

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: P265638

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265638
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-AF72-160-D-U-T2U-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA 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: 12592.4 lumens
Efficiency: N/A
Efficacy: 77.7 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): 162
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

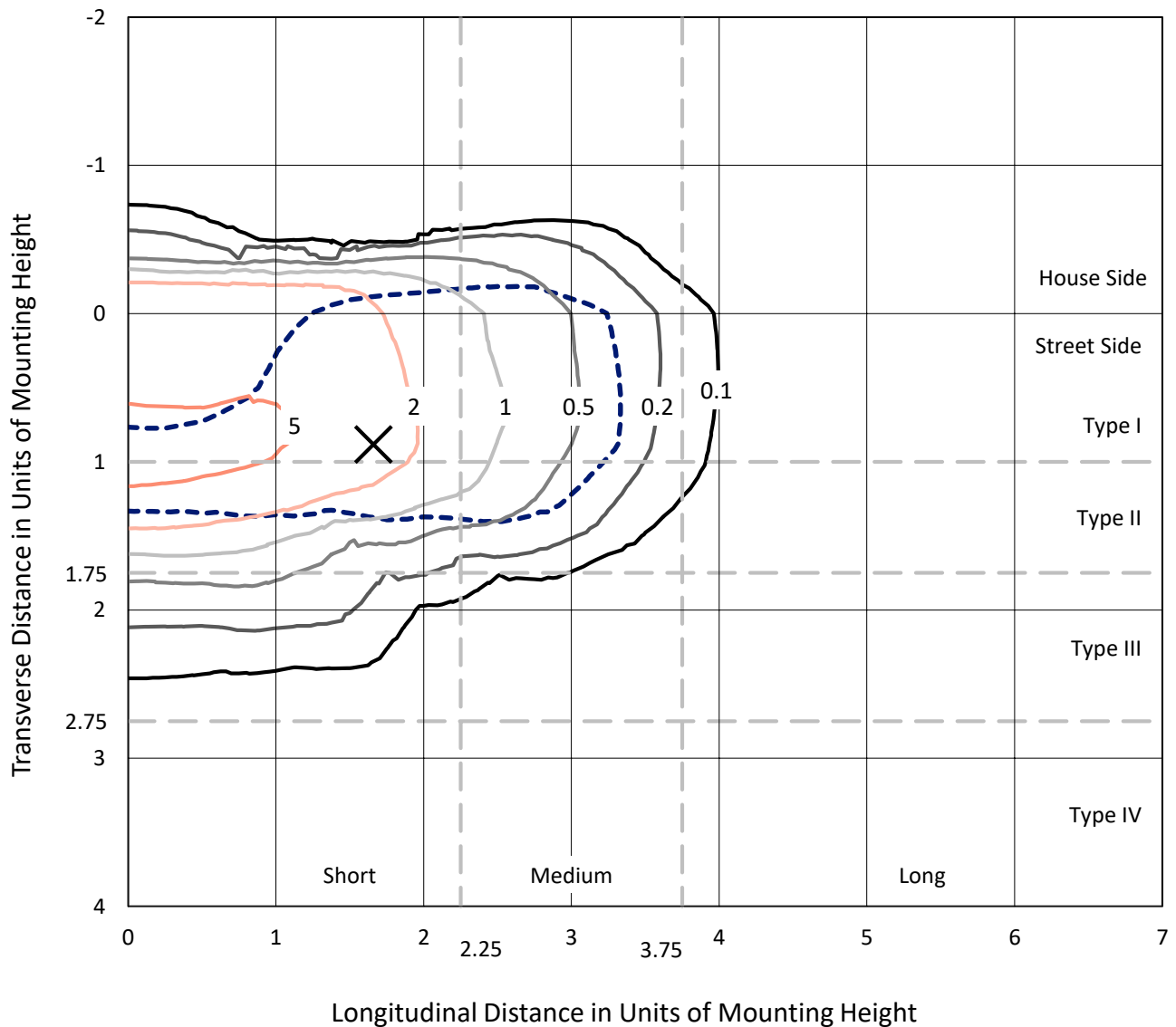


REPORT NUMBER: P265638

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

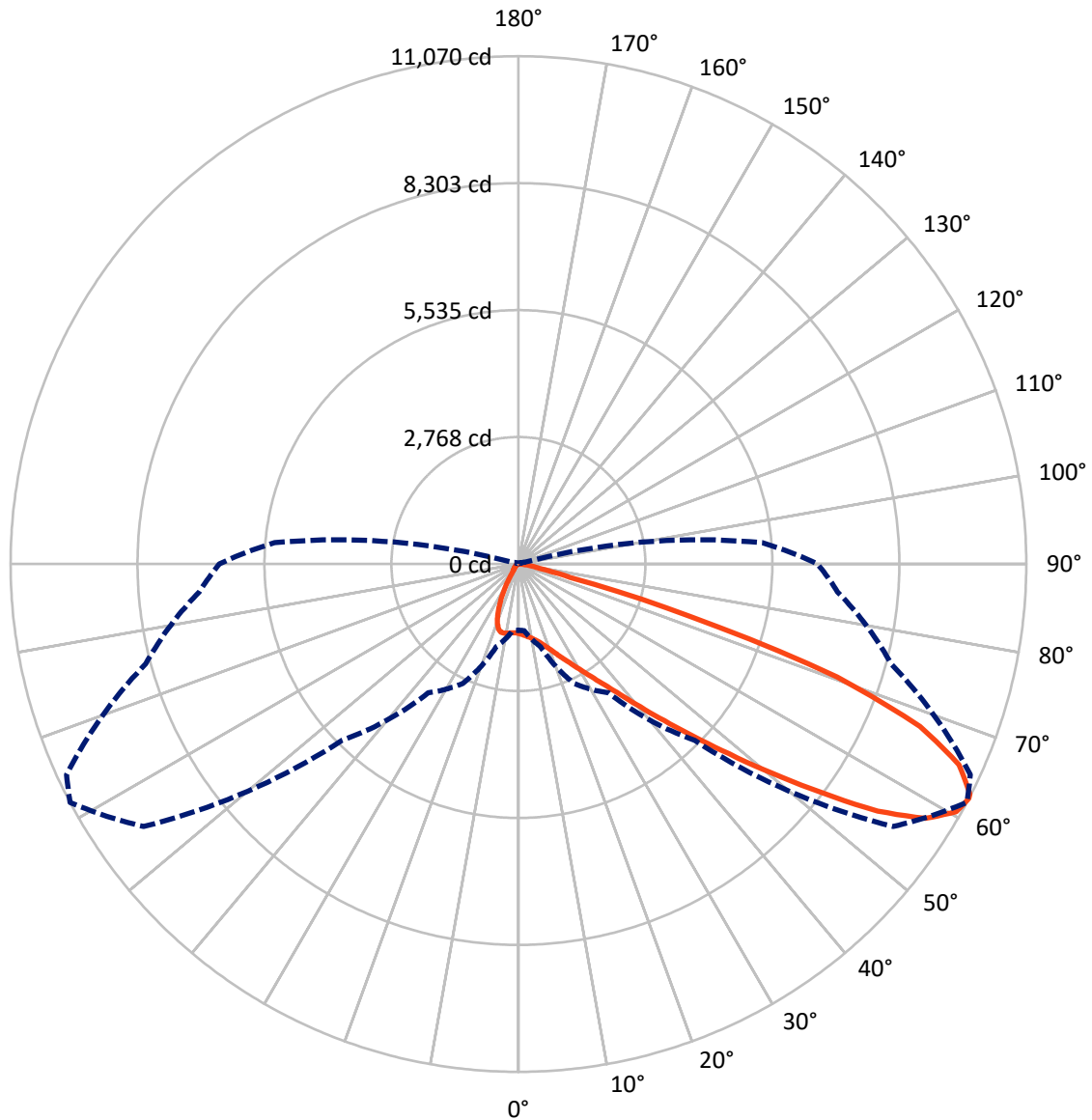


Based on 20 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P265638

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7027-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265638

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7027-HSS

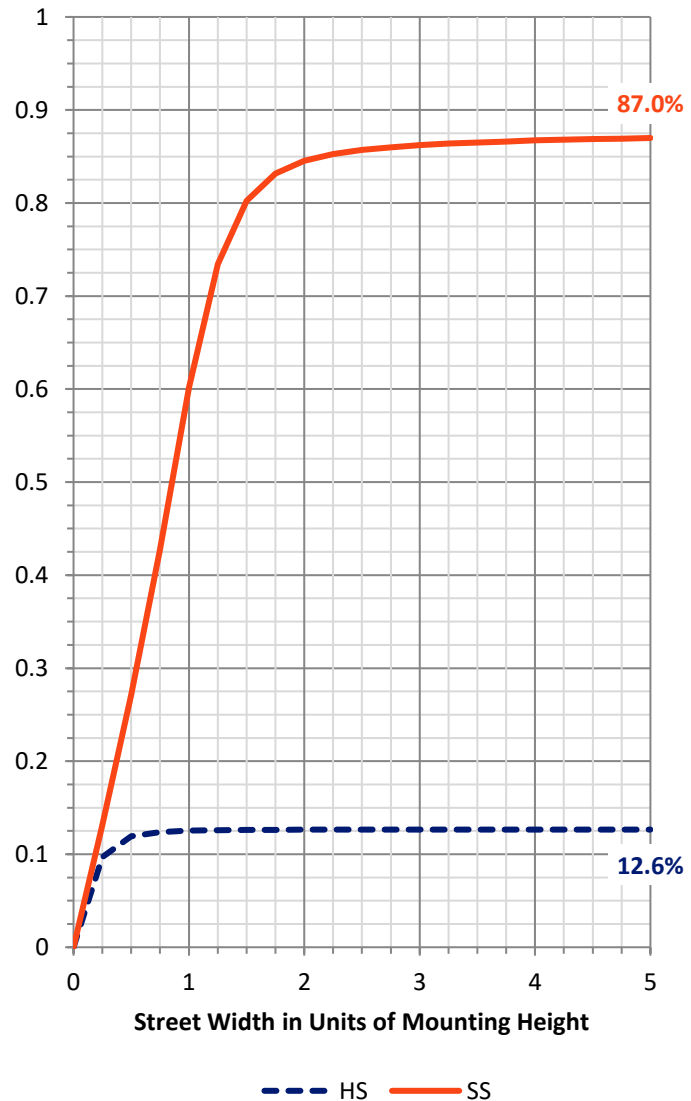
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1610.1	0.0	1610.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	10982.3	0.0	10982.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	12592.4	0.0	12592.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	1.2
10°-20°	407.7	3.2
20°-30°	684.6	5.4
30°-40°	1312.4	10.4
40°-50°	2680.6	21.3
50°-60°	3547.4	28.2
60°-70°	2755.7	21.9
70°-80°	994.7	7.9
80°-90°	63.4	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°	12592.4	100.0
0°-180°	12592.4	100.0



REPORT NUMBER: P265638

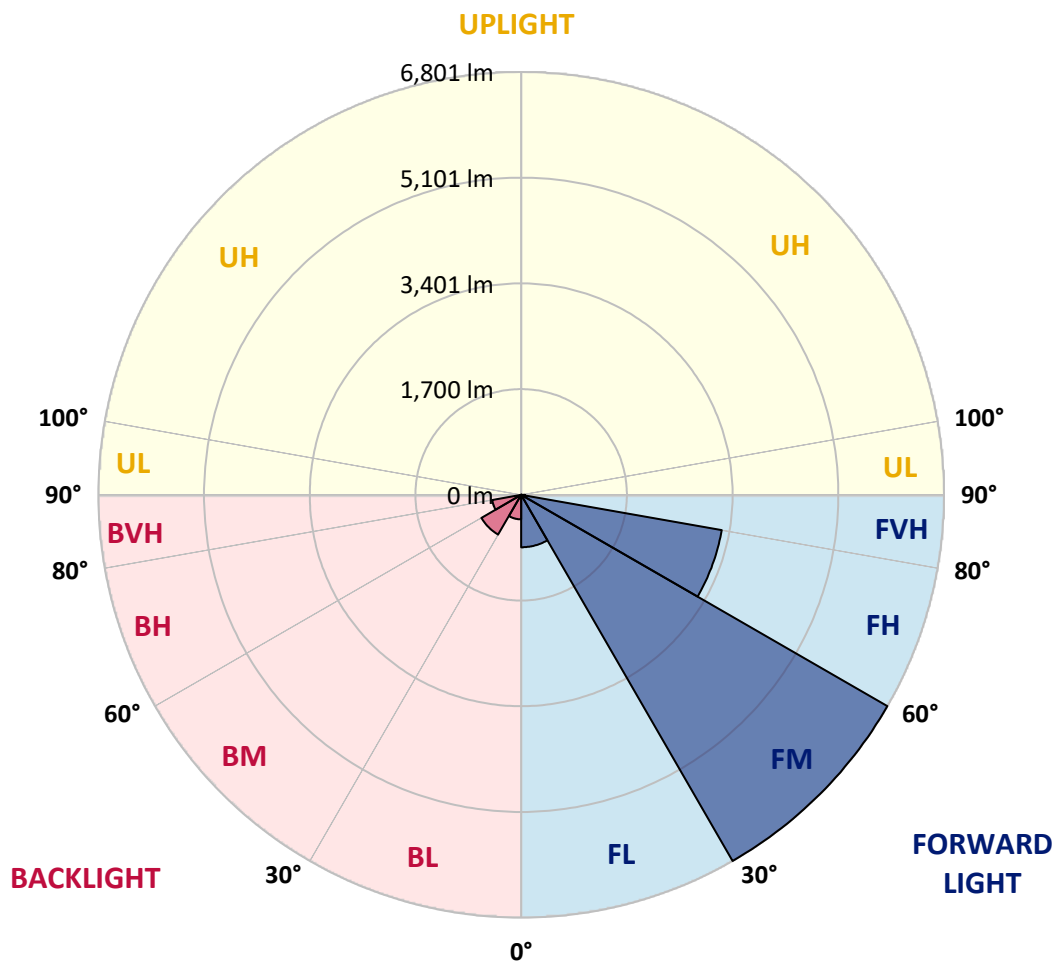
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	844.2	6.7			
FM	(30°-60°)	6801.2	54.0			
FH	(60°-80°)	3276.3	26.0			G2/5000
FVH	(80°-90°)	60.6	0.5			G1/100
BL	(0°-30°)	394.1	3.1	B1/500		
BM	(30°-60°)	739.1	5.9	B1/1000		
BH	(60°-80°)	474.1	3.8	B1/500		G1/500
BVH	(80°-90°)	2.8	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: P265638

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9
2.5°	1557.1	1554.1	1551.0	1547.9	1547.9	1544.7	1541.8	1535.6	1529.4	1523.0	1520.0
5°	1585.0	1581.9	1578.9	1581.9	1578.9	1578.9	1575.7	1569.6	1563.4	1554.1	1544.7
7.5°	1606.7	1603.7	1600.5	1603.7	1606.7	1609.9	1612.8	1606.7	1603.7	1591.2	1581.9
10°	1634.6	1631.4	1628.4	1634.6	1634.6	1650.0	1653.2	1650.0	1647.0	1637.7	1622.2
12.5°	1674.8	1677.9	1677.9	1684.1	1690.3	1708.8	1715.0	1705.7	1705.7	1693.3	1674.8
15°	1749.1	1749.1	1749.1	1755.3	1758.4	1783.1	1789.3	1780.0	1786.3	1764.6	1745.9
17.5°	1820.2	1823.4	1829.6	1842.0	1842.0	1863.7	1876.0	1876.0	1888.3	1860.6	1835.7
20°	1891.6	1894.5	1903.9	1931.7	1931.7	1959.7	1981.3	1990.6	2003.0	1975.2	1931.7
22.5°	1968.8	1968.8	1984.4	2027.7	2018.4	2074.1	2114.4	2129.9	2142.3	2105.1	2036.9
25°	2086.6	2074.1	2086.6	2126.7	2120.5	2198.1	2272.4	2287.8	2303.3	2259.9	2157.8
27.5°	2309.5	2290.9	2247.5	2250.7	2250.7	2340.4	2445.6	2467.4	2476.5	2439.4	2312.5
30°	2755.2	2755.2	2594.2	2485.9	2414.6	2495.2	2643.8	2680.9	2693.3	2637.6	2470.3
32.5°	3532.2	3532.2	3235.1	2959.6	2690.2	2690.2	2860.5	2928.6	2941.1	2876.0	2680.9
35°	4522.8	4516.7	4070.8	3693.2	3167.0	2968.8	3114.3	3228.9	3266.0	3179.3	2953.4
37.5°	5575.5	5535.1	5055.4	4622.0	3900.6	3414.5	3457.9	3609.7	3643.7	3572.5	3306.2
40°	6429.9	6383.4	5996.5	5634.3	4848.0	4126.6	3953.4	4092.6	4132.8	4033.7	3727.2
42.5°	7203.8	7089.2	6823.0	6562.9	5937.6	5358.7	4612.6	4668.4	4711.7	4606.5	4201.0
45°	7764.1	7587.8	7451.5	7371.0	7039.7	6711.5	5467.2	5355.6	5371.1	5241.2	4717.9
47.5°	7779.6	7655.7	7668.2	7878.7	8014.9	8002.6	6578.5	6182.2	6123.3	5906.6	5269.0
50°	7036.7	7107.8	7333.9	7934.4	8671.2	9117.0	7900.4	7160.5	6984.1	6594.0	5817.0
52.5°	5798.4	5909.8	6333.9	7346.2	8767.2	9850.8	9271.8	8278.1	7962.2	7275.1	6237.9
55°	4541.6	4547.7	4993.5	6024.4	8126.3	9983.9	10367.7	9507.0	9024.2	7792.0	6516.6
57.5°	3123.6	3293.8	3860.3	4553.9	6680.6	9321.4	10779.4	10460.6	9838.2	8110.8	6711.5
60°	2046.2	2055.6	2714.9	3516.8	4547.7	7584.6	10528.7	10965.3	10497.8	8299.7	6844.7
62°	1442.6	1458.0	1866.8	2872.9	3427.0	5436.2	9974.5	11070.4	10869.2	8411.2	6984.1
62.5°	1337.3	1349.8	1693.3	2711.9	3219.5	4875.8	9776.4	11045.6	10924.8	8448.3	7033.5
65°	981.4	981.4	1108.2	1863.7	2358.9	2634.5	8284.2	10553.4	10850.5	8745.4	7219.3
67.5°	758.4	764.6	807.9	1148.6	1780.0	1597.4	5287.6	9445.1	10076.6	9185.1	7324.6
70°	653.2	650.2	681.0	761.6	1284.8	1061.8	2328.0	7371.0	8439.0	9073.7	7228.7
72.5°	482.8	486.1	557.2	668.7	894.7	690.3	1052.5	3913.0	5473.4	7101.7	6194.6
75°	309.6	312.7	393.2	526.2	643.9	451.9	606.7	1167.1	2241.4	3937.8	3789.2
77.5°	207.4	213.5	256.9	368.3	563.4	281.7	380.8	489.1	674.8	1476.6	1359.0
80°	139.2	139.2	164.1	247.7	356.0	235.3	204.4	325.0	349.8	458.1	229.1
82.5°	92.9	92.9	108.3	164.1	232.2	210.6	123.8	176.4	204.4	229.1	80.5
85°	55.8	55.8	74.3	102.1	151.8	117.7	80.5	99.1	105.2	145.4	43.4
87.5°	34.0	30.9	49.5	71.1	80.5	71.1	52.6	52.6	55.8	80.5	21.6
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: P265638

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9
2.5°	1513.9	1510.7	1507.6	1501.4	1492.2	1485.9	1479.8	1473.6	1467.4	1467.4	1476.6
5°	1541.8	1532.4	1520.0	1507.6	1489.1	1476.6	1467.4	1455.1	1448.7	1448.7	1451.9
7.5°	1575.7	1566.5	1544.7	1523.0	1495.3	1473.6	1451.9	1424.1	1402.3	1393.1	1402.3
10°	1612.8	1600.5	1569.6	1535.6	1504.5	1448.7	1377.6	1291.0	1216.7	1182.6	1198.1
12.5°	1659.3	1643.9	1606.7	1560.3	1489.1	1352.8	1176.4	975.2	848.2	789.4	801.7
15°	1727.4	1705.7	1653.2	1581.9	1424.1	1130.0	842.0	609.9	492.2	442.7	449.0
17.5°	1807.8	1780.0	1708.8	1575.7	1256.9	814.1	501.6	356.0	306.5	294.0	294.0
20°	1894.5	1857.4	1764.6	1529.4	1003.0	510.7	312.7	272.5	253.9	244.6	244.6
22.5°	1984.4	1934.9	1811.1	1420.9	715.1	318.9	256.9	229.1	207.4	198.2	198.2
25°	2092.7	2027.7	1857.4	1232.1	455.1	256.9	219.7	192.0	170.3	157.9	160.9
27.5°	2219.6	2136.1	1897.7	996.8	294.0	222.9	182.6	154.8	136.3	130.1	130.1
30°	2352.8	2253.7	1907.0	746.1	238.4	192.0	151.8	126.9	114.5	108.3	108.3
32.5°	2535.5	2405.4	1879.2	495.3	201.2	160.9	126.9	105.2	95.9	92.9	92.9
35°	2776.9	2603.6	1814.0	306.5	170.3	133.0	105.2	92.9	83.6	80.5	80.5
37.5°	3083.3	2879.1	1699.6	210.6	145.4	108.3	89.8	80.5	74.3	71.1	71.1
40°	3492.0	3213.3	1551.0	182.6	123.8	92.9	77.4	71.1	64.9	64.9	64.9
42.5°	3925.5	3618.9	1359.0	160.9	105.2	80.5	68.1	62.0	58.7	55.8	55.8
45°	4399.1	4033.7	1120.6	142.4	89.8	71.1	62.0	52.6	49.5	49.5	49.5
47.5°	4869.6	4461.1	860.7	123.8	77.4	62.0	52.6	46.4	43.4	40.2	40.2
50°	5352.6	4848.0	631.5	108.3	68.1	55.8	46.4	40.2	34.0	30.9	30.9
52.5°	5702.4	5080.2	461.3	92.9	58.7	46.4	37.1	30.9	24.8	21.6	21.6
55°	5959.4	5222.6	337.5	77.4	52.6	40.2	30.9	24.8	18.5	18.5	15.5
57.5°	6160.5	5290.7	253.9	68.1	46.4	34.0	24.8	18.5	15.5	12.3	12.3
60°	6315.4	5293.7	188.9	55.8	40.2	27.8	18.5	12.3	9.3	9.3	9.3
62°	6519.7	5334.0	154.8	46.4	37.1	24.8	15.5	9.3	6.2	3.1	3.1
62.5°	6578.5	5349.4	148.6	46.4	34.0	21.6	12.3	9.3	6.2	3.1	3.1
65°	6851.0	5377.3	114.5	37.1	27.8	18.5	9.3	6.2	0.0	0.0	0.0
67.5°	7098.5	5334.0	83.6	27.8	21.6	12.3	9.3	3.1	0.0	0.0	0.0
70°	7073.9	5036.7	58.7	18.5	15.5	9.3	6.2	0.0	0.0	0.0	0.0
72.5°	5829.3	3770.6	40.2	15.5	9.3	6.2	3.1	0.0	0.0	0.0	0.0
75°	3519.9	1650.0	27.8	9.3	9.3	6.2	3.1	0.0	0.0	0.0	0.0
77.5°	1154.7	597.6	18.5	6.2	6.2	3.1	3.1	0.0	0.0	0.0	0.0
80°	188.9	99.1	9.3	6.2	6.2	3.1	3.1	0.0	0.0	0.0	0.0
82.5°	58.7	24.8	6.2	6.2	3.1	3.1	0.0	0.0	0.0	0.0	0.0
85°	21.6	9.3	6.2	6.2	3.1	3.1	0.0	0.0	0.0	0.0	0.0
87.5°	9.3	6.2	6.2	6.2	3.1	3.1	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)