

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: P968173

Luminaire Tested: **NAV-SB5B-722-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968173
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18235.8 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

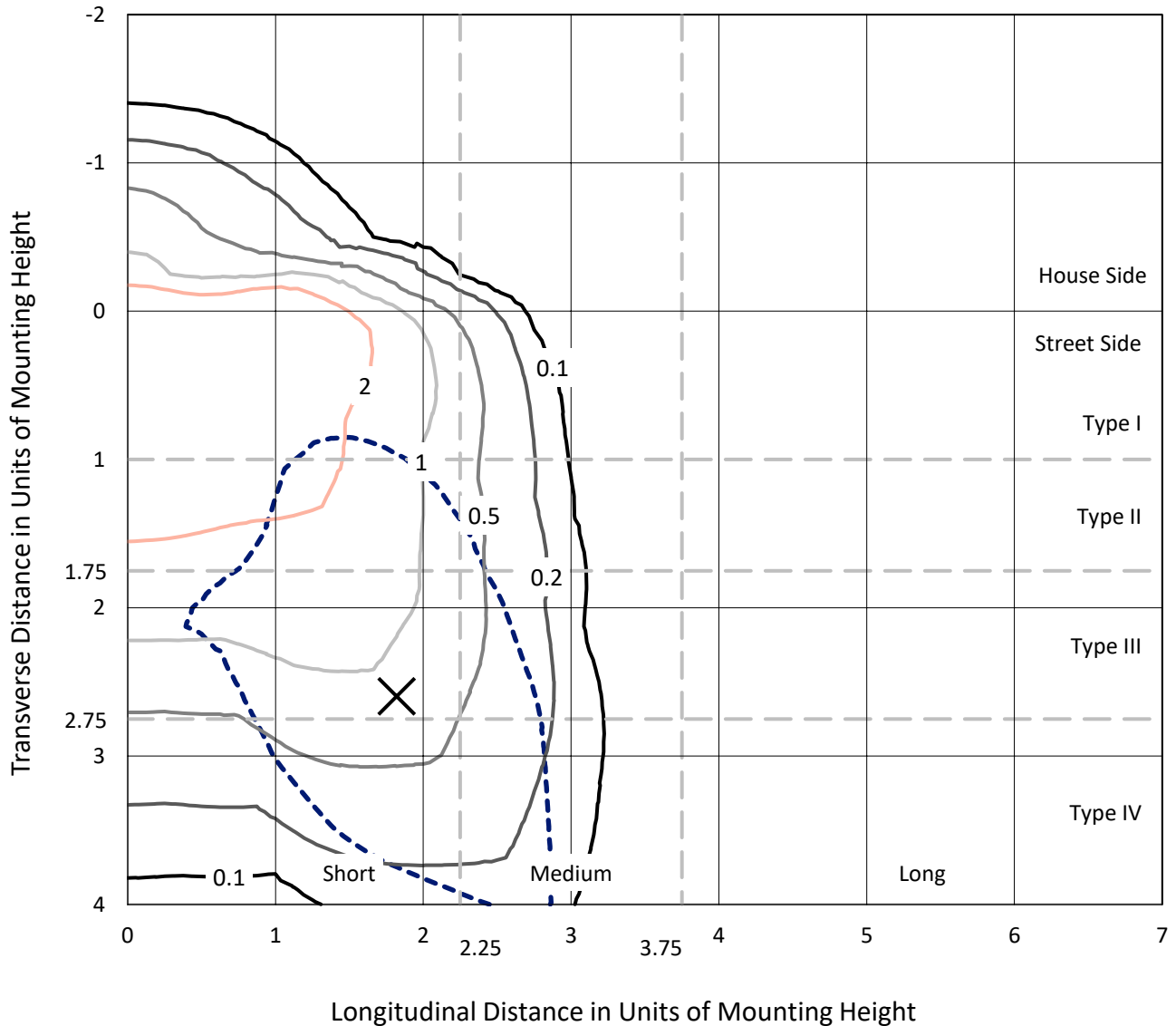
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

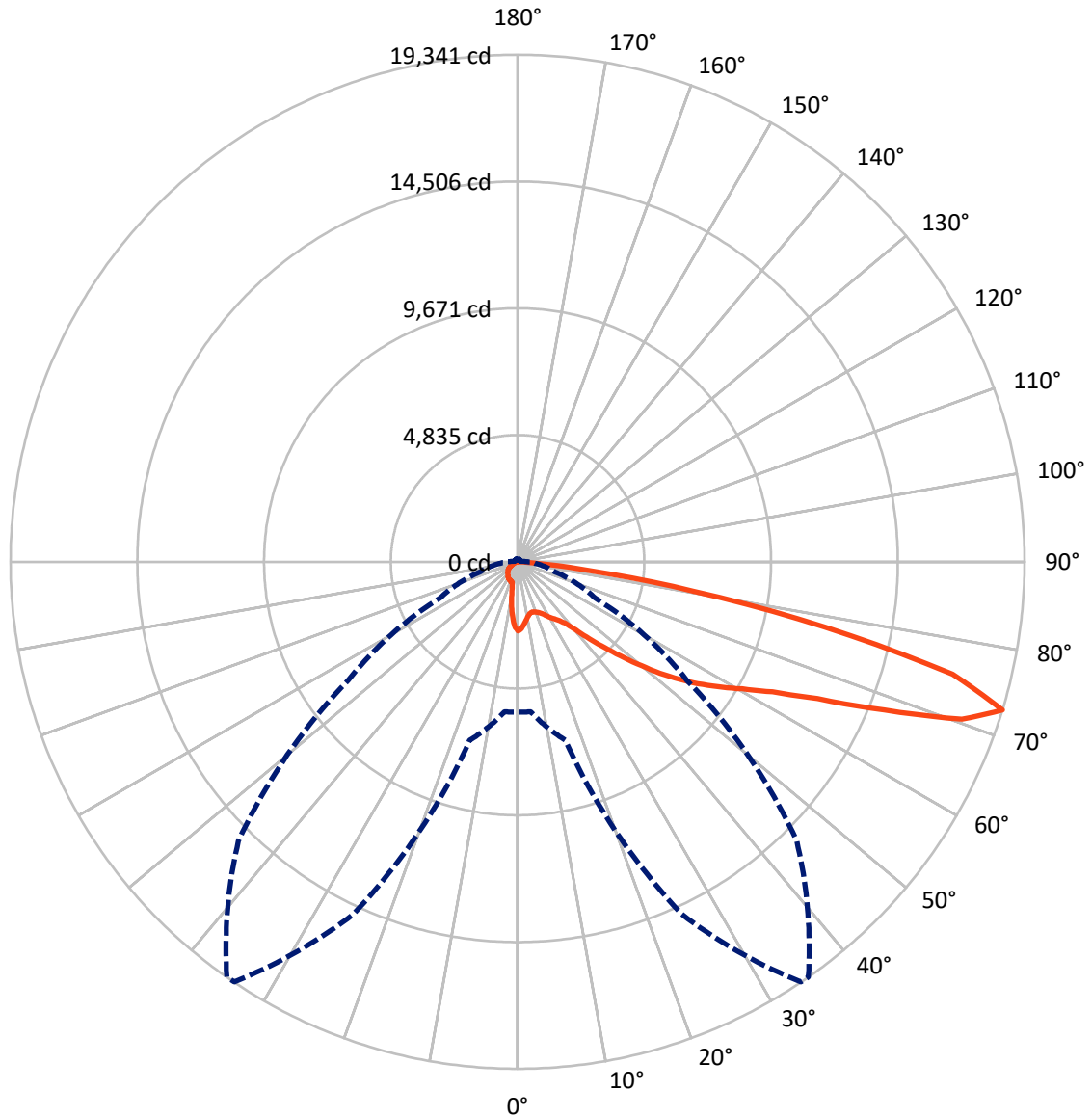
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2052.4	0.0	2052.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	16183.4	0.0	16183.4
	% Fixture	88.7	0.0	88.7
Total	Lumens	18235.8	0.0	18235.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.2	1.2
10°-20°	508.1	2.8
20°-30°	825.3	4.5
30°-40°	1377.1	7.6
40°-50°	2605.5	14.3
50°-60°	4140.1	22.7
60°-70°	5121.6	28.1
70°-80°	3183.6	17.5
80°-90°	257.3	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°	18235.8	100.0
0°-180°	18235.8	100.0

Coefficient of Utilization



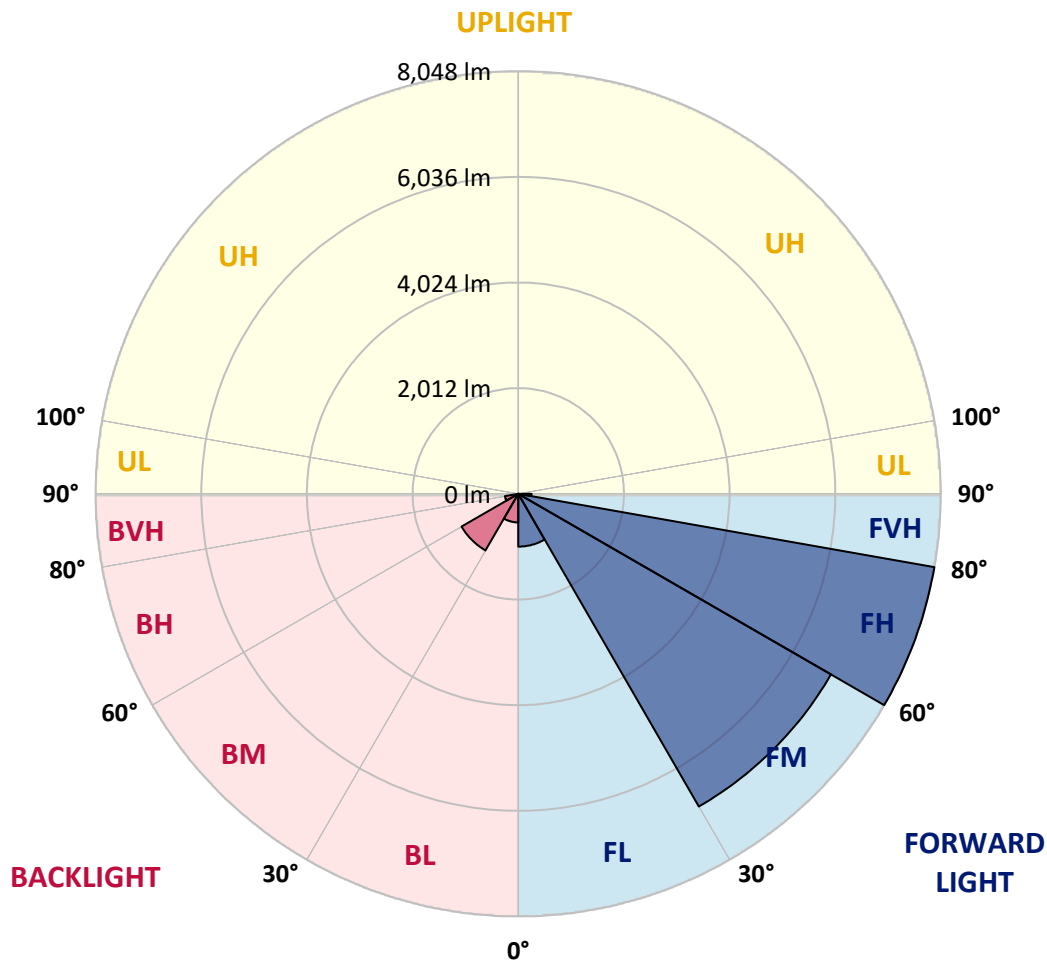
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1005.3	5.5			
FM	(30°-60°)	6876.7	37.7			
FH	(60°-80°)	8047.7	44.1			G4/12000
FVH	(80°-90°)	253.8	1.4			G3/500
BL	(0°-30°)	545.3	3.0	B2/1000		
BM	(30°-60°)	1246.0	6.8	B2/2500		
BH	(60°-80°)	257.5	1.4	B1/500		G1/500
BVH	(80°-90°)	3.5	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°	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0
2.5°	2525.4	2546.8	2550.8	2557.5	2557.5	2565.5	2578.8	2597.6	2628.3	2644.3	2655.0
5°	2327.7	2343.7	2363.8	2379.7	2410.5	2414.5	2466.6	2517.4	2588.2	2641.6	2679.0
7.5°	2128.5	2147.3	2174.0	2212.8	2252.8	2264.8	2343.7	2429.1	2541.4	2641.6	2704.5
10°	1988.3	1989.6	2013.6	2052.4	2116.5	2131.2	2227.4	2349.0	2489.3	2625.6	2728.4
12.5°	1909.4	1918.8	1929.5	1958.9	2020.3	2029.7	2132.5	2275.5	2437.2	2616.2	2756.5
15°	1909.4	1916.1	1922.8	1937.5	1986.9	1995.0	2085.8	2228.8	2410.5	2620.3	2801.9
17.5°	1929.5	1940.1	1934.8	1952.2	2004.3	2009.6	2089.8	2215.4	2409.2	2645.6	2871.4
20°	1977.5	1985.5	1974.9	1985.5	2037.7	2048.4	2131.2	2240.8	2431.8	2689.7	2958.4
22.5°	2053.7	2057.7	2032.4	2040.4	2093.8	2107.2	2203.3	2312.9	2486.6	2760.5	3074.6
25°	2149.9	2157.9	2119.2	2128.5	2179.4	2195.3	2306.2	2421.2	2573.5	2858.1	3222.9
27.5°	2260.8	2264.8	2231.4	2230.1	2295.6	2318.2	2430.5	2554.8	2689.7	2981.0	3410.0
30°	2387.7	2399.8	2367.8	2362.4	2445.2	2463.9	2574.8	2719.1	2860.8	3165.4	3675.9
32.5°	2488.0	2497.3	2478.7	2492.0	2576.1	2590.9	2749.9	2951.6	3129.3	3427.3	4038.0
35°	2632.3	2637.6	2594.9	2618.9	2715.1	2752.5	2989.0	3277.6	3467.4	3756.0	4510.9
37.5°	3154.7	3154.7	2973.0	2854.1	2946.3	2979.7	3316.4	3687.8	3884.3	4197.0	5106.9
40°	3877.6	3865.6	3599.7	3356.5	3344.5	3410.0	3782.8	4205.0	4422.8	4726.1	5777.6
42.5°	4648.6	4629.9	4267.8	4027.2	3987.1	4009.9	4321.2	4842.3	5064.1	5371.5	6499.2
45°	5332.8	5327.3	4996.0	4672.7	4600.5	4672.7	4993.3	5587.9	5747.0	6070.3	7219.4
47.5°	5905.9	5905.9	5664.0	5453.0	5415.6	5458.3	5903.3	6415.1	6400.3	6814.5	7920.9
50°	6566.0	6560.7	6330.8	6240.0	6278.7	6338.9	6950.8	7286.2	7076.4	7545.4	8547.6
52.5°	7028.3	7060.4	6981.6	6966.8	7164.6	7268.9	8014.5	8138.7	7681.8	8238.9	9016.6
55°	7394.5	7431.9	7522.7	7625.6	8006.4	8142.7	9044.6	8947.1	8188.1	8840.2	9286.5
57.5°	7912.9	7859.5	7999.7	8202.9	8818.8	8983.2	10042.7	9710.0	8595.6	9327.9	9315.9
60°	8542.2	8550.2	8574.3	8830.9	9629.9	9841.0	11026.2	10431.6	8857.5	9627.2	8989.9
62.5°	9298.5	9310.6	9360.0	9754.1	10718.8	10918.0	12073.8	11022.2	8977.9	9543.1	8148.0
65°	9246.4	9297.2	9849.0	11197.2	12374.4	12570.8	13296.4	11436.4	8796.1	8773.4	6634.2
67.5°	8423.3	8506.2	9429.5	12920.9	14870.4	15089.5	14774.2	11517.9	8011.8	6822.6	4327.9
70°	7343.7	7373.0	8483.4	14470.8	17760.6	17982.4	16097.0	10621.4	6079.7	3805.4	1938.8
72.5°	5734.9	5741.6	7044.4	14830.3	19329.2	19341.2	15058.8	7884.8	3269.6	1461.8	673.4
75°	4096.7	4056.6	4718.1	12027.0	17005.7	17141.9	11289.5	3698.6	1249.4	690.8	335.4
77.5°	2196.7	2240.8	2669.7	7132.6	11747.7	11980.2	6159.8	1066.3	636.0	470.4	221.8
80°	678.8	716.2	1094.3	3265.6	6654.2	6794.5	2283.5	474.4	443.6	335.4	145.7
82.5°	213.8	221.8	510.4	1372.3	2761.9	2826.0	661.4	268.5	303.3	221.8	85.5
85°	61.5	62.8	227.1	511.8	682.8	696.2	185.7	104.2	173.7	137.7	44.1
87.5°	6.7	21.4	85.5	85.5	60.2	58.8	20.1	22.8	49.4	17.3	8.0
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°	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0	2643.0
2.5°	2648.3	2649.6	2632.3	2602.9	2570.8	2544.0	2510.7	2484.0	2465.2	2459.9	2469.2
5°	2667.0	2657.7	2608.2	2518.7	2411.8	2319.6	2216.8	2135.2	2081.8	2059.0	2067.1
7.5°	2695.1	2668.4	2560.1	2383.7	2179.4	1997.6	1813.2	1670.2	1579.4	1533.9	1540.6
10°	2719.1	2665.7	2480.0	2188.7	1876.0	1600.7	1352.2	1179.9	1083.6	1038.2	1039.6
12.5°	2741.9	2664.4	2375.7	1957.5	1533.9	1197.2	966.1	880.6	853.8	844.5	841.8
15°	2784.6	2668.4	2244.8	1693.0	1193.2	904.6	820.4	819.1	824.4	821.7	820.4
17.5°	2843.5	2672.4	2096.4	1412.3	920.7	797.7	793.7	805.8	813.7	809.7	808.4
20°	2919.6	2688.4	1938.8	1134.5	791.0	771.0	780.3	791.0	797.7	791.0	789.7
22.5°	3026.4	2716.5	1766.5	911.3	749.6	754.9	763.0	775.0	781.7	772.3	771.0
25°	3157.4	2760.5	1596.7	792.3	729.6	736.3	748.2	761.6	769.7	760.2	758.9
27.5°	3327.2	2831.4	1440.4	765.7	709.5	713.5	730.9	750.9	761.6	749.6	749.6
30°	3572.9	2947.6	1305.4	777.7	697.5	688.2	712.2	740.3	752.2	741.6	740.3
32.5°	3899.0	3112.0	1222.6	796.3	692.2	658.8	681.4	717.5	737.6	730.9	730.9
35°	4326.5	3361.8	1190.5	817.7	688.2	628.0	644.0	682.8	717.5	724.2	724.2
37.5°	4845.0	3709.3	1199.9	827.1	676.1	602.6	610.6	644.0	689.5	710.8	716.2
40°	5434.2	4114.1	1253.4	817.7	662.8	581.3	582.6	607.9	648.0	680.1	690.8
42.5°	6042.3	4587.1	1352.2	783.0	650.8	562.5	558.5	575.8	602.6	625.4	634.7
45°	6620.8	5073.5	1449.8	734.9	636.0	543.9	534.4	541.2	546.5	555.9	561.2
47.5°	7125.9	5415.6	1421.7	690.8	616.0	522.4	506.5	503.8	487.7	486.4	485.0
50°	7474.6	5490.4	1262.7	646.7	586.6	498.4	473.0	456.9	429.0	415.5	416.9
52.5°	7585.5	5195.1	1031.6	602.6	538.4	466.4	430.3	404.9	370.1	358.1	356.8
55°	7438.5	4616.5	824.4	549.2	471.7	423.5	383.5	350.0	322.1	307.3	307.3
57.5°	7079.2	3880.2	652.1	486.4	400.9	375.5	335.4	302.0	277.9	263.2	260.6
60°	6483.1	3081.3	515.8	411.5	342.0	323.4	282.0	260.6	239.1	221.8	217.8
62.5°	5578.6	2199.3	404.9	326.1	286.0	264.6	240.5	224.5	199.1	175.1	171.1
65°	4353.3	1345.5	312.6	239.1	229.8	219.1	204.5	189.7	159.0	135.0	131.0
67.5°	2745.9	637.3	223.1	180.4	181.7	176.4	169.7	157.6	135.0	113.6	110.9
70°	1209.3	308.6	147.0	137.7	135.0	135.0	140.3	136.3	114.9	94.9	90.8
72.5°	411.5	165.6	109.6	104.2	97.6	96.2	117.6	113.6	92.1	73.5	69.5
75°	215.1	110.9	80.2	74.8	58.8	70.8	93.6	88.1	65.5	48.1	44.1
77.5°	140.3	78.8	54.7	48.1	33.4	46.7	69.5	61.5	38.7	24.1	21.4
80°	88.1	52.1	32.1	22.8	16.0	25.4	37.4	26.8	14.7	5.3	4.0
82.5°	46.7	26.8	12.0	8.0	6.7	8.0	9.3	6.7	2.7	0.0	0.0
85°	18.8	9.3	4.0	2.7	1.3	0.0	2.7	1.3	0.0	0.0	0.0
87.5°	6.7	1.3	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)