

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: P938165

Luminaire Tested: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938165
REPORT IS A COMBINATION OF REPORTS P933616 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

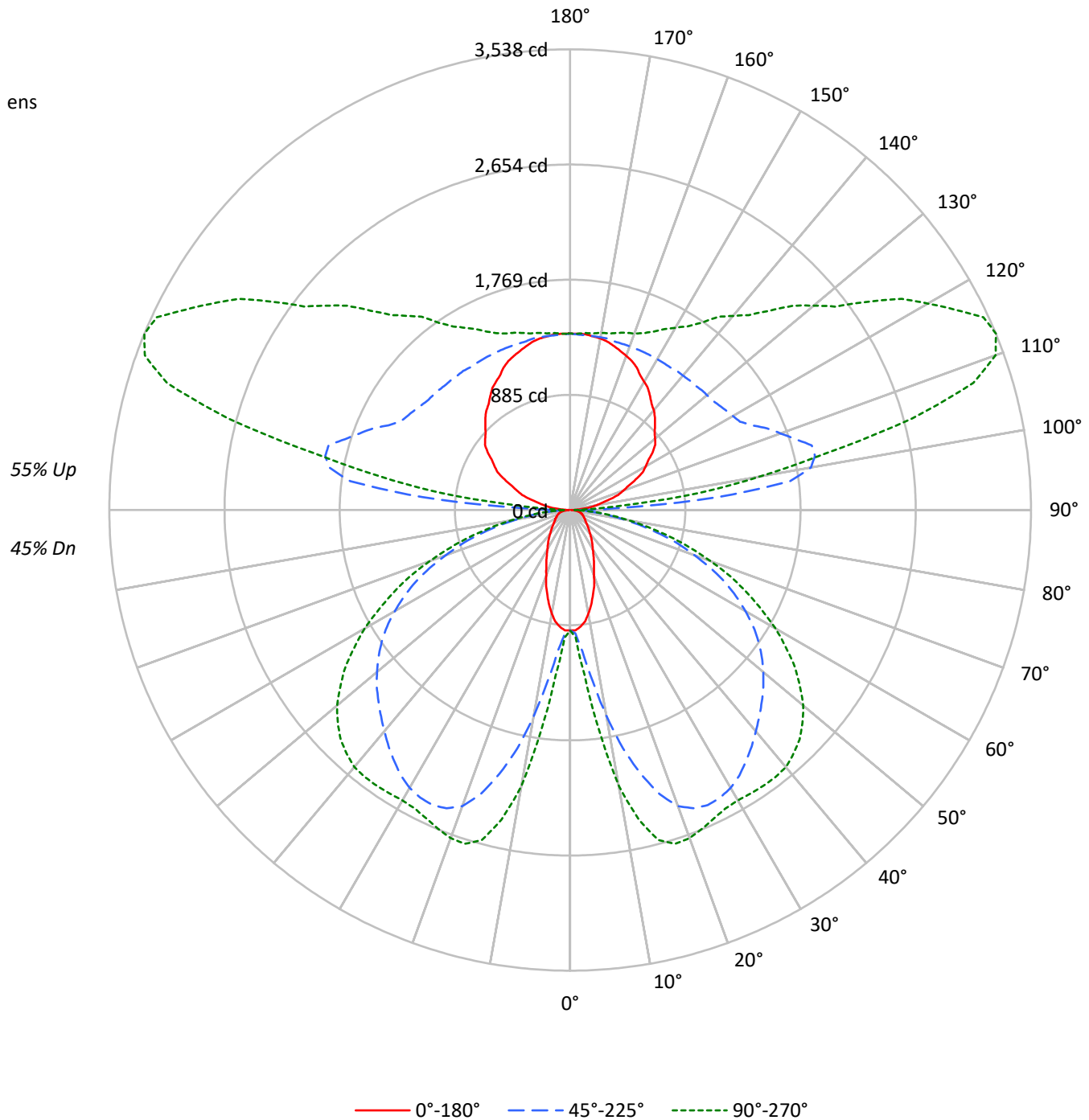
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15942.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 150.4
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: P938165
CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P938165

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

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°	4289	4289	4289
5°	4190	4958	5766
10°	3801	7227	9559
15°	3230	9441	11542
20°	2630	10941	11763
25°	2194	11450	11524
30°	1850	11521	11502
35°	1636	11331	11799
40°	1425	11082	12107
45°	1291	10900	12154
50°	1183	10736	11953
55°	1134	10496	11423
60°	1161	10035	10587
65°	1207	9335	9437
70°	1287	8140	7972
75°	1427	6637	6221
80°	1557	4603	4192
85°	1383	2443	2146

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12154 cd/sqm



TEST NUMBER: P938165

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	0.8
10°-20°	530.0	3.3
20°-30°	927.1	5.8
30°-40°	1193.4	7.5
40°-50°	1333.0	8.4
50°-60°	1276.7	8.0
60°-70°	1011.8	6.3
70°-80°	595.0	3.7
80°-90°	170.4	1.1
90°-100°	660.6	4.1
100°-110°	1736.7	10.9
110°-120°	1800.7	11.3
120°-130°	1444.4	9.1
130°-140°	1133.3	7.1
140°-150°	869.9	5.5
150°-160°	626.5	3.9
160°-170°	383.3	2.4
170°-180°	129.5	0.8
0°-30°	1576.7	9.9
0°-40°	2770.2	17.4
0°-60°	5379.9	33.7
0°-90°	7157.2	44.9
90°-120°	4198.0	26.3
90°-150°	7645.6	48.0
90°-180°	8785.0	55.1
0°-180°	15942.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	901	966	1088	1231	1275	83
15°	675	1246	2099	2545	2625	188
25°	431	1412	2500	2610	2613	199
35°	291	1350	2354	2488	2586	182
45°	199	1076	2081	2384	2491	154
55°	143	684	1766	2051	2108	130
65°	113	363	1311	1474	1495	112
75°	83	223	719	791	794	87
85°	30	68	178	196	199	32
90°	9	26	69	34	34	10
95°	87	342	1138	587	399	97
105°	313	474	1920	2915	2719	332
115°	556	675	1538	3068	3502	549
125°	773	867	1399	2364	2788	686
135°	921	1014	1355	1908	2164	713
145°	1069	1137	1338	1628	1755	669
155°	1208	1242	1338	1469	1512	555
165°	1303	1321	1338	1391	1408	368
175°	1355	1355	1347	1364	1364	129
180°	1355	1355	1355	1355	1355	



TEST NUMBER: P938165

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5
2.5°	924.5	924.5	930.5	933.5	939.3	942.3	948.3	954.3	972.1	975.1	981.0
5°	900.7	912.6	951.3	966.1	1007.8	1064.2	1088.0	1126.7	1206.9	1230.7	1245.5
7.5°	865.0	891.8	986.9	1010.7	1114.7	1263.4	1325.8	1409.1	1536.9	1599.3	1649.9
10°	808.6	865.0	1034.5	1090.9	1260.4	1486.3	1602.3	1718.2	1911.4	1997.7	2030.4
12.5°	746.1	838.3	1085.1	1162.3	1406.1	1736.0	1875.8	2003.6	2223.6	2339.5	2357.4
15°	674.8	799.7	1132.6	1245.5	1560.7	1944.1	2098.7	2256.3	2461.4	2544.6	2565.4
17.5°	612.4	769.9	1177.2	1296.1	1679.6	2131.5	2288.9	2419.8	2586.2	2642.7	2657.6
20°	535.1	722.4	1206.9	1361.5	1804.5	2268.2	2419.8	2520.8	2633.8	2669.5	2675.4
22.5°	478.6	671.8	1224.8	1385.3	1887.6	2351.4	2479.3	2559.5	2636.7	2648.7	2651.7
25°	431.1	615.3	1221.8	1412.0	1959.1	2402.0	2500.1	2559.5	2604.1	2610.0	2610.0
27.5°	386.5	552.9	1209.9	1418.0	2012.5	2413.8	2491.1	2532.8	2553.6	2565.4	2565.4
30°	347.8	493.4	1180.2	1406.1	2036.3	2402.0	2464.3	2485.2	2506.0	2523.8	2532.8
32.5°	318.1	437.0	1135.6	1382.3	2039.2	2372.2	2416.8	2428.7	2458.5	2500.1	2514.9
35°	291.3	380.5	1085.1	1349.6	2021.4	2324.7	2354.4	2366.2	2425.7	2488.1	2509.0
37.5°	264.5	338.8	1019.6	1293.1	1994.7	2268.2	2288.9	2309.8	2402.0	2476.3	2500.1
40°	237.8	303.2	942.3	1230.7	1953.1	2199.8	2217.6	2250.3	2372.2	2458.5	2482.2
42.5°	217.0	273.5	859.2	1165.3	1899.6	2122.5	2149.3	2196.8	2336.5	2428.7	2455.5
45°	199.2	243.7	769.9	1076.1	1831.2	2042.2	2080.9	2146.3	2294.9	2384.1	2407.9
47.5°	181.4	222.9	677.8	984.0	1756.9	1961.9	2012.5	2086.8	2238.4	2324.7	2345.5
50°	166.4	202.2	585.7	885.9	1676.6	1875.8	1935.2	2012.5	2167.1	2247.4	2274.1
52.5°	154.6	184.3	499.4	787.7	1584.5	1786.6	1855.0	1935.2	2080.9	2158.2	2176.0
55°	142.7	169.4	425.1	683.8	1489.3	1691.4	1765.8	1843.1	1985.8	2051.2	2063.0
57.5°	136.8	157.6	362.7	585.7	1388.2	1584.5	1667.7	1739.0	1872.8	1923.3	1935.2
60°	127.8	148.6	315.1	502.4	1278.3	1483.4	1554.7	1626.1	1739.0	1780.7	1789.5
62.5°	118.9	142.7	279.5	422.1	1165.3	1364.4	1435.8	1501.2	1596.3	1626.1	1637.9
65°	112.9	136.8	252.7	362.7	1049.4	1239.6	1311.0	1367.4	1444.7	1474.5	1480.4
67.5°	107.0	130.8	231.9	312.1	933.5	1114.7	1168.2	1221.8	1281.3	1311.0	1313.9
70°	98.1	124.9	214.0	276.5	814.5	972.1	1016.6	1073.1	1120.7	1135.6	1144.5
72.5°	92.1	115.9	202.2	249.7	692.6	835.4	877.0	909.7	951.3	966.1	966.1
75°	83.3	104.1	190.2	222.9	567.8	683.8	719.4	752.1	784.8	790.7	781.9
77.5°	74.3	92.1	163.5	187.3	442.9	541.0	570.7	588.6	615.3	621.3	624.3
80°	62.4	80.3	127.8	145.6	321.0	398.3	419.1	434.1	457.8	457.8	463.7
82.5°	47.6	62.4	92.1	104.1	217.0	273.5	291.3	300.2	315.1	315.1	315.1
85°	29.7	38.6	59.5	68.3	130.8	166.4	178.4	181.4	193.2	196.2	196.2
87.5°	14.8	20.8	38.6	41.6	68.3	86.2	86.2	92.1	92.1	89.1	86.2
90°	9.1	16.4	23.6	25.5	40.1	59.5	69.1	61.4	46.0	34.5	34.5
92.5°	36.4	98.2	160.1	175.6	246.8	341.7	389.3	341.1	245.0	172.8	165.9
95°	87.3	200.5	313.7	342.0	607.3	960.9	1137.8	1015.3	770.4	586.6	565.8
97.5°	151.0	250.8	350.7	375.6	818.0	1407.7	1702.6	1625.2	1470.4	1354.3	1314.6
100°	200.1	290.6	381.2	403.8	894.6	1549.1	1876.3	1881.9	1893.3	1901.8	1854.6
102.5°	241.9	326.4	410.9	432.0	929.9	1593.6	1925.4	2024.0	2221.3	2369.2	2328.8
105°	312.9	384.4	455.9	473.8	955.9	1598.6	1920.0	2141.0	2583.3	2914.9	2893.2
107.5°	385.7	452.3	519.0	535.7	960.7	1527.5	1810.8	2119.3	2736.1	3198.7	3204.0
110°	434.8	495.0	555.3	570.3	953.5	1464.4	1719.9	2064.7	2754.3	3271.4	3294.1



TEST NUMBER: P938165

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	483.0	540.3	597.8	612.1	953.7	1409.3	1637.1	1990.0	2695.7	3225.0	3259.8
115°	555.7	608.7	661.5	674.8	962.5	1346.2	1538.0	1877.9	2557.8	3067.7	3115.9
117.5°	627.5	675.7	723.7	735.8	980.4	1306.6	1469.7	1776.5	2390.1	2850.4	2903.8
120°	669.4	714.7	759.9	771.2	994.9	1293.3	1442.4	1722.8	2283.4	2703.9	2755.8
122.5°	710.3	756.0	801.6	813.0	1015.8	1286.3	1421.5	1674.0	2178.9	2557.5	2608.7
125°	773.1	814.7	856.3	866.7	1044.0	1280.6	1398.8	1613.3	2042.1	2363.8	2410.9
127.5°	824.0	866.1	908.1	918.6	1072.3	1277.2	1379.7	1563.8	1932.1	2208.2	2248.0
130°	851.2	896.6	941.8	953.1	1092.9	1279.2	1372.4	1536.3	1864.2	2110.0	2146.8
132.5°	879.4	924.8	970.0	981.3	1109.6	1280.6	1366.0	1512.8	1806.2	2026.3	2059.3
135°	921.3	962.5	1003.8	1014.1	1127.7	1279.3	1355.1	1478.0	1723.8	1908.1	1936.5
137.5°	964.0	1004.9	1045.7	1055.9	1155.1	1287.2	1353.3	1457.2	1665.0	1820.8	1844.1
140°	999.5	1037.1	1074.7	1084.1	1171.7	1288.6	1347.0	1436.7	1616.2	1750.8	1772.5
142.5°	1026.8	1061.6	1096.3	1105.0	1185.6	1293.2	1347.0	1425.7	1583.4	1701.6	1720.3
145°	1068.6	1098.9	1129.3	1136.9	1203.9	1293.2	1337.8	1402.3	1531.3	1628.0	1642.2
147.5°	1110.5	1140.0	1169.5	1176.9	1230.6	1302.1	1337.8	1388.6	1490.0	1566.2	1577.9
150°	1137.8	1164.5	1191.2	1197.8	1244.5	1306.7	1337.8	1380.7	1466.4	1530.7	1540.2
152.5°	1165.9	1186.1	1206.3	1211.4	1253.6	1309.7	1337.8	1374.5	1447.6	1502.5	1509.7
155°	1207.8	1222.8	1237.7	1241.5	1273.6	1316.4	1337.8	1367.0	1425.2	1468.9	1473.6
157.5°	1238.8	1253.2	1267.8	1271.4	1293.6	1323.1	1337.8	1360.5	1405.7	1439.7	1443.0
160°	1259.7	1271.0	1282.3	1285.1	1302.7	1326.1	1337.8	1357.2	1396.1	1425.1	1427.1
162.5°	1280.6	1289.0	1297.5	1299.6	1312.4	1329.3	1337.8	1354.2	1386.9	1411.5	1413.4
165°	1303.3	1311.0	1318.7	1320.6	1326.3	1334.0	1337.8	1349.6	1373.0	1390.6	1392.5
167.5°	1324.2	1327.8	1331.5	1332.4	1337.2	1343.7	1347.0	1354.6	1370.0	1381.5	1382.3
170°	1337.8	1341.5	1345.2	1346.1	1346.3	1346.8	1347.0	1354.6	1370.0	1381.5	1381.5
172.5°	1345.1	1345.9	1346.8	1347.0	1347.0	1347.0	1347.0	1353.0	1365.1	1374.3	1373.6
175°	1355.1	1355.1	1355.1	1355.1	1352.4	1348.8	1347.0	1350.8	1358.5	1364.3	1364.3
177.5°	1355.1	1355.1	1355.1	1355.1	1353.0	1350.2	1348.8	1351.8	1357.9	1362.4	1361.6
180°	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1



TEST NUMBER: P938165

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	924.5	924.5
2.5°	986.9	981.0
5°	1269.3	1275.3
7.5°	1709.3	1706.4
10°	2125.5	2152.3
12.5°	2428.7	2434.7
15°	2613.0	2624.9
17.5°	2684.4	2687.3
20°	2687.3	2681.4
22.5°	2654.7	2648.7
25°	2616.0	2613.0
27.5°	2580.3	2583.3
30°	2565.4	2574.4
32.5°	2565.4	2580.3
35°	2571.4	2586.2
37.5°	2568.4	2586.2
40°	2556.6	2577.4
42.5°	2523.8	2538.7
45°	2473.3	2491.1
47.5°	2407.9	2419.8
50°	2324.7	2336.5
52.5°	2220.6	2223.6
55°	2095.7	2107.7
57.5°	1961.9	1964.9
60°	1813.3	1822.3
62.5°	1655.8	1655.8
65°	1489.3	1495.3
67.5°	1316.9	1331.8
70°	1141.5	1144.5
72.5°	969.1	969.1
75°	790.7	793.7
77.5°	621.3	621.3
80°	460.8	463.7
82.5°	318.1	324.0
85°	199.2	199.2
87.5°	92.1	83.3
90°	34.5	34.5
92.5°	138.4	110.9
95°	482.5	399.3
97.5°	1156.2	997.7
100°	1665.8	1477.0
102.5°	2167.1	2005.4
105°	2806.3	2719.4
107.5°	3224.9	3245.9
110°	3384.6	3475.2



TEST NUMBER: P938165
CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3398.8	3537.9
115°	3308.7	3501.5
117.5°	3117.6	3331.5
120°	2963.7	3171.4
122.5°	2813.7	3018.6
125°	2599.8	2788.5
127.5°	2407.3	2566.6
130°	2293.9	2441.1
132.5°	2191.1	2322.8
135°	2050.1	2163.7
137.5°	1937.0	2030.0
140°	1859.5	1946.3
142.5°	1795.1	1869.9
145°	1698.7	1755.3
147.5°	1624.8	1671.7
150°	1578.2	1616.2
152.5°	1538.3	1567.1
155°	1492.6	1511.6
157.5°	1456.4	1469.7
160°	1434.7	1442.4
162.5°	1420.7	1427.9
165°	1400.2	1407.9
167.5°	1385.5	1388.8
170°	1381.5	1381.5
172.5°	1370.7	1367.9
175°	1364.3	1364.3
177.5°	1358.4	1355.1
180°	1355.1	1355.1



TEST NUMBER: P938165
 CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3000K

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	5.58	6.43	6.57	7.44	8.78	18.76	19.61	19.75	20.62	21.96
	3H	6.29	7.05	7.29	8.07	9.43	20.60	21.36	21.60	22.38	23.74
	4H	6.58	7.31	7.60	8.33	9.70	21.24	21.97	22.26	22.99	24.35
	6H	6.83	7.50	7.86	8.53	9.91	21.67	22.34	22.70	23.37	24.75
	8H	6.90	7.54	7.93	8.58	9.96	21.79	22.43	22.82	23.47	24.85
	12H	6.92	7.52	7.95	8.56	9.96	21.86	22.47	22.90	23.50	24.90
4H	2H	12.79	13.52	13.82	14.54	15.91	19.03	19.76	20.05	20.78	22.14
	3H	14.36	14.97	15.39	16.02	17.40	21.08	21.68	22.11	22.73	24.11
	4H	14.45	15.01	15.49	16.05	17.46	21.84	22.40	22.88	23.44	24.84
	6H	14.46	14.94	15.51	16.01	17.41	22.38	22.86	23.43	23.93	25.32
	8H	14.44	14.89	15.49	15.95	17.36	22.54	22.99	23.59	24.05	25.46
	12H	14.40	14.80	15.47	15.87	17.30	22.64	23.04	23.70	24.11	25.53
8H	4H	15.90	16.35	16.95	17.40	18.82	21.90	22.35	22.95	23.41	24.82
	6H	16.14	16.51	17.21	17.61	19.02	22.53	22.90	23.60	24.00	25.41
	8H	16.16	16.48	17.24	17.57	19.00	22.75	23.08	23.83	24.16	25.59
	12H	16.13	16.41	17.21	17.49	18.96	22.89	23.18	23.98	24.26	25.73
12H	4H	16.04	16.45	17.11	17.52	18.94	21.85	22.26	22.92	23.33	24.75
	6H	16.40	16.73	17.48	17.81	19.24	22.51	22.84	23.59	23.92	25.35
	8H	16.47	16.75	17.55	17.83	19.30	22.74	23.03	23.83	24.11	25.58