

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: P936965

Luminaire Tested: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936965
REPORT IS A COMBINATION OF REPORTS P933488 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

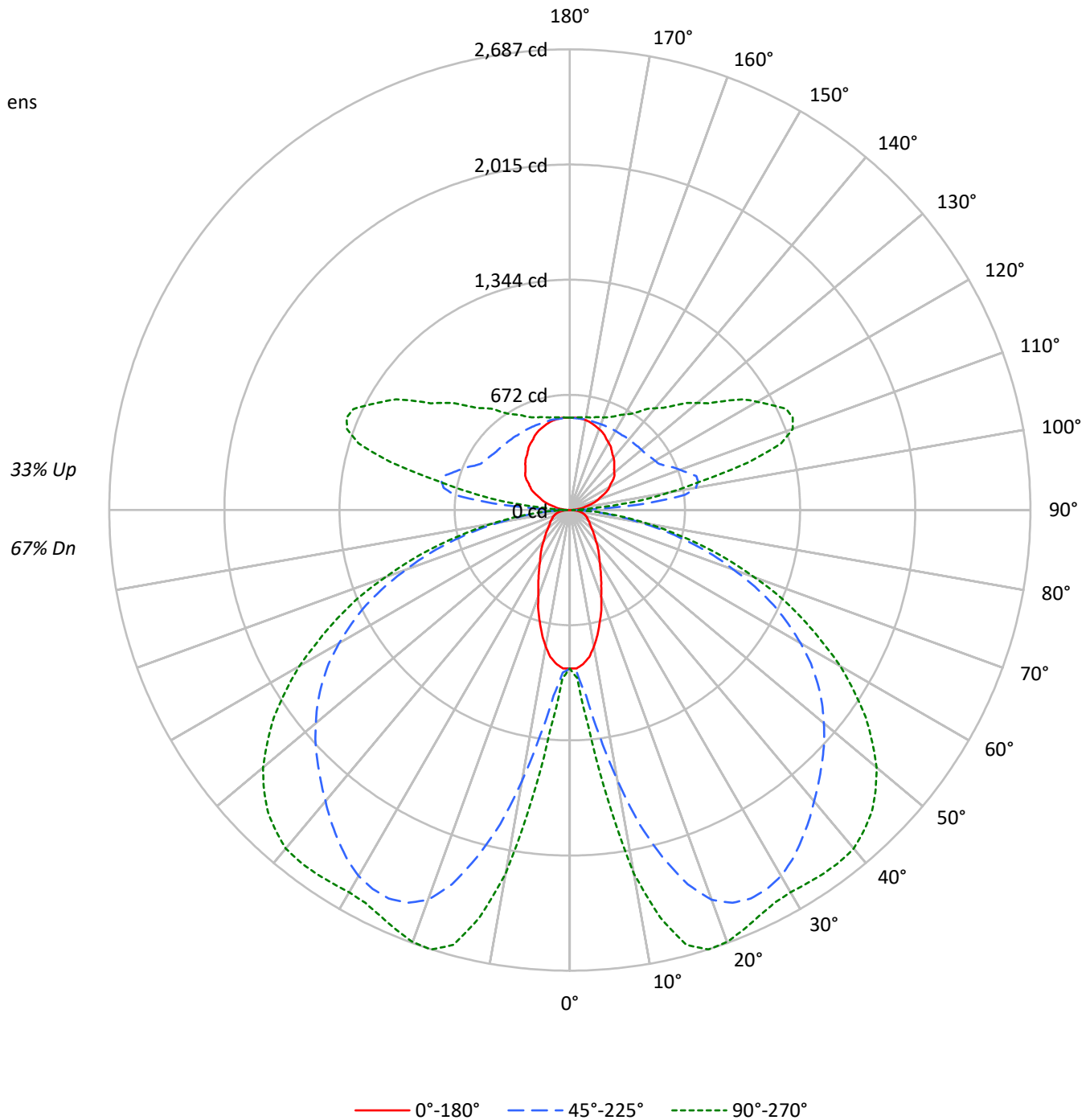
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10651.2 lumens
Efficiency: N/A
Efficacy: 95.1 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): 112
Input Voltage (V): NR
Input Current (A_{in}): 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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4289	4289	4289
5°	4190	4958	5766
10°	3801	7227	9559
15°	3230	9441	11542
20°	2630	10941	11763
25°	2194	11450	11524
30°	1850	11521	11502
35°	1636	11331	11799
40°	1425	11082	12107
45°	1291	10900	12154
50°	1183	10736	11953
55°	1134	10496	11423
60°	1161	10035	10587
65°	1207	9335	9437
70°	1287	8140	7972
75°	1427	6637	6221
80°	1557	4603	4192
85°	1383	2443	2146

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12154 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	1.1
10°-20°	530.0	5.0
20°-30°	927.1	8.7
30°-40°	1193.4	11.2
40°-50°	1333.0	12.5
50°-60°	1276.7	12.0
60°-70°	1011.8	9.5
70°-80°	595.0	5.6
80°-90°	167.3	1.6
90°-100°	263.0	2.5
100°-110°	691.3	6.5
110°-120°	716.8	6.7
120°-130°	575.0	5.4
130°-140°	451.2	4.2
140°-150°	346.3	3.3
150°-160°	249.4	2.3
160°-170°	152.6	1.4
170°-180°	51.6	0.5
0°-30°	1576.7	14.8
0°-40°	2770.2	26.0
0°-60°	5379.9	50.5
0°-90°	7154.0	67.2
90°-120°	1671.1	15.7
90°-150°	3043.6	28.6
90°-180°	3497.0	32.8
0°-180°	10651.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	901	966	1088	1231	1275	83
15°	675	1246	2099	2545	2625	188
25°	431	1412	2500	2610	2613	199
35°	291	1350	2354	2488	2586	182
45°	199	1076	2081	2384	2491	154
55°	143	684	1766	2051	2108	130
65°	113	363	1311	1474	1495	112
75°	83	223	719	791	794	87
85°	30	68	178	196	199	32
90°	4	10	28	14	14	5
95°	35	136	453	234	159	39
105°	124	189	764	1160	1082	132
115°	221	269	612	1221	1394	218
125°	308	345	557	941	1110	273
135°	367	404	540	760	861	284
145°	425	453	533	648	699	267
155°	481	494	533	585	602	221
165°	519	526	533	554	560	146
175°	540	540	536	543	543	51
180°	540	540	540	540	540	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5
2.5°	924.5	924.5	930.5	933.5	939.3	942.3	948.3	954.3	972.1	975.1	981.0
5°	900.7	912.6	951.3	966.1	1007.8	1064.2	1088.0	1126.7	1206.9	1230.7	1245.5
7.5°	865.0	891.8	986.9	1010.7	1114.7	1263.4	1325.8	1409.1	1536.9	1599.3	1649.9
10°	808.6	865.0	1034.5	1090.9	1260.4	1486.3	1602.3	1718.2	1911.4	1997.7	2030.4
12.5°	746.1	838.3	1085.1	1162.3	1406.1	1736.0	1875.8	2003.6	2223.6	2339.5	2357.4
15°	674.8	799.7	1132.6	1245.5	1560.7	1944.1	2098.7	2256.3	2461.4	2544.6	2565.4
17.5°	612.4	769.9	1177.2	1296.1	1679.6	2131.5	2288.9	2419.8	2586.2	2642.7	2657.6
20°	535.1	722.4	1206.9	1361.5	1804.5	2268.2	2419.8	2520.8	2633.8	2669.5	2675.4
22.5°	478.6	671.8	1224.8	1385.3	1887.6	2351.4	2479.3	2559.5	2636.7	2648.7	2651.7
25°	431.1	615.3	1221.8	1412.0	1959.1	2402.0	2500.1	2559.5	2604.1	2610.0	2610.0
27.5°	386.5	552.9	1209.9	1418.0	2012.5	2413.8	2491.1	2532.8	2553.6	2565.4	2565.4
30°	347.8	493.4	1180.2	1406.1	2036.3	2402.0	2464.3	2485.2	2506.0	2523.8	2532.8
32.5°	318.1	437.0	1135.6	1382.3	2039.2	2372.2	2416.8	2428.7	2458.5	2500.1	2514.9
35°	291.3	380.5	1085.1	1349.6	2021.4	2324.7	2354.4	2366.2	2425.7	2488.1	2509.0
37.5°	264.5	338.8	1019.6	1293.1	1994.7	2268.2	2288.9	2309.8	2402.0	2476.3	2500.1
40°	237.8	303.2	942.3	1230.7	1953.1	2199.8	2217.6	2250.3	2372.2	2458.5	2482.2
42.5°	217.0	273.5	859.2	1165.3	1899.6	2122.5	2149.3	2196.8	2336.5	2428.7	2455.5
45°	199.2	243.7	769.9	1076.1	1831.2	2042.2	2080.9	2146.3	2294.9	2384.1	2407.9
47.5°	181.4	222.9	677.8	984.0	1756.9	1961.9	2012.5	2086.8	2238.4	2324.7	2345.5
50°	166.4	202.2	585.7	885.9	1676.6	1875.8	1935.2	2012.5	2167.1	2247.4	2274.1
52.5°	154.6	184.3	499.4	787.7	1584.5	1786.6	1855.0	1935.2	2080.9	2158.2	2176.0
55°	142.7	169.4	425.1	683.8	1489.3	1691.4	1765.8	1843.1	1985.8	2051.2	2063.0
57.5°	136.8	157.6	362.7	585.7	1388.2	1584.5	1667.7	1739.0	1872.8	1923.3	1935.2
60°	127.8	148.6	315.1	502.4	1278.3	1483.4	1554.7	1626.1	1739.0	1780.7	1789.5
62.5°	118.9	142.7	279.5	422.1	1165.3	1364.4	1435.8	1501.2	1596.3	1626.1	1637.9
65°	112.9	136.8	252.7	362.7	1049.4	1239.6	1311.0	1367.4	1444.7	1474.5	1480.4
67.5°	107.0	130.8	231.9	312.1	933.5	1114.7	1168.2	1221.8	1281.3	1311.0	1313.9
70°	98.1	124.9	214.0	276.5	814.5	972.1	1016.6	1073.1	1120.7	1135.6	1144.5
72.5°	92.1	115.9	202.2	249.7	692.6	835.4	877.0	909.7	951.3	966.1	966.1
75°	83.3	104.1	190.2	222.9	567.8	683.8	719.4	752.1	784.8	790.7	781.9
77.5°	74.3	92.1	163.5	187.3	442.9	541.0	570.7	588.6	615.3	621.3	624.3
80°	62.4	80.3	127.8	145.6	321.0	398.3	419.1	434.1	457.8	457.8	463.7
82.5°	47.6	62.4	92.1	104.1	217.0	273.5	291.3	300.2	315.1	315.1	315.1
85°	29.7	38.6	59.5	68.3	130.8	166.4	178.4	181.4	193.2	196.2	196.2
87.5°	14.8	20.8	38.6	41.6	68.3	86.2	86.2	92.1	92.1	89.1	86.2
90°	3.6	6.5	9.4	10.1	15.9	23.6	27.5	24.4	18.4	13.8	13.8
92.5°	14.5	39.1	63.8	69.9	98.3	136.0	154.9	135.8	97.5	68.8	66.0
95°	34.8	79.8	124.9	136.1	241.7	382.5	452.9	404.2	306.7	233.5	225.3
97.5°	60.1	99.8	139.6	149.5	325.6	560.4	677.8	647.0	585.3	539.1	523.3
100°	79.7	115.7	151.7	160.7	356.2	616.7	746.9	749.2	753.7	757.0	738.2
102.5°	96.3	130.0	163.5	172.0	370.1	634.4	766.5	805.8	884.3	943.1	927.0
105°	124.5	153.0	181.5	188.7	380.6	636.4	764.3	852.3	1028.4	1160.4	1151.7
107.5°	153.5	180.1	206.6	213.3	382.4	608.0	720.8	843.6	1089.2	1273.4	1275.5
110°	173.0	197.0	221.1	227.0	379.6	582.9	684.6	821.9	1096.4	1302.3	1311.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	192.3	215.1	237.9	243.6	379.7	561.1	651.7	792.1	1073.1	1283.8	1297.7
115°	221.2	242.3	263.4	268.7	383.2	535.9	612.3	747.6	1018.2	1221.2	1240.3
117.5°	249.8	268.9	288.1	292.9	390.3	520.1	585.0	707.2	951.5	1134.7	1155.9
120°	266.5	284.5	302.6	307.1	396.1	514.9	574.2	685.8	909.0	1076.4	1097.0
122.5°	282.7	300.9	319.1	323.7	404.4	512.0	565.9	666.4	867.4	1018.1	1038.5
125°	307.8	324.3	340.9	345.0	415.6	509.8	556.8	642.2	813.0	941.0	959.8
127.5°	328.0	344.7	361.4	365.6	426.9	508.4	549.2	622.5	769.1	879.1	894.9
130°	338.8	356.9	374.9	379.4	435.0	509.2	546.3	611.6	742.1	839.9	854.6
132.5°	350.1	368.1	386.2	390.7	441.7	509.8	543.8	602.3	719.1	806.6	819.7
135°	366.8	383.2	399.5	403.7	448.9	509.2	539.5	588.4	686.2	759.6	770.9
137.5°	383.8	400.1	416.3	420.4	459.8	512.4	538.7	580.1	662.9	724.9	734.1
140°	397.9	412.9	427.8	431.6	466.5	512.9	536.2	571.9	643.4	696.9	705.5
142.5°	408.8	422.6	436.4	439.9	472.0	514.8	536.2	567.6	630.4	677.4	684.9
145°	425.4	437.5	449.6	452.6	479.3	514.9	532.6	558.2	609.6	648.1	653.7
147.5°	442.0	453.8	465.6	468.5	489.8	518.4	532.6	552.8	593.1	623.4	628.1
150°	452.9	463.6	474.2	476.8	495.4	520.2	532.6	549.6	583.8	609.4	613.1
152.5°	464.2	472.3	480.3	482.3	499.1	521.4	532.6	547.2	576.3	598.1	601.0
155°	480.8	486.8	492.7	494.2	507.0	524.1	532.6	544.2	567.3	584.7	586.6
157.5°	493.1	498.9	504.7	506.2	514.9	526.7	532.6	541.6	559.6	573.1	574.4
160°	501.4	506.0	510.5	511.6	518.6	527.9	532.6	540.3	555.7	567.3	568.1
162.5°	509.8	513.2	516.5	517.4	522.5	529.3	532.6	539.1	552.2	561.9	562.6
165°	518.8	521.9	524.9	525.7	527.9	531.0	532.6	537.3	546.6	553.6	554.4
167.5°	527.2	528.6	530.1	530.4	532.3	534.9	536.2	539.3	545.4	550.0	550.3
170°	532.6	534.0	535.5	535.9	535.9	536.1	536.2	539.3	545.4	550.0	550.0
172.5°	535.5	535.9	536.1	536.2	536.2	536.2	536.2	538.7	543.5	547.1	546.8
175°	539.5	539.5	539.5	539.5	538.4	536.9	536.2	537.7	540.8	543.1	543.1
177.5°	539.5	539.5	539.5	539.5	538.6	537.4	536.9	538.1	540.5	542.4	542.0
180°	539.5	539.5	539.5	539.5	539.5	539.5	539.5	539.5	539.5	539.5	539.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	924.5	924.5
2.5°	986.9	981.0
5°	1269.3	1275.3
7.5°	1709.3	1706.4
10°	2125.5	2152.3
12.5°	2428.7	2434.7
15°	2613.0	2624.9
17.5°	2684.4	2687.3
20°	2687.3	2681.4
22.5°	2654.7	2648.7
25°	2616.0	2613.0
27.5°	2580.3	2583.3
30°	2565.4	2574.4
32.5°	2565.4	2580.3
35°	2571.4	2586.2
37.5°	2568.4	2586.2
40°	2556.6	2577.4
42.5°	2523.8	2538.7
45°	2473.3	2491.1
47.5°	2407.9	2419.8
50°	2324.7	2336.5
52.5°	2220.6	2223.6
55°	2095.7	2107.7
57.5°	1961.9	1964.9
60°	1813.3	1822.3
62.5°	1655.8	1655.8
65°	1489.3	1495.3
67.5°	1316.9	1331.8
70°	1141.5	1144.5
72.5°	969.1	969.1
75°	790.7	793.7
77.5°	621.3	621.3
80°	460.8	463.7
82.5°	318.1	324.0
85°	199.2	199.2
87.5°	92.1	83.3
90°	13.8	13.8
92.5°	55.1	44.2
95°	192.1	159.0
97.5°	460.2	397.2
100°	663.1	587.9
102.5°	862.7	798.3
105°	1117.1	1082.5
107.5°	1283.8	1292.2
110°	1347.3	1383.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1353.0	1408.4
115°	1317.1	1393.9
117.5°	1241.1	1326.2
120°	1179.7	1262.5
122.5°	1120.1	1201.7
125°	1034.9	1110.1
127.5°	958.3	1021.7
130°	913.2	971.8
132.5°	872.2	924.7
135°	816.1	861.3
137.5°	771.1	808.1
140°	740.1	774.7
142.5°	714.6	744.4
145°	676.3	698.8
147.5°	646.8	665.5
150°	628.2	643.4
152.5°	612.4	623.9
155°	594.2	601.7
157.5°	579.8	585.0
160°	571.2	574.2
162.5°	565.5	568.4
165°	557.4	560.4
167.5°	551.6	552.9
170°	550.0	550.0
172.5°	545.7	544.5
175°	543.1	543.1
177.5°	540.8	539.5
180°	539.5	539.5



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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	7.49	8.59	8.28	9.40	10.40	20.67	21.77	21.46	22.58	23.58
	3H	8.21	9.20	9.01	10.03	11.06	22.53	23.52	23.32	24.34	25.37
	4H	8.52	9.46	9.34	10.29	11.33	23.18	24.12	24.00	24.95	25.99
	6H	8.79	9.65	9.62	10.49	11.54	23.63	24.49	24.45	25.33	26.38
	8H	8.86	9.69	9.70	10.55	11.60	23.75	24.58	24.59	25.44	26.49
	12H	8.89	9.67	9.73	10.53	11.61	23.83	24.62	24.67	25.47	26.55
4H	2H	14.73	15.67	15.55	16.50	17.54	20.97	21.91	21.79	22.74	23.78
	3H	16.32	17.11	17.16	17.97	19.03	23.04	23.82	23.87	24.69	25.75
	4H	16.43	17.14	17.27	18.01	19.09	23.82	24.53	24.66	25.40	26.48
	6H	16.45	17.08	17.32	17.96	19.05	24.37	24.99	25.23	25.88	26.96
	8H	16.44	17.02	17.30	17.90	19.00	24.54	25.12	25.40	26.00	27.10
	12H	16.41	16.93	17.29	17.83	18.94	24.64	25.17	25.53	26.07	27.18
8H	4H	17.89	18.48	18.76	19.36	20.46	23.90	24.48	24.76	25.36	26.46
	6H	18.15	18.63	19.04	19.55	20.65	24.54	25.02	25.43	25.94	27.04
	8H	18.17	18.60	19.07	19.51	20.63	24.76	25.19	25.66	26.11	27.22
	12H	18.15	18.53	19.06	19.44	20.60	24.92	25.30	25.83	26.21	27.37
12H	4H	18.05	18.57	18.94	19.48	20.58	23.86	24.39	24.75	25.29	26.39
	6H	18.41	18.84	19.31	19.76	20.87	24.52	24.95	25.43	25.87	26.99
	8H	18.49	18.87	19.40	19.78	20.95	24.77	25.14	25.67	26.05	27.22