

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: P937121

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937121
REPORT IS A COMBINATION OF REPORTS P933494 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-927-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

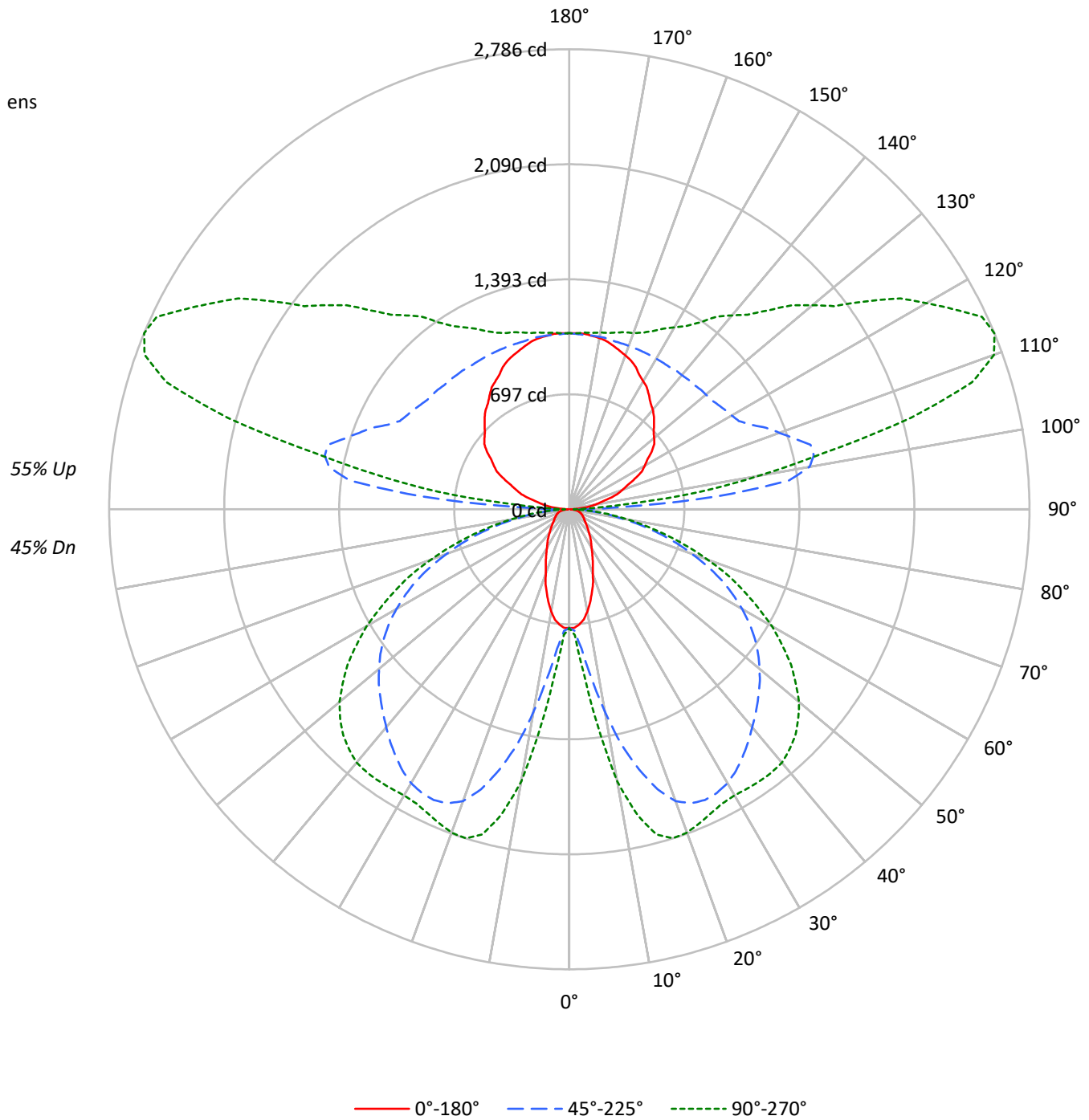
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12478.6 lumens
Efficiency: N/A
Efficacy: 98.1 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): 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2172	2569	2987
10°	1970	3746	4952
15°	1675	4895	5979
20°	1365	5674	6094
25°	1139	5939	5970
30°	961	5978	5959
35°	850	5880	6113
40°	741	5753	6272
45°	672	5660	6297
50°	617	5577	6192
55°	591	5454	5918
60°	606	5217	5485
65°	631	4856	4889
70°	674	4237	4130
75°	750	3458	3223
80°	825	2401	2172
85°	749	1276	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	0.7
10°-20°	411.9	3.3
20°-30°	720.5	5.8
30°-40°	927.4	7.4
40°-50°	1035.9	8.3
50°-60°	992.2	8.0
60°-70°	786.3	6.3
70°-80°	462.3	3.7
80°-90°	132.5	1.1
90°-100°	520.1	4.2
100°-110°	1367.3	11.0
110°-120°	1417.8	11.4
120°-130°	1137.2	9.1
130°-140°	892.3	7.2
140°-150°	684.9	5.5
150°-160°	493.2	4.0
160°-170°	301.8	2.4
170°-180°	102.0	0.8
0°-30°	1225.3	9.8
0°-40°	2152.7	17.3
0°-60°	4180.8	33.5
0°-90°	5561.9	44.6
90°-120°	3305.2	26.5
90°-150°	6019.7	48.2
90°-180°	6917.0	55.4
0°-180°	12478.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	700	751	846	956	991	65
15°	524	968	1631	1977	2040	146
25°	335	1097	1943	2028	2031	154
35°	226	1049	1830	1934	2010	141
45°	155	836	1617	1853	1936	120
55°	111	531	1372	1594	1638	101
65°	88	282	1019	1146	1162	87
75°	65	173	559	614	617	68
85°	23	53	139	152	155	25
90°	7	20	54	27	27	7
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°	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4
2.5°	718.4	718.4	723.0	725.3	730.0	732.3	736.9	741.5	755.4	757.7	762.3
5°	699.9	709.2	739.2	750.8	783.1	827.0	845.5	875.6	937.9	956.4	968.0
7.5°	672.2	693.0	766.9	785.4	866.2	981.8	1030.3	1095.0	1194.3	1242.9	1282.1
10°	628.3	672.2	803.9	847.8	979.5	1155.1	1245.2	1335.3	1485.4	1552.4	1577.8
12.5°	579.8	651.4	843.2	903.3	1092.7	1349.1	1457.7	1557.0	1728.0	1818.0	1831.9
15°	524.4	621.4	880.2	968.0	1212.8	1510.8	1630.9	1753.4	1912.8	1977.4	1993.6
17.5°	475.9	598.3	914.8	1007.2	1305.2	1656.3	1778.8	1880.4	2009.8	2053.7	2065.2
20°	415.8	561.3	937.9	1058.1	1402.2	1762.6	1880.4	1959.0	2046.7	2074.5	2079.1
22.5°	371.9	522.1	951.8	1076.5	1466.9	1827.3	1926.6	1989.0	2049.0	2058.3	2060.6
25°	335.0	478.2	949.5	1097.3	1522.4	1866.6	1942.8	1989.0	2023.6	2028.3	2028.3
27.5°	300.3	429.7	940.2	1101.9	1563.9	1875.8	1935.9	1968.2	1984.4	1993.6	1993.6
30°	270.3	383.5	917.1	1092.7	1582.4	1866.6	1915.1	1931.2	1947.4	1961.3	1968.2
32.5°	247.2	339.6	882.5	1074.2	1584.7	1843.5	1878.1	1887.3	1910.4	1942.8	1954.3
35°	226.4	295.7	843.2	1048.8	1570.9	1806.5	1829.6	1838.8	1885.0	1933.5	1949.7
37.5°	205.6	263.3	792.3	1004.9	1550.1	1762.6	1778.8	1794.9	1866.6	1924.3	1942.8
40°	184.8	235.6	732.3	956.4	1517.7	1709.5	1723.3	1748.7	1843.5	1910.4	1928.9
42.5°	168.6	212.5	667.6	905.6	1476.2	1649.4	1670.2	1707.2	1815.7	1887.3	1908.1
45°	154.8	189.4	598.3	836.2	1423.0	1587.0	1617.1	1667.9	1783.4	1852.7	1871.2
47.5°	140.9	173.2	526.7	764.6	1365.3	1524.7	1563.9	1621.7	1739.5	1806.5	1822.7
50°	129.4	157.1	455.1	688.4	1302.9	1457.7	1503.9	1563.9	1684.1	1746.4	1767.2
52.5°	120.1	143.2	388.1	612.2	1231.3	1388.4	1441.5	1503.9	1617.1	1677.1	1691.0
55°	110.9	131.7	330.3	531.3	1157.4	1314.5	1372.2	1432.3	1543.2	1594.0	1603.2
57.5°	106.3	122.4	281.8	455.1	1078.8	1231.3	1296.0	1351.4	1455.4	1494.6	1503.9
60°	99.3	115.5	244.9	390.4	993.4	1152.8	1208.2	1263.6	1351.4	1383.8	1390.7
62.5°	92.4	110.9	217.1	328.0	905.6	1060.4	1115.8	1166.6	1240.5	1263.6	1272.9
65°	87.8	106.3	196.4	281.8	815.4	963.3	1018.8	1062.7	1122.7	1145.8	1150.5
67.5°	83.2	101.6	180.2	242.6	725.3	866.2	907.9	949.5	995.7	1018.8	1021.1
70°	76.2	97.0	166.3	214.8	632.9	755.4	790.0	833.9	870.9	882.5	889.4
72.5°	71.6	90.1	157.1	194.0	538.2	649.1	681.4	706.9	739.2	750.8	750.8
75°	64.7	80.9	147.8	173.2	441.2	531.3	559.0	584.4	609.8	614.5	607.5
77.5°	57.8	71.6	127.0	145.5	344.2	420.4	443.5	457.4	478.2	482.8	485.1
80°	48.5	62.4	99.3	113.2	249.5	309.5	325.7	337.3	355.7	355.7	360.4
82.5°	37.0	48.5	71.6	80.9	168.6	212.5	226.4	233.3	244.9	244.9	244.9
85°	23.1	30.0	46.2	53.1	101.6	129.4	138.6	140.9	150.2	152.5	152.5
87.5°	11.6	16.2	30.0	32.3	53.1	67.0	67.0	71.6	71.6	69.3	67.0
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°	718.4	718.4
2.5°	766.9	762.3
5°	986.4	991.1
7.5°	1328.3	1326.0
10°	1651.7	1672.5
12.5°	1887.3	1892.0
15°	2030.6	2039.8
17.5°	2086.0	2088.3
20°	2088.3	2083.7
22.5°	2062.9	2058.3
25°	2032.9	2030.6
27.5°	2005.2	2007.5
30°	1993.6	2000.5
32.5°	1993.6	2005.2
35°	1998.2	2009.8
37.5°	1995.9	2009.8
40°	1986.7	2002.8
42.5°	1961.3	1972.8
45°	1922.0	1935.9
47.5°	1871.2	1880.4
50°	1806.5	1815.7
52.5°	1725.6	1728.0
55°	1628.6	1637.9
57.5°	1524.7	1527.0
60°	1409.2	1416.1
62.5°	1286.7	1286.7
65°	1157.4	1162.0
67.5°	1023.4	1035.0
70°	887.1	889.4
72.5°	753.1	753.1
75°	614.5	616.8
77.5°	482.8	482.8
80°	358.0	360.4
82.5°	247.2	251.8
85°	154.8	154.8
87.5°	71.6	64.7
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	3.27	4.11	4.26	5.13	6.47	16.46	17.31	17.45	18.32	19.66
	3H	3.97	4.73	4.98	5.75	7.12	18.30	19.06	19.31	20.09	21.45
	4H	4.27	4.99	5.29	6.01	7.39	18.95	19.67	19.97	20.70	22.07
	6H	4.52	5.18	5.55	6.21	7.60	19.39	20.05	20.41	21.08	22.46
	8H	4.59	5.22	5.62	6.27	7.65	19.51	20.14	20.54	21.19	22.57
	12H	4.60	5.21	5.64	6.25	7.65	19.58	20.18	20.62	21.22	22.63
4H	2H	10.49	11.21	11.51	12.24	13.61	16.73	17.45	17.76	18.48	19.85
	3H	12.05	12.66	13.09	13.71	15.10	18.78	19.39	19.81	20.44	21.82
	4H	12.15	12.70	13.19	13.75	15.15	19.55	20.11	20.59	21.15	22.56
	6H	12.16	12.64	13.21	13.70	15.11	20.09	20.57	21.14	21.64	23.04
	8H	12.14	12.58	13.19	13.64	15.06	20.26	20.70	21.31	21.76	23.18
	12H	12.09	12.49	13.16	13.57	14.99	20.35	20.76	21.42	21.83	23.26
8H	4H	13.60	14.04	14.65	15.10	16.52	19.61	20.06	20.66	21.12	22.53
	6H	13.84	14.21	14.91	15.31	16.72	20.24	20.61	21.32	21.71	23.13
	8H	13.86	14.18	14.94	15.26	16.70	20.47	20.79	21.55	21.88	23.31
	12H	13.82	14.11	14.91	15.19	16.66	20.61	20.90	21.70	21.98	23.45
12H	4H	13.74	14.14	14.81	15.22	16.64	19.56	19.97	20.63	21.04	22.46
	6H	14.10	14.42	15.18	15.51	16.94	20.23	20.55	21.31	21.64	23.07
	8H	14.17	14.45	15.25	15.53	17.01	20.46	20.74	21.55	21.82	23.30