

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: P237460

Luminaire Tested: **ARCH-L-AF72-270-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237460
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-270-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1155mA 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: 21903.4 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G4

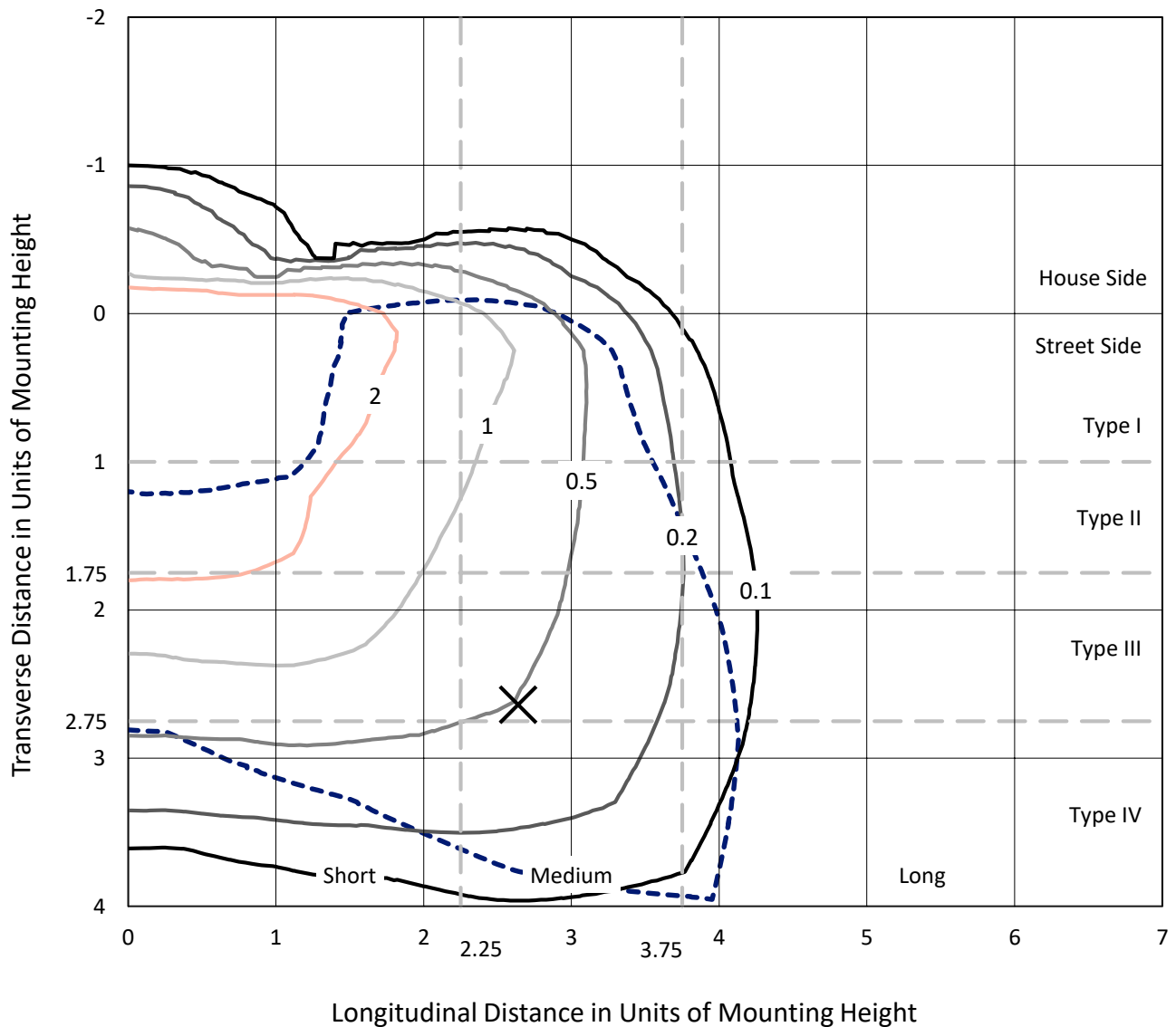
Input Watts (W): 273
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

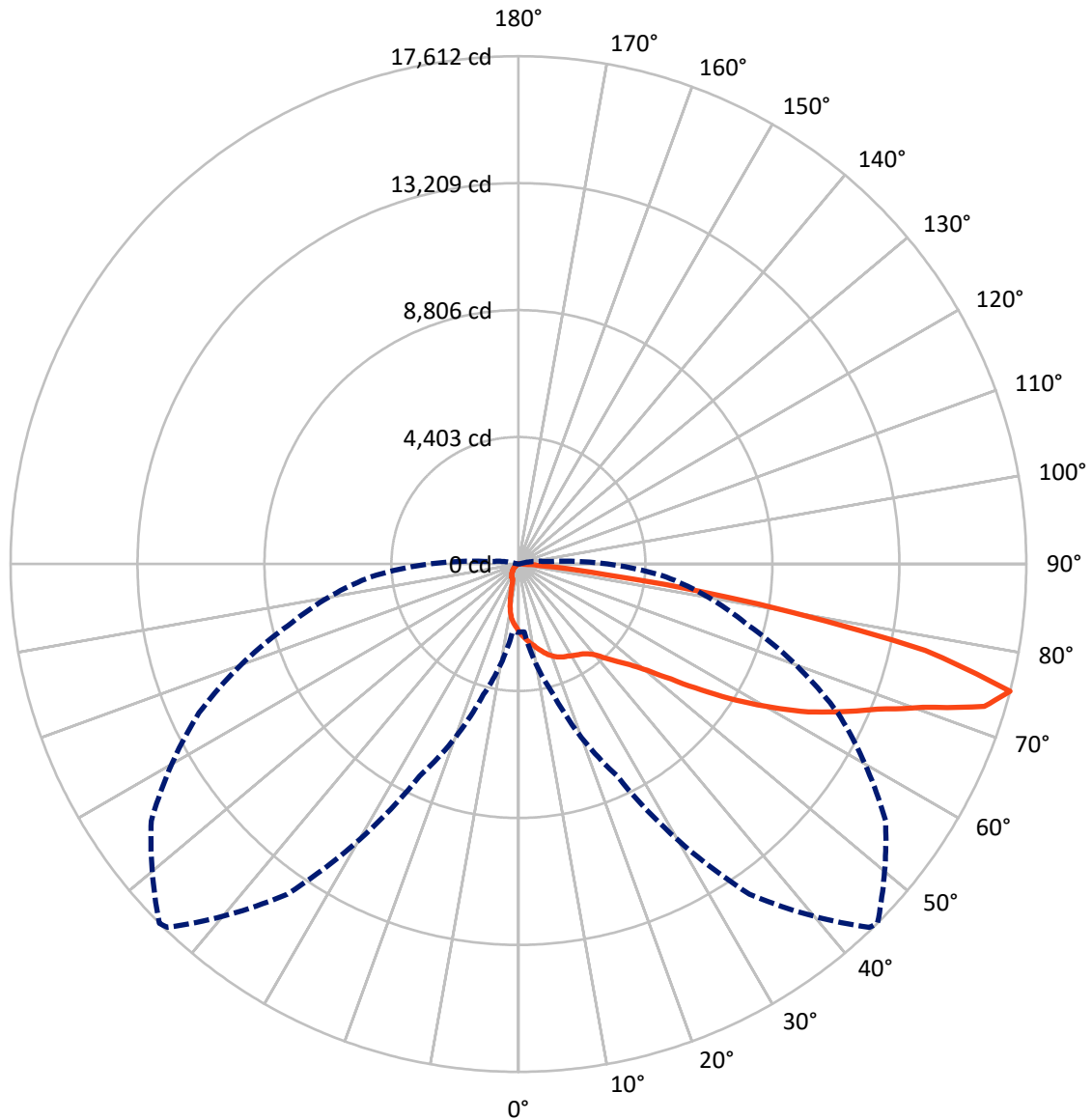
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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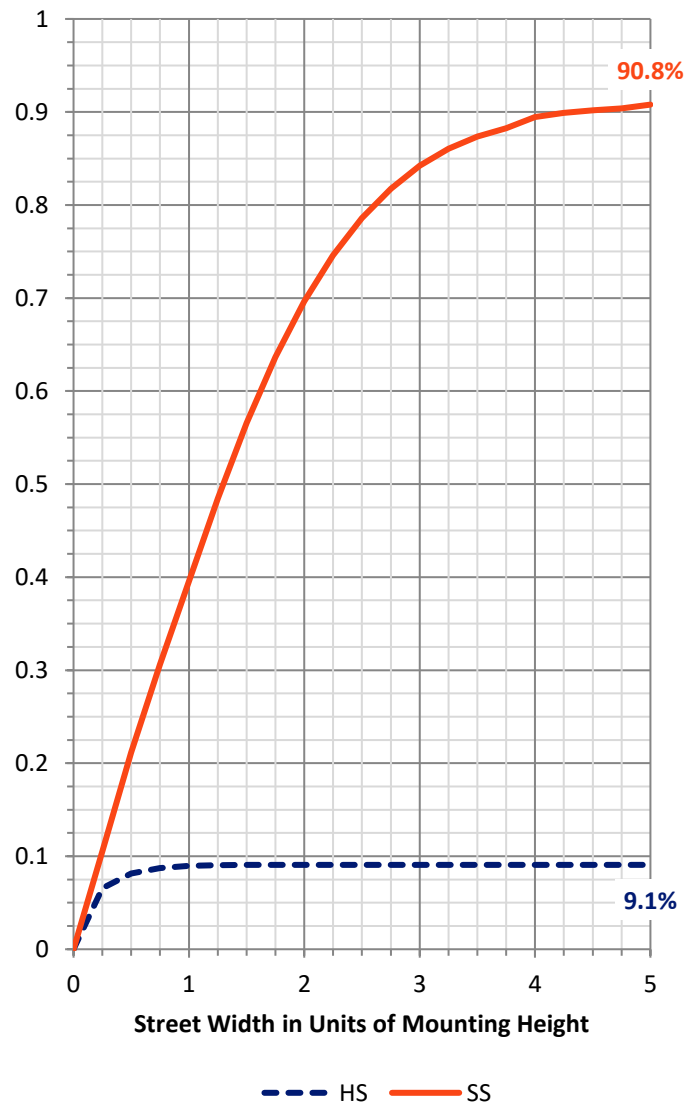
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2003.5	0.0	2003.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	19899.9	0.0	19899.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	21903.4	0.0	21903.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.1	1.0
10°-20°	626.4	2.9
20°-30°	1037.4	4.7
30°-40°	1501.3	6.9
40°-50°	2458.3	11.2
50°-60°	4380.2	20.0
60°-70°	6439.5	29.4
70°-80°	4858.0	22.2
80°-90°	381.1	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°	21903.4	100.0
0°-180°	21903.4	100.0



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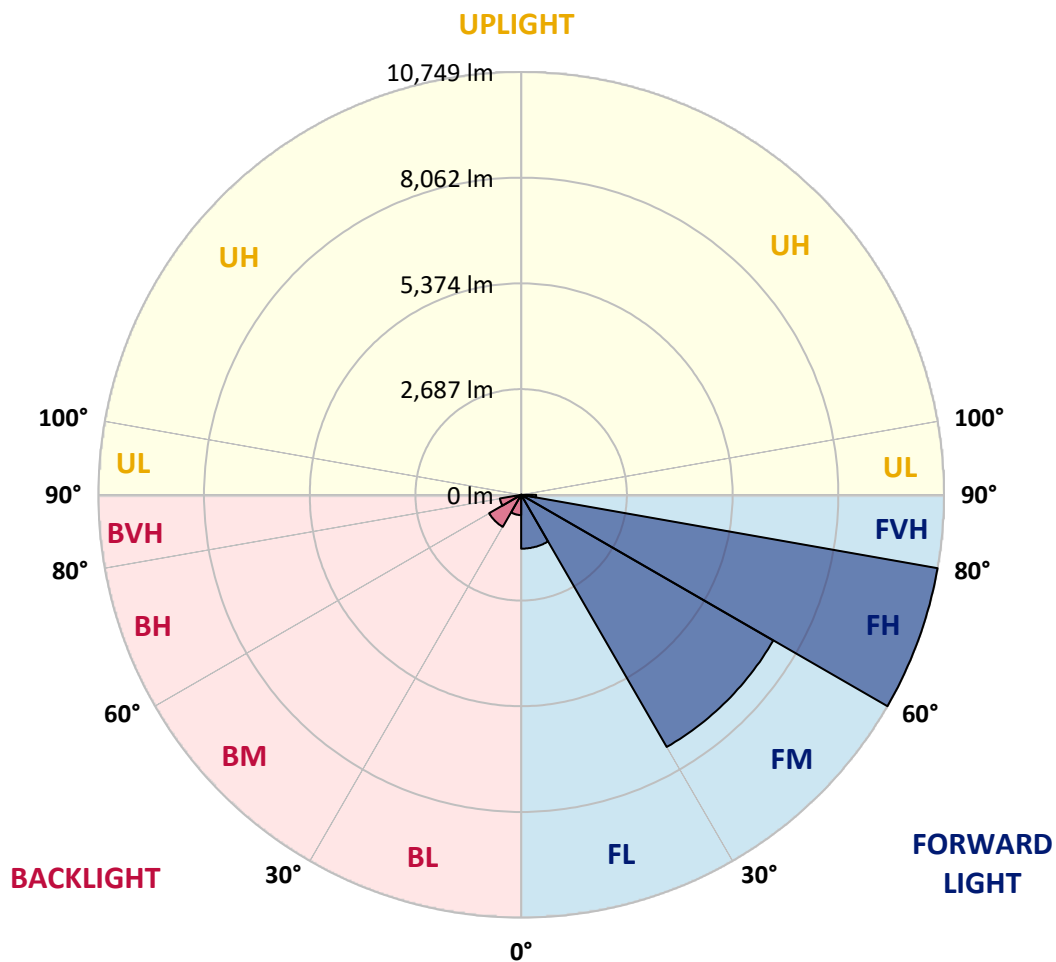
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1370.0	6.3			
FM	(30°-60°)	7401.1	33.8			
FH	(60°-80°)	10748.8	49.1			G4/12000
FVH	(80°-90°)	380.1	1.7			G3/500
BL	(0°-30°)	514.8	2.4	B2/1000		
BM	(30°-60°)	938.9	4.3	B1/1000		
BH	(60°-80°)	548.7	2.5	B2/1000		G2/1000
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: B2-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7
2.5°	2544.8	2544.8	2539.7	2534.5	2508.6	2482.6	2477.5	2461.9	2415.3	2384.2	2353.1
5°	2757.4	2762.5	2752.1	2726.3	2669.2	2612.2	2607.0	2565.6	2477.5	2415.3	2347.9
7.5°	2959.5	2969.8	2944.0	2897.3	2829.9	2746.9	2741.8	2664.1	2550.0	2461.9	2363.4
10°	3130.5	3130.5	3094.2	3037.2	2964.6	2876.5	2866.2	2778.0	2648.5	2539.7	2410.1
12.5°	3317.1	3311.9	3260.0	3182.3	3099.4	3016.5	3011.3	2902.4	2778.0	2638.1	2477.5
15°	3488.2	3477.7	3410.4	3337.8	3249.7	3161.6	3156.4	3047.6	2918.0	2752.1	2575.9
17.5°	3581.5	3576.2	3514.0	3441.5	3368.9	3301.6	3296.4	3182.3	3042.4	2871.3	2674.4
20°	3597.0	3602.1	3550.4	3488.2	3446.6	3410.4	3410.4	3306.7	3156.4	2975.0	2778.0
22.5°	3602.1	3617.7	3581.5	3498.5	3488.2	3493.3	3503.7	3420.7	3265.3	3094.2	2886.9
25°	3638.4	3659.2	3633.2	3534.8	3524.4	3560.7	3571.0	3534.8	3394.9	3223.8	3011.3
27.5°	3711.0	3731.7	3711.0	3586.6	3571.0	3607.3	3617.7	3638.4	3534.8	3348.2	3140.9
30°	3856.1	3861.3	3814.7	3659.2	3628.1	3674.7	3690.3	3747.3	3664.3	3467.4	3265.3
32.5°	4110.1	4058.3	3918.3	3711.0	3685.1	3736.9	3752.5	3814.7	3783.6	3581.5	3394.9
35°	4628.3	4358.9	4037.5	3783.6	3757.6	3809.5	3830.2	3918.3	3933.9	3742.1	3555.5
37.5°	4623.2	4379.6	4317.4	3923.5	3887.2	3923.5	3949.4	4058.3	4120.4	3954.6	3788.7
40°	4949.8	4846.0	4846.0	4187.9	4068.6	4120.4	4146.3	4255.2	4364.0	4234.5	4063.5
42.5°	5976.0	5908.6	5836.0	4695.8	4322.6	4467.7	4483.3	4550.6	4680.2	4638.8	4436.6
45°	7121.4	7059.2	6779.3	5556.2	4757.9	4783.8	4820.1	4929.0	5115.6	5193.3	4954.9
47.5°	8018.0	7955.8	7717.4	6592.7	5436.9	5208.9	5208.9	5421.3	5711.6	5908.6	5680.5
50°	8738.5	8665.9	8520.8	7696.7	6551.3	5820.5	5789.4	6038.2	6468.3	6774.1	6618.6
52.5°	9438.2	9225.7	9137.5	8837.0	7810.7	6706.8	6623.8	6800.1	7396.0	7774.4	7644.8
55°	9904.6	9873.5	9780.2	9883.9	9132.4	7784.8	7712.2	7748.5	8494.9	8748.8	8588.2
57.5°	10340.0	10334.8	10542.1	11024.1	10573.2	9018.3	8904.3	8847.3	9557.3	9495.1	9635.1
60°	10879.0	10785.7	11267.7	11957.1	11894.9	10220.7	10091.2	9977.1	10371.1	10194.8	10889.3
62.5°	10904.9	10879.0	11858.6	12848.5	13206.1	11444.0	11293.6	10884.2	11081.1	10879.0	12086.6
65°	9915.0	10044.6	12107.3	13320.1	14304.9	12516.8	12335.4	11697.9	11713.4	11578.7	13496.4
67.5°	9692.2	9759.5	11423.2	13828.0	15097.9	13600.0	13429.0	12636.0	12449.4	12459.7	14330.8
70°	9137.5	9241.2	10573.2	13791.8	15725.0	15046.1	14875.0	14014.6	13563.7	13061.0	13688.1
72.5°	6981.4	7157.7	8909.5	12091.8	15554.0	16937.8	16891.2	15761.3	14009.5	11993.3	10355.5
75°	2363.4	2358.2	4680.2	8121.7	13973.2	17518.3	17611.6	15543.6	12221.4	8272.0	5141.5
77.5°	507.9	513.1	964.0	3291.1	9282.7	14066.5	14424.1	11723.8	7883.3	3685.1	1176.5
80°	248.8	254.0	399.1	870.7	3711.0	7888.5	8448.2	6027.7	2912.9	736.0	196.9
82.5°	124.4	129.6	207.4	461.2	1373.5	2804.0	2995.7	2218.3	834.4	414.6	98.5
85°	46.6	46.6	103.6	274.7	627.2	658.3	808.5	642.7	502.8	336.9	25.9
87.5°	10.3	10.3	57.0	134.7	279.9	207.4	207.4	196.9	305.8	228.0	10.3
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°	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7	2342.7
2.5°	2337.5	2316.8	2280.5	2244.3	2218.3	2187.2	2171.6	2156.1	2151.0	2145.7	2156.1
5°	2311.6	2280.5	2213.2	2156.1	2104.3	2062.8	2031.7	2000.6	1985.0	1974.7	1979.9
7.5°	2311.6	2264.9	2166.5	2078.3	1995.5	1907.3	1819.2	1751.8	1700.0	1668.9	1674.1
10°	2337.5	2275.3	2145.7	2026.6	1871.1	1684.5	1492.7	1347.5	1249.1	1192.0	1192.0
12.5°	2394.5	2311.6	2151.0	1964.4	1700.0	1373.5	1083.2	907.1	834.4	793.0	798.2
15°	2472.3	2373.8	2176.8	1881.4	1461.6	1021.0	756.7	642.7	642.7	653.1	658.3
17.5°	2560.3	2451.5	2197.6	1757.0	1155.8	730.8	596.1	585.6	601.2	627.2	627.2
20°	2648.5	2529.2	2207.9	1560.1	865.5	580.5	565.0	565.0	575.3	601.2	606.4
22.5°	2757.4	2627.8	2197.6	1316.4	647.8	549.4	544.2	544.2	544.2	575.3	575.3
25°	2871.3	2741.8	2156.1	1057.3	549.4	528.7	523.4	518.3	518.3	544.2	549.4
27.5°	3000.9	2861.0	2057.7	808.5	518.3	507.9	502.8	492.3	492.3	513.1	513.1
30°	3130.5	2995.7	1907.3	611.6	492.3	487.2	476.8	466.5	456.1	476.8	476.8
32.5°	3270.5	3135.7	1710.4	487.2	456.1	456.1	450.9	435.4	425.0	435.4	440.6
35°	3457.1	3296.4	1487.5	425.0	409.5	409.5	409.5	404.3	383.5	393.9	393.9
37.5°	3705.8	3519.3	1228.4	393.9	373.2	362.8	362.8	362.8	347.3	352.4	352.4
40°	4021.9	3778.4	979.6	368.0	347.3	321.3	311.0	316.2	305.8	305.8	300.6
42.5°	4452.2	4058.3	736.0	347.3	326.5	290.2	269.5	264.3	254.0	248.8	248.8
45°	5068.9	4400.3	528.7	326.5	311.0	254.0	233.2	217.7	191.8	176.3	176.3
47.5°	5867.1	4789.0	393.9	305.8	295.4	222.9	196.9	165.8	129.6	119.2	119.2
50°	6841.5	5224.4	331.7	274.7	269.5	196.9	155.5	108.8	72.5	62.2	67.4
52.5°	7790.0	5633.9	295.4	243.6	238.4	171.0	114.1	57.0	31.1	31.1	31.1
55°	8588.2	5924.1	269.5	217.7	207.4	134.7	62.2	25.9	15.5	15.5	15.5
57.5°	9308.5	6089.9	243.6	191.8	165.8	93.3	25.9	10.3	10.3	5.2	5.2
60°	9966.8	6188.4	212.5	165.8	129.6	51.9	10.3	5.2	5.2	0.0	0.0
62.5°	10614.6	6261.0	181.4	134.7	98.5	20.8	5.2	5.2	0.0	0.0	0.0
65°	11107.0	6235.1	145.2	108.8	62.2	10.3	5.2	0.0	0.0	0.0	0.0
67.5°	11091.4	5882.7	108.8	83.0	31.1	5.2	0.0	0.0	0.0	0.0	0.0
70°	9920.2	4954.9	72.5	51.9	10.3	5.2	0.0	0.0	0.0	0.0	0.0
72.5°	7038.4	3177.2	46.6	31.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	3099.4	964.0	25.9	15.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	606.4	222.9	15.5	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	145.2	25.9	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	62.2	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.5	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.3	5.2	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)