

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: P237198

Luminaire Tested: **ARCH-L-AF72-250-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237198
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
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-T3-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19944.2 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 III - Medium
BUG Rating: B2 - U0 - G4

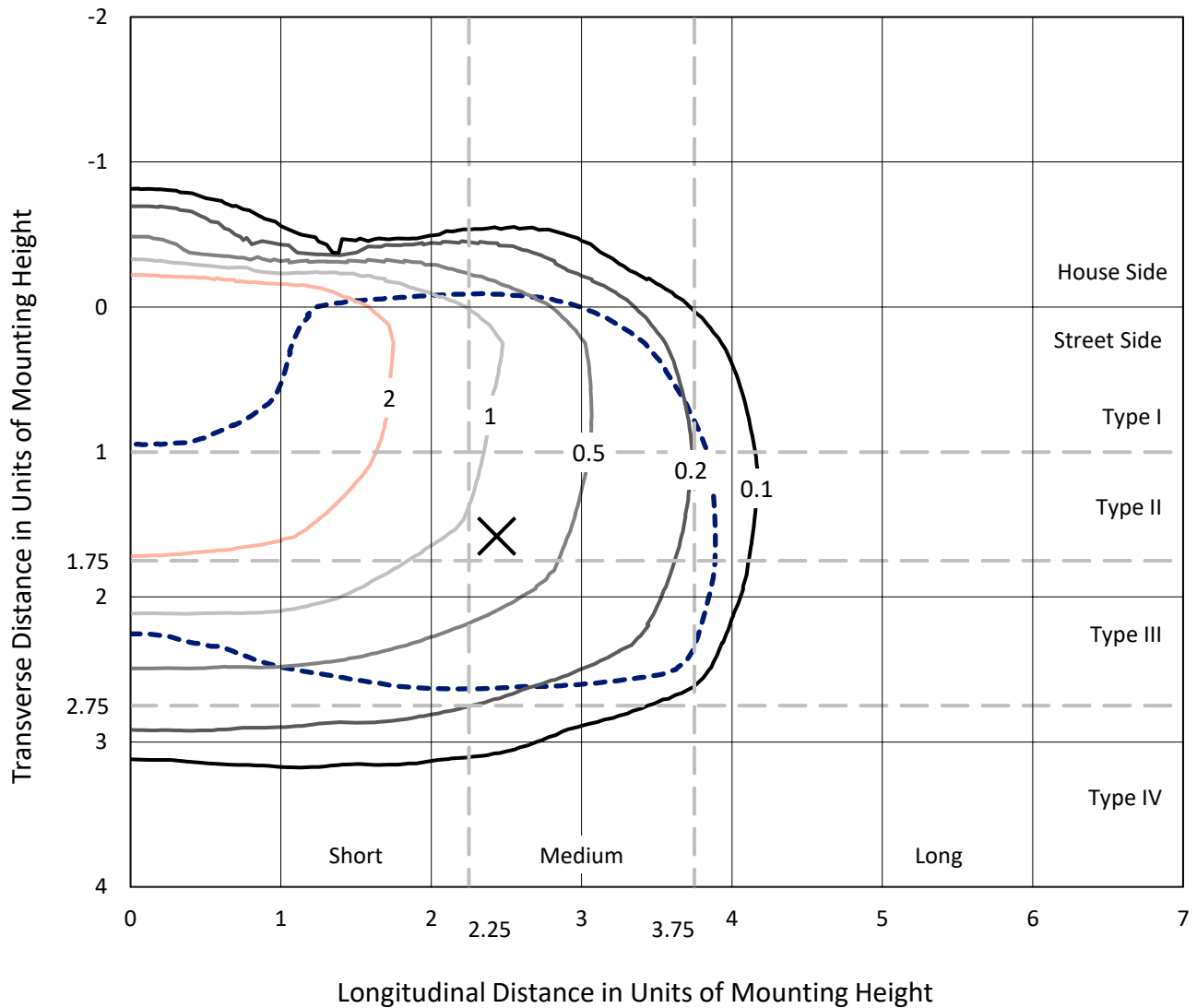
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

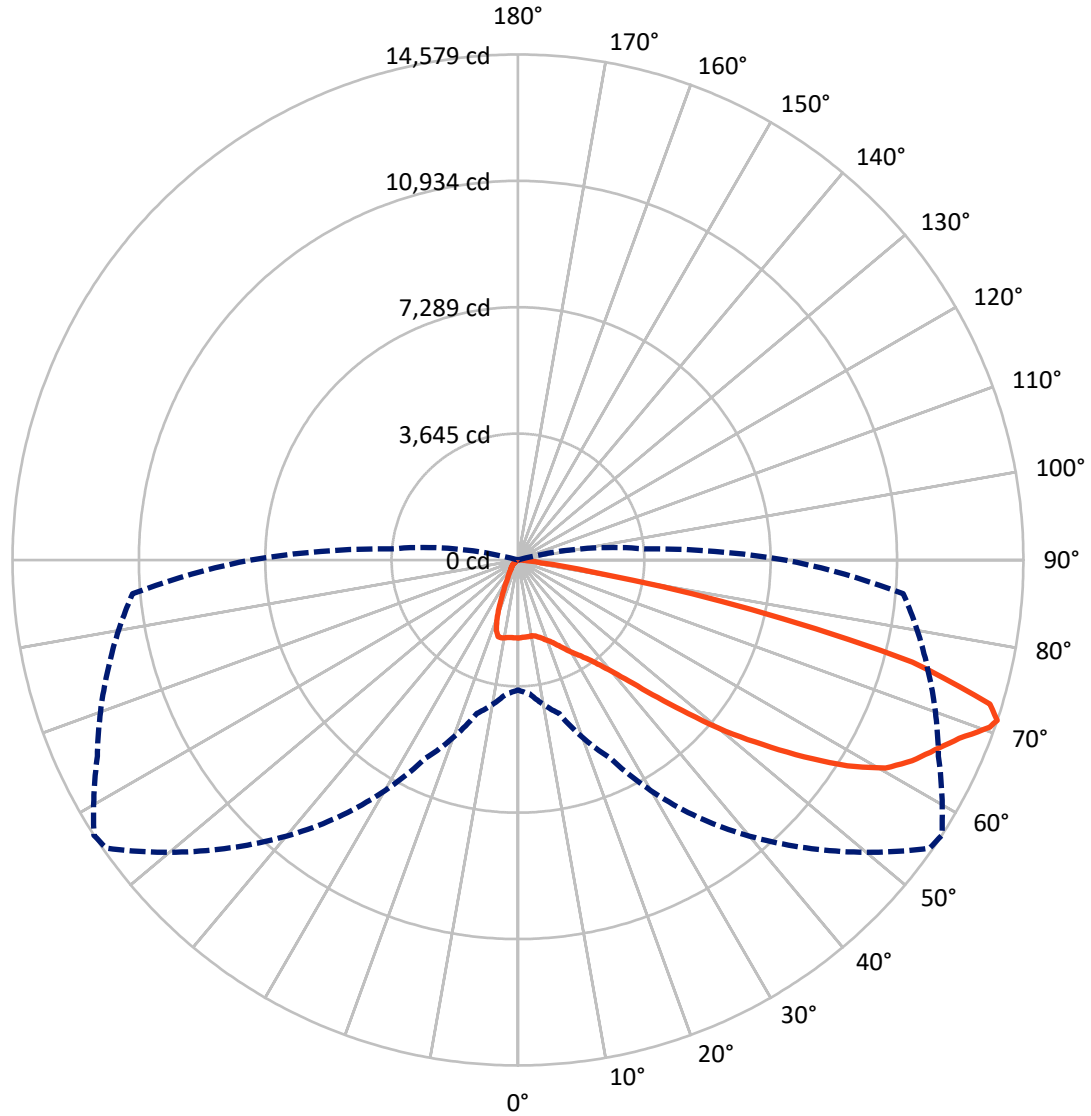
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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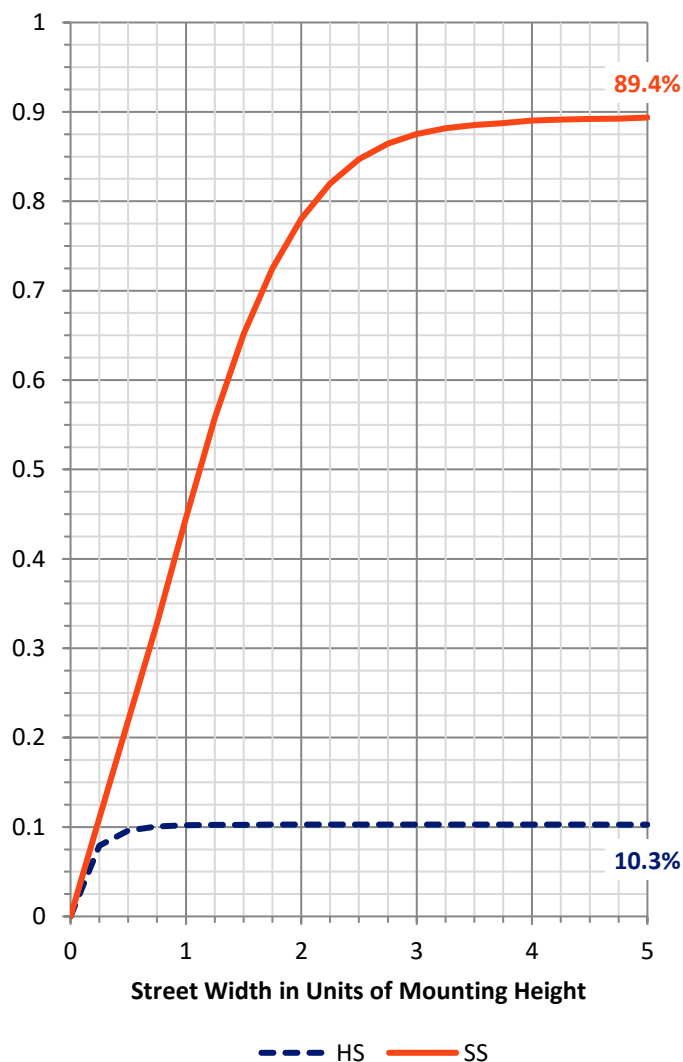
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2066.8	0.0	2066.8
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	17877.3	0.0	17877.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	19944.2	0.0	19944.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.7	1.1
10°-20°	566.0	2.8
20°-30°	882.9	4.4
30°-40°	1492.3	7.5
40°-50°	2898.4	14.5
50°-60°	4867.3	24.4
60°-70°	5808.7	29.1
70°-80°	3061.3	15.3
80°-90°	155.5	0.8
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°	19944.2	100.0
0°-180°	19944.2	100.0

Coefficient of Utilization



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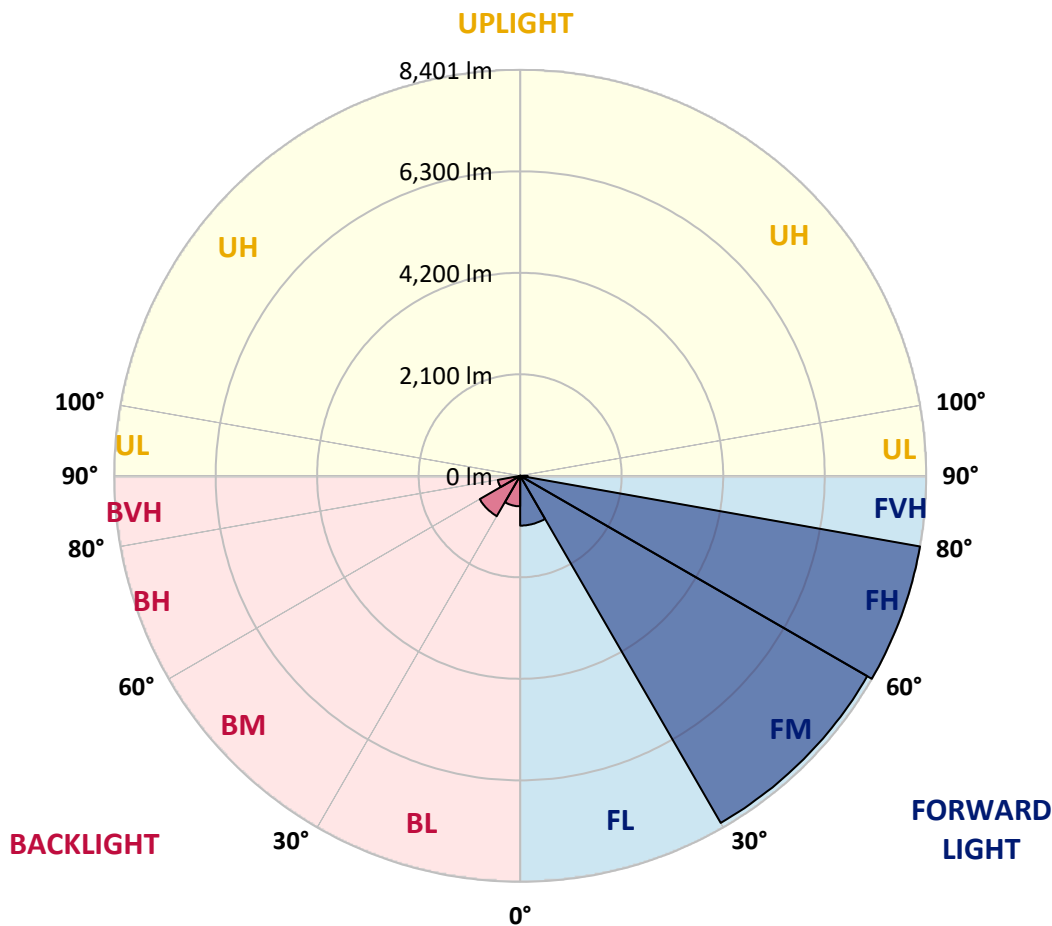
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1029.7	5.2			
FM (30°-60°)	8293.0	41.6			
FH (60°-80°)	8400.6	42.1			G4/12000
FVH (80°-90°)	154.1	0.8			G2/225
BL (0°-30°)	630.9	3.2	B2/1000		
BM (30°-60°)	965.1	4.8	B1/1000		
BH (60°-80°)	469.4	2.4	B1/500		G1/500
BVH (80°-90°)	1.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0
2.5°	2221.5	2221.5	2221.5	2226.1	2230.7	2230.7	2240.1	2235.5	2235.5	2235.5	2244.7
5°	2161.0	2165.7	2170.3	2179.6	2198.2	2212.2	2235.5	2235.5	2240.1	2249.3	2254.0
7.5°	2077.3	2082.1	2096.0	2114.6	2151.8	2184.3	2221.5	2230.7	2244.7	2267.9	2277.2
10°	2026.3	2035.6	2054.2	2077.3	2119.2	2161.0	2207.5	2221.5	2263.3	2305.2	2328.4
12.5°	2012.3	2016.9	2035.6	2072.7	2123.9	2175.1	2235.5	2249.3	2309.7	2374.9	2412.0
15°	2035.6	2040.2	2049.4	2091.3	2151.8	2216.9	2295.9	2314.4	2388.7	2463.1	2509.5
17.5°	2077.3	2077.3	2086.8	2123.9	2188.9	2263.3	2365.6	2393.5	2477.0	2560.7	2611.9
20°	2105.3	2105.3	2119.2	2156.4	2230.7	2328.4	2449.1	2486.4	2579.3	2672.3	2718.7
22.5°	2133.2	2137.7	2151.8	2193.6	2277.2	2412.0	2551.4	2588.6	2695.5	2793.1	2839.5
25°	2212.2	2207.5	2212.2	2249.3	2347.0	2514.3	2690.8	2737.3	2848.8	2955.8	2979.0
27.5°	2430.6	2421.3	2360.9	2337.6	2412.0	2621.1	2867.4	2914.0	3044.1	3150.9	3150.9
30°	2932.5	2914.0	2765.3	2574.7	2514.3	2718.7	3034.7	3099.8	3267.2	3360.0	3332.2
32.5°	3569.2	3527.4	3336.9	3011.5	2769.8	2848.8	3211.3	3285.8	3499.5	3578.5	3518.0
35°	4266.3	4261.6	4024.7	3606.4	3262.5	3118.4	3439.1	3527.4	3797.0	3866.6	3769.0
37.5°	5005.2	5023.8	4865.9	4289.5	3885.3	3559.8	3741.1	3843.4	4173.3	4257.1	4164.1
40°	5827.9	5823.2	5762.8	5079.6	4633.4	4187.4	4178.1	4271.0	4670.7	4800.8	4670.7
42.5°	6868.9	6859.7	6641.1	6027.8	5539.7	5005.2	4814.7	4847.3	5293.4	5507.2	5316.7
45°	7928.5	7863.4	7612.4	7082.6	6650.5	6018.4	5656.0	5656.0	6037.0	6329.8	6032.3
47.5°	8518.7	8453.6	8351.4	8058.6	7928.5	7222.0	6687.6	6622.5	6920.1	7217.4	6799.2
50°	9294.8	9294.8	9039.2	8927.7	9150.8	8653.5	7826.2	7761.2	7905.2	8142.2	7593.8
52.5°	9908.2	9796.7	9615.5	9713.0	10349.8	10122.1	8964.8	8839.4	8950.9	9011.3	8286.3
55°	10163.9	10057.0	10043.1	10400.9	11386.1	11070.1	10131.4	10019.8	10010.6	9713.0	8890.5
57.5°	10214.9	10122.1	10298.7	10926.0	12394.7	11846.2	11293.2	11209.6	10949.3	10205.7	9508.7
60°	9782.8	9829.3	10256.8	11214.3	12989.5	12520.1	12273.8	12185.4	11586.0	10624.0	10196.4
62.5°	8895.2	9006.7	9806.0	11242.1	12771.1	12794.4	12817.5	12757.1	12078.6	11005.0	10888.9
65°	7844.9	7877.4	8839.4	10856.3	12390.0	12710.6	13217.2	13212.6	12455.1	11432.7	11669.7
67.5°	6464.6	6520.4	7352.2	9555.0	11627.8	12673.5	13742.4	13728.4	12882.6	11920.6	12134.5
70°	4810.0	4879.7	5553.6	7431.2	9926.9	12208.7	14430.2	14439.4	13333.5	12292.4	11813.7
71°	3750.5	3876.0	4582.4	6311.2	9057.8	11739.4	14495.3	14578.9	13384.6	12241.3	11153.8
72.5°	1840.4	1989.1	2876.8	4442.9	7454.4	10689.1	14067.6	14230.4	13063.9	11604.7	9536.4
75°	478.7	506.5	859.8	1817.1	3996.8	7082.6	11344.4	11757.9	10679.8	8834.7	5827.9
77.5°	302.1	311.4	404.4	706.4	1496.5	2690.8	6664.4	6868.9	6102.0	4475.5	2054.2
80°	213.8	218.4	255.5	455.4	873.7	785.5	2398.0	2486.4	2207.5	1185.1	367.1
82.5°	130.1	130.1	185.8	292.9	539.0	427.5	632.1	673.9	594.9	330.0	120.8
85°	74.4	79.0	116.2	199.8	255.5	209.1	237.0	251.0	255.5	218.4	51.2
87.5°	60.4	65.0	102.2	167.2	139.5	102.2	102.2	106.8	111.6	130.1	23.3
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°	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0	2254.0
2.5°	2244.7	2244.7	2249.3	2244.7	2244.7	2244.7	2249.3	2249.3	2249.3	2258.6	2263.3
5°	2254.0	2254.0	2254.0	2249.3	2244.7	2244.7	2254.0	2258.6	2258.6	2272.6	2272.6
7.5°	2277.2	2277.2	2267.9	2258.6	2249.3	2235.5	2240.1	2244.7	2240.1	2244.7	2244.7
10°	2328.4	2328.4	2314.4	2295.9	2267.9	2226.1	2170.3	2100.6	2035.6	2012.3	2003.0
12.5°	2412.0	2407.3	2379.4	2347.0	2286.6	2142.5	1933.4	1687.0	1482.5	1426.7	1408.2
15°	2505.0	2495.7	2463.1	2407.3	2244.7	1863.6	1426.7	1110.7	915.6	869.0	859.8
17.5°	2602.5	2588.6	2542.1	2430.6	2054.2	1385.0	920.2	697.1	590.2	580.9	585.5
20°	2704.8	2686.2	2621.1	2384.1	1659.1	924.9	594.9	539.0	529.8	529.8	534.5
22.5°	2821.0	2797.7	2709.4	2216.9	1208.3	613.5	511.3	506.5	501.9	497.2	497.2
25°	2955.8	2927.8	2793.1	1914.8	831.9	501.9	488.0	474.0	464.8	455.4	450.8
27.5°	3118.4	3081.2	2858.1	1543.0	571.7	469.4	460.1	436.8	418.3	399.7	399.7
30°	3281.0	3234.6	2839.5	1161.9	464.8	436.8	418.3	390.4	362.5	343.9	339.2
32.5°	3453.0	3406.6	2718.7	780.7	423.0	399.7	376.4	334.7	302.1	278.8	274.2
35°	3708.6	3671.4	2481.8	515.8	381.1	353.2	320.6	278.8	237.0	213.8	209.1
37.5°	4089.7	4043.2	2188.9	395.1	334.7	292.9	265.0	218.4	176.6	153.4	148.7
40°	4600.9	4461.5	1840.4	348.5	292.9	241.7	204.6	158.0	125.4	111.6	111.6
42.5°	5195.9	4865.9	1464.0	316.0	260.2	199.8	148.7	106.8	88.3	83.7	83.7
45°	5827.9	5242.3	1087.4	292.9	227.7	158.0	106.8	74.4	65.0	60.4	60.4
47.5°	6478.5	5549.1	757.5	265.0	190.5	120.8	74.4	55.7	46.4	41.8	41.8
50°	7087.3	5748.9	534.5	237.0	162.7	88.3	55.7	41.8	32.6	32.6	32.6
52.5°	7510.3	5730.2	385.6	204.6	125.4	60.4	37.1	27.9	27.9	27.9	27.9
55°	7882.0	5660.5	302.1	176.6	97.6	41.8	27.9	23.3	23.3	18.6	18.6
57.5°	8198.0	5549.1	255.5	144.1	69.7	32.6	18.6	18.6	13.9	13.9	13.9
60°	8467.6	5409.5	213.8	120.8	46.4	23.3	13.9	9.3	9.3	4.7	9.3
62.5°	8834.7	5321.3	185.8	93.0	32.6	13.9	9.3	4.7	4.7	0.0	0.0
65°	9104.2	5154.0	158.0	65.0	18.6	9.3	4.7	4.7	0.0	0.0	0.0
67.5°	9113.6	4851.8	116.2	37.1	13.9	9.3	4.7	0.0	0.0	0.0	0.0
70°	8379.3	4136.2	74.4	18.6	9.3	4.7	4.7	0.0	0.0	0.0	0.0
71°	7705.4	3662.2	60.4	13.9	9.3	4.7	0.0	0.0	0.0	0.0	0.0
72.5°	6348.4	2690.8	46.4	13.9	4.7	4.7	0.0	0.0	0.0	0.0	0.0
75°	3499.5	975.9	23.3	9.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1120.0	297.4	13.9	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	190.5	46.4	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	65.0	18.6	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.6	9.3	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)