

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: P256718

Luminaire Tested: **CST-10-8-D-U-T5R-7030-HSS-HM-EX120**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-10-8-D-U-T5R-7030-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 3000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED
120 DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60840 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B5 - U2 - G5

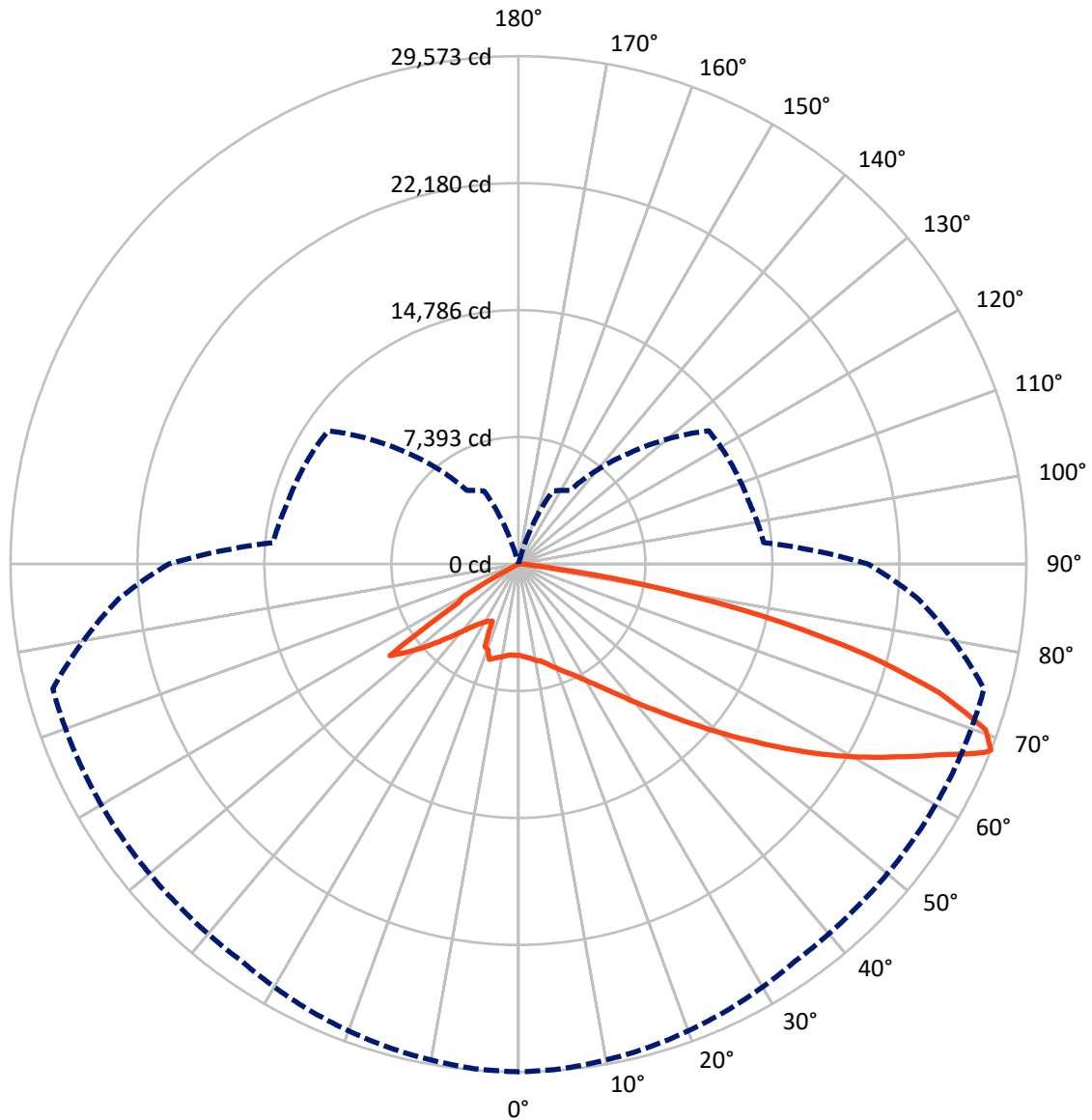
Input Watts (W): 631
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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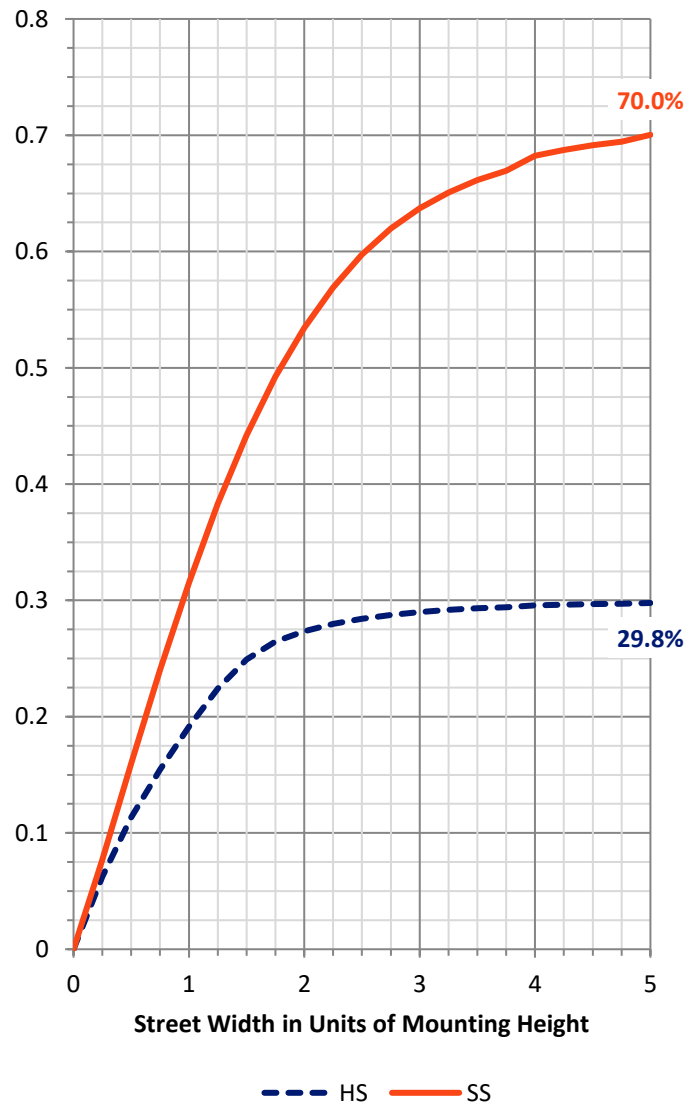
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18135.7	2.8	18138.5
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	42676.6	24.9	42701.5
	% Fixture	70.1	0.0	70.2
Total	Lumens	60812.3	27.7	60840.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	514.8	0.8
10°-20°	1638.4	2.7
20°-30°	2806.5	4.6
30°-40°	4552.7	7.5
40°-50°	7678.0	12.6
50°-60°	12515.3	20.6
60°-70°	16785.0	27.6
70°-80°	13037.6	21.4
80°-90°	1284.0	2.1
90°-100°	24.4	0.0
100°-110°	1.4	0.0
110°-120°	0.3	0.0
120°-130°	0.3	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	60812.3	100.0
0°-180°	60840.0	100.0



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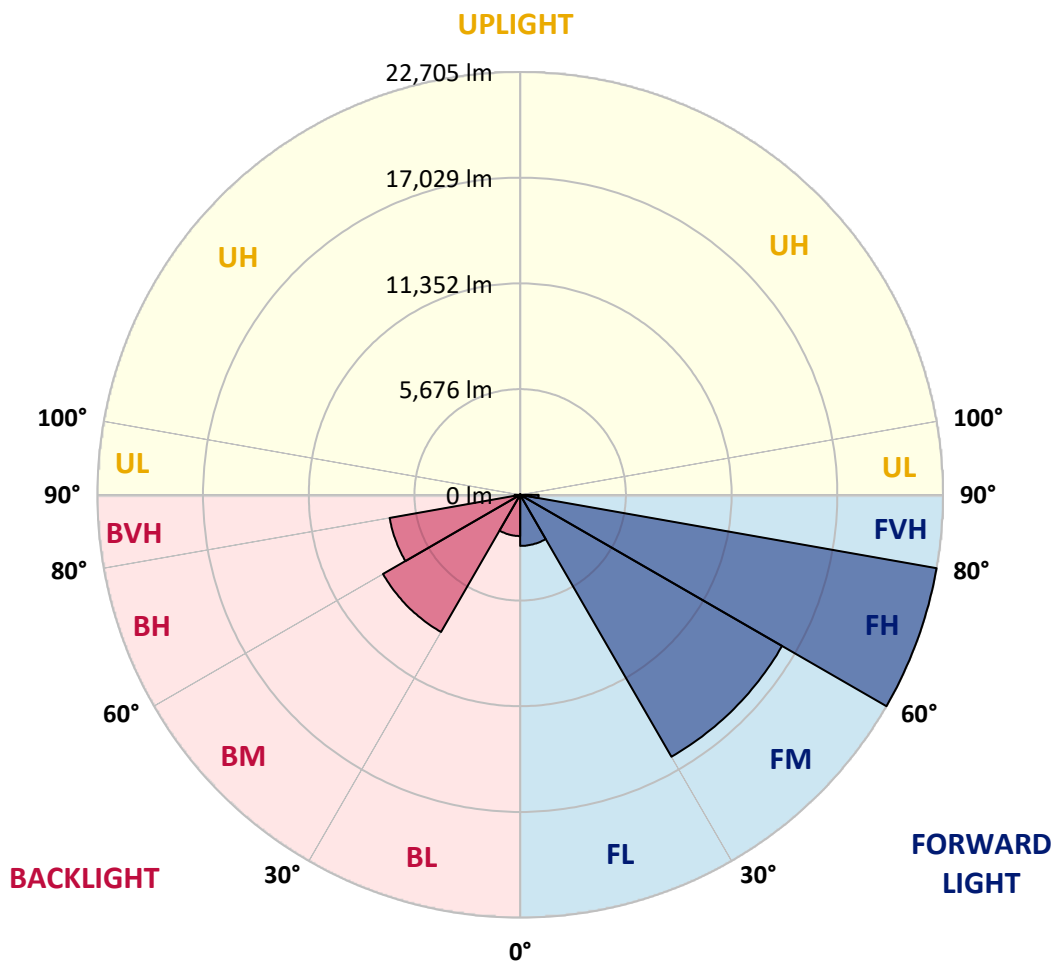
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2744.2	4.5			
FM (30°-60°)	16240.3	26.7			
FH (60°-80°)	22704.8	37.3			G5
FVH (80°-90°)	987.2	1.6			G5
BL (0°-30°)	2215.5	3.6	B3/2500		
BM (30°-60°)	8505.6	14.0	B5		
BH (60°-80°)	7117.9	11.7	B5		G5
BVH (80°-90°)	296.8	0.5			G3/500
UL (90°-100°)	24.4	0.0		U2/50	
UH (100°-180°)	2.8	0.0		U1/10	

BUG Rating: B5-U2-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1
2.5°	5392.2	5377.1	5374.6	5404.8	5309.2	5357.0	5314.2	5349.4	5326.8	5344.4	5346.9
5°	5465.2	5437.5	5419.9	5455.1	5394.7	5417.4	5369.5	5384.6	5321.7	5357.0	5362.0
7.5°	5570.8	5525.5	5520.5	5530.6	5477.7	5495.4	5417.4	5435.0	5389.7	5369.5	5387.2
10°	5714.3	5671.5	5638.8	5661.4	5591.0	5601.0	5518.0	5520.5	5487.8	5450.1	5480.3
12.5°	5794.8	5799.8	5784.7	5802.3	5744.5	5711.7	5653.9	5633.7	5601.0	5555.7	5540.6
15°	5996.1	5986.0	5955.8	5983.5	5975.9	5945.8	5875.3	5830.0	5759.6	5734.4	5709.2
17.5°	6242.7	6210.0	6184.8	6220.0	6257.8	6194.9	6126.9	6064.0	5970.9	5920.6	5890.4
20°	6501.8	6479.2	6454.0	6509.4	6522.0	6474.2	6423.8	6330.7	6222.5	6157.1	6094.2
22.5°	6791.2	6745.9	6753.4	6826.4	6803.8	6781.1	6715.7	6640.2	6509.4	6426.3	6245.2
25°	7090.6	7065.5	7100.7	7133.4	7115.8	7068.0	7035.3	6979.9	6834.0	6733.3	6469.1
27.5°	7463.0	7422.8	7468.0	7480.6	7465.5	7452.9	7407.7	7364.9	7206.4	7093.1	6763.5
30°	7900.8	7853.0	7926.0	7908.4	7893.3	7903.3	7875.7	7782.6	7641.7	7488.2	7158.6
32.5°	8421.7	8358.8	8441.8	8404.1	8368.8	8439.3	8373.9	8285.8	8119.7	7941.1	7619.0
35°	9025.6	9028.1	9070.9	9008.0	8995.4	9070.9	9028.1	8919.9	8766.4	8580.2	8122.3
37.5°	9757.8	9737.6	9845.8	9815.6	9770.4	9871.0	9883.6	9747.7	9470.9	9287.2	8746.3
40°	10648.5	10643.5	10678.7	10683.7	10671.2	10719.0	10741.6	10560.4	10381.8	10105.0	8253.1
42.5°	11599.6	11619.8	11682.7	11637.4	11697.8	11760.7	11768.2	11617.2	11360.6	9694.9	8766.4
45°	12742.0	12804.9	12847.7	12837.6	12865.3	12955.9	12963.4	12882.9	12631.3	10502.6	9697.4
47.5°	14052.9	14113.3	14125.9	14206.4	14181.2	14309.6	14291.9	14294.5	14025.2	11627.3	10711.4
50°	15560.1	15587.8	15690.9	15736.2	15673.3	15846.9	15801.7	15857.0	15524.9	12915.6	11800.9
52.5°	17160.4	17208.2	17251.0	17422.1	17341.6	17492.5	17432.1	17560.5	17175.5	14226.5	13011.2
55°	18979.6	18987.2	19060.1	19233.7	19128.1	19309.2	19221.2	19269.0	18962.0	15675.8	14271.8
57.5°	20907.0	20881.8	20909.5	21047.9	20952.3	21088.2	21052.9	21098.2	20811.4	17200.7	15192.7
60°	22814.3	22776.5	22816.8	22909.9	22779.0	23013.1	22887.2	22930.0	22620.5	18758.2	16506.2
62.5°	24731.6	24703.9	24658.6	24751.7	24560.5	24681.3	24734.1	24663.7	24391.9	20167.2	17648.5
65°	26789.8	26762.2	26596.1	26654.0	26311.8	26253.9	26274.0	26296.7	26115.5	21563.7	18901.6
67.5°	29290.9	29250.7	28938.7	28546.1	28053.0	27944.8	27954.8	28015.2	28040.4	23360.3	20368.5
68°	29572.8	29499.8	29152.6	28697.1	28181.3	28055.5	28042.9	28055.5	28068.1	23375.4	20353.4
70°	28853.1	28825.4	28561.2	28010.2	27481.8	27179.9	26918.2	26908.1	26787.3	22180.2	19228.7
72.5°	25604.7	25569.5	25255.0	24865.0	24537.9	24064.8	23725.1	23745.3	23546.5	19603.6	16830.8
75°	20720.8	20718.3	20340.9	20013.8	20018.8	19983.6	19870.3	20069.1	19862.8	16627.0	14354.9
77.5°	14440.4	14490.7	14465.6	14274.3	14543.6	14916.0	15321.1	15703.5	15585.3	13134.5	11446.1
80°	7543.5	7684.4	8182.6	8205.3	8394.0	8756.3	9033.1	9289.8	9307.4	7452.9	6612.5
82.5°	2005.4	2048.2	2216.8	2169.0	2153.9	2226.8	2287.2	2294.8	2299.8	1942.5	1814.2
85°	624.0	641.6	621.5	593.8	551.0	503.2	490.7	400.1	317.0	261.7	229.0
87.5°	442.8	473.0	427.8	402.6	357.3	339.7	304.5	239.0	186.2	130.8	88.1
90°	229.0	234.0	208.8	178.6	166.1	156.0	133.4	95.6	47.8	25.2	22.6
92.5°	115.7	118.3	103.2	88.1	75.5	65.4	50.3	27.7	15.1	7.5	2.5
95°	45.3	47.8	42.8	37.7	30.2	22.6	20.1	15.1	10.1	5.0	2.5
97.5°	15.1	15.1	15.1	12.6	12.6	12.6	12.6	10.1	7.5	5.0	2.5
100°	0.0	0.0	0.0	2.5	5.0	7.5	7.5	7.5	5.0	2.5	2.5
102.5°	0.0	0.0	0.0	0.0	0.0	2.5	5.0	5.0	5.0	2.5	2.5
105°	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5	2.5
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5
165°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5
170°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5
175°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5
180°	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1	5304.1
2.5°	5334.3	5319.2	5326.8	5263.9	5279.0	5238.7	5324.3	5301.6	5291.5	5326.8
5°	5346.9	5291.5	5336.8	5294.1	5301.6	5243.7	5314.2	5286.5	5284.0	5304.1
7.5°	5351.9	5324.3	5367.0	5296.6	5319.2	5296.6	5349.4	5321.7	5346.9	5364.5
10°	5422.4	5407.3	5402.3	5377.1	5394.7	5344.4	5409.8	5409.8	5422.4	5470.2
12.5°	5525.5	5505.4	5492.8	5447.5	5465.2	5450.1	5502.9	5513.0	5535.6	5555.7
15°	5666.5	5631.2	5618.6	5578.4	5591.0	5588.5	5626.2	5628.7	5679.0	5676.5
17.5°	5847.6	5797.3	5812.4	5782.2	5784.7	5764.6	5744.5	5744.5	5789.7	5799.8
20°	6064.0	5777.2	5399.7	5188.4	5150.6	5178.3	5286.5	5465.2	5241.2	5304.1
22.5°	5674.0	5414.8	5397.2	5349.4	5319.2	4644.9	4471.3	4415.9	4705.3	5203.5
25°	5724.3	5613.6	5580.9	5520.5	4629.8	4622.2	4571.9	4488.9	3668.6	3651.0
27.5°	5991.0	5882.8	5830.0	4836.1	4816.0	4813.5	4738.0	3905.1	3716.4	3741.6
30°	6303.1	6177.2	5231.2	5080.2	5062.6	5022.3	4589.5	3857.3	3854.8	3857.3
32.5°	6662.9	6245.2	5382.1	5374.6	5384.6	5261.3	4066.2	4051.1	4048.5	4073.7
35°	7156.0	5794.8	5759.6	5797.3	5744.5	4549.3	4310.2	4302.7	4305.2	4292.6
37.5°	6828.9	6247.7	6240.1	6240.1	6116.9	4654.9	4607.1	4642.4	4637.3	4619.7
40°	6967.3	6796.2	6750.9	6735.8	5170.8	5022.3	4994.6	5039.9	5047.5	5060.1
42.5°	7639.1	7483.1	7460.5	7281.8	5626.2	5578.4	5492.8	5540.6	5535.6	5550.7
45°	8464.5	8358.8	8260.6	6313.1	6240.1	6179.8	6091.7	6147.0	6162.1	6152.1
47.5°	9425.6	9309.9	8600.3	6942.2	6939.6	6891.8	6793.7	6839.0	6831.4	6831.4
50°	10391.9	10266.0	7812.8	7742.3	7717.1	7641.7	7561.1	7568.7	7571.2	7596.4
52.5°	11471.3	9169.0	8648.1	8507.2	8527.4	8477.0	8399.0	6358.4	8361.3	8383.9
55°	10721.5	9596.7	9566.5	9380.3	9428.2	9362.7	9312.4	6272.9	8316.0	9189.1
57.5°	10600.7	10520.2	10495.0	10303.8	10364.2	9742.7	10208.2	6864.2	5752.0	4202.0
60°	11524.1	11438.6	11423.5	11254.9	11249.9	7742.3	9279.7	4707.8	3678.7	3703.8
62.5°	12419.9	12281.5	12319.3	12120.5	8545.0	4717.9	4159.3	105.7	168.6	178.6
65°	13418.8	13187.3	13225.1	13041.4	8814.2	4974.5	4496.4	55.4	47.8	45.3
67.5°	14380.0	13974.9	13781.2	13587.4	9153.9	5238.7	4685.1	15.1	0.0	0.0
68°	14332.2	13904.5	13705.7	13522.0	9118.7	5231.2	4675.1	15.1	0.0	0.0
70°	13524.5	13139.5	12950.8	12809.9	8706.0	5052.5	4486.4	15.1	0.0	0.0
72.5°	11823.6	11609.7	11488.9	11365.6	7734.8	4519.1	4023.4	15.1	0.0	0.0
75°	10047.1	9986.7	9911.3	9639.5	6446.5	3698.8	3306.3	15.1	0.0	0.0
77.5°	7961.2	7958.7	7775.0	7455.5	4853.7	2715.0	2438.2	12.6	0.0	0.0
80°	4305.2	4692.7	4551.8	4388.2	2752.7	1477.0	1406.5	10.1	0.0	0.0
82.5°	1210.3	1144.9	1099.6	1029.1	578.7	322.1	314.5	10.1	0.0	0.0
85°	168.6	186.2	206.3	234.0	133.4	85.6	75.5	5.0	0.0	0.0
87.5°	95.6	108.2	133.4	138.4	50.3	40.3	12.6	0.0	0.0	0.0
90°	20.1	22.6	25.2	25.2	10.1	10.1	0.0	0.0	0.0	0.0
92.5°	0.0	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)