

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: P836280

Luminaire Tested: **ARCH3-160-750-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23525 lumens
Efficiency: N/A
Efficacy: 146.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 161
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



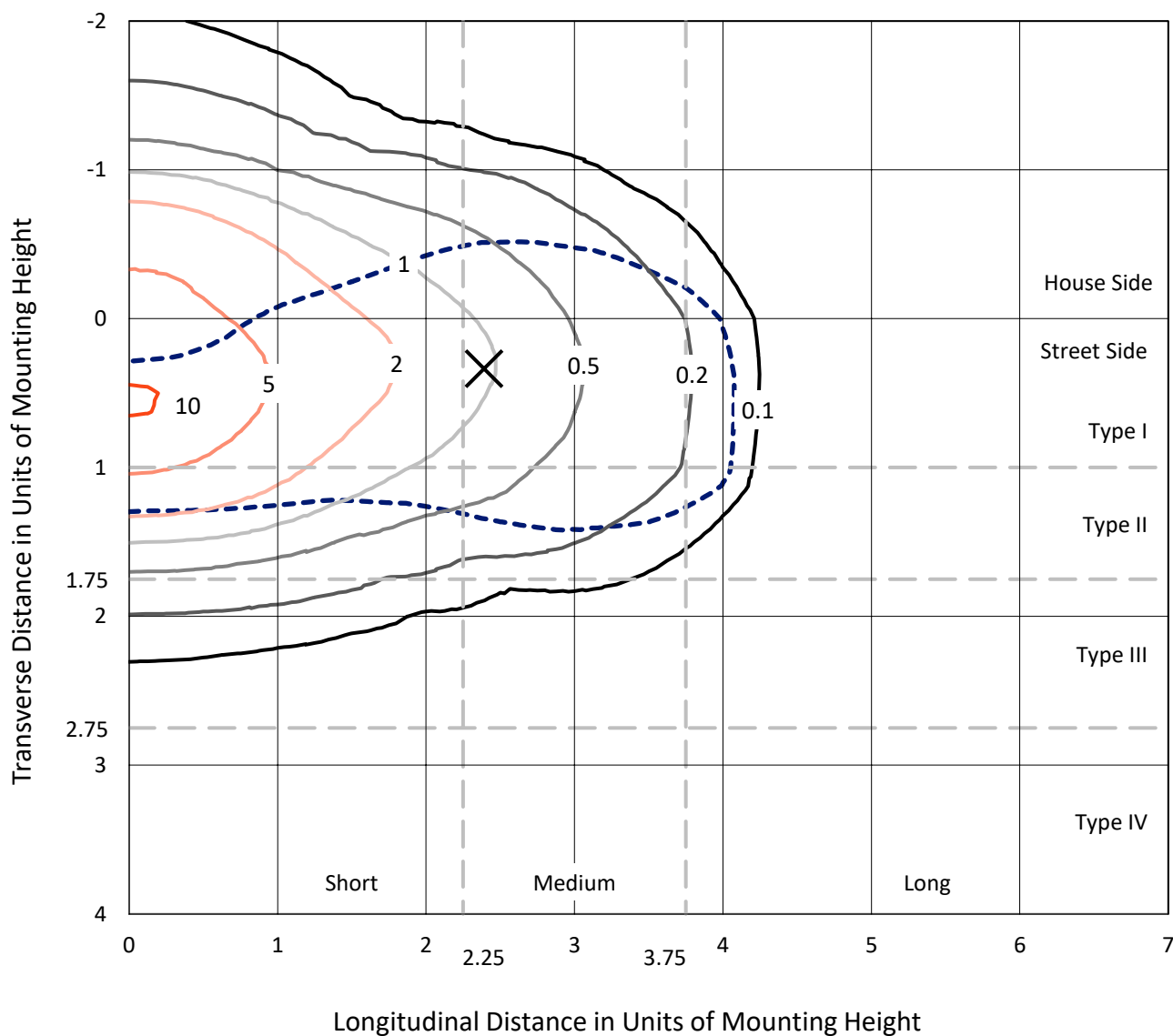
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

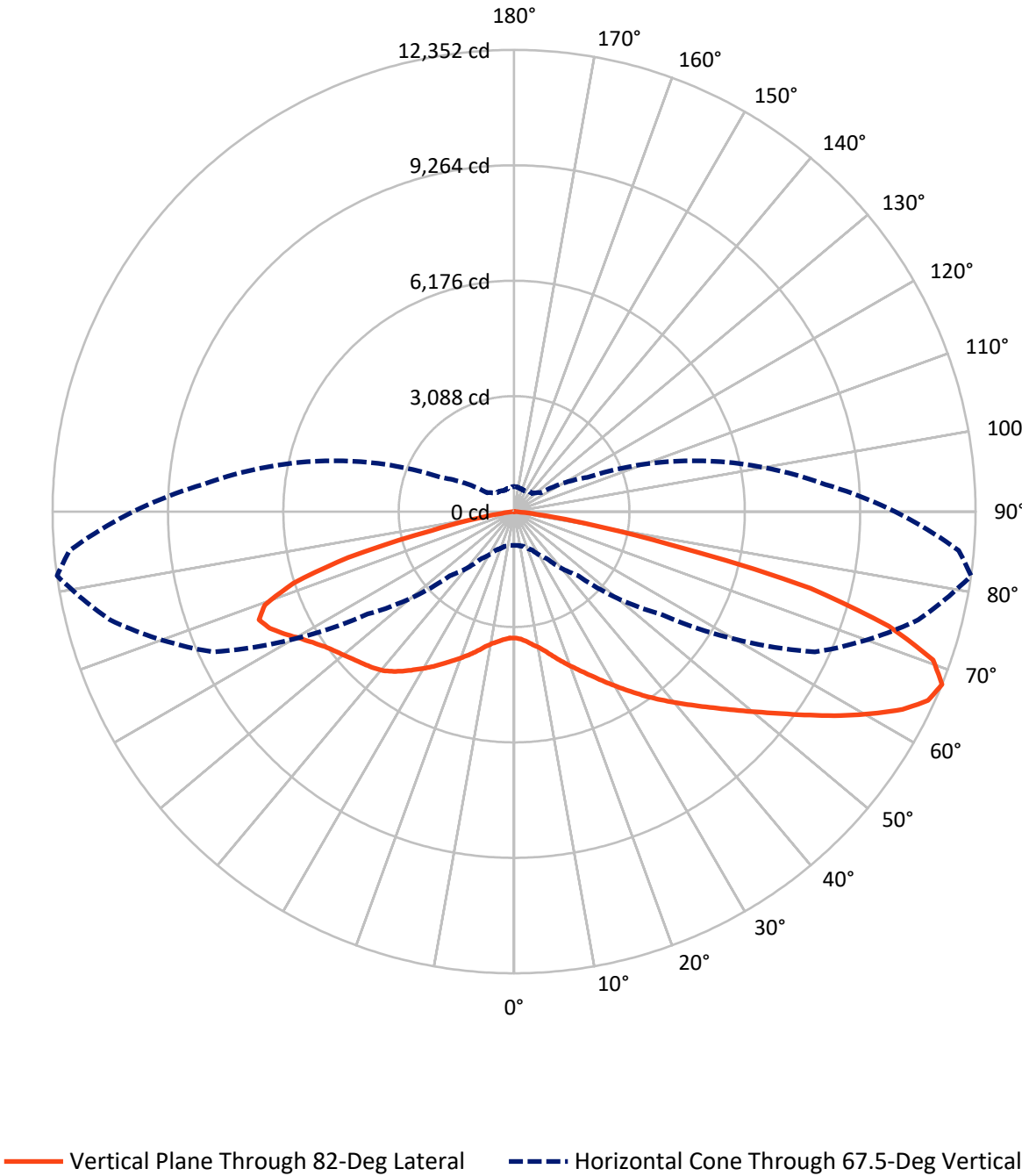
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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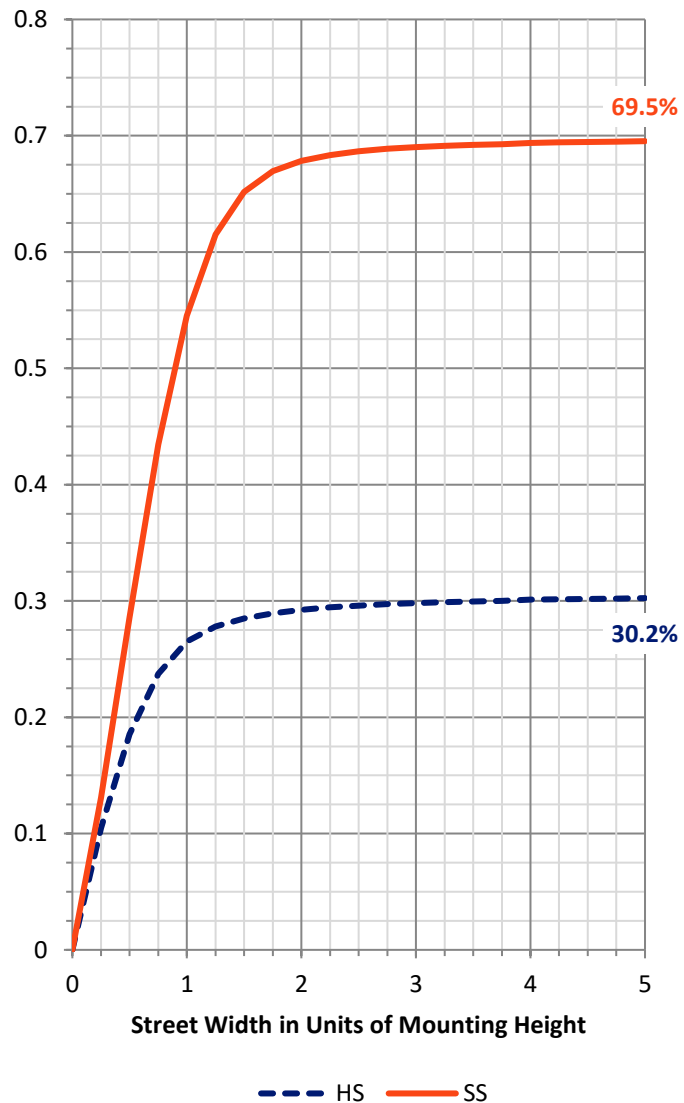
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7164.3	0.0	7164.3
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	16360.7	0.0	16360.7
	% Fixture	69.5	0.0	69.5
Total	Lumens	23525.0	0.0	23525.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.5	1.5
10°-20°	1258.9	5.4
20°-30°	2530.0	10.8
30°-40°	3974.3	16.9
40°-50°	4841.5	20.6
50°-60°	4574.6	19.4
60°-70°	3777.6	16.1
70°-80°	2057.0	8.7
80°-90°	161.7	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°	23525.0	100.0
0°-180°	23525.0	100.0

Coefficient of Utilization



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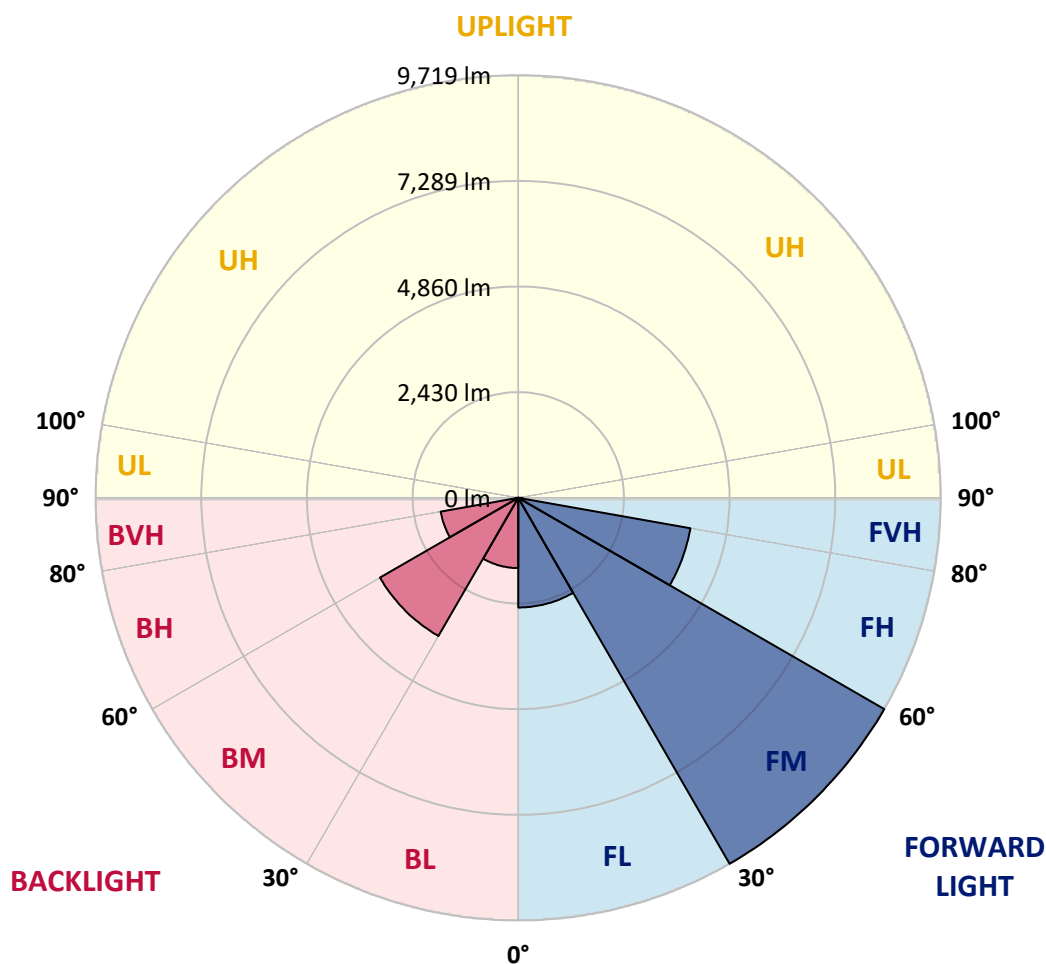
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2522.7	10.7			
FM	(30°-60°)	9719.2	41.3			
FH	(60°-80°)	4021.3	17.1			G2/5000
FVH	(80°-90°)	97.5	0.4			G1/100
BL	(0°-30°)	1615.6	6.9	B3/2500		
BM	(30°-60°)	3671.1	15.6	B3/5000		
BH	(60°-80°)	1813.3	7.7	B3/2500		G3/2500
BVH	(80°-90°)	64.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7
2.5°	3535.4	3535.4	3562.7	3562.7	3538.8	3501.3	3491.0	3450.0	3412.4	3412.4	3415.9
5°	3873.6	3870.2	3890.7	3863.3	3805.3	3730.1	3678.9	3590.1	3514.9	3491.0	3487.6
7.5°	4286.9	4283.5	4293.7	4249.3	4140.0	4017.1	3914.6	3771.1	3648.1	3596.9	3583.2
10°	4748.1	4744.6	4734.4	4659.2	4512.4	4321.1	4167.4	3969.2	3784.8	3702.8	3685.7
12.5°	5277.5	5270.7	5246.8	5137.5	4935.9	4690.0	4468.0	4211.8	3965.8	3853.1	3815.5
15°	5868.5	5858.2	5813.8	5680.6	5410.7	5099.9	4813.0	4485.0	4184.4	4037.6	3986.3
17.5°	6490.1	6490.1	6421.8	6223.7	5923.1	5537.1	5181.9	4765.1	4413.3	4232.3	4170.8
20°	7122.1	7118.7	7033.3	6794.2	6438.9	5994.8	5543.9	5086.2	4649.0	4430.4	4355.2
22.5°	7788.2	7781.3	7675.4	7402.2	6978.6	6476.5	5950.4	5403.9	4908.6	4645.6	4549.9
25°	8553.3	8543.1	8413.3	8078.5	7576.4	7009.4	6408.2	5776.2	5205.8	4884.7	4772.0
27.5°	9366.3	9352.6	9198.9	8809.5	8259.6	7576.4	6913.7	6206.6	5533.7	5151.1	5024.7
30°	10090.5	10080.2	9912.8	9513.2	8881.2	8140.0	7395.3	6637.0	5878.7	5434.6	5277.5
32.5°	10637.0	10637.0	10486.7	10093.9	9438.0	8679.7	7880.4	7043.5	6237.4	5738.7	5554.2
35°	10968.3	10978.6	10848.8	10534.5	9916.3	9188.7	8382.5	7521.7	6619.9	6063.2	5865.0
37.5°	11016.2	11050.3	10975.2	10763.4	10247.6	9612.2	8874.4	7982.9	7016.2	6391.1	6169.1
40°	10794.1	10818.0	10821.5	10739.5	10384.2	9916.3	9308.2	8471.3	7436.3	6736.1	6479.9
42.5°	10350.1	10367.2	10397.9	10421.8	10285.2	10049.5	9639.6	8925.7	7883.8	7087.9	6787.3
45°	9776.2	9772.8	9824.0	9926.5	9919.7	9974.3	9824.0	9339.0	8348.4	7487.6	7128.9
47.5°	8918.8	8901.7	9082.8	9315.1	9431.2	9687.4	9827.4	9663.5	8853.9	7928.2	7518.3
50°	7576.4	7559.3	7955.6	8502.1	8843.7	9233.1	9639.6	9858.2	9383.4	8423.5	7941.9
52.5°	5943.6	5926.5	6428.7	7385.1	8129.8	8696.8	9260.4	9902.6	9885.5	8976.9	8420.1
55°	4420.1	4406.5	4894.9	5929.9	7135.7	8075.1	8795.9	9786.5	10356.9	9612.2	9000.8
57.5°	3115.3	3108.4	3532.0	4389.4	5858.2	7316.8	8348.4	9561.0	10790.7	10302.2	9656.7
60°	2186.2	2175.9	2483.3	3146.0	4430.4	6172.5	7904.3	9260.4	11115.2	10982.0	10353.5
62.5°	1472.2	1465.4	1684.0	2237.4	3146.0	4751.5	7231.4	9058.9	11299.7	11665.2	11057.2
65°	1117.0	1113.6	1212.6	1516.6	2227.1	3412.4	6162.2	9035.0	11323.6	12177.6	11654.9
67.5°	901.8	905.2	959.9	1134.1	1540.6	2425.3	4778.8	8884.7	11197.2	12351.8	11945.3
70°	737.8	737.8	761.7	877.9	1137.5	1636.2	3337.3	8201.5	10845.4	11897.5	11600.3
72.5°	563.6	567.0	642.2	710.5	857.4	1147.7	2138.3	6787.3	10015.3	10490.1	10264.7
75°	447.5	444.1	488.5	584.1	666.1	819.8	1311.7	4867.6	8522.6	8198.1	8054.6
77.5°	321.1	317.7	351.8	433.8	505.5	580.7	782.2	2456.0	4635.3	4259.6	4153.7
80°	218.6	211.8	242.5	300.6	334.8	341.6	382.6	942.8	2022.2	1906.1	1882.1
82.5°	112.7	112.7	129.8	170.8	174.2	177.6	170.8	304.0	669.5	625.1	597.8
85°	44.4	44.4	47.8	58.1	58.1	61.5	61.5	78.6	71.7	68.3	64.9
87.5°	3.4	3.4	6.8	6.8	10.2	10.2	10.2	13.7	17.1	17.1	17.1
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°	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7	3381.7
2.5°	3409.0	3395.4	3351.0	3340.7	3333.9	3323.6	3327.1	3303.1	3292.9	3296.3	3282.6
5°	3470.5	3446.6	3392.0	3368.0	3361.2	3351.0	3361.2	3344.1	3327.1	3333.9	3327.1
7.5°	3555.9	3521.8	3453.4	3429.5	3426.1	3415.9	3429.5	3415.9	3402.2	3409.0	3395.4
10°	3644.7	3600.3	3525.2	3501.3	3501.3	3497.8	3511.5	3491.0	3477.4	3480.8	3473.9
12.5°	3774.5	3716.5	3634.5	3614.0	3603.7	3614.0	3617.4	3590.1	3566.2	3569.6	3559.3
15°	3931.7	3866.8	3777.9	3747.2	3740.4	3737.0	3723.3	3689.1	3658.4	3655.0	3644.7
17.5°	4102.5	4020.5	3914.6	3883.8	3853.1	3842.8	3808.7	3764.3	3716.5	3716.5	3702.8
20°	4266.4	4174.2	4047.8	4003.4	3959.0	3918.0	3859.9	3788.2	3726.7	3716.5	3702.8
22.5°	4444.0	4334.7	4187.9	4122.9	4044.4	3962.4	3863.3	3767.7	3689.1	3672.1	3661.8
25°	4642.2	4505.5	4331.3	4235.7	4109.3	3982.9	3836.0	3713.0	3620.8	3593.5	3586.7
27.5°	4860.8	4696.8	4485.0	4345.0	4160.5	3962.4	3774.5	3627.6	3514.9	3480.8	3470.5
30°	5082.8	4888.1	4625.1	4420.1	4160.5	3897.5	3661.8	3491.0	3361.2	3313.4	3306.6
32.5°	5304.8	5086.2	4751.5	4461.1	4119.5	3788.2	3514.9	3313.4	3166.5	3108.4	3122.1
35°	5571.3	5304.8	4867.6	4478.2	4051.2	3655.0	3347.5	3111.9	2961.6	2910.3	2920.6
37.5°	5848.0	5523.5	4959.8	4464.5	3955.6	3504.7	3159.7	2930.8	2742.9	2654.1	2664.4
40°	6087.1	5721.6	5024.7	4416.7	3832.6	3333.9	2975.2	2674.6	2415.0	2329.6	2319.4
42.5°	6312.5	5868.5	5058.9	4345.0	3692.6	3135.8	2712.2	2326.2	2066.6	1960.7	1964.1
45°	6548.2	6011.9	5045.2	4249.3	3518.3	2903.5	2374.0	1984.6	1755.8	1660.1	1663.5
47.5°	6818.1	6165.6	5031.6	4146.9	3306.6	2602.9	2049.5	1684.0	1485.9	1417.6	1410.8
50°	7105.0	6336.4	5014.5	4020.5	3070.9	2268.1	1728.4	1403.9	1236.5	1192.1	1181.9
52.5°	7429.5	6520.9	5004.2	3870.2	2787.3	1912.9	1441.5	1158.0	1045.3	1014.5	1011.1
55°	7818.9	6736.1	5017.9	3689.1	2445.8	1578.1	1199.0	997.4	922.3	905.2	901.8
57.5°	8293.7	7012.8	5058.9	3477.4	2087.1	1287.8	1021.3	898.4	850.6	836.9	836.9
60°	8809.5	7327.0	5134.0	3238.2	1728.4	1062.3	905.2	819.8	799.3	816.4	816.4
62.5°	9366.3	7695.9	5267.3	2947.9	1393.7	898.4	813.0	754.9	741.2	775.4	778.8
65°	9882.1	8054.6	5352.7	2599.5	1106.7	778.8	741.2	690.0	696.8	731.0	727.6
67.5°	10199.8	8351.8	5233.1	2162.2	877.9	690.0	666.1	621.7	638.8	666.1	669.5
70°	10005.1	8184.4	4642.2	1632.8	686.6	601.2	584.1	556.8	570.4	604.6	618.3
72.5°	9052.0	7330.4	3610.6	1103.3	553.4	505.5	512.4	498.7	515.8	546.5	577.3
75°	7347.5	5540.5	2421.8	707.1	437.2	430.4	440.6	430.4	437.2	468.0	485.1
77.5°	3836.0	2701.9	1205.8	440.6	324.5	334.8	351.8	355.2	375.7	382.6	389.4
80°	1789.9	1216.0	502.1	245.9	215.2	235.7	269.9	273.3	280.1	290.3	293.8
82.5°	584.1	365.5	232.3	133.2	123.0	133.2	174.2	208.4	211.8	232.3	232.3
85°	61.5	37.6	51.2	54.7	47.8	58.1	78.6	75.1	34.2	20.5	20.5
87.5°	17.1	13.7	17.1	17.1	13.7	13.7	10.2	3.4	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)