

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: P400029

Luminaire Tested: **ARCH-L-PA3-220-827-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400029  
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-PA3-220-827-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 945mA 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: 18159 lumens  
Efficiency: N/A  
Efficacy: 81.8 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

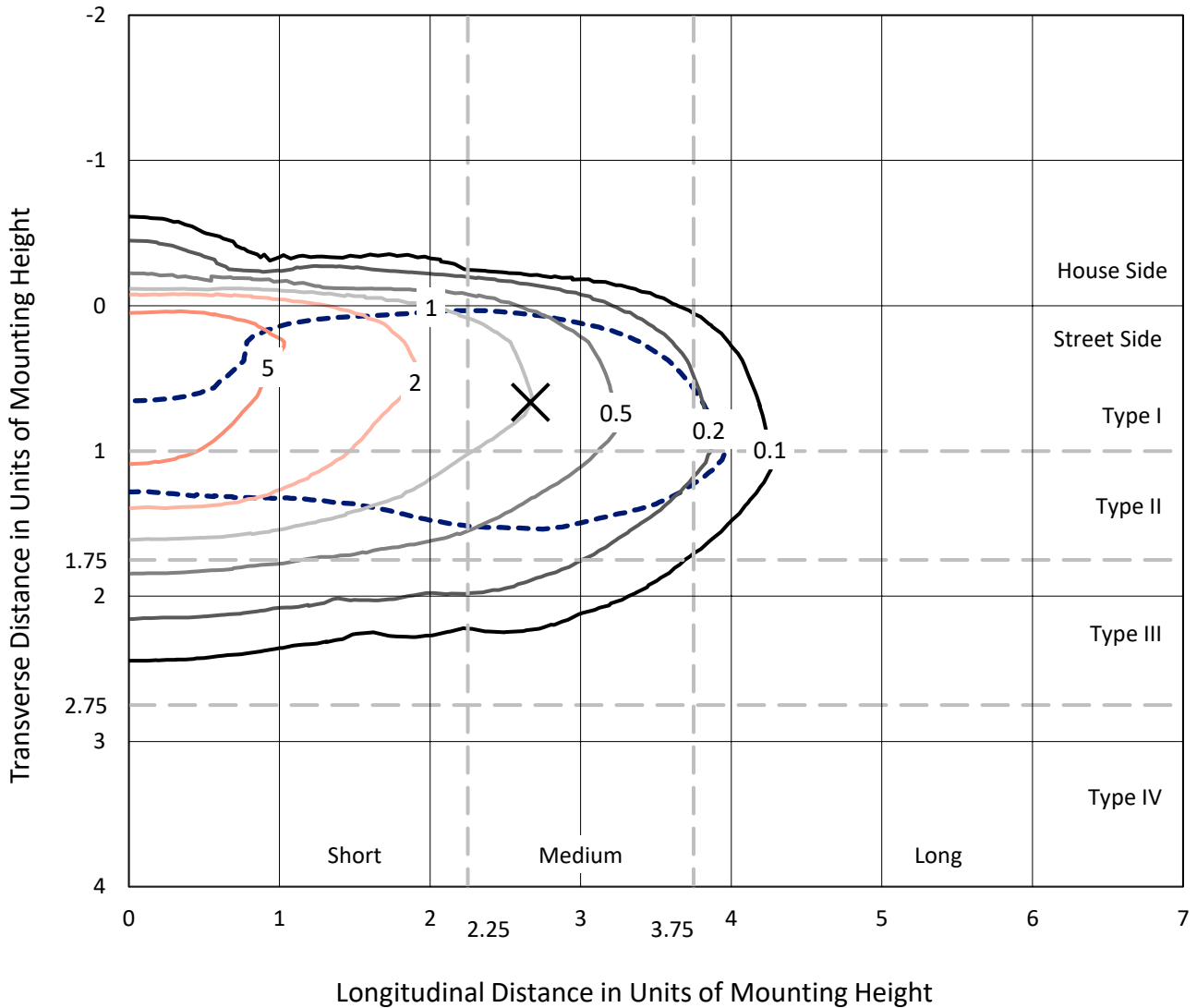
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

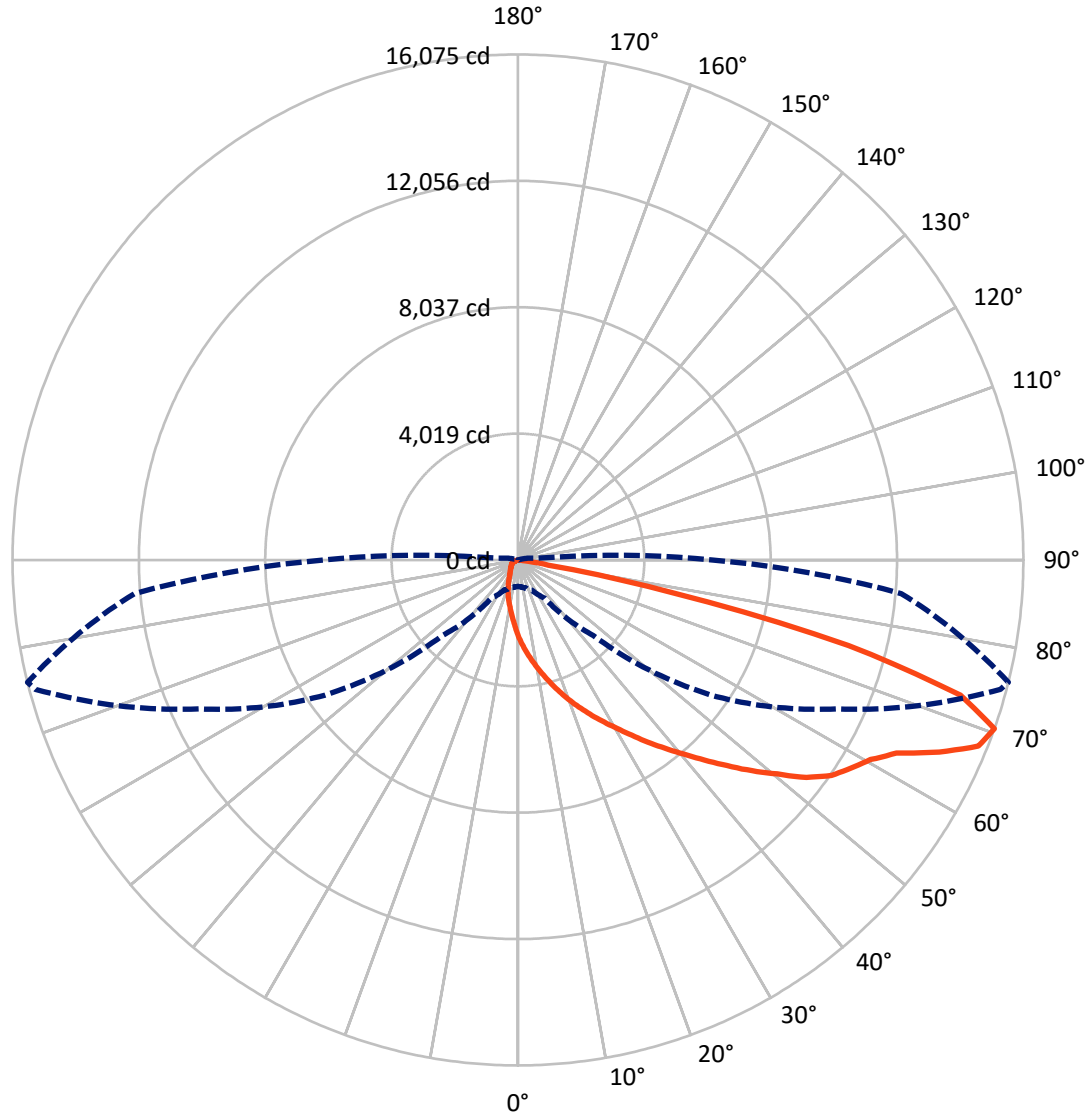
✕ Max cd  
 - - - 1/2 Max cd



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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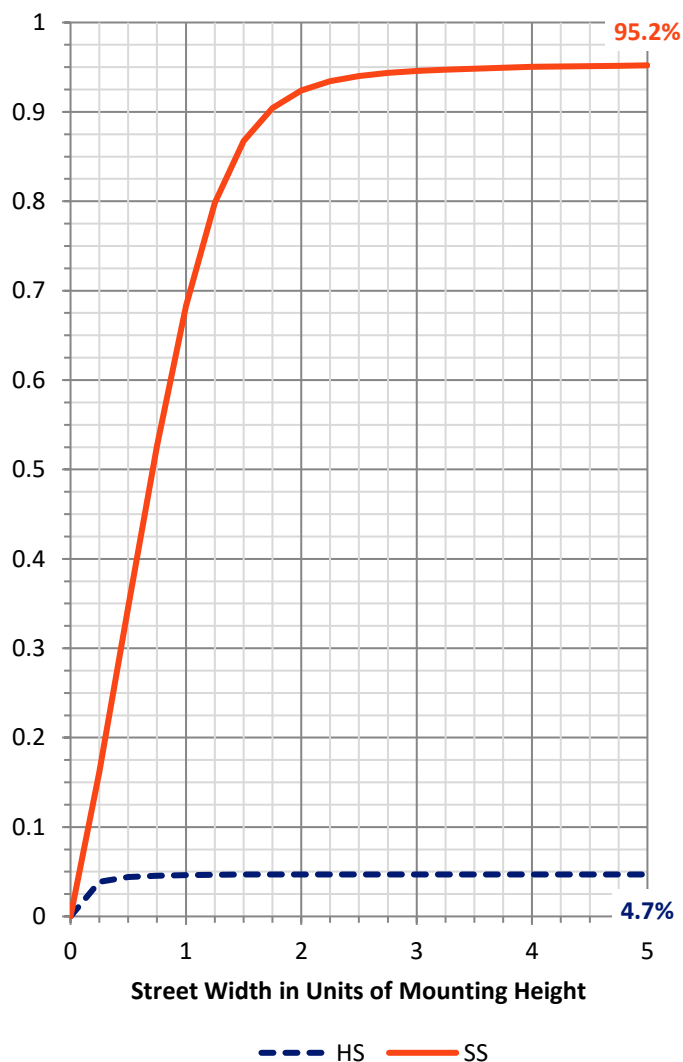
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	856.4	0.0	856.4
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	17302.6	0.0	17302.6
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	18159.0	0.0	18159.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.0	1.3
10°-20°	739.1	4.1
20°-30°	1376.4	7.6
30°-40°	2434.6	13.4
40°-50°	3723.0	20.5
50°-60°	4221.0	23.2
60°-70°	3618.4	19.9
70°-80°	1752.5	9.7
80°-90°	65.0	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°	18159.0	100.0
0°-180°	18159.0	100.0

**Coefficient of Utilization**



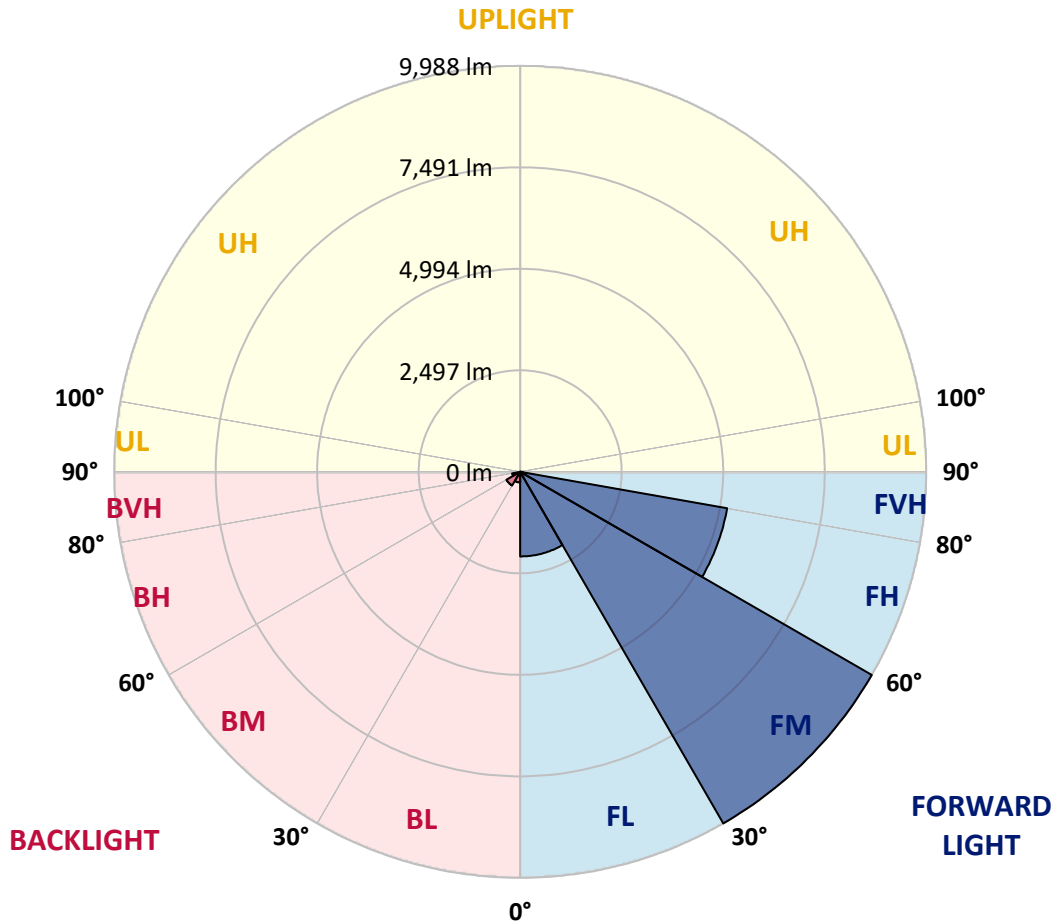
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2081.7	11.5			
FM (30°-60°)	9987.6	55.0			
FH (60°-80°)	5169.3	28.5			G3/7500
FVH (80°-90°)	63.9	0.4			G1/100
BL (0°-30°)	262.7	1.4	B1/500		
BM (30°-60°)	390.9	2.2	B1/1000		
BH (60°-80°)	201.6	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°	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7
2.5°	3322.6	3304.4	3286.3	3216.7	3153.3	3095.8	2987.0	2844.9	2717.9	2690.7	2542.6
5°	3903.0	3881.9	3854.7	3785.1	3703.5	3606.7	3446.5	3228.8	3005.1	2956.7	2681.6
7.5°	4296.0	4277.9	4238.6	4205.4	4123.7	4030.0	3851.6	3597.7	3289.3	3228.8	2841.9
10°	4565.1	4553.0	4547.0	4519.8	4459.3	4383.7	4205.4	3939.3	3576.5	3507.0	3011.2
12.5°	4661.9	4661.9	4692.1	4737.4	4746.5	4722.3	4559.1	4293.0	3878.8	3806.3	3210.7
15°	4531.9	4547.0	4613.5	4758.6	4909.8	5009.5	4906.7	4658.8	4211.4	4132.8	3446.5
17.5°	4495.6	4510.7	4556.0	4683.0	4885.6	5151.6	5203.0	5012.6	4525.8	4459.3	3688.4
20°	4598.4	4613.5	4652.8	4761.6	4915.8	5184.9	5399.5	5354.2	4858.4	4788.8	3933.3
22.5°	4843.3	4852.3	4852.3	4937.0	5073.0	5272.6	5523.5	5677.7	5200.0	5124.4	4175.1
25°	5369.3	5351.2	5278.6	5236.3	5324.0	5487.2	5680.7	5961.9	5580.9	5478.1	4435.1
27.5°	6058.6	6119.1	5943.7	5741.2	5674.7	5768.4	5901.4	6212.8	5949.8	5840.9	4670.9
30°	6992.8	6968.6	6738.8	6448.6	6161.4	6128.1	6173.5	6427.4	6318.6	6215.8	4934.0
32.5°	7760.7	7806.1	7564.2	7210.5	6781.2	6578.6	6530.2	6684.4	6711.6	6645.1	5245.4
35°	8549.8	8598.1	8362.3	7969.3	7458.4	7119.8	6980.7	7001.9	7198.4	7113.7	5571.9
37.5°	9257.2	9299.5	9066.7	8664.7	8153.7	7739.5	7540.0	7376.7	7670.0	7594.4	5916.5
40°	9795.4	9801.4	9644.2	9284.4	8800.7	8371.4	8144.7	7824.2	8168.8	8117.4	6276.3
42.5°	10176.3	10188.4	10073.5	9765.1	9317.7	8918.6	8734.2	8353.3	8743.3	8697.9	6693.5
45°	10354.7	10375.8	10363.7	10079.5	9707.7	9363.0	9302.6	8915.6	9372.1	9329.8	7174.2
47.5°	10185.4	10185.4	10339.5	10300.2	9958.6	9728.8	9798.4	9502.1	10055.4	10016.1	7664.0
50°	9480.9	9490.0	9804.4	10254.9	10055.4	10004.0	10221.6	10076.5	10675.1	10699.3	8250.5
52.5°	7630.7	7615.6	8676.7	9541.4	9988.8	10127.9	10611.6	10663.0	11418.8	11491.4	8834.0
55°	5701.9	5692.8	6708.6	8277.7	9523.3	10064.4	10829.3	11186.1	12053.7	12099.1	9269.3
57.5°	4513.7	4489.5	5048.8	6672.3	8471.2	9780.2	10838.4	11285.8	12407.4	12486.1	9692.6
60°	3470.7	3449.5	3866.7	4964.2	6980.7	9024.4	10578.4	11291.9	12749.1	12888.1	10260.9
62.5°	2482.1	2506.3	2826.7	3561.4	5369.3	7957.2	10239.8	11376.5	13356.8	13514.0	11068.1
65°	1674.9	1662.8	1928.8	2424.7	3818.4	6521.2	9719.8	11554.9	14451.2	14726.3	12035.6
67.5°	1164.0	1173.0	1294.0	1578.1	2424.7	5006.5	8855.1	11654.7	15581.9	15796.5	12712.8
70°	840.5	852.6	919.1	1061.2	1481.4	3395.1	7485.6	11198.1	15887.2	16074.7	12241.2
72.5°	553.3	577.4	677.2	752.8	946.3	2125.3	5514.4	9647.2	14572.1	14711.2	10270.0
75°	299.3	305.3	435.3	562.3	674.2	1324.2	3289.3	6506.0	10901.9	10856.5	6772.1
77.5°	232.8	241.9	269.1	402.1	453.5	728.6	1300.0	2938.6	5163.7	5024.7	2309.8
80°	142.1	148.1	187.4	238.8	317.4	423.3	380.9	798.1	1049.1	982.6	338.6
82.5°	84.7	90.7	111.9	199.5	250.9	199.5	133.0	193.5	196.5	193.5	84.7
85°	15.1	15.1	78.6	139.1	133.0	57.4	78.6	63.5	57.4	60.5	18.1
87.5°	0.0	0.0	30.2	42.3	60.5	21.2	30.2	15.1	15.1	15.1	9.1
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°	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7	2430.7
2.5°	2451.9	2349.1	2137.4	1953.0	1768.6	1632.6	1529.8	1424.0	1387.7	1342.3	1318.1
5°	2494.2	2291.6	1871.4	1535.8	1251.6	1034.0	894.9	810.2	755.8	716.5	707.4
7.5°	2557.7	2246.3	1656.7	1203.3	891.9	674.2	559.3	501.9	471.6	453.5	447.4
10°	2633.3	2207.0	1445.1	937.2	628.8	474.7	411.2	387.0	374.9	368.8	365.8
12.5°	2739.1	2191.9	1266.7	722.6	474.7	390.0	356.7	341.6	332.6	323.5	320.5
15°	2878.1	2197.9	1103.5	559.3	393.0	347.7	320.5	305.3	293.3	284.2	284.2
17.5°	3023.3	2207.0	943.3	453.5	356.7	317.4	287.2	266.0	257.0	247.9	244.9
20°	3159.3	2204.0	789.1	387.0	323.5	284.2	254.0	232.8	217.7	208.6	208.6
22.5°	3289.3	2185.8	644.0	347.7	296.3	250.9	217.7	196.5	184.4	175.3	175.3
25°	3428.4	2149.5	526.0	317.4	263.0	220.7	187.4	166.3	157.2	148.1	148.1
27.5°	3537.2	2089.1	429.3	290.2	232.8	190.5	160.2	142.1	133.0	127.0	127.0
30°	3655.1	2001.4	356.7	260.0	202.6	163.3	136.0	120.9	111.9	108.8	108.8
32.5°	3785.1	1904.7	305.3	229.8	172.3	139.1	114.9	105.8	96.7	93.7	93.7
35°	3936.3	1820.0	275.1	199.5	151.2	117.9	99.8	90.7	84.7	84.7	84.7
37.5°	4108.6	1732.3	247.9	175.3	130.0	99.8	84.7	81.6	78.6	75.6	75.6
40°	4296.0	1638.6	223.7	154.2	111.9	84.7	72.6	72.6	69.5	69.5	69.5
42.5°	4507.7	1557.0	202.6	136.0	96.7	72.6	63.5	63.5	60.5	60.5	60.5
45°	4737.4	1481.4	184.4	120.9	84.7	63.5	57.4	54.4	51.4	51.4	51.4
47.5°	5009.5	1439.1	169.3	105.8	72.6	54.4	48.4	45.3	42.3	39.3	39.3
50°	5357.2	1457.2	154.2	87.7	63.5	45.3	39.3	36.3	33.3	30.2	30.2
52.5°	5632.3	1448.1	133.0	75.6	51.4	36.3	30.2	27.2	24.2	21.2	21.2
55°	5831.9	1411.9	114.9	63.5	39.3	30.2	24.2	18.1	15.1	15.1	15.1
57.5°	6028.4	1375.6	96.7	51.4	30.2	21.2	15.1	12.1	12.1	12.1	12.1
60°	6333.7	1324.2	84.7	42.3	24.2	15.1	9.1	9.1	6.0	6.0	6.0
62.5°	6705.6	1260.7	69.5	36.3	18.1	12.1	6.0	6.0	0.0	0.0	0.0
65°	7113.7	1148.8	57.4	27.2	15.1	9.1	6.0	0.0	0.0	0.0	0.0
67.5°	7020.0	922.1	48.4	18.1	12.1	6.0	3.0	0.0	0.0	0.0	0.0
70°	6209.8	622.8	39.3	15.1	9.1	6.0	3.0	0.0	0.0	0.0	0.0
72.5°	4864.4	368.8	27.2	12.1	6.0	3.0	0.0	0.0	0.0	0.0	0.0
75°	3114.0	184.4	18.1	9.1	6.0	3.0	0.0	0.0	0.0	0.0	0.0
77.5°	1043.0	90.7	12.1	6.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	148.1	30.2	6.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.3	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)