

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: P968451

Luminaire Tested: **NAV-SB5B-835-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968451
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27061 lumens
Efficiency: N/A
Efficacy: 148.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

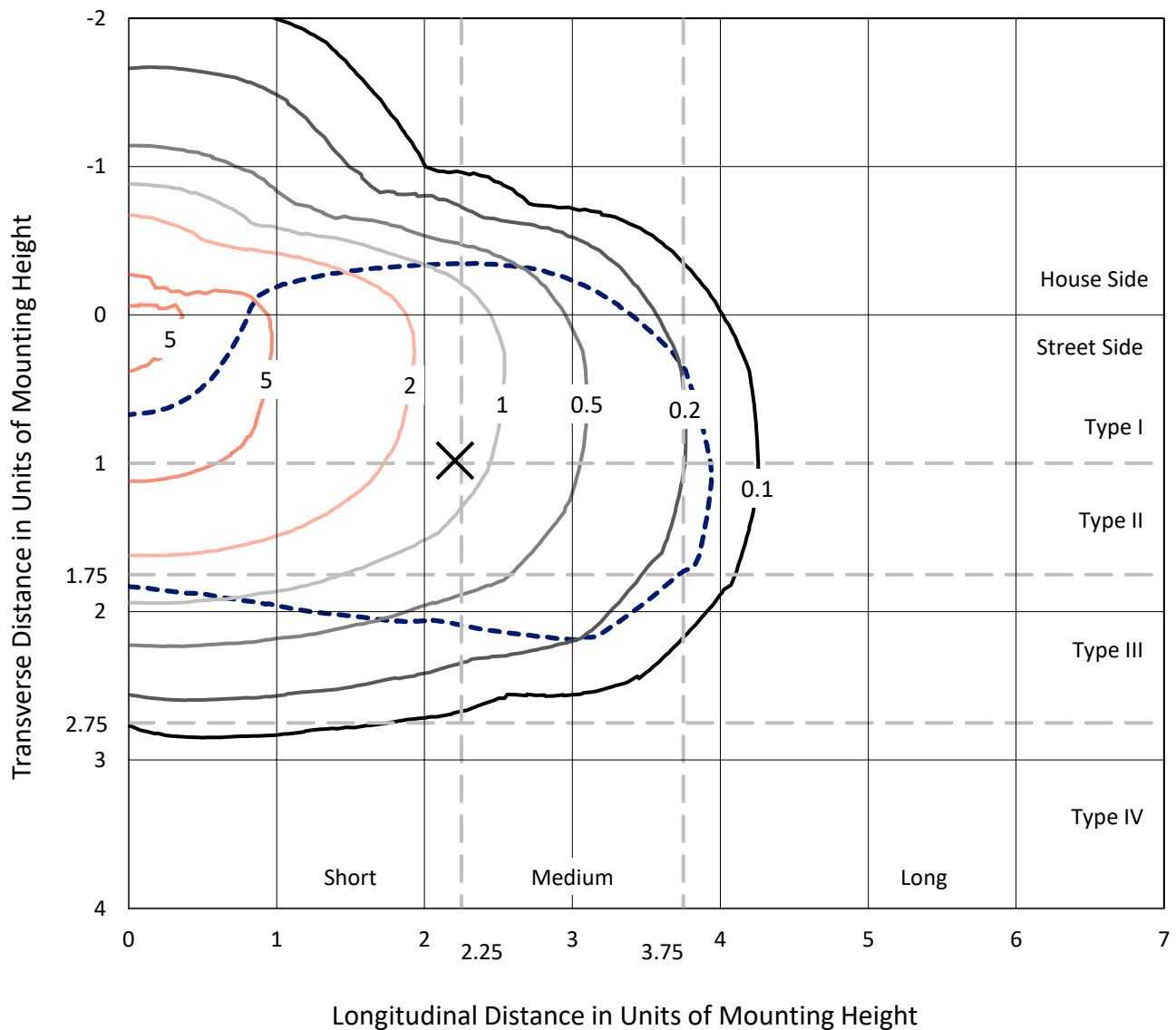
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

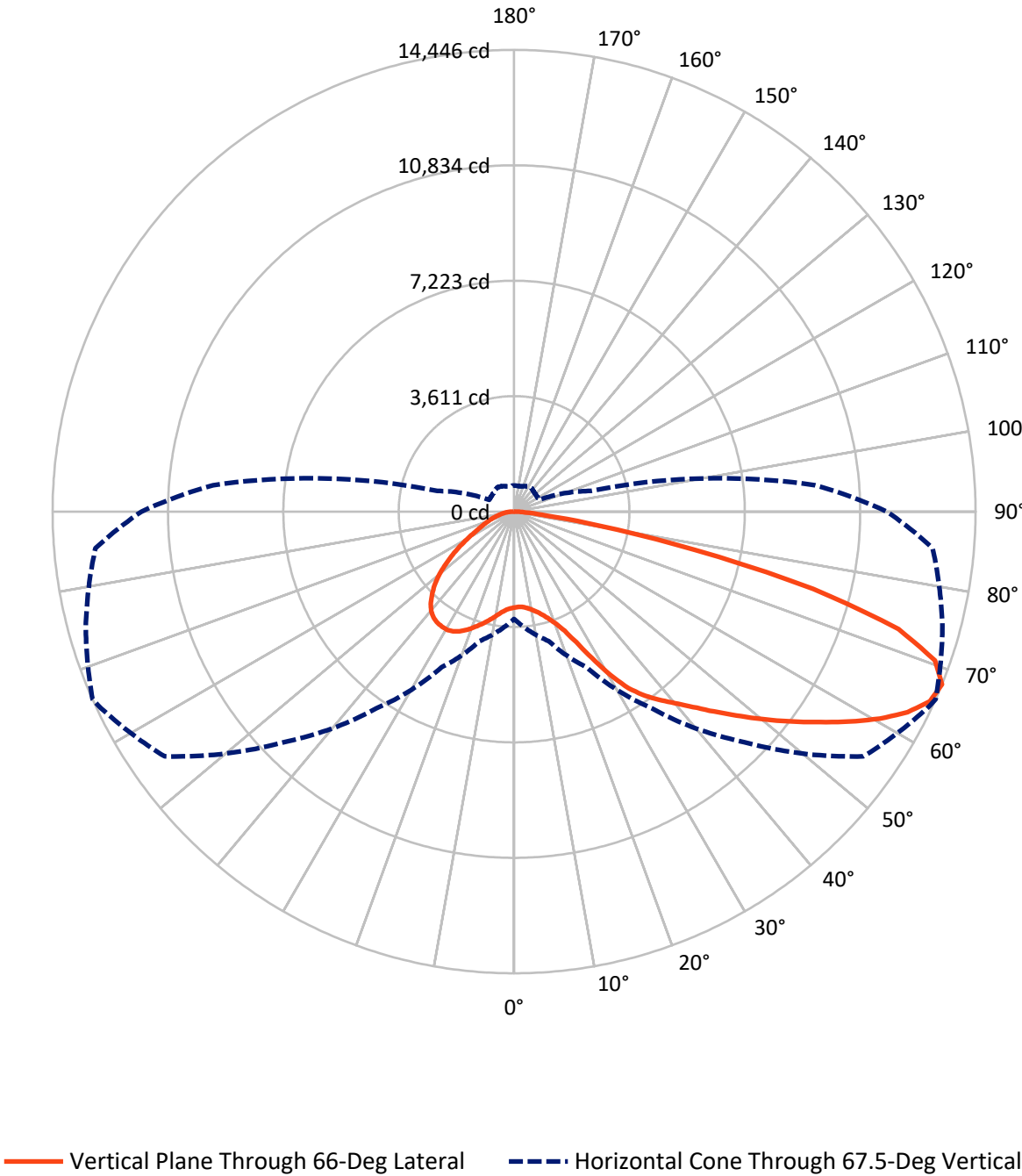
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6728.6	0.0	6728.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	20332.4	0.0	20332.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	27061.0	0.0	27061.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.6	1.1
10°-20°	983.2	3.6
20°-30°	1895.0	7.0
30°-40°	3322.6	12.3
40°-50°	4939.6	18.3
50°-60°	6261.5	23.1
60°-70°	6126.7	22.6
70°-80°	2922.5	10.8
80°-90°	312.3	1.2
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°	27061.0	100.0
0°-180°	27061.0	100.0

Coefficient of Utilization



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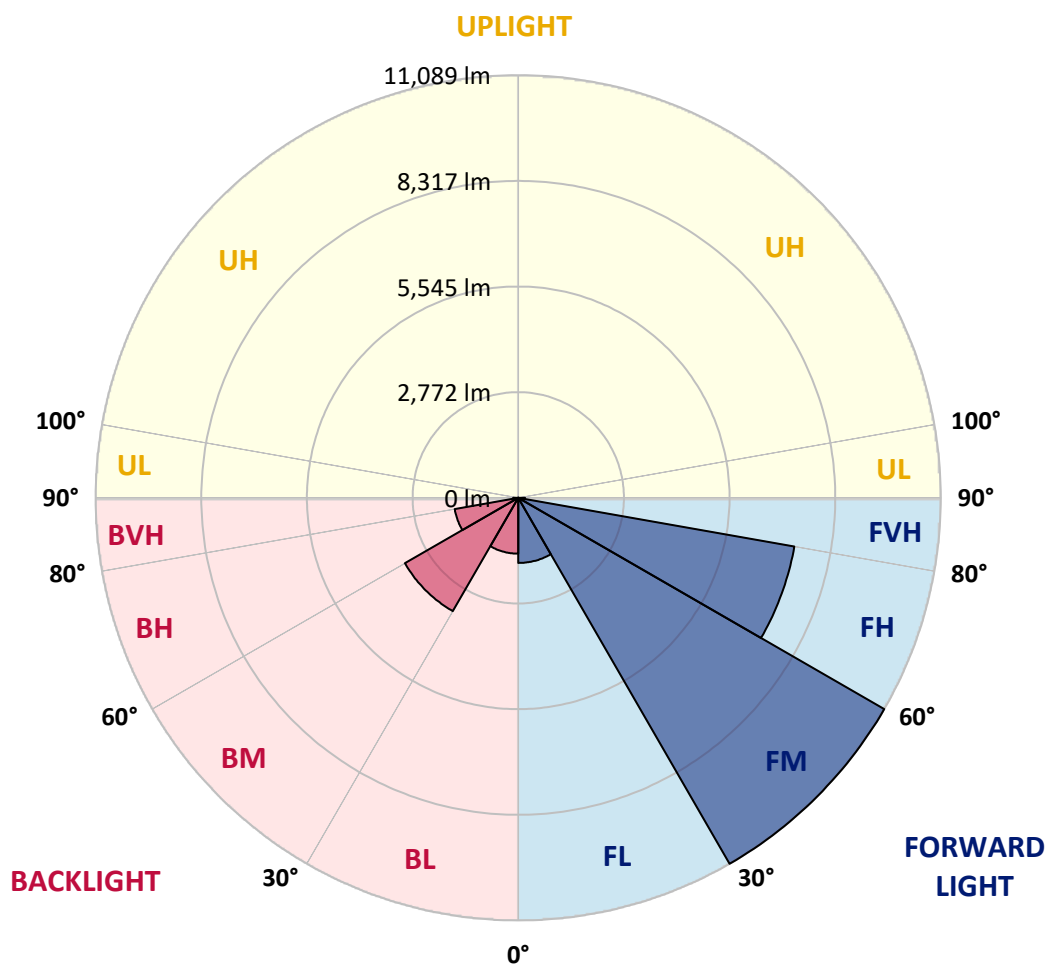
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1710.0	6.3			
FM	(30°-60°)	11089.4	41.0			
FH	(60°-80°)	7355.9	27.2			G3/7500
FVH	(80°-90°)	177.1	0.7			G2/225
BL	(0°-30°)	1465.7	5.4	B3/2500		
BM	(30°-60°)	3434.4	12.7	B3/5000		
BH	(60°-80°)	1693.3	6.3	B3/2500		G3/2500
BVH	(80°-90°)	135.2	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4
2.5°	2970.1	2987.2	2983.0	2975.9	2974.4	2977.2	2981.5	2985.8	2984.4	2991.5	3002.8
5°	2961.6	2978.6	2977.2	2977.2	2983.0	2994.3	3001.4	3008.6	3001.4	3009.9	3025.6
7.5°	2967.3	2980.1	2985.8	2991.5	3005.7	3027.0	3044.0	3059.7	3051.2	3061.2	3081.0
10°	3039.8	3049.8	3055.4	3055.4	3065.4	3089.6	3106.7	3135.1	3128.0	3143.6	3169.2
12.5°	3172.1	3182.0	3182.0	3176.3	3183.4	3199.0	3204.8	3236.0	3223.2	3248.8	3274.4
15°	3334.1	3354.0	3338.4	3328.5	3331.2	3346.9	3345.5	3369.7	3356.9	3378.2	3401.0
17.5°	3513.3	3538.9	3513.3	3511.9	3506.1	3523.2	3524.7	3546.0	3523.2	3538.9	3554.5
20°	3725.2	3760.6	3739.3	3746.5	3733.7	3740.7	3747.9	3779.2	3743.6	3755.0	3750.7
22.5°	4023.7	4066.4	4043.6	4070.6	4062.1	4056.4	4055.0	4110.5	4055.0	4059.2	4018.0
25°	4458.8	4510.0	4470.1	4507.1	4507.1	4525.6	4546.9	4618.0	4525.6	4498.6	4391.9
27.5°	5101.4	5152.6	5074.4	5097.1	5090.0	5135.6	5112.8	5289.1	5189.6	5145.5	4930.8
30°	5874.9	5965.9	5818.0	5812.4	5805.2	5877.8	5910.5	6027.0	5926.0	5882.0	5623.3
32.5°	6710.9	6806.2	6629.9	6578.7	6551.7	6595.8	6568.7	6662.6	6592.9	6524.6	6204.7
35°	7595.2	7689.1	7521.3	7421.8	7313.8	7221.3	7124.7	7148.9	7083.5	6979.6	6648.4
37.5°	8431.2	8603.3	8425.6	8319.0	8119.9	7939.3	7669.2	7556.9	7495.7	7400.5	7066.4
40°	9282.9	9381.0	9246.0	9155.0	8938.9	8655.9	8223.7	7986.3	7903.8	7811.4	7528.4
42.5°	9910.0	10003.8	9931.3	9868.7	9699.6	9371.1	8812.3	8515.2	8395.8	8291.9	8051.7
45°	10407.6	10477.2	10431.7	10454.5	10382.0	10063.6	9422.3	9082.5	8958.8	8832.2	8643.1
47.5°	10608.0	10682.0	10754.5	10889.6	11013.3	10778.7	10077.7	9696.7	9565.9	9436.5	9250.2
50°	10585.3	10660.7	10871.2	11158.4	11542.2	11464.0	10768.8	10350.8	10229.9	10082.0	9910.0
52.5°	10403.3	10488.6	10758.8	11236.5	11847.9	11977.2	11472.5	11026.1	10912.4	10736.1	10564.0
55°	9925.6	9976.8	10382.0	11058.8	11920.4	12335.6	12162.1	11745.5	11631.8	11385.8	11198.1
57.5°	9039.8	9113.8	9703.8	10579.6	11738.4	12578.7	12767.8	12501.9	12392.5	12038.4	11842.2
60°	7883.9	8001.9	8677.2	9774.9	11274.9	12577.3	13318.0	13245.6	13154.5	12681.1	12476.3
62.5°	6575.9	6712.3	7362.1	8637.5	10464.4	12220.4	13662.1	13868.2	13821.3	13274.0	13012.4
65°	5050.3	5144.1	5791.0	7165.9	9203.4	11454.1	13701.9	14293.4	14301.9	13724.6	13292.4
67.5°	3362.5	3632.7	4194.3	5377.3	7514.3	10201.4	13352.2	14363.0	14445.5	13879.6	13151.7
70°	1640.7	1996.2	2546.4	3494.8	5377.3	8280.6	12438.0	13791.5	13974.8	13427.5	12312.8
72.5°	681.0	796.2	1096.2	1724.7	3086.7	5587.7	10601.0	12241.7	12581.6	11897.7	10352.2
75°	459.2	497.6	627.0	884.4	1406.2	2755.4	7645.1	9127.9	9675.4	8985.8	7345.0
77.5°	354.0	378.2	456.4	618.5	836.0	1042.2	4091.9	5501.0	5783.9	5354.5	3821.8
80°	278.7	297.1	341.2	450.7	592.9	557.4	1394.8	2492.4	2655.9	2227.9	1228.5
82.5°	241.7	248.8	244.6	305.7	393.8	325.6	457.9	919.9	1015.2	736.5	401.0
85°	174.9	194.7	203.4	189.1	209.0	164.9	187.7	325.6	358.3	319.9	226.1
87.5°	71.1	105.2	129.4	122.3	76.8	46.9	58.3	95.2	109.5	119.4	73.9
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°	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4	3001.4
2.5°	3004.3	3014.2	3021.3	3029.9	3035.5	3044.0	3061.2	3071.1	3072.5	3079.6	3078.2
5°	3031.2	3045.5	3061.2	3083.9	3109.4	3130.8	3163.6	3186.2	3194.8	3201.9	3200.5
7.5°	3089.6	3109.4	3137.9	3177.7	3214.7	3243.1	3283.0	3309.9	3337.0	3346.9	3348.4
10°	3176.3	3204.8	3246.0	3300.0	3339.9	3376.8	3418.0	3440.7	3467.8	3479.2	3484.8
12.5°	3284.4	3314.2	3368.3	3443.6	3480.6	3506.1	3520.4	3514.7	3520.4	3530.3	3533.2
15°	3408.0	3440.7	3501.9	3583.0	3608.5	3585.8	3554.5	3526.1	3521.8	3524.7	3534.6
17.5°	3554.5	3578.7	3649.7	3718.0	3699.5	3605.6	3537.5	3492.0	3469.2	3462.0	3472.1
20°	3759.3	3759.3	3817.5	3860.2	3736.5	3577.2	3470.6	3396.6	3349.8	3329.8	3325.6
22.5°	4008.1	3985.3	4022.3	3992.4	3729.4	3497.6	3349.8	3221.8	3150.7	3122.3	3118.0
25°	4323.7	4296.7	4286.8	4101.9	3678.2	3371.1	3130.8	2975.9	2913.3	2897.7	2900.4
27.5°	4800.0	4731.8	4602.4	4161.6	3584.3	3172.1	2874.9	2731.3	2695.7	2697.2	2701.4
30°	5434.1	5297.6	4980.6	4171.5	3430.8	2890.5	2613.2	2510.9	2493.8	2501.0	2525.1
32.5°	6021.4	5891.9	5367.3	4126.0	3194.8	2614.7	2378.7	2310.5	2284.8	2293.3	2304.7
35°	6482.0	6446.4	5725.6	4062.1	2904.7	2356.0	2168.3	2110.0	2060.1	2048.8	2057.4
37.5°	6917.1	6902.9	5994.3	3972.5	2617.5	2172.5	1999.1	1922.3	1849.7	1809.9	1811.4
40°	7394.8	7380.6	6170.6	3834.6	2363.0	2013.3	1846.9	1746.0	1656.4	1583.9	1591.0
42.5°	7932.3	7848.3	6254.5	3637.0	2147.0	1878.2	1723.2	1586.7	1468.7	1401.9	1406.2
45°	8519.4	8330.4	6253.1	3385.3	1964.9	1754.5	1591.0	1397.6	1288.1	1225.6	1222.7
47.5°	9142.2	8791.0	6176.3	3106.7	1788.6	1618.0	1386.2	1238.4	1165.8	1127.5	1119.0
50°	9784.9	9221.8	6045.6	2786.8	1608.0	1463.1	1258.3	1157.3	1101.9	1066.3	1053.6
52.5°	10389.1	9612.8	5887.7	2424.1	1424.6	1312.3	1201.4	1123.2	1065.0	1025.1	1008.1
55°	10950.7	9949.8	5664.5	2053.1	1275.4	1211.3	1174.4	1109.0	1042.2	995.3	976.8
57.5°	11449.8	10168.7	5279.2	1704.8	1168.7	1141.7	1145.9	1084.9	1008.1	968.2	942.7
60°	11865.0	10329.4	4709.1	1382.0	1082.0	1073.5	1101.9	1039.4	949.8	904.3	884.4
62.5°	12113.8	10326.6	4009.5	1131.8	1008.1	1010.9	1043.6	982.5	891.4	848.8	836.0
65°	12092.4	10073.5	3241.7	968.2	937.0	939.8	982.5	919.9	843.2	817.5	816.1
67.5°	11664.5	9456.4	2486.8	861.6	858.7	871.6	921.4	877.3	813.2	810.5	814.7
70°	10505.7	8175.4	1791.5	776.3	777.8	796.2	861.6	850.2	797.7	803.3	801.9
72.5°	8424.2	6233.2	1202.8	686.7	688.2	718.0	804.7	828.9	782.0	857.3	868.7
75°	5610.4	3887.2	773.5	591.4	592.9	631.3	755.0	787.7	739.3	854.5	861.6
77.5°	2695.7	1747.4	560.2	497.6	497.6	533.2	652.6	705.2	629.9	664.0	608.5
80°	931.3	656.9	440.7	401.0	392.4	416.6	550.2	611.4	543.1	500.5	469.2
82.5°	366.8	341.2	354.0	311.4	282.9	298.6	427.9	504.7	399.5	361.1	359.7
85°	210.4	221.8	250.2	206.1	163.5	183.4	314.3	362.5	301.5	265.9	271.5
87.5°	56.9	78.2	115.2	106.6	73.9	78.2	149.2	200.5	173.4	133.7	138.0
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)