

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: P265647

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265647
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-AF72-170-D-U-T2U-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 750mA 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: 13196 lumens
Efficiency: N/A
Efficacy: 76.3 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): 173
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

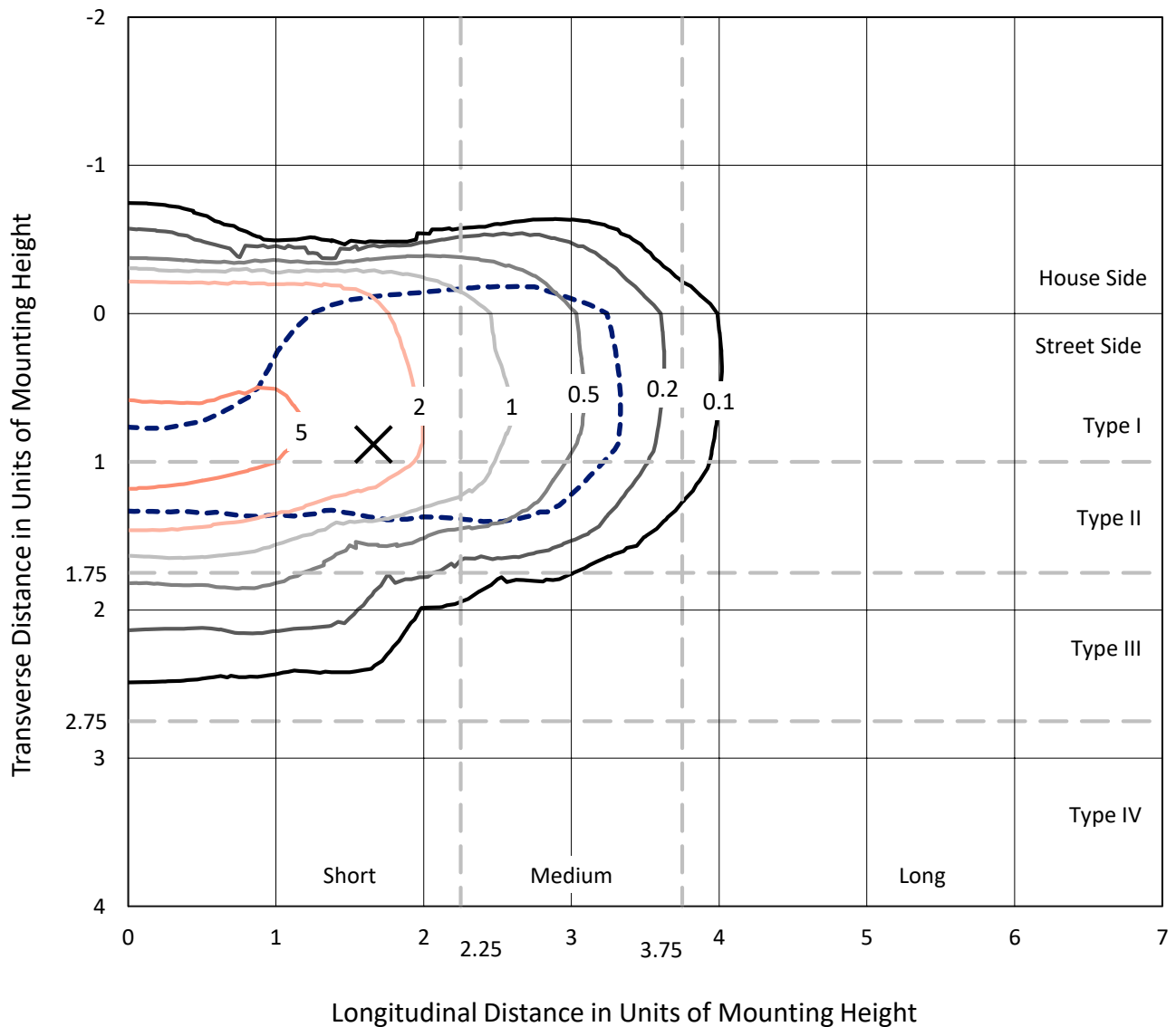


REPORT NUMBER: P265647

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2U-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

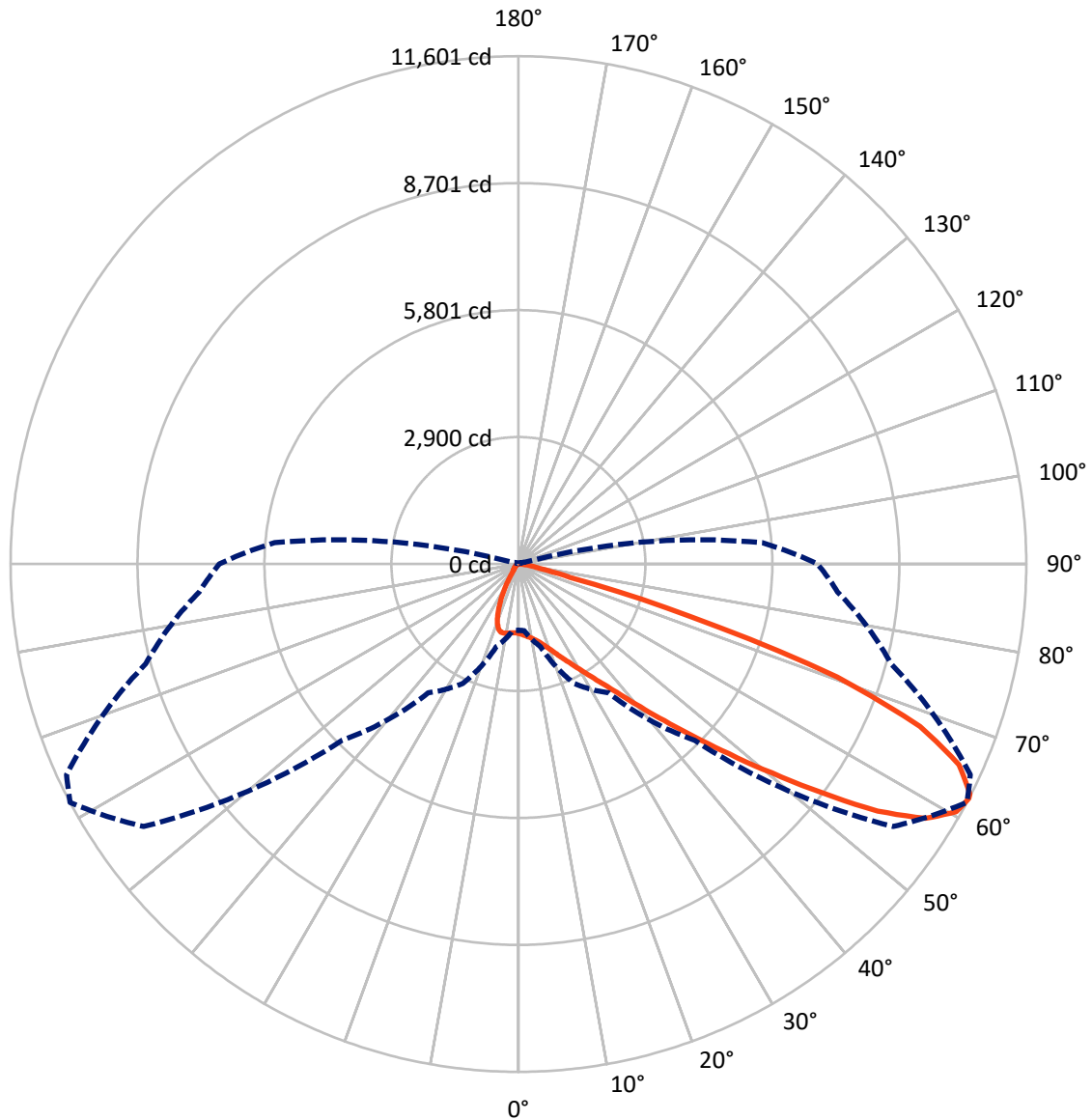


Based on 20 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P265647

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2U-7027-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P265647

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2U-7027-HSS

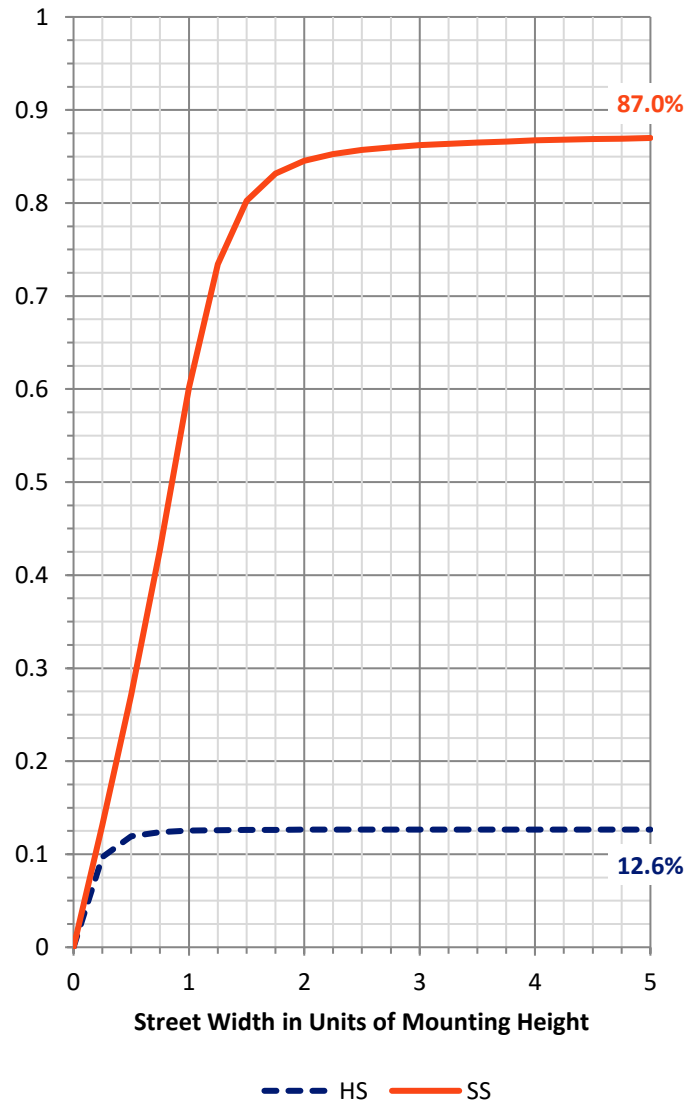
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1687.3	0.0	1687.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	11508.7	0.0	11508.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	13196.0	0.0	13196.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.0	1.2
10°-20°	427.2	3.2
20°-30°	717.5	5.4
30°-40°	1375.3	10.4
40°-50°	2809.1	21.3
50°-60°	3717.4	28.2
60°-70°	2887.8	21.9
70°-80°	1042.4	7.9
80°-90°	66.4	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°	13196.0	100.0
0°-180°	13196.0	100.0

Coefficient of Utilization



REPORT NUMBER: P265647

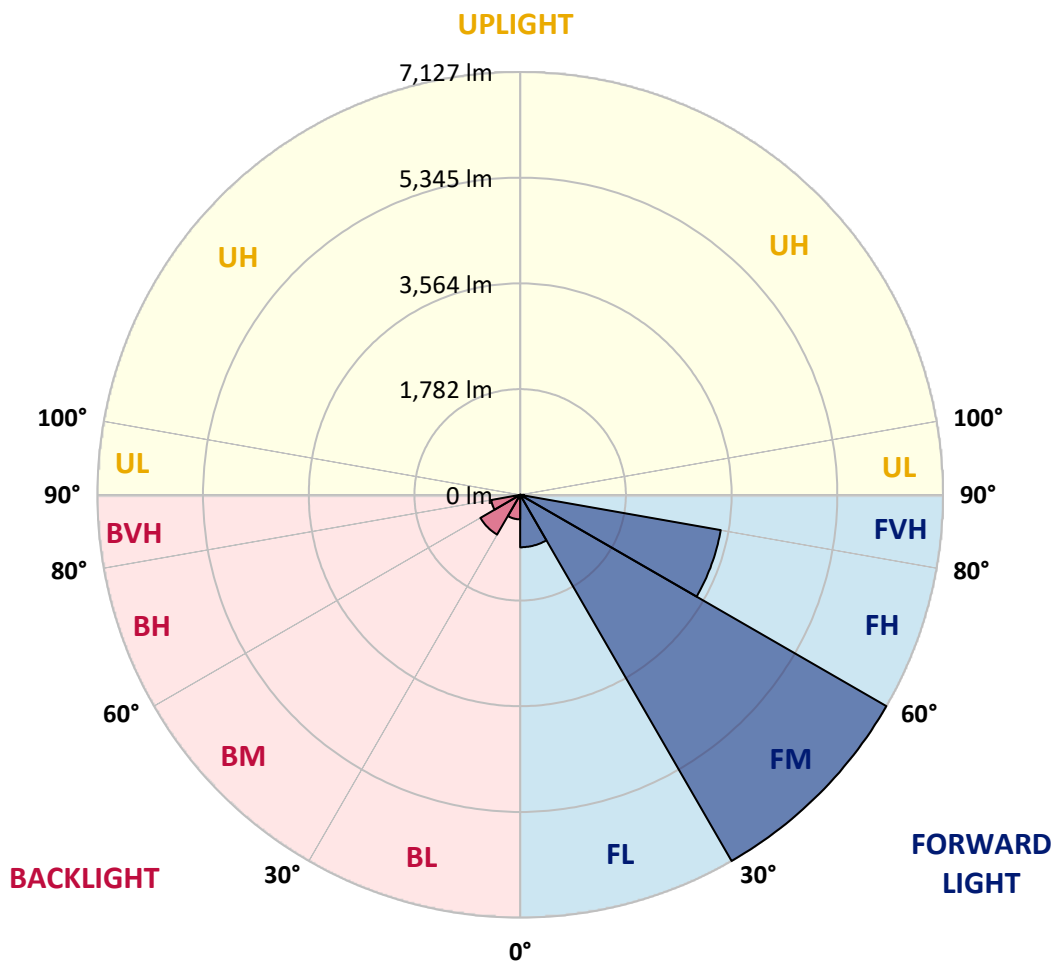
CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2U-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	884.7	6.7			
FM	(30°-60°)	7127.2	54.0			
FH	(60°-80°)	3433.3	26.0			G2/5000
FVH	(80°-90°)	63.5	0.5			G1/100
BL	(0°-30°)	412.9	3.1	B1/500		
BM	(30°-60°)	774.6	5.9	B1/1000		
BH	(60°-80°)	496.8	3.8	B1/500		G1/500
BVH	(80°-90°)	2.9	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: P265647

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6
2.5°	1631.9	1628.5	1625.4	1622.1	1622.1	1618.8	1615.6	1609.1	1602.5	1596.1	1592.9
5°	1661.0	1657.7	1654.5	1657.7	1654.5	1654.5	1651.3	1644.7	1638.2	1628.5	1618.8
7.5°	1683.8	1680.5	1677.2	1680.5	1683.8	1686.9	1690.3	1683.8	1680.5	1667.6	1657.7
10°	1712.9	1709.7	1706.4	1712.9	1712.9	1729.1	1732.4	1729.1	1726.0	1716.1	1700.0
12.5°	1755.1	1758.3	1758.3	1764.8	1771.3	1790.9	1797.2	1787.5	1787.5	1774.5	1755.1
15°	1832.9	1832.9	1832.9	1839.4	1842.7	1868.7	1875.1	1865.4	1871.9	1849.3	1829.7
17.5°	1907.6	1910.9	1917.3	1930.3	1930.3	1952.9	1965.9	1965.9	1979.0	1949.7	1923.8
20°	1982.2	1985.4	1995.1	2024.3	2024.3	2053.5	2076.3	2086.0	2099.0	2069.8	2024.3
22.5°	2063.2	2063.2	2079.4	2124.9	2115.1	2173.5	2215.8	2232.0	2245.0	2206.0	2134.6
25°	2186.6	2173.5	2186.6	2228.8	2222.2	2303.3	2381.1	2397.4	2413.7	2368.2	2261.2
27.5°	2420.2	2400.7	2355.3	2358.5	2358.5	2452.6	2562.9	2585.6	2595.4	2556.3	2423.4
30°	2887.3	2887.3	2718.6	2605.1	2530.4	2614.7	2770.6	2809.4	2822.5	2764.1	2588.8
32.5°	3701.6	3701.6	3390.2	3101.4	2819.2	2819.2	2997.6	3069.0	3081.9	3013.9	2809.4
35°	4739.6	4733.2	4266.1	3870.3	3318.8	3111.1	3263.6	3383.6	3422.6	3331.8	3094.9
37.5°	5842.8	5800.5	5297.7	4843.5	4087.6	3578.3	3623.8	3782.7	3818.3	3743.7	3464.8
40°	6738.0	6689.4	6284.0	5904.4	5080.4	4324.4	4142.8	4288.8	4331.0	4227.2	3906.0
42.5°	7549.1	7429.2	7150.1	6877.7	6222.3	5615.7	4833.8	4892.2	4937.7	4827.3	4402.4
45°	8136.3	7951.3	7808.6	7724.3	7377.2	7033.3	5729.2	5612.4	5628.6	5492.3	4944.1
47.5°	8152.6	8022.9	8035.8	8256.3	8399.2	8386.1	6893.9	6478.5	6417.0	6189.9	5521.5
50°	7373.9	7448.6	7685.4	8314.7	9086.9	9554.1	8279.0	7503.7	7318.9	6910.0	6095.8
52.5°	6076.2	6193.1	6637.5	7698.4	9187.4	10322.9	9716.2	8674.8	8343.9	7623.7	6537.0
55°	4759.2	4765.7	5232.7	6313.1	8515.9	10462.4	10864.6	9962.8	9456.6	8165.6	6828.9
57.5°	3273.3	3451.7	4045.4	4772.2	7000.9	9768.1	11296.1	10961.9	10309.8	8499.7	7033.3
60°	2144.3	2154.1	2845.1	3685.3	4765.7	7948.2	11033.3	11490.8	11001.0	8697.6	7172.7
62°	1511.8	1527.9	1956.1	3010.6	3591.2	5696.7	10452.7	11601.2	11390.1	8814.3	7318.9
62.5°	1401.4	1414.4	1774.5	2841.9	3373.9	5109.5	10245.0	11575.1	11448.5	8853.2	7370.8
65°	1028.4	1028.4	1161.4	1952.9	2472.0	2760.9	8681.3	11059.4	11370.7	9164.7	7565.3
67.5°	794.8	801.3	846.7	1203.5	1865.4	1674.0	5541.0	9897.9	10559.7	9625.3	7675.7
70°	684.5	681.3	713.8	798.1	1346.3	1112.7	2439.5	7724.3	8843.5	9508.6	7575.0
72.5°	506.0	509.2	584.0	700.8	937.6	723.5	1102.9	4100.7	5735.7	7442.1	6491.5
75°	324.4	327.6	412.1	551.5	674.7	473.6	635.9	1223.0	2348.8	4126.5	3970.9
77.5°	217.4	223.9	269.2	386.0	590.5	295.3	399.0	512.6	707.2	1547.5	1424.3
80°	146.0	146.0	171.9	259.5	373.1	246.6	214.2	340.6	366.6	480.1	240.0
82.5°	97.3	97.3	113.5	171.9	243.4	220.7	129.7	185.0	214.2	240.0	84.4
85°	58.4	58.4	77.9	107.1	159.0	123.2	84.4	103.8	110.3	152.5	45.5
87.5°	35.8	32.5	51.9	74.6	84.4	74.6	55.2	55.2	58.4	84.4	22.6
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: P265647

CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6	1589.6
2.5°	1586.3	1583.2	1579.8	1573.4	1563.7	1557.2	1550.7	1544.2	1537.7	1537.7	1547.5
5°	1615.6	1605.9	1592.9	1579.8	1560.4	1547.5	1537.7	1524.8	1518.2	1518.2	1521.5
7.5°	1651.3	1641.6	1618.8	1596.1	1567.0	1544.2	1521.5	1492.4	1469.5	1459.8	1469.5
10°	1690.3	1677.2	1644.7	1609.1	1576.6	1518.2	1443.7	1352.8	1275.0	1239.2	1255.6
12.5°	1738.8	1722.6	1683.8	1635.1	1560.4	1417.6	1232.7	1021.9	889.0	827.2	840.3
15°	1810.3	1787.5	1732.4	1657.7	1492.4	1184.1	882.5	639.1	515.8	464.0	470.4
17.5°	1894.5	1865.4	1790.9	1651.3	1317.2	853.2	525.6	373.1	321.1	308.2	308.2
20°	1985.4	1946.4	1849.3	1602.5	1051.0	535.3	327.6	285.5	266.0	256.2	256.2
22.5°	2079.4	2027.6	1897.8	1489.1	749.4	334.2	269.2	240.0	217.4	207.6	207.6
25°	2193.0	2124.9	1946.4	1291.1	476.9	269.2	230.3	201.1	178.5	165.5	168.7
27.5°	2326.0	2238.4	1988.7	1044.5	308.2	233.6	191.3	162.2	142.7	136.3	136.3
30°	2465.6	2361.7	1998.4	781.9	249.8	201.1	159.0	132.9	120.1	113.5	113.5
32.5°	2656.9	2520.7	1969.3	519.1	210.8	168.7	132.9	110.3	100.6	97.3	97.3
35°	2910.0	2728.3	1901.1	321.1	178.5	139.4	110.3	97.3	87.6	84.4	84.4
37.5°	3231.2	3017.0	1781.0	220.7	152.5	113.5	94.1	84.4	77.9	74.6	74.6
40°	3659.3	3367.4	1625.4	191.3	129.7	97.3	81.0	74.6	68.1	68.1	68.1
42.5°	4113.6	3792.5	1424.3	168.7	110.3	84.4	71.3	64.9	61.7	58.4	58.4
45°	4609.9	4227.2	1174.4	149.2	94.1	74.6	64.9	55.2	51.9	51.9	51.9
47.5°	5103.0	4674.8	901.9	129.7	81.0	64.9	55.2	48.7	45.5	42.2	42.2
50°	5609.1	5080.4	661.8	113.5	71.3	58.4	48.7	42.2	35.8	32.5	32.5
52.5°	5975.7	5323.6	483.4	97.3	61.7	48.7	38.9	32.5	26.0	22.6	22.6
55°	6244.9	5472.8	353.7	81.0	55.2	42.2	32.5	26.0	19.5	19.5	16.2
57.5°	6455.8	5544.2	266.0	71.3	48.7	35.8	26.0	19.5	16.2	12.9	12.9
60°	6618.1	5547.6	197.8	58.4	42.2	29.1	19.5	12.9	9.7	9.7	9.7
62°	6832.1	5589.7	162.2	48.7	38.9	26.0	16.2	9.7	6.5	3.2	3.2
62.5°	6893.9	5606.0	155.8	48.7	35.8	22.6	12.9	9.7	6.5	3.2	3.2
65°	7179.3	5635.1	120.1	38.9	29.1	19.5	9.7	6.5	0.0	0.0	0.0
67.5°	7438.9	5589.7	87.6	29.1	22.6	12.9	9.7	3.2	0.0	0.0	0.0
70°	7412.9	5278.3	61.7	19.5	16.2	9.7	6.5	0.0	0.0	0.0	0.0
72.5°	6108.7	3951.4	42.2	16.2	9.7	6.5	3.2	0.0	0.0	0.0	0.0
75°	3688.6	1729.1	29.1	9.7	9.7	6.5	3.2	0.0	0.0	0.0	0.0
77.5°	1210.0	626.1	19.5	6.5	6.5	3.2	3.2	0.0	0.0	0.0	0.0
80°	197.8	103.8	9.7	6.5	6.5	3.2	3.2	0.0	0.0	0.0	0.0
82.5°	61.7	26.0	6.5	6.5	3.2	3.2	0.0	0.0	0.0	0.0	0.0
85°	22.6	9.7	6.5	6.5	3.2	3.2	0.0	0.0	0.0	0.0	0.0
87.5°	9.7	6.5	6.5	6.5	3.2	3.2	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)