

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: P969297

Luminaire Tested: **NAV-SB5D-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53586 lumens
Efficiency: N/A
Efficacy: 146.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 364.9
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



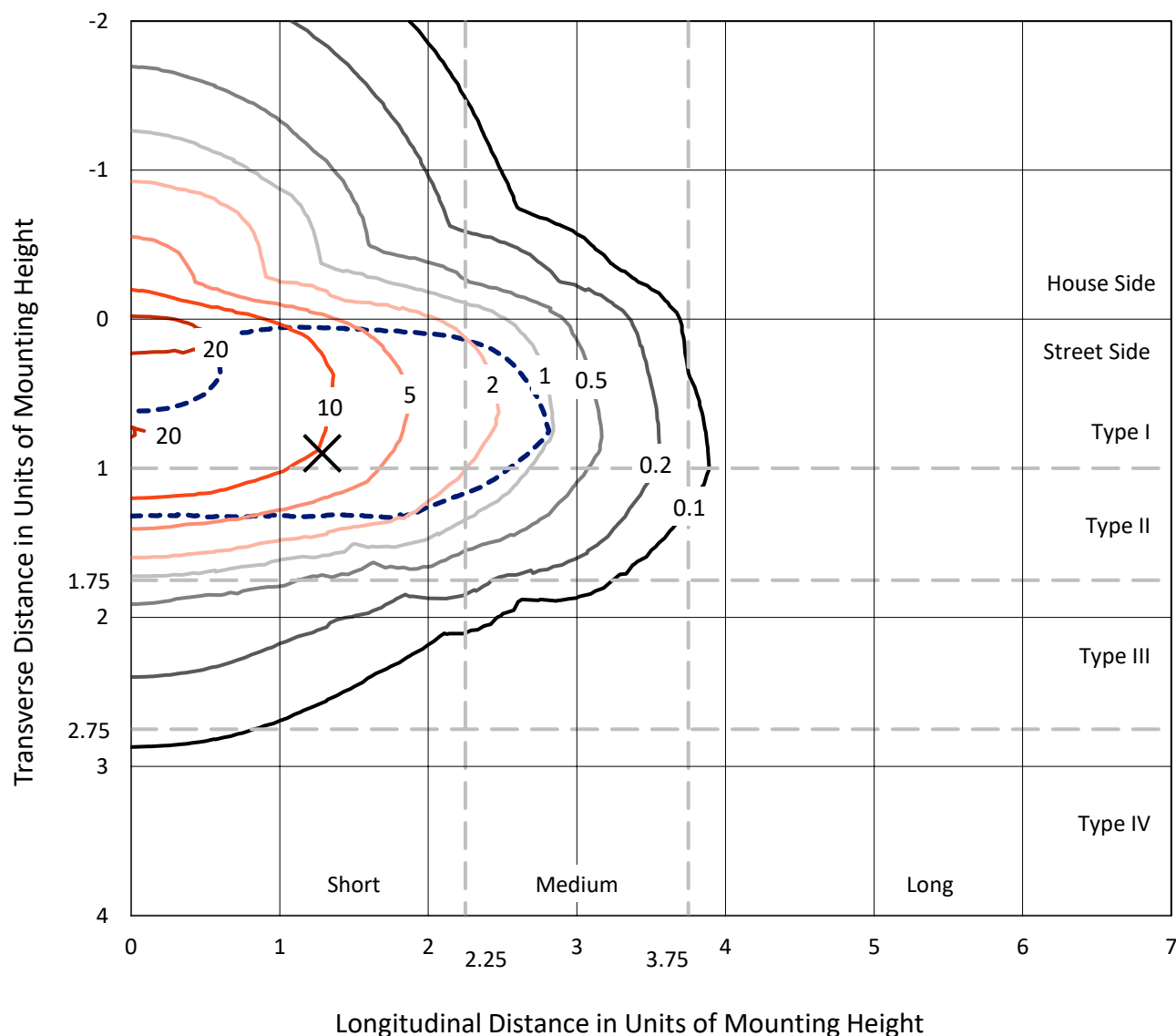
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

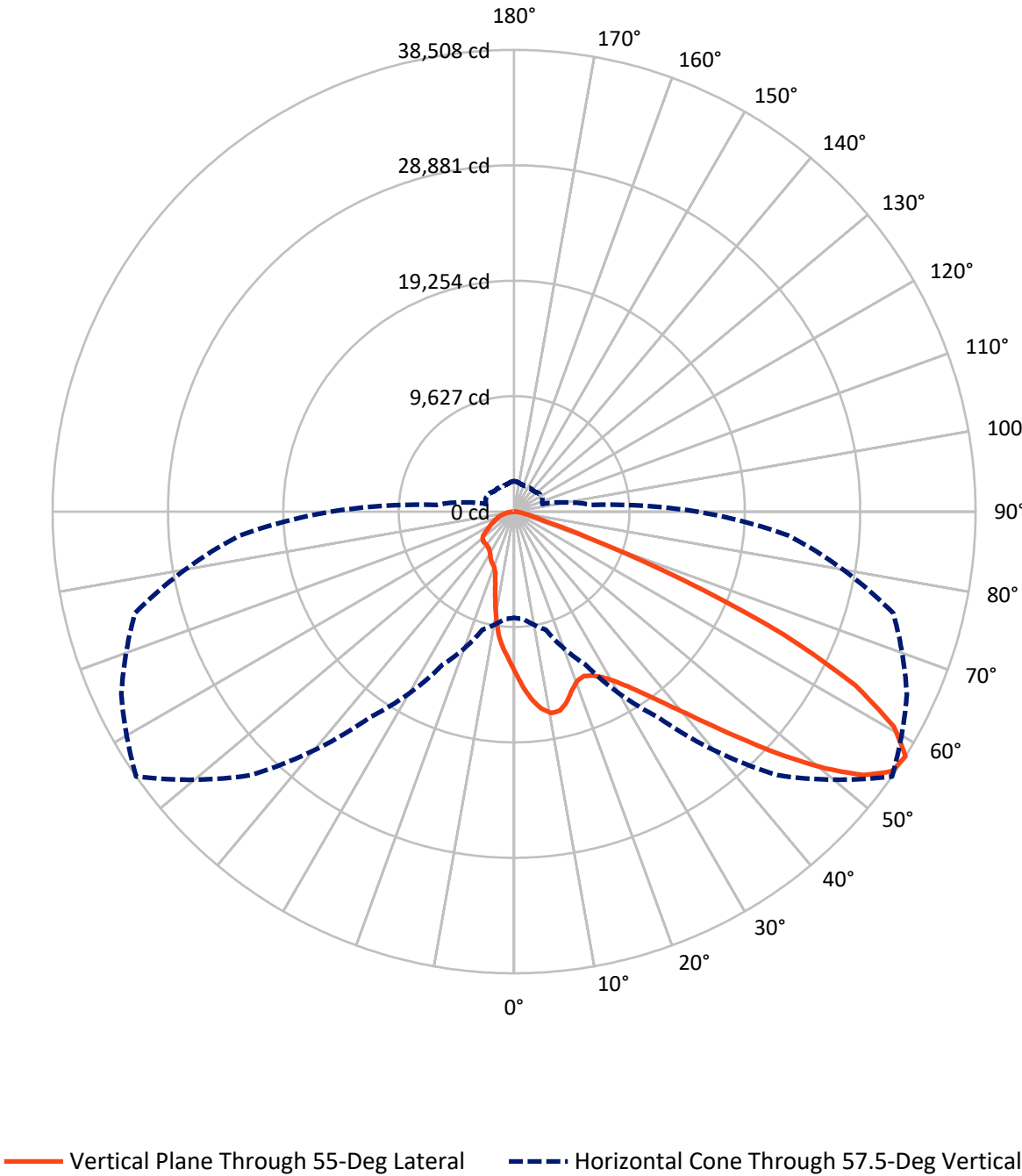


Based on 25 foot mounting height. Maximum calculated value = 26 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9696.1	0.0	9696.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	43889.9	0.0	43889.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	53586.0	0.0	53586.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1245.9	2.3
10°-20°	3144.8	5.9
20°-30°	5018.2	9.4
30°-40°	7945.1	14.8
40°-50°	12160.7	22.7
50°-60°	13025.3	24.3
60°-70°	8194.3	15.3
70°-80°	2423.2	4.5
80°-90°	428.5	0.8
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°	53586.0	100.0
0°-180°	53586.0	100.0

Coefficient of Utilization



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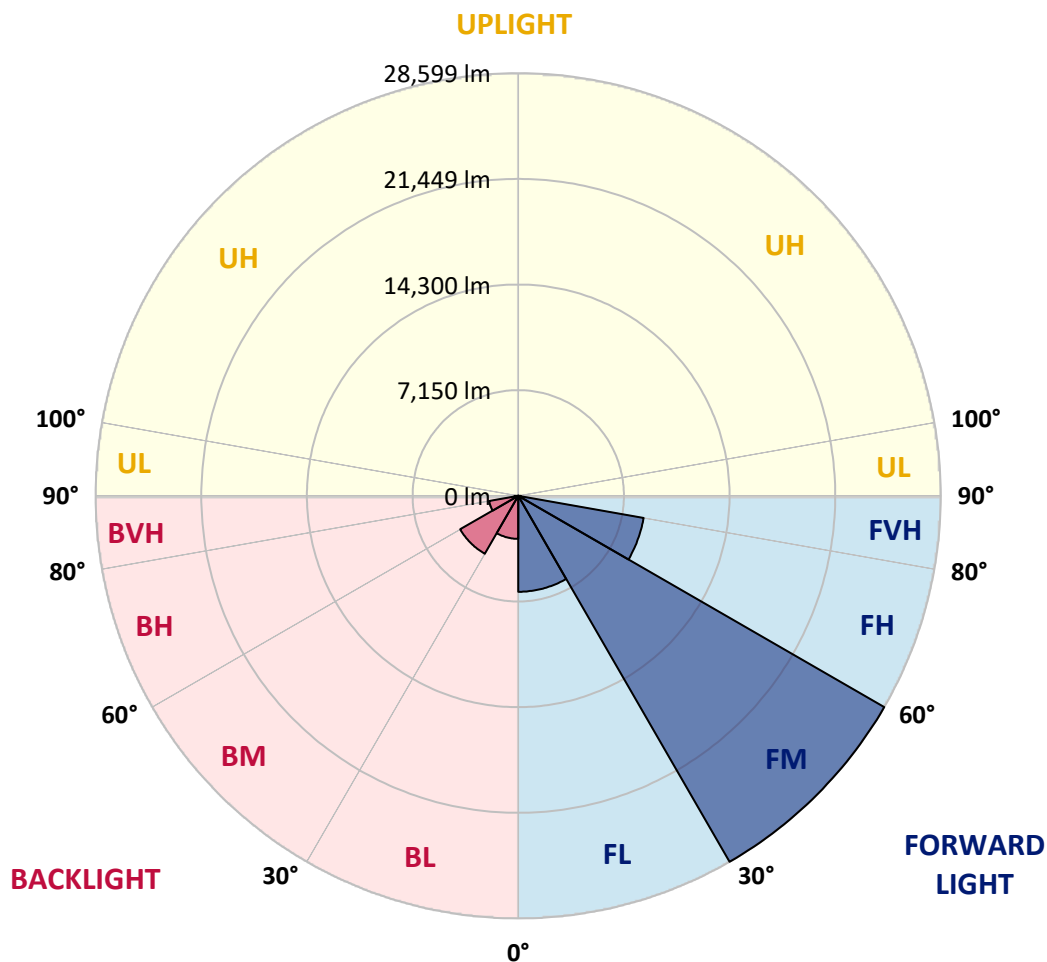
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6494.6	12.1			
FM	(30°-60°)	28599.2	53.4			
FH	(60°-80°)	8615.0	16.1			G4/12000
FVH	(80°-90°)	181.0	0.3			G2/225
BL	(0°-30°)	2914.3	5.4	B4/5000		
BM	(30°-60°)	4531.9	8.5	B3/5000		
BH	(60°-80°)	2002.5	3.7	B3/2500		G3/2500
BVH	(80°-90°)	247.4	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9
2.5°	15404.8	15393.8	15454.6	15246.9	15105.6	14914.5	14662.4	14341.1	13994.7	13629.1	13471.3
5°	16792.7	16695.7	16759.4	16604.3	16449.1	16161.1	15787.0	15263.5	14623.6	13895.1	13507.2
7.5°	16573.8	16507.3	16670.7	16809.3	16925.6	16889.5	16615.4	16066.9	15241.3	14183.1	13620.8
10°	14809.2	14734.4	14964.4	15443.6	16147.2	16759.4	17091.8	16751.1	15872.9	14498.9	13731.6
12.5°	13252.4	13216.4	13368.8	13756.5	14537.8	15712.3	17030.9	17349.5	16529.5	14873.0	13881.2
15°	12587.5	12543.2	12640.2	12836.9	13335.5	14429.7	16476.9	17759.5	17174.9	15305.1	14119.5
17.5°	12440.7	12390.9	12432.4	12534.9	12856.3	13690.1	15640.3	17961.6	17848.0	15787.0	14318.9
20°	12712.3	12670.6	12676.2	12670.6	12895.0	13557.1	15058.5	17884.1	18435.3	16230.3	14512.8
22.5°	13368.8	13299.5	13302.2	13155.5	13277.3	13789.8	14906.2	17676.3	18958.9	16618.1	14659.7
25°	14438.0	14313.3	14338.3	13964.3	13931.1	14310.5	15144.4	17515.6	19479.7	16928.4	14687.3
27.5°	15900.6	15759.4	15684.6	15127.8	14861.9	15050.2	15629.2	17571.1	19972.7	17197.0	14618.0
30°	17728.9	17557.2	17404.8	16615.4	16133.3	16064.1	16382.7	17936.7	20554.5	17479.6	14498.9
32.5°	19970.0	19770.5	19493.6	18446.4	17767.8	17404.8	17357.8	18587.7	21235.9	17839.7	14438.0
35°	22637.6	22377.3	21983.9	20629.3	19770.5	19028.1	18643.1	19526.8	22169.5	18382.7	14507.2
37.5°	25385.7	25092.0	24731.9	23119.7	22064.3	20970.1	20210.9	20801.0	23413.3	19119.5	14690.1
40°	27920.3	27590.6	27255.5	25820.6	24687.5	23369.0	22130.7	22413.3	24934.1	20000.5	15000.4
42.5°	29416.2	29172.4	29045.0	28269.4	27393.9	26056.0	24518.6	24324.7	26643.2	21014.3	15354.9
45°	29349.7	29250.0	29643.3	29964.6	29756.9	29014.6	27316.5	26438.3	28358.0	21892.5	15681.8
47.5°	27781.8	27848.3	28726.4	30532.6	31327.6	31715.4	30502.1	28513.1	29848.3	22549.0	15828.7
50°	23515.8	23571.2	25604.5	29499.3	31732.1	33917.7	33662.8	30538.1	31003.5	22950.7	15795.4
52.5°	20139.0	20175.0	21047.6	26435.6	30396.8	35025.8	36510.5	32446.8	31848.4	23061.5	15609.8
55°	15169.3	15294.0	16271.9	20740.1	26923.1	34147.6	38244.7	34413.6	32383.0	23072.5	15415.9
57.5°	8861.7	8997.4	10205.2	14077.9	20925.7	31086.6	38507.8	36158.7	32745.9	22983.9	15299.6
60°	4340.8	4399.0	4925.3	7399.1	12903.3	25189.0	36391.4	37003.6	32948.1	22936.8	15294.0
62.5°	2925.2	2916.9	2939.1	3651.0	6357.5	16183.2	31981.3	35524.3	32840.1	22756.7	15238.6
65°	2515.2	2484.8	2401.7	2562.4	3293.7	7401.8	24709.7	31108.7	32017.4	22305.2	14859.1
67.5°	2174.5	2177.3	2180.1	2130.3	2351.9	3415.6	15100.1	24504.8	29064.4	20166.7	13396.4
70°	1800.6	1825.5	1836.6	1836.6	1917.0	2241.1	6446.1	16795.4	22925.8	15812.0	10789.8
72.5°	1639.9	1587.3	1592.8	1565.2	1565.2	1706.4	2595.6	9521.0	14443.6	8894.9	6584.6
75°	1337.9	1371.2	1376.8	1357.4	1293.7	1302.0	1540.2	3994.5	6180.2	3689.8	3254.9
77.5°	1155.2	1155.2	1166.2	1152.4	1102.5	975.1	1027.8	1548.5	2102.6	1512.5	1626.1
80°	928.0	925.3	972.3	1000.0	922.5	720.3	656.5	856.0	933.6	664.8	844.9
82.5°	451.5	479.2	667.6	761.8	700.9	520.8	401.7	531.9	498.7	293.7	379.6
85°	263.1	249.3	299.2	423.8	401.7	288.1	193.9	277.1	260.3	149.5	152.3
87.5°	83.1	77.6	61.0	144.0	116.3	80.4	52.6	80.4	72.1	33.2	33.2
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9	13426.9
2.5°	13274.6	12947.7	12623.6	12327.2	12147.1	12030.7	11914.4	11784.2	11734.3	11659.6
5°	13141.6	12510.0	11947.6	11462.9	11022.4	10676.2	10327.1	10044.6	9917.1	10003.0
7.5°	13064.0	12149.8	11282.8	10393.6	9537.6	8853.4	8257.8	7839.5	7651.1	7698.3
10°	12994.7	11742.6	10421.3	9016.8	7786.9	6939.2	6329.8	6011.2	5892.1	5917.0
12.5°	12931.1	11285.6	9382.4	7534.8	6227.3	5667.7	5493.2	5495.9	5518.1	5534.8
15°	12919.9	10734.3	8221.8	6238.4	5385.1	5349.2	5537.6	5656.7	5720.3	5739.8
17.5°	12903.3	10075.0	7039.0	5354.7	5180.1	5424.0	5598.4	5676.0	5725.9	5728.6
20°	12836.9	9238.4	5947.5	4933.6	5135.9	5346.4	5454.4	5515.3	5556.9	5570.8
22.5°	12631.9	8307.6	5097.1	4745.2	4958.5	5127.6	5255.0	5324.3	5349.2	5365.8
25°	12263.4	7266.1	4509.8	4565.2	4712.0	4925.3	5027.8	5041.7	5033.4	5058.3
27.5°	11781.5	6149.7	4144.2	4321.4	4509.8	4692.7	4748.0	4739.7	4723.1	4750.8
30°	11199.7	5146.9	3911.4	4047.2	4304.8	4471.0	4520.9	4501.5	4468.3	4498.7
32.5°	10584.8	4326.9	3720.3	3856.0	4135.9	4299.3	4349.2	4329.7	4304.8	4329.7
35°	10011.3	3753.6	3543.0	3728.6	4002.8	4163.5	4227.2	4230.0	4230.0	4260.5
37.5°	9484.9	3418.4	3396.2	3648.3	3911.4	4055.5	4146.9	4152.5	4033.4	4041.7
40°	8997.4	3277.1	3329.7	3595.7	3822.8	3961.3	3966.9	3656.6	3437.7	3432.2
42.5°	8598.5	3249.4	3349.1	3590.1	3759.1	3764.6	3374.0	3133.0	3072.1	3074.9
45°	8224.6	3241.0	3393.5	3590.1	3664.9	3252.1	2989.0	2925.2	2930.8	2953.0
47.5°	7806.3	3207.8	3401.8	3540.2	3393.5	2892.0	2814.4	2786.8	2775.7	2781.2
50°	7349.2	3088.7	3296.5	3440.5	2928.0	2737.0	2640.0	2631.7	2645.5	2653.8
52.5°	6867.2	2894.8	3116.4	3260.4	2714.7	2601.1	2493.1	2512.5	2573.5	2592.8
55°	6551.4	2667.7	2878.2	2900.3	2565.2	2473.7	2382.3	2426.7	2540.3	2576.2
57.5°	6468.3	2426.7	2606.7	2581.8	2374.0	2362.9	2307.6	2346.3	2490.3	2543.0
60°	6443.4	2210.6	2340.8	2321.4	2188.4	2241.1	2227.2	2246.6	2296.4	2313.1
62.5°	6249.4	2038.8	2102.6	2074.8	2022.2	2113.7	2146.9	2105.4	2144.1	2163.5
65°	5756.4	1900.4	1869.8	1850.4	1872.6	1955.7	2022.2	1939.1	1975.1	2030.5
67.5°	4941.9	1712.0	1628.8	1651.0	1720.3	1764.5	1850.4	1756.2	1786.8	1881.0
70°	3997.3	1473.7	1398.9	1462.7	1529.1	1620.5	1634.4	1570.7	1642.7	1747.9
72.5°	2828.3	1232.7	1180.1	1310.3	1332.4	1451.6	1421.1	1390.6	1490.4	1526.3
75°	1961.2	994.5	964.0	1063.7	1144.1	1246.6	1224.4	1260.4	1471.0	1487.6
77.5°	1241.1	772.8	753.5	817.2	928.0	1041.6	1077.6	1487.6	2512.5	2612.2
80°	720.3	576.2	554.0	603.9	700.9	806.2	1038.8	1825.5	1656.5	1637.1
82.5°	401.7	396.2	368.4	382.3	468.1	581.7	1468.2	1285.4	1044.4	1077.6
85°	188.4	232.7	199.5	191.2	263.1	681.4	980.6	734.1	487.6	476.4
87.5°	49.8	44.3	44.3	49.8	110.8	587.2	390.6	313.0	185.6	180.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)