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: P938191

Luminaire Tested: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

Issue Date: 12/17/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P938191
	REPORT IS A COMBINATION OF REPORTS P933608 AND P933786
Test Lab:	INNOVATION CENTER
Issue Date:	12/17/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	CORELITE
Catalog Number:	SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K
Description:	CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continous Roll L
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	12714.5 lumens
Efficiency:	N/A
Efficacy:	112.7 lumens/watt
Spacing Criteria (0/90/45):	0.71 / 2.69 / 2.33
Luminous Opening:	Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type:	General Diffuse

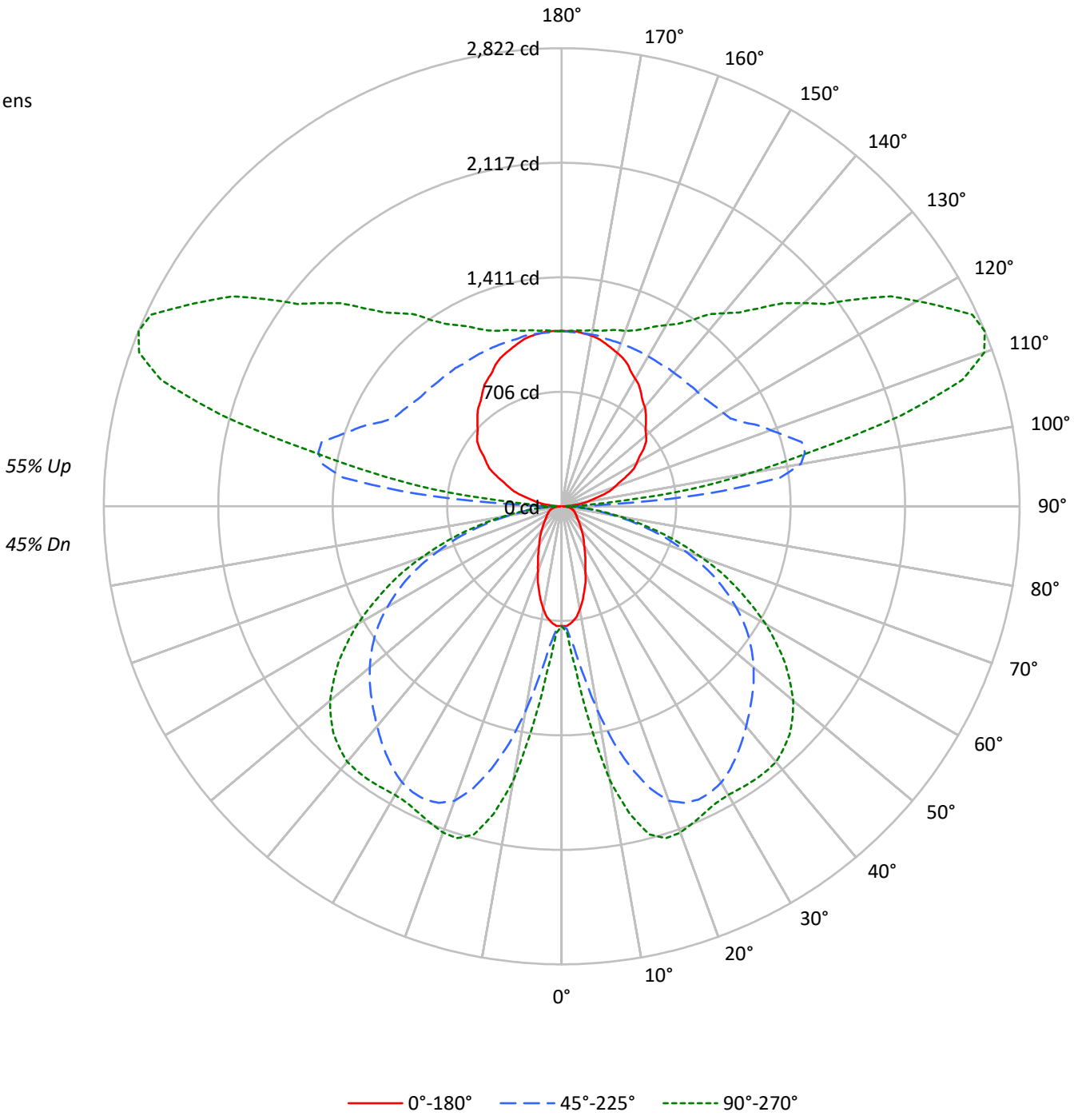
Input Watts (W):	112.8
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	4561	4561	4561
5°	4454	5270	6131
10°	4039	7681	10164
15°	3432	10033	12274
20°	2792	11623	12508
25°	2329	12160	12254
30°	1963	12234	12231
35°	1735	12027	12547
40°	1511	11760	12874
45°	1367	11563	12924
50°	1252	11385	12710
55°	1199	11127	12147
60°	1225	10634	11257
65°	1273	9885	10035
70°	1354	8615	8478
75°	1494	7019	6616
80°	1621	4862	4458
85°	1413	2574	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
Vertical Angle: 45°
Luminance: 12924 cd/sqm

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	0.8
10°-20°	422.7	3.3
20°-30°	739.4	5.8
30°-40°	951.8	7.5
40°-50°	1063.1	8.4
50°-60°	1018.2	8.0
60°-70°	807.0	6.3
70°-80°	474.5	3.7
80°-90°	135.9	1.1
90°-100°	526.8	4.1
100°-110°	1385.1	10.9
110°-120°	1436.2	11.3
120°-130°	1152.0	9.1
130°-140°	903.9	7.1
140°-150°	693.8	5.5
150°-160°	499.6	3.9
160°-170°	305.7	2.4
170°-180°	103.3	0.8
0°-30°	1257.5	9.9
0°-40°	2209.3	17.4
0°-60°	4290.6	33.7
0°-90°	5708.0	44.9
90°-120°	3348.1	26.3
90°-150°	6097.8	48.0
90°-180°	7006.0	55.1
0°-180°	12714.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	718	771	868	982	1017	66
15°	538	993	1674	2029	2094	150
25°	344	1126	1994	2082	2084	158
35°	232	1076	1878	1984	2063	145
45°	159	858	1660	1901	1987	123
55°	114	545	1408	1636	1681	104
65°	90	289	1046	1176	1192	89
75°	66	178	574	631	633	70
85°	24	54	142	156	159	25
90°	7	20	55	28	28	8
95°	70	273	908	468	318	77
105°	250	378	1531	2325	2169	265
115°	443	538	1227	2447	2793	438
125°	616	691	1116	1885	2224	547
135°	735	809	1081	1522	1726	569
145°	852	907	1067	1298	1400	534
155°	963	990	1067	1172	1206	443
165°	1039	1053	1067	1109	1123	293
175°	1081	1081	1074	1088	1088	103
180°	1081	1081	1081	1081	1081	

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3
2.5°	737.3	737.3	742.1	744.4	749.2	751.6	756.3	761.0	775.2	777.6	782.4
5°	718.3	727.9	758.7	770.6	803.7	848.7	867.7	898.5	962.6	981.5	993.4
7.5°	689.9	711.2	787.1	806.0	889.1	1007.6	1057.4	1123.8	1225.7	1275.5	1315.8
10°	644.8	689.9	825.0	870.1	1005.3	1185.4	1277.9	1370.4	1524.5	1593.2	1619.3
12.5°	595.1	668.6	865.4	927.0	1121.4	1384.6	1496.0	1597.9	1773.4	1865.9	1880.0
15°	538.2	637.7	903.3	993.4	1244.6	1550.5	1673.8	1799.4	1963.1	2029.4	2046.0
17.5°	488.4	614.0	938.9	1033.7	1339.5	1699.9	1825.5	1929.8	2062.6	2107.7	2119.5
20°	426.7	576.1	962.6	1085.9	1439.1	1809.0	1929.8	2010.4	2100.6	2129.0	2133.7
22.5°	381.7	535.8	976.8	1104.8	1505.5	1875.3	1977.3	2041.3	2102.9	2112.4	2114.8
25°	343.8	490.7	974.4	1126.1	1562.4	1915.6	1993.9	2041.3	2076.8	2081.6	2081.6
27.5°	308.2	440.9	964.9	1130.9	1605.1	1925.1	1986.7	2020.0	2036.5	2046.0	2046.0
30°	277.4	393.6	941.2	1121.4	1624.0	1915.6	1965.4	1982.0	1998.6	2012.9	2020.0
32.5°	253.7	348.5	905.6	1102.4	1626.4	1891.9	1927.5	1936.9	1960.7	1993.9	2005.7
35°	232.4	303.5	865.4	1076.3	1612.2	1854.0	1877.7	1887.1	1934.6	1984.4	2001.0
37.5°	211.0	270.3	813.2	1031.3	1590.8	1809.0	1825.5	1842.1	1915.6	1974.8	1993.9
40°	189.7	241.8	751.6	981.5	1557.6	1754.4	1768.6	1794.7	1891.9	1960.7	1979.6
42.5°	173.1	218.1	685.2	929.3	1514.9	1692.8	1714.1	1752.0	1863.4	1936.9	1958.3
45°	158.9	194.4	614.0	858.3	1460.4	1628.7	1659.5	1711.7	1830.3	1901.4	1920.4
47.5°	144.6	177.8	540.5	784.7	1401.2	1564.7	1605.1	1664.3	1785.2	1854.0	1870.6
50°	132.7	161.2	467.1	706.5	1337.1	1496.0	1543.4	1605.1	1728.4	1792.3	1813.6
52.5°	123.3	147.0	398.3	628.3	1263.6	1424.8	1479.4	1543.4	1659.5	1721.2	1735.5
55°	113.8	135.1	339.0	545.3	1187.8	1349.0	1408.3	1469.9	1583.7	1635.9	1645.3
57.5°	109.1	125.6	289.3	467.1	1107.2	1263.6	1330.0	1386.9	1493.7	1533.9	1543.4
60°	101.9	118.5	251.3	400.7	1019.5	1183.0	1240.0	1296.9	1386.9	1420.1	1427.2
62.5°	94.8	113.8	222.9	336.6	929.3	1088.2	1145.1	1197.3	1273.1	1296.9	1306.3
65°	90.1	109.1	201.6	289.3	836.9	988.6	1045.5	1090.5	1152.2	1175.9	1180.7
67.5°	85.4	104.3	184.9	248.9	744.4	889.1	931.8	974.4	1021.8	1045.5	1047.9
70°	78.3	99.6	170.7	220.5	649.6	775.2	810.8	855.8	893.8	905.6	912.8
72.5°	73.5	92.5	161.2	199.1	552.4	666.2	699.4	725.4	758.7	770.6	770.6
75°	66.4	82.9	151.8	177.8	452.8	545.3	573.8	599.8	625.9	630.6	623.5
77.5°	59.3	73.5	130.4	149.3	353.2	431.5	455.2	469.4	490.7	495.5	497.9
80°	49.8	64.0	101.9	116.2	256.0	317.7	334.3	346.1	365.1	365.1	369.9
82.5°	37.9	49.8	73.5	82.9	173.1	218.1	232.4	239.5	251.3	251.3	251.3
85°	23.7	30.8	47.4	54.5	104.3	132.7	142.2	144.6	154.1	156.4	156.4
87.5°	11.9	16.6	30.8	33.2	54.5	68.7	68.7	73.5	73.5	71.2	68.7
90°	7.3	13.1	18.9	20.3	31.8	47.4	55.1	48.9	36.7	27.6	27.6
92.5°	29.0	78.4	127.7	140.0	196.8	272.5	310.5	272.1	195.4	137.9	132.3
95°	69.7	159.9	250.1	272.7	484.3	766.4	907.5	809.8	614.4	467.8	451.2
97.5°	120.4	200.0	279.6	299.5	652.3	1122.8	1357.9	1296.2	1172.7	1080.1	1048.5
100°	159.6	231.8	304.0	322.0	713.5	1235.5	1496.5	1500.9	1510.0	1516.7	1479.1
102.5°	193.0	260.3	327.7	344.6	741.6	1270.9	1535.6	1614.2	1771.6	1889.6	1857.4
105°	249.6	306.6	363.6	377.9	762.3	1275.0	1531.3	1707.6	2060.3	2324.8	2307.4
107.5°	307.6	360.7	413.9	427.2	766.3	1218.2	1444.2	1690.3	2182.2	2551.1	2555.3
110°	346.7	394.7	442.7	454.8	760.4	1167.9	1371.7	1646.6	2196.7	2609.2	2627.2

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	*385.2*	*430.9*	*476.7*	*488.2*	*760.6*	*1124.0*	*1305.6*	*1587.1*	*2150.0*	*2572.1*	*2599.9*
115°	443.2	485.4	527.7	538.3	767.7	1073.6	1226.6	1497.8	2040.0	2446.7	2485.2
117.5°	500.5	538.9	577.2	586.8	781.9	1042.1	1172.2	1416.9	1906.3	2273.4	2315.9
120°	533.9	570.0	606.1	615.1	793.5	1031.4	1150.4	1374.0	1821.1	2156.5	2198.0
122.5°	566.6	603.0	639.4	648.5	810.2	1025.9	1133.8	1335.2	1737.8	2039.8	2080.6
125°	616.5	649.8	682.9	691.3	832.8	1021.3	1115.7	1286.7	1628.7	1885.3	1922.9
127.5°	657.2	690.7	724.2	732.6	855.3	1018.7	1100.4	1247.3	1541.0	1761.2	1793.0
130°	678.9	715.1	751.1	760.2	871.6	1020.2	1094.6	1225.3	1486.7	1682.9	1712.2
132.5°	701.4	737.6	773.6	782.7	885.0	1021.3	1089.5	1206.5	1440.6	1616.1	1642.3
135°	734.8	767.7	800.5	808.8	899.4	1020.4	1080.8	1178.8	1374.8	1521.9	1544.5
137.5°	768.9	801.5	834.1	842.2	921.2	1026.7	1079.3	1162.2	1327.9	1452.2	1470.7
140°	797.2	827.2	857.1	864.6	934.5	1027.7	1074.3	1145.8	1289.0	1396.3	1413.7
142.5°	818.9	846.7	874.4	881.3	945.7	1031.4	1074.3	1137.1	1262.9	1357.2	1372.1
145°	852.3	876.5	900.7	906.7	960.2	1031.4	1067.0	1118.5	1221.3	1298.4	1309.7
147.5°	885.7	909.2	932.8	938.7	981.4	1038.5	1067.0	1107.4	1188.4	1249.1	1258.5
150°	907.5	928.8	950.0	955.3	992.6	1042.2	1067.0	1101.2	1169.6	1220.8	1228.4
152.5°	929.9	946.0	962.2	966.2	999.8	1044.6	1067.0	1096.1	1154.5	1198.3	1204.0
155°	963.3	975.3	987.1	990.1	1015.7	1049.9	1067.0	1090.3	1136.7	1171.5	1175.3
157.5°	988.0	999.6	1011.1	1014.0	1031.7	1055.2	1067.0	1085.0	1121.2	1148.3	1150.9
160°	1004.6	1013.7	1022.7	1025.0	1039.0	1057.7	1067.0	1082.5	1113.4	1136.7	1138.2
162.5°	1021.3	1028.1	1034.9	1036.6	1046.7	1060.3	1067.0	1080.1	1106.1	1125.8	1127.2
165°	1039.4	1045.6	1051.8	1053.3	1057.8	1063.9	1067.0	1076.3	1095.1	1109.1	1110.6
167.5°	1056.2	1059.1	1062.0	1062.7	1066.5	1071.7	1074.3	1080.5	1092.7	1101.8	1102.5
170°	1067.0	1069.9	1072.8	1073.5	1073.8	1074.1	1074.3	1080.5	1092.7	1101.8	1101.8
172.5°	1072.8	1073.4	1074.1	1074.3	1074.3	1074.3	1074.3	1079.1	1088.8	1096.0	1095.5
175°	1080.8	1080.8	1080.8	1080.8	1078.7	1075.8	1074.3	1077.4	1083.5	1088.1	1088.1
177.5°	1080.8	1080.8	1080.8	1080.8	1079.1	1076.8	1075.7	1078.1	1083.0	1086.6	1086.0
180°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	737.3	*737.3*
2.5°	787.1	*782.4*
5°	1012.4	*1017.1*
7.5°	1363.3	*1360.8*
10°	1695.1	*1716.5*
12.5°	1936.9	*1941.7*
15°	2083.9	*2093.5*
17.5°	2140.8	*2143.2*
20°	2143.2	*2138.5*
22.5°	2117.1	*2112.4*
25°	2086.3	*2083.9*
27.5°	2057.9	*2060.2*
30°	2046.0	*2053.1*
32.5°	2046.0	*2057.9*
35°	2050.8	*2062.6*
37.5°	2048.4	*2062.6*
40°	2038.9	*2055.5*
42.5°	2012.9	*2024.7*
45°	1972.5	*1986.7*
47.5°	1920.4	*1929.8*
50°	1854.0	*1863.4*
52.5°	1771.0	*1773.4*
55°	1671.4	*1680.9*
57.5°	1564.7	*1567.1*
60°	1446.2	*1453.3*
62.5°	1320.6	*1320.6*
65°	1187.8	*1192.5*
67.5°	1050.3	*1062.1*
70°	910.4	*912.8*
72.5°	772.9	*772.9*
75°	630.6	*633.0*
77.5°	495.5	*495.5*
80°	367.4	*369.9*
82.5°	253.7	*258.4*
85°	158.9	*158.9*
87.5°	73.5	*66.4*
90°	27.6	*27.6*
92.5°	110.4	*88.4*
95°	384.8	*318.4*
97.5°	922.1	*795.8*
100°	1328.6	*1178.1*
102.5°	1728.4	*1599.5*
105°	2238.1	*2168.8*
107.5°	2572.0	*2588.9*
110°	2699.4	*2771.6*

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	*2710.7*	*2821.7*
115°	2638.9	*2792.7*
117.5°	2486.5	*2657.0*
120°	2363.7	*2529.4*
122.5°	2244.0	*2407.5*
125°	2073.5	*2224.0*
127.5°	1920.0	*2047.0*
130°	1829.6	*1946.9*
132.5°	1747.5	*1852.6*
135°	1635.1	*1725.7*
137.5°	1544.8	*1619.0*
140°	1483.0	*1552.3*
142.5°	1431.7	*1491.4*
145°	1354.9	*1400.0*
147.5°	1295.9	*1333.3*
150°	1258.8	*1289.0*
152.5°	1226.9	*1249.8*
155°	1190.5	*1205.6*
157.5°	1161.5	*1172.2*
160°	1144.3	*1150.4*
162.5°	1133.0	*1138.8*
165°	1116.8	*1122.9*
167.5°	1105.0	*1107.6*
170°	1101.8	*1101.8*
172.5°	1093.2	*1091.0*
175°	1088.1	*1088.1*
177.5°	1083.4	*1080.8*
180°	1080.8	*1080.8*

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P938191
CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-6-5000K

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	5.79	6.64	6.78	7.65	8.99	18.95	19.80	19.95	20.81	22.15
	3H	6.49	7.26	7.50	8.28	9.64	20.79	21.55	21.79	22.57	23.93
	4H	6.79	7.52	7.81	8.54	9.90	21.43	22.15	22.44	23.17	24.54
	6H	7.04	7.71	8.07	8.74	10.12	21.85	22.52	22.88	23.55	24.93
	8H	7.11	7.75	8.14	8.79	10.16	21.97	22.61	23.00	23.65	25.03
	12H	7.13	7.73	8.16	8.77	10.17	22.04	22.64	23.07	23.68	25.08
4H	2H	12.99	13.72	14.02	14.74	16.11	19.23	19.95	20.25	20.97	22.34
	3H	14.56	15.17	15.59	16.22	17.60	21.27	21.87	22.30	22.92	24.30
	4H	14.66	15.21	15.69	16.25	17.66	22.03	22.59	23.07	23.63	25.03
	6H	14.67	15.15	15.71	16.21	17.61	22.56	23.04	23.61	24.11	25.51
	8H	14.64	15.09	15.69	16.15	17.56	22.72	23.17	23.77	24.23	25.64
	12H	14.60	15.00	15.67	16.08	17.50	22.81	23.22	23.88	24.29	25.71
8H	4H	16.10	16.54	17.15	17.60	19.02	22.09	22.54	23.14	23.59	25.01
	6H	16.34	16.71	17.41	17.81	19.22	22.71	23.09	23.79	24.18	25.60
	8H	16.36	16.68	17.44	17.76	19.20	22.93	23.26	24.01	24.34	25.77
	12H	16.32	16.61	17.41	17.69	19.16	23.07	23.36	24.16	24.44	25.91
12H	4H	16.24	16.64	17.31	17.72	19.14	22.04	22.45	23.11	23.52	24.94
	6H	16.60	16.92	17.68	18.00	19.44	22.70	23.02	23.78	24.11	25.54
	8H	16.66	16.95	17.75	18.03	19.50	22.92	23.21	24.01	24.29	25.76

END OF REPORT