

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: P399122

Luminaire Tested: **ARCH-L-PA3-100-727-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399122  
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-PA3-100-727-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA 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: 9667 lumens  
Efficiency: N/A  
Efficacy: 94.8 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

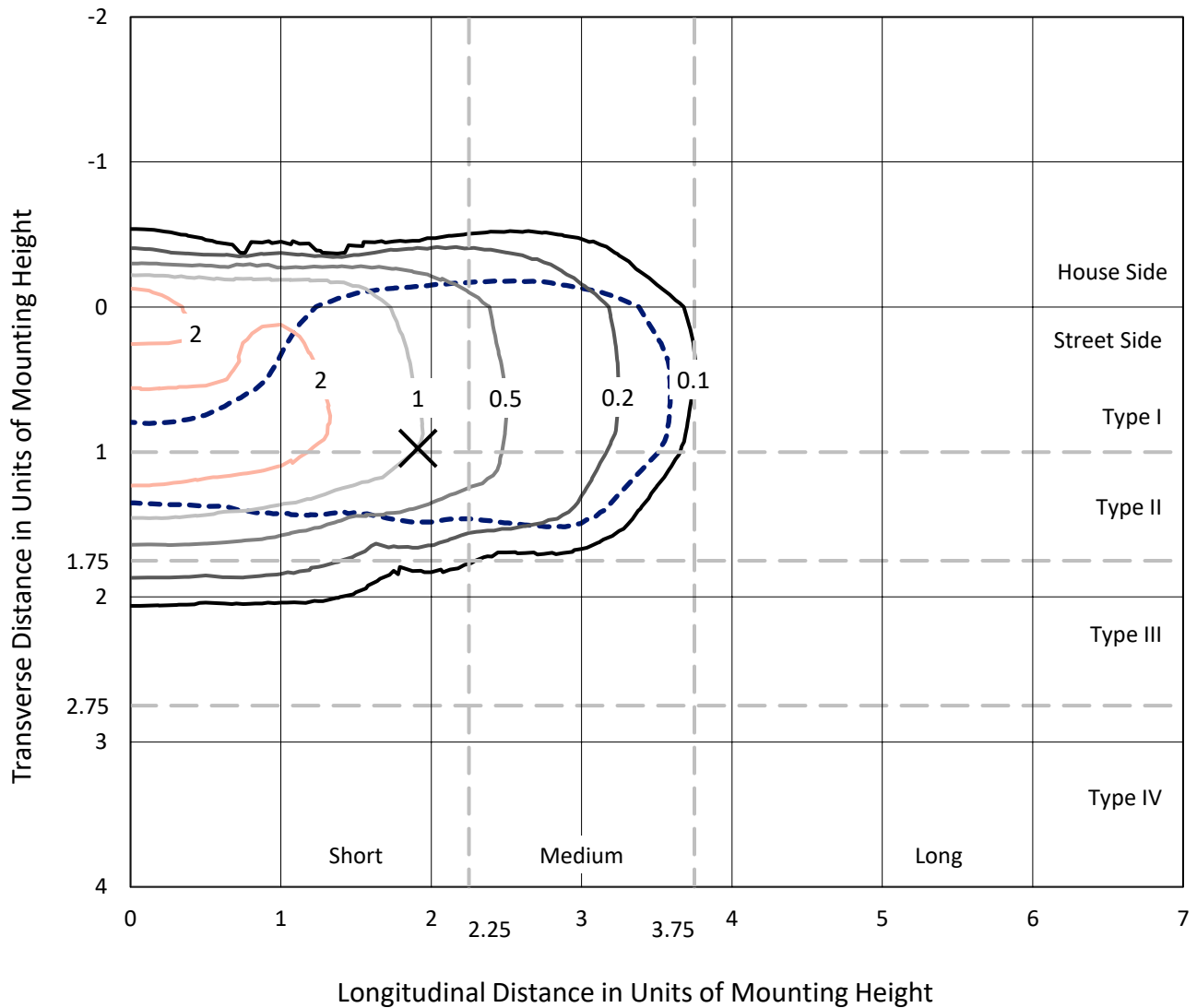
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

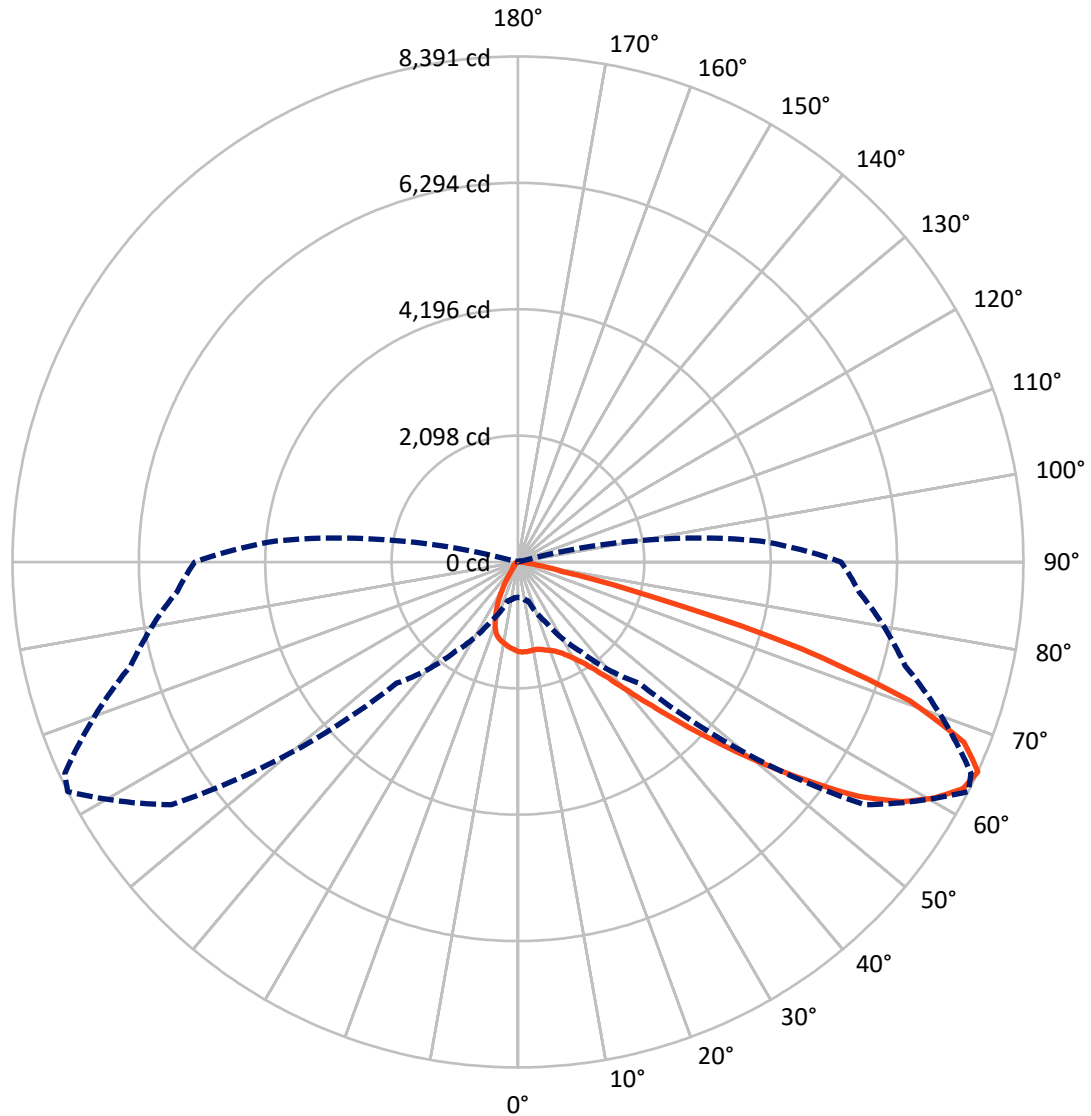
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type 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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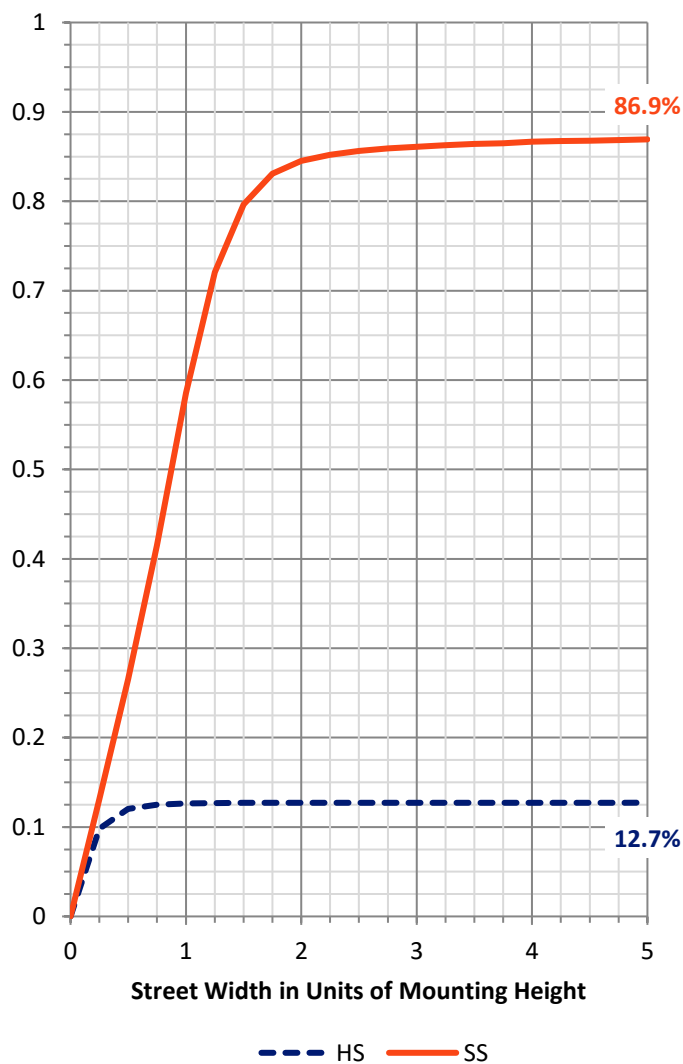
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1244.1	0.0	1244.1
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	8422.9	0.0	8422.9
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	9667.0	0.0	9667.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.9	1.4
10°-20°	335.2	3.5
20°-30°	496.9	5.1
30°-40°	922.5	9.5
40°-50°	1954.3	20.2
50°-60°	2702.3	28.0
60°-70°	2163.3	22.4
70°-80°	898.8	9.3
80°-90°	57.7	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°	9667.0	100.0
0°-180°	9667.0	100.0

**Coefficient of Utilization**



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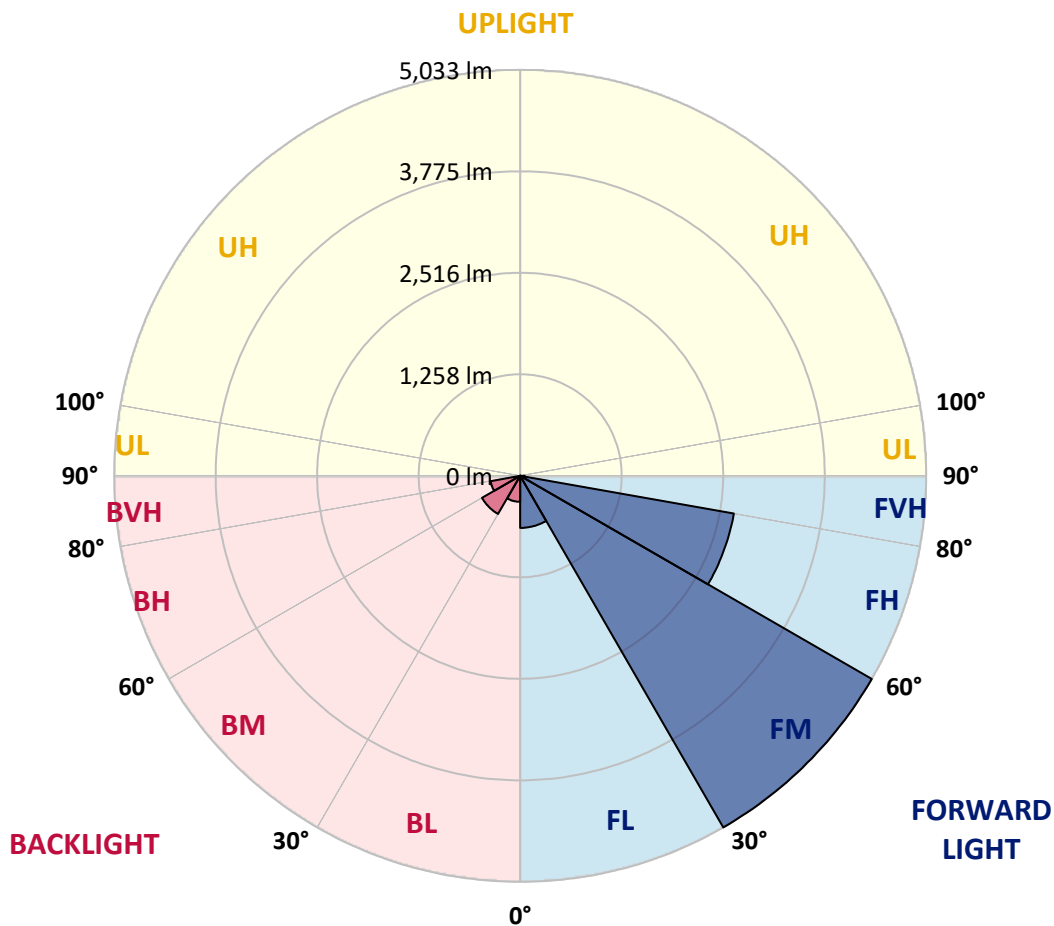
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	645.5	6.7			
FM (30°-60°)	5032.7	52.1			
FH (60°-80°)	2689.6	27.8			G2/5000
FVH (80°-90°)	55.1	0.6			G1/100
BL (0°-30°)	322.4	3.3	B1/500		
BM (30°-60°)	546.5	5.7	B1/1000		
BH (60°-80°)	372.5	3.9	B1/500		G1/500
BVH (80°-90°)	2.6	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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2
2.5°	1514.8	1511.1	1507.5	1505.6	1505.6	1503.8	1496.5	1494.7	1491.0	1487.4	1483.7
5°	1500.2	1494.7	1492.9	1494.7	1496.5	1500.2	1496.5	1496.5	1492.9	1489.2	1481.9
7.5°	1463.7	1460.0	1461.8	1467.3	1469.1	1481.9	1483.7	1489.2	1489.2	1485.6	1480.1
10°	1419.9	1418.0	1418.0	1427.2	1436.3	1454.5	1467.3	1481.9	1483.7	1483.7	1474.6
12.5°	1387.0	1385.2	1390.7	1401.6	1419.9	1443.6	1465.5	1487.4	1491.0	1492.9	1478.3
15°	1366.9	1366.9	1374.2	1396.1	1421.7	1454.5	1480.1	1509.3	1512.9	1511.1	1491.0
17.5°	1348.7	1350.5	1365.1	1401.6	1430.8	1474.6	1505.6	1538.5	1540.3	1538.5	1505.6
20°	1341.4	1345.0	1366.9	1414.4	1447.2	1496.5	1536.7	1569.5	1571.3	1564.0	1520.2
22.5°	1361.5	1363.3	1390.7	1441.8	1472.8	1527.5	1578.6	1609.7	1611.5	1600.5	1542.1
25°	1430.8	1430.8	1454.5	1498.3	1525.7	1580.5	1635.2	1671.7	1671.7	1658.9	1591.4
27.5°	1593.2	1578.6	1573.2	1585.9	1595.1	1653.5	1711.9	1757.5	1755.7	1737.4	1655.3
30°	1907.1	1870.6	1812.2	1746.5	1713.7	1753.8	1808.6	1867.0	1865.2	1836.0	1733.8
32.5°	2434.6	2381.6	2242.9	2069.6	1929.0	1883.4	1934.5	1998.4	2000.2	1965.5	1859.7
35°	3173.7	3089.7	2841.5	2600.6	2279.4	2106.1	2120.7	2190.0	2211.9	2193.7	2071.4
37.5°	3885.4	3808.8	3571.5	3237.6	2801.4	2447.3	2385.3	2445.5	2471.1	2471.1	2341.5
40°	4602.7	4513.2	4303.4	3967.6	3507.7	2980.2	2757.6	2806.9	2834.2	2839.7	2670.0
42.5°	5177.5	5119.1	4958.5	4697.6	4266.9	3914.6	3294.1	3266.8	3292.3	3272.2	3051.4
45°	5575.4	5529.8	5418.4	5319.9	5110.0	4933.0	4011.4	3827.0	3843.5	3774.1	3480.3
47.5°	5657.5	5606.4	5582.7	5719.6	5869.2	5913.0	4892.8	4493.2	4476.7	4323.4	3925.6
50°	5299.8	5305.3	5392.9	5783.5	6407.6	6801.8	5914.9	5245.1	5184.8	4843.6	4339.9
52.5°	4527.8	4615.4	4836.3	5469.5	6571.9	7447.9	6936.9	6042.6	5949.5	5349.1	4650.1
55°	3542.3	3655.5	4018.7	4746.8	6228.8	7736.2	7798.3	6871.2	6659.5	5728.7	4891.0
57.5°	2633.5	2668.2	3091.6	3755.9	5416.6	7453.3	8239.9	7509.9	7238.0	6031.7	5130.1
60°	1640.7	1662.6	2109.7	2859.8	4102.6	6407.6	8239.9	7949.7	7690.6	6303.6	5349.1
62.5°	1020.2	1027.5	1195.4	1960.1	2788.6	4752.3	7898.6	8291.0	8083.0	6498.9	5537.1
65°	587.7	595.0	673.4	1107.8	1814.1	2845.2	7026.3	8391.4	8298.3	6654.0	5683.1
67.5°	428.9	432.5	463.6	622.3	1186.3	1461.8	5277.9	7988.1	8104.9	6730.6	5679.4
70°	372.3	377.8	417.9	485.5	855.9	897.9	2686.4	6898.5	7225.2	6621.1	5509.7
72.5°	286.5	293.8	354.1	456.3	627.8	646.1	972.7	4909.3	5403.8	5936.8	5044.3
75°	197.1	204.4	264.6	376.0	518.3	483.6	534.7	2259.4	2850.7	3982.2	3839.8
77.5°	125.9	127.8	166.1	273.8	447.1	343.1	366.8	737.3	1034.8	1801.3	1812.2
80°	84.0	85.8	102.2	177.0	306.6	317.6	226.3	341.3	374.1	525.6	365.0
82.5°	51.1	51.1	69.4	111.3	186.2	262.8	147.8	178.9	191.6	202.6	94.9
85°	20.1	20.1	42.0	73.0	116.8	122.3	93.1	104.0	109.5	118.6	43.8
87.5°	5.5	5.5	23.7	40.2	51.1	56.6	56.6	51.1	54.8	67.5	21.9
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°	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2	1489.2
2.5°	1481.9	1476.4	1469.1	1461.8	1454.5	1449.1	1443.6	1443.6	1439.9	1434.5	1430.8
5°	1478.3	1469.1	1452.7	1439.9	1419.9	1405.3	1394.3	1385.2	1379.7	1366.9	1365.1
7.5°	1472.8	1461.8	1438.1	1412.6	1379.7	1354.2	1328.6	1310.4	1292.1	1277.5	1273.9
10°	1463.7	1450.9	1416.2	1379.7	1334.1	1286.6	1226.4	1157.1	1093.2	1056.7	1045.7
12.5°	1463.7	1447.2	1401.6	1352.3	1286.6	1169.8	1016.5	863.2	744.6	691.7	677.1
15°	1472.8	1450.9	1390.7	1323.1	1200.9	963.6	715.4	512.8	383.3	343.1	334.0
17.5°	1481.9	1450.9	1374.2	1283.0	1043.9	699.0	407.0	270.1	228.1	219.0	219.0
20°	1485.6	1447.2	1352.3	1208.2	834.0	434.4	242.7	202.6	186.2	180.7	180.7
22.5°	1500.2	1449.1	1335.9	1100.5	605.9	255.5	191.6	169.7	153.3	147.8	147.8
25°	1536.7	1471.0	1339.6	963.6	388.7	193.5	162.4	140.5	124.1	116.8	116.8
27.5°	1595.1	1520.2	1359.6	804.8	244.6	166.1	136.9	113.2	100.4	93.1	93.1
30°	1660.8	1575.0	1368.8	622.3	182.5	140.5	111.3	89.4	80.3	74.8	73.0
32.5°	1775.7	1669.9	1361.5	427.1	149.7	118.6	89.4	71.2	63.9	62.1	62.1
35°	1960.1	1836.0	1346.9	268.3	124.1	94.9	71.2	58.4	52.9	51.1	49.3
37.5°	2210.1	2078.7	1303.1	177.0	102.2	74.8	58.4	49.3	43.8	42.0	42.0
40°	2514.9	2356.1	1219.1	135.1	87.6	60.2	49.3	42.0	38.3	36.5	36.5
42.5°	2863.4	2664.5	1085.9	116.8	73.0	51.1	42.0	34.7	32.9	31.0	31.0
45°	3244.9	2987.5	901.6	104.0	62.1	42.0	34.7	31.0	27.4	27.4	25.6
47.5°	3650.0	3312.4	693.5	91.3	52.9	36.5	31.0	25.6	23.7	21.9	21.9
50°	4040.6	3602.6	487.3	78.5	43.8	31.0	25.6	21.9	20.1	18.3	18.3
52.5°	4316.1	3777.8	344.9	67.5	36.5	27.4	20.1	16.4	14.6	14.6	14.6
55°	4537.0	3887.3	240.9	56.6	31.0	23.7	16.4	12.8	12.8	11.0	11.0
57.5°	4745.0	3958.4	177.0	47.5	25.6	18.3	12.8	9.1	9.1	7.3	7.3
60°	4960.4	3996.8	135.1	38.3	21.9	14.6	9.1	7.3	5.5	5.5	5.5
62.5°	5177.5	4020.5	104.0	31.0	18.3	11.0	7.3	5.5	3.7	1.8	1.8
65°	5367.3	4027.8	80.3	23.7	14.6	7.3	5.5	1.8	0.0	0.0	0.0
67.5°	5423.9	3943.8	62.1	18.3	11.0	5.5	3.7	0.0	0.0	0.0	0.0
70°	5270.6	3721.2	47.5	14.6	9.1	3.7	1.8	0.0	0.0	0.0	0.0
72.5°	4677.5	3120.8	36.5	9.1	7.3	3.7	1.8	0.0	0.0	0.0	0.0
75°	3347.1	1664.4	25.6	7.3	5.5	1.8	0.0	0.0	0.0	0.0	0.0
77.5°	1540.3	644.2	18.3	5.5	3.7	1.8	0.0	0.0	0.0	0.0	0.0
80°	301.1	160.6	7.3	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	69.4	27.4	3.7	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	23.7	9.1	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	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)