

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: P265721

Luminaire Tested: **ARCH-L-AF72-250-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265721
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17916 lumens
Efficiency: N/A
Efficacy: 71.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 251
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: 28.75 FT

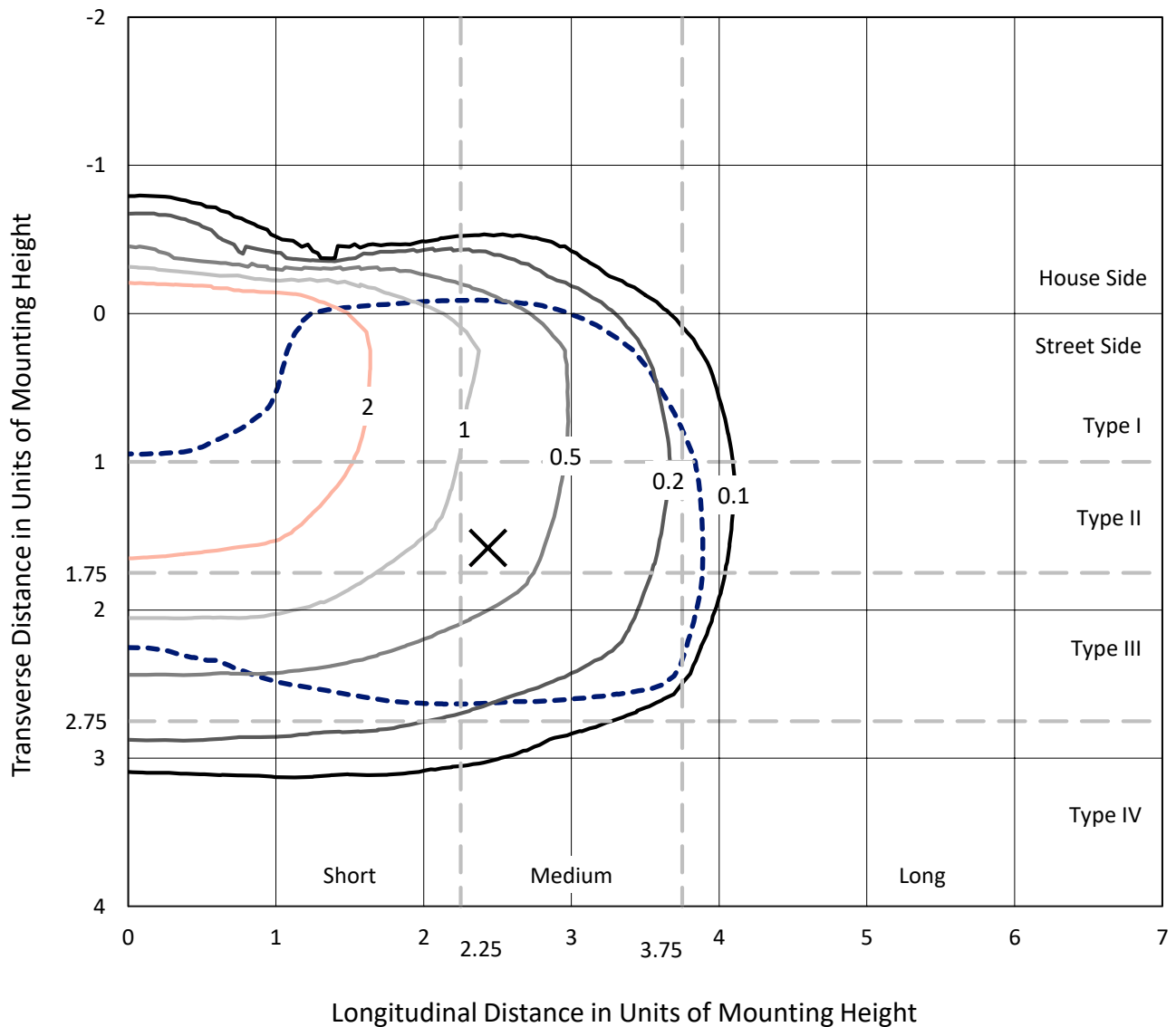


REPORT NUMBER: P265721

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T3-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

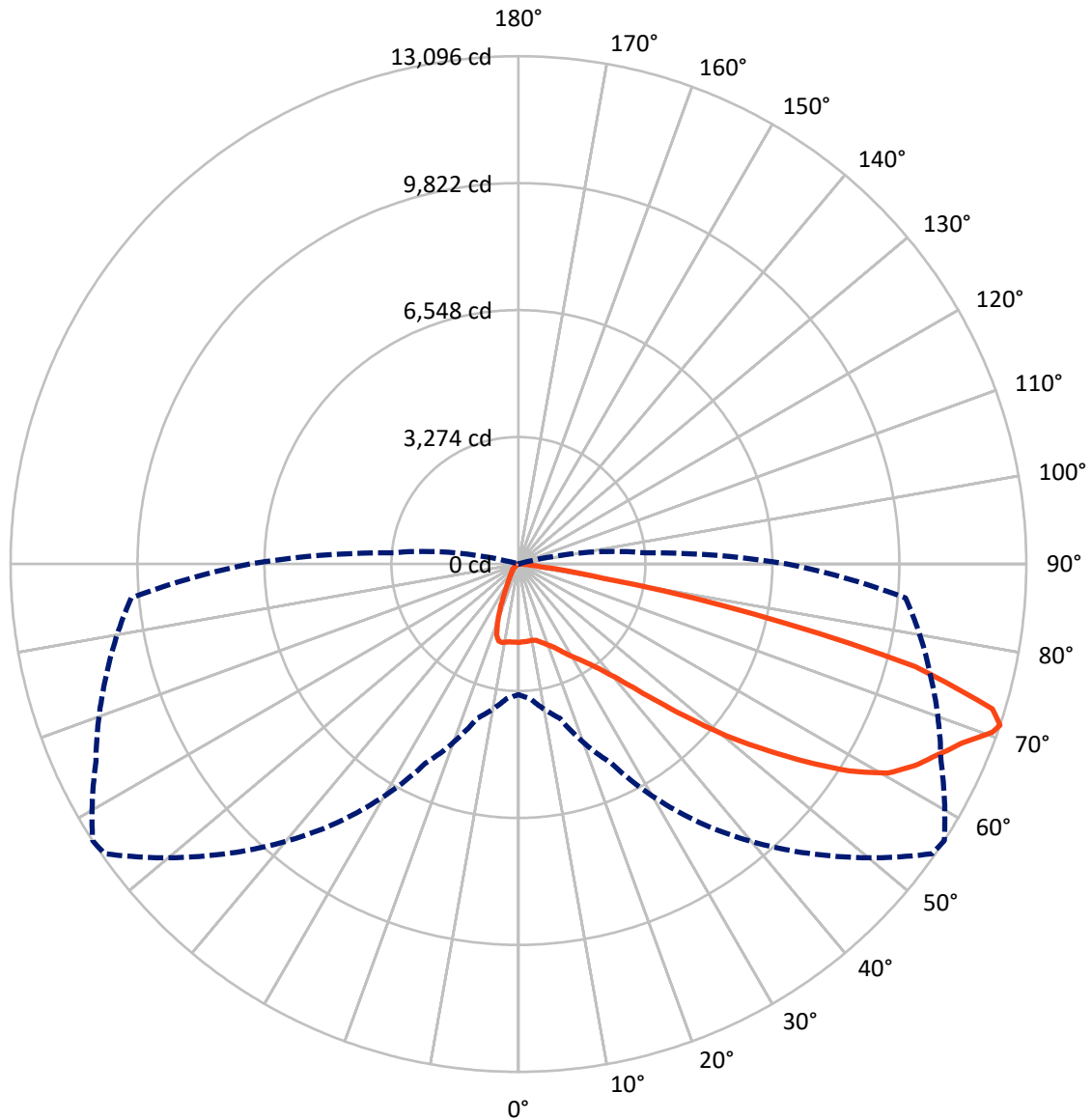


Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P265721

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T3-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P265721

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T3-7027-HSS

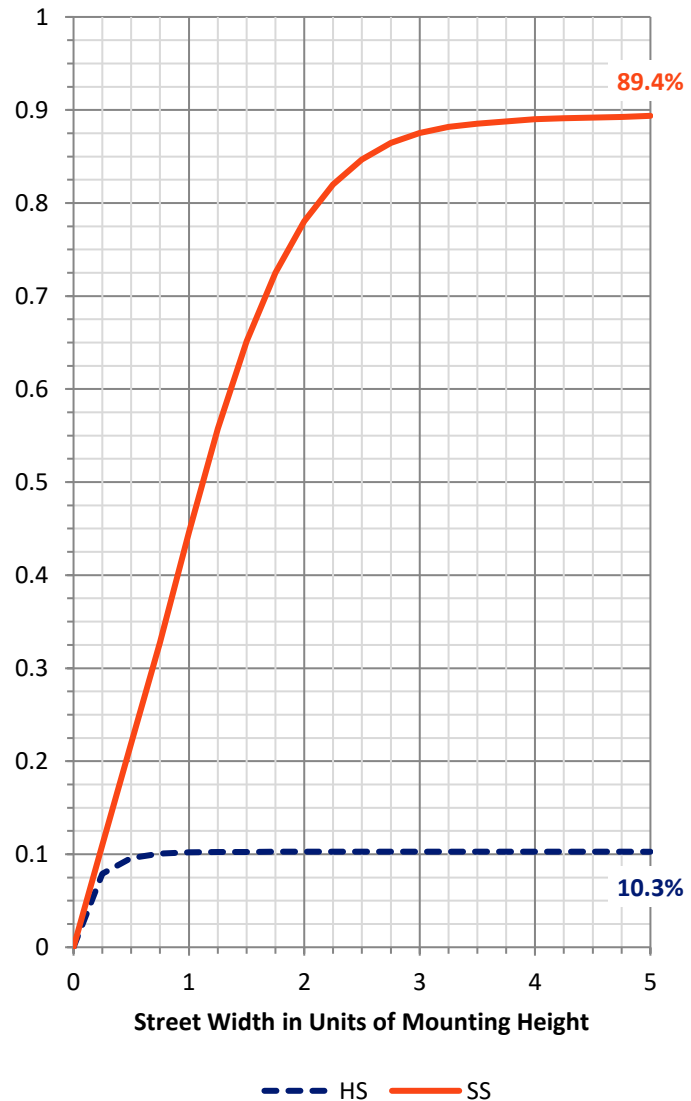
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1856.7	0.0	1856.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	16059.3	0.0	16059.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	17916.0	0.0	17916.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.2	1.1
10°-20°	508.4	2.8
20°-30°	793.1	4.4
30°-40°	1340.5	7.5
40°-50°	2603.7	14.5
50°-60°	4372.4	24.4
60°-70°	5218.0	29.1
70°-80°	2750.0	15.3
80°-90°	139.7	0.8
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°	17916.0	100.0
0°-180°	17916.0	100.0



REPORT NUMBER: P265721

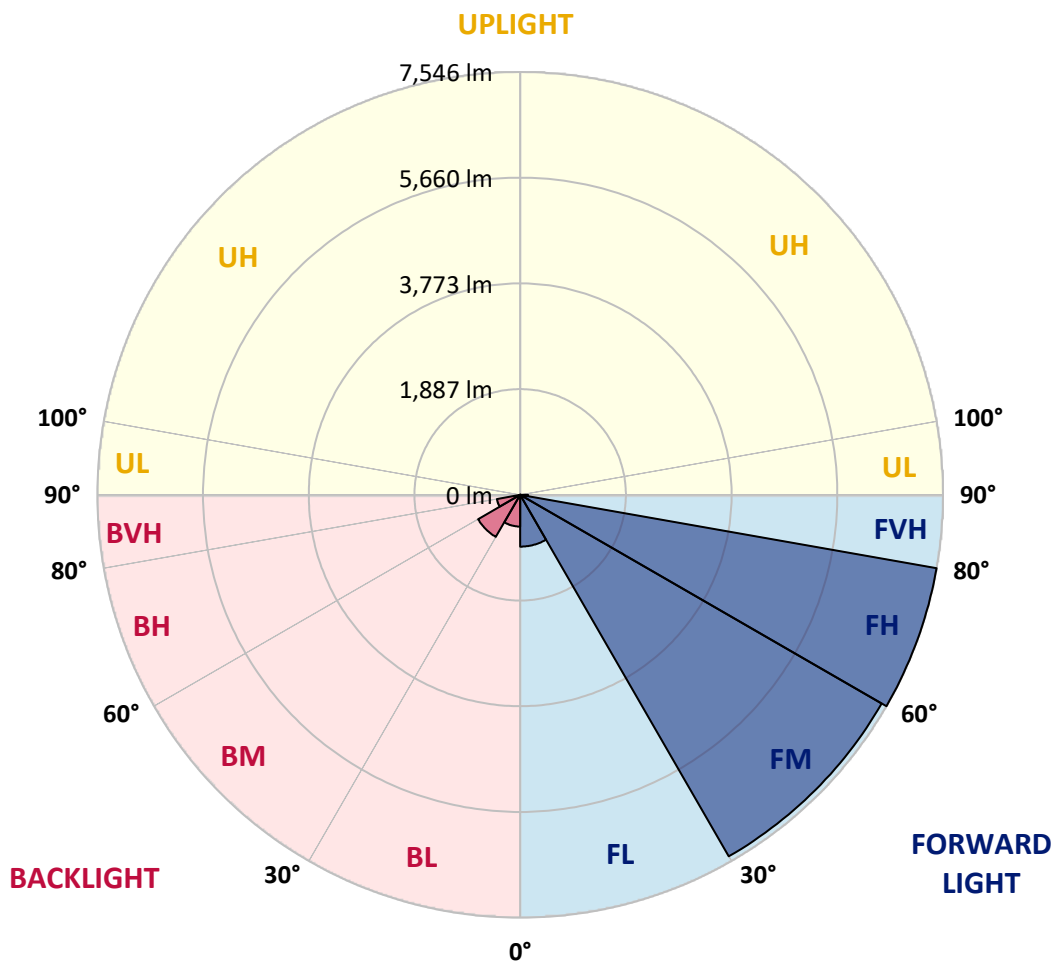
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	925.0	5.2			
FM	(30°-60°)	7449.6	41.6			
FH	(60°-80°)	7546.3	42.1			G4/12000
FVH	(80°-90°)	138.4	0.8			G2/225
BL	(0°-30°)	566.7	3.2	B2/1000		
BM	(30°-60°)	866.9	4.8	B1/1000		
BH	(60°-80°)	421.6	2.4	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





REPORT NUMBER: P265721

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T3-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8
2.5°	1995.6	1995.6	1995.6	1999.7	2003.8	2003.8	2012.3	2008.2	2008.2	2008.2	2016.4
5°	1941.2	1945.5	1949.6	1957.9	1974.7	1987.2	2008.2	2008.2	2012.3	2020.6	2024.8
7.5°	1866.0	1870.4	1882.8	1899.6	1933.0	1962.2	1995.6	2003.8	2016.4	2037.3	2045.6
10°	1820.2	1828.6	1845.3	1866.0	1903.7	1941.2	1983.0	1995.6	2033.1	2070.8	2091.6
12.5°	1807.7	1811.8	1828.6	1861.9	1907.9	1953.9	2008.2	2020.6	2074.8	2133.4	2166.7
15°	1828.6	1832.7	1841.0	1878.6	1933.0	1991.5	2062.4	2079.0	2145.8	2212.6	2254.3
17.5°	1866.0	1866.0	1874.6	1907.9	1966.3	2033.1	2125.0	2150.1	2225.1	2300.3	2346.3
20°	1891.2	1891.2	1903.7	1937.1	2003.8	2091.6	2200.0	2233.5	2317.0	2400.5	2442.2
22.5°	1916.3	1920.3	1933.0	1970.5	2045.6	2166.7	2291.9	2325.4	2421.4	2509.1	2550.7
25°	1987.2	1983.0	1987.2	2020.6	2108.3	2258.6	2417.2	2458.9	2559.1	2655.2	2676.1
27.5°	2183.4	2175.1	2120.8	2099.9	2166.7	2354.5	2575.8	2617.7	2734.5	2830.5	2830.5
30°	2634.3	2617.7	2484.1	2312.9	2258.6	2442.2	2726.1	2784.6	2934.9	3018.3	2993.3
32.5°	3206.2	3168.7	2997.6	2705.2	2488.1	2559.1	2884.7	2951.7	3143.6	3214.6	3160.2
35°	3832.4	3828.2	3615.4	3239.6	2930.7	2801.3	3089.4	3168.7	3410.9	3473.4	3385.7
37.5°	4496.2	4512.9	4371.1	3853.3	3490.2	3197.8	3360.6	3452.5	3748.9	3824.2	3740.6
40°	5235.2	5231.0	5176.8	4563.0	4162.2	3761.6	3753.2	3836.7	4195.7	4312.6	4195.7
42.5°	6170.4	6162.1	5965.7	5414.8	4976.3	4496.2	4325.1	4354.4	4755.1	4947.1	4776.0
45°	7122.2	7063.7	6838.3	6362.3	5974.2	5406.4	5080.8	5080.8	5423.1	5686.1	5418.8
47.5°	7652.4	7593.9	7502.1	7239.1	7122.2	6487.6	6007.5	5949.0	6216.4	6483.4	6107.8
50°	8349.6	8349.6	8120.0	8019.8	8220.2	7773.5	7030.3	6971.9	7101.3	7314.2	6821.5
52.5°	8900.6	8800.4	8637.7	8725.2	9297.3	9092.7	8053.1	7940.5	8040.6	8094.9	7443.6
55°	9130.3	9034.3	9021.8	9343.2	10228.2	9944.3	9101.1	9000.8	8992.6	8725.2	7986.4
57.5°	9176.1	9092.7	9251.4	9814.9	11134.2	10641.5	10144.7	10069.6	9835.8	9167.8	8541.7
60°	8787.9	8829.7	9213.7	10073.9	11668.5	11246.9	11025.6	10946.2	10407.8	9543.6	9159.5
62.5°	7990.6	8090.8	8808.8	10098.8	11472.3	11493.3	11514.0	11459.8	10850.3	9885.8	9781.6
65°	7047.1	7076.3	7940.5	9752.3	11130.0	11418.0	11873.1	11868.9	11188.5	10270.1	10483.0
67.5°	5807.2	5857.3	6604.5	8583.3	10445.3	11384.7	12344.9	12332.3	11572.5	10708.3	10900.5
70°	4320.8	4383.5	4988.8	6675.5	8917.4	10967.1	12962.7	12971.0	11977.6	11042.3	10612.3
71°	3369.1	3481.8	4116.4	5669.4	8136.7	10545.6	13021.2	13096.3	12023.5	10996.4	10019.5
72.5°	1653.2	1786.8	2584.2	3991.1	6696.3	9602.1	12637.0	12783.2	11735.4	10424.6	8566.6
75°	430.0	455.0	772.4	1632.3	3590.3	6362.3	10190.7	10562.2	9593.7	7936.3	5235.2
77.5°	271.4	279.7	363.3	634.6	1344.3	2417.2	5986.7	6170.4	5481.5	4020.4	1845.3
80°	192.1	196.2	229.5	409.1	784.8	705.6	2154.1	2233.5	1983.0	1064.6	329.8
82.5°	116.9	116.9	166.9	263.1	484.2	384.0	567.8	605.4	534.4	296.4	108.5
85°	66.8	71.0	104.4	179.5	229.5	187.8	212.9	225.5	229.5	196.2	46.0
87.5°	54.3	58.4	91.8	150.2	125.3	91.8	91.8	95.9	100.3	116.9	20.9
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: ARCH-L-AF72-250-D-U-T3-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8	2024.8
2.5°	2016.4	2016.4	2020.6	2016.4	2016.4	2016.4	2020.6	2020.6	2020.6	2028.9	2033.1
5°	2024.8	2024.8	2024.8	2020.6	2016.4	2016.4	2024.8	2028.9	2028.9	2041.5	2041.5
7.5°	2045.6	2045.6	2037.3	2028.9	2020.6	2008.2	2012.3	2016.4	2012.3	2016.4	2016.4
10°	2091.6	2091.6	2079.0	2062.4	2037.3	1999.7	1949.6	1887.0	1828.6	1807.7	1799.3
12.5°	2166.7	2162.5	2137.4	2108.3	2054.1	1924.6	1736.8	1515.4	1331.7	1281.6	1265.0
15°	2250.3	2241.9	2212.6	2162.5	2016.4	1674.1	1281.6	997.7	822.5	780.6	772.4
17.5°	2337.8	2325.4	2283.6	2183.4	1845.3	1244.2	826.6	626.2	530.2	521.8	526.0
20°	2429.7	2413.0	2354.5	2141.6	1490.4	830.8	534.4	484.2	475.9	475.9	480.1
22.5°	2534.1	2513.2	2433.9	1991.5	1085.4	551.1	459.3	455.0	450.9	446.6	446.6
25°	2655.2	2630.1	2509.1	1720.1	747.3	450.9	438.4	425.8	417.5	409.1	405.0
27.5°	2801.3	2767.9	2567.4	1386.1	513.6	421.7	413.3	392.4	375.8	359.1	359.1
30°	2947.3	2905.7	2550.7	1043.7	417.5	392.4	375.8	350.7	325.6	308.9	304.7
32.5°	3101.8	3060.2	2442.2	701.3	380.0	359.1	338.1	300.7	271.4	250.4	246.3
35°	3331.5	3298.0	2229.4	463.3	342.3	317.3	288.0	250.4	212.9	192.1	187.8
37.5°	3673.8	3632.0	1966.3	354.9	300.7	263.1	238.1	196.2	158.6	137.8	133.6
40°	4133.0	4007.8	1653.2	313.1	263.1	217.1	183.8	141.9	112.6	100.3	100.3
42.5°	4667.5	4371.1	1315.1	283.9	233.7	179.5	133.6	95.9	79.3	75.2	75.2
45°	5235.2	4709.2	976.8	263.1	204.5	141.9	95.9	66.8	58.4	54.3	54.3
47.5°	5819.7	4984.8	680.5	238.1	171.1	108.5	66.8	50.0	41.7	37.5	37.5
50°	6366.6	5164.3	480.1	212.9	146.2	79.3	50.0	37.5	29.3	29.3	29.3
52.5°	6746.5	5147.5	346.4	183.8	112.6	54.3	33.3	25.1	25.1	25.1	25.1
55°	7080.4	5084.9	271.4	158.6	87.7	37.5	25.1	20.9	20.9	16.7	16.7
57.5°	7364.3	4984.8	229.5	129.4	62.6	29.3	16.7	16.7	12.5	12.5	12.5
60°	7606.5	4859.4	192.1	108.5	41.7	20.9	12.5	8.4	8.4	4.2	8.4
62.5°	7936.3	4780.2	166.9	83.5	29.3	12.5	8.4	4.2	4.2	0.0	0.0
65°	8178.3	4629.9	141.9	58.4	16.7	8.4	4.2	4.2	0.0	0.0	0.0
67.5°	8186.8	4358.4	104.4	33.3	12.5	8.4	4.2	0.0	0.0	0.0	0.0
70°	7527.2	3715.6	66.8	16.7	8.4	4.2	4.2	0.0	0.0	0.0	0.0
71°	6921.8	3289.8	54.3	12.5	8.4	4.2	0.0	0.0	0.0	0.0	0.0
72.5°	5702.8	2417.2	41.7	12.5	4.2	4.2	0.0	0.0	0.0	0.0	0.0
75°	3143.6	876.7	20.9	8.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1006.1	267.2	12.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	171.1	41.7	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	58.4	16.7	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.7	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0	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)