

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: P937726

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937726
REPORT IS A COMBINATION OF REPORTS P933560 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

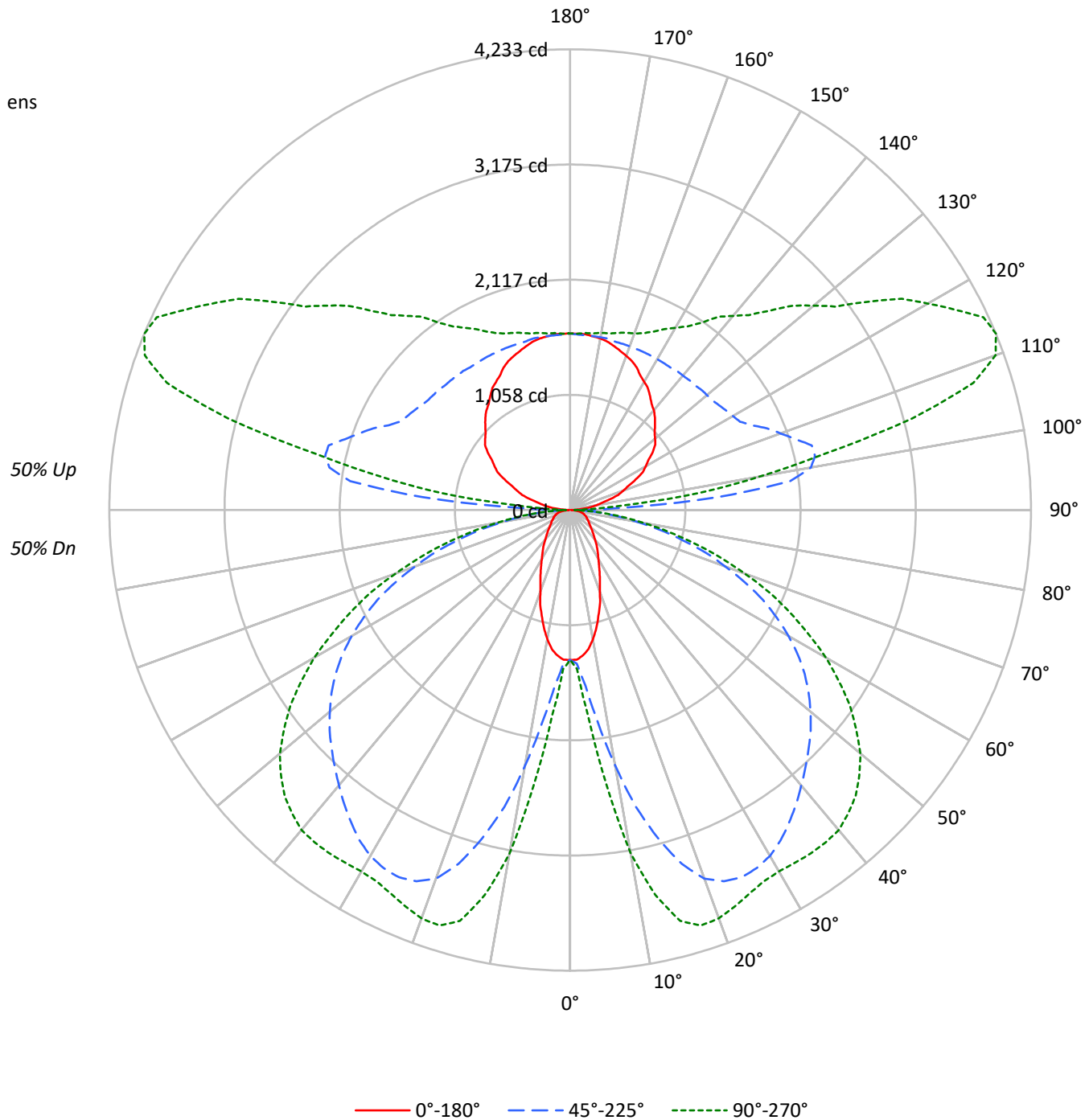
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21167.8 lumens
Efficiency: N/A
Efficacy: 102.6 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: General Diffuse

Input Watts (W): 206.4
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4259	4259	4259
5°	4162	4923	5724
10°	3777	7178	9490
15°	3211	9381	11459
20°	2615	10873	11678
25°	2182	11381	11441
30°	1841	11456	11419
35°	1629	11269	11715
40°	1420	11025	12020
45°	1287	10847	12067
50°	1181	10687	11867
55°	1132	10453	11341
60°	1161	9998	10511
65°	1209	9305	9369
70°	1292	8120	7915
75°	1436	6627	6177
80°	1582	4602	4163
85°	1435	2446	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12067 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.1	0.8
10°-20°	789.3	3.7
20°-30°	1380.7	6.5
30°-40°	1777.3	8.4
40°-50°	1985.2	9.4
50°-60°	1901.4	9.0
60°-70°	1506.8	7.1
70°-80°	886.1	4.2
80°-90°	252.4	1.2
90°-100°	790.3	3.7
100°-110°	2077.8	9.8
110°-120°	2154.5	10.2
120°-130°	1728.2	8.2
130°-140°	1356.0	6.4
140°-150°	1040.8	4.9
150°-160°	749.5	3.5
160°-170°	458.6	2.2
170°-180°	154.9	0.7
0°-30°	2348.1	11.1
0°-40°	4125.4	19.5
0°-60°	8012.0	37.8
0°-90°	10657.2	50.3
90°-120°	5022.6	23.7
90°-150°	9147.5	43.2
90°-180°	10511.0	49.7
0°-180°	21167.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1341	1439	1620	1833	1899	124
15°	1005	1855	3126	3790	3909	280
25°	642	2103	3723	3887	3891	296
35°	434	2010	3506	3705	3852	271
45°	297	1603	3099	3550	3710	229
55°	212	1018	2630	3055	3139	194
65°	168	540	1952	2196	2227	167
75°	124	332	1071	1178	1182	130
85°	44	102	266	292	297	47
90°	11	30	83	41	41	12
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°	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9
2.5°	1376.9	1376.9	1385.7	1390.1	1398.9	1403.4	1412.3	1421.1	1447.7	1452.1	1460.9
5°	1341.4	1359.1	1416.6	1438.8	1500.8	1584.9	1620.3	1677.9	1797.3	1832.8	1854.9
7.5°	1288.3	1328.1	1469.8	1505.2	1660.2	1881.5	1974.5	2098.5	2288.8	2381.8	2457.0
10°	1204.2	1288.3	1540.6	1624.7	1877.1	2213.5	2386.1	2558.8	2846.6	2974.9	3023.7
12.5°	1111.2	1248.4	1615.9	1731.0	2094.0	2585.4	2793.5	2983.8	3311.5	3484.1	3510.6
15°	1004.9	1190.8	1686.7	1854.9	2324.2	2895.3	3125.5	3360.1	3665.6	3789.6	3820.6
17.5°	912.0	1146.6	1753.1	1930.2	2501.3	3174.2	3408.9	3603.6	3851.5	3935.7	3957.8
20°	796.9	1075.7	1797.3	2027.6	2687.3	3377.8	3603.6	3754.1	3922.4	3975.5	3984.3
22.5°	712.7	1000.5	1823.9	2063.0	2811.2	3501.8	3692.2	3811.7	3926.8	3944.5	3948.9
25°	641.9	916.4	1819.5	2102.8	2917.4	3577.1	3723.1	3811.7	3878.1	3886.9	3886.9
27.5°	575.5	823.5	1801.8	2111.7	2997.1	3594.8	3709.9	3771.8	3802.9	3820.6	3820.6
30°	518.0	734.9	1757.5	2094.0	3032.5	3577.1	3670.0	3701.0	3732.0	3758.6	3771.8
32.5°	473.7	650.8	1691.1	2058.6	3036.9	3532.8	3599.2	3616.9	3661.1	3723.1	3745.3
35°	433.8	566.6	1615.9	2009.9	3010.4	3462.0	3506.2	3524.0	3612.5	3705.4	3736.4
37.5°	394.0	504.6	1518.5	1925.8	2970.6	3377.8	3408.9	3439.8	3577.1	3687.7	3723.1
40°	354.1	451.5	1403.4	1832.8	2908.6	3276.1	3302.6	3351.3	3532.8	3661.1	3696.6
42.5°	323.2	407.3	1279.4	1735.4	2828.9	3160.9	3200.8	3271.6	3479.7	3616.9	3656.8
45°	296.6	363.0	1146.6	1602.6	2727.0	3041.4	3098.9	3196.4	3417.7	3550.5	3585.9
47.5°	270.1	332.1	1009.4	1465.4	2616.4	2921.8	2997.1	3107.8	3333.6	3462.0	3492.9
50°	247.9	301.0	872.1	1319.3	2496.9	2793.5	2882.0	2997.1	3227.3	3346.9	3386.7
52.5°	230.2	274.5	743.8	1173.1	2359.6	2660.7	2762.5	2882.0	3098.9	3214.1	3240.6
55°	212.5	252.4	633.1	1018.2	2217.9	2519.0	2629.7	2744.8	2957.2	3054.6	3072.4
57.5°	203.6	234.7	540.1	872.1	2067.4	2359.6	2483.6	2589.9	2789.0	2864.3	2882.0
60°	190.4	221.3	469.2	748.2	1903.7	2209.1	2315.3	2421.6	2589.9	2651.8	2665.1
62.5°	177.1	212.5	416.1	628.6	1735.4	2032.0	2138.2	2235.6	2377.3	2421.6	2439.3
65°	168.2	203.6	376.3	540.1	1562.8	1846.1	1952.3	2036.5	2151.6	2195.8	2204.7
67.5°	159.4	194.8	345.3	464.9	1390.1	1660.2	1739.8	1819.5	1908.1	1952.3	1956.8
70°	146.1	185.9	318.7	411.7	1213.0	1447.7	1514.0	1598.2	1669.0	1691.1	1704.4
72.5°	137.3	172.7	301.0	371.8	1031.5	1244.0	1306.0	1354.7	1416.6	1438.8	1438.8
75°	123.9	155.0	283.3	332.1	845.5	1018.2	1071.4	1120.0	1168.7	1177.6	1164.3
77.5°	110.7	137.3	243.5	278.9	659.6	805.8	850.0	876.6	916.4	925.2	929.7
80°	93.0	119.6	190.4	217.0	478.1	593.2	624.2	646.4	681.8	681.8	690.7
82.5°	70.8	93.0	137.3	155.0	323.2	407.3	433.8	447.1	469.2	469.2	469.2
85°	44.3	57.6	88.5	101.9	194.8	247.9	265.6	270.1	287.8	292.2	292.2
87.5°	22.1	31.0	57.6	62.0	101.9	128.4	128.4	137.3	137.3	132.8	128.4
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°	1376.9	1376.9
2.5°	1469.8	1460.9
5°	1890.4	1899.2
7.5°	2545.6	2541.1
10°	3165.3	3205.2
12.5°	3616.9	3625.7
15°	3891.4	3909.1
17.5°	3997.7	4002.0
20°	4002.0	3993.2
22.5°	3953.4	3944.5
25°	3895.8	3891.4
27.5°	3842.7	3847.2
30°	3820.6	3833.8
32.5°	3820.6	3842.7
35°	3829.4	3851.5
37.5°	3825.0	3851.5
40°	3807.3	3838.3
42.5°	3758.6	3780.7
45°	3683.3	3709.9
47.5°	3585.9	3603.6
50°	3462.0	3479.7
52.5°	3307.0	3311.5
55°	3121.1	3138.8
57.5°	2921.8	2926.3
60°	2700.5	2713.8
62.5°	2465.9	2465.9
65°	2217.9	2226.8
67.5°	1961.2	1983.4
70°	1700.0	1704.4
72.5°	1443.2	1443.2
75°	1177.6	1182.0
77.5°	925.2	925.2
80°	686.2	690.7
82.5°	473.7	482.6
85°	296.6	296.6
87.5°	137.3	123.9
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



TEST NUMBER: P937726
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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	6.08	6.98	7.02	7.95	9.21	19.27	20.17	20.21	21.14	22.40
	3H	6.78	7.60	7.74	8.57	9.86	21.12	21.93	22.07	22.91	24.19
	4H	7.08	7.85	8.06	8.84	10.13	21.77	22.54	22.74	23.52	24.81
	6H	7.34	8.05	8.32	9.03	10.34	22.20	22.91	23.19	23.90	25.21
	8H	7.41	8.08	8.40	9.09	10.39	22.33	23.01	23.32	24.01	25.31
	12H	7.43	8.07	8.42	9.07	10.40	22.40	23.04	23.40	24.04	25.37
4H	2H	13.30	14.07	14.28	15.06	16.35	19.55	20.32	20.52	21.30	22.59
	3H	14.88	15.52	15.86	16.53	17.84	21.60	22.25	22.59	23.26	24.56
	4H	14.97	15.56	15.97	16.57	17.90	22.37	22.96	23.37	23.97	25.30
	6H	14.99	15.49	15.99	16.52	17.85	22.92	23.43	23.93	24.46	25.79
	8H	14.96	15.44	15.97	16.46	17.80	23.09	23.56	24.10	24.58	25.93
	12H	14.92	15.35	15.95	16.39	17.74	23.18	23.62	24.21	24.65	26.00
8H	4H	16.42	16.90	17.43	17.92	19.26	22.44	22.91	23.45	23.93	25.28
	6H	16.67	17.06	17.70	18.12	19.47	23.07	23.47	24.11	24.53	25.87
	8H	16.69	17.04	17.73	18.08	19.44	23.30	23.65	24.34	24.69	26.05
	12H	16.66	16.96	17.70	18.01	19.41	23.45	23.75	24.49	24.80	26.20
12H	4H	16.57	17.00	17.60	18.04	19.39	22.39	22.82	23.42	23.86	25.21
	6H	16.93	17.28	17.97	18.32	19.69	23.06	23.41	24.10	24.45	25.81
	8H	17.00	17.31	18.05	18.35	19.75	23.29	23.60	24.34	24.64	26.04