

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: LUMARK

Report Number: P883920

Luminaire Tested: **NAV-SB4C-727-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883920  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4C-727-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

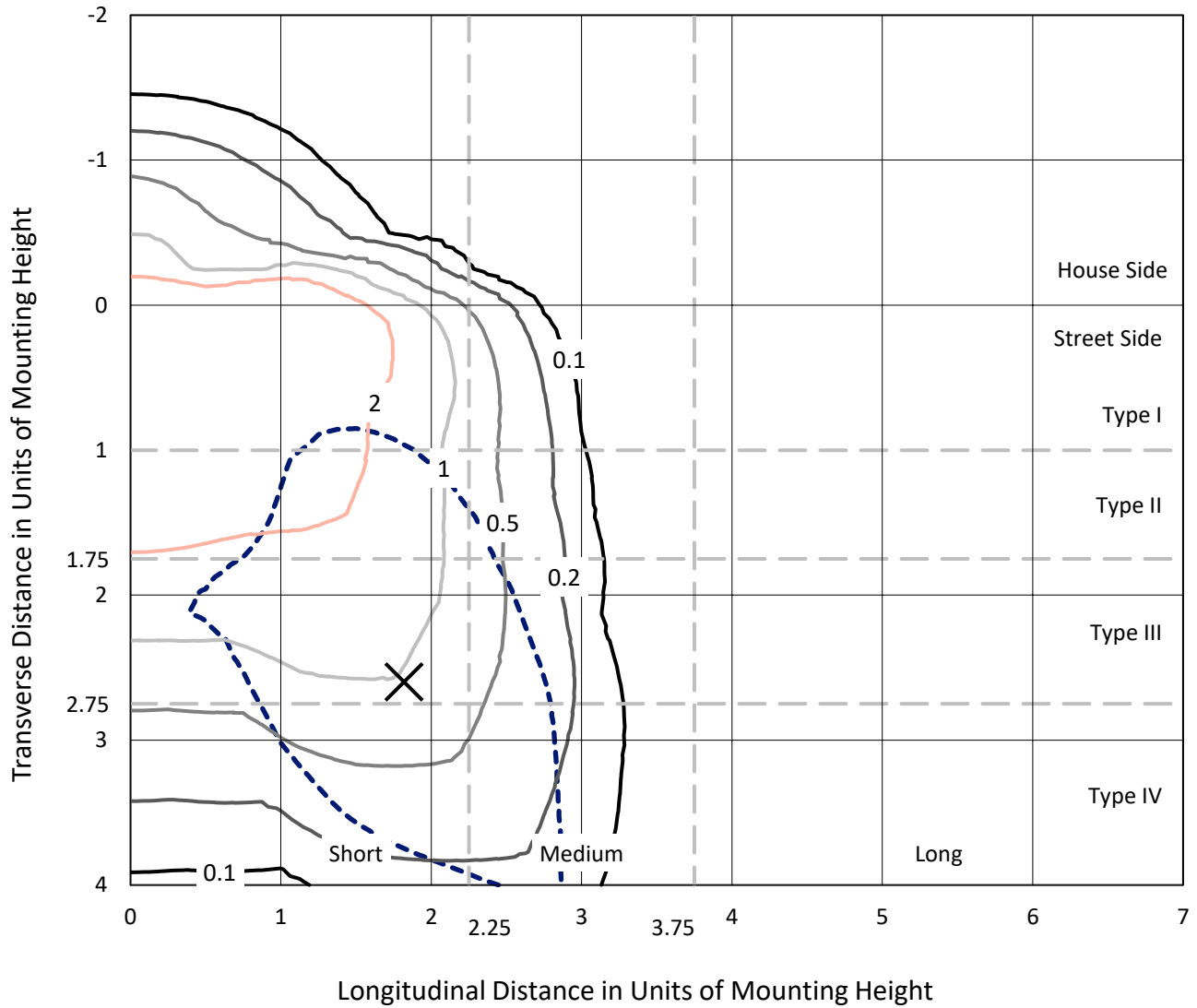
Lumens per Lamp: N/A  
Luminaire Lumens: 20825 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 200.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.714  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

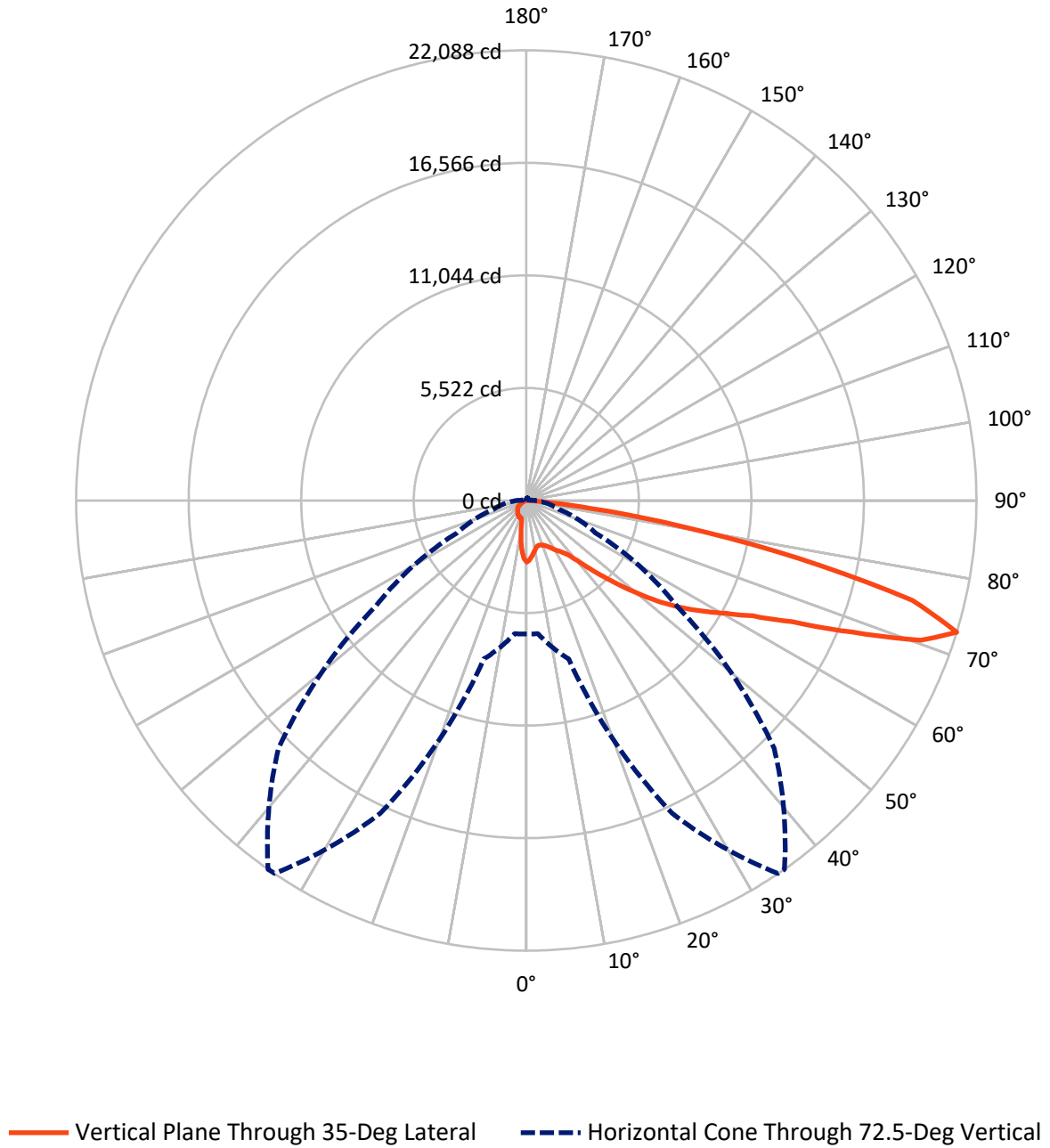
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2343.8	0.0	2343.8
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	18481.2	0.0	18481.2
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	20825.0	0.0	20825.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.0	1.2
10°-20°	580.2	2.8
20°-30°	942.5	4.5
30°-40°	1572.6	7.6
40°-50°	2975.4	14.3
50°-60°	4727.9	22.7
60°-70°	5848.8	28.1
70°-80°	3635.6	17.5
80°-90°	293.8	1.4
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°	20825.0	100.0
0°-180°	20825.0	100.0

**Coefficient of Utilization**



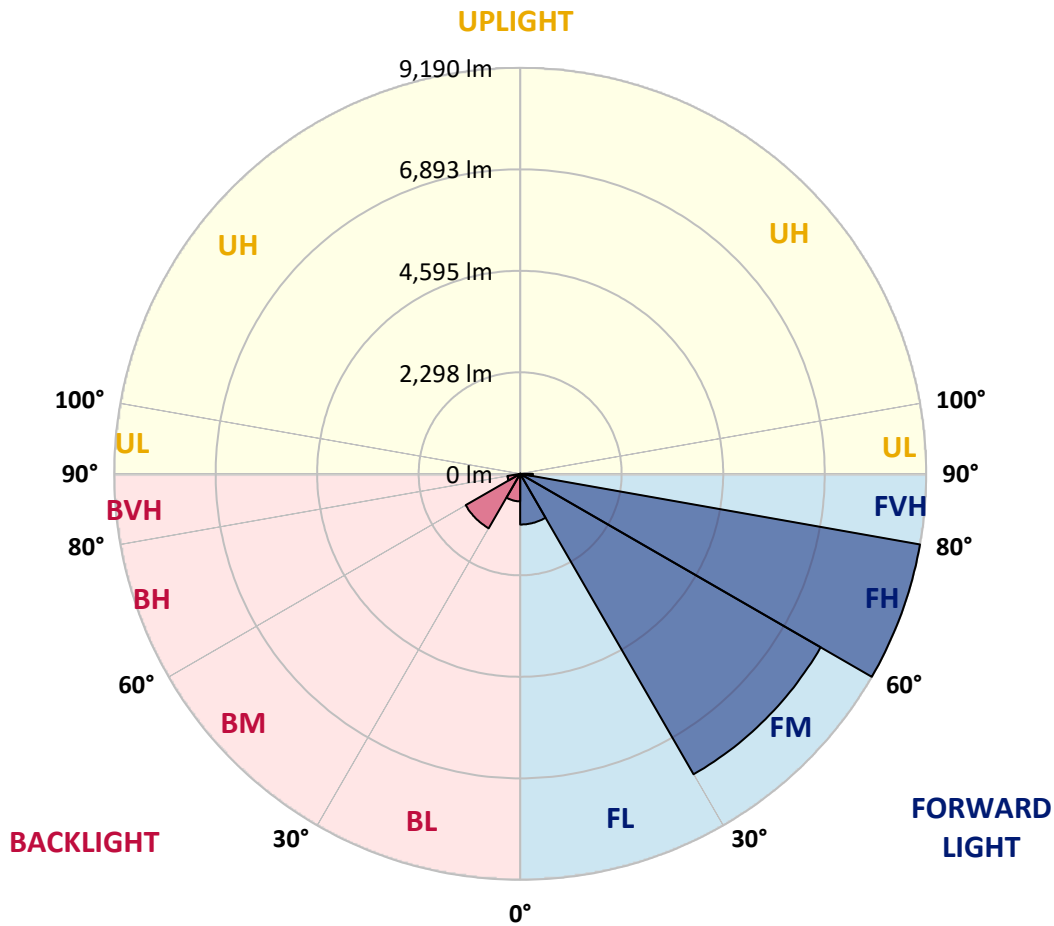
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1148.0	5.5			
FM (30°-60°)	7853.1	37.7			
FH (60°-80°)	9190.3	44.1			G4/12000
FVH (80°-90°)	289.8	1.4			G3/500
BL (0°-30°)	622.8	3.0	B2/1000		
BM (30°-60°)	1422.9	6.8	B2/2500		
BH (60°-80°)	294.1	1.4	B1/500		G1/500
BVH (80°-90°)	4.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2
2.5°	2884.0	2908.4	2913.0	2920.6	2920.6	2929.7	2945.0	2966.4	3001.5	3019.8	3032.0
5°	2658.1	2676.4	2699.3	2717.6	2752.7	2757.3	2816.8	2874.8	2955.7	3016.7	3059.4
7.5°	2430.8	2452.1	2482.6	2526.9	2572.7	2586.4	2676.4	2774.1	2902.3	3016.7	3088.4
10°	2270.5	2272.1	2299.5	2343.8	2417.0	2433.8	2543.7	2682.5	2842.8	2998.4	3115.9
12.5°	2180.5	2191.2	2203.4	2237.0	2307.2	2317.9	2435.3	2598.6	2783.3	2987.7	3147.9
15°	2180.5	2188.1	2195.8	2212.6	2269.0	2278.2	2381.9	2545.2	2752.7	2992.3	3199.8
17.5°	2203.4	2215.6	2209.5	2229.3	2288.9	2295.0	2386.5	2530.0	2751.2	3021.3	3279.2
20°	2258.3	2267.5	2255.3	2267.5	2327.0	2339.2	2433.8	2558.9	2777.1	3071.6	3378.4
22.5°	2345.3	2349.9	2320.9	2330.1	2391.1	2406.4	2516.2	2641.3	2839.7	3152.5	3511.1
25°	2455.2	2464.3	2420.1	2430.8	2488.8	2507.1	2633.7	2764.9	2938.9	3263.9	3680.5
27.5°	2581.8	2586.4	2548.3	2546.7	2621.5	2647.4	2775.6	2917.5	3071.6	3404.3	3894.1
30°	2726.8	2740.5	2703.9	2697.8	2792.4	2813.8	2940.4	3105.2	3267.0	3614.9	4197.8
32.5°	2841.2	2851.9	2830.6	2845.8	2941.9	2958.7	3140.3	3370.7	3573.7	3913.9	4611.3
35°	3006.0	3012.1	2963.3	2990.8	3100.6	3143.4	3413.5	3743.0	3959.7	4289.3	5151.5
37.5°	3602.7	3602.7	3395.1	3259.3	3364.6	3402.8	3787.3	4211.5	4435.8	4792.9	5832.0
40°	4428.2	4414.4	4110.8	3833.1	3819.3	3894.1	4319.8	4802.0	5050.7	5397.1	6598.0
42.5°	5308.6	5287.3	4873.7	4599.1	4553.3	4579.2	4934.8	5529.9	5783.2	6134.1	7422.0
45°	6089.9	6083.8	5705.4	5336.1	5253.7	5336.1	5702.3	6381.3	6562.9	6932.2	8244.5
47.5°	6744.5	6744.5	6468.3	6227.2	6184.5	6233.3	6741.4	7325.9	7309.1	7782.1	9045.6
50°	7498.3	7492.2	7229.7	7126.0	7170.2	7238.9	7937.8	8320.8	8081.2	8616.8	9761.2
52.5°	8026.3	8062.9	7972.9	7956.1	8181.9	8300.9	9152.4	9294.3	8772.4	9408.7	10296.8
55°	8444.4	8487.1	8590.8	8708.3	9143.2	9298.9	10328.9	10217.5	9350.7	10095.4	10605.0
57.5°	9036.4	8975.4	9135.6	9367.5	10071.0	10258.7	11468.7	11088.8	9816.1	10652.3	10638.6
60°	9755.1	9764.3	9791.7	10084.7	10997.2	11238.3	12591.8	11912.7	10115.2	10994.1	10266.3
62.5°	10618.8	10632.5	10689.0	11139.1	12240.8	12468.2	13788.1	12587.2	10252.6	10898.0	9305.0
65°	10559.3	10617.2	11247.4	12787.1	14131.4	14355.7	15184.3	13060.2	10045.0	10019.1	7576.1
67.5°	9619.3	9713.9	10768.3	14755.5	16981.8	17232.0	16871.9	13153.3	9149.3	7791.3	4942.4
70°	8386.4	8419.9	9688.0	16525.6	20282.3	20535.6	18382.6	12129.4	6942.9	4345.8	2214.1
72.5°	6549.2	6556.8	8044.6	16936.0	22073.7	22087.5	17197.0	9004.4	3733.9	1669.3	769.1
75°	4678.4	4632.6	5388.0	13734.7	19420.2	19575.8	12892.4	4223.7	1426.7	788.9	383.0
77.5°	2508.6	2558.9	3048.8	8145.3	13415.8	13681.3	7034.4	1217.7	726.3	537.1	253.3
80°	775.2	817.9	1249.7	3729.3	7599.0	7759.2	2607.8	541.7	506.6	383.0	166.3
82.5°	244.1	253.3	582.9	1567.1	3154.0	3227.3	755.3	306.7	346.4	253.3	97.7
85°	70.2	71.7	259.4	584.4	779.7	795.0	212.1	119.0	198.4	157.2	50.4
87.5°	7.6	24.4	97.7	97.7	68.7	67.1	22.9	25.9	56.5	19.8	9.2
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°	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2	3018.2
2.5°	3024.3	3025.9	3006.0	2972.5	2935.8	2905.3	2867.2	2836.7	2815.3	2809.2	2819.9
5°	3045.7	3035.0	2978.6	2876.3	2754.3	2649.0	2531.5	2438.4	2377.4	2351.4	2360.6
7.5°	3077.8	3047.2	2923.6	2722.2	2488.8	2281.2	2070.7	1907.4	1803.6	1751.7	1759.4
10°	3105.2	3044.2	2832.1	2499.4	2142.4	1828.0	1544.2	1347.4	1237.5	1185.6	1187.2
12.5°	3131.2	3042.7	2713.1	2235.5	1751.7	1367.2	1103.2	1005.6	975.1	964.4	961.3
15°	3180.0	3047.2	2563.5	1933.3	1362.6	1033.0	936.9	935.4	941.5	938.4	936.9
17.5°	3247.1	3051.8	2394.1	1612.9	1051.3	911.0	906.4	920.1	929.3	924.7	923.2
20°	3334.1	3070.1	2214.1	1295.5	903.3	880.4	891.1	903.3	911.0	903.3	901.8
22.5°	3456.2	3102.2	2017.2	1040.7	856.0	862.1	871.3	885.0	892.7	882.0	880.4
25°	3605.7	3152.5	1823.5	904.9	833.1	840.8	854.5	869.8	878.9	868.2	866.7
27.5°	3799.5	3233.4	1644.9	874.3	810.3	814.8	834.7	857.6	869.8	856.0	856.0
30°	4080.3	3366.1	1490.8	888.1	796.5	785.8	813.3	845.4	859.1	846.9	845.4
32.5°	4452.6	3553.8	1396.2	909.4	790.4	752.3	778.2	819.4	842.3	834.7	834.7
35°	4940.9	3839.2	1359.6	933.9	785.8	717.2	735.5	779.7	819.4	827.0	827.0
37.5°	5532.9	4235.9	1370.3	944.5	772.1	688.2	697.3	735.5	787.4	811.8	817.9
40°	6205.9	4698.3	1431.3	933.9	756.8	663.8	665.3	694.3	740.1	776.7	788.9
42.5°	6900.1	5238.4	1544.2	894.2	743.1	642.4	637.8	657.7	688.2	714.1	724.8
45°	7560.9	5793.9	1655.6	839.2	726.3	621.0	610.4	618.0	624.1	634.8	640.9
47.5°	8137.7	6184.5	1623.6	788.9	703.4	596.6	578.3	575.3	557.0	555.4	553.9
50°	8535.9	6269.9	1442.0	738.5	669.9	569.2	540.2	521.9	489.8	474.6	476.1
52.5°	8662.6	5932.7	1178.0	688.2	614.9	532.5	491.3	462.3	422.7	408.9	407.4
55°	8494.7	5272.0	941.5	627.1	538.6	483.7	437.9	399.8	367.7	351.0	351.0
57.5°	8084.2	4431.2	744.6	555.4	457.8	428.8	383.0	344.9	317.4	300.6	297.6
60°	7403.7	3518.7	589.0	470.0	390.6	369.3	322.0	297.6	273.1	253.3	248.7
62.5°	6370.7	2511.6	462.3	372.3	326.5	302.1	274.7	256.4	227.4	199.9	195.3
65°	4971.4	1536.6	357.1	273.1	262.5	250.2	233.5	216.7	181.6	154.1	149.5
67.5°	3135.7	727.9	254.8	206.0	207.5	201.4	193.8	180.1	154.1	129.7	126.7
70°	1380.9	352.5	167.8	157.2	154.1	154.1	160.2	155.6	131.2	108.3	103.8
72.5°	470.0	189.2	125.1	119.0	111.4	109.9	134.3	129.7	105.3	83.9	79.3
75°	245.7	126.7	91.6	85.5	67.1	80.9	106.8	100.7	74.8	54.9	50.4
77.5°	160.2	90.0	62.6	54.9	38.1	53.4	79.3	70.2	44.3	27.5	24.4
80°	100.7	59.5	36.6	25.9	18.3	29.0	42.7	30.5	16.8	6.1	4.6
82.5°	53.4	30.5	13.7	9.2	7.6	9.2	10.7	7.6	3.1	0.0	0.0
85°	21.4	10.7	4.6	3.1	1.5	0.0	3.1	1.5	0.0	0.0	0.0
87.5°	7.6	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)