

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: P399554

Luminaire Tested: **ARCH-L-PA3-160-727-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399554  
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-PA3-160-727-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 705mA 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: 14403 lumens  
Efficiency: N/A  
Efficacy: 88.9 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

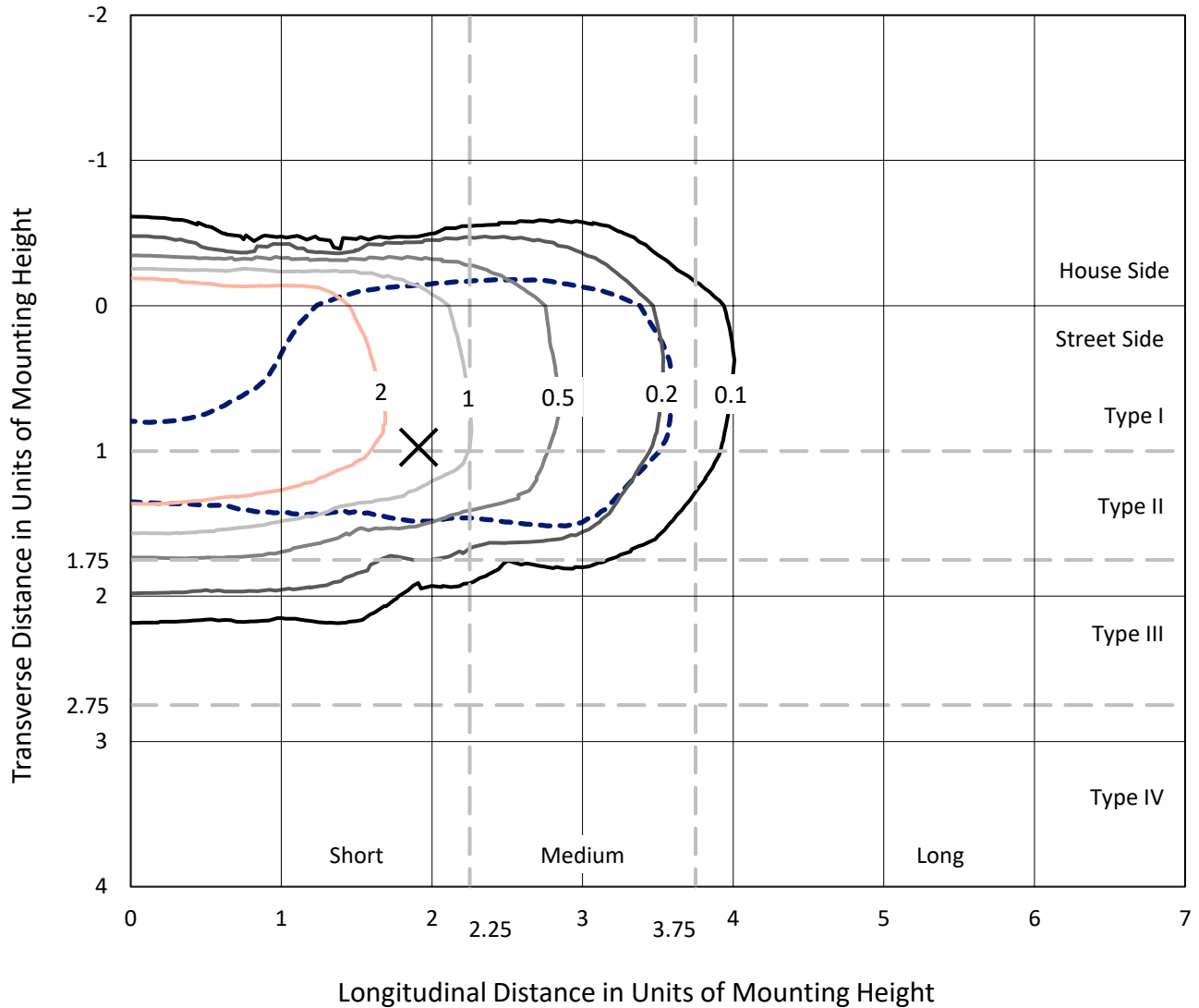
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

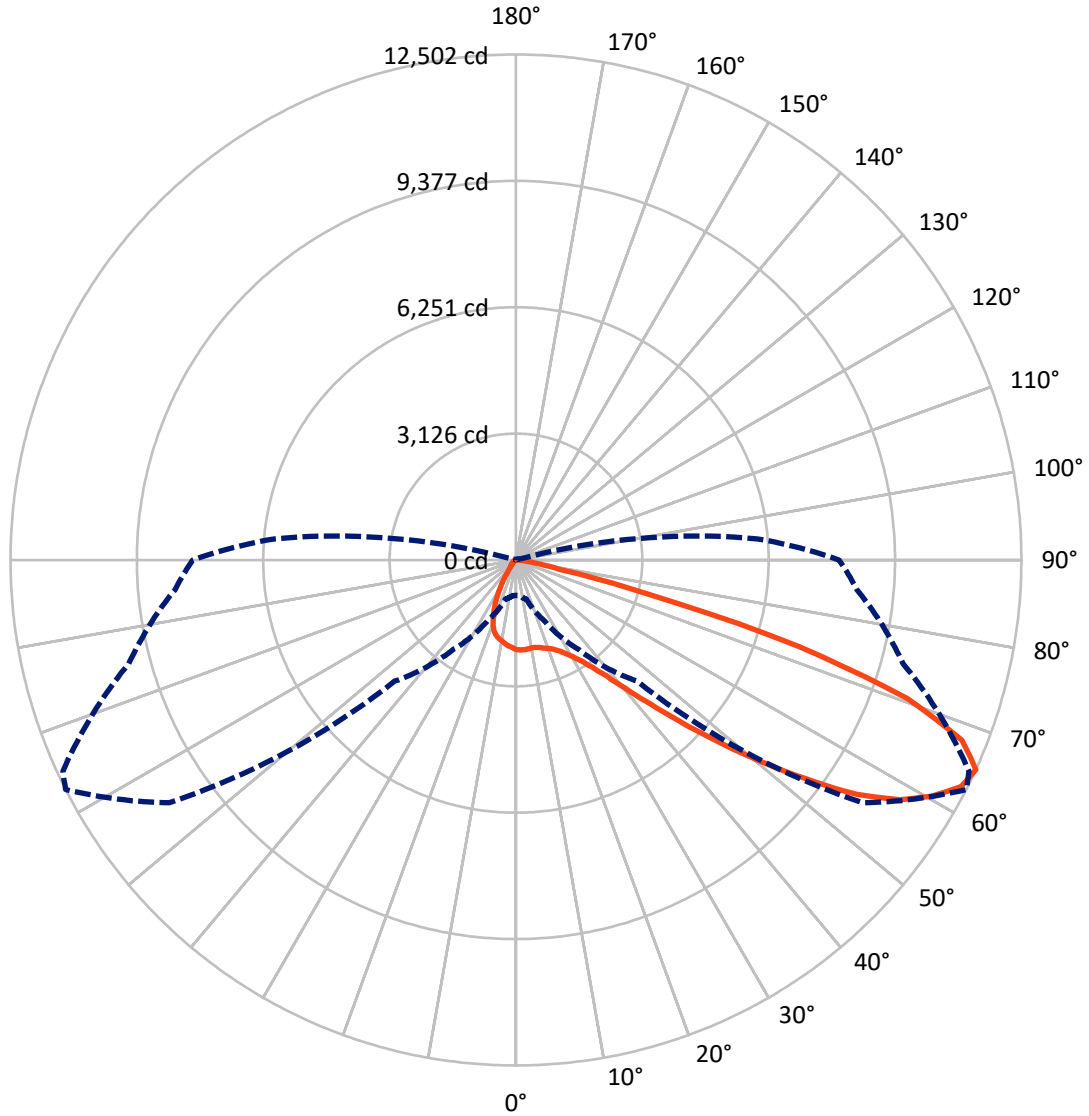
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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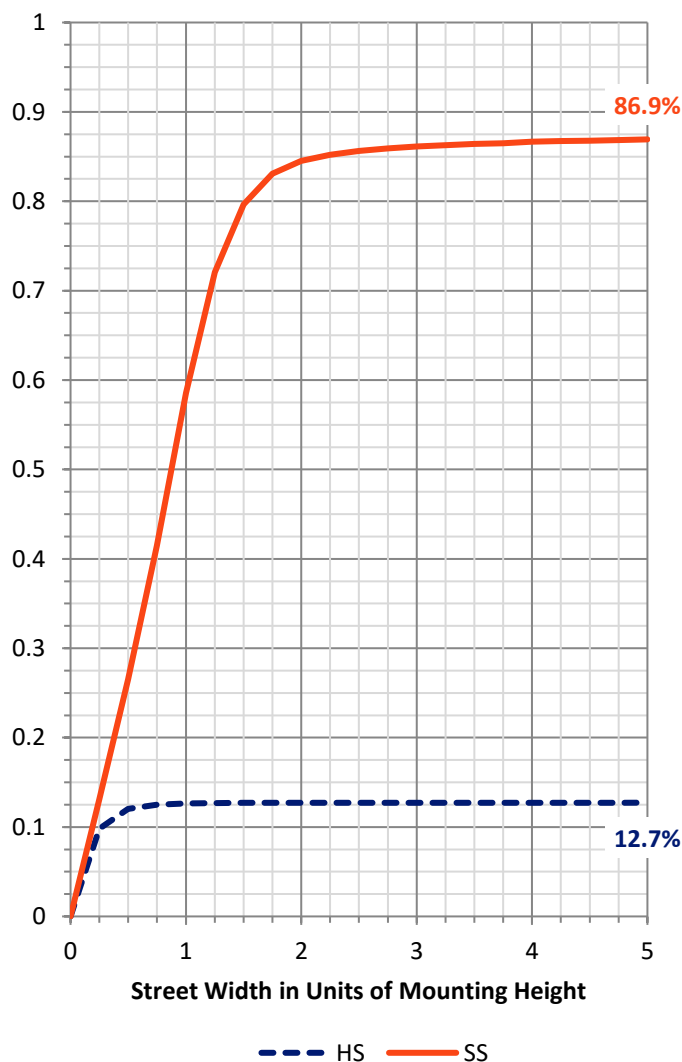
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1853.6	0.0	1853.6
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	12549.4	0.0	12549.4
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	14403.0	0.0	14403.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.5	1.4
10°-20°	499.4	3.5
20°-30°	740.3	5.1
30°-40°	1374.5	9.5
40°-50°	2911.8	20.2
50°-60°	4026.3	28.0
60°-70°	3223.2	22.4
70°-80°	1339.1	9.3
80°-90°	86.0	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°	14403.0	100.0
0°-180°	14403.0	100.0

**Coefficient of Utilization**

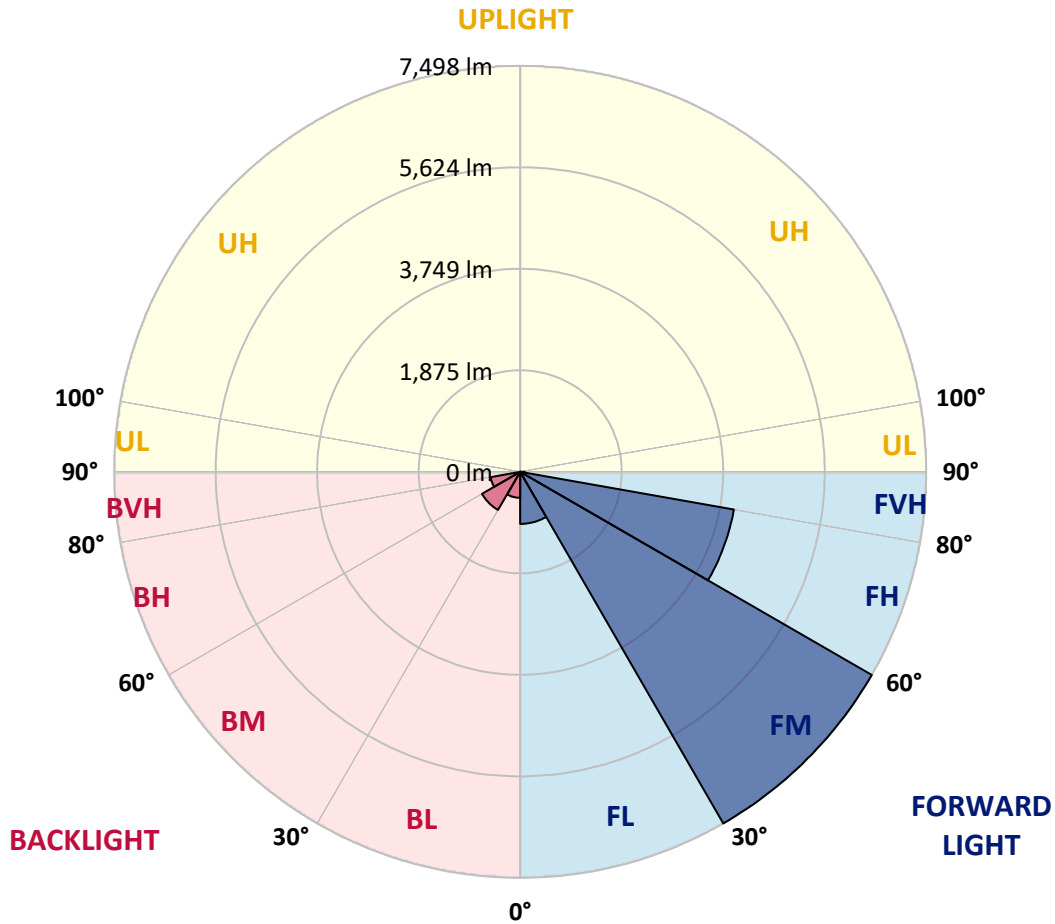


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	961.8	6.7			
FM (30°-60°)	7498.3	52.1			
FH (60°-80°)	4007.2	27.8			G2/5000
FVH (80°-90°)	82.1	0.6			G1/100
BL (0°-30°)	480.4	3.3	B1/500		
BM (30°-60°)	814.3	5.7	B1/1000		
BH (60°-80°)	555.0	3.9	B2/1000		G2/1000
BVH (80°-90°)	3.9	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°	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8
2.5°	2256.9	2251.4	2246.0	2243.3	2243.3	2240.5	2229.7	2226.9	2221.5	2216.1	2210.6
5°	2235.1	2226.9	2224.2	2226.9	2229.7	2235.1	2229.7	2229.7	2224.2	2218.8	2207.9
7.5°	2180.7	2175.3	2178.0	2186.2	2188.9	2207.9	2210.6	2218.8	2218.8	2213.4	2205.2
10°	2115.5	2112.7	2112.7	2126.3	2139.9	2167.1	2186.2	2207.9	2210.6	2210.6	2197.0
12.5°	2066.5	2063.8	2072.0	2088.3	2115.5	2150.8	2183.4	2216.1	2221.5	2224.2	2202.5
15°	2036.6	2036.6	2047.5	2080.1	2118.2	2167.1	2205.2	2248.7	2254.1	2251.4	2221.5
17.5°	2009.4	2012.1	2033.9	2088.3	2131.8	2197.0	2243.3	2292.2	2294.9	2292.2	2243.3
20°	1998.5	2004.0	2036.6	2107.3	2156.3	2229.7	2289.5	2338.4	2341.1	2330.3	2265.0
22.5°	2028.5	2031.2	2072.0	2148.1	2194.3	2275.9	2352.0	2398.3	2401.0	2384.7	2297.6
25°	2131.8	2131.8	2167.1	2232.4	2273.2	2354.7	2436.3	2490.7	2490.7	2471.7	2371.1
27.5°	2373.8	2352.0	2343.9	2362.9	2376.5	2463.5	2550.5	2618.5	2615.8	2588.6	2466.2
30°	2841.5	2787.1	2700.1	2602.2	2553.2	2613.1	2694.6	2781.6	2778.9	2735.4	2583.1
32.5°	3627.3	3548.4	3341.8	3083.5	2874.1	2806.1	2882.3	2977.4	2980.1	2928.5	2770.8
35°	4728.5	4603.4	4233.6	3874.7	3396.2	3137.8	3159.6	3262.9	3295.6	3268.4	3086.2
37.5°	5789.0	5674.8	5321.3	4823.7	4173.8	3646.3	3553.9	3643.6	3681.7	3681.7	3488.6
40°	6857.6	6724.3	6411.7	5911.3	5226.1	4440.3	4108.6	4182.0	4222.8	4230.9	3978.1
42.5°	7714.1	7627.1	7387.8	6999.0	6357.3	5832.5	4908.0	4867.2	4905.3	4875.4	4546.3
45°	8306.9	8238.9	8073.0	7926.2	7613.5	7349.7	5976.6	5702.0	5726.4	5623.1	5185.3
47.5°	8429.2	8353.1	8317.7	8521.7	8744.6	8809.9	7289.9	6694.4	6670.0	6441.6	5848.8
50°	7896.3	7904.4	8035.0	8616.8	9546.8	10134.1	8812.6	7814.7	7725.0	7216.5	6466.0
52.5°	6746.1	6876.6	7205.6	8149.2	9791.5	11096.7	10335.3	9003.0	8864.3	7969.7	6928.3
55°	5277.8	5446.4	5987.5	7072.4	9280.3	11526.3	11618.7	10237.4	9922.0	8535.3	7287.2
57.5°	3923.7	3975.3	4606.2	5595.9	8070.3	11104.8	12276.8	11189.1	10784.0	8986.6	7643.4
60°	2444.5	2477.1	3143.3	4260.8	6112.5	9546.8	12276.8	11844.4	11458.3	9391.8	7969.7
62.5°	1520.0	1530.9	1781.0	2920.3	4154.8	7080.6	11768.3	12352.9	12042.9	9682.7	8249.8
65°	875.6	886.4	1003.3	1650.5	2702.8	4239.1	10468.6	12502.4	12363.8	9913.9	8467.3
67.5°	639.0	644.4	690.7	927.2	1767.4	2178.0	7863.7	11901.5	12075.5	10028.1	8461.9
70°	554.7	562.9	622.7	723.3	1275.3	1337.8	4002.5	10278.2	10764.9	9864.9	8209.0
72.5°	426.9	437.8	527.5	679.8	935.4	962.6	1449.3	7314.4	8051.3	8845.2	7515.6
75°	293.7	304.5	394.3	560.1	772.2	720.6	796.7	3366.3	4247.2	5933.1	5721.0
77.5°	187.6	190.3	247.4	407.9	666.2	511.2	546.5	1098.5	1541.7	2683.8	2700.1
80°	125.1	127.8	152.3	263.8	456.8	473.1	337.2	508.5	557.4	783.1	543.8
82.5°	76.1	76.1	103.3	165.9	277.3	391.6	220.2	266.5	285.5	301.8	141.4
85°	29.9	29.9	62.5	108.8	174.0	182.2	138.7	155.0	163.1	176.7	65.3
87.5°	8.2	8.2	35.3	59.8	76.1	84.3	84.3	76.1	81.6	100.6	32.6
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°	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8	2218.8
2.5°	2207.9	2199.8	2188.9	2178.0	2167.1	2159.0	2150.8	2150.8	2145.4	2137.2	2131.8
5°	2202.5	2188.9	2164.4	2145.4	2115.5	2093.7	2077.4	2063.8	2055.6	2036.6	2033.9
7.5°	2194.3	2178.0	2142.7	2104.6	2055.6	2017.6	1979.5	1952.3	1925.1	1903.4	1897.9
10°	2180.7	2161.7	2110.0	2055.6	1987.7	1917.0	1827.2	1723.9	1628.7	1574.4	1558.0
12.5°	2180.7	2156.3	2088.3	2014.9	1917.0	1742.9	1514.5	1286.1	1109.4	1030.5	1008.8
15°	2194.3	2161.7	2072.0	1971.4	1789.2	1435.7	1065.9	764.1	571.0	511.2	497.6
17.5°	2207.9	2161.7	2047.5	1911.5	1555.3	1041.4	606.4	402.4	339.9	326.3	326.3
20°	2213.4	2156.3	2014.9	1800.0	1242.6	647.1	361.6	301.8	277.3	269.2	269.2
22.5°	2235.1	2159.0	1990.4	1639.6	902.7	380.7	285.5	252.9	228.4	220.2	220.2
25°	2289.5	2191.6	1995.8	1435.7	579.2	288.2	242.0	209.4	184.9	174.0	174.0
27.5°	2376.5	2265.0	2025.7	1199.1	364.4	247.4	203.9	168.6	149.6	138.7	138.7
30°	2474.4	2346.6	2039.3	927.2	271.9	209.4	165.9	133.2	119.6	111.5	108.8
32.5°	2645.7	2488.0	2028.5	636.3	223.0	176.7	133.2	106.0	95.2	92.4	92.4
35°	2920.3	2735.4	2006.7	399.7	184.9	141.4	106.0	87.0	78.9	76.1	73.4
37.5°	3292.8	3097.1	1941.4	263.8	152.3	111.5	87.0	73.4	65.3	62.5	62.5
40°	3746.9	3510.4	1816.4	201.2	130.5	89.7	73.4	62.5	57.1	54.4	54.4
42.5°	4266.3	3969.9	1617.9	174.0	108.8	76.1	62.5	51.7	48.9	46.2	46.2
45°	4834.6	4451.2	1343.2	155.0	92.4	62.5	51.7	46.2	40.8	40.8	38.1
47.5°	5438.2	4935.2	1033.3	136.0	78.9	54.4	46.2	38.1	35.3	32.6	32.6
50°	6020.1	5367.5	726.0	116.9	65.3	46.2	38.1	32.6	29.9	27.2	27.2
52.5°	6430.7	5628.5	513.9	100.6	54.4	40.8	29.9	24.5	21.8	21.8	21.8
55°	6759.7	5791.7	358.9	84.3	46.2	35.3	24.5	19.0	19.0	16.3	16.3
57.5°	7069.7	5897.7	263.8	70.7	38.1	27.2	19.0	13.6	13.6	10.9	10.9
60°	7390.5	5954.8	201.2	57.1	32.6	21.8	13.6	10.9	8.2	8.2	8.2
62.5°	7714.1	5990.2	155.0	46.2	27.2	16.3	10.9	8.2	5.4	2.7	2.7
65°	7996.9	6001.1	119.6	35.3	21.8	10.9	8.2	2.7	0.0	0.0	0.0
67.5°	8081.2	5876.0	92.4	27.2	16.3	8.2	5.4	0.0	0.0	0.0	0.0
70°	7852.8	5544.3	70.7	21.8	13.6	5.4	2.7	0.0	0.0	0.0	0.0
72.5°	6969.1	4649.7	54.4	13.6	10.9	5.4	2.7	0.0	0.0	0.0	0.0
75°	4986.8	2479.8	38.1	10.9	8.2	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	2294.9	959.8	27.2	8.2	5.4	2.7	0.0	0.0	0.0	0.0	0.0
80°	448.7	239.3	10.9	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	103.3	40.8	5.4	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	35.3	13.6	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.6	5.4	2.7	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)