

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: P937147

Luminaire Tested: SQ4-FB-075U-075D-92765-1D-UNV-STD-W-8-5000K

Issue Date: 12/17/2024

**Test Information**

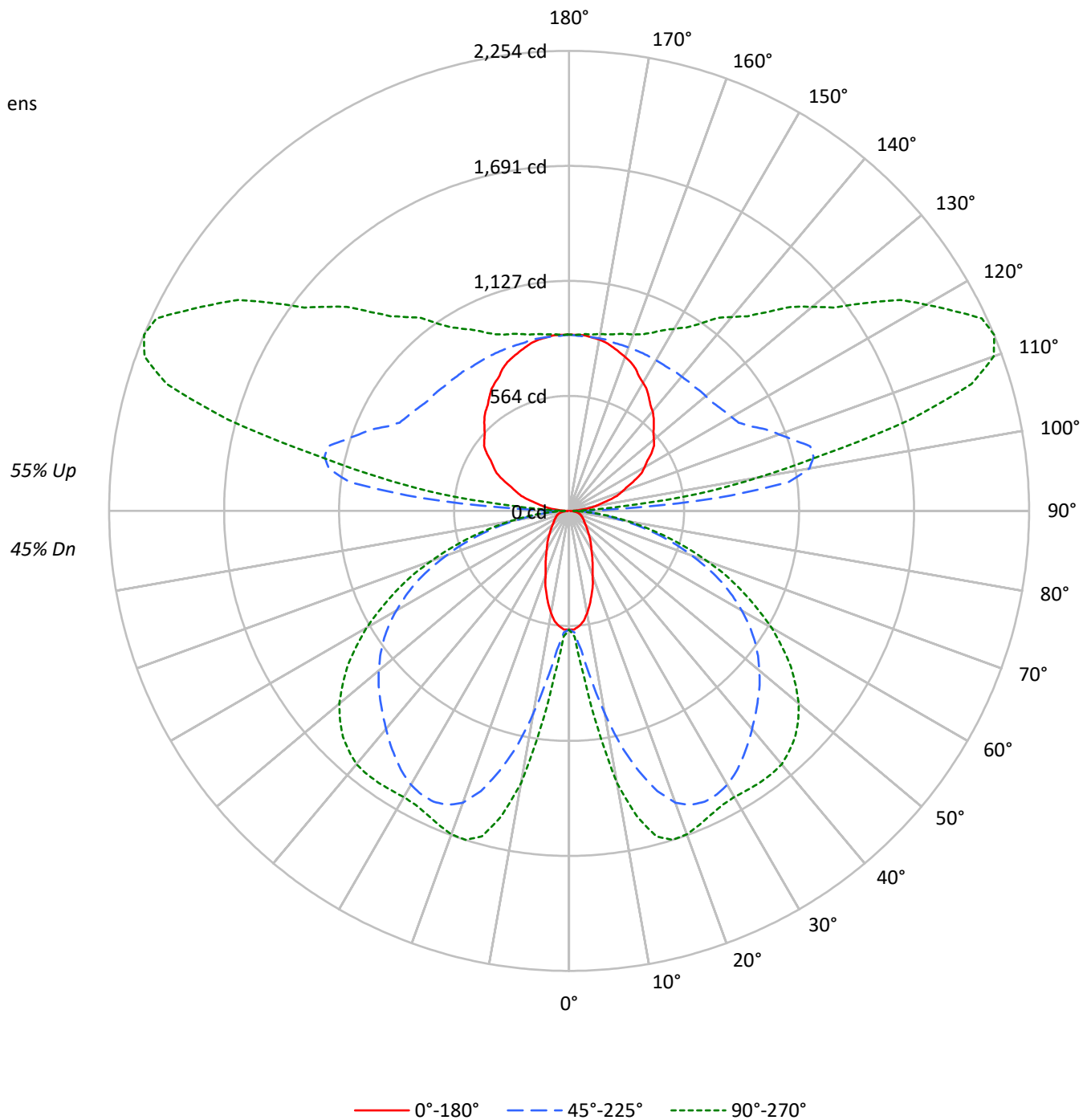
Test Method: LM-79-2019  
Report Number: P937147  
REPORT IS A COMBINATION OF REPORTS P933518 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-92765-1D-UNV-STD-W-8-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10098.6 lumens  
Efficiency: N/A  
Efficacy: 119.1 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 84.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9	9	9	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2697	2697	2697
5°	2635	3118	3626
10°	2390	4545	6011
15°	2032	5938	7259
20°	1654	6881	7397
25°	1380	7201	7247
30°	1163	7246	7233
35°	1029	7126	7421
40°	897	6969	7614
45°	812	6855	7644
50°	745	6752	7517
55°	713	6601	7184
60°	730	6311	6658
65°	759	5870	5934
70°	809	5119	5013
75°	896	4174	3912
80°	981	2895	2636
85°	871	1536	1350

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7644 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.2	0.7
10°-20°	333.3	3.3
20°-30°	583.0	5.8
30°-40°	750.5	7.4
40°-50°	838.3	8.3
50°-60°	802.9	8.0
60°-70°	636.3	6.3
70°-80°	374.2	3.7
80°-90°	107.3	1.1
90°-100°	420.9	4.2
100°-110°	1106.5	11.0
110°-120°	1147.4	11.4
120°-130°	920.3	9.1
130°-140°	722.1	7.2
140°-150°	554.3	5.5
150°-160°	399.2	4.0
160°-170°	244.2	2.4
170°-180°	82.5	0.8
0°-30°	991.6	9.8
0°-40°	1742.1	17.3
0°-60°	3383.4	33.5
0°-90°	4501.1	44.6
90°-120°	2674.8	26.5
90°-150°	4871.6	48.2
90°-180°	5597.0	55.4
0°-180°	10098.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	581	581	581	581	581	
5°	566	608	684	774	802	52
15°	424	783	1320	1600	1651	118
25°	271	888	1572	1641	1643	125
35°	183	849	1481	1565	1626	114
45°	125	677	1309	1499	1567	97
55°	90	430	1110	1290	1326	82
65°	71	228	824	927	940	70
75°	52	140	452	497	499	55
85°	19	43	112	123	125	20
90°	6	16	44	22	22	6
95°	56	218	725	374	254	62
105°	199	302	1223	1857	1733	211
115°	354	430	980	1955	2231	350
125°	493	552	891	1506	1777	437
135°	587	646	864	1216	1379	454
145°	681	724	852	1037	1118	427
155°	770	791	852	936	963	354
165°	830	841	852	886	897	234
175°	864	864	858	869	869	82
180°	864	864	864	864	864	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4
2.5°	581.4	581.4	585.1	587.0	590.7	592.6	596.3	600.1	611.3	613.2	616.9
5°	566.4	573.9	598.2	607.6	633.7	669.2	684.2	708.5	759.0	773.9	783.3
7.5°	544.0	560.8	620.6	635.6	701.0	794.5	833.8	886.1	966.5	1005.7	1037.5
10°	508.5	544.0	650.6	686.1	792.6	934.7	1007.6	1080.6	1202.1	1256.3	1276.9
12.5°	469.2	527.2	682.3	730.9	884.2	1091.8	1179.7	1260.1	1398.4	1471.3	1482.5
15°	424.4	502.9	712.2	783.3	981.4	1222.7	1319.9	1419.0	1548.0	1600.3	1613.4
17.5°	385.1	484.2	740.3	815.1	1056.2	1340.5	1439.5	1521.8	1626.5	1662.0	1671.3
20°	336.5	454.3	759.0	856.2	1134.8	1426.5	1521.8	1585.4	1656.4	1678.8	1682.6
22.5°	301.0	422.5	770.2	871.1	1187.2	1478.8	1559.2	1609.7	1658.3	1665.7	1667.6
25°	271.1	387.0	768.3	888.0	1232.0	1510.6	1572.3	1609.7	1637.7	1641.4	1641.4
27.5°	243.0	347.7	760.9	891.7	1265.7	1518.1	1566.7	1592.8	1605.9	1613.4	1613.4
30°	218.7	310.3	742.2	884.2	1280.6	1510.6	1549.8	1562.9	1576.0	1587.2	1592.8
32.5°	200.0	274.8	714.1	869.3	1282.5	1491.9	1519.9	1527.4	1546.1	1572.3	1581.6
35°	183.2	239.3	682.3	848.7	1271.3	1462.0	1480.7	1488.1	1525.5	1564.8	1577.9
37.5°	166.4	213.1	641.2	813.2	1254.5	1426.5	1439.5	1452.6	1510.6	1557.3	1572.3
40°	149.6	190.7	592.6	773.9	1228.3	1383.5	1394.7	1415.2	1491.9	1546.1	1561.1
42.5°	136.5	172.0	540.3	732.8	1194.6	1334.9	1351.7	1381.6	1469.5	1527.4	1544.2
45°	125.3	153.3	484.2	676.7	1151.7	1284.4	1308.7	1349.8	1443.3	1499.4	1514.3
47.5°	114.0	140.2	426.2	618.8	1104.9	1233.9	1265.7	1312.4	1407.8	1462.0	1475.1
50°	104.7	127.1	368.3	557.1	1054.3	1179.7	1217.1	1265.7	1362.9	1413.4	1430.2
52.5°	97.2	115.9	314.1	495.4	996.4	1123.6	1166.6	1217.1	1308.7	1357.3	1368.5
55°	89.7	106.6	267.3	430.0	936.6	1063.8	1110.5	1159.1	1248.9	1290.0	1297.5
57.5°	86.0	99.1	228.1	368.3	873.0	996.4	1048.7	1093.7	1177.8	1209.6	1217.1
60°	80.4	93.5	198.2	315.9	803.8	932.8	977.7	1022.6	1093.7	1119.9	1125.5
62.5°	74.8	89.7	175.7	265.5	732.8	858.1	902.9	944.1	1003.9	1022.6	1030.0
65°	71.0	86.0	158.9	228.1	659.9	779.5	824.4	859.9	908.5	927.2	931.0
67.5°	67.3	82.3	145.8	196.3	587.0	701.0	734.7	768.3	805.7	824.4	826.3
70°	61.7	78.5	134.6	173.9	512.2	611.3	639.3	674.9	704.8	714.1	719.7
72.5°	58.0	72.9	127.1	157.0	435.6	525.3	551.5	572.0	598.2	607.6	607.6
75°	52.3	65.4	119.6	140.2	357.1	430.0	452.4	473.0	493.5	497.3	491.7
77.5°	46.7	58.0	102.8	117.8	278.5	340.2	358.9	370.1	387.0	390.7	392.6
80°	39.3	50.5	80.4	91.6	201.9	250.5	263.6	272.9	287.9	287.9	291.6
82.5°	29.9	39.3	58.0	65.4	136.5	172.0	183.2	188.8	198.2	198.2	198.2
85°	18.7	24.3	37.4	43.0	82.3	104.7	112.2	114.0	121.5	123.4	123.4
87.5°	9.3	13.1	24.3	26.2	43.0	54.2	54.2	58.0	58.0	56.1	54.2
90°	5.8	10.5	15.1	16.3	25.5	37.9	44.0	39.2	29.3	22.1	22.1
92.5°	23.2	62.6	102.1	111.9	157.3	217.8	248.1	217.4	156.1	110.1	105.7
95°	55.6	127.8	199.8	217.9	386.9	612.2	725.0	646.9	490.8	373.8	360.5
97.5°	96.2	159.8	223.5	239.4	521.2	896.9	1084.8	1035.5	936.9	862.9	837.7
100°	127.5	185.2	242.9	257.3	570.1	987.0	1195.5	1199.1	1206.3	1211.8	1181.7
102.5°	154.1	208.0	261.8	275.3	592.4	1015.4	1226.8	1289.6	1415.3	1509.6	1483.8
105°	199.4	245.0	290.5	301.9	609.1	1018.5	1223.3	1364.2	1645.9	1857.3	1843.4
107.5°	245.7	288.3	330.7	341.4	612.1	973.2	1153.8	1350.3	1743.3	2038.1	2041.5
110°	277.0	315.4	353.7	363.3	607.5	933.0	1095.8	1315.5	1754.9	2084.5	2098.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	307.7	344.3	380.8	390.0	607.7	898.0	1043.1	1268.0	1717.7	2055.0	2077.1
115°	354.1	387.8	421.6	430.0	613.3	857.7	979.9	1196.5	1629.8	1954.7	1985.4
117.5°	399.9	430.5	461.2	468.8	624.8	832.5	936.5	1131.9	1522.9	1816.1	1850.2
120°	426.5	455.3	484.2	491.4	633.9	824.0	919.1	1097.7	1455.0	1722.9	1755.9
122.5°	452.6	481.7	510.8	518.1	647.3	819.6	905.7	1066.6	1388.3	1629.6	1662.2
125°	492.6	519.1	545.6	552.2	665.2	815.9	891.2	1027.9	1301.1	1506.1	1536.2
127.5°	525.0	551.9	578.6	585.3	683.3	813.8	879.1	996.4	1231.0	1407.0	1432.3
130°	542.4	571.2	600.1	607.3	696.4	815.2	874.5	978.9	1187.8	1344.5	1367.9
132.5°	560.4	589.2	618.1	625.3	707.0	815.9	870.4	963.9	1150.9	1291.1	1312.1
135°	587.0	613.3	639.6	646.2	718.6	815.2	863.5	941.8	1098.4	1215.8	1233.9
137.5°	614.3	640.3	666.3	672.8	736.0	820.2	862.3	928.4	1060.9	1160.2	1174.9
140°	636.9	660.8	684.8	690.7	746.5	821.0	858.2	915.5	1029.8	1115.6	1129.4
142.5°	654.3	676.4	698.6	704.1	755.5	824.0	858.2	908.4	1008.9	1084.3	1096.1
145°	680.9	700.3	719.5	724.4	767.1	824.0	852.5	893.6	975.7	1037.3	1046.3
147.5°	707.6	726.4	745.2	749.9	784.1	829.6	852.5	884.8	949.4	997.9	1005.4
150°	725.0	742.0	759.0	763.2	792.9	832.6	852.5	879.7	934.3	975.3	981.3
152.5°	742.9	755.8	768.7	771.9	798.7	834.5	852.5	875.7	922.4	957.3	961.9
155°	769.5	779.1	788.6	791.0	811.5	838.8	852.5	871.0	908.1	935.9	938.9
157.5°	789.3	798.5	807.8	810.1	824.2	843.0	852.5	866.8	895.7	917.3	919.5
160°	802.6	809.8	817.0	818.8	830.0	845.0	852.5	864.8	889.6	908.1	909.3
162.5°	815.9	821.3	826.7	828.1	836.3	847.0	852.5	862.9	883.8	899.4	900.5
165°	830.4	835.3	840.2	841.4	845.1	850.0	852.5	859.9	874.9	886.1	887.3
167.5°	843.8	846.1	848.4	849.0	852.1	856.2	858.2	863.1	872.9	880.3	880.8
170°	852.5	854.8	857.1	857.7	857.9	858.2	858.2	863.1	872.9	880.3	880.3
172.5°	857.1	857.6	858.2	858.2	858.2	858.2	858.2	862.1	869.8	875.6	875.2
175°	863.5	863.5	863.5	863.5	861.7	859.4	858.2	860.7	865.6	869.3	869.3
177.5°	863.5	863.5	863.5	863.5	862.1	860.3	859.4	861.3	865.2	868.1	867.6
180°	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	581.4	581.4
2.5°	620.6	616.9
5°	798.2	802.0
7.5°	1075.0	1073.1
10°	1336.7	1353.5
12.5°	1527.4	1531.1
15°	1643.3	1650.8
17.5°	1688.2	1690.0
20°	1690.0	1686.3
22.5°	1669.5	1665.7
25°	1645.2	1643.3
27.5°	1622.7	1624.6
30°	1613.4	1619.0
32.5°	1613.4	1622.7
35°	1617.1	1626.5
37.5°	1615.3	1626.5
40°	1607.8	1620.9
42.5°	1587.2	1596.6
45°	1555.4	1566.7
47.5°	1514.3	1521.8
50°	1462.0	1469.5
52.5°	1396.5	1398.4
55°	1318.0	1325.5
57.5°	1233.9	1235.8
60°	1140.4	1146.0
62.5°	1041.3	1041.3
65°	936.6	940.3
67.5°	828.1	837.5
70°	717.9	719.7
72.5°	609.4	609.4
75°	497.3	499.1
77.5°	390.7	390.7
80°	289.8	291.6
82.5°	200.0	203.8
85°	125.3	125.3
87.5°	58.0	52.3
90°	22.1	22.1
92.5°	88.2	70.7
95°	307.5	254.4
97.5°	736.6	635.7
100°	1061.5	941.2
102.5°	1380.8	1277.8
105°	1788.0	1732.7
107.5°	2054.9	2068.2
110°	2156.6	2214.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2165.6	2254.2
115°	2108.2	2231.0
117.5°	1986.4	2122.7
120°	1888.4	2020.7
122.5°	1792.8	1923.3
125°	1656.5	1776.8
127.5°	1533.9	1635.4
130°	1461.6	1555.4
132.5°	1396.1	1480.0
135°	1306.3	1378.6
137.5°	1234.2	1293.4
140°	1184.8	1240.2
142.5°	1143.8	1191.5
145°	1082.4	1118.5
147.5°	1035.2	1065.1
150°	1005.6	1029.8
152.5°	980.1	998.5
155°	951.1	963.1
157.5°	928.0	936.5
160°	914.2	919.1
162.5°	905.2	909.8
165°	892.2	897.0
167.5°	882.8	884.9
170°	880.3	880.3
172.5°	873.4	871.6
175°	869.3	869.3
177.5°	865.5	863.5
180°	863.5	863.5



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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	3.94	4.78	4.93	5.80	7.14	17.12	17.96	18.11	18.97	20.32
	3H	4.64	5.40	5.65	6.42	7.79	18.95	19.71	19.96	20.73	22.10
	4H	4.94	5.66	5.96	6.68	8.06	19.60	20.32	20.62	21.34	22.71
	6H	5.19	5.85	6.22	6.88	8.27	20.03	20.69	21.06	21.72	23.11
	8H	5.26	5.89	6.29	6.94	8.32	20.15	20.78	21.18	21.83	23.21
	12H	5.27	5.88	6.31	6.92	8.32	20.22	20.82	21.26	21.86	23.26
4H	2H	11.15	11.87	12.17	12.90	14.27	17.39	18.11	18.41	19.13	20.50
	3H	12.72	13.32	13.75	14.37	15.76	19.43	20.04	20.47	21.09	22.47
	4H	12.81	13.36	13.85	14.41	15.82	20.20	20.75	21.24	21.80	23.20
	6H	12.82	13.30	13.87	14.36	15.77	20.74	21.21	21.79	22.28	23.68
	8H	12.80	13.24	13.85	14.30	15.72	20.90	21.34	21.95	22.40	23.82
	12H	12.75	13.16	13.82	14.23	15.65	20.99	21.40	22.06	22.47	23.89
8H	4H	14.25	14.70	15.31	15.76	17.18	20.26	20.70	21.31	21.76	23.18
	6H	14.50	14.87	15.57	15.97	17.38	20.89	21.26	21.96	22.36	23.77
	8H	14.51	14.84	15.60	15.92	17.36	21.11	21.43	22.19	22.52	23.95
	12H	14.48	14.77	15.57	15.85	17.32	21.25	21.54	22.34	22.62	24.09
12H	4H	14.40	14.80	15.47	15.87	17.30	20.21	20.61	21.28	21.69	23.11
	6H	14.75	15.08	15.84	16.16	17.60	20.87	21.19	21.95	22.28	23.71
	8H	14.82	15.11	15.91	16.19	17.66	21.10	21.38	22.19	22.46	23.94