

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: P237430

Luminaire Tested: **ARCH-L-AF72-170-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237430  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-170-D-U-T4W-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15325.8 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G4

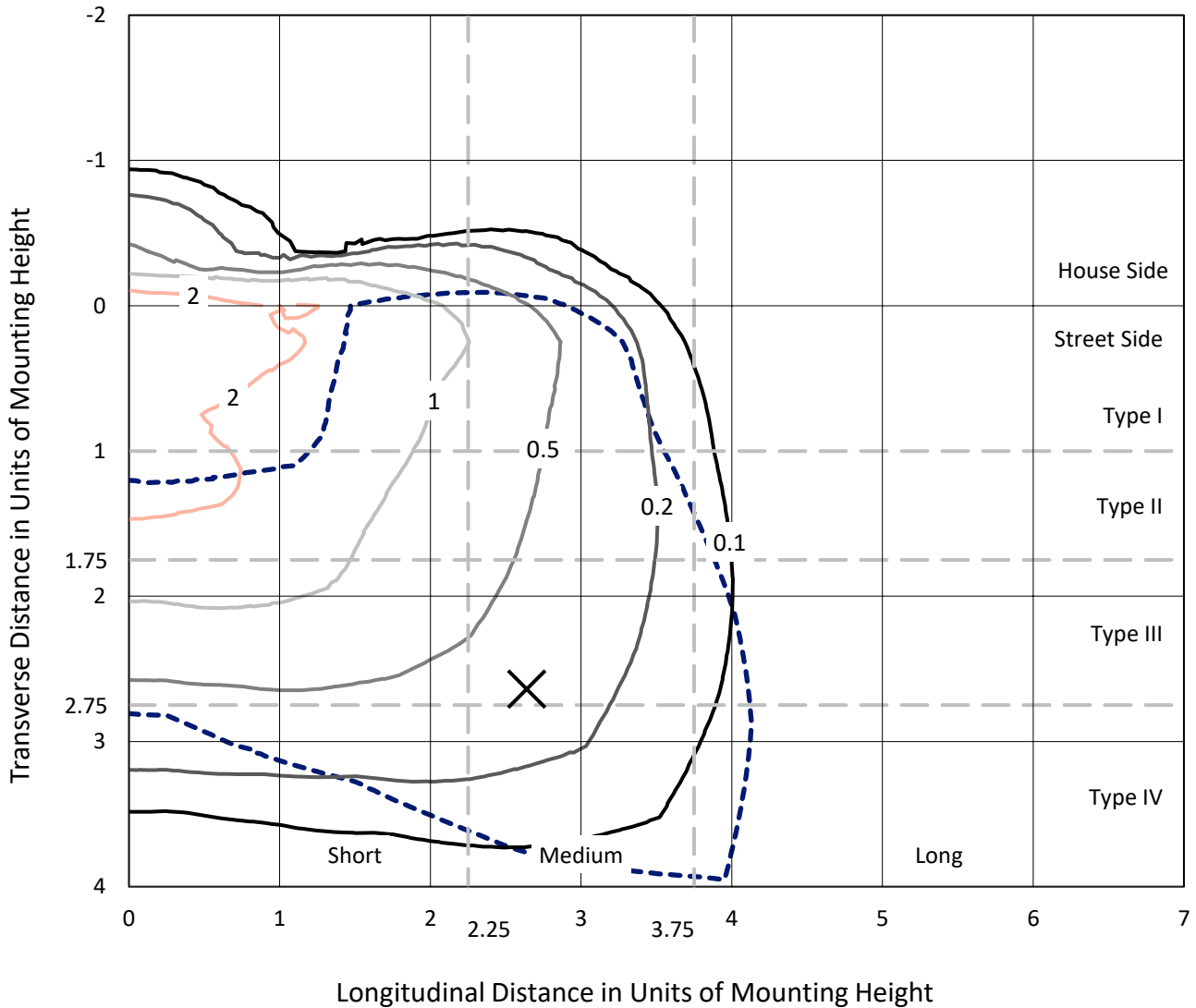
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

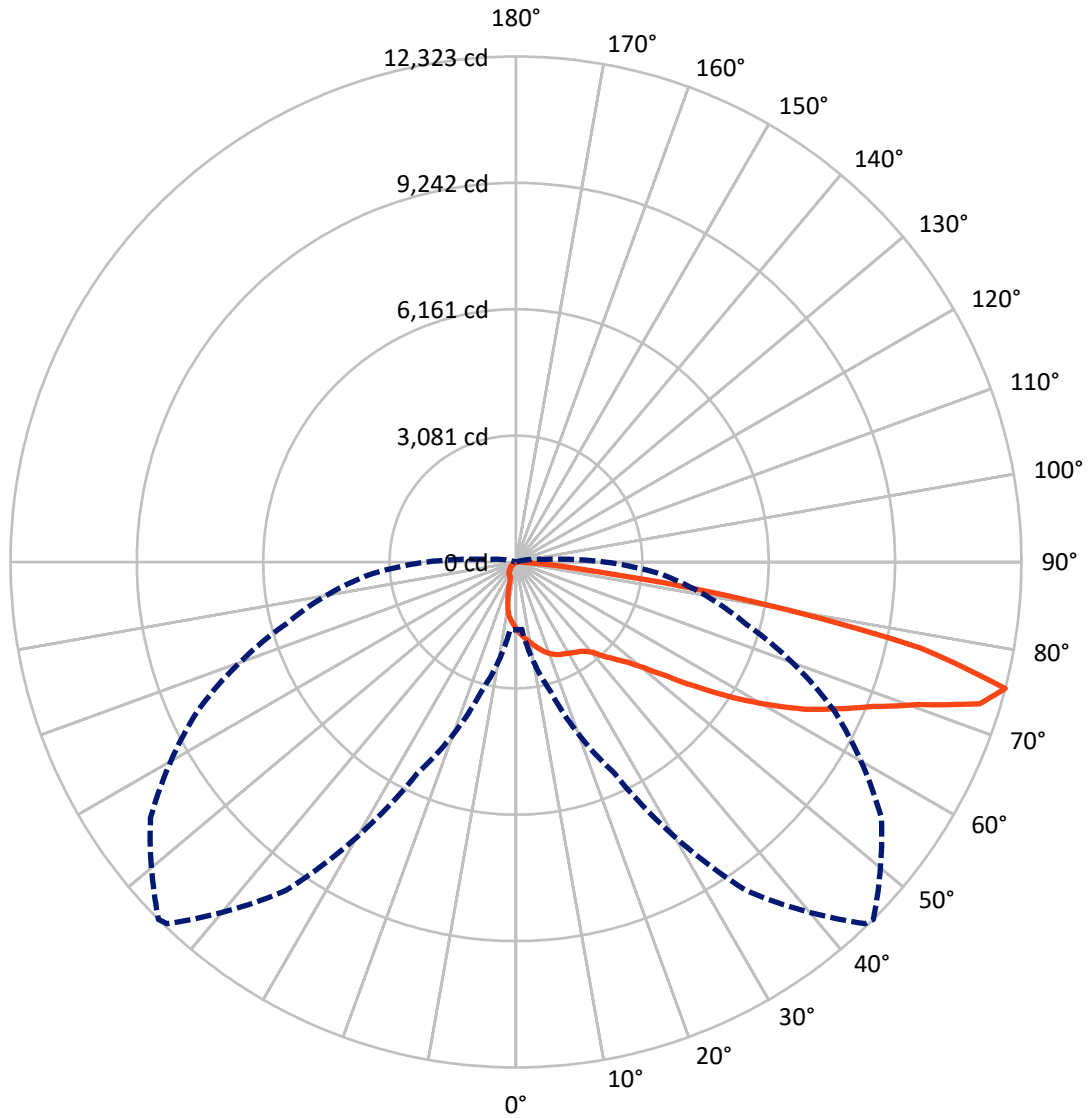
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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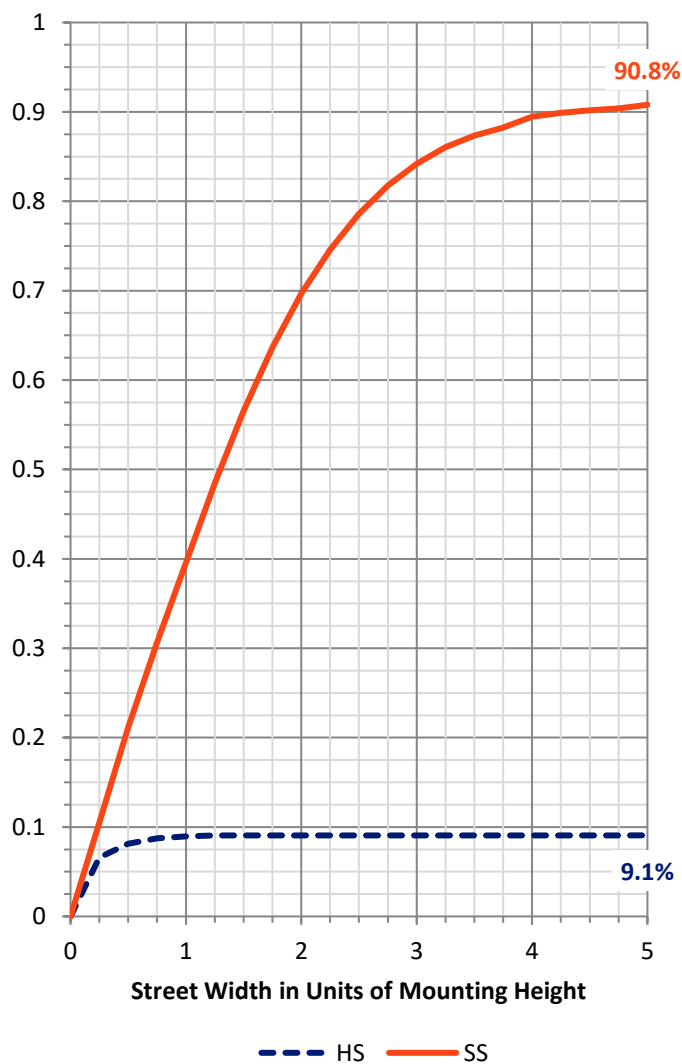
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1401.8	0.0	1401.8
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	13924.0	0.0	13924.0
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	15325.8	0.0	15325.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.7	1.0
10°-20°	438.3	2.9
20°-30°	725.8	4.7
30°-40°	1050.5	6.9
40°-50°	1720.1	11.2
50°-60°	3064.8	20.0
60°-70°	4505.7	29.4
70°-80°	3399.1	22.2
80°-90°	266.7	1.7
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°	15325.8	100.0
0°-180°	15325.8	100.0

**Coefficient of Utilization**



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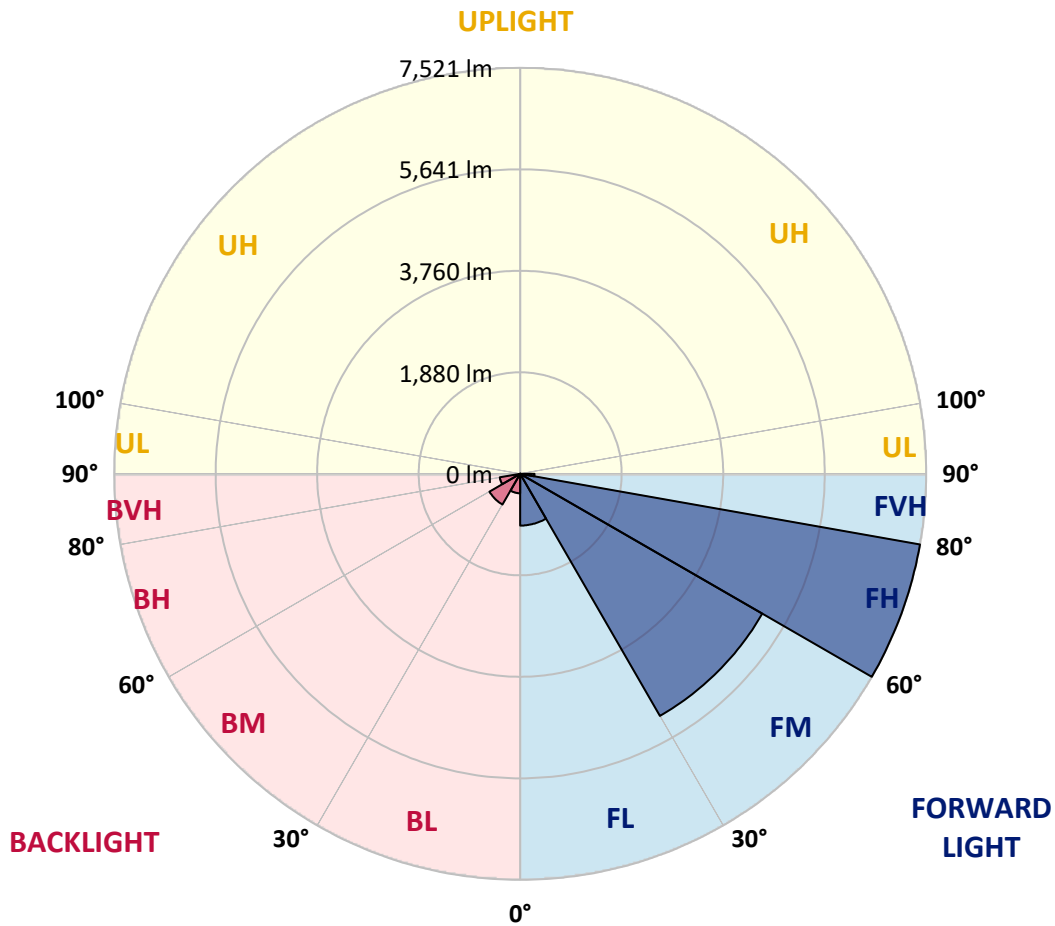
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	958.6	6.3			
FM (30°-60°)	5178.5	33.8			
FH (60°-80°)	7520.9	49.1			G4/12000
FVH (80°-90°)	265.9	1.7			G3/500
BL (0°-30°)	360.2	2.4	B1/500		
BM (30°-60°)	656.9	4.3	B1/1000		
BH (60°-80°)	384.0	2.5	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-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2
2.5°	1780.6	1780.6	1777.0	1773.4	1755.2	1737.1	1733.5	1722.6	1689.9	1668.2	1646.4
5°	1929.3	1932.9	1925.7	1907.5	1867.7	1827.8	1824.1	1795.1	1733.5	1689.9	1642.8
7.5°	2070.7	2078.0	2059.9	2027.2	1980.1	1922.1	1918.4	1864.1	1784.2	1722.6	1653.6
10°	2190.4	2190.4	2165.0	2125.1	2074.4	2012.7	2005.5	1943.8	1853.1	1777.0	1686.3
12.5°	2321.0	2317.3	2281.2	2226.7	2168.7	2110.7	2106.9	2030.8	1943.8	1845.9	1733.5
15°	2440.7	2433.4	2386.2	2335.4	2273.8	2212.2	2208.5	2132.4	2041.7	1925.7	1802.3
17.5°	2505.9	2502.2	2458.8	2408.0	2357.3	2310.1	2306.5	2226.7	2128.8	2009.1	1871.3
20°	2516.8	2520.4	2484.1	2440.7	2411.6	2386.2	2386.2	2313.7	2208.5	2081.6	1943.8
22.5°	2520.4	2531.3	2505.9	2447.9	2440.7	2444.2	2451.6	2393.6	2284.7	2165.0	2019.9
25°	2545.8	2560.3	2542.1	2473.3	2466.0	2491.4	2498.6	2473.3	2375.4	2255.6	2106.9
27.5°	2596.5	2611.1	2596.5	2509.5	2498.6	2524.0	2531.3	2545.8	2473.3	2342.7	2197.6
30°	2698.1	2701.8	2669.1	2560.3	2538.5	2571.2	2582.1	2622.0	2564.0	2426.1	2284.7
32.5°	2875.8	2839.5	2741.7	2596.5	2578.4	2614.7	2625.6	2669.1	2647.4	2505.9	2375.4
35°	3238.5	3049.9	2825.0	2647.4	2629.3	2665.5	2680.0	2741.7	2752.5	2618.3	2487.8
37.5°	3234.8	3064.4	3020.9	2745.2	2719.9	2745.2	2763.3	2839.5	2883.1	2767.0	2650.9
40°	3463.3	3390.8	3390.8	2930.3	2846.8	2883.1	2901.2	2977.4	3053.5	2962.9	2843.2
42.5°	4181.4	4134.3	4083.4	3285.7	3024.6	3126.0	3137.0	3184.1	3274.7	3245.8	3104.3
45°	4982.8	4939.3	4743.5	3887.6	3329.1	3347.2	3372.7	3448.8	3579.4	3633.8	3466.9
47.5°	5610.3	5566.6	5399.8	4612.9	3804.2	3644.7	3644.7	3793.3	3996.3	4134.3	3974.7
50°	6114.2	6063.5	5961.9	5385.4	4583.9	4072.5	4050.8	4224.8	4525.8	4739.8	4631.1
52.5°	6603.8	6455.1	6393.6	6183.2	5465.1	4692.6	4634.7	4757.9	5175.1	5439.8	5349.2
55°	6930.2	6908.5	6843.2	6915.8	6389.9	5447.0	5396.2	5421.7	5943.8	6121.6	6009.2
57.5°	7234.8	7231.3	7376.3	7713.6	7398.1	6310.2	6230.3	6190.4	6687.2	6643.7	6741.7
60°	7612.0	7546.7	7884.0	8366.3	8322.9	7151.4	7060.8	6981.0	7256.7	7133.3	7619.3
62.5°	7630.1	7612.0	8297.4	8990.1	9240.3	8007.3	7902.1	7615.7	7753.5	7612.0	8457.0
65°	6937.5	7028.1	8471.5	9320.2	10009.1	8758.0	8631.1	8185.0	8195.9	8101.6	9443.4
67.5°	6781.5	6828.7	7992.8	9675.5	10563.9	9515.9	9396.3	8841.4	8710.8	8718.2	10027.3
70°	6393.6	6466.1	7398.1	9650.1	11002.9	10527.6	10408.0	9806.0	9490.6	9138.8	9577.5
72.5°	4884.9	5008.2	6233.9	8460.6	10883.1	11851.4	11818.8	11028.2	9802.4	8391.7	7245.7
75°	1653.6	1650.1	3274.7	5682.7	9777.1	12257.6	12322.8	10875.8	8551.2	5787.9	3597.5
77.5°	355.4	359.0	674.5	2302.8	6495.0	9842.3	10092.5	8203.1	5516.0	2578.4	823.3
80°	174.0	177.6	279.2	609.2	2596.5	5519.6	5911.2	4217.6	2038.1	514.9	137.7
82.5°	87.1	90.6	145.1	322.8	961.1	1962.0	2096.1	1552.1	583.9	290.1	69.0
85°	32.7	32.7	72.5	192.2	438.7	460.5	565.8	449.7	351.9	235.7	18.1
87.5°	7.2	7.2	39.9	94.3	195.8	145.1	145.1	137.7	213.9	159.5	7.2
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°	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2	1639.2
2.5°	1635.5	1621.1	1595.6	1570.3	1552.1	1530.4	1519.5	1508.7	1505.0	1501.3	1508.7
5°	1617.4	1595.6	1548.5	1508.7	1472.4	1443.4	1421.6	1399.8	1388.9	1381.7	1385.3
7.5°	1617.4	1584.8	1515.9	1454.2	1396.3	1334.6	1272.9	1225.8	1189.5	1167.8	1171.4
10°	1635.5	1592.0	1501.3	1417.9	1309.2	1178.6	1044.4	942.9	874.0	834.0	834.0
12.5°	1675.5	1617.4	1505.0	1374.5	1189.5	961.1	757.9	634.7	583.9	554.8	558.6
15°	1729.8	1661.0	1523.2	1316.5	1022.6	714.4	529.5	449.7	449.7	456.9	460.5
17.5°	1791.6	1715.4	1537.6	1229.3	808.7	511.4	417.1	409.8	420.6	438.7	438.7
20°	1853.1	1769.8	1544.9	1091.6	605.7	406.1	395.3	395.3	402.5	420.6	424.3
22.5°	1929.3	1838.7	1537.6	921.2	453.3	384.4	380.8	380.8	380.8	402.5	402.5
25°	2009.1	1918.4	1508.7	739.8	384.4	370.0	366.2	362.6	362.6	380.8	384.4
27.5°	2099.8	2001.8	1439.7	565.8	362.6	355.4	351.9	344.5	344.5	359.0	359.0
30°	2190.4	2096.1	1334.6	428.0	344.5	340.9	333.7	326.3	319.1	333.7	333.7
32.5°	2288.3	2194.0	1196.7	340.9	319.1	319.1	315.5	304.7	297.4	304.7	308.2
35°	2418.9	2306.5	1040.8	297.4	286.5	286.5	286.5	282.9	268.3	275.7	275.7
37.5°	2592.9	2462.3	859.5	275.7	261.1	253.8	253.8	253.8	243.0	246.6	246.6
40°	2814.2	2643.7	685.4	257.6	243.0	224.8	217.7	221.2	213.9	213.9	210.4
42.5°	3115.2	2839.5	514.9	243.0	228.5	203.1	188.6	184.9	177.6	174.0	174.0
45°	3546.7	3078.9	370.0	228.5	217.7	177.6	163.3	152.3	134.2	123.4	123.4
47.5°	4105.2	3350.9	275.7	213.9	206.7	155.9	137.7	116.1	90.6	83.4	83.4
50°	4786.9	3655.5	232.0	192.2	188.6	137.7	108.8	76.2	50.8	43.4	47.1
52.5°	5450.6	3942.0	206.7	170.5	166.8	119.6	79.8	39.9	21.8	21.8	21.8
55°	6009.2	4145.1	188.6	152.3	145.1	94.3	43.4	18.1	10.9	10.9	10.9
57.5°	6513.2	4261.1	170.5	134.2	116.1	65.2	18.1	7.2	7.2	3.6	3.6
60°	6973.8	4330.1	148.7	116.1	90.6	36.3	7.2	3.6	3.6	0.0	0.0
62.5°	7427.1	4380.9	127.0	94.3	69.0	14.5	3.6	3.6	0.0	0.0	0.0
65°	7771.6	4362.7	101.5	76.2	43.4	7.2	3.6	0.0	0.0	0.0	0.0
67.5°	7760.6	4116.2	76.2	58.0	21.8	3.6	0.0	0.0	0.0	0.0	0.0
70°	6941.1	3466.9	50.8	36.3	7.2	3.6	0.0	0.0	0.0	0.0	0.0
72.5°	4924.8	2223.0	32.7	21.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	2168.7	674.5	18.1	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	424.3	155.9	10.9	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	101.5	18.1	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.4	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.9	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.2	3.6	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)