

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: P937864

Luminaire Tested: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937864
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

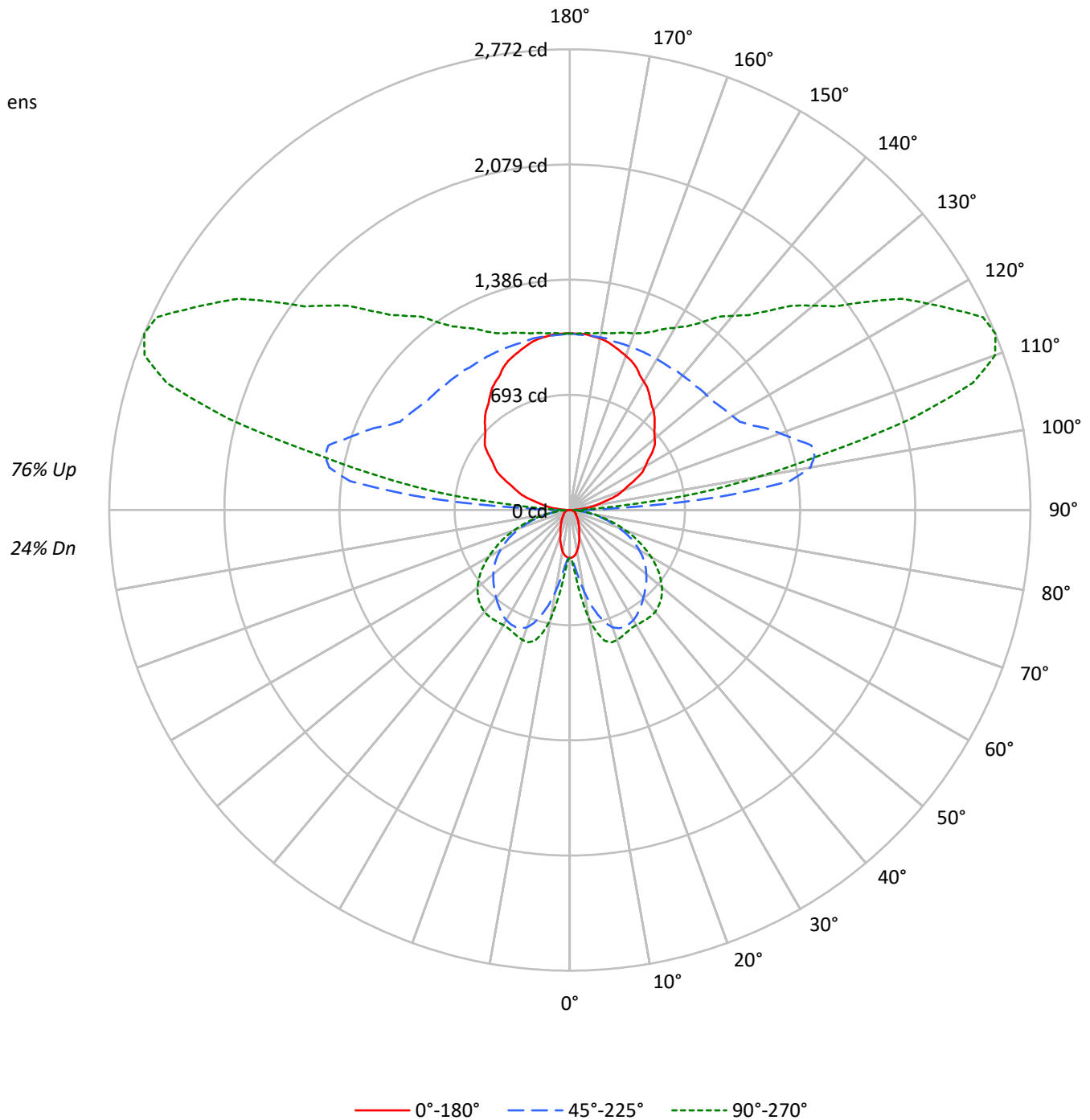
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9109.0 lumens
Efficiency: N/A
Efficacy: 127.6 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): 71.4
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1776	1776	1776
5°	1734	2052	2387
10°	1573	2991	3957
15°	1336	3906	4779
20°	1088	4526	4870
25°	907	4734	4771
30°	764	4764	4762
35°	676	4682	4885
40°	589	4579	5012
45°	533	4502	5032
50°	488	4433	4949
55°	467	4332	4730
60°	477	4140	4383
65°	496	3849	3907
70°	528	3354	3301
75°	583	2733	2576
80°	631	1892	1736
85°	554	1003	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5032 cd/sqm



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CATALOG NUMBER: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-6-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	0.4
10°-20°	164.6	1.8
20°-30°	287.9	3.2
30°-40°	370.6	4.1
40°-50°	413.9	4.5
50°-60°	396.5	4.4
60°-70°	314.2	3.4
70°-80°	184.7	2.0
80°-90°	55.4	0.6
90°-100°	517.6	5.7
100°-110°	1360.9	14.9
110°-120°	1411.1	15.5
120°-130°	1131.9	12.4
130°-140°	888.1	9.7
140°-150°	681.7	7.5
150°-160°	490.9	5.4
160°-170°	300.4	3.3
170°-180°	101.5	1.1
0°-30°	489.6	5.4
0°-40°	860.2	9.4
0°-60°	1670.6	18.3
0°-90°	2224.9	24.4
90°-120°	3289.7	36.1
90°-150°	5991.4	65.8
90°-180°	6884.0	75.6
0°-180°	9109.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	287	287	287	287	287	
5°	280	300	338	382	396	26
15°	210	387	652	790	815	58
25°	134	438	776	810	811	62
35°	90	419	731	773	803	56
45°	62	334	646	740	774	48
55°	44	212	548	637	654	40
65°	35	113	407	458	464	35
75°	26	69	223	246	246	27
85°	9	21	55	61	62	10
90°	7	20	54	27	27	7
95°	68	268	892	460	313	76
105°	245	371	1505	2284	2131	260
115°	435	529	1205	2404	2744	430
125°	606	679	1096	1852	2185	538
135°	722	795	1062	1495	1696	559
145°	837	891	1048	1276	1376	525
155°	946	973	1048	1151	1185	435
165°	1021	1035	1048	1090	1103	288
175°	1062	1062	1056	1069	1069	101
180°	1062	1062	1062	1062	1062	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1
2.5°	287.1	287.1	288.9	289.8	291.7	292.7	294.5	296.3	301.8	302.7	304.6
5°	279.7	283.4	295.4	300.0	312.9	330.5	337.8	349.8	374.8	382.1	386.8
7.5°	268.6	277.0	306.4	313.9	346.2	392.3	411.7	437.6	477.2	496.7	512.3
10°	251.1	268.6	321.2	338.8	391.4	461.5	497.6	533.5	593.6	620.3	630.5
12.5°	231.7	260.4	336.9	360.9	436.6	539.1	582.5	622.2	690.5	726.4	732.0
15°	209.5	248.3	351.7	386.8	484.6	603.7	651.7	700.7	764.3	790.1	796.7
17.5°	190.1	239.1	365.5	402.5	521.5	661.8	710.8	751.4	803.1	820.6	825.2
20°	166.2	224.3	374.8	422.8	560.3	704.3	751.4	782.8	817.8	829.0	830.8
22.5°	148.6	208.6	380.3	430.1	586.1	730.1	769.9	794.7	818.8	822.4	823.4
25°	133.9	191.1	379.4	438.5	608.3	745.8	776.3	794.7	808.6	810.4	810.4
27.5°	120.0	171.7	375.7	440.3	625.0	749.6	773.5	786.5	792.9	796.7	796.7
30°	108.0	153.3	366.4	436.6	632.3	745.8	765.3	771.7	778.1	783.7	786.5
32.5°	98.7	135.7	352.6	429.2	633.2	736.6	750.5	754.2	763.3	776.3	781.0
35°	90.5	118.2	336.9	419.1	627.7	721.9	731.0	734.8	753.2	772.6	779.0
37.5°	82.1	105.3	316.6	401.6	619.4	704.3	710.8	717.3	745.8	768.9	776.3
40°	73.9	94.2	292.7	382.1	606.5	683.0	688.6	698.7	736.6	763.3	770.8
42.5°	67.4	84.9	266.8	361.8	589.8	659.1	667.3	682.1	725.5	754.2	762.4
45°	61.9	75.7	239.1	334.1	568.6	634.1	646.1	666.4	712.6	740.3	747.6
47.5°	56.3	69.2	210.4	305.5	545.6	609.3	625.0	648.0	695.1	721.9	728.3
50°	51.7	62.8	181.9	275.0	520.6	582.5	600.9	625.0	672.9	697.8	706.2
52.5°	48.0	57.3	155.1	244.7	492.0	554.7	576.0	600.9	646.1	670.2	675.7
55°	44.3	52.6	132.0	212.3	462.4	525.2	548.3	572.3	616.6	636.9	640.6
57.5°	42.5	48.9	112.6	181.9	431.0	492.0	517.9	540.0	581.5	597.2	600.9
60°	39.7	46.2	97.8	156.0	396.9	460.6	482.8	504.9	540.0	552.9	555.7
62.5°	36.9	44.3	86.8	131.0	361.8	423.7	445.8	466.2	495.6	504.9	508.6
65°	35.1	42.5	78.5	112.6	325.9	384.9	407.1	424.6	448.6	457.8	459.7
67.5°	33.2	40.7	72.0	96.9	289.8	346.2	362.8	379.4	397.8	407.1	408.0
70°	30.5	38.7	66.4	85.8	252.9	301.8	315.7	333.2	348.0	352.6	355.4
72.5°	28.6	36.0	62.8	77.5	215.1	259.3	272.3	282.5	295.4	300.0	300.0
75°	25.9	32.3	59.1	69.2	176.3	212.3	223.4	233.6	243.6	245.6	242.7
77.5°	23.0	28.6	50.7	58.2	137.6	168.0	177.2	182.8	191.1	192.9	193.8
80°	19.4	25.0	39.7	45.2	99.7	123.7	130.1	134.8	142.2	142.2	144.0
82.5°	14.8	19.4	28.6	32.3	67.4	84.9	90.5	93.2	97.8	97.8	97.8
85°	9.3	12.0	18.4	21.2	40.7	51.7	55.4	56.3	60.0	60.9	60.9
87.5°	4.6	6.4	12.0	12.9	21.2	26.8	26.8	28.6	28.6	27.7	26.8
90°	7.2	12.8	18.5	19.9	31.3	46.5	54.1	48.1	36.1	27.1	27.1
92.5°	28.5	77.0	125.4	137.6	193.4	267.8	305.0	267.3	192.0	135.5	130.0
95°	68.5	157.1	245.8	268.0	475.8	753.1	891.6	795.6	603.7	459.7	443.3
97.5°	118.3	196.5	274.8	294.3	640.9	1103.2	1334.2	1273.6	1152.3	1061.2	1030.2
100°	156.8	227.8	298.7	316.4	701.0	1213.9	1470.3	1474.7	1483.6	1490.2	1453.3
102.5°	189.6	255.8	322.0	338.5	728.6	1248.7	1508.8	1586.1	1740.7	1856.6	1824.9
105°	245.2	301.3	357.3	371.3	749.0	1252.7	1504.6	1677.8	2024.3	2284.2	2267.2
107.5°	302.2	354.4	406.7	419.8	752.9	1196.9	1419.0	1660.8	2144.1	2506.6	2510.7
110°	340.6	387.8	435.0	446.8	747.1	1147.5	1347.7	1617.9	2158.3	2563.7	2581.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	378.5	423.4	468.4	479.7	747.4	1104.4	1282.8	1559.3	2112.4	2527.2	2554.5
115°	435.4	476.9	518.5	528.9	754.3	1054.9	1205.2	1471.6	2004.4	2404.0	2441.8
117.5°	491.8	529.5	567.1	576.6	768.3	1023.9	1151.7	1392.1	1873.0	2233.7	2275.5
120°	524.6	560.1	595.5	604.4	779.7	1013.4	1130.3	1350.0	1789.3	2118.9	2159.6
122.5°	556.7	592.5	628.3	637.2	796.1	1008.0	1114.0	1311.8	1707.5	2004.2	2044.3
125°	605.8	638.4	671.0	679.2	818.2	1003.5	1096.2	1264.2	1600.3	1852.4	1889.4
127.5°	645.7	678.6	711.6	719.8	840.3	1000.9	1081.2	1225.5	1514.1	1730.5	1761.7
130°	667.1	702.6	738.0	746.9	856.4	1002.4	1075.4	1203.9	1460.8	1653.5	1682.3
132.5°	689.2	724.7	760.1	769.0	869.5	1003.5	1070.5	1185.5	1415.5	1587.9	1613.7
135°	722.0	754.3	786.6	794.6	883.7	1002.6	1062.0	1158.2	1350.8	1495.3	1517.5
137.5°	755.4	787.5	819.5	827.5	905.1	1008.7	1060.5	1141.9	1304.7	1426.8	1445.0
140°	783.3	812.7	842.2	849.5	918.2	1009.7	1055.5	1125.8	1266.5	1372.0	1389.0
142.5°	804.6	831.9	859.1	865.9	929.2	1013.4	1055.5	1117.3	1240.8	1333.5	1348.2
145°	837.4	861.2	884.9	890.9	943.4	1013.4	1048.4	1098.9	1200.0	1275.8	1286.9
147.5°	870.3	893.4	916.5	922.3	964.3	1020.4	1048.4	1088.1	1167.7	1227.3	1236.5
150°	891.6	912.6	933.4	938.6	975.2	1024.0	1048.4	1082.0	1149.1	1199.5	1207.0
152.5°	913.7	929.5	945.4	949.4	982.4	1026.4	1048.4	1077.0	1134.4	1177.4	1183.0
155°	946.5	958.3	969.9	972.8	998.0	1031.6	1048.4	1071.2	1116.8	1151.1	1154.8
157.5°	970.7	982.1	993.5	996.3	1013.7	1036.8	1048.4	1066.1	1101.6	1128.2	1130.8
160°	987.1	996.0	1004.9	1007.1	1020.8	1039.2	1048.4	1063.6	1094.0	1116.8	1118.3
162.5°	1003.5	1010.1	1016.8	1018.5	1028.5	1041.8	1048.4	1061.2	1086.8	1106.1	1107.6
165°	1021.3	1027.4	1033.4	1034.9	1039.4	1045.3	1048.4	1057.6	1076.0	1089.8	1091.2
167.5°	1037.7	1040.6	1043.4	1044.2	1047.9	1053.0	1055.5	1061.6	1073.6	1082.6	1083.2
170°	1048.4	1051.2	1054.1	1054.8	1055.1	1055.3	1055.5	1061.6	1073.6	1082.6	1082.6
172.5°	1054.1	1054.7	1055.3	1055.5	1055.5	1055.5	1055.5	1060.3	1069.8	1076.9	1076.4
175°	1062.0	1062.0	1062.0	1062.0	1059.8	1057.0	1055.5	1058.6	1064.6	1069.1	1069.1
177.5°	1062.0	1062.0	1062.0	1062.0	1060.3	1058.0	1056.9	1059.3	1064.1	1067.6	1067.0
180°	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	287.1	287.1
2.5°	306.4	304.6
5°	394.2	396.0
7.5°	530.8	529.9
10°	660.0	668.3
12.5°	754.2	756.0
15°	811.4	815.1
17.5°	833.5	834.5
20°	834.5	832.6
22.5°	824.3	822.4
25°	812.3	811.4
27.5°	801.2	802.2
30°	796.7	799.4
32.5°	796.7	801.2
35°	798.5	803.1
37.5°	797.6	803.1
40°	793.8	800.3
42.5°	783.7	788.3
45°	768.0	773.5
47.5°	747.6	751.4
50°	721.9	725.5
52.5°	689.6	690.5
55°	650.7	654.5
57.5°	609.3	610.2
60°	563.1	565.9
62.5°	514.2	514.2
65°	462.4	464.3
67.5°	408.9	413.5
70°	354.5	355.4
72.5°	300.9	300.9
75°	245.6	246.5
77.5°	192.9	192.9
80°	143.1	144.0
82.5°	98.7	100.6
85°	61.9	61.9
87.5°	28.6	25.9
90°	27.1	27.1
92.5°	108.5	86.9
95°	378.1	312.8
97.5°	906.0	781.9
100°	1305.4	1157.5
102.5°	1698.2	1571.6
105°	2199.1	2131.0
107.5°	2527.1	2543.7
110°	2652.3	2723.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2663.4	2772.4
115°	2592.9	2743.9
117.5°	2443.1	2610.7
120°	2322.4	2485.2
122.5°	2204.9	2365.5
125°	2037.3	2185.2
127.5°	1886.5	2011.3
130°	1797.7	1912.9
132.5°	1717.0	1820.2
135°	1606.5	1695.5
137.5°	1517.9	1590.7
140°	1457.1	1525.2
142.5°	1406.7	1465.4
145°	1331.2	1375.5
147.5°	1273.3	1310.0
150°	1236.8	1266.5
152.5°	1205.5	1228.0
155°	1169.7	1184.6
157.5°	1141.2	1151.7
160°	1124.4	1130.3
162.5°	1113.3	1118.9
165°	1097.3	1103.3
167.5°	1085.7	1088.3
170°	1082.6	1082.6
172.5°	1074.2	1072.0
175°	1069.1	1069.1
177.5°	1064.5	1062.0
180°	1062.0	1062.0



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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	0.00	0.67	1.13	1.80	3.40	13.15	13.83	14.29	14.97	16.56
	3H	0.67	1.29	1.83	2.43	4.04	14.97	15.58	16.12	16.73	18.34
	4H	0.96	1.55	2.12	2.69	4.31	15.60	16.19	16.76	17.33	18.94
	6H	1.20	1.74	2.37	2.89	4.51	16.02	16.56	17.19	17.70	19.33
	8H	1.27	1.78	2.44	2.94	4.56	16.13	16.64	17.30	17.81	19.42
	12H	1.28	1.77	2.46	2.92	4.56	16.19	16.68	17.37	17.83	19.47
4H	2H	7.17	7.75	8.34	8.90	10.51	13.40	13.98	14.57	15.13	16.74
	3H	8.72	9.21	9.89	10.38	12.00	15.42	15.91	16.60	17.08	18.71
	4H	8.81	9.26	9.98	10.41	12.06	16.18	16.63	17.36	17.79	19.43
	6H	8.81	9.19	9.99	10.37	12.01	16.70	17.09	17.88	18.27	19.90
	8H	8.78	9.14	9.96	10.31	11.96	16.86	17.22	18.04	18.39	20.04
	12H	8.73	9.05	9.92	10.24	11.89	16.94	17.27	18.14	18.45	20.11
8H	4H	10.23	10.59	11.41	11.77	13.42	16.22	16.59	17.40	17.76	19.41
	6H	10.47	10.76	11.67	11.98	13.63	16.84	17.14	18.04	18.35	20.00
	8H	10.48	10.74	11.69	11.93	13.60	17.06	17.32	18.26	18.51	20.18
	12H	10.44	10.67	11.65	11.86	13.56	17.19	17.42	18.40	18.61	20.31
12H	4H	10.36	10.69	11.56	11.88	13.53	16.17	16.50	17.37	17.68	19.34
	6H	10.72	10.98	11.93	12.17	13.84	16.82	17.08	18.03	18.27	19.94
	8H	10.78	11.01	11.99	12.20	13.90	17.04	17.27	18.25	18.46	20.16