# Frequency Mixer LAVI-971VH+

## *Typical Performance Data*

| RF (IN) (MHz) | LO (MHz) | CONVERSION LOSS IF FIXED @IF(OUT)=70MHz (dB) @LO (dBm) | | |
|---|---|---|---|---|
| | | +19 | +21 | +23 |
| 10.1 | 80.1 | 7.00 | 6.90 | 6.81 |
| 40.1 | 110.1 | 7.06 | 6.95 | 6.88 |
| 70.1 | 140.1 | 7.28 | 7.21 | 7.14 |
| 100.1 | 170.1 | 7.41 | 7.33 | 7.26 |
| 130.1 | 200.1 | 7.39 | 7.30 | 7.23 |
| 160.1 | 230.1 | 7.45 | 7.37 | 7.31 |
| 190.1 | 260.1 | 7.47 | 7.39 | 7.33 |
| 220.1 | 290.1 | 7.36 | 7.29 | 7.23 |
| 250.1 | 320.1 | 7.37 | 7.30 | 7.24 |
| 280.1 | 350.1 | 7.51 | 7.43 | 7.37 |
| 310.1 | 380.1 | 7.40 | 7.32 | 7.26 |
| 340.1 | 410.1 | 7.41 | 7.34 | 7.29 |
| 370.1 | 440.1 | 7.52 | 7.45 | 7.40 |
| 400.1 | 470.1 | 7.52 | 7.45 | 7.40 |
| 430.1 | 500.1 | 7.56 | 7.49 | 7.45 |
| 460.1 | 530.1 | 7.63 | 7.58 | 7.54 |
| 490.1 | 560.1 | 7.63 | 7.57 | 7.53 |
| 520.1 | 590.1 | 7.64 | 7.58 | 7.53 |
| 550.1 | 620.1 | 7.74 | 7.69 | 7.65 |
| 580.1 | 650.1 | 7.85 | 7.80 | 7.75 |
| 610.1 | 680.1 | 7.95 | 7.88 | 7.83 |
| 640.1 | 710.1 | 8.00 | 7.93 | 7.88 |
| 670.1 | 740.1 | 8.01 | 7.94 | 7.89 |
| 700.1 | 770.1 | 8.00 | 7.94 | 7.86 |
| 730.1 | 800.1 | 8.05 | 7.98 | 7.94 |
| 760.1 | 830.1 | 8.09 | 8.02 | 7.97 |
| 790.1 | 860.1 | 8.12 | 8.04 | 7.99 |
| 820.1 | 890.1 | 8.20 | 8.12 | 8.06 |
| 850.1 | 920.1 | 8.28 | 8.21 | 8.14 |
| 880.1 | 950.1 | 8.40 | 8.32 | 8.27 |
| 910.1 | 980.1 | 8.56 | 8.49 | 8.43 |
| 940.1 | 1010.1 | 8.71 | 8.62 | 8.56 |
| 970.1 | 1040.1 | 8.80 | 8.70 | 8.64 |
| 1000.1 | 1070.1 | 8.90 | 8.80 | 8.72 |
| 1040.1 | 1110.1 | 9.07 | 8.95 | 8.84 |
| 1070.1 | 1140.1 | 9.23 | 9.09 | 8.96 |
| 1110.1 | 1180.1 | 9.73 | 9.55 | 9.40 |
| 1140.1 | 1210.1 | 10.35 | 10.16 | 10.02 |
| 1180.1 | 1250.1 | 11.45 | 11.24 | 11.07 |
| 1210.1 | 1280.1 | 12.83 | 12.58 | 12.38 |

| RF (IN) (MHz) | LO (MHz) | IP3 INPUT (dBm) @LO (dBm) | | |
|---|---|---|---|---|
| | | +19 | +21 | +23 |
| 10.1 | 80.1 | 23.69 | 25.84 | 27.71 |
| 40.1 | 110.1 | 26.99 | 27.60 | 28.34 |
| 70.1 | 140.1 | 26.88 | 27.85 | 28.88 |
| 100.1 | 170.1 | 27.08 | 28.31 | 29.03 |
| 130.1 | 200.1 | 27.35 | 28.46 | 29.48 |
| 160.1 | 230.1 | 27.66 | 28.58 | 29.69 |
| 190.1 | 260.1 | 28.49 | 29.63 | 30.73 |
| 220.1 | 290.1 | 28.91 | 30.11 | 31.29 |
| 250.1 | 320.1 | 28.40 | 29.68 | 30.86 |
| 280.1 | 350.1 | 28.23 | 29.44 | 30.67 |
| 310.1 | 380.1 | 29.09 | 30.44 | 31.95 |
| 340.1 | 410.1 | 28.96 | 30.47 | 31.79 |
| 370.1 | 440.1 | 29.39 | 30.79 | 32.05 |
| 400.1 | 470.1 | 29.92 | 31.57 | 32.78 |
| 430.1 | 500.1 | 30.34 | 31.87 | 33.81 |
| 460.1 | 530.1 | 31.02 | 32.74 | 34.27 |
| 490.1 | 560.1 | 31.56 | 33.26 | 34.83 |
| 520.1 | 590.1 | 32.19 | 34.06 | 35.95 |
| 550.1 | 620.1 | 33.25 | 34.60 | 36.38 |
| 580.1 | 650.1 | 32.73 | 34.40 | 36.02 |
| 610.1 | 680.1 | 32.92 | 34.76 | 35.94 |
| 640.1 | 710.1 | 33.16 | 34.45 | 35.96 |
| 670.1 | 740.1 | 32.85 | 34.48 | 35.92 |
| 700.1 | 770.1 | 33.45 | 35.15 | 37.16 |
| 730.1 | 800.1 | 33.03 | 34.99 | 36.42 |
| 760.1 | 830.1 | 32.59 | 34.51 | 35.93 |
| 790.1 | 860.1 | 32.21 | 34.04 | 36.33 |
| 820.1 | 890.1 | 31.27 | 33.32 | 34.73 |
| 850.1 | 920.1 | 30.36 | 31.99 | 33.65 |
| 880.1 | 950.1 | 30.04 | 31.61 | 33.29 |
| 910.1 | 980.1 | 29.71 | 31.36 | 33.02 |
| 940.1 | 1010.1 | 29.27 | 31.18 | 33.41 |
| 970.1 | 1040.1 | 28.65 | 30.72 | 32.56 |
| 1000.1 | 1070.1 | 27.47 | 29.57 | 31.56 |
| 1040.1 | 1110.1 | 25.47 | 27.36 | 29.26 |
| 1070.1 | 1140.1 | 23.53 | 25.39 | 27.26 |
| 1110.1 | 1180.1 | 20.30 | 21.83 | 23.48 |
| 1140.1 | 1210.1 | 18.96 | 20.48 | 22.13 |
| 1180.1 | 1250.1 | 16.93 | 18.58 | 20.61 |
| 1210.1 | 1280.1 | 15.41 | 16.69 | 18.43 |

| RF (IN) (MHz) | LO (MHz) | COMPRESSION @RF IN=+20dBm (dB) @LO (dBm) | | |
|---|---|---|---|---|
| | | +19 | +21 | +23 |
| 10.1 | 80.1 | 3.07 | 1.92 | 1.15 |
| 40.1 | 110.1 | 1.13 | 0.65 | 0.42 |
| 70.1 | 140.1 | 0.64 | 0.41 | 0.28 |
| 100.1 | 170.1 | 0.60 | 0.39 | 0.27 |
| 130.1 | 200.1 | 0.55 | 0.36 | 0.25 |
| 160.1 | 230.1 | 0.55 | 0.36 | 0.24 |
| 190.1 | 260.1 | 0.45 | 0.30 | 0.20 |
| 220.1 | 290.1 | 0.39 | 0.26 | 0.17 |
| 250.1 | 320.1 | 0.43 | 0.28 | 0.19 |
| 280.1 | 350.1 | 0.52 | 0.34 | 0.22 |
| 310.1 | 380.1 | 0.41 | 0.26 | 0.17 |
| 340.1 | 410.1 | 0.37 | 0.24 | 0.16 |
| 370.1 | 440.1 | 0.37 | 0.24 | 0.16 |
| 400.1 | 470.1 | 0.39 | 0.25 | 0.16 |
| 430.1 | 500.1 | 0.32 | 0.19 | 0.13 |
| 460.1 | 530.1 | 0.27 | 0.16 | 0.11 |
| 490.1 | 560.1 | 0.27 | 0.16 | 0.11 |
| 520.1 | 590.1 | 0.33 | 0.20 | 0.13 |
| 550.1 | 620.1 | 0.30 | 0.17 | 0.11 |
| 580.1 | 650.1 | 0.30 | 0.18 | 0.11 |
| 610.1 | 680.1 | 0.29 | 0.16 | 0.10 |
| 640.1 | 710.1 | 0.30 | 0.18 | 0.11 |
| 670.1 | 740.1 | 0.34 | 0.20 | 0.13 |
| 700.1 | 770.1 | 0.34 | 0.21 | 0.13 |
| 730.1 | 800.1 | 0.40 | 0.24 | 0.15 |
| 760.1 | 830.1 | 0.45 | 0.27 | 0.17 |
| 790.1 | 860.1 | 0.49 | 0.29 | 0.17 |
| 820.1 | 890.1 | 0.61 | 0.37 | 0.23 |
| 850.1 | 920.1 | 0.71 | 0.45 | 0.26 |
| 880.1 | 950.1 | 0.80 | 0.48 | 0.28 |
| 910.1 | 980.1 | 0.96 | 0.57 | 0.32 |
| 940.1 | 1010.1 | 1.21 | 0.67 | 0.37 |
| 970.1 | 1040.1 | 1.48 | 0.82 | 0.45 |
| 1000.1 | 1070.1 | 1.85 | 1.08 | 0.60 |
| 1040.1 | 1110.1 | 2.63 | 1.69 | 0.98 |
| 1070.1 | 1140.1 | 3.28 | 2.30 | 1.43 |
| 1110.1 | 1180.1 | 4.11 | 3.07 | 2.13 |
| 1140.1 | 1210.1 | 4.68 | 3.61 | 2.58 |
| 1180.1 | 1250.1 | 5.16 | 4.13 | 3.09 |
| 1210.1 | 1280.1 | 5.27 | 4.24 | 3.22 |

## *Typical Performance Data*

| IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=490.1MHz (dB) @LO (dBm) +21 |
|---|---|---|
| 480.0 | 10.1 | 9.76 |
| 447.6 | 42.5 | 8.15 |
| 415.2 | 74.9 | 7.95 |
| 399.0 | 91.1 | 7.96 |
| 366.6 | 123.5 | 7.92 |
| 350.3 | 139.8 | 7.86 |
| 317.9 | 172.2 | 7.84 |
| 301.7 | 188.4 | 7.82 |
| 269.3 | 220.8 | 7.72 |
| 253.1 | 237.0 | 7.72 |
| 220.7 | 269.4 | 7.68 |
| 204.5 | 285.6 | 7.63 |
| 172.1 | 318.0 | 7.67 |
| 155.9 | 334.2 | 7.63 |
| 123.4 | 366.7 | 7.65 |
| 107.2 | 382.9 | 7.66 |
| 74.8 | 415.3 | 7.67 |
| 58.6 | 431.5 | 7.66 |
| 26.2 | 463.9 | 7.64 |
| 10.0 | 480.1 | 7.78 |
| 34.8 | 524.9 | 7.53 |
| 59.7 | 549.8 | 7.60 |
| 109.3 | 599.4 | 7.58 |
| 134.1 | 624.2 | 7.54 |
| 183.8 | 673.9 | 7.84 |
| 208.6 | 698.7 | 7.84 |
| 258.3 | 748.4 | 7.75 |
| 283.1 | 773.2 | 7.76 |
| 332.8 | 822.9 | 7.87 |
| 357.6 | 847.7 | 7.94 |
| 407.2 | 897.3 | 8.09 |
| 432.1 | 922.2 | 8.12 |
| 481.7 | 971.8 | 8.38 |
| 506.6 | 996.7 | 8.41 |
| 556.2 | 1046.3 | 8.58 |
| 581.0 | 1071.1 | 8.72 |
| 630.7 | 1120.8 | 8.88 |
| 655.5 | 1145.6 | 9.03 |
| 705.2 | 1195.3 | 9.81 |
| 730.0 | 1220.1 | 10.43 |

| IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10.1MHz (dB) @LO (dBm) +21 |
|---|---|---|
| 10.0 | 20.1 | 7.82 |
| 50.0 | 60.1 | 6.94 |
| 90.0 | 100.1 | 6.84 |
| 130.0 | 140.1 | 6.87 |
| 170.0 | 180.1 | 6.87 |
| 190.0 | 200.1 | 6.96 |
| 230.0 | 240.1 | 7.05 |
| 250.0 | 260.1 | 7.01 |
| 290.0 | 300.1 | 6.97 |
| 310.0 | 320.1 | 7.10 |
| 350.0 | 360.1 | 7.11 |
| 370.0 | 380.1 | 7.08 |
| 410.0 | 420.1 | 7.10 |
| 430.0 | 440.1 | 7.14 |
| 470.0 | 480.1 | 7.18 |
| 490.0 | 500.1 | 7.19 |
| 530.0 | 540.1 | 7.26 |
| 550.0 | 560.1 | 7.30 |
| 590.0 | 600.1 | 7.37 |
| 610.0 | 620.1 | 7.33 |
| 650.0 | 660.1 | 7.26 |
| 670.0 | 680.1 | 7.34 |
| 710.0 | 720.1 | 7.31 |
| 730.0 | 740.1 | 7.38 |
| 770.0 | 780.1 | 7.58 |
| 790.0 | 800.1 | 7.55 |
| 830.0 | 840.1 | 7.68 |
| 850.0 | 860.1 | 7.60 |
| 890.0 | 900.1 | 7.74 |
| 910.0 | 920.1 | 7.89 |
| 950.0 | 960.1 | 8.09 |
| 970.0 | 980.1 | 8.18 |
| 1010.0 | 1020.1 | 8.27 |
| 1030.0 | 1040.1 | 8.25 |
| 1070.0 | 1080.1 | 8.53 |
| 1090.0 | 1100.1 | 8.50 |
| 1130.0 | 1140.1 | 8.87 |
| 1150.0 | 1160.1 | 8.97 |
| 1190.0 | 1200.1 | 9.61 |
| 1210.0 | 1220.1 | 10.00 |

| IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=970.1MHz (dB) @LO (dBm) +21 |
|---|---|---|
| 960.0 | 10.1 | 10.88 |
| 940.0 | 30.1 | 9.54 |
| 920.0 | 50.1 | 9.40 |
| 900.0 | 70.1 | 9.29 |
| 880.0 | 90.1 | 9.17 |
| 860.0 | 110.1 | 9.14 |
| 840.0 | 130.1 | 9.10 |
| 810.0 | 160.1 | 9.07 |
| 790.0 | 180.1 | 9.04 |
| 760.0 | 210.1 | 9.02 |
| 740.0 | 230.1 | 9.09 |
| 710.0 | 260.1 | 8.94 |
| 690.0 | 280.1 | 8.96 |
| 660.0 | 310.1 | 8.98 |
| 640.0 | 330.1 | 8.91 |
| 610.0 | 360.1 | 8.94 |
| 590.0 | 380.1 | 8.96 |
| 560.0 | 410.1 | 8.91 |
| 540.0 | 430.1 | 8.87 |
| 510.0 | 460.1 | 8.81 |
| 490.0 | 480.1 | 8.77 |
| 460.0 | 510.1 | 8.73 |
| 440.0 | 530.1 | 8.64 |
| 410.0 | 560.1 | 8.68 |
| 390.0 | 580.1 | 8.65 |
| 360.0 | 610.1 | 8.65 |
| 340.0 | 630.1 | 8.58 |
| 310.0 | 660.1 | 8.52 |
| 290.0 | 680.1 | 8.40 |
| 260.0 | 710.1 | 8.45 |
| 240.0 | 730.1 | 8.44 |
| 210.0 | 760.1 | 8.41 |
| 190.0 | 780.1 | 8.34 |
| 160.0 | 810.1 | 8.30 |
| 140.0 | 830.1 | 8.28 |
| 110.0 | 860.1 | 8.27 |
| 90.0 | 880.1 | 8.27 |
| 60.0 | 910.1 | 8.34 |
| 40.0 | 930.1 | 8.36 |
| 10.0 | 960.1 | 8.63 |

## *Typical Performance Data*

| LO (MHz) | LO-RF ISOLATION (dB) @LO (dBm) | | | LO-IF ISOLATION (dB) @LO (dBm) | | |
|---|---|---|---|---|---|---|
| | +19 | +21 | +23 | +19 | +21 | +23 |
| 80.1 | 62.50 | 62.12 | 61.79 | 44.80 | 44.52 | 44.35 |
| 110.1 | 59.11 | 58.54 | 58.05 | 44.15 | 44.02 | 43.88 |
| 140.1 | 57.94 | 56.90 | 56.54 | 44.10 | 44.03 | 44.00 |
| 170.1 | 56.60 | 55.81 | 55.08 | 44.00 | 43.94 | 43.93 |
| 200.1 | 56.53 | 55.76 | 55.25 | 43.36 | 43.22 | 43.09 |
| 230.1 | 56.27 | 55.49 | 54.89 | 42.77 | 42.65 | 42.58 |
| 260.1 | 55.44 | 54.71 | 54.13 | 41.89 | 41.77 | 41.70 |
| 290.1 | 54.95 | 54.27 | 53.63 | 40.93 | 40.82 | 40.76 |
| 320.1 | 54.95 | 54.30 | 53.72 | 40.16 | 40.00 | 39.89 |
| 350.1 | 54.72 | 54.07 | 53.52 | 39.63 | 39.44 | 39.29 |
| 380.1 | 53.02 | 52.55 | 52.27 | 38.96 | 38.79 | 38.68 |
| 410.1 | 51.53 | 51.18 | 50.89 | 38.27 | 38.10 | 37.98 |
| 440.1 | 50.00 | 49.69 | 49.42 | 37.76 | 37.58 | 37.47 |
| 470.1 | 49.64 | 49.37 | 49.10 | 37.94 | 37.78 | 37.68 |
| 500.1 | 48.67 | 48.36 | 48.28 | 38.17 | 37.98 | 38.03 |
| 530.1 | 47.67 | 47.36 | 47.36 | 37.99 | 37.76 | 37.49 |
| 560.1 | 46.09 | 45.82 | 45.70 | 37.70 | 37.49 | 37.47 |
| 590.1 | 44.67 | 44.38 | 44.34 | 37.37 | 37.13 | 37.16 |
| 620.1 | 43.90 | 43.84 | 43.70 | 37.30 | 37.26 | 37.03 |
| 650.1 | 43.65 | 43.62 | 43.48 | 36.97 | 36.89 | 36.63 |
| 680.1 | 42.96 | 42.76 | 42.71 | 36.18 | 36.01 | 36.02 |
| 710.1 | 41.68 | 41.45 | 41.41 | 35.90 | 35.69 | 35.65 |
| 740.1 | 41.06 | 40.85 | 40.83 | 35.88 | 35.54 | 35.43 |
| 770.1 | 41.02 | 41.10 | 40.98 | 36.18 | 36.07 | 35.80 |
| 800.1 | 41.48 | 41.44 | 41.62 | 36.57 | 36.25 | 36.26 |
| 830.1 | 42.22 | 42.31 | 42.59 | 37.11 | 36.85 | 36.86 |
| 860.1 | 43.92 | 44.05 | 44.39 | 38.03 | 37.72 | 37.67 |
| 890.1 | 46.00 | 46.04 | 46.36 | 39.19 | 38.77 | 38.74 |
| 920.1 | 48.24 | 48.16 | 47.92 | 41.00 | 40.85 | 40.66 |
| 950.1 | 46.29 | 45.89 | 45.35 | 42.77 | 42.79 | 42.83 |
| 980.1 | 42.95 | 42.51 | 41.96 | 43.53 | 43.50 | 43.38 |
| 1010.1 | 40.52 | 39.92 | 39.67 | 42.63 | 42.30 | 42.19 |
| 1040.1 | 39.53 | 39.03 | 38.84 | 42.72 | 42.41 | 42.33 |
| 1070.1 | 39.51 | 39.00 | 38.80 | 43.20 | 42.81 | 42.72 |
| 1110.1 | 39.96 | 39.63 | 39.19 | 44.47 | 44.23 | 43.84 |
| 1140.1 | 40.35 | 39.96 | 39.41 | 45.84 | 45.44 | 44.89 |
| 1180.1 | 40.67 | 40.20 | 39.49 | 47.43 | 46.80 | 45.85 |
| 1210.1 | 41.19 | 40.70 | 40.02 | 49.72 | 49.14 | 48.26 |
| 1250.1 | 42.23 | 41.76 | 41.05 | 52.09 | 52.36 | 52.18 |
| 1280.1 | 43.20 | 42.73 | 42.09 | 50.04 | 50.39 | 50.57 |

| RF (IN) (MHz) | LO (MHz) | RF-IF ISOLATION (dB) @LO (dBm) | | |
|---|---|---|---|---|
| | | +19 | +21 | +23 |
| 10.1 | 80.1 | 34.89 | 35.34 | 36.57 |
| 40.1 | 110.1 | 37.77 | 38.07 | 38.57 |
| 70.1 | 140.1 | 38.49 | 38.29 | 37.88 |
| 100.1 | 170.1 | 39.93 | 39.25 | 38.13 |
| 130.1 | 200.1 | 47.89 | 48.63 | 52.26 |
| 160.1 | 230.1 | 57.28 | 63.54 | 64.02 |
| 190.1 | 260.1 | 60.39 | 58.46 | 55.10 |
| 220.1 | 290.1 | 44.21 | 43.61 | 42.44 |
| 250.1 | 320.1 | 43.49 | 42.74 | 41.33 |
| 280.1 | 350.1 | 44.18 | 43.38 | 42.18 |
| 310.1 | 380.1 | 45.54 | 45.67 | 45.73 |
| 340.1 | 410.1 | 43.89 | 43.71 | 43.24 |
| 370.1 | 440.1 | 41.86 | 41.36 | 40.76 |
| 400.1 | 470.1 | 40.03 | 39.39 | 38.38 |
| 430.1 | 500.1 | 39.05 | 38.31 | 37.26 |
| 460.1 | 530.1 | 39.90 | 39.46 | 39.85 |
| 490.1 | 560.1 | 39.55 | 39.20 | 38.83 |
| 520.1 | 590.1 | 39.59 | 39.27 | 38.84 |
| 550.1 | 620.1 | 39.55 | 39.19 | 38.67 |
| 580.1 | 650.1 | 40.51 | 40.30 | 39.99 |
| 610.1 | 680.1 | 40.57 | 40.37 | 40.27 |
| 640.1 | 710.1 | 40.28 | 40.04 | 39.85 |
| 670.1 | 740.1 | 39.75 | 39.65 | 39.56 |
| 700.1 | 770.1 | 39.47 | 39.32 | 39.25 |
| 730.1 | 800.1 | 39.62 | 39.56 | 39.54 |
| 760.1 | 830.1 | 39.59 | 39.54 | 39.59 |
| 790.1 | 860.1 | 39.62 | 39.48 | 39.41 |
| 820.1 | 890.1 | 38.96 | 38.74 | 38.70 |
| 850.1 | 920.1 | 39.24 | 39.05 | 38.95 |
| 880.1 | 950.1 | 39.68 | 39.60 | 39.64 |
| 910.1 | 980.1 | 39.30 | 39.30 | 39.28 |
| 940.1 | 1010.1 | 38.56 | 38.43 | 38.33 |
| 970.1 | 1040.1 | 37.32 | 37.25 | 37.19 |
| 1000.1 | 1070.1 | 35.95 | 35.88 | 35.87 |
| 1040.1 | 1110.1 | 34.14 | 34.08 | 34.18 |
| 1070.1 | 1140.1 | 32.71 | 32.65 | 32.69 |
| 1110.1 | 1180.1 | 32.34 | 32.35 | 32.66 |
| 1140.1 | 1210.1 | 32.39 | 32.31 | 32.50 |
| 1180.1 | 1250.1 | 30.47 | 29.60 | 28.77 |
| 1210.1 | 1280.1 | 29.42 | 27.97 | 26.65 |

## *Typical Performance Data*

| RF (IN) (MHz) | LO (MHz) | RF VSWR (:1) @LO (dBm) | | |
|---|---|---|---|---|
| | | +19 | +21 | +23 |
| 10.1 | 80.1 | 1.18 | 1.20 | 1.22 |
| 40.1 | 110.1 | 1.20 | 1.22 | 1.25 |
| 70.1 | 140.1 | 1.18 | 1.21 | 1.23 |
| 100.1 | 170.1 | 1.19 | 1.21 | 1.23 |
| 130.1 | 200.1 | 1.20 | 1.22 | 1.24 |
| 160.1 | 230.1 | 1.22 | 1.24 | 1.26 |
| 190.1 | 260.1 | 1.25 | 1.27 | 1.29 |
| 220.1 | 290.1 | 1.27 | 1.29 | 1.31 |
| 250.1 | 320.1 | 1.27 | 1.30 | 1.32 |
| 280.1 | 350.1 | 1.27 | 1.29 | 1.31 |
| 310.1 | 380.1 | 1.28 | 1.30 | 1.32 |
| 340.1 | 410.1 | 1.28 | 1.30 | 1.32 |
| 370.1 | 440.1 | 1.27 | 1.29 | 1.30 |
| 400.1 | 470.1 | 1.26 | 1.28 | 1.30 |
| 430.1 | 500.1 | 1.26 | 1.28 | 1.29 |
| 460.1 | 530.1 | 1.25 | 1.27 | 1.29 |
| 490.1 | 560.1 | 1.24 | 1.26 | 1.27 |
| 520.1 | 590.1 | 1.22 | 1.23 | 1.24 |
| 550.1 | 620.1 | 1.20 | 1.21 | 1.22 |
| 580.1 | 650.1 | 1.18 | 1.19 | 1.19 |
| 610.1 | 680.1 | 1.17 | 1.17 | 1.17 |
| 640.1 | 710.1 | 1.17 | 1.16 | 1.16 |
| 670.1 | 740.1 | 1.17 | 1.17 | 1.16 |
| 700.1 | 770.1 | 1.18 | 1.17 | 1.16 |
| 730.1 | 800.1 | 1.20 | 1.19 | 1.17 |
| 760.1 | 830.1 | 1.23 | 1.21 | 1.20 |
| 790.1 | 860.1 | 1.25 | 1.23 | 1.21 |
| 820.1 | 890.1 | 1.28 | 1.25 | 1.23 |
| 850.1 | 920.1 | 1.29 | 1.27 | 1.24 |
| 880.1 | 950.1 | 1.29 | 1.27 | 1.24 |
| 910.1 | 980.1 | 1.30 | 1.27 | 1.24 |
| 940.1 | 1010.1 | 1.31 | 1.27 | 1.25 |
| 970.1 | 1040.1 | 1.33 | 1.30 | 1.27 |
| 1000.1 | 1070.1 | 1.37 | 1.33 | 1.30 |
| 1040.1 | 1110.1 | 1.43 | 1.39 | 1.36 |
| 1070.1 | 1140.1 | 1.48 | 1.44 | 1.40 |
| 1110.1 | 1180.1 | 1.53 | 1.49 | 1.44 |
| 1140.1 | 1210.1 | 1.55 | 1.51 | 1.46 |
| 1180.1 | 1250.1 | 1.58 | 1.55 | 1.51 |
| 1210.1 | 1280.1 | 1.57 | 1.54 | 1.51 |

| LO (MHz) | LO VSWR (:1) @LO (dBm) | | |
|---|---|---|---|
| | +19 | +21 | +23 |
| 80.1 | 7.31 | 7.31 | 7.28 |
| 110.1 | 6.89 | 6.89 | 6.89 |
| 140.1 | 7.38 | 7.34 | 7.34 |
| 170.1 | 7.66 | 7.66 | 7.66 |
| 200.1 | 8.01 | 8.01 | 8.01 |
| 230.1 | 8.20 | 8.20 | 8.16 |
| 260.1 | 8.23 | 8.23 | 8.20 |
| 290.1 | 8.05 | 8.05 | 8.05 |
| 320.1 | 7.73 | 7.73 | 7.73 |
| 350.1 | 7.34 | 7.31 | 7.31 |
| 380.1 | 6.73 | 6.73 | 6.73 |
| 410.1 | 6.09 | 6.09 | 6.09 |
| 440.1 | 5.52 | 5.52 | 5.52 |
| 470.1 | 4.87 | 4.88 | 4.88 |
| 500.1 | 4.25 | 4.25 | 4.26 |
| 530.1 | 3.70 | 3.71 | 3.70 |
| 560.1 | 3.25 | 3.26 | 3.26 |
| 590.1 | 2.84 | 2.85 | 2.86 |
| 620.1 | 2.49 | 2.50 | 2.50 |
| 650.1 | 2.22 | 2.22 | 2.22 |
| 680.1 | 2.03 | 2.04 | 2.04 |
| 710.1 | 1.94 | 1.95 | 1.96 |
| 740.1 | 1.95 | 1.96 | 1.97 |
| 770.1 | 2.06 | 2.07 | 2.09 |
| 800.1 | 2.25 | 2.26 | 2.27 |
| 830.1 | 2.50 | 2.51 | 2.52 |
| 860.1 | 2.78 | 2.79 | 2.80 |
| 890.1 | 3.05 | 3.06 | 3.08 |
| 920.1 | 3.31 | 3.31 | 3.32 |
| 950.1 | 3.52 | 3.53 | 3.54 |
| 980.1 | 3.65 | 3.67 | 3.68 |
| 1010.1 | 3.68 | 3.68 | 3.67 |
| 1040.1 | 3.64 | 3.65 | 3.65 |
| 1070.1 | 3.47 | 3.48 | 3.50 |
| 1110.1 | 3.14 | 3.14 | 3.14 |
| 1140.1 | 2.86 | 2.87 | 2.88 |
| 1180.1 | 2.46 | 2.47 | 2.47 |
| 1210.1 | 2.20 | 2.20 | 2.20 |
| 1250.1 | 1.88 | 1.89 | 1.89 |
| 1280.1 | 1.68 | 1.68 | 1.69 |

| IF (OUT) (MHz) | IF VSWR @LO=1040MHz (:1) @LO (dBm) | | |
|---|---|---|---|
| | +19 | +21 | +23 |
| 10.0 | 1.18 | 1.22 | 1.25 |
| 30.0 | 1.22 | 1.26 | 1.29 |
| 50.0 | 1.21 | 1.25 | 1.28 |
| 70.0 | 1.25 | 1.29 | 1.32 |
| 90.0 | 1.28 | 1.31 | 1.34 |
| 110.0 | 1.30 | 1.33 | 1.35 |
| 130.0 | 1.38 | 1.40 | 1.42 |
| 150.0 | 1.39 | 1.41 | 1.43 |
| 170.0 | 1.43 | 1.45 | 1.47 |
| 190.0 | 1.50 | 1.52 | 1.53 |
| 210.0 | 1.53 | 1.54 | 1.56 |
| 230.0 | 1.61 | 1.62 | 1.64 |
| 250.0 | 1.62 | 1.63 | 1.64 |
| 270.0 | 1.68 | 1.68 | 1.69 |
| 290.0 | 1.76 | 1.76 | 1.76 |
| 310.0 | 1.77 | 1.77 | 1.77 |
| 350.0 | 1.86 | 1.86 | 1.85 |
| 370.0 | 1.90 | 1.90 | 1.90 |
| 410.0 | 1.97 | 1.96 | 1.96 |
| 430.0 | 2.04 | 2.03 | 2.02 |
| 470.0 | 2.08 | 2.06 | 2.05 |
| 490.0 | 2.15 | 2.13 | 2.12 |
| 530.0 | 2.16 | 2.13 | 2.11 |
| 550.0 | 2.15 | 2.12 | 2.10 |
| 590.0 | 2.23 | 2.20 | 2.17 |
| 610.0 | 2.16 | 2.12 | 2.10 |
| 650.0 | 2.21 | 2.17 | 2.13 |
| 670.0 | 2.22 | 2.17 | 2.14 |
| 710.0 | 2.13 | 2.08 | 2.04 |
| 730.0 | 2.17 | 2.12 | 2.08 |
| 770.0 | 2.13 | 2.08 | 2.03 |
| 790.0 | 2.14 | 2.08 | 2.04 |
| 830.0 | 2.12 | 2.07 | 2.02 |
| 850.0 | 2.12 | 2.07 | 2.01 |
| 890.0 | 2.11 | 2.05 | 2.00 |
| 910.0 | 2.06 | 2.00 | 1.94 |
| 950.0 | 2.09 | 2.03 | 1.97 |
| 970.0 | 2.05 | 1.99 | 1.93 |
| 1010.0 | 2.00 | 1.93 | 1.88 |
| 1030.0 | 2.04 | 1.97 | 1.92 |

*Harmonics Tables*

| RF HARMONICS ORDER | (-dBm) | (-dBc) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | - | 14 | 19 | 16 | 26 | 35 | 45 | 37 | 46 | 50 | 55 |
| 1 | - | 33 | +0 | 37 | 12 | 42 | 22 | 44 | 33 | 46 | 41 | 51 |
| 2 | 55 | 61 | 63 | 63 | 63 | 55 | 54 | 54 | 55 | 56 | 57 | 58 |
| 3 | 83 | 86 | 68 | 82 | 65 | 81 | 69 | 79 | 72 | 80 | 78 | 84 |
| 4 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 5 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 6 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 7 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 8 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 9 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 10 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

**LO HARMONICS ORDER**

**Test conditions:** RF IN: 490.1 MHz; 5.00 dBm.
LO IN: 560.1 MHz; +21.00 dBm
IF OUT: 70 MHz; -2.95 dBm

| RF HARMONICS ORDER | (-dBm) | (-dBc) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | - | - | 24 | 27 | 25 | 34 | 44 | 52 | 43 | 52 | 46 | 57 |
| 1 | - | 33 | +0 | 37 | 13 | 43 | 23 | 45 | 36 | 48 | 39 | 53 |
| 2 | 36 | 52 | 53 | 53 | 54 | 46 | 45 | 45 | 46 | 46 | 49 | 50 |
| 3 | 55 | 70 | 50 | 67 | 48 | 63 | 50 | 62 | 53 | 63 | 59 | 66 |
| 4 | 76 | 90 | 81 | 80 | 77 | 76 | 78 | 74 | 75 | 72 | 74 | 73 |
| 5 | >90 | 94 | 76 | 92 | 76 | 86 | 75 | 84 | 80 | 85 | 79 | 89 |
| 6 | >90 | >96 | >96 | >96 | 95 | >96 | 91 | >96 | 91 | >96 | >96 | >96 |
| 7 | >90 | >96 | >96 | >96 | >96 | >96 | >96 | >96 | >96 | 92 | >96 | >96 |
| 8 | >90 | >96 | >96 | >96 | >96 | >96 | >96 | >96 | 94 | >96 | >96 | >96 |
| 9 | >90 | >96 | >96 | >96 | >96 | >96 | >96 | 92 | >96 | >96 | >96 | >96 |
| 10 | >90 | >96 | >96 | >96 | >96 | >96 | >96 | >96 | >96 | >96 | >96 | >96 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

**LO HARMONICS ORDER**

**Test conditions:** RF IN: 490.1 MHz; 15.00 dBm.
LO IN: 560.1 MHz; +21.00 dBm
IF OUT: 70 MHz; 6.38 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.