

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: P938538

Luminaire Tested: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938538
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

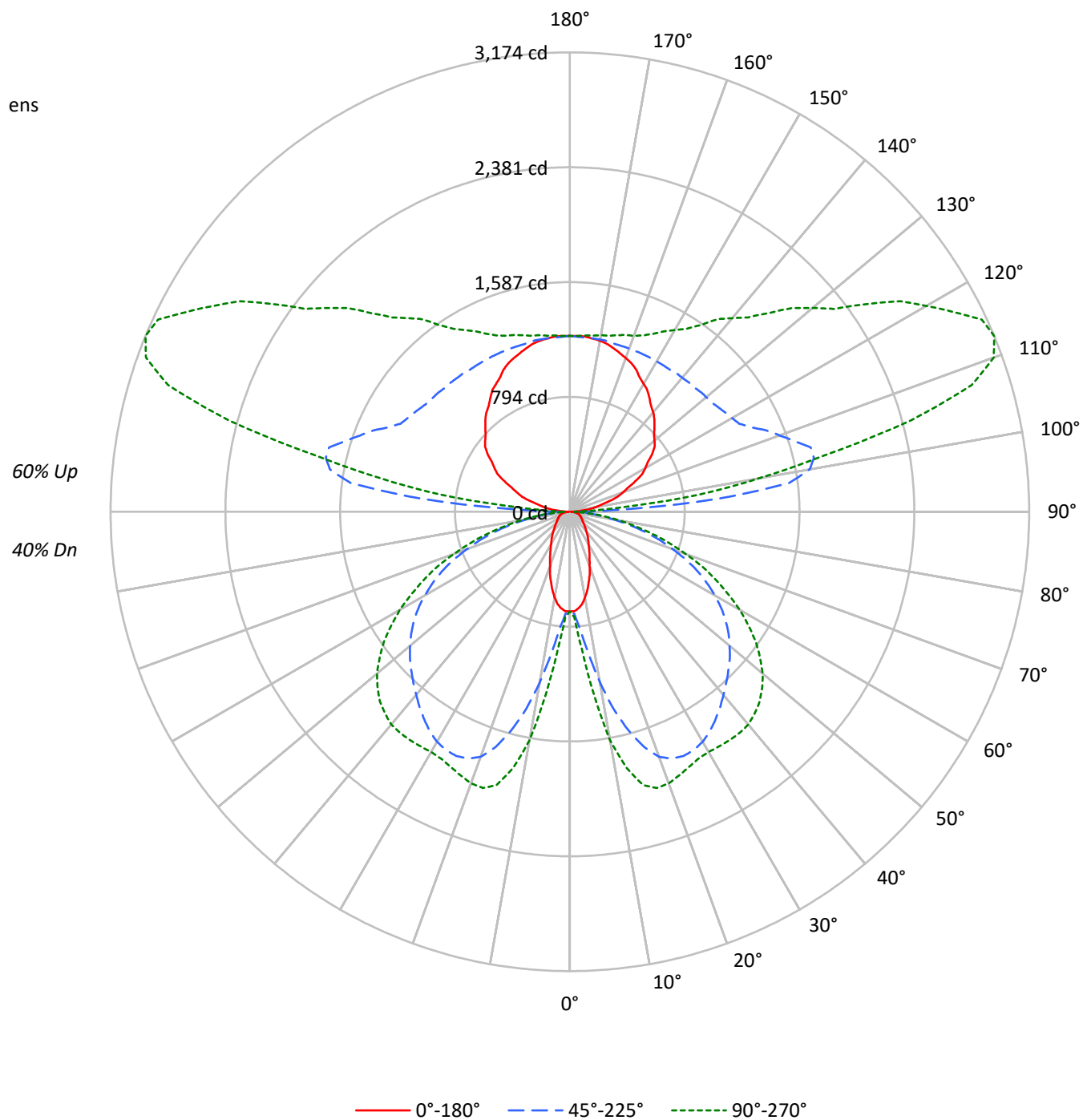
Lumens per Lamp: N/A
Luminaire Lumens: 13210.4 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124.8
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47			40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39			33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32			27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27			22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23			19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19			16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17			14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15			12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13			10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11			9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4259	4259	4259
5°	4159	4921	5724
10°	3771	7171	9490
15°	3204	9367	11459
20°	2607	10852	11678
25°	2174	11353	11441
30°	1832	11422	11419
35°	1620	11229	11715
40°	1410	10980	12020
45°	1276	10796	12067
50°	1169	10630	11867
55°	1119	10389	11341
60°	1144	9928	10511
65°	1190	9230	9369
70°	1264	8043	7915
75°	1395	6553	6177
80°	1513	4539	4162
85°	1318	2404	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12067 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	0.7
10°-20°	394.7	3.0
20°-30°	690.3	5.2
30°-40°	888.7	6.7
40°-50°	992.6	7.5
50°-60°	950.7	7.2
60°-70°	753.4	5.7
70°-80°	443.0	3.4
80°-90°	127.7	1.0
90°-100°	592.6	4.5
100°-110°	1557.8	11.8
110°-120°	1615.3	12.2
120°-130°	1295.7	9.8
130°-140°	1016.6	7.7
140°-150°	780.3	5.9
150°-160°	561.9	4.3
160°-170°	343.8	2.6
170°-180°	116.2	0.9
0°-30°	1174.1	8.9
0°-40°	2062.7	15.6
0°-60°	4006.0	30.3
0°-90°	5330.1	40.3
90°-120°	3765.7	28.5
90°-150°	6858.3	51.9
90°-180°	7880.0	59.6
0°-180°	13210.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	671	719	810	916	950	62
15°	502	928	1563	1895	1955	140
25°	321	1051	1862	1944	1946	148
35°	217	1005	1753	1853	1926	135
45°	148	801	1549	1775	1855	115
55°	106	509	1315	1527	1569	97
65°	84	270	976	1098	1113	83
75°	62	166	536	589	591	65
85°	22	51	133	146	148	23
90°	8	23	62	31	31	8
95°	78	307	1021	526	358	87
105°	281	425	1722	2615	2439	298
115°	498	605	1380	2752	3141	492
125°	693	778	1255	2120	2501	616
135°	826	910	1216	1712	1941	639
145°	959	1020	1200	1460	1574	601
155°	1083	1114	1200	1318	1356	498
165°	1169	1185	1200	1247	1263	330
175°	1216	1216	1208	1224	1224	115
180°	1216	1216	1216	1216	1216	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4
2.5°	688.4	688.4	692.8	695.0	699.5	701.7	706.1	710.5	723.8	726.1	730.5
5°	670.7	679.6	708.4	719.4	750.4	792.4	810.1	838.9	898.7	916.4	927.5
7.5°	644.2	664.1	734.9	752.6	830.1	940.8	987.2	1049.2	1144.4	1190.8	1228.5
10°	602.1	644.2	770.3	812.4	938.6	1106.8	1193.1	1279.4	1423.3	1487.5	1511.8
12.5°	555.6	624.2	807.9	865.5	1047.0	1292.7	1396.7	1491.9	1655.7	1742.1	1755.3
15°	502.5	595.4	843.3	927.5	1162.1	1447.7	1562.8	1680.1	1832.8	1894.8	1910.3
17.5°	456.0	573.3	876.6	965.1	1250.7	1587.1	1704.4	1801.8	1925.8	1967.8	1978.9
20°	398.4	537.9	898.7	1013.8	1343.6	1689.0	1801.8	1877.1	1961.2	1987.7	1992.2
22.5°	356.4	500.3	912.0	1031.5	1405.6	1750.9	1846.1	1905.8	1963.4	1972.3	1974.5
25°	321.0	458.2	909.8	1051.4	1458.7	1788.5	1861.6	1905.8	1939.1	1943.5	1943.5
27.5°	287.8	411.7	900.9	1055.9	1498.6	1797.3	1854.9	1885.9	1901.4	1910.3	1910.3
30°	259.0	367.5	878.7	1047.0	1516.3	1788.5	1835.0	1850.5	1866.0	1879.3	1885.9
32.5°	236.8	325.4	845.5	1029.3	1518.5	1766.4	1799.6	1808.4	1830.6	1861.6	1872.6
35°	217.0	283.3	807.9	1004.9	1505.2	1731.0	1753.1	1761.9	1806.2	1852.7	1868.2
37.5°	197.0	252.4	759.3	962.9	1485.2	1689.0	1704.4	1719.9	1788.5	1843.8	1861.6
40°	177.1	225.8	701.7	916.4	1454.3	1638.0	1651.3	1675.6	1766.4	1830.6	1848.3
42.5°	161.6	203.6	639.7	867.7	1414.4	1580.5	1600.4	1635.8	1739.8	1808.4	1828.4
45°	148.3	181.5	573.3	801.3	1363.5	1520.7	1549.4	1598.2	1708.8	1775.3	1793.0
47.5°	135.0	166.0	504.6	732.7	1308.2	1460.9	1498.6	1553.9	1666.8	1731.0	1746.5
50°	123.9	150.5	436.1	659.6	1248.4	1396.7	1441.0	1498.6	1613.7	1673.4	1693.3
52.5°	115.1	137.3	371.8	586.6	1179.8	1330.3	1381.2	1441.0	1549.4	1607.0	1620.3
55°	106.2	126.2	316.5	509.1	1109.0	1259.5	1314.9	1372.4	1478.6	1527.4	1536.2
57.5°	101.9	117.3	270.1	436.1	1033.7	1179.8	1241.8	1294.9	1394.6	1432.1	1441.0
60°	95.1	110.7	234.7	374.1	951.8	1104.5	1157.7	1210.8	1294.9	1325.9	1332.6
62.5°	88.5	106.2	208.1	314.3	867.7	1016.0	1069.1	1117.9	1188.7	1210.8	1219.6
65°	84.2	101.9	188.2	270.1	781.3	923.0	976.2	1018.2	1075.7	1097.9	1102.3
67.5°	79.7	97.4	172.7	232.4	695.0	830.1	869.9	909.8	954.0	976.2	978.4
70°	73.1	93.0	159.4	205.9	606.5	723.8	757.0	799.0	834.5	845.5	852.2
72.5°	68.6	86.3	150.5	185.9	515.7	622.0	653.0	677.3	708.4	719.4	719.4
75°	62.0	77.4	141.7	166.0	422.8	509.1	535.7	560.0	584.3	588.8	582.2
77.5°	55.4	68.6	121.7	139.4	329.8	402.9	425.0	438.3	458.2	462.6	464.9
80°	46.5	59.7	95.1	108.5	239.0	296.6	312.1	323.2	340.9	340.9	345.3
82.5°	35.4	46.5	68.6	77.4	161.6	203.6	217.0	223.6	234.7	234.7	234.7
85°	22.1	28.8	44.3	50.9	97.4	123.9	132.8	135.0	143.9	146.1	146.1
87.5°	11.1	15.5	28.8	31.0	50.9	64.2	64.2	68.6	68.6	66.4	64.2
90°	8.2	14.7	21.2	22.8	35.9	53.3	62.0	55.1	41.3	31.0	31.0
92.5°	32.6	88.1	143.6	157.5	221.4	306.6	349.2	306.0	219.8	155.0	148.9
95°	78.3	179.8	281.4	306.8	544.8	862.0	1020.6	910.8	691.0	526.2	507.5
97.5°	135.4	225.0	314.5	337.0	733.7	1262.8	1527.3	1457.9	1319.0	1214.8	1179.3
100°	179.5	260.7	341.9	362.2	802.5	1389.6	1683.1	1688.2	1698.4	1706.0	1663.7
102.5°	217.0	292.8	368.6	387.5	834.1	1429.4	1727.2	1815.6	1992.5	2125.2	2089.0
105°	280.6	344.8	409.0	425.0	857.5	1434.0	1722.3	1920.6	2317.3	2614.8	2595.3
107.5°	345.9	405.8	465.6	480.5	861.7	1370.1	1624.3	1901.0	2454.3	2869.3	2874.0
110°	390.0	444.0	498.0	511.5	855.3	1313.5	1542.7	1852.0	2470.6	2934.6	2954.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	433.2	484.7	536.1	549.0	855.6	1264.2	1468.5	1785.1	2418.2	2893.0	2924.2
115°	498.5	546.0	593.5	605.4	863.4	1207.5	1379.6	1684.5	2294.4	2751.8	2795.0
117.5°	562.9	606.1	649.2	660.0	879.5	1172.1	1318.4	1593.6	2144.0	2556.8	2604.8
120°	600.5	641.1	681.8	691.9	892.5	1160.2	1293.9	1545.4	2048.3	2425.5	2472.0
122.5°	637.2	678.2	719.2	729.4	911.3	1153.9	1275.2	1501.6	1954.5	2294.1	2340.1
125°	693.4	730.8	768.2	777.5	936.6	1148.7	1254.8	1447.1	1831.8	2120.4	2162.6
127.5°	739.1	776.8	814.6	824.0	961.9	1145.7	1237.6	1402.8	1733.1	1980.8	2016.6
130°	763.6	804.3	844.9	855.0	980.4	1147.6	1231.1	1378.2	1672.2	1892.7	1925.7
132.5°	788.9	829.6	870.2	880.3	995.3	1148.7	1225.4	1357.0	1620.2	1817.7	1847.2
135°	826.4	863.4	900.5	909.7	1011.6	1147.6	1215.6	1325.8	1546.3	1711.6	1737.1
137.5°	864.8	901.4	938.0	947.2	1036.2	1154.7	1214.0	1307.2	1493.5	1633.3	1654.2
140°	896.6	930.4	964.0	972.5	1051.1	1155.9	1208.3	1288.8	1449.8	1570.5	1590.0
142.5°	921.0	952.3	983.5	991.2	1063.6	1160.1	1208.3	1279.0	1420.4	1526.4	1543.2
145°	958.6	985.8	1013.0	1019.8	1079.9	1160.1	1200.1	1257.9	1373.6	1460.4	1473.0
147.5°	996.1	1022.6	1049.1	1055.7	1103.8	1168.0	1200.1	1245.6	1336.6	1404.8	1415.4
150°	1020.6	1044.5	1068.4	1074.4	1116.3	1172.2	1200.1	1238.5	1315.4	1373.0	1381.6
152.5°	1045.9	1064.1	1082.2	1086.7	1124.5	1174.9	1200.1	1232.9	1298.5	1347.7	1354.2
155°	1083.4	1096.8	1110.3	1113.6	1142.5	1180.9	1200.1	1226.2	1278.4	1317.6	1321.8
157.5°	1111.1	1124.2	1137.3	1140.5	1160.4	1186.8	1200.1	1220.4	1261.0	1291.5	1294.4
160°	1130.0	1140.1	1150.2	1152.7	1168.5	1189.5	1200.1	1217.5	1252.3	1278.4	1280.1
162.5°	1148.7	1156.3	1163.9	1165.8	1177.2	1192.5	1200.1	1214.7	1244.1	1266.2	1267.9
165°	1169.1	1176.0	1182.8	1184.6	1189.7	1196.6	1200.1	1210.6	1231.7	1247.4	1249.2
167.5°	1187.9	1191.1	1194.4	1195.2	1199.6	1205.4	1208.3	1215.2	1229.0	1239.2	1239.9
170°	1200.1	1203.3	1206.6	1207.4	1207.7	1208.1	1208.3	1215.2	1229.0	1239.2	1239.2
172.5°	1206.6	1207.3	1208.1	1208.3	1208.3	1208.3	1208.3	1213.7	1224.6	1232.7	1232.1
175°	1215.6	1215.6	1215.6	1215.6	1213.2	1209.9	1208.3	1211.7	1218.6	1223.7	1223.7
177.5°	1215.6	1215.6	1215.6	1215.6	1213.7	1211.2	1209.9	1212.6	1218.1	1222.2	1221.5
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	688.4	688.4
2.5°	734.9	730.5
5°	945.2	949.6
7.5°	1272.8	1270.6
10°	1582.7	1602.6
12.5°	1808.4	1812.9
15°	1945.7	1954.6
17.5°	1998.8	2001.1
20°	2001.1	1996.6
22.5°	1976.6	1972.3
25°	1947.9	1945.7
27.5°	1921.4	1923.5
30°	1910.3	1916.9
32.5°	1910.3	1921.4
35°	1914.7	1925.8
37.5°	1912.5	1925.8
40°	1903.7	1919.1
42.5°	1879.3	1890.4
45°	1841.6	1854.9
47.5°	1793.0	1801.8
50°	1731.0	1739.8
52.5°	1653.5	1655.7
55°	1560.5	1569.4
57.5°	1460.9	1463.1
60°	1350.3	1356.9
62.5°	1233.0	1233.0
65°	1109.0	1113.4
67.5°	980.6	991.7
70°	850.0	852.2
72.5°	721.6	721.6
75°	588.8	591.0
77.5°	462.6	462.6
80°	343.1	345.3
82.5°	236.8	241.3
85°	148.3	148.3
87.5°	68.6	62.0
90°	31.0	31.0
92.5°	124.2	99.5
95°	432.8	358.1
97.5°	1037.1	895.0
100°	1494.3	1325.0
102.5°	1943.9	1798.9
105°	2517.3	2439.3
107.5°	2892.9	2911.7
110°	3036.1	3117.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3048.9	3173.6
115°	2968.0	3141.0
117.5°	2796.6	2988.5
120°	2658.5	2844.8
122.5°	2523.9	2707.8
125°	2332.0	2501.3
127.5°	2159.4	2302.3
130°	2057.7	2189.7
132.5°	1965.4	2083.6
135°	1839.0	1940.9
137.5°	1737.6	1821.0
140°	1667.9	1745.9
142.5°	1610.3	1677.4
145°	1523.8	1574.5
147.5°	1457.4	1499.5
150°	1415.7	1449.8
152.5°	1379.9	1405.7
155°	1338.8	1355.9
157.5°	1306.5	1318.4
160°	1287.0	1293.9
162.5°	1274.3	1280.8
165°	1256.0	1262.9
167.5°	1242.9	1245.8
170°	1239.2	1239.2
172.5°	1229.6	1227.0
175°	1223.7	1223.7
177.5°	1218.5	1215.6
180°	1215.6	1215.6

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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	5.08	5.89	6.11	6.93	8.33	18.25	19.06	19.28	20.10	21.50
	3H	5.79	6.51	6.82	7.56	8.98	20.08	20.81	21.12	21.86	23.27
	4H	6.08	6.77	7.13	7.82	9.25	20.72	21.41	21.77	22.46	23.89
	6H	6.33	6.97	7.39	8.02	9.46	21.14	21.78	22.20	22.83	24.27
	8H	6.40	7.00	7.46	8.07	9.51	21.26	21.86	22.32	22.94	24.37
	12H	6.41	6.99	7.48	8.05	9.51	21.32	21.90	22.39	22.96	24.42
4H	2H	12.28	12.97	13.34	14.03	15.45	18.52	19.21	19.57	20.26	21.68
	3H	13.85	14.42	14.91	15.50	16.94	20.55	21.13	21.62	22.21	23.65
	4H	13.94	14.47	15.01	15.54	17.00	21.31	21.84	22.39	22.91	24.37
	6H	13.95	14.40	15.03	15.50	16.95	21.85	22.30	22.93	23.40	24.85
	8H	13.92	14.35	15.00	15.44	16.91	22.00	22.43	23.09	23.52	24.99
	12H	13.88	14.26	14.98	15.36	16.84	22.09	22.48	23.19	23.58	25.05
8H	4H	15.38	15.80	16.46	16.89	18.36	21.37	21.80	22.45	22.88	24.35
	6H	15.62	15.97	16.72	17.10	18.57	21.99	22.35	23.10	23.47	24.94
	8H	15.63	15.94	16.74	17.05	18.54	22.21	22.52	23.32	23.63	25.12
	12H	15.60	15.87	16.72	16.98	18.50	22.35	22.62	23.46	23.73	25.25
12H	4H	15.52	15.90	16.62	17.00	18.48	21.32	21.71	22.42	22.81	24.28
	6H	15.87	16.18	16.98	17.29	18.78	21.97	22.29	23.09	23.39	24.88
	8H	15.94	16.21	17.06	17.32	18.84	22.20	22.47	23.32	23.58	25.10