

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: P937545

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937545
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-92765-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

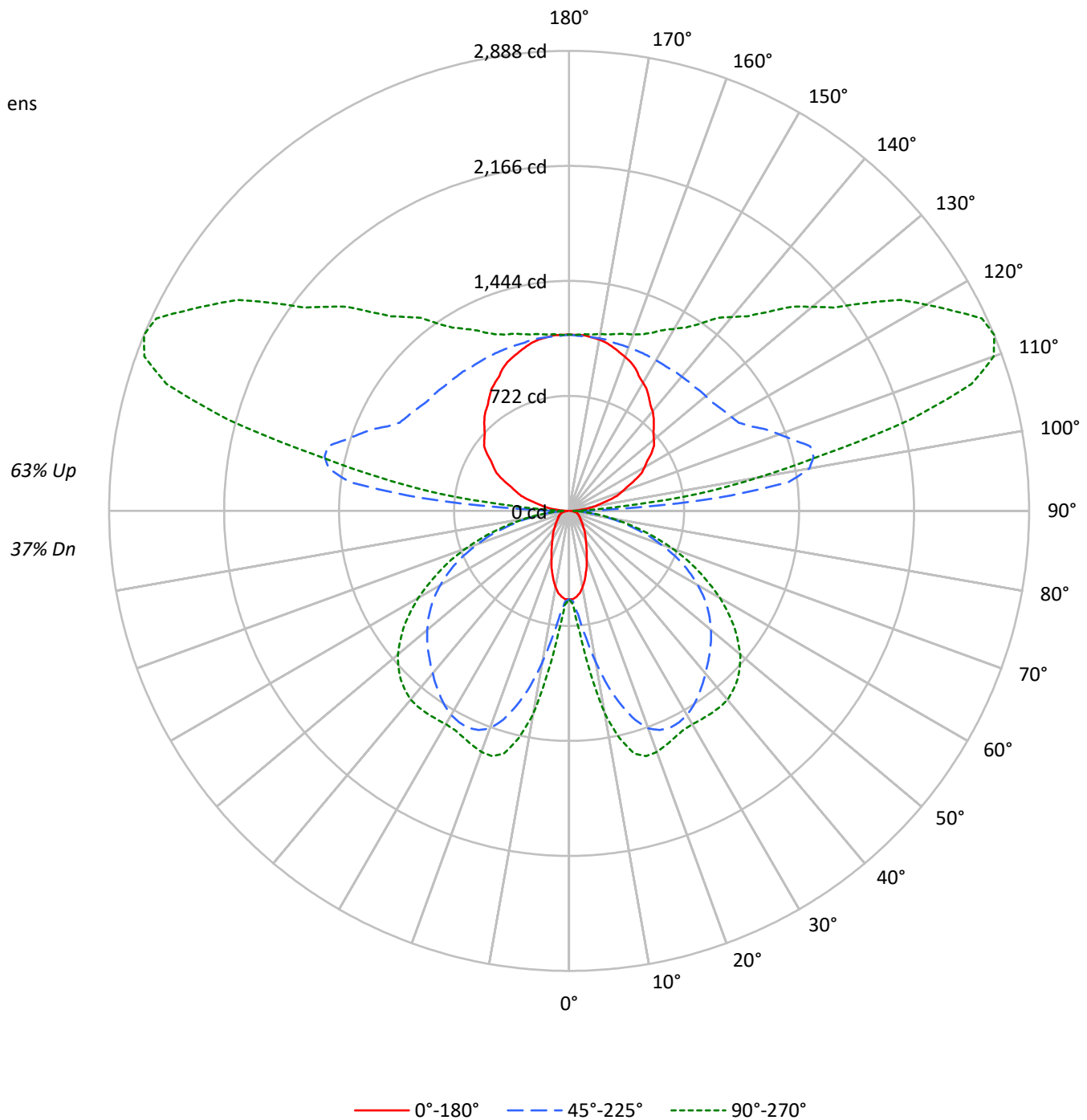
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11472.0 lumens
Efficiency: N/A
Efficacy: 116.6 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 (Ain): 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°	2576	2576	2576
5°	2516	2977	3463
10°	2283	4340	5741
15°	1940	5671	6932
20°	1579	6571	7065
25°	1318	6876	6921
30°	1111	6920	6908
35°	983	6805	7086
40°	856	6656	7271
45°	775	6546	7299
50°	711	6448	7179
55°	681	6304	6860
60°	698	6027	6358
65°	725	5606	5667
70°	772	4889	4788
75°	856	3986	3737
80°	936	2764	2518
85°	834	1466	1288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7299 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	0.6
10°-20°	318.3	2.8
20°-30°	556.8	4.9
30°-40°	716.8	6.2
40°-50°	800.6	7.0
50°-60°	766.8	6.7
60°-70°	607.6	5.3
70°-80°	357.3	3.1
80°-90°	103.5	0.9
90°-100°	539.3	4.7
100°-110°	1417.9	12.4
110°-120°	1470.2	12.8
120°-130°	1179.3	10.3
130°-140°	925.3	8.1
140°-150°	710.2	6.2
150°-160°	511.5	4.5
160°-170°	313.0	2.7
170°-180°	105.7	0.9
0°-30°	946.9	8.3
0°-40°	1663.7	14.5
0°-60°	3231.1	28.2
0°-90°	4299.5	37.5
90°-120°	3427.5	29.9
90°-150°	6242.3	54.4
90°-180°	7172.0	62.5
0°-180°	11472.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	541	580	653	739	766	50
15°	405	748	1260	1528	1576	113
25°	259	848	1502	1568	1569	119
35°	175	810	1414	1494	1553	109
45°	120	646	1250	1432	1496	93
55°	86	411	1060	1232	1266	78
65°	68	218	787	886	898	67
75°	50	134	432	475	477	52
85°	18	41	107	118	120	19
90°	7	21	56	28	28	7
95°	71	279	929	479	326	79
105°	256	387	1568	2380	2220	271
115°	454	551	1256	2505	2859	448
125°	631	708	1142	1930	2277	560
135°	752	828	1106	1558	1767	582
145°	872	928	1092	1329	1433	547
155°	986	1014	1092	1199	1234	453
165°	1064	1078	1092	1135	1150	300
175°	1106	1106	1100	1114	1114	105
180°	1106	1106	1106	1106	1106	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2
2.5°	555.2	555.2	558.8	560.6	564.1	565.9	569.5	573.1	583.8	585.6	589.1
5°	540.9	548.1	571.3	580.2	605.2	639.1	653.4	676.6	724.8	739.1	748.0
7.5°	519.5	535.6	592.7	607.0	669.5	758.7	796.2	846.2	923.0	960.5	990.8
10°	485.6	519.5	621.3	655.2	756.9	892.6	962.2	1032.0	1148.0	1199.8	1219.4
12.5°	448.1	503.4	651.6	698.0	844.4	1042.7	1126.6	1203.3	1335.4	1405.1	1415.8
15°	405.2	480.2	680.2	748.0	937.3	1167.6	1260.5	1355.1	1478.3	1528.3	1540.8
17.5°	367.8	462.4	707.0	778.4	1008.7	1280.1	1374.7	1453.3	1553.2	1587.2	1596.1
20°	321.3	433.8	724.8	817.6	1083.7	1362.2	1453.3	1514.0	1581.8	1603.2	1606.8
22.5°	287.4	403.5	735.5	831.9	1133.7	1412.2	1489.0	1537.2	1583.6	1590.7	1592.5
25°	258.9	369.5	733.7	848.0	1176.6	1442.6	1501.5	1537.2	1564.0	1567.5	1567.5
27.5°	232.1	332.1	726.6	851.6	1208.7	1449.7	1496.1	1521.1	1533.6	1540.8	1540.8
30°	208.9	296.3	708.7	844.4	1223.0	1442.6	1480.1	1492.5	1505.0	1515.8	1521.1
32.5°	191.0	262.4	682.0	830.1	1224.8	1424.7	1451.5	1458.6	1476.5	1501.5	1510.4
35°	175.0	228.5	651.6	810.5	1214.1	1396.1	1414.0	1421.1	1456.8	1494.3	1506.8
37.5°	158.9	203.5	612.3	776.6	1198.0	1362.2	1374.7	1387.2	1442.6	1487.2	1501.5
40°	142.8	182.1	565.9	739.1	1173.0	1321.2	1331.9	1351.5	1424.7	1476.5	1490.8
42.5°	130.3	164.2	515.9	699.8	1140.9	1274.8	1290.8	1319.4	1403.3	1458.6	1474.7
45°	119.6	146.4	462.4	646.3	1099.8	1226.5	1249.8	1289.0	1378.3	1431.9	1446.1
47.5°	108.9	133.9	407.0	590.9	1055.2	1178.3	1208.7	1253.3	1344.4	1396.1	1408.6
50°	100.0	121.4	351.7	532.0	1006.9	1126.6	1162.3	1208.7	1301.5	1349.7	1365.8
52.5°	92.8	110.7	299.9	473.1	951.5	1073.0	1114.1	1162.3	1249.8	1296.2	1306.9
55°	85.7	101.8	255.3	410.6	894.4	1015.9	1060.5	1106.9	1192.6	1231.9	1239.0
57.5°	82.1	94.6	217.8	351.7	833.7	951.5	1001.5	1044.5	1124.8	1155.1	1162.3
60°	76.8	89.3	189.2	301.7	767.7	890.8	933.7	976.5	1044.5	1069.4	1074.8
62.5°	71.4	85.7	167.8	253.5	699.8	819.4	862.3	901.5	958.7	976.5	983.7
65°	67.8	82.1	151.7	217.8	630.2	744.4	787.3	821.2	867.6	885.5	889.0
67.5°	64.3	78.6	139.2	187.5	560.6	669.5	701.6	733.7	769.4	787.3	789.1
70°	58.9	75.0	128.5	166.0	489.2	583.8	610.6	644.5	673.0	682.0	687.3
72.5°	55.3	69.6	121.4	150.0	416.0	501.7	526.6	546.3	571.3	580.2	580.2
75°	50.0	62.5	114.3	133.9	341.0	410.6	432.0	451.7	471.3	474.9	469.5
77.5°	44.6	55.3	98.2	112.5	266.0	324.9	342.8	353.5	369.5	373.1	374.9
80°	37.5	48.2	76.8	87.5	192.8	239.2	251.7	260.6	274.9	274.9	278.5
82.5°	28.6	37.5	55.3	62.5	130.3	164.2	175.0	180.3	189.2	189.2	189.2
85°	17.9	23.2	35.7	41.1	78.6	100.0	107.1	108.9	116.0	117.8	117.8
87.5°	8.9	12.5	23.2	25.0	41.1	51.8	51.8	55.3	55.3	53.6	51.8
90°	7.4	13.4	19.3	20.8	32.7	48.5	56.4	50.2	37.6	28.2	28.2
92.5°	29.7	80.2	130.8	143.4	201.5	279.0	317.8	278.5	200.0	141.1	135.5
95°	71.3	163.7	256.1	279.2	495.8	784.5	928.9	829.0	628.9	479.0	462.0
97.5°	123.3	204.8	286.4	306.7	667.9	1149.3	1390.1	1326.9	1200.5	1105.7	1073.4
100°	163.3	237.3	311.3	329.7	730.4	1264.8	1531.9	1536.6	1545.8	1552.7	1514.2
102.5°	197.5	266.4	335.4	352.7	759.1	1301.0	1572.0	1652.5	1813.6	1934.4	1901.4
105°	255.5	313.8	372.2	386.9	780.4	1305.2	1567.5	1748.0	2109.1	2379.9	2362.1
107.5°	314.8	369.3	423.7	437.4	784.4	1247.1	1478.4	1730.3	2233.9	2611.5	2615.8
110°	354.9	404.1	453.3	465.6	778.5	1195.6	1404.2	1685.7	2248.7	2671.0	2689.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	394.3	441.1	488.1	499.8	778.7	1150.7	1336.6	1624.7	2200.9	2633.1	2661.5
115°	453.7	496.9	540.2	551.0	785.9	1099.1	1255.6	1533.3	2088.4	2504.7	2544.1
117.5°	512.4	551.6	590.9	600.7	800.5	1066.8	1199.9	1450.4	1951.4	2327.1	2370.8
120°	546.6	583.5	620.5	629.7	812.4	1056.0	1177.7	1406.6	1864.3	2207.6	2250.0
122.5°	579.9	617.2	654.6	663.8	829.4	1050.2	1160.6	1366.7	1778.9	2088.1	2130.0
125°	631.2	665.2	699.2	707.7	852.5	1045.5	1142.0	1317.2	1667.3	1929.9	1968.5
127.5°	672.8	707.0	741.4	750.0	875.5	1042.8	1126.5	1276.8	1577.4	1802.9	1835.4
130°	695.0	731.9	768.9	778.2	892.3	1044.5	1120.5	1254.3	1522.0	1722.8	1752.7
132.5°	718.0	755.0	791.9	801.2	905.9	1045.5	1115.3	1235.1	1474.7	1654.4	1681.2
135°	752.2	785.9	819.6	828.0	920.8	1044.5	1106.4	1206.7	1407.4	1557.9	1581.1
137.5°	787.1	820.4	853.8	862.1	943.1	1051.0	1104.9	1189.7	1359.4	1486.6	1505.6
140°	816.0	846.7	877.4	885.1	956.6	1052.0	1099.7	1173.0	1319.6	1429.4	1447.2
142.5°	838.3	866.7	895.1	902.2	968.0	1055.8	1099.7	1164.1	1292.8	1389.4	1404.6
145°	872.5	897.3	922.1	928.2	983.0	1055.9	1092.3	1145.0	1250.2	1329.2	1340.7
147.5°	906.6	930.7	954.8	960.9	1004.7	1063.1	1092.3	1133.7	1216.6	1278.7	1288.2
150°	928.9	950.7	972.5	978.0	1016.1	1066.9	1092.3	1127.3	1197.3	1249.8	1257.5
152.5°	952.0	968.5	985.0	989.1	1023.5	1069.4	1092.3	1122.2	1181.9	1226.7	1232.6
155°	986.1	998.3	1010.5	1013.6	1039.8	1074.8	1092.3	1116.0	1163.6	1199.2	1203.1
157.5°	1011.3	1023.2	1035.2	1038.1	1056.1	1080.2	1092.3	1110.8	1147.7	1175.5	1178.2
160°	1028.5	1037.8	1047.0	1049.3	1063.6	1082.7	1092.3	1108.2	1139.9	1163.6	1165.2
162.5°	1045.5	1052.5	1059.5	1061.1	1071.5	1085.3	1092.3	1105.7	1132.4	1152.5	1154.0
165°	1064.1	1070.3	1076.6	1078.2	1082.9	1089.2	1092.3	1101.9	1121.0	1135.4	1137.0
167.5°	1081.1	1084.1	1087.1	1087.8	1091.8	1097.0	1099.7	1106.0	1118.5	1127.9	1128.5
170°	1092.3	1095.2	1098.3	1099.0	1099.3	1099.5	1099.7	1106.0	1118.5	1127.9	1127.9
172.5°	1098.3	1098.9	1099.5	1099.7	1099.7	1099.7	1099.7	1104.7	1114.6	1122.0	1121.5
175°	1106.4	1106.4	1106.4	1106.4	1104.2	1101.2	1099.7	1102.8	1109.1	1113.8	1113.8
177.5°	1106.4	1106.4	1106.4	1106.4	1104.7	1102.4	1101.2	1103.7	1108.6	1112.4	1111.8
180°	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	555.2	555.2
2.5°	592.7	589.1
5°	762.3	765.9
7.5°	1026.6	1024.8
10°	1276.5	1292.6
12.5°	1458.6	1462.2
15°	1569.3	1576.5
17.5°	1612.2	1613.9
20°	1613.9	1610.4
22.5°	1594.3	1590.7
25°	1571.1	1569.3
27.5°	1549.7	1551.5
30°	1540.8	1546.1
32.5°	1540.8	1549.7
35°	1544.3	1553.2
37.5°	1542.5	1553.2
40°	1535.4	1547.9
42.5°	1515.8	1524.7
45°	1485.4	1496.1
47.5°	1446.1	1453.3
50°	1396.1	1403.3
52.5°	1333.7	1335.4
55°	1258.7	1265.8
57.5°	1178.3	1180.1
60°	1089.1	1094.4
62.5°	994.4	994.4
65°	894.4	898.0
67.5°	790.9	799.8
70°	685.5	687.3
72.5°	582.0	582.0
75°	474.9	476.7
77.5°	373.1	373.1
80°	276.7	278.5
82.5°	191.0	194.6
85°	119.6	119.6
87.5°	55.3	50.0
90°	28.2	28.2
92.5°	113.1	90.6
95°	394.0	326.0
97.5°	943.9	814.6
100°	1360.1	1205.9
102.5°	1769.4	1637.3
105°	2291.2	2220.2
107.5°	2633.1	2650.2
110°	2763.4	2837.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2775.0	2888.5
115°	2701.4	2858.9
117.5°	2545.4	2720.0
120°	2419.7	2589.3
122.5°	2297.2	2464.5
125°	2122.6	2276.7
127.5°	1965.5	2095.5
130°	1872.9	1993.0
132.5°	1788.9	1896.5
135°	1673.8	1766.6
137.5°	1581.5	1657.4
140°	1518.1	1589.0
142.5°	1465.7	1526.7
145°	1387.0	1433.1
147.5°	1326.5	1364.8
150°	1288.5	1319.6
152.5°	1256.0	1279.4
155°	1218.6	1234.1
157.5°	1189.1	1199.9
160°	1171.5	1177.7
162.5°	1159.9	1165.9
165°	1143.3	1149.5
167.5°	1131.2	1133.9
170°	1127.9	1127.9
172.5°	1119.2	1116.8
175°	1113.8	1113.8
177.5°	1109.1	1106.4
180°	1106.4	1106.4



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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	3.03	3.81	4.08	4.87	6.31	16.20	16.99	17.26	18.05	19.49
	3H	3.73	4.43	4.79	5.50	6.95	18.04	18.74	19.10	19.81	21.27
	4H	4.02	4.69	5.09	5.76	7.22	18.68	19.35	19.75	20.42	21.88
	6H	4.27	4.88	5.35	5.96	7.43	19.11	19.72	20.19	20.80	22.27
	8H	4.33	4.92	5.42	6.01	7.48	19.22	19.81	20.31	20.90	22.37
	12H	4.35	4.91	5.44	5.99	7.48	19.29	19.85	20.38	20.93	22.43
4H	2H	10.23	10.90	11.31	11.97	13.43	16.47	17.14	17.55	18.21	19.67
	3H	11.79	12.35	12.88	13.45	14.92	18.51	19.07	19.59	20.16	21.64
	4H	11.88	12.40	12.98	13.49	14.98	19.27	19.79	20.36	20.87	22.37
	6H	11.89	12.33	12.99	13.44	14.93	19.81	20.25	20.91	21.36	22.85
	8H	11.86	12.28	12.96	13.38	14.89	19.97	20.38	21.07	21.48	22.99
	12H	11.82	12.19	12.94	13.31	14.82	20.06	20.43	21.17	21.55	23.06
8H	4H	13.32	13.73	14.42	14.84	16.34	19.32	19.74	20.43	20.84	22.35
	6H	13.56	13.90	14.68	15.05	16.55	19.95	20.29	21.07	21.44	22.94
	8H	13.58	13.88	14.71	15.00	16.52	20.17	20.47	21.30	21.59	23.12
	12H	13.54	13.81	14.68	14.93	16.49	20.31	20.57	21.44	21.70	23.25
12H	4H	13.46	13.84	14.58	14.95	16.46	19.27	19.65	20.39	20.76	22.28
	6H	13.82	14.12	14.95	15.24	16.77	19.93	20.23	21.06	21.36	22.88
	8H	13.88	14.15	15.02	15.27	16.83	20.16	20.42	21.29	21.55	23.10