Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
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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: P842316

Luminaire Tested: **ARCH4-300-730-U-T2R**

Issue Date: 5/27/2024

Report Generated By 670246001

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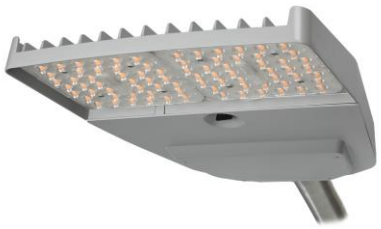
Test Information

Test Method:	LM-79-08
Report Number:	P842316
	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:	ARCH4-300-730-U-T2R
Description:	ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
	(2) 70 CRI, 3000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	41981 lumens
Efficiency:	N/A
Efficacy:	140.3 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):	299.2
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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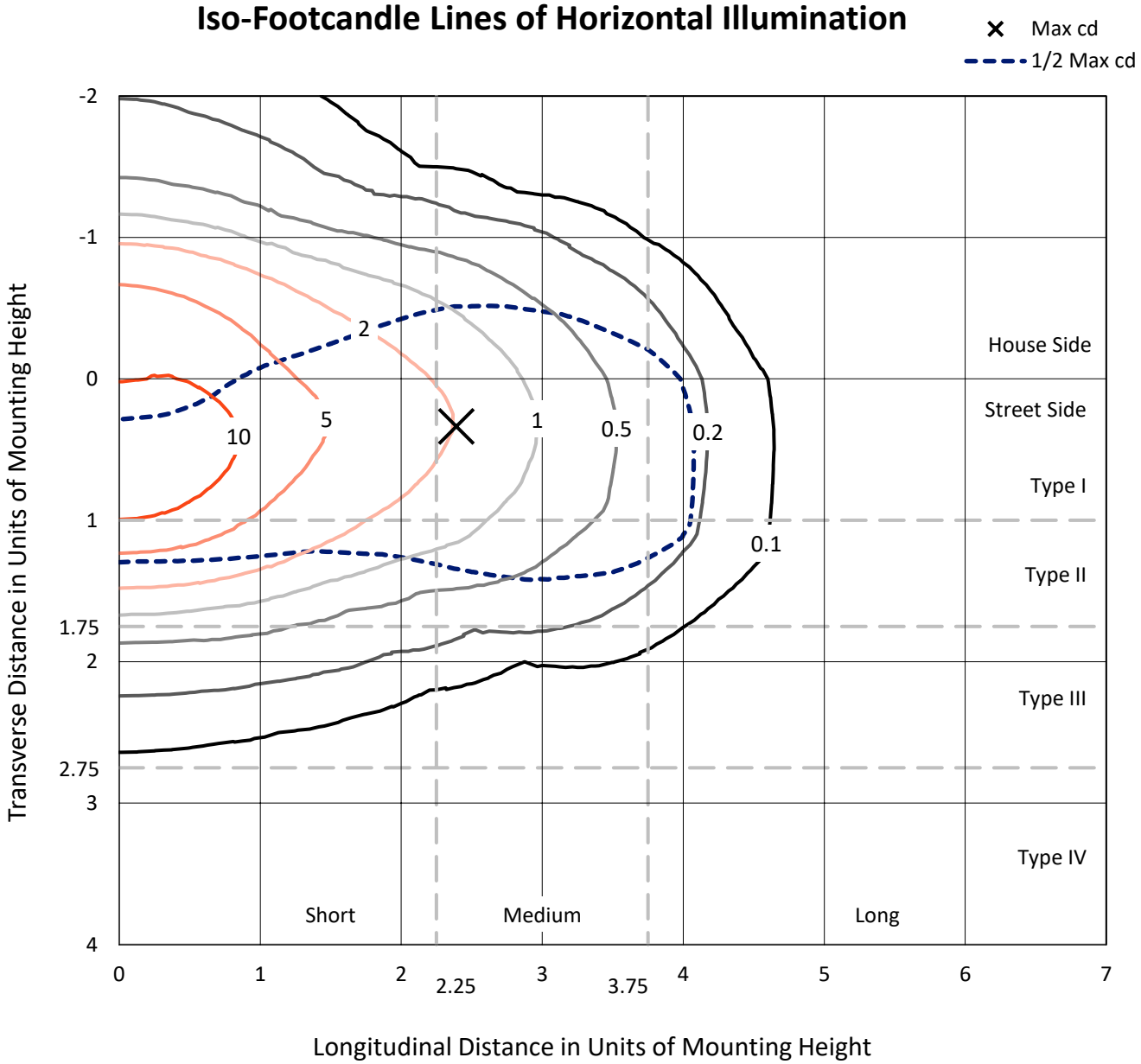
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 18.5 fc
Type II - Medium - N/A

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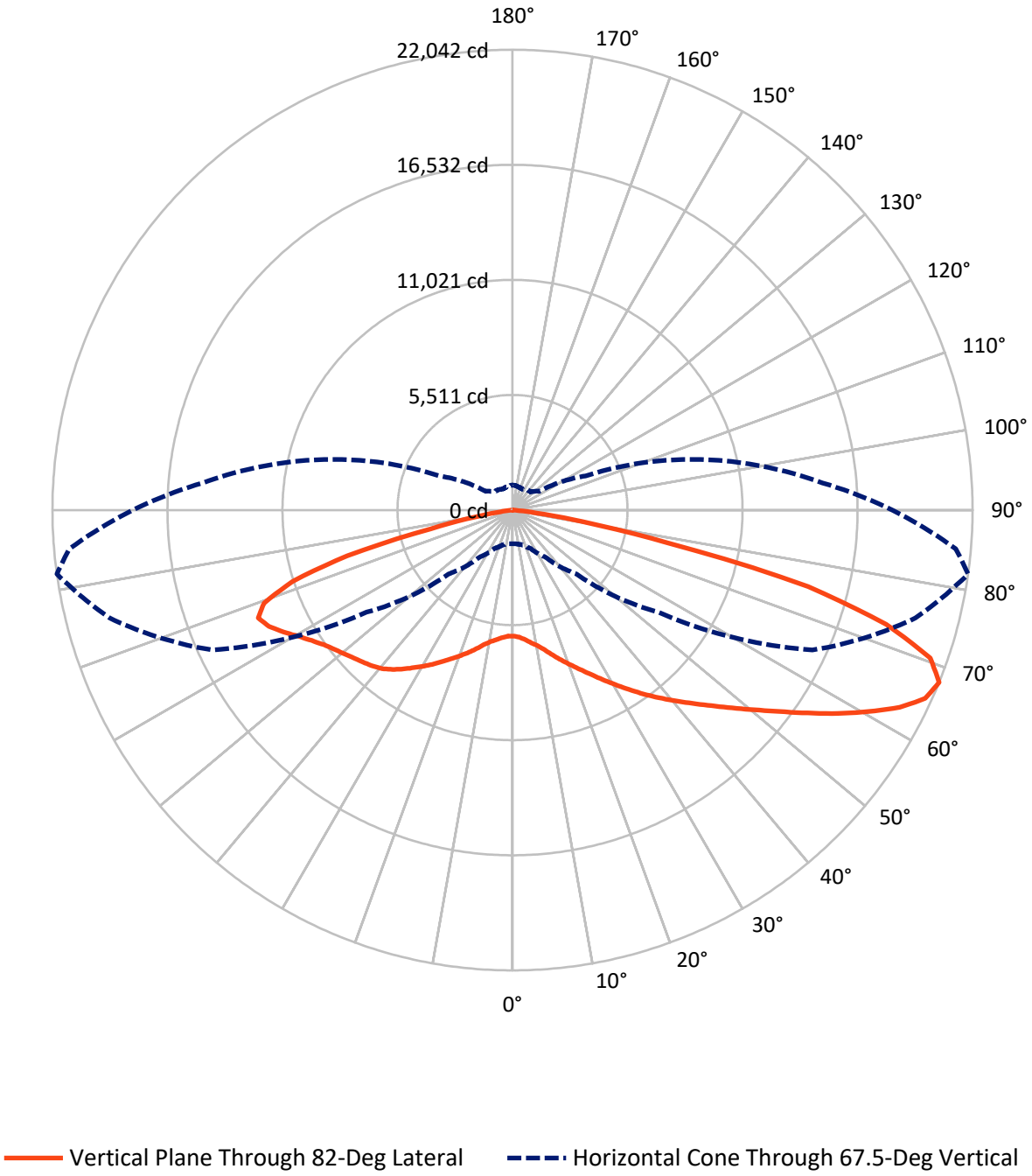
Luminous Intensity Polar Plot



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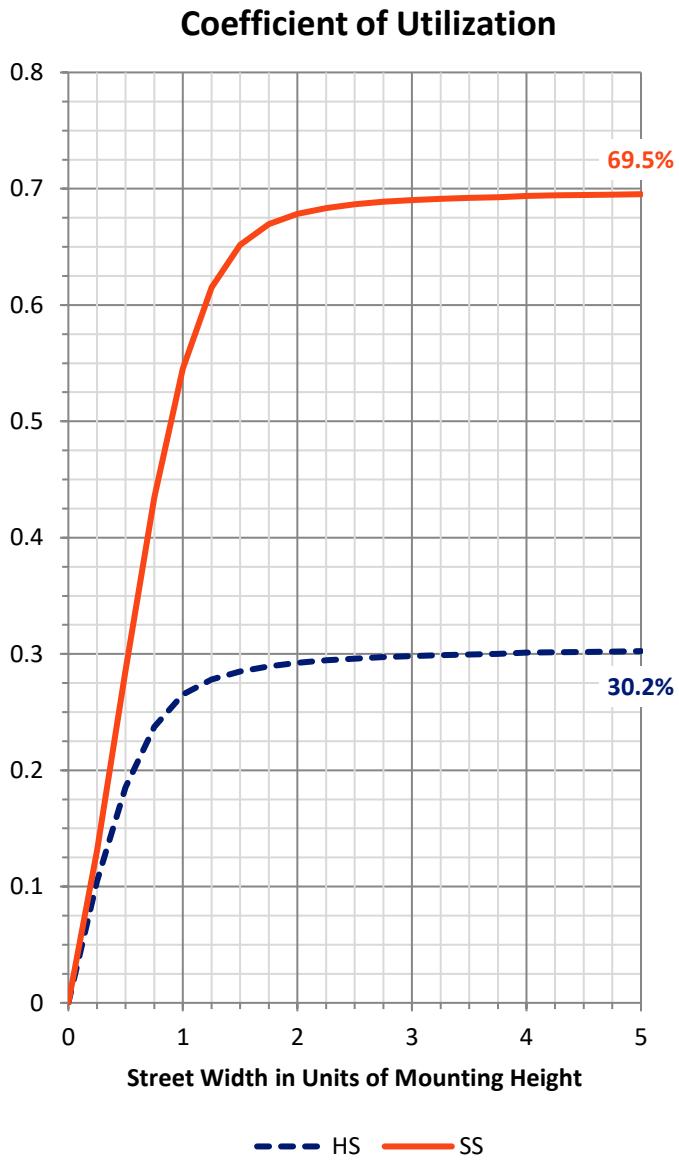
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12784.9	0.0	12784.9
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	29196.1	0.0	29196.1
	% Fixture	69.5	0.0	69.5
Total	Lumens	41981.0	0.0	41981.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	623.7	1.5
10°-20°	2246.5	5.4
20°-30°	4514.9	10.8
30°-40°	7092.2	16.9
40°-50°	8639.7	20.6
50°-60°	8163.5	19.4
60°-70°	6741.1	16.1
70°-80°	3670.9	8.7
80°-90°	288.6	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°	41981.0	100.0
0°-180°	41981.0	100.0



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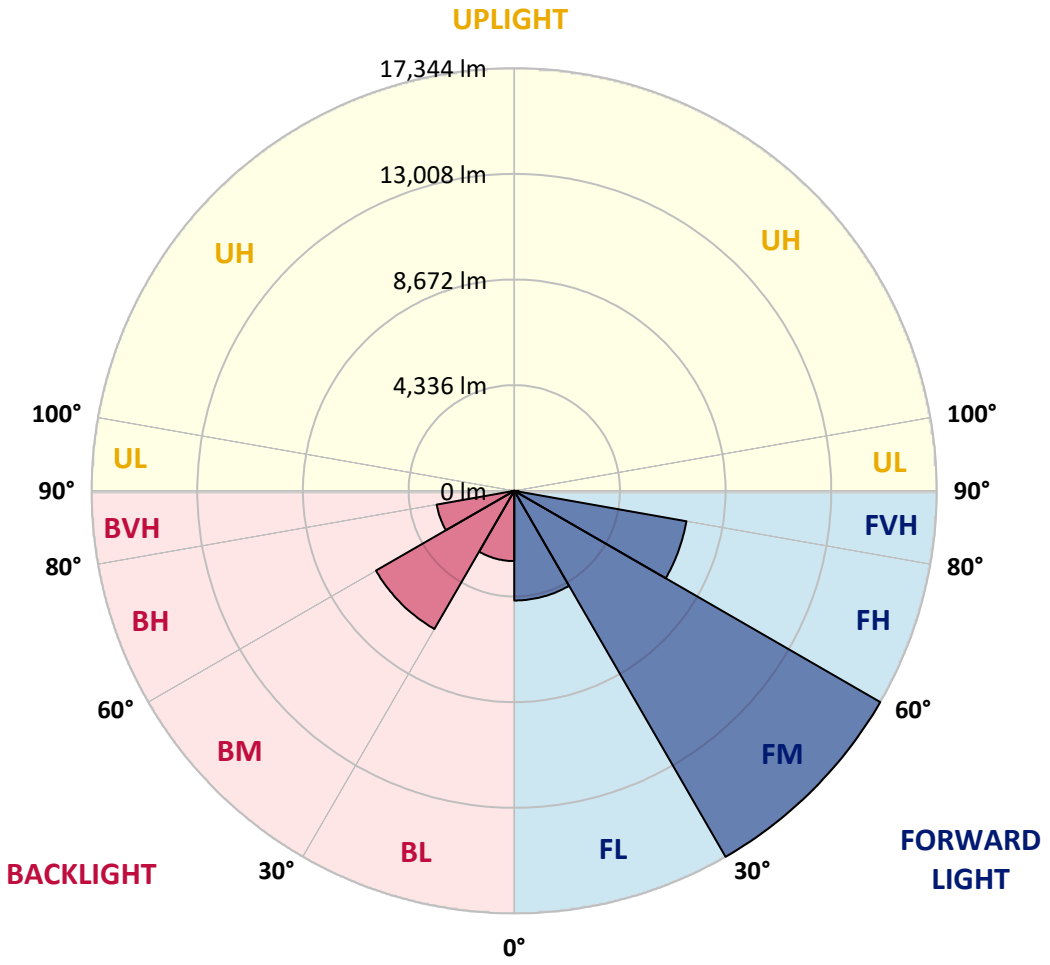
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	4501.9	10.7			
FM	(30°-60°)	17344.1	41.3			
FH	(60°-80°)	7176.1	17.1			G3/7500
FVH	(80°-90°)	174.0	0.4			G2/225
BL	(0°-30°)	2883.1	6.9	B4/5000		
BM	(30°-60°)	6551.2	15.6	B4/8500		
BH	(60°-80°)	3235.9	7.7	B4/5000		G4/5000
BVH	(80°-90°)	114.6	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°	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	*6034.7*	6034.7
2.5°	6309.1	6309.1	6357.8	6357.8	6315.1	6248.1	6229.8	6156.7	6089.6	*6089.6*	6095.7
5°	6912.5	6906.4	6943.0	6894.2	6790.6	6656.5	6565.1	6406.6	6272.5	*6229.8*	6223.7
7.5°	7650.1	7644.0	7662.3	7583.1	7388.0	7168.5	6985.7	6729.7	6510.2	*6418.8*	6394.4
10°	8473.0	8466.9	8448.6	8314.5	8052.4	7711.1	7436.8	7083.2	6754.0	*6607.7*	6577.3
12.5°	9417.9	9405.7	9363.0	9167.9	8808.3	8369.4	7973.2	7516.0	7077.1	*6876.0*	6808.9
15°	10472.4	10454.1	10374.9	10137.2	9655.6	9100.9	8588.8	8003.7	7467.2	*7205.1*	7113.7
17.5°	11581.8	11581.8	11459.9	11106.4	10570.0	9881.1	9247.2	8503.5	7875.6	*7552.6*	7442.9
20°	12709.5	12703.4	12551.1	12124.4	11490.4	10698.0	9893.3	9076.5	8296.3	*7906.1*	7772.0
22.5°	13898.2	13886.0	13697.0	13209.4	12453.5	11557.5	10618.7	9643.4	8759.5	*8290.2*	8119.5
25°	15263.6	15245.4	15013.7	14416.3	13520.3	12508.4	11435.5	10307.8	9289.9	*8716.9*	8515.7
27.5°	16714.4	16690.0	16415.7	15720.8	14739.4	13520.3	12337.7	11075.9	9875.0	*9192.3*	8966.8
30°	18006.7	17988.4	17689.7	16976.5	15848.8	14526.1	13197.2	11844.0	10490.7	*9698.3*	9417.9
32.5°	18982.0	18982.0	18713.8	18012.8	16842.4	15489.2	14062.8	12569.3	11130.8	*10240.8*	9911.6
35°	19573.3	19591.6	19360.0	18799.2	17695.8	16397.4	14958.9	13422.7	11813.5	*10819.9*	10466.3
37.5°	19658.6	19719.6	19585.5	19207.6	18287.1	17153.3	15836.6	14245.7	12520.6	*11405.1*	11008.8
40°	19262.4	19305.1	19311.2	19164.9	18530.9	17695.8	16610.8	15117.3	13270.3	*12020.7*	11563.6
42.5°	18470.0	18500.5	18555.3	18598.0	18354.2	17933.6	17202.1	15928.1	14068.9	*12648.6*	12112.2
45°	17445.9	17439.8	17531.2	17714.1	17701.9	17799.5	17531.2	16665.7	14897.9	*13361.8*	12721.7
47.5°	15915.9	15885.4	16208.5	16623.0	16830.2	17287.4	17537.3	17244.7	15800.1	*14148.1*	13416.6
50°	13520.3	13489.8	14196.9	15172.2	15781.8	16476.7	17202.1	17592.2	16744.9	*15032.0*	14172.5
52.5°	10606.5	10576.0	11472.1	13178.9	14507.8	15519.7	16525.5	17671.4	17641.0	*16019.5*	15025.9
55°	7887.8	7863.5	8735.1	10582.1	12733.9	14410.2	15696.4	17464.2	18482.2	*17153.3*	16062.2
57.5°	5559.3	5547.1	6303.0	7833.0	10454.1	13057.0	14897.9	17061.9	19256.3	*18384.6*	17232.6
60°	3901.3	3883.0	4431.6	5614.1	7906.1	11014.9	14105.5	16525.5	19835.4	*19597.7*	18476.1
62.5°	2627.2	2615.1	3005.2	3992.7	5614.1	8479.1	12904.6	16165.8	20164.6	*20816.8*	19731.8
65°	1993.3	1987.2	2164.0	2706.5	3974.4	6089.6	10996.7	16123.1	20207.3	*21731.2*	20798.5
67.5°	*1609.3*	*1615.4*	*1712.9*	*2023.8*	*2749.2*	*4327.9*	*8527.9*	*15854.9*	*19981.7*	*22042.1*	*21316.7*
70°	1316.7	1316.7	1359.3	1566.6	2029.9	2919.8	5955.5	14635.8	19353.9	*21231.3*	20701.0
72.5°	1005.8	1011.9	1146.0	1267.9	1530.0	2048.2	3815.9	12112.2	17872.6	*18719.9*	18317.6
75°	798.5	792.4	871.7	1042.4	1188.7	1463.0	2340.8	8686.4	15208.8	*14629.7*	14373.7
77.5°	573.0	566.9	627.9	774.2	902.2	1036.3	1395.9	4382.8	8271.9	*7601.3*	7412.4
80°	390.1	377.9	432.8	536.4	597.4	609.6	682.7	1682.4	3608.7	*3401.4*	3358.7
82.5°	201.2	201.2	231.6	304.8	310.9	317.0	304.8	542.5	1194.8	*1115.5*	1066.7
85°	79.2	79.2	85.3	103.6	103.6	109.7	109.7	140.2	128.0	*121.9*	115.8
87.5°	6.1	6.1	12.2	12.2	18.3	18.3	18.3	24.4	30.5	*30.5*	30.5
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°	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7	6034.7
2.5°	6083.5	6059.1	5979.9	5961.6	5949.4	5931.1	5937.2	5894.5	5876.3	5882.4	5858.0
5°	6193.2	6150.6	6053.0	6010.4	5998.2	5979.9	5998.2	5967.7	5937.2	5949.4	5937.2
7.5°	6345.6	6284.7	6162.8	6120.1	6114.0	6095.7	6120.1	6095.7	6071.3	6083.5	6059.1
10°	6504.1	6424.9	6290.8	6248.1	6248.1	6242.0	6266.4	6229.8	6205.4	6211.5	6199.3
12.5°	6735.8	6632.1	6485.8	6449.3	6431.0	6449.3	6455.4	6406.6	6363.9	6370.0	6351.7
15°	7016.2	6900.3	6741.8	6687.0	6674.8	6668.7	6644.3	6583.4	6528.5	6522.4	6504.1
17.5°	7320.9	7174.6	6985.7	6930.8	6876.0	6857.7	6796.7	6717.5	6632.1	6632.1	6607.7
20°	7613.5	7449.0	7223.4	7144.2	7064.9	6991.8	6888.1	6760.1	6650.4	6632.1	6607.7
22.5°	7930.5	7735.4	7473.3	7357.5	7217.3	7071.0	6894.2	6723.6	6583.4	6552.9	6534.6
25°	8284.1	8040.2	7729.4	7558.7	7333.1	7107.6	6845.5	6626.0	6461.4	6412.7	6400.5
27.5°	8674.2	8381.6	8003.7	7753.7	7424.6	7071.0	6735.8	6473.6	6272.5	6211.5	6193.2
30°	9070.4	8723.0	8253.6	7887.8	7424.6	6955.2	6534.6	6229.8	5998.2	5912.8	5900.6
32.5°	9466.6	9076.5	8479.1	7961.0	7351.4	6760.1	6272.5	5912.8	5650.7	5547.1	5571.5
35°	9942.1	9466.6	8686.4	7991.5	7229.5	6522.4	5973.8	5553.2	5285.0	5193.5	5211.8
37.5°	10435.8	9856.8	8851.0	7967.1	7058.8	6254.2	5638.5	5230.1	4894.9	4736.4	4754.6
40°	10862.5	10210.3	8966.8	7881.7	6839.4	5949.4	5309.4	4772.9	4309.7	4157.3	4139.0
42.5°	11264.9	10472.4	9027.7	7753.7	6589.5	5595.9	4840.0	4151.2	3687.9	3498.9	3505.0
45°	11685.5	10728.4	9003.4	7583.1	6278.6	5181.3	4236.5	3541.6	3133.2	2962.5	2968.6
47.5°	12167.0	11002.7	8979.0	7400.2	5900.6	4644.9	3657.4	3005.2	2651.6	2529.7	2517.5
50°	12679.1	11307.5	8948.5	7174.6	5480.0	4047.5	3084.4	2505.3	2206.6	2127.4	2109.1
52.5°	13258.2	11636.7	8930.2	6906.4	4974.1	3413.6	2572.4	2066.4	1865.3	1810.4	1804.3
55°	13953.1	12020.7	8954.6	6583.4	4364.5	2816.2	2139.6	1779.9	1645.8	1615.4	1609.3
57.5°	14800.4	12514.5	9027.7	6205.4	3724.5	2298.1	1822.6	1603.2	1517.8	1493.4	1493.4
60°	15720.8	13075.3	9161.8	5778.7	3084.4	1895.8	1615.4	1463.0	1426.4	1456.9	1456.9
62.5°	16714.4	13733.6	9399.6	5260.6	2487.0	1603.2	1450.8	1347.2	1322.8	1383.7	1389.8
65°	17634.9	14373.7	9552.0	4638.8	1975.0	1389.8	1322.8	1231.3	1243.5	1304.5	1298.4
67.5°	*18201.8*	*14904.0*	*9338.6*	*3858.6*	*1566.6*	*1231.3*	*1188.7*	*1109.4*	*1139.9*	*1188.7*	*1194.8*
70°	17854.3	14605.3	8284.1	2913.7	1225.2	1072.8	1042.4	993.6	1018.0	1078.9	1103.3
72.5°	16153.6	13081.4	6443.2	1968.9	987.5	902.2	914.4	890.0	920.5	975.3	1030.2
75°	13111.9	9887.2	4321.9	1261.8	780.3	768.1	786.3	768.1	780.3	835.1	865.6
77.5°	6845.5	4821.7	2151.8	786.3	579.1	597.4	627.9	634.0	670.5	682.7	694.9
80°	3194.1	2170.1	896.1	438.9	384.0	420.6	481.6	487.7	499.8	518.1	524.2
82.5°	1042.4	652.2	414.5	237.7	219.4	237.7	310.9	371.8	377.9	414.5	414.5
85°	109.7	67.1	91.4	97.5	85.3	103.6	140.2	134.1	61.0	36.6	36.6
87.5°	30.5	24.4	30.5	30.5	24.4	24.4	18.3	6.1	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)