

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: P936479

Luminaire Tested: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936479
REPORT IS A COMBINATION OF REPORTS P933431 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-12-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

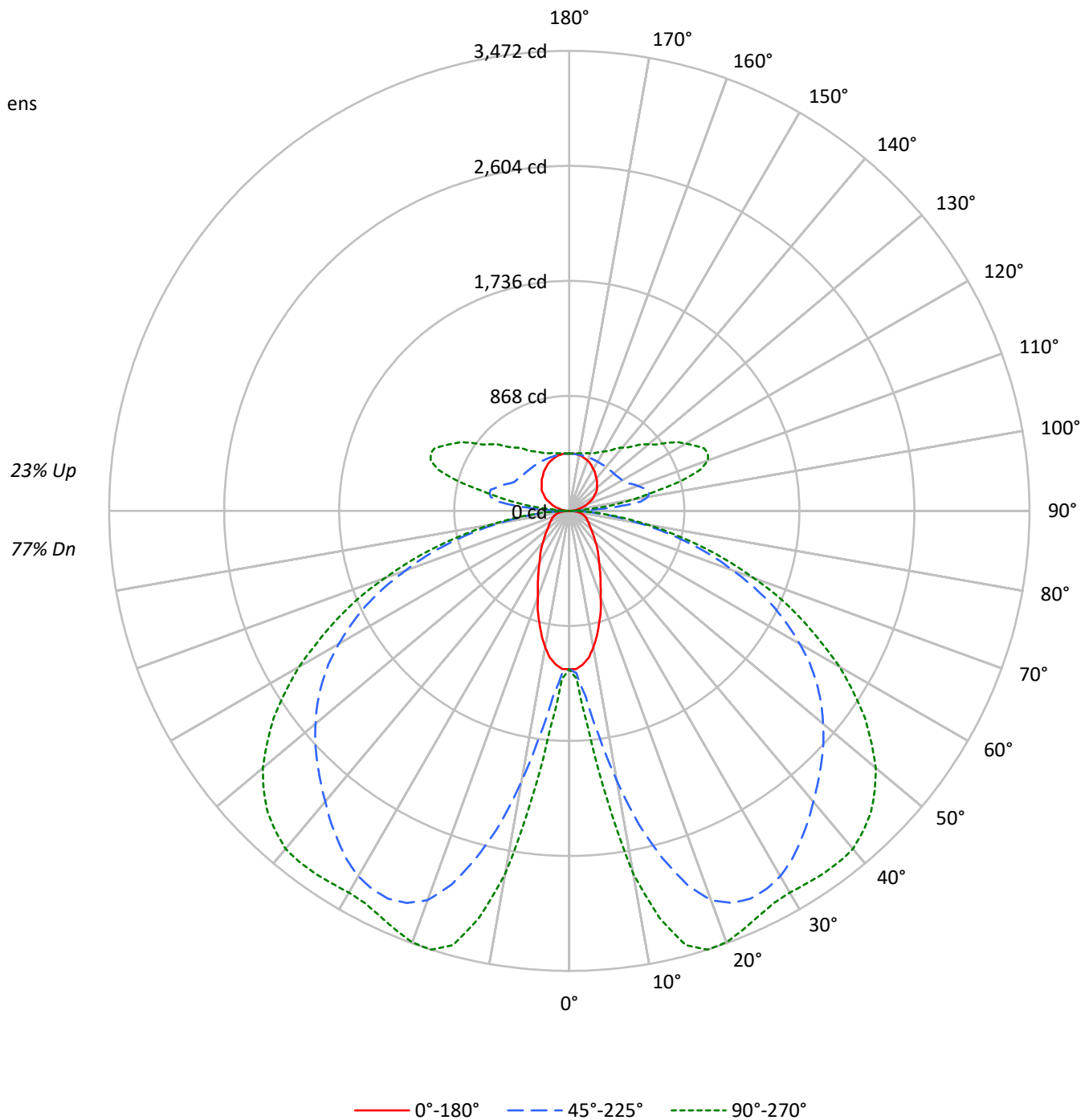
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12054.4 lumens
Efficiency: N/A
Efficacy: 103.6 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): 116.4
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3611	4271	4966
10°	3276	6228	8233
15°	2785	8138	9941
20°	2269	9433	10132
25°	1893	9874	9926
30°	1597	9939	9907
35°	1413	9777	10163
40°	1232	9564	10428
45°	1117	9410	10469
50°	1025	9272	10295
55°	983	9069	9839
60°	1007	8674	9119
65°	1049	8073	8128
70°	1120	7046	6867
75°	1247	5750	5359
80°	1371	3993	3611
85°	1244	2121	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10469 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	1.3
10°-20°	684.8	5.7
20°-30°	1197.8	9.9
30°-40°	1541.9	12.8
40°-50°	1722.3	14.3
50°-60°	1649.5	13.7
60°-70°	1307.3	10.8
70°-80°	768.7	6.4
80°-90°	215.2	1.8
90°-100°	211.5	1.8
100°-110°	556.0	4.6
110°-120°	576.5	4.8
120°-130°	462.4	3.8
130°-140°	362.8	3.0
140°-150°	278.5	2.3
150°-160°	200.6	1.7
160°-170°	122.7	1.0
170°-180°	41.5	0.3
0°-30°	2037.1	16.9
0°-40°	3579.0	29.7
0°-60°	6950.9	57.7
0°-90°	9242.0	76.7
90°-120°	1343.9	11.1
90°-150°	2447.6	20.3
90°-180°	2812.0	23.3
0°-180°	12054.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1164	1248	1406	1590	1648	107
15°	872	1609	2712	3288	3391	243
25°	557	1824	3230	3372	3376	257
35°	376	1744	3042	3215	3341	235
45°	257	1390	2688	3080	3218	199
55°	184	883	2281	2650	2723	168
65°	146	469	1694	1905	1932	145
75°	108	288	930	1022	1026	113
85°	38	88	230	254	257	41
90°	3	8	22	11	11	5
95°	28	110	364	188	128	31
105°	100	152	615	933	870	106
115°	178	216	492	982	1121	176
125°	248	278	448	757	893	220
135°	295	325	434	611	693	228
145°	342	364	428	521	562	214
155°	387	397	428	470	484	178
165°	417	423	428	445	451	118
175°	434	434	431	437	437	41
180°	434	434	434	434	434	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1194.5	1194.5	1202.1	1206.0	1213.7	1217.5	1225.2	1232.9	1255.9	1259.8	1267.5
5°	1163.8	1179.1	1229.1	1248.3	1302.0	1375.0	1405.7	1455.6	1559.3	1590.0	1609.2
7.5°	1117.6	1152.2	1275.1	1305.8	1440.2	1632.3	1713.0	1820.5	1985.7	2066.3	2131.6
10°	1044.7	1117.6	1336.5	1409.5	1628.5	1920.4	2070.2	2220.0	2469.6	2580.9	2623.2
12.5°	964.1	1083.1	1401.9	1501.8	1816.7	2242.9	2423.5	2588.7	2872.9	3022.7	3045.7
15°	871.8	1033.1	1463.3	1609.2	2016.4	2511.8	2711.6	2915.1	3180.2	3287.6	3314.6
17.5°	791.2	994.8	1520.9	1674.5	2170.0	2753.8	2957.4	3126.4	3341.4	3414.4	3433.7
20°	691.3	933.3	1559.3	1759.0	2331.3	2930.4	3126.4	3256.9	3402.8	3449.0	3456.6
22.5°	618.3	868.0	1582.4	1789.7	2438.9	3038.0	3203.1	3306.9	3406.7	3422.1	3425.9
25°	556.9	795.1	1578.5	1824.3	2531.0	3103.3	3230.1	3306.9	3364.5	3372.1	3372.1
27.5°	499.3	714.3	1563.2	1832.0	2600.2	3118.6	3218.5	3272.3	3299.2	3314.6	3314.6
30°	449.3	637.6	1524.7	1816.7	2630.9	3103.3	3183.9	3210.9	3237.7	3260.8	3272.3
32.5°	411.0	564.5	1467.2	1786.0	2634.7	3064.9	3122.5	3137.9	3176.3	3230.1	3249.3
35°	376.4	491.6	1401.9	1743.7	2611.6	3003.4	3041.9	3057.2	3134.0	3214.7	3241.6
37.5°	341.9	437.9	1317.4	1670.7	2577.2	2930.4	2957.4	2984.2	3103.3	3199.3	3230.1
40°	307.3	391.8	1217.5	1590.0	2523.4	2842.2	2865.1	2907.4	3064.9	3176.3	3207.0
42.5°	280.3	353.4	1110.0	1505.5	2454.2	2742.3	2776.9	2838.3	3018.8	3137.9	3172.4
45°	257.4	314.9	994.8	1390.3	2365.9	2638.6	2688.5	2773.0	2965.0	3080.3	3111.0
47.5°	234.3	288.1	875.7	1271.3	2269.9	2534.9	2600.2	2696.1	2892.1	3003.4	3030.4
50°	215.1	261.1	756.6	1144.6	2166.2	2423.5	2500.3	2600.2	2799.9	2903.6	2938.2
52.5°	199.7	238.1	645.3	1017.8	2047.1	2308.3	2396.6	2500.3	2688.5	2788.4	2811.5
55°	184.4	218.9	549.2	883.3	1924.2	2185.4	2281.4	2381.2	2565.6	2650.1	2665.4
57.5°	176.6	203.6	468.6	756.6	1793.6	2047.1	2154.7	2246.8	2419.7	2484.9	2500.3
60°	165.1	192.1	407.1	649.0	1651.5	1916.5	2008.7	2100.9	2246.8	2300.6	2312.1
62.5°	153.6	184.4	361.0	545.4	1505.5	1762.9	1855.1	1939.6	2062.5	2100.9	2116.2
65°	145.9	176.6	326.5	468.6	1355.8	1601.6	1693.7	1766.8	1866.6	1905.0	1912.7
67.5°	138.3	169.0	299.6	403.3	1206.0	1440.2	1509.4	1578.5	1655.3	1693.7	1697.6
70°	126.7	161.3	276.6	357.2	1052.3	1255.9	1313.6	1386.5	1448.0	1467.2	1478.7
72.5°	119.1	149.8	261.1	322.6	894.9	1079.3	1133.1	1175.3	1229.1	1248.3	1248.3
75°	107.6	134.4	245.8	288.1	733.5	883.3	929.5	971.7	1014.0	1021.6	1010.1
77.5°	96.0	119.1	211.2	242.0	572.3	699.0	737.4	760.5	795.1	802.7	806.6
80°	80.6	103.7	165.1	188.2	414.8	514.6	541.6	560.8	591.5	591.5	599.1
82.5°	61.4	80.6	119.1	134.4	280.3	353.4	376.4	387.9	407.1	407.1	407.1
85°	38.4	49.9	76.8	88.4	169.0	215.1	230.4	234.3	249.6	253.5	253.5
87.5°	19.2	26.8	49.9	53.8	88.4	111.3	111.3	119.1	119.1	115.2	111.3
90°	2.9	5.2	7.6	8.1	12.8	19.0	22.1	19.7	14.7	11.0	11.0
92.5°	11.6	31.4	51.3	56.2	79.0	109.4	124.6	109.2	78.4	55.3	53.1
95°	27.9	64.1	100.4	109.5	194.4	307.7	364.2	325.0	246.6	187.8	181.1
97.5°	48.4	80.3	112.3	120.3	261.8	450.7	545.1	520.3	470.7	433.5	420.8
100°	64.1	93.0	122.0	129.3	286.4	495.9	600.7	602.5	606.1	608.8	593.7
102.5°	77.4	104.5	131.5	138.3	297.7	510.2	616.4	648.0	711.1	758.4	745.5
105°	100.2	123.1	145.9	151.6	306.0	511.7	614.6	685.4	826.9	933.1	926.2
107.5°	123.5	144.8	166.2	171.5	307.6	489.0	579.7	678.4	875.9	1024.0	1025.7
110°	139.1	158.4	177.7	182.6	305.2	468.8	550.6	661.0	881.7	1047.3	1054.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	154.7	173.0	191.4	195.9	305.3	451.2	524.1	637.1	863.0	1032.5	1043.6
115°	177.9	194.9	211.8	216.1	308.1	430.9	492.3	601.2	818.8	982.1	997.5
117.5°	200.9	216.3	231.7	235.6	313.9	418.3	470.5	568.8	765.2	912.5	929.7
120°	214.2	228.8	243.3	246.9	318.5	414.0	461.7	551.5	731.0	865.6	882.3
122.5°	227.4	242.1	256.6	260.3	325.2	411.7	455.0	535.9	697.5	818.7	835.1
125°	247.5	260.9	274.2	277.5	334.3	410.0	447.8	516.4	653.7	756.7	771.8
127.5°	263.8	277.2	290.7	294.1	343.3	408.9	441.7	500.6	618.5	706.9	719.7
130°	272.5	287.0	301.6	305.1	349.9	409.5	439.3	491.9	596.8	675.5	687.3
132.5°	281.6	296.0	310.6	314.1	355.2	410.0	437.3	484.3	578.3	648.7	659.3
135°	295.0	308.1	321.3	324.6	361.0	409.6	433.8	473.2	551.8	610.9	620.0
137.5°	308.6	321.7	334.7	338.0	369.8	412.1	433.2	466.5	532.9	582.9	590.3
140°	320.0	332.0	344.1	347.1	375.1	412.5	431.2	459.9	517.3	560.5	567.4
142.5°	328.7	339.8	351.0	353.8	379.6	414.0	431.2	456.4	506.9	544.8	550.8
145°	342.2	351.8	361.5	364.0	385.4	414.0	428.3	448.9	490.2	521.1	525.7
147.5°	355.5	364.9	374.4	376.7	393.9	416.9	428.3	444.6	477.0	501.4	505.1
150°	364.2	372.8	381.3	383.4	398.4	418.3	428.3	442.1	469.5	490.0	493.0
152.5°	373.3	379.8	386.1	387.8	401.3	419.3	428.3	440.0	463.5	481.0	483.3
155°	386.6	391.4	396.2	397.4	407.7	421.4	428.3	437.6	456.3	470.3	471.8
157.5°	396.5	401.2	405.9	407.1	414.2	423.5	428.3	435.6	450.0	460.9	461.9
160°	403.3	406.9	410.6	411.4	417.1	424.5	428.3	434.5	446.9	456.2	456.8
162.5°	410.0	412.7	415.4	416.1	420.2	425.6	428.3	433.5	444.0	451.8	452.4
165°	417.3	419.7	422.2	422.8	424.6	427.0	428.3	432.1	439.5	445.2	445.7
167.5°	423.9	425.1	426.3	426.6	428.1	430.1	431.2	433.6	438.6	442.3	442.5
170°	428.3	429.5	430.6	430.9	431.0	431.1	431.2	433.6	438.6	442.3	442.3
172.5°	430.6	430.9	431.1	431.2	431.2	431.2	431.2	433.1	437.0	439.9	439.7
175°	433.8	433.8	433.8	433.8	432.9	431.8	431.2	432.5	434.9	436.7	436.7
177.5°	433.8	433.8	433.8	433.8	433.1	432.3	431.8	432.8	434.7	436.1	435.9
180°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1194.5	1194.5
2.5°	1275.1	1267.5
5°	1640.0	1647.7
7.5°	2208.4	2204.6
10°	2746.1	2780.6
12.5°	3137.9	3145.6
15°	3376.0	3391.4
17.5°	3468.1	3472.0
20°	3472.0	3464.4
22.5°	3429.8	3422.1
25°	3379.9	3376.0
27.5°	3333.7	3337.6
30°	3314.6	3326.1
32.5°	3314.6	3333.7
35°	3322.2	3341.4
37.5°	3318.3	3341.4
40°	3303.0	3329.9
42.5°	3260.8	3280.0
45°	3195.5	3218.5
47.5°	3111.0	3126.4
50°	3003.4	3018.8
52.5°	2869.0	2872.9
55°	2707.7	2723.1
57.5°	2534.9	2538.7
60°	2342.8	2354.4
62.5°	2139.3	2139.3
65°	1924.2	1931.9
67.5°	1701.5	1720.7
70°	1474.8	1478.7
72.5°	1252.0	1252.0
75°	1021.6	1025.5
77.5°	802.7	802.7
80°	595.4	599.1
82.5°	411.0	418.6
85°	257.4	257.4
87.5°	119.1	107.6
90°	11.0	11.0
92.5°	44.4	35.6
95°	154.5	127.8
97.5°	370.2	319.4
100°	533.3	472.9
102.5°	693.7	642.0
105°	898.4	870.5
107.5°	1032.5	1039.2
110°	1083.5	1112.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1088.1	1132.6
115°	1059.2	1120.9
117.5°	998.1	1066.5
120°	948.7	1015.2
122.5°	900.8	966.4
125°	832.2	892.6
127.5°	770.6	821.6
130°	734.4	781.5
132.5°	701.5	743.6
135°	656.3	692.6
137.5°	620.1	649.9
140°	595.3	623.1
142.5°	574.7	598.6
145°	543.8	561.9
147.5°	520.2	535.2
150°	505.2	517.3
152.5°	492.4	501.7
155°	477.8	483.9
157.5°	466.3	470.5
160°	459.3	461.7
162.5°	454.8	457.1
165°	448.3	450.7
167.5°	443.5	444.6
170°	442.3	442.3
172.5°	438.8	437.9
175°	436.7	436.7
177.5°	434.9	433.8
180°	433.8	433.8



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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	7.68	8.92	8.36	9.62	10.45	20.87	22.11	21.55	22.81	23.64
	3H	8.41	9.53	9.11	10.24	11.10	22.74	23.86	23.44	24.57	25.43
	4H	8.73	9.78	9.44	10.51	11.38	23.41	24.46	24.12	25.19	26.06
	6H	9.00	9.97	9.72	10.71	11.60	23.86	24.84	24.59	25.57	26.46
	8H	9.08	10.01	9.81	10.76	11.65	24.00	24.93	24.73	25.69	26.58
	12H	9.11	10.00	9.85	10.75	11.66	24.08	24.97	24.83	25.72	26.64
4H	2H	14.95	16.00	15.66	16.73	17.60	21.19	22.24	21.91	22.97	23.84
	3H	16.55	17.43	17.28	18.20	19.09	23.27	24.16	24.00	24.92	25.81
	4H	16.66	17.47	17.40	18.23	19.15	24.06	24.87	24.81	25.63	26.55
	6H	16.69	17.39	17.45	18.18	19.11	24.63	25.33	25.39	26.12	27.04
	8H	16.68	17.33	17.45	18.12	19.06	24.80	25.46	25.57	26.24	27.18
	12H	16.65	17.25	17.44	18.05	19.00	24.92	25.51	25.71	26.32	27.26
8H	4H	18.14	18.80	18.91	19.58	20.52	24.15	24.81	24.92	25.59	26.53
	6H	18.40	18.95	19.20	19.77	20.71	24.80	25.35	25.60	26.18	27.12
	8H	18.42	18.91	19.23	19.73	20.69	25.03	25.52	25.84	26.34	27.30
	12H	18.41	18.84	19.22	19.65	20.67	25.20	25.63	26.01	26.44	27.46
12H	4H	18.30	18.90	19.09	19.70	20.65	24.12	24.72	24.91	25.52	26.47
	6H	18.66	19.15	19.47	19.98	20.93	24.79	25.28	25.60	26.10	27.06
	8H	18.75	19.18	19.56	20.00	21.01	25.04	25.47	25.86	26.29	27.30