

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: P938042

Luminaire Tested: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938042
REPORT IS A COMBINATION OF REPORTS P933607 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-6-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

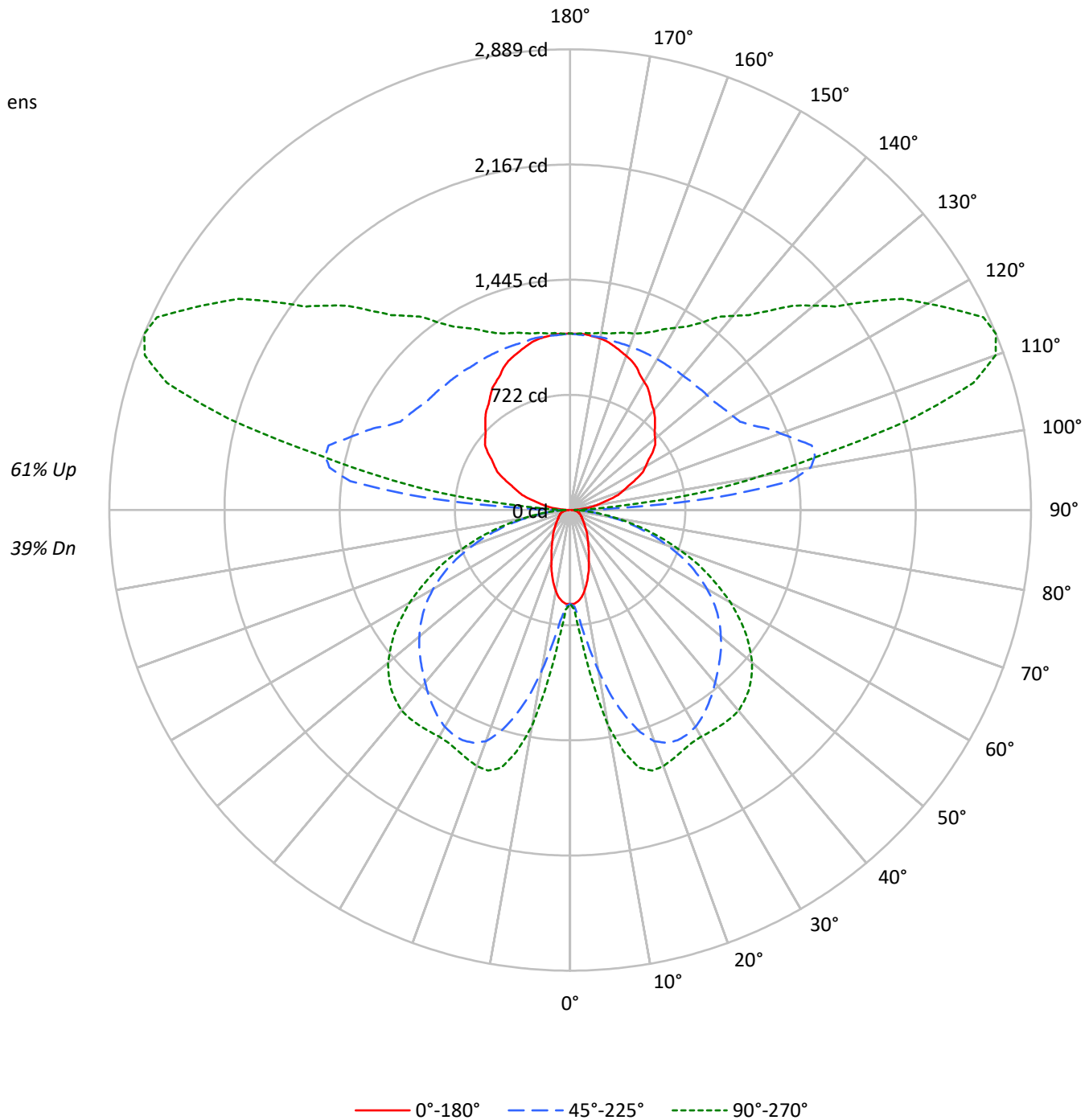
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11736.3 lumens
Efficiency: N/A
Efficacy: 121.5 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: Semi-Indirect

Input Watts (W): 96.6
Input Voltage (V): NR
Input Current (Ain): 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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CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-6500K

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	50	30	10	0
RCR																					
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39			39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32			32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21			21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18			18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10			10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3646	3646	3646
5°	3560	4212	4901
10°	3228	6139	8124
15°	2743	8019	9809
20°	2232	9290	9998
25°	1861	9720	9795
30°	1569	9778	9776
35°	1386	9613	10029
40°	1207	9399	10290
45°	1093	9242	10330
50°	1001	9101	10160
55°	958	8893	9709
60°	980	8499	8998
65°	1018	7901	8020
70°	1081	6886	6776
75°	1195	5610	5287
80°	1295	3886	3564
85°	1127	2058	1824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10330 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	0.6
10°-20°	337.9	2.9
20°-30°	591.0	5.0
30°-40°	760.8	6.5
40°-50°	849.8	7.2
50°-60°	813.9	6.9
60°-70°	645.0	5.5
70°-80°	379.3	3.2
80°-90°	109.6	0.9
90°-100°	539.4	4.6
100°-110°	1418.0	12.1
110°-120°	1470.3	12.5
120°-130°	1179.4	10.0
130°-140°	925.4	7.9
140°-150°	710.3	6.1
150°-160°	511.5	4.4
160°-170°	313.0	2.7
170°-180°	105.7	0.9
0°-30°	1005.1	8.6
0°-40°	1765.9	15.0
0°-60°	3429.5	29.2
0°-90°	4563.4	38.9
90°-120°	3427.7	29.2
90°-150°	6242.7	53.2
90°-180°	7173.0	61.1
0°-180°	11736.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	616	694	785	813	53
15°	430	794	1338	1622	1673	120
25°	275	900	1594	1664	1666	127
35°	186	860	1501	1586	1649	116
45°	127	686	1326	1520	1588	98
55°	91	436	1126	1308	1344	83
65°	72	231	836	940	953	71
75°	53	142	459	504	506	56
85°	19	44	114	125	127	20
90°	8	21	56	28	28	7
95°	71	279	929	479	326	79
105°	256	387	1568	2380	2220	271
115°	454	551	1256	2505	2859	448
125°	631	708	1142	1930	2277	560
135°	752	828	1106	1558	1767	582
145°	872	928	1092	1329	1433	547
155°	986	1014	1092	1199	1234	453
165°	1064	1078	1092	1136	1150	300
175°	1106	1106	1100	1114	1114	105
180°	1106	1106	1106	1106	1106	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3
2.5°	589.3	589.3	593.1	595.0	598.8	600.7	604.5	608.3	619.6	621.5	625.4
5°	574.2	581.7	606.4	615.9	642.4	678.4	693.5	718.2	769.4	784.6	794.0
7.5°	551.4	568.5	629.2	644.3	710.6	805.4	845.2	898.2	979.7	1019.5	1051.7
10°	515.4	551.4	659.5	695.4	803.5	947.5	1021.4	1095.3	1218.5	1273.5	1294.3
12.5°	475.6	534.4	691.7	741.0	896.3	1106.7	1195.7	1277.2	1417.5	1491.4	1502.8
15°	430.2	509.7	722.0	794.0	994.8	1239.3	1337.9	1438.3	1569.0	1622.1	1635.4
17.5°	390.4	490.8	750.4	826.2	1070.6	1358.8	1459.2	1542.5	1648.7	1684.6	1694.1
20°	341.1	460.5	769.4	867.9	1150.3	1445.9	1542.5	1607.0	1679.0	1701.7	1705.5
22.5°	305.1	428.3	780.7	883.0	1203.3	1498.9	1580.4	1631.6	1680.9	1688.4	1690.4
25°	274.8	392.2	778.8	900.2	1248.8	1531.2	1593.7	1631.6	1660.0	1663.8	1663.8
27.5°	246.3	352.5	771.3	903.9	1282.9	1538.7	1587.9	1614.5	1627.8	1635.4	1635.4
30°	221.7	314.6	752.3	896.3	1298.0	1531.2	1570.9	1584.2	1597.5	1608.8	1614.5
32.5°	202.8	278.5	723.8	881.1	1299.9	1512.2	1540.6	1548.2	1567.1	1593.7	1603.2
35°	185.7	242.6	691.7	860.3	1288.6	1481.9	1500.8	1508.4	1546.3	1586.1	1599.3
37.5°	168.7	216.0	650.0	824.3	1271.5	1445.9	1459.2	1472.4	1531.2	1578.5	1593.7
40°	151.6	193.2	600.7	784.6	1245.0	1402.3	1413.6	1434.5	1512.2	1567.1	1582.3
42.5°	138.4	174.3	547.6	742.9	1210.9	1353.0	1370.0	1400.3	1489.5	1548.2	1565.3
45°	127.0	155.4	490.8	686.0	1167.3	1301.9	1326.5	1368.2	1462.9	1519.8	1535.0
47.5°	115.6	142.1	432.1	627.3	1119.9	1250.7	1282.9	1330.3	1426.9	1481.9	1495.1
50°	106.1	128.9	373.3	564.7	1068.7	1195.7	1233.7	1282.9	1381.4	1432.6	1449.7
52.5°	98.6	117.5	318.3	502.2	1010.0	1138.9	1182.4	1233.7	1326.5	1375.8	1387.1
55°	90.9	108.0	271.0	435.8	949.4	1078.2	1125.6	1174.9	1265.8	1307.5	1315.1
57.5°	87.2	100.4	231.2	373.3	885.0	1010.0	1063.1	1108.6	1193.8	1226.0	1233.7
60°	81.5	94.8	200.9	320.2	814.9	945.6	991.1	1036.5	1108.6	1135.1	1140.7
62.5°	75.8	90.9	178.1	269.1	742.9	869.8	915.3	957.0	1017.6	1036.5	1044.2
65°	72.0	87.2	161.1	231.2	669.0	790.2	835.7	871.7	921.0	939.9	943.7
67.5°	68.2	83.4	147.8	199.0	595.0	710.6	744.7	778.8	816.8	835.7	837.6
70°	62.5	79.6	136.4	176.2	519.2	619.6	648.1	684.1	714.4	723.8	729.6
72.5°	58.7	73.9	128.9	159.2	441.6	532.5	559.0	579.8	606.4	615.9	615.9
75°	53.1	66.4	121.2	142.1	361.9	435.8	458.6	479.4	500.3	504.1	498.4
77.5°	47.3	58.7	104.2	119.4	282.4	344.9	363.8	375.2	392.2	396.1	398.0
80°	39.8	51.2	81.5	92.8	204.6	254.0	267.2	276.6	291.8	291.8	295.7
82.5°	30.3	39.8	58.7	66.4	138.4	174.3	185.7	191.4	200.9	200.9	200.9
85°	18.9	24.7	37.9	43.6	83.4	106.1	113.7	115.6	123.2	125.1	125.1
87.5°	9.5	13.3	24.7	26.5	43.6	55.0	55.0	58.7	58.7	56.9	55.0
90°	7.5	13.4	19.3	20.7	32.6	48.5	56.4	50.1	37.6	28.2	28.2
92.5°	29.7	80.2	130.7	143.3	201.5	279.0	317.8	278.5	200.0	141.1	135.5
95°	71.3	163.7	256.1	279.2	495.8	784.7	929.0	829.0	629.0	479.0	461.9
97.5°	123.3	204.7	286.3	306.7	667.8	1149.4	1390.2	1327.0	1200.6	1105.7	1073.4
100°	163.4	237.3	311.2	329.7	730.4	1264.9	1532.0	1536.6	1545.9	1552.8	1514.2
102.5°	197.5	266.5	335.5	352.7	759.2	1301.1	1572.1	1652.6	1813.7	1934.5	1901.5
105°	255.5	313.9	372.2	386.9	780.4	1305.3	1567.7	1748.2	2109.3	2380.1	2362.3
107.5°	314.9	369.3	423.8	437.4	784.5	1247.2	1478.6	1730.4	2234.0	2611.7	2616.0
110°	354.9	404.1	453.2	465.6	778.4	1195.6	1404.3	1685.8	2248.9	2671.2	2689.7



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CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	394.3	441.2	488.0	499.8	778.7	1150.7	1336.7	1624.8	2201.1	2633.3	2661.7
115°	453.7	496.9	540.2	551.1	786.0	1099.1	1255.8	1533.4	2088.5	2504.8	2544.2
117.5°	512.4	551.7	590.9	600.8	800.5	1066.8	1200.0	1450.5	1951.6	2327.4	2371.0
120°	546.6	583.6	620.5	629.7	812.4	1055.9	1177.7	1406.7	1864.4	2207.8	2250.2
122.5°	580.0	617.3	654.6	663.9	829.5	1050.3	1160.7	1366.9	1779.1	2088.2	2130.0
125°	631.2	665.2	699.2	707.7	852.5	1045.6	1142.2	1317.3	1667.4	1930.1	1968.6
127.5°	672.8	707.1	741.4	750.0	875.6	1042.9	1126.6	1276.9	1577.6	1803.1	1835.6
130°	695.1	732.1	769.0	778.2	892.3	1044.4	1120.6	1254.4	1522.1	1722.9	1752.9
132.5°	718.1	755.1	792.0	801.3	906.0	1045.6	1115.4	1235.2	1474.8	1654.5	1681.4
135°	752.2	785.9	819.6	828.0	920.8	1044.6	1106.5	1206.8	1407.5	1558.0	1581.2
137.5°	787.1	820.5	853.9	862.2	943.1	1051.0	1105.0	1189.8	1359.4	1486.7	1505.6
140°	816.1	846.8	877.5	885.1	956.7	1052.1	1099.8	1173.1	1319.6	1429.5	1447.3
142.5°	838.4	866.8	895.2	902.3	968.1	1055.9	1099.8	1164.2	1292.9	1389.4	1404.7
145°	872.5	897.3	922.1	928.3	983.0	1055.9	1092.4	1145.0	1250.3	1329.3	1340.9
147.5°	906.8	930.9	954.9	961.0	1004.8	1063.2	1092.4	1133.8	1216.7	1278.8	1288.4
150°	929.0	950.8	972.5	978.0	1016.1	1066.9	1092.4	1127.4	1197.3	1249.8	1257.6
152.5°	952.0	968.5	985.1	989.2	1023.6	1069.4	1092.4	1122.2	1182.0	1226.8	1232.6
155°	986.2	998.5	1010.6	1013.7	1039.9	1074.9	1092.4	1116.2	1163.7	1199.4	1203.3
157.5°	1011.5	1023.3	1035.2	1038.1	1056.2	1080.3	1092.4	1110.8	1147.8	1175.5	1178.2
160°	1028.5	1037.8	1047.0	1049.3	1063.7	1082.8	1092.4	1108.2	1139.9	1163.7	1165.2
162.5°	1045.6	1052.5	1059.5	1061.2	1071.6	1085.5	1092.4	1105.7	1132.4	1152.5	1154.0
165°	1064.1	1070.5	1076.8	1078.3	1083.0	1089.2	1092.4	1101.9	1121.1	1135.5	1137.0
167.5°	1081.3	1084.2	1087.2	1088.0	1091.9	1097.1	1099.8	1106.1	1118.7	1128.0	1128.7
170°	1092.4	1095.3	1098.3	1099.0	1099.3	1099.6	1099.8	1106.1	1118.7	1128.0	1128.0
172.5°	1098.3	1099.0	1099.6	1099.8	1099.8	1099.8	1099.8	1104.8	1114.6	1122.1	1121.5
175°	1106.5	1106.5	1106.5	1106.5	1104.3	1101.3	1099.8	1103.0	1109.3	1114.0	1114.0
177.5°	1106.5	1106.5	1106.5	1106.5	1104.8	1102.4	1101.2	1103.7	1108.7	1112.4	1111.8
180°	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	589.3	589.3
2.5°	629.2	625.4
5°	809.1	813.0
7.5°	1089.6	1087.8
10°	1354.9	1371.9
12.5°	1548.2	1552.0
15°	1665.7	1673.2
17.5°	1711.2	1713.0
20°	1713.0	1709.3
22.5°	1692.2	1688.4
25°	1667.6	1665.7
27.5°	1644.8	1646.8
30°	1635.4	1641.0
32.5°	1635.4	1644.8
35°	1639.2	1648.7
37.5°	1637.3	1648.7
40°	1629.6	1642.9
42.5°	1608.8	1618.4
45°	1576.7	1587.9
47.5°	1535.0	1542.5
50°	1481.9	1489.5
52.5°	1415.5	1417.5
55°	1336.0	1343.5
57.5°	1250.7	1252.6
60°	1155.9	1161.6
62.5°	1055.5	1055.5
65°	949.4	953.1
67.5°	839.4	848.9
70°	727.7	729.6
72.5°	617.8	617.8
75°	504.1	505.9
77.5°	396.1	396.1
80°	293.7	295.7
82.5°	202.8	206.5
85°	127.0	127.0
87.5°	58.7	53.1
90°	28.2	28.2
92.5°	113.0	90.6
95°	394.0	326.0
97.5°	944.0	814.7
100°	1360.2	1206.0
102.5°	1769.4	1637.5
105°	2291.3	2220.4
107.5°	2633.2	2650.4
110°	2763.6	2837.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2775.2	2888.8
115°	2701.6	2859.0
117.5°	2545.6	2720.2
120°	2419.8	2589.5
122.5°	2297.3	2464.7
125°	2122.7	2276.9
127.5°	1965.6	2095.7
130°	1873.1	1993.2
132.5°	1789.0	1896.6
135°	1673.9	1766.7
137.5°	1581.5	1657.5
140°	1518.2	1589.2
142.5°	1465.7	1526.8
145°	1387.1	1433.2
147.5°	1326.7	1365.0
150°	1288.7	1319.6
152.5°	1256.1	1279.5
155°	1218.8	1234.3
157.5°	1189.1	1200.0
160°	1171.5	1177.7
162.5°	1160.0	1165.9
165°	1143.3	1149.5
167.5°	1131.3	1133.9
170°	1128.0	1128.0
172.5°	1119.2	1116.9
175°	1114.0	1114.0
177.5°	1109.2	1106.5
180°	1106.5	1106.5



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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	4.38	5.18	5.42	6.23	7.65	17.55	18.35	18.59	19.40	20.82
	3H	5.09	5.80	6.13	6.86	8.30	19.38	20.09	20.43	21.15	22.59
	4H	5.38	6.06	6.44	7.12	8.57	20.02	20.70	21.08	21.76	23.20
	6H	5.63	6.25	6.70	7.32	8.78	20.44	21.07	21.51	22.13	23.59
	8H	5.69	6.29	6.77	7.37	8.82	20.56	21.15	21.63	22.24	23.69
	12H	5.71	6.28	6.79	7.35	8.83	20.62	21.19	21.70	22.26	23.74
4H	2H	11.58	12.26	12.65	13.32	14.77	17.82	18.50	18.88	19.56	21.00
	3H	13.15	13.71	14.22	14.80	16.26	19.85	20.42	20.93	21.51	22.97
	4H	13.24	13.76	14.32	14.84	16.32	20.61	21.13	21.69	22.21	23.69
	6H	13.24	13.69	14.34	14.80	16.27	21.14	21.59	22.23	22.69	24.17
	8H	13.22	13.64	14.31	14.73	16.22	21.30	21.72	22.39	22.82	24.30
	12H	13.17	13.55	14.28	14.66	16.16	21.39	21.77	22.50	22.88	24.37
8H	4H	14.67	15.09	15.76	16.19	17.68	20.67	21.09	21.76	22.18	23.67
	6H	14.91	15.26	16.03	16.40	17.88	21.29	21.64	22.40	22.77	24.26
	8H	14.93	15.23	16.05	16.35	17.86	21.50	21.81	22.63	22.93	24.43
	12H	14.90	15.16	16.02	16.28	17.82	21.64	21.91	22.77	23.03	24.57
12H	4H	14.81	15.19	15.92	16.30	17.79	20.62	21.00	21.73	22.10	23.60
	6H	15.17	15.47	16.29	16.59	18.10	21.27	21.58	22.39	22.69	24.20
	8H	15.24	15.50	16.36	16.62	18.16	21.50	21.76	22.62	22.88	24.42