

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: P191223

Luminaire Tested: **GLEON-AF-05-LED-E1-SL4-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191223
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: GLEON-AF-05-LED-E1-SL4-1200-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27094.9 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G4

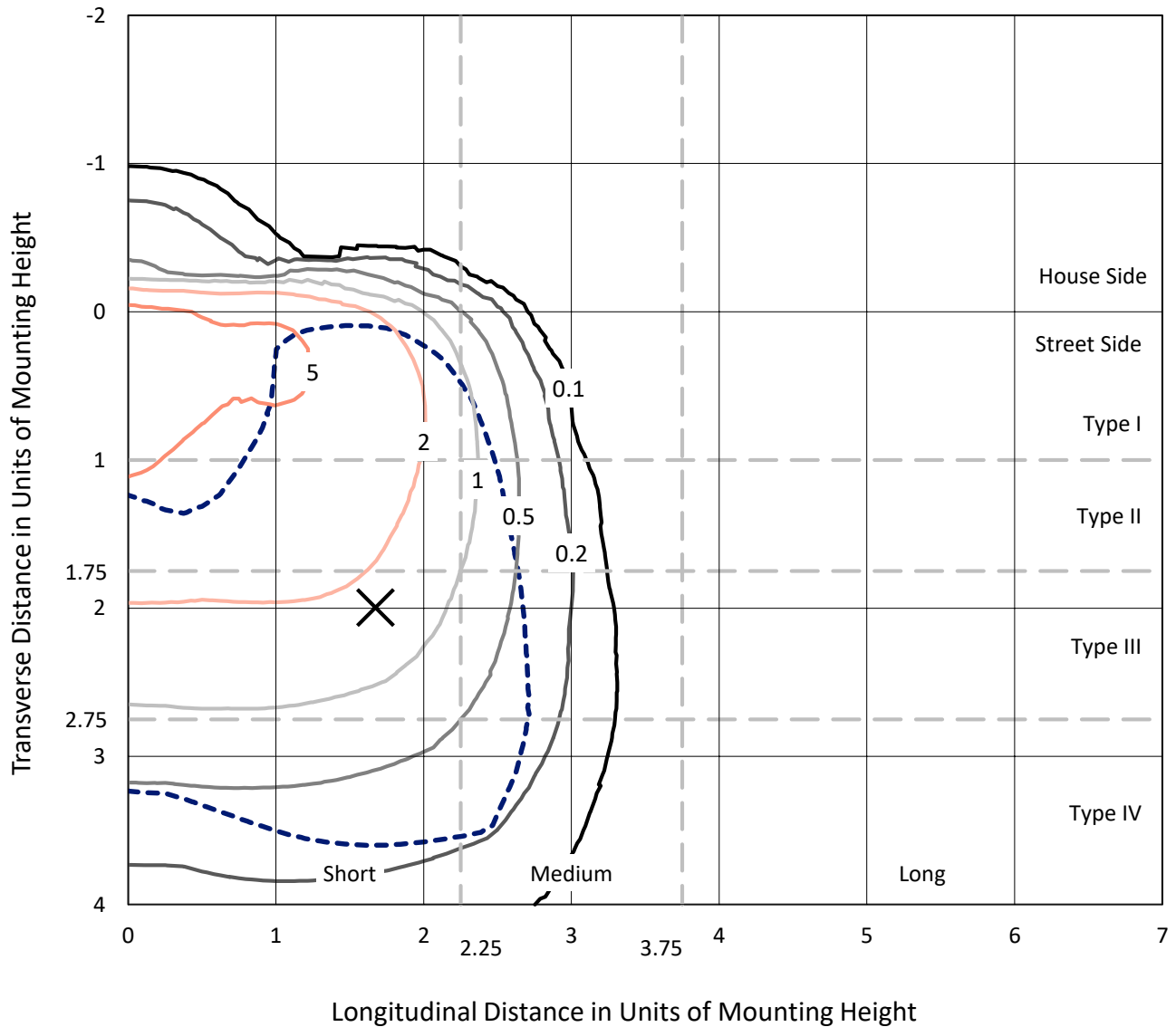
Input Watts (W): 320
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

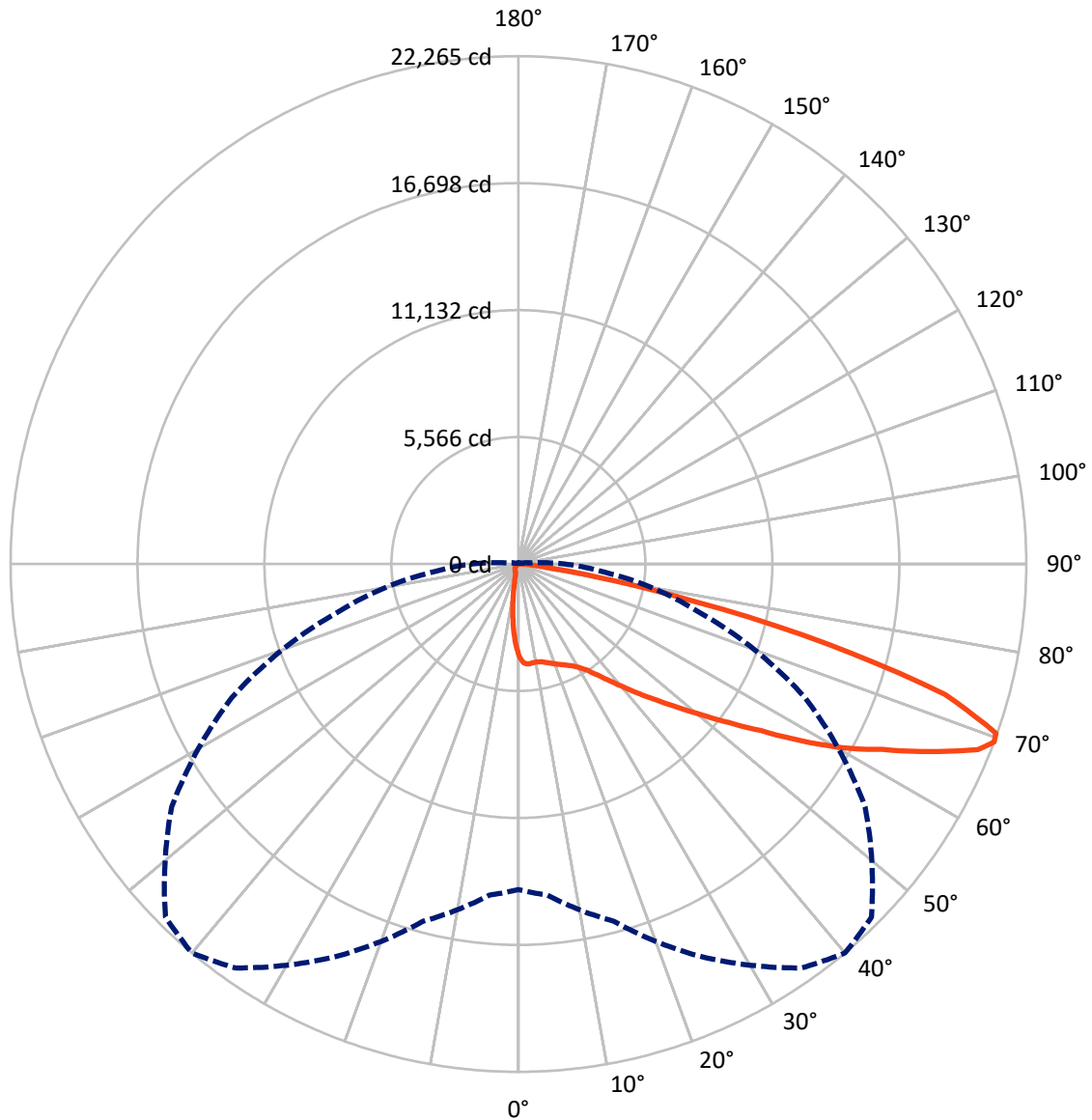
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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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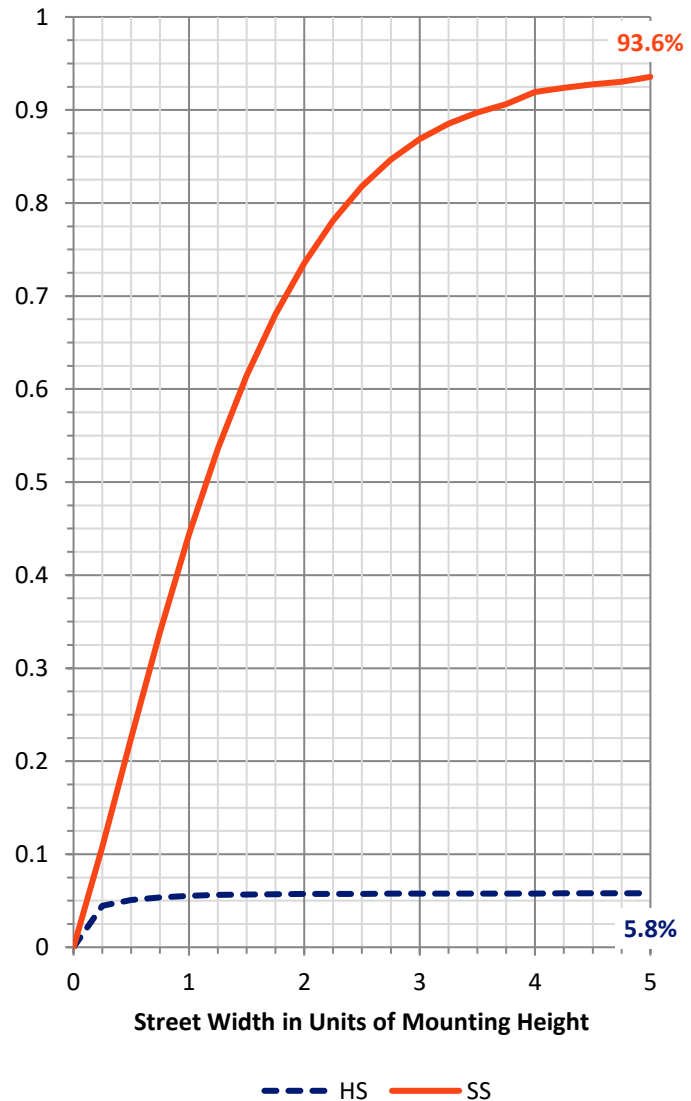
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1585.2	0.0	1585.2
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	25509.7	0.0	25509.7
	% Fixture	94.1	0.0	94.1
Total	Lumens	27094.9	0.0	27094.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.2	1.2
10°-20°	807.2	3.0
20°-30°	1359.5	5.0
30°-40°	2225.6	8.2
40°-50°	3853.6	14.2
50°-60°	6069.7	22.4
60°-70°	7926.8	29.3
70°-80°	4082.7	15.1
80°-90°	441.6	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°	27094.9	100.0
0°-180°	27094.9	100.0



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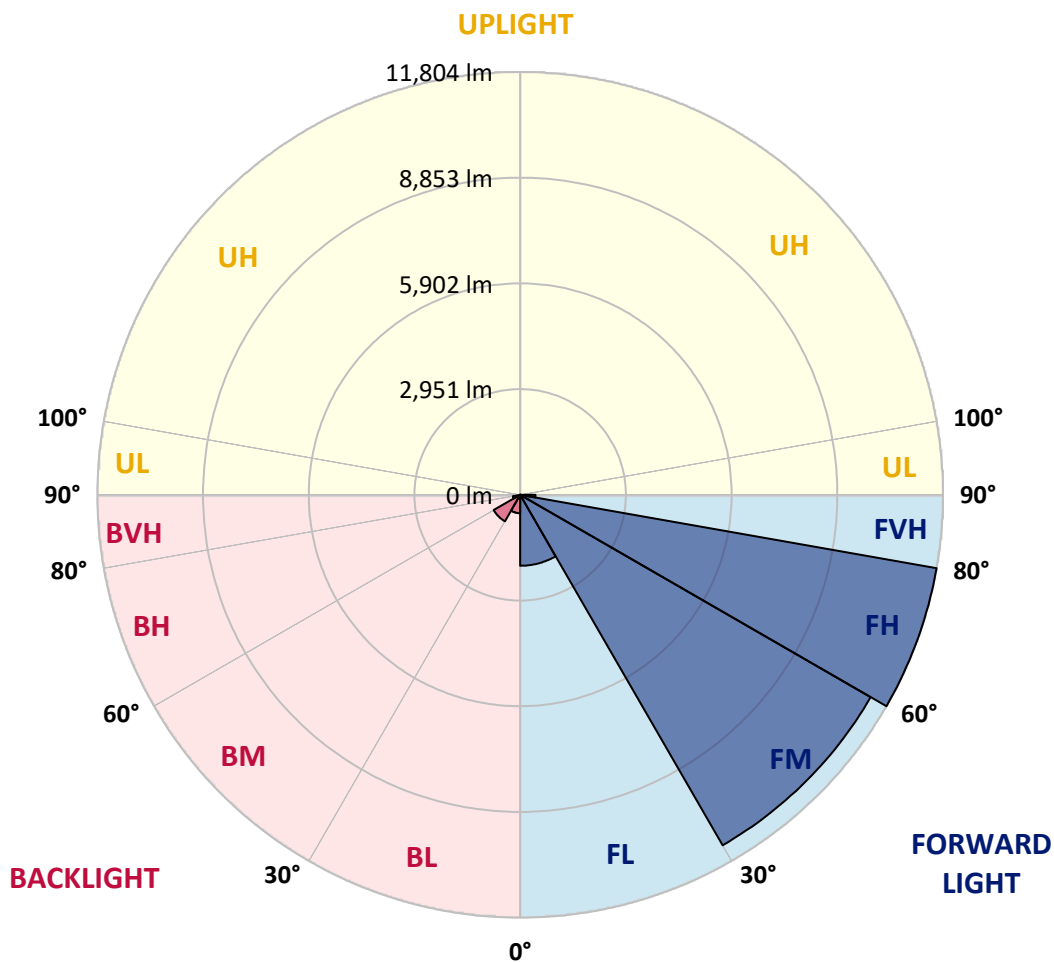
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1981.4	7.3			
FM	(30°-60°)	11296.9	41.7			
FH	(60°-80°)	11803.7	43.6			G4/12000
FVH	(80°-90°)	427.8	1.6			G3/500
BL	(0°-30°)	513.5	1.9	B2/1000		
BM	(30°-60°)	852.0	3.1	B1/1000		
BH	(60°-80°)	205.8	0.8	B1/500		G1/500
BVH	(80°-90°)	13.9	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-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1
2.5°	4444.8	4420.7	4406.2	4386.8	4362.6	4341.6	4333.6	4273.9	4217.4	4140.1	4051.3
5°	4527.1	4519.1	4493.2	4467.4	4438.4	4406.2	4388.5	4317.5	4236.9	4123.9	3969.0
7.5°	4535.2	4525.5	4493.2	4457.8	4417.4	4378.7	4348.1	4277.2	4202.9	4088.4	3899.7
10°	4522.3	4511.0	4486.8	4448.1	4398.1	4361.0	4330.4	4262.6	4199.7	4096.5	3886.8
12.5°	4507.7	4496.5	4485.2	4465.8	4422.3	4396.4	4370.7	4306.2	4249.7	4162.6	3933.7
15°	4522.3	4515.8	4528.7	4520.6	4496.5	4473.9	4448.1	4390.0	4338.4	4265.8	4019.1
17.5°	4583.5	4583.5	4623.8	4628.8	4606.1	4573.9	4536.8	4478.7	4435.2	4373.9	4120.7
20°	4727.1	4722.2	4773.9	4783.5	4728.7	4678.7	4623.8	4552.9	4519.1	4480.3	4220.7
22.5°	4973.9	4951.3	4982.0	4972.3	4864.2	4786.8	4719.1	4631.9	4614.2	4596.4	4332.0
25°	5294.8	5281.9	5302.9	5207.7	5017.4	4912.6	4831.9	4733.6	4733.6	4751.3	4457.8
27.5°	5761.0	5712.6	5641.6	5473.8	5188.4	5054.5	4967.4	4862.6	4890.0	4956.1	4623.8
30°	6238.3	6185.1	6022.2	5764.1	5396.4	5256.1	5154.4	5044.8	5109.3	5230.2	4846.4
32.5°	6709.2	6649.6	6418.9	6093.1	5694.8	5554.4	5456.1	5335.1	5443.2	5646.4	5172.2
35°	7165.7	7112.5	6846.3	6462.5	6091.6	5975.4	5885.1	5780.3	5919.0	6202.8	5631.9
37.5°	7678.5	7620.5	7296.3	6880.2	6573.8	6489.9	6423.7	6319.0	6560.9	6976.9	6272.1
40°	8309.1	8210.7	7773.7	7359.2	7131.8	7091.5	7046.3	7031.8	7407.6	7983.3	7125.4
42.5°	9031.6	8870.4	8273.6	7864.0	7744.7	7773.7	7762.4	7826.9	8467.2	9234.9	8164.0
45°	9754.1	9546.2	8830.0	8402.6	8418.8	8520.4	8583.3	8841.4	9794.5	10670.3	9281.6
47.5°	10367.1	10162.2	9363.9	8984.9	9178.4	9378.4	9549.3	10038.0	11159.0	12083.1	10150.9
50°	10891.3	10697.7	9930.0	9625.1	10060.6	10383.2	10660.6	11384.7	12626.6	13158.8	10760.5
52.5°	11320.2	11191.2	10517.1	10359.0	11068.6	11541.1	11947.6	12815.3	13926.5	14032.9	11234.8
55°	11738.0	11646.0	11147.6	11231.5	12252.4	12895.9	13410.4	14332.9	15045.8	14761.9	11689.6
57.5°	12218.5	12134.7	11866.9	12337.9	13808.7	14618.4	15179.7	15677.9	16031.2	15507.0	12118.6
60°	12708.8	12660.4	12666.9	13566.9	15595.7	16373.1	16682.8	16811.8	16998.9	16208.6	12142.7
62.5°	13176.5	13268.5	13581.3	14934.5	17306.9	17903.7	18060.1	18187.5	17968.1	16319.9	11218.6
65°	13968.4	14118.5	14865.1	16765.0	19189.0	19827.8	19989.0	19552.0	18121.4	14881.3	9125.2
67.5°	14355.5	14629.6	15961.8	18471.3	21014.7	21724.4	21664.7	19640.7	16261.8	11347.6	5856.1
69°	14274.9	14566.8	16215.0	18993.8	21621.1	22264.6	21885.6	18555.2	13853.9	8220.4	3595.0
70°	13955.5	14250.6	16084.4	18974.5	21698.5	22208.2	21476.0	17214.9	11713.7	6010.9	2248.2
72.5°	11654.1	11908.9	14279.7	17150.5	19989.0	19574.5	17966.5	11926.6	5707.7	1637.0	506.5
75°	7173.7	7315.6	10246.1	12920.1	15097.4	14032.9	11970.2	5933.5	1701.5	462.9	280.6
77.5°	3790.0	3854.6	5609.4	7615.7	9570.3	7918.9	6135.0	2314.3	783.8	290.3	203.3
80°	2240.2	2288.5	3020.8	3482.0	4141.6	3459.4	2453.0	1420.9	561.3	182.3	180.7
82.5°	1282.2	1312.9	2190.1	1935.3	1632.1	1393.5	1220.9	1346.7	337.1	122.5	187.1
85°	471.0	477.4	1232.1	1472.4	970.9	577.4	606.4	1116.0	90.3	77.4	146.8
87.5°	219.3	214.5	633.8	901.5	567.7	366.1	472.5	245.1	35.5	50.0	40.3
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°	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1	4048.1
2.5°	3999.7	3940.1	3832.0	3720.7	3607.8	3520.7	3435.3	3367.6	3344.9	3303.0	3306.3
5°	3877.2	3767.5	3541.7	3312.7	3074.0	2877.3	2691.8	2541.7	2469.2	2395.0	2395.0
7.5°	3770.7	3611.0	3257.9	2885.3	2499.8	2175.6	1883.8	1664.4	1543.4	1446.7	1445.0
10°	3730.4	3514.2	3020.8	2486.9	1949.8	1507.9	1161.3	938.7	824.1	749.9	746.8
12.5°	3748.1	3480.4	2838.5	2119.2	1445.0	969.2	672.5	529.0	480.6	458.1	458.1
15°	3799.8	3470.8	2656.3	1759.6	1020.9	606.4	446.7	408.1	404.8	404.8	404.8
17.5°	3862.7	3473.9	2469.2	1409.6	695.1	433.8	385.4	380.6	383.8	383.8	383.8
20°	3927.1	3475.6	2267.6	1085.5	490.3	377.4	362.8	361.3	364.5	364.5	366.1
22.5°	4006.2	3483.7	2066.0	811.2	404.8	356.4	345.1	345.1	346.8	346.8	345.1
25°	4096.5	3499.7	1856.3	601.6	369.3	341.9	332.3	330.6	332.3	330.6	329.0
27.5°	4209.4	3522.3	1622.5	471.0	353.2	327.4	319.4	319.4	317.7	316.1	314.5
30°	4351.3	3548.1	1359.6	400.0	337.1	314.5	306.5	304.8	303.2	299.9	299.9
32.5°	4567.5	3604.6	1099.9	362.8	319.4	296.8	290.3	290.3	287.0	283.9	282.2
35°	4899.6	3715.9	867.7	340.3	299.9	277.4	269.3	269.3	266.1	264.5	262.9
37.5°	5359.3	3885.3	674.1	319.4	280.6	256.5	248.4	246.7	243.6	240.3	238.7
40°	5970.6	4094.9	530.6	299.9	261.3	235.5	229.0	225.8	219.3	214.5	214.5
42.5°	6738.3	4333.6	430.7	279.1	238.7	216.1	211.2	206.4	195.2	190.3	188.7
45°	7541.4	4548.0	364.5	254.8	216.1	196.7	193.5	185.5	170.9	166.1	166.1
47.5°	8120.4	4598.1	320.9	232.2	195.2	175.8	174.2	159.7	146.8	143.5	141.9
50°	8481.7	4499.7	285.5	209.7	175.8	156.4	151.6	133.9	125.8	122.5	120.9
52.5°	8725.3	4323.9	256.5	190.3	158.0	138.7	127.5	114.5	108.0	104.9	104.9
55°	8920.3	4075.5	227.4	172.6	143.5	124.2	108.0	98.4	92.0	88.7	88.7
57.5°	8975.2	3738.5	198.4	158.0	129.0	109.7	92.0	85.5	77.4	75.8	75.8
60°	8576.8	3130.4	175.8	140.3	116.1	95.1	80.6	72.5	64.5	62.9	61.3
62.5°	7526.9	2422.4	154.9	124.2	101.6	82.2	69.4	59.6	53.2	53.2	53.2
65°	5741.5	1624.0	135.4	108.0	88.7	69.4	59.6	48.4	45.1	45.1	46.7
67.5°	3436.9	883.8	116.1	92.0	75.8	58.1	50.0	41.9	40.3	41.9	41.9
69°	2014.4	519.4	104.9	82.2	66.1	51.7	43.6	37.1	40.3	41.9	41.9
70°	1243.5	350.0	96.8	74.2	59.6	46.7	40.3	35.5	38.7	40.3	40.3
72.5°	346.8	180.7	77.4	58.1	48.4	38.7	32.2	32.2	37.1	38.7	38.7
75°	225.8	133.9	59.6	43.6	37.1	30.7	27.4	30.7	35.5	37.1	37.1
77.5°	187.1	109.7	48.4	35.5	30.7	29.1	25.8	27.4	32.2	33.9	33.9
80°	170.9	77.4	38.7	32.2	27.4	25.8	24.1	22.6	29.1	30.7	30.7
82.5°	162.9	61.3	33.9	29.1	25.8	22.6	21.0	22.6	25.8	27.4	29.1
85°	101.6	40.3	30.7	27.4	22.6	21.0	21.0	21.0	24.1	25.8	25.8
87.5°	37.1	32.2	27.4	22.6	19.3	19.3	19.3	19.3	21.0	24.1	24.1
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)