

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: P237438

Luminaire Tested: **ARCH-L-AF72-250-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237438
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-AF72-250-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1070mA 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: 19689.6 lumens
Efficiency: N/A
Efficacy: 78.4 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

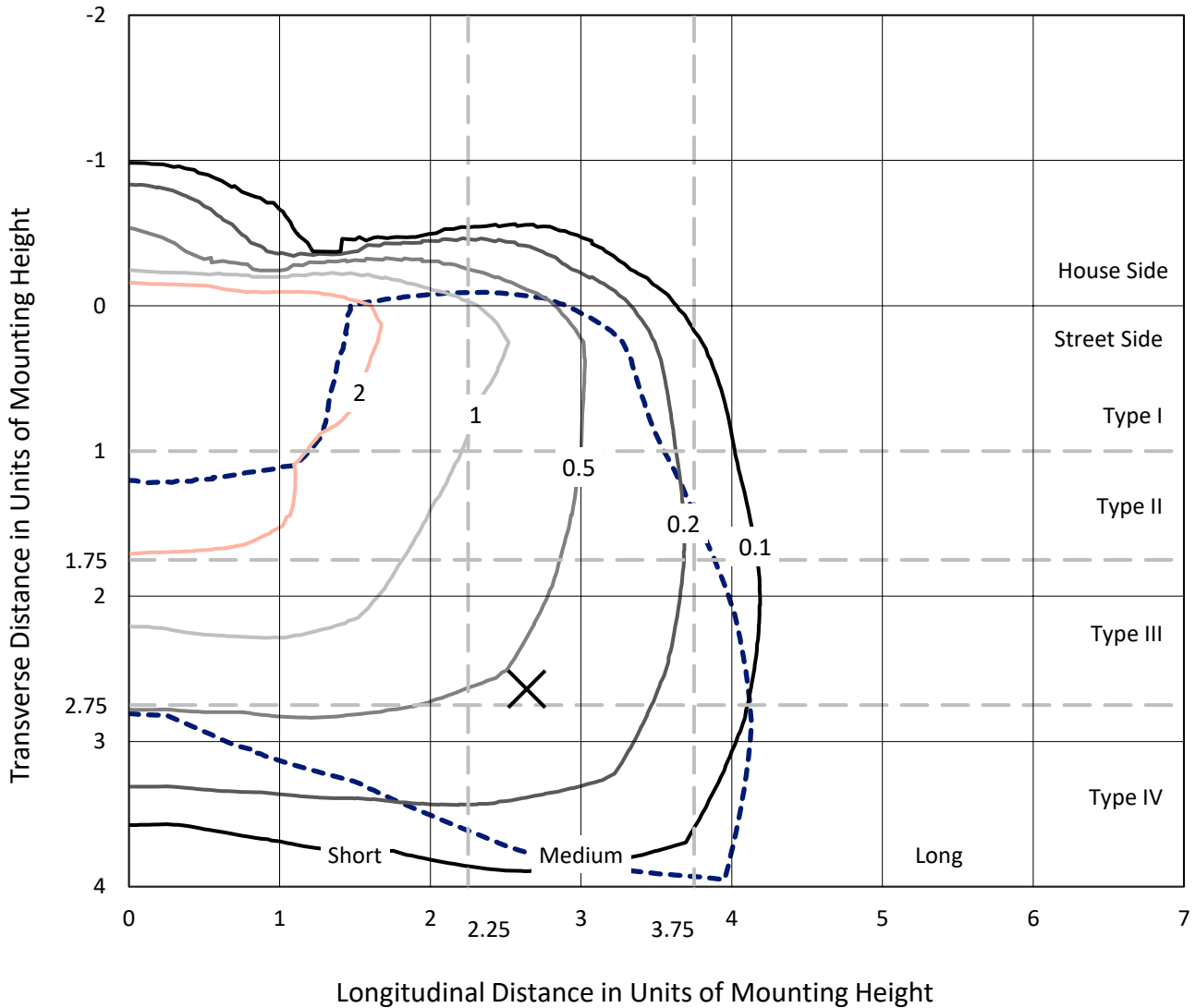
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

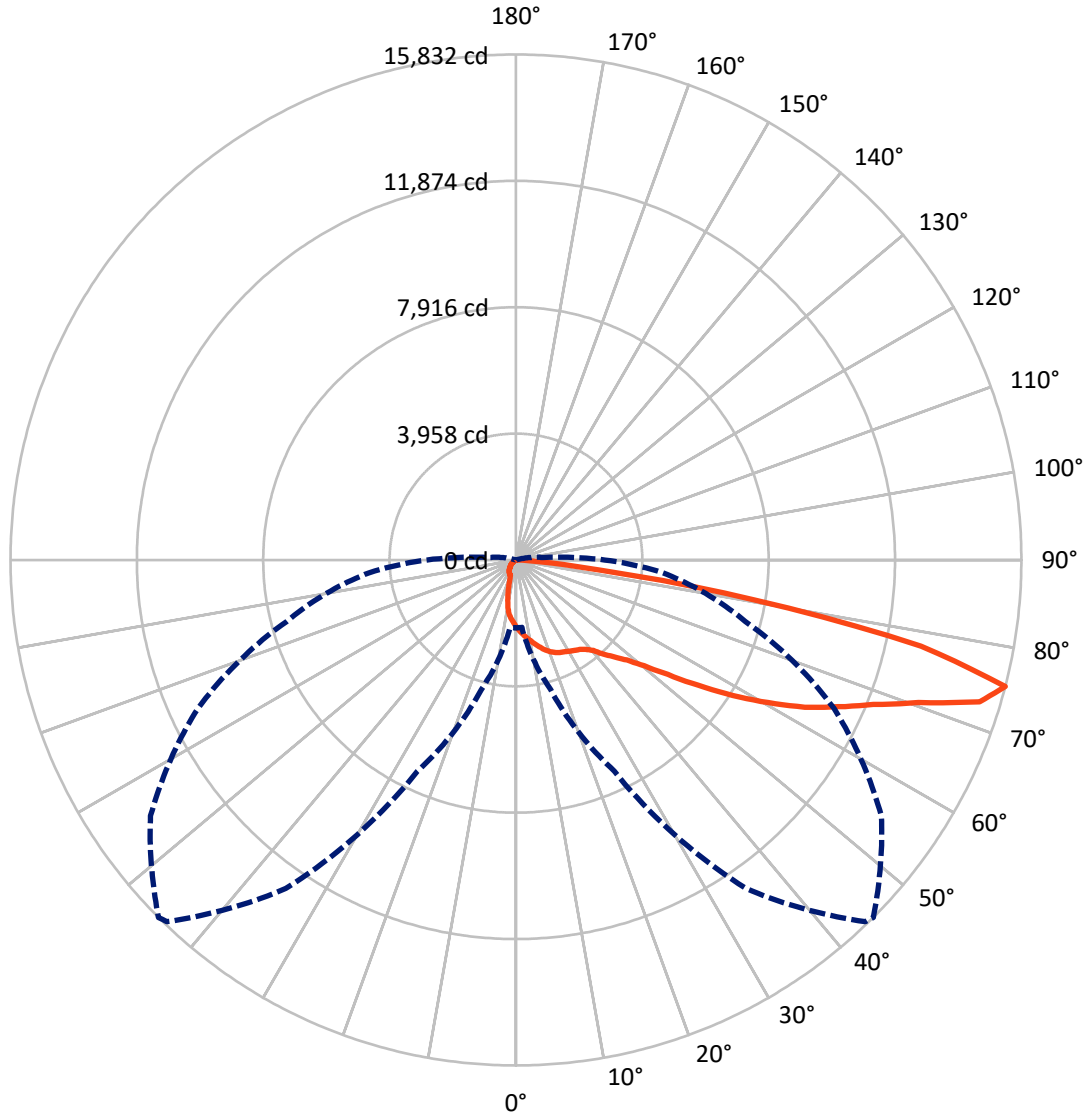
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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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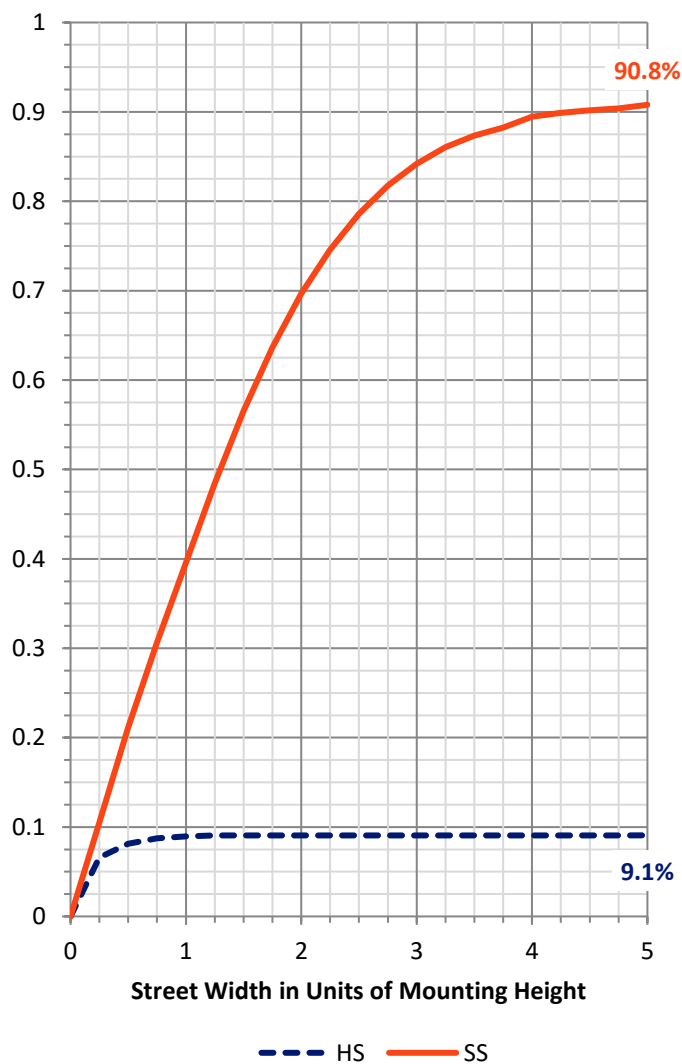
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1801.0	0.0	1801.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	17888.6	0.0	17888.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	19689.6	0.0	19689.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.7	1.0
10°-20°	563.1	2.9
20°-30°	932.5	4.7
30°-40°	1349.6	6.9
40°-50°	2209.9	11.2
50°-60°	3937.5	20.0
60°-70°	5788.7	29.4
70°-80°	4367.0	22.2
80°-90°	342.6	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°	19689.6	100.0
0°-180°	19689.6	100.0

Coefficient of Utilization



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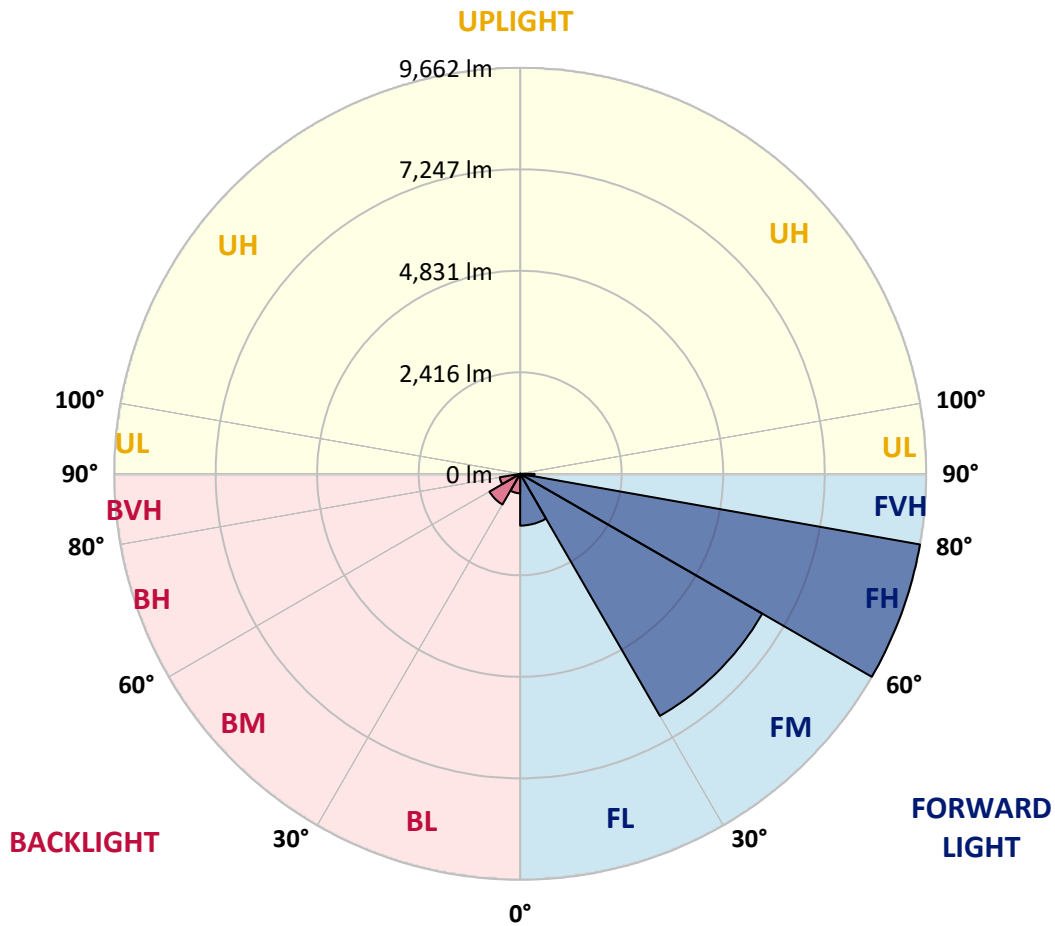
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1231.5	6.3			
FM (30°-60°)	6653.0	33.8			
FH (60°-80°)	9662.4	49.1			G4/12000
FVH (80°-90°)	341.7	1.7			G3/500
BL (0°-30°)	462.8	2.4	B1/500		
BM (30°-60°)	844.0	4.3	B1/1000		
BH (60°-80°)	493.3	2.5	B1/500		G1/500
BVH (80°-90°)	1.0	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°	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9
2.5°	2287.6	2287.6	2283.0	2278.3	2255.0	2231.7	2227.0	2213.0	2171.1	2143.2	2115.3
5°	2478.6	2483.3	2473.9	2450.6	2399.5	2348.2	2343.5	2306.3	2227.0	2171.1	2110.6
7.5°	2660.4	2669.6	2646.4	2604.4	2543.9	2469.4	2464.7	2394.8	2292.3	2213.0	2124.5
10°	2814.1	2814.1	2781.5	2730.3	2665.1	2585.8	2576.5	2497.2	2380.8	2283.0	2166.5
12.5°	2981.8	2977.2	2930.6	2860.7	2786.1	2711.6	2706.9	2609.1	2497.2	2371.5	2227.0
15°	3135.5	3126.2	3065.7	3000.5	2921.3	2842.1	2837.4	2739.5	2623.1	2473.9	2315.5
17.5°	3219.5	3214.7	3158.9	3093.6	3028.4	2967.8	2963.2	2860.7	2734.9	2581.1	2404.1
20°	3233.4	3238.1	3191.5	3135.5	3098.3	3065.7	3065.7	2972.5	2837.4	2674.3	2497.2
22.5°	3238.1	3252.1	3219.5	3144.9	3135.5	3140.2	3149.5	3075.0	2935.2	2781.5	2595.1
25°	3270.6	3289.4	3266.0	3177.5	3168.2	3200.7	3210.1	3177.5	3051.7	2898.0	2706.9
27.5°	3335.9	3354.6	3335.9	3224.1	3210.1	3242.7	3252.1	3270.6	3177.5	3009.8	2823.4
30°	3466.4	3471.0	3429.1	3289.4	3261.4	3303.4	3317.3	3368.6	3293.9	3116.9	2935.2
32.5°	3694.7	3648.0	3522.3	3335.9	3312.6	3359.1	3373.2	3429.1	3401.1	3219.5	3051.7
35°	4160.6	3918.2	3629.5	3401.1	3377.9	3424.4	3443.1	3522.3	3536.2	3363.9	3196.2
37.5°	4155.9	3936.9	3881.0	3526.9	3494.3	3526.9	3550.3	3648.0	3704.0	3554.9	3405.8
40°	4449.5	4356.2	4356.2	3764.5	3657.4	3704.0	3727.3	3825.1	3923.0	3806.5	3652.7
42.5°	5371.9	5311.4	5246.2	4221.1	3885.7	4016.2	4030.1	4090.6	4207.1	4169.9	3988.2
45°	6401.6	6345.7	6094.1	4994.6	4277.1	4300.3	4333.0	4430.8	4598.5	4668.4	4454.1
47.5°	7207.7	7151.7	6937.4	5926.3	4887.3	4682.5	4682.5	4873.4	5134.3	5311.4	5106.3
50°	7855.2	7789.9	7659.5	6918.8	5889.1	5232.2	5204.2	5427.9	5814.6	6089.4	5949.7
52.5°	8484.2	8293.3	8214.0	7943.8	7021.2	6028.8	5954.3	6112.7	6648.5	6988.7	6872.2
55°	8903.5	8875.5	8791.8	8884.9	8209.3	6997.9	6932.7	6965.4	7636.2	7864.6	7720.2
57.5°	9294.9	9290.2	9476.6	9910.0	9504.6	8106.8	8004.4	7953.1	8591.4	8535.5	8661.3
60°	9779.5	9695.5	10128.9	10748.5	10692.6	9187.7	9071.2	8968.8	9322.9	9164.4	9788.7
62.5°	9802.7	9779.5	10660.0	11549.9	11871.3	10287.3	10152.2	9784.0	9961.1	9779.5	10865.0
65°	8912.9	9029.3	10883.7	11973.8	12859.0	11251.7	11088.6	10515.5	10529.6	10408.4	12132.2
67.5°	8712.6	8773.1	10268.6	12430.4	13571.9	12225.4	12071.7	11358.9	11191.1	11200.5	12882.4
70°	8214.0	8307.2	9504.6	12397.8	14135.8	13525.3	13371.5	12598.1	12192.9	11740.9	12304.7
72.5°	6275.9	6434.2	8009.0	10869.6	13981.9	15226.0	15184.0	14168.3	12593.6	10781.1	9308.9
75°	2124.5	2119.8	4207.1	7300.8	12560.9	15747.7	15831.5	13972.6	10986.1	7435.9	4621.7
77.5°	456.6	461.3	866.7	2958.5	8344.4	12644.8	12966.3	10538.8	7086.4	3312.6	1057.6
80°	223.7	228.3	358.7	782.8	3335.9	7091.2	7594.3	5418.5	2618.4	661.6	177.0
82.5°	111.8	116.5	186.4	414.6	1234.6	2520.6	2692.9	1994.1	750.1	372.7	88.5
85°	41.9	41.9	93.2	246.9	563.8	591.7	726.8	577.8	451.9	302.8	23.3
87.5°	9.3	9.3	51.3	121.2	251.7	186.4	186.4	177.0	274.9	205.0	9.3
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°	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9	2105.9
2.5°	2101.3	2082.6	2050.0	2017.4	1994.1	1966.1	1952.1	1938.2	1933.6	1928.9	1938.2
5°	2078.0	2050.0	1989.4	1938.2	1891.6	1854.3	1826.4	1798.4	1784.4	1775.1	1779.8
7.5°	2078.0	2036.0	1947.5	1868.4	1793.7	1714.5	1635.4	1574.8	1528.2	1500.2	1504.9
10°	2101.3	2045.4	1928.9	1821.7	1681.9	1514.3	1341.8	1211.3	1122.8	1071.7	1071.7
12.5°	2152.5	2078.0	1933.6	1765.8	1528.2	1234.6	973.7	815.3	750.1	712.8	717.5
15°	2222.5	2133.9	1956.9	1691.3	1313.9	917.9	680.2	577.8	577.8	587.0	591.7
17.5°	2301.5	2203.8	1975.4	1579.5	1038.9	656.9	535.8	526.5	540.5	563.8	563.8
20°	2380.8	2273.6	1984.8	1402.4	778.0	521.8	507.8	507.8	517.2	540.5	545.1
22.5°	2478.6	2362.1	1975.4	1183.4	582.4	493.9	489.2	489.2	489.2	517.2	517.2
25°	2581.1	2464.7	1938.2	950.4	493.9	475.3	470.6	465.9	465.9	489.2	493.9
27.5°	2697.6	2571.9	1849.6	726.8	465.9	456.6	451.9	442.6	442.6	461.3	461.3
30°	2814.1	2692.9	1714.5	549.8	442.6	437.9	428.7	419.3	410.0	428.7	428.7
32.5°	2939.8	2818.8	1537.5	437.9	410.0	410.0	405.4	391.3	382.1	391.3	396.1
35°	3107.7	2963.2	1337.2	382.1	368.1	368.1	368.1	363.4	344.8	354.1	354.1
37.5°	3331.2	3163.5	1104.2	354.1	335.4	326.1	326.1	326.1	312.2	316.9	316.9
40°	3615.5	3396.5	880.5	330.8	312.2	288.9	279.6	284.2	274.9	274.9	270.2
42.5°	4002.1	3648.0	661.6	312.2	293.5	260.9	242.2	237.6	228.3	223.7	223.7
45°	4556.5	3955.6	475.3	293.5	279.6	228.3	209.7	195.7	172.4	158.4	158.4
47.5°	5274.1	4305.1	354.1	274.9	265.6	200.4	177.0	149.1	116.5	107.2	107.2
50°	6149.9	4696.4	298.2	246.9	242.2	177.0	139.8	97.8	65.2	55.9	60.5
52.5°	7002.7	5064.3	265.6	218.9	214.3	153.7	102.4	51.3	28.0	28.0	28.0
55°	7720.2	5325.3	242.2	195.7	186.4	121.2	55.9	23.3	13.9	13.9	13.9
57.5°	8367.7	5474.4	218.9	172.4	149.1	83.9	23.3	9.3	9.3	4.7	4.7
60°	8959.5	5562.9	190.9	149.1	116.5	46.6	9.3	4.7	4.7	0.0	0.0
62.5°	9541.8	5628.2	163.1	121.2	88.5	18.7	4.7	4.7	0.0	0.0	0.0
65°	9984.4	5604.9	130.4	97.8	55.9	9.3	4.7	0.0	0.0	0.0	0.0
67.5°	9970.5	5288.0	97.8	74.6	28.0	4.7	0.0	0.0	0.0	0.0	0.0
70°	8917.5	4454.1	65.2	46.6	9.3	4.7	0.0	0.0	0.0	0.0	0.0
72.5°	6327.1	2856.0	41.9	28.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	2786.1	866.7	23.3	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	545.1	200.4	13.9	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	130.4	23.3	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	55.9	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.3	4.7	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)