

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: P399421

Luminaire Tested: **ARCH-L-PA3-140-730-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-730-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

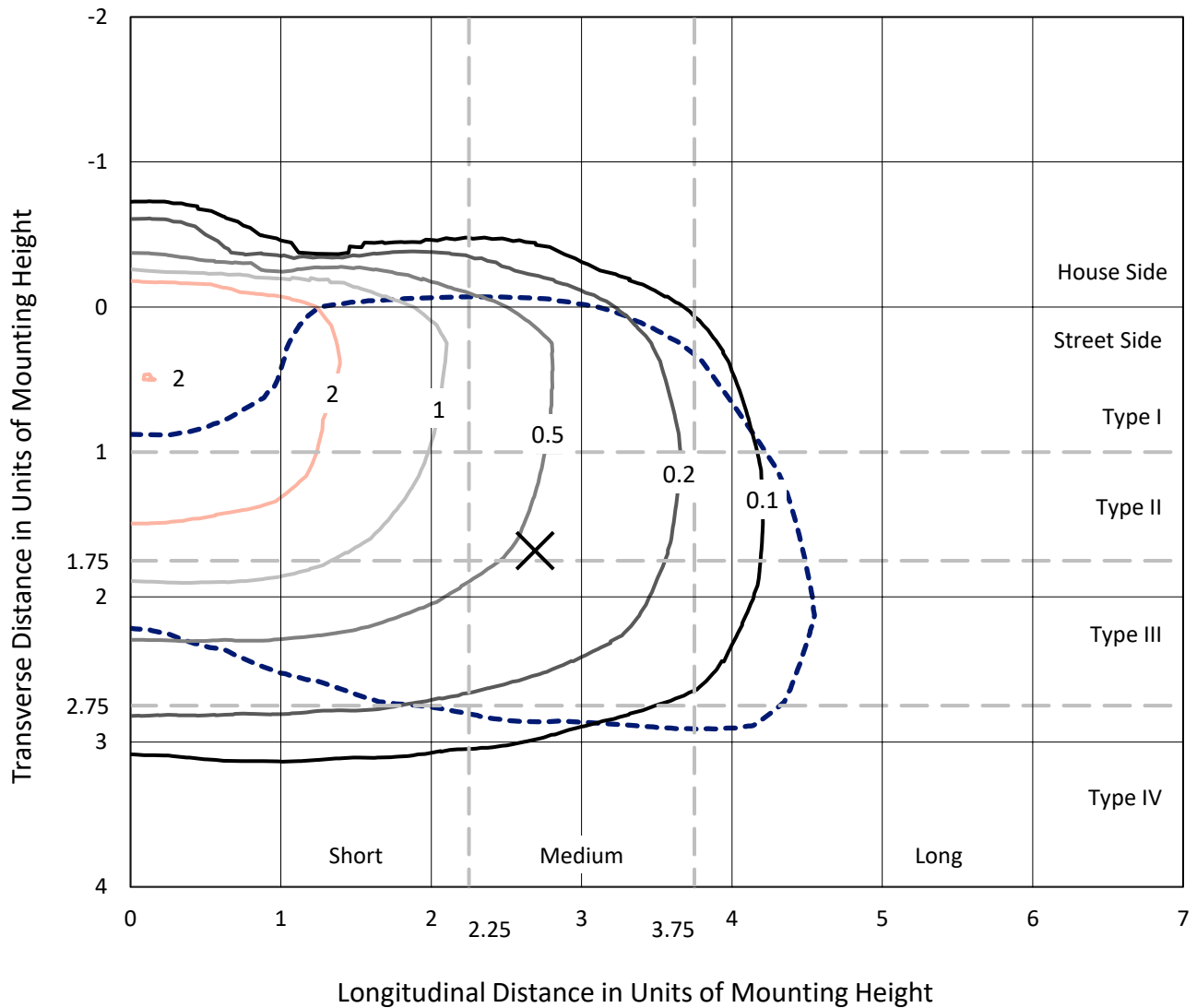
Lumens per Lamp: N/A  
Luminaire Lumens: 14947 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): 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

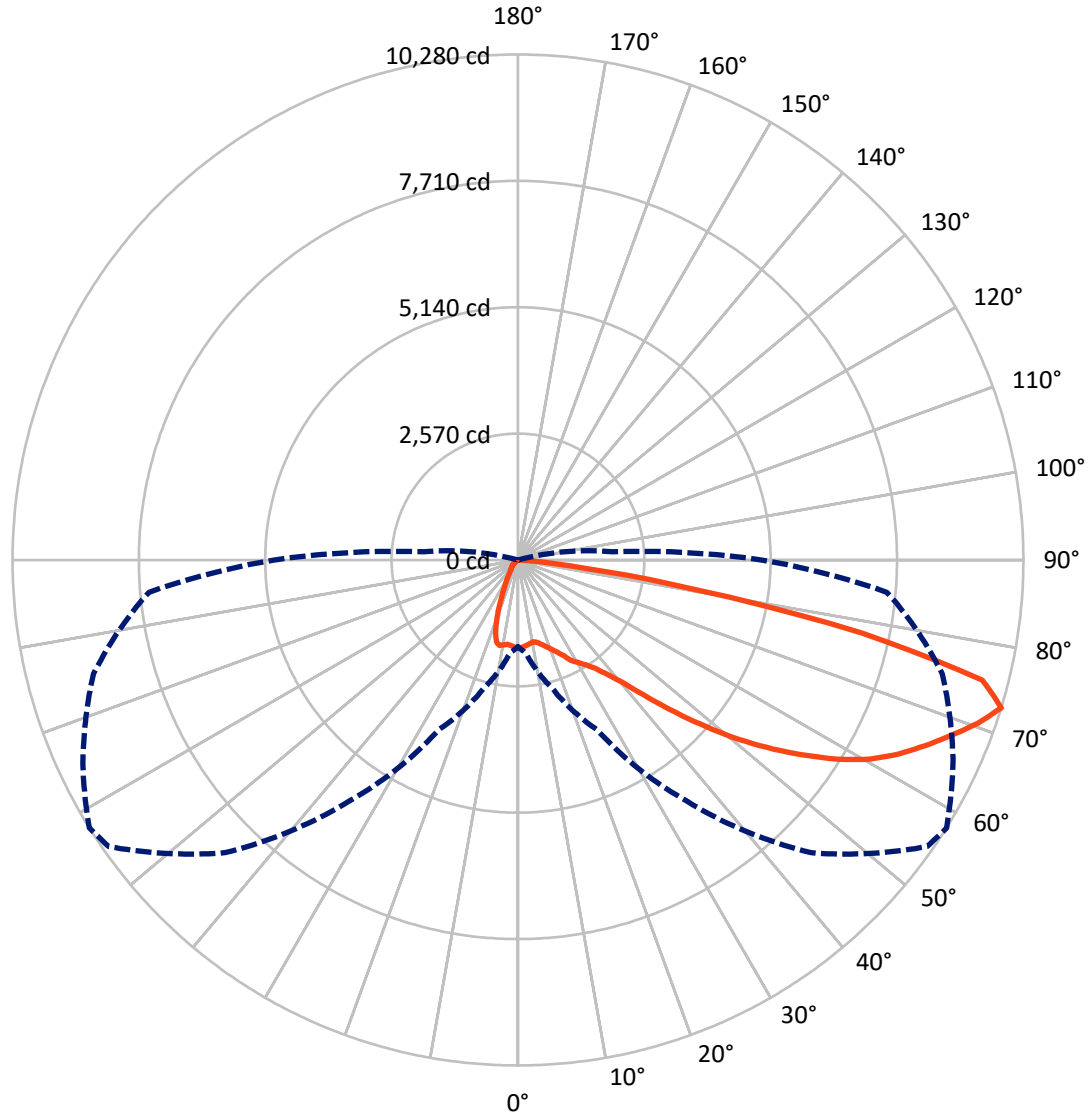
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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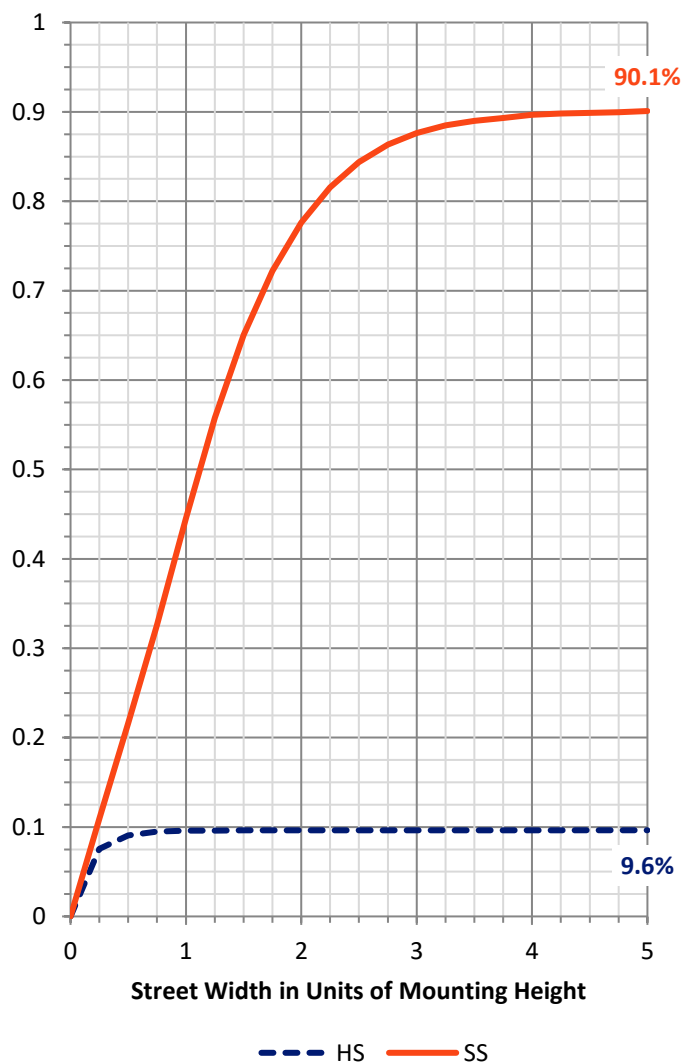
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1453.5	0.0	1453.5
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	13493.5	0.0	13493.5
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	14947.0	0.0	14947.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.6	1.1
10°-20°	428.7	2.9
20°-30°	673.5	4.5
30°-40°	1161.5	7.8
40°-50°	2209.8	14.8
50°-60°	3499.7	23.4
60°-70°	4083.7	27.3
70°-80°	2557.6	17.1
80°-90°	167.9	1.1
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°	14947.0	100.0
0°-180°	14947.0	100.0

**Coefficient of Utilization**

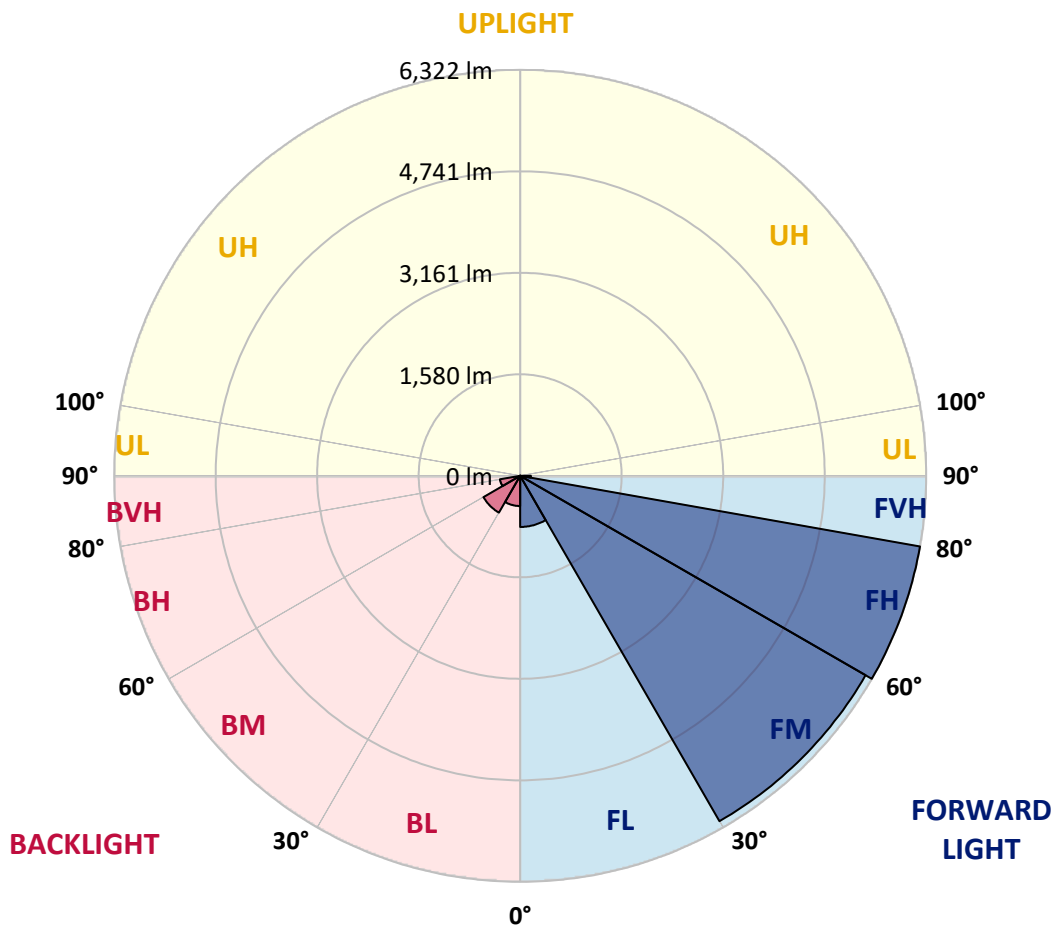


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	796.1	5.3			
FM (30°-60°)	6209.6	41.5			
FH (60°-80°)	6321.5	42.3			G3/7500
FVH (80°-90°)	166.3	1.1			G2/225
BL (0°-30°)	470.7	3.1	B1/500		
BM (30°-60°)	661.4	4.4	B1/1000		
BH (60°-80°)	319.8	2.1	B1/500		G1/500
BVH (80°-90°)	1.6	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-G3**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5
2.5°	1785.5	1777.5	1774.8	1772.2	1774.8	1777.5	1769.5	1777.5	1772.2	1774.8	1780.2
5°	1721.4	1713.4	1710.7	1713.4	1721.4	1734.7	1740.1	1748.1	1748.1	1756.1	1758.8
7.5°	1649.2	1643.9	1641.2	1646.5	1662.6	1692.0	1708.0	1718.7	1729.4	1745.4	1761.5
10°	1609.1	1606.4	1603.8	1611.8	1627.8	1654.6	1675.9	1692.0	1732.1	1777.5	1806.9
12.5°	1582.4	1582.4	1587.7	1603.8	1625.2	1646.5	1697.3	1718.7	1780.2	1849.7	1889.8
15°	1561.0	1561.0	1569.0	1598.4	1627.8	1678.6	1753.5	1777.5	1849.7	1935.2	1988.7
17.5°	1545.0	1550.3	1555.7	1585.1	1641.2	1726.7	1814.9	1849.7	1937.9	2031.4	2090.2
20°	1547.6	1553.0	1555.7	1585.1	1665.2	1782.9	1895.1	1935.2	2036.8	2135.7	2194.5
22.5°	1563.7	1571.7	1574.4	1614.5	1708.0	1841.7	1986.0	2031.4	2141.0	2245.3	2290.7
25°	1630.5	1635.8	1619.8	1654.6	1769.5	1932.5	2103.6	2151.7	2261.3	2357.5	2395.0
27.5°	1857.7	1863.0	1774.8	1734.7	1817.6	2007.4	2248.0	2314.8	2451.1	2515.2	2520.6
30°	2349.5	2354.9	2181.1	1991.3	1932.5	2071.5	2328.1	2421.7	2598.1	2670.3	2638.2
32.5°	2983.0	2977.7	2739.8	2459.1	2205.2	2183.8	2443.1	2542.0	2734.4	2803.9	2779.9
35°	3619.2	3627.2	3424.0	3001.7	2638.2	2395.0	2590.1	2705.0	2937.6	3036.5	2993.7
37.5°	4054.9	4108.3	4020.1	3563.0	3170.1	2785.2	2828.0	2950.9	3242.3	3375.9	3285.1
40°	4669.6	4656.3	4442.4	4105.6	3758.2	3362.6	3212.9	3271.7	3605.8	3784.9	3643.2
42.5°	5495.6	5468.9	5105.3	4776.6	4389.0	4065.6	3760.8	3750.1	4022.8	4231.3	4025.5
45°	6244.0	6203.9	5955.3	5637.2	5212.3	4840.7	4429.1	4335.5	4525.3	4701.7	4461.2
47.5°	6840.1	6773.3	6596.8	6428.4	6324.2	5746.8	5129.4	4987.7	5083.9	5214.9	4875.5
50°	7545.7	7361.3	7104.7	7003.1	7219.6	6773.3	5803.0	5666.7	5661.3	5736.1	5303.1
52.5°	7866.5	7532.4	7388.0	7473.6	7855.8	7727.5	6530.0	6334.9	6257.4	6265.4	5701.4
55°	7478.9	7441.5	7519.0	7786.3	8286.1	8211.3	7227.7	6987.1	6872.2	6727.8	6083.6
57.5°	7037.9	7152.8	7460.2	7970.7	8831.4	8716.5	7914.6	7642.0	7430.8	7099.4	6508.6
60°	6631.6	6749.2	7257.1	8013.5	9130.8	9203.0	8486.6	8227.3	7914.6	7478.9	6976.4
62.5°	6014.1	6105.0	6818.7	7952.0	8999.8	9486.3	8884.9	8689.8	8398.4	7839.8	7513.7
65°	5319.2	5378.0	6083.6	7460.2	8743.2	9454.2	9213.7	9104.1	8820.7	8216.6	8045.6
67.5°	4557.4	4626.9	5214.9	6575.5	8240.7	9304.5	9523.7	9513.0	9189.6	8633.6	8430.5
70°	3680.7	3686.0	4172.5	5452.8	7364.0	9005.2	9908.6	9932.7	9542.4	8946.4	8446.5
72.5°	1761.5	1905.8	2705.0	3806.3	5984.7	8417.1	10159.9	10280.2	9764.3	8935.7	7535.0
75°	403.6	417.0	788.5	1809.6	3509.6	6460.5	9531.7	9756.3	9224.3	7727.5	5308.5
77.5°	147.0	155.0	221.9	529.2	1349.8	3338.5	6821.4	7150.1	6818.7	4995.7	2509.9
80°	98.9	96.2	114.9	235.2	620.1	946.2	3488.2	3683.3	3362.6	1705.3	601.4
82.5°	50.8	53.5	80.2	131.0	417.0	328.8	1165.4	1267.0	1042.5	342.1	112.3
85°	24.1	24.1	45.4	82.9	176.4	114.9	259.3	312.7	280.7	149.7	37.4
87.5°	24.1	24.1	42.8	53.5	90.9	48.1	64.2	80.2	74.8	80.2	13.4
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°	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5	1793.5
2.5°	1780.2	1777.5	1774.8	1780.2	1777.5	1782.9	1782.9	1788.2	1788.2	1782.9	1780.2
5°	1756.1	1750.8	1745.4	1745.4	1742.8	1748.1	1764.1	1777.5	1780.2	1772.2	1769.5
7.5°	1758.8	1758.8	1753.5	1742.8	1724.1	1724.1	1724.1	1740.1	1748.1	1742.8	1740.1
10°	1806.9	1809.6	1796.2	1772.2	1740.1	1710.7	1654.6	1571.7	1494.2	1472.8	1464.8
12.5°	1889.8	1892.4	1865.7	1823.0	1756.1	1582.4	1368.5	1170.8	1018.4	975.6	967.6
15°	1988.7	1991.3	1943.2	1873.7	1670.6	1267.0	948.9	724.4	590.7	558.6	556.0
17.5°	2090.2	2084.9	2012.7	1879.1	1416.7	898.1	577.4	462.4	427.7	419.7	422.3
20°	2189.1	2173.1	2074.2	1780.2	1090.6	588.0	422.3	395.6	387.6	382.2	382.2
22.5°	2280.0	2248.0	2125.0	1585.1	764.5	422.3	376.9	371.5	360.8	352.8	350.2
25°	2370.9	2325.5	2157.1	1331.1	513.2	368.9	355.5	344.8	331.4	320.8	318.1
27.5°	2480.5	2416.3	2141.0	1010.4	384.9	342.1	331.4	315.4	296.7	280.7	275.3
30°	2584.7	2512.6	2050.2	697.6	328.8	315.4	299.4	275.3	251.3	232.5	227.2
32.5°	2715.7	2632.9	1887.1	457.1	286.0	275.3	259.3	229.9	197.8	176.4	171.1
35°	2902.8	2809.3	1678.6	320.8	251.3	232.5	211.2	179.1	144.3	128.3	125.6
37.5°	3164.8	3039.1	1416.7	259.3	221.9	195.1	163.0	131.0	106.9	93.6	90.9
40°	3485.5	3293.1	1125.3	229.9	197.8	163.0	123.0	93.6	77.5	66.8	66.8
42.5°	3833.0	3531.0	828.6	211.2	173.7	133.6	90.9	66.8	56.1	50.8	48.1
45°	4191.2	3742.1	558.6	195.1	152.4	101.6	64.2	45.4	37.4	37.4	34.7
47.5°	4562.7	3883.8	360.8	176.4	128.3	74.8	42.8	32.1	26.7	26.7	26.7
50°	4931.6	3958.6	256.6	160.4	104.2	50.8	32.1	24.1	21.4	21.4	21.4
52.5°	5198.9	3910.5	205.8	139.0	80.2	37.4	24.1	18.7	16.0	16.0	16.0
55°	5431.4	3827.7	179.1	120.3	58.8	26.7	18.7	16.0	13.4	13.4	13.4
57.5°	5669.3	3720.7	160.4	101.6	42.8	18.7	13.4	10.7	10.7	10.7	10.7
60°	5885.8	3539.0	139.0	80.2	29.4	13.4	10.7	8.0	8.0	8.0	8.0
62.5°	6097.0	3384.0	120.3	61.5	21.4	10.7	5.3	5.3	2.7	2.7	2.7
65°	6217.3	3175.5	96.2	40.1	13.4	8.0	2.7	2.7	0.0	0.0	0.0
67.5°	6179.9	2926.9	66.8	24.1	8.0	5.3	2.7	0.0	0.0	0.0	0.0
70°	5920.6	2592.8	40.1	13.4	8.0	5.3	2.7	0.0	0.0	0.0	0.0
72.5°	4958.3	1919.2	24.1	10.7	5.3	2.7	0.0	0.0	0.0	0.0	0.0
75°	3311.8	882.1	13.4	8.0	2.7	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	1515.6	264.6	8.0	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	304.7	69.5	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	64.2	13.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.4	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.3	2.7	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)