

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: P938003

Luminaire Tested: SQ4-FB-125U-075D-B40-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938003  
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-B40-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

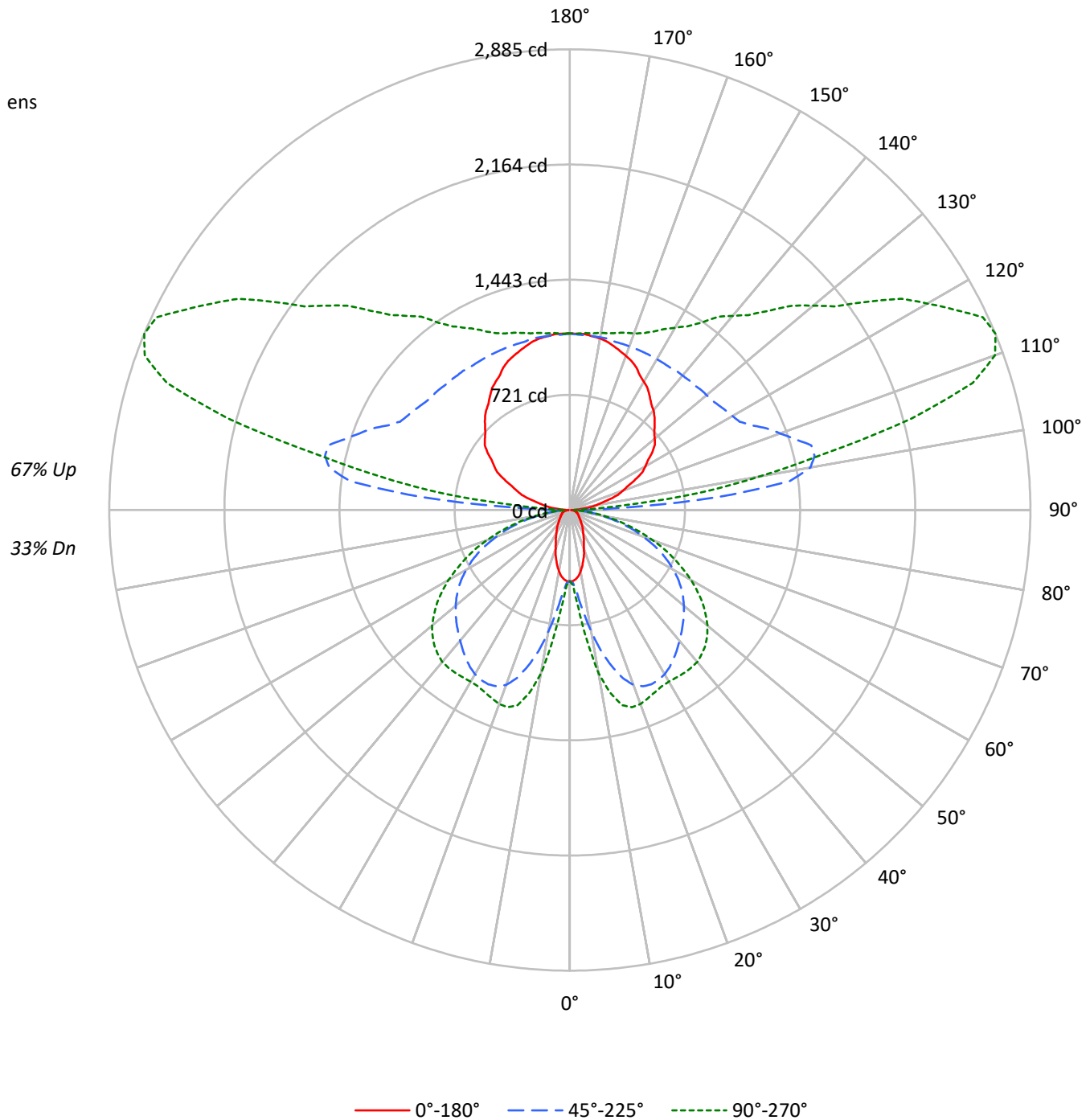
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10614.7 lumens  
Efficiency: N/A  
Efficacy: 127.3 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): 83.4  
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	50	30	10	0
RCR																					
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	33	33	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	27	27	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	23	23	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	19	19	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	16	16	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	14	14	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	12	12	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	11	11	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	10	10	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	9	9	9	7

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

	0°	45°	90°
0°	2756	2756	2756
5°	2691	3185	3704
10°	2440	4641	6141
15°	2073	6062	7416
20°	1687	7024	7558
25°	1407	7348	7405
30°	1186	7392	7390
35°	1048	7268	7582
40°	913	7105	7780
45°	826	6987	7810
50°	757	6880	7680
55°	725	6723	7339
60°	741	6425	6802
65°	769	5973	6063
70°	818	5205	5122
75°	902	4241	3998
80°	980	2938	2694
85°	853	1557	1379

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7810 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.6	0.5
10°-20°	255.4	2.4
20°-30°	446.8	4.2
30°-40°	575.1	5.4
40°-50°	642.4	6.1
50°-60°	615.2	5.8
60°-70°	487.6	4.6
70°-80°	286.7	2.7
80°-90°	83.9	0.8
90°-100°	538.7	5.1
100°-110°	1416.2	13.3
110°-120°	1468.5	13.8
120°-130°	1177.9	11.1
130°-140°	924.2	8.7
140°-150°	709.4	6.7
150°-160°	510.9	4.8
160°-170°	312.6	2.9
170°-180°	105.6	1.0
0°-30°	759.8	7.2
0°-40°	1335.0	12.6
0°-60°	2592.6	24.4
0°-90°	3450.7	32.5
90°-120°	3423.4	32.3
90°-150°	6234.9	58.7
90°-180°	7164.0	67.5
0°-180°	10614.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	434	466	524	593	614	40
15°	325	600	1011	1226	1265	90
25°	208	680	1205	1258	1259	96
35°	140	650	1135	1199	1246	88
45°	96	519	1003	1149	1200	74
55°	69	330	851	988	1016	63
65°	54	175	632	710	720	54
75°	40	107	347	381	382	42
85°	14	33	86	94	96	15
90°	7	21	56	28	28	7
95°	71	279	928	478	326	79
105°	255	386	1566	2377	2218	271
115°	453	550	1254	2502	2855	448
125°	630	707	1141	1928	2274	560
135°	751	827	1105	1556	1764	581
145°	871	927	1091	1328	1431	546
155°	985	1012	1091	1198	1233	453
165°	1063	1077	1091	1134	1148	300
175°	1105	1105	1098	1113	1113	105
180°	1105	1105	1105	1105	1105	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5
2.5°	445.5	445.5	448.4	449.8	452.7	454.1	457.0	459.8	468.4	469.9	472.7
5°	434.0	439.8	458.4	465.6	485.6	512.8	524.3	542.9	581.6	593.1	600.2
7.5°	416.9	429.8	475.6	487.0	537.2	608.8	638.9	679.0	740.6	770.7	795.0
10°	389.6	416.9	498.5	525.7	607.4	716.2	772.1	828.0	921.1	962.6	978.4
12.5°	359.6	404.0	522.9	560.1	677.6	836.6	903.9	965.5	1071.5	1127.5	1136.1
15°	325.2	385.3	545.8	600.2	752.1	936.9	1011.3	1087.4	1186.2	1226.3	1236.3
17.5°	295.1	371.0	567.3	624.6	809.4	1027.1	1103.1	1166.2	1246.4	1273.6	1280.8
20°	257.8	348.1	581.6	656.1	869.5	1093.1	1166.2	1214.9	1269.3	1286.5	1289.3
22.5°	230.6	323.7	590.2	667.5	909.6	1133.2	1194.8	1233.5	1270.7	1276.5	1277.9
25°	207.7	296.5	588.8	680.4	944.0	1157.6	1204.8	1233.5	1255.0	1257.8	1257.8
27.5°	186.2	266.4	583.0	683.3	969.8	1163.3	1200.5	1220.6	1230.6	1236.3	1236.3
30°	167.6	237.8	568.7	677.6	981.3	1157.6	1187.6	1197.7	1207.7	1216.3	1220.6
32.5°	153.3	210.6	547.2	666.1	982.7	1143.2	1164.7	1170.4	1184.8	1204.8	1212.0
35°	140.4	183.4	522.9	650.4	974.1	1120.3	1134.6	1140.4	1169.0	1199.1	1209.1
37.5°	127.5	163.3	491.3	623.1	961.2	1093.1	1103.1	1113.1	1157.6	1193.4	1204.8
40°	114.6	146.1	454.1	593.1	941.2	1060.0	1068.6	1084.4	1143.2	1184.8	1196.2
42.5°	104.6	131.8	414.0	561.5	915.4	1022.8	1035.7	1058.6	1126.0	1170.4	1183.3
45°	96.0	117.5	371.0	518.6	882.4	984.1	1002.8	1034.3	1106.0	1149.0	1160.4
47.5°	87.4	107.4	326.6	474.2	846.6	945.4	969.8	1005.6	1078.7	1120.3	1130.3
50°	80.2	97.4	282.2	426.9	807.9	903.9	932.6	969.8	1044.3	1083.0	1096.0
52.5°	74.5	88.8	240.7	379.6	763.5	860.9	893.9	932.6	1002.8	1040.0	1048.6
55°	68.8	81.7	204.8	329.5	717.7	815.1	850.9	888.2	956.9	988.4	994.2
57.5°	65.9	75.9	174.8	282.2	669.0	763.5	803.6	838.0	902.5	926.8	932.6
60°	61.6	71.6	151.8	242.1	616.0	714.8	749.2	783.6	838.0	858.1	862.4
62.5°	57.3	68.8	134.7	203.4	561.5	657.5	691.9	723.4	769.3	783.6	789.3
65°	54.4	65.9	121.8	174.8	505.7	597.4	631.7	658.9	696.2	710.5	713.4
67.5°	51.6	63.0	111.7	150.4	449.8	537.2	563.0	588.8	617.4	631.7	633.2
70°	47.3	60.2	103.1	133.2	392.5	468.4	489.9	517.1	540.1	547.2	551.5
72.5°	44.4	55.9	97.4	120.3	333.8	402.5	422.6	438.3	458.4	465.6	465.6
75°	40.1	50.1	91.7	107.4	273.6	329.5	346.7	362.4	378.2	381.0	376.7
77.5°	35.8	44.4	78.8	90.2	213.4	260.7	275.0	283.6	296.5	299.4	300.8
80°	30.1	38.7	61.6	70.2	154.7	192.0	202.0	209.1	220.6	220.6	223.5
82.5°	22.9	30.1	44.4	50.1	104.6	131.8	140.4	144.7	151.8	151.8	151.8
85°	14.3	18.6	28.6	32.9	63.0	80.2	86.0	87.4	93.1	94.5	94.5
87.5°	7.2	10.0	18.6	20.1	32.9	41.5	41.5	44.4	44.4	43.0	41.5
90°	7.4	13.4	19.3	20.7	32.6	48.4	56.3	50.0	37.5	28.2	28.2
92.5°	29.7	80.1	130.5	143.2	201.2	278.7	317.4	278.2	199.8	141.0	135.3
95°	71.2	163.5	255.7	278.9	495.2	783.7	927.9	828.0	628.2	478.4	461.4
97.5°	123.1	204.5	285.9	306.3	667.0	1148.0	1388.5	1325.3	1199.1	1104.4	1072.1
100°	163.2	237.0	310.9	329.3	729.5	1263.3	1530.1	1534.7	1543.9	1550.8	1512.3
102.5°	197.3	266.2	335.1	352.3	758.3	1299.5	1570.1	1650.5	1811.4	1932.1	1899.1
105°	255.2	313.5	371.8	386.4	779.5	1303.7	1565.7	1746.0	2106.6	2377.1	2359.3
107.5°	314.5	368.8	423.3	436.8	783.5	1245.6	1476.7	1728.3	2231.3	2608.5	2612.8
110°	354.5	403.6	452.7	465.0	777.5	1194.1	1402.5	1683.7	2246.1	2667.9	2686.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	393.8	440.6	487.4	499.2	777.8	1149.2	1335.0	1622.7	2198.3	2630.0	2658.3
115°	453.1	496.3	539.6	550.4	785.0	1097.8	1254.2	1531.4	2085.9	2501.7	2541.1
117.5°	511.8	551.0	590.2	600.0	799.5	1065.5	1198.5	1448.7	1949.2	2324.5	2368.0
120°	545.9	582.8	619.7	629.0	811.4	1054.6	1176.3	1404.9	1862.1	2205.0	2247.4
122.5°	579.3	616.5	653.8	663.1	828.5	1049.0	1159.3	1365.2	1776.9	2085.6	2127.4
125°	630.4	664.4	698.3	706.8	851.5	1044.3	1140.7	1315.6	1665.3	1927.7	1966.2
127.5°	671.9	706.2	740.5	749.1	874.5	1041.6	1125.2	1275.3	1575.7	1800.8	1833.3
130°	694.2	731.1	768.0	777.3	891.2	1043.1	1119.2	1252.9	1520.2	1720.7	1750.7
132.5°	717.2	754.2	791.0	800.3	904.9	1044.3	1114.0	1233.7	1473.0	1652.4	1679.3
135°	751.3	784.9	818.5	826.9	919.7	1043.3	1105.1	1205.3	1405.8	1556.1	1579.2
137.5°	786.2	819.5	852.8	861.1	941.9	1049.7	1103.6	1188.3	1357.7	1484.8	1503.7
140°	815.1	845.7	876.4	884.0	955.5	1050.8	1098.4	1171.6	1318.0	1427.7	1445.5
142.5°	837.3	865.7	894.1	901.1	966.9	1054.6	1098.4	1162.7	1291.3	1387.7	1403.0
145°	871.4	896.2	920.9	927.1	981.7	1054.6	1091.0	1143.6	1248.8	1327.6	1339.2
147.5°	905.6	929.7	953.8	959.8	1003.5	1061.9	1091.0	1132.3	1215.1	1277.2	1286.8
150°	927.9	949.7	971.3	976.8	1014.9	1065.6	1091.0	1125.9	1195.9	1248.3	1256.0
152.5°	950.8	967.3	983.8	987.9	1022.3	1068.1	1091.0	1120.8	1180.5	1225.3	1231.1
155°	985.0	997.2	1009.3	1012.4	1038.6	1073.5	1091.0	1114.8	1162.2	1197.9	1201.8
157.5°	1010.2	1022.0	1033.9	1036.8	1054.9	1079.0	1091.0	1109.4	1146.4	1174.1	1176.8
160°	1027.2	1036.5	1045.7	1048.0	1062.3	1081.4	1091.0	1106.8	1138.5	1162.2	1163.8
162.5°	1044.3	1051.2	1058.1	1059.9	1070.3	1084.1	1091.0	1104.4	1131.0	1151.1	1152.6
165°	1062.8	1069.1	1075.4	1077.0	1081.6	1087.8	1091.0	1100.5	1119.7	1134.1	1135.6
167.5°	1079.9	1082.9	1085.8	1086.6	1090.5	1095.8	1098.4	1104.7	1117.3	1126.6	1127.3
170°	1091.0	1094.0	1096.9	1097.7	1098.0	1098.2	1098.4	1104.7	1117.3	1126.6	1126.6
172.5°	1096.9	1097.6	1098.2	1098.4	1098.4	1098.4	1098.4	1103.4	1113.2	1120.7	1120.1
175°	1105.1	1105.1	1105.1	1105.1	1102.9	1100.0	1098.4	1101.6	1107.9	1112.6	1112.6
177.5°	1105.1	1105.1	1105.1	1105.1	1103.4	1101.0	1099.9	1102.4	1107.3	1111.0	1110.4
180°	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	445.5	445.5
2.5°	475.6	472.7
5°	611.7	614.5
7.5°	823.7	822.3
10°	1024.2	1037.1
12.5°	1170.4	1173.3
15°	1259.3	1265.0
17.5°	1293.6	1295.1
20°	1295.1	1292.2
22.5°	1279.3	1276.5
25°	1260.7	1259.3
27.5°	1243.5	1244.9
30°	1236.3	1240.6
32.5°	1236.3	1243.5
35°	1239.2	1246.4
37.5°	1237.8	1246.4
40°	1232.0	1242.1
42.5°	1216.3	1223.5
45°	1191.9	1200.5
47.5°	1160.4	1166.2
50°	1120.3	1126.0
52.5°	1070.1	1071.5
55°	1009.9	1015.6
57.5°	945.4	946.9
60°	873.8	878.1
62.5°	797.9	797.9
65°	717.7	720.5
67.5°	634.6	641.8
70°	550.1	551.5
72.5°	467.0	467.0
75°	381.0	382.5
77.5°	299.4	299.4
80°	222.0	223.5
82.5°	153.3	156.1
85°	96.0	96.0
87.5°	44.4	40.1
90°	28.2	28.2
92.5°	112.9	90.4
95°	393.5	325.6
97.5°	942.9	813.7
100°	1358.5	1204.5
102.5°	1767.2	1635.4
105°	2288.5	2217.6
107.5°	2629.9	2647.1
110°	2760.1	2834.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2771.7	2885.2
115°	2698.3	2855.4
117.5°	2542.4	2716.8
120°	2416.8	2586.2
122.5°	2294.5	2461.6
125°	2120.1	2274.0
127.5°	1963.2	2093.1
130°	1870.7	1990.7
132.5°	1786.8	1894.2
135°	1671.8	1764.5
137.5°	1579.6	1655.4
140°	1516.3	1587.2
142.5°	1463.9	1524.9
145°	1385.3	1431.4
147.5°	1325.1	1363.3
150°	1287.1	1318.0
152.5°	1254.5	1277.9
155°	1217.2	1232.7
157.5°	1187.6	1198.5
160°	1170.1	1176.3
162.5°	1158.5	1164.4
165°	1141.9	1148.1
167.5°	1129.9	1132.5
170°	1126.6	1126.6
172.5°	1117.8	1115.5
175°	1112.6	1112.6
177.5°	1107.8	1105.1
180°	1105.1	1105.1



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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	2.66	3.41	3.75	4.50	6.00	15.83	16.57	16.91	17.66	19.16
	3H	3.36	4.03	4.45	5.13	6.64	17.65	18.32	18.75	19.42	20.93
	4H	3.65	4.29	4.76	5.39	6.91	18.29	18.92	19.39	20.02	21.54
	6H	3.89	4.48	5.01	5.58	7.12	18.71	19.29	19.82	20.40	21.93
	8H	3.96	4.52	5.08	5.64	7.16	18.82	19.38	19.94	20.50	22.03
	12H	3.97	4.50	5.10	5.62	7.17	18.88	19.41	20.01	20.53	22.08
4H	2H	9.85	10.49	10.97	11.59	13.11	16.09	16.72	17.20	17.82	19.34
	3H	11.41	11.94	12.53	13.07	14.60	18.12	18.65	19.24	19.77	21.31
	4H	11.50	11.99	12.63	13.10	14.66	18.87	19.36	20.00	20.48	22.03
	6H	11.50	11.92	12.64	13.06	14.61	19.40	19.82	20.53	20.96	22.51
	8H	11.48	11.87	12.61	13.00	14.56	19.56	19.95	20.69	21.08	22.64
	12H	11.43	11.78	12.58	12.93	14.50	19.64	20.00	20.79	21.14	22.71
8H	4H	12.93	13.32	14.06	14.45	16.02	18.92	19.32	20.06	20.45	22.01
	6H	13.17	13.49	14.32	14.67	16.22	19.54	19.87	20.70	21.04	22.60
	8H	13.18	13.47	14.34	14.62	16.20	19.76	20.04	20.92	21.20	22.78
	12H	13.15	13.40	14.31	14.55	16.16	19.90	20.14	21.06	21.29	22.91
12H	4H	13.07	13.42	14.22	14.57	16.13	18.87	19.23	20.02	20.37	21.94
	6H	13.42	13.71	14.58	14.86	16.44	19.53	19.81	20.68	20.96	22.54
	8H	13.49	13.74	14.65	14.89	16.50	19.75	20.00	20.91	21.15	22.76