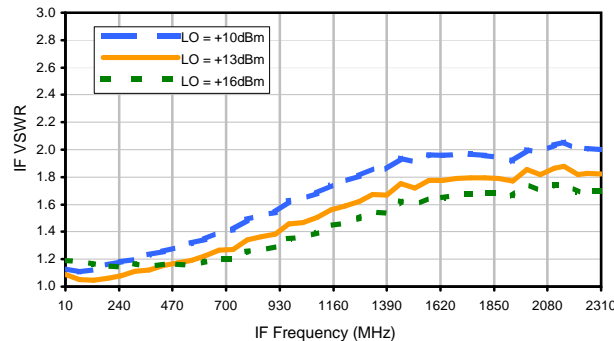
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	13	18	17	25	24	38	32	43	26	41
1	-	26	+0	38	13	41	20	37	40	41	45	60
2	76	56	63	61	56	60	57	63	60	65	65	67
3	>90	73	70	71	68	>76	65	>76	63	>76	71	74
4	>90	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76
5	>90	>76	>76	>76	>76	>76	>76	73	>76	>76	>76	>76
6	>90	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76
7	>90	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76
8	>90	>76	>76	>76	>76	>76	>76	>76	71	>76	>76	>76
9	>90	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76
10	>90	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76	>76
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 1205 MHz; -6.00 dBm.  
 LO IN: 1235 MHz; +13.00 dBm  
 IF OUT: 30 MHz; -13.54 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	23	29	28	36	36	47	47	56	44	53
1	-	26	+0	36	13	42	21	40	41	46	49	65
2	56	47	52	53	46	51	47	70	52	62	59	61
3	84	57	46	57	47	62	51	68	45	57	58	57
4	>90	74	74	67	78	66	74	64	76	63	70	69
5	>90	77	70	>86	68	74	66	79	63	76	63	83
6	>90	84	84	84	83	>86	84	86	80	84	81	78
7	>90	>86	>86	>86	84	>86	84	>86	84	>86	80	>86
8	>90	>86	>86	>86	>86	>86	>86	85	86	84	79	84
9	>90	>86	>86	>86	>86	>86	>86	>86	>86	>86	>86	83
10	>90	>86	>86	>86	>86	>86	>86	>86	>86	>86	82	>86
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 1205 MHz; 4.00 dBm.  
 LO IN: 1235 MHz; +13.00 dBm  
 IF OUT: 30 MHz; -3.59 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.