

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: P936499

Luminaire Tested: SQ4-FB-025U-100D-B35-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

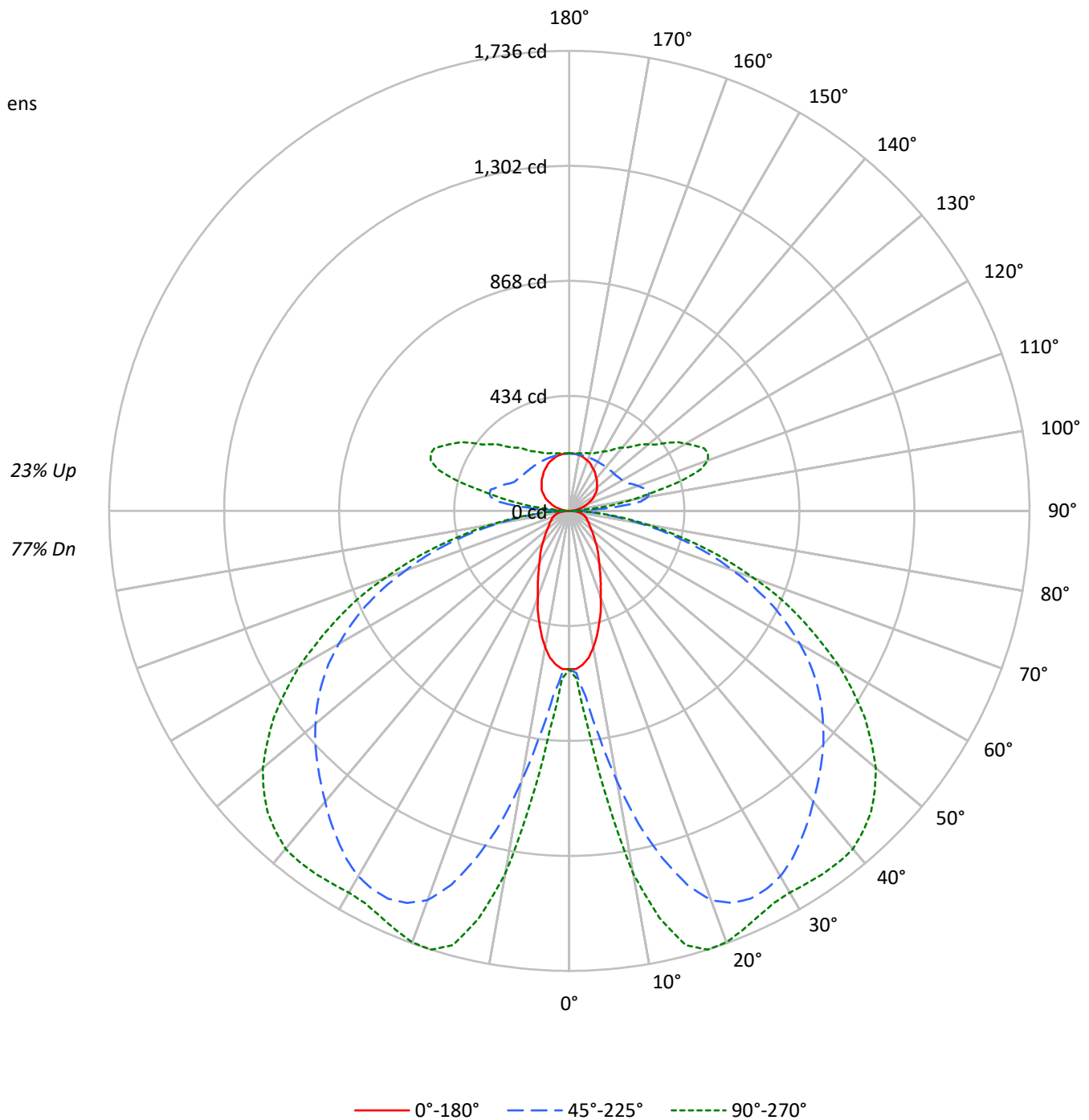
Test Method: LM-79-2019  
Report Number: P936499  
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-B35-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6027.2 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: 6' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 58.2  
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: P936499  
CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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°	3694	3694	3694
5°	3608	4269	4966
10°	3271	6222	8233
15°	2780	8126	9941
20°	2261	9415	10132
25°	1886	9849	9926
30°	1590	9909	9907
35°	1405	9742	10163
40°	1223	9526	10428
45°	1107	9366	10468
50°	1015	9222	10295
55°	971	9013	9839
60°	993	8613	9118
65°	1032	8007	8128
70°	1097	6979	6866
75°	1211	5684	5358
80°	1312	3937	3611
85°	1145	2085	1849

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10468 cd/sqm



TEST NUMBER: P936499

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.3	1.3
10°-20°	342.4	5.7
20°-30°	598.9	9.9
30°-40°	771.0	12.8
40°-50°	861.1	14.3
50°-60°	824.8	13.7
60°-70°	653.6	10.8
70°-80°	384.4	6.4
80°-90°	107.6	1.8
90°-100°	105.7	1.8
100°-110°	278.0	4.6
110°-120°	288.2	4.8
120°-130°	231.2	3.8
130°-140°	181.4	3.0
140°-150°	139.2	2.3
150°-160°	100.3	1.7
160°-170°	61.4	1.0
170°-180°	20.7	0.3
0°-30°	1018.6	16.9
0°-40°	1789.5	29.7
0°-60°	3475.4	57.7
0°-90°	4621.0	76.7
90°-120°	671.9	11.1
90°-150°	1223.8	20.3
90°-180°	1406.0	23.3
0°-180°	6027.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	582	624	703	795	824	54
15°	436	805	1356	1644	1696	121
25°	278	912	1615	1686	1688	128
35°	188	872	1521	1607	1671	118
45°	129	695	1344	1540	1609	100
55°	92	442	1141	1325	1362	84
65°	73	234	847	952	966	72
75°	54	144	465	511	513	56
85°	19	44	115	127	129	20
90°	2	4	11	6	6	3
95°	14	55	182	94	64	16
105°	50	76	307	467	435	53
115°	89	108	246	491	560	88
125°	124	139	224	378	446	110
135°	148	162	217	305	346	114
145°	171	182	214	261	281	107
155°	193	199	214	235	242	89
165°	209	211	214	223	225	59
175°	217	217	216	218	218	21
180°	217	217	217	217	217	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	597.2	597.2	601.1	603.0	606.8	608.7	612.6	616.5	627.9	629.8	633.7
5°	581.9	589.5	614.5	624.1	651.0	687.5	702.8	727.8	779.7	795.1	804.7
7.5°	558.8	576.1	637.6	652.9	720.2	816.2	856.5	910.3	992.8	1033.1	1065.8
10°	522.3	558.8	668.3	704.8	814.3	960.2	1035.1	1110.0	1234.8	1290.5	1311.6
12.5°	482.0	541.6	701.0	750.9	908.3	1121.5	1211.7	1294.3	1436.4	1511.3	1522.9
15°	436.0	516.6	731.7	804.7	1008.1	1255.9	1355.8	1457.6	1590.0	1643.8	1657.3
17.5°	395.6	497.4	760.5	837.3	1085.0	1376.9	1478.7	1563.2	1670.7	1707.2	1716.8
20°	345.6	466.7	779.7	879.6	1165.7	1465.2	1563.2	1628.5	1701.5	1724.5	1728.3
22.5°	309.2	434.0	791.2	894.9	1219.4	1519.0	1601.6	1653.4	1703.4	1711.1	1713.0
25°	278.5	397.5	789.3	912.2	1265.5	1551.7	1615.0	1653.4	1682.3	1686.1	1686.1
27.5°	249.6	357.2	781.6	916.0	1300.1	1559.3	1609.2	1636.2	1649.6	1657.3	1657.3
30°	224.7	318.8	762.4	908.3	1315.4	1551.7	1592.0	1605.4	1618.9	1630.3	1636.2
32.5°	205.5	282.3	733.5	892.9	1317.4	1532.5	1561.3	1568.9	1588.1	1615.0	1624.6
35°	188.2	245.8	701.0	871.8	1305.8	1501.8	1520.9	1528.6	1567.0	1607.4	1620.7
37.5°	170.9	218.9	658.7	835.4	1288.6	1465.2	1478.7	1492.2	1551.7	1599.6	1615.0
40°	153.6	195.8	608.7	795.1	1261.6	1421.0	1432.6	1453.7	1532.5	1588.1	1603.5
42.5°	140.2	176.6	554.9	752.8	1227.1	1371.1	1388.4	1419.1	1509.4	1568.9	1586.3
45°	128.7	157.5	497.4	695.2	1183.0	1319.3	1344.3	1386.5	1482.5	1540.1	1555.5
47.5°	117.2	144.0	437.9	635.7	1134.9	1267.5	1300.1	1348.1	1446.0	1501.8	1515.1
50°	107.6	130.6	378.3	572.3	1083.1	1211.7	1250.2	1300.1	1399.9	1451.8	1469.1
52.5°	99.9	119.1	322.6	508.9	1023.6	1154.2	1198.3	1250.2	1344.3	1394.2	1405.7
55°	92.2	109.5	274.6	441.7	962.1	1092.6	1140.7	1190.6	1282.8	1325.0	1332.8
57.5°	88.4	101.7	234.3	378.3	896.8	1023.6	1077.3	1123.5	1209.8	1242.5	1250.2
60°	82.6	96.0	203.6	324.5	825.8	958.2	1004.4	1050.4	1123.5	1150.3	1156.0
62.5°	76.8	92.2	180.5	272.7	752.8	881.4	927.5	969.8	1031.2	1050.4	1058.1
65°	73.0	88.4	163.3	234.3	677.9	800.8	846.9	883.3	933.3	952.5	956.3
67.5°	69.1	84.5	149.8	201.6	603.0	720.2	754.7	789.3	827.7	846.9	848.8
70°	63.4	80.6	138.3	178.6	526.2	627.9	656.8	693.2	723.9	733.5	739.3
72.5°	59.5	74.9	130.6	161.3	447.5	539.6	566.5	587.6	614.5	624.1	624.1
75°	53.8	67.2	122.9	144.0	366.8	441.7	464.7	485.9	507.0	510.9	505.0
77.5°	48.0	59.5	105.6	121.0	286.1	349.5	368.7	380.2	397.5	401.4	403.3
80°	40.3	51.8	82.6	94.1	207.4	257.4	270.7	280.3	295.7	295.7	299.6
82.5°	30.7	40.3	59.5	67.2	140.2	176.6	188.2	194.0	203.6	203.6	203.6
85°	19.2	25.0	38.4	44.2	84.5	107.6	115.2	117.2	124.8	126.7	126.7
87.5°	9.6	13.5	25.0	26.8	44.2	55.7	55.7	59.5	59.5	57.7	55.7
90°	1.5	2.6	3.8	4.1	6.4	9.5	11.0	9.8	7.4	5.5	5.5
92.5°	5.8	15.7	25.6	28.1	39.5	54.7	62.3	54.6	39.1	27.6	26.6
95°	14.0	32.1	50.2	54.7	97.2	153.8	182.1	162.5	123.3	93.9	90.6
97.5°	24.1	40.1	56.1	60.1	130.9	225.3	272.5	260.1	235.4	216.8	210.5
100°	32.1	46.5	61.0	64.6	143.2	248.0	300.3	301.2	303.0	304.4	296.8
102.5°	38.8	52.3	65.8	69.2	148.8	255.0	308.1	323.9	355.5	379.3	372.8
105°	50.1	61.5	73.0	75.9	153.0	255.8	307.3	342.6	413.5	466.6	463.1
107.5°	61.7	72.4	83.0	85.8	153.8	244.5	289.8	339.2	438.0	512.0	512.9
110°	69.6	79.3	88.9	91.3	152.6	234.4	275.3	330.5	440.9	523.6	527.2



TEST NUMBER: P936499

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	77.3	86.5	95.6	98.0	152.6	225.6	262.0	318.5	431.5	516.2	521.7
115°	89.0	97.5	105.9	108.0	154.1	215.4	246.1	300.6	409.4	491.0	498.7
117.5°	100.5	108.1	115.8	117.7	156.9	209.1	235.3	284.4	382.6	456.2	464.7
120°	107.2	114.4	121.6	123.5	159.3	207.1	230.9	275.8	365.5	432.9	441.2
122.5°	113.7	121.0	128.3	130.1	162.6	205.9	227.5	267.9	348.7	409.4	417.6
125°	123.7	130.4	137.1	138.8	167.2	205.0	223.9	258.2	326.9	378.4	386.0
127.5°	131.9	138.6	145.4	147.0	171.6	204.5	220.8	250.3	309.3	353.5	359.9
130°	136.2	143.5	150.7	152.5	174.9	204.7	219.7	245.9	298.4	337.7	343.6
132.5°	140.8	148.1	155.2	157.1	177.6	205.0	218.7	242.2	289.1	324.3	329.6
135°	147.5	154.1	160.7	162.3	180.5	204.8	217.0	236.6	276.0	305.4	310.0
137.5°	154.4	160.9	167.3	169.0	184.9	206.1	216.7	233.3	266.6	291.5	295.2
140°	160.0	166.0	172.0	173.5	187.6	206.3	215.6	229.9	258.7	280.2	283.7
142.5°	164.3	169.9	175.5	176.8	189.7	207.0	215.6	228.2	253.5	272.4	275.4
145°	171.0	175.9	180.7	182.0	192.7	207.0	214.1	224.4	245.1	260.6	262.8
147.5°	177.7	182.5	187.2	188.4	197.0	208.4	214.1	222.3	238.5	250.7	252.5
150°	182.1	186.3	190.7	191.8	199.2	209.2	214.1	221.0	234.7	245.0	246.5
152.5°	186.6	189.8	193.1	193.9	200.7	209.7	214.1	220.0	231.7	240.5	241.7
155°	193.3	195.7	198.2	198.7	203.9	210.8	214.1	218.8	228.1	235.1	235.9
157.5°	198.3	200.6	202.9	203.5	207.1	211.8	214.1	217.7	225.0	230.4	231.0
160°	201.6	203.5	205.2	205.7	208.5	212.3	214.1	217.2	223.5	228.1	228.4
162.5°	204.9	206.3	207.7	208.0	210.1	212.8	214.1	216.8	222.0	226.0	226.3
165°	208.6	209.8	211.0	211.3	212.3	213.6	214.1	216.0	219.8	222.6	222.9
167.5°	211.9	212.5	213.1	213.3	214.1	215.1	215.6	216.9	219.3	221.1	221.2
170°	214.1	214.7	215.3	215.4	215.5	215.6	215.6	216.9	219.3	221.1	221.1
172.5°	215.3	215.4	215.6	215.6	215.6	215.6	215.6	216.6	218.5	220.0	219.9
175°	217.0	217.0	217.0	217.0	216.5	215.9	215.6	216.2	217.4	218.4	218.4
177.5°	217.0	217.0	217.0	217.0	216.6	216.1	215.9	216.4	217.3	218.1	218.0
180°	217.0	217.0	217.0	217.0	217.0	217.0	217.0	217.0	217.0	217.0	217.0



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CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	597.2	597.2
2.5°	637.6	633.7
5°	820.0	823.8
7.5°	1104.2	1102.3
10°	1373.1	1390.3
12.5°	1568.9	1572.8
15°	1688.0	1695.7
17.5°	1734.1	1736.0
20°	1736.0	1732.2
22.5°	1714.8	1711.1
25°	1689.9	1688.0
27.5°	1666.9	1668.8
30°	1657.3	1663.0
32.5°	1657.3	1666.9
35°	1661.2	1670.7
37.5°	1659.2	1670.7
40°	1651.5	1664.9
42.5°	1630.3	1640.0
45°	1597.8	1609.2
47.5°	1555.5	1563.2
50°	1501.8	1509.4
52.5°	1434.5	1436.4
55°	1353.9	1361.5
57.5°	1267.5	1269.4
60°	1171.4	1177.1
62.5°	1069.7	1069.7
65°	962.1	965.9
67.5°	850.7	860.3
70°	737.4	739.3
72.5°	626.1	626.1
75°	510.9	512.7
77.5°	401.4	401.4
80°	297.7	299.6
82.5°	205.5	209.3
85°	128.7	128.7
87.5°	59.5	53.8
90°	5.5	5.5
92.5°	22.1	17.7
95°	77.2	64.0
97.5°	185.1	159.7
100°	266.7	236.4
102.5°	346.9	321.0
105°	449.2	435.3
107.5°	516.2	519.6
110°	541.8	556.3





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CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	544.0	566.3
115°	529.6	560.5
117.5°	499.0	533.2
120°	474.4	507.7
122.5°	450.4	483.1
125°	416.1	446.3
127.5°	385.4	410.9
130°	367.2	390.7
132.5°	350.7	371.8
135°	328.1	346.3
137.5°	310.1	324.9
140°	297.6	311.5
142.5°	287.3	299.3
145°	271.9	281.0
147.5°	260.1	267.5
150°	252.6	258.7
152.5°	246.2	250.9
155°	238.9	242.0
157.5°	233.1	235.3
160°	229.7	230.9
162.5°	227.4	228.6
165°	224.1	225.4
167.5°	221.8	222.3
170°	221.1	221.1
172.5°	219.4	219.0
175°	218.4	218.4
177.5°	217.4	217.0
180°	217.0	217.0



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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	7.67	8.91	8.35	9.61	10.44	20.84	22.07	21.52	22.78	23.60
	3H	8.40	9.52	9.10	10.23	11.09	22.70	23.81	23.39	24.53	25.39
	4H	8.72	9.77	9.43	10.50	11.37	23.36	24.41	24.07	25.14	26.01
	6H	8.99	9.96	9.71	10.70	11.59	23.80	24.78	24.53	25.51	26.40
	8H	9.07	10.00	9.80	10.75	11.64	23.93	24.86	24.67	25.62	26.51
	12H	9.10	9.99	9.84	10.74	11.66	24.01	24.90	24.75	25.65	26.57
4H	2H	14.92	15.98	15.64	16.70	17.57	21.15	22.21	21.87	22.93	23.81
	3H	16.52	17.41	17.25	18.17	19.06	23.23	24.11	23.96	24.88	25.77
	4H	16.63	17.44	17.38	18.20	19.12	24.01	24.81	24.75	25.58	26.50
	6H	16.67	17.37	17.43	18.16	19.08	24.57	25.27	25.33	26.06	26.98
	8H	16.65	17.31	17.42	18.10	19.04	24.74	25.39	25.50	26.18	27.12
	12H	16.63	17.22	17.42	18.03	18.98	24.84	25.44	25.63	26.24	27.19
8H	4H	18.11	18.76	18.88	19.55	20.49	24.10	24.76	24.87	25.54	26.48
	6H	18.37	18.91	19.17	19.74	20.68	24.74	25.29	25.54	26.12	27.06
	8H	18.39	18.88	19.20	19.70	20.66	24.97	25.45	25.78	26.28	27.24
	12H	18.38	18.81	19.19	19.62	20.64	25.13	25.56	25.94	26.37	27.39
12H	4H	18.27	18.86	19.06	19.67	20.62	24.07	24.67	24.86	25.47	26.42
	6H	18.63	19.12	19.44	19.94	20.90	24.73	25.22	25.54	26.04	27.00
	8H	18.72	19.15	19.53	19.96	20.98	24.98	25.41	25.79	26.22	27.24