

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: P937825

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

**Test Information**

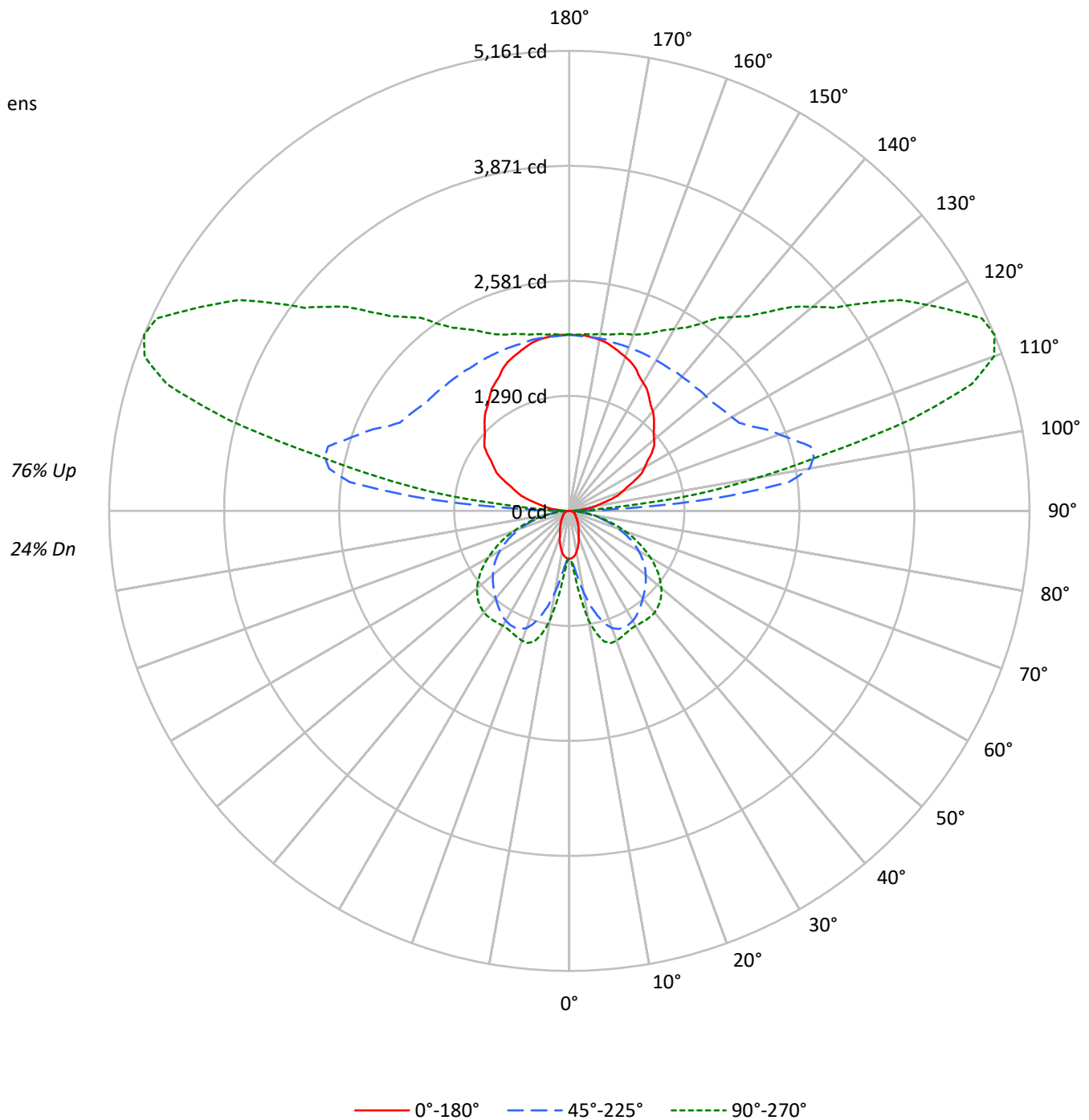
Test Method: LM-79-2019  
Report Number: P937825  
REPORT IS A COMBINATION OF REPORTS P933589 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16957.0 lumens  
Efficiency: N/A  
Efficacy: 118.7 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): 142.8  
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: P937825  
CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P937825

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

**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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

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

	0°	45°	90°
0°	1653	1653	1653
5°	1616	1911	2222
10°	1466	2787	3684
15°	1247	3642	4448
20°	1015	4221	4534
25°	847	4418	4442
30°	715	4448	4433
35°	632	4375	4548
40°	551	4280	4666
45°	499	4211	4684
50°	459	4149	4607
55°	440	4058	4403
60°	451	3882	4080
65°	470	3613	3637
70°	501	3153	3073
75°	557	2573	2398
80°	614	1786	1616
85°	557	949	827

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 4899 cd/sqm



TEST NUMBER: P937825

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	0.4
10°-20°	306.4	1.8
20°-30°	536.0	3.2
30°-40°	690.0	4.1
40°-50°	770.7	4.5
50°-60°	738.1	4.4
60°-70°	585.0	3.4
70°-80°	344.0	2.0
80°-90°	103.1	0.6
90°-100°	963.6	5.7
100°-110°	2533.3	14.9
110°-120°	2626.8	15.5
120°-130°	2107.0	12.4
130°-140°	1653.2	9.7
140°-150°	1268.9	7.5
150°-160°	913.8	5.4
160°-170°	559.1	3.3
170°-180°	188.9	1.1
0°-30°	911.6	5.4
0°-40°	1601.5	9.4
0°-60°	3110.3	18.3
0°-90°	4142.4	24.4
90°-120°	6123.6	36.1
90°-150°	11152.7	65.8
90°-180°	12815.0	75.6
0°-180°	16957.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	521	558	629	712	737	48
15°	390	720	1213	1471	1518	109
25°	249	816	1445	1509	1511	115
35°	168	780	1361	1438	1495	105
45°	115	622	1203	1378	1440	89
55°	82	395	1021	1186	1218	75
65°	65	210	758	852	864	65
75°	48	129	416	457	459	50
85°	17	40	103	113	115	18
90°	13	37	101	50	50	12
95°	127	499	1660	856	582	141
105°	456	691	2801	4252	3967	484
115°	811	984	2244	4475	5108	801
125°	1128	1264	2040	3448	4068	1001
135°	1344	1479	1977	2783	3156	1040
145°	1559	1658	1952	2375	2560	977
155°	1762	1811	1952	2143	2205	810
165°	1901	1926	1952	2028	2054	537
175°	1977	1977	1965	1990	1990	188
180°	1977	1977	1977	1977	1977	



TEST NUMBER: P937825

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5
2.5°	534.5	534.5	537.9	539.6	543.1	544.8	548.3	551.7	562.0	563.7	567.1
5°	520.8	527.6	550.0	558.5	582.6	615.2	629.0	651.4	697.7	711.5	720.1
7.5°	500.1	515.6	570.6	584.3	644.5	730.5	766.5	814.7	888.5	924.6	953.8
10°	467.5	500.1	598.1	630.8	728.7	859.3	926.3	993.4	1105.1	1155.0	1173.8
12.5°	431.3	484.6	627.3	671.9	812.9	1003.7	1084.5	1158.4	1285.5	1352.6	1362.8
15°	390.2	462.3	654.8	720.1	902.3	1123.9	1213.4	1304.4	1423.1	1471.2	1483.2
17.5°	354.0	445.1	680.6	749.3	971.1	1232.3	1323.3	1399.0	1495.2	1527.9	1536.5
20°	309.4	417.7	697.7	787.2	1043.2	1311.3	1399.0	1457.4	1522.7	1543.3	1546.7
22.5°	276.7	388.4	708.1	800.9	1091.3	1359.4	1433.3	1479.8	1524.4	1531.3	1533.0
25°	249.2	355.7	706.4	816.4	1132.6	1388.6	1445.4	1479.8	1505.5	1509.0	1509.0
27.5°	223.4	319.7	699.4	819.8	1163.5	1395.6	1440.2	1464.2	1476.3	1483.2	1483.2
30°	201.1	285.3	682.3	812.9	1177.2	1388.6	1424.8	1436.8	1448.8	1459.1	1464.2
32.5°	183.9	252.7	656.5	799.1	1179.0	1371.5	1397.3	1404.1	1421.3	1445.4	1454.0
35°	168.4	220.0	627.3	780.2	1168.7	1344.0	1361.1	1368.1	1402.4	1438.5	1450.5
37.5°	153.0	195.9	589.5	747.6	1153.2	1311.3	1323.3	1335.3	1388.6	1431.6	1445.4
40°	137.5	175.3	544.8	711.5	1129.2	1271.8	1282.1	1301.0	1371.5	1421.3	1435.0
42.5°	125.5	158.1	496.7	673.7	1098.2	1227.1	1242.6	1270.1	1350.8	1404.1	1419.6
45°	115.1	140.9	445.1	622.1	1058.7	1180.7	1203.0	1240.9	1326.8	1378.3	1392.1
47.5°	104.8	128.9	391.9	568.8	1015.7	1134.3	1163.5	1206.5	1294.1	1344.0	1356.0
50°	96.3	116.8	338.6	512.1	969.3	1084.5	1118.8	1163.5	1252.9	1299.3	1314.8
52.5°	89.3	106.6	288.7	455.4	916.1	1032.9	1072.4	1118.8	1203.0	1247.7	1258.0
55°	82.5	98.0	245.7	395.3	861.0	977.9	1020.9	1065.5	1148.0	1185.9	1192.7
57.5°	79.1	91.1	209.7	338.6	802.6	916.1	964.1	1005.4	1082.7	1112.0	1118.8
60°	73.9	85.9	182.2	290.5	739.0	857.6	898.9	940.1	1005.4	1029.5	1034.6
62.5°	68.8	82.5	161.5	244.0	673.7	788.9	830.1	867.9	922.9	940.1	947.0
65°	65.3	79.1	146.1	209.7	606.7	716.7	758.0	790.6	835.3	852.4	855.8
67.5°	61.8	75.6	134.0	180.5	539.6	644.5	675.4	706.4	740.7	758.0	759.7
70°	56.7	72.2	123.8	159.8	470.9	562.0	587.8	620.4	647.9	656.5	661.7
72.5°	53.3	67.0	116.8	144.3	400.4	482.9	507.0	525.9	550.0	558.5	558.5
75°	48.1	60.1	110.0	128.9	328.2	395.3	415.9	434.8	453.7	457.1	452.0
77.5°	43.0	53.3	94.6	108.3	256.1	312.8	329.9	340.3	355.7	359.2	360.9
80°	36.1	46.4	73.9	84.2	185.6	230.3	242.3	250.9	264.7	264.7	268.1
82.5°	27.5	36.1	53.3	60.1	125.5	158.1	168.4	173.6	182.2	182.2	182.2
85°	17.2	22.4	34.3	39.5	75.6	96.3	103.1	104.8	111.7	113.4	113.4
87.5°	8.6	12.0	22.4	24.1	39.5	49.9	49.9	53.3	53.3	51.6	49.9
90°	13.2	23.8	34.5	37.2	58.3	86.6	100.8	89.6	67.2	50.4	50.4
92.5°	53.0	143.2	233.5	256.1	360.0	498.6	567.8	497.6	357.3	252.1	242.1
95°	127.4	292.5	457.6	498.8	885.7	1401.7	1659.7	1481.0	1123.7	855.8	825.3
97.5°	220.2	365.8	511.5	547.9	1193.1	2053.4	2483.5	2370.6	2144.8	1975.4	1917.6
100°	291.9	424.0	556.0	589.1	1305.0	2259.7	2737.0	2745.3	2761.7	2774.1	2705.3
102.5°	352.9	476.2	599.3	630.2	1356.4	2324.5	2808.6	2952.5	3240.2	3456.1	3397.1
105°	456.4	560.7	665.1	691.2	1394.4	2331.9	2800.6	3123.1	3768.2	4252.0	4220.3
107.5°	562.5	659.8	757.1	781.4	1401.5	2228.2	2641.5	3091.3	3991.1	4665.9	4673.6
110°	634.2	722.0	809.9	831.8	1390.8	2136.1	2508.7	3011.7	4017.6	4772.1	4805.2



TEST NUMBER: P937825

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	704.5	788.2	871.9	892.8	1391.2	2055.8	2388.1	2902.8	3932.3	4704.5	4755.2
115°	810.6	887.8	965.1	984.4	1404.1	1963.6	2243.5	2739.4	3731.1	4474.9	4545.2
117.5°	915.5	985.6	1055.8	1073.3	1430.2	1906.0	2143.9	2591.5	3486.6	4157.8	4235.8
120°	976.4	1042.5	1108.6	1125.1	1451.4	1886.6	2104.1	2513.1	3330.9	3944.3	4020.0
122.5°	1036.1	1102.8	1169.4	1186.0	1481.9	1876.4	2073.7	2441.9	3178.3	3730.7	3805.4
125°	1127.7	1188.4	1249.2	1264.4	1523.1	1868.0	2040.4	2353.2	2978.9	3448.0	3516.9
127.5°	1202.0	1263.3	1324.7	1340.0	1564.2	1863.1	2012.6	2281.1	2818.3	3221.2	3279.3
130°	1241.8	1307.8	1373.9	1390.3	1594.2	1866.1	2002.0	2241.1	2719.3	3077.9	3131.6
132.5°	1282.9	1348.9	1415.0	1431.5	1618.6	1868.0	1992.7	2206.7	2634.8	2955.9	3004.0
135°	1344.0	1404.1	1464.2	1479.3	1645.1	1866.3	1976.8	2156.1	2514.6	2783.4	2824.9
137.5°	1406.3	1465.9	1525.4	1540.2	1684.9	1877.7	1974.1	2125.7	2428.7	2656.0	2689.9
140°	1458.0	1512.8	1567.7	1581.4	1709.2	1879.6	1964.8	2095.7	2357.5	2553.8	2585.5
142.5°	1497.8	1548.5	1599.3	1611.9	1729.5	1886.4	1964.8	2079.8	2309.8	2482.3	2509.5
145°	1558.9	1603.1	1647.4	1658.4	1756.1	1886.4	1951.6	2045.6	2233.7	2374.7	2395.4
147.5°	1619.9	1662.9	1705.9	1716.7	1795.0	1899.4	1951.6	2025.6	2173.6	2284.5	2301.6
150°	1659.7	1698.6	1737.6	1747.3	1815.4	1906.2	1951.6	2014.1	2139.1	2232.8	2246.6
152.5°	1700.8	1730.3	1759.8	1767.2	1828.7	1910.6	1951.6	2005.0	2111.7	2191.7	2202.2
155°	1761.8	1783.7	1805.5	1810.9	1857.8	1920.3	1951.6	1994.0	2078.9	2142.6	2149.5
157.5°	1807.0	1828.2	1849.4	1854.7	1887.0	1930.1	1951.6	1984.6	2050.6	2100.1	2105.0
160°	1837.5	1854.0	1870.5	1874.6	1900.3	1934.5	1951.6	1979.9	2036.5	2078.9	2081.8
162.5°	1868.0	1880.4	1892.7	1895.8	1914.4	1939.2	1951.6	1975.5	2023.3	2059.0	2061.7
165°	1901.1	1912.3	1923.5	1926.3	1934.8	1946.0	1951.6	1968.7	2002.8	2028.5	2031.3
167.5°	1931.7	1937.0	1942.3	1943.6	1950.7	1960.1	1964.8	1976.0	1998.4	2015.2	2016.4
170°	1951.6	1956.9	1962.2	1963.5	1963.9	1964.5	1964.8	1976.0	1998.4	2015.2	2015.2
172.5°	1962.2	1963.4	1964.6	1964.8	1964.8	1964.8	1964.8	1973.7	1991.4	2004.6	2003.6
175°	1976.8	1976.8	1976.8	1976.8	1972.8	1967.5	1964.8	1970.5	1981.7	1990.0	1990.0
177.5°	1976.8	1976.8	1976.8	1976.8	1973.7	1969.5	1967.5	1971.9	1980.7	1987.4	1986.2
180°	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8



TEST NUMBER: P937825

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	534.5	534.5
2.5°	570.6	567.1
5°	733.9	737.3
7.5°	988.2	986.5
10°	1228.8	1244.3
12.5°	1404.1	1407.5
15°	1510.7	1517.5
17.5°	1552.0	1553.7
20°	1553.7	1550.2
22.5°	1534.7	1531.3
25°	1512.4	1510.7
27.5°	1491.7	1493.5
30°	1483.2	1488.3
32.5°	1483.2	1491.7
35°	1486.6	1495.2
37.5°	1484.9	1495.2
40°	1478.0	1490.0
42.5°	1459.1	1467.7
45°	1429.9	1440.2
47.5°	1392.1	1399.0
50°	1344.0	1350.8
52.5°	1283.8	1285.5
55°	1211.7	1218.5
57.5°	1134.3	1136.0
60°	1048.4	1053.5
62.5°	957.3	957.3
65°	861.0	864.5
67.5°	761.4	769.9
70°	660.0	661.7
72.5°	560.3	560.3
75°	457.1	458.8
77.5°	359.2	359.2
80°	266.4	268.1
82.5°	183.9	187.3
85°	115.1	115.1
87.5°	53.3	48.1
90°	50.4	50.4
92.5°	201.9	161.9
95°	703.9	582.4
97.5°	1686.5	1455.3
100°	2429.9	2154.5
102.5°	3161.2	2925.4
105°	4093.6	3966.8
107.5°	4704.3	4734.9
110°	4937.2	5069.2





TEST NUMBER: P937825  
CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	4958.0	5160.8
115°	4826.5	5107.8
117.5°	4547.7	4859.6
120°	4323.1	4626.1
122.5°	4104.3	4403.3
125°	3792.2	4067.6
127.5°	3511.6	3743.9
130°	3346.2	3560.9
132.5°	3196.1	3388.3
135°	2990.5	3156.2
137.5°	2825.5	2961.2
140°	2712.4	2839.1
142.5°	2618.6	2727.7
145°	2477.9	2560.5
147.5°	2370.0	2438.5
150°	2302.1	2357.6
152.5°	2244.1	2285.9
155°	2177.3	2204.9
157.5°	2124.5	2143.9
160°	2093.0	2104.1
162.5°	2072.3	2082.9
165°	2042.5	2053.8
167.5°	2021.1	2025.8
170°	2015.2	2015.2
172.5°	1999.4	1995.3
175°	1990.0	1990.0
177.5°	1981.5	1976.8
180°	1976.8	1976.8



TEST NUMBER: P937825  
 CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-2700K

**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	0.00	0.43	0.89	1.57	3.16	12.93	13.62	14.08	14.76	16.35
	3H	0.44	1.05	1.59	2.20	3.80	14.77	15.38	15.92	16.53	18.13
	4H	0.72	1.31	1.89	2.46	4.07	15.41	15.99	16.57	17.14	18.75
	6H	0.97	1.50	2.13	2.65	4.28	15.83	16.37	17.00	17.52	19.14
	8H	1.03	1.54	2.20	2.70	4.32	15.95	16.46	17.12	17.63	19.24
	12H	1.04	1.53	2.22	2.68	4.32	16.01	16.50	17.19	17.66	19.30
4H	2H	6.95	7.53	8.11	8.68	10.29	13.19	13.77	14.36	14.92	16.53
	3H	8.50	8.98	9.67	10.16	11.78	15.22	15.71	16.40	16.88	18.51
	4H	8.58	9.03	9.76	10.19	11.84	15.98	16.43	17.16	17.59	19.24
	6H	8.58	8.97	9.76	10.15	11.78	16.52	16.90	17.70	18.08	19.72
	8H	8.55	8.91	9.73	10.09	11.74	16.68	17.04	17.86	18.21	19.86
	12H	8.50	8.83	9.70	10.01	11.67	16.76	17.09	17.96	18.28	19.93
8H	4H	10.01	10.38	11.19	11.55	13.20	16.03	16.39	17.21	17.56	19.21
	6H	10.25	10.55	11.45	11.76	13.41	16.65	16.95	17.85	18.17	19.81
	8H	10.26	10.52	11.47	11.72	13.38	16.87	17.13	18.08	18.33	19.99
	12H	10.22	10.45	11.43	11.64	13.34	17.01	17.24	18.22	18.43	20.13
12H	4H	10.15	10.48	11.35	11.66	13.32	15.97	16.30	17.17	17.48	19.14
	6H	10.51	10.77	11.71	11.96	13.63	16.63	16.89	17.84	18.09	19.75
	8H	10.57	10.79	11.78	11.99	13.68	16.86	17.09	18.07	18.28	19.98