

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: P937541

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937541
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

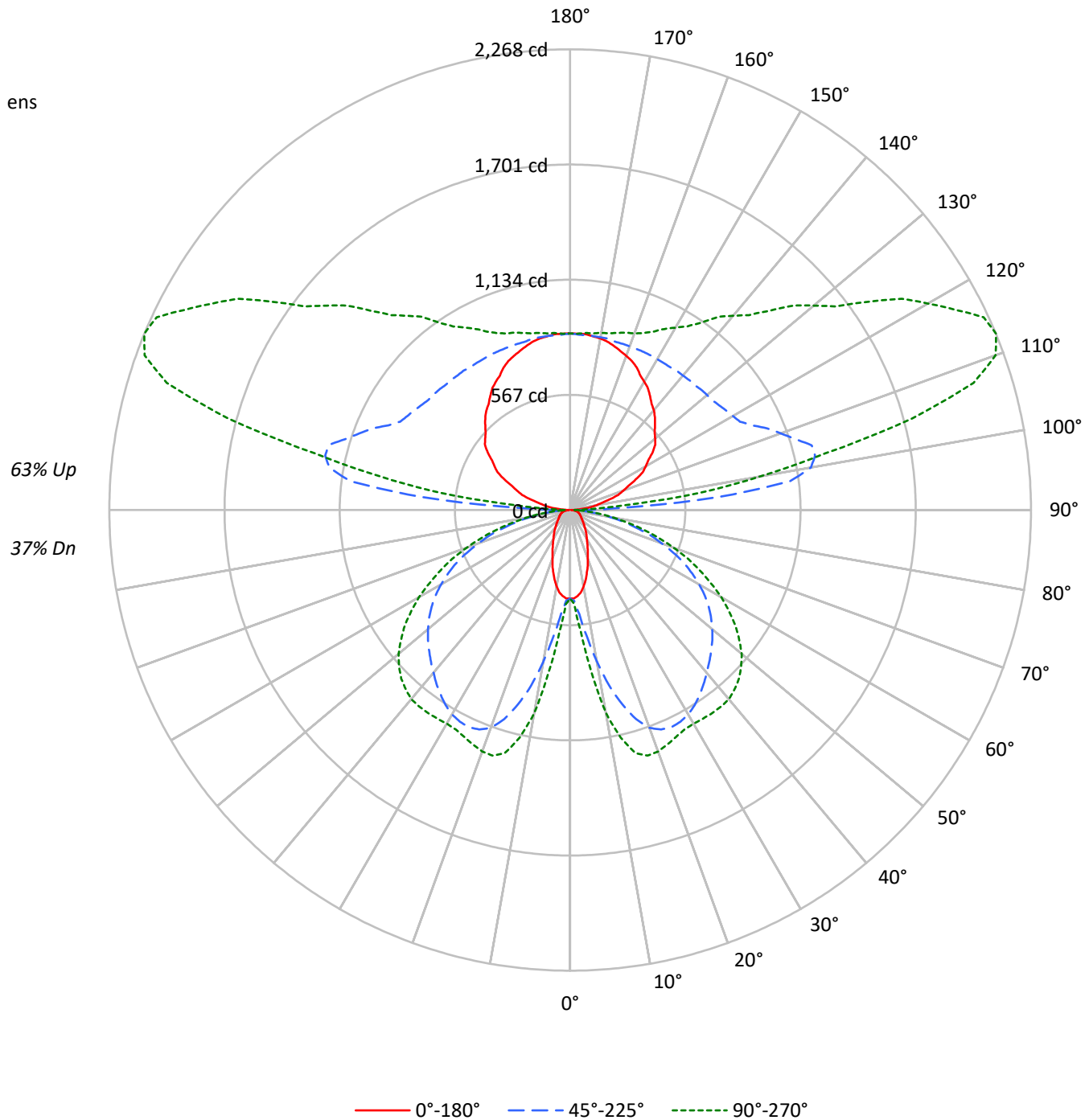
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9009.6 lumens
Efficiency: N/A
Efficacy: 122.1 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-Indirect

Input Watts (W): 73.8
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: P937541
CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P937541

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2697	2697	2697
5°	2634	3117	3626
10°	2389	4542	6011
15°	2029	5933	7259
20°	1652	6874	7398
25°	1377	7192	7247
30°	1160	7235	7234
35°	1026	7113	7421
40°	894	6954	7614
45°	808	6838	7644
50°	741	6733	7517
55°	709	6580	7184
60°	725	6288	6658
65°	753	5846	5934
70°	801	5095	5014
75°	884	4150	3912
80°	957	2875	2636
85°	835	1522	1349

MAXIMUM LUMINANCE 45°-90°:

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



TEST NUMBER: P937541

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	0.6
10°-20°	250.0	2.8
20°-30°	437.3	4.9
30°-40°	562.9	6.2
40°-50°	628.7	7.0
50°-60°	602.2	6.7
60°-70°	477.2	5.3
70°-80°	280.6	3.1
80°-90°	81.3	0.9
90°-100°	423.6	4.7
100°-110°	1113.6	12.4
110°-120°	1154.6	12.8
120°-130°	926.2	10.3
130°-140°	726.7	8.1
140°-150°	557.8	6.2
150°-160°	401.7	4.5
160°-170°	245.8	2.7
170°-180°	83.0	0.9
0°-30°	743.7	8.3
0°-40°	1306.6	14.5
0°-60°	2537.5	28.2
0°-90°	3376.6	37.5
90°-120°	2691.8	29.9
90°-150°	4902.4	54.4
90°-180°	5633.0	62.5
0°-180°	9009.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	425	456	513	580	602	39
15°	318	588	990	1200	1238	89
25°	203	666	1179	1231	1232	94
35°	137	636	1110	1174	1220	86
45°	94	508	981	1124	1175	73
55°	67	322	833	967	994	61
65°	53	171	618	695	705	53
75°	39	105	339	373	374	41
85°	14	32	84	92	94	15
90°	6	16	44	22	22	6
95°	56	219	730	376	256	62
105°	201	304	1231	1869	1744	213
115°	356	433	986	1967	2245	352
125°	496	556	897	1516	1788	440
135°	591	650	869	1224	1387	457
145°	685	729	858	1044	1126	429
155°	774	796	858	942	969	356
165°	836	847	858	892	903	236
175°	869	869	864	875	875	82
180°	869	869	869	869	869	



TEST NUMBER: P937541

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0
2.5°	436.0	436.0	438.8	440.2	443.1	444.5	447.3	450.1	458.5	459.9	462.7
5°	424.8	430.4	448.7	455.7	475.3	501.9	513.2	531.4	569.2	580.5	587.5
7.5°	408.0	420.6	465.5	476.7	525.8	595.9	625.3	664.6	724.9	754.3	778.1
10°	381.4	408.0	487.9	514.6	594.5	701.0	755.7	810.4	901.5	942.2	957.6
12.5°	351.9	395.4	511.8	548.2	663.2	818.8	884.7	945.0	1048.7	1103.5	1111.9
15°	318.3	377.2	534.2	587.5	736.1	916.9	989.9	1064.3	1161.0	1200.3	1210.1
17.5°	288.8	363.1	555.2	611.3	792.2	1005.3	1079.7	1141.4	1219.9	1246.5	1253.5
20°	252.4	340.7	569.2	642.1	851.0	1069.9	1141.4	1189.0	1242.3	1259.1	1261.9
22.5°	225.7	316.9	577.6	653.4	890.3	1109.1	1169.4	1207.3	1243.7	1249.3	1250.7
25°	203.3	290.2	576.2	666.0	924.0	1133.0	1179.2	1207.3	1228.3	1231.1	1231.1
27.5°	182.3	260.8	570.6	668.8	949.2	1138.6	1175.0	1194.6	1204.5	1210.1	1210.1
30°	164.0	232.7	556.6	663.2	960.4	1133.0	1162.4	1172.2	1182.0	1190.4	1194.6
32.5°	150.0	206.1	535.6	652.0	961.8	1118.9	1140.0	1145.6	1159.6	1179.2	1186.2
35°	137.4	179.5	511.8	636.5	953.4	1096.5	1110.5	1116.1	1144.2	1173.6	1183.4
37.5°	124.8	159.8	480.9	609.9	940.8	1069.9	1079.7	1089.5	1133.0	1168.0	1179.2
40°	112.2	143.0	444.5	580.5	921.2	1037.5	1045.9	1061.4	1118.9	1159.6	1170.8
42.5°	102.4	129.0	405.2	549.6	895.9	1001.1	1013.7	1036.1	1102.1	1145.6	1158.2
45°	93.9	115.0	363.1	507.5	863.7	963.2	981.4	1012.3	1082.5	1124.5	1135.8
47.5°	85.5	105.2	319.7	464.1	828.6	925.4	949.2	984.2	1055.8	1096.5	1106.3
50°	78.5	95.3	276.2	417.8	790.8	884.7	912.7	949.2	1022.1	1060.0	1072.7
52.5°	72.9	86.9	235.5	371.5	747.3	842.6	874.9	912.7	981.4	1017.9	1026.3
55°	67.3	79.9	200.5	322.5	702.4	797.8	832.8	869.3	936.6	967.4	973.0
57.5°	64.5	74.3	171.1	276.2	654.8	747.3	786.6	820.2	883.3	907.1	912.7
60°	60.3	70.1	148.6	236.9	602.9	699.6	733.3	766.9	820.2	839.8	844.0
62.5°	56.1	67.3	131.8	199.1	549.6	643.5	677.2	708.0	752.9	766.9	772.5
65°	53.3	64.5	119.2	171.1	494.9	584.7	618.3	644.9	681.4	695.4	698.2
67.5°	50.5	61.7	109.4	147.2	440.2	525.8	551.0	576.2	604.3	618.3	619.7
70°	46.3	58.9	100.9	130.4	384.2	458.5	479.5	506.1	528.6	535.6	539.8
72.5°	43.5	54.7	95.3	117.8	326.7	394.0	413.6	429.0	448.7	455.7	455.7
75°	39.3	49.1	89.7	105.2	267.8	322.5	339.3	354.7	370.1	372.9	368.7
77.5°	35.1	43.5	77.1	88.3	208.9	255.2	269.2	277.6	290.2	293.0	294.4
80°	29.4	37.9	60.3	68.7	151.4	187.9	197.7	204.7	215.9	215.9	218.7
82.5°	22.4	29.4	43.5	49.1	102.4	129.0	137.4	141.6	148.6	148.6	148.6
85°	14.0	18.2	28.0	32.2	61.7	78.5	84.1	85.5	91.1	92.5	92.5
87.5°	7.0	9.8	18.2	19.6	32.2	40.7	40.7	43.5	43.5	42.1	40.7
90°	5.8	10.5	15.1	16.4	25.7	38.1	44.3	39.4	29.5	22.2	22.2
92.5°	23.4	63.0	102.6	112.5	158.2	219.1	249.6	218.7	157.0	110.8	106.4
95°	56.0	128.5	201.1	219.3	389.4	616.2	729.5	651.0	493.9	376.1	362.8
97.5°	96.8	160.9	224.9	240.9	524.5	902.6	1091.7	1042.1	942.8	868.3	842.9
100°	128.3	186.4	244.4	258.9	573.6	993.2	1203.1	1206.7	1214.0	1219.4	1189.1
102.5°	155.2	209.4	263.5	277.0	596.2	1021.8	1234.6	1297.8	1424.3	1519.2	1493.3
105°	200.6	246.5	292.4	303.9	613.0	1025.1	1231.1	1372.9	1656.4	1869.0	1855.1
107.5°	247.2	290.0	332.8	343.5	616.1	979.4	1161.1	1358.9	1754.3	2051.0	2054.4
110°	278.7	317.3	356.0	365.7	611.4	939.0	1102.8	1323.8	1766.0	2097.7	2112.2



TEST NUMBER: P937541

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.7	346.5	383.3	392.5	611.6	903.7	1049.7	1276.0	1728.6	2067.9	2090.2
115°	356.3	390.2	424.2	432.7	617.2	863.1	986.1	1204.1	1640.1	1967.1	1998.0
117.5°	402.4	433.2	464.1	471.7	628.6	837.8	942.4	1139.1	1532.5	1827.6	1861.9
120°	429.2	458.3	487.3	494.6	638.0	829.3	924.9	1104.6	1464.1	1733.8	1767.1
122.5°	455.5	484.7	514.1	521.4	651.4	824.8	911.5	1073.4	1397.1	1639.8	1672.7
125°	495.7	522.4	549.1	555.8	669.5	821.1	896.9	1034.4	1309.4	1515.7	1546.0
127.5°	528.4	555.3	582.3	589.1	687.6	819.0	884.7	1002.8	1238.9	1416.0	1441.5
130°	545.9	574.9	603.9	611.2	700.8	820.3	880.0	985.1	1195.3	1353.0	1376.5
132.5°	563.9	593.0	622.0	629.2	711.5	821.1	875.9	970.0	1158.2	1299.3	1320.5
135°	590.7	617.2	643.6	650.3	723.2	820.3	868.9	947.7	1105.3	1223.5	1241.8
137.5°	618.1	644.3	670.6	677.1	740.7	825.4	867.8	934.4	1067.6	1167.5	1182.4
140°	640.9	665.0	689.2	695.1	751.3	826.2	863.7	921.2	1036.3	1122.6	1136.5
142.5°	658.4	680.7	703.0	708.6	760.3	829.2	863.7	914.2	1015.3	1091.1	1103.0
145°	685.2	704.7	724.1	729.0	772.0	829.3	857.9	899.2	981.9	1043.9	1052.9
147.5°	712.1	730.9	749.8	754.6	789.0	834.9	857.9	890.4	955.5	1004.2	1011.7
150°	729.5	746.6	763.7	768.0	798.0	837.9	857.9	885.4	940.2	981.4	987.5
152.5°	747.7	760.7	773.6	776.8	803.8	839.8	857.9	881.3	928.3	963.4	968.0
155°	774.5	784.0	793.6	796.0	816.7	844.1	857.9	876.6	913.9	941.8	944.9
157.5°	794.3	803.7	812.9	815.3	829.5	848.4	857.9	872.4	901.4	923.2	925.4
160°	807.7	815.0	822.3	824.0	835.3	850.4	857.9	870.3	895.2	913.9	915.1
162.5°	821.1	826.6	832.0	833.4	841.5	852.5	857.9	868.3	889.4	905.1	906.2
165°	835.7	840.6	845.5	846.8	850.5	855.4	857.9	865.4	880.4	891.7	892.9
167.5°	849.1	851.4	853.8	854.3	857.4	861.6	863.7	868.6	878.4	885.8	886.4
170°	857.9	860.2	862.5	863.1	863.3	863.6	863.7	868.6	878.4	885.8	885.8
172.5°	862.5	863.0	863.6	863.7	863.7	863.7	863.7	867.6	875.4	881.1	880.7
175°	868.9	868.9	868.9	868.9	867.1	864.8	863.7	866.1	871.1	874.8	874.8
177.5°	868.9	868.9	868.9	868.9	867.6	865.8	864.9	866.8	870.7	873.6	873.0
180°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9



TEST NUMBER: P937541

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	436.0	436.0
2.5°	465.5	462.7
5°	598.7	601.5
7.5°	806.2	804.8
10°	1002.5	1015.1
12.5°	1145.6	1148.4
15°	1232.5	1238.1
17.5°	1266.2	1267.6
20°	1267.6	1264.8
22.5°	1252.1	1249.3
25°	1233.9	1232.5
27.5°	1217.1	1218.5
30°	1210.1	1214.3
32.5°	1210.1	1217.1
35°	1212.9	1219.9
37.5°	1211.5	1219.9
40°	1205.9	1215.7
42.5°	1190.4	1197.5
45°	1166.6	1175.0
47.5°	1135.8	1141.4
50°	1096.5	1102.1
52.5°	1047.3	1048.7
55°	988.5	994.1
57.5°	925.4	926.8
60°	855.3	859.5
62.5°	780.9	780.9
65°	702.4	705.2
67.5°	621.1	628.1
70°	538.4	539.8
72.5°	457.1	457.1
75°	372.9	374.3
77.5°	293.0	293.0
80°	217.3	218.7
82.5°	150.0	152.8
85°	93.9	93.9
87.5°	43.5	39.3
90°	22.2	22.2
92.5°	88.7	71.1
95°	309.4	256.0
97.5°	741.3	639.7
100°	1068.1	947.0
102.5°	1389.5	1285.9
105°	1799.4	1743.7
107.5°	2067.9	2081.4
110°	2170.3	2228.3



TEST NUMBER: P937541

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2179.4	2268.5
115°	2121.6	2245.3
117.5°	1999.1	2136.2
120°	1900.4	2033.5
122.5°	1804.2	1935.6
125°	1667.0	1788.0
127.5°	1543.7	1645.7
130°	1470.9	1565.3
132.5°	1405.0	1489.5
135°	1314.6	1387.4
137.5°	1242.0	1301.7
140°	1192.3	1248.0
142.5°	1151.1	1199.0
145°	1089.3	1125.6
147.5°	1041.8	1071.9
150°	1011.9	1036.3
152.5°	986.4	1004.8
155°	957.0	969.2
157.5°	933.9	942.4
160°	920.0	924.9
162.5°	910.9	915.5
165°	897.9	902.7
167.5°	888.4	890.5
170°	885.8	885.8
172.5°	878.9	877.1
175°	874.8	874.8
177.5°	871.0	868.9
180°	868.9	868.9



TEST NUMBER: P937541
 CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-5000K

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	3.18	3.97	4.23	5.03	6.46	16.35	17.13	17.40	18.19	19.63
	3H	3.88	4.59	4.94	5.66	7.11	18.17	18.88	19.23	19.95	21.40
	4H	4.18	4.85	5.25	5.92	7.38	18.81	19.48	19.88	20.55	22.01
	6H	4.42	5.04	5.51	6.11	7.59	19.23	19.85	20.32	20.92	22.40
	8H	4.49	5.08	5.58	6.17	7.64	19.35	19.94	20.44	21.03	22.50
	12H	4.50	5.06	5.60	6.15	7.64	19.41	19.97	20.50	21.06	22.55
4H	2H	10.38	11.05	11.46	12.12	13.58	16.61	17.28	17.69	18.35	19.81
	3H	11.94	12.50	13.03	13.60	15.07	18.64	19.20	19.73	20.30	21.78
	4H	12.03	12.55	13.12	13.63	15.13	19.40	19.92	20.50	21.01	22.50
	6H	12.04	12.48	13.14	13.59	15.08	19.93	20.38	21.03	21.49	22.98
	8H	12.01	12.43	13.11	13.53	15.03	20.09	20.51	21.19	21.61	23.11
	12H	11.97	12.34	13.08	13.46	14.97	20.18	20.55	21.30	21.67	23.18
8H	4H	13.47	13.88	14.57	14.98	16.49	19.46	19.87	20.56	20.97	22.48
	6H	13.70	14.05	14.83	15.19	16.69	20.08	20.42	21.20	21.57	23.07
	8H	13.72	14.02	14.85	15.15	16.67	20.30	20.60	21.43	21.72	23.24
	12H	13.69	13.95	14.82	15.07	16.63	20.43	20.70	21.57	21.82	23.38
12H	4H	13.60	13.98	14.72	15.09	16.61	19.41	19.78	20.53	20.90	22.41
	6H	13.96	14.26	15.09	15.39	16.91	20.06	20.36	21.19	21.49	23.01
	8H	14.03	14.29	15.16	15.41	16.97	20.29	20.55	21.42	21.67	23.23