

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: P938039

Luminaire Tested: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938039  
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

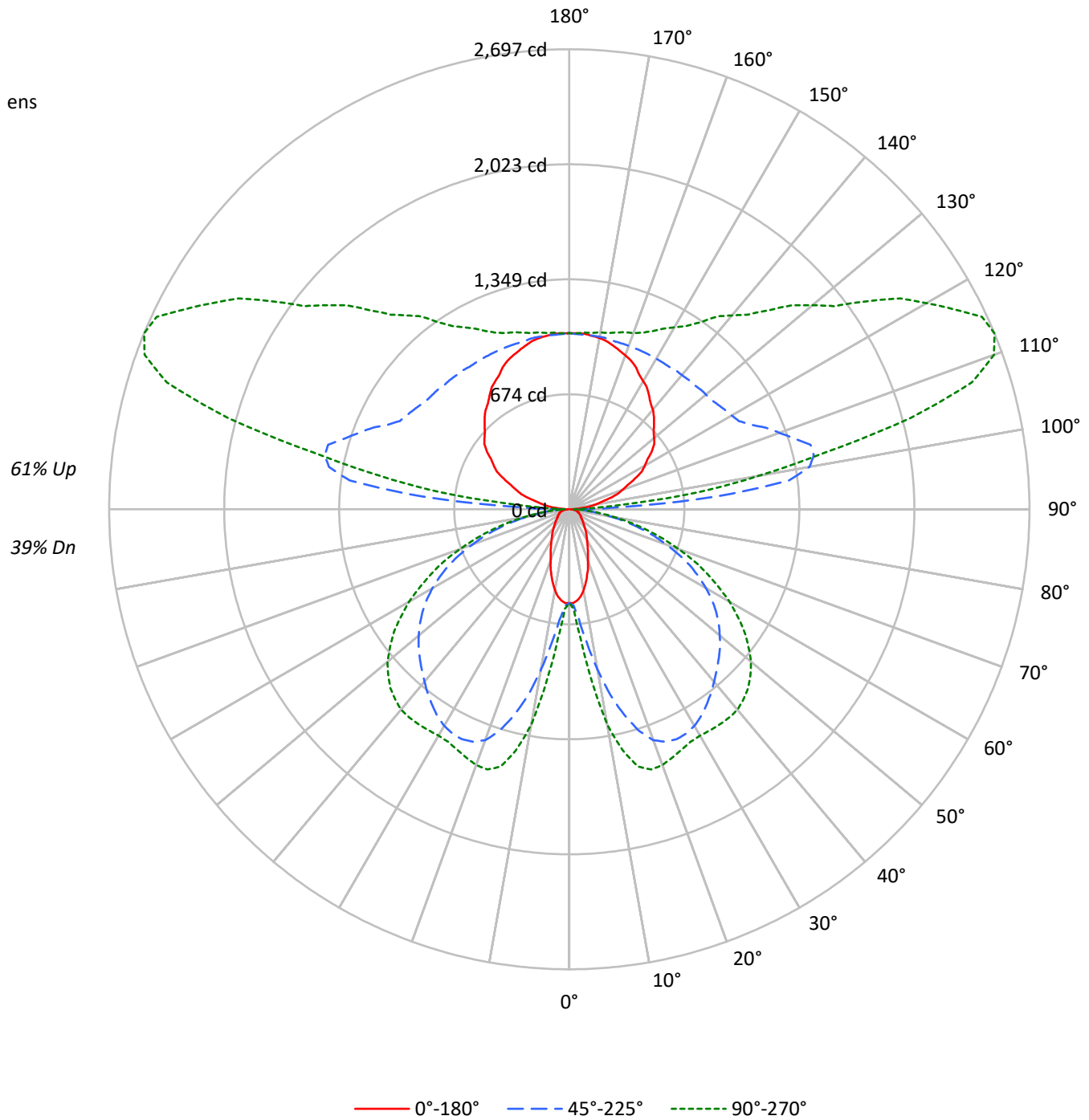
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10956.0 lumens  
Efficiency: N/A  
Efficacy: 113.4 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: Semi-Indirect

Input Watts (W): 96.6  
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: P938039  
CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P938039

CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

**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	50	30	10	0
RCR																					
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39			39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32			32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21			21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18			18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10			10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8			8

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

	0°	45°	90°
0°	3403	3403	3403
5°	3324	3932	4575
10°	3013	5731	7584
15°	2561	7486	9158
20°	2083	8673	9333
25°	1737	9073	9143
30°	1465	9128	9126
35°	1294	8975	9363
40°	1127	8774	9606
45°	1020	8628	9644
50°	935	8496	9484
55°	894	8302	9063
60°	915	7934	8400
65°	950	7376	7488
70°	1010	6428	6326
75°	1114	5237	4936
80°	1208	3627	3327
85°	1055	1920	1702

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9644 cd/sqm



TEST NUMBER: P938039

CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.2	0.6
10°-20°	315.4	2.9
20°-30°	551.7	5.0
30°-40°	710.2	6.5
40°-50°	793.3	7.2
50°-60°	759.8	6.9
60°-70°	602.1	5.5
70°-80°	354.1	3.2
80°-90°	102.3	0.9
90°-100°	503.5	4.6
100°-110°	1323.7	12.1
110°-120°	1372.6	12.5
120°-130°	1101.0	10.0
130°-140°	863.9	7.9
140°-150°	663.1	6.1
150°-160°	477.5	4.4
160°-170°	292.2	2.7
170°-180°	98.7	0.9
0°-30°	938.3	8.6
0°-40°	1648.5	15.0
0°-60°	3201.5	29.2
0°-90°	4259.9	38.9
90°-120°	3199.8	29.2
90°-150°	5827.7	53.2
90°-180°	6696.0	61.1
0°-180°	10956.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	536	575	647	732	759	49
15°	402	741	1249	1514	1562	112
25°	256	840	1488	1553	1555	118
35°	173	803	1401	1481	1539	108
45°	118	640	1238	1419	1482	92
55°	85	407	1051	1221	1254	77
65°	67	216	780	877	890	67
75°	50	133	428	471	472	52
85°	18	41	106	117	118	19
90°	7	19	53	26	26	7
95°	67	261	867	447	304	74
105°	238	361	1464	2222	2073	253
115°	424	514	1172	2338	2669	418
125°	589	661	1066	1802	2126	523
135°	702	773	1033	1454	1649	543
145°	814	867	1020	1241	1338	510
155°	921	946	1020	1120	1152	423
165°	993	1007	1020	1060	1073	280
175°	1033	1033	1027	1040	1040	98
180°	1033	1033	1033	1033	1033	



TEST NUMBER: P938039

CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	550.1	550.1	550.1	550.1	550.1	550.1	550.1	550.1	550.1	550.1	550.1
2.5°	550.1	550.1	553.7	555.5	559.0	560.7	564.3	567.9	578.4	580.2	583.8
5°	536.0	543.1	566.1	574.9	599.7	633.3	647.4	670.4	718.2	732.4	741.2
7.5°	514.8	530.7	587.3	601.4	663.4	751.9	789.0	838.5	914.6	951.7	981.8
10°	481.1	514.8	615.6	649.2	750.1	884.5	953.5	1022.5	1137.5	1188.8	1208.3
12.5°	444.0	498.9	645.7	691.7	836.7	1033.1	1116.2	1192.3	1323.2	1392.2	1402.8
15°	401.6	475.9	674.0	741.2	928.7	1156.9	1249.0	1342.7	1464.7	1514.2	1526.6
17.5°	364.5	458.2	700.5	771.3	999.5	1268.4	1362.1	1440.0	1539.1	1572.6	1581.5
20°	318.4	429.9	718.2	810.2	1073.8	1349.7	1440.0	1500.1	1567.4	1588.6	1592.1
22.5°	284.8	399.8	728.8	824.3	1123.3	1399.3	1475.3	1523.1	1569.1	1576.2	1578.0
25°	256.5	366.2	727.0	840.3	1165.8	1429.4	1487.7	1523.1	1549.7	1553.2	1553.2
27.5°	229.9	329.0	720.0	843.8	1197.6	1436.4	1482.4	1507.2	1519.6	1526.6	1526.6
30°	207.0	293.7	702.3	836.7	1211.7	1429.4	1466.5	1478.9	1491.3	1501.8	1507.2
32.5°	189.3	260.0	675.7	822.5	1213.5	1411.7	1438.2	1445.2	1462.9	1487.7	1496.6
35°	173.3	226.5	645.7	803.1	1202.9	1383.4	1401.1	1408.1	1443.5	1480.7	1493.0
37.5°	157.5	201.6	606.8	769.5	1187.0	1349.7	1362.1	1374.5	1429.4	1473.5	1487.7
40°	141.5	180.4	560.7	732.4	1162.2	1309.0	1319.6	1339.1	1411.7	1462.9	1477.1
42.5°	129.2	162.7	511.2	693.5	1130.4	1263.1	1278.9	1307.2	1390.4	1445.2	1461.2
45°	118.5	145.1	458.2	640.4	1089.7	1215.3	1238.3	1277.2	1365.6	1418.7	1432.9
47.5°	107.9	132.6	403.4	585.6	1045.4	1167.5	1197.6	1241.8	1332.1	1383.4	1395.7
50°	99.1	120.3	348.5	527.2	997.7	1116.2	1151.7	1197.6	1289.6	1337.3	1353.3
52.5°	92.0	109.7	297.2	468.8	942.9	1063.2	1103.8	1151.7	1238.3	1284.3	1294.9
55°	84.9	100.9	253.0	406.9	886.3	1006.5	1050.8	1096.8	1181.7	1220.6	1227.7
57.5°	81.4	93.7	215.8	348.5	826.1	942.9	992.4	1034.9	1114.4	1144.5	1151.7
60°	76.1	88.5	187.5	298.9	760.7	882.7	925.2	967.6	1034.9	1059.6	1064.9
62.5°	70.8	84.9	166.3	251.2	693.5	811.9	854.4	893.3	949.9	967.6	974.7
65°	67.2	81.4	150.4	215.8	624.5	737.7	780.1	813.7	859.8	877.4	880.9
67.5°	63.6	77.8	138.0	185.8	555.5	663.4	695.2	727.0	762.5	780.1	781.9
70°	58.4	74.3	127.4	164.5	484.7	578.4	605.0	638.6	666.9	675.7	681.1
72.5°	54.8	69.0	120.3	148.6	412.2	497.1	521.8	541.3	566.1	574.9	574.9
75°	49.5	61.9	113.2	132.6	337.9	406.9	428.1	447.6	467.0	470.6	465.2
77.5°	44.2	54.8	97.3	111.5	263.6	322.0	339.6	350.3	366.2	369.7	371.5
80°	37.1	47.8	76.1	86.7	191.0	237.1	249.4	258.2	272.4	272.4	276.0
82.5°	28.3	37.1	54.8	61.9	129.2	162.7	173.3	178.7	187.5	187.5	187.5
85°	17.7	23.0	35.3	40.7	77.8	99.1	106.1	107.9	115.0	116.8	116.8
87.5°	8.8	12.4	23.0	24.7	40.7	51.3	51.3	54.8	54.8	53.1	51.3
90°	7.0	12.5	18.0	19.4	30.4	45.3	52.7	46.8	35.1	26.3	26.3
92.5°	27.8	74.9	122.0	133.8	188.1	260.5	296.7	260.0	186.7	131.8	126.5
95°	66.6	152.8	239.0	260.6	462.8	732.5	867.3	773.9	587.2	447.1	431.2
97.5°	115.1	191.1	267.3	286.3	623.4	1073.0	1297.8	1238.8	1120.8	1032.2	1002.1
100°	152.5	221.5	290.5	307.8	681.9	1180.8	1430.2	1434.4	1443.1	1449.5	1413.6
102.5°	184.4	248.8	313.2	329.3	708.7	1214.6	1467.6	1542.7	1693.1	1805.9	1775.1
105°	238.5	293.0	347.5	361.2	728.6	1218.5	1463.5	1632.0	1969.0	2221.8	2205.2
107.5°	293.9	344.7	395.6	408.3	732.3	1164.2	1380.3	1615.4	2085.5	2438.1	2442.1
110°	331.3	377.2	423.1	434.6	726.7	1116.1	1310.9	1573.7	2099.4	2493.6	2510.9



TEST NUMBER: P938039

CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	368.1	411.9	455.6	466.6	726.9	1074.2	1247.8	1516.7	2054.7	2458.2	2484.7
115°	423.5	463.9	504.3	514.4	733.7	1026.1	1172.3	1431.4	1949.7	2338.3	2375.1
117.5°	478.4	515.0	551.6	560.8	747.3	995.9	1120.2	1354.1	1821.8	2172.6	2213.3
120°	510.2	544.8	579.2	587.9	758.4	985.7	1099.4	1313.1	1740.4	2061.0	2100.6
122.5°	541.5	576.3	611.1	619.7	774.3	980.5	1083.6	1276.0	1660.8	1949.4	1988.4
125°	589.2	621.0	652.7	660.6	795.9	976.1	1066.2	1229.7	1556.6	1801.8	1837.7
127.5°	628.0	660.1	692.1	700.2	817.4	973.6	1051.7	1192.0	1472.7	1683.2	1713.6
130°	648.8	683.4	717.8	726.5	833.0	975.0	1046.1	1171.0	1420.9	1608.3	1636.4
132.5°	670.4	704.9	739.4	748.0	845.8	976.1	1041.2	1153.1	1376.8	1544.5	1569.6
135°	702.2	733.6	765.1	772.9	859.6	975.2	1032.9	1126.6	1313.9	1454.4	1476.0
137.5°	734.8	766.0	797.1	804.9	880.4	981.2	1031.5	1110.7	1269.0	1387.8	1405.5
140°	761.9	790.5	819.2	826.3	893.1	982.1	1026.7	1095.1	1231.9	1334.5	1351.1
142.5°	782.6	809.2	835.7	842.3	903.8	985.7	1026.7	1086.8	1206.9	1297.1	1311.3
145°	814.5	837.6	860.8	866.6	917.6	985.7	1019.7	1068.9	1167.2	1240.9	1251.7
147.5°	846.5	869.0	891.5	897.1	938.0	992.5	1019.7	1058.4	1135.8	1193.8	1202.7
150°	867.3	887.6	907.9	913.0	948.6	996.0	1019.7	1052.4	1117.7	1166.7	1174.0
152.5°	888.7	904.1	919.6	923.4	955.5	998.3	1019.7	1047.6	1103.4	1145.2	1150.7
155°	920.6	932.1	943.4	946.3	970.7	1003.4	1019.7	1042.0	1086.3	1119.6	1123.3
157.5°	944.2	955.3	966.4	969.1	986.0	1008.5	1019.7	1037.0	1071.5	1097.4	1099.9
160°	960.1	968.8	977.4	979.6	993.0	1010.8	1019.7	1034.5	1064.1	1086.3	1087.7
162.5°	976.1	982.5	989.0	990.6	1000.4	1013.3	1019.7	1032.2	1057.1	1075.9	1077.3
165°	993.4	999.3	1005.2	1006.6	1011.0	1016.8	1019.7	1028.7	1046.6	1060.0	1061.4
167.5°	1009.4	1012.1	1014.9	1015.6	1019.3	1024.2	1026.7	1032.6	1044.3	1053.0	1053.6
170°	1019.7	1022.5	1025.3	1026.0	1026.2	1026.5	1026.7	1032.6	1044.3	1053.0	1053.0
172.5°	1025.3	1025.9	1026.5	1026.7	1026.7	1026.7	1026.7	1031.3	1040.5	1047.5	1047.0
175°	1032.9	1032.9	1032.9	1032.9	1030.9	1028.1	1026.7	1029.6	1035.5	1039.9	1039.9
177.5°	1032.9	1032.9	1032.9	1032.9	1031.3	1029.1	1028.0	1030.4	1035.0	1038.5	1037.8
180°	1032.9	1032.9	1032.9	1032.9	1032.9	1032.9	1032.9	1032.9	1032.9	1032.9	1032.9



TEST NUMBER: P938039

CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	550.1	550.1
2.5°	587.3	583.8
5°	755.3	758.9
7.5°	1017.1	1015.4
10°	1264.8	1280.7
12.5°	1445.2	1448.8
15°	1554.9	1562.0
17.5°	1597.4	1599.1
20°	1599.1	1595.6
22.5°	1579.7	1576.2
25°	1556.7	1554.9
27.5°	1535.5	1537.3
30°	1526.6	1531.9
32.5°	1526.6	1535.5
35°	1530.2	1539.1
37.5°	1528.4	1539.1
40°	1521.3	1533.7
42.5°	1501.8	1510.8
45°	1471.8	1482.4
47.5°	1432.9	1440.0
50°	1383.4	1390.4
52.5°	1321.4	1323.2
55°	1247.2	1254.2
57.5°	1167.5	1169.3
60°	1079.1	1084.4
62.5°	985.4	985.4
65°	886.3	889.8
67.5°	783.6	792.5
70°	679.3	681.1
72.5°	576.7	576.7
75°	470.6	472.3
77.5°	369.7	369.7
80°	274.2	276.0
82.5°	189.3	192.8
85°	118.5	118.5
87.5°	54.8	49.5
90°	26.3	26.3
92.5°	105.5	84.5
95°	367.8	304.3
97.5°	881.3	760.5
100°	1269.8	1125.9
102.5°	1651.8	1528.6
105°	2139.0	2072.8
107.5°	2458.1	2474.2
110°	2579.9	2648.8





TEST NUMBER: P938039  
CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2590.7	2696.7
115°	2522.0	2668.9
117.5°	2376.3	2539.3
120°	2259.0	2417.3
122.5°	2144.6	2300.8
125°	1981.6	2125.5
127.5°	1835.0	1956.4
130°	1748.6	1860.7
132.5°	1670.1	1770.5
135°	1562.6	1649.2
137.5°	1476.4	1547.3
140°	1417.3	1483.5
142.5°	1368.3	1425.3
145°	1294.8	1337.9
147.5°	1238.5	1274.2
150°	1203.0	1231.9
152.5°	1172.5	1194.4
155°	1137.7	1152.2
157.5°	1110.1	1120.2
160°	1093.6	1099.4
162.5°	1082.8	1088.4
165°	1067.3	1073.1
167.5°	1056.1	1058.6
170°	1053.0	1053.0
172.5°	1044.8	1042.7
175°	1039.9	1039.9
177.5°	1035.4	1032.9
180°	1032.9	1032.9



TEST NUMBER: P938039

CATALOG NUMBER: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-6-3500K

**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	4.14	4.94	5.18	5.99	7.41	17.31	18.11	18.35	19.16	20.58
	3H	4.85	5.56	5.89	6.62	8.06	19.14	19.86	20.19	20.91	22.35
	4H	5.14	5.82	6.20	6.88	8.33	19.78	20.46	20.84	21.52	22.96
	6H	5.39	6.01	6.46	7.08	8.54	20.20	20.83	21.27	21.89	23.35
	8H	5.45	6.05	6.53	7.13	8.58	20.32	20.91	21.39	22.00	23.45
	12H	5.47	6.04	6.55	7.11	8.59	20.38	20.95	21.46	22.02	23.50
4H	2H	11.34	12.02	12.41	13.08	14.53	17.58	18.26	18.65	19.32	20.76
	3H	12.91	13.47	13.98	14.56	16.02	19.61	20.18	20.69	21.27	22.73
	4H	13.00	13.52	14.08	14.60	16.08	20.37	20.89	21.45	21.97	23.45
	6H	13.01	13.45	14.10	14.56	16.03	20.90	21.35	21.99	22.46	23.93
	8H	12.98	13.40	14.07	14.50	15.98	21.06	21.48	22.15	22.58	24.06
	12H	12.93	13.31	14.04	14.42	15.92	21.15	21.53	22.26	22.64	24.13
8H	4H	14.43	14.85	15.53	15.95	17.44	20.43	20.85	21.52	21.94	23.43
	6H	14.67	15.02	15.79	16.16	17.64	21.05	21.40	22.16	22.53	24.02
	8H	14.69	15.00	15.81	16.11	17.62	21.27	21.57	22.39	22.69	24.19
	12H	14.66	14.92	15.78	16.04	17.58	21.40	21.67	22.53	22.79	24.33
12H	4H	14.57	14.95	15.68	16.06	17.56	20.38	20.76	21.49	21.87	23.36
	6H	14.93	15.24	16.05	16.35	17.86	21.03	21.34	22.15	22.45	23.96
	8H	15.00	15.26	16.12	16.38	17.92	21.26	21.52	22.38	22.64	24.18