

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: P399311

Luminaire Tested: **ARCH-L-PA3-120-827-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399311  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-120-827-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10012 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

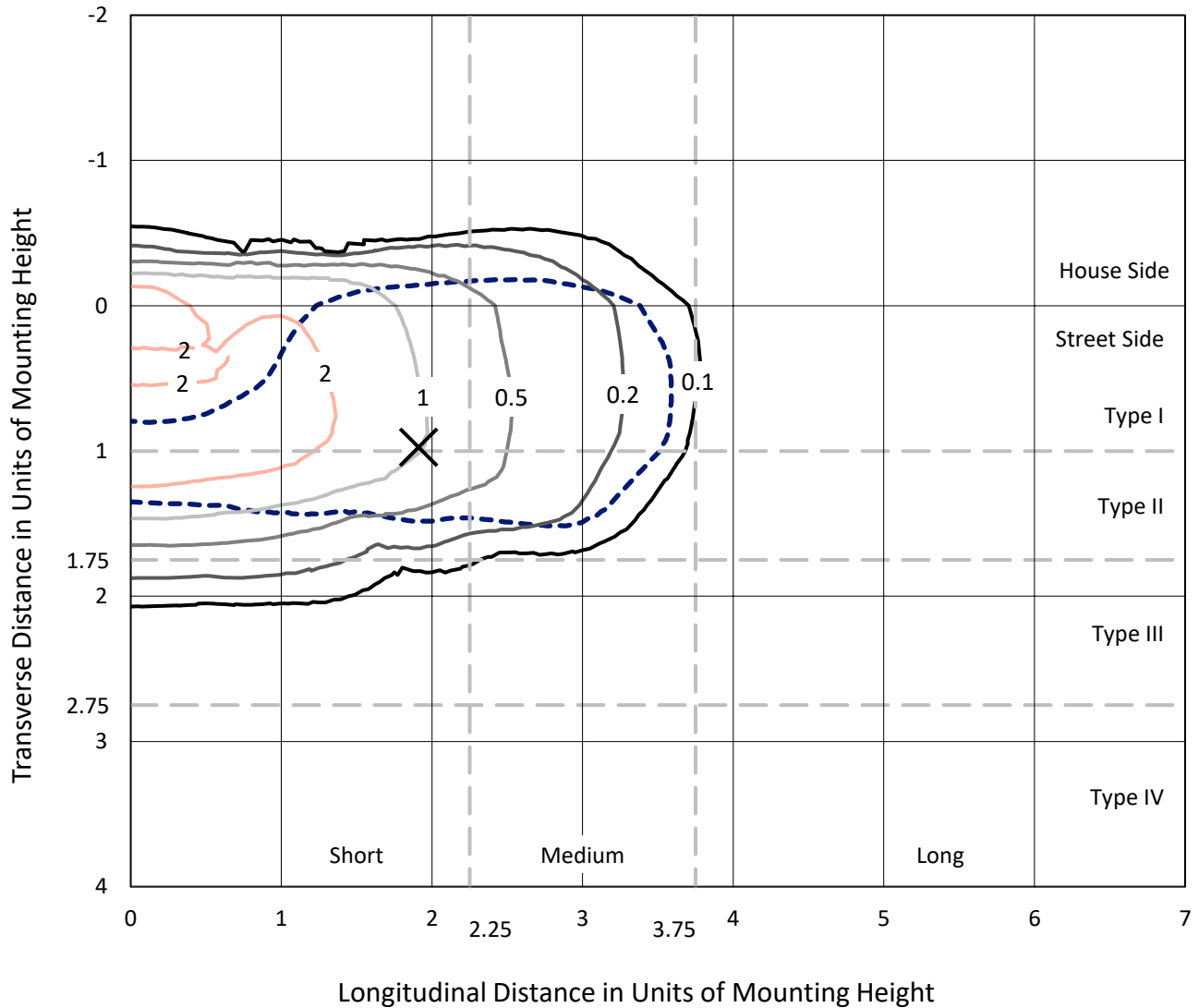
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399311  
 CATALOG NUMBER: ARCH-L-PA3-120-827-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

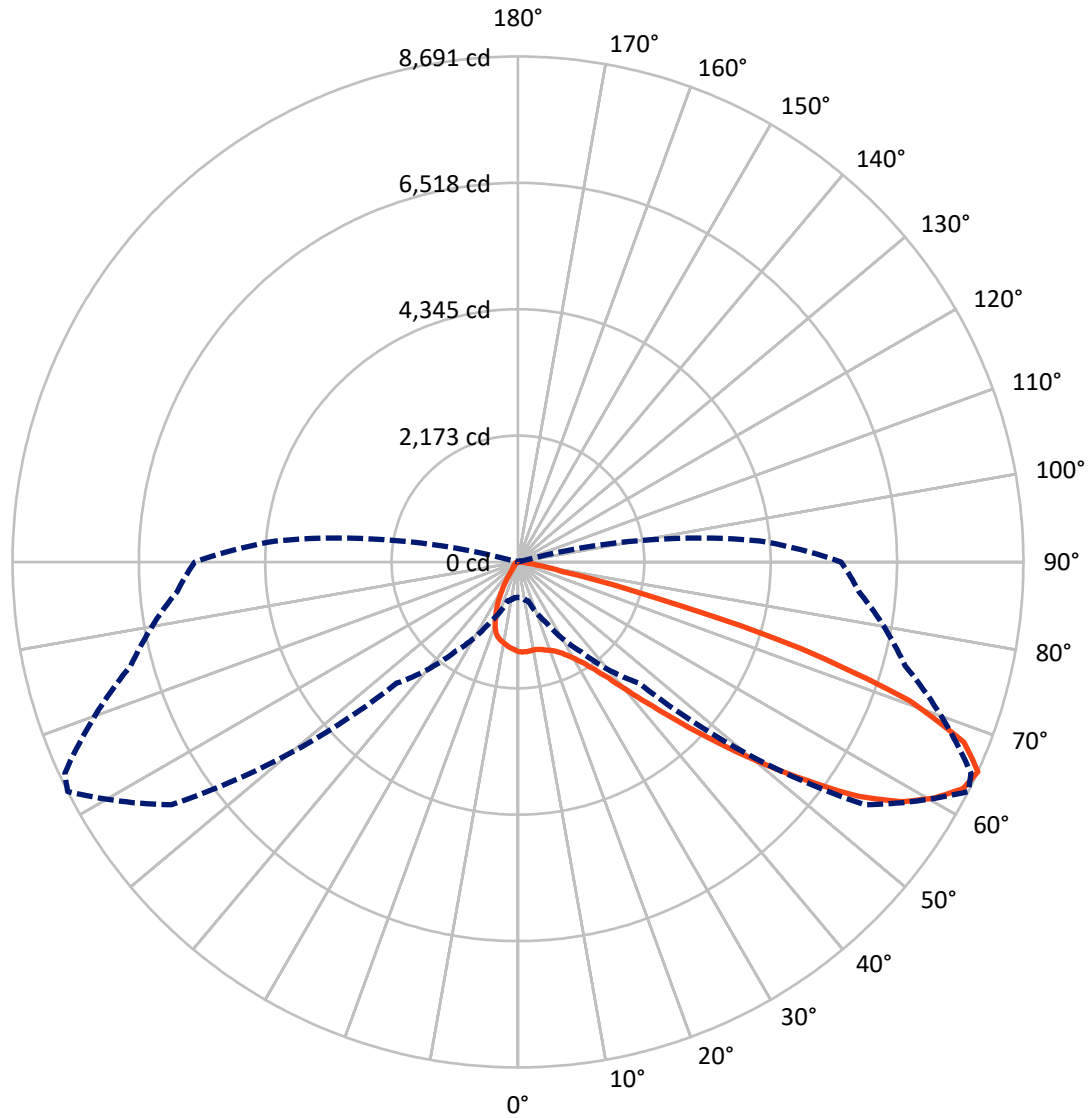
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Short - N/A

REPORT NUMBER: P399311  
CATALOG NUMBER: ARCH-L-PA3-120-827-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P399311  
 CATALOG NUMBER: ARCH-L-PA3-120-827-U-T2U-HSS

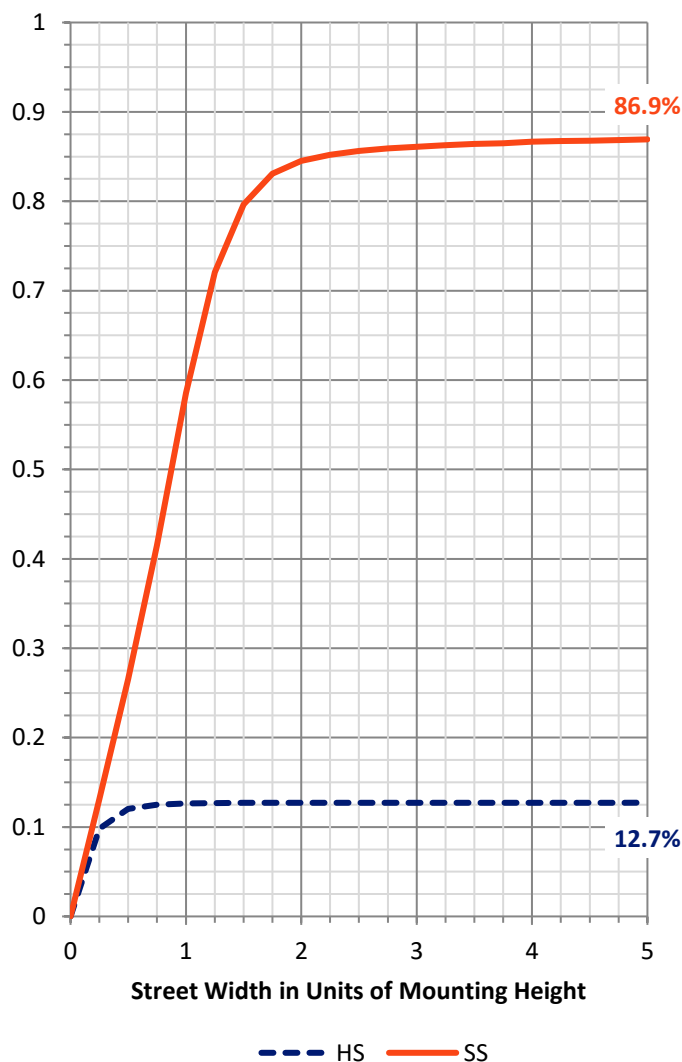
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1288.5	0.0	1288.5
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	8723.5	0.0	8723.5
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	10012.0	0.0	10012.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.7	1.4
10°-20°	347.2	3.5
20°-30°	514.6	5.1
30°-40°	955.5	9.5
40°-50°	2024.1	20.2
50°-60°	2798.8	28.0
60°-70°	2240.5	22.4
70°-80°	930.9	9.3
80°-90°	59.8	0.6
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°	10012.0	100.0
0°-180°	10012.0	100.0

**Coefficient of Utilization**

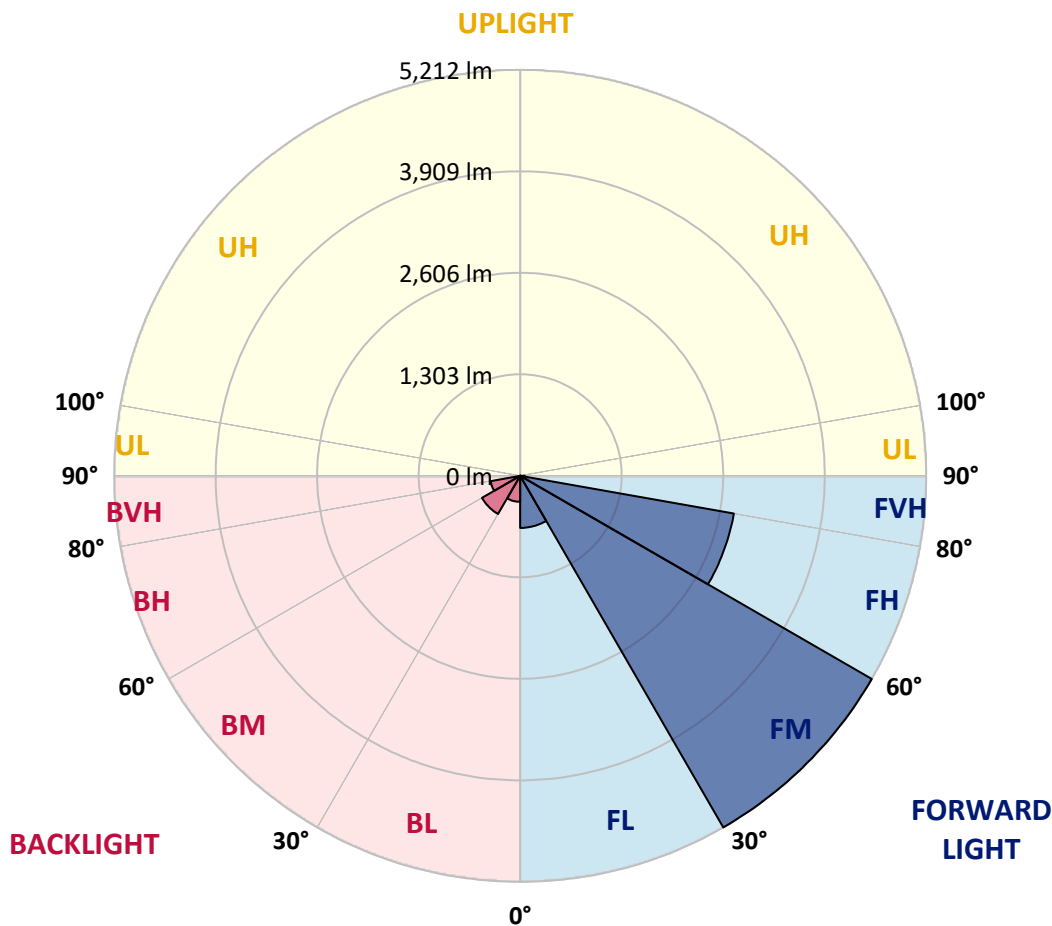


REPORT NUMBER: P399311  
 CATALOG NUMBER: ARCH-L-PA3-120-827-U-T2U-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	668.6	6.7			
FM (30°-60°)	5212.3	52.1			
FH (60°-80°)	2785.6	27.8			G2/5000
FVH (80°-90°)	57.0	0.6			G1/100
BL (0°-30°)	333.9	3.3	B1/500		
BM (30°-60°)	566.0	5.7	B1/1000		
BH (60°-80°)	385.8	3.9	B1/500		G1/500
BVH (80°-90°)	2.7	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 Short





REPORT NUMBER: P399311

CATALOG NUMBER: ARCH-L-PA3-120-827-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1568.8	1565.0	1561.3	1559.4	1559.4	1557.5	1549.9	1548.0	1544.2	1540.5	1536.7
5°	1553.7	1548.0	1546.1	1548.0	1549.9	1553.7	1549.9	1549.9	1546.1	1542.4	1534.8
7.5°	1515.9	1512.1	1514.0	1519.7	1521.6	1534.8	1536.7	1542.4	1542.4	1538.6	1532.9
10°	1470.5	1468.6	1468.6	1478.1	1487.5	1506.4	1519.7	1534.8	1536.7	1536.7	1527.2
12.5°	1436.5	1434.6	1440.3	1451.6	1470.5	1495.1	1517.8	1540.5	1544.2	1546.1	1531.0
15°	1415.7	1415.7	1423.3	1446.0	1472.4	1506.4	1532.9	1563.1	1566.9	1565.0	1544.2
17.5°	1396.8	1398.7	1413.8	1451.6	1481.9	1527.2	1559.4	1593.4	1595.3	1593.4	1559.4
20°	1389.3	1393.0	1415.7	1464.9	1498.9	1549.9	1591.5	1625.5	1627.4	1619.8	1574.5
22.5°	1410.0	1411.9	1440.3	1493.2	1525.3	1582.0	1635.0	1667.1	1669.0	1657.7	1597.2
25°	1481.9	1481.9	1506.4	1551.8	1580.2	1636.9	1693.6	1731.4	1731.4	1718.1	1648.2
27.5°	1650.1	1635.0	1629.3	1642.5	1652.0	1712.5	1773.0	1820.2	1818.3	1799.4	1714.4
30°	1975.2	1937.4	1876.9	1808.9	1774.8	1816.4	1873.1	1933.6	1931.7	1901.5	1795.6
32.5°	2521.4	2466.6	2323.0	2143.4	1997.9	1950.6	2003.5	2069.7	2071.6	2035.7	1926.1
35°	3287.0	3200.0	2942.9	2693.4	2360.8	2181.2	2196.3	2268.2	2290.8	2271.9	2145.3
37.5°	4024.1	3944.7	3699.0	3353.1	2901.4	2534.7	2470.4	2532.8	2559.2	2559.2	2425.0
40°	4766.9	4674.3	4456.9	4109.2	3632.8	3086.6	2856.0	2907.0	2935.4	2941.1	2765.3
42.5°	5362.3	5301.8	5135.5	4865.2	4419.1	4054.3	3411.7	3383.4	3409.8	3389.0	3160.3
45°	5774.4	5727.1	5611.8	5509.8	5292.4	5109.0	4154.5	3963.6	3980.6	3908.8	3604.5
47.5°	5859.4	5806.5	5781.9	5923.7	6078.7	6124.1	5067.5	4653.5	4636.5	4477.7	4065.7
50°	5489.0	5494.6	5585.4	5989.9	6636.3	7044.6	6125.9	5432.3	5369.9	5016.4	4494.8
52.5°	4689.4	4780.2	5008.9	5664.7	6806.4	7713.7	7184.4	6258.3	6161.9	5540.0	4816.1
55°	3668.8	3785.9	4162.1	4916.3	6451.0	8012.3	8076.6	7116.4	6897.1	5933.1	5065.6
57.5°	2727.5	2763.4	3201.9	3889.9	5609.9	7719.3	8534.0	7777.9	7496.3	6246.9	5313.2
60°	1699.2	1721.9	2185.0	2961.8	4249.0	6636.3	8534.0	8233.4	7965.0	6528.5	5540.0
62.5°	1056.6	1064.1	1238.0	2030.0	2888.1	4921.9	8180.5	8586.9	8371.4	6730.8	5734.7
65°	608.6	616.2	697.5	1147.3	1878.8	2946.7	7277.0	8690.9	8594.5	6891.4	5885.9
67.5°	444.2	448.0	480.1	644.5	1228.6	1514.0	5466.3	8273.1	8394.1	6970.8	5882.1
70°	385.6	391.3	432.8	502.8	886.5	929.9	2782.3	7144.7	7483.1	6857.4	5706.3
72.5°	296.8	304.3	366.7	472.5	650.2	669.1	1007.4	5084.5	5596.7	6148.6	5224.3
75°	204.1	211.7	274.1	389.4	536.8	500.9	553.8	2340.0	2952.4	4124.3	3976.9
77.5°	130.4	132.3	172.0	283.5	463.1	355.3	379.9	763.6	1071.7	1865.6	1876.9
80°	86.9	88.8	105.8	183.3	317.5	328.9	234.4	353.5	387.5	544.4	378.0
82.5°	52.9	52.9	71.8	115.3	192.8	272.2	153.1	185.2	198.5	209.8	98.3
85°	20.8	20.8	43.5	75.6	121.0	126.6	96.4	107.7	113.4	122.9	45.4
87.5°	5.7	5.7	24.6	41.6	52.9	58.6	58.6	52.9	56.7	69.9	22.7
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: P399311

CATALOG NUMBER: ARCH-L-PA3-120-827-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1534.8	1529.1	1521.6	1514.0	1506.4	1500.8	1495.1	1495.1	1491.3	1485.6	1481.9
5°	1531.0	1521.6	1504.6	1491.3	1470.5	1455.4	1444.1	1434.6	1428.9	1415.7	1413.8
7.5°	1525.3	1514.0	1489.4	1463.0	1428.9	1402.5	1376.0	1357.1	1338.2	1323.1	1319.3
10°	1515.9	1502.7	1466.7	1428.9	1381.7	1332.5	1270.2	1198.3	1132.2	1094.4	1083.1
12.5°	1515.9	1498.9	1451.6	1400.6	1332.5	1211.6	1052.8	894.0	771.2	716.4	701.2
15°	1525.3	1502.7	1440.3	1370.4	1243.7	998.0	740.9	531.1	396.9	355.3	345.9
17.5°	1534.8	1502.7	1423.3	1328.8	1081.2	723.9	421.5	279.7	236.3	226.8	226.8
20°	1538.6	1498.9	1400.6	1251.3	863.8	449.9	251.4	209.8	192.8	187.1	187.1
22.5°	1553.7	1500.8	1383.6	1139.8	627.5	264.6	198.5	175.8	158.8	153.1	153.1
25°	1591.5	1523.5	1387.4	998.0	402.6	200.4	168.2	145.5	128.5	121.0	121.0
27.5°	1652.0	1574.5	1408.2	833.6	253.3	172.0	141.8	117.2	104.0	96.4	96.4
30°	1720.0	1631.2	1417.6	644.5	189.0	145.5	115.3	92.6	83.2	77.5	75.6
32.5°	1839.1	1729.5	1410.0	442.3	155.0	122.9	92.6	73.7	66.2	64.3	64.3
35°	2030.0	1901.5	1394.9	277.9	128.5	98.3	73.7	60.5	54.8	52.9	51.0
37.5°	2289.0	2152.9	1349.6	183.3	105.8	77.5	60.5	51.0	45.4	43.5	43.5
40°	2604.6	2440.2	1262.6	139.9	90.7	62.4	51.0	43.5	39.7	37.8	37.8
42.5°	2965.6	2759.6	1124.6	121.0	75.6	52.9	43.5	35.9	34.0	32.1	32.1
45°	3360.7	3094.2	933.7	107.7	64.3	43.5	35.9	32.1	28.4	28.4	26.5
47.5°	3780.3	3430.6	718.3	94.5	54.8	37.8	32.1	26.5	24.6	22.7	22.7
50°	4184.8	3731.1	504.7	81.3	45.4	32.1	26.5	22.7	20.8	18.9	18.9
52.5°	4470.2	3912.6	357.2	69.9	37.8	28.4	20.8	17.0	15.1	15.1	15.1
55°	4698.9	4026.0	249.5	58.6	32.1	24.6	17.0	13.2	13.2	11.3	11.3
57.5°	4914.4	4099.7	183.3	49.1	26.5	18.9	13.2	9.5	9.5	7.6	7.6
60°	5137.4	4139.4	139.9	39.7	22.7	15.1	9.5	7.6	5.7	5.7	5.7
62.5°	5362.3	4164.0	107.7	32.1	18.9	11.3	7.6	5.7	3.8	1.9	1.9
65°	5558.9	4171.5	83.2	24.6	15.1	7.6	5.7	1.9	0.0	0.0	0.0
67.5°	5617.5	4084.6	64.3	18.9	11.3	5.7	3.8	0.0	0.0	0.0	0.0
70°	5458.7	3854.0	49.1	15.1	9.5	3.8	1.9	0.0	0.0	0.0	0.0
72.5°	4844.4	3232.1	37.8	9.5	7.6	3.8	1.9	0.0	0.0	0.0	0.0
75°	3466.5	1723.8	26.5	7.6	5.7	1.9	0.0	0.0	0.0	0.0	0.0
77.5°	1595.3	667.2	18.9	5.7	3.8	1.9	0.0	0.0	0.0	0.0	0.0
80°	311.9	166.3	7.6	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	71.8	28.4	3.8	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	24.6	9.5	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.5	3.8	1.9	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)