

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: P236985

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236985
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-AF72-120-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 530mA 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: 13237 lumens
Efficiency: N/A
Efficacy: 107.6 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

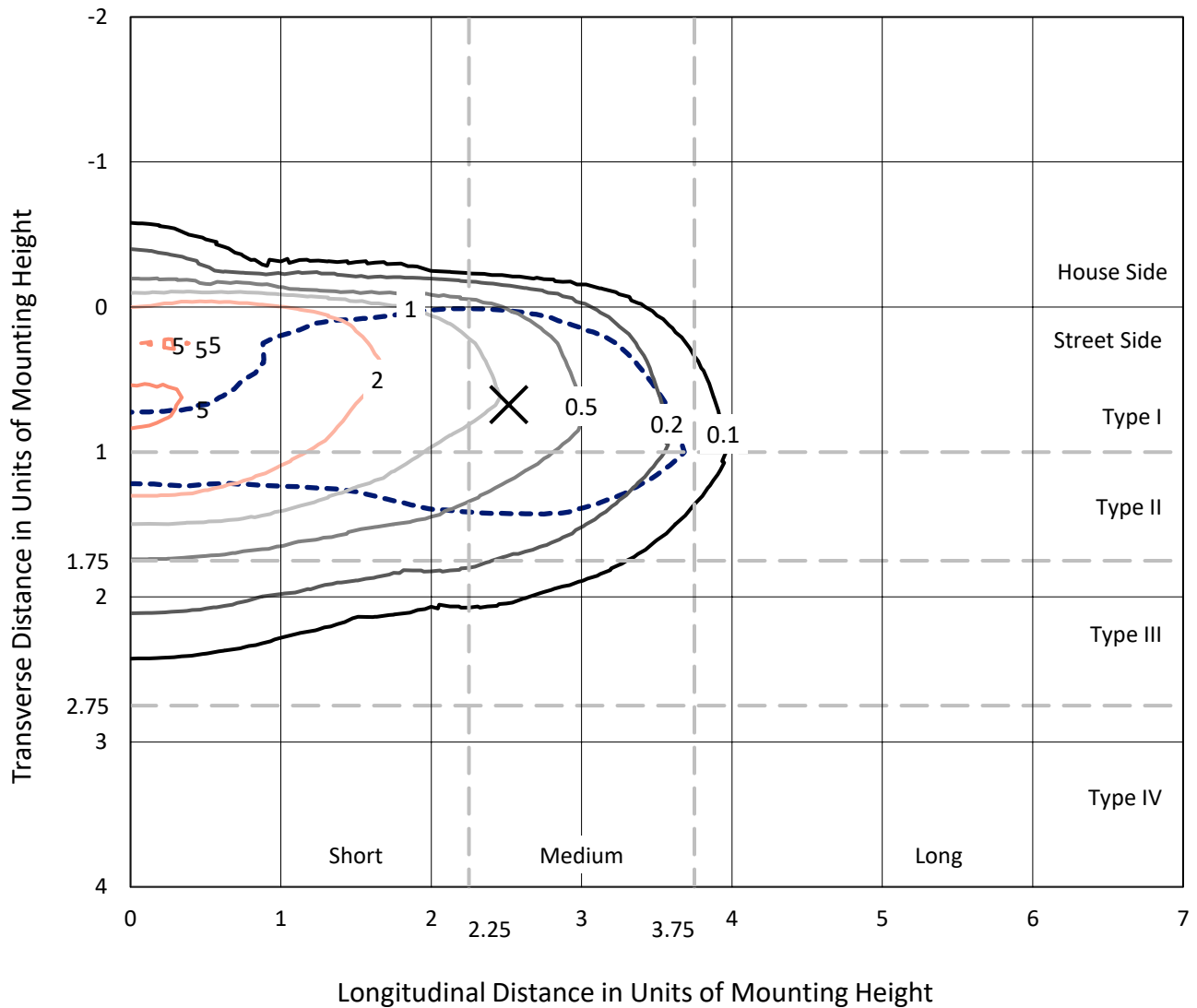
Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P236985
 CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

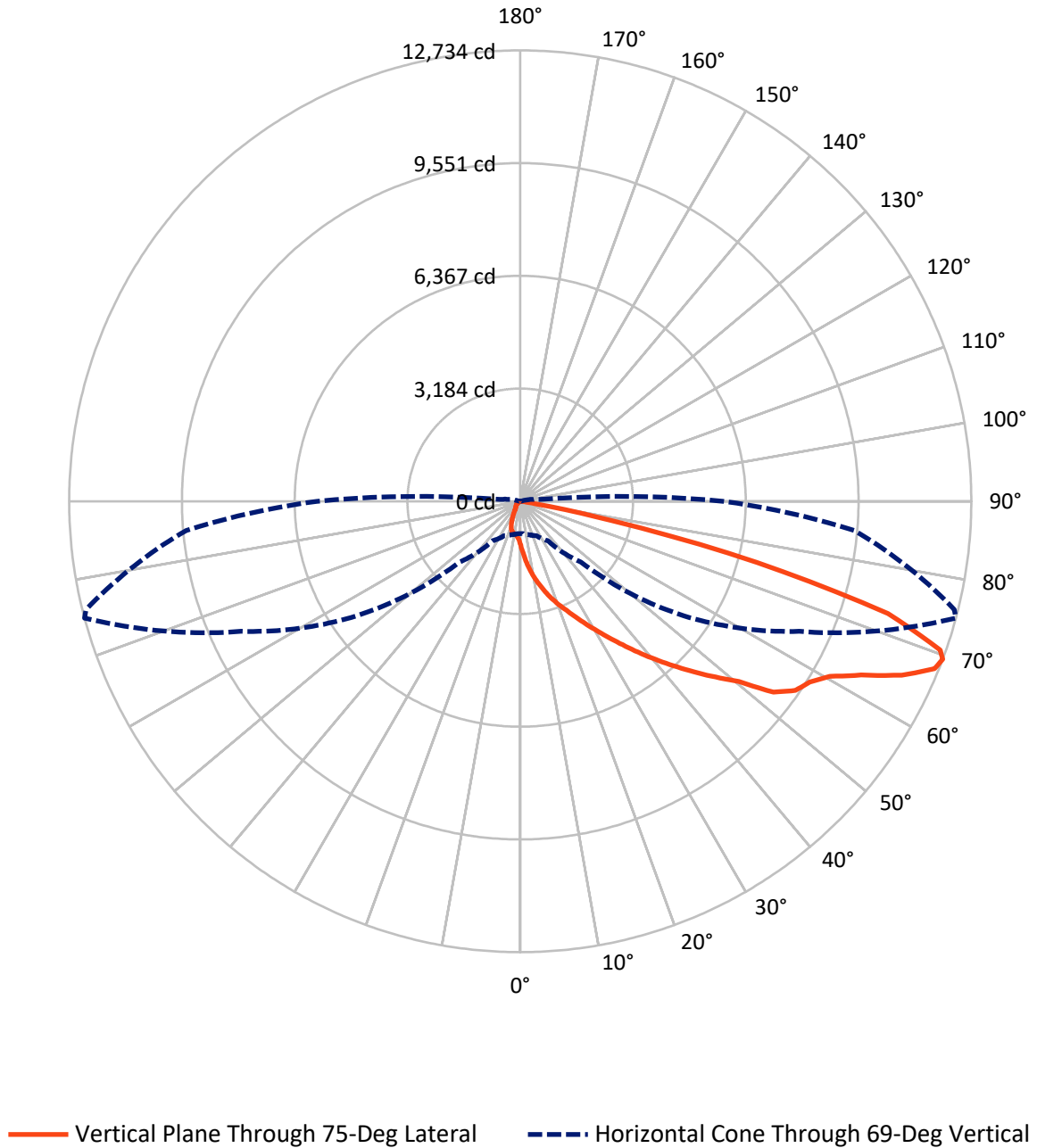
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Medium - N/A

REPORT NUMBER: P236985
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7050-HSS

Luminous Intensity Polar Plot



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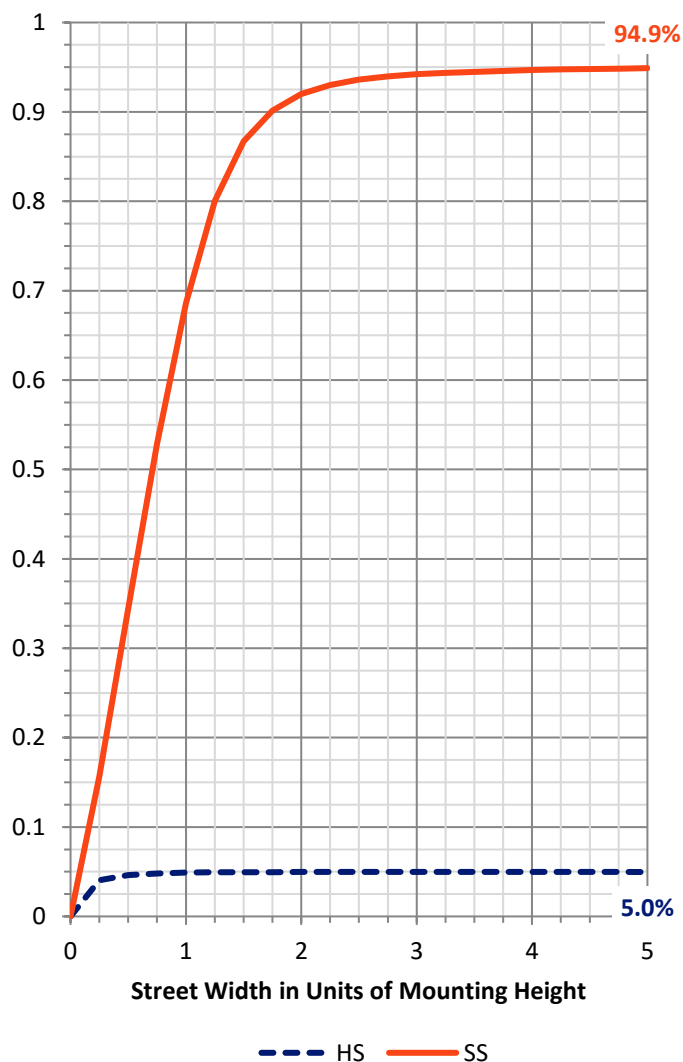
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	660.4	0.0	660.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	12576.6	0.0	12576.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	13237.0	0.0	13237.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	1.1
10°-20°	513.5	3.9
20°-30°	980.2	7.4
30°-40°	1758.4	13.3
40°-50°	2693.9	20.4
50°-60°	3131.0	23.7
60°-70°	2772.6	20.9
70°-80°	1195.9	9.0
80°-90°	47.9	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°	13237.0	100.0
0°-180°	13237.0	100.0

Coefficient of Utilization



REPORT NUMBER: P236985

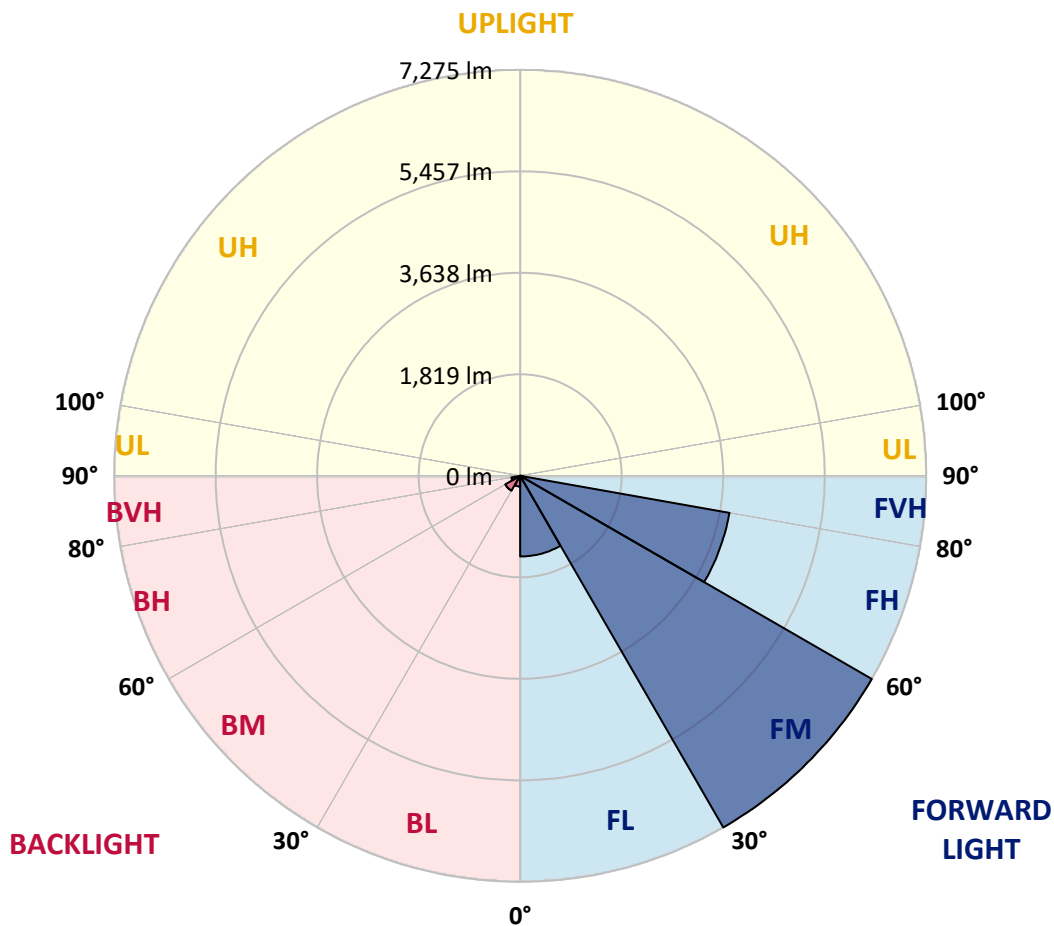
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1445.5	10.9			
FM (30°-60°)	7275.4	55.0			
FH (60°-80°)	3808.5	28.8			G2/5000
FVH (80°-90°)	47.2	0.4			G1/100
BL (0°-30°)	191.8	1.4	B1/500		
BM (30°-60°)	307.9	2.3	B1/1000		
BH (60°-80°)	160.0	1.2	B1/500		G1/500
BVH (80°-90°)	0.7	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: P236985

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7
2.5°	2029.0	2009.0	1989.0	1966.1	1914.7	1826.1	1714.7	1594.6	1446.0	1420.3	1300.3
5°	2463.4	2454.8	2434.8	2403.4	2346.2	2249.1	2123.3	1946.1	1697.5	1654.6	1400.3
7.5°	2769.2	2763.5	2746.3	2709.2	2657.7	2560.6	2429.1	2237.6	1949.0	1900.4	1526.0
10°	3043.5	3040.7	3026.4	2992.1	2940.6	2834.9	2694.9	2494.8	2189.1	2134.8	1671.8
12.5°	3292.1	3295.0	3289.3	3272.1	3235.0	3135.0	2974.9	2757.7	2420.5	2360.5	1846.1
15°	3437.9	3446.5	3469.3	3503.6	3515.1	3435.0	3269.3	3029.2	2657.7	2606.3	2046.2
17.5°	3389.3	3397.9	3469.3	3586.5	3698.0	3709.4	3560.8	3286.4	2892.1	2840.6	2243.3
20°	3272.1	3283.6	3357.9	3517.9	3735.1	3886.6	3826.6	3566.5	3115.0	3052.1	2432.0
22.5°	3403.6	3403.6	3426.5	3523.6	3720.8	3958.0	4038.0	3846.6	3343.6	3266.4	2620.6
25°	3855.1	3846.6	3798.0	3758.0	3820.8	4032.3	4198.1	4132.3	3612.2	3523.6	2820.6
27.5°	4426.7	4466.7	4375.2	4229.5	4086.6	4178.1	4340.9	4415.3	3909.4	3818.0	3026.4
30°	5066.8	5084.0	4975.4	4781.0	4529.6	4441.0	4509.6	4658.2	4232.4	4132.3	3240.7
32.5°	5644.1	5629.8	5538.4	5335.5	5024.0	4832.5	4726.7	4852.5	4583.9	4469.5	3460.8
35°	6155.6	6167.1	6055.6	5821.3	5515.5	5312.6	5061.1	5072.5	4978.2	4846.8	3715.1
37.5°	6615.7	6595.7	6490.0	6255.7	5978.5	5758.4	5492.6	5301.2	5409.8	5272.6	4000.9
40°	6990.1	6970.1	6858.6	6630.0	6370.0	6189.9	5981.3	5606.9	5864.1	5707.0	4306.7
42.5°	7287.3	7264.4	7170.1	6950.1	6698.6	6538.6	6438.6	5984.2	6350.0	6192.8	4649.6
45°	7433.1	7413.0	7355.9	7190.1	6970.1	6830.1	6878.6	6418.5	6870.1	6738.6	5026.8
47.5°	7261.6	7253.0	7318.7	7290.2	7164.4	7090.1	7258.7	6892.9	7415.9	7287.3	5461.2
50°	6741.5	6755.8	6947.2	7184.4	7244.4	7333.0	7570.2	7393.0	8001.7	7864.6	5961.3
52.5°	5458.3	5555.5	6132.8	6704.3	7147.3	7481.6	7936.0	8107.5	8956.2	8821.9	6741.5
55°	4075.2	4115.2	4743.9	5721.3	6755.8	7470.2	8207.5	8527.6	9427.8	9290.6	6947.2
57.5°	3232.1	3246.4	3557.9	4555.3	5949.9	7213.0	8350.4	8679.0	9633.5	9519.2	7253.0
60°	2537.7	2554.8	2780.6	3466.5	4815.3	6518.6	8144.6	8810.5	10036.5	9945.0	7787.4
62.5°	1974.7	1991.9	2129.0	2532.0	3612.2	5449.8	7730.3	9022.0	10802.4	10759.5	8661.9
65°	1528.9	1534.6	1628.9	1817.5	2552.0	4292.4	7224.4	9219.2	11836.9	11799.7	9370.6
67.5°	1128.8	1137.4	1203.1	1320.3	1723.2	3083.5	6395.7	9067.7	12617.0	12508.4	9627.8
69°	911.6	920.2	977.4	1071.7	1360.3	2429.1	5638.4	8693.3	12734.2	12631.3	9464.9
70°	780.2	785.9	843.0	923.1	1160.3	2063.3	5038.2	8370.4	12579.9	12479.9	9093.4
72.5°	500.1	528.7	585.8	637.3	768.7	1366.0	3400.7	6941.5	10853.8	10682.3	7121.6
75°	277.2	285.8	388.7	451.5	511.5	888.8	1891.8	4329.5	6904.4	6784.3	3809.4
77.5°	228.6	234.3	274.3	342.9	342.9	497.3	714.4	1706.1	2626.3	2369.1	1031.7
80°	160.0	165.8	208.6	225.8	245.8	280.1	231.5	374.4	405.8	360.1	154.3
82.5°	111.5	117.2	142.9	185.8	197.2	131.5	85.7	111.5	117.2	117.2	60.0
85°	20.0	28.6	105.7	154.3	117.2	40.0	48.6	40.0	37.2	40.0	14.3
87.5°	0.0	0.0	65.7	74.3	62.9	17.1	20.0	14.3	8.6	11.4	5.7
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: P236985

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7	1231.7
2.5°	1240.3	1180.3	1077.4	1003.1	940.2	891.6	871.6	840.2	817.3	828.8	814.5
5°	1274.6	1168.8	1003.1	897.3	823.0	760.2	708.7	668.7	637.3	631.6	625.9
7.5°	1328.9	1177.4	960.2	828.8	717.3	620.1	540.1	480.1	434.4	434.4	417.2
10°	1403.2	1200.3	934.5	760.2	594.4	463.0	382.9	325.8	302.9	300.1	294.4
12.5°	1506.0	1243.1	914.5	671.6	463.0	337.2	288.6	268.6	260.1	257.2	254.3
15°	1646.1	1306.0	891.6	563.0	351.5	277.2	257.2	240.1	231.5	228.6	225.8
17.5°	1780.4	1363.2	843.0	451.5	285.8	251.5	228.6	214.3	202.9	200.0	200.0
20°	1906.1	1411.7	760.2	351.5	257.2	225.8	202.9	185.8	174.3	171.5	171.5
22.5°	2037.6	1451.7	657.3	285.8	234.3	200.0	177.2	160.0	148.6	145.7	142.9
25°	2177.6	1480.3	540.1	254.3	211.5	177.2	151.5	137.2	128.6	125.7	122.9
27.5°	2329.1	1491.8	428.7	231.5	185.8	154.3	131.5	117.2	111.5	108.6	108.6
30°	2466.3	1480.3	331.5	205.8	162.9	134.3	114.3	102.9	97.2	94.3	94.3
32.5°	2609.1	1451.7	265.8	182.9	142.9	114.3	97.2	88.6	85.7	82.9	82.9
35°	2760.6	1414.6	228.6	162.9	122.9	100.0	85.7	80.0	77.2	74.3	74.3
37.5°	2937.8	1368.9	208.6	145.7	108.6	88.6	74.3	71.4	68.6	68.6	68.6
40°	3137.8	1311.7	194.3	131.5	97.2	77.2	65.7	62.9	60.0	60.0	60.0
42.5°	3349.3	1246.0	180.0	117.2	85.7	65.7	57.2	57.2	54.3	54.3	51.4
45°	3586.5	1180.3	165.8	102.9	74.3	57.2	48.6	45.7	45.7	42.9	42.9
47.5°	3866.6	1120.2	151.5	91.4	65.7	48.6	42.9	40.0	37.2	34.3	34.3
50°	4260.9	1114.5	134.3	80.0	60.0	40.0	34.3	31.4	28.6	25.7	25.7
52.5°	4652.4	1063.1	114.3	65.7	48.6	34.3	25.7	22.9	20.0	20.0	17.1
55°	4741.0	977.4	100.0	57.2	37.2	25.7	20.0	14.3	14.3	11.4	11.4
57.5°	4935.4	937.3	85.7	45.7	28.6	20.0	11.4	8.6	8.6	8.6	8.6
60°	5318.3	925.9	74.3	40.0	20.0	14.3	8.6	5.7	5.7	2.9	2.9
62.5°	5847.0	914.5	62.9	34.3	14.3	8.6	5.7	2.9	0.0	0.0	0.0
65°	6138.5	837.3	51.4	25.7	11.4	8.6	2.9	0.0	0.0	0.0	0.0
67.5°	6061.3	691.6	45.7	17.1	8.6	5.7	2.9	0.0	0.0	0.0	0.0
69°	5738.4	583.0	37.2	14.3	8.6	5.7	2.9	0.0	0.0	0.0	0.0
70°	5349.7	503.0	34.3	11.4	5.7	2.9	2.9	0.0	0.0	0.0	0.0
72.5°	3798.0	262.9	22.9	8.6	5.7	2.9	0.0	0.0	0.0	0.0	0.0
75°	1774.7	117.2	14.3	5.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0
77.5°	391.5	54.3	8.6	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	74.3	20.0	5.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	25.7	8.6	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.6	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	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)