

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: P399509

Luminaire Tested: **ARCH-L-PA3-150-750-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399509  
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-PA3-150-750-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 665mA 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: 16454 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

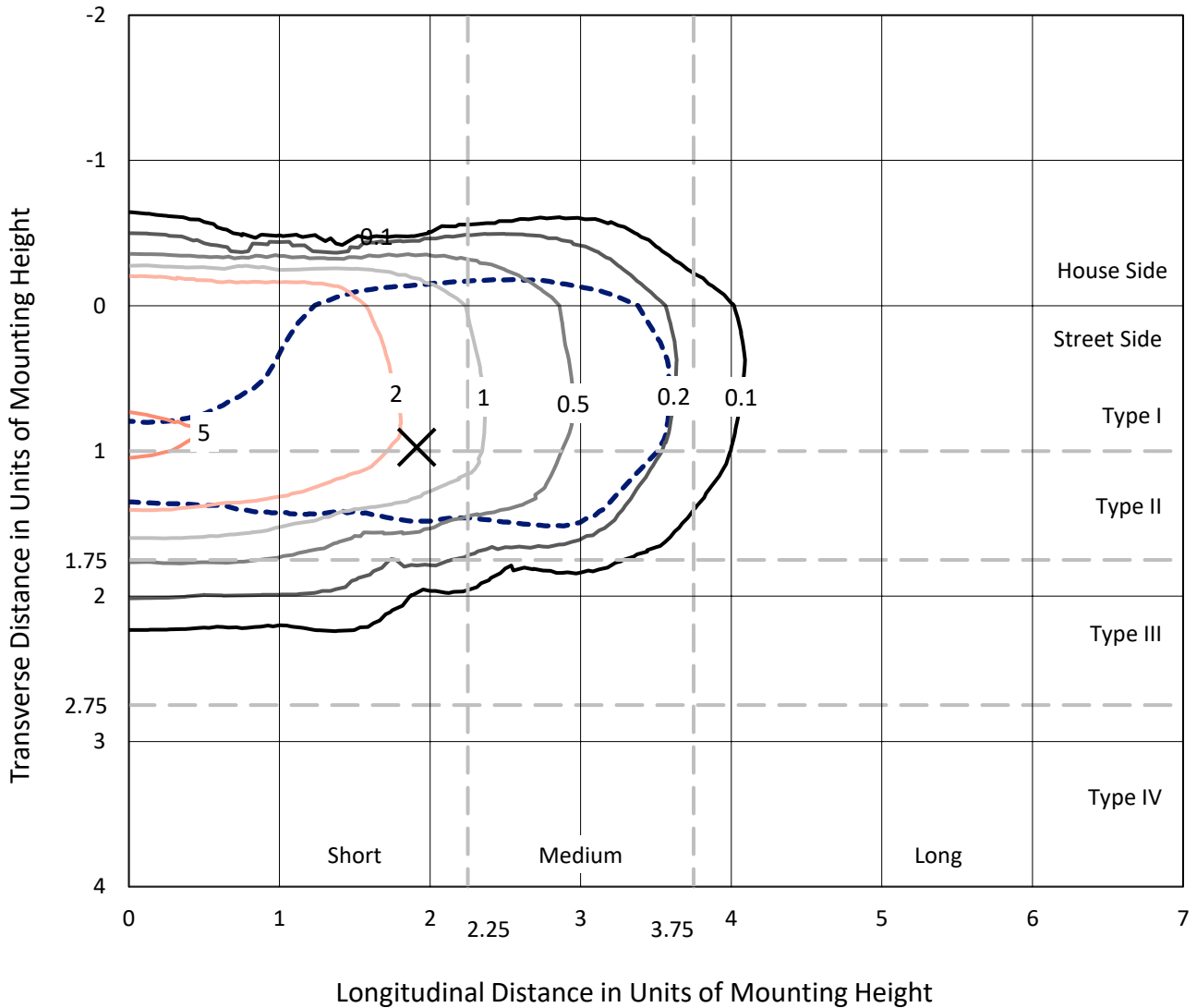
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

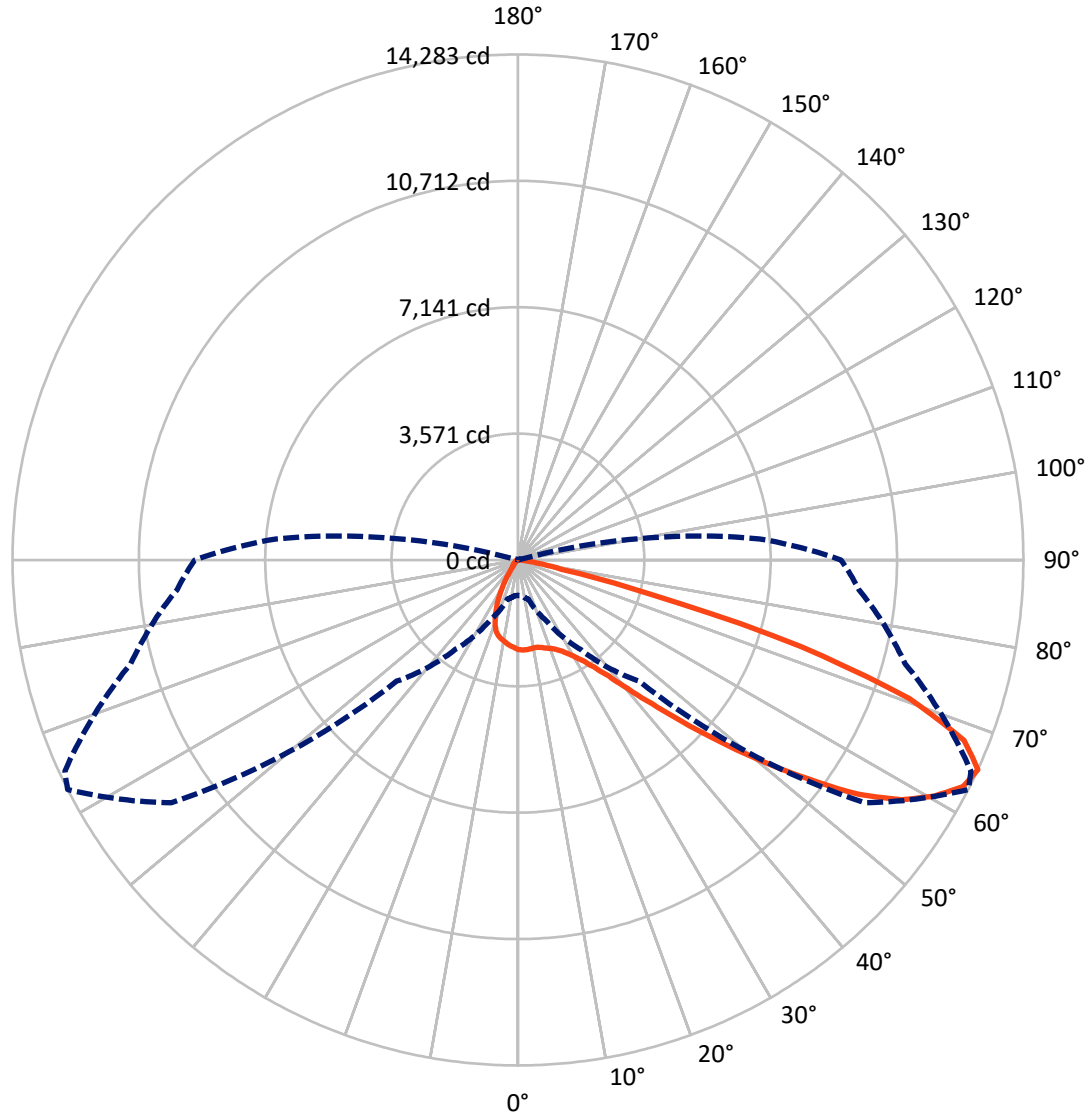
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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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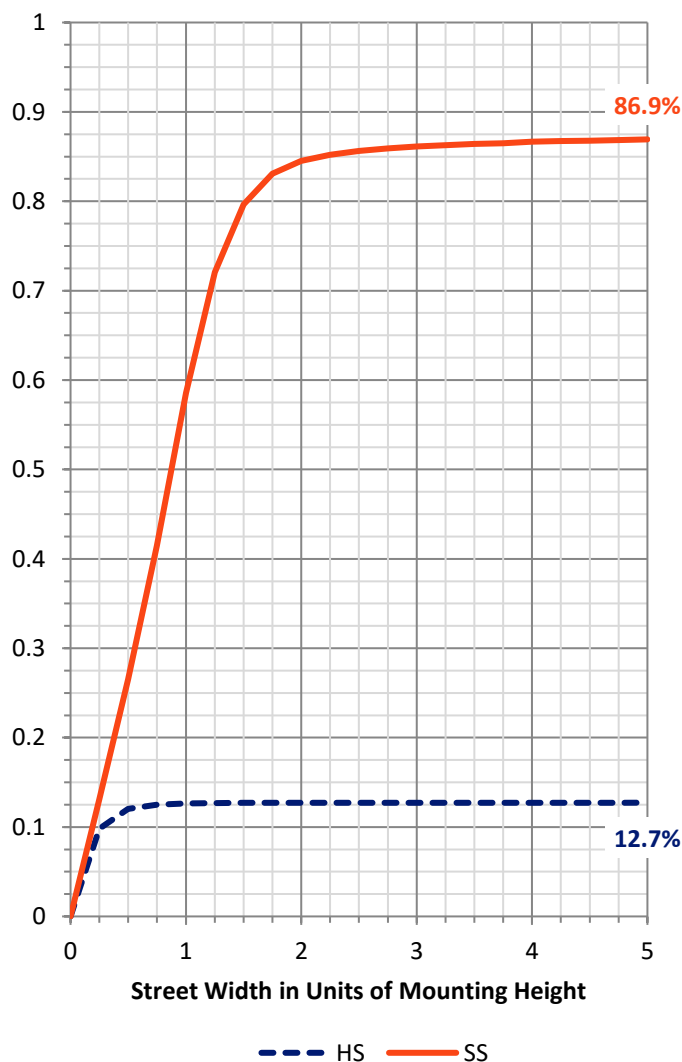
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2117.6	0.0	2117.6
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	14336.4	0.0	14336.4
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	16454.0	0.0	16454.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.3	1.4
10°-20°	570.6	3.5
20°-30°	845.7	5.1
30°-40°	1570.2	9.5
40°-50°	3326.4	20.2
50°-60°	4599.6	28.0
60°-70°	3682.1	22.4
70°-80°	1529.8	9.3
80°-90°	98.2	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°	16454.0	100.0
0°-180°	16454.0	100.0

**Coefficient of Utilization**

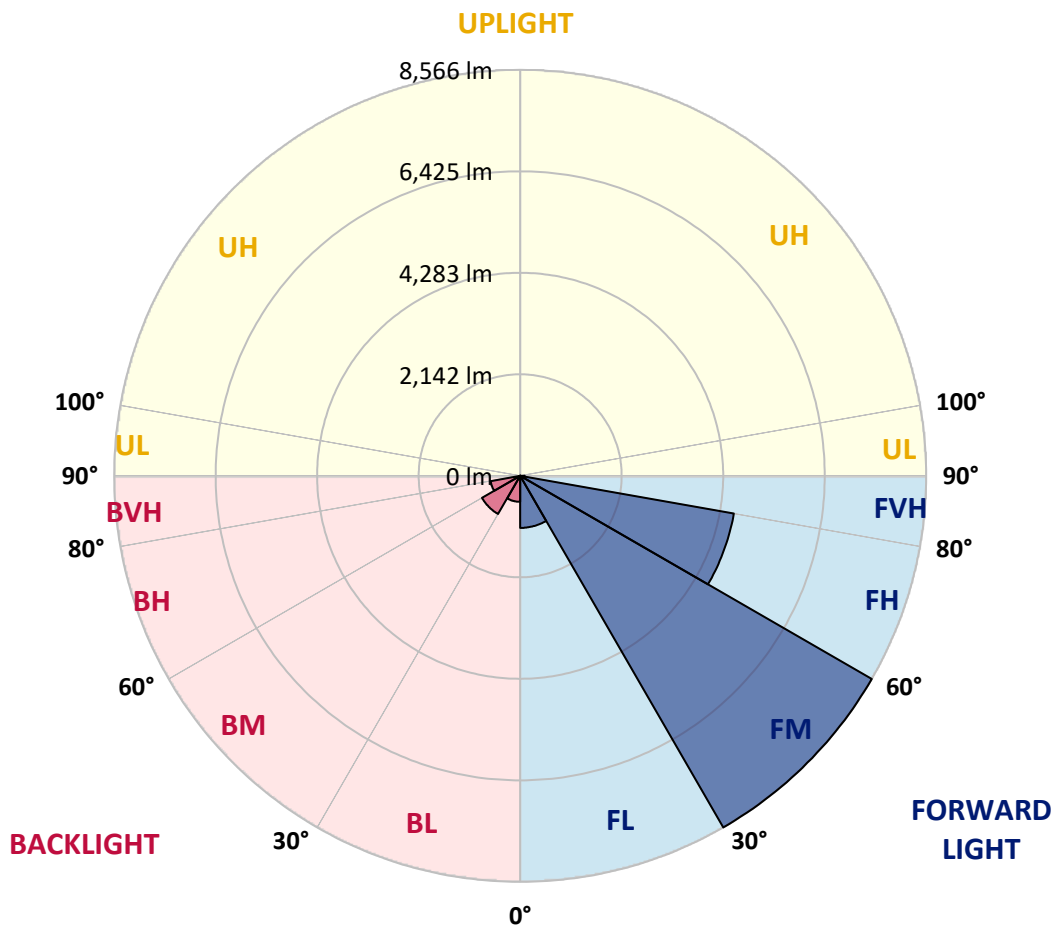


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1098.7	6.7			
FM (30°-60°)	8566.0	52.1			
FH (60°-80°)	4577.9	27.8			G2/5000
FVH (80°-90°)	93.8	0.6			G1/100
BL (0°-30°)	548.8	3.3	B2/1000		
BM (30°-60°)	930.2	5.7	B1/1000		
BH (60°-80°)	634.1	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7
2.5°	2578.2	2572.0	2565.8	2562.7	2562.7	2559.6	2547.2	2544.1	2537.9	2531.6	2525.4
5°	2553.4	2544.1	2541.0	2544.1	2547.2	2553.4	2547.2	2547.2	2541.0	2534.7	2522.3
7.5°	2491.3	2485.0	2488.2	2497.5	2500.6	2522.3	2525.4	2534.7	2534.7	2528.5	2519.2
10°	2416.7	2413.6	2413.6	2429.1	2444.7	2475.7	2497.5	2522.3	2525.4	2525.4	2509.9
12.5°	2360.8	2357.7	2367.0	2385.6	2416.7	2457.1	2494.4	2531.6	2537.9	2541.0	2516.1
15°	2326.6	2326.6	2339.1	2376.3	2419.8	2475.7	2519.2	2568.9	2575.1	2572.0	2537.9
17.5°	2295.6	2298.7	2323.5	2385.6	2435.3	2509.9	2562.7	2618.6	2621.7	2618.6	2562.7
20°	2283.1	2289.3	2326.6	2407.4	2463.3	2547.2	2615.5	2671.4	2674.5	2662.1	2587.6
22.5°	2317.3	2320.4	2367.0	2454.0	2506.8	2600.0	2687.0	2739.8	2742.9	2724.2	2624.8
25°	2435.3	2435.3	2475.7	2550.3	2596.9	2690.1	2783.3	2845.4	2845.4	2823.6	2708.7
27.5°	2711.8	2687.0	2677.6	2699.4	2714.9	2814.3	2913.7	2991.4	2988.3	2957.2	2817.4
30°	3246.1	3184.0	3084.6	2972.7	2916.8	2985.2	3078.4	3177.8	3174.6	3124.9	2951.0
32.5°	4143.8	4053.7	3817.7	3522.6	3283.4	3205.7	3292.7	3401.4	3404.5	3345.5	3165.3
35°	5401.9	5259.0	4836.5	4426.5	3879.8	3584.7	3609.5	3727.6	3764.8	3733.8	3525.7
37.5°	6613.3	6482.9	6079.0	5510.6	4768.2	4165.6	4059.9	4162.5	4205.9	4205.9	3985.4
40°	7834.1	7681.9	7324.7	6753.1	5970.3	5072.6	4693.6	4777.5	4824.1	4833.4	4544.5
42.5°	8812.6	8713.2	8439.8	7995.6	7262.5	6663.0	5606.9	5560.3	5603.8	5569.6	5193.7
45°	9489.8	9412.1	9222.6	9054.9	8697.7	8396.4	6827.7	6513.9	6541.9	6423.8	5923.7
47.5°	9629.6	9542.6	9502.2	9735.2	9989.9	10064.4	8328.0	7647.7	7619.8	7358.8	6681.7
50°	9020.7	9030.0	9179.1	9843.9	10906.2	11577.2	10067.5	8927.5	8825.0	8244.1	7386.8
52.5°	7706.8	7855.9	8231.7	9309.6	11185.8	12676.8	11807.1	10285.0	10126.6	9104.6	7914.9
55°	6029.3	6221.9	6840.1	8079.5	10601.8	13167.6	13273.3	11695.3	11334.9	9750.7	8324.9
57.5°	4482.4	4541.4	5262.1	6392.8	9219.5	12686.2	14025.0	12782.5	12319.6	10266.3	8731.8
60°	2792.6	2829.8	3590.9	4867.6	6983.0	10906.2	14025.0	13531.1	13090.0	10729.2	9104.6
62.5°	1736.4	1748.9	2034.6	3336.2	4746.4	8088.8	13444.1	14112.0	13757.8	11061.6	9424.5
65°	1000.2	1012.7	1146.2	1885.5	3087.7	4842.7	11959.3	14282.8	14124.4	11325.6	9673.0
67.5°	730.0	736.2	789.0	1059.3	2019.1	2488.2	8983.4	13596.3	13795.1	11456.1	9666.8
70°	633.7	643.0	711.3	826.3	1456.9	1528.3	4572.5	11741.8	12297.9	11269.7	9377.9
72.5°	487.7	500.1	602.6	776.6	1068.6	1099.6	1655.7	8356.0	9197.8	10104.8	8585.8
75°	335.5	347.9	450.4	639.9	882.2	823.2	910.1	3845.6	4852.1	6778.0	6535.7
77.5°	214.3	217.4	282.7	465.9	761.0	584.0	624.4	1254.9	1761.3	3065.9	3084.6
80°	142.9	146.0	174.0	301.3	521.9	540.5	385.2	580.9	636.8	894.6	621.3
82.5°	87.0	87.0	118.0	189.5	316.8	447.3	251.6	304.4	326.2	344.8	161.5
85°	34.2	34.2	71.4	124.3	198.8	208.1	158.4	177.1	186.4	201.9	74.6
87.5°	9.3	9.3	40.4	68.3	87.0	96.3	96.3	87.0	93.2	114.9	37.3
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°	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7	2534.7
2.5°	2522.3	2513.0	2500.6	2488.2	2475.7	2466.4	2457.1	2457.1	2450.9	2441.6	2435.3
5°	2516.1	2500.6	2472.6	2450.9	2416.7	2391.9	2373.2	2357.7	2348.4	2326.6	2323.5
7.5°	2506.8	2488.2	2447.8	2404.3	2348.4	2304.9	2261.4	2230.3	2199.3	2174.4	2168.2
10°	2491.3	2469.5	2410.5	2348.4	2270.7	2189.9	2087.4	1969.4	1860.7	1798.6	1779.9
12.5°	2491.3	2463.3	2385.6	2301.8	2189.9	1991.1	1730.2	1469.3	1267.4	1177.3	1152.4
15°	2506.8	2469.5	2367.0	2252.1	2044.0	1640.1	1217.7	872.9	652.3	584.0	568.5
17.5°	2522.3	2469.5	2339.1	2183.7	1776.8	1189.7	692.7	459.7	388.3	372.8	372.8
20°	2528.5	2463.3	2301.8	2056.4	1419.6	739.3	413.1	344.8	316.8	307.5	307.5
22.5°	2553.4	2466.4	2273.8	1873.1	1031.3	434.9	326.2	288.9	260.9	251.6	251.6
25°	2615.5	2503.7	2280.0	1640.1	661.6	329.3	276.5	239.2	211.2	198.8	198.8
27.5°	2714.9	2587.6	2314.2	1369.9	416.2	282.7	233.0	192.6	170.8	158.4	158.4
30°	2826.7	2680.7	2329.7	1059.3	310.6	239.2	189.5	152.2	136.7	127.4	124.3
32.5°	3022.4	2842.3	2317.3	726.9	254.7	201.9	152.2	121.1	108.7	105.6	105.6
35°	3336.2	3124.9	2292.5	456.6	211.2	161.5	121.1	99.4	90.1	87.0	83.9
37.5°	3761.7	3538.1	2217.9	301.3	174.0	127.4	99.4	83.9	74.6	71.4	71.4
40°	4280.5	4010.2	2075.0	229.9	149.1	102.5	83.9	71.4	65.2	62.1	62.1
42.5°	4873.8	4535.2	1848.3	198.8	124.3	87.0	71.4	59.0	55.9	52.8	52.8
45°	5523.0	5085.0	1534.5	177.1	105.6	71.4	59.0	52.8	46.6	46.6	43.5
47.5°	6212.6	5637.9	1180.4	155.3	90.1	62.1	52.8	43.5	40.4	37.3	37.3
50°	6877.4	6131.9	829.4	133.6	74.6	52.8	43.5	37.3	34.2	31.1	31.1
52.5°	7346.4	6430.1	587.1	114.9	62.1	46.6	34.2	28.0	24.9	24.9	24.9
55°	7722.3	6616.4	410.0	96.3	52.8	40.4	28.0	21.7	21.7	18.6	18.6
57.5°	8076.4	6737.6	301.3	80.8	43.5	31.1	21.7	15.5	15.5	12.4	12.4
60°	8442.9	6802.8	229.9	65.2	37.3	24.9	15.5	12.4	9.3	9.3	9.3
62.5°	8812.6	6843.2	177.1	52.8	31.1	18.6	12.4	9.3	6.2	3.1	3.1
65°	9135.7	6855.6	136.7	40.4	24.9	12.4	9.3	3.1	0.0	0.0	0.0
67.5°	9231.9	6712.7	105.6	31.1	18.6	9.3	6.2	0.0	0.0	0.0	0.0
70°	8971.0	6333.8	80.8	24.9	15.5	6.2	3.1	0.0	0.0	0.0	0.0
72.5°	7961.5	5311.8	62.1	15.5	12.4	6.2	3.1	0.0	0.0	0.0	0.0
75°	5697.0	2833.0	43.5	12.4	9.3	3.1	0.0	0.0	0.0	0.0	0.0
77.5°	2621.7	1096.5	31.1	9.3	6.2	3.1	0.0	0.0	0.0	0.0	0.0
80°	512.5	273.4	12.4	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	118.0	46.6	6.2	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	40.4	15.5	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.5	6.2	3.1	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)