

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: P933814

Luminaire Tested: SQ4-FA-025U-050D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933814
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-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

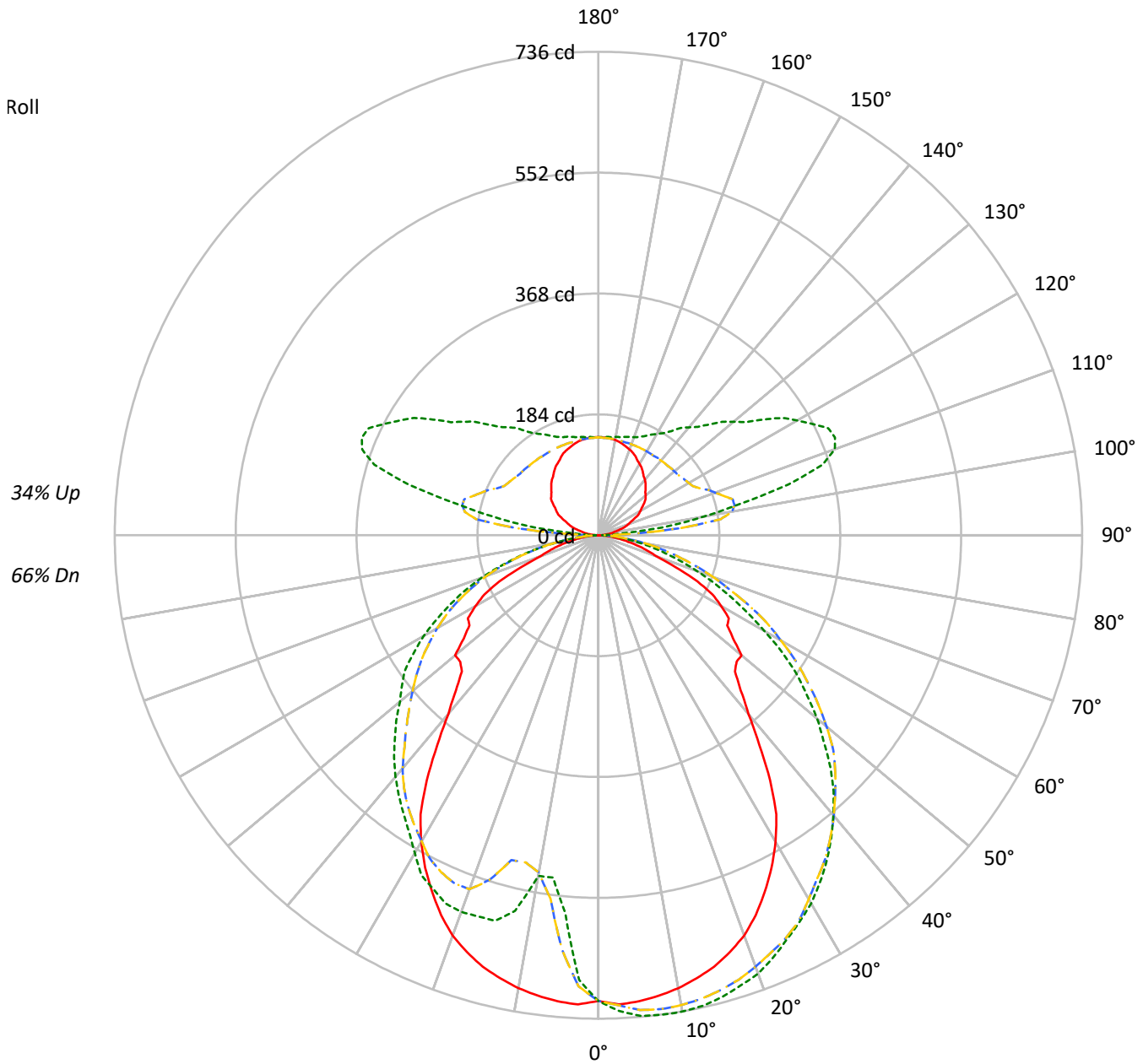
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2806.0 lumens
Efficiency: N/A
Efficacy: 127.5 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-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



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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	6578	6578	6578	6578
5°	6619	6640	6619	5221
10°	6569	6541	6569	4677
15°	6489	6399	6489	5343
20°	6346	6231	6346	5355
25°	6061	5986	6061	5241
30°	5695	5783	5695	4992
35°	5070	5526	5070	4718
40°	4217	5224	4217	4511
45°	3760	4869	3760	4273
50°	3987	4447	3987	4034
55°	3739	3991	3739	3897
60°	3842	3389	3842	3569
65°	3466	2802	3466	3132
70°	2384	2233	2384	2626
75°	2066	1651	2066	1977
80°	1633	1092	1633	1188
85°	886	577	886	491

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5775 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	2.3
10°-20°	181.7	6.5
20°-30°	280.8	10.0
30°-40°	335.3	11.9
40°-50°	337.2	12.0
50°-60°	293.4	10.5
60°-70°	208.1	7.4
70°-80°	110.1	3.9
80°-90°	28.0	1.0
90°-100°	72.7	2.6
100°-110°	191.3	6.8
110°-120°	198.3	7.1
120°-130°	159.0	5.7
130°-140°	124.8	4.4
140°-150°	95.8	3.4
150°-160°	69.0	2.5
160°-170°	42.2	1.5
170°-180°	14.3	0.5
0°-30°	526.5	18.8
0°-40°	861.8	30.7
0°-60°	1492.5	53.2
0°-90°	1838.6	65.5
90°-120°	462.3	16.5
90°-150°	842.0	30.0
90°-180°	967.0	34.5
0°-180°	2806.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	709	709	709	709	709	
5°	712	734	712	577	712	68
15°	680	728	680	608	680	191
25°	599	679	599	594	599	275
35°	455	606	455	517	455	282
45°	294	499	294	438	294	235
55°	239	368	239	360	239	220
65°	166	222	166	248	166	159
75°	63	105	63	126	63	66
85°	11	27	11	23	11	14
90°	1	4	1	4	1	1
95°	10	44	10	44	10	11
105°	34	300	34	300	34	37
115°	61	386	61	386	61	60
125°	85	307	85	307	85	76
135°	102	238	102	238	102	79
145°	118	193	118	193	118	74
155°	133	166	133	166	133	61
165°	144	155	144	155	144	40
175°	149	150	149	150	149	14
180°	149	149	149	149	149	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9
2.5°	714.9	714.9	718.9	720.3	720.3	718.3	716.3	718.3	724.3	726.3	725.6
5°	712.2	717.6	725.0	726.3	727.7	727.0	725.6	727.0	733.7	735.0	735.7
7.5°	706.9	716.9	726.3	728.3	730.3	728.3	727.7	729.0	735.7	737.0	737.0
10°	700.2	714.2	725.0	726.3	728.3	726.3	726.3	729.0	735.7	737.0	737.7
12.5°	690.8	710.2	720.3	721.6	724.3	723.6	723.0	725.6	732.4	733.7	733.7
15°	680.0	702.8	712.2	713.6	718.3	716.9	716.9	719.6	727.0	729.0	728.3
17.5°	665.3	693.5	704.2	706.2	709.6	708.9	709.6	712.2	718.9	720.3	721.0
20°	648.5	680.7	693.5	695.5	698.8	698.8	698.8	702.2	708.9	711.6	711.6
22.5°	625.7	667.3	680.7	682.1	686.1	686.1	687.4	692.1	698.1	698.8	698.8
25°	598.9	652.5	663.9	668.0	672.0	674.0	676.0	678.7	680.7	680.0	680.7
27.5°	570.7	633.8	648.5	651.2	656.6	658.6	661.3	661.9	662.6	664.6	663.3
30°	539.2	607.6	629.7	632.4	641.1	642.5	639.8	641.1	644.5	645.8	647.2
32.5°	503.7	568.7	610.3	616.3	624.4	620.4	619.7	621.7	627.1	627.1	628.4
35°	455.4	538.5	592.2	597.6	603.6	598.9	601.6	602.2	605.6	607.6	606.9
37.5°	402.4	512.4	573.4	577.4	582.1	576.1	580.1	582.1	584.8	583.5	583.5
40°	355.4	471.5	551.3	554.0	558.0	553.3	557.3	558.7	560.0	558.7	558.0
42.5°	320.6	426.5	527.8	531.2	528.5	531.8	533.2	535.9	533.8	531.2	531.2
45°	293.7	414.5	502.3	506.3	502.3	507.7	509.7	509.7	503.7	502.3	501.6
47.5°	285.0	390.3	476.8	476.8	474.8	481.5	484.9	480.2	474.2	472.1	472.1
50°	284.4	363.5	442.0	439.3	448.7	456.7	453.4	448.7	444.0	436.6	436.6
52.5°	258.2	330.6	397.0	407.1	421.8	426.5	421.2	416.5	408.4	405.1	402.4
55°	239.4	296.4	356.1	376.2	391.7	397.7	387.6	382.9	370.9	368.9	367.5
57.5°	235.4	246.8	318.6	344.0	362.8	362.2	356.1	347.4	337.3	335.3	334.7
60°	216.0	178.4	278.3	308.5	327.9	325.9	320.6	312.5	303.1	301.8	300.5
62.5°	195.8	129.4	232.7	266.9	294.4	293.7	289.1	277.0	270.3	266.9	264.2
65°	166.3	108.6	165.7	222.0	261.6	262.9	252.8	244.1	236.7	232.7	232.0
67.5°	126.8	88.5	112.0	185.1	230.0	228.7	216.0	211.9	202.5	200.5	196.5
70°	93.9	59.0	77.8	150.2	199.2	195.8	185.8	181.1	172.4	167.7	165.0
72.5°	77.8	47.6	57.0	116.7	167.7	163.6	154.9	149.6	142.2	138.2	135.5
75°	63.0	50.3	43.6	86.5	136.1	133.5	125.4	120.0	114.0	108.6	109.3
77.5°	46.3	46.9	34.9	63.7	108.0	104.0	99.3	92.6	89.9	84.5	84.5
80°	34.9	36.9	26.2	43.6	77.8	77.8	73.8	69.1	64.4	61.7	61.7
82.5°	23.5	23.5	19.4	27.5	53.0	51.0	48.3	46.9	44.3	42.9	42.9
85°	10.7	13.4	12.1	16.8	28.8	30.2	30.2	28.8	28.2	26.8	27.5
87.5°	3.4	6.0	7.4	9.4	14.8	15.4	16.1	16.1	16.1	16.8	16.8
90°	1.0	1.8	2.6	2.8	4.4	6.5	7.6	6.8	5.1	3.8	3.8
92.5°	4.0	10.8	17.6	19.3	27.2	37.7	42.9	37.6	27.0	19.0	18.2
95°	9.6	22.1	34.6	37.7	66.9	105.8	125.3	111.8	84.8	64.6	62.3
97.5°	16.6	27.6	38.6	41.4	90.1	155.0	187.5	179.0	161.9	149.1	144.7
100°	22.0	32.0	42.0	44.5	98.5	170.6	206.6	207.2	208.5	209.4	204.2
102.5°	26.6	35.9	45.3	47.6	102.4	175.5	212.0	222.9	244.6	260.9	256.4
105°	34.5	42.4	50.2	52.2	105.3	176.0	211.4	235.8	284.5	321.0	318.6
107.5°	42.5	49.8	57.2	59.0	105.8	168.2	199.4	233.4	301.3	352.3	352.9
110°	47.9	54.5	61.1	62.8	105.0	161.3	189.4	227.4	303.3	360.3	362.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	53.2	59.5	65.8	67.4	105.0	155.2	180.3	219.2	296.9	355.2	359.0
115°	61.2	67.0	72.8	74.3	106.0	148.3	169.4	206.8	281.7	337.8	343.1
117.5°	69.1	74.4	79.7	81.0	108.0	143.9	161.9	195.7	263.2	313.9	319.8
120°	73.7	78.7	83.7	84.9	109.5	142.4	158.8	189.7	251.5	297.8	303.5
122.5°	78.2	83.2	88.2	89.5	111.8	141.6	156.5	184.3	239.9	281.6	287.2
125°	85.1	89.7	94.3	95.5	115.0	141.0	154.0	177.6	224.9	260.3	265.5
127.5°	90.7	95.4	100.0	101.2	118.1	140.6	151.9	172.2	212.8	243.2	247.6
130°	93.7	98.7	103.7	105.0	120.4	140.9	151.1	169.2	205.3	232.4	236.4
132.5°	96.9	101.9	106.9	108.1	122.2	141.0	150.4	166.6	198.9	223.2	226.8
135°	101.5	106.0	110.6	111.7	124.2	140.9	149.2	162.7	189.8	210.1	213.2
137.5°	106.2	110.7	115.2	116.3	127.2	141.7	149.0	160.4	183.3	200.5	203.1
140°	110.1	114.2	118.4	119.4	129.0	141.9	148.3	158.2	178.0	192.8	195.2
142.5°	113.1	116.9	120.7	121.7	130.6	142.4	148.3	157.0	174.4	187.4	189.5
145°	117.7	121.0	124.4	125.2	132.6	142.4	147.3	154.4	168.6	179.3	180.9
147.5°	122.3	125.5	128.8	129.6	135.5	143.4	147.3	152.9	164.1	172.5	173.8
150°	125.3	128.2	131.2	131.9	137.0	143.9	147.3	152.0	161.5	168.6	169.6
152.5°	128.4	130.6	132.8	133.4	138.0	144.2	147.3	151.3	159.4	165.5	166.3
155°	133.0	134.6	136.3	136.7	140.2	144.9	147.3	150.5	157.0	161.8	162.3
157.5°	136.4	138.0	139.6	140.0	142.4	145.7	147.3	149.8	154.8	158.5	158.9
160°	138.7	139.9	141.2	141.5	143.4	146.0	147.3	149.4	153.7	156.9	157.1
162.5°	141.0	141.9	142.9	143.1	144.5	146.4	147.3	149.1	152.7	155.4	155.6
165°	143.5	144.3	145.2	145.4	146.0	146.9	147.3	148.6	151.2	153.1	153.3
167.5°	145.8	146.2	146.6	146.7	147.2	147.9	148.3	149.1	150.8	152.1	152.2
170°	147.3	147.7	148.1	148.2	148.2	148.3	148.3	149.1	150.8	152.1	152.1
172.5°	148.1	148.2	148.3	148.3	148.3	148.3	148.3	149.0	150.3	151.3	151.2
175°	149.2	149.2	149.2	149.2	148.9	148.5	148.3	148.7	149.6	150.2	150.2
177.5°	149.2	149.2	149.2	149.2	149.0	148.7	148.5	148.8	149.5	150.0	149.9
180°	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9
2.5°	727.0	725.0	727.0	725.6	726.3	724.3	718.3	716.3	718.3	720.3	720.3
5°	735.7	734.4	735.7	735.7	735.0	733.7	727.0	725.6	727.0	727.7	726.3
7.5°	738.4	736.4	738.4	737.0	737.0	735.7	729.0	727.7	728.3	730.3	728.3
10°	738.4	736.4	738.4	737.7	737.0	735.7	729.0	726.3	726.3	728.3	726.3
12.5°	735.0	733.7	735.0	733.7	733.7	732.4	725.6	723.0	723.6	724.3	721.6
15°	729.7	727.7	729.7	728.3	729.0	727.0	719.6	716.9	716.9	718.3	713.6
17.5°	721.6	718.9	721.6	721.0	720.3	718.9	712.2	709.6	708.9	709.6	706.2
20°	712.2	710.2	712.2	711.6	711.6	708.9	702.2	698.8	698.8	698.8	695.5
22.5°	697.5	695.5	697.5	698.8	698.8	698.1	692.1	687.4	686.1	686.1	682.1
25°	680.7	678.7	680.7	680.7	680.0	680.7	678.7	676.0	674.0	672.0	668.0
27.5°	664.6	663.3	664.6	663.3	664.6	662.6	661.9	661.3	658.6	656.6	651.2
30°	648.5	647.2	648.5	647.2	645.8	644.5	641.1	639.8	642.5	641.1	632.4
32.5°	628.4	627.1	628.4	628.4	627.1	627.1	621.7	619.7	620.4	624.4	616.3
35°	607.6	605.6	607.6	606.9	607.6	605.6	602.2	601.6	598.9	603.6	597.6
37.5°	583.5	581.5	583.5	583.5	583.5	584.8	582.1	580.1	576.1	582.1	577.4
40°	558.7	556.0	558.7	558.0	558.7	560.0	558.7	557.3	553.3	558.0	554.0
42.5°	530.5	529.8	530.5	531.2	531.2	533.8	535.9	533.2	531.8	528.5	531.2
45°	500.3	499.0	500.3	501.6	502.3	503.7	509.7	509.7	507.7	502.3	506.3
47.5°	468.1	464.8	468.1	472.1	472.1	474.2	480.2	484.9	481.5	474.8	476.8
50°	433.9	434.6	433.9	436.6	436.6	444.0	448.7	453.4	456.7	448.7	439.3
52.5°	400.4	399.7	400.4	402.4	405.1	408.4	416.5	421.2	426.5	421.8	407.1
55°	366.8	368.2	366.8	367.5	368.9	370.9	382.9	387.6	397.7	391.7	376.2
57.5°	333.3	331.3	333.3	334.7	335.3	337.3	347.4	356.1	362.2	362.8	344.0
60°	294.4	291.7	294.4	300.5	301.8	303.1	312.5	320.6	325.9	327.9	308.5
62.5°	260.2	255.5	260.2	264.2	266.9	270.3	277.0	289.1	293.7	294.4	266.9
65°	224.0	222.0	224.0	232.0	232.7	236.7	244.1	252.8	262.9	261.6	222.0
67.5°	191.1	191.1	191.1	196.5	200.5	202.5	211.9	216.0	228.7	230.0	185.1
70°	161.0	160.3	161.0	165.0	167.7	172.4	181.1	185.8	195.8	199.2	150.2
72.5°	132.1	131.4	132.1	135.5	138.2	142.2	149.6	154.9	163.6	167.7	116.7
75°	106.6	105.3	106.6	109.3	108.6	114.0	120.0	125.4	133.5	136.1	86.5
77.5°	81.8	81.8	81.8	84.5	84.5	89.9	92.6	99.3	104.0	108.0	63.7
80°	61.0	60.4	61.0	61.7	61.7	64.4	69.1	73.8	77.8	77.8	43.6
82.5°	42.9	41.6	42.9	42.9	42.9	44.3	46.9	48.3	51.0	53.0	27.5
85°	26.8	26.8	26.8	27.5	26.8	28.2	28.8	30.2	30.2	28.8	16.8
87.5°	17.4	16.8	17.4	16.8	16.8	16.1	16.1	16.1	15.4	14.8	9.4
90°	3.8	3.8	3.8	3.8	3.8	5.1	6.8	7.6	6.5	4.4	2.8
92.5°	15.2	12.2	15.2	18.2	19.0	27.0	37.6	42.9	37.7	27.2	19.3
95°	53.2	44.0	53.2	62.3	64.6	84.8	111.8	125.3	105.8	66.9	37.7
97.5°	127.3	109.9	127.3	144.7	149.1	161.9	179.0	187.5	155.0	90.1	41.4
100°	183.5	162.7	183.5	204.2	209.4	208.5	207.2	206.6	170.6	98.5	44.5
102.5°	238.6	220.8	238.6	256.4	260.9	244.6	222.9	212.0	175.5	102.4	47.6
105°	309.1	299.5	309.1	318.6	321.0	284.5	235.8	211.4	176.0	105.3	52.2
107.5°	355.2	357.5	355.2	352.9	352.3	301.3	233.4	199.4	168.2	105.8	59.0
110°	372.7	382.7	372.7	362.8	360.3	303.3	227.4	189.4	161.3	105.0	62.8



TEST NUMBER: P933814

CATALOG NUMBER: SQ4-FA-025U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	374.3	389.6	374.3	359.0	355.2	296.9	219.2	180.3	155.2	105.0	67.4
115°	364.4	385.6	364.4	343.1	337.8	281.7	206.8	169.4	148.3	106.0	74.3
117.5°	343.3	366.9	343.3	319.8	313.9	263.2	195.7	161.9	143.9	108.0	81.0
120°	326.4	349.2	326.4	303.5	297.8	251.5	189.7	158.8	142.4	109.5	84.9
122.5°	309.8	332.4	309.8	287.2	281.6	239.9	184.3	156.5	141.6	111.8	89.5
125°	286.3	307.1	286.3	265.5	260.3	224.9	177.6	154.0	141.0	115.0	95.5
127.5°	265.1	282.6	265.1	247.6	243.2	212.8	172.2	151.9	140.6	118.1	101.2
130°	252.6	268.8	252.6	236.4	232.4	205.3	169.2	151.1	140.9	120.4	105.0
132.5°	241.3	255.8	241.3	226.8	223.2	198.9	166.6	150.4	141.0	122.2	108.1
135°	225.8	238.3	225.8	213.2	210.1	189.8	162.7	149.2	140.9	124.2	111.7
137.5°	213.3	223.6	213.3	203.1	200.5	183.3	160.4	149.0	141.7	127.2	116.3
140°	204.7	214.3	204.7	195.2	192.8	178.0	158.2	148.3	141.9	129.0	119.4
142.5°	197.7	205.9	197.7	189.5	187.4	174.4	157.0	148.3	142.4	130.6	121.7
145°	187.1	193.3	187.1	180.9	179.3	168.6	154.4	147.3	142.4	132.6	125.2
147.5°	178.9	184.1	178.9	173.8	172.5	164.1	152.9	147.3	143.4	135.5	129.6
150°	173.8	178.0	173.8	169.6	168.6	161.5	152.0	147.3	143.9	137.0	131.9
152.5°	169.4	172.6	169.4	166.3	165.5	159.4	151.3	147.3	144.2	138.0	133.4
155°	164.4	166.5	164.4	162.3	161.8	157.0	150.5	147.3	144.9	140.2	136.7
157.5°	160.4	161.9	160.4	158.9	158.5	154.8	149.8	147.3	145.7	142.4	140.0
160°	158.0	158.8	158.0	157.1	156.9	153.7	149.4	147.3	146.0	143.4	141.5
162.5°	156.4	157.2	156.4	155.6	155.4	152.7	149.1	147.3	146.4	144.5	143.1
165°	154.2	155.0	154.2	153.3	153.1	151.2	148.6	147.3	146.9	146.0	145.4
167.5°	152.5	152.9	152.5	152.2	152.1	150.8	149.1	148.3	147.9	147.2	146.7
170°	152.1	152.1	152.1	152.1	152.1	150.8	149.1	148.3	148.3	148.2	148.2
172.5°	150.9	150.6	150.9	151.2	151.3	150.3	149.0	148.3	148.3	148.3	148.3
175°	150.2	150.2	150.2	150.2	150.2	149.6	148.7	148.3	148.5	148.9	149.2
177.5°	149.6	149.2	149.6	149.9	150.0	149.5	148.8	148.5	148.7	149.0	149.2
180°	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2



TEST NUMBER: P933814

CATALOG NUMBER: SQ4-FA-025U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9
2.5°	718.9	714.9	714.9	708.2	705.5	703.5	700.2	690.1	687.4	684.7	688.8
5°	725.0	717.6	712.2	700.2	690.1	686.1	673.3	649.2	633.1	621.0	614.3
7.5°	726.3	716.9	706.9	688.1	663.9	653.2	614.3	570.1	558.0	547.3	540.5
10°	725.0	714.2	700.2	672.0	615.0	596.2	557.3	528.5	521.1	519.1	521.1
12.5°	720.3	710.2	690.8	643.8	564.0	551.3	528.5	511.7	510.4	513.7	531.8
15°	712.2	702.8	680.0	606.3	535.9	526.5	510.4	504.3	511.7	535.2	589.5
17.5°	704.2	693.5	665.3	569.4	514.4	507.7	496.3	508.4	549.9	581.5	599.6
20°	693.5	680.7	648.5	542.6	499.0	492.9	487.6	541.9	573.4	584.8	594.9
22.5°	680.7	667.3	625.7	523.8	482.9	478.2	481.5	560.7	573.4	581.5	590.2
25°	663.9	652.5	598.9	509.0	470.1	464.8	477.5	558.7	566.0	568.0	585.5
27.5°	648.5	633.8	570.7	495.6	454.7	452.7	480.9	549.9	555.3	557.3	576.1
30°	629.7	607.6	539.2	481.5	438.6	437.9	481.5	539.2	537.9	543.2	562.0
32.5°	610.3	568.7	503.7	464.1	423.2	422.5	476.8	523.1	521.8	529.1	543.2
35°	592.2	538.5	455.4	444.0	403.7	404.4	465.4	504.3	505.0	511.7	520.4
37.5°	573.4	512.4	402.4	421.8	385.0	385.0	450.0	486.9	485.6	487.6	499.6
40°	551.3	471.5	355.4	393.0	367.5	365.5	431.2	468.1	463.4	462.8	479.5
42.5°	527.8	426.5	320.6	354.8	347.4	344.7	408.4	445.3	436.6	438.6	460.1
45°	502.3	414.5	293.7	299.8	326.6	324.6	383.6	419.2	413.1	418.5	440.6
47.5°	476.8	390.3	285.0	248.8	304.5	303.8	356.1	393.7	390.3	395.7	419.2
50°	442.0	363.5	284.4	213.3	279.7	282.3	323.3	368.9	368.9	373.6	398.4
52.5°	397.0	330.6	258.2	193.1	250.8	258.9	294.4	347.4	348.7	353.4	375.6
55°	356.1	296.4	239.4	177.7	216.6	234.1	266.2	325.3	327.9	332.6	352.8
57.5°	318.6	246.8	235.4	159.6	185.1	201.9	241.4	303.8	305.1	309.2	328.6
60°	278.3	178.4	216.0	140.2	157.6	170.3	218.6	278.3	283.0	285.7	302.5
62.5°	232.7	129.4	195.8	126.8	144.2	146.9	199.9	254.2	260.2	262.2	272.3
65°	165.7	108.6	166.3	115.4	130.1	130.8	179.7	229.4	234.7	238.1	245.5
67.5°	112.0	88.5	126.8	104.6	119.4	120.0	160.3	200.5	207.9	210.6	215.3
70°	77.8	59.0	93.9	93.2	107.3	108.6	139.5	174.4	181.1	183.1	185.8
72.5°	57.0	47.6	77.8	83.8	94.6	95.9	118.0	144.9	151.6	153.6	154.9
75°	43.6	50.3	63.0	73.1	80.5	81.1	96.6	118.0	122.7	124.1	124.7
77.5°	34.9	46.9	46.3	59.0	65.7	64.4	75.8	91.2	95.2	95.2	95.2
80°	26.2	36.9	34.9	42.3	48.3	46.9	54.3	65.1	66.4	67.7	67.1
82.5°	19.4	23.5	23.5	26.8	32.2	30.9	36.2	42.3	42.3	42.3	43.6
85°	12.1	13.4	10.7	14.1	18.1	17.4	20.1	22.8	23.5	23.5	22.1
87.5°	7.4	6.0	3.4	5.4	8.0	8.0	9.4	10.1	9.4	9.4	9.4
90°	2.6	1.8	1.0	1.8	2.6	2.8	4.4	6.5	7.6	6.8	5.1
92.5°	17.6	10.8	4.0	10.8	17.6	19.3	27.2	37.7	42.9	37.6	27.0
95°	34.6	22.1	9.6	22.1	34.6	37.7	66.9	105.8	125.3	111.8	84.8
97.5°	38.6	27.6	16.6	27.6	38.6	41.4	90.1	155.0	187.5	179.0	161.9
100°	42.0	32.0	22.0	32.0	42.0	44.5	98.5	170.6	206.6	207.2	208.5
102.5°	45.3	35.9	26.6	35.9	45.3	47.6	102.4	175.5	212.0	222.9	244.6
105°	50.2	42.4	34.5	42.4	50.2	52.2	105.3	176.0	211.4	235.8	284.5
107.5°	57.2	49.8	42.5	49.8	57.2	59.0	105.8	168.2	199.4	233.4	301.3
110°	61.1	54.5	47.9	54.5	61.1	62.8	105.0	161.3	189.4	227.4	303.3



TEST NUMBER: P933814

CATALOG NUMBER: SQ4-FA-025U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	65.8	59.5	53.2	59.5	65.8	67.4	105.0	155.2	180.3	219.2	296.9
115°	72.8	67.0	61.2	67.0	72.8	74.3	106.0	148.3	169.4	206.8	281.7
117.5°	79.7	74.4	69.1	74.4	79.7	81.0	108.0	143.9	161.9	195.7	263.2
120°	83.7	78.7	73.7	78.7	83.7	84.9	109.5	142.4	158.8	189.7	251.5
122.5°	88.2	83.2	78.2	83.2	88.2	89.5	111.8	141.6	156.5	184.3	239.9
125°	94.3	89.7	85.1	89.7	94.3	95.5	115.0	141.0	154.0	177.6	224.9
127.5°	100.0	95.4	90.7	95.4	100.0	101.2	118.1	140.6	151.9	172.2	212.8
130°	103.7	98.7	93.7	98.7	103.7	105.0	120.4	140.9	151.1	169.2	205.3
132.5°	106.9	101.9	96.9	101.9	106.9	108.1	122.2	141.0	150.4	166.6	198.9
135°	110.6	106.0	101.5	106.0	110.6	111.7	124.2	140.9	149.2	162.7	189.8
137.5°	115.2	110.7	106.2	110.7	115.2	116.3	127.2	141.7	149.0	160.4	183.3
140°	118.4	114.2	110.1	114.2	118.4	119.4	129.0	141.9	148.3	158.2	178.0
142.5°	120.7	116.9	113.1	116.9	120.7	121.7	130.6	142.4	148.3	157.0	174.4
145°	124.4	121.0	117.7	121.0	124.4	125.2	132.6	142.4	147.3	154.4	168.6
147.5°	128.8	125.5	122.3	125.5	128.8	129.6	135.5	143.4	147.3	152.9	164.1
150°	131.2	128.2	125.3	128.2	131.2	131.9	137.0	143.9	147.3	152.0	161.5
152.5°	132.8	130.6	128.4	130.6	132.8	133.4	138.0	144.2	147.3	151.3	159.4
155°	136.3	134.6	133.0	134.6	136.3	136.7	140.2	144.9	147.3	150.5	157.0
157.5°	139.6	138.0	136.4	138.0	139.6	140.0	142.4	145.7	147.3	149.8	154.8
160°	141.2	139.9	138.7	139.9	141.2	141.5	143.4	146.0	147.3	149.4	153.7
162.5°	142.9	141.9	141.0	141.9	142.9	143.1	144.5	146.4	147.3	149.1	152.7
165°	145.2	144.3	143.5	144.3	145.2	145.4	146.0	146.9	147.3	148.6	151.2
167.5°	146.6	146.2	145.8	146.2	146.6	146.7	147.2	147.9	148.3	149.1	150.8
170°	148.1	147.7	147.3	147.7	148.1	148.2	148.2	148.3	148.3	149.1	150.8
172.5°	148.3	148.2	148.1	148.2	148.3	148.3	148.3	148.3	148.3	149.0	150.3
175°	149.2	149.2	149.2	149.2	149.2	149.2	148.9	148.5	148.3	148.7	149.6
177.5°	149.2	149.2	149.2	149.2	149.2	149.2	149.0	148.7	148.5	148.8	149.5
180°	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2



TEST NUMBER: P933814

CATALOG NUMBER: SQ4-FA-025U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9	708.9
2.5°	684.1	682.1	684.7	677.4	684.7	682.1	684.1	688.8	684.7	687.4	690.1
5°	600.2	596.9	586.2	577.4	586.2	596.9	600.2	614.3	621.0	633.1	649.2
7.5°	536.5	533.8	531.2	525.8	531.2	533.8	536.5	540.5	547.3	558.0	570.1
10°	522.4	523.1	527.1	526.5	527.1	523.1	522.4	521.1	519.1	521.1	528.5
12.5°	558.7	564.7	586.8	585.5	586.8	564.7	558.7	531.8	513.7	510.4	511.7
15°	600.2	602.2	606.9	607.6	606.9	602.2	600.2	589.5	535.2	511.7	504.3
17.5°	604.3	604.9	608.3	608.3	608.3	604.9	604.3	599.6	581.5	549.9	508.4
20°	600.9	602.2	609.0	610.3	609.0	602.2	600.9	594.9	584.8	573.4	541.9
22.5°	599.6	602.2	607.6	606.9	607.6	602.2	599.6	590.2	581.5	573.4	560.7
25°	592.9	592.9	593.5	594.2	593.5	592.9	592.9	585.5	568.0	566.0	558.7
27.5°	578.8	580.1	584.1	583.5	584.1	580.1	578.8	576.1	557.3	555.3	549.9
30°	566.0	564.7	561.3	558.7	561.3	564.7	566.0	562.0	543.2	537.9	539.2
32.5°	544.6	541.2	537.9	535.9	537.9	541.2	544.6	543.2	529.1	521.8	523.1
35°	519.1	519.8	519.1	517.1	519.1	519.8	519.1	520.4	511.7	505.0	504.3
37.5°	501.0	502.3	501.6	499.0	501.6	502.3	501.0	499.6	487.6	485.6	486.9
40°	482.2	482.9	482.2	480.2	482.2	482.9	482.2	479.5	462.8	463.4	468.1
42.5°	464.1	463.4	461.4	460.1	461.4	463.4	464.1	460.1	438.6	436.6	445.3
45°	443.3	444.0	439.9	437.9	439.9	444.0	443.3	440.6	418.5	413.1	419.2
47.5°	422.5	422.5	419.2	417.1	419.2	422.5	422.5	419.2	395.7	390.3	393.7
50°	400.4	399.7	395.0	394.3	395.0	399.7	400.4	398.4	373.6	368.9	368.9
52.5°	374.9	374.9	375.6	376.9	375.6	374.9	374.9	375.6	353.4	348.7	347.4
55°	352.8	353.4	358.1	359.5	358.1	353.4	352.8	352.8	332.6	327.9	325.3
57.5°	330.0	330.0	333.3	333.3	333.3	330.0	330.0	328.6	309.2	305.1	303.8
60°	303.8	305.1	307.8	307.2	307.8	305.1	303.8	302.5	285.7	283.0	278.3
62.5°	276.3	277.7	278.3	277.0	278.3	277.7	276.3	272.3	262.2	260.2	254.2
65°	247.5	248.8	249.5	248.1	249.5	248.8	247.5	245.5	238.1	234.7	229.4
67.5°	218.0	217.3	216.6	219.3	216.6	217.3	218.0	215.3	210.6	207.9	200.5
70°	187.8	187.8	187.1	188.5	187.1	187.8	187.8	185.8	183.1	181.1	174.4
72.5°	155.6	154.9	157.6	155.6	157.6	154.9	155.6	154.9	153.6	151.6	144.9
75°	124.1	125.4	124.1	126.1	124.1	125.4	124.1	124.7	124.1	122.7	118.0
77.5°	94.6	95.9	94.6	94.6	94.6	95.9	94.6	95.2	95.2	95.2	91.2
80°	67.1	66.4	66.4	65.7	66.4	66.4	67.1	67.1	67.7	66.4	65.1
82.5°	42.9	42.3	42.3	43.6	42.3	42.3	42.9	43.6	42.3	42.3	42.3
85°	23.5	24.1	22.8	22.8	22.8	24.1	23.5	22.1	23.5	23.5	22.8
87.5°	8.7	8.0	8.0	8.0	8.0	8.0	8.7	9.4	9.4	9.4	10.1
90°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.1	6.8	7.6	6.5
92.5°	19.0	18.2	15.2	12.2	15.2	18.2	19.0	27.0	37.6	42.9	37.7
95°	64.6	62.3	53.2	44.0	53.2	62.3	64.6	84.8	111.8	125.3	105.8
97.5°	149.1	144.7	127.3	109.9	127.3	144.7	149.1	161.9	179.0	187.5	155.0
100°	209.4	204.2	183.5	162.7	183.5	204.2	209.4	208.5	207.2	206.6	170.6
102.5°	260.9	256.4	238.6	220.8	238.6	256.4	260.9	244.6	222.9	212.0	175.5
105°	321.0	318.6	309.1	299.5	309.1	318.6	321.0	284.5	235.8	211.4	176.0
107.5°	352.3	352.9	355.2	357.5	355.2	352.9	352.3	301.3	233.4	199.4	168.2
110°	360.3	362.8	372.7	382.7	372.7	362.8	360.3	303.3	227.4	189.4	161.3



TEST NUMBER: P933814

CATALOG NUMBER: SQ4-FA-025U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	355.2	359.0	374.3	389.6	374.3	359.0	355.2	296.9	219.2	180.3	155.2
115°	337.8	343.1	364.4	385.6	364.4	343.1	337.8	281.7	206.8	169.4	148.3
117.5°	313.9	319.8	343.3	366.9	343.3	319.8	313.9	263.2	195.7	161.9	143.9
120°	297.8	303.5	326.4	349.2	326.4	303.5	297.8	251.5	189.7	158.8	142.4
122.5°	281.6	287.2	309.8	332.4	309.8	287.2	281.6	239.9	184.3	156.5	141.6
125°	260.3	265.5	286.3	307.1	286.3	265.5	260.3	224.9	177.6	154.0	141.0
127.5°	243.2	247.6	265.1	282.6	265.1	247.6	243.2	212.8	172.2	151.9	140.6
130°	232.4	236.4	252.6	268.8	252.6	236.4	232.4	205.3	169.2	151.1	140.9
132.5°	223.2	226.8	241.3	255.8	241.3	226.8	223.2	198.9	166.6	150.4	141.0
135°	210.1	213.2	225.8	238.3	225.8	213.2	210.1	189.8	162.7	149.2	140.9
137.5°	200.5	203.1	213.3	223.6	213.3	203.1	200.5	183.3	160.4	149.0	141.7
140°	192.8	195.2	204.7	214.3	204.7	195.2	192.8	178.0	158.2	148.3	141.9
142.5°	187.4	189.5	197.7	205.9	197.7	189.5	187.4	174.4	157.0	148.3	142.4
145°	179.3	180.9	187.1	193.3	187.1	180.9	179.3	168.6	154.4	147.3	142.4
147.5°	172.5	173.8	178.9	184.1	178.9	173.8	172.5	164.1	152.9	147.3	143.4
150°	168.6	169.6	173.8	178.0	173.8	169.6	168.6	161.5	152.0	147.3	143.9
152.5°	165.5	166.3	169.4	172.6	169.4	166.3	165.5	159.4	151.3	147.3	144.2
155°	161.8	162.3	164.4	166.5	164.4	162.3	161.8	157.0	150.5	147.3	144.9
157.5°	158.5	158.9	160.4	161.9	160.4	158.9	158.5	154.8	149.8	147.3	145.7
160°	156.9	157.1	158.0	158.8	158.0	157.1	156.9	153.7	149.4	147.3	146.0
162.5°	155.4	155.6	156.4	157.2	156.4	155.6	155.4	152.7	149.1	147.3	146.4
165°	153.1	153.3	154.2	155.0	154.2	153.3	153.1	151.2	148.6	147.3	146.9
167.5°	152.1	152.2	152.5	152.9	152.5	152.2	152.1	150.8	149.1	148.3	147.9
170°	152.1	152.1	152.1	152.1	152.1	152.1	152.1	150.8	149.1	148.3	148.3
172.5°	151.3	151.2	150.9	150.6	150.9	151.2	151.3	150.3	149.0	148.3	148.3
175°	150.2	150.2	150.2	150.2	150.2	150.2	150.2	149.6	148.7	148.3	148.5
177.5°	150.0	149.9	149.6	149.2	149.6	149.9	150.0	149.5	148.8	148.5	148.7
180°	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	708.9	708.9	708.9	708.9	708.9
2.5°	700.2	703.5	705.5	708.2	714.9
5°	673.3	686.1	690.1	700.2	712.2
7.5°	614.3	653.2	663.9	688.1	706.9
10°	557.3	596.2	615.0	672.0	700.2
12.5°	528.5	551.3	564.0	643.8	690.8
15°	510.4	526.5	535.9	606.3	680.0
17.5°	496.3	507.7	514.4	569.4	665.3
20°	487.6	492.9	499.0	542.6	648.5
22.5°	481.5	478.2	482.9	523.8	625.7
25°	477.5	464.8	470.1	509.0	598.9
27.5°	480.9	452.7	454.7	495.6	570.7
30°	481.5	437.9	438.6	481.5	539.2
32.5°	476.8	422.5	423.2	464.1	503.7
35°	465.4	404.4	403.7	444.0	455.4
37.5°	450.0	385.0	385.0	421.8	402.4
40°	431.2	365.5	367.5	393.0	355.4
42.5°	408.4	344.7	347.4	354.8	320.6
45°	383.6	324.6	326.6	299.8	293.7
47.5°	356.1	303.8	304.5	248.8	285.0
50°	323.3	282.3	279.7	213.3	284.4
52.5°	294.4	258.9	250.8	193.1	258.2
55°	266.2	234.1	216.6	177.7	239.4
57.5°	241.4	201.9	185.1	159.6	235.4
60°	218.6	170.3	157.6	140.2	216.0
62.5°	199.9	146.9	144.2	126.8	195.8
65°	179.7	130.8	130.1	115.4	166.3
67.5°	160.3	120.0	119.4	104.6	126.8
70°	139.5	108.6	107.3	93.2	93.9
72.5°	118.0	95.9	94.6	83.8	77.8
75°	96.6	81.1	80.5	73.1	63.0
77.5°	75.8	64.4	65.7	59.0	46.3
80°	54.3	46.9	48.3	42.3	34.9
82.5°	36.2	30.9	32.2	26.8	23.5
85°	20.1	17.4	18.1	14.1	10.7
87.5°	9.4	8.0	8.0	5.4	3.4
90°	4.4	2.8	2.6	1.8	1.0
92.5°	27.2	19.3	17.6	10.8	4.0
95°	66.9	37.7	34.6	22.1	9.6
97.5°	90.1	41.4	38.6	27.6	16.6
100°	98.5	44.5	42.0	32.0	22.0
102.5°	102.4	47.6	45.3	35.9	26.6
105°	105.3	52.2	50.2	42.4	34.5
107.5°	105.8	59.0	57.2	49.8	42.5
110°	105.0	62.8	61.1	54.5	47.9



TEST NUMBER: P933814

CATALOG NUMBER: SQ4-FA-025U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	105.0	67.4	65.8	59.5	53.2
115°	106.0	74.3	72.8	67.0	61.2
117.5°	108.0	81.0	79.7	74.4	69.1
120°	109.5	84.9	83.7	78.7	73.7
122.5°	111.8	89.5	88.2	83.2	78.2
125°	115.0	95.5	94.3	89.7	85.1
127.5°	118.1	101.2	100.0	95.4	90.7
130°	120.4	105.0	103.7	98.7	93.7
132.5°	122.2	108.1	106.9	101.9	96.9
135°	124.2	111.7	110.6	106.0	101.5
137.5°	127.2	116.3	115.2	110.7	106.2
140°	129.0	119.4	118.4	114.2	110.1
142.5°	130.6	121.7	120.7	116.9	113.1
145°	132.6	125.2	124.4	121.0	117.7
147.5°	135.5	129.6	128.8	125.5	122.3
150°	137.0	131.9	131.2	128.2	125.3
152.5°	138.0	133.4	132.8	130.6	128.4
155°	140.2	136.7	136.3	134.6	133.0
157.5°	142.4	140.0	139.6	138.0	136.4
160°	143.4	141.5	141.2	139.9	138.7
162.5°	144.5	143.1	142.9	141.9	141.0
165°	146.0	145.4	145.2	144.3	143.5
167.5°	147.2	146.7	146.6	146.2	145.8
170°	148.2	148.2	148.1	147.7	147.3
172.5°	148.3	148.3	148.3	148.2	148.1
175°	148.9	149.2	149.2	149.2	149.2
177.5°	149.0	149.2	149.2	149.2	149.2
180°	149.2	149.2	149.2	149.2	149.2



TEST NUMBER: P933814
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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	12.66	13.68	13.47	14.51	15.55	15.46	16.48	16.27	17.31	18.34
	3H	13.15	14.06	13.97	14.91	15.97	16.81	17.72	17.63	18.56	19.62
	4H	13.35	14.21	14.19	15.06	16.13	17.25	18.11	18.09	18.97	20.04
	6H	13.48	14.27	14.33	15.13	16.21	17.54	18.33	18.39	19.19	20.27
	8H	13.48	14.24	14.34	15.12	16.20	17.61	18.37	18.47	19.25	20.33
	12H	13.46	14.18	14.33	15.05	16.16	17.65	18.37	18.52	19.24	20.35
4H	2H	13.70	14.57	14.55	15.42	16.49	15.89	16.75	16.73	17.60	18.67
	3H	14.75	15.47	15.60	16.35	17.44	17.40	18.12	18.26	19.00	20.09
	4H	15.03	15.68	15.90	16.57	17.68	17.93	18.58	18.80	19.46	20.58
	6H	15.16	15.73	16.05	16.63	17.75	18.29	18.86	19.18	19.76	20.88
	8H	15.17	15.70	16.06	16.60	17.73	18.40	18.93	19.29	19.83	20.96
	12H	15.15	15.62	16.06	16.54	17.68	18.46	18.93	19.37	19.85	20.99
8H	4H	15.49	16.02	16.38	16.92	18.05	18.06	18.59	18.95	19.49	20.62
	6H	15.76	16.20	16.67	17.14	18.27	18.50	18.94	19.42	19.88	21.01
	8H	15.80	16.19	16.73	17.12	18.27	18.65	19.04	19.57	19.97	21.12
	12H	15.79	16.14	16.72	17.06	18.26	18.75	19.09	19.68	20.02	21.21
12H	4H	15.50	15.98	16.41	16.90	18.03	18.04	18.51	18.95	19.43	20.57
	6H	15.82	16.21	16.74	17.14	18.29	18.50	18.89	19.42	19.82	20.97
	8H	15.89	16.23	16.82	17.16	18.36	18.66	19.00	19.59	19.93	21.13