

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: P237453

Luminaire Tested: **ARCH-L-AF72-200-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237453
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-AF72-200-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 860mA 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: 18008 lumens
Efficiency: N/A
Efficacy: 89.6 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): 201
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

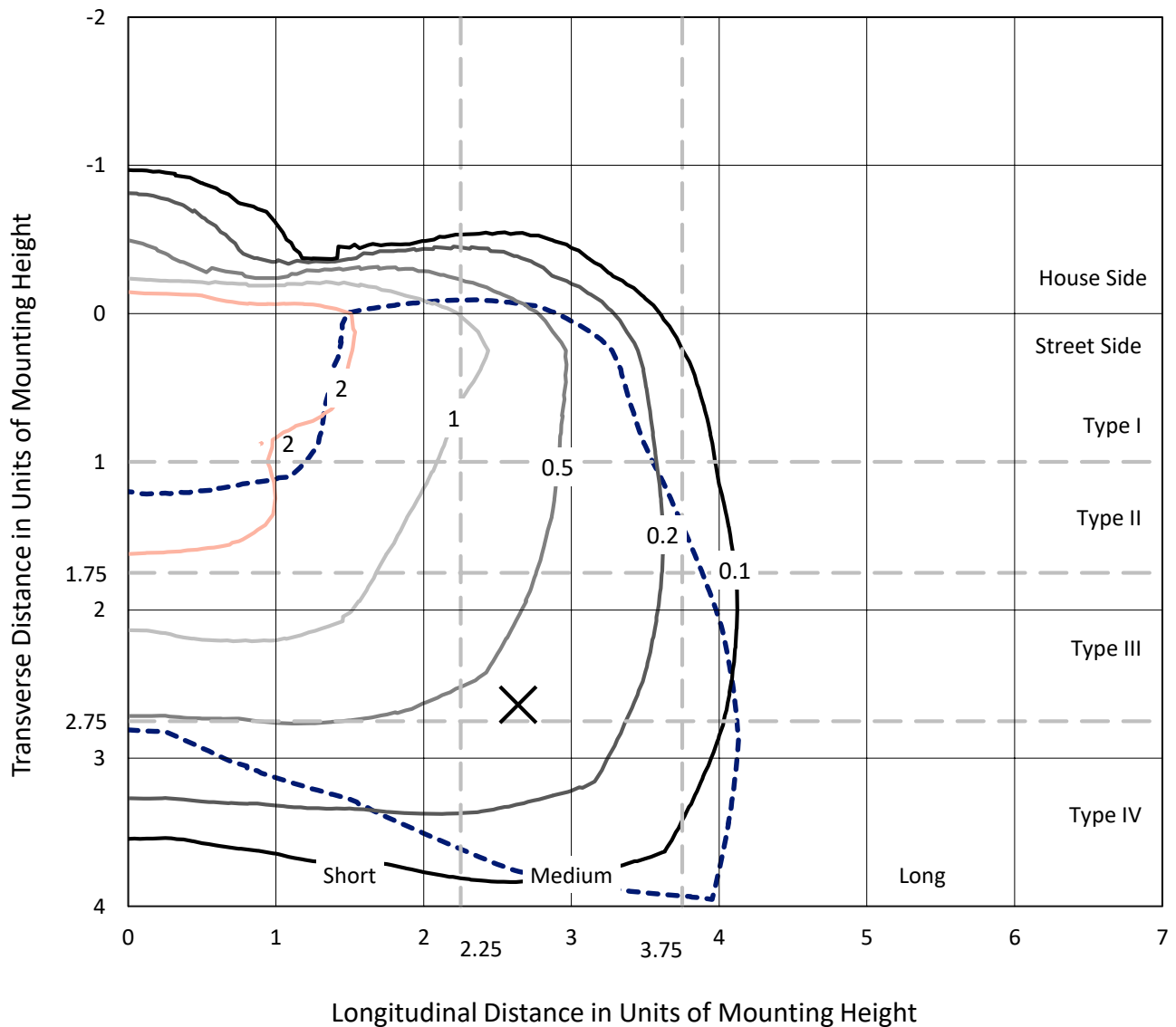


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

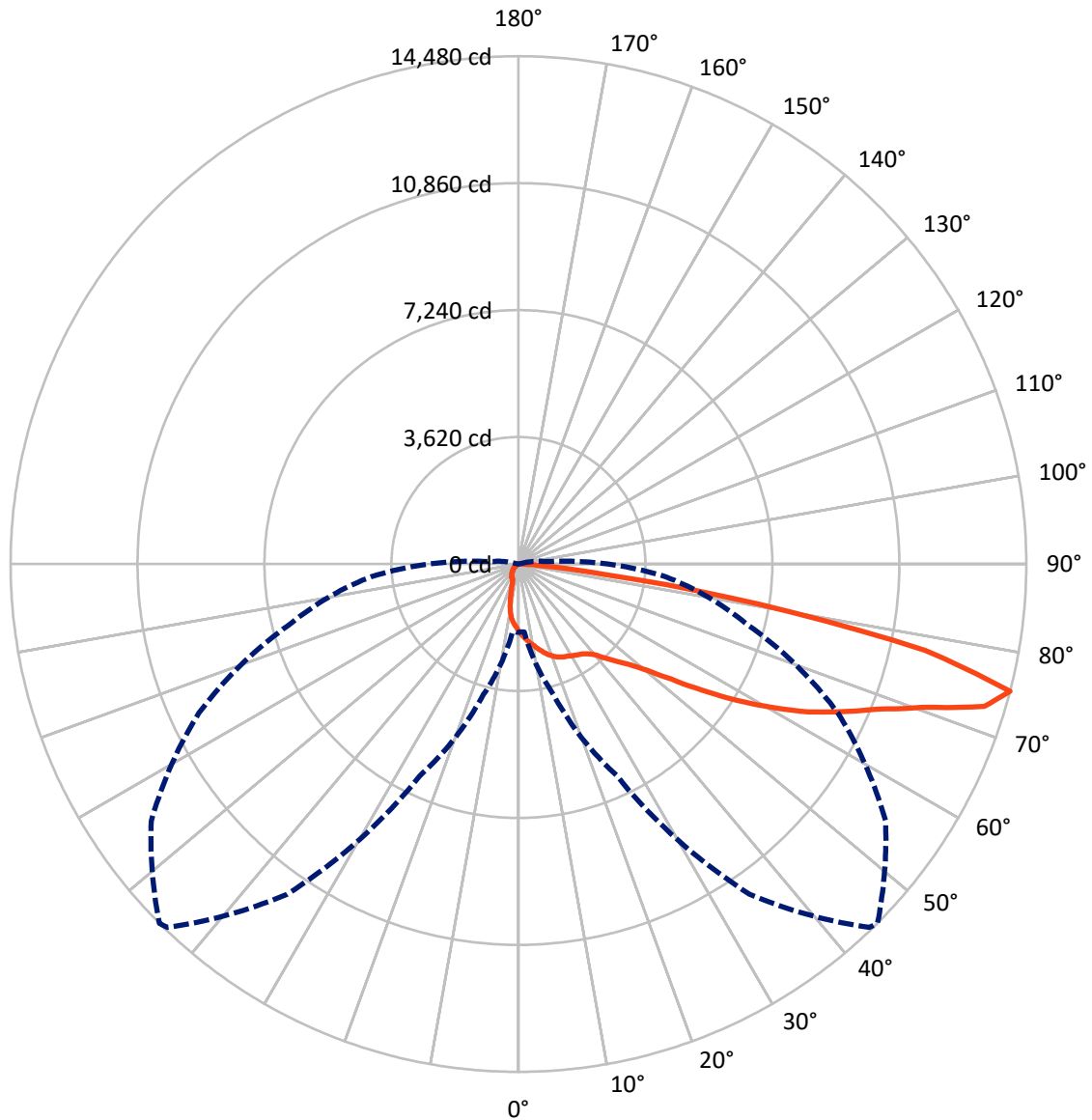


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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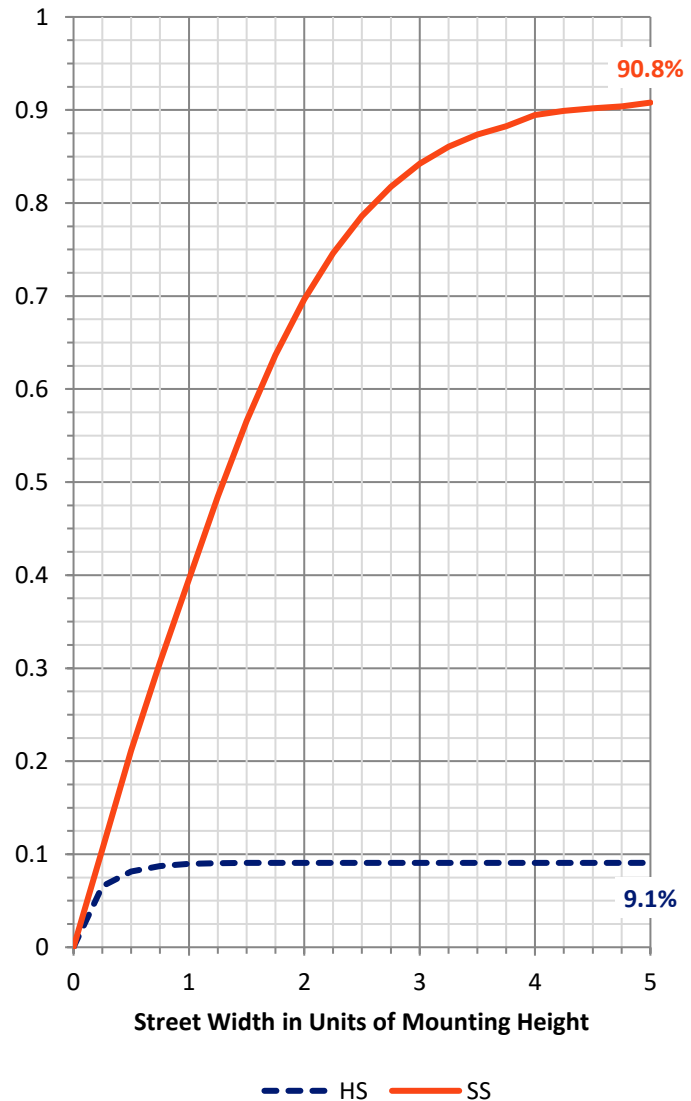
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1647.2	0.0	1647.2
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16360.8	0.0	16360.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	18008.0	0.0	18008.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.8	1.0
10°-20°	515.0	2.9
20°-30°	852.9	4.7
30°-40°	1234.3	6.9
40°-50°	2021.1	11.2
50°-60°	3601.2	20.0
60°-70°	5294.3	29.4
70°-80°	3994.1	22.2
80°-90°	313.4	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°	18008.0	100.0
0°-180°	18008.0	100.0

Coefficient of Utilization



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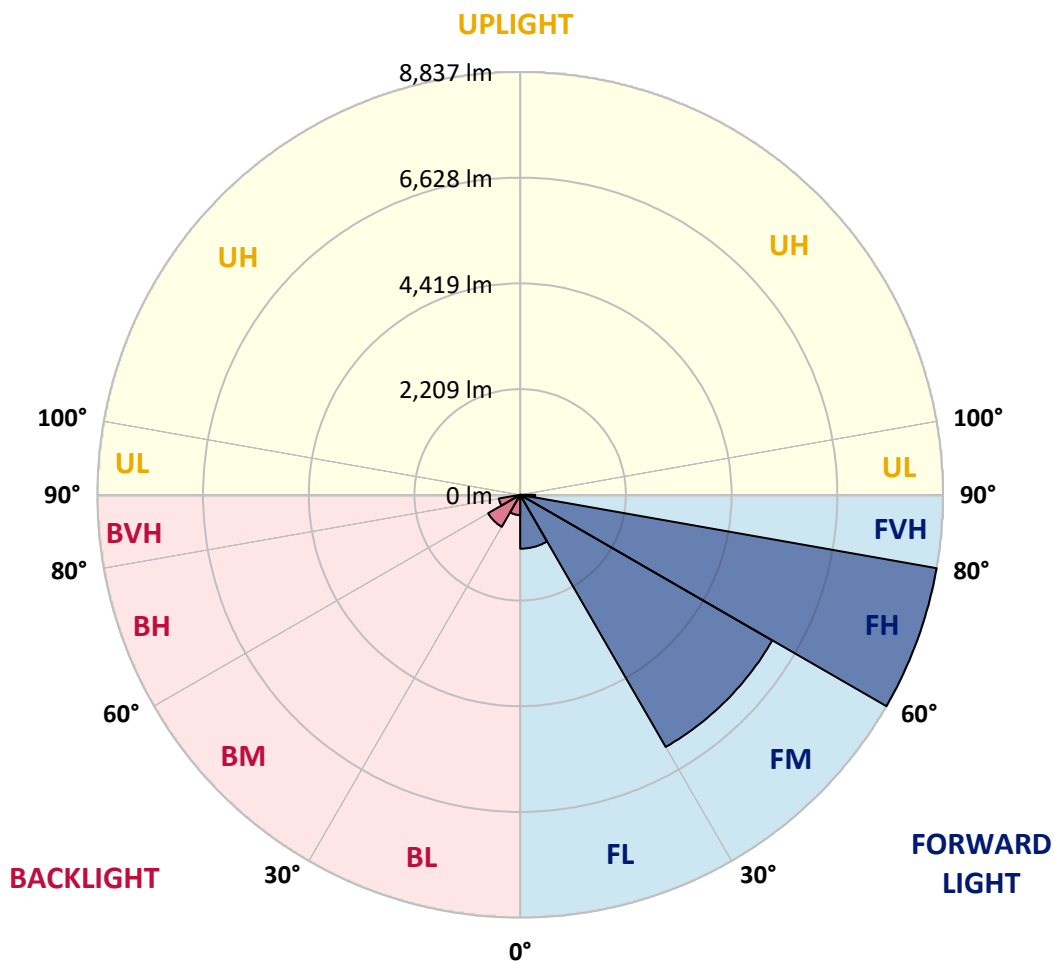
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1126.4	6.3			
FM	(30°-60°)	6084.8	33.8			
FH	(60°-80°)	8837.2	49.1			G4/12000
FVH	(80°-90°)	312.5	1.7			G3/500
BL	(0°-30°)	423.3	2.4	B1/500		
BM	(30°-60°)	771.9	4.3	B1/1000		
BH	(60°-80°)	451.2	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°	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0
2.5°	2092.2	2092.2	2087.9	2083.8	2062.4	2041.1	2036.8	2024.1	1985.8	1960.2	1934.6
5°	2267.0	2271.3	2262.7	2241.4	2194.5	2147.7	2143.4	2109.3	2036.8	1985.8	1930.3
7.5°	2433.1	2441.7	2420.4	2382.0	2326.6	2258.5	2254.2	2190.2	2096.5	2024.1	1943.1
10°	2573.7	2573.7	2544.0	2497.0	2437.4	2365.0	2356.5	2284.0	2177.5	2087.9	1981.5
12.5°	2727.2	2722.9	2680.3	2616.4	2548.2	2480.0	2475.7	2386.2	2284.0	2169.0	2036.8
15°	2867.7	2859.2	2803.9	2744.2	2671.7	2599.3	2595.0	2505.6	2399.0	2262.7	2117.8
17.5°	2944.5	2940.3	2889.1	2829.4	2769.7	2714.4	2710.1	2616.4	2501.3	2360.7	2198.7
20°	2957.2	2961.5	2918.9	2867.7	2833.7	2803.9	2803.9	2718.6	2595.0	2445.9	2284.0
22.5°	2961.5	2974.3	2944.5	2876.3	2867.7	2872.0	2880.5	2812.4	2684.5	2544.0	2373.5
25°	2991.3	3008.4	2987.1	2906.1	2897.6	2927.5	2936.0	2906.1	2791.1	2650.5	2475.7
27.5°	3051.1	3068.0	3051.1	2948.8	2936.0	2965.7	2974.3	2991.3	2906.1	2752.8	2582.2
30°	3170.3	3174.6	3136.3	3008.4	2982.8	3021.2	3034.0	3080.8	3012.7	2850.8	2684.5
32.5°	3379.1	3336.6	3221.5	3051.1	3029.7	3072.3	3085.1	3136.3	3110.7	2944.5	2791.1
35°	3805.3	3583.7	3319.5	3110.7	3089.3	3132.0	3149.1	3221.5	3234.3	3076.6	2923.2
37.5°	3801.0	3600.7	3549.5	3225.7	3195.9	3225.7	3247.1	3336.6	3387.6	3251.2	3114.9
40°	4069.4	3984.2	3984.2	3443.0	3345.0	3387.6	3409.0	3498.4	3587.9	3481.4	3340.8
42.5°	4913.1	4857.8	4798.0	3860.6	3553.8	3673.1	3685.9	3741.3	3847.8	3813.8	3647.5
45°	5854.9	5803.7	5573.6	4568.0	3911.8	3933.0	3962.9	4052.4	4205.8	4269.7	4073.7
47.5°	6592.1	6541.0	6345.0	5420.2	4470.0	4282.5	4282.5	4457.2	4695.9	4857.8	4670.3
50°	7184.4	7124.8	7005.4	6327.9	5386.1	4785.3	4759.8	4964.3	5317.9	5569.4	5441.5
52.5°	7759.6	7584.9	7512.4	7265.3	6421.6	5514.0	5445.8	5590.6	6080.7	6391.8	6285.2
55°	8143.1	8117.5	8040.9	8126.1	7508.3	6400.3	6340.7	6370.4	6984.1	7192.9	7060.8
57.5°	8501.0	8496.8	8667.3	9063.5	8692.8	7414.4	7320.7	7273.8	7857.6	7806.4	7921.5
60°	8944.3	8867.6	9263.8	9830.6	9779.4	8403.0	8296.5	8202.7	8526.6	8381.8	8952.8
62.5°	8965.6	8944.3	9749.6	10563.5	10857.5	9408.7	9285.1	8948.5	9110.4	8944.3	9937.0
65°	8151.7	8258.2	9954.1	10951.2	11760.9	10290.8	10141.6	9617.5	9630.3	9519.5	11096.2
67.5°	7968.4	8023.8	9391.6	11368.9	12412.8	11181.4	11040.7	10388.8	10235.3	10243.9	11782.1
70°	7512.4	7597.7	8692.8	11339.0	12928.5	12370.2	12229.6	11522.2	11151.5	10738.2	11253.8
72.5°	5739.8	5884.7	7324.9	9941.3	12787.8	13925.5	13887.2	12958.2	11518.0	9860.4	8513.8
75°	1943.1	1938.8	3847.8	6677.3	11488.1	14402.8	14479.5	12779.3	10047.8	6800.9	4227.1
77.5°	417.6	421.9	792.6	2705.8	7631.8	11564.9	11858.9	9638.8	6481.3	3029.7	967.3
80°	204.5	208.8	328.1	715.9	3051.1	6485.5	6945.7	4955.8	2394.8	605.1	161.9
82.5°	102.3	106.5	170.4	379.2	1129.2	2305.3	2463.0	1823.8	686.1	340.8	80.9
85°	38.4	38.4	85.2	225.9	515.6	541.1	664.7	528.4	413.4	277.0	21.3
87.5°	8.5	8.5	46.9	110.8	230.1	170.4	170.4	161.9	251.4	187.5	8.5
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°	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0	1926.0
2.5°	1921.8	1904.7	1875.0	1845.1	1823.8	1798.2	1785.5	1772.7	1768.4	1764.2	1772.7
5°	1900.4	1875.0	1819.5	1772.7	1730.0	1696.0	1670.4	1644.8	1632.0	1623.5	1627.8
7.5°	1900.4	1862.2	1781.2	1708.7	1640.5	1568.1	1495.7	1440.3	1397.7	1372.1	1376.4
10°	1921.8	1870.7	1764.2	1666.1	1538.3	1384.9	1227.2	1108.0	1026.9	980.1	980.1
12.5°	1968.7	1900.4	1768.4	1615.0	1397.7	1129.2	890.6	745.7	686.1	651.9	656.2
15°	2032.6	1951.6	1789.7	1546.8	1201.7	839.4	622.2	528.4	528.4	536.9	541.1
17.5°	2105.0	2015.5	1806.7	1444.5	950.2	600.8	490.0	481.5	494.3	515.6	515.6
20°	2177.5	2079.5	1815.2	1282.6	711.7	477.2	464.4	464.4	473.0	494.3	498.6
22.5°	2267.0	2160.5	1806.7	1082.4	532.7	451.7	447.4	447.4	447.4	473.0	473.0
25°	2360.7	2254.2	1772.7	869.3	451.7	434.7	430.4	426.2	426.2	447.4	451.7
27.5°	2467.3	2352.2	1691.7	664.7	426.2	417.6	413.4	404.8	404.8	421.9	421.9
30°	2573.7	2463.0	1568.1	502.8	404.8	400.6	392.0	383.5	375.0	392.0	392.0
32.5°	2688.8	2578.0	1406.1	400.6	375.0	375.0	370.7	357.9	349.4	357.9	362.2
35°	2842.2	2710.1	1222.9	349.4	336.7	336.7	336.7	332.4	315.4	323.9	323.9
37.5°	3046.8	2893.3	1009.9	323.9	306.8	298.3	298.3	298.3	285.5	289.8	289.8
40°	3306.7	3106.4	805.4	302.6	285.5	264.2	255.6	259.9	251.4	251.4	247.1
42.5°	3660.3	3336.6	605.1	285.5	268.4	238.7	221.6	217.3	208.8	204.5	204.5
45°	4167.4	3617.8	434.7	268.4	255.6	208.8	191.8	179.0	157.6	144.8	144.8
47.5°	4823.6	3937.3	323.9	251.4	242.8	183.2	161.9	136.4	106.5	98.0	98.0
50°	5624.8	4295.3	272.7	225.9	221.6	161.9	127.9	89.5	59.6	51.1	55.4
52.5°	6404.6	4631.9	242.8	200.3	196.0	140.7	93.7	46.9	25.6	25.6	25.6
55°	7060.8	4870.6	221.6	179.0	170.4	110.8	51.1	21.3	12.8	12.8	12.8
57.5°	7653.1	5006.9	200.3	157.6	136.4	76.7	21.3	8.5	8.5	4.3	4.3
60°	8194.2	5087.9	174.7	136.4	106.5	42.7	8.5	4.3	4.3	0.0	0.0
62.5°	8726.9	5147.5	149.1	110.8	80.9	17.1	4.3	4.3	0.0	0.0	0.0
65°	9131.7	5126.2	119.3	89.5	51.1	8.5	4.3	0.0	0.0	0.0	0.0
67.5°	9118.9	4836.4	89.5	68.1	25.6	4.3	0.0	0.0	0.0	0.0	0.0
70°	8155.9	4073.7	59.6	42.7	8.5	4.3	0.0	0.0	0.0	0.0	0.0
72.5°	5786.7	2612.1	38.4	25.6	4.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	2548.2	792.6	21.3	12.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	498.6	183.2	12.8	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	119.3	21.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.1	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	4.3	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)