

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: P934222

Luminaire Tested: SQ4-FA-050U-050D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934222
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-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

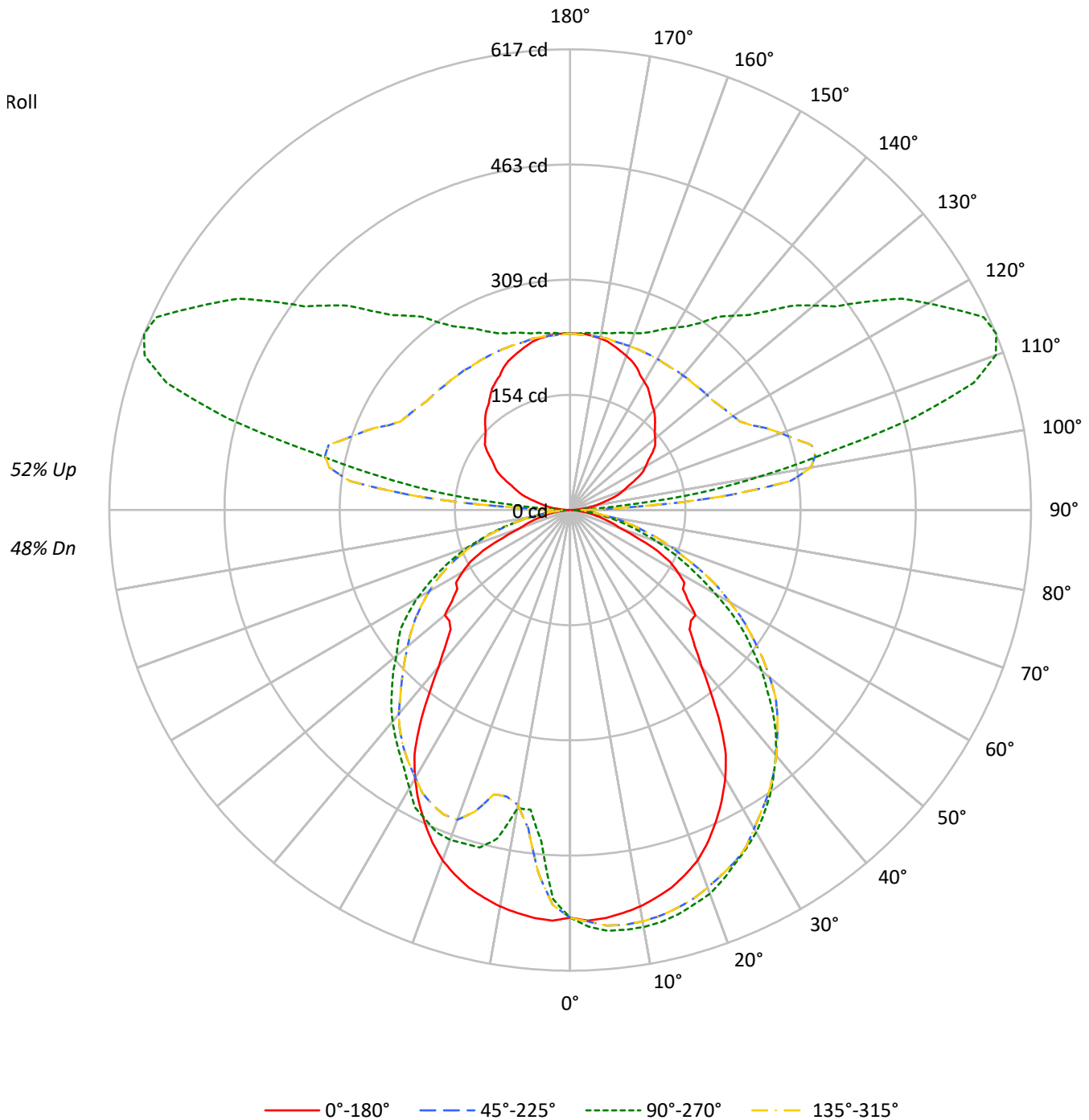
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2949.1 lumens
Efficiency: N/A
Efficacy: 103.8 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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	38	35	33	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	33	31	28	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5066	5066	5066	5066
5°	5097	5113	5097	4020
10°	5058	5036	5058	3601
15°	4997	4927	4997	4115
20°	4886	4798	4886	4123
25°	4668	4609	4668	4035
30°	4385	4453	4385	3844
35°	3904	4255	3904	3633
40°	3247	4022	3247	3474
45°	2895	3749	2895	3290
50°	3070	3423	3070	3106
55°	2879	3073	2879	3000
60°	2958	2610	2958	2748
65°	2670	2157	2670	2411
70°	1835	1719	1835	2021
75°	1590	1271	1590	1522
80°	1259	841	1259	915
85°	679	444	679	379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 4447 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	1.7
10°-20°	139.9	4.7
20°-30°	216.3	7.3
30°-40°	258.2	8.8
40°-50°	259.7	8.8
50°-60°	225.9	7.7
60°-70°	160.2	5.4
70°-80°	84.8	2.9
80°-90°	22.0	0.7
90°-100°	115.3	3.9
100°-110°	303.0	10.3
110°-120°	314.2	10.7
120°-130°	252.0	8.5
130°-140°	197.8	6.7
140°-150°	151.8	5.1
150°-160°	109.3	3.7
160°-170°	66.9	2.3
170°-180°	22.6	0.8
0°-30°	405.4	13.7
0°-40°	663.6	22.5
0°-60°	1149.2	39.0
0°-90°	1416.2	48.0
90°-120°	732.5	24.8
90°-150°	1334.1	45.2
90°-180°	1533.0	52.0
0°-180°	2949.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	546	546	546	546	546	
5°	548	566	548	445	548	52
15°	524	560	524	468	524	147
25°	461	523	461	458	461	212
35°	351	466	351	398	351	217
45°	226	384	226	337	226	181
55°	184	284	184	277	184	169
65°	128	171	128	191	128	122
75°	48	81	48	97	48	51
85°	8	21	8	18	8	11
90°	2	6	2	6	2	2
95°	15	70	15	70	15	17
105°	55	475	55	475	55	58
115°	97	611	97	611	97	96
125°	135	487	135	487	135	120
135°	161	378	161	378	161	124
145°	186	306	186	306	186	117
155°	211	264	211	264	211	97
165°	228	246	228	246	228	64
175°	236	238	236	238	236	22
180°	236	236	236	236	236	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9
2.5°	550.5	550.5	553.6	554.6	554.6	553.1	551.6	553.1	557.7	559.3	558.7
5°	548.4	552.6	558.2	559.3	560.3	559.8	558.7	559.8	564.9	566.0	566.5
7.5°	544.3	552.0	559.3	560.8	562.3	560.8	560.3	561.3	566.5	567.5	567.5
10°	539.2	549.9	558.2	559.3	560.8	559.3	559.3	561.3	566.5	567.5	568.0
12.5°	531.9	546.9	554.6	555.6	557.7	557.2	556.7	558.7	563.9	564.9	564.9
15°	523.6	541.2	548.4	549.5	553.1	552.0	552.0	554.1	559.8	561.3	560.8
17.5°	512.3	534.0	542.2	543.8	546.4	545.9	546.4	548.4	553.6	554.6	555.2
20°	499.3	524.1	534.0	535.5	538.1	538.1	538.1	540.7	545.9	547.9	547.9
22.5°	481.8	513.8	524.1	525.2	528.3	528.3	529.3	532.9	537.5	538.1	538.1
25°	461.2	502.4	511.2	514.4	517.4	519.0	520.5	522.6	524.1	523.6	524.1
27.5°	439.4	488.0	499.3	501.4	505.6	507.1	509.2	509.7	510.2	511.7	510.7
30°	415.2	467.9	484.9	486.9	493.6	494.7	492.6	493.6	496.3	497.3	498.3
32.5°	387.8	437.9	469.9	474.6	480.8	477.7	477.2	478.7	482.9	482.9	483.9
35°	350.7	414.6	456.0	460.2	464.8	461.2	463.2	463.7	466.3	467.9	467.3
37.5°	309.8	394.5	441.5	444.6	448.2	443.6	446.7	448.2	450.3	449.3	449.3
40°	273.7	363.1	424.5	426.6	429.7	426.0	429.1	430.2	431.2	430.2	429.7
42.5°	246.9	328.4	406.4	409.0	406.9	409.5	410.6	412.6	411.0	409.0	409.0
45°	226.1	319.2	386.8	389.9	386.8	390.9	392.5	392.5	387.8	386.8	386.2
47.5°	219.4	300.5	367.1	367.1	365.6	370.8	373.4	369.8	365.1	363.5	363.5
50°	219.0	279.9	340.3	338.3	345.5	351.7	349.1	345.5	341.9	336.2	336.2
52.5°	198.8	254.6	305.7	313.5	324.8	328.4	324.3	320.7	314.5	311.9	309.8
55°	184.3	228.2	274.2	289.7	301.6	306.2	298.5	294.8	285.6	284.1	283.0
57.5°	181.3	190.0	245.3	264.9	279.4	278.9	274.2	267.5	259.7	258.2	257.7
60°	166.3	137.4	214.3	237.5	252.5	250.9	246.9	240.6	233.4	232.4	231.4
62.5°	150.8	99.6	179.2	205.5	226.7	226.1	222.6	213.3	208.1	205.5	203.4
65°	128.1	83.6	127.6	170.9	201.4	202.4	194.7	188.0	182.3	179.2	178.6
67.5°	97.6	68.1	86.2	142.5	177.1	176.1	166.3	163.2	155.9	154.4	151.3
70°	72.3	45.4	59.9	115.7	153.4	150.8	143.1	139.4	132.7	129.1	127.0
72.5°	59.9	36.7	43.9	89.9	129.1	126.0	119.3	115.2	109.5	106.4	104.3
75°	48.5	38.7	33.6	66.6	104.8	102.8	96.6	92.4	87.8	83.6	84.2
77.5°	35.7	36.1	26.9	49.0	83.2	80.1	76.5	71.3	69.2	65.1	65.1
80°	26.9	28.4	20.2	33.6	59.9	59.9	56.8	53.2	49.6	47.5	47.5
82.5°	18.1	18.1	14.9	21.2	40.8	39.3	37.2	36.1	34.1	33.0	33.0
85°	8.2	10.3	9.3	12.9	22.2	23.3	23.3	22.2	21.7	20.6	21.2
87.5°	2.6	4.6	5.7	7.2	11.4	11.9	12.4	12.4	12.4	12.9	12.9
90°	1.6	2.8	4.2	4.5	7.0	10.4	12.1	10.7	8.0	6.0	6.0
92.5°	6.3	17.1	28.0	30.6	43.0	59.6	67.9	59.5	42.7	30.2	29.0
95°	15.2	35.0	54.7	59.7	106.0	167.6	198.5	177.1	134.4	102.3	98.7
97.5°	26.3	43.7	61.1	65.5	142.7	245.6	297.1	283.6	256.6	236.3	229.4
100°	34.9	50.7	66.5	70.5	156.1	270.3	327.4	328.4	330.4	331.9	323.6
102.5°	42.2	57.0	71.7	75.4	162.2	278.0	336.0	353.2	387.6	413.4	406.3
105°	54.6	67.1	79.5	82.7	166.8	279.0	335.0	373.6	450.8	508.7	504.9
107.5°	67.3	78.9	90.6	93.5	167.6	266.6	316.0	369.8	477.5	558.2	559.1
110°	75.8	86.3	96.9	99.5	166.4	255.6	300.1	360.3	480.6	570.9	574.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	84.2	94.2	104.3	106.8	166.4	245.9	285.7	347.3	470.4	562.8	568.9
115°	96.9	106.2	115.4	117.7	167.9	234.8	268.3	327.6	446.3	535.3	543.7
117.5°	109.5	117.9	126.3	128.4	171.1	228.0	256.5	310.0	417.0	497.3	506.7
120°	116.8	124.7	132.6	134.6	173.6	225.7	251.7	300.6	398.5	471.9	480.9
122.5°	124.0	132.0	139.9	141.9	177.3	224.5	248.0	292.1	380.2	446.3	455.2
125°	134.9	142.1	149.4	151.2	182.2	223.5	244.1	281.5	356.4	412.5	420.7
127.5°	143.8	151.2	158.5	160.3	187.1	222.9	240.8	272.9	337.1	385.3	392.2
130°	148.5	156.5	164.3	166.3	190.7	223.2	239.5	268.1	325.3	368.2	374.6
132.5°	153.5	161.4	169.2	171.2	193.7	223.5	238.4	264.0	315.2	353.6	359.4
135°	160.8	167.9	175.2	176.9	196.8	223.2	236.5	257.9	300.8	332.9	337.9
137.5°	168.2	175.3	182.5	184.3	201.6	224.6	236.2	254.3	290.5	317.7	321.8
140°	174.4	181.0	187.6	189.2	204.4	224.8	235.0	250.7	282.1	305.5	309.3
142.5°	179.2	185.3	191.3	192.8	206.9	225.6	235.0	248.8	276.3	296.9	300.1
145°	186.5	191.7	197.0	198.4	210.1	225.7	233.5	244.7	267.2	284.1	286.5
147.5°	193.8	199.0	204.0	205.4	214.8	227.2	233.5	242.3	260.0	273.3	275.4
150°	198.5	203.1	207.8	209.0	217.1	228.0	233.5	240.9	255.9	267.1	268.8
152.5°	203.4	207.0	210.5	211.4	218.8	228.5	233.5	239.9	252.6	262.2	263.4
155°	210.7	213.4	216.0	216.6	222.2	229.7	233.5	238.5	248.7	256.3	257.2
157.5°	216.1	218.7	221.2	221.8	225.7	230.8	233.5	237.4	245.3	251.3	251.9
160°	219.8	221.8	223.8	224.2	227.3	231.4	233.5	236.9	243.6	248.7	249.0
162.5°	223.5	224.9	226.4	226.8	229.0	232.0	233.5	236.3	242.0	246.3	246.6
165°	227.5	228.8	230.2	230.5	231.5	232.8	233.5	235.5	239.5	242.6	242.9
167.5°	231.1	231.7	232.3	232.5	233.3	234.5	235.0	236.4	239.1	241.1	241.2
170°	233.5	234.1	234.7	234.8	234.9	235.0	235.0	236.4	239.1	241.1	241.1
172.5°	234.7	234.8	235.0	235.0	235.0	235.0	235.0	236.1	238.2	239.8	239.6
175°	236.5	236.5	236.5	236.5	236.0	235.3	235.0	235.7	237.1	238.1	238.1
177.5°	236.5	236.5	236.5	236.5	236.1	235.6	235.4	235.9	237.0	237.8	237.6
180°	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9
2.5°	559.8	558.2	559.8	558.7	559.3	557.7	553.1	551.6	553.1	554.6	554.6
5°	566.5	565.5	566.5	566.5	566.0	564.9	559.8	558.7	559.8	560.3	559.3
7.5°	568.6	567.0	568.6	567.5	567.5	566.5	561.3	560.3	560.8	562.3	560.8
10°	568.6	567.0	568.6	568.0	567.5	566.5	561.3	559.3	559.3	560.8	559.3
12.5°	566.0	564.9	566.0	564.9	564.9	563.9	558.7	556.7	557.2	557.7	555.6
15°	561.9	560.3	561.9	560.8	561.3	559.8	554.1	552.0	552.0	553.1	549.5
17.5°	555.6	553.6	555.6	555.2	554.6	553.6	548.4	546.4	545.9	546.4	543.8
20°	548.4	546.9	548.4	547.9	547.9	545.9	540.7	538.1	538.1	538.1	535.5
22.5°	537.1	535.5	537.1	538.1	538.1	537.5	532.9	529.3	528.3	528.3	525.2
25°	524.1	522.6	524.1	524.1	523.6	524.1	522.6	520.5	519.0	517.4	514.4
27.5°	511.7	510.7	511.7	510.7	511.7	510.2	509.7	509.2	507.1	505.6	501.4
30°	499.3	498.3	499.3	498.3	497.3	496.3	493.6	492.6	494.7	493.6	486.9
32.5°	483.9	482.9	483.9	483.9	482.9	482.9	478.7	477.2	477.7	480.8	474.6
35°	467.9	466.3	467.9	467.3	467.9	466.3	463.7	463.2	461.2	464.8	460.2
37.5°	449.3	447.8	449.3	449.3	449.3	450.3	448.2	446.7	443.6	448.2	444.6
40°	430.2	428.1	430.2	429.7	430.2	431.2	430.2	429.1	426.0	429.7	426.6
42.5°	408.5	407.9	408.5	409.0	409.0	411.0	412.6	410.6	409.5	406.9	409.0
45°	385.2	384.2	385.2	386.2	386.8	387.8	392.5	392.5	390.9	386.8	389.9
47.5°	360.4	357.9	360.4	363.5	363.5	365.1	369.8	373.4	370.8	365.6	367.1
50°	334.1	334.6	334.1	336.2	336.2	341.9	345.5	349.1	351.7	345.5	338.3
52.5°	308.3	307.8	308.3	309.8	311.9	314.5	320.7	324.3	328.4	324.8	313.5
55°	282.4	283.5	282.4	283.0	284.1	285.6	294.8	298.5	306.2	301.6	289.7
57.5°	256.6	255.1	256.6	257.7	258.2	259.7	267.5	274.2	278.9	279.4	264.9
60°	226.7	224.6	226.7	231.4	232.4	233.4	240.6	246.9	250.9	252.5	237.5
62.5°	200.4	196.7	200.4	203.4	205.5	208.1	213.3	222.6	226.1	226.7	205.5
65°	172.5	170.9	172.5	178.6	179.2	182.3	188.0	194.7	202.4	201.4	170.9
67.5°	147.1	147.1	147.1	151.3	154.4	155.9	163.2	166.3	176.1	177.1	142.5
70°	124.0	123.4	124.0	127.0	129.1	132.7	139.4	143.1	150.8	153.4	115.7
72.5°	101.7	101.2	101.7	104.3	106.4	109.5	115.2	119.3	126.0	129.1	89.9
75°	82.1	81.1	82.1	84.2	83.6	87.8	92.4	96.6	102.8	104.8	66.6
77.5°	63.0	63.0	63.0	65.1	65.1	69.2	71.3	76.5	80.1	83.2	49.0
80°	47.0	46.5	47.0	47.5	47.5	49.6	53.2	56.8	59.9	59.9	33.6
82.5°	33.0	32.0	33.0	33.0	33.0	34.1	36.1	37.2	39.3	40.8	21.2
85°	20.6	20.6	20.6	21.2	20.6	21.7	22.2	23.3	23.3	22.2	12.9
87.5°	13.4	12.9	13.4	12.9	12.9	12.4	12.4	12.4	11.9	11.4	7.2
90°	6.0	6.0	6.0	6.0	6.0	8.0	10.7	12.1	10.4	7.0	4.5
92.5°	24.2	19.3	24.2	29.0	30.2	42.7	59.5	67.9	59.6	43.0	30.6
95°	84.2	69.7	84.2	98.7	102.3	134.4	177.1	198.5	167.6	106.0	59.7
97.5°	201.7	174.1	201.7	229.4	236.3	256.6	283.6	297.1	245.6	142.7	65.5
100°	290.7	257.7	290.7	323.6	331.9	330.4	328.4	327.4	270.3	156.1	70.5
102.5°	378.1	350.0	378.1	406.3	413.4	387.6	353.2	336.0	278.0	162.2	75.4
105°	489.7	474.6	489.7	504.9	508.7	450.8	373.6	335.0	279.0	166.8	82.7
107.5°	562.7	566.4	562.7	559.1	558.2	477.5	369.8	316.0	266.6	167.6	93.5
110°	590.6	606.4	590.6	574.8	570.9	480.6	360.3	300.1	255.6	166.4	99.5



TEST NUMBER: P934222

CATALOG NUMBER: SQ4-FA-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	593.1	617.4	593.1	568.9	562.8	470.4	347.3	285.7	245.9	166.4	106.8
115°	577.3	611.0	577.3	543.7	535.3	446.3	327.6	268.3	234.8	167.9	117.7
117.5°	544.0	581.4	544.0	506.7	497.3	417.0	310.0	256.5	228.0	171.1	128.4
120°	517.1	553.4	517.1	480.9	471.9	398.5	300.6	251.7	225.7	173.6	134.6
122.5°	491.0	526.8	491.0	455.2	446.3	380.2	292.1	248.0	224.5	177.3	141.9
125°	453.6	486.6	453.6	420.7	412.5	356.4	281.5	244.1	223.5	182.2	151.2
127.5°	420.0	447.8	420.0	392.2	385.3	337.1	272.9	240.8	222.9	187.1	160.3
130°	400.3	426.0	400.3	374.6	368.2	325.3	268.1	239.5	223.2	190.7	166.3
132.5°	382.3	405.3	382.3	359.4	353.6	315.2	264.0	238.4	223.5	193.7	171.2
135°	357.7	377.5	357.7	337.9	332.9	300.8	257.9	236.5	223.2	196.8	176.9
137.5°	338.0	354.2	338.0	321.8	317.7	290.5	254.3	236.2	224.6	201.6	184.3
140°	324.5	339.6	324.5	309.3	305.5	282.1	250.7	235.0	224.8	204.4	189.2
142.5°	313.2	326.3	313.2	300.1	296.9	276.3	248.8	235.0	225.6	206.9	192.8
145°	296.4	306.3	296.4	286.5	284.1	267.2	244.7	233.5	225.7	210.1	198.4
147.5°	283.5	291.7	283.5	275.4	273.3	260.0	242.3	233.5	227.2	214.8	205.4
150°	275.4	282.1	275.4	268.8	267.1	255.9	240.9	233.5	228.0	217.1	209.0
152.5°	268.4	273.4	268.4	263.4	262.2	252.6	239.9	233.5	228.5	218.8	211.4
155°	260.5	263.8	260.5	257.2	256.3	248.7	238.5	233.5	229.7	222.2	216.6
157.5°	254.2	256.5	254.2	251.9	251.3	245.3	237.4	233.5	230.8	225.7	221.8
160°	250.4	251.7	250.4	249.0	248.7	243.6	236.9	233.5	231.4	227.3	224.2
162.5°	247.9	249.2	247.9	246.6	246.3	242.0	236.3	233.5	232.0	229.0	226.8
165°	244.3	245.7	244.3	242.9	242.6	239.5	235.5	233.5	232.8	231.5	230.5
167.5°	241.8	242.3	241.8	241.2	241.1	239.1	236.4	235.0	234.5	233.3	232.5
170°	241.1	241.1	241.1	241.1	241.1	239.1	236.4	235.0	235.0	234.9	234.8
172.5°	239.2	238.7	239.2	239.6	239.8	238.2	236.1	235.0	235.0	235.0	235.0
175°	238.1	238.1	238.1	238.1	238.1	237.1	235.7	235.0	235.3	236.0	236.5
177.5°	237.1	236.5	237.1	237.6	237.8	237.0	235.9	235.4	235.6	236.1	236.5
180°	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5



TEST NUMBER: P934222

CATALOG NUMBER: SQ4-FA-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9
2.5°	553.6	550.5	550.5	545.3	543.2	541.7	539.2	531.4	529.3	527.2	530.4
5°	558.2	552.6	548.4	539.2	531.4	528.3	518.4	499.9	487.5	478.2	473.0
7.5°	559.3	552.0	544.3	529.8	511.2	503.0	473.0	439.0	429.7	421.4	416.2
10°	558.2	549.9	539.2	517.4	473.6	459.1	429.1	406.9	401.2	399.7	401.2
12.5°	554.6	546.9	531.9	495.7	434.3	424.5	406.9	394.0	393.0	395.5	409.5
15°	548.4	541.2	523.6	466.9	412.6	405.4	393.0	388.3	394.0	412.1	453.9
17.5°	542.2	534.0	512.3	438.4	396.1	390.9	382.2	391.5	423.4	447.8	461.7
20°	534.0	524.1	499.3	417.8	384.2	379.5	375.5	417.3	441.5	450.3	458.1
22.5°	524.1	513.8	481.8	403.3	371.8	368.2	370.8	431.7	441.5	447.8	454.5
25°	511.2	502.4	461.2	391.9	362.0	357.9	367.7	430.2	435.8	437.4	450.8
27.5°	499.3	488.0	439.4	381.6	350.1	348.6	370.3	423.4	427.6	429.1	443.6
30°	484.9	467.9	415.2	370.8	337.7	337.2	370.8	415.2	414.2	418.3	432.7
32.5°	469.9	437.9	387.8	357.4	325.9	325.3	367.1	402.8	401.8	407.4	418.3
35°	456.0	414.6	350.7	341.9	310.8	311.4	358.4	388.3	388.8	394.0	400.7
37.5°	441.5	394.5	309.8	324.8	296.4	296.4	346.5	374.9	373.9	375.5	384.7
40°	424.5	363.1	273.7	302.6	283.0	281.4	332.0	360.4	356.8	356.4	369.2
42.5°	406.4	328.4	246.9	273.2	267.5	265.4	314.5	342.9	336.2	337.7	354.3
45°	386.8	319.2	226.1	230.8	251.5	249.9	295.4	322.8	318.1	322.2	339.3
47.5°	367.1	300.5	219.4	191.6	234.5	233.9	274.2	303.1	300.5	304.7	322.8
50°	340.3	279.9	219.0	164.2	215.4	217.4	248.9	284.1	284.1	287.7	306.8
52.5°	305.7	254.6	198.8	148.7	193.1	199.4	226.7	267.5	268.5	272.1	289.2
55°	274.2	228.2	184.3	136.8	166.8	180.3	205.0	250.5	252.5	256.1	271.7
57.5°	245.3	190.0	181.3	122.9	142.5	155.5	185.9	233.9	234.9	238.1	253.0
60°	214.3	137.4	166.3	108.0	121.4	131.1	168.3	214.3	217.9	220.0	232.9
62.5°	179.2	99.6	150.8	97.6	111.0	113.1	153.9	195.7	200.4	201.9	209.7
65°	127.6	83.6	128.1	88.9	100.2	100.7	138.4	176.6	180.7	183.3	189.0
67.5°	86.2	68.1	97.6	80.5	91.9	92.4	123.4	154.4	160.1	162.2	165.8
70°	59.9	45.4	72.3	71.8	82.6	83.6	107.4	134.3	139.4	141.0	143.1
72.5°	43.9	36.7	59.9	64.5	72.8	73.8	90.9	111.6	116.7	118.3	119.3
75°	33.6	38.7	48.5	56.3	62.0	62.4	74.4	90.9	94.5	95.6	96.0
77.5°	26.9	36.1	35.7	45.4	50.6	49.6	58.4	70.2	73.3	73.3	73.3
80°	20.2	28.4	26.9	32.6	37.2	36.1	41.8	50.1	51.1	52.1	51.7
82.5°	14.9	18.1	18.1	20.6	24.8	23.8	27.9	32.6	32.6	32.6	33.6
85°	9.3	10.3	8.2	10.9	13.9	13.4	15.5	17.6	18.1	18.1	17.0
87.5°	5.7	4.6	2.6	4.2	6.2	6.2	7.2	7.8	7.2	7.2	7.2
90°	4.2	2.8	1.6	2.8	4.2	4.5	7.0	10.4	12.1	10.7	8.0
92.5°	28.0	17.1	6.3	17.1	28.0	30.6	43.0	59.6	67.9	59.5	42.7
95°	54.7	35.0	15.2	35.0	54.7	59.7	106.0	167.6	198.5	177.1	134.4
97.5°	61.1	43.7	26.3	43.7	61.1	65.5	142.7	245.6	297.1	283.6	256.6
100°	66.5	50.7	34.9	50.7	66.5	70.5	156.1	270.3	327.4	328.4	330.4
102.5°	71.7	57.0	42.2	57.0	71.7	75.4	162.2	278.0	336.0	353.2	387.6
105°	79.5	67.1	54.6	67.1	79.5	82.7	166.8	279.0	335.0	373.6	450.8
107.5°	90.6	78.9	67.3	78.9	90.6	93.5	167.6	266.6	316.0	369.8	477.5
110°	96.9	86.3	75.8	86.3	96.9	99.5	166.4	255.6	300.1	360.3	480.6



TEST NUMBER: P934222

CATALOG NUMBER: SQ4-FA-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	104.3	94.2	84.2	94.2	104.3	106.8	166.4	245.9	285.7	347.3	470.4
115°	115.4	106.2	96.9	106.2	115.4	117.7	167.9	234.8	268.3	327.6	446.3
117.5°	126.3	117.9	109.5	117.9	126.3	128.4	171.1	228.0	256.5	310.0	417.0
120°	132.6	124.7	116.8	124.7	132.6	134.6	173.6	225.7	251.7	300.6	398.5
122.5°	139.9	132.0	124.0	132.0	139.9	141.9	177.3	224.5	248.0	292.1	380.2
125°	149.4	142.1	134.9	142.1	149.4	151.2	182.2	223.5	244.1	281.5	356.4
127.5°	158.5	151.2	143.8	151.2	158.5	160.3	187.1	222.9	240.8	272.9	337.1
130°	164.3	156.5	148.5	156.5	164.3	166.3	190.7	223.2	239.5	268.1	325.3
132.5°	169.2	161.4	153.5	161.4	169.2	171.2	193.7	223.5	238.4	264.0	315.2
135°	175.2	167.9	160.8	167.9	175.2	176.9	196.8	223.2	236.5	257.9	300.8
137.5°	182.5	175.3	168.2	175.3	182.5	184.3	201.6	224.6	236.2	254.3	290.5
140°	187.6	181.0	174.4	181.0	187.6	189.2	204.4	224.8	235.0	250.7	282.1
142.5°	191.3	185.3	179.2	185.3	191.3	192.8	206.9	225.6	235.0	248.8	276.3
145°	197.0	191.7	186.5	191.7	197.0	198.4	210.1	225.7	233.5	244.7	267.2
147.5°	204.0	199.0	193.8	199.0	204.0	205.4	214.8	227.2	233.5	242.3	260.0
150°	207.8	203.1	198.5	203.1	207.8	209.0	217.1	228.0	233.5	240.9	255.9
152.5°	210.5	207.0	203.4	207.0	210.5	211.4	218.8	228.5	233.5	239.9	252.6
155°	216.0	213.4	210.7	213.4	216.0	216.6	222.2	229.7	233.5	238.5	248.7
157.5°	221.2	218.7	216.1	218.7	221.2	221.8	225.7	230.8	233.5	237.4	245.3
160°	223.8	221.8	219.8	221.8	223.8	224.2	227.3	231.4	233.5	236.9	243.6
162.5°	226.4	224.9	223.5	224.9	226.4	226.8	229.0	232.0	233.5	236.3	242.0
165°	230.2	228.8	227.5	228.8	230.2	230.5	231.5	232.8	233.5	235.5	239.5
167.5°	232.3	231.7	231.1	231.7	232.3	232.5	233.3	234.5	235.0	236.4	239.1
170°	234.7	234.1	233.5	234.1	234.7	234.8	234.9	235.0	235.0	236.4	239.1
172.5°	235.0	234.8	234.7	234.8	235.0	235.0	235.0	235.0	235.0	236.1	238.2
175°	236.5	236.5	236.5	236.5	236.5	236.5	236.0	235.3	235.0	235.7	237.1
177.5°	236.5	236.5	236.5	236.5	236.5	236.5	236.1	235.6	235.4	235.9	237.0
180°	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5



TEST NUMBER: P934222

CATALOG NUMBER: SQ4-FA-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9	545.9
2.5°	526.8	525.2	527.2	521.6	527.2	525.2	526.8	530.4	527.2	529.3	531.4
5°	462.2	459.6	451.4	444.6	451.4	459.6	462.2	473.0	478.2	487.5	499.9
7.5°	413.1	411.0	409.0	404.9	409.0	411.0	413.1	416.2	421.4	429.7	439.0
10°	402.2	402.8	405.9	405.4	405.9	402.8	402.2	401.2	399.7	401.2	406.9
12.5°	430.2	434.8	451.8	450.8	451.8	434.8	430.2	409.5	395.5	393.0	394.0
15°	462.2	463.7	467.3	467.9	467.3	463.7	462.2	453.9	412.1	394.0	388.3
17.5°	465.3	465.8	468.4	468.4	468.4	465.8	465.3	461.7	447.8	423.4	391.5
20°	462.7	463.7	468.9	469.9	468.9	463.7	462.7	458.1	450.3	441.5	417.3
22.5°	461.7	463.7	467.9	467.3	467.9	463.7	461.7	454.5	447.8	441.5	431.7
25°	456.5	456.5	457.0	457.5	457.0	456.5	456.5	450.8	437.4	435.8	430.2
27.5°	445.7	446.7	449.8	449.3	449.8	446.7	445.7	443.6	429.1	427.6	423.4
30°	435.8	434.8	432.2	430.2	432.2	434.8	435.8	432.7	418.3	414.2	415.2
32.5°	419.3	416.7	414.2	412.6	414.2	416.7	419.3	418.3	407.4	401.8	402.8
35°	399.7	400.2	399.7	398.2	399.7	400.2	399.7	400.7	394.0	388.8	388.3
37.5°	385.8	386.8	386.2	384.2	386.2	386.8	385.8	384.7	375.5	373.9	374.9
40°	371.3	371.8	371.3	369.8	371.3	371.8	371.3	369.2	356.4	356.8	360.4
42.5°	357.4	356.8	355.3	354.3	355.3	356.8	357.4	354.3	337.7	336.2	342.9
45°	341.3	341.9	338.7	337.2	338.7	341.9	341.3	339.3	322.2	318.1	322.8
47.5°	325.3	325.3	322.8	321.2	322.8	325.3	325.3	322.8	304.7	300.5	303.1
50°	308.3	307.8	304.2	303.6	304.2	307.8	308.3	306.8	287.7	284.1	284.1
52.5°	288.7	288.7	289.2	290.2	289.2	288.7	288.7	289.2	272.1	268.5	267.5
55°	271.7	272.1	275.7	276.8	275.7	272.1	271.7	271.7	256.1	252.5	250.5
57.5°	254.1	254.1	256.6	256.6	256.6	254.1	254.1	253.0	238.1	234.9	233.9
60°	233.9	234.9	237.0	236.5	237.0	234.9	233.9	232.9	220.0	217.9	214.3
62.5°	212.8	213.8	214.3	213.3	214.3	213.8	212.8	209.7	201.9	200.4	195.7
65°	190.6	191.6	192.1	191.0	192.1	191.6	190.6	189.0	183.3	180.7	176.6
67.5°	167.9	167.3	166.8	168.9	166.8	167.3	167.9	165.8	162.2	160.1	154.4
70°	144.6	144.6	144.1	145.1	144.1	144.6	144.6	143.1	141.0	139.4	134.3
72.5°	119.8	119.3	121.4	119.8	121.4	119.3	119.8	119.3	118.3	116.7	111.6
75°	95.6	96.6	95.6	97.1	95.6	96.6	95.6	96.0	95.6	94.5	90.9
77.5°	72.8	73.8	72.8	72.8	72.8	73.8	72.8	73.3	73.3	73.3	70.2
80°	51.7	51.1	51.1	50.6	51.1	51.1	51.7	51.7	52.1	51.1	50.1
82.5°	33.0	32.6	32.6	33.6	32.6	32.6	33.0	33.6	32.6	32.6	32.6
85°	18.1	18.6	17.6	17.6	17.6	18.6	18.1	17.0	18.1	18.1	17.6
87.5°	6.7	6.2	6.2	6.2	6.2	6.2	6.7	7.2	7.2	7.2	7.8
90°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	8.0	10.7	12.1	10.4
92.5°	30.2	29.0	24.2	19.3	24.2	29.0	30.2	42.7	59.5	67.9	59.6
95°	102.3	98.7	84.2	69.7	84.2	98.7	102.3	134.4	177.1	198.5	167.6
97.5°	236.3	229.4	201.7	174.1	201.7	229.4	236.3	256.6	283.6	297.1	245.6
100°	331.9	323.6	290.7	257.7	290.7	323.6	331.9	330.4	328.4	327.4	270.3
102.5°	413.4	406.3	378.1	350.0	378.1	406.3	413.4	387.6	353.2	336.0	278.0
105°	508.7	504.9	489.7	474.6	489.7	504.9	508.7	450.8	373.6	335.0	279.0
107.5°	558.2	559.1	562.7	566.4	562.7	559.1	558.2	477.5	369.8	316.0	266.6
110°	570.9	574.8	590.6	606.4	590.6	574.8	570.9	480.6	360.3	300.1	255.6



TEST NUMBER: P934222

CATALOG NUMBER: SQ4-FA-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	562.8	568.9	593.1	617.4	593.1	568.9	562.8	470.4	347.3	285.7	245.9
115°	535.3	543.7	577.3	611.0	577.3	543.7	535.3	446.3	327.6	268.3	234.8
117.5°	497.3	506.7	544.0	581.4	544.0	506.7	497.3	417.0	310.0	256.5	228.0
120°	471.9	480.9	517.1	553.4	517.1	480.9	471.9	398.5	300.6	251.7	225.7
122.5°	446.3	455.2	491.0	526.8	491.0	455.2	446.3	380.2	292.1	248.0	224.5
125°	412.5	420.7	453.6	486.6	453.6	420.7	412.5	356.4	281.5	244.1	223.5
127.5°	385.3	392.2	420.0	447.8	420.0	392.2	385.3	337.1	272.9	240.8	222.9
130°	368.2	374.6	400.3	426.0	400.3	374.6	368.2	325.3	268.1	239.5	223.2
132.5°	353.6	359.4	382.3	405.3	382.3	359.4	353.6	315.2	264.0	238.4	223.5
135°	332.9	337.9	357.7	377.5	357.7	337.9	332.9	300.8	257.9	236.5	223.2
137.5°	317.7	321.8	338.0	354.2	338.0	321.8	317.7	290.5	254.3	236.2	224.6
140°	305.5	309.3	324.5	339.6	324.5	309.3	305.5	282.1	250.7	235.0	224.8
142.5°	296.9	300.1	313.2	326.3	313.2	300.1	296.9	276.3	248.8	235.0	225.6
145°	284.1	286.5	296.4	306.3	296.4	286.5	284.1	267.2	244.7	233.5	225.7
147.5°	273.3	275.4	283.5	291.7	283.5	275.4	273.3	260.0	242.3	233.5	227.2
150°	267.1	268.8	275.4	282.1	275.4	268.8	267.1	255.9	240.9	233.5	228.0
152.5°	262.2	263.4	268.4	273.4	268.4	263.4	262.2	252.6	239.9	233.5	228.5
155°	256.3	257.2	260.5	263.8	260.5	257.2	256.3	248.7	238.5	233.5	229.7
157.5°	251.3	251.9	254.2	256.5	254.2	251.9	251.3	245.3	237.4	233.5	230.8
160°	248.7	249.0	250.4	251.7	250.4	249.0	248.7	243.6	236.9	233.5	231.4
162.5°	246.3	246.6	247.9	249.2	247.9	246.6	246.3	242.0	236.3	233.5	232.0
165°	242.6	242.9	244.3	245.7	244.3	242.9	242.6	239.5	235.5	233.5	232.8
167.5°	241.1	241.2	241.8	242.3	241.8	241.2	241.1	239.1	236.4	235.0	234.5
170°	241.1	241.1	241.1	241.1	241.1	241.1	241.1	239.1	236.4	235.0	235.0
172.5°	239.8	239.6	239.2	238.7	239.2	239.6	239.8	238.2	236.1	235.0	235.0
175°	238.1	238.1	238.1	238.1	238.1	238.1	238.1	237.1	235.7	235.0	235.3
177.5°	237.8	237.6	237.1	236.5	237.1	237.6	237.8	237.0	235.9	235.4	235.6
180°	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5



TEST NUMBER: P934222

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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	545.9	545.9	545.9	545.9	545.9
2.5°	539.2	541.7	543.2	545.3	550.5
5°	518.4	528.3	531.4	539.2	548.4
7.5°	473.0	503.0	511.2	529.8	544.3
10°	429.1	459.1	473.6	517.4	539.2
12.5°	406.9	424.5	434.3	495.7	531.9
15°	393.0	405.4	412.6	466.9	523.6
17.5°	382.2	390.9	396.1	438.4	512.3
20°	375.5	379.5	384.2	417.8	499.3
22.5°	370.8	368.2	371.8	403.3	481.8
25°	367.7	357.9	362.0	391.9	461.2
27.5°	370.3	348.6	350.1	381.6	439.4
30°	370.8	337.2	337.7	370.8	415.2
32.5°	367.1	325.3	325.9	357.4	387.8
35°	358.4	311.4	310.8	341.9	350.7
37.5°	346.5	296.4	296.4	324.8	309.8
40°	332.0	281.4	283.0	302.6	273.7
42.5°	314.5	265.4	267.5	273.2	246.9
45°	295.4	249.9	251.5	230.8	226.1
47.5°	274.2	233.9	234.5	191.6	219.4
50°	248.9	217.4	215.4	164.2	219.0
52.5°	226.7	199.4	193.1	148.7	198.8
55°	205.0	180.3	166.8	136.8	184.3
57.5°	185.9	155.5	142.5	122.9	181.3
60°	168.3	131.1	121.4	108.0	166.3
62.5°	153.9	113.1	111.0	97.6	150.8
65°	138.4	100.7	100.2	88.9	128.1
67.5°	123.4	92.4	91.9	80.5	97.6
70°	107.4	83.6	82.6	71.8	72.3
72.5°	90.9	73.8	72.8	64.5	59.9
75°	74.4	62.4	62.0	56.3	48.5
77.5°	58.4	49.6	50.6	45.4	35.7
80°	41.8	36.1	37.2	32.6	26.9
82.5°	27.9	23.8	24.8	20.6	18.1
85°	15.5	13.4	13.9	10.9	8.2
87.5°	7.2	6.2	6.2	4.2	2.6
90°	7.0	4.5	4.2	2.8	1.6
92.5°	43.0	30.6	28.0	17.1	6.3
95°	106.0	59.7	54.7	35.0	15.2
97.5°	142.7	65.5	61.1	43.7	26.3
100°	156.1	70.5	66.5	50.7	34.9
102.5°	162.2	75.4	71.7	57.0	42.2
105°	166.8	82.7	79.5	67.1	54.6
107.5°	167.6	93.5	90.6	78.9	67.3
110°	166.4	99.5	96.9	86.3	75.8



TEST NUMBER: P934222

CATALOG NUMBER: SQ4-FA-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	166.4	106.8	104.3	94.2	84.2
115°	167.9	117.7	115.4	106.2	96.9
117.5°	171.1	128.4	126.3	117.9	109.5
120°	173.6	134.6	132.6	124.7	116.8
122.5°	177.3	141.9	139.9	132.0	124.0
125°	182.2	151.2	149.4	142.1	134.9
127.5°	187.1	160.3	158.5	151.2	143.8
130°	190.7	166.3	164.3	156.5	148.5
132.5°	193.7	171.2	169.2	161.4	153.5
135°	196.8	176.9	175.2	167.9	160.8
137.5°	201.6	184.3	182.5	175.3	168.2
140°	204.4	189.2	187.6	181.0	174.4
142.5°	206.9	192.8	191.3	185.3	179.2
145°	210.1	198.4	197.0	191.7	186.5
147.5°	214.8	205.4	204.0	199.0	193.8
150°	217.1	209.0	207.8	203.1	198.5
152.5°	218.8	211.4	210.5	207.0	203.4
155°	222.2	216.6	216.0	213.4	210.7
157.5°	225.7	221.8	221.2	218.7	216.1
160°	227.3	224.2	223.8	221.8	219.8
162.5°	229.0	226.8	226.4	224.9	223.5
165°	231.5	230.5	230.2	228.8	227.5
167.5°	233.3	232.5	232.3	231.7	231.1
170°	234.9	234.8	234.7	234.1	233.5
172.5°	235.0	235.0	235.0	234.8	234.7
175°	236.0	236.5	236.5	236.5	236.5
177.5°	236.1	236.5	236.5	236.5	236.5
180°	236.5	236.5	236.5	236.5	236.5



TEST NUMBER: P934222
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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	10.24	11.09	11.22	12.08	13.37	13.04	13.89	14.02	14.87	16.17
	3H	10.72	11.48	11.70	12.47	13.79	14.38	15.13	15.36	16.13	17.45
	4H	10.91	11.63	11.91	12.63	13.95	14.81	15.53	15.81	16.53	17.86
	6H	11.03	11.69	12.04	12.69	14.03	15.09	15.75	16.10	16.75	18.09
	8H	11.03	11.66	12.04	12.68	14.02	15.16	15.79	16.17	16.81	18.15
	12H	11.00	11.60	12.02	12.61	13.97	15.19	15.79	16.21	16.80	18.17
4H	2H	11.27	11.98	12.27	12.98	14.31	13.45	14.17	14.45	15.17	16.50
	3H	12.29	12.89	13.30	13.92	15.26	14.94	15.54	15.96	16.57	17.91
	4H	12.57	13.11	13.59	14.13	15.50	15.46	16.01	16.49	17.03	18.40
	6H	12.69	13.16	13.72	14.21	15.57	15.82	16.29	16.85	17.34	18.70
	8H	12.70	13.14	13.73	14.17	15.55	15.92	16.36	16.96	17.40	18.78
	12H	12.66	13.06	13.71	14.11	15.49	15.97	16.37	17.02	17.42	18.80
8H	4H	13.01	13.45	14.05	14.49	15.87	15.59	16.03	16.62	17.07	18.44
	6H	13.28	13.64	14.33	14.72	16.09	16.02	16.38	17.07	17.46	18.83
	8H	13.32	13.64	14.38	14.70	16.09	16.16	16.48	17.23	17.55	18.94
	12H	13.30	13.58	14.37	14.64	16.08	16.25	16.54	17.32	17.59	19.03
12H	4H	13.02	13.41	14.07	14.47	15.85	15.55	15.95	16.60	17.00	18.38
	6H	13.33	13.65	14.40	14.72	16.11	16.01	16.33	17.08	17.40	18.79
	8H	13.40	13.68	14.47	14.74	16.18	16.17	16.45	17.24	17.51	18.94