

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: P964040

Luminaire Tested: **NAV-SB3B-735-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964040
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12645.4 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

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

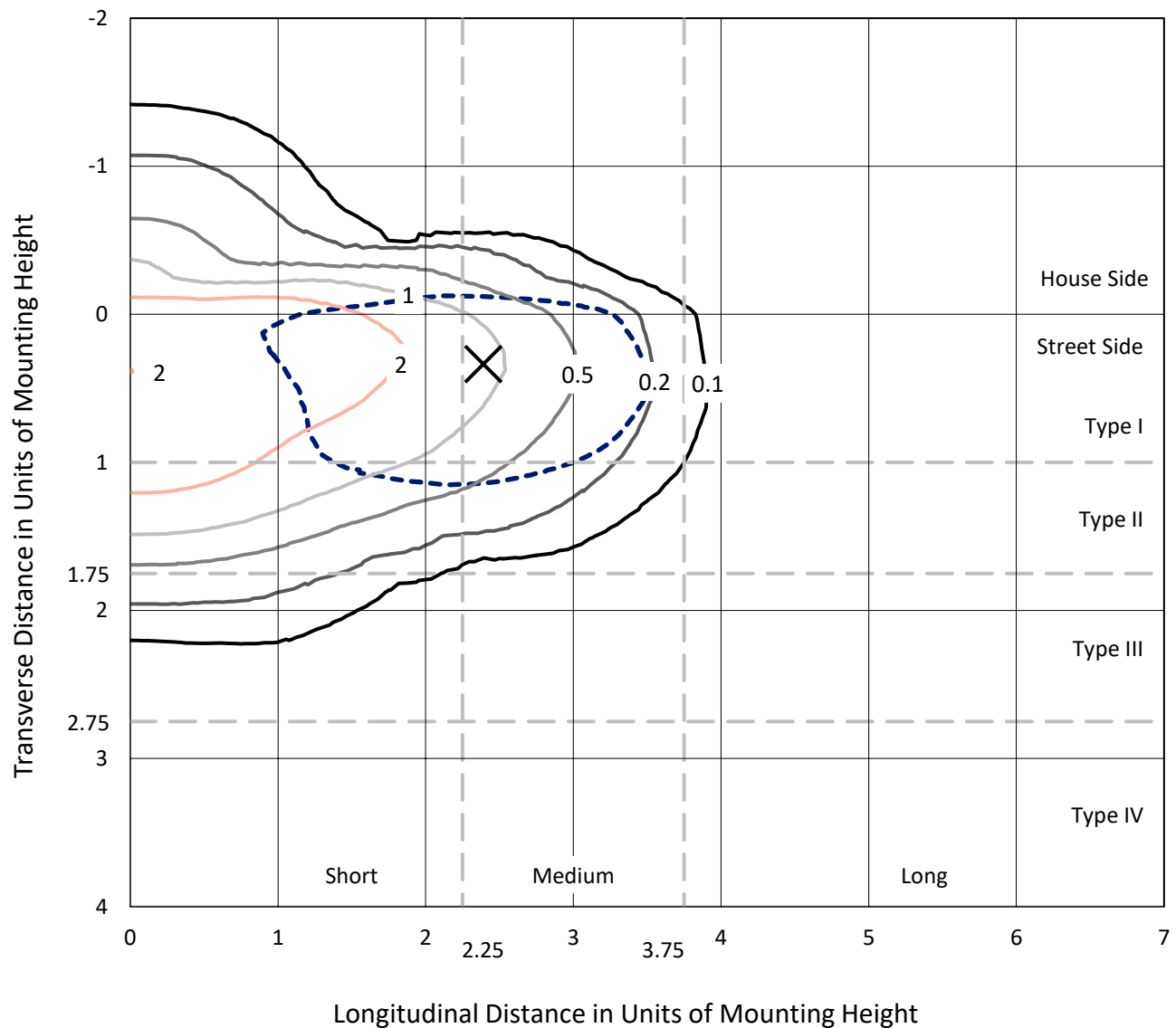


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Iso-Footcandle Lines of Horizontal Illumination

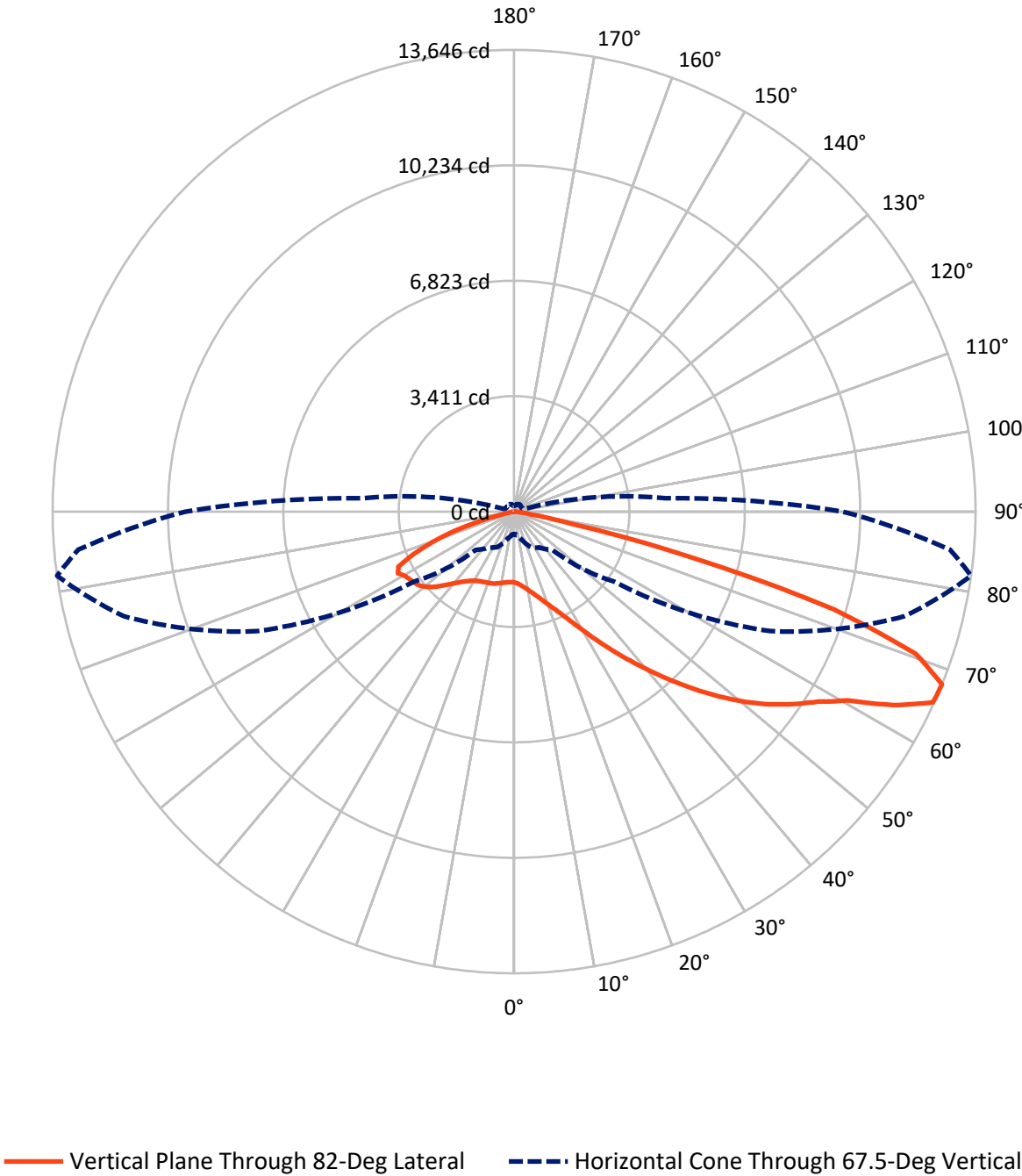
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2290.6	0.0	2290.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10354.8	0.0	10354.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	12645.4	0.0	12645.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	1.5
10°-20°	485.0	3.8
20°-30°	776.8	6.1
30°-40°	1373.7	10.9
40°-50°	2406.8	19.0
50°-60°	3210.0	25.4
60°-70°	2988.3	23.6
70°-80°	1146.9	9.1
80°-90°	71.2	0.6
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°	12645.4	100.0
0°-180°	12645.4	100.0

Coefficient of Utilization



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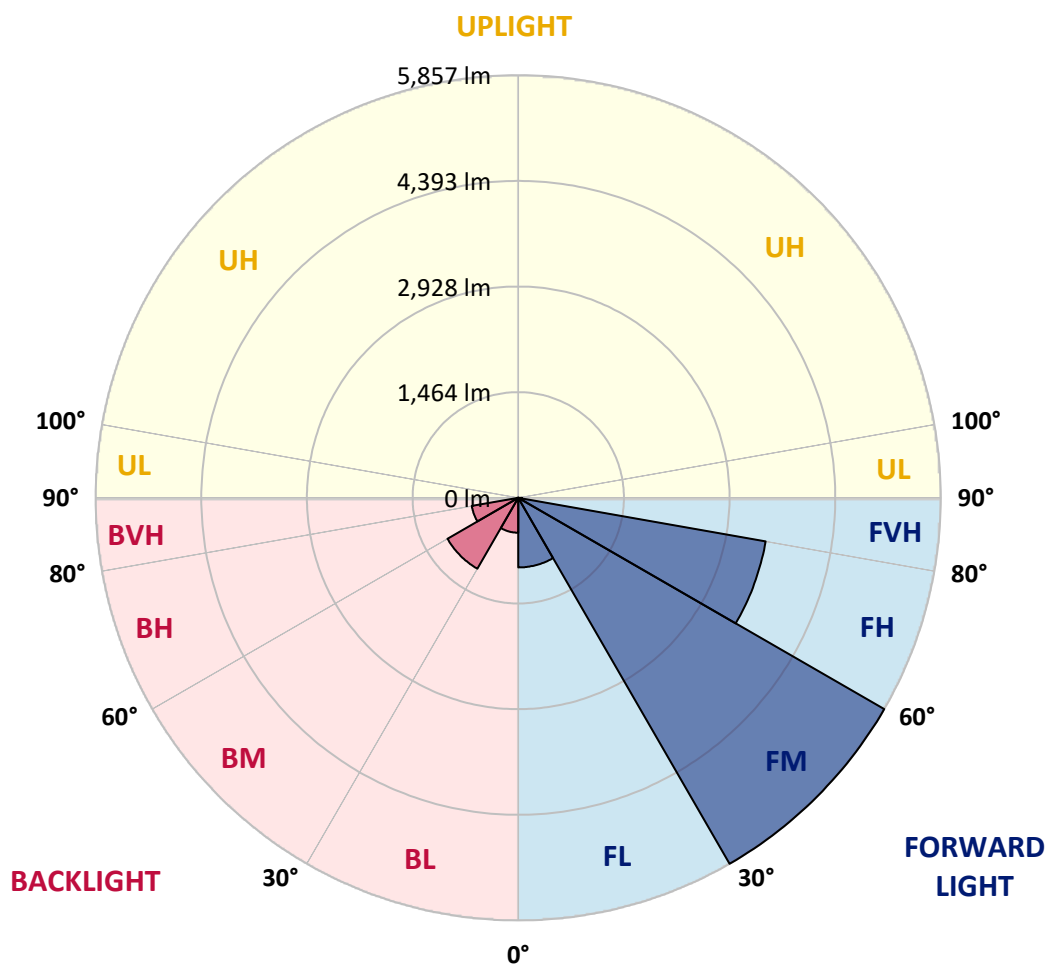
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	964.7	7.6			
FM	(30°-60°)	5856.8	46.3			
FH	(60°-80°)	3481.5	27.5			G2/5000
FVH	(80°-90°)	51.8	0.4			G1/100
BL	(0°-30°)	483.8	3.8	B1/500		
BM	(30°-60°)	1133.6	9.0	B2/2500		
BH	(60°-80°)	653.8	5.2	B2/1000		G2/1000
BVH	(80°-90°)	19.4	0.2			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9
2.5°	2214.2	2226.9	2219.6	2216.0	2209.6	2200.6	2193.3	2170.4	2146.9	2131.4	2125.8
5°	2258.8	2271.5	2270.7	2274.3	2278.8	2281.5	2279.7	2254.3	2220.6	2194.1	2178.6
7.5°	2220.6	2235.1	2247.0	2265.1	2297.0	2330.7	2347.1	2341.6	2307.1	2270.7	2251.5
10°	2112.2	2127.7	2155.9	2198.7	2266.1	2338.9	2399.9	2428.1	2406.3	2366.2	2339.9
12.5°	1913.8	1929.3	1984.7	2077.6	2190.5	2317.1	2433.6	2509.2	2514.6	2474.6	2443.6
15°	1690.6	1706.1	1765.4	1881.9	2054.0	2256.9	2451.8	2594.8	2643.0	2608.4	2571.1
17.5°	1552.3	1566.0	1610.6	1704.4	1883.7	2136.8	2445.4	2685.8	2796.0	2768.6	2724.0
20°	1510.4	1522.2	1543.2	1608.7	1758.1	2012.1	2403.5	2771.4	2960.7	2945.2	2895.2
22.5°	1555.0	1566.0	1572.4	1601.5	1695.2	1930.2	2350.7	2858.8	3152.0	3153.7	3092.7
25°	1657.9	1668.8	1661.5	1679.8	1720.8	1904.7	2330.7	2961.6	3392.3	3412.3	3343.1
27.5°	1827.3	1828.2	1810.9	1809.9	1816.3	1942.9	2351.7	3071.8	3695.4	3732.8	3647.3
30°	2166.8	2153.2	2086.7	2014.8	1982.0	2057.6	2410.0	3202.0	4053.3	4119.8	4012.3
32.5°	2690.3	2670.3	2548.4	2376.3	2203.2	2242.4	2514.6	3350.4	4443.0	4563.1	4432.0
35°	3258.5	3253.0	3125.5	2869.7	2567.4	2505.5	2684.9	3545.3	4868.1	5059.3	4903.6
37.5°	3786.6	3783.8	3710.9	3409.6	3041.8	2872.5	2958.0	3800.2	5323.3	5600.1	5416.2
40°	4269.0	4277.2	4204.4	3934.9	3564.3	3343.1	3329.5	4115.2	5829.6	6189.2	5970.6
42.5°	4686.0	4695.1	4621.4	4422.0	4080.6	3863.9	3785.6	4501.2	6323.9	6821.9	6563.4
45°	4969.2	5025.6	5014.7	4855.3	4610.4	4385.6	4333.7	4985.6	6887.5	7493.0	7189.8
47.5°	5049.3	5101.2	5183.1	5205.0	5055.7	4834.4	4896.3	5569.1	7457.4	8164.8	7819.7
50°	4851.7	4900.0	5070.3	5296.9	5400.7	5332.5	5443.5	6194.6	8041.0	8834.9	8437.9
52.5°	4462.0	4511.2	4726.1	5084.8	5508.1	5723.0	5992.5	6811.0	8606.4	9469.5	9023.4
55°	3898.5	3950.3	4226.3	4632.3	5303.3	5884.1	6450.4	7426.4	9124.4	10040.3	9551.4
57.5°	3131.9	3170.1	3456.9	4025.1	4788.0	5723.9	6788.3	8098.3	9612.4	10601.2	10074.9
60°	2041.2	2074.9	2408.1	3041.8	3934.1	5188.5	6855.6	8847.6	10260.7	11330.5	10780.5
62.5°	1357.5	1380.3	1577.8	2043.0	2770.5	4160.7	6461.4	9445.8	11211.1	12599.6	11990.4
65°	931.4	954.2	1151.7	1475.8	1790.0	2752.2	5327.8	9366.6	12072.4	13607.4	12887.2
67.5°	664.6	683.8	851.3	1157.1	1295.6	1598.7	3611.7	8354.2	11948.6	13645.6	12935.5
70°	476.1	487.1	625.5	901.4	1029.7	960.5	2008.4	6389.4	10461.9	12600.4	11950.4
72.5°	333.2	336.8	434.3	686.4	829.4	701.0	955.9	4259.9	7912.6	9890.1	9264.7
75°	225.8	230.3	292.2	503.5	665.5	535.4	506.2	2284.3	4645.1	5474.4	4907.3
77.5°	138.4	140.2	188.5	344.2	498.0	407.8	326.0	967.8	1797.2	1764.4	1504.1
80°	78.3	78.3	120.1	213.9	339.6	263.1	228.5	411.5	569.0	499.8	440.6
82.5°	43.7	44.6	87.4	132.9	224.9	155.7	125.7	190.2	245.8	217.6	189.4
85°	18.2	20.0	53.7	62.8	107.4	77.4	50.9	80.2	91.0	81.1	59.1
87.5°	1.8	2.8	16.4	11.8	12.7	15.5	7.3	15.5	12.7	12.7	9.1
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°	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9
2.5°	2108.5	2094.9	2060.4	2020.3	1967.5	1942.0	1907.3	1883.7	1863.7	1865.5	1847.3
5°	2149.5	2115.0	2037.6	1941.0	1820.9	1735.3	1644.2	1581.5	1530.4	1519.6	1495.0
7.5°	2206.0	2151.4	2015.7	1841.8	1638.8	1484.9	1347.5	1259.1	1196.3	1176.3	1156.3
10°	2278.8	2199.6	1987.5	1717.1	1424.9	1229.1	1081.6	1012.4	969.6	955.1	944.1
12.5°	2363.5	2255.2	1950.2	1565.1	1204.5	1016.1	922.3	887.6	874.0	869.5	866.7
15°	2470.0	2324.4	1893.7	1384.8	1017.8	885.9	845.8	841.2	843.1	841.2	840.3
17.5°	2596.5	2399.9	1801.7	1199.0	892.3	819.4	804.8	808.5	813.0	812.1	810.3
20°	2735.0	2474.6	1684.3	1034.2	806.7	772.0	763.8	767.5	771.1	769.4	768.4
22.5°	2892.4	2554.7	1554.1	905.9	749.3	728.4	719.2	720.2	720.2	716.5	714.7
25°	3080.9	2643.0	1417.6	814.9	705.6	689.2	678.2	674.7	669.2	658.3	656.4
27.5°	3305.8	2736.7	1286.5	751.1	671.0	655.5	642.8	633.7	620.0	601.8	599.9
30°	3558.9	2850.6	1175.4	711.0	643.7	628.2	613.7	599.9	579.9	557.2	555.3
32.5°	3856.7	2972.6	1094.4	684.7	619.1	602.7	585.4	569.0	547.1	524.4	525.3
35°	4211.7	3120.1	1047.0	666.5	599.9	578.1	559.0	540.8	524.4	504.4	502.6
37.5°	4596.8	3276.6	1032.5	657.3	587.2	553.5	531.7	519.0	517.1	505.3	504.4
40°	5018.3	3462.3	1043.3	651.9	573.6	529.9	506.2	503.5	508.0	487.1	488.0
42.5°	5464.5	3682.7	1061.6	645.5	554.4	506.2	483.5	483.5	479.8	450.7	450.7
45°	5946.9	3936.7	1079.7	630.1	531.7	482.6	465.2	458.9	443.4	415.1	414.2
47.5°	6433.2	4195.3	1093.5	601.8	504.4	462.5	447.0	432.4	409.7	384.2	383.2
50°	6894.8	4427.5	1078.9	560.0	473.4	443.4	427.0	406.9	382.4	365.1	362.3
52.5°	7307.2	4628.7	1017.0	510.8	440.6	423.3	408.8	387.9	367.8	349.6	347.8
55°	7665.9	4791.7	907.7	464.3	411.5	406.1	391.4	365.1	337.7	322.3	320.5
57.5°	8010.1	4915.5	771.1	426.1	385.1	386.9	365.1	341.4	315.9	299.5	297.8
60°	8468.0	5081.1	632.7	390.6	356.9	362.3	338.7	321.3	289.6	268.5	265.9
62.5°	9200.0	5338.8	502.6	346.9	324.1	326.0	315.9	295.0	256.8	232.2	230.3
65°	9780.9	5244.1	396.1	299.5	286.8	289.6	289.6	266.8	225.8	197.5	194.9
67.5°	9715.3	4490.3	315.9	253.1	251.3	253.1	259.4	240.4	200.3	177.5	173.9
70°	8949.6	3571.6	253.1	210.3	218.5	213.9	232.2	219.5	180.3	157.5	154.8
72.5°	7302.6	2572.9	193.0	173.9	167.5	174.8	209.4	197.5	150.3	124.7	122.0
75°	4267.2	1373.0	143.8	137.5	121.1	145.7	185.7	168.4	114.7	91.9	89.2
77.5°	1389.3	478.9	105.6	101.1	90.1	117.5	158.5	142.1	93.8	72.9	70.1
80°	372.4	144.7	72.0	66.4	58.2	87.4	125.7	112.9	67.3	47.4	46.4
82.5°	149.3	61.0	41.9	37.3	31.9	60.1	99.2	91.0	50.1	30.0	30.0
85°	48.3	20.0	15.5	11.8	14.6	37.3	59.1	61.9	35.5	15.5	11.8
87.5°	6.4	2.8	2.8	3.7	2.8	6.4	18.2	17.3	10.0	1.8	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)