

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: P883129

Luminaire Tested: **NAV-SB3B-827-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13733 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

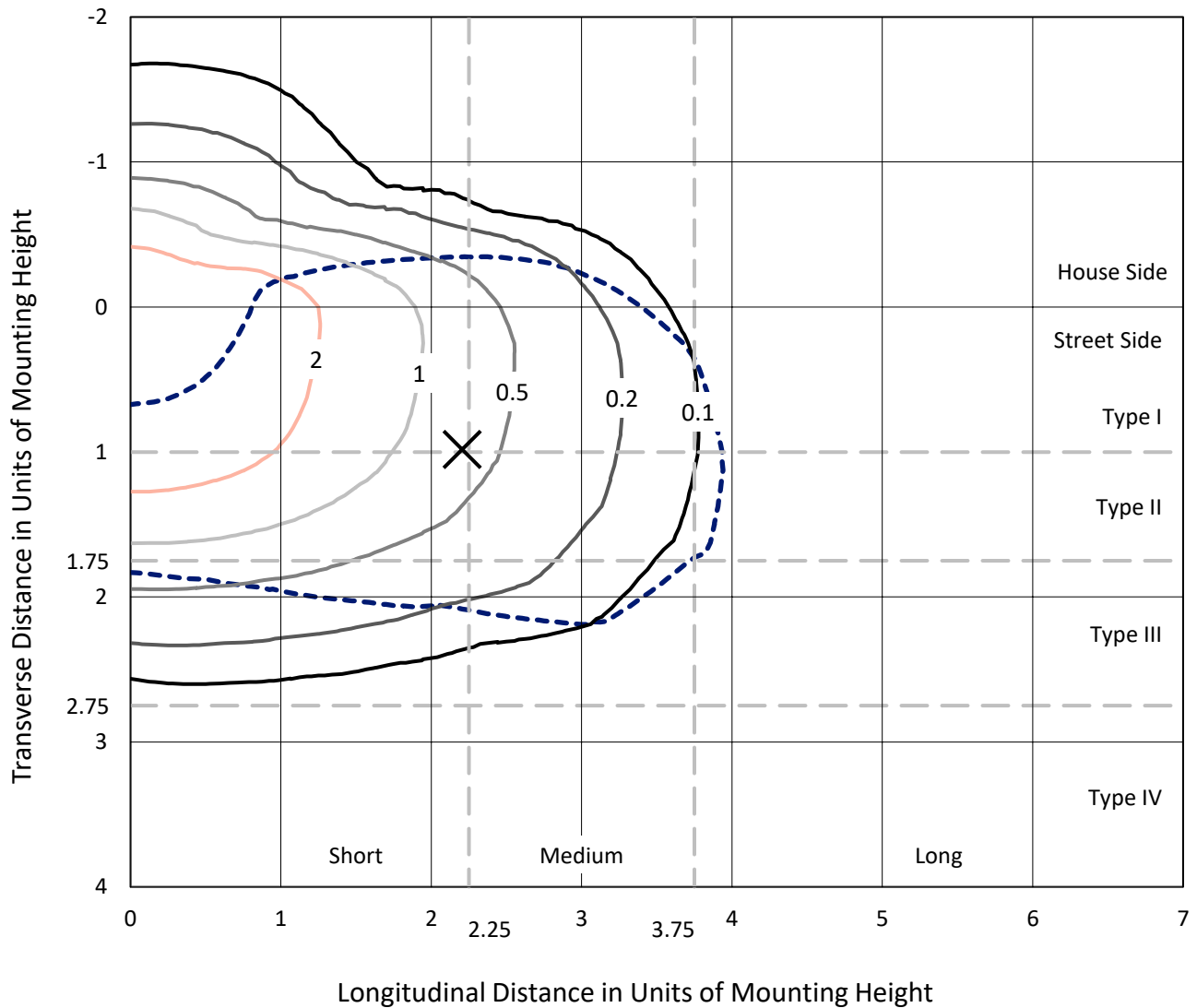
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

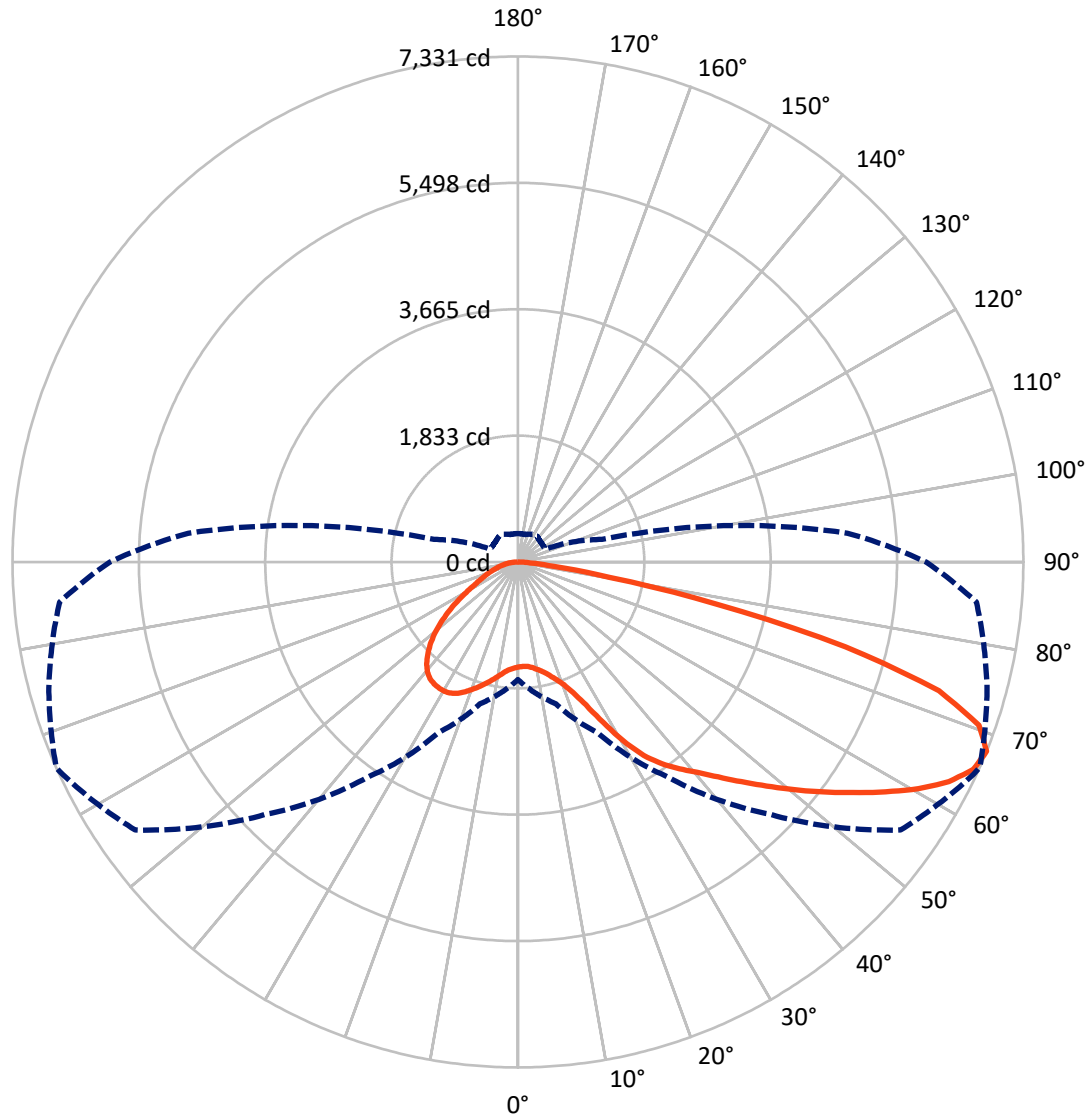
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3414.7	0.0	3414.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	10318.3	0.0	10318.3
	% Fixture	75.1	0.0	75.1
Total	Lumens	13733.0	0.0	13733.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	1.1
10°-20°	498.9	3.6
20°-30°	961.7	7.0
30°-40°	1686.2	12.3
40°-50°	2506.8	18.3
50°-60°	3177.6	23.1
60°-70°	3109.2	22.6
70°-80°	1483.1	10.8
80°-90°	158.5	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°	13733.0	100.0
0°-180°	13733.0	100.0

Coefficient of Utilization



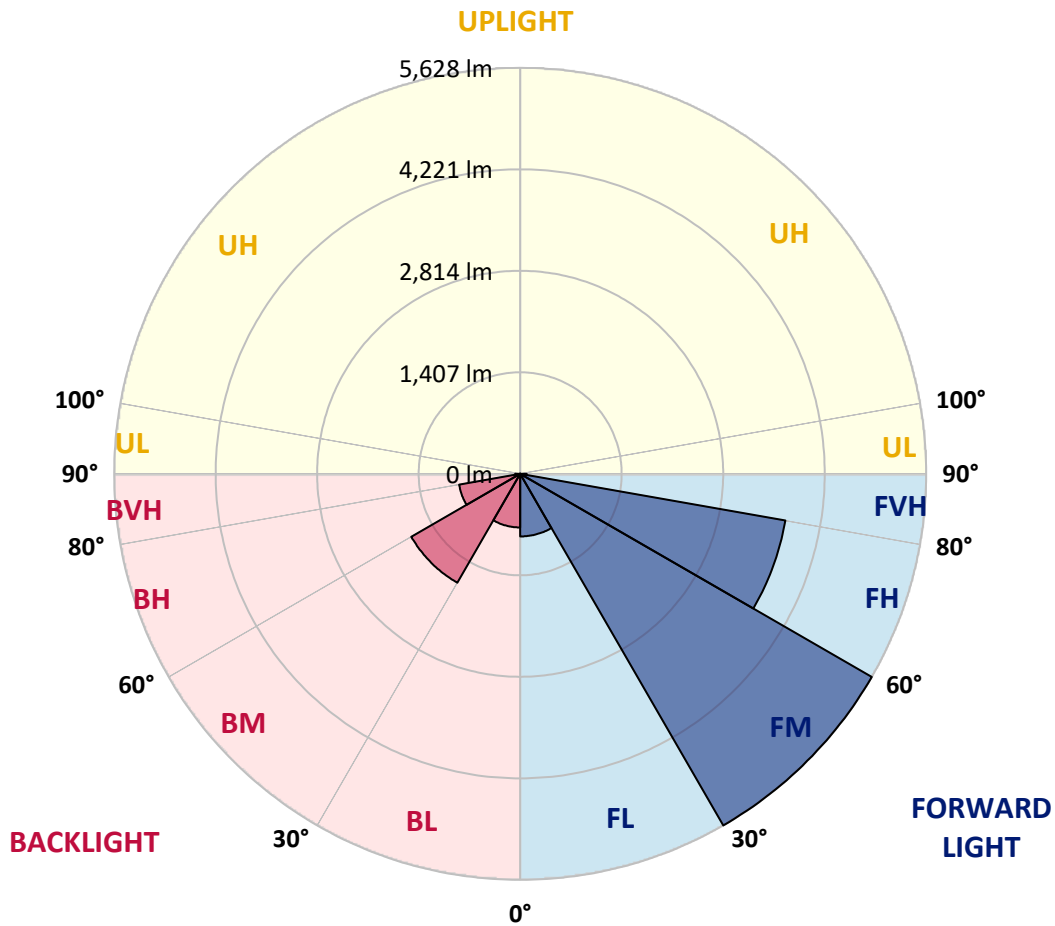
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	867.8	6.3			
FM (30°-60°)	5627.7	41.0			
FH (60°-80°)	3733.0	27.2			G2/5000
FVH (80°-90°)	89.9	0.7			G1/100
BL (0°-30°)	743.8	5.4	B2/1000		
BM (30°-60°)	1742.9	12.7	B2/2500		
BH (60°-80°)	859.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	68.6	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2
2.5°	1507.3	1516.0	1513.8	1510.2	1509.5	1510.9	1513.1	1515.2	1514.5	1518.1	1523.9
5°	1503.0	1511.6	1510.9	1510.9	1513.8	1519.6	1523.2	1526.8	1523.2	1527.5	1535.4
7.5°	1505.9	1512.3	1515.2	1518.1	1525.3	1536.2	1544.8	1552.8	1548.4	1553.5	1563.6
10°	1542.7	1547.7	1550.6	1550.6	1555.6	1567.9	1576.6	1591.0	1587.4	1595.3	1608.3
12.5°	1609.8	1614.8	1614.8	1611.9	1615.5	1623.5	1626.4	1642.2	1635.7	1648.7	1661.7
15°	1692.0	1702.1	1694.2	1689.1	1690.6	1698.5	1697.8	1710.1	1703.6	1714.4	1725.9
17.5°	1782.9	1795.9	1782.9	1782.2	1779.3	1788.0	1788.7	1799.5	1788.0	1795.9	1803.9
20°	1890.4	1908.5	1897.7	1901.3	1894.8	1898.4	1902.0	1917.9	1899.8	1905.6	1903.4
22.5°	2042.0	2063.6	2052.1	2065.8	2061.4	2058.6	2057.8	2086.0	2057.8	2060.0	2039.1
25°	2262.7	2288.7	2268.5	2287.3	2287.3	2296.7	2307.5	2343.6	2296.7	2283.0	2228.8
27.5°	2588.9	2614.9	2575.2	2586.7	2583.1	2606.2	2594.7	2684.1	2633.6	2611.3	2502.3
30°	2981.4	3027.6	2952.5	2949.7	2946.0	2982.8	2999.4	3058.6	3007.4	2985.0	2853.7
32.5°	3405.7	3454.0	3364.5	3338.6	3324.9	3347.2	3333.5	3381.1	3345.8	3311.1	3148.8
35°	3854.5	3902.1	3816.9	3766.4	3711.6	3664.7	3615.6	3627.9	3594.7	3542.0	3373.9
37.5°	4278.7	4366.0	4275.8	4221.7	4120.7	4029.1	3892.0	3835.0	3804.0	3755.6	3586.1
40°	4710.9	4760.7	4692.2	4646.0	4536.3	4392.7	4173.4	4052.9	4011.0	3964.1	3820.6
42.5°	5029.1	5076.8	5040.0	5008.2	4922.3	4755.7	4472.1	4321.3	4260.7	4208.0	4086.1
45°	5281.7	5317.0	5293.9	5305.5	5268.7	5107.1	4781.6	4609.2	4546.4	4482.2	4386.2
47.5°	5383.4	5420.9	5457.7	5526.3	5589.0	5470.0	5114.3	4920.9	4854.5	4788.9	4694.3
50°	5371.9	5410.1	5516.9	5662.6	5857.5	5817.8	5464.9	5252.8	5191.5	5116.4	5029.1
52.5°	5279.5	5322.8	5459.9	5702.3	6012.6	6078.3	5822.1	5595.5	5537.8	5448.3	5361.0
55°	5037.1	5063.0	5268.7	5612.1	6049.4	6260.1	6172.1	5960.6	5902.9	5778.1	5682.8
57.5°	4587.6	4625.1	4924.5	5369.0	5957.0	6383.5	6479.4	6344.5	6288.9	6109.3	6009.7
60°	4000.9	4060.8	4403.6	4960.6	5721.8	6382.7	6758.7	6721.9	6675.7	6435.4	6331.5
62.5°	3337.1	3406.4	3736.1	4383.4	5310.5	6201.6	6933.3	7037.9	7014.1	6736.3	6603.5
65°	2562.9	2610.5	2938.8	3636.6	4670.5	5812.7	6953.5	7253.6	7258.0	6965.0	6745.7
67.5°	1706.4	1843.5	2128.5	2728.9	3813.3	5177.1	6776.0	7289.0	7330.8	7043.7	6674.2
70°	832.7	1013.0	1292.3	1773.5	2728.9	4202.2	6312.0	6998.9	7092.0	6814.2	6248.5
72.5°	345.6	404.1	556.3	875.2	1566.5	2835.7	5379.8	6212.5	6384.9	6037.8	5253.5
75°	233.1	252.5	318.2	448.8	713.6	1398.3	3879.7	4632.3	4910.1	4560.1	3727.5
77.5°	179.7	191.9	231.6	313.9	424.3	528.9	2076.6	2791.6	2935.2	2717.3	1939.5
80°	141.4	150.8	173.2	228.7	300.9	282.8	707.8	1264.9	1347.8	1130.7	623.4
82.5°	122.7	126.3	124.1	155.1	199.9	165.2	232.3	466.8	515.2	373.8	203.5
85°	88.7	98.9	103.2	96.0	106.1	83.7	95.2	165.2	181.8	162.3	114.7
87.5°	36.1	53.4	65.7	62.1	39.0	23.8	29.6	48.3	55.6	60.6	37.5
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°	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2	1523.2
2.5°	1524.6	1529.7	1533.3	1537.6	1540.5	1544.8	1553.5	1558.5	1559.2	1562.9	1562.1
5°	1538.3	1545.5	1553.5	1565.0	1578.0	1588.8	1605.4	1617.0	1621.3	1624.9	1624.2
7.5°	1567.9	1578.0	1592.4	1612.6	1631.4	1645.8	1666.0	1679.7	1693.5	1698.5	1699.2
10°	1611.9	1626.4	1647.3	1674.7	1694.9	1713.7	1734.6	1746.1	1759.8	1765.6	1768.5
12.5°	1666.8	1681.9	1709.3	1747.6	1766.3	1779.3	1786.5	1783.6	1786.5	1791.6	1793.0
15°	1729.5	1746.1	1777.2	1818.3	1831.3	1819.7	1803.9	1789.4	1787.3	1788.7	1793.7
17.5°	1803.9	1816.1	1852.2	1886.8	1877.4	1829.8	1795.2	1772.1	1760.6	1757.0	1762.0
20°	1907.8	1907.8	1937.3	1959.0	1896.2	1815.4	1761.3	1723.8	1699.9	1689.8	1687.7
22.5°	2034.0	2022.5	2041.2	2026.1	1892.6	1775.0	1699.9	1635.0	1598.9	1584.5	1582.3
25°	2194.2	2180.5	2175.4	2081.6	1866.6	1710.8	1588.8	1510.2	1478.4	1470.5	1471.9
27.5°	2435.9	2401.3	2335.6	2111.9	1819.0	1609.8	1459.0	1386.1	1368.0	1368.8	1370.9
30°	2757.7	2688.5	2527.6	2117.0	1741.1	1466.9	1326.2	1274.2	1265.6	1269.2	1281.5
32.5°	3055.7	2990.1	2723.8	2093.9	1621.3	1326.9	1207.1	1172.5	1159.5	1163.8	1169.6
35°	3289.5	3271.5	2905.6	2061.4	1474.1	1195.6	1100.3	1070.8	1045.5	1039.7	1044.1
37.5°	3510.3	3503.1	3042.0	2016.0	1328.4	1102.5	1014.5	975.5	938.7	918.5	919.2
40°	3752.7	3745.5	3131.5	1946.0	1199.2	1021.7	937.3	886.1	840.6	803.8	807.4
42.5°	4025.5	3982.9	3174.1	1845.7	1089.5	953.2	874.5	805.2	745.4	711.4	713.6
45°	4323.5	4227.5	3173.3	1718.0	997.2	890.4	807.4	709.3	653.7	622.0	620.5
47.5°	4639.5	4461.3	3134.4	1576.6	907.7	821.1	703.5	628.5	591.7	572.2	567.9
50°	4965.6	4679.9	3068.0	1414.2	816.1	742.5	638.6	587.3	559.2	541.2	534.7
52.5°	5272.3	4878.3	2987.9	1230.2	723.0	666.0	609.7	570.0	540.4	520.2	511.6
55°	5557.3	5049.3	2874.6	1041.9	647.2	614.8	596.0	562.8	528.9	505.1	495.7
57.5°	5810.6	5160.5	2679.1	865.1	593.1	579.4	581.6	550.5	511.6	491.4	478.4
60°	6021.3	5242.0	2389.7	701.3	549.1	544.8	559.2	527.4	482.0	458.9	448.8
62.5°	6147.5	5240.5	2034.7	574.3	511.6	513.0	529.6	498.6	452.4	430.8	424.3
65°	6136.7	5112.1	1645.1	491.4	475.5	476.9	498.6	466.8	427.9	414.9	414.2
67.5°	5919.5	4799.0	1262.0	437.3	435.8	442.3	467.6	445.2	412.7	411.3	413.4
70°	5331.5	4148.9	909.1	394.0	394.7	404.1	437.3	431.5	404.8	407.7	406.9
72.5°	4275.1	3163.2	610.4	348.5	349.2	364.4	408.4	420.7	396.8	435.1	440.9
75°	2847.2	1972.7	392.5	300.2	300.9	320.4	383.1	399.7	375.2	433.6	437.3
77.5°	1368.0	886.8	284.3	252.5	252.5	270.6	331.2	357.9	319.6	337.0	308.8
80°	472.6	333.4	223.7	203.5	199.1	211.4	279.2	310.3	275.6	254.0	238.1
82.5°	186.2	173.2	179.7	158.0	143.6	151.5	217.2	256.1	202.8	183.3	182.5
85°	106.8	112.6	127.0	104.6	83.0	93.1	159.5	184.0	153.0	134.9	137.8
87.5°	28.9	39.7	58.4	54.1	37.5	39.7	75.8	101.7	88.0	67.8	70.0
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)