

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: P936349

Luminaire Tested: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936349
REPORT IS A COMBINATION OF REPORTS P933430 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

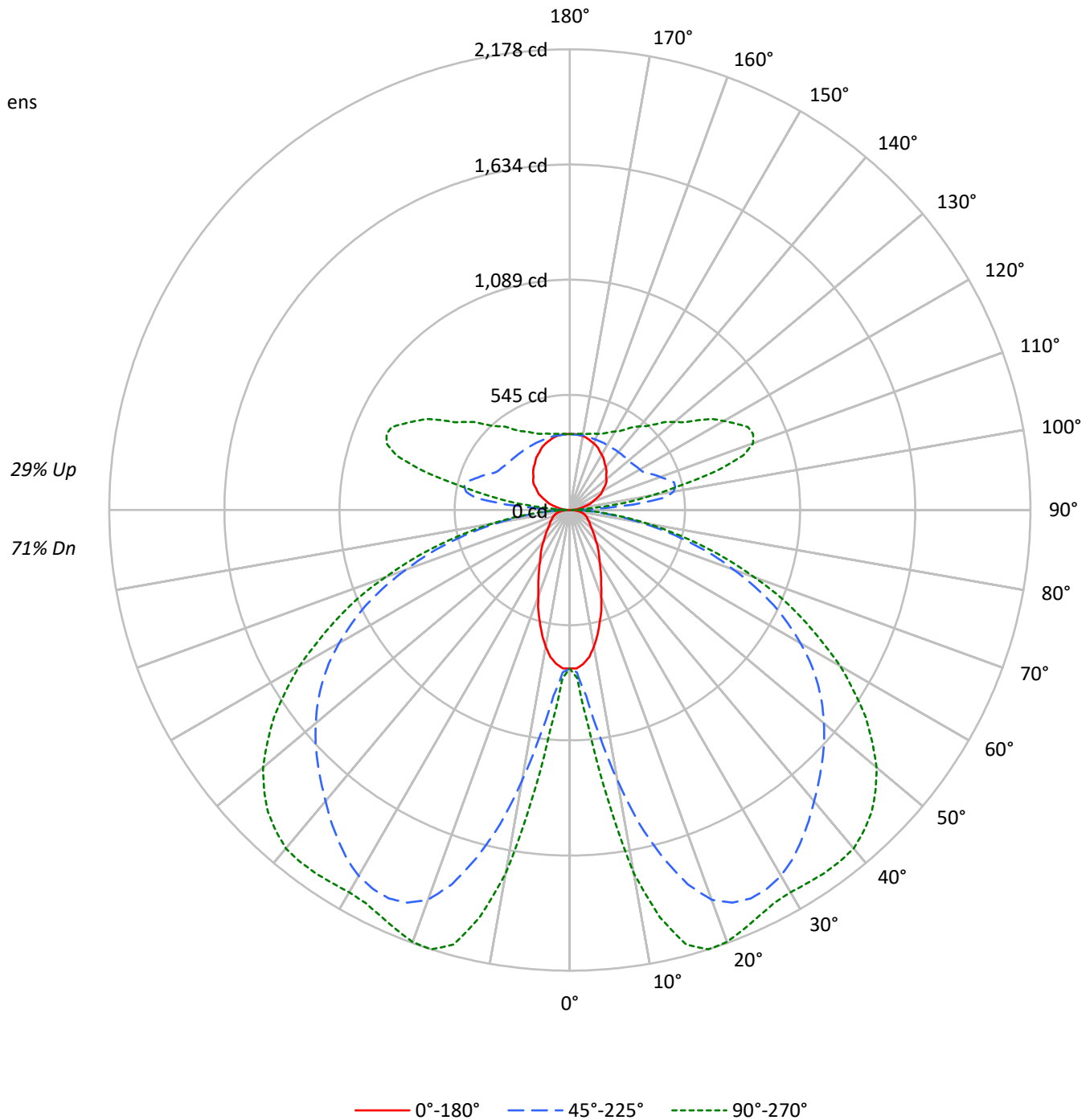
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8128.0 lumens
Efficiency: N/A
Efficacy: 90.3 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: Semi-Direct

Input Watts (W): 90
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

TEST NUMBER: P936349
CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P936349

CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2317	2317	2317
5°	2265	2679	3115
10°	2055	3906	5164
15°	1747	5105	6236
20°	1423	5917	6355
25°	1187	6193	6226
30°	1002	6234	6214
35°	886	6132	6375
40°	773	5999	6541
45°	700	5903	6566
50°	643	5816	6458
55°	616	5688	6172
60°	632	5441	5720
65°	658	5064	5099
70°	703	4419	4307
75°	782	3606	3361
80°	861	2504	2265
85°	781	1330	1159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6566 cd/sqm



TEST NUMBER: P936349

CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	1.2
10°-20°	429.5	5.3
20°-30°	751.3	9.2
30°-40°	967.2	11.9
40°-50°	1080.3	13.3
50°-60°	1034.7	12.7
60°-70°	820.0	10.1
70°-80°	482.2	5.9
80°-90°	135.3	1.7
90°-100°	175.3	2.2
100°-110°	460.7	5.7
110°-120°	477.7	5.9
120°-130°	383.2	4.7
130°-140°	300.7	3.7
140°-150°	230.8	2.8
150°-160°	166.2	2.0
160°-170°	101.7	1.3
170°-180°	34.4	0.4
0°-30°	1277.8	15.7
0°-40°	2244.9	27.6
0°-60°	4359.9	53.6
0°-90°	5797.4	71.3
90°-120°	1113.7	13.7
90°-150°	2028.3	25.0
90°-180°	2331.0	28.7
0°-180°	8128.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	730	783	882	997	1034	67
15°	547	1010	1701	2062	2127	152
25°	349	1144	2026	2115	2118	161
35°	236	1094	1908	2016	2096	147
45°	161	872	1686	1932	2019	125
55°	116	554	1431	1662	1708	105
65°	92	294	1062	1195	1212	91
75°	68	181	583	641	643	71
85°	24	55	144	159	161	26
90°	2	7	18	9	9	4
95°	23	91	302	156	106	26
105°	83	126	509	773	721	88
115°	147	179	408	814	929	146
125°	205	230	371	627	740	182
135°	244	269	360	506	574	189
145°	284	302	355	432	466	178
155°	320	329	355	390	401	147
165°	346	350	355	369	374	98
175°	360	360	357	362	362	34
180°	360	360	360	360	360	



TEST NUMBER: P936349

CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2
2.5°	749.2	749.2	754.0	756.4	761.2	763.7	768.5	773.3	787.7	790.2	795.0
5°	729.9	739.6	770.9	782.9	816.7	862.4	881.7	913.1	978.1	997.4	1009.5
7.5°	701.0	722.7	799.8	819.1	903.4	1023.9	1074.5	1141.9	1245.5	1296.1	1337.1
10°	655.2	701.0	838.3	884.1	1021.5	1204.6	1298.5	1392.5	1549.1	1618.9	1645.4
12.5°	604.7	679.3	879.3	942.0	1139.5	1406.9	1520.2	1623.7	1802.0	1896.0	1910.4
15°	546.8	648.0	917.9	1009.5	1264.8	1575.6	1700.8	1828.5	1994.7	2062.2	2079.0
17.5°	496.3	623.9	954.0	1050.4	1361.2	1727.3	1855.0	1961.0	2095.9	2141.7	2153.7
20°	433.6	585.4	978.1	1103.4	1462.3	1838.1	1961.0	2042.9	2134.5	2163.4	2168.2
22.5°	387.8	544.4	992.6	1122.7	1529.8	1905.6	2009.2	2074.2	2136.9	2146.5	2148.9
25°	349.3	498.7	990.2	1144.4	1587.6	1946.6	2026.0	2074.2	2110.4	2115.2	2115.2
27.5°	313.2	448.1	980.5	1149.2	1631.0	1956.2	2018.8	2052.5	2069.4	2079.0	2079.0
30°	281.9	399.9	956.5	1139.5	1650.2	1946.6	1997.1	2014.0	2030.9	2045.3	2052.5
32.5°	257.8	354.1	920.3	1120.3	1652.7	1922.5	1958.6	1968.2	1992.3	2026.0	2038.1
35°	236.1	308.4	879.3	1093.8	1638.2	1883.9	1908.0	1917.6	1965.8	2016.4	2033.3
37.5°	214.4	274.6	826.3	1048.0	1616.5	1838.1	1855.0	1871.9	1946.6	2006.8	2026.0
40°	192.7	245.7	763.7	997.4	1582.8	1782.7	1797.2	1823.7	1922.5	1992.3	2011.6
42.5°	175.9	221.6	696.2	944.4	1539.4	1720.1	1741.8	1780.3	1893.6	1968.2	1989.9
45°	161.4	197.5	623.9	872.1	1484.0	1655.1	1686.4	1739.4	1859.8	1932.1	1951.4
47.5°	146.9	180.7	549.3	797.4	1423.8	1590.0	1631.0	1691.2	1814.1	1883.9	1900.8
50°	134.9	163.8	474.6	717.9	1358.8	1520.2	1568.3	1631.0	1756.2	1821.3	1843.0
52.5°	125.3	149.4	404.7	638.4	1284.1	1447.9	1503.3	1568.3	1686.4	1749.0	1763.5
55°	115.6	137.3	344.5	554.1	1207.0	1370.8	1431.0	1493.7	1609.3	1662.3	1671.9
57.5°	110.8	127.7	293.9	474.6	1125.1	1284.1	1351.5	1409.3	1517.8	1558.7	1568.3
60°	103.6	120.4	255.4	407.1	1036.0	1202.2	1260.0	1317.8	1409.3	1443.1	1450.3
62.5°	96.4	115.6	226.4	342.1	944.4	1105.8	1163.6	1216.6	1293.7	1317.8	1327.4
65°	91.5	110.8	204.8	293.9	850.4	1004.6	1062.4	1108.2	1170.9	1194.9	1199.8
67.5°	86.7	106.0	187.9	252.9	756.4	903.4	946.8	990.2	1038.4	1062.4	1064.9
70°	79.5	101.2	173.4	224.0	660.1	787.7	823.9	869.6	908.2	920.3	927.5
72.5°	74.7	94.0	163.8	202.4	561.3	676.9	710.7	737.2	770.9	782.9	782.9
75°	67.5	84.3	154.2	180.7	460.1	554.1	583.0	609.5	636.0	640.8	633.6
77.5°	60.2	74.7	132.5	151.8	358.9	438.4	462.5	477.0	498.7	503.5	505.9
80°	50.6	65.0	103.6	118.0	260.2	322.8	339.7	351.7	371.0	371.0	375.8
82.5°	38.5	50.6	74.7	84.3	175.9	221.6	236.1	243.3	255.4	255.4	255.4
85°	24.1	31.3	48.2	55.4	106.0	134.9	144.5	146.9	156.6	159.0	159.0
87.5°	12.0	16.9	31.3	33.7	55.4	69.9	69.9	74.7	74.7	72.3	69.9
90°	2.4	4.3	6.3	6.7	10.6	15.7	18.3	16.3	12.2	9.2	9.2
92.5°	9.6	26.0	42.5	46.6	65.4	90.7	103.3	90.5	65.0	45.9	44.0
95°	23.1	53.2	83.2	90.7	161.1	255.0	301.8	269.3	204.4	155.6	150.1
97.5°	40.1	66.6	93.1	99.7	217.0	373.5	451.7	431.1	390.1	359.3	348.7
100°	53.1	77.1	101.1	107.1	237.4	411.0	497.8	499.3	502.3	504.5	492.0
102.5°	64.2	86.6	109.0	114.6	246.7	422.8	510.8	537.0	589.2	628.5	617.7
105°	83.0	102.0	120.9	125.7	253.6	424.1	509.3	568.0	685.3	773.3	767.5
107.5°	102.3	120.0	137.7	142.1	254.9	405.2	480.4	562.2	725.8	848.6	850.0
110°	115.3	131.3	147.3	151.3	252.9	388.5	456.3	547.7	730.6	867.9	873.9



TEST NUMBER: P936349

CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	128.2	143.3	158.6	162.4	253.0	373.9	434.3	528.0	715.2	855.6	864.8
115°	147.4	161.5	175.5	179.1	255.4	357.1	408.0	498.2	678.5	813.8	826.6
117.5°	166.5	179.2	192.0	195.2	260.1	346.7	389.9	471.4	634.1	756.2	770.4
120°	177.5	189.6	201.6	204.6	263.9	343.0	382.6	457.0	605.8	717.3	731.1
122.5°	188.5	200.6	212.6	215.7	269.5	341.2	377.1	444.1	578.0	678.5	692.0
125°	205.1	216.2	227.2	230.0	277.0	339.7	371.1	427.9	541.7	627.1	639.6
127.5°	218.6	229.7	240.9	243.7	284.5	338.9	366.0	414.8	512.6	585.8	596.4
130°	225.8	237.8	249.9	252.9	290.0	339.3	364.1	407.6	494.6	559.8	569.6
132.5°	233.4	245.3	257.4	260.3	294.4	339.7	362.4	401.3	479.2	537.6	546.4
135°	244.4	255.4	266.3	269.0	299.2	339.4	359.5	392.1	457.3	506.2	513.8
137.5°	255.8	266.6	277.4	280.1	306.4	341.5	359.0	386.6	441.6	483.0	489.2
140°	265.2	275.1	285.1	287.6	310.8	341.8	357.3	381.1	428.7	464.5	470.2
142.5°	272.4	281.6	290.8	293.2	314.5	343.0	357.3	378.2	420.0	451.4	456.4
145°	283.5	291.6	299.6	301.6	319.4	343.0	354.9	372.0	406.2	431.9	435.6
147.5°	294.6	302.4	310.3	312.2	326.4	345.5	354.9	368.4	395.3	415.5	418.6
150°	301.8	308.9	316.0	317.7	330.1	346.7	354.9	366.3	389.1	406.1	408.6
152.5°	309.3	314.7	320.0	321.4	332.5	347.5	354.9	364.6	384.1	398.6	400.5
155°	320.4	324.3	328.3	329.3	337.8	349.2	354.9	362.6	378.1	389.7	391.0
157.5°	328.6	332.4	336.4	337.3	343.2	351.0	354.9	360.9	372.9	381.9	382.8
160°	334.2	337.2	340.2	341.0	345.6	351.8	354.9	360.1	370.3	378.1	378.5
162.5°	339.7	342.0	344.2	344.8	348.2	352.7	354.9	359.3	367.9	374.4	374.9
165°	345.8	347.8	349.9	350.3	351.9	353.9	354.9	358.1	364.2	368.9	369.4
167.5°	351.3	352.3	353.2	353.5	354.8	356.5	357.3	359.3	363.4	366.5	366.7
170°	354.9	355.9	356.9	357.1	357.2	357.3	357.3	359.3	363.4	366.5	366.5
172.5°	356.9	357.1	357.3	357.3	357.3	357.3	357.3	358.9	362.2	364.6	364.4
175°	359.5	359.5	359.5	359.5	358.8	357.8	357.3	358.4	360.4	361.9	361.9
177.5°	359.5	359.5	359.5	359.5	358.9	358.2	357.8	358.6	360.2	361.4	361.2
180°	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5



TEST NUMBER: P936349

CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	749.2	749.2
2.5°	799.8	795.0
5°	1028.7	1033.5
7.5°	1385.3	1382.8
10°	1722.5	1744.2
12.5°	1968.2	1973.1
15°	2117.6	2127.2
17.5°	2175.4	2177.8
20°	2177.8	2173.0
22.5°	2151.3	2146.5
25°	2120.0	2117.6
27.5°	2091.1	2093.5
30°	2079.0	2086.3
32.5°	2079.0	2091.1
35°	2083.9	2095.9
37.5°	2081.5	2095.9
40°	2071.8	2088.7
42.5°	2045.3	2057.4
45°	2004.4	2018.8
47.5°	1951.4	1961.0
50°	1883.9	1893.6
52.5°	1799.6	1802.0
55°	1698.4	1708.1
57.5°	1590.0	1592.4
60°	1469.6	1476.8
62.5°	1341.9	1341.9
65°	1207.0	1211.8
67.5°	1067.3	1079.3
70°	925.1	927.5
72.5°	785.3	785.3
75°	640.8	643.2
77.5°	503.5	503.5
80°	373.4	375.8
82.5°	257.8	262.6
85°	161.4	161.4
87.5°	74.7	67.5
90°	9.2	9.2
92.5°	36.8	29.5
95°	128.0	105.9
97.5°	306.7	264.7
100°	442.0	391.9
102.5°	574.9	532.0
105°	744.5	721.4
107.5°	855.6	861.1
110°	897.9	921.9



TEST NUMBER: P936349

CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	901.7	938.5
115°	877.8	928.9
117.5°	827.1	883.8
120°	786.2	841.3
122.5°	746.5	800.8
125°	689.6	739.7
127.5°	638.6	680.9
130°	608.6	647.6
132.5°	581.3	616.2
135°	543.9	574.0
137.5°	513.8	538.6
140°	493.3	516.3
142.5°	476.3	496.1
145°	450.6	465.7
147.5°	431.1	443.5
150°	418.7	428.7
152.5°	408.1	415.7
155°	396.0	401.0
157.5°	386.4	389.9
160°	380.6	382.6
162.5°	376.8	378.8
165°	371.5	373.5
167.5°	367.5	368.4
170°	366.5	366.5
172.5°	363.6	362.9
175°	361.9	361.9
177.5°	360.4	359.5
180°	359.5	359.5



TEST NUMBER: P936349
 CATALOG NUMBER: SQ4-FB-025U-075D-930-1D-UNV-STD-W-12

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	5.67	6.82	6.41	7.59	8.52	18.86	20.02	19.60	20.79	21.71
	3H	6.40	7.44	7.15	8.22	9.17	20.73	21.77	21.48	22.55	23.51
	4H	6.71	7.69	7.48	8.48	9.45	21.39	22.38	22.16	23.16	24.13
	6H	6.97	7.88	7.76	8.68	9.66	21.84	22.75	22.63	23.55	24.53
	8H	7.05	7.92	7.85	8.74	9.72	21.97	22.84	22.77	23.66	24.64
	12H	7.08	7.91	7.88	8.72	9.73	22.05	22.88	22.86	23.69	24.71
4H	2H	12.93	13.91	13.70	14.70	15.67	19.17	20.16	19.95	20.94	21.91
	3H	14.52	15.35	15.31	16.17	17.16	21.25	22.07	22.04	22.90	23.88
	4H	14.63	15.38	15.43	16.20	17.22	22.03	22.78	22.83	23.61	24.62
	6H	14.66	15.31	15.48	16.16	17.18	22.59	23.25	23.41	24.09	25.11
	8H	14.64	15.25	15.47	16.10	17.13	22.76	23.38	23.59	24.22	25.25
	12H	14.61	15.17	15.46	16.03	17.07	22.88	23.43	23.72	24.29	25.33
8H	4H	16.10	16.72	16.93	17.56	18.59	22.12	22.73	22.94	23.57	24.60
	6H	16.36	16.87	17.21	17.75	18.78	22.76	23.27	23.62	24.16	25.19
	8H	16.38	16.83	17.24	17.71	18.76	22.99	23.44	23.86	24.32	25.37
	12H	16.36	16.76	17.23	17.63	18.74	23.15	23.55	24.02	24.42	25.53
12H	4H	16.26	16.81	17.11	17.68	18.72	22.08	22.64	22.93	23.50	24.54
	6H	16.62	17.08	17.49	17.95	19.00	22.75	23.20	23.61	24.08	25.13
	8H	16.71	17.11	17.57	17.98	19.08	23.00	23.40	23.87	24.27	25.37