

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: P842172

Luminaire Tested: **ARCH4-280-730-U-T2R**

Issue Date: 5/27/2024

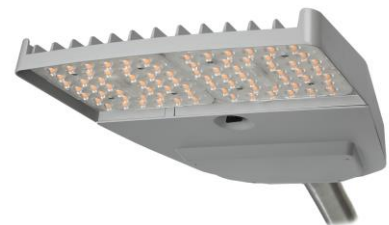
Test Information

Test Method: LM-79-08
Report Number: P842172
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-280-730-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40068 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

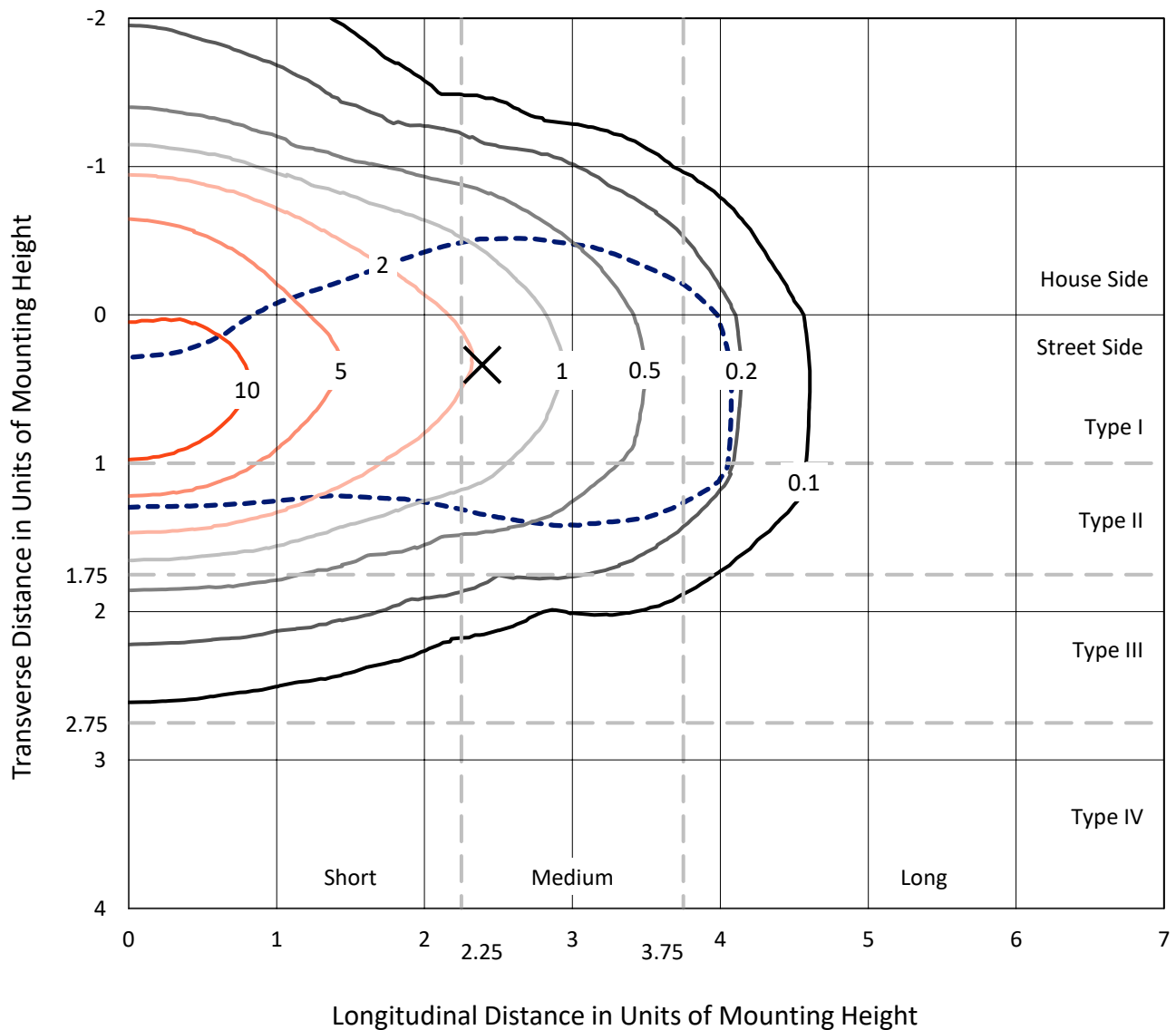
Input Watts (W): 279.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

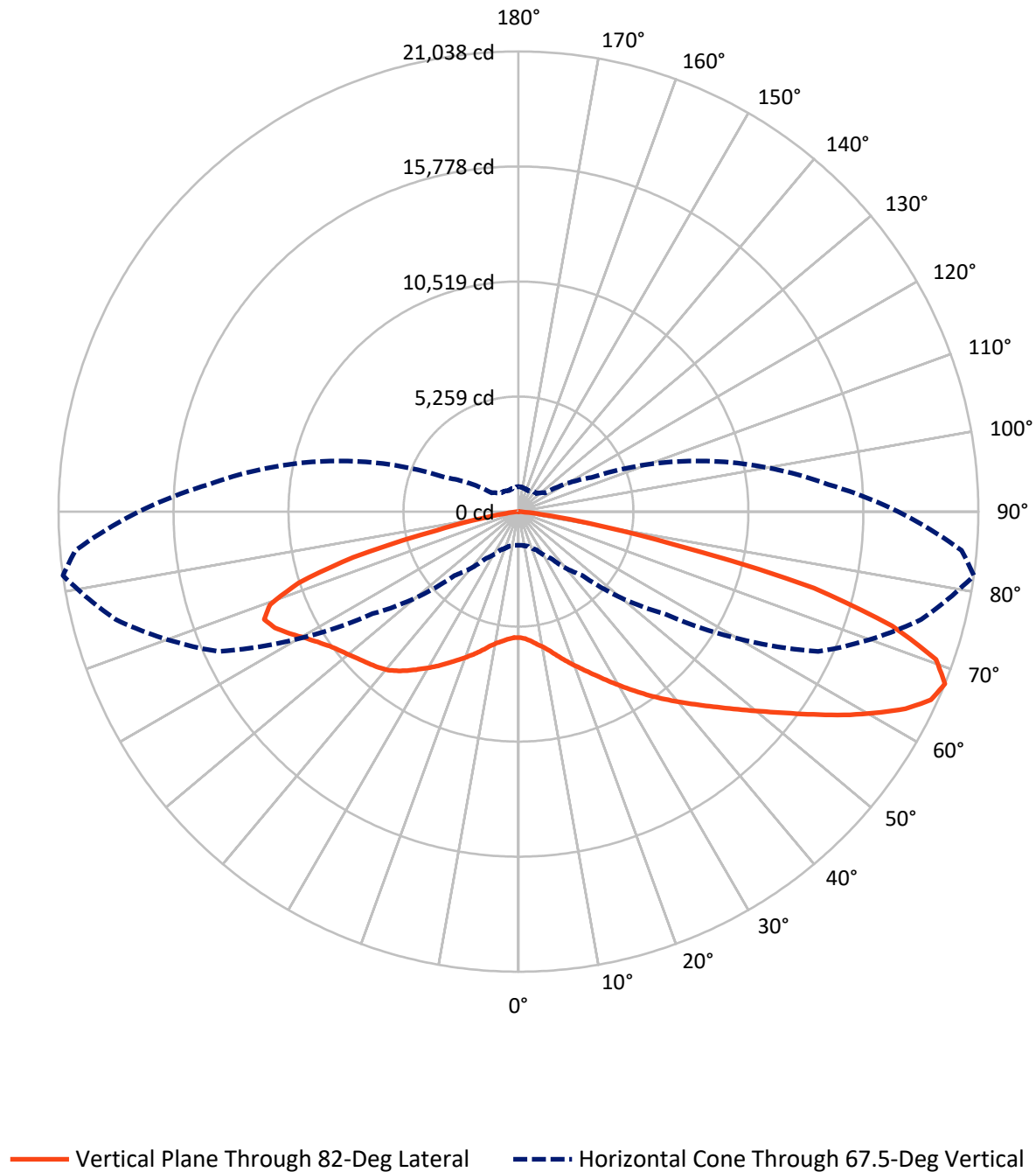
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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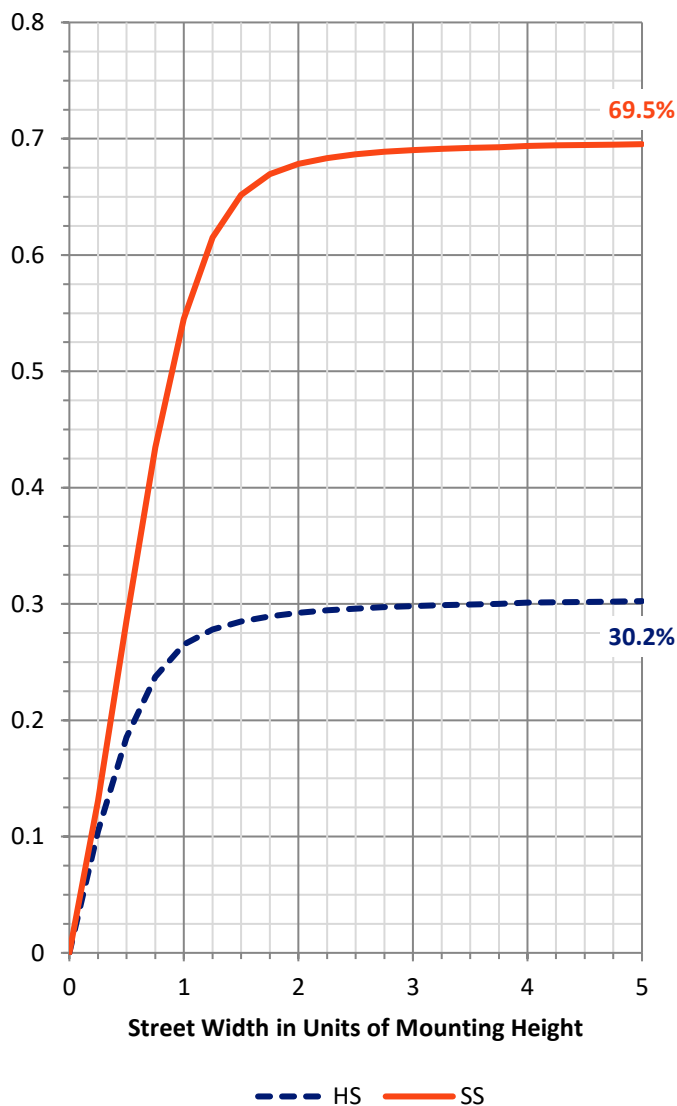
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12202.3	0.0	12202.3
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	27865.7	0.0	27865.7
	% Fixture	69.5	0.0	69.5
Total	Lumens	40068.0	0.0	40068.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	595.3	1.5
10°-20°	2144.1	5.4
20°-30°	4309.1	10.8
30°-40°	6769.0	16.9
40°-50°	8246.0	20.6
50°-60°	7791.5	19.4
60°-70°	6434.0	16.1
70°-80°	3503.6	8.7
80°-90°	275.5	0.7
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°	40068.0	100.0
0°-180°	40068.0	100.0

Coefficient of Utilization



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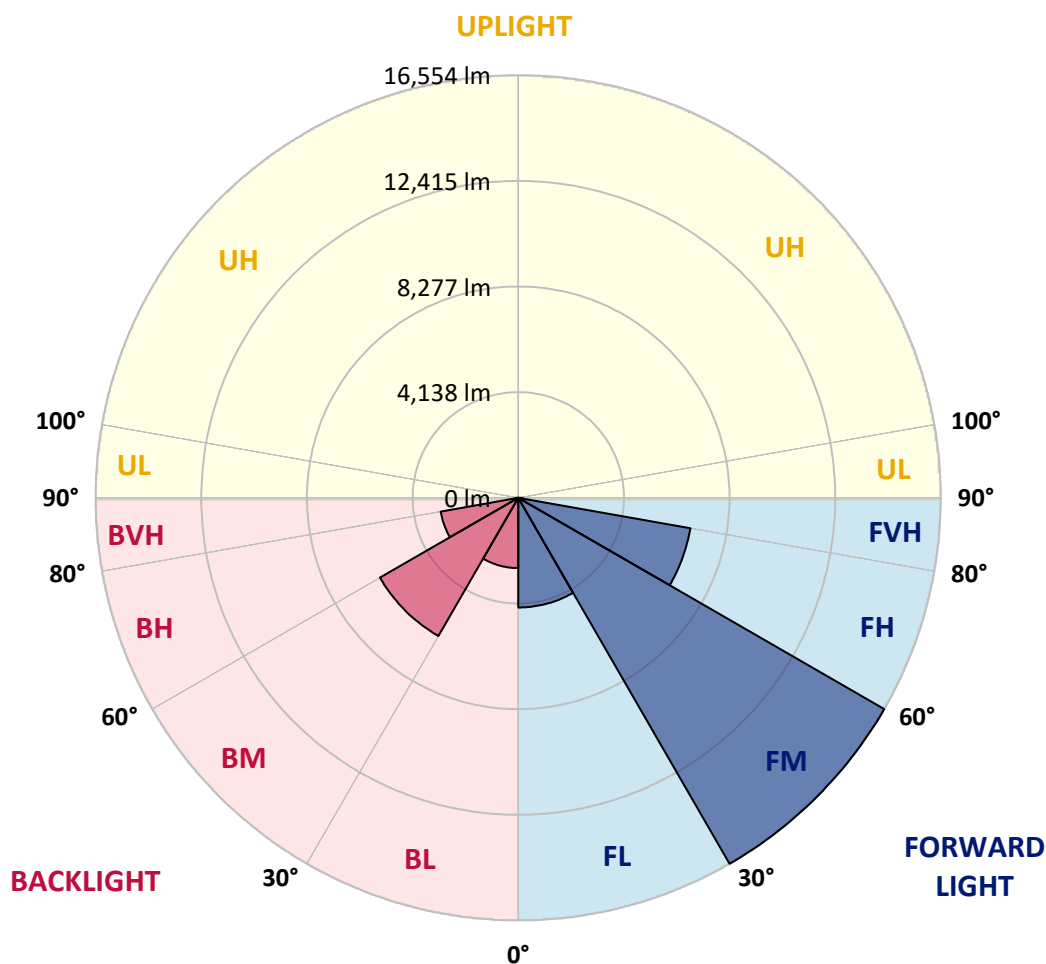
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4296.8	10.7			
FM	(30°-60°)	16553.8	41.3			
FH	(60°-80°)	6849.1	17.1			G3/7500
FVH	(80°-90°)	166.0	0.4			G2/225
BL	(0°-30°)	2751.7	6.9	B4/5000		
BM	(30°-60°)	6252.7	15.6	B4/8500		
BH	(60°-80°)	3088.5	7.7	B4/5000		G4/5000
BVH	(80°-90°)	109.4	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8
2.5°	6021.6	6021.6	6068.1	6068.1	6027.4	5963.4	5945.9	5876.1	5812.1	5812.1	5817.9
5°	6597.5	6591.7	6626.6	6580.1	6481.2	6353.2	6265.9	6114.6	5986.7	5945.9	5940.1
7.5°	7301.5	7295.7	7313.1	7237.5	7051.3	6841.9	6667.4	6423.0	6213.6	6126.3	6103.0
10°	8086.9	8081.1	8063.7	7935.7	7685.5	7359.7	7097.9	6760.4	6446.3	6306.6	6277.6
12.5°	8988.7	8977.1	8936.3	8750.2	8406.9	7988.0	7609.9	7173.5	6754.6	6562.6	6498.6
15°	9995.2	9977.8	9902.1	9675.2	9215.6	8686.2	8197.5	7638.9	7127.0	6876.8	6789.5
17.5°	11054.1	11054.1	10937.7	10600.3	10088.3	9430.9	8825.8	8116.0	7516.8	7208.4	7103.7
20°	12130.4	12124.6	11979.1	11571.9	10966.8	10210.5	9442.5	8662.9	7918.2	7545.9	7417.9
22.5°	13264.9	13253.3	13072.9	12607.5	11886.0	11030.8	10134.8	9204.0	8360.4	7912.4	7749.5
25°	14568.1	14550.7	14329.6	13759.4	12904.2	11938.4	10914.4	9838.1	8866.5	8319.6	8127.7
27.5°	15952.8	15929.5	15667.7	15004.5	14067.8	12904.2	11775.5	10571.2	9425.1	8773.4	8558.2
30°	17186.2	17168.7	16883.6	16202.9	15126.6	13864.1	12595.8	11304.2	10012.7	9256.3	8988.7
32.5°	18117.0	18117.0	17861.1	17192.0	16075.0	14783.4	13422.0	11996.6	10623.5	9774.1	9460.0
35°	18681.4	18698.8	18477.8	17942.5	16889.5	15650.2	14277.2	12811.1	11275.2	10326.8	9989.4
37.5°	18762.8	18821.0	18693.0	18332.3	17453.8	16371.7	15115.0	13596.5	11950.0	10885.4	10507.2
40°	18384.7	18425.4	18431.2	18291.6	17686.5	16889.5	15853.9	14428.5	12665.6	11473.0	11036.6
42.5°	17628.3	17657.4	17709.8	17750.5	17517.8	17116.4	16418.2	15202.3	13427.8	12072.2	11560.2
45°	16650.9	16645.1	16732.4	16906.9	16895.3	16988.4	16732.4	15906.2	14219.0	12752.9	12142.0
47.5°	15190.6	15161.5	15469.9	15865.5	16063.3	16499.7	16738.2	16458.9	15080.1	13503.4	12805.3
50°	12904.2	12875.1	13550.0	14480.8	15062.6	15725.9	16418.2	16790.6	15981.9	14347.0	13526.7
52.5°	10123.2	10094.1	10949.4	12578.4	13846.7	14812.5	15772.4	16866.2	16837.1	15289.5	14341.2
55°	7528.4	7505.1	8337.1	10099.9	12153.7	13753.6	14981.2	16668.4	17640.0	16371.7	15330.3
57.5°	5306.0	5294.3	6015.7	7476.0	9977.8	12462.0	14219.0	16284.4	18378.9	17546.9	16447.3
60°	3723.5	3706.0	4229.6	5358.3	7545.9	10513.0	13462.7	15772.4	18931.6	18704.7	17634.2
62.5°	2507.5	2495.9	2868.2	3810.7	5358.3	8092.7	12316.6	15429.2	19245.7	19868.2	18832.7
65°	1902.5	1896.6	2065.4	2583.2	3793.3	5812.1	10495.6	15388.4	19286.4	20740.9	19850.8
67.5°	1535.9	1541.8	1634.8	1931.6	2623.9	4130.7	8139.3	15132.4	19071.2	21037.6	20345.3
70°	1256.7	1256.7	1297.4	1495.2	1937.4	2786.8	5684.1	13968.9	18471.9	20263.9	19757.7
72.5°	960.0	965.8	1093.8	1210.1	1460.3	1954.8	3642.0	11560.2	17058.2	17866.9	17482.9
75°	762.1	756.3	832.0	994.9	1134.5	1396.3	2234.1	8290.6	14515.7	13963.0	13718.7
77.5°	546.9	541.1	599.2	738.9	861.1	989.0	1332.3	4183.1	7894.9	7255.0	7074.6
80°	372.3	360.7	413.1	512.0	570.2	581.8	651.6	1605.7	3444.2	3246.4	3205.7
82.5°	192.0	192.0	221.1	290.9	296.7	302.5	290.9	517.8	1140.3	1064.7	1018.1
85°	75.6	75.6	81.5	98.9	98.9	104.7	104.7	133.8	122.2	116.4	110.5
87.5°	5.8	5.8	11.6	11.6	17.5	17.5	17.5	23.3	29.1	29.1	29.1
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°	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8	5759.8
2.5°	5806.3	5783.0	5707.4	5689.9	5678.3	5660.8	5666.7	5625.9	5608.5	5614.3	5591.0
5°	5911.0	5870.3	5777.2	5736.5	5724.8	5707.4	5724.8	5695.8	5666.7	5678.3	5666.7
7.5°	6056.5	5998.3	5881.9	5841.2	5835.4	5817.9	5841.2	5817.9	5794.7	5806.3	5783.0
10°	6207.7	6132.1	6004.1	5963.4	5963.4	5957.6	5980.8	5945.9	5922.7	5928.5	5916.8
12.5°	6428.8	6329.9	6190.3	6155.4	6137.9	6155.4	6161.2	6114.6	6073.9	6079.7	6062.3
15°	6696.4	6585.9	6434.6	6382.3	6370.6	6364.8	6341.5	6283.4	6231.0	6225.2	6207.7
17.5°	6987.3	6847.7	6667.4	6615.0	6562.6	6545.2	6487.0	6411.4	6329.9	6329.9	6306.6
20°	7266.6	7109.5	6894.3	6818.6	6743.0	6673.2	6574.3	6452.1	6347.4	6329.9	6306.6
22.5°	7569.1	7383.0	7132.8	7022.2	6888.4	6748.8	6580.1	6417.2	6283.4	6254.3	6236.8
25°	7906.6	7673.9	7377.1	7214.2	6999.0	6783.7	6533.5	6324.1	6167.0	6120.5	6108.8
27.5°	8278.9	7999.7	7638.9	7400.4	7086.2	6748.8	6428.8	6178.6	5986.7	5928.5	5911.0
30°	8657.1	8325.5	7877.5	7528.4	7086.2	6638.3	6236.8	5945.9	5724.8	5643.4	5631.8
32.5°	9035.3	8662.9	8092.7	7598.2	7016.4	6452.1	5986.7	5643.4	5393.2	5294.3	5317.6
35°	9489.0	9035.3	8290.6	7627.3	6900.1	6225.2	5701.6	5300.1	5044.1	4956.9	4974.3
37.5°	9960.3	9407.6	8447.6	7604.0	6737.2	5969.2	5381.6	4991.8	4671.8	4520.5	4538.0
40°	10367.6	9745.0	8558.2	7522.6	6527.7	5678.3	5067.4	4555.4	4113.3	3967.8	3950.4
42.5°	10751.5	9995.2	8616.4	7400.4	6289.2	5340.9	4619.4	3962.0	3519.8	3339.5	3345.3
45°	11153.0	10239.6	8593.1	7237.5	5992.5	4945.2	4043.5	3380.2	2990.4	2827.5	2833.3
47.5°	11612.6	10501.4	8569.8	7063.0	5631.8	4433.3	3490.8	2868.2	2530.8	2414.4	2402.8
50°	12101.3	10792.3	8540.7	6847.7	5230.3	3863.1	2943.9	2391.2	2106.1	2030.5	2013.0
52.5°	12654.0	11106.4	8523.3	6591.7	4747.4	3258.0	2455.2	1972.3	1780.3	1727.9	1722.1
55°	13317.3	11473.0	8546.5	6283.4	4165.6	2687.9	2042.1	1698.8	1570.8	1541.8	1535.9
57.5°	14125.9	11944.2	8616.4	5922.7	3554.8	2193.4	1739.6	1530.1	1448.7	1425.4	1425.4
60°	15004.5	12479.5	8744.4	5515.4	2943.9	1809.4	1541.8	1396.3	1361.4	1390.5	1390.5
62.5°	15952.8	13107.8	8971.3	5020.9	2373.7	1530.1	1384.7	1285.8	1262.5	1320.7	1326.5
65°	16831.3	13718.7	9116.7	4427.4	1885.0	1326.5	1262.5	1175.2	1186.9	1245.0	1239.2
67.5°	17372.3	14224.8	8913.1	3682.8	1495.2	1175.2	1134.5	1058.9	1088.0	1134.5	1140.3
70°	17040.7	13939.8	7906.6	2781.0	1169.4	1024.0	994.9	948.3	971.6	1029.8	1053.0
72.5°	15417.5	12485.3	6149.6	1879.2	942.5	861.1	872.7	849.4	878.5	930.9	983.2
75°	12514.4	9436.7	4124.9	1204.3	744.7	733.1	750.5	733.1	744.7	797.1	826.1
77.5°	6533.5	4602.0	2053.7	750.5	552.7	570.2	599.2	605.1	640.0	651.6	663.2
80°	3048.6	2071.2	855.2	418.9	366.5	401.4	459.6	465.4	477.1	494.5	500.3
82.5°	994.9	622.5	395.6	226.9	209.4	226.9	296.7	354.9	360.7	395.6	395.6
85°	104.7	64.0	87.3	93.1	81.5	98.9	133.8	128.0	58.2	34.9	34.9
87.5°	29.1	23.3	29.1	29.1	23.3	23.3	17.5	5.8	0.0	0.0	0.0
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)