

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: P937565

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937565
REPORT IS A COMBINATION OF REPORTS P933582 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

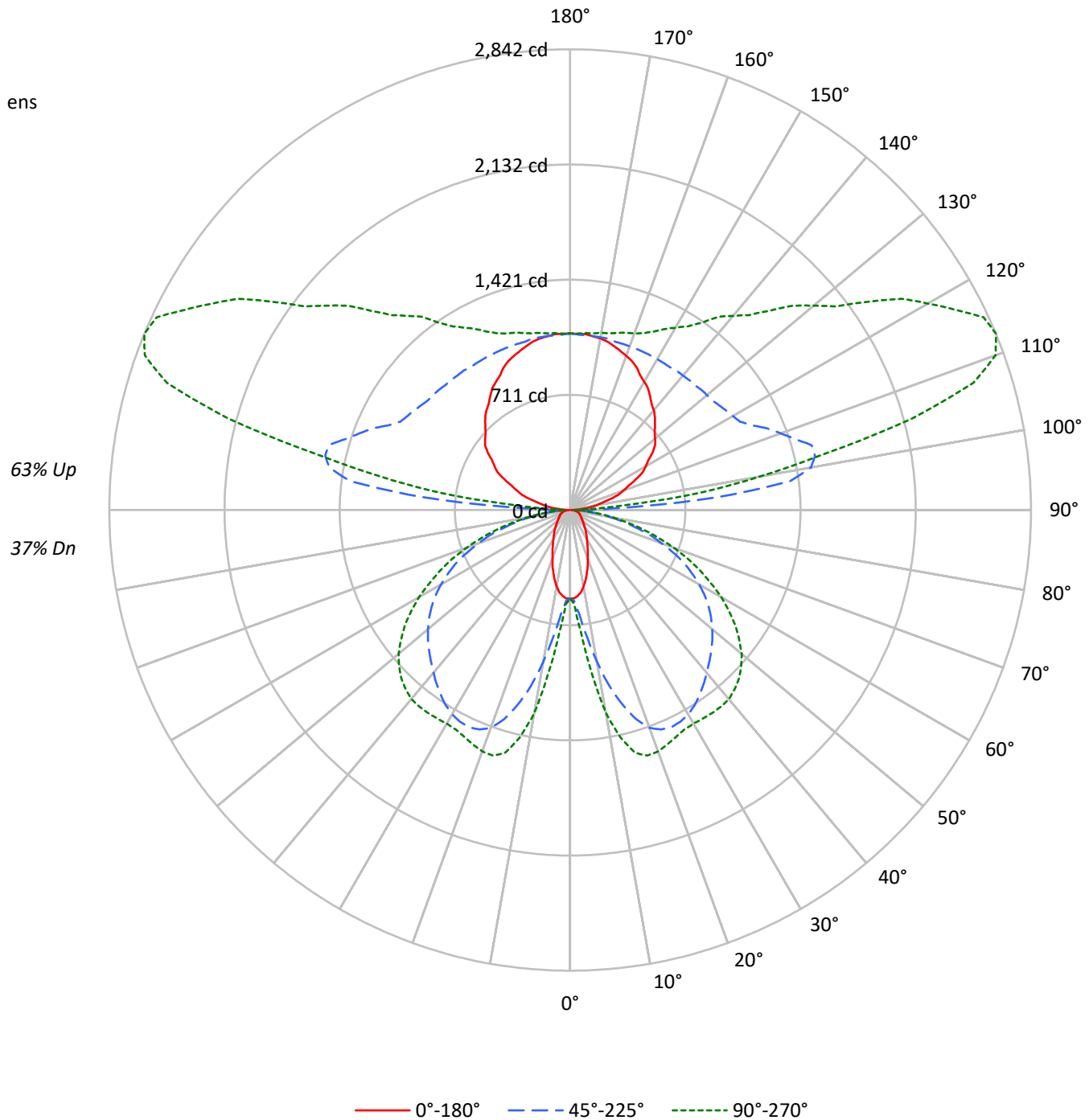
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11288.0 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 98.4
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	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°	2535	2535	2535
5°	2476	2929	3407
10°	2246	4270	5649
15°	1909	5579	6821
20°	1554	6466	6951
25°	1296	6766	6810
30°	1093	6809	6797
35°	966	6696	6973
40°	842	6549	7155
45°	763	6441	7182
50°	700	6344	7064
55°	670	6203	6750
60°	686	5930	6256
65°	714	5516	5577
70°	761	4811	4711
75°	843	3922	3676
80°	921	2720	2477
85°	820	1443	1268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7182 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	0.6
10°-20°	313.2	2.8
20°-30°	547.9	4.9
30°-40°	705.3	6.2
40°-50°	787.7	7.0
50°-60°	754.5	6.7
60°-70°	597.9	5.3
70°-80°	351.6	3.1
80°-90°	101.8	0.9
90°-100°	530.7	4.7
100°-110°	1395.2	12.4
110°-120°	1446.6	12.8
120°-130°	1160.4	10.3
130°-140°	910.5	8.1
140°-150°	698.8	6.2
150°-160°	503.3	4.5
160°-170°	307.9	2.7
170°-180°	104.0	0.9
0°-30°	931.7	8.3
0°-40°	1637.0	14.5
0°-60°	3179.2	28.2
0°-90°	4230.5	37.5
90°-120°	3372.5	29.9
90°-150°	6142.2	54.4
90°-180°	7057.0	62.5
0°-180°	11288.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	532	571	643	727	754	49
15°	399	736	1240	1504	1551	111
25°	255	834	1477	1542	1544	117
35°	172	798	1391	1470	1528	107
45°	118	636	1230	1409	1472	91
55°	84	404	1044	1212	1246	77
65°	67	214	775	871	884	66
75°	49	132	425	467	469	52
85°	18	40	105	116	118	19
90°	7	20	56	28	28	7
95°	70	275	914	471	321	78
105°	251	381	1542	2342	2185	266
115°	446	542	1236	2464	2813	441
125°	621	696	1124	1899	2240	551
135°	740	815	1089	1533	1738	573
145°	858	913	1075	1308	1410	538
155°	970	997	1075	1180	1214	446
165°	1047	1061	1075	1117	1131	295
175°	1089	1089	1082	1096	1096	103
180°	1089	1089	1089	1089	1089	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3
2.5°	546.3	546.3	549.8	551.6	555.1	556.8	560.4	563.9	574.4	576.2	579.7
5°	532.3	539.3	562.1	570.9	595.5	628.9	642.9	665.8	713.2	727.2	736.0
7.5°	511.2	527.0	583.2	597.2	658.7	746.6	783.4	832.6	908.2	945.1	974.9
10°	477.8	511.2	611.3	644.7	744.8	878.3	946.8	1015.4	1129.6	1180.5	1199.8
12.5°	440.9	495.4	641.2	686.8	830.9	1025.9	1108.5	1184.0	1314.0	1382.5	1393.1
15°	398.7	472.5	669.3	736.0	922.2	1148.9	1240.2	1333.3	1454.6	1503.7	1516.0
17.5°	361.9	455.0	695.6	765.9	992.5	1259.6	1352.7	1430.0	1528.3	1561.7	1570.5
20°	316.2	426.9	713.2	804.5	1066.3	1340.4	1430.0	1489.7	1556.4	1577.5	1581.0
22.5°	282.8	397.0	723.7	818.6	1115.5	1389.6	1465.1	1512.5	1558.2	1565.2	1567.0
25°	254.7	363.6	722.0	834.4	1157.7	1419.4	1477.4	1512.5	1538.9	1542.4	1542.4
27.5°	228.4	326.7	714.9	837.9	1189.3	1426.4	1472.1	1496.7	1509.0	1516.0	1516.0
30°	205.5	291.6	697.4	830.9	1203.4	1419.4	1456.3	1468.6	1480.9	1491.4	1496.7
32.5°	188.0	258.2	671.0	816.8	1205.1	1401.9	1428.2	1435.2	1452.8	1477.4	1486.2
35°	172.1	224.8	641.2	797.5	1194.6	1373.8	1391.3	1398.3	1433.5	1470.4	1482.7
37.5°	156.3	200.3	602.5	764.1	1178.8	1340.4	1352.7	1365.0	1419.4	1463.3	1477.4
40°	140.5	179.2	556.8	727.2	1154.2	1300.0	1310.5	1329.8	1401.9	1452.8	1466.9
42.5°	128.2	161.6	507.7	688.6	1122.6	1254.3	1270.1	1298.2	1380.8	1435.2	1451.0
45°	117.7	144.0	455.0	635.9	1082.2	1206.9	1229.7	1268.4	1356.2	1408.9	1422.9
47.5°	107.2	131.7	400.5	581.4	1038.2	1159.4	1189.3	1233.2	1322.8	1373.8	1386.0
50°	98.4	119.4	346.1	523.5	990.7	1108.5	1143.6	1189.3	1280.7	1328.1	1343.9
52.5°	91.3	108.9	295.1	465.5	936.3	1055.8	1096.2	1143.6	1229.7	1275.4	1285.9
55°	84.3	100.1	251.2	404.0	880.1	999.6	1043.5	1089.2	1173.5	1212.1	1219.2
57.5°	80.8	93.1	214.3	346.1	820.3	936.3	985.5	1027.7	1106.7	1136.6	1143.6
60°	75.5	87.8	186.2	296.9	755.3	876.5	918.7	960.9	1027.7	1052.3	1057.6
62.5°	70.3	84.3	165.1	249.4	688.6	806.3	848.4	887.1	943.3	960.9	967.9
65°	66.8	80.8	149.3	214.3	620.1	732.5	774.7	808.0	853.7	871.3	874.8
67.5°	63.2	77.3	137.0	184.4	551.6	658.7	690.3	722.0	757.1	774.7	776.4
70°	58.0	73.8	126.5	163.4	481.3	574.4	600.8	634.1	662.2	671.0	676.3
72.5°	54.5	68.5	119.4	147.6	409.3	493.6	518.2	537.5	562.1	570.9	570.9
75°	49.2	61.5	112.4	131.7	335.5	404.0	425.1	444.4	463.7	467.3	462.0
77.5°	43.9	54.5	96.6	110.7	261.7	319.7	337.3	347.8	363.6	367.1	368.9
80°	36.9	47.4	75.5	86.1	189.7	235.4	247.7	256.5	270.5	270.5	274.0
82.5°	28.1	36.9	54.5	61.5	128.2	161.6	172.1	177.4	186.2	186.2	186.2
85°	17.6	22.8	35.1	40.4	77.3	98.4	105.4	107.2	114.2	115.9	115.9
87.5°	8.8	12.3	22.8	24.6	40.4	50.9	50.9	54.5	54.5	52.7	50.9
90°	7.3	13.2	19.0	20.5	32.1	47.7	55.5	49.4	37.0	27.8	27.8
92.5°	29.2	79.0	128.7	141.1	198.2	274.6	312.7	274.0	196.8	138.9	133.3
95°	70.2	161.1	252.0	274.7	487.8	771.9	914.0	815.7	618.9	471.3	454.6
97.5°	121.3	201.5	281.8	301.8	657.1	1130.9	1367.8	1305.6	1181.2	1088.0	1056.2
100°	160.7	233.5	306.3	324.4	718.7	1244.5	1507.3	1511.9	1521.0	1527.8	1489.9
102.5°	194.4	262.2	330.1	347.0	746.9	1280.1	1546.8	1626.0	1784.5	1903.4	1870.9
105°	251.4	308.8	366.3	380.7	767.9	1284.3	1542.4	1720.0	2075.2	2341.7	2324.2
107.5°	309.8	363.4	416.9	430.4	771.9	1227.1	1454.7	1702.5	2198.0	2569.6	2573.9
110°	349.2	397.6	446.0	458.1	766.0	1176.4	1381.7	1658.7	2212.6	2628.1	2646.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	387.9	434.1	480.3	491.8	766.2	1132.2	1315.2	1598.7	2165.6	2590.9	2618.8
115°	446.4	489.0	531.5	542.2	773.3	1081.5	1235.5	1508.7	2054.9	2464.5	2503.2
117.5°	504.1	542.8	581.4	591.1	787.7	1049.7	1180.7	1427.2	1920.1	2289.8	2332.8
120°	537.8	574.1	610.5	619.6	799.3	1039.0	1158.8	1384.0	1834.4	2172.2	2213.9
122.5°	570.6	607.3	644.1	653.2	816.1	1033.3	1142.0	1344.8	1750.4	2054.6	2095.8
125°	621.0	654.5	688.0	696.3	838.8	1028.8	1123.7	1296.0	1640.6	1899.0	1936.9
127.5°	662.0	695.7	729.5	737.9	861.4	1026.1	1108.4	1256.3	1552.1	1774.0	1806.0
130°	683.8	720.2	756.6	765.7	877.9	1027.7	1102.5	1234.2	1497.6	1695.1	1724.6
132.5°	706.5	742.9	779.2	788.4	891.4	1028.8	1097.4	1215.3	1451.0	1627.8	1654.3
135°	740.1	773.3	806.5	814.7	906.1	1027.8	1088.7	1187.4	1384.8	1532.9	1555.7
137.5°	774.5	807.2	840.1	848.3	927.9	1034.1	1087.2	1170.6	1337.6	1462.7	1481.4
140°	802.9	833.2	863.4	870.9	941.3	1035.2	1082.1	1154.2	1298.4	1406.5	1424.0
142.5°	824.9	852.8	880.8	887.7	952.5	1038.9	1082.1	1145.4	1272.0	1367.1	1382.1
145°	858.5	882.9	907.3	913.3	967.2	1038.9	1074.8	1126.6	1230.1	1307.9	1319.2
147.5°	892.1	915.8	939.5	945.5	988.6	1046.1	1074.8	1115.5	1197.0	1258.2	1267.6
150°	914.0	935.5	956.9	962.3	999.8	1049.7	1074.8	1109.2	1178.1	1229.7	1237.4
152.5°	936.7	953.0	969.2	973.2	1007.1	1052.2	1074.8	1104.2	1163.0	1207.0	1212.8
155°	970.3	982.3	994.3	997.3	1023.1	1057.6	1074.8	1098.1	1145.0	1180.0	1183.8
157.5°	995.1	1006.8	1018.6	1021.5	1039.2	1062.9	1074.8	1093.0	1129.3	1156.6	1159.3
160°	1012.0	1021.1	1030.2	1032.4	1046.6	1065.4	1074.8	1090.4	1121.6	1145.0	1146.5
162.5°	1028.8	1035.6	1042.5	1044.1	1054.3	1067.9	1074.8	1088.0	1114.2	1134.0	1135.5
165°	1047.0	1053.2	1059.3	1060.9	1065.6	1071.7	1074.8	1084.2	1103.1	1117.2	1118.8
167.5°	1063.8	1066.7	1069.7	1070.4	1074.2	1079.4	1082.1	1088.2	1100.6	1109.8	1110.4
170°	1074.8	1077.7	1080.7	1081.4	1081.6	1081.9	1082.1	1088.2	1100.6	1109.8	1109.8
172.5°	1080.7	1081.3	1081.9	1082.1	1082.1	1082.1	1082.1	1087.0	1096.7	1104.0	1103.5
175°	1088.7	1088.7	1088.7	1088.7	1086.5	1083.6	1082.1	1085.1	1091.3	1095.9	1095.9
177.5°	1088.7	1088.7	1088.7	1088.7	1087.0	1084.7	1083.6	1086.0	1090.8	1094.5	1093.9
180°	1088.7	1088.7	1088.7	1088.7	1088.7	1088.7	1088.7	1088.7	1088.7	1088.7	1088.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	546.3	546.3
2.5°	583.2	579.7
5°	750.1	753.6
7.5°	1010.1	1008.4
10°	1256.1	1271.9
12.5°	1435.2	1438.7
15°	1544.1	1551.2
17.5°	1586.3	1588.1
20°	1588.1	1584.5
22.5°	1568.7	1565.2
25°	1545.9	1544.1
27.5°	1524.8	1526.6
30°	1516.0	1521.3
32.5°	1516.0	1524.8
35°	1519.5	1528.3
37.5°	1517.8	1528.3
40°	1510.8	1523.1
42.5°	1491.4	1500.2
45°	1461.6	1472.1
47.5°	1422.9	1430.0
50°	1373.8	1380.8
52.5°	1312.3	1314.0
55°	1238.5	1245.5
57.5°	1159.4	1161.2
60°	1071.6	1076.9
62.5°	978.4	978.4
65°	880.1	883.6
67.5°	778.2	787.0
70°	674.5	676.3
72.5°	572.7	572.7
75°	467.3	469.0
77.5°	367.1	367.1
80°	272.3	274.0
82.5°	188.0	191.5
85°	117.7	117.7
87.5°	54.5	49.2
90°	27.8	27.8
92.5°	111.3	89.1
95°	387.7	320.8
97.5°	928.8	801.5
100°	1338.3	1186.6
102.5°	1741.0	1611.1
105°	2254.4	2184.6
107.5°	2590.8	2607.7
110°	2719.0	2791.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2730.5	2842.2
115°	2658.1	2813.0
117.5°	2504.6	2676.4
120°	2380.9	2547.8
122.5°	2260.4	2425.0
125°	2088.5	2240.2
127.5°	1933.9	2061.9
130°	1842.9	1961.1
132.5°	1760.2	1866.0
135°	1647.0	1738.2
137.5°	1556.1	1630.8
140°	1493.7	1563.6
142.5°	1442.2	1502.2
145°	1364.7	1410.1
147.5°	1305.2	1342.9
150°	1267.8	1298.4
152.5°	1235.9	1258.9
155°	1199.1	1214.3
157.5°	1170.0	1180.7
160°	1152.7	1158.8
162.5°	1141.3	1147.1
165°	1124.9	1131.1
167.5°	1113.1	1115.7
170°	1109.8	1109.8
172.5°	1101.2	1098.9
175°	1095.9	1095.9
177.5°	1091.3	1088.7
180°	1088.7	1088.7



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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	2.97	3.75	4.02	4.81	6.25	16.15	16.93	17.20	17.99	19.43
	3H	3.67	4.37	4.73	5.44	6.90	17.98	18.69	19.04	19.76	21.21
	4H	3.96	4.63	5.04	5.70	7.17	18.62	19.29	19.69	20.36	21.82
	6H	4.21	4.83	5.29	5.90	7.38	19.05	19.67	20.13	20.74	22.21
	8H	4.28	4.86	5.36	5.95	7.42	19.17	19.76	20.25	20.85	22.31
	12H	4.29	4.85	5.38	5.93	7.43	19.23	19.79	20.32	20.88	22.37
4H	2H	10.18	10.84	11.25	11.91	13.38	16.41	17.08	17.49	18.15	19.61
	3H	11.74	12.30	12.82	13.39	14.87	18.45	19.01	19.54	20.11	21.58
	4H	11.83	12.34	12.92	13.43	14.92	19.21	19.73	20.31	20.82	22.31
	6H	11.83	12.28	12.93	13.39	14.87	19.75	20.19	20.85	21.30	22.79
	8H	11.81	12.22	12.91	13.32	14.83	19.91	20.32	21.01	21.43	22.93
	12H	11.76	12.14	12.88	13.25	14.76	20.00	20.37	21.12	21.49	23.00
8H	4H	13.27	13.68	14.37	14.78	16.29	19.27	19.68	20.37	20.78	22.29
	6H	13.50	13.85	14.63	14.99	16.49	19.89	20.24	21.02	21.38	22.88
	8H	13.52	13.82	14.65	14.95	16.47	20.11	20.41	21.24	21.54	23.06
	12H	13.48	13.75	14.62	14.87	16.43	20.25	20.52	21.39	21.64	23.20
12H	4H	13.40	13.78	14.52	14.90	16.41	19.22	19.59	20.34	20.71	22.22
	6H	13.76	14.06	14.89	15.19	16.71	19.88	20.18	21.01	21.30	22.82
	8H	13.83	14.09	14.96	15.21	16.77	20.10	20.37	21.24	21.49	23.05