

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: P938325

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938325  
REPORT IS A COMBINATION OF REPORTS P933622 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-12-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

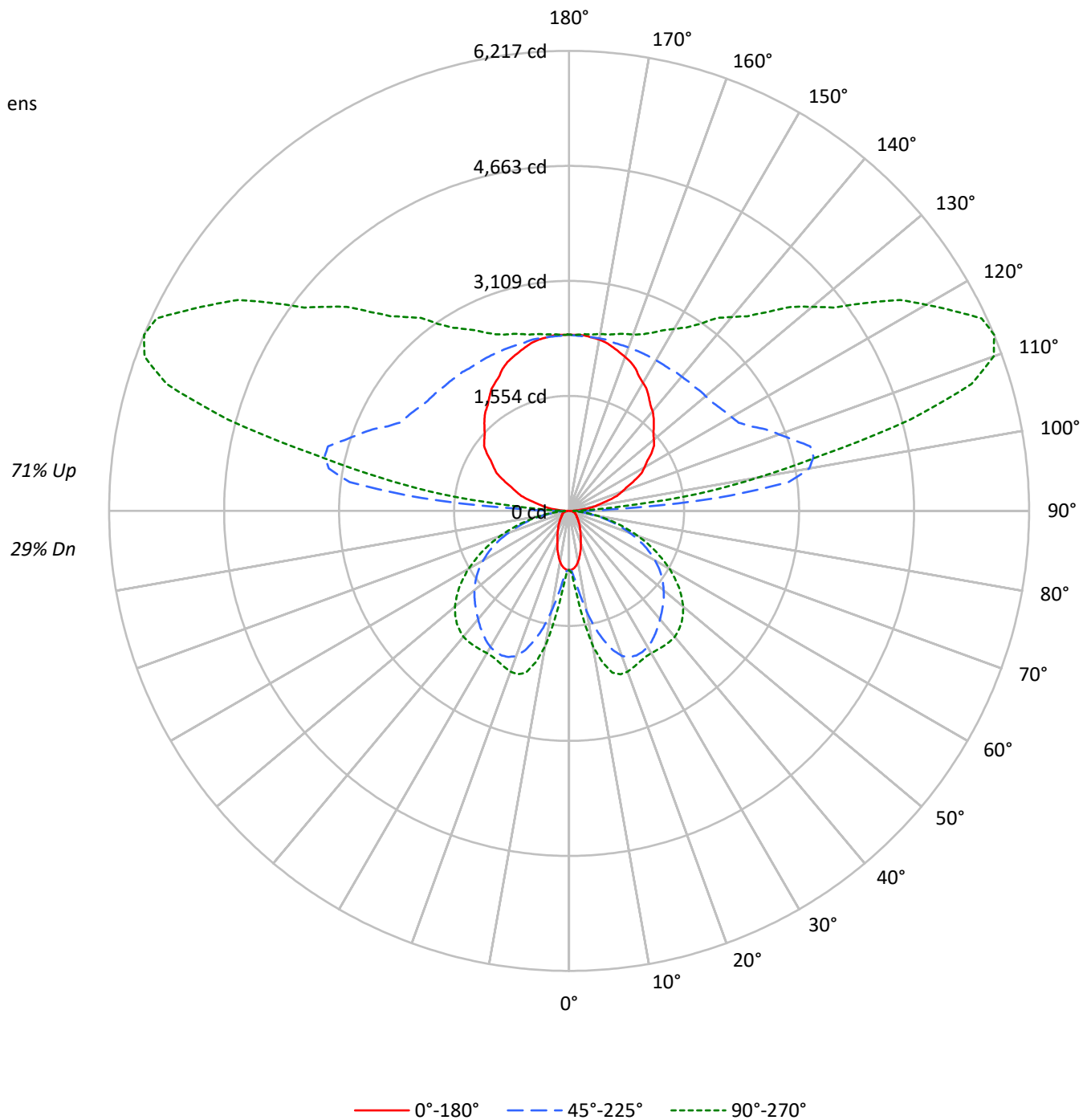
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21611.1 lumens  
Efficiency: N/A  
Efficacy: 113.3 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): 190.8  
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: P938325  
CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-12-2700K

### 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	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	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	17	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	10	9	6			6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			6

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

	0°	45°	90°
0°	2465	2465	2465
5°	2409	2850	3313
10°	2186	4155	5493
15°	1859	5430	6633
20°	1513	6294	6760
25°	1263	6588	6622
30°	1066	6631	6610
35°	943	6523	6781
40°	822	6381	6958
45°	745	6279	6985
50°	684	6186	6869
55°	655	6050	6565
60°	672	5787	6084
65°	700	5386	5423
70°	748	4700	4582
75°	831	3836	3575
80°	915	2663	2409
85°	830	1415	1233

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6985 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.1	0.5
10°-20°	456.9	2.1
20°-30°	799.2	3.7
30°-40°	1028.8	4.8
40°-50°	1149.1	5.3
50°-60°	1100.6	5.1
60°-70°	872.2	4.0
70°-80°	512.8	2.4
80°-90°	151.6	0.7
90°-100°	1160.8	5.4
100°-110°	3051.7	14.1
110°-120°	3164.3	14.6
120°-130°	2538.1	11.7
130°-140°	1991.5	9.2
140°-150°	1528.6	7.1
150°-160°	1100.8	5.1
160°-170°	673.6	3.1
170°-180°	227.6	1.1
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0°-30°	1359.1	6.3
0°-40°	2387.9	11.0
0°-60°	4637.5	21.5
0°-90°	6174.2	28.6
90°-120°	7376.7	34.1
90°-150°	13435.0	62.2
90°-180°	15437.0	71.4
0°-180°	21611.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	776	833	938	1061	1099	72
15°	582	1074	1809	2194	2263	162
25°	372	1217	2155	2250	2252	171
35°	251	1163	2030	2145	2229	157
45°	172	928	1794	2055	2147	133
55°	123	589	1522	1768	1817	112
65°	97	313	1130	1271	1289	97
75°	72	192	620	682	684	75
85°	26	59	154	169	172	27
90°	16	45	122	61	61	15
95°	153	601	1999	1031	702	170
105°	550	833	3374	5122	4779	583
115°	976	1186	2702	5391	6153	964
125°	1358	1523	2458	4154	4900	1206
135°	1619	1782	2381	3353	3802	1253
145°	1878	1998	2351	2861	3084	1176
155°	2122	2182	2351	2581	2656	975
165°	2290	2321	2351	2444	2474	646
175°	2381	2381	2367	2397	2397	226
180°	2381	2381	2381	2381	2381	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	796.9	796.9	802.0	804.6	809.7	812.3	817.4	822.5	837.9	840.5	845.6
5°	776.4	786.7	820.0	832.8	868.6	917.3	937.8	971.2	1040.4	1060.9	1073.7
7.5°	745.7	768.7	850.7	871.2	960.9	1089.1	1142.9	1214.7	1324.8	1378.6	1422.2
10°	697.0	745.7	891.7	940.4	1086.5	1281.3	1381.2	1481.1	1647.7	1722.0	1750.2
12.5°	643.2	722.6	935.3	1002.0	1212.1	1496.5	1616.9	1727.1	1916.7	2016.7	2032.1
15°	581.7	689.3	976.4	1073.7	1345.3	1675.9	1809.1	1944.9	2121.7	2193.5	2211.4
17.5°	527.9	663.7	1014.8	1117.3	1447.8	1837.3	1973.1	2085.9	2229.4	2278.0	2290.9
20°	461.2	622.7	1040.4	1173.7	1555.5	1955.2	2085.9	2173.0	2270.4	2301.1	2306.2
22.5°	412.5	579.1	1055.8	1194.2	1627.2	2026.9	2137.1	2206.3	2272.9	2283.2	2285.7
25°	371.5	530.4	1053.2	1217.2	1688.7	2070.5	2155.1	2206.3	2244.7	2249.9	2249.9
27.5°	333.1	476.6	1043.0	1222.3	1734.8	2080.7	2147.4	2183.2	2201.2	2211.4	2211.4
30°	299.8	425.4	1017.4	1212.1	1755.3	2070.5	2124.3	2142.2	2160.2	2175.5	2183.2
32.5°	274.2	376.7	978.9	1191.6	1757.9	2044.9	2083.3	2093.6	2119.2	2155.1	2167.9
35°	251.1	328.0	935.3	1163.4	1742.5	2003.9	2029.5	2039.7	2091.0	2144.8	2162.7
37.5°	228.1	292.1	878.9	1114.7	1719.4	1955.2	1973.1	1991.1	2070.5	2134.6	2155.1
40°	205.0	261.4	812.3	1060.9	1683.6	1896.2	1911.6	1939.8	2044.9	2119.2	2139.7
42.5°	187.1	235.7	740.5	1004.5	1637.4	1829.6	1852.7	1893.7	2014.1	2093.6	2116.6
45°	171.7	210.1	663.7	927.6	1578.5	1760.4	1793.8	1850.1	1978.2	2055.1	2075.6
47.5°	156.3	192.2	584.2	848.1	1514.5	1691.3	1734.8	1798.9	1929.6	2003.9	2021.8
50°	143.5	174.2	504.8	763.6	1445.3	1616.9	1668.2	1734.8	1868.1	1937.2	1960.3
52.5°	133.2	158.9	430.5	679.0	1365.8	1540.1	1599.0	1668.2	1793.8	1860.4	1875.8
55°	123.0	146.1	366.4	589.3	1283.8	1458.1	1522.1	1588.8	1711.8	1768.1	1778.4
57.5°	117.9	135.8	312.6	504.8	1196.7	1365.8	1437.6	1499.1	1614.4	1657.9	1668.2
60°	110.2	128.1	271.6	433.0	1101.9	1278.7	1340.2	1401.7	1499.1	1535.0	1542.6
62.5°	102.5	123.0	240.9	363.9	1004.5	1176.2	1237.7	1294.1	1376.1	1401.7	1412.0
65°	97.4	117.9	217.8	312.6	904.5	1068.6	1130.1	1178.8	1245.4	1271.0	1276.2
67.5°	92.2	112.7	199.9	269.1	804.6	960.9	1007.1	1053.2	1104.5	1130.1	1132.7
70°	84.6	107.6	184.5	238.3	702.1	837.9	876.3	925.0	966.0	978.9	986.6
72.5°	79.4	99.9	174.2	215.2	597.0	720.0	755.9	784.1	820.0	832.8	832.8
75°	71.7	89.7	164.0	192.2	489.4	589.3	620.1	648.3	676.5	681.6	673.9
77.5°	64.1	79.4	140.9	161.4	381.8	466.4	492.0	507.4	530.4	535.5	538.1
80°	53.8	69.2	110.2	125.6	276.7	343.4	361.3	374.1	394.6	394.6	399.7
82.5°	41.0	53.8	79.4	89.7	187.1	235.7	251.1	258.8	271.6	271.6	271.6
85°	25.6	33.3	51.2	58.9	112.7	143.5	153.7	156.3	166.6	169.1	169.1
87.5°	12.8	17.9	33.3	35.9	58.9	74.3	74.3	79.4	79.4	76.9	74.3
90°	16.0	28.8	41.6	44.8	70.3	104.4	121.5	108.0	81.0	60.7	60.7
92.5°	63.9	172.5	281.3	308.4	433.6	600.5	684.0	599.4	430.4	303.6	291.6
95°	153.4	352.2	551.2	600.9	1067.1	1688.6	1999.3	1784.1	1353.7	1030.8	994.3
97.5°	265.3	440.7	616.2	660.1	1437.3	2473.6	2991.8	2855.8	2583.7	2379.7	2310.1
100°	351.6	510.7	669.8	709.6	1572.1	2722.0	3297.0	3306.9	3326.8	3341.8	3258.8
102.5°	425.1	573.5	722.0	759.1	1633.9	2800.2	3383.4	3556.7	3903.3	4163.3	4092.2
105°	549.8	675.5	801.3	832.7	1679.7	2809.1	3373.7	3762.3	4539.3	5122.1	5083.9
107.5°	677.7	794.9	912.0	941.3	1688.2	2684.0	3182.0	3723.9	4807.8	5620.8	5630.0
110°	763.9	869.8	975.6	1002.1	1675.5	2573.2	3022.2	3628.1	4839.8	5748.6	5788.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	848.7	949.5	1050.4	1075.6	1676.0	2476.5	2876.7	3496.8	4737.0	5667.1	5728.2
115°	976.5	1069.5	1162.6	1185.9	1691.4	2365.5	2702.5	3299.9	4494.6	5390.7	5475.4
117.5°	1102.8	1187.2	1271.8	1292.9	1722.8	2296.0	2582.6	3121.8	4200.0	5008.7	5102.6
120°	1176.2	1255.8	1335.3	1355.2	1748.4	2272.6	2534.7	3027.3	4012.4	4751.3	4842.6
122.5°	1248.1	1328.4	1408.7	1428.8	1785.2	2260.4	2498.0	2941.5	3828.7	4494.1	4584.1
125°	1358.5	1431.6	1504.8	1523.1	1834.8	2250.3	2458.0	2834.9	3588.4	4153.6	4236.6
127.5°	1447.9	1521.8	1595.7	1614.1	1884.2	2244.4	2424.4	2748.0	3395.1	3880.4	3950.3
130°	1495.9	1575.4	1655.0	1674.9	1920.4	2247.9	2411.6	2699.6	3275.8	3707.8	3772.4
132.5°	1545.5	1625.0	1704.5	1724.4	1949.7	2250.2	2400.4	2658.3	3174.0	3560.8	3618.7
135°	1618.9	1691.3	1763.9	1782.0	1981.7	2248.2	2381.3	2597.2	3029.1	3353.0	3402.8
137.5°	1694.1	1765.8	1837.6	1855.5	2029.7	2261.9	2378.1	2560.6	2925.7	3199.6	3240.4
140°	1756.4	1822.5	1888.6	1905.0	2059.0	2264.2	2366.9	2524.5	2840.0	3076.5	3114.7
142.5°	1804.3	1865.4	1926.5	1941.8	2083.5	2272.4	2366.9	2505.4	2782.4	2990.2	3023.1
145°	1877.9	1931.2	1984.4	1997.7	2115.4	2272.4	2350.9	2464.2	2690.8	2860.7	2885.6
147.5°	1951.3	2003.2	2055.0	2068.0	2162.3	2288.0	2350.9	2440.1	2618.3	2752.1	2772.7
150°	1999.3	2046.2	2093.1	2104.8	2186.8	2296.2	2350.9	2426.2	2576.8	2689.7	2706.4
152.5°	2048.9	2084.4	2119.9	2128.7	2202.8	2301.5	2350.9	2415.2	2543.8	2640.2	2652.8
155°	2122.4	2148.7	2175.0	2181.5	2238.0	2313.2	2350.9	2402.1	2504.4	2581.1	2589.5
157.5°	2176.7	2202.3	2227.8	2234.2	2273.1	2324.9	2350.9	2390.7	2470.2	2529.9	2535.8
160°	2213.5	2233.4	2253.3	2258.2	2289.1	2330.3	2350.9	2385.0	2453.1	2504.3	2507.7
162.5°	2250.2	2265.1	2280.0	2283.8	2306.1	2336.0	2350.9	2379.7	2437.3	2480.4	2483.5
165°	2290.2	2303.7	2317.2	2320.6	2330.7	2344.2	2350.9	2371.5	2412.7	2443.6	2447.0
167.5°	2327.0	2333.4	2339.7	2341.3	2349.9	2361.2	2366.9	2380.4	2407.4	2427.6	2429.1
170°	2350.9	2357.3	2363.7	2365.3	2365.8	2366.5	2366.9	2380.4	2407.4	2427.6	2427.6
172.5°	2363.7	2365.1	2366.5	2366.9	2366.9	2366.9	2366.9	2377.6	2398.9	2414.9	2413.6
175°	2381.3	2381.3	2381.3	2381.3	2376.5	2370.1	2366.9	2373.6	2387.1	2397.3	2397.3
177.5°	2381.3	2381.3	2381.3	2381.3	2377.6	2372.6	2370.1	2375.4	2386.1	2394.0	2392.6
180°	2381.3	2381.3	2381.3	2381.3	2381.3	2381.3	2381.3	2381.3	2381.3	2381.3	2381.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	796.9	796.9
2.5°	850.7	845.6
5°	1094.2	1099.3
7.5°	1473.5	1470.9
10°	1832.2	1855.3
12.5°	2093.6	2098.7
15°	2252.4	2262.7
17.5°	2313.9	2316.5
20°	2316.5	2311.4
22.5°	2288.3	2283.2
25°	2255.0	2252.4
27.5°	2224.2	2226.8
30°	2211.4	2219.1
32.5°	2211.4	2224.2
35°	2216.5	2229.4
37.5°	2214.0	2229.4
40°	2203.7	2221.7
42.5°	2175.5	2188.4
45°	2132.0	2147.4
47.5°	2075.6	2085.9
50°	2003.9	2014.1
52.5°	1914.2	1916.7
55°	1806.6	1816.8
57.5°	1691.3	1693.8
60°	1563.1	1570.8
62.5°	1427.3	1427.3
65°	1283.8	1289.0
67.5°	1135.2	1148.0
70°	984.0	986.6
72.5°	835.3	835.3
75°	681.6	684.2
77.5°	535.5	535.5
80°	397.2	399.7
82.5°	274.2	279.3
85°	171.7	171.7
87.5°	79.4	71.7
90°	60.7	60.7
92.5°	243.3	195.0
95°	847.9	701.6
97.5°	2031.6	1753.2
100°	2927.2	2595.4
102.5°	3808.1	3524.0
105°	4931.3	4778.6
107.5°	5667.0	5703.9
110°	5947.5	6106.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	5972.6	6216.9
115°	5814.1	6153.0
117.5°	5478.4	5854.1
120°	5207.7	5572.8
122.5°	4944.3	5304.4
125°	4568.3	4900.0
127.5°	4230.2	4510.1
130°	4031.0	4289.5
132.5°	3850.2	4081.7
135°	3602.5	3802.1
137.5°	3403.8	3567.1
140°	3267.4	3420.1
142.5°	3154.5	3285.8
145°	2985.1	3084.5
147.5°	2855.1	2937.4
150°	2773.2	2840.0
152.5°	2703.2	2753.6
155°	2622.8	2656.2
157.5°	2559.2	2582.6
160°	2521.2	2534.7
162.5°	2496.4	2509.2
165°	2460.5	2474.0
167.5°	2434.7	2440.4
170°	2427.6	2427.6
172.5°	2408.6	2403.7
175°	2397.3	2397.3
177.5°	2386.9	2381.3
180°	2381.3	2381.3



TEST NUMBER: P938325  
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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	1.75	2.47	2.87	3.58	5.13	14.95	15.66	16.06	16.78	18.32
	3H	2.45	3.09	3.57	4.21	5.77	16.78	17.42	17.91	18.55	20.11
	4H	2.74	3.35	3.87	4.47	6.04	17.42	18.03	18.56	19.16	20.72
	6H	2.98	3.54	4.13	4.67	6.25	17.85	18.41	18.99	19.54	21.12
	8H	3.05	3.58	4.19	4.72	6.29	17.97	18.50	19.11	19.64	21.22
	12H	3.06	3.57	4.21	4.70	6.30	18.03	18.54	19.18	19.68	21.27
4H	2H	8.96	9.57	10.10	10.69	12.26	15.20	15.81	16.34	16.94	18.50
	3H	10.51	11.02	11.66	12.17	13.75	17.24	17.75	18.39	18.90	20.48
	4H	10.60	11.07	11.75	12.21	13.81	18.00	18.47	19.15	19.61	21.21
	6H	10.60	11.01	11.76	12.17	13.76	18.54	18.94	19.70	20.10	21.69
	8H	10.58	10.95	11.73	12.10	13.71	18.70	19.08	19.86	20.23	21.83
	12H	10.53	10.87	11.70	12.03	13.64	18.79	19.13	19.96	20.29	21.90
8H	4H	12.04	12.41	13.19	13.57	15.17	18.05	18.43	19.21	19.58	21.19
	6H	12.27	12.58	13.45	13.78	15.38	18.68	18.99	19.85	20.18	21.79
	8H	12.29	12.56	13.47	13.73	15.36	18.90	19.17	20.08	20.34	21.97
	12H	12.25	12.49	13.44	13.66	15.31	19.04	19.28	20.23	20.45	22.10
12H	4H	12.17	12.52	13.35	13.68	15.29	18.00	18.34	19.17	19.50	21.11
	6H	12.53	12.80	13.71	13.97	15.60	18.66	18.93	19.84	20.10	21.73
	8H	12.59	12.83	13.78	14.00	15.66	18.88	19.12	20.07	20.29	21.95