

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: P237452

Luminaire Tested: **ARCH-L-AF72-190-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237452
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-AF72-190-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 810mA 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: 17176.4 lumens
Efficiency: N/A
Efficacy: 90.9 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

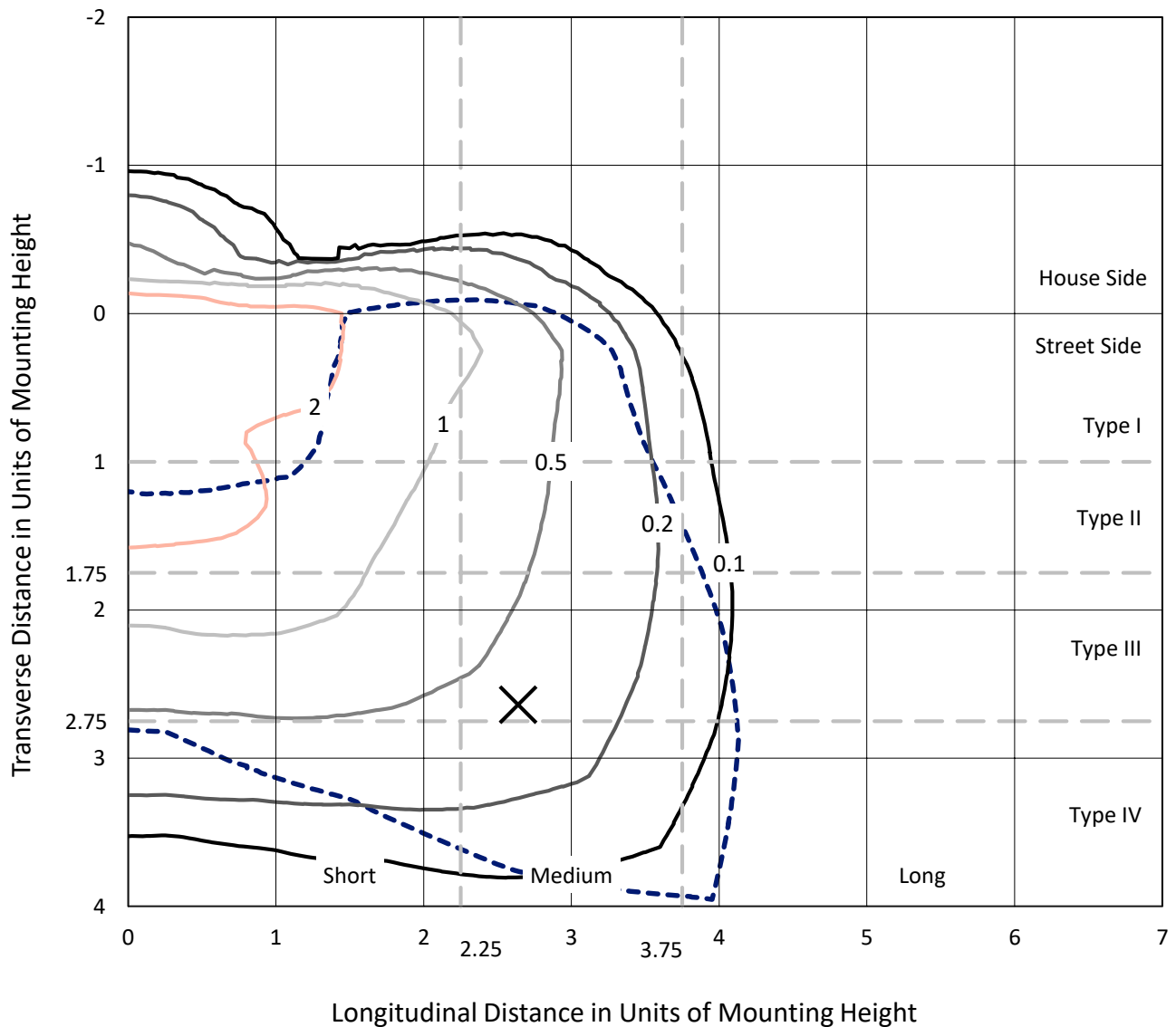
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

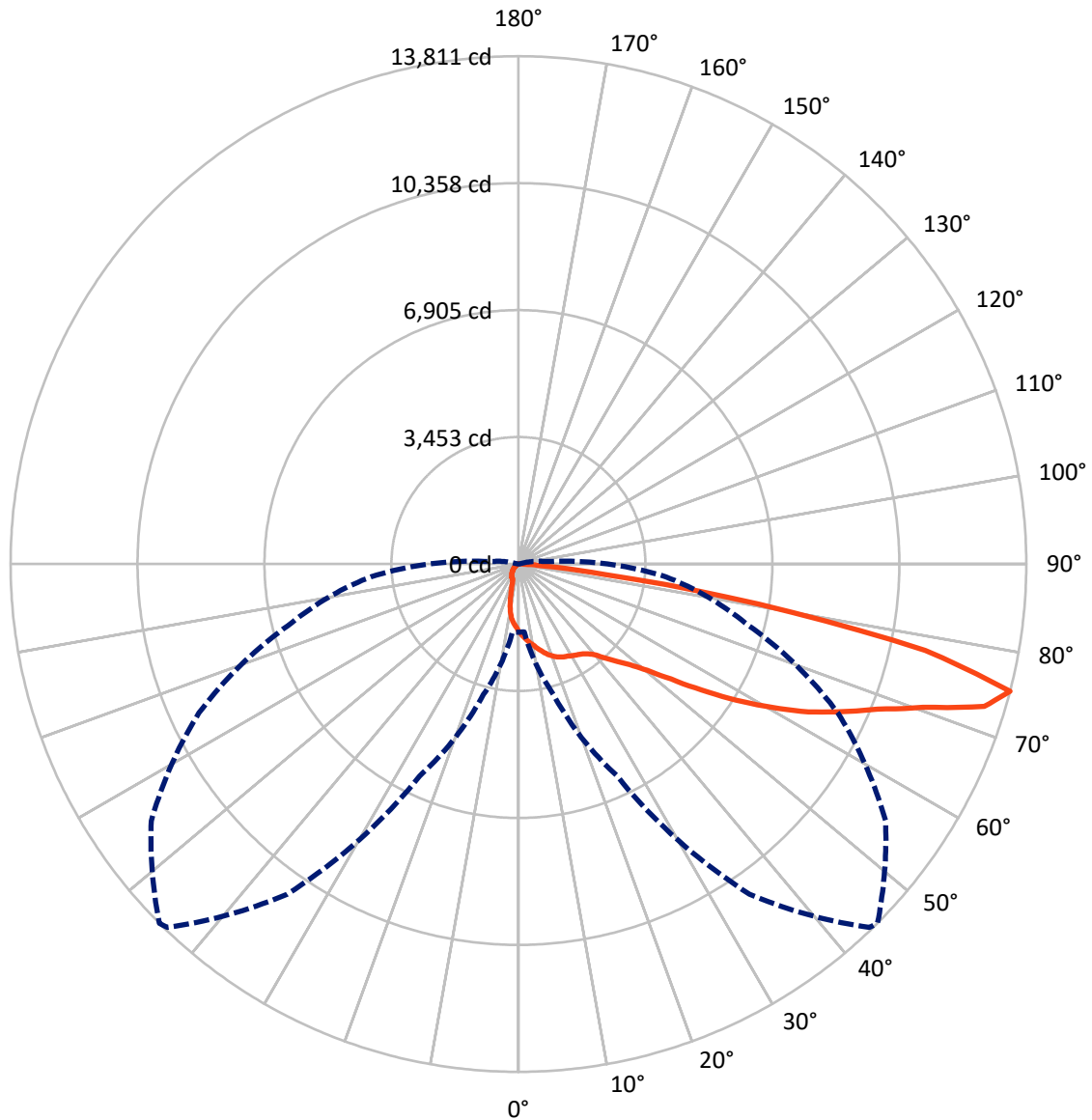
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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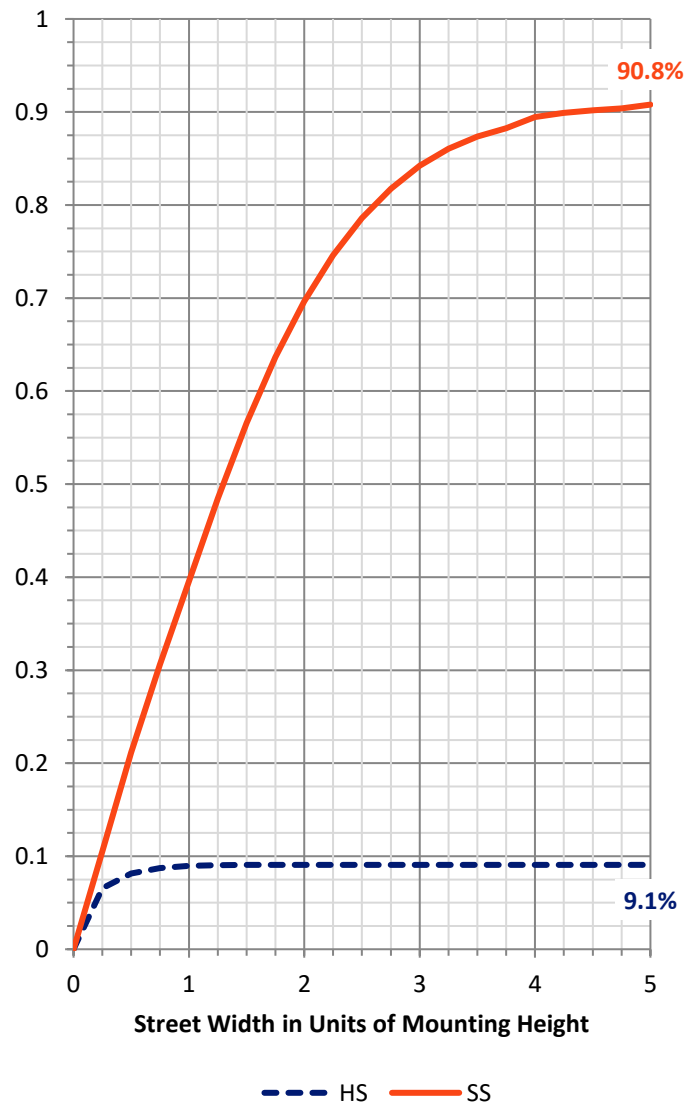
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1571.1	0.0	1571.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	15605.2	0.0	15605.2
	% Fixture	90.9	0.0	90.9
Total	Lumens	17176.4	0.0	17176.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.4	1.0
10°-20°	491.2	2.9
20°-30°	813.5	4.7
30°-40°	1177.3	6.9
40°-50°	1927.8	11.2
50°-60°	3434.9	20.0
60°-70°	5049.8	29.4
70°-80°	3809.6	22.2
80°-90°	298.9	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°	17176.4	100.0
0°-180°	17176.4	100.0



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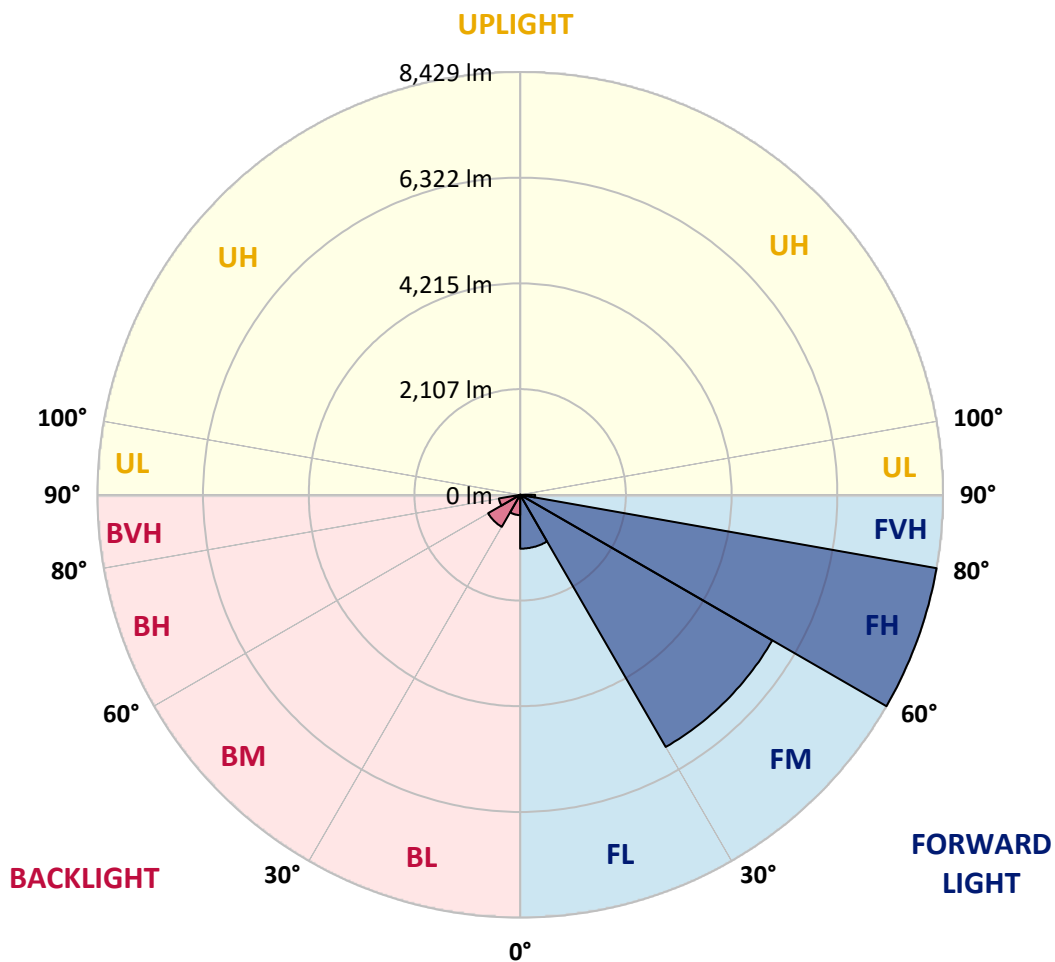
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1074.3	6.3			
FM	(30°-60°)	5803.8	33.8			
FH	(60°-80°)	8429.1	49.1			G4/12000
FVH	(80°-90°)	298.0	1.7			G3/500
BL	(0°-30°)	403.7	2.4	B1/500		
BM	(30°-60°)	736.2	4.3	B1/1000		
BH	(60°-80°)	430.3	2.5	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1
2.5°	1995.6	1995.6	1991.6	1987.5	1967.1	1946.9	1942.8	1930.6	1894.0	1869.6	1845.2
5°	2162.2	2166.3	2158.2	2137.9	2093.2	2048.5	2044.4	2011.8	1942.8	1894.0	1841.2
7.5°	2320.8	2328.8	2308.6	2272.0	2219.2	2154.1	2150.0	2089.1	1999.7	1930.6	1853.4
10°	2454.9	2454.9	2426.4	2381.7	2324.9	2255.7	2247.6	2178.5	2076.9	1991.6	1889.9
12.5°	2601.3	2597.2	2556.5	2495.5	2430.5	2365.5	2361.4	2276.1	2178.5	2068.8	1942.8
15°	2735.4	2727.2	2674.4	2617.4	2548.4	2479.3	2475.2	2389.8	2288.2	2158.2	2020.0
17.5°	2808.5	2804.4	2755.6	2698.7	2641.9	2589.0	2585.0	2495.5	2385.8	2251.7	2097.3
20°	2820.7	2824.8	2784.1	2735.4	2702.8	2674.4	2674.4	2593.1	2475.2	2332.9	2178.5
22.5°	2824.8	2836.9	2808.5	2743.5	2735.4	2739.4	2747.5	2682.5	2560.5	2426.4	2263.9
25°	2853.2	2869.5	2849.1	2771.9	2763.8	2792.2	2800.3	2771.9	2662.1	2528.0	2361.4
27.5°	2910.1	2926.4	2910.1	2812.6	2800.3	2828.9	2836.9	2853.2	2771.9	2625.6	2463.1
30°	3023.9	3027.9	2991.4	2869.5	2845.0	2881.7	2893.8	2938.5	2873.6	2719.1	2560.5
32.5°	3223.1	3182.4	3072.6	2910.1	2889.7	2930.4	2942.6	2991.4	2967.0	2808.5	2662.1
35°	3629.5	3418.2	3166.1	2967.0	2946.7	2987.3	3003.6	3072.6	3084.9	2934.5	2788.2
37.5°	3625.4	3434.5	3385.7	3076.7	3048.3	3076.7	3097.1	3182.4	3231.2	3101.2	2971.1
40°	3881.5	3800.2	3800.2	3284.0	3190.6	3231.2	3251.6	3336.9	3422.2	3320.6	3186.5
42.5°	4686.2	4633.5	4576.5	3682.3	3389.8	3503.5	3515.7	3568.6	3670.1	3637.6	3479.2
45°	5584.5	5535.7	5316.3	4357.1	3731.1	3751.5	3779.9	3865.2	4011.6	4072.6	3885.6
47.5°	6287.6	6238.9	6051.9	5169.9	4263.6	4084.7	4084.7	4251.4	4479.0	4633.5	4454.5
50°	6852.5	6795.7	6681.8	6035.6	5137.4	4564.3	4540.0	4735.0	5072.4	5312.2	5190.2
52.5°	7401.3	7234.6	7165.6	6929.8	6125.0	5259.3	5194.3	5332.4	5799.9	6096.6	5995.0
55°	7767.1	7742.7	7669.5	7750.8	7161.5	6104.8	6047.8	6076.2	6661.6	6860.7	6734.7
57.5°	8108.4	8104.4	8267.0	8645.0	8291.3	7072.1	6982.7	6938.0	7494.8	7446.0	7555.7
60°	8531.2	8458.0	8835.9	9376.6	9327.8	8015.0	7913.3	7823.9	8132.9	7994.7	8539.3
62.5°	8551.5	8531.2	9299.3	10075.7	10356.0	8974.1	8856.3	8535.2	8689.7	8531.2	9478.2
65°	7775.1	7876.8	9494.4	10445.5	11217.7	9815.5	9673.2	9173.3	9185.5	9079.8	10583.7
67.5°	7600.4	7653.2	8957.9	10843.8	11839.5	10665.0	10530.9	9909.0	9762.6	9770.8	11238.0
70°	7165.6	7246.8	8291.3	10815.4	12331.4	11798.9	11664.8	10990.1	10636.5	10242.3	10734.0
72.5°	5474.7	5612.9	6986.7	9482.2	12197.3	13282.4	13245.9	12359.8	10986.1	9405.0	8120.7
75°	1853.4	1849.3	3670.1	6368.9	10957.6	13737.6	13810.8	12189.1	9583.8	6486.7	4031.9
77.5°	398.3	402.3	756.0	2580.9	7279.3	11030.8	11311.2	9193.7	6181.9	2889.7	922.6
80°	195.1	199.2	312.9	682.8	2910.1	6186.0	6624.9	4726.9	2284.1	577.1	154.5
82.5°	97.6	101.6	162.5	361.7	1077.1	2198.8	2349.2	1739.5	654.4	325.2	77.2
85°	36.6	36.6	81.3	215.4	491.8	516.2	634.0	504.0	394.2	264.2	20.4
87.5°	8.1	8.1	44.7	105.7	219.5	162.5	162.5	154.5	239.8	178.8	8.1
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°	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1	1837.1
2.5°	1833.0	1816.8	1788.3	1759.9	1739.5	1715.2	1703.0	1690.8	1686.7	1682.7	1690.8
5°	1812.7	1788.3	1735.5	1690.8	1650.1	1617.6	1593.2	1568.9	1556.6	1548.5	1552.6
7.5°	1812.7	1776.1	1698.9	1629.9	1564.8	1495.7	1426.6	1373.7	1333.1	1308.8	1312.8
10°	1833.0	1784.2	1682.7	1589.2	1467.2	1320.9	1170.6	1056.7	979.5	934.8	934.8
12.5°	1877.7	1812.7	1686.7	1540.4	1333.1	1077.1	849.5	711.3	654.4	621.9	625.9
15°	1938.7	1861.5	1707.0	1475.4	1146.1	800.7	593.4	504.0	504.0	512.1	516.2
17.5°	2007.8	1922.4	1723.3	1377.8	906.3	573.1	467.4	459.3	471.5	491.8	491.8
20°	2076.9	1983.4	1731.4	1223.3	678.7	455.2	443.0	443.0	451.1	471.5	475.6
22.5°	2162.2	2060.6	1723.3	1032.4	508.1	430.9	426.8	426.8	426.8	451.1	451.1
25°	2251.7	2150.0	1690.8	829.1	430.9	414.6	410.5	406.4	406.4	426.8	430.9
27.5°	2353.3	2243.5	1613.6	634.0	406.4	398.3	394.2	386.2	386.2	402.3	402.3
30°	2454.9	2349.2	1495.7	479.6	386.2	382.1	373.9	365.8	357.6	373.9	373.9
32.5°	2564.6	2459.0	1341.3	382.1	357.6	357.6	353.6	341.4	333.3	341.4	345.5
35°	2710.9	2585.0	1166.5	333.3	321.1	321.1	321.1	317.0	300.7	308.9	308.9
37.5°	2906.0	2759.7	963.2	308.9	292.7	284.5	284.5	284.5	272.3	276.4	276.4
40°	3154.0	2963.0	768.1	288.6	272.3	252.0	243.9	248.0	239.8	239.8	235.7
42.5°	3491.3	3182.4	577.1	272.3	256.0	227.6	211.3	207.2	199.2	195.1	195.1
45°	3975.0	3450.7	414.6	256.0	243.9	199.2	182.9	170.7	150.4	138.2	138.2
47.5°	4600.9	3755.5	308.9	239.8	231.7	174.7	154.5	130.0	101.6	93.5	93.5
50°	5365.0	4096.9	260.1	215.4	211.3	154.5	121.9	85.3	56.9	48.8	52.9
52.5°	6108.8	4418.0	231.7	191.0	187.0	134.1	89.4	44.7	24.3	24.3	24.3
55°	6734.7	4645.6	211.3	170.7	162.5	105.7	48.8	20.4	12.2	12.2	12.2
57.5°	7299.7	4775.6	191.0	150.4	130.0	73.1	20.4	8.1	8.1	4.1	4.1
60°	7815.9	4852.9	166.6	130.0	101.6	40.6	8.1	4.1	4.1	0.0	0.0
62.5°	8323.9	4909.8	142.3	105.7	77.2	16.3	4.1	4.1	0.0	0.0	0.0
65°	8710.0	4889.5	113.8	85.3	48.8	8.1	4.1	0.0	0.0	0.0	0.0
67.5°	8697.8	4613.1	85.3	65.1	24.3	4.1	0.0	0.0	0.0	0.0	0.0
70°	7779.2	3885.6	56.9	40.6	8.1	4.1	0.0	0.0	0.0	0.0	0.0
72.5°	5519.4	2491.5	36.6	24.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	2430.5	756.0	20.4	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	475.6	174.7	12.2	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	113.8	20.4	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.8	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.1	4.1	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)