

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: P836421

Luminaire Tested: **ARCH3-180-740-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24531 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 180.5
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



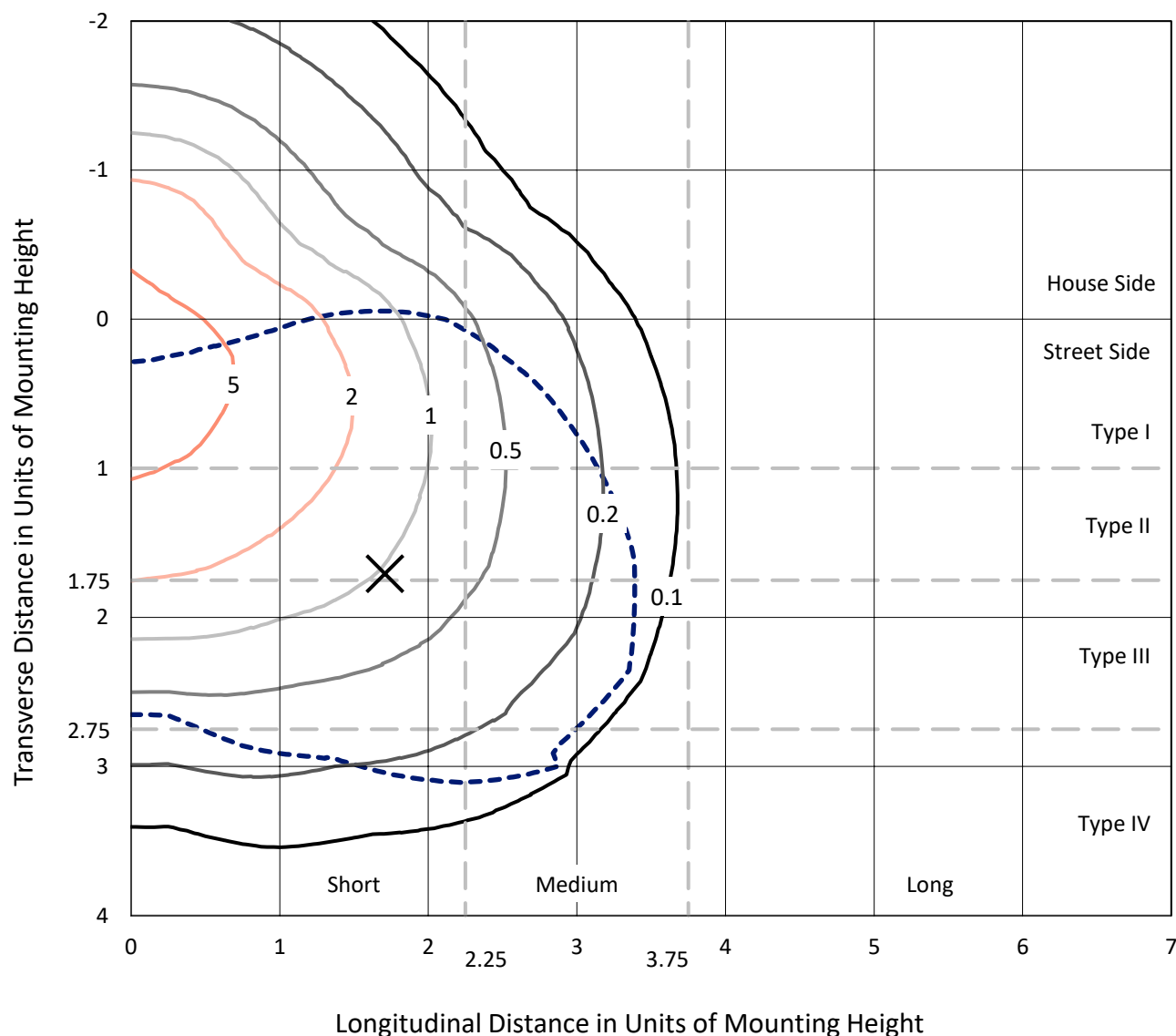
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

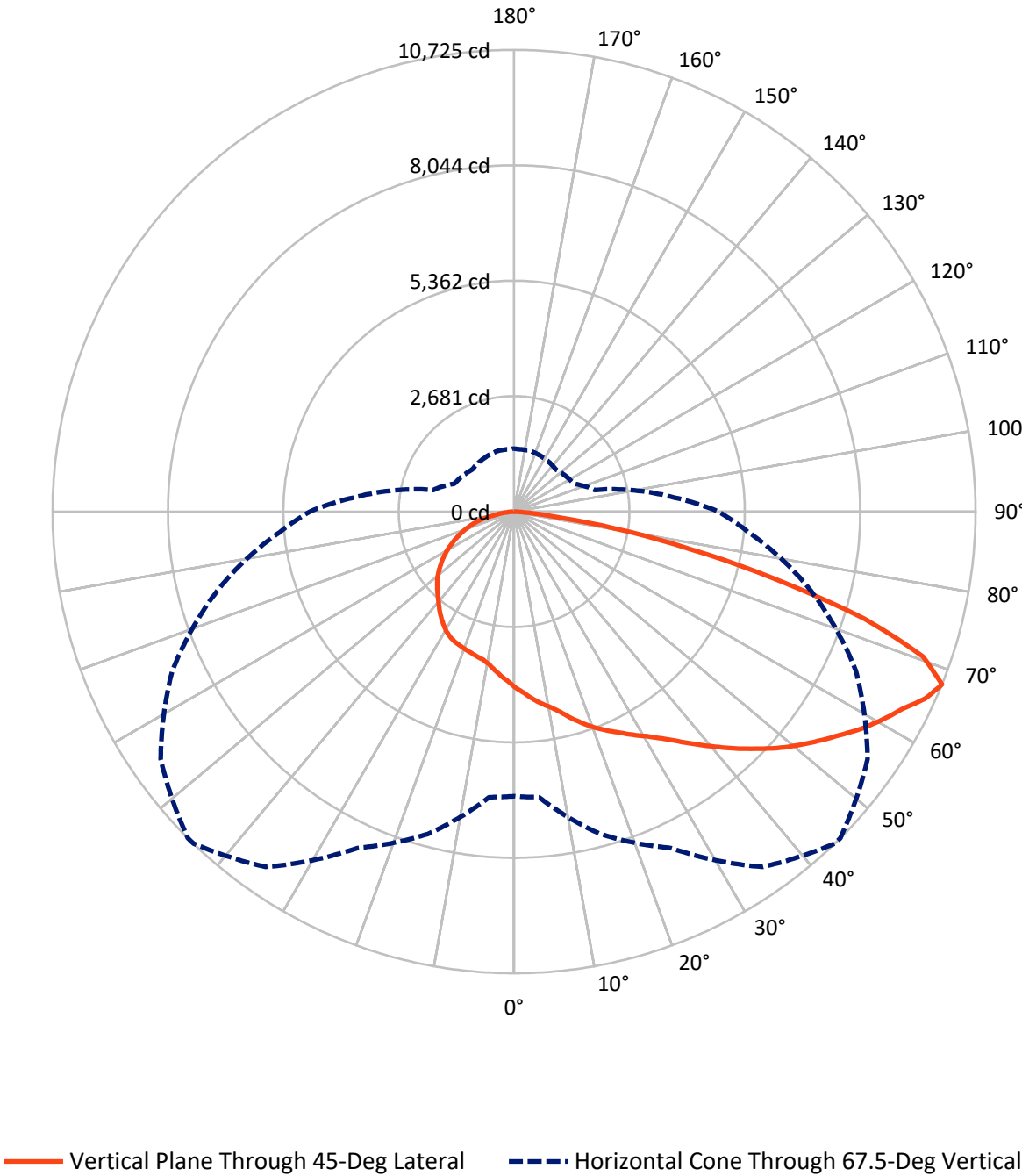


Based on 25 foot mounting height. Maximum calculated value = 7.6 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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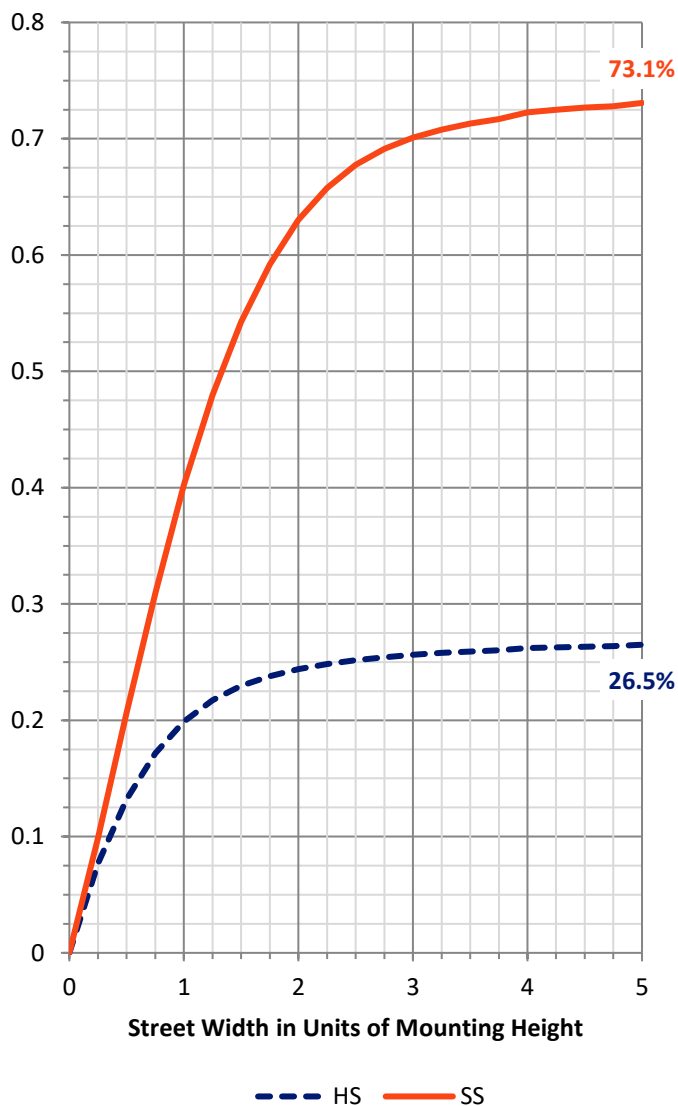
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6553.5	0.0	6553.5
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	17977.5	0.0	17977.5
	% Fixture	73.3	0.0	73.3
Total	Lumens	24531.0	0.0	24531.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.7	1.6
10°-20°	1210.1	4.9
20°-30°	2088.7	8.5
30°-40°	3080.1	12.6
40°-50°	4173.0	17.0
50°-60°	5100.4	20.8
60°-70°	5260.3	21.4
70°-80°	2881.2	11.7
80°-90°	345.3	1.4
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°	24531.0	100.0
0°-180°	24531.0	100.0

Coefficient of Utilization



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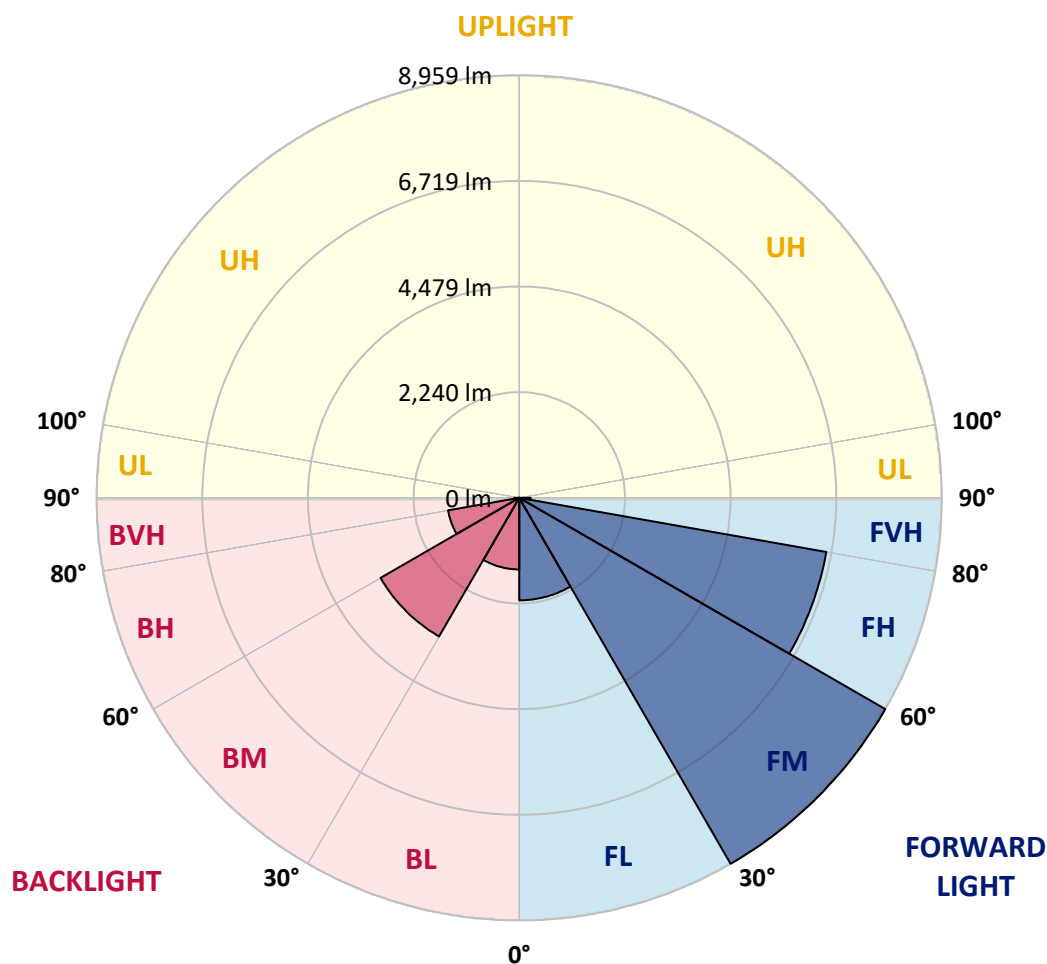
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2171.7	8.9			
FM	(30°-60°)	8959.0	36.5			
FH	(60°-80°)	6609.0	26.9			G3/7500
FVH	(80°-90°)	237.9	1.0			G3/500
BL	(0°-30°)	1518.9	6.2	B3/2500		
BM	(30°-60°)	3394.6	13.8	B3/5000		
BH	(60°-80°)	1532.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	107.4	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3
2.5°	4270.5	4266.8	4274.2	4248.1	4214.5	4210.8	4210.8	4188.4	4162.2	4110.0	4068.9
5°	4472.1	4464.6	4468.3	4431.0	4386.2	4363.8	4360.1	4311.5	4251.8	4169.7	4095.0
7.5°	4658.7	4651.2	4647.5	4606.5	4539.3	4501.9	4498.2	4427.3	4356.3	4229.4	4121.2
10°	4834.2	4826.7	4819.2	4763.2	4681.1	4625.1	4617.7	4528.1	4438.5	4281.7	4143.6
12.5°	5058.1	5043.2	5035.7	4968.5	4849.1	4789.4	4778.2	4658.7	4546.7	4356.3	4188.4
15°	5293.3	5282.1	5270.9	5207.5	5073.1	4994.7	4976.0	4826.7	4673.6	4453.4	4255.6
17.5°	5468.8	5457.6	5457.6	5401.6	5278.4	5188.8	5173.9	4994.7	4804.3	4543.0	4307.8
20°	5577.0	5565.8	5577.0	5543.4	5450.1	5375.4	5360.5	5162.7	4935.0	4625.1	4352.6
22.5°	5655.4	5644.2	5662.9	5647.9	5580.7	5536.0	5524.8	5330.6	5069.3	4711.0	4397.4
25°	5793.5	5793.5	5793.5	5767.4	5703.9	5689.0	5689.0	5521.0	5241.1	4823.0	4464.6
27.5°	6069.8	6054.8	6036.2	5961.5	5853.3	5849.5	5871.9	5715.1	5438.9	4968.5	4546.7
30°	6476.7	6469.2	6398.3	6241.5	6058.6	6039.9	6054.8	5924.2	5651.7	5121.6	4640.0
32.5°	7003.0	6976.9	6831.3	6596.1	6334.8	6248.9	6278.8	6140.7	5875.7	5278.4	4729.6
35°	7376.3	7383.8	7279.2	7066.5	6756.6	6528.9	6551.3	6383.3	6118.3	5453.8	4841.6
37.5°	7805.6	7831.7	7674.9	7514.4	7227.0	6838.8	6861.1	6633.4	6360.9	5674.1	4961.1
40°	8399.1	8346.9	8081.8	7891.4	7574.1	7163.5	7182.2	6913.4	6640.9	5883.1	5099.2
42.5°	8895.6	8802.3	8481.2	8238.6	7857.8	7506.9	7525.6	7215.8	6924.6	6114.6	5252.3
45°	9608.6	9351.0	8888.1	8768.7	8149.0	7842.9	7861.6	7536.8	7223.2	6360.9	5416.5
47.5°	10023.0	9612.3	9317.4	9254.0	8470.0	8190.1	8212.5	7876.5	7544.3	6640.9	5588.2
50°	9996.8	9731.8	9645.9	9489.1	8753.8	8514.8	8537.2	8227.4	7869.0	6917.1	5752.5
52.5°	9825.1	9873.6	9828.8	9567.5	9037.5	8828.4	8854.5	8574.6	8201.3	7174.7	5905.5
55°	10090.1	10123.7	10037.9	9694.5	9351.0	9142.0	9171.8	8940.4	8529.8	7402.4	6036.2
57.5°	10407.4	10288.0	10202.1	9918.4	9675.8	9481.7	9515.3	9313.7	8813.5	7585.3	6137.0
60°	10392.5	10142.4	10228.3	9933.4	9896.0	9795.2	9825.1	9619.8	9030.0	7719.7	6178.0
62.5°	9627.3	9492.9	9925.9	9825.1	10075.2	10075.2	10112.5	9806.4	9160.6	7775.7	6155.6
65°	8298.3	8305.8	9067.3	9485.4	10288.0	10459.7	10489.6	9922.2	9086.0	7611.5	5946.6
67.5°	6611.0	6659.6	7753.3	8623.1	10075.2	10721.0	10724.7	10026.7	8765.0	7148.6	5461.3
70°	4837.9	4875.2	6166.8	7223.2	9071.1	10142.4	10082.7	9731.8	8066.9	6342.3	4703.5
72.5°	3270.1	3303.7	4632.6	5547.2	7443.5	8638.0	8507.4	8600.7	6876.1	5211.2	3781.5
75°	2198.7	2239.8	3296.2	3968.1	5476.2	6558.8	6267.6	6514.0	5319.4	3945.7	2758.6
77.5°	1384.9	1411.1	2094.2	2601.9	3740.4	4464.6	4173.4	4177.2	3064.7	2124.0	1482.0
80°	881.0	888.4	1269.2	1500.6	2165.1	2684.0	2374.2	1929.9	1381.2	1127.3	884.7
82.5°	511.4	500.2	757.8	847.4	1030.3	1019.1	843.6	798.8	604.7	563.7	451.7
85°	205.3	190.4	332.2	309.8	313.6	332.2	246.4	246.4	197.8	153.1	112.0
87.5°	41.1	41.1	44.8	41.1	41.1	44.8	33.6	33.6	29.9	29.9	29.9
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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CATALOG NUMBER: ARCH3-180-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3
2.5°	4061.4	4054.0	4035.3	3986.8	3960.7	3945.7	3923.3	3915.9	3912.1	3915.9	3927.1
5°	4072.6	4046.5	3994.2	3915.9	3863.6	3830.0	3792.7	3777.7	3766.5	3766.5	3777.7
7.5°	4080.1	4039.0	3949.5	3833.7	3759.1	3706.8	3662.0	3643.4	3639.6	3650.8	3654.6
10°	4083.8	4024.1	3897.2	3751.6	3654.6	3587.4	3542.6	3531.4	3542.6	3565.0	3568.7
12.5°	4110.0	4027.8	3867.3	3695.6	3579.9	3512.7	3479.1	3479.1	3509.0	3550.0	3553.8
15°	4154.8	4054.0	3852.4	3650.8	3531.4	3471.6	3460.4	3479.1	3523.9	3587.4	3594.8
17.5°	4188.4	4068.9	3818.8	3591.1	3467.9	3430.6	3449.2	3494.0	3557.5	3643.4	3650.8
20°	4210.8	4068.9	3770.3	3520.2	3404.4	3397.0	3449.2	3520.2	3587.4	3688.1	3699.3
22.5°	4233.2	4061.4	3714.3	3434.3	3333.5	3355.9	3453.0	3542.6	3609.8	3718.0	3736.7
25°	4274.2	4072.6	3658.3	3348.4	3258.9	3322.3	3449.2	3557.5	3628.4	3740.4	3770.3
27.5°	4330.2	4098.8	3617.2	3270.1	3184.2	3270.1	3423.1	3553.8	3628.4	3736.7	3770.3
30°	4389.9	4128.6	3568.7	3184.2	3098.3	3195.4	3367.1	3512.7	3598.6	3699.3	3740.4
32.5°	4453.4	4162.2	3527.6	3090.9	2993.8	3094.6	3285.0	3449.2	3542.6	3635.9	3680.7
35°	4539.3	4222.0	3505.2	3016.2	2900.5	2990.1	3180.5	3367.1	3467.9	3553.8	3606.0
37.5°	4643.8	4296.6	3494.0	2941.6	2799.7	2874.4	3068.5	3266.3	3374.6	3445.5	3494.0
40°	4763.2	4389.9	3490.3	2870.6	2698.9	2754.9	2952.8	3150.6	3255.1	3311.1	3352.2
42.5°	4897.6	4494.5	3482.8	2799.7	2598.1	2642.9	2840.8	3034.9	3124.5	3173.0	3210.3
45°	5039.5	4599.0	3467.9	2713.8	2489.9	2542.1	2725.0	2896.8	2990.1	3031.1	3072.2
47.5°	5181.3	4703.5	3438.0	2616.8	2392.8	2441.3	2601.9	2751.2	2825.8	2863.2	2904.2
50°	5319.4	4796.8	3367.1	2504.8	2292.0	2336.8	2460.0	2560.8	2616.8	2646.7	2687.7
52.5°	5442.6	4860.3	3266.3	2374.2	2191.2	2213.6	2295.8	2381.6	2426.4	2430.1	2467.5
55°	5547.2	4893.9	3120.7	2239.8	2083.0	2086.7	2131.5	2198.7	2217.4	2202.4	2228.6
57.5°	5606.9	4875.2	2960.2	2101.6	1971.0	1956.1	1989.7	2023.3	2027.0	1989.7	2015.8
60°	5621.8	4789.4	2751.2	1963.5	1859.0	1817.9	1829.1	1821.7	1814.2	1799.3	1821.7
62.5°	5547.2	4606.5	2519.7	1829.1	1739.6	1676.1	1672.4	1668.6	1679.8	1683.6	1687.3
65°	5274.6	4263.0	2243.5	1691.0	1612.6	1526.8	1523.0	1567.8	1582.8	1560.4	1567.8
67.5°	4748.3	3736.7	1941.1	1530.5	1452.1	1377.5	1407.3	1433.5	1459.6	1452.1	1459.6
70°	4001.7	3068.5	1664.9	1351.3	1276.7	1235.6	1269.2	1291.6	1295.3	1287.9	1295.3
72.5°	3146.9	2396.5	1407.3	1168.4	1101.2	1082.6	1123.6	1142.3	1175.9	1190.8	1194.5
75°	2273.4	1769.4	1153.5	970.6	914.6	914.6	951.9	985.5	1015.4	996.7	985.5
77.5°	1269.2	1056.4	828.7	668.2	679.4	731.7	746.6	783.9	813.8	810.0	802.6
80°	769.0	660.7	559.9	433.0	429.3	470.4	567.4	630.9	645.8	612.2	608.5
82.5°	399.4	347.2	298.6	242.6	268.8	313.6	328.5	395.7	436.8	421.8	440.5
85°	100.8	97.1	108.3	112.0	138.1	153.1	168.0	197.8	130.7	63.5	63.5
87.5°	29.9	29.9	37.3	37.3	48.5	59.7	56.0	56.0	29.9	3.7	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)