

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: P938240

Luminaire Tested: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938240
REPORT IS A COMBINATION OF REPORTS P933637 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

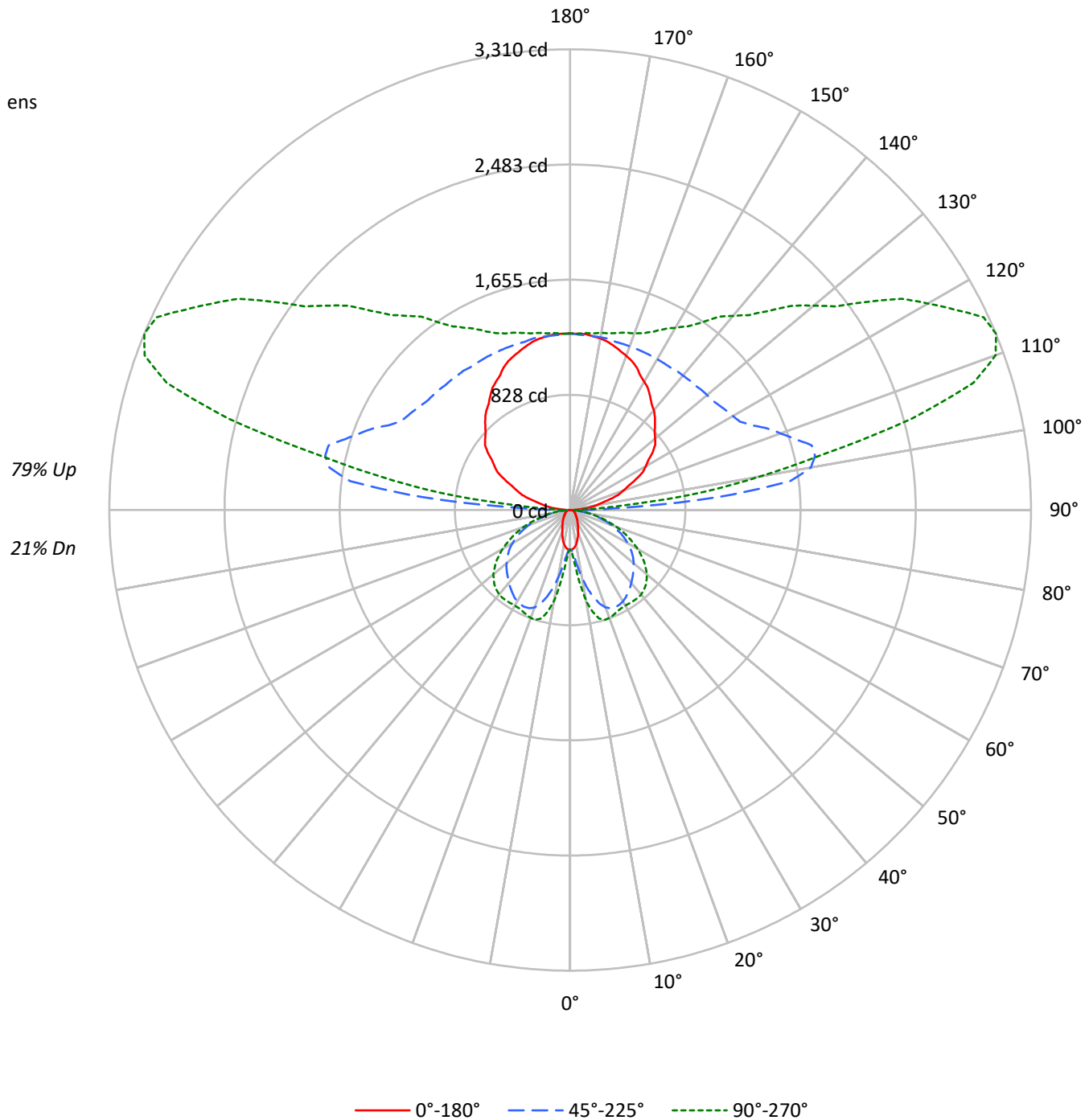
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10426.3 lumens
Efficiency: N/A
Efficacy: 125.0 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: Semi-Indirect

Input Watts (W): 83.4
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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CATALOG NUMBER: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-6-4000K

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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24	17
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	10
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11	7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9	6
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8	5
9	45	34	26	21	40	30	24	19	23	18	15	16	13	11	10	9	7	5
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6	4

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1760	1760	1760
5°	1719	2034	2366
10°	1559	2964	3922
15°	1324	3871	4736
20°	1078	4486	4827
25°	899	4693	4729
30°	758	4721	4720
35°	670	4641	4842
40°	583	4539	4969
45°	527	4463	4988
50°	483	4394	4906
55°	462	4294	4689
60°	474	4104	4345
65°	490	3815	3873
70°	522	3325	3272
75°	578	2708	2553
80°	625	1876	1720
85°	549	994	881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4988 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	0.4
10°-20°	163.1	1.6
20°-30°	285.4	2.7
30°-40°	367.3	3.5
40°-50°	410.3	3.9
50°-60°	393.0	3.8
60°-70°	311.4	3.0
70°-80°	183.1	1.8
80°-90°	55.7	0.5
90°-100°	618.1	5.9
100°-110°	1625.0	15.6
110°-120°	1685.0	16.2
120°-130°	1351.5	13.0
130°-140°	1060.5	10.2
140°-150°	814.0	7.8
150°-160°	586.2	5.6
160°-170°	358.7	3.4
170°-180°	121.2	1.2
0°-30°	485.3	4.7
0°-40°	852.6	8.2
0°-60°	1655.9	15.9
0°-90°	2206.2	21.2
90°-120°	3928.1	37.7
90°-150°	7154.1	68.6
90°-180°	8220.0	78.8
0°-180°	10426.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	284	284	284	284	284	
5°	277	297	335	379	392	26
15°	208	383	646	783	808	58
25°	133	435	770	803	804	61
35°	90	415	725	766	796	56
45°	61	331	640	734	767	47
55°	44	210	544	631	649	40
65°	35	112	404	454	460	34
75°	26	69	221	243	244	27
85°	9	21	55	60	61	10
90°	9	24	65	32	32	8
95°	82	320	1065	549	374	91
105°	293	443	1796	2728	2544	310
115°	520	632	1439	2870	3276	514
125°	723	811	1309	2212	2609	642
135°	862	949	1268	1785	2025	667
145°	1000	1064	1252	1523	1642	626
155°	1130	1162	1252	1374	1414	519
165°	1220	1236	1252	1301	1317	344
175°	1268	1268	1260	1276	1276	120
180°	1268	1268	1268	1268	1268	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5
2.5°	284.5	284.5	286.4	287.3	289.2	290.1	291.9	293.7	299.2	300.1	301.9
5°	277.3	280.9	292.8	297.4	310.2	327.6	334.8	346.8	371.5	378.8	383.4
7.5°	266.3	274.5	303.7	311.1	343.1	388.9	408.1	433.7	473.0	492.3	507.9
10°	248.9	266.3	318.4	335.8	388.0	457.5	493.2	528.9	588.4	614.8	624.9
12.5°	229.7	258.1	333.9	357.8	432.8	534.3	577.3	616.7	684.4	720.1	725.5
15°	207.7	246.1	348.6	383.4	480.4	598.4	645.9	694.5	757.6	783.2	789.7
17.5°	188.5	237.0	362.3	399.0	516.9	656.0	704.5	744.8	796.0	813.4	817.9
20°	164.7	222.3	371.5	419.1	555.4	698.1	744.8	775.9	810.7	821.7	823.5
22.5°	147.3	206.8	377.0	426.3	581.0	723.7	763.1	787.7	811.6	815.2	816.1
25°	132.7	189.4	376.0	434.6	603.0	739.3	769.5	787.7	801.5	803.3	803.3
27.5°	119.0	170.2	372.4	436.4	619.5	743.0	766.7	779.6	785.9	789.7	789.7
30°	107.1	151.9	363.2	432.8	626.7	739.3	758.5	764.9	771.3	776.8	779.6
32.5°	97.9	134.5	349.5	425.4	627.6	730.2	743.9	747.5	756.6	769.5	774.1
35°	89.7	117.2	333.9	415.4	622.2	715.5	724.6	728.3	746.6	765.8	772.2
37.5°	81.4	104.3	313.8	398.1	613.9	698.1	704.5	711.0	739.3	762.2	769.5
40°	73.2	93.3	290.1	378.8	601.2	677.0	682.6	692.6	730.2	756.6	764.0
42.5°	66.8	84.1	264.4	358.7	584.6	653.3	661.5	676.1	719.2	747.5	755.7
45°	61.3	75.0	237.0	331.2	563.6	628.6	640.5	660.6	706.3	733.8	741.1
47.5°	55.9	68.6	208.6	302.8	540.8	603.9	619.5	642.3	689.0	715.5	721.9
50°	51.2	62.2	180.3	272.6	516.0	577.3	595.6	619.5	667.0	691.7	700.0
52.5°	47.6	56.8	153.7	242.5	487.7	549.9	571.0	595.6	640.5	664.3	669.8
55°	43.9	52.1	130.8	210.4	458.4	520.6	543.5	567.2	611.2	631.3	635.0
57.5°	42.1	48.5	111.6	180.3	427.3	487.7	513.3	535.2	576.4	592.0	595.6
60°	39.4	45.8	97.0	154.6	393.4	456.5	478.6	500.5	535.2	548.1	550.8
62.5°	36.6	43.9	86.1	129.9	358.7	420.0	441.9	462.1	491.3	500.5	504.1
65°	34.7	42.1	77.8	111.6	323.0	381.5	403.5	420.9	444.6	453.8	455.6
67.5°	32.9	40.3	71.4	96.1	287.3	343.1	359.6	376.0	394.3	403.5	404.4
70°	30.2	38.4	65.9	85.1	250.7	299.2	312.9	330.3	344.9	349.5	352.3
72.5°	28.4	35.7	62.2	76.9	213.2	257.1	269.9	280.0	292.8	297.4	297.4
75°	25.7	32.0	58.6	68.6	174.7	210.4	221.4	231.5	241.5	243.4	240.6
77.5°	22.8	28.4	50.3	57.7	136.4	166.6	175.7	181.2	189.4	191.2	192.1
80°	19.2	24.7	39.4	44.8	98.8	122.6	129.0	133.6	140.9	140.9	142.7
82.5°	14.6	19.2	28.4	32.0	66.8	84.1	89.7	92.4	97.0	97.0	97.0
85°	9.2	11.9	18.3	21.0	40.3	51.2	54.9	55.9	59.5	60.4	60.4
87.5°	4.5	6.4	11.9	12.8	21.0	26.6	26.6	28.4	28.4	27.5	26.6
90°	8.6	15.4	22.1	23.8	37.5	55.6	64.7	57.5	43.1	32.4	32.4
92.5°	34.0	91.9	149.8	164.3	231.0	319.8	364.2	319.2	229.2	161.7	155.3
95°	81.7	187.6	293.5	320.0	568.3	899.2	1064.6	950.0	720.8	548.9	529.4
97.5°	141.3	234.7	328.1	351.5	765.4	1317.2	1593.1	1520.7	1375.8	1267.2	1230.1
100°	187.2	272.0	356.7	377.9	837.1	1449.5	1755.7	1761.0	1771.6	1779.5	1735.4
102.5°	226.4	305.5	384.5	404.2	870.1	1491.1	1801.6	1893.9	2078.4	2216.9	2179.0
105°	292.7	359.7	426.6	443.4	894.4	1495.8	1796.5	2003.4	2417.2	2727.5	2707.2
107.5°	360.9	423.3	485.7	501.2	898.9	1429.2	1694.4	1983.0	2560.2	2993.1	2998.0
110°	406.8	463.2	519.5	533.6	892.2	1370.2	1609.2	1931.9	2577.2	3061.1	3082.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	451.9	505.6	559.2	572.7	892.4	1318.7	1531.8	1862.0	2522.4	3017.7	3050.3
115°	519.9	569.5	619.1	631.5	900.6	1259.6	1439.0	1757.1	2393.3	2870.5	2915.6
117.5°	587.2	632.2	677.2	688.5	917.5	1222.6	1375.3	1662.4	2236.4	2667.1	2717.1
120°	626.4	668.8	711.2	721.7	931.0	1210.2	1349.7	1612.1	2136.6	2530.1	2578.6
122.5°	664.7	707.4	750.2	760.8	950.6	1203.6	1330.2	1566.4	2038.8	2393.1	2441.0
125°	723.3	762.3	801.3	811.0	977.0	1198.3	1308.9	1509.5	1910.8	2211.8	2255.9
127.5°	771.0	810.3	849.7	859.5	1003.3	1195.1	1291.0	1463.2	1807.8	2066.2	2103.5
130°	796.6	839.0	881.3	891.9	1022.7	1197.1	1284.2	1437.6	1744.3	1974.4	2008.8
132.5°	822.9	865.3	907.7	918.3	1038.3	1198.3	1278.2	1415.5	1690.1	1896.0	1926.9
135°	862.1	900.6	939.3	948.9	1055.3	1197.1	1268.0	1383.0	1613.0	1785.4	1812.0
137.5°	902.1	940.3	978.5	988.0	1080.8	1204.5	1266.3	1363.5	1557.9	1703.8	1725.5
140°	935.3	970.5	1005.6	1014.4	1096.4	1205.7	1260.4	1344.4	1512.3	1638.3	1658.5
142.5°	960.8	993.3	1025.9	1034.0	1109.5	1210.1	1260.4	1334.2	1481.6	1592.2	1609.7
145°	1000.0	1028.3	1056.7	1063.8	1126.5	1210.1	1251.8	1312.2	1432.9	1523.4	1536.6
147.5°	1039.1	1066.7	1094.3	1101.2	1151.4	1218.4	1251.8	1299.3	1394.2	1465.4	1476.4
150°	1064.6	1089.6	1114.5	1120.8	1164.4	1222.7	1251.8	1292.0	1372.1	1432.2	1441.1
152.5°	1091.0	1109.9	1128.9	1133.6	1173.0	1225.6	1251.8	1286.0	1354.5	1405.8	1412.6
155°	1130.1	1144.1	1158.1	1161.6	1191.7	1231.8	1251.8	1279.0	1333.5	1374.4	1378.8
157.5°	1159.1	1172.7	1186.3	1189.7	1210.5	1238.0	1251.8	1273.0	1315.4	1347.2	1350.3
160°	1178.7	1189.3	1199.8	1202.4	1218.9	1240.8	1251.8	1270.0	1306.3	1333.5	1335.3
162.5°	1198.3	1206.2	1214.1	1216.1	1228.0	1243.9	1251.8	1267.1	1297.8	1320.8	1322.5
165°	1219.6	1226.7	1233.8	1235.7	1241.0	1248.2	1251.8	1262.8	1284.8	1301.2	1303.1
167.5°	1239.1	1242.5	1245.9	1246.7	1251.3	1257.4	1260.4	1267.6	1282.0	1292.7	1293.4
170°	1251.8	1255.2	1258.7	1259.5	1259.8	1260.2	1260.4	1267.6	1282.0	1292.7	1292.7
172.5°	1258.7	1259.4	1260.2	1260.4	1260.4	1260.4	1260.4	1266.0	1277.4	1285.9	1285.2
175°	1268.0	1268.0	1268.0	1268.0	1265.5	1262.1	1260.4	1263.9	1271.1	1276.5	1276.5
177.5°	1268.0	1268.0	1268.0	1268.0	1266.0	1263.4	1262.0	1264.9	1270.6	1274.9	1274.1
180°	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0	1268.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	284.5	284.5
2.5°	303.7	301.9
5°	390.7	392.5
7.5°	526.1	525.2
10°	654.2	662.4
12.5°	747.5	749.4
15°	804.3	807.9
17.5°	826.2	827.1
20°	827.1	825.3
22.5°	817.0	815.2
25°	805.2	804.3
27.5°	794.2	795.1
30°	789.7	792.4
32.5°	789.7	794.2
35°	791.5	796.0
37.5°	790.6	796.0
40°	786.8	793.3
42.5°	776.8	781.4
45°	761.3	766.7
47.5°	741.1	744.8
50°	715.5	719.2
52.5°	683.5	684.4
55°	645.0	648.8
57.5°	603.9	604.8
60°	558.2	560.9
62.5°	509.7	509.7
65°	458.4	460.2
67.5°	405.3	409.9
70°	351.4	352.3
72.5°	298.3	298.3
75°	243.4	244.3
77.5°	191.2	191.2
80°	141.8	142.7
82.5°	97.9	99.7
85°	61.3	61.3
87.5°	28.4	25.7
90°	32.4	32.4
92.5°	129.5	103.8
95°	451.5	373.6
97.5°	1081.8	933.6
100°	1558.8	1382.1
102.5°	2027.8	1876.5
105°	2625.8	2544.5
107.5°	3017.6	3037.3
110°	3167.0	3251.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3180.4	3310.4
115°	3095.9	3276.4
117.5°	2917.2	3117.3
120°	2773.1	2967.5
122.5°	2632.8	2824.5
125°	2432.6	2609.2
127.5°	2252.5	2401.6
130°	2146.5	2284.1
132.5°	2050.1	2173.5
135°	1918.3	2024.6
137.5°	1812.5	1899.5
140°	1739.9	1821.2
142.5°	1679.7	1749.7
145°	1589.5	1642.4
147.5°	1520.3	1564.2
150°	1476.7	1512.3
152.5°	1439.4	1466.3
155°	1396.6	1414.4
157.5°	1362.8	1375.3
160°	1342.5	1349.7
162.5°	1329.3	1336.1
165°	1310.2	1317.3
167.5°	1296.5	1299.5
170°	1292.7	1292.7
172.5°	1282.6	1280.0
175°	1276.5	1276.5
177.5°	1271.0	1268.0
180°	1268.0	1268.0



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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	0.00	0.05	0.56	1.21	2.84	12.55	13.22	13.72	14.37	16.00
	3H	0.08	0.67	1.25	1.84	3.48	14.37	14.97	15.55	16.13	17.77
	4H	0.37	0.94	1.55	2.10	3.75	15.01	15.57	16.19	16.73	18.38
	6H	0.61	1.13	1.80	2.29	3.95	15.42	15.94	16.61	17.11	18.77
	8H	0.67	1.17	1.86	2.35	4.00	15.53	16.03	16.73	17.21	18.86
	12H	0.68	1.15	1.88	2.32	4.00	15.59	16.06	16.79	17.24	18.91
4H	2H	6.57	7.14	7.76	8.30	9.95	12.80	13.37	13.99	14.53	16.18
	3H	8.12	8.59	9.32	9.78	11.44	14.83	15.30	16.02	16.49	18.15
	4H	8.21	8.64	9.40	9.82	11.50	15.58	16.02	16.78	17.19	18.87
	6H	8.21	8.58	9.41	9.78	11.44	16.10	16.48	17.30	17.68	19.34
	8H	8.18	8.53	9.38	9.72	11.40	16.26	16.61	17.46	17.80	19.48
	12H	8.12	8.44	9.34	9.64	11.33	16.34	16.66	17.55	17.85	19.54
8H	4H	9.63	9.98	10.83	11.17	12.85	15.62	15.97	16.82	17.16	18.85
	6H	9.86	10.15	11.08	11.38	13.06	16.24	16.53	17.46	17.76	19.44
	8H	9.88	10.13	11.10	11.34	13.04	16.45	16.70	17.68	17.91	19.61
	12H	9.84	10.06	11.06	11.26	13.00	16.59	16.81	17.81	18.01	19.74
12H	4H	9.76	10.08	10.98	11.28	12.97	15.57	15.88	16.78	17.08	18.77
	6H	10.12	10.37	11.34	11.58	13.28	16.22	16.47	17.44	17.68	19.38
	8H	10.18	10.40	11.40	11.60	13.34	16.44	16.66	17.66	17.86	19.59