

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P236992

Luminaire Tested: **ARCH-L-AF72-190-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236992  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-190-D-U-T2R-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18587 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

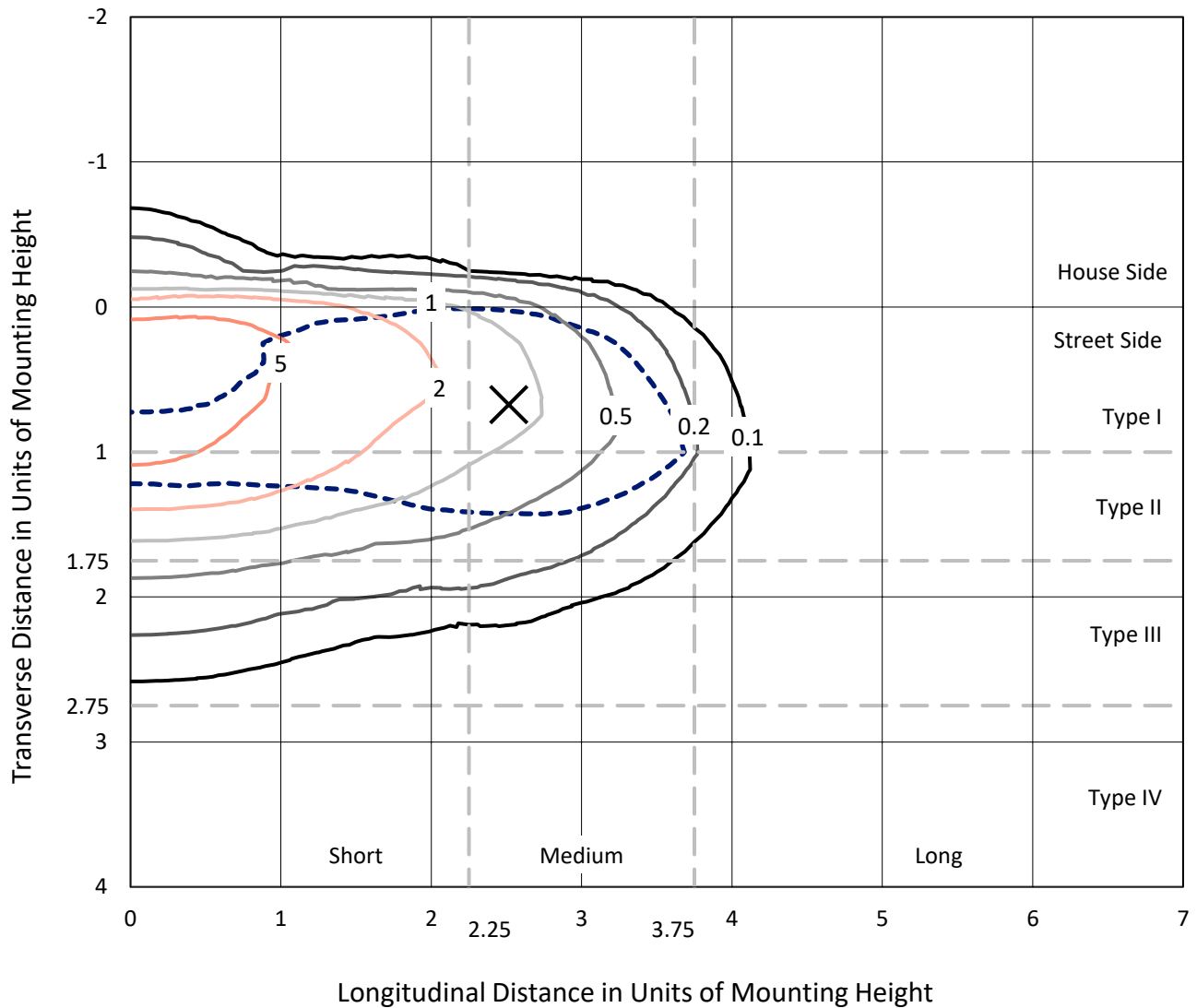
Input Watts (W): 189  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

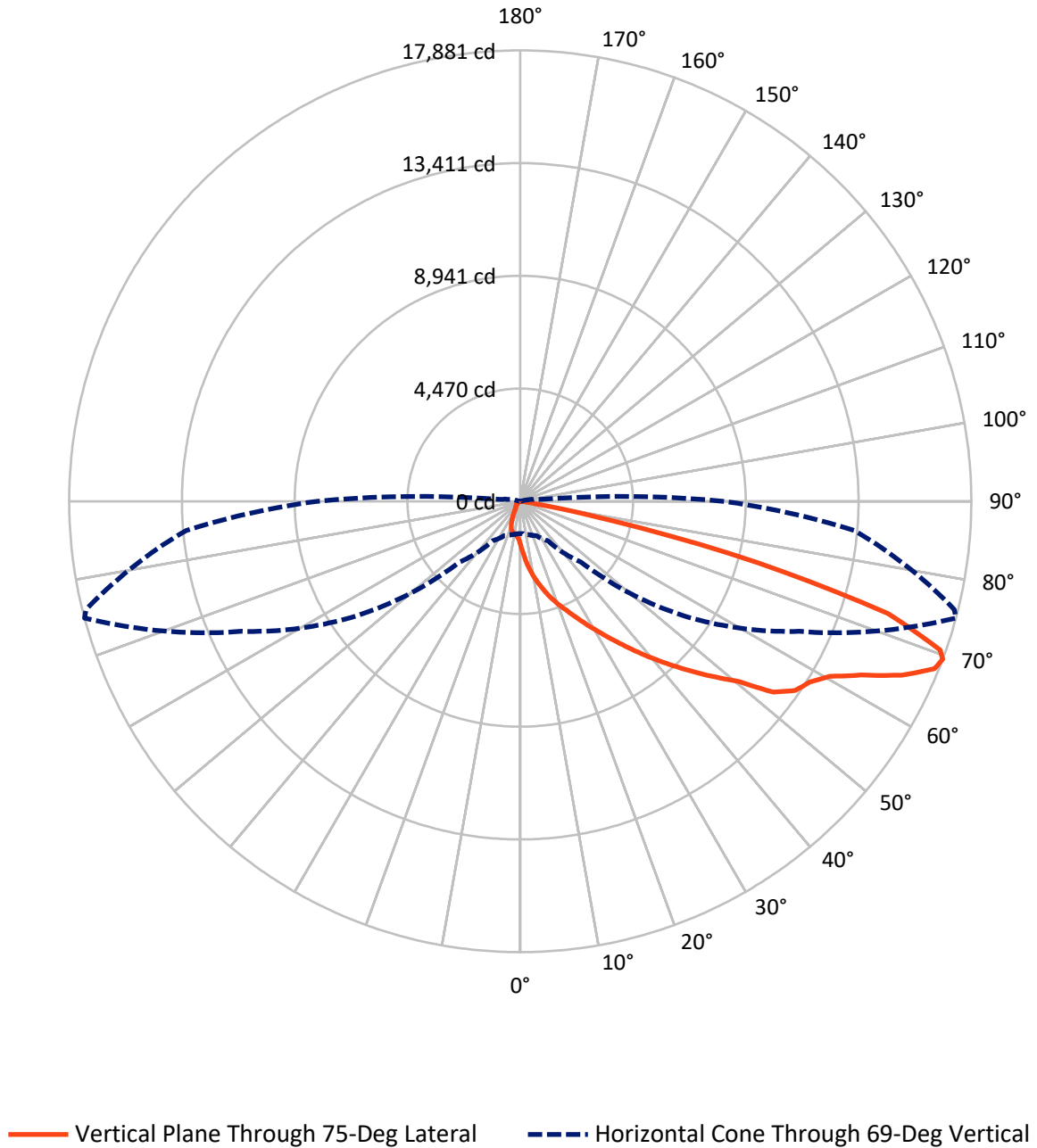
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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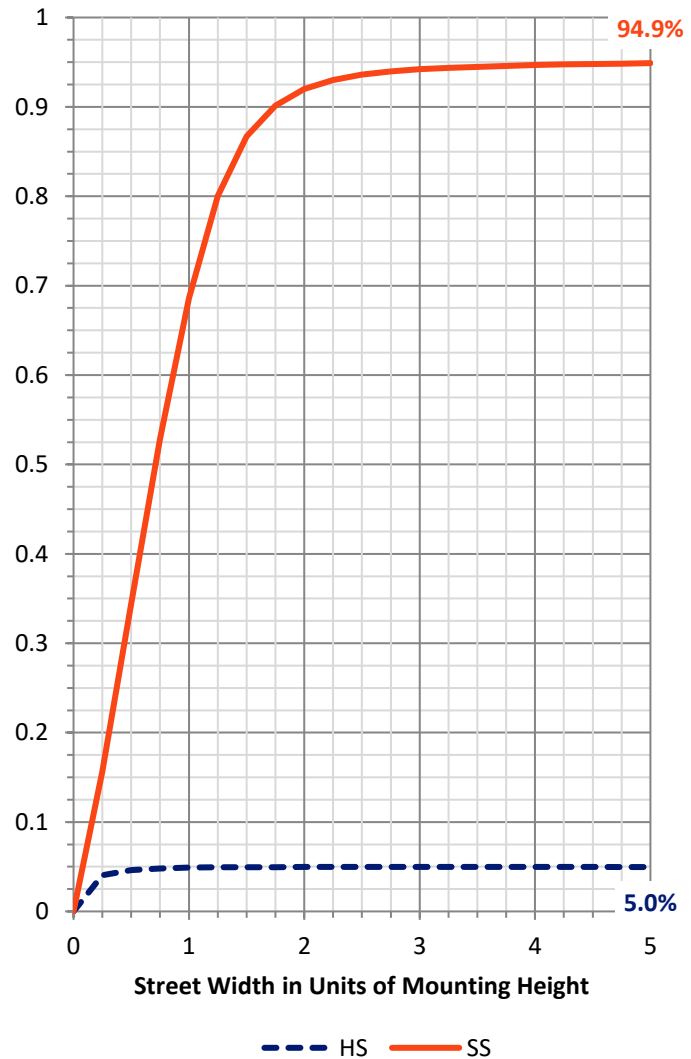
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	927.4	0.0	927.4
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	17659.6	0.0	17659.6
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	18587.0	0.0	18587.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.7	1.1
10°-20°	721.0	3.9
20°-30°	1376.4	7.4
30°-40°	2469.0	13.3
40°-50°	3782.7	20.4
50°-60°	4396.5	23.7
60°-70°	3893.1	20.9
70°-80°	1679.3	9.0
80°-90°	67.3	0.4
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°-90°	18587.0	100.0
0°-180°	18587.0	100.0

**Coefficient of Utilization**



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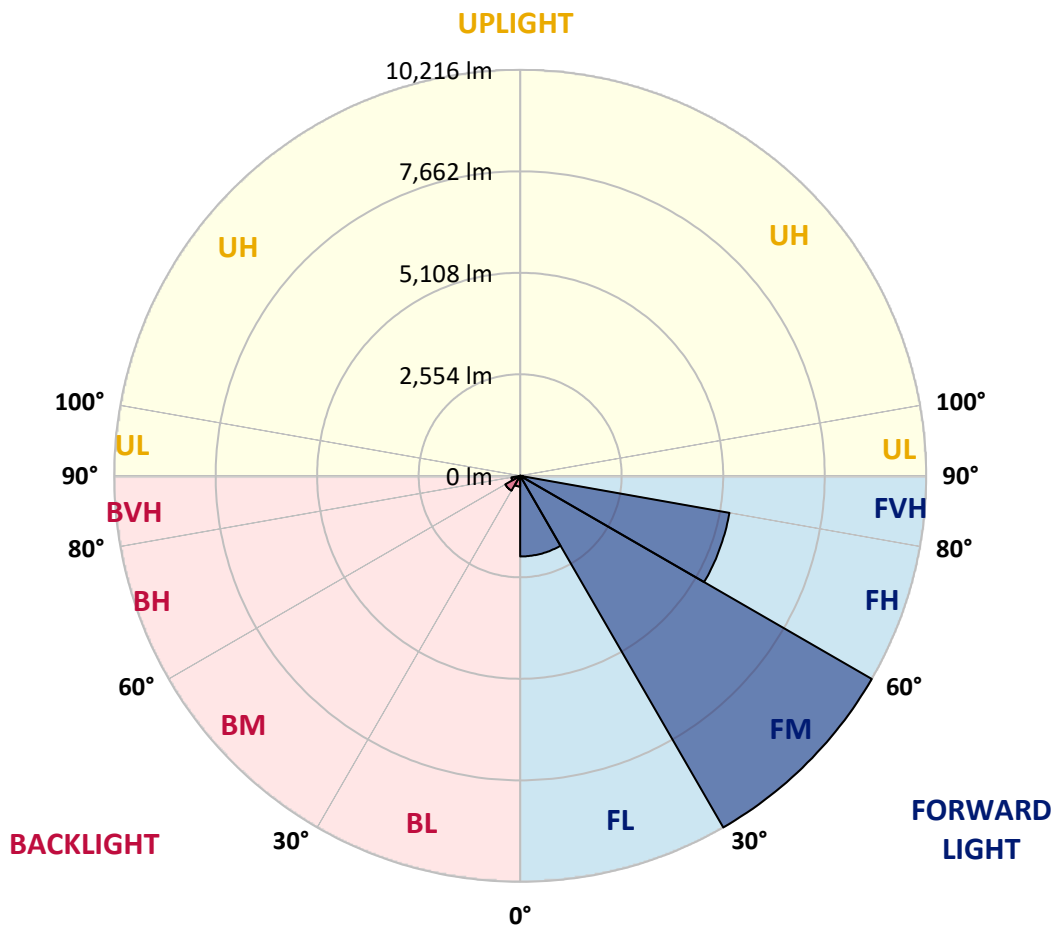
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2029.7	10.9			
FM (30°-60°)	10215.9	55.0			
FH (60°-80°)	5347.7	28.8			G3/7500
FVH (80°-90°)	66.3	0.4			G1/100
BL (0°-30°)	269.3	1.4	B1/500		
BM (30°-60°)	432.4	2.3	B1/1000		
BH (60°-80°)	224.7	1.2	B1/500		G1/500
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5
2.5°	2849.1	2821.0	2792.9	2760.8	2688.6	2564.2	2407.7	2239.1	2030.5	1994.4	1825.8
5°	3459.0	3447.0	3418.9	3374.8	3294.5	3158.1	2981.5	2732.7	2383.6	2323.4	1966.3
7.5°	3888.4	3880.4	3856.3	3804.1	3731.9	3595.5	3410.9	3142.0	2736.7	2668.5	2142.8
10°	4273.6	4269.6	4249.5	4201.4	4129.2	3980.7	3784.1	3503.2	3073.8	2997.6	2347.5
12.5°	4622.7	4626.7	4618.7	4594.6	4542.5	4402.0	4177.3	3872.3	3398.8	3314.6	2592.3
15°	4827.4	4839.4	4871.5	4919.7	4935.7	4823.4	4590.6	4253.6	3731.9	3659.7	2873.2
17.5°	4759.2	4771.2	4871.5	5036.1	5192.6	5208.6	4999.9	4614.7	4060.9	3988.7	3150.0
20°	4594.6	4610.7	4715.0	4939.7	5244.7	5457.4	5373.1	5008.0	4373.9	4285.7	3414.9
22.5°	4779.2	4779.2	4811.3	4947.8	5224.7	5557.7	5670.1	5401.2	4695.0	4586.6	3679.7
25°	5413.3	5401.2	5333.0	5276.8	5365.1	5662.0	5894.8	5802.5	5072.2	4947.8	3960.6
27.5°	6215.8	6272.0	6143.6	5938.9	5738.3	5866.7	6095.4	6199.8	5489.5	5361.1	4249.5
30°	7114.7	7138.8	6986.3	6713.4	6360.3	6235.9	6332.2	6540.9	5942.9	5802.5	4550.5
32.5°	7925.3	7905.2	7776.8	7491.9	7054.5	6785.6	6637.2	6813.7	6436.5	6276.0	4859.5
35°	8643.6	8659.6	8503.1	8174.1	7744.7	7459.8	7106.7	7122.7	6990.3	6805.7	5216.6
37.5°	9289.6	9261.5	9113.1	8784.0	8394.8	8085.8	7712.6	7443.7	7596.2	7403.6	5617.9
40°	9815.3	9787.2	9630.7	9309.7	8944.5	8691.7	8398.8	7873.1	8234.2	8013.5	6047.3
42.5°	10232.6	10200.5	10068.1	9759.1	9406.0	9181.3	9040.8	8402.8	8916.4	8695.7	6528.8
45°	10437.3	10409.2	10328.9	10096.2	9787.2	9590.6	9658.8	9012.7	9646.8	9462.2	7058.5
47.5°	10196.5	10184.5	10276.8	10236.6	10060.1	9955.7	10192.5	9678.9	10413.2	10232.6	7668.4
50°	9466.2	9486.2	9755.1	10088.2	10172.4	10296.8	10629.9	10381.1	11235.8	11043.2	8370.7
52.5°	7664.4	7800.9	8611.5	9414.0	10036.0	10505.5	11143.5	11384.3	12576.1	12387.5	9466.2
55°	5722.2	5778.4	6661.2	8033.6	9486.2	10489.4	11524.7	11974.2	13238.2	13045.6	9755.1
57.5°	4538.5	4558.5	4995.9	6396.4	8354.6	10128.3	11725.4	12186.8	13527.1	13366.6	10184.5
60°	3563.4	3587.4	3904.4	4867.5	6761.6	9153.2	11436.5	12371.4	14092.9	13964.5	10934.9
62.5°	2772.8	2796.9	2989.5	3555.3	5072.2	7652.4	10854.6	12668.4	15168.4	15108.2	12162.8
65°	2146.8	2154.9	2287.3	2552.1	3583.4	6027.2	10144.3	12945.3	16621.0	16568.8	13157.9
67.5°	1585.1	1597.1	1689.4	1853.9	2419.7	4329.8	8980.6	12732.6	17716.5	17564.0	13519.1
69°	1280.1	1292.1	1372.4	1504.8	1910.1	3410.9	7917.2	12206.9	17881.0	17736.5	13290.4
70°	1095.5	1103.5	1183.8	1296.1	1629.2	2897.2	7074.6	11753.5	17664.3	17523.9	12768.7
72.5°	702.2	742.4	822.6	894.9	1079.4	1918.1	4775.2	9747.1	15240.6	14999.8	9999.9
75°	389.2	401.3	545.7	634.0	718.3	1248.0	2656.5	6079.4	9694.9	9526.4	5349.1
77.5°	321.0	329.0	385.2	481.5	481.5	698.2	1003.2	2395.6	3687.8	3326.6	1448.6
80°	224.7	232.7	292.9	317.0	345.1	393.3	325.0	525.7	569.8	505.6	216.7
82.5°	156.5	164.5	200.6	260.8	276.9	184.6	120.4	156.5	164.5	164.5	84.3
85°	28.1	40.1	148.5	216.7	164.5	56.2	68.2	56.2	52.2	56.2	20.1
87.5°	0.0	0.0	92.3	104.3	88.3	24.1	28.1	20.1	12.0	16.1	8.0
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5	1729.5
2.5°	1741.6	1657.3	1512.8	1408.5	1320.2	1252.0	1223.9	1179.8	1147.7	1163.7	1143.6
5°	1789.7	1641.2	1408.5	1260.0	1155.7	1067.4	995.2	939.0	894.9	886.8	878.8
7.5°	1865.9	1653.3	1348.3	1163.7	1007.2	870.8	758.4	674.1	609.9	609.9	585.9
10°	1970.3	1685.4	1312.2	1067.4	834.7	650.1	537.7	457.5	425.4	421.3	413.3
12.5°	2114.7	1745.6	1284.1	943.0	650.1	473.5	405.3	377.2	365.2	361.2	357.1
15°	2311.4	1833.8	1252.0	790.5	493.6	389.2	361.2	337.1	325.0	321.0	317.0
17.5°	2500.0	1914.1	1183.8	634.0	401.3	353.1	321.0	301.0	284.9	280.9	280.9
20°	2676.5	1982.3	1067.4	493.6	361.2	317.0	284.9	260.8	244.8	240.8	240.8
22.5°	2861.1	2038.5	922.9	401.3	329.0	280.9	248.8	224.7	208.7	204.7	200.6
25°	3057.7	2078.6	758.4	357.1	296.9	248.8	212.7	192.6	180.6	176.6	172.6
27.5°	3270.4	2094.7	601.9	325.0	260.8	216.7	184.6	164.5	156.5	152.5	152.5
30°	3463.0	2078.6	465.5	288.9	228.7	188.6	160.5	144.5	136.4	132.4	132.4
32.5°	3663.7	2038.5	373.2	256.8	200.6	160.5	136.4	124.4	120.4	116.4	116.4
35°	3876.4	1986.3	321.0	228.7	172.6	140.4	120.4	112.4	108.3	104.3	104.3
37.5°	4125.2	1922.1	292.9	204.7	152.5	124.4	104.3	100.3	96.3	96.3	96.3
40°	4406.0	1841.9	272.9	184.6	136.4	108.3	92.3	88.3	84.3	84.3	84.3
42.5°	4703.0	1749.6	252.8	164.5	120.4	92.3	80.3	80.3	76.2	76.2	72.2
45°	5036.1	1657.3	232.7	144.5	104.3	80.3	68.2	64.2	64.2	60.2	60.2
47.5°	5429.3	1573.0	212.7	128.4	92.3	68.2	60.2	56.2	52.2	48.2	48.2
50°	5983.1	1565.0	188.6	112.4	84.3	56.2	48.2	44.1	40.1	36.1	36.1
52.5°	6532.8	1492.8	160.5	92.3	68.2	48.2	36.1	32.1	28.1	28.1	24.1
55°	6657.2	1372.4	140.4	80.3	52.2	36.1	28.1	20.1	20.1	16.1	16.1
57.5°	6930.1	1316.2	120.4	64.2	40.1	28.1	16.1	12.0	12.0	12.0	12.0
60°	7467.8	1300.1	104.3	56.2	28.1	20.1	12.0	8.0	8.0	4.0	4.0
62.5°	8210.2	1284.1	88.3	48.2	20.1	12.0	8.0	4.0	0.0	0.0	0.0
65°	8619.5	1175.7	72.2	36.1	16.1	12.0	4.0	0.0	0.0	0.0	0.0
67.5°	8511.1	971.1	64.2	24.1	12.0	8.0	4.0	0.0	0.0	0.0	0.0
69°	8057.7	818.6	52.2	20.1	12.0	8.0	4.0	0.0	0.0	0.0	0.0
70°	7511.9	706.3	48.2	16.1	8.0	4.0	4.0	0.0	0.0	0.0	0.0
72.5°	5333.0	369.2	32.1	12.0	8.0	4.0	0.0	0.0	0.0	0.0	0.0
75°	2491.9	164.5	20.1	8.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0
77.5°	549.8	76.2	12.0	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	104.3	28.1	8.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.1	12.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)