

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: P572849

Luminaire Tested: **ARCH-S-PA2-120-750-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572849  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-120-750-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15578 lumens  
Efficiency: N/A  
Efficacy: 127.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

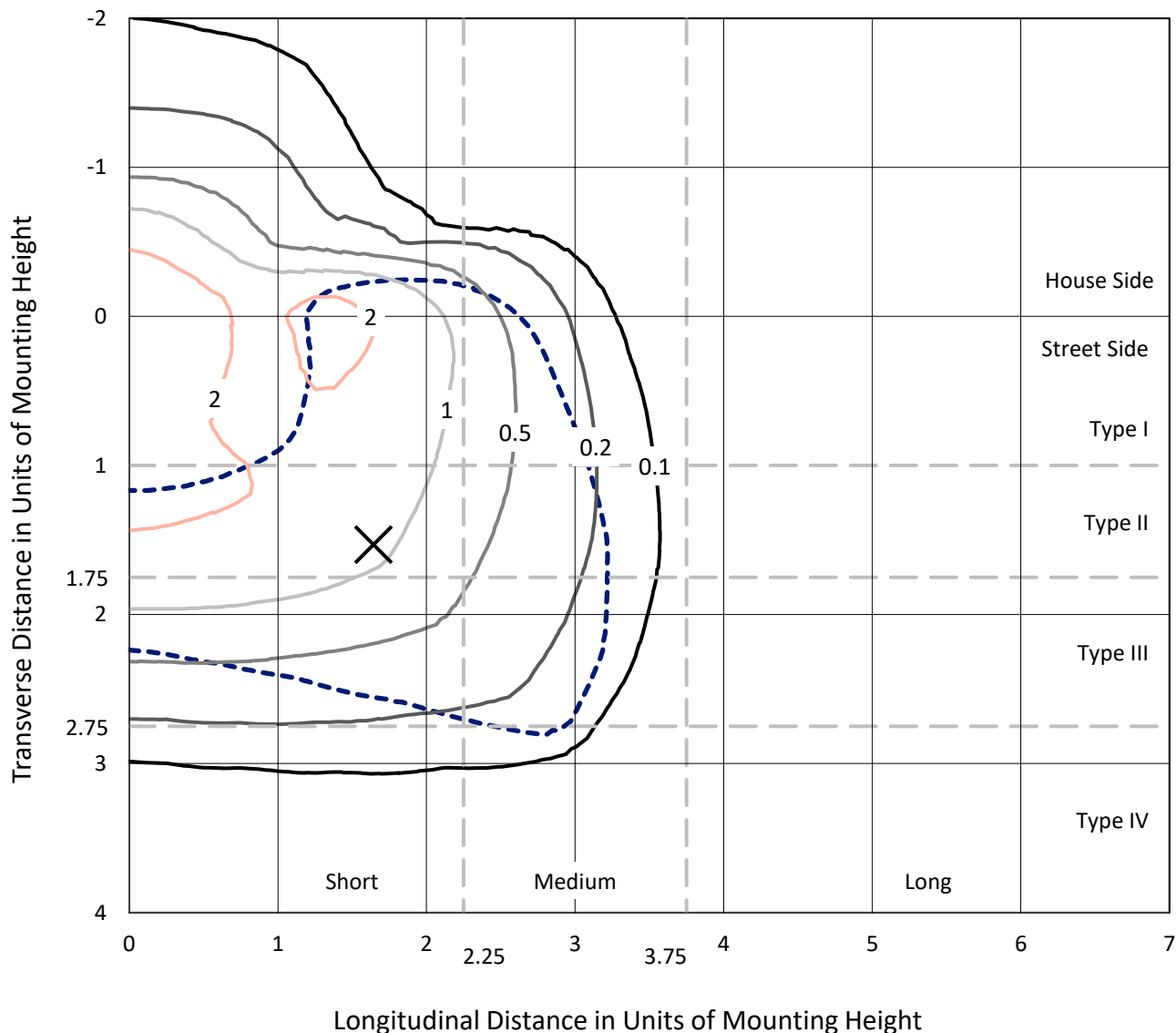
Input Watts (W): 122.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P572849  
 CATALOG NUMBER: ARCH-S-PA2-120-750-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

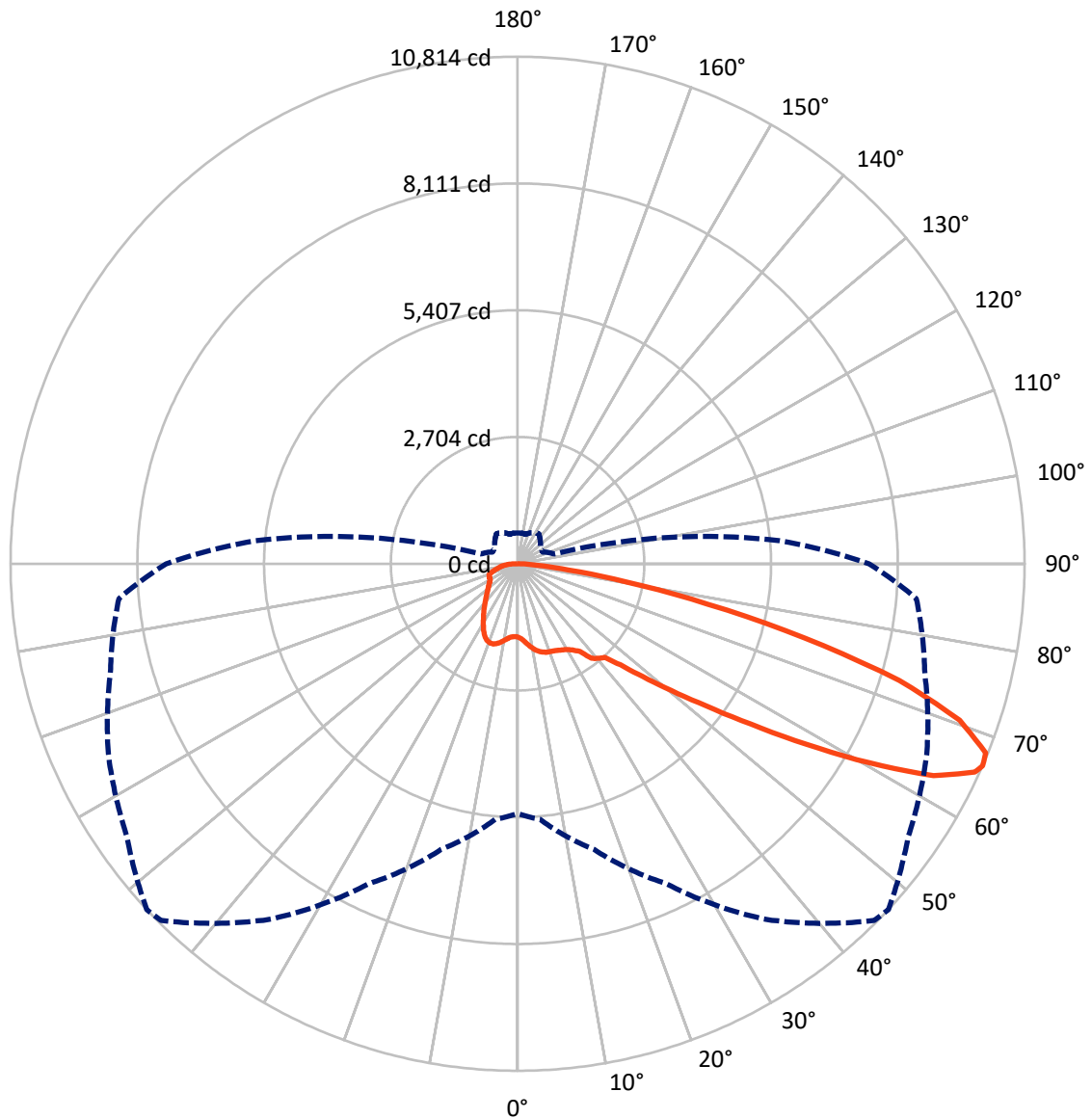
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P572849  
CATALOG NUMBER: ARCH-S-PA2-120-750-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P572849  
 CATALOG NUMBER: ARCH-S-PA2-120-750-U-T4W

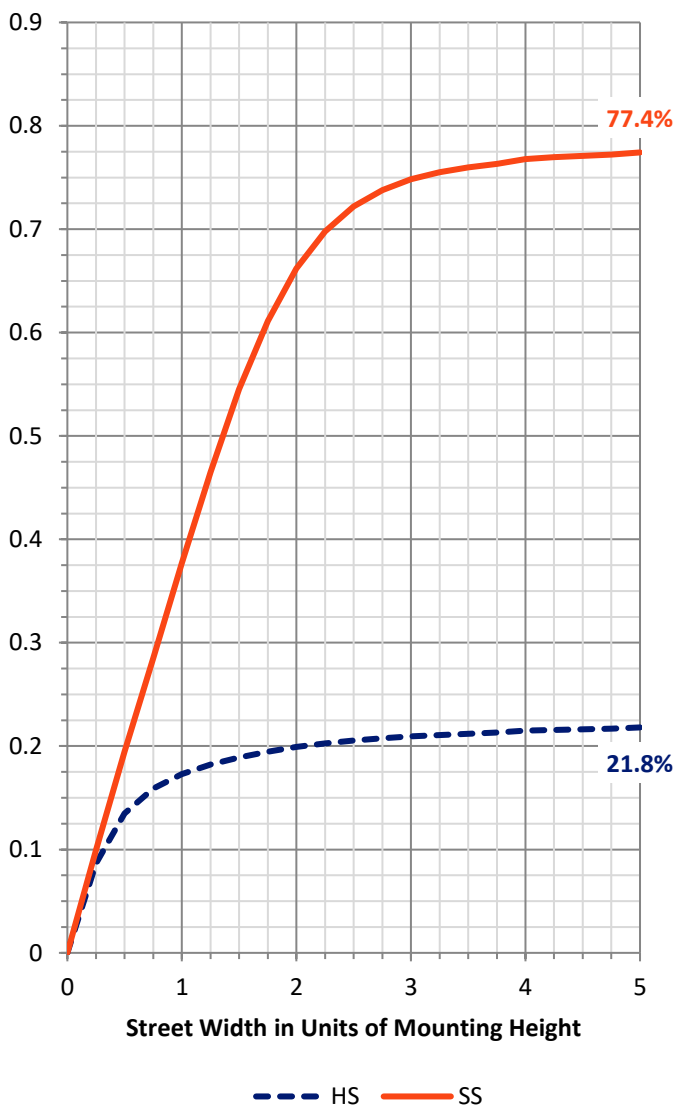
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3463.5	0.0	3463.5
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	12114.5	0.0	12114.5
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	15578.0	0.0	15578.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.3	1.0
10°-20°	522.9	3.4
20°-30°	872.0	5.6
30°-40°	1266.3	8.1
40°-50°	1936.7	12.4
50°-60°	3660.8	23.5
60°-70°	4730.3	30.4
70°-80°	2126.3	13.6
80°-90°	303.3	1.9
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°	15578.0	100.0
0°-180°	15578.0	100.0

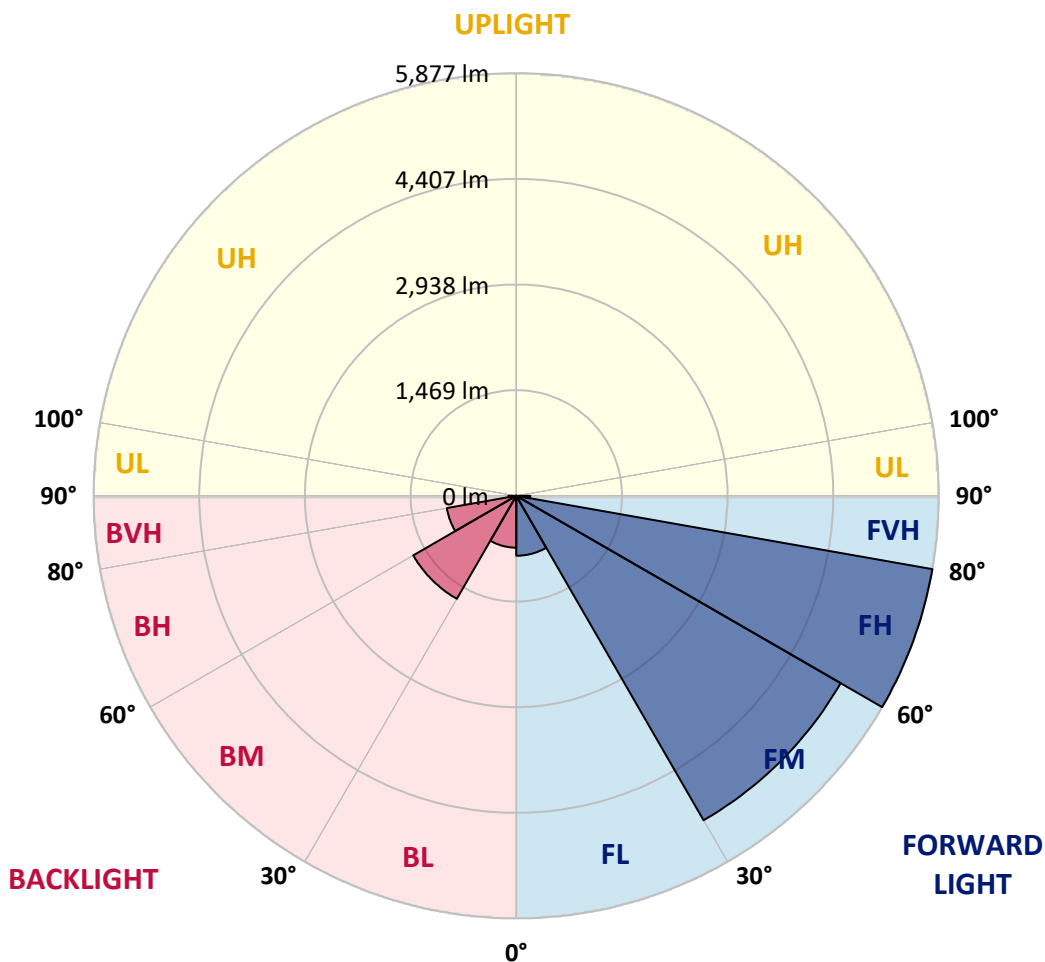


REPORT NUMBER: P572849  
 CATALOG NUMBER: ARCH-S-PA2-120-750-U-T4W

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	833.5	5.4			
FM	(30°-60°)	5209.6	33.4			
FH	(60°-80°)	5876.6	37.7			G3/7500
FVH	(80°-90°)	194.9	1.3			G2/225
BL	(0°-30°)	720.8	4.6	B2/1000		
BM	(30°-60°)	1654.3	10.6	B2/2500		
BH	(60°-80°)	980.0	6.3	B2/1000		G2/1000
BVH	(80°-90°)	108.4	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**  
 Type III Short





REPORT NUMBER: P572849

CATALOG NUMBER: ARCH-S-PA2-120-750-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1
2.5°	1654.9	1642.2	1633.8	1629.6	1621.1	1604.2	1604.2	1599.9	1583.0	1574.5	1570.3
5°	1786.2	1777.7	1756.5	1739.6	1714.2	1680.3	1676.1	1650.7	1616.9	1591.5	1574.5
7.5°	1913.1	1904.7	1883.5	1858.1	1815.8	1773.5	1760.8	1726.9	1671.9	1633.8	1604.2
10°	2023.2	2010.5	1985.1	1951.2	1904.7	1858.1	1845.4	1807.3	1752.3	1697.3	1646.5
12.5°	2095.1	2086.7	2057.0	2014.7	1963.9	1917.4	1908.9	1875.0	1820.0	1760.8	1697.3
15°	2129.0	2124.8	2090.9	2048.6	1997.8	1959.7	1955.5	1925.8	1879.3	1820.0	1748.1
17.5°	2120.5	2116.3	2086.7	2044.3	2006.3	1985.1	1985.1	1963.9	1925.8	1875.0	1798.9
20°	2078.2	2078.2	2052.8	2023.2	2002.0	1997.8	1997.8	1993.6	1968.2	1925.8	1849.6
22.5°	2035.9	2035.9	2019.0	1997.8	1993.6	2010.5	2014.7	2023.2	2014.7	1980.9	1913.1
25°	2044.3	2040.1	2019.0	1993.6	1997.8	2035.9	2044.3	2065.5	2061.3	2035.9	1976.6
27.5°	2137.5	2133.2	2078.2	2027.4	2023.2	2069.7	2078.2	2107.8	2107.8	2086.7	2048.6
30°	2370.3	2378.7	2277.1	2150.2	2086.7	2116.3	2124.8	2158.6	2175.6	2184.0	2154.4
32.5°	2725.8	2713.1	2560.7	2353.3	2213.7	2184.0	2196.7	2226.3	2285.6	2302.5	2230.6
35°	3085.6	3094.0	2945.9	2683.5	2416.8	2306.8	2298.3	2340.6	2429.5	2353.3	2226.3
37.5°	3419.9	3407.2	3233.7	2950.1	2683.5	2556.5	2560.7	2543.8	2467.6	2315.2	2256.0
40°	3783.9	3750.1	3606.2	3242.2	2903.6	2691.9	2653.8	2509.9	2446.4	2383.0	2374.5
42.5°	4143.7	4147.9	4029.4	3669.7	3166.0	2789.3	2730.0	2581.9	2624.2	2611.5	2603.1
45°	4596.6	4596.6	4478.1	4143.7	3580.8	3153.3	3072.9	2895.1	2962.8	3013.6	3115.2
47.5°	5011.4	4986.0	4952.1	4668.6	4122.6	3627.3	3593.5	3390.3	3568.1	3724.7	3932.1
50°	5451.6	5417.7	5396.6	5223.0	4833.6	4346.9	4245.3	4033.7	4423.1	4715.1	5100.3
52.5°	6137.3	6078.0	5968.0	5870.6	5718.2	5155.3	5028.3	4871.7	5375.4	5743.6	6530.9
55°	6755.2	6704.4	6598.6	6670.6	6649.4	6137.3	6027.2	5879.1	6425.1	6873.7	7775.3
57.5°	6983.8	6988.0	7131.9	7517.1	7720.3	7424.0	7267.4	7119.2	7580.6	7788.0	8600.6
60°	7089.6	7076.9	7449.4	8075.8	8736.1	8825.0	8626.0	8321.3	8494.8	8507.5	9299.0
62.5°	6861.0	6894.9	7407.1	8308.6	9345.6	9984.7	9955.1	9421.8	9260.9	9083.2	9485.3
65°	5993.4	6039.9	6793.3	7893.8	9442.9	10687.3	10716.9	10094.8	9646.1	9150.9	8956.2
66°	5333.1	5472.8	6310.8	7534.0	9265.2	10759.3	10814.3	10166.7	9629.2	8990.0	8537.2
67.5°	4473.9	4465.4	5400.8	6742.5	8770.0	10695.8	10767.7	10065.1	9400.6	8516.0	7699.1
70°	2738.5	2823.1	3627.3	5032.6	7258.9	9904.3	10001.6	9349.8	8414.4	7212.4	5692.8
72.5°	1405.2	1544.9	2074.0	3271.8	5269.6	8185.9	8516.0	7851.5	6878.0	5218.8	3475.0
75°	744.9	736.5	977.7	1773.5	3364.9	6141.5	6315.0	5887.5	4753.2	3111.0	1769.2
77.5°	397.9	419.0	512.1	910.0	1849.6	3923.6	4143.7	3796.6	2708.9	1591.5	846.5
80°	270.9	283.6	347.1	512.1	1003.1	2129.0	2332.2	2023.2	1417.9	753.4	397.9
82.5°	173.5	182.0	237.0	317.4	601.0	1032.8	1087.8	1037.0	694.1	427.5	241.3
85°	105.8	110.0	143.9	203.2	376.7	419.0	436.0	440.2	389.4	279.4	131.2
87.5°	50.8	55.0	80.4	101.6	177.8	152.4	139.7	143.9	215.9	165.1	59.3
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: P572849

CATALOG NUMBER: ARCH-S-PA2-120-750-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1	1566.1
2.5°	1566.1	1561.8	1553.4	1549.1	1553.4	1553.4	1553.4	1557.6	1566.1	1566.1	1570.3
5°	1566.1	1557.6	1549.1	1549.1	1557.6	1566.1	1574.5	1591.5	1599.9	1604.2	1604.2
7.5°	1587.2	1578.8	1570.3	1570.3	1583.0	1599.9	1616.9	1638.0	1659.2	1676.1	1676.1
10°	1629.6	1616.9	1608.4	1612.6	1633.8	1654.9	1676.1	1701.5	1722.7	1743.8	1743.8
12.5°	1676.1	1663.4	1650.7	1659.2	1688.8	1714.2	1735.4	1748.1	1769.2	1786.2	1786.2
15°	1722.7	1701.5	1697.3	1714.2	1743.8	1760.8	1769.2	1769.2	1777.7	1794.6	1794.6
17.5°	1773.5	1752.3	1748.1	1765.0	1790.4	1790.4	1773.5	1760.8	1756.5	1769.2	1773.5
20°	1824.3	1803.1	1803.1	1815.8	1811.6	1781.9	1752.3	1731.1	1714.2	1726.9	1731.1
22.5°	1887.7	1866.6	1858.1	1841.2	1803.1	1743.8	1697.3	1671.9	1659.2	1667.6	1676.1
25°	1951.2	1934.3	1913.1	1853.9	1765.0	1671.9	1612.6	1591.5	1595.7	1612.6	1621.1
27.5°	2031.6	2023.2	1972.4	1845.4	1697.3	1570.3	1511.0	1506.8	1523.7	1549.1	1561.8
30°	2129.0	2116.3	2027.4	1820.0	1604.2	1451.8	1409.5	1417.9	1443.3	1464.5	1477.2
32.5°	2196.7	2188.3	2052.8	1760.8	1489.9	1346.0	1312.1	1312.1	1324.8	1354.4	1367.1
35°	2217.9	2251.7	2069.7	1671.9	1354.4	1252.9	1219.0	1197.8	1197.8	1223.2	1231.7
37.5°	2289.8	2366.0	2078.2	1553.4	1244.4	1168.2	1125.9	1087.8	1075.1	1070.8	1070.8
40°	2454.9	2543.8	2074.0	1401.0	1138.6	1083.5	1032.8	990.4	956.6	910.0	914.2
42.5°	2742.7	2810.4	2061.3	1240.2	1045.5	1007.4	956.6	905.8	850.8	800.0	795.7
45°	3297.2	3195.6	2027.4	1100.5	960.8	939.6	893.1	833.8	766.1	719.5	719.5
47.5°	4173.3	3894.0	2006.3	969.3	884.6	880.4	838.1	774.6	706.8	673.0	668.8
50°	5375.4	4859.0	2040.1	876.1	816.9	829.6	795.7	736.5	681.4	651.8	647.6
52.5°	6755.2	5896.0	2078.2	816.9	766.1	791.5	774.6	719.5	664.5	639.1	634.9
55°	7821.8	6738.3	2023.2	761.9	715.3	753.4	753.4	702.6	656.1	630.7	630.7
57.5°	8571.0	7076.9	1832.7	711.1	673.0	719.5	732.2	694.1	651.8	643.4	643.4
60°	8892.7	7060.0	1498.3	664.5	643.4	685.7	719.5	685.7	660.3	681.4	685.7
62.5°	8719.2	6691.7	1164.0	630.7	622.2	677.2	732.2	719.5	689.9	706.8	715.3
65°	7936.1	6044.2	876.1	601.0	596.8	681.4	766.1	740.7	668.8	673.0	677.2
66°	7495.9	5608.2	804.2	592.6	588.3	685.7	783.0	732.2	651.8	660.3	656.1
67.5°	6556.3	4922.5	706.8	575.6	571.4	685.7	804.2	715.3	630.7	643.4	630.7
70°	4808.2	3483.4	605.3	554.5	546.0	673.0	800.0	681.4	584.1	575.6	554.5
72.5°	2789.3	2107.8	537.5	529.1	507.9	592.6	749.2	626.4	533.3	507.9	486.7
75°	1371.4	1070.8	478.3	499.4	444.4	520.6	677.2	579.9	491.0	457.1	444.4
77.5°	630.7	541.8	431.7	457.1	393.6	448.7	618.0	529.1	436.0	385.2	372.5
80°	342.8	338.6	364.0	380.9	330.1	393.6	546.0	461.4	368.2	313.2	296.3
82.5°	211.6	215.9	266.7	292.0	258.2	342.8	482.5	385.2	279.4	220.1	224.3
85°	110.0	122.7	177.8	194.7	169.3	254.0	364.0	258.2	156.6	114.3	114.3
87.5°	38.1	50.8	88.9	105.8	93.1	152.4	228.6	122.7	33.9	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)