

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: P400499

Luminaire Tested: **ARCH-L-PA3-90-730-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400499  
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-PA3-90-730-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 400mA 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: 9778 lumens  
Efficiency: N/A  
Efficacy: 105.1 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

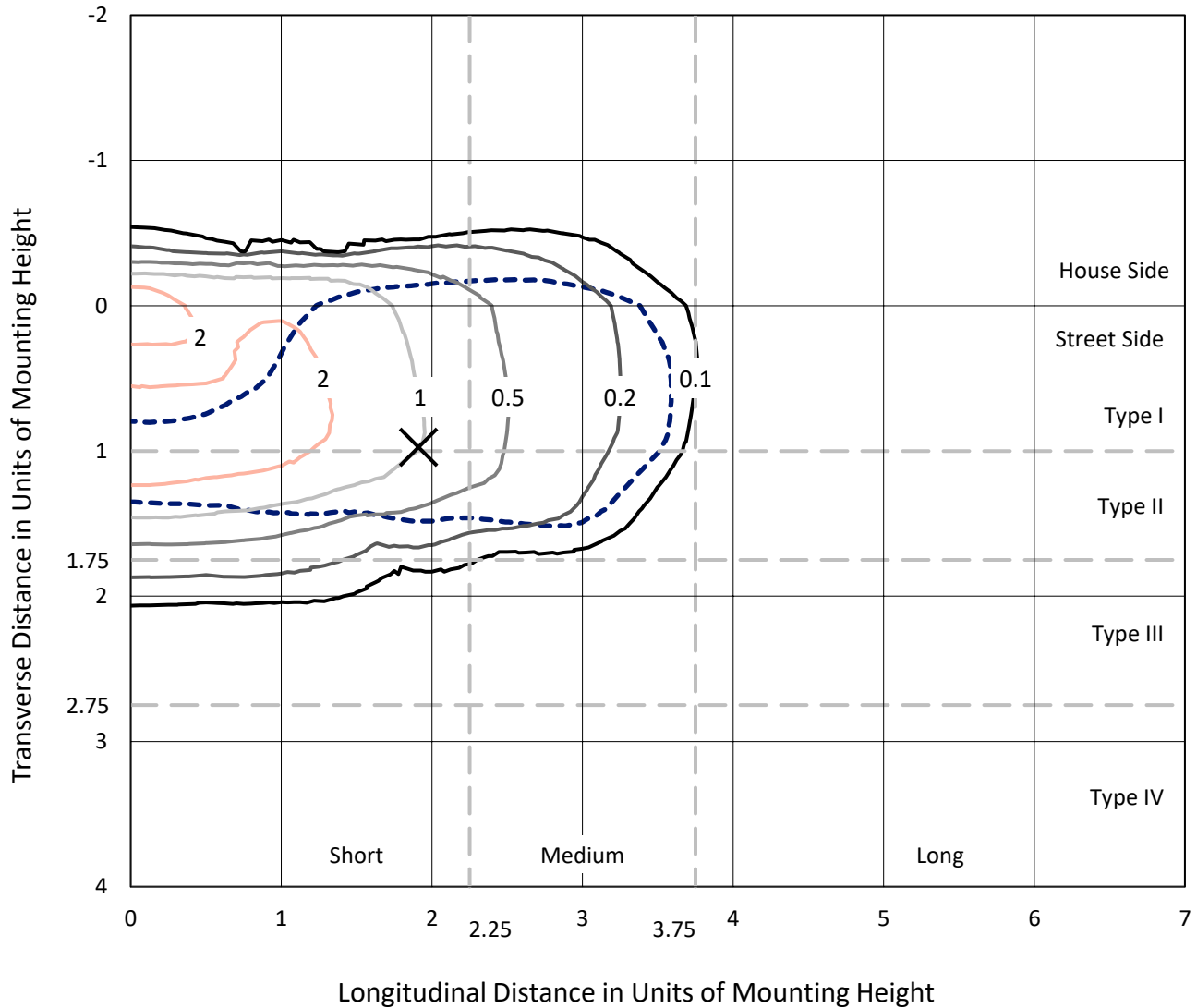
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

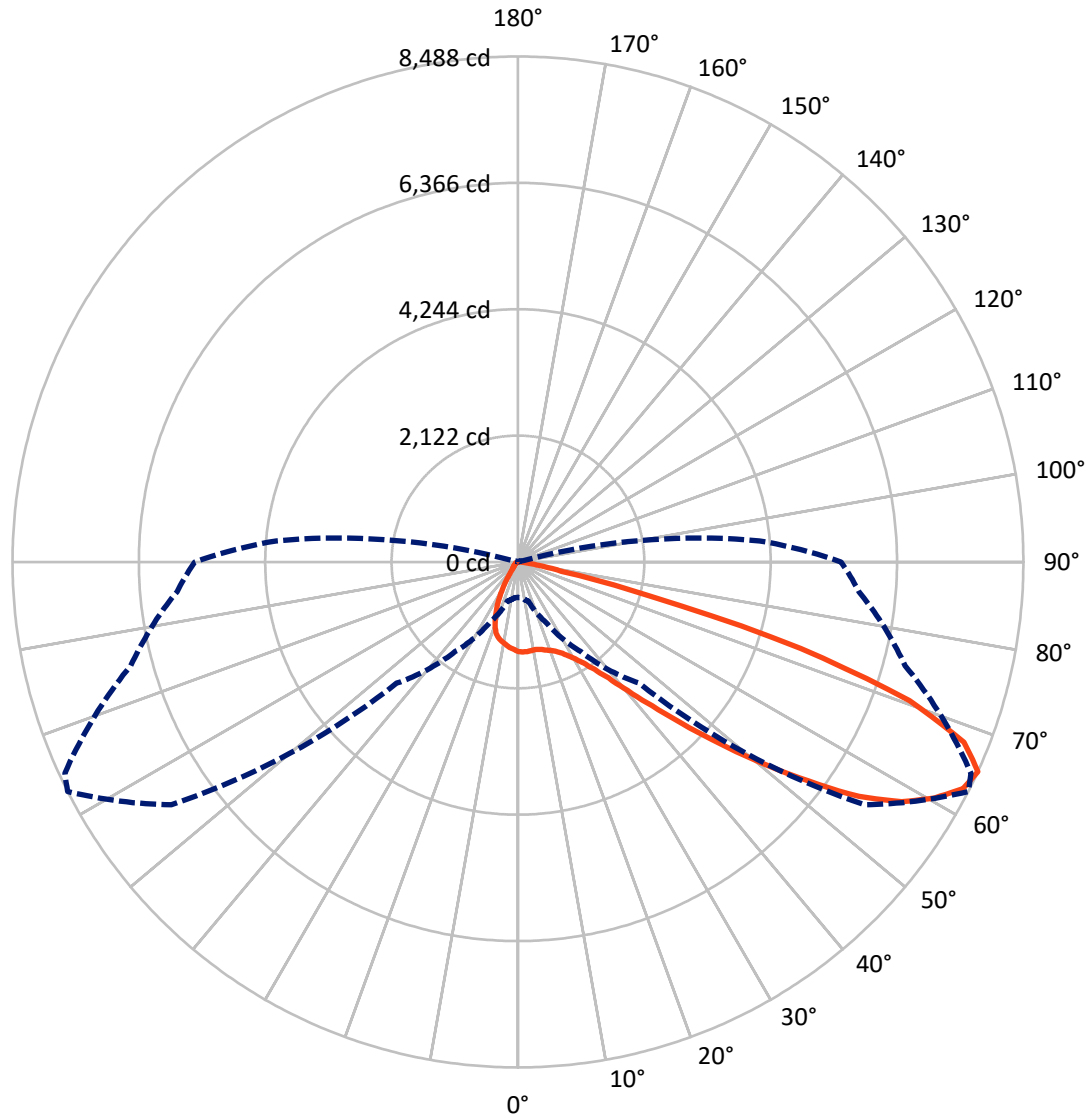
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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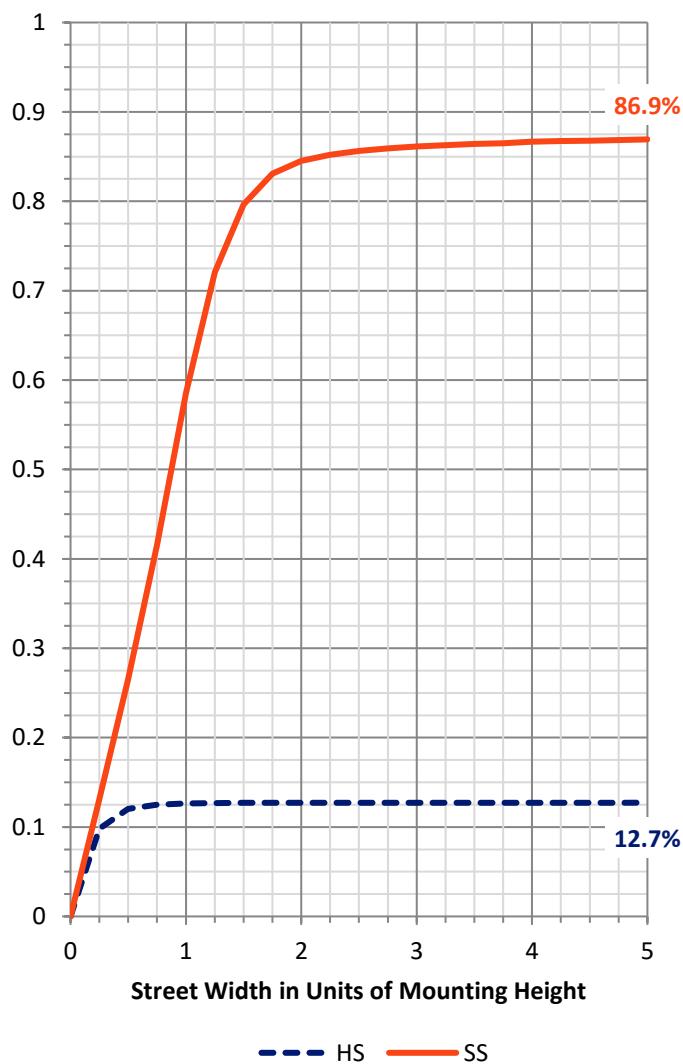
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1258.4	0.0	1258.4
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	8519.6	0.0	8519.6
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	9778.0	0.0	9778.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.5	1.4
10°-20°	339.1	3.5
20°-30°	502.6	5.1
30°-40°	933.1	9.5
40°-50°	1976.8	20.2
50°-60°	2733.4	28.0
60°-70°	2188.2	22.4
70°-80°	909.1	9.3
80°-90°	58.4	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°	9778.0	100.0
0°-180°	9778.0	100.0

**Coefficient of Utilization**

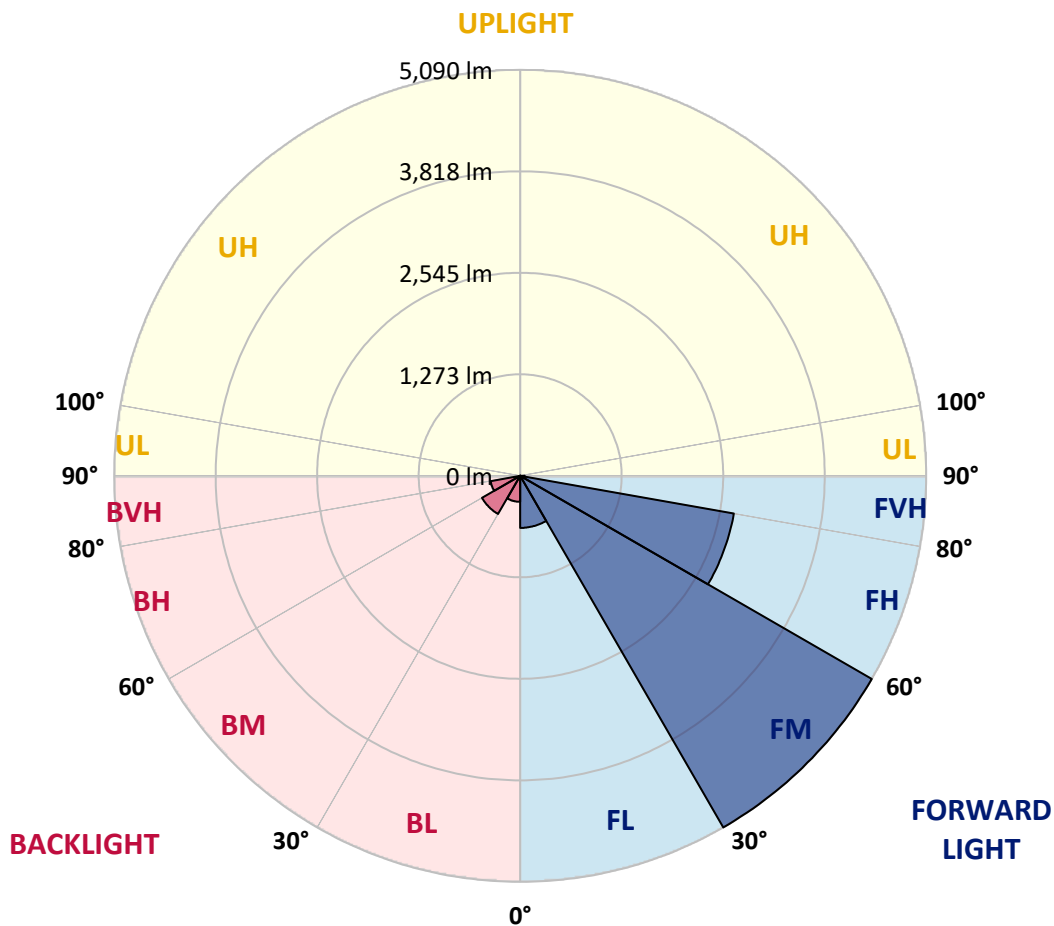


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	652.9	6.7			
FM (30°-60°)	5090.5	52.1			
FH (60°-80°)	2720.5	27.8			G2/5000
FVH (80°-90°)	55.7	0.6			G1/100
BL (0°-30°)	326.1	3.3	B1/500		
BM (30°-60°)	552.8	5.7	B1/1000		
BH (60°-80°)	376.8	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3
2.5°	1532.1	1528.5	1524.8	1522.9	1522.9	1521.1	1513.7	1511.8	1508.2	1504.5	1500.8
5°	1517.4	1511.8	1510.0	1511.8	1513.7	1517.4	1513.7	1513.7	1510.0	1506.3	1498.9
7.5°	1480.5	1476.8	1478.6	1484.2	1486.0	1498.9	1500.8	1506.3	1506.3	1502.6	1497.1
10°	1436.2	1434.3	1434.3	1443.5	1452.8	1471.2	1484.2	1498.9	1500.8	1500.8	1491.5
12.5°	1402.9	1401.1	1406.6	1417.7	1436.2	1460.2	1482.3	1504.5	1508.2	1510.0	1495.2
15°	1382.6	1382.6	1390.0	1412.2	1438.0	1471.2	1497.1	1526.6	1530.3	1528.5	1508.2
17.5°	1364.2	1366.0	1380.8	1417.7	1447.2	1491.5	1522.9	1556.1	1558.0	1556.1	1522.9
20°	1356.8	1360.5	1382.6	1430.6	1463.8	1513.7	1554.3	1587.5	1589.4	1582.0	1537.7
22.5°	1377.1	1378.9	1406.6	1458.3	1489.7	1545.1	1596.8	1628.1	1630.0	1618.9	1559.8
25°	1447.2	1447.2	1471.2	1515.5	1543.2	1598.6	1654.0	1690.9	1690.9	1678.0	1609.7
27.5°	1611.5	1596.8	1591.2	1604.1	1613.4	1672.4	1731.5	1777.7	1775.8	1757.4	1674.3
30°	1929.0	1892.1	1833.0	1766.6	1733.4	1774.0	1829.3	1888.4	1886.6	1857.0	1753.7
32.5°	2462.5	2409.0	2268.7	2093.3	1951.2	1905.0	1956.7	2021.3	2023.2	1988.1	1881.0
35°	3210.1	3125.2	2874.2	2630.5	2305.6	2130.2	2145.0	2215.2	2237.3	2218.8	2095.2
37.5°	3930.1	3852.5	3612.6	3274.7	2833.6	2475.4	2412.7	2473.6	2499.4	2499.4	2368.4
40°	4655.5	4565.1	4352.8	4013.1	3547.9	3014.5	2789.3	2839.1	2866.8	2872.3	2700.6
42.5°	5237.0	5177.9	5015.5	4751.5	4315.9	3959.6	3332.0	3304.3	3330.1	3309.8	3086.5
45°	5639.4	5593.3	5480.7	5381.0	5168.7	4989.6	4057.4	3871.0	3887.6	3817.5	3520.3
47.5°	5722.5	5670.8	5646.8	5785.2	5936.6	5980.9	4949.0	4544.8	4528.1	4373.1	3970.7
50°	5360.7	5366.2	5454.8	5849.9	6481.2	6879.9	5982.8	5305.3	5244.4	4899.2	4389.7
52.5°	4579.8	4668.4	4891.8	5532.4	6647.3	7533.4	7016.5	6112.0	6017.8	5410.5	4703.5
55°	3583.0	3697.5	4064.8	4801.4	6300.3	7825.0	7887.8	6950.1	6735.9	5794.5	4947.2
57.5°	2663.7	2698.8	3127.1	3799.0	5478.8	7538.9	8334.5	7596.1	7321.1	6100.9	5189.0
60°	1659.5	1681.7	2133.9	2892.6	4149.7	6481.2	8334.5	8041.0	7778.9	6376.0	5410.5
62.5°	1031.9	1039.3	1209.1	1982.6	2820.6	4806.9	7989.3	8386.2	8175.8	6573.5	5600.7
65°	594.4	601.8	681.2	1120.5	1834.9	2877.9	7107.0	8487.7	8393.6	6730.4	5748.3
67.5°	433.8	437.5	468.9	629.5	1199.9	1478.6	5338.5	8079.8	8197.9	6807.9	5744.6
70°	376.6	382.1	422.7	491.0	865.8	908.2	2717.3	6977.7	7308.2	6697.2	5573.0
72.5°	289.8	297.2	358.1	461.5	635.0	653.5	983.9	4965.6	5465.9	6004.9	5102.2
75°	199.4	206.7	267.7	380.3	524.3	489.2	540.9	2285.3	2883.4	4027.9	3883.9
77.5°	127.4	129.2	168.0	276.9	452.3	347.0	371.0	745.8	1046.7	1822.0	1833.0
80°	84.9	86.8	103.4	179.1	310.1	321.2	228.9	345.2	378.4	531.6	369.2
82.5°	51.7	51.7	70.1	112.6	188.3	265.8	149.5	180.9	193.8	204.9	96.0
85°	20.3	20.3	42.5	73.8	118.1	123.7	94.1	105.2	110.8	120.0	44.3
87.5°	5.5	5.5	24.0	40.6	51.7	57.2	57.2	51.7	55.4	68.3	22.2
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°	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3
2.5°	1498.9	1493.4	1486.0	1478.6	1471.2	1465.7	1460.2	1460.2	1456.5	1450.9	1447.2
5°	1495.2	1486.0	1469.4	1456.5	1436.2	1421.4	1410.3	1401.1	1395.5	1382.6	1380.8
7.5°	1489.7	1478.6	1454.6	1428.8	1395.5	1369.7	1343.9	1325.4	1306.9	1292.2	1288.5
10°	1480.5	1467.5	1432.5	1395.5	1349.4	1301.4	1240.5	1170.3	1105.7	1068.8	1057.7
12.5°	1480.5	1463.8	1417.7	1367.9	1301.4	1183.3	1028.2	873.1	753.2	699.6	684.9
15°	1489.7	1467.5	1406.6	1338.3	1214.6	974.7	723.6	518.7	387.7	347.0	337.8
17.5°	1498.9	1467.5	1390.0	1297.7	1055.9	707.0	411.6	273.2	230.7	221.5	221.5
20°	1502.6	1463.8	1367.9	1222.0	843.6	439.3	245.5	204.9	188.3	182.8	182.8
22.5°	1517.4	1465.7	1351.2	1113.1	612.9	258.4	193.8	171.7	155.1	149.5	149.5
25°	1554.3	1487.8	1354.9	974.7	393.2	195.7	164.3	142.1	125.5	118.1	118.1
27.5°	1613.4	1537.7	1375.2	814.1	247.4	168.0	138.4	114.4	101.5	94.1	94.1
30°	1679.8	1593.1	1384.5	629.5	184.6	142.1	112.6	90.5	81.2	75.7	73.8
32.5°	1796.1	1689.1	1377.1	432.0	151.4	120.0	90.5	72.0	64.6	62.8	62.8
35°	1982.6	1857.0	1362.3	271.4	125.5	96.0	72.0	59.1	53.5	51.7	49.8
37.5°	2235.5	2102.6	1318.0	179.1	103.4	75.7	59.1	49.8	44.3	42.5	42.5
40°	2543.7	2383.1	1233.1	136.6	88.6	60.9	49.8	42.5	38.8	36.9	36.9
42.5°	2896.3	2695.1	1098.3	118.1	73.8	51.7	42.5	35.1	33.2	31.4	31.4
45°	3282.1	3021.8	911.9	105.2	62.8	42.5	35.1	31.4	27.7	27.7	25.8
47.5°	3691.9	3350.4	701.5	92.3	53.5	36.9	31.4	25.8	24.0	22.2	22.2
50°	4087.0	3643.9	492.9	79.4	44.3	31.4	25.8	22.2	20.3	18.5	18.5
52.5°	4365.7	3821.1	348.9	68.3	36.9	27.7	20.3	16.6	14.8	14.8	14.8
55°	4589.1	3931.9	243.7	57.2	31.4	24.0	16.6	12.9	12.9	11.1	11.1
57.5°	4799.5	4003.9	179.1	48.0	25.8	18.5	12.9	9.2	9.2	7.4	7.4
60°	5017.3	4042.7	136.6	38.8	22.2	14.8	9.2	7.4	5.5	5.5	5.5
62.5°	5237.0	4066.7	105.2	31.4	18.5	11.1	7.4	5.5	3.7	1.8	1.8
65°	5429.0	4074.0	81.2	24.0	14.8	7.4	5.5	1.8	0.0	0.0	0.0
67.5°	5486.2	3989.1	62.8	18.5	11.1	5.5	3.7	0.0	0.0	0.0	0.0
70°	5331.1	3763.9	48.0	14.8	9.2	3.7	1.8	0.0	0.0	0.0	0.0
72.5°	4731.2	3156.6	36.9	9.2	7.4	3.7	1.8	0.0	0.0	0.0	0.0
75°	3385.5	1683.5	25.8	7.4	5.5	1.8	0.0	0.0	0.0	0.0	0.0
77.5°	1558.0	651.6	18.5	5.5	3.7	1.8	0.0	0.0	0.0	0.0	0.0
80°	304.6	162.4	7.4	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	70.1	27.7	3.7	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	24.0	9.2	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.2	3.7	1.8	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)