

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: P936725

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936725
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

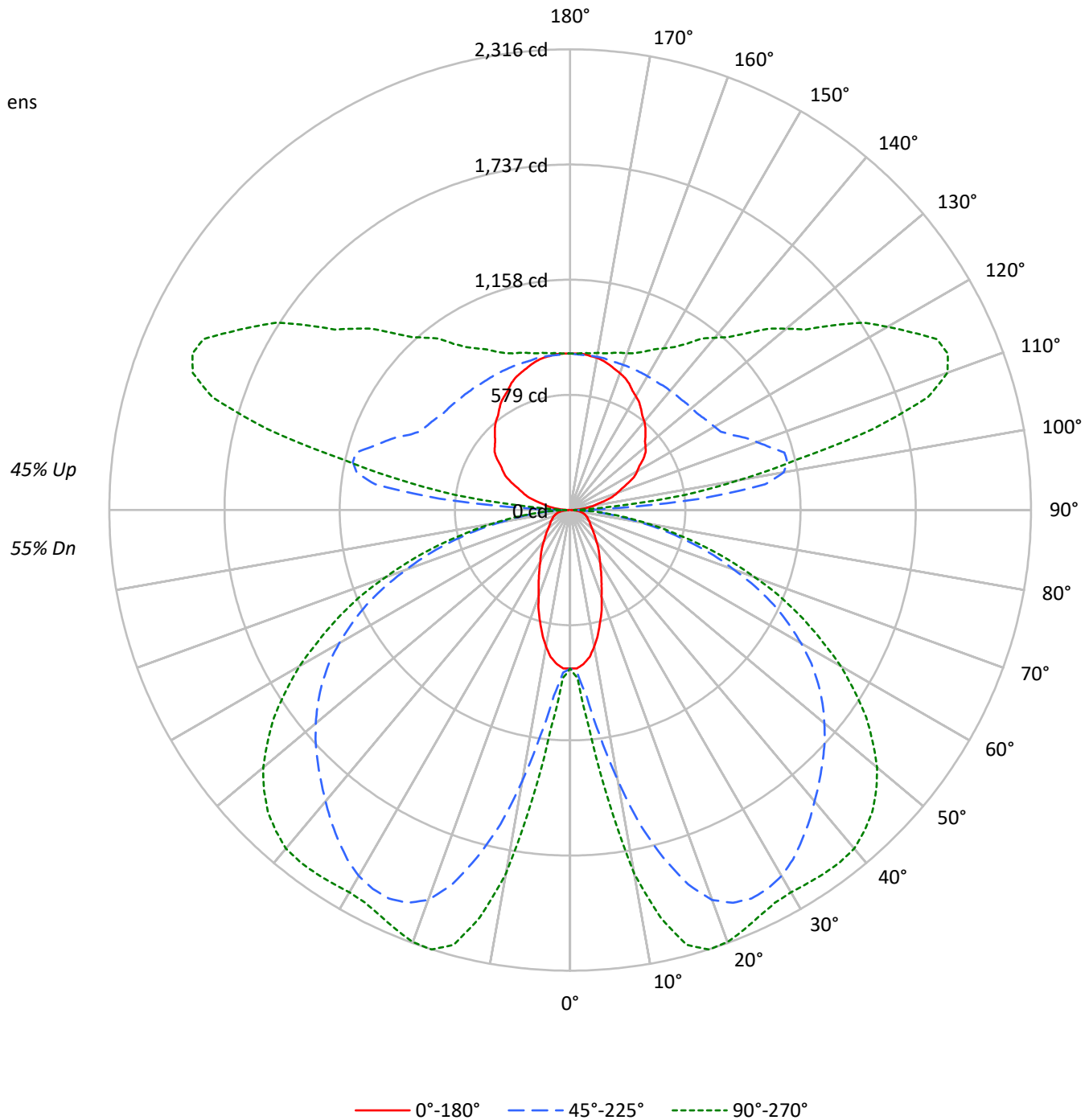
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11269.3 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 109.2
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: P936725
CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-12-2700K

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	0
RCR																		
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2465	2465	2465
5°	2409	2850	3313
10°	2186	4155	5493
15°	1859	5430	6633
20°	1513	6294	6760
25°	1263	6588	6622
30°	1066	6631	6610
35°	943	6523	6781
40°	822	6381	6958
45°	745	6279	6985
50°	684	6186	6869
55°	655	6050	6565
60°	672	5787	6084
65°	700	5386	5423
70°	748	4700	4582
75°	831	3836	3575
80°	915	2663	2409
85°	830	1415	1233

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6985 cd/sqm



TEST NUMBER: P936725

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-12-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	0.9
10°-20°	456.9	4.1
20°-30°	799.2	7.1
30°-40°	1028.8	9.1
40°-50°	1149.1	10.2
50°-60°	1100.6	9.8
60°-70°	872.2	7.7
70°-80°	512.8	4.6
80°-90°	145.5	1.3
90°-100°	383.6	3.4
100°-110°	1008.4	8.9
110°-120°	1045.6	9.3
120°-130°	838.7	7.4
130°-140°	658.1	5.8
140°-150°	505.1	4.5
150°-160°	363.8	3.2
160°-170°	222.6	2.0
170°-180°	75.2	0.7
0°-30°	1359.1	12.1
0°-40°	2387.9	21.2
0°-60°	4637.5	41.2
0°-90°	6168.1	54.7
90°-120°	2437.7	21.6
90°-150°	4439.6	39.4
90°-180°	5101.0	45.3
0°-180°	11269.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	776	833	938	1061	1099	72
15°	582	1074	1809	2194	2263	162
25°	372	1217	2155	2250	2252	171
35°	251	1163	2030	2145	2229	157
45°	172	928	1794	2055	2147	133
55°	123	589	1522	1768	1817	112
65°	97	313	1130	1271	1289	97
75°	72	192	620	682	684	75
85°	26	59	154	169	172	27
90°	5	15	40	20	20	6
95°	51	199	661	341	232	56
105°	182	275	1115	1693	1579	193
115°	323	392	893	1781	2033	319
125°	449	503	812	1373	1619	399
135°	535	589	787	1108	1256	414
145°	620	660	777	945	1019	389
155°	701	721	777	853	878	322
165°	757	767	777	808	818	214
175°	787	787	782	792	792	75
180°	787	787	787	787	787	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	796.9	796.9	802.0	804.6	809.7	812.3	817.4	822.5	837.9	840.5	845.6
5°	776.4	786.7	820.0	832.8	868.6	917.3	937.8	971.2	1040.4	1060.9	1073.7
7.5°	745.7	768.7	850.7	871.2	960.9	1089.1	1142.9	1214.7	1324.8	1378.6	1422.2
10°	697.0	745.7	891.7	940.4	1086.5	1281.3	1381.2	1481.1	1647.7	1722.0	1750.2
12.5°	643.2	722.6	935.3	1002.0	1212.1	1496.5	1616.9	1727.1	1916.7	2016.7	2032.1
15°	581.7	689.3	976.4	1073.7	1345.3	1675.9	1809.1	1944.9	2121.7	2193.5	2211.4
17.5°	527.9	663.7	1014.8	1117.3	1447.8	1837.3	1973.1	2085.9	2229.4	2278.0	2290.9
20°	461.2	622.7	1040.4	1173.7	1555.5	1955.2	2085.9	2173.0	2270.4	2301.1	2306.2
22.5°	412.5	579.1	1055.8	1194.2	1627.2	2026.9	2137.1	2206.3	2272.9	2283.2	2285.7
25°	371.5	530.4	1053.2	1217.2	1688.7	2070.5	2155.1	2206.3	2244.7	2249.9	2249.9
27.5°	333.1	476.6	1043.0	1222.3	1734.8	2080.7	2147.4	2183.2	2201.2	2211.4	2211.4
30°	299.8	425.4	1017.4	1212.1	1755.3	2070.5	2124.3	2142.2	2160.2	2175.5	2183.2
32.5°	274.2	376.7	978.9	1191.6	1757.9	2044.9	2083.3	2093.6	2119.2	2155.1	2167.9
35°	251.1	328.0	935.3	1163.4	1742.5	2003.9	2029.5	2039.7	2091.0	2144.8	2162.7
37.5°	228.1	292.1	878.9	1114.7	1719.4	1955.2	1973.1	1991.1	2070.5	2134.6	2155.1
40°	205.0	261.4	812.3	1060.9	1683.6	1896.2	1911.6	1939.8	2044.9	2119.2	2139.7
42.5°	187.1	235.7	740.5	1004.5	1637.4	1829.6	1852.7	1893.7	2014.1	2093.6	2116.6
45°	171.7	210.1	663.7	927.6	1578.5	1760.4	1793.8	1850.1	1978.2	2055.1	2075.6
47.5°	156.3	192.2	584.2	848.1	1514.5	1691.3	1734.8	1798.9	1929.6	2003.9	2021.8
50°	143.5	174.2	504.8	763.6	1445.3	1616.9	1668.2	1734.8	1868.1	1937.2	1960.3
52.5°	133.2	158.9	430.5	679.0	1365.8	1540.1	1599.0	1668.2	1793.8	1860.4	1875.8
55°	123.0	146.1	366.4	589.3	1283.8	1458.1	1522.1	1588.8	1711.8	1768.1	1778.4
57.5°	117.9	135.8	312.6	504.8	1196.7	1365.8	1437.6	1499.1	1614.4	1657.9	1668.2
60°	110.2	128.1	271.6	433.0	1101.9	1278.7	1340.2	1401.7	1499.1	1535.0	1542.6
62.5°	102.5	123.0	240.9	363.9	1004.5	1176.2	1237.7	1294.1	1376.1	1401.7	1412.0
65°	97.4	117.9	217.8	312.6	904.5	1068.6	1130.1	1178.8	1245.4	1271.0	1276.2
67.5°	92.2	112.7	199.9	269.1	804.6	960.9	1007.1	1053.2	1104.5	1130.1	1132.7
70°	84.6	107.6	184.5	238.3	702.1	837.9	876.3	925.0	966.0	978.9	986.6
72.5°	79.4	99.9	174.2	215.2	597.0	720.0	755.9	784.1	820.0	832.8	832.8
75°	71.7	89.7	164.0	192.2	489.4	589.3	620.1	648.3	676.5	681.6	673.9
77.5°	64.1	79.4	140.9	161.4	381.8	466.4	492.0	507.4	530.4	535.5	538.1
80°	53.8	69.2	110.2	125.6	276.7	343.4	361.3	374.1	394.6	394.6	399.7
82.5°	41.0	53.8	79.4	89.7	187.1	235.7	251.1	258.8	271.6	271.6	271.6
85°	25.6	33.3	51.2	58.9	112.7	143.5	153.7	156.3	166.6	169.1	169.1
87.5°	12.8	17.9	33.3	35.9	58.9	74.3	74.3	79.4	79.4	76.9	74.3
90°	5.3	9.5	13.8	14.8	23.2	34.5	40.1	35.7	26.7	20.1	20.1
92.5°	21.1	57.0	92.9	101.9	143.2	198.4	226.0	198.1	142.2	100.4	96.3
95°	50.7	116.4	182.2	198.6	352.6	558.0	660.7	589.5	447.3	340.6	328.5
97.5°	87.6	145.6	203.6	218.1	475.0	817.4	988.7	943.7	853.8	786.4	763.4
100°	116.2	168.8	221.3	234.5	519.5	899.5	1089.5	1092.8	1099.3	1104.3	1076.9
102.5°	140.5	189.5	238.6	250.9	539.9	925.4	1118.1	1175.3	1289.8	1375.7	1352.3
105°	181.7	223.2	264.7	275.1	555.0	928.3	1114.9	1243.3	1500.0	1692.6	1680.0
107.5°	224.0	262.6	301.4	311.1	557.9	887.0	1051.5	1230.6	1588.8	1857.5	1860.5
110°	252.5	287.4	322.4	331.1	553.6	850.4	998.7	1198.9	1599.4	1899.7	1912.8



TEST NUMBER: P936725

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-12-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	280.4	313.7	347.0	355.4	553.8	818.3	950.6	1155.5	1565.4	1872.8	1892.9
115°	322.7	353.4	384.2	391.9	558.9	781.7	893.1	1090.5	1485.2	1781.4	1809.4
117.5°	364.4	392.3	420.2	427.2	569.3	758.7	853.4	1031.6	1387.9	1655.1	1686.1
120°	388.7	415.0	441.2	447.8	577.7	751.0	837.6	1000.4	1325.9	1570.1	1600.3
122.5°	412.5	439.0	465.5	472.2	589.9	746.9	825.4	972.0	1265.2	1485.1	1514.8
125°	448.9	473.1	497.3	503.3	606.3	743.6	812.3	936.8	1185.8	1372.6	1400.0
127.5°	478.5	502.9	527.3	533.4	622.7	741.6	801.2	908.1	1121.9	1282.3	1305.4
130°	494.4	520.7	546.9	553.5	634.6	742.8	797.0	892.1	1082.5	1225.2	1246.6
132.5°	510.7	537.0	563.3	569.9	644.4	743.6	793.2	878.5	1048.9	1176.6	1195.8
135°	535.0	558.9	582.9	588.8	654.9	742.9	786.9	858.3	1001.0	1108.1	1124.5
137.5°	559.8	583.5	607.3	613.2	670.7	747.5	785.9	846.2	966.9	1057.3	1070.8
140°	580.4	602.2	624.0	629.5	680.4	748.2	782.1	834.2	938.5	1016.7	1029.3
142.5°	596.3	616.4	636.7	641.7	688.5	750.9	782.1	827.9	919.5	988.1	999.0
145°	620.5	638.1	655.7	660.2	699.1	750.9	776.9	814.3	889.2	945.3	953.5
147.5°	644.9	661.9	679.1	683.4	714.6	756.2	776.9	806.4	865.3	909.5	916.3
150°	660.7	676.1	691.7	695.5	722.7	758.8	776.9	801.8	851.5	888.8	894.4
152.5°	677.1	688.8	700.6	703.5	728.0	760.6	776.9	798.2	840.6	872.5	876.7
155°	701.3	710.0	718.7	720.9	739.6	764.4	776.9	793.8	827.6	852.9	855.7
157.5°	719.3	727.8	736.2	738.3	751.2	768.4	776.9	790.1	816.3	836.0	838.0
160°	731.5	738.1	744.6	746.3	756.5	770.1	776.9	788.2	810.7	827.6	828.7
162.5°	743.6	748.6	753.5	754.7	762.1	772.0	776.9	786.4	805.4	819.6	820.6
165°	756.8	761.3	765.7	766.8	770.2	774.7	776.9	783.7	797.3	807.5	808.6
167.5°	769.0	771.0	773.2	773.7	776.5	780.2	782.1	786.6	795.5	802.2	802.7
170°	776.9	779.0	781.1	781.6	781.8	782.0	782.1	786.6	795.5	802.2	802.2
172.5°	781.1	781.5	782.0	782.1	782.1	782.1	782.1	785.6	792.7	798.0	797.6
175°	786.9	786.9	786.9	786.9	785.3	783.1	782.1	784.3	788.9	792.2	792.2
177.5°	786.9	786.9	786.9	786.9	785.7	784.1	783.2	785.0	788.5	791.2	790.7
180°	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	796.9	796.9
2.5°	850.7	845.6
5°	1094.2	1099.3
7.5°	1473.5	1470.9
10°	1832.2	1855.3
12.5°	2093.6	2098.7
15°	2252.4	2262.7
17.5°	2313.9	2316.5
20°	2316.5	2311.4
22.5°	2288.3	2283.2
25°	2255.0	2252.4
27.5°	2224.2	2226.8
30°	2211.4	2219.1
32.5°	2211.4	2224.2
35°	2216.5	2229.4
37.5°	2214.0	2229.4
40°	2203.7	2221.7
42.5°	2175.5	2188.4
45°	2132.0	2147.4
47.5°	2075.6	2085.9
50°	2003.9	2014.1
52.5°	1914.2	1916.7
55°	1806.6	1816.8
57.5°	1691.3	1693.8
60°	1563.1	1570.8
62.5°	1427.3	1427.3
65°	1283.8	1289.0
67.5°	1135.2	1148.0
70°	984.0	986.6
72.5°	835.3	835.3
75°	681.6	684.2
77.5°	535.5	535.5
80°	397.2	399.7
82.5°	274.2	279.3
85°	171.7	171.7
87.5°	79.4	71.7
90°	20.1	20.1
92.5°	80.4	64.4
95°	280.2	231.8
97.5°	671.3	579.4
100°	967.3	857.7
102.5°	1258.4	1164.5
105°	1629.6	1579.1
107.5°	1872.7	1884.9
110°	1965.3	2018.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1973.7	2054.4
115°	1921.4	2033.3
117.5°	1810.3	1934.5
120°	1721.0	1841.6
122.5°	1633.9	1752.8
125°	1509.6	1619.3
127.5°	1397.9	1490.4
130°	1332.1	1417.5
132.5°	1272.3	1348.8
135°	1190.5	1256.4
137.5°	1124.8	1178.8
140°	1079.7	1130.2
142.5°	1042.5	1085.9
145°	986.4	1019.3
147.5°	943.5	970.7
150°	916.4	938.5
152.5°	893.3	910.0
155°	866.8	877.8
157.5°	845.7	853.4
160°	833.2	837.6
162.5°	824.9	829.2
165°	813.1	817.6
167.5°	804.6	806.5
170°	802.2	802.2
172.5°	796.0	794.3
175°	792.2	792.2
177.5°	788.8	786.9
180°	786.9	786.9



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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	4.57	5.51	5.47	6.45	7.64	17.76	18.71	18.66	19.64	20.84
	3H	5.28	6.13	6.19	7.07	8.29	19.61	20.46	20.53	21.40	22.63
	4H	5.58	6.39	6.51	7.33	8.56	20.26	21.07	21.19	22.02	23.25
	6H	5.83	6.58	6.78	7.53	8.78	20.70	21.45	21.65	22.40	23.64
	8H	5.90	6.62	6.86	7.59	8.83	20.83	21.54	21.78	22.51	23.75
	12H	5.92	6.60	6.88	7.57	8.84	20.90	21.58	21.86	22.54	23.81
4H	2H	11.80	12.61	12.74	13.55	14.79	18.04	18.85	18.98	19.80	21.03
	3H	13.37	14.05	14.32	15.03	16.27	20.10	20.78	21.05	21.75	23.00
	4H	13.47	14.09	14.43	15.06	16.33	20.87	21.49	21.83	22.46	23.74
	6H	13.49	14.02	14.46	15.02	16.29	21.42	21.96	22.40	22.95	24.22
	8H	13.47	13.97	14.44	14.96	16.24	21.59	22.09	22.57	23.08	24.36
	12H	13.43	13.88	14.42	14.89	16.18	21.69	22.14	22.69	23.15	24.44
8H	4H	14.93	15.43	15.90	16.42	17.70	20.94	21.44	21.92	22.43	23.72
	6H	15.17	15.59	16.18	16.62	17.90	21.58	22.00	22.58	23.03	24.31
	8H	15.19	15.56	16.20	16.58	17.88	21.80	22.17	22.81	23.19	24.49
	12H	15.17	15.49	16.18	16.50	17.85	21.96	22.28	22.97	23.29	24.64
12H	4H	15.08	15.53	16.07	16.53	17.83	20.90	21.35	21.89	22.36	23.65
	6H	15.44	15.80	16.45	16.82	18.12	21.56	21.93	22.57	22.95	24.25
	8H	15.51	15.83	16.52	16.84	18.19	21.80	22.13	22.82	23.14	24.48