

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: P265748

Luminaire Tested: **ARCH-L-AF72-280-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265748
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-AF72-280-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1180mA 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: 19123.2 lumens
Efficiency: N/A
Efficacy: 68.5 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): 279
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

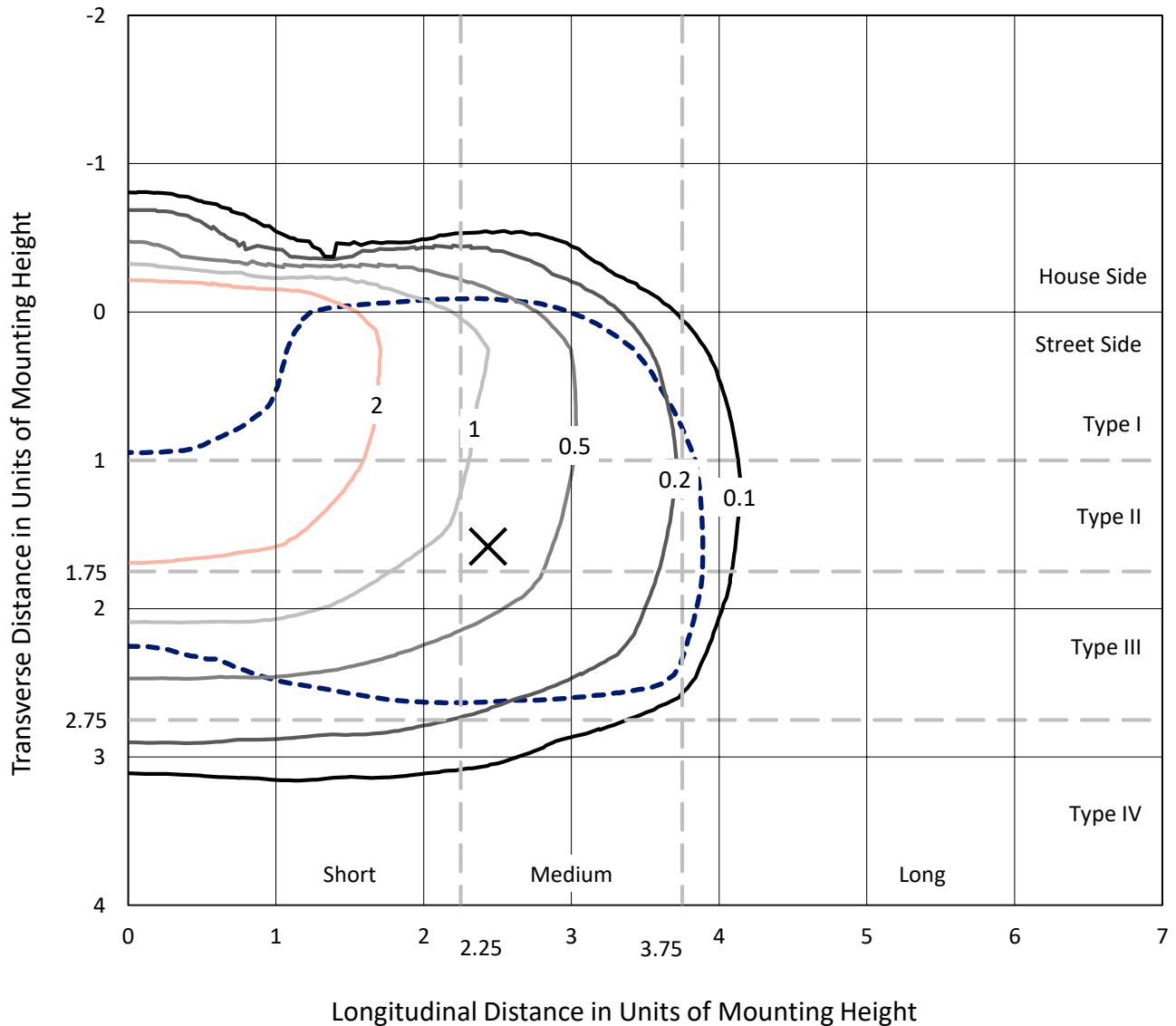


REPORT NUMBER: P265748

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

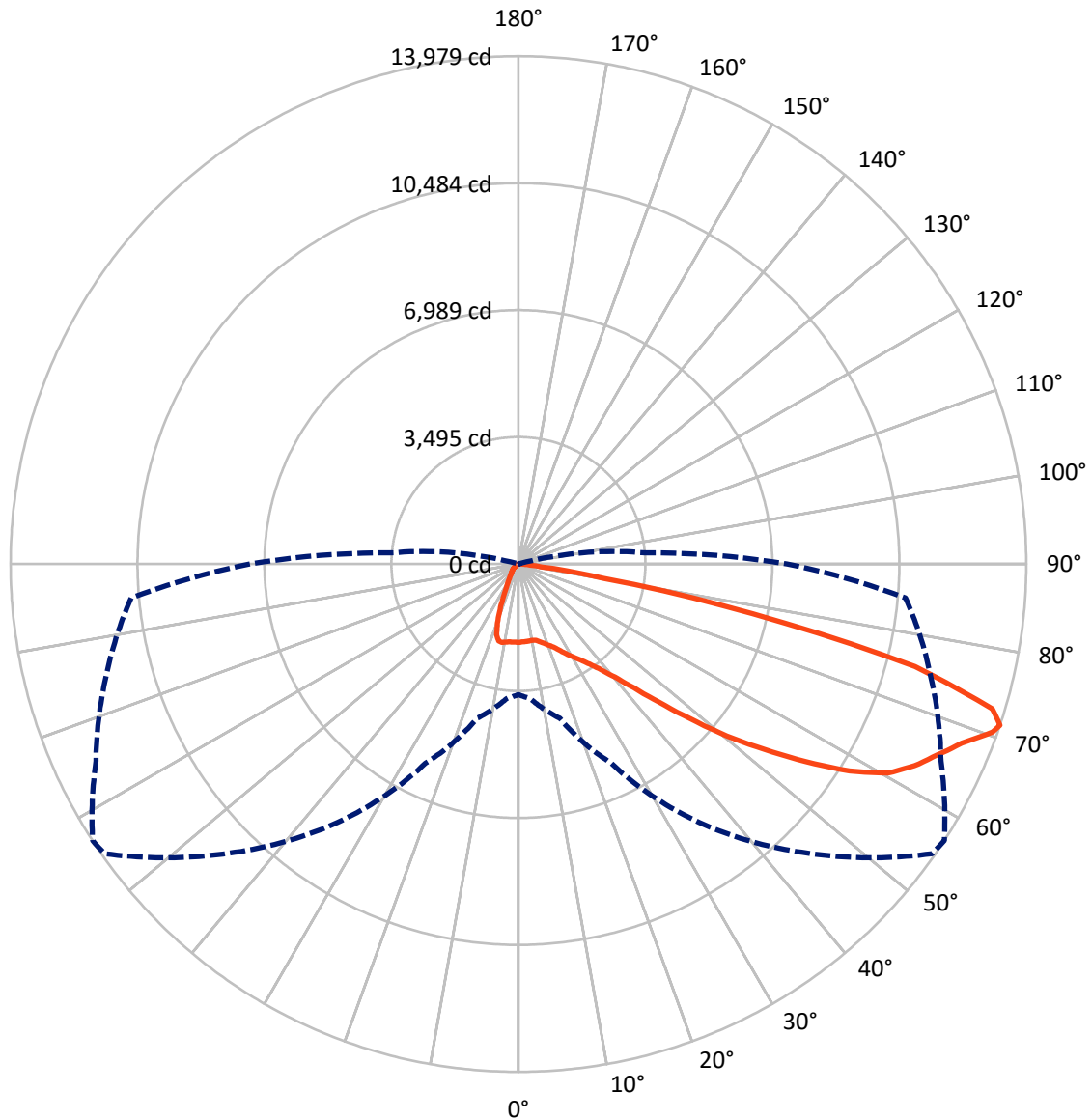


Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P265748

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7027-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265748

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7027-HSS

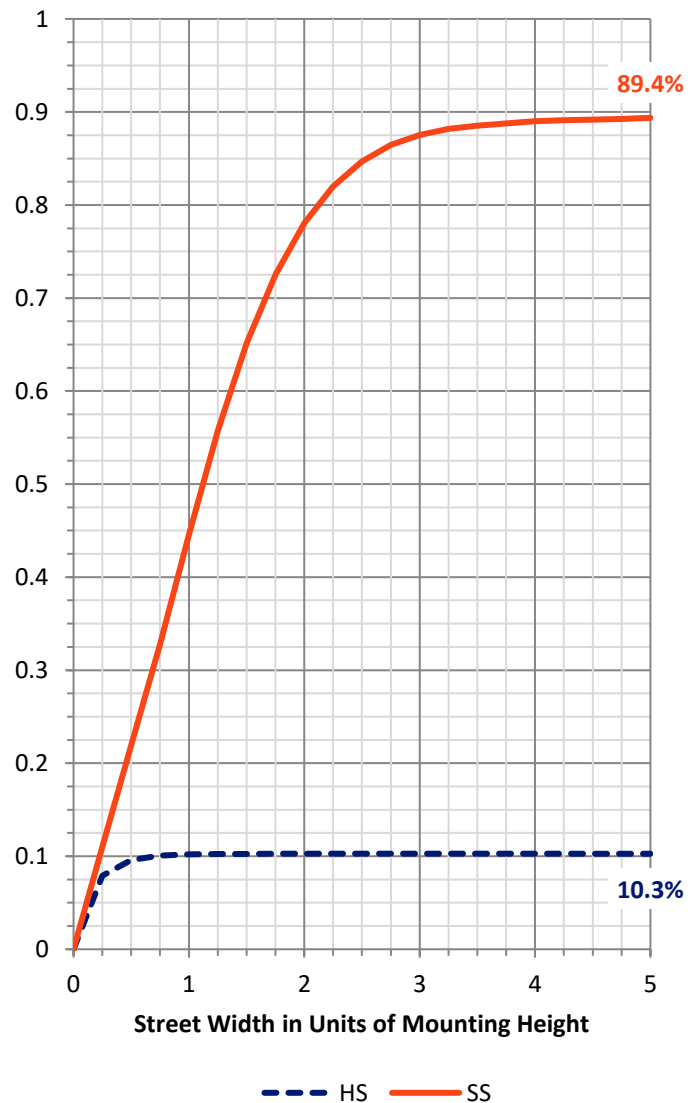
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1981.8	0.0	1981.8
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	17141.4	0.0	17141.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	19123.2	0.0	19123.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.0	1.1
10°-20°	542.7	2.8
20°-30°	846.6	4.4
30°-40°	1430.9	7.5
40°-50°	2779.1	14.5
50°-60°	4667.0	24.4
60°-70°	5569.6	29.1
70°-80°	2935.2	15.3
80°-90°	149.2	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°	19123.2	100.0
0°-180°	19123.2	100.0

Coefficient of Utilization



REPORT NUMBER: P265748

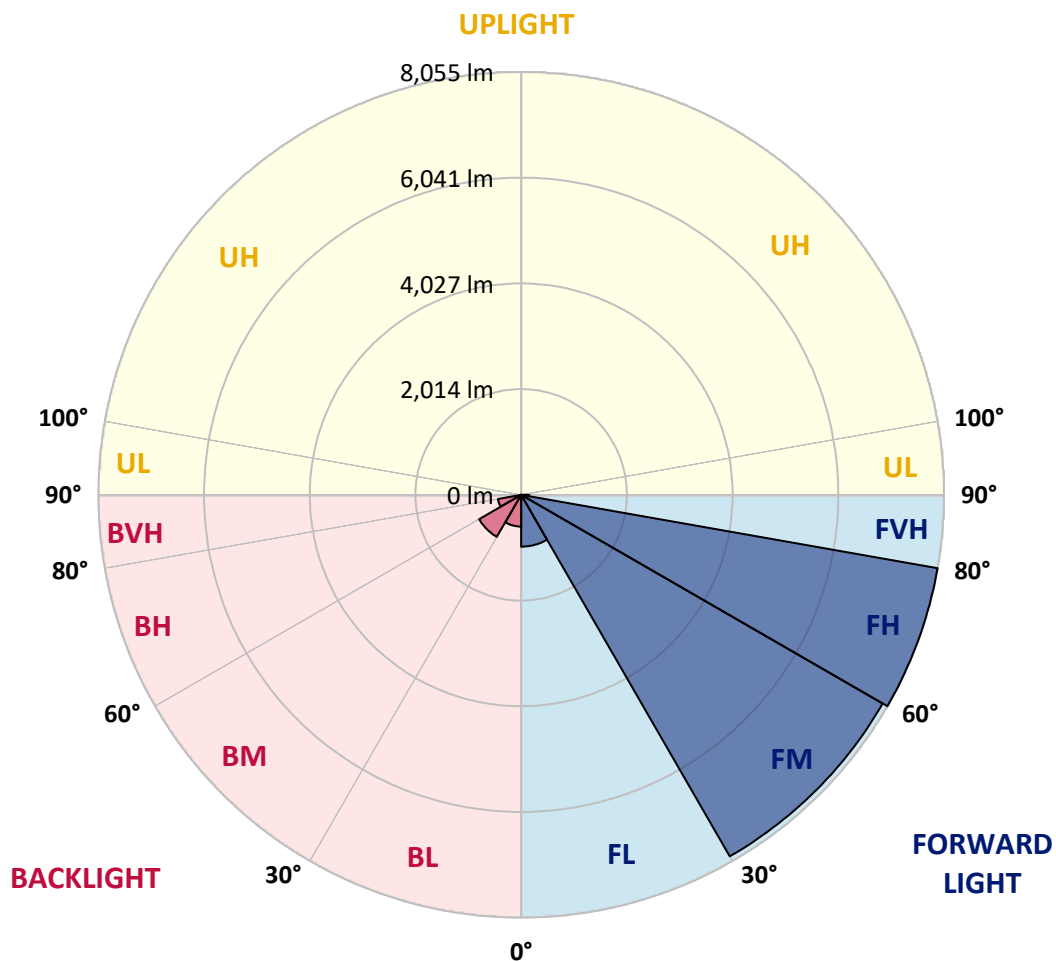
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	987.3	5.2			
FM	(30°-60°)	7951.6	41.6			
FH	(60°-80°)	8054.8	42.1			G4/12000
FVH	(80°-90°)	147.7	0.8			G2/225
BL	(0°-30°)	604.9	3.2	B2/1000		
BM	(30°-60°)	925.4	4.8	B1/1000		
BH	(60°-80°)	450.0	2.4	B1/500		G1/500
BVH	(80°-90°)	1.4	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: P265748

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2
2.5°	2130.1	2130.1	2130.1	2134.5	2139.0	2139.0	2147.8	2143.4	2143.4	2143.4	2152.2
5°	2072.1	2076.5	2081.1	2089.8	2107.8	2121.1	2143.4	2143.4	2147.8	2156.7	2161.2
7.5°	1991.9	1996.4	2009.7	2027.6	2063.1	2094.4	2130.1	2139.0	2152.2	2174.5	2183.5
10°	1942.9	1951.7	1969.7	1991.9	2032.0	2072.1	2116.6	2130.1	2170.1	2210.2	2232.5
12.5°	1929.5	1934.0	1951.7	1987.4	2036.5	2085.4	2143.4	2156.7	2214.7	2277.1	2312.7
15°	1951.7	1956.1	1965.1	2005.2	2063.1	2125.6	2201.2	2219.2	2290.5	2361.7	2406.3
17.5°	1991.9	1991.9	2000.7	2036.5	2098.8	2170.1	2268.2	2294.9	2375.1	2455.2	2504.4
20°	2018.6	2018.6	2032.0	2067.5	2139.0	2232.5	2348.3	2384.0	2473.2	2562.2	2606.8
22.5°	2045.4	2049.8	2063.1	2103.3	2183.5	2312.7	2446.4	2482.0	2584.6	2678.0	2722.8
25°	2121.1	2116.6	2121.1	2156.7	2250.3	2410.7	2580.1	2624.7	2731.6	2834.2	2856.4
27.5°	2330.6	2321.6	2263.6	2241.5	2312.7	2513.3	2749.4	2794.0	2918.8	3021.2	3021.2
30°	2811.9	2794.0	2651.3	2468.7	2410.7	2606.8	2909.8	2972.2	3132.6	3221.9	3195.0
32.5°	3422.4	3382.2	3199.5	2887.5	2655.7	2731.6	3079.2	3150.4	3355.4	3431.2	3373.2
35°	4090.7	4086.2	3858.9	3457.9	3128.2	2990.1	3297.5	3382.2	3640.7	3707.5	3613.9
37.5°	4799.3	4817.0	4665.5	4113.0	3725.4	3413.4	3587.1	3685.1	4001.6	4081.8	3992.6
40°	5587.9	5583.4	5525.6	4870.5	4442.7	4015.0	4006.0	4095.2	4478.4	4603.2	4478.4
42.5°	6586.2	6577.2	6367.7	5779.5	5311.7	4799.3	4616.5	4647.7	5075.6	5280.4	5097.8
45°	7602.0	7539.7	7299.1	6791.0	6376.7	5770.6	5423.1	5423.1	5788.5	6069.2	5784.0
47.5°	8168.1	8105.6	8007.6	7727.0	7602.0	6924.8	6412.3	6349.9	6635.2	6920.4	6519.3
50°	8912.3	8912.3	8667.1	8560.2	8774.0	8297.3	7504.1	7441.6	7579.8	7807.1	7281.3
52.5°	9500.5	9393.4	9219.7	9313.3	9923.8	9705.4	8595.8	8475.5	8582.4	8640.3	7945.1
55°	9745.5	9643.0	9629.7	9972.8	10917.5	10614.5	9714.4	9607.4	9598.4	9313.3	8524.6
57.5°	9794.5	9705.4	9874.7	10476.4	11884.4	11358.6	10828.3	10748.1	10498.6	9785.5	9117.2
60°	9380.1	9424.7	9834.6	10752.6	12454.8	12004.7	11768.5	11684.0	11109.1	10186.7	9776.8
62.5°	8529.0	8635.9	9402.4	10779.3	12245.3	12267.7	12289.9	12232.0	11581.4	10552.0	10440.6
65°	7521.9	7553.0	8475.5	10409.5	11879.9	12187.5	12673.2	12668.6	11942.3	10961.9	11189.3
67.5°	6198.5	6251.9	7049.5	9161.8	11149.1	12151.8	13176.7	13163.4	12352.4	11429.9	11634.8
70°	4612.1	4678.9	5325.1	7125.3	9518.3	11706.3	13836.2	13845.0	12784.6	11786.4	11327.4
71°	3596.1	3716.4	4393.7	6051.4	8685.0	11256.1	13898.5	13978.7	12833.5	11737.3	10694.6
72.5°	1764.6	1907.2	2758.3	4260.0	7147.5	10249.0	13488.6	13644.5	12526.1	11126.9	9143.8
75°	458.9	485.8	824.4	1742.4	3832.3	6791.0	10877.3	11274.0	10240.0	8471.0	5587.9
77.5°	289.7	298.5	387.7	677.3	1434.9	2580.1	6390.1	6586.2	5850.9	4291.3	1969.7
80°	205.0	209.5	245.1	436.7	837.8	753.0	2299.3	2384.0	2116.6	1136.3	352.0
82.5°	124.8	124.8	178.3	280.7	517.0	409.9	606.0	646.2	570.3	316.5	115.8
85°	71.2	75.7	111.4	191.6	245.1	200.5	227.2	240.7	245.1	209.5	49.0
87.5°	57.9	62.4	98.1	160.3	133.7	98.1	98.1	102.4	107.0	124.8	22.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265748

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2	2161.2
2.5°	2152.2	2152.2	2156.7	2152.2	2152.2	2152.2	2156.7	2156.7	2156.7	2165.6	2170.1
5°	2161.2	2161.2	2161.2	2156.7	2152.2	2152.2	2161.2	2165.6	2165.6	2179.0	2179.0
7.5°	2183.5	2183.5	2174.5	2165.6	2156.7	2143.4	2147.8	2152.2	2147.8	2152.2	2152.2
10°	2232.5	2232.5	2219.2	2201.2	2174.5	2134.5	2081.1	2014.2	1951.7	1929.5	1920.5
12.5°	2312.7	2308.3	2281.5	2250.3	2192.5	2054.2	1853.7	1617.6	1421.5	1367.9	1350.2
15°	2401.9	2392.9	2361.7	2308.3	2152.2	1786.9	1367.9	1065.0	877.9	833.3	824.4
17.5°	2495.4	2482.0	2437.6	2330.6	1969.7	1328.0	882.3	668.3	565.9	556.9	561.5
20°	2593.4	2575.6	2513.3	2285.9	1590.8	886.7	570.3	517.0	508.0	508.0	512.5
22.5°	2704.8	2682.6	2597.9	2125.6	1158.5	588.2	490.1	485.8	481.2	476.8	476.8
25°	2834.2	2807.4	2678.0	1836.0	797.7	481.2	467.8	454.5	445.6	436.7	432.3
27.5°	2990.1	2954.3	2740.5	1479.4	548.1	450.1	441.2	418.9	401.1	383.2	383.2
30°	3146.0	3101.5	2722.8	1114.0	445.6	418.9	401.1	374.4	347.6	329.8	325.2
32.5°	3311.0	3266.3	2606.8	748.6	405.6	383.2	360.9	320.9	289.7	267.3	262.9
35°	3556.0	3520.3	2379.6	494.6	365.4	338.8	307.5	267.3	227.2	205.0	200.5
37.5°	3921.5	3876.8	2098.8	378.7	320.9	280.7	254.0	209.5	169.3	147.1	142.7
40°	4411.5	4277.9	1764.6	334.2	280.7	231.8	196.1	151.5	120.4	107.0	107.0
42.5°	4981.9	4665.5	1403.7	303.0	249.5	191.6	142.7	102.4	84.7	80.2	80.2
45°	5587.9	5026.5	1042.8	280.7	218.4	151.5	102.4	71.2	62.4	57.9	57.9
47.5°	6211.8	5320.7	726.3	254.0	182.6	115.8	71.2	53.4	44.6	40.2	40.2
50°	6795.6	5512.2	512.5	227.2	155.9	84.7	53.4	40.2	31.3	31.3	31.3
52.5°	7201.1	5494.4	369.8	196.1	120.4	57.9	35.7	26.7	26.7	26.7	26.7
55°	7557.5	5427.5	289.7	169.3	93.6	40.2	26.7	22.3	22.3	17.8	17.8
57.5°	7860.6	5320.7	245.1	138.1	66.8	31.3	17.8	17.8	13.4	13.4	13.4
60°	8119.1	5187.0	205.0	115.8	44.6	22.3	13.4	9.0	9.0	4.4	9.0
62.5°	8471.0	5102.3	178.3	89.1	31.3	13.4	9.0	4.4	4.4	0.0	0.0
65°	8729.5	4941.8	151.5	62.4	17.8	9.0	4.4	4.4	0.0	0.0	0.0
67.5°	8738.4	4652.1	111.4	35.7	13.4	9.0	4.4	0.0	0.0	0.0	0.0
70°	8034.4	3965.9	71.2	17.8	9.0	4.4	4.4	0.0	0.0	0.0	0.0
71°	7388.2	3511.5	57.9	13.4	9.0	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	6087.1	2580.1	44.6	13.4	4.4	4.4	0.0	0.0	0.0	0.0	0.0
75°	3355.4	935.8	22.3	9.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1074.0	285.2	13.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	182.6	44.6	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	62.4	17.8	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.8	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	4.4	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)