

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: P967920

Luminaire Tested: **NAV-SB5A-835-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21345.6 lumens
Efficiency: N/A
Efficacy: 150.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

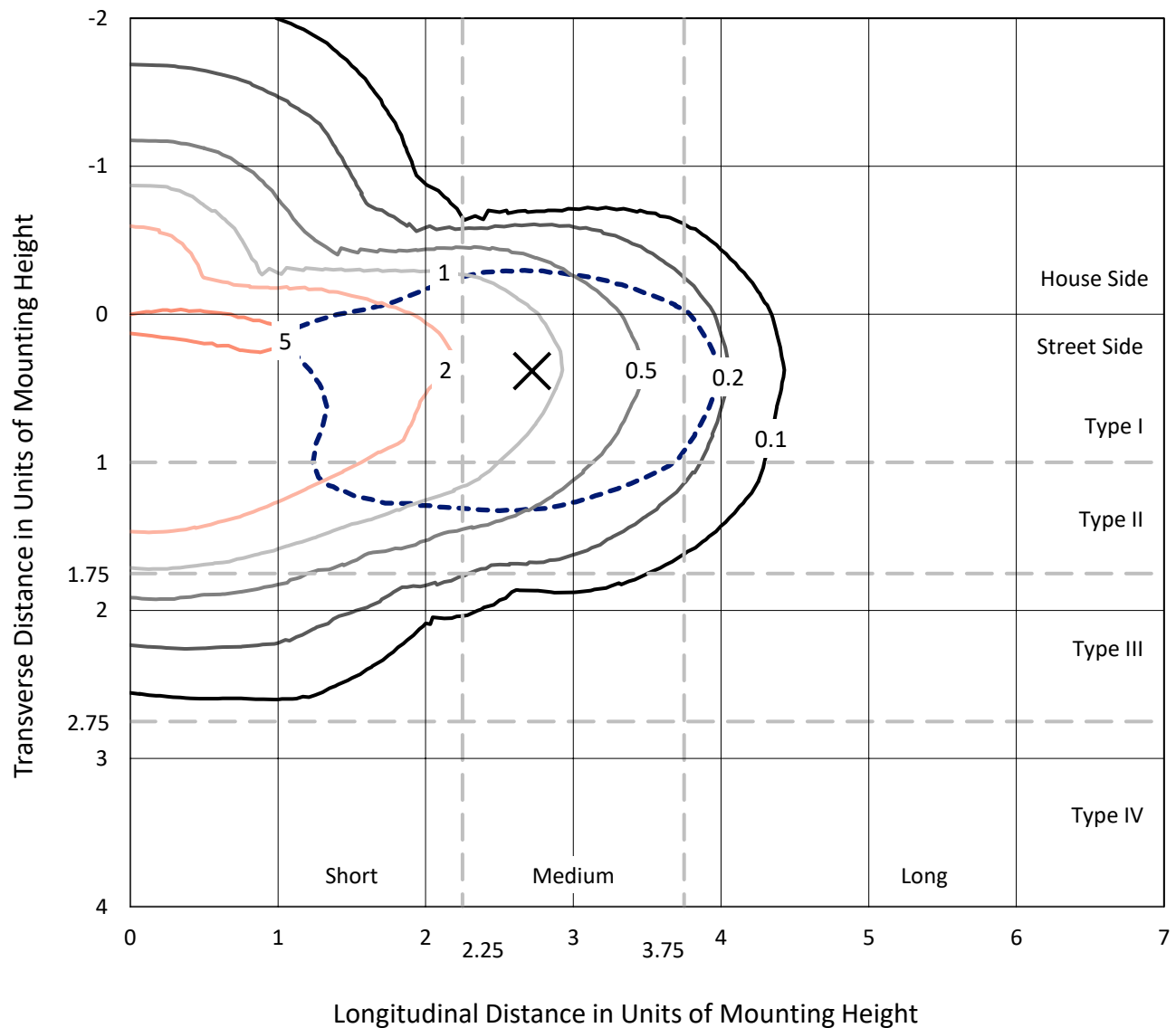
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

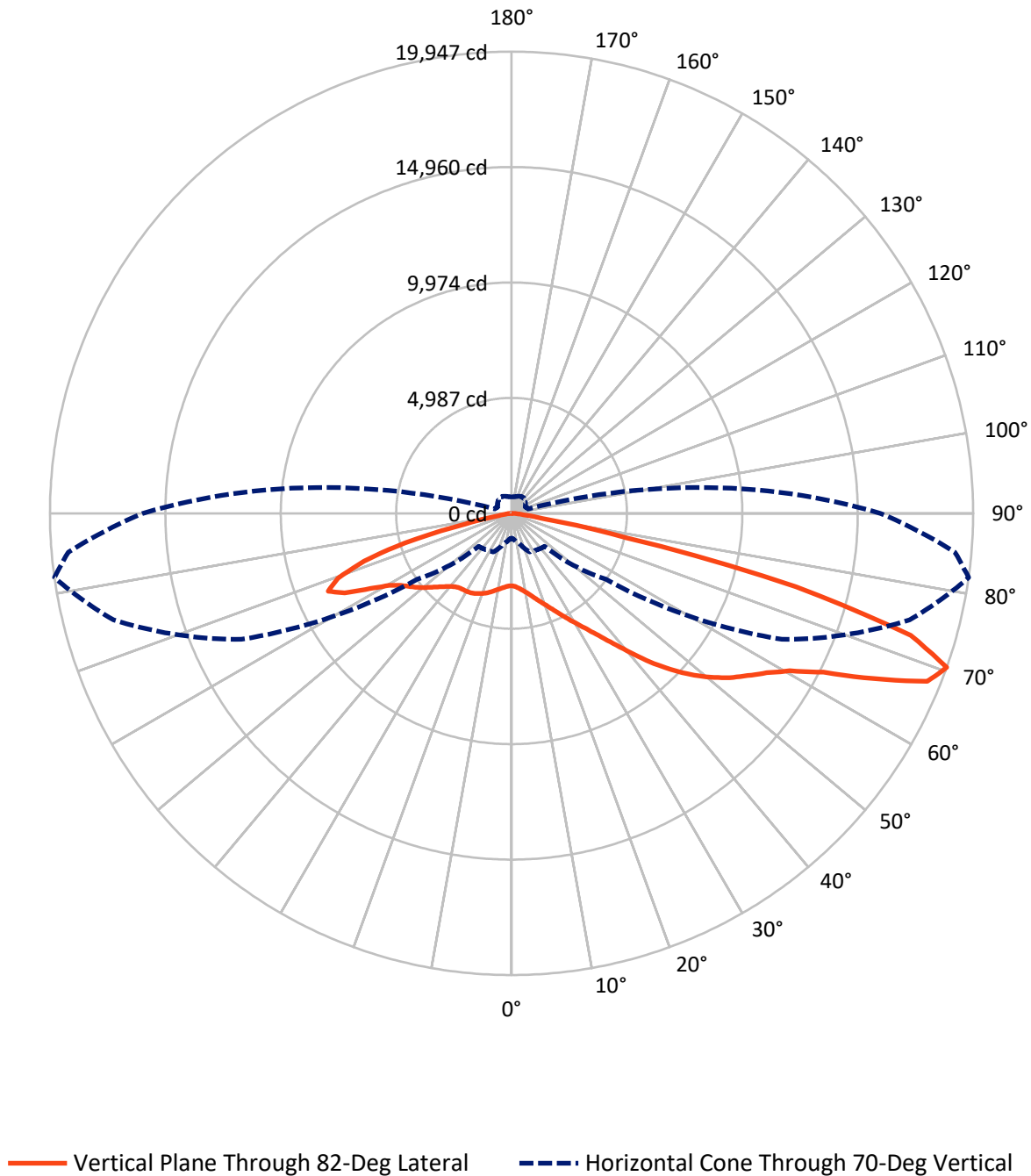
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5262.2	0.0	5262.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	16083.4	0.0	16083.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	21345.6	0.0	21345.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.5	1.4
10°-20°	848.9	4.0
20°-30°	1420.2	6.7
30°-40°	2218.7	10.4
40°-50°	3533.6	16.6
50°-60°	4917.4	23.0
60°-70°	5143.8	24.1
70°-80°	2688.4	12.6
80°-90°	279.2	1.3
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°	21345.6	100.0
0°-180°	21345.6	100.0

Coefficient of Utilization



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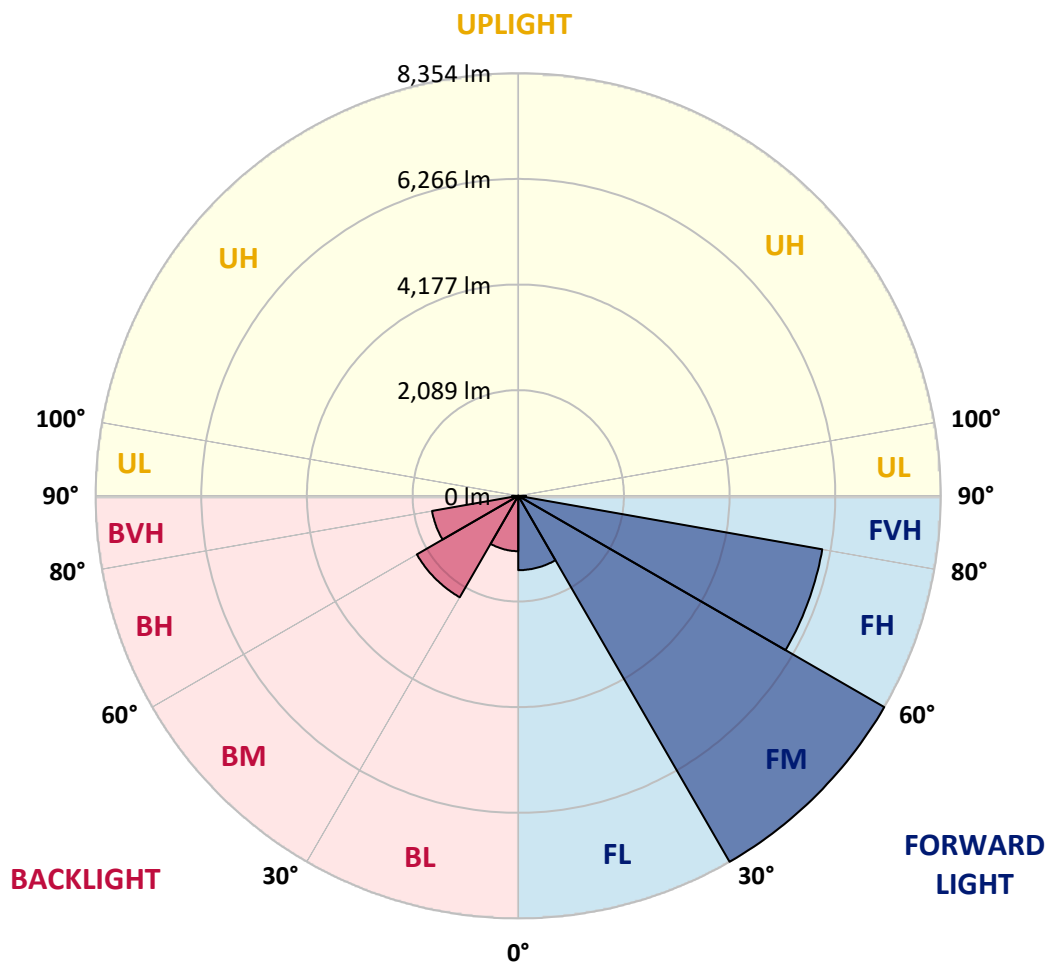
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1469.9	6.9			
FM	(30°-60°)	8354.5	39.1			
FH	(60°-80°)	6102.8	28.6			G3/7500
FVH	(80°-90°)	156.3	0.7			G2/225
BL	(0°-30°)	1094.7	5.1	B3/2500		
BM	(30°-60°)	2315.2	10.8	B2/2500		
BH	(60°-80°)	1729.4	8.1	B3/2500		G3/2500
BVH	(80°-90°)	122.9	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5
2.5°	3204.3	3222.4	3216.8	3211.1	3211.1	3203.1	3202.0	3190.7	3181.6	3166.9	3163.6
5°	3245.0	3264.3	3262.1	3266.6	3281.3	3284.7	3288.1	3281.3	3263.2	3245.0	3237.2
7.5°	3208.9	3230.4	3237.2	3264.3	3309.6	3350.4	3381.0	3393.5	3376.5	3350.4	3337.9
10°	3086.5	3110.3	3134.0	3198.6	3279.1	3375.3	3456.9	3505.6	3502.2	3477.3	3455.8
12.5°	2838.4	2863.3	2914.3	3040.0	3187.3	3357.2	3509.0	3610.9	3646.0	3627.9	3590.6
15°	2640.2	2661.7	2700.3	2829.4	3020.8	3279.1	3528.3	3726.5	3816.0	3805.7	3760.4
17.5°	2634.6	2643.6	2667.5	2728.5	2875.8	3156.7	3507.9	3839.8	4010.7	4009.6	3953.0
20°	2734.2	2737.7	2751.2	2763.7	2847.6	3063.8	3455.8	3933.7	4229.4	4229.4	4168.2
22.5°	2872.5	2870.2	2883.7	2872.5	2913.2	3055.9	3422.9	4016.4	4472.9	4491.0	4414.0
25°	3079.7	3068.3	3065.0	3038.9	3046.8	3129.5	3459.2	4110.5	4761.7	4799.0	4702.8
27.5°	3356.1	3337.9	3325.5	3265.4	3245.0	3281.3	3570.2	4223.7	5083.4	5148.0	5025.6
30°	3716.2	3683.4	3665.3	3561.1	3487.5	3493.1	3737.8	4374.3	5419.8	5523.9	5368.8
32.5°	4207.8	4156.9	4108.2	3937.1	3802.3	3758.2	3954.1	4582.8	5784.5	5950.9	5751.7
35°	4758.3	4717.6	4665.4	4401.6	4194.2	4092.3	4246.4	4873.9	6211.5	6475.4	6216.0
37.5°	5288.4	5253.2	5278.2	4922.6	4655.2	4506.8	4629.2	5264.6	6738.1	7127.8	6798.2
40°	5836.6	5809.4	5812.8	5473.0	5161.5	4995.0	5093.5	5755.1	7341.9	7903.7	7498.2
42.5°	6432.4	6412.0	6344.0	6042.7	5692.7	5537.6	5628.2	6321.4	7989.8	8787.1	8266.1
45°	7099.5	7087.1	7023.6	6678.2	6277.2	6102.7	6225.1	6946.6	8641.1	9618.5	9037.5
47.5°	7676.0	7686.3	7678.3	7387.2	6971.5	6715.5	6861.7	7599.0	9247.0	10400.1	9777.1
50°	7953.5	8006.8	8084.9	7994.3	7736.1	7475.5	7503.8	8228.8	9824.7	11132.9	10486.2
52.5°	7808.6	7909.3	8122.3	8267.2	8367.0	8312.5	8236.7	8853.9	10368.4	11794.4	11156.7
55°	7268.3	7409.8	7763.2	8113.2	8621.8	9017.1	9116.8	9547.2	10898.4	12376.6	11791.0
57.5°	6284.0	6513.9	6831.1	7539.0	8395.3	9358.0	10143.0	10508.8	11460.2	12998.4	12454.7
60°	4596.3	4904.4	5298.5	6351.9	7602.4	9175.7	11016.2	11985.8	12258.8	13803.7	13319.0
62.5°	2941.5	3131.8	3494.2	4486.4	5923.8	8241.2	11283.5	13832.1	13612.3	15124.4	14614.7
65°	2013.8	2136.2	2468.1	3025.3	3829.5	6134.5	10567.7	15216.1	15762.0	17217.5	16830.2
67.5°	1463.4	1556.3	1839.5	2327.6	2495.3	3630.1	8200.4	15152.7	17851.8	19374.1	18771.5
70°	1066.9	1132.6	1370.5	1839.5	1919.8	2019.6	4967.9	12880.6	17806.5	19947.2	19225.7
72.5°	790.6	835.9	995.6	1427.1	1554.0	1363.8	2459.0	9361.4	15301.1	18042.2	17463.3
75°	571.9	606.0	723.8	1091.9	1243.6	1038.6	1226.7	5470.7	10673.0	12691.4	12793.3
77.5°	437.2	463.3	540.3	799.7	995.6	779.3	761.2	2516.8	5060.7	5085.6	5371.1
80°	351.2	368.1	410.0	562.9	763.4	583.3	496.1	1016.0	1599.3	1353.5	1420.3
82.5°	258.2	286.6	346.6	395.3	545.9	402.1	302.4	513.1	608.2	523.3	527.8
85°	147.3	166.5	209.5	283.2	348.9	245.8	173.3	227.7	283.2	232.2	207.3
87.5°	52.1	68.0	73.6	111.0	151.8	102.0	66.8	65.7	92.9	69.1	57.8
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°	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5	3129.5
2.5°	3152.2	3146.5	3123.9	3093.2	3061.6	3031.0	3020.8	2999.3	2984.6	2976.6	2985.7
5°	3215.6	3197.5	3144.3	3076.3	3005.0	2927.9	2873.6	2823.7	2787.5	2753.5	2767.1
7.5°	3306.2	3274.5	3182.7	3063.8	2936.9	2809.0	2713.9	2641.3	2592.6	2561.0	2567.7
10°	3411.6	3362.8	3222.4	3044.6	2848.7	2665.1	2553.0	2490.8	2460.1	2443.2	2447.7
12.5°	3532.8	3463.7	3263.2	3000.4	2713.9	2504.3	2427.3	2409.2	2410.3	2411.4	2413.7
15°	3682.3	3586.0	3296.0	2904.1	2538.3	2380.9	2367.2	2396.7	2427.3	2442.1	2440.8
17.5°	3851.0	3715.1	3301.7	2745.6	2366.1	2301.5	2344.6	2408.0	2454.5	2474.9	2479.4
20°	4032.2	3846.5	3260.9	2521.3	2224.6	2237.0	2314.0	2395.5	2446.6	2472.6	2479.4
22.5°	4239.5	3986.9	3163.6	2285.8	2109.0	2166.7	2257.4	2336.7	2389.9	2415.9	2422.8
25°	4476.3	4144.4	3010.6	2087.5	2009.3	2087.5	2178.1	2243.8	2286.9	2310.7	2317.4
27.5°	4739.1	4308.6	2806.8	1930.1	1922.1	2005.9	2080.6	2131.7	2154.3	2172.5	2179.3
30°	5002.9	4458.1	2559.8	1811.1	1846.2	1925.6	1978.8	2001.4	2008.2	2011.6	2019.6
32.5°	5288.4	4587.3	2300.4	1712.6	1773.8	1847.4	1879.0	1889.3	1857.6	1836.1	1842.8
35°	5633.8	4725.5	2046.7	1634.5	1702.4	1765.8	1776.0	1767.0	1729.6	1685.4	1687.7
37.5°	6060.8	4897.7	1844.0	1578.9	1635.6	1677.5	1665.0	1662.8	1666.1	1614.1	1617.4
40°	6584.2	5121.9	1695.6	1535.9	1581.2	1590.3	1555.1	1574.4	1591.4	1512.1	1514.3
42.5°	7165.2	5392.6	1601.6	1506.4	1535.9	1514.3	1460.0	1481.5	1479.3	1375.0	1373.9
45°	7757.6	5687.1	1568.8	1484.9	1493.9	1450.9	1390.9	1396.6	1349.0	1255.0	1258.4
47.5°	8346.6	6003.1	1589.2	1466.8	1441.9	1393.2	1346.7	1321.8	1251.6	1181.3	1181.3
50°	8924.3	6334.9	1663.9	1430.6	1370.5	1342.2	1308.2	1264.0	1189.3	1129.2	1124.7
52.5°	9459.9	6669.1	1747.7	1370.5	1281.0	1298.1	1276.5	1225.5	1151.9	1090.7	1091.9
55°	9967.4	7003.2	1780.5	1287.8	1197.2	1259.5	1247.0	1153.0	1064.7	1014.9	1010.3
57.5°	10520.1	7405.3	1744.3	1182.5	1129.2	1215.3	1167.8	1063.5	1012.6	975.2	971.8
60°	11285.8	8036.2	1666.1	1052.3	1064.7	1149.6	1068.0	1025.1	969.5	927.6	925.4
62.5°	12557.8	9213.0	1540.4	923.1	988.8	1052.3	1020.5	977.4	920.9	880.1	880.1
65°	14438.0	10848.6	1303.7	822.4	903.8	957.1	969.5	926.5	867.7	824.6	826.9
67.5°	16023.7	11874.8	986.6	738.5	816.6	880.1	915.2	873.3	811.0	769.1	770.2
70°	15936.5	11129.6	753.2	655.8	739.6	804.2	849.5	816.6	749.8	710.2	713.6
72.5°	14154.8	9310.5	609.4	571.9	661.4	724.9	779.3	754.4	686.3	647.9	647.9
75°	10398.9	6609.1	487.1	487.1	564.1	642.3	702.2	686.3	624.1	597.0	589.0
77.5°	4383.4	2772.7	381.7	404.4	468.9	551.7	626.4	632.0	577.7	611.6	555.0
80°	1165.5	764.5	291.1	318.3	368.1	455.3	544.8	542.5	483.6	451.9	420.2
82.5°	444.0	301.2	207.3	224.3	266.2	348.9	431.5	445.2	386.2	334.2	334.2
85°	171.1	129.1	128.0	134.8	155.2	231.0	326.2	337.5	291.1	246.9	254.8
87.5°	44.2	38.5	47.6	45.3	71.3	123.4	186.9	193.7	177.8	103.1	147.3
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)