

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: P937945

Luminaire Tested: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937945
REPORT IS A COMBINATION OF REPORTS P933614 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-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

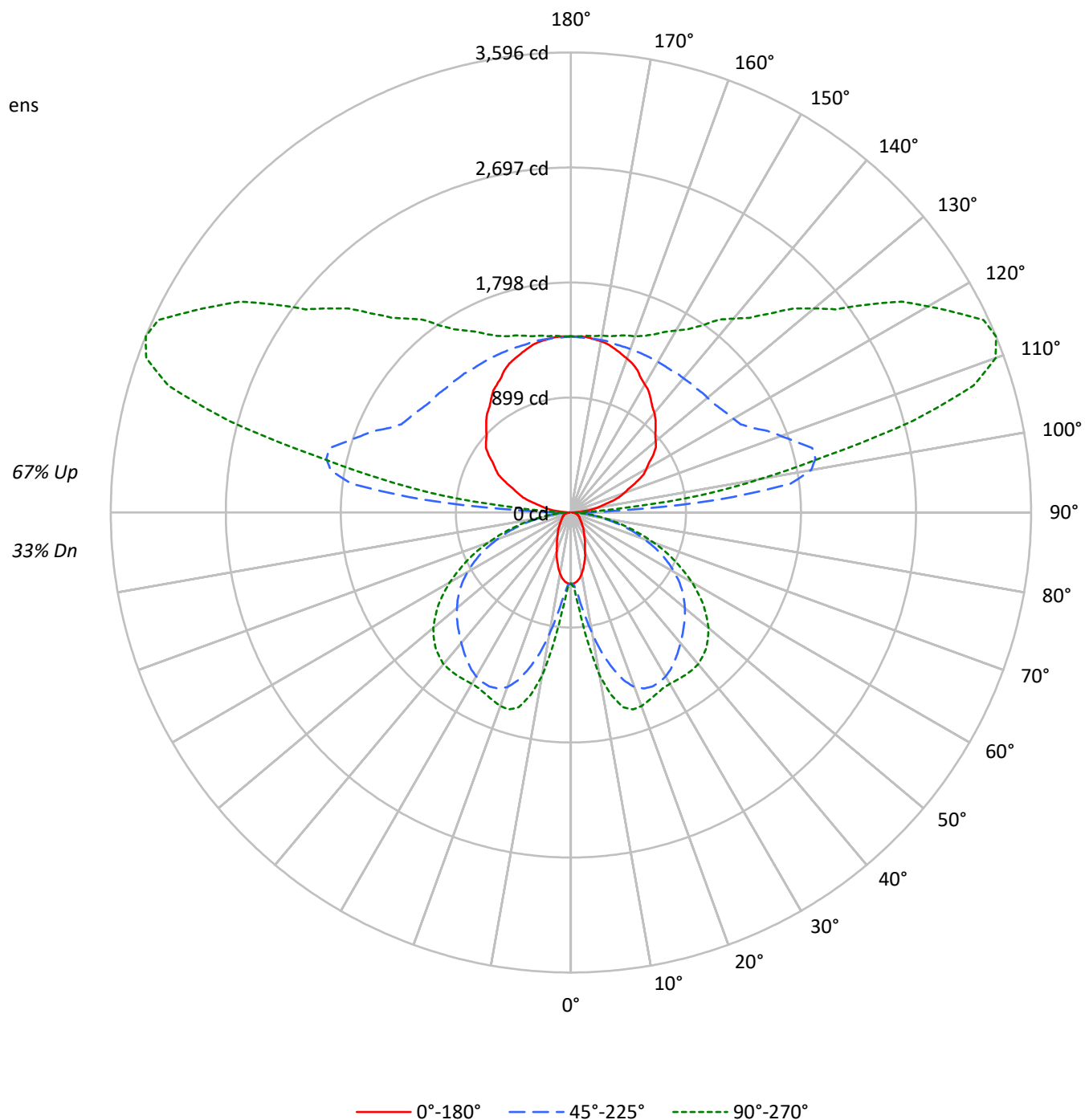
Lumens per Lamp: N/A
Luminaire Lumens: 13228.6 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 111.2
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

TEST NUMBER: P937945

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-8-3500K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9

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	0.5
10°-20°	318.3	2.4
20°-30°	556.8	4.2
30°-40°	716.8	5.4
40°-50°	800.6	6.1
50°-60°	766.8	5.8
60°-70°	607.6	4.6
70°-80°	357.3	2.7
80°-90°	104.5	0.8
90°-100°	671.3	5.1
100°-110°	1765.0	13.3
110°-120°	1830.1	13.8
120°-130°	1468.0	11.1
130°-140°	1151.8	8.7
140°-150°	884.1	6.7
150°-160°	636.7	4.8
160°-170°	389.6	2.9
170°-180°	131.6	1.0
0°-30°	946.9	7.2
0°-40°	1663.7	12.6
0°-60°	3231.1	24.4
0°-90°	4300.5	32.5
90°-120°	4266.4	32.3
90°-150°	7770.2	58.7
90°-180°	8928.0	67.5
0°-180°	13228.6	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°	9	26	70	35	35	9
95°	89	348	1156	596	406	99
105°	318	482	1951	2962	2764	337
115°	565	686	1563	3118	3559	558
125°	786	881	1422	2402	2834	698
135°	936	1031	1377	1939	2199	724
145°	1086	1155	1360	1655	1784	680
155°	1228	1262	1360	1493	1536	564
165°	1325	1342	1360	1413	1431	374
175°	1377	1377	1369	1386	1386	131
180°	1377	1377	1377	1377	1377	

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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°	9.3	16.7	24.0	25.9	40.7	60.4	70.2	62.4	46.8	35.1	35.1
92.5°	37.0	99.8	162.7	178.4	250.8	347.3	395.6	346.7	249.0	175.6	168.6
95°	88.7	203.8	318.8	347.6	617.2	976.6	1156.3	1031.9	782.9	596.2	575.0
97.5°	153.4	254.9	356.4	381.8	831.3	1430.7	1730.3	1651.7	1494.3	1376.3	1336.1
100°	203.3	295.4	387.4	410.4	909.2	1574.3	1906.9	1912.6	1924.1	1932.8	1884.9
102.5°	245.8	331.7	417.6	439.1	945.0	1619.6	1956.8	2057.0	2257.5	2407.8	2366.8
105°	318.0	390.7	463.4	481.6	971.4	1624.7	1951.3	2175.9	2625.4	2962.4	2940.4
107.5°	391.9	459.7	527.4	544.4	976.3	1552.4	1840.3	2153.8	2780.7	3250.8	3256.2
110°	441.8	503.1	564.3	579.6	969.0	1488.3	1747.9	2098.4	2799.2	3324.7	3347.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	490.9	549.1	607.5	622.1	969.3	1432.3	1663.8	2022.4	2739.6	3277.6	3313.0
115°	564.8	618.6	672.3	685.8	978.2	1368.1	1563.1	1908.5	2599.5	3117.7	3166.7
117.5°	637.8	686.7	735.5	747.7	996.4	1328.0	1493.7	1805.5	2429.1	2896.8	2951.2
120°	680.3	726.3	772.3	783.8	1011.2	1314.4	1465.9	1750.9	2320.6	2748.0	2800.8
122.5°	721.9	768.3	814.7	826.3	1032.4	1307.2	1444.7	1701.2	2214.4	2599.2	2651.3
125°	785.7	828.0	870.3	880.8	1061.1	1301.4	1421.6	1639.6	2075.4	2402.3	2450.2
127.5°	837.5	880.2	922.9	933.6	1089.8	1298.0	1402.2	1589.3	1963.6	2244.2	2284.7
130°	865.1	911.2	957.2	968.7	1110.7	1300.1	1394.8	1561.4	1894.6	2144.4	2181.8
132.5°	893.8	939.8	985.8	997.3	1127.6	1301.4	1388.3	1537.4	1835.7	2059.4	2092.8
135°	936.4	978.2	1020.2	1030.6	1146.1	1300.2	1377.2	1502.1	1751.9	1939.2	1968.0
137.5°	979.7	1021.2	1062.8	1073.1	1173.9	1308.2	1375.3	1480.9	1692.1	1850.5	1874.1
140°	1015.8	1054.0	1092.2	1101.8	1190.8	1309.6	1368.9	1460.1	1642.5	1779.3	1801.4
142.5°	1043.6	1078.9	1114.2	1123.0	1204.9	1314.3	1368.9	1449.0	1609.2	1729.4	1748.4
145°	1086.1	1116.8	1147.7	1155.4	1223.5	1314.3	1359.6	1425.2	1556.3	1654.6	1668.9
147.5°	1128.6	1158.6	1188.6	1196.1	1250.6	1323.3	1359.6	1411.2	1514.3	1591.7	1603.6
150°	1156.3	1183.4	1210.6	1217.4	1264.8	1328.0	1359.6	1403.2	1490.3	1555.7	1565.3
152.5°	1185.0	1205.5	1226.0	1231.2	1274.0	1331.1	1359.6	1396.9	1471.2	1527.0	1534.3
155°	1227.5	1242.7	1257.9	1261.7	1294.4	1337.9	1359.6	1389.3	1448.5	1492.8	1497.6
157.5°	1259.0	1273.7	1288.5	1292.2	1314.7	1344.6	1359.6	1382.7	1428.6	1463.2	1466.6
160°	1280.2	1291.7	1303.2	1306.1	1323.9	1347.8	1359.6	1379.4	1418.8	1448.4	1450.3
162.5°	1301.4	1310.0	1318.7	1320.8	1333.8	1351.0	1359.6	1376.2	1409.5	1434.5	1436.4
165°	1324.6	1332.4	1340.2	1342.1	1347.9	1355.7	1359.6	1371.6	1395.4	1413.3	1415.2
167.5°	1345.8	1349.5	1353.2	1354.1	1359.0	1365.6	1368.9	1376.7	1392.3	1404.0	1404.8
170°	1359.6	1363.4	1367.1	1368.0	1368.3	1368.7	1368.9	1376.7	1392.3	1404.0	1404.0
172.5°	1367.0	1367.9	1368.7	1368.9	1368.9	1368.9	1368.9	1375.1	1387.4	1396.7	1396.0
175°	1377.2	1377.2	1377.2	1377.2	1374.5	1370.8	1368.9	1372.8	1380.6	1386.5	1386.5
177.5°	1377.2	1377.2	1377.2	1377.2	1375.1	1372.2	1370.8	1373.8	1380.0	1384.6	1383.8
180°	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2

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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°	35.1	35.1
92.5°	140.7	112.7
95°	490.4	405.8
97.5°	1175.0	1014.0
100°	1692.9	1501.1
102.5°	2202.5	2038.1
105°	2852.0	2763.7
107.5°	3277.5	3298.9
110°	3439.8	3531.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3454.3	3595.6
115°	3362.7	3558.6
117.5°	3168.4	3385.8
120°	3012.0	3223.1
122.5°	2859.6	3067.8
125°	2642.2	2834.0
127.5°	2446.6	2608.4
130°	2331.3	2480.9
132.5°	2226.8	2360.7
135°	2083.6	2199.0
137.5°	1968.6	2063.1
140°	1889.8	1978.0
142.5°	1824.3	1900.4
145°	1726.4	1783.9
147.5°	1651.3	1698.9
150°	1603.9	1642.5
152.5°	1563.4	1592.6
155°	1516.9	1536.2
157.5°	1480.1	1493.7
160°	1458.1	1465.9
162.5°	1443.8	1451.2
165°	1423.0	1430.9
167.5°	1408.1	1411.4
170°	1404.0	1404.0
172.5°	1393.0	1390.2
175°	1386.5	1386.5
177.5°	1380.5	1377.2
180°	1377.2	1377.2

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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	2.43	3.18	3.52	4.27	5.77	15.61	16.36	16.70	17.45	18.94
	3H	3.13	3.80	4.22	4.90	6.41	17.44	18.11	18.54	19.21	20.72
	4H	3.42	4.06	4.53	5.16	6.68	18.08	18.72	19.19	19.82	21.34
	6H	3.66	4.25	4.78	5.35	6.89	18.50	19.09	19.62	20.19	21.73
	8H	3.73	4.29	4.85	5.41	6.93	18.62	19.18	19.74	20.30	21.82
	12H	3.74	4.27	4.87	5.38	6.94	18.69	19.21	19.81	20.33	21.88
4H	2H	9.63	10.27	10.75	11.37	12.89	15.87	16.50	16.98	17.61	19.13
	3H	11.19	11.72	12.31	12.85	14.38	17.90	18.44	19.03	19.56	21.10
	4H	11.28	11.77	12.40	12.88	14.44	18.67	19.15	19.79	20.27	21.82
	6H	11.28	11.70	12.41	12.84	14.39	19.20	19.62	20.33	20.76	22.30
	8H	11.26	11.65	12.39	12.78	14.34	19.36	19.75	20.49	20.88	22.44
	12H	11.21	11.56	12.36	12.70	14.27	19.44	19.80	20.59	20.94	22.51
8H	4H	12.71	13.10	13.84	14.24	15.80	18.72	19.11	19.85	20.24	21.80
	6H	12.95	13.27	14.10	14.45	16.01	19.34	19.66	20.49	20.84	22.40
	8H	12.97	13.25	14.12	14.40	15.98	19.56	19.84	20.72	20.99	22.57
	12H	12.93	13.18	14.09	14.33	15.94	19.70	19.95	20.86	21.10	22.71
12H	4H	12.85	13.21	14.00	14.35	15.92	18.66	19.02	19.81	20.16	21.73
	6H	13.21	13.49	14.37	14.64	16.22	19.32	19.61	20.48	20.76	22.34
	8H	13.27	13.52	14.43	14.67	16.28	19.55	19.79	20.71	20.94	22.56