

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: P191217

Luminaire Tested: **GLEON-AF-09-LED-E1-SL4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191217
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-09-LED-E1-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1050mA 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: 44180.2 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

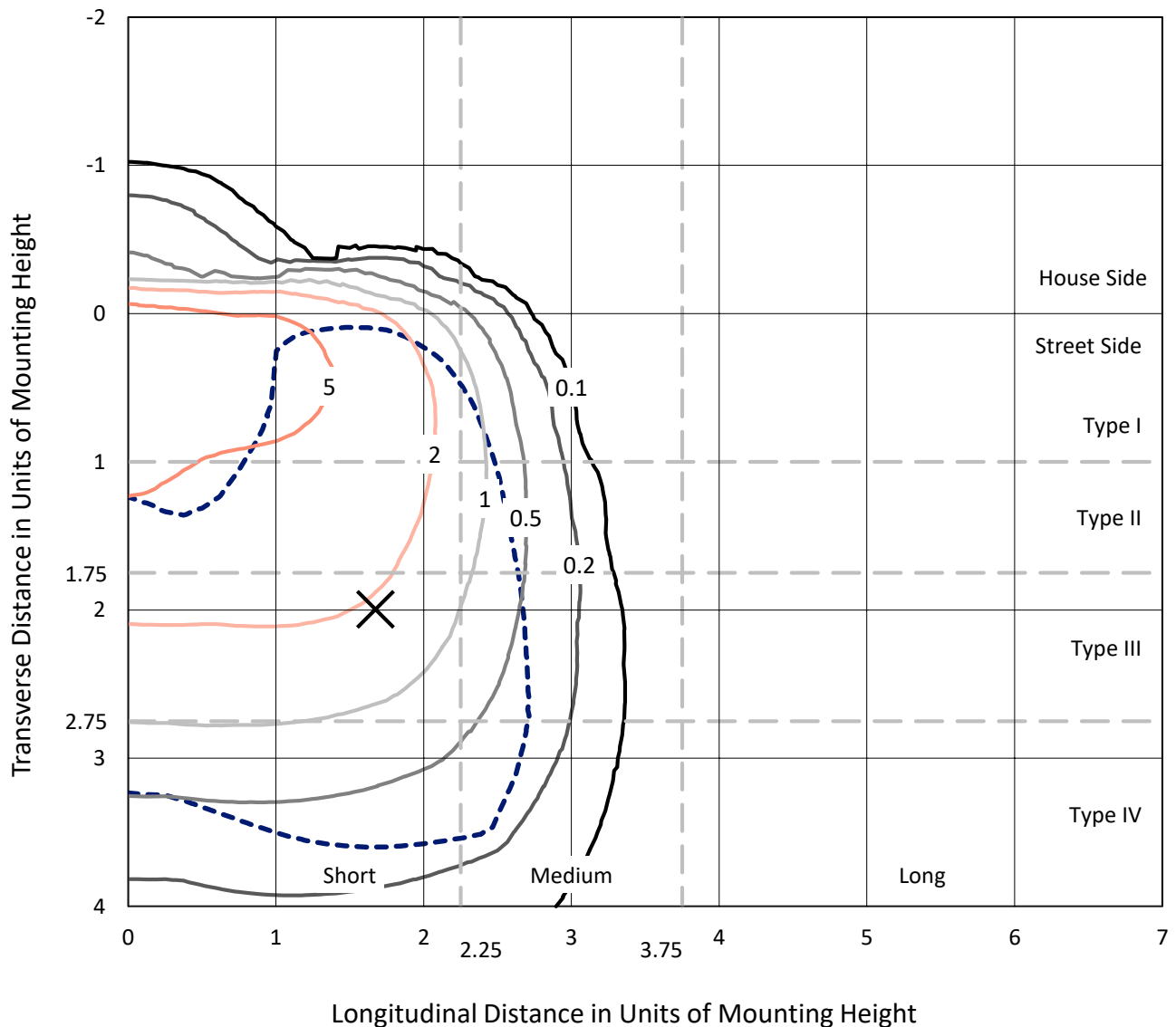
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

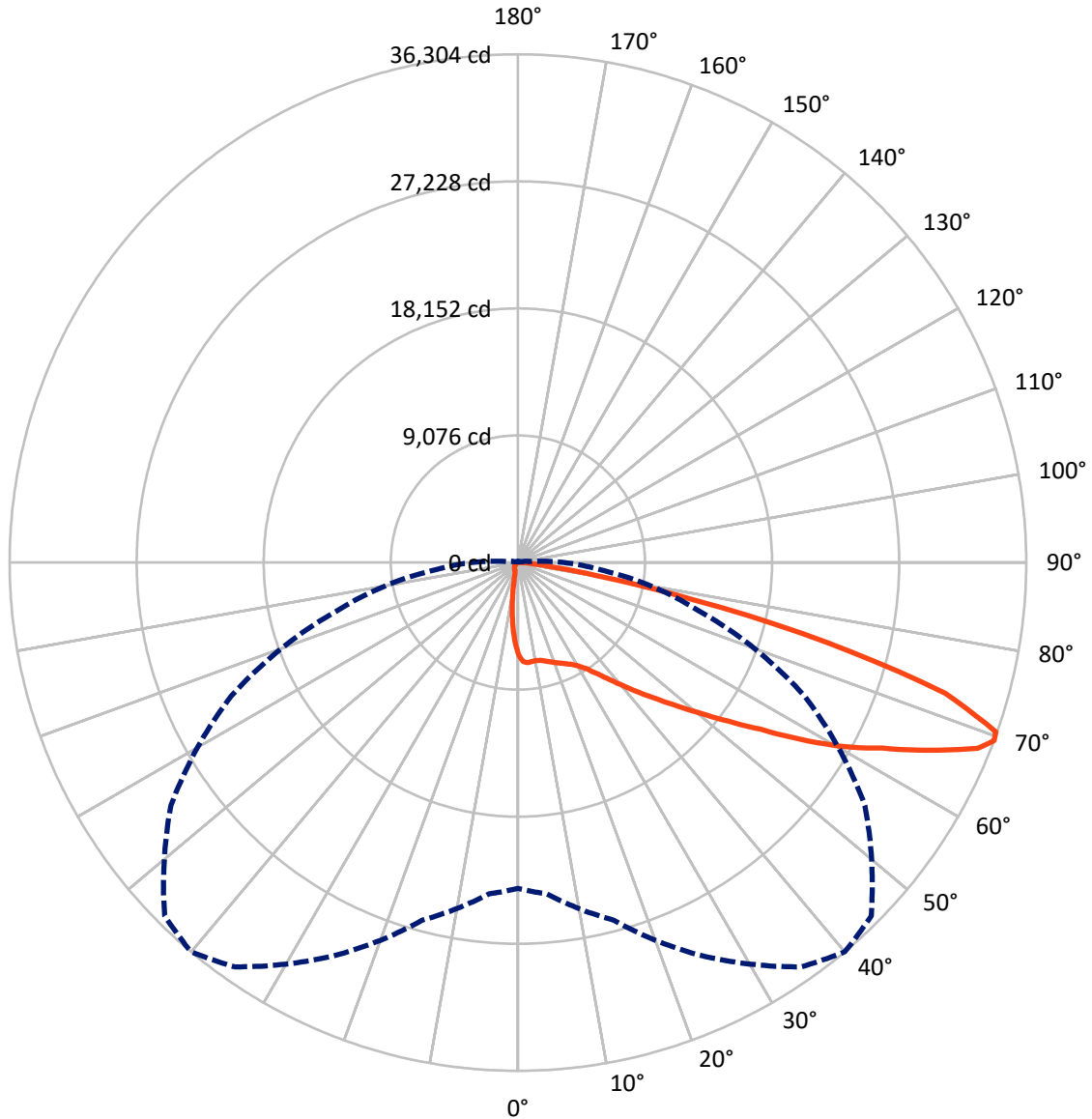
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 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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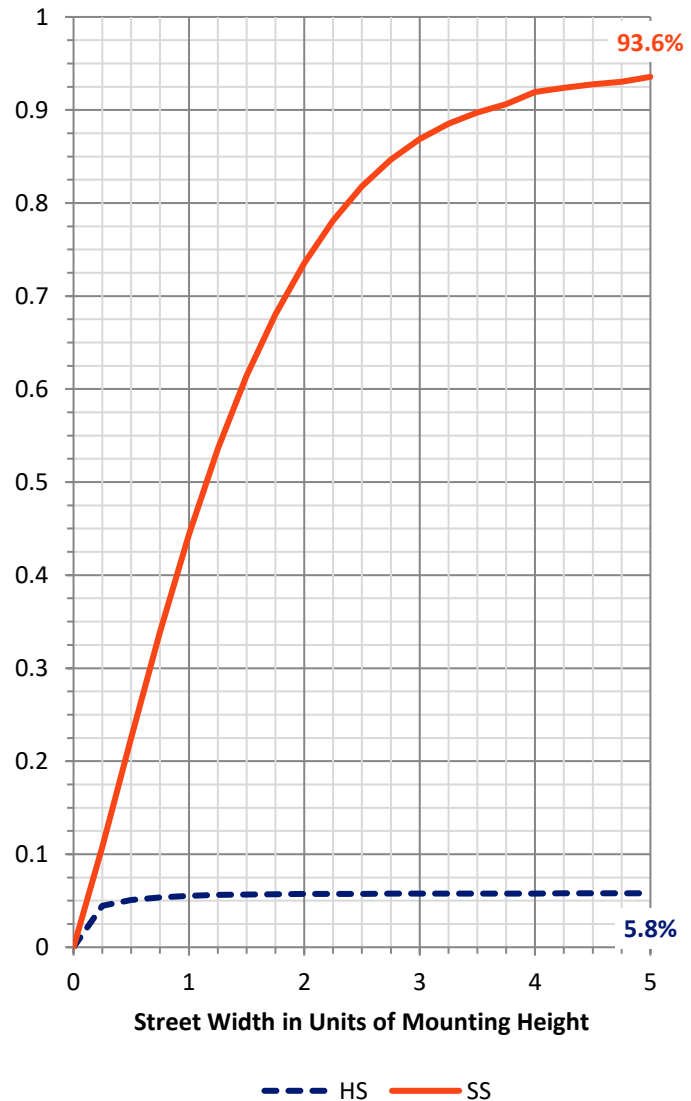
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2584.8	0.0	2584.8
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	41595.4	0.0	41595.4
	% Fixture	94.1	0.0	94.1
Total	Lumens	44180.2	0.0	44180.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	535.2	1.2
10°-20°	1316.1	3.0
20°-30°	2216.8	5.0
30°-40°	3629.0	8.2
40°-50°	6283.5	14.2
50°-60°	9897.1	22.4
60°-70°	12925.3	29.3
70°-80°	6657.1	15.1
80°-90°	720.1	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°	44180.2	100.0
0°-180°	44180.2	100.0



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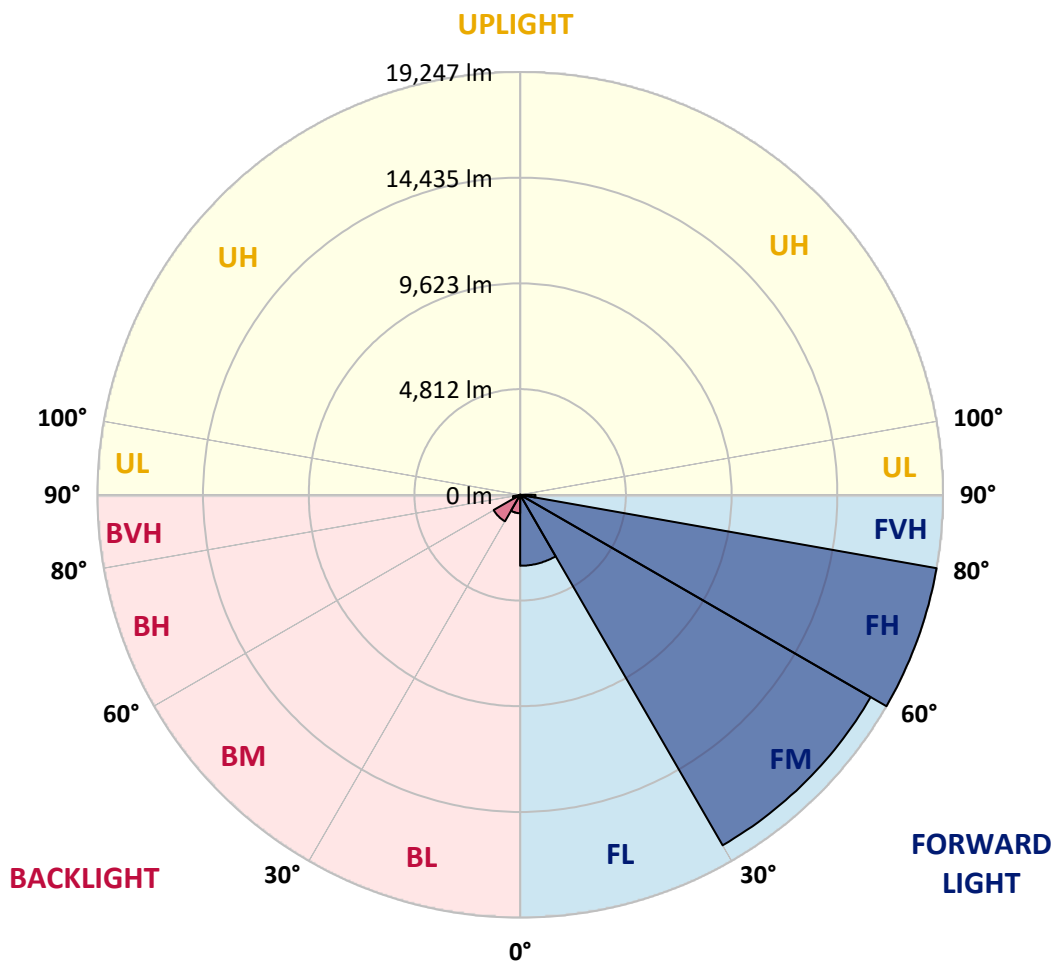
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3230.8	7.3			
FM	(30°-60°)	18420.4	41.7			
FH	(60°-80°)	19246.7	43.6			G5
FVH	(80°-90°)	697.5	1.6			G4/750
BL	(0°-30°)	837.3	1.9	B2/1000		
BM	(30°-60°)	1389.3	3.1	B2/2500		
BH	(60°-80°)	335.6	0.8	B1/500		G1/500
BVH	(80°-90°)	22.6	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°	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8
2.5°	7247.7	7208.2	7184.6	7153.0	7113.6	7079.3	7066.2	6969.0	6876.9	6750.7	6606.0
5°	7381.8	7368.6	7326.6	7284.5	7237.2	7184.6	7155.6	7039.9	6908.4	6724.4	6471.9
7.5°	7394.9	7379.2	7326.6	7268.7	7203.0	7139.9	7089.9	6974.2	6853.3	6666.5	6358.8
10°	7373.9	7355.5	7316.0	7252.9	7171.4	7110.9	7060.9	6950.5	6847.9	6679.7	6337.8
12.5°	7350.2	7331.8	7313.4	7281.9	7210.9	7168.7	7126.7	7021.5	6929.5	6787.5	6414.0
15°	7373.9	7363.4	7384.5	7371.3	7331.8	7295.0	7252.9	7158.3	7074.1	6955.8	6553.4
17.5°	7473.9	7473.9	7539.6	7547.4	7510.6	7458.0	7397.6	7302.9	7231.9	7132.0	6719.0
20°	7707.9	7700.0	7784.1	7799.9	7710.5	7629.0	7539.6	7423.9	7368.6	7305.5	6882.1
22.5°	8110.3	8073.4	8123.4	8107.6	7931.4	7805.2	7694.7	7552.8	7523.8	7494.9	7063.6
25°	8633.6	8612.5	8646.7	8491.5	8181.3	8010.3	7878.9	7718.4	7718.4	7747.3	7268.7
27.5°	9393.6	9314.7	9199.0	8925.5	8460.0	8241.7	8099.7	7928.8	7973.5	8081.3	7539.6
30°	10172.0	10085.2	9819.6	9398.9	8799.2	8570.5	8404.8	8226.0	8331.1	8528.3	7902.5
32.5°	10939.8	10842.6	10466.5	9935.3	9285.7	9057.0	8896.5	8699.3	8875.5	9206.9	8433.7
35°	11684.1	11597.3	11163.5	10537.5	9932.6	9743.3	9596.1	9425.2	9651.3	10114.1	9183.2
37.5°	12520.4	12425.7	11897.1	11218.6	10719.0	10582.2	10474.4	10303.5	10697.9	11376.4	10227.3
40°	13548.7	13388.2	12675.6	11999.7	11628.9	11563.1	11489.5	11465.8	12078.6	13017.5	11618.4
42.5°	14726.8	14463.8	13490.8	12822.8	12628.2	12675.6	12657.2	12762.3	13806.4	15058.1	13312.0
45°	15904.9	15565.6	14398.0	13701.2	13727.5	13893.1	13995.7	14416.4	15970.6	17398.7	15134.4
47.5°	16904.3	16570.3	15268.6	14650.5	14966.1	15292.2	15570.9	16367.7	18195.4	19702.3	16551.9
50°	17758.9	17443.4	16191.6	15694.5	16404.6	16930.6	17382.9	18563.6	20588.5	21456.4	17545.9
52.5°	18458.4	18248.0	17148.8	16891.1	18048.2	18818.7	19481.4	20896.2	22708.2	22881.8	18319.1
55°	19139.5	18989.6	18177.0	18313.8	19978.4	21027.8	21866.6	23370.8	24533.2	24070.4	19060.6
57.5°	19923.2	19786.5	19349.9	20117.9	22516.2	23836.4	24751.5	25564.2	26140.1	25285.4	19760.1
60°	20722.6	20643.8	20654.3	22121.7	25429.9	26697.6	27202.5	27412.8	27717.9	26429.3	19799.6
62.5°	21485.3	21635.2	22145.4	24351.8	28220.1	29193.2	29448.3	29656.1	29298.4	26610.7	18292.7
65°	22776.5	23021.1	24238.7	27336.6	31289.1	32330.6	32593.6	31880.9	29548.2	24265.0	14879.3
67.5°	23407.7	23854.7	26026.9	30118.8	34266.1	35423.2	35325.9	32025.5	26516.1	18503.1	9548.7
69°	23276.2	23752.2	26439.8	30971.0	35254.9	36304.1	35686.2	30255.6	22589.8	13404.0	5861.8
70°	22755.5	23236.7	26226.8	30939.4	35381.1	36212.0	35018.2	28070.3	19100.1	9801.2	3665.9
72.5°	19002.8	19418.3	23284.1	27965.1	32593.6	31917.7	29295.8	19447.2	9306.8	2669.2	825.7
75°	11697.2	11928.7	16707.0	21067.2	24617.4	22881.8	19518.2	9675.0	2774.4	754.7	457.6
77.5°	6180.0	6285.2	9146.4	12417.8	15605.1	12912.2	10003.6	3773.8	1278.1	473.3	331.3
80°	3652.8	3731.6	4925.6	5677.7	6753.3	5640.9	3999.9	2316.9	915.1	297.2	294.5
82.5°	2090.7	2140.6	3571.2	3155.7	2661.3	2272.2	1990.8	2195.9	549.6	199.9	305.0
85°	767.9	778.5	2009.2	2401.0	1583.1	941.4	988.8	1819.8	147.3	126.2	239.3
87.5°	357.6	349.7	1033.5	1470.1	925.7	597.0	770.5	399.8	57.9	81.5	65.8
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°	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8	6600.8
2.5°	6521.8	6424.5	6248.4	6066.9	5882.8	5740.8	5601.5	5491.0	5454.2	5385.8	5391.1
5°	6322.0	6143.1	5775.0	5401.6	5012.4	4691.6	4389.1	4144.5	4026.2	3905.2	3905.2
7.5°	6148.4	5888.1	5312.2	4704.7	4076.2	3547.6	3071.6	2713.9	2516.7	2358.9	2356.3
10°	6082.7	5730.3	4925.6	4055.1	3179.4	2458.9	1893.5	1530.5	1343.9	1222.8	1217.6
12.5°	6111.6	5675.0	4628.4	3455.5	2356.3	1580.5	1096.6	862.6	783.7	746.9	746.9
15°	6195.8	5659.3	4331.3	2869.1	1664.6	988.8	728.4	665.3	660.1	660.1	660.1
17.5°	6298.3	5664.6	4026.2	2298.5	1133.4	707.4	628.5	620.6	625.8	625.8	625.8
20°	6403.6	5667.1	3697.5	1769.8	799.4	615.4	591.7	589.1	594.3	594.3	597.0
22.5°	6532.4	5680.3	3368.8	1322.8	660.1	581.1	562.7	562.7	565.4	565.4	562.7
25°	6679.7	5706.6	3026.9	980.9	602.2	557.5	541.8	539.1	541.8	539.1	536.4
27.5°	6863.7	5743.5	2645.6	767.9	575.9	533.9	520.7	520.7	518.0	515.5	512.8
30°	7095.2	5785.5	2216.9	652.2	549.6	512.8	499.6	497.1	494.4	489.2	489.2
32.5°	7447.5	5877.6	1793.5	591.7	520.7	483.9	473.3	473.3	468.1	462.9	460.2
35°	7989.2	6059.0	1414.8	554.8	489.2	452.3	439.2	439.2	433.9	431.3	428.6
37.5°	8738.8	6335.1	1099.3	520.7	457.6	418.2	405.0	402.3	397.1	391.8	389.2
40°	9735.4	6677.0	865.2	489.2	426.1	383.9	373.5	368.2	357.6	349.7	349.7
42.5°	10987.2	7066.2	702.2	454.9	389.2	352.4	344.5	336.7	318.2	310.4	307.7
45°	12296.9	7416.0	594.3	415.5	352.4	320.8	315.6	302.4	278.8	270.9	270.9
47.5°	13241.0	7497.5	523.3	378.7	318.2	286.6	284.0	260.3	239.3	234.1	231.4
50°	13830.0	7337.1	465.4	341.9	286.6	255.1	247.2	218.3	205.1	199.9	197.2
52.5°	14227.1	7050.5	418.2	310.4	257.7	226.2	207.8	186.7	176.2	170.9	170.9
55°	14545.3	6645.5	370.8	281.4	234.1	202.5	176.2	160.4	149.9	144.6	144.6
57.5°	14634.7	6095.9	323.5	257.7	210.4	178.8	149.9	139.4	126.2	123.6	123.6
60°	13985.2	5104.4	286.6	228.8	189.3	155.2	131.4	118.4	105.2	102.6	99.9
62.5°	12273.2	3949.9	252.5	202.5	165.7	134.1	113.0	97.3	86.7	86.7	86.7
65°	9362.0	2648.2	220.9	176.2	144.6	113.0	97.3	78.9	73.7	73.7	76.3
67.5°	5604.0	1441.1	189.3	149.9	123.6	94.6	81.5	68.3	65.8	68.3	68.3
69°	3284.6	846.8	170.9	134.1	107.8	84.2	71.0	60.5	65.8	68.3	68.3
70°	2027.6	570.7	157.7	121.0	97.3	76.3	65.8	57.9	63.1	65.8	65.8
72.5°	565.4	294.5	126.2	94.6	78.9	63.1	52.6	52.6	60.5	63.1	63.1
75°	368.2	218.3	97.3	71.0	60.5	49.9	44.7	49.9	57.9	60.5	60.5
77.5°	305.0	178.8	78.9	57.9	49.9	47.4	42.0	44.7	52.6	55.2	55.2
80°	278.8	126.2	63.1	52.6	44.7	42.0	39.5	36.8	47.4	49.9	49.9
82.5°	265.6	99.9	55.2	47.4	42.0	36.8	34.2	36.8	42.0	44.7	47.4
85°	165.7	65.8	49.9	44.7	36.8	34.2	34.2	34.2	39.5	42.0	42.0
87.5°	60.5	52.6	44.7	36.8	31.5	31.5	31.5	31.5	34.2	39.5	39.5
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)