(800) 762-7743 (814) 472-5436 Fax: (814) 472-5552

SYSTEMS WITH RELIABILITY, Inc.

Broadcast Antennas & Transmission Systems

SYSTEM DATA SHEET

Customer	KRBK, Pacific Broadcasting
Contact	John Hidle
Location	Osage Beach, MO
Antenna Model	SWEDM8MC / 49
Channel / Frequency	49 / 629 MHz

ELECTRICAL SPECIFICATION

Polarization Type	Horizontal	
Polarization Ratio		
H-Pol. (PRH)	100.00	**%**
Elevation Directivity (ED)	8.298	
Azimuth Directivity (AD) H-Pol.	1.850	
Antenna Gain (GH)		
H-Pol. (GH)	15.35	
dB Gain (AG)		
H-Pol (AGH)	11.86	**dB**
Beam Tilt	-1.00	**Degrees**
Null Fill	10, 7, 5	**%**
Line Type	3 1/8"	**EIA**
Attenuation per 100 ft.	0.242	**dB/100ft**

MECHANICAL SPECIFICATION

No. Of Bays	8	#		
Antenna Aperture	9.91	**ft.**	3.02	**m**
Antenna Total Length	12.74	**ft.**	3.88	**m**
Antenna Weight	65.00	**lbs.**	29.55	**kg**
Windload (50/33 psf) / CaAc	276.00	**lbs.**	7.90	**ft.^2**

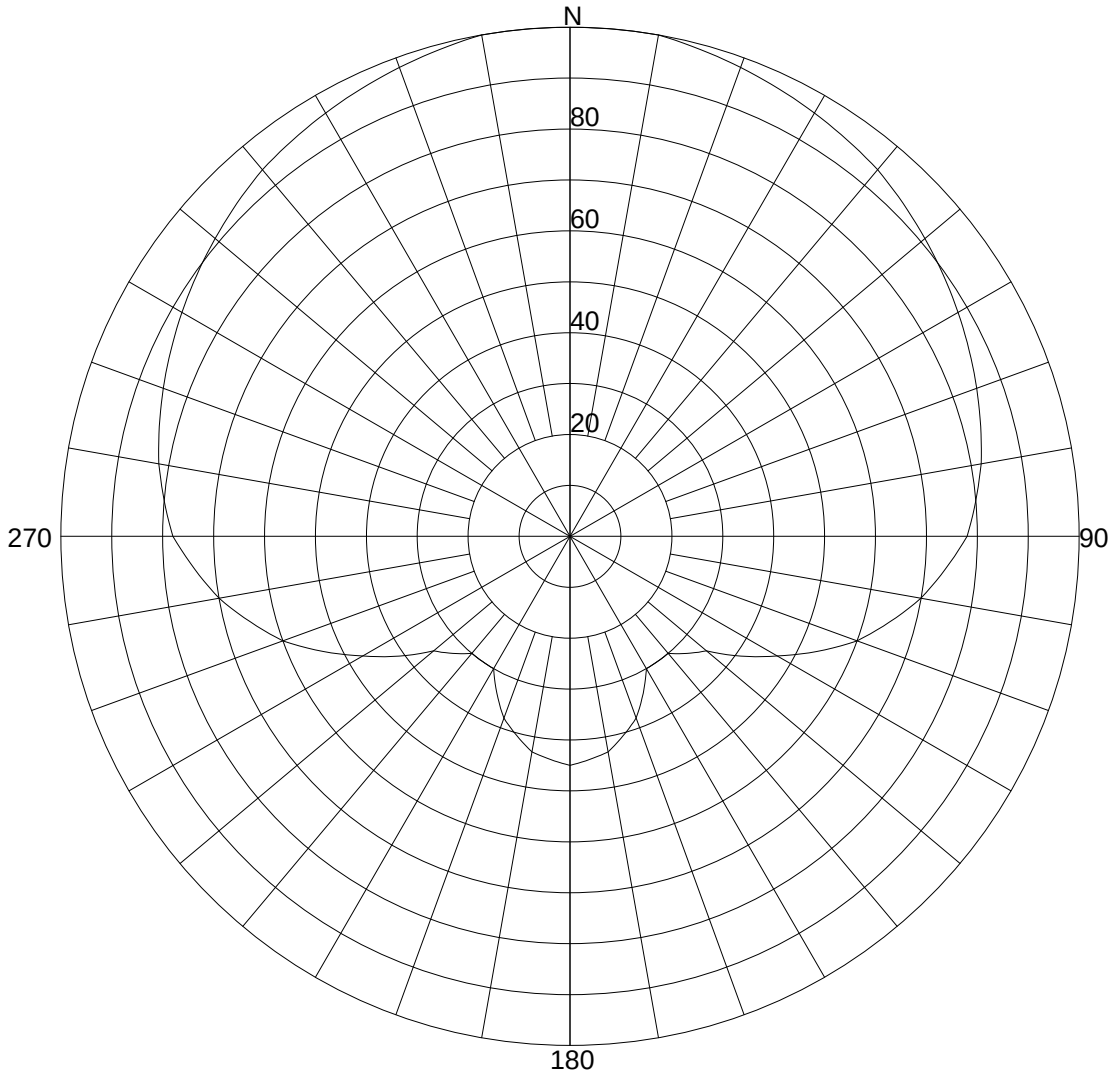
Mechanical Specifications will be certified upon final construction and testing.

Note: Given values can be used for planning system.

Prepared by: Mark Gergely

Mark A. Gergely, BSEE

SWR, LP, Engineering



Azimuth Pattern

Scale: Linear

Unit: Relative Field

Systems With Reliability Inc

CLIENT: *KRBK, Pacific Broadcasting*

Date: 10/29/2008

ANTENNA TYPE: SWEDM8MC / 49

FREQUENCY: 683 MHz

PATTERN POL.: Horizontal

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 1.850 / 2.672 dB

PATTERN RMS: *0.733*

Micro-Tek Eng. Ver. 2.5

Relative Field Tabulation(Azimuth)

Azimuth Heading	Normalized Field(dB)	Azimuth Heading	Normalized Field(dB)
0	1.0000 (0)	180	.4500 (-6.936)
5	1.0000 (0)	185	.4400 (-7.131)
10	1.0000 (0)	190	.4300 (-7.331)
15	.9900 (-0.087)	195	.4050 (-7.851)
20	.9800 (-0.175)	200	.3800 (-8.404)
25	.9700 (-0.265)	205	.3400 (-9.37)
30	.9600 (-0.355)	210	.3000 (-10.458)
35	.9500 (-0.446)	215	.3000 (-10.458)
40	.9400 (-0.537)	220	.3000 (-10.458)
45	.9250 (-0.677)	225	.3250 (-9.762)
50	.9100 (-0.819)	230	.3500 (-9.119)
55	.8950 (-0.964)	235	.4100 (-7.744)
60	.8800 (-1.11)	240	.4700 (-6.558)
65	.8650 (-1.26)	245	.5350 (-5.433)
70	.8500 (-1.412)	250	.6000 (-4.437)
75	.8350 (-1.566)	255	.6500 (-3.742)
80	.8200 (-1.724)	260	.7000 (-3.098)
85	.8000 (-1.938)	265	.7400 (-2.615)
90	.7800 (-2.158)	270	.7800 (-2.158)
95	.7400 (-2.615)	275	.8000 (-1.938)
100	.7000 (-3.098)	280	.8200 (-1.724)
105	.6500 (-3.742)	285	.8350 (-1.566)
110	.6000 (-4.437)	290	.8500 (-1.412)
115	.5350 (-5.433)	295	.8650 (-1.26)
120	.4700 (-6.558)	300	.8800 (-1.11)
125	.4100 (-7.744)	305	.8950 (-0.964)
130	.3500 (-9.119)	310	.9100 (-0.819)
135	.3250 (-9.762)	315	.9250 (-0.677)
140	.3000 (-10.458)	320	.9400 (-0.537)
145	.3000 (-10.458)	325	.9500 (-0.446)
150	.3000 (-10.458)	330	.9600 (-0.355)
155	.3400 (-9.37)	335	.9700 (-0.265)
160	.3800 (-8.404)	340	.9800 (-0.175)
165	.4050 (-7.851)	345	.9900 (-0.087)
170	.4300 (-7.331)	350	1.0000 (0)
175	.4400 (-7.131)	355	1.0000 (0)

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Date: 10/29/2008

ANTENNA TYPE: SWEDM8MC / 49

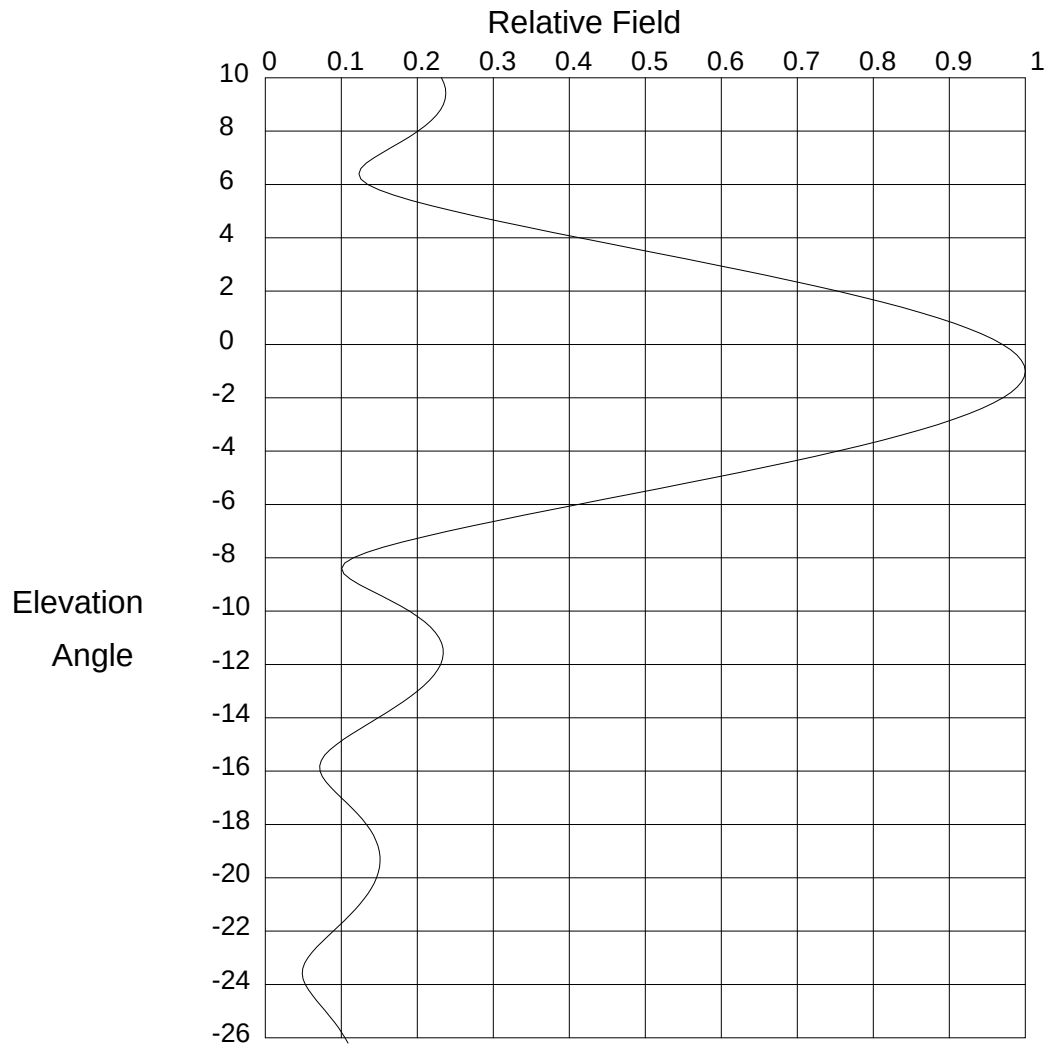
FREQUENCY: 683 MHz

PATTERN POL.: Horizontal

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 1.850 / 2.672 dB

PATTERN RMS: *0.733*



Elevation Pattern

Scale: Linear

Units: Field, Relative

Systems With Reliability Inc

CLIENT: *KRBK, Pacific Broadcasting*

Date: 10/29/2008

ANTENNA TYPE: SWEDM8MC / 49

FREQUENCY: 683 MHz

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 8.298/9.19 dBd

Beam Tilt (Deg.) : *-1*

DIRECTIVITY(Horiz): 7.813/8.928 dBd

Null Fill(s)(%) : *10, 7, 5*

Micro-Tek Eng. Ver. 2.5

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
90.0	.10 (-19.998)	52.0	.125 (-18.061)	14.0	.07 (-23.147)
89.0	.116 (-18.73)	51.0	.104 (-19.665)	13.0	.086 (-21.31)
88.0	.131 (-17.625)	50.0	.08 (-21.988)	12.0	.142 (-16.933)
87.0	.147 (-16.647)	49.0	.058 (-24.769)	11.0	.197 (-14.094)
86.0	.163 (-15.771)	48.0	.05 (-25.936)	10.0	.232 (-12.698)
85.0	.178 (-14.98)	47.0	.064 (-23.923)	9.8	.235 (-12.574)
84.0	.194 (-14.264)	46.0	.085 (-21.419)	9.6	.237 (-12.502)
83.0	.209 (-13.613)	45.0	.104 (-19.645)	9.4	.238 (-12.481)
82.0	.223 (-13.024)	44.0	.117 (-18.661)	9.2	.237 (-12.513)
81.0	.237 (-12.494)	43.0	.12 (-18.411)	9.0	.234 (-12.6)
80.0	.251 (-12.02)	42.0	.114 (-18.897)	8.8	.231 (-12.743)
79.0	.263 (-11.603)	41.0	.098 (-20.204)	8.6	.225 (-12.946)
78.0	.274 (-11.245)	40.0	.075 (-22.508)	8.4	.219 (-13.211)
77.0	.284 (-10.948)	39.0	.051 (-25.776)	8.2	.21 (-13.541)
76.0	.291 (-10.717)	38.0	.043 (-27.338)	8.0	.201 (-13.94)
75.0	.297 (-10.556)	37.0	.06 (-24.495)	7.8	.19 (-14.409)
74.0	.299 (-10.473)	36.0	.084 (-21.538)	7.6	.179 (-14.95)
73.0	.299 (-10.475)	35.0	.103 (-19.717)	7.4	.167 (-15.557)
72.0	.296 (-10.574)	34.0	.113 (-18.932)	7.2	.155 (-16.215)
71.0	.289 (-10.779)	33.0	.111 (-19.106)	7.0	.143 (-16.891)
70.0	.278 (-11.109)	32.0	.097 (-20.304)	6.8	.133 (-17.52)
69.0	.264 (-11.581)	31.0	.073 (-22.733)	6.6	.126 (-17.998)
68.0	.245 (-12.221)	30.0	.049 (-26.253)	6.4	.123 (-18.192)
67.0	.222 (-13.061)	29.0	.046 (-26.701)	6.2	.126 (-17.997)
66.0	.196 (-14.147)	28.0	.071 (-23.006)	6.0	.135 (-17.405)
65.0	.167 (-15.537)	27.0	.098 (-20.14)	5.8	.149 (-16.509)
64.0	.136 (-17.31)	26.0	.117 (-18.615)	5.6	.169 (-15.442)
63.0	.105 (-19.541)	25.0	.122 (-18.254)	5.4	.192 (-14.312)
62.0	.078 (-22.135)	24.0	.112 (-19.048)	5.2	.219 (-13.189)
61.0	.062 (-24.132)	23.0	.087 (-21.193)	5.0	.248 (-12.111)
60.0	.065 (-23.679)	22.0	.058 (-24.734)	4.8	.279 (-11.094)
59.0	.083 (-21.582)	21.0	.053 (-25.581)	4.6	.311 (-10.143)
58.0	.105 (-19.564)	20.0	.084 (-21.536)	4.4	.344 (-9.257)
57.0	.125 (-18.071)	19.0	.12 (-18.396)	4.2	.379 (-8.434)
56.0	.14 (-17.108)	18.0	.145 (-16.743)	4.0	.414 (-7.669)
55.0	.147 (-16.629)	17.0	.152 (-16.37)	3.8	.449 (-6.959)
54.0	.148 (-16.614)	16.0	.137 (-17.289)	3.6	.484 (-6.299)
53.0	.14 (-17.074)	15.0	.103 (-19.742)	3.4	.52 (-5.686)

Systems With Reliability Inc

CLIENT: *KRBK, Pacific Broadcasting*
Date: 10/29/2008
ANTENNA TYPE: SWEDM8MC / 49
FREQUENCY: 683 MHz
PATTERN POL.: Horizontal
DIRECTIVITY(Peak): 8.298/9.19 dBd
Beam Tilt (Deg.) : *-1*
DIRECTIVITY(Horiz): 7.813/8.928 dBd
Null Fill(s)(%) : *10, 7, 5*

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
3.2	.555 (-5.116)	-4.4	.691 (-3.214)	-12.0	.231 (-12.738)
3.0	.59 (-4.587)	-4.6	.658 (-3.638)	-12.2	.227 (-12.881)
2.8	.624 (-4.095)	-4.8	.624 (-4.097)	-12.4	.222 (-13.076)
2.6	.658 (-3.639)	-5.0	.589 (-4.592)	-12.6	.216 (-13.321)
2.4	.691 (-3.216)	-5.2	.554 (-5.125)	-12.8	.208 (-13.618)
2.2	.722 (-2.825)	-5.4	.519 (-5.701)	-13.0	.20 (-13.967)
2.0	.753 (-2.463)	-5.6	.483 (-6.321)	-13.2	.191 (-14.371)
1.8	.782 (-2.131)	-5.8	.447 (-6.992)	-13.4	.181 (-14.83)
1.6	.81 (-1.825)	-6.0	.411 (-7.716)	-13.6	.171 (-15.347)
1.4	.837 (-1.546)	-6.2	.376 (-8.5)	-13.8	.16 (-15.924)
1.2	.862 (-1.292)	-6.4	.341 (-9.349)	-14.0	.149 (-16.561)
1.0	.885 (-1.063)	-6.6	.306 (-10.272)	-14.2	.137 (-17.261)
.8	.906 (-0.857)	-6.8	.273 (-11.274)	-14.4	.126 (-18.021)
.6	.925 (-0.675)	-7.0	.241 (-12.365)	-14.6	.114 (-18.835)
.4	.942 (-0.515)	-7.2	.21 (-13.547)	-14.8	.104 (-19.69)
.2	.957 (-0.378)	-7.4	.182 (-14.818)	-15.0	.094 (-20.557)
.0	.97 (-0.262)	-7.6	.156 (-16.157)	-15.2	.085 (-21.39)
-.2	.981 (-0.167)	-7.8	.133 (-17.504)	-15.4	.078 (-22.116)
-.4	.989 (-0.094)	-8.0	.116 (-18.727)	-15.6	.074 (-22.643)
-.6	.995 (-0.042)	-8.2	.105 (-19.615)	-15.8	.072 (-22.889)
-.8	.999 (-0.011)	-8.4	.101 (-19.951)	-16.0	.072 (-22.823)
-1.0	1.00 (0)	-8.6	.104 (-19.695)	-16.2	.075 (-22.48)
-1.2	.999 (-0.01)	-8.8	.112 (-19.017)	-16.4	.08 (-21.945)
-1.4	.995 (-0.041)	-9.0	.124 (-18.148)	-16.6	.086 (-21.308)
-1.6	.989 (-0.093)	-9.2	.137 (-17.252)	-16.8	.093 (-20.64)
-1.8	.981 (-0.165)	-9.4	.151 (-16.41)	-17.0	.10 (-19.988)
-2.0	.971 (-0.259)	-9.6	.165 (-15.656)	-17.2	.107 (-19.376)
-2.2	.958 (-0.375)	-9.8	.178 (-14.998)	-17.4	.115 (-18.819)
-2.4	.943 (-0.512)	-10.0	.19 (-14.434)	-17.6	.121 (-18.322)
-2.6	.926 (-0.671)	-10.2	.20 (-13.958)	-17.8	.128 (-17.886)
-2.8	.906 (-0.853)	-10.4	.21 (-13.564)	-18.0	.133 (-17.51)
-3.0	.885 (-1.059)	-10.6	.218 (-13.245)	-18.2	.138 (-17.193)
-3.2	.862 (-1.288)	-10.8	.224 (-12.995)	-18.4	.142 (-16.933)
-3.4	.837 (-1.541)	-11.0	.229 (-12.809)	-18.6	.146 (-16.727)
-3.6	.811 (-1.821)	-11.2	.232 (-12.684)	-18.8	.148 (-16.574)
-3.8	.783 (-2.126)	-11.4	.234 (-12.617)	-19.0	.15 (-16.471)
-4.0	.753 (-2.459)	-11.6	.234 (-12.605)	-19.2	.151 (-16.418)
-4.2	.723 (-2.822)	-11.8	.233 (-12.645)	-19.4	.151 (-16.413)

Systems With Reliability Inc

CLIENT: *KRBK, Pacific Broadcasting*
Date: 10/29/2008
ANTENNA TYPE: SWEDM8MC / 49
FREQUENCY: 683 MHz
PATTERN POL.: Horizontal
DIRECTIVITY(Peak): 8.298/9.19 dBd
Beam Tilt (Deg.) : *-1*
DIRECTIVITY(Horiz): 7.813/8.928 dBd
Null Fill(s)(%) : *10, 7, 5*

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
-19.6	.15 (-16.456)	-27.2	.12 (-18.416)	-54.0	.089 (-21.003)
-19.8	.149 (-16.547)	-27.4	.12 (-18.385)	-55.0	.109 (-19.242)
-20.0	.146 (-16.686)	-27.6	.12 (-18.398)	-56.0	.125 (-18.084)
-20.2	.143 (-16.873)	-27.8	.119 (-18.454)	-57.0	.135 (-17.417)
-20.4	.14 (-17.108)	-28.0	.118 (-18.553)	-58.0	.138 (-17.172)
-20.6	.135 (-17.394)	-28.2	.116 (-18.695)	-59.0	.136 (-17.307)
-20.8	.13 (-17.732)	-28.4	.114 (-18.88)	-60.0	.129 (-17.805)
-21.0	.124 (-18.123)	-28.6	.111 (-19.111)	-61.0	.117 (-18.663)
-21.2	.118 (-18.571)	-28.8	.107 (-19.387)	-62.0	.101 (-19.873)
-21.4	.111 (-19.076)	-29.0	.103 (-19.71)	-63.0	.085 (-21.375)
-21.6	.104 (-19.642)	-29.2	.099 (-20.082)	-64.0	.072 (-22.903)
-21.8	.097 (-20.271)	-29.4	.094 (-20.504)	-65.0	.065 (-23.76)
-22.0	.09 (-20.963)	-29.6	.089 (-20.979)	-66.0	.069 (-23.25)
-22.2	.082 (-21.717)	-29.8	.084 (-21.508)	-67.0	.082 (-21.741)
-22.4	.075 (-22.527)	-30.0	.079 (-22.092)	-68.0	.10 (-20.028)
-22.6	.068 (-23.375)	-31.0	.052 (-25.689)	-69.0	.119 (-18.493)
-22.8	.061 (-24.231)	-32.0	.043 (-27.378)	-70.0	.138 (-17.22)
-23.0	.056 (-25.036)	-33.0	.061 (-24.263)	-71.0	.155 (-16.198)
-23.2	.052 (-25.708)	-34.0	.085 (-21.37)	-72.0	.17 (-15.396)
-23.4	.049 (-26.144)	-35.0	.103 (-19.727)	-73.0	.182 (-14.782)
-23.6	.049 (-26.262)	-36.0	.111 (-19.125)	-74.0	.192 (-14.329)
-23.8	.05 (-26.048)	-37.0	.107 (-19.438)	-75.0	.199 (-14.016)
-24.0	.053 (-25.561)	-38.0	.093 (-20.67)	-76.0	.204 (-13.826)
-24.2	.057 (-24.902)	-39.0	.071 (-22.931)	-77.0	.205 (-13.747)
-24.4	.062 (-24.164)	-40.0	.049 (-26.114)	-78.0	.205 (-13.767)
-24.6	.067 (-23.415)	-41.0	.041 (-27.66)	-79.0	.202 (-13.879)
-24.8	.073 (-22.694)	-42.0	.056 (-25.016)	-80.0	.198 (-14.077)
-25.0	.079 (-22.022)	-43.0	.079 (-22.101)	-81.0	.191 (-14.357)
-25.2	.085 (-21.409)	-44.0	.098 (-20.176)	-82.0	.184 (-14.718)
-25.4	.091 (-20.859)	-45.0	.111 (-19.128)	-83.0	.175 (-15.159)
-25.6	.096 (-20.37)	-46.0	.115 (-18.814)	-84.0	.164 (-15.683)
-25.8	.101 (-19.942)	-47.0	.11 (-19.172)	-85.0	.153 (-16.293)
-26.0	.105 (-19.571)	-48.0	.098 (-20.211)	-86.0	.141 (-16.997)
-26.2	.109 (-19.255)	-49.0	.079 (-21.999)	-87.0	.129 (-17.806)
-26.4	.112 (-18.99)	-50.0	.059 (-24.538)	-88.0	.116 (-18.737)
-26.6	.115 (-18.776)	-51.0	.045 (-26.895)	-89.0	.102 (-19.814)
-26.8	.117 (-18.61)	-52.0	.049 (-26.236)	-90.0	.088 (-21.071)
-27.0	.119 (-18.491)	-53.0	.067 (-23.464)	90.0	.00 (-50)

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FREQUENCY: 683 MHz
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