

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: P236977

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22535.6 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G3

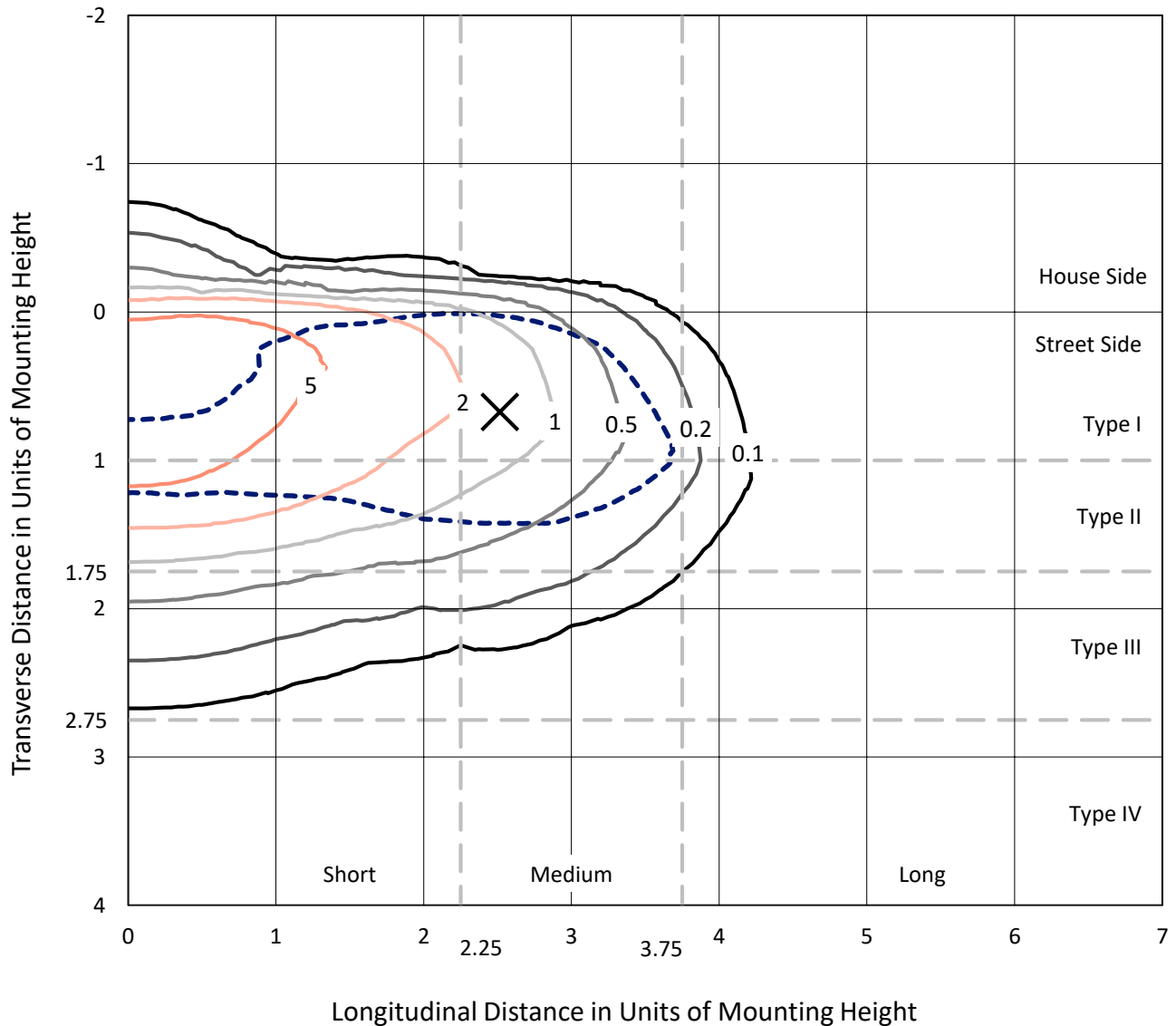
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P236977
 CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

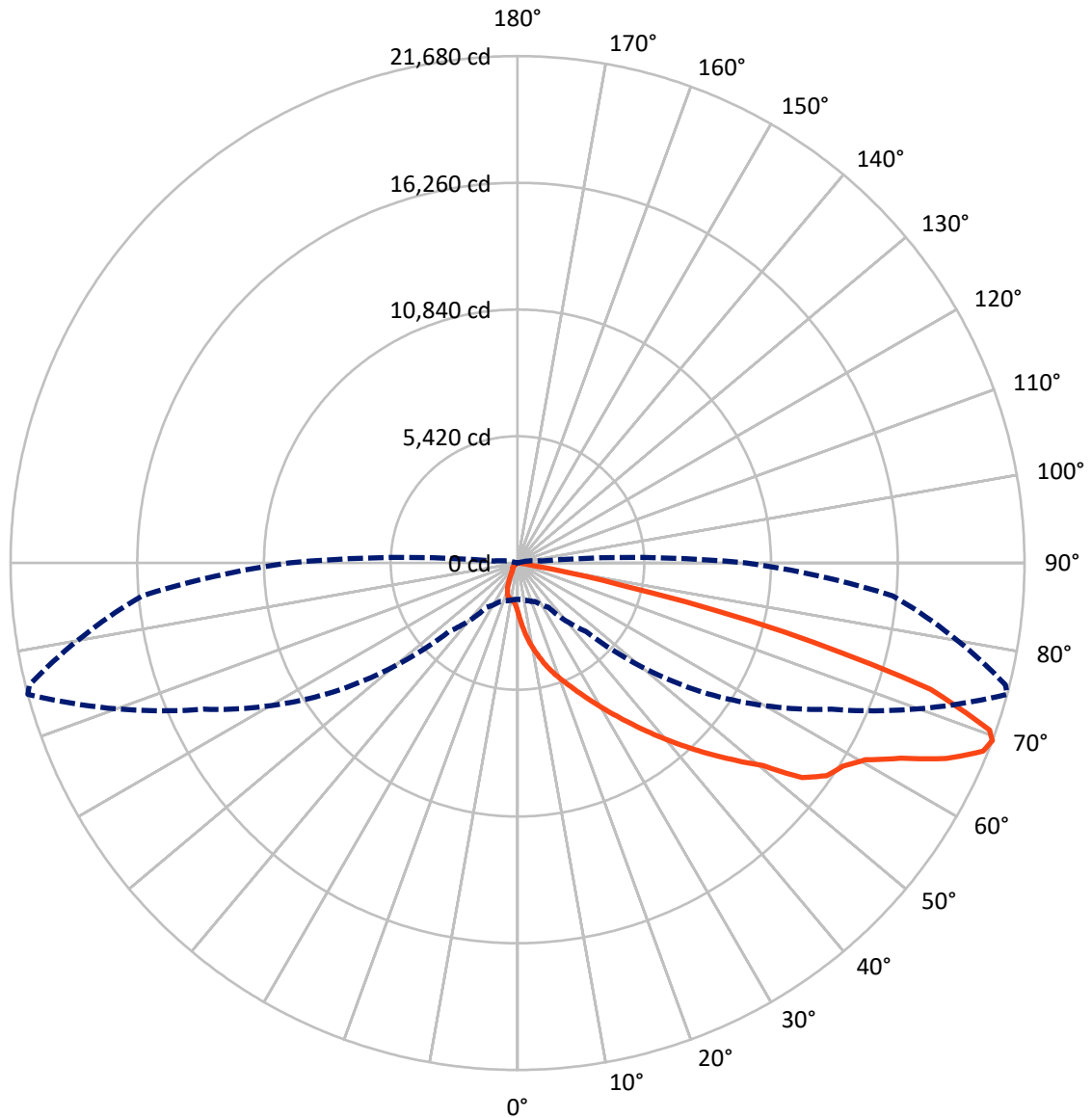
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P236977
CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P236977

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R-HSS

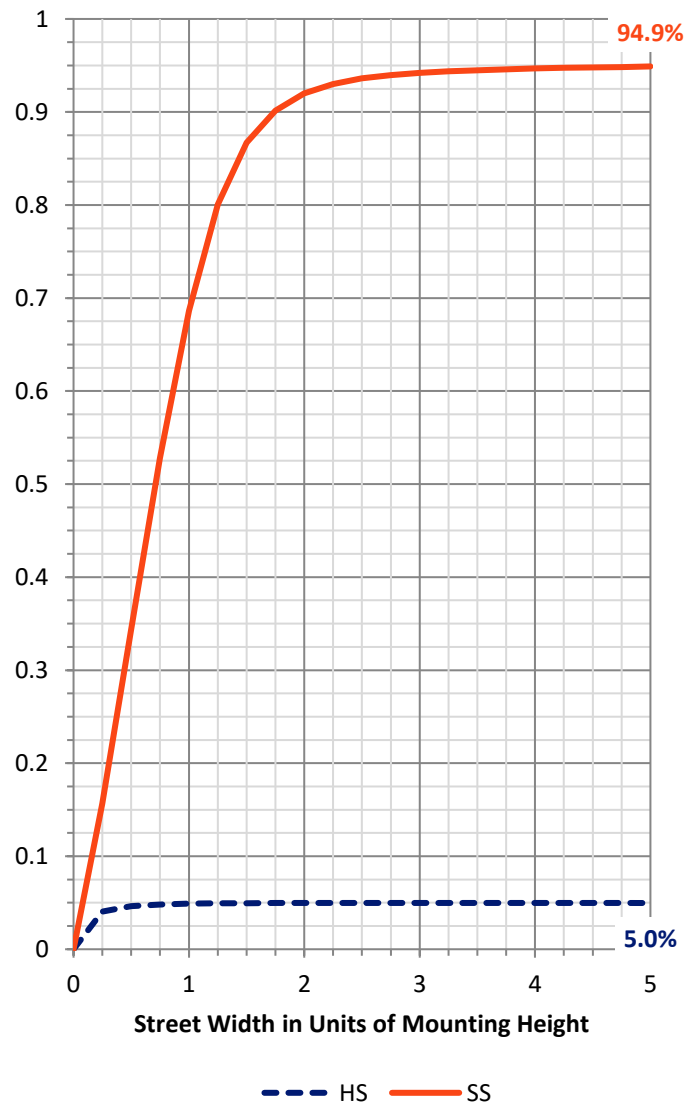
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1124.4	0.0	1124.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	21411.2	0.0	21411.2
	% Fixture	95.0	0.0	95.0
Total	Lumens	22535.6	0.0	22535.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.5	1.1
10°-20°	874.2	3.9
20°-30°	1668.8	7.4
30°-40°	2993.5	13.3
40°-50°	4586.4	20.4
50°-60°	5330.5	23.7
60°-70°	4720.2	20.9
70°-80°	2036.0	9.0
80°-90°	81.6	0.4
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°	22535.6	100.0
0°-180°	22535.6	100.0

Coefficient of Utilization



REPORT NUMBER: P236977

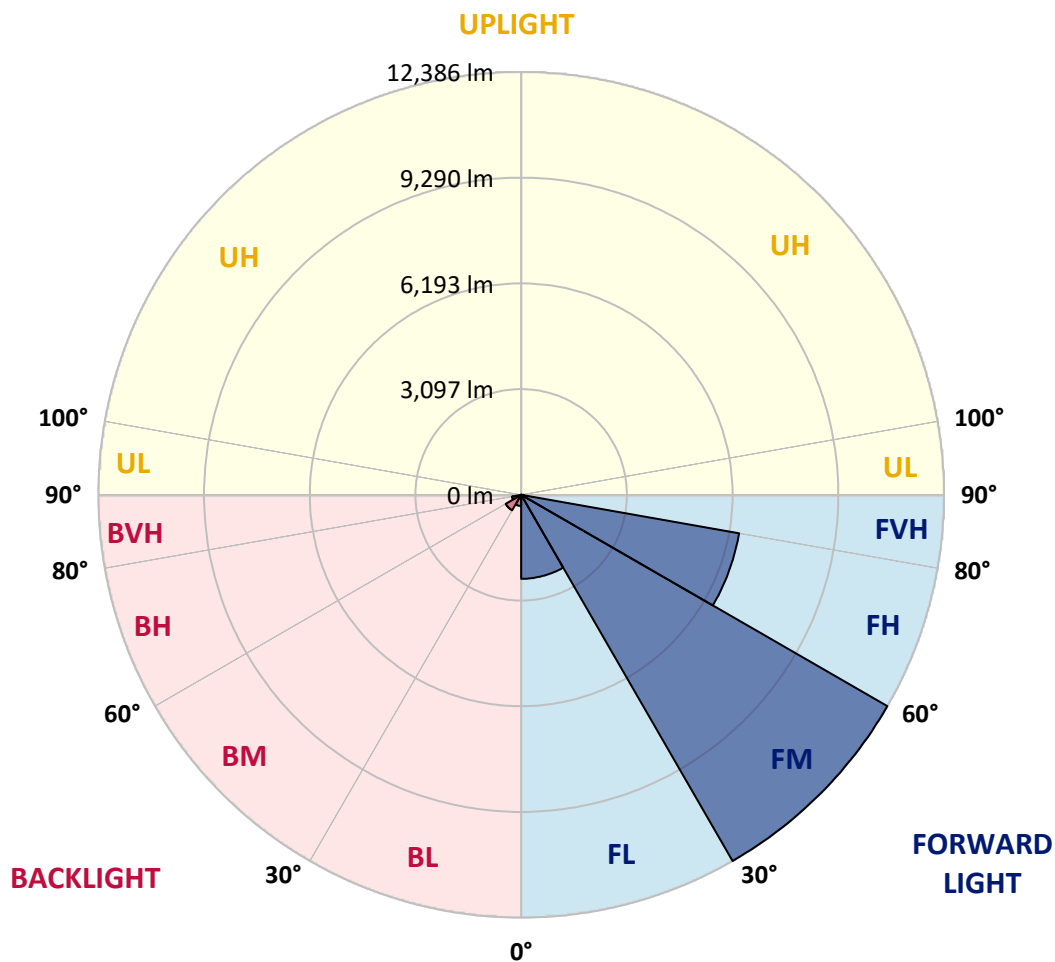
CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2460.9	10.9			
FM	(30°-60°)	12386.1	55.0			
FH	(60°-80°)	6483.8	28.8			G3/7500
FVH	(80°-90°)	80.4	0.4			G1/100
BL	(0°-30°)	326.6	1.4	B1/500		
BM	(30°-60°)	524.2	2.3	B1/1000		
BH	(60°-80°)	272.4	1.2	B1/500		G1/500
BVH	(80°-90°)	1.2	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-G3

Type II Medium





REPORT NUMBER: P236977

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9
2.5°	3454.3	3420.2	3386.3	3347.3	3259.7	3109.0	2919.2	2714.8	2461.8	2418.1	2213.7
5°	4193.9	4179.3	4145.2	4091.7	3994.4	3829.0	3614.9	3313.2	2889.9	2817.0	2384.0
7.5°	4714.5	4704.8	4675.5	4612.3	4524.7	4359.3	4135.5	3809.5	3318.1	3235.4	2598.1
10°	5181.6	5176.6	5152.3	5093.9	5006.3	4826.4	4587.9	4247.4	3726.8	3634.3	2846.2
12.5°	5604.7	5609.7	5599.9	5570.7	5507.5	5337.2	5064.7	4694.9	4120.9	4018.7	3142.9
15°	5852.9	5867.5	5906.4	5964.8	5984.3	5848.0	5565.9	5157.2	4524.7	4437.2	3483.6
17.5°	5770.2	5784.8	5906.4	6105.9	6295.6	6315.1	6062.1	5595.0	4923.7	4836.1	3819.2
20°	5570.7	5590.2	5716.7	5989.2	6358.9	6616.8	6514.6	6071.8	5303.2	5196.1	4140.3
22.5°	5794.5	5794.5	5833.5	5998.9	6334.6	6738.4	6874.6	6548.6	5692.3	5561.0	4461.5
25°	6563.3	6548.6	6466.0	6397.8	6504.8	6864.9	7147.1	7035.1	6149.7	5998.9	4802.0
27.5°	7536.3	7604.4	7448.7	7200.6	6957.3	7113.0	7390.3	7516.8	6655.7	6500.0	5152.3
30°	8626.1	8655.3	8470.4	8139.6	7711.4	7560.6	7677.3	7930.4	7205.5	7035.1	5517.2
32.5°	9608.9	9584.5	9428.8	9083.5	8553.1	8227.2	8047.1	8261.2	7803.9	7609.3	5891.8
35°	10479.8	10499.3	10309.5	9910.6	9390.0	9044.5	8616.4	8635.9	8475.2	8251.5	6324.8
37.5°	11263.1	11229.0	11049.0	10650.0	10178.2	9803.6	9351.0	9025.1	9209.9	8976.4	6811.4
40°	11900.4	11866.4	11676.7	11287.4	10844.7	10538.1	10183.0	9545.7	9983.5	9716.0	7332.0
42.5°	12406.4	12367.5	12207.0	11832.4	11404.2	11131.8	10961.4	10187.9	10810.6	10543.0	7915.8
45°	12654.5	12620.5	12523.2	12241.0	11866.4	11628.0	11710.7	10927.4	11696.1	11472.3	8558.0
47.5°	12362.7	12348.0	12460.0	12411.3	12197.3	12070.7	12357.8	11735.0	12625.4	12406.4	9297.5
50°	11477.2	11501.4	11827.5	12231.3	12333.4	12484.3	12888.1	12586.5	13622.7	13389.2	10148.9
52.5°	9292.7	9458.1	10440.8	11413.9	12168.0	12737.3	13510.8	13802.8	15247.7	15019.1	11477.2
55°	6937.9	7006.0	8076.3	9740.2	11501.4	12717.8	13973.0	14517.9	16050.5	15817.0	11827.5
57.5°	5502.7	5526.9	6057.3	7755.2	10129.5	12279.9	14216.4	14775.8	16400.8	16206.2	12348.0
60°	4320.3	4349.6	4733.9	5901.6	8197.9	11097.7	13866.0	14999.6	17086.9	16931.2	13257.9
62.5°	3361.9	3391.1	3624.6	4310.6	6149.7	9278.1	13160.6	15359.6	18390.7	18317.8	14746.7
65°	2602.9	2612.6	2773.2	3094.3	4344.7	7307.7	12299.3	15695.3	20151.9	20088.7	15953.2
67.5°	1921.8	1936.3	2048.3	2247.7	2933.7	5249.6	10888.5	15437.5	21480.1	21295.3	16391.0
69°	1552.0	1566.6	1663.9	1824.4	2315.9	4135.5	9599.2	14800.2	21679.6	21504.5	16113.7
70°	1328.2	1337.9	1435.3	1571.5	1975.3	3512.7	8577.4	14250.3	21416.9	21246.6	15481.2
72.5°	851.4	900.1	997.4	1084.9	1308.8	2325.6	5789.7	11817.7	18478.3	18186.3	12124.2
75°	471.9	486.5	661.6	768.7	870.8	1513.1	3220.8	7370.9	11754.5	11550.1	6485.4
77.5°	389.2	399.0	467.1	583.8	583.8	846.6	1216.3	2904.6	4471.2	4033.3	1756.4
80°	272.4	282.2	355.2	384.3	418.4	476.8	394.0	637.4	690.9	613.1	262.7
82.5°	189.8	199.5	243.3	316.2	335.7	223.8	146.0	189.8	199.5	199.5	102.2
85°	34.1	48.7	180.0	262.7	199.5	68.1	82.8	68.1	63.2	68.1	24.3
87.5°	0.0	0.0	111.9	126.5	107.0	29.2	34.1	24.3	14.6	19.4	9.7
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: P236977

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9	2096.9
2.5°	2111.6	2009.4	1834.3	1707.7	1600.7	1518.0	1483.9	1430.4	1391.4	1411.0	1386.6
5°	2169.9	1989.8	1707.7	1527.7	1401.2	1294.1	1206.6	1138.4	1084.9	1075.2	1065.5
7.5°	2262.4	2004.5	1634.8	1411.0	1221.2	1055.8	919.5	817.3	739.5	739.5	710.3
10°	2388.8	2043.4	1590.9	1294.1	1012.0	788.2	651.9	554.6	515.7	510.9	501.1
12.5°	2564.0	2116.4	1556.9	1143.4	788.2	574.1	491.4	457.4	442.7	437.8	433.0
15°	2802.4	2223.4	1518.0	958.5	598.4	471.9	437.8	408.7	394.0	389.2	384.3
17.5°	3031.1	2320.8	1435.3	768.7	486.5	428.1	389.2	364.9	345.5	340.5	340.5
20°	3245.1	2403.4	1294.1	598.4	437.8	384.3	345.5	316.2	296.8	292.0	292.0
22.5°	3468.9	2471.6	1119.0	486.5	399.0	340.5	301.7	272.4	253.0	248.2	243.3
25°	3707.4	2520.2	919.5	433.0	360.1	301.7	257.9	233.5	218.9	214.1	209.2
27.5°	3965.2	2539.7	729.8	394.0	316.2	262.7	223.8	199.5	189.8	184.8	184.8
30°	4198.7	2520.2	564.4	350.3	277.3	228.6	194.6	175.1	165.4	160.6	160.6
32.5°	4442.0	2471.6	452.5	311.4	243.3	194.6	165.4	150.8	146.0	141.1	141.1
35°	4699.8	2408.3	389.2	277.3	209.2	170.3	146.0	136.3	131.3	126.5	126.5
37.5°	5001.5	2330.5	355.2	248.2	184.8	150.8	126.5	121.6	116.7	116.7	116.7
40°	5342.1	2233.2	330.8	223.8	165.4	131.3	111.9	107.0	102.2	102.2	102.2
42.5°	5702.1	2121.3	306.5	199.5	146.0	111.9	97.3	97.3	92.5	92.5	87.6
45°	6105.9	2009.4	282.2	175.1	126.5	97.3	82.8	77.8	77.8	72.9	72.9
47.5°	6582.7	1907.2	257.9	155.7	111.9	82.8	72.9	68.1	63.2	58.4	58.4
50°	7254.2	1897.5	228.6	136.3	102.2	68.1	58.4	53.5	48.7	43.8	43.8
52.5°	7920.6	1809.9	194.6	111.9	82.8	58.4	43.8	38.9	34.1	34.1	29.2
55°	8071.5	1663.9	170.3	97.3	63.2	43.8	34.1	24.3	24.3	19.4	19.4
57.5°	8402.3	1595.8	146.0	77.8	48.7	34.1	19.4	14.6	14.6	14.6	14.6
60°	9054.2	1576.4	126.5	68.1	34.1	24.3	14.6	9.7	9.7	4.9	4.9
62.5°	9954.3	1556.9	107.0	58.4	24.3	14.6	9.7	4.9	0.0	0.0	0.0
65°	10450.6	1425.5	87.6	43.8	19.4	14.6	4.9	0.0	0.0	0.0	0.0
67.5°	10319.2	1177.4	77.8	29.2	14.6	9.7	4.9	0.0	0.0	0.0	0.0
69°	9769.5	992.5	63.2	24.3	14.6	9.7	4.9	0.0	0.0	0.0	0.0
70°	9107.7	856.3	58.4	19.4	9.7	4.9	4.9	0.0	0.0	0.0	0.0
72.5°	6466.0	447.6	38.9	14.6	9.7	4.9	0.0	0.0	0.0	0.0	0.0
75°	3021.3	199.5	24.3	9.7	4.9	4.9	0.0	0.0	0.0	0.0	0.0
77.5°	666.6	92.5	14.6	9.7	4.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	126.5	34.1	9.7	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.8	14.6	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	0.0	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)