

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: McGRAW-EDISON

Report Number: P301843

Luminaire Tested: **GLNA-AF-08-LED-E1-SL4-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301843  
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: MCGRAW-EDISON  
Catalog Number: GLNA-AF-08-LED-E1-SL4-7030-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

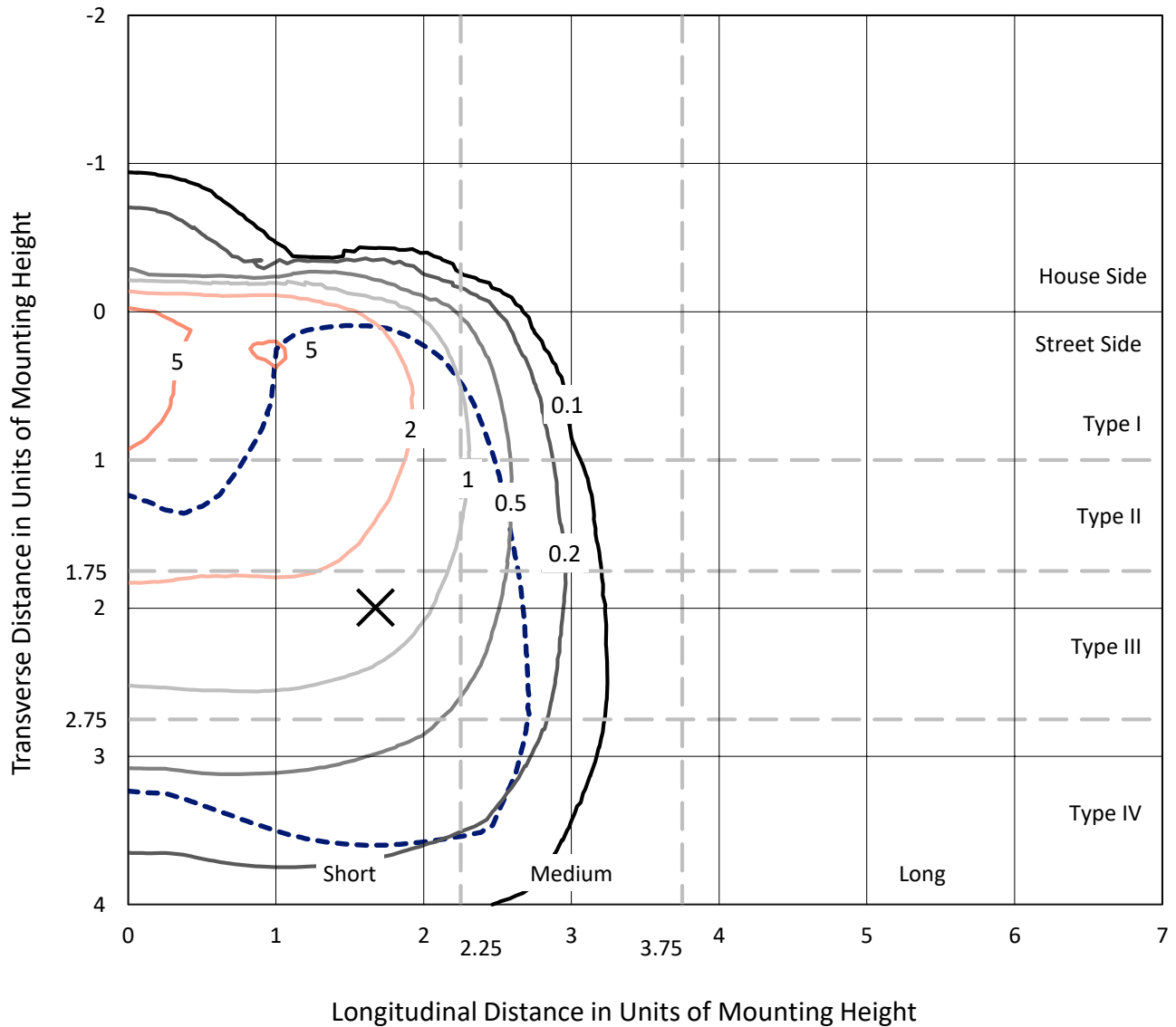
Lumens per Lamp: N/A  
Luminaire Lumens: 34027.4 lumens  
Efficiency: N/A  
Efficacy: 76.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G5  
  
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (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: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

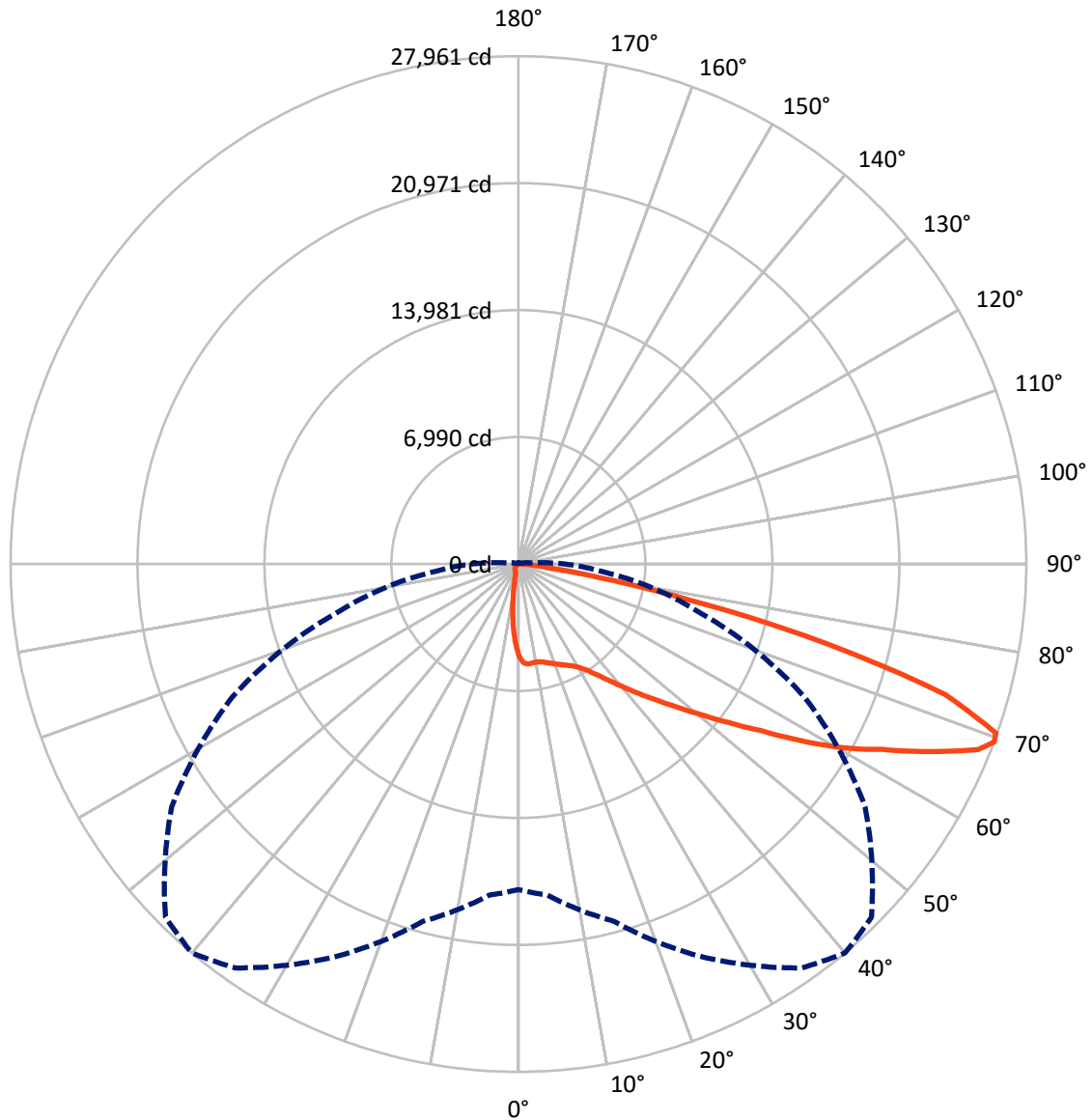
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.2 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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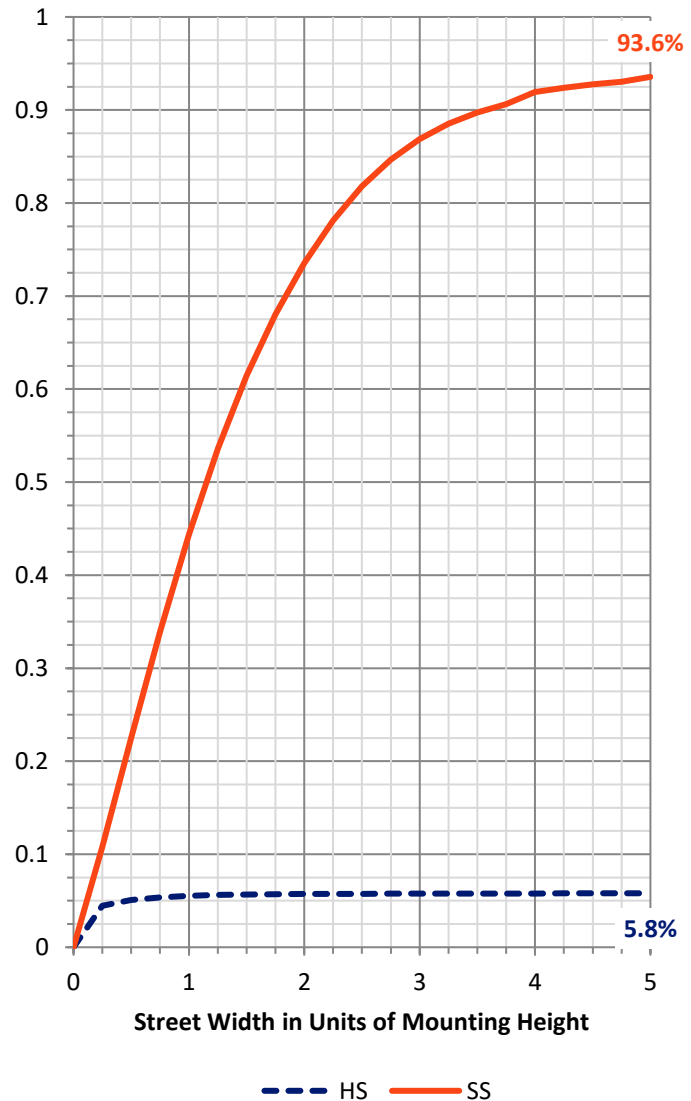
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1990.8	0.0	1990.8
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	32036.6	0.0	32036.6
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	34027.4	0.0	34027.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	412.2	1.2
10°-20°	1013.7	3.0
20°-30°	1707.4	5.0
30°-40°	2795.0	8.2
40°-50°	4839.5	14.2
50°-60°	7622.7	22.4
60°-70°	9955.0	29.3
70°-80°	5127.2	15.1
80°-90°	554.6	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°	34027.4	100.0
0°-180°	34027.4	100.0

**Coefficient of Utilization**



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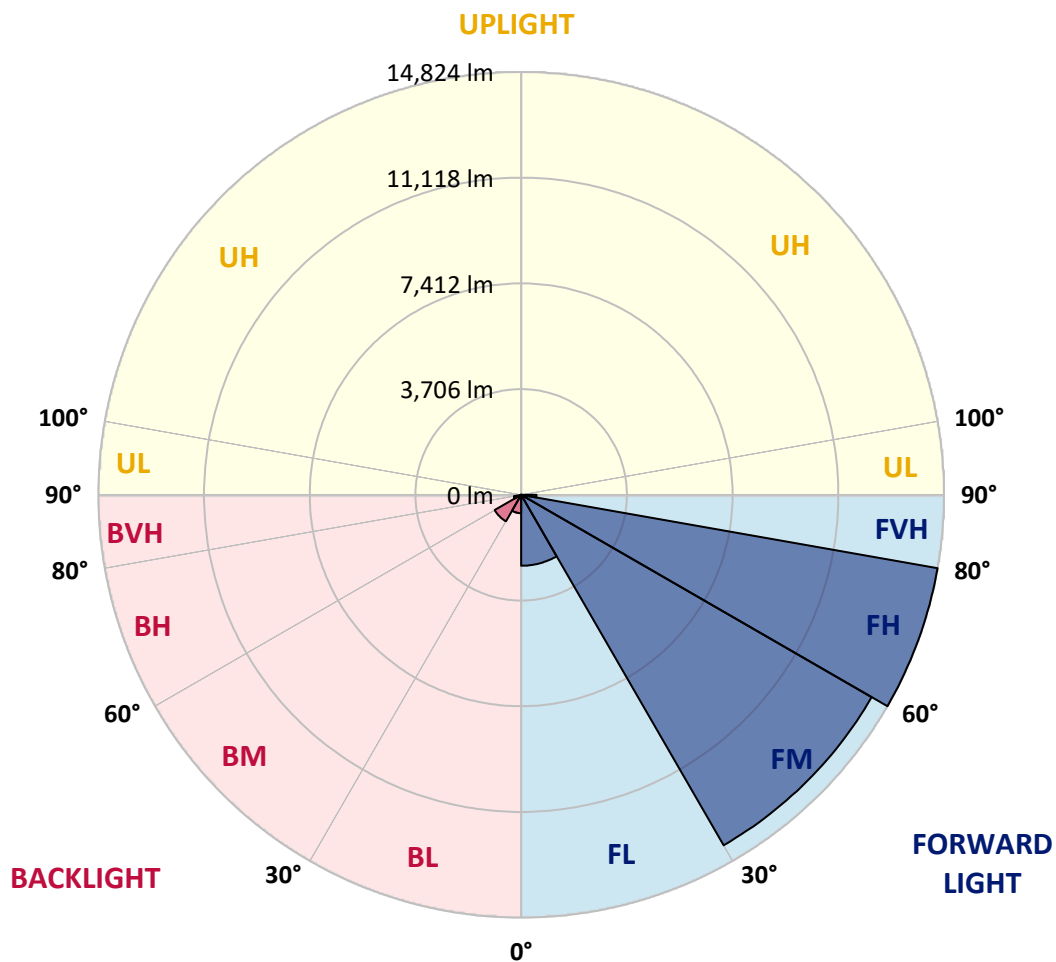
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2488.4	7.3			
FM	(30°-60°)	14187.3	41.7			
FH	(60°-80°)	14823.7	43.6			G5
FVH	(80°-90°)	537.2	1.6			G4/750
BL	(0°-30°)	644.9	1.9	B2/1000		
BM	(30°-60°)	1070.0	3.1	B2/2500		
BH	(60°-80°)	258.5	0.8	B1/500		G1/500
BVH	(80°-90°)	17.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9
2.5°	5582.1	5551.7	5533.5	5509.2	5478.8	5452.5	5442.4	5367.4	5296.5	5199.3	5087.9
5°	5685.4	5675.3	5642.9	5610.5	5574.0	5533.5	5511.2	5422.1	5320.8	5179.1	4984.6
7.5°	5695.5	5683.4	5642.9	5598.3	5547.7	5499.1	5460.6	5371.5	5278.3	5134.5	4897.5
10°	5679.3	5665.2	5634.8	5586.2	5523.4	5476.8	5438.3	5353.2	5274.3	5144.6	4881.3
12.5°	5661.1	5646.9	5632.8	5608.5	5553.8	5521.4	5489.0	5407.9	5337.0	5227.7	4940.1
15°	5679.3	5671.2	5687.4	5677.3	5646.9	5618.6	5586.2	5513.3	5448.4	5357.3	5047.4
17.5°	5756.3	5756.3	5806.9	5813.0	5784.7	5744.2	5697.6	5624.7	5570.0	5493.0	5175.0
20°	5936.6	5930.5	5995.3	6007.5	5938.6	5875.8	5806.9	5717.8	5675.3	5626.7	5300.6
22.5°	6246.5	6218.1	6256.6	6244.4	6108.7	6011.5	5926.4	5817.1	5794.8	5772.5	5440.3
25°	6649.5	6633.3	6659.7	6540.2	6301.2	6169.5	6068.2	5944.7	5944.7	5967.0	5598.3
27.5°	7234.9	7174.1	7085.0	6874.4	6515.9	6347.7	6238.4	6106.7	6141.1	6224.2	5806.9
30°	7834.4	7767.6	7563.0	7238.9	6777.1	6600.9	6473.3	6335.6	6416.6	6568.5	6086.5
32.5°	8425.8	8350.9	8061.3	7652.1	7151.8	6975.6	6852.1	6700.2	6835.9	7091.1	6495.6
35°	8999.0	8932.2	8598.0	8116.0	7650.1	7504.3	7390.8	7259.2	7433.4	7789.9	7072.8
37.5°	9643.1	9570.2	9163.1	8640.5	8255.7	8150.4	8067.3	7935.7	8239.5	8762.1	7877.0
40°	10435.1	10311.5	9762.6	9242.1	8956.5	8905.9	8849.2	8830.9	9302.9	10025.9	8948.4
42.5°	11342.5	11139.9	10390.5	9876.1	9726.2	9762.6	9748.5	9829.5	10633.6	11597.7	10252.8
45°	12249.9	11988.6	11089.3	10552.6	10572.8	10700.4	10779.4	11103.5	12300.5	13400.3	11656.4
47.5°	13019.6	12762.3	11759.7	11283.7	11526.8	11778.0	11992.7	12606.4	14014.0	15174.6	12748.1
50°	13677.8	13434.8	12470.7	12087.8	12634.7	13039.8	13388.2	14297.6	15857.2	16525.6	13513.8
52.5°	14216.6	14054.6	13207.9	13009.4	13900.6	14494.1	15004.5	16094.2	17489.7	17623.4	14109.2
55°	14741.2	14625.7	13999.9	14105.2	15387.3	16195.4	16841.6	18000.1	18895.4	18538.9	14680.4
57.5°	15344.8	15239.4	14903.2	15494.6	17341.8	18358.6	19063.5	19689.3	20132.9	19474.6	15219.2
60°	15960.5	15899.7	15907.8	17038.0	19586.0	20562.3	20951.2	21113.2	21348.2	20355.7	15249.6
62.5°	16547.9	16663.3	17056.3	18755.6	21735.0	22484.4	22680.9	22840.9	22565.5	20495.5	14089.0
65°	17542.4	17730.7	18668.5	21054.5	24098.7	24900.8	25103.3	24554.5	22757.9	18688.8	11460.0
67.5°	18028.5	18372.8	20045.8	23197.4	26391.5	27282.7	27207.8	24665.9	20422.5	14251.0	7354.4
69°	17927.2	18293.8	20363.8	23853.6	27153.1	27961.2	27485.3	23302.7	17398.6	10323.7	4514.7
70°	17526.2	17896.8	20199.7	23829.3	27250.3	27890.4	26970.8	21619.6	14710.8	7548.8	2823.5
72.5°	14635.9	14955.9	17933.3	21538.6	25103.3	24582.8	22563.4	14978.2	7168.0	2055.8	636.0
75°	9009.2	9187.4	12867.6	16225.8	18960.2	17623.4	15032.8	7451.6	2136.8	581.3	352.4
77.5°	4759.8	4840.8	7044.5	9564.1	12019.0	9944.9	7704.8	2906.5	984.4	364.6	255.2
80°	2813.3	2874.1	3793.7	4372.9	5201.3	4344.6	3080.7	1784.4	704.9	228.9	226.8
82.5°	1610.2	1648.7	2750.6	2430.5	2049.7	1750.0	1533.3	1691.2	423.3	153.9	235.0
85°	591.4	599.5	1547.4	1849.2	1219.3	725.1	761.6	1401.6	113.4	97.2	184.3
87.5°	275.5	269.4	796.0	1132.2	713.0	459.8	593.5	307.9	44.6	62.8	50.6
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°	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9	5083.9
2.5°	5023.1	4948.2	4812.5	4672.7	4530.9	4421.5	4314.2	4229.1	4200.8	4148.1	4152.2
5°	4869.2	4731.4	4447.9	4160.3	3860.5	3613.4	3380.5	3192.1	3101.0	3007.8	3007.8
7.5°	4735.5	4535.0	4091.4	3623.5	3139.4	2732.3	2365.7	2090.3	1938.3	1816.8	1814.8
10°	4684.9	4413.4	3793.7	3123.2	2448.8	1893.8	1458.3	1178.8	1035.0	941.8	937.8
12.5°	4707.1	4370.9	3564.8	2661.4	1814.8	1217.3	844.6	664.3	603.6	575.2	575.2
15°	4771.9	4358.8	3335.9	2209.8	1282.1	761.6	561.0	512.4	508.4	508.4	508.4
17.5°	4850.9	4362.8	3101.0	1770.2	873.0	544.8	484.1	478.0	482.1	482.1	482.1
20°	4932.0	4364.8	2847.8	1363.1	615.7	474.0	455.7	453.7	457.8	457.8	459.8
22.5°	5031.2	4375.0	2594.6	1018.8	508.4	447.6	433.4	433.4	435.5	435.5	433.4
25°	5144.6	4395.2	2331.3	755.5	463.8	429.4	417.2	415.2	417.2	415.2	413.2
27.5°	5286.4	4423.6	2037.6	591.4	443.6	411.2	401.0	401.0	399.0	397.0	395.0
30°	5464.6	4456.0	1707.4	502.3	423.3	395.0	384.8	382.8	380.8	376.7	376.7
32.5°	5736.1	4526.9	1381.4	455.7	401.0	372.7	364.6	364.6	360.5	356.5	354.5
35°	6153.3	4666.6	1089.7	427.4	376.7	348.4	338.2	338.2	334.2	332.2	330.1
37.5°	6730.5	4879.3	846.6	401.0	352.4	322.0	311.9	309.9	305.8	301.8	299.8
40°	7498.2	5142.6	666.4	376.7	328.1	295.7	287.6	283.6	275.5	269.4	269.4
42.5°	8462.3	5442.4	540.8	350.4	299.8	271.4	265.3	259.3	245.1	239.0	237.0
45°	9471.0	5711.8	457.8	320.0	271.4	247.1	243.1	232.9	214.7	208.6	208.6
47.5°	10198.1	5774.5	403.1	291.7	245.1	220.8	218.7	200.5	184.3	180.3	178.2
50°	10651.8	5651.0	358.5	263.3	220.8	196.5	190.4	168.1	158.0	153.9	151.9
52.5°	10957.6	5430.2	322.0	239.0	198.5	174.2	160.0	143.8	135.7	131.7	131.7
55°	11202.7	5118.3	285.6	216.7	180.3	156.0	135.7	123.6	115.5	111.4	111.4
57.5°	11271.6	4695.0	249.1	198.5	162.0	137.7	115.5	107.3	97.2	95.2	95.2
60°	10771.3	3931.4	220.8	176.2	145.8	119.5	101.3	91.1	81.0	79.0	77.0
62.5°	9452.7	3042.2	194.4	156.0	127.6	103.3	87.1	74.9	66.8	66.8	66.8
65°	7210.6	2039.6	170.1	135.7	111.4	87.1	74.9	60.8	56.7	56.7	58.7
67.5°	4316.2	1109.9	145.8	115.5	95.2	72.9	62.8	52.7	50.6	52.7	52.7
69°	2529.8	652.2	131.7	103.3	83.0	64.8	54.7	46.6	50.6	52.7	52.7
70°	1561.6	439.5	121.5	93.2	74.9	58.7	50.6	44.6	48.6	50.6	50.6
72.5°	435.5	226.8	97.2	72.9	60.8	48.6	40.5	40.5	46.6	48.6	48.6
75°	283.6	168.1	74.9	54.7	46.6	38.5	34.4	38.5	44.6	46.6	46.6
77.5°	235.0	137.7	60.8	44.6	38.5	36.5	32.4	34.4	40.5	42.5	42.5
80°	214.7	97.2	48.6	40.5	34.4	32.4	30.4	28.4	36.5	38.5	38.5
82.5°	204.6	77.0	42.5	36.5	32.4	28.4	26.3	28.4	32.4	34.4	36.5
85°	127.6	50.6	38.5	34.4	28.4	26.3	26.3	26.3	30.4	32.4	32.4
87.5°	46.6	40.5	34.4	28.4	24.3	24.3	24.3	24.3	26.3	30.4	30.4
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)