

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: P265604

Luminaire Tested: **ARCH-L-AF72-120-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-120-D-U-T3-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10523.4 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 123  
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: 28.75 FT

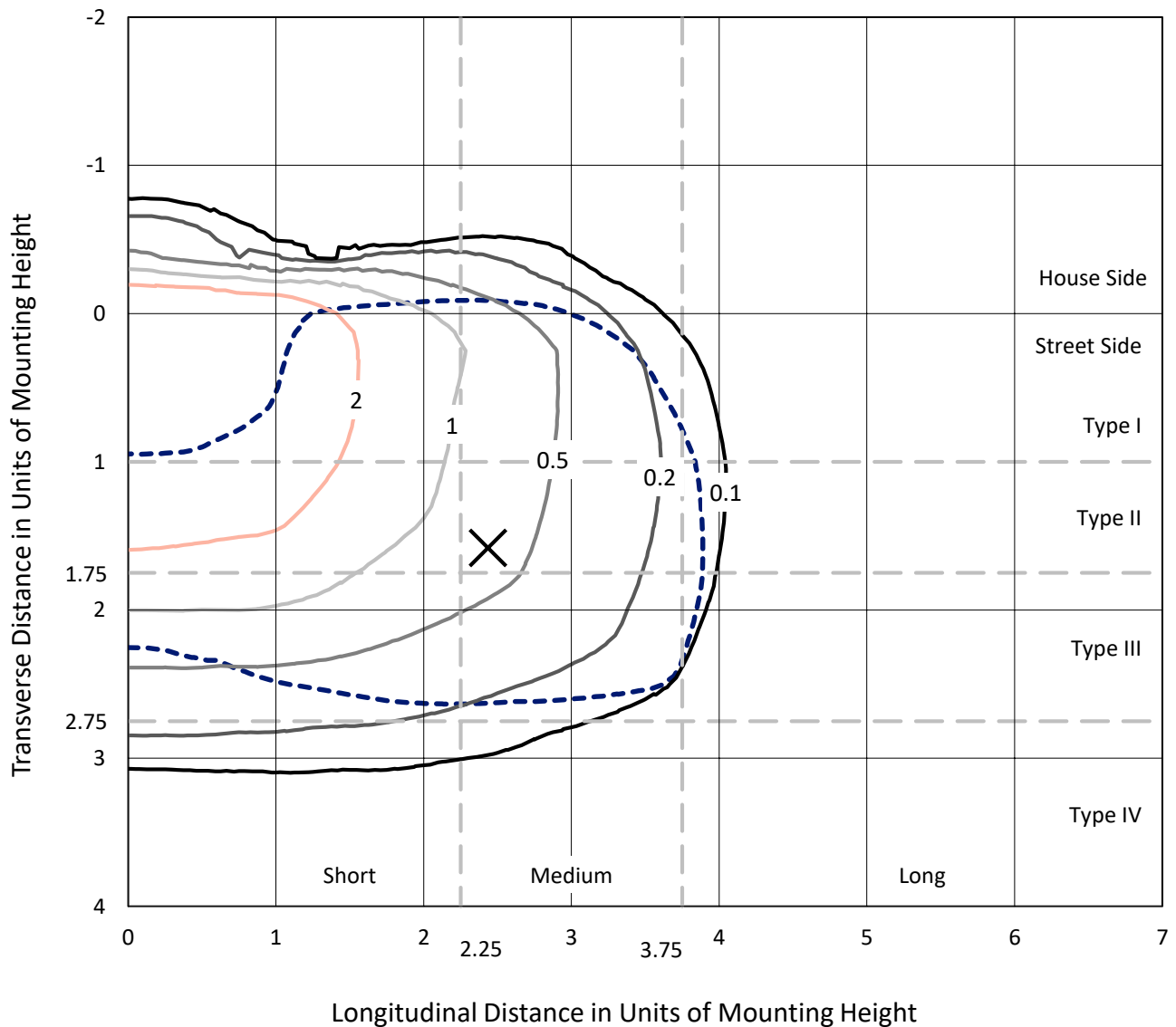


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

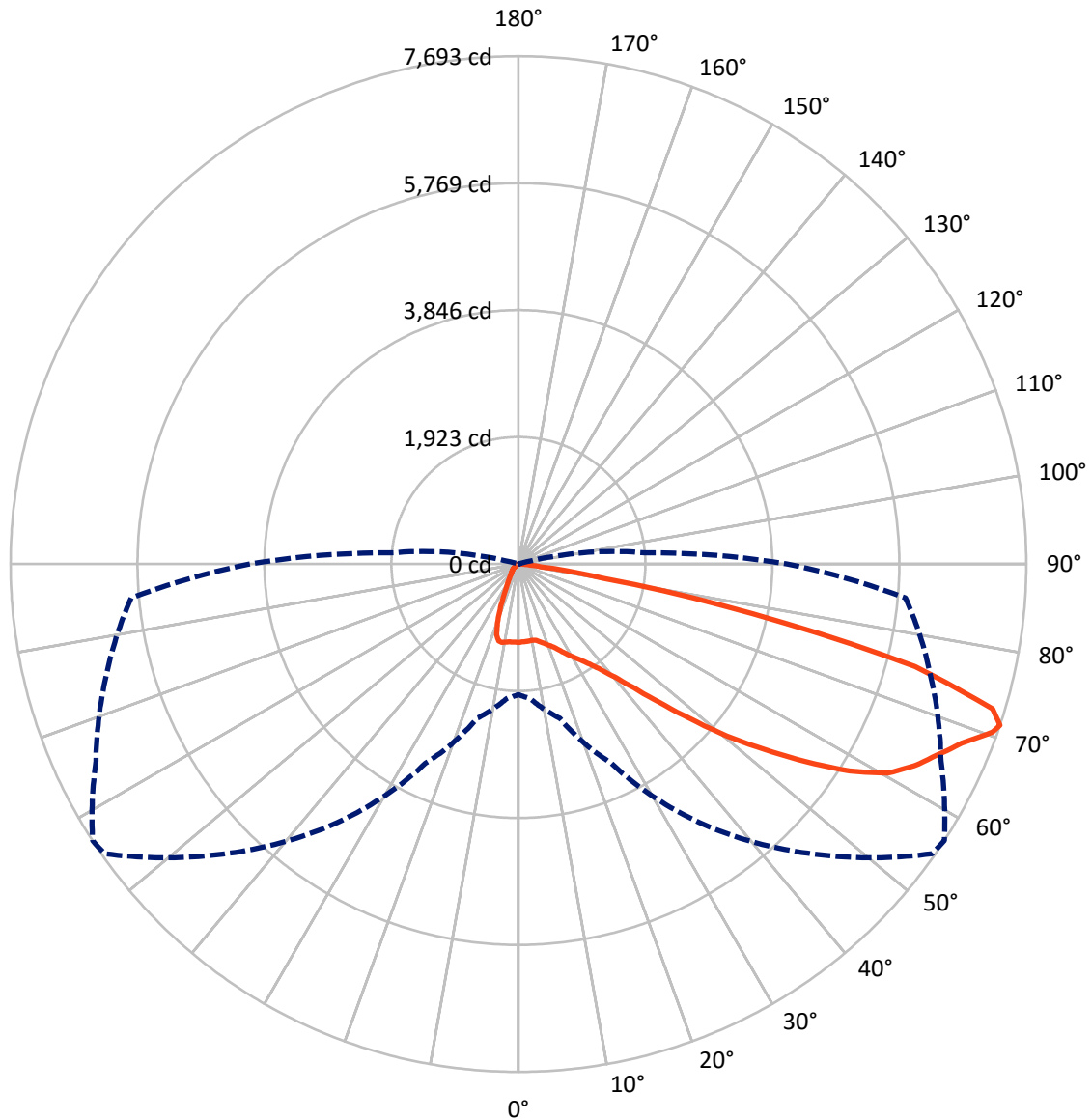


Based on 20 foot mounting height. Maximum calculated value = 3.7 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical



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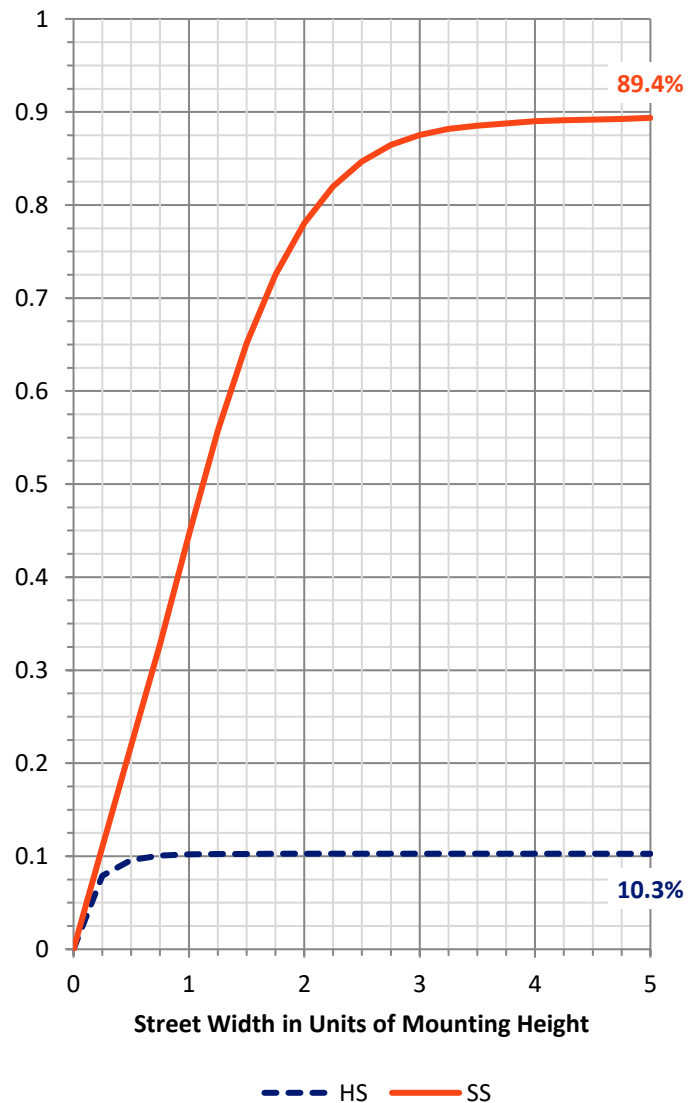
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1090.6	0.0	1090.6
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	9432.9	0.0	9432.9
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	10523.4	0.0	10523.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	1.1
10°-20°	298.6	2.8
20°-30°	465.9	4.4
30°-40°	787.4	7.5
40°-50°	1529.3	14.5
50°-60°	2568.2	24.4
60°-70°	3064.9	29.1
70°-80°	1615.3	15.3
80°-90°	82.1	0.8
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°	10523.4	100.0
0°-180°	10523.4	100.0

**Coefficient of Utilization**



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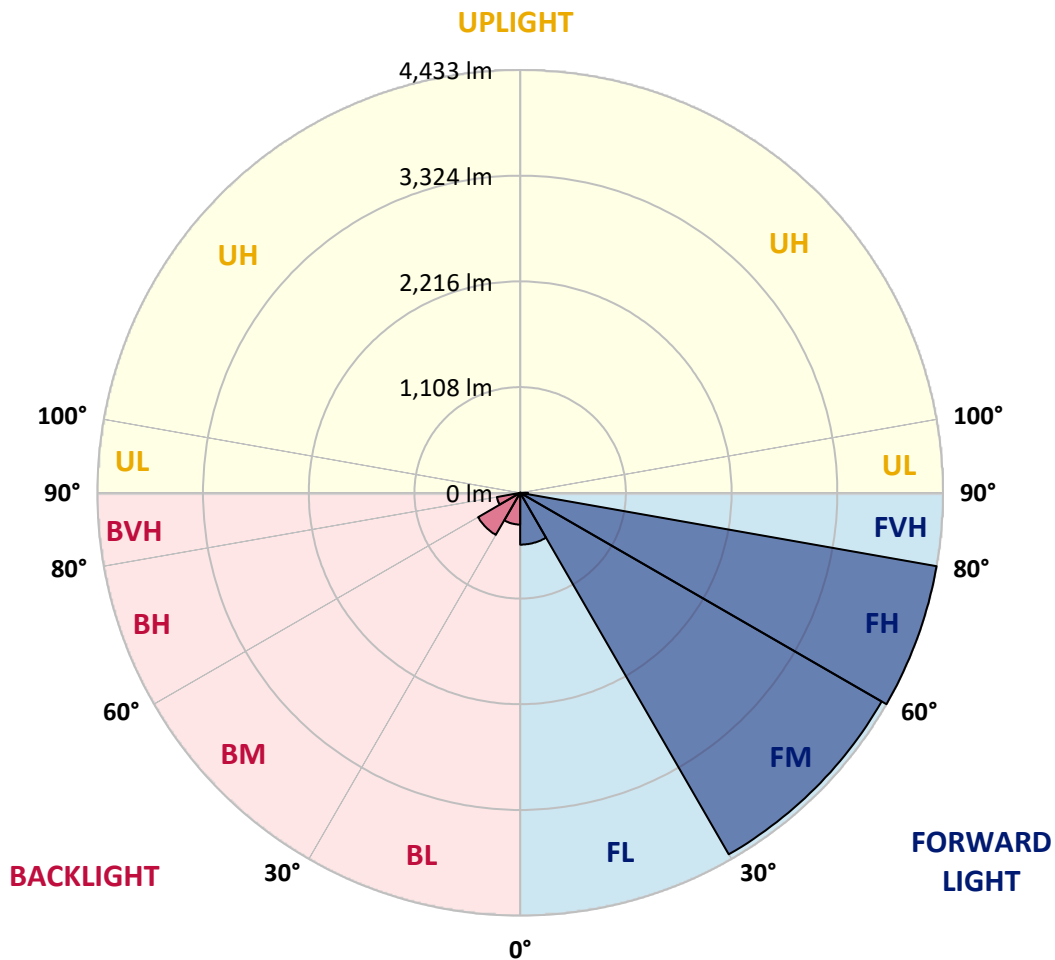
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	543.3	5.2			
FM	(30°-60°)	4375.7	41.6			
FH	(60°-80°)	4432.5	42.1			G2/5000
FVH	(80°-90°)	81.3	0.8			G1/100
BL	(0°-30°)	332.9	3.2	B1/500		
BM	(30°-60°)	509.2	4.8	B1/1000		
BH	(60°-80°)	247.7	2.4	B1/500		G1/500
BVH	(80°-90°)	0.8	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-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3
2.5°	1172.2	1172.2	1172.2	1174.7	1177.0	1177.0	1182.0	1179.6	1179.6	1179.6	1184.4
5°	1140.3	1142.7	1145.2	1150.1	1159.9	1167.3	1179.6	1179.6	1182.0	1186.9	1189.3
7.5°	1096.1	1098.5	1106.0	1115.8	1135.4	1152.5	1172.2	1177.0	1184.4	1196.6	1201.6
10°	1069.2	1074.1	1083.8	1096.1	1118.2	1140.3	1164.8	1172.2	1194.1	1216.2	1228.5
12.5°	1061.7	1064.2	1074.1	1093.6	1120.6	1147.7	1179.6	1186.9	1218.7	1253.0	1272.7
15°	1074.1	1076.4	1081.4	1103.5	1135.4	1169.8	1211.4	1221.2	1260.4	1299.7	1324.2
17.5°	1096.1	1096.1	1101.1	1120.6	1155.0	1194.1	1248.1	1262.8	1307.0	1351.1	1378.1
20°	1110.8	1110.8	1118.2	1137.9	1177.0	1228.5	1292.3	1312.0	1360.9	1410.0	1434.6
22.5°	1125.5	1128.0	1135.4	1157.5	1201.6	1272.7	1346.2	1365.9	1422.2	1473.8	1498.4
25°	1167.3	1164.8	1167.3	1186.9	1238.4	1326.6	1419.9	1444.4	1503.3	1559.5	1571.9
27.5°	1282.5	1277.6	1245.7	1233.5	1272.7	1383.0	1512.9	1537.4	1606.2	1662.6	1662.6
30°	1547.3	1537.4	1459.0	1358.4	1326.6	1434.6	1601.3	1635.6	1723.8	1773.0	1758.3
32.5°	1883.2	1861.2	1760.7	1589.0	1461.5	1503.3	1694.5	1733.6	1846.5	1888.1	1856.3
35°	2251.2	2248.6	2123.7	1902.9	1721.4	1645.4	1814.7	1861.2	2003.4	2040.2	1988.7
37.5°	2640.9	2650.8	2567.4	2263.4	2050.0	1878.4	1974.0	2028.0	2202.0	2246.2	2197.2
40°	3075.1	3072.7	3040.8	2680.3	2444.8	2209.4	2204.5	2253.6	2464.4	2533.1	2464.4
42.5°	3624.3	3619.5	3504.2	3180.4	2923.1	2640.9	2540.4	2557.7	2793.0	2905.8	2805.2
45°	4183.4	4149.1	4016.7	3737.0	3509.0	3175.6	2984.3	2984.3	3185.4	3339.9	3183.0
47.5°	4494.8	4460.5	4406.5	4252.0	4183.4	3810.7	3528.7	3494.3	3651.3	3808.3	3587.6
50°	4904.3	4904.3	4769.6	4710.6	4828.3	4565.9	4129.5	4095.2	4171.2	4296.2	4006.9
52.5°	5228.0	5169.1	5073.5	5125.1	5460.9	5340.9	4730.3	4664.1	4722.8	4754.8	4372.2
55°	5362.9	5306.5	5299.2	5487.9	6007.9	5841.0	5345.8	5287.0	5282.0	5125.1	4690.9
57.5°	5389.9	5340.9	5434.0	5765.1	6540.0	6250.6	5958.7	5914.7	5777.3	5385.0	5017.2
60°	5161.8	5186.4	5412.0	5917.1	6853.9	6606.1	6476.2	6429.6	6113.2	5605.8	5380.0
62.5°	4693.5	4752.4	5174.1	5931.9	6738.5	6750.9	6763.1	6731.2	6373.2	5806.7	5745.5
65°	4139.3	4156.5	4664.1	5728.3	6537.5	6706.7	6974.0	6971.6	6571.8	6032.4	6157.4
67.5°	3411.0	3440.4	3879.3	5041.6	6135.3	6687.2	7251.1	7243.8	6797.5	6289.8	6402.7
70°	2538.0	2574.8	2930.4	3921.0	5237.8	6441.8	7614.0	7619.0	7035.3	6486.0	6233.5
71°	1978.8	2045.1	2417.9	3330.0	4779.3	6194.3	7648.3	7692.5	7062.2	6459.1	5885.2
72.5°	971.1	1049.5	1517.9	2344.2	3933.3	5640.0	7422.8	7508.7	6893.1	6123.0	5031.9
75°	252.6	267.2	453.6	958.9	2109.0	3737.0	5985.8	6204.1	5635.1	4661.7	3075.1
77.5°	159.4	164.3	213.3	372.7	789.6	1419.9	3516.4	3624.3	3219.7	2361.5	1083.8
80°	112.7	115.3	134.8	240.2	461.0	414.4	1265.4	1312.0	1164.8	625.3	193.8
82.5°	68.7	68.7	98.1	154.5	284.5	225.7	333.5	355.5	313.9	174.1	63.8
85°	39.3	41.7	61.4	105.5	134.8	110.3	125.0	132.4	134.8	115.3	26.9
87.5°	31.9	34.3	54.0	88.3	73.7	54.0	54.0	56.5	58.8	68.7	12.2
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3
2.5°	1184.4	1184.4	1186.9	1184.4	1184.4	1184.4	1186.9	1186.9	1186.9	1191.7	1194.1
5°	1189.3	1189.3	1189.3	1186.9	1184.4	1184.4	1189.3	1191.7	1191.7	1199.1	1199.1
7.5°	1201.6	1201.6	1196.6	1191.7	1186.9	1179.6	1182.0	1184.4	1182.0	1184.4	1184.4
10°	1228.5	1228.5	1221.2	1211.4	1196.6	1174.7	1145.2	1108.4	1074.1	1061.7	1056.9
12.5°	1272.7	1270.3	1255.6	1238.4	1206.5	1130.4	1020.1	890.1	782.2	752.8	743.0
15°	1321.8	1316.8	1299.7	1270.3	1184.4	983.4	752.8	586.1	483.1	458.6	453.6
17.5°	1373.1	1365.9	1341.3	1282.5	1083.8	730.7	485.5	367.9	311.4	306.5	308.9
20°	1427.1	1417.3	1383.0	1257.9	875.4	488.0	313.9	284.5	279.6	279.6	282.0
22.5°	1488.5	1476.3	1429.7	1169.8	637.5	323.7	269.8	267.2	264.8	262.3	262.3
25°	1559.5	1544.8	1473.8	1010.4	438.9	264.8	257.5	250.1	245.1	240.2	237.8
27.5°	1645.4	1625.8	1508.1	814.1	301.7	247.7	242.7	230.5	220.8	210.9	210.9
30°	1731.3	1706.7	1498.4	613.1	245.1	230.5	220.8	206.0	191.2	181.5	179.0
32.5°	1821.9	1797.5	1434.6	412.0	223.1	210.9	198.6	176.5	159.4	147.1	144.6
35°	1956.9	1937.3	1309.5	272.1	201.1	186.4	169.2	147.1	125.0	112.7	110.3
37.5°	2157.9	2133.5	1155.0	208.4	176.5	154.5	139.7	115.3	93.2	80.8	78.5
40°	2427.7	2354.1	971.1	184.0	154.5	127.5	107.8	83.4	66.3	58.8	58.8
42.5°	2741.5	2567.4	772.5	166.7	137.4	105.5	78.5	56.5	46.6	44.1	44.1
45°	3075.1	2766.2	573.7	154.5	120.2	83.4	56.5	39.3	34.3	31.9	31.9
47.5°	3418.3	2927.9	399.7	139.7	100.5	63.8	39.3	29.5	24.6	22.1	22.1
50°	3739.6	3033.3	282.0	125.0	85.8	46.6	29.5	22.1	17.2	17.2	17.2
52.5°	3962.8	3023.5	203.6	107.8	66.3	31.9	19.7	14.7	14.7	14.7	14.7
55°	4159.0	2986.8	159.4	93.2	51.6	22.1	14.7	12.2	12.2	9.8	9.8
57.5°	4325.7	2927.9	134.8	76.0	36.8	17.2	9.8	9.8	7.4	7.4	7.4
60°	4467.9	2854.4	112.7	63.8	24.6	12.2	7.4	4.9	4.9	2.4	4.9
62.5°	4661.7	2807.7	98.1	49.0	17.2	7.4	4.9	2.4	2.4	0.0	0.0
65°	4803.9	2719.4	83.4	34.3	9.8	4.9	2.4	2.4	0.0	0.0	0.0
67.5°	4808.7	2560.1	61.4	19.7	7.4	4.9	2.4	0.0	0.0	0.0	0.0
70°	4421.3	2182.4	39.3	9.8	4.9	2.4	2.4	0.0	0.0	0.0	0.0
71°	4065.6	1932.3	31.9	7.4	4.9	2.4	0.0	0.0	0.0	0.0	0.0
72.5°	3349.7	1419.9	24.6	7.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0
75°	1846.5	515.0	12.2	4.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	590.9	156.9	7.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	100.5	24.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.3	9.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	2.4	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)