

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: P934302

Luminaire Tested: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934302
REPORT IS A COMBINATION OF REPORTS P933690 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

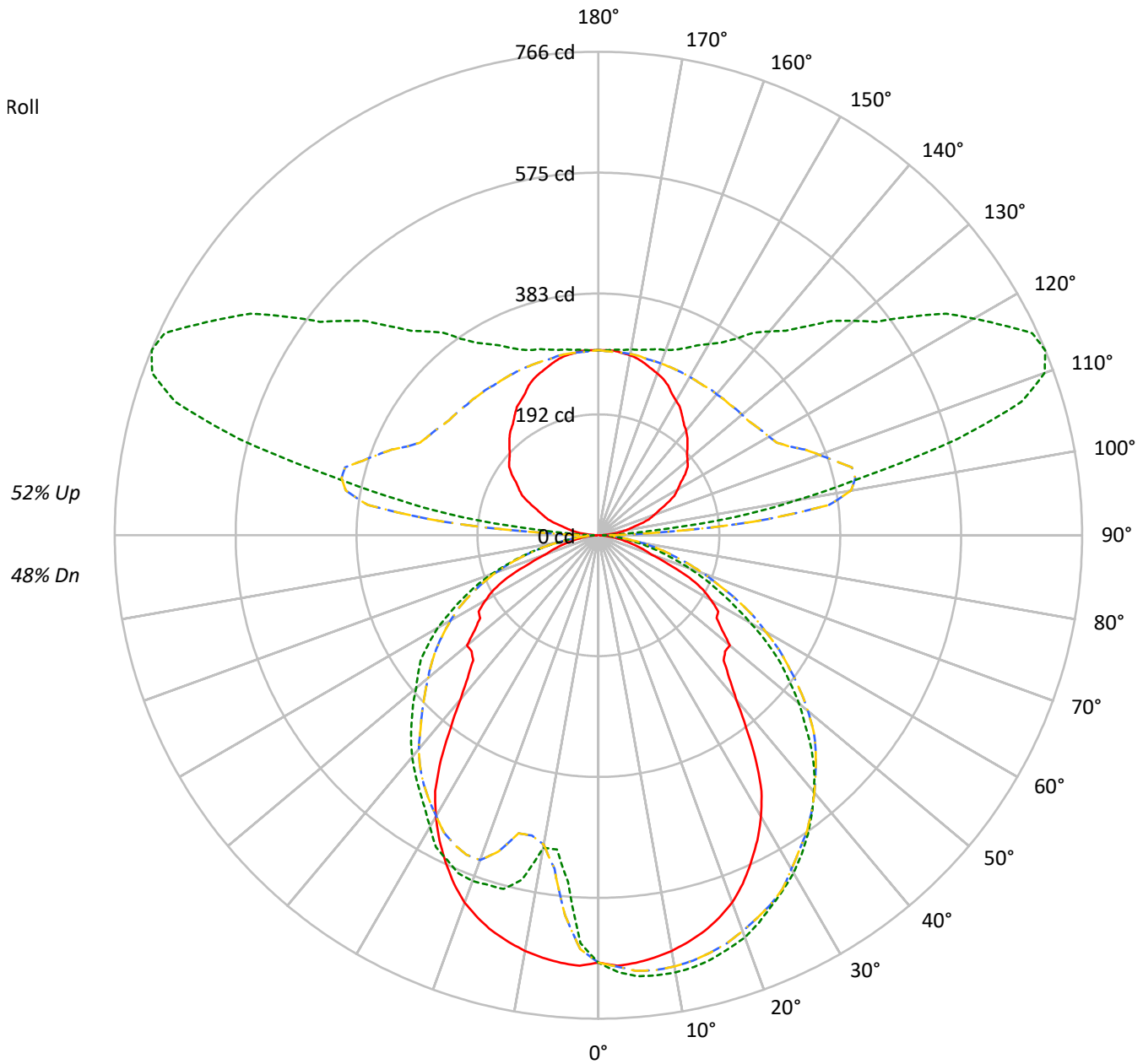
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3657.6 lumens
Efficiency: N/A
Efficacy: 128.8 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: General Diffuse

Input Watts (W): 28.4
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: P934302
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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46	41	41	41	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34	34	34	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	38	35	33	29	29	29	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	33	31	28	25	25	25	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	21	21	21	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22	19	19	19	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17	17	17	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15	15	15	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16	13	13	13	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	20	16	14	12	12	12	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6282	6282	6282	6282
5°	6322	6342	6322	4986
10°	6273	6247	6273	4466
15°	6197	6112	6197	5103
20°	6060	5950	6060	5113
25°	5788	5717	5788	5005
30°	5439	5523	5439	4768
35°	4842	5277	4842	4506
40°	4027	4989	4027	4308
45°	3591	4650	3591	4081
50°	3807	4246	3807	3853
55°	3571	3811	3571	3721
60°	3670	3237	3670	3409
65°	3309	2676	3309	2990
70°	2277	2133	2277	2508
75°	1974	1577	1974	1888
80°	1558	1043	1558	1134
85°	845	552	845	470

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5515 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	1.7
10°-20°	173.5	4.7
20°-30°	268.2	7.3
30°-40°	320.2	8.8
40°-50°	322.1	8.8
50°-60°	280.2	7.7
60°-70°	198.7	5.4
70°-80°	105.1	2.9
80°-90°	27.3	0.7
90°-100°	142.9	3.9
100°-110°	375.9	10.3
110°-120°	389.7	10.7
120°-130°	312.6	8.5
130°-140°	245.3	6.7
140°-150°	188.3	5.1
150°-160°	135.6	3.7
160°-170°	83.0	2.3
170°-180°	28.0	0.8
0°-30°	502.8	13.7
0°-40°	823.0	22.5
0°-60°	1425.3	39.0
0°-90°	1756.4	48.0
90°-120°	908.5	24.8
90°-150°	1654.7	45.2
90°-180°	1901.0	52.0
0°-180°	3657.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	677	677	677	677	677	
5°	680	701	680	551	680	65
15°	649	695	649	580	649	183
25°	572	648	572	568	572	263
35°	435	578	435	494	435	269
45°	280	476	280	418	280	225
55°	229	352	229	343	229	210
65°	159	212	159	237	159	152
75°	60	101	60	120	60	63
85°	10	26	10	22	10	14
90°	2	7	2	7	2	2
95°	19	86	19	86	19	21
105°	68	589	68	589	68	72
115°	120	758	120	758	120	119
125°	167	604	167	604	167	149
135°	199	468	199	468	199	154
145°	231	380	231	380	231	145
155°	261	327	261	327	261	120
165°	282	305	282	305	282	80
175°	293	293	293	293	293	28
180°	293	293	293	293	293	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	682.7	682.7	686.5	687.9	687.9	686.0	684.1	686.0	691.7	693.6	692.9
5°	680.2	685.3	692.4	693.6	695.0	694.3	692.9	694.3	700.7	701.9	702.6
7.5°	675.1	684.6	693.6	695.5	697.4	695.5	695.0	696.2	702.6	703.8	703.8
10°	668.7	682.1	692.4	693.6	695.5	693.6	693.6	696.2	702.6	703.8	704.5
12.5°	659.7	678.2	687.9	689.1	691.7	691.0	690.5	692.9	699.4	700.7	700.7
15°	649.4	671.2	680.2	681.5	686.0	684.6	684.6	687.2	694.3	696.2	695.5
17.5°	635.4	662.3	672.5	674.4	677.7	677.0	677.7	680.2	686.5	687.9	688.6
20°	619.3	650.1	662.3	664.2	667.4	667.4	667.4	670.6	677.0	679.6	679.6
22.5°	597.5	637.3	650.1	651.4	655.2	655.2	656.5	661.0	666.7	667.4	667.4
25°	571.9	623.1	634.0	637.9	641.8	643.7	645.6	648.2	650.1	649.4	650.1
27.5°	545.0	605.3	619.3	621.9	627.1	629.0	631.5	632.1	632.8	634.7	633.5
30°	514.9	580.3	601.4	603.9	612.3	613.6	611.0	612.3	615.5	616.7	618.1
32.5°	481.0	543.1	582.8	588.6	596.3	592.5	591.8	593.7	598.9	598.9	600.1
35°	434.9	514.3	565.6	570.7	576.4	571.9	574.5	575.1	578.3	580.3	579.6
37.5°	384.3	489.3	547.6	551.4	555.9	550.2	554.0	555.9	558.5	557.2	557.2
40°	339.4	450.3	526.5	529.1	532.9	528.4	532.2	533.6	534.8	533.6	532.9
42.5°	306.2	407.3	504.0	507.3	504.7	507.9	509.2	511.8	509.8	507.3	507.3
45°	280.5	395.8	479.7	483.5	479.7	484.9	486.8	486.8	481.0	479.7	479.0
47.5°	272.2	372.7	455.3	455.3	453.4	459.8	463.1	458.6	452.9	450.9	450.9
50°	271.6	347.1	422.1	419.5	428.5	436.1	433.0	428.5	424.0	417.0	417.0
52.5°	246.6	315.7	379.1	388.8	402.8	407.3	402.2	397.8	390.0	386.9	384.3
55°	228.6	283.1	340.1	359.3	374.1	379.8	370.2	365.7	354.2	352.3	351.0
57.5°	224.8	235.7	304.3	328.5	346.5	345.9	340.1	331.8	322.1	320.2	319.6
60°	206.3	170.4	265.8	294.6	313.1	311.2	306.2	298.4	289.5	288.2	287.0
62.5°	187.0	123.6	222.2	254.9	281.2	280.5	276.1	264.5	258.1	254.9	252.3
65°	158.8	103.7	158.2	212.0	249.8	251.1	241.4	233.1	226.0	222.2	221.6
67.5°	121.1	84.5	107.0	176.8	219.6	218.4	206.3	202.4	193.4	191.5	187.7
70°	89.7	56.3	74.3	143.4	190.2	187.0	177.4	173.0	164.6	160.2	157.6
72.5°	74.3	45.5	54.4	111.4	160.2	156.2	147.9	142.9	135.8	132.0	129.4
75°	60.2	48.0	41.6	82.6	130.0	127.5	119.8	114.6	108.9	103.7	104.4
77.5°	44.2	44.8	33.3	60.8	103.1	99.3	94.8	88.4	85.9	80.7	80.7
80°	33.3	35.2	25.0	41.6	74.3	74.3	70.5	66.0	61.5	58.9	58.9
82.5°	22.4	22.4	18.5	26.3	50.6	48.7	46.1	44.8	42.3	41.0	41.0
85°	10.2	12.8	11.6	16.0	27.5	28.8	28.8	27.5	26.9	25.6	26.3
87.5°	3.2	5.7	7.1	9.0	14.1	14.7	15.4	15.4	15.4	16.0	16.0
90°	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9	7.4	7.4
92.5°	7.8	21.2	34.7	38.0	53.4	73.9	84.2	73.8	53.0	37.4	35.9
95°	18.9	43.4	67.9	74.0	131.4	207.9	246.2	219.6	166.6	126.9	122.4
97.5°	32.7	54.2	75.8	81.3	177.0	304.6	368.4	351.7	318.2	293.1	284.5
100°	43.3	62.8	82.5	87.4	193.6	335.2	406.1	407.3	409.8	411.6	401.4
102.5°	52.3	70.7	88.9	93.5	201.2	344.9	416.7	438.1	480.7	512.7	504.0
105°	67.7	83.2	98.7	102.6	206.9	346.0	415.5	463.4	559.1	630.9	626.2
107.5°	83.5	97.9	112.3	115.9	207.9	330.6	391.9	458.7	592.2	692.3	693.4
110°	94.1	107.1	120.1	123.4	206.4	317.0	372.3	446.8	596.1	708.0	712.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	104.5	116.9	129.3	132.5	206.4	305.0	354.3	430.7	583.4	698.0	705.6
115°	120.2	131.7	143.2	146.0	208.3	291.3	332.8	406.4	553.5	663.9	674.3
117.5°	135.8	146.2	156.6	159.2	212.2	282.8	318.1	384.5	517.2	616.8	628.4
120°	144.9	154.7	164.5	166.9	215.4	279.9	312.2	372.8	494.2	585.2	596.5
122.5°	153.8	163.7	173.5	176.0	219.8	278.4	307.6	362.2	471.6	553.5	564.6
125°	167.3	176.3	185.3	187.6	226.0	277.1	302.7	349.1	442.0	511.6	521.8
127.5°	178.3	187.5	196.5	198.8	232.1	276.5	298.6	338.5	418.1	477.9	486.5
130°	184.2	194.1	203.8	206.3	236.6	276.9	297.0	332.5	403.5	456.7	464.6
132.5°	190.3	200.2	209.9	212.4	240.2	277.1	295.7	327.4	390.9	438.5	445.7
135°	199.4	208.3	217.3	219.5	244.1	276.9	293.3	319.8	373.0	412.9	419.1
137.5°	208.7	217.5	226.3	228.5	250.0	278.6	292.9	315.3	360.3	394.0	399.1
140°	216.3	224.4	232.6	234.6	253.6	278.9	291.5	310.9	349.8	378.9	383.6
142.5°	222.2	229.8	237.2	239.1	256.6	279.8	291.5	308.6	342.7	368.2	372.3
145°	231.3	237.8	244.4	246.0	260.5	279.9	289.6	303.5	331.4	352.3	355.4
147.5°	240.4	246.8	253.1	254.7	266.3	281.8	289.6	300.5	322.5	338.9	341.5
150°	246.2	251.9	257.8	259.2	269.3	282.8	289.6	298.8	317.3	331.3	333.4
152.5°	252.3	256.7	261.1	262.1	271.3	283.4	289.6	297.5	313.3	325.2	326.7
155°	261.4	264.6	267.9	268.6	275.6	284.9	289.6	295.9	308.5	317.9	319.0
157.5°	268.1	271.2	274.4	275.1	279.9	286.3	289.6	294.4	304.3	311.6	312.4
160°	272.7	275.0	277.5	278.1	281.9	287.0	289.6	293.8	302.2	308.5	308.8
162.5°	277.1	279.0	280.8	281.2	284.0	287.7	289.6	293.1	300.2	305.5	305.9
165°	282.1	283.7	285.4	285.8	287.1	288.7	289.6	292.0	297.1	300.9	301.3
167.5°	286.6	287.4	288.1	288.3	289.4	290.8	291.5	293.2	296.5	299.0	299.2
170°	289.6	290.3	291.1	291.3	291.4	291.5	291.5	293.2	296.5	299.0	299.0
172.5°	291.1	291.3	291.5	291.5	291.5	291.5	291.5	292.8	295.4	297.4	297.2
175°	293.3	293.3	293.3	293.3	292.7	291.8	291.5	292.3	294.0	295.3	295.3
177.5°	293.3	293.3	293.3	293.3	292.8	292.2	291.9	292.6	293.9	294.9	294.7
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	694.3	692.4	694.3	692.9	693.6	691.7	686.0	684.1	686.0	687.9	687.9
5°	702.6	701.4	702.6	702.6	701.9	700.7	694.3	692.9	694.3	695.0	693.6
7.5°	705.2	703.3	705.2	703.8	703.8	702.6	696.2	695.0	695.5	697.4	695.5
10°	705.2	703.3	705.2	704.5	703.8	702.6	696.2	693.6	693.6	695.5	693.6
12.5°	701.9	700.7	701.9	700.7	700.7	699.4	692.9	690.5	691.0	691.7	689.1
15°	696.9	695.0	696.9	695.5	696.2	694.3	687.2	684.6	684.6	686.0	681.5
17.5°	689.1	686.5	689.1	688.6	687.9	686.5	680.2	677.7	677.0	677.7	674.4
20°	680.2	678.2	680.2	679.6	679.6	677.0	670.6	667.4	667.4	667.4	664.2
22.5°	666.1	664.2	666.1	667.4	667.4	666.7	661.0	656.5	655.2	655.2	651.4
25°	650.1	648.2	650.1	650.1	649.4	650.1	648.2	645.6	643.7	641.8	637.9
27.5°	634.7	633.5	634.7	633.5	634.7	632.8	632.1	631.5	629.0	627.1	621.9
30°	619.3	618.1	619.3	618.1	616.7	615.5	612.3	611.0	613.6	612.3	603.9
32.5°	600.1	598.9	600.1	600.1	598.9	598.9	593.7	591.8	592.5	596.3	588.6
35°	580.3	578.3	580.3	579.6	580.3	578.3	575.1	574.5	571.9	576.4	570.7
37.5°	557.2	555.3	557.2	557.2	557.2	558.5	555.9	554.0	550.2	555.9	551.4
40°	533.6	531.0	533.6	532.9	533.6	534.8	533.6	532.2	528.4	532.9	529.1
42.5°	506.6	506.0	506.6	507.3	507.3	509.8	511.8	509.2	507.9	504.7	507.3
45°	477.8	476.5	477.8	479.0	479.7	481.0	486.8	486.8	484.9	479.7	483.5
47.5°	447.0	443.9	447.0	450.9	450.9	452.9	458.6	463.1	459.8	453.4	455.3
50°	414.4	415.0	414.4	417.0	417.0	424.0	428.5	433.0	436.1	428.5	419.5
52.5°	382.4	381.7	382.4	384.3	386.9	390.0	397.8	402.2	407.3	402.8	388.8
55°	350.3	351.6	350.3	351.0	352.3	354.2	365.7	370.2	379.8	374.1	359.3
57.5°	318.3	316.4	318.3	319.6	320.2	322.1	331.8	340.1	345.9	346.5	328.5
60°	281.2	278.6	281.2	287.0	288.2	289.5	298.4	306.2	311.2	313.1	294.6
62.5°	248.5	244.0	248.5	252.3	254.9	258.1	264.5	276.1	280.5	281.2	254.9
65°	213.9	212.0	213.9	221.6	222.2	226.0	233.1	241.4	251.1	249.8	212.0
67.5°	182.5	182.5	182.5	187.7	191.5	193.4	202.4	206.3	218.4	219.6	176.8
70°	153.8	153.1	153.8	157.6	160.2	164.6	173.0	177.4	187.0	190.2	143.4
72.5°	126.2	125.5	126.2	129.4	132.0	135.8	142.9	147.9	156.2	160.2	111.4
75°	101.8	100.6	101.8	104.4	103.7	108.9	114.6	119.8	127.5	130.0	82.6
77.5°	78.1	78.1	78.1	80.7	80.7	85.9	88.4	94.8	99.3	103.1	60.8
80°	58.3	57.7	58.3	58.9	58.9	61.5	66.0	70.5	74.3	74.3	41.6
82.5°	41.0	39.7	41.0	41.0	41.0	42.3	44.8	46.1	48.7	50.6	26.3
85°	25.6	25.6	25.6	26.3	25.6	26.9	27.5	28.8	28.8	27.5	16.0
87.5°	16.6	16.0	16.6	16.0	16.0	15.4	15.4	15.4	14.7	14.1	9.0
90°	7.4	7.4	7.4	7.4	7.4	9.9	13.3	15.0	12.9	8.7	5.5
92.5°	30.0	24.0	30.0	35.9	37.4	53.0	73.8	84.2	73.9	53.4	38.0
95°	104.4	86.4	104.4	122.4	126.9	166.6	219.6	246.2	207.9	131.4	74.0
97.5°	250.2	215.9	250.2	284.5	293.1	318.2	351.7	368.4	304.6	177.0	81.3
100°	360.5	319.6	360.5	401.4	411.6	409.8	407.3	406.1	335.2	193.6	87.4
102.5°	469.0	434.0	469.0	504.0	512.7	480.7	438.1	416.7	344.9	201.2	93.5
105°	607.4	588.6	607.4	626.2	630.9	559.1	463.4	415.5	346.0	206.9	102.6
107.5°	697.9	702.5	697.9	693.4	692.3	592.2	458.7	391.9	330.6	207.9	115.9
110°	732.5	752.1	732.5	712.9	708.0	596.1	446.8	372.3	317.0	206.4	123.4



TEST NUMBER: P934302

CATALOG NUMBER: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	735.6	765.7	735.6	705.6	698.0	583.4	430.7	354.3	305.0	206.4	132.5
115°	716.1	757.8	716.1	674.3	663.9	553.5	406.4	332.8	291.3	208.3	146.0
117.5°	674.7	721.0	674.7	628.4	616.8	517.2	384.5	318.1	282.8	212.2	159.2
120°	641.4	686.4	641.4	596.5	585.2	494.2	372.8	312.2	279.9	215.4	166.9
122.5°	609.0	653.3	609.0	564.6	553.5	471.6	362.2	307.6	278.4	219.8	176.0
125°	562.6	603.5	562.6	521.8	511.6	442.0	349.1	302.7	277.1	226.0	187.6
127.5°	521.0	555.4	521.0	486.5	477.9	418.1	338.5	298.6	276.5	232.1	198.8
130°	496.5	528.3	496.5	464.6	456.7	403.5	332.5	297.0	276.9	236.6	206.3
132.5°	474.2	502.7	474.2	445.7	438.5	390.9	327.4	295.7	277.1	240.2	212.4
135°	443.7	468.2	443.7	419.1	412.9	373.0	319.8	293.3	276.9	244.1	219.5
137.5°	419.1	439.3	419.1	399.1	394.0	360.3	315.3	292.9	278.6	250.0	228.5
140°	402.4	421.3	402.4	383.6	378.9	349.8	310.9	291.5	278.9	253.6	234.6
142.5°	388.5	404.7	388.5	372.3	368.2	342.7	308.6	291.5	279.8	256.6	239.1
145°	367.7	379.9	367.7	355.4	352.3	331.4	303.5	289.6	279.9	260.5	246.0
147.5°	351.6	361.8	351.6	341.5	338.9	322.5	300.5	289.6	281.8	266.3	254.7
150°	341.6	349.8	341.6	333.4	331.3	317.3	298.8	289.6	282.8	269.3	259.2
152.5°	332.9	339.1	332.9	326.7	325.2	313.3	297.5	289.6	283.4	271.3	262.1
155°	323.1	327.2	323.1	319.0	317.9	308.5	295.9	289.6	284.9	275.6	268.6
157.5°	315.2	318.1	315.2	312.4	311.6	304.3	294.4	289.6	286.3	279.9	275.1
160°	310.6	312.2	310.6	308.8	308.5	302.2	293.8	289.6	287.0	281.9	278.1
162.5°	307.5	309.0	307.5	305.9	305.5	300.2	293.1	289.6	287.7	284.0	281.2
165°	303.0	304.7	303.0	301.3	300.9	297.1	292.0	289.6	288.7	287.1	285.8
167.5°	299.9	300.5	299.9	299.2	299.0	296.5	293.2	291.5	290.8	289.4	288.3
170°	299.0	299.0	299.0	299.0	299.0	296.5	293.2	291.5	291.5	291.4	291.3
172.5°	296.6	296.0	296.6	297.2	297.4	295.4	292.8	291.5	291.5	291.5	291.5
175°	295.3	295.3	295.3	295.3	295.3	294.0	292.3	291.5	291.8	292.7	293.3
177.5°	294.0	293.3	294.0	294.7	294.9	293.9	292.6	291.9	292.2	292.8	293.3
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934302

CATALOG NUMBER: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	686.5	682.7	682.7	676.3	673.8	671.8	668.7	659.0	656.5	653.9	657.8
5°	692.4	685.3	680.2	668.7	659.0	655.2	643.0	620.0	604.6	593.1	586.7
7.5°	693.6	684.6	675.1	657.1	634.0	623.8	586.7	544.4	532.9	522.7	516.2
10°	692.4	682.1	668.7	641.8	587.3	569.4	532.2	504.7	497.7	495.7	497.7
12.5°	687.9	678.2	659.7	614.8	538.6	526.5	504.7	488.7	487.4	490.6	507.9
15°	680.2	671.2	649.4	579.0	511.8	502.8	487.4	481.6	488.7	511.1	563.0
17.5°	672.5	662.3	635.4	543.8	491.3	484.9	474.0	485.5	525.2	555.3	572.6
20°	662.3	650.1	619.3	518.2	476.5	470.7	465.7	517.5	547.6	558.5	568.1
22.5°	650.1	637.3	597.5	500.2	461.2	456.7	459.8	535.5	547.6	555.3	563.6
25°	634.0	623.1	571.9	486.1	448.9	443.9	456.0	533.6	540.5	542.4	559.2
27.5°	619.3	605.3	545.0	473.3	434.2	432.3	459.3	525.2	530.3	532.2	550.2
30°	601.4	580.3	514.9	459.8	418.9	418.2	459.8	514.9	513.7	518.8	536.7
32.5°	582.8	543.1	481.0	443.2	404.2	403.5	455.3	499.6	498.3	505.3	518.8
35°	565.6	514.3	434.9	424.0	385.5	386.2	444.5	481.6	482.3	488.7	497.0
37.5°	547.6	489.3	384.3	402.8	367.7	367.7	429.8	465.0	463.7	465.7	477.1
40°	526.5	450.3	339.4	375.3	351.0	349.1	411.8	447.0	442.5	442.0	457.9
42.5°	504.0	407.3	306.2	338.8	331.8	329.2	390.0	425.3	417.0	418.9	439.4
45°	479.7	395.8	280.5	286.3	311.9	310.0	366.3	400.3	394.5	399.7	420.8
47.5°	455.3	372.7	272.2	237.6	290.8	290.1	340.1	376.0	372.7	377.9	400.3
50°	422.1	347.1	271.6	203.7	267.1	269.6	308.8	352.3	352.3	356.8	380.5
52.5°	379.1	315.7	246.6	184.4	239.5	247.2	281.2	331.8	333.0	337.5	358.7
55°	340.1	283.1	228.6	169.7	206.9	223.6	254.2	310.7	313.1	317.6	336.9
57.5°	304.3	235.7	224.8	152.4	176.8	192.8	230.5	290.1	291.4	295.3	313.8
60°	265.8	170.4	206.3	133.9	150.5	162.6	208.8	265.8	270.3	272.8	288.9
62.5°	222.2	123.6	187.0	121.1	137.7	140.3	190.9	242.8	248.5	250.4	260.0
65°	158.2	103.7	158.8	110.2	124.2	124.9	171.6	219.1	224.1	227.4	234.5
67.5°	107.0	84.5	121.1	99.9	114.0	114.6	153.1	191.5	198.5	201.1	205.6
70°	74.3	56.3	89.7	89.0	102.5	103.7	133.2	166.6	173.0	174.9	177.4
72.5°	54.4	45.5	74.3	80.0	90.3	91.6	112.7	138.4	144.8	146.7	147.9
75°	41.6	48.0	60.2	69.8	76.9	77.5	92.3	112.7	117.2	118.5	119.1
77.5°	33.3	44.8	44.2	56.3	62.7	61.5	72.4	87.1	90.9	90.9	90.9
80°	25.0	35.2	33.3	40.4	46.1	44.8	51.9	62.2	63.4	64.7	64.1
82.5°	18.5	22.4	22.4	25.6	30.8	29.5	34.6	40.4	40.4	40.4	41.6
85°	11.6	12.8	10.2	13.5	17.3	16.6	19.2	21.8	22.4	22.4	21.1
87.5°	7.1	5.7	3.2	5.2	7.6	7.6	9.0	9.6	9.0	9.0	9.0
90°	5.2	3.5	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9
92.5°	34.7	21.2	7.8	21.2	34.7	38.0	53.4	73.9	84.2	73.8	53.0
95°	67.9	43.4	18.9	43.4	67.9	74.0	131.4	207.9	246.2	219.6	166.6
97.5°	75.8	54.2	32.7	54.2	75.8	81.3	177.0	304.6	368.4	351.7	318.2
100°	82.5	62.8	43.3	62.8	82.5	87.4	193.6	335.2	406.1	407.3	409.8
102.5°	88.9	70.7	52.3	70.7	88.9	93.5	201.2	344.9	416.7	438.1	480.7
105°	98.7	83.2	67.7	83.2	98.7	102.6	206.9	346.0	415.5	463.4	559.1
107.5°	112.3	97.9	83.5	97.9	112.3	115.9	207.9	330.6	391.9	458.7	592.2
110°	120.1	107.1	94.1	107.1	120.1	123.4	206.4	317.0	372.3	446.8	596.1



TEST NUMBER: P934302

CATALOG NUMBER: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	129.3	116.9	104.5	116.9	129.3	132.5	206.4	305.0	354.3	430.7	583.4
115°	143.2	131.7	120.2	131.7	143.2	146.0	208.3	291.3	332.8	406.4	553.5
117.5°	156.6	146.2	135.8	146.2	156.6	159.2	212.2	282.8	318.1	384.5	517.2
120°	164.5	154.7	144.9	154.7	164.5	166.9	215.4	279.9	312.2	372.8	494.2
122.5°	173.5	163.7	153.8	163.7	173.5	176.0	219.8	278.4	307.6	362.2	471.6
125°	185.3	176.3	167.3	176.3	185.3	187.6	226.0	277.1	302.7	349.1	442.0
127.5°	196.5	187.5	178.3	187.5	196.5	198.8	232.1	276.5	298.6	338.5	418.1
130°	203.8	194.1	184.2	194.1	203.8	206.3	236.6	276.9	297.0	332.5	403.5
132.5°	209.9	200.2	190.3	200.2	209.9	212.4	240.2	277.1	295.7	327.4	390.9
135°	217.3	208.3	199.4	208.3	217.3	219.5	244.1	276.9	293.3	319.8	373.0
137.5°	226.3	217.5	208.7	217.5	226.3	228.5	250.0	278.6	292.9	315.3	360.3
140°	232.6	224.4	216.3	224.4	232.6	234.6	253.6	278.9	291.5	310.9	349.8
142.5°	237.2	229.8	222.2	229.8	237.2	239.1	256.6	279.8	291.5	308.6	342.7
145°	244.4	237.8	231.3	237.8	244.4	246.0	260.5	279.9	289.6	303.5	331.4
147.5°	253.1	246.8	240.4	246.8	253.1	254.7	266.3	281.8	289.6	300.5	322.5
150°	257.8	251.9	246.2	251.9	257.8	259.2	269.3	282.8	289.6	298.8	317.3
152.5°	261.1	256.7	252.3	256.7	261.1	262.1	271.3	283.4	289.6	297.5	313.3
155°	267.9	264.6	261.4	264.6	267.9	268.6	275.6	284.9	289.6	295.9	308.5
157.5°	274.4	271.2	268.1	271.2	274.4	275.1	279.9	286.3	289.6	294.4	304.3
160°	277.5	275.0	272.7	275.0	277.5	278.1	281.9	287.0	289.6	293.8	302.2
162.5°	280.8	279.0	277.1	279.0	280.8	281.2	284.0	287.7	289.6	293.1	300.2
165°	285.4	283.7	282.1	283.7	285.4	285.8	287.1	288.7	289.6	292.0	297.1
167.5°	288.1	287.4	286.6	287.4	288.1	288.3	289.4	290.8	291.5	293.2	296.5
170°	291.1	290.3	289.6	290.3	291.1	291.3	291.4	291.5	291.5	293.2	296.5
172.5°	291.5	291.3	291.1	291.3	291.5	291.5	291.5	291.5	291.5	292.8	295.4
175°	293.3	293.3	293.3	293.3	293.3	293.3	292.7	291.8	291.5	292.3	294.0
177.5°	293.3	293.3	293.3	293.3	293.3	293.3	292.8	292.2	291.9	292.6	293.9
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934302

CATALOG NUMBER: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	653.3	651.4	653.9	646.9	653.9	651.4	653.3	657.8	653.9	656.5	659.0
5°	573.2	570.0	559.8	551.4	559.8	570.0	573.2	586.7	593.1	604.6	620.0
7.5°	512.4	509.8	507.3	502.1	507.3	509.8	512.4	516.2	522.7	532.9	544.4
10°	498.9	499.6	503.4	502.8	503.4	499.6	498.9	497.7	495.7	497.7	504.7
12.5°	533.6	539.3	560.4	559.2	560.4	539.3	533.6	507.9	490.6	487.4	488.7
15°	573.2	575.1	579.6	580.3	579.6	575.1	573.2	563.0	511.1	488.7	481.6
17.5°	577.1	577.7	580.9	580.9	580.9	577.7	577.1	572.6	555.3	525.2	485.5
20°	573.9	575.1	581.6	582.8	581.6	575.1	573.9	568.1	558.5	547.6	517.5
22.5°	572.6	575.1	580.3	579.6	580.3	575.1	572.6	563.6	555.3	547.6	535.5
25°	566.2	566.2	566.8	567.5	566.8	566.2	566.2	559.2	542.4	540.5	533.6
27.5°	552.8	554.0	557.8	557.2	557.8	554.0	552.8	550.2	532.2	530.3	525.2
30°	540.5	539.3	536.0	533.6	536.0	539.3	540.5	536.7	518.8	513.7	514.9
32.5°	520.1	516.8	513.7	511.8	513.7	516.8	520.1	518.8	505.3	498.3	499.6
35°	495.7	496.4	495.7	493.8	495.7	496.4	495.7	497.0	488.7	482.3	481.6
37.5°	478.5	479.7	479.0	476.5	479.0	479.7	478.5	477.1	465.7	463.7	465.0
40°	460.5	461.2	460.5	458.6	460.5	461.2	460.5	457.9	442.0	442.5	447.0
42.5°	443.2	442.5	440.6	439.4	440.6	442.5	443.2	439.4	418.9	417.0	425.3
45°	423.4	424.0	420.1	418.2	420.1	424.0	423.4	420.8	399.7	394.5	400.3
47.5°	403.5	403.5	400.3	398.3	400.3	403.5	403.5	400.3	377.9	372.7	376.0
50°	382.4	381.7	377.2	376.6	377.2	381.7	382.4	380.5	356.8	352.3	352.3
52.5°	358.0	358.0	358.7	359.9	358.7	358.0	358.0	358.7	337.5	333.0	331.8
55°	336.9	337.5	342.0	343.3	342.0	337.5	336.9	336.9	317.6	313.1	310.7
57.5°	315.2	315.2	318.3	318.3	318.3	315.2	315.2	313.8	295.3	291.4	290.1
60°	290.1	291.4	293.9	293.4	293.9	291.4	290.1	288.9	272.8	270.3	265.8
62.5°	263.9	265.2	265.8	264.5	265.8	265.2	263.9	260.0	250.4	248.5	242.8
65°	236.4	237.6	238.3	236.9	238.3	237.6	236.4	234.5	227.4	224.1	219.1
67.5°	208.2	207.5	206.9	209.4	206.9	207.5	208.2	205.6	201.1	198.5	191.5
70°	179.3	179.3	178.7	180.0	178.7	179.3	179.3	177.4	174.9	173.0	166.6
72.5°	148.6	147.9	150.5	148.6	150.5	147.9	148.6	147.9	146.7	144.8	138.4
75°	118.5	119.8	118.5	120.4	118.5	119.8	118.5	119.1	118.5	117.2	112.7
77.5°	90.3	91.6	90.3	90.3	90.3	91.6	90.3	90.9	90.9	90.9	87.1
80°	64.1	63.4	63.4	62.7	63.4	63.4	64.1	64.1	64.7	63.4	62.2
82.5°	41.0	40.4	40.4	41.6	40.4	40.4	41.0	41.6	40.4	40.4	40.4
85°	22.4	23.0	21.8	21.8	21.8	23.0	22.4	21.1	22.4	22.4	21.8
87.5°	8.3	7.6	7.6	7.6	7.6	7.6	8.3	9.0	9.0	9.0	9.6
90°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	9.9	13.3	15.0	12.9
92.5°	37.4	35.9	30.0	24.0	30.0	35.9	37.4	53.0	73.8	84.2	73.9
95°	126.9	122.4	104.4	86.4	104.4	122.4	126.9	166.6	219.6	246.2	207.9
97.5°	293.1	284.5	250.2	215.9	250.2	284.5	293.1	318.2	351.7	368.4	304.6
100°	411.6	401.4	360.5	319.6	360.5	401.4	411.6	409.8	407.3	406.1	335.2
102.5°	512.7	504.0	469.0	434.0	469.0	504.0	512.7	480.7	438.1	416.7	344.9
105°	630.9	626.2	607.4	588.6	607.4	626.2	630.9	559.1	463.4	415.5	346.0
107.5°	692.3	693.4	697.9	702.5	697.9	693.4	692.3	592.2	458.7	391.9	330.6
110°	708.0	712.9	732.5	752.1	732.5	712.9	708.0	596.1	446.8	372.3	317.0



TEST NUMBER: P934302

CATALOG NUMBER: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	698.0	705.6	735.6	765.7	735.6	705.6	698.0	583.4	430.7	354.3	305.0
115°	663.9	674.3	716.1	757.8	716.1	674.3	663.9	553.5	406.4	332.8	291.3
117.5°	616.8	628.4	674.7	721.0	674.7	628.4	616.8	517.2	384.5	318.1	282.8
120°	585.2	596.5	641.4	686.4	641.4	596.5	585.2	494.2	372.8	312.2	279.9
122.5°	553.5	564.6	609.0	653.3	609.0	564.6	553.5	471.6	362.2	307.6	278.4
125°	511.6	521.8	562.6	603.5	562.6	521.8	511.6	442.0	349.1	302.7	277.1
127.5°	477.9	486.5	521.0	555.4	521.0	486.5	477.9	418.1	338.5	298.6	276.5
130°	456.7	464.6	496.5	528.3	496.5	464.6	456.7	403.5	332.5	297.0	276.9
132.5°	438.5	445.7	474.2	502.7	474.2	445.7	438.5	390.9	327.4	295.7	277.1
135°	412.9	419.1	443.7	468.2	443.7	419.1	412.9	373.0	319.8	293.3	276.9
137.5°	394.0	399.1	419.1	439.3	419.1	399.1	394.0	360.3	315.3	292.9	278.6
140°	378.9	383.6	402.4	421.3	402.4	383.6	378.9	349.8	310.9	291.5	278.9
142.5°	368.2	372.3	388.5	404.7	388.5	372.3	368.2	342.7	308.6	291.5	279.8
145°	352.3	355.4	367.7	379.9	367.7	355.4	352.3	331.4	303.5	289.6	279.9
147.5°	338.9	341.5	351.6	361.8	351.6	341.5	338.9	322.5	300.5	289.6	281.8
150°	331.3	333.4	341.6	349.8	341.6	333.4	331.3	317.3	298.8	289.6	282.8
152.5°	325.2	326.7	332.9	339.1	332.9	326.7	325.2	313.3	297.5	289.6	283.4
155°	317.9	319.0	323.1	327.2	323.1	319.0	317.9	308.5	295.9	289.6	284.9
157.5°	311.6	312.4	315.2	318.1	315.2	312.4	311.6	304.3	294.4	289.6	286.3
160°	308.5	308.8	310.6	312.2	310.6	308.8	308.5	302.2	293.8	289.6	287.0
162.5°	305.5	305.9	307.5	309.0	307.5	305.9	305.5	300.2	293.1	289.6	287.7
165°	300.9	301.3	303.0	304.7	303.0	301.3	300.9	297.1	292.0	289.6	288.7
167.5°	299.0	299.2	299.9	300.5	299.9	299.2	299.0	296.5	293.2	291.5	290.8
170°	299.0	299.0	299.0	299.0	299.0	299.0	299.0	296.5	293.2	291.5	291.5
172.5°	297.4	297.2	296.6	296.0	296.6	297.2	297.4	295.4	292.8	291.5	291.5
175°	295.3	295.3	295.3	295.3	295.3	295.3	295.3	294.0	292.3	291.5	291.8
177.5°	294.9	294.7	294.0	293.3	294.0	294.7	294.9	293.9	292.6	291.9	292.2
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934302

CATALOG NUMBER: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	677.0	677.0	677.0	677.0	677.0
2.5°	668.7	671.8	673.8	676.3	682.7
5°	643.0	655.2	659.0	668.7	680.2
7.5°	586.7	623.8	634.0	657.1	675.1
10°	532.2	569.4	587.3	641.8	668.7
12.5°	504.7	526.5	538.6	614.8	659.7
15°	487.4	502.8	511.8	579.0	649.4
17.5°	474.0	484.9	491.3	543.8	635.4
20°	465.7	470.7	476.5	518.2	619.3
22.5°	459.8	456.7	461.2	500.2	597.5
25°	456.0	443.9	448.9	486.1	571.9
27.5°	459.3	432.3	434.2	473.3	545.0
30°	459.8	418.2	418.9	459.8	514.9
32.5°	455.3	403.5	404.2	443.2	481.0
35°	444.5	386.2	385.5	424.0	434.9
37.5°	429.8	367.7	367.7	402.8	384.3
40°	411.8	349.1	351.0	375.3	339.4
42.5°	390.0	329.2	331.8	338.8	306.2
45°	366.3	310.0	311.9	286.3	280.5
47.5°	340.1	290.1	290.8	237.6	272.2
50°	308.8	269.6	267.1	203.7	271.6
52.5°	281.2	247.2	239.5	184.4	246.6
55°	254.2	223.6	206.9	169.7	228.6
57.5°	230.5	192.8	176.8	152.4	224.8
60°	208.8	162.6	150.5	133.9	206.3
62.5°	190.9	140.3	137.7	121.1	187.0
65°	171.6	124.9	124.2	110.2	158.8
67.5°	153.1	114.6	114.0	99.9	121.1
70°	133.2	103.7	102.5	89.0	89.7
72.5°	112.7	91.6	90.3	80.0	74.3
75°	92.3	77.5	76.9	69.8	60.2
77.5°	72.4	61.5	62.7	56.3	44.2
80°	51.9	44.8	46.1	40.4	33.3
82.5°	34.6	29.5	30.8	25.6	22.4
85°	19.2	16.6	17.3	13.5	10.2
87.5°	9.0	7.6	7.6	5.2	3.2
90°	8.7	5.5	5.2	3.5	2.0
92.5°	53.4	38.0	34.7	21.2	7.8
95°	131.4	74.0	67.9	43.4	18.9
97.5°	177.0	81.3	75.8	54.2	32.7
100°	193.6	87.4	82.5	62.8	43.3
102.5°	201.2	93.5	88.9	70.7	52.3
105°	206.9	102.6	98.7	83.2	67.7
107.5°	207.9	115.9	112.3	97.9	83.5
110°	206.4	123.4	120.1	107.1	94.1



TEST NUMBER: P934302

CATALOG NUMBER: SQ4-FA-050U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	206.4	132.5	129.3	116.9	104.5
115°	208.3	146.0	143.2	131.7	120.2
117.5°	212.2	159.2	156.6	146.2	135.8
120°	215.4	166.9	164.5	154.7	144.9
122.5°	219.8	176.0	173.5	163.7	153.8
125°	226.0	187.6	185.3	176.3	167.3
127.5°	232.1	198.8	196.5	187.5	178.3
130°	236.6	206.3	203.8	194.1	184.2
132.5°	240.2	212.4	209.9	200.2	190.3
135°	244.1	219.5	217.3	208.3	199.4
137.5°	250.0	228.5	226.3	217.5	208.7
140°	253.6	234.6	232.6	224.4	216.3
142.5°	256.6	239.1	237.2	229.8	222.2
145°	260.5	246.0	244.4	237.8	231.3
147.5°	266.3	254.7	253.1	246.8	240.4
150°	269.3	259.2	257.8	251.9	246.2
152.5°	271.3	262.1	261.1	256.7	252.3
155°	275.6	268.6	267.9	264.6	261.4
157.5°	279.9	275.1	274.4	271.2	268.1
160°	281.9	278.1	277.5	275.0	272.7
162.5°	284.0	281.2	280.8	279.0	277.1
165°	287.1	285.8	285.4	283.7	282.1
167.5°	289.4	288.3	288.1	287.4	286.6
170°	291.4	291.3	291.1	290.3	289.6
172.5°	291.5	291.5	291.5	291.3	291.1
175°	292.7	293.3	293.3	293.3	293.3
177.5°	292.8	293.3	293.3	293.3	293.3
180°	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934302
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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	10.99	11.84	11.97	12.82	14.12	13.79	14.63	14.76	15.62	16.92
	3H	11.47	12.22	12.45	13.22	14.54	15.12	15.88	16.11	16.88	18.20
	4H	11.66	12.37	12.66	13.37	14.70	15.56	16.28	16.56	17.28	18.61
	6H	11.78	12.44	12.79	13.44	14.78	15.84	16.50	16.85	17.50	18.84
	8H	11.78	12.41	12.79	13.43	14.76	15.91	16.53	16.92	17.56	18.89
	12H	11.75	12.34	12.77	13.36	14.72	15.94	16.54	16.96	17.55	18.92
4H	2H	12.02	12.73	13.02	13.73	15.06	14.20	14.91	15.20	15.91	17.24
	3H	13.04	13.64	14.05	14.67	16.01	15.69	16.29	16.71	17.32	18.66
	4H	13.32	13.86	14.34	14.88	16.25	16.21	16.76	17.23	17.78	19.15
	6H	13.44	13.91	14.47	14.95	16.32	16.57	17.04	17.60	18.08	19.45
	8H	13.45	13.88	14.48	14.92	16.30	16.67	17.11	17.70	18.15	19.52
	12H	13.41	13.81	14.46	14.86	16.24	16.72	17.12	17.77	18.17	19.55
8H	4H	13.76	14.20	14.80	15.24	16.62	16.34	16.78	17.37	17.81	19.19
	6H	14.02	14.39	15.08	15.47	16.84	16.76	17.13	17.82	18.21	19.58
	8H	14.07	14.38	15.13	15.45	16.84	16.91	17.23	17.98	18.29	19.69
	12H	14.05	14.33	15.12	15.39	16.82	17.00	17.28	18.07	18.34	19.78
12H	4H	13.77	14.16	14.82	15.22	16.60	16.30	16.70	17.35	17.75	19.13
	6H	14.08	14.40	15.15	15.47	16.86	16.76	17.08	17.83	18.15	19.54
	8H	14.15	14.43	15.22	15.49	16.92	16.92	17.20	17.99	18.26	19.69