

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: P937725

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

**Test Information**

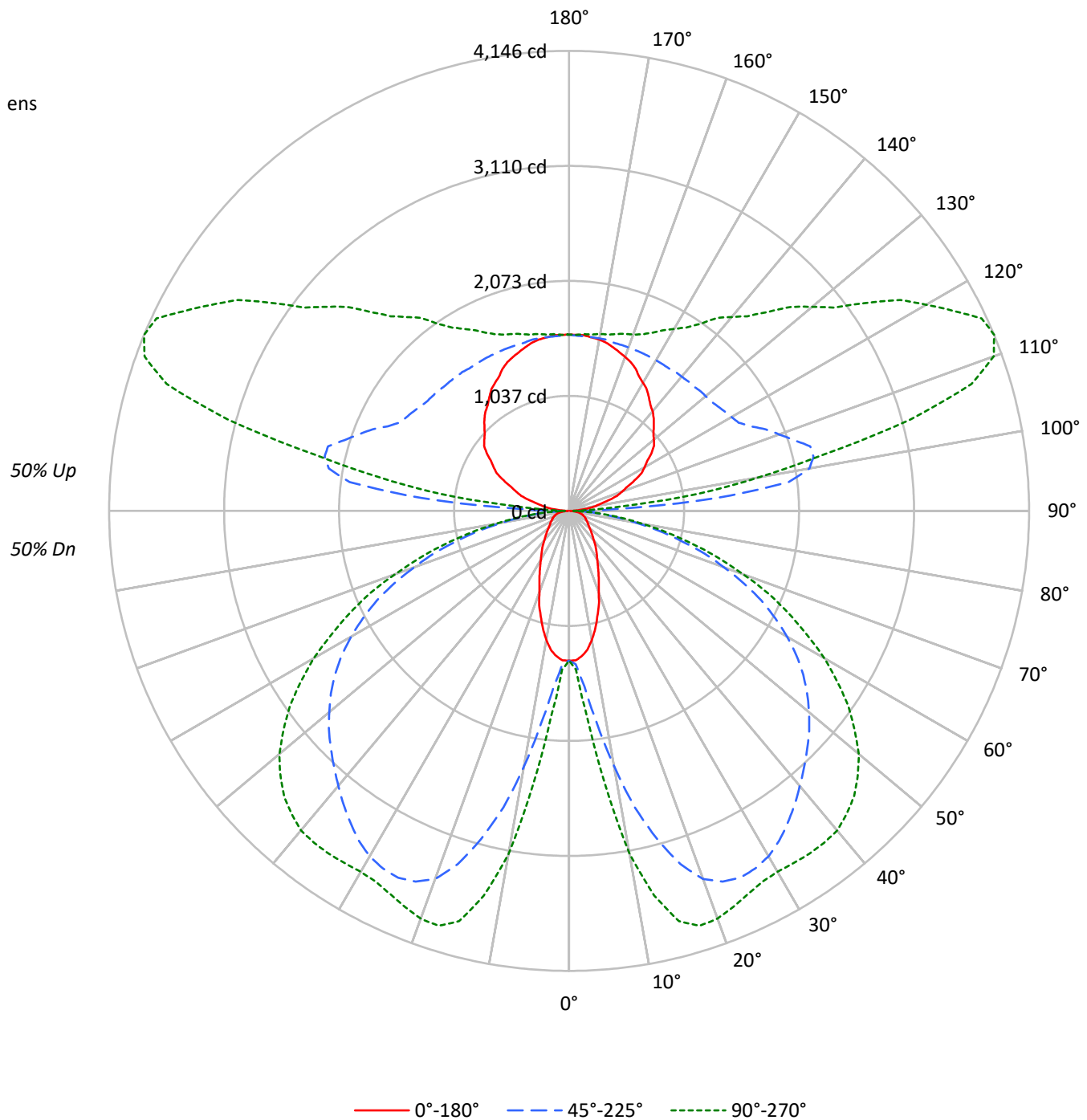
Test Method: LM-79-2019  
Report Number: P937725  
REPORT IS A COMBINATION OF REPORTS P933560 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-12-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20733.1 lumens  
Efficiency: N/A  
Efficacy: 100.5 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 (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

TEST NUMBER: P937725  
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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	0
RCR																		
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10

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

	0°	45°	90°
0°	4171	4171	4171
5°	4076	4822	5607
10°	3699	7031	9295
15°	3145	9188	11224
20°	2561	10650	11438
25°	2137	11147	11206
30°	1804	11221	11185
35°	1595	11037	11474
40°	1391	10799	11773
45°	1260	10624	11819
50°	1157	10468	11624
55°	1110	10238	11108
60°	1137	9793	10294
65°	1185	9114	9177
70°	1265	7954	7753
75°	1407	6491	6050
80°	1549	4507	4077
85°	1406	2396	2086

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.4	0.8
10°-20°	773.1	3.7
20°-30°	1352.3	6.5
30°-40°	1740.8	8.4
40°-50°	1944.4	9.4
50°-60°	1862.3	9.0
60°-70°	1475.9	7.1
70°-80°	867.9	4.2
80°-90°	247.2	1.2
90°-100°	774.1	3.7
100°-110°	2035.1	9.8
110°-120°	2110.2	10.2
120°-130°	1692.7	8.2
130°-140°	1328.1	6.4
140°-150°	1019.4	4.9
150°-160°	734.1	3.5
160°-170°	449.2	2.2
170°-180°	151.8	0.7
0°-30°	2299.9	11.1
0°-40°	4040.7	19.5
0°-60°	7847.5	37.8
0°-90°	10438.4	50.3
90°-120°	4919.5	23.7
90°-150°	8959.7	43.2
90°-180°	10295.0	49.7
0°-180°	20733.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1314	1409	1587	1795	1860	121
15°	984	1817	3061	3712	3829	274
25°	629	2060	3647	3807	3812	290
35°	425	1969	3434	3629	3772	265
45°	290	1570	3035	3478	3634	225
55°	208	997	2576	2992	3074	190
65°	165	529	1912	2151	2181	163
75°	121	325	1049	1153	1158	127
85°	43	100	260	286	290	46
90°	11	30	81	40	40	12
95°	102	401	1333	687	468	114
105°	367	555	2250	3416	3187	389
115°	651	791	1802	3595	4103	643
125°	906	1016	1639	2770	3268	804
135°	1080	1188	1588	2236	2536	835
145°	1252	1332	1568	1908	2057	785
155°	1415	1455	1568	1721	1771	650
165°	1527	1548	1568	1630	1650	431
175°	1588	1588	1578	1599	1599	151
180°	1588	1588	1588	1588	1588	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6
2.5°	1348.6	1348.6	1357.2	1361.6	1370.2	1374.5	1383.3	1391.9	1417.9	1422.3	1430.9
5°	1313.8	1331.2	1387.5	1409.2	1470.0	1552.4	1587.1	1643.4	1760.4	1795.2	1816.8
7.5°	1261.8	1300.8	1439.6	1474.3	1626.1	1842.9	1933.9	2055.4	2241.8	2332.9	2406.6
10°	1179.5	1261.8	1509.0	1591.3	1838.5	2168.0	2337.2	2506.3	2788.1	2913.9	2961.6
12.5°	1088.4	1222.8	1582.7	1695.4	2051.0	2532.3	2736.1	2922.6	3243.5	3412.6	3438.5
15°	984.3	1166.4	1652.1	1816.8	2276.5	2835.9	3061.3	3291.1	3590.3	3711.8	3742.1
17.5°	893.2	1123.1	1717.1	1890.5	2449.9	3109.0	3338.9	3529.6	3772.4	3854.9	3876.5
20°	780.5	1053.7	1760.4	1985.9	2632.1	3308.5	3529.6	3677.0	3841.9	3893.9	3902.5
22.5°	698.1	979.9	1786.5	2020.6	2753.5	3429.9	3616.4	3733.4	3846.1	3863.5	3867.8
25°	628.7	897.6	1782.1	2059.6	2857.5	3503.6	3646.7	3733.4	3798.5	3807.1	3807.1
27.5°	563.7	806.6	1764.8	2068.4	2935.6	3521.0	3633.7	3694.4	3724.8	3742.1	3742.1
30°	507.4	719.8	1721.4	2051.0	2970.2	3503.6	3594.7	3625.0	3655.4	3681.4	3694.4
32.5°	464.0	637.4	1656.4	2016.3	2974.6	3460.2	3525.3	3542.7	3586.0	3646.7	3668.4
35°	424.9	555.0	1582.7	1968.6	2948.6	3390.9	3434.2	3451.6	3538.3	3629.4	3659.7
37.5°	385.9	494.3	1487.3	1886.3	2909.6	3308.5	3338.9	3369.2	3503.6	3612.0	3646.7
40°	346.9	442.3	1374.5	1795.2	2848.9	3208.8	3234.8	3282.5	3460.2	3586.0	3620.6
42.5°	316.5	399.0	1253.2	1699.8	2770.8	3096.0	3135.1	3204.4	3408.2	3542.7	3581.7
45°	290.5	355.6	1123.1	1569.7	2671.0	2978.9	3035.3	3130.7	3347.5	3477.6	3512.3
47.5°	264.5	325.3	988.7	1435.3	2562.6	2861.8	2935.6	3043.9	3265.2	3390.9	3421.2
50°	242.8	294.8	854.2	1292.2	2445.6	2736.1	2822.8	2935.6	3161.0	3278.1	3317.2
52.5°	225.5	268.9	728.5	1149.1	2311.2	2606.0	2705.8	2822.8	3035.3	3148.1	3174.0
55°	208.2	247.2	620.1	997.3	2172.4	2467.2	2575.7	2688.5	2896.5	2991.9	3009.3
57.5°	199.4	229.8	529.0	854.2	2025.0	2311.2	2432.6	2536.7	2731.8	2805.5	2822.8
60°	186.5	216.8	459.6	732.8	1864.6	2163.8	2267.8	2371.9	2536.7	2597.3	2610.4
62.5°	173.5	208.2	407.6	615.7	1699.8	1990.3	2094.3	2189.7	2328.5	2371.9	2389.3
65°	164.8	199.4	368.6	529.0	1530.7	1808.2	1912.2	1994.6	2107.4	2150.7	2159.4
67.5°	156.1	190.8	338.2	455.3	1361.6	1626.1	1704.1	1782.1	1868.9	1912.2	1916.6
70°	143.1	182.1	312.2	403.2	1188.1	1417.9	1482.9	1565.4	1634.7	1656.4	1669.4
72.5°	134.4	169.1	294.8	364.2	1010.3	1218.5	1279.1	1326.9	1387.5	1409.2	1409.2
75°	121.4	151.8	277.5	325.3	828.2	997.3	1049.4	1097.0	1144.7	1153.4	1140.4
77.5°	108.4	134.4	238.5	273.2	646.1	789.2	832.5	858.6	897.6	906.2	910.6
80°	91.1	117.1	186.5	212.5	468.3	581.1	611.4	633.1	667.8	667.8	676.5
82.5°	69.4	91.1	134.4	151.8	316.5	399.0	424.9	437.9	459.6	459.6	459.6
85°	43.4	56.4	86.7	99.8	190.8	242.8	260.2	264.5	281.9	286.2	286.2
87.5°	21.7	30.3	56.4	60.7	99.8	125.7	125.7	134.4	134.4	130.1	125.7
90°	10.7	19.2	27.7	29.8	46.9	69.6	81.0	72.0	54.0	40.5	40.5
92.5°	42.6	115.1	187.6	205.7	289.2	400.5	456.2	399.8	287.1	202.5	194.5
95°	102.3	235.0	367.6	400.8	711.6	1126.1	1333.3	1189.8	902.7	687.4	663.0
97.5°	176.9	293.9	410.9	440.2	958.5	1649.6	1995.2	1904.4	1723.0	1587.0	1540.6
100°	234.5	340.5	446.6	473.2	1048.4	1815.3	2198.8	2205.4	2218.7	2228.6	2173.3
102.5°	283.5	382.5	481.5	506.2	1089.6	1867.5	2256.3	2371.9	2603.0	2776.4	2729.0
105°	366.7	450.5	534.3	555.3	1120.2	1873.4	2249.9	2509.1	3027.3	3415.9	3390.5
107.5°	451.9	530.1	608.2	627.8	1125.8	1789.9	2122.0	2483.5	3206.3	3748.4	3754.6
110°	509.5	580.0	650.6	668.3	1117.3	1716.0	2015.4	2419.5	3227.6	3833.7	3860.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	565.9	633.3	700.5	717.3	1117.7	1651.5	1918.5	2332.0	3159.1	3779.3	3820.1
115°	651.2	713.3	775.3	790.8	1128.0	1577.5	1802.3	2200.7	2997.4	3594.9	3651.4
117.5°	735.4	791.8	848.1	862.2	1149.0	1531.2	1722.3	2081.9	2800.9	3340.2	3402.8
120°	784.4	837.5	890.6	903.8	1166.1	1515.7	1690.4	2018.9	2675.9	3168.6	3229.5
122.5°	832.4	886.0	939.5	952.9	1190.6	1507.5	1665.9	1961.7	2553.3	2997.0	3057.1
125°	906.0	954.7	1003.5	1015.7	1223.5	1500.7	1639.2	1890.5	2393.1	2770.0	2825.3
127.5°	965.6	1014.9	1064.2	1076.5	1256.6	1496.8	1616.9	1832.6	2264.1	2587.8	2634.4
130°	997.6	1050.7	1103.7	1116.9	1280.8	1499.2	1608.3	1800.4	2184.6	2472.7	2515.8
132.5°	1030.7	1083.7	1136.8	1150.0	1300.2	1500.6	1600.8	1772.7	2116.7	2374.6	2413.3
135°	1079.7	1128.0	1176.3	1188.3	1321.6	1499.3	1588.1	1732.1	2020.0	2236.0	2269.3
137.5°	1129.8	1177.6	1225.4	1237.4	1353.5	1508.5	1585.9	1707.7	1951.2	2133.8	2161.0
140°	1171.4	1215.4	1259.4	1270.4	1373.1	1510.0	1578.4	1683.6	1893.9	2051.7	2077.2
142.5°	1203.3	1244.0	1284.8	1294.9	1389.4	1515.4	1578.4	1670.8	1855.6	1994.1	2016.0
145°	1252.3	1287.9	1323.4	1332.3	1410.8	1515.5	1567.8	1643.3	1794.4	1907.8	1924.4
147.5°	1301.3	1335.9	1370.5	1379.2	1442.0	1525.9	1567.8	1627.3	1746.2	1835.4	1849.1
150°	1333.3	1364.6	1395.8	1403.7	1458.4	1531.4	1567.8	1618.1	1718.4	1793.8	1804.9
152.5°	1366.3	1390.0	1413.8	1419.6	1469.0	1534.9	1567.8	1610.7	1696.4	1760.7	1769.1
155°	1415.4	1432.9	1450.5	1454.8	1492.5	1542.7	1567.8	1601.9	1670.1	1721.2	1726.8
157.5°	1451.6	1468.7	1485.8	1490.0	1516.0	1550.6	1567.8	1594.3	1647.4	1687.2	1691.1
160°	1476.1	1489.4	1502.7	1506.0	1526.6	1554.1	1567.8	1590.6	1636.0	1670.1	1672.3
162.5°	1500.6	1510.5	1520.5	1523.0	1537.9	1557.8	1567.8	1587.0	1625.3	1654.1	1656.2
165°	1527.3	1536.2	1545.3	1547.5	1554.3	1563.3	1567.8	1581.6	1609.0	1629.6	1631.8
167.5°	1551.8	1556.1	1560.3	1561.4	1567.1	1574.7	1578.4	1587.5	1605.5	1619.0	1619.9
170°	1567.8	1572.1	1576.4	1577.4	1577.7	1578.2	1578.4	1587.5	1605.5	1619.0	1619.0
172.5°	1576.3	1577.2	1578.2	1578.4	1578.4	1578.4	1578.4	1585.5	1599.8	1610.5	1609.6
175°	1588.1	1588.1	1588.1	1588.1	1584.8	1580.6	1578.4	1583.0	1591.9	1598.7	1598.7
177.5°	1588.1	1588.1	1588.1	1588.1	1585.6	1582.3	1580.6	1584.2	1591.2	1596.5	1595.6
180°	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1348.6	1348.6
2.5°	1439.6	1430.9
5°	1851.6	1860.2
7.5°	2493.3	2488.9
10°	3100.3	3139.3
12.5°	3542.7	3551.3
15°	3811.5	3828.8
17.5°	3915.6	3919.8
20°	3919.8	3911.2
22.5°	3872.2	3863.5
25°	3815.8	3811.5
27.5°	3763.8	3768.2
30°	3742.1	3755.1
32.5°	3742.1	3763.8
35°	3750.7	3772.4
37.5°	3746.5	3772.4
40°	3729.1	3759.4
42.5°	3681.4	3703.1
45°	3607.7	3633.7
47.5°	3512.3	3529.6
50°	3390.9	3408.2
52.5°	3239.1	3243.5
55°	3057.0	3074.3
57.5°	2861.8	2866.2
60°	2645.1	2658.0
62.5°	2415.2	2415.2
65°	2172.4	2181.1
67.5°	1920.9	1942.6
70°	1665.1	1669.4
72.5°	1413.6	1413.6
75°	1153.4	1157.8
77.5°	906.2	906.2
80°	672.1	676.5
82.5°	464.0	472.7
85°	290.5	290.5
87.5°	134.4	121.4
90°	40.5	40.5
92.5°	162.2	130.0
95°	565.4	467.9
97.5°	1354.9	1169.2
100°	1952.1	1730.9
102.5°	2539.6	2350.1
105°	3288.6	3186.8
107.5°	3779.3	3803.9
110°	3966.3	4072.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3983.1	4146.0
115°	3877.4	4103.3
117.5°	3653.4	3904.0
120°	3473.0	3716.5
122.5°	3297.2	3537.4
125°	3046.5	3267.7
127.5°	2821.1	3007.7
130°	2688.2	2860.6
132.5°	2567.7	2722.1
135°	2402.4	2535.6
137.5°	2269.9	2378.9
140°	2179.1	2280.9
142.5°	2103.6	2191.3
145°	1990.7	2057.0
147.5°	1904.0	1958.9
150°	1849.4	1893.9
152.5°	1802.7	1836.4
155°	1749.1	1771.4
157.5°	1706.7	1722.3
160°	1681.4	1690.4
162.5°	1664.8	1673.3
165°	1640.9	1649.8
167.5°	1623.7	1627.5
170°	1619.0	1619.0
172.5°	1606.3	1602.9
175°	1598.7	1598.7
177.5°	1591.8	1588.1
180°	1588.1	1588.1



TEST NUMBER: P937725  
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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	6.00	6.91	6.95	7.88	9.14	19.20	20.10	20.14	21.07	22.33
	3H	6.71	7.52	7.67	8.50	9.79	21.04	21.86	22.00	22.83	24.12
	4H	7.01	7.78	7.98	8.76	10.06	21.69	22.46	22.67	23.45	24.74
	6H	7.27	7.98	8.25	8.96	10.27	22.13	22.84	23.11	23.83	25.14
	8H	7.33	8.01	8.32	9.01	10.32	22.26	22.93	23.25	23.94	25.24
	12H	7.35	8.00	8.35	9.00	10.33	22.33	22.97	23.32	23.97	25.30
4H	2H	13.23	14.00	14.21	14.98	16.28	19.47	20.24	20.45	21.23	22.52
	3H	14.80	15.45	15.79	16.46	17.77	21.53	22.17	22.52	23.18	24.49
	4H	14.90	15.49	15.90	16.49	17.82	22.30	22.89	23.30	23.90	25.23
	6H	14.91	15.42	15.92	16.45	17.78	22.85	23.36	23.86	24.38	25.71
	8H	14.89	15.37	15.90	16.39	17.73	23.01	23.49	24.02	24.51	25.85
	12H	14.85	15.28	15.88	16.32	17.67	23.11	23.54	24.14	24.58	25.93
8H	4H	16.35	16.83	17.36	17.85	19.19	22.37	22.84	23.37	23.86	25.21
	6H	16.60	16.99	17.63	18.05	19.39	23.00	23.40	24.04	24.46	25.80
	8H	16.61	16.96	17.66	18.01	19.37	23.22	23.57	24.27	24.62	25.98
	12H	16.58	16.89	17.63	17.93	19.34	23.37	23.68	24.42	24.72	26.13
12H	4H	16.50	16.93	17.53	17.97	19.32	22.32	22.75	23.35	23.79	25.14
	6H	16.86	17.21	17.90	18.25	19.61	22.99	23.33	24.03	24.38	25.74
	8H	16.93	17.23	17.98	18.28	19.68	23.22	23.53	24.27	24.57	25.97