

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: P933822

Luminaire Tested: SQ4-FA-025U-050D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933822
REPORT IS A COMBINATION OF REPORTS P933674 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-025U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

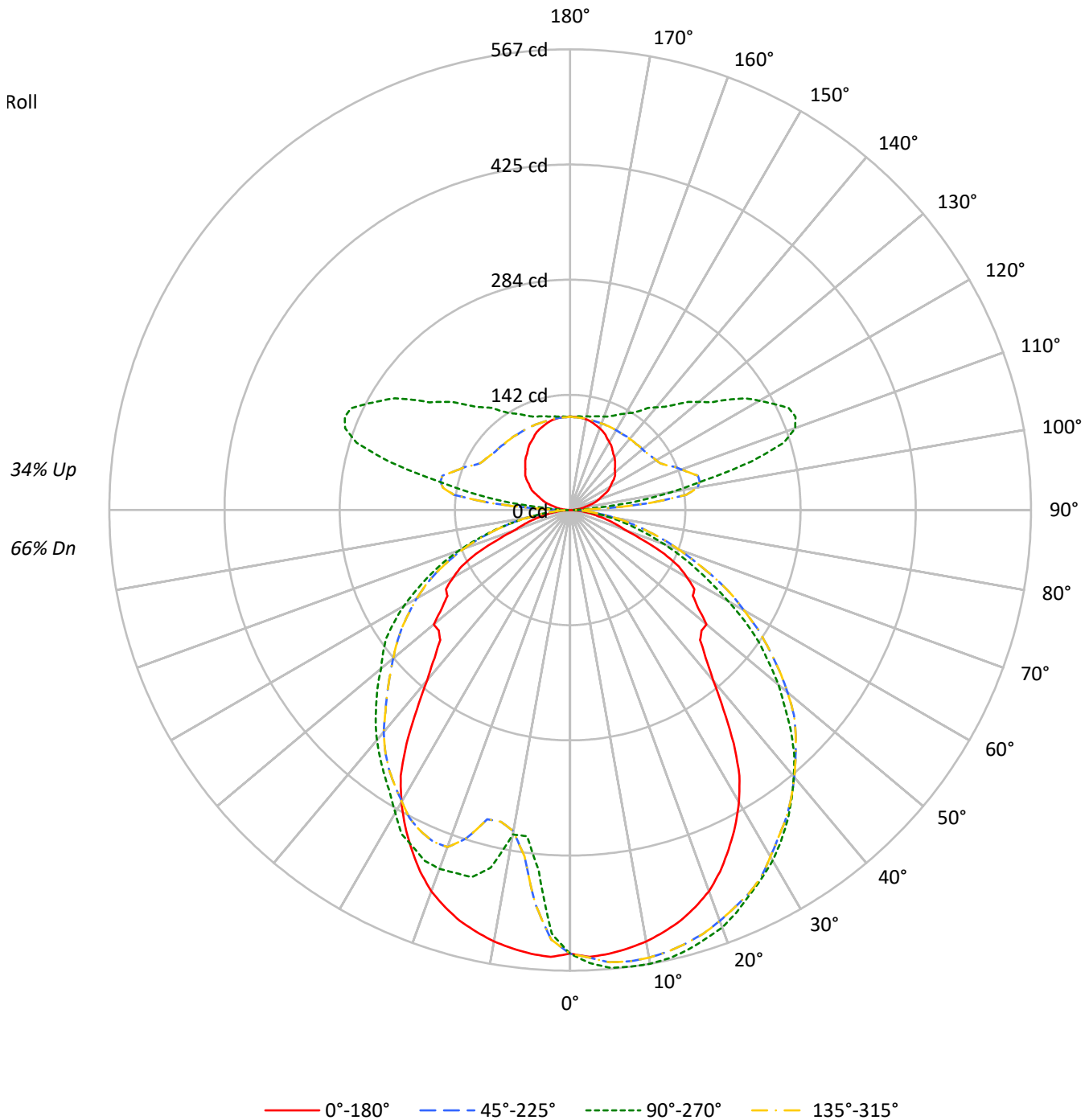
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2160.6 lumens
Efficiency: N/A
Efficacy: 98.2 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-Direct

Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	101	97	93	89	95	91	88	85	81	78	76	71	69	68	62	61	60	55				
2	92	85	78	73	87	80	74	70	71	67	63	63	59	56	55	52	50	46				
3	84	75	67	61	79	70	64	58	63	57	53	55	51	48	49	46	43	39				
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	43	40	37	34				
5	71	59	50	44	66	56	48	43	50	44	39	44	39	35	39	35	32	29				
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	26				
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	23				
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20				
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18				
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	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	2.3
10°-20°	139.9	6.5
20°-30°	216.3	10.0
30°-40°	258.2	11.9
40°-50°	259.7	12.0
50°-60°	225.9	10.5
60°-70°	160.2	7.4
70°-80°	84.8	3.9
80°-90°	21.6	1.0
90°-100°	56.0	2.6
100°-110°	147.3	6.8
110°-120°	152.7	7.1
120°-130°	122.5	5.7
130°-140°	96.1	4.4
140°-150°	73.8	3.4
150°-160°	53.1	2.5
160°-170°	32.5	1.5
170°-180°	11.0	0.5
0°-30°	405.4	18.8
0°-40°	663.6	30.7
0°-60°	1149.2	53.2
0°-90°	1415.7	65.5
90°-120°	356.0	16.5
90°-150°	648.3	30.0
90°-180°	745.0	34.5
0°-180°	2160.6	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°	1	3	1	3	1	1
95°	7	34	7	34	7	8
105°	27	231	27	231	27	28
115°	47	297	47	297	47	47
125°	66	236	66	236	66	58
135°	78	184	78	184	78	60
145°	91	149	91	149	91	57
155°	102	128	102	128	102	47
165°	110	119	110	119	110	31
175°	115	116	115	116	115	11
180°	115	115	115	115	115	



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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°	0.8	1.4	2.0	2.2	3.4	5.0	5.9	5.2	3.9	2.9	2.9
92.5°	3.1	8.3	13.6	14.9	20.9	29.0	33.0	29.0	20.8	14.6	14.0
95°	7.4	17.0	26.6	29.0	51.5	81.5	96.5	86.1	65.3	49.7	48.0
97.5°	12.8	21.3	29.7	31.9	69.4	119.4	144.4	137.8	124.7	114.8	111.4
100°	16.9	24.6	32.3	34.3	75.8	131.4	159.1	159.5	160.5	161.2	157.2
102.5°	20.5	27.6	34.9	36.7	78.8	135.1	163.2	171.6	188.3	200.9	197.4
105°	26.6	32.6	38.7	40.2	81.1	135.5	162.8	181.6	219.1	247.2	245.3
107.5°	32.7	38.3	44.0	45.4	81.5	129.5	153.5	179.7	232.0	271.3	271.7
110°	36.9	42.0	47.0	48.4	80.9	124.2	145.8	175.1	233.5	277.4	279.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	41.0	45.8	50.7	51.9	80.9	119.5	138.8	168.8	228.6	273.5	276.4
115°	47.1	51.6	56.1	57.2	81.6	114.2	130.4	159.2	216.9	260.1	264.2
117.5°	53.2	57.3	61.4	62.4	83.2	110.8	124.7	150.7	202.7	241.7	246.2
120°	56.7	60.6	64.4	65.4	84.3	109.6	122.3	146.1	193.7	229.3	233.7
122.5°	60.2	64.1	67.9	68.9	86.1	109.0	120.5	141.9	184.7	216.8	221.1
125°	65.5	69.1	72.6	73.5	88.6	108.6	118.6	136.8	173.2	200.4	204.4
127.5°	69.8	73.5	77.0	77.9	90.9	108.3	117.0	132.6	163.9	187.3	190.7
130°	72.1	76.0	79.8	80.9	92.7	108.5	116.3	130.3	158.1	178.9	182.0
132.5°	74.6	78.5	82.3	83.2	94.1	108.6	115.8	128.3	153.2	171.9	174.6
135°	78.2	81.6	85.2	86.0	95.6	108.5	114.9	125.3	146.1	161.8	164.2
137.5°	81.8	85.2	88.7	89.6	97.9	109.1	114.7	123.5	141.1	154.4	156.4
140°	84.8	87.9	91.2	91.9	99.3	109.3	114.2	121.8	137.1	148.5	150.3
142.5°	87.1	90.0	92.9	93.7	100.6	109.6	114.2	120.9	134.3	144.3	145.9
145°	90.6	93.2	95.8	96.4	102.1	109.6	113.4	118.9	129.8	138.1	139.3
147.5°	94.2	96.6	99.2	99.8	104.3	110.4	113.4	117.7	126.4	132.8	133.8
150°	96.5	98.7	101.0	101.6	105.5	110.8	113.4	117.0	124.4	129.8	130.6
152.5°	98.9	100.6	102.3	102.7	106.3	111.0	113.4	116.5	122.7	127.4	128.1
155°	102.4	103.6	105.0	105.3	108.0	111.6	113.4	115.9	120.9	124.6	125.0
157.5°	105.0	106.3	107.5	107.8	109.6	112.2	113.4	115.3	119.2	122.0	122.4
160°	106.8	107.7	108.7	109.0	110.4	112.4	113.4	115.0	118.3	120.8	121.0
162.5°	108.6	109.3	110.0	110.2	111.3	112.7	113.4	114.8	117.6	119.7	119.8
165°	110.5	111.1	111.8	112.0	112.4	113.1	113.4	114.4	116.4	117.9	118.0
167.5°	112.3	112.6	112.9	113.0	113.3	113.9	114.2	114.8	116.1	117.1	117.2
170°	113.4	113.7	114.0	114.1	114.1	114.2	114.2	114.8	116.1	117.1	117.1
172.5°	114.0	114.1	114.2	114.2	114.2	114.2	114.2	114.7	115.7	116.5	116.4
175°	114.9	114.9	114.9	114.9	114.7	114.3	114.2	114.5	115.2	115.7	115.7
177.5°	114.9	114.9	114.9	114.9	114.7	114.5	114.3	114.6	115.1	115.5	115.4
180°	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9



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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°	2.9	2.9	2.9	2.9	2.9	3.9	5.2	5.9	5.0	3.4	2.2
92.5°	11.7	9.4	11.7	14.0	14.6	20.8	29.0	33.0	29.0	20.9	14.9
95°	41.0	33.9	41.0	48.0	49.7	65.3	86.1	96.5	81.5	51.5	29.0
97.5°	98.0	84.6	98.0	111.4	114.8	124.7	137.8	144.4	119.4	69.4	31.9
100°	141.3	125.3	141.3	157.2	161.2	160.5	159.5	159.1	131.4	75.8	34.3
102.5°	183.7	170.0	183.7	197.4	200.9	188.3	171.6	163.2	135.1	78.8	36.7
105°	238.0	230.6	238.0	245.3	247.2	219.1	181.6	162.8	135.5	81.1	40.2
107.5°	273.5	275.3	273.5	271.7	271.3	232.0	179.7	153.5	129.5	81.5	45.4
110°	287.0	294.7	287.0	279.4	277.4	233.5	175.1	145.8	124.2	80.9	48.4



TEST NUMBER: P933822

CATALOG NUMBER: SQ4-FA-025U-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°	288.2	300.0	288.2	276.4	273.5	228.6	168.8	138.8	119.5	80.9	51.9
115°	280.6	296.9	280.6	264.2	260.1	216.9	159.2	130.4	114.2	81.6	57.2
117.5°	264.3	282.5	264.3	246.2	241.7	202.7	150.7	124.7	110.8	83.2	62.4
120°	251.3	268.9	251.3	233.7	229.3	193.7	146.1	122.3	109.6	84.3	65.4
122.5°	238.5	255.9	238.5	221.1	216.8	184.7	141.9	120.5	109.0	86.1	68.9
125°	220.5	236.5	220.5	204.4	200.4	173.2	136.8	118.6	108.6	88.6	73.5
127.5°	204.1	217.6	204.1	190.7	187.3	163.9	132.6	117.0	108.3	90.9	77.9
130°	194.5	207.0	194.5	182.0	178.9	158.1	130.3	116.3	108.5	92.7	80.9
132.5°	185.8	197.0	185.8	174.6	171.9	153.2	128.3	115.8	108.6	94.1	83.2
135°	173.9	183.5	173.9	164.2	161.8	146.1	125.3	114.9	108.5	95.6	86.0
137.5°	164.2	172.2	164.2	156.4	154.4	141.1	123.5	114.7	109.1	97.9	89.6
140°	157.6	165.0	157.6	150.3	148.5	137.1	121.8	114.2	109.3	99.3	91.9
142.5°	152.2	158.5	152.2	145.9	144.3	134.3	120.9	114.2	109.6	100.6	93.7
145°	144.1	148.8	144.1	139.3	138.1	129.8	118.9	113.4	109.6	102.1	96.4
147.5°	137.8	141.8	137.8	133.8	132.8	126.4	117.7	113.4	110.4	104.3	99.8
150°	133.8	137.1	133.8	130.6	129.8	124.4	117.0	113.4	110.8	105.5	101.6
152.5°	130.4	132.9	130.4	128.1	127.4	122.7	116.5	113.4	111.0	106.3	102.7
155°	126.6	128.2	126.6	125.0	124.6	120.9	115.9	113.4	111.6	108.0	105.3
157.5°	123.5	124.7	123.5	122.4	122.0	119.2	115.3	113.4	112.2	109.6	107.8
160°	121.7	122.3	121.7	121.0	120.8	118.3	115.0	113.4	112.4	110.4	109.0
162.5°	120.4	121.0	120.4	119.8	119.7	117.6	114.8	113.4	112.7	111.3	110.2
165°	118.7	119.4	118.7	118.0	117.9	116.4	114.4	113.4	113.1	112.4	112.0
167.5°	117.4	117.7	117.4	117.2	117.1	116.1	114.8	114.2	113.9	113.3	113.0
170°	117.1	117.1	117.1	117.1	117.1	116.1	114.8	114.2	114.2	114.1	114.1
172.5°	116.2	116.0	116.2	116.4	116.5	115.7	114.7	114.2	114.2	114.2	114.2
175°	115.7	115.7	115.7	115.7	115.7	115.2	114.5	114.2	114.3	114.7	114.9
177.5°	115.2	114.9	115.2	115.4	115.5	115.1	114.6	114.3	114.5	114.7	114.9
180°	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9



TEST NUMBER: P933822

CATALOG NUMBER: SQ4-FA-025U-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°	2.0	1.4	0.8	1.4	2.0	2.2	3.4	5.0	5.9	5.2	3.9
92.5°	13.6	8.3	3.1	8.3	13.6	14.9	20.9	29.0	33.0	29.0	20.8
95°	26.6	17.0	7.4	17.0	26.6	29.0	51.5	81.5	96.5	86.1	65.3
97.5°	29.7	21.3	12.8	21.3	29.7	31.9	69.4	119.4	144.4	137.8	124.7
100°	32.3	24.6	16.9	24.6	32.3	34.3	75.8	131.4	159.1	159.5	160.5
102.5°	34.9	27.6	20.5	27.6	34.9	36.7	78.8	135.1	163.2	171.6	188.3
105°	38.7	32.6	26.6	32.6	38.7	40.2	81.1	135.5	162.8	181.6	219.1
107.5°	44.0	38.3	32.7	38.3	44.0	45.4	81.5	129.5	153.5	179.7	232.0
110°	47.0	42.0	36.9	42.0	47.0	48.4	80.9	124.2	145.8	175.1	233.5



TEST NUMBER: P933822

CATALOG NUMBER: SQ4-FA-025U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	50.7	45.8	41.0	45.8	50.7	51.9	80.9	119.5	138.8	168.8	228.6
115°	56.1	51.6	47.1	51.6	56.1	57.2	81.6	114.2	130.4	159.2	216.9
117.5°	61.4	57.3	53.2	57.3	61.4	62.4	83.2	110.8	124.7	150.7	202.7
120°	64.4	60.6	56.7	60.6	64.4	65.4	84.3	109.6	122.3	146.1	193.7
122.5°	67.9	64.1	60.2	64.1	67.9	68.9	86.1	109.0	120.5	141.9	184.7
125°	72.6	69.1	65.5	69.1	72.6	73.5	88.6	108.6	118.6	136.8	173.2
127.5°	77.0	73.5	69.8	73.5	77.0	77.9	90.9	108.3	117.0	132.6	163.9
130°	79.8	76.0	72.1	76.0	79.8	80.9	92.7	108.5	116.3	130.3	158.1
132.5°	82.3	78.5	74.6	78.5	82.3	83.2	94.1	108.6	115.8	128.3	153.2
135°	85.2	81.6	78.2	81.6	85.2	86.0	95.6	108.5	114.9	125.3	146.1
137.5°	88.7	85.2	81.8	85.2	88.7	89.6	97.9	109.1	114.7	123.5	141.1
140°	91.2	87.9	84.8	87.9	91.2	91.9	99.3	109.3	114.2	121.8	137.1
142.5°	92.9	90.0	87.1	90.0	92.9	93.7	100.6	109.6	114.2	120.9	134.3
145°	95.8	93.2	90.6	93.2	95.8	96.4	102.1	109.6	113.4	118.9	129.8
147.5°	99.2	96.6	94.2	96.6	99.2	99.8	104.3	110.4	113.4	117.7	126.4
150°	101.0	98.7	96.5	98.7	101.0	101.6	105.5	110.8	113.4	117.0	124.4
152.5°	102.3	100.6	98.9	100.6	102.3	102.7	106.3	111.0	113.4	116.5	122.7
155°	105.0	103.6	102.4	103.6	105.0	105.3	108.0	111.6	113.4	115.9	120.9
157.5°	107.5	106.3	105.0	106.3	107.5	107.8	109.6	112.2	113.4	115.3	119.2
160°	108.7	107.7	106.8	107.7	108.7	109.0	110.4	112.4	113.4	115.0	118.3
162.5°	110.0	109.3	108.6	109.3	110.0	110.2	111.3	112.7	113.4	114.8	117.6
165°	111.8	111.1	110.5	111.1	111.8	112.0	112.4	113.1	113.4	114.4	116.4
167.5°	112.9	112.6	112.3	112.6	112.9	113.0	113.3	113.9	114.2	114.8	116.1
170°	114.0	113.7	113.4	113.7	114.0	114.1	114.1	114.2	114.2	114.8	116.1
172.5°	114.2	114.1	114.0	114.1	114.2	114.2	114.2	114.2	114.2	114.7	115.7
175°	114.9	114.9	114.9	114.9	114.9	114.9	114.7	114.3	114.2	114.5	115.2
177.5°	114.9	114.9	114.9	114.9	114.9	114.9	114.7	114.5	114.3	114.6	115.1
180°	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9



TEST NUMBER: P933822

CATALOG NUMBER: SQ4-FA-025U-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°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	5.2	5.9	5.0
92.5°	14.6	14.0	11.7	9.4	11.7	14.0	14.6	20.8	29.0	33.0	29.0
95°	49.7	48.0	41.0	33.9	41.0	48.0	49.7	65.3	86.1	96.5	81.5
97.5°	114.8	111.4	98.0	84.6	98.0	111.4	114.8	124.7	137.8	144.4	119.4
100°	161.2	157.2	141.3	125.3	141.3	157.2	161.2	160.5	159.5	159.1	131.4
102.5°	200.9	197.4	183.7	170.0	183.7	197.4	200.9	188.3	171.6	163.2	135.1
105°	247.2	245.3	238.0	230.6	238.0	245.3	247.2	219.1	181.6	162.8	135.5
107.5°	271.3	271.7	273.5	275.3	273.5	271.7	271.3	232.0	179.7	153.5	129.5
110°	277.4	279.4	287.0	294.7	287.0	279.4	277.4	233.5	175.1	145.8	124.2



TEST NUMBER: P933822

CATALOG NUMBER: SQ4-FA-025U-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°	273.5	276.4	288.2	300.0	288.2	276.4	273.5	228.6	168.8	138.8	119.5
115°	260.1	264.2	280.6	296.9	280.6	264.2	260.1	216.9	159.2	130.4	114.2
117.5°	241.7	246.2	264.3	282.5	264.3	246.2	241.7	202.7	150.7	124.7	110.8
120°	229.3	233.7	251.3	268.9	251.3	233.7	229.3	193.7	146.1	122.3	109.6
122.5°	216.8	221.1	238.5	255.9	238.5	221.1	216.8	184.7	141.9	120.5	109.0
125°	200.4	204.4	220.5	236.5	220.5	204.4	200.4	173.2	136.8	118.6	108.6
127.5°	187.3	190.7	204.1	217.6	204.1	190.7	187.3	163.9	132.6	117.0	108.3
130°	178.9	182.0	194.5	207.0	194.5	182.0	178.9	158.1	130.3	116.3	108.5
132.5°	171.9	174.6	185.8	197.0	185.8	174.6	171.9	153.2	128.3	115.8	108.6
135°	161.8	164.2	173.9	183.5	173.9	164.2	161.8	146.1	125.3	114.9	108.5
137.5°	154.4	156.4	164.2	172.2	164.2	156.4	154.4	141.1	123.5	114.7	109.1
140°	148.5	150.3	157.6	165.0	157.6	150.3	148.5	137.1	121.8	114.2	109.3
142.5°	144.3	145.9	152.2	158.5	152.2	145.9	144.3	134.3	120.9	114.2	109.6
145°	138.1	139.3	144.1	148.8	144.1	139.3	138.1	129.8	118.9	113.4	109.6
147.5°	132.8	133.8	137.8	141.8	137.8	133.8	132.8	126.4	117.7	113.4	110.4
150°	129.8	130.6	133.8	137.1	133.8	130.6	129.8	124.4	117.0	113.4	110.8
152.5°	127.4	128.1	130.4	132.9	130.4	128.1	127.4	122.7	116.5	113.4	111.0
155°	124.6	125.0	126.6	128.2	126.6	125.0	124.6	120.9	115.9	113.4	111.6
157.5°	122.0	122.4	123.5	124.7	123.5	122.4	122.0	119.2	115.3	113.4	112.2
160°	120.8	121.0	121.7	122.3	121.7	121.0	120.8	118.3	115.0	113.4	112.4
162.5°	119.7	119.8	120.4	121.0	120.4	119.8	119.7	117.6	114.8	113.4	112.7
165°	117.9	118.0	118.7	119.4	118.7	118.0	117.9	116.4	114.4	113.4	113.1
167.5°	117.1	117.2	117.4	117.7	117.4	117.2	117.1	116.1	114.8	114.2	113.9
170°	117.1	117.1	117.1	117.1	117.1	117.1	117.1	116.1	114.8	114.2	114.2
172.5°	116.5	116.4	116.2	116.0	116.2	116.4	116.5	115.7	114.7	114.2	114.2
175°	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.2	114.5	114.2	114.3
177.5°	115.5	115.4	115.2	114.9	115.2	115.4	115.5	115.1	114.6	114.3	114.5
180°	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9



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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°	3.4	2.2	2.0	1.4	0.8
92.5°	20.9	14.9	13.6	8.3	3.1
95°	51.5	29.0	26.6	17.0	7.4
97.5°	69.4	31.9	29.7	21.3	12.8
100°	75.8	34.3	32.3	24.6	16.9
102.5°	78.8	36.7	34.9	27.6	20.5
105°	81.1	40.2	38.7	32.6	26.6
107.5°	81.5	45.4	44.0	38.3	32.7
110°	80.9	48.4	47.0	42.0	36.9



TEST NUMBER: P933822

CATALOG NUMBER: SQ4-FA-025U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	80.9	51.9	50.7	45.8	41.0
115°	81.6	57.2	56.1	51.6	47.1
117.5°	83.2	62.4	61.4	57.3	53.2
120°	84.3	65.4	64.4	60.6	56.7
122.5°	86.1	68.9	67.9	64.1	60.2
125°	88.6	73.5	72.6	69.1	65.5
127.5°	90.9	77.9	77.0	73.5	69.8
130°	92.7	80.9	79.8	76.0	72.1
132.5°	94.1	83.2	82.3	78.5	74.6
135°	95.6	86.0	85.2	81.6	78.2
137.5°	97.9	89.6	88.7	85.2	81.8
140°	99.3	91.9	91.2	87.9	84.8
142.5°	100.6	93.7	92.9	90.0	87.1
145°	102.1	96.4	95.8	93.2	90.6
147.5°	104.3	99.8	99.2	96.6	94.2
150°	105.5	101.6	101.0	98.7	96.5
152.5°	106.3	102.7	102.3	100.6	98.9
155°	108.0	105.3	105.0	103.6	102.4
157.5°	109.6	107.8	107.5	106.3	105.0
160°	110.4	109.0	108.7	107.7	106.8
162.5°	111.3	110.2	110.0	109.3	108.6
165°	112.4	112.0	111.8	111.1	110.5
167.5°	113.3	113.0	112.9	112.6	112.3
170°	114.1	114.1	114.0	113.7	113.4
172.5°	114.2	114.2	114.2	114.1	114.0
175°	114.7	114.9	114.9	114.9	114.9
177.5°	114.7	114.9	114.9	114.9	114.9
180°	114.9	114.9	114.9	114.9	114.9



TEST NUMBER: P933822
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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	11.75	12.77	12.56	13.61	14.64	14.55	15.57	15.36	16.40	17.43
	3H	12.24	13.16	13.06	14.00	15.06	15.90	16.81	16.72	17.66	18.71
	4H	12.44	13.30	13.28	14.15	15.22	16.34	17.21	17.18	18.06	19.13
	6H	12.57	13.36	13.42	14.22	15.31	16.63	17.42	17.48	18.28	19.37
	8H	12.57	13.33	13.43	14.21	15.29	16.70	17.46	17.56	18.34	19.42
	12H	12.55	13.27	13.42	14.14	15.25	16.74	17.46	17.61	18.34	19.44
4H	2H	12.80	13.66	13.64	14.51	15.58	14.98	15.84	15.83	16.70	17.76
	3H	13.84	14.56	14.69	15.44	16.53	16.49	17.21	17.35	18.09	19.18
	4H	14.12	14.78	14.99	15.66	16.77	17.02	17.67	17.89	18.55	19.67
	6H	14.25	14.82	15.14	15.73	16.84	17.38	17.95	18.27	18.86	19.97
	8H	14.26	14.79	15.15	15.69	16.82	17.49	18.02	18.38	18.92	20.05
	12H	14.24	14.72	15.15	15.63	16.77	17.55	18.03	18.46	18.94	20.08
8H	4H	14.58	15.11	15.47	16.01	17.14	17.16	17.69	18.04	18.59	19.71
	6H	14.85	15.29	15.77	16.23	17.36	17.59	18.03	18.51	18.97	20.10
	8H	14.89	15.28	15.82	16.22	17.36	17.74	18.13	18.67	19.06	20.21
	12H	14.89	15.23	15.81	16.15	17.35	17.84	18.18	18.77	19.11	20.30
12H	4H	14.59	15.07	15.50	15.99	17.12	17.13	17.61	18.04	18.52	19.66
	6H	14.91	15.30	15.84	16.23	17.38	17.59	17.98	18.52	18.91	20.06
	8H	14.98	15.33	15.91	16.25	17.45	17.75	18.10	18.68	19.02	20.22