

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: P522158

Luminaire Tested: **CST-CA10-630-750-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522158
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: STREETWORKS
Catalog Number: CST-CA10-630-750-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 79562 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

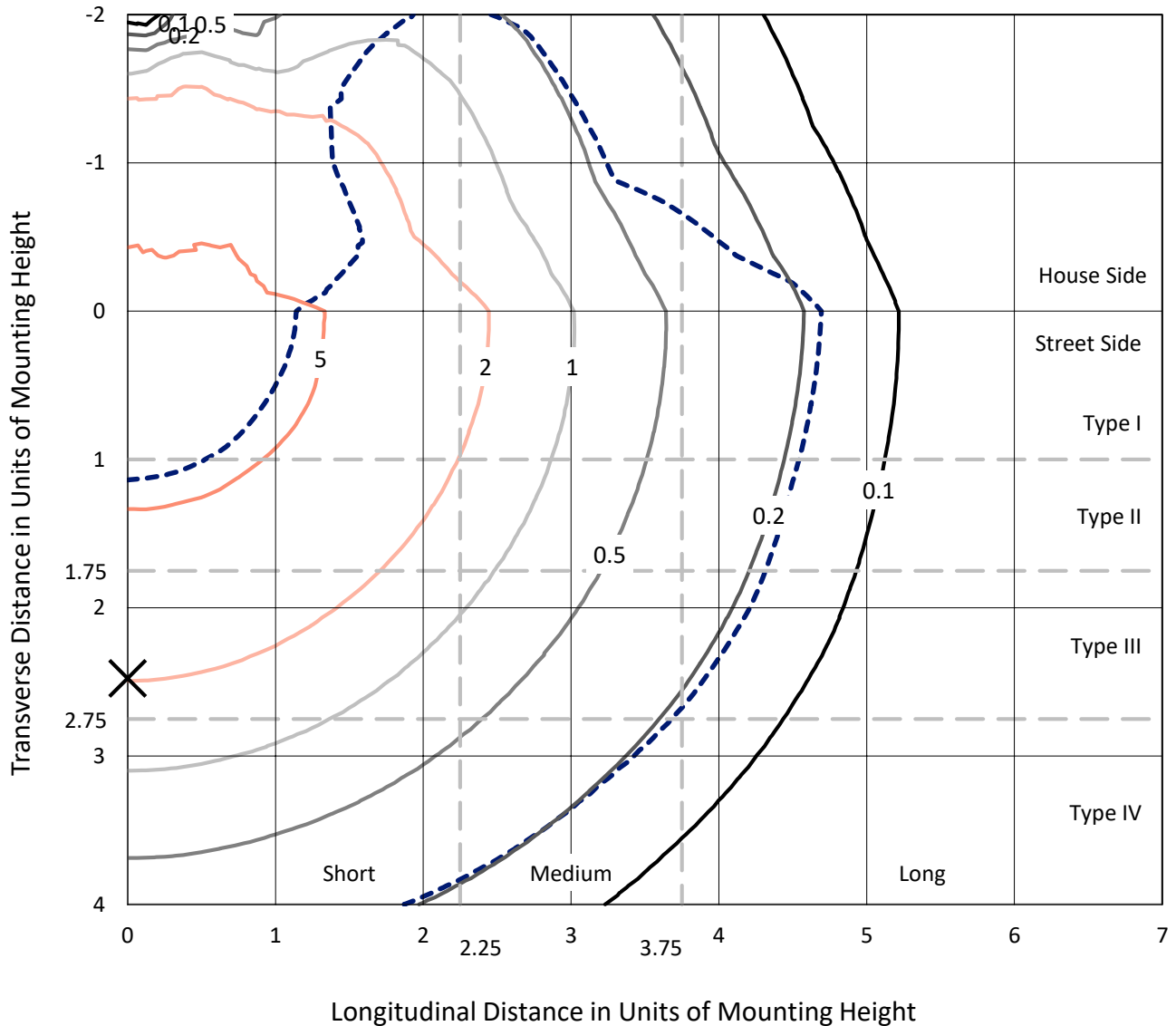
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

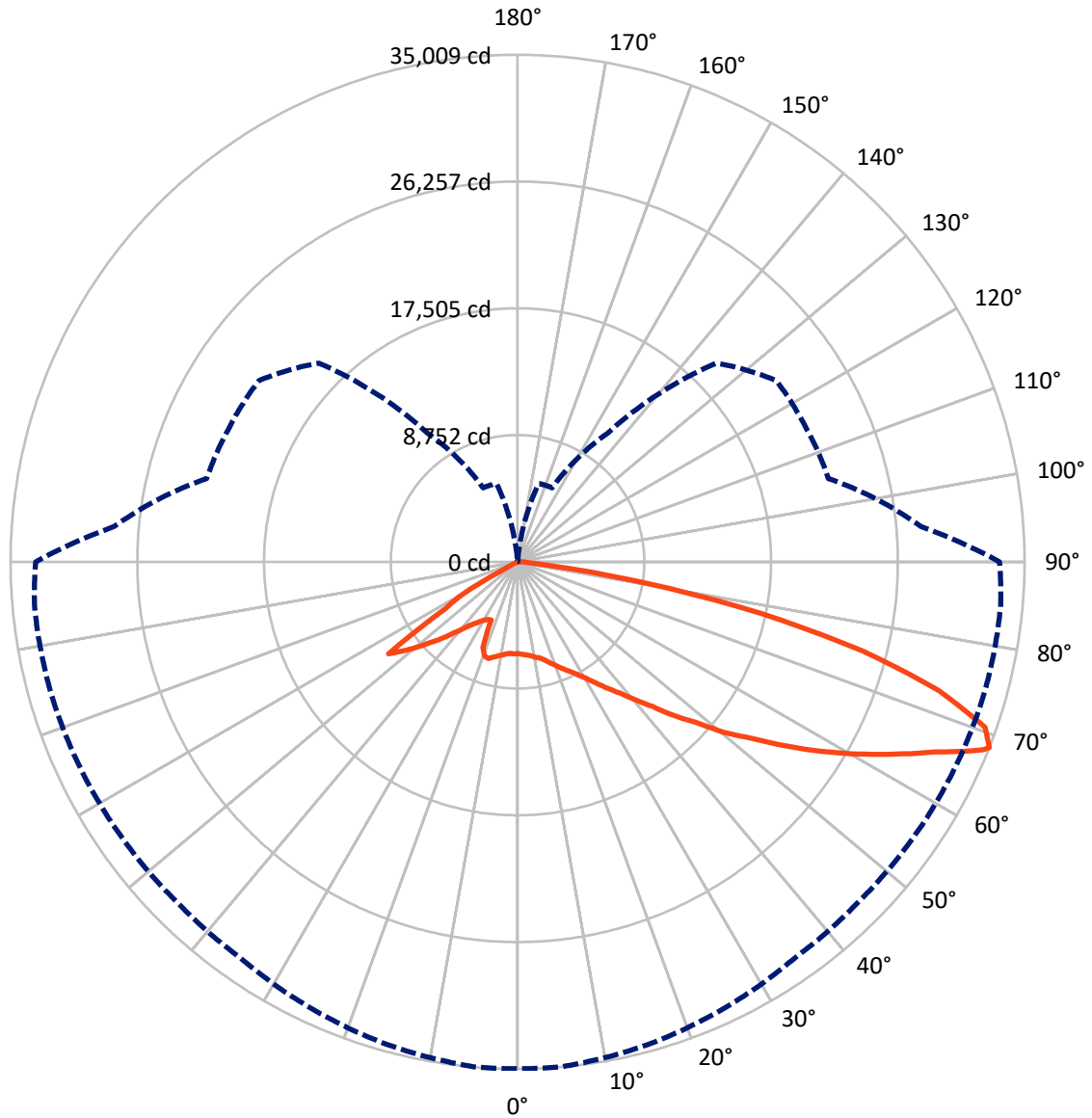
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.1 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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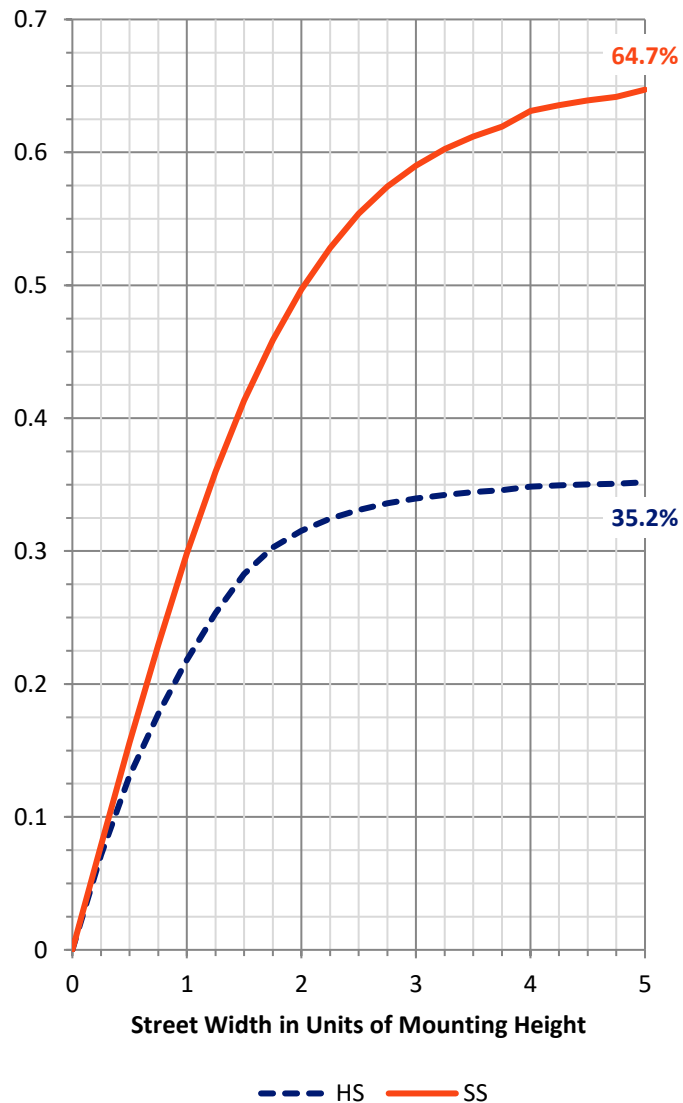
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	28000.4	4.8	28005.2
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	51535.8	21.0	51556.8
	% Fixture	64.8	0.0	64.8
Total	Lumens	79536.2	25.8	79562.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	612.6	0.8
10°-20°	1962.6	2.5
20°-30°	3503.5	4.4
30°-40°	5699.5	7.2
40°-50°	9733.1	12.2
50°-60°	16240.1	20.4
60°-70°	22593.3	28.4
70°-80°	17513.3	22.0
80°-90°	1678.2	2.1
90°-100°	20.3	0.0
100°-110°	1.7	0.0
110°-120°	0.9	0.0
120°-130°	0.6	0.0
130°-140°	0.6	0.0
140°-150°	0.7	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-90°	79536.2	100.0
0°-180°	79562.0	100.0

Coefficient of Utilization

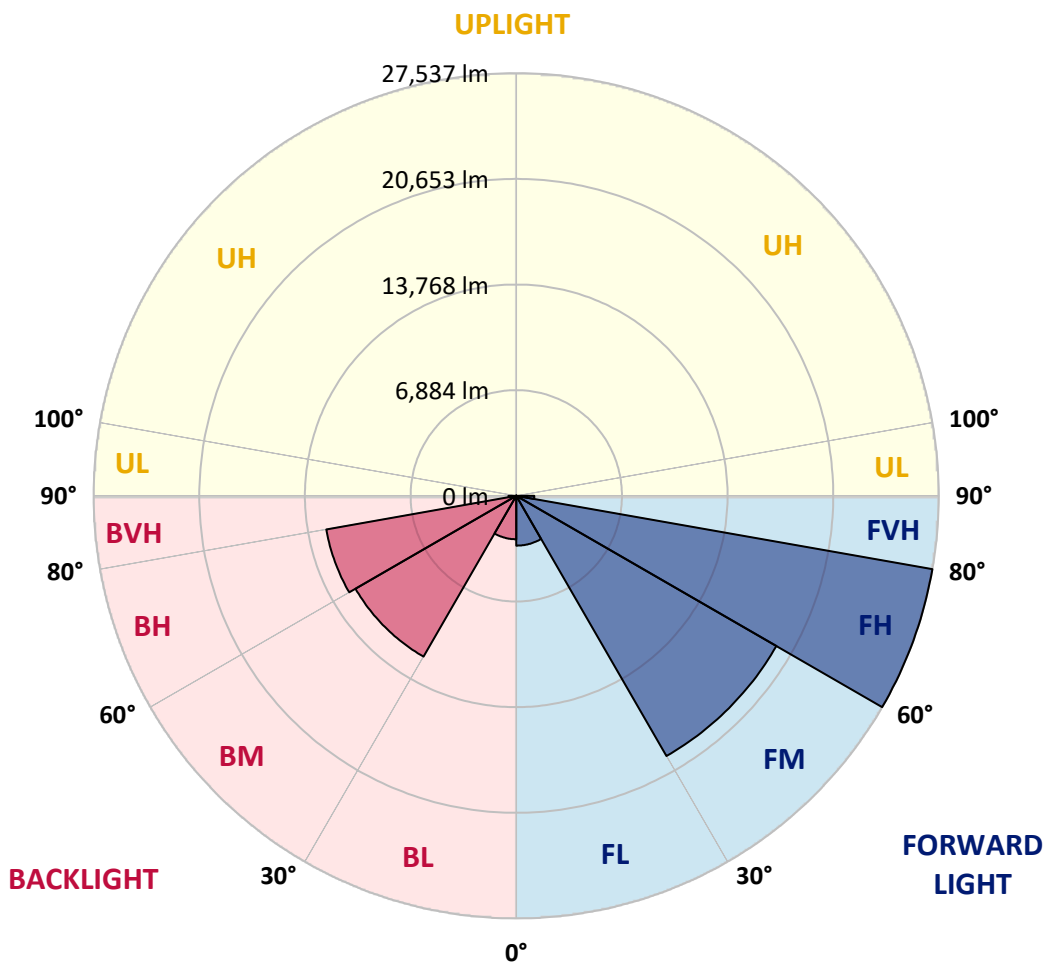


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3247.2	4.1			
FM	(30°-60°)	19577.8	24.6			
FH	(60°-80°)	27536.7	34.6			G5
FVH	(80°-90°)	1174.1	1.5			G5
BL	(0°-30°)	2831.4	3.6	B4/5000		
BM	(30°-60°)	12094.9	15.2	B5		
BH	(60°-80°)	12569.9	15.8	B5		G5
BVH	(80°-90°)	504.1	0.6			G4/750
UL	(90°-100°)	20.3	0.0		U2/50	
UH	(100°-180°)	5.5	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°	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8
2.5°	6403.6	6394.7	6388.7	6427.6	6316.8	6361.7	6331.8	6370.7	6361.7	6379.7	6382.7
5°	6448.6	6433.6	6412.6	6454.5	6388.7	6418.6	6385.7	6403.6	6346.8	6394.7	6400.7
7.5°	6550.3	6508.4	6505.4	6517.4	6472.5	6493.5	6436.6	6457.5	6427.6	6409.6	6427.6
10°	6703.0	6667.1	6628.2	6652.1	6577.3	6604.2	6544.4	6562.3	6547.3	6508.4	6544.4
12.5°	6807.8	6819.8	6792.8	6810.8	6744.9	6721.0	6700.0	6697.0	6688.1	6631.2	6622.2
15°	7041.3	7047.3	6999.4	7011.4	6996.4	6984.4	6954.5	6930.5	6882.6	6846.7	6822.8
17.5°	7346.7	7313.7	7268.8	7280.8	7322.7	7268.8	7250.9	7206.0	7137.1	7077.2	7065.3
20°	7667.0	7646.1	7604.1	7628.1	7625.1	7589.2	7598.2	7523.3	7424.5	7373.6	7334.7
22.5°	8023.3	7993.3	7963.4	8008.3	7972.4	7948.4	7939.4	7888.5	7765.8	7708.9	7699.9
25°	8379.5	8364.6	8385.5	8370.5	8319.6	8301.7	8313.7	8295.7	8152.0	8083.1	8041.2
27.5°	8825.6	8789.7	8822.6	8804.6	8750.8	8753.7	8756.7	8759.7	8598.1	8508.3	8448.4
30°	9334.5	9322.6	9364.5	9307.6	9256.7	9289.6	9316.6	9256.7	9116.0	8984.3	8963.3
32.5°	9996.2	9921.3	9969.2	9897.4	9819.5	9897.4	9945.3	9825.5	9711.7	9544.1	9574.0
35°	10729.6	10705.7	10705.7	10612.9	10571.0	10693.7	10741.6	10624.8	10448.2	10301.5	10265.6
37.5°	11508.0	11532.0	11606.8	11567.9	11529.0	11603.8	11711.6	11555.9	11328.4	11172.7	11130.8
40°	12540.8	12600.7	12651.6	12600.7	12555.8	12603.7	12726.5	12522.9	12364.2	12280.4	12190.6
42.5°	13651.5	13753.3	13720.4	13726.4	13765.3	13834.1	13956.9	13771.3	13588.7	13585.7	13453.9
45°	15154.4	15154.4	15085.5	15151.4	15145.4	15316.1	15369.9	15268.2	15115.5	15070.6	14956.8
47.5°	16558.5	16705.2	16678.2	16774.0	16699.2	16842.9	17025.5	16938.7	16762.0	16603.4	16579.4
50°	18516.4	18480.5	18444.5	18588.2	18576.3	18675.1	18842.7	18788.8	18543.3	18363.7	18330.8
52.5°	20237.8	20426.4	20381.5	20597.0	20477.3	20618.0	20818.6	20809.6	20510.2	20333.6	20282.7
55°	22411.3	22537.0	22528.0	22749.6	22584.9	22770.5	22938.2	22956.1	22629.8	22378.3	22456.2
57.5°	24674.5	24779.3	24719.4	24902.1	24740.4	24994.9	25096.7	25030.8	24839.2	24521.9	24638.6
60°	26940.8	27030.6	27099.5	27114.5	27021.6	27171.3	27267.1	27324.0	27021.6	26659.4	26800.1
62.5°	29243.0	29344.8	29284.9	29308.9	29051.4	29255.0	29374.7	29389.7	29042.4	28722.1	28820.9
65°	31668.0	31808.7	31593.1	31449.4	31132.1	31129.1	31287.8	31314.7	31069.2	30841.7	30802.8
67.5°	34670.7	34733.6	34272.5	33790.5	33254.6	33137.9	33248.7	33311.5	33452.2	33446.2	33269.6
68°	35009.0	34997.0	34530.0	33955.2	33380.4	33245.7	33299.6	33380.4	33473.2	33491.2	33278.6
70°	34239.6	34092.9	33826.5	33102.0	32533.2	32179.9	31991.3	32141.0	31889.5	31892.5	31494.3
72.5°	30413.6	30395.6	29904.6	29545.4	29039.4	28452.7	28183.2	28180.2	28204.2	28030.5	27620.4
75°	24635.6	24659.6	24087.8	23839.3	23683.6	23572.8	23629.7	23806.4	23824.3	23821.3	23677.6
77.5°	17181.2	17280.0	17127.3	16723.1	17157.2	17528.4	18244.0	18609.2	18492.4	18842.7	19064.2
80°	9005.2	9202.8	9208.8	9493.2	9843.5	10181.8	10798.5	11352.3	10945.2	10765.5	10579.9
82.5°	2368.1	2439.9	2547.7	2383.0	2433.9	2484.8	2963.8	2918.9	2694.4	2814.1	2993.8
85°	676.6	697.5	667.6	604.7	553.8	508.9	520.9	440.1	383.2	380.2	368.2
87.5°	476.0	511.9	452.1	389.2	350.3	326.3	314.3	266.4	215.6	188.6	149.7
90°	221.5	218.5	188.6	146.7	128.7	122.7	122.7	95.8	53.9	32.9	29.9
92.5°	92.8	95.8	77.8	62.9	53.9	41.9	32.9	21.0	12.0	6.0	3.0
95°	32.9	35.9	29.9	24.0	21.0	18.0	15.0	12.0	6.0	3.0	3.0
97.5°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	6.0	6.0	3.0	3.0
100°	0.0	0.0	0.0	3.0	6.0	6.0	6.0	6.0	3.0	3.0	3.0
102.5°	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
105°	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0



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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	3.0	3.0	3.0	3.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
165°	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
167.5°	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
170°	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
172.5°	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
175°	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
177.5°	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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°	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8	6331.8
2.5°	6376.7	6361.7	6355.7	6280.9	6301.9	6257.0	6361.7	6331.8	6325.8	6367.7
5°	6391.7	6322.8	6364.7	6316.8	6328.8	6262.9	6346.8	6310.8	6313.8	6334.8
7.5°	6400.7	6361.7	6403.6	6319.8	6352.8	6328.8	6388.7	6352.8	6388.7	6406.6
10°	6490.5	6472.5	6442.6	6418.6	6442.6	6385.7	6460.5	6454.5	6475.5	6529.4
12.5°	6613.2	6592.3	6562.3	6520.4	6538.4	6517.4	6574.3	6580.3	6619.2	6646.1
15°	6795.8	6768.9	6753.9	6712.0	6718.0	6703.0	6736.0	6741.9	6819.8	6810.8
17.5°	7053.3	7023.4	7035.3	6996.4	6981.4	6945.5	6885.6	6864.7	6957.5	6984.4
20°	7334.7	7301.8	7316.7	7283.8	7005.4	6439.6	6819.8	7080.2	6882.6	6867.7
22.5°	7655.0	7619.1	7631.1	7580.2	7235.9	6176.1	5373.8	5307.9	6062.4	6367.7
25°	8008.3	7960.4	7954.4	7888.5	6756.9	5592.3	5502.5	5385.8	4834.9	4397.8
27.5°	8445.4	8373.5	8337.6	7343.7	6709.0	5810.9	5676.2	5260.0	4460.7	4487.6
30°	8918.4	8813.6	8140.0	7484.4	7059.3	6068.3	5888.7	4610.4	4616.4	4604.4
32.5°	9457.3	9223.8	7975.4	7915.5	7478.4	6343.8	4888.8	4834.9	4840.9	4858.9
35°	10163.8	8562.1	8529.2	8532.2	7990.3	6137.2	5179.2	5128.3	5134.3	5146.3
37.5°	10313.5	9229.8	9235.7	9166.9	8535.2	5607.3	5532.5	5529.5	5517.5	5505.5
40°	10433.2	10071.0	9984.2	9873.4	7912.5	6038.4	6014.5	5996.5	6005.5	6029.4
42.5°	11370.3	11097.9	11014.0	10882.3	8116.1	6691.0	6613.2	6592.3	6616.2	6604.2
45°	12615.7	12388.2	12223.5	10062.0	8966.3	7400.6	7337.7	7310.8	7319.7	7394.6
47.5°	13932.9	13798.2	13295.3	10870.3	9957.2	8238.8	8175.9	8134.0	8149.0	8131.0
50°	15367.0	15244.2	12307.3	12088.8	11052.9	9142.9	9050.1	9035.2	9041.1	9038.2
52.5°	16923.7	14358.1	13639.6	13412.0	12208.5	10089.0	10056.0	9975.2	9993.2	9975.2
55°	18749.9	15124.5	15106.5	14840.1	13507.8	11187.7	11148.7	11035.0	10319.5	10945.2
57.5°	20483.3	16588.4	16588.4	16330.9	14837.1	12280.4	12217.5	12133.7	7334.7	5915.7
60°	22381.3	18055.3	18013.4	17800.9	16118.4	13322.2	10828.4	10804.5	4430.8	4445.7
62.5°	24021.9	19363.6	19438.5	19240.9	17351.8	9975.2	5017.5	4915.7	437.1	673.6
65°	25860.1	20809.6	20899.4	20695.8	18687.0	10579.9	5445.6	5394.7	98.8	89.8
67.5°	27943.7	22252.6	22049.0	21824.5	19468.4	10894.3	5658.2	5613.3	26.9	18.0
68°	27961.7	22222.7	21959.2	21806.5	19393.6	10834.4	5640.2	5598.3	26.9	18.0
70°	26524.7	21103.0	20839.5	20878.5	18465.5	10361.4	5406.7	5328.9	26.9	18.0
72.5°	23270.5	18779.8	18483.5	18273.9	16375.8	9211.8	4846.9	4700.2	26.9	18.0
75°	19911.5	15914.8	15423.8	14962.8	13175.5	7538.3	3975.7	3811.1	26.9	18.0
77.5°	15693.3	12130.7	11433.2	11130.8	9900.4	5568.4	2954.8	2775.2	26.9	15.0
80°	8672.9	6960.5	6367.7	6182.1	5661.2	3272.2	1694.5	1586.7	24.0	15.0
82.5°	2242.3	1682.5	1466.9	1416.0	1329.2	775.4	413.1	392.2	21.0	12.0
85°	320.3	236.5	260.5	308.4	296.4	200.6	143.7	122.7	18.0	9.0
87.5°	167.7	140.7	164.7	185.6	188.6	116.8	59.9	32.9	9.0	0.0
90°	26.9	26.9	29.9	32.9	32.9	15.0	12.0	0.0	0.0	0.0
92.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	3.0	6.0	3.0	3.0	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°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	3.0	3.0	3.0	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)