

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: P399561

Luminaire Tested: **ARCH-L-PA3-160-730-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399561  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-160-730-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18114 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

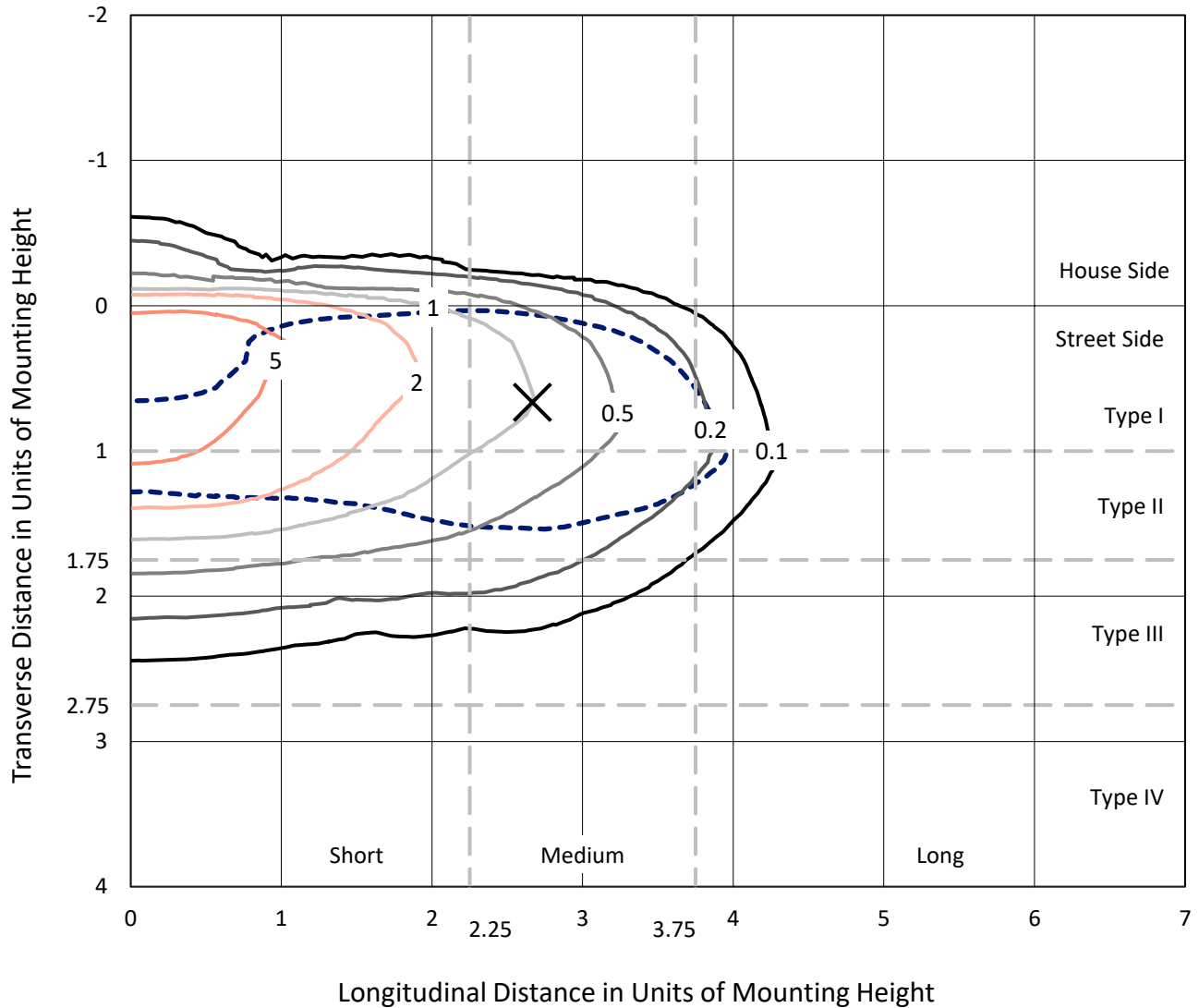
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

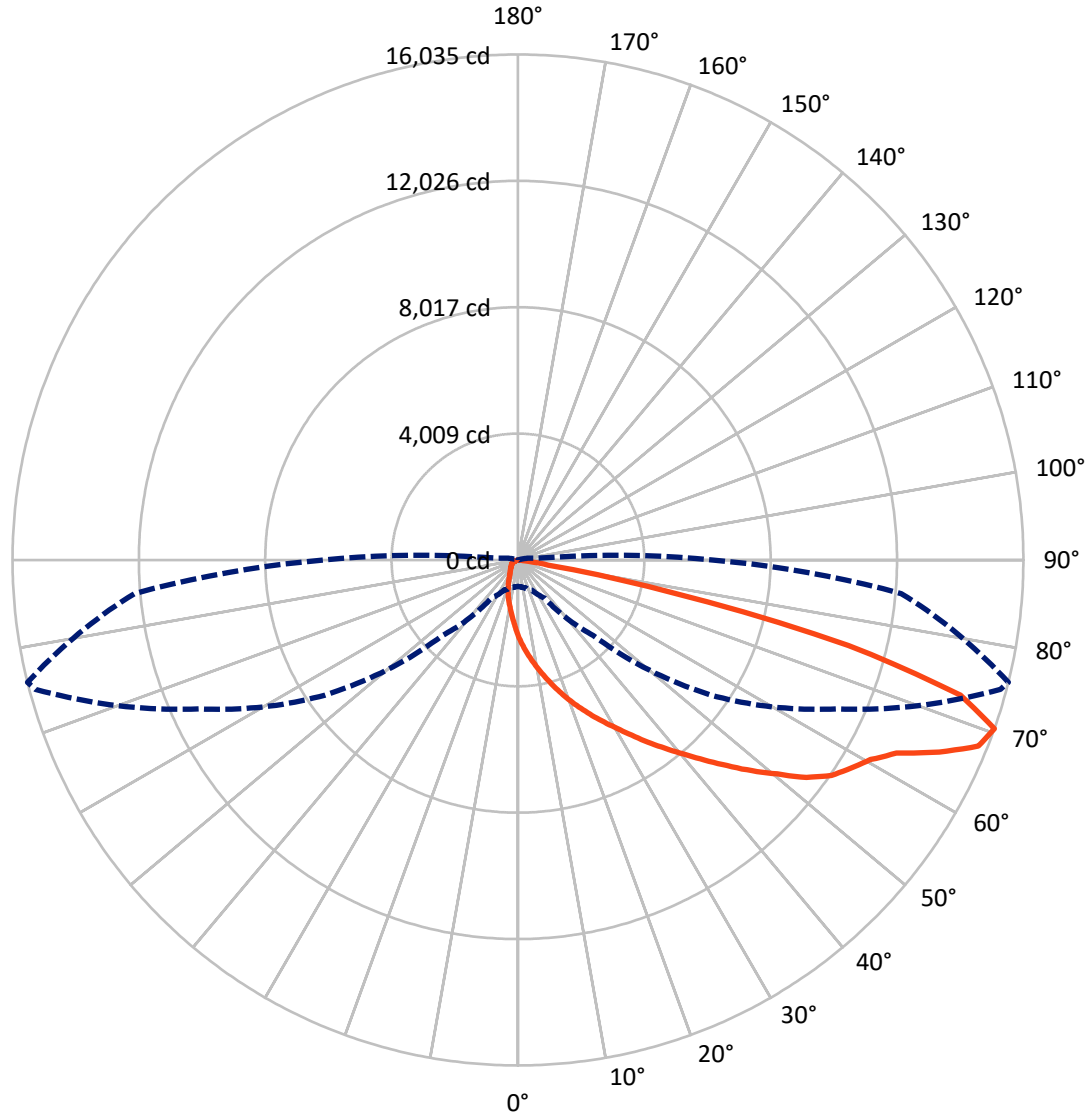
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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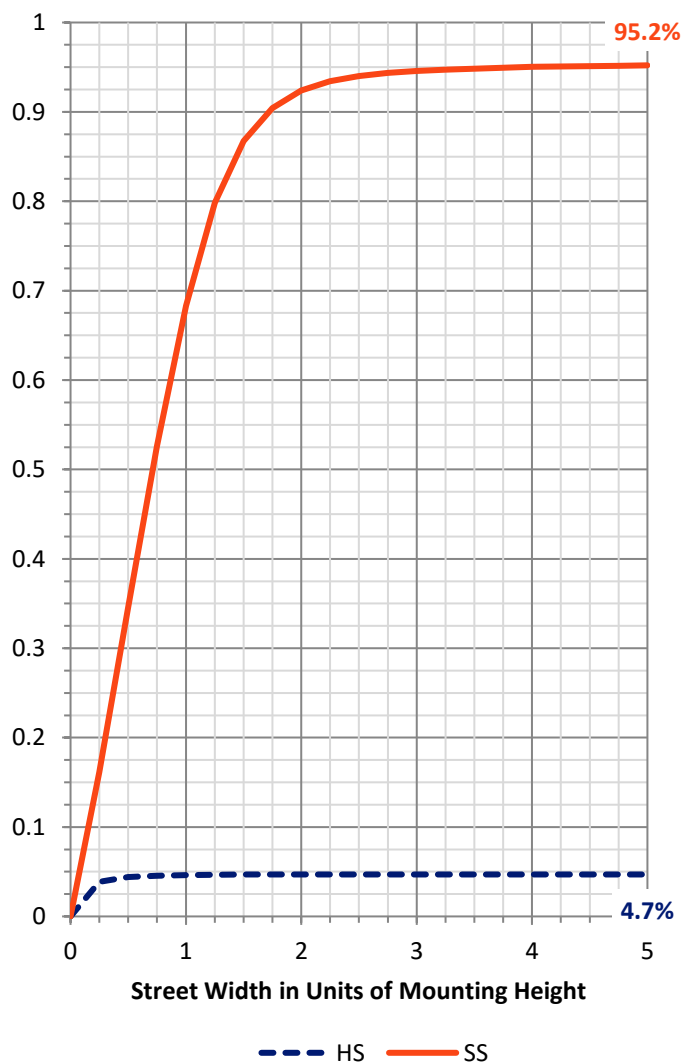
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	854.3	0.0	854.3
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	17259.7	0.0	17259.7
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	18114.0	0.0	18114.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.4	1.3
10°-20°	737.2	4.1
20°-30°	1373.0	7.6
30°-40°	2428.5	13.4
40°-50°	3713.8	20.5
50°-60°	4210.5	23.2
60°-70°	3609.5	19.9
70°-80°	1748.2	9.7
80°-90°	64.8	0.4
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°	18114.0	100.0
0°-180°	18114.0	100.0

**Coefficient of Utilization**

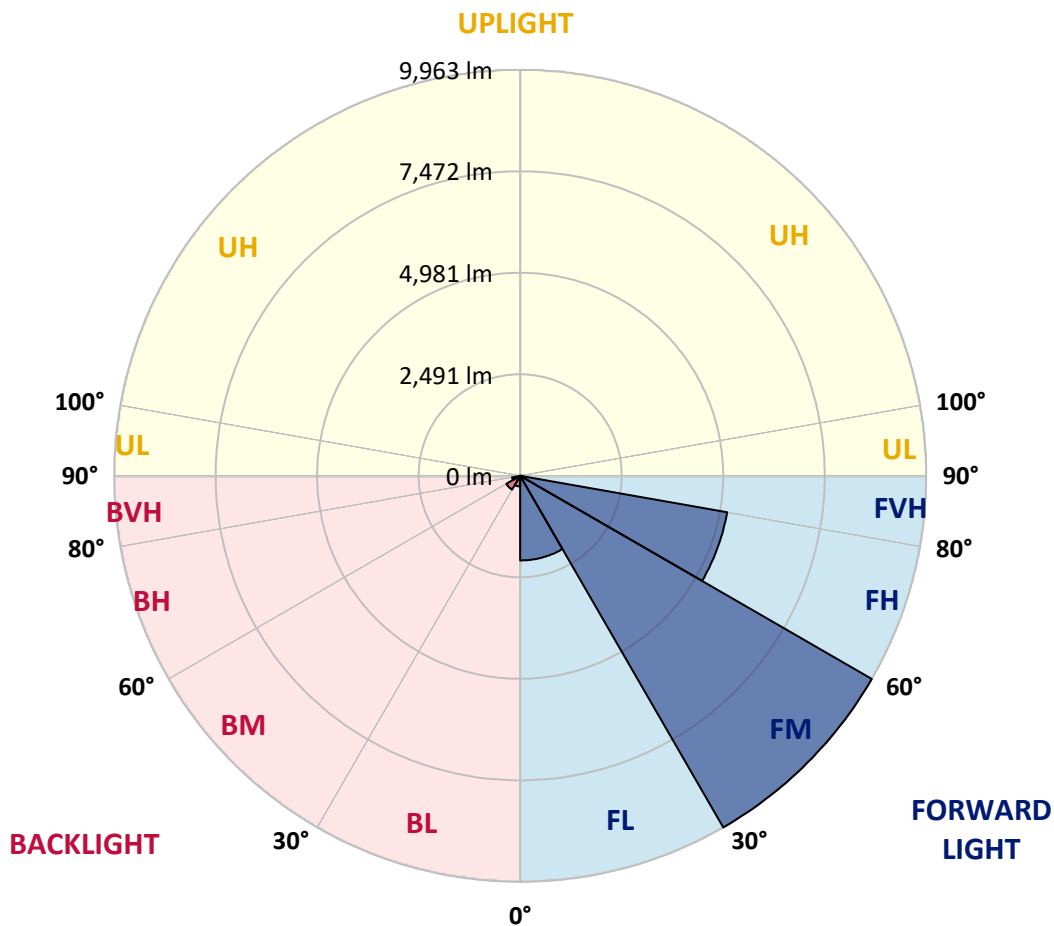


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2076.6	11.5			
FM (30°-60°)	9962.9	55.0			
FH (60°-80°)	5156.5	28.5			G3/7500
FVH (80°-90°)	63.7	0.4			G1/100
BL (0°-30°)	262.1	1.4	B1/500		
BM (30°-60°)	390.0	2.2	B1/1000		
BH (60°-80°)	201.2	1.1	B1/500		G1/500
BVH (80°-90°)	1.1	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7
2.5°	3314.3	3296.2	3278.1	3208.8	3145.4	3088.1	2979.6	2837.8	2711.2	2684.0	2536.3
5°	3893.4	3872.2	3845.1	3775.7	3694.3	3597.8	3438.0	3220.8	2997.7	2949.4	2675.0
7.5°	4285.4	4267.3	4228.1	4194.9	4113.5	4020.0	3842.1	3588.8	3281.2	3220.8	2834.8
10°	4553.8	4541.7	4535.7	4508.6	4448.3	4372.9	4194.9	3929.5	3567.7	3498.3	3003.7
12.5°	4650.3	4650.3	4680.5	4725.7	4734.8	4710.6	4547.8	4282.4	3869.2	3796.8	3202.7
15°	4520.6	4535.7	4602.1	4746.8	4897.6	4997.1	4894.6	4647.3	4201.0	4122.6	3438.0
17.5°	4484.4	4499.5	4544.8	4671.4	4873.5	5138.9	5190.1	5000.1	4514.6	4448.3	3679.2
20°	4587.0	4602.1	4641.3	4749.8	4903.6	5172.0	5386.2	5340.9	4846.3	4777.0	3923.5
22.5°	4831.3	4840.3	4840.3	4924.7	5060.5	5259.5	5509.8	5663.6	5187.1	5111.7	4164.8
25°	5356.0	5337.9	5265.5	5223.3	5310.8	5473.6	5666.6	5947.1	5567.1	5464.6	4424.1
27.5°	6043.6	6103.9	5929.0	5726.9	5660.6	5754.1	5886.8	6197.4	5935.0	5826.5	4659.4
30°	6975.5	6951.3	6722.1	6432.6	6146.1	6113.0	6158.2	6411.5	6302.9	6200.4	4921.7
32.5°	7741.5	7786.7	7545.4	7192.6	6764.4	6562.3	6514.1	6667.9	6695.0	6628.7	5232.4
35°	8528.6	8576.8	8341.6	7949.6	7439.9	7102.1	6963.4	6984.5	7180.5	7096.1	5558.1
37.5°	9234.3	9276.5	9044.3	8643.2	8133.5	7720.4	7521.3	7358.5	7651.0	7575.6	5901.9
40°	9771.1	9777.1	9620.3	9261.4	8778.9	8350.7	8124.5	7804.8	8148.6	8097.3	6260.7
42.5°	10151.1	10163.1	10048.5	9740.9	9294.6	8896.5	8712.5	8332.6	8721.6	8676.4	6676.9
45°	10329.0	10350.1	10338.0	10054.6	9683.6	9339.8	9279.5	8893.5	9348.9	9306.7	7156.4
47.5°	10160.1	10160.1	10313.9	10274.7	9933.9	9704.7	9774.1	9478.6	10030.4	9991.2	7645.0
50°	9457.4	9466.5	9780.1	10229.5	10030.4	9979.2	10196.3	10051.5	10648.7	10672.8	8230.0
52.5°	7611.8	7596.7	8655.2	9517.8	9964.1	10102.8	10585.3	10636.6	11390.5	11462.9	8812.1
55°	5687.7	5678.7	6692.0	8257.2	9499.7	10039.5	10802.5	11158.3	12023.9	12069.1	9246.3
57.5°	4502.5	4478.4	5036.3	6655.8	8450.2	9756.0	10811.5	11257.9	12376.7	12455.1	9668.5
60°	3462.1	3441.0	3857.2	4951.9	6963.4	9002.1	10552.2	11263.9	12717.5	12856.2	10235.5
62.5°	2475.9	2500.1	2819.7	3552.6	5356.0	7937.5	10214.4	11348.3	13323.7	13480.5	11040.7
65°	1670.7	1658.7	1924.1	2418.6	3808.9	6505.0	9695.7	11526.3	14415.4	14689.8	12005.8
67.5°	1161.1	1170.1	1290.7	1574.2	2418.6	4994.1	8833.2	11625.8	15543.3	15757.4	12681.3
70°	838.4	850.4	916.8	1058.5	1477.7	3386.7	7467.0	11170.4	15847.8	16034.8	12210.8
72.5°	551.9	576.0	675.5	750.9	943.9	2120.1	5500.8	9623.3	14536.0	14674.7	10244.6
75°	298.6	304.6	434.3	560.9	672.5	1320.9	3281.2	6489.9	10874.8	10829.6	6755.3
77.5°	232.2	241.3	268.4	401.1	452.4	726.8	1296.8	2931.3	5150.9	5012.2	2304.0
80°	141.7	147.8	187.0	238.2	316.7	422.2	380.0	796.2	1046.5	980.1	337.8
82.5°	84.4	90.5	111.6	199.0	250.3	199.0	132.7	193.0	196.0	193.0	84.4
85°	15.1	15.1	78.4	138.7	132.7	57.3	78.4	63.3	57.3	60.3	18.1
87.5°	0.0	0.0	30.2	42.2	60.3	21.1	30.2	15.1	15.1	15.1	9.0
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°	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7	2424.7
2.5°	2445.8	2343.2	2132.1	1948.2	1764.2	1628.5	1526.0	1420.4	1384.2	1339.0	1314.9
5°	2488.0	2286.0	1866.8	1532.0	1248.5	1031.4	892.7	808.2	753.9	714.7	705.7
7.5°	2551.3	2240.7	1652.6	1200.3	889.7	672.5	557.9	500.6	470.5	452.4	446.3
10°	2626.7	2201.5	1441.5	934.9	627.3	473.5	410.1	386.0	374.0	367.9	364.9
12.5°	2732.3	2186.4	1263.6	720.8	473.5	389.0	355.9	340.8	331.7	322.7	319.7
15°	2871.0	2192.5	1100.8	557.9	392.0	346.8	319.7	304.6	292.5	283.5	283.5
17.5°	3015.8	2201.5	940.9	452.4	355.9	316.7	286.5	265.4	256.3	247.3	244.3
20°	3151.5	2198.5	787.1	386.0	322.7	283.5	253.3	232.2	217.1	208.1	208.1
22.5°	3281.2	2180.4	642.4	346.8	295.5	250.3	217.1	196.0	184.0	174.9	174.9
25°	3419.9	2144.2	524.7	316.7	262.4	220.2	187.0	165.9	156.8	147.8	147.8
27.5°	3528.4	2083.9	428.2	289.5	232.2	190.0	159.8	141.7	132.7	126.7	126.7
30°	3646.1	1996.4	355.9	259.4	202.1	162.9	135.7	120.6	111.6	108.6	108.6
32.5°	3775.7	1899.9	304.6	229.2	171.9	138.7	114.6	105.6	96.5	93.5	93.5
35°	3926.5	1815.5	274.4	199.0	150.8	117.6	99.5	90.5	84.4	84.4	84.4
37.5°	4098.4	1728.0	247.3	174.9	129.7	99.5	84.4	81.4	78.4	75.4	75.4
40°	4285.4	1634.5	223.2	153.8	111.6	84.4	72.4	72.4	69.4	69.4	69.4
42.5°	4496.5	1553.1	202.1	135.7	96.5	72.4	63.3	63.3	60.3	60.3	60.3
45°	4725.7	1477.7	184.0	120.6	84.4	63.3	57.3	54.3	51.3	51.3	51.3
47.5°	4997.1	1435.5	168.9	105.6	72.4	54.3	48.3	45.2	42.2	39.2	39.2
50°	5343.9	1453.6	153.8	87.5	63.3	45.2	39.2	36.2	33.2	30.2	30.2
52.5°	5618.4	1444.6	132.7	75.4	51.3	36.2	30.2	27.1	24.1	21.1	21.1
55°	5817.4	1408.4	114.6	63.3	39.2	30.2	24.1	18.1	15.1	15.1	15.1
57.5°	6013.4	1372.2	96.5	51.3	30.2	21.1	15.1	12.1	12.1	12.1	12.1
60°	6318.0	1320.9	84.4	42.2	24.1	15.1	9.0	9.0	6.0	6.0	6.0
62.5°	6689.0	1257.6	69.4	36.2	18.1	12.1	6.0	6.0	0.0	0.0	0.0
65°	7096.1	1146.0	57.3	27.1	15.1	9.0	6.0	0.0	0.0	0.0	0.0
67.5°	7002.6	919.8	48.3	18.1	12.1	6.0	3.0	0.0	0.0	0.0	0.0
70°	6194.4	621.2	39.2	15.1	9.0	6.0	3.0	0.0	0.0	0.0	0.0
72.5°	4852.4	367.9	27.1	12.1	6.0	3.0	0.0	0.0	0.0	0.0	0.0
75°	3106.2	184.0	18.1	9.0	6.0	3.0	0.0	0.0	0.0	0.0	0.0
77.5°	1040.4	90.5	12.1	6.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	147.8	30.2	6.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.2	12.1	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.1	6.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	3.0	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)