

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: P937961

Luminaire Tested: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937961
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

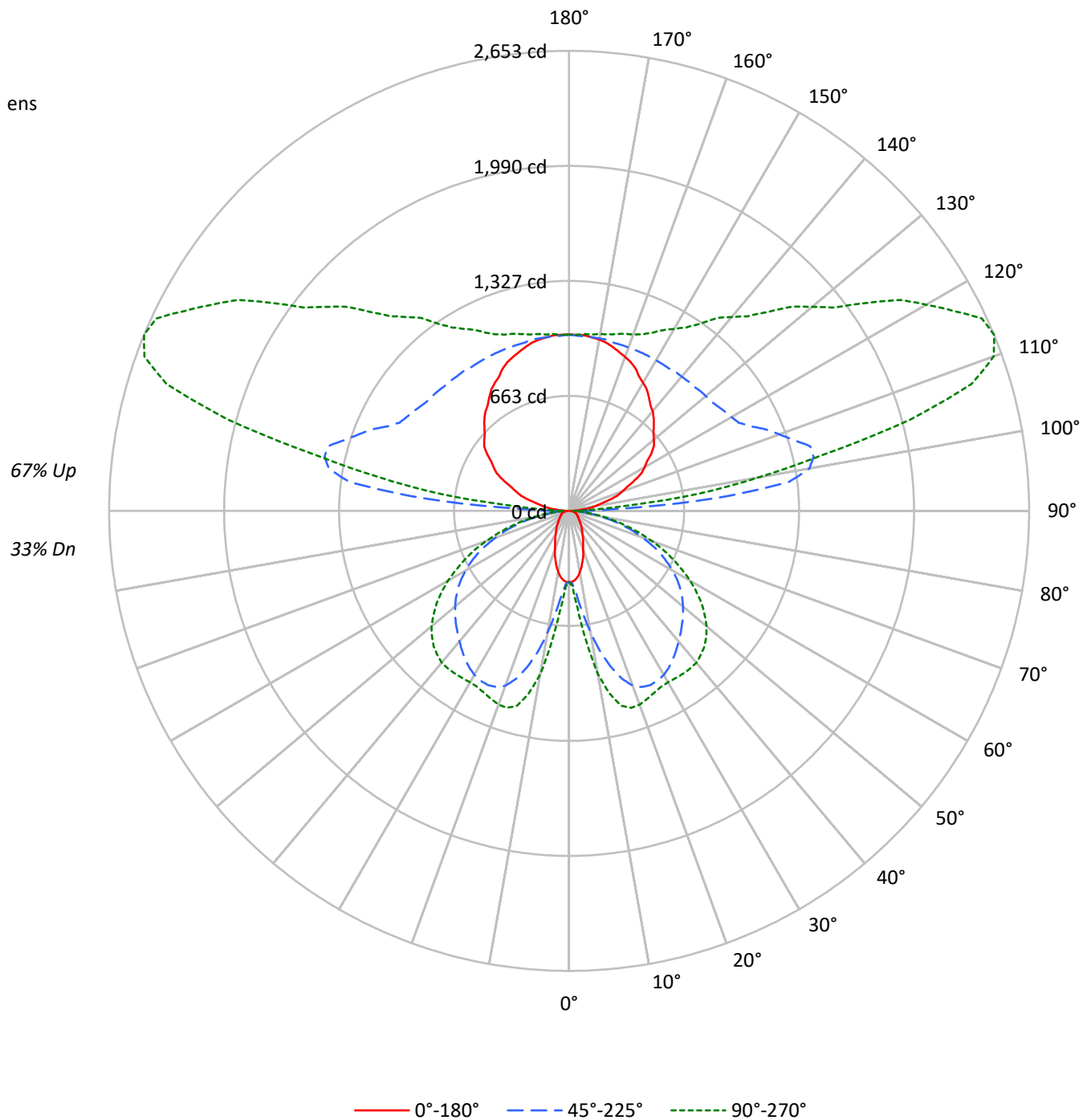
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9762.2 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 83.4
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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2534	2534	2534
5°	2475	2929	3407
10°	2244	4268	5648
15°	1907	5575	6821
20°	1551	6459	6951
25°	1294	6758	6810
30°	1090	6799	6797
35°	964	6684	6973
40°	839	6535	7154
45°	760	6425	7183
50°	696	6327	7064
55°	666	6183	6750
60°	682	5909	6256
65°	708	5493	5577
70°	752	4788	4711
75°	830	3900	3677
80°	902	2702	2477
85°	787	1430	1268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7183 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	0.5
10°-20°	234.9	2.4
20°-30°	410.9	4.2
30°-40°	528.9	5.4
40°-50°	590.8	6.1
50°-60°	565.8	5.8
60°-70°	448.4	4.6
70°-80°	263.7	2.7
80°-90°	77.1	0.8
90°-100°	495.4	5.1
100°-110°	1302.5	13.3
110°-120°	1350.5	13.8
120°-130°	1083.3	11.1
130°-140°	850.0	8.7
140°-150°	652.4	6.7
150°-160°	469.8	4.8
160°-170°	287.5	2.9
170°-180°	97.1	1.0
0°-30°	698.8	7.2
0°-40°	1227.8	12.6
0°-60°	2384.4	24.4
0°-90°	3173.6	32.5
90°-120°	3148.4	32.3
90°-150°	5734.2	58.7
90°-180°	6589.0	67.5
0°-180°	9762.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	399	428	482	545	565	37
15°	299	552	930	1128	1163	83
25°	191	626	1108	1157	1158	88
35°	129	598	1044	1103	1146	81
45°	88	477	922	1057	1104	68
55°	63	303	783	909	934	58
65°	50	161	581	654	663	50
75°	37	99	319	350	352	39
85°	13	30	79	87	88	14
90°	7	19	52	26	26	7
95°	66	256	853	440	299	73
105°	235	355	1440	2186	2040	249
115°	417	506	1154	2301	2626	412
125°	580	650	1049	1773	2091	515
135°	691	760	1016	1431	1623	535
145°	801	853	1003	1221	1316	502
155°	906	931	1003	1102	1134	416
165°	978	990	1003	1043	1056	276
175°	1016	1016	1010	1023	1023	96
180°	1016	1016	1016	1016	1016	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7
2.5°	409.7	409.7	412.4	413.7	416.3	417.6	420.3	422.9	430.8	432.1	434.8
5°	399.2	404.5	421.6	428.2	446.6	471.6	482.2	499.3	534.9	545.4	552.0
7.5°	383.4	395.2	437.4	447.9	494.0	559.9	587.6	624.5	681.1	708.8	731.2
10°	358.3	383.4	458.5	483.5	558.6	658.7	710.1	761.5	847.1	885.3	899.8
12.5°	330.7	371.5	480.9	515.1	623.2	769.4	831.3	888.0	985.5	1036.9	1044.8
15°	299.1	354.4	501.9	552.0	691.7	861.6	930.1	1000.0	1090.9	1127.8	1137.0
17.5°	271.4	341.2	521.7	574.4	744.4	944.6	1014.5	1072.5	1146.3	1171.3	1177.9
20°	237.1	320.1	534.9	603.4	799.7	1005.3	1072.5	1117.3	1167.3	1183.2	1185.8
22.5°	212.1	297.7	542.8	613.9	836.6	1042.2	1098.8	1134.4	1168.7	1173.9	1175.3
25°	191.0	272.7	541.5	625.8	868.2	1064.6	1108.1	1134.4	1154.2	1156.8	1156.8
27.5°	171.3	245.0	536.2	628.4	891.9	1069.9	1104.1	1122.6	1131.8	1137.0	1137.0
30°	154.1	218.7	523.0	623.2	902.5	1064.6	1092.3	1101.5	1110.7	1118.6	1122.6
32.5°	141.0	193.7	503.3	612.6	903.8	1051.4	1071.2	1076.4	1089.6	1108.1	1114.7
35°	129.1	168.6	480.9	598.1	895.9	1030.3	1043.5	1048.8	1075.1	1102.8	1112.0
37.5°	117.3	150.2	451.9	573.1	884.0	1005.3	1014.5	1023.7	1064.6	1097.5	1108.1
40°	105.4	134.4	417.6	545.4	865.6	974.9	982.8	997.3	1051.4	1089.6	1100.2
42.5°	96.2	121.2	380.7	516.4	841.9	940.7	952.5	973.6	1035.6	1076.4	1088.3
45°	88.3	108.0	341.2	476.9	811.6	905.1	922.2	951.2	1017.2	1056.7	1067.2
47.5°	80.4	98.8	300.4	436.1	778.6	869.5	891.9	924.9	992.0	1030.3	1039.6
50°	73.8	89.6	259.5	392.6	743.0	831.3	857.7	891.9	960.4	996.0	1007.9
52.5°	68.5	81.7	221.3	349.1	702.2	791.8	822.1	857.7	922.2	956.5	964.4
55°	63.2	75.1	188.4	303.0	660.0	749.6	782.6	816.8	880.1	909.0	914.3
57.5°	60.6	69.8	160.7	259.5	615.2	702.2	739.1	770.7	830.0	852.4	857.7
60°	56.7	65.9	139.6	222.6	566.5	657.4	689.0	720.6	770.7	789.2	793.1
62.5°	52.7	63.2	123.8	187.1	516.4	604.7	636.3	665.3	707.5	720.6	725.9
65°	50.1	60.6	112.0	160.7	465.1	549.4	581.0	606.0	640.3	653.5	656.1
67.5°	47.4	58.0	102.8	138.3	413.7	494.0	517.8	541.5	567.8	581.0	582.3
70°	43.5	55.3	94.9	122.5	361.0	430.8	450.6	475.6	496.7	503.3	507.2
72.5°	40.8	51.4	89.6	110.7	307.0	370.2	388.6	403.1	421.6	428.2	428.2
75°	36.9	46.1	84.3	98.8	251.6	303.0	318.8	333.3	347.8	350.4	346.5
77.5°	32.9	40.8	72.5	83.0	196.3	239.8	253.0	260.9	272.7	275.3	276.7
80°	27.7	35.6	56.7	64.6	142.3	176.5	185.8	192.3	202.9	202.9	205.5
82.5°	21.1	27.7	40.8	46.1	96.2	121.2	129.1	133.1	139.6	139.6	139.6
85°	13.2	17.1	26.3	30.3	58.0	73.8	79.0	80.4	85.6	87.0	87.0
87.5°	6.6	9.2	17.1	18.4	30.3	38.2	38.2	40.8	40.8	39.5	38.2
90°	6.9	12.3	17.7	19.1	30.0	44.5	51.8	46.0	34.5	25.9	25.9
92.5°	27.3	73.7	120.1	131.7	185.1	256.3	291.9	255.8	183.7	129.6	124.5
95°	65.5	150.4	235.2	256.5	455.4	720.7	853.4	761.5	577.7	439.9	424.3
97.5°	113.2	188.0	263.0	281.7	613.4	1055.8	1277.0	1218.9	1102.8	1015.7	986.0
100°	150.1	218.0	285.9	302.8	670.9	1161.8	1407.2	1411.4	1419.9	1426.3	1390.9
102.5°	181.5	244.8	308.2	324.0	697.4	1195.1	1444.0	1518.0	1666.0	1776.9	1746.6
105°	234.7	288.3	341.9	355.4	716.9	1199.0	1440.0	1605.8	1937.4	2186.2	2169.8
107.5°	289.2	339.2	389.3	401.7	720.6	1145.6	1358.1	1589.5	2052.1	2399.0	2402.9
110°	326.0	371.2	416.3	427.6	715.0	1098.2	1289.9	1548.4	2065.7	2453.6	2470.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	362.2	405.2	448.3	459.1	715.3	1056.9	1227.8	1492.4	2021.8	2418.8	2444.8
115°	416.8	456.5	496.2	506.2	722.0	1009.6	1153.5	1408.4	1918.4	2300.8	2337.0
117.5°	470.7	506.8	542.8	551.8	735.3	979.9	1102.3	1332.4	1792.6	2137.8	2177.8
120°	502.0	536.0	569.9	578.4	746.2	969.9	1081.8	1292.1	1712.5	2027.9	2066.9
122.5°	532.8	567.0	601.3	609.8	761.9	964.7	1066.2	1255.5	1634.2	1918.1	1956.5
125°	579.8	611.0	642.2	650.0	783.1	960.4	1049.1	1209.9	1531.6	1772.9	1808.2
127.5°	618.0	649.5	681.0	688.9	804.3	958.0	1034.8	1172.9	1449.1	1656.2	1686.1
130°	638.4	672.4	706.3	714.8	819.6	959.4	1029.3	1152.2	1398.1	1582.5	1610.1
132.5°	659.6	693.6	727.5	736.0	832.2	960.4	1024.5	1134.6	1354.7	1519.7	1544.4
135°	691.0	721.9	752.8	760.5	845.8	959.5	1016.4	1108.5	1292.9	1431.1	1452.4
137.5°	723.0	753.7	784.3	792.0	866.3	965.4	1015.0	1092.9	1248.7	1365.6	1383.0
140°	749.6	777.8	806.0	813.0	878.7	966.4	1010.2	1077.5	1212.1	1313.1	1329.4
142.5°	770.1	796.2	822.3	828.8	889.3	969.9	1010.2	1069.3	1187.6	1276.3	1290.3
145°	801.4	824.2	846.9	852.7	902.9	969.9	1003.4	1051.8	1148.5	1221.0	1231.6
147.5°	832.9	855.0	877.2	882.7	922.9	976.6	1003.4	1041.4	1117.6	1174.6	1183.4
150°	853.4	873.4	893.3	898.3	933.4	980.0	1003.4	1035.5	1099.8	1148.0	1155.1
152.5°	874.4	889.6	904.8	908.6	940.2	982.3	1003.4	1030.8	1085.7	1126.9	1132.2
155°	905.9	917.1	928.3	931.1	955.2	987.3	1003.4	1025.2	1068.9	1101.7	1105.3
157.5°	929.1	940.0	950.8	953.6	970.2	992.3	1003.4	1020.3	1054.3	1079.8	1082.2
160°	944.7	953.2	961.7	963.8	977.0	994.6	1003.4	1018.0	1047.0	1068.9	1070.3
162.5°	960.4	966.7	973.2	974.7	984.3	997.0	1003.4	1015.7	1040.2	1058.6	1060.0
165°	977.5	983.3	989.1	990.5	994.8	1000.5	1003.4	1012.2	1029.8	1043.0	1044.4
167.5°	993.2	995.9	998.6	999.3	1002.9	1007.8	1010.2	1016.0	1027.5	1036.1	1036.7
170°	1003.4	1006.1	1008.8	1009.5	1009.8	1010.0	1010.2	1016.0	1027.5	1036.1	1036.1
172.5°	1008.8	1009.4	1010.0	1010.2	1010.2	1010.2	1010.2	1014.8	1023.8	1030.7	1030.2
175°	1016.4	1016.4	1016.4	1016.4	1014.3	1011.6	1010.2	1013.1	1018.9	1023.2	1023.2
177.5°	1016.4	1016.4	1016.4	1016.4	1014.8	1012.6	1011.5	1013.8	1018.4	1021.8	1021.2
180°	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4	1016.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	409.7	409.7
2.5°	437.4	434.8
5°	562.6	565.2
7.5°	757.5	756.2
10°	942.0	953.8
12.5°	1076.4	1079.1
15°	1158.1	1163.4
17.5°	1189.7	1191.1
20°	1191.1	1188.4
22.5°	1176.6	1173.9
25°	1159.4	1158.1
27.5°	1143.6	1145.0
30°	1137.0	1141.0
32.5°	1137.0	1143.6
35°	1139.7	1146.3
37.5°	1138.4	1146.3
40°	1133.1	1142.3
42.5°	1118.6	1125.2
45°	1096.2	1104.1
47.5°	1067.2	1072.5
50°	1030.3	1035.6
52.5°	984.1	985.5
55°	928.8	934.1
57.5°	869.5	870.8
60°	803.6	807.6
62.5°	733.8	733.8
65°	660.0	662.7
67.5°	583.6	590.2
70°	505.9	507.2
72.5°	429.5	429.5
75°	350.4	351.8
77.5°	275.3	275.3
80°	204.2	205.5
82.5°	141.0	143.6
85°	88.3	88.3
87.5°	40.8	36.9
90°	25.9	25.9
92.5°	103.8	83.2
95°	361.9	299.4
97.5°	867.1	748.3
100°	1249.4	1107.8
102.5°	1625.3	1504.1
105°	2104.7	2039.5
107.5°	2418.7	2434.5
110°	2538.5	2606.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2549.1	2653.4
115°	2481.6	2626.1
117.5°	2338.2	2498.6
120°	2222.7	2378.5
122.5°	2110.2	2263.9
125°	1949.8	2091.4
127.5°	1805.5	1925.0
130°	1720.5	1830.8
132.5°	1643.3	1742.1
135°	1537.6	1622.7
137.5°	1452.7	1522.4
140°	1394.6	1459.7
142.5°	1346.3	1402.5
145°	1274.1	1316.5
147.5°	1218.6	1253.8
150°	1183.7	1212.1
152.5°	1153.7	1175.3
155°	1119.5	1133.7
157.5°	1092.3	1102.3
160°	1076.1	1081.8
162.5°	1065.5	1070.9
165°	1050.2	1055.9
167.5°	1039.1	1041.6
170°	1036.1	1036.1
172.5°	1028.1	1025.9
175°	1023.2	1023.2
177.5°	1018.8	1016.4
180°	1016.4	1016.4



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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	2.37	3.11	3.46	4.20	5.70	15.53	16.28	16.62	17.37	18.87
	3H	3.07	3.73	4.16	4.83	6.35	17.36	18.03	18.46	19.13	20.64
	4H	3.36	3.99	4.47	5.09	6.62	18.00	18.63	19.10	19.73	21.25
	6H	3.60	4.19	4.72	5.29	6.82	18.42	19.00	19.53	20.10	21.64
	8H	3.67	4.22	4.79	5.34	6.87	18.53	19.09	19.65	20.21	21.74
	12H	3.68	4.21	4.81	5.32	6.87	18.59	19.12	19.72	20.24	21.79
4H	2H	9.56	10.20	10.68	11.30	12.82	15.80	16.43	16.91	17.53	19.05
	3H	11.12	11.65	12.24	12.78	14.31	17.82	18.36	18.95	19.48	21.02
	4H	11.21	11.70	12.33	12.81	14.37	18.58	19.07	19.71	20.19	21.74
	6H	11.21	11.63	12.35	12.77	14.32	19.11	19.53	20.24	20.67	22.22
	8H	11.19	11.58	12.32	12.71	14.27	19.27	19.66	20.40	20.79	22.35
	12H	11.14	11.49	12.29	12.64	14.20	19.35	19.71	20.50	20.85	22.42
8H	4H	12.64	13.03	13.77	14.16	15.73	18.63	19.03	19.77	20.16	21.72
	6H	12.88	13.20	14.03	14.37	15.93	19.25	19.58	20.41	20.75	22.31
	8H	12.89	13.18	14.05	14.33	15.91	19.47	19.75	20.63	20.90	22.48
	12H	12.86	13.11	14.02	14.26	15.87	19.60	19.85	20.77	21.00	22.62
12H	4H	12.78	13.13	13.93	14.28	15.84	18.58	18.94	19.73	20.08	21.65
	6H	13.13	13.42	14.29	14.57	16.15	19.23	19.52	20.39	20.67	22.25
	8H	13.20	13.45	14.36	14.60	16.21	19.46	19.71	20.62	20.86	22.47