

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: P938315

Luminaire Tested: SQ4-FB-150U-075D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938315
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-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

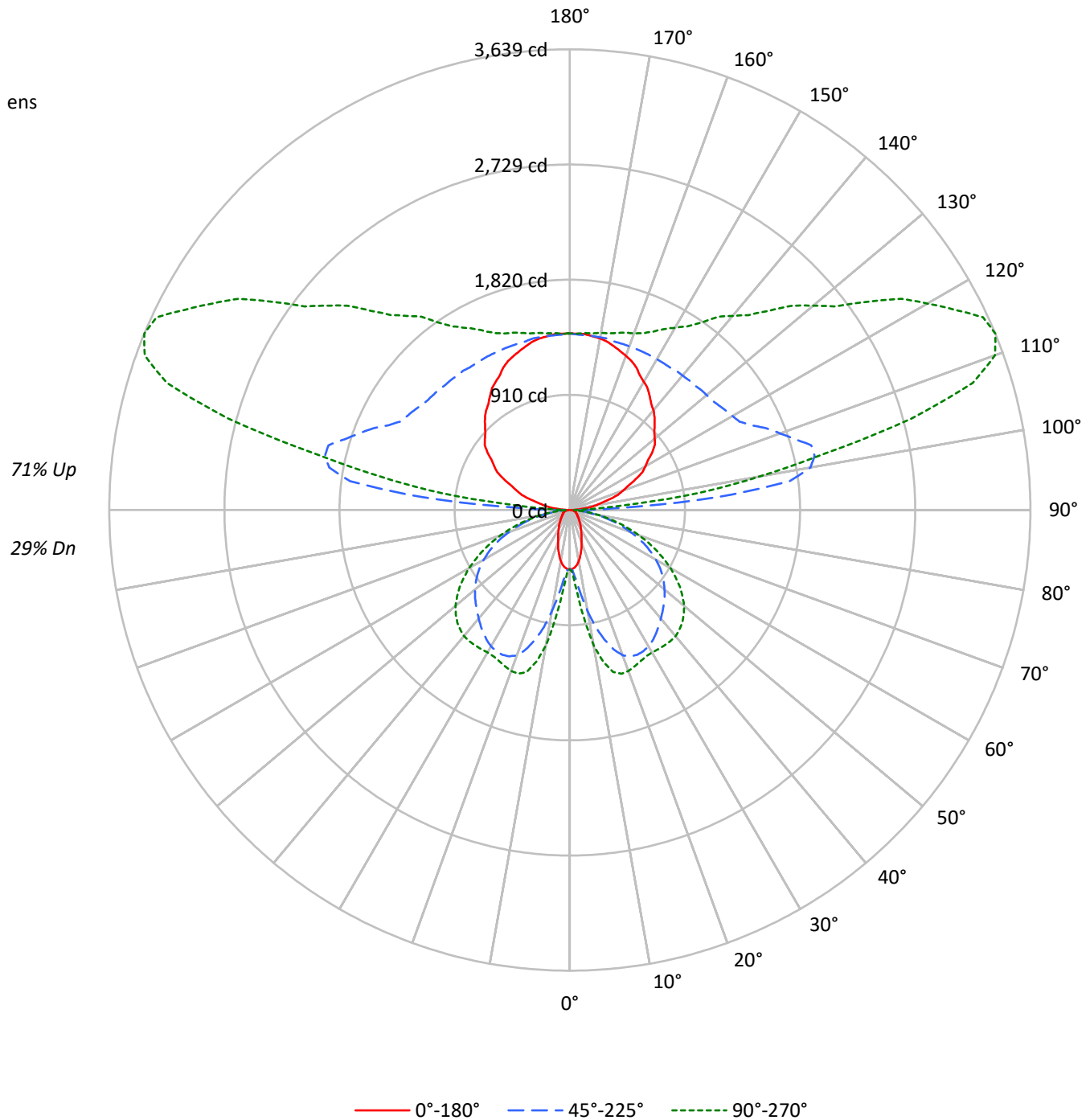
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12651.0 lumens
Efficiency: N/A
Efficacy: 132.6 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 (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	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°	2886	2886	2886
5°	2818	3335	3879
10°	2555	4860	6431
15°	2171	6347	7766
20°	1767	7354	7914
25°	1473	7694	7754
30°	1242	7741	7739
35°	1097	7610	7939
40°	956	7441	8146
45°	865	7316	8178
50°	793	7203	8043
55°	758	7040	7685
60°	776	6728	7122
65°	806	6254	6349
70°	856	5451	5364
75°	945	4440	4186
80°	1025	3076	2820
85°	894	1629	1444

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8178 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	0.5
10°-20°	267.5	2.1
20°-30°	467.8	3.7
30°-40°	602.2	4.8
40°-50°	672.7	5.3
50°-60°	644.2	5.1
60°-70°	510.6	4.0
70°-80°	300.2	2.4
80°-90°	88.7	0.7
90°-100°	679.5	5.4
100°-110°	1786.4	14.1
110°-120°	1852.3	14.6
120°-130°	1485.8	11.7
130°-140°	1165.8	9.2
140°-150°	894.8	7.1
150°-160°	644.4	5.1
160°-170°	394.3	3.1
170°-180°	133.2	1.1
0°-30°	795.6	6.3
0°-40°	1397.9	11.0
0°-60°	2714.8	21.5
0°-90°	3614.3	28.6
90°-120°	4318.3	34.1
90°-150°	7864.8	62.2
90°-180°	9037.0	71.4
0°-180°	12651.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	466	466	466	466	466	
5°	454	488	549	621	644	42
15°	340	628	1059	1284	1325	95
25°	218	712	1262	1317	1319	100
35°	147	681	1188	1256	1305	92
45°	100	543	1050	1203	1257	78
55°	72	345	891	1035	1064	66
65°	57	183	662	744	754	56
75°	42	112	363	399	400	44
85°	15	34	90	99	100	16
90°	9	26	71	36	36	9
95°	90	352	1170	603	411	100
105°	322	487	1975	2998	2797	341
115°	572	694	1582	3156	3602	565
125°	795	892	1439	2432	2868	706
135°	948	1043	1394	1963	2226	733
145°	1099	1170	1376	1675	1806	689
155°	1242	1277	1376	1511	1555	571
165°	1341	1358	1376	1430	1448	378
175°	1394	1394	1386	1403	1403	132
180°	1394	1394	1394	1394	1394	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5
2.5°	466.5	466.5	469.5	471.0	474.0	475.5	478.5	481.5	490.5	492.0	495.0
5°	454.5	460.5	480.0	487.5	508.5	537.0	549.0	568.5	609.0	621.0	628.5
7.5°	436.5	450.0	498.0	510.0	562.5	637.5	669.0	711.0	775.5	807.0	832.5
10°	408.0	436.5	522.0	550.5	636.0	750.0	808.5	867.0	964.5	1008.0	1024.5
12.5°	376.5	423.0	547.5	586.5	709.5	876.0	946.5	1011.0	1122.0	1180.6	1189.6
15°	340.5	403.5	571.5	628.5	787.5	981.0	1059.0	1138.6	1242.1	1284.1	1294.6
17.5°	309.0	388.5	594.0	654.0	847.5	1075.5	1155.1	1221.1	1305.1	1333.6	1341.1
20°	270.0	364.5	609.0	687.0	910.5	1144.6	1221.1	1272.1	1329.1	1347.1	1350.1
22.5°	241.5	339.0	618.0	699.0	952.5	1186.6	1251.1	1291.6	1330.6	1336.6	1338.1
25°	217.5	310.5	616.5	712.5	988.5	1212.1	1261.6	1291.6	1314.1	1317.1	1317.1
27.5°	195.0	279.0	610.5	715.5	1015.5	1218.1	1257.1	1278.1	1288.6	1294.6	1294.6
30°	175.5	249.0	595.5	709.5	1027.5	1212.1	1243.6	1254.1	1264.6	1273.6	1278.1
32.5°	160.5	220.5	573.0	697.5	1029.0	1197.1	1219.6	1225.6	1240.6	1261.6	1269.1
35°	147.0	192.0	547.5	681.0	1020.0	1173.1	1188.1	1194.1	1224.1	1255.6	1266.1
37.5°	133.5	171.0	514.5	652.5	1006.5	1144.6	1155.1	1165.6	1212.1	1249.6	1261.6
40°	120.0	153.0	475.5	621.0	985.5	1110.0	1119.0	1135.5	1197.1	1240.6	1252.6
42.5°	109.5	138.0	433.5	588.0	958.5	1071.0	1084.5	1108.5	1179.1	1225.6	1239.1
45°	100.5	123.0	388.5	543.0	924.0	1030.5	1050.0	1083.0	1158.1	1203.1	1215.1
47.5°	91.5	112.5	342.0	496.5	886.5	990.0	1015.5	1053.0	1129.5	1173.1	1183.6
50°	84.0	102.0	295.5	447.0	846.0	946.5	976.5	1015.5	1093.5	1134.0	1147.6
52.5°	78.0	93.0	252.0	397.5	799.5	901.5	936.0	976.5	1050.0	1089.0	1098.0
55°	72.0	85.5	214.5	345.0	751.5	853.5	891.0	930.0	1002.0	1035.0	1041.0
57.5°	69.0	79.5	183.0	295.5	700.5	799.5	841.5	877.5	945.0	970.5	976.5
60°	64.5	75.0	159.0	253.5	645.0	748.5	784.5	820.5	877.5	898.5	903.0
62.5°	60.0	72.0	141.0	213.0	588.0	688.5	724.5	757.5	805.5	820.5	826.5
65°	57.0	69.0	127.5	183.0	529.5	625.5	661.5	690.0	729.0	744.0	747.0
67.5°	54.0	66.0	117.0	157.5	471.0	562.5	589.5	616.5	646.5	661.5	663.0
70°	49.5	63.0	108.0	139.5	411.0	490.5	513.0	541.5	565.5	573.0	577.5
72.5°	46.5	58.5	102.0	126.0	349.5	421.5	442.5	459.0	480.0	487.5	487.5
75°	42.0	52.5	96.0	112.5	286.5	345.0	363.0	379.5	396.0	399.0	394.5
77.5°	37.5	46.5	82.5	94.5	223.5	273.0	288.0	297.0	310.5	313.5	315.0
80°	31.5	40.5	64.5	73.5	162.0	201.0	211.5	219.0	231.0	231.0	234.0
82.5°	24.0	31.5	46.5	52.5	109.5	138.0	147.0	151.5	159.0	159.0	159.0
85°	15.0	19.5	30.0	34.5	66.0	84.0	90.0	91.5	97.5	99.0	99.0
87.5°	7.5	10.5	19.5	21.0	34.5	43.5	43.5	46.5	46.5	45.0	43.5
90°	9.4	16.9	24.3	26.2	41.2	61.1	71.1	63.2	47.4	35.6	35.6
92.5°	37.4	101.0	164.7	180.6	253.9	351.6	400.4	350.9	252.0	177.8	170.7
95°	89.8	206.2	322.7	351.8	624.7	988.5	1170.4	1044.4	792.4	603.4	582.0
97.5°	155.3	258.0	360.7	386.4	841.4	1448.1	1751.4	1671.8	1512.5	1393.1	1352.3
100°	205.8	299.0	392.1	415.4	920.3	1593.5	1930.1	1935.9	1947.6	1956.3	1907.8
102.5°	248.9	335.8	422.7	444.4	956.5	1639.2	1980.6	2082.0	2284.9	2437.1	2395.5
105°	321.8	395.4	469.0	487.4	983.3	1644.4	1975.0	2202.4	2657.3	2998.5	2976.1
107.5°	396.7	465.3	533.9	551.0	988.2	1571.2	1862.7	2180.0	2814.5	3290.4	3295.8
110°	447.2	509.2	571.1	586.6	980.8	1506.3	1769.1	2123.8	2833.2	3365.2	3388.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	496.8	555.8	614.8	629.6	981.1	1449.7	1684.0	2047.0	2773.0	3317.5	3353.3
115°	571.6	626.1	680.6	694.2	990.1	1384.7	1582.0	1931.7	2631.1	3155.6	3205.2
117.5°	645.5	695.0	744.5	756.9	1008.6	1344.1	1511.9	1827.5	2458.6	2932.0	2987.0
120°	688.6	735.2	781.8	793.4	1023.5	1330.4	1483.8	1772.2	2348.9	2781.4	2834.8
122.5°	730.7	777.7	824.7	836.4	1045.0	1323.2	1462.3	1722.0	2241.3	2630.8	2683.5
125°	795.2	838.0	880.9	891.6	1074.0	1317.3	1438.9	1659.5	2100.6	2431.5	2480.0
127.5°	847.6	890.8	934.1	944.9	1103.0	1313.8	1419.2	1608.6	1987.4	2271.5	2312.5
130°	875.7	922.3	968.9	980.5	1124.3	1316.0	1411.8	1580.4	1917.6	2170.5	2208.3
132.5°	904.7	951.3	997.9	1009.5	1141.4	1317.3	1405.2	1556.1	1858.0	2084.4	2118.3
135°	947.7	990.1	1032.6	1043.2	1160.1	1316.0	1394.0	1520.4	1773.2	1962.8	1992.0
137.5°	991.7	1033.7	1075.7	1086.2	1188.2	1324.1	1392.1	1499.0	1712.7	1873.0	1896.9
140°	1028.2	1066.9	1105.5	1115.2	1205.3	1325.5	1385.6	1477.9	1662.5	1801.0	1823.3
142.5°	1056.2	1092.0	1127.8	1136.7	1219.7	1330.3	1385.6	1466.7	1628.8	1750.4	1769.6
145°	1099.3	1130.5	1161.7	1169.5	1238.4	1330.3	1376.2	1442.5	1575.2	1674.7	1689.2
147.5°	1142.3	1172.7	1203.0	1210.6	1265.8	1339.4	1376.2	1428.4	1532.7	1611.0	1623.1
150°	1170.4	1197.8	1225.2	1232.1	1280.1	1344.2	1376.2	1420.3	1508.4	1574.5	1584.3
152.5°	1199.4	1220.2	1241.0	1246.2	1289.5	1347.3	1376.2	1413.8	1489.1	1545.5	1552.9
155°	1242.4	1257.8	1273.2	1277.0	1310.1	1354.2	1376.2	1406.1	1466.0	1510.9	1515.8
157.5°	1274.2	1289.2	1304.2	1307.9	1330.7	1361.0	1376.2	1399.5	1446.1	1481.0	1484.4
160°	1295.8	1307.4	1319.0	1321.9	1340.0	1364.1	1376.2	1396.2	1436.1	1466.0	1468.0
162.5°	1317.3	1326.0	1334.7	1336.9	1350.0	1367.5	1376.2	1393.0	1426.7	1452.0	1453.9
165°	1340.7	1348.6	1356.4	1358.4	1364.3	1372.2	1376.2	1388.3	1412.4	1430.5	1432.5
167.5°	1362.2	1365.9	1369.7	1370.6	1375.6	1382.3	1385.6	1393.5	1409.3	1421.1	1421.9
170°	1376.2	1379.9	1383.7	1384.6	1384.9	1385.4	1385.6	1393.5	1409.3	1421.1	1421.1
172.5°	1383.7	1384.5	1385.4	1385.6	1385.6	1385.6	1385.6	1391.8	1404.3	1413.6	1412.9
175°	1394.0	1394.0	1394.0	1394.0	1391.2	1387.5	1385.6	1389.5	1397.4	1403.3	1403.3
177.5°	1394.0	1394.0	1394.0	1394.0	1391.8	1388.9	1387.4	1390.5	1396.8	1401.5	1400.7
180°	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	466.5	466.5
2.5°	498.0	495.0
5°	640.5	643.5
7.5°	862.5	861.0
10°	1072.5	1086.0
12.5°	1225.6	1228.6
15°	1318.6	1324.6
17.5°	1354.6	1356.1
20°	1356.1	1353.1
22.5°	1339.6	1336.6
25°	1320.1	1318.6
27.5°	1302.1	1303.6
30°	1294.6	1299.1
32.5°	1294.6	1302.1
35°	1297.6	1305.1
37.5°	1296.1	1305.1
40°	1290.1	1300.6
42.5°	1273.6	1281.1
45°	1248.1	1257.1
47.5°	1215.1	1221.1
50°	1173.1	1179.1
52.5°	1120.5	1122.0
55°	1057.5	1063.5
57.5°	990.0	991.5
60°	915.0	919.5
62.5°	835.5	835.5
65°	751.5	754.5
67.5°	664.5	672.0
70°	576.0	577.5
72.5°	489.0	489.0
75°	399.0	400.5
77.5°	313.5	313.5
80°	232.5	234.0
82.5°	160.5	163.5
85°	100.5	100.5
87.5°	46.5	42.0
90°	35.6	35.6
92.5°	142.4	114.1
95°	496.3	410.7
97.5°	1189.3	1026.3
100°	1713.6	1519.4
102.5°	2229.2	2062.9
105°	2886.7	2797.3
107.5°	3317.4	3339.0
110°	3481.6	3574.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3496.3	3639.3
115°	3403.5	3601.9
117.5°	3207.0	3427.0
120°	3048.6	3262.3
122.5°	2894.3	3105.1
125°	2674.2	2868.4
127.5°	2476.3	2640.2
130°	2359.7	2511.0
132.5°	2253.8	2389.4
135°	2108.9	2225.7
137.5°	1992.6	2088.2
140°	1912.7	2002.1
142.5°	1846.6	1923.5
145°	1747.4	1805.6
147.5°	1671.3	1719.6
150°	1623.4	1662.5
152.5°	1582.4	1612.0
155°	1535.3	1554.9
157.5°	1498.2	1511.9
160°	1475.9	1483.8
162.5°	1461.3	1468.8
165°	1440.3	1448.2
167.5°	1425.3	1428.6
170°	1421.1	1421.1
172.5°	1410.0	1407.1
175°	1403.3	1403.3
177.5°	1397.3	1394.0
180°	1394.0	1394.0



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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	2.29	3.01	3.41	4.12	5.67	15.46	16.17	16.57	17.29	18.83
	3H	2.99	3.63	4.11	4.75	6.31	17.28	17.92	18.41	19.05	20.61
	4H	3.28	3.89	4.41	5.01	6.58	17.92	18.53	19.05	19.65	21.22
	6H	3.52	4.08	4.66	5.21	6.79	18.33	18.90	19.48	20.02	21.60
	8H	3.59	4.12	4.73	5.26	6.83	18.45	18.98	19.59	20.13	21.70
	12H	3.60	4.11	4.75	5.24	6.84	18.51	19.02	19.66	20.15	21.75
4H	2H	9.48	10.09	10.62	11.22	12.78	15.72	16.33	16.86	17.45	19.02
	3H	11.04	11.55	12.18	12.70	14.28	17.74	18.25	18.89	19.40	20.98
	4H	11.13	11.60	12.28	12.73	14.33	18.50	18.97	19.65	20.11	21.71
	6H	11.13	11.53	12.28	12.69	14.28	19.03	19.43	20.18	20.59	22.18
	8H	11.10	11.48	12.26	12.63	14.24	19.18	19.56	20.34	20.71	22.32
	12H	11.05	11.39	12.22	12.55	14.17	19.26	19.61	20.44	20.77	22.38
8H	4H	12.55	12.93	13.71	14.08	15.69	18.55	18.92	19.70	20.08	21.68
	6H	12.79	13.10	13.97	14.29	15.90	19.16	19.48	20.34	20.67	22.27
	8H	12.81	13.08	13.99	14.25	15.87	19.38	19.65	20.56	20.82	22.45
	12H	12.77	13.01	13.95	14.18	15.83	19.51	19.75	20.70	20.92	22.58
12H	4H	12.69	13.03	13.86	14.19	15.81	18.49	18.83	19.67	20.00	21.61
	6H	13.04	13.32	14.23	14.49	16.11	19.15	19.42	20.33	20.59	22.21
	8H	13.11	13.35	14.29	14.52	16.17	19.37	19.61	20.55	20.78	22.43