

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: P398139

Luminaire Tested: **ARCH-S-PA1-90-750-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398139
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-750-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9039 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

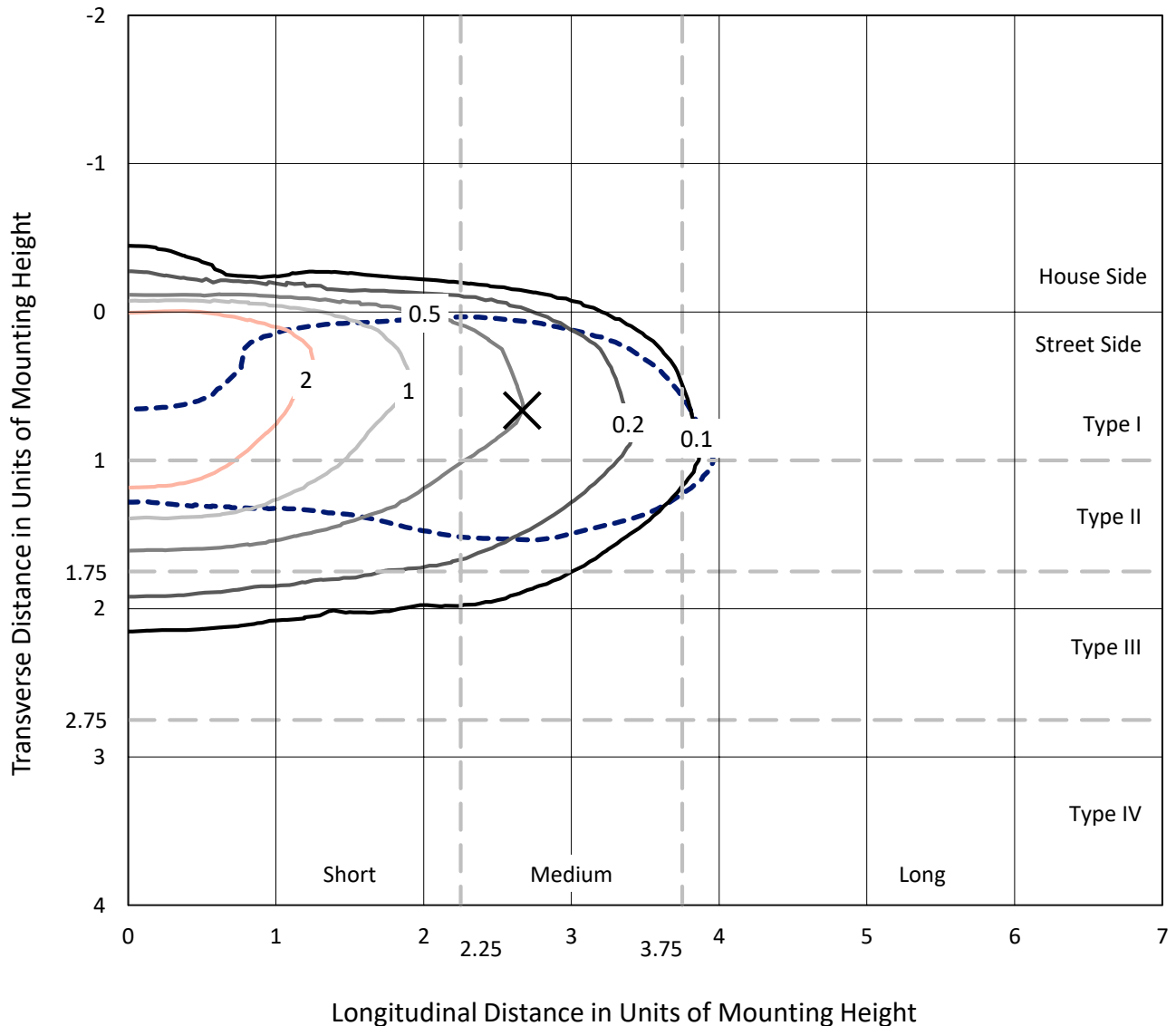
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

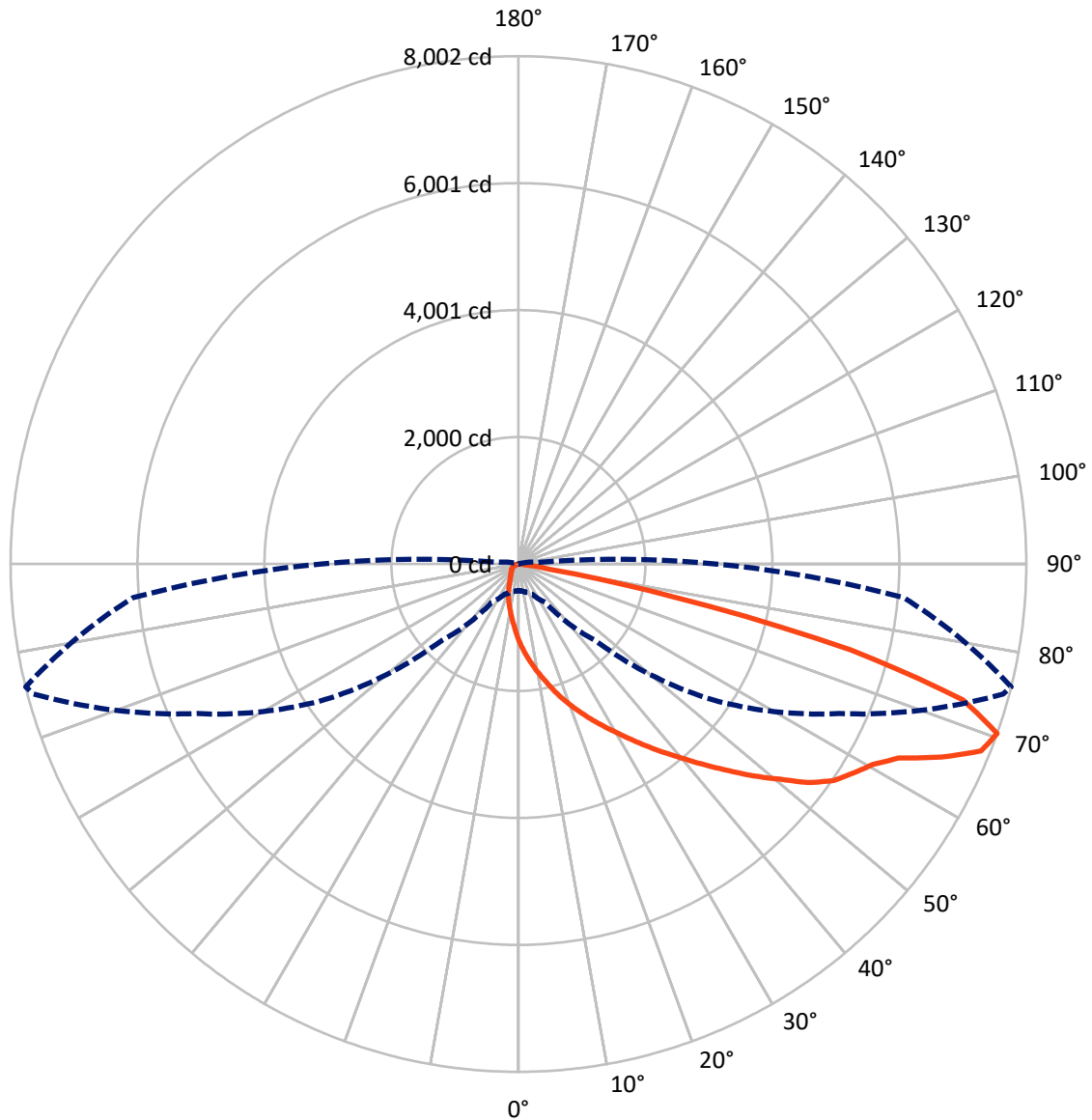
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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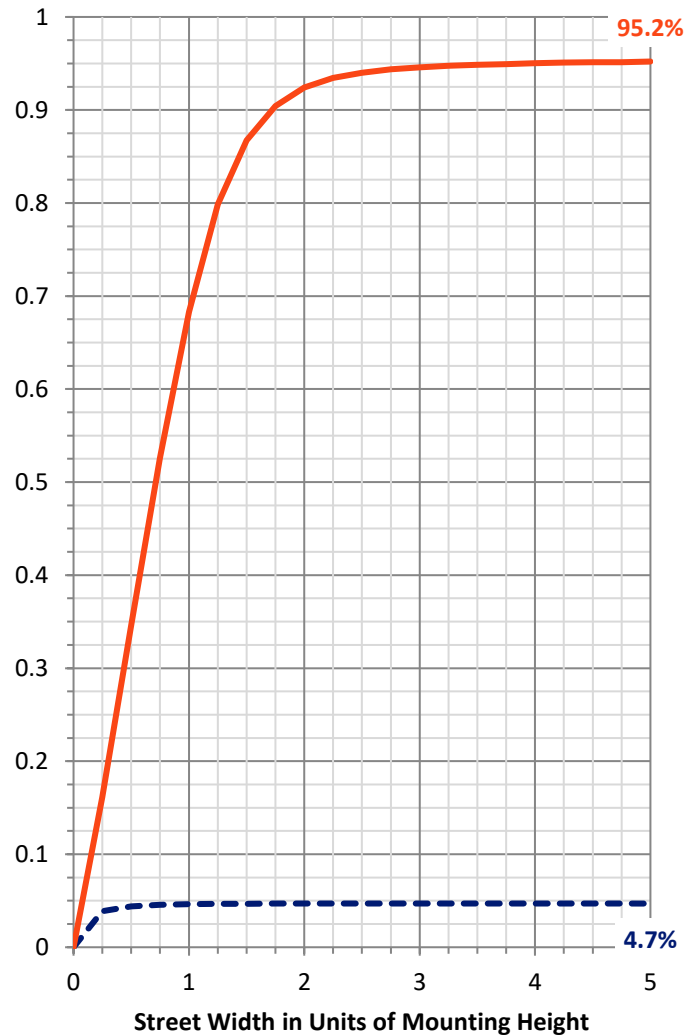
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	426.3	0.0	426.3
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	8612.7	0.0	8612.7
	% Fixture	95.3	0.0	95.3
Total	Lumens	9039.0	0.0	9039.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	1.3
10°-20°	367.9	4.1
20°-30°	685.1	7.6
30°-40°	1211.8	13.4
40°-50°	1853.2	20.5
50°-60°	2101.1	23.2
60°-70°	1801.1	19.9
70°-80°	872.4	9.7
80°-90°	32.4	0.4
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°	9039.0	100.0
0°-180°	9039.0	100.0



--- HS — SS

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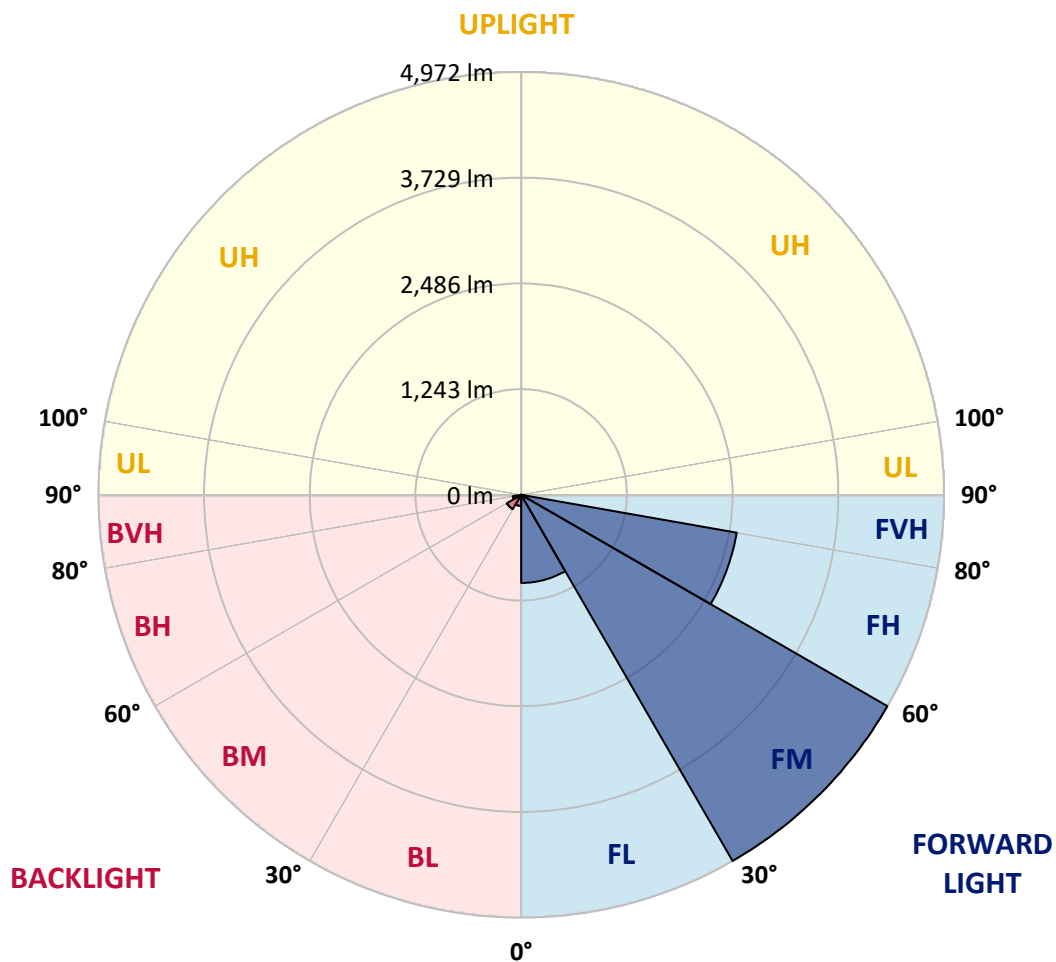
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1036.2	11.5			
FM	(30°-60°)	4971.5	55.0			
FH	(60°-80°)	2573.1	28.5			G2/5000
FVH	(80°-90°)	31.8	0.4			G1/100
BL	(0°-30°)	130.8	1.4	B1/500		
BM	(30°-60°)	194.6	2.2	B0/220		
BH	(60°-80°)	100.4	1.1	B0/110		G0/110
BVH	(80°-90°)	0.6	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-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9
2.5°	1653.9	1644.8	1635.8	1601.2	1569.6	1541.0	1486.8	1416.1	1352.9	1339.3	1265.6
5°	1942.8	1932.3	1918.7	1884.1	1843.5	1795.3	1715.6	1607.2	1495.9	1471.8	1334.8
7.5°	2138.4	2129.4	2109.8	2093.3	2052.7	2006.0	1917.2	1790.8	1637.3	1607.2	1414.6
10°	2272.4	2266.4	2263.3	2249.8	2219.7	2182.1	2093.3	1960.9	1780.3	1745.7	1498.9
12.5°	2320.5	2320.5	2335.6	2358.2	2362.7	2350.6	2269.4	2136.9	1930.8	1894.7	1598.2
15°	2255.8	2263.3	2296.5	2368.7	2443.9	2493.6	2442.4	2319.0	2096.3	2057.2	1715.6
17.5°	2237.8	2245.3	2267.9	2331.1	2431.9	2564.3	2589.9	2495.1	2252.8	2219.7	1836.0
20°	2288.9	2296.5	2316.0	2370.2	2446.9	2580.9	2687.7	2665.2	2418.4	2383.7	1957.9
22.5°	2410.8	2415.3	2415.3	2457.5	2525.2	2624.5	2749.4	2826.2	2588.4	2550.8	2078.2
25°	2672.7	2663.6	2627.5	2606.5	2650.1	2731.4	2827.7	2967.6	2778.0	2726.9	2207.7
27.5°	3015.8	3045.9	2958.6	2857.8	2824.7	2871.3	2937.5	3092.5	2961.6	2907.4	2325.0
30°	3480.8	3468.8	3354.4	3209.9	3067.0	3050.4	3073.0	3199.4	3145.2	3094.0	2456.0
32.5°	3863.0	3885.6	3765.2	3589.2	3375.5	3274.6	3250.6	3327.3	3340.8	3307.7	2611.0
35°	4255.8	4279.9	4162.5	3966.9	3712.6	3544.0	3474.8	3485.3	3583.1	3541.0	2773.5
37.5°	4608.0	4629.0	4513.2	4313.0	4058.7	3852.5	3753.2	3671.9	3817.9	3780.3	2945.1
40°	4875.8	4878.8	4800.6	4621.5	4380.7	4167.0	4054.2	3894.6	4066.2	4040.6	3124.1
42.5°	5065.4	5071.5	5014.3	4860.8	4638.1	4439.4	4347.6	4158.0	4352.1	4329.6	3331.8
45°	5154.2	5164.8	5158.7	5017.3	4832.2	4660.6	4630.5	4437.9	4665.1	4644.1	3571.1
47.5°	5070.0	5070.0	5146.7	5127.1	4957.1	4842.7	4877.3	4729.9	5005.3	4985.7	3814.9
50°	4719.3	4723.8	4880.3	5104.6	5005.3	4979.7	5088.0	5015.8	5313.8	5325.8	4106.8
52.5°	3798.3	3790.8	4319.0	4749.4	4972.1	5041.4	5282.1	5307.7	5684.0	5720.1	4397.3
55°	2838.2	2833.7	3339.3	4120.4	4740.4	5009.8	5390.5	5568.1	6000.0	6022.6	4614.0
57.5°	2246.8	2234.8	2513.2	3321.3	4216.7	4868.3	5395.0	5617.7	6176.1	6215.2	4824.7
60°	1727.6	1717.1	1924.7	2471.0	3474.8	4492.1	5265.6	5620.7	6346.1	6415.3	5107.6
62.5°	1235.5	1247.6	1407.1	1772.8	2672.7	3960.9	5097.0	5662.9	6648.6	6726.8	5509.4
65°	833.7	827.7	960.1	1206.9	1900.7	3246.0	4838.2	5751.7	7193.4	7330.3	5991.0
67.5°	579.4	583.9	644.1	785.6	1206.9	2492.1	4407.8	5801.3	7756.2	7863.0	6328.0
70°	418.4	424.4	457.5	528.2	737.4	1690.0	3726.1	5574.1	7908.2	8001.5	6093.3
72.5°	275.4	287.4	337.1	374.7	471.0	1057.9	2744.9	4802.1	7253.5	7322.8	5112.1
75°	149.0	152.0	216.7	279.9	335.6	659.1	1637.3	3238.5	5426.6	5404.0	3370.9
77.5°	115.9	120.4	133.9	200.1	225.7	362.7	647.1	1462.7	2570.3	2501.1	1149.7
80°	70.7	73.7	93.3	118.9	158.0	210.7	189.6	397.3	522.2	489.1	168.5
82.5°	42.1	45.1	55.7	99.3	124.9	99.3	66.2	96.3	97.8	96.3	42.1
85°	7.5	7.5	39.1	69.2	66.2	28.6	39.1	31.6	28.6	30.1	9.0
87.5°	0.0	0.0	15.0	21.1	30.1	10.5	15.0	7.5	7.5	7.5	4.5
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°	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9	1209.9
2.5°	1220.5	1169.3	1064.0	972.2	880.4	812.6	761.5	708.8	690.7	668.2	656.1
5°	1241.5	1140.7	931.5	764.5	623.0	514.7	445.4	403.3	376.2	356.7	352.1
7.5°	1273.1	1118.1	824.7	598.9	443.9	335.6	278.4	249.8	234.8	225.7	222.7
10°	1310.8	1098.6	719.3	466.5	313.0	236.3	204.7	192.6	186.6	183.6	182.1
12.5°	1363.4	1091.0	630.5	359.7	236.3	194.1	177.6	170.1	165.5	161.0	159.5
15°	1432.7	1094.1	549.3	278.4	195.6	173.1	159.5	152.0	146.0	141.5	141.5
17.5°	1504.9	1098.6	469.5	225.7	177.6	158.0	143.0	132.4	127.9	123.4	121.9
20°	1572.6	1097.1	392.8	192.6	161.0	141.5	126.4	115.9	108.4	103.8	103.8
22.5°	1637.3	1088.0	320.5	173.1	147.5	124.9	108.4	97.8	91.8	87.3	87.3
25°	1706.5	1070.0	261.9	158.0	130.9	109.9	93.3	82.8	78.3	73.7	73.7
27.5°	1760.7	1039.9	213.7	144.5	115.9	94.8	79.8	70.7	66.2	63.2	63.2
30°	1819.4	996.2	177.6	129.4	100.8	81.3	67.7	60.2	55.7	54.2	54.2
32.5°	1884.1	948.1	152.0	114.4	85.8	69.2	57.2	52.7	48.2	46.7	46.7
35°	1959.4	905.9	136.9	99.3	75.2	58.7	49.7	45.1	42.1	42.1	42.1
37.5°	2045.1	862.3	123.4	87.3	64.7	49.7	42.1	40.6	39.1	37.6	37.6
40°	2138.4	815.6	111.4	76.7	55.7	42.1	36.1	36.1	34.6	34.6	34.6
42.5°	2243.8	775.0	100.8	67.7	48.2	36.1	31.6	31.6	30.1	30.1	30.1
45°	2358.2	737.4	91.8	60.2	42.1	31.6	28.6	27.1	25.6	25.6	25.6
47.5°	2493.6	716.3	84.3	52.7	36.1	27.1	24.1	22.6	21.1	19.6	19.6
50°	2666.7	725.4	76.7	43.6	31.6	22.6	19.6	18.1	16.6	15.0	15.0
52.5°	2803.6	720.8	66.2	37.6	25.6	18.1	15.0	13.5	12.0	10.5	10.5
55°	2902.9	702.8	57.2	31.6	19.6	15.0	12.0	9.0	7.5	7.5	7.5
57.5°	3000.7	684.7	48.2	25.6	15.0	10.5	7.5	6.0	6.0	6.0	6.0
60°	3152.7	659.1	42.1	21.1	12.0	7.5	4.5	4.5	3.0	3.0	3.0
62.5°	3337.8	627.5	34.6	18.1	9.0	6.0	3.0	3.0	0.0	0.0	0.0
65°	3541.0	571.9	28.6	13.5	7.5	4.5	3.0	0.0	0.0	0.0	0.0
67.5°	3494.3	459.0	24.1	9.0	6.0	3.0	1.5	0.0	0.0	0.0	0.0
70°	3091.0	310.0	19.6	7.5	4.5	3.0	1.5	0.0	0.0	0.0	0.0
72.5°	2421.4	183.6	13.5	6.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0
75°	1550.0	91.8	9.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	519.2	45.1	6.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	73.7	15.0	3.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.6	6.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	1.5	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)