

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: P938148

Luminaire Tested: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-8-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938148
REPORT IS A COMBINATION OF REPORTS P933616 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-8-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

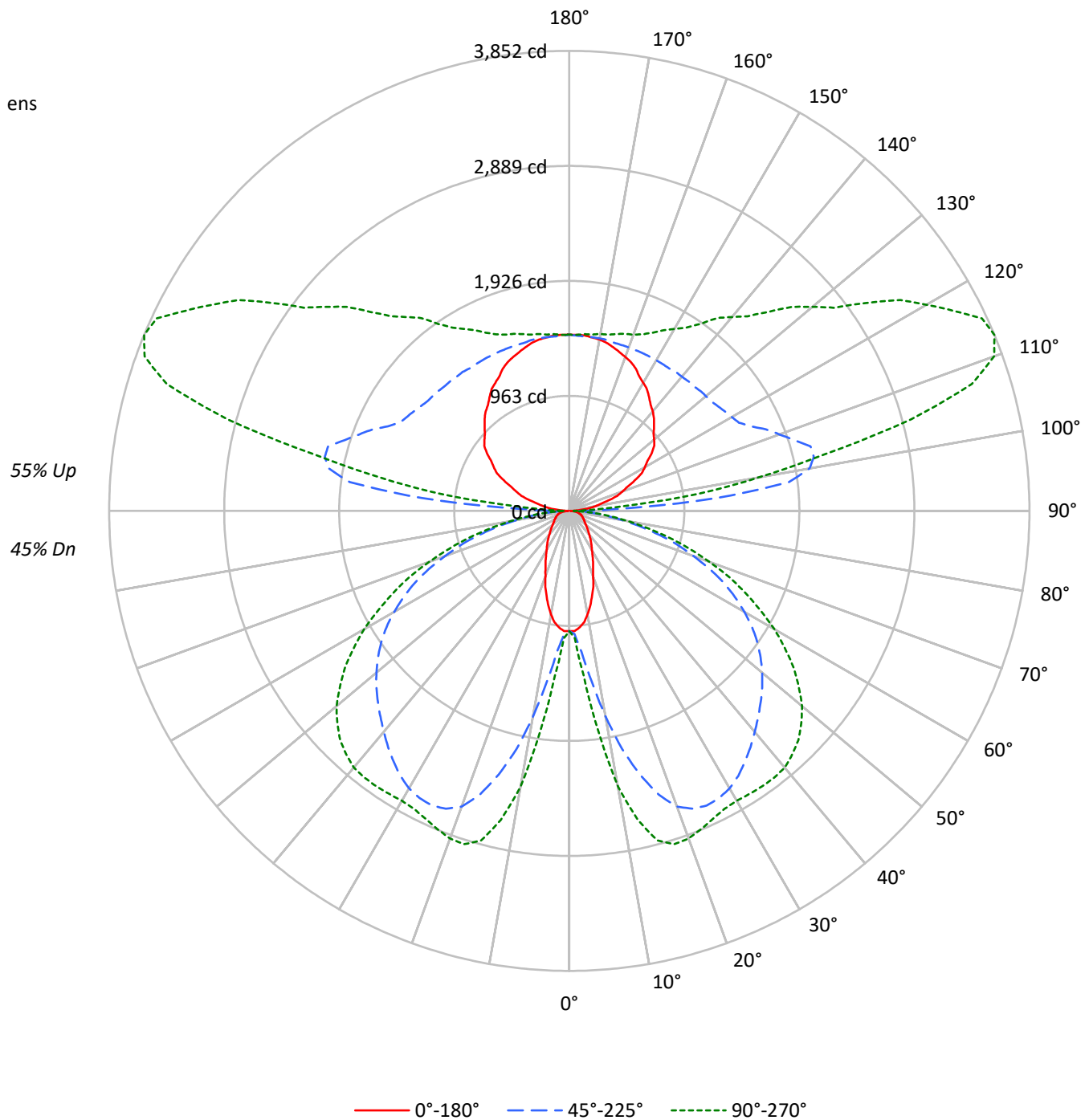
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17355.9 lumens
Efficiency: N/A
Efficacy: 115.4 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: General Diffuse

Input Watts (W): 150.4
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

TEST NUMBER: P938148
CATALOG NUMBER: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-8-6500K

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4670	4670	4670
5°	4562	5397	6277
10°	4138	7868	10407
15°	3517	10279	12565
20°	2863	11912	12806
25°	2389	12465	12546
30°	2014	12543	12522
35°	1781	12335	12846
40°	1552	12065	13180
45°	1406	11866	13232
50°	1289	11688	13013
55°	1235	11427	12436
60°	1263	10925	11525
65°	1315	10162	10274
70°	1401	8862	8679
75°	1552	7226	6773
80°	1697	5011	4564
85°	1504	2659	2337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13232 cd/sqm



TEST NUMBER: P938148

CATALOG NUMBER: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-8-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	0.8
10°-20°	577.0	3.3
20°-30°	1009.3	5.8
30°-40°	1299.3	7.5
40°-50°	1451.3	8.4
50°-60°	1390.0	8.0
60°-70°	1101.6	6.3
70°-80°	647.8	3.7
80°-90°	185.6	1.1
90°-100°	719.2	4.1
100°-110°	1890.7	10.9
110°-120°	1960.4	11.3
120°-130°	1572.5	9.1
130°-140°	1233.8	7.1
140°-150°	947.0	5.5
150°-160°	682.0	3.9
160°-170°	417.3	2.4
170°-180°	141.0	0.8
0°-30°	1716.5	9.9
0°-40°	3015.8	17.4
0°-60°	5857.0	33.7
0°-90°	7791.9	44.9
90°-120°	4570.3	26.3
90°-150°	8323.6	48.0
90°-180°	9564.0	55.1
0°-180°	17355.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	981	1052	1184	1340	1388	91
15°	735	1356	2285	2770	2858	204
25°	469	1537	2722	2842	2845	216
35°	317	1469	2563	2709	2816	198
45°	217	1172	2265	2596	2712	168
55°	155	744	1922	2233	2295	142
65°	123	395	1427	1605	1628	122
75°	91	243	783	861	864	95
85°	32	74	194	214	217	34
90°	10	28	75	38	38	10
95°	95	372	1239	639	435	106
105°	341	516	2090	3173	2961	361
115°	605	735	1674	3340	3812	598
125°	842	944	1523	2573	3036	747
135°	1003	1104	1475	2077	2356	776
145°	1163	1238	1456	1772	1911	729
155°	1315	1352	1456	1599	1646	604
165°	1419	1438	1456	1514	1533	400
175°	1475	1475	1466	1485	1485	140
180°	1475	1475	1475	1475	1475	



TEST NUMBER: P938148

CATALOG NUMBER: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-8-6500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5	1006.5
2.5°	1006.5	1006.5	1013.0	1016.2	1022.6	1025.9	1032.4	1038.9	1058.3	1061.6	1068.0
5°	980.6	993.6	1035.7	1051.8	1097.1	1158.6	1184.5	1226.6	1313.9	1339.8	1356.0
7.5°	941.8	970.9	1074.5	1100.4	1213.6	1375.5	1443.4	1534.0	1673.1	1741.1	1796.2
10°	880.3	941.8	1126.2	1187.7	1372.2	1618.2	1744.4	1870.6	2081.0	2174.9	2210.4
12.5°	812.3	912.7	1181.3	1265.4	1530.8	1890.0	2042.1	2181.3	2420.8	2547.0	2566.4
15°	734.6	870.6	1233.0	1356.0	1699.1	2116.5	2284.8	2456.4	2679.7	2770.3	2792.9
17.5°	666.7	838.2	1281.6	1411.1	1828.5	2320.5	2491.9	2634.4	2815.6	2877.1	2893.2
20°	582.5	786.5	1313.9	1482.2	1964.5	2469.4	2634.4	2744.4	2867.4	2906.3	2912.7
22.5°	521.0	731.4	1333.4	1508.1	2055.0	2559.9	2699.1	2786.4	2870.6	2883.6	2886.8
25°	469.3	669.9	1330.2	1537.3	2132.8	2615.0	2721.8	2786.4	2835.0	2841.5	2841.5
27.5°	420.7	601.9	1317.2	1543.8	2191.0	2627.9	2712.1	2757.4	2780.0	2792.9	2792.9
30°	378.7	537.2	1284.8	1530.8	2216.9	2615.0	2682.9	2705.5	2728.2	2747.6	2757.4
32.5°	346.3	475.7	1236.3	1504.9	2220.1	2582.6	2631.2	2644.1	2676.5	2721.8	2738.0
35°	317.2	414.2	1181.3	1469.3	2200.7	2530.9	2563.2	2576.1	2640.8	2708.8	2731.5
37.5°	288.0	368.9	1110.0	1407.8	2171.6	2469.4	2491.9	2514.6	2615.0	2695.9	2721.8
40°	258.9	330.1	1025.9	1339.8	2126.3	2394.9	2414.3	2449.9	2582.6	2676.5	2702.3
42.5°	236.3	297.8	935.3	1268.7	2068.1	2310.7	2339.9	2391.6	2543.8	2644.1	2673.2
45°	216.9	265.3	838.2	1171.5	1993.6	2223.3	2265.4	2336.6	2498.4	2595.6	2621.4
47.5°	197.5	242.7	737.9	1071.2	1912.7	2135.9	2191.0	2271.9	2437.0	2530.9	2553.5
50°	181.2	220.1	637.6	964.4	1825.3	2042.1	2106.9	2191.0	2359.3	2446.7	2475.8
52.5°	168.3	200.6	543.7	857.6	1725.0	1945.0	2019.5	2106.9	2265.4	2349.6	2369.0
55°	155.4	184.4	462.8	744.4	1621.4	1841.4	1922.4	2006.6	2161.9	2233.1	2246.0
57.5°	148.9	171.5	394.8	637.6	1511.4	1725.0	1815.6	1893.3	2038.9	2093.9	2106.9
60°	139.1	161.8	343.1	546.9	1391.6	1614.9	1692.6	1770.3	1893.3	1938.6	1948.2
62.5°	129.5	155.4	304.3	459.5	1268.7	1485.4	1563.2	1634.3	1737.9	1770.3	1783.2
65°	123.0	148.9	275.1	394.8	1142.5	1349.6	1427.2	1488.7	1572.8	1605.3	1611.7
67.5°	116.5	142.4	252.4	339.8	1016.2	1213.6	1271.8	1330.2	1394.9	1427.2	1430.5
70°	106.8	136.0	233.0	301.0	886.8	1058.3	1106.8	1168.3	1220.1	1236.3	1246.0
72.5°	100.3	126.2	220.1	271.8	754.1	909.4	954.8	990.3	1035.7	1051.8	1051.8
75°	90.6	113.3	207.1	242.7	618.2	744.4	783.2	818.8	854.4	860.9	851.2
77.5°	80.9	100.3	178.0	203.9	482.2	589.0	621.3	640.8	669.9	676.4	679.7
80°	68.0	87.4	139.1	158.5	349.5	433.6	456.3	472.6	498.4	498.4	504.9
82.5°	51.8	68.0	100.3	113.3	236.3	297.8	317.2	326.8	343.1	343.1	343.1
85°	32.3	42.1	64.7	74.4	142.4	181.2	194.2	197.5	210.4	213.6	213.6
87.5°	16.2	22.7	42.1	45.3	74.4	93.9	93.9	100.3	100.3	97.1	93.9
90°	9.9	17.9	25.7	27.7	43.6	64.7	75.3	66.8	50.1	37.6	37.6
92.5°	39.6	106.9	174.3	191.1	268.7	372.1	423.8	371.4	266.7	188.1	180.6
95°	95.0	218.3	341.6	372.3	661.1	1046.2	1238.7	1105.4	838.7	638.6	616.0
97.5°	164.4	273.1	381.8	409.0	890.5	1532.6	1853.6	1769.3	1600.8	1474.4	1431.2
100°	217.8	316.4	415.0	439.7	974.0	1686.4	2042.7	2048.8	2061.2	2070.4	2019.1
102.5°	263.3	355.3	447.3	470.4	1012.3	1734.9	2096.2	2203.5	2418.3	2579.3	2535.3
105°	340.6	418.5	496.4	515.9	1040.6	1740.4	2090.2	2330.9	2812.4	3173.4	3149.8
107.5°	419.9	492.4	565.0	583.2	1045.9	1662.9	1971.4	2307.2	2978.7	3482.4	3488.1
110°	473.3	538.9	604.5	620.9	1038.0	1594.3	1872.4	2247.8	2998.5	3561.5	3586.2



TEST NUMBER: P938148

CATALOG NUMBER: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-8-6500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	525.8	588.2	650.8	666.4	1038.3	1534.3	1782.2	2166.4	2934.7	3511.0	3548.9
115°	605.0	662.6	720.2	734.6	1047.9	1465.6	1674.4	2044.4	2784.6	3339.8	3392.3
117.5°	683.2	735.6	787.9	801.0	1067.4	1422.5	1600.1	1934.1	2602.1	3103.1	3161.4
120°	728.7	778.1	827.3	839.6	1083.2	1408.0	1570.4	1875.6	2485.9	2943.7	3000.2
122.5°	773.3	823.0	872.7	885.1	1105.9	1400.3	1547.6	1822.4	2372.1	2784.3	2840.1
125°	841.6	887.0	932.3	943.6	1136.6	1394.1	1522.8	1756.3	2223.2	2573.4	2624.7
127.5°	897.1	942.9	988.6	1000.1	1167.4	1390.5	1502.1	1702.5	2103.4	2404.1	2447.4
130°	926.7	976.1	1025.3	1037.7	1189.8	1392.7	1494.1	1672.6	2029.5	2297.2	2337.2
132.5°	957.4	1006.8	1056.0	1068.4	1208.0	1394.1	1487.2	1646.9	1966.4	2206.0	2241.9
135°	1003.0	1047.9	1092.8	1104.0	1227.8	1392.8	1475.3	1609.1	1876.6	2077.3	2108.2
137.5°	1049.5	1094.0	1138.4	1149.5	1257.5	1401.4	1473.3	1586.4	1812.7	1982.3	2007.6
140°	1088.1	1129.1	1170.0	1180.2	1275.7	1402.8	1466.4	1564.1	1759.5	1906.1	1929.7
142.5°	1117.9	1155.8	1193.5	1203.0	1290.8	1407.9	1466.4	1552.2	1723.8	1852.5	1872.9
145°	1163.4	1196.4	1229.5	1237.7	1310.7	1407.9	1456.5	1526.7	1667.1	1772.4	1787.8
147.5°	1209.0	1241.1	1273.3	1281.3	1339.7	1417.6	1456.5	1511.7	1622.2	1705.1	1717.8
150°	1238.7	1267.7	1296.8	1304.1	1354.8	1422.6	1456.5	1503.1	1596.5	1666.5	1676.8
152.5°	1269.3	1291.3	1313.3	1318.9	1364.8	1425.9	1456.5	1496.3	1576.0	1635.8	1643.6
155°	1315.0	1331.2	1347.5	1351.6	1386.6	1433.1	1456.5	1488.2	1551.6	1599.1	1604.3
157.5°	1348.6	1364.4	1380.3	1384.2	1408.3	1440.4	1456.5	1481.1	1530.4	1567.4	1571.0
160°	1371.4	1383.7	1396.0	1399.1	1418.2	1443.8	1456.5	1477.6	1519.9	1551.5	1553.6
162.5°	1394.1	1403.3	1412.6	1414.9	1428.7	1447.2	1456.5	1474.3	1509.9	1536.7	1538.7
165°	1418.9	1427.3	1435.6	1437.7	1443.9	1452.3	1456.5	1469.3	1494.8	1513.9	1516.0
167.5°	1441.7	1445.6	1449.6	1450.5	1455.8	1462.9	1466.4	1474.7	1491.5	1504.0	1504.9
170°	1456.5	1460.5	1464.5	1465.5	1465.7	1466.2	1466.4	1474.7	1491.5	1504.0	1504.0
172.5°	1464.4	1465.3	1466.2	1466.4	1466.4	1466.4	1466.4	1473.0	1486.2	1496.2	1495.4
175°	1475.3	1475.3	1475.3	1475.3	1472.3	1468.4	1466.4	1470.6	1478.9	1485.3	1485.3
177.5°	1475.3	1475.3	1475.3	1475.3	1473.0	1470.0	1468.4	1471.7	1478.3	1483.2	1482.4
180°	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1006.5	1006.5
2.5°	1074.5	1068.0
5°	1381.9	1388.4
7.5°	1860.8	1857.7
10°	2314.0	2343.2
12.5°	2644.1	2650.6
15°	2844.8	2857.7
17.5°	2922.4	2925.7
20°	2925.7	2919.2
22.5°	2890.1	2883.6
25°	2848.0	2844.8
27.5°	2809.1	2812.4
30°	2792.9	2802.7
32.5°	2792.9	2809.1
35°	2799.4	2815.6
37.5°	2796.2	2815.6
40°	2783.3	2805.9
42.5°	2747.6	2763.9
45°	2692.6	2712.1
47.5°	2621.4	2634.4
50°	2530.9	2543.8
52.5°	2417.5	2420.8
55°	2281.6	2294.6
57.5°	2135.9	2139.2
60°	1974.2	1983.9
62.5°	1802.6	1802.6
65°	1621.4	1627.9
67.5°	1433.7	1449.9
70°	1242.8	1246.0
72.5°	1055.1	1055.1
75°	860.9	864.1
77.5°	676.4	676.4
80°	501.6	504.9
82.5°	346.3	352.7
85°	216.9	216.9
87.5°	100.3	90.6
90°	37.6	37.6
92.5°	150.7	120.8
95°	525.3	434.7
97.5°	1258.7	1086.2
100°	1813.5	1608.0
102.5°	2359.3	2183.3
105°	3055.1	2960.6
107.5°	3510.9	3533.8
110°	3684.8	3783.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3700.3	3851.6
115°	3602.2	3812.1
117.5°	3394.1	3626.9
120°	3226.5	3452.6
122.5°	3063.3	3286.3
125°	2830.3	3035.8
127.5°	2620.8	2794.2
130°	2497.4	2657.5
132.5°	2385.4	2528.8
135°	2231.9	2355.6
137.5°	2108.8	2210.0
140°	2024.4	2118.9
142.5°	1954.3	2035.7
145°	1849.4	1911.0
147.5°	1768.9	1819.9
150°	1718.2	1759.5
152.5°	1674.8	1706.0
155°	1625.0	1645.6
157.5°	1585.6	1600.1
160°	1561.9	1570.4
162.5°	1546.6	1554.6
165°	1524.4	1532.8
167.5°	1508.4	1511.9
170°	1504.0	1504.0
172.5°	1492.2	1489.2
175°	1485.3	1485.3
177.5°	1478.8	1475.3
180°	1475.3	1475.3



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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	5.87	6.72	6.87	7.73	9.07	19.05	19.90	20.05	20.91	22.25
	3H	6.58	7.34	7.58	8.36	9.72	20.89	21.66	21.89	22.67	24.03
	4H	6.88	7.60	7.89	8.62	9.99	21.54	22.26	22.55	23.28	24.65
	6H	7.13	7.80	8.15	8.82	10.20	21.97	22.64	22.99	23.66	25.04
	8H	7.19	7.83	8.23	8.87	10.25	22.09	22.72	23.12	23.77	25.14
	12H	7.21	7.82	8.25	8.85	10.26	22.16	22.76	23.19	23.80	25.20
4H	2H	13.09	13.81	14.11	14.83	16.20	19.33	20.05	20.35	21.07	22.44
	3H	14.66	15.26	15.69	16.31	17.69	21.37	21.98	22.40	23.03	24.41
	4H	14.75	15.31	15.79	16.35	17.75	22.14	22.69	23.18	23.73	25.14
	6H	14.76	15.24	15.81	16.30	17.70	22.68	23.16	23.72	24.22	25.62
	8H	14.74	15.18	15.79	16.24	17.66	22.84	23.29	23.89	24.34	25.76
	12H	14.69	15.10	15.76	16.17	17.59	22.93	23.34	24.00	24.41	25.83
8H	4H	16.19	16.64	17.24	17.70	19.11	22.20	22.64	23.25	23.70	25.12
	6H	16.44	16.81	17.51	17.91	19.32	22.83	23.20	23.90	24.30	25.71
	8H	16.45	16.78	17.53	17.86	19.29	23.05	23.37	24.13	24.45	25.89
	12H	16.42	16.71	17.51	17.79	19.26	23.19	23.48	24.28	24.56	26.03
12H	4H	16.34	16.74	17.41	17.81	19.23	22.15	22.55	23.22	23.63	25.05
	6H	16.69	17.02	17.77	18.10	19.53	22.81	23.14	23.89	24.22	25.65
	8H	16.76	17.05	17.85	18.13	19.60	23.04	23.33	24.12	24.40	25.88