

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: P522164

Luminaire Tested: **CTN-CA10-760-722-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522164
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-722-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 73516 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

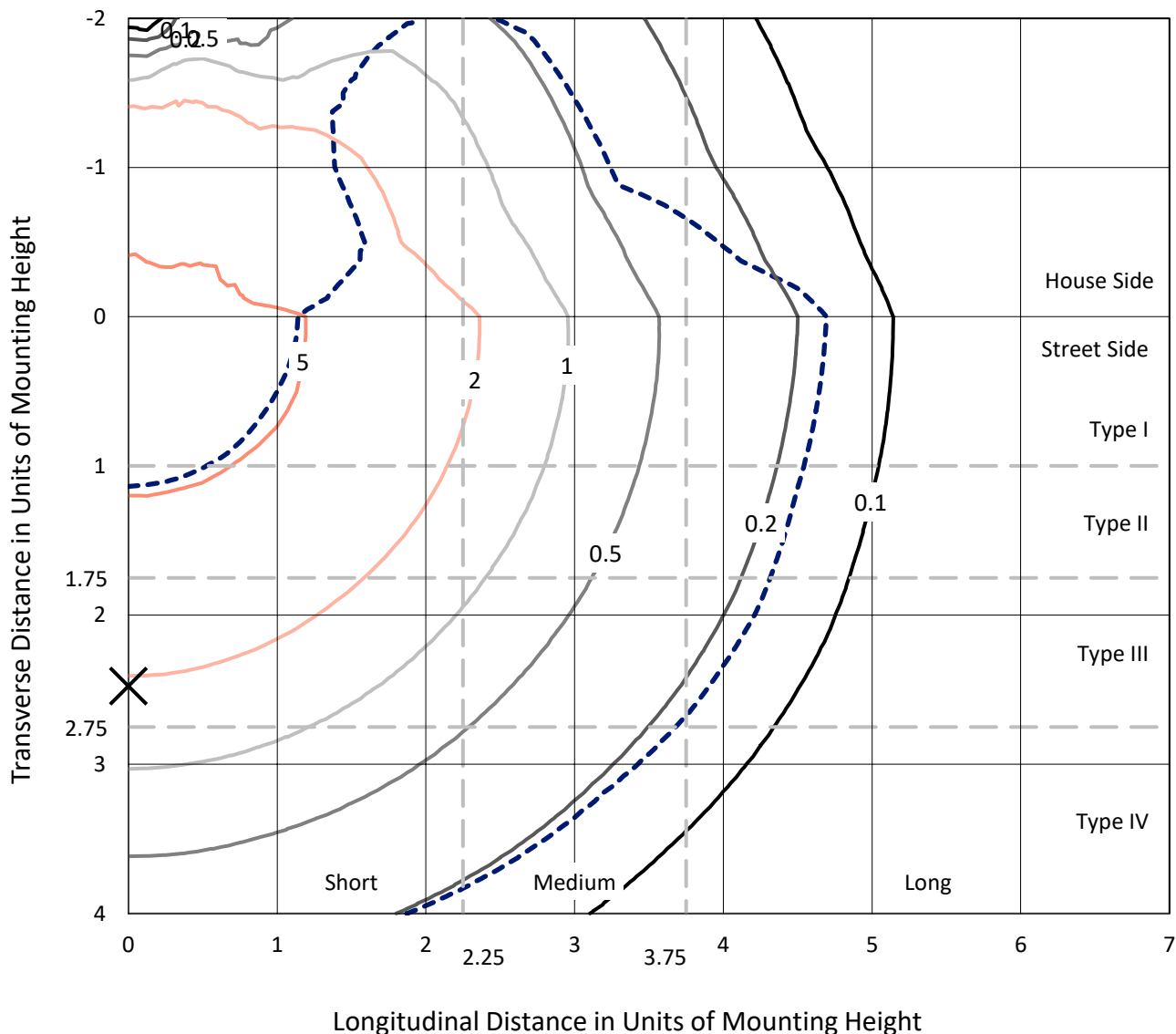
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

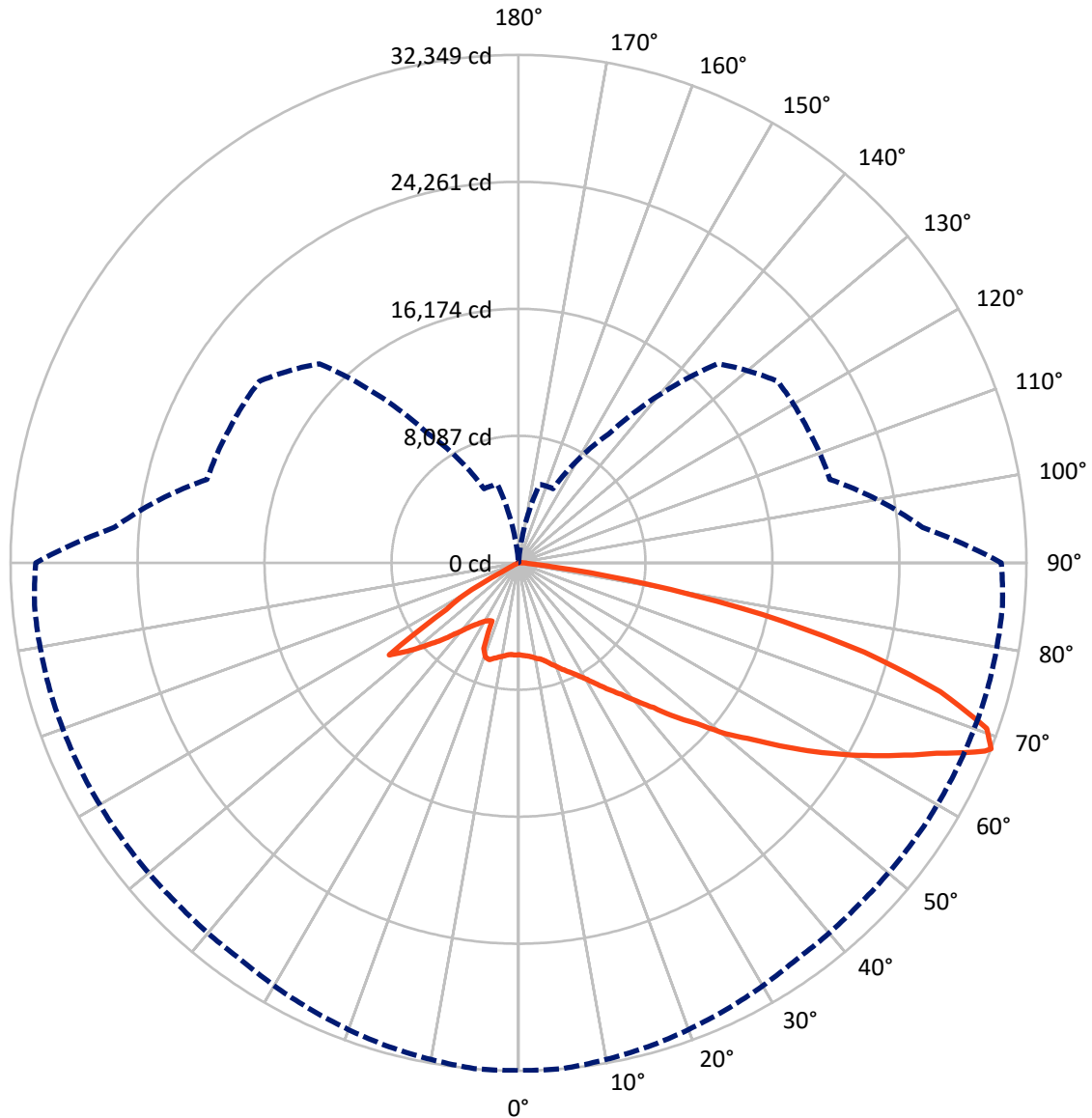
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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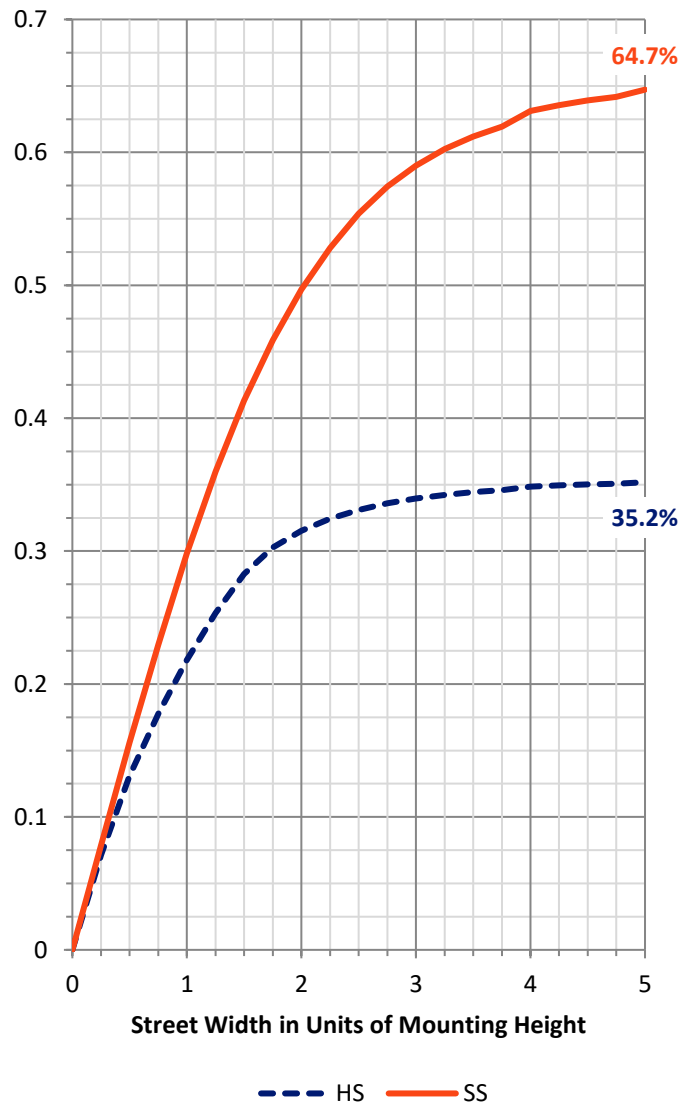
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	25872.6	4.5	25877.1
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	47619.6	19.4	47639.0
	% Fixture	64.8	0.0	64.8
Total	Lumens	73492.2	23.9	73516.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	566.0	0.8
10°-20°	1813.4	2.5
20°-30°	3237.3	4.4
30°-40°	5266.4	7.2
40°-50°	8993.5	12.2
50°-60°	15006.0	20.4
60°-70°	20876.4	28.4
70°-80°	16182.4	22.0
80°-90°	1550.7	2.1
90°-100°	18.8	0.0
100°-110°	1.6	0.0
110°-120°	0.8	0.0
120°-130°	0.5	0.0
130°-140°	0.6	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-90°	73492.2	100.0
0°-180°	73516.0	100.0

Coefficient of Utilization

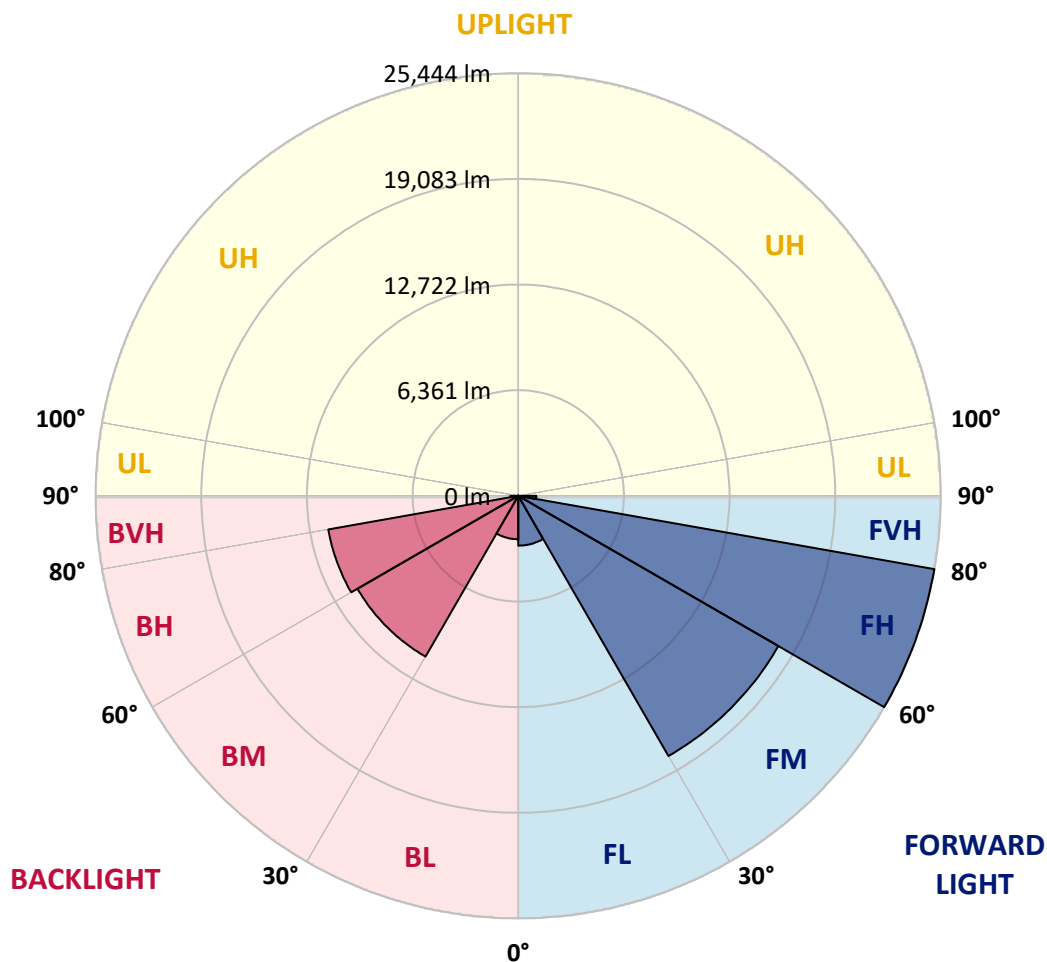


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3000.5	4.1			
FM	(30°-60°)	18090.1	24.6			
FH	(60°-80°)	25444.1	34.6			G5
FVH	(80°-90°)	1084.8	1.5			G5
BL	(0°-30°)	2616.2	3.6	B4/5000		
BM	(30°-60°)	11175.8	15.2	B5		
BH	(60°-80°)	11614.7	15.8	B5		G5
BVH	(80°-90°)	465.8	0.6			G3/500
UL	(90°-100°)	18.8	0.0		U2/50	
UH	(100°-180°)	5.1	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°	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6
2.5°	5917.0	5908.7	5903.2	5939.2	5836.8	5878.3	5850.6	5886.6	5878.3	5894.9	5897.7
5°	5958.5	5944.7	5925.3	5964.1	5903.2	5930.9	5900.4	5917.0	5864.5	5908.7	5914.3
7.5°	6052.6	6013.8	6011.1	6022.1	5980.6	6000.0	5947.5	5966.8	5939.2	5922.6	5939.2
10°	6193.7	6160.5	6124.5	6146.6	6077.5	6102.4	6047.0	6063.6	6049.8	6013.8	6047.0
12.5°	6290.5	6301.5	6276.6	6293.2	6232.4	6210.2	6190.9	6188.1	6179.8	6127.3	6119.0
15°	6506.2	6511.8	6467.5	6478.6	6464.7	6453.7	6426.0	6403.9	6359.6	6326.4	6304.3
17.5°	6788.4	6758.0	6716.5	6727.5	6766.3	6716.5	6699.9	6658.4	6594.8	6539.4	6528.4
20°	7084.4	7065.0	7026.3	7048.4	7045.7	7012.5	7020.8	6951.6	6860.3	6813.3	6777.3
22.5°	7413.6	7385.9	7358.2	7399.7	7366.5	7344.4	7336.1	7289.1	7175.7	7123.1	7114.8
25°	7742.8	7728.9	7748.3	7734.5	7687.4	7670.8	7681.9	7665.3	7532.5	7468.9	7430.2
27.5°	8154.9	8121.7	8152.2	8135.6	8085.8	8088.5	8091.3	8094.1	7944.7	7861.7	7806.4
30°	8625.2	8614.1	8652.9	8600.3	8553.3	8583.7	8608.6	8553.3	8423.3	8301.5	8282.2
32.5°	9236.5	9167.4	9211.6	9145.2	9073.3	9145.2	9189.5	9078.9	8973.7	8818.8	8846.5
35°	9914.3	9892.1	9892.1	9806.4	9767.7	9881.1	9925.3	9817.4	9654.2	9518.7	9485.5
37.5°	10633.5	10655.6	10724.8	10688.8	10652.9	10722.0	10821.6	10677.8	10467.5	10323.7	10284.9
40°	11587.9	11643.2	11690.2	11643.2	11601.7	11645.9	11759.4	11571.3	11424.6	11347.2	11264.2
42.5°	12614.1	12708.2	12677.8	12683.3	12719.3	12782.9	12896.3	12724.8	12556.0	12553.3	12431.6
45°	14002.8	14002.8	13939.2	14000.0	13994.5	14152.2	14202.0	14107.9	13966.8	13925.3	13820.2
47.5°	15300.2	15435.7	15410.8	15499.3	15430.2	15563.0	15731.7	15651.5	15488.3	15341.7	15319.5
50°	17109.3	17076.1	17042.9	17175.7	17164.6	17255.9	17410.8	17361.0	17134.2	16968.2	16937.8
52.5°	18699.9	18874.2	18832.7	19031.9	18921.2	19051.2	19236.6	19228.3	18951.6	18788.4	18741.4
55°	20708.2	20824.4	20816.1	21020.8	20868.6	21040.2	21195.1	21211.7	20910.1	20677.8	20749.7
57.5°	22799.5	22896.3	22841.0	23009.7	22860.4	23095.5	23189.5	23128.7	22951.6	22658.4	22766.3
60°	24893.6	24976.5	25040.2	25054.0	24968.2	25106.6	25195.1	25247.6	24968.2	24633.5	24763.5
62.5°	27020.8	27114.9	27059.5	27081.7	26843.8	27031.9	27142.5	27156.4	26835.5	26539.5	26630.8
65°	29261.5	29391.5	29192.3	29059.5	28766.3	28763.5	28910.2	28935.1	28708.2	28498.0	28462.0
67.5°	32036.0	32094.1	31668.1	31222.8	30727.6	30619.7	30722.1	30780.2	30910.2	30904.6	30741.4
68°	32348.6	32337.6	31906.0	31374.9	30843.8	30719.3	30769.1	30843.8	30929.5	30946.1	30749.7
70°	31637.7	31502.1	31255.9	30586.5	30060.9	29734.5	29560.2	29698.5	29466.2	29468.9	29101.0
72.5°	28102.4	28085.8	27632.2	27300.2	26832.7	26290.5	26041.6	26038.8	26060.9	25900.5	25521.5
75°	22763.5	22785.7	22257.3	22027.7	21883.9	21781.5	21834.1	21997.3	22013.9	22011.1	21878.3
77.5°	15875.6	15966.8	15825.8	15452.3	15853.4	16196.4	16857.6	17195.1	17087.2	17410.8	17615.5
80°	8320.9	8503.5	8509.0	8771.8	9095.5	9408.0	9977.9	10489.7	10113.4	9947.5	9776.0
82.5°	2188.1	2254.5	2354.1	2201.9	2249.0	2296.0	2738.6	2697.1	2489.6	2600.3	2766.3
85°	625.2	644.5	616.9	558.8	511.8	470.3	481.3	406.6	354.1	351.3	340.2
87.5°	439.8	473.0	417.7	359.6	323.7	301.5	290.5	246.2	199.2	174.3	138.3
90°	204.7	201.9	174.3	135.5	118.9	113.4	113.4	88.5	49.8	30.4	27.7
92.5°	85.8	88.5	71.9	58.1	49.8	38.7	30.4	19.4	11.1	5.5	2.8
95°	30.4	33.2	27.7	22.1	19.4	16.6	13.8	11.1	5.5	2.8	2.8
97.5°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	5.5	5.5	2.8	2.8
100°	0.0	0.0	0.0	2.8	5.5	5.5	5.5	5.5	2.8	2.8	2.8
102.5°	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
105°	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8



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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	2.8	2.8	2.8	2.8
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8
145°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8
150°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8
160°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8
165°	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8
167.5°	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8
170°	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
172.5°	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
175°	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
177.5°	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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°	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6	5850.6
2.5°	5892.1	5878.3	5872.8	5803.6	5823.0	5781.5	5878.3	5850.6	5845.1	5883.8
5°	5906.0	5842.3	5881.1	5836.8	5847.9	5787.0	5864.5	5831.3	5834.0	5853.4
7.5°	5914.3	5878.3	5917.0	5839.6	5870.0	5847.9	5903.2	5870.0	5903.2	5919.8
10°	5997.2	5980.6	5953.0	5930.9	5953.0	5900.4	5969.6	5964.1	5983.4	6033.2
12.5°	6110.7	6091.3	6063.6	6024.9	6041.5	6022.1	6074.7	6080.2	6116.2	6141.1
15°	6279.4	6254.5	6240.7	6202.0	6207.5	6193.7	6224.1	6229.6	6301.5	6293.2
17.5°	6517.3	6489.6	6500.7	6464.7	6450.9	6417.7	6362.4	6343.0	6428.8	6453.7
20°	6777.3	6746.9	6760.7	6730.3	6473.0	5950.2	6301.5	6542.2	6359.6	6345.8
22.5°	7073.3	7040.1	7051.2	7004.2	6686.0	5706.8	4965.4	4904.6	5601.7	5883.8
25°	7399.7	7355.5	7349.9	7289.1	6243.4	5167.4	5084.4	4976.5	4467.5	4063.6
27.5°	7803.6	7737.2	7704.0	6785.6	6199.2	5369.3	5244.8	4860.3	4121.7	4146.6
30°	8240.7	8143.9	7521.5	6915.6	6522.8	5607.2	5441.2	4260.0	4265.6	4254.5
32.5°	8738.6	8522.8	7369.3	7314.0	6910.1	5861.7	4517.3	4467.5	4473.0	4489.6
35°	9391.4	7911.5	7881.1	7883.8	7383.1	5670.8	4785.6	4738.6	4744.1	4755.2
37.5°	9529.8	8528.4	8533.9	8470.3	7886.6	5181.2	5112.0	5109.3	5098.2	5087.1
40°	9640.4	9305.7	9225.5	9123.1	7311.2	5579.5	5557.4	5540.8	5549.1	5571.2
42.5°	10506.2	10254.5	10177.1	10055.3	7499.3	6182.6	6110.7	6091.3	6113.4	6102.4
45°	11657.0	11446.8	11294.6	9297.4	8284.9	6838.2	6780.1	6755.2	6763.5	6832.7
47.5°	12874.2	12749.7	12285.0	10044.3	9200.6	7612.7	7554.7	7515.9	7529.8	7513.2
50°	14199.2	14085.8	11372.1	11170.1	10213.0	8448.2	8362.4	8348.6	8354.1	8351.3
52.5°	15637.7	13267.0	12603.1	12392.8	11280.8	9322.3	9291.9	9217.2	9233.8	9217.2
55°	17325.1	13975.1	13958.5	13712.3	12481.4	10337.5	10301.5	10196.4	9535.3	10113.4
57.5°	18926.7	15327.8	15327.8	15089.9	13709.6	11347.2	11289.1	11211.6	6777.3	5466.1
60°	20680.5	16683.3	16644.6	16448.2	14893.5	12309.8	10005.6	9983.4	4094.1	4107.9
62.5°	22196.5	17892.2	17961.3	17778.7	16033.2	9217.2	4636.2	4542.2	403.9	622.4
65°	23894.9	19228.3	19311.2	19123.1	17267.0	9776.0	5031.8	4984.8	91.3	83.0
67.5°	25820.3	20561.6	20373.5	20166.0	17989.0	10066.4	5228.2	5186.7	24.9	16.6
68°	25836.8	20533.9	20290.5	20149.4	17919.8	10011.1	5211.6	5172.9	24.9	16.6
70°	24509.0	19499.4	19255.9	19291.9	17062.3	9574.0	4995.9	4923.9	24.9	16.6
72.5°	21502.1	17352.7	17078.9	16885.2	15131.4	8511.8	4478.6	4343.0	24.9	16.6
75°	18398.4	14705.4	14251.8	13825.8	12174.3	6965.4	3673.6	3521.4	24.9	16.6
77.5°	14500.7	11208.9	10564.3	10284.9	9148.0	5145.2	2730.3	2564.3	24.9	13.8
80°	8013.8	6431.5	5883.8	5712.3	5231.0	3023.5	1565.7	1466.1	22.1	13.8
82.5°	2071.9	1554.6	1355.5	1308.4	1228.2	716.5	381.7	362.4	19.4	11.1
85°	296.0	218.5	240.7	284.9	273.9	185.3	132.8	113.4	16.6	8.3
87.5°	154.9	130.0	152.1	171.5	174.3	107.9	55.3	30.4	8.3	0.0
90°	24.9	24.9	27.7	30.4	30.4	13.8	11.1	0.0	0.0	0.0
92.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.8	5.5	2.8	2.8	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°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.8	2.8	2.8	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)