

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: P937221

Luminaire Tested: SQ4-FB-075U-100D-927-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937221
REPORT IS A COMBINATION OF REPORTS P933495 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-927-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

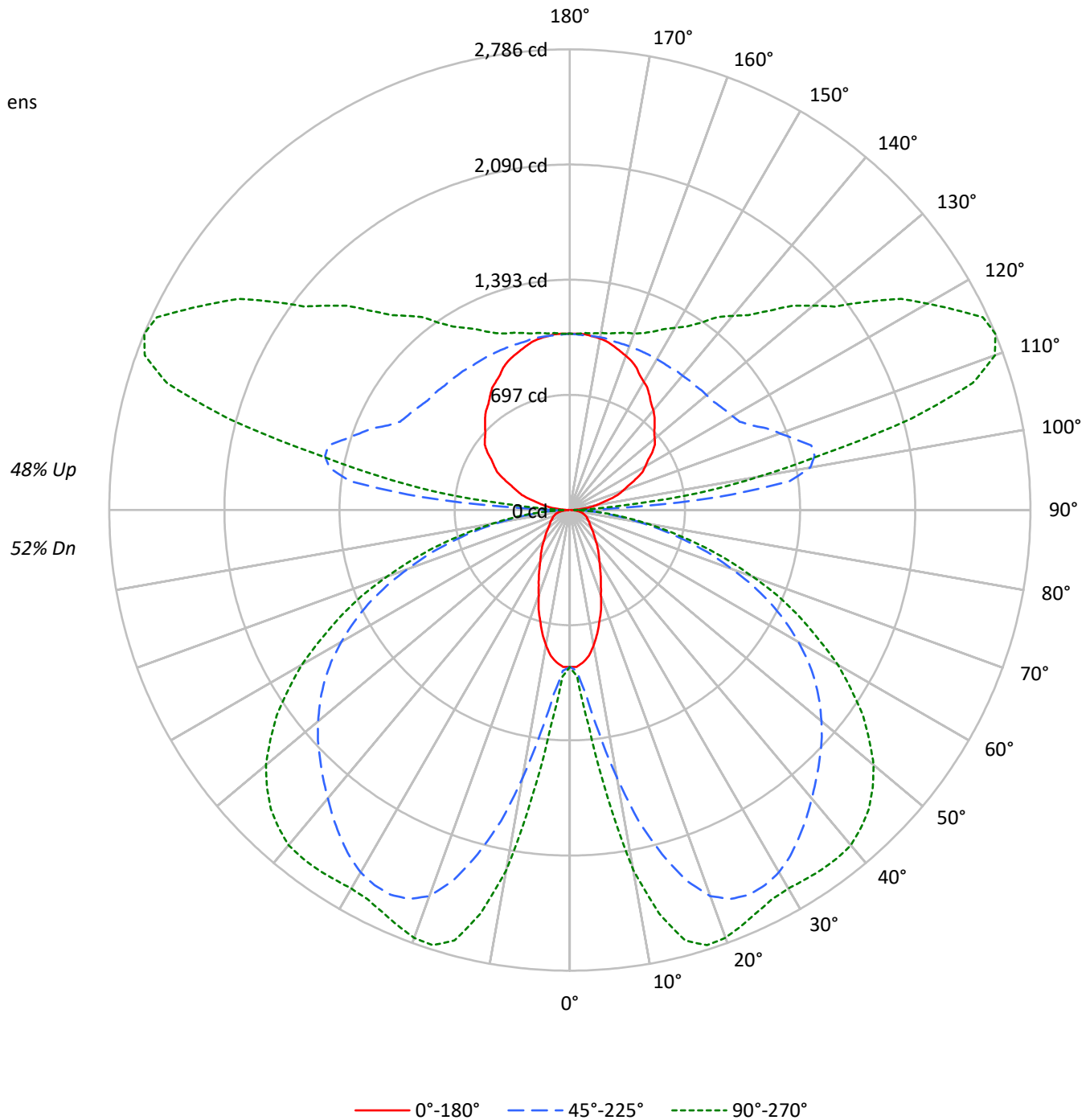
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14263.5 lumens
Efficiency: N/A
Efficacy: 92.9 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: General Diffuse

Input Watts (W): 153.6
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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2936	2936	2936
5°	2869	3394	3946
10°	2603	4949	6542
15°	2214	6467	7900
20°	1803	7496	8051
25°	1504	7846	7887
30°	1269	7898	7872
35°	1123	7769	8076
40°	979	7600	8286
45°	887	7478	8319
50°	814	7368	8181
55°	781	7206	7819
60°	800	6893	7246
65°	834	6415	6459
70°	890	5598	5457
75°	991	4569	4258
80°	1090	3173	2869
85°	988	1686	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8319 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	0.9
10°-20°	544.2	3.8
20°-30°	951.8	6.7
30°-40°	1225.3	8.6
40°-50°	1368.6	9.6
50°-60°	1310.8	9.2
60°-70°	1038.8	7.3
70°-80°	610.8	4.3
80°-90°	173.8	1.2
90°-100°	520.1	3.6
100°-110°	1367.3	9.6
110°-120°	1417.8	9.9
120°-130°	1137.2	8.0
130°-140°	892.3	6.3
140°-150°	684.9	4.8
150°-160°	493.2	3.5
160°-170°	301.8	2.1
170°-180°	102.0	0.7
0°-30°	1618.8	11.3
0°-40°	2844.0	19.9
0°-60°	5523.4	38.7
0°-90°	7346.8	51.5
90°-120°	3305.2	23.2
90°-150°	6019.7	42.2
90°-180°	6917.0	48.5
0°-180°	14263.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	925	992	1117	1264	1309	85
15°	693	1279	2155	2612	2695	193
25°	442	1450	2567	2680	2683	204
35°	299	1386	2417	2554	2655	187
45°	204	1105	2136	2448	2558	158
55°	146	702	1813	2106	2164	133
65°	116	372	1346	1514	1535	115
75°	86	229	739	812	815	89
85°	30	70	183	201	204	32
90°	7	20	54	27	27	8
95°	69	269	896	462	314	76
105°	246	373	1512	2295	2141	261
115°	438	531	1211	2415	2757	432
125°	609	682	1101	1861	2196	540
135°	725	798	1067	1502	1704	561
145°	841	895	1053	1282	1382	527
155°	951	977	1053	1156	1190	437
165°	1026	1040	1053	1095	1108	290
175°	1067	1067	1060	1074	1074	101
180°	1067	1067	1067	1067	1067	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2
2.5°	949.2	949.2	955.3	958.3	964.4	967.5	973.6	979.7	998.0	1001.1	1007.2
5°	924.8	936.9	976.7	991.9	1034.6	1092.6	1117.0	1156.7	1239.1	1263.5	1278.7
7.5°	888.1	915.6	1013.2	1037.7	1144.5	1297.1	1361.2	1446.6	1577.9	1641.9	1693.8
10°	830.1	888.1	1062.1	1120.0	1294.1	1526.0	1645.0	1764.1	1962.4	2050.9	2084.5
12.5°	766.1	860.6	1114.0	1193.3	1443.6	1782.3	1925.8	2057.1	2282.9	2401.9	2420.2
15°	692.8	821.0	1162.8	1278.7	1602.3	1996.0	2154.7	2316.5	2527.1	2612.5	2633.9
17.5°	628.7	790.5	1208.6	1330.6	1724.3	2188.3	2350.0	2484.3	2655.2	2713.2	2728.5
20°	549.3	741.7	1239.1	1397.8	1852.5	2328.6	2484.3	2588.0	2704.0	2740.7	2746.7
22.5°	491.3	689.8	1257.4	1422.2	1938.0	2414.1	2545.3	2627.8	2707.1	2719.3	2722.3
25°	442.5	631.8	1254.3	1449.7	2011.2	2466.0	2566.7	2627.8	2673.5	2679.6	2679.6
27.5°	396.8	567.6	1242.2	1455.8	2066.2	2478.2	2557.6	2600.3	2621.6	2633.9	2633.9
30°	357.0	506.7	1211.6	1443.6	2090.6	2466.0	2530.1	2551.5	2572.8	2591.1	2600.3
32.5°	326.6	448.6	1165.9	1419.2	2093.6	2435.5	2481.2	2493.5	2524.0	2566.7	2582.0
35°	299.1	390.6	1114.0	1385.6	2075.3	2386.6	2417.2	2429.4	2490.4	2554.5	2575.9
37.5°	271.7	348.0	1046.8	1327.6	2047.9	2328.6	2350.0	2371.4	2466.0	2542.3	2566.7
40°	244.2	311.3	967.5	1263.5	2005.2	2258.5	2276.7	2310.3	2435.5	2524.0	2548.4
42.5°	222.8	280.8	882.0	1196.3	1950.2	2179.1	2206.6	2255.4	2398.9	2493.5	2520.9
45°	204.5	250.2	790.5	1104.8	1880.0	2096.7	2136.4	2203.5	2356.1	2447.7	2472.1
47.5°	186.2	228.9	695.8	1010.2	1803.7	2014.3	2066.2	2142.4	2298.1	2386.6	2408.0
50°	170.9	207.5	601.2	909.5	1721.3	1925.8	1986.8	2066.2	2224.9	2307.3	2334.8
52.5°	158.7	189.2	512.7	808.8	1626.7	1834.2	1904.4	1986.8	2136.4	2215.8	2234.1
55°	146.5	173.9	436.4	701.9	1529.1	1736.6	1812.9	1892.2	2038.7	2105.9	2118.0
57.5°	140.4	161.8	372.4	601.2	1425.3	1626.7	1712.2	1785.4	1922.8	1974.6	1986.8
60°	131.2	152.6	323.5	515.7	1312.3	1522.9	1596.2	1669.4	1785.4	1828.1	1837.3
62.5°	122.0	146.5	286.9	433.4	1196.3	1400.9	1474.1	1541.2	1638.9	1669.4	1681.6
65°	116.0	140.4	259.4	372.4	1077.4	1272.7	1345.9	1403.9	1483.3	1513.7	1519.9
67.5°	109.9	134.3	238.1	320.5	958.3	1144.5	1199.4	1254.3	1315.4	1345.9	1349.0
70°	100.7	128.2	219.8	283.8	836.2	998.0	1043.8	1101.8	1150.6	1165.9	1175.0
72.5°	94.6	119.0	207.5	256.3	711.1	857.6	900.4	933.9	976.7	991.9	991.9
75°	85.5	106.8	195.3	228.9	582.9	701.9	738.6	772.2	805.7	811.8	802.6
77.5°	76.3	94.6	167.9	192.3	454.8	555.5	586.0	604.3	631.8	637.9	640.9
80°	64.1	82.4	131.2	149.5	329.6	408.9	430.4	445.6	470.0	470.0	476.1
82.5°	48.8	64.1	94.6	106.8	222.8	280.8	299.1	308.2	323.5	323.5	323.5
85°	30.5	39.7	61.1	70.2	134.3	170.9	183.1	186.2	198.4	201.4	201.4
87.5°	15.2	21.3	39.7	42.7	70.2	88.5	88.5	94.6	94.6	91.6	88.5
90°	7.2	12.9	18.6	20.0	31.5	46.8	54.4	48.4	36.3	27.2	27.2
92.5°	28.6	77.3	126.0	138.2	194.3	269.0	306.5	268.6	192.9	136.1	130.7
95°	68.8	157.8	247.0	269.3	478.1	756.6	895.8	799.4	606.5	461.8	445.4
97.5°	118.9	197.5	276.1	295.8	644.0	1108.3	1340.5	1279.5	1157.6	1066.2	1035.0
100°	157.5	228.8	300.1	317.9	704.4	1219.6	1477.2	1481.7	1490.6	1497.3	1460.2
102.5°	190.5	257.0	323.5	340.1	732.0	1254.6	1516.0	1593.6	1748.9	1865.4	1833.6
105°	246.3	302.7	359.0	373.1	752.6	1258.6	1511.7	1685.8	2034.0	2295.1	2278.0
107.5°	303.6	356.1	408.6	421.8	756.4	1202.7	1425.7	1668.6	2154.2	2518.4	2522.6
110°	342.3	389.7	437.1	449.0	750.7	1153.0	1354.1	1625.6	2168.6	2575.7	2593.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	380.2	425.4	470.6	481.9	751.0	1109.6	1289.0	1566.8	2122.5	2539.2	2566.6
115°	437.5	479.2	520.9	531.3	757.8	1059.9	1210.9	1478.6	2013.9	2415.3	2453.3
117.5°	494.1	532.0	569.8	579.3	771.9	1028.7	1157.2	1398.7	1881.8	2244.2	2286.3
120°	527.1	562.7	598.3	607.2	783.4	1018.2	1135.7	1356.4	1797.8	2128.9	2169.8
122.5°	559.3	595.2	631.2	640.2	799.9	1012.8	1119.2	1317.9	1715.5	2013.6	2054.0
125°	608.7	641.5	674.3	682.5	822.1	1008.2	1101.3	1270.2	1607.8	1861.1	1898.3
127.5°	648.8	681.9	715.0	723.3	844.3	1005.6	1086.3	1231.3	1521.2	1738.7	1770.0
130°	670.3	705.9	741.5	750.4	860.5	1007.2	1080.5	1209.6	1467.7	1661.3	1690.2
132.5°	692.5	728.1	763.7	772.6	873.6	1008.2	1075.5	1191.0	1422.1	1595.4	1621.4
135°	725.4	757.8	790.3	798.4	888.0	1007.3	1067.0	1163.7	1357.2	1502.3	1524.7
137.5°	759.1	791.2	823.4	831.4	909.4	1013.5	1065.5	1147.3	1310.9	1433.6	1451.9
140°	786.9	816.5	846.2	853.5	922.5	1014.6	1060.5	1131.2	1272.5	1378.5	1395.5
142.5°	808.4	835.8	863.2	870.0	933.5	1018.2	1060.5	1122.6	1246.7	1339.8	1354.5
145°	841.4	865.2	889.1	895.1	947.9	1018.2	1053.4	1104.1	1205.7	1281.8	1293.0
147.5°	874.3	897.6	920.8	926.6	968.9	1025.2	1053.4	1093.3	1173.2	1233.1	1242.3
150°	895.8	916.8	937.9	943.1	979.8	1028.9	1053.4	1087.1	1154.5	1205.1	1212.6
152.5°	918.0	933.9	949.8	953.8	987.0	1031.3	1053.4	1082.2	1139.8	1183.0	1188.6
155°	951.0	962.7	974.5	977.4	1002.8	1036.5	1053.4	1076.3	1122.1	1156.5	1160.2
157.5°	975.3	986.8	998.2	1001.1	1018.5	1041.7	1053.4	1071.1	1106.8	1133.5	1136.1
160°	991.8	1000.7	1009.6	1011.9	1025.7	1044.1	1053.4	1068.6	1099.2	1122.1	1123.7
162.5°	1008.2	1014.9	1021.6	1023.3	1033.3	1046.7	1053.4	1066.2	1092.0	1111.3	1112.8
165°	1026.2	1032.2	1038.2	1039.7	1044.3	1050.4	1053.4	1062.6	1081.0	1094.9	1096.4
167.5°	1042.6	1045.4	1048.4	1049.0	1052.9	1058.0	1060.5	1066.5	1078.6	1087.7	1088.3
170°	1053.4	1056.2	1059.1	1059.8	1060.1	1060.4	1060.5	1066.5	1078.6	1087.7	1087.7
172.5°	1059.1	1059.7	1060.4	1060.5	1060.5	1060.5	1060.5	1065.3	1074.8	1082.0	1081.5
175°	1067.0	1067.0	1067.0	1067.0	1064.8	1062.0	1060.5	1063.5	1069.6	1074.2	1074.2
177.5°	1067.0	1067.0	1067.0	1067.0	1065.3	1063.1	1062.0	1064.4	1069.1	1072.7	1072.1
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	949.2	949.2
2.5°	1013.2	1007.2
5°	1303.2	1309.3
7.5°	1754.9	1751.8
10°	2182.2	2209.6
12.5°	2493.5	2499.6
15°	2682.7	2694.9
17.5°	2755.9	2759.0
20°	2759.0	2752.9
22.5°	2725.4	2719.3
25°	2685.8	2682.7
27.5°	2649.1	2652.2
30°	2633.9	2643.0
32.5°	2633.9	2649.1
35°	2639.9	2655.2
37.5°	2636.9	2655.2
40°	2624.7	2646.0
42.5°	2591.1	2606.4
45°	2539.2	2557.6
47.5°	2472.1	2484.3
50°	2386.6	2398.9
52.5°	2279.8	2282.9
55°	2151.6	2163.9
57.5°	2014.3	2017.3
60°	1861.7	1870.9
62.5°	1699.9	1699.9
65°	1529.1	1535.1
67.5°	1352.0	1367.3
70°	1171.9	1175.0
72.5°	994.9	994.9
75°	811.8	814.9
77.5°	637.9	637.9
80°	473.1	476.1
82.5°	326.6	332.6
85°	204.5	204.5
87.5°	94.6	85.5
90°	27.2	27.2
92.5°	109.0	87.4
95°	379.9	314.4
97.5°	910.3	785.6
100°	1311.5	1162.9
102.5°	1706.2	1579.0
105°	2209.5	2141.1
107.5°	2539.2	2555.7
110°	2664.8	2736.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2676.1	2785.6
115°	2605.1	2756.9
117.5°	2454.6	2623.0
120°	2333.4	2497.0
122.5°	2215.3	2376.7
125°	2046.9	2195.5
127.5°	1895.4	2020.8
130°	1806.1	1922.0
132.5°	1725.1	1828.9
135°	1614.2	1703.5
137.5°	1525.1	1598.3
140°	1464.0	1532.4
142.5°	1413.4	1472.2
145°	1337.5	1382.0
147.5°	1279.2	1316.2
150°	1242.5	1272.5
152.5°	1211.2	1233.8
155°	1175.2	1190.1
157.5°	1146.7	1157.2
160°	1129.7	1135.7
162.5°	1118.5	1124.3
165°	1102.4	1108.5
167.5°	1090.9	1093.5
170°	1087.7	1087.7
172.5°	1079.2	1077.0
175°	1074.2	1074.2
177.5°	1069.5	1067.0
180°	1067.0	1067.0



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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	4.89	5.80	5.83	6.76	8.01	18.08	19.00	19.02	19.95	21.20
	3H	5.60	6.42	6.55	7.39	8.66	19.93	20.75	20.88	21.72	22.99
	4H	5.90	6.68	6.86	7.65	8.93	20.58	21.36	21.54	22.33	23.61
	6H	6.15	6.87	7.13	7.85	9.14	21.02	21.74	21.99	22.72	24.01
	8H	6.22	6.91	7.20	7.90	9.19	21.14	21.83	22.12	22.82	24.11
	12H	6.24	6.89	7.23	7.88	9.20	21.22	21.87	22.20	22.86	24.17
4H	2H	12.12	12.90	13.09	13.87	15.15	18.36	19.14	19.33	20.11	21.39
	3H	13.69	14.34	14.67	15.35	16.64	20.42	21.07	21.39	22.07	23.36
	4H	13.79	14.39	14.77	15.38	16.70	21.19	21.79	22.18	22.78	24.10
	6H	13.80	14.32	14.80	15.34	16.65	21.74	22.25	22.74	23.27	24.58
	8H	13.78	14.26	14.78	15.27	16.60	21.90	22.39	22.90	23.40	24.73
	12H	13.74	14.18	14.76	15.20	16.54	22.00	22.44	23.02	23.47	24.80
8H	4H	15.24	15.72	16.24	16.74	18.06	21.25	21.74	22.25	22.75	24.08
	6H	15.49	15.89	16.51	16.94	18.27	21.89	22.29	22.92	23.34	24.67
	8H	15.50	15.86	16.54	16.90	18.24	22.11	22.47	23.15	23.51	24.85
	12H	15.48	15.79	16.51	16.82	18.21	22.26	22.58	23.30	23.61	25.00
12H	4H	15.39	15.82	16.41	16.85	18.19	21.21	21.65	22.23	22.67	24.01
	6H	15.75	16.10	16.78	17.14	18.48	21.87	22.23	22.91	23.27	24.61
	8H	15.82	16.13	16.86	17.16	18.55	22.11	22.42	23.15	23.46	24.84