

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: P963629

Luminaire Tested: **NAV-SB3A-827-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963629
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-SB3A-827-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 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: 11724 lumens
Efficiency: N/A
Efficacy: 138.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

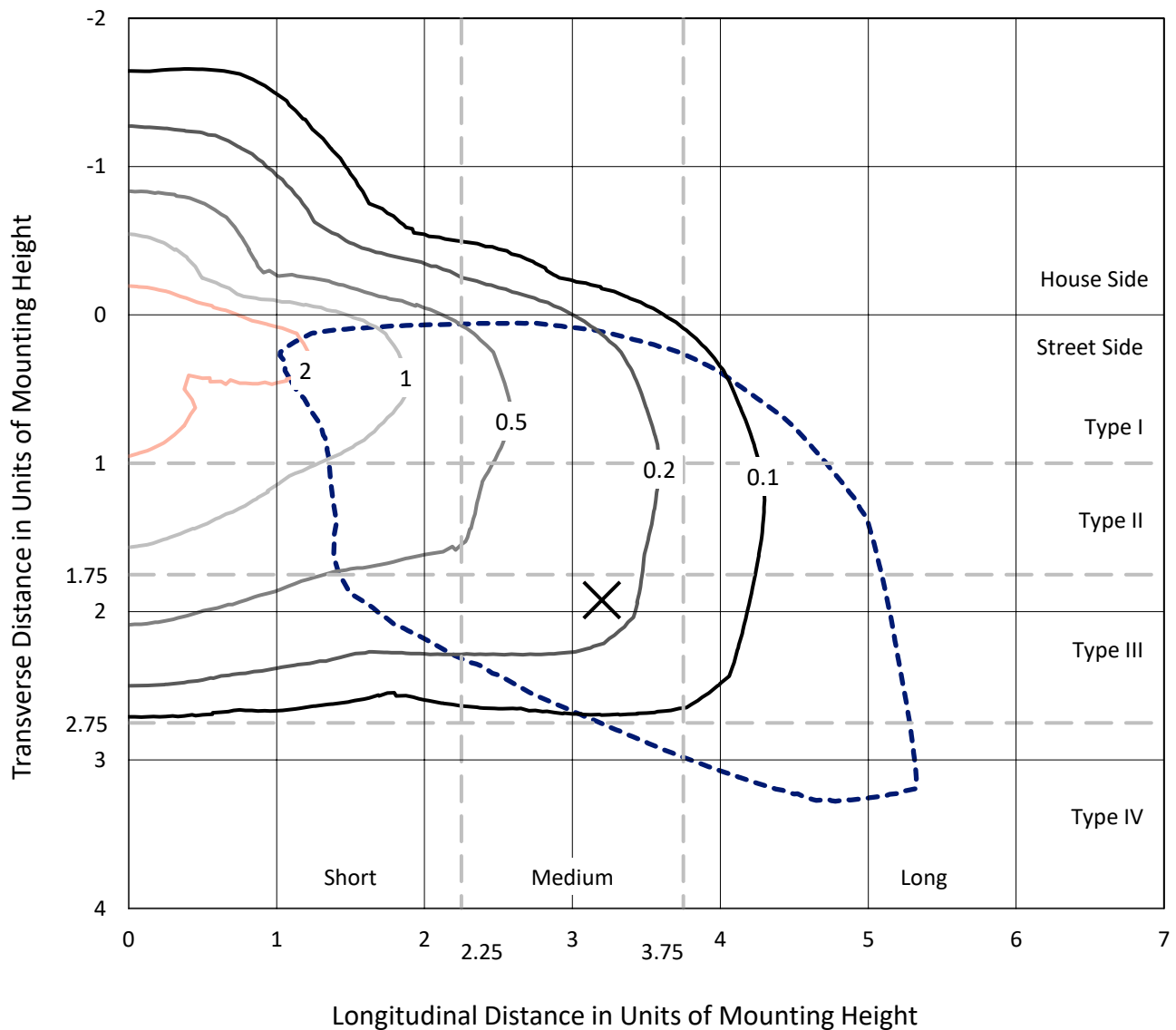
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

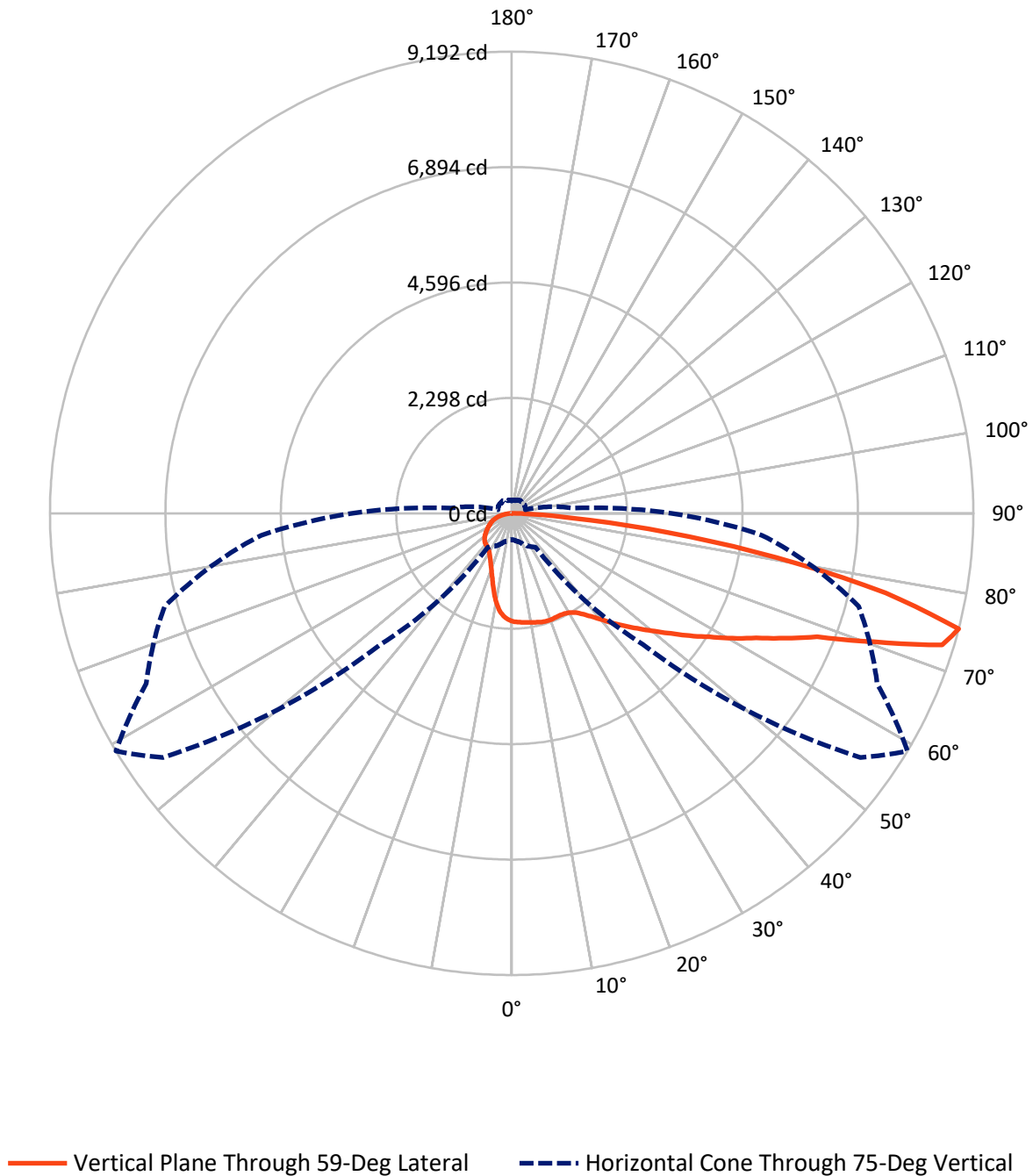
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2198.9	0.0	2198.9
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	9525.1	0.0	9525.1
	% Fixture	81.2	0.0	81.2
Total	Lumens	11724.0	0.0	11724.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.0	1.6
10°-20°	493.2	4.2
20°-30°	749.1	6.4
30°-40°	1113.6	9.5
40°-50°	1656.1	14.1
50°-60°	2247.9	19.2
60°-70°	2744.3	23.4
70°-80°	2153.7	18.4
80°-90°	373.1	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°	11724.0	100.0
0°-180°	11724.0	100.0

Coefficient of Utilization



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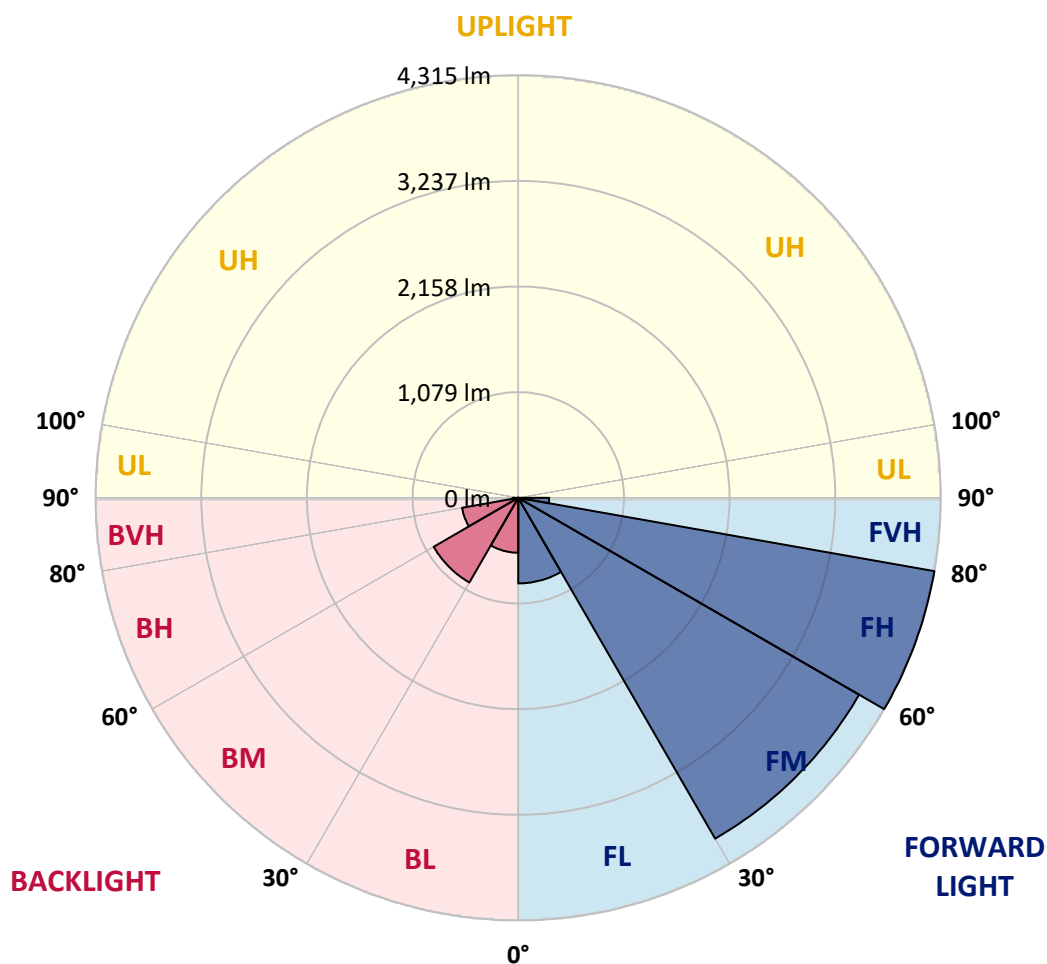
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	874.1	7.5			
FM	(30°-60°)	4019.5	34.3			
FH	(60°-80°)	4315.5	36.8			G2/5000
FVH	(80°-90°)	316.0	2.7			G3/500
BL	(0°-30°)	561.1	4.8	B2/1000		
BM	(30°-60°)	998.1	8.5	B1/1000		
BH	(60°-80°)	582.6	5.0	B2/1000		G2/1000
BVH	(80°-90°)	57.1	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°	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9
2.5°	2170.2	2162.6	2170.2	2167.1	2165.8	2163.3	2163.9	2168.3	2165.8	2168.9	2158.2
5°	2155.7	2151.3	2158.9	2156.9	2165.1	2166.4	2174.6	2179.7	2182.8	2183.5	2175.3
7.5°	2131.7	2127.3	2138.0	2146.9	2164.5	2169.5	2186.6	2194.8	2199.2	2206.8	2194.8
10°	2044.1	2042.2	2068.7	2102.1	2143.7	2169.5	2195.4	2209.3	2216.3	2236.4	2222.5
12.5°	1888.9	1891.4	1926.1	1990.4	2073.7	2156.9	2205.5	2225.7	2236.4	2261.7	2255.3
15°	1740.7	1740.0	1777.9	1846.6	1963.3	2101.5	2210.5	2245.3	2263.5	2300.7	2295.7
17.5°	1655.0	1652.4	1678.8	1731.2	1839.7	2016.3	2197.9	2255.9	2295.1	2341.7	2337.3
20°	1639.2	1634.2	1648.0	1673.8	1750.8	1923.0	2165.1	2255.9	2320.3	2380.9	2378.3
22.5°	1696.6	1688.4	1682.6	1679.6	1713.6	1846.0	2127.9	2248.4	2357.5	2436.9	2432.5
25°	1812.0	1799.4	1770.4	1742.0	1731.8	1811.4	2095.1	2246.5	2413.1	2512.7	2496.3
27.5°	1998.6	1982.9	1924.2	1856.1	1795.0	1829.0	2080.6	2257.9	2474.1	2592.7	2559.9
30°	2230.1	2213.1	2139.3	2034.6	1924.8	1894.6	2098.9	2291.3	2552.4	2699.3	2635.0
32.5°	2437.7	2418.7	2355.7	2249.1	2100.8	2008.1	2156.9	2354.9	2675.4	2847.6	2747.9
35°	2621.7	2599.7	2542.9	2444.5	2316.5	2167.7	2261.7	2467.9	2850.1	3088.4	2901.2
37.5°	2802.1	2776.3	2714.5	2610.4	2520.9	2380.3	2406.1	2612.9	3082.2	3381.1	3104.2
40°	3004.0	2966.8	2891.7	2788.9	2701.9	2629.3	2595.9	2790.8	3318.0	3707.8	3357.8
42.5°	3199.4	3164.2	3074.6	2987.0	2877.8	2857.0	2816.0	2998.9	3576.0	4066.7	3615.1
45°	3410.2	3367.8	3259.4	3148.4	3079.6	3008.4	3029.2	3207.0	3828.9	4432.5	3885.1
47.5°	3607.5	3560.2	3432.2	3308.6	3270.8	3135.8	3224.8	3436.0	4091.9	4803.4	4152.5
50°	3714.1	3667.4	3560.8	3449.2	3419.6	3292.8	3436.6	3687.6	4367.5	5172.9	4409.1
52.5°	3803.1	3752.6	3613.2	3551.4	3542.6	3463.8	3697.7	3975.3	4643.1	5499.6	4657.0
55°	3897.7	3841.5	3663.7	3608.2	3648.5	3655.5	4007.3	4301.3	4934.5	5818.1	4891.0
57.5°	4006.7	3935.5	3712.2	3656.1	3751.9	3880.0	4363.1	4639.4	5220.8	6113.2	5099.1
60°	4109.5	4037.7	3805.5	3732.4	3863.6	4140.5	4771.2	5048.6	5545.0	6376.2	5295.9
62.5°	4129.7	4070.5	3880.0	3879.3	4014.9	4444.5	5254.3	5461.7	5828.2	6636.1	5472.5
65°	3780.3	3743.1	3630.2	3873.7	4231.9	4882.2	5792.3	5990.3	6188.3	6863.1	5627.7
67.5°	2877.2	2882.2	2874.0	3343.9	4056.5	5510.9	6571.2	6556.0	6633.0	7117.9	5806.1
70°	1315.6	1345.2	1538.2	2308.3	3250.0	5583.5	7859.0	7662.9	7191.1	7447.8	5960.6
72.5°	710.7	733.5	812.3	1118.2	1953.9	4964.2	8821.5	8960.8	7933.4	7669.8	5790.9
75°	521.6	534.2	589.1	710.7	820.5	3689.5	8476.4	9191.6	8026.2	7152.0	5000.8
77.5°	390.4	396.1	440.9	563.2	420.0	1945.0	6773.0	7612.4	6870.7	5876.1	3693.9
80°	283.2	289.5	322.9	422.6	294.5	711.5	4650.7	5343.2	4705.6	3745.7	1841.0
82.5°	195.5	198.0	212.6	287.6	205.6	276.2	2638.8	3133.2	2626.8	1314.4	497.0
85°	118.0	121.1	127.4	167.8	116.6	131.2	1139.0	1178.1	785.3	314.1	154.5
87.5°	48.6	51.8	56.8	70.6	46.0	36.6	188.0	235.9	147.0	92.0	48.0
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°	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9	2151.9
2.5°	2155.1	2150.7	2138.7	2122.3	2107.1	2088.2	2080.0	2073.1	2066.8	2054.8	2049.1
5°	2168.3	2156.3	2124.1	2082.5	2035.2	1983.5	1933.0	1898.4	1868.7	1846.6	1828.4
7.5°	2188.5	2165.8	2107.1	2022.0	1913.5	1802.5	1702.2	1631.0	1577.4	1557.8	1523.8
10°	2209.3	2182.2	2080.0	1929.9	1742.6	1571.6	1438.6	1365.4	1322.6	1308.7	1287.2
12.5°	2233.9	2194.1	2037.7	1801.8	1551.4	1364.2	1248.1	1205.2	1183.2	1175.6	1177.5
15°	2269.9	2204.3	1974.0	1641.6	1369.2	1212.8	1137.8	1108.1	1096.8	1096.1	1098.7
17.5°	2296.9	2206.1	1875.0	1470.2	1229.2	1121.4	1059.5	1048.2	1055.8	1067.1	1071.5
20°	2327.3	2189.1	1745.1	1313.7	1130.8	1041.3	1015.4	1023.0	1041.3	1057.7	1063.3
22.5°	2348.7	2158.2	1588.0	1192.0	1045.7	995.3	993.9	1009.7	1019.8	1028.0	1032.5
25°	2367.6	2105.9	1421.6	1089.8	975.7	967.5	981.3	976.3	969.3	976.3	980.7
27.5°	2381.5	2023.2	1272.7	1000.3	926.5	948.5	940.3	929.0	928.3	932.1	938.5
30°	2377.1	1912.9	1150.4	915.1	891.7	913.3	893.7	891.7	889.9	891.7	898.7
32.5°	2377.1	1787.4	1056.4	856.5	869.7	861.5	859.7	855.3	847.7	847.1	855.3
35°	2390.3	1661.8	975.7	824.9	851.5	831.9	833.1	822.5	806.7	799.1	806.7
37.5°	2417.5	1561.0	895.5	809.9	819.3	818.7	813.5	795.3	767.5	743.5	751.7
40°	2483.1	1531.4	840.7	802.9	804.1	811.7	798.5	763.1	700.1	660.9	666.0
42.5°	2585.8	1581.2	828.7	785.9	794.1	801.7	775.7	693.7	648.9	625.7	625.7
45°	2716.4	1668.2	854.5	761.3	770.1	783.3	706.3	667.3	647.1	647.7	650.9
47.5°	2881.6	1759.6	902.5	739.8	735.3	742.9	660.3	636.3	608.6	615.5	633.2
50°	3072.7	1852.3	947.9	710.7	696.9	672.3	630.7	608.0	572.7	556.3	560.7
52.5°	3279.6	1941.9	966.2	675.5	655.3	626.9	610.5	582.7	539.9	512.7	512.1
55°	3475.7	2023.2	946.1	633.2	613.7	591.6	589.1	572.1	526.0	488.1	488.1
57.5°	3661.1	2091.4	895.5	590.3	571.4	558.1	575.2	567.0	509.0	460.4	457.9
60°	3818.2	2138.0	822.5	546.8	533.5	526.6	552.5	549.9	485.0	430.8	428.9
62.5°	3943.1	2156.3	741.7	505.2	502.0	489.4	520.9	520.9	454.7	401.7	399.9
65°	4040.9	2138.7	659.7	464.2	470.5	451.6	482.5	478.7	422.6	375.9	373.4
67.5°	4127.3	2080.6	568.9	423.8	438.3	414.4	442.1	433.3	387.2	350.0	347.5
70°	4165.7	1945.7	465.5	383.5	401.1	377.8	401.7	385.4	347.5	322.3	317.2
72.5°	3856.7	1617.0	366.4	341.2	356.3	337.4	358.2	339.3	304.6	293.3	283.8
75°	3190.6	1213.4	281.9	295.2	306.5	292.0	305.9	292.0	260.5	268.7	245.4
77.5°	2317.1	819.3	215.7	246.6	251.6	244.1	256.0	240.3	211.9	210.0	200.6
80°	1152.3	479.9	169.0	194.9	193.0	188.0	201.8	194.2	170.3	180.4	178.5
82.5°	333.6	205.6	123.0	136.8	133.0	134.4	144.4	148.2	222.0	220.1	225.2
85°	104.7	80.8	73.8	76.4	72.6	74.4	85.2	169.0	156.4	91.4	99.0
87.5°	27.2	27.8	18.2	19.6	20.2	24.0	27.2	102.8	49.2	32.2	34.0
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)