

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: P937029

Luminaire Tested: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-12-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937029
REPORT IS A COMBINATION OF REPORTS P933493 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-12-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

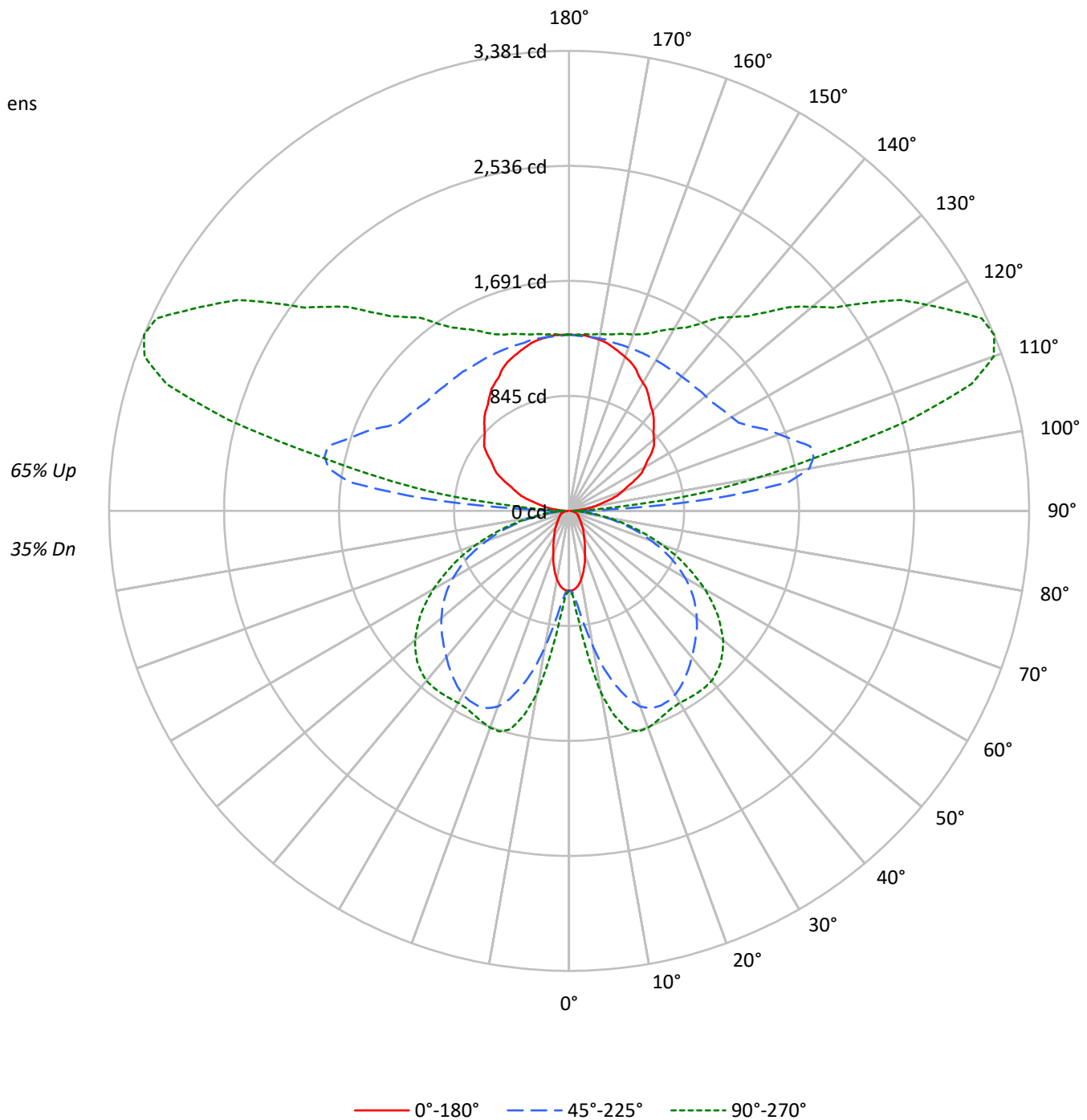
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12926.1 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 103.2
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	50	30	10	0
RCR																					
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35			35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29			29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23			23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19			19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16			16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14			14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12			12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10			10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9			9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8			8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1809	1809	1809
5°	1768	2091	2432
10°	1604	3050	4032
15°	1364	3985	4868
20°	1111	4620	4961
25°	927	4835	4861
30°	782	4867	4851
35°	692	4787	4977
40°	603	4684	5106
45°	547	4608	5127
50°	502	4540	5041
55°	481	4441	4818
60°	493	4248	4465
65°	514	3954	3980
70°	549	3450	3363
75°	610	2815	2624
80°	672	1955	1768
85°	609	1039	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5127 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	0.6
10°-20°	335.3	2.6
20°-30°	586.6	4.5
30°-40°	755.1	5.8
40°-50°	843.4	6.5
50°-60°	807.8	6.2
60°-70°	640.2	5.0
70°-80°	376.4	2.9
80°-90°	109.5	0.8
90°-100°	631.3	4.9
100°-110°	1659.8	12.8
110°-120°	1721.1	13.3
120°-130°	1380.5	10.7
130°-140°	1083.2	8.4
140°-150°	831.4	6.4
150°-160°	598.7	4.6
160°-170°	366.3	2.8
170°-180°	123.8	1.0
0°-30°	997.6	7.7
0°-40°	1752.6	13.6
0°-60°	3403.8	26.3
0°-90°	4529.9	35.0
90°-120°	4012.2	31.0
90°-150°	7307.3	56.5
90°-180°	8396.0	65.0
0°-180°	12926.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	570	611	688	779	807	53
15°	427	788	1328	1610	1661	119
25°	273	893	1582	1651	1653	126
35°	184	854	1490	1574	1636	115
45°	126	681	1316	1508	1576	97
55°	90	433	1117	1298	1334	82
65°	72	230	830	933	946	71
75°	53	141	455	500	502	55
85°	19	43	113	124	126	20
90°	9	24	66	33	33	8
95°	84	327	1087	561	382	93
105°	299	453	1835	2786	2599	317
115°	531	645	1470	2932	3347	525
125°	739	828	1337	2259	2665	656
135°	881	969	1295	1824	2068	681
145°	1021	1087	1279	1556	1678	640
155°	1154	1186	1279	1404	1445	530
165°	1246	1262	1279	1329	1346	352
175°	1295	1295	1287	1304	1304	123
180°	1295	1295	1295	1295	1295	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	584.9	584.9	584.9	584.9	584.9	584.9	584.9	584.9	584.9	584.9	584.9
2.5°	584.9	584.9	588.7	590.5	594.3	596.2	600.0	603.7	615.0	616.9	620.6
5°	569.9	577.4	601.9	611.2	637.6	673.3	688.3	712.8	763.6	778.6	788.1
7.5°	547.3	564.2	624.4	639.4	705.3	799.4	838.8	891.5	972.4	1011.8	1043.8
10°	511.6	547.3	654.5	690.3	797.4	940.4	1013.7	1087.1	1209.3	1263.9	1284.6
12.5°	472.0	530.4	686.4	735.3	889.6	1098.4	1186.8	1267.6	1406.8	1480.2	1491.4
15°	427.0	506.0	716.5	788.1	987.4	1230.0	1327.8	1427.5	1557.3	1609.9	1623.1
17.5°	387.4	487.1	744.8	820.0	1062.7	1348.5	1448.1	1531.0	1636.3	1672.0	1681.4
20°	338.6	457.1	763.6	861.4	1141.6	1435.1	1531.0	1594.9	1666.4	1688.9	1692.7
22.5°	302.8	425.0	774.9	876.5	1194.3	1487.7	1568.5	1619.4	1668.3	1675.7	1677.6
25°	272.7	389.3	773.0	893.4	1239.4	1519.6	1581.7	1619.4	1647.5	1651.3	1651.3
27.5°	244.5	349.9	765.4	897.1	1273.3	1527.2	1576.1	1602.4	1615.5	1623.1	1623.1
30°	220.0	312.2	746.6	889.6	1288.3	1519.6	1559.2	1572.4	1585.4	1596.8	1602.4
32.5°	201.2	276.5	718.4	874.5	1290.2	1500.9	1529.1	1536.6	1555.4	1581.7	1591.2
35°	184.3	240.8	686.4	853.9	1279.0	1470.8	1489.5	1497.1	1534.7	1574.2	1587.3
37.5°	167.4	214.4	645.1	818.1	1261.9	1435.1	1448.1	1461.3	1519.6	1566.7	1581.7
40°	150.5	191.8	596.2	778.6	1235.7	1391.8	1403.1	1423.7	1500.9	1555.4	1570.4
42.5°	137.3	173.0	543.5	737.3	1201.8	1342.9	1359.8	1389.9	1478.2	1536.6	1553.5
45°	126.0	154.2	487.1	680.8	1158.6	1292.0	1316.5	1357.9	1452.0	1508.3	1523.4
47.5°	114.7	141.0	428.8	622.5	1111.6	1241.3	1273.3	1320.3	1416.2	1470.8	1483.9
50°	105.3	127.9	370.5	560.4	1060.7	1186.8	1224.4	1273.3	1371.1	1421.9	1438.8
52.5°	97.8	116.7	315.9	498.4	1002.5	1130.3	1173.6	1224.4	1316.5	1365.4	1376.7
55°	90.3	107.2	268.9	432.6	942.3	1070.1	1117.2	1166.0	1256.3	1297.7	1305.2
57.5°	86.6	99.6	229.5	370.5	878.3	1002.5	1055.1	1100.2	1184.8	1216.9	1224.4
60°	80.9	94.0	199.4	317.9	808.7	938.5	983.7	1028.7	1100.2	1126.6	1132.2
62.5°	75.2	90.3	176.8	267.0	737.3	863.3	908.4	949.8	1009.9	1028.7	1036.3
65°	71.5	86.6	159.8	229.5	663.9	784.3	829.5	865.2	914.0	932.8	936.6
67.5°	67.7	82.7	146.7	197.5	590.5	705.3	739.2	773.0	810.6	829.5	831.3
70°	62.1	79.0	135.4	174.9	515.3	615.0	643.3	679.0	709.1	718.4	724.1
72.5°	58.3	73.4	127.9	158.0	438.2	528.5	554.8	575.5	601.9	611.2	611.2
75°	52.6	65.8	120.4	141.0	359.2	432.6	455.1	475.9	496.5	500.3	494.6
77.5°	47.0	58.3	103.5	118.5	280.2	342.3	361.1	372.4	389.3	393.0	394.9
80°	39.5	50.8	80.9	92.2	203.1	252.0	265.2	274.6	289.7	289.7	293.4
82.5°	30.1	39.5	58.3	65.8	137.3	173.0	184.3	189.9	199.4	199.4	199.4
85°	18.8	24.5	37.6	43.3	82.7	105.3	112.8	114.7	122.3	124.1	124.1
87.5°	9.4	13.2	24.5	26.4	43.3	54.6	54.6	58.3	58.3	56.5	54.6
90°	8.7	15.6	22.5	24.3	38.2	56.8	66.1	58.7	44.0	33.0	33.0
92.5°	34.8	93.8	153.0	167.8	235.8	326.6	372.0	326.0	234.1	165.2	158.6
95°	83.5	191.6	299.9	326.9	580.4	918.4	1087.4	970.4	736.3	560.6	540.7
97.5°	144.3	239.8	335.2	359.0	781.8	1345.4	1627.2	1553.2	1405.2	1294.3	1256.4
100°	191.2	277.8	364.3	385.9	855.1	1480.5	1793.2	1798.7	1809.5	1817.6	1772.5
102.5°	231.2	312.0	392.7	412.9	888.6	1523.0	1840.2	1934.5	2123.0	2264.4	2225.8
105°	299.0	367.4	435.8	452.9	913.6	1527.9	1835.0	2046.4	2469.0	2786.0	2765.2
107.5°	368.6	432.3	496.0	512.0	918.3	1459.9	1730.7	2025.5	2615.0	3057.1	3062.2
110°	415.5	473.1	530.6	545.0	911.2	1399.6	1643.8	1973.4	2632.4	3126.7	3148.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	461.6	516.4	571.3	585.0	911.6	1347.0	1564.7	1901.9	2576.5	3082.4	3115.6
115°	531.1	581.7	632.3	644.9	919.9	1286.6	1469.9	1794.8	2444.6	2932.0	2978.1
117.5°	599.8	645.8	691.7	703.2	937.0	1248.8	1404.7	1697.9	2284.3	2724.2	2775.3
120°	639.8	683.1	726.3	737.1	951.0	1236.1	1378.6	1646.5	2182.4	2584.3	2633.9
122.5°	678.9	722.5	766.2	777.1	971.0	1229.4	1358.6	1599.8	2082.4	2444.3	2493.3
125°	738.9	778.7	818.5	828.4	997.9	1223.9	1336.9	1541.9	1951.8	2259.2	2304.3
127.5°	787.6	827.8	868.0	878.0	1024.9	1220.7	1318.7	1494.7	1846.6	2110.6	2148.6
130°	813.7	856.9	900.1	911.0	1044.5	1222.6	1311.7	1468.3	1781.6	2016.6	2051.8
132.5°	840.6	883.9	927.0	937.9	1060.4	1223.9	1305.6	1445.8	1726.3	1936.7	1968.2
135°	880.6	919.9	959.4	969.2	1077.9	1222.8	1295.2	1412.6	1647.5	1823.7	1850.8
137.5°	921.4	960.4	999.5	1009.2	1104.0	1230.3	1293.4	1392.7	1591.3	1740.2	1762.5
140°	955.3	991.2	1027.1	1036.1	1119.9	1231.6	1287.4	1373.2	1544.7	1673.3	1694.1
142.5°	981.3	1014.6	1047.8	1056.1	1133.2	1236.0	1287.4	1362.7	1513.4	1626.4	1644.2
145°	1021.4	1050.3	1079.3	1086.6	1150.6	1236.0	1278.7	1340.3	1463.6	1556.0	1569.6
147.5°	1061.4	1089.6	1117.8	1124.8	1176.1	1244.5	1278.7	1327.2	1424.1	1496.8	1508.1
150°	1087.4	1113.0	1138.5	1144.8	1189.4	1249.0	1278.7	1319.6	1401.5	1462.9	1472.0
152.5°	1114.4	1133.7	1153.0	1157.8	1198.1	1251.9	1278.7	1313.6	1383.6	1436.0	1442.8
155°	1154.4	1168.7	1183.0	1186.5	1217.3	1258.2	1278.7	1306.5	1362.1	1403.8	1408.4
157.5°	1183.9	1197.8	1211.8	1215.2	1236.3	1264.6	1278.7	1300.3	1343.5	1376.0	1379.2
160°	1203.9	1214.7	1225.6	1228.3	1245.1	1267.5	1278.7	1297.2	1334.3	1362.1	1364.0
162.5°	1223.9	1232.0	1240.1	1242.1	1254.3	1270.5	1278.7	1294.3	1325.6	1349.1	1350.8
165°	1245.7	1253.0	1260.3	1262.1	1267.6	1275.0	1278.7	1289.9	1312.2	1329.1	1330.9
167.5°	1265.6	1269.1	1272.6	1273.4	1278.1	1284.3	1287.4	1294.7	1309.3	1320.4	1321.1
170°	1278.7	1282.1	1285.7	1286.5	1286.8	1287.2	1287.4	1294.7	1309.3	1320.4	1320.4
172.5°	1285.6	1286.3	1287.2	1287.4	1287.4	1287.4	1287.4	1293.2	1304.8	1313.4	1312.8
175°	1295.2	1295.2	1295.2	1295.2	1292.6	1289.1	1287.4	1291.0	1298.4	1303.9	1303.9
177.5°	1295.2	1295.2	1295.2	1295.2	1293.2	1290.5	1289.1	1292.0	1297.8	1302.1	1301.4
180°	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	584.9	584.9
2.5°	624.4	620.6
5°	803.1	806.8
7.5°	1081.5	1079.6
10°	1344.8	1361.7
12.5°	1536.6	1540.3
15°	1653.2	1660.7
17.5°	1698.4	1700.2
20°	1700.2	1696.5
22.5°	1679.5	1675.7
25°	1655.1	1653.2
27.5°	1632.5	1634.4
30°	1623.1	1628.7
32.5°	1623.1	1632.5
35°	1626.9	1636.3
37.5°	1625.0	1636.3
40°	1617.4	1630.6
42.5°	1596.8	1606.2
45°	1564.8	1576.1
47.5°	1523.4	1531.0
50°	1470.8	1478.2
52.5°	1405.0	1406.8
55°	1326.0	1333.5
57.5°	1241.3	1243.2
60°	1147.3	1152.9
62.5°	1047.6	1047.6
65°	942.3	946.0
67.5°	833.2	842.5
70°	722.2	724.1
72.5°	613.2	613.2
75°	500.3	502.1
77.5°	393.0	393.0
80°	291.5	293.4
82.5°	201.2	205.0
85°	126.0	126.0
87.5°	58.3	52.6
90°	33.0	33.0
92.5°	132.4	106.1
95°	461.2	381.6
97.5°	1105.0	953.6
100°	1592.1	1411.7
102.5°	2071.2	1916.7
105°	2682.1	2599.0
107.5°	3082.3	3102.4
110°	3234.8	3321.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3248.5	3381.4
115°	3162.3	3346.6
117.5°	2979.7	3184.1
120°	2832.5	3031.1
122.5°	2689.1	2885.1
125°	2484.7	2665.1
127.5°	2300.9	2453.0
130°	2192.4	2333.1
132.5°	2094.1	2220.1
135°	1959.4	2067.9
137.5°	1851.3	1940.2
140°	1777.2	1860.2
142.5°	1715.7	1787.2
145°	1623.6	1677.6
147.5°	1552.8	1597.7
150°	1508.3	1544.7
152.5°	1470.3	1497.7
155°	1426.5	1444.7
157.5°	1392.0	1404.7
160°	1371.3	1378.6
162.5°	1357.8	1364.8
165°	1338.2	1345.6
167.5°	1324.3	1327.4
170°	1320.4	1320.4
172.5°	1310.1	1307.4
175°	1303.9	1303.9
177.5°	1298.3	1295.2
180°	1295.2	1295.2



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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	1.52	2.29	2.59	3.36	4.83	14.71	15.48	15.78	16.55	18.02
	3H	2.22	2.90	3.30	3.99	5.47	16.55	17.24	17.63	18.32	19.81
	4H	2.51	3.16	3.60	4.25	5.74	17.19	17.85	18.28	18.93	20.42
	6H	2.76	3.36	3.86	4.45	5.95	17.62	18.22	18.72	19.31	20.82
	8H	2.82	3.39	3.92	4.50	6.00	17.74	18.32	18.85	19.42	20.92
	12H	2.84	3.38	3.94	4.48	6.00	17.81	18.35	18.92	19.45	20.97
4H	2H	8.73	9.38	9.83	10.47	11.96	14.97	15.63	16.07	16.71	18.20
	3H	10.29	10.84	11.39	11.95	13.45	17.02	17.56	18.12	18.67	20.18
	4H	10.38	10.88	11.49	11.98	13.51	17.78	18.28	18.89	19.39	20.91
	6H	10.38	10.82	11.50	11.94	13.46	18.32	18.75	19.44	19.88	21.39
	8H	10.36	10.76	11.47	11.88	13.41	18.48	18.88	19.60	20.00	21.54
	12H	10.31	10.68	11.44	11.80	13.34	18.57	18.94	19.71	20.07	21.61
8H	4H	11.82	12.22	12.94	13.34	14.87	17.83	18.24	18.95	19.35	20.89
	6H	12.06	12.39	13.20	13.55	15.08	18.46	18.80	19.60	19.95	21.49
	8H	12.07	12.37	13.22	13.50	15.06	18.68	18.98	19.83	20.11	21.67
	12H	12.04	12.29	13.19	13.43	15.02	18.83	19.08	19.98	20.22	21.81
12H	4H	11.96	12.32	13.09	13.45	14.99	17.78	18.15	18.91	19.28	20.81
	6H	12.32	12.61	13.46	13.75	15.30	18.44	18.74	19.59	19.88	21.43
	8H	12.38	12.64	13.53	13.77	15.36	18.67	18.93	19.82	20.06	21.65