

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: P300435

Luminaire Tested: **GLNA-AF-04-LED-E1-AFL-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-AFL-8030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13197.7 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 129
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



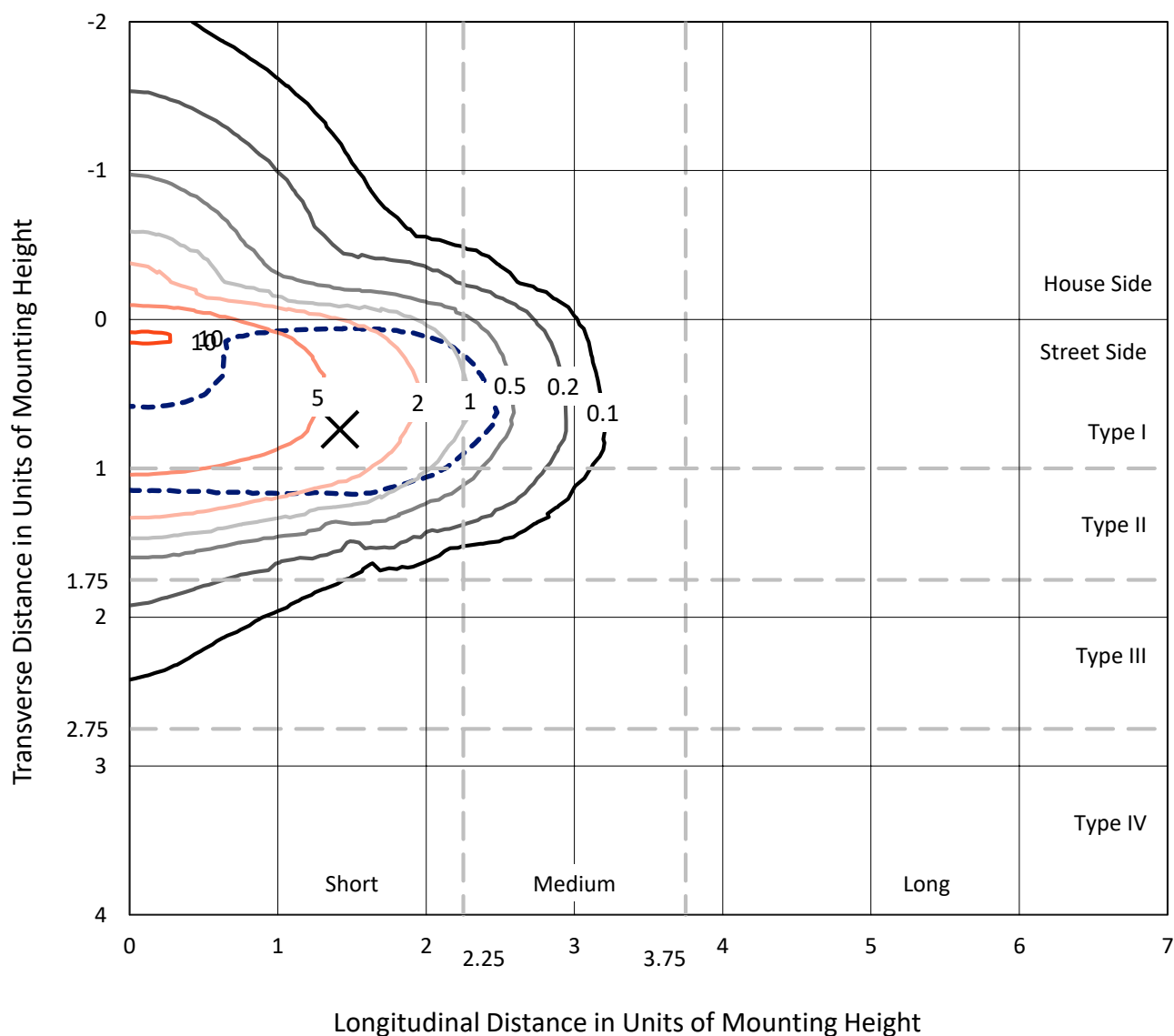
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

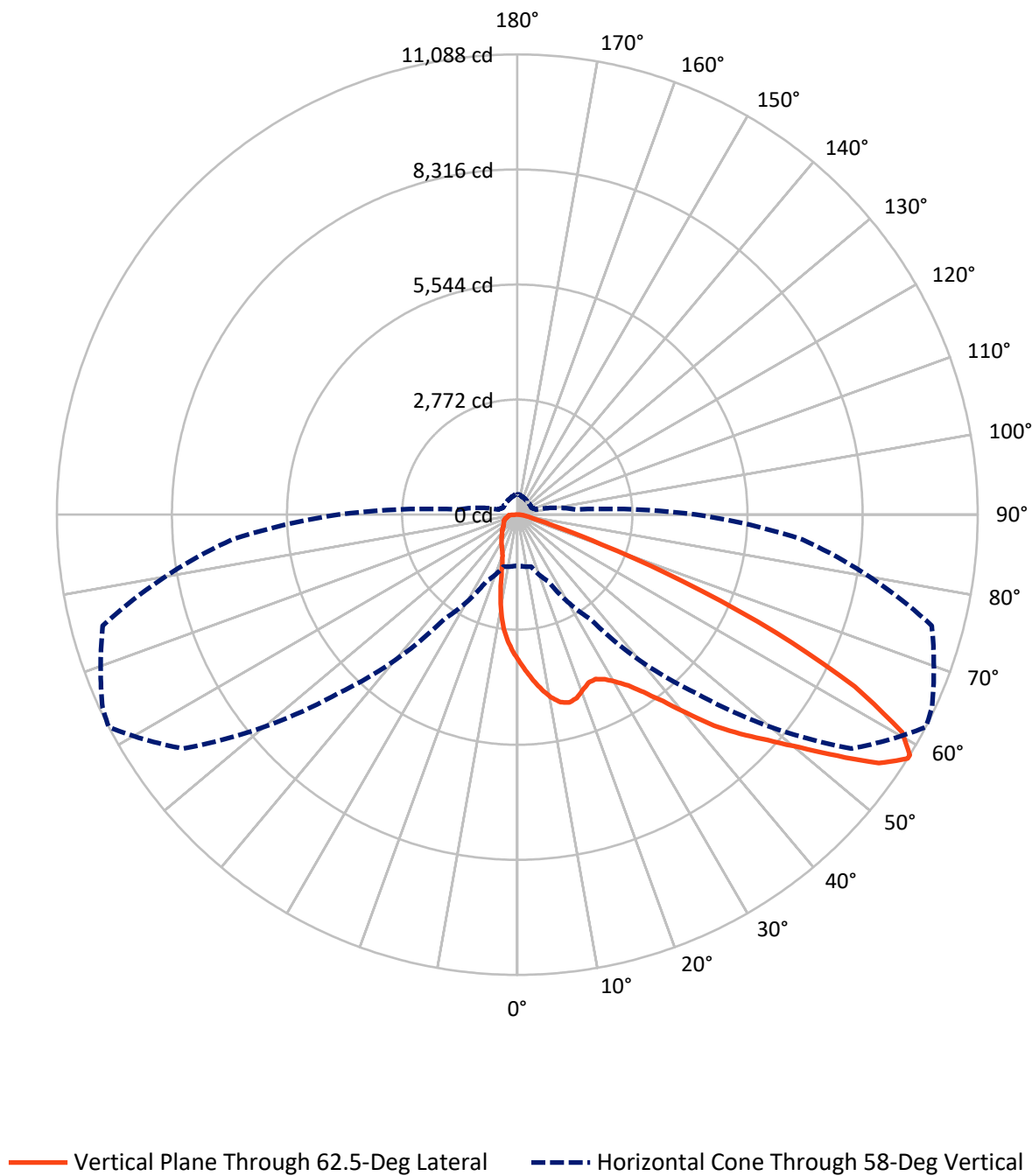


Based on 20 foot mounting height. Maximum calculated value = 10.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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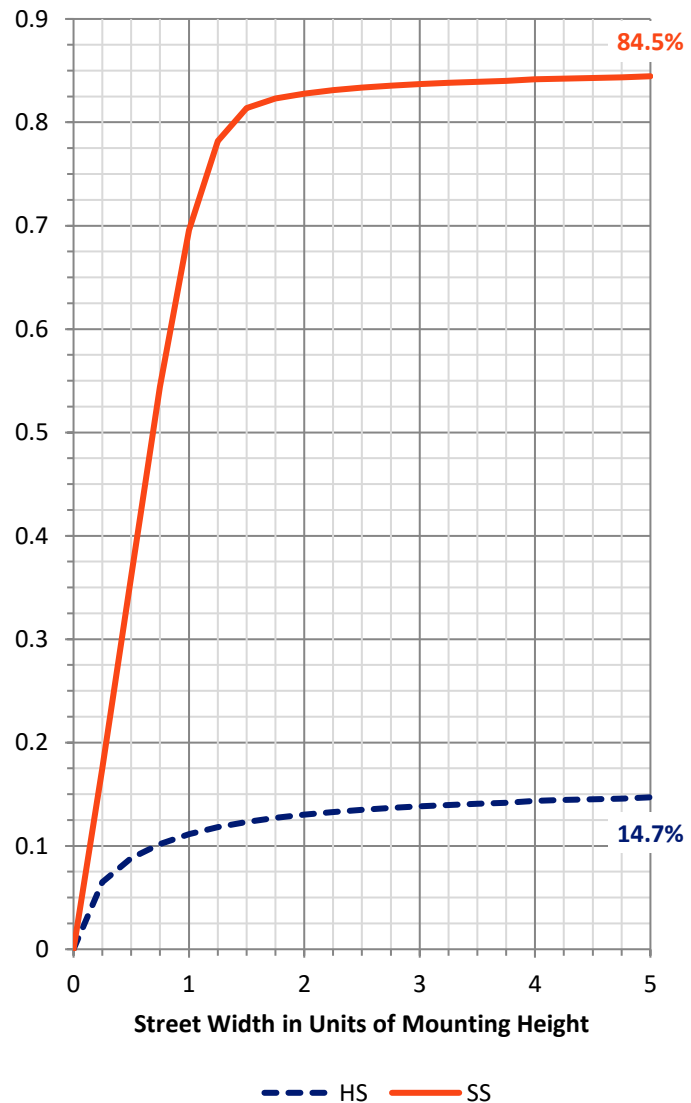
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2012.7	0.0	2012.7
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	11185.0	0.0	11185.0
	% Fixture	84.7	0.0	84.7
Total	Lumens	13197.7	0.0	13197.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.5	2.4
10°-20°	801.4	6.1
20°-30°	1295.6	9.8
30°-40°	2056.7	15.6
40°-50°	3009.4	22.8
50°-60°	3147.5	23.8
60°-70°	1859.6	14.1
70°-80°	523.8	4.0
80°-90°	190.2	1.4
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°	13197.7	100.0
0°-180°	13197.7	100.0

Coefficient of Utilization



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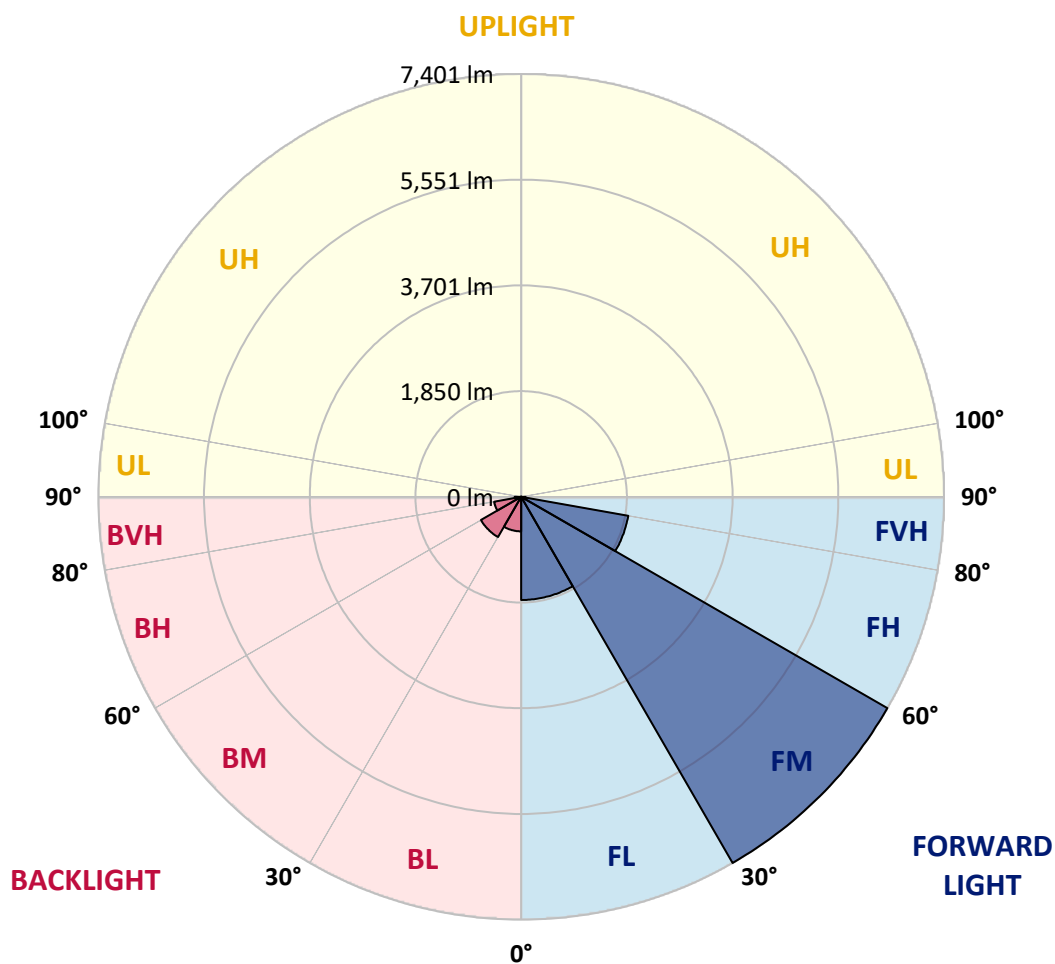
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1805.6	13.7			
FM	(30°-60°)	7401.2	56.1			
FH	(60°-80°)	1903.2	14.4			G2/5000
FVH	(80°-90°)	75.0	0.6			G1/100
BL	(0°-30°)	604.9	4.6	B2/1000		
BM	(30°-60°)	812.4	6.2	B1/1000		
BH	(60°-80°)	480.2	3.6	B1/500		G1/500
BVH	(80°-90°)	115.2	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7
2.5°	4006.0	3973.7	3953.2	3935.1	3911.5	3861.2	3793.4	3750.6	3728.8	3654.9	3567.2
5°	4398.8	4370.2	4349.0	4324.8	4282.5	4203.6	4094.2	4007.2	3964.3	3816.4	3641.2
7.5°	4306.8	4318.6	4355.3	4419.3	4474.0	4463.4	4365.8	4255.2	4198.6	3992.9	3726.9
10°	3752.4	3772.9	3836.3	3986.1	4228.5	4477.1	4552.9	4476.4	4419.3	4167.6	3815.2
12.5°	3641.2	3640.6	3645.5	3685.3	3829.5	4179.4	4559.1	4636.2	4602.0	4334.1	3905.3
15°	3686.6	3687.8	3684.1	3700.8	3745.6	3884.2	4368.9	4697.7	4721.9	4501.9	3998.5
17.5°	3805.9	3802.8	3788.5	3788.5	3804.6	3858.7	4145.2	4640.5	4752.4	4650.5	4080.6
20°	4006.0	3991.7	3953.8	3919.0	3901.6	3930.8	4053.2	4508.8	4699.5	4780.3	4148.3
22.5°	4248.4	4237.2	4175.6	4101.1	4040.8	4040.2	4100.5	4393.8	4608.2	4902.8	4205.5
25°	4561.6	4543.6	4452.2	4332.9	4227.2	4186.8	4203.6	4388.2	4558.5	5035.8	4256.4
27.5°	4929.5	4896.6	4788.4	4616.3	4460.9	4379.5	4355.3	4489.5	4603.8	5200.5	4327.3
30°	5375.7	5337.8	5199.2	4974.9	4755.5	4621.9	4570.3	4669.1	4754.2	5401.2	4441.0
32.5°	5883.4	5828.8	5668.4	5421.1	5132.7	4928.9	4845.0	4906.5	4974.2	5642.9	4583.3
35°	6585.1	6519.8	6288.0	5946.8	5621.2	5340.9	5206.7	5251.4	5317.3	6003.4	4789.0
37.5°	7063.6	7034.4	6880.3	6559.6	6205.4	5882.8	5675.3	5701.4	5738.6	6454.0	5052.5
40°	7059.3	7071.1	7074.2	7077.3	6836.2	6527.3	6304.2	6276.8	6269.4	6948.6	5352.1
42.5°	6705.6	6754.1	6910.7	7228.3	7375.0	7233.3	7028.8	6949.9	6910.7	7531.6	5669.7
45°	6164.3	6190.5	6483.8	7104.0	7650.9	7932.4	7777.7	7529.1	7458.2	8067.3	5933.2
47.5°	5885.3	5913.9	6098.5	6774.6	7647.8	8497.3	8586.8	8113.3	7986.5	8533.4	6160.6
50°	5221.0	5280.6	5513.1	6201.6	7368.8	8757.1	9432.7	8809.3	8547.1	8987.1	6388.7
52.5°	4001.0	4093.0	4353.4	5259.5	6660.9	8628.5	10109.4	9653.3	9282.9	9456.9	6584.5
55°	2523.8	2592.1	2810.9	3714.5	5328.5	7959.2	10366.1	10566.2	10236.8	9901.9	6754.1
57.5°	1372.2	1402.7	1484.7	2050.8	3465.9	6479.4	9992.0	11085.8	10949.0	10279.7	6882.1
58°	1228.0	1248.5	1299.5	1777.4	3073.8	6074.9	9826.0	11087.6	11019.3	10335.0	6892.1
60°	911.1	900.5	855.1	1014.2	1710.9	4196.8	8823.0	10643.9	10844.6	10402.8	6843.6
62.5°	800.5	775.0	682.4	671.8	832.1	1933.4	6751.0	9117.6	9591.8	10016.2	6549.0
65°	752.0	724.6	605.3	566.8	600.3	817.9	3976.8	6838.0	7432.8	8844.1	5795.8
67.5°	715.9	680.5	556.2	503.4	505.9	540.7	1594.1	4306.8	4976.1	6715.0	4508.1
70°	681.1	642.6	514.6	453.7	439.4	427.6	633.9	2155.9	2763.1	4241.5	2874.3
72.5°	643.8	605.9	477.9	414.5	386.6	347.4	413.9	881.9	1231.8	2006.7	1303.8
75°	589.8	555.6	441.2	379.7	339.9	287.7	312.6	460.5	552.5	799.2	628.3
77.5°	523.3	495.3	400.2	351.1	301.4	233.7	240.5	319.4	354.2	457.4	373.5
80°	376.0	385.9	356.1	315.7	268.5	189.5	184.6	233.1	251.7	294.0	243.0
82.5°	264.1	269.7	294.6	257.9	221.9	149.2	136.1	164.1	175.3	193.3	131.1
85°	182.1	175.9	202.0	179.6	160.3	99.4	93.2	111.2	118.1	119.9	67.7
87.5°	109.4	109.4	116.8	96.3	86.4	51.6	50.3	63.4	67.7	64.6	37.3
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°	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7	3505.7
2.5°	3515.0	3470.9	3377.1	3301.9	3206.8	3108.0	3052.7	2993.6	2953.2	2924.0	2970.6
5°	3541.8	3451.6	3257.7	3073.8	2870.6	2659.3	2498.9	2349.8	2246.0	2181.4	2242.3
7.5°	3584.0	3445.4	3136.6	2822.1	2457.3	2105.5	1791.1	1594.1	1479.1	1422.5	1458.0
10°	3632.5	3435.5	2994.2	2480.9	1958.9	1515.8	1280.8	1201.3	1175.2	1164.6	1169.6
12.5°	3672.9	3414.3	2819.6	2068.2	1471.0	1196.9	1129.2	1127.3	1132.9	1134.2	1136.0
15°	3701.5	3383.3	2560.5	1638.2	1176.4	1090.7	1086.9	1098.1	1108.7	1113.1	1115.5
17.5°	3720.7	3319.3	2267.7	1295.1	1054.0	1039.1	1047.8	1062.1	1073.3	1076.4	1078.9
20°	3718.9	3225.4	1919.1	1080.1	987.5	987.5	1002.4	1013.6	1014.2	1010.5	1012.4
22.5°	3699.6	3096.8	1581.0	965.8	928.5	939.0	954.0	943.4	899.9	871.3	873.2
25°	3667.3	2943.3	1291.4	893.1	873.8	892.4	888.1	808.5	746.4	718.4	718.4
27.5°	3638.7	2761.8	1068.9	829.7	819.1	842.1	765.0	692.9	666.8	653.8	649.4
30°	3618.2	2566.0	920.4	768.8	767.5	750.7	663.7	643.8	639.5	628.9	625.2
32.5°	3623.2	2367.8	825.3	715.3	719.7	642.6	615.3	619.6	615.9	604.7	599.7
35°	3664.2	2179.5	763.2	666.8	653.8	580.5	586.7	594.7	593.5	578.0	573.0
37.5°	3737.5	2001.1	722.1	626.4	570.5	549.4	559.3	571.8	568.6	558.1	554.4
40°	3814.6	1833.3	688.6	594.7	521.4	528.2	536.9	543.8	546.9	550.0	547.5
42.5°	3889.8	1658.1	647.6	562.4	500.9	508.4	512.1	518.9	535.7	547.5	546.9
45°	3934.5	1493.4	605.3	516.4	484.7	489.1	486.6	500.3	520.8	540.1	540.7
47.5°	3984.2	1365.4	571.8	474.2	469.2	472.3	464.9	478.5	497.2	520.8	523.3
50°	4044.5	1288.9	545.0	440.6	448.1	448.1	446.2	458.6	484.7	512.1	517.1
52.5°	4112.9	1274.0	522.7	416.4	426.9	426.3	428.2	446.8	475.4	502.1	506.5
55°	4196.2	1314.4	498.4	398.4	406.4	408.9	415.1	436.3	460.5	491.0	492.8
57.5°	4293.1	1396.4	479.2	384.1	387.8	395.9	405.8	425.1	451.2	484.7	486.6
58°	4309.3	1413.8	476.0	382.8	384.1	393.4	404.6	423.2	449.3	486.0	487.9
60°	4309.9	1471.6	469.2	377.2	369.8	385.3	397.7	416.4	446.2	490.3	494.7
62.5°	4157.0	1471.0	464.2	369.2	354.9	374.1	388.4	410.2	443.1	500.9	509.6
65°	3660.5	1336.8	440.6	356.7	343.1	364.2	380.3	405.8	451.8	546.9	552.5
67.5°	2863.1	1095.6	396.5	339.3	327.5	354.2	375.4	405.2	461.1	557.5	561.2
70°	1893.0	819.7	348.0	319.4	311.4	342.4	377.9	426.3	450.6	535.1	525.1
72.5°	982.5	575.5	308.9	294.6	292.7	331.9	413.9	423.8	440.0	503.4	491.0
75°	515.8	399.6	274.7	267.2	270.3	329.4	488.5	412.7	426.3	481.6	505.3
77.5°	315.7	322.5	245.5	242.4	248.6	321.9	487.9	398.4	406.4	443.1	469.2
80°	211.3	261.6	223.1	223.7	228.1	294.6	438.1	376.0	382.2	418.9	445.6
82.5°	133.6	154.7	202.6	213.2	207.6	243.0	372.3	342.4	351.1	479.2	506.5
85°	67.7	96.9	175.9	205.1	187.1	170.3	302.0	300.2	304.5	345.5	361.1
87.5°	31.1	53.4	137.3	179.0	141.1	106.3	219.4	222.5	239.9	245.5	245.5
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)