

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: P938342

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938342
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-92765-1D-UNV-STD-W-6-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

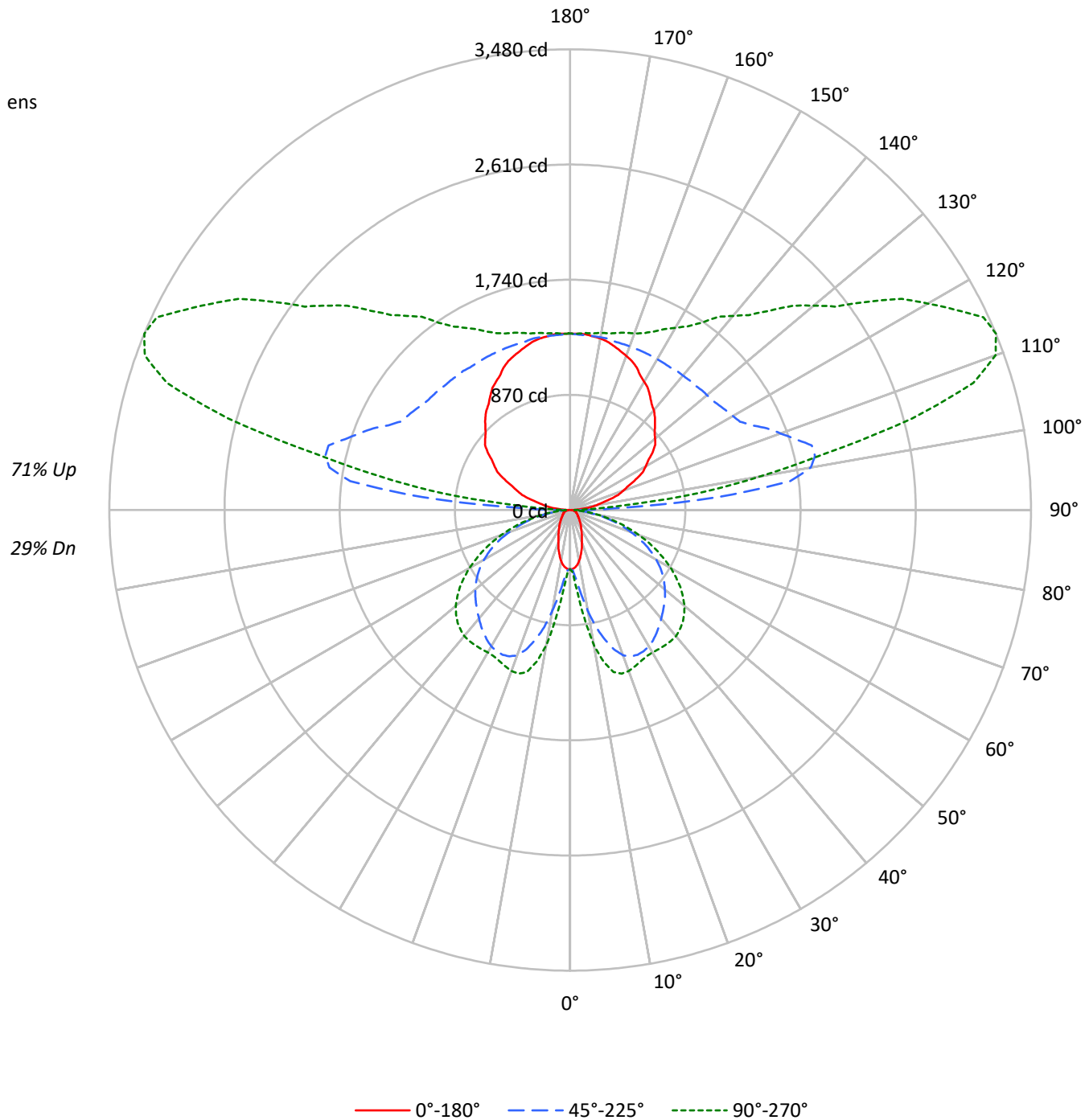
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12096.8 lumens
Efficiency: N/A
Efficacy: 126.8 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				
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			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6			6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2760	2760	2760
5°	2695	3188	3709
10°	2443	4647	6149
15°	2076	6069	7426
20°	1690	7032	7568
25°	1409	7357	7414
30°	1187	7402	7400
35°	1050	7277	7591
40°	913	7115	7789
45°	827	6995	7819
50°	758	6888	7690
55°	725	6732	7349
60°	742	6433	6810
65°	770	5980	6071
70°	818	5212	5129
75°	905	4246	4003
80°	980	2941	2696
85°	853	1558	1380

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7819 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	0.5
10°-20°	255.7	2.1
20°-30°	447.3	3.7
30°-40°	575.9	4.8
40°-50°	643.2	5.3
50°-60°	616.0	5.1
60°-70°	488.2	4.0
70°-80°	287.1	2.4
80°-90°	84.8	0.7
90°-100°	649.8	5.4
100°-110°	1708.2	14.1
110°-120°	1771.2	14.6
120°-130°	1420.7	11.7
130°-140°	1114.8	9.2
140°-150°	855.6	7.1
150°-160°	616.2	5.1
160°-170°	377.0	3.1
170°-180°	127.4	1.1
0°-30°	760.8	6.3
0°-40°	1336.6	11.0
0°-60°	2595.8	21.5
0°-90°	3455.9	28.6
90°-120°	4129.1	34.1
90°-150°	7520.2	62.2
90°-180°	8641.0	71.4
0°-180°	12096.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	435	466	525	594	615	40
15°	326	601	1013	1228	1267	91
25°	208	681	1206	1259	1261	96
35°	141	651	1136	1201	1248	88
45°	96	519	1004	1150	1202	74
55°	69	330	852	990	1017	63
65°	54	175	632	711	721	54
75°	40	108	347	382	383	42
85°	14	33	86	95	96	15
90°	9	25	68	34	34	8
95°	86	336	1119	577	393	95
105°	308	466	1888	2867	2675	326
115°	547	664	1513	3017	3444	540
125°	760	852	1376	2325	2743	675
135°	906	998	1333	1877	2128	701
145°	1051	1118	1316	1601	1726	659
155°	1188	1221	1316	1445	1487	546
165°	1282	1299	1316	1368	1385	362
175°	1333	1333	1325	1342	1342	127
180°	1333	1333	1333	1333	1333	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1
2.5°	446.1	446.1	448.9	450.4	453.2	454.7	457.5	460.4	469.0	470.4	473.3
5°	434.6	440.3	459.0	466.1	486.2	513.5	524.9	543.6	582.3	593.8	601.0
7.5°	417.4	430.3	476.2	487.7	537.9	609.6	639.7	679.9	741.5	771.6	796.0
10°	390.1	417.4	499.1	526.4	608.1	717.1	773.1	829.0	922.2	963.8	979.6
12.5°	360.0	404.5	523.5	560.8	678.4	837.6	905.0	966.7	1072.8	1128.9	1137.5
15°	325.6	385.8	546.5	601.0	753.0	938.0	1012.6	1088.7	1187.7	1227.8	1237.9
17.5°	295.5	371.5	568.0	625.4	810.4	1028.4	1104.5	1167.6	1247.9	1275.2	1282.4
20°	258.2	348.5	582.3	656.9	870.6	1094.5	1167.6	1216.4	1270.9	1288.1	1291.0
22.5°	230.9	324.1	590.9	668.4	910.8	1134.6	1196.3	1235.0	1272.3	1278.0	1279.5
25°	208.0	296.9	589.5	681.3	945.2	1159.0	1206.3	1235.0	1256.5	1259.4	1259.4
27.5°	186.5	266.8	583.8	684.2	971.0	1164.7	1202.0	1222.1	1232.2	1237.9	1237.9
30°	167.8	238.1	569.4	678.4	982.5	1159.0	1189.1	1199.2	1209.2	1217.8	1222.1
32.5°	153.5	210.8	547.9	666.9	983.9	1144.7	1166.2	1171.9	1186.3	1206.3	1213.5
35°	140.6	183.6	523.5	651.2	975.3	1121.7	1136.1	1141.8	1170.5	1200.6	1210.6
37.5°	127.7	163.5	492.0	623.9	962.4	1094.5	1104.5	1114.5	1159.0	1194.9	1206.3
40°	114.7	146.3	454.7	593.8	942.3	1061.4	1070.0	1085.8	1144.7	1186.3	1197.7
42.5°	104.7	132.0	414.5	562.2	916.5	1024.1	1037.0	1059.9	1127.4	1171.9	1184.8
45°	96.1	117.6	371.5	519.2	883.5	985.4	1004.0	1035.6	1107.4	1150.4	1161.9
47.5°	87.5	107.6	327.0	474.7	847.7	946.6	971.0	1006.9	1080.0	1121.7	1131.8
50°	80.3	97.5	282.6	427.4	808.9	905.0	933.7	971.0	1045.6	1084.3	1097.3
52.5°	74.6	88.9	241.0	380.1	764.5	862.0	895.0	933.7	1004.0	1041.3	1049.9
55°	68.8	81.8	205.1	329.9	718.6	816.1	852.0	889.3	958.1	989.7	995.4
57.5°	66.0	76.0	175.0	282.6	669.8	764.5	804.6	839.1	903.6	928.0	933.7
60°	61.7	71.7	152.0	242.4	616.7	715.7	750.1	784.6	839.1	859.1	863.4
62.5°	57.4	68.8	134.8	203.7	562.2	658.3	692.8	724.3	770.2	784.6	790.3
65°	54.5	66.0	121.9	175.0	506.3	598.1	632.5	659.8	697.1	711.4	714.3
67.5°	51.6	63.1	111.9	150.6	450.4	537.9	563.7	589.5	618.2	632.5	634.0
70°	47.3	60.2	103.3	133.4	393.0	469.0	490.5	517.8	540.7	547.9	552.2
72.5°	44.5	55.9	97.5	120.5	334.2	403.0	423.1	438.9	459.0	466.1	466.1
75°	40.2	50.2	91.8	107.6	273.9	329.9	347.1	362.9	378.7	381.5	377.2
77.5°	35.9	44.5	78.9	90.4	213.7	261.0	275.4	284.0	296.9	299.8	301.2
80°	30.1	38.7	61.7	70.3	154.9	192.2	202.2	209.4	220.9	220.9	223.7
82.5°	22.9	30.1	44.5	50.2	104.7	132.0	140.6	144.9	152.0	152.0	152.0
85°	14.3	18.6	28.7	33.0	63.1	80.3	86.1	87.5	93.2	94.7	94.7
87.5°	7.2	10.0	18.6	20.1	33.0	41.6	41.6	44.5	44.5	43.0	41.6
90°	9.0	16.2	23.2	25.1	39.4	58.4	68.0	60.4	45.3	34.0	34.0
92.5°	35.8	96.6	157.5	172.7	242.8	336.2	382.9	335.5	241.0	170.0	163.2
95°	85.9	197.2	308.6	336.4	597.3	945.2	1119.1	998.6	757.7	577.0	556.5
97.5°	148.5	246.7	344.9	369.5	804.5	1384.7	1674.7	1598.6	1446.2	1332.1	1293.1
100°	196.8	285.9	374.9	397.2	880.0	1523.7	1845.5	1851.1	1862.3	1870.6	1824.2
102.5°	238.0	321.1	404.2	424.9	914.6	1567.4	1893.8	1990.8	2184.8	2330.3	2290.6
105°	307.7	378.1	448.5	466.0	940.2	1572.4	1888.5	2105.9	2540.9	2867.1	2845.7
107.5°	379.3	444.9	510.5	526.9	944.9	1502.4	1781.1	2084.5	2691.2	3146.3	3151.4
110°	427.6	486.9	546.1	560.9	937.8	1440.3	1691.6	2030.8	2709.1	3217.8	3240.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	475.0	531.5	587.9	602.0	938.1	1386.2	1610.2	1957.3	2651.5	3172.2	3206.4
115°	546.6	598.7	650.8	663.8	946.7	1324.0	1512.7	1847.1	2515.8	3017.4	3064.8
117.5°	617.2	664.6	711.9	723.7	964.4	1285.2	1445.7	1747.4	2350.9	2803.6	2856.1
120°	658.4	703.0	747.6	758.6	978.7	1272.1	1418.8	1694.6	2246.0	2659.6	2710.6
122.5°	698.7	743.6	788.6	799.8	999.2	1265.2	1398.2	1646.6	2143.1	2515.6	2565.9
125°	760.4	801.3	842.3	852.5	1027.0	1259.6	1375.9	1586.8	2008.6	2325.0	2371.4
127.5°	810.5	851.8	893.2	903.5	1054.7	1256.2	1357.0	1538.1	1900.3	2172.0	2211.2
130°	837.3	881.9	926.5	937.5	1075.0	1258.3	1350.0	1511.2	1833.6	2075.4	2111.6
132.5°	865.1	909.6	954.2	965.3	1091.4	1259.6	1343.6	1487.9	1776.6	1993.1	2025.5
135°	906.2	946.7	987.4	997.5	1109.3	1258.3	1332.9	1453.8	1695.5	1876.8	1904.7
137.5°	948.3	988.4	1028.6	1038.6	1136.1	1266.1	1331.1	1433.3	1637.7	1790.9	1813.8
140°	983.2	1020.2	1057.1	1066.3	1152.5	1267.4	1324.9	1413.2	1589.7	1722.1	1743.4
142.5°	1009.9	1044.2	1078.4	1086.9	1166.3	1272.0	1324.9	1402.4	1557.4	1673.7	1692.1
145°	1051.1	1081.0	1110.8	1118.3	1184.1	1272.0	1315.9	1379.3	1506.2	1601.3	1615.2
147.5°	1092.3	1121.3	1150.3	1157.6	1210.3	1280.7	1315.9	1365.8	1465.6	1540.4	1552.0
150°	1119.1	1145.3	1171.5	1178.1	1224.0	1285.3	1315.9	1358.1	1442.3	1505.5	1514.9
152.5°	1146.9	1166.7	1186.6	1191.6	1233.0	1288.3	1315.9	1351.9	1423.9	1477.8	1484.9
155°	1188.0	1202.7	1217.4	1221.1	1252.7	1294.9	1315.9	1344.5	1401.8	1444.7	1449.4
157.5°	1218.4	1232.7	1247.1	1250.6	1272.4	1301.4	1315.9	1338.2	1382.8	1416.1	1419.4
160°	1239.0	1250.1	1261.2	1264.0	1281.3	1304.3	1315.9	1335.0	1373.2	1401.8	1403.7
162.5°	1259.6	1267.9	1276.2	1278.3	1290.9	1307.6	1315.9	1332.0	1364.2	1388.4	1390.2
165°	1282.0	1289.5	1297.0	1298.9	1304.5	1312.1	1315.9	1327.5	1350.5	1367.8	1369.7
167.5°	1302.5	1306.1	1309.7	1310.6	1315.3	1321.7	1324.9	1332.5	1347.6	1358.8	1359.6
170°	1315.9	1319.5	1323.1	1323.9	1324.2	1324.7	1324.9	1332.5	1347.6	1358.8	1358.8
172.5°	1323.1	1323.8	1324.7	1324.9	1324.9	1324.9	1324.9	1330.8	1342.8	1351.7	1351.0
175°	1332.9	1332.9	1332.9	1332.9	1330.3	1326.7	1324.9	1328.6	1336.2	1341.8	1341.8
177.5°	1332.9	1332.9	1332.9	1332.9	1330.8	1328.1	1326.6	1329.6	1335.6	1340.1	1339.3
180°	1332.9	1332.9	1332.9	1332.9	1332.9	1332.9	1332.9	1332.9	1332.9	1332.9	1332.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	446.1	446.1
2.5°	476.2	473.3
5°	612.4	615.3
7.5°	824.7	823.3
10°	1025.5	1038.4
12.5°	1171.9	1174.8
15°	1260.8	1266.6
17.5°	1295.3	1296.7
20°	1296.7	1293.8
22.5°	1280.9	1278.0
25°	1262.3	1260.8
27.5°	1245.1	1246.5
30°	1237.9	1242.2
32.5°	1237.9	1245.1
35°	1240.8	1247.9
37.5°	1239.3	1247.9
40°	1233.6	1243.6
42.5°	1217.8	1225.0
45°	1193.4	1202.0
47.5°	1161.9	1167.6
50°	1121.7	1127.4
52.5°	1071.4	1072.8
55°	1011.2	1016.9
57.5°	946.6	948.1
60°	874.9	879.2
62.5°	798.9	798.9
65°	718.6	721.4
67.5°	635.4	642.6
70°	550.8	552.2
72.5°	467.6	467.6
75°	381.5	383.0
77.5°	299.8	299.8
80°	222.3	223.7
82.5°	153.5	156.3
85°	96.1	96.1
87.5°	44.5	40.2
90°	34.0	34.0
92.5°	136.2	109.1
95°	474.6	392.7
97.5°	1137.2	981.3
100°	1638.5	1452.8
102.5°	2131.5	1972.5
105°	2760.2	2674.8
107.5°	3172.1	3192.7
110°	3329.1	3418.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3343.1	3479.9
115°	3254.4	3444.1
117.5°	3066.5	3276.9
120°	2915.0	3119.4
122.5°	2767.5	2969.1
125°	2557.1	2742.7
127.5°	2367.8	2524.5
130°	2256.3	2401.0
132.5°	2155.1	2284.7
135°	2016.5	2128.2
137.5°	1905.3	1996.7
140°	1828.9	1914.4
142.5°	1765.7	1839.2
145°	1670.9	1726.5
147.5°	1598.1	1644.3
150°	1552.3	1589.7
152.5°	1513.1	1541.4
155°	1468.0	1486.8
157.5°	1432.6	1445.7
160°	1411.2	1418.8
162.5°	1397.3	1404.5
165°	1377.2	1384.8
167.5°	1362.9	1366.0
170°	1358.8	1358.8
172.5°	1348.2	1345.5
175°	1341.8	1341.8
177.5°	1336.1	1332.9
180°	1332.9	1332.9



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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	2.14	2.85	3.25	3.97	5.51	15.30	16.02	16.42	17.13	18.68
	3H	2.83	3.47	3.96	4.60	6.16	17.13	17.77	18.25	18.89	20.45
	4H	3.12	3.73	4.26	4.86	6.42	17.76	18.37	18.89	19.49	21.06
	6H	3.37	3.93	4.51	5.05	6.63	18.18	18.74	19.32	19.87	21.45
	8H	3.43	3.97	4.58	5.11	6.68	18.29	18.83	19.44	19.97	21.54
	12H	3.44	3.95	4.59	5.08	6.68	18.35	18.86	19.50	20.00	21.59
4H	2H	9.33	9.94	10.47	11.06	12.63	15.56	16.17	16.70	17.29	18.86
	3H	10.88	11.39	12.03	12.54	14.12	17.59	18.10	18.73	19.25	20.82
	4H	10.97	11.44	12.12	12.58	14.18	18.34	18.81	19.49	19.95	21.55
	6H	10.97	11.37	12.13	12.54	14.12	18.87	19.27	20.03	20.43	22.02
	8H	10.94	11.32	12.10	12.47	14.08	19.03	19.40	20.18	20.55	22.16
	12H	10.89	11.24	12.07	12.40	14.01	19.11	19.45	20.28	20.61	22.22
8H	4H	12.40	12.77	13.55	13.93	15.53	18.39	18.77	19.55	19.92	21.53
	6H	12.63	12.94	13.81	14.14	15.74	19.01	19.32	20.19	20.51	22.12
	8H	12.65	12.92	13.83	14.09	15.72	19.22	19.50	20.41	20.67	22.29
	12H	12.61	12.85	13.80	14.02	15.68	19.36	19.60	20.55	20.77	22.42
12H	4H	12.53	12.87	13.71	14.04	15.65	18.34	18.68	19.51	19.84	21.45
	6H	12.89	13.16	14.07	14.33	15.96	18.99	19.26	20.17	20.43	22.06
	8H	12.95	13.19	14.14	14.36	16.02	19.21	19.45	20.40	20.62	22.28