

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: P237431

Luminaire Tested: **ARCH-L-AF72-180-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237431
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-AF72-180-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 775mA 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: 15691.8 lumens
Efficiency: N/A
Efficacy: 86.7 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

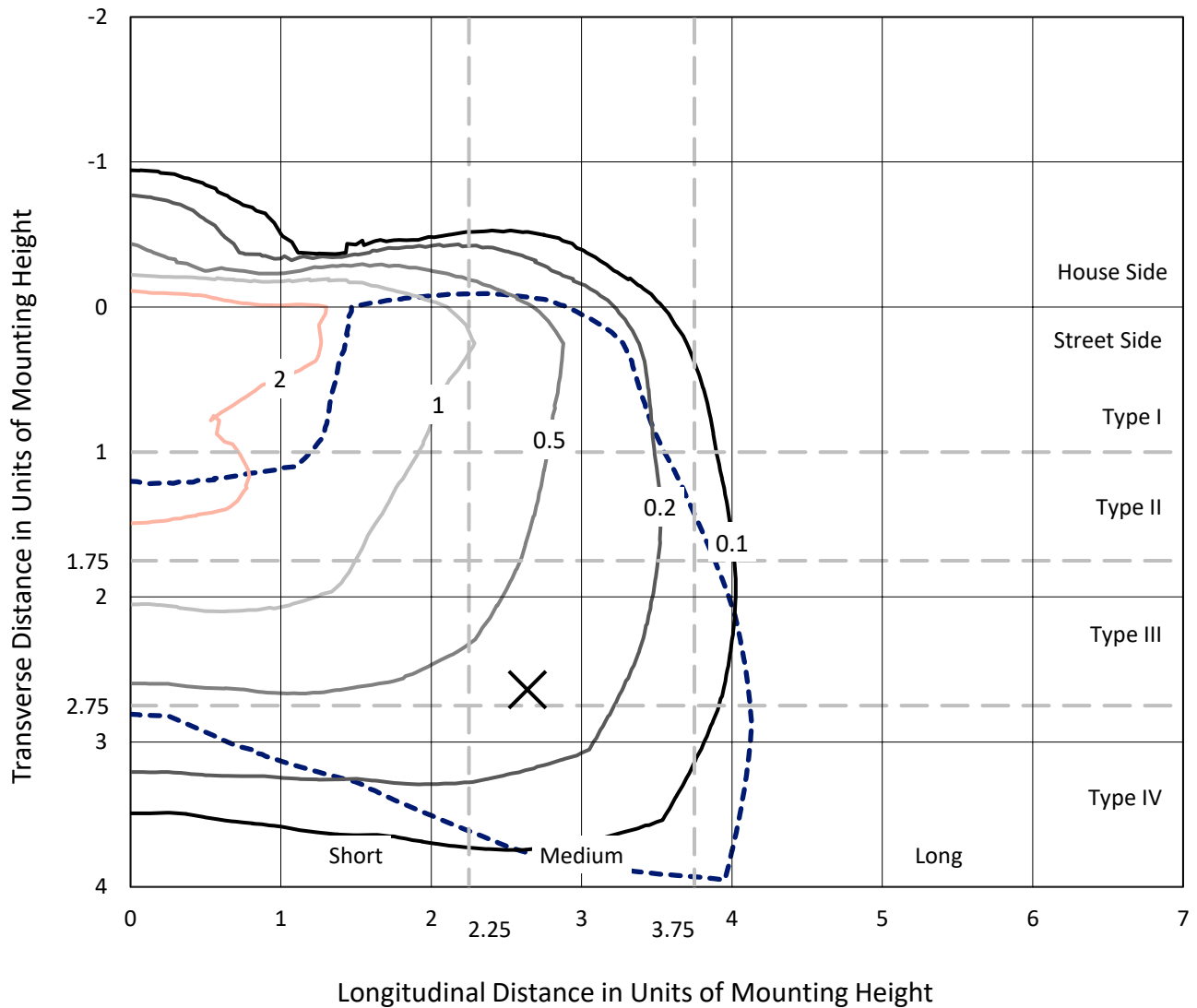
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

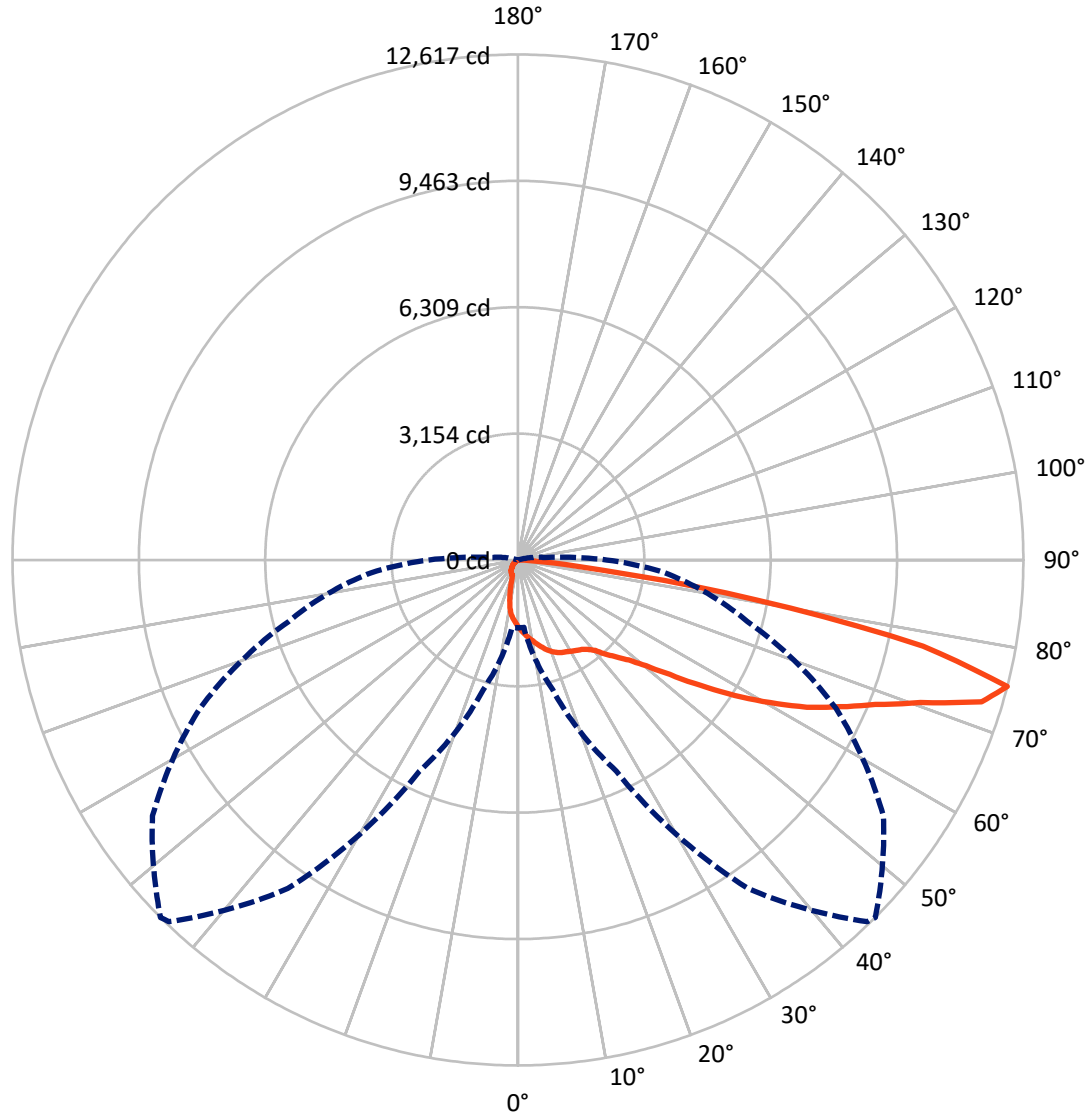
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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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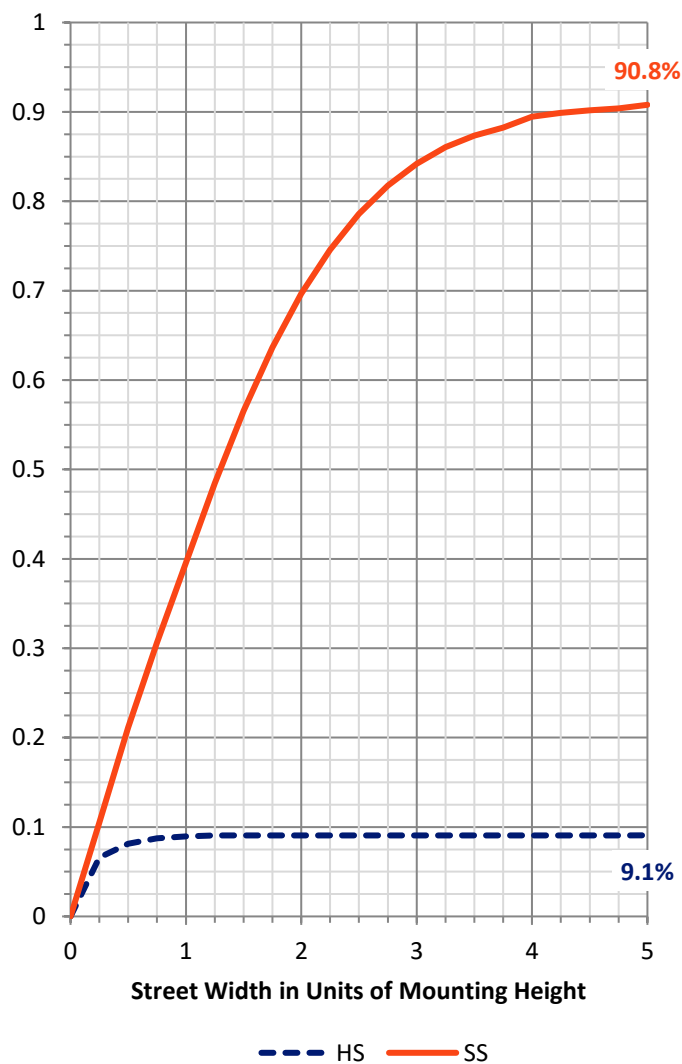
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1435.3	0.0	1435.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	14256.5	0.0	14256.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	15691.8	0.0	15691.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.4	1.0
10°-20°	448.7	2.9
20°-30°	743.2	4.7
30°-40°	1075.6	6.9
40°-50°	1761.2	11.2
50°-60°	3138.0	20.0
60°-70°	4613.3	29.4
70°-80°	3480.3	22.2
80°-90°	273.1	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°	15691.8	100.0
0°-180°	15691.8	100.0

Coefficient of Utilization



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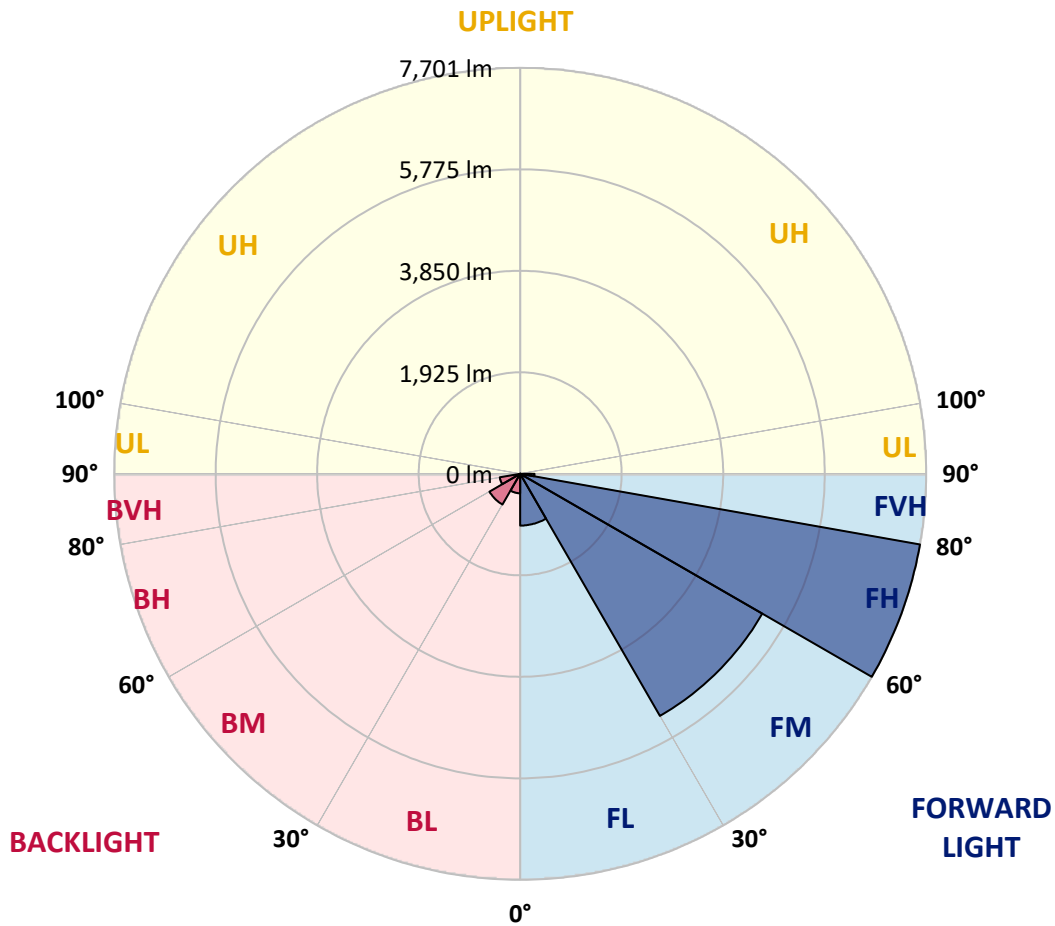
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	981.5	6.3			
FM (30°-60°)	5302.2	33.8			
FH (60°-80°)	7700.5	49.1			G4/12000
FVH (80°-90°)	272.3	1.7			G3/500
BL (0°-30°)	368.8	2.4	B1/500		
BM (30°-60°)	672.6	4.3	B1/1000		
BH (60°-80°)	393.1	2.5	B1/500		G1/500
BVH (80°-90°)	0.8	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°	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3
2.5°	1823.1	1823.1	1819.3	1815.7	1797.1	1778.6	1774.9	1763.8	1730.3	1708.0	1685.8
5°	1975.4	1979.1	1971.7	1953.1	1912.2	1871.4	1867.7	1838.0	1774.9	1730.3	1682.0
7.5°	2120.1	2127.6	2109.0	2075.6	2027.3	1968.0	1964.3	1908.5	1826.9	1763.8	1693.2
10°	2242.8	2242.8	2216.8	2175.9	2123.9	2060.7	2053.3	1990.2	1897.4	1819.3	1726.7
12.5°	2376.4	2372.7	2335.5	2279.8	2220.4	2161.0	2157.4	2079.3	1990.2	1889.9	1774.9
15°	2498.9	2491.5	2443.2	2391.2	2328.1	2265.0	2261.2	2183.3	2090.4	1971.7	1845.4
17.5°	2565.7	2562.0	2517.5	2465.6	2413.5	2365.3	2361.5	2279.8	2179.6	2057.1	1916.0
20°	2576.9	2580.6	2543.4	2498.9	2469.3	2443.2	2443.2	2369.0	2261.2	2131.3	1990.2
22.5°	2580.6	2591.7	2565.7	2506.3	2498.9	2502.6	2510.0	2450.6	2339.2	2216.8	2068.2
25°	2606.6	2621.4	2602.9	2532.3	2524.9	2550.8	2558.3	2532.3	2432.1	2309.5	2157.4
27.5°	2658.6	2673.5	2658.6	2569.4	2558.3	2584.3	2591.7	2606.6	2532.3	2398.7	2250.2
30°	2762.5	2766.2	2732.8	2621.4	2599.2	2632.6	2643.7	2684.6	2625.2	2484.1	2339.2
32.5°	2944.5	2907.4	2807.1	2658.6	2640.0	2677.2	2688.4	2732.8	2710.6	2565.7	2432.1
35°	3315.8	3122.7	2892.5	2710.6	2692.0	2729.2	2743.9	2807.1	2818.3	2680.9	2547.2
37.5°	3312.0	3137.6	3093.0	2810.8	2784.8	2810.8	2829.4	2907.4	2951.9	2833.1	2714.3
40°	3546.0	3471.7	3471.7	3000.2	2914.8	2951.9	2970.4	3048.5	3126.5	3033.6	2911.1
42.5°	4281.3	4232.9	4181.0	3364.1	3096.7	3200.7	3211.7	3260.1	3352.9	3323.2	3178.5
45°	5101.9	5057.3	4856.8	3980.5	3408.7	3427.3	3453.1	3531.2	3664.9	3720.5	3549.8
47.5°	5744.2	5699.6	5528.8	4723.1	3895.1	3731.6	3731.6	3883.9	4091.9	4232.9	4069.6
50°	6260.3	6208.3	6104.4	5514.0	4693.3	4169.8	4147.6	4325.8	4633.9	4853.1	4741.7
52.5°	6761.6	6609.3	6546.2	6330.8	5595.6	4804.7	4745.3	4871.6	5298.6	5569.7	5476.8
55°	7095.8	7073.5	7006.7	7080.9	6542.5	5577.1	5525.1	5551.1	6085.7	6267.7	6152.6
57.5°	7407.7	7404.0	7552.4	7897.8	7574.7	6460.8	6379.1	6338.2	6846.9	6802.4	6902.7
60°	7793.8	7727.0	8072.3	8566.2	8521.5	7322.2	7229.4	7147.7	7429.9	7303.7	7801.2
62.5°	7812.4	7793.8	8495.6	9204.8	9461.0	8198.5	8090.8	7797.5	7938.7	7793.8	8659.1
65°	7103.2	7196.1	8673.8	9542.7	10248.2	8967.1	8837.2	8380.5	8391.6	8295.1	9668.9
67.5°	6943.5	6991.8	8183.7	9906.5	10816.2	9743.2	9620.8	9052.5	8918.9	8926.3	10266.8
70°	6546.2	6620.4	7574.7	9880.6	11265.6	10779.2	10656.6	10040.3	9717.2	9357.1	9806.3
72.5°	5001.6	5127.7	6382.8	8662.7	11143.1	12134.5	12101.0	11291.5	10036.5	8592.1	7418.8
75°	1693.2	1689.4	3352.9	5818.5	10010.6	12550.3	12617.1	11135.6	8755.5	5926.1	3683.3
77.5°	363.9	367.5	690.6	2357.9	6650.2	10077.4	10333.6	8399.1	5647.6	2640.0	842.8
80°	178.2	181.9	285.9	623.8	2658.6	5651.3	6052.4	4318.4	2086.8	527.2	141.1
82.5°	89.1	92.9	148.5	330.5	984.0	2008.8	2146.2	1589.1	597.7	297.0	70.6
85°	33.5	33.5	74.3	196.7	449.3	471.6	579.3	460.4	360.1	241.4	18.6
87.5°	7.4	7.4	40.9	96.5	200.5	148.5	148.5	141.1	219.1	163.4	7.4
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°	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3	1678.3
2.5°	1674.6	1659.7	1633.8	1607.7	1589.1	1566.9	1555.8	1544.6	1541.0	1537.3	1544.6
5°	1656.1	1633.8	1585.5	1544.6	1507.6	1477.8	1455.6	1433.3	1422.1	1414.7	1418.4
7.5°	1656.1	1622.6	1552.0	1488.9	1429.5	1366.4	1303.4	1255.1	1217.9	1195.7	1199.3
10°	1674.6	1630.0	1537.3	1451.8	1340.4	1206.8	1069.3	965.5	894.9	854.0	854.0
12.5°	1715.5	1656.1	1541.0	1407.3	1217.9	984.0	776.1	649.8	597.7	568.1	571.9
15°	1771.2	1700.6	1559.4	1347.8	1047.1	731.5	542.2	460.4	460.4	467.8	471.6
17.5°	1834.3	1756.4	1574.3	1258.7	828.0	523.6	426.9	419.5	430.7	449.3	449.3
20°	1897.4	1811.9	1581.7	1117.6	620.0	415.8	404.7	404.7	412.1	430.7	434.5
22.5°	1975.4	1882.5	1574.3	943.1	464.2	393.6	389.8	389.8	389.8	412.1	412.1
25°	2057.1	1964.3	1544.6	757.5	393.6	378.7	375.0	371.3	371.3	389.8	393.6
27.5°	2149.9	2049.6	1474.1	579.3	371.3	363.9	360.1	352.8	352.8	367.5	367.5
30°	2242.8	2146.2	1366.4	438.1	352.8	349.1	341.7	334.3	326.8	341.7	341.7
32.5°	2342.9	2246.5	1225.4	349.1	326.8	326.8	323.1	311.9	304.5	311.9	315.6
35°	2476.7	2361.5	1065.8	304.5	293.4	293.4	293.4	289.6	274.8	282.2	282.2
37.5°	2654.9	2521.1	880.0	282.2	267.3	259.9	259.9	259.9	248.8	252.5	252.5
40°	2881.3	2706.9	701.8	263.7	248.8	230.2	222.8	226.5	219.1	219.1	215.3
42.5°	3189.6	2907.4	527.2	248.8	234.0	207.9	193.1	189.3	181.9	178.2	178.2
45°	3631.4	3152.4	378.7	234.0	222.8	181.9	167.0	155.9	137.3	126.2	126.2
47.5°	4203.2	3431.0	282.2	219.1	211.6	159.6	141.1	118.8	92.9	85.4	85.4
50°	4901.3	3742.7	237.6	196.7	193.1	141.1	111.5	78.0	52.0	44.6	48.3
52.5°	5580.9	4036.1	211.6	174.5	170.8	122.5	81.7	40.9	22.3	22.3	22.3
55°	6152.6	4244.0	193.1	155.9	148.5	96.5	44.6	18.6	11.2	11.2	11.2
57.5°	6668.7	4362.9	174.5	137.3	118.8	66.8	18.6	7.4	7.4	3.8	3.8
60°	7140.3	4433.4	152.2	118.8	92.9	37.1	7.4	3.8	3.8	0.0	0.0
62.5°	7604.5	4485.4	129.9	96.5	70.6	14.9	3.8	3.8	0.0	0.0	0.0
65°	7957.3	4466.8	104.1	78.0	44.6	7.4	3.8	0.0	0.0	0.0	0.0
67.5°	7946.1	4214.3	78.0	59.4	22.3	3.8	0.0	0.0	0.0	0.0	0.0
70°	7106.9	3549.8	52.0	37.1	7.4	3.8	0.0	0.0	0.0	0.0	0.0
72.5°	5042.5	2276.1	33.5	22.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	2220.4	690.6	18.6	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	434.5	159.6	11.2	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	104.1	18.6	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	44.6	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.2	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.4	3.8	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)