

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: P399538

Luminaire Tested: **ARCH-L-PA3-150-830-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399538  
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-PA3-150-830-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 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: 13817 lumens  
Efficiency: N/A  
Efficacy: 90.3 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

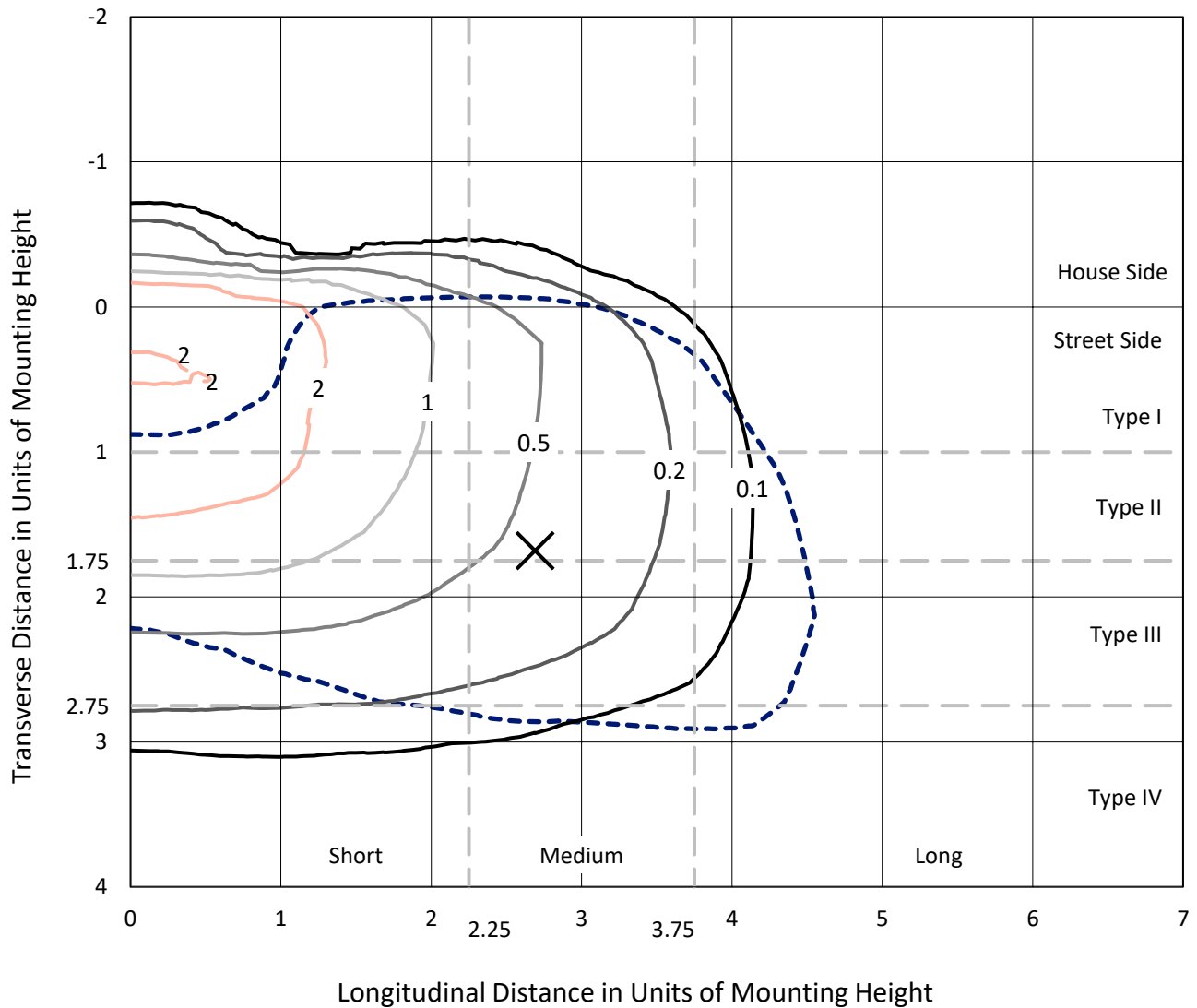
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

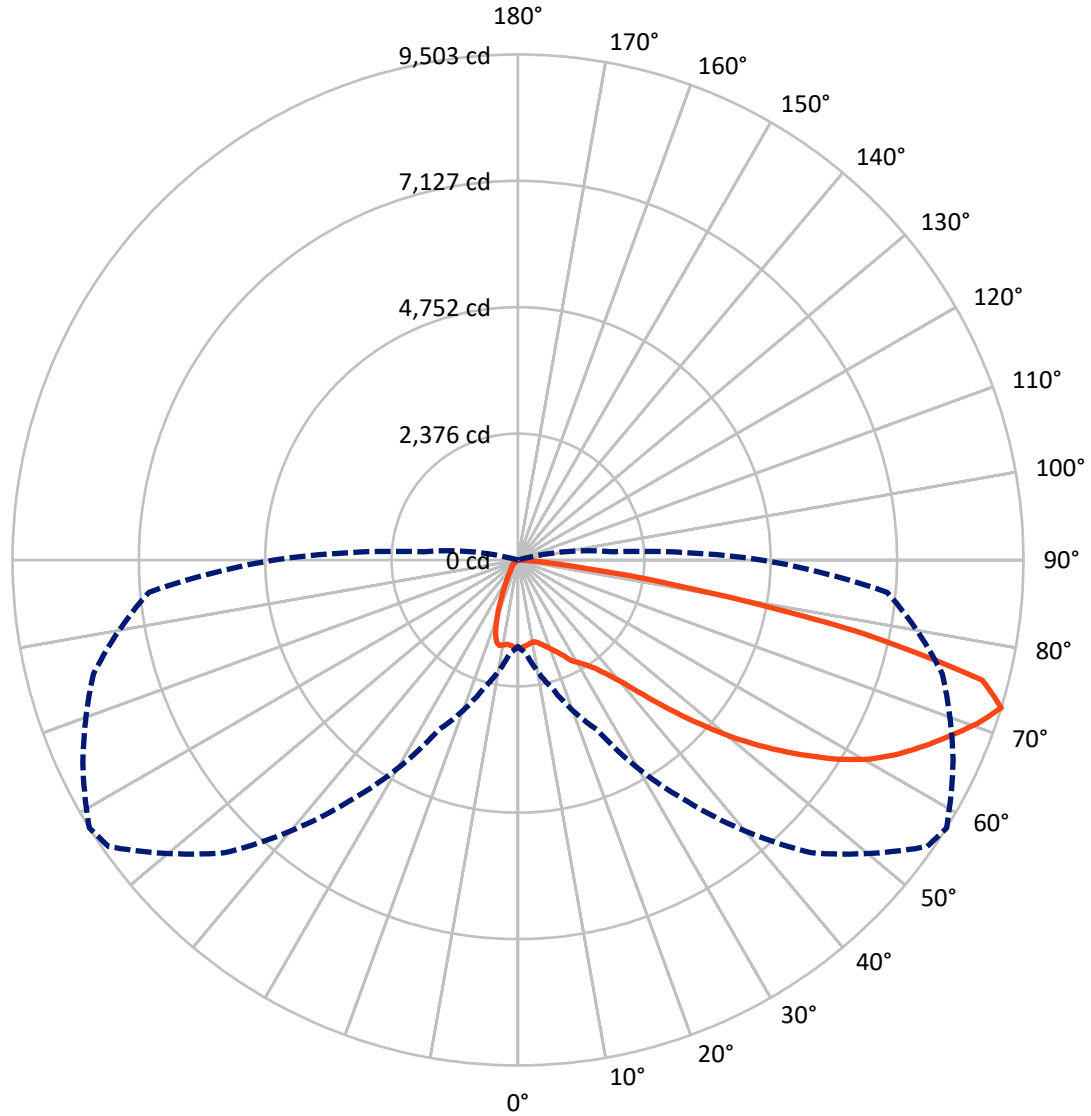
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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

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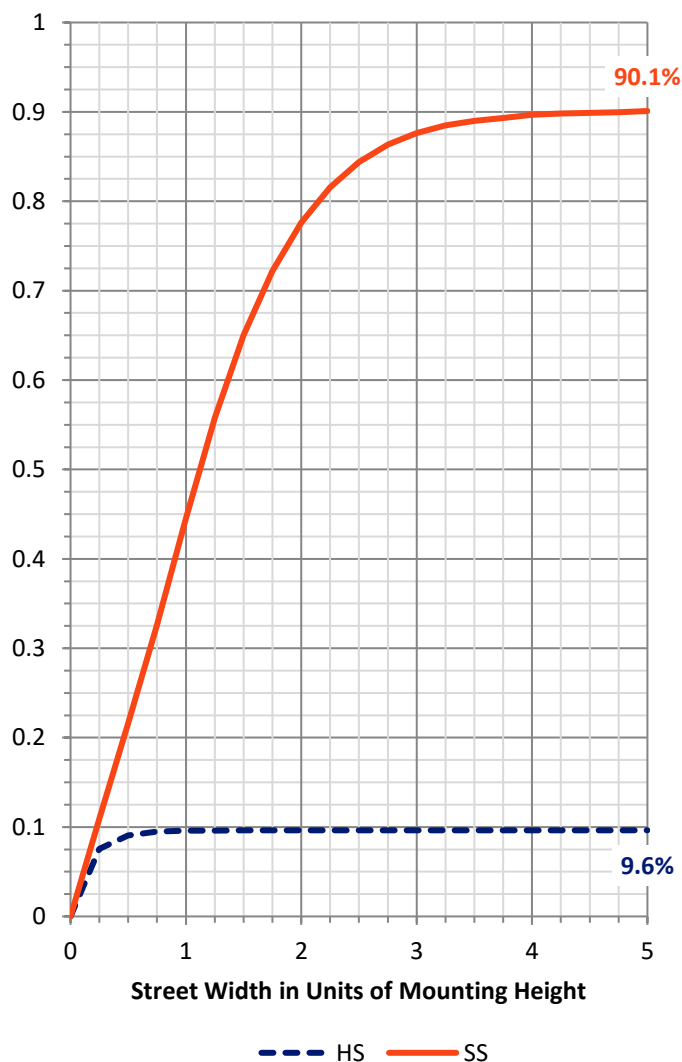
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1343.6	0.0	1343.6
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	12473.4	0.0	12473.4
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	13817.0	0.0	13817.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.2	1.1
10°-20°	396.3	2.9
20°-30°	622.6	4.5
30°-40°	1073.7	7.8
40°-50°	2042.8	14.8
50°-60°	3235.1	23.4
60°-70°	3775.0	27.3
70°-80°	2364.3	17.1
80°-90°	155.2	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°	13817.0	100.0
0°-180°	13817.0	100.0

**Coefficient of Utilization**



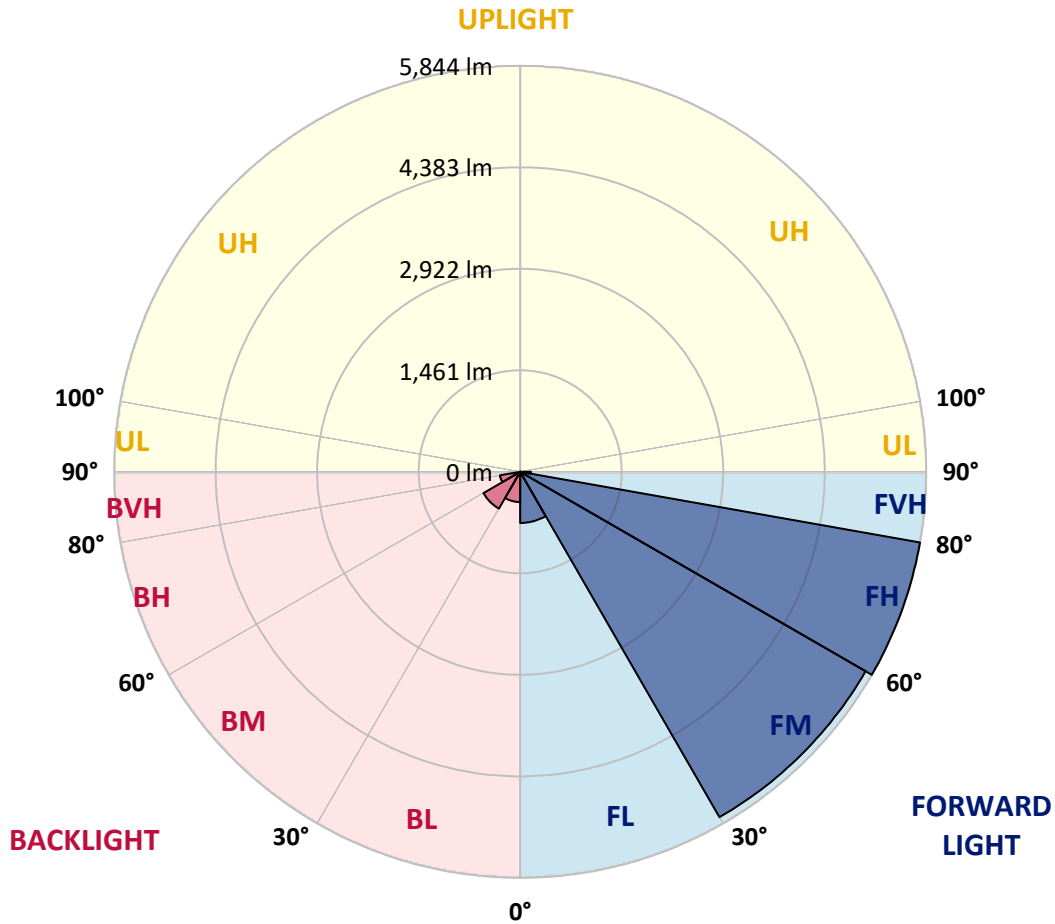
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 CATALOG NUMBER: ARCH-L-PA3-150-830-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	735.9	5.3			
FM (30°-60°)	5740.2	41.5			
FH (60°-80°)	5843.6	42.3			G3/7500
FVH (80°-90°)	153.7	1.1			G2/225
BL (0°-30°)	435.1	3.1	B1/500		
BM (30°-60°)	611.4	4.4	B1/1000		
BH (60°-80°)	295.7	2.1	B1/500		G1/500
BVH (80°-90°)	1.5	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: P399538

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0
2.5°	1650.5	1643.1	1640.7	1638.2	1640.7	1643.1	1635.7	1643.1	1638.2	1640.7	1645.6
5°	1591.2	1583.8	1581.4	1583.8	1591.2	1603.6	1608.5	1616.0	1616.0	1623.4	1625.8
7.5°	1524.5	1519.6	1517.1	1522.1	1536.9	1564.1	1578.9	1588.8	1598.7	1613.5	1628.3
10°	1487.5	1485.0	1482.5	1489.9	1504.8	1529.5	1549.2	1564.1	1601.1	1643.1	1670.3
12.5°	1462.8	1462.8	1467.7	1482.5	1502.3	1522.1	1569.0	1588.8	1645.6	1709.8	1746.9
15°	1443.0	1443.0	1450.4	1477.6	1504.8	1551.7	1620.9	1643.1	1709.8	1788.9	1838.3
17.5°	1428.2	1433.1	1438.0	1465.2	1517.1	1596.2	1677.7	1709.8	1791.4	1877.9	1932.2
20°	1430.6	1435.6	1438.0	1465.2	1539.4	1648.1	1751.8	1788.9	1882.8	1974.2	2028.6
22.5°	1445.5	1452.9	1455.3	1492.4	1578.9	1702.4	1835.9	1877.9	1979.2	2075.5	2117.5
25°	1507.2	1512.2	1497.3	1529.5	1635.7	1786.4	1944.6	1989.1	2090.4	2179.3	2213.9
27.5°	1717.3	1722.2	1640.7	1603.6	1680.2	1855.6	2078.0	2139.8	2265.8	2325.1	2330.0
30°	2171.9	2176.8	2016.2	1840.8	1786.4	1914.9	2152.1	2238.6	2401.7	2468.4	2438.8
32.5°	2757.5	2752.6	2532.6	2273.2	2038.5	2018.7	2258.4	2349.8	2527.7	2591.9	2569.7
35°	3345.6	3353.0	3165.2	2774.8	2438.8	2213.9	2394.3	2500.5	2715.5	2806.9	2767.4
37.5°	3748.3	3797.7	3716.2	3293.7	2930.5	2574.6	2614.2	2727.8	2997.2	3120.7	3036.7
40°	4316.6	4304.3	4106.6	3795.3	3474.0	3108.4	2970.0	3024.3	3333.2	3498.8	3367.8
42.5°	5080.1	5055.4	4719.4	4415.5	4057.2	3758.2	3476.5	3466.6	3718.7	3911.4	3721.1
45°	5772.0	5734.9	5505.1	5211.1	4818.2	4474.8	4094.2	4007.8	4183.2	4346.3	4123.9
47.5°	6323.0	6261.2	6098.1	5942.4	5846.1	5312.4	4741.6	4610.6	4699.6	4820.7	4506.9
50°	6975.3	6804.8	6567.6	6473.7	6673.8	6261.2	5364.3	5238.3	5233.3	5302.5	4902.2
52.5°	7271.8	6962.9	6829.5	6908.6	7261.9	7143.3	6036.3	5856.0	5784.3	5791.7	5270.4
55°	6913.5	6878.9	6950.6	7197.7	7659.7	7590.5	6681.2	6458.9	6352.6	6219.2	5623.7
57.5°	6505.8	6612.1	6896.2	7368.1	8163.8	8057.5	7316.3	7064.2	6869.0	6562.6	6016.6
60°	6130.2	6239.0	6708.4	7407.7	8440.5	8507.2	7845.0	7605.3	7316.3	6913.5	6449.0
62.5°	5559.5	5643.5	6303.2	7350.8	8319.4	8769.1	8213.2	8032.8	7763.5	7247.1	6945.6
65°	4917.0	4971.4	5623.7	6896.2	8082.2	8739.5	8517.1	8415.8	8153.9	7595.5	7437.3
67.5°	4212.8	4277.1	4820.7	6078.3	7617.7	8601.1	8803.7	8793.8	8494.9	7980.9	7793.1
70°	3402.4	3407.3	3857.0	5040.6	6807.3	8324.4	9159.5	9181.8	8821.0	8270.0	7808.0
72.5°	1628.3	1761.7	2500.5	3518.5	5532.3	7780.8	9391.8	9503.0	9026.1	8260.1	6965.4
75°	373.1	385.5	728.9	1672.8	3244.3	5972.1	8811.1	9018.7	8527.0	7143.3	4907.2
77.5°	135.9	143.3	205.1	489.2	1247.8	3086.1	6305.7	6609.6	6303.2	4618.1	2320.1
80°	91.4	89.0	106.2	217.4	573.2	874.7	3224.5	3404.9	3108.4	1576.4	555.9
82.5°	46.9	49.4	74.1	121.1	385.5	303.9	1077.3	1171.2	963.6	316.3	103.8
85°	22.2	22.2	42.0	76.6	163.1	106.2	239.7	289.1	259.4	138.4	34.6
87.5°	22.2	22.2	39.5	49.4	84.0	44.5	59.3	74.1	69.2	74.1	12.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0
2.5°	1645.6	1643.1	1640.7	1645.6	1643.1	1648.1	1648.1	1653.0	1653.0	1648.1	1645.6
5°	1623.4	1618.4	1613.5	1613.5	1611.0	1616.0	1630.8	1643.1	1645.6	1638.2	1635.7
7.5°	1625.8	1625.8	1620.9	1611.0	1593.7	1593.7	1593.7	1608.5	1616.0	1611.0	1608.5
10°	1670.3	1672.8	1660.4	1638.2	1608.5	1581.4	1529.5	1452.9	1381.2	1361.5	1354.0
12.5°	1746.9	1749.4	1724.7	1685.1	1623.4	1462.8	1265.1	1082.2	941.4	901.9	894.5
15°	1838.3	1840.8	1796.3	1732.1	1544.3	1171.2	877.2	669.6	546.1	516.4	513.9
17.5°	1932.2	1927.3	1860.6	1737.0	1309.6	830.2	533.7	427.5	395.3	387.9	390.4
20°	2023.6	2008.8	1917.4	1645.6	1008.1	543.6	390.4	365.7	358.3	353.3	353.3
22.5°	2107.7	2078.0	1964.3	1465.2	706.7	390.4	348.4	343.5	333.6	326.2	323.7
25°	2191.7	2149.7	1994.0	1230.5	474.4	341.0	328.6	318.7	306.4	296.5	294.0
27.5°	2293.0	2233.7	1979.2	934.0	355.8	316.3	306.4	291.6	274.3	259.4	254.5
30°	2389.3	2322.6	1895.2	644.9	303.9	291.6	276.7	254.5	232.3	215.0	210.0
32.5°	2510.4	2433.8	1744.4	422.5	264.4	254.5	239.7	212.5	182.8	163.1	158.1
35°	2683.4	2596.9	1551.7	296.5	232.3	215.0	195.2	165.5	133.4	118.6	116.1
37.5°	2925.5	2809.4	1309.6	239.7	205.1	180.4	150.7	121.1	98.8	86.5	84.0
40°	3222.0	3044.1	1040.2	212.5	182.8	150.7	113.7	86.5	71.7	61.8	61.8
42.5°	3543.2	3264.0	766.0	195.2	160.6	123.5	84.0	61.8	51.9	46.9	44.5
45°	3874.3	3459.2	516.4	180.4	140.8	93.9	59.3	42.0	34.6	34.6	32.1
47.5°	4217.8	3590.2	333.6	163.1	118.6	69.2	39.5	29.7	24.7	24.7	24.7
50°	4558.8	3659.4	237.2	148.3	96.4	46.9	29.7	22.2	19.8	19.8	19.8
52.5°	4805.8	3614.9	190.3	128.5	74.1	34.6	22.2	17.3	14.8	14.8	14.8
55°	5020.8	3538.3	165.5	111.2	54.4	24.7	17.3	14.8	12.4	12.4	12.4
57.5°	5240.7	3439.5	148.3	93.9	39.5	17.3	12.4	9.9	9.9	9.9	9.9
60°	5440.9	3271.4	128.5	74.1	27.2	12.4	9.9	7.4	7.4	7.4	7.4
62.5°	5636.1	3128.1	111.2	56.8	19.8	9.9	4.9	4.9	2.5	2.5	2.5
65°	5747.3	2935.4	89.0	37.1	12.4	7.4	2.5	2.5	0.0	0.0	0.0
67.5°	5712.7	2705.6	61.8	22.2	7.4	4.9	2.5	0.0	0.0	0.0	0.0
70°	5473.0	2396.7	37.1	12.4	7.4	4.9	2.5	0.0	0.0	0.0	0.0
72.5°	4583.5	1774.1	22.2	9.9	4.9	2.5	0.0	0.0	0.0	0.0	0.0
75°	3061.4	815.4	12.4	7.4	2.5	2.5	0.0	0.0	0.0	0.0	0.0
77.5°	1401.0	244.6	7.4	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	281.7	64.2	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	59.3	12.4	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.4	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	2.5	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)