

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: P938551

Luminaire Tested: SQ4-FB-150U-125D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938551
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

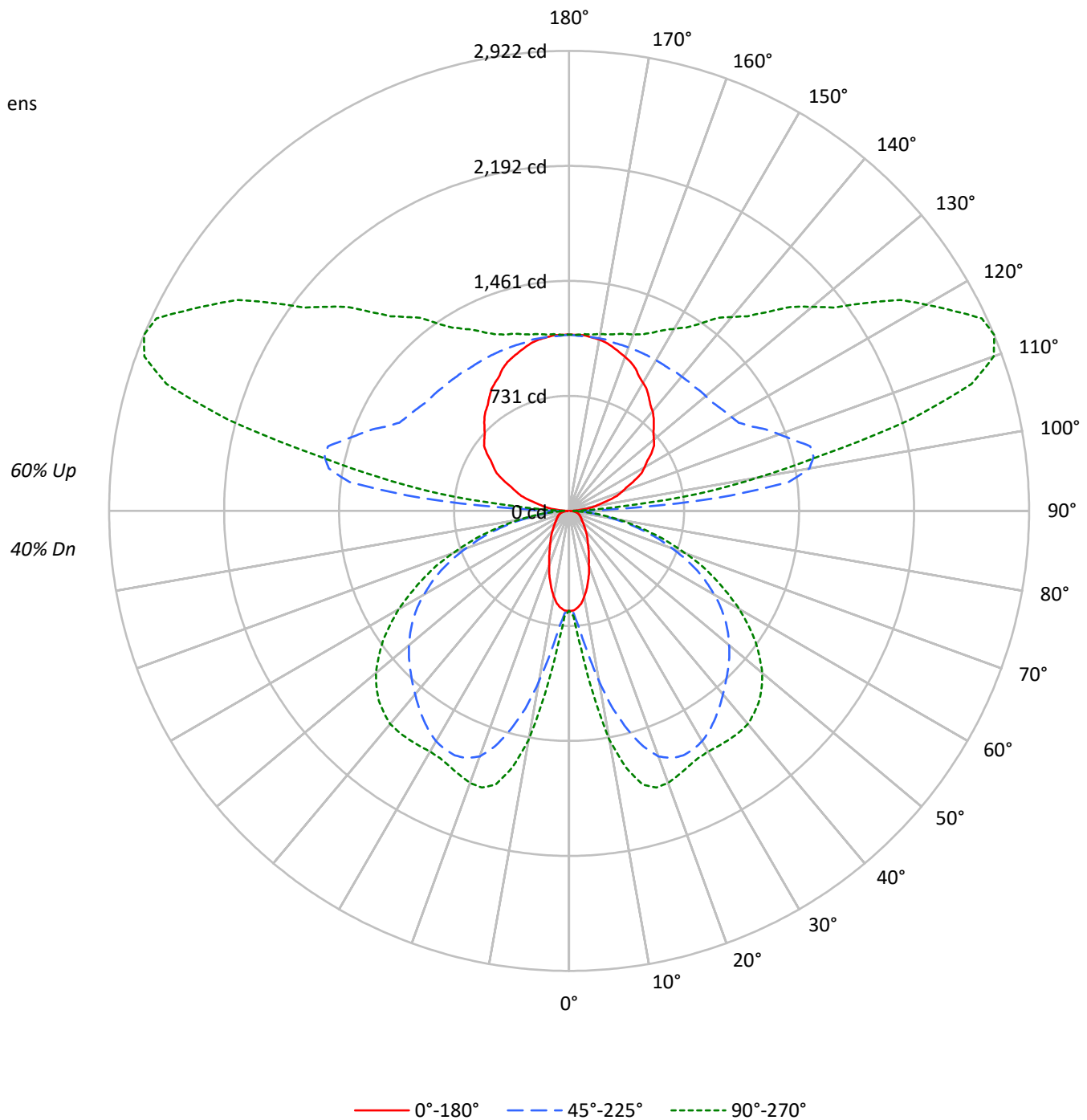
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12164.7 lumens
Efficiency: N/A
Efficacy: 97.5 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: General Diffuse

Input Watts (W): 124.8
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				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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3921	3921	3921
5°	3830	4531	5271
10°	3472	6604	8739
15°	2950	8626	10552
20°	2401	9993	10754
25°	2002	10454	10535
30°	1687	10518	10516
35°	1491	10341	10787
40°	1299	10111	11068
45°	1175	9941	11112
50°	1077	9789	10928
55°	1030	9566	10444
60°	1053	9142	9679
65°	1095	8499	8628
70°	1164	7407	7289
75°	1285	6034	5688
80°	1393	4180	3833
85°	1216	2213	1962

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11112 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.0	0.7
10°-20°	363.4	3.0
20°-30°	635.7	5.2
30°-40°	818.3	6.7
40°-50°	914.0	7.5
50°-60°	875.4	7.2
60°-70°	693.8	5.7
70°-80°	408.0	3.4
80°-90°	117.6	1.0
90°-100°	545.6	4.5
100°-110°	1434.5	11.8
110°-120°	1487.4	12.2
120°-130°	1193.1	9.8
130°-140°	936.2	7.7
140°-150°	718.5	5.9
150°-160°	517.5	4.3
160°-170°	316.6	2.6
170°-180°	107.0	0.9
0°-30°	1081.1	8.9
0°-40°	1899.4	15.6
0°-60°	3688.9	30.3
0°-90°	4908.3	40.3
90°-120°	3467.6	28.5
90°-150°	6315.4	51.9
90°-180°	7256.0	59.6
0°-180°	12164.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	618	662	746	844	874	57
15°	463	854	1439	1745	1800	129
25°	296	968	1714	1790	1792	136
35°	200	925	1614	1706	1773	125
45°	137	738	1427	1635	1708	106
55°	98	469	1211	1406	1445	89
65°	78	249	899	1011	1025	77
75°	57	153	493	542	544	60
85°	20	47	122	134	137	22
90°	8	21	57	29	29	8
95°	72	282	940	484	330	80
105°	258	391	1586	2408	2246	274
115°	459	557	1270	2534	2892	453
125°	638	716	1155	1952	2303	567
135°	761	838	1119	1576	1787	589
145°	883	939	1105	1345	1450	553
155°	998	1025	1105	1213	1249	458
165°	1077	1091	1105	1149	1163	304
175°	1119	1119	1113	1127	1127	106
180°	1119	1119	1119	1119	1119	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
2.5°	633.9	633.9	638.0	640.0	644.1	646.2	650.2	654.3	666.5	668.6	672.7
5°	617.6	625.8	652.3	662.5	691.0	729.7	746.0	772.5	827.6	843.9	854.1
7.5°	593.2	611.5	676.7	693.0	764.4	866.3	909.1	966.2	1053.8	1096.6	1131.3
10°	554.4	593.2	709.3	748.1	864.3	1019.2	1098.7	1178.2	1310.7	1369.8	1392.2
12.5°	511.6	574.8	744.0	797.0	964.1	1190.4	1286.2	1373.8	1524.7	1604.2	1616.4
15°	462.7	548.3	776.6	854.1	1070.1	1333.1	1439.1	1547.1	1687.7	1744.8	1759.1
17.5°	419.9	527.9	807.2	888.7	1151.7	1461.5	1569.5	1659.2	1773.3	1812.0	1822.2
20°	366.9	495.3	827.6	933.6	1237.3	1555.3	1659.2	1728.5	1805.9	1830.4	1834.5
22.5°	328.2	460.7	839.8	949.9	1294.4	1612.3	1700.0	1755.0	1808.0	1816.1	1818.2
25°	295.6	421.9	837.8	968.2	1343.3	1647.0	1714.2	1755.0	1785.6	1789.6	1789.6
27.5°	265.0	379.1	829.6	972.3	1380.0	1655.1	1708.1	1736.6	1750.9	1759.1	1759.1
30°	238.5	338.4	809.2	964.1	1396.3	1647.0	1689.8	1704.0	1718.3	1730.5	1736.6
32.5°	218.1	299.6	778.6	947.8	1398.3	1626.6	1657.2	1665.3	1685.7	1714.2	1724.4
35°	199.8	260.9	744.0	925.4	1386.1	1594.0	1614.4	1622.5	1663.3	1706.1	1720.3
37.5°	181.4	232.4	699.2	886.7	1367.7	1555.3	1569.5	1583.8	1647.0	1697.9	1714.2
40°	163.1	207.9	646.2	843.9	1339.2	1508.4	1520.6	1543.0	1626.6	1685.7	1702.0
42.5°	148.8	187.5	589.1	799.0	1302.5	1455.4	1473.7	1506.3	1602.1	1665.3	1683.7
45°	136.6	167.1	527.9	737.9	1255.6	1400.3	1426.8	1471.7	1573.6	1634.7	1651.0
47.5°	124.3	152.9	464.7	674.7	1204.7	1345.3	1380.0	1430.9	1534.9	1594.0	1608.2
50°	114.1	138.6	401.6	607.4	1149.6	1286.2	1327.0	1380.0	1486.0	1541.0	1559.3
52.5°	106.0	126.4	342.4	540.2	1086.4	1225.0	1271.9	1327.0	1426.8	1479.8	1492.1
55°	97.8	116.2	291.5	468.8	1021.2	1159.8	1210.8	1263.8	1361.6	1406.5	1414.6
57.5°	93.8	108.0	248.7	401.6	951.9	1086.4	1143.5	1192.4	1284.2	1318.8	1327.0
60°	87.6	101.9	216.1	344.5	876.5	1017.1	1066.1	1115.0	1192.4	1221.0	1227.1
62.5°	81.5	97.8	191.6	289.4	799.0	935.6	984.5	1029.4	1094.6	1115.0	1123.1
65°	77.5	93.8	173.3	248.7	719.5	850.0	898.9	937.6	990.6	1011.0	1015.1
67.5°	73.4	89.7	159.0	214.0	640.0	764.4	801.1	837.8	878.5	898.9	901.0
70°	67.3	85.6	146.8	189.6	558.5	666.5	697.1	735.8	768.5	778.6	784.8
72.5°	63.2	79.5	138.6	171.2	474.9	572.8	601.3	623.7	652.3	662.5	662.5
75°	57.1	71.3	130.5	152.9	389.3	468.8	493.3	515.7	538.1	542.2	536.1
77.5°	51.0	63.2	112.1	128.4	303.7	371.0	391.4	403.6	421.9	426.0	428.1
80°	42.8	55.0	87.6	99.9	220.1	273.1	287.4	297.6	313.9	313.9	318.0
82.5°	32.6	42.8	63.2	71.3	148.8	187.5	199.8	205.9	216.1	216.1	216.1
85°	20.4	26.5	40.8	46.9	89.7	114.1	122.3	124.3	132.5	134.5	134.5
87.5°	10.2	14.3	26.5	28.5	46.9	59.1	59.1	63.2	63.2	61.2	59.1
90°	7.5	13.6	19.5	21.0	33.1	49.1	57.1	50.7	38.1	28.6	28.6
92.5°	30.0	81.1	132.3	145.0	203.9	282.3	321.5	281.8	202.4	142.8	137.1
95°	72.1	165.6	259.1	282.5	501.6	793.8	939.8	838.7	636.3	484.5	467.3
97.5°	124.7	207.2	289.6	310.3	675.6	1162.8	1406.4	1342.5	1214.5	1118.7	1085.9
100°	165.3	240.1	314.9	333.6	739.0	1279.6	1549.9	1554.5	1563.9	1570.9	1532.0
102.5°	199.9	269.6	339.4	356.9	768.1	1316.3	1590.4	1671.8	1834.8	1957.0	1923.6
105°	258.4	317.5	376.6	391.4	789.6	1320.5	1585.9	1768.5	2133.8	2407.8	2389.8
107.5°	318.6	373.6	428.7	442.5	793.5	1261.7	1495.7	1750.5	2260.0	2642.2	2646.5
110°	359.1	408.9	458.6	471.0	787.6	1209.6	1420.6	1705.4	2275.1	2702.3	2721.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	398.9	446.3	493.7	505.6	787.8	1164.1	1352.3	1643.7	2226.7	2664.0	2692.7
115°	459.0	502.8	546.5	557.4	795.1	1111.9	1270.3	1551.2	2112.8	2533.9	2573.8
117.5°	518.3	558.1	597.8	607.8	809.9	1079.3	1214.1	1467.5	1974.3	2354.4	2398.6
120°	552.9	590.4	627.8	637.1	821.9	1068.3	1191.5	1423.1	1886.2	2233.5	2276.3
122.5°	586.8	624.5	662.2	671.6	839.1	1062.5	1174.2	1382.8	1799.8	2112.5	2154.9
125°	638.5	672.9	707.4	716.0	862.4	1057.8	1155.4	1332.6	1686.8	1952.5	1991.4
127.5°	680.6	715.3	750.1	758.8	885.7	1055.0	1139.6	1291.7	1595.9	1824.0	1856.9
130°	703.2	740.6	778.0	787.3	902.8	1056.7	1133.7	1269.1	1539.8	1742.9	1773.3
132.5°	726.5	763.9	801.3	810.6	916.5	1057.8	1128.4	1249.5	1492.0	1673.8	1701.0
135°	761.0	795.1	829.2	837.7	931.6	1056.7	1119.4	1220.9	1423.9	1576.1	1599.6
137.5°	796.3	830.1	863.8	872.2	954.1	1063.3	1117.9	1203.7	1375.3	1504.0	1523.2
140°	825.6	856.7	887.7	895.5	967.9	1064.4	1112.6	1186.8	1335.0	1446.2	1464.1
142.5°	848.1	876.9	905.6	912.8	979.4	1068.2	1112.6	1177.8	1307.9	1405.6	1421.0
145°	882.7	907.8	932.8	939.1	994.4	1068.2	1105.1	1158.3	1264.9	1344.8	1356.4
147.5°	917.3	941.7	966.0	972.1	1016.4	1075.5	1105.1	1147.0	1230.8	1293.6	1303.3
150°	939.8	961.8	983.8	989.4	1027.9	1079.4	1105.1	1140.5	1211.2	1264.3	1272.2
152.5°	963.1	979.8	996.5	1000.7	1035.5	1081.9	1105.1	1135.3	1195.7	1241.0	1247.0
155°	997.6	1010.0	1022.4	1025.4	1052.0	1087.4	1105.1	1129.1	1177.2	1213.3	1217.2
157.5°	1023.2	1035.2	1047.3	1050.2	1068.6	1092.9	1105.1	1123.8	1161.2	1189.2	1192.0
160°	1040.5	1049.8	1059.2	1061.5	1076.0	1095.4	1105.1	1121.1	1153.2	1177.2	1178.8
162.5°	1057.8	1064.8	1071.8	1073.5	1084.0	1098.1	1105.1	1118.6	1145.6	1166.0	1167.5
165°	1076.6	1082.9	1089.2	1090.8	1095.5	1101.9	1105.1	1114.8	1134.2	1148.7	1150.3
167.5°	1093.8	1096.8	1099.9	1100.6	1104.6	1110.0	1112.6	1119.0	1131.7	1141.1	1141.8
170°	1105.1	1108.1	1111.1	1111.8	1112.1	1112.5	1112.6	1119.0	1131.7	1141.1	1141.1
172.5°	1111.1	1111.8	1112.5	1112.6	1112.6	1112.6	1112.6	1117.6	1127.7	1135.1	1134.6
175°	1119.4	1119.4	1119.4	1119.4	1117.1	1114.2	1112.6	1115.8	1122.1	1126.8	1126.8
177.5°	1119.4	1119.4	1119.4	1119.4	1117.6	1115.3	1114.1	1116.6	1121.6	1125.4	1124.8
180°	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4	1119.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	633.9	633.9
2.5°	676.7	672.7
5°	870.4	874.5
7.5°	1172.1	1170.0
10°	1457.4	1475.8
12.5°	1665.3	1669.4
15°	1791.7	1799.8
17.5°	1840.6	1842.6
20°	1842.6	1838.5
22.5°	1820.2	1816.1
25°	1793.7	1791.7
27.5°	1769.2	1771.3
30°	1759.1	1765.2
32.5°	1759.1	1769.2
35°	1763.1	1773.3
37.5°	1761.1	1773.3
40°	1752.9	1767.2
42.5°	1730.5	1740.7
45°	1695.9	1708.1
47.5°	1651.0	1659.2
50°	1594.0	1602.1
52.5°	1522.6	1524.7
55°	1437.0	1445.2
57.5°	1345.3	1347.3
60°	1243.4	1249.5
62.5°	1135.4	1135.4
65°	1021.2	1025.3
67.5°	903.0	913.2
70°	782.7	784.8
72.5°	664.5	664.5
75°	542.2	544.2
77.5°	426.0	426.0
80°	315.9	318.0
82.5°	218.1	222.2
85°	136.6	136.6
87.5°	63.2	57.1
90°	28.6	28.6
92.5°	114.3	91.6
95°	398.5	329.8
97.5°	955.0	824.1
100°	1376.0	1220.1
102.5°	1790.0	1656.5
105°	2318.0	2246.2
107.5°	2663.9	2681.2
110°	2795.7	2870.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2807.5	2922.4
115°	2733.0	2892.3
117.5°	2575.2	2751.9
120°	2448.0	2619.6
122.5°	2324.1	2493.4
125°	2147.4	2303.3
127.5°	1988.5	2120.1
130°	1894.8	2016.3
132.5°	1809.8	1918.7
135°	1693.4	1787.2
137.5°	1600.1	1676.8
140°	1535.9	1607.7
142.5°	1482.8	1544.6
145°	1403.2	1449.9
147.5°	1342.1	1380.8
150°	1303.6	1335.0
152.5°	1270.7	1294.4
155°	1232.8	1248.6
157.5°	1203.1	1214.1
160°	1185.1	1191.5
162.5°	1173.4	1179.4
165°	1156.6	1162.9
167.5°	1144.5	1147.2
170°	1141.1	1141.1
172.5°	1132.2	1129.9
175°	1126.8	1126.8
177.5°	1122.0	1119.4
180°	1119.4	1119.4



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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	4.80	5.61	5.83	6.65	8.05	17.96	18.77	18.99	19.81	21.21
	3H	5.50	6.23	6.54	7.28	8.69	19.79	20.52	20.83	21.57	22.99
	4H	5.79	6.48	6.84	7.54	8.96	20.43	21.12	21.48	22.17	23.60
	6H	6.04	6.68	7.10	7.73	9.17	20.85	21.49	21.92	22.55	23.99
	8H	6.11	6.71	7.17	7.79	9.22	20.97	21.58	22.04	22.65	24.08
	12H	6.12	6.70	7.20	7.77	9.23	21.04	21.61	22.11	22.68	24.14
4H	2H	12.00	12.69	13.05	13.74	15.17	18.23	18.92	19.29	19.97	21.40
	3H	13.56	14.14	14.63	15.22	16.66	20.27	20.84	21.33	21.92	23.36
	4H	13.65	14.18	14.73	15.25	16.71	21.03	21.56	22.10	22.63	24.09
	6H	13.66	14.12	14.74	15.21	16.67	21.56	22.02	22.64	23.11	24.56
	8H	13.64	14.06	14.72	15.15	16.62	21.72	22.14	22.80	23.23	24.70
	12H	13.59	13.98	14.69	15.08	16.55	21.81	22.19	22.90	23.29	24.77
8H	4H	15.09	15.52	16.17	16.60	18.07	21.08	21.51	22.16	22.60	24.07
	6H	15.33	15.68	16.43	16.81	18.28	21.71	22.06	22.81	23.19	24.65
	8H	15.35	15.66	16.46	16.77	18.25	21.92	22.23	23.03	23.34	24.83
	12H	15.31	15.59	16.43	16.69	18.22	22.06	22.33	23.18	23.44	24.97
12H	4H	15.23	15.62	16.33	16.72	18.19	21.03	21.42	22.13	22.52	24.00
	6H	15.59	15.90	16.70	17.01	18.49	21.69	22.00	22.80	23.11	24.60
	8H	15.65	15.93	16.77	17.03	18.56	21.91	22.19	23.03	23.29	24.82