

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P937840

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

**Test Information**

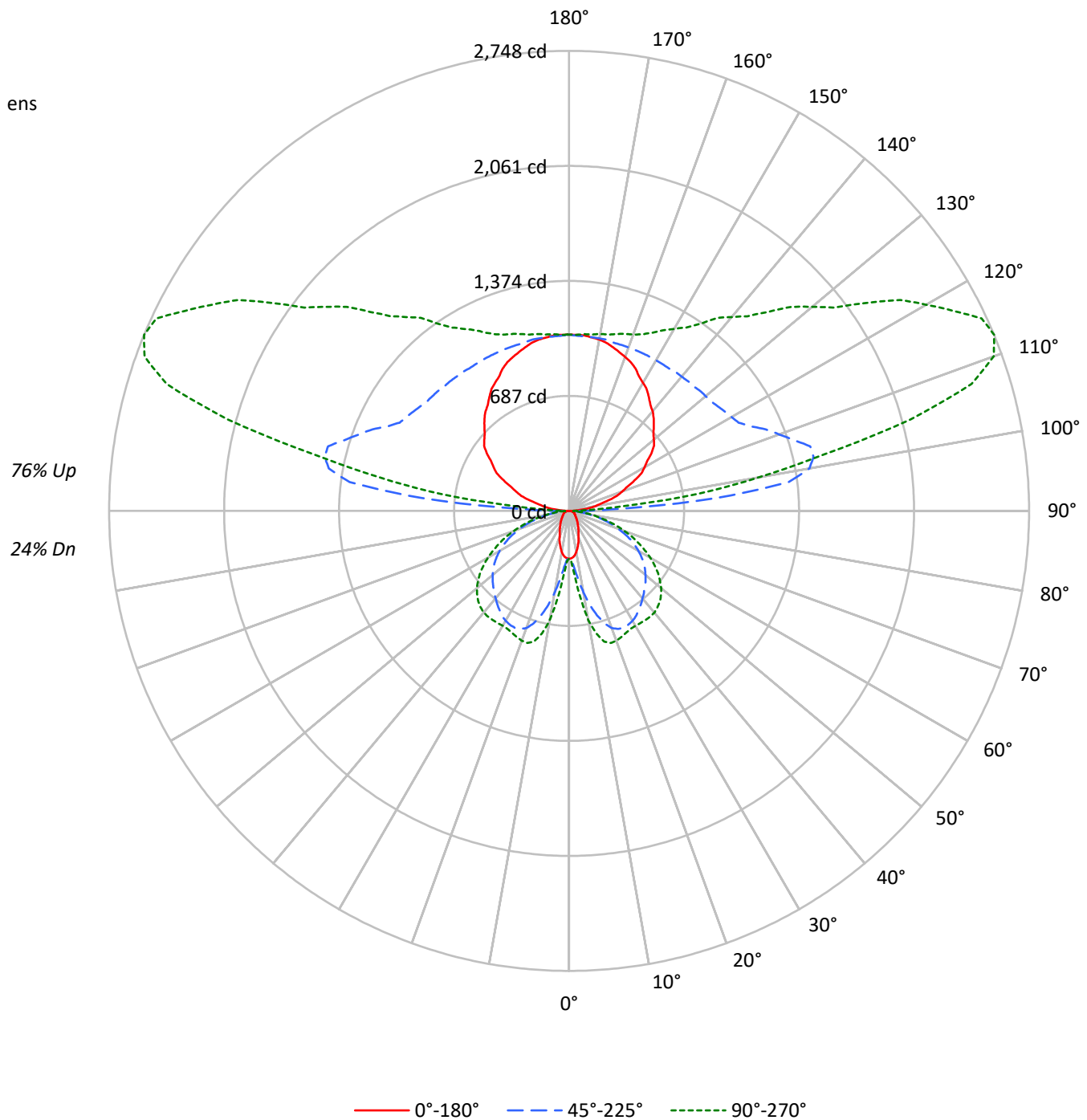
Test Method: LM-79-2019  
Report Number: P937840  
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9029.0 lumens  
Efficiency: N/A  
Efficacy: 126.5 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 71.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1760	1760	1760
5°	1719	2034	2366
10°	1559	2964	3922
15°	1324	3871	4736
20°	1078	4486	4827
25°	899	4693	4729
30°	758	4721	4720
35°	670	4641	4842
40°	583	4539	4969
45°	527	4463	4988
50°	483	4394	4906
55°	462	4294	4689
60°	474	4104	4345
65°	490	3815	3873
70°	522	3325	3272
75°	578	2708	2553
80°	625	1876	1720
85°	549	994	881

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4988 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.8	0.4
10°-20°	163.1	1.8
20°-30°	285.4	3.2
30°-40°	367.3	4.1
40°-50°	410.3	4.5
50°-60°	393.0	4.4
60°-70°	311.4	3.4
70°-80°	183.1	2.0
80°-90°	54.9	0.6
90°-100°	513.1	5.7
100°-110°	1349.0	14.9
110°-120°	1398.7	15.5
120°-130°	1122.0	12.4
130°-140°	880.3	9.7
140°-150°	675.7	7.5
150°-160°	486.6	5.4
160°-170°	297.7	3.3
170°-180°	100.6	1.1
0°-30°	485.3	5.4
0°-40°	852.6	9.4
0°-60°	1655.9	18.3
0°-90°	2205.3	24.4
90°-120°	3260.8	36.1
90°-150°	5938.8	65.8
90°-180°	6824.0	75.6
0°-180°	9029.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	284	284	284	284	284	
5°	277	297	335	379	392	26
15°	208	383	646	783	808	58
25°	133	435	770	803	804	61
35°	90	415	725	766	796	56
45°	61	331	640	734	767	47
55°	44	210	544	631	649	40
65°	35	112	404	454	460	34
75°	26	69	221	243	244	27
85°	9	21	55	60	61	10
90°	7	20	54	27	27	6
95°	68	266	884	456	310	75
105°	243	368	1491	2264	2112	258
115°	432	524	1195	2383	2720	426
125°	600	673	1087	1836	2166	533
135°	716	788	1053	1482	1681	554
145°	830	883	1039	1265	1364	520
155°	938	964	1039	1141	1174	431
165°	1012	1026	1039	1080	1094	286
175°	1053	1053	1046	1060	1060	100
180°	1053	1053	1053	1053	1053	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5
2.5°	284.5	284.5	286.4	287.3	289.2	290.1	291.9	293.7	299.2	300.1	301.9
5°	277.3	280.9	292.8	297.4	310.2	327.6	334.8	346.8	371.5	378.8	383.4
7.5°	266.3	274.5	303.7	311.1	343.1	388.9	408.1	433.7	473.0	492.3	507.9
10°	248.9	266.3	318.4	335.8	388.0	457.5	493.2	528.9	588.4	614.8	624.9
12.5°	229.7	258.1	333.9	357.8	432.8	534.3	577.3	616.7	684.4	720.1	725.5
15°	207.7	246.1	348.6	383.4	480.4	598.4	645.9	694.5	757.6	783.2	789.7
17.5°	188.5	237.0	362.3	399.0	516.9	656.0	704.5	744.8	796.0	813.4	817.9
20°	164.7	222.3	371.5	419.1	555.4	698.1	744.8	775.9	810.7	821.7	823.5
22.5°	147.3	206.8	377.0	426.3	581.0	723.7	763.1	787.7	811.6	815.2	816.1
25°	132.7	189.4	376.0	434.6	603.0	739.3	769.5	787.7	801.5	803.3	803.3
27.5°	119.0	170.2	372.4	436.4	619.5	743.0	766.7	779.6	785.9	789.7	789.7
30°	107.1	151.9	363.2	432.8	626.7	739.3	758.5	764.9	771.3	776.8	779.6
32.5°	97.9	134.5	349.5	425.4	627.6	730.2	743.9	747.5	756.6	769.5	774.1
35°	89.7	117.2	333.9	415.4	622.2	715.5	724.6	728.3	746.6	765.8	772.2
37.5°	81.4	104.3	313.8	398.1	613.9	698.1	704.5	711.0	739.3	762.2	769.5
40°	73.2	93.3	290.1	378.8	601.2	677.0	682.6	692.6	730.2	756.6	764.0
42.5°	66.8	84.1	264.4	358.7	584.6	653.3	661.5	676.1	719.2	747.5	755.7
45°	61.3	75.0	237.0	331.2	563.6	628.6	640.5	660.6	706.3	733.8	741.1
47.5°	55.9	68.6	208.6	302.8	540.8	603.9	619.5	642.3	689.0	715.5	721.9
50°	51.2	62.2	180.3	272.6	516.0	577.3	595.6	619.5	667.0	691.7	700.0
52.5°	47.6	56.8	153.7	242.5	487.7	549.9	571.0	595.6	640.5	664.3	669.8
55°	43.9	52.1	130.8	210.4	458.4	520.6	543.5	567.2	611.2	631.3	635.0
57.5°	42.1	48.5	111.6	180.3	427.3	487.7	513.3	535.2	576.4	592.0	595.6
60°	39.4	45.8	97.0	154.6	393.4	456.5	478.6	500.5	535.2	548.1	550.8
62.5°	36.6	43.9	86.1	129.9	358.7	420.0	441.9	462.1	491.3	500.5	504.1
65°	34.7	42.1	77.8	111.6	323.0	381.5	403.5	420.9	444.6	453.8	455.6
67.5°	32.9	40.3	71.4	96.1	287.3	343.1	359.6	376.0	394.3	403.5	404.4
70°	30.2	38.4	65.9	85.1	250.7	299.2	312.9	330.3	344.9	349.5	352.3
72.5°	28.4	35.7	62.2	76.9	213.2	257.1	269.9	280.0	292.8	297.4	297.4
75°	25.7	32.0	58.6	68.6	174.7	210.4	221.4	231.5	241.5	243.4	240.6
77.5°	22.8	28.4	50.3	57.7	136.4	166.6	175.7	181.2	189.4	191.2	192.1
80°	19.2	24.7	39.4	44.8	98.8	122.6	129.0	133.6	140.9	140.9	142.7
82.5°	14.6	19.2	28.4	32.0	66.8	84.1	89.7	92.4	97.0	97.0	97.0
85°	9.2	11.9	18.3	21.0	40.3	51.2	54.9	55.9	59.5	60.4	60.4
87.5°	4.5	6.4	11.9	12.8	21.0	26.6	26.6	28.4	28.4	27.5	26.6
90°	7.1	12.7	18.4	19.7	31.0	46.1	53.7	47.7	35.7	26.8	26.8
92.5°	28.3	76.3	124.3	136.4	191.7	265.4	302.4	265.0	190.3	134.3	128.9
95°	67.9	155.7	243.6	265.6	471.6	746.4	883.8	788.7	598.4	455.6	439.4
97.5°	117.3	194.8	272.3	291.7	635.3	1093.5	1322.5	1262.4	1142.1	1051.9	1021.2
100°	155.5	225.8	296.1	313.6	694.9	1203.3	1457.4	1461.8	1470.6	1477.2	1440.5
102.5°	187.9	253.5	319.2	335.6	722.3	1237.7	1495.5	1572.1	1725.4	1840.3	1808.9
105°	243.1	298.6	354.1	368.0	742.4	1241.7	1491.3	1663.1	2006.6	2264.2	2247.3
107.5°	299.5	351.3	403.2	416.1	746.3	1186.4	1406.6	1646.2	2125.3	2484.6	2488.7
110°	337.7	384.4	431.2	442.9	740.5	1137.4	1335.9	1603.7	2139.4	2541.2	2558.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	375.1	419.7	464.3	475.5	740.8	1094.7	1271.6	1545.7	2093.9	2505.0	2532.1
115°	431.6	472.7	513.9	524.2	747.7	1045.6	1194.6	1458.7	1986.8	2382.9	2420.4
117.5°	487.5	524.9	562.2	571.5	761.5	1014.9	1141.6	1379.9	1856.6	2214.1	2255.5
120°	519.9	555.2	590.3	599.1	772.8	1004.5	1120.4	1338.2	1773.6	2100.3	2140.6
122.5°	551.8	587.3	622.7	631.6	789.1	999.1	1104.2	1300.3	1692.5	1986.6	2026.3
125°	600.5	632.8	665.1	673.2	811.0	994.7	1086.6	1253.1	1586.2	1836.1	1872.8
127.5°	640.0	672.7	705.3	713.5	833.0	992.1	1071.7	1214.7	1500.8	1715.3	1746.2
130°	661.2	696.4	731.5	740.4	848.9	993.6	1066.0	1193.4	1448.0	1639.0	1667.5
132.5°	683.1	718.3	753.5	762.3	861.9	994.7	1061.1	1175.1	1403.0	1573.9	1599.5
135°	715.6	747.6	779.6	787.7	876.0	993.8	1052.6	1148.1	1339.0	1482.2	1504.2
137.5°	748.8	780.6	812.3	820.2	897.2	999.9	1051.2	1131.9	1293.2	1414.3	1432.3
140°	776.4	805.6	834.8	842.1	910.1	1000.9	1046.3	1115.9	1255.4	1359.9	1376.8
142.5°	797.6	824.6	851.6	858.3	921.0	1004.5	1046.3	1107.5	1229.9	1321.8	1336.3
145°	830.0	853.6	877.2	883.1	935.1	1004.5	1039.2	1089.3	1189.4	1264.6	1275.6
147.5°	862.6	885.5	908.5	914.2	955.8	1011.4	1039.2	1078.6	1157.4	1216.5	1225.6
150°	883.8	904.5	925.2	930.4	966.7	1015.0	1039.2	1072.5	1139.0	1189.0	1196.4
152.5°	905.6	921.4	937.1	941.0	973.8	1017.3	1039.2	1067.5	1124.4	1167.1	1172.6
155°	938.2	949.8	961.4	964.3	989.2	1022.5	1039.2	1061.8	1107.0	1141.0	1144.7
157.5°	962.2	973.5	984.8	987.6	1004.8	1027.7	1039.2	1056.7	1091.9	1118.3	1120.9
160°	978.4	987.2	996.1	998.2	1011.9	1030.1	1039.2	1054.3	1084.4	1107.0	1108.5
162.5°	994.7	1001.2	1007.9	1009.5	1019.4	1032.6	1039.2	1051.9	1077.3	1096.4	1097.8
165°	1012.3	1018.3	1024.3	1025.8	1030.3	1036.2	1039.2	1048.3	1066.5	1080.2	1081.6
167.5°	1028.6	1031.4	1034.3	1035.0	1038.7	1043.7	1046.3	1052.3	1064.2	1073.1	1073.7
170°	1039.2	1042.0	1044.8	1045.5	1045.8	1046.1	1046.3	1052.3	1064.2	1073.1	1073.1
172.5°	1044.8	1045.4	1046.1	1046.3	1046.3	1046.3	1046.3	1051.0	1060.4	1067.5	1066.9
175°	1052.6	1052.6	1052.6	1052.6	1050.5	1047.7	1046.3	1049.3	1055.3	1059.7	1059.7
177.5°	1052.6	1052.6	1052.6	1052.6	1051.0	1048.7	1047.6	1050.0	1054.7	1058.3	1057.6
180°	1052.6	1052.6	1052.6	1052.6	1052.6	1052.6	1052.6	1052.6	1052.6	1052.6	1052.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	284.5	284.5
2.5°	303.7	301.9
5°	390.7	392.5
7.5°	526.1	525.2
10°	654.2	662.4
12.5°	747.5	749.4
15°	804.3	807.9
17.5°	826.2	827.1
20°	827.1	825.3
22.5°	817.0	815.2
25°	805.2	804.3
27.5°	794.2	795.1
30°	789.7	792.4
32.5°	789.7	794.2
35°	791.5	796.0
37.5°	790.6	796.0
40°	786.8	793.3
42.5°	776.8	781.4
45°	761.3	766.7
47.5°	741.1	744.8
50°	715.5	719.2
52.5°	683.5	684.4
55°	645.0	648.8
57.5°	603.9	604.8
60°	558.2	560.9
62.5°	509.7	509.7
65°	458.4	460.2
67.5°	405.3	409.9
70°	351.4	352.3
72.5°	298.3	298.3
75°	243.4	244.3
77.5°	191.2	191.2
80°	141.8	142.7
82.5°	97.9	99.7
85°	61.3	61.3
87.5°	28.4	25.7
90°	26.8	26.8
92.5°	107.5	86.1
95°	374.8	310.1
97.5°	898.1	775.0
100°	1294.0	1147.3
102.5°	1683.3	1557.8
105°	2179.8	2112.3
107.5°	2505.0	2521.3
110°	2629.0	2699.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2640.0	2748.1
115°	2570.1	2719.8
117.5°	2421.6	2587.7
120°	2302.0	2463.4
122.5°	2185.5	2344.7
125°	2019.4	2166.0
127.5°	1869.9	1993.7
130°	1781.9	1896.1
132.5°	1701.9	1804.3
135°	1592.4	1680.6
137.5°	1504.5	1576.8
140°	1444.3	1511.8
142.5°	1394.4	1452.5
145°	1319.5	1363.5
147.5°	1262.1	1298.5
150°	1225.9	1255.4
152.5°	1194.9	1217.2
155°	1159.4	1174.2
157.5°	1131.2	1141.6
160°	1114.5	1120.4
162.5°	1103.5	1109.1
165°	1087.7	1093.6
167.5°	1076.2	1078.7
170°	1073.1	1073.1
172.5°	1064.7	1062.5
175°	1059.7	1059.7
177.5°	1055.2	1052.6
180°	1052.6	1052.6



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.64	1.09	1.77	3.37	13.12	13.80	14.26	14.94	16.53
	3H	0.64	1.26	1.79	2.40	4.01	14.94	15.55	16.09	16.70	18.31
	4H	0.93	1.52	2.09	2.66	4.28	15.57	16.16	16.73	17.30	18.91
	6H	1.17	1.71	2.34	2.86	4.48	15.99	16.53	17.16	17.67	19.30
	8H	1.24	1.75	2.41	2.91	4.53	16.10	16.61	17.27	17.78	19.39
	12H	1.25	1.73	2.42	2.89	4.53	16.16	16.65	17.34	17.80	19.44
4H	2H	7.14	7.72	8.31	8.87	10.48	13.37	13.95	14.54	15.10	16.71
	3H	8.69	9.18	9.86	10.35	11.97	15.39	15.88	16.57	17.05	18.68
	4H	8.77	9.23	9.95	10.38	12.03	16.15	16.60	17.32	17.76	19.40
	6H	8.78	9.16	9.96	10.34	11.98	16.67	17.06	17.85	18.24	19.87
	8H	8.75	9.11	9.93	10.28	11.93	16.83	17.19	18.01	18.36	20.01
	12H	8.69	9.02	9.89	10.21	11.86	16.91	17.24	18.11	18.42	20.08
8H	4H	10.20	10.56	11.38	11.73	13.39	16.19	16.55	17.37	17.73	19.38
	6H	10.43	10.73	11.63	11.95	13.59	16.81	17.11	18.01	18.32	19.97
	8H	10.45	10.71	11.66	11.90	13.57	17.02	17.28	18.23	18.48	20.14
	12H	10.41	10.64	11.62	11.83	13.53	17.16	17.39	18.37	18.58	20.27
12H	4H	10.33	10.66	11.53	11.85	13.50	16.14	16.47	17.33	17.65	19.30
	6H	10.69	10.95	11.89	12.14	13.81	16.79	17.05	18.00	18.24	19.91
	8H	10.75	10.98	11.96	12.17	13.87	17.01	17.24	18.22	18.43	20.13