

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: P937924

Luminaire Tested: SQ4-FB-125U-075D-927-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937924  
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-927-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

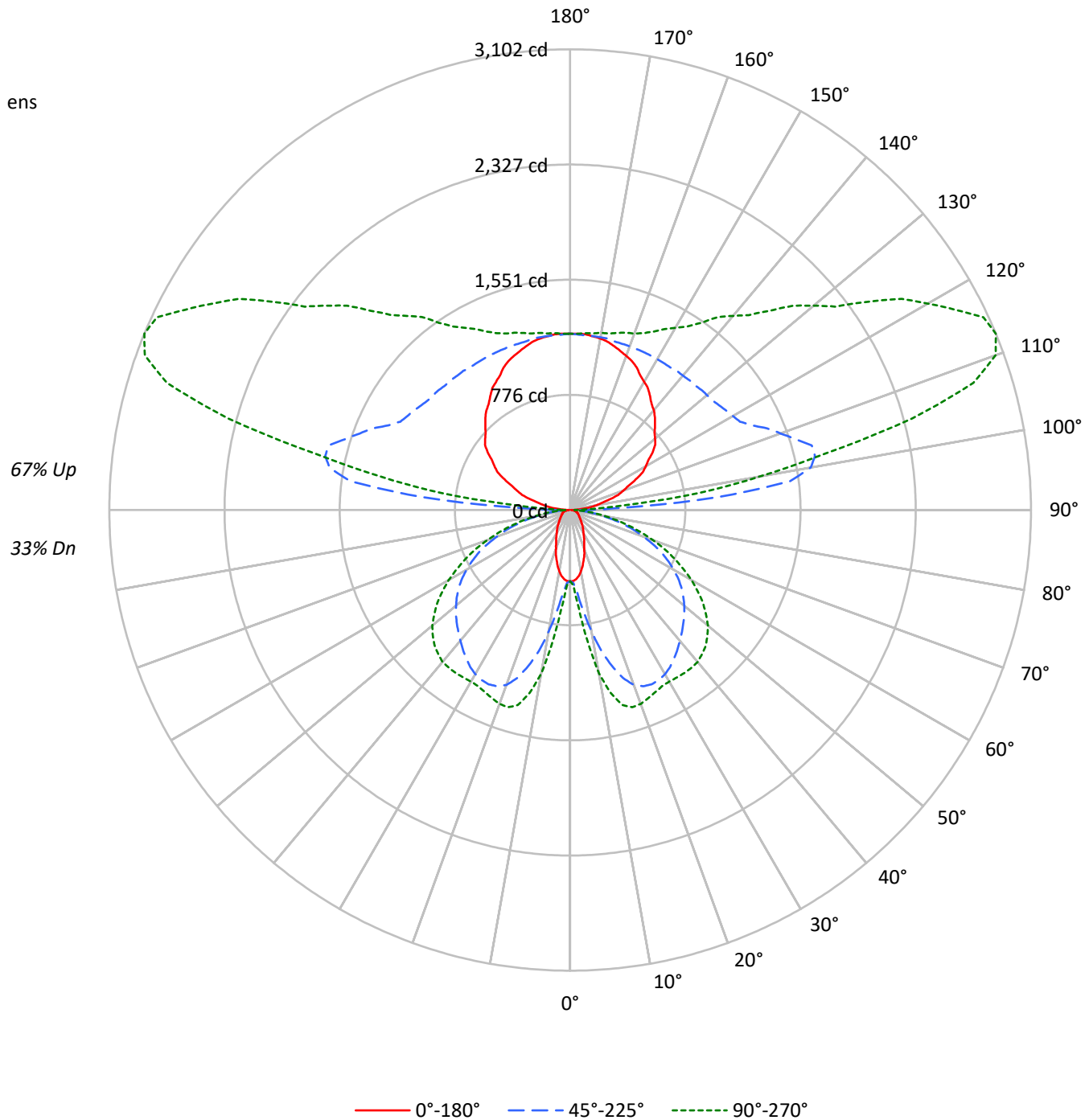
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11411.4 lumens  
Efficiency: N/A  
Efficacy: 102.6 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

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

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

	0°	45°	90°
0°	2222	2222	2222
5°	2171	2568	2987
10°	1969	3744	4952
15°	1674	4891	5980
20°	1362	5668	6094
25°	1137	5932	5970
30°	958	5969	5959
35°	847	5870	6113
40°	738	5741	6272
45°	669	5647	6297
50°	613	5562	6193
55°	587	5438	5918
60°	601	5198	5485
65°	625	4835	4889
70°	666	4217	4130
75°	738	3439	3223
80°	806	2384	2171
85°	717	1265	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6297 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	0.5
10°-20°	274.6	2.4
20°-30°	480.3	4.2
30°-40°	618.3	5.4
40°-50°	690.6	6.1
50°-60°	661.5	5.8
60°-70°	524.2	4.6
70°-80°	308.2	2.7
80°-90°	90.2	0.8
90°-100°	579.1	5.1
100°-110°	1522.5	13.3
110°-120°	1578.7	13.8
120°-130°	1266.3	11.1
130°-140°	993.6	8.7
140°-150°	762.6	6.7
150°-160°	549.2	4.8
160°-170°	336.0	2.9
170°-180°	113.5	1.0
0°-30°	816.8	7.2
0°-40°	1435.1	12.6
0°-60°	2787.2	24.4
0°-90°	3709.8	32.5
90°-120°	3680.3	32.3
90°-150°	6702.9	58.7
90°-180°	7702.0	67.5
0°-180°	11411.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	467	500	564	638	661	43
15°	350	645	1087	1318	1360	97
25°	223	732	1295	1352	1354	103
35°	151	699	1220	1289	1340	94
45°	103	558	1078	1235	1291	80
55°	74	354	915	1063	1092	67
65°	58	188	679	764	775	58
75°	43	116	373	410	411	45
85°	15	35	92	102	103	16
90°	8	22	61	30	30	8
95°	76	300	998	514	350	85
105°	274	415	1683	2556	2384	291
115°	487	592	1348	2690	3070	481
125°	678	760	1226	2072	2445	602
135°	808	889	1188	1673	1897	625
145°	937	997	1173	1427	1539	587
155°	1059	1088	1173	1288	1325	487
165°	1143	1158	1173	1219	1234	322
175°	1188	1188	1181	1196	1196	113
180°	1188	1188	1188	1188	1188	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9
2.5°	478.9	478.9	482.0	483.6	486.6	488.2	491.3	494.3	503.6	505.1	508.2
5°	466.6	472.8	492.8	500.5	522.1	551.3	563.6	583.7	625.2	637.6	645.3
7.5°	448.1	462.0	511.3	523.6	577.5	654.5	686.8	730.0	796.2	828.5	854.7
10°	418.9	448.1	535.9	565.2	653.0	770.0	830.1	890.2	990.3	1035.0	1051.9
12.5°	386.5	434.3	562.1	602.1	728.4	899.4	971.8	1038.0	1152.0	1212.1	1221.3
15°	349.6	414.3	586.7	645.3	808.5	1007.2	1087.3	1168.9	1275.2	1318.3	1329.1
17.5°	317.2	398.9	609.8	671.4	870.1	1104.3	1185.9	1253.6	1339.9	1369.1	1376.8
20°	277.2	374.2	625.2	705.3	934.9	1175.1	1253.6	1306.0	1364.5	1383.0	1386.1
22.5°	247.9	348.0	634.5	717.6	978.0	1218.2	1284.4	1326.0	1366.1	1372.2	1373.8
25°	223.3	318.8	632.9	731.5	1014.9	1244.4	1295.2	1326.0	1349.1	1352.2	1352.2
27.5°	200.2	286.4	626.8	734.6	1042.7	1250.6	1290.6	1312.2	1322.9	1329.1	1329.1
30°	180.2	255.6	611.4	728.4	1055.0	1244.4	1276.7	1287.5	1298.3	1307.5	1312.2
32.5°	164.8	226.4	588.3	716.1	1056.5	1229.0	1252.1	1258.3	1273.7	1295.2	1302.9
35°	150.9	197.1	562.1	699.2	1047.3	1204.4	1219.8	1225.9	1256.7	1289.1	1299.8
37.5°	137.1	175.6	528.2	669.9	1033.4	1175.1	1185.9	1196.7	1244.4	1282.9	1295.2
40°	123.2	157.1	488.2	637.6	1011.9	1139.7	1148.9	1165.9	1229.0	1273.7	1286.0
42.5°	112.4	141.7	445.1	603.7	984.1	1099.6	1113.5	1138.1	1210.5	1258.3	1272.1
45°	103.2	126.3	398.9	557.5	948.7	1058.1	1078.1	1112.0	1189.0	1235.2	1247.5
47.5°	93.9	115.5	351.1	509.7	910.2	1016.5	1042.7	1081.2	1159.7	1204.4	1215.1
50°	86.2	104.7	303.4	458.9	868.6	971.8	1002.6	1042.7	1122.7	1164.3	1178.2
52.5°	80.1	95.5	258.7	408.1	820.8	925.6	961.0	1002.6	1078.1	1118.1	1127.4
55°	73.9	87.8	220.2	354.2	771.5	876.3	914.8	954.9	1028.8	1062.7	1068.8
57.5°	70.8	81.6	187.9	303.4	719.2	820.8	863.9	901.0	970.3	996.5	1002.6
60°	66.2	77.0	163.2	260.3	662.2	768.5	805.4	842.4	901.0	922.5	927.2
62.5°	61.6	73.9	144.8	218.7	603.7	706.9	743.8	777.7	827.0	842.4	848.5
65°	58.5	70.8	130.9	187.9	543.6	642.2	679.1	708.4	748.4	763.8	766.9
67.5°	55.4	67.8	120.1	161.7	483.6	577.5	605.2	632.9	663.7	679.1	680.7
70°	50.8	64.7	110.9	143.2	422.0	503.6	526.7	555.9	580.6	588.3	592.9
72.5°	47.7	60.1	104.7	129.4	358.8	432.7	454.3	471.2	492.8	500.5	500.5
75°	43.1	53.9	98.6	115.5	294.1	354.2	372.7	389.6	406.6	409.6	405.0
77.5°	38.5	47.7	84.7	97.0	229.5	280.3	295.7	304.9	318.8	321.9	323.4
80°	32.3	41.6	66.2	75.5	166.3	206.4	217.1	224.8	237.2	237.2	240.2
82.5°	24.6	32.3	47.7	53.9	112.4	141.7	150.9	155.5	163.2	163.2	163.2
85°	15.4	20.0	30.8	35.4	67.8	86.2	92.4	93.9	100.1	101.6	101.6
87.5°	7.7	10.8	20.0	21.6	35.4	44.7	44.7	47.7	47.7	46.2	44.7
90°	8.0	14.4	20.7	22.3	35.1	52.1	60.6	53.8	40.3	30.3	30.3
92.5°	31.9	86.1	140.4	153.9	216.4	299.6	341.3	299.1	214.8	151.5	145.5
95°	76.5	175.8	275.0	299.8	532.4	842.5	997.5	890.1	675.4	514.3	496.0
97.5°	132.4	219.9	307.5	329.3	717.1	1234.2	1492.6	1424.8	1289.1	1187.3	1152.5
100°	175.4	254.8	334.2	354.0	784.3	1358.0	1645.0	1649.9	1659.8	1667.3	1625.9
102.5°	212.1	286.1	360.2	378.8	815.2	1397.1	1688.0	1774.5	1947.4	2077.1	2041.7
105°	274.3	337.0	399.7	415.4	838.0	1401.5	1683.2	1877.0	2264.7	2555.5	2536.5
107.5°	338.1	396.6	455.0	469.6	842.2	1339.1	1587.5	1857.9	2398.7	2804.3	2808.9
110°	381.2	434.0	486.8	500.0	835.9	1283.8	1507.8	1810.1	2414.6	2868.0	2887.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	423.4	473.7	524.1	536.6	836.1	1235.5	1435.2	1744.6	2363.3	2827.4	2857.9
115°	487.2	533.6	580.0	591.6	843.8	1180.2	1348.3	1646.3	2242.4	2689.5	2731.7
117.5°	550.2	592.4	634.5	645.0	859.6	1145.5	1288.5	1557.5	2095.4	2498.9	2545.8
120°	586.8	626.5	666.2	676.1	872.3	1133.8	1264.6	1510.4	2001.8	2370.5	2416.0
122.5°	622.7	662.7	702.8	712.8	890.6	1127.7	1246.2	1467.5	1910.2	2242.2	2287.1
125°	677.8	714.3	750.8	759.8	915.3	1122.7	1226.3	1414.3	1790.3	2072.3	2113.6
127.5°	722.4	759.3	796.1	805.3	940.1	1119.7	1209.6	1371.0	1693.8	1935.9	1970.8
130°	746.3	786.0	825.7	835.6	958.1	1121.5	1203.2	1346.9	1634.3	1849.8	1882.1
132.5°	771.0	810.7	850.4	860.3	972.7	1122.7	1197.6	1326.2	1583.5	1776.5	1805.3
135°	807.7	843.8	880.0	889.0	988.7	1121.6	1188.0	1295.8	1511.2	1672.8	1697.7
137.5°	845.2	881.0	916.8	925.7	1012.6	1128.5	1186.4	1277.5	1459.7	1596.3	1616.7
140°	876.3	909.2	942.2	950.4	1027.3	1129.7	1180.9	1259.6	1416.9	1534.9	1553.9
142.5°	900.2	930.7	961.1	968.7	1039.4	1133.7	1180.9	1249.9	1388.2	1491.8	1508.2
145°	936.9	963.4	990.1	996.7	1055.4	1133.7	1172.9	1229.4	1342.5	1427.3	1439.7
147.5°	973.6	999.5	1025.3	1031.8	1078.8	1141.5	1172.9	1217.4	1306.3	1373.1	1383.3
150°	997.5	1020.9	1044.3	1050.1	1091.0	1145.6	1172.9	1210.4	1285.6	1342.0	1350.3
152.5°	1022.2	1039.9	1057.6	1062.1	1099.0	1148.2	1172.9	1205.0	1269.1	1317.2	1323.6
155°	1058.9	1072.0	1085.1	1088.4	1116.6	1154.1	1172.9	1198.4	1249.5	1287.7	1291.9
157.5°	1086.0	1098.7	1111.5	1114.7	1134.1	1159.9	1172.9	1192.7	1232.4	1262.2	1265.1
160°	1104.3	1114.3	1124.2	1126.7	1142.1	1162.6	1172.9	1189.9	1223.9	1249.4	1251.1
162.5°	1122.7	1130.1	1137.5	1139.4	1150.5	1165.4	1172.9	1187.2	1215.9	1237.5	1239.1
165°	1142.6	1149.4	1156.1	1157.8	1162.8	1169.5	1172.9	1183.2	1203.7	1219.1	1220.8
167.5°	1160.9	1164.1	1167.3	1168.1	1172.3	1178.0	1180.9	1187.6	1201.0	1211.1	1211.8
170°	1172.9	1176.1	1179.3	1180.1	1180.3	1180.7	1180.9	1187.6	1201.0	1211.1	1211.1
172.5°	1179.3	1179.9	1180.7	1180.9	1180.9	1180.9	1180.9	1186.2	1196.8	1204.8	1204.2
175°	1188.0	1188.0	1188.0	1188.0	1185.6	1182.5	1180.9	1184.3	1191.0	1196.0	1196.0
177.5°	1188.0	1188.0	1188.0	1188.0	1186.2	1183.7	1182.5	1185.1	1190.4	1194.4	1193.7
180°	1188.0	1188.0	1188.0	1188.0	1188.0	1188.0	1188.0	1188.0	1188.0	1188.0	1188.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	478.9	478.9
2.5°	511.3	508.2
5°	657.6	660.7
7.5°	885.6	884.0
10°	1101.2	1115.0
12.5°	1258.3	1261.3
15°	1353.7	1359.9
17.5°	1390.7	1392.2
20°	1392.2	1389.2
22.5°	1375.3	1372.2
25°	1355.3	1353.7
27.5°	1336.8	1338.3
30°	1329.1	1333.7
32.5°	1329.1	1336.8
35°	1332.2	1339.9
37.5°	1330.6	1339.9
40°	1324.5	1335.3
42.5°	1307.5	1315.2
45°	1281.4	1290.6
47.5°	1247.5	1253.6
50°	1204.4	1210.5
52.5°	1150.5	1152.0
55°	1085.8	1091.9
57.5°	1016.5	1018.0
60°	939.5	944.1
62.5°	857.8	857.8
65°	771.5	774.6
67.5°	682.2	689.9
70°	591.4	592.9
72.5°	502.0	502.0
75°	409.6	411.2
77.5°	321.9	321.9
80°	238.7	240.2
82.5°	164.8	167.9
85°	103.2	103.2
87.5°	47.7	43.1
90°	30.3	30.3
92.5°	121.4	97.3
95°	423.0	350.0
97.5°	1013.6	874.7
100°	1460.4	1294.9
102.5°	1899.9	1758.1
105°	2460.2	2384.1
107.5°	2827.3	2845.7
110°	2967.3	3046.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2979.7	3101.6
115°	2900.7	3069.8
117.5°	2733.2	2920.7
120°	2598.2	2780.3
122.5°	2466.8	2646.4
125°	2279.2	2444.7
127.5°	2110.5	2250.1
130°	2011.1	2140.1
132.5°	1920.9	2036.4
135°	1797.3	1896.9
137.5°	1698.2	1779.7
140°	1630.2	1706.3
142.5°	1573.7	1639.3
145°	1489.3	1538.8
147.5°	1424.4	1465.5
150°	1383.6	1416.9
152.5°	1348.7	1373.8
155°	1308.5	1325.2
157.5°	1276.8	1288.5
160°	1257.8	1264.6
162.5°	1245.5	1251.9
165°	1227.5	1234.3
167.5°	1214.7	1217.5
170°	1211.1	1211.1
172.5°	1201.7	1199.2
175°	1196.0	1196.0
177.5°	1190.9	1188.0
180°	1188.0	1188.0



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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	1.92	2.66	3.01	3.75	5.25	15.10	15.84	16.18	16.93	18.43
	3H	2.61	3.28	3.71	4.38	5.90	16.93	17.60	18.02	18.69	20.21
	4H	2.91	3.54	4.01	4.64	6.16	17.57	18.20	18.67	19.30	20.82
	6H	3.15	3.74	4.27	4.84	6.37	17.99	18.58	19.11	19.68	21.21
	8H	3.22	3.77	4.34	4.89	6.42	18.11	18.67	19.23	19.78	21.31
	12H	3.23	3.76	4.35	4.87	6.42	18.17	18.70	19.30	19.81	21.37
4H	2H	9.12	9.75	10.23	10.85	12.37	15.36	15.99	16.47	17.09	18.61
	3H	10.67	11.21	11.80	12.33	13.87	17.39	17.92	18.51	19.05	20.58
	4H	10.76	11.25	11.89	12.37	13.92	18.15	18.64	19.28	19.76	21.31
	6H	10.77	11.19	11.90	12.33	13.87	18.68	19.10	19.82	20.24	21.79
	8H	10.74	11.13	11.87	12.26	13.83	18.84	19.24	19.98	20.37	21.93
	12H	10.69	11.05	11.84	12.19	13.76	18.93	19.29	20.08	20.43	22.00
8H	4H	12.20	12.59	13.33	13.72	15.28	18.20	18.59	19.33	19.73	21.29
	6H	12.44	12.76	13.59	13.93	15.49	18.83	19.15	19.98	20.32	21.88
	8H	12.45	12.74	13.61	13.89	15.47	19.04	19.33	20.20	20.48	22.06
	12H	12.41	12.66	13.58	13.81	15.43	19.18	19.43	20.35	20.58	22.20
12H	4H	12.34	12.69	13.49	13.84	15.40	18.15	18.50	19.30	19.65	21.22
	6H	12.69	12.98	13.85	14.13	15.71	18.81	19.09	19.97	20.24	21.82
	8H	12.76	13.01	13.92	14.16	15.77	19.03	19.28	20.20	20.43	22.05