

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: P938041

Luminaire Tested: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

**Test Information**

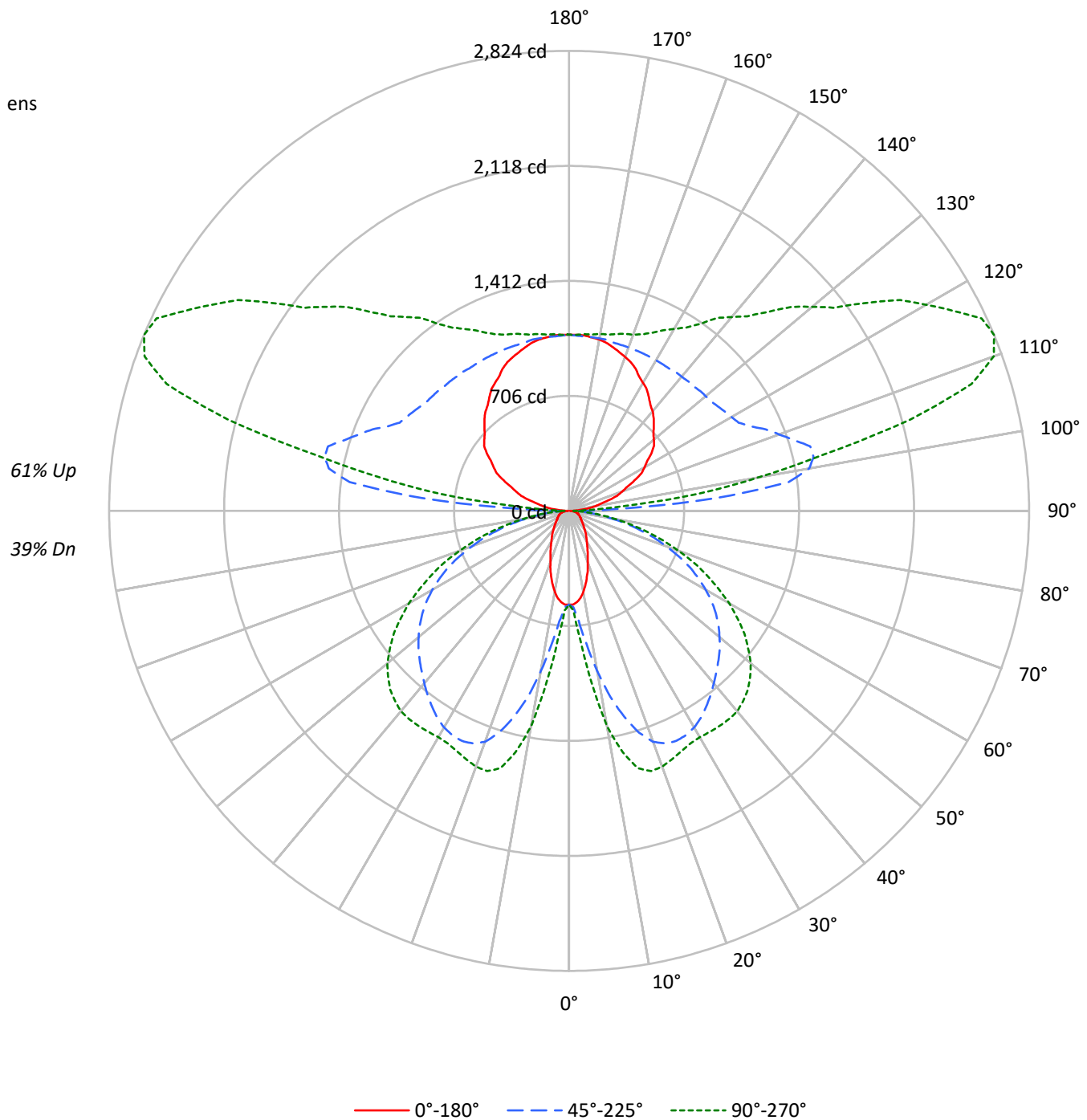
Test Method: LM-79-2019  
Report Number: P938041  
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11472.6 lumens  
Efficiency: N/A  
Efficacy: 118.8 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 (A<sub>in</sub>): 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	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°	3564	3564	3564
5°	3480	4118	4790
10°	3155	6002	7941
15°	2681	7839	9589
20°	2182	9082	9773
25°	1819	9501	9575
30°	1534	9558	9556
35°	1355	9397	9804
40°	1180	9189	10059
45°	1068	9035	10098
50°	980	8896	9931
55°	937	8693	9491
60°	957	8308	8796
65°	995	7724	7840
70°	1057	6731	6624
75°	1168	5484	5169
80°	1266	3799	3483
85°	1103	2011	1783

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10098 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.5	0.6
10°-20°	330.3	2.9
20°-30°	577.7	5.0
30°-40°	743.7	6.5
40°-50°	830.7	7.2
50°-60°	795.6	6.9
60°-70°	630.5	5.5
70°-80°	370.8	3.2
80°-90°	107.1	0.9
90°-100°	527.2	4.6
100°-110°	1386.1	12.1
110°-120°	1437.3	12.5
120°-130°	1152.9	10.0
130°-140°	904.6	7.9
140°-150°	694.3	6.1
150°-160°	500.0	4.4
160°-170°	305.9	2.7
170°-180°	103.4	0.9
0°-30°	982.5	8.6
0°-40°	1726.2	15.0
0°-60°	3352.4	29.2
0°-90°	4460.8	38.9
90°-120°	3350.6	29.2
90°-150°	6102.4	53.2
90°-180°	7012.0	61.1
0°-180°	11472.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	576	576	576	576	576	
5°	561	602	678	767	795	52
15°	420	776	1308	1586	1636	117
25°	269	880	1558	1626	1628	124
35°	182	841	1467	1550	1612	113
45°	124	671	1297	1486	1552	96
55°	89	426	1100	1278	1313	81
65°	70	226	817	919	932	70
75°	52	139	448	493	495	54
85°	18	43	111	122	124	20
90°	7	20	55	28	28	7
95°	70	273	908	468	319	77
105°	250	378	1532	2327	2170	265
115°	444	539	1228	2449	2795	438
125°	617	692	1116	1887	2226	548
135°	735	809	1082	1523	1727	569
145°	853	907	1068	1299	1401	534
155°	964	991	1068	1172	1206	443
165°	1040	1054	1068	1110	1124	294
175°	1082	1082	1075	1089	1089	103
180°	1082	1082	1082	1082	1082	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	576.1	576.1	576.1	576.1	576.1	576.1	576.1	576.1	576.1	576.1	576.1
2.5°	576.1	576.1	579.8	581.7	585.3	587.2	590.9	594.7	605.7	607.6	611.3
5°	561.3	568.7	592.8	602.0	627.9	663.2	677.9	702.1	752.1	766.9	776.2
7.5°	539.0	555.7	615.0	629.8	694.7	787.3	826.2	878.1	957.7	996.6	1028.1
10°	503.8	539.0	644.7	679.8	785.4	926.2	998.5	1070.7	1191.1	1244.8	1265.2
12.5°	464.9	522.4	676.2	724.3	876.2	1081.8	1168.8	1248.5	1385.6	1457.9	1469.0
15°	420.5	498.3	705.8	776.2	972.5	1211.5	1307.8	1406.0	1533.8	1585.6	1598.6
17.5°	381.6	479.8	733.6	807.7	1046.6	1328.2	1426.4	1507.9	1611.6	1646.8	1656.0
20°	333.4	450.2	752.1	848.4	1124.5	1413.4	1507.9	1570.9	1641.3	1663.5	1667.1
22.5°	298.3	418.7	763.2	863.2	1176.2	1465.2	1544.9	1594.9	1643.1	1650.5	1652.4
25°	268.6	383.4	761.3	879.9	1220.7	1496.7	1557.9	1594.9	1622.7	1626.4	1626.4
27.5°	240.8	344.5	753.9	883.6	1254.1	1504.1	1552.3	1578.3	1591.2	1598.6	1598.6
30°	216.8	307.5	735.4	876.2	1268.9	1496.7	1535.6	1548.6	1561.6	1572.6	1578.3
32.5°	198.3	272.3	707.6	861.3	1270.7	1478.2	1506.0	1513.4	1531.9	1557.9	1567.1
35°	181.5	237.1	676.2	841.0	1259.6	1448.6	1467.1	1474.5	1511.5	1550.5	1563.4
37.5°	164.9	211.2	635.4	805.8	1243.0	1413.4	1426.4	1439.4	1496.7	1543.0	1557.9
40°	148.2	188.9	587.2	766.9	1217.0	1370.7	1381.9	1402.2	1478.2	1531.9	1546.8
42.5°	135.3	170.4	535.3	726.2	1183.7	1322.6	1339.2	1368.9	1456.0	1513.4	1530.1
45°	124.1	151.9	479.8	670.6	1141.1	1272.6	1296.7	1337.5	1430.0	1485.6	1500.5
47.5°	113.0	138.9	422.4	613.2	1094.7	1222.6	1254.1	1300.4	1394.9	1448.6	1461.5
50°	103.8	126.0	364.9	552.0	1044.7	1168.8	1206.0	1254.1	1350.4	1400.4	1417.1
52.5°	96.4	114.9	311.2	490.9	987.3	1113.3	1155.9	1206.0	1296.7	1344.9	1356.0
55°	88.9	105.6	264.9	426.0	928.1	1054.0	1100.3	1148.5	1237.4	1278.1	1285.6
57.5°	85.2	98.1	226.0	364.9	865.1	987.3	1039.2	1083.7	1167.0	1198.5	1206.0
60°	79.6	92.6	196.4	313.0	796.6	924.3	968.8	1013.2	1083.7	1109.6	1115.1
62.5°	74.1	88.9	174.1	263.0	726.2	850.2	894.7	935.5	994.7	1013.2	1020.7
65°	70.4	85.2	157.5	226.0	653.9	772.4	816.9	852.1	900.3	918.8	922.5
67.5°	66.6	81.5	144.5	194.5	581.7	694.7	727.9	761.3	798.4	816.9	818.8
70°	61.1	77.8	133.4	172.3	507.5	605.7	633.5	668.7	698.3	707.6	713.2
72.5°	57.4	72.3	126.0	155.6	431.6	520.5	546.4	566.8	592.8	602.0	602.0
75°	51.9	64.9	118.5	138.9	353.8	426.0	448.3	468.7	489.0	492.8	487.2
77.5°	46.3	57.4	101.9	116.7	276.0	337.1	355.7	366.8	383.4	387.2	389.0
80°	38.9	50.0	79.6	90.8	200.0	248.3	261.2	270.4	285.3	285.3	289.0
82.5°	29.6	38.9	57.4	64.9	135.3	170.4	181.5	187.1	196.4	196.4	196.4
85°	18.5	24.1	37.0	42.6	81.5	103.8	111.1	113.0	120.4	122.3	122.3
87.5°	9.3	13.0	24.1	25.9	42.6	53.7	53.7	57.4	57.4	55.6	53.7
90°	7.3	13.1	18.9	20.3	31.9	47.4	55.1	49.0	36.7	27.6	27.6
92.5°	29.1	78.4	127.8	140.1	196.9	272.7	310.7	272.3	195.5	138.0	132.4
95°	69.7	160.0	250.3	272.9	484.6	767.0	908.2	810.4	614.8	468.2	451.6
97.5°	120.5	200.1	279.9	299.8	652.8	1123.6	1359.0	1297.2	1173.6	1080.9	1049.3
100°	159.7	232.0	304.2	322.3	714.0	1236.4	1497.6	1502.1	1511.1	1517.9	1480.2
102.5°	193.1	260.5	328.0	344.8	742.2	1271.9	1536.8	1615.5	1773.0	1891.0	1858.8
105°	249.8	306.9	363.9	378.2	762.9	1276.0	1532.5	1708.9	2061.9	2326.6	2309.2
107.5°	307.8	361.0	414.3	427.5	766.8	1219.1	1445.3	1691.5	2183.8	2553.1	2557.3
110°	347.0	395.0	443.1	455.1	760.9	1168.8	1372.7	1647.9	2198.3	2611.2	2629.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	385.5	431.3	477.1	488.6	761.2	1124.8	1306.6	1588.3	2151.6	2574.1	2601.8
115°	443.5	485.8	528.1	538.7	768.3	1074.4	1227.5	1498.9	2041.6	2448.6	2487.1
117.5°	500.9	539.3	577.6	587.3	782.5	1042.9	1173.1	1417.9	1907.7	2275.1	2317.7
120°	534.3	570.5	606.5	615.6	794.1	1032.2	1151.3	1375.0	1822.5	2158.1	2199.6
122.5°	567.0	603.4	639.9	649.0	810.9	1026.7	1134.6	1336.2	1739.1	2041.3	2082.2
125°	617.0	650.3	683.5	691.8	833.4	1022.1	1116.5	1287.7	1629.9	1886.7	1924.4
127.5°	657.7	691.2	724.8	733.2	855.9	1019.5	1101.3	1248.2	1542.2	1762.6	1794.4
130°	679.4	715.6	751.7	760.8	872.3	1021.0	1095.4	1226.2	1487.9	1684.2	1713.5
132.5°	702.0	738.1	774.2	783.3	885.6	1022.1	1090.3	1207.5	1441.7	1617.3	1643.6
135°	735.3	768.2	801.1	809.4	900.1	1021.2	1081.6	1179.7	1375.9	1523.0	1545.6
137.5°	769.4	802.1	834.7	842.8	921.9	1027.4	1080.1	1163.1	1328.9	1453.3	1471.8
140°	797.8	827.8	857.8	865.3	935.2	1028.5	1075.1	1146.7	1290.0	1397.4	1414.8
142.5°	819.6	847.3	875.1	882.0	946.4	1032.2	1075.1	1138.0	1263.8	1358.2	1373.2
145°	852.9	877.1	901.3	907.4	960.9	1032.2	1067.8	1119.3	1222.2	1299.4	1310.7
147.5°	886.4	909.9	933.5	939.4	982.2	1039.3	1067.8	1108.3	1189.3	1250.1	1259.4
150°	908.2	929.5	950.7	956.0	993.3	1042.9	1067.8	1102.0	1170.4	1221.8	1229.3
152.5°	930.6	946.8	962.9	967.0	1000.6	1045.4	1067.8	1097.0	1155.4	1199.2	1204.9
155°	964.1	976.0	987.9	990.9	1016.5	1050.7	1067.8	1091.1	1137.5	1172.4	1176.2
157.5°	988.7	1000.3	1011.9	1014.8	1032.5	1056.0	1067.8	1085.8	1122.0	1149.1	1151.7
160°	1005.4	1014.4	1023.5	1025.7	1039.8	1058.5	1067.8	1083.3	1114.3	1137.5	1139.0
162.5°	1022.1	1028.8	1035.7	1037.3	1047.5	1061.1	1067.8	1080.9	1107.0	1126.6	1128.1
165°	1040.2	1046.4	1052.6	1054.1	1058.6	1064.7	1067.8	1077.2	1095.9	1110.0	1111.5
167.5°	1057.0	1059.9	1062.8	1063.5	1067.3	1072.5	1075.1	1081.3	1093.5	1102.7	1103.3
170°	1067.8	1070.7	1073.6	1074.4	1074.6	1074.9	1075.1	1081.3	1093.5	1102.7	1102.7
172.5°	1073.6	1074.3	1074.9	1075.1	1075.1	1075.1	1075.1	1080.0	1089.6	1096.9	1096.3
175°	1081.6	1081.6	1081.6	1081.6	1079.5	1076.6	1075.1	1078.2	1084.4	1088.9	1088.9
177.5°	1081.6	1081.6	1081.6	1081.6	1080.0	1077.6	1076.5	1078.9	1083.8	1087.4	1086.8
180°	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	576.1	576.1
2.5°	615.0	611.3
5°	790.9	794.7
7.5°	1065.1	1063.3
10°	1324.5	1341.1
12.5°	1513.4	1517.1
15°	1628.3	1635.6
17.5°	1672.7	1674.5
20°	1674.5	1670.9
22.5°	1654.1	1650.5
25°	1630.1	1628.3
27.5°	1607.9	1609.8
30°	1598.6	1604.1
32.5°	1598.6	1607.9
35°	1602.4	1611.6
37.5°	1600.5	1611.6
40°	1593.0	1606.0
42.5°	1572.6	1582.0
45°	1541.2	1552.3
47.5°	1500.5	1507.9
50°	1448.6	1456.0
52.5°	1383.7	1385.6
55°	1306.0	1313.4
57.5°	1222.6	1224.5
60°	1130.0	1135.5
62.5°	1031.8	1031.8
65°	928.1	931.7
67.5°	820.6	829.8
70°	711.3	713.2
72.5°	603.9	603.9
75°	492.8	494.6
77.5°	387.2	387.2
80°	287.1	289.0
82.5°	198.3	201.9
85°	124.1	124.1
87.5°	57.4	51.9
90°	27.6	27.6
92.5°	110.5	88.5
95°	385.1	318.6
97.5°	922.8	796.4
100°	1329.6	1178.9
102.5°	1729.7	1600.7
105°	2239.8	2170.5
107.5°	2574.0	2590.8
110°	2701.5	2773.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2712.8	2823.8
115°	2640.9	2794.8
117.5°	2488.4	2659.1
120°	2365.5	2531.3
122.5°	2245.7	2409.3
125°	2075.0	2225.7
127.5°	1921.5	2048.6
130°	1831.0	1948.4
132.5°	1748.8	1854.0
135°	1636.3	1727.0
137.5°	1546.0	1620.2
140°	1484.1	1553.5
142.5°	1432.8	1492.5
145°	1355.9	1401.0
147.5°	1296.9	1334.3
150°	1259.7	1290.0
152.5°	1227.8	1250.7
155°	1191.4	1206.5
157.5°	1162.4	1173.1
160°	1145.2	1151.3
162.5°	1133.9	1139.7
165°	1117.6	1123.7
167.5°	1105.9	1108.5
170°	1102.7	1102.7
172.5°	1094.1	1091.8
175°	1088.9	1088.9
177.5°	1084.3	1081.6
180°	1081.6	1081.6



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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	4.31	5.10	5.35	6.15	7.57	17.47	18.27	18.51	19.32	20.74
	3H	5.01	5.72	6.06	6.78	8.22	19.30	20.02	20.35	21.07	22.51
	4H	5.30	5.98	6.36	7.04	8.49	19.94	20.62	21.00	21.68	23.12
	6H	5.55	6.17	6.62	7.24	8.70	20.36	20.99	21.43	22.05	23.51
	8H	5.61	6.21	6.69	7.29	8.74	20.48	21.07	21.55	22.16	23.61
	12H	5.63	6.20	6.71	7.27	8.75	20.54	21.11	21.62	22.18	23.66
4H	2H	11.50	12.18	12.57	13.25	14.69	17.74	18.42	18.81	19.48	20.92
	3H	13.07	13.63	14.14	14.72	16.18	19.77	20.34	20.85	21.43	22.89
	4H	13.16	13.68	14.24	14.76	16.24	20.53	21.05	21.61	22.13	23.61
	6H	13.17	13.61	14.26	14.72	16.19	21.06	21.51	22.15	22.62	24.09
	8H	13.14	13.56	14.23	14.66	16.14	21.22	21.64	22.31	22.74	24.23
	12H	13.09	13.47	14.20	14.58	16.08	21.31	21.69	22.42	22.80	24.29
8H	4H	14.59	15.01	15.69	16.11	17.60	20.59	21.01	21.68	22.10	23.59
	6H	14.83	15.18	15.95	16.32	17.80	21.21	21.56	22.32	22.69	24.18
	8H	14.85	15.16	15.97	16.27	17.78	21.43	21.73	22.55	22.85	24.35
	12H	14.82	15.08	15.94	16.20	17.74	21.56	21.83	22.69	22.95	24.49
12H	4H	14.73	15.11	15.84	16.22	17.72	20.54	20.92	21.65	22.03	23.52
	6H	15.09	15.40	16.21	16.51	18.02	21.19	21.50	22.31	22.62	24.12
	8H	15.16	15.42	16.28	16.54	18.08	21.42	21.68	22.54	22.80	24.34