

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: P265741

Luminaire Tested: **ARCH-L-AF72-270-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265741
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-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 18603 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - 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

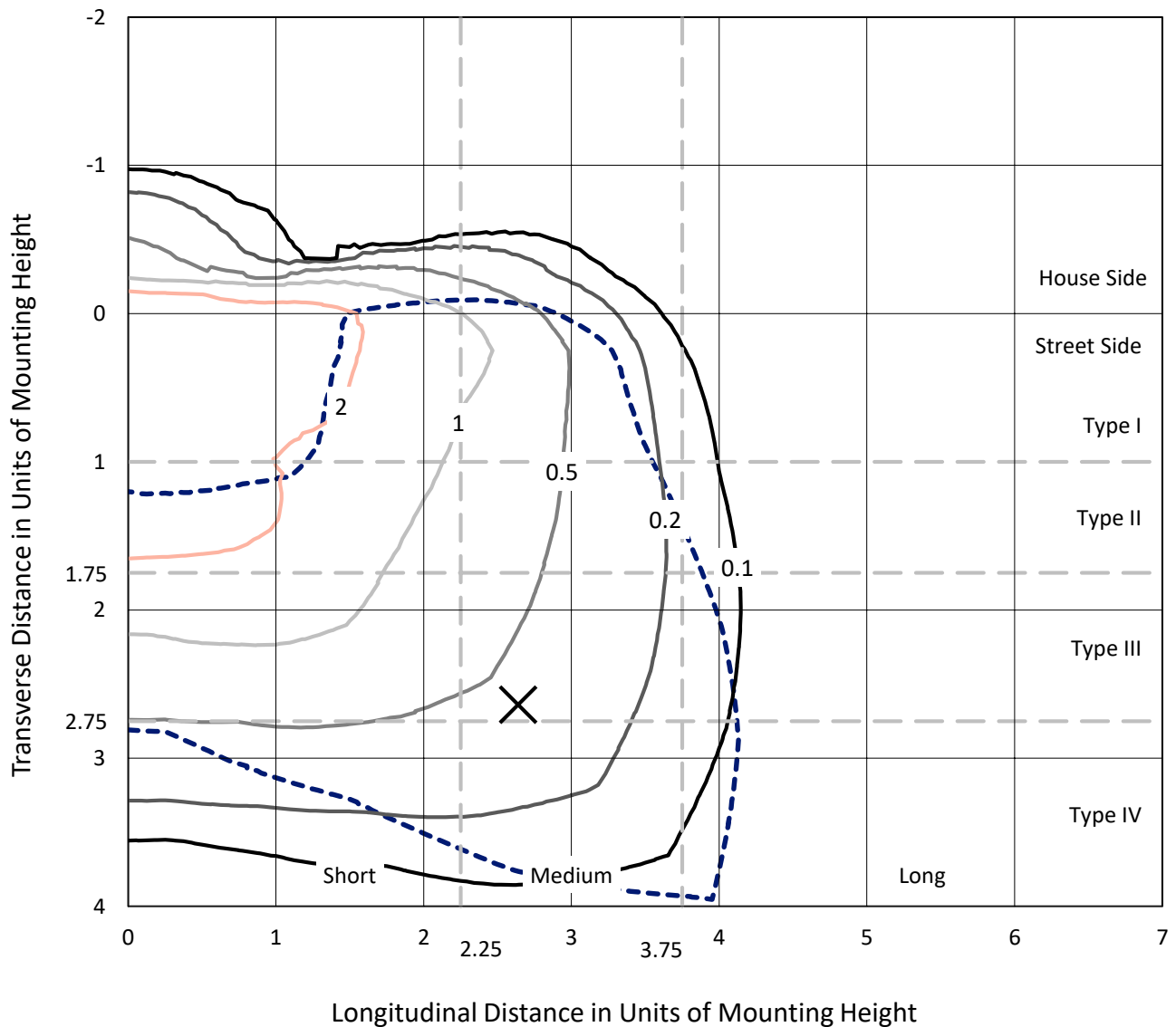


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

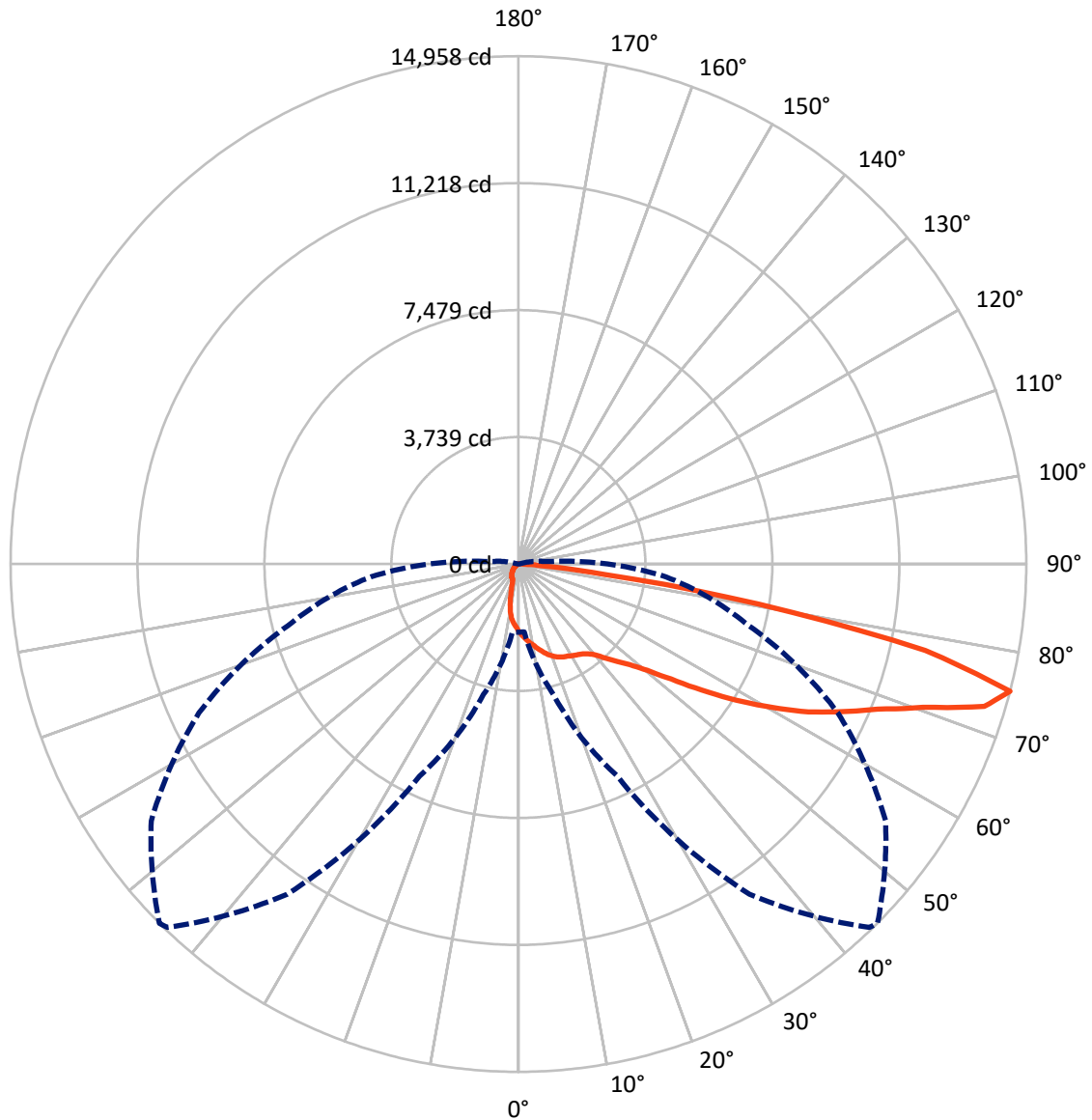


Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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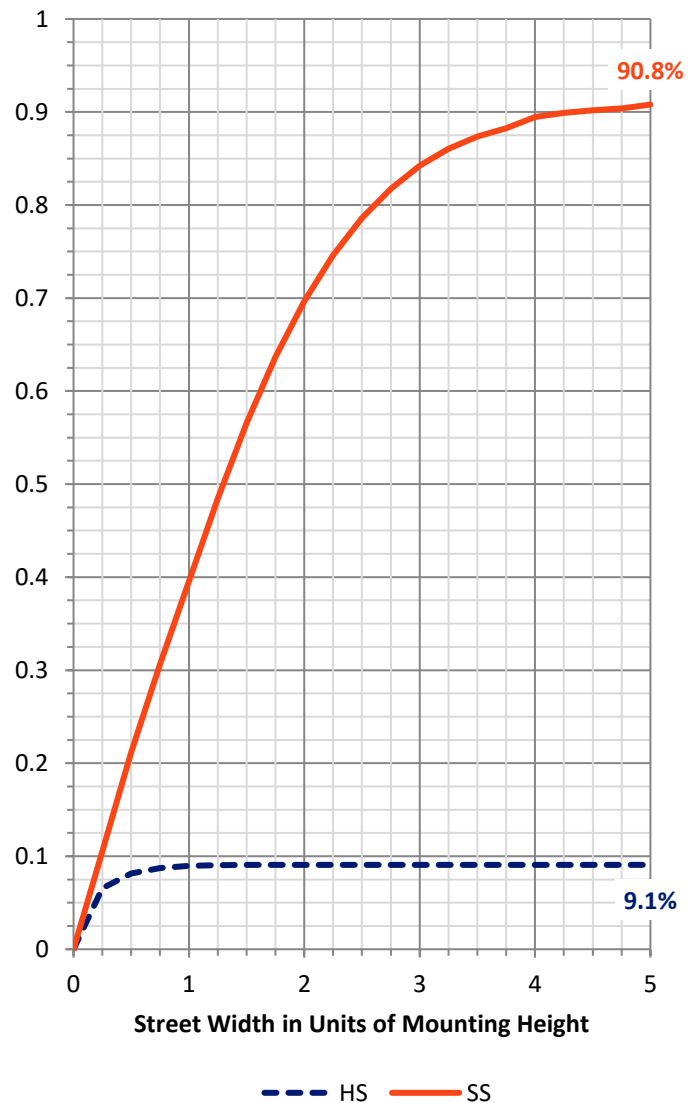
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1701.6	0.0	1701.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16901.4	0.0	16901.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	18603.0	0.0	18603.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.8	1.0
10°-20°	532.0	2.9
20°-30°	881.1	4.7
30°-40°	1275.1	6.9
40°-50°	2087.9	11.2
50°-60°	3720.2	20.0
60°-70°	5469.2	29.4
70°-80°	4126.0	22.2
80°-90°	323.7	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°	18603.0	100.0
0°-180°	18603.0	100.0



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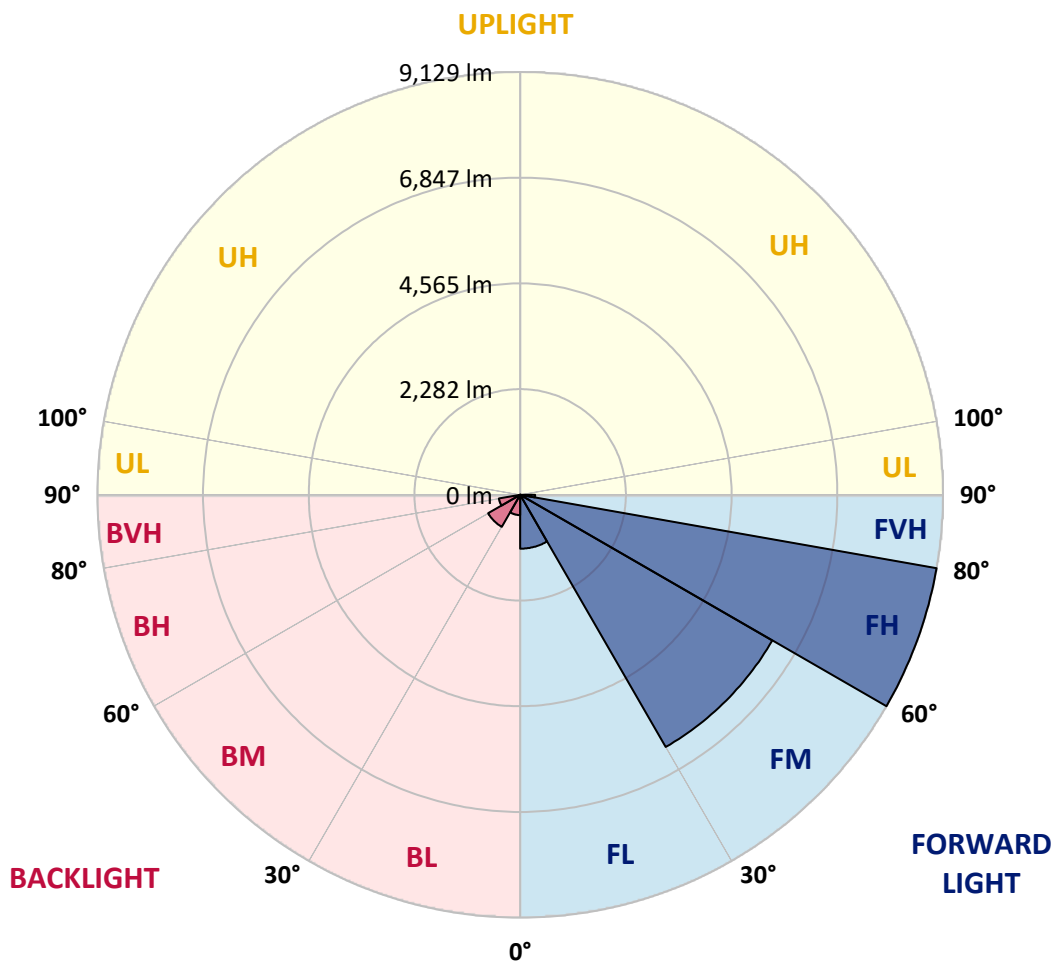
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1163.6	6.3			
FM	(30°-60°)	6285.8	33.8			
FH	(60°-80°)	9129.2	49.1			G4/12000
FVH	(80°-90°)	322.8	1.7			G3/500
BL	(0°-30°)	437.3	2.4	B1/500		
BM	(30°-60°)	797.4	4.3	B1/1000		
BH	(60°-80°)	466.1	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°	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7
2.5°	2161.3	2161.3	2157.0	2152.6	2130.6	2108.5	2104.1	2091.0	2051.3	2024.9	1998.5
5°	2341.8	2346.3	2337.5	2315.4	2267.1	2218.6	2214.2	2179.0	2104.1	2051.3	1994.1
7.5°	2513.5	2522.4	2500.3	2460.6	2403.4	2333.1	2328.6	2262.7	2165.8	2091.0	2007.4
10°	2658.9	2658.9	2628.0	2579.6	2517.9	2443.1	2434.2	2359.5	2249.4	2157.0	2046.9
12.5°	2817.3	2812.9	2768.8	2702.8	2632.4	2562.0	2557.6	2465.0	2359.5	2240.6	2104.1
15°	2962.5	2953.7	2896.4	2835.0	2760.0	2685.3	2680.8	2588.3	2478.3	2337.5	2187.8
17.5°	3041.8	3037.3	2984.4	2922.9	2861.3	2804.1	2799.7	2702.8	2584.0	2438.7	2271.5
20°	3055.0	3059.4	3015.3	2962.5	2927.2	2896.4	2896.4	2808.5	2680.8	2526.8	2359.5
22.5°	3059.4	3072.7	3041.8	2971.4	2962.5	2966.9	2975.7	2905.3	2773.2	2628.0	2452.0
25°	3090.2	3107.7	3085.8	3002.1	2993.3	3024.1	3032.9	3002.1	2883.3	2738.0	2557.6
27.5°	3151.9	3169.4	3151.9	3046.2	3032.9	3063.8	3072.7	3090.2	3002.1	2843.7	2667.5
30°	3275.1	3279.4	3239.8	3107.7	3081.4	3121.0	3134.1	3182.7	3112.2	2945.0	2773.2
32.5°	3490.8	3446.7	3328.0	3151.9	3129.9	3173.8	3187.0	3239.8	3213.4	3041.8	2883.3
35°	3931.0	3702.1	3429.1	3213.4	3191.4	3235.4	3253.0	3328.0	3341.1	3178.3	3019.7
37.5°	3926.5	3719.6	3666.8	3332.4	3301.5	3332.4	3354.4	3446.7	3499.5	3358.8	3217.9
40°	4203.9	4115.9	4115.9	3556.7	3455.5	3499.5	3521.5	3614.1	3706.4	3596.5	3451.2
42.5°	5075.5	5018.2	4956.6	3988.1	3671.3	3794.5	3807.6	3865.0	3975.0	3939.7	3768.1
45°	6048.3	5995.5	5757.7	4718.9	4041.0	4063.0	4093.8	4186.3	4344.7	4410.8	4208.3
47.5°	6809.8	6757.1	6554.6	5599.3	4617.6	4424.1	4424.1	4604.4	4850.9	5018.2	4824.5
50°	7421.7	7360.2	7236.8	6537.0	5564.1	4943.5	4917.1	5128.3	5493.7	5753.4	5621.4
52.5°	8015.9	7835.6	7760.6	7505.3	6633.8	5696.2	5625.7	5775.5	6281.6	6602.9	6492.9
55°	8412.2	8385.8	8306.4	8394.5	7756.2	6611.7	6550.1	6581.0	7214.8	7430.5	7294.1
57.5°	8781.9	8777.5	8953.5	9363.0	8980.0	7659.5	7562.7	7514.1	8117.3	8064.4	8183.3
60°	9239.7	9160.5	9570.0	10155.3	10102.5	8680.7	8570.6	8473.8	8808.3	8658.8	9248.5
62.5°	9261.7	9239.7	10071.6	10912.5	11216.2	9719.5	9591.9	9244.2	9411.5	9239.7	10265.4
65°	8421.0	8531.1	10283.0	11313.1	12149.4	10630.7	10476.8	9935.3	9948.5	9834.0	11462.7
67.5°	8231.7	8288.9	9702.0	11744.5	12822.9	11550.8	11405.5	10732.1	10573.5	10582.4	12171.5
70°	7760.6	7848.8	8980.0	11713.7	13355.6	12778.8	12633.7	11902.9	11520.0	11093.0	11625.7
72.5°	5929.4	6079.1	7567.1	10269.9	13210.4	14385.6	14346.0	13386.5	11898.5	10186.2	8795.1
75°	2007.4	2003.0	3975.0	6897.8	11867.7	14878.6	14957.9	13201.5	10379.8	7025.6	4366.8
77.5°	431.4	435.8	818.7	2795.3	7884.0	11947.0	12250.6	9957.3	6695.3	3129.9	999.3
80°	211.3	215.8	338.9	739.6	3151.9	6699.7	7175.2	5119.5	2473.9	625.1	167.3
82.5°	105.6	110.0	176.1	391.8	1166.4	2381.4	2544.3	1884.0	708.8	352.1	83.6
85°	39.6	39.6	88.0	233.3	532.6	559.0	686.8	545.8	427.0	286.1	22.0
87.5°	8.9	8.9	48.4	114.4	237.7	176.1	176.1	167.3	259.7	193.7	8.9
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°	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7	1989.7
2.5°	1985.3	1967.6	1936.8	1906.1	1884.0	1857.7	1844.4	1831.3	1826.9	1822.4	1831.3
5°	1963.2	1936.8	1879.7	1831.3	1787.2	1752.0	1725.6	1699.1	1685.9	1677.1	1681.5
7.5°	1963.2	1923.7	1840.0	1765.2	1694.7	1620.0	1545.1	1487.9	1443.8	1417.4	1421.8
10°	1985.3	1932.4	1822.4	1721.2	1589.1	1430.6	1267.8	1144.5	1060.9	1012.5	1012.5
12.5°	2033.8	1963.2	1826.9	1668.3	1443.8	1166.4	920.0	770.3	708.8	673.5	678.0
15°	2099.8	2016.1	1848.8	1597.9	1241.4	867.3	642.6	545.8	545.8	554.7	559.0
17.5°	2174.5	2082.1	1866.5	1492.3	981.7	620.6	506.3	497.4	510.6	532.6	532.6
20°	2249.4	2148.1	1875.2	1325.0	735.2	493.0	479.9	479.9	488.6	510.6	515.0
22.5°	2341.8	2231.7	1866.5	1118.1	550.2	466.6	462.2	462.2	462.2	488.6	488.6
25°	2438.7	2328.6	1831.3	897.9	466.6	449.1	444.7	440.2	440.2	462.2	466.6
27.5°	2548.8	2429.8	1747.7	686.8	440.2	431.4	427.0	418.3	418.3	435.8	435.8
30°	2658.9	2544.3	1620.0	519.4	418.3	413.8	405.0	396.2	387.3	405.0	405.0
32.5°	2777.6	2663.1	1452.6	413.8	387.3	387.3	382.9	369.7	360.9	369.7	374.1
35°	2936.1	2799.7	1263.3	360.9	347.7	347.7	347.7	343.3	325.7	334.6	334.6
37.5°	3147.4	2988.9	1043.3	334.6	316.9	308.2	308.2	308.2	295.0	299.3	299.3
40°	3416.0	3209.0	832.0	312.5	295.0	272.9	264.1	268.6	259.7	259.7	255.3
42.5°	3781.2	3446.7	625.1	295.0	277.3	246.6	228.9	224.4	215.8	211.3	211.3
45°	4305.1	3737.3	449.1	277.3	264.1	215.8	198.0	185.0	162.9	149.7	149.7
47.5°	4983.1	4067.4	334.6	259.7	250.8	189.4	167.3	140.9	110.0	101.2	101.2
50°	5810.5	4437.2	281.7	233.3	228.9	167.3	132.1	92.4	61.7	52.8	57.2
52.5°	6616.1	4784.9	250.8	206.9	202.5	145.3	96.8	48.4	26.4	26.4	26.4
55°	7294.1	5031.4	228.9	185.0	176.1	114.4	52.8	22.0	13.2	13.2	13.2
57.5°	7906.0	5172.4	206.9	162.9	140.9	79.2	22.0	8.9	8.9	4.4	4.4
60°	8465.0	5256.0	180.5	140.9	110.0	44.0	8.9	4.4	4.4	0.0	0.0
62.5°	9015.2	5317.5	154.1	114.4	83.6	17.5	4.4	4.4	0.0	0.0	0.0
65°	9433.5	5295.6	123.2	92.4	52.8	8.9	4.4	0.0	0.0	0.0	0.0
67.5°	9420.3	4996.3	92.4	70.4	26.4	4.4	0.0	0.0	0.0	0.0	0.0
70°	8425.4	4208.3	61.7	44.0	8.9	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	5978.0	2698.4	39.6	26.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	2632.4	818.7	22.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	515.0	189.4	13.2	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	123.2	22.0	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.8	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.2	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.9	4.4	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)