

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: P937846

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

**Test Information**

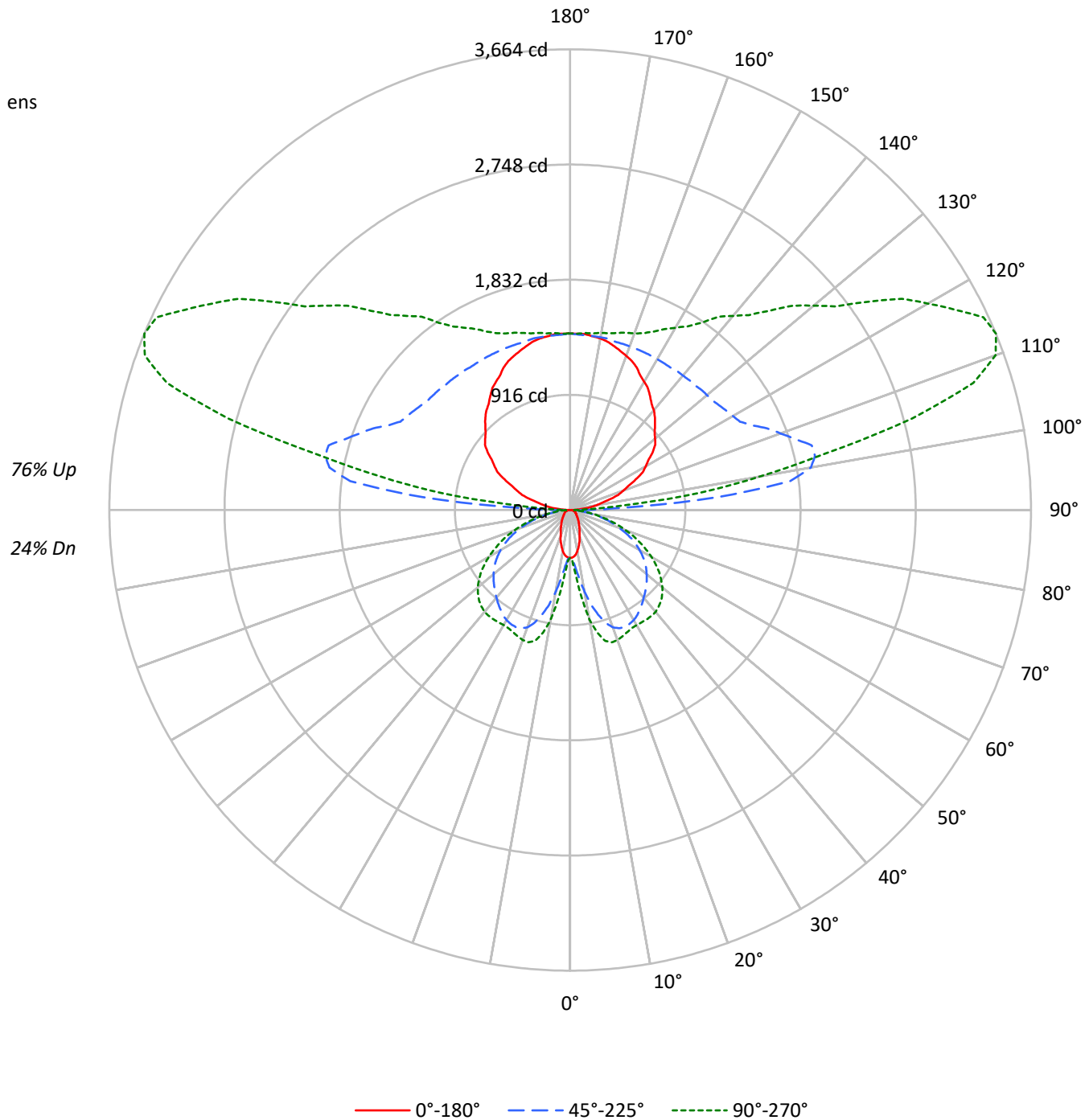
Test Method: LM-79-2019  
Report Number: P937846  
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12039.1 lumens  
Efficiency: N/A  
Efficacy: 126.5 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): 95.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-4000K

### 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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1760	1760	1760
5°	1720	2035	2366
10°	1560	2966	3923
15°	1326	3875	4737
20°	1079	4490	4828
25°	900	4699	4730
30°	759	4729	4721
35°	671	4650	4843
40°	585	4548	4969
45°	530	4474	4988
50°	486	4406	4906
55°	466	4308	4689
60°	477	4119	4345
65°	496	3831	3873
70°	529	3341	3272
75°	586	2724	2553
80°	641	1889	1720
85°	568	1002	881

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4988 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.1	0.4
10°-20°	217.5	1.8
20°-30°	380.5	3.2
30°-40°	489.8	4.1
40°-50°	547.1	4.5
50°-60°	524.0	4.4
60°-70°	415.3	3.4
70°-80°	244.2	2.0
80°-90°	73.2	0.6
90°-100°	684.1	5.7
100°-110°	1798.6	14.9
110°-120°	1865.0	15.5
120°-130°	1495.9	12.4
130°-140°	1173.8	9.7
140°-150°	900.9	7.5
150°-160°	648.8	5.4
160°-170°	397.0	3.3
170°-180°	134.1	1.1
0°-30°	647.1	5.4
0°-40°	1137.0	9.4
0°-60°	2208.1	18.3
0°-90°	2940.8	24.4
90°-120°	4347.7	36.1
90°-150°	7918.4	65.8
90°-180°	9098.0	75.6
0°-180°	12039.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	379	379	379	379	379	
5°	370	396	446	505	523	34
15°	277	511	861	1044	1077	77
25°	177	580	1026	1071	1072	81
35°	120	554	966	1021	1062	75
45°	82	442	854	978	1022	63
55°	59	281	725	842	865	53
65°	46	149	538	605	614	46
75°	34	92	295	325	326	36
85°	12	28	73	80	82	13
90°	10	26	72	36	36	9
95°	90	354	1178	608	414	100
105°	324	491	1988	3019	2816	343
115°	576	699	1593	3177	3626	568
125°	801	898	1449	2448	2888	711
135°	954	1050	1404	1976	2241	738
145°	1107	1177	1386	1686	1818	693
155°	1251	1286	1386	1521	1566	575
165°	1350	1368	1386	1440	1458	381
175°	1404	1404	1395	1413	1413	133
180°	1404	1404	1404	1404	1404	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4
2.5°	379.4	379.4	381.9	383.1	385.5	386.8	389.2	391.7	399.0	400.1	402.6
5°	369.7	374.6	390.4	396.5	413.6	436.8	446.5	462.4	495.4	505.1	511.2
7.5°	355.0	366.0	405.1	414.8	457.5	518.5	544.1	578.3	630.7	656.4	677.1
10°	331.8	355.0	424.6	447.8	517.3	610.0	657.7	705.2	784.5	819.9	833.3
12.5°	306.3	344.0	445.4	477.0	577.1	712.5	769.9	822.3	912.6	960.2	967.5
15°	277.0	328.2	464.8	511.2	640.6	797.9	861.4	926.0	1010.2	1044.4	1052.9
17.5°	251.3	316.0	483.2	532.0	689.3	874.8	939.5	993.1	1061.5	1084.7	1090.7
20°	219.6	296.5	495.4	558.8	740.6	930.9	993.1	1034.6	1081.0	1095.7	1098.1
22.5°	196.4	275.7	502.7	568.5	774.7	965.1	1017.5	1050.5	1082.2	1087.1	1088.3
25°	176.9	252.5	501.5	579.5	804.0	985.9	1026.1	1050.5	1068.8	1071.3	1071.3
27.5°	158.6	227.0	496.6	582.0	826.0	990.7	1022.4	1039.5	1048.1	1052.9	1052.9
30°	142.7	202.6	484.4	577.1	835.8	985.9	1011.4	1020.0	1028.5	1035.9	1039.5
32.5°	130.5	179.4	466.1	567.3	837.0	973.6	992.0	996.8	1009.0	1026.1	1032.2
35°	119.5	156.2	445.4	553.9	829.7	954.1	966.3	971.2	995.6	1021.2	1029.7
37.5°	108.6	139.1	418.5	530.8	818.7	930.9	939.5	948.0	985.9	1016.3	1026.1
40°	97.6	124.4	386.8	505.1	801.6	902.9	910.2	923.6	973.6	1009.0	1018.8
42.5°	89.1	112.2	352.6	478.3	779.6	871.2	882.2	901.6	959.0	996.8	1007.8
45°	81.8	100.1	316.0	441.6	751.5	838.2	854.1	880.9	941.9	978.5	988.2
47.5°	74.4	91.5	278.2	403.9	721.1	805.3	826.0	856.5	918.7	954.1	962.7
50°	68.3	83.0	240.3	363.6	688.1	769.9	794.3	826.0	889.4	922.4	933.4
52.5°	63.4	75.7	204.9	323.3	650.3	733.3	761.4	794.3	854.1	885.8	893.1
55°	58.6	69.6	174.5	280.6	611.3	694.2	724.7	756.5	815.0	841.9	846.8
57.5°	56.1	64.7	148.8	240.3	569.8	650.3	684.5	713.8	768.6	789.4	794.3
60°	52.5	61.0	129.4	206.2	524.7	608.8	638.1	667.4	713.8	730.8	734.5
62.5°	48.8	58.6	114.7	173.3	478.3	560.1	589.3	616.2	655.2	667.4	672.3
65°	46.4	56.1	103.7	148.8	430.7	508.8	538.1	561.2	593.0	605.2	607.6
67.5°	43.9	53.7	95.1	128.1	383.1	457.5	479.5	501.5	525.9	538.1	539.2
70°	40.3	51.2	87.9	113.4	334.3	399.0	417.3	440.4	460.0	466.1	469.7
72.5°	37.8	47.6	83.0	102.5	284.3	342.8	359.9	373.3	390.4	396.5	396.5
75°	34.2	42.7	78.0	91.5	233.0	280.6	295.3	308.6	322.1	324.6	320.9
77.5°	30.5	37.8	67.1	76.9	181.8	222.0	234.2	241.6	252.5	255.0	256.2
80°	25.7	32.9	52.5	59.8	131.8	163.5	172.0	178.1	187.9	187.9	190.3
82.5°	19.6	25.7	37.8	42.7	89.1	112.2	119.5	123.3	129.4	129.4	129.4
85°	12.2	15.8	24.4	28.0	53.7	68.3	73.2	74.4	79.3	80.5	80.5
87.5°	6.1	8.6	15.8	17.1	28.0	35.4	35.4	37.8	37.8	36.6	35.4
90°	9.5	17.0	24.5	26.4	41.5	61.6	71.6	63.6	47.7	35.7	35.7
92.5°	37.7	101.7	165.8	181.8	255.6	353.9	403.2	353.3	253.7	178.9	171.8
95°	90.4	207.7	324.9	354.2	628.9	995.2	1178.3	1051.5	797.8	607.5	586.0
97.5°	156.4	259.8	363.2	389.1	847.1	1458.0	1763.3	1683.2	1522.8	1402.6	1361.5
100°	207.2	301.0	394.8	418.3	926.6	1604.3	1943.3	1949.1	1960.8	1969.6	1920.8
102.5°	250.5	338.0	425.5	447.5	963.0	1650.4	1994.1	2096.3	2300.6	2453.7	2411.9
105°	324.0	398.1	472.2	490.7	990.0	1655.6	1988.5	2217.4	2675.4	3018.9	2996.4
107.5°	399.4	468.5	537.5	554.8	995.0	1581.9	1875.4	2194.9	2833.7	3312.8	3318.3
110°	450.3	512.7	575.1	590.6	987.5	1516.6	1781.3	2138.4	2852.5	3388.1	3411.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	500.2	559.6	619.1	633.9	987.8	1459.6	1695.5	2061.0	2791.9	3340.1	3376.1
115°	575.5	630.4	685.1	698.9	996.9	1394.2	1592.9	1944.9	2649.0	3177.2	3227.1
117.5°	649.9	699.8	749.5	762.0	1015.4	1353.3	1522.2	1839.9	2475.4	2952.0	3007.4
120°	693.2	740.2	787.0	798.8	1030.4	1339.4	1493.9	1784.3	2364.9	2800.4	2854.2
122.5°	735.6	782.9	830.2	842.1	1052.1	1332.2	1472.2	1733.7	2256.6	2648.8	2701.8
125°	800.7	843.8	886.9	897.6	1081.3	1326.3	1448.7	1670.8	2115.0	2448.1	2497.0
127.5°	853.4	897.0	940.5	951.4	1110.6	1322.8	1428.9	1619.6	2001.0	2287.0	2328.2
130°	881.6	928.6	975.4	987.1	1131.9	1324.9	1421.4	1591.1	1930.7	2185.3	2223.4
132.5°	910.8	957.8	1004.6	1016.3	1149.1	1326.3	1414.8	1566.8	1870.7	2098.6	2132.7
135°	954.2	996.9	1039.6	1050.3	1168.0	1325.0	1403.5	1530.7	1785.3	1976.2	2005.6
137.5°	998.4	1040.7	1083.0	1093.6	1196.3	1333.2	1401.6	1509.2	1724.4	1885.8	1909.9
140°	1035.2	1074.1	1113.0	1122.8	1213.5	1334.5	1395.0	1488.0	1673.8	1813.3	1835.7
142.5°	1063.5	1099.5	1135.4	1144.4	1227.9	1339.3	1395.0	1476.6	1639.9	1762.3	1781.7
145°	1106.8	1138.1	1169.6	1177.4	1246.8	1339.3	1385.6	1452.3	1586.0	1686.1	1700.7
147.5°	1150.1	1180.7	1211.3	1218.9	1274.5	1348.5	1385.6	1438.1	1543.2	1622.1	1634.2
150°	1178.3	1206.0	1233.6	1240.6	1288.9	1353.4	1385.6	1429.9	1518.7	1585.3	1595.1
152.5°	1207.5	1228.5	1249.4	1254.7	1298.3	1356.5	1385.6	1423.5	1499.3	1556.1	1563.6
155°	1250.9	1266.4	1281.9	1285.8	1319.1	1363.4	1385.6	1415.8	1476.1	1521.3	1526.2
157.5°	1283.0	1298.0	1313.1	1316.8	1339.7	1370.3	1385.6	1409.0	1455.9	1491.1	1494.5
160°	1304.6	1316.3	1328.1	1331.0	1349.2	1373.5	1385.6	1405.7	1445.9	1476.0	1478.0
162.5°	1326.3	1335.0	1343.8	1346.0	1359.2	1376.7	1385.6	1402.5	1436.4	1461.9	1463.8
165°	1349.8	1357.8	1365.7	1367.7	1373.6	1381.6	1385.6	1397.7	1422.0	1440.2	1442.2
167.5°	1371.5	1375.2	1379.0	1379.9	1384.9	1391.7	1395.0	1402.9	1418.9	1430.8	1431.6
170°	1385.6	1389.4	1393.2	1394.1	1394.4	1394.8	1395.0	1402.9	1418.9	1430.8	1430.8
172.5°	1393.1	1393.9	1394.8	1395.0	1395.0	1395.0	1395.0	1401.3	1413.8	1423.3	1422.6
175°	1403.5	1403.5	1403.5	1403.5	1400.7	1396.9	1395.0	1399.0	1406.9	1412.9	1412.9
177.5°	1403.5	1403.5	1403.5	1403.5	1401.3	1398.4	1396.9	1400.0	1406.3	1411.0	1410.2
180°	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5	1403.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	379.4	379.4
2.5°	405.1	402.6
5°	520.9	523.4
7.5°	701.5	700.3
10°	872.3	883.3
12.5°	996.8	999.2
15°	1072.5	1077.4
17.5°	1101.8	1102.9
20°	1102.9	1100.5
22.5°	1089.6	1087.1
25°	1073.6	1072.5
27.5°	1059.0	1060.3
30°	1052.9	1056.6
32.5°	1052.9	1059.0
35°	1055.4	1061.5
37.5°	1054.2	1061.5
40°	1049.3	1057.8
42.5°	1035.9	1042.0
45°	1015.2	1022.4
47.5°	988.2	993.1
50°	954.1	959.0
52.5°	911.4	912.6
55°	860.2	865.1
57.5°	805.3	806.5
60°	744.3	747.9
62.5°	679.6	679.6
65°	611.3	613.7
67.5°	540.5	546.6
70°	468.6	469.7
72.5°	397.8	397.8
75°	324.6	325.7
77.5°	255.0	255.0
80°	189.1	190.3
82.5°	130.5	133.0
85°	81.8	81.8
87.5°	37.8	34.2
90°	35.7	35.7
92.5°	143.4	114.9
95°	499.8	413.5
97.5°	1197.4	1033.3
100°	1725.2	1529.7
102.5°	2244.4	2077.0
105°	2906.4	2816.4
107.5°	3340.0	3361.7
110°	3505.4	3599.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3520.1	3664.1
115°	3426.8	3626.4
117.5°	3228.8	3450.3
120°	3069.4	3284.5
122.5°	2914.1	3126.3
125°	2692.5	2888.0
127.5°	2493.2	2658.1
130°	2375.8	2528.2
132.5°	2269.3	2405.7
135°	2123.3	2240.9
137.5°	2006.1	2102.4
140°	1925.8	2015.8
142.5°	1859.1	1936.6
145°	1759.3	1817.9
147.5°	1682.7	1731.3
150°	1634.5	1673.8
152.5°	1593.2	1623.0
155°	1545.8	1565.5
157.5°	1508.4	1522.2
160°	1485.9	1493.9
162.5°	1471.3	1478.9
165°	1450.1	1458.1
167.5°	1435.0	1438.3
170°	1430.8	1430.8
172.5°	1419.6	1416.7
175°	1412.9	1412.9
177.5°	1406.8	1403.5
180°	1403.5	1403.5



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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	0.00	0.64	1.10	1.78	3.37	13.14	13.82	14.28	14.96	16.55
	3H	0.65	1.26	1.80	2.41	4.02	14.96	15.58	16.11	16.72	18.33
	4H	0.94	1.52	2.10	2.67	4.28	15.60	16.18	16.76	17.33	18.94
	6H	1.18	1.72	2.35	2.86	4.49	16.02	16.56	17.19	17.70	19.33
	8H	1.24	1.75	2.41	2.92	4.53	16.13	16.65	17.31	17.81	19.43
	12H	1.25	1.74	2.43	2.90	4.54	16.20	16.68	17.37	17.84	19.48
4H	2H	7.15	7.74	8.32	8.88	10.49	13.39	13.97	14.56	15.12	16.73
	3H	8.70	9.19	9.88	10.36	11.99	15.42	15.91	16.59	17.08	18.70
	4H	8.79	9.24	9.96	10.40	12.04	16.18	16.63	17.35	17.79	19.43
	6H	8.79	9.17	9.97	10.36	11.99	16.70	17.09	17.89	18.27	19.91
	8H	8.76	9.12	9.94	10.29	11.94	16.86	17.22	18.04	18.40	20.05
	12H	8.71	9.04	9.90	10.22	11.87	16.95	17.27	18.14	18.46	20.11
8H	4H	10.22	10.58	11.40	11.75	13.40	16.22	16.58	17.40	17.75	19.40
	6H	10.45	10.75	11.65	11.96	13.61	16.84	17.14	18.04	18.35	20.00
	8H	10.47	10.73	11.67	11.92	13.59	17.06	17.32	18.26	18.51	20.18
	12H	10.43	10.65	11.64	11.84	13.54	17.19	17.42	18.40	18.61	20.31
12H	4H	10.35	10.68	11.55	11.86	13.52	16.16	16.49	17.36	17.68	19.33
	6H	10.71	10.97	11.91	12.16	13.83	16.82	17.08	18.03	18.27	19.94
	8H	10.77	11.00	11.98	12.19	13.88	17.04	17.27	18.25	18.46	20.16