

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: P237473

Luminaire Tested: **ARCH-L-AF72-200-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237473
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-200-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 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: 17604 lumens
Efficiency: N/A
Efficacy: 87.6 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

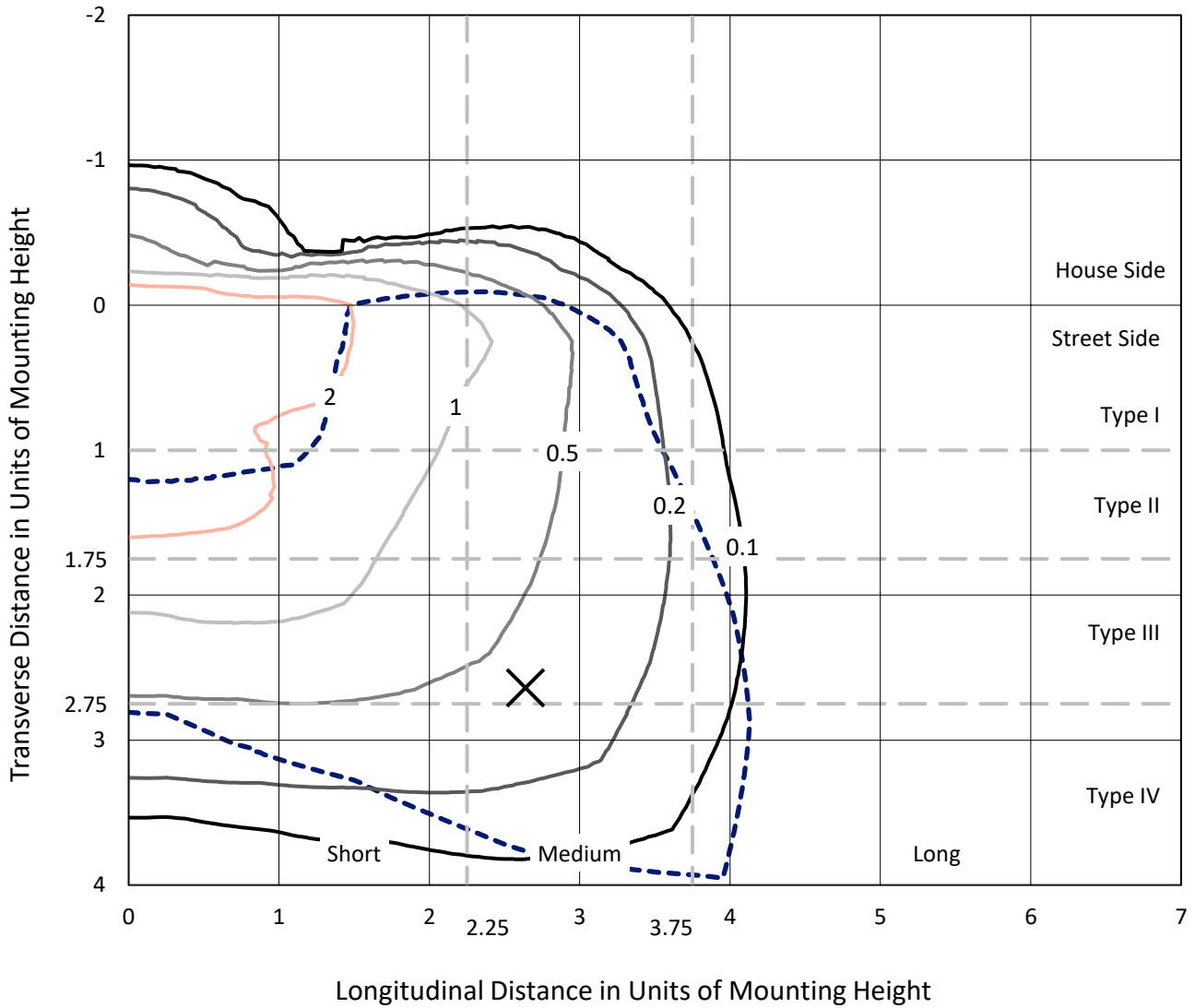
Input Watts (W): 201
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

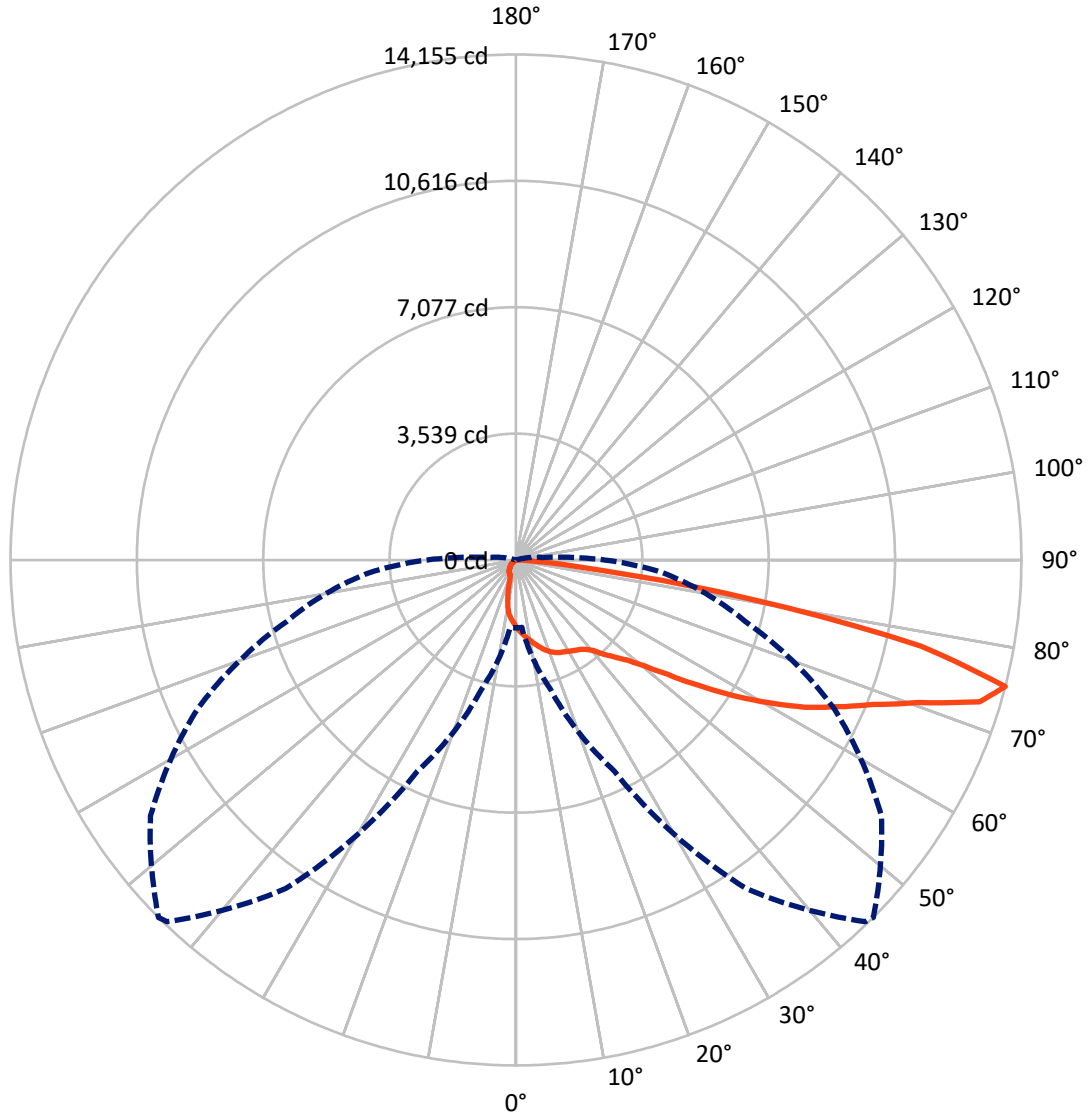
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 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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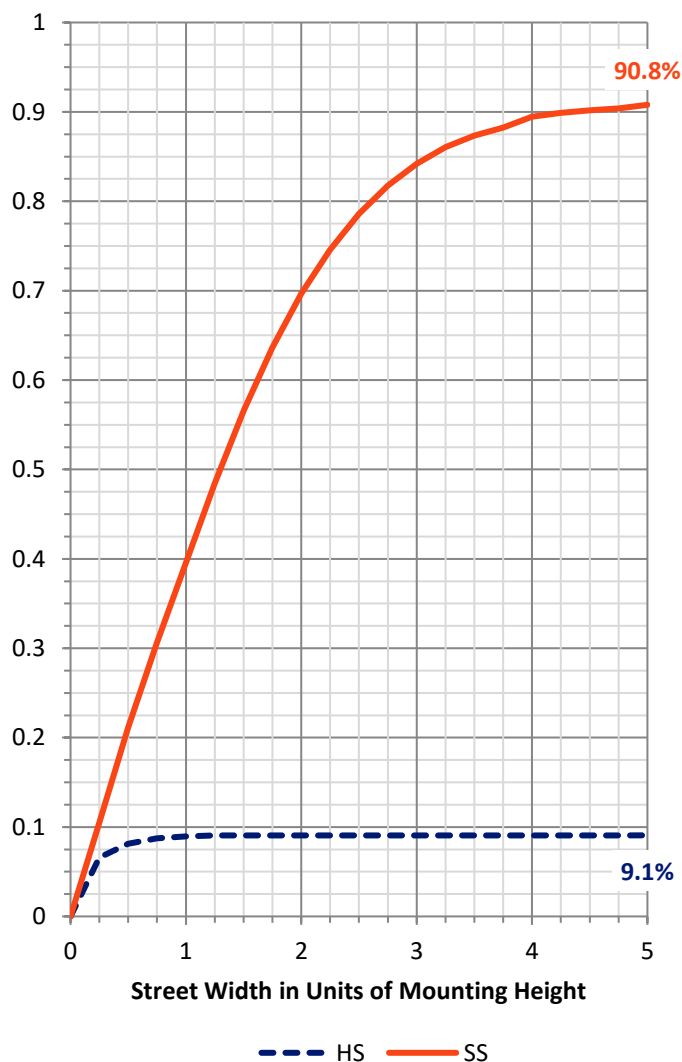
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1610.2	0.0	1610.2
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	15993.8	0.0	15993.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	17604.0	0.0	17604.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.7	1.0
10°-20°	503.4	2.9
20°-30°	833.7	4.7
30°-40°	1206.6	6.9
40°-50°	1975.8	11.2
50°-60°	3520.4	20.0
60°-70°	5175.5	29.4
70°-80°	3904.4	22.2
80°-90°	306.3	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°	17604.0	100.0
0°-180°	17604.0	100.0

Coefficient of Utilization



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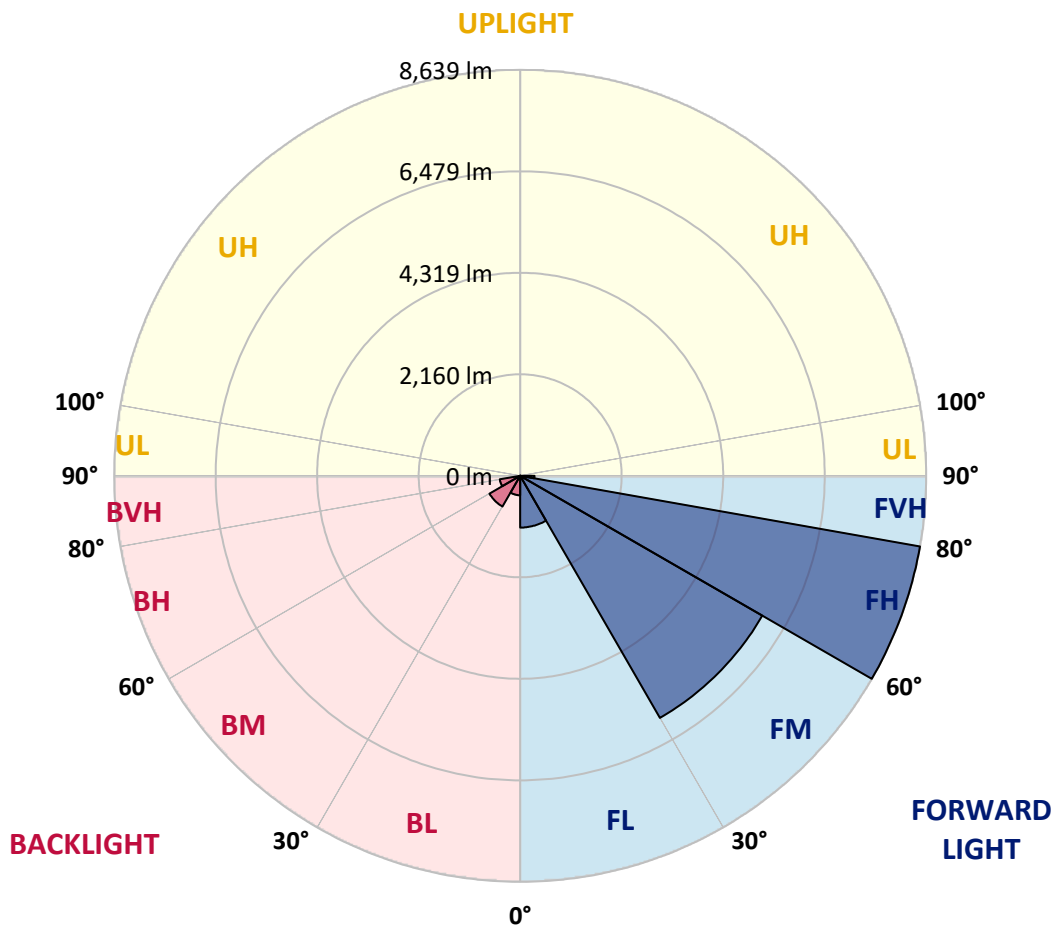
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1101.1	6.3			
FM (30°-60°)	5948.3	33.8			
FH (60°-80°)	8638.9	49.1			G4/12000
FVH (80°-90°)	305.5	1.7			G3/500
BL (0°-30°)	413.8	2.4	B1/500		
BM (30°-60°)	754.6	4.3	B1/1000		
BH (60°-80°)	441.0	2.5	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°	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8
2.5°	2045.3	2045.3	2041.1	2037.0	2016.1	1995.3	1991.1	1978.7	1941.2	1916.2	1891.2
5°	2216.1	2220.3	2211.9	2191.1	2145.3	2099.5	2095.3	2062.0	1991.1	1941.2	1887.0
7.5°	2378.5	2386.9	2366.1	2328.6	2274.4	2207.8	2203.6	2141.1	2049.5	1978.7	1899.5
10°	2516.0	2516.0	2486.9	2441.0	2382.7	2311.9	2303.6	2232.8	2128.6	2041.1	1937.0
12.5°	2666.0	2661.8	2620.2	2557.7	2491.0	2424.4	2420.2	2332.7	2232.8	2120.3	1991.1
15°	2803.4	2795.1	2741.0	2682.6	2611.8	2541.0	2536.8	2449.4	2345.2	2211.9	2070.3
17.5°	2878.4	2874.3	2824.3	2765.9	2707.6	2653.5	2649.3	2557.7	2445.2	2307.7	2149.4
20°	2890.9	2895.1	2853.4	2803.4	2770.1	2741.0	2741.0	2657.6	2536.8	2391.0	2232.8
22.5°	2895.1	2907.6	2878.4	2811.8	2803.4	2807.6	2815.9	2749.3	2624.3	2486.9	2320.2
25°	2924.2	2940.9	2920.1	2840.9	2832.6	2861.8	2870.1	2840.9	2728.5	2591.0	2420.2
27.5°	2982.6	2999.2	2982.6	2882.6	2870.1	2899.2	2907.6	2924.2	2840.9	2691.0	2524.3
30°	3099.2	3103.4	3065.9	2940.9	2915.9	2953.4	2965.9	3011.7	2945.1	2786.8	2624.3
32.5°	3303.3	3261.7	3149.2	2982.6	2961.7	3003.4	3015.9	3065.9	3040.9	2878.4	2728.5
35°	3719.9	3503.3	3245.0	3040.9	3020.0	3061.7	3078.4	3149.2	3161.7	3007.6	2857.6
37.5°	3715.7	3519.9	3469.9	3153.3	3124.2	3153.3	3174.2	3261.7	3311.6	3178.3	3045.0
40°	3978.1	3894.8	3894.8	3365.8	3270.0	3311.6	3332.5	3419.9	3507.4	3403.3	3265.8
42.5°	4802.9	4748.8	4690.4	3774.0	3474.1	3590.7	3603.2	3657.4	3761.5	3728.2	3565.7
45°	5723.5	5673.5	5448.6	4465.5	3824.0	3844.8	3874.0	3961.5	4111.4	4173.9	3982.3
47.5°	6444.2	6394.2	6202.6	5298.6	4369.7	4186.4	4186.4	4357.2	4590.5	4748.8	4565.5
50°	7023.2	6964.9	6848.2	6185.9	5265.3	4677.9	4653.0	4852.9	5198.6	5444.4	5319.4
52.5°	7585.5	7414.7	7343.9	7102.3	6277.5	5390.3	5323.6	5465.2	5944.3	6248.4	6144.2
55°	7960.4	7935.4	7860.5	7943.8	7339.8	6256.7	6198.4	6227.5	6827.4	7031.5	6902.4
57.5°	8310.3	8306.2	8472.8	8860.2	8497.8	7248.1	7156.5	7110.6	7681.3	7631.3	7743.8
60°	8743.6	8668.6	9056.0	9610.0	9560.0	8214.5	8110.4	8018.7	8335.3	8193.7	8751.9
62.5°	8764.4	8743.6	9530.9	10326.5	10613.9	9197.6	9076.8	8747.7	8906.0	8743.6	9714.1
65°	7968.8	8072.9	9730.8	10705.5	11497.0	10059.9	9914.1	9401.7	9414.2	9305.9	10847.2
67.5°	7789.6	7843.8	9180.9	11113.8	12134.3	10930.5	10793.0	10155.7	10005.7	10014.1	11517.8
70°	7343.9	7427.2	8497.8	11084.6	12638.4	12092.7	11955.2	11263.7	10901.3	10497.3	11001.3
72.5°	5611.0	5752.7	7160.6	9718.3	12500.9	13613.1	13575.6	12667.5	11259.6	9639.2	8322.8
75°	1899.5	1895.3	3761.5	6527.5	11230.4	14079.7	14154.6	12492.6	9822.4	6648.3	4132.3
77.5°	408.2	412.4	774.8	2645.1	7460.6	11305.4	11592.8	9422.5	6335.9	2961.7	945.6
80°	199.9	204.1	320.7	699.8	2982.6	6340.0	6789.9	4844.6	2341.1	591.5	158.3
82.5°	100.0	104.1	166.6	370.7	1103.9	2253.6	2407.7	1782.9	670.7	333.2	79.1
85°	37.5	37.5	83.3	220.8	504.0	529.0	649.8	516.5	404.1	270.8	20.8
87.5°	8.3	8.3	45.8	108.3	224.9	166.6	166.6	158.3	245.8	183.3	8.3
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°	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8	1882.8
2.5°	1878.7	1862.0	1832.9	1803.7	1782.9	1757.9	1745.4	1732.9	1728.7	1724.6	1732.9
5°	1857.8	1832.9	1778.7	1732.9	1691.2	1657.9	1632.9	1607.9	1595.4	1587.1	1591.3
7.5°	1857.8	1820.4	1741.2	1670.4	1603.7	1532.9	1462.1	1408.0	1366.3	1341.3	1345.5
10°	1878.7	1828.7	1724.6	1628.7	1503.8	1353.8	1199.7	1083.1	1003.9	958.1	958.1
12.5°	1924.5	1857.8	1728.7	1578.8	1366.3	1103.9	870.6	729.0	670.7	637.3	641.5
15°	1987.0	1907.8	1749.5	1512.1	1174.7	820.6	608.2	516.5	516.5	524.9	529.0
17.5°	2057.8	1970.3	1766.2	1412.1	928.9	587.3	479.0	470.7	483.2	504.0	504.0
20°	2128.6	2032.8	1774.5	1253.8	695.7	466.5	454.0	454.0	462.4	483.2	487.4
22.5°	2216.1	2112.0	1766.2	1058.1	520.7	441.6	437.4	437.4	437.4	462.4	462.4
25°	2307.7	2203.6	1732.9	849.8	441.6	424.9	420.7	416.6	416.6	437.4	441.6
27.5°	2411.9	2299.4	1653.7	649.8	416.6	408.2	404.1	395.7	395.7	412.4	412.4
30°	2516.0	2407.7	1532.9	491.5	395.7	391.6	383.2	374.9	366.6	383.2	383.2
32.5°	2628.5	2520.2	1374.6	391.6	366.6	366.6	362.4	349.9	341.6	349.9	354.1
35°	2778.4	2649.3	1195.5	341.6	329.1	329.1	329.1	324.9	308.3	316.6	316.6
37.5°	2978.4	2828.4	987.2	316.6	299.9	291.6	291.6	291.6	279.1	283.3	283.3
40°	3232.5	3036.7	787.3	295.8	279.1	258.3	249.9	254.1	245.8	245.8	241.6
42.5°	3578.2	3261.7	591.5	279.1	262.4	233.3	216.6	212.4	204.1	199.9	199.9
45°	4073.9	3536.6	424.9	262.4	249.9	204.1	187.5	175.0	154.1	141.6	141.6
47.5°	4715.4	3849.0	316.6	245.8	237.4	179.1	158.3	133.3	104.1	95.8	95.8
50°	5498.6	4198.9	266.6	220.8	216.6	158.3	125.0	87.5	58.3	50.0	54.2
52.5°	6260.9	4528.0	237.4	195.8	191.6	137.5	91.6	45.8	25.0	25.0	25.0
55°	6902.4	4761.3	216.6	175.0	166.6	108.3	50.0	20.8	12.5	12.5	12.5
57.5°	7481.4	4894.6	195.8	154.1	133.3	75.0	20.8	8.3	8.3	4.2	4.2
60°	8010.4	4973.7	170.8	133.3	104.1	41.7	8.3	4.2	4.2	0.0	0.0
62.5°	8531.1	5032.0	145.8	108.3	79.1	16.7	4.2	4.2	0.0	0.0	0.0
65°	8926.8	5011.2	116.6	87.5	50.0	8.3	4.2	0.0	0.0	0.0	0.0
67.5°	8914.3	4727.9	87.5	66.6	25.0	4.2	0.0	0.0	0.0	0.0	0.0
70°	7972.9	3982.3	58.3	41.7	8.3	4.2	0.0	0.0	0.0	0.0	0.0
72.5°	5656.9	2553.5	37.5	25.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	2491.0	774.8	20.8	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	487.4	179.1	12.5	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	116.6	20.8	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	50.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.3	4.2	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)