

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: P399891

Luminaire Tested: **ARCH-L-PA3-200-827-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399891  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-200-827-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 860mA 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: 15377 lumens  
Efficiency: N/A  
Efficacy: 76.5 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

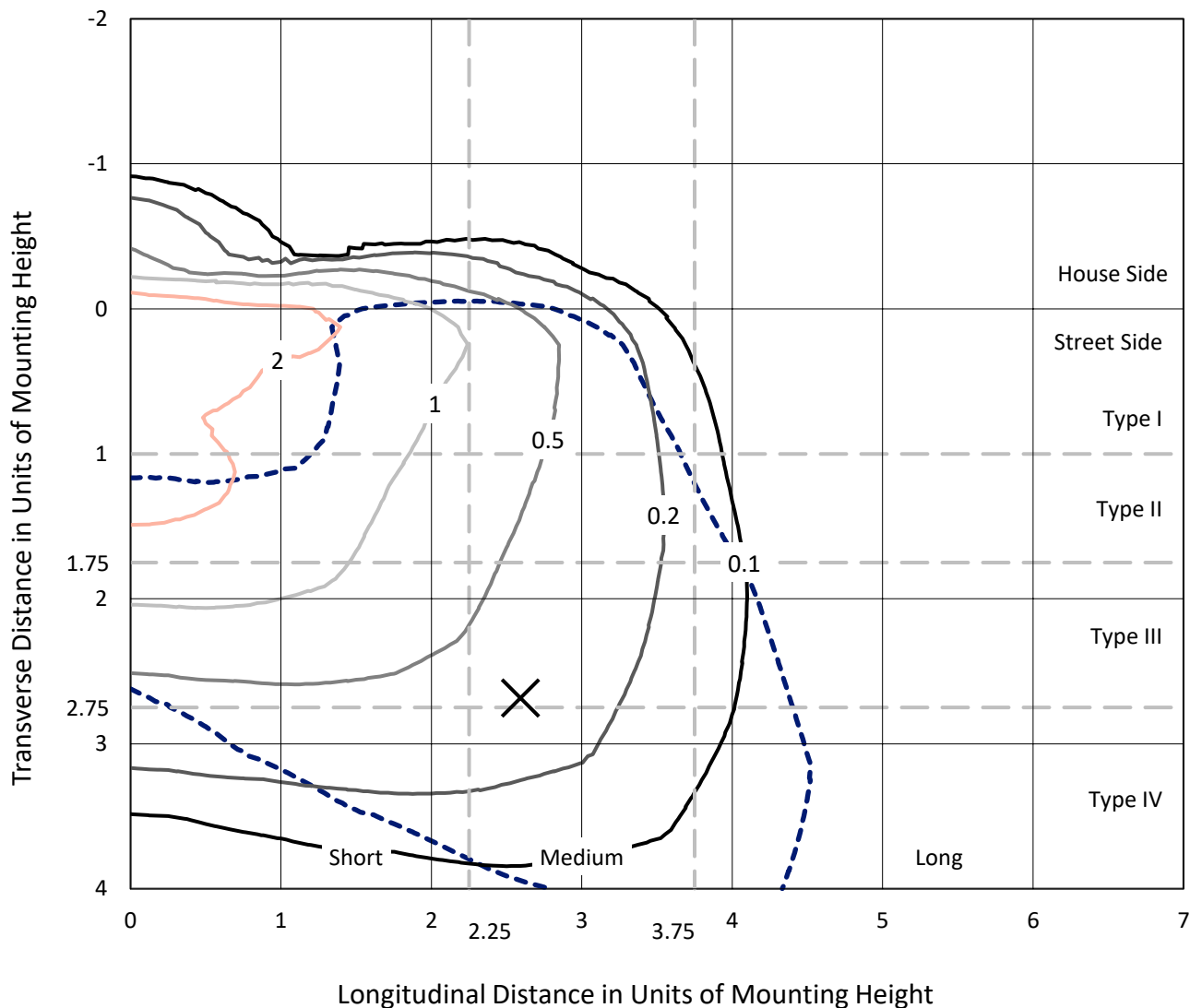
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

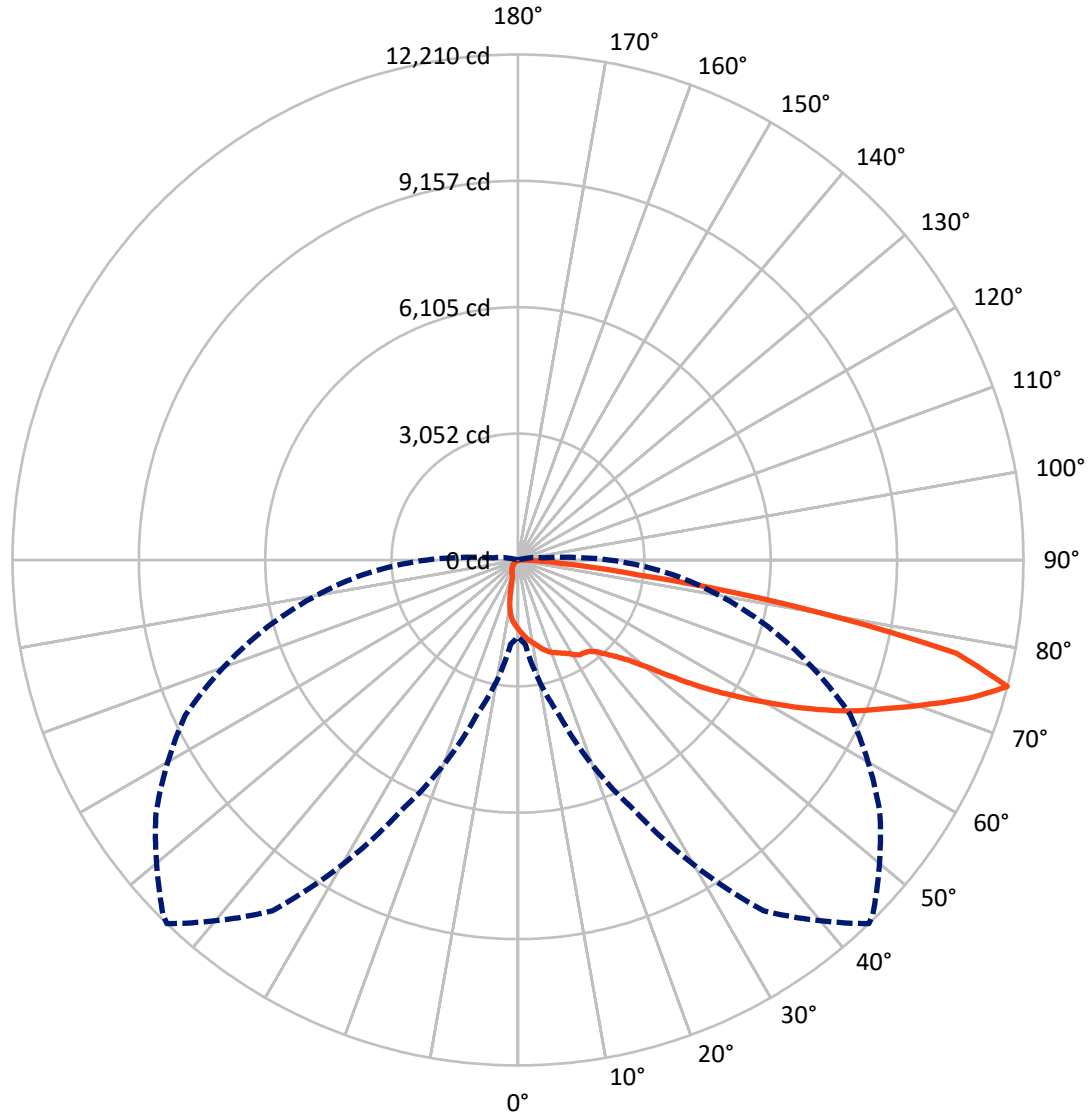
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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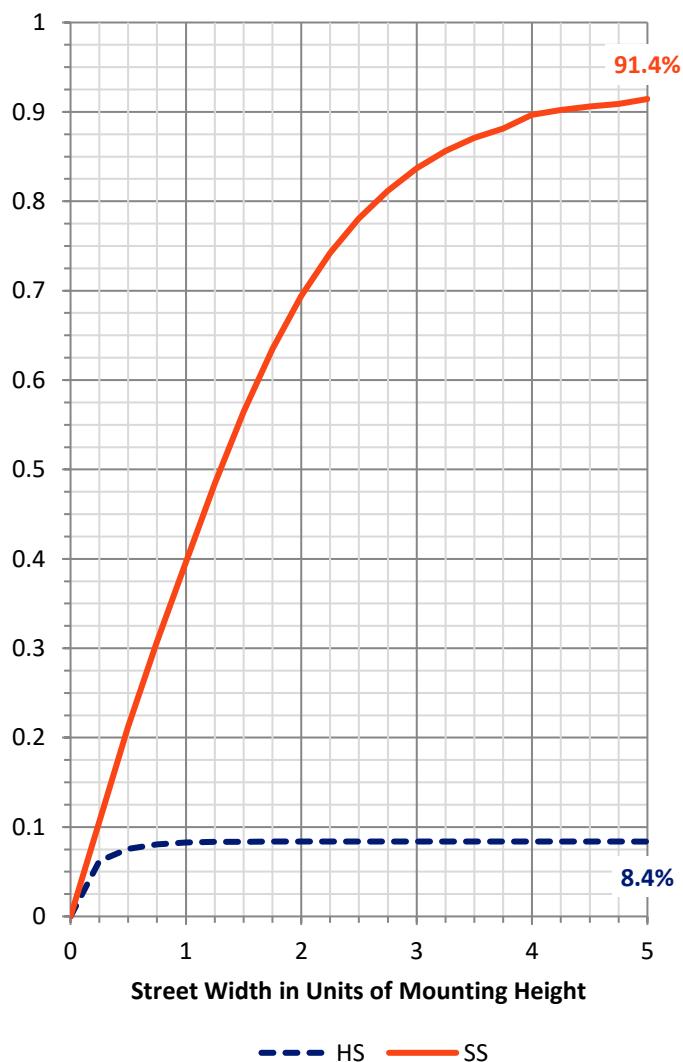
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1296.8	0.0	1296.8
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	14080.2	0.0	14080.2
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	15377.0	0.0	15377.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.8	1.0
10°-20°	442.3	2.9
20°-30°	729.9	4.7
30°-40°	1059.4	6.9
40°-50°	1722.1	11.2
50°-60°	3035.9	19.7
60°-70°	4363.2	28.4
70°-80°	3494.0	22.7
80°-90°	372.3	2.4
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°	15377.0	100.0
0°-180°	15377.0	100.0

**Coefficient of Utilization**



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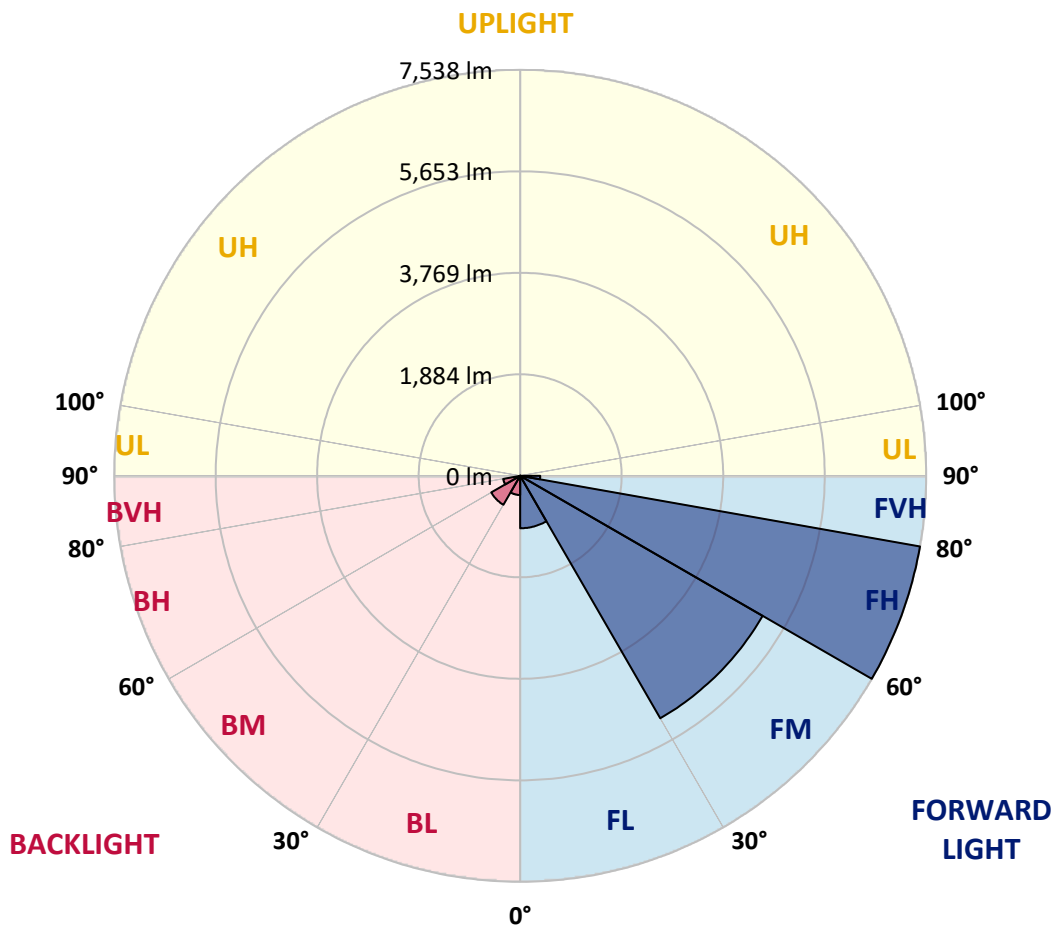
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	973.8	6.3			
FM (30°-60°)	5197.6	33.8			
FH (60°-80°)	7537.5	49.0			G4/12000
FVH (80°-90°)	371.3	2.4			G3/500
BL (0°-30°)	356.3	2.3	B1/500		
BM (30°-60°)	619.9	4.0	B1/1000		
BH (60°-80°)	319.7	2.1	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7
2.5°	1824.1	1821.2	1812.7	1798.5	1784.4	1770.2	1767.3	1744.6	1719.1	1699.3	1682.2
5°	1985.8	1982.9	1968.8	1937.6	1906.3	1869.5	1866.6	1812.7	1764.5	1710.6	1665.2
7.5°	2153.2	2147.5	2121.9	2073.7	2019.8	1963.1	1957.4	1878.0	1807.1	1736.1	1670.9
10°	2283.6	2278.0	2241.1	2184.4	2110.6	2039.7	2031.2	1948.9	1878.0	1787.2	1699.3
12.5°	2411.3	2400.0	2351.7	2289.3	2198.5	2130.5	2121.9	2036.8	1951.7	1858.1	1750.3
15°	2530.5	2516.3	2470.9	2391.4	2295.0	2229.7	2224.1	2133.3	2045.4	1937.6	1818.4
17.5°	2612.7	2607.0	2553.1	2465.2	2371.6	2317.7	2312.0	2218.4	2130.5	2017.0	1889.3
20°	2655.3	2655.3	2604.2	2507.8	2422.7	2385.8	2377.3	2289.3	2204.2	2096.4	1963.1
22.5°	2663.8	2672.3	2632.6	2527.6	2465.2	2434.0	2428.3	2351.7	2269.5	2170.2	2045.4
25°	2680.8	2680.8	2660.9	2547.5	2502.1	2493.6	2490.7	2422.7	2348.9	2249.6	2127.6
27.5°	2700.7	2700.7	2686.5	2575.8	2558.8	2556.0	2553.1	2521.9	2462.4	2346.1	2224.1
30°	2751.7	2754.6	2743.2	2632.6	2621.2	2652.4	2658.1	2641.1	2567.3	2422.7	2323.4
32.5°	2879.4	2853.8	2822.6	2672.3	2692.1	2731.9	2734.7	2700.7	2621.2	2504.9	2442.5
35°	3199.9	3049.6	2907.7	2706.3	2714.8	2754.6	2760.2	2757.4	2709.2	2609.9	2578.7
37.5°	3497.8	3285.0	3083.6	2785.8	2757.4	2799.9	2811.3	2859.5	2822.6	2754.6	2763.1
40°	3670.9	3588.6	3446.7	3004.2	2842.5	2907.7	2919.1	2992.9	2978.7	2950.3	3004.2
42.5°	4204.2	4209.9	4056.7	3330.4	2998.5	3103.5	3117.7	3177.2	3197.1	3211.3	3341.8
45°	4822.6	4842.5	4805.6	3917.7	3293.6	3327.6	3347.5	3426.9	3500.6	3591.4	3829.7
47.5°	5565.9	5548.8	5412.7	4635.4	3807.0	3617.0	3631.1	3784.3	3912.0	4110.6	4451.0
50°	6224.0	6266.6	6008.4	5304.9	4530.4	4073.7	4059.5	4209.9	4439.6	4717.6	5146.0
52.5°	6887.8	6825.4	6476.5	5968.7	5387.1	4694.9	4652.4	4734.7	5058.1	5387.1	5826.8
55°	7063.7	7069.4	6950.2	6694.9	6102.0	5449.5	5378.6	5373.0	5775.8	5999.9	6541.7
57.5°	7409.8	7424.0	7452.3	7503.4	7222.6	6204.1	6130.4	6051.0	6442.4	6572.9	7259.4
60°	7761.6	7778.6	7951.6	8226.8	8039.6	7018.3	6938.9	6751.6	6970.1	7146.0	8014.0
62.5°	7716.2	7835.3	8337.4	8884.9	8862.2	7911.9	7812.6	7361.6	7500.6	7653.8	8706.2
65°	6967.2	7094.9	8224.0	9066.5	9687.8	8794.2	8632.5	7991.3	7999.9	8184.2	9372.9
67.5°	6297.8	6436.8	7514.8	8989.9	10232.4	9585.6	9418.3	8624.0	8490.6	8797.0	9730.3
70°	5911.9	6051.0	6950.2	8751.6	10385.6	10462.2	10317.5	9347.3	9075.0	9355.9	9330.3
72.5°	4626.9	4845.3	6229.7	8297.7	10550.2	11401.2	11287.7	10263.6	9571.5	8771.5	7103.4
75°	1843.9	2045.4	3889.3	6677.9	10343.1	12209.7	12121.8	10675.0	8859.4	6263.7	3636.8
77.5°	556.0	595.7	1080.8	3302.1	7582.8	10825.3	10797.0	8975.7	6269.4	2907.7	992.9
80°	184.4	204.3	331.9	910.6	3460.9	6763.0	6890.7	5719.0	2848.2	666.7	201.4
82.5°	76.6	85.1	167.4	366.0	1225.5	2913.4	2870.9	2561.7	992.9	414.2	73.8
85°	19.9	25.5	76.6	209.9	448.2	1004.2	1055.3	859.6	561.7	343.3	22.7
87.5°	0.0	0.0	36.9	85.1	201.4	303.5	317.7	261.0	317.7	258.2	11.3
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°	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7	1673.7
2.5°	1668.1	1653.9	1628.3	1611.3	1588.6	1582.9	1571.6	1557.4	1554.6	1540.4	1543.2
5°	1639.7	1617.0	1571.6	1540.4	1503.5	1492.2	1472.3	1458.1	1446.8	1426.9	1429.8
7.5°	1634.0	1600.0	1537.6	1478.0	1418.4	1375.9	1316.3	1268.1	1228.3	1185.8	1194.3
10°	1653.9	1611.3	1523.4	1441.1	1333.3	1197.1	1041.1	939.0	887.9	836.9	842.5
12.5°	1693.6	1642.5	1529.0	1404.2	1185.8	953.2	737.6	598.6	561.7	539.0	541.8
15°	1753.2	1690.7	1546.1	1333.3	987.2	689.3	490.8	431.2	445.4	453.9	453.9
17.5°	1815.6	1744.6	1560.3	1205.7	763.1	482.3	400.0	394.3	414.2	434.0	434.0
20°	1892.2	1801.4	1563.1	1044.0	550.3	391.5	377.3	377.3	391.5	414.2	414.2
22.5°	1965.9	1863.8	1537.6	859.6	419.9	363.1	363.1	363.1	371.6	394.3	397.2
25°	2053.9	1940.4	1483.7	663.8	360.3	346.1	346.1	348.9	354.6	374.5	377.3
27.5°	2147.5	2019.8	1392.9	485.1	329.1	326.2	329.1	331.9	334.7	354.6	360.3
30°	2255.3	2107.8	1276.6	363.1	300.7	300.7	309.2	314.9	314.9	331.9	337.6
32.5°	2380.1	2224.1	1137.6	300.7	272.3	269.5	283.7	292.2	292.2	306.4	312.1
35°	2536.1	2343.2	970.2	266.7	249.6	244.0	249.6	263.8	269.5	280.8	283.7
37.5°	2743.2	2485.1	791.5	246.8	232.6	221.3	221.3	224.1	235.5	246.8	249.6
40°	3007.0	2641.1	615.6	232.6	215.6	204.3	195.7	192.9	190.1	198.6	204.3
42.5°	3338.9	2817.0	459.6	218.4	201.4	184.4	173.0	161.7	147.5	144.7	147.5
45°	3764.5	3032.6	340.4	207.1	192.9	167.4	147.5	127.7	102.1	93.6	96.5
47.5°	4266.6	3256.7	266.7	195.7	187.2	147.5	122.0	87.9	62.4	56.7	59.6
50°	4799.9	3472.3	226.9	181.6	175.9	127.7	87.9	53.9	36.9	36.9	39.7
52.5°	5253.8	3594.3	207.1	170.2	158.9	105.0	56.7	31.2	22.7	22.7	25.5
55°	5693.5	3659.5	192.9	158.9	136.2	73.8	31.2	19.9	14.2	14.2	14.2
57.5°	6147.4	3687.9	175.9	144.7	107.8	45.4	17.0	11.3	8.5	8.5	8.5
60°	6550.2	3634.0	150.4	119.1	70.9	22.7	8.5	8.5	5.7	2.8	2.8
62.5°	6887.8	3531.9	105.0	85.1	42.6	11.3	5.7	2.8	0.0	0.0	0.0
65°	7094.9	3367.3	68.1	56.7	25.5	8.5	2.8	0.0	0.0	0.0	0.0
67.5°	7035.3	3058.1	42.6	36.9	11.3	5.7	2.8	0.0	0.0	0.0	0.0
70°	6348.8	2507.8	31.2	22.7	8.5	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	4575.8	1696.4	22.7	14.2	5.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	2201.4	604.2	14.2	11.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	539.0	133.3	8.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	119.1	25.5	5.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.7	11.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.2	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	2.8	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)