

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: P936717

Luminaire Tested: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936717
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

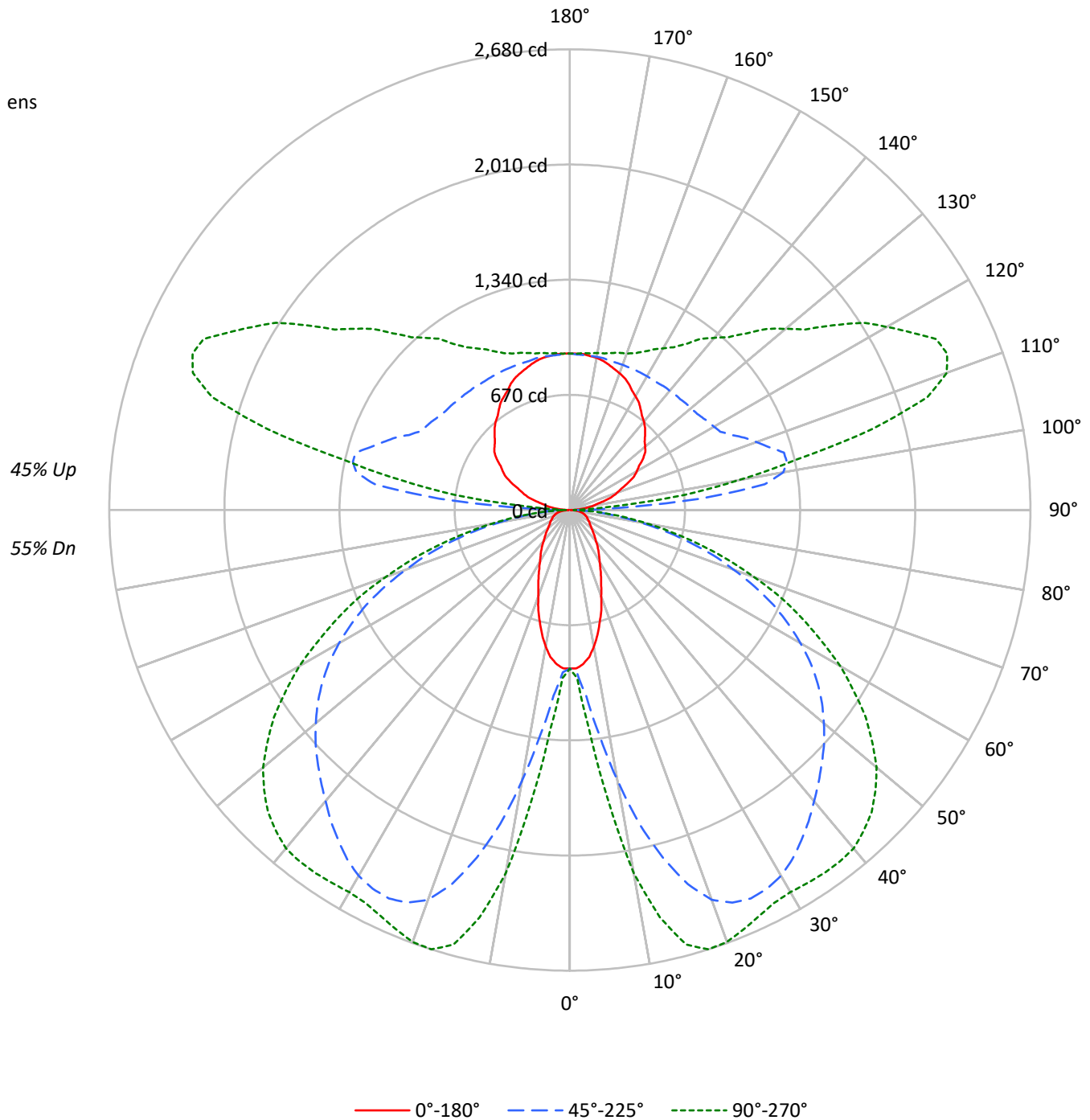
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13035.6 lumens
Efficiency: N/A
Efficacy: 119.4 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: General Diffuse

Input Watts (W): 109.2
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

TEST NUMBER: P936717
CATALOG NUMBER: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P936717

CATALOG NUMBER: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	50	50	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	41	41	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	34	34	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	29	29	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	25	25	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	21	21	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	19	19	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	16	16	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	15	15	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	13	13	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2851	2851	2851
5°	2786	3296	3833
10°	2528	4806	6354
15°	2150	6281	7672
20°	1751	7280	7819
25°	1461	7620	7660
30°	1233	7671	7646
35°	1091	7545	7844
40°	951	7381	8048
45°	862	7263	8079
50°	791	7156	7946
55°	758	6999	7594
60°	778	6695	7037
65°	810	6231	6273
70°	865	5437	5300
75°	962	4437	4136
80°	1058	3081	2787
85°	959	1637	1426

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8079 cd/sqm



TEST NUMBER: P936717

CATALOG NUMBER: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	0.9
10°-20°	528.5	4.1
20°-30°	924.4	7.1
30°-40°	1190.0	9.1
40°-50°	1329.2	10.2
50°-60°	1273.1	9.8
60°-70°	1008.9	7.7
70°-80°	593.2	4.6
80°-90°	168.3	1.3
90°-100°	443.7	3.4
100°-110°	1166.5	8.9
110°-120°	1209.5	9.3
120°-130°	970.2	7.4
130°-140°	761.3	5.8
140°-150°	584.3	4.5
150°-160°	420.8	3.2
160°-170°	257.5	2.0
170°-180°	87.0	0.7
0°-30°	1572.2	12.1
0°-40°	2762.2	21.2
0°-60°	5364.4	41.2
0°-90°	7134.8	54.7
90°-120°	2819.7	21.6
90°-150°	5135.5	39.4
90°-180°	5901.0	45.3
0°-180°	13035.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	898	963	1085	1227	1272	83
15°	673	1242	2093	2537	2617	187
25°	430	1408	2493	2602	2606	198
35°	290	1346	2348	2481	2579	181
45°	199	1073	2075	2377	2484	154
55°	142	682	1761	2045	2102	130
65°	113	362	1307	1470	1491	112
75°	83	222	717	788	791	87
85°	30	68	178	196	199	31
90°	6	17	46	23	23	7
95°	59	230	764	394	268	65
105°	210	318	1290	1958	1827	223
115°	373	453	1033	2061	2352	369
125°	519	582	940	1588	1873	461
135°	619	681	910	1282	1453	479
145°	718	764	899	1094	1179	450
155°	811	834	899	987	1015	373
165°	876	887	899	934	946	247
175°	910	910	905	916	916	86
180°	910	910	910	910	910	



TEST NUMBER: P936717

CATALOG NUMBER: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8
2.5°	921.8	921.8	927.7	930.7	936.6	939.6	945.5	951.4	969.2	972.2	978.1
5°	898.1	909.9	948.5	963.3	1004.8	1061.1	1084.8	1123.5	1203.5	1227.2	1242.0
7.5°	862.5	889.2	984.0	1007.8	1111.5	1259.8	1322.0	1405.0	1532.5	1594.7	1645.1
10°	806.2	862.5	1031.5	1087.8	1256.8	1482.1	1597.7	1713.3	1906.0	1991.9	2024.5
12.5°	744.0	835.8	1081.9	1159.0	1402.1	1731.1	1870.4	1997.8	2217.2	2332.8	2350.6
15°	672.8	797.3	1129.4	1242.0	1556.2	1938.6	2092.7	2249.8	2454.3	2537.3	2558.0
17.5°	610.6	767.7	1173.8	1292.4	1674.8	2125.3	2282.4	2412.8	2578.8	2635.1	2649.9
20°	533.5	720.3	1203.5	1357.6	1799.2	2261.6	2412.8	2513.6	2626.2	2661.8	2667.7
22.5°	477.2	669.9	1221.3	1381.3	1882.2	2344.6	2472.1	2552.1	2629.2	2641.0	2644.0
25°	429.8	613.5	1218.3	1408.0	1953.4	2395.0	2492.8	2552.1	2596.6	2602.5	2602.5
27.5°	385.3	551.3	1206.4	1413.9	2006.7	2406.9	2483.9	2525.4	2546.2	2558.0	2558.0
30°	346.8	492.0	1176.8	1402.1	2030.4	2395.0	2457.3	2478.0	2498.8	2516.5	2525.4
32.5°	317.1	435.7	1132.3	1378.4	2033.4	2365.4	2409.8	2421.7	2451.3	2492.8	2507.6
35°	290.5	379.4	1081.9	1345.8	2015.6	2317.9	2347.6	2359.4	2418.7	2481.0	2501.7
37.5°	263.8	337.9	1016.7	1289.4	1988.9	2261.6	2282.4	2303.1	2395.0	2469.1	2492.8
40°	237.1	302.3	939.6	1227.2	1947.4	2193.5	2211.2	2243.8	2365.4	2451.3	2475.0
42.5°	216.4	272.7	856.6	1162.0	1894.1	2116.4	2143.1	2190.5	2329.8	2421.7	2448.4
45°	198.6	243.0	767.7	1073.0	1825.9	2036.4	2074.9	2140.1	2288.3	2377.2	2400.9
47.5°	180.8	222.3	675.8	981.1	1751.8	1956.3	2006.7	2080.8	2232.0	2317.9	2338.7
50°	166.0	201.6	583.9	883.3	1671.8	1870.4	1929.7	2006.7	2160.9	2240.9	2267.6
52.5°	154.1	183.8	498.0	785.5	1579.9	1781.5	1849.6	1929.7	2074.9	2152.0	2169.7
55°	142.3	168.9	423.9	681.7	1485.1	1686.6	1760.7	1837.8	1980.1	2045.3	2057.1
57.5°	136.3	157.1	361.6	583.9	1384.3	1579.9	1662.9	1734.0	1867.4	1917.8	1929.7
60°	127.5	148.2	314.2	500.9	1274.6	1479.1	1550.3	1621.4	1734.0	1775.5	1784.4
62.5°	118.6	142.3	278.6	420.9	1162.0	1360.6	1431.7	1496.9	1591.8	1621.4	1633.3
65°	112.6	136.3	251.9	361.6	1046.3	1236.1	1307.2	1363.5	1440.6	1470.2	1476.2
67.5°	106.7	130.4	231.2	311.2	930.7	1111.5	1165.0	1218.3	1277.6	1307.2	1310.2
70°	97.8	124.5	213.4	275.7	812.1	969.2	1013.7	1070.0	1117.4	1132.3	1141.2
72.5°	91.9	115.6	201.6	249.0	690.6	832.9	874.4	907.0	948.5	963.3	963.3
75°	83.0	103.7	189.7	222.3	566.1	681.7	717.3	749.9	782.5	788.4	779.5
77.5°	74.1	91.9	163.0	186.7	441.6	539.4	569.1	586.9	613.5	619.5	622.4
80°	62.2	80.0	127.5	145.2	320.1	397.2	417.9	432.7	456.5	456.5	462.4
82.5°	47.4	62.2	91.9	103.7	216.4	272.7	290.5	299.4	314.2	314.2	314.2
85°	29.6	38.5	59.3	68.2	130.4	166.0	177.8	180.8	192.7	195.6	195.6
87.5°	14.8	20.7	38.5	41.5	68.2	86.0	86.0	91.9	91.9	88.9	86.0
90°	6.1	11.0	15.9	17.1	26.9	39.9	46.4	41.3	30.9	23.2	23.2
92.5°	24.4	65.9	107.5	117.9	165.7	229.5	261.4	229.1	164.5	116.1	111.4
95°	58.7	134.7	210.7	229.7	407.8	645.5	764.2	681.9	517.4	394.0	380.0
97.5°	101.4	168.5	235.5	252.3	549.4	945.5	1143.6	1091.6	987.6	909.7	883.1
100°	134.4	195.2	256.0	271.2	600.9	1040.5	1260.3	1264.0	1271.7	1277.4	1245.7
102.5°	162.5	219.2	275.9	290.2	624.5	1070.4	1293.3	1359.5	1492.0	1591.4	1564.2
105°	210.1	258.2	306.2	318.2	642.0	1073.8	1289.6	1438.1	1735.1	1957.9	1943.3
107.5°	259.1	303.8	348.7	359.8	645.4	1026.0	1216.3	1423.5	1837.9	2148.6	2152.2
110°	292.1	332.5	373.0	383.0	640.4	983.7	1155.3	1386.9	1850.0	2197.4	2212.6



TEST NUMBER: P936717

CATALOG NUMBER: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	324.4	362.9	401.4	411.1	640.6	946.6	1099.6	1336.7	1810.7	2166.3	2189.6
115°	373.3	408.8	444.4	453.3	646.5	904.2	1033.1	1261.4	1718.0	2060.6	2093.0
117.5°	421.5	453.8	486.1	494.2	658.5	877.6	987.2	1193.3	1605.4	1914.5	1950.4
120°	449.6	480.1	510.4	518.0	668.3	868.7	968.9	1157.2	1533.8	1816.2	1851.1
122.5°	477.1	507.8	538.5	546.2	682.4	864.0	954.8	1124.3	1463.5	1717.8	1752.2
125°	519.3	547.3	575.2	582.2	701.4	860.2	939.6	1083.6	1371.6	1587.7	1619.4
127.5°	553.5	581.7	610.0	617.0	720.3	857.9	926.7	1050.4	1297.7	1483.3	1510.1
130°	571.9	602.3	632.6	640.2	734.1	859.3	921.9	1032.0	1252.2	1417.3	1442.0
132.5°	590.7	621.2	651.6	659.2	745.3	860.2	917.6	1016.2	1213.3	1361.1	1383.2
135°	618.9	646.5	674.2	681.1	757.5	859.4	910.2	992.8	1157.9	1281.7	1300.8
137.5°	647.5	675.0	702.5	709.3	775.9	864.7	909.1	978.8	1118.4	1223.0	1238.7
140°	671.3	696.6	721.8	728.2	787.0	865.5	904.7	965.0	1085.6	1176.0	1190.6
142.5°	689.7	713.0	736.5	742.3	796.4	868.6	904.7	957.7	1063.6	1143.0	1155.6
145°	717.8	738.1	758.5	763.6	808.7	868.6	898.7	942.0	1028.6	1093.5	1103.0
147.5°	745.9	765.7	785.6	790.5	826.6	874.7	898.7	932.8	1000.9	1052.0	1059.9
150°	764.2	782.1	800.1	804.5	835.9	877.7	898.7	927.4	984.9	1028.1	1034.5
152.5°	783.2	796.7	810.4	813.7	842.1	879.8	898.7	923.3	972.4	1009.2	1014.1
155°	811.2	821.3	831.4	833.9	855.5	884.3	898.7	918.2	957.3	986.6	989.8
157.5°	832.1	841.9	851.6	854.0	868.9	888.8	898.7	913.9	944.2	967.1	969.3
160°	846.1	853.7	861.3	863.2	875.1	890.8	898.7	911.7	937.7	957.3	958.6
162.5°	860.2	865.9	871.6	873.0	881.6	893.0	898.7	909.7	931.6	948.1	949.3
165°	875.5	880.6	885.7	887.0	890.9	896.1	898.7	906.6	922.3	934.1	935.3
167.5°	889.5	891.9	894.3	894.9	898.2	902.5	904.7	909.8	920.2	927.9	928.5
170°	898.7	901.1	903.5	904.1	904.3	904.6	904.7	909.8	920.2	927.9	927.9
172.5°	903.5	904.0	904.6	904.7	904.7	904.7	904.7	908.8	917.0	923.1	922.6
175°	910.2	910.2	910.2	910.2	908.4	905.9	904.7	907.3	912.5	916.4	916.4
177.5°	910.2	910.2	910.2	910.2	908.9	907.0	906.0	908.1	912.1	915.2	914.6
180°	910.2	910.2	910.2	910.2	910.2	910.2	910.2	910.2	910.2	910.2	910.2



TEST NUMBER: P936717

CATALOG NUMBER: SQ4-FB-050U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	921.8	921.8
2.5°	984.0	978.1
5°	1265.7	1271.7
7.5°	1704.4	1701.4
10°	2119.4	2146.0
12.5°	2421.7	2427.6
15°	2605.5	2617.3
17.5°	2676.6	2679.6
20°	2679.6	2673.6
22.5°	2647.0	2641.0
25°	2608.4	2605.5
27.5°	2572.9	2575.8
30°	2558.0	2566.9
32.5°	2558.0	2572.9
35°	2564.0	2578.8
37.5°	2561.0	2578.8
40°	2549.1	2569.9
42.5°	2516.5	2531.4
45°	2466.1	2483.9
47.5°	2400.9	2412.8
50°	2317.9	2329.8
52.5°	2214.2	2217.2
55°	2089.7	2101.6
57.5°	1956.3	1959.3
60°	1808.1	1817.0
62.5°	1651.0	1651.0
65°	1485.1	1491.0
67.5°	1313.2	1328.0
70°	1138.3	1141.2
72.5°	966.3	966.3
75°	788.4	791.4
77.5°	619.5	619.5
80°	459.4	462.4
82.5°	317.1	323.1
85°	198.6	198.6
87.5°	91.9	83.0
90°	23.2	23.2
92.5°	93.0	74.5
95°	324.1	268.1
97.5°	776.6	670.2
100°	1118.9	992.1
102.5°	1455.6	1347.0
105°	1885.0	1826.6
107.5°	2166.2	2180.3
110°	2273.4	2334.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2283.1	2376.4
115°	2222.5	2352.0
117.5°	2094.1	2237.7
120°	1990.7	2130.2
122.5°	1889.9	2027.6
125°	1746.2	1873.1
127.5°	1617.0	1724.0
130°	1540.9	1639.7
132.5°	1471.7	1560.2
135°	1377.1	1453.3
137.5°	1301.1	1363.5
140°	1248.9	1307.3
142.5°	1205.9	1256.0
145°	1141.0	1179.1
147.5°	1091.3	1122.9
150°	1060.0	1085.6
152.5°	1033.3	1052.6
155°	1002.6	1015.4
157.5°	978.2	987.2
160°	963.8	968.9
162.5°	954.2	959.2
165°	940.6	945.7
167.5°	930.7	932.9
170°	927.9	927.9
172.5°	920.7	918.8
175°	916.4	916.4
177.5°	912.4	910.2
180°	910.2	910.2



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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	5.07	6.02	5.98	6.95	8.15	18.26	19.21	19.17	20.14	21.34
	3H	5.78	6.64	6.70	7.58	8.80	20.11	20.97	21.03	21.91	23.13
	4H	6.08	6.89	7.02	7.84	9.07	20.77	21.58	21.70	22.52	23.75
	6H	6.34	7.09	7.28	8.04	9.28	21.21	21.95	22.15	22.91	24.15
	8H	6.41	7.12	7.36	8.09	9.33	21.33	22.04	22.29	23.01	24.26
	12H	6.43	7.11	7.39	8.07	9.34	21.41	22.08	22.37	23.05	24.32
4H	2H	12.31	13.11	13.24	14.06	15.29	18.55	19.36	19.49	20.30	21.53
	3H	13.88	14.56	14.83	15.53	16.78	20.61	21.28	21.56	22.26	23.51
	4H	13.98	14.60	14.94	15.57	16.84	21.38	22.00	22.34	22.97	24.24
	6H	13.99	14.53	14.97	15.52	16.79	21.93	22.47	22.90	23.46	24.73
	8H	13.97	14.47	14.95	15.46	16.75	22.10	22.60	23.07	23.59	24.87
	12H	13.93	14.39	14.93	15.39	16.68	22.20	22.65	23.19	23.65	24.94
8H	4H	15.43	15.94	16.41	16.92	18.21	21.45	21.95	22.42	22.94	24.22
	6H	15.68	16.10	16.68	17.13	18.41	22.09	22.50	23.09	23.53	24.81
	8H	15.70	16.07	16.71	17.08	18.38	22.31	22.68	23.32	23.69	24.99
	12H	15.67	16.00	16.69	17.01	18.35	22.46	22.79	23.48	23.80	25.14
12H	4H	15.58	16.04	16.58	17.04	18.33	21.41	21.86	22.40	22.86	24.15
	6H	15.94	16.31	16.95	17.33	18.63	22.07	22.44	23.08	23.45	24.76
	8H	16.02	16.34	17.03	17.35	18.70	22.31	22.63	23.32	23.64	24.99