

*Typical Performance Data***NOTE: Use PDF Bookmarks to view DATA at required****Definitions:**

Input Return Loss = S11 (dB)

Gain(Power Gain) = S21 (dB)

Isolation = S12 (dB)

Output Return Loss = S22 (dB)

TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^{\circ}\text{C}$

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Noise Figure	1dB Comp. Output	P_{SAT} Comp. Output	PAE @ 1dB Comp.	PAE @ P_{SAT} Comp.
(GHz)	(dB)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	(%)	(%)
0.0	24.9	-71.4	-42.6	-19.0	21.3	29.7	35.1	11.4	35.8
0.1	22.5	-80.5	-39.5	-21.1	18.7	27.8	34.0	7.5	29.5
0.2	19.9	-84.2	-34.3	-23.4	15.9	28.9	34.4	9.4	31.1
0.3	19.3	-79.6	-24.5	-22.3	13.3	29.2	34.3	10.0	30.8
0.4	18.9	-73.6	-19.8	-21.5	11.3	29.9	34.5	11.5	32.0
0.5	18.6	-72.8	-17.6	-20.0	10.0	30.0	34.6	11.6	32.2
0.6	18.2	-72.5	-19.7	-18.4	9.1	30.2	34.7	12.1	32.6
0.7	18.2	-70.0	-19.9	-16.5	8.4	30.2	34.6	12.0	32.3
0.8	18.1	-67.2	-19.5	-14.8	7.7	30.3	34.6	12.0	32.1
0.9	17.9	-64.9	-18.9	-13.6	7.1	30.2	34.6	12.0	31.7
1.0	17.7	-63.3	-18.1	-12.8	6.7	30.2	34.5	11.9	31.2
2.0	16.1	-58.3	-13.0	-10.3	4.9	30.8	34.6	13.3	26.9
3.0	15.0	-54.4	-11.5	-9.2	4.4	30.8	34.6	13.7	24.2
4.0	14.3	-51.5	-11.5	-8.9	3.7	31.3	34.8	15.1	23.6
5.0	14.2	-48.8	-12.6	-9.4	3.1	31.4	34.7	15.4	22.8
6.0	14.6	-46.7	-15.8	-11.0	2.5	31.8	34.5	16.9	22.8
7.0	15.2	-45.0	-24.0	-13.5	2.2	31.7	34.1	17.4	23.2
8.0	15.8	-44.1	-24.8	-14.7	2.3	31.6	33.7	17.3	23.2
9.0	15.9	-43.1	-15.7	-12.2	2.4	31.6	33.2	17.3	21.5
10.0	15.8	-42.3	-12.3	-10.0	2.4	31.3	33.6	16.2	21.5
11.0	15.8	-41.1	-11.1	-9.2	2.5	31.0	33.3	15.1	20.2
12.0	16.3	-40.0	-11.5	-10.1	2.6	30.3	33.3	13.0	19.9
13.0	17.4	-38.8	-14.1	-13.7	2.5	30.6	33.7	14.5	24.6
14.0	18.6	-38.1	-20.5	-22.0	2.4	30.3	33.5	13.7	25.0
15.0	19.3	-37.5	-17.2	-13.7	2.9	29.9	32.8	12.4	22.3
16.0	19.0	-37.5	-11.2	-9.5	3.3	29.3	32.4	10.9	20.1
17.0	18.3	-37.5	-8.7	-8.9	4.0	29.4	32.1	11.0	18.7
18.0	18.9	-37.0	-8.5	-9.9	4.5	29.6	31.9	11.7	17.7
19.0	20.2	-35.8	-11.4	-10.8	4.5	29.3	31.9	10.9	17.1
20.0	20.0	-35.4	-16.0	-14.0	4.3	29.4	31.8	11.0	16.1
21.0	19.6	-35.4	-9.2	-11.0	4.6	28.2	31.5	8.6	14.6
22.0	19.2	-35.5	-6.9	-10.0	5.2	26.9	30.5	6.4	11.5
23.0	18.7	-36.7	-7.9	-9.6	6.1	25.2	29.5	4.2	8.9
24.0	15.9	-37.7	-9.3	-13.3	8.0	24.9	29.1	3.9	7.5

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

Set P_{IN}	Measured P_{IN} @ 2GHz	Measured P_{IN} @ 8GHz	Measured P_{IN} @ 16GHz	Measured P_{IN} @ 22GHz
(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
-10.0	-9.3	-9.6	-9.7	-9.5
-9.0	-8.8	-9.0	-9.0	-8.9
-8.0	-8.0	-8.0	-8.1	-8.0
-7.0	-7.1	-7.1	-7.1	-7.0
-6.0	-6.2	-6.1	-6.1	-6.0
-5.0	-5.3	-5.1	-5.1	-5.0
-4.0	-4.4	-4.1	-4.1	-4.0
-3.0	-3.5	-3.1	-3.1	-3.0
-2.0	-2.5	-2.1	-2.1	-2.0
-1.0	-1.6	-1.1	-1.1	-1.0
0.0	-0.6	-0.1	-0.1	0.0
1.0	0.3	0.9	0.9	1.0
2.0	1.3	1.9	1.9	2.0
3.0	2.3	2.9	2.9	3.0
4.0	3.3	3.9	3.9	4.0
5.0	4.3	4.8	4.9	5.0
6.0	5.3	5.8	5.9	6.0
7.0	6.3	6.8	6.9	7.0
8.0	7.3	7.8	7.9	8.0
9.0	8.3	8.8	8.9	9.0
10.0	9.3	9.8	9.9	10.0
11.0	10.3	10.8	10.9	11.0
12.0	11.2	11.8	11.9	12.0
13.0	12.2	12.8	12.9	13.1
14.0	13.2	13.8	13.9	14.1
15.0	14.2	14.8	14.8	15.1
16.0	15.2	15.8	15.8	16.2
17.0	16.2	16.8	16.8	17.2
18.0	17.2	17.8	17.7	18.1
19.0	18.2	18.8	18.7	18.6
20.0	19.2	19.7	19.5	18.8
21.0	20.2	20.6	20.4	19.0
22.0	21.2	21.5	21.2	19.0
23.0	22.1	22.3	21.9	19.1
24.0	23.1	23.0	22.4	19.2
25.0	23.9	23.5	22.7	19.5
26.0	24.5	23.9	22.8	20.0

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

Set P_{IN}	P_{OUT} @ 2GHz	P_{OUT} @ 8GHz	P_{OUT} @ 16GHz	P_{OUT} @ 22GHz
(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
-10.0	6.6	6.0	9.0	8.7
-9.0	7.2	6.6	9.7	9.3
-8.0	8.0	7.6	10.7	10.4
-7.0	8.9	8.6	11.7	11.4
-6.0	9.8	9.6	12.6	12.4
-5.0	10.7	10.5	13.6	13.4
-4.0	11.6	11.5	14.6	14.4
-3.0	12.5	12.5	15.6	15.4
-2.0	13.5	13.5	16.6	16.4
-1.0	14.4	14.5	17.6	17.4
0.0	15.4	15.5	18.6	18.4
1.0	16.4	16.5	19.6	19.4
2.0	17.3	17.5	20.6	20.4
3.0	18.3	18.5	21.6	21.4
4.0	19.3	19.5	22.6	22.4
5.0	20.3	20.5	23.6	23.3
6.0	21.3	21.5	24.6	24.2
7.0	22.2	22.5	25.6	25.0
8.0	23.2	23.4	26.5	25.8
9.0	24.2	24.4	27.3	26.4
10.0	25.1	25.4	28.1	27.1
11.0	26.1	26.3	28.7	27.7
12.0	27.0	27.3	29.3	28.2
13.0	27.8	28.2	29.8	28.6
14.0	28.7	29.0	30.3	29.1
15.0	29.5	29.9	30.9	29.4
16.0	30.4	30.6	31.3	29.8
17.0	31.2	31.2	31.7	30.1
18.0	32.0	31.6	31.8	30.3
19.0	32.6	31.9	32.0	30.5
20.0	33.1	32.2	32.2	30.6
21.0	33.5	32.4	32.5	30.6
22.0	33.8	32.7	32.9	30.6
23.0	34.1	32.9	33.3	30.6
24.0	34.3	33.1	33.5	30.6
25.0	34.5	33.3	33.7	30.6
26.0	34.6	33.4	33.7	30.6

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

Set P_{IN}	PAE @ 2GHz	PAE @ 8GHz	PAE @ 16GHz	PAE @ 22GHz
(dBm)	(%)	(%)	(%)	(%)
-10.0	0.1	0.1	0.1	0.1
-9.0	0.1	0.1	0.1	0.1
-8.0	0.1	0.1	0.2	0.1
-7.0	0.1	0.1	0.2	0.2
-6.0	0.1	0.1	0.2	0.2
-5.0	0.2	0.1	0.3	0.3
-4.0	0.2	0.2	0.4	0.4
-3.0	0.2	0.2	0.5	0.5
-2.0	0.3	0.3	0.6	0.6
-1.0	0.4	0.4	0.8	0.7
0.0	0.5	0.5	1.0	0.9
1.0	0.6	0.6	1.2	1.2
2.0	0.7	0.7	1.5	1.5
3.0	0.9	0.9	1.9	1.8
4.0	1.1	1.2	2.4	2.3
5.0	1.4	1.5	3.0	2.8
6.0	1.7	1.8	3.8	3.5
7.0	2.2	2.3	4.7	4.2
8.0	2.7	2.9	5.8	4.9
9.0	3.4	3.6	7.0	5.7
10.0	4.2	4.4	8.3	6.5
11.0	5.1	5.5	9.6	7.3
12.0	6.2	6.7	10.8	8.1
13.0	7.4	8.2	11.9	8.7
14.0	8.7	10.0	13.1	9.2
15.0	10.3	12.0	14.3	9.6
16.0	12.1	14.2	15.5	9.8
17.0	14.5	16.4	16.4	10.1
18.0	17.5	18.3	17.0	10.3
19.0	20.8	19.5	17.6	10.4
20.0	23.3	20.1	18.0	10.5
21.0	24.7	20.4	18.5	10.5
22.0	25.4	20.7	19.1	10.5
23.0	25.8	21.0	19.8	10.5
24.0	25.9	21.1	20.3	10.5
25.0	25.9	21.1	20.5	10.5
26.0	25.8	21.1	20.6	10.5

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

Set P_{IN}	Gain @ 2GHz	Gain @ 8GHz	Gain @ 16GHz	Gain @ 22GHz
(dBm)	(dB)	(dB)	(dB)	(dB)
-10.0	15.9	15.6	18.6	18.2
-9.0	16.0	15.6	18.7	18.3
-8.0	16.0	15.6	18.7	18.4
-7.0	16.0	15.6	18.7	18.4
-6.0	16.0	15.6	18.7	18.4
-5.0	16.0	15.6	18.7	18.4
-4.0	16.0	15.6	18.7	18.4
-3.0	16.0	15.6	18.7	18.4
-2.0	16.0	15.6	18.7	18.4
-1.0	16.0	15.6	18.7	18.4
0.0	16.0	15.6	18.7	18.4
1.0	16.0	15.6	18.7	18.4
2.0	16.0	15.6	18.7	18.4
3.0	16.0	15.6	18.7	18.4
4.0	16.0	15.6	18.7	18.3
5.0	16.0	15.6	18.7	18.3
6.0	16.0	15.6	18.7	18.1
7.0	16.0	15.6	18.7	18.0
8.0	15.9	15.6	18.6	17.7
9.0	15.9	15.6	18.4	17.4
10.0	15.9	15.6	18.2	17.1
11.0	15.8	15.5	17.9	16.6
12.0	15.7	15.4	17.4	16.1
13.0	15.6	15.3	17.0	15.6
14.0	15.4	15.2	16.5	15.0
15.0	15.3	15.1	16.0	14.3
16.0	15.1	14.8	15.5	13.6
17.0	15.0	14.4	14.9	12.9
18.0	14.7	13.8	14.1	12.3
19.0	14.4	13.1	13.3	11.9
20.0	13.9	12.4	12.7	11.7
21.0	13.3	11.8	12.2	11.5
22.0	12.6	11.1	11.7	11.5
23.0	11.9	10.6	11.4	11.3
24.0	11.2	10.2	11.1	11.1
25.0	10.6	9.8	11.0	10.9
26.0	10.2	9.6	10.9	10.8

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

Set P_{IN}	Current @ 2GHz	Current @ 8GHz	Current @ 16GHz	Current @ 22GHz
(dBm)	(mA)	(mA)	(mA)	(mA)
-10.0	0.5	0.5	0.5	0.5
-9.0	0.5	0.5	0.5	0.5
-8.0	0.5	0.5	0.5	0.5
-7.0	0.5	0.5	0.5	0.5
-6.0	0.5	0.5	0.5	0.5
-5.0	0.5	0.5	0.5	0.5
-4.0	0.5	0.5	0.5	0.5
-3.0	0.5	0.5	0.5	0.5
-2.0	0.5	0.5	0.5	0.5
-1.0	0.5	0.5	0.5	0.5
0.0	0.5	0.5	0.5	0.5
1.0	0.5	0.5	0.5	0.5
2.0	0.5	0.5	0.5	0.5
3.0	0.5	0.5	0.5	0.5
4.0	0.5	0.5	0.5	0.5
5.0	0.5	0.5	0.5	0.5
6.0	0.5	0.5	0.5	0.5
7.0	0.5	0.5	0.5	0.5
8.0	0.5	0.5	0.5	0.5
9.0	0.5	0.5	0.5	0.5
10.0	0.5	0.5	0.5	0.5
11.0	0.5	0.5	0.5	0.5
12.0	0.5	0.5	0.5	0.5
13.0	0.5	0.5	0.5	0.5
14.0	0.5	0.5	0.5	0.6
15.0	0.6	0.5	0.6	0.6
16.0	0.6	0.5	0.6	0.6
17.0	0.6	0.5	0.6	0.6
18.0	0.6	0.5	0.6	0.7
19.0	0.6	0.5	0.6	0.7
20.0	0.6	0.5	0.6	0.7
21.0	0.6	0.5	0.6	0.7
22.0	0.6	0.5	0.6	0.7
23.0	0.6	0.6	0.7	0.7
24.0	0.6	0.6	0.7	0.7
25.0	0.7	0.6	0.7	0.7
26.0	0.7	0.6	0.7	0.7

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

Set P_{IN}	P_{DISS} @ 2GHz	P_{DISS} @ 8GHz	P_{DISS} @ 16GHz	P_{DISS} @ 22GHz
(dBm)	(W)	(W)	(W)	(W)
-10.0	7.4	7.4	7.4	7.3
-9.0	7.4	7.4	7.4	7.3
-8.0	7.4	7.5	7.4	7.3
-7.0	7.4	7.5	7.4	7.3
-6.0	7.4	7.5	7.4	7.3
-5.0	7.4	7.5	7.4	7.3
-4.0	7.5	7.5	7.4	7.3
-3.0	7.4	7.5	7.4	7.3
-2.0	7.4	7.4	7.4	7.3
-1.0	7.4	7.4	7.4	7.3
0.0	7.4	7.4	7.4	7.3
1.0	7.4	7.4	7.4	7.3
2.0	7.4	7.4	7.3	7.3
3.0	7.4	7.4	7.3	7.3
4.0	7.4	7.4	7.3	7.3
5.0	7.4	7.4	7.2	7.3
6.0	7.4	7.3	7.2	7.2
7.0	7.4	7.3	7.2	7.2
8.0	7.3	7.3	7.1	7.2
9.0	7.3	7.3	7.0	7.1
10.0	7.3	7.2	7.0	7.1
11.0	7.4	7.2	6.9	7.2
12.0	7.4	7.2	6.9	7.3
13.0	7.4	7.1	6.9	7.4
14.0	7.5	7.0	7.0	7.7
15.0	7.6	6.9	7.1	8.0
16.0	7.6	6.8	7.2	8.3
17.0	7.5	6.5	7.2	8.6
18.0	7.1	6.2	7.2	8.8
19.0	6.7	6.1	7.1	9.0
20.0	6.4	6.2	7.1	9.0
21.0	6.5	6.3	7.4	9.0
22.0	6.7	6.5	7.7	9.0
23.0	6.9	6.7	8.0	9.0
24.0	7.1	7.0	8.2	9.0
25.0	7.4	7.2	8.3	9.0
26.0	7.5	7.4	8.3	9.0

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^{\circ}\text{C}$

FREQ	P_{out} @ 20 dBm 2nd Harmonic
(GHz)	(dBc)
0.0	-38.7
0.1	-39.1
0.2	-39.5
0.4	-40.1
0.5	-40.3
0.6	-40.8
0.7	-41.2
0.8	-41.3
1.0	-41.2
2.0	-35.8
3.0	-32.4
4.0	-29.9
5.0	-29.6
6.0	-30.7
7.0	-29.5
8.0	-27.0
9.0	-27.9
10.0	-27.8
11.0	-27.2
12.0	-27.9
13.0	-29.7
14.0	-27.9
15.0	-27.7
16.0	-28.8
17.0	-31.5
18.0	-35.6
19.0	-37.0
20.0	-36.8
21.0	-37.3
22.0	-35.8
23.0	-30.2
24.0	-27.2

*Typical Performance Data*TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^{\circ}\text{C}$

FREQ	P _{OUT} @ 20 dBm OIP2	P _{OUT} @ 20 dBm OIP3
(GHz)	(dBm)	(dBm)
0.0	54.7	38.5
0.1	56.9	38.3
0.2	57.3	38.5
0.3	61.9	38.7
0.4	60.9	39.3
0.5	62.5	39.1
1.0	62.1	39.0
2.0	51.5	39.5
3.0	46.8	40.6
4.0	45.1	40.2
5.0	44.1	41.4
6.0	44.8	42.2
7.0	43.7	42.6
8.0	41.7	42.0
9.0	42.0	41.9
10.0	42.2	41.2
11.0	42.1	41.1
12.0	42.2	40.8
13.0	43.7	40.7
14.0	42.6	41.9
15.0	41.8	41.8
16.0	41.9	39.9
17.0	44.9	39.1
18.0	49.0	39.1
19.0	51.8	38.3
20.0	54.7	41.3
21.0	53.9	39.8
22.0	54.3	38.2
23.0	47.6	33.8
24.0	40.9	32.4

Typical Performance Data

TEST CONDITIONS: $V_{DD} = +15\text{ V}$, $V_{ctrl} = +9.5\text{ V}$, $I_{DD} = 500\text{ mA}$ @ Temperature = $+25^\circ\text{C}$

P_{OUT}/Tone	OIP2 (@ 1 GHz)	OIP2 (@ 4 GHz)	OIP2 (@ 8 GHz)	OIP2 (@ 12 GHz)	OIP2 (@ 16 GHz)	OIP2 (@ 20 GHz)	OIP2 (@ 22 GHz)
(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
0.00	54.93	44.95	42.06	43.59	44.88	50.38	52.55
2.00	55.19	44.84	42.01	43.42	44.80	52.68	54.14
4.00	55.16	44.75	41.96	43.39	44.67	52.83	54.56
6.00	55.07	44.70	41.86	43.24	44.63	53.08	54.39
8.00	55.07	44.63	41.74	43.05	44.25	52.18	54.11
10.00	54.96	44.50	41.59	42.80	43.87	51.68	53.52
12.00	54.87	44.34	41.41	42.51	43.43	50.86	52.68
14.00	54.76	44.16	41.21	42.23	42.95	50.42	52.12
16.00	54.69	43.95	41.00	41.96	42.43	50.29	51.77
18.00	55.14	43.88	40.94	41.76	41.87	50.99	51.93
20.00	62.13	45.13	41.71	42.17	41.89	54.66	54.29
22.00	57.90	48.18	43.83	44.24	44.35	60.59	65.69

P_{OUT}/Tone	OIP3 (@ 1 GHz)	OIP3 (@ 4 GHz)	OIP3 (@ 8 GHz)	OIP3 (@ 12 GHz)	OIP3 (@ 16 GHz)	OIP3 (@ 20 GHz)	OIP3 (@ 22 GHz)
(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
0.00	37.29	36.80	36.24	36.39	35.22	33.86	33.37
2.00	40.11	39.45	37.76	37.74	36.32	34.67	33.97
4.00	42.91	40.84	39.05	38.44	36.74	34.83	34.17
6.00	44.72	41.51	39.06	38.58	36.75	35.06	34.45
8.00	45.11	41.71	39.25	38.69	37.03	35.23	34.63
10.00	44.98	41.70	39.32	38.74	37.15	35.46	34.75
12.00	44.18	41.44	39.42	38.82	37.27	35.76	34.85
14.00	43.42	41.22	39.60	38.92	37.44	36.31	34.99
16.00	42.85	40.98	39.84	39.07	37.70	37.08	35.36
18.00	42.00	40.82	40.52	39.39	38.21	38.45	36.54
20.00	39.01	40.18	41.99	40.80	39.89	41.34	38.17
22.00	37.10	38.73	41.75	43.05	39.12	37.90	33.96

P_{OUT}/Tone	IM3 (@ 1 GHz)	IM3 (@ 4 GHz)	IM3 (@ 8 GHz)	IM3 (@ 12 GHz)	IM3 (@ 16 GHz)	IM3 (@ 20 GHz)	IM3 (@ 22 GHz)
(dBm)	(dBc)	(dBc)	(dBc)	(dBc)	(dBc)	(dBc)	(dBc)
0.00	-74.26	-73.65	-72.45	-72.71	-70.26	-67.92	-66.85
2.00	-75.92	-74.92	-71.48	-71.43	-68.83	-65.33	-64.04
4.00	-77.54	-73.68	-70.08	-68.84	-65.66	-61.67	-60.50
6.00	-77.20	-71.02	-66.11	-65.12	-61.67	-58.12	-57.09
8.00	-73.95	-67.41	-62.47	-61.36	-58.22	-54.50	-53.44
10.00	-69.70	-63.39	-58.62	-57.44	-54.48	-51.02	-49.71
12.00	-64.12	-58.87	-54.82	-53.60	-50.74	-47.57	-45.88
14.00	-58.59	-54.42	-51.17	-49.81	-47.08	-44.66	-42.15
16.00	-53.45	-49.91	-47.66	-46.15	-43.54	-42.25	-38.78
18.00	-47.72	-45.57	-45.01	-42.85	-40.43	-41.08	-37.04
20.00	-37.76	-40.30	-43.97	-41.71	-39.78	-42.60	-36.24
22.00	-29.94	-33.51	-39.52	-42.19	-34.06	-31.70	-23.61
24.00	-26.91	-28.85	-33.52	-29.54	-22.72	-19.07	-14.53