

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: P399246

Luminaire Tested: **ARCH-L-PA3-110-830-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399246  
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-PA3-110-830-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 485mA 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: 11596 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

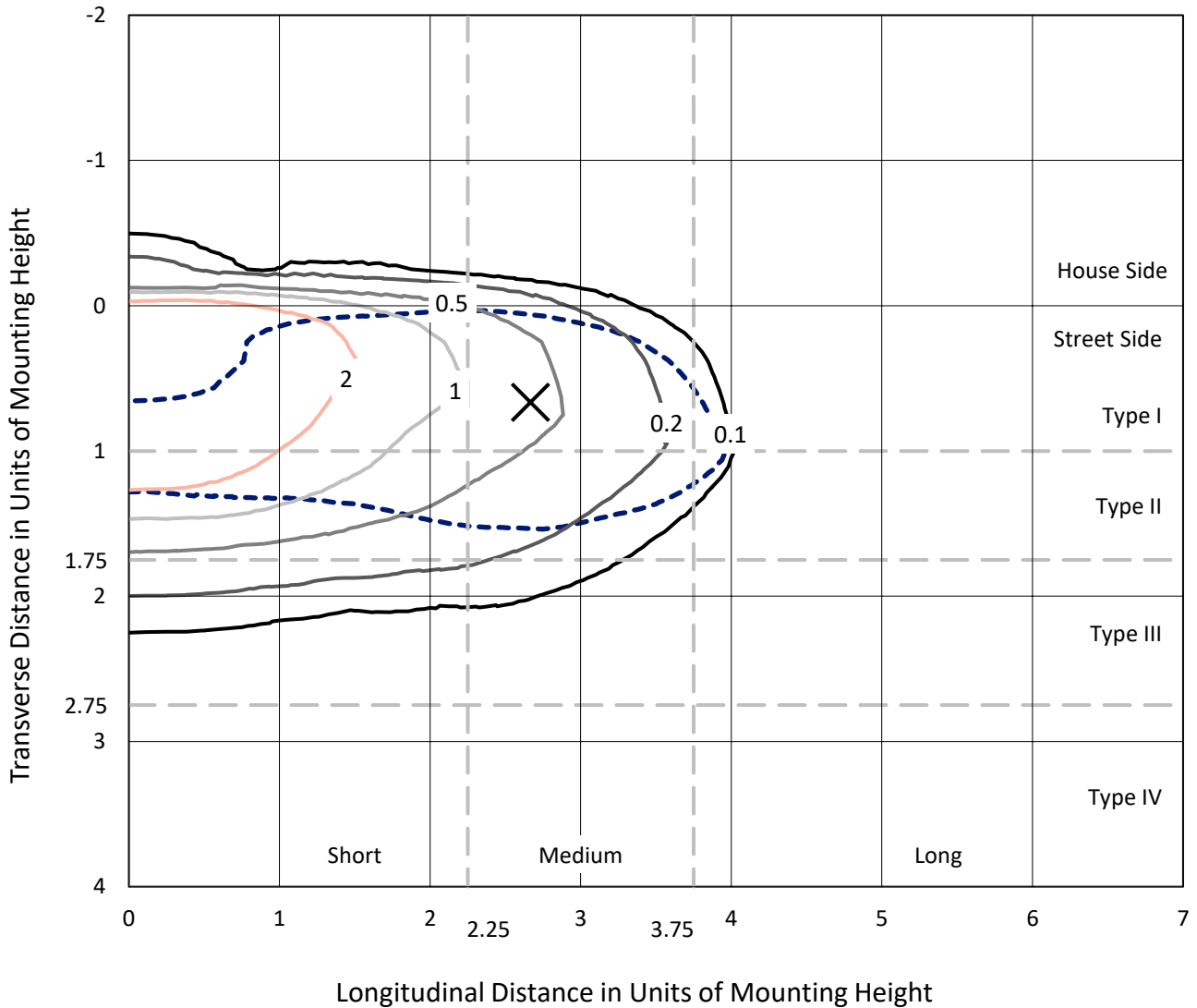
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

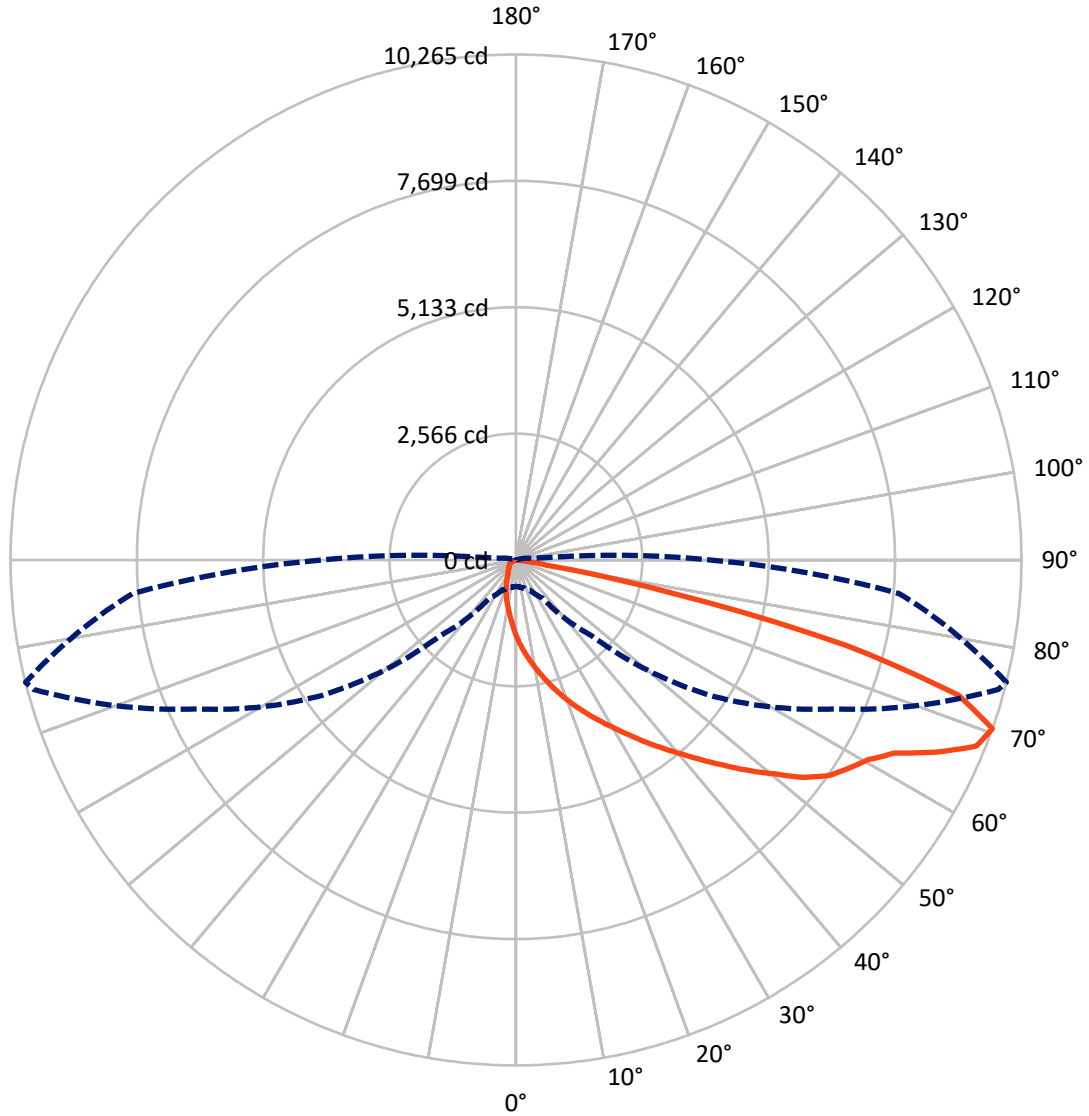
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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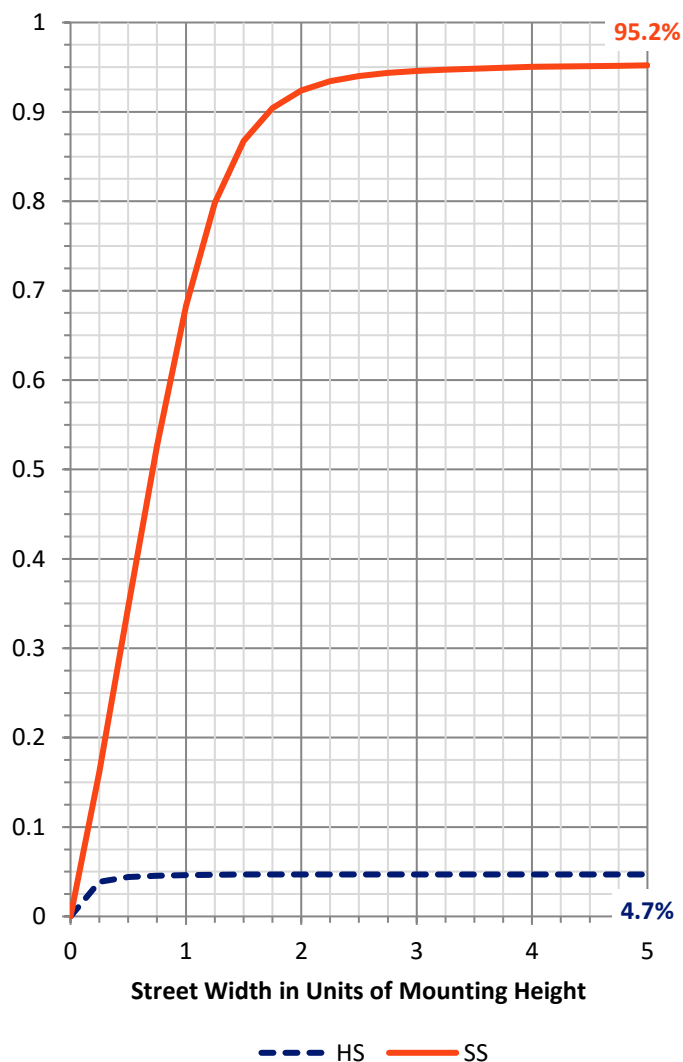
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	546.9	0.0	546.9
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	11049.1	0.0	11049.1
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	11596.0	0.0	11596.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.2	1.3
10°-20°	472.0	4.1
20°-30°	878.9	7.6
30°-40°	1554.7	13.4
40°-50°	2377.4	20.5
50°-60°	2695.4	23.2
60°-70°	2310.7	19.9
70°-80°	1119.1	9.7
80°-90°	41.5	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°	11596.0	100.0
0°-180°	11596.0	100.0

**Coefficient of Utilization**

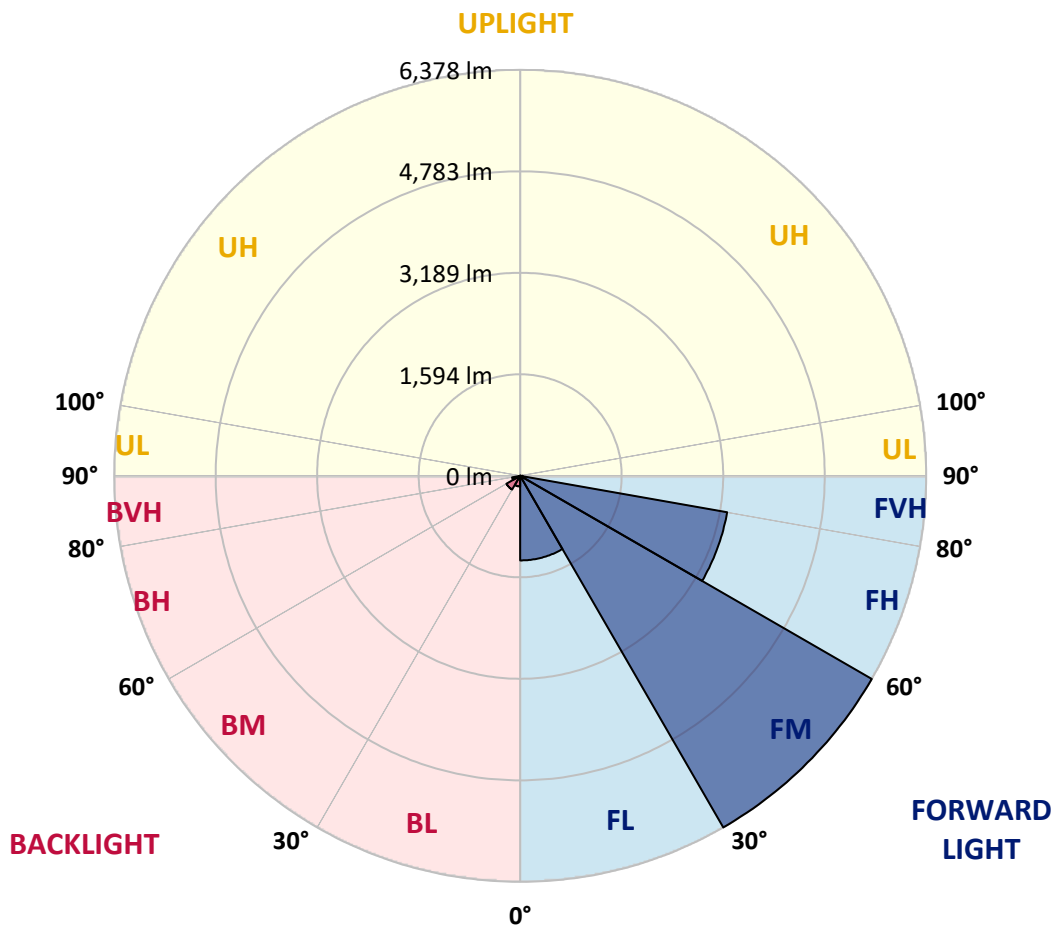


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1329.4	11.5			
FM (30°-60°)	6377.9	55.0			
FH (60°-80°)	3301.0	28.5			G2/5000
FVH (80°-90°)	40.8	0.4			G1/100
BL (0°-30°)	167.8	1.4	B1/500		
BM (30°-60°)	249.7	2.2	B1/1000		
BH (60°-80°)	128.8	1.1	B1/500		G1/500
BVH (80°-90°)	0.7	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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2
2.5°	2121.7	2110.1	2098.6	2054.2	2013.6	1976.9	1907.4	1816.7	1735.6	1718.2	1623.6
5°	2492.4	2478.9	2461.5	2417.1	2365.0	2303.2	2200.9	2061.9	1919.0	1888.1	1712.4
7.5°	2743.4	2731.8	2706.7	2685.5	2633.3	2573.5	2459.6	2297.4	2100.5	2061.9	1814.8
10°	2915.2	2907.5	2903.6	2886.2	2847.6	2799.4	2685.5	2515.6	2283.9	2239.5	1922.9
12.5°	2977.0	2977.0	2996.3	3025.2	3031.0	3015.6	2911.3	2741.4	2477.0	2430.6	2050.3
15°	2894.0	2903.6	2946.1	3038.8	3135.3	3199.0	3133.4	2975.0	2689.3	2639.1	2200.9
17.5°	2870.8	2880.4	2909.4	2990.5	3119.8	3289.7	3322.6	3200.9	2890.1	2847.6	2355.3
20°	2936.4	2946.1	2971.2	3040.7	3139.1	3311.0	3448.0	3419.1	3102.5	3058.1	2511.7
22.5°	3092.8	3098.6	3098.6	3152.7	3239.5	3367.0	3527.2	3625.7	3320.6	3272.4	2666.2
25°	3428.7	3417.2	3370.8	3343.8	3399.8	3504.0	3627.6	3807.1	3563.9	3498.2	2832.2
27.5°	3868.9	3907.5	3795.6	3666.2	3623.7	3683.6	3768.5	3967.4	3799.4	3729.9	2982.8
30°	4465.5	4450.0	4303.3	4118.0	3934.6	3913.3	3942.3	4104.4	4034.9	3969.3	3150.7
32.5°	4955.8	4984.8	4830.4	4604.5	4330.3	4201.0	4170.1	4268.5	4285.9	4243.4	3349.6
35°	5459.7	5490.6	5340.0	5089.1	4762.8	4546.6	4457.7	4471.3	4596.7	4542.7	3558.1
37.5°	5911.5	5938.5	5789.9	5533.1	5206.8	4942.3	4814.9	4710.7	4897.9	4849.7	3778.2
40°	6255.1	6259.0	6158.6	5928.9	5620.0	5345.8	5201.0	4996.4	5216.5	5183.6	4007.9
42.5°	6498.4	6506.1	6432.7	6235.8	5950.1	5695.3	5577.5	5334.2	5583.3	5554.3	4274.3
45°	6612.3	6625.8	6618.1	6436.6	6199.1	5979.1	5940.4	5693.3	5984.8	5957.8	4581.3
47.5°	6504.2	6504.2	6602.6	6577.5	6359.4	6212.7	6257.1	6067.9	6421.2	6396.1	4894.1
50°	6054.3	6060.1	6260.9	6548.6	6421.2	6388.3	6527.3	6434.7	6816.9	6832.4	5268.6
52.5°	4872.8	4863.2	5540.8	6093.0	6378.7	6467.5	6776.4	6809.2	7291.9	7338.2	5641.2
55°	3641.1	3635.3	4284.0	5286.0	6081.4	6427.0	6915.4	7143.2	7697.3	7726.2	5919.2
57.5°	2882.4	2866.9	3224.1	4260.8	5409.5	6245.5	6921.2	7206.9	7923.2	7973.4	6189.5
60°	2216.3	2202.8	2469.2	3170.0	4457.7	5762.8	6755.2	7210.8	8141.3	8230.1	6552.4
62.5°	1585.0	1600.5	1805.1	2274.2	3428.7	5081.3	6538.9	7264.8	8529.4	8629.8	7067.9
65°	1069.6	1061.8	1231.7	1548.3	2438.3	4164.3	6206.9	7378.7	9228.2	9403.9	7685.7
67.5°	743.3	749.1	826.3	1007.8	1548.3	3197.1	5654.7	7442.4	9950.3	10087.4	8118.2
70°	536.7	544.4	586.9	677.6	946.0	2168.1	4780.2	7150.9	10145.3	10265.0	7817.0
72.5°	353.3	368.7	432.5	480.7	604.3	1357.2	3521.4	6160.5	9305.5	9394.3	6558.2
75°	191.1	195.0	278.0	359.1	430.5	845.6	2100.5	4154.6	6961.7	6932.8	4324.5
77.5°	148.7	154.4	171.8	256.8	289.6	465.3	830.2	1876.5	3297.5	3208.7	1475.0
80°	90.7	94.6	119.7	152.5	202.7	270.3	243.3	509.7	669.9	627.4	216.2
82.5°	54.1	57.9	71.4	127.4	160.2	127.4	84.9	123.6	125.5	123.6	54.1
85°	9.7	9.7	50.2	88.8	84.9	36.7	50.2	40.5	36.7	38.6	11.6
87.5°	0.0	0.0	19.3	27.0	38.6	13.5	19.3	9.7	9.7	9.7	5.8
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°	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2
2.5°	1565.7	1500.1	1364.9	1247.2	1129.4	1042.5	976.9	909.3	886.1	857.2	841.7
5°	1592.7	1463.4	1195.0	980.7	799.3	660.3	571.5	517.4	482.6	457.6	451.8
7.5°	1633.3	1434.4	1058.0	768.4	569.5	430.5	357.2	320.5	301.2	289.6	285.7
10°	1681.5	1409.3	922.8	598.5	401.6	303.1	262.6	247.1	239.4	235.5	233.6
12.5°	1749.1	1399.7	808.9	461.4	303.1	249.0	227.8	218.2	212.4	206.6	204.6
15°	1837.9	1403.5	704.7	357.2	251.0	222.0	204.6	195.0	187.3	181.5	181.5
17.5°	1930.6	1409.3	602.3	289.6	227.8	202.7	183.4	169.9	164.1	158.3	156.4
20°	2017.5	1407.4	503.9	247.1	206.6	181.5	162.2	148.7	139.0	133.2	133.2
22.5°	2100.5	1395.8	411.2	222.0	189.2	160.2	139.0	125.5	117.8	112.0	112.0
25°	2189.3	1372.7	335.9	202.7	168.0	140.9	119.7	106.2	100.4	94.6	94.6
27.5°	2258.8	1334.0	274.1	185.3	148.7	121.6	102.3	90.7	84.9	81.1	81.1
30°	2334.1	1278.1	227.8	166.0	129.3	104.3	86.9	77.2	71.4	69.5	69.5
32.5°	2417.1	1216.3	195.0	146.7	110.0	88.8	73.4	67.6	61.8	59.8	59.8
35°	2513.6	1162.2	175.7	127.4	96.5	75.3	63.7	57.9	54.1	54.1	54.1
37.5°	2623.7	1106.2	158.3	112.0	83.0	63.7	54.1	52.1	50.2	48.3	48.3
40°	2743.4	1046.4	142.9	98.5	71.4	54.1	46.3	46.3	44.4	44.4	44.4
42.5°	2878.5	994.3	129.3	86.9	61.8	46.3	40.5	40.5	38.6	38.6	38.6
45°	3025.2	946.0	117.8	77.2	54.1	40.5	36.7	34.8	32.8	32.8	32.8
47.5°	3199.0	919.0	108.1	67.6	46.3	34.8	30.9	29.0	27.0	25.1	25.1
50°	3421.0	930.5	98.5	56.0	40.5	29.0	25.1	23.2	21.2	19.3	19.3
52.5°	3596.7	924.8	84.9	48.3	32.8	23.2	19.3	17.4	15.4	13.5	13.5
55°	3724.1	901.6	73.4	40.5	25.1	19.3	15.4	11.6	9.7	9.7	9.7
57.5°	3849.6	878.4	61.8	32.8	19.3	13.5	9.7	7.7	7.7	7.7	7.7
60°	4044.6	845.6	54.1	27.0	15.4	9.7	5.8	5.8	3.9	3.9	3.9
62.5°	4282.1	805.1	44.4	23.2	11.6	7.7	3.9	3.9	0.0	0.0	0.0
65°	4542.7	733.6	36.7	17.4	9.7	5.8	3.9	0.0	0.0	0.0	0.0
67.5°	4482.8	588.8	30.9	11.6	7.7	3.9	1.9	0.0	0.0	0.0	0.0
70°	3965.4	397.7	25.1	9.7	5.8	3.9	1.9	0.0	0.0	0.0	0.0
72.5°	3106.3	235.5	17.4	7.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0
75°	1988.5	117.8	11.6	5.8	3.9	1.9	0.0	0.0	0.0	0.0	0.0
77.5°	666.1	57.9	7.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	94.6	19.3	3.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.2	7.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	1.9	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)