

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: P963548

Luminaire Tested: **NAV-SB3A-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963548
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14790.7 lumens
Efficiency: N/A
Efficacy: 174.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 84.7
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



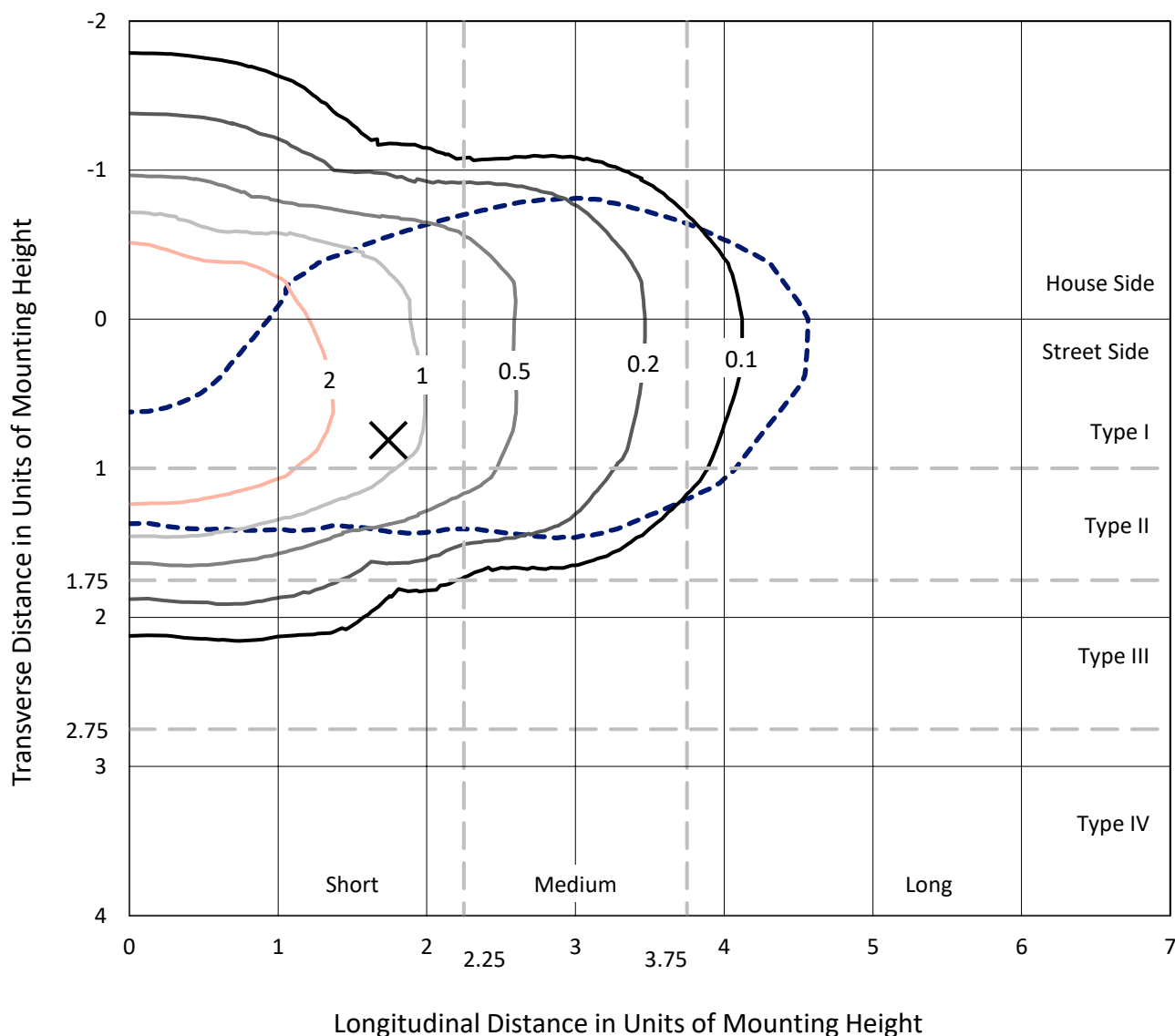
REPORT NUMBER: P963548

CATALOG NUMBER: NAV-SB3A-740-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

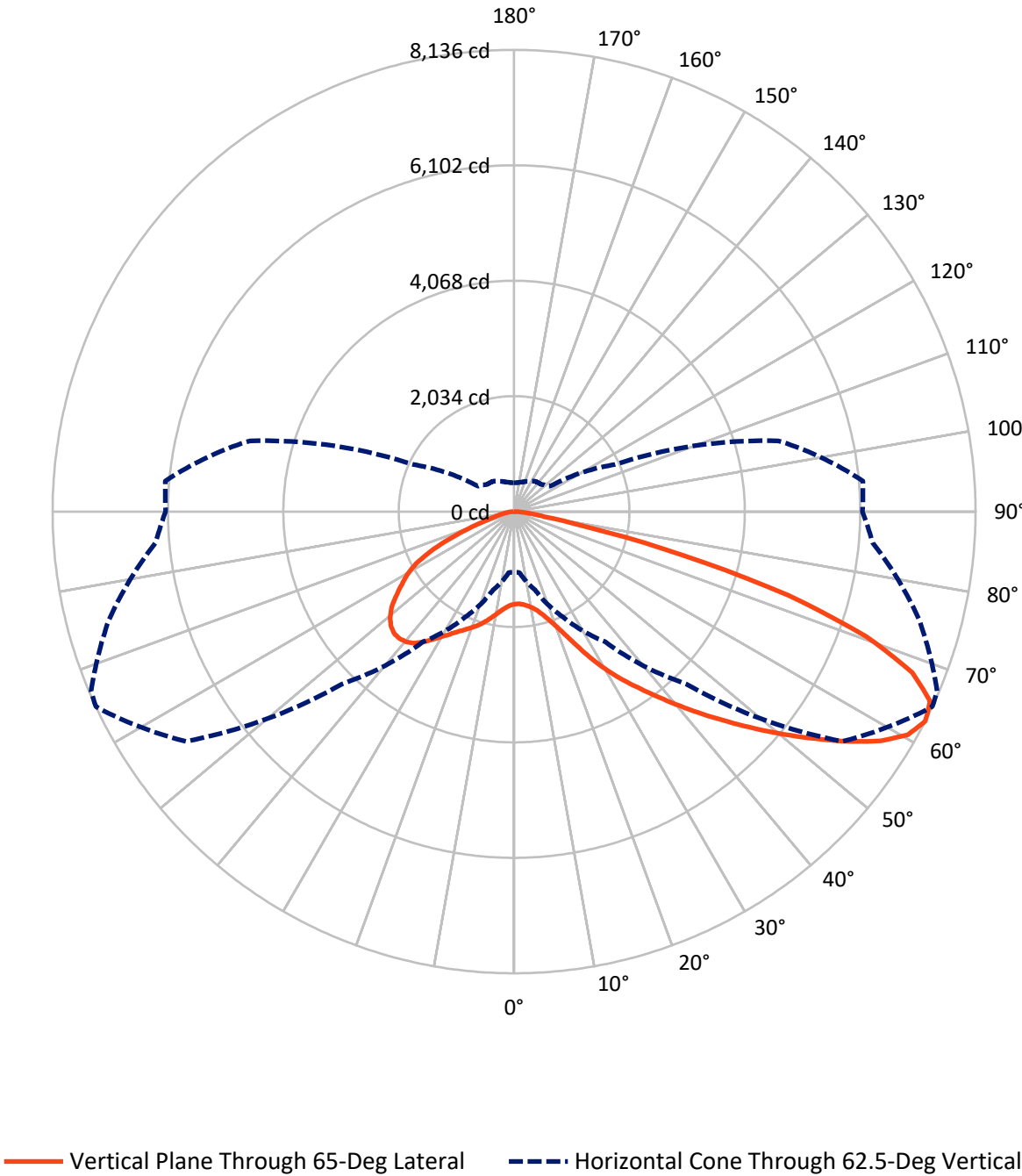


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc

Type II - Short - N/A

REPORT NUMBER: P963548
CATALOG NUMBER: NAV-SB3A-740-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P963548

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4667.3	0.0	4667.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	10123.4	0.0	10123.4
	% Fixture	68.4	0.0	68.4
Total	Lumens	14790.7	0.0	14790.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	1.1
10°-20°	551.0	3.7
20°-30°	1117.3	7.6
30°-40°	1933.5	13.1
40°-50°	2925.9	19.8
50°-60°	3430.5	23.2
60°-70°	2876.0	19.4
70°-80°	1587.8	10.7
80°-90°	206.3	1.4
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°	14790.7	100.0
0°-180°	14790.7	100.0

Coefficient of Utilization



REPORT NUMBER: P963548

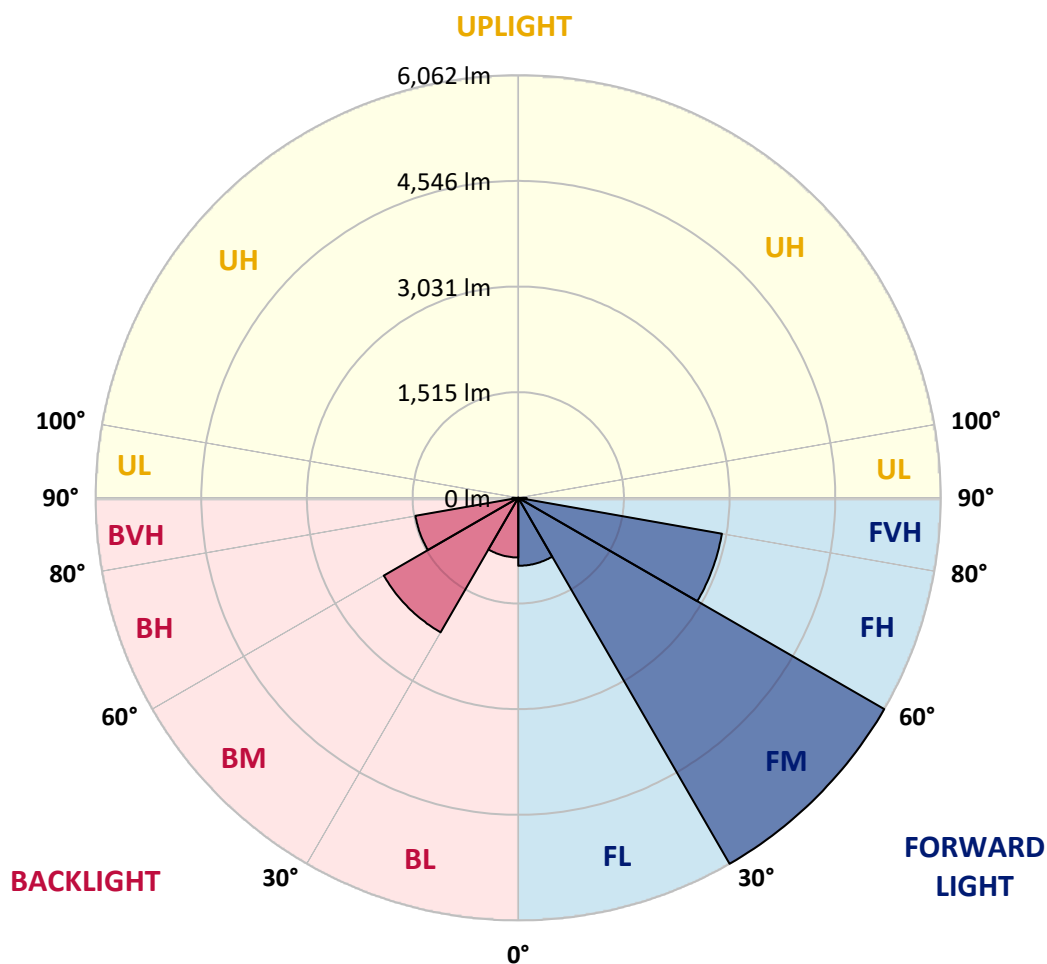
CATALOG NUMBER: NAV-SB3A-740-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	974.9	6.6			
FM	(30°-60°)	6061.7	41.0			
FH	(60°-80°)	2966.6	20.1			G2/5000
FVH	(80°-90°)	120.2	0.8			G2/225
BL	(0°-30°)	855.9	5.8	B2/1000		
BM	(30°-60°)	2228.1	15.1	B2/2500		
BH	(60°-80°)	1497.2	10.1	B3/2500		G3/2500
BVH	(80°-90°)	86.0	0.6			G1/100
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 Short



REPORT NUMBER: P963548

CATALOG NUMBER: NAV-SB3A-740-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9
2.5°	1619.1	1614.6	1618.4	1618.4	1619.9	1619.1	1624.5	1626.1	1628.3	1632.9	1632.9
5°	1603.0	1602.3	1609.1	1615.3	1621.4	1626.8	1633.7	1643.7	1645.2	1650.6	1657.5
7.5°	1597.7	1593.1	1603.8	1611.5	1626.1	1639.1	1657.5	1674.3	1681.3	1683.6	1696.7
10°	1639.1	1631.4	1641.4	1645.9	1658.2	1671.4	1692.8	1719.6	1727.3	1736.6	1751.1
12.5°	1709.7	1701.2	1715.8	1722.7	1734.2	1745.8	1760.3	1786.4	1790.3	1807.2	1820.9
15°	1806.4	1796.4	1805.6	1814.0	1833.2	1844.0	1858.5	1883.8	1883.8	1897.0	1906.9
17.5°	1937.6	1924.5	1931.4	1934.5	1946.8	1962.9	1987.5	2009.7	2021.2	2016.6	2002.8
20°	2133.2	2117.1	2117.1	2101.8	2097.1	2110.3	2142.5	2173.2	2185.4	2161.6	2127.9
22.5°	2427.2	2404.1	2391.1	2338.9	2318.2	2319.8	2352.0	2389.6	2399.5	2357.3	2281.3
25°	2800.9	2764.8	2747.2	2670.4	2623.6	2582.9	2608.2	2656.6	2670.4	2618.3	2495.5
27.5°	3174.5	3176.9	3160.0	3067.9	2990.4	2916.0	2902.9	2953.5	2968.2	2909.1	2757.1
30°	3698.7	3644.2	3612.0	3501.5	3391.0	3286.6	3232.8	3253.7	3257.4	3186.8	3010.3
32.5°	4150.6	4136.8	4067.8	3971.1	3829.1	3665.7	3575.9	3542.9	3536.8	3436.2	3226.8
35°	4665.6	4657.9	4585.0	4469.9	4316.4	4089.2	3927.4	3833.0	3825.3	3684.1	3440.8
37.5°	5188.9	5188.9	5117.5	4991.6	4832.9	4549.0	4302.6	4153.0	4128.4	3944.2	3658.7
40°	5606.3	5581.0	5594.0	5541.2	5359.2	5057.7	4719.3	4502.1	4469.1	4248.1	3890.5
42.5°	5843.4	5835.0	5913.3	5972.4	5898.0	5657.0	5178.2	4880.4	4834.4	4582.7	4157.6
45°	5896.4	5887.2	6026.9	6243.3	6347.6	6248.6	5677.0	5278.6	5222.7	4932.6	4443.8
47.5°	5774.4	5756.0	5960.9	6302.3	6636.9	6811.1	6217.1	5710.7	5629.4	5273.3	4737.7
50°	5407.6	5390.0	5699.9	6153.5	6734.4	7193.2	6803.4	6168.9	6044.5	5638.5	5034.7
52.5°	4610.3	4618.8	5104.5	5727.6	6606.2	7431.1	7308.4	6651.5	6501.9	6012.2	5313.2
55°	3591.3	3609.6	4206.7	4892.7	6093.6	7395.1	7652.9	7148.8	6999.8	6363.7	5601.0
57.5°	2571.4	2652.8	3212.1	3891.3	5109.1	6823.4	7728.1	7621.4	7477.2	6747.4	5882.6
60°	1666.8	1681.3	2256.8	2941.3	3890.5	5807.4	7575.4	7979.8	7867.0	7138.8	6118.2
62.5°	1068.2	1078.1	1428.8	2057.3	2800.1	4296.5	7061.2	8135.5	8101.1	7397.3	6344.5
65°	785.0	777.4	960.0	1359.8	1886.2	2649.7	6062.9	8060.4	8128.7	7559.3	6531.8
67.5°	655.3	644.6	734.4	941.6	1389.7	1504.8	4486.0	7571.6	7821.7	7540.8	6669.2
70°	597.0	587.8	642.3	699.0	1084.2	1007.6	2261.5	6582.4	6967.6	7331.4	6646.9
72.5°	505.7	489.5	564.1	620.8	843.4	772.7	934.7	5056.1	5525.8	6659.9	6333.8
75°	392.2	381.4	445.1	546.3	633.9	603.1	590.9	3070.2	3582.8	5150.5	5541.2
77.5°	310.8	296.2	354.5	425.9	570.1	455.0	430.5	1322.1	1830.1	3288.1	4146.0
80°	234.0	221.0	269.4	336.9	438.2	343.0	278.6	539.5	689.8	1665.9	2085.0
82.5°	166.6	155.0	188.0	247.1	294.7	307.7	171.1	302.4	340.0	642.3	465.8
85°	106.7	99.7	125.9	155.0	187.3	198.0	104.3	158.1	173.4	264.8	194.1
87.5°	58.3	47.6	67.5	72.2	86.7	79.0	49.9	57.5	62.1	95.9	82.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P963548

CATALOG NUMBER: NAV-SB3A-740-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9	1629.9
2.5°	1636.0	1638.4	1645.9	1648.3	1653.6	1660.6	1665.2	1669.8	1669.8	1674.3	1674.3
5°	1658.2	1663.7	1679.8	1688.2	1702.0	1715.8	1724.3	1734.2	1740.3	1743.4	1745.0
7.5°	1701.2	1709.7	1732.7	1747.3	1771.1	1790.3	1803.3	1817.1	1820.2	1828.6	1825.5
10°	1759.5	1769.6	1795.6	1823.3	1851.7	1875.4	1887.7	1897.7	1901.5	1903.0	1899.2
12.5°	1826.3	1840.9	1874.6	1908.4	1938.4	1959.1	1962.2	1959.8	1949.1	1939.9	1939.9
15°	1908.4	1921.5	1959.1	1995.9	2025.1	2028.9	2009.7	1997.4	1984.4	1982.1	1982.1
17.5°	2006.6	2013.5	2048.1	2084.1	2086.5	2073.4	2045.0	2033.5	2021.2	2012.8	2013.5
20°	2121.0	2118.7	2143.3	2158.5	2142.5	2102.6	2059.6	2040.4	2028.2	2018.1	2018.9
22.5°	2257.6	2239.9	2236.9	2233.1	2190.0	2106.4	2048.1	2023.6	2004.4	1990.5	1995.2
25°	2456.3	2388.8	2342.0	2315.9	2219.2	2085.7	2011.3	1956.7	1920.7	1897.0	1906.1
27.5°	2705.0	2591.4	2473.2	2409.5	2219.2	2043.4	1922.3	1834.0	1774.9	1750.4	1762.6
30°	2942.1	2823.2	2648.9	2522.3	2213.8	1974.5	1778.8	1656.0	1586.9	1562.3	1577.0
32.5°	3144.7	3014.9	2835.4	2645.8	2200.8	1862.4	1600.7	1464.9	1398.1	1369.0	1383.5
35°	3332.7	3194.5	3022.6	2781.6	2166.2	1698.2	1405.1	1301.4	1227.0	1180.2	1195.6
37.5°	3525.3	3361.1	3199.9	2904.4	2104.1	1506.3	1254.6	1166.3	1078.9	1016.0	1032.9
40°	3734.8	3538.3	3389.5	2977.3	2002.0	1323.7	1138.0	1057.4	964.5	897.8	910.8
42.5°	3979.6	3750.9	3600.4	3014.9	1862.4	1194.0	1062.0	983.0	895.5	841.0	851.8
45°	4235.1	3984.9	3793.1	3014.2	1706.6	1133.3	1037.5	959.2	862.5	805.8	815.0
47.5°	4502.9	4229.7	3959.6	2965.1	1571.5	1141.8	1023.7	907.7	801.1	745.9	753.6
50°	4771.5	4497.5	4120.7	2873.0	1514.0	1123.4	972.2	835.7	709.8	659.9	663.0
52.5°	5037.8	4782.2	4259.6	2741.8	1455.7	1055.1	906.3	742.0	672.2	637.7	637.7
55°	5305.5	5063.8	4410.8	2550.7	1309.8	975.3	795.7	706.7	642.3	610.8	607.7
57.5°	5574.2	5389.1	4554.3	2359.7	1126.5	877.1	735.1	663.8	612.3	585.5	580.9
60°	5853.5	5761.3	4702.4	2183.9	945.4	751.2	690.6	629.2	577.1	547.1	544.8
62.5°	6141.2	6171.1	4818.2	1957.5	778.9	674.6	650.8	587.8	537.2	508.8	508.0
65°	6431.3	6566.4	4894.3	1643.7	631.5	601.6	607.7	542.5	491.1	466.6	465.8
67.5°	6650.0	6851.0	4872.7	1243.9	517.9	532.6	554.0	495.0	446.6	427.4	428.1
70°	6674.5	6817.3	4661.0	851.8	433.6	465.0	494.2	448.1	398.2	384.5	385.2
72.5°	6347.6	6356.8	4070.9	556.4	366.8	408.3	431.2	400.6	352.2	338.5	337.6
75°	5490.5	5257.2	2988.9	366.8	307.0	350.7	372.2	350.7	303.9	307.0	296.2
77.5°	4159.9	3723.2	1814.8	260.9	256.2	294.7	323.8	308.5	268.5	301.6	265.5
80°	2143.3	2014.3	809.5	195.0	202.5	235.5	266.3	246.3	212.6	202.5	184.9
82.5°	491.1	570.9	319.2	139.7	146.6	169.6	203.4	184.9	152.7	128.9	127.4
85°	171.9	188.0	141.2	87.4	85.9	105.9	138.2	123.5	103.6	82.9	87.4
87.5°	54.5	71.3	53.0	35.3	36.8	47.6	63.7	58.3	48.4	31.5	33.0
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)