Frequency Mixer MCA1-12GL+

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB)		
		@LO (dBm)		
		+1	+4	+7
2900.1	2870.1	16.35	13.40	11.65
3152.6	3122.6	10.89	9.36	8.36
3405.1	3375.1	8.12	7.07	6.42
3657.6	3627.6	6.33	5.74	5.29
3910.1	3880.1	5.56	5.18	4.90
4162.6	4132.6	5.30	5.00	4.84
4415.1	4385.1	5.39	5.00	4.76
4667.6	4637.6	5.38	5.06	4.94
4920.1	4890.1	5.31	5.01	4.93
5172.6	5142.6	7.39	6.64	6.19
5425.1	5395.1	7.12	6.50	6.23
5677.6	5647.6	7.70	7.03	6.69
5930.1	5900.1	7.10	6.48	6.16
6182.6	6152.6	6.72	6.09	5.79
6435.1	6405.1	7.25	6.39	5.95
6687.6	6657.6	7.04	6.14	5.71
6940.1	6910.1	8.52	7.50	6.87
7192.6	7162.6	8.53	7.23	6.58
7445.1	7415.1	7.90	6.59	6.01
7697.6	7667.6	7.68	6.34	5.76
7950.1	7920.1	8.27	6.23	5.57
8227.9	8197.9	7.78	5.78	5.24
8480.4	8450.4	8.57	5.99	5.34
8758.1	8728.1	9.01	6.10	5.38
9010.6	8980.6	9.00	6.21	5.58
9288.3	9258.3	9.66	6.44	5.82
9540.8	9510.8	11.22	6.77	6.00
9818.6	9788.6	9.70	6.99	6.53
10071.1	10041.1	9.15	7.41	7.09
10348.9	10318.9	8.55	7.48	7.28
10601.4	10571.4	8.12	7.39	7.23
10879.1	10849.1	8.09	7.49	7.35
11131.6	11101.6	8.99	7.78	7.41
11409.3	11379.3	9.80	8.43	7.99
11661.8	11631.8	10.05	7.78	7.27
11939.6	11909.6	9.63	7.66	7.17
12192.1	12162.1	10.17	7.70	7.14
12469.9	12439.9	10.50	8.26	7.53
12722.3	12692.3	9.12	7.87	7.55
13000.1	12970.1	21.26	14.25	12.03

RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm)		
		@LO (dBm)		
		+1	+4	+7
2900.1	2870.1	-0.19	1.61	5.00
3152.6	3122.6	6.94	9.00	8.58
3405.1	3375.1	4.43	5.26	7.27
3657.6	3627.6	6.83	9.02	9.53
3910.1	3880.1	8.09	9.33	8.77
4162.6	4132.6	8.74	9.89	9.40
4415.1	4385.1	8.68	8.52	7.89
4667.6	4637.6	9.12	10.70	11.23
4920.1	4890.1	9.84	12.51	13.28
5172.6	5142.6	15.82	16.26	14.27
5425.1	5395.1	8.10	10.63	10.76
5677.6	5647.6	8.73	11.38	12.24
5930.1	5900.1	9.81	11.95	14.11
6182.6	6152.6	9.45	9.20	11.46
6435.1	6405.1	9.81	9.33	10.04
6687.6	6657.6	7.60	9.02	8.99
6940.1	6910.1	12.19	11.22	20.38
7192.6	7162.6	6.26	8.31	8.98
7445.1	7415.1	4.74	7.11	8.17
7697.6	7667.6	4.52	6.90	8.17
7950.1	7920.1	3.50	5.69	8.11
8227.9	8197.9	2.69	5.39	8.43
8480.4	8450.4	2.69	5.53	8.16
8758.1	8728.1	1.78	4.80	8.54
9010.6	8980.6	1.91	5.47	9.14
9288.3	9258.3	1.24	6.18	10.26
9540.8	9510.8	-0.84	6.33	10.08
9818.6	9788.6	3.66	8.63	11.97
10071.1	10041.1	10.66	11.44	13.49
10348.9	10318.9	12.59	13.28	15.53
10601.4	10571.4	12.56	14.77	16.78
10879.1	10849.1	12.93	15.97	18.14
11131.6	11101.6	14.35	18.49	18.25
11409.3	11379.3	13.79	12.61	15.25
11661.8	11631.8	12.48	10.53	12.45
11939.6	11909.6	14.23	10.45	11.79
12192.1	12162.1	8.98	13.79	12.49
12469.9	12439.9	11.11	13.23	12.22
12722.3	12692.3	7.29	8.71	8.49
13000.1	12970.1	-3.52	1.76	4.05

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+1dBm (dB)		
		@LO (dBm)		
		+1	+4	+7
2900.1	2870.1	1.13	1.98	1.93
3152.6	3122.6	1.50	1.33	1.48
3405.1	3375.1	1.81	1.72	1.64
3657.6	3627.6	2.21	1.84	1.78
3910.1	3880.1	2.30	1.91	1.73
4162.6	4132.6	2.14	1.70	1.55
4415.1	4385.1	1.67	1.38	1.36
4667.6	4637.6	1.61	1.10	0.93
4920.1	4890.1	1.63	0.85	0.63
5172.6	5142.6	1.57	1.34	1.26
5425.1	5395.1	1.71	1.38	1.29
5677.6	5647.6	1.27	0.83	0.66
5930.1	5900.1	1.15	0.71	0.52
6182.6	6152.6	1.25	0.68	0.42
6435.1	6405.1	1.36	0.80	0.50
6687.6	6657.6	1.56	0.83	0.55
6940.1	6910.1	0.96	0.69	0.56
7192.6	7162.6	1.31	0.87	0.80
7445.1	7415.1	1.62	1.06	0.85
7697.6	7667.6	1.50	1.01	0.76
7950.1	7920.1	1.38	1.34	0.95
8227.9	8197.9	1.54	1.42	0.98
8480.4	8450.4	1.00	1.25	0.88
8758.1	8728.1	0.85	1.39	0.89
9010.6	8980.6	0.78	1.22	0.76
9288.3	9258.3	0.33	1.14	0.74
9540.8	9510.8	-0.84	0.88	0.61
9818.6	9788.6	0.19	0.65	0.50
10071.1	10041.1	0.61	0.53	0.54
10348.9	10318.9	0.61	0.38	0.43
10601.4	10571.4	0.65	0.33	0.34
10879.1	10849.1	0.62	0.26	0.23
11131.6	11101.6	0.53	0.28	0.23
11409.3	11379.3	0.15	0.12	0.23
11661.8	11631.8	-0.03	0.22	0.33
11939.6	11909.6	0.25	0.31	0.36
12192.1	12162.1	-0.05	0.42	0.42
12469.9	12439.9	0.18	0.43	0.62
12722.3	12692.3	2.72	1.96	1.82
13000.1	12970.1	-3.12	1.43	1.87

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=7900MHz (dB) @LO (dBm) +4
2399.9	5500.1	10.71
2282.4	5617.6	10.11
2164.8	5735.2	9.54
2047.3	5852.7	9.90
1929.8	5970.2	9.58
1812.2	6087.8	9.17
1694.7	6205.3	9.14
1577.1	6322.9	8.30
1459.6	6440.4	8.02
1342.1	6557.9	7.78
1224.5	6675.5	7.17
1107.0	6793.0	6.74
989.5	6910.5	6.60
871.9	7028.1	6.56
754.4	7145.6	6.46
636.9	7263.1	6.17
519.3	7380.7	6.09
401.8	7498.2	6.18
284.3	7615.7	6.19
147.1	7752.9	6.08
29.6	7870.4	6.25
112.1	8012.1	6.36
234.5	8134.5	6.54
377.4	8277.4	6.56
499.9	8399.9	6.68
642.7	8542.7	7.18
765.2	8665.2	7.12
908.1	8808.1	7.51
1030.5	8930.5	8.20
1173.4	9073.4	7.87
1295.9	9195.9	8.39
1438.7	9338.7	8.37
1561.2	9461.2	8.05
1704.1	9604.1	7.96
1826.5	9726.5	8.00
1969.4	9869.4	8.10
2091.9	9991.9	8.88
2234.8	10134.8	8.85
2357.2	10257.2	10.15
2500.1	10400.1	10.42

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=3790MHz (dB) @LO (dBm) +4
10.1	3800.1	5.37
150.1	3940.1	5.22
290.1	4080.1	5.26
430.1	4220.1	5.22
570.1	4360.1	5.28
710.1	4500.1	5.31
870.1	4660.1	5.07
1010.1	4800.1	5.02
1170.1	4960.1	5.19
1310.1	5100.1	5.36
1470.1	5260.1	5.94
1610.1	5400.1	6.08
1770.1	5560.1	6.06
1910.1	5700.1	6.56
2070.1	5860.1	6.93
2210.1	6000.1	7.44
2370.1	6160.1	9.51
2510.1	6300.1	10.79
2670.1	6460.1	12.61
2810.1	6600.1	11.79
2970.1	6760.1	10.80
3110.1	6900.1	10.17
3270.1	7060.1	10.08
3410.1	7200.1	10.21
3570.1	7360.1	10.51
3710.1	7500.1	11.17
3870.1	7660.1	11.00
4010.1	7800.1	11.40
4170.1	7960.1	11.19
4310.1	8100.1	11.56
4470.1	8260.1	11.16
4610.1	8400.1	11.11
4770.1	8560.1	10.96
4910.1	8700.1	10.29
5070.1	8860.1	10.05
5210.1	9000.1	9.88
5370.1	9160.1	9.13
5510.1	9300.1	9.12
5670.1	9460.1	9.34
5810.1	9600.1	11.20

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=12010.09MHz (dB) @LO (dBm) +4
2310.0	9700.1	12.01
2250.0	9760.1	11.01
2190.0	9820.1	11.43
2130.0	9880.1	10.74
2070.0	9940.1	10.43
2010.0	10000.1	10.58
1950.0	10060.1	10.14
1890.0	10120.1	9.95
1830.0	10180.1	10.35
1770.0	10240.1	10.14
1710.0	10300.1	10.15
1650.0	10360.1	10.53
1590.0	10420.1	10.22
1530.0	10480.1	10.05
1470.0	10540.1	9.98
1410.0	10600.1	9.82
1350.0	10660.1	9.49
1290.0	10720.1	9.28
1230.0	10780.1	9.23
1170.0	10840.1	9.23
1110.0	10900.1	9.05
1050.0	10960.1	8.87
990.0	11020.1	8.77
930.0	11080.1	8.59
870.0	11140.1	8.41
810.0	11200.1	8.33
750.0	11260.1	8.16
690.0	11320.1	8.06
630.0	11380.1	7.96
570.0	11440.1	7.81
510.0	11500.1	7.74
450.0	11560.1	7.57
390.0	11620.1	7.61
330.0	11680.1	7.64
270.0	11740.1	7.78
210.0	11800.1	7.63
170.0	11840.1	7.88
110.0	11900.1	7.65
70.0	11940.1	7.97
10.0	12000.1	7.98

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB) @LO (dBm)			LO-IF ISOLATION (dB) @LO (dBm)		
	+1	+4	+7	+1	+4	+7
2930.1	30.05	34.55	36.91	5.08	5.01	5.06
3182.6	32.22	37.59	44.11	7.17	7.45	7.68
3435.1	29.54	30.76	32.11	9.50	9.93	9.53
3687.6	30.74	31.04	30.91	12.08	11.87	10.96
3940.1	32.12	31.77	30.93	14.21	13.16	11.75
4192.6	33.52	31.27	29.46	15.87	14.20	12.86
4445.1	34.96	31.89	29.21	15.81	14.38	13.40
4697.6	29.60	27.56	25.52	14.95	14.24	13.36
4950.1	27.99	26.36	24.75	12.93	13.04	12.78
5202.6	24.58	26.72	27.58	10.67	11.46	11.84
5455.1	20.89	22.75	23.90	9.45	10.81	11.87
5707.6	19.85	22.08	24.00	11.75	13.57	15.11
5960.1	22.29	24.65	26.65	15.91	17.91	19.73
6212.6	24.49	26.68	28.82	20.37	22.13	23.91
6465.1	26.86	29.42	31.67	25.22	26.47	27.56
6717.6	29.06	31.66	34.42	30.88	30.25	29.80
6970.1	33.79	36.44	39.39	32.94	30.82	29.32
7222.6	33.99	35.66	37.35	35.15	32.41	31.01
7475.1	37.70	39.90	41.68	35.16	33.61	31.71
7727.6	43.29	45.80	46.83	34.73	34.19	32.70
7980.1	54.77	54.31	49.88	36.10	35.91	34.66
8257.8	50.91	48.95	46.47	40.05	40.34	39.45
8510.3	44.18	43.03	40.56	59.37	60.94	53.77
8788.1	48.70	49.87	39.93	36.60	37.52	39.97
9040.6	33.78	35.64	33.39	36.65	36.23	36.91
9318.3	30.96	31.87	30.49	32.38	32.05	32.73
9570.8	29.79	29.30	27.82	37.83	37.08	39.82
9848.6	27.24	26.65	25.28	31.17	30.56	30.30
10101.1	26.47	26.14	24.93	24.88	23.74	22.81
10378.9	24.12	24.95	24.66	26.37	24.31	22.61
10631.4	22.70	23.89	24.02	23.24	23.23	22.20
10909.1	22.61	23.93	24.43	20.73	21.68	21.84
11161.6	23.17	24.32	25.44	19.59	20.73	21.81
11439.3	25.55	26.06	26.75	18.76	20.17	21.78
11691.8	26.17	26.53	26.83	18.24	19.78	21.65
11969.6	23.02	24.09	24.58	18.08	19.40	20.88
12222.1	21.28	22.38	23.21	19.04	20.06	20.81
12499.9	18.98	20.12	20.99	20.10	18.98	18.18
12752.4	16.48	18.28	19.68	15.66	14.58	14.00
13030.1	16.80	17.51	18.84	11.59	11.80	11.77

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB) @LO (dBm)		
		+1	+4	+7
2900.1	2870.1	23.36	23.19	22.94
3152.6	3122.6	25.00	26.10	27.90
3405.1	3375.1	28.26	31.55	33.74
3657.6	3627.6	28.02	29.52	30.15
3910.1	3880.1	28.39	28.59	28.20
4162.6	4132.6	25.43	24.33	23.31
4415.1	4385.1	22.52	21.24	19.96
4667.6	4637.6	18.60	17.45	16.29
4920.1	4890.1	15.40	14.56	13.86
5172.6	5142.6	15.09	14.54	13.84
5425.1	5395.1	9.39	9.13	8.87
5677.6	5647.6	8.36	8.57	8.72
5930.1	5900.1	10.09	10.56	10.92
6182.6	6152.6	11.96	12.59	13.19
6435.1	6405.1	13.46	14.04	14.59
6687.6	6657.6	15.09	15.58	16.07
6940.1	6910.1	16.41	16.62	16.78
7192.6	7162.6	18.10	18.37	18.52
7445.1	7415.1	20.84	21.37	21.58
7697.6	7667.6	24.30	24.53	24.47
7950.1	7920.1	28.68	27.25	26.26
8227.9	8197.9	28.76	25.55	24.12
8480.4	8450.4	24.95	23.68	22.76
8758.1	8728.1	20.77	20.83	20.55
9010.6	8980.6	18.69	19.13	19.18
9288.3	9258.3	17.39	18.32	18.72
9540.8	9510.8	16.82	18.00	18.55
9818.6	9788.6	17.14	18.61	19.55
10071.1	10041.1	18.24	19.24	19.72
10348.9	10318.9	17.80	18.69	19.11
10601.4	10571.4	18.11	19.02	19.59
10879.1	10849.1	18.50	19.35	20.00
11131.6	11101.6	18.81	19.48	19.90
11409.3	11379.3	20.65	21.59	22.11
11661.8	11631.8	22.88	24.12	24.91
11939.6	11909.6	24.92	25.01	24.92
12192.1	12162.1	25.78	23.75	22.64
12469.9	12439.9	23.25	21.04	19.88
12722.3	12692.3	18.85	18.20	17.57
13000.1	12970.1	18.35	17.44	16.06

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1) @LO (dBm)		
		+1	+4	+7
2900.1	2870.1	4.29	3.34	2.71
3152.6	3122.6	3.71	2.98	2.57
3405.1	3375.1	2.75	2.28	2.06
3657.6	3627.6	2.27	1.92	1.71
3910.1	3880.1	1.96	1.70	1.51
4162.6	4132.6	1.88	1.61	1.43
4415.1	4385.1	2.06	1.75	1.49
4667.6	4637.6	1.98	1.68	1.43
4920.1	4890.1	1.70	1.42	1.21
5172.6	5142.6	3.09	2.74	2.44
5425.1	5395.1	2.35	2.11	1.92
5677.6	5647.6	2.05	1.93	1.85
5930.1	5900.1	2.23	2.03	1.90
6182.6	6152.6	2.41	2.06	1.83
6435.1	6405.1	2.80	2.35	2.01
6687.6	6657.6	2.99	2.48	2.08
6940.1	6910.1	3.24	2.79	2.44
7192.6	7162.6	3.67	3.20	2.89
7445.1	7415.1	3.39	2.84	2.55
7697.6	7667.6	3.15	2.56	2.23
7950.1	7920.1	3.00	2.21	1.90
8227.9	8197.9	2.70	1.87	1.56
8480.4	8450.4	2.56	1.73	1.44
8758.1	8728.1	2.28	1.51	1.27
9010.6	8980.6	2.09	1.45	1.34
9288.3	9258.3	2.24	1.62	1.60
9540.8	9510.8	2.57	1.81	1.83
9818.6	9788.6	2.68	2.20	2.20
10071.1	10041.1	3.13	2.80	2.75
10348.9	10318.9	3.33	3.08	3.08
10601.4	10571.4	3.54	3.34	3.31
10879.1	10849.1	3.50	3.26	3.13
11131.6	11101.6	3.86	3.33	3.02
11409.3	11379.3	3.86	3.40	3.25
11661.8	11631.8	3.87	3.19	3.00
11939.6	11909.6	4.08	3.27	2.91
12192.1	12162.1	3.89	3.00	2.54
12469.9	12439.9	3.29	2.67	2.27
12722.3	12692.3	2.45	2.14	1.97
13000.1	12970.1	3.26	2.27	1.54

LO (MHz)	LO VSWR (:1) @LO (dBm)		
	+1	+4	+7
2930.1	2.38	2.44	2.68
3182.6	3.11	3.17	3.42
3435.1	3.01	3.10	3.47
3687.6	2.51	2.72	3.21
3940.1	2.02	2.42	2.98
4192.6	1.73	2.26	2.93
4445.1	1.48	2.02	2.66
4697.6	1.32	1.86	2.48
4950.1	1.29	1.74	2.28
5202.6	1.37	1.75	2.29
5455.1	1.42	1.77	2.20
5707.6	1.71	1.87	2.37
5960.1	1.94	2.05	2.48
6212.6	2.35	2.37	2.71
6465.1	2.84	2.77	3.07
6717.6	3.50	3.16	3.35
6970.1	4.01	3.37	3.47
7222.6	4.82	3.67	3.58
7475.1	6.13	4.20	3.81
7727.6	8.16	4.87	3.99
7980.1	8.72	4.96	3.81
8257.8	8.95	5.20	3.69
8510.3	7.97	4.74	3.42
8788.1	7.17	4.56	3.15
9040.6	6.73	4.75	3.22
9318.3	6.81	5.09	3.31
9570.8	6.71	4.50	2.91
9848.6	6.17	3.88	2.45
10101.1	5.04	3.04	1.92
10378.9	3.56	2.11	1.36
10631.4	2.41	1.53	1.09
10909.1	2.07	1.45	1.36
11161.6	2.52	1.85	1.69
11439.3	3.64	2.50	2.06
11691.8	4.31	2.91	2.28
11969.6	4.42	3.09	2.27
12222.1	3.95	2.83	2.06
12499.9	2.92	2.13	1.60
12752.4	1.60	1.54	1.54
13030.1	2.82	2.75	2.60

IF (OUT) (MHz)	IF VSWR @LO=12000MHz (:1) @LO (dBm)		
	+1	+4	+7
10.1	1.75	1.09	1.16
90.1	1.69	1.10	1.16
170.1	1.69	1.11	1.19
250.1	1.76	1.16	1.21
330.1	1.86	1.21	1.18
410.1	1.96	1.27	1.15
490.1	2.05	1.31	1.12
570.1	2.14	1.37	1.13
650.1	2.35	1.51	1.20
730.1	2.52	1.65	1.30
810.1	2.69	1.81	1.44
890.1	2.85	1.95	1.57
970.1	3.12	2.18	1.77
1050.1	3.31	2.37	1.94
1130.1	3.47	2.54	2.10
1210.1	3.35	2.55	2.15
1290.1	3.45	2.67	2.28
1370.1	3.59	2.78	2.38
1450.1	3.69	2.87	2.48
1530.1	3.56	2.84	2.46
1610.1	3.29	2.74	2.44
1690.1	3.20	2.73	2.47
1770.1	3.31	2.78	2.48
1850.1	3.26	2.73	2.42
1930.1	2.57	2.26	2.07
2010.1	2.44	2.13	1.93
2090.1	2.50	2.22	2.03
2170.1	2.36	2.12	1.94
2250.1	2.10	1.86	1.69
2310.1	1.88	1.75	1.66
2390.1	1.82	1.71	1.65
2450.1	1.81	1.77	1.75
2530.1	1.77	1.78	1.79
2590.1	1.68	1.85	1.96
2670.1	1.83	2.09	2.23
2730.1	1.90	2.17	2.33
2810.1	1.92	2.29	2.52
2870.1	2.17	2.71	3.02
2950.1	2.46	3.00	3.30
3010.1	2.45	3.05	3.41

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	10	37	29	---	---	---	---	---	---	---
1	-	18	+0	31	45	46	---	---	---	---	---	---
2	84	45	62	53	63	52	61	---	---	---	---	---
3	>90	>69	>69	68	50	>69	68	>69	---	---	---	---
4	---	---	>69	>69	>69	>69	>69	>69	>69	---	---	---
5	---	---	---	>69	>69	>69	>69	>69	>69	>69	---	---
6	---	---	---	---	>69	>69	>69	>69	>69	>69	>69	---
7	---	---	---	---	---	>69	>69	>69	>69	>69	>69	>69
8	---	---	---	---	---	---	>69	>69	>69	>69	>69	>69
9	---	---	---	---	---	---	---	>69	>69	>69	>69	>69
10	---	---	---	---	---	---	---	---	>69	>69	>69	>69
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

Test conditions: RF IN: 7750 MHz; -14.00 dBm.
LO IN: 7720 MHz; +4.00 dBm
IF OUT: 30 MHz; -20.87 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	20	46	42	---	---	---	---	---	---	---
1	-	18	+0	33	45	48	---	---	---	---	---	---
2	65	36	55	47	57	50	65	---	---	---	---	---
3	83	47	60	50	35	53	61	68	---	---	---	---
4	---	---	76	61	71	59	78	63	75	---	---	---
5	---	---	---	71	>79	>79	47	>79	69	78	---	---
6	---	---	---	---	>79	>79	>79	68	>79	76	>79	---
7	---	---	---	---	---	>79	>79	>79	61	>79	>79	78
8	---	---	---	---	---	---	>79	>79	>79	77	>79	>79
9	---	---	---	---	---	---	---	>79	>79	>79	75	>79
10	---	---	---	---	---	---	---	---	>79	>79	>79	>79
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 7750 MHz; -4.00 dBm.
LO IN: 7720 MHz; +4.00 dBm
IF OUT: 30 MHz; -11.02 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.