

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: P237454

Luminaire Tested: **ARCH-L-AF72-210-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237454
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-AF72-210-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 900mA 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: 18559.4 lumens
Efficiency: N/A
Efficacy: 88.0 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

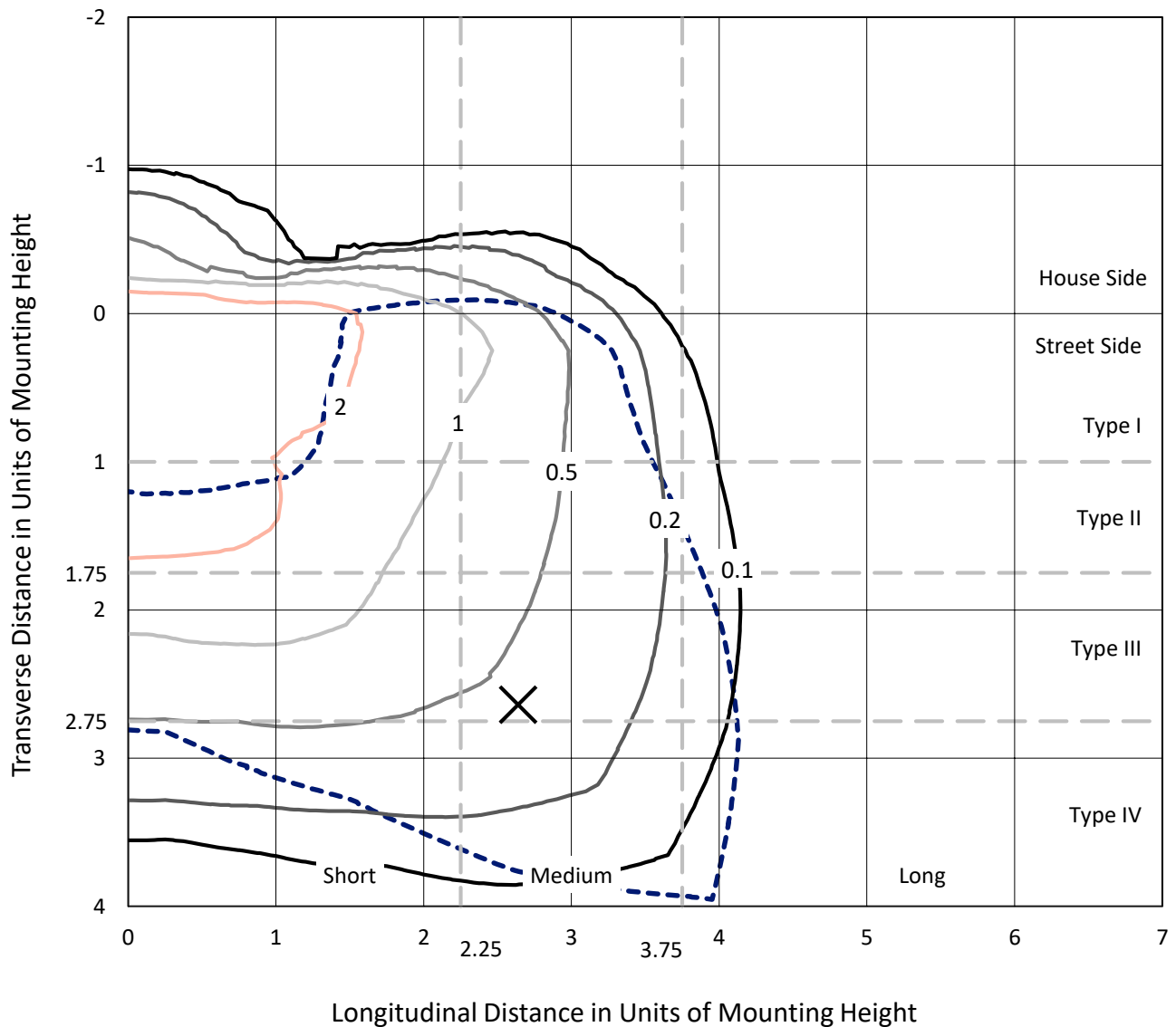
Input Watts (W): 211
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

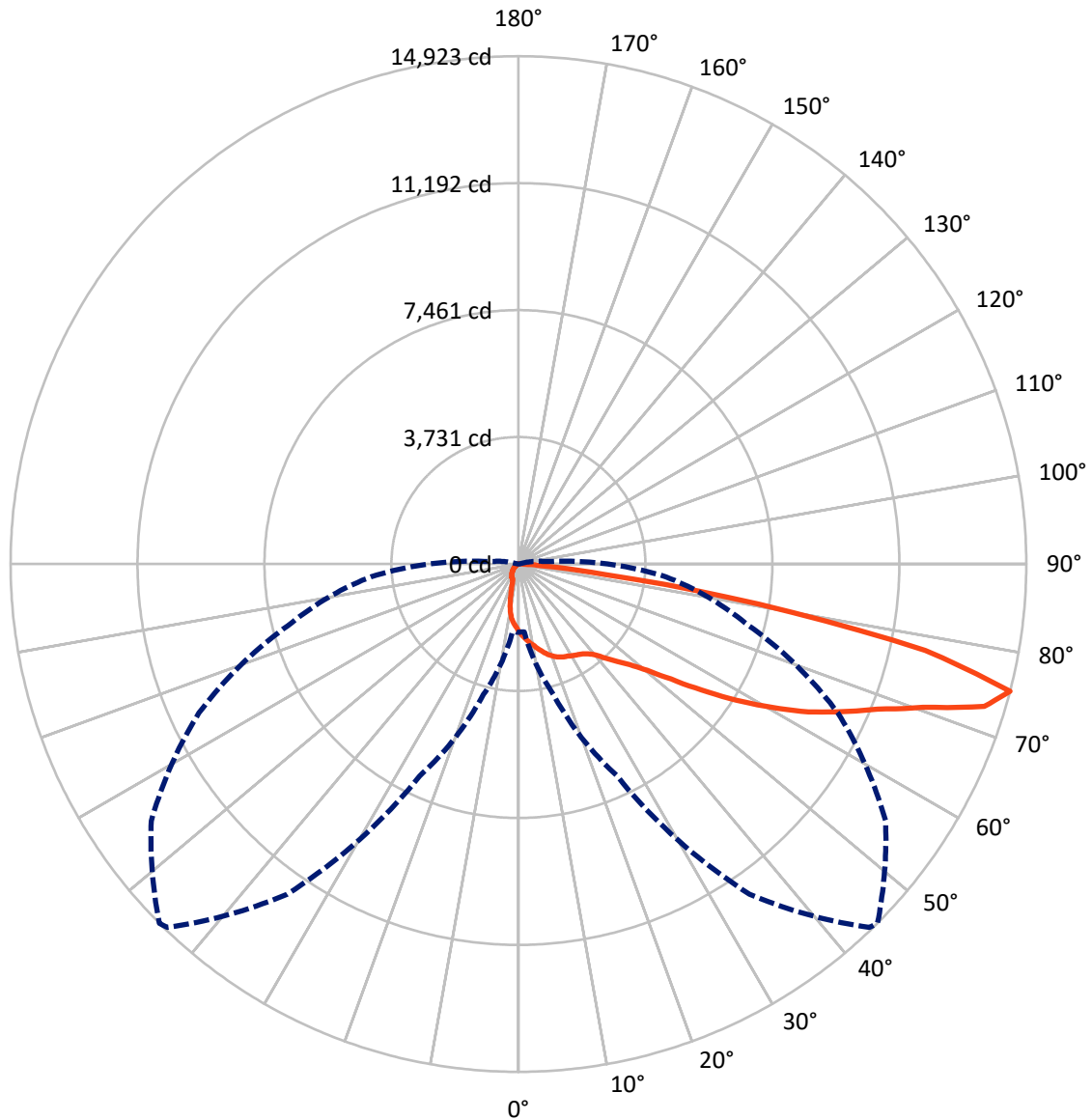


Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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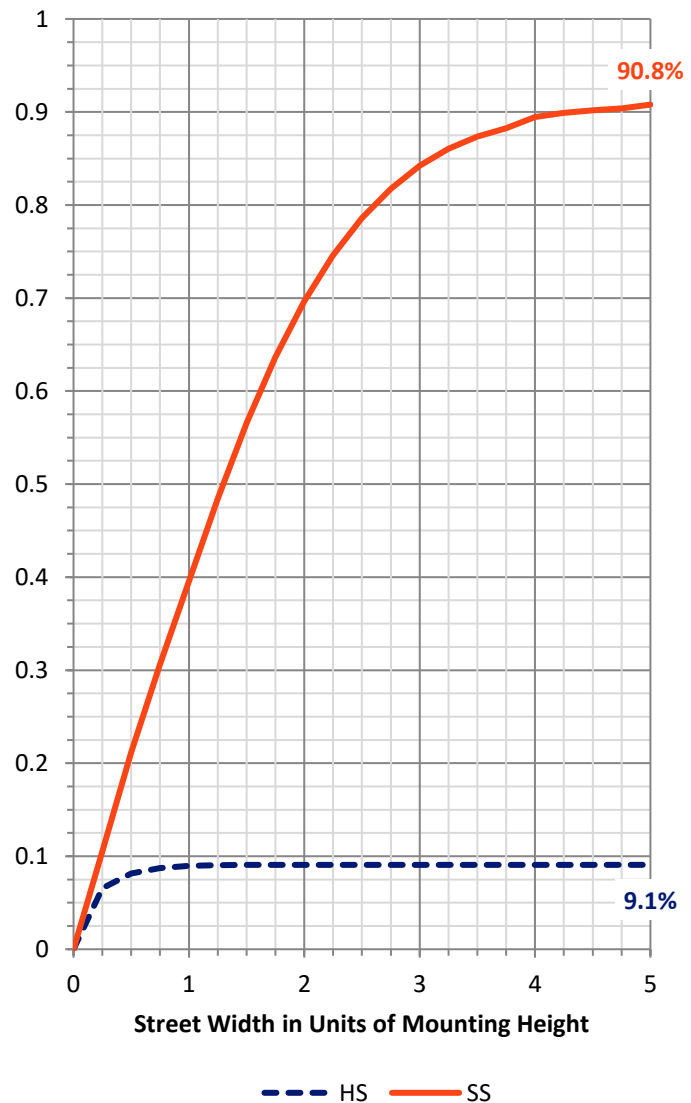
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1697.6	0.0	1697.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16861.8	0.0	16861.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	18559.4	0.0	18559.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.3	1.0
10°-20°	530.8	2.9
20°-30°	879.0	4.7
30°-40°	1272.1	6.9
40°-50°	2083.0	11.2
50°-60°	3711.5	20.0
60°-70°	5456.4	29.4
70°-80°	4116.4	22.2
80°-90°	323.0	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°	18559.4	100.0
0°-180°	18559.4	100.0



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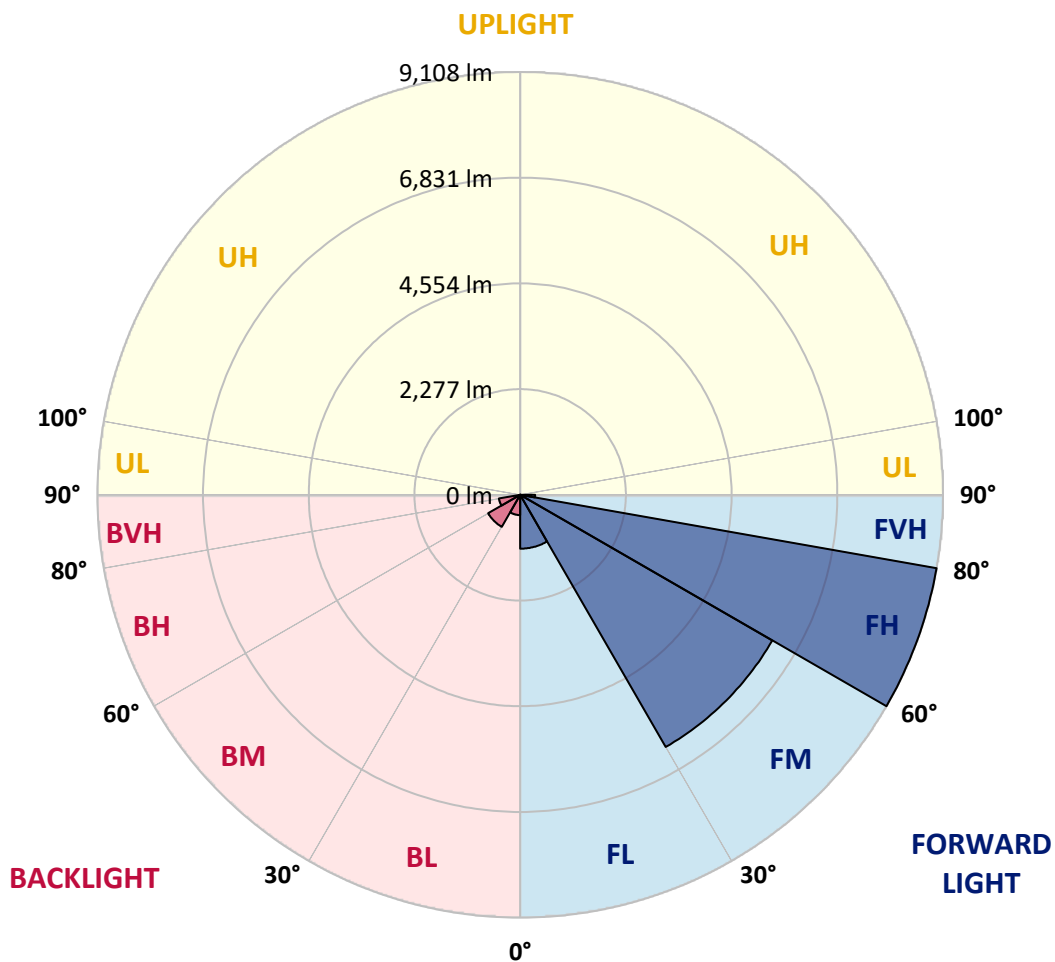
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1160.8	6.3			
FM	(30°-60°)	6271.1	33.8			
FH	(60°-80°)	9107.8	49.1			G4/12000
FVH	(80°-90°)	322.1	1.7			G3/500
BL	(0°-30°)	436.2	2.4	B1/500		
BM	(30°-60°)	795.5	4.3	B1/1000		
BH	(60°-80°)	465.0	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°	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0
2.5°	2156.3	2156.3	2151.9	2147.5	2125.6	2103.6	2099.2	2086.0	2046.5	2020.1	1993.8
5°	2336.3	2340.7	2331.9	2310.0	2261.7	2213.4	2209.0	2173.9	2099.2	2046.5	1989.4
7.5°	2507.7	2516.5	2494.5	2455.0	2397.8	2327.6	2323.2	2257.3	2160.7	2086.0	2002.6
10°	2652.5	2652.5	2621.8	2573.5	2512.1	2437.4	2428.6	2353.9	2244.1	2151.9	2042.1
12.5°	2810.7	2806.3	2762.4	2696.5	2626.2	2555.9	2551.5	2459.3	2353.9	2235.4	2099.2
15°	2955.6	2946.8	2889.7	2828.3	2753.6	2678.9	2674.5	2582.3	2472.5	2331.9	2182.7
17.5°	3034.6	3030.3	2977.5	2916.0	2854.5	2797.5	2793.1	2696.5	2577.9	2433.0	2266.1
20°	3047.8	3052.2	3008.3	2955.6	2920.4	2889.7	2889.7	2801.9	2674.5	2520.9	2353.9
22.5°	3052.2	3065.4	3034.6	2964.4	2955.6	2960.0	2968.8	2898.5	2766.8	2621.8	2446.2
25°	3083.0	3100.5	3078.6	2995.1	2986.3	3017.1	3025.9	2995.1	2876.5	2731.6	2551.5
27.5°	3144.4	3161.9	3144.4	3039.0	3025.9	3056.6	3065.4	3083.0	2995.1	2837.1	2661.3
30°	3267.4	3271.8	3232.2	3100.5	3074.2	3113.7	3126.9	3175.1	3104.9	2938.0	2766.8
32.5°	3482.5	3438.6	3320.1	3144.4	3122.5	3166.3	3179.5	3232.2	3205.9	3034.6	2876.5
35°	3921.8	3693.4	3421.1	3205.9	3183.9	3227.8	3245.4	3320.1	3333.3	3170.7	3012.7
37.5°	3917.4	3711.0	3658.3	3324.5	3293.7	3324.5	3346.5	3438.6	3491.3	3350.9	3210.3
40°	4194.0	4106.2	4106.2	3548.4	3447.4	3491.3	3513.3	3605.6	3697.8	3588.0	3443.0
42.5°	5063.6	5006.5	4945.0	3978.9	3662.7	3785.6	3798.8	3855.9	3965.7	3930.5	3759.2
45°	6034.2	5981.4	5744.3	4707.8	4031.6	4053.5	4084.2	4176.5	4334.5	4400.4	4198.4
47.5°	6793.9	6741.1	6539.2	5586.2	4606.9	4413.6	4413.6	4593.7	4839.6	5006.5	4813.3
50°	7404.3	7342.8	7219.9	6521.6	5551.0	4931.9	4905.5	5116.3	5480.8	5739.9	5608.1
52.5°	7997.2	7817.2	7742.5	7487.8	6618.2	5682.8	5612.5	5761.9	6266.9	6587.5	6477.7
55°	8392.5	8366.1	8287.0	8374.9	7738.1	6596.3	6534.8	6565.5	7197.9	7413.1	7277.0
57.5°	8761.4	8757.0	8932.6	9341.1	8959.0	7641.4	7544.9	7496.6	8098.2	8045.5	8164.1
60°	9218.1	9139.0	9547.5	10131.5	10078.8	8660.3	8550.5	8454.0	8787.7	8638.4	9226.9
62.5°	9240.0	9218.1	10048.1	10887.0	11190.0	9696.8	9569.4	9222.5	9389.4	9218.1	10241.4
65°	8401.2	8511.1	10258.9	11286.5	12120.9	10605.9	10452.1	9912.0	9925.2	9810.9	11435.9
67.5°	8212.4	8269.5	9679.2	11717.0	12792.9	11523.7	11378.8	10706.8	10548.8	10557.6	12142.9
70°	7742.5	7830.3	8959.0	11686.2	13324.2	12748.9	12604.1	11875.0	11493.0	11067.0	11598.3
72.5°	5915.5	6064.9	7549.3	10245.8	13179.4	14351.9	14312.4	13355.0	11870.6	10162.3	8774.6
75°	2002.6	1998.2	3965.7	6881.7	11839.9	14843.8	14922.8	13170.6	10355.5	7009.1	4356.5
77.5°	430.4	434.8	816.8	2788.7	7865.5	11918.9	12222.0	9933.9	6679.7	3122.5	996.9
80°	210.8	215.2	338.2	737.8	3144.4	6684.1	7158.4	5107.5	2468.1	623.6	166.8
82.5°	105.4	109.8	175.6	390.9	1163.8	2375.9	2538.4	1879.7	707.1	351.3	83.5
85°	39.5	39.5	87.9	232.7	531.4	557.7	685.1	544.5	426.0	285.5	22.0
87.5°	8.8	8.8	48.3	114.2	237.1	175.6	175.6	166.8	259.1	193.2	8.8
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°	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0	1985.0
2.5°	1980.6	1963.0	1932.4	1901.6	1879.7	1853.3	1840.1	1826.9	1822.5	1818.2	1826.9
5°	1958.6	1932.4	1875.3	1826.9	1783.0	1747.9	1721.5	1695.1	1682.0	1673.2	1677.6
7.5°	1958.6	1919.2	1835.7	1761.0	1690.8	1616.2	1541.5	1484.4	1440.4	1414.1	1418.5
10°	1980.6	1928.0	1818.2	1717.1	1585.4	1427.3	1264.8	1141.8	1058.3	1010.1	1010.1
12.5°	2028.9	1958.6	1822.5	1664.4	1440.4	1163.8	917.9	768.5	707.1	671.9	676.3
15°	2094.8	2011.4	1844.5	1594.2	1238.5	865.1	641.2	544.5	544.5	553.3	557.7
17.5°	2169.5	2077.2	1862.1	1488.8	979.4	619.2	505.0	496.2	509.4	531.4	531.4
20°	2244.1	2143.1	1870.9	1321.9	733.5	491.8	478.7	478.7	487.4	509.4	513.8
22.5°	2336.3	2226.6	1862.1	1115.5	548.9	465.5	461.1	461.1	461.1	487.4	487.4
25°	2433.0	2323.2	1826.9	895.9	465.5	448.0	443.6	439.2	439.2	461.1	465.5
27.5°	2542.7	2424.2	1743.5	685.1	439.2	430.4	426.0	417.2	417.2	434.8	434.8
30°	2652.5	2538.4	1616.2	518.2	417.2	412.9	404.1	395.3	386.5	404.1	404.1
32.5°	2771.2	2656.9	1449.2	412.9	386.5	386.5	382.1	368.9	360.1	368.9	373.3
35°	2929.2	2793.1	1260.4	360.1	347.0	347.0	347.0	342.6	325.0	333.8	333.8
37.5°	3140.0	2981.9	1040.9	333.8	316.2	307.4	307.4	307.4	294.2	298.6	298.6
40°	3408.0	3201.5	830.0	311.8	294.2	272.3	263.5	267.9	259.1	259.1	254.7
42.5°	3772.4	3438.6	623.6	294.2	276.7	245.9	228.3	223.9	215.2	210.8	210.8
45°	4295.1	3728.6	448.0	276.7	263.5	215.2	197.6	184.4	162.4	149.4	149.4
47.5°	4971.3	4057.8	333.8	259.1	250.3	188.8	166.8	140.6	109.8	101.0	101.0
50°	5797.0	4426.8	281.1	232.7	228.3	166.8	131.8	92.3	61.5	52.7	57.1
52.5°	6600.7	4773.7	250.3	206.4	202.0	145.0	96.6	48.3	26.4	26.4	26.4
55°	7277.0	5019.6	228.3	184.4	175.6	114.2	52.7	22.0	13.2	13.2	13.2
57.5°	7887.5	5160.2	206.4	162.4	140.6	79.1	22.0	8.8	8.8	4.4	4.4
60°	8445.2	5243.6	180.0	140.6	109.8	43.9	8.8	4.4	4.4	0.0	0.0
62.5°	8994.1	5305.1	153.7	114.2	83.5	17.6	4.4	4.4	0.0	0.0	0.0
65°	9411.4	5283.1	123.0	92.3	52.7	8.8	4.4	0.0	0.0	0.0	0.0
67.5°	9398.2	4984.5	92.3	70.3	26.4	4.4	0.0	0.0	0.0	0.0	0.0
70°	8405.6	4198.4	61.5	43.9	8.8	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	5963.9	2692.1	39.5	26.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	2626.2	816.8	22.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	513.8	188.8	13.2	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	123.0	22.0	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.7	8.8	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°	8.8	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)