

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: P937892

Luminaire Tested: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-8-2700K

Issue Date: 12/17/2024

**Test Information**

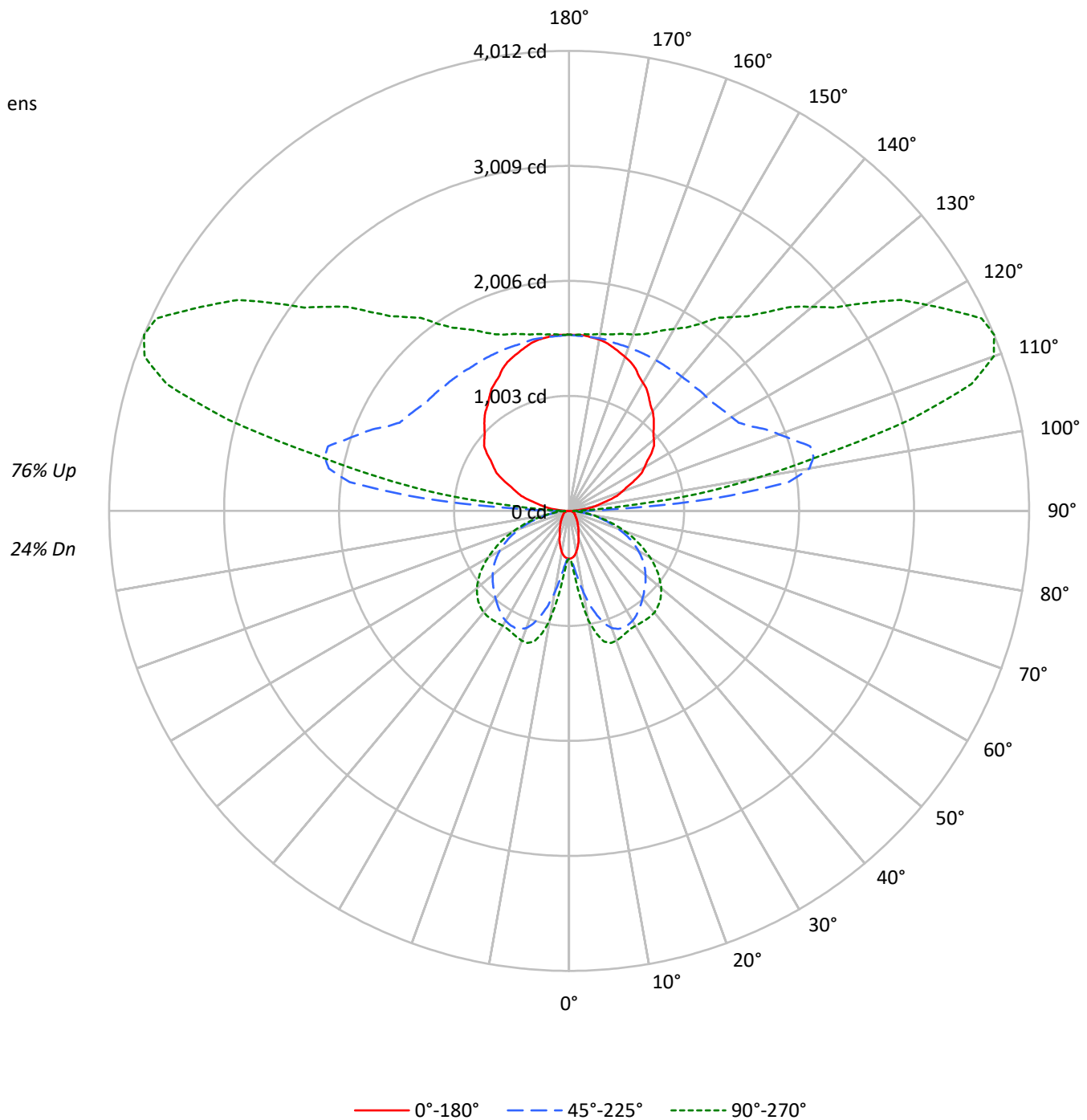
Test Method: LM-79-2019  
Report Number: P937892  
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-8-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13182.1 lumens  
Efficiency: N/A  
Efficacy: 138.5 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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### 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°	1927	1927	1927
5°	1883	2228	2591
10°	1708	3248	4295
15°	1452	4243	5187
20°	1182	4917	5286
25°	986	5145	5179
30°	831	5178	5169
35°	735	5092	5302
40°	641	4980	5441
45°	580	4898	5462
50°	532	4825	5372
55°	509	4717	5134
60°	522	4510	4757
65°	543	4195	4241
70°	578	3658	3583
75°	641	2983	2796
80°	701	2068	1884
85°	619	1098	964

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5462 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.7	0.4
10°-20°	238.2	1.8
20°-30°	416.6	3.2
30°-40°	536.3	4.1
40°-50°	599.1	4.5
50°-60°	573.8	4.4
60°-70°	454.7	3.4
70°-80°	267.4	2.0
80°-90°	80.1	0.6
90°-100°	749.1	5.7
100°-110°	1969.4	14.9
110°-120°	2042.0	15.5
120°-130°	1638.0	12.4
130°-140°	1285.2	9.7
140°-150°	986.5	7.5
150°-160°	710.4	5.4
160°-170°	434.7	3.3
170°-180°	146.9	1.1
0°-30°	708.6	5.4
0°-40°	1244.9	9.4
0°-60°	2417.7	18.3
0°-90°	3220.0	24.4
90°-120°	4760.5	36.1
90°-150°	8670.2	65.8
90°-180°	9962.0	75.6
0°-180°	13182.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	415	415	415	415	415	
5°	405	434	489	553	573	37
15°	303	560	943	1144	1180	84
25°	194	635	1124	1173	1174	89
35°	131	606	1058	1118	1162	82
45°	90	484	935	1071	1120	69
55°	64	307	794	922	947	58
65°	51	163	589	663	672	50
75°	37	100	323	355	357	39
85°	13	31	80	88	90	14
90°	10	29	78	39	39	9
95°	99	388	1290	665	453	110
105°	355	537	2177	3306	3084	376
115°	630	765	1744	3479	3971	622
125°	877	983	1586	2680	3162	778
135°	1045	1150	1537	2164	2454	808
145°	1212	1289	1517	1846	1990	759
155°	1370	1408	1517	1666	1714	629
165°	1478	1498	1517	1577	1597	417
175°	1537	1537	1528	1547	1547	146
180°	1537	1537	1537	1537	1537	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4
2.5°	415.4	415.4	418.1	419.5	422.1	423.5	426.2	428.9	436.8	438.1	440.8
5°	404.8	410.2	427.5	434.2	452.9	478.3	488.9	506.3	542.4	553.1	559.8
7.5°	388.7	400.8	443.5	454.2	501.0	567.7	595.8	633.3	690.6	718.7	741.4
10°	363.3	388.7	464.9	490.3	566.4	667.9	720.1	772.2	859.0	897.7	912.4
12.5°	335.4	376.7	487.6	522.3	631.9	780.2	843.0	900.4	999.3	1051.4	1059.3
15°	303.3	359.4	509.0	559.8	701.4	873.7	943.2	1013.9	1106.2	1143.5	1152.9
17.5°	275.2	346.0	529.1	582.5	754.8	957.9	1028.7	1087.4	1162.2	1187.6	1194.3
20°	240.4	324.6	542.4	611.8	810.9	1019.3	1087.4	1132.9	1183.6	1199.7	1202.4
22.5°	215.0	301.9	550.4	622.5	848.3	1056.8	1114.1	1150.3	1184.9	1190.3	1191.6
25°	193.7	276.5	549.1	634.6	880.4	1079.5	1123.5	1150.3	1170.3	1173.0	1173.0
27.5°	173.7	248.5	543.7	637.2	904.5	1084.7	1119.5	1138.2	1147.6	1152.9	1152.9
30°	156.3	221.8	530.4	631.9	915.1	1079.5	1107.5	1116.8	1126.2	1134.2	1138.2
32.5°	142.9	196.4	510.4	621.2	916.4	1066.0	1086.1	1091.4	1104.8	1123.5	1130.2
35°	130.9	171.0	487.6	606.5	908.5	1044.7	1058.1	1063.4	1090.1	1118.2	1127.5
37.5°	118.9	152.3	458.3	581.2	896.4	1019.3	1028.7	1038.0	1079.5	1112.8	1123.5
40°	106.9	136.3	423.5	553.1	877.7	988.6	996.6	1011.3	1066.0	1104.8	1115.5
42.5°	97.5	122.9	386.0	523.7	853.7	953.9	965.9	987.2	1050.1	1091.4	1103.5
45°	89.5	109.6	346.0	483.6	822.9	917.8	935.1	964.5	1031.4	1071.4	1082.1
47.5°	81.5	100.2	304.6	442.2	789.5	881.8	904.5	937.8	1006.0	1044.7	1054.1
50°	74.8	90.8	263.1	398.1	753.5	843.0	869.7	904.5	973.9	1009.9	1022.0
52.5°	69.4	82.9	224.4	354.0	712.0	802.9	833.7	869.7	935.1	969.9	977.9
55°	64.1	76.2	191.0	307.3	669.3	760.1	793.5	828.3	892.4	921.8	927.2
57.5°	61.5	70.8	162.9	263.1	623.9	712.0	749.5	781.6	841.6	864.3	869.7
60°	57.5	66.8	141.6	225.8	574.5	666.6	698.7	730.8	781.6	800.2	804.3
62.5°	53.5	64.1	125.6	189.7	523.7	613.2	645.2	674.7	717.4	730.8	736.1
65°	50.8	61.5	113.5	162.9	471.6	557.1	589.1	614.5	649.3	662.6	665.3
67.5°	48.1	58.8	104.2	140.2	419.5	501.0	525.0	549.1	575.8	589.1	590.4
70°	44.1	56.1	96.2	124.2	366.0	436.8	456.9	482.3	503.7	510.4	514.3
72.5°	41.4	52.1	90.8	112.2	311.2	375.4	394.1	408.8	427.5	434.2	434.2
75°	37.4	46.7	85.5	100.2	255.2	307.3	323.3	337.9	352.7	355.4	351.4
77.5°	33.4	41.4	73.5	84.2	199.1	243.1	256.5	264.5	276.5	279.2	280.6
80°	28.1	36.1	57.5	65.4	144.3	179.0	188.3	195.0	205.8	205.8	208.4
82.5°	21.4	28.1	41.4	46.7	97.5	122.9	130.9	135.0	141.6	141.6	141.6
85°	13.3	17.3	26.7	30.7	58.8	74.8	80.2	81.5	86.9	88.1	88.1
87.5°	6.7	9.4	17.3	18.7	30.7	38.7	38.7	41.4	41.4	40.0	38.7
90°	10.4	18.6	26.8	28.9	45.4	67.4	78.4	69.6	52.2	39.1	39.1
92.5°	41.2	111.4	181.6	199.1	279.9	387.5	441.4	386.8	277.8	195.9	188.1
95°	99.0	227.4	355.8	387.8	688.6	1089.7	1290.2	1151.4	873.6	665.2	641.6
97.5°	171.2	284.5	397.7	426.0	927.6	1596.4	1930.7	1843.0	1667.4	1535.7	1490.8
100°	226.9	329.6	432.3	458.0	1014.5	1756.6	2127.8	2134.1	2147.0	2156.6	2103.2
102.5°	274.3	370.1	465.9	489.9	1054.5	1807.1	2183.4	2295.3	2519.0	2686.7	2640.9
105°	354.8	435.9	517.0	537.3	1083.9	1812.8	2177.3	2427.9	2929.4	3305.5	3280.9
107.5°	437.3	512.9	588.5	607.5	1089.4	1732.1	2053.5	2403.2	3102.7	3627.3	3633.3
110°	493.0	561.3	629.7	646.7	1081.3	1660.6	1950.4	2341.4	3123.4	3709.8	3735.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	547.7	612.7	677.9	694.1	1081.6	1598.2	1856.4	2256.6	3056.9	3657.2	3696.7
115°	630.2	690.2	750.2	765.2	1091.5	1526.6	1744.1	2129.5	2900.6	3478.8	3533.5
117.5°	711.6	766.2	820.7	834.3	1111.8	1481.7	1666.7	2014.6	2710.4	3232.3	3293.0
120°	759.1	810.4	861.7	874.6	1128.3	1466.6	1635.7	1953.7	2589.4	3066.3	3125.1
122.5°	805.5	857.3	909.0	922.0	1152.0	1458.6	1612.0	1898.3	2470.9	2900.3	2958.3
125°	876.7	923.9	971.1	982.9	1183.9	1452.2	1586.2	1829.5	2315.8	2680.5	2734.0
127.5°	934.4	982.2	1029.8	1041.7	1216.0	1448.4	1564.6	1773.4	2191.0	2504.1	2549.3
130°	965.3	1016.7	1068.0	1080.9	1239.3	1450.7	1556.3	1742.2	2114.0	2392.8	2434.5
132.5°	997.3	1048.7	1100.0	1112.8	1258.2	1452.2	1549.1	1715.5	2048.3	2297.9	2335.2
135°	1044.8	1091.5	1138.3	1150.0	1278.9	1450.8	1536.7	1676.1	1954.7	2163.8	2196.0
137.5°	1093.2	1139.5	1185.8	1197.4	1309.8	1459.7	1534.6	1652.5	1888.1	2064.8	2091.2
140°	1133.4	1176.1	1218.7	1229.4	1328.8	1461.2	1527.5	1629.3	1832.7	1985.4	2010.0
142.5°	1164.4	1203.9	1243.2	1253.1	1344.5	1466.5	1527.5	1616.8	1795.6	1929.7	1950.9
145°	1211.8	1246.2	1280.7	1289.2	1365.2	1466.5	1517.1	1590.2	1736.5	1846.2	1862.2
147.5°	1259.3	1292.8	1326.3	1334.6	1395.5	1476.6	1517.1	1574.7	1689.7	1776.1	1789.3
150°	1290.2	1320.5	1350.8	1358.3	1411.2	1481.8	1517.1	1565.7	1662.9	1735.8	1746.6
152.5°	1322.2	1345.1	1368.0	1373.8	1421.6	1485.2	1517.1	1558.6	1641.6	1703.9	1712.0
155°	1369.7	1386.6	1403.6	1407.8	1444.3	1492.8	1517.1	1550.2	1616.2	1665.7	1671.1
157.5°	1404.8	1421.2	1437.7	1441.8	1466.9	1500.4	1517.1	1542.8	1594.1	1632.6	1636.4
160°	1428.5	1441.3	1454.2	1457.3	1477.3	1503.9	1517.1	1539.1	1583.1	1616.1	1618.3
162.5°	1452.2	1461.7	1471.4	1473.8	1488.2	1507.4	1517.1	1535.6	1572.8	1600.7	1602.8
165°	1478.0	1486.7	1495.4	1497.6	1504.1	1512.7	1517.1	1530.5	1557.0	1577.0	1579.2
167.5°	1501.7	1505.8	1509.9	1510.9	1516.4	1523.8	1527.5	1536.1	1553.6	1566.6	1567.5
170°	1517.1	1521.3	1525.5	1526.5	1526.8	1527.3	1527.5	1536.1	1553.6	1566.6	1566.6
172.5°	1525.4	1526.3	1527.3	1527.5	1527.5	1527.5	1527.5	1534.3	1548.1	1558.4	1557.6
175°	1536.7	1536.7	1536.7	1536.7	1533.6	1529.6	1527.5	1531.8	1540.5	1547.1	1547.1
177.5°	1536.7	1536.7	1536.7	1536.7	1534.3	1531.2	1529.6	1532.9	1539.8	1545.0	1544.1
180°	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7	1536.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	415.4	415.4
2.5°	443.5	440.8
5°	570.4	573.1
7.5°	768.1	766.8
10°	955.2	967.2
12.5°	1091.4	1094.1
15°	1174.3	1179.7
17.5°	1206.4	1207.6
20°	1207.6	1205.0
22.5°	1193.0	1190.3
25°	1175.6	1174.3
27.5°	1159.5	1160.9
30°	1152.9	1157.0
32.5°	1152.9	1159.5
35°	1155.6	1162.2
37.5°	1154.3	1162.2
40°	1148.9	1158.2
42.5°	1134.2	1140.9
45°	1111.5	1119.5
47.5°	1082.1	1087.4
50°	1044.7	1050.1
52.5°	997.9	999.3
55°	941.8	947.2
57.5°	881.8	883.1
60°	814.9	818.9
62.5°	744.1	744.1
65°	669.3	672.0
67.5°	591.8	598.5
70°	513.0	514.3
72.5°	435.6	435.6
75°	355.4	356.7
77.5°	279.2	279.2
80°	207.1	208.4
82.5°	142.9	145.6
85°	89.5	89.5
87.5°	41.4	37.4
90°	39.1	39.1
92.5°	157.0	125.8
95°	547.2	452.8
97.5°	1311.1	1131.5
100°	1889.0	1675.0
102.5°	2457.5	2274.2
105°	3182.3	3083.8
107.5°	3657.1	3680.9
110°	3838.2	3940.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3854.3	4012.0
115°	3752.1	3970.8
117.5°	3535.4	3777.9
120°	3360.8	3596.4
122.5°	3190.8	3423.2
125°	2948.2	3162.2
127.5°	2729.9	2910.5
130°	2601.4	2768.2
132.5°	2484.7	2634.1
135°	2324.9	2453.6
137.5°	2196.6	2302.1
140°	2108.6	2207.1
142.5°	2035.6	2120.5
145°	1926.4	1990.5
147.5°	1842.5	1895.7
150°	1789.7	1832.7
152.5°	1744.5	1777.1
155°	1692.6	1714.1
157.5°	1651.6	1666.7
160°	1627.0	1635.7
162.5°	1611.0	1619.3
165°	1587.8	1596.6
167.5°	1571.2	1574.9
170°	1566.6	1566.6
172.5°	1554.4	1551.2
175°	1547.1	1547.1
177.5°	1540.4	1536.7
180°	1536.7	1536.7



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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	0.27	0.96	1.41	2.09	3.69	13.45	14.14	14.60	15.27	16.87
	3H	0.96	1.58	2.11	2.72	4.33	15.28	15.89	16.43	17.04	18.64
	4H	1.25	1.84	2.41	2.98	4.59	15.91	16.50	17.07	17.64	19.26
	6H	1.49	2.03	2.66	3.18	4.80	16.33	16.87	17.50	18.02	19.64
	8H	1.56	2.07	2.73	3.23	4.85	16.45	16.96	17.62	18.12	19.74
	12H	1.57	2.05	2.74	3.21	4.85	16.51	17.00	17.69	18.15	19.79
4H	2H	7.46	8.05	8.63	9.19	10.81	13.70	14.29	14.87	15.43	17.05
	3H	9.02	9.50	10.19	10.67	12.30	15.73	16.22	16.91	17.39	19.02
	4H	9.10	9.55	10.28	10.71	12.36	16.49	16.94	17.67	18.10	19.74
	6H	9.10	9.49	10.28	10.67	12.30	17.02	17.41	18.20	18.59	20.22
	8H	9.07	9.43	10.25	10.61	12.26	17.18	17.54	18.36	18.71	20.36
	12H	9.02	9.35	10.22	10.53	12.19	17.26	17.59	18.46	18.77	20.43
8H	4H	10.53	10.89	11.71	12.07	13.72	16.54	16.90	17.72	18.07	19.72
	6H	10.77	11.06	11.97	12.28	13.93	17.16	17.45	18.36	18.67	20.32
	8H	10.78	11.04	11.99	12.23	13.90	17.37	17.63	18.58	18.83	20.49
	12H	10.74	10.97	11.95	12.16	13.86	17.51	17.74	18.72	18.93	20.63
12H	4H	10.67	10.99	11.86	12.18	13.83	16.48	16.81	17.68	17.99	19.65
	6H	11.02	11.28	12.23	12.47	14.14	17.14	17.40	18.34	18.59	20.26
	8H	11.08	11.31	12.29	12.50	14.20	17.36	17.59	18.57	18.78	20.48