Frequency Mixer SIM-14H+

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB) @LO (dBm)		
		+14	+17	+20
3100.1	3130.1	46.49	28.45	12.76
3302.6	3332.6	30.03	16.37	7.44
3505.1	3535.1	17.68	8.45	6.68
3707.6	3737.6	8.64	7.09	6.51
3910.1	3940.1	7.53	6.94	6.63
4112.6	4142.6	7.57	7.07	6.74
4315.1	4345.1	7.50	7.05	6.77
4517.6	4547.6	7.01	6.73	6.62
4720.1	4750.1	7.10	6.66	6.47
4922.6	4952.6	8.23	7.43	7.08
5125.1	5155.1	9.03	8.01	7.53
5327.6	5357.6	9.11	8.01	7.60
5530.1	5560.1	9.02	8.03	7.56
5732.6	5762.6	8.87	8.07	7.56
5935.1	5965.1	8.66	7.92	7.44
6137.6	6167.6	8.44	7.71	7.24
6340.1	6370.1	8.16	7.41	6.98
6542.6	6572.6	8.07	7.15	6.70
6745.1	6775.1	8.38	6.95	6.47
6947.6	6977.6	8.50	6.82	6.31
7150.1	7180.1	8.44	6.44	6.07
7372.9	7402.9	8.23	6.33	6.04
7575.3	7605.3	8.26	6.72	6.39
7798.1	7828.1	8.88	6.95	6.59
8000.6	8030.6	8.36	6.87	6.57
8223.3	8253.3	8.57	6.78	6.51
8425.8	8455.8	8.42	6.87	6.59
8648.6	8678.6	8.21	7.18	7.02
8851.1	8881.1	8.34	7.63	7.47
9073.9	9103.9	8.57	7.95	7.83
9276.4	9306.4	8.80	8.16	8.00
9499.1	9529.1	9.75	9.02	8.76
9701.6	9731.6	10.35	9.48	9.22
9924.3	9954.3	10.86	9.60	9.26
10126.8	10156.8	11.88	9.46	9.10
10349.6	10379.6	13.36	9.53	9.13
10552.1	10582.1	13.06	9.61	9.31
10774.8	10804.8	14.46	9.95	9.47
10977.3	11007.3	17.94	10.23	9.82
11200.1	11230.1	24.13	10.94	10.05

RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm) @LO (dBm)		
		+14	+17	+20
3100.1	3130.1	7.64	-0.14	8.52
3302.6	3332.6	0.22	4.87	17.79
3505.1	3535.1	4.54	16.18	19.99
3707.6	3737.6	16.12	19.18	22.12
3910.1	3940.1	18.94	21.79	23.20
4112.6	4142.6	21.08	23.55	24.81
4315.1	4345.1	22.51	23.22	22.87
4517.6	4547.6	22.93	27.87	30.97
4720.1	4750.1	23.35	26.79	30.16
4922.6	4952.6	24.29	26.62	29.00
5125.1	5155.1	28.45	31.06	33.33
5327.6	5357.6	31.78	28.23	29.03
5530.1	5560.1	28.33	26.74	27.10
5732.6	5762.6	28.53	25.99	25.75
5935.1	5965.1	28.08	26.10	24.85
6137.6	6167.6	26.13	25.52	23.90
6340.1	6370.1	23.52	24.20	23.47
6542.6	6572.6	20.40	22.82	23.13
6745.1	6775.1	17.44	21.07	22.34
6947.6	6977.6	16.60	19.70	21.53
7150.1	7180.1	15.97	19.06	20.71
7372.9	7402.9	15.99	19.15	20.93
7575.3	7605.3	17.33	20.11	22.62
7798.1	7828.1	18.93	20.56	22.72
8000.6	8030.6	18.84	20.54	22.36
8223.3	8253.3	19.30	20.74	22.32
8425.8	8455.8	19.82	21.83	23.87
8648.6	8678.6	21.43	23.55	25.01
8851.1	8881.1	23.83	25.33	26.25
9073.9	9103.9	24.44	26.56	27.41
9276.4	9306.4	25.05	27.46	27.59
9499.1	9529.1	25.83	27.82	28.12
9701.6	9731.6	24.70	28.11	28.03
9924.3	9954.3	21.87	27.40	28.68
10126.8	10156.8	21.82	26.47	28.17
10349.6	10379.6	22.50	25.82	26.82
10552.1	10582.1	25.12	26.16	26.92
10774.8	10804.8	19.17	26.28	26.92
10977.3	11007.3	12.51	25.92	26.78
11200.1	11230.1	8.03	27.17	27.83

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+14dBm (dB) @LO (dBm)		
		+14	+17	+20
3100.1	3130.1	-31.07	-15.71	-2.72
3302.6	3332.6	-16.86	-5.45	1.51
3505.1	3535.1	-6.09	1.29	1.39
3707.6	3737.6	1.95	1.74	1.10
3910.1	3940.1	2.23	1.15	0.66
4112.6	4142.6	1.73	0.83	0.57
4315.1	4345.1	1.37	0.70	0.49
4517.6	4547.6	1.27	0.54	0.21
4720.1	4750.1	1.24	0.55	0.28
4922.6	4952.6	0.89	0.51	0.28
5125.1	5155.1	0.30	0.24	0.16
5327.6	5357.6	0.08	0.19	0.17
5530.1	5560.1	0.01	0.19	0.23
5732.6	5762.6	0.14	0.18	0.25
5935.1	5965.1	0.20	0.18	0.24
6137.6	6167.6	0.39	0.23	0.28
6340.1	6370.1	0.70	0.37	0.38
6542.6	6572.6	1.20	0.59	0.56
6745.1	6775.1	1.27	0.79	0.71
6947.6	6977.6	0.91	0.81	0.71
7150.1	7180.1	1.00	0.96	0.83
7372.9	7402.9	1.06	0.87	0.74
7575.3	7605.3	0.86	0.63	0.60
7798.1	7828.1	0.48	0.53	0.55
8000.6	8030.6	0.92	0.60	0.66
8223.3	8253.3	0.66	0.49	0.61
8425.8	8455.8	0.64	0.42	0.57
8648.6	8678.6	0.76	0.40	0.54
8851.1	8881.1	0.63	0.32	0.50
9073.9	9103.9	0.59	0.28	0.42
9276.4	9306.4	0.67	0.34	0.45
9499.1	9529.1	0.66	0.32	0.42
9701.6	9731.6	0.66	0.24	0.34
9924.3	9954.3	0.69	0.15	0.26
10126.8	10156.8	0.05	0.13	0.22
10349.6	10379.6	-1.01	0.10	0.29
10552.1	10582.1	-0.96	0.03	0.13
10774.8	10804.8	-1.69	0.10	0.26
10977.3	11007.3	-3.79	-0.01	0.03
11200.1	11230.1	-8.93	-0.01	0.10

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=6850MHz (dB) @LO (dBm) +17
3549.9	3300.1	21.34
3372.0	3478.0	16.23
3194.1	3655.9	10.60
3016.2	3833.8	10.41
2838.4	4011.6	9.84
2660.5	4189.5	9.14
2482.6	4367.4	8.39
2304.7	4545.3	8.02
2126.8	4723.2	8.61
1948.9	4901.1	8.64
1771.1	5078.9	8.69
1593.2	5256.8	8.26
1415.3	5434.7	7.52
1237.4	5612.6	6.75
1059.5	5790.5	6.45
881.6	5968.4	6.12
703.7	6146.3	5.99
525.9	6324.1	5.97
348.0	6502.0	6.07
170.1	6679.9	6.24
10.0	6860.0	7.34
259.7	7109.7	7.11
486.7	7336.7	7.21
736.4	7586.4	7.60
963.4	7813.4	7.77
1213.1	8063.1	7.72
1440.1	8290.1	7.74
1689.8	8539.8	7.56
1916.8	8766.8	7.37
2166.5	9016.5	7.64
2393.6	9243.6	7.63
2643.3	9493.3	7.77
2870.3	9720.3	7.67
3120.0	9970.0	8.10
3347.0	10197.0	8.53
3596.7	10446.7	9.67
3823.7	10673.7	9.69
4073.4	10923.4	9.94
4300.4	11150.4	9.72
4550.1	11400.1	10.54

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=3690MHz (dB) @LO (dBm) +17
10.1	3700.1	7.74
70.1	3760.1	6.79
130.1	3820.1	6.68
190.1	3880.1	6.39
270.1	3960.1	6.25
330.1	4020.1	6.28
410.1	4100.1	6.08
470.1	4160.1	5.99
550.1	4240.1	6.07
610.1	4300.1	6.21
690.1	4380.1	6.13
750.1	4440.1	5.93
830.1	4520.1	6.02
890.1	4580.1	6.01
970.1	4660.1	6.06
1030.1	4720.1	6.17
1110.1	4800.1	6.26
1170.1	4860.1	6.43
1250.1	4940.1	6.46
1310.1	5000.1	6.62
1390.1	5080.1	6.87
1450.1	5140.1	7.19
1530.1	5220.1	7.43
1590.1	5280.1	7.74
1670.1	5360.1	8.01
1730.1	5420.1	8.24
1810.1	5500.1	8.69
1870.1	5560.1	8.92
1950.1	5640.1	8.85
2010.1	5700.1	9.02
2090.1	5780.1	9.19
2150.1	5840.1	9.27
2230.1	5920.1	9.62
2290.1	5980.1	9.78
2370.1	6060.1	10.10
2430.1	6120.1	10.24
2510.1	6200.1	10.40
2570.1	6260.1	10.53
2650.1	6340.1	10.51
2710.1	6400.1	10.57

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10010.09MHz (dB) @LO (dBm) +17
1010.0	9000.1	11.04
990.0	9020.1	11.10
970.0	9040.1	11.05
950.0	9060.1	11.09
930.0	9080.1	11.03
910.0	9100.1	11.07
890.0	9120.1	11.09
870.0	9140.1	11.01
850.0	9160.1	11.02
830.0	9180.1	10.95
810.0	9200.1	10.87
790.0	9220.1	10.81
770.0	9240.1	10.76
750.0	9260.1	10.52
730.0	9280.1	10.57
710.0	9300.1	10.48
690.0	9320.1	10.49
670.0	9340.1	10.49
630.0	9380.1	10.53
610.0	9400.1	10.38
570.0	9440.1	10.19
550.0	9460.1	10.15
510.0	9500.1	10.03
490.0	9520.1	9.91
450.0	9560.1	9.92
430.0	9580.1	9.81
390.0	9620.1	9.72
370.0	9640.1	9.62
330.0	9680.1	9.62
310.0	9700.1	9.68
270.0	9740.1	9.46
250.0	9760.1	9.54
210.0	9800.1	9.43
190.0	9820.1	9.37
150.0	9860.1	9.41
130.0	9880.1	9.53
90.0	9920.1	9.40
70.0	9940.1	9.55
30.0	9980.1	9.63
10.0	10000.1	10.09

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB) @LO (dBm)			LO-IF ISOLATION (dB) @LO (dBm)		
	+14	+17	+20	+14	+17	+20
3130.1	37.62	37.46	37.19	20.50	20.38	20.64
3332.6	37.34	37.05	39.45	19.43	19.63	19.55
3535.1	37.22	40.05	41.30	18.57	18.43	18.99
3737.6	42.56	45.21	44.17	16.77	17.51	18.59
3940.1	44.53	42.67	40.77	15.85	17.09	18.12
4142.6	41.29	39.59	37.66	15.82	16.54	16.96
4345.1	39.88	38.85	37.85	16.27	16.58	16.67
4547.6	41.99	39.73	37.01	17.00	16.83	16.21
4750.1	39.85	39.12	37.34	17.80	16.74	15.51
4952.6	37.46	38.63	38.45	18.27	16.60	15.12
5155.1	36.02	37.67	38.63	17.83	16.55	15.14
5357.6	34.85	36.55	38.23	17.22	16.18	15.60
5560.1	34.79	36.43	38.29	15.89	15.88	15.56
5762.6	35.29	36.87	37.97	14.49	15.05	15.20
5965.1	35.59	38.34	40.83	13.67	14.71	15.26
6167.6	34.89	37.64	40.91	13.14	14.51	15.39
6370.1	34.23	36.88	40.23	12.82	14.34	15.68
6572.6	33.30	36.04	39.36	12.83	14.50	16.18
6775.1	33.19	36.46	40.45	12.83	14.52	16.37
6977.6	33.96	37.89	41.68	12.89	14.65	16.54
7180.1	35.20	39.77	39.66	13.73	15.30	17.07
7402.8	36.44	37.87	36.12	14.44	15.64	16.57
7605.4	35.15	35.00	34.24	15.43	15.99	15.44
7828.1	31.89	33.23	33.08	18.16	16.74	14.19
8030.6	31.11	32.03	30.83	20.93	16.12	12.85
8253.3	31.78	33.09	33.14	18.08	14.95	12.81
8455.8	31.65	34.78	36.48	16.72	15.32	14.27
8678.6	33.29	35.76	37.92	16.24	16.21	16.22
8881.1	34.95	37.19	38.45	16.48	16.97	17.44
9103.9	35.18	35.66	34.65	16.72	18.00	19.12
9306.3	36.11	36.67	37.41	16.16	17.98	19.54
9529.1	40.91	44.44	41.90	16.89	18.85	20.23
9731.6	41.89	58.14	49.43	17.57	19.54	20.41
9954.3	39.28	48.78	45.25	19.55	21.53	22.53
10156.9	36.61	43.54	41.42	20.30	21.62	22.37
10379.6	34.90	40.46	41.29	22.53	22.97	24.23
10582.1	34.38	39.19	39.54	25.92	25.90	27.12
10804.8	35.52	39.37	40.54	30.17	30.07	31.97
11007.3	37.20	39.15	38.61	34.28	33.70	35.15
11230.1	40.29	42.02	41.22	35.07	36.20	39.73

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB) @LO (dBm)		
		+14	+17	+20
3100.1	3130.1	16.92	17.02	19.17
3302.6	3332.6	17.76	18.00	20.01
3505.1	3535.1	19.02	21.42	21.78
3707.6	3737.6	24.37	25.87	26.50
3910.1	3940.1	25.34	24.75	23.82
4112.6	4142.6	22.82	21.90	21.05
4315.1	4345.1	20.69	19.75	19.13
4517.6	4547.6	18.95	18.45	18.10
4720.1	4750.1	20.74	20.22	19.88
4922.6	4952.6	25.19	24.19	23.58
5125.1	5155.1	30.11	28.64	27.52
5327.6	5357.6	29.04	28.45	27.65
5530.1	5560.1	26.81	26.49	25.94
5732.6	5762.6	25.46	25.18	24.66
5935.1	5965.1	25.17	24.80	24.33
6137.6	6167.6	25.66	25.30	24.84
6340.1	6370.1	26.55	26.18	25.83
6542.6	6572.6	27.72	27.65	27.24
6745.1	6775.1	29.46	29.79	29.62
6947.6	6977.6	33.14	34.70	35.14
7150.1	7180.1	41.57	44.43	44.69
7372.9	7402.9	32.17	31.43	31.00
7575.3	7605.3	27.25	26.83	26.56
7798.1	7828.1	25.10	24.80	24.49
8000.6	8030.6	23.18	23.04	23.79
8223.3	8253.3	24.16	23.67	23.23
8425.8	8455.8	29.60	28.10	27.27
8648.6	8678.6	27.82	29.40	28.42
8851.1	8881.1	22.03	22.59	22.74
9073.9	9103.9	19.72	19.71	19.65
9276.4	9306.4	18.05	18.03	18.01
9499.1	9529.1	14.85	14.85	14.98
9701.6	9731.6	13.98	14.30	14.59
9924.3	9954.3	13.52	14.45	14.87
10126.8	10156.8	13.49	15.28	15.88
10349.6	10379.6	13.39	15.39	16.13
10552.1	10582.1	15.10	16.87	17.29
10774.8	10804.8	17.29	19.05	19.72
10977.3	11007.3	18.30	20.13	20.58
11200.1	11230.1	19.41	20.99	21.75

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1) @LO (dBm)		
		+14	+17	+20
3100.1	3130.1	7.25	6.07	3.38
3302.6	3332.6	6.91	4.43	2.33
3505.1	3535.1	5.51	2.95	2.54
3707.6	3737.6	3.42	2.95	2.79
3910.1	3940.1	3.27	3.04	2.92
4112.6	4142.6	3.47	3.22	3.01
4315.1	4345.1	3.58	3.28	3.07
4517.6	4547.6	3.23	2.99	2.84
4720.1	4750.1	3.56	3.19	2.94
4922.6	4952.6	4.54	4.03	3.70
5125.1	5155.1	5.66	5.03	4.62
5327.6	5357.6	6.19	5.44	5.04
5530.1	5560.1	6.39	5.61	5.12
5732.6	5762.6	5.89	5.25	4.70
5935.1	5965.1	5.25	4.72	4.19
6137.6	6167.6	4.50	4.06	3.64
6340.1	6370.1	4.13	3.73	3.41
6542.6	6572.6	3.69	3.25	2.97
6745.1	6775.1	3.39	2.72	2.44
6947.6	6977.6	2.85	2.18	1.90
7150.1	7180.1	2.34	1.68	1.47
7372.9	7402.9	1.83	1.29	1.11
7575.3	7605.3	1.48	1.13	1.05
7798.1	7828.1	1.43	1.18	1.23
8000.6	8030.6	1.55	1.50	1.58
8223.3	8253.3	2.01	1.86	1.93
8425.8	8455.8	2.50	2.31	2.34
8648.6	8678.6	2.69	2.57	2.60
8851.1	8881.1	3.06	2.95	2.95
9073.9	9103.9	3.70	3.58	3.56
9276.4	9306.4	4.38	4.11	3.99
9499.1	9529.1	4.51	4.17	3.98
9701.6	9731.6	4.37	4.07	3.94
9924.3	9954.3	4.60	4.29	4.17
10126.8	10156.8	5.56	4.99	4.80
10349.6	10379.6	6.56	5.46	5.13
10552.1	10582.1	6.39	5.33	5.09
10774.8	10804.8	6.05	4.87	4.52
10977.3	11007.3	6.81	5.10	4.88
11200.1	11230.1	10.50	6.89	6.07

LO (MHz)	LO VSWR (:1) @LO (dBm)		
	+14	+17	+20
3130.1	21.46	20.45	18.11
3332.6	19.98	18.90	13.92
3535.1	16.26	11.77	8.77
3737.6	8.16	6.26	6.51
3940.1	3.88	4.44	5.39
4142.6	2.69	3.54	4.46
4345.1	2.06	2.79	3.60
4547.6	1.72	2.22	2.83
4750.1	1.99	1.94	2.26
4952.6	2.13	1.66	1.71
5155.1	1.95	1.33	1.35
5357.6	1.58	1.05	1.38
5560.1	1.22	1.24	1.71
5762.6	1.08	1.52	2.07
5965.1	1.36	1.82	2.41
6167.6	1.71	2.13	2.73
6370.1	2.13	2.42	2.97
6572.6	2.66	2.66	3.13
6775.1	3.29	2.88	3.16
6977.6	3.92	3.10	3.18
7180.1	4.79	3.47	3.29
7402.8	5.95	3.99	3.40
7605.4	6.73	4.20	3.30
7828.1	7.25	4.13	2.98
8030.6	6.53	3.65	2.57
8253.3	5.58	3.13	2.18
8455.8	4.74	2.68	1.86
8678.6	3.88	2.23	1.59
8881.1	3.12	1.88	1.38
9103.9	2.52	1.57	1.26
9306.3	2.13	1.40	1.31
9529.1	1.94	1.46	1.58
9731.6	2.14	1.72	1.83
9954.3	2.90	2.22	2.15
10156.9	3.65	2.61	2.35
10379.6	4.32	2.98	2.52
10582.1	4.72	3.19	2.77
10804.8	5.31	3.56	2.76
11007.3	5.49	3.82	3.14
11230.1	6.86	4.95	3.26

IF (OUT) (MHz)	IF VSWR @LO=10000MHz (:1) @LO (dBm)		
	+14	+17	+20
10.0	1.76	1.23	1.03
129.7	1.79	1.26	1.11
249.5	1.91	1.37	1.23
369.2	2.03	1.48	1.34
488.9	2.31	1.69	1.52
608.7	2.54	1.89	1.70
728.4	2.83	2.10	1.87
848.1	3.08	2.29	2.03
967.9	3.56	2.63	2.30
1087.6	3.84	2.85	2.49
1207.3	4.13	3.02	2.62
1327.1	4.41	3.22	2.77
1446.8	4.54	3.31	2.85
1566.5	4.54	3.29	2.82
1686.3	4.74	3.40	2.89
1806.0	4.59	3.34	2.84
1925.7	5.00	3.52	2.96
2045.5	4.78	3.38	2.86
2165.2	4.79	3.37	2.84
2284.9	4.54	3.21	2.71
2404.7	4.36	3.10	2.62
2524.4	4.22	3.00	2.55
2644.1	4.00	2.82	2.40
2743.9	3.73	2.63	2.24
2863.6	3.65	2.55	2.19
2963.4	3.35	2.38	2.07
3083.2	3.20	2.29	2.03
3182.9	3.10	2.25	2.04
3302.7	3.08	2.39	2.23
3402.4	2.95	2.41	2.31
3522.2	3.21	2.82	2.78
3622.0	3.15	2.90	2.92
3741.7	3.57	3.56	3.66
3841.5	3.58	3.69	3.82
3961.2	4.00	4.41	4.68
4061.0	4.01	4.50	4.79
4180.7	4.01	4.68	5.09
4280.5	3.95	4.63	5.07
4400.2	3.58	4.41	4.96
4500.0	3.80	4.83	5.52

Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	+11	37	15	---	---	---	---	---	---	---
1	-	24	+0	38	29	40	---	---	---	---	---	---
2	60	57	42	50	42	75	58	---	---	---	---	---
3	88	72	63	78	53	>82	66	>82	---	---	---	---
4	---	---	>82	>82	80	78	78	>82	>82	---	---	---
5	---	---	---	>82	>82	>82	>82	>82	>82	>82	---	---
6	---	---	---	---	>82	>82	>82	>82	>82	>82	>82	---
7	---	---	---	---	---	>82	>82	>82	>82	>82	>82	>82
8	---	---	---	---	---	---	>82	>82	>82	>82	>82	>82
9	---	---	---	---	---	---	---	>82	>82	>82	>82	>82
10	---	---	---	---	---	---	---	---	>82	>82	>82	>82
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

Test conditions: RF IN: 6850 MHz; -1.00 dBm.
LO IN: 6880 MHz; +17.00 dBm
IF OUT: 30 MHz; -8.08 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	+1	64	27	---	---	---	---	---	---	---
1	-	24	+0	40	28	44	---	---	---	---	---	---
2	40	47	32	39	35	65	51	---	---	---	---	---
3	60	49	42	58	34	59	50	64	---	---	---	---
4	---	---	64	67	54	55	54	68	76	---	---	---
5	---	---	---	79	64	75	50	81	61	80	---	---
6	---	---	---	---	91	81	71	63	66	75	71	---
7	---	---	---	---	---	>92	79	86	62	84	76	78
8	---	---	---	---	---	---	>92	91	83	72	75	85
9	---	---	---	---	---	---	---	>92	91	>92	73	88
10	---	---	---	---	---	---	---	---	>92	>92	>92	80
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 6850 MHz; 9.00 dBm.
LO IN: 6880 MHz; +17.00 dBm
IF OUT: 30 MHz; 1.86 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.