

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: P236984

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236984
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-110-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 485mA 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: 12281 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

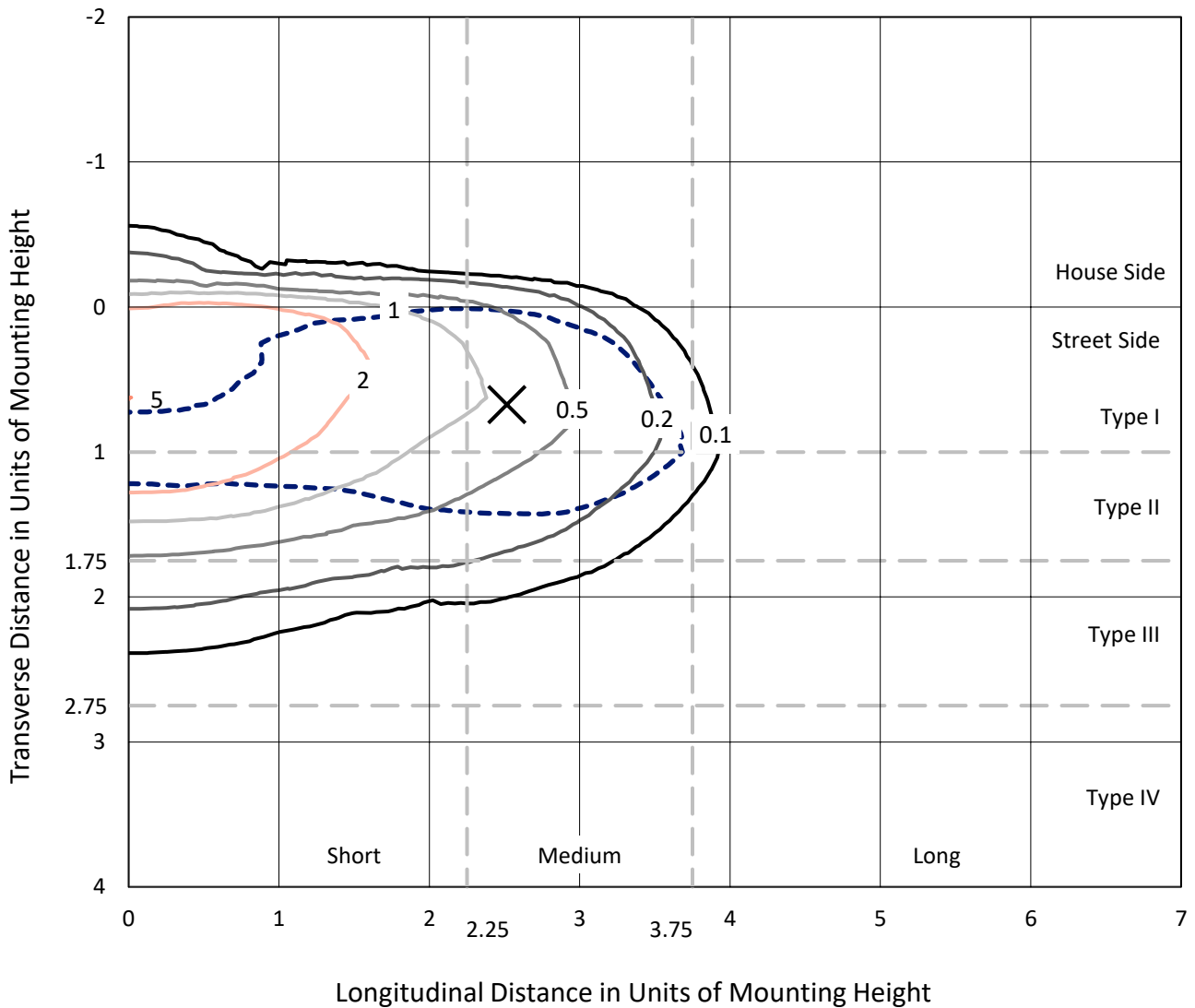
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P236984
 CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2R-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

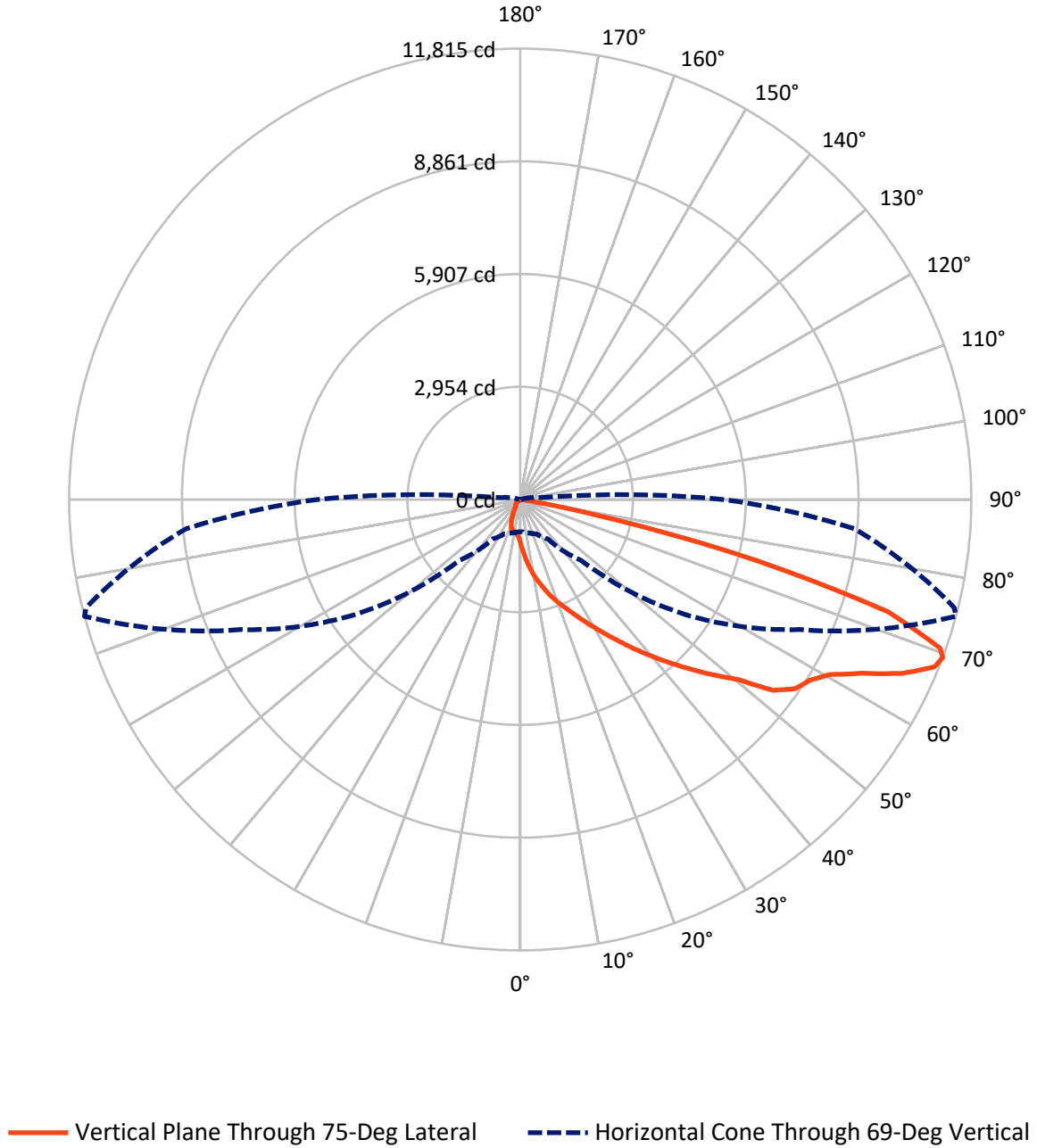
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type II - Medium - N/A

REPORT NUMBER: P236984
CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2R-7050-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P236984
 CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2R-7050-HSS

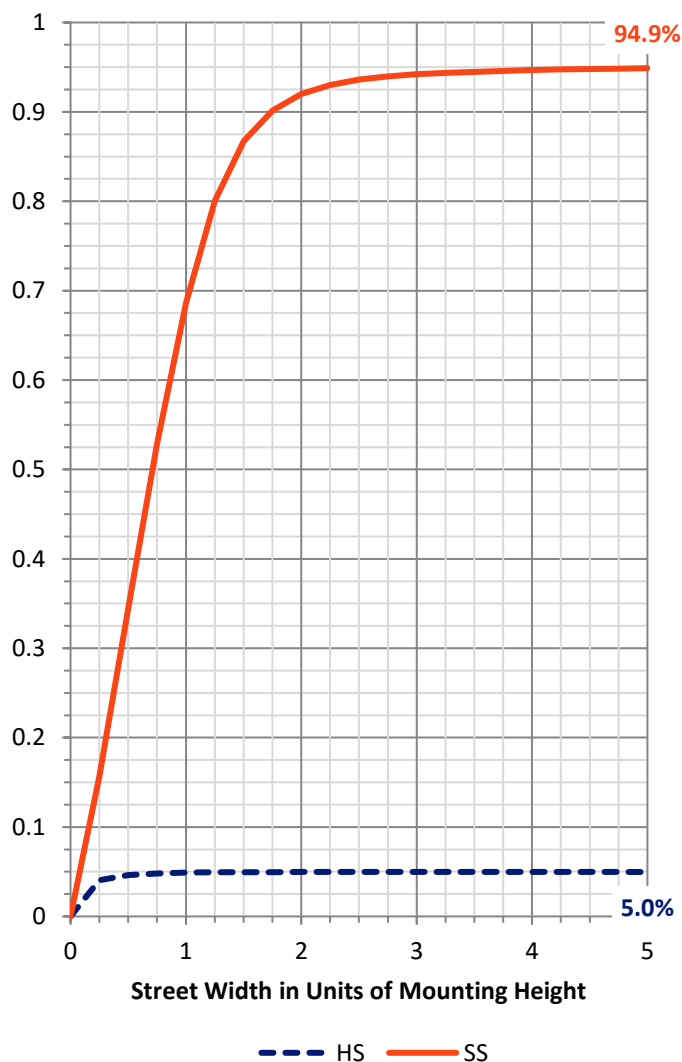
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	612.8	0.0	612.8
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	11668.3	0.0	11668.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	12281.0	0.0	12281.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	1.1
10°-20°	476.4	3.9
20°-30°	909.4	7.4
30°-40°	1631.4	13.3
40°-50°	2499.4	20.4
50°-60°	2904.9	23.7
60°-70°	2572.3	20.9
70°-80°	1109.5	9.0
80°-90°	44.5	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°	12281.0	100.0
0°-180°	12281.0	100.0

Coefficient of Utilization



REPORT NUMBER: P236984

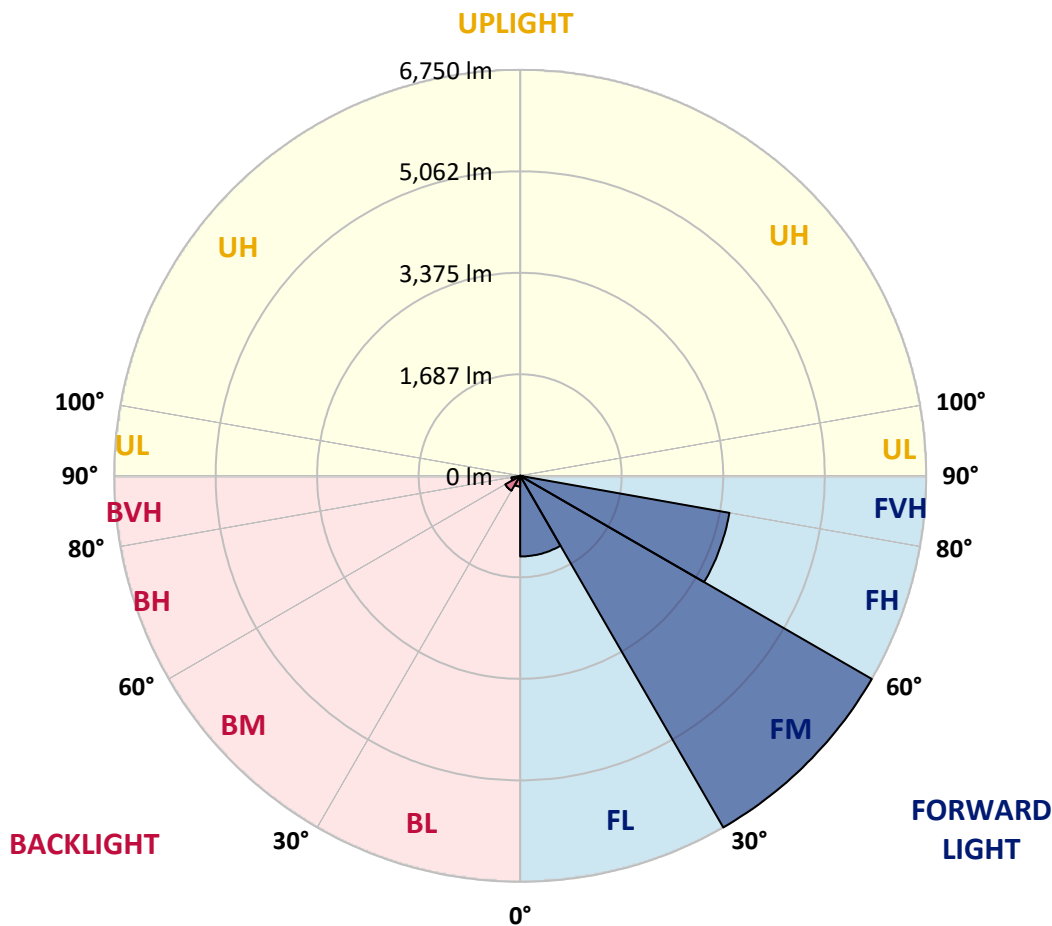
CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2R-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1341.1	10.9			
FM (30°-60°)	6749.9	55.0			
FH (60°-80°)	3533.4	28.8			G2/5000
FVH (80°-90°)	43.8	0.4			G1/100
BL (0°-30°)	178.0	1.4	B1/500		
BM (30°-60°)	285.7	2.3	B1/1000		
BH (60°-80°)	148.5	1.2	B1/500		G1/500
BVH (80°-90°)	0.6	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 Medium





REPORT NUMBER: P236984

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7
2.5°	1882.5	1863.9	1845.4	1824.1	1776.4	1694.2	1590.8	1479.5	1341.6	1317.7	1206.4
5°	2285.5	2277.5	2259.0	2229.8	2176.8	2086.6	1970.0	1805.6	1574.9	1535.1	1299.2
7.5°	2569.2	2563.9	2548.0	2513.5	2465.8	2375.6	2253.7	2076.0	1808.2	1763.2	1415.8
10°	2823.7	2821.1	2807.8	2776.0	2728.3	2630.2	2500.2	2314.7	2031.0	1980.6	1551.1
12.5°	3054.4	3057.0	3051.7	3035.8	3001.4	2908.6	2760.1	2558.6	2245.7	2190.0	1712.8
15°	3189.6	3197.6	3218.8	3250.6	3261.2	3187.0	3033.2	2810.5	2465.8	2418.1	1898.4
17.5°	3144.5	3152.5	3218.8	3327.5	3430.9	3441.5	3303.6	3049.1	2683.2	2635.5	2081.3
20°	3035.8	3046.4	3115.4	3263.8	3465.3	3605.9	3550.2	3308.9	2890.0	2831.7	2256.3
22.5°	3157.8	3157.8	3179.0	3269.1	3452.1	3672.2	3746.4	3568.8	3102.1	3030.5	2431.3
25°	3576.7	3568.8	3523.7	3486.6	3544.9	3741.1	3894.9	3833.9	3351.3	3269.1	2616.9
27.5°	4107.0	4144.1	4059.3	3924.0	3791.5	3876.3	4027.4	4096.4	3627.1	3542.2	2807.8
30°	4700.9	4716.8	4616.0	4435.7	4202.4	4120.2	4183.9	4321.7	3926.7	3833.9	3006.7
32.5°	5236.5	5223.2	5138.4	4950.1	4661.1	4483.5	4385.4	4502.0	4252.8	4146.7	3210.8
35°	5711.1	5721.7	5618.3	5400.9	5117.2	4928.9	4695.6	4706.2	4618.7	4496.7	3446.8
37.5°	6137.9	6119.4	6021.3	5803.9	5546.7	5342.5	5095.9	4918.3	5019.1	4891.8	3711.9
40°	6485.3	6466.7	6363.3	6151.2	5909.9	5742.9	5549.3	5202.0	5440.6	5294.8	3995.6
42.5°	6761.0	6739.8	6652.3	6448.1	6214.8	6066.3	5973.5	5552.0	5891.4	5745.5	4313.8
45°	6896.2	6877.7	6824.6	6670.9	6466.7	6336.8	6381.9	5955.0	6373.9	6251.9	4663.8
47.5°	6737.1	6729.2	6790.2	6763.7	6647.0	6578.1	6734.5	6395.1	6880.3	6761.0	5066.8
50°	6254.6	6267.8	6445.5	6665.6	6721.2	6803.4	7023.5	6859.1	7423.8	7296.6	5530.8
52.5°	5064.1	5154.3	5689.8	6220.1	6631.1	6941.3	7362.9	7521.9	8309.4	8184.8	6254.6
55°	3780.9	3818.0	4401.3	5308.1	6267.8	6930.7	7614.7	7911.7	8746.9	8619.6	6445.5
57.5°	2998.7	3012.0	3301.0	4226.3	5520.2	6692.1	7747.3	8052.2	8937.8	8831.7	6729.2
60°	2354.4	2370.3	2579.8	3216.1	4467.6	6047.8	7556.4	8174.2	9311.6	9226.8	7225.0
62.5°	1832.1	1848.0	1975.3	2349.1	3351.3	5056.2	7172.0	8370.4	10022.2	9982.4	8036.3
65°	1418.5	1423.8	1511.3	1686.3	2367.7	3982.4	6702.7	8553.3	10982.0	10947.5	8693.9
67.5°	1047.3	1055.2	1116.2	1224.9	1598.8	2860.8	5933.8	8412.8	11705.8	11605.1	8932.5
69°	845.8	853.7	906.8	994.3	1262.1	2253.7	5231.2	8065.5	11814.5	11719.1	8781.4
70°	723.8	729.1	782.2	856.4	1076.5	1914.3	4674.4	7765.9	11671.4	11578.6	8436.7
72.5°	464.0	490.5	543.5	591.3	713.2	1267.4	3155.1	6440.2	10069.9	9910.8	6607.2
75°	257.2	265.1	360.6	418.9	474.6	824.6	1755.2	4016.8	6405.7	6294.4	3534.3
77.5°	212.1	217.4	254.5	318.2	318.2	461.3	662.8	1582.9	2436.6	2198.0	957.1
80°	148.5	153.8	193.6	209.5	228.0	259.8	214.8	347.3	376.5	334.1	143.2
82.5°	103.4	108.7	132.6	172.3	182.9	122.0	79.5	103.4	108.7	108.7	55.7
85°	18.6	26.5	98.1	143.2	108.7	37.1	45.1	37.1	34.5	37.1	13.3
87.5°	0.0	0.0	61.0	68.9	58.3	15.9	18.6	13.3	8.0	10.6	5.3
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: P236984
 CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7	1142.7
2.5°	1150.7	1095.0	999.6	930.6	872.3	827.2	808.7	779.5	758.3	768.9	755.6
5°	1182.5	1084.4	930.6	832.5	763.6	705.3	657.5	620.4	591.3	586.0	580.7
7.5°	1232.9	1092.4	890.9	768.9	665.5	575.3	501.1	445.4	403.0	403.0	387.1
10°	1301.8	1113.6	867.0	705.3	551.5	429.5	355.3	302.3	281.0	278.4	273.1
12.5°	1397.3	1153.3	848.4	623.1	429.5	312.9	267.8	249.2	241.3	238.6	236.0
15°	1527.2	1211.7	827.2	522.3	326.1	257.2	238.6	222.7	214.8	212.1	209.5
17.5°	1651.8	1264.7	782.2	418.9	265.1	233.3	212.1	198.9	188.2	185.6	185.6
20°	1768.5	1309.8	705.3	326.1	238.6	209.5	188.2	172.3	161.7	159.1	159.1
22.5°	1890.4	1346.9	609.8	265.1	217.4	185.6	164.4	148.5	137.9	135.2	132.6
25°	2020.3	1373.4	501.1	236.0	196.2	164.4	140.5	127.3	119.3	116.7	114.0
27.5°	2160.9	1384.0	397.7	214.8	172.3	143.2	122.0	108.7	103.4	100.8	100.8
30°	2288.1	1373.4	307.6	190.9	151.1	124.6	106.1	95.4	90.1	87.5	87.5
32.5°	2420.7	1346.9	246.6	169.7	132.6	106.1	90.1	82.2	79.5	76.9	76.9
35°	2561.2	1312.4	212.1	151.1	114.0	92.8	79.5	74.2	71.6	68.9	68.9
37.5°	2725.6	1270.0	193.6	135.2	100.8	82.2	68.9	66.3	63.6	63.6	63.6
40°	2911.2	1217.0	180.3	122.0	90.1	71.6	61.0	58.3	55.7	55.7	55.7
42.5°	3107.4	1156.0	167.0	108.7	79.5	61.0	53.0	53.0	50.4	50.4	47.7
45°	3327.5	1095.0	153.8	95.4	68.9	53.0	45.1	42.4	42.4	39.8	39.8
47.5°	3587.3	1039.3	140.5	84.8	61.0	45.1	39.8	37.1	34.5	31.8	31.8
50°	3953.2	1034.0	124.6	74.2	55.7	37.1	31.8	29.2	26.5	23.9	23.9
52.5°	4316.4	986.3	106.1	61.0	45.1	31.8	23.9	21.2	18.6	18.6	15.9
55°	4398.6	906.8	92.8	53.0	34.5	23.9	18.6	13.3	13.3	10.6	10.6
57.5°	4578.9	869.7	79.5	42.4	26.5	18.6	10.6	8.0	8.0	8.0	8.0
60°	4934.2	859.0	68.9	37.1	18.6	13.3	8.0	5.3	5.3	2.7	2.7
62.5°	5424.7	848.4	58.3	31.8	13.3	8.0	5.3	2.7	0.0	0.0	0.0
65°	5695.2	776.9	47.7	23.9	10.6	8.0	2.7	0.0	0.0	0.0	0.0
67.5°	5623.6	641.6	42.4	15.9	8.0	5.3	2.7	0.0	0.0	0.0	0.0
69°	5324.0	540.9	34.5	13.3	8.0	5.3	2.7	0.0	0.0	0.0	0.0
70°	4963.4	466.6	31.8	10.6	5.3	2.7	2.7	0.0	0.0	0.0	0.0
72.5°	3523.7	243.9	21.2	8.0	5.3	2.7	0.0	0.0	0.0	0.0	0.0
75°	1646.5	108.7	13.3	5.3	2.7	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	363.2	50.4	8.0	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	68.9	18.6	5.3	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.9	8.0	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	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)