

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: P938362

Luminaire Tested: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938362
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-93050-1D-UNV-STD-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

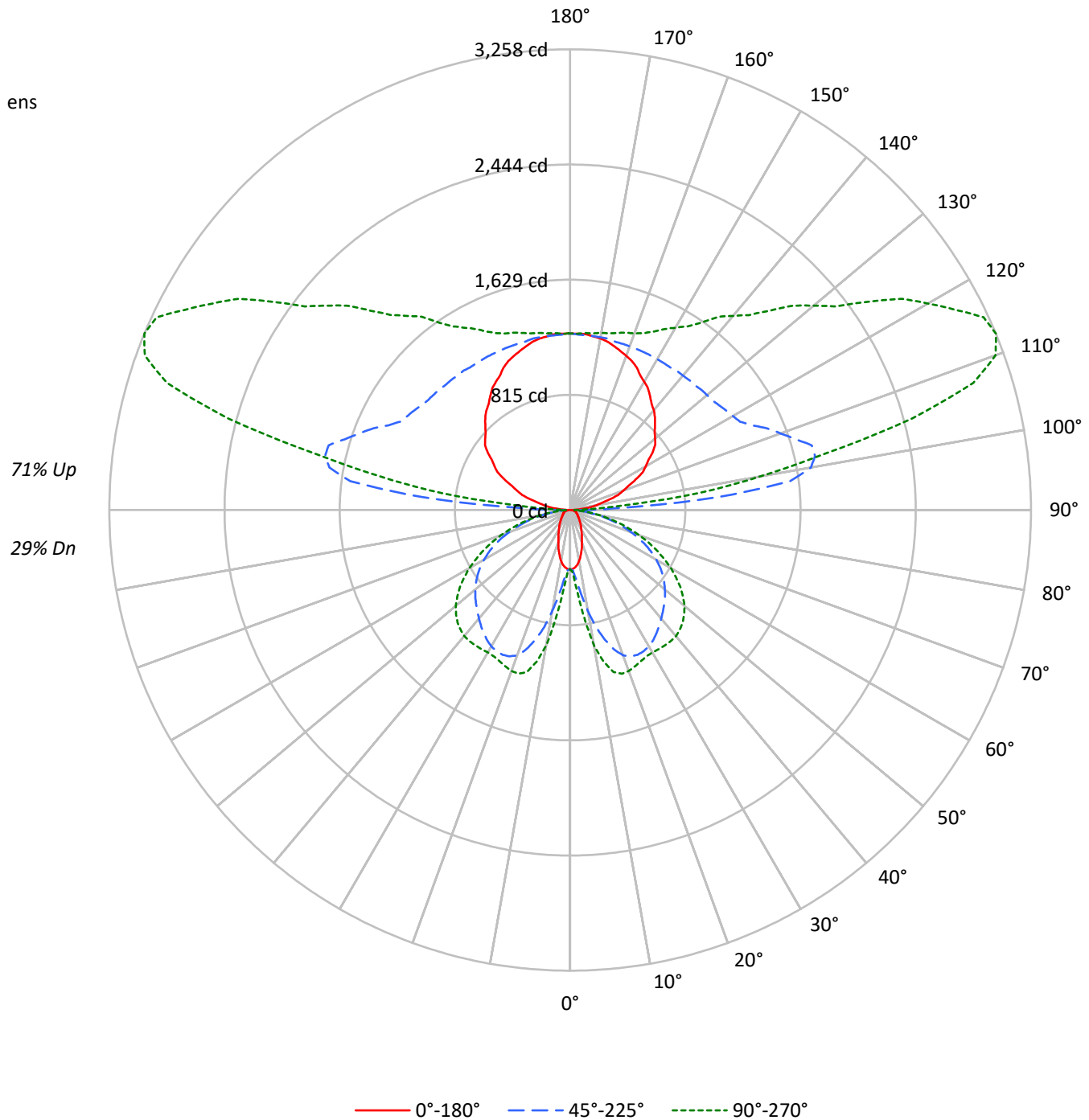
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11326.6 lumens
Efficiency: N/A
Efficacy: 118.7 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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CATALOG NUMBER: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-6-3500K

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	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°	2584	2584	2584
5°	2523	2985	3473
10°	2288	4351	5758
15°	1944	5683	6953
20°	1582	6585	7086
25°	1319	6889	6942
30°	1111	6930	6929
35°	982	6813	7108
40°	855	6662	7293
45°	774	6550	7322
50°	710	6450	7201
55°	679	6303	6881
60°	694	6023	6376
65°	721	5599	5684
70°	766	4880	4802
75°	846	3975	3748
80°	918	2754	2525
85°	799	1459	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7322 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	0.5
10°-20°	239.5	2.1
20°-30°	418.9	3.7
30°-40°	539.2	4.8
40°-50°	602.2	5.3
50°-60°	576.8	5.1
60°-70°	457.1	4.0
70°-80°	268.8	2.4
80°-90°	79.4	0.7
90°-100°	608.4	5.4
100°-110°	1599.4	14.1
110°-120°	1658.4	14.6
120°-130°	1330.3	11.7
130°-140°	1043.8	9.2
140°-150°	801.1	7.1
150°-160°	576.9	5.1
160°-170°	353.0	3.1
170°-180°	119.3	1.1
0°-30°	712.3	6.3
0°-40°	1251.5	11.0
0°-60°	2430.6	21.5
0°-90°	3235.9	28.6
90°-120°	3866.2	34.1
90°-150°	7041.4	62.2
90°-180°	8091.0	71.4
0°-180°	11326.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	407	436	492	556	576	38
15°	305	563	948	1150	1186	85
25°	195	638	1130	1179	1181	90
35°	132	610	1064	1124	1168	82
45°	90	486	940	1077	1126	70
55°	64	309	798	927	952	59
65°	51	164	592	666	676	51
75°	38	101	325	357	359	39
85°	13	31	81	89	90	14
90°	8	24	64	32	32	8
95°	80	315	1048	540	368	89
105°	288	436	1768	2685	2504	305
115°	512	622	1416	2825	3225	505
125°	712	798	1288	2177	2568	632
135°	848	934	1248	1757	1993	657
145°	984	1047	1232	1499	1617	617
155°	1112	1143	1232	1353	1392	511
165°	1200	1216	1232	1281	1297	339
175°	1248	1248	1240	1256	1256	118
180°	1248	1248	1248	1248	1248	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
2.5°	417.7	417.7	420.3	421.7	424.4	425.7	428.4	431.1	439.2	440.5	443.2
5°	406.9	412.3	429.7	436.5	455.3	480.8	491.5	509.0	545.2	556.0	562.7
7.5°	390.8	402.9	445.9	456.6	503.6	570.8	599.0	636.6	694.3	722.5	745.3
10°	365.3	390.8	467.4	492.9	569.4	671.5	723.9	776.2	863.5	902.5	917.2
12.5°	337.1	378.7	490.2	525.1	635.2	784.3	847.4	905.2	1004.5	1057.0	1065.1
15°	304.9	361.3	511.7	562.7	705.1	878.3	948.1	1019.4	1112.1	1149.7	1159.1
17.5°	276.7	347.8	531.8	585.5	758.8	962.9	1034.2	1093.3	1168.5	1194.0	1200.7
20°	241.7	326.3	545.2	615.1	815.2	1024.8	1093.3	1138.9	1190.0	1206.1	1208.8
22.5°	216.2	303.5	553.3	625.8	852.8	1062.4	1120.1	1156.4	1191.3	1196.7	1198.0
25°	194.7	278.0	552.0	637.9	885.0	1085.2	1129.5	1156.4	1176.5	1179.2	1179.2
27.5°	174.6	249.8	546.6	640.6	909.2	1090.6	1125.5	1144.3	1153.7	1159.1	1159.1
30°	157.1	222.9	533.2	635.2	919.9	1085.2	1113.4	1122.8	1132.2	1140.3	1144.3
32.5°	143.7	197.4	513.0	624.5	921.3	1071.8	1091.9	1097.3	1110.7	1129.5	1136.2
35°	131.6	171.9	490.2	609.7	913.2	1050.3	1063.7	1069.1	1096.0	1124.2	1133.6
37.5°	119.5	153.1	460.6	584.2	901.1	1024.8	1034.2	1043.6	1085.2	1118.8	1129.5
40°	107.4	137.0	425.7	556.0	882.3	993.8	1001.9	1016.6	1071.8	1110.7	1121.5
42.5°	98.0	123.6	388.1	526.4	858.2	958.9	971.0	992.5	1055.7	1097.3	1109.4
45°	90.0	110.1	347.8	486.2	827.3	922.6	940.1	969.6	1036.9	1077.1	1087.9
47.5°	81.9	100.7	306.2	444.5	793.7	886.4	909.2	942.8	1011.3	1050.3	1059.7
50°	75.2	91.3	264.6	400.2	757.4	847.4	874.3	909.2	979.0	1015.3	1027.5
52.5°	69.8	83.3	225.6	355.9	715.8	807.1	838.0	874.3	940.1	975.0	983.1
55°	64.5	76.5	192.0	308.9	672.8	764.1	797.7	832.6	897.1	926.6	932.0
57.5°	61.8	71.2	163.8	264.6	627.2	715.8	753.4	785.6	846.1	868.9	874.3
60°	57.7	67.1	142.4	227.0	577.5	670.1	702.4	734.6	785.6	804.4	808.5
62.5°	53.7	64.5	126.2	190.7	526.4	616.4	648.7	678.2	721.2	734.6	740.0
65°	51.0	61.8	114.2	163.8	474.1	560.0	592.2	617.8	652.7	666.1	668.8
67.5°	48.3	59.1	104.8	141.0	421.7	503.6	527.8	552.0	578.8	592.2	593.6
70°	44.3	56.4	96.7	124.9	368.0	439.2	459.3	484.8	506.3	513.0	517.0
72.5°	41.6	52.4	91.3	112.8	312.9	377.4	396.2	410.9	429.7	436.5	436.5
75°	37.6	47.0	85.9	100.7	256.5	308.9	325.0	339.8	354.5	357.2	353.2
77.5°	33.6	41.6	73.9	84.6	200.1	244.4	257.8	265.9	278.0	280.7	282.0
80°	28.2	36.3	57.7	65.8	145.0	180.0	189.4	196.1	206.8	206.8	209.5
82.5°	21.5	28.2	41.6	47.0	98.0	123.6	131.6	135.6	142.4	142.4	142.4
85°	13.4	17.5	26.9	30.9	59.1	75.2	80.6	81.9	87.3	88.6	88.6
87.5°	6.7	9.4	17.5	18.8	30.9	38.9	38.9	41.6	41.6	40.3	38.9
90°	8.4	15.1	21.8	23.5	36.9	54.7	63.7	56.6	42.4	31.9	31.9
92.5°	33.5	90.4	147.5	161.7	227.3	314.8	358.5	314.2	225.6	159.2	152.8
95°	80.4	184.6	288.9	315.0	559.3	885.0	1047.9	935.1	709.4	540.2	521.1
97.5°	139.0	231.0	322.9	345.9	753.3	1296.5	1568.0	1496.8	1354.2	1247.3	1210.7
100°	184.3	267.7	351.1	371.9	824.0	1426.7	1728.0	1733.2	1743.7	1751.5	1708.1
102.5°	222.8	300.6	378.4	397.9	856.4	1467.6	1773.3	1864.0	2045.7	2182.0	2144.7
105°	288.1	354.0	419.9	436.4	880.4	1472.3	1768.2	1971.8	2379.1	2684.6	2664.5
107.5°	355.2	416.6	478.0	493.3	884.7	1406.7	1667.7	1951.8	2519.9	2945.9	2950.8
110°	400.4	455.9	511.3	525.2	878.1	1348.6	1583.9	1901.5	2536.6	3012.9	3033.8



TEST NUMBER: P938362

CATALOG NUMBER: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	444.8	497.6	550.4	563.7	878.4	1297.9	1507.7	1832.7	2482.7	2970.2	3002.2
115°	511.8	560.6	609.3	621.5	886.4	1239.7	1416.4	1729.5	2355.7	2825.2	2869.7
117.5°	577.9	622.2	666.6	677.7	903.0	1203.4	1353.6	1636.2	2201.2	2625.1	2674.3
120°	616.5	658.2	700.0	710.3	916.4	1191.1	1328.5	1586.7	2103.0	2490.2	2538.0
122.5°	654.2	696.3	738.4	748.8	935.6	1184.7	1309.2	1541.7	2006.7	2355.4	2402.6
125°	712.0	750.3	788.7	798.3	961.6	1179.4	1288.3	1485.8	1880.7	2177.0	2220.4
127.5°	758.9	797.5	836.3	846.0	987.5	1176.3	1270.6	1440.2	1779.3	2033.7	2070.4
130°	784.0	825.7	867.5	877.9	1006.6	1178.2	1264.0	1415.0	1716.9	1943.3	1977.1
132.5°	810.0	851.7	893.4	903.8	1021.9	1179.4	1258.1	1393.2	1663.5	1866.2	1896.5
135°	848.5	886.4	924.5	934.0	1038.7	1178.2	1248.1	1361.2	1587.6	1757.3	1783.5
137.5°	887.9	925.5	963.1	972.5	1063.8	1185.5	1246.4	1342.1	1533.4	1676.9	1698.3
140°	920.6	955.2	989.8	998.5	1079.1	1186.7	1240.5	1323.2	1488.5	1612.5	1632.4
142.5°	945.6	977.7	1009.7	1017.7	1092.0	1191.0	1240.5	1313.2	1458.3	1567.2	1584.3
145°	984.2	1012.2	1040.1	1047.1	1108.8	1191.0	1232.1	1291.5	1410.3	1499.4	1512.4
147.5°	1022.7	1049.9	1077.1	1083.9	1133.3	1199.2	1232.1	1278.9	1372.2	1442.3	1453.2
150°	1047.9	1072.4	1096.9	1103.1	1146.1	1203.5	1232.1	1271.6	1350.5	1409.7	1418.4
152.5°	1073.8	1092.5	1111.1	1115.7	1154.5	1206.3	1232.1	1265.8	1333.2	1383.7	1390.3
155°	1112.3	1126.1	1139.9	1143.3	1172.9	1212.4	1232.1	1258.9	1312.5	1352.7	1357.1
157.5°	1140.8	1154.2	1167.7	1171.0	1191.4	1218.5	1232.1	1253.0	1294.7	1326.0	1329.0
160°	1160.1	1170.5	1180.9	1183.5	1199.7	1221.3	1232.1	1250.0	1285.8	1312.5	1314.3
162.5°	1179.4	1187.2	1195.0	1196.9	1208.7	1224.3	1232.1	1247.2	1277.3	1300.0	1301.7
165°	1200.3	1207.4	1214.4	1216.2	1221.5	1228.5	1232.1	1243.0	1264.5	1280.7	1282.5
167.5°	1219.6	1222.9	1226.3	1227.1	1231.6	1237.6	1240.5	1247.6	1261.8	1272.3	1273.0
170°	1232.1	1235.4	1238.8	1239.6	1239.9	1240.4	1240.5	1247.6	1261.8	1272.3	1272.3
172.5°	1238.8	1239.6	1240.4	1240.5	1240.5	1240.5	1240.5	1246.1	1257.3	1265.6	1265.0
175°	1248.1	1248.1	1248.1	1248.1	1245.6	1242.2	1240.5	1244.0	1251.1	1256.4	1256.4
177.5°	1248.1	1248.1	1248.1	1248.1	1246.1	1243.5	1242.2	1244.9	1250.6	1254.8	1254.1
180°	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	417.7	417.7
2.5°	445.9	443.2
5°	573.4	576.1
7.5°	772.2	770.9
10°	960.2	972.3
12.5°	1097.3	1100.0
15°	1180.6	1185.9
17.5°	1212.8	1214.1
20°	1214.1	1211.4
22.5°	1199.4	1196.7
25°	1181.9	1180.6
27.5°	1165.8	1167.1
30°	1159.1	1163.1
32.5°	1159.1	1165.8
35°	1161.8	1168.5
37.5°	1160.4	1168.5
40°	1155.0	1164.4
42.5°	1140.3	1147.0
45°	1117.4	1125.5
47.5°	1087.9	1093.3
50°	1050.3	1055.7
52.5°	1003.2	1004.5
55°	946.8	952.2
57.5°	886.4	887.7
60°	819.2	823.2
62.5°	748.0	748.0
65°	672.8	675.5
67.5°	594.9	601.6
70°	515.7	517.0
72.5°	437.8	437.8
75°	357.2	358.6
77.5°	280.7	280.7
80°	208.2	209.5
82.5°	143.7	146.4
85°	90.0	90.0
87.5°	41.6	37.6
90°	31.9	31.9
92.5°	127.5	102.2
95°	444.3	367.7
97.5°	1064.8	918.9
100°	1534.2	1360.3
102.5°	1995.8	1846.9
105°	2584.5	2504.5
107.5°	2970.1	2989.4
110°	3117.1	3200.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3130.3	3258.3
115°	3047.2	3224.8
117.5°	2871.3	3068.2
120°	2729.4	2920.8
122.5°	2591.3	2780.0
125°	2394.2	2568.1
127.5°	2217.1	2363.8
130°	2112.7	2248.1
132.5°	2017.9	2139.3
135°	1888.1	1992.7
137.5°	1784.0	1869.6
140°	1712.5	1792.5
142.5°	1653.3	1722.1
145°	1564.5	1616.6
147.5°	1496.3	1539.6
150°	1453.4	1488.5
152.5°	1416.7	1443.2
155°	1374.6	1392.1
157.5°	1341.4	1353.6
160°	1321.4	1328.5
162.5°	1308.3	1315.0
165°	1289.5	1296.6
167.5°	1276.1	1279.0
170°	1272.3	1272.3
172.5°	1262.4	1259.8
175°	1256.4	1256.4
177.5°	1251.0	1248.1
180°	1248.1	1248.1



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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	1.91	2.62	3.02	3.74	5.28	15.07	15.79	16.19	16.90	18.45
	3H	2.60	3.24	3.73	4.37	5.93	16.90	17.54	18.02	18.66	20.22
	4H	2.89	3.50	4.03	4.63	6.19	17.53	18.14	18.67	19.27	20.83
	6H	3.14	3.70	4.28	4.82	6.40	17.95	18.51	19.09	19.64	21.22
	8H	3.20	3.74	4.35	4.88	6.45	18.06	18.60	19.21	19.74	21.31
	12H	3.21	3.72	4.36	4.86	6.45	18.13	18.63	19.28	19.77	21.36
4H	2H	9.10	9.71	10.24	10.83	12.40	15.33	15.94	16.47	17.06	18.63
	3H	10.65	11.16	11.80	12.31	13.89	17.36	17.87	18.51	19.02	20.60
	4H	10.74	11.21	11.89	12.35	13.95	18.11	18.58	19.27	19.72	21.32
	6H	10.74	11.15	11.90	12.31	13.90	18.64	19.04	19.80	20.20	21.79
	8H	10.72	11.09	11.87	12.24	13.85	18.80	19.17	19.95	20.33	21.93
	12H	10.67	11.01	11.84	12.17	13.78	18.88	19.22	20.05	20.38	22.00
8H	4H	12.17	12.55	13.33	13.70	15.30	18.16	18.54	19.32	19.69	21.30
	6H	12.40	12.72	13.58	13.91	15.51	18.78	19.09	19.96	20.29	21.89
	8H	12.42	12.69	13.60	13.86	15.49	19.00	19.27	20.18	20.44	22.06
	12H	12.38	12.62	13.57	13.79	15.45	19.13	19.37	20.32	20.54	22.20
12H	4H	12.30	12.65	13.48	13.81	15.42	18.11	18.45	19.28	19.61	21.22
	6H	12.66	12.93	13.84	14.10	15.73	18.76	19.03	19.94	20.21	21.83
	8H	12.72	12.96	13.91	14.13	15.79	18.98	19.22	20.17	20.39	22.05