

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: P937216

Luminaire Tested: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937216
REPORT IS A COMBINATION OF REPORTS P933519 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

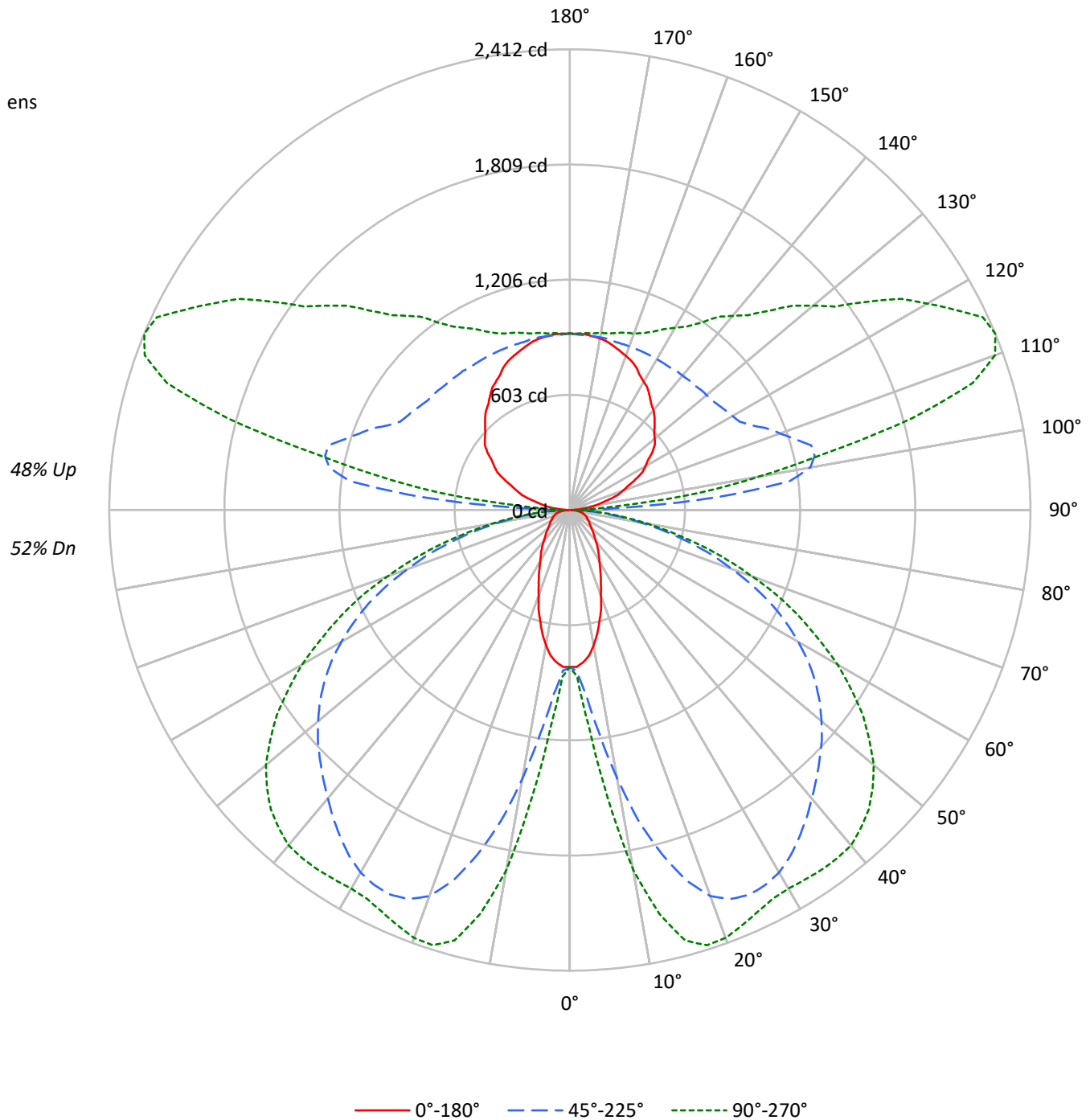
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12350.0 lumens
Efficiency: N/A
Efficacy: 120.6 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: General Diffuse

Input Watts (W): 102.4
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

TEST NUMBER: P937216
CATALOG NUMBER: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P937216

CATALOG NUMBER: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	47	47	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	39	39	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	32	32	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	27	27	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	23	23	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	20	20	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	18	18	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	16	16	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	14	14	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3813	3813	3813
5°	3725	4407	5125
10°	3379	6424	8497
15°	2872	8393	10260
20°	2338	9726	10457
25°	1950	10178	10244
30°	1645	10243	10225
35°	1454	10073	10489
40°	1267	9851	10763
45°	1148	9690	10805
50°	1053	9544	10626
55°	1008	9330	10155
60°	1032	8921	9411
65°	1073	8298	8390
70°	1144	7237	7087
75°	1267	5900	5531
80°	1385	4092	3727
85°	1230	2172	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10805 cd/sqm



TEST NUMBER: P937216

CATALOG NUMBER: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	0.9
10°-20°	471.2	3.8
20°-30°	824.2	6.7
30°-40°	1061.0	8.6
40°-50°	1185.0	9.6
50°-60°	1135.0	9.2
60°-70°	899.5	7.3
70°-80°	528.9	4.3
80°-90°	150.5	1.2
90°-100°	450.3	3.6
100°-110°	1183.8	9.6
110°-120°	1227.5	9.9
120°-130°	984.6	8.0
130°-140°	772.6	6.3
140°-150°	593.0	4.8
150°-160°	427.0	3.5
160°-170°	261.3	2.1
170°-180°	88.3	0.7
0°-30°	1401.7	11.3
0°-40°	2462.6	19.9
0°-60°	4782.7	38.7
0°-90°	6361.5	51.5
90°-120°	2861.7	23.2
90°-150°	5211.9	42.2
90°-180°	5988.0	48.5
0°-180°	12350.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	822	822	822	822	822	
5°	801	859	967	1094	1134	74
15°	600	1107	1866	2262	2334	167
25°	383	1255	2222	2320	2323	176
35°	259	1200	2093	2212	2299	162
45°	177	957	1850	2119	2215	137
55°	127	608	1570	1823	1874	116
65°	100	322	1165	1311	1329	100
75°	74	198	640	703	706	77
85°	26	61	159	174	177	28
90°	6	17	47	24	24	7
95°	60	233	776	400	272	66
105°	213	323	1309	1987	1854	226
115°	379	460	1048	2091	2387	374
125°	527	591	954	1611	1901	468
135°	628	691	924	1301	1475	486
145°	728	775	912	1110	1197	456
155°	823	846	912	1001	1030	378
165°	888	900	912	948	960	251
175°	924	924	918	930	930	88
180°	924	924	924	924	924	



TEST NUMBER: P937216

CATALOG NUMBER: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9
2.5°	821.9	821.9	827.2	829.8	835.1	837.7	843.0	848.3	864.2	866.8	872.1
5°	800.7	811.3	845.7	858.9	895.9	946.1	967.2	1001.6	1072.9	1094.1	1107.3
7.5°	769.0	792.8	877.4	898.5	991.0	1123.1	1178.6	1252.6	1366.3	1421.8	1466.7
10°	718.8	769.0	919.7	969.9	1120.5	1321.3	1424.4	1527.5	1699.2	1775.9	1804.9
12.5°	663.3	745.2	964.6	1033.3	1250.0	1543.3	1667.5	1781.2	1976.7	2079.8	2095.6
15°	599.9	710.9	1006.9	1107.3	1387.4	1728.3	1865.7	2005.8	2188.1	2262.1	2280.6
17.5°	544.4	684.5	1046.5	1152.2	1493.1	1894.8	2034.9	2151.1	2299.1	2349.3	2362.6
20°	475.7	642.2	1072.9	1210.3	1604.1	2016.4	2151.1	2241.0	2341.4	2373.1	2378.4
22.5°	425.5	597.2	1088.8	1231.5	1678.1	2090.4	2204.0	2275.3	2344.1	2354.6	2357.3
25°	383.2	547.0	1086.1	1255.3	1741.5	2135.3	2222.5	2275.3	2315.0	2320.3	2320.3
27.5°	343.5	491.5	1075.6	1260.6	1789.1	2145.9	2214.6	2251.6	2270.1	2280.6	2280.6
30°	309.2	438.7	1049.1	1250.0	1810.2	2135.3	2190.8	2209.3	2227.8	2243.6	2251.6
32.5°	282.8	388.5	1009.5	1228.8	1812.9	2108.9	2148.5	2159.1	2185.5	2222.5	2235.7
35°	259.0	338.3	964.6	1199.8	1797.0	2066.6	2093.0	2103.6	2156.4	2211.9	2230.4
37.5°	235.2	301.3	906.4	1149.6	1773.2	2016.4	2034.9	2053.4	2135.3	2201.3	2222.5
40°	211.4	269.6	837.7	1094.1	1736.2	1955.6	1971.4	2000.5	2108.9	2185.5	2206.6
42.5°	192.9	243.1	763.7	1035.9	1688.7	1886.9	1910.7	1952.9	2077.1	2159.1	2182.9
45°	177.1	216.7	684.5	956.6	1627.9	1815.5	1849.9	1908.0	2040.1	2119.4	2140.6
47.5°	161.2	198.2	602.5	874.7	1561.8	1744.2	1789.1	1855.2	1989.9	2066.6	2085.1
50°	148.0	179.7	520.6	787.5	1490.5	1667.5	1720.4	1789.1	1926.5	1997.9	2021.6
52.5°	137.4	163.8	444.0	700.3	1408.5	1588.2	1649.0	1720.4	1849.9	1918.6	1934.4
55°	126.8	150.6	377.9	607.8	1324.0	1503.7	1569.7	1638.5	1765.3	1823.4	1834.0
57.5°	121.6	140.1	322.4	520.6	1234.1	1408.5	1482.5	1546.0	1664.9	1709.8	1720.4
60°	113.6	132.1	280.1	446.6	1136.4	1318.7	1382.1	1445.5	1546.0	1583.0	1590.9
62.5°	105.7	126.8	248.4	375.3	1035.9	1213.0	1276.4	1334.6	1419.1	1445.5	1456.1
65°	100.4	121.6	224.6	322.4	932.9	1102.0	1165.4	1215.6	1284.3	1310.8	1316.1
67.5°	95.1	116.3	206.1	277.5	829.8	991.0	1038.6	1086.1	1139.0	1165.4	1168.1
70°	87.2	111.0	190.3	245.8	724.1	864.2	903.8	954.0	996.3	1009.5	1017.4
72.5°	81.9	103.1	179.7	222.0	615.7	742.6	779.6	808.7	845.7	858.9	858.9
75°	74.0	92.5	169.1	198.2	504.8	607.8	639.5	668.6	697.7	703.0	695.0
77.5°	66.1	81.9	145.3	166.5	393.8	481.0	507.4	523.2	547.0	552.3	555.0
80°	55.5	71.4	113.6	129.5	285.4	354.1	372.6	385.8	407.0	407.0	412.3
82.5°	42.3	55.5	81.9	92.5	192.9	243.1	259.0	266.9	280.1	280.1	280.1
85°	26.4	34.4	52.9	60.8	116.3	148.0	158.6	161.2	171.8	174.4	174.4
87.5°	13.2	18.5	34.4	37.0	60.8	76.6	76.6	81.9	81.9	79.3	76.6
90°	6.2	11.2	16.2	17.4	27.3	40.5	47.1	41.9	31.4	23.6	23.6
92.5°	24.8	67.0	109.2	119.7	168.3	233.0	265.4	232.6	167.0	117.8	113.1
95°	59.5	136.7	213.8	233.1	413.9	655.0	775.6	692.1	525.1	399.9	385.7
97.5°	102.9	171.0	239.1	256.1	557.6	959.6	1160.6	1107.8	1002.3	923.2	896.2
100°	136.4	198.1	259.9	275.3	609.9	1056.0	1279.0	1282.9	1290.6	1296.4	1264.2
102.5°	164.9	222.5	280.1	294.5	633.8	1086.3	1312.5	1379.7	1514.2	1615.1	1587.5
105°	213.3	262.1	310.8	323.0	651.6	1089.7	1308.8	1459.5	1760.9	1987.0	1972.2
107.5°	262.9	308.4	353.8	365.2	654.9	1041.2	1234.4	1444.6	1865.1	2180.5	2184.1
110°	296.4	337.4	378.4	388.7	649.9	998.2	1172.4	1407.4	1877.5	2230.1	2245.5



TEST NUMBER: P937216

CATALOG NUMBER: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	329.2	368.3	407.4	417.2	650.1	960.7	1116.0	1356.6	1837.7	2198.5	2222.2
115°	378.8	414.9	451.0	460.0	656.1	917.6	1048.4	1280.1	1743.6	2091.2	2124.1
117.5°	427.8	460.6	493.4	501.6	668.4	890.7	1001.9	1211.0	1629.3	1943.0	1979.4
120°	456.3	487.1	518.0	525.7	678.2	881.6	983.3	1174.4	1556.6	1843.2	1878.6
122.5°	484.2	515.4	546.5	554.3	692.5	876.8	969.0	1141.1	1485.3	1743.4	1778.3
125°	527.0	555.4	583.7	590.8	711.7	872.9	953.5	1099.7	1392.0	1611.3	1643.5
127.5°	561.7	590.4	619.0	626.2	731.0	870.7	940.5	1066.0	1317.0	1505.3	1532.4
130°	580.3	611.1	642.0	649.7	745.0	872.1	935.6	1047.3	1270.8	1438.4	1463.5
132.5°	599.5	630.4	661.3	669.0	756.4	872.9	931.2	1031.2	1231.3	1381.3	1403.8
135°	628.0	656.1	684.3	691.3	768.8	872.1	923.8	1007.6	1175.1	1300.7	1320.1
137.5°	657.2	685.0	712.8	719.8	787.4	877.5	922.5	993.3	1135.0	1241.2	1257.0
140°	681.4	707.0	732.6	739.0	798.7	878.4	918.2	979.4	1101.7	1193.5	1208.3
142.5°	700.0	723.7	747.4	753.3	808.3	881.6	918.2	971.9	1079.4	1160.0	1172.7
145°	728.5	749.2	769.8	775.0	820.7	881.6	912.0	956.0	1043.9	1109.8	1119.4
147.5°	757.0	777.1	797.3	802.3	838.9	887.6	912.0	946.6	1015.7	1067.6	1075.6
150°	775.6	793.8	812.0	816.5	848.3	890.8	912.0	941.2	999.6	1043.4	1049.9
152.5°	794.8	808.6	822.4	825.8	854.5	892.8	912.0	936.9	986.8	1024.2	1029.1
155°	823.3	833.5	843.7	846.3	868.2	897.4	912.0	931.8	971.5	1001.3	1004.5
157.5°	844.4	854.3	864.2	866.7	881.8	901.9	912.0	927.4	958.3	981.4	983.7
160°	858.7	866.4	874.1	876.0	888.0	904.0	912.0	925.2	951.7	971.5	972.8
162.5°	872.9	878.7	884.5	886.0	894.7	906.2	912.0	923.2	945.5	962.2	963.4
165°	888.4	893.6	898.9	900.2	904.1	909.4	912.0	920.0	936.0	948.0	949.3
167.5°	902.7	905.2	907.7	908.3	911.6	916.0	918.2	923.4	933.9	941.8	942.3
170°	912.0	914.5	917.0	917.6	917.8	918.1	918.2	923.4	933.9	941.8	941.8
172.5°	917.0	917.5	918.1	918.2	918.2	918.2	918.2	922.3	930.6	936.8	936.3
175°	923.8	923.8	923.8	923.8	921.9	919.4	918.2	920.8	926.1	930.0	930.0
177.5°	923.8	923.8	923.8	923.8	922.3	920.4	919.4	921.5	925.6	928.7	928.2
180°	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8



TEST NUMBER: P937216

CATALOG NUMBER: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	821.9	821.9
2.5°	877.4	872.1
5°	1128.4	1133.7
7.5°	1519.5	1516.9
10°	1889.5	1913.3
12.5°	2159.1	2164.4
15°	2322.9	2333.5
17.5°	2386.3	2389.0
20°	2389.0	2383.7
22.5°	2359.9	2354.6
25°	2325.6	2322.9
27.5°	2293.8	2296.5
30°	2280.6	2288.6
32.5°	2280.6	2293.8
35°	2285.9	2299.1
37.5°	2283.3	2299.1
40°	2272.7	2291.2
42.5°	2243.6	2256.8
45°	2198.7	2214.6
47.5°	2140.6	2151.1
50°	2066.6	2077.1
52.5°	1974.1	1976.7
55°	1863.1	1873.7
57.5°	1744.2	1746.8
60°	1612.0	1620.0
62.5°	1472.0	1472.0
65°	1324.0	1329.3
67.5°	1170.7	1183.9
70°	1014.8	1017.4
72.5°	861.5	861.5
75°	703.0	705.6
77.5°	552.3	552.3
80°	409.6	412.3
82.5°	282.8	288.1
85°	177.1	177.1
87.5°	81.9	74.0
90°	23.6	23.6
92.5°	94.4	75.6
95°	329.0	272.2
97.5°	788.1	680.1
100°	1135.6	1006.9
102.5°	1477.3	1367.1
105°	1912.9	1853.7
107.5°	2198.4	2212.7
110°	2307.3	2369.0



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CATALOG NUMBER: SQ4-FB-075U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2316.9	2411.7
115°	2255.5	2386.9
117.5°	2125.2	2271.0
120°	2020.3	2161.9
122.5°	1918.0	2057.7
125°	1772.2	1900.9
127.5°	1641.0	1749.6
130°	1563.7	1664.0
132.5°	1493.6	1583.4
135°	1397.5	1474.9
137.5°	1320.4	1383.8
140°	1267.6	1326.8
142.5°	1223.7	1274.7
145°	1158.0	1196.6
147.5°	1107.5	1139.5
150°	1075.8	1101.7
152.5°	1048.6	1068.2
155°	1017.5	1030.4
157.5°	992.8	1001.9
160°	978.1	983.3
162.5°	968.4	973.4
165°	954.5	959.7
167.5°	944.5	946.7
170°	941.8	941.8
172.5°	934.4	932.5
175°	930.0	930.0
177.5°	926.0	923.8
180°	923.8	923.8



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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	5.79	6.71	6.73	7.67	8.91	18.97	19.89	19.91	20.85	22.09
	3H	6.50	7.33	7.45	8.29	9.56	20.82	21.64	21.76	22.61	23.87
	4H	6.80	7.58	7.76	8.56	9.83	21.46	22.24	22.42	23.21	24.49
	6H	7.06	7.78	8.03	8.75	10.04	21.90	22.62	22.87	23.59	24.88
	8H	7.13	7.81	8.11	8.81	10.10	22.02	22.70	23.00	23.70	24.99
	12H	7.15	7.80	8.13	8.79	10.10	22.09	22.74	23.07	23.73	25.04
4H	2H	13.01	13.79	13.98	14.77	16.04	19.25	20.03	20.22	21.00	22.28
	3H	14.59	15.24	15.56	16.24	17.53	21.30	21.96	22.28	22.96	24.25
	4H	14.68	15.28	15.67	16.28	17.59	22.07	22.67	23.06	23.66	24.98
	6H	14.70	15.21	15.70	16.23	17.55	22.61	23.13	23.61	24.15	25.46
	8H	14.68	15.16	15.68	16.17	17.50	22.78	23.26	23.78	24.27	25.60
	12H	14.64	15.07	15.66	16.10	17.43	22.87	23.31	23.89	24.34	25.67
8H	4H	16.13	16.62	17.13	17.63	18.96	22.14	22.62	23.14	23.63	24.96
	6H	16.38	16.78	17.40	17.83	19.16	22.77	23.17	23.79	24.22	25.55
	8H	16.40	16.75	17.43	17.79	19.13	22.99	23.34	24.02	24.38	25.73
	12H	16.37	16.68	17.41	17.71	19.10	23.14	23.45	24.18	24.48	25.87
12H	4H	16.28	16.72	17.30	17.74	19.08	22.09	22.53	23.11	23.56	24.89
	6H	16.64	16.99	17.67	18.03	19.38	22.75	23.11	23.79	24.15	25.49
	8H	16.71	17.02	17.75	18.06	19.44	22.99	23.30	24.02	24.33	25.72