

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: P937739

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

**Test Information**

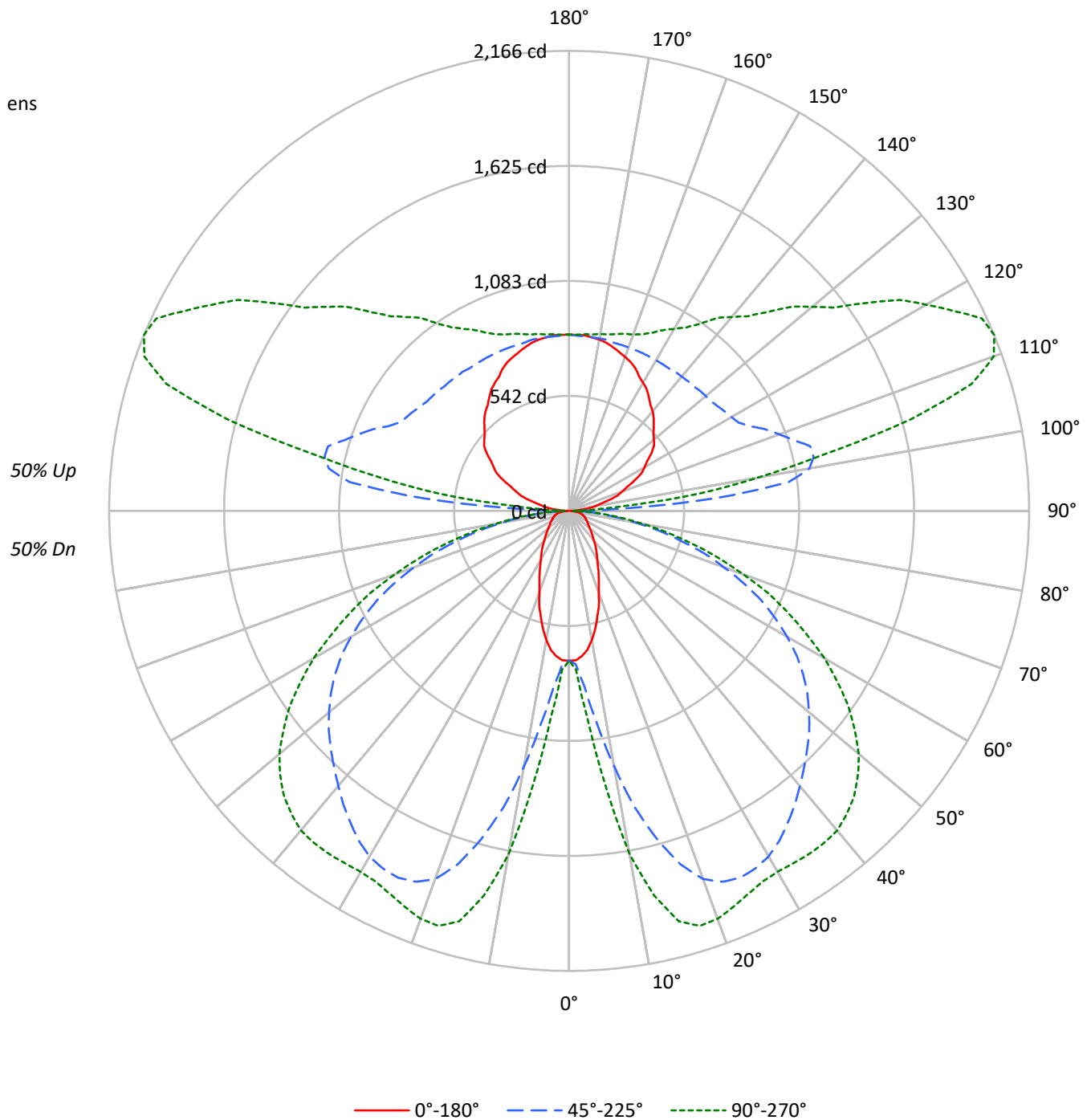
Test Method: LM-79-2019  
Report Number: P937739  
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10833.7 lumens  
Efficiency: N/A  
Efficacy: 105.0 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: General Diffuse  
  
Input Watts (W): 103.2  
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

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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	50	30	10	50	30	10	0				
RCR																															
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50													
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41													
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34													
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28													
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23													
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20													
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17													
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15													
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13													
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11													
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10													

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

	0°	45°	90°
0°	4359	4359	4359
5°	4257	5037	5860
10°	3860	7341	9714
15°	3279	9588	11729
20°	2668	11108	11954
25°	2226	11622	11711
30°	1876	11692	11689
35°	1658	11495	11992
40°	1444	11239	12303
45°	1306	11051	12352
50°	1197	10881	12147
55°	1145	10634	11609
60°	1171	10162	10758
65°	1217	9447	9591
70°	1294	8233	8103
75°	1429	6707	6322
80°	1549	4646	4261
85°	1353	2460	2180

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12352 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.2	0.8
10°-20°	404.0	3.7
20°-30°	706.6	6.5
30°-40°	909.6	8.4
40°-50°	1016.0	9.4
50°-60°	973.1	9.0
60°-70°	771.2	7.1
70°-80°	453.5	4.2
80°-90°	129.1	1.2
90°-100°	404.5	3.7
100°-110°	1063.4	9.8
110°-120°	1102.7	10.2
120°-130°	884.5	8.2
130°-140°	694.0	6.4
140°-150°	532.7	4.9
150°-160°	383.6	3.5
160°-170°	234.7	2.2
170°-180°	79.3	0.7
0°-30°	1201.8	11.1
0°-40°	2111.4	19.5
0°-60°	4100.6	37.8
0°-90°	5454.4	50.3
90°-120°	2570.6	23.7
90°-150°	4681.7	43.2
90°-180°	5379.0	49.7
0°-180°	10833.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	686	736	829	938	972	63
15°	514	949	1600	1940	2001	143
25°	329	1076	1906	1989	1992	151
35°	222	1029	1794	1896	1971	139
45°	152	820	1586	1817	1899	117
55°	109	521	1346	1563	1606	99
65°	86	276	999	1124	1140	85
75°	64	170	548	603	605	66
85°	23	52	136	150	152	24
90°	6	16	42	21	21	6
95°	54	209	697	359	244	59
105°	192	290	1176	1785	1665	203
115°	340	413	942	1878	2144	336
125°	473	531	857	1448	1708	420
135°	564	621	830	1168	1325	436
145°	654	696	819	997	1075	410
155°	740	760	819	899	926	340
165°	798	809	819	852	862	225
175°	830	830	825	835	835	79
180°	830	830	830	830	830	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6
2.5°	704.6	704.6	709.2	711.4	716.0	718.3	722.8	727.3	740.9	743.2	747.7
5°	686.5	695.6	725.1	736.4	768.1	811.1	829.2	858.7	919.9	938.1	949.4
7.5°	659.4	679.7	752.2	770.3	849.7	963.0	1010.5	1074.0	1171.4	1219.0	1257.5
10°	616.3	659.4	788.5	831.6	960.7	1132.9	1221.3	1309.7	1456.9	1522.6	1547.5
12.5°	568.7	638.9	827.0	885.9	1071.7	1323.2	1429.7	1527.1	1694.8	1783.2	1796.8
15°	514.3	609.5	863.3	949.4	1189.5	1481.8	1599.7	1719.7	1876.1	1939.5	1955.4
17.5°	466.8	586.8	897.3	987.9	1280.2	1624.6	1744.6	1844.3	1971.3	2014.3	2025.6
20°	407.8	550.6	919.9	1037.8	1375.3	1728.8	1844.3	1921.4	2007.5	2034.6	2039.2
22.5°	364.8	512.1	933.5	1055.9	1438.8	1792.2	1889.7	1950.8	2009.7	2018.8	2021.1
25°	328.6	469.0	931.3	1076.2	1493.2	1830.8	1905.6	1950.8	1984.8	1989.4	1989.4
27.5°	294.6	421.4	922.2	1080.8	1534.0	1839.8	1898.7	1930.5	1946.3	1955.4	1955.4
30°	265.1	376.2	899.5	1071.7	1552.1	1830.8	1878.3	1894.2	1910.0	1923.7	1930.5
32.5°	242.4	333.0	865.5	1053.6	1554.3	1808.1	1842.1	1851.1	1873.8	1905.6	1916.8
35°	222.1	290.0	827.0	1028.7	1540.8	1771.9	1794.5	1803.5	1848.9	1896.5	1912.3
37.5°	201.6	258.3	777.2	985.6	1520.3	1728.8	1744.6	1760.5	1830.8	1887.4	1905.6
40°	181.3	231.1	718.3	938.1	1488.6	1676.7	1690.3	1715.2	1808.1	1873.8	1891.9
42.5°	165.4	208.4	654.8	888.2	1447.8	1617.8	1638.1	1674.4	1780.9	1851.1	1871.6
45°	151.8	185.8	586.8	820.2	1395.7	1556.6	1586.0	1635.9	1749.2	1817.2	1835.3
47.5°	138.2	170.0	516.6	750.0	1339.1	1495.4	1534.0	1590.6	1706.2	1771.9	1787.7
50°	126.8	154.1	446.4	675.2	1277.9	1429.7	1475.1	1534.0	1651.8	1712.9	1733.3
52.5°	117.8	140.5	380.6	600.5	1207.6	1361.7	1413.8	1475.1	1586.0	1644.9	1658.6
55°	108.7	129.2	324.0	521.1	1135.1	1289.2	1345.9	1404.8	1513.5	1563.4	1572.4
57.5°	104.3	120.1	276.4	446.4	1058.1	1207.6	1271.1	1325.5	1427.5	1465.9	1475.1
60°	97.4	113.3	240.2	382.9	974.3	1130.6	1185.0	1239.4	1325.5	1357.2	1364.0
62.5°	90.6	108.7	213.0	321.7	888.2	1040.0	1094.4	1144.2	1216.7	1239.4	1248.4
65°	86.1	104.3	192.6	276.4	799.8	944.8	999.2	1042.2	1101.1	1123.8	1128.4
67.5°	81.6	99.7	176.7	237.9	711.4	849.7	890.5	931.3	976.5	999.2	1001.5
70°	74.8	95.2	163.2	210.7	620.8	740.9	774.9	817.9	854.2	865.5	872.4
72.5°	70.2	88.4	154.1	190.3	527.9	636.7	668.4	693.3	725.1	736.4	736.4
75°	63.5	79.3	145.1	170.0	432.7	521.1	548.3	573.2	598.1	602.7	595.9
77.5°	56.7	70.2	124.6	142.7	337.6	412.4	435.1	448.6	469.0	473.5	475.9
80°	47.6	61.1	97.4	111.0	244.7	303.6	319.5	330.8	348.9	348.9	353.5
82.5°	36.2	47.6	70.2	79.3	165.4	208.4	222.1	228.9	240.2	240.2	240.2
85°	22.7	29.5	45.3	52.1	99.7	126.8	135.9	138.2	147.3	149.5	149.5
87.5°	11.3	15.9	29.5	31.7	52.1	65.7	65.7	70.2	70.2	68.0	65.7
90°	5.5	10.0	14.5	15.6	24.5	36.4	42.3	37.6	28.2	21.2	21.2
92.5°	22.3	60.2	98.0	107.5	151.1	209.2	238.3	208.9	150.0	105.8	101.6
95°	53.5	122.7	192.1	209.4	371.9	588.4	696.7	621.7	471.7	359.2	346.4
97.5°	92.5	153.6	214.8	230.0	500.8	862.0	1042.6	995.2	900.4	829.2	805.0
100°	122.6	178.0	233.4	247.3	547.8	948.5	1148.9	1152.4	1159.3	1164.5	1135.6
102.5°	148.2	199.9	251.6	264.6	569.4	975.8	1179.0	1239.4	1360.2	1450.8	1426.0
105°	191.6	235.4	279.2	290.2	585.4	978.9	1175.7	1311.1	1581.8	1784.9	1771.6
107.5°	236.1	277.0	317.9	328.0	588.3	935.3	1108.8	1297.7	1675.4	1958.7	1961.9
110°	266.2	303.0	340.0	349.2	583.9	896.7	1053.1	1264.2	1686.5	2003.2	2017.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	295.7	330.9	366.1	374.8	584.0	863.0	1002.4	1218.5	1650.7	1974.8	1996.1
115°	340.3	372.7	405.1	413.2	589.4	824.2	941.7	1149.9	1566.3	1878.5	1908.1
117.5°	384.3	413.7	443.2	450.5	600.3	800.1	899.9	1087.8	1463.5	1745.3	1778.1
120°	409.9	437.7	465.3	472.3	609.3	791.9	883.2	1054.9	1398.2	1655.7	1687.5
122.5°	435.0	462.9	490.9	497.9	622.1	787.6	870.5	1025.1	1334.2	1566.0	1597.4
125°	473.4	498.9	524.4	530.8	639.4	784.2	856.6	987.9	1250.5	1447.5	1476.4
127.5°	504.6	530.3	556.1	562.5	656.6	782.1	844.9	957.6	1183.1	1352.2	1376.6
130°	521.3	549.1	576.7	583.7	669.3	783.4	840.4	940.7	1141.5	1292.1	1314.6
132.5°	538.5	566.3	593.9	600.9	679.5	784.2	836.5	926.4	1106.0	1240.8	1261.0
135°	564.1	589.4	614.7	621.0	690.6	783.4	829.8	905.0	1055.5	1168.4	1185.8
137.5°	590.3	615.3	640.4	646.6	707.3	788.3	828.7	892.4	1019.6	1115.0	1129.2
140°	612.1	635.1	658.1	663.8	717.5	789.0	824.8	879.8	989.6	1072.0	1085.3
142.5°	628.8	650.1	671.3	676.7	726.1	791.8	824.8	873.1	969.6	1042.0	1053.4
145°	654.4	672.9	691.5	696.2	737.2	791.9	819.2	858.7	937.7	996.9	1005.5
147.5°	680.0	698.0	716.1	720.6	753.5	797.3	819.2	850.3	912.4	959.0	966.2
150°	696.7	713.0	729.4	733.5	762.0	800.1	819.2	845.5	897.9	937.3	943.1
152.5°	714.0	726.4	738.7	741.9	767.7	802.0	819.2	841.7	886.5	920.0	924.4
155°	739.6	748.7	757.8	760.2	779.9	806.1	819.2	837.1	872.7	899.4	902.3
157.5°	758.5	767.5	776.3	778.5	792.1	810.2	819.2	833.1	860.8	881.6	883.7
160°	771.3	778.3	785.2	786.9	797.7	812.1	819.2	831.1	854.9	872.7	873.9
162.5°	784.2	789.3	794.5	795.9	803.6	814.1	819.2	829.2	849.3	864.3	865.4
165°	798.1	802.7	807.5	808.6	812.2	816.9	819.2	826.4	840.8	851.6	852.7
167.5°	810.9	813.1	815.3	815.9	818.8	822.8	824.8	829.5	838.9	845.9	846.5
170°	819.2	821.5	823.7	824.2	824.4	824.7	824.8	829.5	838.9	845.9	845.9
172.5°	823.7	824.2	824.7	824.8	824.8	824.8	824.8	828.5	835.9	841.5	841.0
175°	829.8	829.8	829.8	829.8	828.1	825.9	824.8	827.1	831.8	835.4	835.4
177.5°	829.8	829.8	829.8	829.8	828.5	826.8	825.9	827.8	831.5	834.2	833.7
180°	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	704.6	704.6
2.5°	752.2	747.7
5°	967.5	972.1
7.5°	1302.9	1300.5
10°	1620.0	1640.5
12.5°	1851.1	1855.7
15°	1991.6	2000.7
17.5°	2046.0	2048.3
20°	2048.3	2043.7
22.5°	2023.3	2018.8
25°	1993.8	1991.6
27.5°	1966.7	1968.9
30°	1955.4	1962.2
32.5°	1955.4	1966.7
35°	1959.9	1971.3
37.5°	1957.6	1971.3
40°	1948.6	1964.4
42.5°	1923.7	1935.0
45°	1885.1	1898.7
47.5°	1835.3	1844.3
50°	1771.9	1780.9
52.5°	1692.5	1694.8
55°	1597.3	1606.4
57.5°	1495.4	1497.6
60°	1382.1	1388.9
62.5°	1262.1	1262.1
65°	1135.1	1139.7
67.5°	1003.8	1015.1
70°	870.0	872.4
72.5°	738.6	738.6
75°	602.7	604.9
77.5°	473.5	473.5
80°	351.2	353.5
82.5°	242.4	247.0
85°	151.8	151.8
87.5°	70.2	63.5
90°	21.2	21.2
92.5°	84.7	67.9
95°	295.5	244.5
97.5°	707.9	610.9
100°	1020.0	904.4
102.5°	1327.0	1228.0
105°	1718.4	1665.2
107.5°	1974.8	1987.7
110°	2072.6	2128.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2081.2	2166.4
115°	2026.1	2144.2
117.5°	1909.0	2040.0
120°	1814.8	1942.0
122.5°	1722.9	1848.4
125°	1591.9	1707.5
127.5°	1474.2	1571.6
130°	1404.7	1494.8
132.5°	1341.7	1422.4
135°	1255.4	1324.9
137.5°	1186.1	1243.1
140°	1138.6	1191.8
142.5°	1099.3	1145.1
145°	1040.3	1074.9
147.5°	994.9	1023.7
150°	966.4	989.6
152.5°	942.0	959.6
155°	914.0	925.6
157.5°	891.8	899.9
160°	878.6	883.2
162.5°	869.9	874.3
165°	857.5	862.1
167.5°	848.4	850.4
170°	845.9	845.9
172.5°	839.3	837.6
175°	835.4	835.4
177.5°	831.7	829.8
180°	829.8	829.8



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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	6.15	7.05	7.09	8.02	9.28	19.31	20.22	20.26	21.18	22.45
	3H	6.86	7.67	7.81	8.65	9.93	21.15	21.96	22.11	22.94	24.22
	4H	7.16	7.93	8.13	8.91	10.20	21.79	22.56	22.77	23.54	24.84
	6H	7.41	8.12	8.39	9.11	10.41	22.22	22.93	23.21	23.92	25.23
	8H	7.48	8.16	8.47	9.16	10.46	22.34	23.02	23.33	24.02	25.33
	12H	7.50	8.14	8.49	9.14	10.47	22.41	23.05	23.40	24.05	25.38
4H	2H	13.36	14.13	14.34	15.11	16.40	19.59	20.36	20.57	21.34	22.64
	3H	14.93	15.58	15.92	16.59	17.90	21.64	22.28	22.62	23.29	24.60
	4H	15.03	15.62	16.02	16.62	17.95	22.40	22.99	23.40	24.00	25.33
	6H	15.04	15.55	16.05	16.58	17.91	22.94	23.45	23.95	24.48	25.81
	8H	15.02	15.50	16.03	16.52	17.86	23.10	23.58	24.11	24.60	25.94
	12H	14.98	15.41	16.01	16.45	17.80	23.19	23.62	24.22	24.66	26.01
8H	4H	16.47	16.95	17.48	17.97	19.31	22.47	22.94	23.48	23.96	25.31
	6H	16.72	17.11	17.75	18.17	19.52	23.09	23.49	24.13	24.55	25.89
	8H	16.74	17.09	17.78	18.13	19.49	23.31	23.66	24.35	24.71	26.07
	12H	16.71	17.01	17.75	18.06	19.46	23.46	23.76	24.50	24.80	26.21
12H	4H	16.62	17.05	17.65	18.08	19.43	22.42	22.85	23.45	23.89	25.24
	6H	16.98	17.32	18.02	18.37	19.73	23.08	23.43	24.12	24.47	25.83
	8H	17.05	17.35	18.09	18.40	19.80	23.31	23.61	24.35	24.66	26.06