

Typical Performance Data

RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	DOWN CONVERTER IMAGE REJECTION @ FIXED IF=200MHz			RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	DOWN CONVERTER IMAGE REJECTION @ FIXED IF=2000MHz			RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	DOWN CONVERTER IMAGE REJECTION @ FIXED IF=3000MHz		
		@ LO (dBm)					@ LO (dBm)					@ LO (dBm)		
		+17	+18	+19			+17	+18	+19			+17	+18	+19
18.4	18.2	24.5	24.2	23.9	22.0	20.0	21.4	22.2	22.9	24.0	21.0	20.7	21.4	22.0
18.5	18.3	24.0	23.4	23.0	22.5	20.5	27.3	28.9	29.6	24.5	21.5	20.4	21.1	21.9
19.0	18.8	21.0	21.3	21.6	23.0	21.0	31.4	33.3	32.8	25.0	22.0	21.2	22.1	23.0
19.5	19.3	21.0	22.1	22.9	23.5	21.5	25.4	26.5	27.6	25.5	22.5	24.6	25.2	26.0
20.0	19.8	23.4	24.8	26.0	24.0	22.0	23.9	25.1	26.2	26.0	23.0	28.5	27.8	27.4
20.5	20.3	26.3	27.5	28.5	24.5	22.5	24.6	26.0	27.4	26.5	23.5	32.2	30.2	28.7
21.0	20.8	24.4	25.7	27.0	25.0	23.0	26.7	28.7	31.0	27.0	24.0	31.6	33.0	32.3
21.5	21.3	24.0	25.7	27.7	25.5	23.5	27.2	28.6	30.0	27.5	24.5	28.4	29.6	30.2
22.0	21.8	20.7	22.3	24.1	26.0	24.0	28.5	28.5	28.8	28.0	25.0	27.0	27.6	27.2
22.5	22.3	22.6	24.4	25.8	26.5	24.5	34.6	31.7	30.2	28.5	25.5	27.2	29.7	30.2
23.0	22.8	23.5	25.5	26.9	27.0	25.0	49.1	39.5	34.1	29.0	26.0	25.4	27.9	30.6
23.5	23.3	27.1	27.1	27.0	27.5	25.5	37.0	45.5	39.3	29.5	26.5	26.0	27.4	29.1
24.0	23.8	31.8	31.2	30.4	28.0	26.0	28.3	32.6	38.1	30.0	27.0	29.5	30.9	32.3
24.5	24.3	37.3	44.5	38.9	28.5	26.5	25.1	28.2	32.1	30.5	27.5	29.9	31.6	33.2
25.0	24.8	32.9	38.8	52.4	29.0	27.0	25.2	27.8	31.0	31.0	28.0	34.9	34.7	33.9
25.5	25.3	33.1	38.6	53.1	29.5	27.5	26.8	28.9	31.8	31.5	28.5	41.5	41.9	39.1
26.0	25.8	33.3	37.4	45.7	30.0	28.0	28.5	30.0	32.0	32.0	29.0	42.0	40.4	37.7
26.5	26.3	33.8	34.9	36.3	30.5	28.5	32.4	35.0	38.4	32.5	29.5	44.9	37.4	34.2
27.0	26.8	46.6	44.9	39.3	31.0	29.0	31.6	33.8	36.4	33.0	30.0	48.3	36.9	33.1
27.5	27.3	33.8	37.6	37.6	31.5	29.5	39.9	43.6	42.6	33.5	30.5	41.5	36.5	33.8
28.0	27.8	27.6	30.9	33.7	32.0	30.0	38.8	47.4	52.5	34.0	31.0	29.1	30.8	32.0
28.5	28.3	25.3	28.4	31.7	32.5	30.5	36.0	44.1	52.7	34.5	31.5	27.2	29.0	30.7
29.0	28.8	23.7	26.2	29.3	33.0	31.0	36.5	47.2	46.8	35.0	32.0	27.5	27.1	26.6
29.5	29.3	22.5	24.0	25.9	33.5	31.5	39.7	39.3	37.5	35.5	32.5	26.3	25.0	24.2
30.0	29.8	23.2	24.1	25.4	34.0	32.0	34.2	37.3	38.2	36.0	33.0	23.7	22.4	21.5
30.5	30.3	26.8	27.6	28.6	34.5	32.5	25.2	27.2	29.0	36.5	33.5	21.0	20.1	19.4
31.0	30.8	42.2	53.3	46.1	35.0	33.0	24.6	26.1	27.6	37.0	34.0	18.6	17.9	17.5
31.5	31.3	28.8	31.1	32.5	35.5	33.5	28.4	28.6	28.5	37.5	34.5	17.4	17.2	17.1
32.0	31.8	28.2	30.5	32.5	36.0	34.0	29.5	27.7	26.2	38.0	35.0	17.2	17.2	17.1
32.5	32.3	30.7	33.8	35.8	36.5	34.5	26.9	24.2	22.5	38.5	35.5	18.0	17.8	17.5
33.0	32.8	27.0	29.4	31.1	37.0	35.0	29.4	25.1	22.8	39.0	36.0	19.2	18.4	17.9
33.5	33.3	28.8	30.9	32.8	37.5	35.5	24.6	22.6	21.2	39.5	36.5	20.4	19.0	18.1
34.0	33.8	28.2	30.5	32.6	38.0	36.0	21.3	20.1	19.4	40.0	37.0	20.6	19.1	18.2
34.5	34.3	25.1	27.1	28.8	38.5	36.5	20.2	18.8	18.0	40.5	37.5	20.8	19.3	18.4
35.0	34.8	25.1	27.0	29.3	39.0	37.0	19.9	18.3	17.3	41.0	38.0	22.5	20.7	19.7
35.5	35.3	19.9	21.5	23.3	39.5	37.5	21.5	19.0	17.8	41.5	38.5	23.9	21.8	20.5
36.0	35.8	20.7	21.8	22.8	40.0	38.0	22.5	20.2	19.0	42.0	39.0	25.9	23.1	21.4
36.5	36.3	24.4	25.3	25.8	40.5	38.5	23.8	21.6	20.3	42.5	39.5	26.6	24.3	22.6
37.0	36.8	26.1	27.2	26.7	41.0	39.0	25.4	22.9	21.6	43.0	40.0	22.6	24.4	23.5
37.5	37.3	28.6	28.3	26.6	41.5	39.5	25.8	23.4	21.8	43.5	40.5	12.1	21.4	23.3
38.0	37.8	27.5	26.1	24.5	42.0	40.0	27.5	24.7	22.7					
38.5	38.3	24.6	22.8	21.5										
39.0	38.8	22.1	20.3	19.2										
39.5	39.3	22.2	19.8	18.5										
40.0	39.8	22.1	19.7	18.3										

Typical Performance Data

RF (OUT) FREQUENCY (GHz)	LO FREQUENCY (GHz)	UPCONVERTER SSB REJECTION @ FIXED IF=200MHz			RF (OUT) FREQUENCY (GHz)	LO FREQUENCY (GHz)	UPCONVERTER SSB REJECTION @ FIXED IF=2000MHz			RF (OUT) FREQUENCY (GHz)	LO FREQUENCY (GHz)	UPCONVERTER SSB REJECTION @ FIXED IF=3000MHz		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+17	+18	+19			+17	+18	+19			+17	+18	+19
18.4	18.2	40.0	40.5	39.4	22.0	20.0	28.9	28.4	27.6	24.0	21.0	31.8	30.5	29.7
18.5	18.3	41.7	43.0	39.8	22.5	20.5	27.7	27.3	26.8	24.5	21.5	29.8	28.0	26.9
19.0	18.8	32.8	32.7	32.6	23.0	21.0	25.9	25.6	25.3	25.0	22.0	38.6	33.4	30.4
19.5	19.3	31.8	33.3	33.5	23.5	21.5	25.9	25.0	24.2	25.5	22.5	28.5	27.0	25.8
20.0	19.8	40.3	41.6	38.3	24.0	22.0	27.4	26.4	25.6	26.0	23.0	25.8	24.9	24.1
20.5	20.3	37.5	41.3	40.4	24.5	22.5	26.9	25.6	24.4	26.5	23.5	24.1	23.5	23.0
21.0	20.8	36.2	36.3	35.3	25.0	23.0	23.0	22.9	22.6	27.0	24.0	23.3	22.9	22.8
21.5	21.3	29.4	28.7	28.1	25.5	23.5	21.4	21.4	21.5	27.5	24.5	23.2	23.1	23.0
22.0	21.8	28.2	27.1	26.5	26.0	24.0	21.8	21.8	21.9	28.0	25.0	23.7	23.7	23.5
22.5	22.3	27.2	25.5	25.0	26.5	24.5	22.2	22.5	22.7	28.5	25.5	24.7	24.6	24.2
23.0	22.8	31.8	28.1	26.0	27.0	25.0	22.0	22.3	22.4	29.0	26.0	24.3	24.3	23.8
23.5	23.3	37.0	38.3	35.7	27.5	25.5	22.0	22.2	22.2	29.5	26.5	23.6	23.9	23.9
24.0	23.8	31.6	32.0	32.2	28.0	26.0	22.8	22.9	22.9	30.0	27.0	23.9	24.3	24.3
24.5	24.3	26.9	27.2	27.2	28.5	26.5	22.6	23.0	23.2	30.5	27.5	23.9	24.7	25.0
25.0	24.8	25.1	25.1	25.0	29.0	27.0	22.2	22.7	23.0	31.0	28.0	22.3	23.0	23.6
25.5	25.3	24.7	24.6	24.5	29.5	27.5	21.0	21.6	22.3	31.5	28.5	21.6	22.4	23.2
26.0	25.8	23.9	24.0	24.0	30.0	28.0	21.4	22.1	22.8	32.0	29.0	22.7	23.6	24.4
26.5	26.3	23.3	23.7	23.9	30.5	28.5	22.3	23.3	24.2	32.5	29.5	24.1	24.9	25.6
27.0	26.8	23.9	24.3	24.5	31.0	29.0	21.3	22.1	23.0	33.0	30.0	25.9	26.7	27.4
27.5	27.3	24.7	25.2	25.5	31.5	29.5	21.2	21.8	22.5	33.5	30.5	28.2	29.3	30.3
28.0	27.8	23.8	24.9	25.7	32.0	30.0	22.6	23.5	24.1	34.0	31.0	28.9	30.6	32.0
28.5	28.3	22.9	24.0	25.2	32.5	30.5	24.9	25.8	26.8	34.5	31.5	31.1	33.3	33.6
29.0	28.8	22.4	23.5	24.5	33.0	31.0	27.5	28.7	30.2	35.0	32.0	35.1	35.1	35.4
29.5	29.3	23.1	24.2	25.1	33.5	31.5	30.0	32.1	33.8	35.5	32.5	35.7	35.4	35.9
30.0	29.8	23.9	25.3	26.7	34.0	32.0	33.6	36.3	36.8	36.0	33.0	32.8	32.8	32.0
30.5	30.3	24.8	26.4	28.0	34.5	32.5	39.1	41.0	40.5	36.5	33.5	27.0	26.9	27.2
31.0	30.8	23.9	25.2	26.5	35.0	33.0	53.0	43.7	39.1	37.0	34.0	25.7	25.8	25.6
31.5	31.3	24.8	25.8	27.0	35.5	33.5	41.8	38.2	36.2	37.5	34.5	25.8	26.1	26.0
32.0	31.8	28.9	30.5	31.9	36.0	34.0	31.9	31.6	31.0	38.0	35.0	22.0	22.2	22.3
32.5	32.3	31.6	34.1	36.2	36.5	34.5	26.4	26.1	26.4	38.5	35.5	18.8	19.2	19.5
33.0	32.8	35.4	38.3	40.7	37.0	35.0	26.8	27.3	27.3	39.0	36.0	16.8	17.7	17.8
33.5	33.3	32.7	33.9	34.0	37.5	35.5	22.7	23.4	24.1	39.5	36.5	15.7	16.2	16.8
34.0	33.8	31.2	31.5	31.3	38.0	36.0	19.5	20.2	20.7	40.0	37.0	14.3	14.9	15.5
34.5	34.3	28.8	29.5	29.8	38.5	36.5	15.6	16.4	16.9	40.5	37.5	14.9	15.4	15.7
35.0	34.8	25.6	26.6	27.4	39.0	37.0	13.5	14.2	14.7	41.0	38.0	16.3	16.9	17.3
35.5	35.3	22.9	23.8	24.6	39.5	37.5	13.7	14.2	14.6	41.5	38.5	18.0	19.0	19.4
36.0	35.8	20.9	21.9	22.9	40.0	38.0	15.0	15.6	16.0	42.0	39.0	19.8	21.0	21.1
36.5	36.3	19.1	20.1	20.9	40.5	38.5	16.7	17.6	18.1	42.5	39.5	22.4	22.4	22.1
37.0	36.8	18.2	18.9	19.8	41.0	39.0	17.9	18.9	19.4	43.0	40.0	25.5	24.4	23.6
37.5	37.3	17.0	17.7	18.5	41.5	39.5	19.7	19.5	19.6	43.5	40.5	27.8	26.6	25.4
38.0	37.8	16.5	17.2	17.6	42.0	40.0	20.6	19.6	19.6					
38.5	38.3	16.2	17.2	17.6										
39.0	38.8	15.6	17.0	17.8										
39.5	39.3	15.5	16.7	17.5										
40.0	39.8	15.4	16.2	16.8										

*Typical Performance Data*

RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	CONVERSION LOSS @ FIXED IF=200MHz			RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	CONVERSION LOSS @ FIXED IF=200MHz			RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	CONVERSION LOSS @ FIXED IF=3000MHz		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+17	+18	+19			+17	+18	+19			+17	+18	+19
18.0	18.2	8.9	9.0	9.2	18.0	20.0	8.7	8.7	8.8	18.0	21.0	8.8	8.9	9.0
18.6	18.8	9.3	9.4	9.6	18.6	20.6	9.2	9.2	9.3	18.6	21.6	9.0	9.0	9.2
19.2	19.4	9.8	9.8	9.9	19.2	21.2	9.7	9.8	9.9	19.2	22.2	9.7	9.6	9.8
19.8	20.0	9.7	9.7	9.7	19.8	21.8	9.9	9.9	10.0	19.8	22.8	10.1	9.9	9.9
20.4	20.6	9.7	9.7	9.8	20.4	22.4	10.1	10.0	10.0	20.4	23.4	10.3	10.2	10.2
21.0	21.2	10.4	10.3	10.4	21.0	23.0	10.6	10.4	10.4	21.0	24.0	10.9	10.8	10.8
21.6	21.8	10.7	10.6	10.7	21.6	23.6	11.2	11.1	11.0	21.6	24.6	10.9	10.8	10.8
22.2	22.4	10.5	10.3	10.3	22.2	24.2	10.5	10.4	10.4	22.2	25.2	10.1	10.0	10.1
22.8	23.0	10.4	10.3	10.3	22.8	24.8	10.1	10.0	10.1	22.8	25.8	10.1	10.0	10.1
23.4	23.6	9.5	9.5	9.5	23.4	25.4	9.6	9.6	9.6	23.4	26.4	9.5	9.5	9.5
24.0	24.2	9.2	9.1	9.2	24.0	26.0	9.3	9.2	9.3	24.0	27.0	9.2	9.2	9.3
24.6	24.8	9.1	9.1	9.2	24.6	26.6	9.0	9.0	9.1	24.6	27.6	9.0	9.0	9.1
25.2	25.4	9.2	9.2	9.2	25.2	27.2	9.1	9.1	9.1	25.2	28.2	9.2	9.2	9.3
25.8	26.0	9.2	9.2	9.2	25.8	27.8	9.2	9.2	9.3	25.8	28.8	9.0	9.1	9.3
26.4	26.6	9.2	9.2	9.2	26.4	28.4	9.0	9.1	9.2	26.4	29.4	8.8	8.9	9.1
27.0	27.2	9.2	9.2	9.2	27.0	29.0	8.9	9.0	9.1	27.0	30.0	8.6	8.7	9.0
27.6	27.8	9.2	9.2	9.3	27.6	29.6	8.9	9.0	9.2	27.6	30.6	8.6	8.8	9.0
28.2	28.4	9.1	9.1	9.2	28.2	30.2	8.8	9.0	9.2	28.2	31.2	8.7	8.7	8.8
28.8	29.0	8.9	9.0	9.1	28.8	30.8	8.6	8.7	8.8	28.8	31.8	8.9	8.9	9.0
29.4	29.6	8.9	8.9	9.0	29.4	31.4	8.9	8.9	9.1	29.4	32.4	9.3	9.2	9.3
30.0	30.2	8.8	8.9	9.0	30.0	32.0	9.2	9.2	9.3	30.0	33.0	9.4	9.4	9.5
30.6	30.8	9.4	9.4	9.5	30.6	32.6	9.7	9.7	9.8	30.6	33.6	10.0	9.9	10.0
31.2	31.4	9.5	9.5	9.6	31.2	33.2	9.9	9.9	10.0	31.2	34.2	10.2	10.1	10.1
31.8	32.0	9.4	9.4	9.5	31.8	33.8	10.1	10.0	10.1	31.8	34.8	10.2	10.1	10.1
32.4	32.6	10.1	10.0	10.0	32.4	34.4	10.3	10.3	10.3	32.4	35.4	10.5	10.4	10.5
33.0	33.2	10.7	10.6	10.7	33.0	35.0	10.9	10.8	10.9	33.0	36.0	11.3	11.1	11.0
33.6	33.8	11.2	11.1	11.0	33.6	35.6	11.5	11.3	11.3	33.6	36.6	11.9	11.7	11.5
34.2	34.4	11.4	11.3	11.3	34.2	36.2	12.0	11.8	11.7	34.2	37.2	12.8	12.5	12.3
34.8	35.0	11.2	11.1	11.2	34.8	36.8	12.4	12.2	12.1	34.8	37.8	12.5	12.2	12.0
35.4	35.6	11.6	11.3	11.3	35.4	37.4	12.1	11.8	11.7	35.4	38.4	11.9	11.6	11.5
36.0	36.2	11.9	11.7	11.6	36.0	38.0	12.1	11.9	11.8	36.0	39.0	12.0	11.7	11.6
36.6	36.8	11.8	11.6	11.6	36.6	38.6	12.0	11.7	11.6	36.6	39.6	11.9	11.6	11.5
37.2	37.4	11.6	11.4	11.3	37.2	39.2	11.8	11.5	11.3	37.2	40.2	11.5	11.3	11.2
37.8	38.0	11.1	10.9	10.9	37.8	39.8	11.2	10.9	10.8	37.8	40.8	10.9	10.8	10.8
38.4	38.6	10.5	10.3	10.3	38.4	40.4	10.4	10.3	10.2	38.4	41.4	10.3	10.2	10.2
39.0	39.2	10.4	10.0	9.9	39.0	41.0	10.0	9.8	9.8	39.0	42.0	9.9	9.7	9.7
39.6	39.8	10.3	10.0	9.9	39.6	41.6	9.9	9.8	9.8	39.6	42.6	10.1	9.7	9.6
40.2	40.4	10.4	10.1	10.0	40.2	42.2	10.3	10.0	9.9	40.2	43.2	11.9	10.4	9.9
40.8	41.0	10.7	10.4	10.3	40.8	42.8	11.3	10.4	10.2	40.8	43.8	13.5	11.6	10.3
41.4	41.6	11.6	11.3	11.1	41.4	43.4	13.0	11.6	11.1	41.4	44.4	13.5	11.6	10.3
42.0	42.2	13.1	12.5	12.3	42.0	44.0	15.0	13.3	11.9	42.0	45.0	13.5	11.6	10.3



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IF/RF MICROWAVE COMPONENTS

*Typical Performance Data*

RF FREQUENCY (GHz)	IF FREQUENCY (GHz)	CONVERSION LOSS @ FIXED LO=42GHz		
		@ LO (dBm)		
		+17	+18	+19
35.0	7.00	13.1	12.6	12.4
35.3	6.75	12.7	12.3	12.2
35.5	6.50	12.5	12.1	12.0
35.8	6.25	12.3	12.0	11.8
36.0	6.00	12.3	12.0	11.9
36.3	5.75	12.3	11.9	11.8
36.5	5.50	12.3	12.0	11.9
36.8	5.25	12.2	11.9	11.8
37.0	5.00	11.9	11.6	11.5
37.3	4.75	11.8	11.5	11.4
37.5	4.50	11.5	11.3	11.2
37.8	4.25	11.3	11.0	11.0
38.0	4.00	10.9	10.6	10.6
38.3	3.75	10.5	10.3	10.3
38.5	3.50	10.3	10.1	10.1
38.8	3.25	10.0	9.8	9.8
39.0	3.00	10.0	9.8	9.8
39.3	2.75	9.9	9.7	9.7
39.5	2.50	10.0	9.7	9.7
39.8	2.25	10.0	9.8	9.7
40.0	2.00	10.2	9.9	9.9
40.3	1.75	10.3	10.0	9.9
40.5	1.50	10.4	10.1	10.0
40.8	1.25	10.7	10.3	10.2
41.0	1.00	10.9	10.5	10.4
41.3	0.75	11.5	11.1	11.0
41.5	0.50	11.9	11.5	11.3
41.8	0.25	12.6	12.1	11.9

RF FREQUENCY (GHz)	IF FREQUENCY (GHz)	CONVERSION LOSS @ FIXED LO=28GHz		
		@ LO (dBm)		
		+17	+18	+19
21.0	7.00	11.5	11.5	11.5
21.4	6.60	11.3	11.4	11.4
21.8	6.20	11.0	11.0	11.1
22.2	5.80	10.8	10.9	11.0
22.6	5.40	10.6	10.6	10.7
23.0	5.00	10.1	10.2	10.2
23.4	4.60	9.9	10.0	10.1
23.8	4.20	9.4	9.5	9.6
24.2	3.80	9.1	9.2	9.3
24.6	3.40	9.2	9.2	9.3
25.0	3.00	9.2	9.2	9.3
25.4	2.60	9.1	9.1	9.2
25.8	2.20	9.1	9.1	9.2
26.2	1.80	9.0	9.0	9.1
26.6	1.40	9.0	9.1	9.2
27.0	1.00	9.1	9.1	9.2
27.4	0.60	9.1	9.2	9.3
27.8	0.20	9.1	9.1	9.2
28.2	0.20	9.0	9.1	9.2
28.6	0.60	9.1	9.2	9.3
29.0	1.00	9.3	9.3	9.4
29.4	1.40	9.4	9.4	9.5
29.8	1.80	9.5	9.5	9.7
30.2	2.20	9.7	9.7	9.8
30.6	2.60	10.0	10.1	10.3
31.0	3.00	10.2	10.3	10.4
31.4	3.40	10.0	10.1	10.3
31.8	3.80	10.0	10.1	10.3
32.2	4.20	10.5	10.6	10.8
32.6	4.60	11.2	11.3	11.4
33.0	5.00	11.4	11.4	11.6
33.4	5.40	12.0	12.0	12.1
33.8	5.80	12.3	12.3	12.4
34.2	6.20	12.4	12.4	12.5
34.6	6.60	12.5	12.4	12.5
35.0	7.00	12.4	12.3	12.4

LO FREQUENCY (GHz)	IF FREQUENCY (GHz)	CONVERSION LOSS @ FIXED RF=28GHz		
		@ LO (dBm)		
		+17	+18	+19
21.0	7.00	14.4	14.1	13.9
21.4	6.60	12.8	12.6	12.5
21.8	6.20	11.9	11.7	11.6
22.2	5.80	11.3	11.2	11.2
22.6	5.40	11.0	10.9	10.9
23.0	5.00	10.8	10.7	10.7
23.4	4.60	10.5	10.5	10.5
23.8	4.20	10.4	10.4	10.5
24.2	3.80	10.2	10.2	10.3
24.6	3.40	10.0	10.0	10.1
25.0	3.00	9.9	9.9	10.0
25.4	2.60	9.8	9.8	9.9
25.8	2.20	9.9	9.9	9.9
26.2	1.80	9.8	9.8	9.9
26.6	1.40	9.7	9.7	9.8
27.0	1.00	9.5	9.5	9.6
27.4	0.60	9.3	9.3	9.4
27.8	0.20	9.1	9.1	9.2
28.2	0.20	9.0	9.0	9.1
28.6	0.60	8.9	9.0	9.1
29.0	1.00	8.9	9.0	9.1
29.4	1.40	8.8	8.9	9.1
29.8	1.80	8.8	8.9	9.1
30.2	2.20	8.6	8.8	9.0
30.6	2.60	8.5	8.6	8.8
31.0	3.00	8.5	8.6	8.8
31.4	3.40	8.7	8.7	8.9
31.8	3.80	8.9	8.9	9.0
32.2	4.20	9.1	9.1	9.2
32.6	4.60	9.5	9.4	9.5
33.0	5.00	9.5	9.4	9.4
33.4	5.40	9.6	9.5	9.6
33.8	5.80	9.9	9.8	9.8
34.2	6.20	10.1	10.0	10.0
34.6	6.60	10.6	10.4	10.4
35.0	7.00	11.1	10.9	10.9



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IF/RF MICROWAVE COMPONENTS

Typical Performance Data

LO FREQUENCY (GHz)	LO-RF Isolation (dB)			LO-IF (Q) Isolation (dB)			LO-IF (I) Isolation (dB)			RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	RF-IF (Q) Isolation (dB)			RF-IF (I) Isolation (dB)		
	@LO (dBm)			@LO (dBm)			@LO (dBm)					@LO (dBm)			@LO (dBm)		
	+17	+18	+19	+17	+18	+19	+17	+18	+19			+17	+18	+19	+17	+18	+19
18.0	42.6	43.2	43.7	50.3	55.4	62.5	36.7	38.6	40.5	18.0	18.2	33.4	33.3	33.2	21.0	20.7	20.4
18.5	44.8	45.4	45.9	47.4	49.9	52.4	38.3	40.3	42.1	18.5	18.7	34.2	34.1	34.1	21.1	20.9	20.8
19.0	45.2	45.6	45.9	43.2	45.1	47.0	40.2	41.3	41.9	19.0	19.2	35.1	35.0	34.9	21.3	21.2	21.1
19.5	44.7	45.2	45.6	43.1	44.7	46.2	38.5	39.3	39.9	19.5	19.7	35.4	35.3	35.2	20.9	20.9	20.9
20.0	43.9	44.5	45.1	42.1	43.6	44.9	35.5	36.3	37.0	20.0	20.2	33.5	33.5	33.5	20.7	20.6	20.6
20.5	43.4	44.0	44.5	42.7	44.1	45.2	33.7	34.5	35.2	20.5	20.7	31.8	31.8	31.8	20.8	20.8	20.8
21.0	43.0	43.6	44.3	42.6	43.9	45.0	33.1	34.0	34.7	21.0	21.2	30.8	30.8	30.8	21.6	21.6	21.6
21.5	43.3	43.9	44.5	41.7	42.8	43.9	34.4	35.2	35.9	21.5	21.7	29.1	29.1	29.1	22.5	22.5	22.5
22.0	45.3	45.9	46.5	43.6	44.4	45.3	35.5	36.4	37.2	22.0	22.2	28.3	28.2	28.3	23.5	23.5	23.5
22.5	45.5	46.4	46.9	42.8	43.7	44.5	37.6	38.3	38.9	22.5	22.7	28.0	27.9	27.8	24.6	24.5	24.5
23.0	43.4	44.2	45.0	41.4	42.2	43.1	39.2	40.0	40.7	23.0	23.2	27.2	27.1	27.1	25.5	25.5	25.5
23.5	41.7	42.5	43.2	40.0	40.8	41.6	40.7	41.7	42.5	23.5	23.7	25.6	25.7	25.7	26.3	26.3	26.3
24.0	40.8	41.5	42.2	39.4	40.2	41.0	42.0	43.0	43.9	24.0	24.2	25.2	25.2	25.3	27.6	27.7	27.7
24.5	40.8	41.5	42.3	39.9	40.6	41.4	43.5	44.5	45.3	24.5	24.7	25.6	25.6	25.7	29.1	29.2	29.2
25.0	40.6	41.3	42.0	40.7	41.4	42.1	45.2	46.0	46.9	25.0	25.2	26.4	26.4	26.5	31.4	31.5	31.5
25.5	40.3	41.0	41.7	41.5	42.2	42.9	46.3	47.1	47.8	25.5	25.7	27.5	27.6	27.6	33.8	33.8	33.9
26.0	40.0	40.7	41.4	42.4	43.0	43.6	48.0	48.7	49.4	26.0	26.2	28.7	28.8	28.9	35.1	35.1	35.1
26.5	39.9	40.7	41.3	43.3	43.8	44.4	50.6	51.4	52.2	26.5	26.7	30.1	30.2	30.2	35.0	35.0	35.0
27.0	39.7	40.5	41.1	43.7	44.1	44.5	55.1	56.4	57.7	27.0	27.2	31.2	31.3	31.3	32.3	32.4	32.4
27.5	39.7	40.5	41.1	44.0	44.4	44.7	61.1	63.9	67.3	27.5	27.7	33.3	33.3	33.4	30.0	30.1	30.2
28.0	39.6	40.5	41.2	44.7	45.0	45.3	70.5	69.8	66.7	28.0	28.2	37.2	37.3	37.3	28.1	28.2	28.2
28.5	39.3	40.1	40.8	45.0	45.3	45.5	63.1	60.3	58.5	28.5	28.7	49.2	49.0	49.0	26.3	26.4	26.4
29.0	39.4	40.2	40.8	43.9	44.2	44.5	54.3	53.4	52.6	29.0	29.2	42.1	42.3	42.3	24.8	24.9	24.9
29.5	39.5	40.2	40.7	42.4	42.6	42.8	49.4	48.8	48.4	29.5	29.7	33.3	33.5	33.5	22.8	22.9	22.9
30.0	39.4	40.0	40.5	39.9	40.1	40.3	45.0	44.7	44.4	30.0	30.2	26.8	26.9	27.0	20.2	20.3	20.4
30.5	38.3	38.5	38.8	35.6	35.8	36.0	40.1	39.9	39.6	30.5	30.7	21.0	21.1	21.2	17.0	17.1	17.2
31.0	36.2	36.4	36.6	31.7	31.9	32.0	38.7	38.5	38.3	31.0	31.2	17.3	17.4	17.6	15.6	15.7	15.8
31.5	36.5	36.8	37.0	30.8	31.0	31.3	36.9	36.9	36.8	31.5	31.7	18.8	19.0	19.1	17.3	17.4	17.5
32.0	37.5	37.8	38.1	30.2	30.5	30.8	32.8	32.9	33.0	32.0	32.2	22.0	22.2	22.3	18.9	19.0	19.1
32.5	38.6	38.9	39.1	30.5	30.8	31.1	30.9	31.0	31.1	32.5	32.7	26.3	26.5	26.6	20.7	20.8	20.9
33.0	39.9	40.3	40.6	31.0	31.4	31.7	30.2	30.3	30.5	33.0	33.2	31.3	31.4	31.6	23.2	23.3	23.3
33.5	40.3	40.6	40.9	30.9	31.3	31.6	29.4	29.5	29.6	33.5	33.7	35.3	35.6	35.7	25.6	25.7	25.7
34.0	40.9	41.2	41.4	31.0	31.4	31.8	29.3	29.5	29.6	34.0	34.2	39.0	39.2	39.4	28.1	28.2	28.2
34.5	41.2	41.4	41.5	30.6	31.0	31.3	29.2	29.3	29.4	34.5	34.7	41.4	41.7	41.6	30.0	30.0	30.1
35.0	40.9	41.0	41.0	29.3	29.7	30.1	28.7	28.8	28.9	35.0	35.2	44.4	44.1	44.2	31.6	31.6	31.6
35.5	41.7	41.8	41.9	28.4	28.8	29.1	28.7	28.8	28.9	35.5	35.7	50.2	50.2	49.9	33.1	33.2	33.2
36.0	43.9	44.1	44.2	27.7	28.0	28.4	28.6	28.7	28.8	36.0	36.2	57.2	55.3	53.7	35.4	35.5	35.6
36.5	45.2	45.2	45.1	27.2	27.5	27.8	28.4	28.5	28.6	36.5	36.7	49.7	49.1	48.7	37.0	37.1	37.2
37.0	46.0	45.6	45.3	27.0	27.3	27.7	28.7	28.8	28.9	37.0	37.2	45.9	45.5	45.2	36.9	37.1	37.1
37.5	45.1	44.6	44.1	26.2	26.5	26.8	28.0	28.1	28.2	37.5	37.7	44.3	44.1	43.8	35.1	35.3	35.5
38.0	43.3	42.8	42.4	25.3	25.6	25.9	27.2	27.4	27.5	38.0	38.2	43.0	42.8	42.8	32.3	32.4	32.6
38.5	40.3	39.9	39.7	24.1	24.4	24.7	26.3	26.4	26.5	38.5	38.7	41.6	41.6	41.8	28.8	29.0	29.1
39.0	36.2	36.2	36.2	21.9	22.2	22.5	24.5	24.7	24.9	39.0	39.2	38.5	39.1	39.3	25.2	25.5	25.7
39.5	33.4	33.5	33.7	20.1	20.4	20.8	23.4	23.7	24.0	39.5	39.7	35.8	36.6	37.2	22.6	22.9	23.1
40.0	32.1	32.3	32.6	19.0	19.4	19.8	23.4	23.7	24.1	40.0	40.2	33.8	34.4	35.2	21.0	21.3	21.6





*Typical Performance Data*

RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	AMP UNBALANCE VS. RF @ FIXED IF=200MHz		
		@LO (dBm)		
		+17	+18	+19
18.0	18.2	0.0	0.1	0.2
18.5	18.7	0.0	0.1	0.2
19.0	19.2	0.2	0.3	0.3
19.5	19.7	0.3	0.3	0.3
20.0	20.2	0.2	0.2	0.2
20.5	20.7	0.2	0.1	0.1
21.0	21.2	0.4	0.4	0.3
21.5	21.7	0.3	0.2	0.1
22.0	22.2	0.3	0.2	0.1
22.5	22.7	0.2	0.2	0.2
23.0	23.2	0.5	0.5	0.5
23.5	23.7	0.6	0.7	0.7
24.0	24.2	0.2	0.3	0.4
24.5	24.7	0.1	0.0	0.2
25.0	25.2	0.2	0.1	0.1
25.5	25.7	0.3	0.1	0.0
26.0	26.2	0.2	0.1	0.0
26.5	26.7	0.2	0.2	0.0
27.0	27.2	0.0	0.0	0.1
27.5	27.7	0.2	0.2	0.2
28.0	28.2	0.2	0.2	0.3
28.5	28.7	0.2	0.2	0.2
29.0	29.2	0.2	0.3	0.3
29.5	29.7	0.2	0.2	0.2
30.0	30.2	0.1	0.2	0.2
30.5	30.7	0.0	0.0	0.0
31.0	31.2	0.1	0.0	0.0
31.5	31.7	0.4	0.3	0.3
32.0	32.2	0.4	0.4	0.3
32.5	32.7	0.4	0.3	0.3
33.0	33.2	0.6	0.5	0.4
33.5	33.7	0.7	0.5	0.4
34.0	34.2	0.5	0.4	0.4
34.5	34.7	0.6	0.4	0.3
35.0	35.2	0.7	0.5	0.4
35.5	35.7	1.2	1.1	0.9
36.0	36.2	1.2	1.0	0.9
36.5	36.7	0.8	0.7	0.6
37.0	37.2	0.7	0.6	0.5
37.5	37.7	0.6	0.5	0.4
38.0	38.2	0.5	0.4	0.4
38.5	38.7	0.5	0.3	0.2
39.0	39.2	0.5	0.2	0.0
39.5	39.7	0.1	0.2	0.4
40.0	40.2	0.4	0.6	0.9

RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	AMP UNBALANCE VS. RF @ FIXED IF=2000MHz		
		@LO (dBm)		
		+17	+18	+19
18.0	20.0	0.1	0.1	0.1
18.5	20.5	0.2	0.2	0.2
19.0	21.0	0.3	0.3	0.3
19.5	21.5	0.1	0.1	0.2
20.0	22.0	0.2	0.1	0.0
20.5	22.5	0.3	0.2	0.1
21.0	23.0	0.1	0.1	0.2
21.5	23.5	0.6	0.7	0.7
22.0	24.0	0.9	0.9	0.9
22.5	24.5	0.9	1.0	1.0
23.0	25.0	0.5	0.6	0.7
23.5	25.5	0.1	0.3	0.4
24.0	26.0	0.0	0.1	0.3
24.5	26.5	0.0	0.1	0.2
25.0	27.0	0.0	0.1	0.3
25.5	27.5	0.1	0.2	0.3
26.0	28.0	0.3	0.4	0.4
26.5	28.5	0.5	0.5	0.5
27.0	29.0	0.5	0.5	0.5
27.5	29.5	0.5	0.5	0.5
28.0	30.0	0.4	0.4	0.5
28.5	30.5	0.3	0.4	0.4
29.0	31.0	0.3	0.4	0.4
29.5	31.5	0.4	0.4	0.3
30.0	32.0	0.6	0.5	0.4
30.5	32.5	0.6	0.5	0.5
31.0	33.0	0.6	0.5	0.5
31.5	33.5	0.6	0.6	0.5
32.0	34.0	0.9	0.8	0.7
32.5	34.5	0.9	0.8	0.8
33.0	35.0	0.8	0.8	0.7
33.5	35.5	0.8	0.7	0.6
34.0	36.0	1.0	0.8	0.7
34.5	36.5	1.4	1.2	1.1
35.0	37.0	1.7	1.6	1.5
35.5	37.5	1.3	1.3	1.2
36.0	38.0	1.2	1.1	1.1
36.5	38.5	1.2	1.0	0.9
37.0	39.0	1.2	0.9	0.8
37.5	39.5	1.3	0.9	0.7
38.0	40.0	1.1	0.8	0.5

RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	AMP UNBALANCE VS. RF @ FIXED IF=3000MHz		
		@LO (dBm)		
		+17	+18	+19
18.0	21.0	0.2	0.3	0.3
18.5	21.5	0.2	0.3	0.3
19.0	22.0	0.3	0.4	0.5
19.5	22.5	0.1	0.2	0.3
20.0	23.0	0.1	0.2	0.3
20.5	23.5	0.3	0.3	0.4
21.0	24.0	0.7	0.8	0.8
21.5	24.5	1.0	1.0	1.1
22.0	25.0	1.1	1.1	1.1
22.5	25.5	0.7	0.8	0.9
23.0	26.0	0.4	0.5	0.6
23.5	26.5	0.3	0.4	0.5
24.0	27.0	0.3	0.4	0.5
24.5	27.5	0.3	0.4	0.5
25.0	28.0	0.3	0.4	0.4
25.5	28.5	0.5	0.6	0.6
26.0	29.0	0.7	0.7	0.7
26.5	29.5	0.7	0.7	0.7
27.0	30.0	0.7	0.7	0.7
27.5	30.5	0.6	0.7	0.7
28.0	31.0	0.6	0.6	0.6
28.5	31.5	0.6	0.6	0.6
29.0	32.0	0.7	0.7	0.6
29.5	32.5	0.9	0.8	0.8
30.0	33.0	1.0	0.9	0.9
30.5	33.5	0.8	0.7	0.7
31.0	34.0	0.6	0.5	0.5
31.5	34.5	1.1	1.0	0.9
32.0	35.0	1.1	1.0	0.9
32.5	35.5	1.0	0.9	0.8
33.0	36.0	1.1	1.0	0.9
33.5	36.5	1.2	1.1	1.0
34.0	37.0	1.8	1.6	1.5
34.5	37.5	2.1	2.0	1.8
35.0	38.0	1.6	1.5	1.5
35.5	38.5	1.5	1.4	1.3
36.0	39.0	1.5	1.3	1.1
36.5	39.5	1.6	1.2	1.0
37.0	40.0	1.5	1.1	0.9

*Typical Performance Data*

RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	PHASE UNBALANCE VS. RF @ FIXED IF=200MHz			RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	PHASE UNBALANCE VS. RF @ FIXED IF=2000MHz			RF FREQUENCY (GHz)	LO FREQUENCY (GHz)	PHASE UNBALANCE VS. RF @ FIXED IF=3000MHz		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+17	+18	+19			+17	+18	+19			+17	+18	+19
18.0	18.2	4.2	3.9	3.7	18.0	20.0	0.7	0.1	0.8	18.0	21.0	0.4	0.2	0.7
18.5	18.7	5.7	5.9	5.9	18.5	20.5	1.9	1.2	0.5	18.5	21.5	1.3	1.6	1.9
19.0	19.2	6.2	5.7	5.2	19.0	21.0	2.4	1.8	1.2	19.0	22.0	2.9	3.0	2.9
19.5	19.7	5.6	4.6	3.9	19.5	21.5	0.8	1.0	1.1	19.5	22.5	4.2	5.0	5.2
20.0	20.2	4.1	3.3	2.6	20.0	22.0	0.3	0.6	0.8	20.0	23.0	0.3	1.8	3.1
20.5	20.7	2.9	2.3	1.9	20.5	22.5	0.7	1.6	2.1	20.5	23.5	3.1	2.3	1.3
21.0	21.2	2.8	2.3	1.9	21.0	23.0	3.0	1.5	0.2	21.0	24.0	2.6	2.2	1.8
21.5	21.7	2.9	2.0	1.3	21.5	23.5	4.2	3.4	2.5	21.5	24.5	0.2	0.3	0.3
22.0	22.2	5.9	5.0	4.1	22.0	24.0	2.1	1.9	1.8	22.0	25.0	3.8	3.3	2.9
22.5	22.7	5.0	3.7	2.8	22.5	24.5	1.8	1.4	1.0	22.5	25.5	7.4	6.7	5.9
23.0	23.2	3.5	2.6	1.8	23.0	25.0	5.6	4.9	4.2	23.0	26.0	7.3	6.6	5.9
23.5	23.7	0.2	0.3	0.3	23.5	25.5	5.1	4.5	4.0	23.5	26.5	6.7	5.9	5.3
24.0	24.2	2.1	1.8	1.4	24.0	26.0	4.8	4.3	3.8	24.0	27.0	6.1	5.4	4.7
24.5	24.7	1.5	1.0	0.5	24.5	26.5	4.6	3.9	3.4	24.5	27.5	5.6	4.8	4.2
25.0	25.2	1.0	0.8	0.4	25.0	27.0	4.4	3.8	3.2	25.0	28.0	5.4	4.4	3.6
25.5	25.7	0.7	0.5	0.3	25.5	27.5	3.5	2.8	2.4	25.5	28.5	5.5	4.4	3.5
26.0	26.2	0.2	0.1	0.3	26.0	28.0	4.0	3.0	2.2	26.0	29.0	7.1	5.8	4.6
26.5	26.7	0.1	0.3	0.5	26.5	28.5	5.5	4.2	3.0	26.5	29.5	7.9	6.6	5.5
27.0	27.2	0.9	0.3	0.1	27.0	29.0	6.4	5.1	3.8	27.0	30.0	8.6	7.3	6.1
27.5	27.7	2.7	1.7	0.8	27.5	29.5	7.2	6.0	4.8	27.5	30.5	7.5	6.5	5.7
28.0	28.2	3.6	2.4	1.3	28.0	30.0	7.5	6.5	5.5	28.0	31.0	6.3	5.6	5.1
28.5	28.7	4.7	3.3	1.9	28.5	30.5	6.2	5.5	4.8	28.5	31.5	5.0	4.5	4.1
29.0	29.2	5.8	4.4	3.0	29.0	31.0	5.0	4.5	4.1	29.0	32.0	3.4	2.9	2.6
29.5	29.7	5.8	4.9	3.9	29.5	31.5	3.7	3.3	3.1	29.5	32.5	3.0	2.2	1.6
30.0	30.2	5.2	4.6	4.0	30.0	32.0	3.0	2.3	1.9	30.0	33.0	2.7	1.8	1.1
30.5	30.7	3.8	3.6	3.3	30.5	32.5	3.0	2.1	1.6	30.5	33.5	2.5	1.7	1.2
31.0	31.2	0.7	0.3	0.0	31.0	33.0	1.6	1.0	0.4	31.0	34.0	0.4	0.7	0.9
31.5	31.7	0.3	0.2	0.6	31.5	33.5	1.1	1.4	1.6	31.5	34.5	2.1	2.2	2.3
32.0	32.2	1.8	1.3	0.8	32.0	34.0	1.3	1.6	1.8	32.0	35.0	1.6	1.5	1.3
32.5	32.7	0.3	0.0	0.2	32.5	34.5	0.6	0.7	0.7	32.5	35.5	1.9	1.4	0.9
33.0	33.2	0.2	0.1	0.3	33.0	35.0	1.8	1.5	1.2	33.0	36.0	3.1	2.4	1.6
33.5	33.7	0.0	0.1	0.0	33.5	35.5	3.4	2.9	2.3	33.5	36.5	3.7	2.8	1.8
34.0	34.2	1.0	0.8	0.7	34.0	36.0	3.7	2.9	2.0	34.0	37.0	6.7	5.5	4.2
34.5	34.7	2.3	2.0	1.6	34.5	36.5	5.2	4.2	3.0	34.5	37.5	1.1	0.4	0.2
35.0	35.2	2.9	2.2	1.6	35.0	37.0	0.8	0.0	0.7	35.0	38.0	1.3	2.0	2.4
35.5	35.7	3.6	2.8	2.0	35.5	37.5	0.3	1.2	1.9	35.5	38.5	2.5	3.7	4.4
36.0	36.2	0.5	1.2	1.8	36.0	38.0	1.5	2.2	2.9	36.0	39.0	4.3	5.5	6.5
36.5	36.7	0.2	1.4	2.4	36.5	38.5	2.7	3.9	4.7	36.5	39.5	5.0	6.2	7.2
37.0	37.2	0.4	1.7	3.0	37.0	39.0	4.6	5.9	6.9	37.0	40.0	5.8	6.6	7.4
37.5	37.7	0.7	2.0	3.2	37.5	39.5	5.5	6.8	7.8					
38.0	38.2	2.9	4.2	5.2	38.0	40.0	6.6	7.6	8.4					
38.5	38.7	5.0	6.4	7.6										
39.0	39.2	5.1	7.5	9.0										
39.5	39.7	6.8	8.5	9.7										
40.0	40.2	6.6	7.9	8.9										

## Typical Performance Data

RF FREQUENCY (GHz)	RF VSWR (:1)			LO VSWR (:1)			IF FREQUENCY (GHz)	IF (Q) VSWR (:1)			IF (I) VSWR (:1)		
	@LO (dBm)			@LO (dBm)				@LO (dBm)			@LO (dBm)		
	+17	+18	+19	+17	+18	+19		+17	+18	+19	+17	+18	+19
18.0	2.00	1.99	1.97	2.20	2.19	2.18	0.0	1.10	1.17	1.22	1.20	1.24	1.24
18.5	2.19	2.17	2.15	2.06	2.05	2.06	0.1	1.10	1.17	1.22	1.19	1.23	1.23
19.0	2.45	2.43	2.41	1.75	1.75	1.77	0.1	1.10	1.17	1.22	1.17	1.21	1.21
19.5	2.73	2.71	2.68	1.42	1.42	1.43	0.2	1.10	1.17	1.22	1.19	1.23	1.23
20.0	2.92	2.89	2.87	1.30	1.30	1.28	0.5	1.09	1.15	1.20	1.15	1.18	1.19
20.5	2.98	2.95	2.93	1.40	1.40	1.39	1.0	1.09	1.15	1.19	1.09	1.09	1.10
21.0	3.15	3.11	3.08	1.56	1.55	1.55	1.2	1.09	1.14	1.19	1.11	1.09	1.08
21.5	3.13	3.09	3.05	1.66	1.66	1.64	1.4	1.08	1.14	1.19	1.14	1.12	1.11
22.0	2.91	2.86	2.83	1.83	1.83	1.80	1.6	1.09	1.15	1.20	1.16	1.15	1.15
22.5	2.64	2.60	2.56	1.95	1.95	1.97	1.8	1.09	1.15	1.20	1.18	1.19	1.19
23.0	2.53	2.48	2.44	1.99	1.98	2.02	2.0	1.12	1.18	1.23	1.21	1.24	1.24
23.5	2.35	2.31	2.28	1.95	1.96	1.96	2.2	1.14	1.20	1.25	1.24	1.29	1.30
24.0	2.18	2.13	2.10	1.84	1.85	1.84	2.4	1.17	1.22	1.27	1.29	1.35	1.36
24.5	2.02	1.98	1.94	1.72	1.72	1.72	2.6	1.21	1.26	1.30	1.36	1.42	1.44
25.0	1.87	1.83	1.79	1.61	1.60	1.60	2.8	1.24	1.29	1.33	1.44	1.49	1.51
25.5	1.72	1.68	1.65	1.51	1.51	1.49	3.0	1.29	1.33	1.37	1.52	1.56	1.58
26.0	1.80	1.76	1.73	1.45	1.45	1.44	3.2	1.33	1.37	1.41	1.59	1.63	1.64
26.5	1.96	1.92	1.89	1.45	1.46	1.46	3.4	1.39	1.42	1.46	1.66	1.68	1.69
27.0	2.06	2.02	1.98	1.50	1.51	1.51	3.6	1.46	1.48	1.51	1.70	1.70	1.71
27.5	2.08	2.04	2.00	1.59	1.59	1.59	3.8	1.52	1.54	1.57	1.71	1.71	1.70
28.0	2.09	2.04	2.00	1.71	1.70	1.71	4.0	1.58	1.59	1.61	1.68	1.66	1.65
28.5	2.01	1.96	1.92	1.82	1.82	1.84	4.2	1.63	1.64	1.65	1.59	1.56	1.55
29.0	1.89	1.84	1.81	1.88	1.88	1.91	4.4	1.69	1.69	1.70	1.47	1.44	1.43
29.5	1.87	1.82	1.78	1.88	1.87	1.87	4.6	1.74	1.74	1.75	1.34	1.32	1.32
30.0	1.73	1.68	1.65	1.89	1.89	1.87	4.8	1.81	1.81	1.82	1.25	1.25	1.25
30.5	1.44	1.40	1.37	1.88	1.89	1.87	5.0	1.89	1.88	1.88	1.27	1.29	1.30
31.0	1.27	1.25	1.23	1.82	1.83	1.83	5.2	1.93	1.92	1.93	1.41	1.45	1.46
31.5	1.38	1.36	1.34	1.75	1.75	1.73	5.3	1.96	1.95	1.95	1.50	1.54	1.55
32.0	1.64	1.62	1.60	1.74	1.74	1.73	5.4	1.97	1.96	1.96	1.60	1.64	1.65
32.5	2.17	2.14	2.12	1.67	1.66	1.70	5.5	1.97	1.96	1.96	1.71	1.75	1.76
33.0	2.80	2.76	2.72	1.54	1.53	1.57	5.6	1.98	1.96	1.96	1.81	1.85	1.86
33.5	2.98	2.93	2.88	1.43	1.43	1.43	5.7	1.96	1.94	1.94	1.89	1.93	1.94
34.0	3.06	3.01	2.97	1.35	1.36	1.37	5.8	1.96	1.94	1.93	2.01	2.06	2.07
34.5	3.34	3.28	3.23	1.30	1.30	1.32	5.9	1.95	1.93	1.92	2.09	2.13	2.15
35.0	3.56	3.49	3.43	1.28	1.29	1.28	6.0	1.94	1.92	1.91	2.20	2.23	2.25
35.5	3.40	3.35	3.31	1.31	1.32	1.29	6.1	1.96	1.93	1.92	2.26	2.30	2.31
36.0	3.10	3.06	3.02	1.37	1.37	1.37	6.2	1.92	1.89	1.88	2.41	2.43	2.45
36.5	3.01	2.97	2.93	1.49	1.48	1.52	6.3	1.95	1.92	1.91	2.45	2.47	2.49
37.0	2.69	2.65	2.62	1.56	1.56	1.59	6.4	1.94	1.91	1.89	2.54	2.55	2.57
37.5	2.26	2.22	2.19	1.58	1.58	1.59	6.5	1.95	1.91	1.90	2.58	2.59	2.60
38.0	1.99	1.96	1.94	1.55	1.55	1.57	6.6	1.94	1.91	1.89	2.63	2.62	2.63
38.5	1.78	1.76	1.75	1.55	1.55	1.58	6.7	1.97	1.93	1.91	2.63	2.61	2.63
39.0	1.49	1.49	1.49	1.54	1.54	1.54	6.8	1.99	1.94	1.92	2.64	2.61	2.62
39.5	1.33	1.35	1.37	1.54	1.55	1.54	6.9	1.99	1.94	1.92	2.64	2.61	2.62
40.0	1.52	1.55	1.57	1.64	1.66	1.64	7.0	2.03	1.98	1.96	2.61	2.57	2.58



Typical Performance Data

RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	INPUT IP3 VS. RF (I) @ FIXED IF=200MHz			RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	INPUT IP3 VS. RF (I) @ FIXED IF=200MHz			RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	INPUT IP3 VS. RF (I) @ FIXED IF=300MHz		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+17	+18	+19			+17	+18	+19			+17	+18	+19
18.0	18.2	22.0	22.4	23.3	18.0	20.0	22.1	22.4	22.4	18.0	21.0	23.9	23.8	23.9
18.5	18.7	20.9	21.5	22.4	18.5	20.5	24.6	24.4	24.2	18.5	21.5	25.6	25.7	25.8
19.0	19.2	21.8	22.7	23.4	19.0	21.0	27.6	27.4	27.3	19.0	22.0	24.3	24.6	24.9
19.5	19.7	23.7	24.4	24.7	19.5	21.5	27.3	27.3	27.2	19.5	22.5	25.6	25.4	25.5
20.0	20.2	26.4	26.6	26.6	20.0	22.0	26.3	26.6	26.9	20.0	23.0	27.9	27.1	26.6
20.5	20.7	27.9	27.4	27.2	20.5	22.5	25.8	25.7	25.8	20.5	23.5	29.5	30.4	31.0
21.0	21.2	27.7	27.7	27.6	21.0	23.0	30.6	29.3	28.2	21.0	24.0	32.6	34.3	34.5
21.5	21.7	27.4	27.7	27.8	21.5	23.5	30.2	31.8	34.8	21.5	24.5	29.6	30.9	32.3
22.0	22.2	28.1	28.1	28.3	22.0	24.0	38.6	39.5	39.4	22.0	25.0	27.7	28.5	29.5
22.5	22.7	30.7	29.1	28.6	22.5	24.5	30.6	31.4	32.7	22.5	25.5	26.4	27.3	28.2
23.0	23.2	29.8	28.6	28.0	23.0	25.0	28.0	28.6	29.5	23.0	26.0	25.9	26.6	27.3
23.5	23.7	28.1	28.2	28.5	23.5	25.5	28.2	28.7	29.4	23.5	26.5	26.2	26.7	27.3
24.0	24.2	27.4	28.1	29.2	24.0	26.0	27.5	28.0	28.9	24.0	27.0	26.5	26.8	27.2
24.5	24.7	26.1	26.9	28.2	24.5	26.5	26.8	27.2	27.9	24.5	27.5	26.6	26.8	26.8
25.0	25.2	25.7	26.4	27.6	25.0	27.0	27.1	27.2	27.6	25.0	28.0	27.2	27.4	27.3
25.5	25.7	25.1	25.7	26.8	25.5	27.5	26.7	26.7	26.6	25.5	28.5	25.5	25.4	25.2
26.0	26.2	25.8	26.3	27.2	26.0	28.0	26.5	26.7	26.6	26.0	29.0	24.9	24.6	24.3
26.5	26.7	25.8	26.0	26.5	26.5	28.5	24.9	25.0	25.1	26.5	29.5	24.5	24.1	23.7
27.0	27.2	25.2	25.5	25.7	27.0	29.0	24.6	24.5	24.3	27.0	30.0	24.0	23.8	23.5
27.5	27.7	25.2	25.6	25.8	27.5	29.5	25.0	24.7	24.4	27.5	30.5	23.6	23.7	23.5
28.0	28.2	25.3	25.6	25.7	28.0	30.0	24.8	24.4	24.0	28.0	31.0	23.3	23.3	23.1
28.5	28.7	25.7	25.8	25.8	28.5	30.5	24.8	24.7	24.1	28.5	31.5	24.1	24.0	23.5
29.0	29.2	25.1	25.1	24.9	29.0	31.0	24.5	24.4	23.9	29.0	32.0	24.5	24.4	24.0
29.5	29.7	24.9	24.7	24.5	29.5	31.5	25.6	25.5	24.8	29.5	32.5	25.4	25.4	25.0
30.0	30.2	25.5	25.1	24.7	30.0	32.0	26.4	26.5	26.0	30.0	33.0	25.6	25.7	25.4
30.5	30.7	27.1	26.5	25.7	30.5	32.5	26.9	27.0	26.7	30.5	33.5	25.9	26.1	25.9
31.0	31.2	27.3	27.1	26.2	31.0	33.0	26.6	26.5	26.1	31.0	34.0	25.4	25.6	25.4
31.5	31.7	27.3	27.3	26.7	31.5	33.5	26.5	26.4	26.1	31.5	34.5	25.3	25.5	25.3
32.0	32.2	27.7	27.8	27.3	32.0	34.0	27.0	27.0	26.6	32.0	35.0	25.7	25.8	25.6
32.5	32.7	27.1	27.1	26.7	32.5	34.5	26.8	26.6	26.3	32.5	35.5	25.2	25.1	24.9
33.0	33.2	26.5	26.4	26.1	33.0	35.0	26.3	26.1	25.7	33.0	36.0	25.6	25.4	25.2
33.5	33.7	26.0	25.9	25.6	33.5	35.5	25.8	25.6	25.3	33.5	36.5	26.3	26.1	25.9
34.0	34.2	27.0	26.9	26.5	34.0	36.0	27.0	26.8	26.6	34.0	37.0	29.1	28.6	28.2
34.5	34.7	27.0	26.9	26.5	34.5	36.5	28.0	28.0	27.9	34.5	37.5	28.0	27.7	27.4
35.0	35.2	27.1	26.9	26.6	35.0	37.0	28.7	28.3	27.8	35.0	38.0	26.5	26.4	26.2
35.5	35.7	28.3	27.8	27.6	35.5	37.5	26.9	26.7	26.4	35.5	38.5	25.3	25.7	25.7
36.0	36.2	28.2	27.6	27.2	36.0	38.0	26.9	26.9	26.7	36.0	39.0	24.9	25.6	25.8
36.5	36.7	27.1	26.9	26.6	36.5	38.5	26.0	26.8	26.8	36.5	39.5	24.6	25.4	25.8
37.0	37.2	27.2	27.1	26.9	37.0	39.0	25.9	26.8	27.2	37.0	40.0	25.4	26.2	26.8
37.5	37.7	27.0	26.9	26.8	37.5	39.5	25.6	26.4	26.8	37.5	40.5	25.3	26.3	26.8
38.0	38.2	25.3	25.7	25.8	38.0	40.0	24.6	25.3	25.7	38.0	41.0	24.5	25.3	25.8
38.5	38.7	23.5	24.7	25.1	38.5	40.5	24.0	24.9	25.4	38.5	41.5	24.0	24.9	25.4
39.0	39.2	23.1	24.1	24.7	39.0	41.0	24.2	24.8	25.4	39.0	42.0	21.9	23.9	24.7
39.5	39.7	22.8	23.7	24.3	39.5	41.5	23.7	24.5	24.9	39.5	42.5	18.7	21.6	23.2
40.0	40.2	22.9	23.8	24.5	40.0	42.0	22.0	24.0	24.7	40.0	43.0	18.7	20.3	22.7

*Typical Performance Data*

RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	INPUT IP3 VS. RF (Q) @ FIXED IF=200MHz			RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	INPUT IP3 VS. RF (Q) @ FIXED IF=200MHz			RF (IN) FREQUENCY (GHz)	LO FREQUENCY (GHz)	INPUT IP3 VS. RF (Q) @ FIXED IF=300MHz		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+17	+18	+19			+17	+18	+19			+17	+18	+19
18.0	18.2	26.8	27.7	29.4	18.0	20.0	27.4	27.6	27.8	18.0	21.0	30.2	30.1	30.2
18.5	18.7	26.3	26.9	27.7	18.5	20.5	29.7	29.6	29.6	18.5	21.5	32.4	32.6	33.0
19.0	19.2	27.2	27.7	28.3	19.0	21.0	33.0	32.3	32.2	19.0	22.0	32.8	32.9	33.2
19.5	19.7	28.7	29.0	29.3	19.5	21.5	33.9	34.0	34.2	19.5	22.5	33.1	33.0	33.4
20.0	20.2	31.9	31.8	31.8	20.0	22.0	32.7	32.7	33.2	20.0	23.0	30.6	31.7	32.4
20.5	20.7	33.7	33.3	33.2	20.5	22.5	33.6	33.7	33.8	20.5	23.5	30.3	30.9	31.6
21.0	21.2	33.3	33.2	33.5	21.0	23.0	31.6	32.1	32.7	21.0	24.0	31.0	31.8	32.6
21.5	21.7	32.5	33.0	33.2	21.5	23.5	32.4	32.7	33.1	21.5	24.5	31.9	32.6	33.7
22.0	22.2	32.5	32.4	32.8	22.0	24.0	33.0	33.7	34.7	22.0	25.0	34.0	34.6	35.4
22.5	22.7	33.2	33.4	33.7	22.5	24.5	33.6	34.1	35.1	22.5	25.5	34.9	35.5	36.2
23.0	23.2	32.1	32.4	33.0	23.0	25.0	34.5	35.0	35.0	23.0	26.0	31.2	31.9	32.3
23.5	23.7	33.2	33.3	34.0	23.5	25.5	32.2	32.8	33.5	23.5	26.5	31.7	31.9	32.1
24.0	24.2	33.0	33.4	33.9	24.0	26.0	32.1	32.6	33.0	24.0	27.0	31.9	31.9	31.8
24.5	24.7	30.4	30.8	31.6	24.5	26.5	31.7	31.9	32.1	24.5	27.5	31.3	31.2	30.8
25.0	25.2	30.1	30.7	31.4	25.0	27.0	31.7	31.9	31.7	25.0	28.0	31.8	31.5	30.9
25.5	25.7	28.9	29.5	30.0	25.5	27.5	30.5	30.5	30.2	25.5	28.5	30.6	30.1	29.6
26.0	26.2	29.1	29.6	30.1	26.0	28.0	30.5	30.3	29.8	26.0	29.0	31.0	30.6	29.7
26.5	26.7	28.9	29.3	29.5	26.5	28.5	30.7	30.1	29.4	26.5	29.5	31.2	30.4	29.4
27.0	27.2	28.7	29.1	29.1	27.0	29.0	31.5	30.6	29.6	27.0	30.0	30.7	30.3	29.4
27.5	27.7	29.8	30.0	29.8	27.5	29.5	32.2	31.0	29.9	27.5	30.5	30.3	30.3	29.6
28.0	28.2	30.1	30.0	29.7	28.0	30.0	31.4	30.6	29.7	28.0	31.0	29.8	29.5	29.0
28.5	28.7	30.5	30.2	29.8	28.5	30.5	30.8	30.6	29.8	28.5	31.5	30.4	30.1	29.4
29.0	29.2	30.3	29.8	29.3	29.0	31.0	30.3	30.1	29.5	29.0	32.0	30.2	30.1	29.6
29.5	29.7	30.8	30.0	29.4	29.5	31.5	31.1	30.8	30.0	29.5	32.5	30.5	30.4	30.0
30.0	30.2	31.5	30.7	29.9	30.0	32.0	31.3	31.2	30.6	30.0	33.0	31.2	30.9	30.4
30.5	30.7	32.5	32.1	31.2	30.5	32.5	32.0	32.0	31.5	30.5	33.5	32.5	32.1	31.7
31.0	31.2	31.6	31.5	31.0	31.0	33.0	31.7	31.3	30.8	31.0	34.0	31.6	31.2	30.8
31.5	31.7	31.9	31.8	31.3	31.5	33.5	31.8	31.4	30.9	31.5	34.5	31.1	30.8	30.4
32.0	32.2	32.8	32.5	31.9	32.0	34.0	31.9	31.6	31.2	32.0	35.0	31.3	31.2	30.8
32.5	32.7	31.9	31.6	31.0	32.5	34.5	31.1	30.9	30.4	32.5	35.5	30.7	30.4	30.3
33.0	33.2	31.3	31.0	30.8	33.0	35.0	30.7	30.5	30.2	33.0	36.0	30.8	30.6	30.5
33.5	33.7	30.9	30.7	30.5	33.5	35.5	30.3	30.0	29.8	33.5	36.5	31.1	31.1	30.8
34.0	34.2	31.2	31.2	31.1	34.0	36.0	31.6	31.2	31.1	34.0	37.0	32.1	32.1	31.8
34.5	34.7	30.9	31.0	30.8	34.5	36.5	32.2	32.0	31.9	34.5	37.5	32.1	31.8	31.6
35.0	35.2	31.5	31.4	31.2	35.0	37.0	31.5	31.5	31.3	35.0	38.0	32.0	31.8	31.5
35.5	35.7	31.6	31.3	31.2	35.5	37.5	30.8	30.7	30.6	35.5	38.5	30.8	31.0	31.1
36.0	36.2	31.6	31.2	31.1	36.0	38.0	31.5	31.4	31.2	36.0	39.0	31.1	31.2	31.3
36.5	36.7	31.4	31.3	31.0	36.5	38.5	31.5	31.7	31.7	36.5	39.5	31.2	31.3	31.2
37.0	37.2	31.9	31.8	31.7	37.0	39.0	32.3	32.5	32.4	37.0	40.0	31.9	32.0	32.0
37.5	37.7	31.7	31.6	31.6	37.5	39.5	32.3	32.2	32.2	37.5	40.5	32.0	32.0	31.7
38.0	38.2	30.5	30.7	30.8	38.0	40.0	31.3	31.3	31.4	38.0	41.0	31.4	31.0	30.9
38.5	38.7	30.5	30.7	30.9	38.5	40.5	31.4	31.3	30.9	38.5	41.5	31.1	30.9	30.8
39.0	39.2	30.8	30.9	31.0	39.0	41.0	31.4	31.0	30.9	39.0	42.0	30.7	30.8	30.7
39.5	39.7	30.6	30.9	30.8	39.5	41.5	30.9	30.7	30.6	39.5	42.5	29.6	30.2	30.3
40.0	40.2	31.7	31.6	31.5	40.0	42.0	31.2	31.3	31.1	40.0	43.0	29.8	30.2	30.3