

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: P964083

Luminaire Tested: **NAV-SB3B-740-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-740-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14113.2 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

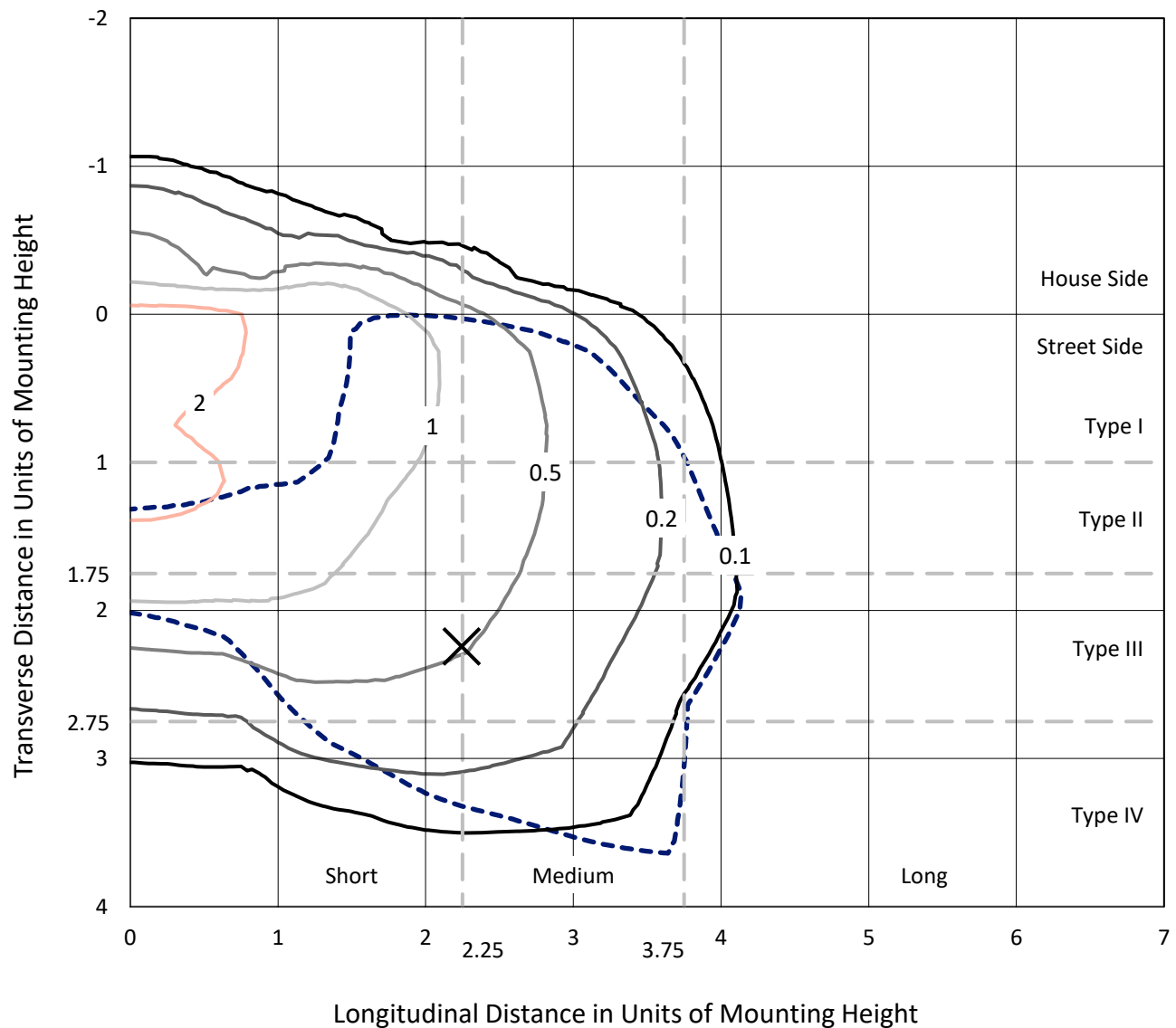
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

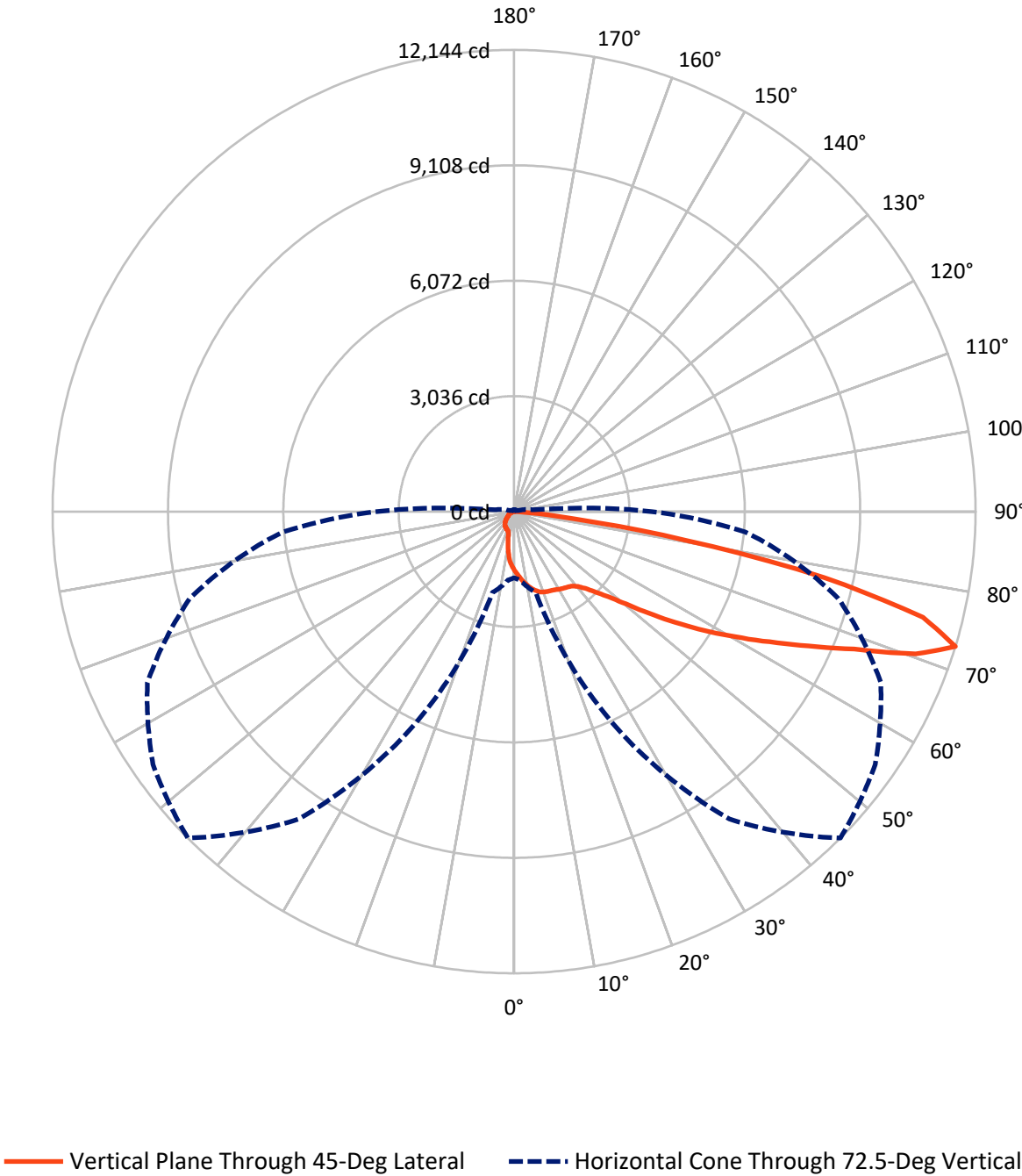
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1482.9	0.0	1482.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	12630.3	0.0	12630.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	14113.2	0.0	14113.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	1.0
10°-20°	425.8	3.0
20°-30°	699.2	5.0
30°-40°	991.6	7.0
40°-50°	1638.9	11.6
50°-60°	2944.2	20.9
60°-70°	4088.1	29.0
70°-80°	2965.4	21.0
80°-90°	214.4	1.5
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°	14113.2	100.0
0°-180°	14113.2	100.0

Coefficient of Utilization



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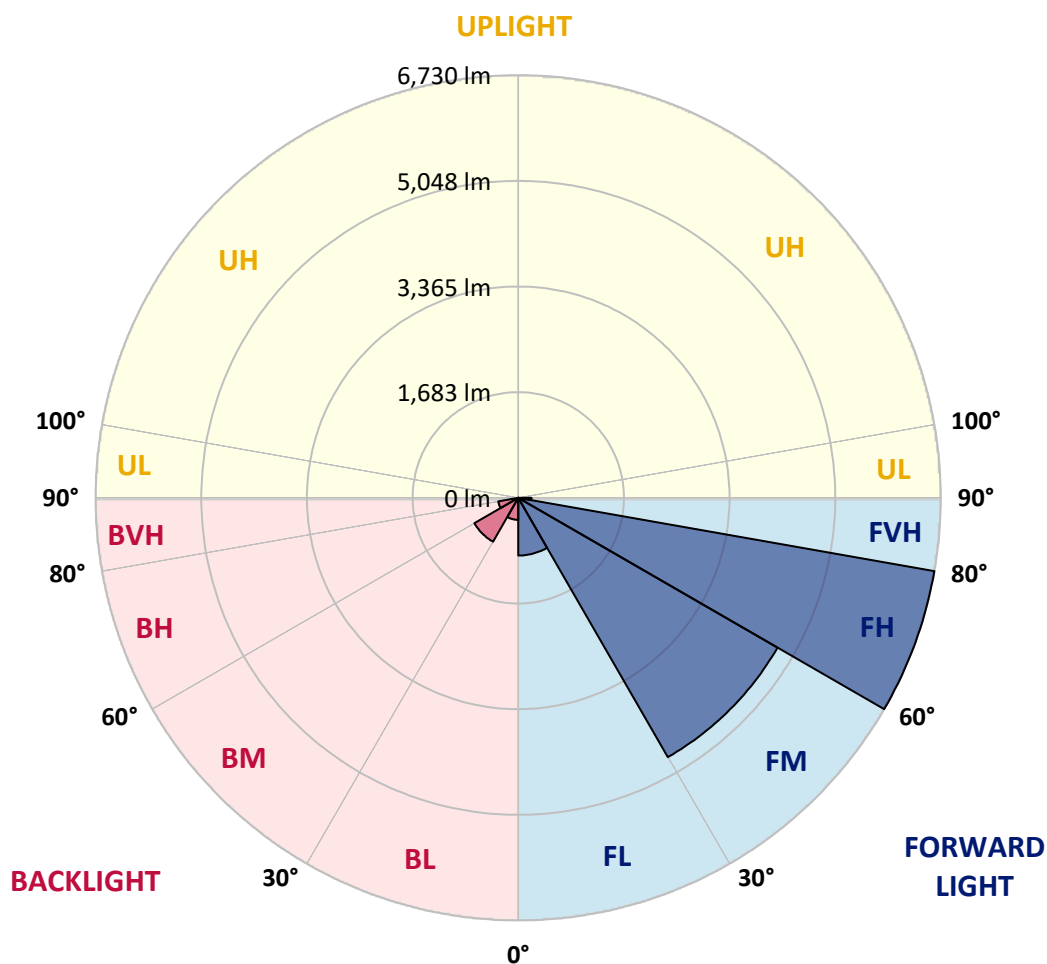
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	919.3	6.5			
FM	(30°-60°)	4768.2	33.8			
FH	(60°-80°)	6730.2	47.7			G3/7500
FVH	(80°-90°)	212.6	1.5			G2/225
BL	(0°-30°)	351.2	2.5	B1/500		
BM	(30°-60°)	806.5	5.7	B1/1000		
BH	(60°-80°)	323.4	2.3	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1
2.5°	1688.7	1691.6	1689.7	1678.1	1658.9	1648.2	1642.5	1623.2	1610.7	1588.5	1565.4
5°	1843.8	1855.4	1848.6	1825.5	1788.9	1762.9	1755.2	1715.6	1680.1	1638.6	1590.5
7.5°	2008.5	2014.3	2001.8	1971.9	1922.8	1878.5	1871.8	1816.8	1760.0	1696.4	1630.9
10°	2151.1	2157.8	2138.6	2095.2	2039.3	1984.4	1974.8	1914.1	1846.6	1768.6	1684.9
12.5°	2270.6	2277.3	2252.2	2200.3	2138.6	2081.8	2072.1	2008.5	1934.4	1847.7	1743.6
15°	2361.1	2373.6	2339.9	2284.0	2217.6	2160.7	2155.9	2093.3	2021.1	1924.7	1813.9
17.5°	2414.1	2426.6	2394.8	2327.4	2270.6	2222.4	2216.6	2164.6	2097.1	2004.7	1882.3
20°	2422.8	2434.3	2400.7	2341.8	2294.7	2256.1	2253.3	2215.6	2166.5	2077.9	1956.5
22.5°	2396.8	2411.2	2380.4	2333.2	2300.4	2280.2	2276.3	2255.1	2227.2	2152.1	2025.9
25°	2369.8	2381.4	2358.2	2316.8	2299.5	2297.5	2300.4	2296.5	2290.8	2227.2	2106.8
27.5°	2367.9	2380.4	2354.3	2314.9	2305.2	2325.4	2328.4	2346.6	2351.5	2295.6	2184.8
30°	2384.3	2392.9	2367.9	2326.4	2321.6	2367.9	2368.8	2401.6	2409.3	2353.4	2261.9
32.5°	2419.8	2429.5	2404.4	2343.8	2337.0	2401.6	2404.4	2447.8	2460.3	2415.0	2342.8
35°	2503.7	2515.2	2486.3	2391.9	2367.9	2433.4	2442.1	2493.1	2518.1	2480.6	2426.6
37.5°	2712.8	2679.0	2639.5	2489.2	2438.2	2483.5	2497.9	2557.6	2602.0	2558.6	2526.8
40°	3231.9	3125.9	3002.6	2655.0	2561.5	2590.4	2602.0	2661.6	2722.4	2680.0	2664.6
42.5°	4011.2	3886.1	3687.6	3036.4	2747.4	2761.9	2770.5	2822.5	2908.2	2874.5	2878.4
45°	4705.9	4660.6	4458.2	3687.6	3095.2	3023.9	3034.5	3061.5	3187.6	3175.1	3200.2
47.5°	5239.5	5213.5	5057.5	4435.2	3682.8	3344.7	3374.5	3387.0	3569.2	3613.4	3680.9
50°	5649.9	5640.3	5500.6	5099.8	4450.5	3817.6	3828.3	3801.3	4073.9	4183.7	4311.9
52.5°	6037.1	6069.9	5966.8	5717.3	5270.3	4437.0	4435.2	4308.0	4675.9	4841.7	5060.3
55°	6386.9	6398.4	6409.0	6347.3	6095.0	5142.2	5123.9	4915.8	5374.4	5545.9	5782.8
57.5°	6715.3	6720.1	6814.5	6940.8	6953.3	5899.4	5865.7	5616.2	6137.3	6259.7	6405.1
60°	6936.0	6958.1	7157.5	7508.1	7661.3	6680.6	6662.3	6408.0	6913.7	6970.6	6943.7
62.5°	6618.0	6752.9	7255.8	7951.2	8329.9	7546.7	7538.1	7299.1	7730.7	7684.4	7453.2
65°	5357.1	5585.3	6469.7	8250.8	8985.9	8513.9	8526.4	8272.1	8569.7	8419.5	7867.5
67.5°	3747.3	3988.2	5034.3	8274.9	9718.9	9649.7	9721.8	9323.1	9460.8	9123.6	7965.7
70°	2591.3	2715.6	3396.6	7756.7	10290.2	11214.0	11212.2	10613.9	10347.1	9444.5	7464.8
72.5°	1742.6	1807.2	2206.0	6153.7	9870.2	12143.7	12087.8	11600.3	10645.6	8832.7	6098.7
75°	735.0	782.2	1021.1	3458.4	7808.7	11110.0	10958.8	10251.6	9458.9	6955.2	3805.1
77.5°	233.1	253.4	402.6	1237.9	4301.2	8351.1	8191.2	6402.3	6339.6	3489.2	1391.0
80°	110.8	129.0	226.4	497.1	1692.6	4542.1	4519.9	2904.4	2727.2	942.2	279.3
82.5°	48.2	56.8	125.3	265.9	757.2	1620.3	1653.0	988.4	817.8	357.4	85.7
85°	15.4	20.2	57.8	122.4	319.8	402.6	397.8	235.0	329.4	194.5	29.8
87.5°	0.0	0.0	19.3	28.0	32.8	23.2	26.0	20.2	91.5	53.9	10.6
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°	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1	1546.1
2.5°	1553.8	1538.4	1511.5	1486.5	1464.2	1442.1	1428.6	1409.4	1407.4	1407.4	1412.2
5°	1564.5	1539.3	1491.3	1440.1	1381.4	1325.5	1269.7	1215.8	1198.3	1185.8	1191.7
7.5°	1595.3	1555.7	1479.7	1382.4	1270.6	1148.3	1062.5	970.1	934.4	915.1	918.1
10°	1639.6	1585.7	1470.1	1299.5	1118.4	951.7	829.4	729.2	690.7	674.3	674.3
12.5°	1688.7	1622.3	1452.7	1196.5	951.7	752.3	632.9	586.7	580.9	580.9	580.9
15°	1747.4	1666.5	1422.8	1075.0	777.4	595.3	553.0	554.8	560.7	564.5	564.5
17.5°	1808.2	1713.8	1375.7	939.2	623.3	535.6	536.6	539.5	544.3	548.2	548.2
20°	1873.7	1761.0	1313.0	794.8	534.6	518.2	521.1	524.1	527.9	529.8	530.7
22.5°	1944.0	1805.2	1238.8	653.1	504.8	503.8	504.8	507.7	512.5	512.5	514.4
25°	2019.1	1854.4	1154.0	550.0	489.3	489.3	491.3	493.2	497.1	497.1	498.0
27.5°	2096.2	1899.6	1064.5	496.1	475.9	474.9	474.9	477.9	479.7	480.7	481.6
30°	2181.0	1952.6	974.9	484.5	465.2	460.4	457.6	459.5	461.5	462.4	464.3
32.5°	2267.7	2003.7	894.9	489.3	454.7	446.0	436.3	434.5	434.5	438.3	441.2
35°	2364.0	2059.6	833.3	505.7	449.0	424.9	409.4	400.8	401.7	407.4	410.4
37.5°	2479.6	2127.0	788.0	520.2	445.1	400.8	375.7	365.1	358.3	365.1	363.2
40°	2630.9	2226.2	755.2	531.8	440.2	372.8	339.1	321.7	309.2	313.0	311.2
42.5°	2853.4	2382.3	742.7	532.7	429.7	340.1	301.6	278.4	260.1	261.1	257.2
45°	3165.5	2628.9	807.3	520.2	406.5	304.4	262.0	231.2	219.7	216.8	212.9
47.5°	3593.2	2988.2	956.5	494.2	372.8	269.8	223.4	197.5	188.8	184.0	181.1
50°	4166.4	3449.6	1122.3	465.2	339.1	237.0	191.7	175.3	169.5	164.7	163.8
52.5°	4831.0	3917.9	1258.1	436.3	305.3	208.1	171.5	161.8	157.0	153.1	152.2
55°	5440.8	4240.5	1250.4	405.6	272.6	184.9	157.0	151.3	145.4	141.7	139.7
57.5°	5820.4	4285.8	1030.7	371.9	235.0	166.7	143.5	139.7	132.9	128.1	127.2
60°	5994.7	4027.6	722.5	327.5	197.5	149.3	129.0	127.2	118.5	111.7	109.8
62.5°	6026.6	3547.9	481.6	272.6	164.7	132.9	114.6	111.7	100.1	88.7	82.8
65°	5897.4	2862.0	333.3	212.9	140.6	115.6	98.3	92.5	79.9	68.4	64.6
67.5°	5489.0	2009.5	232.2	153.1	119.4	91.5	78.0	76.1	66.4	56.8	53.9
70°	4740.5	1145.4	155.1	114.6	94.4	62.6	61.6	63.6	53.9	46.2	42.4
72.5°	3634.6	524.1	96.4	83.8	64.6	42.4	49.1	50.1	41.4	34.6	30.9
75°	2139.6	224.5	60.7	53.9	32.8	28.0	35.7	36.6	28.0	22.1	19.3
77.5°	728.3	84.8	38.5	31.8	16.4	15.4	23.2	23.2	15.4	8.7	6.8
80°	165.7	31.8	19.3	12.5	7.7	6.8	7.7	6.8	3.9	0.9	0.0
82.5°	47.3	12.5	7.7	4.8	2.9	2.9	0.9	0.0	0.0	0.0	0.0
85°	13.5	5.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.7	0.9	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)