

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: P399648

Luminaire Tested: **ARCH-L-PA3-170-740-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-740-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA 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: 18830 lumens
Efficiency: N/A
Efficacy: 108.8 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

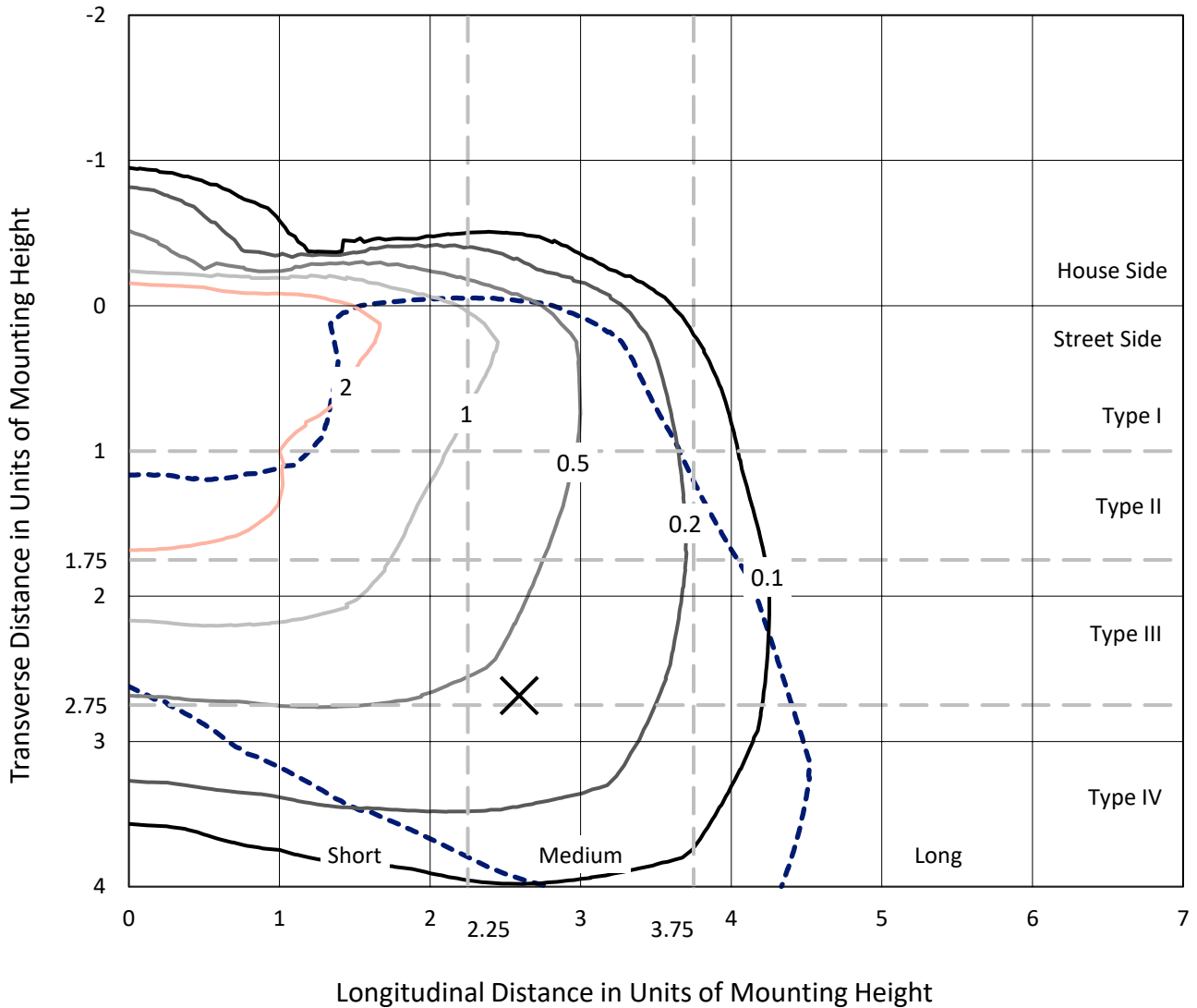
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

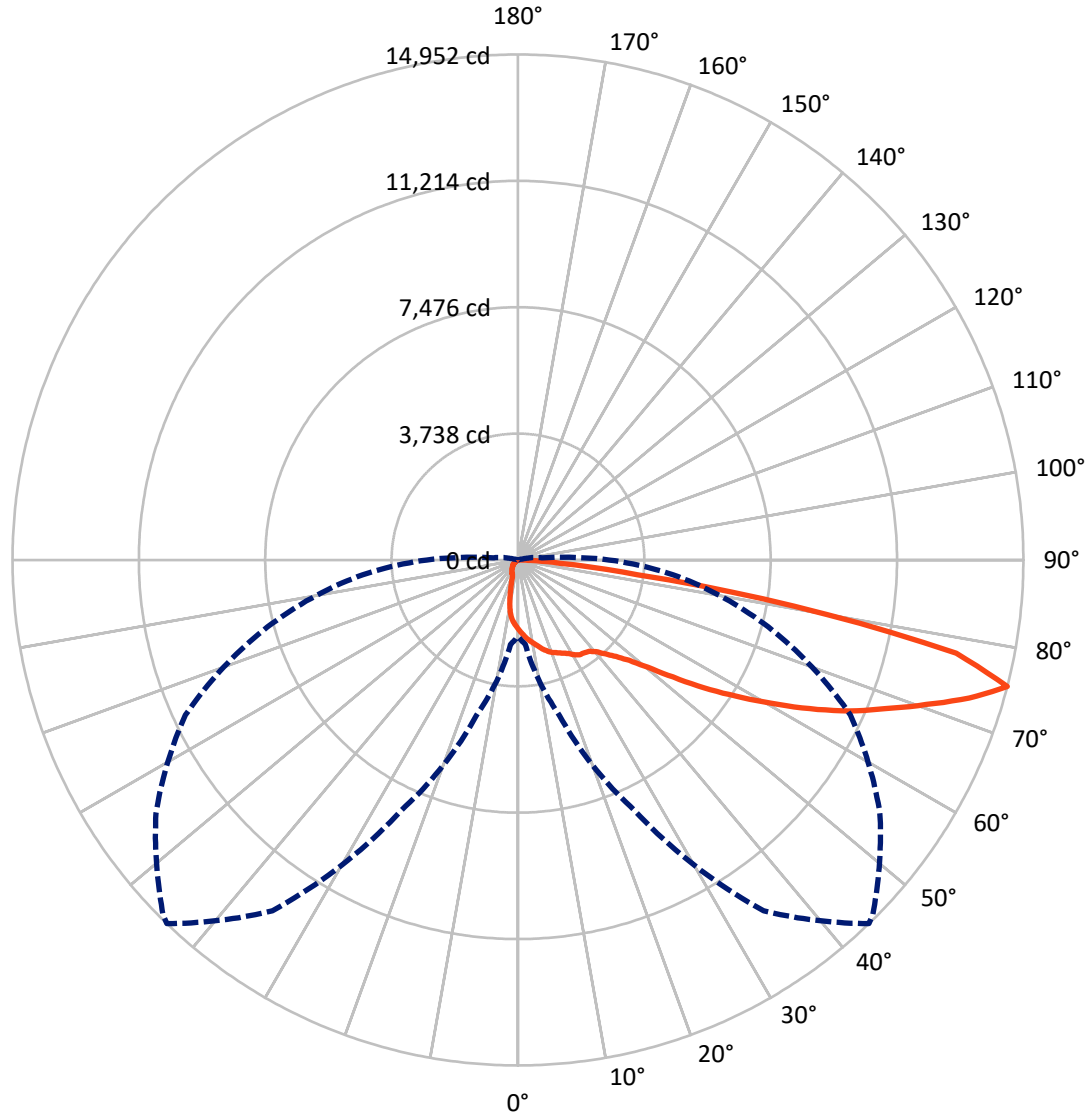
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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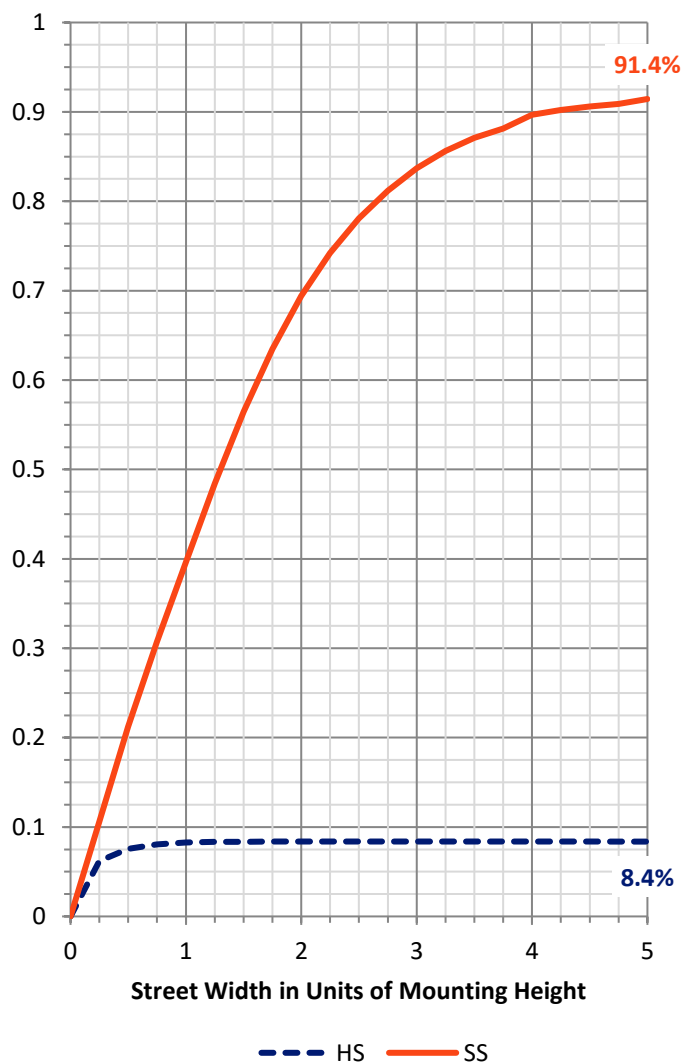
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1588.0	0.0	1588.0
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	17242.0	0.0	17242.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	18830.0	0.0	18830.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.3	1.0
10°-20°	541.6	2.9
20°-30°	893.8	4.7
30°-40°	1297.3	6.9
40°-50°	2108.8	11.2
50°-60°	3717.6	19.7
60°-70°	5343.0	28.4
70°-80°	4278.6	22.7
80°-90°	455.8	2.4
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°	18830.0	100.0
0°-180°	18830.0	100.0

Coefficient of Utilization



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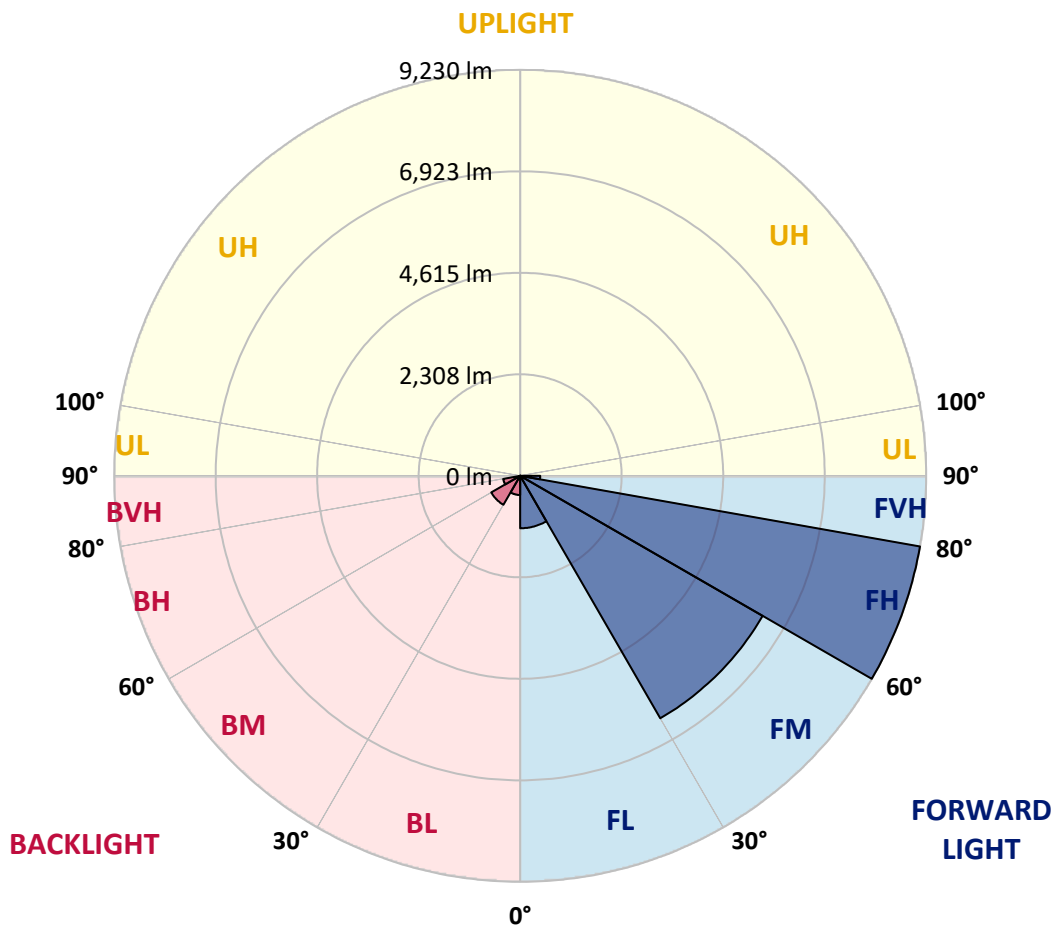
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1192.5	6.3			
FM (30°-60°)	6364.7	33.8			
FH (60°-80°)	9230.1	49.0			G4/12000
FVH (80°-90°)	454.7	2.4			G3/500
BL (0°-30°)	436.3	2.3	B1/500		
BM (30°-60°)	759.1	4.0	B1/1000		
BH (60°-80°)	391.5	2.1	B1/500		G1/500
BVH (80°-90°)	1.1	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°	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6
2.5°	2233.7	2230.2	2219.8	2202.4	2185.1	2167.7	2164.2	2136.4	2105.2	2080.8	2060.0
5°	2431.7	2428.2	2410.9	2372.6	2334.4	2289.3	2285.8	2219.8	2160.7	2094.7	2039.2
7.5°	2636.7	2629.7	2598.4	2539.4	2473.4	2403.9	2397.0	2299.7	2212.8	2126.0	2046.1
10°	2796.5	2789.5	2744.3	2674.9	2584.5	2497.7	2487.3	2386.5	2299.7	2188.5	2080.8
12.5°	2952.8	2938.9	2879.8	2803.4	2692.2	2608.9	2598.4	2494.2	2390.0	2275.4	2143.4
15°	3098.7	3081.3	3025.7	2928.5	2810.3	2730.4	2723.5	2612.3	2504.6	2372.6	2226.7
17.5°	3199.4	3192.5	3126.5	3018.8	2904.1	2838.1	2831.2	2716.6	2608.9	2469.9	2313.6
20°	3251.5	3251.5	3189.0	3070.9	2966.7	2921.5	2911.1	2803.4	2699.2	2567.2	2403.9
22.5°	3261.9	3272.4	3223.7	3095.2	3018.8	2980.6	2973.6	2879.8	2779.1	2657.5	2504.6
25°	3282.8	3282.8	3258.5	3119.5	3063.9	3053.5	3050.0	2966.7	2876.4	2754.8	2605.4
27.5°	3307.1	3307.1	3289.7	3154.3	3133.4	3129.9	3126.5	3088.3	3015.3	2872.9	2723.5
30°	3369.6	3373.1	3359.2	3223.7	3209.8	3248.1	3255.0	3234.2	3143.8	2966.7	2845.1
32.5°	3526.0	3494.7	3456.5	3272.4	3296.7	3345.3	3348.8	3307.1	3209.8	3067.4	2991.0
35°	3918.5	3734.4	3560.7	3314.1	3324.5	3373.1	3380.1	3376.6	3317.5	3195.9	3157.7
37.5°	4283.3	4022.7	3776.1	3411.3	3376.6	3428.7	3442.6	3501.6	3456.5	3373.1	3383.5
40°	4495.2	4394.4	4220.7	3678.8	3480.8	3560.7	3574.6	3664.9	3647.5	3612.8	3678.8
42.5°	5148.3	5155.2	4967.6	4078.3	3671.9	3800.4	3817.8	3890.7	3915.0	3932.4	4092.2
45°	5905.6	5929.9	5884.7	4797.4	4033.1	4074.8	4099.1	4196.4	4286.7	4397.9	4689.7
47.5°	6815.7	6794.9	6628.1	5676.3	4661.9	4429.2	4446.5	4634.1	4790.4	5033.6	5450.5
50°	7621.6	7673.7	7357.6	6496.1	5547.7	4988.5	4971.1	5155.2	5436.6	5777.0	6301.6
52.5°	8434.5	8358.1	7930.8	7309.0	6596.8	5749.2	5697.1	5797.9	6193.9	6596.8	7135.3
55°	8649.9	8656.8	8510.9	8198.3	7472.3	6673.3	6586.4	6579.5	7072.8	7347.2	8010.7
57.5°	9073.7	9091.1	9125.8	9188.3	8844.4	7597.3	7507.0	7409.7	7889.1	8048.9	8889.6
60°	9504.5	9525.3	9737.2	10074.2	9844.9	8594.3	8497.0	8267.8	8535.3	8750.6	9813.6
62.5°	9448.9	9594.8	10209.7	10880.1	10852.3	9688.6	9567.0	9014.7	9184.9	9372.5	10661.3
65°	8531.8	8688.1	10070.7	11102.4	11863.2	10768.9	10570.9	9785.8	9796.3	10022.1	11477.6
67.5°	7712.0	7882.2	9202.2	11008.6	12530.2	11738.2	11533.2	10560.5	10397.2	10772.4	11915.3
70°	7239.5	7409.7	8510.9	10716.8	12717.8	12811.6	12634.4	11446.4	11112.9	11456.8	11425.5
72.5°	5665.9	5933.3	7628.6	10161.0	12919.3	13961.4	13822.5	12568.4	11720.8	10741.2	8698.5
75°	2258.0	2504.6	4762.7	8177.5	12665.7	14951.5	14843.8	13072.1	10848.8	7670.3	4453.5
77.5°	680.9	729.5	1323.5	4043.6	9285.6	13256.2	13221.5	10991.3	7677.2	3560.7	1215.8
80°	225.8	250.1	406.4	1115.1	4238.1	8281.7	8438.0	7003.3	3487.7	816.4	246.6
82.5°	93.8	104.2	205.0	448.1	1500.7	3567.6	3515.5	3136.9	1215.8	507.2	90.3
85°	24.3	31.3	93.8	257.1	548.9	1229.7	1292.3	1052.6	687.8	420.3	27.8
87.5°	0.0	0.0	45.2	104.2	246.6	371.7	389.1	319.6	389.1	316.1	13.9
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°	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6	2049.6
2.5°	2042.6	2025.3	1994.0	1973.1	1945.4	1938.4	1924.5	1907.1	1903.7	1886.3	1889.8
5°	2007.9	1980.1	1924.5	1886.3	1841.1	1827.2	1802.9	1785.6	1771.7	1747.3	1750.8
7.5°	2000.9	1959.3	1882.8	1809.9	1736.9	1684.8	1611.9	1552.8	1504.2	1452.1	1462.5
10°	2025.3	1973.1	1865.5	1764.7	1632.7	1466.0	1274.9	1149.8	1087.3	1024.8	1031.7
12.5°	2073.9	2011.4	1872.4	1719.6	1452.1	1167.2	903.2	733.0	687.8	660.0	663.5
15°	2146.8	2070.4	1893.3	1632.7	1208.9	844.1	601.0	528.0	545.4	555.8	555.8
17.5°	2223.3	2136.4	1910.6	1476.4	934.5	590.6	489.8	482.9	507.2	531.5	531.5
20°	2317.1	2205.9	1914.1	1278.4	673.9	479.4	462.0	462.0	479.4	507.2	507.2
22.5°	2407.4	2282.3	1882.8	1052.6	514.1	444.7	444.7	444.7	455.1	482.9	486.3
25°	2515.1	2376.1	1816.8	812.9	441.2	423.8	423.8	427.3	434.2	458.5	462.0
27.5°	2629.7	2473.4	1705.7	594.0	403.0	399.5	403.0	406.4	409.9	434.2	441.2
30°	2761.7	2581.1	1563.2	444.7	368.2	368.2	378.7	385.6	385.6	406.4	413.4
32.5°	2914.6	2723.5	1393.0	368.2	333.5	330.0	347.4	357.8	357.8	375.2	382.1
35°	3105.6	2869.4	1188.1	326.5	305.7	298.8	305.7	323.1	330.0	343.9	347.4
37.5°	3359.2	3043.1	969.2	302.2	284.9	271.0	271.0	274.4	288.3	302.2	305.7
40°	3682.3	3234.2	753.8	284.9	264.0	250.1	239.7	236.2	232.7	243.2	250.1
42.5°	4088.7	3449.5	562.8	267.5	246.6	225.8	211.9	198.0	180.6	177.2	180.6
45°	4609.8	3713.6	416.9	253.6	236.2	205.0	180.6	156.3	125.1	114.6	118.1
47.5°	5224.7	3988.0	326.5	239.7	229.3	180.6	149.4	107.7	76.4	69.5	73.0
50°	5877.8	4252.0	277.9	222.3	215.4	156.3	107.7	66.0	45.2	45.2	48.6
52.5°	6433.6	4401.4	253.6	208.4	194.5	128.5	69.5	38.2	27.8	27.8	31.3
55°	6972.0	4481.3	236.2	194.5	166.7	90.3	38.2	24.3	17.4	17.4	17.4
57.5°	7527.8	4516.0	215.4	177.2	132.0	55.6	20.8	13.9	10.4	10.4	10.4
60°	8021.1	4450.0	184.1	145.9	86.8	27.8	10.4	10.4	6.9	3.5	3.5
62.5°	8434.5	4324.9	128.5	104.2	52.1	13.9	6.9	3.5	0.0	0.0	0.0
65°	8688.1	4123.5	83.4	69.5	31.3	10.4	3.5	0.0	0.0	0.0	0.0
67.5°	8615.2	3744.8	52.1	45.2	13.9	6.9	3.5	0.0	0.0	0.0	0.0
70°	7774.5	3070.9	38.2	27.8	10.4	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	5603.3	2077.4	27.8	17.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2695.7	739.9	17.4	13.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	660.0	163.3	10.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	145.9	31.3	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.6	13.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.4	3.5	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)