

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: P400056

Luminaire Tested: **ARCH-L-PA3-230-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400056  
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-PA3-230-727-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 980mA 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: 21176 lumens  
Efficiency: N/A  
Efficacy: 92.5 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

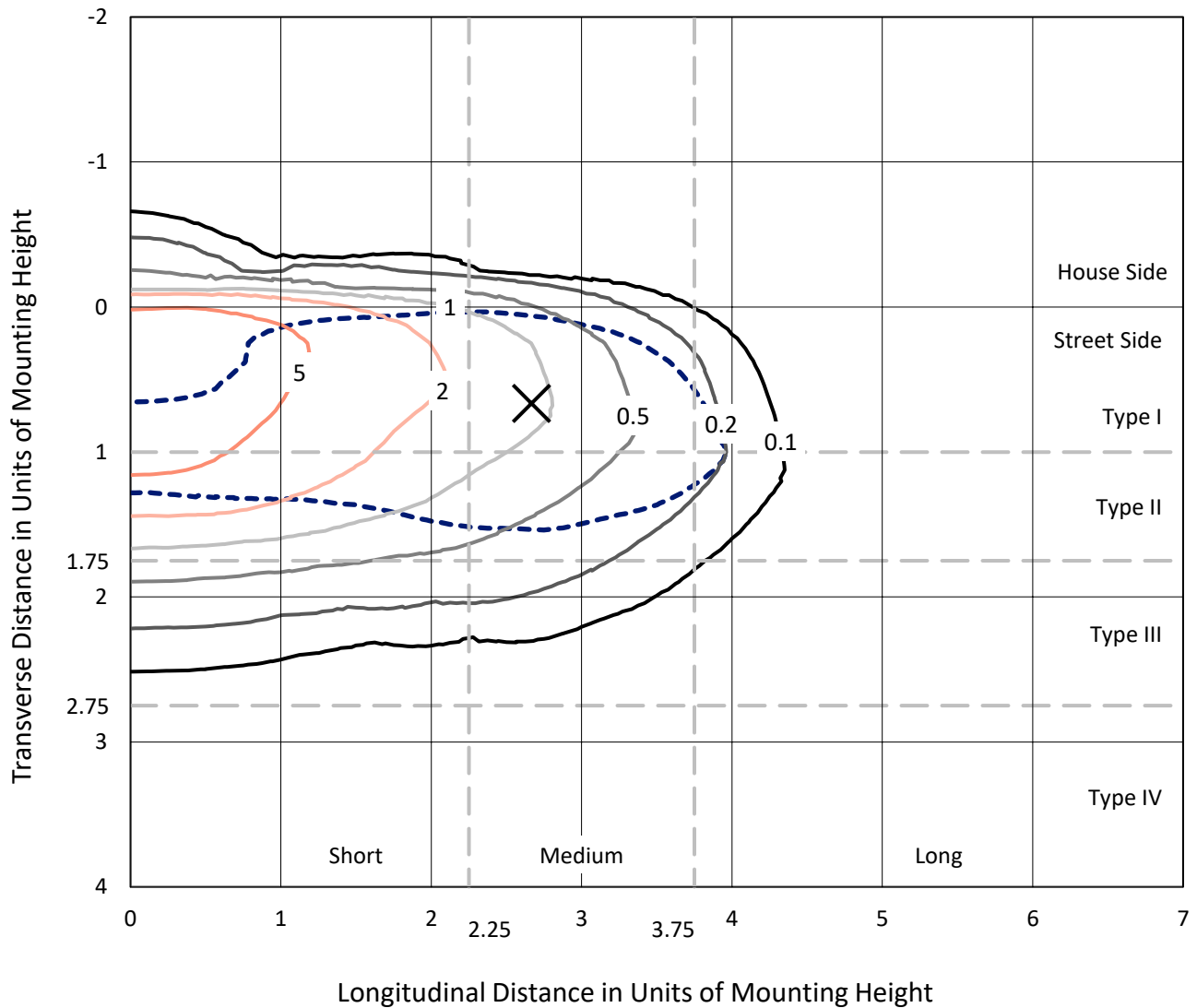
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

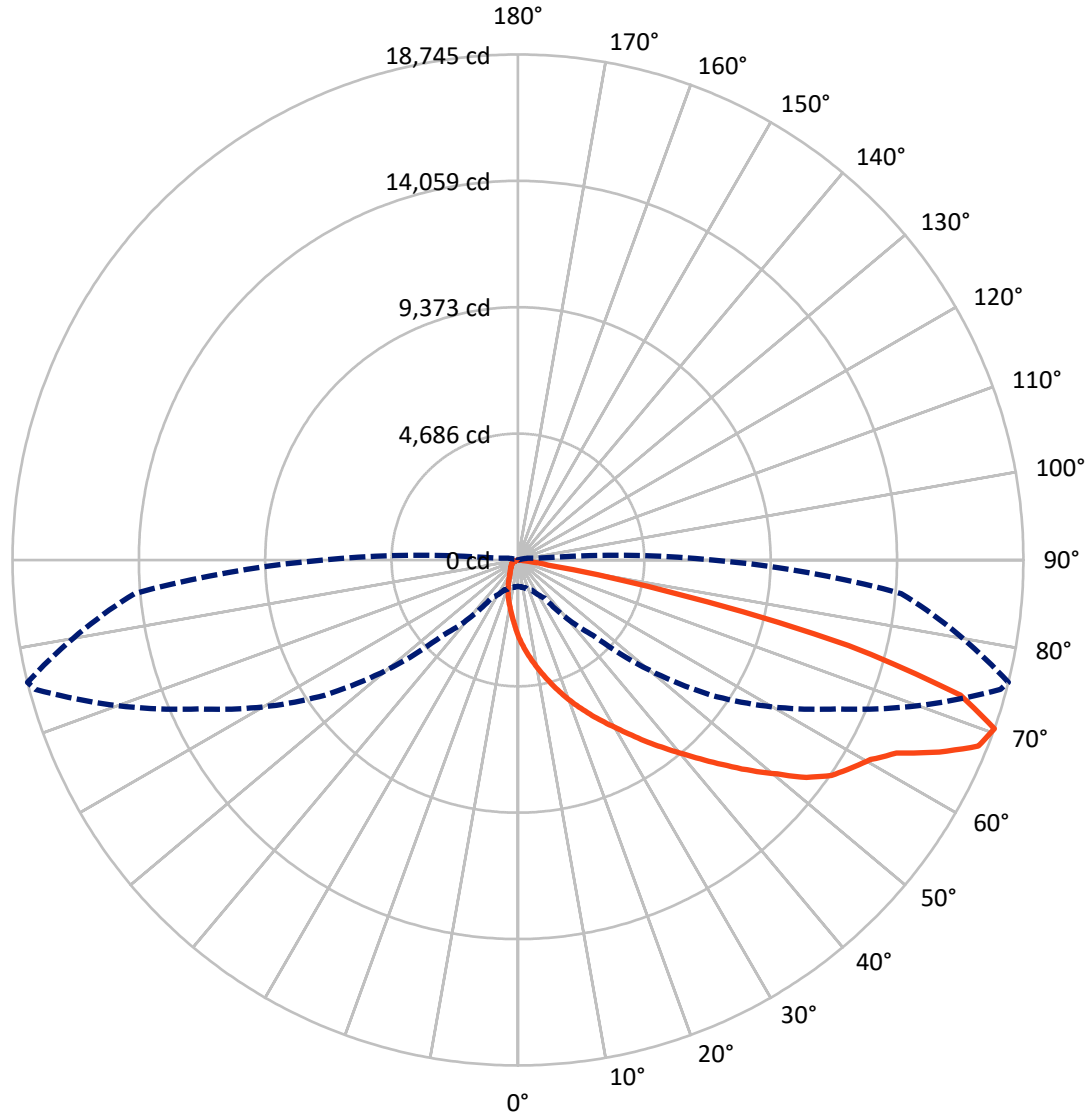
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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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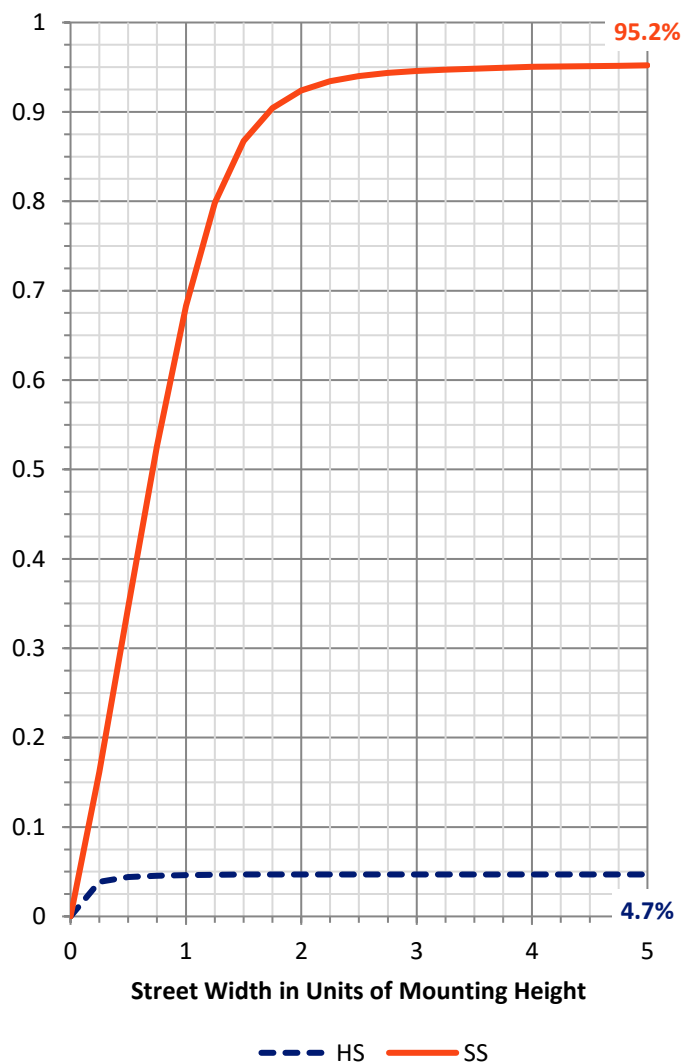
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	998.7	0.0	998.7
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	20177.3	0.0	20177.3
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	21176.0	0.0	21176.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.0	1.3
10°-20°	861.9	4.1
20°-30°	1605.1	7.6
30°-40°	2839.0	13.4
40°-50°	4341.6	20.5
50°-60°	4922.3	23.2
60°-70°	4219.6	19.9
70°-80°	2043.7	9.7
80°-90°	75.8	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°	21176.0	100.0
0°-180°	21176.0	100.0

**Coefficient of Utilization**

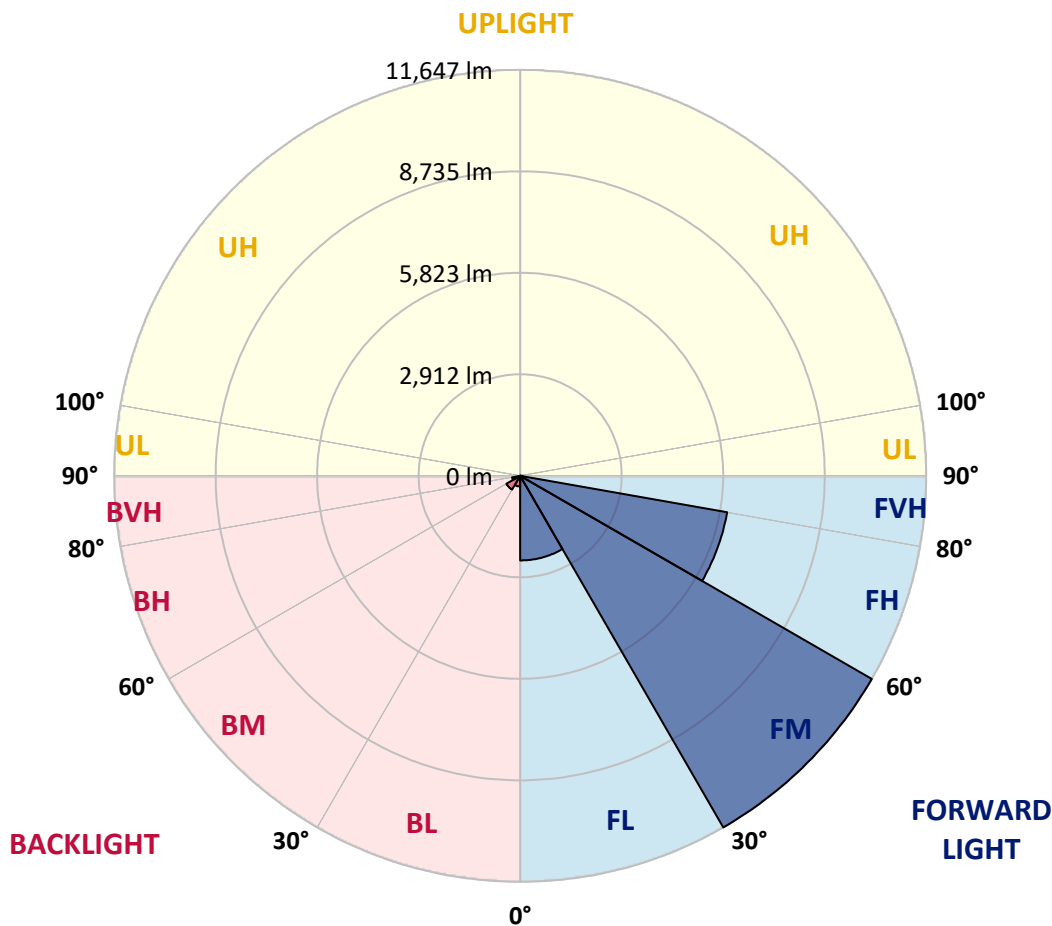


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2427.6	11.5			
FM (30°-60°)	11647.0	55.0			
FH (60°-80°)	6028.2	28.5			G3/7500
FVH (80°-90°)	74.5	0.4			G1/100
BL (0°-30°)	306.4	1.4	B1/500		
BM (30°-60°)	455.9	2.2	B1/1000		
BH (60°-80°)	235.2	1.1	B1/500		G1/500
BVH (80°-90°)	1.3	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°	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5
2.5°	3874.6	3853.4	3832.3	3751.2	3677.2	3610.2	3483.2	3317.5	3169.5	3137.7	2965.0
5°	4551.5	4526.8	4495.1	4414.0	4318.8	4206.0	4019.1	3765.3	3504.4	3448.0	3127.2
7.5°	5009.8	4988.7	4942.8	4904.0	4808.9	4699.6	4491.6	4195.4	3835.8	3765.3	3314.0
10°	5323.6	5309.5	5302.4	5270.7	5200.2	5112.1	4904.0	4593.8	4170.7	4089.6	3511.4
12.5°	5436.4	5436.4	5471.7	5524.5	5535.1	5506.9	5316.5	5006.3	4523.3	4438.7	3744.1
15°	5284.8	5302.4	5380.0	5549.2	5725.5	5841.8	5722.0	5432.9	4911.1	4819.4	4019.1
17.5°	5242.5	5260.1	5313.0	5461.1	5697.3	6007.5	6067.5	5845.4	5277.8	5200.2	4301.2
20°	5362.4	5380.0	5425.8	5552.7	5732.5	6046.3	6296.6	6243.8	5665.6	5584.5	4586.7
22.5°	5647.9	5658.5	5658.5	5757.2	5915.9	6148.6	6441.2	6621.0	6063.9	5975.8	4868.8
25°	6261.4	6240.2	6155.6	6106.3	6208.5	6398.9	6624.5	6952.4	6508.2	6388.3	5172.0
27.5°	7065.2	7135.7	6931.2	6695.0	6617.5	6726.8	6881.9	7245.0	6938.3	6811.4	5447.0
30°	8154.6	8126.4	7858.5	7520.0	7185.1	7146.3	7199.2	7495.3	7368.4	7248.5	5753.7
32.5°	9050.1	9103.0	8820.9	8408.4	7907.8	7671.6	7615.2	7795.0	7826.7	7749.2	6116.8
35°	9970.3	10026.7	9751.7	9293.4	8697.5	8302.7	8140.5	8165.2	8394.3	8295.6	6497.6
37.5°	10795.2	10844.6	10573.1	10104.2	9508.4	9025.4	8792.7	8602.3	8944.3	8856.2	6899.5
40°	11422.8	11429.8	11246.5	10827.0	10262.9	9762.3	9497.8	9124.1	9526.0	9466.1	7319.0
42.5°	11867.0	11881.1	11747.1	11387.5	10865.8	10400.4	10185.3	9741.1	10195.9	10143.0	7805.6
45°	12075.0	12099.7	12085.6	11754.2	11320.5	10918.6	10848.1	10396.9	10929.2	10879.9	8366.1
47.5°	11877.6	11877.6	12057.4	12011.6	11613.2	11345.2	11426.3	11080.8	11726.0	11680.2	8937.3
50°	11056.1	11066.7	11433.4	11958.7	11726.0	11666.1	11919.9	11750.7	12448.7	12476.9	9621.2
52.5°	8898.5	8880.9	10118.3	11126.6	11648.4	11810.6	12374.7	12434.6	13316.0	13400.6	10301.7
55°	6649.2	6638.6	7823.2	9653.0	11105.5	11736.6	12628.5	13044.5	14056.4	14109.3	10809.3
57.5°	5263.6	5235.4	5887.7	7780.9	9878.6	11405.2	12639.1	13160.9	14468.9	14560.5	11302.9
60°	4047.3	4022.7	4509.2	5789.0	8140.5	10523.8	12335.9	13167.9	14867.3	15029.4	11965.7
62.5°	2894.5	2922.7	3296.4	4153.1	6261.4	9279.3	11941.0	13266.7	15575.9	15759.2	12907.0
65°	1953.2	1939.1	2249.3	2827.5	4452.8	7604.6	11334.6	13474.7	16852.1	17173.0	14035.2
67.5°	1357.3	1367.9	1508.9	1840.3	2827.5	5838.3	10326.3	13591.0	18170.7	18421.0	14824.9
70°	980.1	994.2	1071.8	1237.5	1727.5	3959.2	8729.3	13058.6	18526.8	18745.4	14275.0
72.5°	645.2	673.4	789.7	877.9	1103.5	2478.5	6430.6	11250.0	16993.2	17155.3	11976.3
75°	349.0	356.1	507.7	655.8	786.2	1544.2	3835.8	7587.0	12713.1	12660.3	7897.2
77.5°	271.5	282.0	313.8	468.9	528.8	849.7	1516.0	3426.8	6021.6	5859.5	2693.5
80°	165.7	172.8	218.6	278.5	370.2	493.6	444.2	930.7	1223.4	1145.8	394.9
82.5°	98.7	105.8	130.4	232.7	292.6	232.7	155.1	225.6	229.2	225.6	98.7
85°	17.6	17.6	91.7	162.2	155.1	67.0	91.7	74.0	67.0	70.5	21.2
87.5°	0.0	0.0	35.3	49.4	70.5	24.7	35.3	17.6	17.6	17.6	10.6
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°	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5	2834.5
2.5°	2859.2	2739.4	2492.6	2277.5	2062.4	1903.8	1783.9	1660.5	1618.2	1565.3	1537.1
5°	2908.6	2672.4	2182.3	1791.0	1459.6	1205.7	1043.6	944.8	881.4	835.6	825.0
7.5°	2982.6	2619.5	1932.0	1403.2	1040.0	786.2	652.2	585.2	550.0	528.8	521.8
10°	3070.8	2573.7	1685.2	1092.9	733.3	553.5	479.5	451.3	437.2	430.1	426.6
12.5°	3194.1	2556.0	1477.2	842.6	553.5	454.8	416.0	398.4	387.8	377.2	373.7
15°	3356.3	2563.1	1286.8	652.2	458.3	405.4	373.7	356.1	342.0	331.4	331.4
17.5°	3525.6	2573.7	1100.0	528.8	416.0	370.2	334.9	310.2	299.7	289.1	285.6
20°	3684.2	2570.1	920.2	451.3	377.2	331.4	296.1	271.5	253.8	243.3	243.3
22.5°	3835.8	2549.0	750.9	405.4	345.5	292.6	253.8	229.2	215.1	204.5	204.5
25°	3998.0	2506.7	613.4	370.2	306.7	257.4	218.6	193.9	183.3	172.8	172.8
27.5°	4124.9	2436.2	500.6	338.5	271.5	222.1	186.9	165.7	155.1	148.1	148.1
30°	4262.4	2333.9	416.0	303.2	236.2	190.4	158.6	141.0	130.4	126.9	126.9
32.5°	4414.0	2221.1	356.1	267.9	201.0	162.2	134.0	123.4	112.8	109.3	109.3
35°	4590.3	2122.4	320.8	232.7	176.3	137.5	116.3	105.8	98.7	98.7	98.7
37.5°	4791.2	2020.1	289.1	204.5	151.6	116.3	98.7	95.2	91.7	88.1	88.1
40°	5009.8	1910.8	260.9	179.8	130.4	98.7	84.6	84.6	81.1	81.1	81.1
42.5°	5256.6	1815.7	236.2	158.6	112.8	84.6	74.0	74.0	70.5	70.5	70.5
45°	5524.5	1727.5	215.1	141.0	98.7	74.0	67.0	63.5	59.9	59.9	59.9
47.5°	5841.8	1678.2	197.4	123.4	84.6	63.5	56.4	52.9	49.4	45.8	45.8
50°	6247.3	1699.3	179.8	102.2	74.0	52.9	45.8	42.3	38.8	35.3	35.3
52.5°	6568.1	1688.7	155.1	88.1	59.9	42.3	35.3	31.7	28.2	24.7	24.7
55°	6800.8	1646.4	134.0	74.0	45.8	35.3	28.2	21.2	17.6	17.6	17.6
57.5°	7030.0	1604.1	112.8	59.9	35.3	24.7	17.6	14.1	14.1	14.1	14.1
60°	7386.0	1544.2	98.7	49.4	28.2	17.6	10.6	10.6	7.1	7.1	7.1
62.5°	7819.7	1470.2	81.1	42.3	21.2	14.1	7.1	7.1	0.0	0.0	0.0
65°	8295.6	1339.7	67.0	31.7	17.6	10.6	7.1	0.0	0.0	0.0	0.0
67.5°	8186.3	1075.3	56.4	21.2	14.1	7.1	3.5	0.0	0.0	0.0	0.0
70°	7241.5	726.3	45.8	17.6	10.6	7.1	3.5	0.0	0.0	0.0	0.0
72.5°	5672.6	430.1	31.7	14.1	7.1	3.5	0.0	0.0	0.0	0.0	0.0
75°	3631.3	215.1	21.2	10.6	7.1	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	1216.3	105.8	14.1	7.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	172.8	35.3	7.1	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.8	14.1	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.1	7.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	3.5	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)