

## Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB)		
		@LO (dBm)		
		+4	+7	+10
920.0	950.0	13.72	10.56	9.77
1000.0	1030.0	10.25	8.77	8.36
1080.0	1110.0	8.48	7.78	7.54
1160.0	1190.0	7.79	7.35	7.08
1240.0	1270.0	7.20	6.71	6.41
1320.0	1350.0	6.60	6.19	5.99
1400.0	1430.0	6.31	6.00	5.85
1480.0	1510.0	6.34	6.01	5.84
1560.0	1590.0	6.24	5.93	5.77
1660.0	1690.0	6.12	5.89	5.80
1740.0	1770.0	6.25	6.01	5.90
1840.0	1870.0	6.38	6.15	6.05
1920.0	1950.0	6.44	6.25	6.20
2020.0	2050.0	6.38	6.24	6.20
2100.0	2130.0	6.38	6.25	6.22
2200.0	2230.0	6.22	6.09	6.07
2280.0	2310.0	6.28	6.17	6.23
2380.0	2410.0	7.89	7.56	7.32
2460.0	2490.0	7.52	7.20	7.00
2560.0	2590.0	7.36	7.06	6.91
2640.0	2670.0	7.17	6.88	6.74
2740.0	2770.0	7.03	6.77	6.63
2820.0	2850.0	6.92	6.65	6.50
2920.0	2950.0	6.76	6.47	6.38
3000.0	3030.0	6.78	6.38	6.26
3100.0	3130.0	6.86	6.30	6.09
3180.0	3210.0	7.09	6.42	6.12
3280.0	3310.0	7.22	6.50	6.18
3360.0	3390.0	7.32	6.54	6.20
3460.0	3490.0	7.28	6.43	6.09
3540.0	3570.0	7.18	6.40	6.07
3640.0	3670.0	7.05	6.32	6.01
3720.0	3750.0	6.88	6.27	6.01
3820.0	3850.0	6.84	6.34	6.12
3900.0	3930.0	6.79	6.43	6.27
4000.0	4030.0	6.97	6.69	6.59
4080.0	4110.0	7.20	6.95	6.87
4180.0	4210.0	7.94	7.63	7.57
4260.0	4290.0	8.61	8.34	8.31
4360.0	4390.0	9.78	9.46	9.67

RF (IN) (MHz)	LO (MHz)	IP-3 INPUT (dBm)		
		@LO (dBm)		
		+4	+7	+10
920.0	950.0	6.29	10.78	12.24
1000.0	1030.0	8.11	8.10	7.78
1080.0	1110.0	7.68	8.57	7.72
1160.0	1190.0	6.69	6.12	5.16
1240.0	1270.0	6.85	7.15	7.52
1320.0	1350.0	7.84	8.25	8.36
1400.0	1430.0	6.32	6.52	6.55
1480.0	1510.0	6.81	8.60	10.35
1560.0	1590.0	6.36	8.36	10.69
1660.0	1690.0	12.76	14.19	13.89
1740.0	1770.0	14.38	13.10	12.48
1840.0	1870.0	14.80	13.29	11.47
1920.0	1950.0	15.28	13.23	11.73
2020.0	2050.0	13.42	13.88	13.15
2100.0	2130.0	11.86	14.18	15.47
2200.0	2230.0	13.96	15.53	16.34
2280.0	2310.0	8.39	10.35	11.52
2380.0	2410.0	13.57	10.67	6.70
2460.0	2490.0	8.49	8.27	6.67
2560.0	2590.0	8.36	8.34	7.67
2640.0	2670.0	8.51	8.61	8.25
2740.0	2770.0	8.34	8.58	8.83
2820.0	2850.0	8.71	9.07	9.10
2920.0	2950.0	8.69	9.75	10.07
3000.0	3030.0	9.02	10.07	10.71
3100.0	3130.0	8.68	8.61	12.06
3180.0	3210.0	9.88	11.93	13.26
3280.0	3310.0	10.02	11.51	13.14
3360.0	3390.0	10.05	10.85	12.08
3460.0	3490.0	9.36	10.63	11.64
3540.0	3570.0	9.35	10.92	12.82
3640.0	3670.0	9.18	10.45	11.96
3720.0	3750.0	9.39	10.44	12.12
3820.0	3850.0	10.58	11.08	12.37
3900.0	3930.0	10.74	11.57	12.61
4000.0	4030.0	11.12	11.73	13.03
4080.0	4110.0	11.05	11.72	12.48
4180.0	4210.0	12.43	11.82	12.15
4260.0	4290.0	13.00	12.91	11.81
4360.0	4390.0	11.07	9.95	7.47

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+1dBm (dB)		
		@LO (dBm)		
		+4	+7	+10
920.0	950.0	-0.64	0.65	0.77
1000.0	1030.0	0.79	1.04	1.09
1080.0	1110.0	1.37	1.28	1.29
1160.0	1190.0	1.44	1.30	1.26
1240.0	1270.0	1.42	1.26	1.20
1320.0	1350.0	1.45	1.27	1.19
1400.0	1430.0	1.35	1.20	1.16
1480.0	1510.0	1.30	1.17	1.11
1560.0	1590.0	1.25	1.05	0.95
1660.0	1690.0	1.21	0.99	0.90
1740.0	1770.0	1.07	0.91	0.87
1840.0	1870.0	1.00	0.85	0.85
1920.0	1950.0	0.89	0.73	0.77
2020.0	2050.0	0.72	0.58	0.65
2100.0	2130.0	0.74	0.52	0.55
2200.0	2230.0	1.04	0.69	0.59
2280.0	2310.0	1.76	1.45	1.32
2380.0	2410.0	1.50	1.31	1.31
2460.0	2490.0	1.42	1.27	1.29
2560.0	2590.0	1.28	1.13	1.16
2640.0	2670.0	1.26	1.06	1.06
2740.0	2770.0	1.20	0.96	0.96
2820.0	2850.0	1.29	0.99	0.92
2920.0	2950.0	1.37	0.91	0.79
3000.0	3030.0	1.35	0.85	0.72
3100.0	3130.0	1.39	0.91	0.69
3180.0	3210.0	1.35	0.92	0.72
3280.0	3310.0	1.36	0.94	0.77
3360.0	3390.0	1.30	0.98	0.84
3460.0	3490.0	1.40	1.11	1.00
3540.0	3570.0	1.56	1.18	1.09
3640.0	3670.0	1.60	1.30	1.25
3720.0	3750.0	1.67	1.38	1.37
3820.0	3850.0	1.64	1.40	1.45
3900.0	3930.0	1.61	1.41	1.45
4000.0	4030.0	1.49	1.32	1.36
4080.0	4110.0	1.49	1.37	1.42
4180.0	4210.0	1.38	1.34	1.39
4260.0	4290.0	1.35	1.33	1.47
4360.0	4390.0	1.56	1.71	1.93

## Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1589.9MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1189.9MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=2010.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+7			+7			+7
10.1	1600.0	6.5	10.1	1200.0	7.51	1110.1	900.0	10.27
20.1	1610.0	6.2	30.1	1220.0	7.20	1090.1	920.0	9.61
30.1	1620.0	6.2	70.1	1260.0	7.14	1070.1	940.0	9.02
40.1	1630.0	6.2	90.1	1280.0	7.10	1050.1	960.0	8.46
50.1	1640.0	6.2	130.1	1320.0	7.03	1030.1	980.0	7.97
60.1	1650.0	6.2	150.1	1340.0	7.09	1010.1	1000.0	7.45
70.1	1660.0	6.2	190.1	1380.0	7.17	990.1	1020.0	7.18
80.1	1670.0	6.2	210.1	1400.0	7.20	970.1	1040.0	7.00
90.1	1680.0	6.2	250.1	1440.0	7.40	930.1	1080.0	6.89
100.1	1690.0	6.2	270.1	1460.0	7.43	910.1	1100.0	6.84
110.1	1700.0	6.3	310.1	1500.0	7.45	870.1	1140.0	6.64
120.1	1710.0	6.3	330.1	1520.0	7.45	850.1	1160.0	6.56
130.1	1720.0	6.3	370.1	1560.0	7.59	810.1	1200.0	6.54
140.1	1730.0	6.4	390.1	1580.0	7.60	790.1	1220.0	6.42
150.1	1740.0	6.4	430.1	1620.0	7.75	750.1	1260.0	6.35
160.1	1750.0	6.4	450.1	1640.0	7.82	730.1	1280.0	6.37
170.1	1760.0	6.3	490.1	1680.0	7.91	690.1	1320.0	6.21
180.1	1770.0	6.4	510.1	1700.0	7.93	670.1	1340.0	6.10
190.1	1780.0	6.4	550.1	1740.0	8.09	630.1	1380.0	6.40
200.1	1790.0	6.5	570.1	1760.0	8.16	610.1	1400.0	6.61
210.1	1800.0	6.5	610.1	1800.0	8.20	570.1	1440.0	6.88
220.1	1810.0	6.5	630.1	1820.0	8.32	550.1	1460.0	6.99
230.1	1820.0	6.6	670.1	1860.0	8.39	510.1	1500.0	7.05
240.1	1830.0	6.6	690.1	1880.0	8.36	490.1	1520.0	7.08
250.1	1840.0	6.6	730.1	1920.0	8.27	450.1	1560.0	7.07
260.1	1850.0	6.6	750.1	1940.0	8.08	430.1	1580.0	7.04
270.1	1860.0	6.6	790.1	1980.0	7.99	390.1	1620.0	6.69
280.1	1870.0	6.7	810.1	2000.0	7.99	370.1	1640.0	6.60
290.1	1880.0	6.7	850.1	2040.0	8.15	330.1	1680.0	6.43
300.1	1890.0	6.7	870.1	2060.0	8.30	310.1	1700.0	6.35
310.1	1900.0	6.8	910.1	2100.0	8.40	270.1	1740.0	6.25
320.1	1910.0	6.8	930.1	2120.0	8.50	250.1	1760.0	6.24
330.1	1920.0	6.8	970.1	2160.0	8.65	210.1	1800.0	6.12
340.1	1930.0	6.8	990.1	2180.0	8.64	190.1	1820.0	6.12
350.1	1940.0	6.8	1030.1	2220.0	8.98	150.1	1860.0	6.14
360.1	1950.0	6.8	1050.1	2240.0	9.16	130.1	1880.0	6.14
370.1	1960.0	6.8	1090.1	2280.0	9.42	90.1	1920.0	6.14
380.1	1970.0	6.8	1110.1	2300.0	9.67	70.1	1940.0	6.15
400.1	1990.0	6.9	1150.1	2340.0	10.16	30.1	1980.0	6.21
410.1	2000.0	6.9	1170.1	2360.0	10.32	10.1	2000.0	6.49

## Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)					@LO (dBm)		
	+4	+7	+10	+4	+7	+10			+4	+7	+10
950.0	32.02	32.03	36.14	13.75	14.76	16.28	920.0	950.0	25.60	25.38	22.82
1030.0	30.18	31.86	35.99	14.22	15.57	16.23	1000.0	1030.0	28.93	27.92	25.10
1110.0	28.84	31.68	36.46	15.58	16.00	15.30	1080.0	1110.0	25.04	23.70	22.93
1190.0	27.22	30.52	35.92	17.22	16.00	14.82	1160.0	1190.0	22.30	21.83	22.11
1270.0	25.86	30.01	37.02	17.98	15.95	14.49	1240.0	1270.0	23.71	23.56	23.89
1350.0	25.48	30.54	39.23	18.01	15.90	14.74	1320.0	1350.0	29.49	28.00	27.04
1430.0	24.73	29.58	37.40	17.54	16.38	15.62	1400.0	1430.0	36.25	32.51	30.67
1510.0	23.12	27.85	35.42	17.15	16.97	16.76	1480.0	1510.0	27.12	26.51	25.62
1590.0	23.16	28.14	33.70	16.64	17.45	18.00	1560.0	1590.0	21.82	21.98	21.86
1690.0	23.28	27.13	30.41	15.97	17.56	19.18	1660.0	1690.0	18.28	18.59	18.97
1770.0	23.15	26.06	28.21	15.68	17.36	18.88	1740.0	1770.0	16.27	16.82	17.16
1870.0	23.02	24.50	25.45	15.27	16.21	16.85	1840.0	1870.0	14.89	15.43	15.70
1950.0	22.98	23.59	23.99	14.64	14.98	15.13	1920.0	1950.0	14.35	14.92	15.26
2050.0	23.32	23.03	22.62	14.28	13.89	13.23	2020.0	2050.0	14.20	14.57	14.97
2130.0	23.53	22.76	22.04	13.80	12.87	12.14	2100.0	2130.0	13.99	14.34	14.62
2230.0	22.82	21.65	20.72	12.71	11.66	10.93	2200.0	2230.0	13.88	14.10	14.20
2310.0	21.81	20.44	19.47	11.91	10.87	10.14	2280.0	2310.0	12.87	12.93	12.86
2410.0	22.76	21.98	21.44	10.97	10.18	9.59	2380.0	2410.0	12.74	13.03	13.56
2490.0	23.16	22.93	22.63	9.92	9.40	9.05	2460.0	2490.0	14.35	14.73	15.30
2590.0	23.12	23.21	23.16	9.03	8.67	8.60	2560.0	2590.0	15.96	16.40	16.79
2670.0	22.83	23.16	22.95	8.36	8.25	8.03	2640.0	2670.0	16.82	17.06	17.28
2770.0	22.26	22.70	22.43	7.55	7.82	7.73	2740.0	2770.0	17.88	17.91	17.88
2850.0	21.86	22.14	21.90	7.13	7.48	7.61	2820.0	2850.0	18.16	18.18	17.99
2950.0	21.47	21.31	20.59	6.49	7.09	7.38	2920.0	2950.0	18.21	18.19	17.96
3030.0	22.14	21.60	20.48	6.18	6.71	7.18	3000.0	3030.0	18.23	17.93	17.67
3130.0	22.34	21.87	20.61	5.87	6.48	7.11	3100.0	3130.0	18.76	18.17	17.75
3210.0	21.90	21.32	20.22	5.66	6.31	7.09	3180.0	3210.0	18.50	17.86	17.54
3310.0	21.41	20.59	19.41	5.46	6.28	7.18	3280.0	3310.0	18.15	17.62	17.18
3390.0	21.24	20.18	18.86	5.19	6.17	7.30	3360.0	3390.0	18.52	17.96	17.74
3490.0	21.52	20.19	18.49	5.05	6.19	7.50	3460.0	3490.0	19.19	18.92	19.26
3570.0	21.73	20.06	17.98	5.07	6.23	7.53	3540.0	3570.0	20.01	20.61	21.57
3670.0	21.90	19.66	17.57	5.31	6.53	7.82	3640.0	3670.0	21.69	23.79	26.48
3750.0	21.67	19.48	17.58	5.76	7.03	8.13	3720.0	3750.0	24.23	29.27	33.31
3850.0	21.07	19.67	18.20	6.65	7.85	8.50	3820.0	3850.0	28.26	37.28	32.48
3930.0	20.84	19.90	19.30	7.77	8.51	8.95	3900.0	3930.0	26.88	28.72	28.10
4030.0	20.82	21.40	21.49	9.47	9.93	9.79	4000.0	4030.0	23.91	24.81	24.68
4110.0	21.07	22.47	23.34	11.29	11.15	10.63	4080.0	4110.0	22.29	23.82	24.03
4210.0	21.12	22.55	23.66	13.67	13.24	12.40	4180.0	4210.0	20.08	22.77	23.92
4290.0	21.46	21.98	22.12	14.62	14.26	13.57	4260.0	4290.0	18.57	20.48	23.65
4390.0	20.89	20.39	20.30	14.53	14.17	13.93	4360.0	4390.0	18.80	20.05	23.13

## Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=2000MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+4	+7	+10		+4	+7	+10		+4	+7	+10
920.0	950.0	9.38	7.00	6.09	950.0	12.80	8.39	6.97	10.0	1.31	1.43	1.54
1000.0	1030.0	6.17	4.99	4.47	1030.0	8.27	5.83	5.63	50.0	1.30	1.42	1.52
1080.0	1110.0	4.32	3.73	3.39	1110.0	5.30	4.53	4.82	90.0	1.31	1.42	1.52
1160.0	1190.0	3.33	2.96	2.72	1190.0	3.86	3.76	4.25	130.0	1.33	1.44	1.53
1240.0	1270.0	2.62	2.36	2.18	1270.0	3.06	3.25	3.81	170.0	1.37	1.45	1.54
1320.0	1350.0	2.10	1.95	1.84	1350.0	2.44	2.77	3.42	190.0	1.40	1.48	1.56
1400.0	1430.0	1.72	1.63	1.58	1430.0	1.95	2.40	3.12	230.0	1.45	1.51	1.58
1480.0	1510.0	1.42	1.36	1.36	1510.0	1.70	2.20	2.92	250.0	1.47	1.51	1.56
1560.0	1590.0	1.18	1.22	1.27	1590.0	1.53	2.04	2.74	290.0	1.54	1.57	1.61
1660.0	1690.0	1.02	1.10	1.18	1690.0	1.34	1.88	2.57	310.0	1.61	1.62	1.64
1740.0	1770.0	1.08	1.12	1.20	1770.0	1.28	1.80	2.47	350.0	1.68	1.68	1.69
1840.0	1870.0	1.24	1.23	1.29	1870.0	1.27	1.76	2.40	370.0	1.74	1.73	1.73
1920.0	1950.0	1.32	1.34	1.41	1950.0	1.24	1.71	2.33	410.0	1.83	1.80	1.80
2020.0	2050.0	1.41	1.44	1.51	2050.0	1.20	1.70	2.30	430.0	1.90	1.86	1.83
2100.0	2130.0	1.44	1.46	1.53	2130.0	1.22	1.71	2.28	470.0	2.07	1.99	1.94
2200.0	2230.0	1.45	1.41	1.46	2230.0	1.28	1.75	2.29	490.0	2.12	2.05	2.01
2280.0	2310.0	1.37	1.22	1.13	2310.0	1.33	1.77	2.29	530.0	2.24	2.14	2.07
2380.0	2410.0	2.21	2.12	2.02	2410.0	1.41	1.83	2.34	550.0	2.33	2.20	2.12
2460.0	2490.0	2.48	2.33	2.21	2490.0	1.50	1.90	2.38	590.0	2.51	2.37	2.26
2560.0	2590.0	2.58	2.41	2.30	2590.0	1.61	1.96	2.42	610.0	2.56	2.41	2.30
2640.0	2670.0	2.63	2.45	2.31	2670.0	1.73	2.03	2.45	650.0	2.79	2.61	2.49
2740.0	2770.0	2.62	2.44	2.29	2770.0	1.89	2.14	2.54	670.0	2.80	2.61	2.47
2820.0	2850.0	2.61	2.43	2.27	2850.0	1.98	2.21	2.60	710.0	2.88	2.68	2.51
2920.0	2950.0	2.48	2.26	2.12	2950.0	2.16	2.26	2.59	730.0	2.98	2.77	2.60
3000.0	3030.0	2.45	2.15	1.98	3030.0	2.26	2.31	2.63	770.0	3.00	2.78	2.60
3100.0	3130.0	2.46	2.09	1.85	3130.0	2.40	2.32	2.54	790.0	2.96	2.75	2.57
3180.0	3210.0	2.40	2.03	1.79	3210.0	2.52	2.35	2.55	830.0	2.88	2.66	2.50
3280.0	3310.0	2.27	1.92	1.70	3310.0	2.54	2.31	2.40	850.0	2.89	2.67	2.52
3360.0	3390.0	2.15	1.83	1.63	3390.0	2.59	2.26	2.27	890.0	2.62	2.42	2.28
3460.0	3490.0	1.98	1.68	1.49	3490.0	2.50	2.13	2.06	910.0	2.46	2.28	2.16
3540.0	3570.0	1.81	1.54	1.38	3570.0	2.40	1.98	1.81	950.0	2.27	2.10	2.00
3640.0	3670.0	1.73	1.52	1.41	3670.0	2.26	1.77	1.60	970.0	2.13	1.96	1.87
3720.0	3750.0	1.71	1.56	1.50	3750.0	2.04	1.55	1.42	1010.0	2.12	2.00	1.92
3820.0	3850.0	1.82	1.73	1.73	3850.0	1.68	1.30	1.31	1030.0	2.19	2.08	2.02
3900.0	3930.0	1.98	1.94	1.96	3930.0	1.38	1.16	1.37	1070.0	2.55	2.48	2.44
4000.0	4030.0	2.28	2.25	2.28	4030.0	1.10	1.29	1.67	1090.0	2.92	2.84	2.80
4080.0	4110.0	2.60	2.54	2.56	4110.0	1.23	1.56	1.97	1130.0	3.69	3.65	3.59
4180.0	4210.0	3.14	2.99	2.93	4210.0	1.62	2.02	2.48	1150.0	4.11	4.09	4.07
4260.0	4290.0	3.71	3.54	3.38	4290.0	2.00	2.43	2.90	1190.0	5.46	5.44	5.44
4360.0	4390.0	4.39	4.12	3.90	4390.0	2.47	2.84	3.28	1210.0	6.15	6.17	6.13

## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	10	7	9	12	19	30	33	41	47	34
1	-	15	0	37	15	41	29	51	33	42	42	61
2	31	49	63	37	47	50	45	52	58	62	52	65
3	34	73	61	77	55	71	59	68	69	74	62	66
4	55	81	88	83	86	76	86	84	85	92	81	83
5	62	96	87	88	87	84	83	87	88	91	93	90
6	67	95	87	83	83	96	84	87	87	88	85	82
7	73	94	83	89	86	85	94	85	89	88	91	90
8	71	87	78	94	80	87	87	102	91	88	94	90
9	76	77	90	86	85	84	100	90	85	100	98	90
10	86	89	78	80	91	91	91	87	88	93	85	92
		0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 1600 MHz; -14.00 dBm.  
 LO IN: 1630 MHz; +7.00 dBm  
 IF OUT: 30 MHz; -20.14 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	0	18	21	24	30	41	52	61	54	57
1	-	15	0	40	17	41	31	60	39	48	49	67
2	31	36	58	30	41	39	40	41	52	54	50	56
3	34	48	40	66	41	49	45	51	54	60	52	58
4	55	64	55	53	71	45	53	58	56	56	67	58
5	62	84	78	69	66	71	58	67	61	61	73	66
6	67	82	96	78	77	73	88	66	71	64	70	72
7	73	93	93	106	91	85	94	89	73	84	69	74
8	71	90	91	92	92	93	97	98	88	88	84	75
9	76	87	106	95	97	96	95	98	104	94	86	94
10	86	97	95	102	117	95	95	118	101	93	97	94
		0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 1600 MHz; -4.00 dBm.  
 LO IN: 1630 MHz; +7.00 dBm  
 IF OUT: 30 MHz; -10.22 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.