

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: P938534

Luminaire Tested: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938534  
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

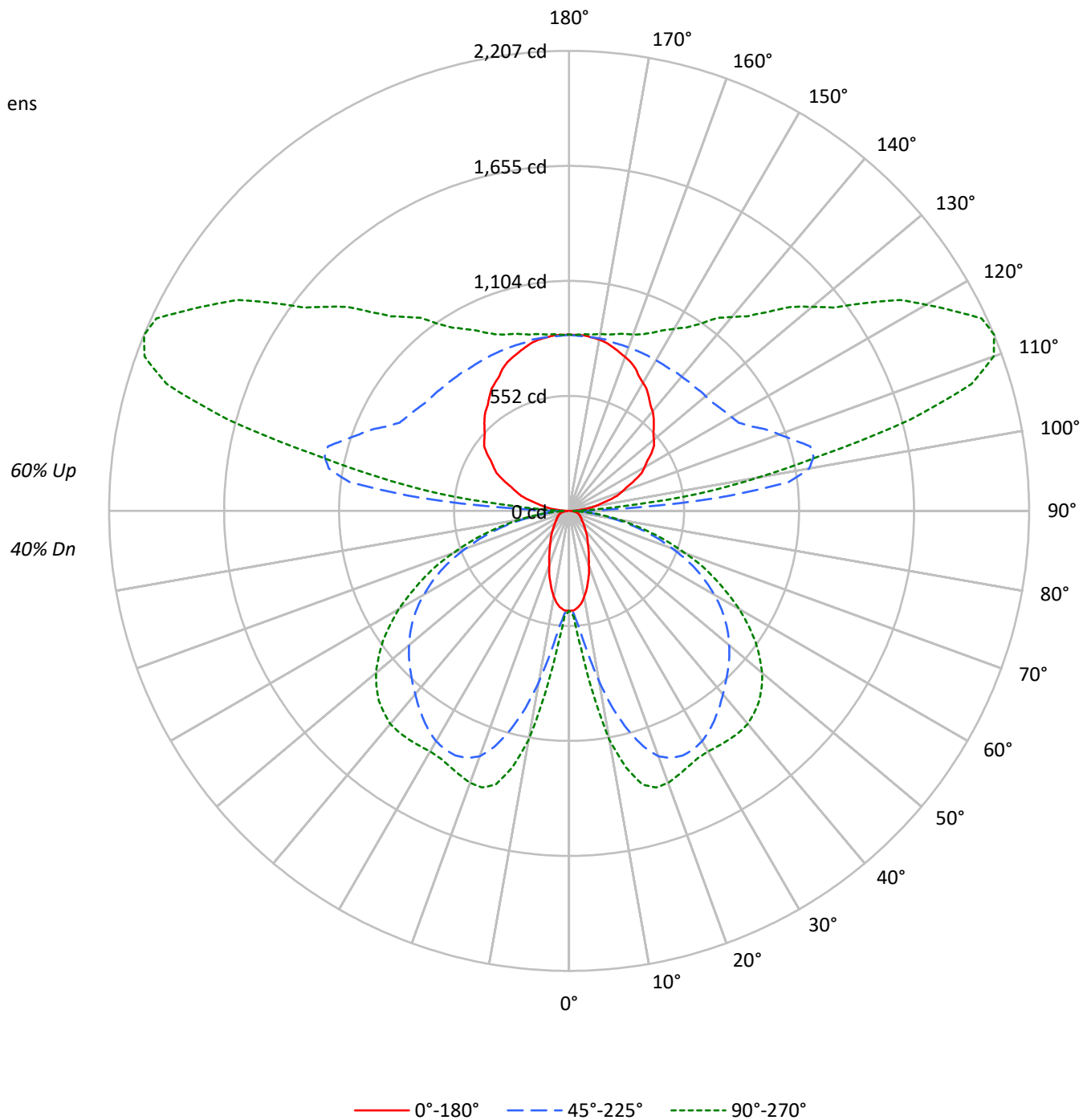
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9186.5 lumens  
Efficiency: N/A  
Efficacy: 110.4 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 83.2  
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

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

	0°	45°	90°
0°	4442	4442	4442
5°	4335	5130	5970
10°	3927	7472	9898
15°	3334	9756	11952
20°	2712	11297	12181
25°	2259	11813	11934
30°	1902	11878	11911
35°	1679	11671	12219
40°	1462	11406	12536
45°	1321	11209	12587
50°	1208	11029	12378
55°	1154	10769	11829
60°	1178	10282	10964
65°	1219	9549	9772
70°	1290	8311	8256
75°	1413	6759	6443
80°	1512	4670	4341
85°	1275	2463	2224

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12587 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.9	0.7
10°-20°	274.4	3.0
20°-30°	480.0	5.2
30°-40°	617.9	6.7
40°-50°	690.2	7.5
50°-60°	661.1	7.2
60°-70°	523.9	5.7
70°-80°	308.1	3.4
80°-90°	88.8	1.0
90°-100°	412.1	4.5
100°-110°	1083.4	11.8
110°-120°	1123.3	12.2
120°-130°	901.0	9.8
130°-140°	707.0	7.7
140°-150°	542.6	5.9
150°-160°	390.8	4.3
160°-170°	239.1	2.6
170°-180°	80.8	0.9
0°-30°	816.4	8.9
0°-40°	1434.3	15.6
0°-60°	2785.6	30.3
0°-90°	3706.4	40.3
90°-120°	2618.8	28.5
90°-150°	4769.4	51.9
90°-180°	5480.0	59.7
0°-180°	9186.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	466	500	563	637	660	43
15°	349	645	1087	1318	1359	97
25°	223	731	1294	1351	1353	103
35°	151	699	1219	1288	1339	94
45°	103	557	1078	1234	1290	80
55°	74	354	914	1062	1091	67
65°	58	188	679	764	774	58
75°	43	115	372	409	411	45
85°	15	35	92	102	103	16
90°	6	16	43	22	22	6
95°	54	213	710	366	249	60
105°	195	296	1198	1818	1696	207
115°	347	421	959	1914	2184	342
125°	482	541	873	1474	1740	428
135°	575	633	845	1190	1350	445
145°	667	709	835	1016	1095	418
155°	754	774	835	916	943	346
165°	813	824	835	867	878	229
175°	845	845	840	851	851	80
180°	845	845	845	845	845	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7
2.5°	478.7	478.7	481.7	483.3	486.4	487.9	491.0	494.1	503.3	504.8	507.9
5°	466.4	472.6	492.6	500.2	521.8	551.1	563.3	583.4	624.9	637.2	644.9
7.5°	447.9	461.7	511.0	523.3	577.2	654.1	686.5	729.6	795.8	828.0	854.2
10°	418.6	447.9	535.6	564.9	652.6	769.6	829.6	889.6	989.7	1034.3	1051.3
12.5°	386.3	434.1	561.8	601.8	728.1	898.9	971.2	1037.4	1151.3	1211.4	1220.6
15°	349.4	414.1	586.4	644.9	808.0	1006.6	1086.7	1168.2	1274.5	1317.5	1328.3
17.5°	317.1	398.7	609.5	671.1	869.6	1103.6	1185.2	1252.9	1339.1	1368.4	1376.0
20°	277.1	374.0	624.9	705.0	934.3	1174.4	1252.9	1305.2	1363.7	1382.2	1385.3
22.5°	247.8	347.8	634.1	717.2	977.4	1217.5	1283.7	1325.3	1365.3	1371.5	1372.9
25°	223.2	318.6	632.7	731.1	1014.3	1243.7	1294.5	1325.3	1348.4	1351.4	1351.4
27.5°	200.1	286.3	626.5	734.2	1042.0	1249.8	1289.9	1311.4	1322.2	1328.3	1328.3
30°	180.1	255.5	611.1	728.1	1054.4	1243.7	1275.9	1286.8	1297.5	1306.8	1311.4
32.5°	164.7	226.2	588.0	715.7	1055.9	1228.3	1251.4	1257.5	1272.9	1294.5	1302.1
35°	150.8	197.0	561.8	698.8	1046.6	1203.6	1219.0	1225.2	1255.9	1288.3	1299.1
37.5°	137.0	175.5	528.0	669.6	1032.8	1174.4	1185.2	1196.0	1243.7	1282.1	1294.5
40°	123.2	157.0	487.9	637.2	1011.2	1139.0	1148.2	1165.2	1228.3	1272.9	1285.2
42.5°	112.3	141.6	444.8	603.4	983.5	1099.0	1112.8	1137.5	1209.8	1257.5	1271.4
45°	103.2	126.3	398.7	557.2	948.1	1057.5	1077.5	1111.3	1188.3	1234.5	1246.7
47.5°	93.9	115.4	350.9	509.5	909.6	1015.9	1042.0	1080.6	1159.0	1203.6	1214.5
50°	86.2	104.7	303.2	458.6	868.1	971.2	1002.1	1042.0	1122.0	1163.6	1177.5
52.5°	80.0	95.4	258.6	407.9	820.4	925.0	960.5	1002.1	1077.5	1117.5	1126.7
55°	73.9	87.7	220.1	354.0	771.1	875.8	914.3	954.3	1028.2	1062.0	1068.2
57.5°	70.8	81.6	187.7	303.2	718.8	820.4	863.5	900.4	969.7	995.9	1002.1
60°	66.2	77.0	163.2	260.2	661.9	768.1	805.0	842.0	900.4	922.0	926.6
62.5°	61.6	73.9	144.7	218.6	603.4	706.5	743.4	777.3	826.6	842.0	848.1
65°	58.5	70.8	130.8	187.7	543.3	641.8	678.8	708.1	748.1	763.5	766.6
67.5°	55.4	67.8	120.1	161.6	483.3	577.2	604.9	632.7	663.4	678.8	680.3
70°	50.8	64.7	110.8	143.2	421.7	503.3	526.4	555.6	580.3	588.0	592.6
72.5°	47.8	60.0	104.7	129.3	358.7	432.5	454.1	471.0	492.6	500.2	500.2
75°	43.1	53.9	98.5	115.4	294.0	354.0	372.5	389.4	406.3	409.4	404.8
77.5°	38.5	47.8	84.7	97.0	229.3	280.2	295.5	304.7	318.6	321.6	323.2
80°	32.3	41.6	66.2	75.4	166.2	206.2	217.0	224.7	237.1	237.1	240.1
82.5°	24.7	32.3	47.8	53.9	112.3	141.6	150.8	155.5	163.2	163.2	163.2
85°	15.4	20.0	30.7	35.4	67.8	86.2	92.3	93.9	100.1	101.6	101.6
87.5°	7.7	10.7	20.0	21.6	35.4	44.7	44.7	47.8	47.8	46.2	44.7
90°	5.6	10.2	14.7	15.9	25.0	37.1	43.1	38.3	28.7	21.6	21.6
92.5°	22.6	61.2	99.9	109.5	153.9	213.1	242.8	212.8	152.8	107.8	103.5
95°	54.5	125.1	195.7	213.3	378.8	599.5	709.8	633.4	480.6	365.9	352.9
97.5°	94.1	156.5	218.8	234.3	510.2	878.2	1062.1	1013.8	917.2	844.8	820.0
100°	124.8	181.3	237.8	251.9	558.1	966.3	1170.4	1174.0	1181.1	1186.3	1156.9
102.5°	150.9	203.7	256.3	269.5	580.1	994.1	1201.1	1262.6	1385.7	1478.0	1452.8
105°	195.2	239.9	284.4	295.6	596.3	997.1	1197.6	1335.5	1611.4	1818.4	1804.8
107.5°	240.6	282.2	323.8	334.2	599.4	952.8	1129.6	1322.0	1706.8	1995.4	1998.7
110°	271.2	308.7	346.4	355.8	594.8	913.5	1072.8	1288.0	1718.1	2040.8	2054.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	301.3	337.1	373.0	381.9	595.0	879.2	1021.2	1241.4	1681.6	2011.8	2033.5
115°	346.7	379.7	412.7	421.0	600.5	839.8	959.4	1171.4	1595.6	1913.7	1943.8
117.5°	391.5	421.5	451.5	459.0	611.6	815.1	916.8	1108.2	1491.0	1778.1	1811.5
120°	417.5	445.8	474.0	481.1	620.6	806.8	899.8	1074.6	1424.4	1686.7	1719.1
122.5°	443.1	471.6	500.1	507.2	633.7	802.5	886.8	1044.3	1359.2	1595.4	1627.3
125°	482.3	508.2	534.2	540.7	651.3	798.8	872.6	1006.3	1273.9	1474.5	1504.0
127.5°	514.0	540.2	566.4	573.0	668.9	796.8	860.7	975.6	1205.3	1377.6	1402.4
130°	531.0	559.2	587.4	594.5	681.8	798.0	856.2	958.4	1162.9	1316.2	1339.2
132.5°	548.6	576.9	605.1	612.2	692.1	798.8	852.1	943.7	1126.8	1264.0	1284.6
135°	574.7	600.5	626.1	632.6	703.5	798.0	845.3	922.0	1075.3	1190.3	1208.0
137.5°	601.4	626.8	652.3	658.7	720.5	803.0	844.2	909.0	1038.6	1135.9	1150.3
140°	623.6	647.0	670.5	676.3	731.0	803.8	840.2	896.2	1008.2	1092.1	1105.7
142.5°	640.6	662.2	683.9	689.3	739.6	806.7	840.2	889.4	987.8	1061.5	1073.2
145°	666.7	685.6	704.4	709.2	751.0	806.8	834.6	874.8	955.2	1015.5	1024.3
147.5°	692.7	711.2	729.5	734.2	767.6	812.3	834.6	866.2	929.5	977.0	984.2
150°	709.8	726.4	743.0	747.2	776.3	815.1	834.6	861.3	914.7	954.8	960.8
152.5°	727.3	740.0	752.5	755.7	782.0	817.0	834.6	857.4	903.1	937.3	941.7
155°	753.5	762.8	772.1	774.5	794.5	821.2	834.6	852.8	889.1	916.3	919.3
157.5°	772.7	781.8	790.8	793.1	806.9	825.4	834.6	848.7	876.9	898.1	900.2
160°	785.7	792.8	799.9	801.7	812.7	827.3	834.6	846.7	870.9	889.0	890.2
162.5°	798.8	804.1	809.4	810.8	818.7	829.3	834.6	844.8	865.2	880.5	881.6
165°	813.0	817.8	822.6	823.8	827.4	832.2	834.6	841.9	856.5	867.4	868.6
167.5°	826.0	828.3	830.6	831.1	834.1	838.2	840.2	845.1	854.6	861.8	862.3
170°	834.6	836.9	839.1	839.7	839.9	840.1	840.2	845.1	854.6	861.8	861.8
172.5°	839.1	839.6	840.1	840.2	840.2	840.2	840.2	844.1	851.6	857.2	856.8
175°	845.3	845.3	845.3	845.3	843.6	841.3	840.2	842.6	847.4	851.1	851.1
177.5°	845.3	845.3	845.3	845.3	844.1	842.3	841.4	843.3	847.1	849.9	849.3
180°	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	478.7	478.7
2.5°	511.0	507.9
5°	657.2	660.3
7.5°	885.1	883.5
10°	1100.5	1114.4
12.5°	1257.5	1260.6
15°	1353.0	1359.1
17.5°	1389.9	1391.5
20°	1391.5	1388.4
22.5°	1374.5	1371.5
25°	1354.4	1353.0
27.5°	1336.0	1337.5
30°	1328.3	1333.0
32.5°	1328.3	1336.0
35°	1331.4	1339.1
37.5°	1329.9	1339.1
40°	1323.7	1334.4
42.5°	1306.8	1314.4
45°	1280.6	1289.9
47.5°	1246.7	1252.9
50°	1203.6	1209.8
52.5°	1149.8	1151.3
55°	1085.1	1091.3
57.5°	1015.9	1017.4
60°	938.9	943.6
62.5°	857.3	857.3
65°	771.1	774.2
67.5°	681.9	689.6
70°	591.1	592.6
72.5°	501.8	501.8
75°	409.4	411.0
77.5°	321.6	321.6
80°	238.6	240.1
82.5°	164.7	167.7
85°	103.2	103.2
87.5°	47.8	43.1
90°	21.6	21.6
92.5°	86.3	69.2
95°	301.0	249.1
97.5°	721.3	622.4
100°	1039.2	921.4
102.5°	1351.9	1251.0
105°	1750.6	1696.4
107.5°	2011.8	2024.9
110°	2111.4	2167.8





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2120.3	2207.0
115°	2064.1	2184.3
117.5°	1944.8	2078.2
120°	1848.7	1978.4
122.5°	1755.2	1883.0
125°	1621.7	1739.5
127.5°	1501.7	1601.1
130°	1430.9	1522.7
132.5°	1366.7	1449.0
135°	1278.9	1349.7
137.5°	1208.4	1266.3
140°	1159.9	1214.1
142.5°	1119.9	1166.4
145°	1059.7	1095.0
147.5°	1013.5	1042.8
150°	984.5	1008.2
152.5°	959.7	977.5
155°	931.1	942.9
157.5°	908.5	916.8
160°	895.0	899.8
162.5°	886.2	890.7
165°	873.4	878.3
167.5°	864.3	866.3
170°	861.8	861.8
172.5°	855.1	853.3
175°	851.1	851.1
177.5°	847.3	845.3
180°	845.3	845.3



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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	5.22	6.03	6.25	7.07	8.47	18.36	19.17	19.39	20.21	21.61
	3H	5.92	6.65	6.96	7.70	9.12	20.18	20.91	21.22	21.96	23.37
	4H	6.22	6.91	7.27	7.96	9.39	20.81	21.50	21.86	22.55	23.98
	6H	6.47	7.10	7.53	8.16	9.60	21.23	21.86	22.29	22.92	24.36
	8H	6.53	7.14	7.60	8.21	9.65	21.34	21.95	22.40	23.02	24.45
	12H	6.55	7.13	7.62	8.19	9.65	21.40	21.97	22.47	23.04	24.50
4H	2H	12.40	13.09	13.46	14.15	15.57	18.63	19.32	19.69	20.37	21.80
	3H	13.97	14.55	15.03	15.63	17.07	20.65	21.23	21.72	22.31	23.75
	4H	14.06	14.59	15.13	15.66	17.12	21.41	21.94	22.48	23.01	24.47
	6H	14.07	14.53	15.15	15.62	17.07	21.93	22.39	23.01	23.48	24.94
	8H	14.05	14.47	15.13	15.56	17.03	22.09	22.51	23.17	23.60	25.07
	12H	14.00	14.39	15.10	15.49	16.96	22.17	22.55	23.27	23.65	25.13
8H	4H	15.49	15.92	16.57	17.00	18.48	21.47	21.89	22.55	22.98	24.45
	6H	15.73	16.08	16.84	17.21	18.68	22.08	22.43	23.18	23.56	25.03
	8H	15.75	16.06	16.86	17.17	18.66	22.29	22.60	23.40	23.71	25.20
	12H	15.72	15.99	16.83	17.09	18.62	22.42	22.70	23.54	23.80	25.33
12H	4H	15.63	16.02	16.73	17.12	18.59	21.42	21.80	22.51	22.90	24.38
	6H	15.99	16.30	17.10	17.41	18.89	22.06	22.37	23.17	23.48	24.97
	8H	16.05	16.33	17.17	17.43	18.96	22.28	22.55	23.40	23.66	25.19