

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: P968420

Luminaire Tested: **NAV-SB5B-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968420
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-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26215.4 lumens
Efficiency: N/A
Efficacy: 143.5 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



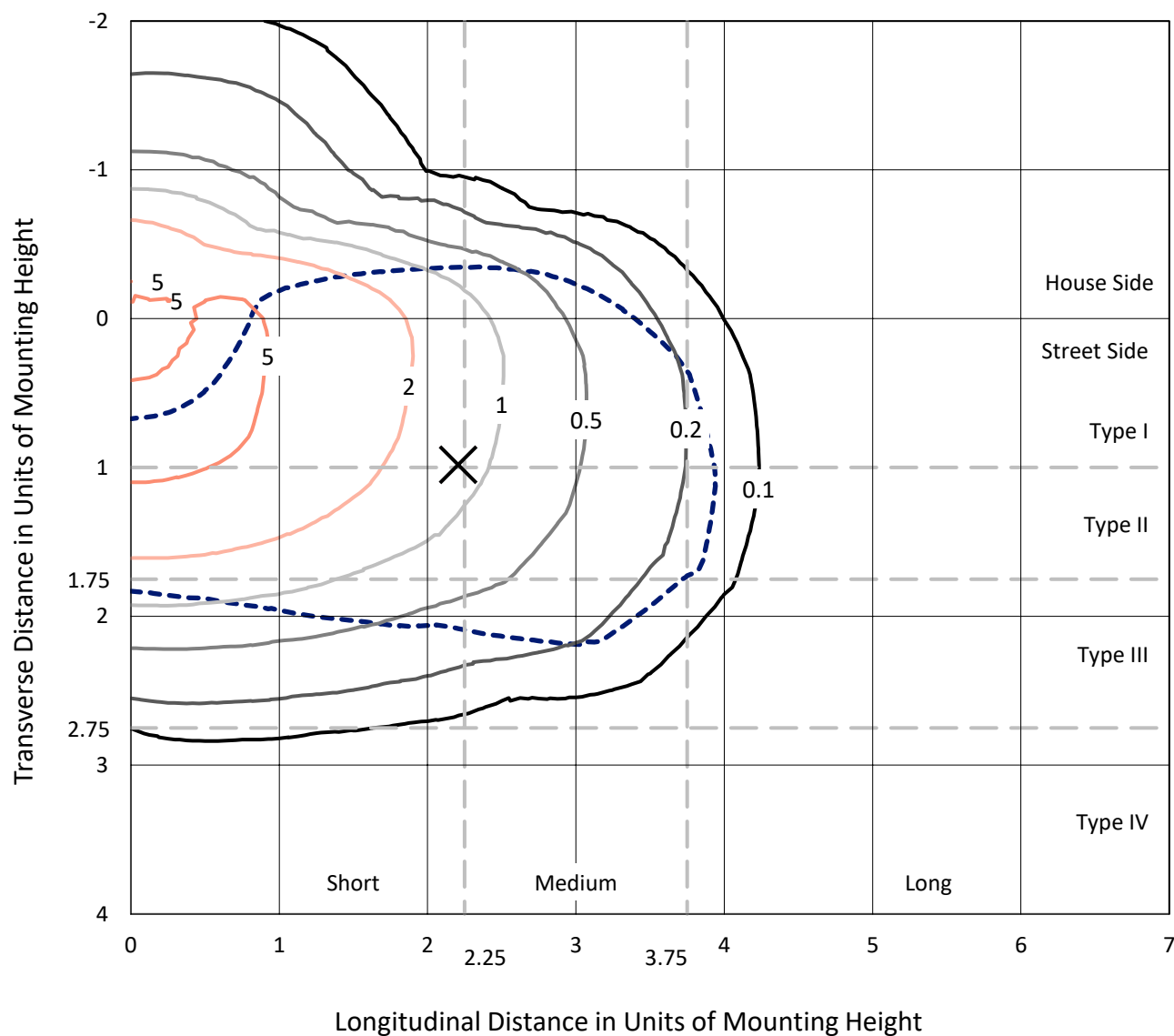
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

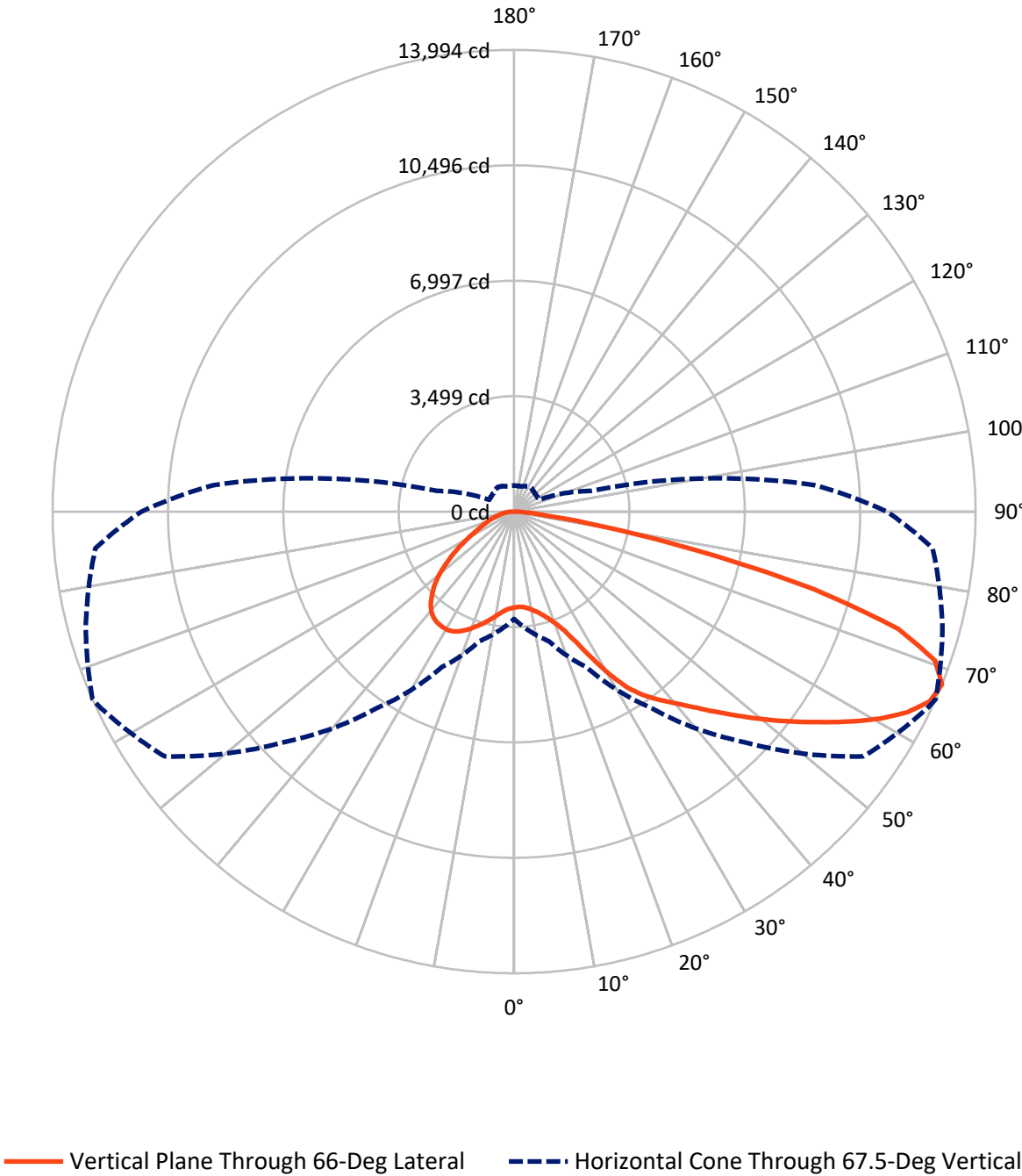


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc

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	6518.4	0.0	6518.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	19697.0	0.0	19697.0
	% Fixture	75.1	0.0	75.1
Total	Lumens	26215.4	0.0	26215.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.3	1.1
10°-20°	952.4	3.6
20°-30°	1835.8	7.0
30°-40°	3218.8	12.3
40°-50°	4785.3	18.3
50°-60°	6065.8	23.1
60°-70°	5935.3	22.6
70°-80°	2831.2	10.8
80°-90°	302.6	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°	26215.4	100.0
0°-180°	26215.4	100.0

Coefficient of Utilization



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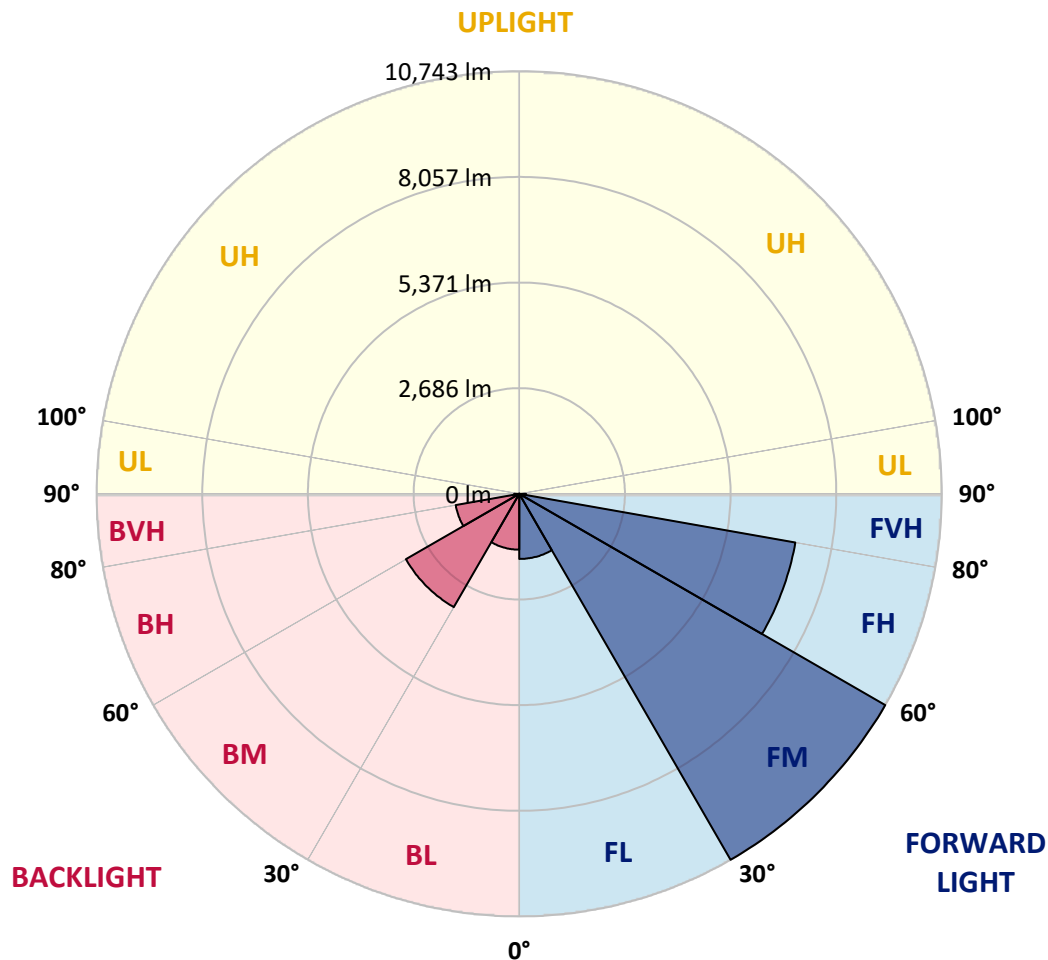
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1656.6	6.3			
FM	(30°-60°)	10742.9	41.0			
FH	(60°-80°)	7126.1	27.2			G3/7500
FVH	(80°-90°)	171.5	0.7			G2/225
BL	(0°-30°)	1419.9	5.4	B3/2500		
BM	(30°-60°)	3327.1	12.7	B3/5000		
BH	(60°-80°)	1640.4	6.3	B3/2500		G3/2500
BVH	(80°-90°)	131.0	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°	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6
2.5°	2877.4	2893.9	2889.7	2882.8	2881.5	2884.2	2888.3	2892.4	2891.1	2898.0	2909.1
5°	2869.1	2885.6	2884.2	2884.2	2889.7	2900.7	2907.6	2914.5	2907.6	2915.9	2931.1
7.5°	2874.6	2887.0	2892.4	2898.0	2911.7	2932.4	2948.9	2964.1	2955.8	2965.5	2984.8
10°	2944.8	2954.5	2960.0	2960.0	2969.6	2993.0	3009.6	3037.1	3030.2	3045.4	3070.2
12.5°	3073.0	3082.6	3082.6	3077.0	3083.9	3099.1	3104.6	3134.9	3122.5	3147.3	3172.1
15°	3230.0	3249.2	3234.1	3224.4	3227.2	3242.4	3240.9	3264.4	3252.0	3272.6	3294.7
17.5°	3403.5	3428.3	3403.5	3402.1	3396.6	3413.1	3414.5	3435.2	3413.1	3428.3	3443.4
20°	3608.7	3643.2	3622.5	3629.4	3617.0	3623.9	3630.8	3661.1	3626.7	3637.6	3633.5
22.5°	3898.0	3939.3	3917.2	3943.4	3935.2	3929.6	3928.3	3982.0	3928.3	3932.4	3892.4
25°	4319.5	4369.1	4330.4	4366.3	4366.3	4384.1	4404.8	4473.7	4384.1	4358.0	4254.7
27.5°	4942.0	4991.6	4915.8	4937.8	4931.0	4975.0	4953.0	5123.9	5027.4	4984.7	4776.7
30°	5691.3	5779.5	5636.2	5630.7	5623.8	5694.1	5725.8	5838.7	5740.9	5698.2	5447.5
32.5°	6501.2	6593.5	6422.6	6373.1	6346.9	6389.6	6363.5	6454.3	6386.9	6320.8	6010.8
35°	7358.0	7448.9	7286.3	7189.9	7085.2	6995.7	6902.0	6925.4	6862.1	6761.5	6440.6
37.5°	8167.8	8334.5	8162.3	8059.0	7866.2	7691.3	7429.5	7320.8	7261.5	7169.3	6845.6
40°	8992.8	9088.0	8957.1	8868.9	8659.5	8385.4	7966.7	7736.7	7656.9	7567.3	7293.2
42.5°	9600.3	9691.2	9621.0	9560.4	9396.5	9078.2	8536.9	8249.1	8133.4	8032.8	7800.0
45°	10082.4	10149.9	10105.8	10127.8	10057.6	9749.1	9127.8	8798.7	8678.8	8556.3	8373.0
47.5°	10276.5	10348.2	10418.4	10549.3	10669.1	10441.9	9762.8	9393.7	9266.9	9141.7	8961.2
50°	10254.5	10327.6	10531.4	10809.6	11181.5	11105.8	10432.2	10027.3	9910.2	9766.9	9600.3
52.5°	10078.2	10160.9	10422.6	10885.4	11477.6	11603.0	11114.0	10681.5	10571.3	10400.6	10233.9
55°	9615.4	9665.0	10057.6	10713.2	11547.9	11950.1	11782.1	11378.5	11268.3	11030.0	10848.2
57.5°	8757.3	8828.9	9400.6	10249.1	11371.6	12185.6	12368.8	12111.2	12005.2	11662.2	11472.1
60°	7637.6	7751.9	8406.1	9469.5	10922.6	12184.3	12901.9	12831.6	12743.4	12284.8	12086.5
62.5°	6370.4	6502.6	7132.1	8367.6	10137.5	11838.5	13235.2	13434.9	13389.5	12859.1	12605.8
65°	4892.4	4983.3	5610.0	6941.9	8915.8	11096.1	13273.7	13846.7	13855.0	13295.8	12877.1
67.5°	3257.4	3519.2	4063.2	5209.3	7279.4	9882.6	12934.9	13914.3	13994.1	13446.0	12740.7
70°	1589.5	1933.9	2466.9	3385.6	5209.3	8021.9	12049.3	13360.6	13538.2	13007.9	11928.0
72.5°	659.8	771.3	1062.0	1670.7	2990.2	5413.0	10269.7	11859.1	12188.4	11525.8	10028.7
75°	444.8	482.1	607.4	856.7	1362.2	2669.3	7406.1	8842.8	9373.0	8705.0	7115.6
77.5°	343.0	366.3	442.2	599.1	809.9	1009.6	3964.1	5329.1	5603.2	5187.2	3702.4
80°	270.0	287.8	330.6	436.6	574.4	540.0	1351.2	2414.5	2573.0	2158.3	1190.0
82.5°	234.1	241.1	236.9	296.1	381.5	315.4	443.5	891.1	983.5	713.5	388.4
85°	169.4	188.7	197.0	183.2	202.4	159.8	181.8	315.4	347.1	310.0	219.0
87.5°	68.9	101.9	125.4	118.5	74.4	45.4	56.5	92.2	106.1	115.7	71.6
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°	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6	2907.6
2.5°	2910.4	2920.0	2926.9	2935.2	2940.7	2948.9	2965.5	2975.2	2976.5	2983.4	2982.0
5°	2936.5	2950.4	2965.5	2987.6	3012.3	3033.0	3064.6	3086.7	3095.0	3101.9	3100.4
7.5°	2993.0	3012.3	3039.8	3078.4	3114.3	3141.8	3180.4	3206.5	3232.6	3242.4	3243.7
10°	3077.0	3104.6	3144.5	3196.9	3235.4	3271.3	3311.2	3333.2	3359.4	3370.4	3375.9
12.5°	3181.7	3210.6	3263.0	3336.0	3371.8	3396.6	3410.4	3404.8	3410.4	3420.0	3422.8
15°	3301.5	3333.2	3392.4	3471.0	3495.8	3473.7	3443.4	3415.9	3411.7	3414.5	3424.1
17.5°	3443.4	3466.9	3535.7	3601.8	3583.9	3493.0	3426.9	3382.8	3360.8	3353.9	3363.5
20°	3641.8	3641.8	3698.2	3739.6	3619.7	3465.4	3362.2	3290.6	3245.0	3225.8	3221.7
22.5°	3882.8	3860.8	3896.5	3867.6	3612.8	3388.3	3245.0	3121.1	3052.2	3024.7	3020.6
25°	4188.6	4162.4	4152.8	3973.7	3563.3	3265.8	3033.0	2882.8	2822.2	2807.1	2809.8
27.5°	4650.0	4583.9	4458.5	4031.5	3472.4	3073.0	2785.0	2645.9	2611.5	2612.8	2617.0
30°	5264.3	5132.1	4825.0	4041.2	3323.6	2800.2	2531.6	2432.4	2415.9	2422.8	2446.3
32.5°	5833.2	5707.8	5199.6	3997.1	3095.0	2533.0	2304.3	2238.2	2213.5	2221.7	2232.8
35°	6279.5	6245.0	5546.7	3935.2	2813.9	2282.3	2100.5	2044.1	1995.8	1984.8	1993.0
37.5°	6700.9	6687.1	5807.0	3848.4	2535.7	2104.6	1936.6	1862.2	1792.0	1753.4	1754.8
40°	7163.7	7150.0	5977.8	3714.8	2289.2	1950.4	1789.2	1691.5	1604.6	1534.4	1541.3
42.5°	7684.3	7603.1	6059.1	3523.3	2079.8	1819.5	1669.4	1537.2	1422.8	1358.1	1362.2
45°	8253.2	8070.0	6057.6	3279.5	1903.5	1699.7	1541.3	1353.9	1247.9	1187.3	1184.5
47.5°	8856.5	8516.3	5983.3	3009.6	1732.8	1567.4	1343.0	1199.7	1129.4	1092.2	1084.0
50°	9479.1	8933.6	5856.5	2699.6	1557.8	1417.3	1218.9	1121.1	1067.4	1033.0	1020.6
52.5°	10064.5	9312.4	5703.7	2348.4	1380.2	1271.3	1163.9	1088.1	1031.7	993.1	976.5
55°	10608.5	9638.9	5487.4	1988.9	1235.5	1173.5	1137.8	1074.3	1009.6	964.1	946.3
57.5°	11091.9	9851.0	5114.1	1651.5	1132.2	1106.1	1110.2	1050.9	976.5	938.0	913.2
60°	11494.1	10006.7	4561.9	1338.9	1048.2	1040.0	1067.4	1006.9	920.0	876.0	856.7
62.5°	11735.2	10003.9	3884.2	1096.3	976.5	979.3	1011.0	951.8	863.6	822.3	809.9
65°	11714.5	9758.7	3140.4	938.0	907.7	910.4	951.8	891.1	816.8	792.0	790.6
67.5°	11300.0	9160.9	2409.1	834.7	831.9	844.3	892.6	849.8	787.8	785.2	789.2
70°	10177.4	7919.9	1735.5	752.0	753.4	771.3	834.7	823.7	772.7	778.2	776.8
72.5°	8160.9	6038.4	1165.2	665.2	666.7	695.6	779.6	803.0	757.6	830.6	841.5
75°	5435.1	3765.7	749.3	573.0	574.4	611.5	731.3	763.1	716.3	827.8	834.7
77.5°	2611.5	1692.8	542.6	482.1	482.1	516.5	632.2	683.2	610.2	643.2	589.5
80°	902.2	636.3	427.0	388.4	380.2	403.5	533.0	592.2	526.1	484.8	454.5
82.5°	355.4	330.6	343.0	301.7	274.1	289.3	414.6	488.9	387.0	349.8	348.5
85°	203.9	214.8	242.4	199.7	158.4	177.6	304.4	351.3	292.0	257.6	263.1
87.5°	55.1	75.7	111.5	103.3	71.6	75.7	144.6	194.2	168.0	129.5	133.6
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)