

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: P937711

Luminaire Tested: SQ4-FB-100U-125D-830-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937711
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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

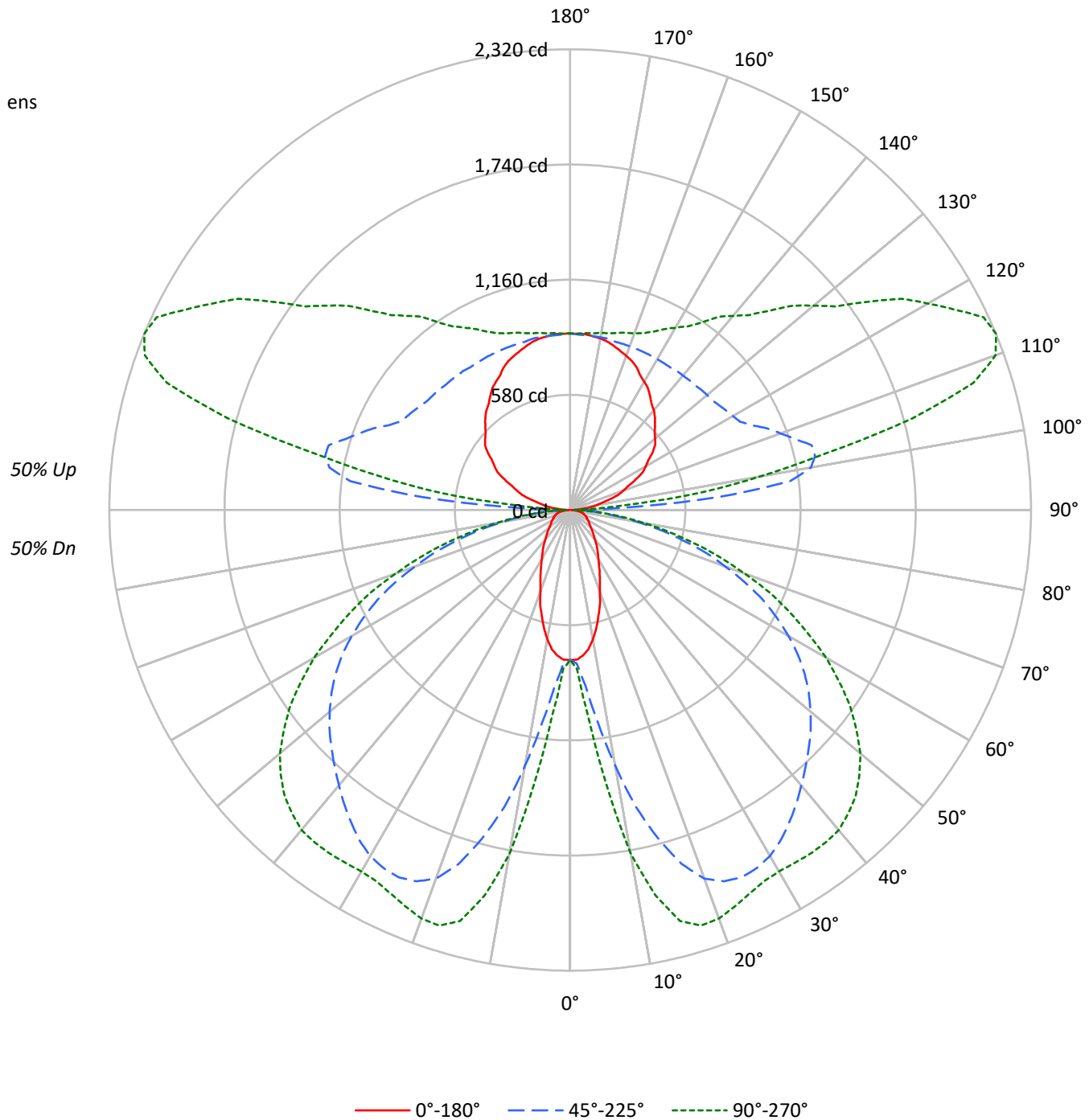
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11603.0 lumens
Efficiency: N/A
Efficacy: 112.4 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				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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4669	4669	4669
5°	4559	5394	6276
10°	4134	7862	10404
15°	3512	10269	12563
20°	2858	11897	12803
25°	2383	12447	12542
30°	2009	12522	12519
35°	1776	12311	12843
40°	1547	12037	13177
45°	1399	11835	13229
50°	1281	11654	13010
55°	1226	11389	12433
60°	1254	10884	11522
65°	1304	10118	10271
70°	1385	8818	8678
75°	1530	7184	6771
80°	1660	4977	4563
85°	1449	2635	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13229 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.6	0.8
10°-20°	432.7	3.7
20°-30°	756.8	6.5
30°-40°	974.2	8.4
40°-50°	1088.2	9.4
50°-60°	1042.2	9.0
60°-70°	826.0	7.1
70°-80°	485.7	4.2
80°-90°	138.3	1.2
90°-100°	433.2	3.7
100°-110°	1138.9	9.8
110°-120°	1180.9	10.2
120°-130°	947.3	8.2
130°-140°	743.3	6.4
140°-150°	570.5	4.9
150°-160°	410.8	3.5
160°-170°	251.4	2.2
170°-180°	84.9	0.7
0°-30°	1287.1	11.1
0°-40°	2261.3	19.5
0°-60°	4391.7	37.8
0°-90°	5841.7	50.3
90°-120°	2753.1	23.7
90°-150°	5014.1	43.2
90°-180°	5761.0	49.7
0°-180°	11603.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	755	755	755	755	755	
5°	735	789	888	1005	1041	68
15°	551	1017	1713	2077	2143	153
25°	352	1153	2041	2131	2133	162
35°	238	1102	1922	2031	2111	149
45°	163	878	1699	1946	2034	126
55°	116	558	1442	1674	1720	106
65°	92	296	1070	1204	1221	91
75°	68	182	587	646	648	71
85°	24	56	146	160	163	26
90°	6	17	45	23	23	7
95°	57	224	746	385	262	64
105°	205	311	1259	1912	1783	218
115°	364	442	1009	2012	2296	360
125°	507	568	917	1550	1829	450
135°	604	665	889	1251	1419	467
145°	701	746	877	1068	1151	439
155°	792	814	877	963	991	364
165°	855	866	877	912	923	241
175°	889	889	883	895	895	84
180°	889	889	889	889	889	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7
2.5°	754.7	754.7	759.5	761.9	766.8	769.3	774.1	778.9	793.5	796.0	800.8
5°	735.3	745.0	776.6	788.7	822.6	868.7	888.1	919.7	985.3	1004.7	1016.8
7.5°	706.2	728.0	805.6	825.0	910.0	1031.3	1082.3	1150.3	1254.6	1305.5	1346.8
10°	660.0	706.2	844.4	890.6	1028.9	1213.4	1308.0	1402.6	1560.4	1630.7	1657.4
12.5°	609.1	684.3	885.7	948.8	1147.8	1417.2	1531.2	1635.5	1815.2	1909.8	1924.3
15°	550.8	652.8	924.5	1016.8	1274.0	1587.1	1713.2	1841.8	2009.3	2077.2	2094.2
17.5°	499.9	628.5	961.0	1058.0	1371.1	1739.9	1868.5	1975.3	2111.2	2157.3	2169.5
20°	436.8	589.7	985.3	1111.4	1473.0	1851.6	1975.3	2057.8	2150.0	2179.1	2184.0
22.5°	390.7	548.5	999.8	1130.9	1541.0	1919.5	2023.9	2089.3	2152.4	2162.2	2164.6
25°	351.9	502.3	997.4	1152.6	1599.2	1960.8	2040.9	2089.3	2125.8	2130.6	2130.6
27.5°	315.5	451.3	987.6	1157.5	1642.9	1970.4	2033.5	2067.5	2084.5	2094.2	2094.2
30°	283.9	402.9	963.4	1147.8	1662.3	1960.8	2011.7	2028.7	2045.6	2060.3	2067.5
32.5°	259.6	356.7	926.9	1128.4	1664.7	1936.5	1972.9	1982.6	2006.8	2040.9	2052.9
35°	237.9	310.6	885.7	1101.7	1650.2	1897.7	1921.9	1931.6	1980.2	2031.1	2048.1
37.5°	216.0	276.7	832.4	1055.6	1628.3	1851.6	1868.5	1885.5	1960.8	2021.4	2040.9
40°	194.2	247.5	769.3	1004.7	1594.3	1795.8	1810.3	1837.0	1936.5	2006.8	2026.2
42.5°	177.1	223.2	701.3	951.2	1550.6	1732.7	1754.5	1793.3	1907.3	1982.6	2004.4
45°	162.6	198.9	628.5	878.5	1494.8	1667.1	1698.6	1752.1	1873.4	1946.2	1965.6
47.5°	148.0	182.0	553.2	803.2	1434.2	1601.6	1642.9	1703.5	1827.3	1897.7	1914.7
50°	135.8	165.0	478.1	723.1	1368.6	1531.2	1579.8	1642.9	1769.1	1834.6	1856.4
52.5°	126.2	150.5	407.6	643.1	1293.4	1458.4	1514.2	1579.8	1698.6	1761.7	1776.3
55°	116.4	138.3	347.0	558.1	1215.7	1380.8	1441.5	1504.6	1621.0	1674.4	1684.1
57.5°	111.7	128.6	296.1	478.1	1133.2	1293.4	1361.3	1419.6	1528.8	1570.0	1579.8
60°	104.3	121.3	257.3	410.1	1043.5	1210.9	1269.2	1327.4	1419.6	1453.6	1460.9
62.5°	97.0	116.4	228.1	344.5	951.2	1113.8	1172.1	1225.5	1303.1	1327.4	1337.1
65°	92.3	111.7	206.3	296.1	856.6	1011.9	1070.1	1116.2	1179.3	1203.6	1208.5
67.5°	87.4	106.8	189.3	254.8	761.9	910.0	953.7	997.4	1045.9	1070.1	1072.6
70°	80.1	101.9	174.8	225.7	664.9	793.5	829.9	876.0	914.9	926.9	934.3
72.5°	75.2	94.6	165.0	203.8	565.4	681.9	715.9	742.5	776.6	788.7	788.7
75°	68.0	84.9	155.4	182.0	463.5	558.1	587.3	613.9	640.6	645.5	638.2
77.5°	60.7	75.2	133.5	152.9	361.6	441.7	466.0	480.5	502.3	507.2	509.6
80°	51.0	65.5	104.3	118.9	262.0	325.1	342.2	354.3	373.7	373.7	378.6
82.5°	38.8	51.0	75.2	84.9	177.1	223.2	237.9	245.1	257.3	257.3	257.3
85°	24.3	31.5	48.6	55.8	106.8	135.8	145.6	148.0	157.7	160.1	160.1
87.5°	12.1	17.0	31.5	33.9	55.8	70.4	70.4	75.2	75.2	72.8	70.4
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.7	22.7
92.5°	23.9	64.4	105.0	115.1	161.9	224.1	255.3	223.7	160.6	113.3	108.8
95°	57.3	131.4	205.7	224.3	398.3	630.2	746.2	665.9	505.2	384.7	371.0
97.5°	99.0	164.5	230.0	246.4	536.4	923.2	1116.6	1065.8	964.3	888.1	862.1
100°	131.3	190.6	250.0	264.8	586.7	1015.8	1230.5	1234.2	1241.7	1247.2	1216.2
102.5°	158.7	214.1	269.5	283.4	609.8	1045.1	1262.7	1327.4	1456.8	1553.8	1527.3
105°	205.2	252.1	299.0	310.8	626.9	1048.4	1259.1	1404.2	1694.1	1911.6	1897.4
107.5°	252.9	296.6	340.4	351.3	630.1	1001.7	1187.5	1389.8	1794.3	2097.8	2101.2
110°	285.1	324.6	364.1	374.0	625.3	960.4	1127.9	1354.0	1806.3	2145.5	2160.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.7	354.4	392.1	401.4	625.5	924.3	1073.6	1305.0	1767.9	2115.1	2137.8
115°	364.4	399.1	433.8	442.5	631.2	882.8	1008.6	1231.5	1677.5	2011.9	2043.5
117.5°	411.6	443.1	474.7	482.5	642.9	856.9	963.8	1165.1	1567.5	1869.3	1904.4
120°	439.0	468.7	498.4	505.8	652.6	848.2	946.0	1129.8	1497.5	1773.3	1807.3
122.5°	465.9	495.8	525.8	533.3	666.2	843.6	932.3	1097.9	1428.9	1677.2	1710.9
125°	507.0	534.3	561.6	568.4	684.8	839.8	917.4	1058.0	1339.3	1550.2	1581.2
127.5°	540.4	568.0	595.6	602.5	703.2	837.6	904.9	1025.6	1267.1	1448.2	1474.3
130°	558.3	588.0	617.7	625.1	716.8	839.0	900.1	1007.5	1222.5	1383.8	1407.9
132.5°	576.8	606.5	636.1	643.6	727.7	839.8	895.9	992.1	1184.6	1328.9	1350.5
135°	604.2	631.2	658.3	665.1	739.7	839.0	888.7	969.3	1130.5	1251.4	1270.0
137.5°	632.2	659.0	685.8	692.5	757.5	844.2	887.6	955.7	1091.9	1194.1	1209.3
140°	655.5	680.2	704.9	711.0	768.4	845.0	883.3	942.2	1059.9	1148.2	1162.4
142.5°	673.4	696.3	719.0	724.7	777.6	848.1	883.3	935.1	1038.4	1115.9	1128.2
145°	700.8	720.7	740.6	745.6	789.6	848.2	877.4	919.7	1004.3	1067.7	1076.9
147.5°	728.3	747.6	766.9	771.8	807.0	853.9	877.4	910.7	977.2	1027.1	1034.8
150°	746.2	763.7	781.1	785.5	816.1	857.0	877.4	905.5	961.6	1003.8	1010.0
152.5°	764.7	778.0	791.2	794.5	822.2	859.0	877.4	901.4	949.4	985.3	990.0
155°	792.1	801.9	811.6	814.1	835.3	863.4	877.4	896.5	934.7	963.3	966.4
157.5°	812.4	822.0	831.4	833.8	848.4	867.8	877.4	892.2	922.0	944.2	946.4
160°	826.1	833.5	841.0	842.8	854.4	869.8	877.4	890.1	915.6	934.7	935.9
162.5°	839.8	845.4	850.9	852.4	860.7	871.9	877.4	888.1	909.6	925.7	926.8
165°	854.8	859.7	864.8	866.0	869.9	874.9	877.4	885.1	900.5	912.0	913.3
167.5°	868.4	870.8	873.2	873.8	876.9	881.2	883.3	888.4	898.4	906.0	906.6
170°	877.4	879.8	882.2	882.8	883.0	883.2	883.3	888.4	898.4	906.0	906.0
172.5°	882.2	882.7	883.2	883.3	883.3	883.3	883.3	887.4	895.3	901.2	900.7
175°	888.7	888.7	888.7	888.7	886.9	884.5	883.3	885.8	890.9	894.7	894.7
177.5°	888.7	888.7	888.7	888.7	887.4	885.5	884.6	886.6	890.5	893.5	892.9
180°	888.7	888.7	888.7	888.7	888.7	888.7	888.7	888.7	888.7	888.7	888.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	754.7	754.7
2.5°	805.6	800.8
5°	1036.2	1041.1
7.5°	1395.4	1392.9
10°	1735.0	1756.9
12.5°	1982.6	1987.4
15°	2133.0	2142.8
17.5°	2191.2	2193.7
20°	2193.7	2188.9
22.5°	2167.0	2162.2
25°	2135.4	2133.0
27.5°	2106.4	2108.7
30°	2094.2	2101.5
32.5°	2094.2	2106.4
35°	2099.1	2111.2
37.5°	2096.6	2111.2
40°	2086.9	2103.9
42.5°	2060.3	2072.4
45°	2019.0	2033.5
47.5°	1965.6	1975.3
50°	1897.7	1907.3
52.5°	1812.7	1815.2
55°	1710.8	1720.5
57.5°	1601.6	1604.0
60°	1480.3	1487.5
62.5°	1351.7	1351.7
65°	1215.7	1220.6
67.5°	1075.0	1087.2
70°	931.8	934.3
72.5°	791.1	791.1
75°	645.5	647.9
77.5°	507.2	507.2
80°	376.1	378.6
82.5°	259.6	264.5
85°	162.6	162.6
87.5°	75.2	68.0
90°	22.7	22.7
92.5°	90.7	72.8
95°	316.4	261.8
97.5°	758.2	654.3
100°	1092.4	968.6
102.5°	1421.2	1315.2
105°	1840.4	1783.4
107.5°	2115.1	2128.8
110°	2219.7	2279.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2229.0	2320.2
115°	2169.9	2296.4
117.5°	2044.6	2184.8
120°	1943.6	2079.9
122.5°	1845.3	1979.7
125°	1704.9	1828.7
127.5°	1578.8	1683.2
130°	1504.5	1600.9
132.5°	1437.0	1523.4
135°	1344.5	1419.0
137.5°	1270.3	1331.3
140°	1219.5	1276.5
142.5°	1177.3	1226.4
145°	1114.1	1151.2
147.5°	1065.6	1096.3
150°	1035.0	1059.9
152.5°	1008.9	1027.7
155°	978.8	991.3
157.5°	955.1	963.8
160°	941.0	946.0
162.5°	931.6	936.4
165°	918.3	923.3
167.5°	908.7	910.8
170°	906.0	906.0
172.5°	898.9	897.1
175°	894.7	894.7
177.5°	890.8	888.7
180°	888.7	888.7



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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	6.39	7.29	7.33	8.26	9.52	19.55	20.45	20.50	21.42	22.69
	3H	7.10	7.91	8.05	8.88	10.17	21.39	22.20	22.35	23.18	24.46
	4H	7.40	8.17	8.37	9.15	10.44	22.03	22.80	23.00	23.78	25.08
	6H	7.65	8.36	8.63	9.34	10.65	22.46	23.17	23.44	24.16	25.46
	8H	7.72	8.39	8.71	9.40	10.70	22.58	23.26	23.57	24.26	25.57
	12H	7.74	8.38	8.73	9.38	10.71	22.65	23.29	23.64	24.29	25.62
4H	2H	13.60	14.37	14.57	15.35	16.64	19.83	20.60	20.81	21.58	22.88
	3H	15.17	15.81	16.16	16.83	18.13	21.88	22.52	22.86	23.53	24.84
	4H	15.27	15.86	16.26	16.86	18.19	22.64	23.23	23.64	24.23	25.57
	6H	15.28	15.79	16.29	16.82	18.15	23.18	23.69	24.19	24.72	26.04
	8H	15.26	15.73	16.27	16.76	18.10	23.34	23.82	24.35	24.84	26.18
	12H	15.22	15.65	16.25	16.68	18.03	23.43	23.86	24.46	24.90	26.25
8H	4H	16.71	17.19	17.72	18.21	19.55	22.71	23.18	23.71	24.20	25.55
	6H	16.96	17.35	17.99	18.41	19.75	23.33	23.73	24.37	24.79	26.13
	8H	16.98	17.32	18.02	18.37	19.73	23.55	23.90	24.59	24.95	26.31
	12H	16.95	17.25	17.99	18.29	19.70	23.69	24.00	24.74	25.04	26.45
12H	4H	16.86	17.29	17.89	18.32	19.67	22.66	23.09	23.69	24.13	25.48
	6H	17.21	17.56	18.26	18.61	19.97	23.32	23.66	24.36	24.71	26.07
	8H	17.29	17.59	18.33	18.63	20.04	23.55	23.85	24.59	24.89	26.30