

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: P960870

Luminaire Tested: **NAV-SB1D-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960870
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-SB1D-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10197.7 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 79.6
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



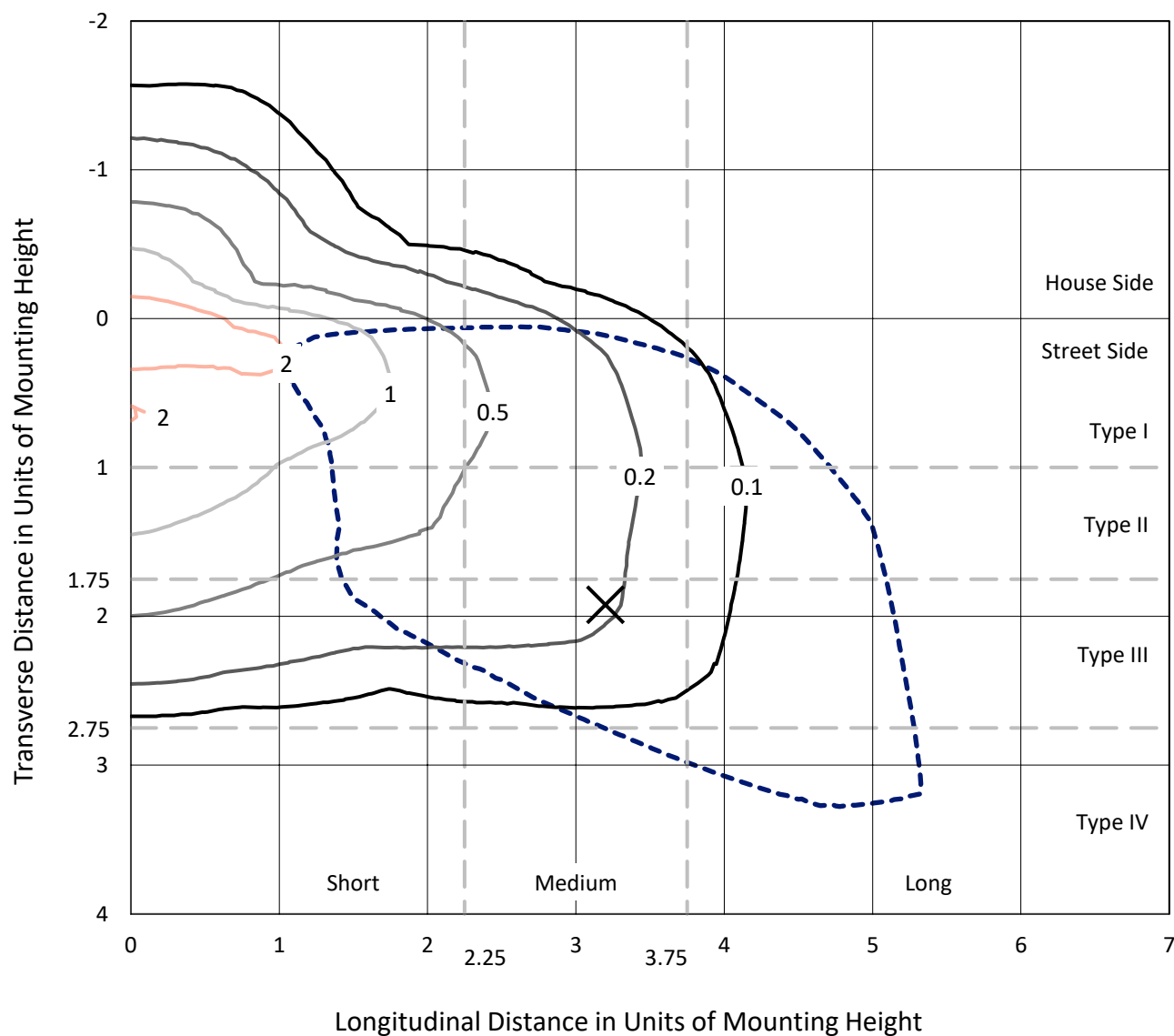
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

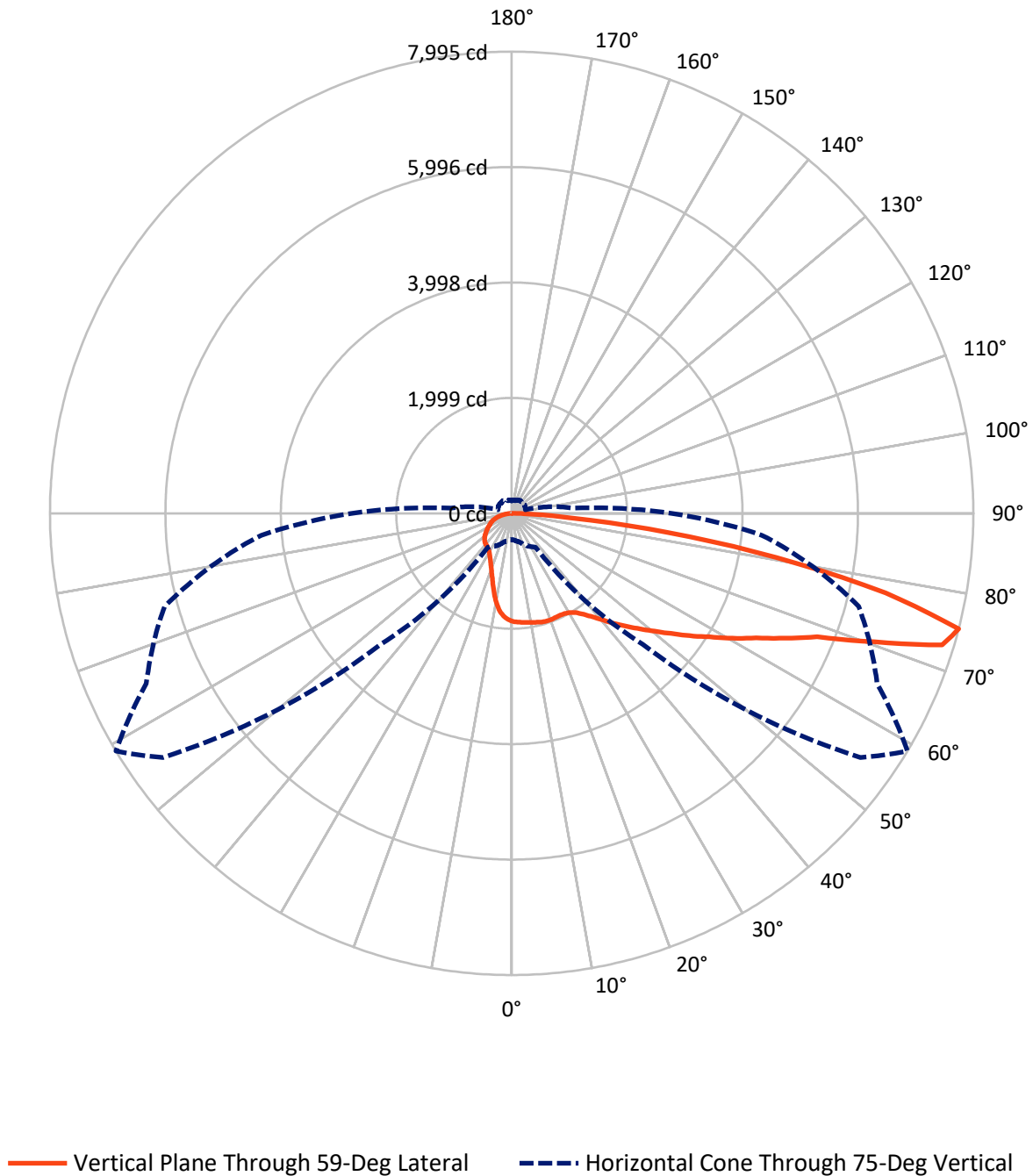
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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	1912.6	0.0	1912.6
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	8285.1	0.0	8285.1
	% Fixture	81.2	0.0	81.2
Total	Lumens	10197.7	0.0	10197.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	1.6
10°-20°	429.0	4.2
20°-30°	651.6	6.4
30°-40°	968.6	9.5
40°-50°	1440.5	14.1
50°-60°	1955.3	19.2
60°-70°	2387.1	23.4
70°-80°	1873.3	18.4
80°-90°	324.5	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°	10197.7	100.0
0°-180°	10197.7	100.0

Coefficient of Utilization



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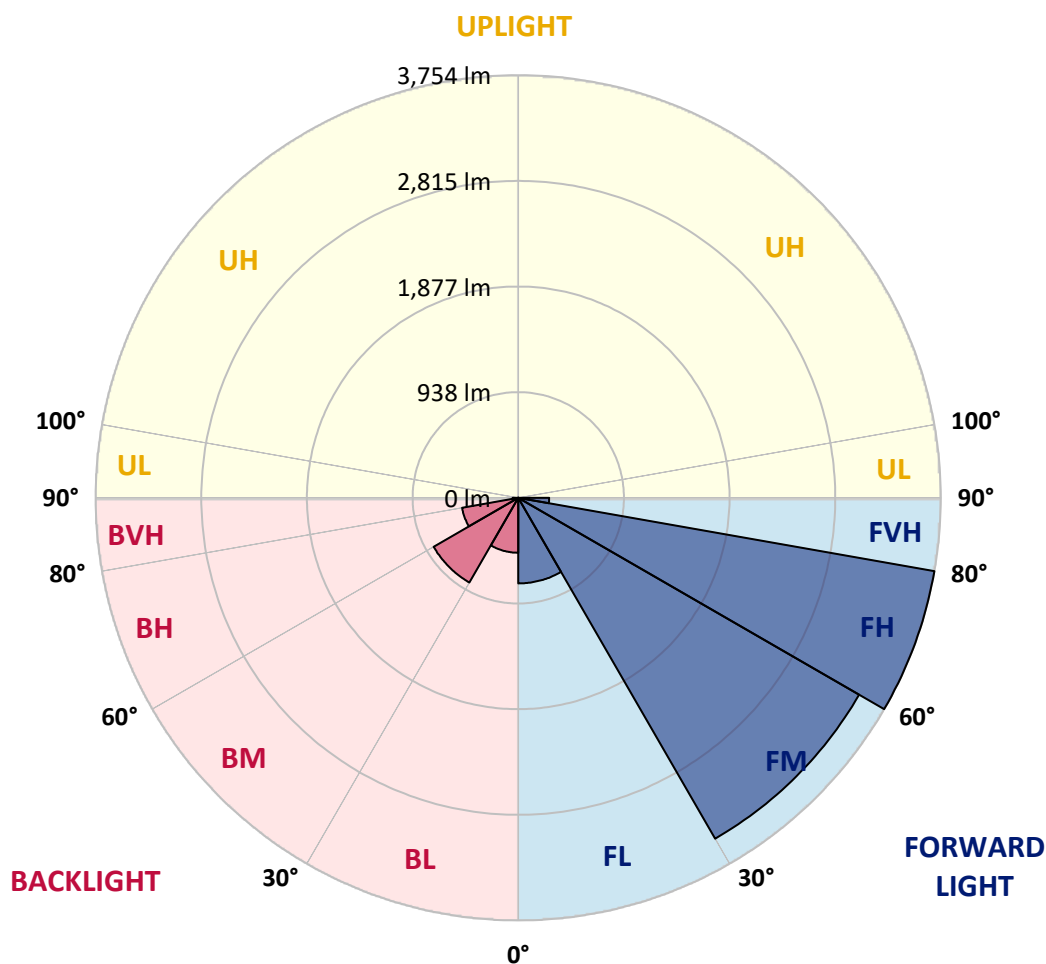
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	760.3	7.5			
FM	(30°-60°)	3496.2	34.3			
FH	(60°-80°)	3753.7	36.8			G2/5000
FVH	(80°-90°)	274.8	2.7			G3/500
BL	(0°-30°)	488.1	4.8	B1/500		
BM	(30°-60°)	868.2	8.5	B1/1000		
BH	(60°-80°)	506.7	5.0	B2/1000		G2/1000
BVH	(80°-90°)	49.7	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-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8
2.5°	1887.6	1881.1	1887.6	1885.0	1883.8	1881.7	1882.2	1886.0	1883.8	1886.6	1877.3
5°	1875.0	1871.2	1877.8	1876.2	1883.3	1884.4	1891.5	1895.9	1898.6	1899.2	1892.0
7.5°	1854.2	1850.3	1859.7	1867.3	1882.7	1887.1	1902.0	1909.1	1913.0	1919.5	1909.1
10°	1778.0	1776.3	1799.4	1828.4	1864.7	1887.1	1909.6	1921.7	1927.7	1945.2	1933.3
12.5°	1643.0	1645.2	1675.4	1731.3	1803.8	1876.2	1918.4	1935.9	1945.2	1967.2	1961.7
15°	1514.1	1513.5	1546.4	1606.3	1707.8	1827.9	1922.8	1952.9	1968.8	2001.2	1996.8
17.5°	1439.5	1437.3	1460.3	1505.8	1600.2	1753.8	1911.8	1962.3	1996.3	2036.9	2033.1
20°	1425.8	1421.4	1433.5	1455.9	1522.8	1672.6	1883.3	1962.3	2018.2	2070.9	2068.8
22.5°	1475.7	1468.5	1463.6	1460.8	1490.5	1605.7	1850.9	1955.7	2050.6	2119.7	2115.9
25°	1576.0	1565.1	1539.9	1515.2	1506.4	1575.5	1822.3	1954.1	2098.9	2185.6	2171.3
27.5°	1738.5	1724.8	1673.7	1614.5	1561.3	1590.9	1809.7	1963.9	2152.1	2255.2	2226.7
30°	1939.8	1925.0	1860.8	1769.8	1674.2	1648.0	1825.7	1993.0	2220.1	2348.0	2292.0
32.5°	2120.3	2103.8	2049.0	1956.2	1827.4	1746.7	1876.2	2048.5	2327.1	2476.8	2390.2
35°	2280.4	2261.3	2211.8	2126.4	2014.9	1885.5	1967.2	2146.7	2479.1	2686.4	2523.4
37.5°	2437.3	2414.9	2361.1	2270.6	2192.7	2070.4	2092.8	2272.8	2680.9	2940.9	2700.2
40°	2612.9	2580.5	2515.2	2425.9	2350.1	2287.1	2258.0	2427.5	2886.1	3225.2	2920.6
42.5°	2783.0	2752.2	2674.3	2598.1	2503.2	2485.1	2449.4	2608.5	3110.5	3537.3	3144.5
45°	2966.1	2929.4	2835.0	2738.5	2678.7	2616.7	2634.9	2789.5	3330.4	3855.4	3379.3
47.5°	3137.9	3096.7	2985.4	2877.9	2845.0	2727.5	2804.9	2988.7	3559.2	4178.0	3611.9
50°	3230.6	3190.0	3097.3	3000.2	2974.4	2864.2	2989.2	3207.5	3799.0	4499.4	3835.1
52.5°	3308.0	3264.1	3142.9	3089.0	3081.4	3012.8	3216.3	3457.7	4038.7	4783.7	4050.7
55°	3390.3	3341.4	3186.7	3138.4	3173.6	3179.5	3485.7	3741.4	4292.1	5060.7	4254.3
57.5°	3485.2	3423.2	3229.0	3180.2	3263.5	3374.9	3795.1	4035.4	4541.2	5317.4	4435.3
60°	3574.6	3512.1	3310.1	3246.5	3360.7	3601.4	4150.0	4391.4	4823.1	5546.2	4606.5
62.5°	3592.1	3540.6	3374.9	3374.3	3492.3	3865.9	4570.3	4750.8	5069.4	5772.2	4760.1
65°	3288.2	3255.8	3157.6	3369.4	3681.0	4246.6	5038.2	5210.5	5382.7	5969.7	4895.0
67.5°	2502.6	2507.0	2499.9	2908.6	3528.5	4793.5	5715.7	5702.5	5769.4	6191.3	5050.3
70°	1144.3	1170.1	1338.0	2007.8	2826.8	4856.7	6835.9	6665.3	6255.0	6478.2	5184.7
72.5°	618.3	638.0	706.5	972.6	1699.6	4317.9	7673.0	7794.3	6900.6	6671.3	5037.1
75°	453.7	464.6	512.4	618.3	713.7	3209.2	7372.9	7995.1	6981.3	6220.9	4349.7
77.5°	339.6	344.5	383.5	489.8	365.3	1691.9	5891.3	6621.4	5976.3	5111.2	3213.1
80°	246.3	251.8	280.8	367.6	256.1	618.8	4045.3	4647.7	4093.0	3258.1	1601.4
82.5°	170.0	172.3	184.9	250.2	178.9	240.3	2295.3	2725.4	2284.8	1143.3	432.2
85°	102.6	105.4	110.8	146.0	101.5	114.1	990.8	1024.8	683.0	273.2	134.4
87.5°	42.2	45.0	49.4	61.4	40.1	31.8	163.5	205.2	127.8	80.1	41.7
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°	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8	1871.8
2.5°	1874.5	1870.6	1860.3	1846.0	1832.8	1816.4	1809.2	1803.2	1797.7	1787.3	1782.4
5°	1886.0	1875.6	1847.7	1811.4	1770.3	1725.3	1681.4	1651.3	1625.4	1606.3	1590.4
7.5°	1903.6	1883.8	1832.8	1758.8	1664.4	1567.8	1480.6	1418.6	1372.0	1355.0	1325.4
10°	1921.7	1898.1	1809.2	1678.6	1515.8	1367.0	1251.3	1187.7	1150.4	1138.3	1119.7
12.5°	1943.1	1908.5	1772.4	1567.3	1349.5	1186.5	1085.7	1048.4	1029.1	1022.5	1024.2
15°	1974.4	1917.3	1717.1	1427.9	1190.9	1054.9	989.6	963.9	954.0	953.5	955.6
17.5°	1997.9	1918.9	1631.0	1278.8	1069.2	975.4	921.6	911.7	918.3	928.2	932.0
20°	2024.3	1904.1	1517.9	1142.7	983.6	905.7	883.2	889.8	905.7	919.9	925.0
22.5°	2042.9	1877.3	1381.3	1036.8	909.6	865.7	864.6	878.3	887.0	894.2	898.0
25°	2059.4	1831.7	1236.6	947.9	848.7	841.5	853.6	849.2	843.2	849.2	853.0
27.5°	2071.4	1759.8	1107.0	870.0	805.9	825.0	817.9	808.1	807.5	810.8	816.3
30°	2067.6	1663.9	1000.6	796.0	775.7	794.4	777.4	775.7	774.1	775.7	781.8
32.5°	2067.6	1554.7	918.9	745.0	756.4	749.4	747.7	743.8	737.3	736.8	743.8
35°	2079.1	1445.6	848.7	717.5	740.6	723.5	724.7	715.3	701.6	695.1	701.6
37.5°	2102.7	1357.7	779.0	704.4	712.6	712.1	707.7	691.8	667.6	646.8	653.9
40°	2159.8	1332.0	731.2	698.3	699.5	706.0	694.5	663.8	609.0	574.9	579.3
42.5°	2249.2	1375.3	720.9	683.6	690.6	697.2	674.8	603.4	564.5	544.2	544.2
45°	2362.7	1451.0	743.3	662.2	669.8	681.3	614.4	580.4	562.8	563.4	566.1
47.5°	2506.4	1530.5	785.0	643.5	639.6	646.3	574.4	553.5	529.4	535.5	550.7
50°	2672.7	1611.2	824.5	618.3	606.2	584.8	548.6	528.8	498.2	483.9	487.7
52.5°	2852.7	1689.1	840.4	587.5	570.0	545.3	531.1	506.9	469.6	446.0	445.5
55°	3023.2	1759.8	822.9	550.7	533.8	514.6	512.4	497.5	457.6	424.6	424.6
57.5°	3184.6	1819.1	779.0	513.5	497.0	485.5	500.3	493.1	442.7	400.5	398.3
60°	3321.1	1859.7	715.3	475.6	464.1	458.1	480.5	478.4	421.9	374.6	373.0
62.5°	3429.8	1875.6	645.1	439.4	436.6	425.7	453.2	453.2	395.5	349.4	347.8
65°	3514.8	1860.3	573.8	403.7	409.3	392.8	419.6	416.4	367.6	327.0	324.7
67.5°	3590.0	1809.7	494.9	368.7	381.3	360.4	384.6	376.9	336.8	304.4	302.3
70°	3623.4	1692.4	404.9	333.5	348.9	328.6	349.4	335.2	302.3	280.3	275.9
72.5°	3354.6	1406.6	318.8	296.7	310.0	293.5	311.6	295.1	265.0	255.1	246.8
75°	2775.3	1055.4	245.2	256.8	266.6	254.0	266.1	254.0	226.5	233.7	213.4
77.5°	2015.5	712.6	187.6	214.5	218.8	212.3	222.7	209.0	184.3	182.7	174.5
80°	1002.2	417.5	147.0	169.5	167.9	163.5	175.6	168.9	148.1	156.9	155.3
82.5°	290.2	178.9	107.0	119.0	115.7	116.8	125.7	128.9	193.1	191.5	195.9
85°	91.0	70.2	64.2	66.4	63.0	64.8	74.1	147.0	136.0	79.5	86.1
87.5°	23.6	24.1	15.9	17.0	17.5	20.8	23.6	89.4	42.7	28.0	29.6
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)