

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: P934270

Luminaire Tested: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

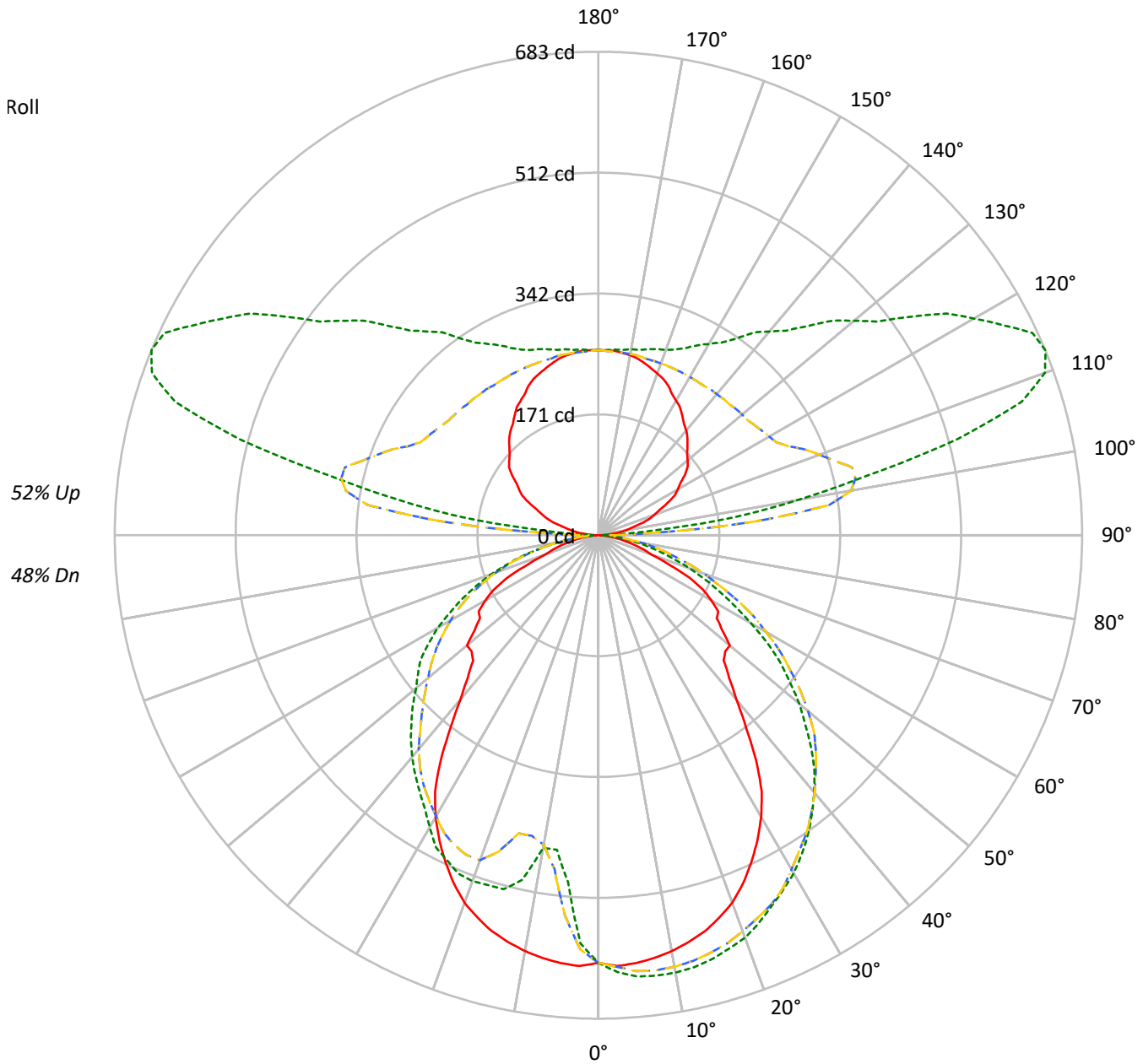
Test Method: LM-79-2019  
Report Number: P934270  
REPORT IS A COMBINATION OF REPORTS P933690 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3263.1 lumens  
Efficiency: N/A  
Efficacy: 114.9 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: General Diffuse  
  
Input Watts (W): 28.4  
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: P934270  
CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot



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



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46	41	41	41	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34	34	34	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	38	35	33	29	29	29	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	33	31	28	25	25	25	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	21	21	21	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22	19	19	19	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17	17	17	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15	15	15	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16	13	13	13	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	20	16	14	12	12	12	12

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

	0°	90°	180°	270°
0°	5605	5605	5605	5605
5°	5640	5658	5640	4448
10°	5597	5573	5597	3985
15°	5529	5452	5529	4553
20°	5407	5309	5407	4562
25°	5165	5101	5165	4466
30°	4852	4927	4852	4253
35°	4320	4708	4320	4020
40°	3593	4450	3593	3843
45°	3203	4148	3203	3641
50°	3397	3789	3397	3437
55°	3187	3400	3187	3320
60°	3273	2887	3273	3041
65°	2953	2387	2953	2668
70°	2031	1903	2031	2237
75°	1761	1406	1761	1684
80°	1390	931	1390	1012
85°	754	491	754	418

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 4921 cd/sqm



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.5	1.7
10°-20°	154.8	4.7
20°-30°	239.3	7.3
30°-40°	285.7	8.8
40°-50°	287.3	8.8
50°-60°	250.0	7.7
60°-70°	177.3	5.4
70°-80°	93.8	2.9
80°-90°	24.3	0.7
90°-100°	127.5	3.9
100°-110°	335.3	10.3
110°-120°	347.7	10.7
120°-130°	278.9	8.5
130°-140°	218.8	6.7
140°-150°	168.0	5.1
150°-160°	121.0	3.7
160°-170°	74.0	2.3
170°-180°	25.0	0.8
0°-30°	448.6	13.7
0°-40°	734.2	22.5
0°-60°	1271.6	39.0
0°-90°	1567.0	48.0
90°-120°	810.5	24.8
90°-150°	1476.2	45.2
90°-180°	1696.0	52.0
0°-180°	3263.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	604	604	604	604	604	
5°	607	626	607	492	607	58
15°	579	620	579	518	579	163
25°	510	578	510	506	510	234
35°	388	516	388	441	388	240
45°	250	425	250	373	250	200
55°	204	314	204	306	204	187
65°	142	189	142	211	142	135
75°	54	90	54	107	54	56
85°	9	23	9	19	9	12
90°	2	7	2	7	2	2
95°	17	77	17	77	17	19
105°	60	525	60	525	60	64
115°	107	676	107	676	107	106
125°	149	538	149	538	149	133
135°	178	418	178	418	178	138
145°	206	339	206	339	206	129
155°	233	292	233	292	233	107
165°	252	272	252	272	252	71
175°	262	263	262	263	262	25
180°	262	262	262	262	262	



TEST NUMBER: P934270  
 CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0
2.5°	609.1	609.1	612.5	613.7	613.7	612.0	610.3	612.0	617.1	618.8	618.2
5°	606.8	611.4	617.7	618.8	620.0	619.4	618.2	619.4	625.1	626.2	626.8
7.5°	602.3	610.8	618.8	620.5	622.2	620.5	620.0	621.1	626.8	627.9	627.9
10°	596.6	608.5	617.7	618.8	620.5	618.8	618.8	621.1	626.8	627.9	628.5
12.5°	588.6	605.1	613.7	614.8	617.1	616.5	616.0	618.2	624.0	625.1	625.1
15°	579.4	598.8	606.8	608.0	612.0	610.8	610.8	613.1	619.4	621.1	620.5
17.5°	566.8	590.9	600.0	601.7	604.6	604.0	604.6	606.8	612.5	613.7	614.3
20°	552.5	580.0	590.9	592.6	595.4	595.4	595.4	598.3	604.0	606.3	606.3
22.5°	533.1	568.5	580.0	581.1	584.6	584.6	585.7	589.7	594.8	595.4	595.4
25°	510.3	555.9	565.6	569.1	572.5	574.2	576.0	578.3	580.0	579.4	580.0
27.5°	486.2	540.0	552.5	554.8	559.4	561.1	563.4	563.9	564.5	566.2	565.1
30°	459.4	517.7	536.5	538.8	546.2	547.4	545.1	546.2	549.1	550.2	551.4
32.5°	429.2	484.5	520.0	525.1	532.0	528.6	528.0	529.7	534.3	534.3	535.4
35°	388.0	458.8	504.6	509.2	514.3	510.3	512.6	513.1	516.0	517.7	517.1
37.5°	342.8	436.6	488.5	491.9	495.9	490.8	494.2	495.9	498.2	497.1	497.1
40°	302.8	401.7	469.7	472.0	475.4	471.4	474.8	476.0	477.1	476.0	475.4
42.5°	273.2	363.4	449.7	452.6	450.3	453.1	454.3	456.6	454.8	452.6	452.6
45°	250.2	353.2	428.0	431.4	428.0	432.6	434.3	434.3	429.2	428.0	427.4
47.5°	242.8	332.5	406.2	406.2	404.5	410.2	413.1	409.1	404.0	402.2	402.2
50°	242.3	309.7	376.6	374.3	382.3	389.1	386.3	382.3	378.3	372.0	372.0
52.5°	220.0	281.7	338.2	346.8	359.4	363.4	358.9	354.9	348.0	345.1	342.8
55°	204.0	252.5	303.4	320.5	333.7	338.8	330.2	326.2	316.0	314.3	313.1
57.5°	200.6	210.3	271.4	293.1	309.1	308.6	303.4	296.0	287.4	285.7	285.2
60°	184.0	152.0	237.1	262.8	279.4	277.7	273.2	266.2	258.2	257.1	256.0
62.5°	166.8	110.2	198.3	227.4	250.8	250.2	246.3	236.0	230.3	227.4	225.1
65°	141.7	92.5	141.2	189.1	222.9	224.0	215.4	208.0	201.7	198.3	197.7
67.5°	108.0	75.4	95.4	157.7	196.0	194.9	184.0	180.5	172.5	170.8	167.4
70°	80.0	50.3	66.3	128.0	169.7	166.8	158.3	154.3	146.9	142.9	140.6
72.5°	66.3	40.6	48.6	99.4	142.9	139.4	132.0	127.5	121.2	117.7	115.4
75°	53.7	42.9	37.1	73.7	116.0	113.7	106.8	102.2	97.1	92.5	93.1
77.5°	39.4	40.0	29.7	54.3	92.0	88.6	84.6	78.9	76.6	72.0	72.0
80°	29.7	31.4	22.3	37.1	66.3	66.3	62.9	58.9	54.9	52.6	52.6
82.5°	20.0	20.0	16.5	23.4	45.2	43.5	41.2	40.0	37.7	36.6	36.6
85°	9.1	11.4	10.3	14.3	24.5	25.7	25.7	24.5	24.0	22.8	23.4
87.5°	2.9	5.1	6.3	8.0	12.6	13.1	13.7	13.7	13.7	14.3	14.3
90°	1.8	3.2	4.6	4.9	7.8	11.5	13.4	11.8	8.9	6.6	6.6
92.5°	7.0	18.9	30.9	33.9	47.6	65.9	75.1	65.9	47.3	33.4	32.0
95°	16.9	38.7	60.6	66.0	117.2	185.5	219.6	196.0	148.7	113.2	109.2
97.5°	29.1	48.4	67.6	72.5	157.9	271.8	328.7	313.8	283.9	261.5	253.8
100°	38.6	56.1	73.6	78.0	172.7	299.1	362.3	363.4	365.6	367.2	358.1
102.5°	46.7	63.0	79.3	83.4	179.5	307.7	371.7	390.8	428.9	457.4	449.6
105°	60.4	74.2	88.0	91.5	184.5	308.7	370.7	413.4	498.8	562.8	558.7
107.5°	74.5	87.3	100.2	103.4	185.5	295.0	349.7	409.2	528.3	617.6	618.6
110°	83.9	95.5	107.2	110.1	184.1	282.8	332.1	398.7	531.8	631.7	636.0



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	93.2	104.3	115.4	118.2	184.1	272.1	316.1	384.3	520.5	622.7	629.5
115°	107.3	117.5	127.7	130.3	185.8	259.9	296.9	362.5	493.8	592.3	601.6
117.5°	121.2	130.4	139.7	142.0	189.3	252.3	283.8	343.0	461.4	550.3	560.6
120°	129.2	138.0	146.7	148.9	192.1	249.7	278.5	332.6	440.9	522.1	532.2
122.5°	137.2	146.0	154.8	157.0	196.1	248.4	274.4	323.2	420.7	493.8	503.7
125°	149.3	157.3	165.3	167.3	201.6	247.3	270.1	311.5	394.3	456.4	465.5
127.5°	159.1	167.2	175.3	177.4	207.0	246.7	266.4	301.9	373.0	426.3	434.0
130°	164.4	173.1	181.8	184.0	211.0	247.0	265.0	296.7	360.0	407.4	414.5
132.5°	169.8	178.6	187.3	189.5	214.3	247.3	263.8	292.1	348.7	391.2	397.6
135°	177.9	185.8	193.8	195.8	217.8	247.0	261.6	285.3	332.8	368.4	373.9
137.5°	186.2	194.0	201.9	203.9	223.1	248.5	261.3	281.3	321.5	351.5	356.1
140°	193.0	200.2	207.5	209.3	226.2	248.8	260.0	277.4	312.1	338.1	342.2
142.5°	198.3	205.0	211.6	213.3	228.9	249.6	260.0	275.3	305.7	328.5	332.1
145°	206.4	212.1	218.0	219.5	232.4	249.7	258.3	270.8	295.6	314.3	317.0
147.5°	214.4	220.2	225.8	227.2	237.6	251.4	258.3	268.1	287.7	302.4	304.7
150°	219.6	224.8	230.0	231.2	240.3	252.3	258.3	266.6	283.1	295.6	297.4
152.5°	225.1	229.0	232.9	233.9	242.1	252.9	258.3	265.4	279.5	290.1	291.5
155°	233.2	236.1	239.0	239.7	245.9	254.2	258.3	263.9	275.2	283.6	284.6
157.5°	239.2	242.0	244.8	245.5	249.7	255.4	258.3	262.7	271.4	278.0	278.7
160°	243.2	245.4	247.6	248.1	251.5	256.0	258.3	262.1	269.6	275.2	275.5
162.5°	247.3	248.9	250.5	250.9	253.4	256.7	258.3	261.5	267.8	272.6	272.9
165°	251.7	253.1	254.7	255.0	256.1	257.6	258.3	260.5	265.1	268.5	268.8
167.5°	255.7	256.4	257.0	257.2	258.2	259.4	260.0	261.6	264.5	266.8	266.9
170°	258.3	259.0	259.7	259.9	259.9	260.0	260.0	261.6	264.5	266.8	266.8
172.5°	259.7	259.9	260.0	260.0	260.0	260.0	260.0	261.2	263.5	265.3	265.1
175°	261.6	261.6	261.6	261.6	261.1	260.4	260.0	260.8	262.3	263.4	263.4
177.5°	261.6	261.6	261.6	261.6	261.2	260.7	260.5	261.1	262.2	263.1	262.9
180°	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0
2.5°	619.4	617.7	619.4	618.2	618.8	617.1	612.0	610.3	612.0	613.7	613.7
5°	626.8	625.7	626.8	626.8	626.2	625.1	619.4	618.2	619.4	620.0	618.8
7.5°	629.1	627.4	629.1	627.9	627.9	626.8	621.1	620.0	620.5	622.2	620.5
10°	629.1	627.4	629.1	628.5	627.9	626.8	621.1	618.8	618.8	620.5	618.8
12.5°	626.2	625.1	626.2	625.1	625.1	624.0	618.2	616.0	616.5	617.1	614.8
15°	621.7	620.0	621.7	620.5	621.1	619.4	613.1	610.8	610.8	612.0	608.0
17.5°	614.8	612.5	614.8	614.3	613.7	612.5	606.8	604.6	604.0	604.6	601.7
20°	606.8	605.1	606.8	606.3	606.3	604.0	598.3	595.4	595.4	595.4	592.6
22.5°	594.3	592.6	594.3	595.4	595.4	594.8	589.7	585.7	584.6	584.6	581.1
25°	580.0	578.3	580.0	580.0	579.4	580.0	578.3	576.0	574.2	572.5	569.1
27.5°	566.2	565.1	566.2	565.1	566.2	564.5	563.9	563.4	561.1	559.4	554.8
30°	552.5	551.4	552.5	551.4	550.2	549.1	546.2	545.1	547.4	546.2	538.8
32.5°	535.4	534.3	535.4	535.4	534.3	534.3	529.7	528.0	528.6	532.0	525.1
35°	517.7	516.0	517.7	517.1	517.7	516.0	513.1	512.6	510.3	514.3	509.2
37.5°	497.1	495.4	497.1	497.1	497.1	498.2	495.9	494.2	490.8	495.9	491.9
40°	476.0	473.7	476.0	475.4	476.0	477.1	476.0	474.8	471.4	475.4	472.0
42.5°	452.0	451.4	452.0	452.6	452.6	454.8	456.6	454.3	453.1	450.3	452.6
45°	426.3	425.1	426.3	427.4	428.0	429.2	434.3	434.3	432.6	428.0	431.4
47.5°	398.8	396.0	398.8	402.2	402.2	404.0	409.1	413.1	410.2	404.5	406.2
50°	369.7	370.3	369.7	372.0	372.0	378.3	382.3	386.3	389.1	382.3	374.3
52.5°	341.1	340.5	341.1	342.8	345.1	348.0	354.9	358.9	363.4	359.4	346.8
55°	312.5	313.7	312.5	313.1	314.3	316.0	326.2	330.2	338.8	333.7	320.5
57.5°	284.0	282.3	284.0	285.2	285.7	287.4	296.0	303.4	308.6	309.1	293.1
60°	250.8	248.5	250.8	256.0	257.1	258.2	266.2	273.2	277.7	279.4	262.8
62.5°	221.7	217.7	221.7	225.1	227.4	230.3	236.0	246.3	250.2	250.8	227.4
65°	190.8	189.1	190.8	197.7	198.3	201.7	208.0	215.4	224.0	222.9	189.1
67.5°	162.8	162.8	162.8	167.4	170.8	172.5	180.5	184.0	194.9	196.0	157.7
70°	137.2	136.6	137.2	140.6	142.9	146.9	154.3	158.3	166.8	169.7	128.0
72.5°	112.5	112.0	112.5	115.4	117.7	121.2	127.5	132.0	139.4	142.9	99.4
75°	90.8	89.7	90.8	93.1	92.5	97.1	102.2	106.8	113.7	116.0	73.7
77.5°	69.7	69.7	69.7	72.0	72.0	76.6	78.9	84.6	88.6	92.0	54.3
80°	52.0	51.5	52.0	52.6	52.6	54.9	58.9	62.9	66.3	66.3	37.1
82.5°	36.6	35.4	36.6	36.6	36.6	37.7	40.0	41.2	43.5	45.2	23.4
85°	22.8	22.8	22.8	23.4	22.8	24.0	24.5	25.7	25.7	24.5	14.3
87.5°	14.8	14.3	14.8	14.3	14.3	13.7	13.7	13.7	13.1	12.6	8.0
90°	6.6	6.6	6.6	6.6	6.6	8.9	11.8	13.4	11.5	7.8	4.9
92.5°	26.8	21.4	26.8	32.0	33.4	47.3	65.9	75.1	65.9	47.6	33.9
95°	93.1	77.1	93.1	109.2	113.2	148.7	196.0	219.6	185.5	117.2	66.0
97.5°	223.2	192.6	223.2	253.8	261.5	283.9	313.8	328.7	271.8	157.9	72.5
100°	321.6	285.2	321.6	358.1	367.2	365.6	363.4	362.3	299.1	172.7	78.0
102.5°	418.4	387.2	418.4	449.6	457.4	428.9	390.8	371.7	307.7	179.5	83.4
105°	541.9	525.1	541.9	558.7	562.8	498.8	413.4	370.7	308.7	184.5	91.5
107.5°	622.6	626.7	622.6	618.6	617.6	528.3	409.2	349.7	295.0	185.5	103.4
110°	653.5	670.9	653.5	636.0	631.7	531.8	398.7	332.1	282.8	184.1	110.1





TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	656.3	683.1	656.3	629.5	622.7	520.5	384.3	316.1	272.1	184.1	118.2
115°	638.8	676.1	638.8	601.6	592.3	493.8	362.5	296.9	259.9	185.8	130.3
117.5°	601.9	643.3	601.9	560.6	550.3	461.4	343.0	283.8	252.3	189.3	142.0
120°	572.2	612.3	572.2	532.2	522.1	440.9	332.6	278.5	249.7	192.1	148.9
122.5°	543.3	582.9	543.3	503.7	493.8	420.7	323.2	274.4	248.4	196.1	157.0
125°	501.9	538.4	501.9	465.5	456.4	394.3	311.5	270.1	247.3	201.6	167.3
127.5°	464.8	495.5	464.8	434.0	426.3	373.0	301.9	266.4	246.7	207.0	177.4
130°	443.0	471.3	443.0	414.5	407.4	360.0	296.7	265.0	247.0	211.0	184.0
132.5°	423.0	448.5	423.0	397.6	391.2	348.7	292.1	263.8	247.3	214.3	189.5
135°	395.8	417.7	395.8	373.9	368.4	332.8	285.3	261.6	247.0	217.8	195.8
137.5°	373.9	391.9	373.9	356.1	351.5	321.5	281.3	261.3	248.5	223.1	203.9
140°	359.0	375.8	359.0	342.2	338.1	312.1	277.4	260.0	248.8	226.2	209.3
142.5°	346.6	361.1	346.6	332.1	328.5	305.7	275.3	260.0	249.6	228.9	213.3
145°	328.0	338.9	328.0	317.0	314.3	295.6	270.8	258.3	249.7	232.4	219.5
147.5°	313.7	322.7	313.7	304.7	302.4	287.7	268.1	258.3	251.4	237.6	227.2
150°	304.8	312.1	304.8	297.4	295.6	283.1	266.6	258.3	252.3	240.3	231.2
152.5°	297.0	302.5	297.0	291.5	290.1	279.5	265.4	258.3	252.9	242.1	233.9
155°	288.2	291.9	288.2	284.6	283.6	275.2	263.9	258.3	254.2	245.9	239.7
157.5°	281.2	283.8	281.2	278.7	278.0	271.4	262.7	258.3	255.4	249.7	245.5
160°	277.1	278.5	277.1	275.5	275.2	269.6	262.1	258.3	256.0	251.5	248.1
162.5°	274.3	275.7	274.3	272.9	272.6	267.8	261.5	258.3	256.7	253.4	250.9
165°	270.3	271.9	270.3	268.8	268.5	265.1	260.5	258.3	257.6	256.1	255.0
167.5°	267.5	268.1	267.5	266.9	266.8	264.5	261.6	260.0	259.4	258.2	257.2
170°	266.8	266.8	266.8	266.8	266.8	264.5	261.6	260.0	260.0	259.9	259.9
172.5°	264.6	264.1	264.6	265.1	265.3	263.5	261.2	260.0	260.0	260.0	260.0
175°	263.4	263.4	263.4	263.4	263.4	262.3	260.8	260.0	260.4	261.1	261.6
177.5°	262.3	261.6	262.3	262.9	263.1	262.2	261.1	260.5	260.7	261.2	261.6
180°	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6



TEST NUMBER: P934270  
 CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0
2.5°	612.5	609.1	609.1	603.4	601.1	599.4	596.6	588.0	585.7	583.4	586.9
5°	617.7	611.4	606.8	596.6	588.0	584.6	573.7	553.1	539.4	529.1	523.4
7.5°	618.8	610.8	602.3	586.3	565.6	556.5	523.4	485.7	475.4	466.3	460.5
10°	617.7	608.5	596.6	572.5	524.0	508.0	474.8	450.3	444.0	442.3	444.0
12.5°	613.7	605.1	588.6	548.5	480.5	469.7	450.3	436.0	434.9	437.7	453.1
15°	606.8	598.8	579.4	516.6	456.6	448.6	434.9	429.7	436.0	456.0	502.3
17.5°	600.0	590.9	566.8	485.1	438.3	432.6	422.8	433.2	468.5	495.4	510.9
20°	590.9	580.0	552.5	462.3	425.1	420.0	415.4	461.7	488.5	498.2	506.9
22.5°	580.0	568.5	533.1	446.3	411.4	407.4	410.2	477.7	488.5	495.4	502.9
25°	565.6	555.9	510.3	433.7	400.5	396.0	406.8	476.0	482.2	483.9	498.8
27.5°	552.5	540.0	486.2	422.3	387.4	385.7	409.7	468.5	473.1	474.8	490.8
30°	536.5	517.7	459.4	410.2	373.7	373.1	410.2	459.4	458.3	462.8	478.8
32.5°	520.0	484.5	429.2	395.4	360.6	360.0	406.2	445.7	444.6	450.8	462.8
35°	504.6	458.8	388.0	378.3	344.0	344.5	396.5	429.7	430.3	436.0	443.4
37.5°	488.5	436.6	342.8	359.4	328.0	328.0	383.4	414.8	413.7	415.4	425.7
40°	469.7	401.7	302.8	334.8	313.1	311.4	367.4	398.8	394.8	394.3	408.5
42.5°	449.7	363.4	273.2	302.3	296.0	293.7	348.0	379.4	372.0	373.7	392.0
45°	428.0	353.2	250.2	255.4	278.3	276.6	326.8	357.2	352.0	356.6	375.4
47.5°	406.2	332.5	242.8	212.0	259.4	258.8	303.4	335.4	332.5	337.1	357.2
50°	376.6	309.7	242.3	181.7	238.3	240.5	275.5	314.3	314.3	318.3	339.4
52.5°	338.2	281.7	220.0	164.5	213.7	220.6	250.8	296.0	297.1	301.1	320.0
55°	303.4	252.5	204.0	151.4	184.5	199.5	226.8	277.2	279.4	283.4	300.6
57.5°	271.4	210.3	200.6	136.0	157.7	172.0	205.7	258.8	259.9	263.4	280.0
60°	237.1	152.0	184.0	119.5	134.3	145.1	186.2	237.1	241.1	243.4	257.7
62.5°	198.3	110.2	166.8	108.0	122.9	125.2	170.3	216.6	221.7	223.4	232.0
65°	141.2	92.5	141.7	98.3	110.8	111.4	153.1	195.4	200.0	202.9	209.2
67.5°	95.4	75.4	108.0	89.1	101.7	102.2	136.6	170.8	177.1	179.4	183.4
70°	66.3	50.3	80.0	79.4	91.4	92.5	118.9	148.6	154.3	156.0	158.3
72.5°	48.6	40.6	66.3	71.4	80.6	81.7	100.5	123.5	129.2	130.9	132.0
75°	37.1	42.9	53.7	62.3	68.6	69.1	82.3	100.5	104.5	105.7	106.2
77.5°	29.7	40.0	39.4	50.3	56.0	54.9	64.6	77.7	81.1	81.1	81.1
80°	22.3	31.4	29.7	36.0	41.2	40.0	46.3	55.5	56.6	57.7	57.2
82.5°	16.5	20.0	20.0	22.8	27.4	26.3	30.8	36.0	36.0	36.0	37.1
85°	10.3	11.4	9.1	12.0	15.4	14.8	17.1	19.4	20.0	20.0	18.8
87.5°	6.3	5.1	2.9	4.6	6.8	6.8	8.0	8.6	8.0	8.0	8.0
90°	4.6	3.2	1.8	3.2	4.6	4.9	7.8	11.5	13.4	11.8	8.9
92.5°	30.9	18.9	7.0	18.9	30.9	33.9	47.6	65.9	75.1	65.9	47.3
95°	60.6	38.7	16.9	38.7	60.6	66.0	117.2	185.5	219.6	196.0	148.7
97.5°	67.6	48.4	29.1	48.4	67.6	72.5	157.9	271.8	328.7	313.8	283.9
100°	73.6	56.1	38.6	56.1	73.6	78.0	172.7	299.1	362.3	363.4	365.6
102.5°	79.3	63.0	46.7	63.0	79.3	83.4	179.5	307.7	371.7	390.8	428.9
105°	88.0	74.2	60.4	74.2	88.0	91.5	184.5	308.7	370.7	413.4	498.8
107.5°	100.2	87.3	74.5	87.3	100.2	103.4	185.5	295.0	349.7	409.2	528.3
110°	107.2	95.5	83.9	95.5	107.2	110.1	184.1	282.8	332.1	398.7	531.8



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	115.4	104.3	93.2	104.3	115.4	118.2	184.1	272.1	316.1	384.3	520.5
115°	127.7	117.5	107.3	117.5	127.7	130.3	185.8	259.9	296.9	362.5	493.8
117.5°	139.7	130.4	121.2	130.4	139.7	142.0	189.3	252.3	283.8	343.0	461.4
120°	146.7	138.0	129.2	138.0	146.7	148.9	192.1	249.7	278.5	332.6	440.9
122.5°	154.8	146.0	137.2	146.0	154.8	157.0	196.1	248.4	274.4	323.2	420.7
125°	165.3	157.3	149.3	157.3	165.3	167.3	201.6	247.3	270.1	311.5	394.3
127.5°	175.3	167.2	159.1	167.2	175.3	177.4	207.0	246.7	266.4	301.9	373.0
130°	181.8	173.1	164.4	173.1	181.8	184.0	211.0	247.0	265.0	296.7	360.0
132.5°	187.3	178.6	169.8	178.6	187.3	189.5	214.3	247.3	263.8	292.1	348.7
135°	193.8	185.8	177.9	185.8	193.8	195.8	217.8	247.0	261.6	285.3	332.8
137.5°	201.9	194.0	186.2	194.0	201.9	203.9	223.1	248.5	261.3	281.3	321.5
140°	207.5	200.2	193.0	200.2	207.5	209.3	226.2	248.8	260.0	277.4	312.1
142.5°	211.6	205.0	198.3	205.0	211.6	213.3	228.9	249.6	260.0	275.3	305.7
145°	218.0	212.1	206.4	212.1	218.0	219.5	232.4	249.7	258.3	270.8	295.6
147.5°	225.8	220.2	214.4	220.2	225.8	227.2	237.6	251.4	258.3	268.1	287.7
150°	230.0	224.8	219.6	224.8	230.0	231.2	240.3	252.3	258.3	266.6	283.1
152.5°	232.9	229.0	225.1	229.0	232.9	233.9	242.1	252.9	258.3	265.4	279.5
155°	239.0	236.1	233.2	236.1	239.0	239.7	245.9	254.2	258.3	263.9	275.2
157.5°	244.8	242.0	239.2	242.0	244.8	245.5	249.7	255.4	258.3	262.7	271.4
160°	247.6	245.4	243.2	245.4	247.6	248.1	251.5	256.0	258.3	262.1	269.6
162.5°	250.5	248.9	247.3	248.9	250.5	250.9	253.4	256.7	258.3	261.5	267.8
165°	254.7	253.1	251.7	253.1	254.7	255.0	256.1	257.6	258.3	260.5	265.1
167.5°	257.0	256.4	255.7	256.4	257.0	257.2	258.2	259.4	260.0	261.6	264.5
170°	259.7	259.0	258.3	259.0	259.7	259.9	259.9	260.0	260.0	261.6	264.5
172.5°	260.0	259.9	259.7	259.9	260.0	260.0	260.0	260.0	260.0	261.2	263.5
175°	261.6	261.6	261.6	261.6	261.6	261.6	261.1	260.4	260.0	260.8	262.3
177.5°	261.6	261.6	261.6	261.6	261.6	261.6	261.2	260.7	260.5	261.1	262.2
180°	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6



TEST NUMBER: P934270  
 CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0
2.5°	582.9	581.1	583.4	577.1	583.4	581.1	582.9	586.9	583.4	585.7	588.0
5°	511.4	508.6	499.4	491.9	499.4	508.6	511.4	523.4	529.1	539.4	553.1
7.5°	457.1	454.8	452.6	448.0	452.6	454.8	457.1	460.5	466.3	475.4	485.7
10°	445.1	445.7	449.1	448.6	449.1	445.7	445.1	444.0	442.3	444.0	450.3
12.5°	476.0	481.1	500.0	498.8	500.0	481.1	476.0	453.1	437.7	434.9	436.0
15°	511.4	513.1	517.1	517.7	517.1	513.1	511.4	502.3	456.0	436.0	429.7
17.5°	514.9	515.4	518.3	518.3	518.3	515.4	514.9	510.9	495.4	468.5	433.2
20°	512.0	513.1	518.9	520.0	518.9	513.1	512.0	506.9	498.2	488.5	461.7
22.5°	510.9	513.1	517.7	517.1	517.7	513.1	510.9	502.9	495.4	488.5	477.7
25°	505.2	505.2	505.7	506.3	505.7	505.2	505.2	498.8	483.9	482.2	476.0
27.5°	493.1	494.2	497.7	497.1	497.7	494.2	493.1	490.8	474.8	473.1	468.5
30°	482.2	481.1	478.2	476.0	478.2	481.1	482.2	478.8	462.8	458.3	459.4
32.5°	464.0	461.1	458.3	456.6	458.3	461.1	464.0	462.8	450.8	444.6	445.7
35°	442.3	442.9	442.3	440.6	442.3	442.9	442.3	443.4	436.0	430.3	429.7
37.5°	426.9	428.0	427.4	425.1	427.4	428.0	426.9	425.7	415.4	413.7	414.8
40°	410.8	411.4	410.8	409.1	410.8	411.4	410.8	408.5	394.3	394.8	398.8
42.5°	395.4	394.8	393.1	392.0	393.1	394.8	395.4	392.0	373.7	372.0	379.4
45°	377.7	378.3	374.8	373.1	374.8	378.3	377.7	375.4	356.6	352.0	357.2
47.5°	360.0	360.0	357.2	355.4	357.2	360.0	360.0	357.2	337.1	332.5	335.4
50°	341.1	340.5	336.5	335.9	336.5	340.5	341.1	339.4	318.3	314.3	314.3
52.5°	319.4	319.4	320.0	321.1	320.0	319.4	319.4	320.0	301.1	297.1	296.0
55°	300.6	301.1	305.1	306.3	305.1	301.1	300.6	300.6	283.4	279.4	277.2
57.5°	281.2	281.2	284.0	284.0	284.0	281.2	281.2	280.0	263.4	259.9	258.8
60°	258.8	259.9	262.2	261.7	262.2	259.9	258.8	257.7	243.4	241.1	237.1
62.5°	235.4	236.6	237.1	236.0	237.1	236.6	235.4	232.0	223.4	221.7	216.6
65°	210.9	212.0	212.6	211.4	212.6	212.0	210.9	209.2	202.9	200.0	195.4
67.5°	185.7	185.1	184.5	186.8	184.5	185.1	185.7	183.4	179.4	177.1	170.8
70°	160.0	160.0	159.4	160.6	159.4	160.0	160.0	158.3	156.0	154.3	148.6
72.5°	132.6	132.0	134.3	132.6	134.3	132.0	132.6	132.0	130.9	129.2	123.5
75°	105.7	106.8	105.7	107.4	105.7	106.8	105.7	106.2	105.7	104.5	100.5
77.5°	80.6	81.7	80.6	80.6	80.6	81.7	80.6	81.1	81.1	81.1	77.7
80°	57.2	56.6	56.6	56.0	56.6	56.6	57.2	57.2	57.7	56.6	55.5
82.5°	36.6	36.0	36.0	37.1	36.0	36.0	36.6	37.1	36.0	36.0	36.0
85°	20.0	20.5	19.4	19.4	19.4	20.5	20.0	18.8	20.0	20.0	19.4
87.5°	7.4	6.8	6.8	6.8	6.8	6.8	7.4	8.0	8.0	8.0	8.6
90°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	8.9	11.8	13.4	11.5
92.5°	33.4	32.0	26.8	21.4	26.8	32.0	33.4	47.3	65.9	75.1	65.9
95°	113.2	109.2	93.1	77.1	93.1	109.2	113.2	148.7	196.0	219.6	185.5
97.5°	261.5	253.8	223.2	192.6	223.2	253.8	261.5	283.9	313.8	328.7	271.8
100°	367.2	358.1	321.6	285.2	321.6	358.1	367.2	365.6	363.4	362.3	299.1
102.5°	457.4	449.6	418.4	387.2	418.4	449.6	457.4	428.9	390.8	371.7	307.7
105°	562.8	558.7	541.9	525.1	541.9	558.7	562.8	498.8	413.4	370.7	308.7
107.5°	617.6	618.6	622.6	626.7	622.6	618.6	617.6	528.3	409.2	349.7	295.0
110°	631.7	636.0	653.5	670.9	653.5	636.0	631.7	531.8	398.7	332.1	282.8



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	622.7	629.5	656.3	683.1	656.3	629.5	622.7	520.5	384.3	316.1	272.1
115°	592.3	601.6	638.8	676.1	638.8	601.6	592.3	493.8	362.5	296.9	259.9
117.5°	550.3	560.6	601.9	643.3	601.9	560.6	550.3	461.4	343.0	283.8	252.3
120°	522.1	532.2	572.2	612.3	572.2	532.2	522.1	440.9	332.6	278.5	249.7
122.5°	493.8	503.7	543.3	582.9	543.3	503.7	493.8	420.7	323.2	274.4	248.4
125°	456.4	465.5	501.9	538.4	501.9	465.5	456.4	394.3	311.5	270.1	247.3
127.5°	426.3	434.0	464.8	495.5	464.8	434.0	426.3	373.0	301.9	266.4	246.7
130°	407.4	414.5	443.0	471.3	443.0	414.5	407.4	360.0	296.7	265.0	247.0
132.5°	391.2	397.6	423.0	448.5	423.0	397.6	391.2	348.7	292.1	263.8	247.3
135°	368.4	373.9	395.8	417.7	395.8	373.9	368.4	332.8	285.3	261.6	247.0
137.5°	351.5	356.1	373.9	391.9	373.9	356.1	351.5	321.5	281.3	261.3	248.5
140°	338.1	342.2	359.0	375.8	359.0	342.2	338.1	312.1	277.4	260.0	248.8
142.5°	328.5	332.1	346.6	361.1	346.6	332.1	328.5	305.7	275.3	260.0	249.6
145°	314.3	317.0	328.0	338.9	328.0	317.0	314.3	295.6	270.8	258.3	249.7
147.5°	302.4	304.7	313.7	322.7	313.7	304.7	302.4	287.7	268.1	258.3	251.4
150°	295.6	297.4	304.8	312.1	304.8	297.4	295.6	283.1	266.6	258.3	252.3
152.5°	290.1	291.5	297.0	302.5	297.0	291.5	290.1	279.5	265.4	258.3	252.9
155°	283.6	284.6	288.2	291.9	288.2	284.6	283.6	275.2	263.9	258.3	254.2
157.5°	278.0	278.7	281.2	283.8	281.2	278.7	278.0	271.4	262.7	258.3	255.4
160°	275.2	275.5	277.1	278.5	277.1	275.5	275.2	269.6	262.1	258.3	256.0
162.5°	272.6	272.9	274.3	275.7	274.3	272.9	272.6	267.8	261.5	258.3	256.7
165°	268.5	268.8	270.3	271.9	270.3	268.8	268.5	265.1	260.5	258.3	257.6
167.5°	266.8	266.9	267.5	268.1	267.5	266.9	266.8	264.5	261.6	260.0	259.4
170°	266.8	266.8	266.8	266.8	266.8	266.8	266.8	264.5	261.6	260.0	260.0
172.5°	265.3	265.1	264.6	264.1	264.6	265.1	265.3	263.5	261.2	260.0	260.0
175°	263.4	263.4	263.4	263.4	263.4	263.4	263.4	262.3	260.8	260.0	260.4
177.5°	263.1	262.9	262.3	261.6	262.3	262.9	263.1	262.2	261.1	260.5	260.7
180°	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	604.0	604.0	604.0	604.0	604.0
2.5°	596.6	599.4	601.1	603.4	609.1
5°	573.7	584.6	588.0	596.6	606.8
7.5°	523.4	556.5	565.6	586.3	602.3
10°	474.8	508.0	524.0	572.5	596.6
12.5°	450.3	469.7	480.5	548.5	588.6
15°	434.9	448.6	456.6	516.6	579.4
17.5°	422.8	432.6	438.3	485.1	566.8
20°	415.4	420.0	425.1	462.3	552.5
22.5°	410.2	407.4	411.4	446.3	533.1
25°	406.8	396.0	400.5	433.7	510.3
27.5°	409.7	385.7	387.4	422.3	486.2
30°	410.2	373.1	373.7	410.2	459.4
32.5°	406.2	360.0	360.6	395.4	429.2
35°	396.5	344.5	344.0	378.3	388.0
37.5°	383.4	328.0	328.0	359.4	342.8
40°	367.4	311.4	313.1	334.8	302.8
42.5°	348.0	293.7	296.0	302.3	273.2
45°	326.8	276.6	278.3	255.4	250.2
47.5°	303.4	258.8	259.4	212.0	242.8
50°	275.5	240.5	238.3	181.7	242.3
52.5°	250.8	220.6	213.7	164.5	220.0
55°	226.8	199.5	184.5	151.4	204.0
57.5°	205.7	172.0	157.7	136.0	200.6
60°	186.2	145.1	134.3	119.5	184.0
62.5°	170.3	125.2	122.9	108.0	166.8
65°	153.1	111.4	110.8	98.3	141.7
67.5°	136.6	102.2	101.7	89.1	108.0
70°	118.9	92.5	91.4	79.4	80.0
72.5°	100.5	81.7	80.6	71.4	66.3
75°	82.3	69.1	68.6	62.3	53.7
77.5°	64.6	54.9	56.0	50.3	39.4
80°	46.3	40.0	41.2	36.0	29.7
82.5°	30.8	26.3	27.4	22.8	20.0
85°	17.1	14.8	15.4	12.0	9.1
87.5°	8.0	6.8	6.8	4.6	2.9
90°	7.8	4.9	4.6	3.2	1.8
92.5°	47.6	33.9	30.9	18.9	7.0
95°	117.2	66.0	60.6	38.7	16.9
97.5°	157.9	72.5	67.6	48.4	29.1
100°	172.7	78.0	73.6	56.1	38.6
102.5°	179.5	83.4	79.3	63.0	46.7
105°	184.5	91.5	88.0	74.2	60.4
107.5°	185.5	103.4	100.2	87.3	74.5
110°	184.1	110.1	107.2	95.5	83.9



TEST NUMBER: P934270

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	184.1	118.2	115.4	104.3	93.2
115°	185.8	130.3	127.7	117.5	107.3
117.5°	189.3	142.0	139.7	130.4	121.2
120°	192.1	148.9	146.7	138.0	129.2
122.5°	196.1	157.0	154.8	146.0	137.2
125°	201.6	167.3	165.3	157.3	149.3
127.5°	207.0	177.4	175.3	167.2	159.1
130°	211.0	184.0	181.8	173.1	164.4
132.5°	214.3	189.5	187.3	178.6	169.8
135°	217.8	195.8	193.8	185.8	177.9
137.5°	223.1	203.9	201.9	194.0	186.2
140°	226.2	209.3	207.5	200.2	193.0
142.5°	228.9	213.3	211.6	205.0	198.3
145°	232.4	219.5	218.0	212.1	206.4
147.5°	237.6	227.2	225.8	220.2	214.4
150°	240.3	231.2	230.0	224.8	219.6
152.5°	242.1	233.9	232.9	229.0	225.1
155°	245.9	239.7	239.0	236.1	233.2
157.5°	249.7	245.5	244.8	242.0	239.2
160°	251.5	248.1	247.6	245.4	243.2
162.5°	253.4	250.9	250.5	248.9	247.3
165°	256.1	255.0	254.7	253.1	251.7
167.5°	258.2	257.2	257.0	256.4	255.7
170°	259.9	259.9	259.7	259.0	258.3
172.5°	260.0	260.0	260.0	259.9	259.7
175°	261.1	261.6	261.6	261.6	261.6
177.5°	261.2	261.6	261.6	261.6	261.6
180°	261.6	261.6	261.6	261.6	261.6



TEST NUMBER: P934270  
 CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-4

**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	10.60	11.44	11.57	12.43	13.73	13.39	14.24	14.37	15.23	16.53
	3H	11.07	11.83	12.06	12.82	14.14	14.73	15.48	15.71	16.48	17.80
	4H	11.26	11.98	12.26	12.98	14.31	15.16	15.88	16.16	16.88	18.21
	6H	11.38	12.04	12.39	13.04	14.39	15.44	16.10	16.45	17.11	18.45
	8H	11.38	12.01	12.40	13.03	14.37	15.51	16.14	16.53	17.16	18.50
	12H	11.35	11.95	12.37	12.96	14.33	15.54	16.14	16.56	17.16	18.52
4H	2H	11.62	12.33	12.62	13.33	14.66	13.80	14.52	14.81	15.52	16.85
	3H	12.64	13.24	13.66	14.27	15.61	15.30	15.89	16.31	16.92	18.27
	4H	12.92	13.46	13.94	14.49	15.85	15.82	16.36	16.84	17.38	18.75
	6H	13.04	13.51	14.08	14.56	15.92	16.17	16.64	17.21	17.69	19.05
	8H	13.05	13.49	14.08	14.52	15.90	16.28	16.71	17.31	17.75	19.13
	12H	13.02	13.41	14.07	14.46	15.85	16.33	16.72	17.38	17.77	19.16
8H	4H	13.37	13.80	14.40	14.84	16.22	15.94	16.38	16.97	17.42	18.79
	6H	13.63	13.99	14.68	15.07	16.44	16.37	16.73	17.43	17.81	19.19
	8H	13.67	13.99	14.73	15.05	16.45	16.52	16.83	17.58	17.90	19.29
	12H	13.65	13.93	14.72	14.99	16.43	16.61	16.89	17.68	17.95	19.38
12H	4H	13.37	13.77	14.42	14.82	16.20	15.91	16.30	16.96	17.35	18.74
	6H	13.69	14.01	14.75	15.07	16.46	16.37	16.69	17.43	17.75	19.14
	8H	13.75	14.03	14.82	15.09	16.53	16.52	16.80	17.59	17.86	19.30