

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: P937930

Luminaire Tested: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

Issue Date: 12/17/2024

**Test Information**

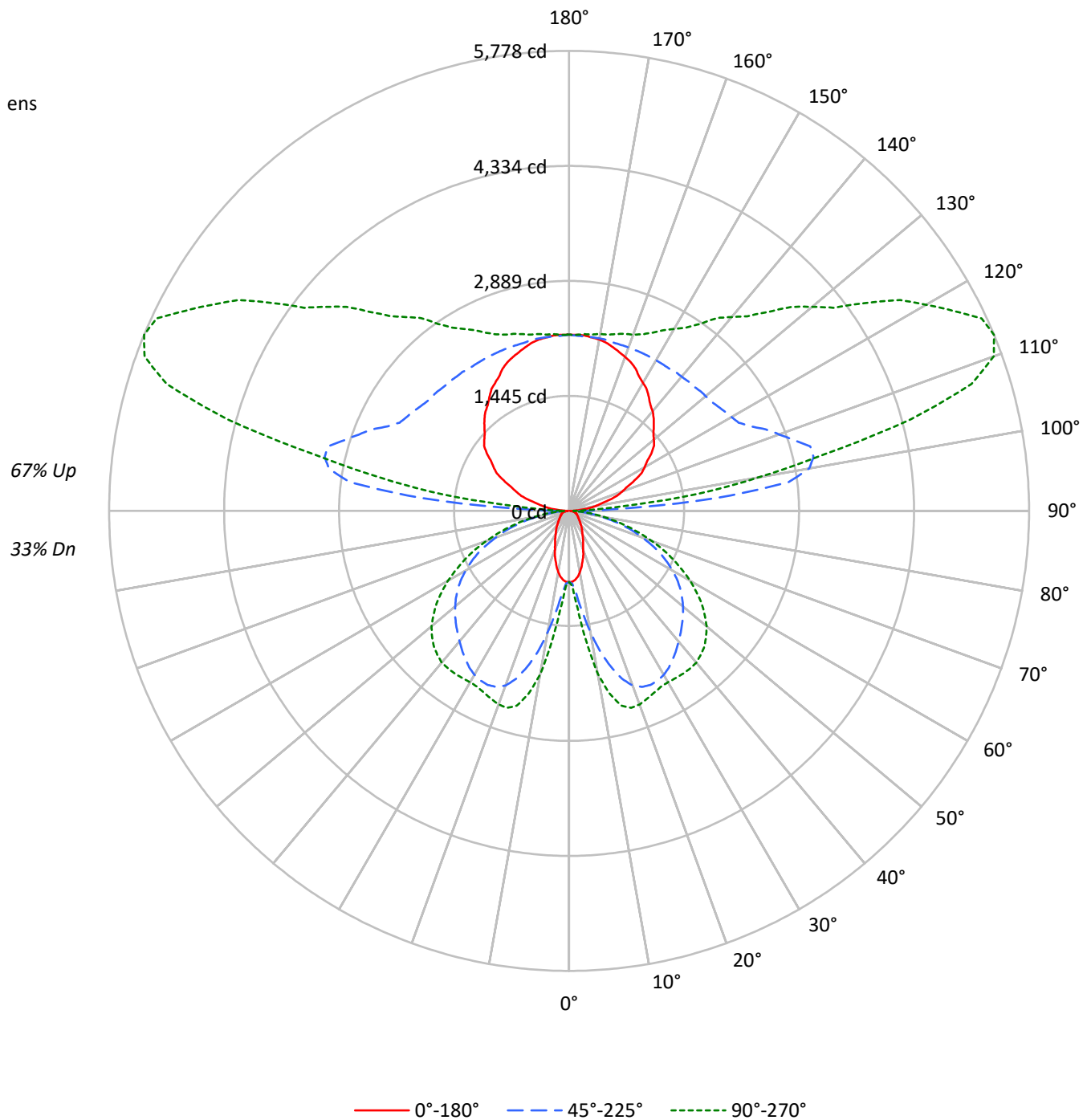
Test Method: LM-79-2019  
Report Number: P937930  
REPORT IS A COMBINATION OF REPORTS P933590 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21256.1 lumens  
Efficiency: N/A  
Efficacy: 127.4 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): 166.8  
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: P937930  
CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P937930

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

**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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

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

	0°	45°	90°
0°	2759	2759	2759
5°	2697	3190	3709
10°	2447	4652	6149
15°	2081	6079	7425
20°	1694	7046	7568
25°	1414	7375	7414
30°	1193	7423	7400
35°	1055	7302	7591
40°	920	7144	7789
45°	834	7029	7819
50°	765	6925	7690
55°	734	6773	7349
60°	752	6479	6811
65°	784	6030	6071
70°	837	5262	5129
75°	931	4294	4002
80°	1024	2982	2697
85°	930	1585	1380

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7819 cd/sqm



TEST NUMBER: P937930

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.4	0.5
10°-20°	511.5	2.4
20°-30°	894.7	4.2
30°-40°	1151.7	5.4
40°-50°	1286.4	6.1
50°-60°	1232.1	5.8
60°-70°	976.4	4.6
70°-80°	574.1	2.7
80°-90°	167.9	0.8
90°-100°	1078.7	5.1
100°-110°	2836.0	13.3
110°-120°	2940.6	13.8
120°-130°	2358.8	11.1
130°-140°	1850.8	8.7
140°-150°	1420.5	6.7
150°-160°	1023.0	4.8
160°-170°	626.0	2.9
170°-180°	211.5	1.0
0°-30°	1521.5	7.2
0°-40°	2673.2	12.6
0°-60°	5191.7	24.4
0°-90°	6910.2	32.5
90°-120°	6855.4	32.3
90°-150°	12485.5	58.7
90°-180°	14346.0	67.5
0°-180°	21256.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	869	932	1050	1188	1231	80
15°	651	1202	2025	2456	2533	181
25°	416	1363	2413	2519	2522	192
35°	281	1302	2272	2401	2496	176
45°	192	1038	2008	2301	2404	149
55°	138	660	1704	1979	2034	125
65°	109	350	1265	1423	1443	108
75°	80	215	694	763	766	84
85°	29	66	172	189	192	30
90°	15	42	113	56	56	14
95°	143	558	1858	958	652	158
105°	511	774	3135	4760	4441	542
115°	907	1102	2512	5010	5718	896
125°	1262	1416	2284	3860	4554	1121
135°	1505	1656	2213	3116	3533	1164
145°	1745	1856	2185	2658	2866	1093
155°	1972	2027	2185	2399	2468	906
165°	2128	2156	2185	2271	2299	601
175°	2213	2213	2200	2228	2228	210
180°	2213	2213	2213	2213	2213	



TEST NUMBER: P937930

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1
2.5°	892.1	892.1	897.9	900.7	906.5	909.3	915.1	920.8	938.0	940.9	946.6
5°	869.2	880.7	917.9	932.3	972.4	1027.0	1049.9	1087.3	1164.7	1187.7	1202.0
7.5°	834.8	860.6	952.4	975.3	1075.7	1219.2	1279.5	1359.8	1483.2	1543.4	1592.2
10°	780.3	834.8	998.3	1052.8	1216.4	1434.4	1546.3	1658.1	1844.6	1927.8	1959.3
12.5°	720.0	808.9	1047.0	1121.7	1356.9	1675.3	1810.2	1933.5	2145.8	2257.7	2274.9
15°	651.2	771.6	1093.0	1202.0	1506.1	1876.1	2025.3	2177.3	2375.3	2455.6	2475.7
17.5°	590.9	743.0	1136.1	1250.8	1620.8	2056.9	2208.9	2335.1	2495.8	2550.3	2564.6
20°	516.3	697.1	1164.7	1313.9	1741.3	2188.8	2335.1	2432.7	2541.7	2576.1	2581.8
22.5°	461.8	648.3	1182.0	1336.9	1821.6	2269.1	2392.5	2469.9	2544.5	2556.0	2558.9
25°	415.9	593.8	1179.1	1362.7	1890.5	2317.9	2412.6	2469.9	2513.0	2518.7	2518.7
27.5°	372.9	533.6	1167.6	1368.4	1942.1	2329.4	2404.0	2444.1	2464.2	2475.7	2475.7
30°	335.6	476.2	1138.9	1356.9	1965.1	2317.9	2378.1	2398.2	2418.3	2435.5	2444.1
32.5°	306.9	421.7	1095.9	1334.0	1967.9	2289.2	2332.3	2343.7	2372.4	2412.6	2426.9
35°	281.1	367.2	1047.0	1302.4	1950.7	2243.3	2272.0	2283.5	2340.9	2401.1	2421.2
37.5°	255.3	327.0	983.9	1247.9	1924.9	2188.8	2208.9	2229.0	2317.9	2389.6	2412.6
40°	229.5	292.6	909.3	1187.7	1884.8	2122.8	2140.1	2171.6	2289.2	2372.4	2395.4
42.5°	209.4	263.9	829.0	1124.6	1833.1	2048.3	2074.1	2120.0	2254.8	2343.7	2369.5
45°	192.2	235.2	743.0	1038.4	1767.1	1970.8	2008.1	2071.2	2214.6	2300.7	2323.6
47.5°	175.0	215.1	654.0	949.5	1695.4	1893.4	1942.1	2013.8	2160.1	2243.3	2263.4
50°	160.6	195.1	565.1	854.8	1618.0	1810.2	1867.5	1942.1	2091.3	2168.7	2194.6
52.5°	149.2	177.9	481.9	760.2	1529.0	1724.1	1790.1	1867.5	2008.1	2082.7	2099.9
55°	137.7	163.5	410.2	659.8	1437.3	1632.3	1704.0	1778.6	1916.3	1979.4	1990.9
57.5°	132.0	152.0	350.0	565.1	1339.7	1529.0	1609.4	1678.2	1807.3	1856.1	1867.5
60°	123.3	143.4	304.1	484.8	1233.6	1431.5	1500.4	1569.2	1678.2	1718.4	1727.0
62.5°	114.7	137.7	269.6	407.3	1124.6	1316.8	1385.6	1448.7	1540.5	1569.2	1580.7
65°	109.0	132.0	243.8	350.0	1012.6	1196.3	1265.1	1319.6	1394.2	1422.9	1428.6
67.5°	103.3	126.2	223.7	301.2	900.7	1075.7	1127.4	1179.1	1236.5	1265.1	1268.0
70°	94.7	120.5	206.5	266.8	786.0	938.0	981.1	1035.6	1081.5	1095.9	1104.5
72.5°	88.9	111.9	195.1	241.0	668.4	806.1	846.2	877.8	917.9	932.3	932.3
75°	80.3	100.4	183.6	215.1	547.9	659.8	694.2	725.8	757.3	763.0	754.4
77.5°	71.7	88.9	157.8	180.7	427.4	522.1	550.8	568.0	593.8	599.5	602.4
80°	60.2	77.5	123.3	140.6	309.8	384.4	404.5	418.8	441.8	441.8	447.5
82.5°	45.9	60.2	88.9	100.4	209.4	263.9	281.1	289.7	304.1	304.1	304.1
85°	28.7	37.3	57.4	66.0	126.2	160.6	172.1	175.0	186.5	189.3	189.3
87.5°	14.3	20.1	37.3	40.2	66.0	83.2	83.2	88.9	88.9	86.1	83.2
90°	14.8	26.7	38.6	41.6	65.3	97.0	112.8	100.3	75.3	56.4	56.4
92.5°	59.4	160.4	261.4	286.7	403.0	558.1	635.7	557.1	400.0	282.2	271.0
95°	142.6	327.4	512.2	558.4	991.6	1569.2	1858.0	1657.9	1258.0	958.0	924.0
97.5°	246.5	409.5	572.7	613.4	1335.7	2298.8	2780.3	2653.9	2401.1	2211.5	2146.7
100°	326.7	474.7	622.5	659.5	1461.0	2529.7	3064.0	3073.3	3091.8	3105.6	3028.6
102.5°	395.1	533.1	671.0	705.5	1518.4	2602.3	3144.2	3305.3	3627.4	3869.0	3803.1
105°	510.9	627.7	744.6	773.8	1561.0	2610.5	3135.3	3496.3	4218.5	4760.1	4724.6
107.5°	629.7	738.7	847.6	874.8	1568.9	2494.4	2957.1	3460.7	4468.0	5223.5	5232.1
110°	710.0	808.3	906.7	931.2	1557.0	2391.3	2808.5	3371.6	4497.7	5342.3	5379.4



TEST NUMBER: P937930

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	788.7	882.4	976.1	999.5	1557.4	2301.5	2673.4	3249.7	4402.2	5266.6	5323.4
115°	907.4	993.9	1080.4	1102.0	1571.9	2198.3	2511.5	3066.7	4176.9	5009.7	5088.4
117.5°	1024.8	1103.4	1182.0	1201.6	1601.0	2133.7	2400.1	2901.2	3903.2	4654.7	4742.0
120°	1093.1	1167.0	1241.0	1259.5	1624.9	2112.0	2355.6	2813.4	3729.0	4415.6	4500.4
122.5°	1160.0	1234.5	1309.1	1327.8	1659.0	2100.7	2321.4	2733.7	3558.1	4176.5	4260.1
125°	1262.5	1330.4	1398.4	1415.5	1705.1	2091.2	2284.2	2634.4	3334.8	3860.1	3937.1
127.5°	1345.7	1414.3	1483.0	1500.1	1751.1	2085.7	2253.1	2553.7	3155.1	3606.1	3671.1
130°	1390.2	1464.1	1538.0	1556.5	1784.7	2089.1	2241.2	2508.9	3044.2	3445.7	3505.8
132.5°	1436.2	1510.1	1584.1	1602.6	1812.0	2091.2	2230.8	2470.4	2949.7	3309.1	3362.9
135°	1504.6	1571.9	1639.2	1656.0	1841.7	2089.3	2213.0	2413.7	2815.0	3116.0	3162.4
137.5°	1574.4	1641.0	1707.7	1724.3	1886.2	2102.1	2210.0	2379.7	2718.9	2973.4	3011.3
140°	1632.2	1693.6	1755.0	1770.4	1913.4	2104.2	2199.6	2346.1	2639.2	2859.0	2894.5
142.5°	1676.8	1733.6	1790.4	1804.5	1936.2	2111.8	2199.6	2328.3	2585.8	2778.9	2809.4
145°	1745.1	1794.7	1844.2	1856.5	1965.9	2111.8	2184.8	2290.1	2500.6	2658.5	2681.6
147.5°	1813.4	1861.6	1909.8	1921.9	2009.5	2126.4	2184.8	2267.6	2433.3	2557.5	2576.7
150°	1858.0	1901.6	1945.2	1956.1	2032.3	2133.9	2184.8	2254.8	2394.7	2499.6	2515.1
152.5°	1904.1	1937.1	1970.1	1978.4	2047.2	2138.9	2184.8	2244.6	2364.0	2453.6	2465.4
155°	1972.3	1996.8	2021.2	2027.3	2079.8	2149.8	2184.8	2232.3	2327.4	2398.6	2406.4
157.5°	2022.9	2046.6	2070.4	2076.4	2112.5	2160.7	2184.8	2221.7	2295.6	2351.1	2356.5
160°	2057.1	2075.5	2094.1	2098.7	2127.3	2165.7	2184.8	2216.5	2279.9	2327.4	2330.5
162.5°	2091.2	2105.1	2118.9	2122.4	2143.2	2170.9	2184.8	2211.6	2265.0	2305.1	2308.1
165°	2128.3	2140.8	2153.3	2156.5	2166.0	2178.5	2184.8	2203.9	2242.2	2270.9	2274.0
167.5°	2162.5	2168.5	2174.4	2175.8	2183.8	2194.4	2199.6	2212.2	2237.2	2256.0	2257.4
170°	2184.8	2190.7	2196.7	2198.1	2198.6	2199.2	2199.6	2212.2	2237.2	2256.0	2256.0
172.5°	2196.7	2198.0	2199.3	2199.6	2199.6	2199.6	2199.6	2209.6	2229.4	2244.2	2243.0
175°	2213.0	2213.0	2213.0	2213.0	2208.5	2202.6	2199.6	2205.9	2218.5	2227.8	2227.8
177.5°	2213.0	2213.0	2213.0	2213.0	2209.6	2204.9	2202.6	2207.6	2217.4	2224.9	2223.5
180°	2213.0	2213.0	2213.0	2213.0	2213.0	2213.0	2213.0	2213.0	2213.0	2213.0	2213.0



TEST NUMBER: P937930

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	892.1	892.1
2.5°	952.4	946.6
5°	1225.0	1230.7
7.5°	1649.5	1646.7
10°	2051.1	2076.9
12.5°	2343.7	2349.5
15°	2521.6	2533.1
17.5°	2590.4	2593.3
20°	2593.3	2587.6
22.5°	2561.7	2556.0
25°	2524.4	2521.6
27.5°	2490.0	2492.9
30°	2475.7	2484.3
32.5°	2475.7	2490.0
35°	2481.4	2495.8
37.5°	2478.5	2495.8
40°	2467.1	2487.2
42.5°	2435.5	2449.9
45°	2386.8	2404.0
47.5°	2323.6	2335.1
50°	2243.3	2254.8
52.5°	2142.9	2145.8
55°	2022.4	2033.9
57.5°	1893.4	1896.2
60°	1749.9	1758.5
62.5°	1597.9	1597.9
65°	1437.3	1443.0
67.5°	1270.9	1285.2
70°	1101.6	1104.5
72.5°	935.2	935.2
75°	763.0	765.9
77.5°	599.5	599.5
80°	444.6	447.5
82.5°	306.9	312.7
85°	192.2	192.2
87.5°	88.9	80.3
90°	56.4	56.4
92.5°	226.0	181.2
95°	788.0	652.0
97.5°	1888.0	1629.3
100°	2720.3	2412.0
102.5°	3539.0	3275.0
105°	4582.7	4440.8
107.5°	5266.4	5300.8
110°	5527.2	5675.0





TEST NUMBER: P937930

CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	5550.4	5777.5
115°	5403.3	5718.1
117.5°	5091.2	5440.4
120°	4839.7	5178.9
122.5°	4594.8	4929.5
125°	4245.4	4553.7
127.5°	3931.2	4191.3
130°	3746.1	3986.4
132.5°	3578.1	3793.2
135°	3347.8	3533.3
137.5°	3163.2	3315.0
140°	3036.5	3178.4
142.5°	2931.5	3053.6
145°	2774.0	2866.5
147.5°	2653.2	2729.8
150°	2577.2	2639.3
152.5°	2512.2	2559.1
155°	2437.4	2468.4
157.5°	2378.3	2400.1
160°	2343.1	2355.6
162.5°	2319.9	2331.8
165°	2286.5	2299.2
167.5°	2262.6	2267.9
170°	2256.0	2256.0
172.5°	2238.4	2233.8
175°	2227.8	2227.8
177.5°	2218.3	2213.0
180°	2213.0	2213.0



TEST NUMBER: P937930  
 CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-6500K

**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	2.67	3.42	3.76	4.51	6.01	15.87	16.61	16.95	17.70	19.20
	3H	3.37	4.04	4.47	5.14	6.65	17.70	18.37	18.80	19.47	20.99
	4H	3.66	4.30	4.77	5.40	6.92	18.35	18.98	19.45	20.08	21.60
	6H	3.91	4.49	5.02	5.60	7.13	18.77	19.36	19.89	20.46	22.00
	8H	3.97	4.53	5.09	5.65	7.18	18.89	19.45	20.01	20.57	22.10
	12H	3.99	4.51	5.11	5.63	7.18	18.96	19.49	20.09	20.60	22.15
4H	2H	9.88	10.52	11.00	11.62	13.14	16.13	16.76	17.24	17.86	19.38
	3H	11.44	11.97	12.56	13.10	14.63	18.17	18.70	19.29	19.82	21.36
	4H	11.53	12.02	12.65	13.13	14.69	18.93	19.42	20.06	20.54	22.09
	6H	11.53	11.95	12.66	13.09	14.64	19.47	19.89	20.60	21.03	22.57
	8H	11.51	11.90	12.64	13.03	14.59	19.63	20.02	20.76	21.15	22.72
	12H	11.46	11.81	12.61	12.96	14.52	19.72	20.08	20.87	21.22	22.79
8H	4H	12.97	13.36	14.10	14.49	16.05	18.98	19.37	20.11	20.50	22.07
	6H	13.20	13.53	14.36	14.70	16.26	19.61	19.93	20.76	21.11	22.67
	8H	13.22	13.50	14.38	14.66	16.24	19.83	20.11	20.99	21.27	22.85
	12H	13.18	13.43	14.35	14.58	16.20	19.97	20.22	21.14	21.37	22.99
12H	4H	13.11	13.46	14.26	14.60	16.17	18.93	19.28	20.08	20.43	21.99
	6H	13.46	13.75	14.62	14.90	16.48	19.59	19.87	20.75	21.03	22.61
	8H	13.53	13.77	14.69	14.92	16.54	19.82	20.07	20.98	21.22	22.83