

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: P934322

Luminaire Tested: SQ4-FA-050U-075D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934322
REPORT IS A COMBINATION OF REPORTS P933694 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

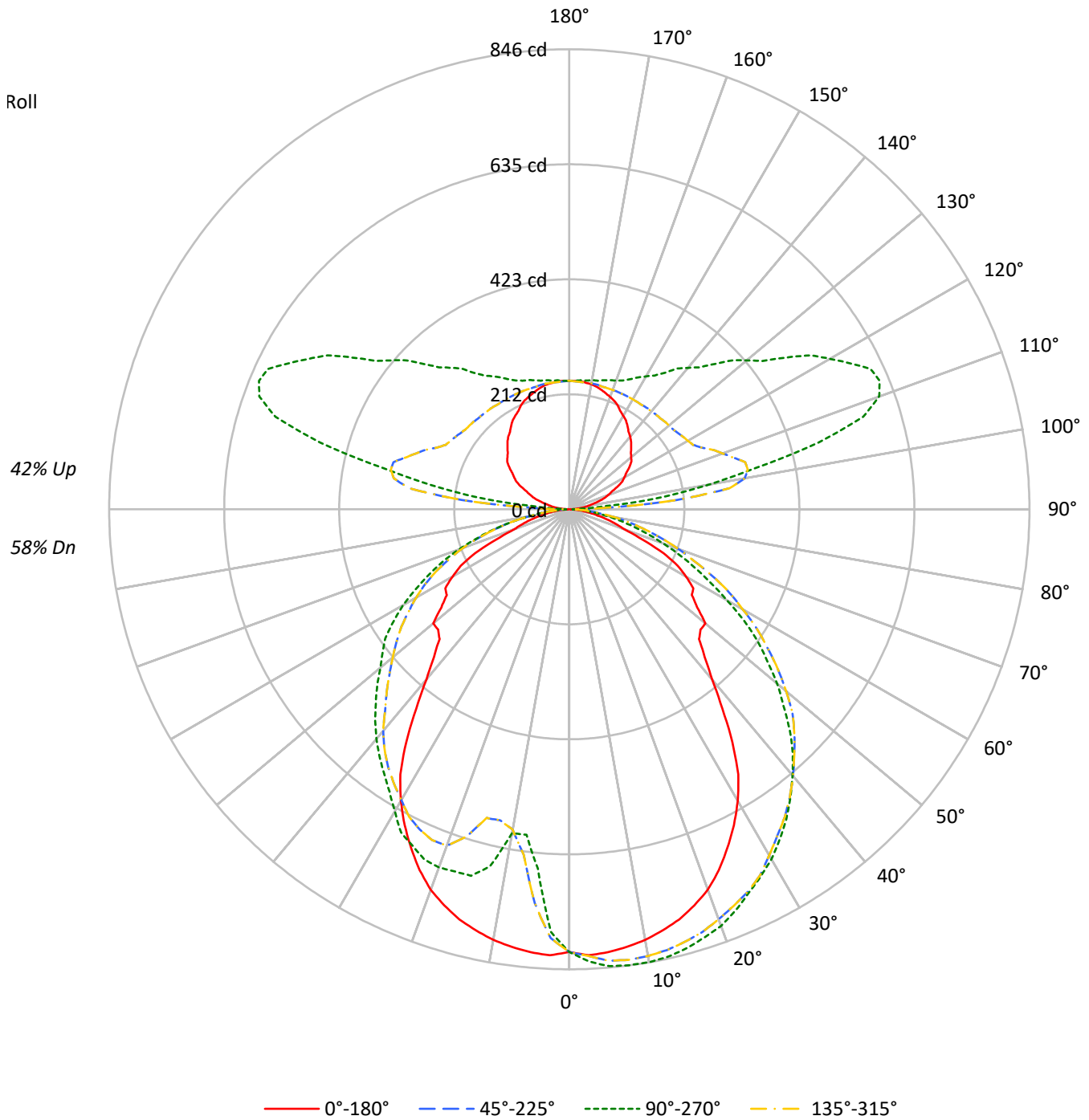
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3644.3 lumens
Efficiency: N/A
Efficacy: 100.1 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): 36.4
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	50	30	10	0
RCR																					
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	100	95	91	88	93	89	86	83	77	75	72	66	64	63	56	55	54	49			49
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	49	47	45	41			41
3	83	73	66	60	77	68	62	57	60	55	50	51	48	44	44	41	39	35			35
4	76	65	57	51	70	61	54	48	53	47	43	46	41	38	39	36	33	30			30
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29	26			26
6	64	52	44	38	60	49	41	36	43	37	32	37	32	29	32	28	25	23			23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	25	29	25	23	20			20
8	55	42	35	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18			18
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18	16			16
10	48	36	28	23	45	34	27	22	30	24	20	26	22	18	23	19	17	15			15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7553	7553	7553	7553
5°	7601	7625	7601	5995
10°	7542	7511	7542	5369
15°	7452	7348	7452	6136
20°	7287	7155	7287	6149
25°	6960	6874	6960	6018
30°	6540	6640	6540	5732
35°	5821	6345	5821	5417
40°	4843	5998	4843	5180
45°	4318	5591	4318	4907
50°	4578	5105	4578	4633
55°	4296	4583	4296	4475
60°	4410	3892	4410	4098
65°	3980	3217	3980	3597
70°	2737	2563	2737	3015
75°	2374	1895	2374	2270
80°	1872	1253	1872	1365
85°	1019	664	1019	565

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 6631 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	2.0
10°-20°	208.6	5.7
20°-30°	322.5	8.8
30°-40°	385.0	10.6
40°-50°	387.3	10.6
50°-60°	337.0	9.2
60°-70°	238.9	6.6
70°-80°	126.4	3.5
80°-90°	32.4	0.9
90°-100°	115.3	3.2
100°-110°	303.0	8.3
110°-120°	314.2	8.6
120°-130°	252.0	6.9
130°-140°	197.8	5.4
140°-150°	151.8	4.2
150°-160°	109.3	3.0
160°-170°	66.9	1.8
170°-180°	22.6	0.6
0°-30°	604.6	16.6
0°-40°	989.6	27.2
0°-60°	1713.8	47.0
0°-90°	2111.4	57.9
90°-120°	732.5	20.1
90°-150°	1334.1	36.6
90°-180°	1533.0	42.1
0°-180°	3644.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	814	814	814	814	814	
5°	818	843	818	663	818	78
15°	781	836	781	698	781	220
25°	688	779	688	682	688	316
35°	523	695	523	594	523	324
45°	337	573	337	503	337	270
55°	275	423	275	413	275	253
65°	191	255	191	285	191	182
75°	72	121	72	145	72	76
85°	12	31	12	26	12	17
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°	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0
2.5°	820.9	820.9	825.6	827.1	827.1	824.8	822.5	824.8	831.8	834.1	833.3
5°	817.8	824.1	832.5	834.1	835.6	834.8	833.3	834.8	842.5	844.1	844.8
7.5°	811.7	823.3	834.1	836.4	838.7	836.4	835.6	837.1	844.8	846.4	846.4
10°	804.0	820.1	832.5	834.1	836.4	834.1	834.1	837.1	844.8	846.4	847.2
12.5°	793.2	815.5	827.1	828.7	831.8	831.0	830.2	833.3	841.0	842.5	842.5
15°	780.9	807.0	817.8	819.4	824.8	823.3	823.3	826.4	834.8	837.1	836.4
17.5°	763.9	796.3	808.6	810.9	814.7	814.0	814.7	817.8	825.6	827.1	827.9
20°	744.7	781.6	796.3	798.6	802.4	802.4	802.4	806.3	814.0	817.0	817.0
22.5°	718.5	766.2	781.6	783.2	787.8	787.8	789.3	794.7	801.6	802.4	802.4
25°	687.7	749.3	762.4	767.0	771.6	773.9	776.2	779.3	781.6	780.9	781.6
27.5°	655.3	727.7	744.7	747.7	753.9	756.2	759.3	760.1	760.8	763.1	761.6
30°	619.2	697.7	723.1	726.2	736.2	737.7	734.7	736.2	740.0	741.6	743.1
32.5°	578.3	653.0	700.8	707.7	716.9	712.3	711.6	713.9	720.0	720.0	721.6
35°	522.9	618.4	680.0	686.1	693.1	687.7	690.8	691.5	695.4	697.7	696.9
37.5°	462.1	588.4	658.4	663.0	668.4	661.5	666.1	668.4	671.5	670.0	670.0
40°	408.2	541.4	633.0	636.1	640.7	635.3	639.9	641.5	643.0	641.5	640.7
42.5°	368.1	489.8	606.1	609.9	606.8	610.7	612.2	615.3	613.0	609.9	609.9
45°	337.3	475.9	576.8	581.4	576.8	583.0	585.3	585.3	578.3	576.8	576.0
47.5°	327.3	448.2	547.5	547.5	545.2	552.9	556.8	551.4	544.5	542.2	542.2
50°	326.6	417.4	507.5	504.4	515.2	524.4	520.6	515.2	509.8	501.3	501.3
52.5°	296.5	379.7	455.9	467.5	484.4	489.8	483.6	478.2	469.0	465.2	462.1
55°	275.0	340.4	408.9	432.0	449.8	456.7	445.1	439.7	425.9	423.6	422.0
57.5°	270.3	283.4	365.8	395.1	416.6	415.9	408.9	398.9	387.4	385.1	384.3
60°	247.9	204.8	319.6	354.3	376.6	374.3	368.1	358.9	348.1	346.6	345.0
62.5°	224.8	148.6	267.2	306.5	338.1	337.3	331.9	318.1	310.4	306.5	303.5
65°	191.0	124.7	190.2	254.9	300.4	301.9	290.4	280.4	271.8	267.2	266.4
67.5°	145.5	101.6	128.6	212.5	264.1	262.6	247.9	243.3	232.5	230.2	225.6
70°	107.8	67.8	89.3	172.5	228.7	224.8	213.3	207.9	197.9	192.5	189.4
72.5°	89.3	54.7	65.4	134.0	192.5	187.9	177.9	171.7	163.2	158.6	155.5
75°	72.4	57.8	50.1	99.3	156.3	153.2	144.0	137.8	130.9	124.7	125.5
77.5°	53.1	53.9	40.0	73.2	124.0	119.4	114.0	106.3	103.2	97.0	97.0
80°	40.0	42.4	30.0	50.1	89.3	89.3	84.7	79.3	73.9	70.8	70.8
82.5°	27.0	27.0	22.3	31.6	60.8	58.5	55.4	53.9	50.8	49.3	49.3
85°	12.3	15.4	13.9	19.2	33.1	34.6	34.6	33.1	32.3	30.8	31.6
87.5°	3.8	6.9	8.5	10.8	16.9	17.7	18.5	18.5	18.5	19.2	19.2
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°	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0
2.5°	834.8	832.5	834.8	833.3	834.1	831.8	824.8	822.5	824.8	827.1	827.1
5°	844.8	843.3	844.8	844.8	844.1	842.5	834.8	833.3	834.8	835.6	834.1
7.5°	847.9	845.6	847.9	846.4	846.4	844.8	837.1	835.6	836.4	838.7	836.4
10°	847.9	845.6	847.9	847.2	846.4	844.8	837.1	834.1	834.1	836.4	834.1
12.5°	844.1	842.5	844.1	842.5	842.5	841.0	833.3	830.2	831.0	831.8	828.7
15°	837.9	835.6	837.9	836.4	837.1	834.8	826.4	823.3	823.3	824.8	819.4
17.5°	828.7	825.6	828.7	827.9	827.1	825.6	817.8	814.7	814.0	814.7	810.9
20°	817.8	815.5	817.8	817.0	817.0	814.0	806.3	802.4	802.4	802.4	798.6
22.5°	800.9	798.6	800.9	802.4	802.4	801.6	794.7	789.3	787.8	787.8	783.2
25°	781.6	779.3	781.6	781.6	780.9	781.6	779.3	776.2	773.9	771.6	767.0
27.5°	763.1	761.6	763.1	761.6	763.1	760.8	760.1	759.3	756.2	753.9	747.7
30°	744.7	743.1	744.7	743.1	741.6	740.0	736.2	734.7	737.7	736.2	726.2
32.5°	721.6	720.0	721.6	721.6	720.0	720.0	713.9	711.6	712.3	716.9	707.7
35°	697.7	695.4	697.7	696.9	697.7	695.4	691.5	690.8	687.7	693.1	686.1
37.5°	670.0	667.7	670.0	670.0	670.0	671.5	668.4	666.1	661.5	668.4	663.0
40°	641.5	638.4	641.5	640.7	641.5	643.0	641.5	639.9	635.3	640.7	636.1
42.5°	609.1	608.4	609.1	609.9	609.9	613.0	615.3	612.2	610.7	606.8	609.9
45°	574.5	573.0	574.5	576.0	576.8	578.3	585.3	585.3	583.0	576.8	581.4
47.5°	537.5	533.7	537.5	542.2	542.2	544.5	551.4	556.8	552.9	545.2	547.5
50°	498.3	499.0	498.3	501.3	501.3	509.8	515.2	520.6	524.4	515.2	504.4
52.5°	459.8	459.0	459.8	462.1	465.2	469.0	478.2	483.6	489.8	484.4	467.5
55°	421.3	422.8	421.3	422.0	423.6	425.9	439.7	445.1	456.7	449.8	432.0
57.5°	382.8	380.5	382.8	384.3	385.1	387.4	398.9	408.9	415.9	416.6	395.1
60°	338.1	335.0	338.1	345.0	346.6	348.1	358.9	368.1	374.3	376.6	354.3
62.5°	298.8	293.4	298.8	303.5	306.5	310.4	318.1	331.9	337.3	338.1	306.5
65°	257.2	254.9	257.2	266.4	267.2	271.8	280.4	290.4	301.9	300.4	254.9
67.5°	219.4	219.4	219.4	225.6	230.2	232.5	243.3	247.9	262.6	264.1	212.5
70°	184.8	184.0	184.8	189.4	192.5	197.9	207.9	213.3	224.8	228.7	172.5
72.5°	151.7	150.9	151.7	155.5	158.6	163.2	171.7	177.9	187.9	192.5	134.0
75°	122.4	120.9	122.4	125.5	124.7	130.9	137.8	144.0	153.2	156.3	99.3
77.5°	93.9	93.9	93.9	97.0	97.0	103.2	106.3	114.0	119.4	124.0	73.2
80°	70.1	69.3	70.1	70.8	70.8	73.9	79.3	84.7	89.3	89.3	50.1
82.5°	49.3	47.7	49.3	49.3	49.3	50.8	53.9	55.4	58.5	60.8	31.6
85°	30.8	30.8	30.8	31.6	30.8	32.3	33.1	34.6	34.6	33.1	19.2
87.5°	20.0	19.2	20.0	19.2	19.2	18.5	18.5	18.5	17.7	16.9	10.8
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: P934322

CATALOG NUMBER: SQ4-FA-050U-075D-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: P934322

CATALOG NUMBER: SQ4-FA-050U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0
2.5°	825.6	820.9	820.9	813.2	810.1	807.8	804.0	792.4	789.3	786.2	790.9
5°	832.5	824.1	817.8	804.0	792.4	787.8	773.2	745.4	727.0	713.1	705.4
7.5°	834.1	823.3	811.7	790.1	762.4	750.1	705.4	654.6	640.7	628.4	620.7
10°	832.5	820.1	804.0	771.6	706.2	684.6	639.9	606.8	598.4	596.1	598.4
12.5°	827.1	815.5	793.2	739.3	647.6	633.0	606.8	587.6	586.0	589.9	610.7
15°	817.8	807.0	780.9	696.2	615.3	604.5	586.0	579.1	587.6	614.5	676.9
17.5°	808.6	796.3	763.9	653.8	590.7	583.0	569.9	583.7	631.5	667.7	688.5
20°	796.3	781.6	744.7	623.0	573.0	566.0	559.9	622.2	658.4	671.5	683.1
22.5°	781.6	766.2	718.5	601.4	554.5	549.1	552.9	643.8	658.4	667.7	677.7
25°	762.4	749.3	687.7	584.5	539.8	533.7	548.3	641.5	650.0	652.3	672.3
27.5°	744.7	727.7	655.3	569.1	522.1	519.8	552.2	631.5	637.6	639.9	661.5
30°	723.1	697.7	619.2	552.9	503.7	502.9	552.9	619.2	617.6	623.8	645.3
32.5°	700.8	653.0	578.3	532.9	485.9	485.2	547.5	600.7	599.1	607.6	623.8
35°	680.0	618.4	522.9	509.8	463.6	464.4	534.5	579.1	579.9	587.6	597.6
37.5°	658.4	588.4	462.1	484.4	442.1	442.1	516.7	559.1	557.6	559.9	573.7
40°	633.0	541.4	408.2	451.3	422.0	419.7	495.2	537.5	532.1	531.4	550.6
42.5°	606.1	489.8	368.1	407.4	398.9	395.9	469.0	511.4	501.3	503.7	528.3
45°	576.8	475.9	337.3	344.3	375.1	372.8	440.5	481.3	474.4	480.6	506.0
47.5°	547.5	448.2	327.3	285.7	349.7	348.9	408.9	452.1	448.2	454.4	481.3
50°	507.5	417.4	326.6	244.9	321.2	324.2	371.2	423.6	423.6	429.0	457.5
52.5°	455.9	379.7	296.5	221.8	288.1	297.3	338.1	398.9	400.5	405.9	431.3
55°	408.9	340.4	275.0	204.0	248.7	268.7	305.8	373.5	376.6	382.0	405.1
57.5°	365.8	283.4	270.3	183.3	212.5	231.8	277.3	348.9	350.4	355.0	377.4
60°	319.6	204.8	247.9	160.9	181.0	195.6	251.0	319.6	325.0	328.1	347.3
62.5°	267.2	148.6	224.8	145.5	165.6	168.6	229.5	291.9	298.8	301.1	312.7
65°	190.2	124.7	191.0	132.4	149.4	150.2	206.4	263.3	269.5	273.4	281.9
67.5°	128.6	101.6	145.5	120.1	137.1	137.8	184.0	230.2	238.7	241.8	247.2
70°	89.3	67.8	107.8	107.0	123.2	124.7	160.2	200.2	207.9	210.2	213.3
72.5°	65.4	54.7	89.3	96.2	108.6	110.1	135.5	166.3	174.0	176.3	177.9
75°	50.1	57.8	72.4	83.9	92.4	93.2	110.9	135.5	140.9	142.5	143.2
77.5°	40.0	53.9	53.1	67.8	75.5	73.9	87.0	104.7	109.3	109.3	109.3
80°	30.0	42.4	40.0	48.5	55.4	53.9	62.4	74.7	76.2	77.8	77.0
82.5°	22.3	27.0	27.0	30.8	37.0	35.4	41.6	48.5	48.5	48.5	50.1
85°	13.9	15.4	12.3	16.2	20.8	20.0	23.1	26.2	27.0	27.0	25.4
87.5°	8.5	6.9	3.8	6.2	9.2	9.2	10.8	11.6	10.8	10.8	10.8
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: P934322

CATALOG NUMBER: SQ4-FA-050U-075D-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: P934322
 CATALOG NUMBER: SQ4-FA-050U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0
2.5°	785.5	783.2	786.2	777.8	786.2	783.2	785.5	790.9	786.2	789.3	792.4
5°	689.2	685.4	673.1	663.0	673.1	685.4	689.2	705.4	713.1	727.0	745.4
7.5°	616.1	613.0	609.9	603.8	609.9	613.0	616.1	620.7	628.4	640.7	654.6
10°	599.9	600.7	605.3	604.5	605.3	600.7	599.9	598.4	596.1	598.4	606.8
12.5°	641.5	648.4	673.8	672.3	673.8	648.4	641.5	610.7	589.9	586.0	587.6
15°	689.2	691.5	696.9	697.7	696.9	691.5	689.2	676.9	614.5	587.6	579.1
17.5°	693.8	694.6	698.5	698.5	698.5	694.6	693.8	688.5	667.7	631.5	583.7
20°	690.0	691.5	699.2	700.8	699.2	691.5	690.0	683.1	671.5	658.4	622.2
22.5°	688.5	691.5	697.7	696.9	697.7	691.5	688.5	677.7	667.7	658.4	643.8
25°	680.8	680.8	681.5	682.3	681.5	680.8	680.8	672.3	652.3	650.0	641.5
27.5°	664.6	666.1	670.7	670.0	670.7	666.1	664.6	661.5	639.9	637.6	631.5
30°	650.0	648.4	644.6	641.5	644.6	648.4	650.0	645.3	623.8	617.6	619.2
32.5°	625.3	621.5	617.6	615.3	617.6	621.5	625.3	623.8	607.6	599.1	600.7
35°	596.1	596.8	596.1	593.7	596.1	596.8	596.1	597.6	587.6	579.9	579.1
37.5°	575.3	576.8	576.0	573.0	576.0	576.8	575.3	573.7	559.9	557.6	559.1
40°	553.7	554.5	553.7	551.4	553.7	554.5	553.7	550.6	531.4	532.1	537.5
42.5°	532.9	532.1	529.8	528.3	529.8	532.1	532.9	528.3	503.7	501.3	511.4
45°	509.0	509.8	505.2	502.9	505.2	509.8	509.0	506.0	480.6	474.4	481.3
47.5°	485.2	485.2	481.3	479.0	481.3	485.2	485.2	481.3	454.4	448.2	452.1
50°	459.8	459.0	453.6	452.8	453.6	459.0	459.8	457.5	429.0	423.6	423.6
52.5°	430.5	430.5	431.3	432.8	431.3	430.5	430.5	431.3	405.9	400.5	398.9
55°	405.1	405.9	411.3	412.8	411.3	405.9	405.1	405.1	382.0	376.6	373.5
57.5°	378.9	378.9	382.8	382.8	382.8	378.9	378.9	377.4	355.0	350.4	348.9
60°	348.9	350.4	353.5	352.7	353.5	350.4	348.9	347.3	328.1	325.0	319.6
62.5°	317.3	318.9	319.6	318.1	319.6	318.9	317.3	312.7	301.1	298.8	291.9
65°	284.2	285.7	286.5	285.0	286.5	285.7	284.2	281.9	273.4	269.5	263.3
67.5°	250.2	249.5	248.7	251.8	248.7	249.5	250.2	247.2	241.8	238.7	230.2
70°	215.6	215.6	214.8	216.4	214.8	215.6	215.6	213.3	210.2	207.9	200.2
72.5°	178.6	177.9	181.0	178.6	181.0	177.9	178.6	177.9	176.3	174.0	166.3
75°	142.5	144.0	142.5	144.8	142.5	144.0	142.5	143.2	142.5	140.9	135.5
77.5°	108.6	110.1	108.6	108.6	108.6	110.1	108.6	109.3	109.3	109.3	104.7
80°	77.0	76.2	76.2	75.5	76.2	76.2	77.0	77.0	77.8	76.2	74.7
82.5°	49.3	48.5	48.5	50.1	48.5	48.5	49.3	50.1	48.5	48.5	48.5
85°	27.0	27.7	26.2	26.2	26.2	27.7	27.0	25.4	27.0	27.0	26.2
87.5°	10.0	9.2	9.2	9.2	9.2	9.2	10.0	10.8	10.8	10.8	11.6
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: P934322

CATALOG NUMBER: SQ4-FA-050U-075D-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



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	814.0	814.0	814.0	814.0	814.0
2.5°	804.0	807.8	810.1	813.2	820.9
5°	773.2	787.8	792.4	804.0	817.8
7.5°	705.4	750.1	762.4	790.1	811.7
10°	639.9	684.6	706.2	771.6	804.0
12.5°	606.8	633.0	647.6	739.3	793.2
15°	586.0	604.5	615.3	696.2	780.9
17.5°	569.9	583.0	590.7	653.8	763.9
20°	559.9	566.0	573.0	623.0	744.7
22.5°	552.9	549.1	554.5	601.4	718.5
25°	548.3	533.7	539.8	584.5	687.7
27.5°	552.2	519.8	522.1	569.1	655.3
30°	552.9	502.9	503.7	552.9	619.2
32.5°	547.5	485.2	485.9	532.9	578.3
35°	534.5	464.4	463.6	509.8	522.9
37.5°	516.7	442.1	442.1	484.4	462.1
40°	495.2	419.7	422.0	451.3	408.2
42.5°	469.0	395.9	398.9	407.4	368.1
45°	440.5	372.8	375.1	344.3	337.3
47.5°	408.9	348.9	349.7	285.7	327.3
50°	371.2	324.2	321.2	244.9	326.6
52.5°	338.1	297.3	288.1	221.8	296.5
55°	305.8	268.7	248.7	204.0	275.0
57.5°	277.3	231.8	212.5	183.3	270.3
60°	251.0	195.6	181.0	160.9	247.9
62.5°	229.5	168.6	165.6	145.5	224.8
65°	206.4	150.2	149.4	132.4	191.0
67.5°	184.0	137.8	137.1	120.1	145.5
70°	160.2	124.7	123.2	107.0	107.8
72.5°	135.5	110.1	108.6	96.2	89.3
75°	110.9	93.2	92.4	83.9	72.4
77.5°	87.0	73.9	75.5	67.8	53.1
80°	62.4	53.9	55.4	48.5	40.0
82.5°	41.6	35.4	37.0	30.8	27.0
85°	23.1	20.0	20.8	16.2	12.3
87.5°	10.8	9.2	9.2	6.2	3.8
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: P934322

CATALOG NUMBER: SQ4-FA-050U-075D-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



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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	12.52	13.46	13.41	14.36	15.52	15.32	16.26	16.20	17.16	18.32
	3H	13.00	13.84	13.90	14.76	15.94	16.66	17.50	17.56	18.42	19.59
	4H	13.20	13.99	14.11	14.91	16.10	17.10	17.89	18.01	18.82	20.00
	6H	13.32	14.05	14.25	14.98	16.18	17.38	18.11	18.31	19.04	20.24
	8H	13.32	14.02	14.26	14.97	16.17	17.45	18.15	18.39	19.10	20.30
	12H	13.30	13.96	14.24	14.90	16.13	17.49	18.15	18.43	19.09	20.32
4H	2H	13.56	14.35	14.47	15.27	16.46	15.74	16.53	16.66	17.45	18.64
	3H	14.59	15.25	15.52	16.20	17.41	17.24	17.90	18.17	18.86	20.06
	4H	14.87	15.47	15.81	16.42	17.65	17.77	18.37	18.71	19.32	20.54
	6H	15.00	15.52	15.95	16.49	17.72	18.13	18.65	19.08	19.62	20.85
	8H	15.01	15.49	15.96	16.46	17.70	18.23	18.72	19.19	19.68	20.92
	12H	14.98	15.41	15.95	16.40	17.64	18.29	18.72	19.26	19.71	20.95
8H	4H	15.32	15.81	16.28	16.77	18.02	17.90	18.38	18.85	19.35	20.59
	6H	15.59	15.99	16.57	17.00	18.24	18.33	18.73	19.31	19.74	20.98
	8H	15.63	15.99	16.62	16.98	18.24	18.48	18.83	19.47	19.83	21.09
	12H	15.62	15.93	16.61	16.92	18.23	18.57	18.89	19.57	19.87	21.18
12H	4H	15.33	15.77	16.31	16.75	18.00	17.87	18.30	18.84	19.29	20.53
	6H	15.65	16.00	16.64	17.00	18.26	18.33	18.68	19.32	19.68	20.94
	8H	15.72	16.03	16.71	17.02	18.32	18.49	18.80	19.48	19.79	21.09