

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: P933902

Luminaire Tested: SQ4-FA-025U-050D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933902
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-B40-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

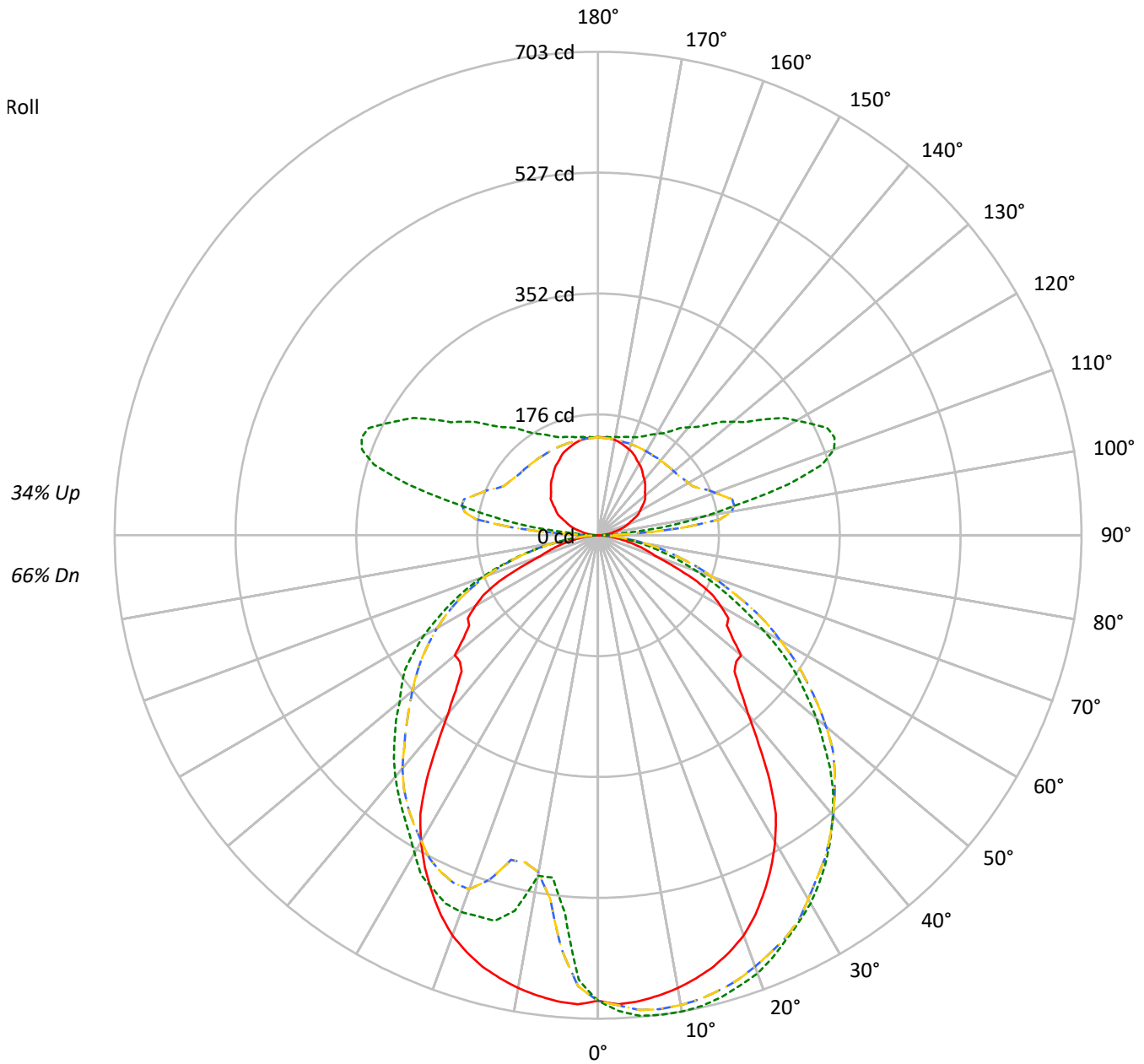
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2679.7 lumens
Efficiency: N/A
Efficacy: 121.8 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-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°	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	2.3
10°-20°	173.5	6.5
20°-30°	268.2	10.0
30°-40°	320.2	11.9
40°-50°	322.1	12.0
50°-60°	280.2	10.5
60°-70°	198.7	7.4
70°-80°	105.1	3.9
80°-90°	26.7	1.0
90°-100°	69.5	2.6
100°-110°	182.7	6.8
110°-120°	189.4	7.1
120°-130°	151.9	5.7
130°-140°	119.2	4.4
140°-150°	91.5	3.4
150°-160°	65.9	2.5
160°-170°	40.3	1.5
170°-180°	13.6	0.5
0°-30°	502.8	18.8
0°-40°	823.0	30.7
0°-60°	1425.3	53.2
0°-90°	1755.8	65.5
90°-120°	441.5	16.5
90°-150°	804.1	30.0
90°-180°	924.0	34.5
0°-180°	2679.7	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°	1	4	1	4	1	1
95°	9	42	9	42	9	10
105°	33	286	33	286	33	35
115°	58	368	58	368	58	58
125°	81	293	81	293	81	72
135°	97	228	97	228	97	75
145°	112	185	112	185	112	70
155°	127	159	127	159	127	58
165°	137	148	137	148	137	39
175°	142	143	142	143	142	14
180°	142	142	142	142	142	



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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°	1.0	1.7	2.5	2.7	4.2	6.2	7.3	6.5	4.9	3.6	3.6
92.5°	3.8	10.3	16.8	18.4	26.0	36.0	41.0	35.9	25.8	18.1	17.4
95°	9.2	21.1	33.0	36.0	63.9	101.0	119.7	106.8	81.0	61.7	59.5
97.5°	15.9	26.4	36.9	39.5	86.0	148.0	179.1	170.9	154.6	142.4	138.2
100°	21.0	30.6	40.1	42.5	94.1	162.9	197.3	197.9	199.1	200.0	195.0
102.5°	25.4	34.3	43.3	45.5	97.8	167.6	202.5	212.9	233.6	249.2	244.9
105°	32.9	40.5	47.9	49.9	100.6	168.1	201.9	225.2	271.7	306.6	304.3
107.5°	40.6	47.6	54.6	56.3	101.0	160.6	190.4	222.9	287.7	336.4	337.0
110°	45.7	52.0	58.4	60.0	100.3	154.0	180.9	217.2	289.7	344.1	346.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	50.8	56.8	62.8	64.4	100.3	148.2	172.2	209.3	283.5	339.2	342.8
115°	58.4	64.0	69.5	71.0	101.2	141.6	161.8	197.5	269.0	322.6	327.7
117.5°	66.0	71.1	76.1	77.4	103.1	137.4	154.6	186.9	251.4	299.8	305.4
120°	70.4	75.2	79.9	81.1	104.6	136.0	151.7	181.2	240.2	284.4	289.8
122.5°	74.7	79.5	84.2	85.5	106.8	135.2	149.5	176.0	229.1	268.9	274.3
125°	81.3	85.7	90.1	91.2	109.8	134.7	147.1	169.6	214.8	248.6	253.6
127.5°	86.6	91.1	95.5	96.6	112.8	134.3	145.1	164.5	203.2	232.3	236.5
130°	89.5	94.3	99.0	100.3	115.0	134.6	144.3	161.6	196.1	221.9	225.8
132.5°	92.5	97.3	102.1	103.2	116.7	134.7	143.6	159.1	189.9	213.2	216.6
135°	96.9	101.2	105.6	106.7	118.6	134.6	142.5	155.4	181.3	200.6	203.6
137.5°	101.4	105.7	110.0	111.1	121.5	135.3	142.3	153.2	175.1	191.5	194.0
140°	105.1	109.1	113.1	114.0	123.2	135.5	141.6	151.1	170.0	184.1	186.4
142.5°	108.0	111.6	115.3	116.2	124.7	136.0	141.6	149.9	166.6	179.0	181.0
145°	112.4	115.6	118.8	119.6	126.6	136.0	140.7	147.5	161.0	171.2	172.8
147.5°	116.8	119.9	123.0	123.8	129.4	136.9	140.7	146.0	156.7	164.7	166.0
150°	119.7	122.4	125.3	126.0	130.8	137.4	140.7	145.2	154.2	161.0	162.0
152.5°	122.6	124.7	126.8	127.4	131.8	137.7	140.7	144.5	152.2	158.1	158.8
155°	127.0	128.5	130.2	130.5	133.9	138.4	140.7	143.7	149.9	154.5	155.0
157.5°	130.3	131.8	133.3	133.7	136.0	139.1	140.7	143.1	147.8	151.4	151.7
160°	132.5	133.6	134.8	135.1	136.9	139.4	140.7	142.7	146.8	149.8	150.0
162.5°	134.7	135.5	136.5	136.7	138.0	139.8	140.7	142.4	145.8	148.4	148.6
165°	137.0	137.8	138.7	138.9	139.4	140.3	140.7	141.9	144.4	146.2	146.4
167.5°	139.2	139.6	140.0	140.1	140.6	141.2	141.6	142.4	144.0	145.3	145.4
170°	140.7	141.1	141.4	141.5	141.5	141.6	141.6	142.4	144.0	145.3	145.3
172.5°	141.4	141.5	141.6	141.6	141.6	141.6	141.6	142.3	143.5	144.5	144.4
175°	142.5	142.5	142.5	142.5	142.2	141.8	141.6	142.0	142.9	143.4	143.4
177.5°	142.5	142.5	142.5	142.5	142.3	142.0	141.8	142.1	142.8	143.2	143.2
180°	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5



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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°	3.6	3.6	3.6	3.6	3.6	4.9	6.5	7.3	6.2	4.2	2.7
92.5°	14.5	11.7	14.5	17.4	18.1	25.8	35.9	41.0	36.0	26.0	18.4
95°	50.8	42.0	50.8	59.5	61.7	81.0	106.8	119.7	101.0	63.9	36.0
97.5°	121.6	105.0	121.6	138.2	142.4	154.6	170.9	179.1	148.0	86.0	39.5
100°	175.2	155.4	175.2	195.0	200.0	199.1	197.9	197.3	162.9	94.1	42.5
102.5°	227.9	210.9	227.9	244.9	249.2	233.6	212.9	202.5	167.6	97.8	45.5
105°	295.2	286.0	295.2	304.3	306.6	271.7	225.2	201.9	168.1	100.6	49.9
107.5°	339.2	341.4	339.2	337.0	336.4	287.7	222.9	190.4	160.6	101.0	56.3
110°	355.9	365.5	355.9	346.5	344.1	289.7	217.2	180.9	154.0	100.3	60.0



TEST NUMBER: P933902

CATALOG NUMBER: SQ4-FA-025U-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°	357.5	372.1	357.5	342.8	339.2	283.5	209.3	172.2	148.2	100.3	64.4
115°	348.0	368.2	348.0	327.7	322.6	269.0	197.5	161.8	141.6	101.2	71.0
117.5°	327.9	350.4	327.9	305.4	299.8	251.4	186.9	154.6	137.4	103.1	77.4
120°	311.7	333.5	311.7	289.8	284.4	240.2	181.2	151.7	136.0	104.6	81.1
122.5°	295.9	317.4	295.9	274.3	268.9	229.1	176.0	149.5	135.2	106.8	85.5
125°	273.4	293.3	273.4	253.6	248.6	214.8	169.6	147.1	134.7	109.8	91.2
127.5°	253.2	269.9	253.2	236.5	232.3	203.2	164.5	145.1	134.3	112.8	96.6
130°	241.2	256.7	241.2	225.8	221.9	196.1	161.6	144.3	134.6	115.0	100.3
132.5°	230.4	244.3	230.4	216.6	213.2	189.9	159.1	143.6	134.7	116.7	103.2
135°	215.6	227.6	215.6	203.6	200.6	181.3	155.4	142.5	134.6	118.6	106.7
137.5°	203.7	213.5	203.7	194.0	191.5	175.1	153.2	142.3	135.3	121.5	111.1
140°	195.5	204.7	195.5	186.4	184.1	170.0	151.1	141.6	135.5	123.2	114.0
142.5°	188.8	196.6	188.8	181.0	179.0	166.6	149.9	141.6	136.0	124.7	116.2
145°	178.7	184.6	178.7	172.8	171.2	161.0	147.5	140.7	136.0	126.6	119.6
147.5°	170.8	175.8	170.8	166.0	164.7	156.7	146.0	140.7	136.9	129.4	123.8
150°	166.0	170.0	166.0	162.0	161.0	154.2	145.2	140.7	137.4	130.8	126.0
152.5°	161.8	164.8	161.8	158.8	158.1	152.2	144.5	140.7	137.7	131.8	127.4
155°	157.0	159.0	157.0	155.0	154.5	149.9	143.7	140.7	138.4	133.9	130.5
157.5°	153.2	154.6	153.2	151.7	151.4	147.8	143.1	140.7	139.1	136.0	133.7
160°	150.9	151.7	150.9	150.0	149.8	146.8	142.7	140.7	139.4	136.9	135.1
162.5°	149.4	150.1	149.4	148.6	148.4	145.8	142.4	140.7	139.8	138.0	136.7
165°	147.3	148.0	147.3	146.4	146.2	144.4	141.9	140.7	140.3	139.4	138.9
167.5°	145.6	146.0	145.6	145.4	145.3	144.0	142.4	141.6	141.2	140.6	140.1
170°	145.3	145.3	145.3	145.3	145.3	144.0	142.4	141.6	141.6	141.5	141.5
172.5°	144.1	143.8	144.1	144.4	144.5	143.5	142.3	141.6	141.6	141.6	141.6
175°	143.4	143.4	143.4	143.4	143.4	142.9	142.0	141.6	141.8	142.2	142.5
177.5°	142.9	142.5	142.9	143.2	143.2	142.8	142.1	141.8	142.0	142.3	142.5
180°	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5



TEST NUMBER: P933902

CATALOG NUMBER: SQ4-FA-025U-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°	2.5	1.7	1.0	1.7	2.5	2.7	4.2	6.2	7.3	6.5	4.9
92.5°	16.8	10.3	3.8	10.3	16.8	18.4	26.0	36.0	41.0	35.9	25.8
95°	33.0	21.1	9.2	21.1	33.0	36.0	63.9	101.0	119.7	106.8	81.0
97.5°	36.9	26.4	15.9	26.4	36.9	39.5	86.0	148.0	179.1	170.9	154.6
100°	40.1	30.6	21.0	30.6	40.1	42.5	94.1	162.9	197.3	197.9	199.1
102.5°	43.3	34.3	25.4	34.3	43.3	45.5	97.8	167.6	202.5	212.9	233.6
105°	47.9	40.5	32.9	40.5	47.9	49.9	100.6	168.1	201.9	225.2	271.7
107.5°	54.6	47.6	40.6	47.6	54.6	56.3	101.0	160.6	190.4	222.9	287.7
110°	58.4	52.0	45.7	52.0	58.4	60.0	100.3	154.0	180.9	217.2	289.7



TEST NUMBER: P933902

CATALOG NUMBER: SQ4-FA-025U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	62.8	56.8	50.8	56.8	62.8	64.4	100.3	148.2	172.2	209.3	283.5
115°	69.5	64.0	58.4	64.0	69.5	71.0	101.2	141.6	161.8	197.5	269.0
117.5°	76.1	71.1	66.0	71.1	76.1	77.4	103.1	137.4	154.6	186.9	251.4
120°	79.9	75.2	70.4	75.2	79.9	81.1	104.6	136.0	151.7	181.2	240.2
122.5°	84.2	79.5	74.7	79.5	84.2	85.5	106.8	135.2	149.5	176.0	229.1
125°	90.1	85.7	81.3	85.7	90.1	91.2	109.8	134.7	147.1	169.6	214.8
127.5°	95.5	91.1	86.6	91.1	95.5	96.6	112.8	134.3	145.1	164.5	203.2
130°	99.0	94.3	89.5	94.3	99.0	100.3	115.0	134.6	144.3	161.6	196.1
132.5°	102.1	97.3	92.5	97.3	102.1	103.2	116.7	134.7	143.6	159.1	189.9
135°	105.6	101.2	96.9	101.2	105.6	106.7	118.6	134.6	142.5	155.4	181.3
137.5°	110.0	105.7	101.4	105.7	110.0	111.1	121.5	135.3	142.3	153.2	175.1
140°	113.1	109.1	105.1	109.1	113.1	114.0	123.2	135.5	141.6	151.1	170.0
142.5°	115.3	111.6	108.0	111.6	115.3	116.2	124.7	136.0	141.6	149.9	166.6
145°	118.8	115.6	112.4	115.6	118.8	119.6	126.6	136.0	140.7	147.5	161.0
147.5°	123.0	119.9	116.8	119.9	123.0	123.8	129.4	136.9	140.7	146.0	156.7
150°	125.3	122.4	119.7	122.4	125.3	126.0	130.8	137.4	140.7	145.2	154.2
152.5°	126.8	124.7	122.6	124.7	126.8	127.4	131.8	137.7	140.7	144.5	152.2
155°	130.2	128.5	127.0	128.5	130.2	130.5	133.9	138.4	140.7	143.7	149.9
157.5°	133.3	131.8	130.3	131.8	133.3	133.7	136.0	139.1	140.7	143.1	147.8
160°	134.8	133.6	132.5	133.6	134.8	135.1	136.9	139.4	140.7	142.7	146.8
162.5°	136.5	135.5	134.7	135.5	136.5	136.7	138.0	139.8	140.7	142.4	145.8
165°	138.7	137.8	137.0	137.8	138.7	138.9	139.4	140.3	140.7	141.9	144.4
167.5°	140.0	139.6	139.2	139.6	140.0	140.1	140.6	141.2	141.6	142.4	144.0
170°	141.4	141.1	140.7	141.1	141.4	141.5	141.5	141.6	141.6	142.4	144.0
172.5°	141.6	141.5	141.4	141.5	141.6	141.6	141.6	141.6	141.6	142.3	143.5
175°	142.5	142.5	142.5	142.5	142.5	142.5	142.2	141.8	141.6	142.0	142.9
177.5°	142.5	142.5	142.5	142.5	142.5	142.5	142.3	142.0	141.8	142.1	142.8
180°	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5



TEST NUMBER: P933902

CATALOG NUMBER: SQ4-FA-025U-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°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	4.9	6.5	7.3	6.2
92.5°	18.1	17.4	14.5	11.7	14.5	17.4	18.1	25.8	35.9	41.0	36.0
95°	61.7	59.5	50.8	42.0	50.8	59.5	61.7	81.0	106.8	119.7	101.0
97.5°	142.4	138.2	121.6	105.0	121.6	138.2	142.4	154.6	170.9	179.1	148.0
100°	200.0	195.0	175.2	155.4	175.2	195.0	200.0	199.1	197.9	197.3	162.9
102.5°	249.2	244.9	227.9	210.9	227.9	244.9	249.2	233.6	212.9	202.5	167.6
105°	306.6	304.3	295.2	286.0	295.2	304.3	306.6	271.7	225.2	201.9	168.1
107.5°	336.4	337.0	339.2	341.4	339.2	337.0	336.4	287.7	222.9	190.4	160.6
110°	344.1	346.5	355.9	365.5	355.9	346.5	344.1	289.7	217.2	180.9	154.0



TEST NUMBER: P933902

CATALOG NUMBER: SQ4-FA-025U-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°	339.2	342.8	357.5	372.1	357.5	342.8	339.2	283.5	209.3	172.2	148.2
115°	322.6	327.7	348.0	368.2	348.0	327.7	322.6	269.0	197.5	161.8	141.6
117.5°	299.8	305.4	327.9	350.4	327.9	305.4	299.8	251.4	186.9	154.6	137.4
120°	284.4	289.8	311.7	333.5	311.7	289.8	284.4	240.2	181.2	151.7	136.0
122.5°	268.9	274.3	295.9	317.4	295.9	274.3	268.9	229.1	176.0	149.5	135.2
125°	248.6	253.6	273.4	293.3	273.4	253.6	248.6	214.8	169.6	147.1	134.7
127.5°	232.3	236.5	253.2	269.9	253.2	236.5	232.3	203.2	164.5	145.1	134.3
130°	221.9	225.8	241.2	256.7	241.2	225.8	221.9	196.1	161.6	144.3	134.6
132.5°	213.2	216.6	230.4	244.3	230.4	216.6	213.2	189.9	159.1	143.6	134.7
135°	200.6	203.6	215.6	227.6	215.6	203.6	200.6	181.3	155.4	142.5	134.6
137.5°	191.5	194.0	203.7	213.5	203.7	194.0	191.5	175.1	153.2	142.3	135.3
140°	184.1	186.4	195.5	204.7	195.5	186.4	184.1	170.0	151.1	141.6	135.5
142.5°	179.0	181.0	188.8	196.6	188.8	181.0	179.0	166.6	149.9	141.6	136.0
145°	171.2	172.8	178.7	184.6	178.7	172.8	171.2	161.0	147.5	140.7	136.0
147.5°	164.7	166.0	170.8	175.8	170.8	166.0	164.7	156.7	146.0	140.7	136.9
150°	161.0	162.0	166.0	170.0	166.0	162.0	161.0	154.2	145.2	140.7	137.4
152.5°	158.1	158.8	161.8	164.8	161.8	158.8	158.1	152.2	144.5	140.7	137.7
155°	154.5	155.0	157.0	159.0	157.0	155.0	154.5	149.9	143.7	140.7	138.4
157.5°	151.4	151.7	153.2	154.6	153.2	151.7	151.4	147.8	143.1	140.7	139.1
160°	149.8	150.0	150.9	151.7	150.9	150.0	149.8	146.8	142.7	140.7	139.4
162.5°	148.4	148.6	149.4	150.1	149.4	148.6	148.4	145.8	142.4	140.7	139.8
165°	146.2	146.4	147.3	148.0	147.3	146.4	146.2	144.4	141.9	140.7	140.3
167.5°	145.3	145.4	145.6	146.0	145.6	145.4	145.3	144.0	142.4	141.6	141.2
170°	145.3	145.3	145.3	145.3	145.3	145.3	145.3	144.0	142.4	141.6	141.6
172.5°	144.5	144.4	144.1	143.8	144.1	144.4	144.5	143.5	142.3	141.6	141.6
175°	143.4	143.4	143.4	143.4	143.4	143.4	143.4	142.9	142.0	141.6	141.8
177.5°	143.2	143.2	142.9	142.5	142.9	143.2	143.2	142.8	142.1	141.8	142.0
180°	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5



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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°	4.2	2.7	2.5	1.7	1.0
92.5°	26.0	18.4	16.8	10.3	3.8
95°	63.9	36.0	33.0	21.1	9.2
97.5°	86.0	39.5	36.9	26.4	15.9
100°	94.1	42.5	40.1	30.6	21.0
102.5°	97.8	45.5	43.3	34.3	25.4
105°	100.6	49.9	47.9	40.5	32.9
107.5°	101.0	56.3	54.6	47.6	40.6
110°	100.3	60.0	58.4	52.0	45.7



TEST NUMBER: P933902

CATALOG NUMBER: SQ4-FA-025U-050D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	100.3	64.4	62.8	56.8	50.8
115°	101.2	71.0	69.5	64.0	58.4
117.5°	103.1	77.4	76.1	71.1	66.0
120°	104.6	81.1	79.9	75.2	70.4
122.5°	106.8	85.5	84.2	79.5	74.7
125°	109.8	91.2	90.1	85.7	81.3
127.5°	112.8	96.6	95.5	91.1	86.6
130°	115.0	100.3	99.0	94.3	89.5
132.5°	116.7	103.2	102.1	97.3	92.5
135°	118.6	106.7	105.6	101.2	96.9
137.5°	121.5	111.1	110.0	105.7	101.4
140°	123.2	114.0	113.1	109.1	105.1
142.5°	124.7	116.2	115.3	111.6	108.0
145°	126.6	119.6	118.8	115.6	112.4
147.5°	129.4	123.8	123.0	119.9	116.8
150°	130.8	126.0	125.3	122.4	119.7
152.5°	131.8	127.4	126.8	124.7	122.6
155°	133.9	130.5	130.2	128.5	127.0
157.5°	136.0	133.7	133.3	131.8	130.3
160°	136.9	135.1	134.8	133.6	132.5
162.5°	138.0	136.7	136.5	135.5	134.7
165°	139.4	138.9	138.7	137.8	137.0
167.5°	140.6	140.1	140.0	139.6	139.2
170°	141.5	141.5	141.4	141.1	140.7
172.5°	141.6	141.6	141.6	141.5	141.4
175°	142.2	142.5	142.5	142.5	142.5
177.5°	142.3	142.5	142.5	142.5	142.5
180°	142.5	142.5	142.5	142.5	142.5



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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	12.50	13.52	13.31	14.36	15.39	15.30	16.32	16.11	17.15	18.18
	3H	12.99	13.91	13.81	14.75	15.81	16.64	17.56	17.47	18.40	19.46
	4H	13.19	14.05	14.03	14.90	15.97	17.09	17.95	17.93	18.81	19.88
	6H	13.32	14.11	14.17	14.97	16.05	17.38	18.17	18.23	19.03	20.11
	8H	13.32	14.08	14.18	14.96	16.04	17.45	18.21	18.31	19.09	20.17
	12H	13.30	14.02	14.17	14.89	16.00	17.49	18.21	18.36	19.08	20.19
4H	2H	13.54	14.41	14.39	15.26	16.33	15.73	16.59	16.57	17.44	18.51
	3H	14.59	15.31	15.44	16.19	17.28	17.24	17.96	18.10	18.84	19.93
	4H	14.87	15.52	15.74	16.41	17.52	17.77	18.42	18.64	19.30	20.42
	6H	15.00	15.57	15.89	16.47	17.59	18.13	18.70	19.02	19.60	20.72
	8H	15.01	15.54	15.90	16.44	17.57	18.24	18.77	19.13	19.67	20.80
	12H	14.99	15.46	15.90	16.38	17.52	18.30	18.77	19.21	19.69	20.83
8H	4H	15.33	15.86	16.22	16.76	17.89	17.90	18.43	18.79	19.33	20.46
	6H	15.60	16.04	16.51	16.98	18.11	18.34	18.78	19.26	19.72	20.85
	8H	15.64	16.03	16.57	16.96	18.11	18.49	18.88	19.41	19.81	20.96
	12H	15.63	15.98	16.56	16.90	18.10	18.59	18.93	19.52	19.86	21.05
12H	4H	15.34	15.82	16.25	16.74	17.87	17.88	18.35	18.79	19.27	20.41
	6H	15.66	16.05	16.58	16.98	18.13	18.34	18.73	19.26	19.66	20.81
	8H	15.73	16.07	16.66	17.00	18.20	18.50	18.84	19.43	19.77	20.97