

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: P301869

Luminaire Tested: **GAA-AF-02-LED-U-SL4-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301869  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-02-LED-U-SL4-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

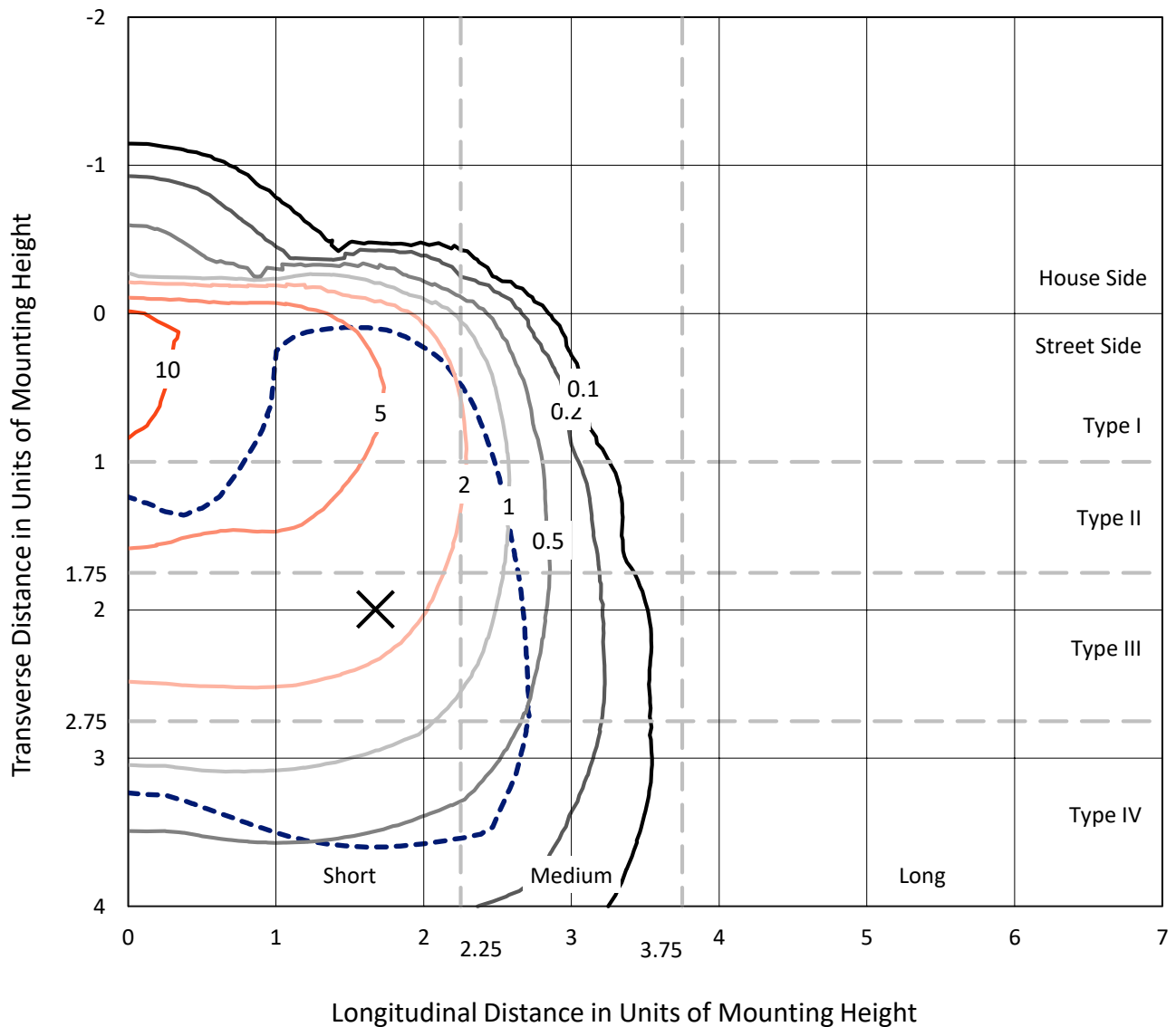
Lumens per Lamp: N/A  
Luminaire Lumens: 7255.2 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (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

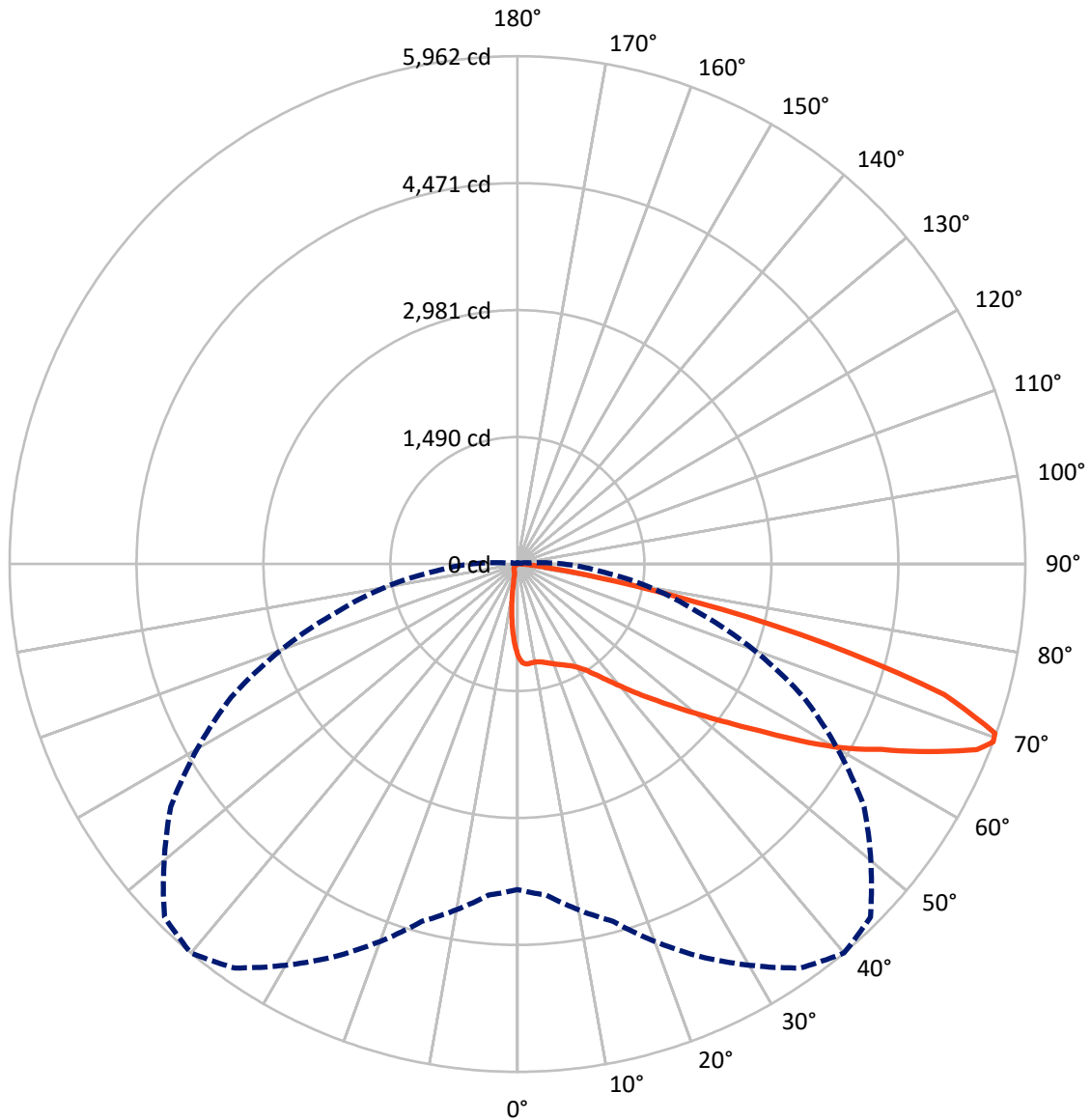
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.9 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical



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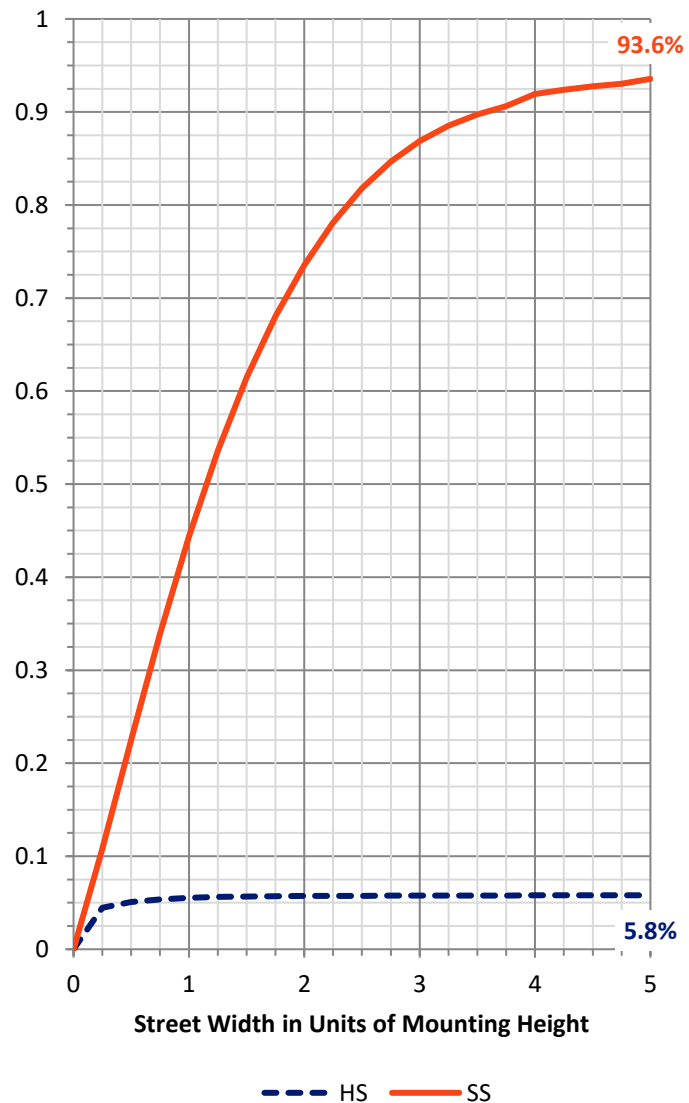
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	424.5	0.0	424.5
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	6830.8	0.0	6830.8
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	7255.2	0.0	7255.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.9	1.2
10°-20°	216.1	3.0
20°-30°	364.0	5.0
30°-40°	595.9	8.2
40°-50°	1031.9	14.2
50°-60°	1625.3	22.4
60°-70°	2122.6	29.3
70°-80°	1093.2	15.1
80°-90°	118.2	1.6
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°	7255.2	100.0
0°-180°	7255.2	100.0

**Coefficient of Utilization**



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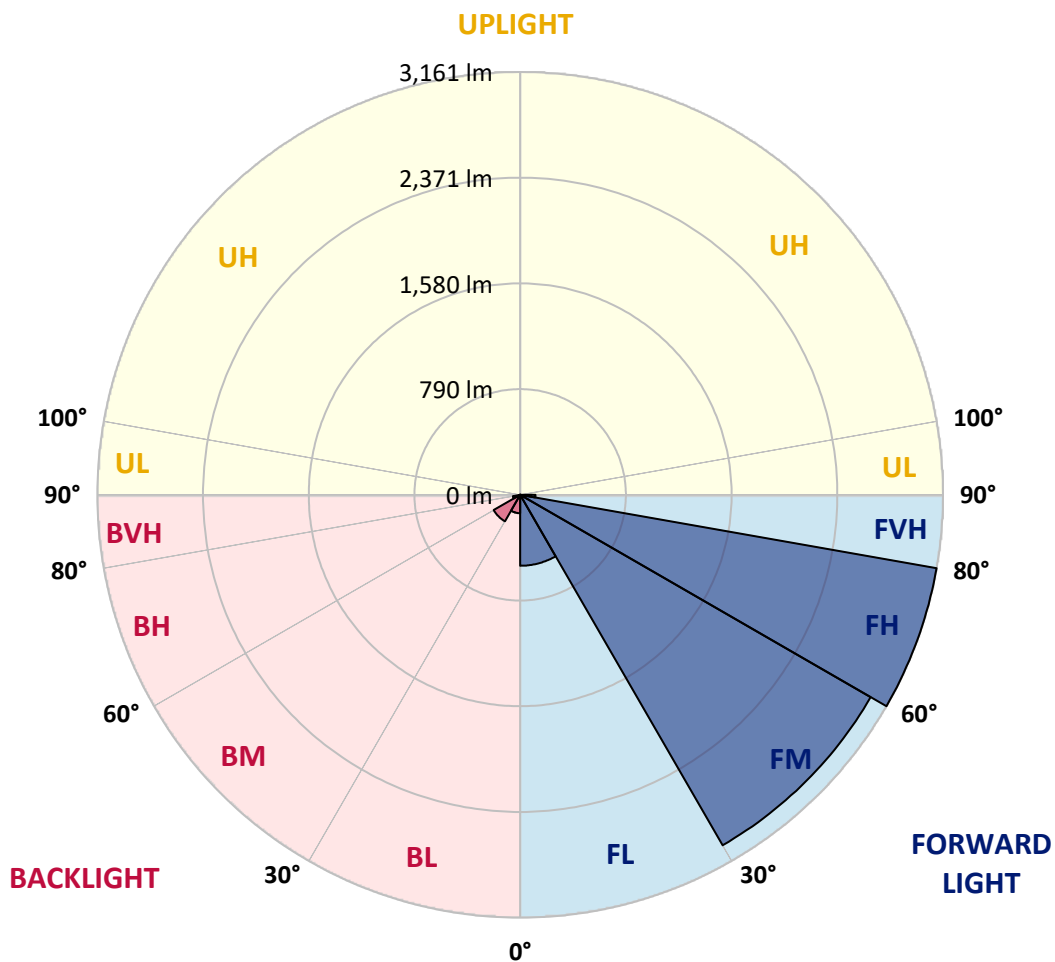
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	530.6	7.3			
FM	(30°-60°)	3025.0	41.7			
FH	(60°-80°)	3160.7	43.6			G2/5000
FVH	(80°-90°)	114.5	1.6			G2/225
BL	(0°-30°)	137.5	1.9	B1/500		
BM	(30°-60°)	228.1	3.1	B1/1000		
BH	(60°-80°)	55.1	0.8	B0/110		G0/110
BVH	(80°-90°)	3.7	0.1			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0
2.5°	1190.2	1183.7	1179.8	1174.7	1168.2	1162.6	1160.4	1144.4	1129.3	1108.6	1084.8
5°	1212.2	1210.1	1203.2	1196.3	1188.5	1179.8	1175.1	1156.1	1134.5	1104.3	1062.8
7.5°	1214.4	1211.8	1203.2	1193.7	1182.9	1172.5	1164.3	1145.3	1125.4	1094.8	1044.2
10°	1210.9	1207.9	1201.4	1191.1	1177.7	1167.8	1159.5	1141.4	1124.6	1096.9	1040.8
12.5°	1207.1	1204.0	1201.0	1195.8	1184.2	1177.3	1170.3	1153.1	1138.0	1114.6	1053.3
15°	1210.9	1209.2	1212.7	1210.5	1204.0	1198.0	1191.1	1175.5	1161.7	1142.3	1076.2
17.5°	1227.3	1227.3	1238.1	1239.4	1233.4	1224.8	1214.8	1199.3	1187.6	1171.2	1103.4
20°	1265.8	1264.5	1278.3	1280.9	1266.2	1252.8	1238.1	1219.1	1210.1	1199.7	1130.2
22.5°	1331.9	1325.8	1334.0	1331.4	1302.5	1281.8	1263.6	1240.3	1235.6	1230.8	1160.0
25°	1417.8	1414.3	1420.0	1394.5	1343.5	1315.4	1293.9	1267.5	1267.5	1272.3	1193.7
27.5°	1542.6	1529.7	1510.7	1465.7	1389.3	1353.5	1330.1	1302.1	1309.4	1327.1	1238.1
30°	1670.4	1656.2	1612.6	1543.5	1445.0	1407.4	1380.2	1350.9	1368.1	1400.5	1297.7
32.5°	1796.5	1780.6	1718.8	1631.6	1524.9	1487.3	1461.0	1428.6	1457.5	1511.9	1385.0
35°	1918.8	1904.5	1833.3	1730.5	1631.1	1600.0	1575.9	1547.8	1584.9	1660.9	1508.1
37.5°	2056.1	2040.5	1953.7	1842.3	1760.3	1737.8	1720.1	1692.0	1756.8	1868.2	1679.5
40°	2224.9	2198.6	2081.6	1970.6	1909.7	1898.9	1886.8	1882.9	1983.5	2137.7	1908.0
42.5°	2418.4	2375.2	2215.4	2105.8	2073.8	2081.6	2078.5	2095.8	2267.3	2472.8	2186.1
45°	2611.9	2556.2	2364.4	2250.0	2254.3	2281.5	2298.4	2367.5	2622.7	2857.2	2485.4
47.5°	2776.0	2721.2	2507.4	2405.9	2457.7	2511.3	2557.0	2687.9	2988.0	3235.5	2718.1
50°	2916.4	2864.5	2659.0	2577.3	2693.9	2780.3	2854.6	3048.5	3381.0	3523.6	2881.4
52.5°	3031.2	2996.7	2816.2	2773.8	2963.9	3090.4	3199.2	3431.6	3729.1	3757.6	3008.3
55°	3143.1	3118.5	2985.0	3007.5	3280.8	3453.2	3590.9	3838.0	4028.8	3952.8	3130.1
57.5°	3271.8	3249.3	3177.6	3303.7	3697.6	3914.4	4064.7	4198.1	4292.7	4152.3	3245.0
60°	3403.1	3390.1	3391.8	3632.8	4176.1	4384.3	4467.2	4501.7	4551.8	4340.2	3251.5
62.5°	3528.3	3552.9	3636.7	3999.0	4634.3	4794.1	4836.0	4870.1	4811.4	4370.0	3004.0
65°	3740.3	3780.5	3980.5	4489.2	5138.3	5309.3	5352.5	5235.5	4852.4	3984.8	2443.5
67.5°	3844.0	3917.4	4274.1	4946.1	5627.2	5817.2	5801.2	5259.2	4354.5	3038.6	1568.1
69°	3822.4	3900.6	4341.9	5086.0	5789.5	5961.8	5860.4	4968.6	3709.7	2201.2	962.6
70°	3736.9	3815.9	4307.0	5080.8	5810.3	5946.7	5750.7	4609.7	3136.6	1609.5	602.0
72.5°	3120.6	3188.9	3823.7	4592.4	5352.5	5241.5	4810.9	3193.6	1528.4	438.3	135.6
75°	1920.9	1958.9	2743.6	3459.6	4042.7	3757.6	3205.3	1588.8	455.6	123.9	75.1
77.5°	1014.9	1032.1	1502.0	2039.2	2562.7	2120.4	1642.8	619.7	209.9	77.7	54.4
80°	599.9	612.8	808.9	932.4	1109.0	926.3	656.9	380.5	150.3	48.8	48.4
82.5°	343.3	351.5	586.5	518.2	437.0	373.1	326.9	360.6	90.3	32.8	50.1
85°	126.1	127.8	329.9	394.3	260.0	154.6	162.4	298.8	24.2	20.7	39.3
87.5°	58.7	57.4	169.7	241.4	152.0	98.0	126.5	65.6	9.5	13.4	10.8
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°	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0	1084.0
2.5°	1071.0	1055.0	1026.1	996.3	966.1	942.8	919.9	901.7	895.7	884.5	885.3
5°	1038.2	1008.8	948.4	887.0	823.1	770.4	720.8	680.6	661.2	641.3	641.3
7.5°	1009.7	966.9	872.4	772.6	669.4	582.6	504.4	445.7	413.3	387.4	386.9
10°	998.9	941.0	808.9	665.9	522.1	403.8	310.9	251.3	220.7	200.8	200.0
12.5°	1003.6	932.0	760.1	567.5	386.9	259.5	180.1	141.7	128.7	122.6	122.6
15°	1017.5	929.4	711.3	471.2	273.4	162.4	119.6	109.3	108.4	108.4	108.4
17.5°	1034.3	930.2	661.2	377.4	186.1	116.2	103.2	101.9	102.8	102.8	102.8
20°	1051.6	930.7	607.2	290.6	131.3	101.1	97.2	96.7	97.6	97.6	98.0
22.5°	1072.7	932.8	553.2	217.2	108.4	95.4	92.4	92.4	92.9	92.9	92.4
25°	1096.9	937.1	497.1	161.1	98.9	91.6	89.0	88.5	89.0	88.5	88.1
27.5°	1127.2	943.2	434.5	126.1	94.6	87.7	85.5	85.5	85.1	84.6	84.2
30°	1165.2	950.1	364.1	107.1	90.3	84.2	82.1	81.6	81.2	80.3	80.3
32.5°	1223.0	965.2	294.5	97.2	85.5	79.5	77.7	77.7	76.9	76.0	75.6
35°	1312.0	995.0	232.3	91.1	80.3	74.3	72.1	72.1	71.3	70.8	70.4
37.5°	1435.1	1040.4	180.5	85.5	75.1	68.7	66.5	66.1	65.2	64.3	63.9
40°	1598.7	1096.5	142.1	80.3	70.0	63.1	61.3	60.5	58.7	57.4	57.4
42.5°	1804.3	1160.4	115.3	74.7	63.9	57.9	56.6	55.3	52.3	51.0	50.5
45°	2019.4	1217.8	97.6	68.2	57.9	52.7	51.8	49.7	45.8	44.5	44.5
47.5°	2174.4	1231.2	85.9	62.2	52.3	47.1	46.6	42.8	39.3	38.4	38.0
50°	2271.2	1204.9	76.4	56.1	47.1	41.9	40.6	35.8	33.7	32.8	32.4
52.5°	2336.4	1157.8	68.7	51.0	42.3	37.1	34.1	30.7	28.9	28.1	28.1
55°	2388.6	1091.3	60.9	46.2	38.4	33.3	28.9	26.3	24.6	23.8	23.8
57.5°	2403.3	1001.1	53.1	42.3	34.5	29.4	24.6	22.9	20.7	20.3	20.3
60°	2296.6	838.2	47.1	37.6	31.1	25.5	21.6	19.4	17.3	16.8	16.4
62.5°	2015.5	648.7	41.5	33.3	27.2	22.0	18.6	16.0	14.3	14.3	14.3
65°	1537.4	434.9	36.3	28.9	23.8	18.6	16.0	13.0	12.1	12.1	12.5
67.5°	920.3	236.7	31.1	24.6	20.3	15.5	13.4	11.2	10.8	11.2	11.2
69°	539.4	139.1	28.1	22.0	17.7	13.8	11.7	9.9	10.8	11.2	11.2
70°	333.0	93.7	25.9	19.9	16.0	12.5	10.8	9.5	10.4	10.8	10.8
72.5°	92.9	48.4	20.7	15.5	13.0	10.4	8.6	8.6	9.9	10.4	10.4
75°	60.5	35.8	16.0	11.7	9.9	8.2	7.3	8.2	9.5	9.9	9.9
77.5°	50.1	29.4	13.0	9.5	8.2	7.8	6.9	7.3	8.6	9.1	9.1
80°	45.8	20.7	10.4	8.6	7.3	6.9	6.5	6.0	7.8	8.2	8.2
82.5°	43.6	16.4	9.1	7.8	6.9	6.0	5.6	6.0	6.9	7.3	7.8
85°	27.2	10.8	8.2	7.3	6.0	5.6	5.6	5.6	6.5	6.9	6.9
87.5°	9.9	8.6	7.3	6.0	5.2	5.2	5.2	5.2	5.6	6.5	6.5
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)