

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: P961428

Luminaire Tested: **NAV-SB2A-740-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961428
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-740-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9507.9 lumens
Efficiency: N/A
Efficacy: 165.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

Input Watts (W): 57.3
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



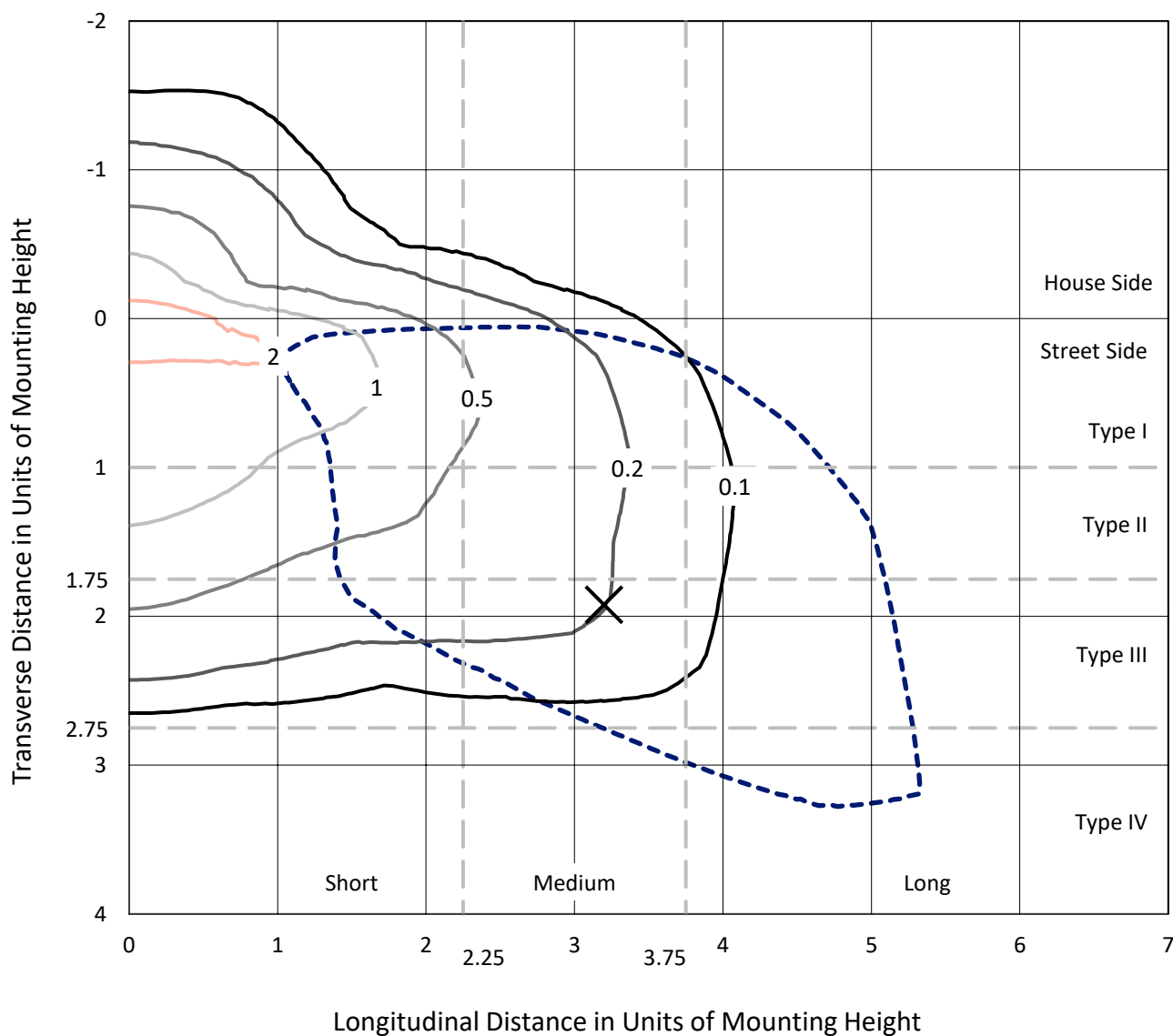
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

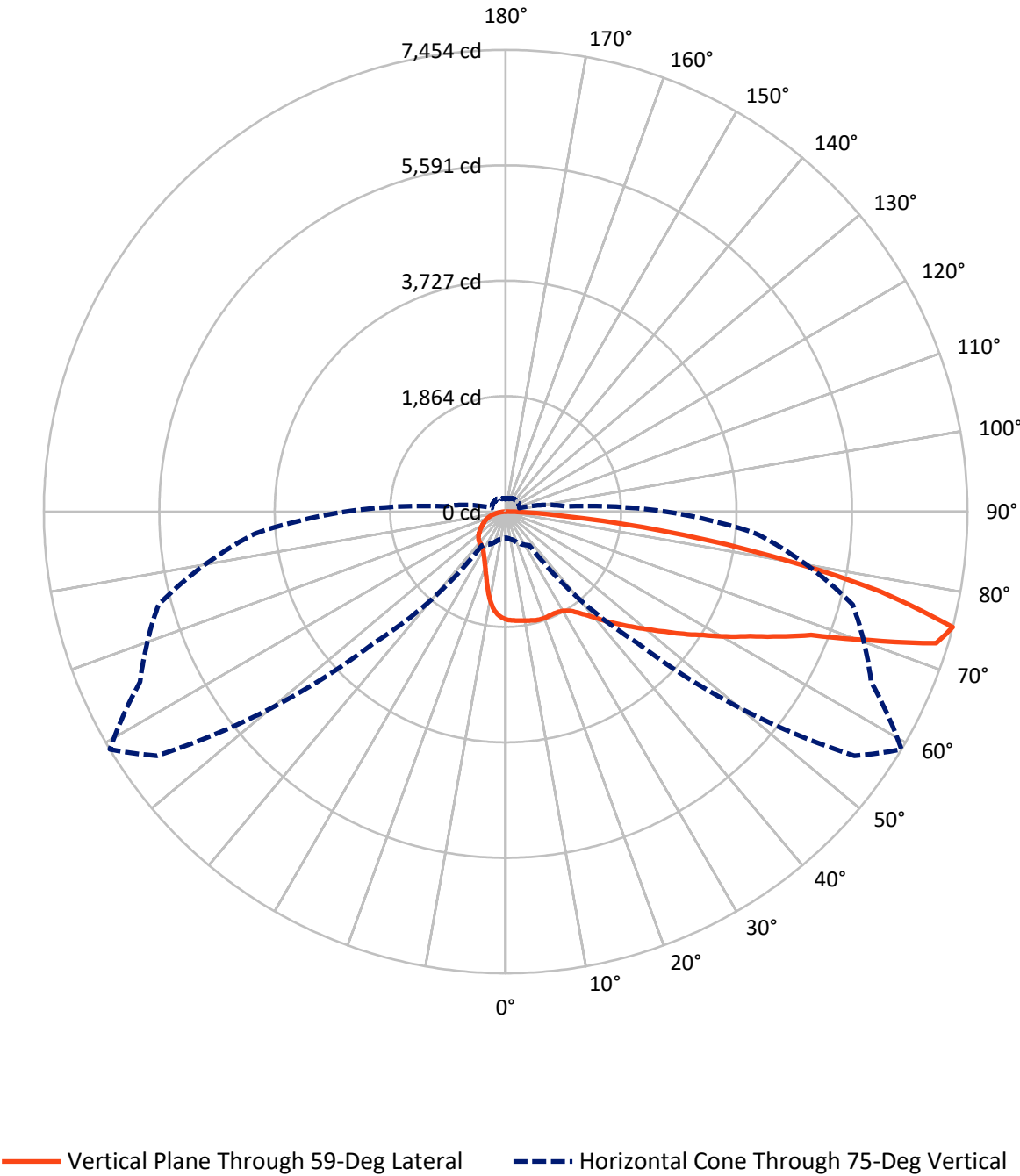
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1783.3	0.0	1783.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	7724.6	0.0	7724.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	9507.9	0.0	9507.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.5	1.6
10°-20°	400.0	4.2
20°-30°	607.5	6.4
30°-40°	903.1	9.5
40°-50°	1343.0	14.1
50°-60°	1823.0	19.2
60°-70°	2225.6	23.4
70°-80°	1746.6	18.4
80°-90°	302.6	3.2
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°	9507.9	100.0
0°-180°	9507.9	100.0

Coefficient of Utilization



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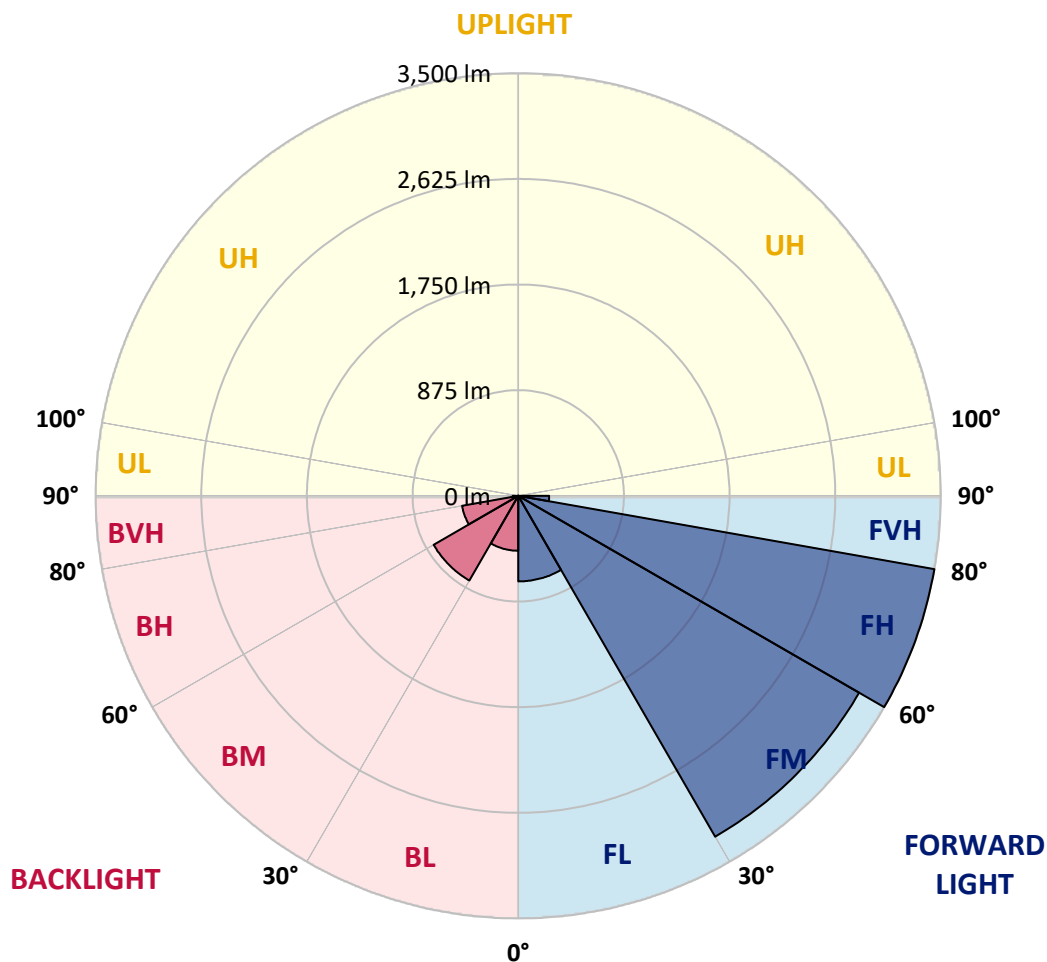
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	708.9	7.5			
FM	(30°-60°)	3259.7	34.3			
FH	(60°-80°)	3499.8	36.8			G2/5000
FVH	(80°-90°)	256.2	2.7			G3/500
BL	(0°-30°)	455.1	4.8	B1/500		
BM	(30°-60°)	809.4	8.5	B1/1000		
BH	(60°-80°)	472.5	5.0	B1/500		G1/500
BVH	(80°-90°)	46.3	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2
2.5°	1760.0	1753.9	1760.0	1757.5	1756.4	1754.4	1754.9	1758.5	1756.4	1759.0	1750.3
5°	1748.2	1744.7	1750.8	1749.3	1755.9	1757.0	1763.6	1767.6	1770.2	1770.7	1764.1
7.5°	1728.8	1725.2	1733.9	1741.1	1755.4	1759.5	1773.2	1779.9	1783.5	1789.6	1779.9
10°	1657.7	1656.2	1677.6	1704.8	1738.5	1759.5	1780.4	1791.7	1797.3	1813.7	1802.5
12.5°	1531.9	1533.9	1562.0	1614.2	1681.7	1749.3	1788.6	1805.0	1813.7	1834.1	1829.0
15°	1411.6	1411.1	1441.9	1497.6	1592.2	1704.3	1792.7	1820.8	1835.7	1865.9	1861.8
17.5°	1342.1	1340.1	1361.5	1404.0	1492.0	1635.2	1782.5	1829.5	1861.3	1899.1	1895.5
20°	1329.3	1325.2	1336.5	1357.4	1419.8	1559.5	1755.9	1829.5	1881.7	1930.8	1928.7
22.5°	1375.9	1369.2	1364.6	1362.0	1389.7	1497.1	1725.7	1823.4	1911.9	1976.3	1972.7
25°	1469.4	1459.2	1435.7	1412.7	1404.6	1468.9	1699.1	1821.8	1956.9	2037.7	2024.4
27.5°	1620.8	1608.1	1560.6	1505.3	1455.7	1483.3	1687.4	1831.1	2006.5	2102.7	2076.0
30°	1808.6	1794.8	1734.9	1650.0	1561.0	1536.5	1702.2	1858.2	2070.0	2189.1	2136.9
32.5°	1976.8	1961.5	1910.4	1823.9	1703.8	1628.5	1749.3	1909.9	2169.7	2309.3	2228.5
35°	2126.2	2108.3	2062.3	1982.5	1878.6	1758.0	1834.1	2001.4	2311.4	2504.7	2352.8
37.5°	2272.5	2251.5	2201.4	2117.0	2044.4	1930.3	1951.3	2119.1	2499.6	2742.0	2517.5
40°	2436.1	2406.0	2345.1	2261.8	2191.1	2132.3	2105.2	2263.3	2690.8	3006.9	2723.1
42.5°	2594.7	2566.1	2493.4	2422.4	2333.8	2317.0	2283.7	2432.0	2900.0	3298.0	2931.8
45°	2765.6	2731.3	2643.3	2553.3	2497.5	2439.7	2456.6	2600.8	3105.1	3594.7	3150.6
47.5°	2925.7	2887.3	2783.5	2683.2	2652.5	2543.0	2615.2	2786.6	3318.4	3895.4	3367.5
50°	3012.1	2974.2	2887.8	2797.2	2773.2	2670.4	2787.1	2990.6	3542.0	4195.1	3575.7
52.5°	3084.2	3043.3	2930.3	2880.1	2873.0	2809.0	2998.7	3223.8	3765.4	4460.1	3776.7
55°	3160.9	3115.4	2971.2	2926.2	2958.9	2964.5	3249.9	3488.3	4001.8	4718.4	3966.4
57.5°	3249.4	3191.6	3010.5	2965.0	3042.8	3146.6	3538.4	3762.4	4234.0	4957.7	4135.3
60°	3332.8	3274.5	3086.3	3026.9	3133.3	3357.8	3869.3	4094.4	4496.9	5171.0	4294.9
62.5°	3349.2	3301.0	3146.6	3146.1	3256.0	3604.4	4261.1	4429.3	4726.6	5381.8	4438.0
65°	3065.8	3035.6	2944.0	3141.5	3432.0	3959.4	4697.4	4858.0	5018.6	5565.9	4563.9
67.5°	2333.3	2337.4	2330.7	2711.8	3289.8	4469.3	5329.1	5316.8	5379.2	5772.5	4708.6
70°	1066.9	1091.0	1247.5	1872.0	2635.6	4528.0	6373.4	6214.5	5831.8	6040.0	4834.0
72.5°	576.5	594.8	658.8	906.8	1584.5	4025.8	7154.0	7267.0	6433.8	6220.0	4696.3
75°	423.0	433.3	477.8	576.5	665.4	2992.2	6874.3	7454.2	6509.1	5800.2	4055.5
77.5°	316.6	321.2	357.5	456.7	340.6	1577.4	5492.8	6173.5	5572.0	4765.4	2995.7
80°	229.7	234.7	261.9	342.7	238.8	577.0	3771.6	4333.2	3816.1	3037.7	1493.0
82.5°	158.6	160.6	172.4	233.2	166.8	224.1	2140.0	2541.0	2130.3	1065.9	403.0
85°	95.6	98.2	103.3	136.0	94.6	106.4	923.7	955.4	636.8	254.7	125.4
87.5°	39.4	41.9	46.0	57.3	37.3	29.6	152.4	191.3	119.2	74.7	38.8
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°	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2	1745.2
2.5°	1747.7	1744.1	1734.4	1721.1	1708.9	1693.5	1686.8	1681.2	1676.1	1666.3	1661.8
5°	1758.5	1748.8	1722.6	1688.9	1650.6	1608.6	1567.6	1539.6	1515.5	1497.6	1482.8
7.5°	1774.8	1756.4	1708.9	1639.8	1551.8	1461.8	1380.5	1322.7	1279.2	1263.3	1235.7
10°	1791.7	1769.7	1686.8	1565.1	1413.2	1274.6	1166.7	1107.3	1072.6	1061.3	1044.0
12.5°	1811.7	1779.4	1652.6	1461.2	1258.2	1106.3	1012.2	977.4	959.5	953.4	954.9
15°	1840.8	1787.6	1600.9	1331.4	1110.4	983.6	922.7	898.6	889.5	889.0	891.0
17.5°	1862.8	1789.1	1520.6	1192.3	996.9	909.4	859.3	850.0	856.2	865.4	869.0
20°	1887.3	1775.3	1415.2	1065.4	917.1	844.4	823.5	829.6	844.4	857.7	862.3
22.5°	1904.8	1750.3	1287.9	966.7	848.0	807.1	806.1	818.9	827.1	833.7	837.3
25°	1920.0	1707.9	1152.8	883.9	791.3	784.6	795.8	791.8	786.2	791.8	795.3
27.5°	1931.3	1640.8	1032.2	811.2	751.3	769.3	762.6	753.4	752.9	755.9	761.1
30°	1927.7	1551.3	933.0	742.1	723.2	740.7	724.8	723.2	721.7	723.2	728.9
32.5°	1927.7	1449.6	856.7	694.5	705.3	698.6	697.1	693.5	687.5	687.0	693.5
35°	1938.5	1347.8	791.3	669.0	690.5	674.7	675.7	667.0	654.2	648.0	654.2
37.5°	1960.5	1265.9	726.3	656.7	664.4	663.9	659.8	644.9	622.5	603.0	609.7
40°	2013.7	1241.9	681.8	651.1	652.1	658.3	647.5	618.9	567.7	536.1	540.1
42.5°	2097.0	1282.3	672.1	637.3	643.9	650.1	629.1	562.6	526.3	507.4	507.4
45°	2202.9	1352.9	693.0	617.4	624.5	635.3	572.9	541.1	524.8	525.3	527.9
47.5°	2336.9	1427.0	732.0	599.9	596.3	602.5	535.6	516.1	493.5	499.2	513.5
50°	2491.9	1502.2	768.7	576.5	565.2	545.2	511.5	493.0	464.4	451.1	454.7
52.5°	2659.7	1574.8	783.6	547.8	531.5	508.4	495.1	472.6	437.8	415.8	415.3
55°	2818.7	1640.8	767.2	513.5	497.6	479.8	477.8	463.9	426.6	395.9	395.9
57.5°	2969.1	1696.1	726.3	478.8	463.4	452.6	466.5	459.8	412.8	373.4	371.4
60°	3096.4	1733.9	667.0	443.4	432.8	427.1	448.0	446.0	393.3	349.3	347.8
62.5°	3197.8	1748.8	601.5	409.7	407.1	396.9	422.5	422.5	368.8	325.8	324.3
65°	3277.0	1734.4	535.0	376.5	381.6	366.2	391.2	388.2	342.7	304.8	302.8
67.5°	3347.1	1687.4	461.4	343.7	355.5	336.0	358.5	351.4	314.1	283.8	281.8
70°	3378.3	1577.9	377.5	311.0	325.3	306.4	325.8	312.5	281.8	261.4	257.3
72.5°	3127.7	1311.4	297.1	276.8	288.9	273.7	290.5	275.2	247.0	237.8	230.2
75°	2587.5	984.1	228.7	239.3	248.6	236.8	248.0	236.8	211.3	217.9	199.0
77.5°	1879.1	664.4	175.0	200.0	204.1	197.9	207.7	194.9	171.9	170.4	162.7
80°	934.5	389.2	137.0	158.1	156.5	152.4	163.7	157.5	138.1	146.3	144.7
82.5°	270.6	166.8	99.7	111.0	107.9	109.0	117.2	120.2	180.0	178.6	182.6
85°	84.9	65.5	59.9	61.9	58.8	60.4	69.1	137.0	126.9	74.2	80.3
87.5°	22.0	22.5	14.9	15.9	16.4	19.5	22.0	83.3	39.9	26.0	27.6
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)