

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: P938523

Luminaire Tested: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

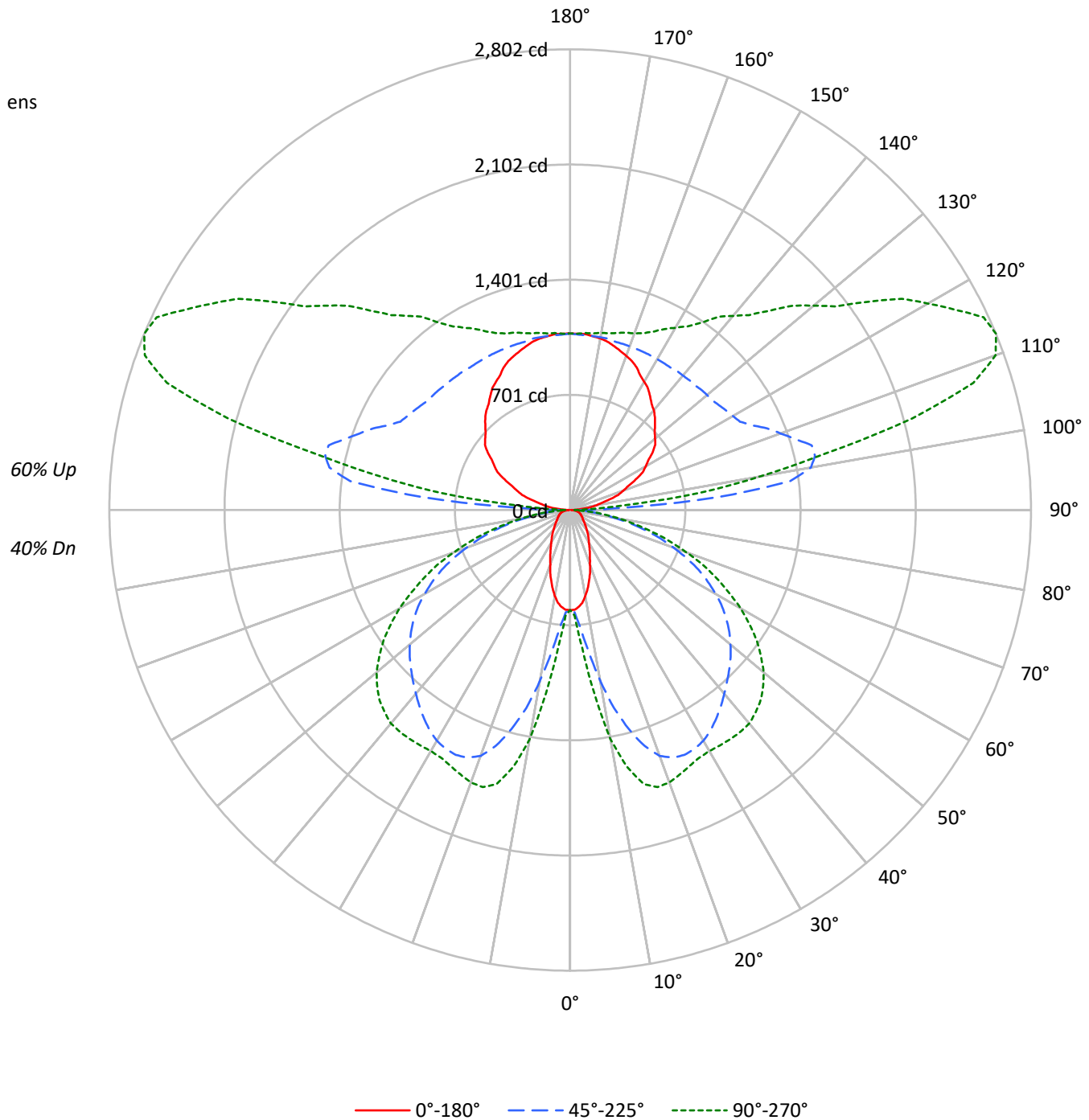
Test Method: LM-79-2019  
Report Number: P938523  
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11664.7 lumens  
Efficiency: N/A  
Efficacy: 93.5 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 (A<sub>in</sub>): 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: P938523  
CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P938523

CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

**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	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°	3760	3760	3760
5°	3672	4345	5054
10°	3330	6332	8380
15°	2829	8271	10118
20°	2302	9582	10312
25°	1919	10025	10102
30°	1618	10086	10083
35°	1430	9916	10344
40°	1246	9695	10613
45°	1127	9532	10655
50°	1032	9386	10478
55°	988	9173	10014
60°	1010	8767	9280
65°	1050	8149	8273
70°	1116	7102	6989
75°	1231	5786	5454
80°	1334	4008	3675
85°	1169	2123	1882

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10655 cd/sqm



TEST NUMBER: P938523

CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.6	0.7
10°-20°	348.5	3.0
20°-30°	609.6	5.2
30°-40°	784.7	6.7
40°-50°	876.5	7.5
50°-60°	839.4	7.2
60°-70°	665.3	5.7
70°-80°	391.2	3.4
80°-90°	112.8	1.0
90°-100°	523.2	4.5
100°-110°	1375.6	11.8
110°-120°	1426.3	12.2
120°-130°	1144.1	9.8
130°-140°	897.7	7.7
140°-150°	689.0	5.9
150°-160°	496.2	4.3
160°-170°	303.6	2.6
170°-180°	102.6	0.9
0°-30°	1036.7	8.9
0°-40°	1821.4	15.6
0°-60°	3537.3	30.3
0°-90°	4706.5	40.3
90°-120°	3325.1	28.5
90°-150°	6055.9	51.9
90°-180°	6958.0	59.6
0°-180°	11664.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	592	635	715	809	838	55
15°	444	819	1380	1673	1726	123
25°	283	928	1644	1716	1718	131
35°	192	887	1548	1636	1700	120
45°	131	708	1368	1568	1638	101
55°	94	450	1161	1349	1386	85
65°	74	238	862	969	983	74
75°	55	147	473	520	522	57
85°	20	45	117	129	131	21
90°	7	20	55	27	27	7
95°	69	271	901	465	316	77
105°	248	375	1521	2309	2154	263
115°	440	534	1218	2430	2774	435
125°	612	686	1108	1872	2209	544
135°	730	803	1073	1511	1714	565
145°	846	900	1060	1290	1390	530
155°	957	983	1060	1163	1197	440
165°	1032	1046	1060	1102	1115	291
175°	1073	1073	1067	1080	1080	102
180°	1073	1073	1073	1073	1073	



TEST NUMBER: P938523

CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8
2.5°	607.8	607.8	611.8	613.7	617.6	619.6	623.5	627.4	639.1	641.1	645.0
5°	592.2	600.1	625.5	635.2	662.6	699.7	715.3	740.7	793.6	809.2	819.0
7.5°	568.8	586.4	648.9	664.5	733.0	830.7	871.7	926.5	1010.5	1051.5	1084.8
10°	531.6	568.8	680.1	717.3	828.8	977.3	1053.5	1129.7	1256.8	1313.5	1334.9
12.5°	490.6	551.2	713.4	764.2	924.5	1141.4	1233.3	1317.3	1462.0	1538.2	1549.9
15°	443.7	525.8	744.7	819.0	1026.1	1278.3	1379.9	1483.5	1618.4	1673.1	1686.8
17.5°	402.6	506.2	774.0	852.2	1104.3	1401.4	1505.0	1591.0	1700.5	1737.6	1747.4
20°	351.8	474.9	793.6	895.2	1186.4	1491.3	1591.0	1657.4	1731.7	1755.1	1759.1
22.5°	314.7	441.7	805.3	910.8	1241.2	1546.0	1630.1	1682.8	1733.7	1741.5	1743.4
25°	283.4	404.6	803.3	928.4	1288.1	1579.3	1643.8	1682.8	1712.2	1716.1	1716.1
27.5°	254.1	363.5	795.5	932.3	1323.2	1587.0	1637.9	1665.3	1678.9	1686.8	1686.8
30°	228.7	324.5	775.9	924.5	1338.9	1579.3	1620.3	1634.0	1647.6	1659.4	1665.3
32.5°	209.1	287.3	746.6	908.8	1340.8	1559.7	1589.0	1596.8	1616.4	1643.8	1653.5
35°	191.6	250.2	713.4	887.3	1329.1	1528.4	1548.0	1555.8	1594.9	1635.9	1649.6
37.5°	173.9	222.8	670.4	850.2	1311.5	1491.3	1505.0	1518.7	1579.3	1628.1	1643.8
40°	156.4	199.4	619.6	809.2	1284.1	1446.4	1458.1	1479.6	1559.7	1616.4	1632.0
42.5°	142.7	179.8	564.9	766.2	1248.9	1395.5	1413.1	1444.4	1536.2	1596.8	1614.5
45°	131.0	160.2	506.2	707.6	1204.0	1342.7	1368.1	1411.2	1508.9	1567.6	1583.2
47.5°	119.2	146.6	445.6	647.0	1155.2	1290.0	1323.2	1372.1	1471.8	1528.4	1542.2
50°	109.4	132.9	385.1	582.4	1102.3	1233.3	1272.4	1323.2	1424.9	1477.6	1495.2
52.5°	101.6	121.2	328.3	518.0	1041.7	1174.6	1219.6	1272.4	1368.1	1419.0	1430.7
55°	93.8	111.4	279.5	449.5	979.2	1112.1	1161.0	1211.8	1305.6	1348.7	1356.4
57.5°	89.9	103.6	238.5	385.1	912.8	1041.7	1096.5	1143.4	1231.4	1264.6	1272.4
60°	84.0	97.7	207.2	330.3	840.5	975.3	1022.3	1069.1	1143.4	1170.8	1176.6
62.5°	78.2	93.8	183.7	277.5	766.2	897.1	944.0	987.1	1049.6	1069.1	1076.9
65°	74.3	89.9	166.2	238.5	689.9	815.0	861.9	899.1	949.9	969.4	973.4
67.5°	70.4	86.0	152.5	205.2	613.7	733.0	768.2	803.3	842.4	861.9	863.9
70°	64.5	82.1	140.8	181.8	535.5	639.1	668.4	705.6	736.9	746.6	752.5
72.5°	60.6	76.2	132.9	164.2	455.4	549.2	576.6	598.1	625.5	635.2	635.2
75°	54.7	68.4	125.1	146.6	373.3	449.5	473.0	494.5	516.0	519.9	514.1
77.5°	48.9	60.6	107.5	123.1	291.2	355.7	375.3	387.0	404.6	408.5	410.5
80°	41.0	52.7	84.0	95.8	211.1	261.9	275.6	285.4	301.0	301.0	304.9
82.5°	31.3	41.0	60.6	68.4	142.7	179.8	191.6	197.4	207.2	207.2	207.2
85°	19.6	25.4	39.1	45.0	86.0	109.4	117.3	119.2	127.0	129.0	129.0
87.5°	9.8	13.7	25.4	27.3	45.0	56.7	56.7	60.6	60.6	58.7	56.7
90°	7.2	13.0	18.7	20.2	31.7	47.0	54.7	48.7	36.5	27.4	27.4
92.5°	28.8	77.8	126.8	139.1	195.5	270.7	308.3	270.2	194.0	136.9	131.4
95°	69.1	158.8	248.5	270.9	481.0	761.1	901.2	804.2	610.1	464.6	448.1
97.5°	119.6	198.7	277.7	297.5	647.9	1115.0	1348.6	1287.3	1164.6	1072.7	1041.3
100°	158.5	230.2	301.9	319.9	708.6	1227.0	1486.2	1490.6	1499.7	1506.4	1469.0
102.5°	191.7	258.6	325.5	342.2	736.5	1262.2	1525.1	1603.1	1759.4	1876.6	1844.5
105°	247.8	304.5	361.1	375.3	757.1	1266.2	1520.8	1695.8	2046.1	2308.8	2291.6
107.5°	305.5	358.3	411.1	424.3	760.9	1209.8	1434.3	1678.6	2167.2	2533.6	2537.8
110°	344.3	392.1	439.7	451.7	755.2	1159.9	1362.2	1635.3	2181.6	2591.2	2609.1



TEST NUMBER: P938523

CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	382.5	428.0	473.4	484.8	755.4	1116.3	1296.7	1576.2	2135.2	2554.5	2582.0
115°	440.1	482.1	524.1	534.5	762.4	1066.2	1218.1	1487.4	2025.9	2429.8	2468.0
117.5°	497.0	535.2	573.3	582.8	776.6	1035.0	1164.2	1407.2	1893.1	2257.6	2300.0
120°	530.2	566.1	602.0	610.9	788.1	1024.4	1142.5	1364.6	1808.7	2141.7	2182.8
122.5°	562.6	598.8	635.0	644.0	804.6	1018.9	1126.0	1325.9	1725.8	2025.7	2066.3
125°	612.3	645.3	678.3	686.5	827.0	1014.3	1108.0	1277.8	1617.5	1872.3	1909.6
127.5°	652.7	685.9	719.3	727.6	849.3	1011.6	1092.8	1238.6	1530.3	1749.1	1780.6
130°	674.3	710.2	746.1	755.0	865.7	1013.3	1087.1	1216.9	1476.6	1671.3	1700.4
132.5°	696.6	732.5	768.4	777.3	878.9	1014.3	1082.0	1198.2	1430.7	1605.0	1631.1
135°	729.7	762.4	795.1	803.3	893.3	1013.3	1073.4	1170.7	1365.4	1511.4	1533.8
137.5°	763.6	795.9	828.3	836.4	914.9	1019.6	1071.9	1154.2	1318.8	1442.2	1460.6
140°	791.7	821.5	851.2	858.7	928.1	1020.6	1066.9	1138.0	1280.1	1386.8	1403.9
142.5°	813.3	840.8	868.4	875.3	939.2	1024.3	1066.9	1129.4	1254.2	1347.8	1362.6
145°	846.5	870.5	894.5	900.5	953.6	1024.3	1059.7	1110.7	1212.9	1289.5	1300.7
147.5°	879.6	903.0	926.3	932.2	974.7	1031.3	1059.7	1099.9	1180.2	1240.5	1249.8
150°	901.2	922.3	943.4	948.7	985.7	1035.0	1059.7	1093.6	1161.5	1212.4	1219.9
152.5°	923.5	939.6	955.6	959.6	992.9	1037.4	1059.7	1088.6	1146.6	1190.0	1195.7
155°	956.6	968.5	980.4	983.3	1008.8	1042.7	1059.7	1082.7	1128.8	1163.4	1167.2
157.5°	981.1	992.7	1004.2	1007.1	1024.6	1048.0	1059.7	1077.6	1113.5	1140.4	1143.0
160°	997.8	1006.7	1015.6	1017.9	1031.8	1050.4	1059.7	1075.1	1105.8	1128.8	1130.4
162.5°	1014.3	1021.0	1027.7	1029.4	1039.5	1053.0	1059.7	1072.6	1098.6	1118.0	1119.5
165°	1032.3	1038.4	1044.4	1046.0	1050.5	1056.6	1059.7	1069.0	1087.5	1101.5	1103.0
167.5°	1048.9	1051.7	1054.7	1055.4	1059.2	1064.4	1066.9	1073.0	1085.2	1094.2	1094.9
170°	1059.7	1062.5	1065.4	1066.1	1066.4	1066.8	1066.9	1073.0	1085.2	1094.2	1094.2
172.5°	1065.4	1066.1	1066.8	1066.9	1066.9	1066.9	1066.9	1071.7	1081.3	1088.5	1087.9
175°	1073.4	1073.4	1073.4	1073.4	1071.2	1068.4	1066.9	1069.9	1076.0	1080.5	1080.5
177.5°	1073.4	1073.4	1073.4	1073.4	1071.7	1069.5	1068.3	1070.7	1075.5	1079.2	1078.5
180°	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4



TEST NUMBER: P938523

CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	607.8	607.8
2.5°	648.9	645.0
5°	834.6	838.5
7.5°	1123.9	1121.9
10°	1397.5	1415.1
12.5°	1596.8	1600.8
15°	1718.0	1725.9
17.5°	1764.9	1766.9
20°	1766.9	1763.0
22.5°	1745.4	1741.5
25°	1719.9	1718.0
27.5°	1696.5	1698.5
30°	1686.8	1692.6
32.5°	1686.8	1696.5
35°	1690.7	1700.5
37.5°	1688.7	1700.5
40°	1680.9	1694.5
42.5°	1659.4	1669.2
45°	1626.2	1637.9
47.5°	1583.2	1591.0
50°	1528.4	1536.2
52.5°	1460.0	1462.0
55°	1377.9	1385.8
57.5°	1290.0	1291.9
60°	1192.3	1198.1
62.5°	1088.7	1088.7
65°	979.2	983.1
67.5°	865.9	875.6
70°	750.5	752.5
72.5°	637.2	637.2
75°	519.9	521.8
77.5°	408.5	408.5
80°	302.9	304.9
82.5°	209.1	213.1
85°	131.0	131.0
87.5°	60.6	54.7
90°	27.4	27.4
92.5°	109.6	87.9
95°	382.2	316.2
97.5°	915.8	790.3
100°	1319.5	1169.9
102.5°	1716.5	1588.4
105°	2222.8	2153.9
107.5°	2554.4	2571.0
110°	2680.8	2752.6





TEST NUMBER: P938523

CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2692.2	2802.3
115°	2620.7	2773.5
117.5°	2469.4	2638.8
120°	2347.4	2512.0
122.5°	2228.6	2390.9
125°	2059.1	2208.7
127.5°	1906.8	2033.0
130°	1817.0	1933.5
132.5°	1735.4	1839.8
135°	1623.9	1713.8
137.5°	1534.3	1607.9
140°	1472.8	1541.6
142.5°	1421.9	1481.1
145°	1345.5	1390.3
147.5°	1286.9	1324.1
150°	1250.0	1280.1
152.5°	1218.4	1241.2
155°	1182.2	1197.3
157.5°	1153.6	1164.2
160°	1136.4	1142.5
162.5°	1125.2	1131.0
165°	1109.0	1115.1
167.5°	1097.5	1100.0
170°	1094.2	1094.2
172.5°	1085.7	1083.5
175°	1080.5	1080.5
177.5°	1075.9	1073.4
180°	1073.4	1073.4



TEST NUMBER: P938523  
 CATALOG NUMBER: SQ4-FB-150U-125D-927-1D-UNV-STD-W-6

**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	4.65	5.46	5.68	6.50	7.90	17.82	18.63	18.84	19.67	21.07
	3H	5.35	6.08	6.39	7.13	8.55	19.65	20.37	20.68	21.42	22.84
	4H	5.65	6.34	6.70	7.39	8.82	20.29	20.98	21.34	22.03	23.45
	6H	5.90	6.53	6.96	7.59	9.03	20.71	21.35	21.77	22.40	23.84
	8H	5.96	6.57	7.03	7.64	9.08	20.83	21.43	21.89	22.50	23.94
	12H	5.98	6.56	7.05	7.62	9.08	20.89	21.47	21.96	22.53	23.99
4H	2H	11.85	12.54	12.91	13.59	15.02	18.08	18.77	19.14	19.83	21.25
	3H	13.41	13.99	14.48	15.07	16.51	20.12	20.70	21.19	21.78	23.22
	4H	13.51	14.04	14.58	15.11	16.57	20.88	21.41	21.95	22.48	23.94
	6H	13.51	13.97	14.60	15.06	16.52	21.41	21.87	22.49	22.96	24.42
	8H	13.49	13.92	14.57	15.00	16.47	21.57	22.00	22.65	23.08	24.55
	12H	13.44	13.83	14.54	14.93	16.41	21.66	22.05	22.76	23.14	24.62
8H	4H	14.94	15.37	16.03	16.46	17.93	20.94	21.36	22.02	22.45	23.92
	6H	15.18	15.54	16.29	16.66	18.13	21.56	21.91	22.66	23.04	24.51
	8H	15.20	15.51	16.31	16.62	18.11	21.78	22.09	22.89	23.20	24.68
	12H	15.17	15.44	16.28	16.55	18.07	21.92	22.19	23.03	23.29	24.82
12H	4H	15.08	15.47	16.18	16.57	18.05	20.89	21.27	21.99	22.37	23.85
	6H	15.44	15.75	16.55	16.86	18.35	21.54	21.85	22.65	22.96	24.45
	8H	15.51	15.78	16.62	16.89	18.41	21.77	22.04	22.88	23.15	24.67