

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: P938015

Luminaire Tested: SQ4-FB-125U-100D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938015
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

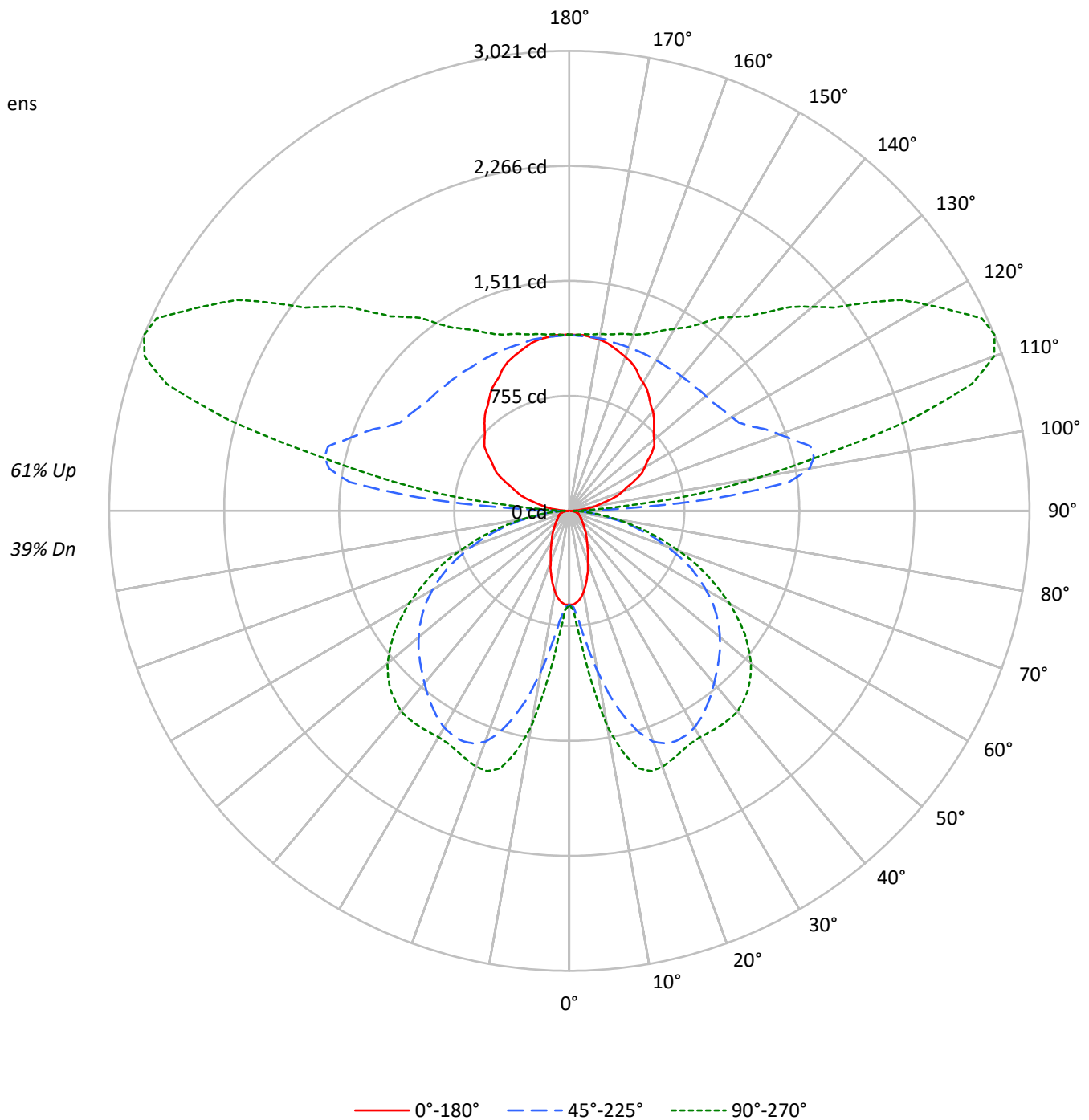
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12274.0 lumens
Efficiency: N/A
Efficacy: 127.1 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): 96.6
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				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	95	95	95	95	77	77	77	61	61	61	46	46	46	39			
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32			
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26			
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21			
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18			
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15			
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11			
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10			
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9			
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3813	3813	3813
5°	3724	4405	5125
10°	3376	6421	8496
15°	2869	8387	10259
20°	2334	9716	10456
25°	1947	10165	10243
30°	1641	10226	10224
35°	1450	10054	10489
40°	1262	9830	10761
45°	1143	9666	10803
50°	1047	9518	10625
55°	1002	9301	10154
60°	1025	8889	9410
65°	1064	8264	8388
70°	1131	7202	7087
75°	1249	5867	5530
80°	1354	4063	3727
85°	1180	2152	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10803 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	0.6
10°-20°	353.4	2.9
20°-30°	618.1	5.0
30°-40°	795.6	6.5
40°-50°	888.7	7.2
50°-60°	851.2	6.9
60°-70°	674.5	5.5
70°-80°	396.7	3.2
80°-90°	114.6	0.9
90°-100°	564.1	4.6
100°-110°	1483.0	12.1
110°-120°	1537.7	12.5
120°-130°	1233.4	10.0
130°-140°	967.8	7.9
140°-150°	742.8	6.1
150°-160°	534.9	4.4
160°-170°	327.3	2.7
170°-180°	110.6	0.9
0°-30°	1051.1	8.6
0°-40°	1846.8	15.0
0°-60°	3586.6	29.2
0°-90°	4772.4	38.9
90°-120°	3584.7	29.2
90°-150°	6528.7	53.2
90°-180°	7502.0	61.1
0°-180°	12274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	600	644	725	820	850	55
15°	450	830	1399	1696	1750	125
25°	287	941	1667	1740	1742	132
35°	194	900	1570	1659	1724	121
45°	133	717	1387	1589	1661	103
55°	95	456	1177	1367	1405	87
65°	75	242	874	983	997	75
75°	56	149	480	527	529	58
85°	20	46	119	131	133	21
90°	8	22	59	30	30	8
95°	75	292	972	501	341	83
105°	267	405	1640	2489	2322	283
115°	474	576	1313	2620	2990	469
125°	660	740	1194	2018	2381	586
135°	787	866	1157	1629	1848	609
145°	912	971	1142	1390	1499	572
155°	1031	1060	1142	1254	1291	474
165°	1113	1128	1142	1188	1202	314
175°	1157	1157	1150	1165	1165	110
180°	1157	1157	1157	1157	1157	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3
2.5°	616.3	616.3	620.3	622.3	626.2	628.2	632.2	636.2	648.0	650.0	654.0
5°	600.5	608.4	634.2	644.1	671.8	709.5	725.3	751.1	804.6	820.5	830.4
7.5°	576.7	594.5	658.0	673.8	743.2	842.3	883.9	939.4	1024.6	1066.2	1099.9
10°	539.0	576.7	689.7	727.3	840.3	990.9	1068.2	1145.5	1274.3	1331.8	1353.6
12.5°	497.4	558.9	723.4	774.9	937.4	1157.4	1250.5	1335.7	1482.4	1559.7	1571.6
15°	449.9	533.1	755.1	830.4	1040.4	1296.1	1399.2	1504.2	1640.9	1696.4	1710.3
17.5°	408.3	513.3	784.8	864.1	1119.7	1421.0	1526.0	1613.2	1724.2	1761.8	1771.7
20°	356.7	481.6	804.6	907.7	1203.0	1512.1	1613.2	1680.6	1755.9	1779.7	1783.6
22.5°	319.1	447.9	816.5	923.5	1258.4	1567.6	1652.8	1706.3	1757.9	1765.8	1767.8
25°	287.4	410.2	814.5	941.4	1306.0	1601.3	1666.7	1706.3	1736.1	1740.0	1740.0
27.5°	257.6	368.6	806.6	945.3	1341.7	1609.2	1660.7	1688.5	1702.4	1710.3	1710.3
30°	231.9	329.0	786.8	937.4	1357.5	1601.3	1642.9	1656.8	1670.7	1682.5	1688.5
32.5°	212.1	291.3	757.0	921.5	1359.5	1581.5	1611.2	1619.1	1638.9	1666.7	1676.6
35°	194.2	253.7	723.4	899.7	1347.6	1549.8	1569.6	1577.5	1617.1	1658.8	1672.6
37.5°	176.4	225.9	679.8	862.1	1329.8	1512.1	1526.0	1539.9	1601.3	1650.8	1666.7
40°	158.5	202.1	628.2	820.5	1302.0	1466.5	1478.4	1500.2	1581.5	1638.9	1654.8
42.5°	144.7	182.3	572.7	776.9	1266.4	1415.0	1432.8	1464.5	1557.7	1619.1	1637.0
45°	132.8	162.5	513.3	717.4	1220.8	1361.5	1387.3	1430.9	1529.9	1589.4	1605.3
47.5°	120.9	148.6	451.9	656.0	1171.2	1308.0	1341.7	1391.2	1492.3	1549.8	1563.6
50°	111.0	134.8	390.4	590.6	1117.7	1250.5	1290.2	1341.7	1444.7	1498.2	1516.1
52.5°	103.1	122.9	332.9	525.2	1056.3	1191.1	1236.6	1290.2	1387.3	1438.8	1450.7
55°	95.1	113.0	283.4	455.8	992.9	1127.6	1177.2	1228.7	1323.8	1367.4	1375.4
57.5°	91.2	105.0	241.8	390.4	925.5	1056.3	1111.8	1159.4	1248.5	1282.2	1290.2
60°	85.2	99.1	210.1	334.9	852.2	988.9	1036.5	1084.0	1159.4	1187.1	1193.0
62.5°	79.3	95.1	186.3	281.4	776.9	909.6	957.2	1000.8	1064.2	1084.0	1092.0
65°	75.3	91.2	168.5	241.8	699.6	826.4	874.0	911.6	963.2	983.0	986.9
67.5°	71.3	87.2	154.6	208.1	622.3	743.2	778.8	814.5	854.2	874.0	876.0
70°	65.4	83.2	142.7	184.3	543.0	648.0	677.8	715.4	747.1	757.0	763.0
72.5°	61.4	77.3	134.8	166.5	461.8	556.9	584.6	606.4	634.2	644.1	644.1
75°	55.5	69.4	126.8	148.6	378.5	455.8	479.6	501.4	523.2	527.2	521.2
77.5°	49.5	61.4	109.0	124.9	295.3	360.7	380.5	392.4	410.2	414.2	416.2
80°	41.6	53.5	85.2	97.1	214.0	265.6	279.4	289.3	305.2	305.2	309.2
82.5°	31.7	41.6	61.4	69.4	144.7	182.3	194.2	200.2	210.1	210.1	210.1
85°	19.8	25.8	39.6	45.6	87.2	111.0	118.9	120.9	128.8	130.8	130.8
87.5°	9.9	13.9	25.8	27.7	45.6	57.5	57.5	61.4	61.4	59.5	57.5
90°	7.8	14.0	20.2	21.7	34.1	50.7	59.0	52.4	39.3	29.5	29.5
92.5°	31.1	83.9	136.7	149.9	210.7	291.8	332.4	291.3	209.2	147.6	141.7
95°	74.6	171.2	267.8	292.0	518.5	820.6	971.6	867.0	657.8	500.9	483.1
97.5°	128.9	214.1	299.4	320.7	698.4	1202.1	1453.9	1387.8	1255.6	1156.4	1122.6
100°	170.9	248.2	325.5	344.8	763.9	1322.8	1602.2	1607.0	1616.7	1623.9	1583.6
102.5°	206.6	278.7	350.9	368.9	794.0	1360.7	1644.1	1728.3	1896.8	2023.1	1988.6
105°	267.2	328.3	389.3	404.6	816.2	1365.1	1639.5	1828.3	2205.9	2489.1	2470.5
107.5°	329.3	386.2	443.2	457.4	820.4	1304.3	1546.3	1809.7	2336.4	2731.4	2735.9
110°	371.2	422.6	474.0	486.9	814.1	1250.4	1468.6	1763.0	2351.9	2793.6	2812.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	412.4	461.4	510.4	522.7	814.4	1203.4	1397.9	1699.2	2301.9	2753.9	2783.6
115°	474.5	519.7	565.0	576.3	822.0	1149.5	1313.3	1603.6	2184.2	2619.6	2660.8
117.5°	535.9	577.0	618.0	628.3	837.2	1115.7	1255.0	1517.0	2041.0	2434.0	2479.6
120°	571.6	610.3	648.9	658.6	849.6	1104.3	1231.7	1471.1	1949.8	2308.9	2353.3
122.5°	606.6	645.6	684.6	694.3	867.5	1098.4	1213.9	1429.5	1860.6	2183.9	2227.6
125°	660.1	695.7	731.2	740.1	891.6	1093.5	1194.5	1377.6	1743.8	2018.5	2058.8
127.5°	703.6	739.5	775.4	784.4	915.7	1090.7	1178.2	1335.4	1649.9	1885.7	1919.7
130°	726.9	765.6	804.2	813.9	933.2	1092.3	1171.9	1311.9	1591.8	1801.8	1833.2
132.5°	751.0	789.7	828.3	838.0	947.5	1093.5	1166.5	1291.8	1542.4	1730.3	1758.4
135°	786.7	821.9	857.1	865.9	963.0	1092.5	1157.2	1262.1	1472.0	1629.4	1653.6
137.5°	823.2	858.1	893.0	901.7	986.3	1099.2	1155.6	1244.3	1421.7	1554.8	1574.6
140°	853.5	885.6	917.7	925.7	1000.5	1100.3	1150.2	1226.8	1380.1	1495.0	1513.6
142.5°	876.8	906.5	936.2	943.6	1012.5	1104.3	1150.2	1217.5	1352.1	1453.1	1469.1
145°	912.5	938.4	964.3	970.8	1028.0	1104.3	1142.4	1197.5	1307.6	1390.2	1402.3
147.5°	948.3	973.5	998.7	1005.0	1050.8	1111.9	1142.4	1185.7	1272.4	1337.4	1347.4
150°	971.6	994.4	1017.1	1022.8	1062.7	1115.8	1142.4	1179.0	1252.2	1307.1	1315.2
152.5°	995.6	1012.9	1030.2	1034.5	1070.5	1118.4	1142.4	1173.6	1236.1	1283.0	1289.1
155°	1031.4	1044.2	1056.9	1060.1	1087.5	1124.1	1142.4	1167.3	1217.0	1254.3	1258.4
157.5°	1057.8	1070.2	1082.6	1085.7	1104.6	1129.8	1142.4	1161.7	1200.4	1229.4	1232.2
160°	1075.6	1085.3	1095.0	1097.4	1112.4	1132.4	1142.4	1159.0	1192.1	1217.0	1218.6
162.5°	1093.5	1100.7	1108.0	1109.8	1120.7	1135.2	1142.4	1156.4	1184.3	1205.3	1206.9
165°	1112.9	1119.5	1126.1	1127.7	1132.6	1139.1	1142.4	1152.4	1172.5	1187.5	1189.1
167.5°	1130.8	1133.9	1137.0	1137.8	1141.9	1147.4	1150.2	1156.8	1169.9	1179.7	1180.4
170°	1142.4	1145.5	1148.6	1149.4	1149.7	1150.0	1150.2	1156.8	1169.9	1179.7	1179.7
172.5°	1148.6	1149.3	1150.0	1150.2	1150.2	1150.2	1150.2	1155.4	1165.7	1173.5	1172.9
175°	1157.2	1157.2	1157.2	1157.2	1154.9	1151.8	1150.2	1153.5	1160.1	1165.0	1165.0
177.5°	1157.2	1157.2	1157.2	1157.2	1155.4	1152.9	1151.7	1154.3	1159.5	1163.4	1162.7
180°	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	616.3	616.3
2.5°	658.0	654.0
5°	846.2	850.2
7.5°	1139.5	1137.6
10°	1417.0	1434.8
12.5°	1619.1	1623.1
15°	1742.0	1749.9
17.5°	1789.6	1791.5
20°	1791.5	1787.6
22.5°	1769.7	1765.8
25°	1744.0	1742.0
27.5°	1720.2	1722.2
30°	1710.3	1716.2
32.5°	1710.3	1720.2
35°	1714.3	1724.2
37.5°	1712.3	1724.2
40°	1704.3	1718.2
42.5°	1682.5	1692.5
45°	1648.9	1660.7
47.5°	1605.3	1613.2
50°	1549.8	1557.7
52.5°	1480.4	1482.4
55°	1397.2	1405.1
57.5°	1308.0	1310.0
60°	1208.9	1214.8
62.5°	1103.9	1103.9
65°	992.9	996.8
67.5°	877.9	887.8
70°	761.0	763.0
72.5°	646.1	646.1
75°	527.2	529.1
77.5°	414.2	414.2
80°	307.2	309.2
82.5°	212.1	216.0
85°	132.8	132.8
87.5°	61.4	55.5
90°	29.5	29.5
92.5°	118.2	94.7
95°	412.0	340.9
97.5°	987.3	852.0
100°	1422.5	1261.3
102.5°	1850.5	1712.5
105°	2396.3	2322.1
107.5°	2753.8	2771.8
110°	2890.2	2967.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2902.3	3021.1
115°	2825.4	2990.0
117.5°	2662.2	2844.8
120°	2530.7	2708.1
122.5°	2402.6	2577.6
125°	2220.0	2381.2
127.5°	2055.7	2191.7
130°	1958.9	2084.5
132.5°	1871.0	1983.5
135°	1750.6	1847.6
137.5°	1654.0	1733.4
140°	1587.8	1662.0
142.5°	1532.9	1596.8
145°	1450.6	1498.9
147.5°	1387.5	1427.5
150°	1347.7	1380.1
152.5°	1313.6	1338.1
155°	1274.6	1290.8
157.5°	1243.6	1255.0
160°	1225.2	1231.7
162.5°	1213.1	1219.3
165°	1195.7	1202.2
167.5°	1183.1	1185.9
170°	1179.7	1179.7
172.5°	1170.5	1168.1
175°	1165.0	1165.0
177.5°	1160.0	1157.2
180°	1157.2	1157.2



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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	4.54	5.34	5.58	6.39	7.81	17.71	18.50	18.74	19.55	20.97
	3H	5.24	5.96	6.29	7.02	8.45	19.53	20.25	20.58	21.31	22.75
	4H	5.54	6.22	6.60	7.28	8.72	20.17	20.85	21.23	21.91	23.36
	6H	5.78	6.41	6.85	7.47	8.93	20.60	21.22	21.67	22.29	23.74
	8H	5.85	6.45	6.93	7.53	8.98	20.71	21.31	21.79	22.39	23.84
	12H	5.86	6.43	6.95	7.51	8.98	20.78	21.34	21.86	22.42	23.89
4H	2H	11.74	12.42	12.81	13.48	14.92	17.97	18.65	19.04	19.71	21.16
	3H	13.30	13.87	14.38	14.96	16.42	20.01	20.57	21.08	21.66	23.12
	4H	13.39	13.92	14.48	14.99	16.47	20.77	21.29	21.85	22.37	23.85
	6H	13.40	13.85	14.49	14.95	16.42	21.30	21.75	22.39	22.85	24.32
	8H	13.38	13.80	14.47	14.89	16.38	21.46	21.88	22.55	22.97	24.46
	12H	13.33	13.71	14.44	14.82	16.31	21.54	21.92	22.65	23.03	24.53
8H	4H	14.83	15.25	15.92	16.34	17.83	20.82	21.24	21.91	22.34	23.83
	6H	15.07	15.42	16.18	16.55	18.04	21.44	21.79	22.56	22.93	24.41
	8H	15.09	15.39	16.21	16.51	18.01	21.66	21.97	22.78	23.08	24.59
	12H	15.05	15.32	16.18	16.43	17.98	21.80	22.07	22.92	23.18	24.72
12H	4H	14.97	15.35	16.08	16.46	17.95	20.77	21.15	21.88	22.26	23.75
	6H	15.32	15.63	16.45	16.75	18.25	21.43	21.73	22.55	22.85	24.36
	8H	15.39	15.66	16.52	16.77	18.32	21.65	21.92	22.78	23.03	24.58