

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: P936394

Luminaire Tested: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

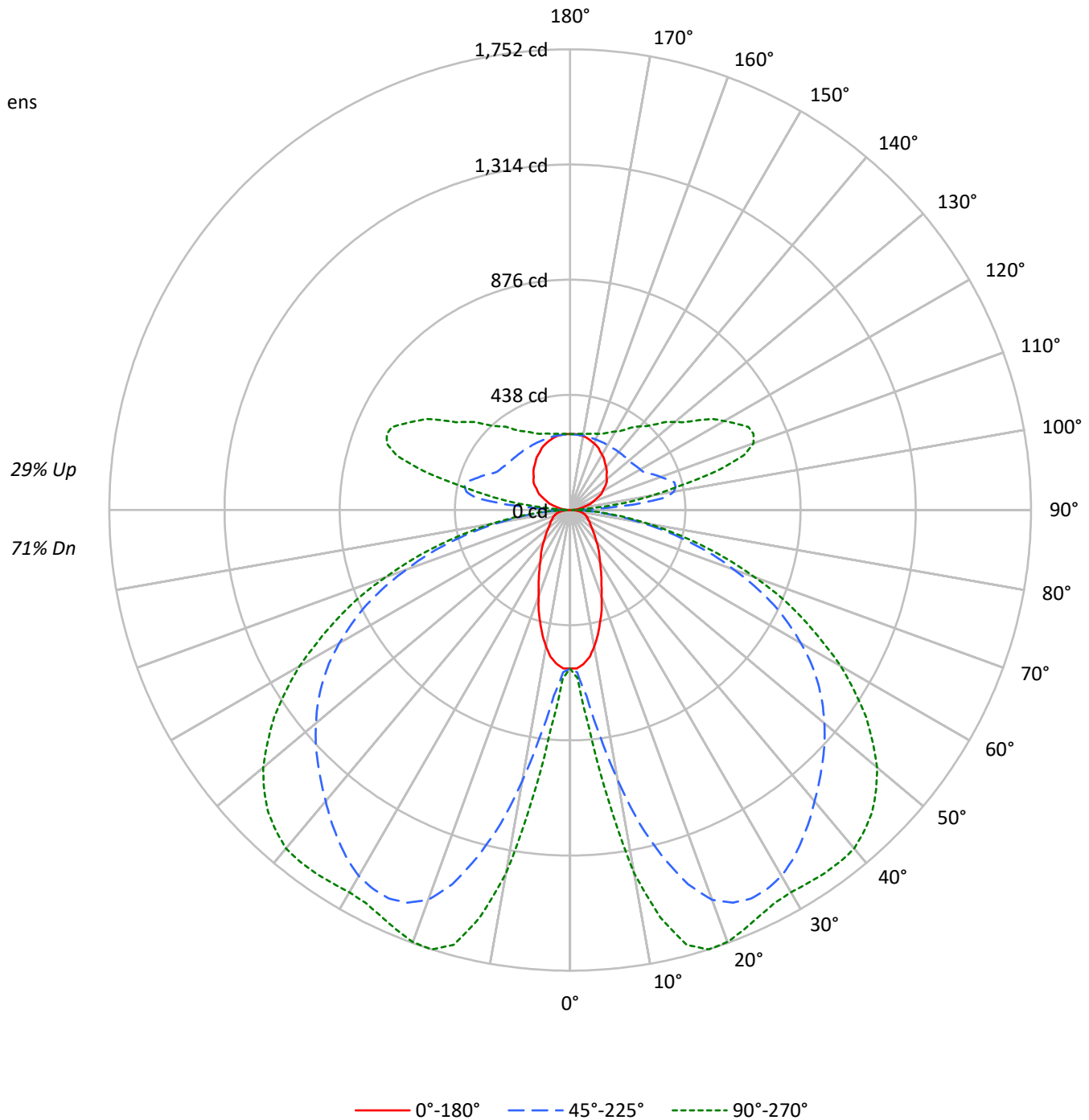
Test Method: LM-79-2019  
Report Number: P936394  
REPORT IS A COMBINATION OF REPORTS P933454 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6538.8 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 60  
Input Voltage (V): NR  
Input Current (Ain): 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

TEST NUMBER: P936394  
CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P936394

CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

**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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	58
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	48
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	39
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	33
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	24
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	21
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	16
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	14

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

	0°	45°	90°
0°	2796	2796	2796
5°	2732	3232	3759
10°	2478	4711	6232
15°	2106	6156	7525
20°	1714	7133	7669
25°	1430	7465	7513
30°	1206	7512	7499
35°	1066	7387	7693
40°	929	7225	7893
45°	841	7106	7924
50°	772	6999	7793
55°	739	6843	7447
60°	757	6542	6902
65°	787	6086	6152
70°	839	5307	5197
75°	930	4327	4056
80°	1015	3001	2733
85°	904	1592	1398

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7924 cd/sqm



TEST NUMBER: P936394

CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.0	1.2
10°-20°	345.6	5.3
20°-30°	604.4	9.2
30°-40°	778.1	11.9
40°-50°	869.1	13.3
50°-60°	832.4	12.7
60°-70°	659.6	10.1
70°-80°	387.9	5.9
80°-90°	108.9	1.7
90°-100°	141.0	2.2
100°-110°	370.6	5.7
110°-120°	384.3	5.9
120°-130°	308.3	4.7
130°-140°	241.9	3.7
140°-150°	185.7	2.8
150°-160°	133.7	2.0
160°-170°	81.8	1.3
170°-180°	27.6	0.4
0°-30°	1028.0	15.7
0°-40°	1806.0	27.6
0°-60°	3507.5	53.6
0°-90°	4663.9	71.3
90°-120°	895.9	13.7
90°-150°	1631.8	25.0
90°-180°	1875.0	28.7
0°-180°	6538.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	603	603	603	603	603	
5°	587	630	709	802	831	54
15°	440	812	1368	1659	1711	122
25°	281	921	1630	1702	1704	129
35°	190	880	1535	1622	1686	119
45°	130	702	1357	1554	1624	100
55°	93	446	1151	1337	1374	85
65°	74	236	855	961	975	73
75°	54	145	469	516	517	57
85°	19	45	116	128	130	21
90°	2	5	15	7	7	3
95°	19	73	243	125	85	21
105°	67	101	410	622	580	71
115°	119	144	328	655	747	117
125°	165	185	298	504	595	146
135°	197	216	289	407	462	152
145°	228	243	286	348	375	143
155°	258	265	286	314	323	118
165°	278	282	286	297	300	79
175°	289	289	288	291	291	27
180°	289	289	289	289	289	



TEST NUMBER: P936394

CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7
2.5°	602.7	602.7	606.6	608.5	612.4	614.3	618.2	622.1	633.7	635.7	639.5
5°	587.2	595.0	620.2	629.8	657.0	693.8	709.3	734.5	786.8	802.3	812.0
7.5°	564.0	581.4	643.4	658.9	726.8	823.6	864.3	918.6	1001.9	1042.6	1075.6
10°	527.1	564.0	674.4	711.2	821.7	969.0	1044.6	1120.3	1246.2	1302.4	1323.8
12.5°	486.4	546.5	707.4	757.8	916.7	1131.9	1223.0	1306.3	1449.7	1525.3	1536.9
15°	439.9	521.3	738.4	812.0	1017.4	1267.5	1368.3	1471.0	1604.8	1659.0	1672.6
17.5°	399.2	501.9	767.4	845.0	1095.0	1389.6	1492.4	1577.6	1686.2	1723.0	1732.7
20°	348.8	470.9	786.8	887.6	1176.5	1478.8	1577.6	1643.5	1717.2	1740.4	1744.3
22.5°	312.0	438.0	798.5	903.1	1230.7	1533.1	1616.4	1668.7	1719.1	1726.9	1728.8
25°	281.0	401.2	796.5	920.6	1277.2	1566.0	1630.0	1668.7	1697.8	1701.7	1701.7
27.5°	251.9	360.5	788.8	924.4	1312.1	1573.8	1624.1	1651.3	1664.8	1672.6	1672.6
30°	226.7	321.7	769.4	916.7	1327.6	1566.0	1606.7	1620.3	1633.8	1645.5	1651.3
32.5°	207.4	284.9	740.3	901.2	1329.6	1546.6	1575.7	1583.4	1602.8	1630.0	1639.6
35°	189.9	248.1	707.4	879.9	1317.9	1515.6	1535.0	1542.7	1581.5	1622.2	1635.8
37.5°	172.5	220.9	664.7	843.0	1300.5	1478.8	1492.4	1505.9	1566.0	1614.5	1630.0
40°	155.0	197.7	614.3	802.3	1273.4	1434.2	1445.8	1467.2	1546.6	1602.8	1618.3
42.5°	141.5	178.3	560.1	759.7	1238.5	1383.8	1401.3	1432.3	1523.4	1583.4	1600.9
45°	129.8	158.9	501.9	701.6	1193.9	1331.5	1356.7	1399.3	1496.2	1554.4	1569.9
47.5°	118.2	145.4	441.9	641.5	1145.5	1279.2	1312.1	1360.6	1459.4	1515.6	1529.2
50°	108.5	131.8	381.8	577.5	1093.0	1223.0	1261.7	1312.1	1412.9	1465.2	1482.7
52.5°	100.8	120.2	325.6	513.6	1033.0	1164.8	1209.4	1261.7	1356.7	1407.1	1418.7
55°	93.0	110.5	277.1	445.7	970.9	1102.8	1151.3	1201.7	1294.7	1337.3	1345.1
57.5°	89.1	102.7	236.4	381.8	905.0	1033.0	1087.2	1133.8	1221.0	1254.0	1261.7
60°	83.3	96.9	205.4	327.5	833.3	967.1	1013.6	1060.1	1133.8	1161.0	1166.8
62.5°	77.5	93.0	182.2	275.2	759.7	889.5	936.1	978.7	1040.7	1060.1	1067.8
65°	73.6	89.1	164.7	236.4	684.1	808.1	854.7	891.5	941.9	961.2	965.1
67.5°	69.8	85.3	151.2	203.5	608.5	726.8	761.6	796.5	835.3	854.7	856.6
70°	64.0	81.4	139.5	180.2	531.0	633.7	662.8	699.6	730.6	740.3	746.1
72.5°	60.1	75.6	131.8	162.8	451.6	544.6	571.7	593.0	620.2	629.8	629.8
75°	54.3	67.8	124.0	145.4	370.2	445.7	469.0	490.3	511.6	515.5	509.7
77.5°	48.4	60.1	106.6	122.1	288.8	352.7	372.1	383.7	401.2	405.0	407.0
80°	40.7	52.3	83.3	95.0	209.3	259.7	273.3	282.9	298.5	298.5	302.3
82.5°	31.0	40.7	60.1	67.8	141.5	178.3	189.9	195.7	205.4	205.4	205.4
85°	19.4	25.2	38.8	44.6	85.3	108.5	116.3	118.2	126.0	127.9	127.9
87.5°	9.7	13.6	25.2	27.1	44.6	56.2	56.2	60.1	60.1	58.1	56.2
90°	1.9	3.5	5.0	5.4	8.5	12.7	14.7	13.1	9.8	7.4	7.4
92.5°	7.8	20.9	34.2	37.5	52.7	73.0	83.0	72.8	52.3	36.9	35.5
95°	18.6	42.7	67.0	73.0	129.6	205.0	242.8	216.7	164.4	125.2	120.7
97.5°	32.3	53.6	74.8	80.1	174.5	300.4	363.4	346.9	313.9	289.1	280.6
100°	42.7	62.0	81.3	86.1	190.9	330.5	400.4	401.7	404.1	405.9	395.8
102.5°	51.6	69.7	87.7	92.2	198.5	340.1	411.0	432.0	474.0	505.6	497.0
105°	66.8	82.1	97.4	101.2	204.1	341.2	409.8	457.0	551.4	622.1	617.4
107.5°	82.3	96.5	110.8	114.3	205.0	326.0	386.4	452.2	583.9	682.7	683.8
110°	92.8	105.6	118.5	121.7	203.5	312.5	367.1	440.6	587.8	698.2	703.0



TEST NUMBER: P936394

CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	103.1	115.3	127.5	130.6	203.6	300.8	349.4	424.7	575.3	688.3	695.7
115°	118.6	129.8	141.2	144.0	205.4	287.3	328.2	400.8	545.9	654.8	665.0
117.5°	133.9	144.2	154.5	157.1	209.3	278.9	313.7	379.2	510.1	608.3	619.8
120°	142.8	152.5	162.2	164.6	212.4	276.1	307.9	367.6	487.3	577.0	588.1
122.5°	151.6	161.3	171.1	173.5	216.9	274.5	303.4	357.3	465.0	545.8	556.8
125°	165.0	173.9	182.8	185.0	222.9	273.4	298.5	344.3	435.9	504.5	514.5
127.5°	175.9	184.8	193.8	196.0	228.9	272.6	294.5	333.8	412.4	471.3	479.8
130°	181.7	191.4	201.0	203.4	233.2	273.1	292.9	327.9	397.9	450.3	458.1
132.5°	187.7	197.4	207.0	209.4	236.8	273.4	291.6	322.9	385.5	432.5	439.5
135°	196.6	205.4	214.2	216.5	240.7	273.1	289.2	315.5	367.9	407.3	413.3
137.5°	205.7	214.4	223.2	225.4	246.5	274.7	288.9	311.0	355.3	388.6	393.5
140°	213.3	221.3	229.4	231.4	250.1	275.0	287.5	306.7	345.0	373.6	378.3
142.5°	219.2	226.6	234.0	235.9	253.1	276.1	287.5	304.4	338.0	363.2	367.2
145°	228.1	234.6	241.0	242.6	257.0	276.1	285.6	299.3	326.8	347.5	350.5
147.5°	237.0	243.3	249.6	251.2	262.6	277.9	285.6	296.4	318.0	334.2	336.7
150°	242.8	248.5	254.2	255.6	265.6	278.9	285.6	294.7	313.0	326.6	328.7
152.5°	248.8	253.1	257.5	258.5	267.5	279.6	285.6	293.3	308.9	320.6	322.2
155°	257.8	261.0	264.1	264.9	271.8	281.0	285.6	291.8	304.2	313.5	314.4
157.5°	264.3	267.4	270.5	271.3	276.1	282.4	285.6	290.4	300.0	307.3	307.9
160°	268.8	271.2	273.6	274.2	278.0	283.0	285.6	289.7	298.0	304.2	304.6
162.5°	273.3	275.1	276.8	277.3	280.0	283.7	285.6	289.1	296.0	301.3	301.6
165°	278.2	279.8	281.5	281.9	283.1	284.8	285.6	288.1	293.0	296.8	297.2
167.5°	282.7	283.4	284.2	284.4	285.5	286.8	287.5	289.1	292.4	294.9	295.1
170°	285.6	286.3	287.1	287.3	287.4	287.5	287.5	289.1	292.4	294.9	294.9
172.5°	287.1	287.3	287.5	287.5	287.5	287.5	287.5	288.8	291.4	293.3	293.1
175°	289.2	289.2	289.2	289.2	288.7	287.9	287.5	288.3	289.9	291.2	291.2
177.5°	289.2	289.2	289.2	289.2	288.8	288.2	287.9	288.6	289.8	290.8	290.6
180°	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2



TEST NUMBER: P936394

CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	602.7	602.7
2.5°	643.4	639.5
5°	827.5	831.4
7.5°	1114.4	1112.5
10°	1385.8	1403.2
12.5°	1583.4	1587.3
15°	1703.6	1711.4
17.5°	1750.1	1752.0
20°	1752.0	1748.2
22.5°	1730.7	1726.9
25°	1705.5	1703.6
27.5°	1682.3	1684.2
30°	1672.6	1678.4
32.5°	1672.6	1682.3
35°	1676.5	1686.2
37.5°	1674.5	1686.2
40°	1666.8	1680.3
42.5°	1645.5	1655.1
45°	1612.5	1624.1
47.5°	1569.9	1577.6
50°	1515.6	1523.4
52.5°	1447.8	1449.7
55°	1366.4	1374.1
57.5°	1279.2	1281.1
60°	1182.3	1188.1
62.5°	1079.5	1079.5
65°	970.9	974.8
67.5°	858.5	868.2
70°	744.2	746.1
72.5°	631.8	631.8
75°	515.5	517.4
77.5°	405.0	405.0
80°	300.4	302.3
82.5°	207.4	211.2
85°	129.8	129.8
87.5°	60.1	54.3
90°	7.4	7.4
92.5°	29.6	23.6
95°	103.0	85.2
97.5°	246.7	212.9
100°	355.5	315.2
102.5°	462.5	428.0
105°	598.9	580.3
107.5°	688.3	692.7
110°	722.3	741.7





TEST NUMBER: P936394  
CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	725.4	755.0
115°	706.2	747.3
117.5°	665.4	711.1
120°	632.5	676.8
122.5°	600.5	644.2
125°	554.8	595.2
127.5°	513.8	547.8
130°	489.5	520.9
132.5°	467.6	495.7
135°	437.5	461.7
137.5°	413.4	433.2
140°	396.8	415.4
142.5°	383.1	399.0
145°	362.6	374.6
147.5°	346.7	356.8
150°	336.8	345.0
152.5°	328.3	334.4
155°	318.5	322.6
157.5°	310.9	313.7
160°	306.2	307.9
162.5°	303.2	304.8
165°	298.8	300.5
167.5°	295.7	296.4
170°	294.9	294.9
172.5°	292.5	292.0
175°	291.2	291.2
177.5°	289.9	289.2
180°	289.2	289.2



TEST NUMBER: P936394  
 CATALOG NUMBER: SQ4-FB-025U-075D-B2750-1D-UNV-STD-W-8-3500K

**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	6.32	7.47	7.06	8.24	9.17	19.50	20.65	20.24	21.42	22.35
	3H	7.04	8.09	7.80	8.86	9.82	21.36	22.40	22.11	23.18	24.13
	4H	7.36	8.34	8.13	9.13	10.10	22.02	23.00	22.79	23.79	24.76
	6H	7.62	8.53	8.41	9.33	10.31	22.46	23.37	23.25	24.17	25.15
	8H	7.70	8.57	8.49	9.38	10.37	22.59	23.46	23.39	24.28	25.26
	12H	7.73	8.56	8.53	9.37	10.38	22.67	23.50	23.47	24.31	25.32
4H	2H	13.57	14.55	14.34	15.34	16.31	19.81	20.79	20.58	21.58	22.55
	3H	15.16	15.99	15.95	16.81	17.80	21.88	22.70	22.67	23.53	24.51
	4H	15.27	16.02	16.07	16.85	17.86	22.66	23.41	23.46	24.23	25.25
	6H	15.30	15.95	16.12	16.80	17.82	23.21	23.87	24.03	24.72	25.73
	8H	15.28	15.90	16.11	16.74	17.77	23.38	24.00	24.21	24.84	25.87
	12H	15.25	15.81	16.10	16.67	17.71	23.49	24.05	24.34	24.91	25.95
8H	4H	16.74	17.35	17.56	18.19	19.23	22.74	23.36	23.57	24.20	25.23
	6H	17.00	17.51	17.85	18.39	19.42	23.39	23.90	24.24	24.78	25.81
	8H	17.02	17.47	17.88	18.35	19.40	23.61	24.06	24.47	24.94	25.99
	12H	17.00	17.40	17.87	18.27	19.37	23.77	24.17	24.64	25.04	26.14
12H	4H	16.90	17.45	17.74	18.31	19.35	22.71	23.26	23.56	24.13	25.16
	6H	17.26	17.71	18.12	18.59	19.64	23.37	23.83	24.24	24.71	25.75
	8H	17.34	17.74	18.21	18.61	19.72	23.62	24.02	24.49	24.89	25.99