

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: P934674

Luminaire Tested: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934674
REPORT IS A COMBINATION OF REPORTS P933706 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

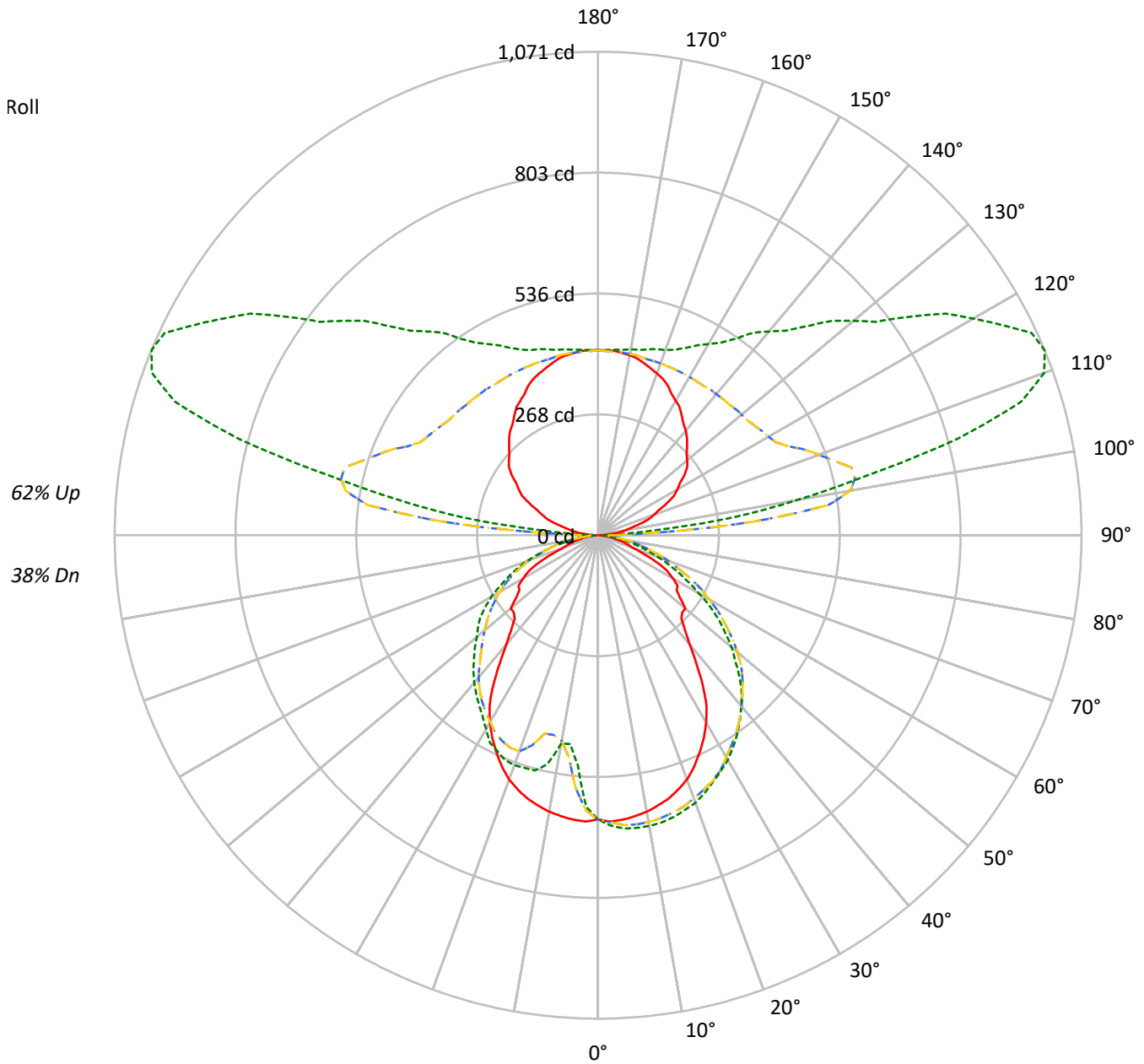
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4292.6 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.4
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

TEST NUMBER: P934674
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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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				38
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32				32
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27				27
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27	23				23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	25	24	20				20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17				17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15				15
7	56	44	36	31	51	40	34	29	33	28	24	27	23	20	21	18	16	13				13
8	52	40	32	27	47	37	30	25	30	25	22	24	21	18	19	16	14	12				12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	11				11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	14	16	14	12	10				10

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5841	5841	5841	5841
5°	5878	5896	5878	4636
10°	5833	5808	5833	4152
15°	5762	5683	5762	4744
20°	5636	5534	5636	4754
25°	5382	5316	5382	4654
30°	5057	5135	5057	4433
35°	4502	4907	4502	4190
40°	3744	4638	3744	4006
45°	3339	4324	3339	3795
50°	3540	3948	3540	3582
55°	3321	3545	3321	3460
60°	3412	3009	3412	3170
65°	3078	2488	3078	2781
70°	2117	1982	2117	2332
75°	1833	1466	1833	1756
80°	1451	969	1451	1054
85°	787	513	787	435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5128 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	1.3
10°-20°	161.3	3.8
20°-30°	249.4	5.8
30°-40°	297.7	6.9
40°-50°	299.5	7.0
50°-60°	260.6	6.1
60°-70°	184.7	4.3
70°-80°	97.7	2.3
80°-90°	25.9	0.6
90°-100°	199.9	4.7
100°-110°	525.6	12.2
110°-120°	545.0	12.7
120°-130°	437.2	10.2
130°-140°	343.0	8.0
140°-150°	263.3	6.1
150°-160°	189.6	4.4
160°-170°	116.0	2.7
170°-180°	39.2	0.9
0°-30°	467.5	10.9
0°-40°	765.3	17.8
0°-60°	1325.3	30.9
0°-90°	1633.7	38.1
90°-120°	1270.6	29.6
90°-150°	2314.1	53.9
90°-180°	2659.0	61.9
0°-180°	4292.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	630	630	630	630	630	
5°	632	652	632	513	632	60
15°	604	646	604	540	604	170
25°	532	603	532	528	532	244
35°	404	538	404	459	404	250
45°	261	443	261	389	261	209
55°	213	327	213	319	213	195
65°	148	197	148	220	148	141
75°	56	94	56	112	56	59
85°	10	24	10	20	10	13
90°	3	10	3	10	3	3
95°	26	121	26	121	26	29
105°	95	823	95	823	95	100
115°	168	1060	168	1060	168	166
125°	234	844	234	844	234	208
135°	279	655	279	655	279	216
145°	323	531	323	531	323	203
155°	366	458	366	458	366	168
165°	394	426	394	426	394	111
175°	410	413	410	413	410	39
180°	410	410	410	410	410	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5
2.5°	634.8	634.8	638.4	639.6	639.6	637.9	636.1	637.9	643.2	645.0	644.3
5°	632.4	637.2	643.8	645.0	646.2	645.6	644.3	645.6	651.5	652.7	653.3
7.5°	627.7	636.6	645.0	646.7	648.5	646.7	646.2	647.4	653.3	654.5	654.5
10°	621.8	634.2	643.8	645.0	646.7	645.0	645.0	647.4	653.3	654.5	655.1
12.5°	613.4	630.7	639.6	640.8	643.2	642.6	642.0	644.3	650.4	651.5	651.5
15°	603.8	624.1	632.4	633.7	637.9	636.6	636.6	639.0	645.6	647.4	646.7
17.5°	590.8	615.8	625.3	627.1	630.1	629.5	630.1	632.4	638.4	639.6	640.2
20°	575.9	604.5	615.8	617.6	620.5	620.5	620.5	623.6	629.5	631.9	631.9
22.5°	555.6	592.6	604.5	605.7	609.3	609.3	610.4	614.6	619.9	620.5	620.5
25°	531.8	579.4	589.5	593.2	596.7	598.5	600.3	602.7	604.5	603.8	604.5
27.5°	506.8	562.8	575.9	578.3	583.1	584.8	587.2	587.8	588.4	590.2	589.0
30°	478.8	539.5	559.2	561.6	569.3	570.5	568.1	569.3	572.3	573.5	574.7
32.5°	447.3	505.0	541.9	547.3	554.5	550.9	550.3	552.1	556.9	556.9	558.0
35°	404.4	478.2	525.9	530.7	536.0	531.8	534.2	534.8	537.8	539.5	538.9
37.5°	357.3	455.0	509.2	512.7	516.9	511.6	515.1	516.9	519.3	518.1	518.1
40°	315.6	418.7	489.6	492.0	495.5	491.3	494.9	496.1	497.3	496.1	495.5
42.5°	284.7	378.7	468.7	471.7	469.3	472.2	473.5	475.9	474.0	471.7	471.7
45°	260.8	368.1	446.0	449.6	446.0	450.8	452.6	452.6	447.3	446.0	445.4
47.5°	253.1	346.6	423.4	423.4	421.6	427.6	430.6	426.4	421.1	419.2	419.2
50°	252.5	322.8	392.5	390.1	398.4	405.5	402.6	398.4	394.3	387.7	387.7
52.5°	229.3	293.6	352.5	361.5	374.6	378.7	374.0	369.9	362.7	359.7	357.3
55°	212.6	263.2	316.2	334.1	347.8	353.2	344.2	340.0	329.4	327.6	326.3
57.5°	209.0	219.2	282.9	305.5	322.2	321.6	316.2	308.5	299.5	297.7	297.2
60°	191.8	158.4	247.1	273.9	291.2	289.4	284.7	277.5	269.2	268.0	266.8
62.5°	173.9	114.9	206.6	237.0	261.4	260.8	256.7	246.0	240.0	237.0	234.6
65°	147.7	96.4	147.1	197.1	232.3	233.5	224.5	216.8	210.2	206.6	206.0
67.5°	112.6	78.6	99.5	164.4	204.2	203.1	191.8	188.2	179.8	178.0	174.5
70°	83.4	52.4	69.1	133.4	176.9	173.9	165.0	160.8	153.1	148.9	146.5
72.5°	69.1	42.3	50.6	103.6	148.9	145.3	137.6	132.8	126.3	122.7	120.3
75°	55.9	44.7	38.7	76.8	120.9	118.5	111.4	106.6	101.2	96.4	97.1
77.5°	41.1	41.6	31.0	56.6	95.9	92.4	88.2	82.2	79.8	75.0	75.0
80°	31.0	32.8	23.3	38.7	69.1	69.1	65.5	61.4	57.2	54.8	54.8
82.5°	20.9	20.9	17.2	24.4	47.1	45.3	42.9	41.6	39.3	38.1	38.1
85°	9.5	11.9	10.7	14.9	25.6	26.8	26.8	25.6	25.0	23.8	24.4
87.5°	3.0	5.3	6.6	8.3	13.1	13.7	14.3	14.3	14.3	14.9	14.9
90°	2.8	5.0	7.2	7.7	12.2	18.0	21.0	18.6	13.9	10.5	10.5
92.5°	11.0	29.7	48.4	53.1	74.7	103.5	117.8	103.3	74.1	52.3	50.3
95°	26.5	60.7	95.0	103.5	183.8	290.8	344.4	307.2	233.1	177.5	171.2
97.5°	45.7	75.9	106.1	113.7	247.6	426.1	515.3	491.9	445.1	409.9	397.9
100°	60.6	87.9	115.4	122.2	270.8	468.9	567.9	569.6	573.0	575.6	561.3
102.5°	73.3	98.8	124.3	130.7	281.4	482.4	582.8	612.6	672.3	717.1	704.8
105°	94.7	116.3	138.0	143.4	289.3	483.9	581.1	648.1	781.9	882.2	875.7
107.5°	116.7	136.9	157.1	162.1	290.8	462.3	548.1	641.4	828.1	968.1	969.7
110°	131.6	149.8	168.1	172.6	288.6	443.2	520.5	624.9	833.6	990.1	997.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	146.2	163.6	180.9	185.2	288.7	426.6	495.5	602.3	815.9	976.1	986.7
115°	168.2	184.2	200.2	204.2	291.4	407.4	465.5	568.4	774.2	928.5	943.1
117.5°	189.9	204.5	219.1	222.7	296.8	395.4	444.8	537.7	723.4	862.7	878.9
120°	202.6	216.3	230.0	233.5	301.1	391.4	436.5	521.4	691.1	818.4	834.1
122.5°	215.0	228.8	242.6	246.1	307.4	389.3	430.2	506.6	659.4	774.1	789.6
125°	234.0	246.6	259.2	262.3	316.0	387.6	423.4	488.3	618.1	715.5	729.8
127.5°	249.4	262.1	274.8	278.0	324.6	386.6	417.6	473.4	584.8	668.4	680.5
130°	257.7	271.4	285.0	288.5	330.8	387.2	415.4	465.0	564.2	638.6	649.7
132.5°	266.2	279.9	293.6	297.0	335.8	387.6	413.5	457.9	546.7	613.3	623.3
135°	278.8	291.3	303.8	306.9	341.3	387.3	410.2	447.4	521.8	577.6	586.2
137.5°	291.8	304.1	316.5	319.6	349.6	389.7	409.6	441.1	503.9	551.1	558.1
140°	302.5	313.9	325.3	328.1	354.7	390.0	407.7	434.9	489.1	529.9	536.4
142.5°	310.8	321.3	331.8	334.4	358.8	391.4	407.7	431.6	479.3	515.0	520.7
145°	323.4	332.6	341.8	344.1	364.3	391.4	404.9	424.5	463.4	492.8	497.0
147.5°	336.1	345.0	354.0	356.2	372.4	394.1	404.9	420.3	451.0	474.0	477.6
150°	344.4	352.4	360.5	362.6	376.7	395.5	404.9	417.9	443.8	463.3	466.1
152.5°	352.9	359.0	365.1	366.7	379.4	396.4	404.9	416.0	438.1	454.7	456.9
155°	365.6	370.1	374.6	375.7	385.5	398.4	404.9	413.7	431.3	444.5	446.0
157.5°	374.9	379.4	383.8	384.9	391.5	400.5	404.9	411.8	425.4	435.7	436.7
160°	381.2	384.7	388.1	388.9	394.3	401.4	404.9	410.8	422.6	431.4	431.9
162.5°	387.6	390.2	392.8	393.4	397.2	402.4	404.9	409.9	419.8	427.2	427.7
165°	394.4	396.8	399.1	399.7	401.5	403.8	404.9	408.5	415.6	420.9	421.5
167.5°	400.8	401.8	403.0	403.2	404.8	406.7	407.7	410.0	414.7	418.2	418.4
170°	404.9	406.0	407.1	407.4	407.5	407.6	407.7	410.0	414.7	418.2	418.2
172.5°	407.1	407.4	407.6	407.7	407.7	407.7	407.7	409.5	413.2	415.9	415.8
175°	410.2	410.2	410.2	410.2	409.4	408.2	407.7	408.8	411.1	412.9	412.9
177.5°	410.2	410.2	410.2	410.2	409.5	408.7	408.2	409.1	411.0	412.4	412.1
180°	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5
2.5°	645.6	643.8	645.6	644.3	645.0	643.2	637.9	636.1	637.9	639.6	639.6
5°	653.3	652.1	653.3	653.3	652.7	651.5	645.6	644.3	645.6	646.2	645.0
7.5°	655.7	653.9	655.7	654.5	654.5	653.3	647.4	646.2	646.7	648.5	646.7
10°	655.7	653.9	655.7	655.1	654.5	653.3	647.4	645.0	645.0	646.7	645.0
12.5°	652.7	651.5	652.7	651.5	651.5	650.4	644.3	642.0	642.6	643.2	640.8
15°	648.0	646.2	648.0	646.7	647.4	645.6	639.0	636.6	636.6	637.9	633.7
17.5°	640.8	638.4	640.8	640.2	639.6	638.4	632.4	630.1	629.5	630.1	627.1
20°	632.4	630.7	632.4	631.9	631.9	629.5	623.6	620.5	620.5	620.5	617.6
22.5°	619.4	617.6	619.4	620.5	620.5	619.9	614.6	610.4	609.3	609.3	605.7
25°	604.5	602.7	604.5	604.5	603.8	604.5	602.7	600.3	598.5	596.7	593.2
27.5°	590.2	589.0	590.2	589.0	590.2	588.4	587.8	587.2	584.8	583.1	578.3
30°	575.9	574.7	575.9	574.7	573.5	572.3	569.3	568.1	570.5	569.3	561.6
32.5°	558.0	556.9	558.0	558.0	556.9	556.9	552.1	550.3	550.9	554.5	547.3
35°	539.5	537.8	539.5	538.9	539.5	537.8	534.8	534.2	531.8	536.0	530.7
37.5°	518.1	516.4	518.1	518.1	518.1	519.3	516.9	515.1	511.6	516.9	512.7
40°	496.1	493.7	496.1	495.5	496.1	497.3	496.1	494.9	491.3	495.5	492.0
42.5°	471.1	470.5	471.1	471.7	471.7	474.0	475.9	473.5	472.2	469.3	471.7
45°	444.3	443.1	444.3	445.4	446.0	447.3	452.6	452.6	450.8	446.0	449.6
47.5°	415.7	412.7	415.7	419.2	419.2	421.1	426.4	430.6	427.6	421.6	423.4
50°	385.3	385.9	385.3	387.7	387.7	394.3	398.4	402.6	405.5	398.4	390.1
52.5°	355.6	354.9	355.6	357.3	359.7	362.7	369.9	374.0	378.7	374.6	361.5
55°	325.7	327.0	325.7	326.3	327.6	329.4	340.0	344.2	353.2	347.8	334.1
57.5°	296.0	294.2	296.0	297.2	297.7	299.5	308.5	316.2	321.6	322.2	305.5
60°	261.4	259.0	261.4	266.8	268.0	269.2	277.5	284.7	289.4	291.2	273.9
62.5°	231.1	226.9	231.1	234.6	237.0	240.0	246.0	256.7	260.8	261.4	237.0
65°	198.9	197.1	198.9	206.0	206.6	210.2	216.8	224.5	233.5	232.3	197.1
67.5°	169.7	169.7	169.7	174.5	178.0	179.8	188.2	191.8	203.1	204.2	164.4
70°	143.0	142.3	143.0	146.5	148.9	153.1	160.8	165.0	173.9	176.9	133.4
72.5°	117.3	116.7	117.3	120.3	122.7	126.3	132.8	137.6	145.3	148.9	103.6
75°	94.7	93.5	94.7	97.1	96.4	101.2	106.6	111.4	118.5	120.9	76.8
77.5°	72.6	72.6	72.6	75.0	75.0	79.8	82.2	88.2	92.4	95.9	56.6
80°	54.2	53.6	54.2	54.8	54.8	57.2	61.4	65.5	69.1	69.1	38.7
82.5°	38.1	36.9	38.1	38.1	38.1	39.3	41.6	42.9	45.3	47.1	24.4
85°	23.8	23.8	23.8	24.4	23.8	25.0	25.6	26.8	26.8	25.6	14.9
87.5°	15.5	14.9	15.5	14.9	14.9	14.3	14.3	14.3	13.7	13.1	8.3
90°	10.5	10.5	10.5	10.5	10.5	13.9	18.6	21.0	18.0	12.2	7.7
92.5°	41.9	33.6	41.9	50.3	52.3	74.1	103.3	117.8	103.5	74.7	53.1
95°	146.1	120.9	146.1	171.2	177.5	233.1	307.2	344.4	290.8	183.8	103.5
97.5°	350.0	302.0	350.0	397.9	409.9	445.1	491.9	515.3	426.1	247.6	113.7
100°	504.2	447.0	504.2	561.3	575.6	573.0	569.6	567.9	468.9	270.8	122.2
102.5°	655.9	606.9	655.9	704.8	717.1	672.3	612.6	582.8	482.4	281.4	130.7
105°	849.4	823.1	849.4	875.7	882.2	781.9	648.1	581.1	483.9	289.3	143.4
107.5°	976.1	982.5	976.1	969.7	968.1	828.1	641.4	548.1	462.3	290.8	162.1
110°	1024.4	1051.8	1024.4	997.0	990.1	833.6	624.9	520.5	443.2	288.6	172.6



TEST NUMBER: P934674

CATALOG NUMBER: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1028.7	1070.8	1028.7	986.7	976.1	815.9	602.3	495.5	426.6	288.7	185.2
115°	1001.5	1059.8	1001.5	943.1	928.5	774.2	568.4	465.5	407.4	291.4	204.2
117.5°	943.6	1008.3	943.6	878.9	862.7	723.4	537.7	444.8	395.4	296.8	222.7
120°	897.0	959.8	897.0	834.1	818.4	691.1	521.4	436.5	391.4	301.1	233.5
122.5°	851.6	913.7	851.6	789.6	774.1	659.4	506.6	430.2	389.3	307.4	246.1
125°	786.9	844.0	786.9	729.8	715.5	618.1	488.3	423.4	387.6	316.0	262.3
127.5°	728.6	776.8	728.6	680.5	668.4	584.8	473.4	417.6	386.6	324.6	278.0
130°	694.3	738.8	694.3	649.7	638.6	564.2	465.0	415.4	387.2	330.8	288.5
132.5°	663.2	703.0	663.2	623.3	613.3	546.7	457.9	413.5	387.6	335.8	297.0
135°	620.5	654.9	620.5	586.2	577.6	521.8	447.4	410.2	387.3	341.3	306.9
137.5°	586.3	614.4	586.3	558.1	551.1	503.9	441.1	409.6	389.7	349.6	319.6
140°	562.8	589.1	562.8	536.4	529.9	489.1	434.9	407.7	390.0	354.7	328.1
142.5°	543.3	565.9	543.3	520.7	515.0	479.3	431.6	407.7	391.4	358.8	334.4
145°	514.2	531.3	514.2	497.0	492.8	463.4	424.5	404.9	391.4	364.3	344.1
147.5°	491.8	506.0	491.8	477.6	474.0	451.0	420.3	404.9	394.1	372.4	356.2
150°	477.7	489.2	477.7	466.1	463.3	443.8	417.9	404.9	395.5	376.7	362.6
152.5°	465.6	474.3	465.6	456.9	454.7	438.1	416.0	404.9	396.4	379.4	366.7
155°	451.7	457.5	451.7	446.0	444.5	431.3	413.7	404.9	398.4	385.5	375.7
157.5°	440.8	444.8	440.8	436.7	435.7	425.4	411.8	404.9	400.5	391.5	384.9
160°	434.2	436.5	434.2	431.9	431.4	422.6	410.8	404.9	401.4	394.3	388.9
162.5°	430.0	432.2	430.0	427.7	427.2	419.8	409.9	404.9	402.4	397.2	393.4
165°	423.8	426.2	423.8	421.5	420.9	415.6	408.5	404.9	403.8	401.5	399.7
167.5°	419.4	420.4	419.4	418.4	418.2	414.7	410.0	407.7	406.7	404.8	403.2
170°	418.2	418.2	418.2	418.2	418.2	414.7	410.0	407.7	407.6	407.5	407.4
172.5°	414.9	414.0	414.9	415.8	415.9	413.2	409.5	407.7	407.7	407.7	407.7
175°	412.9	412.9	412.9	412.9	412.9	411.1	408.8	407.7	408.2	409.4	410.2
177.5°	411.1	410.2	411.1	412.1	412.4	411.0	409.1	408.2	408.7	409.5	410.2
180°	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2



TEST NUMBER: P934674

CATALOG NUMBER: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5
2.5°	638.4	634.8	634.8	628.9	626.5	624.7	621.8	612.8	610.4	608.0	611.7
5°	643.8	637.2	632.4	621.8	612.8	609.3	597.9	576.5	562.2	551.4	545.5
7.5°	645.0	636.6	627.7	611.0	589.5	580.0	545.5	506.2	495.5	486.0	480.0
10°	643.8	634.2	621.8	596.7	546.1	529.4	494.9	469.3	462.7	461.0	462.7
12.5°	639.6	630.7	613.4	571.7	500.8	489.6	469.3	454.4	453.2	456.2	472.2
15°	632.4	624.1	603.8	538.4	475.9	467.5	453.2	447.8	454.4	475.3	523.5
17.5°	625.3	615.8	590.8	505.6	456.8	450.8	440.7	451.5	488.3	516.4	532.4
20°	615.8	604.5	575.9	481.8	443.1	437.7	433.0	481.2	509.2	519.3	528.3
22.5°	604.5	592.6	555.6	465.1	428.8	424.6	427.6	497.9	509.2	516.4	524.1
25°	589.5	579.4	531.8	452.0	417.4	412.7	424.0	496.1	502.6	504.4	519.9
27.5°	575.9	562.8	506.8	440.1	403.8	402.0	427.0	488.3	493.1	494.9	511.6
30°	559.2	539.5	478.8	427.6	389.5	388.9	427.6	478.8	477.7	482.4	499.1
32.5°	541.9	505.0	447.3	412.1	375.8	375.2	423.4	464.5	463.4	469.8	482.4
35°	525.9	478.2	404.4	394.3	358.5	359.1	413.3	447.8	448.4	454.4	462.1
37.5°	509.2	455.0	357.3	374.6	341.9	341.9	399.6	432.4	431.2	433.0	443.6
40°	489.6	418.7	315.6	349.0	326.3	324.6	382.9	415.7	411.5	411.0	425.8
42.5°	468.7	378.7	284.7	315.1	308.5	306.1	362.7	395.4	387.7	389.5	408.6
45°	446.0	368.1	260.8	266.2	290.0	288.2	340.6	372.2	366.8	371.6	391.3
47.5°	423.4	346.6	253.1	220.9	270.4	269.8	316.2	349.6	346.6	351.4	372.2
50°	392.5	322.8	252.5	189.4	248.4	250.7	287.1	327.6	327.6	331.8	353.8
52.5°	352.5	293.6	229.3	171.5	222.7	229.9	261.4	308.5	309.6	313.8	333.5
55°	316.2	263.2	212.6	157.8	192.3	207.9	236.4	288.9	291.2	295.3	313.3
57.5°	282.9	219.2	209.0	141.7	164.4	179.3	214.4	269.8	270.9	274.6	291.8
60°	247.1	158.4	191.8	124.5	139.9	151.2	194.1	247.1	251.3	253.7	268.6
62.5°	206.6	114.9	173.9	112.6	128.0	130.4	177.5	225.7	231.1	232.8	241.8
65°	147.1	96.4	147.7	102.5	115.5	116.2	159.6	203.7	208.4	211.4	218.0
67.5°	99.5	78.6	112.6	92.9	106.0	106.6	142.3	178.0	184.6	187.0	191.2
70°	69.1	52.4	83.4	82.8	95.3	96.4	123.9	154.9	160.8	162.6	165.0
72.5°	50.6	42.3	69.1	74.4	84.0	85.2	104.8	128.7	134.6	136.4	137.6
75°	38.7	44.7	55.9	64.9	71.5	72.0	85.8	104.8	109.0	110.2	110.7
77.5°	31.0	41.6	41.1	52.4	58.3	57.2	67.3	81.0	84.5	84.5	84.5
80°	23.3	32.8	31.0	37.6	42.9	41.6	48.2	57.8	59.0	60.1	59.6
82.5°	17.2	20.9	20.9	23.8	28.6	27.4	32.1	37.6	37.6	37.6	38.7
85°	10.7	11.9	9.5	12.5	16.1	15.5	17.8	20.2	20.9	20.9	19.6
87.5°	6.6	5.3	3.0	4.8	7.1	7.1	8.3	9.0	8.3	8.3	8.3
90°	7.2	5.0	2.8	5.0	7.2	7.7	12.2	18.0	21.0	18.6	13.9
92.5°	48.4	29.7	11.0	29.7	48.4	53.1	74.7	103.5	117.8	103.3	74.1
95°	95.0	60.7	26.5	60.7	95.0	103.5	183.8	290.8	344.4	307.2	233.1
97.5°	106.1	75.9	45.7	75.9	106.1	113.7	247.6	426.1	515.3	491.9	445.1
100°	115.4	87.9	60.6	87.9	115.4	122.2	270.8	468.9	567.9	569.6	573.0
102.5°	124.3	98.8	73.3	98.8	124.3	130.7	281.4	482.4	582.8	612.6	672.3
105°	138.0	116.3	94.7	116.3	138.0	143.4	289.3	483.9	581.1	648.1	781.9
107.5°	157.1	136.9	116.7	136.9	157.1	162.1	290.8	462.3	548.1	641.4	828.1
110°	168.1	149.8	131.6	149.8	168.1	172.6	288.6	443.2	520.5	624.9	833.6



TEST NUMBER: P934674

CATALOG NUMBER: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	180.9	163.6	146.2	163.6	180.9	185.2	288.7	426.6	495.5	602.3	815.9
115°	200.2	184.2	168.2	184.2	200.2	204.2	291.4	407.4	465.5	568.4	774.2
117.5°	219.1	204.5	189.9	204.5	219.1	222.7	296.8	395.4	444.8	537.7	723.4
120°	230.0	216.3	202.6	216.3	230.0	233.5	301.1	391.4	436.5	521.4	691.1
122.5°	242.6	228.8	215.0	228.8	242.6	246.1	307.4	389.3	430.2	506.6	659.4
125°	259.2	246.6	234.0	246.6	259.2	262.3	316.0	387.6	423.4	488.3	618.1
127.5°	274.8	262.1	249.4	262.1	274.8	278.0	324.6	386.6	417.6	473.4	584.8
130°	285.0	271.4	257.7	271.4	285.0	288.5	330.8	387.2	415.4	465.0	564.2
132.5°	293.6	279.9	266.2	279.9	293.6	297.0	335.8	387.6	413.5	457.9	546.7
135°	303.8	291.3	278.8	291.3	303.8	306.9	341.3	387.3	410.2	447.4	521.8
137.5°	316.5	304.1	291.8	304.1	316.5	319.6	349.6	389.7	409.6	441.1	503.9
140°	325.3	313.9	302.5	313.9	325.3	328.1	354.7	390.0	407.7	434.9	489.1
142.5°	331.8	321.3	310.8	321.3	331.8	334.4	358.8	391.4	407.7	431.6	479.3
145°	341.8	332.6	323.4	332.6	341.8	344.1	364.3	391.4	404.9	424.5	463.4
147.5°	354.0	345.0	336.1	345.0	354.0	356.2	372.4	394.1	404.9	420.3	451.0
150°	360.5	352.4	344.4	352.4	360.5	362.6	376.7	395.5	404.9	417.9	443.8
152.5°	365.1	359.0	352.9	359.0	365.1	366.7	379.4	396.4	404.9	416.0	438.1
155°	374.6	370.1	365.6	370.1	374.6	375.7	385.5	398.4	404.9	413.7	431.3
157.5°	383.8	379.4	374.9	379.4	383.8	384.9	391.5	400.5	404.9	411.8	425.4
160°	388.1	384.7	381.2	384.7	388.1	388.9	394.3	401.4	404.9	410.8	422.6
162.5°	392.8	390.2	387.6	390.2	392.8	393.4	397.2	402.4	404.9	409.9	419.8
165°	399.1	396.8	394.4	396.8	399.1	399.7	401.5	403.8	404.9	408.5	415.6
167.5°	403.0	401.8	400.8	401.8	403.0	403.2	404.8	406.7	407.7	410.0	414.7
170°	407.1	406.0	404.9	406.0	407.1	407.4	407.5	407.6	407.7	410.0	414.7
172.5°	407.6	407.4	407.1	407.4	407.6	407.7	407.7	407.7	407.7	409.5	413.2
175°	410.2	410.2	410.2	410.2	410.2	410.2	409.4	408.2	407.7	408.8	411.1
177.5°	410.2	410.2	410.2	410.2	410.2	410.2	409.5	408.7	408.2	409.1	411.0
180°	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2



TEST NUMBER: P934674

CATALOG NUMBER: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5	629.5
2.5°	607.5	605.7	608.0	601.5	608.0	605.7	607.5	611.7	608.0	610.4	612.8
5°	533.0	530.0	520.5	512.7	520.5	530.0	533.0	545.5	551.4	562.2	576.5
7.5°	476.4	474.0	471.7	466.9	471.7	474.0	476.4	480.0	486.0	495.5	506.2
10°	463.9	464.5	468.1	467.5	468.1	464.5	463.9	462.7	461.0	462.7	469.3
12.5°	496.1	501.5	521.1	519.9	521.1	501.5	496.1	472.2	456.2	453.2	454.4
15°	533.0	534.8	538.9	539.5	538.9	534.8	533.0	523.5	475.3	454.4	447.8
17.5°	536.6	537.2	540.2	540.2	540.2	537.2	536.6	532.4	516.4	488.3	451.5
20°	533.6	534.8	540.8	541.9	540.8	534.8	533.6	528.3	519.3	509.2	481.2
22.5°	532.4	534.8	539.5	538.9	539.5	534.8	532.4	524.1	516.4	509.2	497.9
25°	526.5	526.5	527.0	527.6	527.0	526.5	526.5	519.9	504.4	502.6	496.1
27.5°	514.0	515.1	518.7	518.1	518.7	515.1	514.0	511.6	494.9	493.1	488.3
30°	502.6	501.5	498.4	496.1	498.4	501.5	502.6	499.1	482.4	477.7	478.8
32.5°	483.6	480.6	477.7	475.9	477.7	480.6	483.6	482.4	469.8	463.4	464.5
35°	461.0	461.6	461.0	459.2	461.0	461.6	461.0	462.1	454.4	448.4	447.8
37.5°	444.9	446.0	445.4	443.1	445.4	446.0	444.9	443.6	433.0	431.2	432.4
40°	428.2	428.8	428.2	426.4	428.2	428.8	428.2	425.8	411.0	411.5	415.7
42.5°	412.1	411.5	409.7	408.6	409.7	411.5	412.1	408.6	389.5	387.7	395.4
45°	393.7	394.3	390.6	388.9	390.6	394.3	393.7	391.3	371.6	366.8	372.2
47.5°	375.2	375.2	372.2	370.4	372.2	375.2	375.2	372.2	351.4	346.6	349.6
50°	355.6	354.9	350.8	350.1	350.8	354.9	355.6	353.8	331.8	327.6	327.6
52.5°	332.9	332.9	333.5	334.7	333.5	332.9	332.9	333.5	313.8	309.6	308.5
55°	313.3	313.8	318.0	319.2	318.0	313.8	313.3	313.3	295.3	291.2	288.9
57.5°	293.0	293.0	296.0	296.0	296.0	293.0	293.0	291.8	274.6	270.9	269.8
60°	269.8	270.9	273.3	272.8	273.3	270.9	269.8	268.6	253.7	251.3	247.1
62.5°	245.4	246.6	247.1	246.0	247.1	246.6	245.4	241.8	232.8	231.1	225.7
65°	219.8	220.9	221.6	220.3	221.6	220.9	219.8	218.0	211.4	208.4	203.7
67.5°	193.6	193.0	192.3	194.7	192.3	193.0	193.6	191.2	187.0	184.6	178.0
70°	166.8	166.8	166.1	167.4	166.1	166.8	166.8	165.0	162.6	160.8	154.9
72.5°	138.2	137.6	139.9	138.2	139.9	137.6	138.2	137.6	136.4	134.6	128.7
75°	110.2	111.4	110.2	112.0	110.2	111.4	110.2	110.7	110.2	109.0	104.8
77.5°	84.0	85.2	84.0	84.0	84.0	85.2	84.0	84.5	84.5	84.5	81.0
80°	59.6	59.0	59.0	58.3	59.0	59.0	59.6	59.6	60.1	59.0	57.8
82.5°	38.1	37.6	37.6	38.7	37.6	37.6	38.1	38.7	37.6	37.6	37.6
85°	20.9	21.4	20.2	20.2	20.2	21.4	20.9	19.6	20.9	20.9	20.2
87.5°	7.7	7.1	7.1	7.1	7.1	7.1	7.7	8.3	8.3	8.3	9.0
90°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	13.9	18.6	21.0	18.0
92.5°	52.3	50.3	41.9	33.6	41.9	50.3	52.3	74.1	103.3	117.8	103.5
95°	177.5	171.2	146.1	120.9	146.1	171.2	177.5	233.1	307.2	344.4	290.8
97.5°	409.9	397.9	350.0	302.0	350.0	397.9	409.9	445.1	491.9	515.3	426.1
100°	575.6	561.3	504.2	447.0	504.2	561.3	575.6	573.0	569.6	567.9	468.9
102.5°	717.1	704.8	655.9	606.9	655.9	704.8	717.1	672.3	612.6	582.8	482.4
105°	882.2	875.7	849.4	823.1	849.4	875.7	882.2	781.9	648.1	581.1	483.9
107.5°	968.1	969.7	976.1	982.5	976.1	969.7	968.1	828.1	641.4	548.1	462.3
110°	990.1	997.0	1024.4	1051.8	1024.4	997.0	990.1	833.6	624.9	520.5	443.2



TEST NUMBER: P934674

CATALOG NUMBER: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	976.1	986.7	1028.7	1070.8	1028.7	986.7	976.1	815.9	602.3	495.5	426.6
115°	928.5	943.1	1001.5	1059.8	1001.5	943.1	928.5	774.2	568.4	465.5	407.4
117.5°	862.7	878.9	943.6	1008.3	943.6	878.9	862.7	723.4	537.7	444.8	395.4
120°	818.4	834.1	897.0	959.8	897.0	834.1	818.4	691.1	521.4	436.5	391.4
122.5°	774.1	789.6	851.6	913.7	851.6	789.6	774.1	659.4	506.6	430.2	389.3
125°	715.5	729.8	786.9	844.0	786.9	729.8	715.5	618.1	488.3	423.4	387.6
127.5°	668.4	680.5	728.6	776.8	728.6	680.5	668.4	584.8	473.4	417.6	386.6
130°	638.6	649.7	694.3	738.8	694.3	649.7	638.6	564.2	465.0	415.4	387.2
132.5°	613.3	623.3	663.2	703.0	663.2	623.3	613.3	546.7	457.9	413.5	387.6
135°	577.6	586.2	620.5	654.9	620.5	586.2	577.6	521.8	447.4	410.2	387.3
137.5°	551.1	558.1	586.3	614.4	586.3	558.1	551.1	503.9	441.1	409.6	389.7
140°	529.9	536.4	562.8	589.1	562.8	536.4	529.9	489.1	434.9	407.7	390.0
142.5°	515.0	520.7	543.3	565.9	543.3	520.7	515.0	479.3	431.6	407.7	391.4
145°	492.8	497.0	514.2	531.3	514.2	497.0	492.8	463.4	424.5	404.9	391.4
147.5°	474.0	477.6	491.8	506.0	491.8	477.6	474.0	451.0	420.3	404.9	394.1
150°	463.3	466.1	477.7	489.2	477.7	466.1	463.3	443.8	417.9	404.9	395.5
152.5°	454.7	456.9	465.6	474.3	465.6	456.9	454.7	438.1	416.0	404.9	396.4
155°	444.5	446.0	451.7	457.5	451.7	446.0	444.5	431.3	413.7	404.9	398.4
157.5°	435.7	436.7	440.8	444.8	440.8	436.7	435.7	425.4	411.8	404.9	400.5
160°	431.4	431.9	434.2	436.5	434.2	431.9	431.4	422.6	410.8	404.9	401.4
162.5°	427.2	427.7	430.0	432.2	430.0	427.7	427.2	419.8	409.9	404.9	402.4
165°	420.9	421.5	423.8	426.2	423.8	421.5	420.9	415.6	408.5	404.9	403.8
167.5°	418.2	418.4	419.4	420.4	419.4	418.4	418.2	414.7	410.0	407.7	406.7
170°	418.2	418.2	418.2	418.2	418.2	418.2	418.2	414.7	410.0	407.7	407.6
172.5°	415.9	415.8	414.9	414.0	414.9	415.8	415.9	413.2	409.5	407.7	407.7
175°	412.9	412.9	412.9	412.9	412.9	412.9	412.9	411.1	408.8	407.7	408.2
177.5°	412.4	412.1	411.1	410.2	411.1	412.1	412.4	411.0	409.1	408.2	408.7
180°	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	629.5	629.5	629.5	629.5	629.5
2.5°	621.8	624.7	626.5	628.9	634.8
5°	597.9	609.3	612.8	621.8	632.4
7.5°	545.5	580.0	589.5	611.0	627.7
10°	494.9	529.4	546.1	596.7	621.8
12.5°	469.3	489.6	500.8	571.7	613.4
15°	453.2	467.5	475.9	538.4	603.8
17.5°	440.7	450.8	456.8	505.6	590.8
20°	433.0	437.7	443.1	481.8	575.9
22.5°	427.6	424.6	428.8	465.1	555.6
25°	424.0	412.7	417.4	452.0	531.8
27.5°	427.0	402.0	403.8	440.1	506.8
30°	427.6	388.9	389.5	427.6	478.8
32.5°	423.4	375.2	375.8	412.1	447.3
35°	413.3	359.1	358.5	394.3	404.4
37.5°	399.6	341.9	341.9	374.6	357.3
40°	382.9	324.6	326.3	349.0	315.6
42.5°	362.7	306.1	308.5	315.1	284.7
45°	340.6	288.2	290.0	266.2	260.8
47.5°	316.2	269.8	270.4	220.9	253.1
50°	287.1	250.7	248.4	189.4	252.5
52.5°	261.4	229.9	222.7	171.5	229.3
55°	236.4	207.9	192.3	157.8	212.6
57.5°	214.4	179.3	164.4	141.7	209.0
60°	194.1	151.2	139.9	124.5	191.8
62.5°	177.5	130.4	128.0	112.6	173.9
65°	159.6	116.2	115.5	102.5	147.7
67.5°	142.3	106.6	106.0	92.9	112.6
70°	123.9	96.4	95.3	82.8	83.4
72.5°	104.8	85.2	84.0	74.4	69.1
75°	85.8	72.0	71.5	64.9	55.9
77.5°	67.3	57.2	58.3	52.4	41.1
80°	48.2	41.6	42.9	37.6	31.0
82.5°	32.1	27.4	28.6	23.8	20.9
85°	17.8	15.5	16.1	12.5	9.5
87.5°	8.3	7.1	7.1	4.8	3.0
90°	12.2	7.7	7.2	5.0	2.8
92.5°	74.7	53.1	48.4	29.7	11.0
95°	183.8	103.5	95.0	60.7	26.5
97.5°	247.6	113.7	106.1	75.9	45.7
100°	270.8	122.2	115.4	87.9	60.6
102.5°	281.4	130.7	124.3	98.8	73.3
105°	289.3	143.4	138.0	116.3	94.7
107.5°	290.8	162.1	157.1	136.9	116.7
110°	288.6	172.6	168.1	149.8	131.6



TEST NUMBER: P934674

CATALOG NUMBER: SQ4-FA-075U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	288.7	185.2	180.9	163.6	146.2
115°	291.4	204.2	200.2	184.2	168.2
117.5°	296.8	222.7	219.1	204.5	189.9
120°	301.1	233.5	230.0	216.3	202.6
122.5°	307.4	246.1	242.6	228.8	215.0
125°	316.0	262.3	259.2	246.6	234.0
127.5°	324.6	278.0	274.8	262.1	249.4
130°	330.8	288.5	285.0	271.4	257.7
132.5°	335.8	297.0	293.6	279.9	266.2
135°	341.3	306.9	303.8	291.3	278.8
137.5°	349.6	319.6	316.5	304.1	291.8
140°	354.7	328.1	325.3	313.9	302.5
142.5°	358.8	334.4	331.8	321.3	310.8
145°	364.3	344.1	341.8	332.6	323.4
147.5°	372.4	356.2	354.0	345.0	336.1
150°	376.7	362.6	360.5	352.4	344.4
152.5°	379.4	366.7	365.1	359.0	352.9
155°	385.5	375.7	374.6	370.1	365.6
157.5°	391.5	384.9	383.8	379.4	374.9
160°	394.3	388.9	388.1	384.7	381.2
162.5°	397.2	393.4	392.8	390.2	387.6
165°	401.5	399.7	399.1	396.8	394.4
167.5°	404.8	403.2	403.0	401.8	400.8
170°	407.5	407.4	407.1	406.0	404.9
172.5°	407.7	407.7	407.6	407.4	407.1
175°	409.4	410.2	410.2	410.2	410.2
177.5°	409.5	410.2	410.2	410.2	410.2
180°	410.2	410.2	410.2	410.2	410.2



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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	9.71	10.47	10.76	11.53	12.96	12.51	13.27	13.56	14.33	15.76
	3H	10.18	10.86	11.24	11.93	13.38	13.84	14.52	14.90	15.58	17.04
	4H	10.37	11.01	11.44	12.08	13.54	14.27	14.92	15.34	15.98	17.44
	6H	10.48	11.08	11.56	12.15	13.62	14.54	15.14	15.62	16.21	17.68
	8H	10.48	11.05	11.57	12.13	13.60	14.61	15.17	15.70	16.26	17.73
	12H	10.45	10.99	11.54	12.07	13.55	14.64	15.18	15.73	16.26	17.75
4H	2H	10.72	11.37	11.80	12.44	13.90	12.91	13.55	13.99	14.62	16.08
	3H	11.74	12.28	12.83	13.37	14.85	14.39	14.93	15.48	16.03	17.50
	4H	12.01	12.51	13.11	13.59	15.08	14.91	15.40	16.00	16.49	17.98
	6H	12.13	12.56	13.23	13.67	15.15	15.26	15.69	16.36	16.79	18.28
	8H	12.14	12.53	13.24	13.63	15.13	15.36	15.76	16.46	16.86	18.36
	12H	12.10	12.46	13.22	13.57	15.08	15.41	15.77	16.53	16.88	18.39
8H	4H	12.45	12.85	13.55	13.95	15.45	15.03	15.42	16.13	16.52	18.03
	6H	12.71	13.04	13.83	14.18	15.68	15.45	15.78	16.58	16.92	18.42
	8H	12.75	13.04	13.88	14.16	15.68	15.60	15.88	16.73	17.01	18.53
	12H	12.73	12.98	13.87	14.10	15.66	15.68	15.94	16.82	17.06	18.61
12H	4H	12.45	12.81	13.57	13.93	15.43	14.99	15.35	16.11	16.46	17.97
	6H	12.77	13.06	13.90	14.18	15.70	15.45	15.73	16.58	16.86	18.38
	8H	12.83	13.08	13.96	14.20	15.76	15.60	15.85	16.73	16.97	18.53