

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:

Luminaire Tested: SQ4-FA-0U-050D-930-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-0U-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

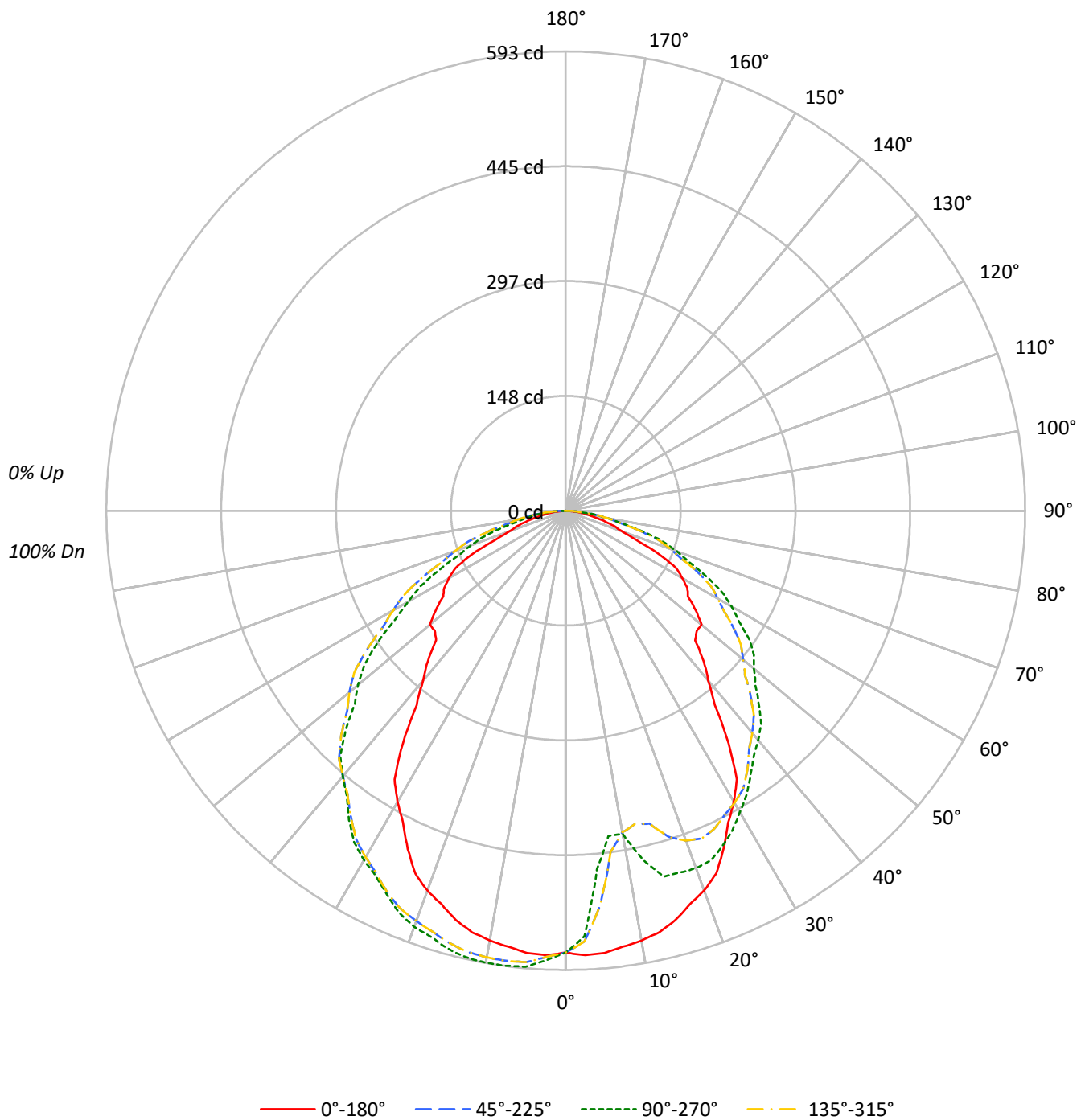
Lumens per Lamp: N/A
Luminaire Lumens: 1478.5 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
Input Voltage (V): 120
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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		71
3	91	81	73	66	88	79	72	66	76	70	64		73	68	63		60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		51
5	77	64	55	49	75	63	54	48	61	53	48		59	52	47		45
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		39
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		35
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		31
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		28
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5264	5264	5264	5264
5°	5309	4304	5309	5474
10°	5279	3969	5279	5553
15°	5228	4671	5228	5594
20°	5125	4823	5125	5612
25°	4907	4868	4907	5561
30°	4624	4790	4624	5549
35°	4128	4688	4128	5490
40°	3446	4655	3446	5390
45°	3085	4599	3085	5240
50°	3285	4556	3285	5021
55°	3100	4654	3100	4766
60°	3207	4561	3207	4333
65°	2923	4360	2923	3901
70°	2039	4092	2039	3480
75°	1807	3618	1807	3019
80°	1493	2811	1493	2582
85°	910	1948	910	2287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 5352 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	3.5
10°-20°	146.2	9.9
20°-30°	225.9	15.3
30°-40°	269.9	18.3
40°-50°	271.6	18.4
50°-60°	235.8	15.9
60°-70°	166.9	11.3
70°-80°	88.3	6.0
80°-90°	22.5	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	423.5	28.6
0°-40°	693.4	46.9
0°-60°	1200.8	81.2
0°-90°	1478.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1478.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	570	570	570	570	570	
5°	573	465	573	591	573	54
15°	547	489	547	586	547	154
25°	482	478	482	546	482	221
35°	366	416	366	487	366	226
45°	236	352	236	402	236	190
55°	193	289	193	296	193	177
65°	134	200	134	179	134	127
75°	51	102	51	85	51	54
85°	9	18	9	22	9	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5
2.5°	574.4	570.1	568.4	564.9	558.5	555.0	557.6	553.3	555.0	550.2	555.0
5°	573.2	563.5	555.4	541.9	522.5	499.8	494.4	480.4	471.8	464.7	471.8
7.5°	567.8	551.2	526.5	485.3	452.1	435.9	431.9	427.9	426.9	423.3	426.9
10°	563.5	540.9	495.0	448.6	425.3	417.8	419.4	421.0	424.3	423.7	424.3
12.5°	557.5	522.7	462.2	430.0	414.5	414.3	426.3	447.8	462.7	461.7	462.7
15°	547.3	488.0	431.3	410.8	405.9	430.7	474.5	484.7	488.5	489.0	488.5
17.5°	532.8	454.0	411.5	398.0	414.5	468.5	481.8	486.4	489.7	489.9	489.7
20°	522.0	436.7	401.6	392.4	436.1	470.7	478.8	484.7	490.1	491.2	490.1
22.5°	507.3	424.6	391.2	388.5	448.2	468.5	475.8	484.7	489.3	489.0	489.3
25°	482.0	409.7	378.4	384.3	449.6	457.2	471.2	477.2	477.7	478.2	477.7
27.5°	454.3	396.6	363.4	387.1	440.9	446.3	461.4	464.4	466.5	465.6	466.5
30°	434.0	387.6	353.0	387.6	434.0	437.2	452.3	454.5	451.8	449.6	451.8
32.5°	411.1	376.3	343.1	384.5	423.6	428.2	440.2	439.4	436.7	435.0	436.7
35°	366.5	357.3	324.9	374.6	405.9	411.8	418.9	418.3	417.8	416.2	417.8
37.5°	316.3	334.9	307.0	359.2	388.9	388.4	398.9	401.2	400.6	398.6	400.6
40°	286.1	316.3	295.8	347.1	376.8	372.4	385.9	388.6	388.1	386.5	388.1
42.5°	263.6	291.7	282.8	332.4	362.1	356.9	373.4	376.1	374.7	373.5	374.7
45°	236.4	241.3	262.9	308.8	337.4	336.8	354.6	357.3	354.1	352.5	354.1
47.5°	229.3	194.5	241.1	281.3	312.9	314.9	334.0	336.4	333.5	332.1	333.5
50°	228.9	171.6	225.1	260.2	296.9	300.7	320.6	321.7	317.9	317.4	317.9
52.5°	212.0	158.7	206.5	241.6	283.1	287.7	305.9	305.7	305.4	306.2	305.4
55°	192.7	143.0	174.3	214.3	261.8	267.7	283.9	284.5	288.2	289.3	288.2
57.5°	186.3	125.3	144.6	190.6	240.4	245.1	260.3	261.6	264.2	264.1	264.2
60°	173.8	112.8	126.8	176.0	224.0	229.9	243.4	245.6	247.8	247.2	247.8
62.5°	160.9	104.2	118.2	163.9	208.5	214.8	224.0	227.9	228.8	227.8	228.8
65°	133.9	92.8	104.7	144.7	184.6	191.6	197.6	200.3	200.8	199.7	200.8
67.5°	96.7	82.4	94.1	125.7	157.2	165.1	168.5	170.1	169.6	171.5	169.6
70°	75.6	75.0	86.4	112.3	140.3	147.4	149.5	151.1	150.6	151.7	150.6
72.5°	65.2	69.0	78.2	98.5	121.3	128.4	129.7	130.0	131.6	130.5	131.6
75°	50.7	58.8	64.8	77.7	95.0	99.9	100.4	100.9	99.9	101.5	99.9
77.5°	35.4	44.8	50.1	57.5	69.2	72.2	72.1	72.4	71.6	71.5	71.6
80°	28.1	34.0	38.9	43.7	52.4	54.5	54.0	53.4	53.4	52.9	53.4
82.5°	20.7	24.1	28.5	32.1	37.7	38.1	38.9	37.9	37.9	38.6	37.9
85°	8.6	11.3	14.6	16.2	18.4	18.9	17.8	19.4	18.4	18.4	18.4
87.5°	2.2	3.5	5.2	6.0	6.5	6.0	6.0	5.2	5.2	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5
2.5°	553.3	557.6	555.0	558.5	564.9	568.4	570.1	574.4	574.4	577.0	577.9
5°	480.4	494.4	499.8	522.5	541.9	555.4	563.5	573.2	577.6	583.5	585.7
7.5°	427.9	431.9	435.9	452.1	485.3	526.5	551.2	567.8	576.6	584.4	587.5
10°	421.0	419.4	417.8	425.3	448.6	495.0	540.9	563.5	574.9	583.5	586.2
12.5°	447.8	426.3	414.3	414.5	430.0	462.2	522.7	557.5	572.3	580.5	583.6
15°	484.7	474.5	430.7	405.9	410.8	431.3	488.0	547.3	565.7	573.2	578.1
17.5°	486.4	481.8	468.5	414.5	398.0	411.5	454.0	532.8	556.1	565.0	569.4
20°	484.7	478.8	470.7	436.1	392.4	401.6	436.7	522.0	547.9	558.1	562.4
22.5°	484.7	475.8	468.5	448.2	388.5	391.2	424.6	507.3	539.2	549.9	554.2
25°	477.2	471.2	457.2	449.6	384.3	378.4	409.7	482.0	525.2	534.4	540.9
27.5°	464.4	461.4	446.3	440.9	387.1	363.4	396.6	454.3	505.9	518.9	526.0
30°	454.5	452.3	437.2	434.0	387.6	353.0	387.6	434.0	489.0	506.8	516.0
32.5°	439.4	440.2	428.2	423.6	384.5	343.1	376.3	411.1	464.0	494.3	505.2
35°	418.3	418.9	411.8	405.9	374.6	324.9	357.3	366.5	433.4	476.6	485.8
37.5°	401.2	398.9	388.4	388.9	359.2	307.0	334.9	316.3	405.8	457.9	464.6
40°	388.6	385.9	372.4	376.8	347.1	295.8	316.3	286.1	379.5	443.7	449.1
42.5°	376.1	373.4	356.9	362.1	332.4	282.8	291.7	263.6	350.5	428.6	430.1
45°	357.3	354.6	336.8	337.4	308.8	262.9	241.3	236.4	333.6	404.3	404.3
47.5°	336.4	334.0	314.9	312.9	281.3	241.1	194.5	229.3	309.8	378.2	378.0
50°	321.7	320.6	300.7	296.9	260.2	225.1	171.6	228.9	292.6	355.7	361.1
52.5°	305.7	305.9	287.7	283.1	241.6	206.5	158.7	212.0	271.4	326.8	343.8
55°	284.5	283.9	267.7	261.8	214.3	174.3	143.0	192.7	238.6	286.6	315.2
57.5°	261.6	260.3	245.1	240.4	190.6	144.6	125.3	186.3	187.6	249.9	286.4
60°	245.6	243.4	229.9	224.0	176.0	126.8	112.8	173.8	143.6	224.0	264.0
62.5°	227.9	224.0	214.8	208.5	163.9	118.2	104.2	160.9	112.1	194.6	242.4
65°	200.3	197.6	191.6	184.6	144.7	104.7	92.8	133.9	87.4	133.3	210.5
67.5°	170.1	168.5	165.1	157.2	125.7	94.1	82.4	96.7	66.5	84.6	180.2
70°	151.1	149.5	147.4	140.3	112.3	86.4	75.0	75.6	47.5	62.6	160.3
72.5°	130.0	129.7	128.4	121.3	98.5	78.2	69.0	65.2	40.2	49.2	140.0
75°	100.9	100.4	99.9	95.0	77.7	64.8	58.8	50.7	40.5	35.1	109.6
77.5°	72.4	72.1	72.2	69.2	57.5	50.1	44.8	35.4	36.2	26.7	82.0
80°	53.4	54.0	54.5	52.4	43.7	38.9	34.0	28.1	29.7	21.1	62.6
82.5°	37.9	38.9	38.1	37.7	32.1	28.5	24.1	20.7	21.1	16.7	46.6
85°	19.4	17.8	18.9	18.4	16.2	14.6	11.3	8.6	10.8	9.7	23.2
87.5°	5.2	6.0	6.0	6.5	6.0	5.2	3.5	2.2	3.9	4.8	9.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5
2.5°	576.6	576.6	580.5	581.3	582.2	580.9	582.2	581.3	580.5	576.6	576.6
5°	585.1	585.1	590.5	592.1	592.1	591.1	592.1	592.1	590.5	585.1	585.1
7.5°	585.9	586.7	592.1	593.3	594.3	592.7	594.3	593.3	592.1	586.7	585.9
10°	584.6	586.7	592.1	593.8	594.3	592.7	594.3	593.8	592.1	586.7	584.6
12.5°	582.8	584.6	590.0	591.2	592.1	590.9	592.1	591.2	590.0	584.6	582.8
15°	577.0	579.2	585.1	586.2	587.3	585.7	587.3	586.2	585.1	579.2	577.0
17.5°	568.9	571.6	577.0	578.7	579.3	577.2	579.3	578.7	577.0	571.6	568.9
20°	562.4	565.1	570.5	572.7	573.2	571.6	573.2	572.7	570.5	565.1	562.4
22.5°	554.2	558.7	563.6	564.5	563.7	562.1	563.7	564.5	563.6	558.7	554.2
25°	542.5	546.3	547.9	547.9	547.9	546.3	547.9	547.9	547.9	546.3	542.5
27.5°	527.5	529.4	530.4	531.2	532.3	531.2	532.3	531.2	530.4	529.4	527.5
30°	517.1	516.0	518.7	520.9	522.0	520.9	522.0	520.9	518.7	516.0	517.1
32.5°	502.9	503.5	507.5	508.8	509.0	507.9	509.0	508.8	507.5	503.5	502.9
35°	482.0	484.7	487.4	488.5	489.0	487.4	489.0	488.5	487.4	484.7	482.0
37.5°	460.0	464.7	466.7	465.5	465.6	463.9	465.6	465.5	466.7	464.7	460.0
40°	445.3	449.6	450.7	449.1	449.6	447.5	449.6	449.1	450.7	449.6	445.3
42.5°	431.5	435.0	433.9	431.8	431.5	430.6	431.5	431.8	433.9	435.0	431.5
45°	408.6	410.2	405.4	403.8	402.7	401.6	402.7	403.8	405.4	410.2	408.6
47.5°	383.6	381.4	376.8	374.3	371.3	369.2	371.3	374.3	376.8	381.4	383.6
50°	367.6	361.1	357.3	351.4	349.2	349.8	349.2	351.4	357.3	361.1	367.6
52.5°	348.2	340.4	334.4	329.4	327.6	327.3	327.6	329.4	334.4	340.4	348.2
55°	320.1	308.2	298.5	295.8	295.3	296.3	295.3	295.8	298.5	308.2	320.1
57.5°	285.6	274.0	266.0	263.8	262.0	260.3	262.0	263.8	266.0	274.0	285.6
60°	262.3	251.5	244.0	241.8	237.0	234.8	237.0	241.8	244.0	251.5	262.3
62.5°	241.6	228.6	222.8	218.5	214.9	211.5	214.9	218.5	222.8	228.6	241.6
65°	211.6	196.5	190.5	186.8	180.3	178.7	180.3	186.8	190.5	196.5	211.6
67.5°	178.8	165.6	158.2	153.1	149.0	148.9	149.0	153.1	158.2	165.6	178.8
70°	157.6	145.7	138.7	132.8	129.5	129.0	129.5	132.8	138.7	145.7	157.6
72.5°	136.9	125.4	119.3	113.8	111.0	110.4	111.0	113.8	119.3	125.4	136.9
75°	107.4	96.6	91.8	88.0	85.8	84.7	85.8	88.0	91.8	96.6	107.4
77.5°	79.5	70.7	68.2	64.3	62.5	62.4	62.5	64.3	68.2	70.7	79.5
80°	62.6	55.6	51.8	49.7	49.1	48.6	49.1	49.7	51.8	55.6	62.6
82.5°	45.3	41.3	38.9	37.6	37.5	36.5	37.5	37.6	38.9	41.3	45.3
85°	24.3	23.2	22.7	22.1	21.6	21.6	21.6	22.1	22.7	23.2	24.3
87.5°	9.9	10.4	10.4	10.8	11.2	10.8	11.2	10.8	10.4	10.4	9.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	570.5	570.5	570.5	570.5
2.5°	577.9	577.0	574.4	574.4
5°	585.7	583.5	577.6	573.2
7.5°	587.5	584.4	576.6	567.8
10°	586.2	583.5	574.9	563.5
12.5°	583.6	580.5	572.3	557.5
15°	578.1	573.2	565.7	547.3
17.5°	569.4	565.0	556.1	532.8
20°	562.4	558.1	547.9	522.0
22.5°	554.2	549.9	539.2	507.3
25°	540.9	534.4	525.2	482.0
27.5°	526.0	518.9	505.9	454.3
30°	516.0	506.8	489.0	434.0
32.5°	505.2	494.3	464.0	411.1
35°	485.8	476.6	433.4	366.5
37.5°	464.6	457.9	405.8	316.3
40°	449.1	443.7	379.5	286.1
42.5°	430.1	428.6	350.5	263.6
45°	404.3	404.3	333.6	236.4
47.5°	378.0	378.2	309.8	229.3
50°	361.1	355.7	292.6	228.9
52.5°	343.8	326.8	271.4	212.0
55°	315.2	286.6	238.6	192.7
57.5°	286.4	249.9	187.6	186.3
60°	264.0	224.0	143.6	173.8
62.5°	242.4	194.6	112.1	160.9
65°	210.5	133.3	87.4	133.9
67.5°	180.2	84.6	66.5	96.7
70°	160.3	62.6	47.5	75.6
72.5°	140.0	49.2	40.2	65.2
75°	109.6	35.1	40.5	50.7
77.5°	82.0	26.7	36.2	35.4
80°	62.6	21.1	29.7	28.1
82.5°	46.6	16.7	21.1	20.7
85°	23.2	9.7	10.8	8.6
87.5°	9.5	4.8	3.9	2.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)