

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: P938063

Luminaire Tested: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938063  
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-6-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

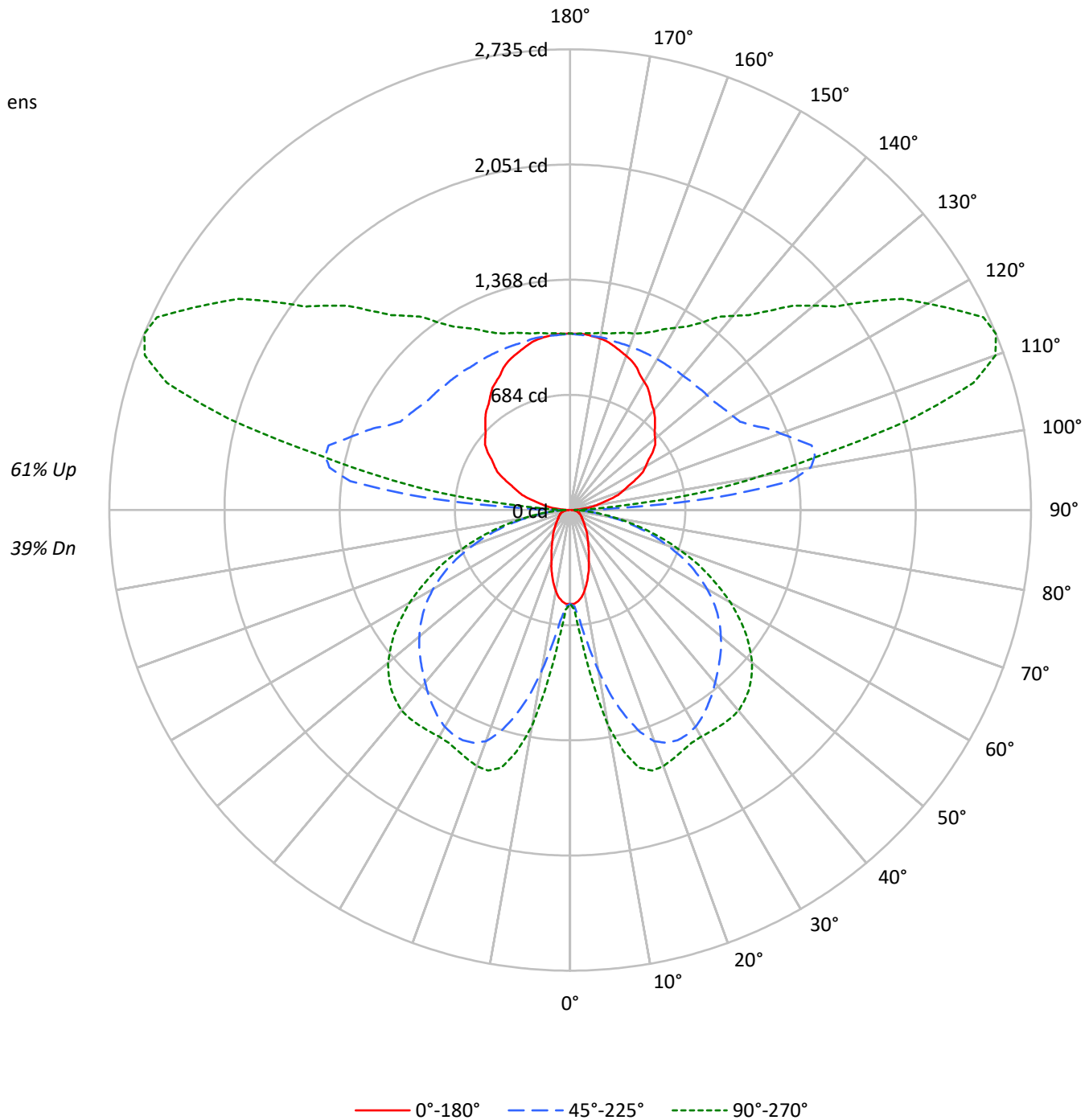
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11109.9 lumens  
Efficiency: N/A  
Efficacy: 115.0 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: Semi-Indirect

Input Watts (W): 96.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-6-4000K

### 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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3451	3451	3451
5°	3370	3988	4639
10°	3056	5812	7690
15°	2596	7591	9286
20°	2113	8795	9464
25°	1762	9201	9272
30°	1485	9257	9254
35°	1312	9100	9494
40°	1143	8898	9741
45°	1034	8749	9779
50°	948	8615	9617
55°	907	8419	9191
60°	927	8046	8517
65°	964	7480	7593
70°	1024	6519	6414
75°	1130	5310	5005
80°	1227	3678	3374
85°	1067	1947	1727

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9779 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.2	0.6
10°-20°	319.8	2.9
20°-30°	559.4	5.0
30°-40°	720.2	6.5
40°-50°	804.4	7.2
50°-60°	770.4	6.9
60°-70°	610.6	5.5
70°-80°	359.0	3.2
80°-90°	103.8	0.9
90°-100°	510.6	4.6
100°-110°	1342.3	12.1
110°-120°	1391.8	12.5
120°-130°	1116.4	10.0
130°-140°	876.0	7.9
140°-150°	672.4	6.1
150°-160°	484.2	4.4
160°-170°	296.3	2.7
170°-180°	100.1	0.9
0°-30°	951.5	8.6
0°-40°	1671.6	15.0
0°-60°	3246.5	29.2
0°-90°	4319.8	38.9
90°-120°	3244.7	29.2
90°-150°	5909.5	53.2
90°-180°	6790.0	61.1
0°-180°	11109.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	544	583	656	743	770	50
15°	407	752	1266	1536	1584	113
25°	260	852	1509	1575	1577	120
35°	176	814	1421	1502	1561	110
45°	120	649	1256	1439	1503	93
55°	86	413	1066	1238	1272	78
65°	68	219	791	890	902	68
75°	50	134	434	477	479	53
85°	18	41	108	118	120	19
90°	7	20	53	27	27	7
95°	68	264	880	453	309	75
105°	242	366	1484	2253	2102	256
115°	430	522	1189	2371	2706	424
125°	598	670	1081	1827	2155	531
135°	712	784	1048	1475	1672	551
145°	826	879	1034	1258	1357	517
155°	934	960	1034	1135	1168	429
165°	1007	1021	1034	1075	1088	284
175°	1048	1048	1041	1054	1054	99
180°	1048	1048	1048	1048	1048	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	557.9	557.9	557.9	557.9	557.9	557.9	557.9	557.9	557.9	557.9	557.9
2.5°	557.9	557.9	561.5	563.3	566.8	568.6	572.2	575.9	586.5	588.4	592.0
5°	543.5	550.7	574.1	583.0	608.1	642.2	656.5	679.9	728.3	742.7	751.6
7.5°	522.0	538.1	595.6	609.9	672.7	762.4	800.1	850.3	927.4	965.1	995.6
10°	487.9	522.0	624.3	658.3	760.6	896.9	966.9	1036.9	1153.4	1205.5	1225.2
12.5°	450.2	505.9	654.8	701.4	848.5	1047.6	1131.9	1209.0	1341.8	1411.8	1422.6
15°	407.2	482.5	683.5	751.6	941.7	1173.2	1266.5	1361.5	1485.3	1535.5	1548.1
17.5°	369.6	464.6	710.4	782.1	1013.5	1286.2	1381.3	1460.2	1560.7	1594.7	1603.7
20°	322.9	435.9	728.3	821.6	1088.9	1368.7	1460.2	1521.2	1589.4	1610.9	1614.4
22.5°	288.8	405.4	739.1	835.9	1139.1	1418.9	1496.1	1544.5	1591.2	1598.3	1600.1
25°	260.1	371.3	737.3	852.1	1182.1	1449.4	1508.6	1544.5	1571.5	1575.0	1575.0
27.5°	233.2	333.6	730.1	855.6	1214.5	1456.6	1503.2	1528.4	1540.9	1548.1	1548.1
30°	209.9	297.8	712.2	848.5	1228.8	1449.4	1487.1	1499.7	1512.3	1522.9	1528.4
32.5°	192.0	263.7	685.2	834.1	1230.6	1431.5	1458.4	1465.5	1483.5	1508.6	1517.6
35°	175.8	229.6	654.8	814.4	1219.8	1402.8	1420.7	1427.9	1463.7	1501.5	1514.0
37.5°	159.7	204.5	615.3	780.3	1203.7	1368.7	1381.3	1393.9	1449.4	1494.2	1508.6
40°	143.5	182.9	568.6	742.7	1178.5	1327.4	1338.2	1357.9	1431.5	1483.5	1497.9
42.5°	131.0	165.0	518.4	703.2	1146.3	1280.8	1296.9	1325.6	1410.0	1465.5	1481.7
45°	120.2	147.1	464.6	649.4	1105.0	1232.4	1255.7	1295.2	1384.8	1438.7	1453.1
47.5°	109.4	134.5	409.0	593.8	1060.1	1184.0	1214.5	1259.3	1350.8	1402.8	1415.3
50°	100.5	122.0	353.4	534.6	1011.7	1131.9	1167.8	1214.5	1307.7	1356.1	1372.3
52.5°	93.3	111.2	301.3	475.4	956.1	1078.1	1119.3	1167.8	1255.7	1302.3	1313.1
55°	86.1	102.3	256.5	412.6	898.7	1020.7	1065.6	1112.2	1198.3	1237.7	1245.0
57.5°	82.6	95.0	218.9	353.4	837.7	956.1	1006.4	1049.4	1130.1	1160.6	1167.8
60°	77.1	89.7	190.2	303.1	771.4	895.1	938.2	981.2	1049.4	1074.5	1079.9
62.5°	71.8	86.1	168.6	254.7	703.2	823.3	866.4	905.9	963.3	981.2	988.4
65°	68.2	82.6	152.5	218.9	633.3	748.0	791.1	825.1	871.9	889.8	893.3
67.5°	64.5	78.9	139.9	188.4	563.3	672.7	704.9	737.3	773.2	791.1	792.9
70°	59.2	75.3	129.2	166.8	491.5	586.5	613.5	647.6	676.2	685.2	690.6
72.5°	55.6	70.0	122.0	150.7	418.0	504.1	529.2	548.9	574.1	583.0	583.0
75°	50.2	62.8	114.8	134.5	342.6	412.6	434.1	453.8	473.6	477.2	471.8
77.5°	44.8	55.6	98.7	113.1	267.3	326.5	344.4	355.2	371.3	374.9	376.7
80°	37.7	48.4	77.1	87.9	193.7	240.4	252.9	261.9	276.3	276.3	279.9
82.5°	28.7	37.7	55.6	62.8	131.0	165.0	175.8	181.2	190.2	190.2	190.2
85°	17.9	23.4	35.8	41.3	78.9	100.5	107.6	109.4	116.6	118.4	118.4
87.5°	9.0	12.6	23.4	25.1	41.3	52.0	52.0	55.6	55.6	53.9	52.0
90°	7.1	12.7	18.3	19.6	30.9	45.9	53.4	47.4	35.6	26.7	26.7
92.5°	28.2	75.9	123.7	135.7	190.7	264.1	300.9	263.7	189.4	133.6	128.3
95°	67.5	155.0	242.4	264.3	469.3	742.8	879.5	784.8	595.4	453.4	437.3
97.5°	116.7	193.8	271.0	290.3	632.2	1088.1	1316.0	1256.2	1136.5	1046.7	1016.1
100°	154.7	224.7	294.6	312.1	691.5	1197.3	1450.2	1454.6	1463.4	1469.9	1433.4
102.5°	187.0	252.3	317.6	333.9	718.7	1231.7	1488.2	1564.4	1716.9	1831.2	1800.0
105°	241.9	297.2	352.4	366.2	738.8	1235.6	1484.0	1654.9	1996.7	2253.0	2236.2
107.5°	298.1	349.6	401.2	414.0	742.6	1180.6	1399.7	1638.1	2114.8	2472.4	2476.4
110°	336.0	382.5	429.0	440.7	736.9	1131.8	1329.3	1595.8	2128.8	2528.7	2546.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	373.3	417.6	462.0	473.1	737.2	1089.3	1265.3	1538.0	2083.6	2492.7	2519.6
115°	429.5	470.4	511.4	521.6	744.0	1040.5	1188.7	1451.5	1977.1	2371.2	2408.5
117.5°	485.1	522.3	559.4	568.7	757.8	1009.9	1136.0	1373.1	1847.4	2203.2	2244.4
120°	517.4	552.4	587.4	596.1	769.0	999.6	1114.9	1331.6	1764.9	2089.9	2130.1
122.5°	549.1	584.4	619.7	628.5	785.2	994.2	1098.8	1293.9	1684.1	1976.8	2016.3
125°	597.5	629.7	661.9	669.9	807.0	989.8	1081.2	1246.9	1578.4	1827.1	1863.5
127.5°	636.9	669.4	701.9	710.0	828.9	987.3	1066.5	1208.8	1493.4	1706.9	1737.6
130°	658.0	693.0	727.9	736.7	844.7	988.7	1060.8	1187.5	1440.8	1630.9	1659.3
132.5°	679.8	714.8	749.7	758.5	857.6	989.8	1055.9	1169.3	1396.1	1566.2	1591.6
135°	712.1	744.0	775.8	783.8	871.7	988.9	1047.5	1142.4	1332.4	1474.9	1496.8
137.5°	745.1	776.7	808.3	816.2	892.8	995.0	1046.0	1126.3	1286.9	1407.3	1425.3
140°	772.6	801.6	830.7	837.9	905.6	995.9	1041.1	1110.5	1249.2	1353.2	1370.1
142.5°	793.6	820.5	847.4	854.1	916.5	999.6	1041.1	1102.0	1223.9	1315.3	1329.8
145°	826.0	849.4	872.8	878.7	930.5	999.6	1034.1	1083.9	1183.6	1258.4	1269.3
147.5°	858.4	881.2	904.0	909.7	951.1	1006.4	1034.1	1073.2	1151.7	1210.6	1219.6
150°	879.5	900.1	920.6	925.8	961.9	1010.0	1034.1	1067.2	1133.4	1183.1	1190.5
152.5°	901.2	916.8	932.5	936.4	969.0	1012.3	1034.1	1062.3	1118.9	1161.3	1166.8
155°	933.6	945.2	956.7	959.6	984.4	1017.5	1034.1	1056.6	1101.6	1135.3	1139.1
157.5°	957.5	968.7	979.9	982.7	999.8	1022.7	1034.1	1051.5	1086.6	1112.8	1115.3
160°	973.6	982.4	991.2	993.3	1006.9	1025.0	1034.1	1049.1	1079.0	1101.6	1103.0
162.5°	989.8	996.3	1002.9	1004.5	1014.4	1027.5	1034.1	1046.7	1072.0	1091.0	1092.4
165°	1007.4	1013.3	1019.3	1020.8	1025.2	1031.1	1034.1	1043.1	1061.3	1074.9	1076.3
167.5°	1023.6	1026.4	1029.2	1029.9	1033.6	1038.6	1041.1	1047.1	1058.9	1067.8	1068.5
170°	1034.1	1036.9	1039.7	1040.4	1040.7	1040.9	1041.1	1047.1	1058.9	1067.8	1067.8
172.5°	1039.7	1040.3	1040.9	1041.1	1041.1	1041.1	1041.1	1045.8	1055.1	1062.2	1061.7
175°	1047.5	1047.5	1047.5	1047.5	1045.4	1042.6	1041.1	1044.1	1050.1	1054.5	1054.5
177.5°	1047.5	1047.5	1047.5	1047.5	1045.8	1043.6	1042.5	1044.8	1049.5	1053.1	1052.4
180°	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	557.9	557.9
2.5°	595.6	592.0
5°	765.9	769.6
7.5°	1031.4	1029.7
10°	1282.6	1298.7
12.5°	1465.5	1469.2
15°	1576.8	1583.9
17.5°	1619.9	1621.6
20°	1621.6	1618.1
22.5°	1601.9	1598.3
25°	1578.6	1576.8
27.5°	1557.1	1558.9
30°	1548.1	1553.4
32.5°	1548.1	1557.1
35°	1551.7	1560.7
37.5°	1549.9	1560.7
40°	1542.7	1555.2
42.5°	1522.9	1532.0
45°	1492.5	1503.2
47.5°	1453.1	1460.2
50°	1402.8	1410.0
52.5°	1340.0	1341.8
55°	1264.7	1271.8
57.5°	1184.0	1185.8
60°	1094.2	1099.6
62.5°	999.2	999.2
65°	898.7	902.3
67.5°	794.6	803.6
70°	688.8	690.6
72.5°	584.8	584.8
75°	477.2	478.9
77.5°	374.9	374.9
80°	278.1	279.9
82.5°	192.0	195.5
85°	120.2	120.2
87.5°	55.6	50.2
90°	26.7	26.7
92.5°	107.0	85.7
95°	372.9	308.6
97.5°	893.7	771.2
100°	1287.6	1141.7
102.5°	1675.0	1550.1
105°	2169.0	2101.9
107.5°	2492.6	2508.9
110°	2616.1	2686.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2627.0	2734.6
115°	2557.4	2706.4
117.5°	2409.7	2575.0
120°	2290.7	2451.3
122.5°	2174.7	2333.1
125°	2009.5	2155.4
127.5°	1860.7	1983.8
130°	1773.1	1886.8
132.5°	1693.6	1795.4
135°	1584.6	1672.4
137.5°	1497.1	1569.0
140°	1437.2	1504.4
142.5°	1387.5	1445.4
145°	1313.0	1356.7
147.5°	1255.9	1292.1
150°	1219.9	1249.2
152.5°	1189.0	1211.2
155°	1153.7	1168.4
157.5°	1125.7	1136.0
160°	1109.0	1114.9
162.5°	1098.1	1103.7
165°	1082.3	1088.2
167.5°	1070.9	1073.4
170°	1067.8	1067.8
172.5°	1059.5	1057.3
175°	1054.5	1054.5
177.5°	1050.0	1047.5
180°	1047.5	1047.5



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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	4.19	4.99	5.23	6.04	7.46	17.36	18.16	18.40	19.21	20.63
	3H	4.89	5.61	5.94	6.67	8.11	19.19	19.90	20.24	20.96	22.40
	4H	5.19	5.87	6.25	6.93	8.38	19.83	20.51	20.89	21.57	23.01
	6H	5.44	6.06	6.51	7.13	8.59	20.25	20.88	21.32	21.94	23.40
	8H	5.50	6.10	6.58	7.18	8.63	20.37	20.96	21.44	22.04	23.50
	12H	5.52	6.09	6.60	7.16	8.64	20.43	21.00	21.51	22.07	23.55
4H	2H	11.39	12.07	12.46	13.13	14.58	17.63	18.31	18.69	19.37	20.81
	3H	12.96	13.52	14.03	14.61	16.07	19.66	20.23	20.74	21.32	22.77
	4H	13.05	13.57	14.13	14.65	16.13	20.42	20.94	21.50	22.02	23.50
	6H	13.05	13.50	14.14	14.61	16.08	20.95	21.40	22.04	22.50	23.98
	8H	13.03	13.45	14.12	14.54	16.03	21.11	21.53	22.20	22.62	24.11
	12H	12.98	13.36	14.09	14.47	15.97	21.20	21.58	22.31	22.69	24.18
8H	4H	14.48	14.90	15.57	16.00	17.49	20.48	20.90	21.57	21.99	23.48
	6H	14.72	15.07	15.84	16.21	17.69	21.10	21.45	22.21	22.58	24.07
	8H	14.74	15.04	15.86	16.16	17.67	21.31	21.62	22.43	22.74	24.24
	12H	14.70	14.97	15.83	16.09	17.63	21.45	21.72	22.58	22.84	24.38
12H	4H	14.62	15.00	15.73	16.11	17.60	20.43	20.81	21.53	21.91	23.41
	6H	14.98	15.28	16.10	16.40	17.91	21.08	21.39	22.20	22.50	24.01
	8H	15.04	15.31	16.17	16.43	17.97	21.30	21.57	22.43	22.69	24.23