

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: P938044

Luminaire Tested: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938044
REPORT IS A COMBINATION OF REPORTS P933615 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

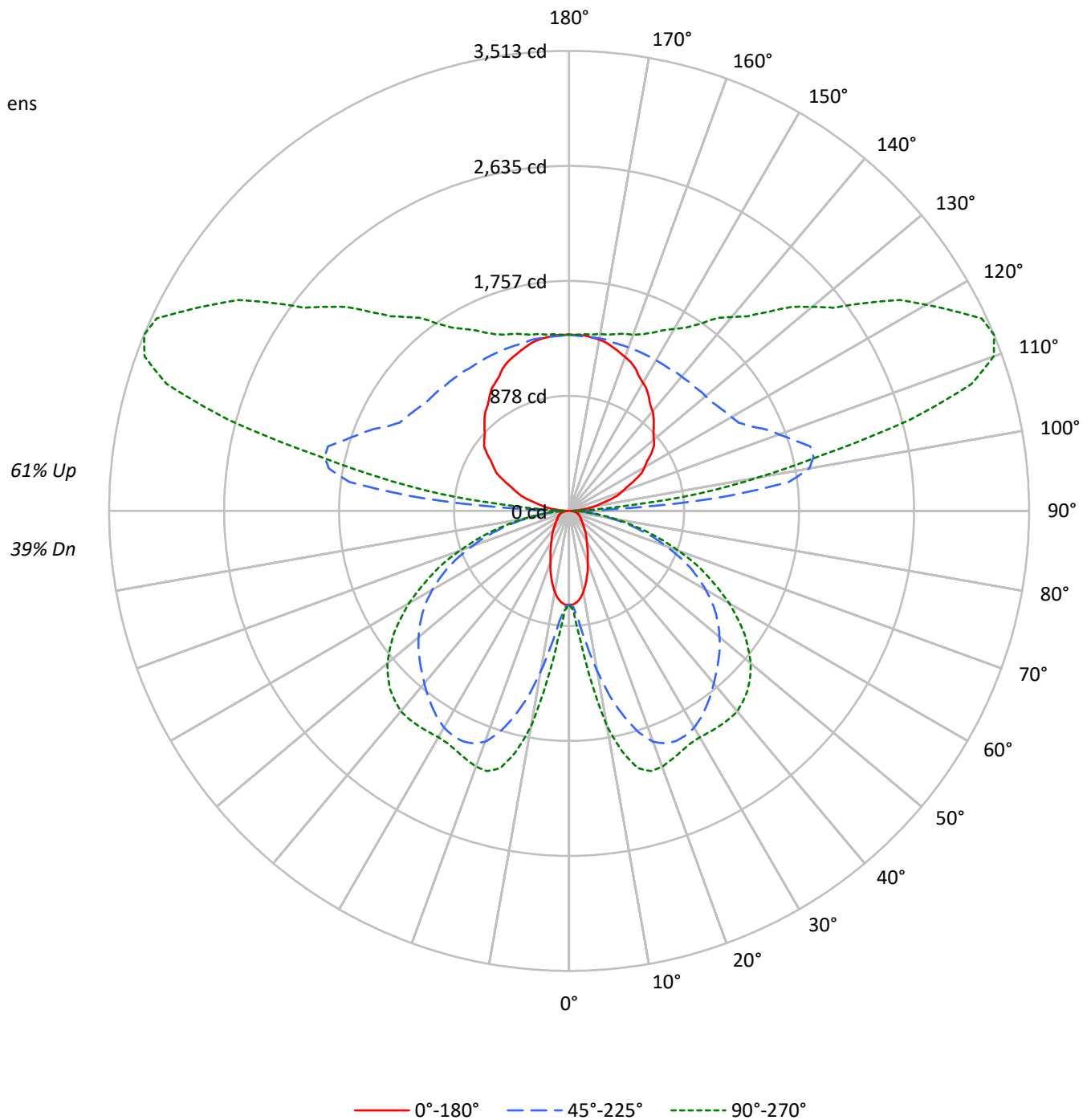
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14271.7 lumens
Efficiency: N/A
Efficacy: 110.8 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): 128.8
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	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°	3325	3325	3325
5°	3248	3843	4469
10°	2946	5602	7410
15°	2504	7319	8947
20°	2039	8482	9119
25°	1701	8876	8933
30°	1434	8932	8917
35°	1268	8784	9147
40°	1105	8591	9385
45°	1001	8450	9422
50°	918	8322	9266
55°	879	8136	8855
60°	900	7779	8207
65°	937	7236	7316
70°	997	6310	6180
75°	1105	5145	4823
80°	1208	3568	3250
85°	1071	1894	1663

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9422 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	0.6
10°-20°	410.9	2.9
20°-30°	718.7	5.0
30°-40°	925.2	6.5
40°-50°	1033.4	7.2
50°-60°	989.8	6.9
60°-70°	784.4	5.5
70°-80°	461.2	3.2
80°-90°	133.3	0.9
90°-100°	655.9	4.6
100°-110°	1724.3	12.1
110°-120°	1787.9	12.5
120°-130°	1434.1	10.0
130°-140°	1125.3	7.9
140°-150°	863.7	6.1
150°-160°	622.0	4.4
160°-170°	380.6	2.7
170°-180°	128.6	0.9
0°-30°	1222.3	8.6
0°-40°	2147.5	15.0
0°-60°	4170.6	29.2
0°-90°	5549.5	38.9
90°-120°	4168.0	29.2
90°-150°	7591.1	53.2
90°-180°	8722.0	61.1
0°-180°	14271.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	698	749	843	954	989	64
15°	523	966	1627	1973	2035	146
25°	334	1095	1938	2023	2026	154
35°	226	1046	1825	1929	2005	141
45°	154	834	1613	1848	1931	119
55°	111	530	1369	1590	1634	101
65°	88	281	1016	1143	1159	87
75°	64	173	558	613	615	68
85°	23	53	138	152	154	24
90°	9	25	69	34	34	9
95°	87	340	1130	582	396	96
105°	311	470	1906	2894	2700	329
115°	552	670	1527	3046	3476	545
125°	768	860	1389	2347	2769	681
135°	915	1007	1346	1894	2148	708
145°	1061	1129	1328	1616	1743	665
155°	1199	1233	1328	1458	1501	551
165°	1294	1311	1328	1381	1398	365
175°	1346	1346	1337	1354	1354	128
180°	1346	1346	1346	1346	1346	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	716.7	716.7	716.7	716.7	716.7	716.7	716.7	716.7	716.7	716.7	716.7
2.5°	716.7	716.7	721.3	723.6	728.2	730.5	735.1	739.7	753.6	755.9	760.5
5°	698.2	707.5	737.5	749.0	781.3	825.0	843.4	873.4	935.6	954.1	965.6
7.5°	670.6	691.3	765.1	783.5	864.2	979.4	1027.8	1092.3	1191.5	1239.9	1279.0
10°	626.8	670.6	802.0	845.8	977.1	1152.2	1242.1	1332.0	1481.8	1548.6	1573.9
12.5°	578.4	649.8	841.2	901.1	1090.0	1345.8	1454.1	1553.3	1723.7	1813.7	1827.4
15°	523.1	619.9	878.1	965.6	1209.9	1507.1	1627.0	1749.1	1908.1	1972.6	1988.8
17.5°	474.7	596.9	912.6	1004.8	1302.0	1652.3	1774.5	1875.8	2004.9	2048.7	2060.3
20°	414.8	560.0	935.6	1055.4	1398.8	1758.4	1875.8	1954.2	2041.8	2069.4	2074.0
22.5°	371.1	520.8	949.5	1073.9	1463.4	1822.9	1922.0	1984.1	2044.1	2053.3	2055.6
25°	334.2	477.0	947.1	1094.7	1518.6	1862.1	1938.1	1984.1	2018.8	2023.4	2023.4
27.5°	299.5	428.6	938.0	1099.3	1560.2	1871.3	1931.2	1963.5	1979.6	1988.8	1988.8
30°	269.6	382.6	914.9	1090.0	1578.6	1862.1	1910.5	1926.6	1942.7	1956.5	1963.5
32.5°	246.6	338.8	880.3	1071.6	1580.9	1839.0	1873.6	1882.8	1905.8	1938.1	1949.6
35°	225.9	295.0	841.2	1046.3	1567.0	1802.1	1825.2	1834.4	1880.5	1928.9	1945.0
37.5°	205.1	262.7	790.4	1002.5	1546.3	1758.4	1774.5	1790.6	1862.1	1919.6	1938.1
40°	184.3	235.1	730.5	954.1	1514.0	1705.3	1719.1	1744.5	1839.0	1905.8	1924.2
42.5°	168.2	212.0	666.0	903.3	1472.6	1645.4	1666.2	1703.0	1811.3	1882.8	1903.6
45°	154.4	189.0	596.9	834.2	1419.6	1583.2	1613.2	1663.8	1779.0	1848.2	1866.7
47.5°	140.6	172.8	525.4	762.8	1361.9	1521.0	1560.2	1617.8	1735.3	1802.1	1818.3
50°	129.1	156.7	454.0	686.7	1299.8	1454.1	1500.2	1560.2	1680.0	1742.2	1762.9
52.5°	119.8	142.8	387.2	610.7	1228.3	1385.0	1438.0	1500.2	1613.2	1673.1	1686.9
55°	110.6	131.3	329.5	530.0	1154.6	1311.3	1368.8	1428.8	1539.4	1590.1	1599.3
57.5°	106.0	122.2	281.1	454.0	1076.2	1228.3	1292.8	1348.2	1451.8	1491.0	1500.2
60°	99.1	115.2	244.3	389.5	991.0	1150.0	1205.2	1260.5	1348.2	1380.4	1387.3
62.5°	92.2	110.6	216.6	327.3	903.3	1057.8	1113.1	1163.8	1237.5	1260.5	1269.8
65°	87.6	106.0	195.9	281.1	813.5	961.0	1016.3	1060.0	1120.0	1143.1	1147.7
67.5°	82.9	101.4	179.7	242.0	723.6	864.2	905.7	947.1	993.2	1016.3	1018.6
70°	76.0	96.8	165.9	214.3	631.4	753.6	788.1	831.9	868.8	880.3	887.2
72.5°	71.4	89.9	156.7	193.6	536.9	647.6	679.8	705.2	737.5	749.0	749.0
75°	64.5	80.7	147.5	172.8	440.2	530.0	557.7	583.0	608.4	613.0	606.1
77.5°	57.6	71.4	126.7	145.2	343.4	419.4	442.5	456.2	477.0	481.6	484.0
80°	48.4	62.3	99.1	112.9	248.9	308.8	324.9	336.4	354.9	354.9	359.5
82.5°	36.9	48.4	71.4	80.7	168.2	212.0	225.9	232.7	244.3	244.3	244.3
85°	23.0	30.0	46.1	53.0	101.4	129.1	138.3	140.6	149.8	152.1	152.1
87.5°	11.5	16.1	30.0	32.3	53.0	66.8	66.8	71.4	71.4	69.2	66.8
90°	9.1	16.3	23.5	25.3	39.8	59.0	68.6	61.0	45.7	34.3	34.3
92.5°	36.1	97.5	159.0	174.3	245.0	339.3	386.5	338.7	243.2	171.5	164.7
95°	86.7	199.1	311.5	339.6	602.9	954.1	1129.6	1008.1	764.9	582.4	561.8
97.5°	149.9	249.1	348.2	373.0	812.1	1397.7	1690.4	1613.6	1459.9	1344.6	1305.3
100°	198.6	288.6	378.5	401.0	888.3	1538.0	1862.9	1868.5	1879.8	1888.2	1841.4
102.5°	240.2	324.0	407.9	429.0	923.2	1582.2	1911.7	2009.6	2205.5	2352.3	2312.2
105°	310.6	381.7	452.7	470.5	949.0	1587.2	1906.3	2125.8	2564.8	2894.1	2872.6
107.5°	382.9	449.1	515.3	531.9	953.8	1516.6	1797.9	2104.1	2716.6	3175.9	3181.1
110°	431.7	491.5	551.3	566.2	946.7	1453.9	1707.6	2050.0	2734.6	3248.1	3270.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	479.5	536.5	593.5	607.7	946.9	1399.3	1625.4	1975.8	2676.4	3202.0	3236.6
115°	551.7	604.3	656.8	670.0	955.7	1336.6	1527.0	1864.5	2539.5	3045.8	3093.7
117.5°	623.1	670.9	718.6	730.5	973.5	1297.3	1459.3	1763.9	2373.1	2830.0	2883.1
120°	664.6	709.6	754.5	765.7	987.8	1284.1	1432.1	1710.5	2267.1	2684.6	2736.2
122.5°	705.2	750.6	795.9	807.2	1008.6	1277.1	1411.4	1662.0	2163.3	2539.3	2590.1
125°	767.6	808.9	850.2	860.5	1036.6	1271.4	1388.8	1601.8	2027.6	2346.9	2393.7
127.5°	818.1	859.9	901.6	912.1	1064.7	1268.1	1369.9	1552.7	1918.3	2192.5	2232.0
130°	845.2	890.2	935.1	946.3	1085.1	1270.1	1362.6	1525.4	1850.9	2095.0	2131.5
132.5°	873.2	918.2	963.1	974.3	1101.6	1271.4	1356.3	1502.0	1793.3	2011.9	2044.6
135°	914.8	955.7	996.6	1006.9	1119.7	1270.2	1345.5	1467.5	1711.5	1894.5	1922.7
137.5°	957.1	997.7	1038.2	1048.4	1146.8	1278.1	1343.6	1446.8	1653.1	1807.8	1830.9
140°	992.4	1029.7	1067.0	1076.4	1163.4	1279.4	1337.4	1426.5	1604.6	1738.3	1759.9
142.5°	1019.5	1054.0	1088.5	1097.1	1177.2	1284.0	1337.4	1415.6	1572.1	1689.5	1708.1
145°	1061.0	1091.1	1121.3	1128.8	1195.3	1284.0	1328.3	1392.3	1520.4	1616.4	1630.4
147.5°	1102.6	1131.9	1161.2	1168.5	1221.8	1292.8	1328.3	1378.7	1479.4	1555.0	1566.6
150°	1129.6	1156.1	1182.7	1189.3	1235.6	1297.4	1328.3	1370.8	1455.9	1519.8	1529.2
152.5°	1157.6	1177.7	1197.7	1202.8	1244.7	1300.4	1328.3	1364.6	1437.3	1491.8	1498.9
155°	1199.2	1214.0	1228.9	1232.6	1264.5	1307.0	1328.3	1357.2	1415.0	1458.4	1463.1
157.5°	1229.9	1244.3	1258.8	1262.4	1284.3	1313.6	1328.3	1350.8	1395.7	1429.4	1432.8
160°	1250.7	1261.9	1273.2	1276.0	1293.4	1316.7	1328.3	1347.6	1386.1	1415.0	1416.9
162.5°	1271.4	1279.8	1288.3	1290.3	1303.0	1319.8	1328.3	1344.5	1377.0	1401.4	1403.3
165°	1294.0	1301.7	1309.3	1311.2	1316.9	1324.4	1328.3	1340.0	1363.3	1380.7	1382.6
167.5°	1314.8	1318.3	1322.0	1322.9	1327.7	1334.1	1337.4	1344.9	1360.2	1371.6	1372.4
170°	1328.3	1331.9	1335.6	1336.5	1336.7	1337.2	1337.4	1344.9	1360.2	1371.6	1371.6
172.5°	1335.5	1336.3	1337.2	1337.4	1337.4	1337.4	1337.4	1343.4	1355.4	1364.5	1363.8
175°	1345.5	1345.5	1345.5	1345.5	1342.8	1339.2	1337.4	1341.2	1348.8	1354.5	1354.5
177.5°	1345.5	1345.5	1345.5	1345.5	1343.4	1340.6	1339.2	1342.1	1348.2	1352.7	1351.9
180°	1345.5	1345.5	1345.5	1345.5	1345.5	1345.5	1345.5	1345.5	1345.5	1345.5	1345.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	716.7	716.7
2.5°	765.1	760.5
5°	984.0	988.6
7.5°	1325.1	1322.8
10°	1647.7	1668.5
12.5°	1882.8	1887.4
15°	2025.6	2034.9
17.5°	2080.9	2083.3
20°	2083.3	2078.7
22.5°	2057.9	2053.3
25°	2028.0	2025.6
27.5°	2000.3	2002.6
30°	1988.8	1995.7
32.5°	1988.8	2000.3
35°	1993.4	2004.9
37.5°	1991.1	2004.9
40°	1981.9	1998.0
42.5°	1956.5	1968.0
45°	1917.3	1931.2
47.5°	1866.7	1875.8
50°	1802.1	1811.3
52.5°	1721.5	1723.7
55°	1624.7	1633.9
57.5°	1521.0	1523.3
60°	1405.7	1412.7
62.5°	1283.6	1283.6
65°	1154.6	1159.2
67.5°	1020.9	1032.4
70°	884.9	887.2
72.5°	751.3	751.3
75°	613.0	615.3
77.5°	481.6	481.6
80°	357.2	359.5
82.5°	246.6	251.2
85°	154.4	154.4
87.5°	71.4	64.5
90°	34.3	34.3
92.5°	137.4	110.1
95°	479.1	396.4
97.5°	1147.9	990.6
100°	1653.9	1466.5
102.5°	2151.7	1991.1
105°	2786.2	2700.0
107.5°	3201.9	3222.8
110°	3360.5	3450.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3374.6	3512.6
115°	3285.1	3476.5
117.5°	3095.4	3307.7
120°	2942.5	3148.7
122.5°	2793.6	2997.1
125°	2581.2	2768.6
127.5°	2390.2	2548.3
130°	2277.6	2423.6
132.5°	2175.5	2306.3
135°	2035.5	2148.3
137.5°	1923.2	2015.5
140°	1846.2	1932.4
142.5°	1782.3	1856.6
145°	1686.6	1742.8
147.5°	1613.2	1659.7
150°	1567.0	1604.6
152.5°	1527.4	1555.9
155°	1481.9	1500.8
157.5°	1446.0	1459.3
160°	1424.5	1432.1
162.5°	1410.5	1417.8
165°	1390.2	1397.9
167.5°	1375.6	1378.9
170°	1371.6	1371.6
172.5°	1360.9	1358.1
175°	1354.5	1354.5
177.5°	1348.7	1345.5
180°	1345.5	1345.5



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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	4.07	4.87	5.11	5.92	7.34	17.25	18.05	18.29	19.10	20.51
	3H	4.77	5.49	5.82	6.54	7.98	19.08	19.80	20.13	20.86	22.30
	4H	5.06	5.74	6.13	6.81	8.25	19.72	20.40	20.79	21.47	22.91
	6H	5.31	5.94	6.38	7.00	8.46	20.15	20.78	21.22	21.84	23.30
	8H	5.38	5.97	6.45	7.06	8.51	20.27	20.87	21.35	21.95	23.40
	12H	5.39	5.96	6.47	7.04	8.51	20.34	20.90	21.42	21.98	23.46
4H	2H	11.28	11.96	12.34	13.02	14.46	17.51	18.19	18.58	19.26	20.70
	3H	12.84	13.41	13.91	14.50	15.95	19.55	20.12	20.63	21.21	22.67
	4H	12.93	13.45	14.01	14.53	16.01	20.32	20.84	21.40	21.92	23.40
	6H	12.94	13.39	14.03	14.49	15.96	20.85	21.30	21.94	22.41	23.88
	8H	12.91	13.33	14.00	14.43	15.92	21.01	21.43	22.11	22.53	24.02
	12H	12.87	13.25	13.97	14.35	15.85	21.10	21.48	22.21	22.59	24.09
8H	4H	14.37	14.79	15.46	15.88	17.37	20.37	20.79	21.46	21.89	23.38
	6H	14.61	14.96	15.72	16.09	17.58	21.00	21.35	22.11	22.48	23.97
	8H	14.63	14.93	15.75	16.05	17.55	21.22	21.52	22.34	22.64	24.15
	12H	14.59	14.86	15.72	15.97	17.52	21.36	21.63	22.48	22.74	24.28
12H	4H	14.51	14.89	15.62	16.00	17.49	20.32	20.70	21.43	21.81	23.30
	6H	14.87	15.17	15.99	16.29	17.79	20.98	21.29	22.10	22.40	23.91
	8H	14.93	15.20	16.06	16.32	17.86	21.21	21.48	22.33	22.59	24.13