

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: P938345

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938345
REPORT IS A COMBINATION OF REPORTS P933646 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

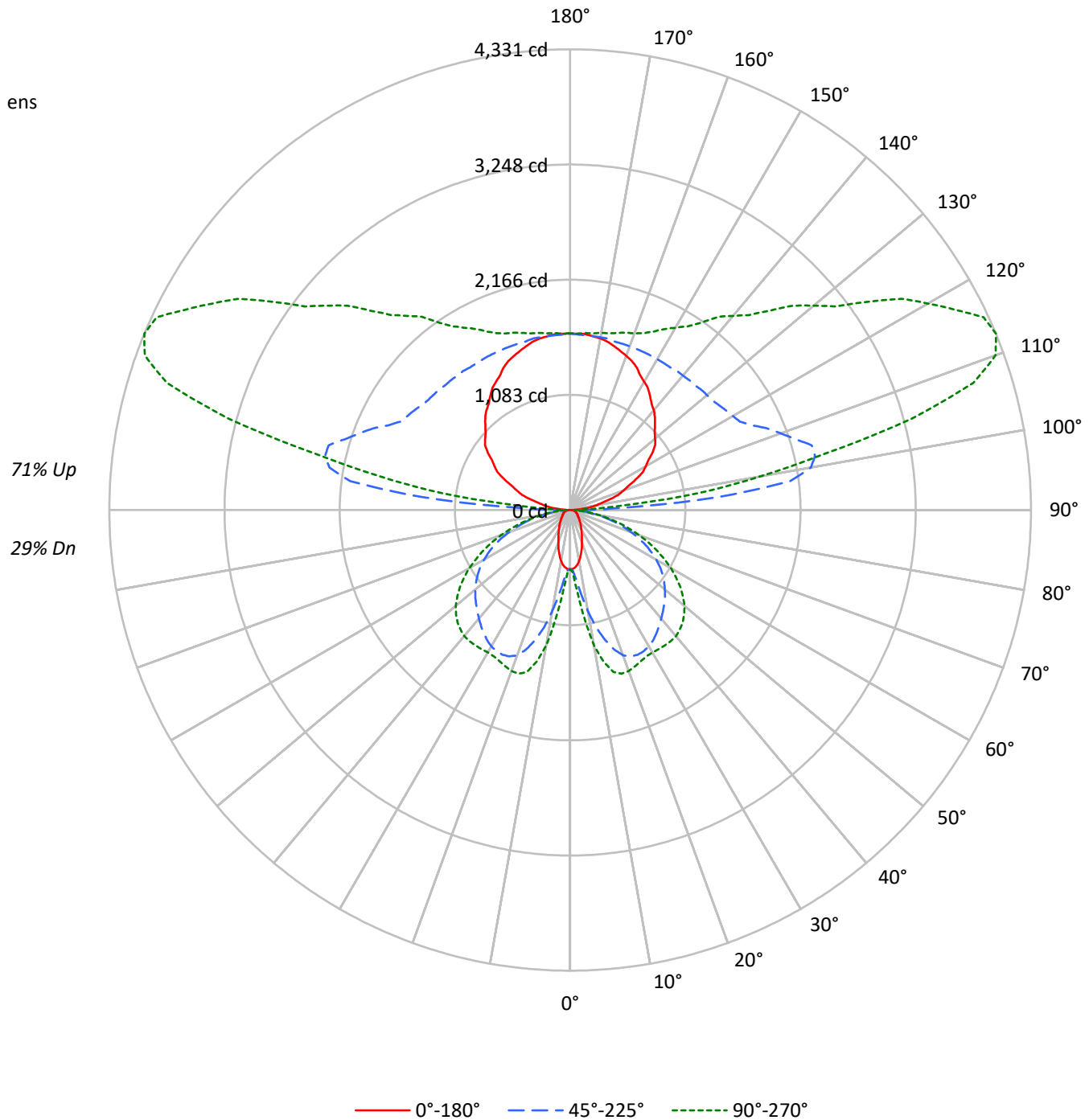
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15056.7 lumens
Efficiency: N/A
Efficacy: 118.4 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: Semi-Indirect

Input Watts (W): 127.2
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				
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	36	36	36	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	12	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2576	2576	2576
5°	2516	2977	3463
10°	2283	4340	5741
15°	1940	5671	6932
20°	1579	6571	7065
25°	1318	6876	6921
30°	1111	6920	6908
35°	983	6805	7086
40°	856	6656	7271
45°	775	6546	7299
50°	711	6448	7179
55°	681	6304	6860
60°	698	6027	6358
65°	725	5606	5667
70°	772	4889	4788
75°	856	3986	3737
80°	936	2764	2518
85°	834	1466	1288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7299 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	0.5
10°-20°	318.3	2.1
20°-30°	556.8	3.7
30°-40°	716.8	4.8
40°-50°	800.6	5.3
50°-60°	766.8	5.1
60°-70°	607.6	4.0
70°-80°	357.3	2.4
80°-90°	105.6	0.7
90°-100°	808.7	5.4
100°-110°	2126.2	14.1
110°-120°	2204.6	14.6
120°-130°	1768.3	11.7
130°-140°	1387.5	9.2
140°-150°	1065.0	7.1
150°-160°	767.0	5.1
160°-170°	469.3	3.1
170°-180°	158.5	1.1
0°-30°	946.9	6.3
0°-40°	1663.7	11.0
0°-60°	3231.1	21.5
0°-90°	4301.6	28.6
90°-120°	5139.5	34.1
90°-150°	9360.3	62.2
90°-180°	10755.0	71.4
0°-180°	15056.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	541	580	653	739	766	50
15°	405	748	1260	1528	1576	113
25°	259	848	1502	1568	1569	119
35°	175	810	1414	1494	1553	109
45°	120	646	1250	1432	1496	93
55°	86	411	1060	1232	1266	78
65°	68	218	787	886	898	67
75°	50	134	432	475	477	52
85°	18	41	107	118	120	19
90°	11	31	85	42	42	10
95°	107	419	1393	718	489	119
105°	383	580	2350	3569	3329	406
115°	680	826	1883	3756	4287	672
125°	946	1061	1712	2894	3414	840
135°	1128	1242	1659	2336	2649	873
145°	1308	1392	1638	1993	2149	820
155°	1479	1520	1638	1798	1851	679
165°	1596	1617	1638	1702	1724	450
175°	1659	1659	1649	1670	1670	157
180°	1659	1659	1659	1659	1659	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2	555.2
2.5°	555.2	555.2	558.8	560.6	564.1	565.9	569.5	573.1	583.8	585.6	589.1
5°	540.9	548.1	571.3	580.2	605.2	639.1	653.4	676.6	724.8	739.1	748.0
7.5°	519.5	535.6	592.7	607.0	669.5	758.7	796.2	846.2	923.0	960.5	990.8
10°	485.6	519.5	621.3	655.2	756.9	892.6	962.2	1032.0	1148.0	1199.8	1219.4
12.5°	448.1	503.4	651.6	698.0	844.4	1042.7	1126.6	1203.3	1335.4	1405.1	1415.8
15°	405.2	480.2	680.2	748.0	937.3	1167.6	1260.5	1355.1	1478.3	1528.3	1540.8
17.5°	367.8	462.4	707.0	778.4	1008.7	1280.1	1374.7	1453.3	1553.2	1587.2	1596.1
20°	321.3	433.8	724.8	817.6	1083.7	1362.2	1453.3	1514.0	1581.8	1603.2	1606.8
22.5°	287.4	403.5	735.5	831.9	1133.7	1412.2	1489.0	1537.2	1583.6	1590.7	1592.5
25°	258.9	369.5	733.7	848.0	1176.6	1442.6	1501.5	1537.2	1564.0	1567.5	1567.5
27.5°	232.1	332.1	726.6	851.6	1208.7	1449.7	1496.1	1521.1	1533.6	1540.8	1540.8
30°	208.9	296.3	708.7	844.4	1223.0	1442.6	1480.1	1492.5	1505.0	1515.8	1521.1
32.5°	191.0	262.4	682.0	830.1	1224.8	1424.7	1451.5	1458.6	1476.5	1501.5	1510.4
35°	175.0	228.5	651.6	810.5	1214.1	1396.1	1414.0	1421.1	1456.8	1494.3	1506.8
37.5°	158.9	203.5	612.3	776.6	1198.0	1362.2	1374.7	1387.2	1442.6	1487.2	1501.5
40°	142.8	182.1	565.9	739.1	1173.0	1321.2	1331.9	1351.5	1424.7	1476.5	1490.8
42.5°	130.3	164.2	515.9	699.8	1140.9	1274.8	1290.8	1319.4	1403.3	1458.6	1474.7
45°	119.6	146.4	462.4	646.3	1099.8	1226.5	1249.8	1289.0	1378.3	1431.9	1446.1
47.5°	108.9	133.9	407.0	590.9	1055.2	1178.3	1208.7	1253.3	1344.4	1396.1	1408.6
50°	100.0	121.4	351.7	532.0	1006.9	1126.6	1162.3	1208.7	1301.5	1349.7	1365.8
52.5°	92.8	110.7	299.9	473.1	951.5	1073.0	1114.1	1162.3	1249.8	1296.2	1306.9
55°	85.7	101.8	255.3	410.6	894.4	1015.9	1060.5	1106.9	1192.6	1231.9	1239.0
57.5°	82.1	94.6	217.8	351.7	833.7	951.5	1001.5	1044.5	1124.8	1155.1	1162.3
60°	76.8	89.3	189.2	301.7	767.7	890.8	933.7	976.5	1044.5	1069.4	1074.8
62.5°	71.4	85.7	167.8	253.5	699.8	819.4	862.3	901.5	958.7	976.5	983.7
65°	67.8	82.1	151.7	217.8	630.2	744.4	787.3	821.2	867.6	885.5	889.0
67.5°	64.3	78.6	139.2	187.5	560.6	669.5	701.6	733.7	769.4	787.3	789.1
70°	58.9	75.0	128.5	166.0	489.2	583.8	610.6	644.5	673.0	682.0	687.3
72.5°	55.3	69.6	121.4	150.0	416.0	501.7	526.6	546.3	571.3	580.2	580.2
75°	50.0	62.5	114.3	133.9	341.0	410.6	432.0	451.7	471.3	474.9	469.5
77.5°	44.6	55.3	98.2	112.5	266.0	324.9	342.8	353.5	369.5	373.1	374.9
80°	37.5	48.2	76.8	87.5	192.8	239.2	251.7	260.6	274.9	274.9	278.5
82.5°	28.6	37.5	55.3	62.5	130.3	164.2	175.0	180.3	189.2	189.2	189.2
85°	17.9	23.2	35.7	41.1	78.6	100.0	107.1	108.9	116.0	117.8	117.8
87.5°	8.9	12.5	23.2	25.0	41.1	51.8	51.8	55.3	55.3	53.6	51.8
90°	11.2	20.1	28.9	31.2	49.0	72.7	84.6	75.2	56.4	42.3	42.3
92.5°	44.5	120.2	196.0	214.9	302.2	418.5	476.6	417.7	299.9	211.6	203.2
95°	106.9	245.5	384.0	418.6	743.4	1176.4	1392.9	1243.0	943.1	718.2	692.7
97.5°	184.9	307.1	429.4	459.9	1001.4	1723.5	2084.4	1989.6	1800.1	1658.0	1609.5
100°	244.9	355.8	466.7	494.4	1095.3	1896.5	2297.1	2304.0	2317.9	2328.2	2270.5
102.5°	296.2	399.6	503.0	528.9	1138.4	1950.9	2357.2	2478.0	2719.5	2900.6	2851.1
105°	383.0	470.6	558.2	580.1	1170.2	1957.1	2350.5	2621.3	3162.6	3568.7	3542.1
107.5°	472.1	553.8	635.4	655.8	1176.2	1870.0	2216.9	2594.5	3349.7	3916.1	3922.5
110°	532.3	606.0	679.7	698.1	1167.3	1792.8	2105.6	2527.7	3372.0	4005.2	4032.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	591.3	661.5	731.8	749.4	1167.6	1725.3	2004.2	2436.2	3300.3	3948.3	3990.9
115°	680.4	745.2	810.0	826.2	1178.4	1648.0	1882.9	2299.0	3131.4	3755.7	3814.7
117.5°	768.3	827.2	886.1	900.8	1200.3	1599.7	1799.3	2175.0	2926.2	3489.6	3555.0
120°	819.5	874.9	930.4	944.2	1218.2	1583.3	1766.0	2109.2	2795.6	3310.4	3373.9
122.5°	869.6	925.6	981.4	995.4	1243.8	1574.8	1740.3	2049.4	2667.5	3131.0	3193.8
125°	946.4	997.4	1048.4	1061.1	1278.2	1567.7	1712.5	1975.0	2500.1	2893.9	2951.6
127.5°	1008.8	1060.3	1111.8	1124.6	1312.8	1563.7	1689.1	1914.5	2365.4	2703.5	2752.2
130°	1042.2	1097.7	1153.1	1166.9	1338.0	1566.1	1680.2	1880.8	2282.3	2583.2	2628.3
132.5°	1076.8	1132.2	1187.6	1201.5	1358.5	1567.8	1672.4	1852.0	2211.3	2480.8	2521.1
135°	1127.9	1178.4	1229.0	1241.5	1380.7	1566.3	1659.0	1809.5	2110.4	2336.1	2370.8
137.5°	1180.3	1230.3	1280.2	1292.7	1414.1	1575.9	1656.9	1784.1	2038.4	2229.1	2257.6
140°	1223.7	1269.8	1315.7	1327.2	1434.5	1577.5	1649.0	1758.9	1978.7	2143.4	2170.0
142.5°	1257.1	1299.7	1342.2	1352.9	1451.6	1583.2	1649.0	1745.5	1938.5	2083.3	2106.1
145°	1308.3	1345.4	1382.6	1391.9	1473.9	1583.2	1637.9	1716.8	1874.7	1993.1	2010.4
147.5°	1359.5	1395.7	1431.9	1440.9	1506.6	1594.1	1637.9	1700.0	1824.2	1917.3	1931.7
150°	1392.9	1425.6	1458.3	1466.4	1523.5	1599.8	1637.9	1690.4	1795.2	1874.0	1885.6
152.5°	1427.5	1452.2	1477.0	1483.2	1534.8	1603.5	1637.9	1682.7	1772.2	1839.4	1848.2
155°	1478.7	1497.0	1515.3	1519.9	1559.2	1611.6	1637.9	1673.5	1744.8	1798.3	1804.1
157.5°	1516.6	1534.4	1552.2	1556.6	1583.7	1619.8	1637.9	1665.6	1721.1	1762.7	1766.8
160°	1542.2	1556.0	1569.9	1573.3	1594.8	1623.5	1637.9	1661.6	1709.2	1744.8	1747.1
162.5°	1567.8	1578.2	1588.6	1591.2	1606.7	1627.5	1637.9	1658.0	1698.0	1728.1	1730.3
165°	1595.6	1604.9	1614.4	1616.7	1623.8	1633.1	1637.9	1652.2	1681.0	1702.5	1704.8
167.5°	1621.2	1625.6	1630.1	1631.3	1637.2	1645.1	1649.0	1658.4	1677.2	1691.3	1692.3
170°	1637.9	1642.3	1646.8	1648.0	1648.3	1648.8	1649.0	1658.4	1677.2	1691.3	1691.3
172.5°	1646.8	1647.8	1648.8	1649.0	1649.0	1649.0	1649.0	1656.4	1671.3	1682.4	1681.5
175°	1659.0	1659.0	1659.0	1659.0	1655.7	1651.3	1649.0	1653.8	1663.1	1670.2	1670.2
177.5°	1659.0	1659.0	1659.0	1659.0	1656.4	1653.0	1651.3	1655.0	1662.4	1667.9	1667.0
180°	1659.0	1659.0	1659.0	1659.0	1659.0	1659.0	1659.0	1659.0	1659.0	1659.0	1659.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	555.2	555.2
2.5°	592.7	589.1
5°	762.3	765.9
7.5°	1026.6	1024.8
10°	1276.5	1292.6
12.5°	1458.6	1462.2
15°	1569.3	1576.5
17.5°	1612.2	1613.9
20°	1613.9	1610.4
22.5°	1594.3	1590.7
25°	1571.1	1569.3
27.5°	1549.7	1551.5
30°	1540.8	1546.1
32.5°	1540.8	1549.7
35°	1544.3	1553.2
37.5°	1542.5	1553.2
40°	1535.4	1547.9
42.5°	1515.8	1524.7
45°	1485.4	1496.1
47.5°	1446.1	1453.3
50°	1396.1	1403.3
52.5°	1333.7	1335.4
55°	1258.7	1265.8
57.5°	1178.3	1180.1
60°	1089.1	1094.4
62.5°	994.4	994.4
65°	894.4	898.0
67.5°	790.9	799.8
70°	685.5	687.3
72.5°	582.0	582.0
75°	474.9	476.7
77.5°	373.1	373.1
80°	276.7	278.5
82.5°	191.0	194.6
85°	119.6	119.6
87.5°	55.3	50.0
90°	42.3	42.3
92.5°	169.5	135.9
95°	590.7	488.8
97.5°	1415.4	1221.5
100°	2039.4	1808.3
102.5°	2653.1	2455.2
105°	3435.7	3329.3
107.5°	3948.2	3973.9
110°	4143.7	4254.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4161.1	4331.3
115°	4050.8	4286.8
117.5°	3816.8	4078.6
120°	3628.3	3882.6
122.5°	3444.7	3695.6
125°	3182.8	3413.9
127.5°	2947.3	3142.2
130°	2808.5	2988.6
132.5°	2682.4	2843.8
135°	2509.9	2648.9
137.5°	2371.4	2485.2
140°	2276.4	2382.8
142.5°	2197.7	2289.3
145°	2079.7	2149.0
147.5°	1989.1	2046.5
150°	1932.2	1978.7
152.5°	1883.3	1918.5
155°	1827.4	1850.6
157.5°	1783.0	1799.3
160°	1756.6	1766.0
162.5°	1739.2	1748.1
165°	1714.3	1723.6
167.5°	1696.3	1700.3
170°	1691.3	1691.3
172.5°	1678.1	1674.6
175°	1670.2	1670.2
177.5°	1663.0	1659.0
180°	1659.0	1659.0



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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	1.90	2.62	3.02	3.73	5.28	15.08	15.80	16.20	16.91	18.46
	3H	2.60	3.24	3.72	4.36	5.92	16.91	17.55	18.03	18.68	20.24
	4H	2.89	3.50	4.02	4.62	6.19	17.55	18.16	18.68	19.28	20.85
	6H	3.13	3.69	4.27	4.82	6.40	17.97	18.53	19.11	19.66	21.24
	8H	3.20	3.73	4.34	4.87	6.44	18.09	18.62	19.23	19.76	21.34
	12H	3.21	3.72	4.36	4.85	6.45	18.15	18.66	19.30	19.79	21.39
4H	2H	9.10	9.71	10.24	10.83	12.40	15.34	15.95	16.48	17.07	18.64
	3H	10.65	11.17	11.80	12.31	13.89	17.37	17.88	18.52	19.03	20.61
	4H	10.74	11.21	11.89	12.35	13.95	18.13	18.60	19.28	19.74	21.34
	6H	10.74	11.15	11.90	12.31	13.90	18.66	19.06	19.82	20.22	21.81
	8H	10.72	11.09	11.87	12.25	13.85	18.82	19.20	19.98	20.35	21.95
	12H	10.67	11.01	11.84	12.17	13.78	18.91	19.25	20.08	20.41	22.02
8H	4H	12.17	12.55	13.33	13.70	15.31	18.18	18.55	19.33	19.71	21.31
	6H	12.41	12.72	13.59	13.92	15.52	18.80	19.11	19.98	20.31	21.91
	8H	12.43	12.70	13.61	13.87	15.49	19.02	19.29	20.20	20.46	22.09
	12H	12.39	12.63	13.57	13.80	15.45	19.16	19.39	20.34	20.56	22.22
12H	4H	12.31	12.65	13.48	13.82	15.43	18.12	18.47	19.30	19.63	21.24
	6H	12.67	12.94	13.85	14.11	15.73	18.78	19.05	19.96	20.23	21.85
	8H	12.73	12.97	13.92	14.14	15.79	19.00	19.24	20.19	20.41	22.07