

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: P938065

Luminaire Tested: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938065
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-93050-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

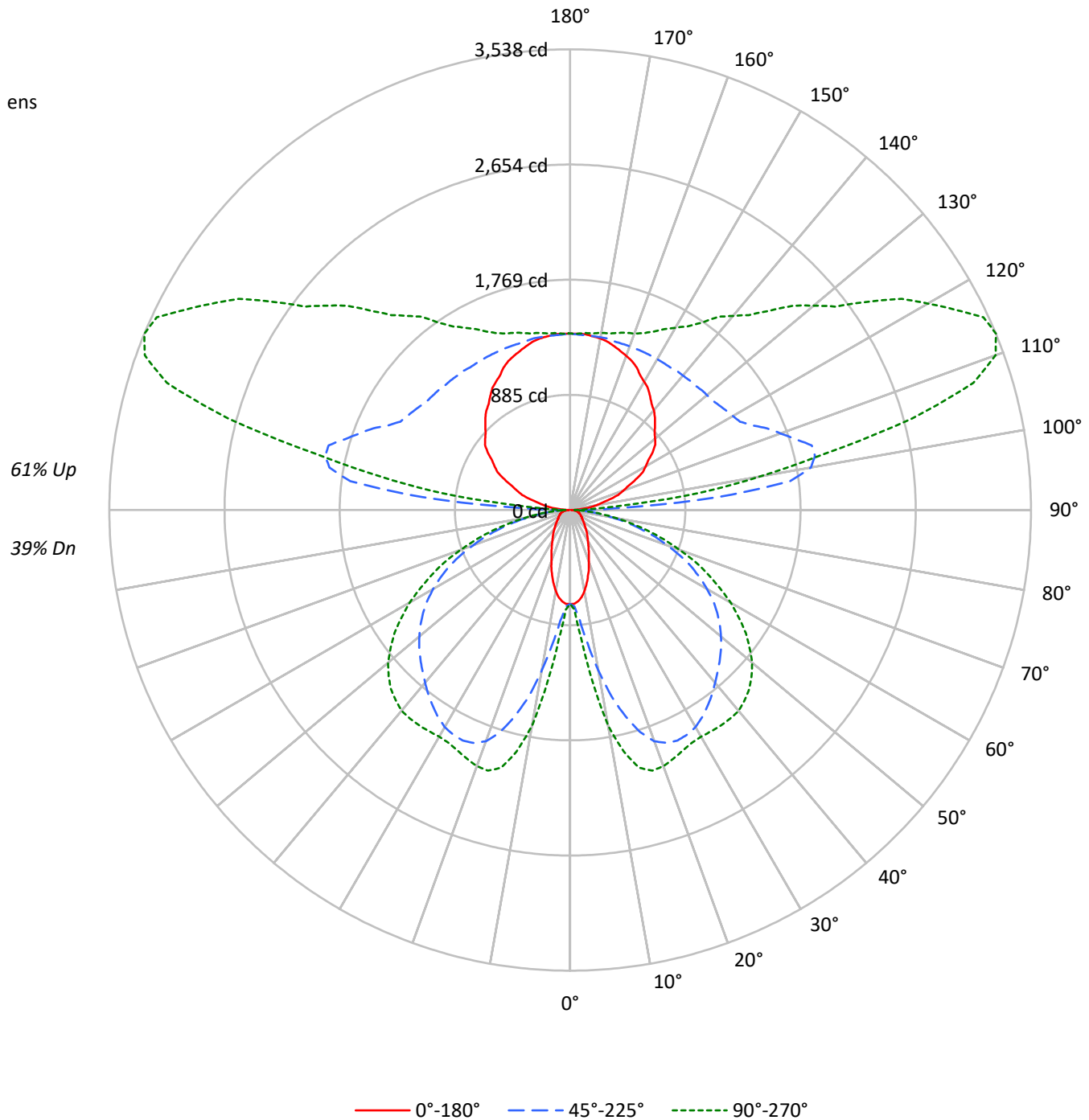
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14374.3 lumens
Efficiency: N/A
Efficacy: 111.6 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°	3349	3349	3349
5°	3272	3871	4502
10°	2968	5643	7463
15°	2522	7372	9012
20°	2053	8543	9184
25°	1713	8940	8998
30°	1445	8996	8981
35°	1277	8847	9213
40°	1113	8653	9453
45°	1008	8511	9490
50°	925	8382	9333
55°	885	8195	8919
60°	906	7835	8266
65°	943	7288	7368
70°	1005	6356	6225
75°	1113	5182	4858
80°	1215	3594	3273
85°	1081	1907	1675

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9490 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.4	0.6
10°-20°	413.8	2.9
20°-30°	723.9	5.0
30°-40°	931.8	6.5
40°-50°	1040.8	7.2
50°-60°	996.9	6.9
60°-70°	790.0	5.5
70°-80°	464.6	3.2
80°-90°	134.2	0.9
90°-100°	660.6	4.6
100°-110°	1736.7	12.1
110°-120°	1800.7	12.5
120°-130°	1444.4	10.0
130°-140°	1133.3	7.9
140°-150°	869.9	6.1
150°-160°	626.5	4.4
160°-170°	383.3	2.7
170°-180°	129.5	0.9
0°-30°	1231.1	8.6
0°-40°	2162.9	15.0
0°-60°	4200.6	29.2
0°-90°	5589.4	38.9
90°-120°	4198.0	29.2
90°-150°	7645.6	53.2
90°-180°	8785.0	61.1
0°-180°	14374.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	703	754	850	961	996	65
15°	527	972	1639	1987	2050	147
25°	337	1102	1952	2038	2040	155
35°	228	1054	1838	1943	2019	142
45°	156	840	1625	1862	1945	120
55°	111	534	1379	1602	1646	102
65°	88	283	1024	1151	1168	87
75°	65	174	562	617	620	68
85°	23	53	139	153	156	25
90°	9	26	69	34	34	9
95°	87	342	1138	587	399	97
105°	313	474	1920	2915	2719	332
115°	556	675	1538	3068	3502	549
125°	773	867	1399	2364	2788	686
135°	921	1014	1355	1908	2164	713
145°	1069	1137	1338	1628	1755	669
155°	1208	1242	1338	1469	1512	555
165°	1303	1321	1338	1391	1408	368
175°	1355	1355	1347	1364	1364	129
180°	1355	1355	1355	1355	1355	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9
2.5°	721.9	721.9	726.5	728.8	733.5	735.8	740.4	745.1	759.0	761.3	766.0
5°	703.3	712.6	742.8	754.4	786.9	831.0	849.5	879.7	942.3	960.9	972.5
7.5°	675.4	696.3	770.6	789.2	870.4	986.4	1035.2	1100.2	1200.0	1248.8	1288.2
10°	631.3	675.4	807.8	851.9	984.1	1160.5	1251.1	1341.6	1492.4	1559.8	1585.2
12.5°	582.6	654.5	847.2	907.5	1097.9	1355.5	1464.6	1564.4	1736.1	1826.7	1840.6
15°	526.9	624.4	884.4	972.5	1218.6	1518.0	1638.6	1761.7	1921.8	1986.8	2003.1
17.5°	478.1	601.2	919.1	1012.0	1311.4	1664.2	1787.3	1889.3	2019.3	2063.4	2075.1
20°	417.8	564.0	942.3	1063.0	1408.9	1771.0	1889.3	1968.3	2056.5	2084.3	2089.0
22.5°	373.7	524.5	956.3	1081.6	1473.9	1836.0	1935.8	1998.4	2058.8	2068.0	2070.4
25°	336.6	480.4	953.9	1102.5	1529.6	1875.4	1952.0	1998.4	2033.3	2037.9	2037.9
27.5°	301.7	431.7	944.7	1107.2	1571.4	1884.7	1945.1	1977.6	1993.8	2003.1	2003.1
30°	271.6	385.3	921.4	1097.9	1589.9	1875.4	1924.2	1940.4	1956.7	1970.6	1977.6
32.5°	248.4	341.2	886.6	1079.3	1592.3	1852.2	1887.0	1896.3	1919.5	1952.0	1963.6
35°	227.5	297.1	847.2	1053.8	1578.3	1815.1	1838.3	1847.6	1894.0	1942.7	1959.0
37.5°	206.6	264.6	796.1	1009.7	1557.4	1771.0	1787.3	1803.5	1875.4	1933.4	1952.0
40°	185.7	236.8	735.8	960.9	1524.9	1717.6	1731.5	1757.0	1852.2	1919.5	1938.1
42.5°	169.4	213.5	670.8	909.8	1483.2	1657.3	1678.2	1715.2	1824.3	1896.3	1917.2
45°	155.5	190.3	601.2	840.2	1429.8	1594.6	1624.8	1675.8	1791.8	1861.5	1880.1
47.5°	141.6	174.1	529.2	768.2	1371.7	1531.9	1571.4	1629.4	1747.7	1815.1	1831.3
50°	130.0	157.8	457.2	691.7	1309.1	1464.6	1511.0	1571.4	1692.0	1754.8	1775.6
52.5°	120.7	143.9	390.0	615.1	1237.1	1394.9	1448.3	1511.0	1624.8	1685.1	1699.0
55°	111.4	132.3	331.9	533.8	1162.9	1320.7	1378.7	1439.1	1550.5	1601.5	1610.8
57.5°	106.8	123.0	283.2	457.2	1083.9	1237.1	1302.1	1357.9	1462.3	1501.7	1511.0
60°	99.8	116.0	246.0	392.2	998.1	1158.2	1213.9	1269.6	1357.9	1390.4	1397.3
62.5°	92.8	111.4	218.2	329.6	909.8	1065.4	1121.1	1172.2	1246.4	1269.6	1278.9
65°	88.2	106.8	197.3	283.2	819.4	967.9	1023.6	1067.7	1128.0	1151.3	1155.9
67.5°	83.5	102.1	181.0	243.7	728.8	870.4	912.2	953.9	1000.4	1023.6	1025.9
70°	76.6	97.5	167.1	215.9	636.0	759.0	793.8	837.9	875.1	886.6	893.6
72.5°	71.9	90.6	157.8	195.0	540.8	652.2	684.7	710.3	742.8	754.4	754.4
75°	65.0	81.2	148.5	174.1	443.4	533.8	561.7	587.2	612.8	617.4	610.4
77.5°	58.1	71.9	127.6	146.2	345.9	422.5	445.6	459.5	480.4	485.1	487.5
80°	48.7	62.7	99.8	113.7	250.7	311.0	327.3	338.8	357.5	357.5	362.1
82.5°	37.2	48.7	71.9	81.2	169.4	213.5	227.5	234.4	246.0	246.0	246.0
85°	23.2	30.2	46.5	53.4	102.1	130.0	139.3	141.6	150.9	153.2	153.2
87.5°	11.6	16.2	30.2	32.5	53.4	67.3	67.3	71.9	71.9	69.6	67.3
90°	9.1	16.4	23.6	25.5	40.1	59.5	69.1	61.4	46.0	34.5	34.5
92.5°	36.4	98.2	160.1	175.6	246.8	341.7	389.3	341.1	245.0	172.8	165.9
95°	87.3	200.5	313.7	342.0	607.3	960.9	1137.8	1015.3	770.4	586.6	565.8
97.5°	151.0	250.8	350.7	375.6	818.0	1407.7	1702.6	1625.2	1470.4	1354.3	1314.6
100°	200.1	290.6	381.2	403.8	894.6	1549.1	1876.3	1881.9	1893.3	1901.8	1854.6
102.5°	241.9	326.4	410.9	432.0	929.9	1593.6	1925.4	2024.0	2221.3	2369.2	2328.8
105°	312.9	384.4	455.9	473.8	955.9	1598.6	1920.0	2141.0	2583.3	2914.9	2893.2
107.5°	385.7	452.3	519.0	535.7	960.7	1527.5	1810.8	2119.3	2736.1	3198.7	3204.0
110°	434.8	495.0	555.3	570.3	953.5	1464.4	1719.9	2064.7	2754.3	3271.4	3294.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	483.0	540.3	597.8	612.1	953.7	1409.3	1637.1	1990.0	2695.7	3225.0	3259.8
115°	555.7	608.7	661.5	674.8	962.5	1346.2	1538.0	1877.9	2557.8	3067.7	3115.9
117.5°	627.5	675.7	723.7	735.8	980.4	1306.6	1469.7	1776.5	2390.1	2850.4	2903.8
120°	669.4	714.7	759.9	771.2	994.9	1293.3	1442.4	1722.8	2283.4	2703.9	2755.8
122.5°	710.3	756.0	801.6	813.0	1015.8	1286.3	1421.5	1674.0	2178.9	2557.5	2608.7
125°	773.1	814.7	856.3	866.7	1044.0	1280.6	1398.8	1613.3	2042.1	2363.8	2410.9
127.5°	824.0	866.1	908.1	918.6	1072.3	1277.2	1379.7	1563.8	1932.1	2208.2	2248.0
130°	851.2	896.6	941.8	953.1	1092.9	1279.2	1372.4	1536.3	1864.2	2110.0	2146.8
132.5°	879.4	924.8	970.0	981.3	1109.6	1280.6	1366.0	1512.8	1806.2	2026.3	2059.3
135°	921.3	962.5	1003.8	1014.1	1127.7	1279.3	1355.1	1478.0	1723.8	1908.1	1936.5
137.5°	964.0	1004.9	1045.7	1055.9	1155.1	1287.2	1353.3	1457.2	1665.0	1820.8	1844.1
140°	999.5	1037.1	1074.7	1084.1	1171.7	1288.6	1347.0	1436.7	1616.2	1750.8	1772.5
142.5°	1026.8	1061.6	1096.3	1105.0	1185.6	1293.2	1347.0	1425.7	1583.4	1701.6	1720.3
145°	1068.6	1098.9	1129.3	1136.9	1203.9	1293.2	1337.8	1402.3	1531.3	1628.0	1642.2
147.5°	1110.5	1140.0	1169.5	1176.9	1230.6	1302.1	1337.8	1388.6	1490.0	1566.2	1577.9
150°	1137.8	1164.5	1191.2	1197.8	1244.5	1306.7	1337.8	1380.7	1466.4	1530.7	1540.2
152.5°	1165.9	1186.1	1206.3	1211.4	1253.6	1309.7	1337.8	1374.5	1447.6	1502.5	1509.7
155°	1207.8	1222.8	1237.7	1241.5	1273.6	1316.4	1337.8	1367.0	1425.2	1468.9	1473.6
157.5°	1238.8	1253.2	1267.8	1271.4	1293.6	1323.1	1337.8	1360.5	1405.7	1439.7	1443.0
160°	1259.7	1271.0	1282.3	1285.1	1302.7	1326.1	1337.8	1357.2	1396.1	1425.1	1427.1
162.5°	1280.6	1289.0	1297.5	1299.6	1312.4	1329.3	1337.8	1354.2	1386.9	1411.5	1413.4
165°	1303.3	1311.0	1318.7	1320.6	1326.3	1334.0	1337.8	1349.6	1373.0	1390.6	1392.5
167.5°	1324.2	1327.8	1331.5	1332.4	1337.2	1343.7	1347.0	1354.6	1370.0	1381.5	1382.3
170°	1337.8	1341.5	1345.2	1346.1	1346.3	1346.8	1347.0	1354.6	1370.0	1381.5	1381.5
172.5°	1345.1	1345.9	1346.8	1347.0	1347.0	1347.0	1347.0	1353.0	1365.1	1374.3	1373.6
175°	1355.1	1355.1	1355.1	1355.1	1352.4	1348.8	1347.0	1350.8	1358.5	1364.3	1364.3
177.5°	1355.1	1355.1	1355.1	1355.1	1353.0	1350.2	1348.8	1351.8	1357.9	1362.4	1361.6
180°	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	721.9	721.9
2.5°	770.6	766.0
5°	991.1	995.7
7.5°	1334.6	1332.3
10°	1659.5	1680.5
12.5°	1896.3	1901.0
15°	2040.2	2049.5
17.5°	2095.9	2098.3
20°	2098.3	2093.6
22.5°	2072.7	2068.0
25°	2042.6	2040.2
27.5°	2014.6	2017.0
30°	2003.1	2010.1
32.5°	2003.1	2014.6
35°	2007.7	2019.3
37.5°	2005.4	2019.3
40°	1996.1	2012.4
42.5°	1970.6	1982.1
45°	1931.1	1945.1
47.5°	1880.1	1889.3
50°	1815.1	1824.3
52.5°	1733.9	1736.1
55°	1636.4	1645.7
57.5°	1531.9	1534.2
60°	1415.8	1422.8
62.5°	1292.9	1292.9
65°	1162.9	1167.5
67.5°	1028.2	1039.8
70°	891.3	893.6
72.5°	756.7	756.7
75°	617.4	619.7
77.5°	485.1	485.1
80°	359.8	362.1
82.5°	248.4	253.0
85°	155.5	155.5
87.5°	71.9	65.0
90°	34.5	34.5
92.5°	138.4	110.9
95°	482.5	399.3
97.5°	1156.2	997.7
100°	1665.8	1477.0
102.5°	2167.1	2005.4
105°	2806.3	2719.4
107.5°	3224.9	3245.9
110°	3384.6	3475.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3398.8	3537.9
115°	3308.7	3501.5
117.5°	3117.6	3331.5
120°	2963.7	3171.4
122.5°	2813.7	3018.6
125°	2599.8	2788.5
127.5°	2407.3	2566.6
130°	2293.9	2441.1
132.5°	2191.1	2322.8
135°	2050.1	2163.7
137.5°	1937.0	2030.0
140°	1859.5	1946.3
142.5°	1795.1	1869.9
145°	1698.7	1755.3
147.5°	1624.8	1671.7
150°	1578.2	1616.2
152.5°	1538.3	1567.1
155°	1492.6	1511.6
157.5°	1456.4	1469.7
160°	1434.7	1442.4
162.5°	1420.7	1427.9
165°	1400.2	1407.9
167.5°	1385.5	1388.8
170°	1381.5	1381.5
172.5°	1370.7	1367.9
175°	1364.3	1364.3
177.5°	1358.4	1355.1
180°	1355.1	1355.1



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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	4.10	4.89	5.13	5.94	7.36	17.27	18.07	18.31	19.12	20.54
	3H	4.80	5.51	5.84	6.57	8.01	19.11	19.82	20.16	20.88	22.32
	4H	5.09	5.77	6.15	6.83	8.28	19.75	20.43	20.81	21.49	22.93
	6H	5.34	5.96	6.41	7.03	8.49	20.18	20.80	21.25	21.87	23.32
	8H	5.40	6.00	6.48	7.08	8.53	20.30	20.89	21.37	21.97	23.43
	12H	5.42	5.99	6.50	7.06	8.54	20.36	20.93	21.44	22.00	23.48
4H	2H	11.30	11.98	12.37	13.04	14.49	17.54	18.22	18.61	19.28	20.72
	3H	12.86	13.43	13.94	14.52	15.98	19.58	20.15	20.66	21.24	22.69
	4H	12.96	13.48	14.04	14.56	16.04	20.34	20.86	21.42	21.94	23.42
	6H	12.96	13.41	14.05	14.51	15.99	20.88	21.33	21.97	22.43	23.90
	8H	12.94	13.36	14.03	14.45	15.94	21.04	21.46	22.13	22.55	24.04
	12H	12.89	13.27	14.00	14.38	15.87	21.13	21.51	22.24	22.62	24.11
8H	4H	14.39	14.81	15.49	15.91	17.40	20.40	20.82	21.49	21.91	23.40
	6H	14.63	14.98	15.75	16.12	17.60	21.02	21.37	22.14	22.51	23.99
	8H	14.65	14.96	15.77	16.07	17.58	21.24	21.55	22.36	22.67	24.17
	12H	14.62	14.88	15.74	16.00	17.54	21.38	21.65	22.51	22.77	24.31
12H	4H	14.53	14.91	15.64	16.02	17.52	20.35	20.73	21.46	21.84	23.33
	6H	14.89	15.20	16.01	16.31	17.82	21.01	21.31	22.13	22.43	23.93
	8H	14.96	15.23	16.08	16.34	17.88	21.23	21.50	22.36	22.62	24.16