

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: P933867

Luminaire Tested: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

**Test Information**

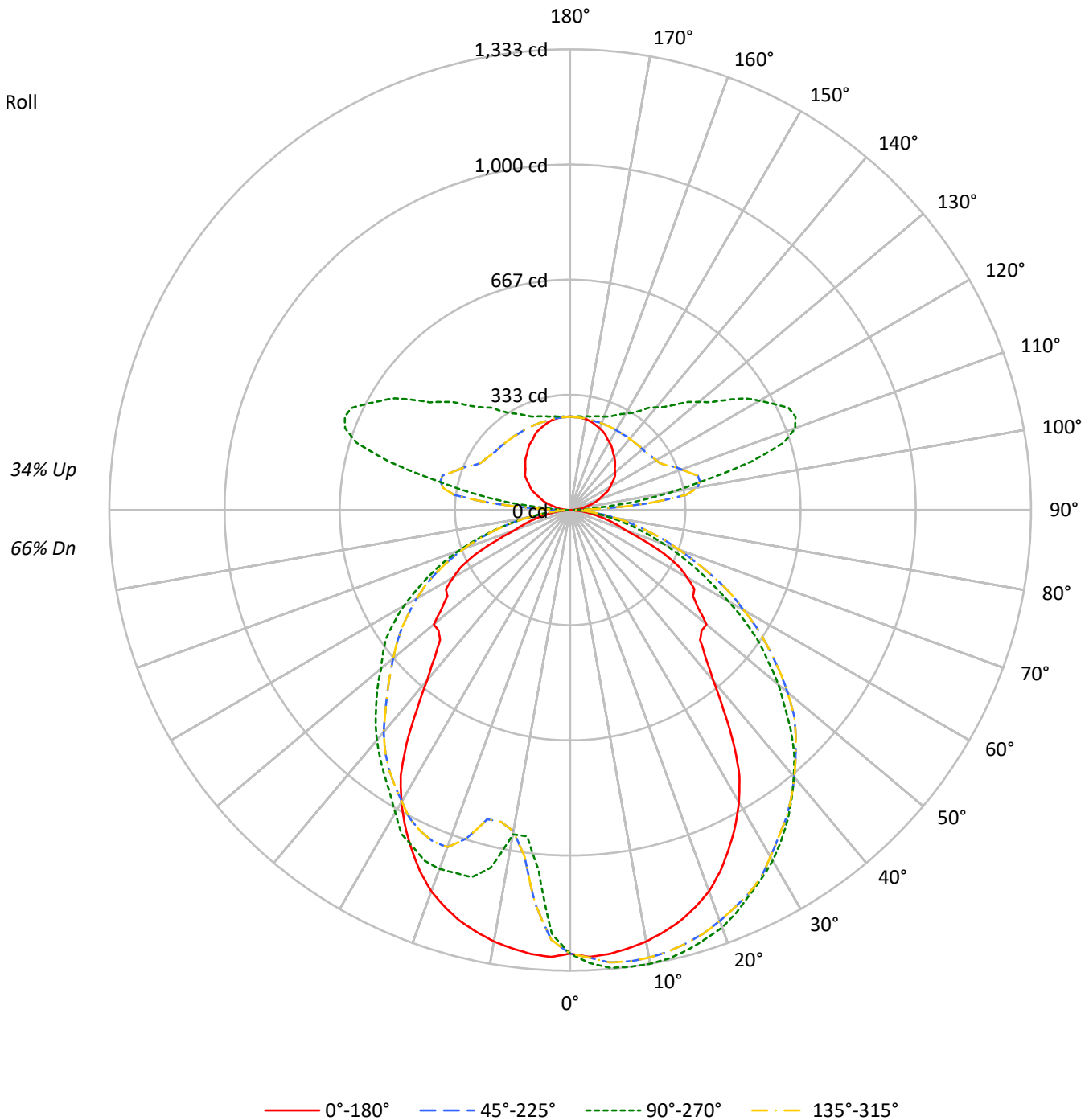
Test Method: LM-79-2019  
Report Number: P933867  
REPORT IS A COMBINATION OF REPORTS P933676 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5079.8 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 44  
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

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### Luminous Intensity Polar Plot





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**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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66			
1	101	97	93	89	95	91	88	85	81	78	76	71	69	68	62	61	60	55			
2	92	85	78	73	87	80	74	70	71	67	63	63	59	56	55	52	50	46			
3	84	75	67	61	79	70	64	58	63	57	53	55	51	48	49	46	43	39			
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	43	40	37	34			
5	71	59	50	44	66	56	48	43	50	44	39	44	39	35	39	35	32	29			
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	26			
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	23			
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20			
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18			
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	16			

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

	0°	90°	180°	270°
0°	5954	5954	5954	5954
5°	5999	6010	5999	4726
10°	5958	5921	5958	4232
15°	5894	5792	5894	4837
20°	5770	5640	5770	4847
25°	5518	5419	5518	4744
30°	5192	5235	5192	4518
35°	4628	5002	4628	4270
40°	3857	4727	3857	4083
45°	3446	4407	3446	3868
50°	3661	4025	3661	3652
55°	3444	3613	3444	3527
60°	3550	3069	3550	3230
65°	3219	2536	3219	2835
70°	2230	2021	2230	2377
75°	1954	1494	1954	1790
80°	1574	988	1574	1075
85°	908	524	908	445

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5281 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.8	2.3
10°-20°	328.9	6.5
20°-30°	508.4	10.0
30°-40°	606.9	11.9
40°-50°	610.5	12.0
50°-60°	531.2	10.5
60°-70°	376.6	7.4
70°-80°	199.3	3.9
80°-90°	50.7	1.0
90°-100°	131.7	2.6
100°-110°	346.2	6.8
110°-120°	359.0	7.1
120°-130°	288.0	5.7
130°-140°	225.9	4.4
140°-150°	173.4	3.4
150°-160°	124.9	2.5
160°-170°	76.4	1.5
170°-180°	25.8	0.5
0°-30°	953.2	18.8
0°-40°	1560.1	30.7
0°-60°	2701.8	53.2
0°-90°	3328.4	65.5
90°-120°	836.9	16.5
90°-150°	1524.3	30.0
90°-180°	1751.0	34.5
0°-180°	5079.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1283	1283	1283	1283	1283	
5°	1289	1329	1289	1045	1289	122
15°	1231	1317	1231	1100	1231	346
25°	1084	1229	1084	1076	1084	498
35°	824	1096	824	936	824	510
45°	532	903	532	793	532	426
55°	433	667	433	651	433	398
65°	301	402	301	449	301	288
75°	114	191	114	228	114	120
85°	20	49	20	41	20	26
90°	2	7	2	7	2	2
95°	17	80	17	80	17	19
105°	62	542	62	542	62	66
115°	111	698	111	698	111	109
125°	154	556	154	556	154	137
135°	184	431	184	431	184	142
145°	213	350	213	350	213	133
155°	241	301	241	301	241	111
165°	260	281	260	281	260	73
175°	270	272	270	272	270	26
180°	270	270	270	270	270	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3
2.5°	1294.2	1294.2	1301.5	1304.0	1304.0	1300.3	1296.6	1300.3	1311.2	1314.8	1313.7
5°	1289.4	1299.1	1312.5	1314.8	1317.3	1316.1	1313.7	1316.1	1328.2	1330.7	1331.9
7.5°	1279.6	1297.9	1314.8	1318.5	1322.2	1318.5	1317.3	1319.7	1331.9	1334.3	1334.3
10°	1267.5	1293.0	1312.5	1314.8	1318.5	1314.8	1314.8	1319.7	1331.9	1334.3	1335.5
12.5°	1250.5	1285.7	1304.0	1306.3	1311.2	1310.0	1308.8	1313.7	1325.8	1328.2	1328.2
15°	1231.1	1272.4	1289.4	1291.8	1300.3	1297.9	1297.9	1302.7	1316.1	1319.7	1318.5
17.5°	1204.4	1255.4	1274.8	1278.4	1284.5	1283.3	1284.5	1289.4	1301.5	1304.0	1305.2
20°	1174.0	1232.3	1255.4	1259.0	1265.1	1265.1	1265.1	1271.1	1283.3	1288.1	1288.1
22.5°	1132.7	1208.0	1232.3	1234.7	1242.1	1242.1	1244.4	1252.9	1263.9	1265.1	1265.1
25°	1084.2	1181.3	1202.0	1209.2	1216.5	1220.2	1223.8	1228.7	1232.3	1231.1	1232.3
27.5°	1033.2	1147.3	1174.0	1178.9	1188.6	1192.3	1197.1	1198.3	1199.5	1203.1	1200.8
30°	976.1	1100.0	1140.1	1144.9	1160.7	1163.1	1158.2	1160.7	1166.8	1169.2	1171.6
32.5°	911.8	1029.5	1104.8	1115.8	1130.4	1123.0	1121.9	1125.5	1135.2	1135.2	1137.6
35°	824.3	974.9	1072.1	1081.8	1092.7	1084.2	1089.1	1090.3	1096.3	1100.0	1098.8
37.5°	728.5	927.6	1038.0	1045.4	1053.9	1042.9	1050.2	1053.9	1058.7	1056.2	1056.2
40°	643.5	853.5	998.0	1002.8	1010.2	1001.7	1008.9	1011.3	1013.8	1011.3	1010.2
42.5°	580.3	772.2	955.5	961.6	956.7	962.8	965.2	970.1	966.4	961.6	961.6
45°	531.8	750.3	909.3	916.7	909.3	919.1	922.7	922.7	911.8	909.3	908.1
47.5°	516.0	706.6	863.3	863.3	859.5	871.8	877.8	869.3	858.4	854.7	854.7
50°	514.8	658.1	800.1	795.3	812.2	826.8	820.7	812.2	803.7	790.4	790.4
52.5°	467.4	598.6	718.8	737.0	763.7	772.2	762.4	754.0	739.4	733.3	728.5
55°	433.4	536.7	644.7	681.1	709.0	720.0	701.8	693.3	671.4	667.7	665.3
57.5°	426.1	446.8	576.7	622.8	656.8	655.6	644.7	628.9	610.7	607.1	605.8
60°	390.9	323.0	503.8	558.5	593.7	590.1	580.3	565.7	548.8	546.4	543.9
62.5°	354.6	234.3	421.3	483.2	533.0	531.8	523.3	501.5	489.2	483.2	478.4
65°	301.1	196.7	299.9	401.9	473.5	475.9	457.7	441.9	428.6	421.3	420.1
67.5°	229.5	160.3	202.8	335.1	416.5	414.0	390.9	383.7	366.7	363.1	355.7
70°	170.0	106.8	140.8	272.0	360.6	354.6	336.3	327.8	312.0	303.5	298.7
72.5°	140.8	86.2	103.2	211.3	303.5	296.3	280.4	270.7	257.4	250.1	245.2
75°	114.1	91.1	78.9	156.6	246.5	241.6	227.0	217.3	206.4	196.7	197.9
77.5°	83.8	85.0	63.1	115.3	195.5	188.2	179.7	167.5	162.7	153.0	153.0
80°	63.1	66.8	47.3	78.9	140.8	140.8	133.5	125.1	116.6	111.7	111.7
82.5°	42.5	42.5	35.2	49.8	95.9	92.2	87.4	85.0	80.1	77.7	77.7
85°	19.5	24.3	21.8	30.3	52.2	54.7	54.7	52.2	51.0	48.6	49.8
87.5°	6.1	11.0	13.4	17.0	26.7	28.0	29.1	29.1	29.1	30.3	30.3
90°	1.8	3.3	4.7	5.1	8.0	11.9	13.8	12.2	9.1	6.9	6.9
92.5°	7.2	19.6	32.0	35.0	49.2	68.2	77.6	68.0	48.9	34.5	33.1
95°	17.4	39.9	62.5	68.2	121.0	191.5	226.8	202.4	153.6	116.9	112.8
97.5°	30.1	50.1	69.9	74.9	163.0	280.6	339.4	324.0	293.2	270.0	262.1
100°	39.9	57.9	75.9	80.5	178.3	308.8	374.0	375.2	377.5	379.2	369.8
102.5°	48.2	65.1	81.9	86.1	185.4	317.7	383.9	403.5	442.8	472.3	464.3
105°	62.4	76.7	91.0	94.5	190.6	318.7	382.8	426.9	515.0	581.1	576.8
107.5°	76.8	90.2	103.5	106.8	191.5	304.5	361.0	422.4	545.5	637.7	638.8
110°	86.7	98.7	110.7	113.7	190.1	291.9	342.9	411.6	549.1	652.2	656.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	96.3	107.7	119.1	122.0	190.2	281.0	326.4	396.7	537.4	642.9	649.9
115°	110.8	121.3	131.9	134.5	191.9	268.4	306.6	374.4	510.0	611.6	621.2
117.5°	125.1	134.7	144.3	146.7	195.5	260.5	293.0	354.2	476.5	568.3	578.9
120°	133.4	142.5	151.5	153.8	198.4	257.9	287.6	343.4	455.2	539.0	549.3
122.5°	141.6	150.7	159.9	162.1	202.6	256.4	283.4	333.7	434.4	509.9	520.1
125°	154.1	162.5	170.7	172.8	208.2	255.3	278.9	321.6	407.1	471.2	480.6
127.5°	164.3	172.6	181.0	183.1	213.8	254.6	275.1	311.8	385.2	440.3	448.2
130°	169.7	178.8	187.7	190.0	217.9	255.1	273.6	306.3	371.7	420.6	428.0
132.5°	175.3	184.4	193.3	195.6	221.2	255.3	272.4	301.6	360.1	404.0	410.6
135°	183.7	191.9	200.1	202.2	224.8	255.1	270.2	294.7	343.7	380.4	386.1
137.5°	192.2	200.3	208.5	210.5	230.3	256.6	269.8	290.6	331.9	363.0	367.6
140°	199.2	206.7	214.3	216.2	233.6	256.9	268.6	286.5	322.2	349.0	353.4
142.5°	204.7	211.6	218.6	220.3	236.4	257.9	268.6	284.3	315.7	339.3	343.0
145°	213.1	219.1	225.1	226.7	240.0	257.9	266.8	279.6	305.3	324.6	327.4
147.5°	221.4	227.3	233.2	234.6	245.3	259.6	266.8	276.9	297.1	312.2	314.5
150°	226.8	232.2	237.4	238.8	248.1	260.5	266.8	275.3	292.4	305.1	307.0
152.5°	232.4	236.4	240.5	241.5	249.9	261.1	266.8	274.0	288.6	299.5	301.0
155°	240.8	243.8	246.7	247.5	253.9	262.5	266.8	272.5	284.1	292.8	293.7
157.5°	246.9	249.8	252.7	253.4	257.9	263.8	266.8	271.3	280.2	287.0	287.7
160°	251.1	253.4	255.6	256.2	259.7	264.4	266.8	270.6	278.3	284.1	284.5
162.5°	255.3	257.0	258.6	259.1	261.6	265.0	266.8	270.0	276.5	281.4	281.8
165°	259.9	261.4	262.9	263.3	264.5	266.0	266.8	269.1	273.7	277.3	277.6
167.5°	264.0	264.8	265.5	265.7	266.7	267.9	268.6	270.1	273.2	275.4	275.6
170°	266.8	267.5	268.2	268.4	268.5	268.6	268.6	270.1	273.2	275.4	275.4
172.5°	268.2	268.4	268.6	268.6	268.6	268.6	268.6	269.7	272.2	274.0	273.8
175°	270.2	270.2	270.2	270.2	269.6	268.9	268.6	269.3	270.8	272.0	272.0
177.5°	270.2	270.2	270.2	270.2	269.7	269.2	268.9	269.6	270.7	271.6	271.5
180°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3
2.5°	1316.1	1312.5	1316.1	1313.7	1314.8	1311.2	1300.3	1296.6	1300.3	1304.0	1304.0
5°	1331.9	1329.4	1331.9	1331.9	1330.7	1328.2	1316.1	1313.7	1316.1	1317.3	1314.8
7.5°	1336.7	1333.1	1336.7	1334.3	1334.3	1331.9	1319.7	1317.3	1318.5	1322.2	1318.5
10°	1336.7	1333.1	1336.7	1335.5	1334.3	1331.9	1319.7	1314.8	1314.8	1318.5	1314.8
12.5°	1330.7	1328.2	1330.7	1328.2	1328.2	1325.8	1313.7	1308.8	1310.0	1311.2	1306.3
15°	1320.9	1317.3	1320.9	1318.5	1319.7	1316.1	1302.7	1297.9	1297.9	1300.3	1291.8
17.5°	1306.3	1301.5	1306.3	1305.2	1304.0	1301.5	1289.4	1284.5	1283.3	1284.5	1278.4
20°	1289.4	1285.7	1289.4	1288.1	1288.1	1283.3	1271.1	1265.1	1265.1	1265.1	1259.0
22.5°	1262.7	1259.0	1262.7	1265.1	1265.1	1263.9	1252.9	1244.4	1242.1	1242.1	1234.7
25°	1232.3	1228.7	1232.3	1232.3	1231.1	1232.3	1228.7	1223.8	1220.2	1216.5	1209.2
27.5°	1203.1	1200.8	1203.1	1200.8	1203.1	1199.5	1198.3	1197.1	1192.3	1188.6	1178.9
30°	1174.0	1171.6	1174.0	1171.6	1169.2	1166.8	1160.7	1158.2	1163.1	1160.7	1144.9
32.5°	1137.6	1135.2	1137.6	1137.6	1135.2	1135.2	1125.5	1121.9	1123.0	1130.4	1115.8
35°	1100.0	1096.3	1100.0	1098.8	1100.0	1096.3	1090.3	1089.1	1084.2	1092.7	1081.8
37.5°	1056.2	1052.6	1056.2	1056.2	1056.2	1058.7	1053.9	1050.2	1042.9	1053.9	1045.4
40°	1011.3	1006.4	1011.3	1010.2	1011.3	1013.8	1011.3	1008.9	1001.7	1010.2	1002.8
42.5°	960.4	959.1	960.4	961.6	961.6	966.4	970.1	965.2	962.8	956.7	961.6
45°	905.7	903.3	905.7	908.1	909.3	911.8	922.7	922.7	919.1	909.3	916.7
47.5°	847.4	841.3	847.4	854.7	854.7	858.4	869.3	877.8	871.8	859.5	863.3
50°	785.5	786.8	785.5	790.4	790.4	803.7	812.2	820.7	826.8	812.2	795.3
52.5°	724.9	723.6	724.9	728.5	733.3	739.4	754.0	762.4	772.2	763.7	737.0
55°	664.1	666.6	664.1	665.3	667.7	671.4	693.3	701.8	720.0	709.0	681.1
57.5°	603.4	599.8	603.4	605.8	607.1	610.7	628.9	644.7	655.6	656.8	622.8
60°	533.0	528.2	533.0	543.9	546.4	548.8	565.7	580.3	590.1	593.7	558.5
62.5°	471.0	462.5	471.0	478.4	483.2	489.2	501.5	523.3	531.8	533.0	483.2
65°	405.5	401.9	405.5	420.1	421.3	428.6	441.9	457.7	475.9	473.5	401.9
67.5°	346.0	346.0	346.0	355.7	363.1	366.7	383.7	390.9	414.0	416.5	335.1
70°	291.4	290.2	291.4	298.7	303.5	312.0	327.8	336.3	354.6	360.6	272.0
72.5°	239.1	238.0	239.1	245.2	250.1	257.4	270.7	280.4	296.3	303.5	211.3
75°	193.1	190.6	193.1	197.9	196.7	206.4	217.3	227.0	241.6	246.5	156.6
77.5°	148.1	148.1	148.1	153.0	153.0	162.7	167.5	179.7	188.2	195.5	115.3
80°	110.5	109.3	110.5	111.7	111.7	116.6	125.1	133.5	140.8	140.8	78.9
82.5°	77.7	75.3	77.7	77.7	77.7	80.1	85.0	87.4	92.2	95.9	49.8
85°	48.6	48.6	48.6	49.8	48.6	51.0	52.2	54.7	54.7	52.2	30.3
87.5°	31.6	30.3	31.6	30.3	30.3	29.1	29.1	29.1	28.0	26.7	17.0
90°	6.9	6.9	6.9	6.9	6.9	9.1	12.2	13.8	11.9	8.0	5.1
92.5°	27.6	22.1	27.6	33.1	34.5	48.9	68.0	77.6	68.2	49.2	35.0
95°	96.2	79.6	96.2	112.8	116.9	153.6	202.4	226.8	191.5	121.0	68.2
97.5°	230.5	198.9	230.5	262.1	270.0	293.2	324.0	339.4	280.6	163.0	74.9
100°	332.1	294.4	332.1	369.8	379.2	377.5	375.2	374.0	308.8	178.3	80.5
102.5°	432.0	399.8	432.0	464.3	472.3	442.8	403.5	383.9	317.7	185.4	86.1
105°	559.5	542.1	559.5	576.8	581.1	515.0	426.9	382.8	318.7	190.6	94.5
107.5°	642.9	647.1	642.9	638.8	637.7	545.5	422.4	361.0	304.5	191.5	106.8
110°	674.7	692.8	674.7	656.7	652.2	549.1	411.6	342.9	291.9	190.1	113.7





TEST NUMBER: P933867

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	677.6	705.3	677.6	649.9	642.9	537.4	396.7	326.4	281.0	190.2	122.0
115°	659.7	698.1	659.7	621.2	611.6	510.0	374.4	306.6	268.4	191.9	134.5
117.5°	621.6	664.2	621.6	578.9	568.3	476.5	354.2	293.0	260.5	195.5	146.7
120°	590.8	632.3	590.8	549.3	539.0	455.2	343.4	287.6	257.9	198.4	153.8
122.5°	560.9	601.8	560.9	520.1	509.9	434.4	333.7	283.4	256.4	202.6	162.1
125°	518.3	555.9	518.3	480.6	471.2	407.1	321.6	278.9	255.3	208.2	172.8
127.5°	479.9	511.7	479.9	448.2	440.3	385.2	311.8	275.1	254.6	213.8	183.1
130°	457.3	486.6	457.3	428.0	420.6	371.7	306.3	273.6	255.1	217.9	190.0
132.5°	436.8	463.1	436.8	410.6	404.0	360.1	301.6	272.4	255.3	221.2	195.6
135°	408.7	431.3	408.7	386.1	380.4	343.7	294.7	270.2	255.1	224.8	202.2
137.5°	386.1	404.7	386.1	367.6	363.0	331.9	290.6	269.8	256.6	230.3	210.5
140°	370.7	388.0	370.7	353.4	349.0	322.2	286.5	268.6	256.9	233.6	216.2
142.5°	357.9	372.7	357.9	343.0	339.3	315.7	284.3	268.6	257.9	236.4	220.3
145°	338.7	349.9	338.7	327.4	324.6	305.3	279.6	266.8	257.9	240.0	226.7
147.5°	323.9	333.3	323.9	314.5	312.2	297.1	276.9	266.8	259.6	245.3	234.6
150°	314.6	322.2	314.6	307.0	305.1	292.4	275.3	266.8	260.5	248.1	238.8
152.5°	306.7	312.4	306.7	301.0	299.5	288.6	274.0	266.8	261.1	249.9	241.5
155°	297.5	301.3	297.5	293.7	292.8	284.1	272.5	266.8	262.5	253.9	247.5
157.5°	290.4	293.0	290.4	287.7	287.0	280.2	271.3	266.8	263.8	257.9	253.4
160°	286.0	287.6	286.0	284.5	284.1	278.3	270.6	266.8	264.4	259.7	256.2
162.5°	283.2	284.7	283.2	281.8	281.4	276.5	270.0	266.8	265.0	261.6	259.1
165°	279.2	280.7	279.2	277.6	277.3	273.7	269.1	266.8	266.0	264.5	263.3
167.5°	276.3	276.9	276.3	275.6	275.4	273.2	270.1	268.6	267.9	266.7	265.7
170°	275.4	275.4	275.4	275.4	275.4	273.2	270.1	268.6	268.6	268.5	268.4
172.5°	273.3	272.7	273.3	273.8	274.0	272.2	269.7	268.6	268.6	268.6	268.6
175°	272.0	272.0	272.0	272.0	272.0	270.8	269.3	268.6	268.9	269.6	270.2
177.5°	270.8	270.2	270.8	271.5	271.6	270.7	269.6	268.9	269.2	269.7	270.2
180°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2



TEST NUMBER: P933867

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3
2.5°	1301.5	1294.2	1294.2	1282.1	1277.3	1273.6	1267.5	1249.3	1244.4	1239.6	1246.9
5°	1312.5	1299.1	1289.4	1267.5	1249.3	1242.1	1219.0	1175.3	1146.1	1124.2	1112.1
7.5°	1314.8	1297.9	1279.6	1245.7	1202.0	1182.5	1112.1	1032.0	1010.2	990.7	978.6
10°	1312.5	1293.0	1267.5	1216.5	1113.3	1079.3	1008.9	956.7	943.4	939.7	943.4
12.5°	1304.0	1285.7	1250.5	1165.6	1021.0	998.0	956.7	926.3	923.9	930.0	962.8
15°	1289.4	1272.4	1231.1	1097.5	970.1	953.0	923.9	913.0	926.3	968.9	1067.2
17.5°	1274.8	1255.4	1204.4	1030.8	931.2	919.1	898.5	920.3	995.6	1052.6	1085.4
20°	1255.4	1232.3	1174.0	982.2	903.3	892.4	882.6	981.0	1038.0	1058.7	1076.9
22.5°	1232.3	1208.0	1132.7	948.2	874.1	865.7	871.8	1015.0	1038.0	1052.6	1068.4
25°	1202.0	1181.3	1084.2	921.5	851.1	841.3	864.4	1011.3	1024.7	1028.4	1059.9
27.5°	1174.0	1147.3	1033.2	897.2	823.2	819.5	870.5	995.6	1005.3	1008.9	1042.9
30°	1140.1	1100.0	976.1	871.8	794.0	792.8	871.8	976.1	973.7	983.5	1017.4
32.5°	1104.8	1029.5	911.8	840.2	766.1	764.9	863.3	947.0	944.5	957.9	983.5
35°	1072.1	974.9	824.3	803.7	730.9	732.1	842.6	913.0	914.2	926.3	942.2
37.5°	1038.0	927.6	728.5	763.7	696.9	696.9	814.6	881.4	879.0	882.6	904.5
40°	998.0	853.5	643.5	711.5	665.3	661.7	780.7	847.4	838.9	837.7	868.0
42.5°	955.5	772.2	580.3	642.3	628.9	624.0	739.4	806.1	790.4	794.0	832.8
45°	909.3	750.3	531.8	542.7	591.3	587.6	694.4	758.8	747.8	757.6	797.6
47.5°	863.3	706.6	516.0	450.4	551.2	550.0	644.7	712.6	706.6	716.3	758.8
50°	800.1	658.1	514.8	386.1	506.3	511.1	585.2	667.7	667.7	676.2	721.1
52.5°	718.8	598.6	467.4	349.7	454.0	468.6	533.0	628.9	631.3	639.9	679.9
55°	644.7	536.7	433.4	321.7	392.1	423.7	482.0	588.8	593.7	602.2	638.6
57.5°	576.7	446.8	426.1	288.9	335.1	365.4	437.1	550.0	552.4	559.7	594.9
60°	503.8	323.0	390.9	253.7	285.3	308.4	395.8	503.8	512.3	517.2	547.5
62.5°	421.3	234.3	354.6	229.5	261.0	265.8	361.8	460.2	471.0	474.8	493.0
65°	299.9	196.7	301.1	208.8	235.5	236.8	325.4	415.2	425.0	431.0	444.3
67.5°	202.8	160.3	229.5	189.4	216.2	217.3	290.2	363.1	376.4	381.3	389.8
70°	140.8	106.8	170.0	168.7	194.2	196.7	252.5	315.6	327.8	331.5	336.3
72.5°	103.2	86.2	140.8	151.8	171.2	173.6	213.7	262.2	274.4	278.1	280.4
75°	78.9	91.1	114.1	132.3	145.7	146.9	174.8	213.7	222.2	224.6	225.8
77.5°	63.1	85.0	83.8	106.8	118.9	116.6	137.2	165.1	172.4	172.4	172.4
80°	47.3	66.8	63.1	76.5	87.4	85.0	98.3	117.8	120.2	122.6	121.4
82.5°	35.2	42.5	42.5	48.6	58.3	55.8	65.5	76.5	76.5	76.5	78.9
85°	21.8	24.3	19.5	25.5	32.8	31.6	36.4	41.3	42.5	42.5	40.1
87.5°	13.4	11.0	6.1	9.7	14.6	14.6	17.0	18.2	17.0	17.0	17.0
90°	4.7	3.3	1.8	3.3	4.7	5.1	8.0	11.9	13.8	12.2	9.1
92.5°	32.0	19.6	7.2	19.6	32.0	35.0	49.2	68.2	77.6	68.0	48.9
95°	62.5	39.9	17.4	39.9	62.5	68.2	121.0	191.5	226.8	202.4	153.6
97.5°	69.9	50.1	30.1	50.1	69.9	74.9	163.0	280.6	339.4	324.0	293.2
100°	75.9	57.9	39.9	57.9	75.9	80.5	178.3	308.8	374.0	375.2	377.5
102.5°	81.9	65.1	48.2	65.1	81.9	86.1	185.4	317.7	383.9	403.5	442.8
105°	91.0	76.7	62.4	76.7	91.0	94.5	190.6	318.7	382.8	426.9	515.0
107.5°	103.5	90.2	76.8	90.2	103.5	106.8	191.5	304.5	361.0	422.4	545.5
110°	110.7	98.7	86.7	98.7	110.7	113.7	190.1	291.9	342.9	411.6	549.1



TEST NUMBER: P933867

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	119.1	107.7	96.3	107.7	119.1	122.0	190.2	281.0	326.4	396.7	537.4
115°	131.9	121.3	110.8	121.3	131.9	134.5	191.9	268.4	306.6	374.4	510.0
117.5°	144.3	134.7	125.1	134.7	144.3	146.7	195.5	260.5	293.0	354.2	476.5
120°	151.5	142.5	133.4	142.5	151.5	153.8	198.4	257.9	287.6	343.4	455.2
122.5°	159.9	150.7	141.6	150.7	159.9	162.1	202.6	256.4	283.4	333.7	434.4
125°	170.7	162.5	154.1	162.5	170.7	172.8	208.2	255.3	278.9	321.6	407.1
127.5°	181.0	172.6	164.3	172.6	181.0	183.1	213.8	254.6	275.1	311.8	385.2
130°	187.7	178.8	169.7	178.8	187.7	190.0	217.9	255.1	273.6	306.3	371.7
132.5°	193.3	184.4	175.3	184.4	193.3	195.6	221.2	255.3	272.4	301.6	360.1
135°	200.1	191.9	183.7	191.9	200.1	202.2	224.8	255.1	270.2	294.7	343.7
137.5°	208.5	200.3	192.2	200.3	208.5	210.5	230.3	256.6	269.8	290.6	331.9
140°	214.3	206.7	199.2	206.7	214.3	216.2	233.6	256.9	268.6	286.5	322.2
142.5°	218.6	211.6	204.7	211.6	218.6	220.3	236.4	257.9	268.6	284.3	315.7
145°	225.1	219.1	213.1	219.1	225.1	226.7	240.0	257.9	266.8	279.6	305.3
147.5°	233.2	227.3	221.4	227.3	233.2	234.6	245.3	259.6	266.8	276.9	297.1
150°	237.4	232.2	226.8	232.2	237.4	238.8	248.1	260.5	266.8	275.3	292.4
152.5°	240.5	236.4	232.4	236.4	240.5	241.5	249.9	261.1	266.8	274.0	288.6
155°	246.7	243.8	240.8	243.8	246.7	247.5	253.9	262.5	266.8	272.5	284.1
157.5°	252.7	249.8	246.9	249.8	252.7	253.4	257.9	263.8	266.8	271.3	280.2
160°	255.6	253.4	251.1	253.4	255.6	256.2	259.7	264.4	266.8	270.6	278.3
162.5°	258.6	257.0	255.3	257.0	258.6	259.1	261.6	265.0	266.8	270.0	276.5
165°	262.9	261.4	259.9	261.4	262.9	263.3	264.5	266.0	266.8	269.1	273.7
167.5°	265.5	264.8	264.0	264.8	265.5	265.7	266.7	267.9	268.6	270.1	273.2
170°	268.2	267.5	266.8	267.5	268.2	268.4	268.5	268.6	268.6	270.1	273.2
172.5°	268.6	268.4	268.2	268.4	268.6	268.6	268.6	268.6	268.6	269.7	272.2
175°	270.2	270.2	270.2	270.2	270.2	270.2	269.6	268.9	268.6	269.3	270.8
177.5°	270.2	270.2	270.2	270.2	270.2	270.2	269.7	269.2	268.9	269.6	270.7
180°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2



TEST NUMBER: P933867

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3
2.5°	1238.4	1234.7	1239.6	1226.2	1239.6	1234.7	1238.4	1246.9	1239.6	1244.4	1249.3
5°	1086.6	1080.6	1061.1	1045.4	1061.1	1080.6	1086.6	1112.1	1124.2	1146.1	1175.3
7.5°	971.2	966.4	961.6	951.9	961.6	966.4	971.2	978.6	990.7	1010.2	1032.0
10°	945.8	947.0	954.3	953.0	954.3	947.0	945.8	943.4	939.7	943.4	956.7
12.5°	1011.3	1022.3	1062.3	1059.9	1062.3	1022.3	1011.3	962.8	930.0	923.9	926.3
15°	1086.6	1090.3	1098.8	1100.0	1098.8	1090.3	1086.6	1067.2	968.9	926.3	913.0
17.5°	1093.9	1095.2	1101.2	1101.2	1101.2	1095.2	1093.9	1085.4	1052.6	995.6	920.3
20°	1087.8	1090.3	1102.4	1104.8	1102.4	1090.3	1087.8	1076.9	1058.7	1038.0	981.0
22.5°	1085.4	1090.3	1100.0	1098.8	1100.0	1090.3	1085.4	1068.4	1052.6	1038.0	1015.0
25°	1073.2	1073.2	1074.5	1075.7	1074.5	1073.2	1073.2	1059.9	1028.4	1024.7	1011.3
27.5°	1047.7	1050.2	1057.5	1056.2	1057.5	1050.2	1047.7	1042.9	1008.9	1005.3	995.6
30°	1024.7	1022.3	1016.2	1011.3	1016.2	1022.3	1024.7	1017.4	983.5	973.7	976.1
32.5°	985.8	979.7	973.7	970.1	973.7	979.7	985.8	983.5	957.9	944.5	947.0
35°	939.7	940.9	939.7	936.0	939.7	940.9	939.7	942.2	926.3	914.2	913.0
37.5°	907.0	909.3	908.1	903.3	908.1	909.3	907.0	904.5	882.6	879.0	881.4
40°	872.9	874.1	872.9	869.3	872.9	874.1	872.9	868.0	837.7	838.9	847.4
42.5°	840.2	838.9	835.3	832.8	835.3	838.9	840.2	832.8	794.0	790.4	806.1
45°	802.5	803.7	796.5	792.8	796.5	803.7	802.5	797.6	757.6	747.8	758.8
47.5°	764.9	764.9	758.8	755.2	758.8	764.9	764.9	758.8	716.3	706.6	712.6
50°	724.9	723.6	715.1	713.9	715.1	723.6	724.9	721.1	676.2	667.7	667.7
52.5°	678.7	678.7	679.9	682.3	679.9	678.7	678.7	679.9	639.9	631.3	628.9
55°	638.6	639.9	648.4	650.7	648.4	639.9	638.6	638.6	602.2	593.7	588.8
57.5°	597.3	597.3	603.4	603.4	603.4	597.3	597.3	594.9	559.7	552.4	550.0
60°	550.0	552.4	557.3	556.0	557.3	552.4	550.0	547.5	517.2	512.3	503.8
62.5°	500.2	502.6	503.8	501.5	503.8	502.6	500.2	493.0	474.8	471.0	460.2
65°	448.0	450.4	451.7	449.2	451.7	450.4	448.0	444.3	431.0	425.0	415.2
67.5°	394.6	393.4	392.1	397.0	392.1	393.4	394.6	389.8	381.3	376.4	363.1
70°	340.0	340.0	338.7	341.2	338.7	340.0	340.0	336.3	331.5	327.8	315.6
72.5°	281.7	280.4	285.3	281.7	285.3	280.4	281.7	280.4	278.1	274.4	262.2
75°	224.6	227.0	224.6	228.3	224.6	227.0	224.6	225.8	224.6	222.2	213.7
77.5°	171.2	173.6	171.2	171.2	171.2	173.6	171.2	172.4	172.4	172.4	165.1
80°	121.4	120.2	120.2	118.9	120.2	120.2	121.4	121.4	122.6	120.2	117.8
82.5°	77.7	76.5	76.5	78.9	76.5	76.5	77.7	78.9	76.5	76.5	76.5
85°	42.5	43.7	41.3	41.3	41.3	43.7	42.5	40.1	42.5	42.5	41.3
87.5°	15.7	14.6	14.6	14.6	14.6	14.6	15.7	17.0	17.0	17.0	18.2
90°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	9.1	12.2	13.8	11.9
92.5°	34.5	33.1	27.6	22.1	27.6	33.1	34.5	48.9	68.0	77.6	68.2
95°	116.9	112.8	96.2	79.6	96.2	112.8	116.9	153.6	202.4	226.8	191.5
97.5°	270.0	262.1	230.5	198.9	230.5	262.1	270.0	293.2	324.0	339.4	280.6
100°	379.2	369.8	332.1	294.4	332.1	369.8	379.2	377.5	375.2	374.0	308.8
102.5°	472.3	464.3	432.0	399.8	432.0	464.3	472.3	442.8	403.5	383.9	317.7
105°	581.1	576.8	559.5	542.1	559.5	576.8	581.1	515.0	426.9	382.8	318.7
107.5°	637.7	638.8	642.9	647.1	642.9	638.8	637.7	545.5	422.4	361.0	304.5
110°	652.2	656.7	674.7	692.8	674.7	656.7	652.2	549.1	411.6	342.9	291.9



TEST NUMBER: P933867

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	642.9	649.9	677.6	705.3	677.6	649.9	642.9	537.4	396.7	326.4	281.0
115°	611.6	621.2	659.7	698.1	659.7	621.2	611.6	510.0	374.4	306.6	268.4
117.5°	568.3	578.9	621.6	664.2	621.6	578.9	568.3	476.5	354.2	293.0	260.5
120°	539.0	549.3	590.8	632.3	590.8	549.3	539.0	455.2	343.4	287.6	257.9
122.5°	509.9	520.1	560.9	601.8	560.9	520.1	509.9	434.4	333.7	283.4	256.4
125°	471.2	480.6	518.3	555.9	518.3	480.6	471.2	407.1	321.6	278.9	255.3
127.5°	440.3	448.2	479.9	511.7	479.9	448.2	440.3	385.2	311.8	275.1	254.6
130°	420.6	428.0	457.3	486.6	457.3	428.0	420.6	371.7	306.3	273.6	255.1
132.5°	404.0	410.6	436.8	463.1	436.8	410.6	404.0	360.1	301.6	272.4	255.3
135°	380.4	386.1	408.7	431.3	408.7	386.1	380.4	343.7	294.7	270.2	255.1
137.5°	363.0	367.6	386.1	404.7	386.1	367.6	363.0	331.9	290.6	269.8	256.6
140°	349.0	353.4	370.7	388.0	370.7	353.4	349.0	322.2	286.5	268.6	256.9
142.5°	339.3	343.0	357.9	372.7	357.9	343.0	339.3	315.7	284.3	268.6	257.9
145°	324.6	327.4	338.7	349.9	338.7	327.4	324.6	305.3	279.6	266.8	257.9
147.5°	312.2	314.5	323.9	333.3	323.9	314.5	312.2	297.1	276.9	266.8	259.6
150°	305.1	307.0	314.6	322.2	314.6	307.0	305.1	292.4	275.3	266.8	260.5
152.5°	299.5	301.0	306.7	312.4	306.7	301.0	299.5	288.6	274.0	266.8	261.1
155°	292.8	293.7	297.5	301.3	297.5	293.7	292.8	284.1	272.5	266.8	262.5
157.5°	287.0	287.7	290.4	293.0	290.4	287.7	287.0	280.2	271.3	266.8	263.8
160°	284.1	284.5	286.0	287.6	286.0	284.5	284.1	278.3	270.6	266.8	264.4
162.5°	281.4	281.8	283.2	284.7	283.2	281.8	281.4	276.5	270.0	266.8	265.0
165°	277.3	277.6	279.2	280.7	279.2	277.6	277.3	273.7	269.1	266.8	266.0
167.5°	275.4	275.6	276.3	276.9	276.3	275.6	275.4	273.2	270.1	268.6	267.9
170°	275.4	275.4	275.4	275.4	275.4	275.4	275.4	273.2	270.1	268.6	268.6
172.5°	274.0	273.8	273.3	272.7	273.3	273.8	274.0	272.2	269.7	268.6	268.6
175°	272.0	272.0	272.0	272.0	272.0	272.0	272.0	270.8	269.3	268.6	268.9
177.5°	271.6	271.5	270.8	270.2	270.8	271.5	271.6	270.7	269.6	268.9	269.2
180°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2



TEST NUMBER: P933867

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	1283.3	1283.3	1283.3	1283.3	1283.3
2.5°	1267.5	1273.6	1277.3	1282.1	1294.2
5°	1219.0	1242.1	1249.3	1267.5	1289.4
7.5°	1112.1	1182.5	1202.0	1245.7	1279.6
10°	1008.9	1079.3	1113.3	1216.5	1267.5
12.5°	956.7	998.0	1021.0	1165.6	1250.5
15°	923.9	953.0	970.1	1097.5	1231.1
17.5°	898.5	919.1	931.2	1030.8	1204.4
20°	882.6	892.4	903.3	982.2	1174.0
22.5°	871.8	865.7	874.1	948.2	1132.7
25°	864.4	841.3	851.1	921.5	1084.2
27.5°	870.5	819.5	823.2	897.2	1033.2
30°	871.8	792.8	794.0	871.8	976.1
32.5°	863.3	764.9	766.1	840.2	911.8
35°	842.6	732.1	730.9	803.7	824.3
37.5°	814.6	696.9	696.9	763.7	728.5
40°	780.7	661.7	665.3	711.5	643.5
42.5°	739.4	624.0	628.9	642.3	580.3
45°	694.4	587.6	591.3	542.7	531.8
47.5°	644.7	550.0	551.2	450.4	516.0
50°	585.2	511.1	506.3	386.1	514.8
52.5°	533.0	468.6	454.0	349.7	467.4
55°	482.0	423.7	392.1	321.7	433.4
57.5°	437.1	365.4	335.1	288.9	426.1
60°	395.8	308.4	285.3	253.7	390.9
62.5°	361.8	265.8	261.0	229.5	354.6
65°	325.4	236.8	235.5	208.8	301.1
67.5°	290.2	217.3	216.2	189.4	229.5
70°	252.5	196.7	194.2	168.7	170.0
72.5°	213.7	173.6	171.2	151.8	140.8
75°	174.8	146.9	145.7	132.3	114.1
77.5°	137.2	116.6	118.9	106.8	83.8
80°	98.3	85.0	87.4	76.5	63.1
82.5°	65.5	55.8	58.3	48.6	42.5
85°	36.4	31.6	32.8	25.5	19.5
87.5°	17.0	14.6	14.6	9.7	6.1
90°	8.0	5.1	4.7	3.3	1.8
92.5°	49.2	35.0	32.0	19.6	7.2
95°	121.0	68.2	62.5	39.9	17.4
97.5°	163.0	74.9	69.9	50.1	30.1
100°	178.3	80.5	75.9	57.9	39.9
102.5°	185.4	86.1	81.9	65.1	48.2
105°	190.6	94.5	91.0	76.7	62.4
107.5°	191.5	106.8	103.5	90.2	76.8
110°	190.1	113.7	110.7	98.7	86.7



TEST NUMBER: P933867

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	190.2	122.0	119.1	107.7	96.3
115°	191.9	134.5	131.9	121.3	110.8
117.5°	195.5	146.7	144.3	134.7	125.1
120°	198.4	153.8	151.5	142.5	133.4
122.5°	202.6	162.1	159.9	150.7	141.6
125°	208.2	172.8	170.7	162.5	154.1
127.5°	213.8	183.1	181.0	172.6	164.3
130°	217.9	190.0	187.7	178.8	169.7
132.5°	221.2	195.6	193.3	184.4	175.3
135°	224.8	202.2	200.1	191.9	183.7
137.5°	230.3	210.5	208.5	200.3	192.2
140°	233.6	216.2	214.3	206.7	199.2
142.5°	236.4	220.3	218.6	211.6	204.7
145°	240.0	226.7	225.1	219.1	213.1
147.5°	245.3	234.6	233.2	227.3	221.4
150°	248.1	238.8	237.4	232.2	226.8
152.5°	249.9	241.5	240.5	236.4	232.4
155°	253.9	247.5	246.7	243.8	240.8
157.5°	257.9	253.4	252.7	249.8	246.9
160°	259.7	256.2	255.6	253.4	251.1
162.5°	261.6	259.1	258.6	257.0	255.3
165°	264.5	263.3	262.9	261.4	259.9
167.5°	266.7	265.7	265.5	264.8	264.0
170°	268.5	268.4	268.2	267.5	266.8
172.5°	268.6	268.6	268.6	268.4	268.2
175°	269.6	270.2	270.2	270.2	270.2
177.5°	269.7	270.2	270.2	270.2	270.2
180°	270.2	270.2	270.2	270.2	270.2



TEST NUMBER: P933867  
 CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-8-4000K

**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	12.33	13.35	13.14	14.18	15.21	15.16	16.18	15.98	17.02	18.05
	3H	12.82	13.73	13.64	14.58	15.63	16.52	17.44	17.35	18.28	19.34
	4H	13.01	13.88	13.86	14.73	15.80	16.98	17.84	17.82	18.69	19.76
	6H	13.14	13.94	14.00	14.80	15.88	17.27	18.07	18.13	18.93	20.01
	8H	13.15	13.91	14.01	14.78	15.87	17.35	18.11	18.22	18.99	20.07
	12H	13.12	13.85	13.99	14.72	15.83	17.40	18.12	18.27	18.99	20.10
4H	2H	13.38	14.25	14.23	15.10	16.17	15.59	16.46	16.44	17.31	18.38
	3H	14.42	15.14	15.28	16.03	17.11	17.12	17.84	17.97	18.72	19.81
	4H	14.71	15.36	15.58	16.24	17.36	17.65	18.31	18.52	19.19	20.30
	6H	14.84	15.41	15.73	16.31	17.43	18.03	18.60	18.91	19.50	20.62
	8H	14.85	15.38	15.74	16.28	17.41	18.14	18.67	19.03	19.57	20.70
	12H	14.82	15.30	15.73	16.22	17.35	18.21	18.68	19.11	19.60	20.74
8H	4H	15.17	15.70	16.06	16.60	17.73	17.79	18.32	18.68	19.22	20.35
	6H	15.44	15.88	16.36	16.82	17.95	18.23	18.67	19.15	19.61	20.74
	8H	15.49	15.87	16.41	16.81	17.95	18.39	18.78	19.32	19.71	20.86
	12H	15.48	15.82	16.41	16.74	17.94	18.50	18.84	19.43	19.76	20.96
12H	4H	15.19	15.66	16.10	16.58	17.72	17.76	18.24	18.67	19.16	20.29
	6H	15.50	15.89	16.43	16.83	17.97	18.23	18.62	19.16	19.56	20.70
	8H	15.58	15.92	16.51	16.85	18.04	18.40	18.74	19.33	19.67	20.87