

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: P938352

Luminaire Tested: SQ4-FB-150U-075D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938352
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-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

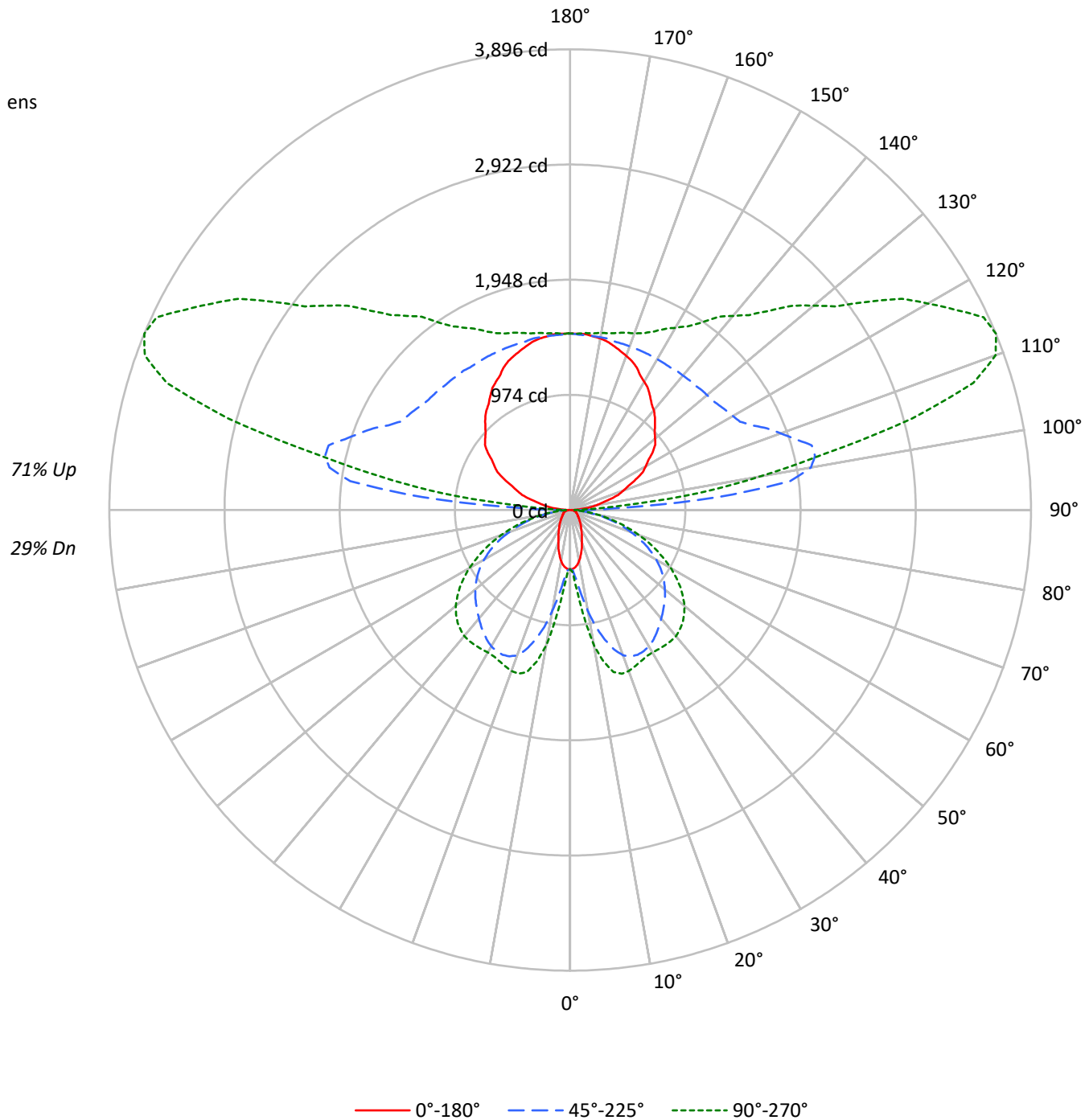
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13545.0 lumens
Efficiency: N/A
Efficacy: 106.5 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				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	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°	2317	2317	2317
5°	2264	2678	3115
10°	2053	3904	5164
15°	1745	5101	6236
20°	1421	5911	6355
25°	1185	6186	6226
30°	999	6225	6214
35°	884	6121	6375
40°	770	5988	6541
45°	697	5889	6567
50°	639	5800	6458
55°	613	5671	6172
60°	628	5421	5720
65°	652	5043	5098
70°	695	4398	4307
75°	771	3586	3361
80°	841	2486	2264
85°	750	1320	1159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6567 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.6	0.5
10°-20°	286.4	2.1
20°-30°	500.9	3.7
30°-40°	644.8	4.8
40°-50°	720.2	5.3
50°-60°	689.8	5.1
60°-70°	546.6	4.0
70°-80°	321.4	2.4
80°-90°	95.0	0.7
90°-100°	727.5	5.4
100°-110°	1912.7	14.1
110°-120°	1983.2	14.6
120°-130°	1590.8	11.7
130°-140°	1248.2	9.2
140°-150°	958.1	7.1
150°-160°	690.0	5.1
160°-170°	422.2	3.1
170°-180°	142.6	1.1
0°-30°	851.9	6.3
0°-40°	1496.7	11.0
0°-60°	2906.7	21.5
0°-90°	3869.7	28.6
90°-120°	4623.4	34.1
90°-150°	8420.5	62.2
90°-180°	9675.0	71.4
0°-180°	13545.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	487	522	588	665	689	45
15°	365	673	1134	1375	1418	101
25°	233	763	1351	1410	1412	107
35°	157	729	1272	1344	1397	98
45°	108	581	1124	1288	1346	83
55°	77	369	954	1108	1139	70
65°	61	196	708	797	808	60
75°	45	120	389	427	429	47
85°	16	37	96	106	108	17
90°	10	28	76	38	38	9
95°	96	377	1253	646	440	107
105°	345	522	2114	3210	2995	365
115°	612	743	1694	3379	3856	604
125°	851	955	1541	2603	3071	756
135°	1015	1117	1492	2102	2383	785
145°	1177	1252	1473	1793	1933	737
155°	1330	1367	1473	1618	1665	611
165°	1435	1454	1473	1532	1551	405
175°	1492	1492	1484	1502	1502	142
180°	1492	1492	1492	1492	1492	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5
2.5°	499.5	499.5	502.7	504.3	507.5	509.1	512.3	515.5	525.2	526.8	530.0
5°	486.6	493.0	513.9	522.0	544.4	574.9	587.8	608.7	652.0	664.9	672.9
7.5°	467.3	481.8	533.2	546.0	602.2	682.6	716.3	761.2	830.3	864.0	891.3
10°	436.8	467.3	558.9	589.4	680.9	803.0	865.6	928.3	1032.7	1079.3	1097.0
12.5°	403.1	452.9	586.2	627.9	759.6	938.0	1013.5	1082.5	1201.4	1264.0	1273.6
15°	364.6	432.0	611.9	672.9	843.2	1050.4	1133.9	1219.0	1329.8	1374.8	1386.1
17.5°	330.8	416.0	636.0	700.2	907.4	1151.6	1236.7	1307.4	1397.3	1427.8	1435.8
20°	289.1	390.3	652.0	735.5	974.9	1225.5	1307.4	1362.0	1423.0	1442.3	1445.5
22.5°	258.6	363.0	661.7	748.4	1019.9	1270.4	1339.5	1382.8	1424.6	1431.0	1432.6
25°	232.9	332.4	660.1	762.8	1058.4	1297.7	1350.7	1382.8	1406.9	1410.1	1410.1
27.5°	208.8	298.7	653.6	766.1	1087.3	1304.2	1345.9	1368.4	1379.6	1386.1	1386.1
30°	187.9	266.6	637.6	759.6	1100.2	1297.7	1331.5	1342.7	1353.9	1363.6	1368.4
32.5°	171.8	236.1	613.5	746.8	1101.8	1281.7	1305.8	1312.2	1328.2	1350.7	1358.8
35°	157.4	205.6	586.2	729.1	1092.2	1256.0	1272.0	1278.5	1310.6	1344.3	1355.5
37.5°	142.9	183.1	550.9	698.6	1077.7	1225.5	1236.7	1247.9	1297.7	1337.9	1350.7
40°	128.5	163.8	509.1	664.9	1055.2	1188.5	1198.2	1215.8	1281.7	1328.2	1341.1
42.5°	117.2	147.8	464.1	629.6	1026.3	1146.8	1161.2	1186.9	1262.4	1312.2	1326.6
45°	107.6	131.7	416.0	581.4	989.4	1103.4	1124.3	1159.6	1239.9	1288.1	1300.9
47.5°	98.0	120.4	366.2	531.6	949.2	1060.0	1087.3	1127.5	1209.4	1256.0	1267.2
50°	89.9	109.2	316.4	478.6	905.8	1013.5	1045.6	1087.3	1170.9	1214.2	1228.7
52.5°	83.5	99.6	269.8	425.6	856.0	965.3	1002.2	1045.6	1124.3	1166.0	1175.7
55°	77.1	91.5	229.7	369.4	804.6	913.9	954.0	995.8	1072.9	1108.2	1114.6
57.5°	73.9	85.1	195.9	316.4	750.0	856.0	901.0	939.6	1011.9	1039.2	1045.6
60°	69.1	80.3	170.2	271.4	690.6	801.4	839.9	878.5	939.6	962.1	966.9
62.5°	64.2	77.1	151.0	228.1	629.6	737.2	775.7	811.0	862.4	878.5	884.9
65°	61.0	73.9	136.5	195.9	566.9	669.7	708.2	738.8	780.5	796.6	799.8
67.5°	57.8	70.7	125.3	168.6	504.3	602.2	631.2	660.1	692.2	708.2	709.9
70°	53.0	67.5	115.6	149.4	440.0	525.2	549.3	579.8	605.5	613.5	618.3
72.5°	49.8	62.6	109.2	134.9	374.2	451.3	473.8	491.4	513.9	522.0	522.0
75°	45.0	56.2	102.8	120.4	306.7	369.4	388.7	406.3	424.0	427.2	422.4
77.5°	40.2	49.8	88.3	101.2	239.3	292.3	308.4	318.0	332.4	335.7	337.3
80°	33.7	43.4	69.1	78.7	173.4	215.2	226.4	234.5	247.3	247.3	250.5
82.5°	25.7	33.7	49.8	56.2	117.2	147.8	157.4	162.2	170.2	170.2	170.2
85°	16.1	20.9	32.1	36.9	70.7	89.9	96.4	98.0	104.4	106.0	106.0
87.5°	8.0	11.2	20.9	22.5	36.9	46.6	46.6	49.8	49.8	48.2	46.6
90°	10.0	18.1	26.0	28.0	44.1	65.4	76.1	67.7	50.7	38.1	38.1
92.5°	40.1	108.2	176.3	193.4	271.8	376.4	428.7	375.7	269.8	190.3	182.8
95°	96.2	220.8	345.5	376.6	668.7	1058.3	1253.1	1118.2	848.4	646.1	623.1
97.5°	166.3	276.2	386.2	413.7	900.9	1550.4	1875.2	1789.9	1619.4	1491.5	1447.9
100°	220.3	320.1	419.8	444.8	985.4	1706.1	2066.4	2072.7	2085.2	2094.5	2042.5
102.5°	266.4	359.5	452.5	475.8	1024.1	1755.0	2120.6	2229.2	2446.4	2609.3	2564.9
105°	344.6	423.3	502.2	521.9	1052.7	1760.6	2114.5	2358.1	2845.1	3210.4	3186.5
107.5°	424.7	498.2	571.6	590.0	1058.1	1682.3	1994.3	2334.0	3013.4	3522.9	3528.7
110°	478.8	545.2	611.5	628.0	1050.1	1612.8	1894.2	2273.9	3033.4	3603.1	3628.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	531.9	595.1	658.3	674.1	1050.4	1552.1	1803.0	2191.6	2968.9	3551.9	3590.2
115°	612.0	670.3	728.6	743.3	1060.1	1482.6	1693.8	2068.2	2817.0	3378.6	3431.7
117.5°	691.1	744.1	797.1	810.4	1079.8	1439.1	1618.7	1956.6	2632.4	3139.2	3198.1
120°	737.2	787.1	837.0	849.4	1095.9	1424.4	1588.7	1897.4	2514.9	2978.0	3035.2
122.5°	782.3	832.6	882.9	895.5	1118.9	1416.7	1565.6	1843.6	2399.7	2816.7	2873.1
125°	851.4	897.3	943.1	954.6	1149.9	1410.3	1540.6	1776.7	2249.0	2603.3	2655.3
127.5°	907.6	953.8	1000.1	1011.7	1181.0	1406.7	1519.5	1722.3	2127.9	2432.0	2475.9
130°	937.6	987.4	1037.3	1049.8	1203.7	1408.9	1511.5	1692.0	2053.1	2323.9	2364.4
132.5°	968.7	1018.5	1068.4	1080.8	1222.1	1410.4	1504.5	1666.1	1989.3	2231.7	2268.0
135°	1014.7	1060.1	1105.6	1116.9	1242.1	1409.0	1492.5	1627.8	1898.5	2101.5	2132.8
137.5°	1061.8	1106.8	1151.7	1162.9	1272.1	1417.7	1490.5	1605.0	1833.7	2005.3	2030.9
140°	1100.8	1142.3	1183.6	1194.0	1290.5	1419.1	1483.5	1582.3	1780.0	1928.2	1952.2
142.5°	1130.9	1169.2	1207.5	1217.0	1305.8	1424.3	1483.5	1570.3	1743.9	1874.1	1894.7
145°	1177.0	1210.4	1243.8	1252.1	1325.9	1424.3	1473.4	1544.4	1686.5	1793.0	1808.6
147.5°	1223.0	1255.6	1288.1	1296.2	1355.3	1434.1	1473.4	1529.3	1641.0	1724.8	1737.8
150°	1253.1	1282.5	1311.9	1319.2	1370.6	1439.1	1473.4	1520.6	1615.0	1685.8	1696.3
152.5°	1284.2	1306.4	1328.7	1334.3	1380.7	1442.5	1473.4	1513.7	1594.3	1654.7	1662.6
155°	1330.2	1346.7	1363.2	1367.3	1402.7	1449.8	1473.4	1505.5	1569.6	1617.7	1622.9
157.5°	1364.3	1380.4	1396.3	1400.4	1424.7	1457.2	1473.4	1498.4	1548.3	1585.7	1589.4
160°	1387.3	1399.8	1412.2	1415.4	1434.7	1460.5	1473.4	1494.8	1537.6	1569.6	1571.7
162.5°	1410.4	1419.7	1429.1	1431.4	1445.4	1464.1	1473.4	1491.5	1527.5	1554.6	1556.6
165°	1435.4	1443.8	1452.3	1454.4	1460.7	1469.2	1473.4	1486.4	1512.2	1531.6	1533.6
167.5°	1458.4	1462.4	1466.4	1467.5	1472.8	1479.9	1483.5	1491.9	1508.8	1521.5	1522.4
170°	1473.4	1477.4	1481.5	1482.5	1482.8	1483.2	1483.5	1491.9	1508.8	1521.5	1521.5
172.5°	1481.5	1482.3	1483.2	1483.5	1483.5	1483.5	1483.5	1490.1	1503.5	1513.5	1512.7
175°	1492.5	1492.5	1492.5	1492.5	1489.5	1485.5	1483.5	1487.7	1496.1	1502.5	1502.5
177.5°	1492.5	1492.5	1492.5	1492.5	1490.1	1487.0	1485.5	1488.8	1495.5	1500.5	1499.6
180°	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	499.5	499.5
2.5°	533.2	530.0
5°	685.8	689.0
7.5°	923.5	921.9
10°	1148.4	1162.8
12.5°	1312.2	1315.4
15°	1411.8	1418.2
17.5°	1450.3	1451.9
20°	1451.9	1448.7
22.5°	1434.2	1431.0
25°	1413.4	1411.8
27.5°	1394.1	1395.7
30°	1386.1	1390.9
32.5°	1386.1	1394.1
35°	1389.3	1397.3
37.5°	1387.7	1397.3
40°	1381.2	1392.5
42.5°	1363.6	1371.6
45°	1336.3	1345.9
47.5°	1300.9	1307.4
50°	1256.0	1262.4
52.5°	1199.8	1201.4
55°	1132.3	1138.7
57.5°	1060.0	1061.6
60°	979.7	984.6
62.5°	894.5	894.5
65°	804.6	807.8
67.5°	711.5	719.5
70°	616.7	618.3
72.5°	523.6	523.6
75°	427.2	428.8
77.5°	335.7	335.7
80°	248.9	250.5
82.5°	171.8	175.1
85°	107.6	107.6
87.5°	49.8	45.0
90°	38.1	38.1
92.5°	152.5	122.2
95°	531.4	439.7
97.5°	1273.3	1098.8
100°	1834.6	1626.7
102.5°	2386.8	2208.7
105°	3090.7	2995.0
107.5°	3551.8	3575.0
110°	3727.7	3827.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3743.3	3896.5
115°	3644.1	3856.4
117.5°	3433.6	3669.1
120°	3264.0	3492.8
122.5°	3098.9	3324.6
125°	2863.3	3071.2
127.5°	2651.3	2826.7
130°	2526.5	2688.5
132.5°	2413.1	2558.3
135°	2257.9	2383.0
137.5°	2133.3	2235.7
140°	2047.9	2143.6
142.5°	1977.1	2059.5
145°	1870.9	1933.2
147.5°	1789.4	1841.0
150°	1738.2	1780.0
152.5°	1694.2	1725.9
155°	1643.9	1664.8
157.5°	1604.0	1618.7
160°	1580.2	1588.7
162.5°	1564.6	1572.6
165°	1542.2	1550.6
167.5°	1526.0	1529.6
170°	1521.5	1521.5
172.5°	1509.6	1506.5
175°	1502.5	1502.5
177.5°	1496.0	1492.5
180°	1492.5	1492.5



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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	1.53	2.25	2.65	3.36	4.91	14.71	15.43	15.83	16.54	18.09
	3H	2.23	2.87	3.35	3.99	5.56	16.54	17.19	17.67	18.31	19.87
	4H	2.52	3.13	3.66	4.25	5.82	17.18	17.79	18.32	18.91	20.48
	6H	2.76	3.33	3.91	4.45	6.03	17.60	18.17	18.75	19.29	20.87
	8H	2.83	3.36	3.97	4.50	6.08	17.72	18.26	18.87	19.40	20.97
	12H	2.84	3.35	3.99	4.48	6.08	17.78	18.29	18.93	19.43	21.02
4H	2H	8.73	9.34	9.87	10.47	12.03	14.97	15.58	16.11	16.70	18.27
	3H	10.29	10.80	11.43	11.95	13.53	17.00	17.51	18.15	18.66	20.24
	4H	10.37	10.84	11.53	11.98	13.58	17.76	18.23	18.91	19.37	20.97
	6H	10.38	10.78	11.53	11.94	13.53	18.29	18.70	19.45	19.86	21.45
	8H	10.35	10.73	11.51	11.88	13.48	18.45	18.83	19.61	19.98	21.59
	12H	10.30	10.64	11.47	11.80	13.42	18.54	18.88	19.71	20.04	21.65
8H	4H	11.81	12.18	12.96	13.34	14.94	17.81	18.19	18.97	19.34	20.95
	6H	12.04	12.35	13.22	13.55	15.15	18.43	18.74	19.61	19.94	21.54
	8H	12.06	12.33	13.24	13.50	15.13	18.65	18.92	19.83	20.09	21.72
	12H	12.02	12.26	13.21	13.43	15.08	18.79	19.03	19.97	20.20	21.85
12H	4H	11.94	12.28	13.12	13.45	15.06	17.76	18.10	18.93	19.26	20.87
	6H	12.30	12.57	13.48	13.74	15.37	18.41	18.69	19.60	19.86	21.48
	8H	12.36	12.60	13.55	13.77	15.43	18.64	18.88	19.82	20.05	21.70