

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: P937954

Luminaire Tested: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937954
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-93050-1D-UNV-STD-W-12-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

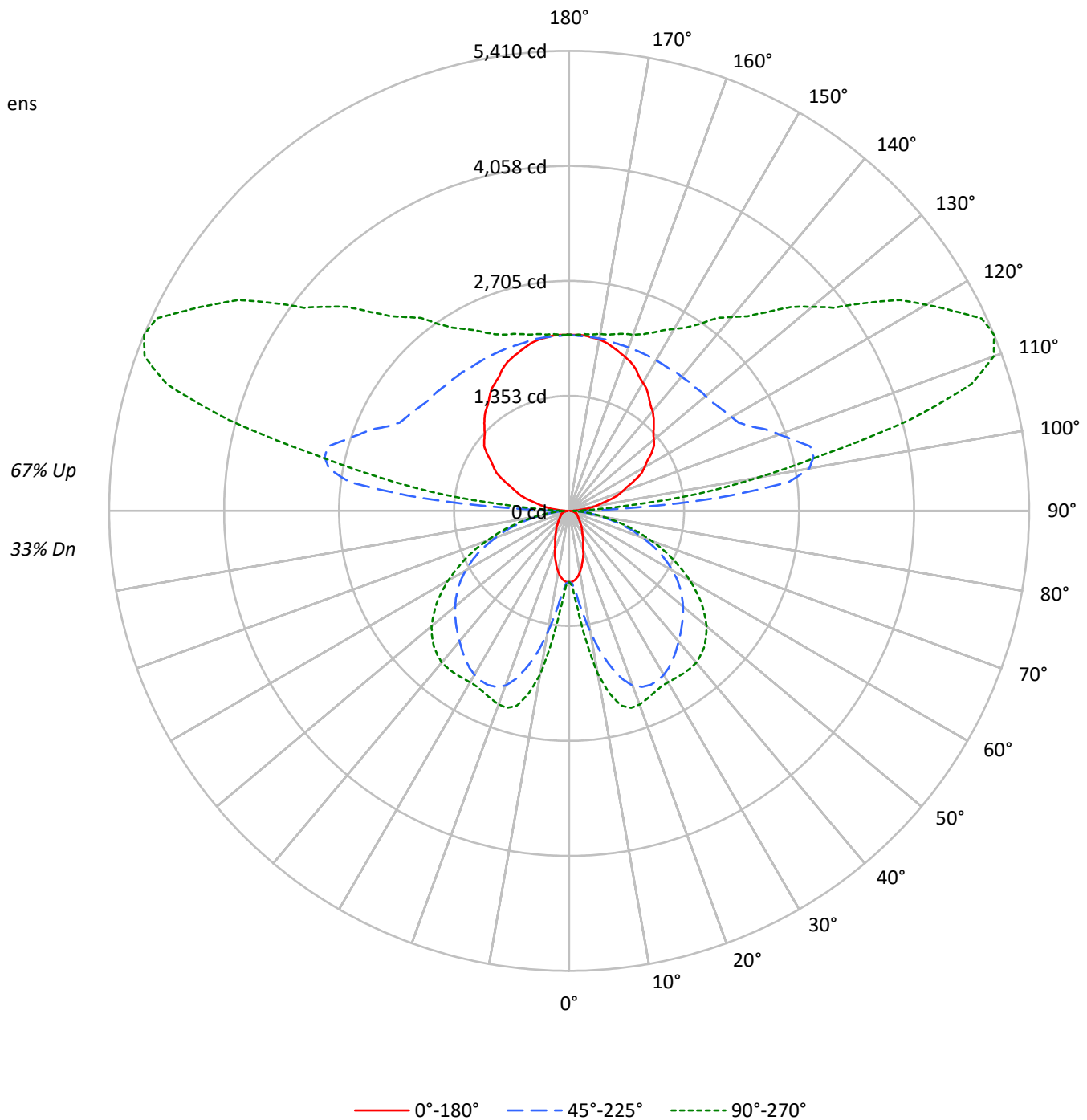
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19902.8 lumens
Efficiency: N/A
Efficacy: 119.3 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): 166.8
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: P937954
CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P937954

CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

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°	2584	2584	2584
5°	2525	2987	3473
10°	2291	4355	5758
15°	1948	5692	6953
20°	1587	6597	7086
25°	1324	6905	6942
30°	1117	6951	6928
35°	988	6837	7108
40°	862	6689	7293
45°	781	6581	7321
50°	717	6484	7200
55°	687	6342	6881
60°	704	6066	6377
65°	734	5646	5685
70°	783	4927	4803
75°	872	4021	3747
80°	959	2792	2525
85°	872	1484	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7321 cd/sqm



TEST NUMBER: P937954

CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	0.5
10°-20°	478.9	2.4
20°-30°	837.7	4.2
30°-40°	1078.4	5.4
40°-50°	1204.5	6.1
50°-60°	1153.6	5.8
60°-70°	914.3	4.6
70°-80°	537.6	2.7
80°-90°	157.3	0.8
90°-100°	1010.0	5.1
100°-110°	2655.4	13.3
110°-120°	2753.4	13.8
120°-130°	2208.6	11.1
130°-140°	1733.0	8.7
140°-150°	1330.1	6.7
150°-160°	957.9	4.8
160°-170°	586.1	2.9
170°-180°	198.0	1.0
0°-30°	1424.7	7.2
0°-40°	2503.0	12.6
0°-60°	4861.1	24.4
0°-90°	6470.2	32.5
90°-120°	6418.9	32.3
90°-150°	11690.5	58.7
90°-180°	13433.0	67.5
0°-180°	19902.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	814	873	983	1112	1152	75
15°	610	1126	1896	2299	2372	170
25°	390	1276	2259	2358	2361	179
35°	263	1220	2127	2248	2337	164
45°	180	972	1880	2154	2251	139
55°	129	618	1596	1853	1904	117
65°	102	328	1185	1332	1351	101
75°	75	201	650	714	717	79
85°	27	62	161	177	180	29
90°	14	39	106	53	53	13
95°	134	523	1740	897	610	148
105°	478	725	2936	4457	4158	507
115°	850	1032	2352	4691	5354	839
125°	1182	1325	2139	3614	4264	1049
135°	1409	1551	2072	2918	3308	1090
145°	1634	1738	2046	2489	2684	1024
155°	1847	1898	2046	2246	2311	849
165°	1993	2019	2046	2126	2153	562
175°	2072	2072	2060	2086	2086	197
180°	2072	2072	2072	2072	2072	



TEST NUMBER: P937954

CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3
2.5°	835.3	835.3	840.7	843.4	848.8	851.4	856.8	862.2	878.3	881.0	886.4
5°	813.8	824.6	859.5	872.9	910.5	961.6	983.1	1018.1	1090.6	1112.1	1125.5
7.5°	781.6	805.8	891.7	913.2	1007.2	1141.6	1198.0	1273.2	1388.7	1445.1	1490.8
10°	730.6	781.6	934.7	985.7	1138.9	1343.1	1447.8	1552.6	1727.1	1805.0	1834.6
12.5°	674.2	757.4	980.4	1050.3	1270.5	1568.7	1694.9	1810.4	2009.2	2113.9	2130.0
15°	609.7	722.5	1023.4	1125.5	1410.2	1756.7	1896.4	2038.7	2224.0	2299.3	2318.1
17.5°	553.3	695.7	1063.7	1171.2	1517.6	1925.9	2068.3	2186.4	2336.9	2387.9	2401.3
20°	483.5	652.7	1090.6	1230.2	1630.5	2049.5	2186.4	2277.8	2379.8	2412.1	2417.4
22.5°	432.4	607.0	1106.7	1251.7	1705.7	2124.7	2240.2	2312.7	2382.5	2393.3	2395.9
25°	389.5	556.0	1104.0	1275.9	1770.1	2170.3	2259.0	2312.7	2353.0	2358.3	2358.3
27.5°	349.2	499.6	1093.3	1281.3	1818.5	2181.1	2250.9	2288.5	2307.3	2318.1	2318.1
30°	314.3	445.9	1066.4	1270.5	1840.0	2170.3	2226.7	2245.5	2264.3	2280.4	2288.5
32.5°	287.4	394.8	1026.1	1249.0	1842.6	2143.5	2183.8	2194.5	2221.4	2259.0	2272.4
35°	263.2	343.8	980.4	1219.5	1826.5	2100.5	2127.4	2138.1	2191.8	2248.2	2267.0
37.5°	239.0	306.2	921.3	1168.5	1802.4	2049.5	2068.3	2087.1	2170.3	2237.5	2259.0
40°	214.9	274.0	851.4	1112.1	1764.7	1987.7	2003.8	2033.3	2143.5	2221.4	2242.8
42.5°	196.1	247.1	776.2	1053.0	1716.4	1917.8	1942.0	1985.0	2111.2	2194.5	2218.7
45°	180.0	220.2	695.7	972.3	1654.6	1845.3	1880.2	1939.3	2073.6	2154.2	2175.7
47.5°	163.8	201.4	612.4	889.0	1587.5	1772.8	1818.5	1885.6	2022.6	2100.5	2119.3
50°	150.4	182.6	529.1	800.4	1515.0	1694.9	1748.6	1818.5	1958.1	2030.7	2054.8
52.5°	139.7	166.5	451.2	711.8	1431.7	1614.3	1676.1	1748.6	1880.2	1950.1	1966.2
55°	128.9	153.1	384.1	617.8	1345.7	1528.4	1595.5	1665.4	1794.3	1853.4	1864.1
57.5°	123.6	142.4	327.7	529.1	1254.4	1431.7	1506.9	1571.4	1692.2	1737.9	1748.6
60°	115.5	134.3	284.7	453.9	1155.0	1340.4	1404.8	1469.3	1571.4	1609.0	1617.0
62.5°	107.4	128.9	252.5	381.4	1053.0	1232.9	1297.4	1356.5	1442.4	1469.3	1480.0
65°	102.1	123.6	228.3	327.7	948.1	1120.1	1184.6	1235.6	1305.5	1332.3	1337.7
67.5°	96.7	118.2	209.5	282.0	843.4	1007.2	1055.7	1104.0	1157.7	1184.6	1187.3
70°	88.6	112.8	193.4	249.8	735.9	878.3	918.6	969.6	1012.6	1026.1	1034.2
72.5°	83.3	104.8	182.6	225.6	625.8	754.7	792.4	821.9	859.5	872.9	872.9
75°	75.2	94.0	171.9	201.4	513.0	617.8	650.0	679.5	709.1	714.5	706.4
77.5°	67.1	83.3	147.7	169.2	400.2	488.8	515.7	531.8	556.0	561.4	564.0
80°	56.4	72.5	115.5	131.6	290.1	359.9	378.7	392.1	413.6	413.6	419.0
82.5°	43.0	56.4	83.3	94.0	196.1	247.1	263.2	271.3	284.7	284.7	284.7
85°	26.9	34.9	53.7	61.8	118.2	150.4	161.2	163.8	174.6	177.3	177.3
87.5°	13.4	18.8	34.9	37.6	61.8	77.9	77.9	83.3	83.3	80.6	77.9
90°	13.9	25.0	36.2	38.9	61.1	90.8	105.6	93.9	70.5	52.8	52.8
92.5°	55.6	150.1	244.8	268.4	377.4	522.6	595.2	521.6	374.5	264.2	253.7
95°	133.5	306.6	479.6	522.9	928.4	1469.3	1739.7	1552.4	1177.9	897.0	865.1
97.5°	230.8	383.5	536.2	574.3	1250.7	2152.4	2603.3	2484.9	2248.2	2070.7	2010.1
100°	305.9	444.4	582.8	617.5	1367.9	2368.6	2868.9	2877.6	2894.9	2907.9	2835.7
102.5°	369.9	499.1	628.2	660.6	1421.8	2436.6	2944.1	3094.8	3396.5	3622.7	3560.9
105°	478.4	587.8	697.2	724.6	1461.6	2444.3	2935.6	3273.7	3949.9	4457.0	4423.8
107.5°	589.7	691.6	793.6	819.1	1469.0	2335.6	2768.8	3240.4	4183.5	4890.9	4899.0
110°	664.8	756.8	848.9	871.9	1457.8	2239.1	2629.7	3157.0	4211.4	5002.2	5036.8



TEST NUMBER: P937954

CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	738.5	826.2	913.9	935.9	1458.3	2154.9	2503.2	3042.8	4121.9	4931.3	4984.5
115°	849.7	930.6	1011.6	1031.8	1471.8	2058.3	2351.6	2871.4	3911.0	4690.7	4764.4
117.5°	959.6	1033.1	1106.7	1125.0	1499.1	1997.9	2247.3	2716.5	3654.7	4358.3	4440.0
120°	1023.5	1092.7	1162.0	1179.3	1521.4	1977.6	2205.6	2634.3	3491.5	4134.5	4213.9
122.5°	1086.1	1155.9	1225.8	1243.2	1553.4	1966.9	2173.6	2559.6	3331.5	3910.5	3988.9
125°	1182.1	1245.7	1309.4	1325.3	1596.5	1958.0	2138.8	2466.7	3122.5	3614.3	3686.4
127.5°	1260.0	1324.3	1388.5	1404.6	1639.6	1952.9	2109.6	2391.1	2954.2	3376.5	3437.4
130°	1301.7	1370.9	1440.1	1457.4	1671.1	1956.1	2098.5	2349.1	2850.4	3226.3	3282.6
132.5°	1344.8	1414.0	1483.3	1500.5	1696.6	1958.0	2088.8	2313.1	2761.9	3098.4	3148.8
135°	1408.8	1471.8	1534.8	1550.6	1724.5	1956.3	2072.1	2260.0	2635.8	2917.6	2961.1
137.5°	1474.1	1536.5	1598.9	1614.5	1766.1	1968.3	2069.3	2228.2	2545.8	2784.1	2819.6
140°	1528.3	1585.8	1643.3	1657.7	1791.6	1970.2	2059.6	2196.7	2471.2	2677.0	2710.2
142.5°	1570.0	1623.2	1676.4	1689.6	1812.9	1977.4	2059.6	2180.1	2421.2	2602.0	2630.5
145°	1634.0	1680.4	1726.8	1738.3	1840.8	1977.4	2045.7	2144.3	2341.4	2489.2	2510.9
147.5°	1698.0	1743.1	1788.2	1799.5	1881.6	1991.0	2045.7	2123.2	2278.4	2394.7	2412.6
150°	1739.7	1780.5	1821.3	1831.5	1902.9	1998.1	2045.7	2111.2	2242.2	2340.4	2354.9
152.5°	1782.8	1813.7	1844.7	1852.4	1916.9	2002.7	2045.7	2101.7	2213.5	2297.4	2308.4
155°	1846.8	1869.7	1892.5	1898.2	1947.4	2012.9	2045.7	2090.2	2179.2	2245.9	2253.1
157.5°	1894.1	1916.3	1938.6	1944.2	1978.0	2023.1	2045.7	2080.3	2149.5	2201.4	2206.5
160°	1926.1	1943.4	1960.7	1965.0	1991.9	2027.8	2045.7	2075.3	2134.7	2179.2	2182.1
162.5°	1958.0	1971.0	1984.0	1987.2	2006.8	2032.7	2045.7	2070.8	2120.8	2158.3	2161.1
165°	1992.8	2004.5	2016.2	2019.2	2028.1	2039.8	2045.7	2063.6	2099.4	2126.3	2129.2
167.5°	2024.8	2030.4	2035.9	2037.3	2044.7	2054.7	2059.6	2071.3	2094.8	2112.4	2113.7
170°	2045.7	2051.2	2056.8	2058.1	2058.6	2059.2	2059.6	2071.3	2094.8	2112.4	2112.4
172.5°	2056.8	2058.1	2059.3	2059.6	2059.6	2059.6	2059.6	2068.9	2087.4	2101.3	2100.2
175°	2072.1	2072.1	2072.1	2072.1	2067.9	2062.4	2059.6	2065.5	2077.2	2086.0	2086.0
177.5°	2072.1	2072.1	2072.1	2072.1	2068.9	2064.5	2062.4	2067.0	2076.2	2083.2	2082.0
180°	2072.1	2072.1	2072.1	2072.1	2072.1	2072.1	2072.1	2072.1	2072.1	2072.1	2072.1



TEST NUMBER: P937954

CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	835.3	835.3
2.5°	891.7	886.4
5°	1147.0	1152.4
7.5°	1544.5	1541.8
10°	1920.5	1944.7
12.5°	2194.5	2199.9
15°	2361.0	2371.8
17.5°	2425.5	2428.2
20°	2428.2	2422.8
22.5°	2398.6	2393.3
25°	2363.7	2361.0
27.5°	2331.5	2334.2
30°	2318.1	2326.1
32.5°	2318.1	2331.5
35°	2323.4	2336.9
37.5°	2320.7	2336.9
40°	2310.0	2328.8
42.5°	2280.4	2293.9
45°	2234.8	2250.9
47.5°	2175.7	2186.4
50°	2100.5	2111.2
52.5°	2006.5	2009.2
55°	1893.7	1904.4
57.5°	1772.8	1775.5
60°	1638.5	1646.6
62.5°	1496.2	1496.2
65°	1345.7	1351.1
67.5°	1190.0	1203.4
70°	1031.5	1034.2
72.5°	875.6	875.6
75°	714.5	717.1
77.5°	561.4	561.4
80°	416.3	419.0
82.5°	287.4	292.8
85°	180.0	180.0
87.5°	83.3	75.2
90°	52.8	52.8
92.5°	211.7	169.7
95°	737.8	610.5
97.5°	1767.8	1525.5
100°	2547.1	2258.4
102.5°	3313.6	3066.4
105°	4291.0	4158.1
107.5°	4931.1	4963.3
110°	5175.3	5313.7



TEST NUMBER: P937954
CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5197.0	5409.7
115°	5059.2	5354.1
117.5°	4767.0	5094.0
120°	4531.5	4849.2
122.5°	4302.2	4615.6
125°	3975.1	4263.7
127.5°	3680.9	3924.4
130°	3507.6	3732.6
132.5°	3350.3	3551.7
135°	3134.7	3308.4
137.5°	2961.8	3104.0
140°	2843.2	2976.0
142.5°	2744.8	2859.2
145°	2597.4	2684.0
147.5°	2484.3	2556.0
150°	2413.1	2471.2
152.5°	2352.3	2396.1
155°	2282.2	2311.2
157.5°	2226.9	2247.3
160°	2193.9	2205.6
162.5°	2172.2	2183.3
165°	2141.0	2152.8
167.5°	2118.6	2123.5
170°	2112.4	2112.4
172.5°	2095.8	2091.5
175°	2086.0	2086.0
177.5°	2077.0	2072.1
180°	2072.1	2072.1



TEST NUMBER: P937954
 CATALOG NUMBER: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-12-3500K

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	2.45	3.19	3.53	4.28	5.78	15.64	16.38	16.73	17.47	18.97
	3H	3.14	3.81	4.24	4.91	6.43	17.47	18.14	18.57	19.24	20.76
	4H	3.43	4.07	4.54	5.17	6.69	18.12	18.75	19.22	19.85	21.37
	6H	3.68	4.26	4.80	5.37	6.90	18.55	19.13	19.66	20.23	21.77
	8H	3.74	4.30	4.86	5.42	6.95	18.67	19.22	19.79	20.34	21.87
	12H	3.76	4.29	4.88	5.40	6.95	18.73	19.26	19.86	20.37	21.93
4H	2H	9.66	10.29	10.77	11.39	12.91	15.90	16.53	17.01	17.63	19.15
	3H	11.21	11.74	12.33	12.87	14.40	17.94	18.47	19.06	19.60	21.13
	4H	11.30	11.79	12.43	12.91	14.46	18.70	19.19	19.83	20.31	21.86
	6H	11.30	11.72	12.44	12.86	14.41	19.24	19.66	20.37	20.80	22.34
	8H	11.28	11.67	12.41	12.80	14.36	19.40	19.79	20.53	20.92	22.49
	12H	11.23	11.58	12.38	12.73	14.29	19.49	19.85	20.64	20.99	22.56
8H	4H	12.74	13.13	13.87	14.26	15.82	18.75	19.14	19.88	20.28	21.84
	6H	12.97	13.30	14.13	14.47	16.03	19.38	19.70	20.53	20.88	22.44
	8H	12.99	13.27	14.15	14.43	16.01	19.60	19.89	20.76	21.04	22.62
	12H	12.95	13.20	14.12	14.35	15.97	19.74	19.99	20.91	21.14	22.76
12H	4H	12.88	13.23	14.03	14.38	15.94	18.70	19.05	19.85	20.20	21.77
	6H	13.23	13.52	14.39	14.67	16.25	19.36	19.65	20.52	20.80	22.38
	8H	13.30	13.55	14.46	14.70	16.31	19.59	19.84	20.75	20.99	22.60