

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: P971532

Luminaire Tested: **NAV-SB6D-827-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971532
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54667.3 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 440.1
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

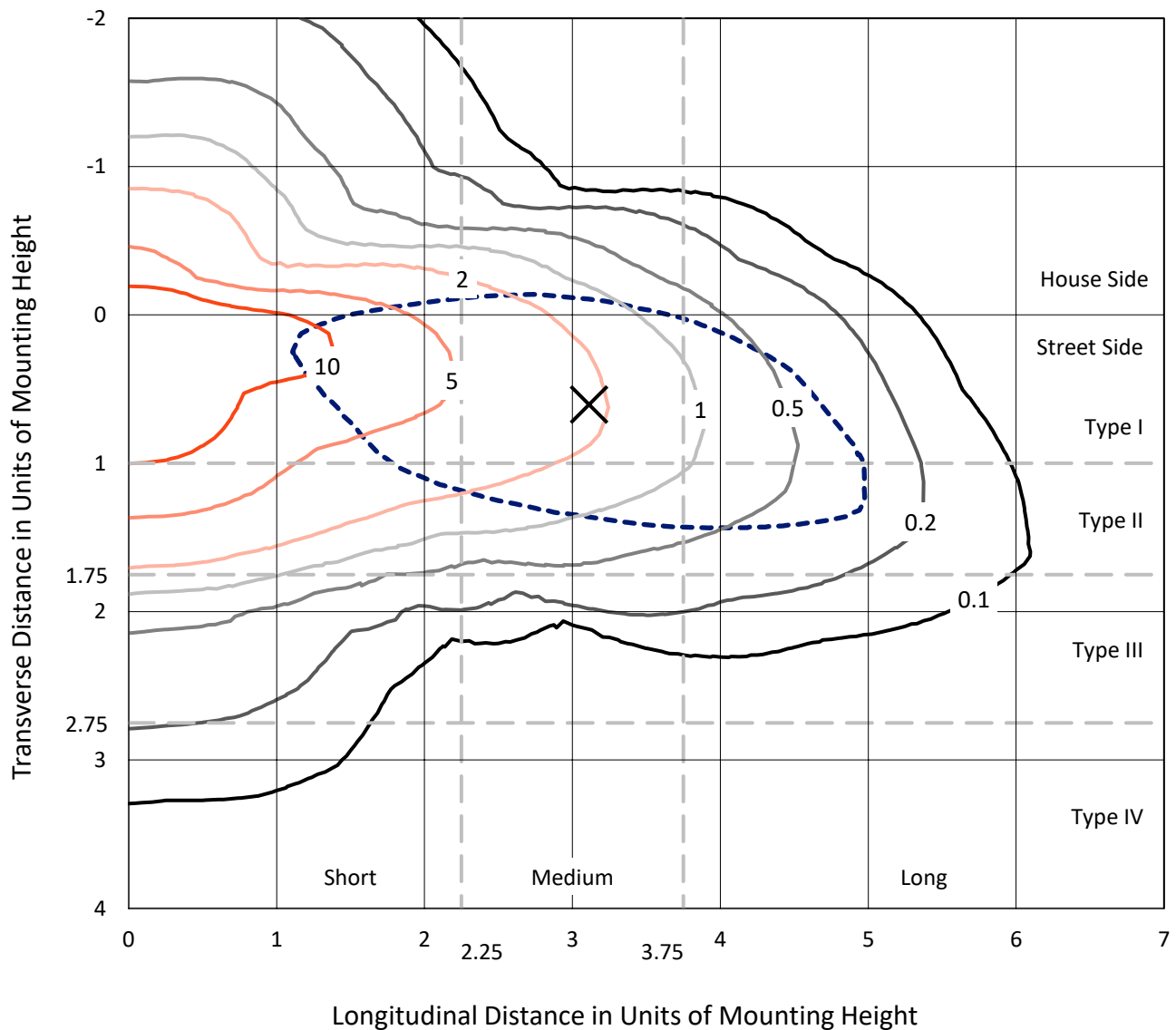


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Iso-Footcandle Lines of Horizontal Illumination

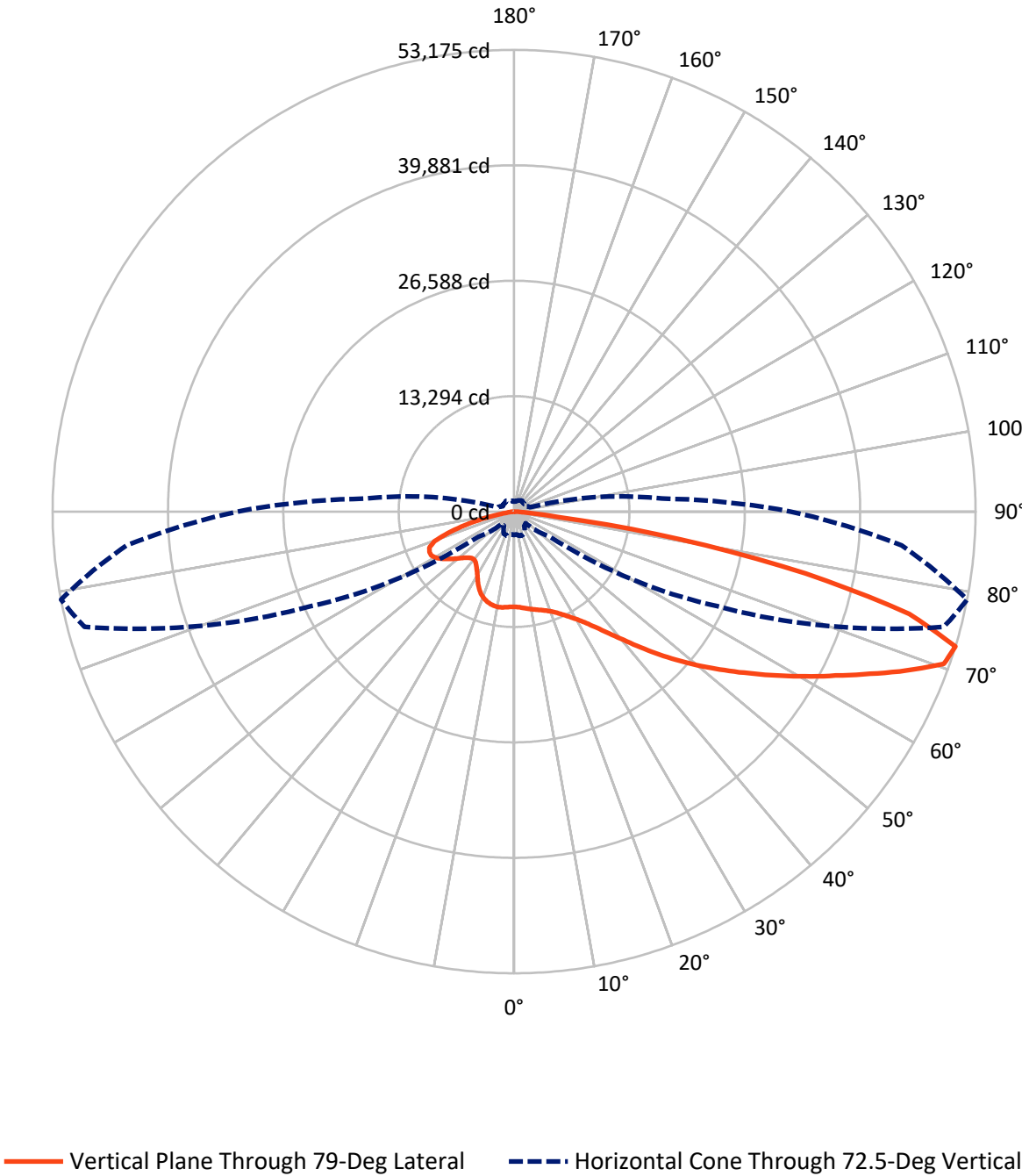
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.6 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	12029.8	0.0	12029.8
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	42637.5	0.0	42637.5
	% Fixture	78.0	0.0	78.0
Total	Lumens	54667.3	0.0	54667.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	996.1	1.8
10°-20°	2604.4	4.8
20°-30°	4202.4	7.7
30°-40°	6307.1	11.5
40°-50°	8947.0	16.4
50°-60°	11298.9	20.7
60°-70°	11475.6	21.0
70°-80°	7821.1	14.3
80°-90°	1014.7	1.9
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°	54667.3	100.0
0°-180°	54667.3	100.0

Coefficient of Utilization



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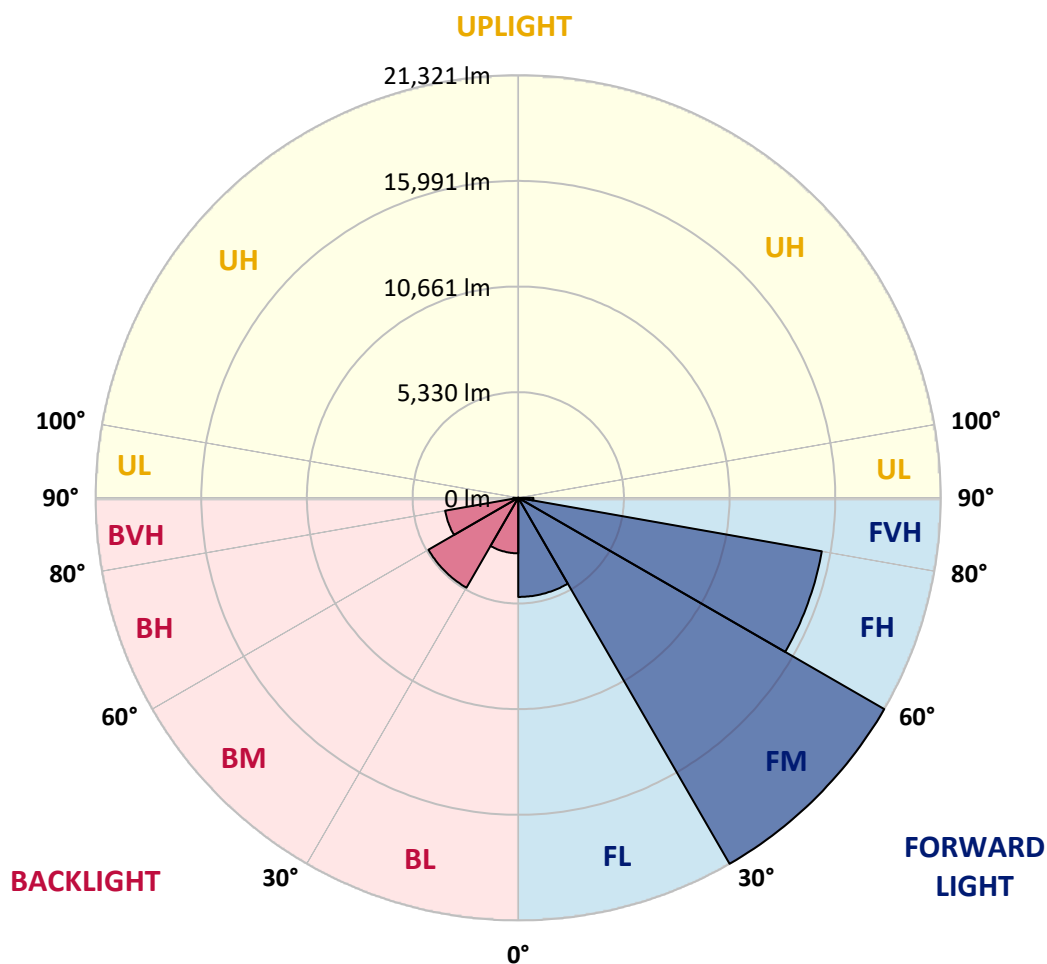
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5000.7	9.1			
FM	(30°-60°)	21321.4	39.0			
FH	(60°-80°)	15551.0	28.4			G5
FVH	(80°-90°)	764.4	1.4			G5
BL	(0°-30°)	2802.1	5.1	B4/5000		
BM	(30°-60°)	5231.7	9.6	B4/8500		
BH	(60°-80°)	3745.7	6.9	B4/5000		G4/5000
BVH	(80°-90°)	250.3	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-G5

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0
2.5°	10979.7	10927.7	10959.5	10947.9	10962.4	10979.7	10985.5	10994.2	11023.2	11020.2	11017.3
5°	10956.6	10904.6	10947.9	10933.5	10971.1	11011.6	11046.2	11078.1	11124.3	11144.5	11115.6
7.5°	10907.4	10872.8	10916.1	10959.5	11028.9	11089.6	11138.8	11211.0	11277.6	11289.1	11309.3
10°	10621.2	10595.1	10696.4	10809.1	11000.0	11164.8	11271.8	11355.7	11427.9	11439.5	11468.4
12.5°	10323.3	10291.5	10404.3	10557.5	10866.9	11164.8	11390.3	11500.2	11563.8	11601.5	11644.8
15°	10274.2	10248.2	10311.7	10444.8	10702.1	11086.7	11471.3	11673.7	11728.7	11772.0	11789.4
17.5°	10511.3	10462.1	10488.1	10534.4	10684.8	11014.4	11534.9	11870.4	11954.3	12000.5	12000.5
20°	11060.7	10991.3	10950.8	10858.2	10832.3	11026.0	11529.2	12107.5	12217.4	12275.2	12289.6
22.5°	11792.3	11746.0	11659.3	11425.1	11170.6	11167.7	11639.1	12411.1	12616.4	12671.4	12636.7
25°	12677.2	12607.7	12497.8	12179.8	11691.0	11448.2	11824.1	12798.6	13142.8	13157.2	13055.9
27.5°	13695.0	13590.9	13440.5	13021.3	12361.9	11887.7	12107.5	13243.9	13747.1	13741.3	13533.1
30°	14767.9	14663.8	14504.7	13995.8	13165.8	12480.5	12500.8	13723.9	14464.2	14432.4	14076.7
32.5°	15551.5	15473.4	15441.6	15048.3	14091.2	13180.3	12951.9	14256.0	15349.1	15320.2	14822.8
35°	16153.0	16051.7	16089.3	15889.9	15100.4	13964.0	13504.2	14889.3	16424.8	16421.9	15803.0
37.5°	16748.6	16659.0	16690.8	16557.7	16034.4	14958.6	14177.9	15664.3	17757.8	17821.5	16988.7
40°	17292.3	17196.8	17324.1	17199.7	16760.2	16017.1	14944.2	16540.4	19302.0	19423.4	18422.9
42.5°	17619.0	17543.9	17754.9	17757.8	17390.6	16910.6	15785.7	17506.3	21089.1	21360.9	20186.9
45°	17731.8	17705.7	18023.9	18090.4	17948.7	17428.2	16543.3	18558.9	23014.9	23500.7	22196.6
47.5°	17610.4	17561.2	18000.7	18246.5	18359.3	17671.1	17170.8	19698.1	24981.3	25692.6	24388.4
50°	16997.4	16901.9	17555.4	18073.0	18475.0	17830.2	17804.1	21013.9	27216.5	27994.4	26592.0
52.5°	15895.6	15823.3	16566.5	17465.8	18220.5	17908.2	18515.5	22451.1	29339.1	30345.3	28850.4
55°	14487.4	14391.9	15210.3	16384.3	17587.3	17882.1	19226.8	24058.8	31843.3	32864.1	31184.0
57.5°	12255.0	12064.1	13099.3	14487.4	16554.9	17850.4	19967.1	25657.9	34387.9	35611.2	33673.7
60°	8998.9	8715.6	9985.0	11630.4	14536.6	17540.9	20883.8	27450.7	37441.5	38543.3	36391.9
62.5°	5239.7	5074.9	5904.8	7440.3	10956.6	15719.2	21398.5	29535.7	40443.1	41599.8	39063.8
65°	4068.6	4022.3	4094.7	4213.2	6098.5	11769.2	19811.0	31568.6	44260.1	45069.9	41848.5
67.5°	3721.6	3686.9	3718.7	3496.1	3094.1	6555.5	15673.0	32083.2	48349.0	48840.6	44286.1
70°	3308.1	3267.6	3371.7	3180.9	2434.8	2981.3	10126.7	30215.3	51602.2	52524.6	46139.8
72.5°	2695.0	2648.8	2891.7	2804.9	2050.2	1914.3	5086.5	25776.5	51261.0	53175.3	44812.5
75°	2070.4	2044.5	2333.6	2405.9	1671.4	1506.5	2440.6	19160.3	45110.4	47039.1	38621.4
77.5°	1607.8	1587.5	1735.0	1998.1	1347.6	1168.2	1500.8	12153.7	33994.6	34333.0	26615.0
80°	1205.8	1148.0	1283.9	1547.0	1049.7	853.0	1017.8	7087.6	21488.1	19478.4	11584.1
82.5°	754.7	725.8	838.6	1032.4	740.3	587.0	662.2	3915.3	8611.4	5072.0	2235.3
85°	430.9	419.3	456.8	589.9	401.9	338.4	378.8	1729.3	1573.1	1081.5	673.7
87.5°	173.5	167.7	208.2	263.1	147.5	124.3	133.0	416.4	347.0	320.9	222.6
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°	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0	10974.0
2.5°	11005.7	11005.7	10965.2	10901.7	10829.3	10783.1	10707.9	10687.7	10609.6	10586.5	10624.0
5°	11138.8	11115.6	10991.3	10812.0	10566.2	10340.7	10091.9	9935.8	9716.1	9638.0	9695.8
7.5°	11306.5	11242.9	11028.9	10635.6	10121.0	9614.8	9088.6	8689.5	8307.8	8171.9	8189.2
10°	11459.7	11370.1	11005.7	10317.5	9426.9	8550.8	7712.1	7125.1	6679.8	6497.6	6538.1
12.5°	11613.0	11448.2	10852.5	9788.3	8440.9	7252.4	6358.8	5902.0	5627.2	5407.5	5479.8
15°	11757.6	11526.2	10615.4	9079.9	7359.3	6153.5	5494.2	5129.8	4910.1	4765.5	4791.6
17.5°	11925.4	11592.7	10259.7	8180.6	6329.9	5393.0	4855.1	4635.4	4592.0	4574.7	4586.3
20°	12159.6	11653.5	9791.2	7174.3	5572.3	4785.7	4508.2	4487.9	4485.0	4476.4	4505.3
22.5°	12411.1	11725.8	9172.4	6260.5	4927.5	4406.9	4357.8	4317.3	4291.3	4288.4	4320.2
25°	12709.0	11749.0	8397.4	5511.5	4378.0	4227.6	4169.8	4109.1	4091.7	4091.7	4109.1
27.5°	12998.1	11670.9	7495.2	4861.0	4068.6	4062.8	3987.7	3967.4	3964.5	3973.2	3996.3
30°	13287.3	11523.4	6598.8	4259.5	3889.4	3889.4	3863.3	3877.8	3889.4	3918.3	3938.5
32.5°	13677.7	11367.2	5849.9	3814.1	3733.2	3704.2	3730.3	3759.2	3770.8	3808.4	3840.2
35°	14250.3	11257.4	5254.2	3571.2	3571.2	3533.7	3548.1	3542.3	3516.3	3498.9	3539.4
37.5°	15007.8	11251.5	4762.6	3458.5	3435.3	3429.5	3432.4	3394.8	3293.6	3172.2	3175.0
40°	15918.8	11407.7	4383.8	3380.3	3363.0	3397.8	3380.3	3279.2	3001.6	2790.5	2784.7
42.5°	17141.9	11853.0	4140.9	3284.9	3337.0	3380.3	3311.0	2961.1	2773.1	2631.5	2625.6
45°	18582.0	12575.9	4016.6	3183.8	3287.9	3339.9	3004.5	2851.2	2700.9	2530.2	2518.6
47.5°	20212.9	13486.8	3987.7	3088.3	3178.0	3209.8	2874.3	2804.9	2634.4	2449.2	2434.8
50°	21988.4	14565.5	4065.7	2975.6	3018.9	2909.1	2830.9	2767.3	2591.0	2408.8	2388.6
52.5°	23824.6	15753.9	4221.9	2822.2	2859.9	2738.4	2813.6	2758.7	2565.0	2319.2	2301.7
55°	25629.0	16951.0	4372.2	2643.0	2697.9	2585.2	2764.4	2723.9	2446.4	2168.8	2154.3
57.5°	27462.3	18142.4	4519.7	2484.0	2541.8	2437.7	2686.4	2631.5	2313.3	2030.0	2024.2
60°	29368.0	19299.1	4589.1	2330.7	2371.1	2301.7	2567.8	2472.4	2163.0	1888.3	1879.6
62.5°	31152.1	20262.1	4476.4	2177.4	2203.4	2174.5	2411.6	2284.4	2012.6	1729.3	1726.3
65°	32942.1	20834.6	4129.3	2027.0	2032.9	2018.4	2191.9	2082.0	1836.2	1590.4	1573.1
67.5°	34564.3	21155.6	3577.0	1865.1	1850.6	1844.9	1986.6	1862.2	1665.6	1451.6	1434.3
70°	34908.4	20340.1	2732.6	1674.3	1674.3	1659.8	1761.1	1633.8	1477.6	1304.1	1298.4
72.5°	31883.8	17110.1	1940.3	1457.4	1480.5	1451.6	1535.4	1428.5	1286.8	1171.2	1136.4
75°	25710.0	12547.0	1411.1	1234.7	1275.2	1226.1	1304.1	1229.0	1107.5	1104.6	994.8
77.5°	17665.4	7758.4	1023.7	1017.8	1046.8	983.2	1072.8	1032.4	922.4	873.3	818.4
80°	7538.7	3094.1	746.1	786.6	786.6	728.7	832.8	844.4	749.0	725.8	725.8
82.5°	1500.8	879.0	523.4	540.8	508.9	491.6	589.9	653.5	902.2	1003.4	1006.3
85°	451.1	323.9	315.2	295.0	260.2	263.1	347.0	656.4	809.6	462.7	399.0
87.5°	124.3	81.0	83.8	66.5	54.9	72.3	118.6	497.3	271.8	115.6	98.3
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)