

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: P937025

Luminaire Tested: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937025
REPORT IS A COMBINATION OF REPORTS P933493 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

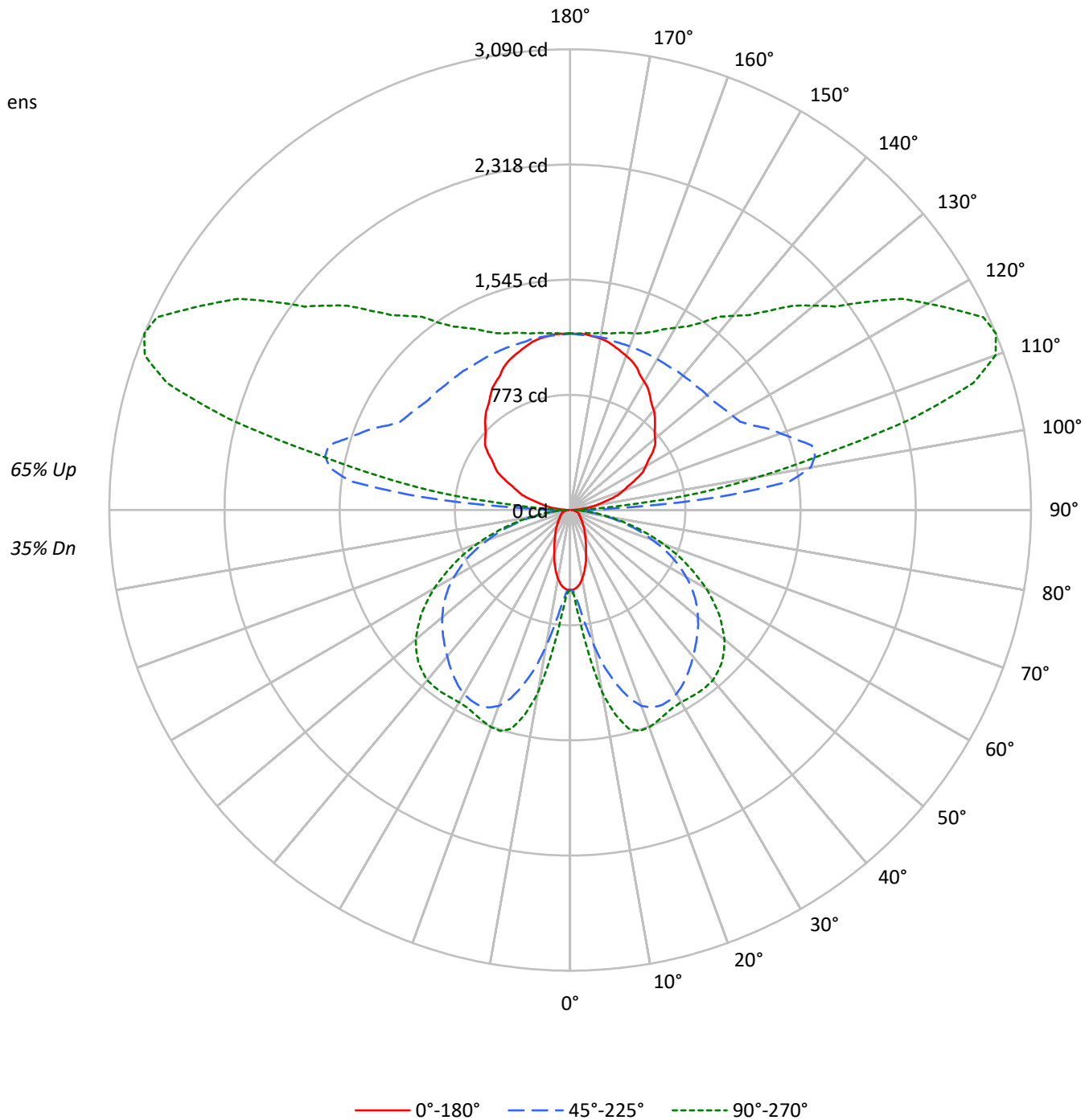
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11811.8 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 103.2
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	75	75	75	58	58	58	42	42	42	35			35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29			29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23			23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19			19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16			16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14			14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12			12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10			10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9			9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8			8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1653	1653	1653
5°	1616	1911	2222
10°	1466	2787	3684
15°	1247	3642	4448
20°	1015	4221	4534
25°	847	4418	4442
30°	715	4448	4433
35°	632	4375	4548
40°	551	4280	4666
45°	499	4211	4684
50°	459	4149	4607
55°	440	4058	4403
60°	451	3882	4080
65°	470	3613	3637
70°	501	3153	3073
75°	557	2573	2398
80°	614	1786	1616
85°	557	949	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4684 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	0.6
10°-20°	306.4	2.6
20°-30°	536.0	4.5
30°-40°	690.0	5.8
40°-50°	770.7	6.5
50°-60°	738.1	6.2
60°-70°	585.0	5.0
70°-80°	344.0	2.9
80°-90°	100.1	0.8
90°-100°	576.9	4.9
100°-110°	1516.7	12.8
110°-120°	1572.7	13.3
120°-130°	1261.5	10.7
130°-140°	989.8	8.4
140°-150°	759.7	6.4
150°-160°	547.1	4.6
160°-170°	334.8	2.8
170°-180°	113.1	1.0
0°-30°	911.6	7.7
0°-40°	1601.5	13.6
0°-60°	3110.3	26.3
0°-90°	4139.4	35.0
90°-120°	3666.4	31.0
90°-150°	6677.4	56.5
90°-180°	7672.0	65.0
0°-180°	11811.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	521	558	629	712	737	48
15°	390	720	1213	1471	1518	109
25°	249	816	1445	1509	1511	115
35°	168	780	1361	1438	1495	105
45°	115	622	1203	1378	1440	89
55°	82	395	1021	1186	1218	75
65°	65	210	758	852	864	65
75°	48	129	416	457	459	50
85°	17	40	103	113	115	18
90°	8	22	60	30	30	8
95°	76	299	994	512	349	85
105°	273	414	1677	2546	2375	290
115°	485	589	1343	2679	3058	479
125°	675	757	1222	2064	2435	599
135°	805	886	1184	1666	1890	623
145°	933	993	1168	1422	1533	585
155°	1055	1084	1168	1283	1320	485
165°	1138	1153	1168	1214	1230	321
175°	1184	1184	1176	1192	1192	112
180°	1184	1184	1184	1184	1184	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5
2.5°	534.5	534.5	537.9	539.6	543.1	544.8	548.3	551.7	562.0	563.7	567.1
5°	520.8	527.6	550.0	558.5	582.6	615.2	629.0	651.4	697.7	711.5	720.1
7.5°	500.1	515.6	570.6	584.3	644.5	730.5	766.5	814.7	888.5	924.6	953.8
10°	467.5	500.1	598.1	630.8	728.7	859.3	926.3	993.4	1105.1	1155.0	1173.8
12.5°	431.3	484.6	627.3	671.9	812.9	1003.7	1084.5	1158.4	1285.5	1352.6	1362.8
15°	390.2	462.3	654.8	720.1	902.3	1123.9	1213.4	1304.4	1423.1	1471.2	1483.2
17.5°	354.0	445.1	680.6	749.3	971.1	1232.3	1323.3	1399.0	1495.2	1527.9	1536.5
20°	309.4	417.7	697.7	787.2	1043.2	1311.3	1399.0	1457.4	1522.7	1543.3	1546.7
22.5°	276.7	388.4	708.1	800.9	1091.3	1359.4	1433.3	1479.8	1524.4	1531.3	1533.0
25°	249.2	355.7	706.4	816.4	1132.6	1388.6	1445.4	1479.8	1505.5	1509.0	1509.0
27.5°	223.4	319.7	699.4	819.8	1163.5	1395.6	1440.2	1464.2	1476.3	1483.2	1483.2
30°	201.1	285.3	682.3	812.9	1177.2	1388.6	1424.8	1436.8	1448.8	1459.1	1464.2
32.5°	183.9	252.7	656.5	799.1	1179.0	1371.5	1397.3	1404.1	1421.3	1445.4	1454.0
35°	168.4	220.0	627.3	780.2	1168.7	1344.0	1361.1	1368.1	1402.4	1438.5	1450.5
37.5°	153.0	195.9	589.5	747.6	1153.2	1311.3	1323.3	1335.3	1388.6	1431.6	1445.4
40°	137.5	175.3	544.8	711.5	1129.2	1271.8	1282.1	1301.0	1371.5	1421.3	1435.0
42.5°	125.5	158.1	496.7	673.7	1098.2	1227.1	1242.6	1270.1	1350.8	1404.1	1419.6
45°	115.1	140.9	445.1	622.1	1058.7	1180.7	1203.0	1240.9	1326.8	1378.3	1392.1
47.5°	104.8	128.9	391.9	568.8	1015.7	1134.3	1163.5	1206.5	1294.1	1344.0	1356.0
50°	96.3	116.8	338.6	512.1	969.3	1084.5	1118.8	1163.5	1252.9	1299.3	1314.8
52.5°	89.3	106.6	288.7	455.4	916.1	1032.9	1072.4	1118.8	1203.0	1247.7	1258.0
55°	82.5	98.0	245.7	395.3	861.0	977.9	1020.9	1065.5	1148.0	1185.9	1192.7
57.5°	79.1	91.1	209.7	338.6	802.6	916.1	964.1	1005.4	1082.7	1112.0	1118.8
60°	73.9	85.9	182.2	290.5	739.0	857.6	898.9	940.1	1005.4	1029.5	1034.6
62.5°	68.8	82.5	161.5	244.0	673.7	788.9	830.1	867.9	922.9	940.1	947.0
65°	65.3	79.1	146.1	209.7	606.7	716.7	758.0	790.6	835.3	852.4	855.8
67.5°	61.8	75.6	134.0	180.5	539.6	644.5	675.4	706.4	740.7	758.0	759.7
70°	56.7	72.2	123.8	159.8	470.9	562.0	587.8	620.4	647.9	656.5	661.7
72.5°	53.3	67.0	116.8	144.3	400.4	482.9	507.0	525.9	550.0	558.5	558.5
75°	48.1	60.1	110.0	128.9	328.2	395.3	415.9	434.8	453.7	457.1	452.0
77.5°	43.0	53.3	94.6	108.3	256.1	312.8	329.9	340.3	355.7	359.2	360.9
80°	36.1	46.4	73.9	84.2	185.6	230.3	242.3	250.9	264.7	264.7	268.1
82.5°	27.5	36.1	53.3	60.1	125.5	158.1	168.4	173.6	182.2	182.2	182.2
85°	17.2	22.4	34.3	39.5	75.6	96.3	103.1	104.8	111.7	113.4	113.4
87.5°	8.6	12.0	22.4	24.1	39.5	49.9	49.9	53.3	53.3	51.6	49.9
90°	7.9	14.3	20.6	22.2	34.9	51.9	60.4	53.6	40.2	30.2	30.2
92.5°	31.8	85.8	139.8	153.3	215.5	298.4	339.9	297.9	214.0	150.9	144.9
95°	76.3	175.1	274.0	298.7	530.3	839.3	993.7	886.8	672.8	512.3	494.1
97.5°	131.9	219.1	306.3	328.1	714.4	1229.4	1487.0	1419.3	1284.1	1182.7	1148.1
100°	174.8	253.8	332.9	352.7	781.4	1352.9	1638.6	1643.6	1653.5	1660.9	1619.7
102.5°	211.3	285.1	358.8	377.3	812.0	1391.7	1681.6	1767.7	1940.0	2069.2	2033.9
105°	273.2	335.8	398.2	413.8	834.8	1396.2	1676.8	1869.9	2256.2	2545.8	2526.9
107.5°	336.8	395.0	453.3	467.9	839.1	1334.1	1581.5	1850.9	2389.6	2793.6	2798.2
110°	379.7	432.3	484.9	498.0	832.7	1279.0	1502.1	1803.2	2405.5	2857.1	2876.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	421.8	471.9	522.0	534.6	833.0	1230.9	1429.8	1738.0	2354.4	2816.7	2847.0
115°	485.3	531.5	577.8	589.3	840.6	1175.7	1343.2	1640.1	2233.9	2679.2	2721.3
117.5°	548.1	590.1	632.1	642.6	856.3	1141.1	1283.6	1551.5	2087.4	2489.4	2536.1
120°	584.7	624.2	663.7	673.6	869.0	1129.5	1259.8	1504.5	1994.2	2361.5	2406.8
122.5°	620.4	660.2	700.1	710.1	887.3	1123.4	1241.5	1461.9	1902.9	2233.6	2278.4
125°	675.2	711.6	748.0	757.0	911.9	1118.4	1221.7	1409.0	1783.5	2064.4	2105.7
127.5°	719.7	756.4	793.1	802.3	936.6	1115.5	1205.0	1365.8	1687.4	1928.6	1963.4
130°	743.5	783.1	822.5	832.4	954.5	1117.2	1198.6	1341.7	1628.1	1842.8	1874.9
132.5°	768.1	807.7	847.1	857.0	969.0	1118.4	1193.0	1321.2	1577.5	1769.8	1798.5
135°	804.7	840.6	876.7	885.6	985.0	1117.4	1183.6	1290.8	1505.5	1666.5	1691.3
137.5°	842.0	877.6	913.3	922.2	1008.8	1124.2	1181.9	1272.7	1454.2	1590.2	1610.5
140°	872.9	905.7	938.6	946.8	1023.3	1125.4	1176.4	1254.8	1411.5	1529.1	1548.0
142.5°	896.7	927.2	957.5	965.1	1035.5	1129.4	1176.4	1245.2	1382.9	1486.2	1502.5
145°	933.3	959.8	986.3	992.9	1051.4	1129.4	1168.4	1224.7	1337.4	1421.9	1434.3
147.5°	969.9	995.7	1021.5	1027.9	1074.7	1137.2	1168.4	1212.8	1301.3	1367.8	1378.1
150°	993.7	1017.0	1040.3	1046.1	1086.9	1141.3	1168.4	1205.9	1280.7	1336.8	1345.1
152.5°	1018.3	1036.0	1053.6	1058.0	1094.8	1143.9	1168.4	1200.4	1264.3	1312.2	1318.4
155°	1054.8	1067.9	1081.0	1084.2	1112.3	1149.7	1168.4	1193.9	1244.7	1282.8	1287.0
157.5°	1081.8	1094.6	1107.3	1110.5	1129.8	1155.5	1168.4	1188.2	1227.7	1257.4	1260.3
160°	1100.1	1110.0	1119.9	1122.4	1137.8	1158.2	1168.4	1185.4	1219.3	1244.7	1246.4
162.5°	1118.4	1125.8	1133.2	1135.1	1146.2	1161.0	1168.4	1182.7	1211.3	1232.8	1234.4
165°	1138.3	1145.0	1151.6	1153.3	1158.4	1165.1	1168.4	1178.7	1199.1	1214.5	1216.2
167.5°	1156.5	1159.6	1162.9	1163.7	1167.9	1173.6	1176.4	1183.1	1196.5	1206.5	1207.2
170°	1168.4	1171.6	1174.9	1175.6	1175.9	1176.2	1176.4	1183.1	1196.5	1206.5	1206.5
172.5°	1174.8	1175.5	1176.2	1176.4	1176.4	1176.4	1176.4	1181.7	1192.3	1200.2	1199.6
175°	1183.6	1183.6	1183.6	1183.6	1181.2	1178.0	1176.4	1179.7	1186.5	1191.5	1191.5
177.5°	1183.6	1183.6	1183.6	1183.6	1181.7	1179.2	1178.0	1180.7	1186.0	1189.9	1189.2
180°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	534.5	534.5
2.5°	570.6	567.1
5°	733.9	737.3
7.5°	988.2	986.5
10°	1228.8	1244.3
12.5°	1404.1	1407.5
15°	1510.7	1517.5
17.5°	1552.0	1553.7
20°	1553.7	1550.2
22.5°	1534.7	1531.3
25°	1512.4	1510.7
27.5°	1491.7	1493.5
30°	1483.2	1488.3
32.5°	1483.2	1491.7
35°	1486.6	1495.2
37.5°	1484.9	1495.2
40°	1478.0	1490.0
42.5°	1459.1	1467.7
45°	1429.9	1440.2
47.5°	1392.1	1399.0
50°	1344.0	1350.8
52.5°	1283.8	1285.5
55°	1211.7	1218.5
57.5°	1134.3	1136.0
60°	1048.4	1053.5
62.5°	957.3	957.3
65°	861.0	864.5
67.5°	761.4	769.9
70°	660.0	661.7
72.5°	560.3	560.3
75°	457.1	458.8
77.5°	359.2	359.2
80°	266.4	268.1
82.5°	183.9	187.3
85°	115.1	115.1
87.5°	53.3	48.1
90°	30.2	30.2
92.5°	120.9	96.9
95°	421.4	348.7
97.5°	1009.8	871.4
100°	1454.8	1290.0
102.5°	1892.7	1751.5
105°	2450.9	2375.0
107.5°	2816.6	2834.9
110°	2956.0	3035.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2968.4	3089.9
115°	2889.7	3058.1
117.5°	2722.8	2909.6
120°	2588.3	2769.8
122.5°	2457.3	2636.4
125°	2270.5	2435.4
127.5°	2102.5	2241.6
130°	2003.4	2132.0
132.5°	1913.6	2028.7
135°	1790.5	1889.7
137.5°	1691.7	1772.9
140°	1624.0	1699.8
142.5°	1567.8	1633.1
145°	1483.6	1533.0
147.5°	1419.0	1460.0
150°	1378.3	1411.5
152.5°	1343.5	1368.6
155°	1303.6	1320.1
157.5°	1272.0	1283.6
160°	1253.1	1259.8
162.5°	1240.7	1247.1
165°	1222.9	1229.6
167.5°	1210.1	1212.9
170°	1206.5	1206.5
172.5°	1197.1	1194.7
175°	1191.5	1191.5
177.5°	1186.4	1183.6
180°	1183.6	1183.6



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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	1.21	1.97	2.28	3.05	4.52	14.40	15.16	15.47	16.24	17.71
	3H	1.90	2.59	2.98	3.68	5.16	16.24	16.92	17.31	18.01	19.49
	4H	2.20	2.85	3.29	3.94	5.43	16.88	17.53	17.97	18.62	20.11
	6H	2.44	3.04	3.54	4.13	5.64	17.31	17.91	18.41	19.00	20.50
	8H	2.51	3.08	3.61	4.19	5.68	17.43	18.00	18.53	19.11	20.60
	12H	2.52	3.07	3.63	4.17	5.69	17.50	18.04	18.61	19.14	20.66
4H	2H	8.42	9.07	9.52	10.16	11.65	14.66	15.31	15.76	16.40	17.89
	3H	9.98	10.52	11.08	11.63	13.14	16.70	17.25	17.81	18.36	19.86
	4H	10.07	10.57	11.18	11.67	13.19	17.47	17.97	18.58	19.07	20.60
	6H	10.07	10.50	11.19	11.63	13.14	18.01	18.44	19.12	19.56	21.08
	8H	10.05	10.45	11.16	11.57	13.10	18.17	18.57	19.28	19.69	21.22
	12H	10.00	10.36	11.13	11.49	13.03	18.26	18.62	19.39	19.75	21.29
8H	4H	11.51	11.91	12.62	13.03	14.56	17.52	17.92	18.64	19.04	20.57
	6H	11.74	12.08	12.88	13.24	14.77	18.15	18.48	19.29	19.64	21.17
	8H	11.76	12.05	12.90	13.19	14.74	18.37	18.66	19.51	19.80	21.35
	12H	11.72	11.98	12.87	13.12	14.70	18.51	18.77	19.66	19.91	21.49
12H	4H	11.65	12.01	12.78	13.14	14.68	17.47	17.83	18.60	18.96	20.50
	6H	12.00	12.29	13.15	13.43	14.98	18.13	18.42	19.28	19.56	21.11
	8H	12.07	12.32	13.22	13.46	15.05	18.36	18.62	19.51	19.75	21.34