

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: P935060

Luminaire Tested: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

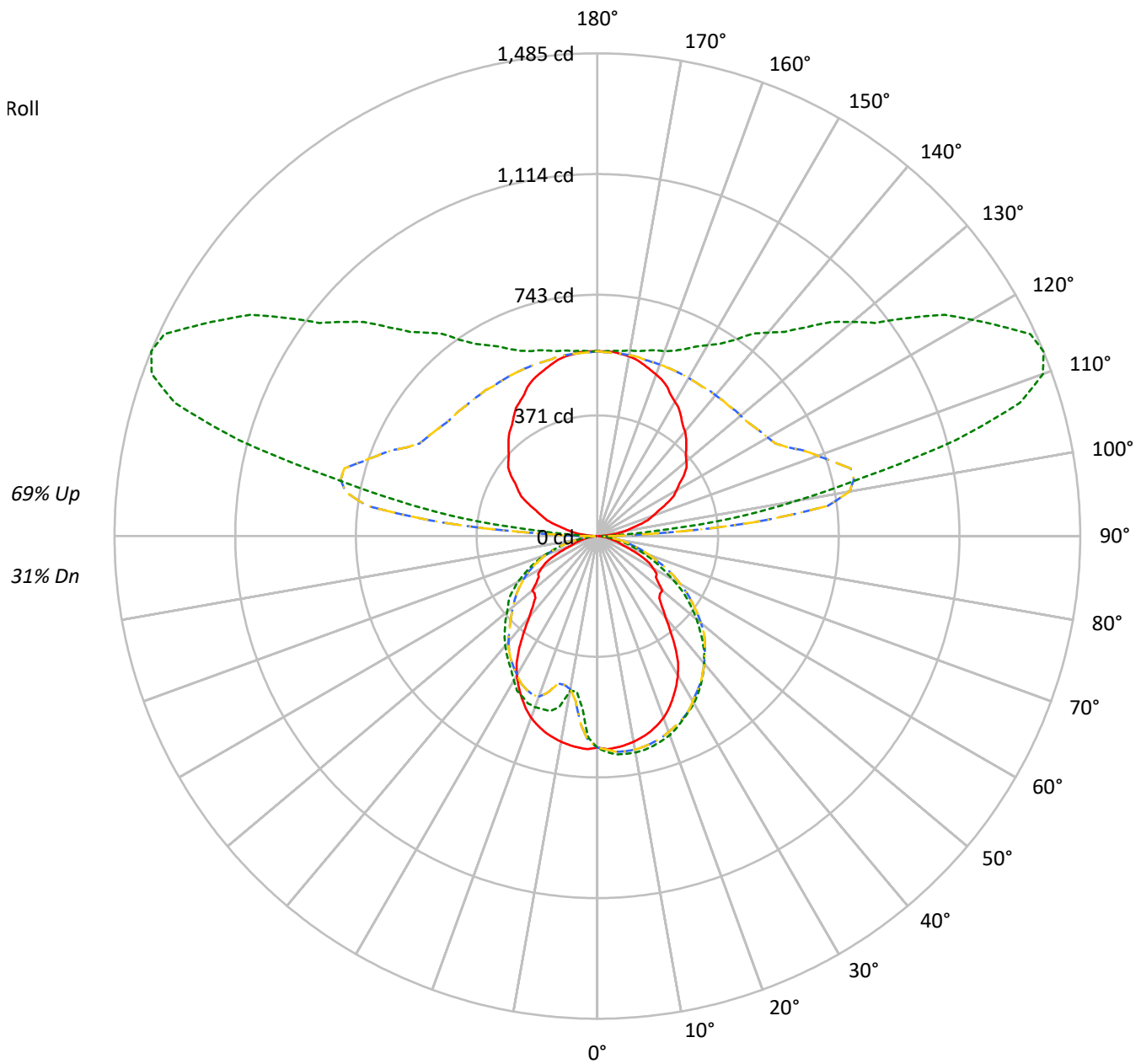
Test Method: LM-79-2019  
Report Number: P935060  
REPORT IS A COMBINATION OF REPORTS P933738 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5375.8 lumens  
Efficiency: N/A  
Efficacy: 130.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 41.2  
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: P935060  
CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

### Luminous Intensity Polar Plot



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



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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	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°	6037	6037	6037	6037
5°	6075	6094	6075	4791
10°	6028	6003	6028	4292
15°	5955	5873	5955	4904
20°	5823	5718	5823	4914
25°	5562	5493	5562	4810
30°	5226	5307	5226	4581
35°	4652	5072	4652	4330
40°	3869	4793	3869	4140
45°	3450	4468	3450	3922
50°	3659	4080	3659	3702
55°	3432	3663	3432	3576
60°	3526	3110	3526	3275
65°	3180	2571	3180	2874
70°	2188	2049	2188	2410
75°	1895	1514	1895	1814
80°	1498	1002	1498	1090
85°	811	530	811	450

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5300 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	1.1
10°-20°	166.7	3.1
20°-30°	257.7	4.8
30°-40°	307.7	5.7
40°-50°	309.5	5.8
50°-60°	269.3	5.0
60°-70°	190.9	3.6
70°-80°	101.0	1.9
80°-90°	27.3	0.5
90°-100°	277.2	5.2
100°-110°	728.9	13.6
110°-120°	755.8	14.1
120°-130°	606.2	11.3
130°-140°	475.7	8.8
140°-150°	365.1	6.8
150°-160°	262.9	4.9
160°-170°	160.9	3.0
170°-180°	54.4	1.0
0°-30°	483.2	9.0
0°-40°	790.9	14.7
0°-60°	1369.6	25.5
0°-90°	1688.9	31.4
90°-120°	1761.9	32.8
90°-150°	3208.8	59.7
90°-180°	3687.0	68.6
0°-180°	5375.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	651	651	651	651	651	
5°	654	674	654	530	654	62
15°	624	668	624	558	624	176
25°	550	623	550	545	550	252
35°	418	556	418	474	418	259
45°	270	458	270	402	270	216
55°	220	338	220	330	220	202
65°	153	204	153	228	153	146
75°	58	97	58	116	58	61
85°	10	25	10	21	10	13
90°	4	14	4	14	4	4
95°	37	168	37	168	37	41
105°	131	1141	131	1141	131	139
115°	233	1470	233	1470	233	230
125°	324	1170	324	1170	324	288
135°	387	908	387	908	387	299
145°	448	737	448	737	448	281
155°	507	634	507	634	507	233
165°	547	591	547	591	547	154
175°	569	572	569	572	569	54
180°	569	569	569	569	569	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	656.1	656.1	659.7	661.0	661.0	659.2	657.3	659.2	664.7	666.5	665.9
5°	653.6	658.5	665.3	666.5	667.8	667.2	665.9	667.2	673.3	674.5	675.1
7.5°	648.7	657.9	666.5	668.4	670.2	668.4	667.8	669.0	675.1	676.3	676.3
10°	642.6	655.4	665.3	666.5	668.4	666.5	666.5	669.0	675.1	676.3	677.0
12.5°	633.9	651.7	661.0	662.2	664.7	664.0	663.5	665.9	672.1	673.3	673.3
15°	624.0	645.0	653.6	654.9	659.2	657.9	657.9	660.4	667.2	669.0	668.4
17.5°	610.5	636.4	646.2	648.1	651.2	650.6	651.2	653.6	659.7	661.0	661.7
20°	595.1	624.7	636.4	638.3	641.3	641.3	641.3	644.4	650.6	653.0	653.0
22.5°	574.2	612.4	624.7	626.0	629.6	629.6	630.8	635.1	640.6	641.3	641.3
25°	549.6	598.8	609.3	613.0	616.7	618.5	620.4	622.8	624.7	624.0	624.7
27.5°	523.7	581.6	595.1	597.6	602.6	604.4	606.9	607.4	608.1	609.9	608.7
30°	494.8	557.6	577.9	580.4	588.3	589.6	587.1	588.3	591.5	592.6	593.9
32.5°	462.2	521.9	560.1	565.6	573.0	569.3	568.7	570.5	575.5	575.5	576.7
35°	417.9	494.2	543.5	548.4	553.9	549.6	552.1	552.6	555.8	557.6	556.9
37.5°	369.3	470.2	526.2	529.9	534.2	528.7	532.4	534.2	536.7	535.5	535.5
40°	326.1	432.7	505.9	508.4	512.1	507.8	511.4	512.7	513.9	512.7	512.1
42.5°	294.2	391.4	484.4	487.5	485.0	488.0	489.3	491.8	489.9	487.5	487.5
45°	269.5	380.4	461.0	464.6	461.0	465.9	467.7	467.7	462.2	461.0	460.3
47.5°	261.5	358.2	437.6	437.6	435.7	441.9	445.0	440.7	435.2	433.2	433.2
50°	261.0	333.6	405.6	403.1	411.8	419.1	416.1	411.8	407.5	400.7	400.7
52.5°	236.9	303.4	364.3	373.6	387.1	391.4	386.5	382.2	374.8	371.8	369.3
55°	219.7	272.0	326.8	345.2	359.5	365.0	355.7	351.4	340.4	338.5	337.3
57.5°	216.0	226.5	292.4	315.7	332.9	332.4	326.8	318.8	309.5	307.7	307.2
60°	198.2	163.7	255.4	283.1	300.9	299.1	294.2	286.8	278.2	277.0	275.8
62.5°	179.7	118.7	213.5	244.9	270.2	269.5	265.3	254.2	248.1	244.9	242.5
65°	152.6	99.7	152.1	203.7	240.1	241.3	232.0	224.0	217.2	213.5	212.9
67.5°	116.4	81.2	102.8	169.9	211.1	209.9	198.2	194.5	185.8	184.0	180.3
70°	86.2	54.1	71.4	137.8	182.8	179.7	170.5	166.2	158.2	153.9	151.4
72.5°	71.4	43.7	52.3	107.1	153.9	150.1	142.2	137.3	130.5	126.8	124.3
75°	57.8	46.2	40.0	79.4	124.9	122.5	115.1	110.1	104.6	99.7	100.3
77.5°	42.5	43.0	32.0	58.5	99.1	95.4	91.1	85.0	82.5	77.5	77.5
80°	32.0	33.9	24.0	40.0	71.4	71.4	67.7	63.4	59.1	56.6	56.6
82.5°	21.6	21.6	17.8	25.2	48.6	46.8	44.3	43.0	40.7	39.4	39.4
85°	9.8	12.3	11.1	15.4	26.4	27.7	27.7	26.4	25.9	24.6	25.2
87.5°	3.1	5.5	6.8	8.6	13.6	14.1	14.8	14.8	14.8	15.4	15.4
90°	3.9	6.9	9.9	10.6	16.8	25.0	29.0	25.8	19.4	14.5	14.5
92.5°	15.2	41.2	67.2	73.7	103.6	143.4	163.3	143.2	102.8	72.5	69.7
95°	36.6	84.2	131.7	143.5	254.8	403.2	477.5	426.1	323.3	246.2	237.5
97.5°	63.3	105.3	147.2	157.7	343.3	590.8	714.5	682.0	617.1	568.3	551.7
100°	84.0	122.0	160.0	169.5	375.5	650.2	787.5	789.9	794.5	798.1	778.3
102.5°	101.5	137.0	172.4	181.3	390.3	668.8	808.1	849.5	932.3	994.3	977.3
105°	131.3	161.3	191.3	198.9	401.2	670.9	805.8	898.6	1084.2	1223.4	1214.3
107.5°	161.9	189.9	217.9	224.8	403.2	641.0	759.9	889.4	1148.3	1342.5	1344.7
110°	182.4	207.8	233.0	239.3	400.1	614.6	721.8	866.5	1155.9	1373.0	1382.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	202.7	226.8	250.8	256.9	400.3	591.5	687.1	835.2	1131.3	1353.5	1368.1
115°	233.2	255.4	277.6	283.2	404.0	565.0	645.5	788.2	1073.5	1287.5	1307.7
117.5°	263.4	283.6	303.8	308.8	411.5	548.4	616.9	745.6	1003.1	1196.3	1218.7
120°	280.9	299.9	318.9	323.7	417.6	542.8	605.4	723.1	958.3	1134.8	1156.7
122.5°	298.2	317.3	336.5	341.3	426.4	539.9	596.6	702.5	914.4	1073.3	1094.8
125°	324.5	341.9	359.4	363.8	438.2	537.4	587.0	677.1	857.0	992.0	1011.9
127.5°	345.8	363.4	381.1	385.5	450.0	536.0	579.1	656.3	810.9	926.8	943.5
130°	357.3	376.3	395.3	400.0	458.7	536.9	576.0	644.9	782.4	885.6	901.0
132.5°	369.1	388.1	407.1	411.9	465.6	537.4	573.3	634.9	758.0	850.4	864.3
135°	386.7	404.0	421.3	425.6	473.3	536.9	568.8	620.4	723.4	800.8	812.7
137.5°	404.6	421.8	438.8	443.2	484.7	540.2	568.0	611.6	698.7	764.2	773.9
140°	419.5	435.3	451.0	455.0	491.8	540.8	565.3	602.9	678.3	734.8	743.9
142.5°	430.9	445.5	460.1	463.8	497.7	542.7	565.3	598.3	664.5	714.2	722.0
145°	448.5	461.2	473.9	477.1	505.3	542.8	561.5	588.6	642.7	683.2	689.2
147.5°	466.1	478.5	490.8	493.9	516.5	546.5	561.5	582.8	625.4	657.3	662.3
150°	477.5	488.7	499.9	502.7	522.4	548.5	561.5	579.5	615.4	642.4	646.3
152.5°	489.3	497.8	506.3	508.4	526.1	549.7	561.5	576.9	607.5	630.5	633.6
155°	506.9	513.2	519.5	521.1	534.6	552.5	561.5	573.7	598.2	616.4	618.4
157.5°	519.9	526.0	532.1	533.6	542.9	555.3	561.5	571.0	590.0	604.2	605.6
160°	528.7	533.5	538.1	539.3	546.8	556.6	561.5	569.7	585.9	598.2	599.0
162.5°	537.4	541.0	544.6	545.5	550.8	558.0	561.5	568.4	582.1	592.4	593.1
165°	546.9	550.2	553.4	554.2	556.7	559.9	561.5	566.5	576.3	583.7	584.5
167.5°	555.8	557.3	558.9	559.2	561.3	563.9	565.3	568.5	574.9	579.8	580.2
170°	561.5	563.0	564.6	564.9	565.0	565.2	565.3	568.5	574.9	579.8	579.8
172.5°	564.6	564.9	565.2	565.3	565.3	565.3	565.3	567.9	572.9	576.8	576.5
175°	568.8	568.8	568.8	568.8	567.6	566.0	565.3	567.0	570.2	572.5	572.5
177.5°	568.8	568.8	568.8	568.8	567.9	566.7	566.0	567.3	569.9	571.8	571.4
180°	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	667.2	665.3	667.2	665.9	666.5	664.7	659.2	657.3	659.2	661.0	661.0
5°	675.1	674.0	675.1	675.1	674.5	673.3	667.2	665.9	667.2	667.8	666.5
7.5°	677.6	675.8	677.6	676.3	676.3	675.1	669.0	667.8	668.4	670.2	668.4
10°	677.6	675.8	677.6	677.0	676.3	675.1	669.0	666.5	666.5	668.4	666.5
12.5°	674.5	673.3	674.5	673.3	673.3	672.1	665.9	663.5	664.0	664.7	662.2
15°	669.6	667.8	669.6	668.4	669.0	667.2	660.4	657.9	657.9	659.2	654.9
17.5°	662.2	659.7	662.2	661.7	661.0	659.7	653.6	651.2	650.6	651.2	648.1
20°	653.6	651.7	653.6	653.0	653.0	650.6	644.4	641.3	641.3	641.3	638.3
22.5°	640.1	638.3	640.1	641.3	641.3	640.6	635.1	630.8	629.6	629.6	626.0
25°	624.7	622.8	624.7	624.7	624.0	624.7	622.8	620.4	618.5	616.7	613.0
27.5°	609.9	608.7	609.9	608.7	609.9	608.1	607.4	606.9	604.4	602.6	597.6
30°	595.1	593.9	595.1	593.9	592.6	591.5	588.3	587.1	589.6	588.3	580.4
32.5°	576.7	575.5	576.7	576.7	575.5	575.5	570.5	568.7	569.3	573.0	565.6
35°	557.6	555.8	557.6	556.9	557.6	555.8	552.6	552.1	549.6	553.9	548.4
37.5°	535.5	533.6	535.5	535.5	535.5	536.7	534.2	532.4	528.7	534.2	529.9
40°	512.7	510.2	512.7	512.1	512.7	513.9	512.7	511.4	507.8	512.1	508.4
42.5°	486.8	486.2	486.8	487.5	487.5	489.9	491.8	489.3	488.0	485.0	487.5
45°	459.1	457.9	459.1	460.3	461.0	462.2	467.7	467.7	465.9	461.0	464.6
47.5°	429.6	426.5	429.6	433.2	433.2	435.2	440.7	445.0	441.9	435.7	437.6
50°	398.2	398.8	398.2	400.7	400.7	407.5	411.8	416.1	419.1	411.8	403.1
52.5°	367.4	366.8	367.4	369.3	371.8	374.8	382.2	386.5	391.4	387.1	373.6
55°	336.6	337.9	336.6	337.3	338.5	340.4	351.4	355.7	365.0	359.5	345.2
57.5°	305.9	304.0	305.9	307.2	307.7	309.5	318.8	326.8	332.4	332.9	315.7
60°	270.2	267.7	270.2	275.8	277.0	278.2	286.8	294.2	299.1	300.9	283.1
62.5°	238.8	234.5	238.8	242.5	244.9	248.1	254.2	265.3	269.5	270.2	244.9
65°	205.6	203.7	205.6	212.9	213.5	217.2	224.0	232.0	241.3	240.1	203.7
67.5°	175.4	175.4	175.4	180.3	184.0	185.8	194.5	198.2	209.9	211.1	169.9
70°	147.7	147.1	147.7	151.4	153.9	158.2	166.2	170.5	179.7	182.8	137.8
72.5°	121.2	120.6	121.2	124.3	126.8	130.5	137.3	142.2	150.1	153.9	107.1
75°	97.8	96.6	97.8	100.3	99.7	104.6	110.1	115.1	122.5	124.9	79.4
77.5°	75.1	75.1	75.1	77.5	77.5	82.5	85.0	91.1	95.4	99.1	58.5
80°	56.0	55.4	56.0	56.6	56.6	59.1	63.4	67.7	71.4	71.4	40.0
82.5°	39.4	38.2	39.4	39.4	39.4	40.7	43.0	44.3	46.8	48.6	25.2
85°	24.6	24.6	24.6	25.2	24.6	25.9	26.4	27.7	27.7	26.4	15.4
87.5°	16.0	15.4	16.0	15.4	15.4	14.8	14.8	14.8	14.1	13.6	8.6
90°	14.5	14.5	14.5	14.5	14.5	19.4	25.8	29.0	25.0	16.8	10.6
92.5°	58.1	46.5	58.1	69.7	72.5	102.8	143.2	163.3	143.4	103.6	73.7
95°	202.5	167.6	202.5	237.5	246.2	323.3	426.1	477.5	403.2	254.8	143.5
97.5°	485.2	418.7	485.2	551.7	568.3	617.1	682.0	714.5	590.8	343.3	157.7
100°	699.1	619.9	699.1	778.3	798.1	794.5	789.9	787.5	650.2	375.5	169.5
102.5°	909.5	841.7	909.5	977.3	994.3	932.3	849.5	808.1	668.8	390.3	181.3
105°	1177.8	1141.3	1177.8	1214.3	1223.4	1084.2	898.6	805.8	670.9	401.2	198.9
107.5°	1353.5	1362.3	1353.5	1344.7	1342.5	1148.3	889.4	759.9	641.0	403.2	224.8
110°	1420.5	1458.5	1420.5	1382.5	1373.0	1155.9	866.5	721.8	614.6	400.1	239.3





TEST NUMBER: P935060

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1426.5	1484.8	1426.5	1368.1	1353.5	1131.3	835.2	687.1	591.5	400.3	256.9
115°	1388.7	1469.6	1388.7	1307.7	1287.5	1073.5	788.2	645.5	565.0	404.0	283.2
117.5°	1308.4	1398.2	1308.4	1218.7	1196.3	1003.1	745.6	616.9	548.4	411.5	308.8
120°	1243.8	1331.0	1243.8	1156.7	1134.8	958.3	723.1	605.4	542.8	417.6	323.7
122.5°	1180.9	1266.9	1180.9	1094.8	1073.3	914.4	702.5	596.6	539.9	426.4	341.3
125°	1091.0	1170.3	1091.0	1011.9	992.0	857.0	677.1	587.0	537.4	438.2	363.8
127.5°	1010.4	1077.2	1010.4	943.5	926.8	810.9	656.3	579.1	536.0	450.0	385.5
130°	962.8	1024.5	962.8	901.0	885.6	782.4	644.9	576.0	536.9	458.7	400.0
132.5°	919.5	974.9	919.5	864.3	850.4	758.0	634.9	573.3	537.4	465.6	411.9
135°	860.3	908.1	860.3	812.7	800.8	723.4	620.4	568.8	536.9	473.3	425.6
137.5°	813.0	852.0	813.0	773.9	764.2	698.7	611.6	568.0	540.2	484.7	443.2
140°	780.4	816.8	780.4	743.9	734.8	678.3	602.9	565.3	540.8	491.8	455.0
142.5°	753.4	784.8	753.4	722.0	714.2	664.5	598.3	565.3	542.7	497.7	463.8
145°	713.0	736.7	713.0	689.2	683.2	642.7	588.6	561.5	542.8	505.3	477.1
147.5°	681.9	701.6	681.9	662.3	657.3	625.4	582.8	561.5	546.5	516.5	493.9
150°	662.3	678.3	662.3	646.3	642.4	615.4	579.5	561.5	548.5	522.4	502.7
152.5°	645.6	657.7	645.6	633.6	630.5	607.5	576.9	561.5	549.7	526.1	508.4
155°	626.4	634.4	626.4	618.4	616.4	598.2	573.7	561.5	552.5	534.6	521.1
157.5°	611.3	616.9	611.3	605.6	604.2	590.0	571.0	561.5	555.3	542.9	533.6
160°	602.2	605.4	602.2	599.0	598.2	585.9	569.7	561.5	556.6	546.8	539.3
162.5°	596.2	599.3	596.2	593.1	592.4	582.1	568.4	561.5	558.0	550.8	545.5
165°	587.7	590.9	587.7	584.5	583.7	576.3	566.5	561.5	559.9	556.7	554.2
167.5°	581.5	582.8	581.5	580.2	579.8	574.9	568.5	565.3	563.9	561.3	559.2
170°	579.8	579.8	579.8	579.8	579.8	574.9	568.5	565.3	565.2	565.0	564.9
172.5°	575.3	574.1	575.3	576.5	576.8	572.9	567.9	565.3	565.3	565.3	565.3
175°	572.5	572.5	572.5	572.5	572.5	570.2	567.0	565.3	566.0	567.6	568.8
177.5°	570.2	568.8	570.2	571.4	571.8	569.9	567.3	566.0	566.7	567.9	568.8
180°	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8



TEST NUMBER: P935060

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	659.7	656.1	656.1	649.9	647.4	645.6	642.6	633.3	630.8	628.3	632.1
5°	665.3	658.5	653.6	642.6	633.3	629.6	617.9	595.8	581.0	569.9	563.7
7.5°	666.5	657.9	648.7	631.5	609.3	599.4	563.7	523.2	512.1	502.3	496.0
10°	665.3	655.4	642.6	616.7	564.4	547.1	511.4	485.0	478.2	476.4	478.2
12.5°	661.0	651.7	633.9	590.8	517.6	505.9	485.0	469.6	468.4	471.4	488.0
15°	653.6	645.0	624.0	556.4	491.8	483.2	468.4	462.8	469.6	491.2	541.0
17.5°	646.2	636.4	610.5	522.5	472.1	465.9	455.5	466.6	504.6	533.6	550.2
20°	636.4	624.7	595.1	497.9	457.9	452.3	447.5	497.3	526.2	536.7	545.9
22.5°	624.7	612.4	574.2	480.7	443.2	438.8	441.9	514.6	526.2	533.6	541.6
25°	609.3	598.8	549.6	467.1	431.4	426.5	438.2	512.7	519.4	521.3	537.3
27.5°	595.1	581.6	523.7	454.8	417.3	415.4	441.3	504.6	509.6	511.4	528.7
30°	577.9	557.6	494.8	441.9	402.5	401.9	441.9	494.8	493.6	498.5	515.7
32.5°	560.1	521.9	462.2	425.9	388.4	387.7	437.6	480.0	478.9	485.6	498.5
35°	543.5	494.2	417.9	407.5	370.5	371.1	427.1	462.8	463.4	469.6	477.6
37.5°	526.2	470.2	369.3	387.1	353.3	353.3	413.0	446.8	445.6	447.5	458.5
40°	505.9	432.7	326.1	360.7	337.3	335.4	395.7	429.6	425.3	424.7	440.0
42.5°	484.4	391.4	294.2	325.6	318.8	316.3	374.8	408.6	400.7	402.5	422.2
45°	461.0	380.4	269.5	275.1	299.7	297.9	352.0	384.7	379.1	384.1	404.3
47.5°	437.6	358.2	261.5	228.3	279.4	278.8	326.8	361.3	358.2	363.1	384.7
50°	405.6	333.6	261.0	195.7	256.7	259.1	296.7	338.5	338.5	342.9	365.6
52.5°	364.3	303.4	236.9	177.2	230.2	237.6	270.2	318.8	320.0	324.3	344.7
55°	326.8	272.0	219.7	163.1	198.8	214.8	244.3	298.5	300.9	305.2	323.8
57.5°	292.4	226.5	216.0	146.5	169.9	185.3	221.5	278.8	280.0	283.8	301.6
60°	255.4	163.7	198.2	128.7	144.6	156.3	200.6	255.4	259.7	262.2	277.6
62.5°	213.5	118.7	179.7	116.4	132.3	134.8	183.4	233.3	238.8	240.6	249.9
65°	152.1	99.7	152.6	105.9	119.4	120.0	164.9	210.5	215.4	218.5	225.3
67.5°	102.8	81.2	116.4	96.0	109.6	110.1	147.1	184.0	190.8	193.3	197.6
70°	71.4	54.1	86.2	85.5	98.5	99.7	128.0	160.0	166.2	168.0	170.5
72.5°	52.3	43.7	71.4	76.9	86.8	88.0	108.3	133.0	139.1	141.0	142.2
75°	40.0	46.2	57.8	67.1	73.9	74.4	88.6	108.3	112.6	113.9	114.4
77.5°	32.0	43.0	42.5	54.1	60.3	59.1	69.6	83.7	87.4	87.4	87.4
80°	24.0	33.9	32.0	38.8	44.3	43.0	49.8	59.7	60.9	62.1	61.6
82.5°	17.8	21.6	21.6	24.6	29.5	28.4	33.2	38.8	38.8	38.8	40.0
85°	11.1	12.3	9.8	12.9	16.6	16.0	18.4	20.9	21.6	21.6	20.3
87.5°	6.8	5.5	3.1	5.0	7.3	7.3	8.6	9.3	8.6	8.6	8.6
90°	9.9	6.9	3.9	6.9	9.9	10.6	16.8	25.0	29.0	25.8	19.4
92.5°	67.2	41.2	15.2	41.2	67.2	73.7	103.6	143.4	163.3	143.2	102.8
95°	131.7	84.2	36.6	84.2	131.7	143.5	254.8	403.2	477.5	426.1	323.3
97.5°	147.2	105.3	63.3	105.3	147.2	157.7	343.3	590.8	714.5	682.0	617.1
100°	160.0	122.0	84.0	122.0	160.0	169.5	375.5	650.2	787.5	789.9	794.5
102.5°	172.4	137.0	101.5	137.0	172.4	181.3	390.3	668.8	808.1	849.5	932.3
105°	191.3	161.3	131.3	161.3	191.3	198.9	401.2	670.9	805.8	898.6	1084.2
107.5°	217.9	189.9	161.9	189.9	217.9	224.8	403.2	641.0	759.9	889.4	1148.3
110°	233.0	207.8	182.4	207.8	233.0	239.3	400.1	614.6	721.8	866.5	1155.9



TEST NUMBER: P935060

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	250.8	226.8	202.7	226.8	250.8	256.9	400.3	591.5	687.1	835.2	1131.3
115°	277.6	255.4	233.2	255.4	277.6	283.2	404.0	565.0	645.5	788.2	1073.5
117.5°	303.8	283.6	263.4	283.6	303.8	308.8	411.5	548.4	616.9	745.6	1003.1
120°	318.9	299.9	280.9	299.9	318.9	323.7	417.6	542.8	605.4	723.1	958.3
122.5°	336.5	317.3	298.2	317.3	336.5	341.3	426.4	539.9	596.6	702.5	914.4
125°	359.4	341.9	324.5	341.9	359.4	363.8	438.2	537.4	587.0	677.1	857.0
127.5°	381.1	363.4	345.8	363.4	381.1	385.5	450.0	536.0	579.1	656.3	810.9
130°	395.3	376.3	357.3	376.3	395.3	400.0	458.7	536.9	576.0	644.9	782.4
132.5°	407.1	388.1	369.1	388.1	407.1	411.9	465.6	537.4	573.3	634.9	758.0
135°	421.3	404.0	386.7	404.0	421.3	425.6	473.3	536.9	568.8	620.4	723.4
137.5°	438.8	421.8	404.6	421.8	438.8	443.2	484.7	540.2	568.0	611.6	698.7
140°	451.0	435.3	419.5	435.3	451.0	455.0	491.8	540.8	565.3	602.9	678.3
142.5°	460.1	445.5	430.9	445.5	460.1	463.8	497.7	542.7	565.3	598.3	664.5
145°	473.9	461.2	448.5	461.2	473.9	477.1	505.3	542.8	561.5	588.6	642.7
147.5°	490.8	478.5	466.1	478.5	490.8	493.9	516.5	546.5	561.5	582.8	625.4
150°	499.9	488.7	477.5	488.7	499.9	502.7	522.4	548.5	561.5	579.5	615.4
152.5°	506.3	497.8	489.3	497.8	506.3	508.4	526.1	549.7	561.5	576.9	607.5
155°	519.5	513.2	506.9	513.2	519.5	521.1	534.6	552.5	561.5	573.7	598.2
157.5°	532.1	526.0	519.9	526.0	532.1	533.6	542.9	555.3	561.5	571.0	590.0
160°	538.1	533.5	528.7	533.5	538.1	539.3	546.8	556.6	561.5	569.7	585.9
162.5°	544.6	541.0	537.4	541.0	544.6	545.5	550.8	558.0	561.5	568.4	582.1
165°	553.4	550.2	546.9	550.2	553.4	554.2	556.7	559.9	561.5	566.5	576.3
167.5°	558.9	557.3	555.8	557.3	558.9	559.2	561.3	563.9	565.3	568.5	574.9
170°	564.6	563.0	561.5	563.0	564.6	564.9	565.0	565.2	565.3	568.5	574.9
172.5°	565.2	564.9	564.6	564.9	565.2	565.3	565.3	565.3	565.3	567.9	572.9
175°	568.8	568.8	568.8	568.8	568.8	568.8	567.6	566.0	565.3	567.0	570.2
177.5°	568.8	568.8	568.8	568.8	568.8	568.8	567.9	566.7	566.0	567.3	569.9
180°	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8



TEST NUMBER: P935060

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	627.8	626.0	628.3	621.6	628.3	626.0	627.8	632.1	628.3	630.8	633.3
5°	550.8	547.8	538.0	529.9	538.0	547.8	550.8	563.7	569.9	581.0	595.8
7.5°	492.3	489.9	487.5	482.5	487.5	489.9	492.3	496.0	502.3	512.1	523.2
10°	479.4	480.0	483.7	483.2	483.7	480.0	479.4	478.2	476.4	478.2	485.0
12.5°	512.7	518.2	538.5	537.3	538.5	518.2	512.7	488.0	471.4	468.4	469.6
15°	550.8	552.6	556.9	557.6	556.9	552.6	550.8	541.0	491.2	469.6	462.8
17.5°	554.6	555.1	558.2	558.2	558.2	555.1	554.6	550.2	533.6	504.6	466.6
20°	551.4	552.6	558.9	560.1	558.9	552.6	551.4	545.9	536.7	526.2	497.3
22.5°	550.2	552.6	557.6	556.9	557.6	552.6	550.2	541.6	533.6	526.2	514.6
25°	544.1	544.1	544.7	545.3	544.7	544.1	544.1	537.3	521.3	519.4	512.7
27.5°	531.2	532.4	536.0	535.5	536.0	532.4	531.2	528.7	511.4	509.6	504.6
30°	519.4	518.2	515.1	512.7	515.1	518.2	519.4	515.7	498.5	493.6	494.8
32.5°	499.8	496.7	493.6	491.8	493.6	496.7	499.8	498.5	485.6	478.9	480.0
35°	476.4	477.0	476.4	474.5	476.4	477.0	476.4	477.6	469.6	463.4	462.8
37.5°	459.8	461.0	460.3	457.9	460.3	461.0	459.8	458.5	447.5	445.6	446.8
40°	442.5	443.2	442.5	440.7	442.5	443.2	442.5	440.0	424.7	425.3	429.6
42.5°	425.9	425.3	423.4	422.2	423.4	425.3	425.9	422.2	402.5	400.7	408.6
45°	406.8	407.5	403.7	401.9	403.7	407.5	406.8	404.3	384.1	379.1	384.7
47.5°	387.7	387.7	384.7	382.8	384.7	387.7	387.7	384.7	363.1	358.2	361.3
50°	367.4	366.8	362.5	361.8	362.5	366.8	367.4	365.6	342.9	338.5	338.5
52.5°	344.0	344.0	344.7	345.9	344.7	344.0	344.0	344.7	324.3	320.0	318.8
55°	323.8	324.3	328.6	329.9	328.6	324.3	323.8	323.8	305.2	300.9	298.5
57.5°	302.8	302.8	305.9	305.9	305.9	302.8	302.8	301.6	283.8	280.0	278.8
60°	278.8	280.0	282.5	281.9	282.5	280.0	278.8	277.6	262.2	259.7	255.4
62.5°	253.6	254.8	255.4	254.2	255.4	254.8	253.6	249.9	240.6	238.8	233.3
65°	227.1	228.3	229.0	227.7	229.0	228.3	227.1	225.3	218.5	215.4	210.5
67.5°	200.1	199.4	198.8	201.3	198.8	199.4	200.1	197.6	193.3	190.8	184.0
70°	172.3	172.3	171.7	173.0	171.7	172.3	172.3	170.5	168.0	166.2	160.0
72.5°	142.8	142.2	144.6	142.8	144.6	142.2	142.8	142.2	141.0	139.1	133.0
75°	113.9	115.1	113.9	115.7	113.9	115.1	113.9	114.4	113.9	112.6	108.3
77.5°	86.8	88.0	86.8	86.8	86.8	88.0	86.8	87.4	87.4	87.4	83.7
80°	61.6	60.9	60.9	60.3	60.9	60.9	61.6	61.6	62.1	60.9	59.7
82.5°	39.4	38.8	38.8	40.0	38.8	38.8	39.4	40.0	38.8	38.8	38.8
85°	21.6	22.1	20.9	20.9	20.9	22.1	21.6	20.3	21.6	21.6	20.9
87.5°	8.0	7.3	7.3	7.3	7.3	7.3	8.0	8.6	8.6	8.6	9.3
90°	14.5	14.5	14.5	14.5	14.5	14.5	14.5	19.4	25.8	29.0	25.0
92.5°	72.5	69.7	58.1	46.5	58.1	69.7	72.5	102.8	143.2	163.3	143.4
95°	246.2	237.5	202.5	167.6	202.5	237.5	246.2	323.3	426.1	477.5	403.2
97.5°	568.3	551.7	485.2	418.7	485.2	551.7	568.3	617.1	682.0	714.5	590.8
100°	798.1	778.3	699.1	619.9	699.1	778.3	798.1	794.5	789.9	787.5	650.2
102.5°	994.3	977.3	909.5	841.7	909.5	977.3	994.3	932.3	849.5	808.1	668.8
105°	1223.4	1214.3	1177.8	1141.3	1177.8	1214.3	1223.4	1084.2	898.6	805.8	670.9
107.5°	1342.5	1344.7	1353.5	1362.3	1353.5	1344.7	1342.5	1148.3	889.4	759.9	641.0
110°	1373.0	1382.5	1420.5	1458.5	1420.5	1382.5	1373.0	1155.9	866.5	721.8	614.6



TEST NUMBER: P935060

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1353.5	1368.1	1426.5	1484.8	1426.5	1368.1	1353.5	1131.3	835.2	687.1	591.5
115°	1287.5	1307.7	1388.7	1469.6	1388.7	1307.7	1287.5	1073.5	788.2	645.5	565.0
117.5°	1196.3	1218.7	1308.4	1398.2	1308.4	1218.7	1196.3	1003.1	745.6	616.9	548.4
120°	1134.8	1156.7	1243.8	1331.0	1243.8	1156.7	1134.8	958.3	723.1	605.4	542.8
122.5°	1073.3	1094.8	1180.9	1266.9	1180.9	1094.8	1073.3	914.4	702.5	596.6	539.9
125°	992.0	1011.9	1091.0	1170.3	1091.0	1011.9	992.0	857.0	677.1	587.0	537.4
127.5°	926.8	943.5	1010.4	1077.2	1010.4	943.5	926.8	810.9	656.3	579.1	536.0
130°	885.6	901.0	962.8	1024.5	962.8	901.0	885.6	782.4	644.9	576.0	536.9
132.5°	850.4	864.3	919.5	974.9	919.5	864.3	850.4	758.0	634.9	573.3	537.4
135°	800.8	812.7	860.3	908.1	860.3	812.7	800.8	723.4	620.4	568.8	536.9
137.5°	764.2	773.9	813.0	852.0	813.0	773.9	764.2	698.7	611.6	568.0	540.2
140°	734.8	743.9	780.4	816.8	780.4	743.9	734.8	678.3	602.9	565.3	540.8
142.5°	714.2	722.0	753.4	784.8	753.4	722.0	714.2	664.5	598.3	565.3	542.7
145°	683.2	689.2	713.0	736.7	713.0	689.2	683.2	642.7	588.6	561.5	542.8
147.5°	657.3	662.3	681.9	701.6	681.9	662.3	657.3	625.4	582.8	561.5	546.5
150°	642.4	646.3	662.3	678.3	662.3	646.3	642.4	615.4	579.5	561.5	548.5
152.5°	630.5	633.6	645.6	657.7	645.6	633.6	630.5	607.5	576.9	561.5	549.7
155°	616.4	618.4	626.4	634.4	626.4	618.4	616.4	598.2	573.7	561.5	552.5
157.5°	604.2	605.6	611.3	616.9	611.3	605.6	604.2	590.0	571.0	561.5	555.3
160°	598.2	599.0	602.2	605.4	602.2	599.0	598.2	585.9	569.7	561.5	556.6
162.5°	592.4	593.1	596.2	599.3	596.2	593.1	592.4	582.1	568.4	561.5	558.0
165°	583.7	584.5	587.7	590.9	587.7	584.5	583.7	576.3	566.5	561.5	559.9
167.5°	579.8	580.2	581.5	582.8	581.5	580.2	579.8	574.9	568.5	565.3	563.9
170°	579.8	579.8	579.8	579.8	579.8	579.8	579.8	574.9	568.5	565.3	565.2
172.5°	576.8	576.5	575.3	574.1	575.3	576.5	576.8	572.9	567.9	565.3	565.3
175°	572.5	572.5	572.5	572.5	572.5	572.5	572.5	570.2	567.0	565.3	566.0
177.5°	571.8	571.4	570.2	568.8	570.2	571.4	571.8	569.9	567.3	566.0	566.7
180°	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8	568.8



TEST NUMBER: P935060

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	650.6	650.6	650.6	650.6	650.6
2.5°	642.6	645.6	647.4	649.9	656.1
5°	617.9	629.6	633.3	642.6	653.6
7.5°	563.7	599.4	609.3	631.5	648.7
10°	511.4	547.1	564.4	616.7	642.6
12.5°	485.0	505.9	517.6	590.8	633.9
15°	468.4	483.2	491.8	556.4	624.0
17.5°	455.5	465.9	472.1	522.5	610.5
20°	447.5	452.3	457.9	497.9	595.1
22.5°	441.9	438.8	443.2	480.7	574.2
25°	438.2	426.5	431.4	467.1	549.6
27.5°	441.3	415.4	417.3	454.8	523.7
30°	441.9	401.9	402.5	441.9	494.8
32.5°	437.6	387.7	388.4	425.9	462.2
35°	427.1	371.1	370.5	407.5	417.9
37.5°	413.0	353.3	353.3	387.1	369.3
40°	395.7	335.4	337.3	360.7	326.1
42.5°	374.8	316.3	318.8	325.6	294.2
45°	352.0	297.9	299.7	275.1	269.5
47.5°	326.8	278.8	279.4	228.3	261.5
50°	296.7	259.1	256.7	195.7	261.0
52.5°	270.2	237.6	230.2	177.2	236.9
55°	244.3	214.8	198.8	163.1	219.7
57.5°	221.5	185.3	169.9	146.5	216.0
60°	200.6	156.3	144.6	128.7	198.2
62.5°	183.4	134.8	132.3	116.4	179.7
65°	164.9	120.0	119.4	105.9	152.6
67.5°	147.1	110.1	109.6	96.0	116.4
70°	128.0	99.7	98.5	85.5	86.2
72.5°	108.3	88.0	86.8	76.9	71.4
75°	88.6	74.4	73.9	67.1	57.8
77.5°	69.6	59.1	60.3	54.1	42.5
80°	49.8	43.0	44.3	38.8	32.0
82.5°	33.2	28.4	29.5	24.6	21.6
85°	18.4	16.0	16.6	12.9	9.8
87.5°	8.6	7.3	7.3	5.0	3.1
90°	16.8	10.6	9.9	6.9	3.9
92.5°	103.6	73.7	67.2	41.2	15.2
95°	254.8	143.5	131.7	84.2	36.6
97.5°	343.3	157.7	147.2	105.3	63.3
100°	375.5	169.5	160.0	122.0	84.0
102.5°	390.3	181.3	172.4	137.0	101.5
105°	401.2	198.9	191.3	161.3	131.3
107.5°	403.2	224.8	217.9	189.9	161.9
110°	400.1	239.3	233.0	207.8	182.4



TEST NUMBER: P935060

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	400.3	256.9	250.8	226.8	202.7
115°	404.0	283.2	277.6	255.4	233.2
117.5°	411.5	308.8	303.8	283.6	263.4
120°	417.6	323.7	318.9	299.9	280.9
122.5°	426.4	341.3	336.5	317.3	298.2
125°	438.2	363.8	359.4	341.9	324.5
127.5°	450.0	385.5	381.1	363.4	345.8
130°	458.7	400.0	395.3	376.3	357.3
132.5°	465.6	411.9	407.1	388.1	369.1
135°	473.3	425.6	421.3	404.0	386.7
137.5°	484.7	443.2	438.8	421.8	404.6
140°	491.8	455.0	451.0	435.3	419.5
142.5°	497.7	463.8	460.1	445.5	430.9
145°	505.3	477.1	473.9	461.2	448.5
147.5°	516.5	493.9	490.8	478.5	466.1
150°	522.4	502.7	499.9	488.7	477.5
152.5°	526.1	508.4	506.3	497.8	489.3
155°	534.6	521.1	519.5	513.2	506.9
157.5°	542.9	533.6	532.1	526.0	519.9
160°	546.8	539.3	538.1	533.5	528.7
162.5°	550.8	545.5	544.6	541.0	537.4
165°	556.7	554.2	553.4	550.2	546.9
167.5°	561.3	559.2	558.9	557.3	555.8
170°	565.0	564.9	564.6	563.0	561.5
172.5°	565.3	565.3	565.2	564.9	564.6
175°	567.6	568.8	568.8	568.8	568.8
177.5°	567.9	568.8	568.8	568.8	568.8
180°	568.8	568.8	568.8	568.8	568.8



TEST NUMBER: P935060  
 CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-5000K

**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	9.02	9.73	10.12	10.83	12.35	11.81	12.53	12.92	13.63	15.14
	3H	9.48	10.12	10.59	11.23	12.76	13.14	13.78	14.25	14.89	16.42
	4H	9.67	10.27	10.79	11.38	12.92	13.57	14.18	14.69	15.28	16.82
	6H	9.78	10.34	10.91	11.45	13.00	13.84	14.40	14.97	15.51	17.06
	8H	9.78	10.31	10.91	11.43	12.98	13.90	14.44	15.04	15.56	17.10
	12H	9.74	10.25	10.88	11.37	12.93	13.93	14.44	15.07	15.56	17.12
4H	2H	10.02	10.63	11.15	11.74	13.28	12.21	12.82	13.34	13.92	15.46
	3H	11.04	11.54	12.17	12.68	14.23	13.69	14.20	14.82	15.33	16.88
	4H	11.31	11.77	12.44	12.89	14.46	14.20	14.67	15.34	15.79	17.36
	6H	11.42	11.82	12.57	12.97	14.53	14.55	14.95	15.70	16.10	17.66
	8H	11.43	11.80	12.57	12.94	14.51	14.65	15.02	15.79	16.16	17.74
	12H	11.39	11.72	12.55	12.87	14.45	14.70	15.03	15.86	16.18	17.76
8H	4H	11.74	12.11	12.89	13.25	14.83	14.32	14.69	15.46	15.83	17.40
	6H	12.00	12.31	13.16	13.49	15.06	14.74	15.05	15.90	16.23	17.80
	8H	12.04	12.31	13.21	13.47	15.06	14.89	15.15	16.06	16.31	17.91
	12H	12.02	12.25	13.19	13.41	15.04	14.97	15.21	16.14	16.36	17.99
12H	4H	11.74	12.08	12.90	13.23	14.81	14.27	14.61	15.44	15.76	17.34
	6H	12.06	12.32	13.23	13.48	15.08	14.74	15.00	15.91	16.16	17.76
	8H	12.12	12.35	13.29	13.51	15.14	14.89	15.12	16.06	16.28	17.91