

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: P938563

Luminaire Tested: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

**Test Information**

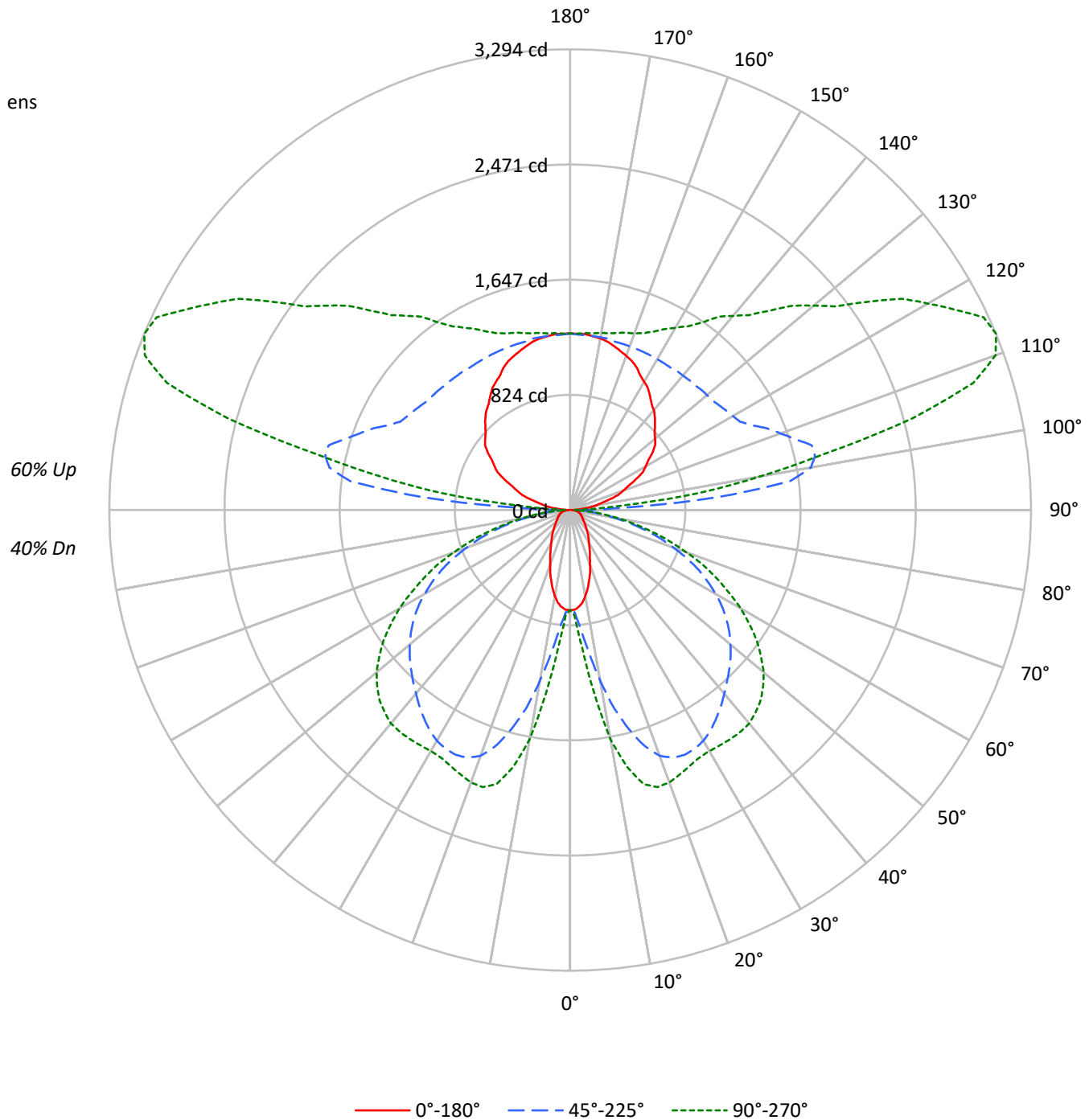
Test Method: LM-79-2019  
Report Number: P938563  
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13712.3 lumens  
Efficiency: N/A  
Efficacy: 109.9 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): 124.8  
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

TEST NUMBER: P938563  
CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P938563

CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

**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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

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

	0°	45°	90°
0°	4420	4420	4420
5°	4317	5108	5942
10°	3914	7444	9850
15°	3326	9723	11894
20°	2706	11264	12122
25°	2257	11785	11876
30°	1902	11856	11853
35°	1681	11656	12160
40°	1464	11397	12476
45°	1325	11206	12525
50°	1214	11034	12318
55°	1161	10783	11772
60°	1188	10305	10909
65°	1234	9580	9725
70°	1313	8349	8216
75°	1449	6801	6411
80°	1569	4712	4320
85°	1371	2496	2212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12525 cd/sqm



TEST NUMBER: P938563

CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.4	0.7
10°-20°	409.7	3.0
20°-30°	716.6	5.2
30°-40°	922.4	6.7
40°-50°	1030.3	7.5
50°-60°	986.8	7.2
60°-70°	782.0	5.7
70°-80°	459.9	3.4
80°-90°	132.6	1.0
90°-100°	615.1	4.5
100°-110°	1617.0	11.8
110°-120°	1676.7	12.2
120°-130°	1344.9	9.8
130°-140°	1055.3	7.7
140°-150°	810.0	5.9
150°-160°	583.3	4.3
160°-170°	356.9	2.6
170°-180°	120.6	0.9
0°-30°	1218.6	8.9
0°-40°	2141.1	15.6
0°-60°	4158.2	30.3
0°-90°	5532.6	40.3
90°-120°	3908.8	28.5
90°-150°	7118.9	51.9
90°-180°	8180.0	59.7
0°-180°	13712.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	696	747	841	951	986	64
15°	522	963	1622	1967	2029	145
25°	333	1091	1932	2017	2020	153
35°	225	1043	1820	1923	1999	141
45°	154	832	1608	1843	1925	119
55°	110	528	1365	1585	1629	100
65°	87	280	1013	1140	1156	87
75°	64	172	556	611	613	67
85°	23	53	138	152	154	24
90°	8	24	64	32	32	9
95°	81	318	1059	546	372	90
105°	291	441	1788	2714	2532	309
115°	517	628	1432	2856	3260	511
125°	720	807	1302	2201	2596	639
135°	858	944	1262	1777	2015	664
145°	995	1059	1246	1516	1634	623
155°	1125	1156	1246	1368	1407	517
165°	1214	1230	1246	1295	1311	342
175°	1262	1262	1254	1270	1270	120
180°	1262	1262	1262	1262	1262	



TEST NUMBER: P938563

CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-400K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5
2.5°	714.5	714.5	719.2	721.4	726.0	728.4	732.9	737.5	751.3	753.6	758.3
5°	696.2	705.4	735.3	746.8	778.9	822.5	840.9	870.8	932.9	951.2	962.7
7.5°	668.6	689.3	762.8	781.2	861.6	976.5	1024.7	1089.1	1187.8	1236.1	1275.2
10°	624.9	668.6	799.5	843.2	974.2	1148.8	1238.4	1328.1	1477.4	1544.0	1569.3
12.5°	576.7	647.9	838.6	898.4	1086.7	1341.8	1449.8	1548.5	1718.6	1808.2	1822.0
15°	521.6	618.0	875.4	962.7	1206.2	1502.7	1622.1	1743.9	1902.5	1966.7	1982.8
17.5°	473.3	595.1	909.9	1001.7	1298.2	1647.4	1769.1	1870.2	1999.0	2042.6	2054.1
20°	413.6	558.3	932.9	1052.3	1394.7	1753.1	1870.2	1948.4	2035.7	2063.2	2067.8
22.5°	369.9	519.3	946.6	1070.7	1459.0	1817.4	1916.2	1978.2	2038.0	2047.2	2049.5
25°	333.2	475.6	944.4	1091.4	1514.2	1856.5	1932.3	1978.2	2012.7	2017.3	2017.3
27.5°	298.7	427.3	935.1	1096.0	1555.5	1865.6	1925.4	1957.6	1973.6	1982.8	1982.8
30°	268.8	381.4	912.1	1086.7	1573.9	1856.5	1904.7	1920.8	1936.9	1950.7	1957.6
32.5°	245.8	337.7	877.6	1068.4	1576.2	1833.5	1868.0	1877.1	1900.1	1932.3	1943.7
35°	225.2	294.1	838.6	1043.1	1562.4	1796.7	1819.7	1828.9	1874.9	1923.1	1939.2
37.5°	204.5	262.0	788.1	999.5	1541.7	1753.1	1769.1	1785.2	1856.5	1913.9	1932.3
40°	183.8	234.3	728.4	951.2	1509.5	1700.3	1714.0	1739.3	1833.5	1900.1	1918.5
42.5°	167.7	211.4	664.0	900.6	1468.2	1640.5	1661.2	1697.9	1805.9	1877.1	1897.9
45°	154.0	188.4	595.1	831.8	1415.3	1578.4	1608.3	1658.9	1773.8	1842.7	1861.1
47.5°	140.1	172.3	523.8	760.5	1357.9	1516.4	1555.5	1612.9	1730.1	1796.7	1812.9
50°	128.6	156.2	452.7	684.7	1295.8	1449.8	1495.8	1555.5	1675.0	1737.0	1757.6
52.5°	119.5	142.5	386.0	608.9	1224.6	1380.8	1433.7	1495.8	1608.3	1668.0	1681.9
55°	110.2	131.0	328.6	528.4	1151.1	1307.3	1364.8	1424.5	1534.8	1585.4	1594.5
57.5°	105.7	121.7	280.3	452.7	1073.0	1224.6	1288.9	1344.1	1447.5	1486.5	1495.8
60°	98.8	114.9	243.6	388.3	988.0	1146.5	1201.7	1256.8	1344.1	1376.3	1383.2
62.5°	91.9	110.2	216.0	326.2	900.6	1054.6	1109.7	1160.3	1233.8	1256.8	1266.0
65°	87.3	105.7	195.3	280.3	811.0	958.1	1013.2	1056.9	1116.6	1139.6	1144.2
67.5°	82.7	101.1	179.2	241.2	721.4	861.6	903.0	944.4	990.2	1013.2	1015.6
70°	75.9	96.5	165.5	213.7	629.5	751.3	785.8	829.4	866.2	877.6	884.6
72.5°	71.2	89.6	156.2	193.0	535.3	645.7	677.8	703.0	735.3	746.8	746.8
75°	64.4	80.4	147.1	172.3	438.8	528.4	556.0	581.3	606.5	611.2	604.3
77.5°	57.5	71.2	126.4	144.7	342.3	418.2	441.2	454.9	475.6	480.2	482.5
80°	48.2	62.0	98.8	112.6	248.1	307.8	324.0	335.5	353.8	353.8	358.4
82.5°	36.7	48.2	71.2	80.4	167.7	211.4	225.2	232.1	243.6	243.6	243.6
85°	23.0	29.9	46.0	52.9	101.1	128.6	137.9	140.1	149.4	151.6	151.6
87.5°	11.5	16.1	29.9	32.1	52.9	66.6	66.6	71.2	71.2	69.0	66.6
90°	8.5	15.3	22.0	23.7	37.3	55.3	64.4	57.2	42.9	32.2	32.2
92.5°	33.9	91.4	149.1	163.5	229.8	318.3	362.4	317.6	228.1	160.9	154.5
95°	81.3	186.6	292.1	318.4	565.5	894.8	1059.4	945.4	717.2	546.2	526.8
97.5°	140.6	233.5	326.5	349.8	761.6	1310.8	1585.3	1513.2	1369.1	1261.0	1224.0
100°	186.3	270.6	354.9	376.0	833.0	1442.4	1747.1	1752.3	1762.9	1770.8	1726.9
102.5°	225.3	304.0	382.6	402.3	865.8	1483.7	1792.8	1884.5	2068.2	2206.0	2168.3
105°	291.3	357.9	424.5	441.2	890.0	1488.4	1787.7	1993.5	2405.3	2714.1	2693.8
107.5°	359.1	421.2	483.3	498.7	894.5	1422.2	1686.0	1973.3	2547.6	2978.3	2983.2
110°	404.8	460.9	516.9	531.0	887.8	1363.4	1601.3	1922.4	2564.5	3046.0	3067.1



TEST NUMBER: P938563

CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	449.7	503.1	556.5	569.9	888.1	1312.2	1524.3	1852.9	2510.0	3002.9	3035.3
115°	517.4	566.7	616.1	628.4	896.2	1253.4	1432.0	1748.5	2381.6	2856.3	2901.2
117.5°	584.3	629.1	673.9	685.1	912.9	1216.6	1368.5	1654.2	2225.4	2653.9	2703.7
120°	623.3	665.5	707.7	718.2	926.4	1204.2	1343.1	1604.1	2126.1	2517.6	2566.0
122.5°	661.4	703.9	746.5	757.1	945.9	1197.7	1323.6	1558.7	2028.7	2381.3	2429.0
125°	719.8	758.5	797.4	807.0	972.1	1192.4	1302.4	1502.1	1901.4	2200.9	2244.8
127.5°	767.2	806.3	845.5	855.3	998.4	1189.2	1284.6	1456.0	1798.9	2056.1	2093.2
130°	792.6	834.8	877.0	887.5	1017.7	1191.2	1277.9	1430.5	1735.7	1964.7	1998.9
132.5°	818.9	861.1	903.3	913.8	1033.2	1192.4	1271.9	1408.5	1681.8	1886.7	1917.4
135°	857.8	896.2	934.7	944.3	1050.1	1191.2	1261.8	1376.2	1605.0	1776.7	1803.1
137.5°	897.6	935.7	973.7	983.2	1075.5	1198.5	1260.1	1356.8	1550.3	1695.4	1717.0
140°	930.7	965.7	1000.7	1009.4	1091.0	1199.8	1254.2	1337.7	1504.8	1630.2	1650.4
142.5°	956.0	988.4	1020.8	1028.9	1104.0	1204.1	1254.2	1327.6	1474.3	1584.4	1601.8
145°	995.0	1023.3	1051.5	1058.6	1121.0	1204.1	1245.7	1305.7	1425.8	1515.9	1529.0
147.5°	1034.0	1061.5	1088.9	1095.8	1145.8	1212.4	1245.7	1292.9	1387.3	1458.2	1469.2
150°	1059.4	1084.2	1109.0	1115.2	1158.7	1216.7	1245.7	1285.6	1365.3	1425.2	1434.0
152.5°	1085.7	1104.5	1123.3	1128.0	1167.2	1219.5	1245.7	1279.7	1347.9	1398.9	1405.6
155°	1124.6	1138.5	1152.5	1155.9	1185.9	1225.8	1245.7	1272.7	1327.0	1367.6	1372.0
157.5°	1153.4	1166.9	1180.5	1183.9	1204.5	1231.9	1245.7	1266.8	1309.0	1340.5	1343.6
160°	1172.9	1183.4	1193.9	1196.5	1212.9	1234.7	1245.7	1263.8	1299.9	1327.0	1328.8
162.5°	1192.4	1200.2	1208.1	1210.1	1222.0	1237.8	1245.7	1260.9	1291.4	1314.3	1316.0
165°	1213.5	1220.7	1227.8	1229.6	1234.9	1242.1	1245.7	1256.6	1278.4	1294.8	1296.6
167.5°	1233.0	1236.4	1239.8	1240.6	1245.1	1251.2	1254.2	1261.3	1275.6	1286.3	1287.0
170°	1245.7	1249.0	1252.5	1253.3	1253.6	1254.0	1254.2	1261.3	1275.6	1286.3	1286.3
172.5°	1252.5	1253.2	1254.0	1254.2	1254.2	1254.2	1254.2	1259.8	1271.1	1279.5	1278.9
175°	1261.8	1261.8	1261.8	1261.8	1259.3	1255.9	1254.2	1257.7	1264.9	1270.2	1270.2
177.5°	1261.8	1261.8	1261.8	1261.8	1259.8	1257.2	1255.8	1258.6	1264.3	1268.6	1267.9
180°	1261.8	1261.8	1261.8	1261.8	1261.8	1261.8	1261.8	1261.8	1261.8	1261.8	1261.8



TEST NUMBER: P938563

CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	714.5	714.5
2.5°	762.8	758.3
5°	981.1	985.7
7.5°	1321.2	1318.8
10°	1642.8	1663.5
12.5°	1877.1	1881.7
15°	2019.6	2028.8
17.5°	2074.7	2077.1
20°	2077.1	2072.5
22.5°	2051.7	2047.2
25°	2021.9	2019.6
27.5°	1994.3	1996.6
30°	1982.8	1989.7
32.5°	1982.8	1994.3
35°	1987.5	1999.0
37.5°	1985.1	1999.0
40°	1976.0	1992.0
42.5°	1950.7	1962.2
45°	1911.6	1925.4
47.5°	1861.1	1870.2
50°	1796.7	1805.9
52.5°	1716.3	1718.6
55°	1619.8	1629.0
57.5°	1516.4	1518.7
60°	1401.6	1408.4
62.5°	1279.8	1279.8
65°	1151.1	1155.7
67.5°	1017.9	1029.3
70°	882.3	884.6
72.5°	749.0	749.0
75°	611.2	613.4
77.5°	480.2	480.2
80°	356.1	358.4
82.5°	245.8	250.5
85°	154.0	154.0
87.5°	71.2	64.4
90°	32.2	32.2
92.5°	128.9	103.3
95°	449.2	371.7
97.5°	1076.5	929.0
100°	1551.1	1375.3
102.5°	2017.8	1867.3
105°	2612.9	2532.0
107.5°	3002.8	3022.3
110°	3151.4	3235.8





TEST NUMBER: P938563  
CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3164.7	3294.2
115°	3080.7	3260.3
117.5°	2902.9	3102.0
120°	2759.5	2952.9
122.5°	2619.8	2810.6
125°	2420.6	2596.4
127.5°	2241.5	2389.8
130°	2135.9	2272.9
132.5°	2040.1	2162.8
135°	1908.9	2014.6
137.5°	1803.6	1890.2
140°	1731.3	1812.2
142.5°	1671.5	1741.1
145°	1581.7	1634.4
147.5°	1512.8	1556.5
150°	1469.4	1504.8
152.5°	1432.3	1459.1
155°	1389.7	1407.4
157.5°	1356.1	1368.5
160°	1335.9	1343.1
162.5°	1322.7	1329.5
165°	1303.7	1310.9
167.5°	1290.1	1293.1
170°	1286.3	1286.3
172.5°	1276.3	1273.7
175°	1270.2	1270.2
177.5°	1264.8	1261.8
180°	1261.8	1261.8



TEST NUMBER: P938563  
 CATALOG NUMBER: SQ4-FB-150U-125D-93050-1D-UNV-STD-W-6-4000K

**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	5.21	6.02	6.24	7.06	8.46	18.38	19.19	19.41	20.23	21.63
	3H	5.91	6.64	6.95	7.69	9.11	20.21	20.94	21.25	21.98	23.40
	4H	6.21	6.90	7.26	7.95	9.38	20.85	21.54	21.90	22.59	24.02
	6H	6.46	7.09	7.52	8.15	9.59	21.27	21.91	22.33	22.96	24.40
	8H	6.52	7.13	7.59	8.20	9.64	21.39	21.99	22.45	23.07	24.50
	12H	6.54	7.12	7.61	8.18	9.64	21.45	22.03	22.52	23.09	24.55
4H	2H	12.41	13.10	13.47	14.15	15.58	18.65	19.34	19.70	20.39	21.81
	3H	13.98	14.55	15.04	15.63	17.07	20.68	21.26	21.75	22.34	23.78
	4H	14.07	14.60	15.14	15.67	17.13	21.44	21.97	22.51	23.04	24.50
	6H	14.08	14.53	15.16	15.63	17.08	21.97	22.43	23.06	23.52	24.98
	8H	14.05	14.48	15.13	15.56	17.04	22.13	22.56	23.21	23.65	25.12
	12H	14.01	14.39	15.11	15.49	16.97	22.22	22.61	23.32	23.71	25.18
8H	4H	15.51	15.93	16.59	17.02	18.49	21.50	21.93	22.58	23.01	24.48
	6H	15.75	16.10	16.85	17.23	18.69	22.12	22.47	23.23	23.60	25.07
	8H	15.76	16.07	16.87	17.18	18.67	22.34	22.65	23.45	23.76	25.25
	12H	15.73	16.00	16.84	17.11	18.63	22.48	22.75	23.59	23.86	25.38
12H	4H	15.65	16.03	16.75	17.13	18.61	21.45	21.84	22.55	22.93	24.41
	6H	16.00	16.31	17.11	17.42	18.91	22.10	22.41	23.22	23.52	25.01
	8H	16.07	16.34	17.18	17.45	18.97	22.33	22.60	23.44	23.71	25.23