

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: P935041

Luminaire Tested: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

**Test Information**

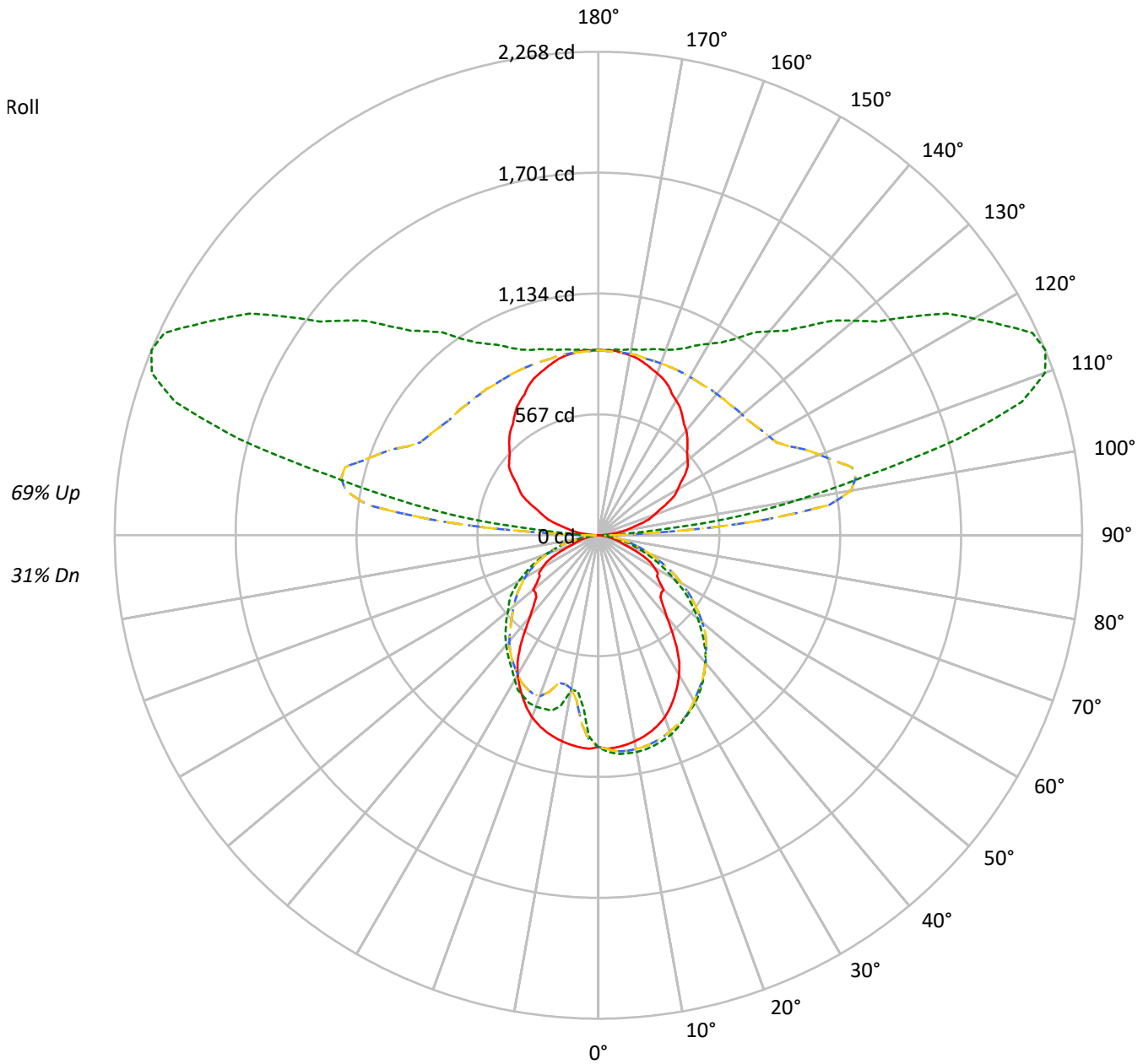
Test Method: LM-79-2019  
Report Number: P935041  
REPORT IS A COMBINATION OF REPORTS P933739 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8213.3 lumens  
Efficiency: N/A  
Efficacy: 132.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 61.8  
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: P935041  
CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°    - - - 135°-315°



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**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	0
RCR																		
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	50	43	40	38	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	25	21	18	18	15	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	15	15	13	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	12	10	8

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

	0°	90°	180°	270°
0°	6148	6148	6148	6148
5°	6191	6206	6191	4880
10°	6148	6114	6148	4371
15°	6079	5981	6079	4994
20°	5950	5824	5950	5004
25°	5687	5596	5687	4899
30°	5349	5406	5349	4666
35°	4766	5165	4766	4410
40°	3969	4882	3969	4217
45°	3544	4550	3544	3994
50°	3762	4156	3762	3771
55°	3536	3730	3536	3642
60°	3641	3168	3641	3335
65°	3296	2620	3296	2928
70°	2276	2087	2276	2454
75°	1989	1543	1989	1848
80°	1592	1020	1592	1111
85°	894	540	894	460

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5435 cd/sqm



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	1.1
10°-20°	254.7	3.1
20°-30°	393.8	4.8
30°-40°	470.1	5.7
40°-50°	472.8	5.8
50°-60°	411.4	5.0
60°-70°	291.7	3.6
70°-80°	154.3	1.9
80°-90°	41.8	0.5
90°-100°	423.6	5.2
100°-110°	1113.6	13.6
110°-120°	1154.6	14.1
120°-130°	926.2	11.3
130°-140°	726.7	8.8
140°-150°	557.8	6.8
150°-160°	401.7	4.9
160°-170°	245.8	3.0
170°-180°	83.0	1.0
0°-30°	738.2	9.0
0°-40°	1208.3	14.7
0°-60°	2092.5	25.5
0°-90°	2580.3	31.4
90°-120°	2691.8	32.8
90°-150°	4902.4	59.7
90°-180°	5633.0	68.6
0°-180°	8213.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	994	994	994	994	994	
5°	998	1030	998	810	998	95
15°	954	1020	954	852	954	268
25°	840	952	840	833	840	386
35°	638	849	638	725	638	395
45°	412	700	412	614	412	330
55°	336	516	336	504	336	308
65°	233	311	233	348	233	223
75°	88	148	88	177	88	93
85°	15	38	15	32	15	20
90°	6	22	6	22	6	5
95°	56	256	56	256	56	62
105°	201	1744	201	1744	201	213
115°	356	2245	356	2245	356	352
125°	496	1788	496	1788	496	440
135°	591	1387	591	1387	591	457
145°	685	1126	685	1126	685	429
155°	774	969	774	969	774	356
165°	836	903	836	903	836	236
175°	869	875	869	875	869	82
180°	869	869	869	869	869	



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9
2.5°	1002.4	1002.4	1008.0	1009.9	1009.9	1007.1	1004.2	1007.1	1015.6	1018.4	1017.4
5°	998.5	1006.1	1016.5	1018.4	1020.2	1019.3	1017.4	1019.3	1028.6	1030.6	1031.5
7.5°	991.1	1005.2	1018.4	1021.2	1024.0	1021.2	1020.2	1022.1	1031.5	1033.4	1033.4
10°	981.6	1001.4	1016.5	1018.4	1021.2	1018.4	1018.4	1022.1	1031.5	1033.4	1034.3
12.5°	968.5	995.7	1009.9	1011.7	1015.6	1014.6	1013.6	1017.4	1026.8	1028.6	1028.6
15°	953.5	985.5	998.5	1000.5	1007.1	1005.2	1005.2	1008.9	1019.3	1022.1	1021.2
17.5°	932.7	972.3	987.3	990.1	994.8	993.9	994.8	998.5	1008.0	1009.9	1010.8
20°	909.3	954.4	972.3	975.1	979.8	979.8	979.8	984.5	993.9	997.6	997.6
22.5°	877.3	935.5	954.4	956.3	961.9	961.9	963.8	970.4	978.8	979.8	979.8
25°	839.6	914.9	930.9	936.6	942.2	945.0	947.8	951.6	954.4	953.5	954.4
27.5°	800.2	888.5	909.3	913.0	920.6	923.4	927.1	928.1	929.0	931.8	929.9
30°	756.0	851.9	882.9	886.7	898.9	900.8	897.0	898.9	903.6	905.5	907.4
32.5°	706.2	797.4	855.6	864.1	875.4	869.7	868.8	871.6	879.2	879.2	881.1
35°	638.5	755.1	830.3	837.8	846.3	839.6	843.5	844.4	849.1	851.9	851.0
37.5°	564.2	718.4	803.9	809.5	816.2	807.7	813.4	816.2	819.9	818.1	818.1
40°	498.4	661.0	772.9	776.6	782.3	775.7	781.4	783.3	785.2	783.3	782.3
42.5°	449.5	598.0	740.0	744.7	740.9	745.6	747.6	751.3	748.5	744.7	744.7
45°	411.8	581.1	704.3	709.9	704.3	711.8	714.6	714.6	706.2	704.3	703.4
47.5°	399.6	547.3	668.6	668.6	665.7	675.1	679.8	673.3	664.8	662.0	662.0
50°	398.7	509.6	619.6	615.9	629.1	640.4	635.6	629.1	622.5	612.1	612.1
52.5°	362.0	463.5	556.6	570.7	591.5	598.0	590.5	583.9	572.6	567.9	564.2
55°	335.7	415.6	499.3	527.5	549.1	557.6	543.5	536.9	520.0	517.2	515.3
57.5°	330.0	346.0	446.6	482.4	508.7	507.7	499.3	487.1	473.0	470.2	469.2
60°	302.8	250.1	390.2	432.6	459.8	457.0	449.5	438.2	425.0	423.1	421.3
62.5°	274.5	181.5	326.3	374.3	412.8	411.8	405.3	388.4	378.9	374.3	370.5
65°	233.2	152.4	232.3	311.3	366.7	368.6	354.5	342.3	331.9	326.3	325.4
67.5°	177.7	124.1	157.0	259.6	322.6	320.6	302.8	297.1	284.0	281.2	275.6
70°	131.6	82.7	109.1	210.6	279.3	274.5	260.5	253.9	241.6	235.1	231.3
72.5°	109.1	66.7	79.9	163.6	235.1	229.5	217.2	209.7	199.4	193.7	189.9
75°	88.4	70.5	61.1	121.3	190.9	187.1	175.8	168.3	159.8	152.4	153.3
77.5°	64.9	65.8	48.9	89.4	151.4	145.7	139.2	129.7	126.0	118.5	118.5
80°	48.9	51.7	36.6	61.1	109.1	109.1	103.5	96.8	90.3	86.6	86.6
82.5°	32.9	32.9	27.3	38.5	74.3	71.5	67.7	65.8	62.1	60.2	60.2
85°	15.0	18.8	16.9	23.5	40.5	42.3	42.3	40.5	39.5	37.6	38.5
87.5°	4.7	8.5	10.4	13.2	20.7	21.6	22.5	22.5	22.5	23.5	23.5
90°	5.8	10.5	15.1	16.4	25.7	38.1	44.3	39.4	29.5	22.2	22.2
92.5°	23.4	63.0	102.6	112.5	158.2	219.1	249.6	218.7	157.0	110.8	106.4
95°	56.0	128.5	201.1	219.3	389.4	616.2	729.5	651.0	493.9	376.1	362.8
97.5°	96.8	160.9	224.9	240.9	524.5	902.6	1091.7	1042.1	942.8	868.3	842.9
100°	128.3	186.4	244.4	258.9	573.6	993.2	1203.1	1206.7	1214.0	1219.4	1189.1
102.5°	155.2	209.4	263.5	277.0	596.2	1021.8	1234.6	1297.8	1424.3	1519.2	1493.3
105°	200.6	246.5	292.4	303.9	613.0	1025.1	1231.1	1372.9	1656.4	1869.0	1855.1
107.5°	247.2	290.0	332.8	343.5	616.1	979.4	1161.1	1358.9	1754.3	2051.0	2054.4
110°	278.7	317.3	356.0	365.7	611.4	939.0	1102.8	1323.8	1766.0	2097.7	2112.2



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.7	346.5	383.3	392.5	611.6	903.7	1049.7	1276.0	1728.6	2067.9	2090.2
115°	356.3	390.2	424.2	432.7	617.2	863.1	986.1	1204.1	1640.1	1967.1	1998.0
117.5°	402.4	433.2	464.1	471.7	628.6	837.8	942.4	1139.1	1532.5	1827.6	1861.9
120°	429.2	458.3	487.3	494.6	638.0	829.3	924.9	1104.6	1464.1	1733.8	1767.1
122.5°	455.5	484.7	514.1	521.4	651.4	824.8	911.5	1073.4	1397.1	1639.8	1672.7
125°	495.7	522.4	549.1	555.8	669.5	821.1	896.9	1034.4	1309.4	1515.7	1546.0
127.5°	528.4	555.3	582.3	589.1	687.6	819.0	884.7	1002.8	1238.9	1416.0	1441.5
130°	545.9	574.9	603.9	611.2	700.8	820.3	880.0	985.1	1195.3	1353.0	1376.5
132.5°	563.9	593.0	622.0	629.2	711.5	821.1	875.9	970.0	1158.2	1299.3	1320.5
135°	590.7	617.2	643.6	650.3	723.2	820.3	868.9	947.7	1105.3	1223.5	1241.8
137.5°	618.1	644.3	670.6	677.1	740.7	825.4	867.8	934.4	1067.6	1167.5	1182.4
140°	640.9	665.0	689.2	695.1	751.3	826.2	863.7	921.2	1036.3	1122.6	1136.5
142.5°	658.4	680.7	703.0	708.6	760.3	829.2	863.7	914.2	1015.3	1091.1	1103.0
145°	685.2	704.7	724.1	729.0	772.0	829.3	857.9	899.2	981.9	1043.9	1052.9
147.5°	712.1	730.9	749.8	754.6	789.0	834.9	857.9	890.4	955.5	1004.2	1011.7
150°	729.5	746.6	763.7	768.0	798.0	837.9	857.9	885.4	940.2	981.4	987.5
152.5°	747.7	760.7	773.6	776.8	803.8	839.8	857.9	881.3	928.3	963.4	968.0
155°	774.5	784.0	793.6	796.0	816.7	844.1	857.9	876.6	913.9	941.8	944.9
157.5°	794.3	803.7	812.9	815.3	829.5	848.4	857.9	872.4	901.4	923.2	925.4
160°	807.7	815.0	822.3	824.0	835.3	850.4	857.9	870.3	895.2	913.9	915.1
162.5°	821.1	826.6	832.0	833.4	841.5	852.5	857.9	868.3	889.4	905.1	906.2
165°	835.7	840.6	845.5	846.8	850.5	855.4	857.9	865.4	880.4	891.7	892.9
167.5°	849.1	851.4	853.8	854.3	857.4	861.6	863.7	868.6	878.4	885.8	886.4
170°	857.9	860.2	862.5	863.1	863.3	863.6	863.7	868.6	878.4	885.8	885.8
172.5°	862.5	863.0	863.6	863.7	863.7	863.7	863.7	867.6	875.4	881.1	880.7
175°	868.9	868.9	868.9	868.9	867.1	864.8	863.7	866.1	871.1	874.8	874.8
177.5°	868.9	868.9	868.9	868.9	867.6	865.8	864.9	866.8	870.7	873.6	873.0
180°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9
2.5°	1019.3	1016.5	1019.3	1017.4	1018.4	1015.6	1007.1	1004.2	1007.1	1009.9	1009.9
5°	1031.5	1029.6	1031.5	1031.5	1030.6	1028.6	1019.3	1017.4	1019.3	1020.2	1018.4
7.5°	1035.3	1032.5	1035.3	1033.4	1033.4	1031.5	1022.1	1020.2	1021.2	1024.0	1021.2
10°	1035.3	1032.5	1035.3	1034.3	1033.4	1031.5	1022.1	1018.4	1018.4	1021.2	1018.4
12.5°	1030.6	1028.6	1030.6	1028.6	1028.6	1026.8	1017.4	1013.6	1014.6	1015.6	1011.7
15°	1023.0	1020.2	1023.0	1021.2	1022.1	1019.3	1008.9	1005.2	1005.2	1007.1	1000.5
17.5°	1011.7	1008.0	1011.7	1010.8	1009.9	1008.0	998.5	994.8	993.9	994.8	990.1
20°	998.5	995.7	998.5	997.6	997.6	993.9	984.5	979.8	979.8	979.8	975.1
22.5°	977.9	975.1	977.9	979.8	979.8	978.8	970.4	963.8	961.9	961.9	956.3
25°	954.4	951.6	954.4	954.4	953.5	954.4	951.6	947.8	945.0	942.2	936.6
27.5°	931.8	929.9	931.8	929.9	931.8	929.0	928.1	927.1	923.4	920.6	913.0
30°	909.3	907.4	909.3	907.4	905.5	903.6	898.9	897.0	900.8	898.9	886.7
32.5°	881.1	879.2	881.1	881.1	879.2	879.2	871.6	868.8	869.7	875.4	864.1
35°	851.9	849.1	851.9	851.0	851.9	849.1	844.4	843.5	839.6	846.3	837.8
37.5°	818.1	815.3	818.1	818.1	818.1	819.9	816.2	813.4	807.7	816.2	809.5
40°	783.3	779.5	783.3	782.3	783.3	785.2	783.3	781.4	775.7	782.3	776.6
42.5°	743.7	742.8	743.7	744.7	744.7	748.5	751.3	747.6	745.6	740.9	744.7
45°	701.5	699.5	701.5	703.4	704.3	706.2	714.6	714.6	711.8	704.3	709.9
47.5°	656.4	651.6	656.4	662.0	662.0	664.8	673.3	679.8	675.1	665.7	668.6
50°	608.4	609.3	608.4	612.1	612.1	622.5	629.1	635.6	640.4	629.1	615.9
52.5°	561.4	560.4	561.4	564.2	567.9	572.6	583.9	590.5	598.0	591.5	570.7
55°	514.4	516.2	514.4	515.3	517.2	520.0	536.9	543.5	557.6	549.1	527.5
57.5°	467.4	464.5	467.4	469.2	470.2	473.0	487.1	499.3	507.7	508.7	482.4
60°	412.8	409.0	412.8	421.3	423.1	425.0	438.2	449.5	457.0	459.8	432.6
62.5°	364.8	358.3	364.8	370.5	374.3	378.9	388.4	405.3	411.8	412.8	374.3
65°	314.1	311.3	314.1	325.4	326.3	331.9	342.3	354.5	368.6	366.7	311.3
67.5°	268.0	268.0	268.0	275.6	281.2	284.0	297.1	302.8	320.6	322.6	259.6
70°	225.6	224.7	225.6	231.3	235.1	241.6	253.9	260.5	274.5	279.3	210.6
72.5°	185.3	184.3	185.3	189.9	193.7	199.4	209.7	217.2	229.5	235.1	163.6
75°	149.6	147.6	149.6	153.3	152.4	159.8	168.3	175.8	187.1	190.9	121.3
77.5°	114.7	114.7	114.7	118.5	118.5	126.0	129.7	139.2	145.7	151.4	89.4
80°	85.5	84.6	85.5	86.6	86.6	90.3	96.8	103.5	109.1	109.1	61.1
82.5°	60.2	58.3	60.2	60.2	60.2	62.1	65.8	67.7	71.5	74.3	38.5
85°	37.6	37.6	37.6	38.5	37.6	39.5	40.5	42.3	42.3	40.5	23.5
87.5°	24.5	23.5	24.5	23.5	23.5	22.5	22.5	22.5	21.6	20.7	13.2
90°	22.2	22.2	22.2	22.2	22.2	29.5	39.4	44.3	38.1	25.7	16.4
92.5°	88.7	71.1	88.7	106.4	110.8	157.0	218.7	249.6	219.1	158.2	112.5
95°	309.4	256.0	309.4	362.8	376.1	493.9	651.0	729.5	616.2	389.4	219.3
97.5°	741.3	639.7	741.3	842.9	868.3	942.8	1042.1	1091.7	902.6	524.5	240.9
100°	1068.1	947.0	1068.1	1189.1	1219.4	1214.0	1206.7	1203.1	993.2	573.6	258.9
102.5°	1389.5	1285.9	1389.5	1493.3	1519.2	1424.3	1297.8	1234.6	1021.8	596.2	277.0
105°	1799.4	1743.7	1799.4	1855.1	1869.0	1656.4	1372.9	1231.1	1025.1	613.0	303.9
107.5°	2067.9	2081.4	2067.9	2054.4	2051.0	1754.3	1358.9	1161.1	979.4	616.1	343.5
110°	2170.3	2228.3	2170.3	2112.2	2097.7	1766.0	1323.8	1102.8	939.0	611.4	365.7





TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2179.4	2268.5	2179.4	2090.2	2067.9	1728.6	1276.0	1049.7	903.7	611.6	392.5
115°	2121.6	2245.3	2121.6	1998.0	1967.1	1640.1	1204.1	986.1	863.1	617.2	432.7
117.5°	1999.1	2136.2	1999.1	1861.9	1827.6	1532.5	1139.1	942.4	837.8	628.6	471.7
120°	1900.4	2033.5	1900.4	1767.1	1733.8	1464.1	1104.6	924.9	829.3	638.0	494.6
122.5°	1804.2	1935.6	1804.2	1672.7	1639.8	1397.1	1073.4	911.5	824.8	651.4	521.4
125°	1667.0	1788.0	1667.0	1546.0	1515.7	1309.4	1034.4	896.9	821.1	669.5	555.8
127.5°	1543.7	1645.7	1543.7	1441.5	1416.0	1238.9	1002.8	884.7	819.0	687.6	589.1
130°	1470.9	1565.3	1470.9	1376.5	1353.0	1195.3	985.1	880.0	820.3	700.8	611.2
132.5°	1405.0	1489.5	1405.0	1320.5	1299.3	1158.2	970.0	875.9	821.1	711.5	629.2
135°	1314.6	1387.4	1314.6	1241.8	1223.5	1105.3	947.7	868.9	820.3	723.2	650.3
137.5°	1242.0	1301.7	1242.0	1182.4	1167.5	1067.6	934.4	867.8	825.4	740.7	677.1
140°	1192.3	1248.0	1192.3	1136.5	1122.6	1036.3	921.2	863.7	826.2	751.3	695.1
142.5°	1151.1	1199.0	1151.1	1103.0	1091.1	1015.3	914.2	863.7	829.2	760.3	708.6
145°	1089.3	1125.6	1089.3	1052.9	1043.9	981.9	899.2	857.9	829.3	772.0	729.0
147.5°	1041.8	1071.9	1041.8	1011.7	1004.2	955.5	890.4	857.9	834.9	789.0	754.6
150°	1011.9	1036.3	1011.9	987.5	981.4	940.2	885.4	857.9	837.9	798.0	768.0
152.5°	986.4	1004.8	986.4	968.0	963.4	928.3	881.3	857.9	839.8	803.8	776.8
155°	957.0	969.2	957.0	944.9	941.8	913.9	876.6	857.9	844.1	816.7	796.0
157.5°	933.9	942.4	933.9	925.4	923.2	901.4	872.4	857.9	848.4	829.5	815.3
160°	920.0	924.9	920.0	915.1	913.9	895.2	870.3	857.9	850.4	835.3	824.0
162.5°	910.9	915.5	910.9	906.2	905.1	889.4	868.3	857.9	852.5	841.5	833.4
165°	897.9	902.7	897.9	892.9	891.7	880.4	865.4	857.9	855.4	850.5	846.8
167.5°	888.4	890.5	888.4	886.4	885.8	878.4	868.6	863.7	861.6	857.4	854.3
170°	885.8	885.8	885.8	885.8	885.8	878.4	868.6	863.7	863.6	863.3	863.1
172.5°	878.9	877.1	878.9	880.7	881.1	875.4	867.6	863.7	863.7	863.7	863.7
175°	874.8	874.8	874.8	874.8	874.8	871.1	866.1	863.7	864.8	867.1	868.9
177.5°	871.0	868.9	871.0	873.0	873.6	870.7	866.8	864.9	865.8	867.6	868.9
180°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9
2.5°	1008.0	1002.4	1002.4	992.9	989.2	986.4	981.6	967.6	963.8	960.0	965.6
5°	1016.5	1006.1	998.5	981.6	967.6	961.9	944.1	910.2	887.6	870.7	861.3
7.5°	1018.4	1005.2	991.1	964.7	930.9	915.8	861.3	799.3	782.3	767.3	757.9
10°	1016.5	1001.4	981.6	942.2	862.3	835.9	781.4	740.9	730.6	727.8	730.6
12.5°	1009.9	995.7	968.5	902.6	790.8	772.9	740.9	717.5	715.5	720.3	745.6
15°	998.5	985.5	953.5	850.0	751.3	738.1	715.5	707.1	717.5	750.4	826.6
17.5°	987.3	972.3	932.7	798.3	721.2	711.8	695.8	712.7	771.0	815.3	840.6
20°	972.3	954.4	909.3	760.7	699.5	691.1	683.6	759.7	803.9	819.9	834.0
22.5°	954.4	935.5	877.3	734.4	677.0	670.5	675.1	786.1	803.9	815.3	827.5
25°	930.9	914.9	839.6	713.6	659.2	651.6	669.5	783.3	793.6	796.5	820.9
27.5°	909.3	888.5	800.2	694.9	637.6	634.7	674.2	771.0	778.6	781.4	807.7
30°	882.9	851.9	756.0	675.1	614.9	614.0	675.1	756.0	754.1	761.6	788.0
32.5°	855.6	797.4	706.2	650.6	593.4	592.4	668.6	733.5	731.6	741.9	761.6
35°	830.3	755.1	638.5	622.5	566.1	567.0	652.5	707.1	708.0	717.5	729.6
37.5°	803.9	718.4	564.2	591.5	539.7	539.7	630.9	682.6	680.7	683.6	700.6
40°	772.9	661.0	498.4	551.0	515.3	512.5	604.6	656.4	649.7	648.8	672.3
42.5°	740.0	598.0	449.5	497.5	487.1	483.3	572.6	624.4	612.1	614.9	645.0
45°	704.3	581.1	411.8	420.3	457.9	455.1	537.8	587.6	579.2	586.7	617.7
47.5°	668.6	547.3	399.6	348.8	426.9	425.9	499.3	551.9	547.3	554.7	587.6
50°	619.6	509.6	398.7	299.0	392.1	395.8	453.2	517.2	517.2	523.7	558.6
52.5°	556.6	463.5	362.0	270.8	351.6	362.9	412.8	487.1	488.9	495.6	526.5
55°	499.3	415.6	335.7	249.2	303.7	328.2	373.3	456.0	459.8	466.4	494.6
57.5°	446.6	346.0	330.0	223.8	259.6	283.0	338.6	425.9	427.8	433.5	460.7
60°	390.2	250.1	302.8	196.5	221.0	238.8	306.5	390.2	396.8	400.5	424.1
62.5°	326.3	181.5	274.5	177.7	202.2	205.9	280.2	356.4	364.8	367.6	381.7
65°	232.3	152.4	233.2	161.7	182.5	183.4	252.0	321.5	329.1	333.8	344.2
67.5°	157.0	124.1	177.7	146.7	167.4	168.3	224.7	281.2	291.5	295.3	301.8
70°	109.1	82.7	131.6	130.7	150.5	152.4	195.5	244.5	253.9	256.7	260.5
72.5°	79.9	66.7	109.1	117.5	132.5	134.5	165.5	203.1	212.6	215.4	217.2
75°	61.1	70.5	88.4	102.5	112.8	113.8	135.4	165.5	172.1	173.9	174.9
77.5°	48.9	65.8	64.9	82.7	92.2	90.3	106.3	127.9	133.5	133.5	133.5
80°	36.6	51.7	48.9	59.3	67.7	65.8	76.2	91.2	93.1	95.0	94.0
82.5°	27.3	32.9	32.9	37.6	45.1	43.3	50.8	59.3	59.3	59.3	61.1
85°	16.9	18.8	15.0	19.7	25.4	24.5	28.2	32.0	32.9	32.9	31.0
87.5°	10.4	8.5	4.7	7.5	11.3	11.3	13.2	14.1	13.2	13.2	13.2
90°	15.1	10.5	5.8	10.5	15.1	16.4	25.7	38.1	44.3	39.4	29.5
92.5°	102.6	63.0	23.4	63.0	102.6	112.5	158.2	219.1	249.6	218.7	157.0
95°	201.1	128.5	56.0	128.5	201.1	219.3	389.4	616.2	729.5	651.0	493.9
97.5°	224.9	160.9	96.8	160.9	224.9	240.9	524.5	902.6	1091.7	1042.1	942.8
100°	244.4	186.4	128.3	186.4	244.4	258.9	573.6	993.2	1203.1	1206.7	1214.0
102.5°	263.5	209.4	155.2	209.4	263.5	277.0	596.2	1021.8	1234.6	1297.8	1424.3
105°	292.4	246.5	200.6	246.5	292.4	303.9	613.0	1025.1	1231.1	1372.9	1656.4
107.5°	332.8	290.0	247.2	290.0	332.8	343.5	616.1	979.4	1161.1	1358.9	1754.3
110°	356.0	317.3	278.7	317.3	356.0	365.7	611.4	939.0	1102.8	1323.8	1766.0



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	383.3	346.5	309.7	346.5	383.3	392.5	611.6	903.7	1049.7	1276.0	1728.6
115°	424.2	390.2	356.3	390.2	424.2	432.7	617.2	863.1	986.1	1204.1	1640.1
117.5°	464.1	433.2	402.4	433.2	464.1	471.7	628.6	837.8	942.4	1139.1	1532.5
120°	487.3	458.3	429.2	458.3	487.3	494.6	638.0	829.3	924.9	1104.6	1464.1
122.5°	514.1	484.7	455.5	484.7	514.1	521.4	651.4	824.8	911.5	1073.4	1397.1
125°	549.1	522.4	495.7	522.4	549.1	555.8	669.5	821.1	896.9	1034.4	1309.4
127.5°	582.3	555.3	528.4	555.3	582.3	589.1	687.6	819.0	884.7	1002.8	1238.9
130°	603.9	574.9	545.9	574.9	603.9	611.2	700.8	820.3	880.0	985.1	1195.3
132.5°	622.0	593.0	563.9	593.0	622.0	629.2	711.5	821.1	875.9	970.0	1158.2
135°	643.6	617.2	590.7	617.2	643.6	650.3	723.2	820.3	868.9	947.7	1105.3
137.5°	670.6	644.3	618.1	644.3	670.6	677.1	740.7	825.4	867.8	934.4	1067.6
140°	689.2	665.0	640.9	665.0	689.2	695.1	751.3	826.2	863.7	921.2	1036.3
142.5°	703.0	680.7	658.4	680.7	703.0	708.6	760.3	829.2	863.7	914.2	1015.3
145°	724.1	704.7	685.2	704.7	724.1	729.0	772.0	829.3	857.9	899.2	981.9
147.5°	749.8	730.9	712.1	730.9	749.8	754.6	789.0	834.9	857.9	890.4	955.5
150°	763.7	746.6	729.5	746.6	763.7	768.0	798.0	837.9	857.9	885.4	940.2
152.5°	773.6	760.7	747.7	760.7	773.6	776.8	803.8	839.8	857.9	881.3	928.3
155°	793.6	784.0	774.5	784.0	793.6	796.0	816.7	844.1	857.9	876.6	913.9
157.5°	812.9	803.7	794.3	803.7	812.9	815.3	829.5	848.4	857.9	872.4	901.4
160°	822.3	815.0	807.7	815.0	822.3	824.0	835.3	850.4	857.9	870.3	895.2
162.5°	832.0	826.6	821.1	826.6	832.0	833.4	841.5	852.5	857.9	868.3	889.4
165°	845.5	840.6	835.7	840.6	845.5	846.8	850.5	855.4	857.9	865.4	880.4
167.5°	853.8	851.4	849.1	851.4	853.8	854.3	857.4	861.6	863.7	868.6	878.4
170°	862.5	860.2	857.9	860.2	862.5	863.1	863.3	863.6	863.7	868.6	878.4
172.5°	863.6	863.0	862.5	863.0	863.6	863.7	863.7	863.7	863.7	867.6	875.4
175°	868.9	868.9	868.9	868.9	868.9	868.9	867.1	864.8	863.7	866.1	871.1
177.5°	868.9	868.9	868.9	868.9	868.9	868.9	867.6	865.8	864.9	866.8	870.7
180°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9	993.9
2.5°	959.1	956.3	960.0	949.7	960.0	956.3	959.1	965.6	960.0	963.8	967.6
5°	841.6	836.8	821.8	809.5	821.8	836.8	841.6	861.3	870.7	887.6	910.2
7.5°	752.3	748.5	744.7	737.2	744.7	748.5	752.3	757.9	767.3	782.3	799.3
10°	732.5	733.5	739.1	738.1	739.1	733.5	732.5	730.6	727.8	730.6	740.9
12.5°	783.3	791.7	822.7	820.9	822.7	791.7	783.3	745.6	720.3	715.5	717.5
15°	841.6	844.4	851.0	851.9	851.0	844.4	841.6	826.6	750.4	717.5	707.1
17.5°	847.2	848.2	852.8	852.8	852.8	848.2	847.2	840.6	815.3	771.0	712.7
20°	842.5	844.4	853.8	855.6	853.8	844.4	842.5	834.0	819.9	803.9	759.7
22.5°	840.6	844.4	851.9	851.0	851.9	844.4	840.6	827.5	815.3	803.9	786.1
25°	831.2	831.2	832.2	833.1	832.2	831.2	831.2	820.9	796.5	793.6	783.3
27.5°	811.5	813.4	819.0	818.1	819.0	813.4	811.5	807.7	781.4	778.6	771.0
30°	793.6	791.7	787.0	783.3	787.0	791.7	793.6	788.0	761.6	754.1	756.0
32.5°	763.6	758.8	754.1	751.3	754.1	758.8	763.6	761.6	741.9	731.6	733.5
35°	727.8	728.7	727.8	725.0	727.8	728.7	727.8	729.6	717.5	708.0	707.1
37.5°	702.4	704.3	703.4	699.5	703.4	704.3	702.4	700.6	683.6	680.7	682.6
40°	676.1	677.0	676.1	673.3	676.1	677.0	676.1	672.3	648.8	649.7	656.4
42.5°	650.6	649.7	646.9	645.0	646.9	649.7	650.6	645.0	614.9	612.1	624.4
45°	621.6	622.5	616.8	614.0	616.8	622.5	621.6	617.7	586.7	579.2	587.6
47.5°	592.4	592.4	587.6	584.8	587.6	592.4	592.4	587.6	554.7	547.3	551.9
50°	561.4	560.4	553.8	552.9	553.8	560.4	561.4	558.6	523.7	517.2	517.2
52.5°	525.6	525.6	526.5	528.5	526.5	525.6	525.6	526.5	495.6	488.9	487.1
55°	494.6	495.6	502.1	504.0	502.1	495.6	494.6	494.6	466.4	459.8	456.0
57.5°	462.6	462.6	467.4	467.4	467.4	462.6	462.6	460.7	433.5	427.8	425.9
60°	425.9	427.8	431.6	430.6	431.6	427.8	425.9	424.1	400.5	396.8	390.2
62.5°	387.4	389.3	390.2	388.4	390.2	389.3	387.4	381.7	367.6	364.8	356.4
65°	347.0	348.8	349.8	347.9	349.8	348.8	347.0	344.2	333.8	329.1	321.5
67.5°	305.6	304.6	303.7	307.5	303.7	304.6	305.6	301.8	295.3	291.5	281.2
70°	263.3	263.3	262.4	264.2	262.4	263.3	263.3	260.5	256.7	253.9	244.5
72.5°	218.2	217.2	221.0	218.2	221.0	217.2	218.2	217.2	215.4	212.6	203.1
75°	173.9	175.8	173.9	176.8	173.9	175.8	173.9	174.9	173.9	172.1	165.5
77.5°	132.5	134.5	132.5	132.5	132.5	134.5	132.5	133.5	133.5	133.5	127.9
80°	94.0	93.1	93.1	92.2	93.1	93.1	94.0	94.0	95.0	93.1	91.2
82.5°	60.2	59.3	59.3	61.1	59.3	59.3	60.2	61.1	59.3	59.3	59.3
85°	32.9	33.8	32.0	32.0	32.0	33.8	32.9	31.0	32.9	32.9	32.0
87.5°	12.2	11.3	11.3	11.3	11.3	11.3	12.2	13.2	13.2	13.2	14.1
90°	22.2	22.2	22.2	22.2	22.2	22.2	22.2	29.5	39.4	44.3	38.1
92.5°	110.8	106.4	88.7	71.1	88.7	106.4	110.8	157.0	218.7	249.6	219.1
95°	376.1	362.8	309.4	256.0	309.4	362.8	376.1	493.9	651.0	729.5	616.2
97.5°	868.3	842.9	741.3	639.7	741.3	842.9	868.3	942.8	1042.1	1091.7	902.6
100°	1219.4	1189.1	1068.1	947.0	1068.1	1189.1	1219.4	1214.0	1206.7	1203.1	993.2
102.5°	1519.2	1493.3	1389.5	1285.9	1389.5	1493.3	1519.2	1424.3	1297.8	1234.6	1021.8
105°	1869.0	1855.1	1799.4	1743.7	1799.4	1855.1	1869.0	1656.4	1372.9	1231.1	1025.1
107.5°	2051.0	2054.4	2067.9	2081.4	2067.9	2054.4	2051.0	1754.3	1358.9	1161.1	979.4
110°	2097.7	2112.2	2170.3	2228.3	2170.3	2112.2	2097.7	1766.0	1323.8	1102.8	939.0



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2067.9	2090.2	2179.4	2268.5	2179.4	2090.2	2067.9	1728.6	1276.0	1049.7	903.7
115°	1967.1	1998.0	2121.6	2245.3	2121.6	1998.0	1967.1	1640.1	1204.1	986.1	863.1
117.5°	1827.6	1861.9	1999.1	2136.2	1999.1	1861.9	1827.6	1532.5	1139.1	942.4	837.8
120°	1733.8	1767.1	1900.4	2033.5	1900.4	1767.1	1733.8	1464.1	1104.6	924.9	829.3
122.5°	1639.8	1672.7	1804.2	1935.6	1804.2	1672.7	1639.8	1397.1	1073.4	911.5	824.8
125°	1515.7	1546.0	1667.0	1788.0	1667.0	1546.0	1515.7	1309.4	1034.4	896.9	821.1
127.5°	1416.0	1441.5	1543.7	1645.7	1543.7	1441.5	1416.0	1238.9	1002.8	884.7	819.0
130°	1353.0	1376.5	1470.9	1565.3	1470.9	1376.5	1353.0	1195.3	985.1	880.0	820.3
132.5°	1299.3	1320.5	1405.0	1489.5	1405.0	1320.5	1299.3	1158.2	970.0	875.9	821.1
135°	1223.5	1241.8	1314.6	1387.4	1314.6	1241.8	1223.5	1105.3	947.7	868.9	820.3
137.5°	1167.5	1182.4	1242.0	1301.7	1242.0	1182.4	1167.5	1067.6	934.4	867.8	825.4
140°	1122.6	1136.5	1192.3	1248.0	1192.3	1136.5	1122.6	1036.3	921.2	863.7	826.2
142.5°	1091.1	1103.0	1151.1	1199.0	1151.1	1103.0	1091.1	1015.3	914.2	863.7	829.2
145°	1043.9	1052.9	1089.3	1125.6	1089.3	1052.9	1043.9	981.9	899.2	857.9	829.3
147.5°	1004.2	1011.7	1041.8	1071.9	1041.8	1011.7	1004.2	955.5	890.4	857.9	834.9
150°	981.4	987.5	1011.9	1036.3	1011.9	987.5	981.4	940.2	885.4	857.9	837.9
152.5°	963.4	968.0	986.4	1004.8	986.4	968.0	963.4	928.3	881.3	857.9	839.8
155°	941.8	944.9	957.0	969.2	957.0	944.9	941.8	913.9	876.6	857.9	844.1
157.5°	923.2	925.4	933.9	942.4	933.9	925.4	923.2	901.4	872.4	857.9	848.4
160°	913.9	915.1	920.0	924.9	920.0	915.1	913.9	895.2	870.3	857.9	850.4
162.5°	905.1	906.2	910.9	915.5	910.9	906.2	905.1	889.4	868.3	857.9	852.5
165°	891.7	892.9	897.9	902.7	897.9	892.9	891.7	880.4	865.4	857.9	855.4
167.5°	885.8	886.4	888.4	890.5	888.4	886.4	885.8	878.4	868.6	863.7	861.6
170°	885.8	885.8	885.8	885.8	885.8	885.8	885.8	878.4	868.6	863.7	863.6
172.5°	881.1	880.7	878.9	877.1	878.9	880.7	881.1	875.4	867.6	863.7	863.7
175°	874.8	874.8	874.8	874.8	874.8	874.8	874.8	871.1	866.1	863.7	864.8
177.5°	873.6	873.0	871.0	868.9	871.0	873.0	873.6	870.7	866.8	864.9	865.8
180°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	993.9	993.9	993.9	993.9	993.9
2.5°	981.6	986.4	989.2	992.9	1002.4
5°	944.1	961.9	967.6	981.6	998.5
7.5°	861.3	915.8	930.9	964.7	991.1
10°	781.4	835.9	862.3	942.2	981.6
12.5°	740.9	772.9	790.8	902.6	968.5
15°	715.5	738.1	751.3	850.0	953.5
17.5°	695.8	711.8	721.2	798.3	932.7
20°	683.6	691.1	699.5	760.7	909.3
22.5°	675.1	670.5	677.0	734.4	877.3
25°	669.5	651.6	659.2	713.6	839.6
27.5°	674.2	634.7	637.6	694.9	800.2
30°	675.1	614.0	614.9	675.1	756.0
32.5°	668.6	592.4	593.4	650.6	706.2
35°	652.5	567.0	566.1	622.5	638.5
37.5°	630.9	539.7	539.7	591.5	564.2
40°	604.6	512.5	515.3	551.0	498.4
42.5°	572.6	483.3	487.1	497.5	449.5
45°	537.8	455.1	457.9	420.3	411.8
47.5°	499.3	425.9	426.9	348.8	399.6
50°	453.2	395.8	392.1	299.0	398.7
52.5°	412.8	362.9	351.6	270.8	362.0
55°	373.3	328.2	303.7	249.2	335.7
57.5°	338.6	283.0	259.6	223.8	330.0
60°	306.5	238.8	221.0	196.5	302.8
62.5°	280.2	205.9	202.2	177.7	274.5
65°	252.0	183.4	182.5	161.7	233.2
67.5°	224.7	168.3	167.4	146.7	177.7
70°	195.5	152.4	150.5	130.7	131.6
72.5°	165.5	134.5	132.5	117.5	109.1
75°	135.4	113.8	112.8	102.5	88.4
77.5°	106.3	90.3	92.2	82.7	64.9
80°	76.2	65.8	67.7	59.3	48.9
82.5°	50.8	43.3	45.1	37.6	32.9
85°	28.2	24.5	25.4	19.7	15.0
87.5°	13.2	11.3	11.3	7.5	4.7
90°	25.7	16.4	15.1	10.5	5.8
92.5°	158.2	112.5	102.6	63.0	23.4
95°	389.4	219.3	201.1	128.5	56.0
97.5°	524.5	240.9	224.9	160.9	96.8
100°	573.6	258.9	244.4	186.4	128.3
102.5°	596.2	277.0	263.5	209.4	155.2
105°	613.0	303.9	292.4	246.5	200.6
107.5°	616.1	343.5	332.8	290.0	247.2
110°	611.4	365.7	356.0	317.3	278.7



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-W-6-5000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	611.6	392.5	383.3	346.5	309.7
115°	617.2	432.7	424.2	390.2	356.3
117.5°	628.6	471.7	464.1	433.2	402.4
120°	638.0	494.6	487.3	458.3	429.2
122.5°	651.4	521.4	514.1	484.7	455.5
125°	669.5	555.8	549.1	522.4	495.7
127.5°	687.6	589.1	582.3	555.3	528.4
130°	700.8	611.2	603.9	574.9	545.9
132.5°	711.5	629.2	622.0	593.0	563.9
135°	723.2	650.3	643.6	617.2	590.7
137.5°	740.7	677.1	670.6	644.3	618.1
140°	751.3	695.1	689.2	665.0	640.9
142.5°	760.3	708.6	703.0	680.7	658.4
145°	772.0	729.0	724.1	704.7	685.2
147.5°	789.0	754.6	749.8	730.9	712.1
150°	798.0	768.0	763.7	746.6	729.5
152.5°	803.8	776.8	773.6	760.7	747.7
155°	816.7	796.0	793.6	784.0	774.5
157.5°	829.5	815.3	812.9	803.7	794.3
160°	835.3	824.0	822.3	815.0	807.7
162.5°	841.5	833.4	832.0	826.6	821.1
165°	850.5	846.8	845.5	840.6	835.7
167.5°	857.4	854.3	853.8	851.4	849.1
170°	863.3	863.1	862.5	860.2	857.9
172.5°	863.7	863.7	863.6	863.0	862.5
175°	867.1	868.9	868.9	868.9	868.9
177.5°	867.6	868.9	868.9	868.9	868.9
180°	868.9	868.9	868.9	868.9	868.9



TEST NUMBER: P935041

CATALOG NUMBER: SQ4-FA-100U-050D-92765-1D-UNV-STD-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	9.09	9.80	10.19	10.90	12.42	11.91	12.63	13.02	13.73	15.24
	3H	9.55	10.20	10.67	11.30	12.83	13.25	13.89	14.36	14.99	16.52
	4H	9.74	10.35	10.86	11.45	12.99	13.68	14.29	14.80	15.40	16.93
	6H	9.85	10.41	10.98	11.52	13.07	13.96	14.52	15.09	15.63	17.18
	8H	9.85	10.38	10.98	11.51	13.05	14.03	14.56	15.16	15.69	17.23
	12H	9.81	10.32	10.95	11.44	13.00	14.06	14.57	15.20	15.69	17.25
4H	2H	10.10	10.71	11.23	11.82	13.35	12.30	12.91	13.43	14.02	15.56
	3H	11.11	11.62	12.25	12.76	14.31	13.79	14.30	14.93	15.44	16.98
	4H	11.38	11.85	12.52	12.97	14.54	14.32	14.78	15.45	15.90	17.47
	6H	11.50	11.90	12.65	13.05	14.61	14.67	15.07	15.82	16.22	17.78
	8H	11.50	11.88	12.65	13.01	14.59	14.77	15.15	15.92	16.28	17.86
	12H	11.46	11.80	12.62	12.95	14.53	14.82	15.16	15.98	16.31	17.89
8H	4H	11.83	12.20	12.97	13.34	14.91	14.43	14.80	15.57	15.94	17.52
	6H	12.08	12.39	13.25	13.57	15.14	14.86	15.16	16.02	16.35	17.92
	8H	12.12	12.39	13.29	13.55	15.14	15.01	15.28	16.18	16.43	18.03
	12H	12.10	12.34	13.27	13.49	15.12	15.10	15.33	16.27	16.49	18.12
12H	4H	11.82	12.16	12.98	13.31	14.89	14.39	14.72	15.55	15.87	17.46
	6H	12.14	12.41	13.31	13.57	15.16	14.85	15.12	16.02	16.28	17.87
	8H	12.20	12.44	13.37	13.59	15.22	15.01	15.24	16.18	16.40	18.03