

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: P933818

Luminaire Tested: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933818
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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

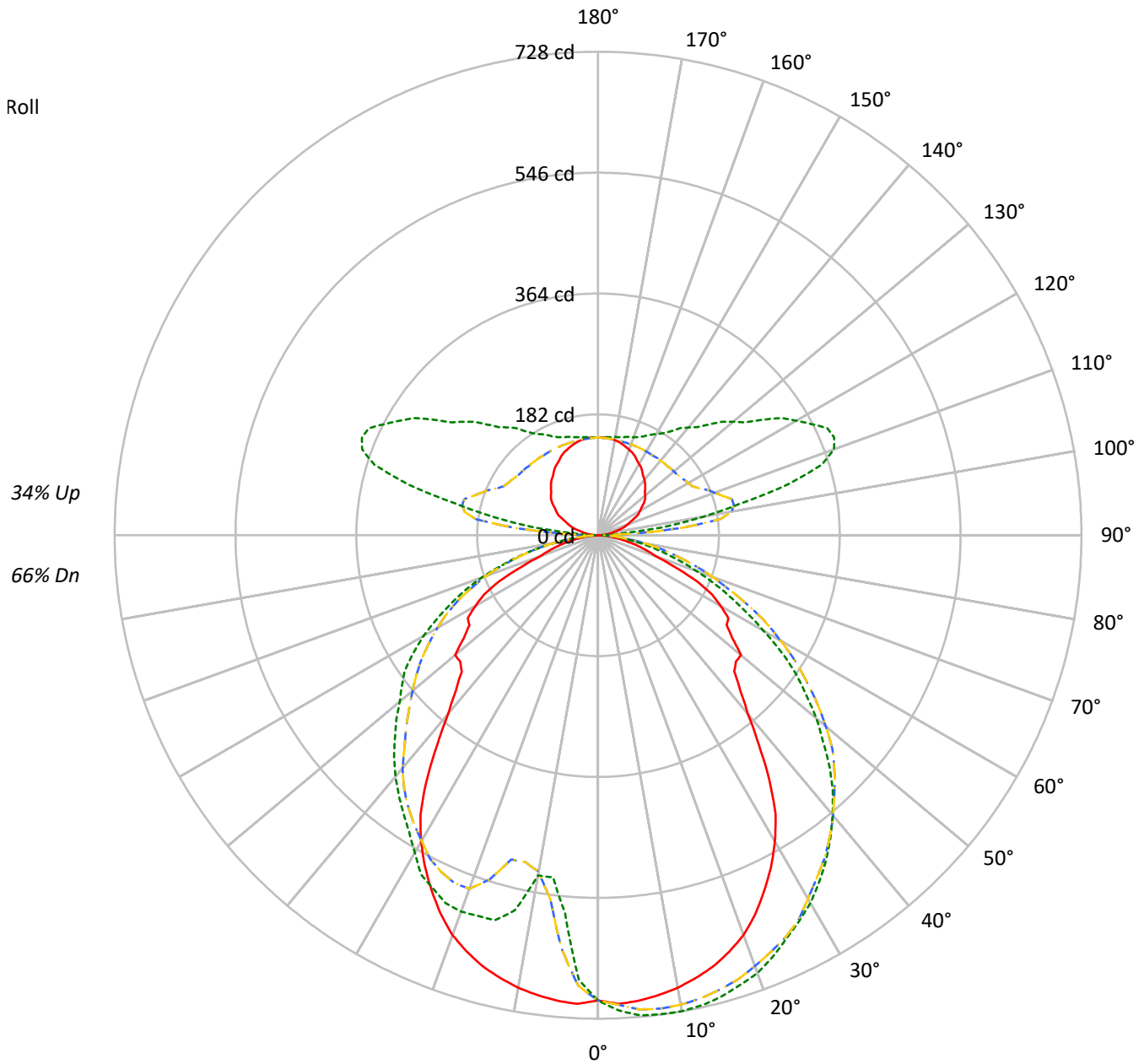
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2772.3 lumens
Efficiency: N/A
Efficacy: 126.0 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°	6499	6499	6499	6499
5°	6540	6561	6540	5158
10°	6490	6463	6490	4621
15°	6411	6323	6411	5279
20°	6270	6156	6270	5290
25°	5988	5915	5988	5178
30°	5627	5714	5627	4933
35°	5009	5459	5009	4662
40°	4166	5161	4166	4457
45°	3715	4811	3715	4221
50°	3939	4393	3939	3986
55°	3694	3943	3694	3850
60°	3796	3349	3796	3526
65°	3424	2768	3424	3094
70°	2356	2207	2356	2594
75°	2040	1630	2040	1953
80°	1615	1079	1615	1173
85°	878	571	878	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5706 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	2.3
10°-20°	179.5	6.5
20°-30°	277.5	10.0
30°-40°	331.3	11.9
40°-50°	333.2	12.0
50°-60°	289.9	10.5
60°-70°	205.6	7.4
70°-80°	108.8	3.9
80°-90°	27.7	1.0
90°-100°	71.9	2.6
100°-110°	189.0	6.8
110°-120°	195.9	7.1
120°-130°	157.1	5.7
130°-140°	123.3	4.4
140°-150°	94.6	3.4
150°-160°	68.2	2.5
160°-170°	41.7	1.5
170°-180°	14.1	0.5
0°-30°	520.2	18.8
0°-40°	851.5	30.7
0°-60°	1474.6	53.2
0°-90°	1816.5	65.5
90°-120°	456.8	16.5
90°-150°	831.9	30.0
90°-180°	956.0	34.5
0°-180°	2772.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	700	700	700	700	700	
5°	704	726	704	570	704	67
15°	672	719	672	600	672	189
25°	592	671	592	587	592	272
35°	450	598	450	511	450	278
45°	290	493	290	433	290	232
55°	236	364	236	355	236	217
65°	164	219	164	245	164	157
75°	62	104	62	125	62	65
85°	11	26	11	22	11	14
90°	1	4	1	4	1	1
95°	10	44	10	44	10	11
105°	34	296	34	296	34	36
115°	60	381	60	381	60	60
125°	84	303	84	303	84	75
135°	100	235	100	235	100	78
145°	116	191	116	191	116	73
155°	131	164	131	164	131	60
165°	142	153	142	153	142	40
175°	147	148	147	148	147	14
180°	147	147	147	147	147	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4
2.5°	706.3	706.3	710.3	711.7	711.7	709.7	707.7	709.7	715.6	717.6	716.9
5°	703.7	709.0	716.3	717.6	719.0	718.3	716.9	718.3	724.9	726.2	726.9
7.5°	698.4	708.3	717.6	719.6	721.5	719.6	719.0	720.3	726.9	728.2	728.2
10°	691.8	705.6	716.3	717.6	719.6	717.6	717.6	720.3	726.9	728.2	728.8
12.5°	682.5	701.7	711.7	712.9	715.6	714.9	714.3	716.9	723.6	724.9	724.9
15°	671.8	694.4	703.7	705.0	709.7	708.3	708.3	711.0	718.3	720.3	719.6
17.5°	657.3	685.2	695.7	697.7	701.1	700.4	701.1	703.7	710.3	711.7	712.3
20°	640.7	672.5	685.2	687.2	690.4	690.4	690.4	693.8	700.4	703.1	703.1
22.5°	618.2	659.3	672.5	673.9	677.9	677.9	679.2	683.8	689.7	690.4	690.4
25°	591.7	644.7	655.9	660.0	663.9	665.9	667.9	670.6	672.5	671.8	672.5
27.5°	563.9	626.2	640.7	643.4	648.7	650.7	653.4	654.0	654.6	656.6	655.3
30°	532.7	600.3	622.1	624.8	633.4	634.8	632.1	633.4	636.8	638.1	639.4
32.5°	497.7	561.9	603.0	608.9	616.9	613.0	612.3	614.2	619.6	619.6	620.9
35°	449.9	532.0	585.1	590.4	596.4	591.7	594.4	595.0	598.3	600.3	599.6
37.5°	397.6	506.3	566.5	570.5	575.1	569.2	573.1	575.1	577.8	576.5	576.5
40°	351.1	465.8	544.7	547.4	551.3	546.7	550.6	552.0	553.3	552.0	551.3
42.5°	316.8	421.4	521.5	524.8	522.2	525.4	526.8	529.5	527.4	524.8	524.8
45°	290.2	409.5	496.3	500.2	496.3	501.6	503.6	503.6	497.7	496.3	495.6
47.5°	281.6	385.6	471.1	471.1	469.1	475.7	479.1	474.4	468.5	466.4	466.4
50°	281.0	359.1	436.7	434.0	443.3	451.2	448.0	443.3	438.7	431.4	431.4
52.5°	255.1	326.6	392.2	402.2	416.7	421.4	416.1	411.5	403.5	400.2	397.6
55°	236.5	292.8	351.8	371.7	387.0	392.9	382.9	378.3	366.4	364.5	363.1
57.5°	232.6	243.8	314.8	339.9	358.4	357.9	351.8	343.2	333.3	331.3	330.7
60°	213.4	176.3	275.0	304.8	324.0	322.0	316.8	308.8	299.5	298.2	296.9
62.5°	193.5	127.8	229.9	263.7	290.9	290.2	285.6	273.7	267.1	263.7	261.0
65°	164.3	107.3	163.7	219.3	258.5	259.7	249.8	241.2	233.9	229.9	229.2
67.5°	125.3	87.4	110.7	182.9	227.2	226.0	213.4	209.4	200.1	198.1	194.1
70°	92.8	58.3	76.9	148.4	196.8	193.5	183.6	178.9	170.3	165.7	163.0
72.5°	76.9	47.0	56.3	115.3	165.7	161.6	153.0	147.8	140.5	136.5	133.9
75°	62.2	49.7	43.1	85.5	134.5	131.9	123.9	118.6	112.6	107.3	108.0
77.5°	45.7	46.3	34.5	62.9	106.7	102.8	98.1	91.5	88.8	83.5	83.5
80°	34.5	36.5	25.9	43.1	76.9	76.9	72.9	68.3	63.6	61.0	61.0
82.5°	23.2	23.2	19.2	27.2	52.4	50.4	47.7	46.3	43.8	42.4	42.4
85°	10.6	13.2	12.0	16.6	28.5	29.8	29.8	28.5	27.9	26.5	27.2
87.5°	3.4	5.9	7.3	9.3	14.6	15.2	15.9	15.9	15.9	16.6	16.6
90°	1.0	1.8	2.6	2.8	4.3	6.4	7.5	6.7	5.0	3.8	3.8
92.5°	4.0	10.7	17.4	19.1	26.9	37.2	42.4	37.1	26.7	18.8	18.0
95°	9.5	21.8	34.2	37.2	66.1	104.5	123.8	110.5	83.8	63.8	61.6
97.5°	16.4	27.3	38.1	40.9	89.0	153.1	185.2	176.9	160.0	147.3	143.0
100°	21.7	31.6	41.5	44.0	97.3	168.6	204.1	204.7	206.0	206.9	201.7
102.5°	26.3	35.5	44.8	47.0	101.2	173.4	209.5	220.2	241.7	257.8	253.3
105°	34.1	41.9	49.6	51.6	104.0	173.9	208.9	233.0	281.1	317.1	314.8
107.5°	42.0	49.2	56.5	58.3	104.5	166.2	197.0	230.6	297.7	348.1	348.7
110°	47.3	53.8	60.4	62.0	103.7	159.4	187.1	224.7	299.7	356.0	358.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	52.6	58.8	65.0	66.6	103.7	153.3	178.1	216.6	293.3	350.9	354.7
115°	60.5	66.2	71.9	73.4	104.7	146.5	167.4	204.3	278.3	333.7	339.0
117.5°	68.3	73.5	78.7	80.0	106.7	142.2	160.0	193.4	260.0	310.1	316.0
120°	72.8	77.8	82.7	83.9	108.2	140.7	156.9	187.4	248.5	294.2	299.9
122.5°	77.3	82.2	87.1	88.4	110.5	139.9	154.6	182.1	237.0	278.2	283.8
125°	84.1	88.6	93.2	94.4	113.6	139.3	152.2	175.5	222.2	257.2	262.3
127.5°	89.6	94.3	98.8	100.0	116.7	138.9	150.1	170.1	210.2	240.3	244.6
130°	92.6	97.5	102.5	103.7	119.0	139.2	149.3	167.2	202.8	229.6	233.6
132.5°	95.7	100.7	105.6	106.8	120.7	139.3	148.6	164.6	196.5	220.5	224.1
135°	100.3	104.7	109.3	110.4	122.7	139.2	147.4	160.7	187.5	207.6	210.6
137.5°	104.9	109.4	113.8	114.9	125.7	140.0	147.2	158.5	181.1	198.1	200.7
140°	108.8	112.8	117.0	118.0	127.5	140.2	146.5	156.3	175.9	190.5	192.9
142.5°	111.7	115.5	119.3	120.2	129.0	140.7	146.5	155.1	172.3	185.2	187.2
145°	116.3	119.5	122.9	123.7	131.0	140.7	145.5	152.5	166.6	177.1	178.7
147.5°	120.8	124.0	127.3	128.0	133.9	141.7	145.5	151.1	162.1	170.4	171.7
150°	123.8	126.7	129.6	130.3	135.4	142.2	145.5	150.2	159.6	166.6	167.6
152.5°	126.9	129.0	131.2	131.8	136.3	142.5	145.5	149.5	157.5	163.5	164.3
155°	131.4	133.0	134.7	135.1	138.5	143.2	145.5	148.7	155.1	159.9	160.4
157.5°	134.8	136.3	137.9	138.3	140.7	144.0	145.5	148.0	152.9	156.6	157.0
160°	137.0	138.2	139.5	139.8	141.7	144.2	145.5	147.6	151.9	155.0	155.2
162.5°	139.3	140.2	141.2	141.4	142.8	144.6	145.5	147.3	150.9	153.5	153.7
165°	141.8	142.6	143.5	143.7	144.2	145.1	145.5	146.8	149.4	151.3	151.5
167.5°	144.1	144.4	144.8	144.9	145.4	146.1	146.5	147.3	149.0	150.3	150.4
170°	145.5	145.9	146.3	146.4	146.4	146.5	146.5	147.3	149.0	150.3	150.3
172.5°	146.3	146.4	146.5	146.5	146.5	146.5	146.5	147.2	148.5	149.5	149.4
175°	147.4	147.4	147.4	147.4	147.1	146.7	146.5	146.9	147.8	148.4	148.4
177.5°	147.4	147.4	147.4	147.4	147.2	146.9	146.7	147.0	147.7	148.2	148.1
180°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4
2.5°	718.3	716.3	718.3	716.9	717.6	715.6	709.7	707.7	709.7	711.7	711.7
5°	726.9	725.6	726.9	726.9	726.2	724.9	718.3	716.9	718.3	719.0	717.6
7.5°	729.5	727.6	729.5	728.2	728.2	726.9	720.3	719.0	719.6	721.5	719.6
10°	729.5	727.6	729.5	728.8	728.2	726.9	720.3	717.6	717.6	719.6	717.6
12.5°	726.2	724.9	726.2	724.9	724.9	723.6	716.9	714.3	714.9	715.6	712.9
15°	720.9	719.0	720.9	719.6	720.3	718.3	711.0	708.3	708.3	709.7	705.0
17.5°	712.9	710.3	712.9	712.3	711.7	710.3	703.7	701.1	700.4	701.1	697.7
20°	703.7	701.7	703.7	703.1	703.1	700.4	693.8	690.4	690.4	690.4	687.2
22.5°	689.1	687.2	689.1	690.4	690.4	689.7	683.8	679.2	677.9	677.9	673.9
25°	672.5	670.6	672.5	672.5	671.8	672.5	670.6	667.9	665.9	663.9	660.0
27.5°	656.6	655.3	656.6	655.3	656.6	654.6	654.0	653.4	650.7	648.7	643.4
30°	640.7	639.4	640.7	639.4	638.1	636.8	633.4	632.1	634.8	633.4	624.8
32.5°	620.9	619.6	620.9	620.9	619.6	619.6	614.2	612.3	613.0	616.9	608.9
35°	600.3	598.3	600.3	599.6	600.3	598.3	595.0	594.4	591.7	596.4	590.4
37.5°	576.5	574.5	576.5	576.5	576.5	577.8	575.1	573.1	569.2	575.1	570.5
40°	552.0	549.3	552.0	551.3	552.0	553.3	552.0	550.6	546.7	551.3	547.4
42.5°	524.1	523.4	524.1	524.8	524.8	527.4	529.5	526.8	525.4	522.2	524.8
45°	494.3	493.0	494.3	495.6	496.3	497.7	503.6	503.6	501.6	496.3	500.2
47.5°	462.5	459.2	462.5	466.4	466.4	468.5	474.4	479.1	475.7	469.1	471.1
50°	428.7	429.4	428.7	431.4	431.4	438.7	443.3	448.0	451.2	443.3	434.0
52.5°	395.6	394.9	395.6	397.6	400.2	403.5	411.5	416.1	421.4	416.7	402.2
55°	362.4	363.8	362.4	363.1	364.5	366.4	378.3	382.9	392.9	387.0	371.7
57.5°	329.3	327.3	329.3	330.7	331.3	333.3	343.2	351.8	357.9	358.4	339.9
60°	290.9	288.2	290.9	296.9	298.2	299.5	308.8	316.8	322.0	324.0	304.8
62.5°	257.1	252.4	257.1	261.0	263.7	267.1	273.7	285.6	290.2	290.9	263.7
65°	221.3	219.3	221.3	229.2	229.9	233.9	241.2	249.8	259.7	258.5	219.3
67.5°	188.8	188.8	188.8	194.1	198.1	200.1	209.4	213.4	226.0	227.2	182.9
70°	159.1	158.4	159.1	163.0	165.7	170.3	178.9	183.6	193.5	196.8	148.4
72.5°	130.5	129.8	130.5	133.9	136.5	140.5	147.8	153.0	161.6	165.7	115.3
75°	105.3	104.0	105.3	108.0	107.3	112.6	118.6	123.9	131.9	134.5	85.5
77.5°	80.8	80.8	80.8	83.5	83.5	88.8	91.5	98.1	102.8	106.7	62.9
80°	60.3	59.7	60.3	61.0	61.0	63.6	68.3	72.9	76.9	76.9	43.1
82.5°	42.4	41.1	42.4	42.4	42.4	43.8	46.3	47.7	50.4	52.4	27.2
85°	26.5	26.5	26.5	27.2	26.5	27.9	28.5	29.8	29.8	28.5	16.6
87.5°	17.2	16.6	17.2	16.6	16.6	15.9	15.9	15.9	15.2	14.6	9.3
90°	3.8	3.8	3.8	3.8	3.8	5.0	6.7	7.5	6.4	4.3	2.8
92.5°	15.0	12.1	15.0	18.0	18.8	26.7	37.1	42.4	37.2	26.9	19.1
95°	52.6	43.5	52.6	61.6	63.8	83.8	110.5	123.8	104.5	66.1	37.2
97.5°	125.8	108.6	125.8	143.0	147.3	160.0	176.9	185.2	153.1	89.0	40.9
100°	181.3	160.7	181.3	201.7	206.9	206.0	204.7	204.1	168.6	97.3	44.0
102.5°	235.7	218.2	235.7	253.3	257.8	241.7	220.2	209.5	173.4	101.2	47.0
105°	305.4	295.9	305.4	314.8	317.1	281.1	233.0	208.9	173.9	104.0	51.6
107.5°	350.9	353.2	350.9	348.7	348.1	297.7	230.6	197.0	166.2	104.5	58.3
110°	368.2	378.1	368.2	358.4	356.0	299.7	224.7	187.1	159.4	103.7	62.0



TEST NUMBER: P933818

CATALOG NUMBER: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	369.8	384.9	369.8	354.7	350.9	293.3	216.6	178.1	153.3	103.7	66.6
115°	360.0	381.0	360.0	339.0	333.7	278.3	204.3	167.4	146.5	104.7	73.4
117.5°	339.2	362.5	339.2	316.0	310.1	260.0	193.4	160.0	142.2	106.7	80.0
120°	322.5	345.0	322.5	299.9	294.2	248.5	187.4	156.9	140.7	108.2	83.9
122.5°	306.1	328.4	306.1	283.8	278.2	237.0	182.1	154.6	139.9	110.5	88.4
125°	282.9	303.4	282.9	262.3	257.2	222.2	175.5	152.2	139.3	113.6	94.4
127.5°	261.9	279.2	261.9	244.6	240.3	210.2	170.1	150.1	138.9	116.7	100.0
130°	249.6	265.6	249.6	233.6	229.6	202.8	167.2	149.3	139.2	119.0	103.7
132.5°	238.4	252.7	238.4	224.1	220.5	196.5	164.6	148.6	139.3	120.7	106.8
135°	223.1	235.4	223.1	210.6	207.6	187.5	160.7	147.4	139.2	122.7	110.4
137.5°	210.7	220.9	210.7	200.7	198.1	181.1	158.5	147.2	140.0	125.7	114.9
140°	202.2	211.7	202.2	192.9	190.5	175.9	156.3	146.5	140.2	127.5	118.0
142.5°	195.3	203.4	195.3	187.2	185.2	172.3	155.1	146.5	140.7	129.0	120.2
145°	184.9	191.0	184.9	178.7	177.1	166.6	152.5	145.5	140.7	131.0	123.7
147.5°	176.8	181.9	176.8	171.7	170.4	162.1	151.1	145.5	141.7	133.9	128.0
150°	171.7	175.9	171.7	167.6	166.6	159.6	150.2	145.5	142.2	135.4	130.3
152.5°	167.4	170.5	167.4	164.3	163.5	157.5	149.5	145.5	142.5	136.3	131.8
155°	162.4	164.5	162.4	160.4	159.9	155.1	148.7	145.5	143.2	138.5	135.1
157.5°	158.5	160.0	158.5	157.0	156.6	152.9	148.0	145.5	144.0	140.7	138.3
160°	156.1	156.9	156.1	155.2	155.0	151.9	147.6	145.5	144.2	141.7	139.8
162.5°	154.5	155.3	154.5	153.7	153.5	150.9	147.3	145.5	144.6	142.8	141.4
165°	152.3	153.1	152.3	151.5	151.3	149.4	146.8	145.5	145.1	144.2	143.7
167.5°	150.7	151.1	150.7	150.4	150.3	149.0	147.3	146.5	146.1	145.4	144.9
170°	150.3	150.3	150.3	150.3	150.3	149.0	147.3	146.5	146.5	146.4	146.4
172.5°	149.1	148.8	149.1	149.4	149.5	148.5	147.2	146.5	146.5	146.5	146.5
175°	148.4	148.4	148.4	148.4	148.4	147.8	146.9	146.5	146.7	147.1	147.4
177.5°	147.8	147.4	147.8	148.1	148.2	147.7	147.0	146.7	146.9	147.2	147.4
180°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4



TEST NUMBER: P933818
 CATALOG NUMBER: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4
2.5°	710.3	706.3	706.3	699.7	697.0	695.1	691.8	681.8	679.2	676.5	680.5
5°	716.3	709.0	703.7	691.8	681.8	677.9	665.2	641.4	625.5	613.5	606.9
7.5°	717.6	708.3	698.4	679.8	655.9	645.4	606.9	563.3	551.3	540.7	534.0
10°	716.3	705.6	691.8	663.9	607.6	589.0	550.6	522.2	514.8	512.9	514.8
12.5°	711.7	701.7	682.5	636.1	557.2	544.7	522.2	505.6	504.3	507.5	525.4
15°	703.7	694.4	671.8	599.0	529.5	520.2	504.3	498.2	505.6	528.8	582.4
17.5°	695.7	685.2	657.3	562.6	508.2	501.6	490.3	502.3	543.3	574.5	592.4
20°	685.2	672.5	640.7	536.1	493.0	487.0	481.7	535.4	566.5	577.8	587.8
22.5°	672.5	659.3	618.2	517.5	477.1	472.5	475.7	554.0	566.5	574.5	583.1
25°	655.9	644.7	591.7	502.9	464.5	459.2	471.8	552.0	559.2	561.2	578.5
27.5°	640.7	626.2	563.9	489.7	449.2	447.3	475.1	543.3	548.6	550.6	569.2
30°	622.1	600.3	532.7	475.7	433.3	432.6	475.7	532.7	531.4	536.7	555.3
32.5°	603.0	561.9	497.7	458.5	418.1	417.4	471.1	516.8	515.5	522.8	536.7
35°	585.1	532.0	449.9	438.7	398.9	399.5	459.8	498.2	498.9	505.6	514.2
37.5°	566.5	506.3	397.6	416.7	380.4	380.4	444.6	481.1	479.8	481.7	493.6
40°	544.7	465.8	351.1	388.3	363.1	361.1	426.0	462.5	457.8	457.2	473.7
42.5°	521.5	421.4	316.8	350.5	343.2	340.6	403.5	440.0	431.4	433.3	454.6
45°	496.3	409.5	290.2	296.2	322.7	320.7	379.0	414.2	408.1	413.5	435.3
47.5°	471.1	385.6	281.6	245.8	300.8	300.2	351.8	389.0	385.6	391.0	414.2
50°	436.7	359.1	281.0	210.7	276.3	278.9	319.4	364.5	364.5	369.1	393.6
52.5°	392.2	326.6	255.1	190.8	247.8	255.8	290.9	343.2	344.5	349.2	371.1
55°	351.8	292.8	236.5	175.6	214.0	231.3	263.0	321.4	324.0	328.6	348.6
57.5°	314.8	243.8	232.6	157.7	182.9	199.5	238.5	300.2	301.4	305.5	324.7
60°	275.0	176.3	213.4	138.5	155.7	168.3	216.0	275.0	279.6	282.3	298.9
62.5°	229.9	127.8	193.5	125.3	142.5	145.1	197.5	251.1	257.1	259.1	269.0
65°	163.7	107.3	164.3	114.0	128.5	129.2	177.5	226.6	231.9	235.2	242.6
67.5°	110.7	87.4	125.3	103.3	118.0	118.6	158.4	198.1	205.4	208.1	212.7
70°	76.9	58.3	92.8	92.1	106.0	107.3	137.8	172.3	178.9	180.9	183.6
72.5°	56.3	47.0	76.9	82.8	93.5	94.7	116.6	143.2	149.8	151.8	153.0
75°	43.1	49.7	62.2	72.2	79.5	80.1	95.4	116.6	121.2	122.6	123.2
77.5°	34.5	46.3	45.7	58.3	64.9	63.6	74.9	90.1	94.1	94.1	94.1
80°	25.9	36.5	34.5	41.8	47.7	46.3	53.6	64.3	65.6	66.9	66.3
82.5°	19.2	23.2	23.2	26.5	31.8	30.5	35.8	41.8	41.8	41.8	43.1
85°	12.0	13.2	10.6	13.9	17.9	17.2	19.9	22.5	23.2	23.2	21.8
87.5°	7.3	5.9	3.4	5.3	7.9	7.9	9.3	10.0	9.3	9.3	9.3
90°	2.6	1.8	1.0	1.8	2.6	2.8	4.3	6.4	7.5	6.7	5.0
92.5°	17.4	10.7	4.0	10.7	17.4	19.1	26.9	37.2	42.4	37.1	26.7
95°	34.2	21.8	9.5	21.8	34.2	37.2	66.1	104.5	123.8	110.5	83.8
97.5°	38.1	27.3	16.4	27.3	38.1	40.9	89.0	153.1	185.2	176.9	160.0
100°	41.5	31.6	21.7	31.6	41.5	44.0	97.3	168.6	204.1	204.7	206.0
102.5°	44.8	35.5	26.3	35.5	44.8	47.0	101.2	173.4	209.5	220.2	241.7
105°	49.6	41.9	34.1	41.9	49.6	51.6	104.0	173.9	208.9	233.0	281.1
107.5°	56.5	49.2	42.0	49.2	56.5	58.3	104.5	166.2	197.0	230.6	297.7
110°	60.4	53.8	47.3	53.8	60.4	62.0	103.7	159.4	187.1	224.7	299.7



TEST NUMBER: P933818

CATALOG NUMBER: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	65.0	58.8	52.6	58.8	65.0	66.6	103.7	153.3	178.1	216.6	293.3
115°	71.9	66.2	60.5	66.2	71.9	73.4	104.7	146.5	167.4	204.3	278.3
117.5°	78.7	73.5	68.3	73.5	78.7	80.0	106.7	142.2	160.0	193.4	260.0
120°	82.7	77.8	72.8	77.8	82.7	83.9	108.2	140.7	156.9	187.4	248.5
122.5°	87.1	82.2	77.3	82.2	87.1	88.4	110.5	139.9	154.6	182.1	237.0
125°	93.2	88.6	84.1	88.6	93.2	94.4	113.6	139.3	152.2	175.5	222.2
127.5°	98.8	94.3	89.6	94.3	98.8	100.0	116.7	138.9	150.1	170.1	210.2
130°	102.5	97.5	92.6	97.5	102.5	103.7	119.0	139.2	149.3	167.2	202.8
132.5°	105.6	100.7	95.7	100.7	105.6	106.8	120.7	139.3	148.6	164.6	196.5
135°	109.3	104.7	100.3	104.7	109.3	110.4	122.7	139.2	147.4	160.7	187.5
137.5°	113.8	109.4	104.9	109.4	113.8	114.9	125.7	140.0	147.2	158.5	181.1
140°	117.0	112.8	108.8	112.8	117.0	118.0	127.5	140.2	146.5	156.3	175.9
142.5°	119.3	115.5	111.7	115.5	119.3	120.2	129.0	140.7	146.5	155.1	172.3
145°	122.9	119.5	116.3	119.5	122.9	123.7	131.0	140.7	145.5	152.5	166.6
147.5°	127.3	124.0	120.8	124.0	127.3	128.0	133.9	141.7	145.5	151.1	162.1
150°	129.6	126.7	123.8	126.7	129.6	130.3	135.4	142.2	145.5	150.2	159.6
152.5°	131.2	129.0	126.9	129.0	131.2	131.8	136.3	142.5	145.5	149.5	157.5
155°	134.7	133.0	131.4	133.0	134.7	135.1	138.5	143.2	145.5	148.7	155.1
157.5°	137.9	136.3	134.8	136.3	137.9	138.3	140.7	144.0	145.5	148.0	152.9
160°	139.5	138.2	137.0	138.2	139.5	139.8	141.7	144.2	145.5	147.6	151.9
162.5°	141.2	140.2	139.3	140.2	141.2	141.4	142.8	144.6	145.5	147.3	150.9
165°	143.5	142.6	141.8	142.6	143.5	143.7	144.2	145.1	145.5	146.8	149.4
167.5°	144.8	144.4	144.1	144.4	144.8	144.9	145.4	146.1	146.5	147.3	149.0
170°	146.3	145.9	145.5	145.9	146.3	146.4	146.4	146.5	146.5	147.3	149.0
172.5°	146.5	146.4	146.3	146.4	146.5	146.5	146.5	146.5	146.5	147.2	148.5
175°	147.4	147.4	147.4	147.4	147.4	147.4	147.1	146.7	146.5	146.9	147.8
177.5°	147.4	147.4	147.4	147.4	147.4	147.4	147.2	146.9	146.7	147.0	147.7
180°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4



TEST NUMBER: P933818

CATALOG NUMBER: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4	700.4
2.5°	675.9	673.9	676.5	669.3	676.5	673.9	675.9	680.5	676.5	679.2	681.8
5°	593.0	589.7	579.2	570.5	579.2	589.7	593.0	606.9	613.5	625.5	641.4
7.5°	530.1	527.4	524.8	519.5	524.8	527.4	530.1	534.0	540.7	551.3	563.3
10°	516.1	516.8	520.8	520.2	520.8	516.8	516.1	514.8	512.9	514.8	522.2
12.5°	552.0	557.9	579.8	578.5	579.8	557.9	552.0	525.4	507.5	504.3	505.6
15°	593.0	595.0	599.6	600.3	599.6	595.0	593.0	582.4	528.8	505.6	498.2
17.5°	597.0	597.6	601.0	601.0	601.0	597.6	597.0	592.4	574.5	543.3	502.3
20°	593.7	595.0	601.7	603.0	601.7	595.0	593.7	587.8	577.8	566.5	535.4
22.5°	592.4	595.0	600.3	599.6	600.3	595.0	592.4	583.1	574.5	566.5	554.0
25°	585.8	585.8	586.4	587.1	586.4	585.8	585.8	578.5	561.2	559.2	552.0
27.5°	571.9	573.1	577.1	576.5	577.1	573.1	571.9	569.2	550.6	548.6	543.3
30°	559.2	557.9	554.6	552.0	554.6	557.9	559.2	555.3	536.7	531.4	532.7
32.5°	538.1	534.7	531.4	529.5	531.4	534.7	538.1	536.7	522.8	515.5	516.8
35°	512.9	513.6	512.9	510.9	512.9	513.6	512.9	514.2	505.6	498.9	498.2
37.5°	495.0	496.3	495.6	493.0	495.6	496.3	495.0	493.6	481.7	479.8	481.1
40°	476.4	477.1	476.4	474.4	476.4	477.1	476.4	473.7	457.2	457.8	462.5
42.5°	458.5	457.8	455.9	454.6	455.9	457.8	458.5	454.6	433.3	431.4	440.0
45°	438.0	438.7	434.6	432.6	434.6	438.7	438.0	435.3	413.5	408.1	414.2
47.5°	417.4	417.4	414.2	412.1	414.2	417.4	417.4	414.2	391.0	385.6	389.0
50°	395.6	394.9	390.3	389.6	390.3	394.9	395.6	393.6	369.1	364.5	364.5
52.5°	370.4	370.4	371.1	372.4	371.1	370.4	370.4	371.1	349.2	344.5	343.2
55°	348.6	349.2	353.8	355.2	353.8	349.2	348.6	348.6	328.6	324.0	321.4
57.5°	326.0	326.0	329.3	329.3	329.3	326.0	326.0	324.7	305.5	301.4	300.2
60°	300.2	301.4	304.1	303.5	304.1	301.4	300.2	298.9	282.3	279.6	275.0
62.5°	273.0	274.4	275.0	273.7	275.0	274.4	273.0	269.0	259.1	257.1	251.1
65°	244.5	245.8	246.5	245.1	246.5	245.8	244.5	242.6	235.2	231.9	226.6
67.5°	215.4	214.7	214.0	216.7	214.0	214.7	215.4	212.7	208.1	205.4	198.1
70°	185.5	185.5	184.9	186.2	184.9	185.5	185.5	183.6	180.9	178.9	172.3
72.5°	153.7	153.0	155.7	153.7	155.7	153.0	153.7	153.0	151.8	149.8	143.2
75°	122.6	123.9	122.6	124.6	122.6	123.9	122.6	123.2	122.6	121.2	116.6
77.5°	93.5	94.7	93.5	93.5	93.5	94.7	93.5	94.1	94.1	94.1	90.1
80°	66.3	65.6	65.6	64.9	65.6	65.6	66.3	66.3	66.9	65.6	64.3
82.5°	42.4	41.8	41.8	43.1	41.8	41.8	42.4	43.1	41.8	41.8	41.8
85°	23.2	23.8	22.5	22.5	22.5	23.8	23.2	21.8	23.2	23.2	22.5
87.5°	8.6	7.9	7.9	7.9	7.9	7.9	8.6	9.3	9.3	9.3	10.0
90°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.0	6.7	7.5	6.4
92.5°	18.8	18.0	15.0	12.1	15.0	18.0	18.8	26.7	37.1	42.4	37.2
95°	63.8	61.6	52.6	43.5	52.6	61.6	63.8	83.8	110.5	123.8	104.5
97.5°	147.3	143.0	125.8	108.6	125.8	143.0	147.3	160.0	176.9	185.2	153.1
100°	206.9	201.7	181.3	160.7	181.3	201.7	206.9	206.0	204.7	204.1	168.6
102.5°	257.8	253.3	235.7	218.2	235.7	253.3	257.8	241.7	220.2	209.5	173.4
105°	317.1	314.8	305.4	295.9	305.4	314.8	317.1	281.1	233.0	208.9	173.9
107.5°	348.1	348.7	350.9	353.2	350.9	348.7	348.1	297.7	230.6	197.0	166.2
110°	356.0	358.4	368.2	378.1	368.2	358.4	356.0	299.7	224.7	187.1	159.4



TEST NUMBER: P933818

CATALOG NUMBER: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	350.9	354.7	369.8	384.9	369.8	354.7	350.9	293.3	216.6	178.1	153.3
115°	333.7	339.0	360.0	381.0	360.0	339.0	333.7	278.3	204.3	167.4	146.5
117.5°	310.1	316.0	339.2	362.5	339.2	316.0	310.1	260.0	193.4	160.0	142.2
120°	294.2	299.9	322.5	345.0	322.5	299.9	294.2	248.5	187.4	156.9	140.7
122.5°	278.2	283.8	306.1	328.4	306.1	283.8	278.2	237.0	182.1	154.6	139.9
125°	257.2	262.3	282.9	303.4	282.9	262.3	257.2	222.2	175.5	152.2	139.3
127.5°	240.3	244.6	261.9	279.2	261.9	244.6	240.3	210.2	170.1	150.1	138.9
130°	229.6	233.6	249.6	265.6	249.6	233.6	229.6	202.8	167.2	149.3	139.2
132.5°	220.5	224.1	238.4	252.7	238.4	224.1	220.5	196.5	164.6	148.6	139.3
135°	207.6	210.6	223.1	235.4	223.1	210.6	207.6	187.5	160.7	147.4	139.2
137.5°	198.1	200.7	210.7	220.9	210.7	200.7	198.1	181.1	158.5	147.2	140.0
140°	190.5	192.9	202.2	211.7	202.2	192.9	190.5	175.9	156.3	146.5	140.2
142.5°	185.2	187.2	195.3	203.4	195.3	187.2	185.2	172.3	155.1	146.5	140.7
145°	177.1	178.7	184.9	191.0	184.9	178.7	177.1	166.6	152.5	145.5	140.7
147.5°	170.4	171.7	176.8	181.9	176.8	171.7	170.4	162.1	151.1	145.5	141.7
150°	166.6	167.6	171.7	175.9	171.7	167.6	166.6	159.6	150.2	145.5	142.2
152.5°	163.5	164.3	167.4	170.5	167.4	164.3	163.5	157.5	149.5	145.5	142.5
155°	159.9	160.4	162.4	164.5	162.4	160.4	159.9	155.1	148.7	145.5	143.2
157.5°	156.6	157.0	158.5	160.0	158.5	157.0	156.6	152.9	148.0	145.5	144.0
160°	155.0	155.2	156.1	156.9	156.1	155.2	155.0	151.9	147.6	145.5	144.2
162.5°	153.5	153.7	154.5	155.3	154.5	153.7	153.5	150.9	147.3	145.5	144.6
165°	151.3	151.5	152.3	153.1	152.3	151.5	151.3	149.4	146.8	145.5	145.1
167.5°	150.3	150.4	150.7	151.1	150.7	150.4	150.3	149.0	147.3	146.5	146.1
170°	150.3	150.3	150.3	150.3	150.3	150.3	150.3	149.0	147.3	146.5	146.5
172.5°	149.5	149.4	149.1	148.8	149.1	149.4	149.5	148.5	147.2	146.5	146.5
175°	148.4	148.4	148.4	148.4	148.4	148.4	148.4	147.8	146.9	146.5	146.7
177.5°	148.2	148.1	147.8	147.4	147.8	148.1	148.2	147.7	147.0	146.7	146.9
180°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4



TEST NUMBER: P933818

CATALOG NUMBER: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	700.4	700.4	700.4	700.4	700.4
2.5°	691.8	695.1	697.0	699.7	706.3
5°	665.2	677.9	681.8	691.8	703.7
7.5°	606.9	645.4	655.9	679.8	698.4
10°	550.6	589.0	607.6	663.9	691.8
12.5°	522.2	544.7	557.2	636.1	682.5
15°	504.3	520.2	529.5	599.0	671.8
17.5°	490.3	501.6	508.2	562.6	657.3
20°	481.7	487.0	493.0	536.1	640.7
22.5°	475.7	472.5	477.1	517.5	618.2
25°	471.8	459.2	464.5	502.9	591.7
27.5°	475.1	447.3	449.2	489.7	563.9
30°	475.7	432.6	433.3	475.7	532.7
32.5°	471.1	417.4	418.1	458.5	497.7
35°	459.8	399.5	398.9	438.7	449.9
37.5°	444.6	380.4	380.4	416.7	397.6
40°	426.0	361.1	363.1	388.3	351.1
42.5°	403.5	340.6	343.2	350.5	316.8
45°	379.0	320.7	322.7	296.2	290.2
47.5°	351.8	300.2	300.8	245.8	281.6
50°	319.4	278.9	276.3	210.7	281.0
52.5°	290.9	255.8	247.8	190.8	255.1
55°	263.0	231.3	214.0	175.6	236.5
57.5°	238.5	199.5	182.9	157.7	232.6
60°	216.0	168.3	155.7	138.5	213.4
62.5°	197.5	145.1	142.5	125.3	193.5
65°	177.5	129.2	128.5	114.0	164.3
67.5°	158.4	118.6	118.0	103.3	125.3
70°	137.8	107.3	106.0	92.1	92.8
72.5°	116.6	94.7	93.5	82.8	76.9
75°	95.4	80.1	79.5	72.2	62.2
77.5°	74.9	63.6	64.9	58.3	45.7
80°	53.6	46.3	47.7	41.8	34.5
82.5°	35.8	30.5	31.8	26.5	23.2
85°	19.9	17.2	17.9	13.9	10.6
87.5°	9.3	7.9	7.9	5.3	3.4
90°	4.3	2.8	2.6	1.8	1.0
92.5°	26.9	19.1	17.4	10.7	4.0
95°	66.1	37.2	34.2	21.8	9.5
97.5°	89.0	40.9	38.1	27.3	16.4
100°	97.3	44.0	41.5	31.6	21.7
102.5°	101.2	47.0	44.8	35.5	26.3
105°	104.0	51.6	49.6	41.9	34.1
107.5°	104.5	58.3	56.5	49.2	42.0
110°	103.7	62.0	60.4	53.8	47.3



TEST NUMBER: P933818

CATALOG NUMBER: SQ4-FA-025U-050D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	103.7	66.6	65.0	58.8	52.6
115°	104.7	73.4	71.9	66.2	60.5
117.5°	106.7	80.0	78.7	73.5	68.3
120°	108.2	83.9	82.7	77.8	72.8
122.5°	110.5	88.4	87.1	82.2	77.3
125°	113.6	94.4	93.2	88.6	84.1
127.5°	116.7	100.0	98.8	94.3	89.6
130°	119.0	103.7	102.5	97.5	92.6
132.5°	120.7	106.8	105.6	100.7	95.7
135°	122.7	110.4	109.3	104.7	100.3
137.5°	125.7	114.9	113.8	109.4	104.9
140°	127.5	118.0	117.0	112.8	108.8
142.5°	129.0	120.2	119.3	115.5	111.7
145°	131.0	123.7	122.9	119.5	116.3
147.5°	133.9	128.0	127.3	124.0	120.8
150°	135.4	130.3	129.6	126.7	123.8
152.5°	136.3	131.8	131.2	129.0	126.9
155°	138.5	135.1	134.7	133.0	131.4
157.5°	140.7	138.3	137.9	136.3	134.8
160°	141.7	139.8	139.5	138.2	137.0
162.5°	142.8	141.4	141.2	140.2	139.3
165°	144.2	143.7	143.5	142.6	141.8
167.5°	145.4	144.9	144.8	144.4	144.1
170°	146.4	146.4	146.3	145.9	145.5
172.5°	146.5	146.5	146.5	146.4	146.3
175°	147.1	147.4	147.4	147.4	147.4
177.5°	147.2	147.4	147.4	147.4	147.4
180°	147.4	147.4	147.4	147.4	147.4



TEST NUMBER: P933818
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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	12.62	13.64	13.43	14.47	15.50	15.42	16.44	16.23	17.27	18.30
	3H	13.11	14.02	13.93	14.87	15.93	16.76	17.68	17.59	18.52	19.58
	4H	13.31	14.17	14.15	15.02	16.09	17.21	18.07	18.05	18.92	19.99
	6H	13.43	14.23	14.29	15.09	16.17	17.49	18.29	18.35	19.15	20.23
	8H	13.44	14.20	14.30	15.08	16.16	17.57	18.33	18.43	19.20	20.29
	12H	13.42	14.14	14.28	15.01	16.12	17.61	18.33	18.48	19.20	20.31
4H	2H	13.66	14.53	14.51	15.38	16.45	15.85	16.71	16.69	17.56	18.63
	3H	14.70	15.42	15.56	16.31	17.39	17.36	18.08	18.21	18.96	20.05
	4H	14.99	15.64	15.86	16.52	17.64	17.88	18.54	18.75	19.42	20.53
	6H	15.12	15.69	16.01	16.59	17.71	18.25	18.82	19.14	19.72	20.84
	8H	15.13	15.66	16.02	16.56	17.69	18.36	18.89	19.25	19.79	20.91
	12H	15.11	15.58	16.01	16.50	17.64	18.42	18.89	19.32	19.81	20.95
8H	4H	15.45	15.98	16.34	16.88	18.01	18.02	18.55	18.91	19.45	20.58
	6H	15.72	16.15	16.63	17.10	18.22	18.46	18.90	19.37	19.84	20.97
	8H	15.76	16.15	16.69	17.08	18.23	18.61	18.99	19.53	19.93	21.07
	12H	15.75	16.09	16.68	17.02	18.22	18.71	19.05	19.64	19.97	21.17
12H	4H	15.46	15.94	16.37	16.86	17.99	17.99	18.47	18.90	19.39	20.52
	6H	15.78	16.17	16.70	17.10	18.24	18.46	18.84	19.38	19.78	20.92
	8H	15.85	16.19	16.78	17.12	18.32	18.62	18.96	19.55	19.89	21.09