

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: P841764

Luminaire Tested: **ARCH4-220-740-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841764
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34408 lumens
Efficiency: N/A
Efficacy: 155.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 221.8
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



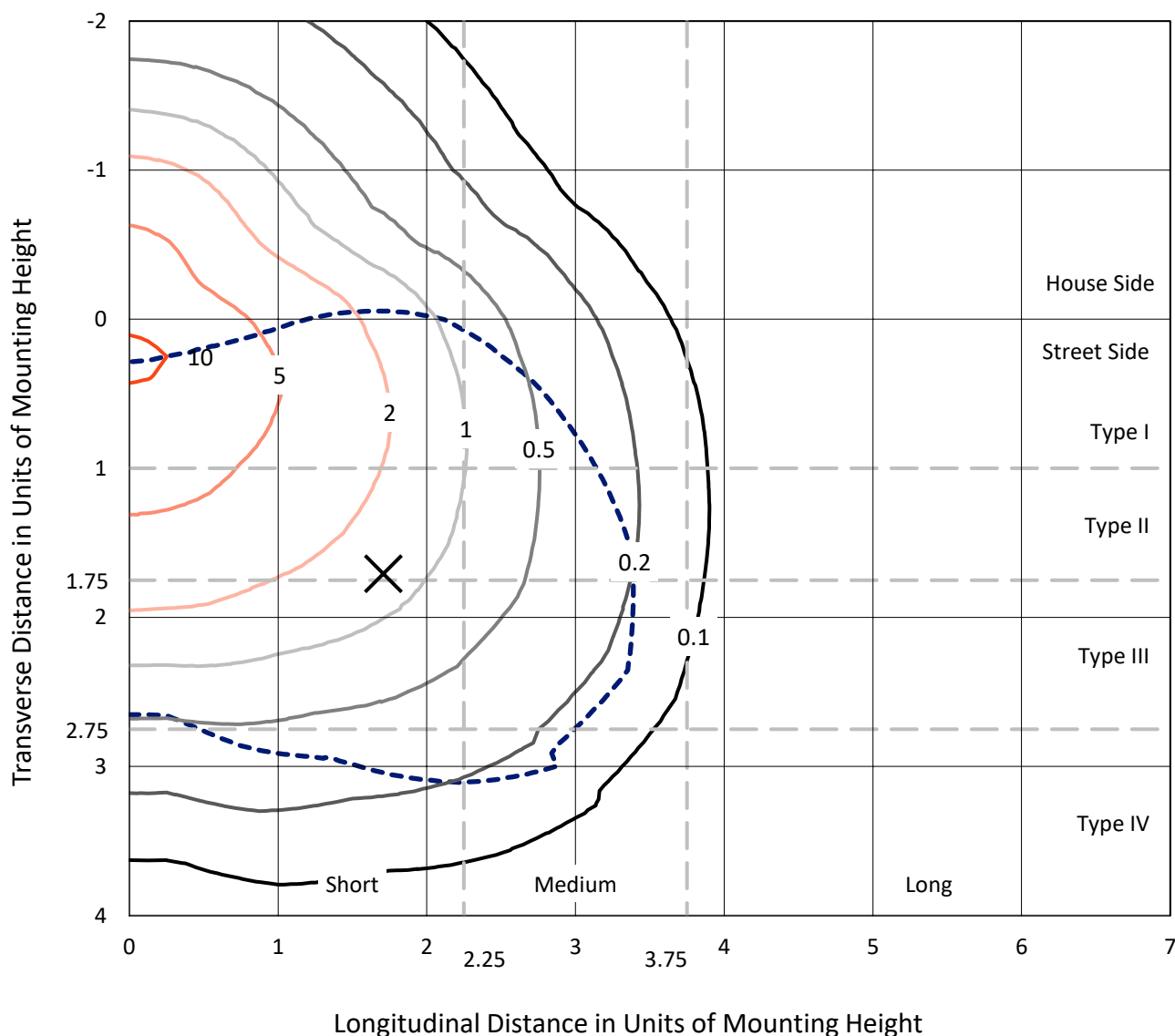
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

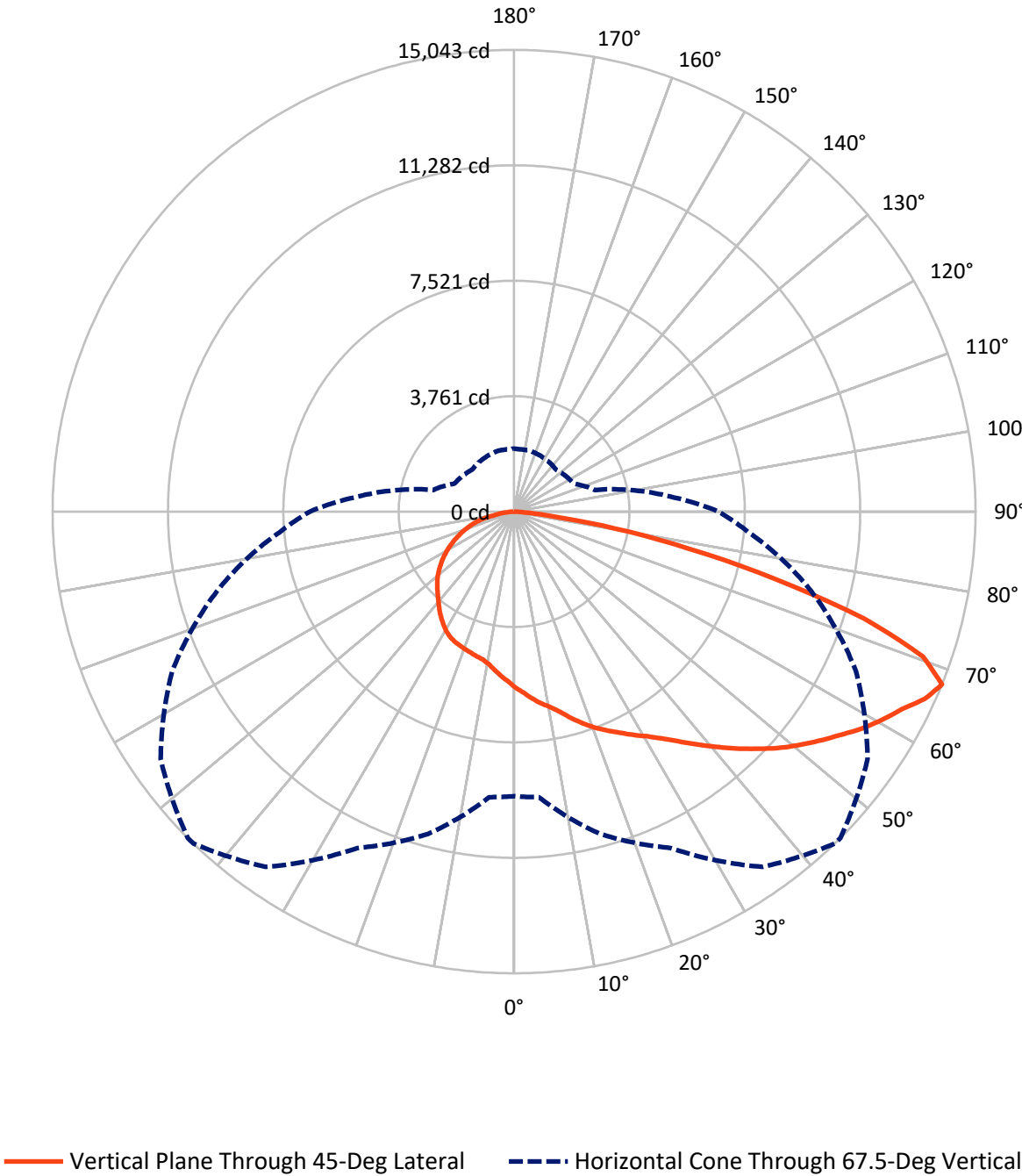


Based on 25 foot mounting height. Maximum calculated value = 10.7 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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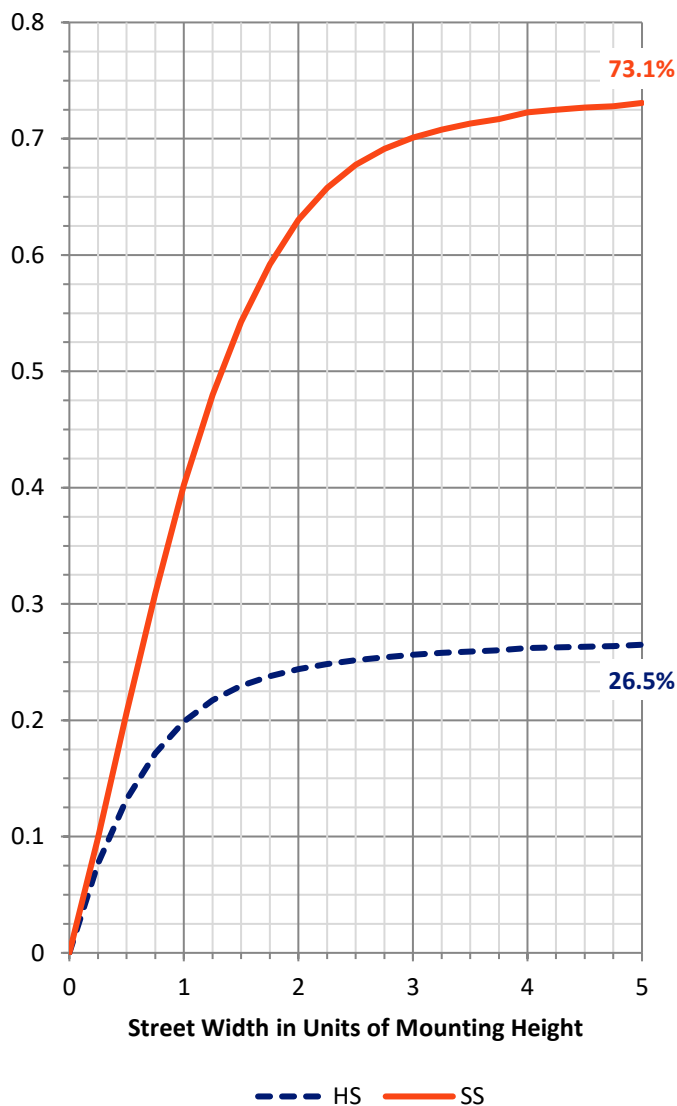
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9192.1	0.0	9192.1
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	25215.9	0.0	25215.9
	% Fixture	73.3	0.0	73.3
Total	Lumens	34408.0	0.0	34408.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	549.4	1.6
10°-20°	1697.3	4.9
20°-30°	2929.7	8.5
30°-40°	4320.3	12.6
40°-50°	5853.2	17.0
50°-60°	7154.0	20.8
60°-70°	7378.3	21.4
70°-80°	4041.3	11.7
80°-90°	484.4	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°	34408.0	100.0
0°-180°	34408.0	100.0

Coefficient of Utilization



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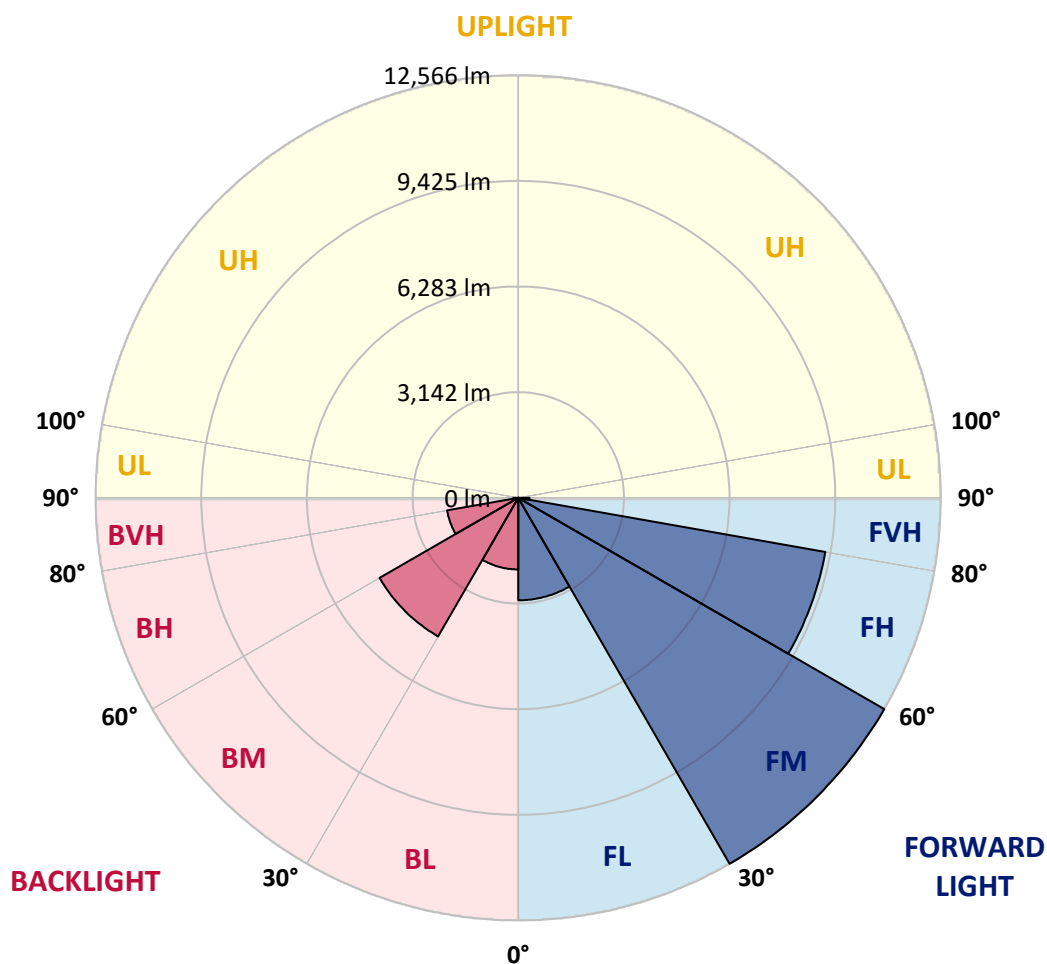
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3046.0	8.9			
FM	(30°-60°)	12566.1	36.5			
FH	(60°-80°)	9270.0	26.9			G4/12000
FVH	(80°-90°)	333.7	1.0			G3/500
BL	(0°-30°)	2130.4	6.2	B3/2500		
BM	(30°-60°)	4761.4	13.8	B3/5000		
BH	(60°-80°)	2149.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	150.7	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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6
2.5°	5989.9	5984.7	5995.2	5958.5	5911.4	5906.2	5906.2	5874.7	5838.1	5764.8	5707.2
5°	6272.7	6262.2	6267.4	6215.1	6152.2	6120.8	6115.6	6047.5	5963.7	5848.6	5743.8
7.5°	6534.5	6524.0	6518.8	6461.2	6366.9	6314.6	6309.3	6209.8	6110.4	5932.3	5780.5
10°	6780.6	6770.1	6759.6	6681.1	6565.9	6487.3	6476.9	6351.2	6225.5	6005.6	5811.9
12.5°	7094.7	7073.8	7063.3	6969.1	6801.5	6717.7	6702.0	6534.5	6377.4	6110.4	5874.7
15°	7424.6	7408.9	7393.2	7304.2	7115.7	7005.7	6979.5	6770.1	6555.4	6246.5	5969.0
17.5°	7670.7	7655.0	7655.0	7576.4	7403.6	7278.0	7257.0	7005.7	6738.7	6372.2	6042.3
20°	7822.5	7806.8	7822.5	7775.4	7644.5	7539.8	7518.8	7241.3	6921.9	6487.3	6105.1
22.5°	7932.5	7916.8	7942.9	7922.0	7827.7	7764.9	7749.2	7476.9	7110.4	6607.8	6167.9
25°	8126.2	8126.2	8126.2	8089.5	8000.5	7979.6	7979.6	7744.0	7351.3	6764.8	6262.2
27.5°	8513.7	8492.7	8466.5	8361.8	8210.0	8204.7	8236.2	8016.2	7628.8	6969.1	6377.4
30°	9084.4	9073.9	8974.4	8754.5	8497.9	8471.8	8492.7	8309.5	7927.2	7183.7	6508.3
32.5°	9822.6	9786.0	9581.8	9251.9	8885.4	8765.0	8806.9	8613.1	8241.4	7403.6	6633.9
35°	10346.2	10356.7	10210.1	9911.7	9477.1	9157.7	9189.1	8953.5	8581.7	7649.7	6791.0
37.5°	10948.4	10985.0	10765.1	10540.0	10136.8	9592.3	9623.7	9304.3	8922.1	7958.6	6958.6
40°	11780.9	11707.6	11335.8	11068.8	10623.7	10047.8	10074.0	9697.0	9314.8	8251.9	7152.3
42.5°	12477.3	12346.4	11896.1	11555.7	11021.7	10529.5	10555.7	10121.1	9712.7	8576.5	7367.0
45°	13477.3	13116.1	12466.8	12299.2	11430.1	11000.7	11026.9	10571.4	10131.6	8922.1	7597.4
47.5°	14058.5	13482.6	13068.9	12979.9	11880.4	11487.7	11519.1	11047.9	10581.9	9314.8	7838.2
50°	14021.9	13650.1	13529.7	13309.8	12278.3	11943.2	11974.6	11540.0	11037.4	9702.2	8068.6
52.5°	13781.0	13849.1	13786.3	13419.7	12676.2	12383.0	12419.7	12027.0	11503.4	10063.5	8283.3
55°	14152.8	14199.9	14079.5	13597.8	13116.1	12822.8	12864.7	12540.1	11964.1	10382.9	8466.5
57.5°	14597.8	14430.3	14309.9	13911.9	13571.6	13299.3	13346.4	13063.7	12362.1	10639.5	8607.9
60°	14576.9	14226.1	14346.5	13932.9	13880.5	13739.1	13781.0	13493.0	12665.8	10827.9	8665.5
62.5°	13503.5	13315.0	13922.4	13781.0	14131.8	14131.8	14184.2	13754.8	12849.0	10906.5	8634.1
65°	11639.5	11650.0	12718.1	13304.6	14430.3	14671.1	14713.0	13917.2	12744.3	10676.1	8340.9
67.5°	9272.9	9340.9	10875.1	12095.0	14131.8	15037.6	15042.9	14063.8	12294.0	10026.8	7660.2
70°	6785.8	6838.2	8649.8	10131.6	12723.4	14226.1	14142.3	13650.1	11314.9	8895.9	6597.3
72.5°	4586.7	4633.8	6497.8	7780.6	10440.5	12116.0	11932.7	12063.6	9644.6	7309.4	5304.0
75°	3084.0	3141.6	4623.3	5565.8	7681.1	9199.6	8791.2	9136.7	7461.2	5534.4	3869.4
77.5°	1942.5	1979.2	2937.4	3649.5	5246.4	6262.2	5853.8	5859.0	4298.7	2979.3	2078.7
80°	1235.7	1246.2	1780.2	2104.9	3036.9	3764.6	3330.1	2707.0	1937.3	1581.3	1240.9
82.5°	717.3	701.6	1062.9	1188.6	1445.1	1429.4	1183.3	1120.5	848.2	790.6	633.6
85°	288.0	267.0	466.0	434.6	439.8	466.0	345.6	345.6	277.5	214.7	157.1
87.5°	57.6	57.6	62.8	57.6	57.6	62.8	47.1	47.1	41.9	41.9	41.9
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: ARCH4-220-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6	5738.6
2.5°	5696.7	5686.2	5660.1	5592.0	5555.3	5534.4	5503.0	5492.5	5487.3	5492.5	5508.2
5°	5712.4	5675.8	5602.5	5492.5	5419.2	5372.1	5319.7	5298.8	5283.1	5283.1	5298.8
7.5°	5722.9	5665.3	5539.6	5377.3	5272.6	5199.3	5136.5	5110.3	5105.1	5120.8	5126.0
10°	5728.1	5644.4	5466.3	5262.1	5126.0	5031.7	4968.9	4953.2	4968.9	5000.3	5005.6
12.5°	5764.8	5649.6	5424.4	5183.6	5021.3	4927.0	4879.9	4879.9	4921.8	4979.4	4984.6
15°	5827.6	5686.2	5403.5	5120.8	4953.2	4869.4	4853.7	4879.9	4942.7	5031.7	5042.2
17.5°	5874.7	5707.2	5356.4	5037.0	4864.2	4811.8	4838.0	4900.8	4989.9	5110.3	5120.8
20°	5906.2	5707.2	5288.3	4937.5	4775.2	4764.7	4838.0	4937.5	5031.7	5173.1	5188.8
22.5°	5937.6	5696.7	5209.8	4817.1	4675.7	4707.1	4843.3	4968.9	5063.2	5215.0	5241.2
25°	5995.2	5712.4	5131.2	4696.6	4571.0	4660.0	4838.0	4989.9	5089.3	5246.4	5288.3
27.5°	6073.7	5749.1	5073.6	4586.7	4466.3	4586.7	4801.4	4984.6	5089.3	5241.2	5288.3
30°	6157.5	5791.0	5005.6	4466.3	4345.8	4482.0	4722.8	4927.0	5047.5	5188.8	5246.4
32.5°	6246.5	5838.1	4948.0	4335.4	4199.2	4340.6	4607.6	4838.0	4968.9	5099.8	5162.6
35°	6366.9	5921.9	4916.6	4230.6	4068.3	4194.0	4461.0	4722.8	4864.2	4984.6	5057.9
37.5°	6513.5	6026.6	4900.8	4125.9	3927.0	4031.7	4304.0	4581.5	4733.3	4832.8	4900.8
40°	6681.1	6157.5	4895.6	4026.4	3785.6	3864.1	4141.6	4419.1	4565.7	4644.3	4701.9
42.5°	6869.6	6304.1	4885.1	3927.0	3644.2	3707.1	3984.6	4256.8	4382.5	4450.6	4502.9
45°	7068.5	6450.7	4864.2	3806.5	3492.4	3565.7	3822.2	4063.1	4194.0	4251.6	4309.2
47.5°	7267.5	6597.3	4822.3	3670.4	3356.2	3424.3	3649.5	3858.9	3963.6	4016.0	4073.6
50°	7461.2	6728.2	4722.8	3513.3	3214.9	3277.7	3450.5	3591.9	3670.4	3712.3	3769.9
52.5°	7634.0	6817.2	4581.5	3330.1	3073.5	3104.9	3220.1	3340.5	3403.4	3408.6	3461.0
55°	7780.6	6864.3	4377.3	3141.6	2921.7	2926.9	2989.7	3084.0	3110.2	3089.2	3125.9
57.5°	7864.4	6838.2	4152.1	2947.8	2764.6	2743.6	2790.8	2837.9	2843.1	2790.8	2827.4
60°	7885.3	6717.7	3858.9	2754.1	2607.5	2549.9	2565.6	2555.1	2544.7	2523.7	2555.1
62.5°	7780.6	6461.2	3534.3	2565.6	2440.0	2350.9	2345.7	2340.5	2356.2	2361.4	2366.6
65°	7398.4	5979.5	3146.8	2371.9	2261.9	2141.5	2136.3	2199.1	2220.0	2188.6	2199.1
67.5°	6660.1	5241.2	2722.7	2146.7	2036.8	1932.1	1974.0	2010.6	2047.3	2036.8	2047.3
70°	5612.9	4304.0	2335.2	1895.4	1790.7	1733.1	1780.2	1811.6	1816.9	1806.4	1816.9
72.5°	4413.9	3361.5	1974.0	1638.9	1544.6	1518.4	1576.0	1602.2	1649.3	1670.3	1675.5
75°	3188.7	2481.8	1617.9	1361.3	1282.8	1282.8	1335.2	1382.3	1424.2	1398.0	1382.3
77.5°	1780.2	1481.8	1162.4	937.2	952.9	1026.2	1047.2	1099.5	1141.4	1136.2	1125.7
80°	1078.6	926.8	785.4	607.4	602.1	659.7	795.9	884.9	905.8	858.7	853.5
82.5°	560.2	486.9	418.9	340.3	377.0	439.8	460.8	555.0	612.6	591.7	617.8
85°	141.4	136.1	151.8	157.1	193.7	214.7	235.6	277.5	183.3	89.0	89.0
87.5°	41.9	41.9	52.4	52.4	68.1	83.8	78.5	78.5	41.9	5.2	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)