

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: P937426

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

**Test Information**

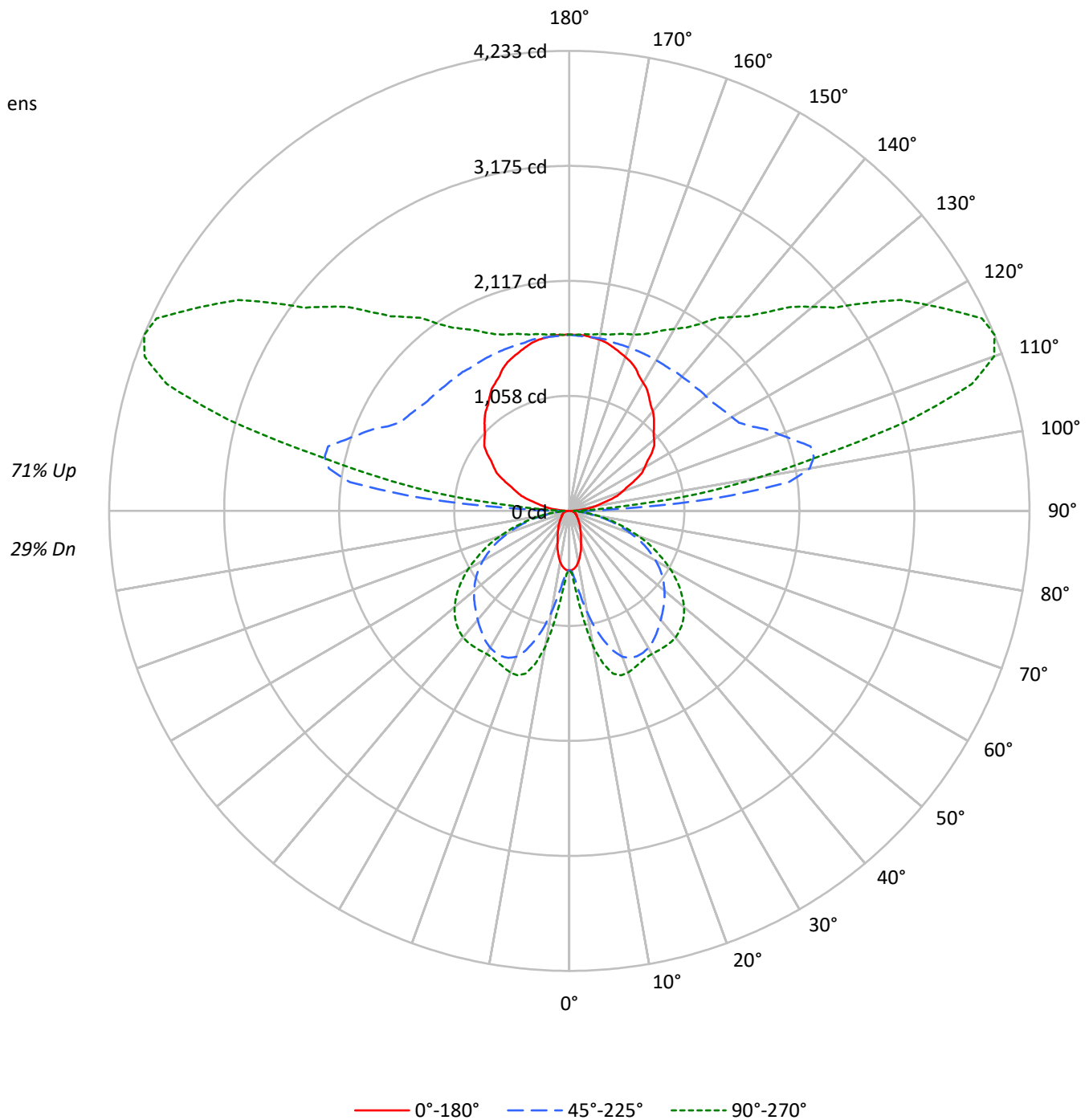
Test Method: LM-79-2019  
Report Number: P937426  
REPORT IS A COMBINATION OF REPORTS P933557 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-12-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14738.3 lumens  
Efficiency: N/A  
Efficacy: 119.2 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 123.6  
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

TEST NUMBER: P937426  
CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-12-3000K

### 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7			7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6			6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1688	1688	1688
5°	1650	1951	2269
10°	1497	2845	3761
15°	1273	3718	4542
20°	1037	4310	4629
25°	865	4511	4535
30°	730	4541	4526
35°	646	4466	4643
40°	563	4370	4764
45°	510	4299	4783
50°	468	4236	4703
55°	449	4143	4495
60°	460	3963	4166
65°	480	3688	3714
70°	512	3219	3137
75°	569	2626	2448
80°	628	1824	1649
85°	567	970	845

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4783 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.6	0.5
10°-20°	312.9	2.1
20°-30°	547.2	3.7
30°-40°	704.4	4.8
40°-50°	786.8	5.3
50°-60°	753.6	5.1
60°-70°	597.2	4.1
70°-80°	351.2	2.4
80°-90°	103.8	0.7
90°-100°	790.3	5.4
100°-110°	2077.8	14.1
110°-120°	2154.5	14.6
120°-130°	1728.2	11.7
130°-140°	1356.0	9.2
140°-150°	1040.8	7.1
150°-160°	749.5	5.1
160°-170°	458.6	3.1
170°-180°	154.9	1.1
0°-30°	930.7	6.3
0°-40°	1635.1	11.1
0°-60°	3175.5	21.5
0°-90°	4227.7	28.7
90°-120°	5022.6	34.1
90°-150°	9147.5	62.1
90°-180°	10511.0	71.3
0°-180°	14738.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	532	570	642	726	753	49
15°	398	735	1239	1502	1549	111
25°	254	834	1476	1541	1542	117
35°	172	797	1390	1469	1527	107
45°	118	635	1228	1407	1470	91
55°	84	404	1042	1211	1244	77
65°	67	214	774	870	883	66
75°	49	132	425	467	468	51
85°	18	40	105	116	118	19
90°	11	30	83	41	41	10
95°	104	409	1361	702	478	116
105°	374	567	2297	3488	3254	397
115°	665	807	1840	3670	4189	657
125°	925	1037	1674	2828	3336	821
135°	1102	1213	1621	2283	2589	853
145°	1279	1360	1601	1948	2100	801
155°	1445	1485	1601	1757	1808	664
165°	1559	1580	1601	1664	1684	440
175°	1621	1621	1612	1632	1632	154
180°	1621	1621	1621	1621	1621	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7
2.5°	545.7	545.7	549.2	551.0	554.4	556.2	559.8	563.2	573.8	575.5	579.0
5°	531.7	538.7	561.5	570.2	594.8	628.1	642.2	665.0	712.4	726.4	735.2
7.5°	510.6	526.4	582.5	596.6	658.0	745.8	782.6	831.7	907.2	944.0	973.8
10°	477.3	510.6	610.6	644.0	743.9	877.4	945.7	1014.2	1128.2	1179.2	1198.4
12.5°	440.4	494.8	640.4	686.0	829.9	1024.7	1107.2	1182.7	1312.5	1381.0	1391.4
15°	398.3	472.0	668.5	735.2	921.2	1147.5	1238.8	1331.8	1452.9	1502.0	1514.3
17.5°	361.5	454.4	694.8	765.0	991.4	1258.1	1351.0	1428.3	1526.6	1559.9	1568.7
20°	315.9	426.4	712.4	803.7	1065.1	1338.8	1428.3	1488.0	1554.7	1575.7	1579.2
22.5°	282.5	396.5	722.9	817.7	1114.2	1387.9	1463.4	1510.8	1556.4	1563.4	1565.1
25°	254.5	363.2	721.2	833.5	1156.3	1417.8	1475.7	1510.8	1537.0	1540.6	1540.6
27.5°	228.1	326.4	714.1	837.0	1187.9	1424.8	1470.4	1494.9	1507.2	1514.3	1514.3
30°	205.3	291.3	696.6	829.9	1201.9	1417.8	1454.6	1466.9	1479.1	1489.7	1494.9
32.5°	187.7	257.9	670.2	815.9	1203.7	1400.2	1426.6	1433.5	1451.1	1475.7	1484.5
35°	172.0	224.6	640.4	796.6	1193.2	1372.1	1389.7	1396.7	1431.8	1468.7	1480.9
37.5°	156.2	200.0	601.9	763.3	1177.3	1338.8	1351.0	1363.3	1417.8	1461.6	1475.7
40°	140.4	178.9	556.2	726.4	1152.8	1298.5	1309.0	1328.3	1400.2	1451.1	1465.1
42.5°	128.1	161.4	507.1	687.9	1121.3	1252.9	1268.6	1296.7	1379.1	1433.5	1449.3
45°	117.6	143.9	454.4	635.2	1080.9	1205.4	1228.3	1266.9	1354.6	1407.2	1421.2
47.5°	107.0	131.6	400.1	580.8	1037.0	1158.1	1187.9	1231.7	1321.2	1372.1	1384.4
50°	98.3	119.3	345.7	522.9	989.6	1107.2	1142.3	1187.9	1279.2	1326.5	1342.3
52.5°	91.2	108.8	294.7	465.0	935.3	1054.6	1094.9	1142.3	1228.3	1273.9	1284.4
55°	84.2	100.0	250.9	403.6	879.1	998.4	1042.3	1087.9	1172.1	1210.7	1217.7
57.5°	80.8	93.0	214.1	345.7	819.5	935.3	984.4	1026.5	1105.4	1135.3	1142.3
60°	75.4	87.7	186.0	296.6	754.5	875.6	917.7	959.8	1026.5	1051.1	1056.3
62.5°	70.2	84.2	164.9	249.1	687.9	805.4	847.5	886.1	942.2	959.8	966.8
65°	66.7	80.8	149.1	214.1	619.4	731.7	773.8	807.2	852.8	870.3	873.8
67.5°	63.1	77.2	136.8	184.3	551.0	658.0	689.6	721.2	756.2	773.8	775.6
70°	57.9	73.7	126.4	163.2	480.8	573.8	600.1	633.4	661.5	670.2	675.6
72.5°	54.4	68.5	119.3	147.4	408.8	493.0	517.6	536.9	561.5	570.2	570.2
75°	49.1	61.4	112.3	131.6	335.1	403.6	424.6	444.0	463.2	466.7	461.5
77.5°	43.9	54.4	96.5	110.6	261.4	319.3	336.9	347.4	363.2	366.7	368.4
80°	36.9	47.4	75.4	86.0	189.5	235.1	247.4	256.2	270.2	270.2	273.7
82.5°	28.1	36.9	54.4	61.4	128.1	161.4	172.0	177.2	186.0	186.0	186.0
85°	17.5	22.8	35.1	40.4	77.2	98.3	105.3	107.0	114.1	115.8	115.8
87.5°	8.8	12.3	22.8	24.6	40.4	50.9	50.9	54.4	54.4	52.7	50.9
90°	10.9	19.6	28.3	30.4	47.9	71.1	82.7	73.5	55.1	41.3	41.3
92.5°	43.5	117.5	191.5	210.0	295.3	408.9	465.8	408.2	293.1	206.8	198.6
95°	104.5	239.9	375.3	409.2	726.5	1149.7	1361.2	1214.7	921.7	701.8	676.9
97.5°	180.6	300.1	419.5	449.4	978.6	1684.2	2037.0	1944.4	1759.2	1620.2	1572.9
100°	239.4	347.7	456.0	483.1	1070.3	1853.3	2244.9	2251.7	2265.2	2275.3	2218.9
102.5°	289.4	390.5	491.6	516.9	1112.5	1906.6	2303.7	2421.6	2657.6	2834.6	2786.2
105°	374.4	459.9	545.5	566.9	1143.7	1912.6	2297.1	2561.7	3090.8	3487.5	3461.5
107.5°	461.4	541.2	621.0	640.9	1149.4	1827.4	2166.5	2535.5	3273.5	3827.0	3833.3
110°	520.2	592.2	664.2	682.3	1140.7	1752.0	2057.7	2470.2	3295.2	3914.0	3941.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	577.8	646.5	715.2	732.3	1141.1	1686.2	1958.7	2380.9	3225.3	3858.6	3900.2
115°	664.8	728.2	791.5	807.4	1151.6	1610.6	1840.1	2246.8	3060.2	3670.3	3727.9
117.5°	750.8	808.4	865.9	880.3	1173.1	1563.3	1758.5	2125.5	2859.7	3410.3	3474.2
120°	800.9	855.0	909.3	922.8	1190.5	1547.4	1725.8	2061.2	2732.0	3235.1	3297.2
122.5°	849.9	904.6	959.2	972.8	1215.5	1539.1	1700.8	2002.8	2606.9	3059.9	3121.2
125°	925.0	974.8	1024.6	1037.0	1249.2	1532.2	1673.6	1930.2	2443.3	2828.1	2884.5
127.5°	985.8	1036.2	1086.5	1099.0	1282.9	1528.2	1650.8	1871.0	2311.6	2642.0	2689.6
130°	1018.5	1072.7	1126.8	1140.4	1307.6	1530.6	1642.0	1838.2	2230.4	2524.5	2568.6
132.5°	1052.3	1106.4	1160.6	1174.1	1327.5	1532.1	1634.4	1809.9	2161.1	2424.4	2463.8
135°	1102.3	1151.6	1201.0	1213.3	1349.3	1530.7	1621.4	1768.4	2062.4	2282.9	2316.9
137.5°	1153.4	1202.3	1251.1	1263.3	1381.9	1540.1	1619.2	1743.5	1992.1	2178.5	2206.3
140°	1195.9	1240.9	1285.8	1297.1	1401.9	1541.7	1611.5	1718.9	1933.6	2094.7	2120.7
142.5°	1228.5	1270.1	1311.7	1322.1	1418.5	1547.2	1611.5	1705.9	1894.5	2035.9	2058.3
145°	1278.6	1314.9	1351.1	1360.2	1440.3	1547.2	1600.7	1677.8	1832.1	1947.8	1964.7
147.5°	1328.6	1363.9	1399.3	1408.1	1472.3	1557.9	1600.7	1661.4	1782.8	1873.8	1887.9
150°	1361.2	1393.2	1425.1	1433.1	1489.0	1563.5	1600.7	1652.0	1754.4	1831.4	1842.7
152.5°	1395.0	1419.1	1443.4	1449.4	1499.8	1567.0	1600.7	1644.5	1731.9	1797.6	1806.2
155°	1445.0	1462.9	1480.9	1485.3	1523.8	1575.1	1600.7	1635.5	1705.1	1757.3	1763.0
157.5°	1482.0	1499.5	1516.9	1521.3	1547.8	1583.1	1600.7	1627.7	1681.9	1722.5	1726.5
160°	1507.0	1520.7	1534.2	1537.6	1558.6	1586.7	1600.7	1623.9	1670.3	1705.1	1707.4
162.5°	1532.1	1542.2	1552.4	1554.9	1570.2	1590.5	1600.7	1620.2	1659.4	1688.8	1691.0
165°	1559.3	1568.4	1577.7	1580.0	1586.8	1596.1	1600.7	1614.7	1642.7	1663.8	1666.0
167.5°	1584.3	1588.7	1593.0	1594.2	1599.9	1607.7	1611.5	1620.8	1639.2	1652.9	1653.9
170°	1600.7	1605.1	1609.4	1610.5	1610.8	1611.3	1611.5	1620.8	1639.2	1652.9	1652.9
172.5°	1609.3	1610.3	1611.3	1611.5	1611.5	1611.5	1611.5	1618.8	1633.3	1644.2	1643.3
175°	1621.4	1621.4	1621.4	1621.4	1618.1	1613.7	1611.5	1616.1	1625.3	1632.2	1632.2
177.5°	1621.4	1621.4	1621.4	1621.4	1618.8	1615.4	1613.7	1617.4	1624.6	1630.0	1629.0
180°	1621.4	1621.4	1621.4	1621.4	1621.4	1621.4	1621.4	1621.4	1621.4	1621.4	1621.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	545.7	545.7
2.5°	582.5	579.0
5°	749.3	752.7
7.5°	1008.9	1007.2
10°	1254.6	1270.4
12.5°	1433.5	1437.0
15°	1542.4	1549.3
17.5°	1584.5	1586.2
20°	1586.2	1582.7
22.5°	1566.9	1563.4
25°	1544.1	1542.4
27.5°	1523.0	1524.8
30°	1514.3	1519.5
32.5°	1514.3	1523.0
35°	1517.8	1526.6
37.5°	1516.0	1526.6
40°	1509.0	1521.3
42.5°	1489.7	1498.5
45°	1459.9	1470.4
47.5°	1421.2	1428.3
50°	1372.1	1379.1
52.5°	1310.8	1312.5
55°	1237.1	1244.0
57.5°	1158.1	1159.8
60°	1070.3	1075.6
62.5°	977.4	977.4
65°	879.1	882.6
67.5°	777.3	786.1
70°	673.8	675.6
72.5°	572.1	572.1
75°	466.7	468.5
77.5°	366.7	366.7
80°	272.0	273.7
82.5°	187.7	191.2
85°	117.6	117.6
87.5°	54.4	49.1
90°	41.3	41.3
92.5°	165.6	132.7
95°	577.3	477.7
97.5°	1383.3	1193.7
100°	1993.0	1767.2
102.5°	2592.8	2399.4
105°	3357.5	3253.6
107.5°	3858.5	3883.6
110°	4049.5	4157.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	4066.6	4232.9
115°	3958.7	4189.3
117.5°	3730.0	3985.9
120°	3545.8	3794.4
122.5°	3366.3	3611.5
125°	3110.4	3336.2
127.5°	2880.2	3070.8
130°	2744.6	2920.6
132.5°	2621.5	2779.2
135°	2452.8	2588.7
137.5°	2317.5	2428.8
140°	2224.7	2328.7
142.5°	2147.7	2237.2
145°	2032.4	2100.1
147.5°	1943.9	2000.0
150°	1888.2	1933.6
152.5°	1840.5	1874.9
155°	1785.8	1808.5
157.5°	1742.5	1758.5
160°	1716.6	1725.8
162.5°	1699.7	1708.4
165°	1675.3	1684.4
167.5°	1657.7	1661.6
170°	1652.9	1652.9
172.5°	1639.9	1636.5
175°	1632.2	1632.2
177.5°	1625.2	1621.4
180°	1621.4	1621.4



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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	0.46	1.17	1.57	2.29	3.83	13.65	14.37	14.76	15.48	17.02
	3H	1.15	1.79	2.27	2.92	4.48	15.48	16.12	16.61	17.25	18.81
	4H	1.44	2.05	2.58	3.18	4.74	16.12	16.73	17.26	17.86	19.42
	6H	1.68	2.25	2.83	3.37	4.95	16.55	17.11	17.69	18.24	19.82
	8H	1.75	2.28	2.89	3.42	4.99	16.67	17.21	17.81	18.35	19.92
	12H	1.76	2.27	2.91	3.40	5.00	16.73	17.24	17.88	18.38	19.97
4H	2H	7.66	8.27	8.80	9.40	10.96	13.90	14.51	15.04	15.64	17.20
	3H	9.21	9.73	10.36	10.87	12.45	15.94	16.45	17.09	17.60	19.18
	4H	9.30	9.77	10.45	10.91	12.51	16.70	17.18	17.85	18.31	19.91
	6H	9.30	9.71	10.46	10.87	12.46	17.24	17.64	18.40	18.80	20.39
	8H	9.28	9.65	10.43	10.81	12.41	17.40	17.78	18.56	18.93	20.53
	12H	9.23	9.57	10.40	10.73	12.34	17.49	17.83	18.66	18.99	20.60
8H	4H	10.74	11.12	11.89	12.27	13.87	16.75	17.13	17.91	18.28	19.89
	6H	10.97	11.28	12.15	12.48	14.08	17.38	17.69	18.56	18.88	20.49
	8H	10.99	11.26	12.17	12.43	14.06	17.60	17.87	18.78	19.04	20.67
	12H	10.95	11.19	12.14	12.36	14.01	17.74	17.98	18.93	19.15	20.80
12H	4H	10.88	11.22	12.05	12.38	13.99	16.70	17.04	17.87	18.20	19.81
	6H	11.23	11.50	12.41	12.68	14.30	17.36	17.63	18.54	18.80	20.43
	8H	11.29	11.53	12.48	12.70	14.36	17.59	17.82	18.77	18.99	20.65