

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: P938367

Luminaire Tested: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938367
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-93050-1D-UNV-STD-W-8-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

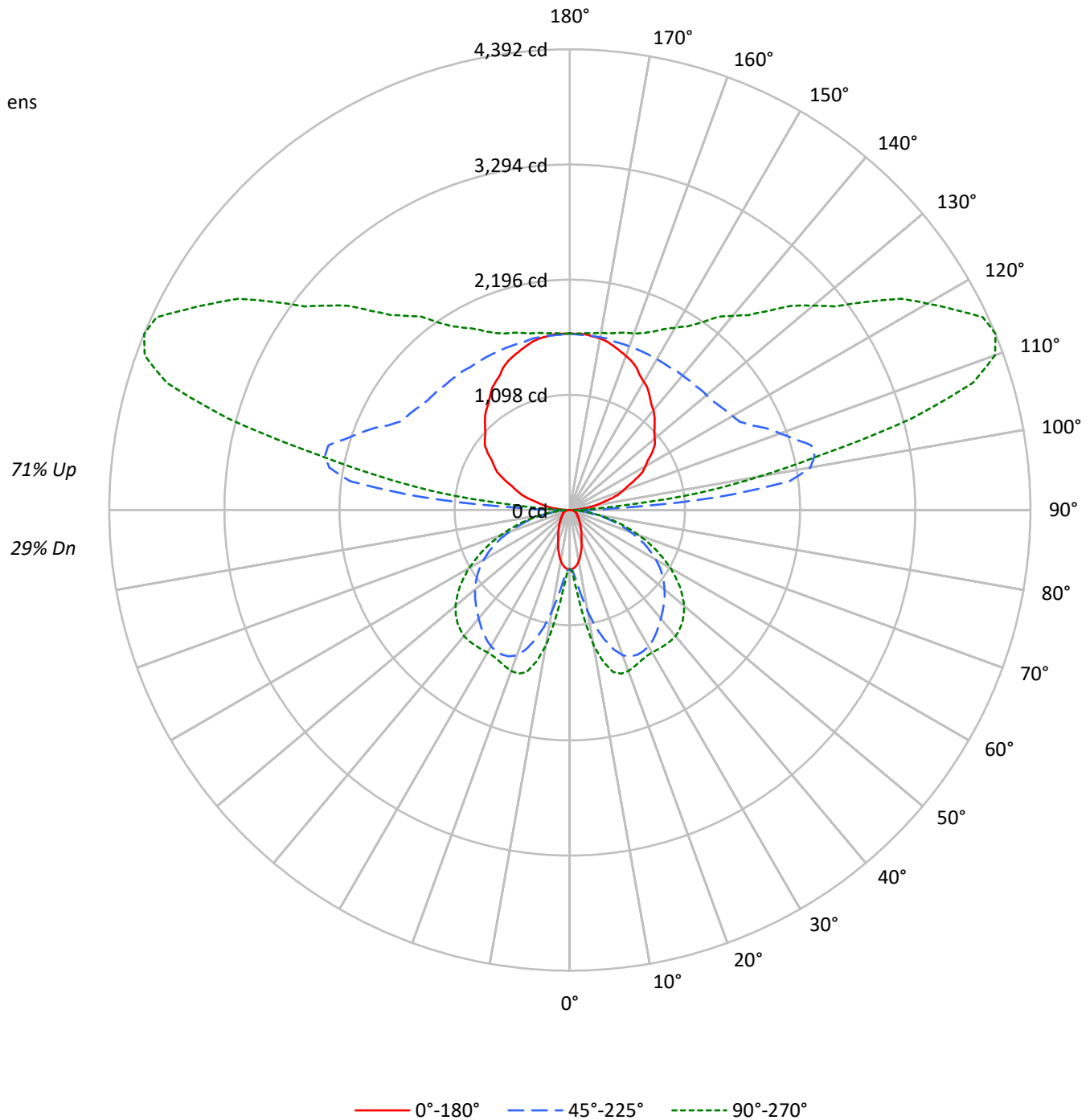
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15268.2 lumens
Efficiency: N/A
Efficacy: 120.0 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 (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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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°	2612	2612	2612
5°	2552	3019	3511
10°	2315	4401	5821
15°	1967	5750	7029
20°	1602	6663	7164
25°	1336	6973	7018
30°	1127	7017	7005
35°	996	6901	7186
40°	868	6749	7373
45°	786	6638	7402
50°	721	6538	7280
55°	691	6392	6957
60°	707	6111	6447
65°	736	5685	5747
70°	783	4957	4855
75°	868	4042	3789
80°	948	2804	2553
85°	843	1487	1307

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7402 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.8	0.5
10°-20°	322.8	2.1
20°-30°	564.6	3.7
30°-40°	726.8	4.8
40°-50°	811.8	5.3
50°-60°	777.6	5.1
60°-70°	616.2	4.0
70°-80°	362.3	2.4
80°-90°	107.1	0.7
90°-100°	820.1	5.4
100°-110°	2156.0	14.1
110°-120°	2235.6	14.6
120°-130°	1793.2	11.7
130°-140°	1407.0	9.2
140°-150°	1079.9	7.1
150°-160°	777.7	5.1
160°-170°	475.9	3.1
170°-180°	160.8	1.1
0°-30°	960.2	6.3
0°-40°	1687.1	11.0
0°-60°	3276.5	21.5
0°-90°	4362.0	28.6
90°-120°	5211.7	34.1
90°-150°	9491.8	62.2
90°-180°	10906.0	71.4
0°-180°	15268.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	548	588	663	750	777	51
15°	411	758	1278	1550	1599	114
25°	262	860	1523	1590	1591	121
35°	177	822	1434	1515	1575	111
45°	121	655	1267	1452	1517	94
55°	87	416	1075	1249	1284	79
65°	69	221	798	898	911	68
75°	51	136	438	482	483	53
85°	18	42	109	120	121	19
90°	11	32	86	43	43	11
95°	108	424	1412	728	496	120
105°	388	588	2384	3619	3376	412
115°	690	838	1909	3808	4347	681
125°	960	1076	1737	2934	3462	852
135°	1144	1259	1682	2369	2686	885
145°	1327	1411	1661	2021	2179	831
155°	1500	1541	1661	1824	1877	689
165°	1618	1639	1661	1726	1748	457
175°	1682	1682	1672	1694	1694	160
180°	1682	1682	1682	1682	1682	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0
2.5°	563.0	563.0	566.6	568.4	572.1	573.9	577.5	581.1	592.0	593.8	597.4
5°	548.5	555.8	579.3	588.4	613.7	648.1	662.6	686.1	735.0	749.5	758.5
7.5°	526.8	543.1	601.0	615.5	678.9	769.4	807.4	858.1	935.9	974.0	1004.7
10°	492.4	526.8	630.0	664.4	767.6	905.2	975.8	1046.5	1164.1	1216.6	1236.5
12.5°	454.4	510.5	660.8	707.8	856.3	1057.3	1142.4	1220.2	1354.2	1424.8	1435.7
15°	410.9	487.0	689.7	758.5	950.4	1184.0	1278.2	1374.1	1499.0	1549.7	1562.4
17.5°	372.9	468.9	716.9	789.3	1022.8	1298.1	1394.0	1473.7	1575.1	1609.5	1618.5
20°	325.9	439.9	735.0	829.1	1099.0	1381.4	1473.7	1535.2	1604.0	1625.8	1629.4
22.5°	291.5	409.1	745.9	843.6	1149.6	1432.1	1509.9	1558.8	1605.8	1613.1	1614.9
25°	262.5	374.7	744.0	859.9	1193.1	1462.8	1522.6	1558.8	1585.9	1589.6	1589.6
27.5°	235.3	336.7	736.8	863.5	1225.7	1470.1	1517.1	1542.5	1555.2	1562.4	1562.4
30°	211.8	300.5	718.7	856.3	1240.2	1462.8	1500.8	1513.5	1526.2	1537.1	1542.5
32.5°	193.7	266.1	691.5	841.8	1242.0	1444.7	1471.9	1479.1	1497.2	1522.6	1531.6
35°	177.4	231.7	660.8	821.9	1231.1	1415.8	1433.9	1441.1	1477.3	1515.3	1528.0
37.5°	161.1	206.4	620.9	787.5	1214.8	1381.4	1394.0	1406.7	1462.8	1508.1	1522.6
40°	144.8	184.7	573.9	749.5	1189.5	1339.7	1350.6	1370.5	1444.7	1497.2	1511.7
42.5°	132.2	166.5	523.2	709.6	1156.9	1292.7	1309.0	1337.9	1423.0	1479.1	1495.4
45°	121.3	148.4	468.9	655.3	1115.2	1243.8	1267.3	1307.1	1397.7	1452.0	1466.5
47.5°	110.4	135.8	412.8	599.2	1070.0	1194.9	1225.7	1270.9	1363.3	1415.8	1428.4
50°	101.4	123.1	356.6	539.5	1021.0	1142.4	1178.6	1225.7	1319.8	1368.7	1385.0
52.5°	94.1	112.2	304.1	479.7	964.9	1088.1	1129.7	1178.6	1267.3	1314.4	1325.2
55°	86.9	103.2	258.9	416.4	907.0	1030.2	1075.4	1122.5	1209.4	1249.2	1256.5
57.5°	83.3	95.9	220.9	356.6	845.4	964.9	1015.6	1059.1	1140.6	1171.4	1178.6
60°	77.8	90.5	191.9	305.9	778.4	903.4	946.8	990.2	1059.1	1084.5	1089.9
62.5°	72.4	86.9	170.2	257.1	709.6	830.9	874.4	914.2	972.1	990.2	997.5
65°	68.8	83.3	153.9	220.9	639.0	754.9	798.4	832.7	879.8	897.9	901.5
67.5°	65.2	79.7	141.2	190.1	568.4	678.9	711.5	744.0	780.2	798.4	800.2
70°	59.7	76.0	130.3	168.4	496.0	592.0	619.1	653.5	682.5	691.5	697.0
72.5°	56.1	70.6	123.1	152.1	421.8	508.7	534.0	554.0	579.3	588.4	588.4
75°	50.7	63.4	115.9	135.8	345.8	416.4	438.1	458.0	477.9	481.5	476.1
77.5°	45.3	56.1	99.6	114.1	269.7	329.5	347.6	358.4	374.7	378.4	380.2
80°	38.0	48.9	77.8	88.7	195.5	242.6	255.3	264.3	278.8	278.8	282.4
82.5°	29.0	38.0	56.1	63.4	132.2	166.5	177.4	182.8	191.9	191.9	191.9
85°	18.1	23.5	36.2	41.6	79.7	101.4	108.6	110.4	117.7	119.5	119.5
87.5°	9.1	12.7	23.5	25.3	41.6	52.5	52.5	56.1	56.1	54.3	52.5
90°	11.3	20.4	29.3	31.6	49.7	73.8	85.8	76.3	57.2	42.9	42.9
92.5°	45.2	121.9	198.8	218.0	306.4	424.3	483.3	423.5	304.1	214.5	206.0
95°	108.4	248.9	389.4	424.5	753.8	1192.9	1412.5	1260.4	956.4	728.3	702.4
97.5°	187.5	311.4	435.4	466.3	1015.5	1747.7	2113.7	2017.6	1825.4	1681.2	1632.1
100°	248.4	360.8	473.2	501.4	1110.7	1923.1	2329.3	2336.4	2350.4	2360.9	2302.4
102.5°	300.3	405.2	510.1	536.3	1154.4	1978.3	2390.3	2512.8	2757.7	2941.3	2891.2
105°	388.4	477.2	566.1	588.3	1186.7	1984.6	2383.6	2658.1	3207.1	3618.8	3591.9
107.5°	478.7	561.6	644.3	665.0	1192.7	1896.3	2248.1	2630.9	3396.8	3971.1	3977.6
110°	539.7	614.5	689.3	707.9	1183.7	1818.0	2135.2	2563.2	3419.3	4061.5	4089.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	599.6	670.8	742.1	759.9	1184.0	1749.6	2032.4	2470.5	3346.7	4003.8	4047.0
115°	689.9	755.6	821.3	837.8	1195.0	1671.2	1909.3	2331.3	3175.4	3808.5	3868.3
117.5°	779.1	838.8	898.6	913.5	1217.2	1622.1	1824.6	2205.5	2967.3	3538.6	3605.0
120°	831.0	887.2	943.4	957.5	1235.3	1605.6	1790.8	2138.8	2834.9	3356.9	3421.3
122.5°	881.8	938.6	995.2	1009.4	1261.3	1597.0	1764.8	2078.2	2705.0	3175.0	3238.7
125°	959.7	1011.4	1063.1	1076.1	1296.2	1589.7	1736.6	2002.8	2535.2	2934.5	2993.1
127.5°	1023.0	1075.2	1127.4	1140.4	1331.2	1585.7	1712.8	1941.4	2398.6	2741.5	2790.9
130°	1056.9	1113.1	1169.3	1183.3	1356.8	1588.1	1703.8	1907.3	2314.3	2619.5	2665.2
132.5°	1091.9	1148.1	1204.3	1218.3	1377.6	1589.8	1695.9	1878.0	2242.4	2515.6	2556.5
135°	1143.8	1195.0	1246.2	1259.0	1400.1	1588.3	1682.3	1834.9	2140.1	2368.9	2404.1
137.5°	1196.9	1247.6	1298.2	1310.9	1434.0	1598.1	1680.2	1809.1	2067.0	2260.5	2289.3
140°	1240.9	1287.6	1334.2	1345.9	1454.7	1599.7	1672.2	1783.6	2006.5	2173.6	2200.5
142.5°	1274.7	1317.9	1361.1	1371.9	1472.0	1605.5	1672.2	1770.0	1965.7	2112.6	2135.7
145°	1326.7	1364.3	1402.0	1411.4	1494.6	1605.5	1660.9	1740.9	1901.0	2021.1	2038.7
147.5°	1378.7	1415.3	1452.0	1461.1	1527.7	1616.5	1660.9	1723.9	1849.8	1944.3	1958.9
150°	1412.5	1445.6	1478.8	1487.0	1544.9	1622.2	1660.9	1714.1	1820.5	1900.3	1912.1
152.5°	1447.5	1472.6	1497.8	1504.0	1556.3	1626.0	1660.9	1706.3	1797.1	1865.3	1874.1
155°	1499.5	1518.0	1536.6	1541.2	1581.1	1634.3	1660.9	1697.0	1769.3	1823.5	1829.4
157.5°	1537.9	1556.0	1574.0	1578.5	1605.9	1642.6	1660.9	1689.0	1745.2	1787.4	1791.6
160°	1563.8	1577.9	1591.9	1595.4	1617.3	1646.3	1660.9	1685.0	1733.2	1769.3	1771.7
162.5°	1589.8	1600.3	1610.9	1613.5	1629.3	1650.4	1660.9	1681.2	1721.9	1752.4	1754.7
165°	1618.0	1627.5	1637.1	1639.4	1646.6	1656.1	1660.9	1675.5	1704.6	1726.4	1728.8
167.5°	1644.0	1648.5	1653.0	1654.2	1660.2	1668.2	1672.2	1681.7	1700.8	1715.1	1716.1
170°	1660.9	1665.4	1669.9	1671.1	1671.5	1671.9	1672.2	1681.7	1700.8	1715.1	1715.1
172.5°	1669.9	1670.9	1671.9	1672.2	1672.2	1672.2	1672.2	1679.7	1694.7	1706.0	1705.1
175°	1682.3	1682.3	1682.3	1682.3	1679.0	1674.5	1672.2	1677.0	1686.5	1693.6	1693.6
177.5°	1682.3	1682.3	1682.3	1682.3	1679.7	1676.2	1674.5	1678.3	1685.8	1691.4	1690.4
180°	1682.3	1682.3	1682.3	1682.3	1682.3	1682.3	1682.3	1682.3	1682.3	1682.3	1682.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	563.0	563.0
2.5°	601.0	597.4
5°	773.0	776.6
7.5°	1041.0	1039.2
10°	1294.5	1310.8
12.5°	1479.1	1482.7
15°	1591.4	1598.6
17.5°	1634.8	1636.6
20°	1636.6	1633.0
22.5°	1616.7	1613.1
25°	1593.2	1591.4
27.5°	1571.5	1573.3
30°	1562.4	1567.8
32.5°	1562.4	1571.5
35°	1566.0	1575.1
37.5°	1564.2	1575.1
40°	1557.0	1569.6
42.5°	1537.1	1546.1
45°	1506.3	1517.1
47.5°	1466.5	1473.7
50°	1415.8	1423.0
52.5°	1352.4	1354.2
55°	1276.4	1283.6
57.5°	1194.9	1196.7
60°	1104.4	1109.8
62.5°	1008.3	1008.3
65°	907.0	910.6
67.5°	802.0	811.0
70°	695.2	697.0
72.5°	590.2	590.2
75°	481.5	483.4
77.5°	378.4	378.4
80°	280.6	282.4
82.5°	193.7	197.3
85°	121.3	121.3
87.5°	56.1	50.7
90°	42.9	42.9
92.5°	171.9	137.8
95°	599.0	495.7
97.5°	1435.3	1238.6
100°	2068.0	1833.7
102.5°	2690.4	2489.7
105°	3484.0	3376.1
107.5°	4003.7	4029.8
110°	4201.9	4314.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4219.6	4392.2
115°	4107.7	4347.0
117.5°	3870.5	4136.0
120°	3679.3	3937.2
122.5°	3493.1	3747.5
125°	3227.5	3461.9
127.5°	2988.7	3186.3
130°	2847.9	3030.6
132.5°	2720.1	2883.8
135°	2545.1	2686.2
137.5°	2404.7	2520.1
140°	2308.4	2416.3
142.5°	2228.6	2321.5
145°	2108.9	2179.2
147.5°	2017.1	2075.3
150°	1959.3	2006.5
152.5°	1909.8	1945.5
155°	1853.0	1876.6
157.5°	1808.1	1824.6
160°	1781.3	1790.8
162.5°	1763.6	1772.7
165°	1738.4	1747.9
167.5°	1720.2	1724.2
170°	1715.1	1715.1
172.5°	1701.7	1698.2
175°	1693.6	1693.6
177.5°	1686.3	1682.3
180°	1682.3	1682.3



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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	1.95	2.67	3.07	3.78	5.33	15.13	15.85	16.25	16.96	18.51
	3H	2.65	3.29	3.77	4.41	5.97	16.96	17.60	18.08	18.72	20.28
	4H	2.94	3.55	4.07	4.67	6.24	17.60	18.21	18.73	19.33	20.90
	6H	3.18	3.74	4.32	4.87	6.45	18.02	18.58	19.16	19.71	21.29
	8H	3.24	3.78	4.39	4.92	6.49	18.14	18.67	19.28	19.81	21.38
	12H	3.26	3.76	4.41	4.90	6.49	18.20	18.71	19.35	19.84	21.44
4H	2H	9.15	9.76	10.29	10.88	12.45	15.39	16.00	16.53	17.12	18.69
	3H	10.70	11.21	11.85	12.36	13.94	17.42	17.93	18.57	19.08	20.66
	4H	10.79	11.26	11.94	12.40	14.00	18.18	18.65	19.33	19.79	21.39
	6H	10.79	11.20	11.95	12.36	13.95	18.71	19.11	19.87	20.27	21.86
	8H	10.77	11.14	11.92	12.29	13.90	18.87	19.24	20.02	20.40	22.00
	12H	10.72	11.06	11.89	12.22	13.83	18.95	19.30	20.13	20.46	22.07
8H	4H	12.22	12.60	13.38	13.75	15.36	18.23	18.60	19.38	19.76	21.36
	6H	12.46	12.77	13.64	13.96	15.57	18.85	19.16	20.03	20.35	21.96
	8H	12.47	12.75	13.66	13.92	15.54	19.07	19.34	20.25	20.51	22.13
	12H	12.44	12.67	13.62	13.84	15.50	19.20	19.44	20.39	20.61	22.27
12H	4H	12.36	12.70	13.53	13.86	15.48	18.17	18.51	19.34	19.68	21.29
	6H	12.72	12.99	13.90	14.16	15.78	18.83	19.10	20.01	20.27	21.90
	8H	12.78	13.02	13.96	14.19	15.84	19.05	19.29	20.24	20.46	22.12