

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: P937642

Luminaire Tested: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937642
REPORT IS A COMBINATION OF REPORTS P933575 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

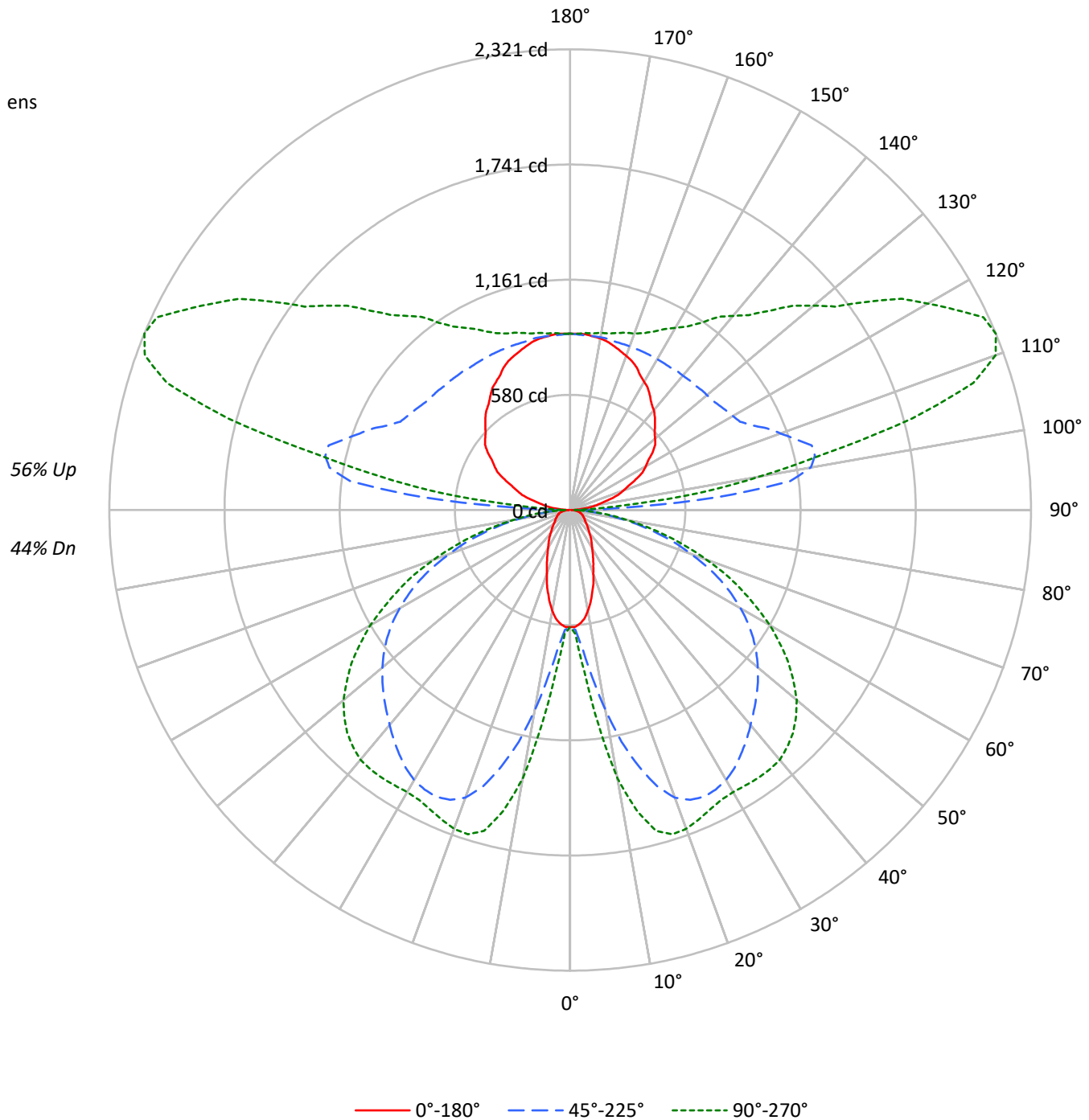
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10325.0 lumens
Efficiency: N/A
Efficacy: 118.7 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): 87
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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CATALOG NUMBER: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-6500K

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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3646	3646	3646
5°	3560	4212	4901
10°	3228	6139	8124
15°	2743	8019	9809
20°	2232	9290	9998
25°	1861	9720	9795
30°	1569	9778	9776
35°	1386	9613	10029
40°	1207	9399	10290
45°	1093	9242	10330
50°	1001	9101	10160
55°	958	8893	9709
60°	980	8499	8998
65°	1018	7901	8020
70°	1081	6886	6776
75°	1195	5610	5287
80°	1295	3886	3564
85°	1127	2058	1824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10330 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	0.7
10°-20°	337.9	3.3
20°-30°	591.0	5.7
30°-40°	760.8	7.4
40°-50°	849.8	8.2
50°-60°	813.9	7.9
60°-70°	645.0	6.2
70°-80°	379.3	3.7
80°-90°	108.8	1.1
90°-100°	433.3	4.2
100°-110°	1139.2	11.0
110°-120°	1181.2	11.4
120°-130°	947.5	9.2
130°-140°	743.4	7.2
140°-150°	570.6	5.5
150°-160°	410.9	4.0
160°-170°	251.4	2.4
170°-180°	84.9	0.8
0°-30°	1005.1	9.7
0°-40°	1765.9	17.1
0°-60°	3429.5	33.2
0°-90°	4562.5	44.2
90°-120°	2753.7	26.7
90°-150°	5015.2	48.6
90°-180°	5762.0	55.8
0°-180°	10325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	616	694	785	813	53
15°	430	794	1338	1622	1673	120
25°	275	900	1594	1664	1666	127
35°	186	860	1501	1586	1649	116
45°	127	686	1326	1520	1588	98
55°	91	436	1126	1308	1344	83
65°	72	231	836	940	953	71
75°	53	142	459	504	506	56
85°	19	44	114	125	127	20
90°	6	17	45	23	23	6
95°	57	224	746	385	262	64
105°	205	311	1259	1912	1784	218
115°	364	443	1009	2012	2297	360
125°	507	569	918	1551	1829	450
135°	604	665	889	1252	1419	468
145°	701	746	878	1068	1151	439
155°	792	814	878	964	992	364
165°	855	866	878	912	924	241
175°	889	889	884	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°	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3
2.5°	589.3	589.3	593.1	595.0	598.8	600.7	604.5	608.3	619.6	621.5	625.4
5°	574.2	581.7	606.4	615.9	642.4	678.4	693.5	718.2	769.4	784.6	794.0
7.5°	551.4	568.5	629.2	644.3	710.6	805.4	845.2	898.2	979.7	1019.5	1051.7
10°	515.4	551.4	659.5	695.4	803.5	947.5	1021.4	1095.3	1218.5	1273.5	1294.3
12.5°	475.6	534.4	691.7	741.0	896.3	1106.7	1195.7	1277.2	1417.5	1491.4	1502.8
15°	430.2	509.7	722.0	794.0	994.8	1239.3	1337.9	1438.3	1569.0	1622.1	1635.4
17.5°	390.4	490.8	750.4	826.2	1070.6	1358.8	1459.2	1542.5	1648.7	1684.6	1694.1
20°	341.1	460.5	769.4	867.9	1150.3	1445.9	1542.5	1607.0	1679.0	1701.7	1705.5
22.5°	305.1	428.3	780.7	883.0	1203.3	1498.9	1580.4	1631.6	1680.9	1688.4	1690.4
25°	274.8	392.2	778.8	900.2	1248.8	1531.2	1593.7	1631.6	1660.0	1663.8	1663.8
27.5°	246.3	352.5	771.3	903.9	1282.9	1538.7	1587.9	1614.5	1627.8	1635.4	1635.4
30°	221.7	314.6	752.3	896.3	1298.0	1531.2	1570.9	1584.2	1597.5	1608.8	1614.5
32.5°	202.8	278.5	723.8	881.1	1299.9	1512.2	1540.6	1548.2	1567.1	1593.7	1603.2
35°	185.7	242.6	691.7	860.3	1288.6	1481.9	1500.8	1508.4	1546.3	1586.1	1599.3
37.5°	168.7	216.0	650.0	824.3	1271.5	1445.9	1459.2	1472.4	1531.2	1578.5	1593.7
40°	151.6	193.2	600.7	784.6	1245.0	1402.3	1413.6	1434.5	1512.2	1567.1	1582.3
42.5°	138.4	174.3	547.6	742.9	1210.9	1353.0	1370.0	1400.3	1489.5	1548.2	1565.3
45°	127.0	155.4	490.8	686.0	1167.3	1301.9	1326.5	1368.2	1462.9	1519.8	1535.0
47.5°	115.6	142.1	432.1	627.3	1119.9	1250.7	1282.9	1330.3	1426.9	1481.9	1495.1
50°	106.1	128.9	373.3	564.7	1068.7	1195.7	1233.7	1282.9	1381.4	1432.6	1449.7
52.5°	98.6	117.5	318.3	502.2	1010.0	1138.9	1182.4	1233.7	1326.5	1375.8	1387.1
55°	90.9	108.0	271.0	435.8	949.4	1078.2	1125.6	1174.9	1265.8	1307.5	1315.1
57.5°	87.2	100.4	231.2	373.3	885.0	1010.0	1063.1	1108.6	1193.8	1226.0	1233.7
60°	81.5	94.8	200.9	320.2	814.9	945.6	991.1	1036.5	1108.6	1135.1	1140.7
62.5°	75.8	90.9	178.1	269.1	742.9	869.8	915.3	957.0	1017.6	1036.5	1044.2
65°	72.0	87.2	161.1	231.2	669.0	790.2	835.7	871.7	921.0	939.9	943.7
67.5°	68.2	83.4	147.8	199.0	595.0	710.6	744.7	778.8	816.8	835.7	837.6
70°	62.5	79.6	136.4	176.2	519.2	619.6	648.1	684.1	714.4	723.8	729.6
72.5°	58.7	73.9	128.9	159.2	441.6	532.5	559.0	579.8	606.4	615.9	615.9
75°	53.1	66.4	121.2	142.1	361.9	435.8	458.6	479.4	500.3	504.1	498.4
77.5°	47.3	58.7	104.2	119.4	282.4	344.9	363.8	375.2	392.2	396.1	398.0
80°	39.8	51.2	81.5	92.8	204.6	254.0	267.2	276.6	291.8	291.8	295.7
82.5°	30.3	39.8	58.7	66.4	138.4	174.3	185.7	191.4	200.9	200.9	200.9
85°	18.9	24.7	37.9	43.6	83.4	106.1	113.7	115.6	123.2	125.1	125.1
87.5°	9.5	13.3	24.7	26.5	43.6	55.0	55.0	58.7	58.7	56.9	55.0
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.3	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	131.5	205.8	224.3	398.4	630.3	746.3	666.0	505.3	384.8	371.1
97.5°	99.1	164.6	230.1	246.4	536.5	923.4	1116.8	1066.1	964.5	888.3	862.3
100°	131.3	190.7	250.0	264.9	586.8	1016.1	1230.7	1234.4	1241.9	1247.4	1216.5
102.5°	158.7	214.2	269.6	283.4	610.0	1045.3	1262.9	1327.7	1457.0	1554.1	1527.6
105°	205.2	252.1	299.1	310.9	627.1	1048.7	1259.4	1404.5	1694.5	1912.0	1897.8
107.5°	252.9	296.7	340.5	351.4	630.2	1001.9	1187.8	1390.1	1794.7	2098.2	2101.6
110°	285.1	324.6	364.2	374.1	625.4	960.6	1128.1	1354.3	1806.6	2145.9	2160.7



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CATALOG NUMBER: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.8	354.5	392.1	401.5	625.6	924.4	1073.8	1305.3	1768.3	2115.5	2138.2
115°	364.5	399.2	433.9	442.6	631.4	882.9	1008.8	1231.8	1677.8	2012.3	2044.0
117.5°	411.6	443.2	474.7	482.6	643.0	857.0	964.0	1165.3	1567.8	1869.6	1904.7
120°	439.1	468.8	498.5	505.9	652.7	848.3	946.2	1130.0	1497.8	1773.6	1807.7
122.5°	466.0	495.9	525.9	533.4	666.4	843.7	932.5	1098.1	1429.2	1677.5	1711.2
125°	507.1	534.4	561.8	568.6	684.9	840.0	917.6	1058.2	1339.5	1550.6	1581.5
127.5°	540.5	568.1	595.7	602.6	703.4	837.8	905.0	1025.8	1267.3	1448.5	1474.6
130°	558.4	588.2	617.8	625.3	717.0	839.2	900.3	1007.7	1222.8	1384.1	1408.2
132.5°	576.9	606.6	636.3	643.7	727.9	840.0	896.0	992.3	1184.8	1329.2	1350.8
135°	604.3	631.4	658.4	665.2	739.8	839.2	888.9	969.5	1130.7	1251.7	1270.3
137.5°	632.3	659.1	686.0	692.7	757.7	844.4	887.7	955.9	1092.2	1194.4	1209.6
140°	655.7	680.3	705.0	711.1	768.6	845.2	883.5	942.4	1060.1	1148.4	1162.6
142.5°	673.5	696.4	719.2	724.9	777.8	848.2	883.5	935.3	1038.6	1116.2	1128.4
145°	701.0	720.9	740.8	745.7	789.7	848.3	877.6	919.9	1004.5	1067.9	1077.2
147.5°	728.4	747.7	767.1	771.9	807.1	854.1	877.6	910.9	977.4	1027.3	1035.0
150°	746.3	763.8	781.3	785.7	816.3	857.1	877.6	905.7	961.8	1004.0	1010.2
152.5°	764.9	778.1	791.3	794.7	822.3	859.1	877.6	901.6	949.6	985.5	990.2
155°	792.3	802.1	811.8	814.3	835.4	863.5	877.6	896.7	934.9	963.5	966.6
157.5°	812.6	822.1	831.6	834.0	848.5	867.9	877.6	892.4	922.2	944.4	946.6
160°	826.2	833.7	841.2	843.0	854.5	869.9	877.6	890.3	915.7	934.9	936.1
162.5°	840.0	845.6	851.1	852.5	860.9	872.0	877.6	888.3	909.8	925.9	927.0
165°	854.9	859.9	865.0	866.2	870.0	875.1	877.6	885.2	900.6	912.2	913.5
167.5°	868.6	871.0	873.4	874.0	877.1	881.4	883.5	888.6	898.6	906.2	906.8
170°	877.6	880.0	882.4	882.9	883.1	883.4	883.5	888.6	898.6	906.2	906.2
172.5°	882.4	882.9	883.4	883.5	883.5	883.5	883.5	887.5	895.5	901.4	900.9
175°	888.9	888.9	888.9	888.9	887.1	884.7	883.5	886.0	891.1	894.9	894.9
177.5°	888.9	888.9	888.9	888.9	887.5	885.7	884.8	886.8	890.7	893.7	893.1
180°	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	589.3	589.3
2.5°	629.2	625.4
5°	809.1	813.0
7.5°	1089.6	1087.8
10°	1354.9	1371.9
12.5°	1548.2	1552.0
15°	1665.7	1673.2
17.5°	1711.2	1713.0
20°	1713.0	1709.3
22.5°	1692.2	1688.4
25°	1667.6	1665.7
27.5°	1644.8	1646.8
30°	1635.4	1641.0
32.5°	1635.4	1644.8
35°	1639.2	1648.7
37.5°	1637.3	1648.7
40°	1629.6	1642.9
42.5°	1608.8	1618.4
45°	1576.7	1587.9
47.5°	1535.0	1542.5
50°	1481.9	1489.5
52.5°	1415.5	1417.5
55°	1336.0	1343.5
57.5°	1250.7	1252.6
60°	1155.9	1161.6
62.5°	1055.5	1055.5
65°	949.4	953.1
67.5°	839.4	848.9
70°	727.7	729.6
72.5°	617.8	617.8
75°	504.1	505.9
77.5°	396.1	396.1
80°	293.7	295.7
82.5°	202.8	206.5
85°	127.0	127.0
87.5°	58.7	53.1
90°	22.7	22.7
92.5°	90.7	72.8
95°	316.5	261.9
97.5°	758.4	654.4
100°	1092.6	968.8
102.5°	1421.5	1315.4
105°	1840.8	1783.8
107.5°	2115.5	2129.3
110°	2220.2	2279.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2229.5	2320.7
115°	2170.4	2296.9
117.5°	2045.0	2185.3
120°	1944.0	2080.3
122.5°	1845.6	1980.1
125°	1705.3	1829.1
127.5°	1579.2	1683.6
130°	1504.8	1601.2
132.5°	1437.3	1523.7
135°	1344.8	1419.3
137.5°	1270.6	1331.6
140°	1219.7	1276.7
142.5°	1177.6	1226.6
145°	1114.3	1151.4
147.5°	1065.8	1096.6
150°	1035.2	1060.1
152.5°	1009.1	1027.9
155°	979.0	991.5
157.5°	955.3	964.0
160°	941.2	946.2
162.5°	931.8	936.6
165°	918.5	923.5
167.5°	908.9	911.0
170°	906.2	906.2
172.5°	899.1	897.3
175°	894.9	894.9
177.5°	891.0	888.9
180°	888.9	888.9



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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	4.94	5.78	5.94	6.80	8.15	18.11	18.95	19.10	19.96	21.31
	3H	5.64	6.40	6.65	7.43	8.80	19.94	20.70	20.95	21.72	23.09
	4H	5.94	6.66	6.96	7.69	9.06	20.58	21.30	21.60	22.32	23.70
	6H	6.19	6.86	7.22	7.89	9.28	21.00	21.67	22.04	22.70	24.09
	8H	6.26	6.89	7.30	7.94	9.32	21.12	21.75	22.16	22.80	24.19
	12H	6.28	6.88	7.32	7.92	9.33	21.19	21.79	22.23	22.83	24.24
4H	2H	12.15	12.86	13.17	13.89	15.27	18.38	19.10	19.41	20.12	21.50
	3H	13.71	14.31	14.75	15.37	16.76	20.42	21.02	21.45	22.07	23.46
	4H	13.81	14.36	14.85	15.40	16.82	21.18	21.73	22.22	22.78	24.19
	6H	13.82	14.29	14.87	15.36	16.77	21.71	22.19	22.77	23.26	24.67
	8H	13.79	14.24	14.85	15.30	16.72	21.87	22.32	22.93	23.38	24.80
	12H	13.75	14.15	14.82	15.23	16.66	21.96	22.37	23.04	23.44	24.87
8H	4H	15.25	15.69	16.30	16.75	18.18	21.24	21.68	22.29	22.75	24.17
	6H	15.49	15.86	16.57	16.96	18.38	21.86	22.23	22.94	23.33	24.76
	8H	15.51	15.83	16.59	16.92	18.36	22.08	22.40	23.17	23.49	24.93
	12H	15.47	15.76	16.56	16.84	18.32	22.22	22.51	23.31	23.59	25.07
12H	4H	15.39	15.79	16.46	16.87	18.30	21.19	21.59	22.26	22.67	24.10
	6H	15.74	16.07	16.83	17.16	18.60	21.85	22.17	22.93	23.26	24.70
	8H	15.81	16.10	16.90	17.18	18.66	22.07	22.36	23.16	23.44	24.92