

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: P265620

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265620  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-140-D-U-T2U-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11355.8 lumens  
Efficiency: N/A  
Efficacy: 79.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 143  
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

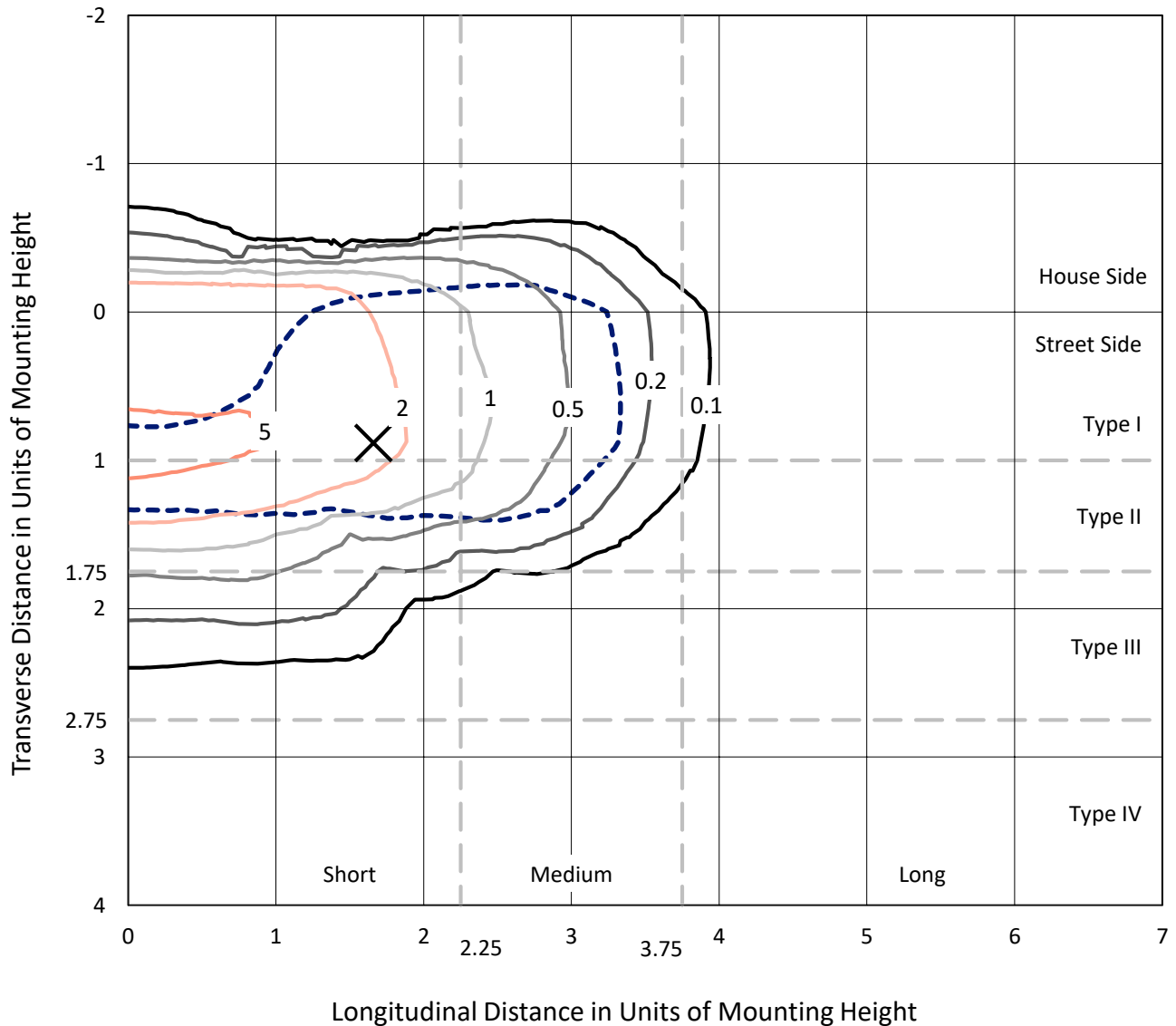


REPORT NUMBER: P265620

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7027-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

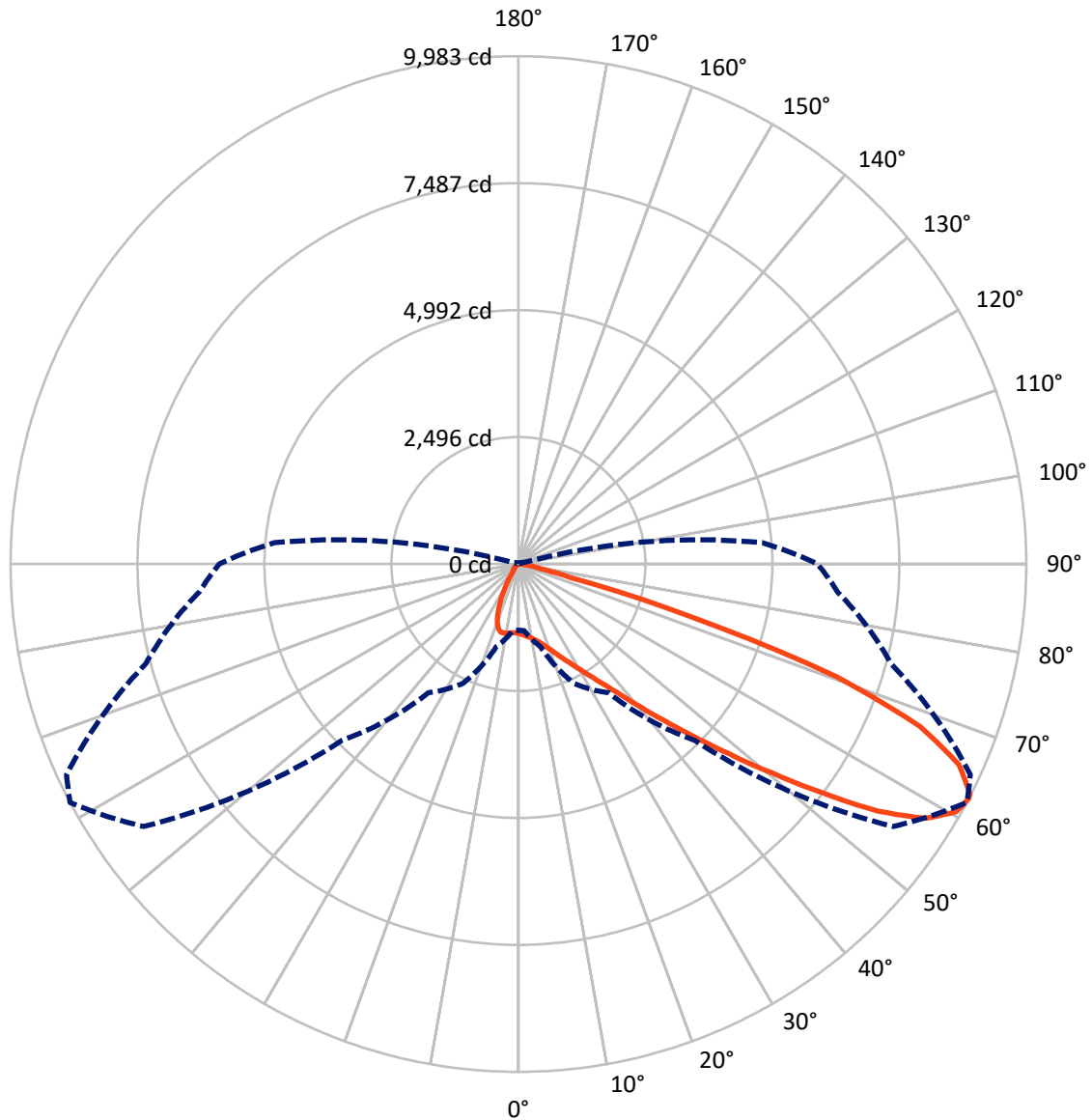


Based on 20 foot mounting height. Maximum calculated value = 6.5 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P265620

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7027-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: P265620

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7027-HSS

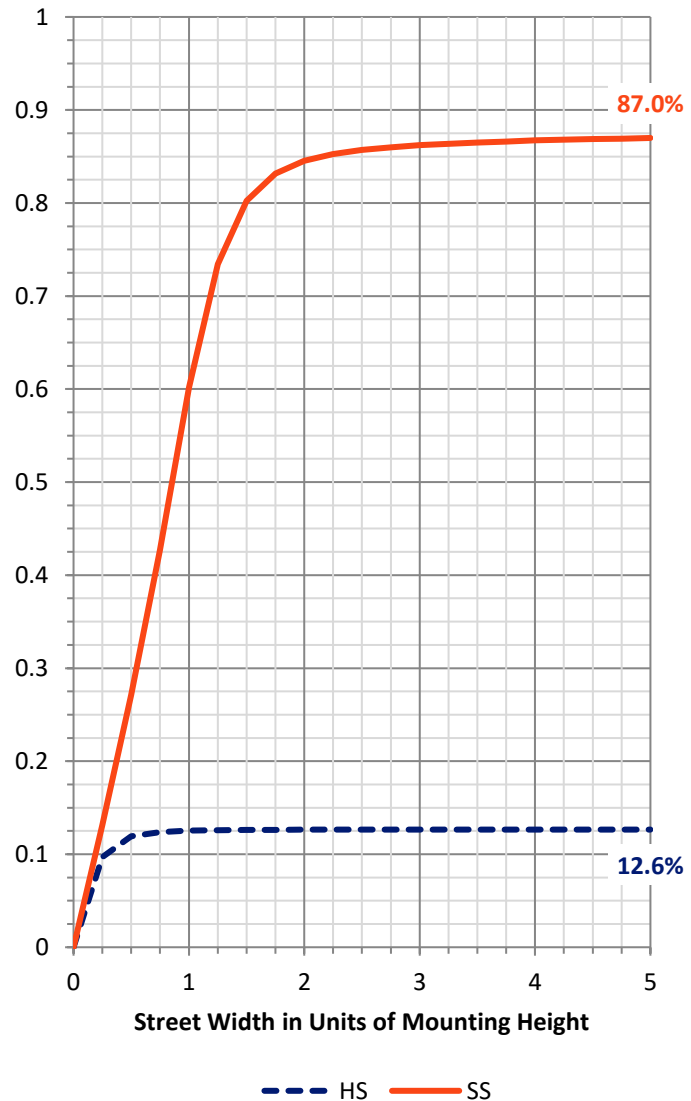
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1452.0	0.0	1452.0
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	9903.8	0.0	9903.8
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	11355.8	0.0	11355.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.6	1.2
10°-20°	367.6	3.2
20°-30°	617.4	5.4
30°-40°	1183.5	10.4
40°-50°	2417.4	21.3
50°-60°	3199.0	28.2
60°-70°	2485.1	21.9
70°-80°	897.0	7.9
80°-90°	57.2	0.5
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°	11355.8	100.0
0°-180°	11355.8	100.0

**Coefficient of Utilization**



REPORT NUMBER: P265620

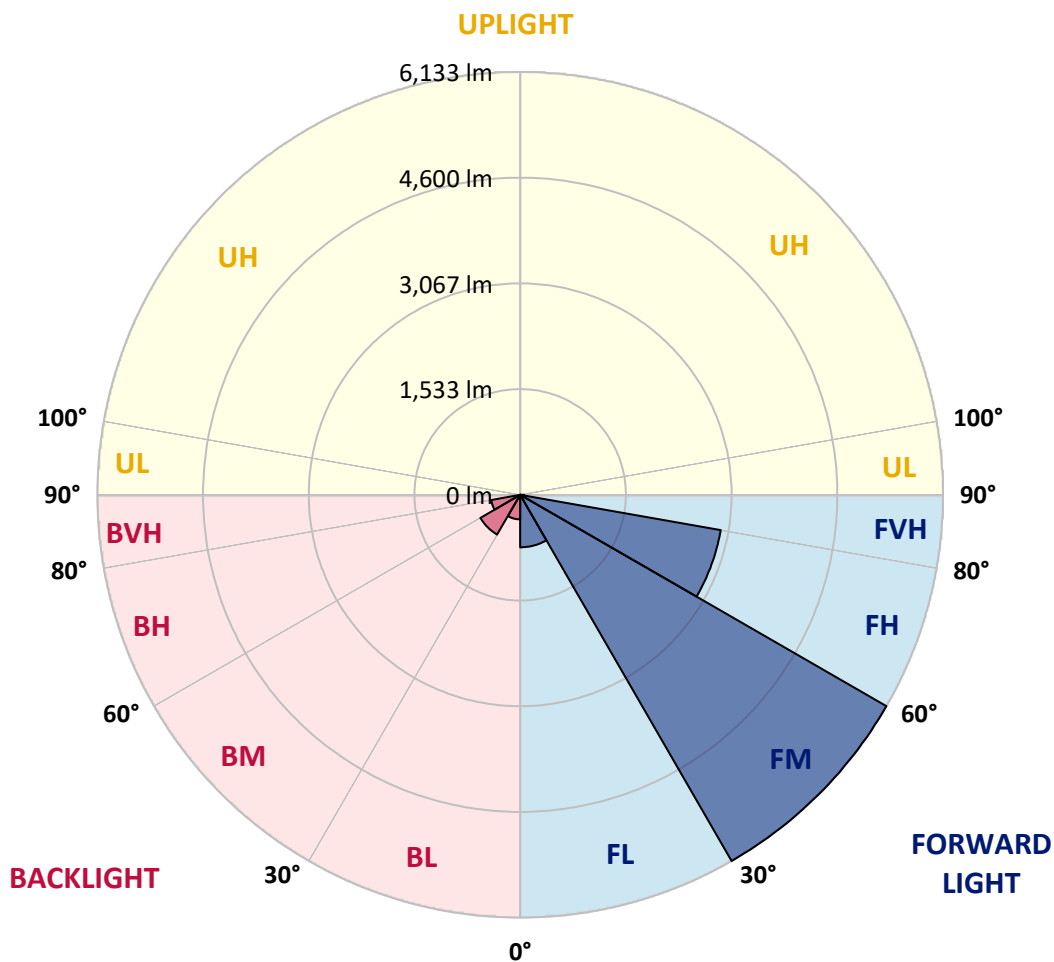
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7027-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	761.3	6.7			
FM	(30°-60°)	6133.3	54.0			
FH	(60°-80°)	2954.5	26.0			G2/5000
FVH	(80°-90°)	54.7	0.5			G1/100
BL	(0°-30°)	355.4	3.1	B1/500		
BM	(30°-60°)	666.6	5.9	B1/1000		
BH	(60°-80°)	427.6	3.8	B1/500		G1/500
BVH	(80°-90°)	2.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Short





REPORT NUMBER: P265620

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7027-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9
2.5°	1404.2	1401.4	1398.7	1395.8	1395.8	1393.1	1390.2	1384.6	1379.1	1373.5	1370.8
5°	1429.4	1426.6	1423.8	1426.6	1423.8	1423.8	1420.9	1415.4	1409.8	1401.4	1393.1
7.5°	1448.8	1446.1	1443.3	1446.1	1448.8	1451.8	1454.4	1448.8	1446.1	1435.0	1426.6
10°	1473.9	1471.2	1468.5	1473.9	1473.9	1488.0	1490.7	1488.0	1485.2	1476.9	1462.9
12.5°	1510.3	1513.1	1513.1	1518.8	1524.2	1541.0	1546.6	1538.3	1538.3	1527.1	1510.3
15°	1577.3	1577.3	1577.3	1583.0	1585.7	1608.1	1613.6	1605.2	1610.8	1591.3	1574.5
17.5°	1641.6	1644.3	1649.8	1661.1	1661.1	1680.5	1691.8	1691.8	1702.9	1677.9	1655.4
20°	1705.7	1708.5	1716.9	1742.1	1742.1	1767.1	1786.6	1795.2	1806.2	1781.1	1742.1
22.5°	1775.5	1775.5	1789.6	1828.6	1820.2	1870.5	1906.7	1920.7	1931.8	1898.4	1836.9
25°	1881.6	1870.5	1881.6	1917.9	1912.3	1982.1	2049.2	2063.0	2077.1	2038.0	1945.8
27.5°	2082.6	2065.9	2026.8	2029.6	2029.6	2110.6	2205.5	2225.0	2233.4	2199.9	2085.4
30°	2484.6	2484.6	2339.5	2241.8	2177.5	2250.2	2384.1	2417.7	2428.7	2378.5	2227.7
32.5°	3185.4	3185.4	2917.3	2668.9	2426.1	2426.1	2579.6	2640.9	2652.2	2593.5	2417.7
35°	4078.8	4073.2	3671.2	3330.6	2855.9	2677.3	2808.6	2911.8	2945.3	2867.1	2663.4
37.5°	5028.0	4991.6	4558.9	4168.0	3517.6	3079.3	3118.3	3255.2	3285.9	3221.6	2981.6
40°	5798.4	5756.6	5407.5	5081.0	4371.8	3721.4	3565.1	3690.6	3727.0	3637.6	3361.3
42.5°	6496.4	6393.1	6153.0	5918.5	5354.5	4832.5	4159.7	4209.9	4249.1	4154.1	3788.4
45°	7001.7	6842.5	6719.7	6647.1	6348.4	6052.5	4930.2	4829.6	4843.7	4726.4	4254.6
47.5°	7015.7	6904.0	6915.2	7105.0	7227.9	7216.7	5932.4	5575.2	5522.1	5326.6	4751.6
50°	6345.5	6409.8	6613.6	7155.2	7819.7	8221.6	7124.5	6457.2	6298.1	5946.4	5245.7
52.5°	5228.9	5329.5	5711.9	6624.8	7906.2	8883.2	8361.2	7465.1	7180.3	6560.5	5625.4
55°	4095.5	4101.0	4503.1	5432.7	7328.4	9003.4	9349.5	8573.5	8137.8	7026.8	5876.6
57.5°	2816.8	2970.3	3481.3	4106.6	6024.6	8405.9	9720.7	9433.2	8872.1	7314.3	6052.5
60°	1845.4	1853.7	2448.3	3171.3	4101.0	6839.8	9494.6	9888.4	9466.8	7484.6	6172.6
62°	1300.9	1314.8	1683.5	2590.7	3090.4	4902.3	8995.0	9983.3	9801.8	7585.1	6298.1
62.5°	1206.1	1217.3	1527.1	2445.5	2903.4	4396.9	8816.2	9960.9	9852.0	7618.6	6342.8
65°	885.0	885.0	999.5	1680.5	2127.2	2375.7	7470.7	9517.1	9785.0	7886.6	6510.2
67.5°	684.0	689.5	728.6	1035.7	1605.2	1440.5	4768.3	8517.5	9087.1	8283.0	6605.2
70°	589.1	586.2	614.3	686.8	1158.5	957.6	2099.3	6647.1	7610.3	8182.5	6518.7
72.5°	435.5	438.4	502.5	603.0	806.8	622.5	949.1	3528.7	4935.7	6404.2	5586.2
75°	279.2	282.0	354.6	474.6	580.7	407.7	547.2	1052.5	2021.1	3551.1	3417.1
77.5°	187.0	192.6	231.8	332.3	508.1	254.0	343.4	441.1	608.6	1331.6	1225.6
80°	125.7	125.7	148.0	223.4	321.1	212.2	184.2	293.1	315.5	413.2	206.6
82.5°	83.7	83.7	97.7	148.0	209.3	189.8	111.7	159.1	184.2	206.6	72.7
85°	50.2	50.2	67.1	92.2	136.8	106.1	72.7	89.3	95.0	131.2	39.0
87.5°	30.7	27.8	44.6	64.1	72.7	64.1	47.5	47.5	50.2	72.7	19.6
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: P265620

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7027-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9	1367.9
2.5°	1365.2	1362.4	1359.6	1353.9	1345.7	1340.0	1334.4	1328.9	1323.3	1323.3	1331.6
5°	1390.2	1382.0	1370.8	1359.6	1342.8	1331.6	1323.3	1312.2	1306.6	1306.6	1309.3
7.5°	1420.9	1412.7	1393.1	1373.5	1348.4	1328.9	1309.3	1284.1	1264.6	1256.3	1264.6
10°	1454.4	1443.3	1415.4	1384.6	1356.8	1306.6	1242.4	1164.2	1097.2	1066.5	1080.4
12.5°	1496.3	1482.5	1448.8	1407.0	1342.8	1220.0	1060.9	879.4	764.9	711.8	723.0
15°	1557.8	1538.3	1490.7	1426.6	1284.1	1018.9	759.3	549.9	443.9	399.1	404.7
17.5°	1630.3	1605.2	1541.0	1420.9	1133.4	734.3	452.2	321.1	276.4	265.2	265.2
20°	1708.5	1675.0	1591.3	1379.1	904.6	460.7	282.0	245.6	228.9	220.5	220.5
22.5°	1789.6	1744.9	1633.2	1281.4	645.0	287.5	231.8	206.6	187.0	178.7	178.7
25°	1887.2	1828.6	1675.0	1111.2	410.3	231.8	198.3	173.2	153.5	142.4	145.2
27.5°	2001.7	1926.2	1711.4	898.9	265.2	201.0	164.7	139.5	122.9	117.3	117.3
30°	2121.6	2032.3	1719.7	672.8	215.0	173.2	136.8	114.4	103.2	97.7	97.7
32.5°	2286.5	2169.1	1694.7	446.6	181.5	145.2	114.4	95.0	86.5	83.7	83.7
35°	2504.1	2347.8	1636.0	276.4	153.5	120.1	95.0	83.7	75.4	72.7	72.7
37.5°	2780.6	2596.3	1532.7	189.8	131.2	97.7	80.9	72.7	67.1	64.1	64.1
40°	3149.1	2897.8	1398.7	164.7	111.7	83.7	69.8	64.1	58.6	58.6	58.6
42.5°	3540.0	3263.5	1225.6	145.2	95.0	72.7	61.4	55.9	53.0	50.2	50.2
45°	3967.1	3637.6	1010.7	128.4	80.9	64.1	55.9	47.5	44.6	44.6	44.6
47.5°	4391.4	4022.9	776.0	111.7	69.8	55.9	47.5	42.0	39.0	36.3	36.3
50°	4827.0	4371.8	569.5	97.7	61.4	50.2	42.0	36.3	30.7	27.8	27.8
52.5°	5142.3	4581.3	415.9	83.7	53.0	42.0	33.4	27.8	22.4	19.6	19.6
55°	5374.1	4709.6	304.3	69.8	47.5	36.3	27.8	22.4	16.8	16.8	14.0
57.5°	5555.6	4771.1	228.9	61.4	42.0	30.7	22.4	16.8	14.0	11.1	11.1
60°	5695.2	4773.9	170.3	50.2	36.3	25.2	16.8	11.1	8.4	8.4	8.4
62°	5879.3	4810.2	139.5	42.0	33.4	22.4	14.0	8.4	5.6	2.8	2.8
62.5°	5932.4	4824.1	133.9	42.0	30.7	19.6	11.1	8.4	5.6	2.8	2.8
65°	6178.2	4849.2	103.2	33.4	25.2	16.8	8.4	5.6	0.0	0.0	0.0
67.5°	6401.4	4810.2	75.4	25.2	19.6	11.1	8.4	2.8	0.0	0.0	0.0
70°	6379.1	4542.1	53.0	16.8	14.0	8.4	5.6	0.0	0.0	0.0	0.0
72.5°	5256.8	3400.4	36.3	14.0	8.4	5.6	2.8	0.0	0.0	0.0	0.0
75°	3174.3	1488.0	25.2	8.4	8.4	5.6	2.8	0.0	0.0	0.0	0.0
77.5°	1041.3	538.9	16.8	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0
80°	170.3	89.3	8.4	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0
82.5°	53.0	22.4	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0	0.0
85°	19.6	8.4	5.6	5.6	2.8	2.8	0.0	0.0	0.0	0.0	0.0
87.5°	8.4	5.6	5.6	5.6	2.8	2.8	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)