

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: P938351

Luminaire Tested: SQ4-FB-150U-075D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938351
REPORT IS A COMBINATION OF REPORTS P933638 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

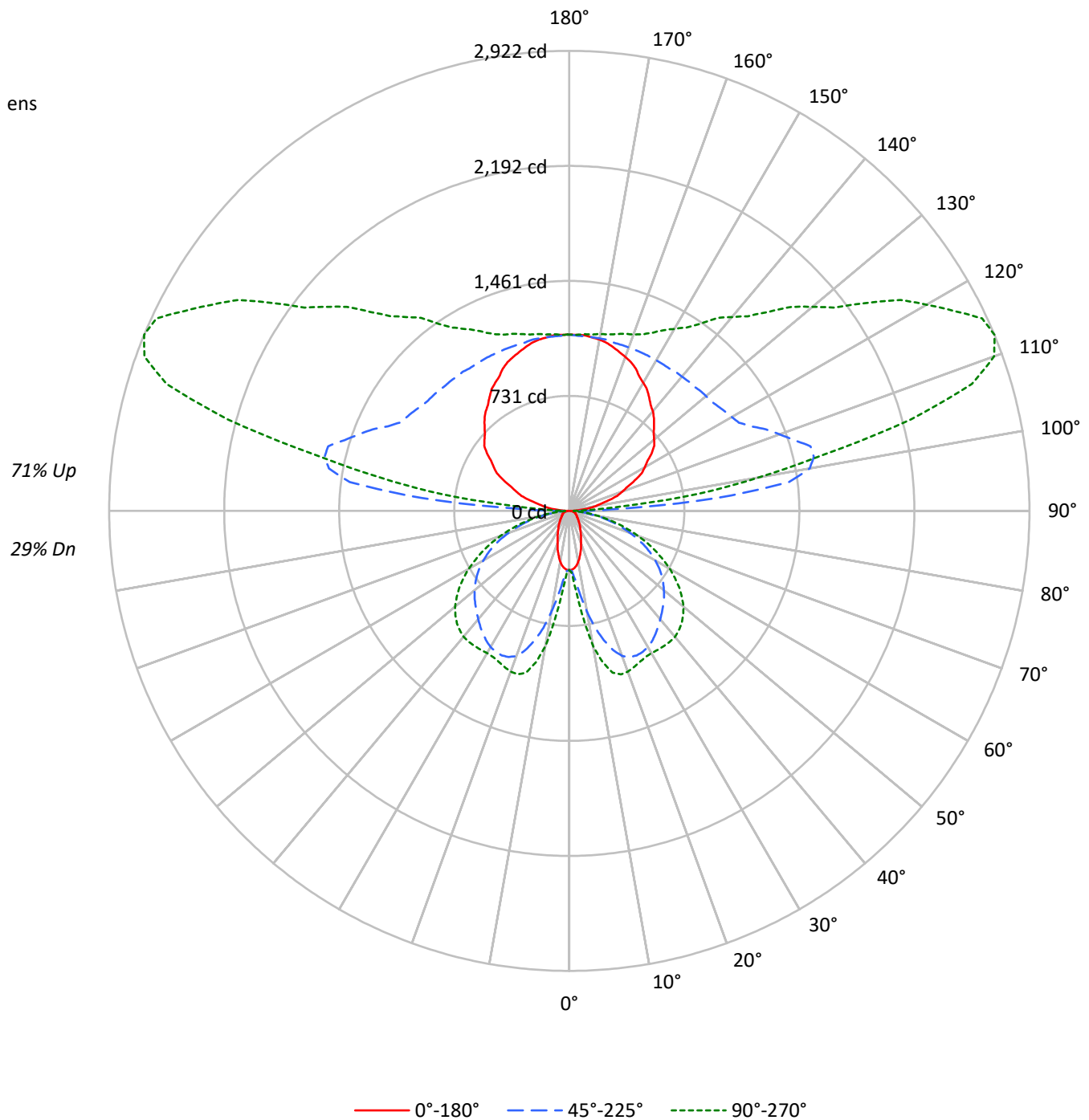
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10158.7 lumens
Efficiency: N/A
Efficacy: 106.5 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): 95.4
Input Voltage (V): NR
Input Current (A_{in}): 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29			
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19			
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13			
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6			
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2317	2317	2317
5°	2263	2677	3115
10°	2052	3902	5164
15°	1743	5097	6236
20°	1419	5905	6355
25°	1183	6179	6226
30°	997	6216	6215
35°	881	6111	6375
40°	768	5975	6541
45°	694	5875	6567
50°	637	5784	6458
55°	609	5653	6171
60°	623	5403	5720
65°	647	5022	5099
70°	687	4376	4307
75°	758	3566	3361
80°	823	2469	2265
85°	715	1309	1159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6567 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.5	0.5
10°-20°	214.8	2.1
20°-30°	375.7	3.7
30°-40°	483.6	4.8
40°-50°	540.1	5.3
50°-60°	517.3	5.1
60°-70°	410.0	4.0
70°-80°	241.1	2.4
80°-90°	71.2	0.7
90°-100°	545.6	5.4
100°-110°	1434.5	14.1
110°-120°	1487.4	14.6
120°-130°	1193.1	11.7
130°-140°	936.2	9.2
140°-150°	718.5	7.1
150°-160°	517.5	5.1
160°-170°	316.6	3.1
170°-180°	107.0	1.1
0°-30°	638.9	6.3
0°-40°	1122.5	11.0
0°-60°	2180.0	21.5
0°-90°	2902.3	28.6
90°-120°	3467.6	34.1
90°-150°	6315.4	62.2
90°-180°	7256.0	71.4
0°-180°	10158.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	375	375	375	375	375	
5°	365	392	441	499	517	34
15°	273	505	850	1031	1064	76
25°	175	572	1013	1058	1059	80
35°	118	547	954	1008	1048	74
45°	81	436	843	966	1010	62
55°	58	277	716	831	854	53
65°	46	147	531	597	606	45
75°	34	90	292	320	322	35
85°	12	28	72	80	81	13
90°	8	21	57	29	29	7
95°	72	282	940	484	330	80
105°	258	391	1586	2408	2246	274
115°	459	557	1270	2534	2892	453
125°	638	716	1155	1952	2303	567
135°	761	838	1119	1576	1787	589
145°	883	939	1105	1345	1450	553
155°	998	1025	1105	1213	1249	458
165°	1077	1091	1105	1149	1163	304
175°	1119	1119	1113	1127	1127	106
180°	1119	1119	1119	1119	1119	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6
2.5°	374.6	374.6	377.0	378.2	380.6	381.8	384.2	386.6	393.9	395.1	397.5
5°	365.0	369.8	385.4	391.5	408.3	431.2	440.8	456.5	489.0	498.7	504.7
7.5°	350.5	361.4	399.9	409.5	451.7	511.9	537.2	570.9	622.7	648.0	668.5
10°	327.6	350.5	419.2	442.1	510.7	602.2	649.2	696.2	774.5	809.4	822.7
12.5°	302.3	339.7	439.6	471.0	569.7	703.4	760.0	811.8	901.0	948.0	955.2
15°	273.4	324.0	458.9	504.7	632.4	787.7	850.4	914.3	997.4	1031.1	1039.6
17.5°	248.1	312.0	477.0	525.2	680.5	863.6	927.5	980.5	1048.0	1070.9	1076.9
20°	216.8	292.7	489.0	551.7	731.1	919.1	980.5	1021.5	1067.3	1081.7	1084.1
22.5°	193.9	272.2	496.3	561.3	764.9	952.8	1004.6	1037.2	1068.5	1073.3	1074.5
25°	174.7	249.3	495.0	572.1	793.8	973.3	1013.1	1037.2	1055.2	1057.6	1057.6
27.5°	156.6	224.0	490.2	574.5	815.4	978.1	1009.5	1026.3	1034.7	1039.6	1039.6
30°	140.9	199.9	478.2	569.7	825.1	973.3	998.6	1007.0	1015.5	1022.7	1026.3
32.5°	128.9	177.1	460.1	560.1	826.3	961.3	979.3	984.2	996.2	1013.1	1019.1
35°	118.0	154.2	439.6	546.8	819.1	942.0	954.0	958.9	983.0	1008.2	1016.7
37.5°	107.2	137.3	413.1	524.0	808.2	919.1	927.5	936.0	973.3	1003.4	1013.1
40°	96.4	122.9	381.8	498.7	791.4	891.3	898.6	911.8	961.3	996.2	1005.8
42.5°	87.9	110.8	348.1	472.2	769.7	860.0	870.9	890.1	946.8	984.2	995.0
45°	80.7	98.8	312.0	436.0	742.0	827.5	843.2	869.6	930.0	966.1	975.7
47.5°	73.5	90.3	274.6	398.7	711.9	795.0	815.4	845.6	907.0	942.0	950.4
50°	67.5	81.9	237.3	358.9	679.3	760.0	784.1	815.4	878.1	910.6	921.5
52.5°	62.6	74.7	202.4	319.2	642.0	723.9	751.6	784.1	843.2	874.5	881.7
55°	57.8	68.7	172.2	277.0	603.5	685.4	715.5	746.8	804.6	831.1	835.9
57.5°	55.4	63.8	146.9	237.3	562.5	642.0	675.7	704.6	758.8	779.3	784.1
60°	51.8	60.2	127.7	203.6	517.9	601.0	630.0	658.9	704.6	721.5	725.1
62.5°	48.2	57.8	113.2	171.0	472.2	552.9	581.8	608.3	646.8	658.9	663.7
65°	45.8	55.4	102.4	146.9	425.2	502.3	531.2	554.1	585.4	597.4	599.8
67.5°	43.4	53.0	94.0	126.5	378.2	451.7	473.4	495.0	519.1	531.2	532.4
70°	39.7	50.6	86.7	112.0	330.0	393.9	411.9	434.8	454.1	460.1	463.7
72.5°	37.3	47.0	81.9	101.2	280.6	338.5	355.3	368.6	385.4	391.5	391.5
75°	33.7	42.2	77.1	90.3	230.1	277.0	291.5	304.7	318.0	320.4	316.8
77.5°	30.1	37.3	66.2	75.9	179.5	219.2	231.3	238.5	249.3	251.7	252.9
80°	25.3	32.5	51.8	59.0	130.1	161.4	169.8	175.9	185.5	185.5	187.9
82.5°	19.3	25.3	37.3	42.2	87.9	110.8	118.0	121.7	127.7	127.7	127.7
85°	12.0	15.7	24.1	27.7	53.0	67.5	72.3	73.5	78.3	79.5	79.5
87.5°	6.0	8.4	15.7	16.9	27.7	34.9	34.9	37.3	37.3	36.1	34.9
90°	7.5	13.6	19.5	21.0	33.1	49.1	57.1	50.7	38.1	28.6	28.6
92.5°	30.0	81.1	132.3	145.0	203.9	282.3	321.5	281.8	202.4	142.8	137.1
95°	72.1	165.6	259.1	282.5	501.6	793.8	939.8	838.7	636.3	484.5	467.3
97.5°	124.7	207.2	289.6	310.3	675.6	1162.8	1406.4	1342.5	1214.5	1118.7	1085.9
100°	165.3	240.1	314.9	333.6	739.0	1279.6	1549.9	1554.5	1563.9	1570.9	1532.0
102.5°	199.9	269.6	339.4	356.9	768.1	1316.3	1590.4	1671.8	1834.8	1957.0	1923.6
105°	258.4	317.5	376.6	391.4	789.6	1320.5	1585.9	1768.5	2133.8	2407.8	2389.8
107.5°	318.6	373.6	428.7	442.5	793.5	1261.7	1495.7	1750.5	2260.0	2642.2	2646.5
110°	359.1	408.9	458.6	471.0	787.6	1209.6	1420.6	1705.4	2275.1	2702.3	2721.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	398.9	446.3	493.7	505.6	787.8	1164.1	1352.3	1643.7	2226.7	2664.0	2692.7
115°	459.0	502.8	546.5	557.4	795.1	1111.9	1270.3	1551.2	2112.8	2533.9	2573.8
117.5°	518.3	558.1	597.8	607.8	809.9	1079.3	1214.1	1467.5	1974.3	2354.4	2398.6
120°	552.9	590.4	627.8	637.1	821.9	1068.3	1191.5	1423.1	1886.2	2233.5	2276.3
122.5°	586.8	624.5	662.2	671.6	839.1	1062.5	1174.2	1382.8	1799.8	2112.5	2154.9
125°	638.5	672.9	707.4	716.0	862.4	1057.8	1155.4	1332.6	1686.8	1952.5	1991.4
127.5°	680.6	715.3	750.1	758.8	885.7	1055.0	1139.6	1291.7	1595.9	1824.0	1856.9
130°	703.2	740.6	778.0	787.3	902.8	1056.7	1133.7	1269.1	1539.8	1742.9	1773.3
132.5°	726.5	763.9	801.3	810.6	916.5	1057.8	1128.4	1249.5	1492.0	1673.8	1701.0
135°	761.0	795.1	829.2	837.7	931.6	1056.7	1119.4	1220.9	1423.9	1576.1	1599.6
137.5°	796.3	830.1	863.8	872.2	954.1	1063.3	1117.9	1203.7	1375.3	1504.0	1523.2
140°	825.6	856.7	887.7	895.5	967.9	1064.4	1112.6	1186.8	1335.0	1446.2	1464.1
142.5°	848.1	876.9	905.6	912.8	979.4	1068.2	1112.6	1177.8	1307.9	1405.6	1421.0
145°	882.7	907.8	932.8	939.1	994.4	1068.2	1105.1	1158.3	1264.9	1344.8	1356.4
147.5°	917.3	941.7	966.0	972.1	1016.4	1075.5	1105.1	1147.0	1230.8	1293.6	1303.3
150°	939.8	961.8	983.8	989.4	1027.9	1079.4	1105.1	1140.5	1211.2	1264.3	1272.2
152.5°	963.1	979.8	996.5	1000.7	1035.5	1081.9	1105.1	1135.3	1195.7	1241.0	1247.0
155°	997.6	1010.0	1022.4	1025.4	1052.0	1087.4	1105.1	1129.1	1177.2	1213.3	1217.2
157.5°	1023.2	1035.2	1047.3	1050.2	1068.6	1092.9	1105.1	1123.8	1161.2	1189.2	1192.0
160°	1040.5	1049.8	1059.2	1061.5	1076.0	1095.4	1105.1	1121.1	1153.2	1177.2	1178.8
162.5°	1057.8	1064.8	1071.8	1073.5	1084.0	1098.1	1105.1	1118.6	1145.6	1166.0	1167.5
165°	1076.6	1082.9	1089.2	1090.8	1095.5	1101.9	1105.1	1114.8	1134.2	1148.7	1150.3
167.5°	1093.8	1096.8	1099.9	1100.6	1104.6	1110.0	1112.6	1119.0	1131.7	1141.1	1141.8
170°	1105.1	1108.1	1111.1	1111.8	1112.1	1112.5	1112.6	1119.0	1131.7	1141.1	1141.1
172.5°	1111.1	1111.8	1112.5	1112.6	1112.6	1112.6	1112.6	1117.6	1127.7	1135.1	1134.6
175°	1119.4	1119.4	1119.4	1119.4	1117.1	1114.2	1112.6	1115.8	1122.1	1126.8	1126.8
177.5°	1119.4	1119.4	1119.4	1119.4	1117.6	1115.3	1114.1	1116.6	1121.6	1125.4	1124.8
180°	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	374.6	374.6
2.5°	399.9	397.5
5°	514.3	516.7
7.5°	692.6	691.4
10°	861.2	872.1
12.5°	984.2	986.6
15°	1058.8	1063.7
17.5°	1087.7	1088.9
20°	1088.9	1086.5
22.5°	1075.7	1073.3
25°	1060.0	1058.8
27.5°	1045.6	1046.8
30°	1039.6	1043.2
32.5°	1039.6	1045.6
35°	1042.0	1048.0
37.5°	1040.8	1048.0
40°	1036.0	1044.4
42.5°	1022.7	1028.7
45°	1002.2	1009.5
47.5°	975.7	980.5
50°	942.0	946.8
52.5°	899.8	901.0
55°	849.2	854.0
57.5°	795.0	796.2
60°	734.7	738.4
62.5°	670.9	670.9
65°	603.5	605.9
67.5°	533.6	539.6
70°	462.5	463.7
72.5°	392.7	392.7
75°	320.4	321.6
77.5°	251.7	251.7
80°	186.7	187.9
82.5°	128.9	131.3
85°	80.7	80.7
87.5°	37.3	33.7
90°	28.6	28.6
92.5°	114.3	91.6
95°	398.5	329.8
97.5°	955.0	824.1
100°	1376.0	1220.1
102.5°	1790.0	1656.5
105°	2318.0	2246.2
107.5°	2663.9	2681.2
110°	2795.7	2870.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2807.5	2922.4
115°	2733.0	2892.3
117.5°	2575.2	2751.9
120°	2448.0	2619.6
122.5°	2324.1	2493.4
125°	2147.4	2303.3
127.5°	1988.5	2120.1
130°	1894.8	2016.3
132.5°	1809.8	1918.7
135°	1693.4	1787.2
137.5°	1600.1	1676.8
140°	1535.9	1607.7
142.5°	1482.8	1544.6
145°	1403.2	1449.9
147.5°	1342.1	1380.8
150°	1303.6	1335.0
152.5°	1270.7	1294.4
155°	1232.8	1248.6
157.5°	1203.1	1214.1
160°	1185.1	1191.5
162.5°	1173.4	1179.4
165°	1156.6	1162.9
167.5°	1144.5	1147.2
170°	1141.1	1141.1
172.5°	1132.2	1129.9
175°	1126.8	1126.8
177.5°	1122.0	1119.4
180°	1119.4	1119.4



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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	1.53	2.25	2.65	3.36	4.90	14.70	15.41	15.81	16.53	18.07
	3H	2.22	2.87	3.35	3.99	5.55	16.52	17.16	17.64	18.28	19.84
	4H	2.52	3.13	3.65	4.25	5.82	17.15	17.76	18.29	18.89	20.45
	6H	2.76	3.32	3.90	4.45	6.02	17.57	18.13	18.72	19.26	20.84
	8H	2.82	3.36	3.97	4.50	6.07	17.69	18.22	18.83	19.36	20.93
	12H	2.83	3.34	3.99	4.48	6.07	17.75	18.26	18.90	19.39	20.98
4H	2H	8.72	9.33	9.86	10.45	12.02	14.95	15.56	16.09	16.69	18.25
	3H	10.27	10.78	11.42	11.93	13.51	16.98	17.49	18.13	18.64	20.22
	4H	10.36	10.83	11.51	11.97	13.57	17.74	18.21	18.89	19.34	20.94
	6H	10.36	10.77	11.52	11.93	13.52	18.26	18.67	19.42	19.83	21.42
	8H	10.34	10.71	11.49	11.87	13.47	18.42	18.79	19.57	19.95	21.55
	12H	10.29	10.63	11.46	11.79	13.40	18.50	18.84	19.67	20.01	21.62
8H	4H	11.79	12.17	12.95	13.32	14.93	17.78	18.16	18.94	19.31	20.92
	6H	12.03	12.34	13.20	13.53	15.13	18.40	18.71	19.58	19.91	21.51
	8H	12.04	12.31	13.22	13.49	15.11	18.62	18.89	19.80	20.06	21.69
	12H	12.00	12.24	13.19	13.41	15.07	18.75	18.99	19.94	20.16	21.82
12H	4H	11.93	12.27	13.10	13.43	15.04	17.73	18.07	18.90	19.23	20.85
	6H	12.28	12.55	13.46	13.73	15.35	18.38	18.66	19.57	19.83	21.45
	8H	12.34	12.58	13.53	13.75	15.41	18.60	18.84	19.79	20.01	21.67