

Azimuth Pattern

Systems With Reliability

Scale: Linear

Unit: Relative Field

CLIENT: *WBIF*

Date: 9/26/2018

ANTENNA TYPE: SWEDL16EC/26-EP

FREQUENCY: 545 MHz

PATTERN POL.: Elliptical

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 1.633 / 2.130 dB

PATTERN RMS: 0.781

Relative Field Tabulation(Azimuth)

Azimuth Heading	Normalized Field(dB)	Azimuth Heading	Normalized Field(dB)
0	.9000 (-0.92)	180	.2600 (-11.7)
5	.9000 (-0.92)	185	.2600 (-11.7)
10	.9000 (-0.92)	190	.2600 (-11.7)
15	.9100 (-0.82)	195	.2500 (-12.04)
20	.9200 (-0.72)	200	.2400 (-12.4)
25	.9300 (-0.63)	205	.2700 (-11.37)
30	.9400 (-0.54)	210	.3000 (-10.46)
35	.9500 (-0.45)	215	.3500 (-9.12)
40	.9600 (-0.35)	220	.4000 (-7.96)
45	.9700 (-0.26)	225	.4500 (-6.94)
50	.9800 (-0.18)	230	.5000 (-6.02)
55	.9800 (-0.18)	235	.5600 (-5.04)
60	.9800 (-0.18)	240	.6200 (-4.15)
65	.9900 (-0.09)	245	.6900 (-3.22)
70	1.0000 (0)	250	.7600 (-2.38)
75	.9900 (-0.09)	255	.8100 (-1.83)
80	.9800 (-0.18)	260	.8600 (-1.31)
85	.9600 (-0.35)	265	.9000 (-0.92)
90	.9400 (-0.54)	270	.9400 (-0.54)
95	.9000 (-0.92)	275	.9600 (-0.35)
100	.8600 (-1.31)	280	.9800 (-0.18)
105	.8100 (-1.83)	285	.9900 (-0.09)
110	.7600 (-2.38)	290	1.0000 (0)
115	.6900 (-3.22)	295	.9900 (-0.09)
120	.6200 (-4.15)	300	.9800 (-0.18)
125	.5600 (-5.04)	305	.9800 (-0.18)
130	.5000 (-6.02)	310	.9800 (-0.18)
135	.4500 (-6.94)	315	.9700 (-0.26)
140	.4000 (-7.96)	320	.9600 (-0.35)
145	.3500 (-9.12)	325	.9500 (-0.45)
150	.3000 (-10.46)	330	.9400 (-0.54)
155	.2700 (-11.37)	335	.9300 (-0.63)
160	.2400 (-12.4)	340	.9200 (-0.72)
165	.2500 (-12.04)	345	.9100 (-0.82)
170	.2600 (-11.7)	350	.9000 (-0.92)
175	.2600 (-11.7)	355	.9000 (-0.92)

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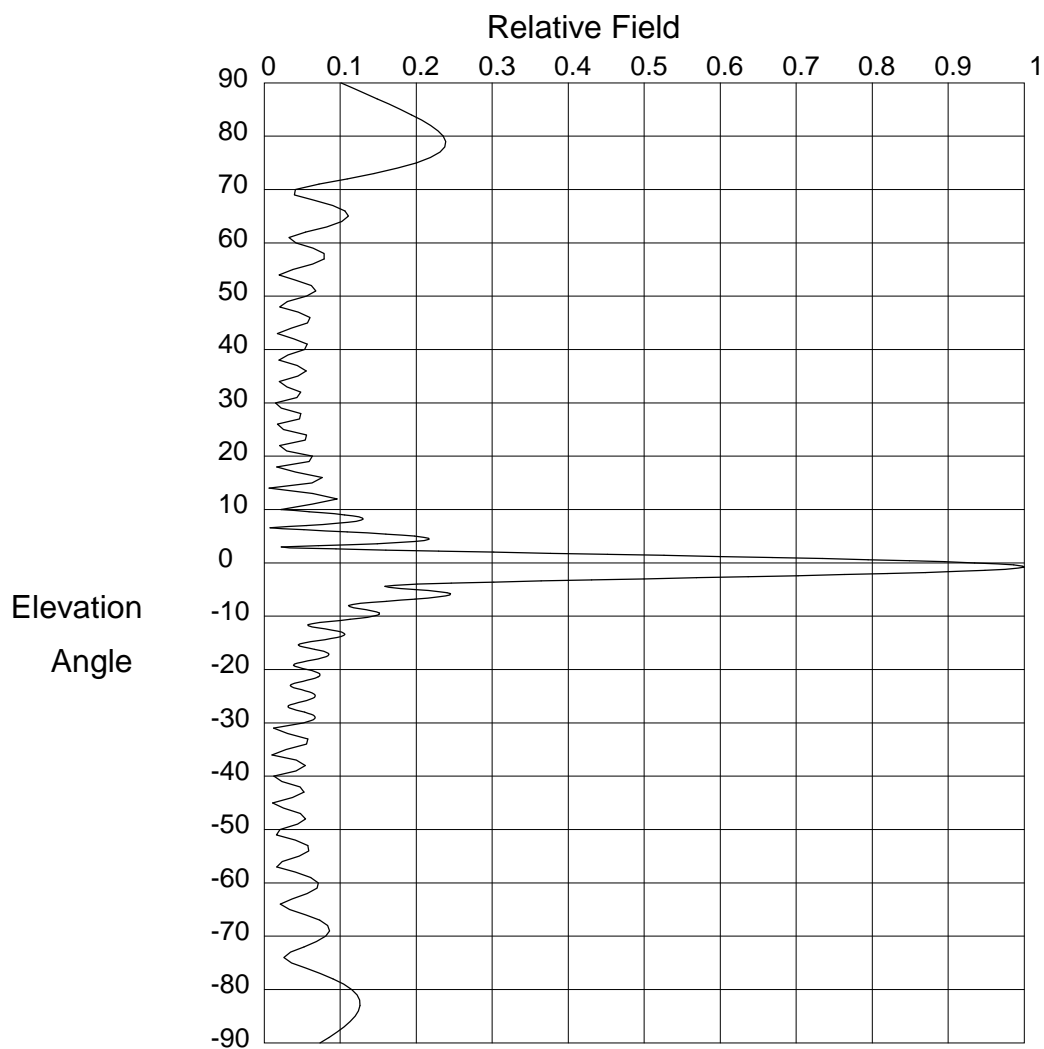
FREQUENCY: 545 MHz

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Scale: Linear

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FREQUENCY: 545 MHz

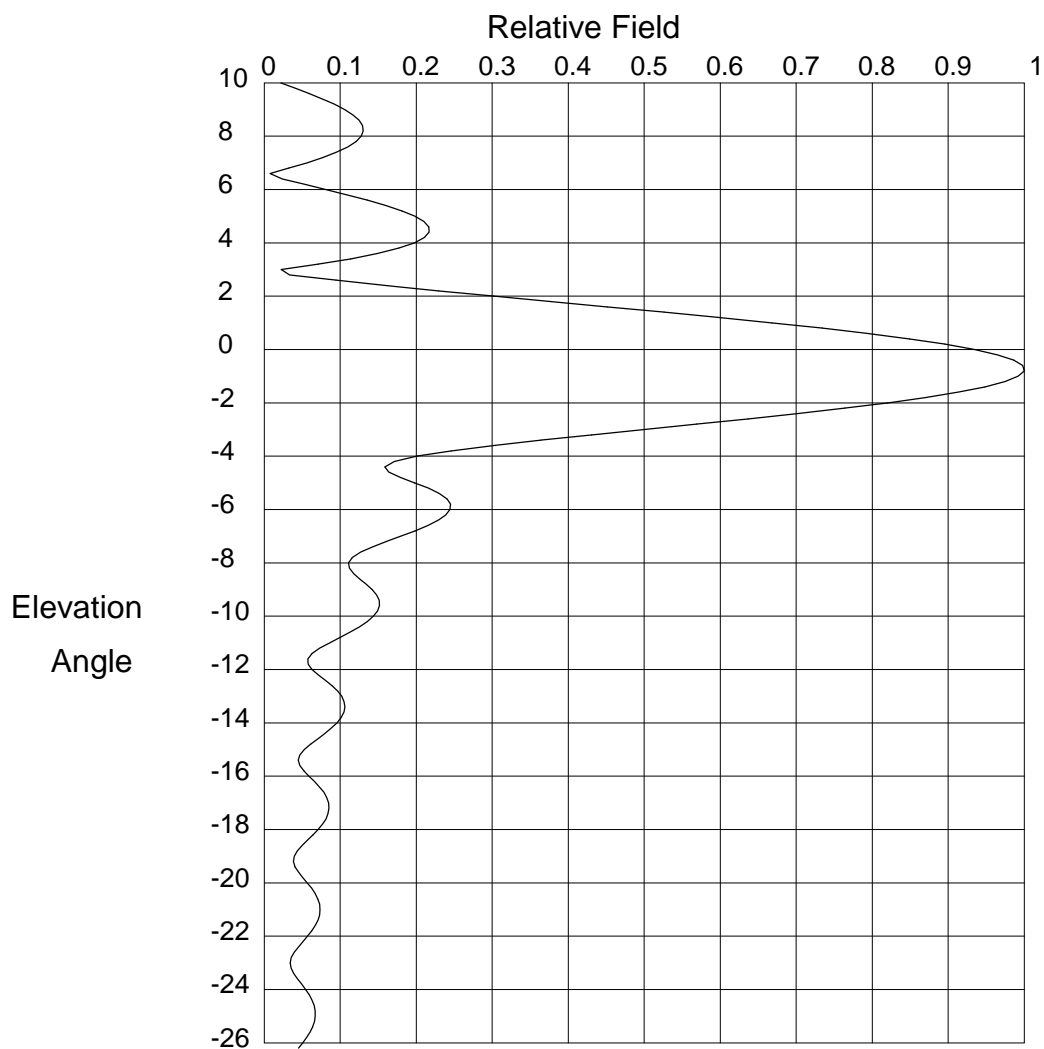
PATTERN POL.: Elliptical

DIRECTIVITY(Peak): 17.258/12.37 dBd

Beam Tilt (Deg.) : -0.7

DIRECTIVITY(Horiz): 15.083/11.785 dBd

Null Fill(s)(%) : 15, 10, 5



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Null Fill(s)(%) : 15, 10, 5

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
90.0	.101 (-19.904)	52.0	.062 (-24.141)	14.0	.006 (-43.919)
89.0	.117 (-18.637)	51.0	.068 (-23.374)	13.0	.064 (-23.837)
88.0	.133 (-17.533)	50.0	.056 (-25.082)	12.0	.096 (-20.348)
87.0	.149 (-16.558)	49.0	.031 (-30.284)	11.0	.063 (-23.966)
86.0	.164 (-15.693)	48.0	.02 (-33.773)	10.0	.022 (-33.217)
85.0	.179 (-14.925)	47.0	.045 (-26.992)	9.8	.041 (-27.83)
84.0	.194 (-14.25)	46.0	.06 (-24.38)	9.6	.059 (-24.586)
83.0	.207 (-13.668)	45.0	.057 (-24.877)	9.4	.076 (-22.345)
82.0	.219 (-13.185)	44.0	.036 (-28.886)	9.2	.092 (-20.714)
81.0	.229 (-12.809)	43.0	.017 (-35.177)	9.0	.106 (-19.514)
80.0	.236 (-12.554)	42.0	.039 (-28.125)	8.8	.117 (-18.651)
79.0	.239 (-12.438)	41.0	.056 (-24.972)	8.6	.125 (-18.074)
78.0	.238 (-12.484)	40.0	.053 (-25.495)	8.4	.129 (-17.757)
77.0	.231 (-12.725)	39.0	.031 (-30.149)	8.2	.13 (-17.693)
76.0	.219 (-13.203)	38.0	.019 (-34.205)	8.0	.128 (-17.887)
75.0	.20 (-13.976)	37.0	.044 (-27.212)	7.8	.121 (-18.365)
74.0	.175 (-15.133)	36.0	.055 (-25.145)	7.6	.11 (-19.176)
73.0	.144 (-16.81)	35.0	.044 (-27.078)	7.4	.095 (-20.41)
72.0	.109 (-19.243)	34.0	.02 (-33.955)	7.2	.077 (-22.24)
71.0	.072 (-22.851)	33.0	.03 (-30.492)	7.0	.056 (-25.043)
70.0	.041 (-27.792)	32.0	.048 (-26.367)	6.8	.032 (-29.897)
69.0	.04 (-28.032)	31.0	.043 (-27.32)	6.6	.008 (-42.348)
68.0	.065 (-23.737)	30.0	.015 (-36.551)	6.4	.024 (-32.534)
67.0	.09 (-20.911)	29.0	.022 (-33.009)	6.2	.052 (-25.659)
66.0	.106 (-19.468)	28.0	.048 (-26.392)	6.0	.081 (-21.829)
65.0	.111 (-19.118)	27.0	.046 (-26.665)	5.8	.109 (-19.233)
64.0	.102 (-19.81)	26.0	.017 (-35.277)	5.6	.136 (-17.334)
63.0	.082 (-21.714)	25.0	.026 (-31.84)	5.4	.16 (-15.907)
62.0	.055 (-25.255)	24.0	.055 (-25.126)	5.2	.181 (-14.837)
61.0	.032 (-29.767)	23.0	.054 (-25.322)	5.0	.198 (-14.062)
60.0	.042 (-27.619)	22.0	.02 (-33.906)	4.8	.21 (-13.549)
59.0	.064 (-23.853)	21.0	.03 (-30.543)	4.6	.217 (-13.283)
58.0	.079 (-22.081)	20.0	.063 (-23.969)	4.4	.217 (-13.269)
57.0	.079 (-22.069)	19.0	.059 (-24.562)	4.2	.211 (-13.524)
56.0	.064 (-23.923)	18.0	.017 (-35.545)	4.0	.197 (-14.091)
55.0	.037 (-28.537)	17.0	.042 (-27.629)	3.8	.177 (-15.047)
54.0	.02 (-34.169)	16.0	.076 (-22.357)	3.6	.149 (-16.541)
53.0	.041 (-27.726)	15.0	.063 (-24.051)	3.4	.114 (-18.887)

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DIRECTIVITY(Peak): 17.258/12.37 dBd

Beam Tilt (Deg.) : -0.7

DIRECTIVITY(Horiz): 15.083/11.785 dBd

Null Fill(s)(%) : 15, 10, 5

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
3.2	.071 (-22.933)	-4.4	.159 (-15.968)	-12.0	.063 (-24.013)
3.0	.022 (-32.97)	-4.6	.164 (-15.701)	-12.2	.071 (-22.95)
2.8	.033 (-29.5)	-4.8	.179 (-14.929)	-12.4	.08 (-21.903)
2.6	.094 (-20.51)	-5.0	.198 (-14.062)	-12.6	.089 (-21.013)
2.4	.16 (-15.916)	-5.2	.216 (-13.31)	-12.8	.096 (-20.326)
2.2	.23 (-12.778)	-5.4	.231 (-12.746)	-13.0	.102 (-19.847)
2.0	.302 (-10.394)	-5.6	.24 (-12.382)	-13.2	.105 (-19.57)
1.8	.377 (-8.483)	-5.8	.245 (-12.214)	-13.4	.106 (-19.488)
1.6	.452 (-6.905)	-6.0	.245 (-12.234)	-13.6	.105 (-19.598)
1.4	.526 (-5.579)	-6.2	.239 (-12.433)	-13.8	.101 (-19.898)
1.2	.599 (-4.454)	-6.4	.229 (-12.805)	-14.0	.096 (-20.39)
1.0	.669 (-3.497)	-6.6	.215 (-13.346)	-14.2	.088 (-21.08)
.8	.734 (-2.683)	-6.8	.198 (-14.05)	-14.4	.08 (-21.97)
.6	.795 (-1.996)	-7.0	.18 (-14.904)	-14.6	.07 (-23.052)
.4	.849 (-1.423)	-7.2	.161 (-15.883)	-14.8	.061 (-24.286)
.2	.896 (-0.955)	-7.4	.142 (-16.927)	-15.0	.053 (-25.547)
.0	.935 (-0.585)	-7.6	.127 (-17.926)	-15.2	.047 (-26.562)
-.2	.965 (-0.308)	-7.8	.116 (-18.707)	-15.4	.045 (-26.956)
-.4	.986 (-0.119)	-8.0	.111 (-19.092)	-15.6	.047 (-26.572)
-.6	.998 (-0.017)	-8.2	.112 (-19.021)	-15.8	.052 (-25.662)
-.8	1.00 (0)	-8.4	.117 (-18.603)	-16.0	.059 (-24.594)
-1.0	.992 (-0.068)	-8.6	.126 (-18.027)	-16.2	.066 (-23.597)
-1.2	.975 (-0.22)	-8.8	.134 (-17.447)	-16.4	.073 (-22.765)
-1.4	.949 (-0.459)	-9.0	.142 (-16.957)	-16.6	.078 (-22.128)
-1.6	.913 (-0.786)	-9.2	.148 (-16.604)	-16.8	.082 (-21.688)
-1.8	.87 (-1.206)	-9.4	.151 (-16.409)	-17.0	.085 (-21.44)
-2.0	.82 (-1.722)	-9.6	.152 (-16.381)	-17.2	.085 (-21.378)
-2.2	.764 (-2.34)	-9.8	.149 (-16.524)	-17.4	.084 (-21.499)
-2.4	.702 (-3.069)	-10.0	.144 (-16.845)	-17.6	.081 (-21.804)
-2.6	.637 (-3.918)	-10.2	.136 (-17.349)	-17.8	.077 (-22.294)
-2.8	.569 (-4.898)	-10.4	.125 (-18.046)	-18.0	.071 (-22.973)
-3.0	.50 (-6.024)	-10.6	.113 (-18.942)	-18.2	.064 (-23.841)
-3.2	.431 (-7.31)	-10.8	.10 (-20.043)	-18.4	.057 (-24.884)
-3.4	.364 (-8.77)	-11.0	.086 (-21.331)	-18.6	.05 (-26.051)
-3.6	.302 (-10.404)	-11.2	.073 (-22.728)	-18.8	.044 (-27.203)
-3.8	.246 (-12.173)	-11.4	.063 (-24.021)	-19.0	.04 (-28.068)
-4.0	.201 (-13.933)	-11.6	.057 (-24.815)	-19.2	.038 (-28.318)
-4.2	.171 (-15.346)	-11.8	.058 (-24.774)	-19.4	.04 (-27.862)

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Null Fill(s)(%) : 15, 10, 5

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
-19.6	.045 (-26.951)	-27.2	.033 (-29.603)	-54.0	.059 (-24.601)
-19.8	.051 (-25.908)	-27.4	.037 (-28.602)	-55.0	.046 (-26.74)
-20.0	.057 (-24.934)	-27.6	.042 (-27.468)	-56.0	.024 (-32.578)
-20.2	.062 (-24.114)	-27.8	.048 (-26.397)	-57.0	.016 (-35.684)
-20.4	.067 (-23.477)	-28.0	.053 (-25.474)	-58.0	.041 (-27.798)
-20.6	.071 (-23.026)	-28.2	.058 (-24.724)	-59.0	.061 (-24.244)
-20.8	.073 (-22.758)	-28.4	.062 (-24.15)	-60.0	.071 (-22.914)
-21.0	.074 (-22.667)	-28.6	.065 (-23.747)	-61.0	.07 (-23.153)
-21.2	.073 (-22.752)	-28.8	.067 (-23.511)	-62.0	.057 (-24.932)
-21.4	.071 (-23.012)	-29.0	.067 (-23.438)	-63.0	.037 (-28.688)
-21.6	.067 (-23.45)	-29.2	.067 (-23.531)	-64.0	.021 (-33.412)
-21.8	.063 (-24.067)	-29.4	.065 (-23.795)	-65.0	.033 (-29.586)
-22.0	.057 (-24.866)	-29.6	.061 (-24.24)	-66.0	.055 (-25.215)
-22.2	.051 (-25.834)	-29.8	.057 (-24.888)	-67.0	.073 (-22.755)
-22.4	.045 (-26.931)	-30.0	.051 (-25.771)	-68.0	.084 (-21.555)
-22.6	.04 (-28.044)	-31.0	.012 (-38.161)	-69.0	.086 (-21.29)
-22.8	.036 (-28.941)	-32.0	.031 (-30.221)	-70.0	.081 (-21.847)
-23.0	.034 (-29.313)	-33.0	.057 (-24.841)	-71.0	.069 (-23.25)
-23.2	.035 (-29)	-34.0	.056 (-25.069)	-72.0	.052 (-25.659)
-23.4	.039 (-28.173)	-35.0	.029 (-30.802)	-73.0	.035 (-29.227)
-23.6	.044 (-27.142)	-36.0	.01 (-39.853)	-74.0	.026 (-31.812)
-23.8	.049 (-26.132)	-37.0	.042 (-27.512)	-75.0	.036 (-28.869)
-24.0	.055 (-25.252)	-38.0	.054 (-25.348)	-76.0	.055 (-25.223)
-24.2	.059 (-24.539)	-39.0	.042 (-27.57)	-77.0	.074 (-22.627)
-24.4	.063 (-24.004)	-40.0	.013 (-37.824)	-78.0	.091 (-20.834)
-24.6	.066 (-23.644)	-41.0	.023 (-32.674)	-79.0	.105 (-19.6)
-24.8	.067 (-23.457)	-42.0	.047 (-26.545)	-80.0	.115 (-18.775)
-25.0	.067 (-23.438)	-43.0	.052 (-25.652)	-81.0	.122 (-18.266)
-25.2	.066 (-23.587)	-44.0	.037 (-28.563)	-82.0	.126 (-18.012)
-25.4	.064 (-23.906)	-45.0	.011 (-39.09)	-83.0	.126 (-17.973)
-25.6	.06 (-24.4)	-46.0	.025 (-31.929)	-84.0	.124 (-18.123)
-25.8	.056 (-25.072)	-47.0	.048 (-26.427)	-85.0	.12 (-18.445)
-26.0	.051 (-25.923)	-48.0	.055 (-25.254)	-86.0	.113 (-18.932)
-26.2	.045 (-26.942)	-49.0	.044 (-27.126)	-87.0	.105 (-19.583)
-26.4	.039 (-28.073)	-50.0	.021 (-33.604)	-88.0	.095 (-20.407)
-26.6	.035 (-29.177)	-51.0	.016 (-35.81)	-89.0	.085 (-21.421)
-26.8	.032 (-29.978)	-52.0	.041 (-27.728)	-90.0	.074 (-22.658)
-27.0	.031 (-30.147)	-53.0	.057 (-24.848)	90.0	.00 (-50)

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