

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: P399556

Luminaire Tested: **ARCH-L-PA3-160-727-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399556
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-727-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA 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: 15220 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

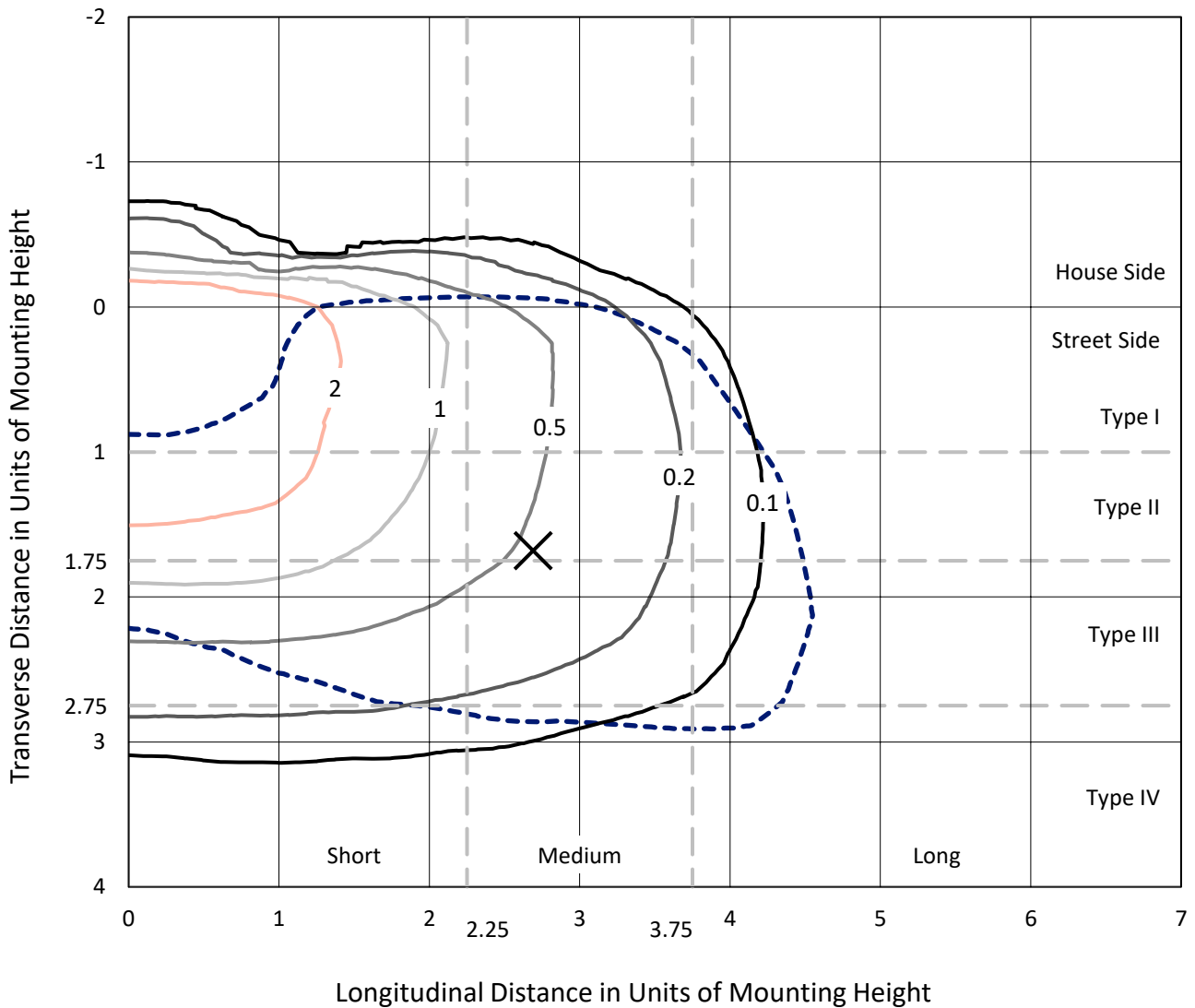
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399556
 CATALOG NUMBER: ARCH-L-PA3-160-727-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

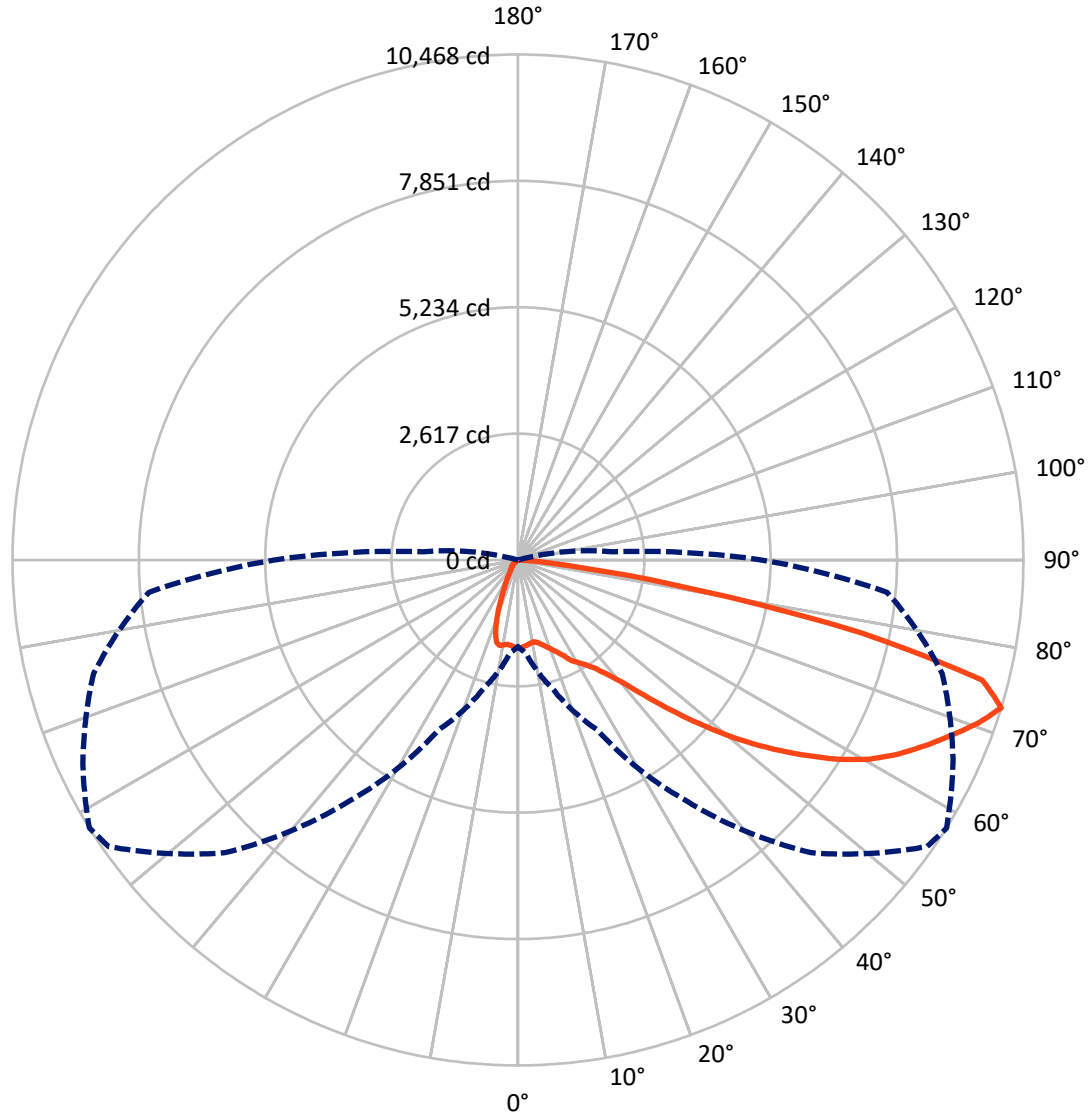
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - N/A

REPORT NUMBER: P399556
CATALOG NUMBER: ARCH-L-PA3-160-727-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P399556
 CATALOG NUMBER: ARCH-L-PA3-160-727-U-T3-HSS

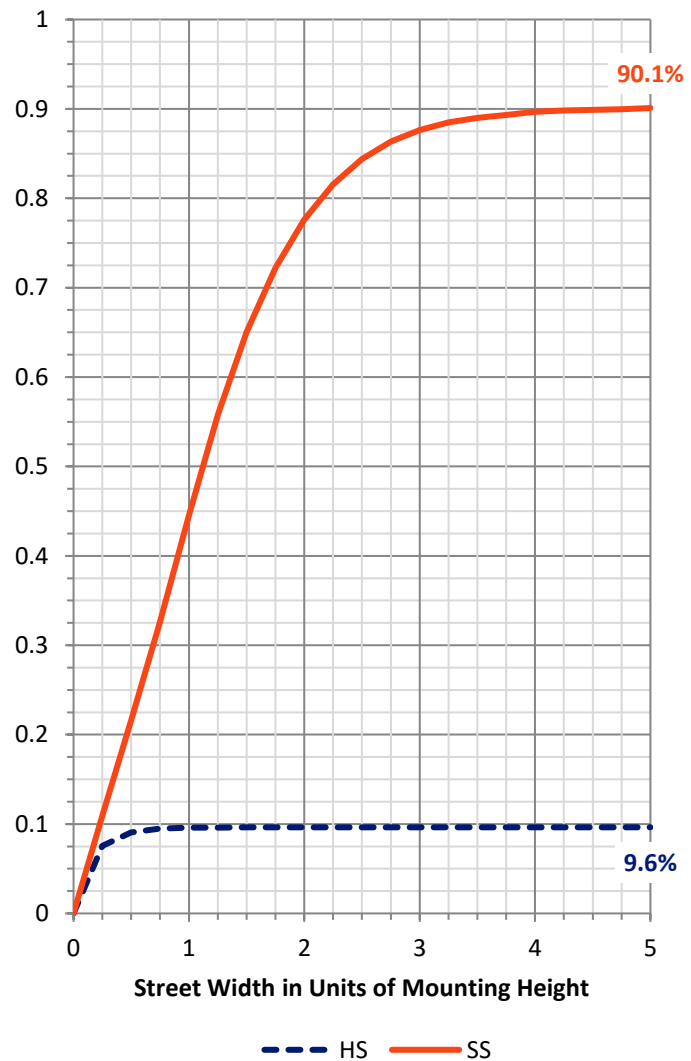
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1480.0	0.0	1480.0
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	13740.0	0.0	13740.0
	% Fixture	90.3	0.0	90.3
Total	Lumens	15220.0	0.0	15220.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.6	1.1
10°-20°	436.5	2.9
20°-30°	685.8	4.5
30°-40°	1182.7	7.8
40°-50°	2250.2	14.8
50°-60°	3563.6	23.4
60°-70°	4158.3	27.3
70°-80°	2604.3	17.1
80°-90°	170.9	1.1
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°	15220.0	100.0
0°-180°	15220.0	100.0



REPORT NUMBER: P399556

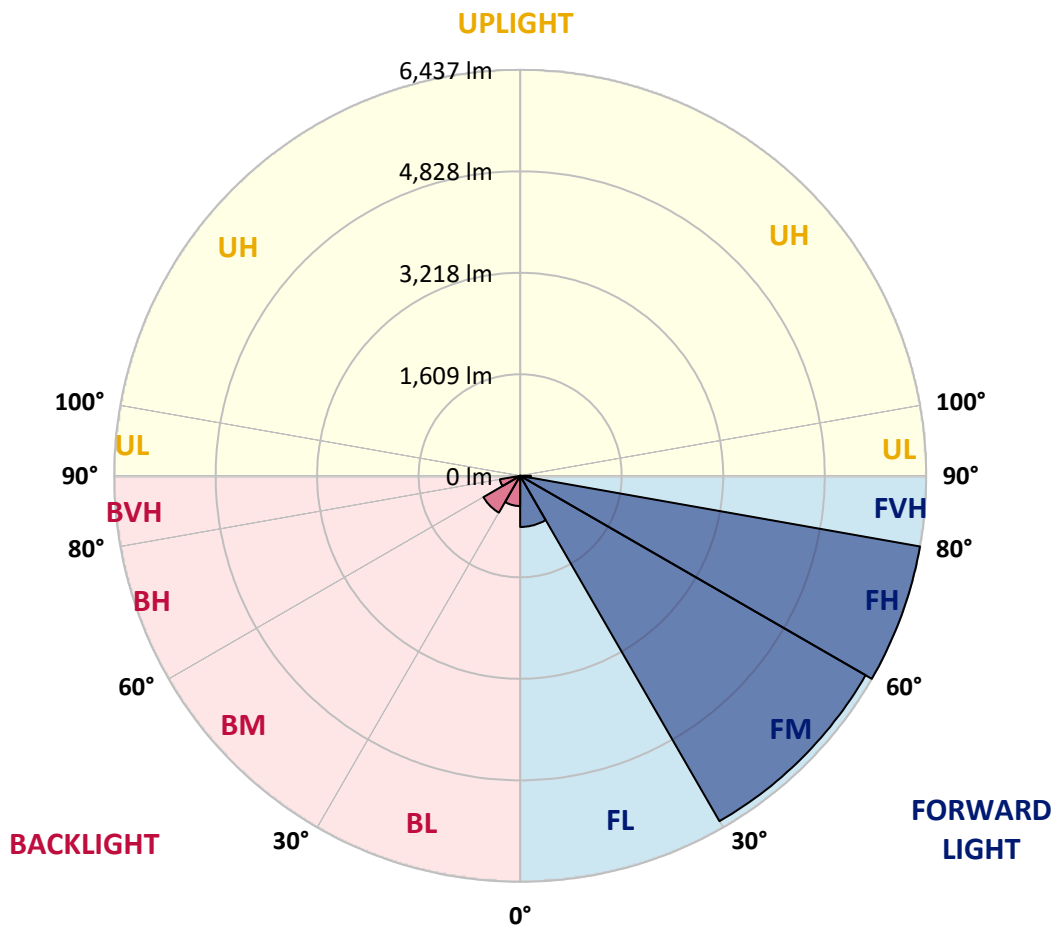
CATALOG NUMBER: ARCH-L-PA3-160-727-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	810.7	5.3			
FM (30°-60°)	6323.0	41.5			
FH (60°-80°)	6437.0	42.3			G3/7500
FVH (80°-90°)	169.3	1.1			G2/225
BL (0°-30°)	479.3	3.1	B1/500		
BM (30°-60°)	673.4	4.4	B1/1000		
BH (60°-80°)	325.7	2.1	B1/500		G1/500
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: B1-U0-G3

Type IV Medium





REPORT NUMBER: P399556

CATALOG NUMBER: ARCH-L-PA3-160-727-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3
2.5°	1818.1	1810.0	1807.3	1804.5	1807.3	1810.0	1801.8	1810.0	1804.5	1807.3	1812.7
5°	1752.8	1744.7	1741.9	1744.7	1752.8	1766.4	1771.9	1780.0	1780.0	1788.2	1790.9
7.5°	1679.3	1673.9	1671.2	1676.6	1692.9	1722.9	1739.2	1750.1	1761.0	1777.3	1793.6
10°	1638.5	1635.8	1633.1	1641.2	1657.6	1684.8	1706.5	1722.9	1763.7	1810.0	1839.9
12.5°	1611.3	1611.3	1616.7	1633.1	1654.8	1676.6	1728.3	1750.1	1812.7	1883.5	1924.3
15°	1589.5	1589.5	1597.7	1627.6	1657.6	1709.3	1785.5	1810.0	1883.5	1970.6	2025.0
17.5°	1573.2	1578.6	1584.1	1614.0	1671.2	1758.3	1848.1	1883.5	1973.3	2068.5	2128.4
20°	1575.9	1581.3	1584.1	1614.0	1695.7	1815.4	1929.7	1970.6	2074.0	2174.7	2234.6
22.5°	1592.2	1600.4	1603.1	1643.9	1739.2	1875.3	2022.3	2068.5	2180.1	2286.3	2332.6
25°	1660.3	1665.7	1649.4	1684.8	1801.8	1967.8	2142.0	2191.0	2302.6	2400.6	2438.7
27.5°	1891.6	1897.1	1807.3	1766.4	1850.8	2044.0	2289.0	2357.1	2495.9	2561.2	2566.6
30°	2392.4	2397.9	2221.0	2027.7	1967.8	2109.4	2370.7	2465.9	2645.6	2719.0	2686.4
32.5°	3037.5	3032.1	2789.8	2504.0	2245.5	2223.7	2487.7	2588.4	2784.4	2855.1	2830.6
35°	3685.3	3693.4	3486.6	3056.5	2686.4	2438.7	2637.4	2754.4	2991.2	3091.9	3048.4
37.5°	4128.9	4183.4	4093.5	3628.1	3228.0	2836.1	2879.6	3004.8	3301.5	3437.6	3345.1
40°	4754.9	4741.3	4523.6	4180.6	3826.8	3424.0	3271.6	3331.4	3671.7	3854.0	3709.8
42.5°	5596.0	5568.7	5198.6	4863.8	4469.1	4139.8	3829.5	3818.6	4096.3	4308.6	4099.0
45°	6358.1	6317.2	6064.1	5740.2	5307.5	4929.1	4510.0	4414.7	4608.0	4787.6	4542.6
47.5°	6965.0	6897.0	6717.3	6545.9	6439.7	5851.8	5223.1	5078.8	5176.8	5310.2	4964.5
50°	7683.6	7495.8	7234.5	7131.0	7351.5	6897.0	5909.0	5770.2	5764.7	5840.9	5400.0
52.5°	8010.2	7669.9	7523.0	7610.1	7999.3	7868.6	6649.3	6450.6	6371.7	6379.8	5805.5
55°	7615.5	7577.4	7656.3	7928.5	8437.5	8361.3	7359.7	7114.7	6997.7	6850.7	6194.7
57.5°	7166.4	7283.5	7596.5	8116.3	8992.7	8875.7	8059.2	7781.5	7566.5	7229.0	6627.5
60°	6752.7	6872.5	7389.6	8159.9	9297.6	9371.1	8641.6	8377.6	8059.2	7615.5	7103.8
62.5°	6124.0	6216.5	6943.2	8097.3	9164.2	9659.6	9047.2	8848.5	8551.8	7982.9	7650.9
65°	5416.3	5476.2	6194.7	7596.5	8902.9	9626.9	9381.9	9270.3	8981.8	8366.7	8192.5
67.5°	4640.6	4711.4	5310.2	6695.6	8391.2	9474.5	9697.7	9686.8	9357.4	8791.3	8584.5
70°	3747.9	3753.3	4248.7	5552.4	7498.5	9169.6	10089.6	10114.1	9716.7	9109.8	8600.8
72.5°	1793.6	1940.6	2754.4	3875.8	6094.0	8570.9	10345.4	10467.9	9942.6	9098.9	7672.7
75°	411.0	424.6	802.9	1842.6	3573.7	6578.5	9705.8	9934.5	9392.8	7868.6	5405.4
77.5°	149.7	157.9	225.9	538.9	1374.5	3399.5	6946.0	7280.7	6943.2	5087.0	2555.7
80°	100.7	98.0	117.0	239.5	631.5	963.5	3551.9	3750.6	3424.0	1736.5	612.4
82.5°	51.7	54.4	81.7	133.4	424.6	334.8	1186.7	1290.1	1061.5	348.4	114.3
85°	24.5	24.5	46.3	84.4	179.6	117.0	264.0	318.4	285.8	152.4	38.1
87.5°	24.5	24.5	43.5	54.4	92.5	49.0	65.3	81.7	76.2	81.7	13.6
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: P399556

CATALOG NUMBER: ARCH-L-PA3-160-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3	1826.3
2.5°	1812.7	1810.0	1807.3	1812.7	1810.0	1815.4	1815.4	1820.9	1820.9	1815.4	1812.7
5°	1788.2	1782.8	1777.3	1777.3	1774.6	1780.0	1796.4	1810.0	1812.7	1804.5	1801.8
7.5°	1790.9	1790.9	1785.5	1774.6	1755.5	1755.5	1755.5	1771.9	1780.0	1774.6	1771.9
10°	1839.9	1842.6	1829.0	1804.5	1771.9	1741.9	1684.8	1600.4	1521.5	1499.7	1491.5
12.5°	1924.3	1927.0	1899.8	1856.2	1788.2	1611.3	1393.5	1192.1	1037.0	993.4	985.3
15°	2025.0	2027.7	1978.7	1908.0	1701.1	1290.1	966.2	737.6	601.5	568.8	566.1
17.5°	2128.4	2123.0	2049.5	1913.4	1442.5	914.5	587.9	470.9	435.5	427.3	430.0
20°	2229.1	2212.8	2112.1	1812.7	1110.5	598.8	430.0	402.8	394.7	389.2	389.2
22.5°	2321.7	2289.0	2163.8	1614.0	778.4	430.0	383.8	378.3	367.4	359.3	356.6
25°	2414.2	2367.9	2196.5	1355.4	522.6	375.6	362.0	351.1	337.5	326.6	323.9
27.5°	2525.8	2460.5	2180.1	1028.8	391.9	348.4	337.5	321.2	302.1	285.8	280.3
30°	2632.0	2558.5	2087.6	710.4	334.8	321.2	304.8	280.3	255.8	236.8	231.4
32.5°	2765.3	2680.9	1921.6	465.4	291.2	280.3	264.0	234.1	201.4	179.6	174.2
35°	2955.8	2860.6	1709.3	326.6	255.8	236.8	215.0	182.4	147.0	130.6	127.9
37.5°	3222.6	3094.7	1442.5	264.0	225.9	198.7	166.0	133.4	108.9	95.3	92.5
40°	3549.2	3353.2	1145.9	234.1	201.4	166.0	125.2	95.3	78.9	68.0	68.0
42.5°	3903.0	3595.5	843.7	215.0	176.9	136.1	92.5	68.0	57.2	51.7	49.0
45°	4267.7	3810.5	568.8	198.7	155.1	103.4	65.3	46.3	38.1	38.1	35.4
47.5°	4646.1	3954.7	367.4	179.6	130.6	76.2	43.5	32.7	27.2	27.2	27.2
50°	5021.7	4030.9	261.3	163.3	106.1	51.7	32.7	24.5	21.8	21.8	21.8
52.5°	5293.8	3981.9	209.6	141.5	81.7	38.1	24.5	19.1	16.3	16.3	16.3
55°	5530.6	3897.6	182.4	122.5	59.9	27.2	19.1	16.3	13.6	13.6	13.6
57.5°	5772.9	3788.7	163.3	103.4	43.5	19.1	13.6	10.9	10.9	10.9	10.9
60°	5993.3	3603.6	141.5	81.7	29.9	13.6	10.9	8.2	8.2	8.2	8.2
62.5°	6208.4	3445.8	122.5	62.6	21.8	10.9	5.4	5.4	2.7	2.7	2.7
65°	6330.8	3233.5	98.0	40.8	13.6	8.2	2.7	2.7	0.0	0.0	0.0
67.5°	6292.7	2980.3	68.0	24.5	8.2	5.4	2.7	0.0	0.0	0.0	0.0
70°	6028.7	2640.1	40.8	13.6	8.2	5.4	2.7	0.0	0.0	0.0	0.0
72.5°	5048.9	1954.2	24.5	10.9	5.4	2.7	0.0	0.0	0.0	0.0	0.0
75°	3372.3	898.2	13.6	8.2	2.7	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	1543.2	269.5	8.2	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	310.3	70.8	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	65.3	13.6	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.6	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	2.7	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)