

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: P842087

Luminaire Tested: **ARCH4-270-722-U-T4W-HSS**

Issue Date: 5/27/2024

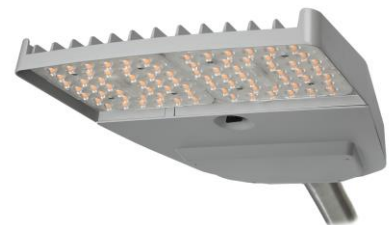
Test Information

Test Method: LM-79-08
Report Number: P842087
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-722-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23251 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 269
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



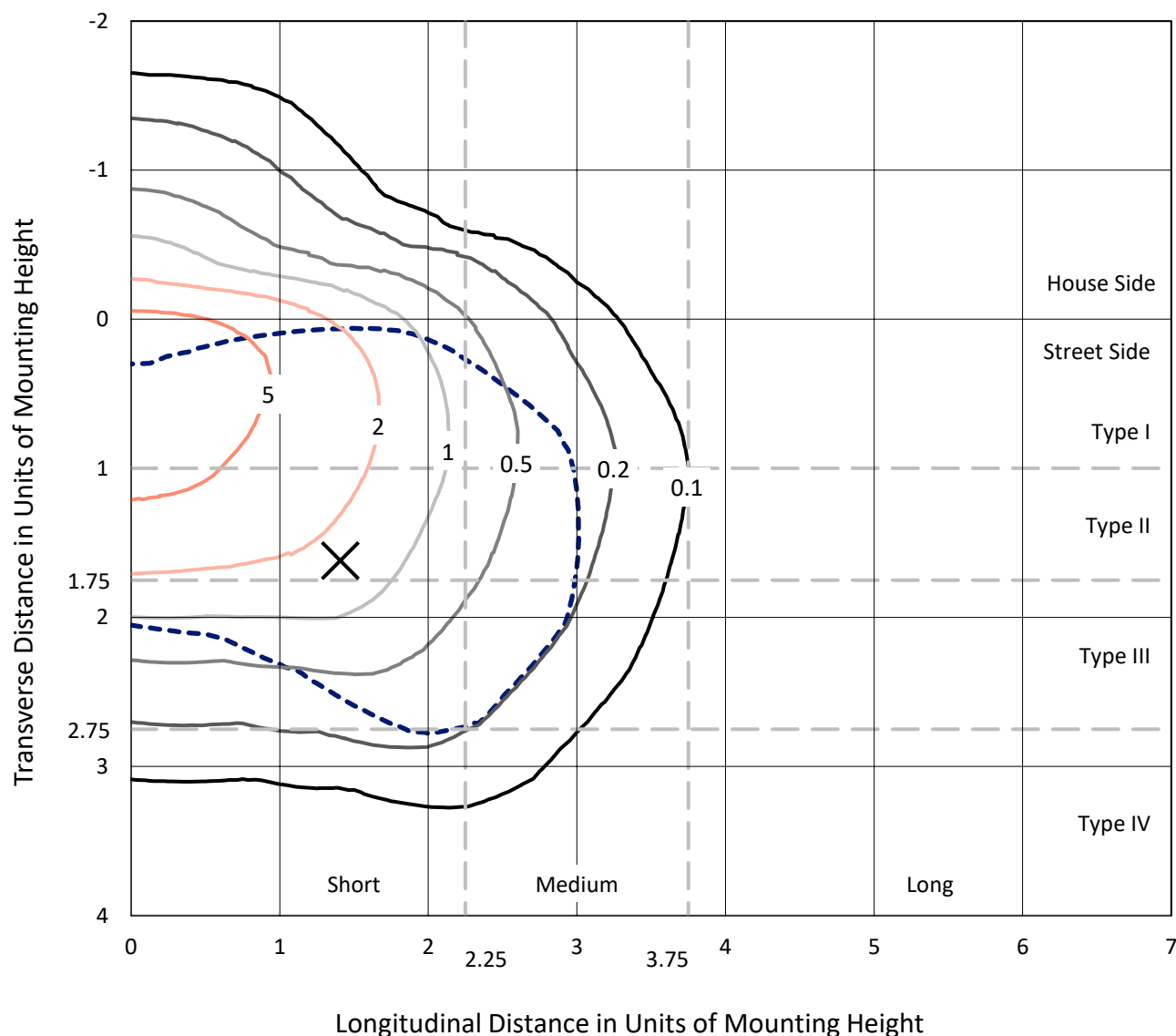
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

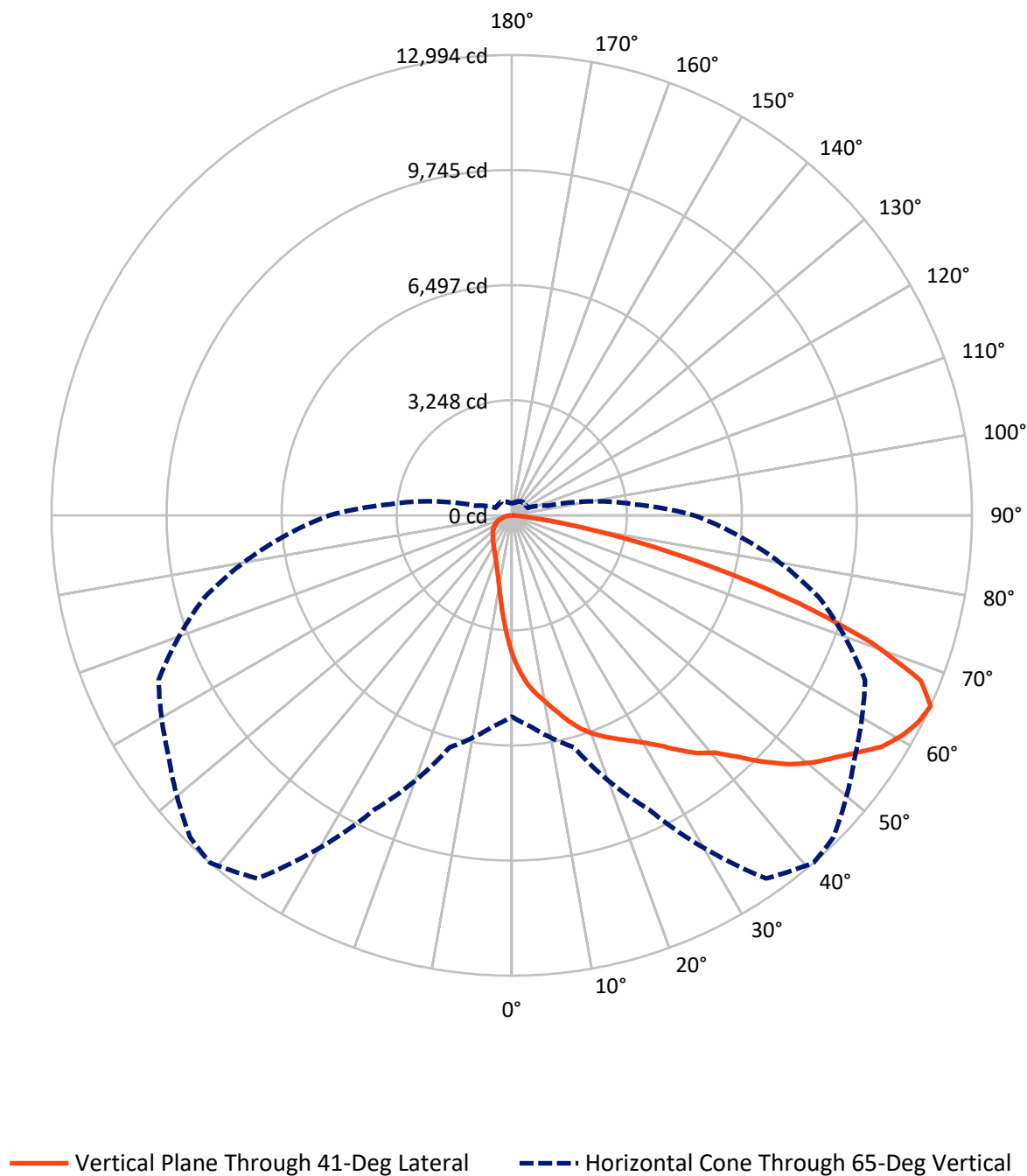


Based on 25 foot mounting height. Maximum calculated value = 9.2 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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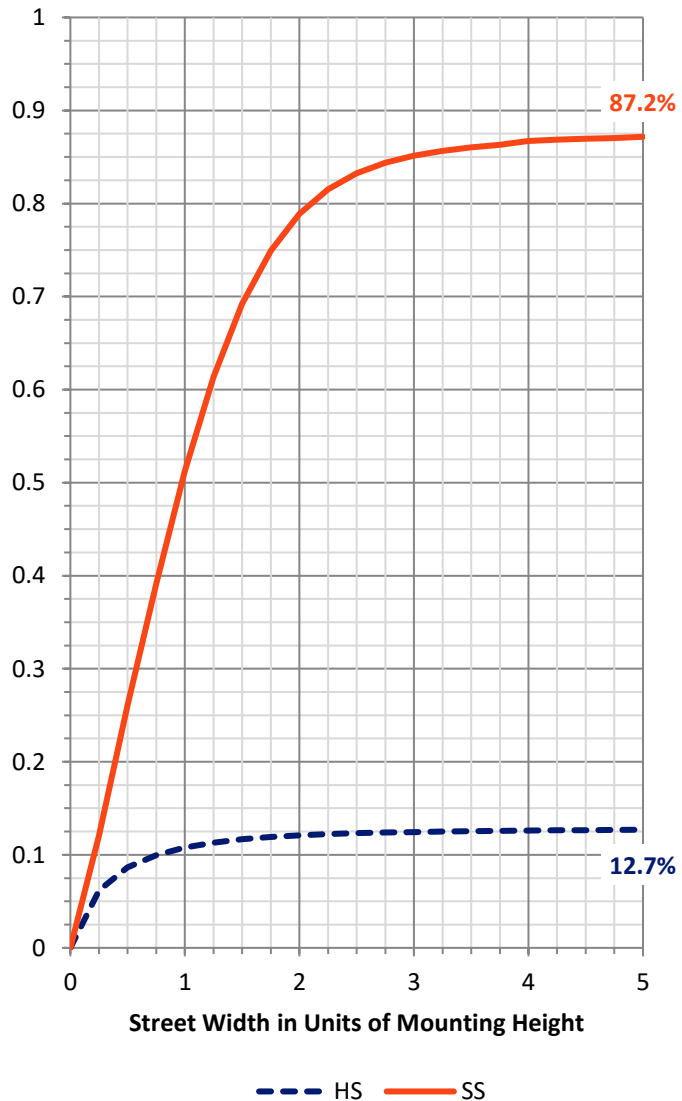
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2985.1	0.0	2985.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	20265.9	0.0	20265.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	23251.0	0.0	23251.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.1	1.6
10°-20°	1106.9	4.8
20°-30°	1904.3	8.2
30°-40°	2888.1	12.4
40°-50°	4231.1	18.2
50°-60°	5343.0	23.0
60°-70°	5010.1	21.5
70°-80°	2233.0	9.6
80°-90°	165.4	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°	23251.0	100.0
0°-180°	23251.0	100.0

Coefficient of Utilization



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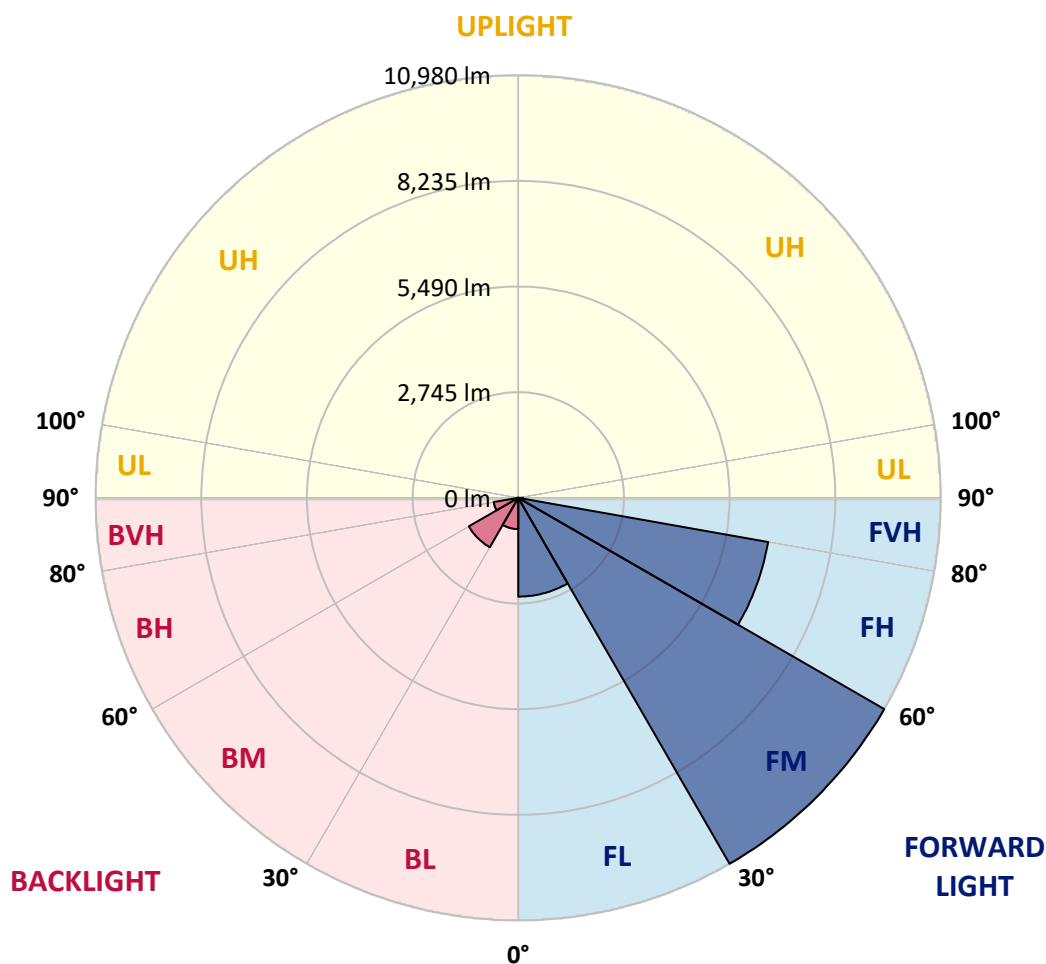
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2567.8	11.0			
FM	(30°-60°)	10980.0	47.2			
FH	(60°-80°)	6594.6	28.4			G3/7500
FVH	(80°-90°)	123.5	0.5			G2/225
BL	(0°-30°)	812.5	3.5	B2/1000		
BM	(30°-60°)	1482.2	6.4	B2/2500		
BH	(60°-80°)	648.4	2.8	B2/1000		G2/1000
BVH	(80°-90°)	41.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8
2.5°	4569.9	4555.1	4545.3	4491.4	4491.4	4417.9	4422.8	4354.1	4270.8	4138.4	3996.2
5°	5001.3	4981.7	4957.2	4903.3	4883.7	4810.1	4800.3	4702.2	4560.0	4329.6	4074.6
7.5°	5378.9	5359.3	5325.0	5246.5	5192.6	5104.3	5079.8	4952.3	4795.4	4511.0	4153.1
10°	5722.1	5707.4	5663.3	5565.2	5491.7	5383.8	5339.7	5168.1	4971.9	4658.1	4216.8
12.5°	6070.3	6050.6	5991.8	5908.5	5820.2	5692.7	5638.8	5418.1	5168.1	4819.9	4310.0
15°	6393.9	6364.5	6320.3	6232.1	6153.6	6031.0	5972.2	5712.3	5408.3	5001.3	4432.6
17.5°	6604.7	6580.2	6541.0	6491.9	6428.2	6335.0	6276.2	6021.2	5648.6	5177.9	4560.0
20°	6732.2	6722.4	6707.7	6678.3	6648.8	6585.1	6541.0	6300.7	5908.5	5349.5	4682.6
22.5°	6830.3	6820.5	6815.6	6815.6	6820.5	6795.9	6766.5	6560.6	6158.5	5530.9	4795.4
25°	6982.3	6977.4	6967.6	6957.8	6992.1	6997.0	6987.2	6845.0	6472.3	5771.2	4937.6
27.5°	7193.1	7178.4	7158.8	7149.0	7183.3	7207.8	7227.4	7129.4	6805.8	6016.3	5099.4
30°	7516.7	7472.6	7423.6	7389.2	7413.8	7453.0	7497.1	7438.3	7149.0	6320.3	5266.1
32.5°	7899.2	7845.2	7732.5	7668.7	7732.5	7761.9	7796.2	7766.8	7506.9	6648.8	5432.8
35°	8365.0	8301.3	8183.6	8090.4	8203.2	8139.4	8124.7	8095.3	7845.2	6972.5	5619.2
37.5°	9139.7	9046.5	8860.2	8654.3	8654.3	8517.0	8463.1	8374.8	8149.2	7261.8	5800.6
40°	10037.0	9914.4	9674.2	9370.2	9090.7	8806.3	8772.0	8708.2	8507.2	7595.2	6006.5
42.5°	11022.6	10787.2	10453.8	10086.0	9634.9	9311.3	9232.9	9051.5	8855.3	7933.5	6212.5
45°	12116.0	11625.7	11140.2	10953.9	10208.6	9914.4	9767.3	9438.8	9218.2	8286.5	6428.2
47.5°	12292.5	11910.1	11586.4	11557.0	10743.1	10497.9	10331.2	9860.5	9610.4	8664.1	6653.7
50°	12194.5	11964.0	11998.3	11880.6	11135.3	10973.5	10846.1	10311.6	9997.8	9026.9	6859.7
52.5°	11782.6	11910.1	12106.2	11890.4	11508.0	11375.6	11311.9	10797.0	10360.6	9360.4	7046.0
55°	11292.2	11380.5	11802.2	12067.0	11939.5	11821.8	11763.0	11360.9	10718.6	9639.8	7217.6
57.5°	10576.4	10537.1	11003.0	12037.5	12390.6	12321.9	12258.2	11915.0	11052.0	9840.9	7325.5
60°	9502.6	9419.2	10007.6	11449.2	12537.7	12645.6	12616.1	12282.7	11307.0	9836.0	7281.4
62.5°	7644.2	7850.1	8664.1	10488.1	12601.4	12876.0	12822.1	12312.1	11390.3	9551.6	7001.9
65°	5682.9	5977.1	6776.3	9164.2	12513.2	12993.7	12846.6	11831.6	11003.0	8987.7	6389.0
67.5°	4094.2	4354.1	4937.6	7541.2	11664.9	12454.3	12282.7	11047.1	10110.6	8188.5	5540.7
70°	2799.8	2986.1	3383.3	5491.7	9958.6	10767.6	10659.7	9875.2	8703.3	7237.2	4501.2
72.5°	1976.0	2054.5	2309.4	3623.5	7565.8	8448.3	8320.9	8124.7	6992.1	6016.3	3500.9
75°	1480.8	1529.8	1667.1	2343.8	5104.3	5854.5	5736.8	5849.6	5222.0	4555.1	2549.7
77.5°	559.0	608.0	946.3	1495.5	3020.4	3594.1	3476.4	3545.1	2902.7	2299.6	1269.9
80°	152.0	161.8	313.8	711.0	1372.9	1789.7	1627.9	1397.4	1078.7	1059.1	671.7
82.5°	63.7	73.5	142.2	382.5	490.3	490.3	411.9	509.9	411.9	495.2	323.6
85°	24.5	29.4	34.3	98.1	63.7	68.6	73.5	98.1	83.4	103.0	73.5
87.5°	0.0	0.0	0.0	4.9	4.9	9.8	4.9	9.8	14.7	14.7	14.7
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°	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8	3961.8
2.5°	3937.3	3883.4	3804.9	3677.5	3545.1	3471.5	3378.4	3363.6	3265.6	3255.8	3216.6
5°	3961.8	3849.1	3648.0	3402.9	3162.6	2976.3	2839.0	2765.4	2623.3	2623.3	2584.0
7.5°	3981.5	3804.9	3481.3	3118.5	2790.0	2539.9	2353.6	2275.1	2147.6	2137.8	2108.4
10°	3986.4	3751.0	3299.9	2829.2	2427.1	2172.2	1990.7	1902.5	1789.7	1779.9	1760.3
12.5°	4025.6	3721.6	3138.1	2579.1	2167.2	1892.7	1716.1	1642.6	1554.3	1544.5	1524.9
15°	4089.3	3721.6	3000.8	2368.3	1936.8	1681.8	1529.8	1461.2	1397.4	1387.6	1377.8
17.5°	4153.1	3711.8	2863.5	2172.2	1745.6	1515.1	1382.7	1328.8	1279.8	1274.9	1265.0
20°	4211.9	3706.9	2726.2	2005.4	1598.5	1377.8	1274.9	1225.8	1186.6	1186.6	1181.7
22.5°	4270.8	3697.1	2593.8	1848.5	1471.0	1274.9	1186.6	1132.7	1103.2	1103.2	1098.3
25°	4359.0	3697.1	2471.3	1716.1	1368.0	1196.4	1108.1	1068.9	1044.4	1039.5	1039.5
27.5°	4462.0	3726.5	2363.4	1598.5	1279.8	1117.9	1049.3	1010.1	980.7	970.8	975.8
30°	4574.8	3751.0	2265.3	1495.5	1196.4	1059.1	985.6	946.3	916.9	907.1	912.0
32.5°	4687.5	3780.4	2177.1	1402.3	1113.0	1005.2	931.6	887.5	858.1	853.2	853.2
35°	4810.1	3809.8	2088.8	1323.9	1044.4	951.2	882.6	833.6	813.9	804.1	809.0
37.5°	4932.7	3858.9	2005.4	1250.3	995.4	902.2	838.5	789.4	774.7	769.8	769.8
40°	5079.8	3932.4	1971.1	1201.3	951.2	858.1	804.1	755.1	740.4	740.4	740.4
42.5°	5202.4	3991.3	1941.7	1147.4	916.9	818.8	769.8	730.6	720.8	715.9	720.8
45°	5325.0	4045.2	1902.5	1098.3	872.8	779.6	740.4	701.2	691.4	691.4	691.4
47.5°	5447.5	4074.6	1848.5	1049.3	833.6	745.3	711.0	676.7	666.8	666.8	666.8
50°	5545.6	4099.1	1770.1	995.4	789.4	715.9	681.6	647.2	637.4	637.4	637.4
52.5°	5643.7	4104.0	1686.7	931.6	745.3	681.6	652.1	617.8	608.0	603.1	603.1
55°	5731.9	4099.1	1588.7	858.1	696.3	642.3	617.8	588.4	568.8	549.2	559.0
57.5°	5795.7	4094.2	1475.9	784.5	647.2	603.1	593.3	554.1	514.8	465.8	475.6
60°	5771.2	4040.3	1353.3	691.4	593.3	563.9	563.9	509.9	441.3	416.8	421.7
62.5°	5614.3	3888.3	1225.8	593.3	539.4	524.7	519.7	460.9	407.0	382.5	387.4
65°	5143.5	3505.8	1039.5	505.0	485.4	480.5	480.5	426.6	377.6	348.1	353.0
67.5°	4427.7	2942.0	848.3	426.6	431.5	441.3	441.3	392.3	343.2	313.8	318.7
70°	3550.0	2299.6	676.7	367.7	372.6	387.4	397.2	353.0	308.9	279.5	279.5
72.5°	2672.3	1745.6	544.3	308.9	333.4	333.4	348.1	313.8	269.7	240.3	245.2
75°	1936.8	1250.3	431.5	259.9	289.3	284.4	284.4	264.8	230.5	210.8	210.8
77.5°	916.9	657.0	343.2	186.3	225.6	220.6	225.6	210.8	196.1	176.5	181.4
80°	451.1	323.6	220.6	132.4	156.9	161.8	176.5	166.7	161.8	147.1	147.1
82.5°	215.7	127.5	103.0	93.2	107.9	112.8	122.6	122.6	127.5	117.7	117.7
85°	58.8	34.3	44.1	58.8	68.6	73.5	83.4	88.3	88.3	83.4	88.3
87.5°	14.7	14.7	19.6	29.4	34.3	39.2	44.1	44.1	19.6	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)