

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: P938125

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938125
REPORT IS A COMBINATION OF REPORTS P933592 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-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: -

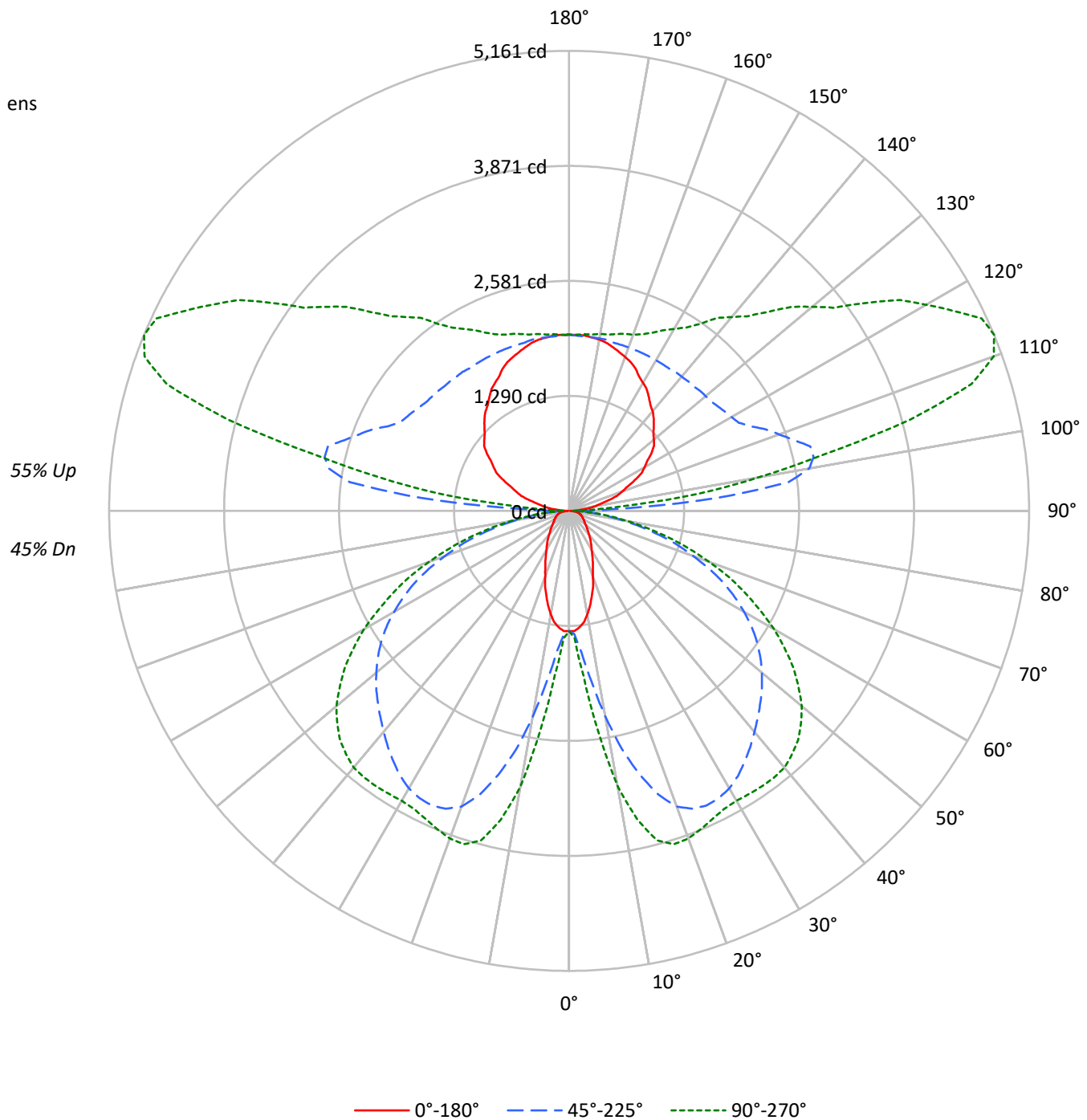
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23254.5 lumens
Efficiency: N/A
Efficacy: 103.1 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): 225.6
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

TEST NUMBER: P938125
CATALOG NUMBER: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-12-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P938125

CATALOG NUMBER: SQ4-FB-125U-125D-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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

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



TEST NUMBER: P938125

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	0.8
10°-20°	773.1	3.3
20°-30°	1352.3	5.8
30°-40°	1740.8	7.5
40°-50°	1944.4	8.4
50°-60°	1862.3	8.0
60°-70°	1475.9	6.3
70°-80°	867.9	3.7
80°-90°	248.6	1.1
90°-100°	963.6	4.1
100°-110°	2533.3	10.9
110°-120°	2626.8	11.3
120°-130°	2107.0	9.1
130°-140°	1653.2	7.1
140°-150°	1268.9	5.5
150°-160°	913.8	3.9
160°-170°	559.1	2.4
170°-180°	188.9	0.8
0°-30°	2299.9	9.9
0°-40°	4040.7	17.4
0°-60°	7847.5	33.7
0°-90°	10439.9	44.9
90°-120°	6123.6	26.3
90°-150°	11152.7	48.0
90°-180°	12815.0	55.1
0°-180°	23254.5	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°	13	37	101	50	50	14
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: P938125
 CATALOG NUMBER: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-12-2700K

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°	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: P938125

CATALOG NUMBER: SQ4-FB-125U-125D-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: P938125
 CATALOG NUMBER: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-12-2700K

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°	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: P938125
CATALOG NUMBER: SQ4-FB-125U-125D-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: P938125
 CATALOG NUMBER: SQ4-FB-125U-125D-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	5.49	6.34	6.48	7.35	8.69	18.68	19.53	19.67	20.54	21.88
	3H	6.19	6.96	7.19	7.97	9.33	20.52	21.29	21.53	22.31	23.67
	4H	6.49	7.21	7.50	8.24	9.60	21.17	21.90	22.19	22.92	24.28
	6H	6.74	7.41	7.77	8.43	9.81	21.61	22.27	22.63	23.30	24.68
	8H	6.81	7.44	7.84	8.49	9.86	21.73	22.37	22.76	23.41	24.78
	12H	6.82	7.43	7.86	8.47	9.87	21.80	22.40	22.84	23.44	24.84
4H	2H	12.71	13.43	13.73	14.46	15.82	18.95	19.68	19.97	20.70	22.06
	3H	14.28	14.88	15.31	15.93	17.31	21.00	21.61	22.03	22.66	24.04
	4H	14.37	14.93	15.41	15.97	17.37	21.77	22.33	22.81	23.37	24.77
	6H	14.38	14.86	15.43	15.92	17.32	22.31	22.79	23.36	23.86	25.26
	8H	14.36	14.80	15.41	15.86	17.28	22.48	22.93	23.53	23.98	25.40
	12H	14.31	14.72	15.38	15.79	17.21	22.57	22.98	23.64	24.05	25.47
8H	4H	15.82	16.26	16.87	17.32	18.74	21.83	22.28	22.88	23.34	24.75
	6H	16.06	16.43	17.13	17.53	18.94	22.46	22.84	23.54	23.93	25.35
	8H	16.08	16.40	17.16	17.49	18.92	22.69	23.01	23.77	24.10	25.53
	12H	16.04	16.33	17.13	17.41	18.88	22.83	23.12	23.92	24.20	25.67
12H	4H	15.96	16.37	17.03	17.44	18.86	21.78	22.19	22.85	23.26	24.68
	6H	16.32	16.65	17.40	17.73	19.16	22.45	22.77	23.53	23.86	25.29
	8H	16.39	16.67	17.47	17.75	19.22	22.68	22.97	23.76	24.04	25.52