

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: P938365

Luminaire Tested: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938365
REPORT IS A COMBINATION OF REPORTS P933646 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

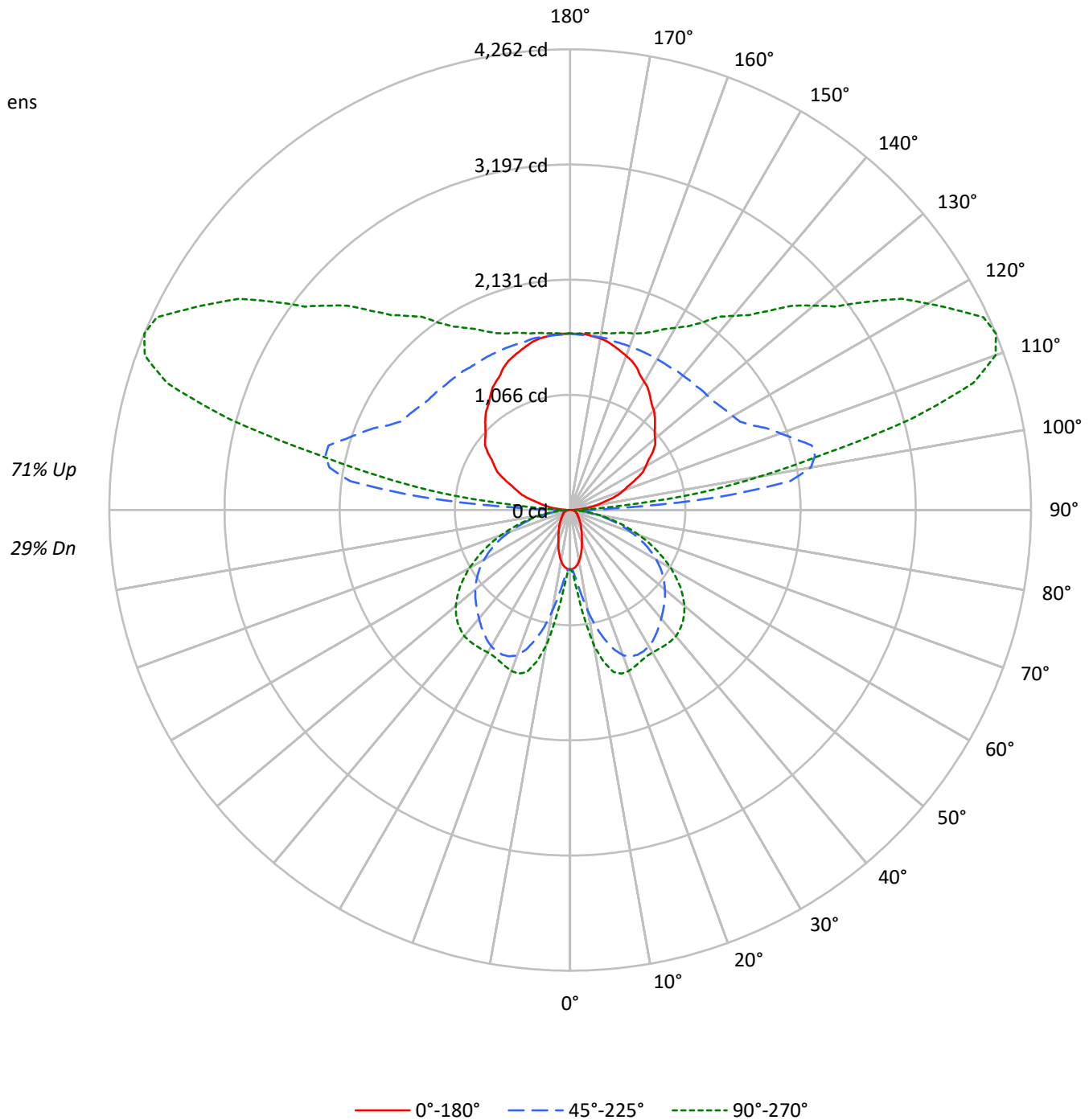
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14815.2 lumens
Efficiency: N/A
Efficacy: 116.5 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): 127.2
Input Voltage (V): NR
Input Current (A_{in}): 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2535	2535	2535
5°	2476	2929	3407
10°	2246	4270	5649
15°	1909	5579	6821
20°	1554	6466	6951
25°	1296	6766	6810
30°	1093	6809	6797
35°	966	6696	6973
40°	842	6549	7155
45°	763	6441	7182
50°	700	6344	7064
55°	670	6203	6750
60°	686	5930	6256
65°	714	5516	5577
70°	761	4811	4711
75°	843	3922	3676
80°	921	2720	2477
85°	820	1443	1268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7182 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	0.5
10°-20°	313.2	2.1
20°-30°	547.9	3.7
30°-40°	705.3	4.8
40°-50°	787.7	5.3
50°-60°	754.5	5.1
60°-70°	597.9	4.0
70°-80°	351.6	2.4
80°-90°	103.9	0.7
90°-100°	795.8	5.4
100°-110°	2092.1	14.1
110°-120°	2169.2	14.6
120°-130°	1740.0	11.7
130°-140°	1365.3	9.2
140°-150°	1047.9	7.1
150°-160°	754.7	5.1
160°-170°	461.7	3.1
170°-180°	156.0	1.1
0°-30°	931.7	6.3
0°-40°	1637.0	11.0
0°-60°	3179.2	21.5
0°-90°	4232.6	28.6
90°-120°	5057.0	34.1
90°-150°	9210.2	62.2
90°-180°	10583.0	71.4
0°-180°	14815.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	532	571	643	727	754	49
15°	399	736	1240	1504	1551	111
25°	255	834	1477	1542	1544	117
35°	172	798	1391	1470	1528	107
45°	118	636	1230	1409	1472	91
55°	84	404	1044	1212	1246	77
65°	67	214	775	871	884	66
75°	49	132	425	467	469	52
85°	18	40	105	116	118	19
90°	11	31	83	42	42	10
95°	105	412	1371	707	481	117
105°	377	571	2313	3511	3276	400
115°	669	813	1853	3696	4218	661
125°	931	1044	1685	2848	3359	827
135°	1110	1222	1632	2299	2606	859
145°	1287	1370	1612	1961	2114	806
155°	1455	1496	1612	1769	1821	669
165°	1570	1591	1612	1675	1696	443
175°	1632	1632	1623	1643	1643	155
180°	1632	1632	1632	1632	1632	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3	546.3
2.5°	546.3	546.3	549.8	551.6	555.1	556.8	560.4	563.9	574.4	576.2	579.7
5°	532.3	539.3	562.1	570.9	595.5	628.9	642.9	665.8	713.2	727.2	736.0
7.5°	511.2	527.0	583.2	597.2	658.7	746.6	783.4	832.6	908.2	945.1	974.9
10°	477.8	511.2	611.3	644.7	744.8	878.3	946.8	1015.4	1129.6	1180.5	1199.8
12.5°	440.9	495.4	641.2	686.8	830.9	1025.9	1108.5	1184.0	1314.0	1382.5	1393.1
15°	398.7	472.5	669.3	736.0	922.2	1148.9	1240.2	1333.3	1454.6	1503.7	1516.0
17.5°	361.9	455.0	695.6	765.9	992.5	1259.6	1352.7	1430.0	1528.3	1561.7	1570.5
20°	316.2	426.9	713.2	804.5	1066.3	1340.4	1430.0	1489.7	1556.4	1577.5	1581.0
22.5°	282.8	397.0	723.7	818.6	1115.5	1389.6	1465.1	1512.5	1558.2	1565.2	1567.0
25°	254.7	363.6	722.0	834.4	1157.7	1419.4	1477.4	1512.5	1538.9	1542.4	1542.4
27.5°	228.4	326.7	714.9	837.9	1189.3	1426.4	1472.1	1496.7	1509.0	1516.0	1516.0
30°	205.5	291.6	697.4	830.9	1203.4	1419.4	1456.3	1468.6	1480.9	1491.4	1496.7
32.5°	188.0	258.2	671.0	816.8	1205.1	1401.9	1428.2	1435.2	1452.8	1477.4	1486.2
35°	172.1	224.8	641.2	797.5	1194.6	1373.8	1391.3	1398.3	1433.5	1470.4	1482.7
37.5°	156.3	200.3	602.5	764.1	1178.8	1340.4	1352.7	1365.0	1419.4	1463.3	1477.4
40°	140.5	179.2	556.8	727.2	1154.2	1300.0	1310.5	1329.8	1401.9	1452.8	1466.9
42.5°	128.2	161.6	507.7	688.6	1122.6	1254.3	1270.1	1298.2	1380.8	1435.2	1451.0
45°	117.7	144.0	455.0	635.9	1082.2	1206.9	1229.7	1268.4	1356.2	1408.9	1422.9
47.5°	107.2	131.7	400.5	581.4	1038.2	1159.4	1189.3	1233.2	1322.8	1373.8	1386.0
50°	98.4	119.4	346.1	523.5	990.7	1108.5	1143.6	1189.3	1280.7	1328.1	1343.9
52.5°	91.3	108.9	295.1	465.5	936.3	1055.8	1096.2	1143.6	1229.7	1275.4	1285.9
55°	84.3	100.1	251.2	404.0	880.1	999.6	1043.5	1089.2	1173.5	1212.1	1219.2
57.5°	80.8	93.1	214.3	346.1	820.3	936.3	985.5	1027.7	1106.7	1136.6	1143.6
60°	75.5	87.8	186.2	296.9	755.3	876.5	918.7	960.9	1027.7	1052.3	1057.6
62.5°	70.3	84.3	165.1	249.4	688.6	806.3	848.4	887.1	943.3	960.9	967.9
65°	66.8	80.8	149.3	214.3	620.1	732.5	774.7	808.0	853.7	871.3	874.8
67.5°	63.2	77.3	137.0	184.4	551.6	658.7	690.3	722.0	757.1	774.7	776.4
70°	58.0	73.8	126.5	163.4	481.3	574.4	600.8	634.1	662.2	671.0	676.3
72.5°	54.5	68.5	119.4	147.6	409.3	493.6	518.2	537.5	562.1	570.9	570.9
75°	49.2	61.5	112.4	131.7	335.5	404.0	425.1	444.4	463.7	467.3	462.0
77.5°	43.9	54.5	96.6	110.7	261.7	319.7	337.3	347.8	363.6	367.1	368.9
80°	36.9	47.4	75.5	86.1	189.7	235.4	247.7	256.5	270.5	270.5	274.0
82.5°	28.1	36.9	54.5	61.5	128.2	161.6	172.1	177.4	186.2	186.2	186.2
85°	17.6	22.8	35.1	40.4	77.3	98.4	105.4	107.2	114.2	115.9	115.9
87.5°	8.8	12.3	22.8	24.6	40.4	50.9	50.9	54.5	54.5	52.7	50.9
90°	11.0	19.8	28.5	30.7	48.2	71.6	83.3	74.0	55.5	41.6	41.6
92.5°	43.8	118.3	192.9	211.5	297.3	411.7	468.9	411.0	295.1	208.2	199.9
95°	105.2	241.5	377.8	411.9	731.4	1157.5	1370.6	1223.0	928.0	706.7	681.6
97.5°	181.9	302.1	422.5	452.5	985.4	1695.8	2051.0	1957.7	1771.3	1631.4	1583.7
100°	241.0	350.1	459.2	486.5	1077.8	1866.0	2260.2	2267.1	2280.7	2290.9	2234.0
102.5°	291.4	393.2	494.9	520.4	1120.1	1919.6	2319.4	2438.3	2675.8	2854.0	2805.4
105°	376.9	463.0	549.3	570.8	1151.5	1925.7	2312.8	2579.2	3111.9	3511.4	3485.3
107.5°	464.5	544.9	625.2	645.3	1157.3	1840.0	2181.3	2552.9	3296.0	3853.3	3859.6
110°	523.7	596.3	668.8	686.9	1148.6	1764.1	2071.8	2487.2	3317.9	3940.9	3968.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	581.8	650.9	720.0	737.3	1148.9	1697.7	1972.0	2397.1	3247.3	3885.0	3926.9
115°	669.4	733.2	797.0	813.0	1159.5	1621.6	1852.7	2262.2	3081.2	3695.5	3753.5
117.5°	756.0	813.9	871.9	886.4	1181.1	1574.0	1770.5	2140.1	2879.2	3433.6	3498.0
120°	806.4	860.9	915.5	929.1	1198.6	1557.9	1737.6	2075.3	2750.8	3257.3	3319.8
122.5°	855.6	910.7	965.7	979.5	1223.8	1549.6	1712.4	2016.5	2624.7	3080.8	3142.6
125°	931.3	981.4	1031.6	1044.1	1257.7	1542.6	1685.0	1943.3	2459.9	2847.5	2904.3
127.5°	992.7	1043.2	1093.9	1106.6	1291.7	1538.6	1662.0	1883.8	2327.4	2660.1	2708.1
130°	1025.5	1080.0	1134.6	1148.2	1316.6	1541.0	1653.2	1850.7	2245.6	2541.8	2586.2
132.5°	1059.5	1114.0	1168.6	1182.2	1336.7	1542.6	1645.6	1822.3	2175.8	2441.0	2480.7
135°	1109.8	1159.5	1209.2	1221.6	1358.6	1541.2	1632.4	1780.5	2076.6	2298.6	2332.8
137.5°	1161.4	1210.6	1259.7	1272.0	1391.4	1550.6	1630.3	1755.5	2005.7	2193.4	2221.4
140°	1204.1	1249.4	1294.6	1305.9	1411.5	1552.2	1622.6	1730.7	1946.9	2109.1	2135.2
142.5°	1236.9	1278.8	1320.7	1331.2	1428.3	1557.8	1622.6	1717.5	1907.4	2049.9	2072.4
145°	1287.3	1323.9	1360.4	1369.5	1450.3	1557.8	1611.6	1689.2	1844.6	1961.2	1978.2
147.5°	1337.7	1373.3	1408.9	1417.8	1482.4	1568.6	1611.6	1672.7	1794.9	1886.6	1900.7
150°	1370.6	1402.7	1434.9	1442.9	1499.1	1574.1	1611.6	1663.2	1766.4	1843.9	1855.3
152.5°	1404.6	1428.9	1453.3	1459.4	1510.2	1577.8	1611.6	1655.7	1743.8	1809.9	1818.5
155°	1455.0	1473.0	1491.0	1495.5	1534.2	1585.8	1611.6	1646.6	1716.8	1769.4	1775.1
157.5°	1492.2	1509.8	1527.3	1531.7	1558.3	1593.9	1611.6	1638.9	1693.5	1734.4	1738.4
160°	1517.4	1531.1	1544.7	1548.1	1569.3	1597.5	1611.6	1635.0	1681.8	1716.8	1719.1
162.5°	1542.6	1552.8	1563.1	1565.7	1580.9	1601.4	1611.6	1631.4	1670.8	1700.4	1702.6
165°	1570.0	1579.2	1588.5	1590.8	1597.7	1606.9	1611.6	1625.7	1654.0	1675.2	1677.5
167.5°	1595.2	1599.6	1604.0	1605.1	1610.9	1618.7	1622.6	1631.8	1650.3	1664.2	1665.2
170°	1611.6	1616.0	1620.4	1621.5	1621.9	1622.3	1622.6	1631.8	1650.3	1664.2	1664.2
172.5°	1620.4	1621.3	1622.3	1622.6	1622.6	1622.6	1622.6	1629.9	1644.4	1655.4	1654.5
175°	1632.4	1632.4	1632.4	1632.4	1629.2	1624.8	1622.6	1627.2	1636.5	1643.4	1643.4
177.5°	1632.4	1632.4	1632.4	1632.4	1629.9	1626.4	1624.8	1628.5	1635.7	1641.2	1640.2
180°	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	546.3	546.3
2.5°	583.2	579.7
5°	750.1	753.6
7.5°	1010.1	1008.4
10°	1256.1	1271.9
12.5°	1435.2	1438.7
15°	1544.1	1551.2
17.5°	1586.3	1588.1
20°	1588.1	1584.5
22.5°	1568.7	1565.2
25°	1545.9	1544.1
27.5°	1524.8	1526.6
30°	1516.0	1521.3
32.5°	1516.0	1524.8
35°	1519.5	1528.3
37.5°	1517.8	1528.3
40°	1510.8	1523.1
42.5°	1491.4	1500.2
45°	1461.6	1472.1
47.5°	1422.9	1430.0
50°	1373.8	1380.8
52.5°	1312.3	1314.0
55°	1238.5	1245.5
57.5°	1159.4	1161.2
60°	1071.6	1076.9
62.5°	978.4	978.4
65°	880.1	883.6
67.5°	778.2	787.0
70°	674.5	676.3
72.5°	572.7	572.7
75°	467.3	469.0
77.5°	367.1	367.1
80°	272.3	274.0
82.5°	188.0	191.5
85°	117.7	117.7
87.5°	54.5	49.2
90°	41.6	41.6
92.5°	166.8	133.7
95°	581.3	481.0
97.5°	1392.7	1201.9
100°	2006.7	1779.3
102.5°	2610.6	2415.9
105°	3380.6	3275.9
107.5°	3884.9	3910.2
110°	4077.2	4186.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4094.4	4261.9
115°	3985.8	4218.0
117.5°	3755.6	4013.2
120°	3570.1	3820.3
122.5°	3389.5	3636.3
125°	3131.8	3359.2
127.5°	2900.0	3091.8
130°	2763.4	2940.6
132.5°	2639.4	2798.2
135°	2469.6	2606.4
137.5°	2333.4	2445.4
140°	2239.9	2344.6
142.5°	2162.5	2252.6
145°	2046.4	2114.5
147.5°	1957.2	2013.7
150°	1901.2	1946.9
152.5°	1853.1	1887.7
155°	1798.1	1820.9
157.5°	1754.4	1770.5
160°	1728.4	1737.6
162.5°	1711.3	1720.1
165°	1686.8	1696.0
167.5°	1669.1	1673.0
170°	1664.2	1664.2
172.5°	1651.2	1647.8
175°	1643.4	1643.4
177.5°	1636.3	1632.4
180°	1632.4	1632.4



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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	1.85	2.56	2.96	3.68	5.22	15.03	15.74	16.14	16.86	18.40
	3H	2.54	3.18	3.67	4.31	5.87	16.85	17.50	17.98	18.62	20.18
	4H	2.83	3.44	3.97	4.57	6.13	17.49	18.10	18.63	19.23	20.79
	6H	3.08	3.64	4.22	4.76	6.34	17.92	18.48	19.06	19.60	21.18
	8H	3.14	3.67	4.29	4.82	6.39	18.03	18.57	19.18	19.71	21.28
	12H	3.15	3.66	4.30	4.79	6.39	18.09	18.60	19.24	19.74	21.33
4H	2H	9.04	9.66	10.19	10.78	12.34	15.28	15.89	16.42	17.02	18.58
	3H	10.60	11.11	11.75	12.26	13.84	17.31	17.82	18.46	18.97	20.55
	4H	10.69	11.16	11.84	12.29	13.89	18.07	18.54	19.23	19.68	21.28
	6H	10.69	11.09	11.85	12.25	13.84	18.60	19.01	19.76	20.17	21.76
	8H	10.66	11.04	11.82	12.19	13.80	18.76	19.14	19.92	20.29	21.90
	12H	10.61	10.95	11.78	12.12	13.73	18.85	19.19	20.02	20.35	21.97
8H	4H	12.12	12.49	13.27	13.65	15.25	18.12	18.50	19.28	19.65	21.26
	6H	12.35	12.66	13.53	13.86	15.46	18.74	19.06	19.92	20.25	21.85
	8H	12.37	12.64	13.55	13.81	15.44	18.96	19.23	20.14	20.41	22.03
	12H	12.33	12.57	13.52	13.74	15.40	19.10	19.34	20.29	20.51	22.16
12H	4H	12.25	12.60	13.43	13.76	15.37	18.07	18.41	19.24	19.57	21.18
	6H	12.61	12.88	13.79	14.05	15.68	18.73	19.00	19.91	20.17	21.79
	8H	12.67	12.91	13.86	14.08	15.74	18.95	19.19	20.13	20.36	22.01