

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: P237208

Luminaire Tested: **ARCH-L-AF72-150-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237208
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-AF72-150-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 665mA 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: 14968.8 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 153
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

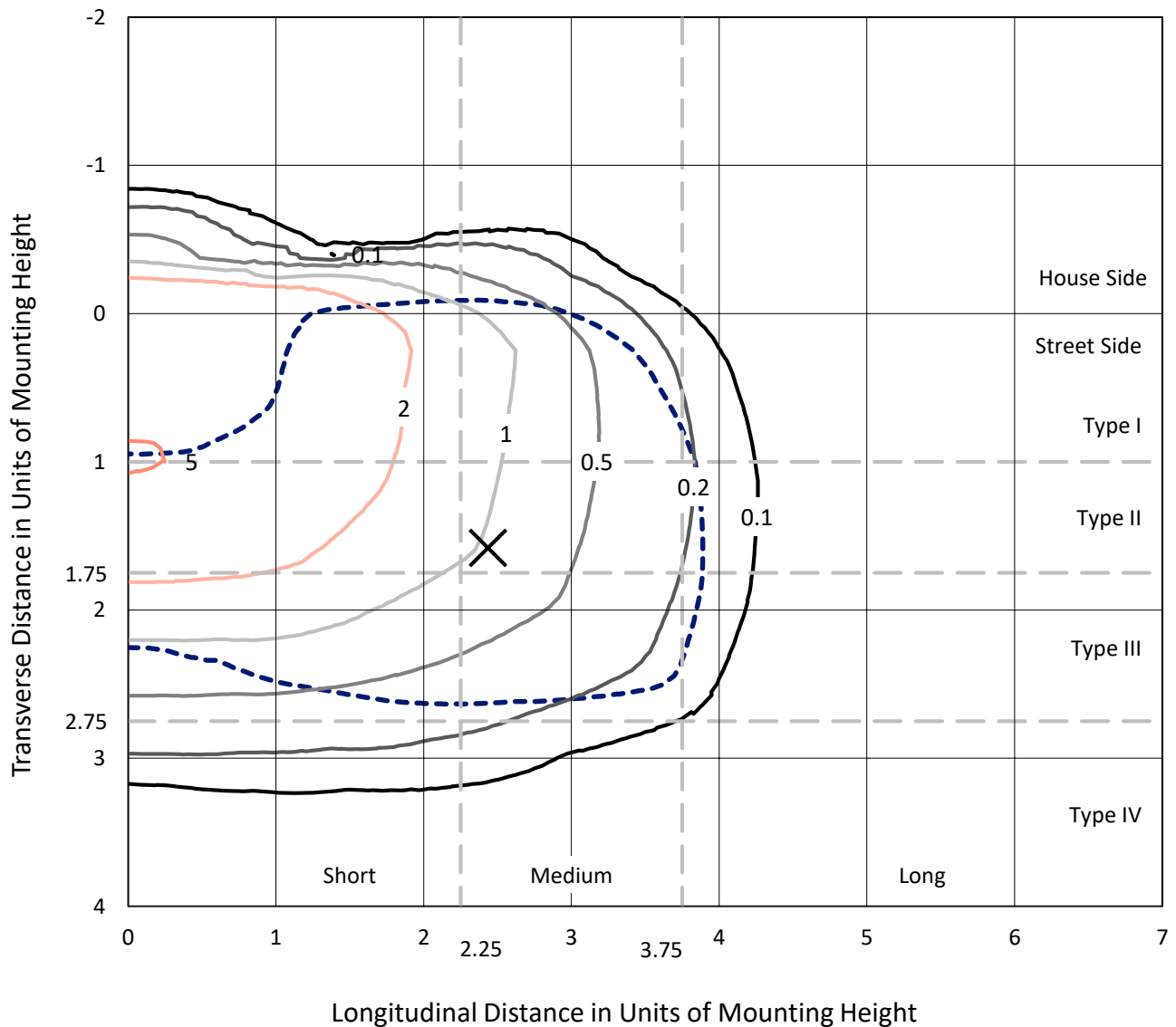


REPORT NUMBER: P237208

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

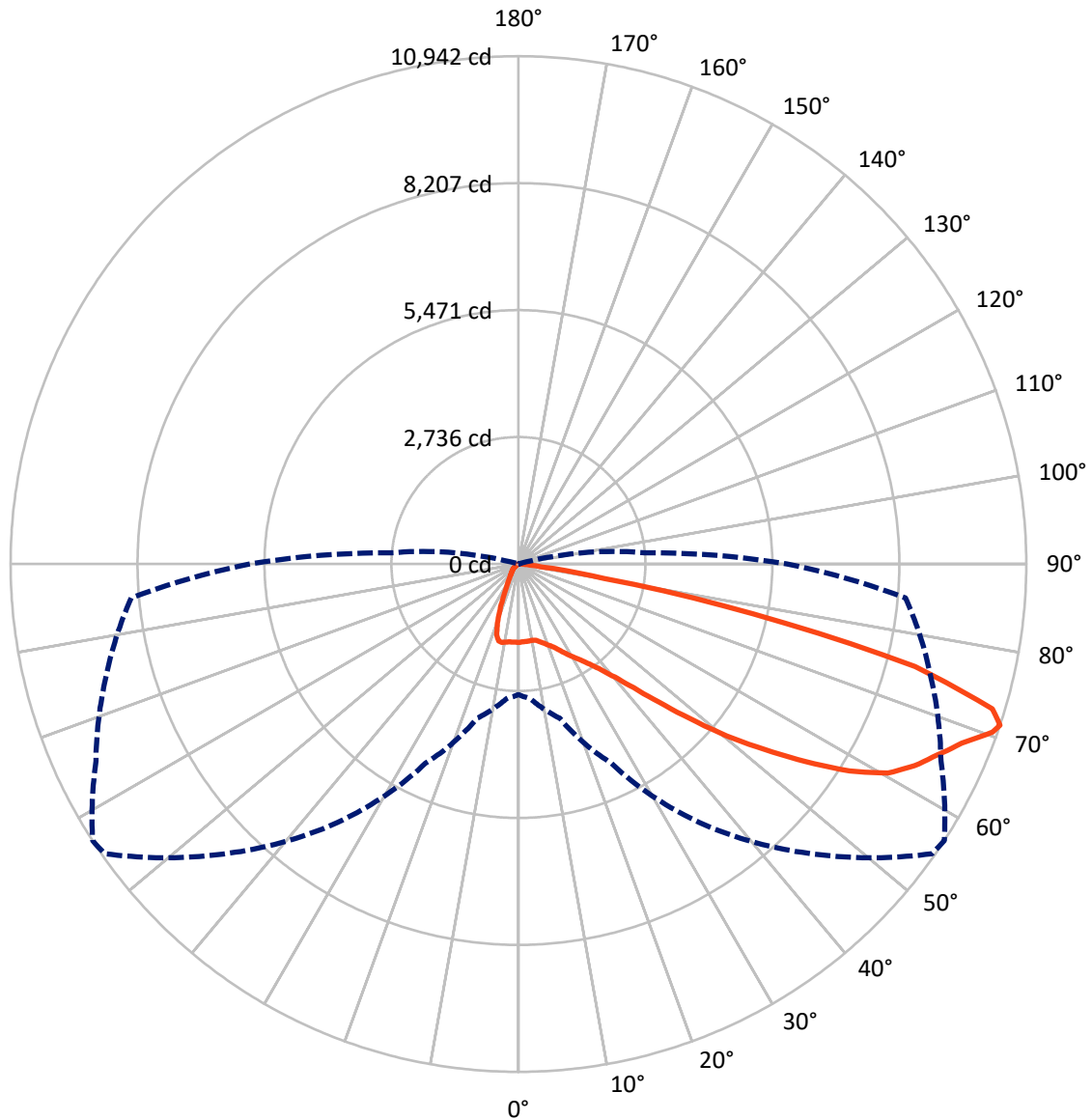


Based on 20 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P237208

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237208

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T3-HSS

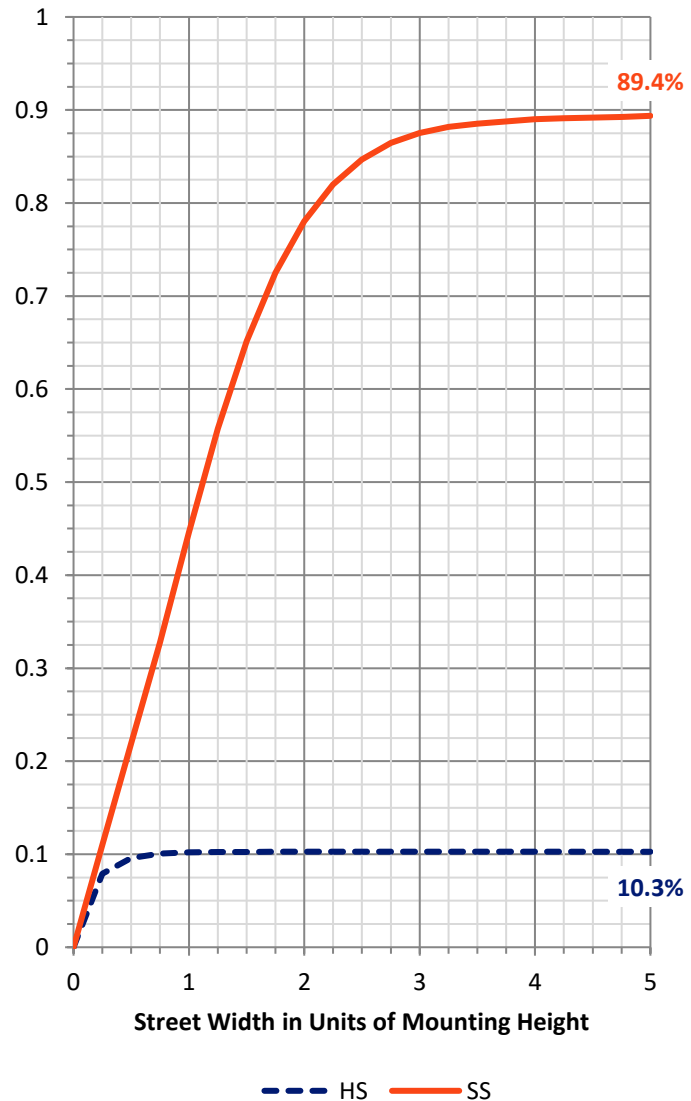
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1551.2	0.0	1551.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	13417.6	0.0	13417.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	14968.8	0.0	14968.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.9	1.1
10°-20°	424.8	2.8
20°-30°	662.7	4.4
30°-40°	1120.0	7.5
40°-50°	2175.4	14.5
50°-60°	3653.1	24.4
60°-70°	4359.7	29.1
70°-80°	2297.6	15.3
80°-90°	116.7	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°	14968.8	100.0
0°-180°	14968.8	100.0



REPORT NUMBER: P237208

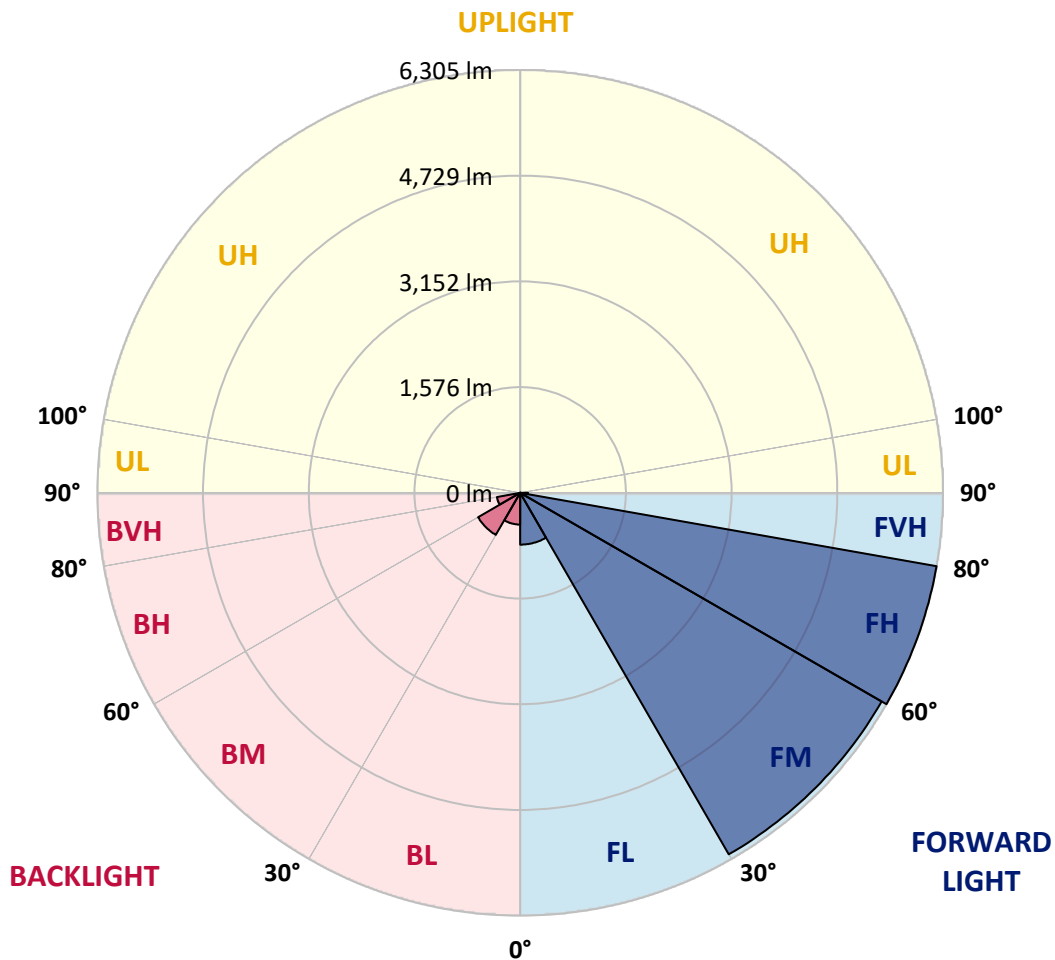
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	772.8	5.2			
FM	(30°-60°)	6224.2	41.6			
FH	(60°-80°)	6305.0	42.1			G3/7500
FVH	(80°-90°)	115.6	0.8			G2/225
BL	(0°-30°)	473.5	3.2	B1/500		
BM	(30°-60°)	724.3	4.8	B1/1000		
BH	(60°-80°)	352.3	2.4	B1/500		G1/500
BVH	(80°-90°)	1.1	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 III Medium





REPORT NUMBER: P237208

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8
2.5°	1667.3	1667.3	1667.3	1670.8	1674.3	1674.3	1681.2	1677.7	1677.7	1677.7	1684.7
5°	1622.0	1625.5	1628.9	1635.9	1649.8	1660.4	1677.7	1677.7	1681.2	1688.2	1691.8
7.5°	1559.2	1562.7	1573.1	1587.1	1614.9	1639.4	1667.3	1674.3	1684.7	1702.2	1709.1
10°	1520.8	1527.8	1541.7	1559.2	1590.6	1622.0	1656.9	1667.3	1698.7	1730.1	1747.5
12.5°	1510.3	1513.9	1527.8	1555.7	1594.1	1632.4	1677.7	1688.2	1733.6	1782.4	1810.3
15°	1527.8	1531.3	1538.2	1569.6	1614.9	1663.8	1723.1	1737.1	1792.8	1848.7	1883.6
17.5°	1559.2	1559.2	1566.1	1594.1	1642.9	1698.7	1775.4	1796.3	1859.1	1921.9	1960.3
20°	1580.0	1580.0	1590.6	1618.4	1674.3	1747.5	1838.2	1866.1	1935.8	2005.6	2040.5
22.5°	1601.0	1604.5	1614.9	1646.3	1709.1	1810.3	1915.0	1942.9	2023.1	2096.3	2131.2
25°	1660.4	1656.9	1660.4	1688.2	1761.4	1887.0	2019.6	2054.5	2138.2	2218.4	2235.9
27.5°	1824.2	1817.3	1772.0	1754.5	1810.3	1967.2	2152.1	2187.0	2284.7	2364.9	2364.9
30°	2201.0	2187.0	2075.4	1932.4	1887.0	2040.5	2277.7	2326.5	2452.1	2521.9	2500.9
32.5°	2678.8	2647.4	2504.4	2260.2	2078.8	2138.2	2410.3	2466.0	2626.5	2685.8	2640.4
35°	3202.0	3198.6	3020.7	2706.7	2448.6	2340.5	2581.1	2647.4	2849.7	2902.0	2828.8
37.5°	3756.6	3770.6	3652.0	3219.4	2916.0	2671.8	2807.9	2884.6	3132.3	3195.1	3125.3
40°	4374.0	4370.6	4325.1	3812.4	3477.6	3142.7	3135.8	3205.5	3505.4	3603.1	3505.4
42.5°	5155.4	5148.4	4984.4	4524.0	4157.8	3756.6	3613.6	3638.0	3972.9	4133.3	3990.3
45°	5950.6	5901.8	5713.4	5315.8	4991.4	4517.0	4244.9	4244.9	4531.0	4750.7	4527.5
47.5°	6393.6	6344.8	6268.0	6048.3	5950.6	5420.4	5019.3	4970.5	5193.7	5416.9	5103.0
50°	6976.1	6976.1	6784.3	6700.5	6868.0	6494.7	5873.9	5825.1	5933.2	6111.1	5699.5
52.5°	7436.5	7352.8	7216.8	7290.1	7767.9	7596.9	6728.5	6634.2	6718.0	6763.3	6219.2
55°	7628.3	7548.1	7537.7	7806.2	8545.7	8308.5	7604.0	7520.2	7513.3	7290.1	6672.6
57.5°	7666.7	7596.9	7729.5	8200.4	9302.6	8891.1	8476.0	8413.2	8217.9	7659.8	7136.5
60°	7342.3	7377.2	7698.1	8416.6	9749.1	9396.8	9212.0	9145.7	8695.7	7973.7	7652.8
62.5°	6676.1	6759.9	7359.8	8437.6	9585.2	9602.6	9620.0	9574.7	9065.5	8259.7	8172.6
65°	5887.8	5912.2	6634.2	8148.1	9299.1	9539.8	9920.1	9916.5	9348.0	8580.6	8758.5
67.5°	4851.9	4893.7	5518.1	7171.4	8727.1	9511.9	10314.2	10303.7	9668.9	8946.8	9107.3
70°	3610.1	3662.5	4168.2	5577.4	7450.5	9163.1	10830.4	10837.3	10007.2	9225.9	8866.6
71°	2814.9	2909.1	3439.3	4736.8	6798.2	8810.8	10879.3	10942.0	10045.6	9187.5	8371.3
72.5°	1381.3	1492.9	2159.1	3334.6	5594.8	8022.5	10558.4	10680.4	9804.9	8709.7	7157.5
75°	359.3	380.2	645.3	1363.8	2999.7	5315.8	8514.3	8824.8	8015.5	6630.8	4374.0
77.5°	226.7	233.7	303.5	530.2	1123.2	2019.6	5001.8	5155.4	4579.9	3359.0	1541.7
80°	160.5	164.0	191.8	341.9	655.7	589.5	1799.9	1866.1	1656.9	889.5	275.6
82.5°	97.7	97.7	139.5	219.7	404.6	320.9	474.3	505.7	446.5	247.7	90.7
85°	55.9	59.3	87.2	150.0	191.8	156.9	177.9	188.3	191.8	164.0	38.4
87.5°	45.3	48.8	76.7	125.6	104.6	76.7	76.7	80.2	83.7	97.7	17.4
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: P237208

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8
2.5°	1684.7	1684.7	1688.2	1684.7	1684.7	1684.7	1688.2	1688.2	1688.2	1695.2	1698.7
5°	1691.8	1691.8	1691.8	1688.2	1684.7	1684.7	1691.8	1695.2	1695.2	1705.7	1705.7
7.5°	1709.1	1709.1	1702.2	1695.2	1688.2	1677.7	1681.2	1684.7	1681.2	1684.7	1684.7
10°	1747.5	1747.5	1737.1	1723.1	1702.2	1670.8	1628.9	1576.6	1527.8	1510.3	1503.3
12.5°	1810.3	1806.8	1785.9	1761.4	1716.1	1608.0	1451.1	1266.2	1112.7	1070.8	1056.9
15°	1880.1	1873.1	1848.7	1806.8	1684.7	1398.7	1070.8	833.6	687.1	652.2	645.3
17.5°	1953.3	1942.9	1908.0	1824.2	1541.7	1039.4	690.6	523.2	442.9	436.0	439.5
20°	2030.0	2016.1	1967.2	1789.3	1245.2	694.1	446.5	404.6	397.6	397.6	401.1
22.5°	2117.2	2099.8	2033.5	1663.8	906.8	460.4	383.7	380.2	376.8	373.2	373.2
25°	2218.4	2197.5	2096.3	1437.0	624.4	376.8	366.2	355.8	348.8	341.9	338.4
27.5°	2340.5	2312.6	2145.1	1158.1	429.0	352.3	345.3	327.9	313.9	299.9	299.9
30°	2462.5	2427.7	2131.2	872.0	348.8	327.9	313.9	293.0	272.1	258.1	254.6
32.5°	2591.6	2556.8	2040.5	585.9	317.4	299.9	282.5	251.1	226.7	209.3	205.8
35°	2783.4	2755.5	1862.6	387.2	286.0	265.0	240.7	209.3	177.9	160.5	156.9
37.5°	3069.5	3034.6	1642.9	296.5	251.1	219.7	198.9	164.0	132.6	115.1	111.6
40°	3453.2	3348.5	1381.3	261.6	219.7	181.4	153.4	118.6	94.2	83.7	83.7
42.5°	3899.7	3652.0	1098.8	237.2	195.3	150.0	111.6	80.2	66.3	62.8	62.8
45°	4374.0	3934.5	816.2	219.7	170.9	118.6	80.2	55.9	48.8	45.3	45.3
47.5°	4862.4	4164.7	568.6	198.9	143.0	90.7	55.9	41.8	34.9	31.4	31.4
50°	5319.2	4314.7	401.1	177.9	122.0	66.3	41.8	31.4	24.4	24.4	24.4
52.5°	5636.7	4300.8	289.5	153.4	94.2	45.3	27.9	21.0	21.0	21.0	21.0
55°	5915.7	4248.4	226.7	132.6	73.2	31.4	21.0	17.4	17.4	13.9	13.9
57.5°	6152.9	4164.7	191.8	108.1	52.3	24.4	13.9	13.9	10.4	10.4	10.4
60°	6355.2	4060.1	160.5	90.7	34.9	17.4	10.4	7.0	7.0	3.5	7.0
62.5°	6630.8	3993.8	139.5	69.8	24.4	10.4	7.0	3.5	3.5	0.0	0.0
65°	6833.1	3868.3	118.6	48.8	13.9	7.0	3.5	3.5	0.0	0.0	0.0
67.5°	6840.1	3641.5	87.2	27.9	10.4	7.0	3.5	0.0	0.0	0.0	0.0
70°	6289.0	3104.3	55.9	13.9	7.0	3.5	3.5	0.0	0.0	0.0	0.0
71°	5783.2	2748.6	45.3	10.4	7.0	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	4764.7	2019.6	34.9	10.4	3.5	3.5	0.0	0.0	0.0	0.0	0.0
75°	2626.5	732.5	17.4	7.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	840.7	223.2	10.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	143.0	34.9	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.8	13.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.0	3.5	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)