

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: P237220

Luminaire Tested: **ARCH-L-AF72-270-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237220
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-270-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22186.8 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 273
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

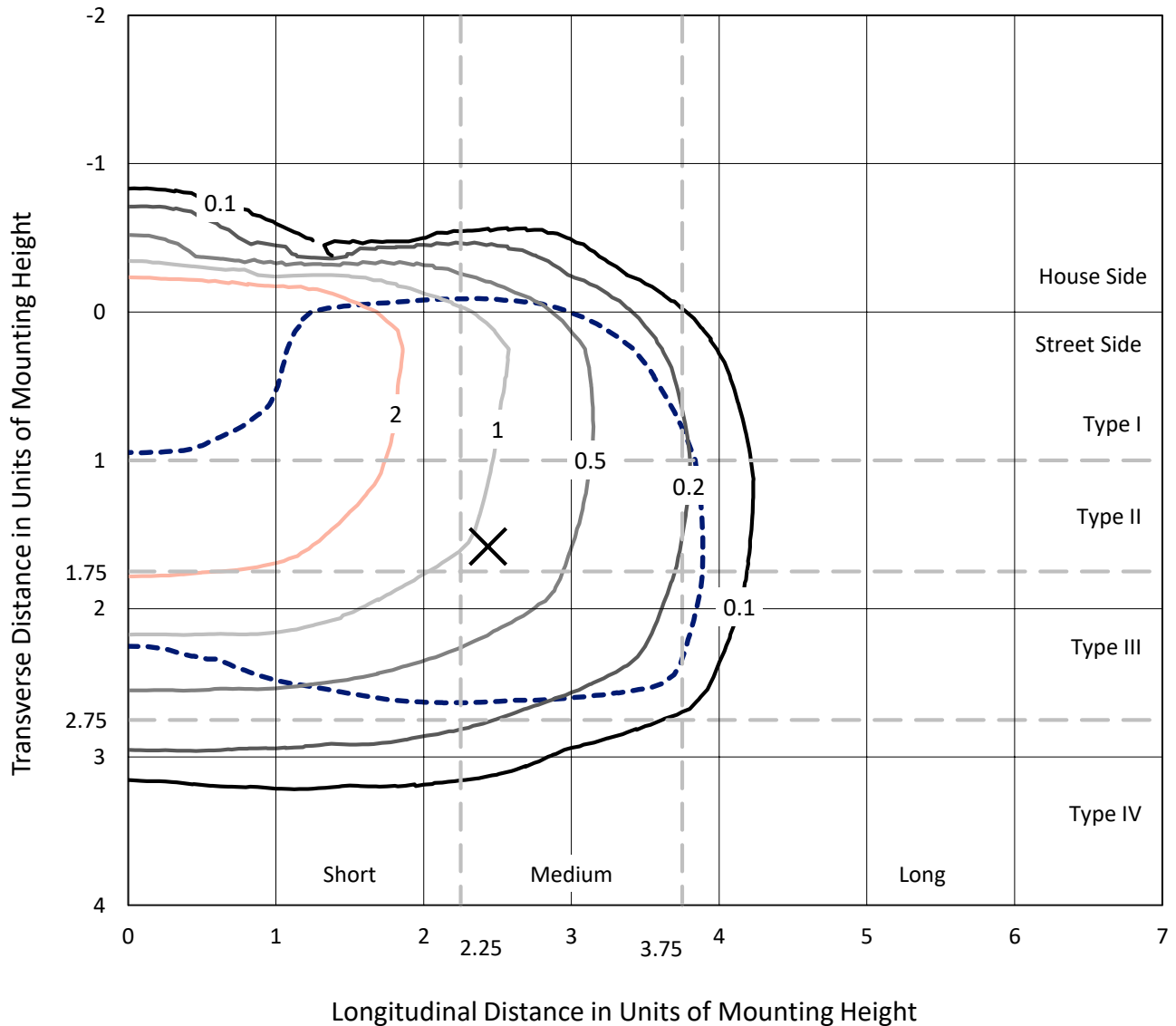


REPORT NUMBER: P237220

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

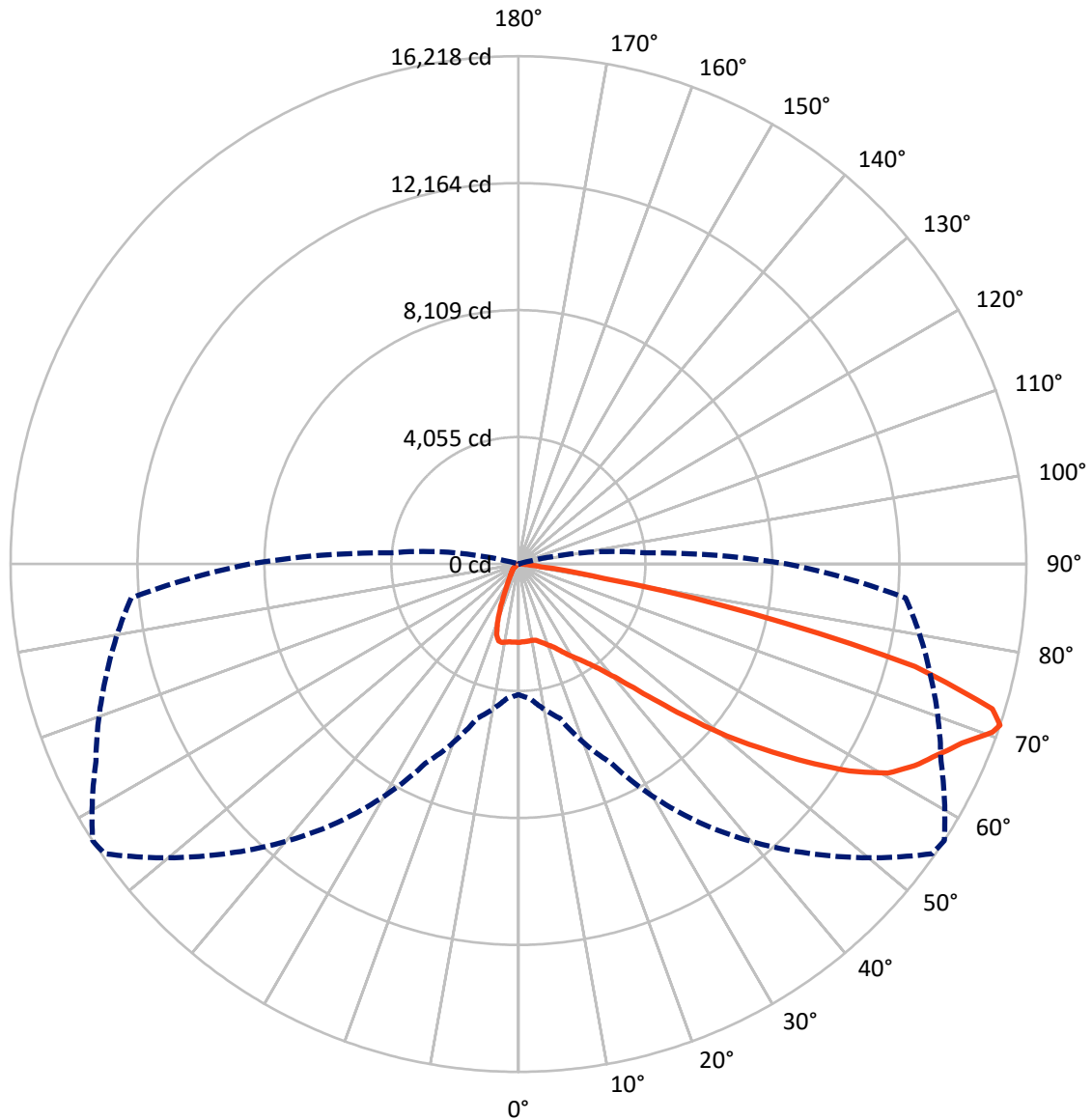


Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P237220

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



REPORT NUMBER: P237220

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T3-HSS

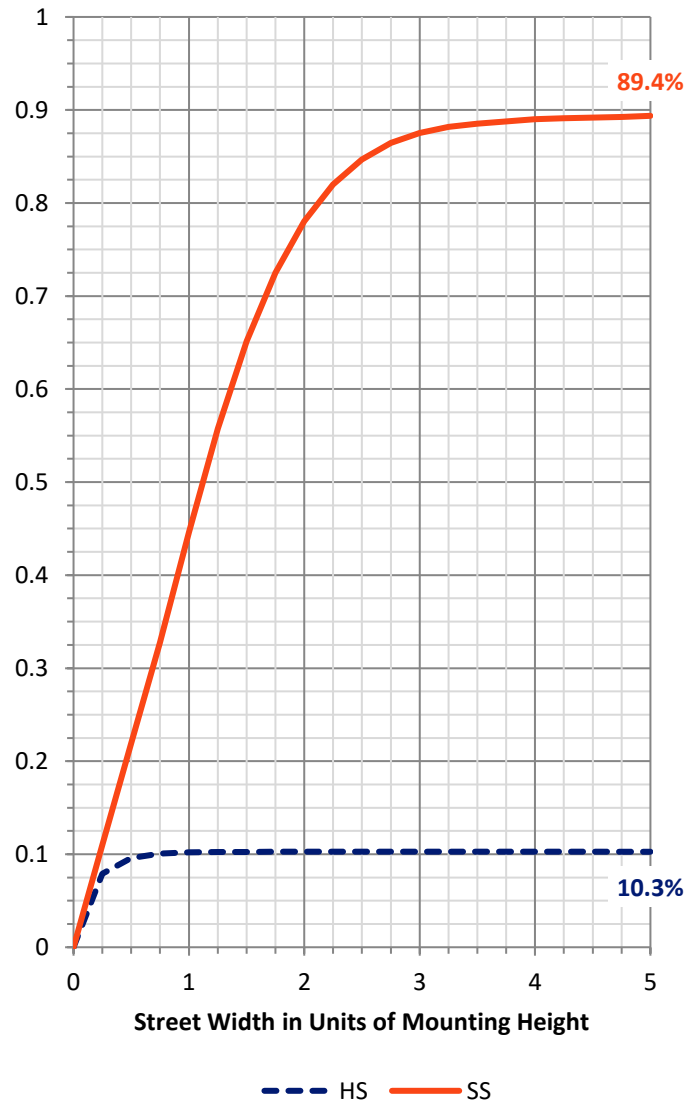
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2299.2	0.0	2299.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	19887.6	0.0	19887.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	22186.8	0.0	22186.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.5	1.1
10°-20°	629.6	2.8
20°-30°	982.2	4.4
30°-40°	1660.1	7.5
40°-50°	3224.3	14.5
50°-60°	5414.6	24.4
60°-70°	6461.9	29.1
70°-80°	3405.5	15.3
80°-90°	173.0	0.8
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°	22186.8	100.0
0°-180°	22186.8	100.0

Coefficient of Utilization



REPORT NUMBER: P237220

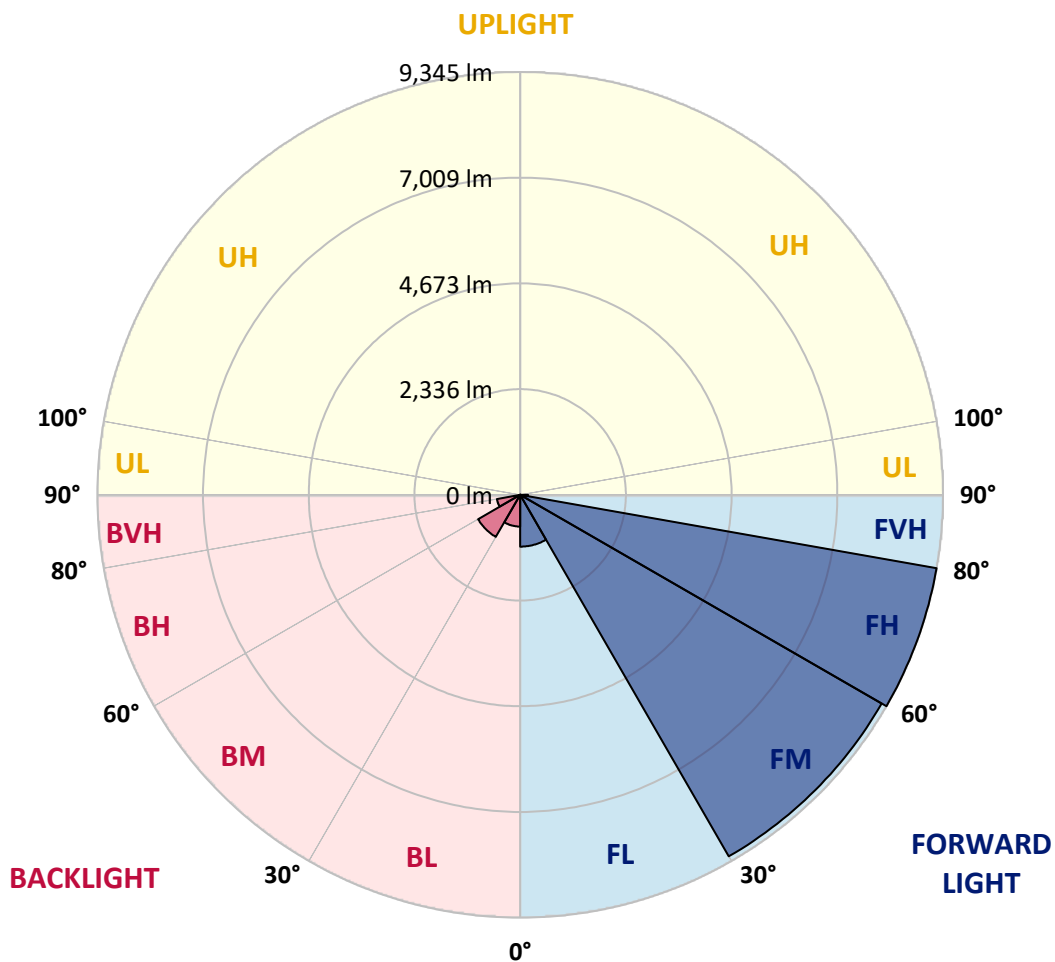
CATALOG NUMBER: ARCH-L-AF72-270-D-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1145.5	5.2			
FM	(30°-60°)	9225.5	41.6			
FH	(60°-80°)	9345.2	42.1			G4/12000
FVH	(80°-90°)	171.4	0.8			G2/225
BL	(0°-30°)	701.8	3.2	B2/1000		
BM	(30°-60°)	1073.6	4.8	B2/2500		
BH	(60°-30°)	522.1	2.4	B2/1000		G2/1000
BVH	(80°-90°)	1.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





REPORT NUMBER: P237220

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5
2.5°	2471.2	2471.2	2471.2	2476.5	2481.6	2481.6	2491.9	2486.8	2486.8	2486.8	2497.1
5°	2404.0	2409.3	2414.4	2424.7	2445.4	2460.9	2486.8	2486.8	2491.9	2502.2	2507.5
7.5°	2310.9	2316.2	2331.7	2352.4	2393.7	2429.9	2471.2	2481.6	2497.1	2522.9	2533.3
10°	2254.1	2264.4	2285.2	2310.9	2357.5	2404.0	2455.7	2471.2	2517.8	2564.3	2590.1
12.5°	2238.6	2243.7	2264.4	2305.8	2362.7	2419.6	2486.8	2502.2	2569.4	2641.9	2683.2
15°	2264.4	2269.6	2280.0	2326.5	2393.7	2466.1	2554.0	2574.7	2657.4	2740.1	2791.8
17.5°	2310.9	2310.9	2321.3	2362.7	2435.0	2517.8	2631.5	2662.5	2755.6	2848.6	2905.5
20°	2342.0	2342.0	2357.5	2398.9	2481.6	2590.1	2724.6	2766.0	2869.4	2972.7	3024.5
22.5°	2373.0	2378.2	2393.7	2440.2	2533.3	2683.2	2838.3	2879.7	2998.6	3107.1	3158.9
25°	2460.9	2455.7	2460.9	2502.2	2610.9	2797.0	2993.5	3045.1	3169.2	3288.1	3314.0
27.5°	2703.9	2693.5	2626.3	2600.5	2683.2	2915.9	3189.9	3241.6	3386.4	3505.2	3505.2
30°	3262.3	3241.6	3076.1	2864.2	2797.0	3024.5	3376.0	3448.4	3634.5	3737.9	3706.9
32.5°	3970.6	3924.0	3712.1	3350.2	3081.3	3169.2	3572.5	3655.2	3893.0	3980.9	3913.7
35°	4746.1	4740.9	4477.3	4011.9	3629.3	3469.0	3825.8	3924.0	4223.9	4301.4	4192.9
37.5°	5568.0	5588.8	5412.9	4771.9	4322.1	3960.3	4161.9	4275.6	4642.7	4735.8	4632.3
40°	6483.2	6478.0	6410.7	5650.8	5154.4	4658.1	4647.8	4751.2	5195.9	5340.6	5195.9
42.5°	7641.2	7630.9	7388.0	6705.4	6162.7	5568.0	5356.1	5392.3	5888.6	6126.5	5914.5
45°	8820.0	8747.7	8468.4	7879.1	7398.3	6695.1	6291.9	6291.9	6715.8	7041.5	6710.7
47.5°	9476.6	9404.2	9290.4	8964.7	8820.0	8034.2	7439.6	7367.2	7698.1	8028.9	7563.7
50°	10340.0	10340.0	10055.6	9931.5	10179.7	9626.5	8706.2	8633.9	8794.1	9057.8	8447.7
52.5°	11022.4	10898.3	10696.7	10805.2	11513.5	11260.2	9972.8	9833.3	9957.4	10024.6	9218.1
55°	11306.8	11187.8	11172.4	11570.4	12666.5	12314.9	11270.6	11146.5	11136.1	10805.2	9890.2
57.5°	11363.7	11260.2	11456.6	12154.6	13788.4	13178.3	12563.1	12470.0	12180.5	11353.3	10577.8
60°	10882.9	10934.5	11410.2	12475.2	14450.1	13928.0	13653.9	13555.7	12888.8	11818.6	11343.0
62.5°	9895.3	10019.4	10908.6	12506.2	14207.2	14232.9	14258.8	14191.6	13436.8	12242.6	12113.3
65°	8726.9	8763.1	9833.3	12077.1	13783.1	14139.9	14703.5	14698.3	13855.6	12718.1	12981.9
67.5°	7191.4	7253.4	8178.9	10629.5	12935.3	14098.5	15287.7	15272.1	14331.2	13261.0	13498.9
70°	5351.0	5428.5	6178.1	8266.8	11043.1	13581.5	16052.8	16063.2	14832.7	13674.6	13142.1
71°	4172.2	4311.7	5097.6	7020.8	10076.3	13059.4	16125.2	16218.3	14889.6	13617.7	12408.0
72.5°	2047.3	2212.7	3200.2	4942.5	8292.7	11891.0	15649.5	15830.5	14532.9	12909.4	10608.8
75°	532.5	563.5	956.5	2021.5	4446.2	7879.1	12619.9	13080.1	11880.7	9828.1	6483.2
77.5°	336.0	346.4	449.8	785.8	1664.8	2993.5	7413.7	7641.2	6788.2	4978.7	2285.2
80°	237.8	243.0	284.4	506.7	972.0	873.7	2667.8	2766.0	2455.7	1318.4	408.5
82.5°	144.7	144.7	206.8	325.7	599.8	475.7	703.1	749.6	661.7	367.0	134.4
85°	82.8	87.9	129.2	222.3	284.4	232.6	263.7	279.2	284.4	243.0	56.9
87.5°	67.2	72.4	113.8	186.1	155.1	113.8	113.8	118.9	124.1	144.7	25.9
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: P237220

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5	2507.5
2.5°	2497.1	2497.1	2502.2	2497.1	2497.1	2497.1	2502.2	2502.2	2502.2	2512.6	2517.8
5°	2507.5	2507.5	2507.5	2502.2	2497.1	2497.1	2507.5	2512.6	2512.6	2528.1	2528.1
7.5°	2533.3	2533.3	2522.9	2512.6	2502.2	2486.8	2491.9	2497.1	2491.9	2497.1	2497.1
10°	2590.1	2590.1	2574.7	2554.0	2522.9	2476.5	2414.4	2336.8	2264.4	2238.6	2228.3
12.5°	2683.2	2678.1	2647.0	2610.9	2543.7	2383.4	2150.8	1876.7	1649.2	1587.2	1566.5
15°	2786.6	2776.3	2740.1	2678.1	2497.1	2073.2	1587.2	1235.6	1018.4	966.8	956.5
17.5°	2895.2	2879.7	2827.9	2703.9	2285.2	1540.7	1023.7	775.5	656.6	646.2	651.4
20°	3008.9	2988.2	2915.9	2652.2	1845.7	1028.8	661.7	599.8	589.4	589.4	594.5
22.5°	3138.2	3112.3	3014.1	2466.1	1344.2	682.4	568.7	563.5	558.3	553.2	553.2
25°	3288.1	3257.1	3107.1	2130.0	925.5	558.3	542.9	527.3	517.0	506.7	501.5
27.5°	3469.0	3427.7	3179.5	1716.4	635.9	522.2	511.8	486.0	465.3	444.6	444.6
30°	3650.0	3598.3	3158.9	1292.5	517.0	486.0	465.3	434.2	403.2	382.6	377.4
32.5°	3841.3	3789.6	3024.5	868.6	470.5	444.6	418.8	372.3	336.0	310.2	305.0
35°	4125.7	4084.3	2760.7	573.9	423.9	392.9	356.7	310.2	263.7	237.8	232.6
37.5°	4549.6	4497.9	2435.0	439.5	372.3	325.7	294.7	243.0	196.5	170.6	165.4
40°	5118.3	4963.2	2047.3	387.7	325.7	268.8	227.5	175.7	139.6	124.1	124.1
42.5°	5780.1	5412.9	1628.5	351.6	289.5	222.3	165.4	118.9	98.2	93.1	93.1
45°	6483.2	5831.7	1209.7	325.7	253.3	175.7	118.9	82.8	72.4	67.2	67.2
47.5°	7207.0	6173.0	842.7	294.7	212.0	134.4	82.8	62.0	51.7	46.5	46.5
50°	7884.2	6395.3	594.5	263.7	181.0	98.2	62.0	46.5	36.2	36.2	36.2
52.5°	8354.7	6374.6	429.1	227.5	139.6	67.2	41.3	31.0	31.0	31.0	31.0
55°	8768.3	6297.1	336.0	196.5	108.5	46.5	31.0	25.9	25.9	20.7	20.7
57.5°	9119.8	6173.0	284.4	160.3	77.5	36.2	20.7	20.7	15.5	15.5	15.5
60°	9419.7	6017.8	237.8	134.4	51.7	25.9	15.5	10.3	10.3	5.2	10.3
62.5°	9828.1	5919.6	206.8	103.4	36.2	15.5	10.3	5.2	5.2	0.0	0.0
65°	10128.0	5733.5	175.7	72.4	20.7	10.3	5.2	5.2	0.0	0.0	0.0
67.5°	10138.4	5397.5	129.2	41.3	15.5	10.3	5.2	0.0	0.0	0.0	0.0
70°	9321.4	4601.3	82.8	20.7	10.3	5.2	5.2	0.0	0.0	0.0	0.0
71°	8571.8	4073.9	67.2	15.5	10.3	5.2	0.0	0.0	0.0	0.0	0.0
72.5°	7062.2	2993.5	51.7	15.5	5.2	5.2	0.0	0.0	0.0	0.0	0.0
75°	3893.0	1085.7	25.9	10.3	5.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1246.0	330.9	15.5	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	212.0	51.7	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	72.4	20.7	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.7	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.3	5.2	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)