

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: P237437

Luminaire Tested: **ARCH-L-AF72-240-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237437
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-AF72-240-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1030mA 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: 19247.1 lumens
Efficiency: N/A
Efficacy: 79.5 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

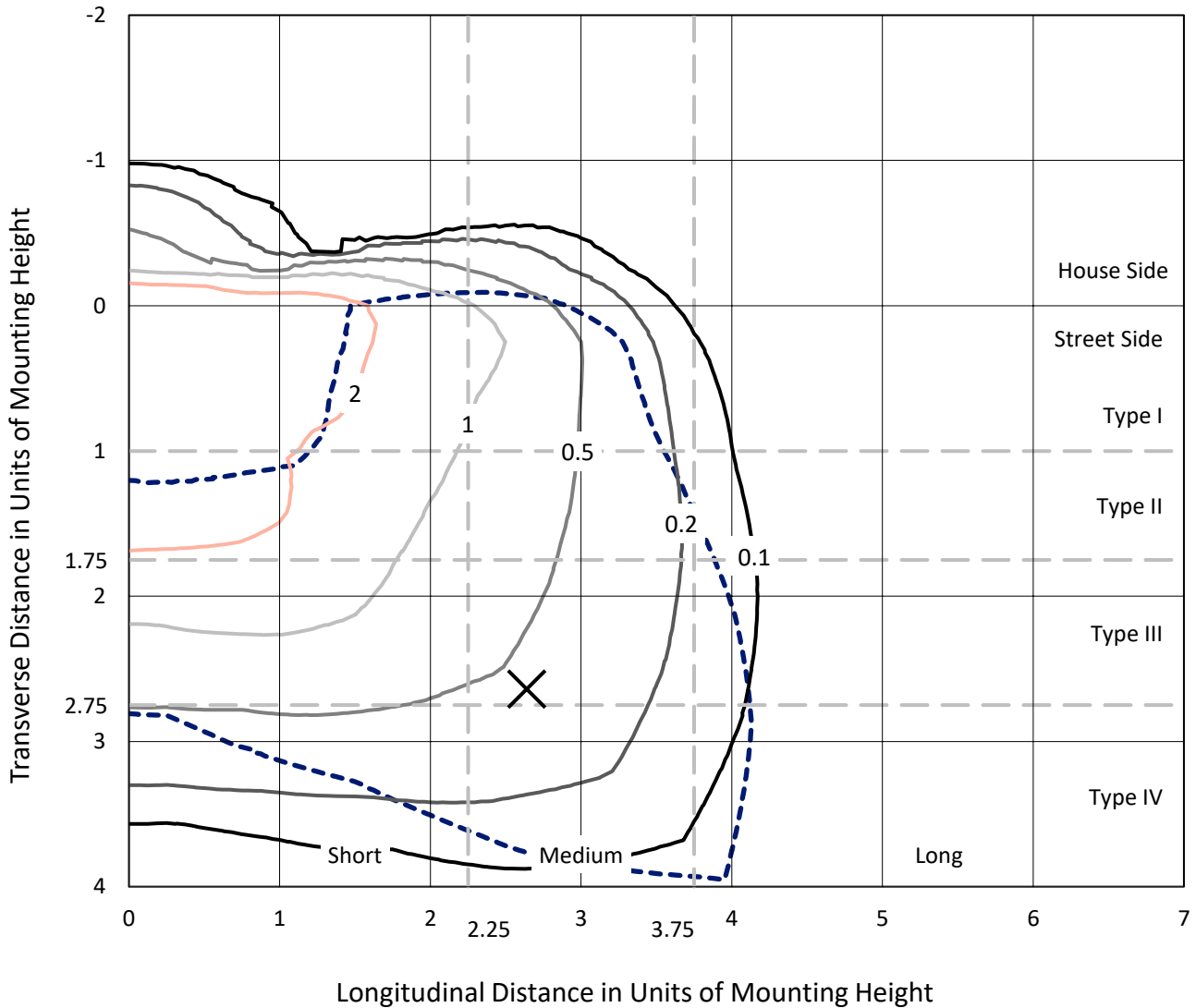
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

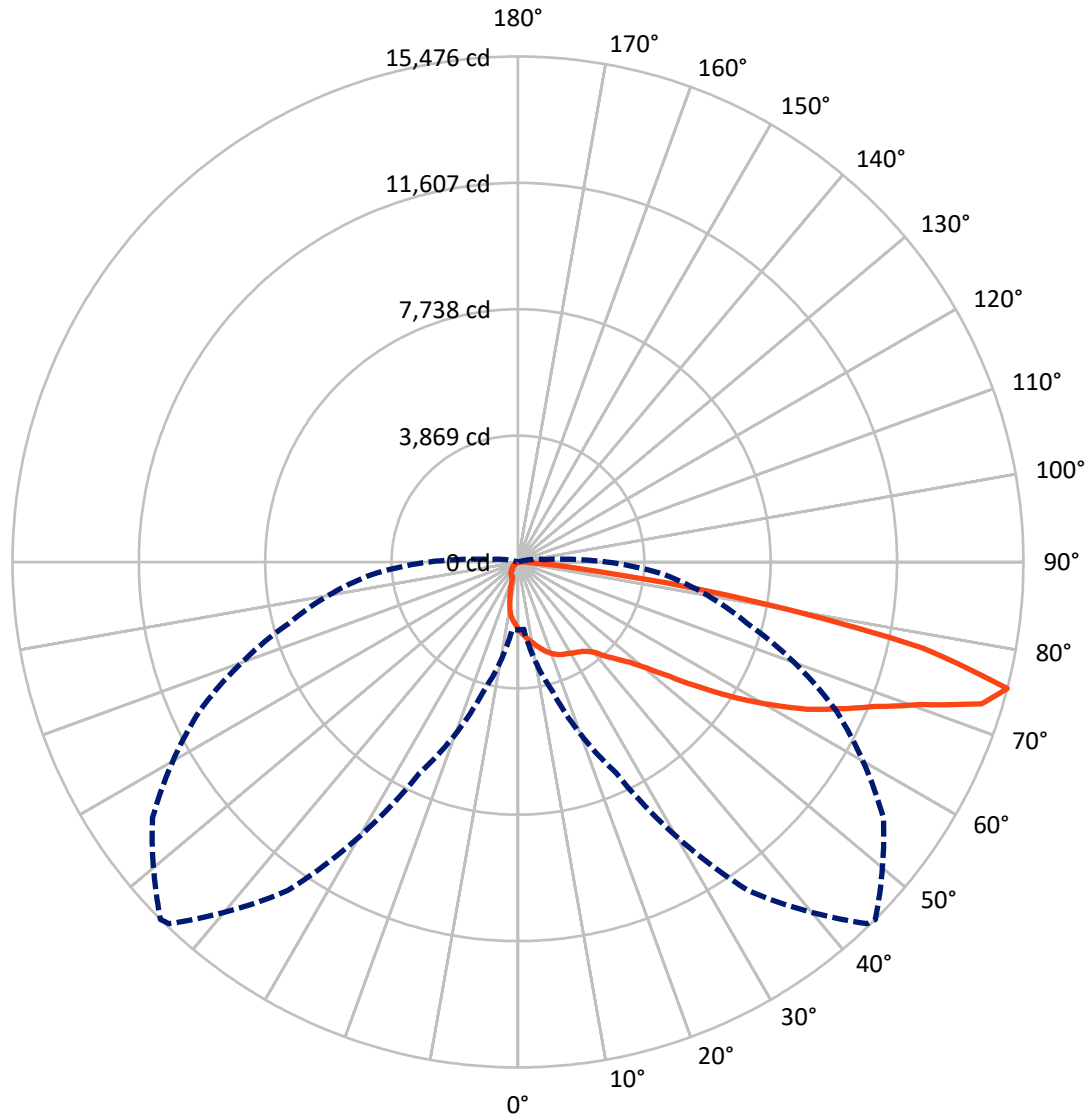
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 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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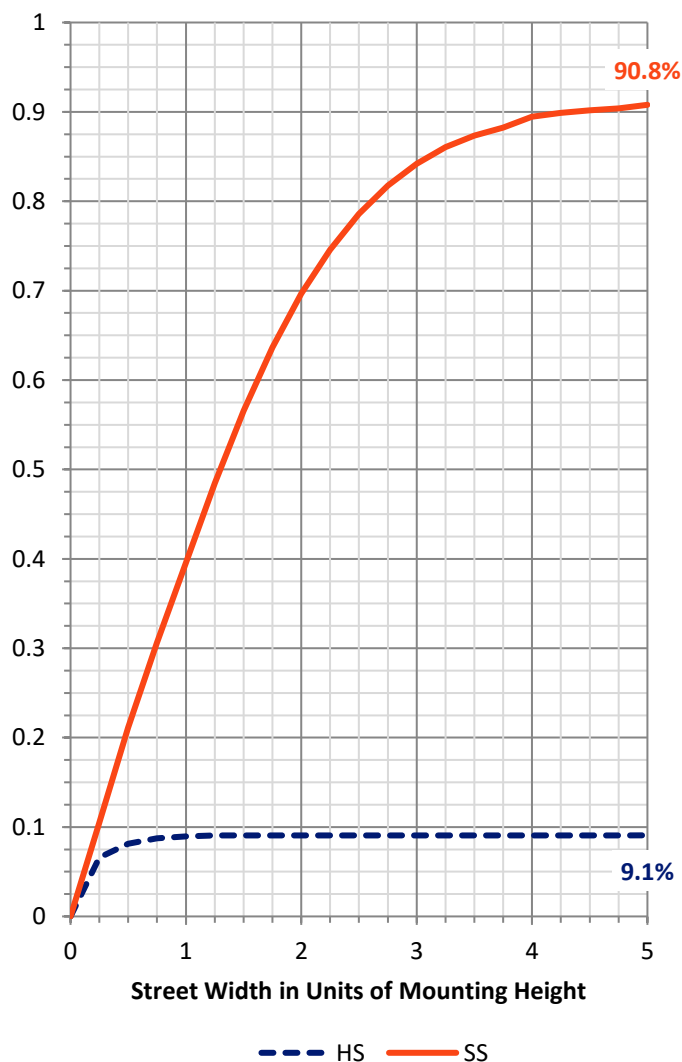
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1760.5	0.0	1760.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	17486.6	0.0	17486.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	19247.1	0.0	19247.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.3	1.0
10°-20°	550.4	2.9
20°-30°	911.6	4.7
30°-40°	1319.2	6.9
40°-50°	2160.2	11.2
50°-60°	3849.0	20.0
60°-70°	5658.6	29.4
70°-80°	4268.9	22.2
80°-90°	334.9	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°	19247.1	100.0
0°-180°	19247.1	100.0

Coefficient of Utilization



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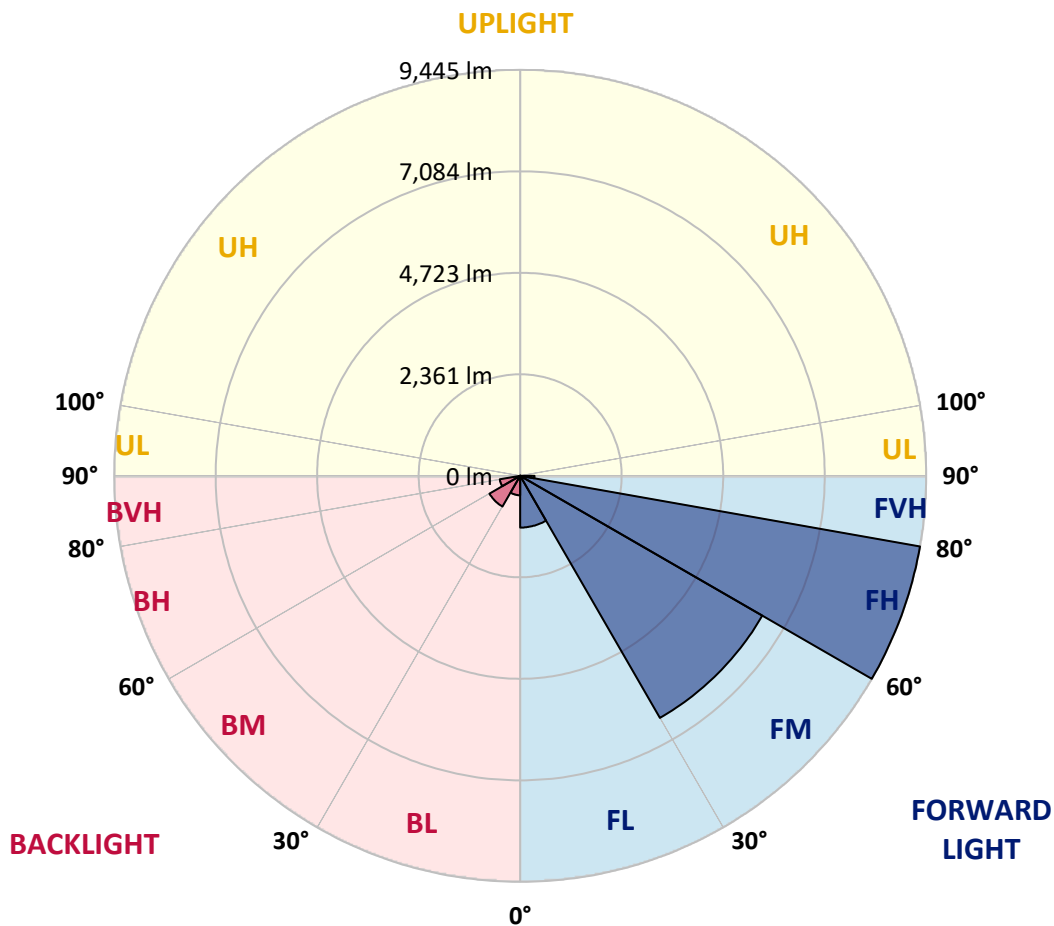
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1203.9	6.3			
FM (30°-60°)	6503.5	33.8			
FH (60°-80°)	9445.2	49.1			G4/12000
FVH (80°-90°)	334.0	1.7			G3/500
BL (0°-30°)	452.4	2.4	B1/500		
BM (30°-60°)	825.0	4.3	B1/1000		
BH (60°-80°)	482.2	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°	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6
2.5°	2236.2	2236.2	2231.6	2227.1	2204.3	2181.6	2177.0	2163.4	2122.4	2095.0	2067.7
5°	2423.0	2427.5	2418.4	2395.6	2345.5	2295.4	2290.8	2254.4	2177.0	2122.4	2063.2
7.5°	2600.6	2609.6	2586.9	2545.8	2486.7	2413.9	2409.2	2341.0	2240.8	2163.4	2076.8
10°	2750.8	2750.8	2718.9	2668.8	2605.1	2527.7	2518.5	2441.2	2327.3	2231.6	2117.8
12.5°	2914.8	2910.2	2864.7	2796.4	2723.5	2650.6	2646.2	2550.4	2441.2	2318.2	2177.0
15°	3065.0	3056.0	2996.8	2933.1	2855.6	2778.1	2773.6	2678.0	2564.1	2418.4	2263.6
17.5°	3147.1	3142.6	3087.8	3024.1	2960.4	2901.2	2896.6	2796.4	2673.5	2523.2	2350.0
20°	3160.8	3165.3	3119.8	3065.0	3028.6	2996.8	2996.8	2905.8	2773.6	2614.2	2441.2
22.5°	3165.3	3179.0	3147.1	3074.2	3065.0	3069.6	3078.8	3005.9	2869.2	2718.9	2536.8
25°	3197.2	3215.4	3192.7	3106.1	3097.0	3128.8	3137.9	3106.1	2983.1	2832.9	2646.2
27.5°	3261.0	3279.2	3261.0	3151.6	3137.9	3169.8	3179.0	3197.2	3106.1	2942.2	2760.0
30°	3388.4	3393.0	3352.1	3215.4	3188.0	3229.0	3242.7	3292.8	3220.0	3046.9	2869.2
32.5°	3611.7	3566.1	3443.1	3261.0	3238.1	3283.7	3297.3	3352.1	3324.6	3147.1	2983.1
35°	4067.0	3830.2	3547.8	3324.6	3302.0	3347.4	3365.7	3443.1	3456.8	3288.2	3124.3
37.5°	4062.5	3848.4	3793.8	3447.6	3415.8	3447.6	3470.4	3566.1	3620.8	3475.0	3329.2
40°	4349.4	4258.4	4258.4	3680.0	3575.2	3620.8	3643.5	3739.2	3834.8	3721.0	3570.6
42.5°	5251.2	5192.0	5128.2	4126.2	3798.4	3925.9	3939.6	3998.8	4112.6	4076.1	3898.6
45°	6257.8	6203.0	5957.2	4882.2	4181.0	4203.8	4235.6	4331.2	4495.2	4563.5	4354.0
47.5°	7045.6	6991.0	6781.5	5793.2	4777.6	4577.2	4577.2	4763.9	5019.0	5192.0	4991.6
50°	7678.7	7615.0	7487.4	6763.2	5756.8	5114.5	5087.2	5305.8	5683.8	5952.6	5816.0
52.5°	8293.6	8106.8	8029.4	7765.3	6863.4	5893.3	5820.5	5975.4	6499.1	6831.6	6717.7
55°	8703.5	8676.1	8594.2	8685.2	8024.9	6840.7	6777.0	6808.8	7464.6	7687.8	7546.6
57.5°	9086.0	9081.4	9263.6	9687.2	9291.0	7924.7	7824.4	7774.4	8398.3	8343.6	8466.6
60°	9559.6	9477.7	9901.2	10506.9	10452.3	8981.2	8867.4	8767.2	9113.4	8958.5	9568.8
62.5°	9582.5	9559.6	10420.4	11290.3	11604.5	10056.1	9924.0	9564.2	9737.3	9559.6	10620.9
65°	8712.6	8826.4	10639.0	11704.7	12570.1	10998.8	10839.4	10279.2	10292.9	10174.6	11859.6
67.5°	8516.6	8575.9	10037.8	12151.0	13267.0	11950.7	11800.4	11103.6	10939.6	10948.8	12592.9
70°	8029.4	8120.4	9291.0	12119.2	13818.0	13221.4	13071.1	12315.0	11918.9	11477.0	12028.2
72.5°	6134.8	6289.6	7829.0	10625.4	13667.7	14883.8	14842.8	13849.9	12310.5	10538.8	9099.6
75°	2076.8	2072.2	4112.6	7136.7	12278.7	15393.9	15475.8	13658.6	10739.2	7268.8	4518.0
77.5°	446.4	450.9	847.1	2892.0	8156.9	12360.6	12674.8	10302.0	6927.2	3238.1	1033.8
80°	218.6	223.2	350.7	765.2	3261.0	6931.7	7423.6	5296.8	2559.6	646.7	173.0
82.5°	109.3	113.8	182.1	405.4	1206.9	2463.9	2632.4	1949.3	733.2	364.4	86.6
85°	41.0	41.0	91.1	241.4	551.1	578.4	710.5	564.8	441.7	296.0	22.7
87.5°	9.1	9.1	50.1	118.4	246.0	182.1	182.1	173.0	268.7	200.4	9.1
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°	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6	2058.6
2.5°	2054.1	2035.8	2004.0	1972.0	1949.3	1922.0	1908.3	1894.7	1890.0	1885.5	1894.7
5°	2031.2	2004.0	1944.7	1894.7	1849.1	1812.6	1785.3	1758.0	1744.4	1735.2	1739.7
7.5°	2031.2	1990.2	1903.8	1826.3	1753.4	1676.0	1598.6	1539.4	1493.8	1466.5	1471.0
10°	2054.1	1999.3	1885.5	1780.8	1644.2	1480.1	1311.6	1184.2	1097.6	1047.5	1047.5
12.5°	2104.2	2031.2	1890.0	1726.1	1493.8	1206.9	951.8	797.0	733.2	696.8	701.3
15°	2172.4	2085.9	1912.8	1653.2	1284.4	897.2	665.0	564.8	564.8	573.8	578.4
17.5°	2249.8	2154.3	1931.0	1544.0	1015.7	642.1	523.8	514.6	528.3	551.1	551.1
20°	2327.3	2222.6	1940.1	1370.8	760.6	510.1	496.5	496.5	505.6	528.3	532.8
22.5°	2423.0	2309.0	1931.0	1156.8	569.4	482.8	478.2	478.2	478.2	505.6	505.6
25°	2523.2	2409.2	1894.7	929.1	482.8	464.6	460.0	455.4	455.4	478.2	482.8
27.5°	2637.0	2514.0	1808.1	710.5	455.4	446.4	441.7	432.6	432.6	450.9	450.9
30°	2750.8	2632.4	1676.0	537.4	432.6	428.1	419.0	409.9	400.8	419.0	419.0
32.5°	2873.8	2755.4	1503.0	428.1	400.8	400.8	396.3	382.5	373.4	382.5	387.1
35°	3037.7	2896.6	1307.1	373.4	359.8	359.8	359.8	355.2	337.1	346.2	346.2
37.5°	3256.4	3092.5	1079.4	346.2	327.9	318.8	318.8	318.8	305.2	309.8	309.8
40°	3534.2	3320.2	860.8	323.4	305.2	282.3	273.2	277.8	268.7	268.7	264.2
42.5°	3912.2	3566.1	646.7	305.2	287.0	255.0	236.9	232.2	223.2	218.6	218.6
45°	4454.2	3866.6	464.6	287.0	273.2	223.2	205.0	191.3	168.5	154.8	154.8
47.5°	5155.6	4208.2	346.2	268.7	259.6	195.8	173.0	145.8	113.8	104.8	104.8
50°	6011.8	4590.8	291.5	241.4	236.9	173.0	136.7	95.6	63.8	54.6	59.2
52.5°	6845.2	4950.6	259.6	214.0	209.4	150.3	100.2	50.1	27.4	27.4	27.4
55°	7546.6	5205.6	236.9	191.3	182.1	118.4	54.6	22.7	13.6	13.6	13.6
57.5°	8179.7	5351.4	214.0	168.5	145.8	82.0	22.7	9.1	9.1	4.6	4.6
60°	8758.1	5438.0	186.8	145.8	113.8	45.6	9.1	4.6	4.6	0.0	0.0
62.5°	9327.4	5501.8	159.4	118.4	86.6	18.2	4.6	4.6	0.0	0.0	0.0
65°	9760.0	5479.0	127.5	95.6	54.6	9.1	4.6	0.0	0.0	0.0	0.0
67.5°	9746.4	5169.3	95.6	72.8	27.4	4.6	0.0	0.0	0.0	0.0	0.0
70°	8717.1	4354.0	63.8	45.6	9.1	4.6	0.0	0.0	0.0	0.0	0.0
72.5°	6184.8	2791.8	41.0	27.4	4.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	2723.5	847.1	22.7	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	532.8	195.8	13.6	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	127.5	22.7	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	54.6	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	4.6	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)