

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: P967754

Luminaire Tested: **NAV-SB5A-740-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24358.1 lumens
Efficiency: N/A
Efficacy: 171.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 141.7
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

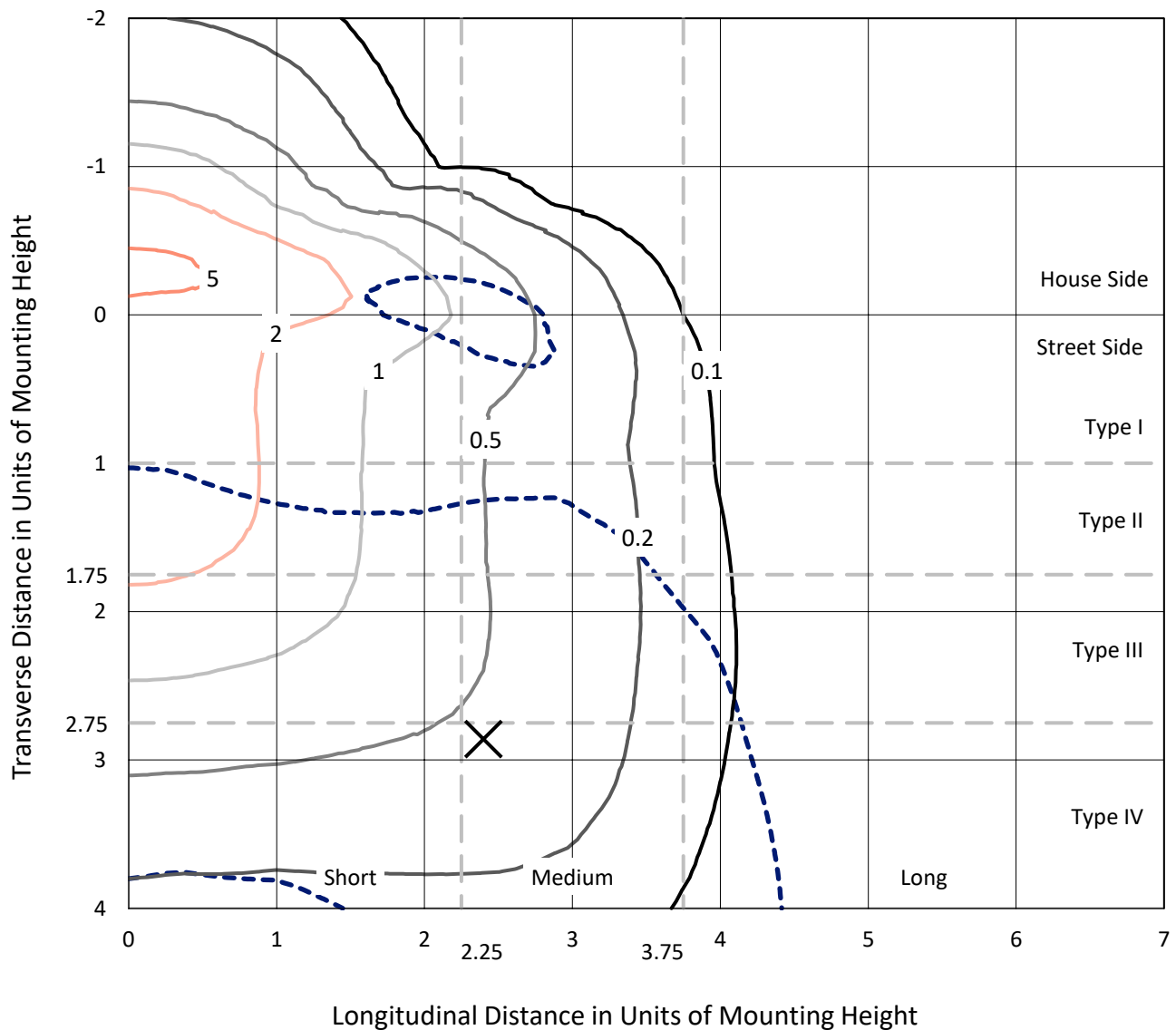


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

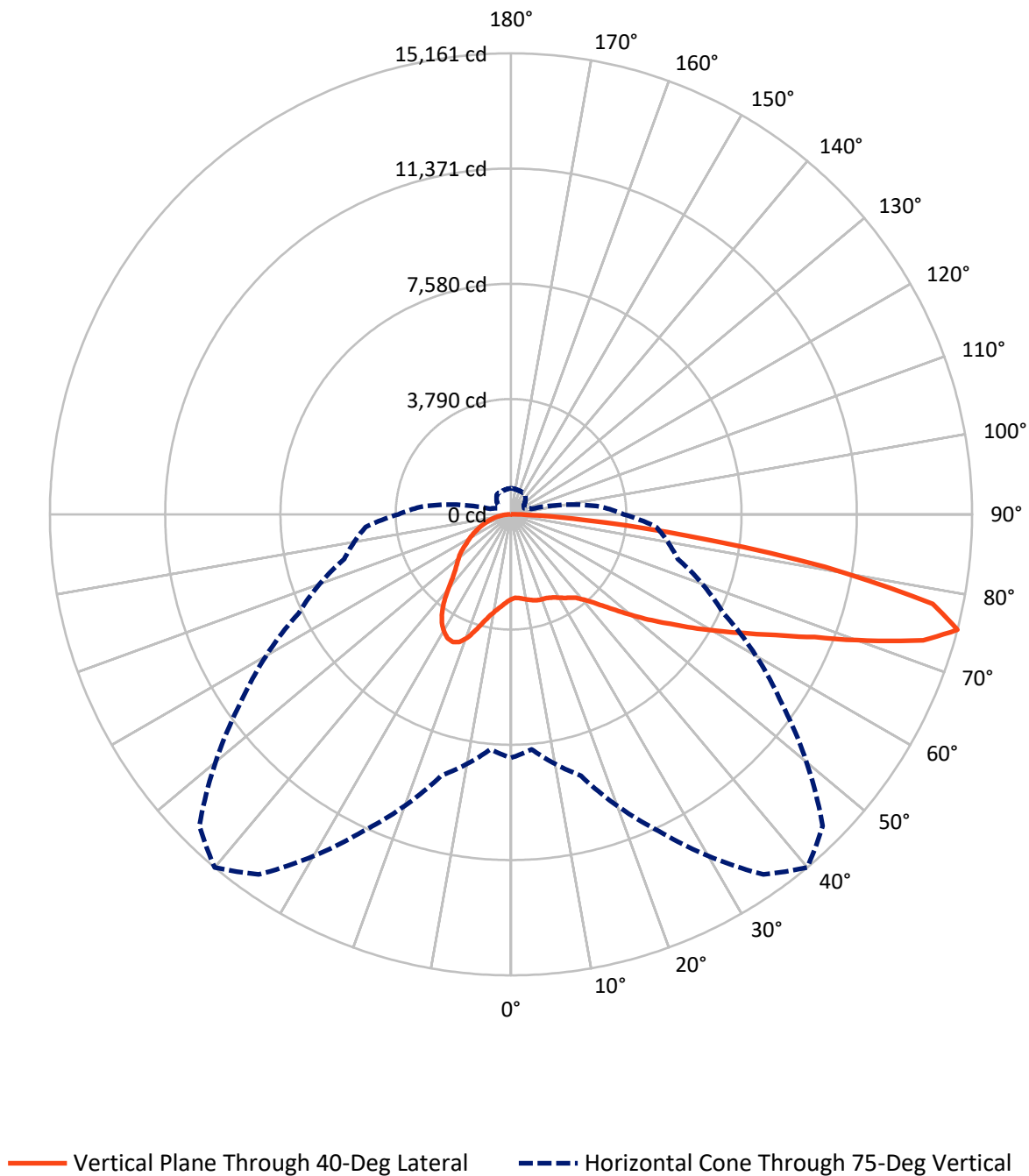


Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7547.0	0.0	7547.0
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	16811.2	0.0	16811.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	24358.1	0.0	24358.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.0	1.1
10°-20°	933.5	3.8
20°-30°	1704.5	7.0
30°-40°	2417.4	9.9
40°-50°	3264.2	13.4
50°-60°	4391.3	18.0
60°-70°	5573.5	22.9
70°-80°	5058.3	20.8
80°-90°	737.3	3.0
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°	24358.1	100.0
0°-180°	24358.1	100.0

Coefficient of Utilization



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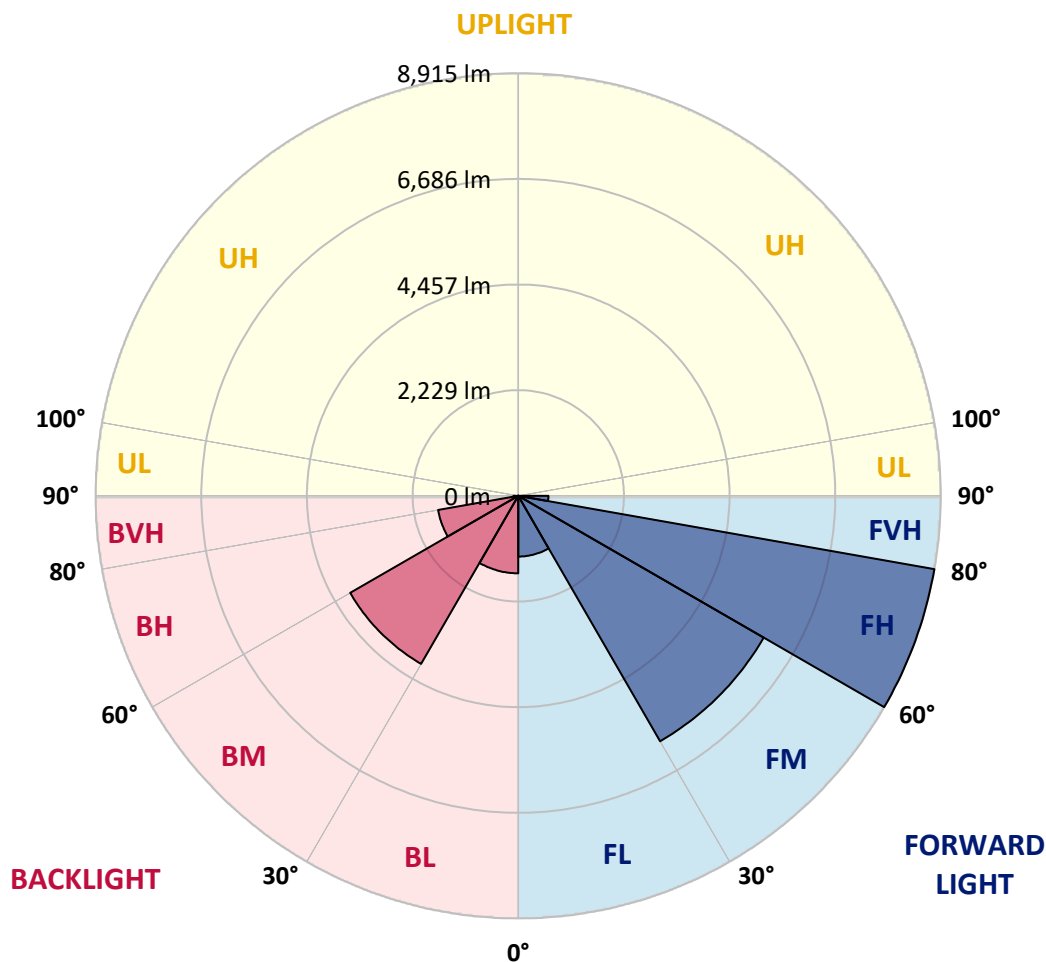
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1281.3	5.3			
FM	(30°-60°)	5979.4	24.5			
FH	(60°-80°)	8914.7	36.6			G4/12000
FVH	(80°-90°)	635.8	2.6			G4/750
BL	(0°-30°)	1634.7	6.7	B3/2500		
BM	(30°-60°)	4093.5	16.8	B3/5000		
BH	(60°-80°)	1717.2	7.0	B3/2500		G3/2500
BVH	(80°-90°)	101.5	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3
2.5°	2742.8	2758.3	2754.4	2749.3	2749.3	2750.5	2749.3	2758.3	2767.3	2776.3	2790.6
5°	2771.2	2786.7	2778.9	2772.4	2767.3	2766.0	2762.2	2760.8	2766.0	2777.6	2797.0
7.5°	2826.7	2842.2	2830.6	2819.0	2808.6	2803.5	2798.2	2790.6	2786.7	2793.1	2820.3
10°	2888.8	2904.2	2890.0	2869.4	2852.6	2846.1	2840.9	2833.2	2828.0	2831.9	2861.6
12.5°	2950.8	2966.2	2946.9	2918.5	2896.4	2892.7	2886.2	2883.5	2882.3	2881.0	2910.7
15°	3008.9	3021.8	2997.3	2963.7	2940.4	2934.0	2927.5	2931.4	2937.9	2945.5	2979.2
17.5°	3054.1	3067.0	3030.8	2987.0	2964.9	2962.4	2958.5	2971.4	2989.5	3008.9	3050.2
20°	3095.4	3108.3	3061.9	3002.4	2976.6	2976.6	2977.8	3005.0	3030.8	3059.3	3116.1
22.5°	3153.6	3163.9	3107.1	3025.7	2988.2	2990.8	3001.1	3028.3	3060.5	3099.3	3178.1
25°	3240.1	3247.9	3178.1	3069.6	3026.9	3034.7	3043.7	3056.7	3087.7	3132.9	3238.8
27.5°	3379.6	3386.1	3294.4	3147.2	3082.5	3095.4	3108.3	3099.3	3113.5	3152.3	3287.9
30°	3576.0	3579.9	3463.7	3268.5	3176.8	3183.3	3185.9	3148.4	3121.3	3152.3	3322.8
32.5°	3808.6	3807.3	3669.1	3415.8	3284.1	3277.6	3255.6	3182.0	3118.7	3145.8	3353.8
35°	4169.0	4154.8	3976.5	3622.6	3405.5	3365.5	3313.8	3219.4	3131.6	3139.4	3381.0
37.5°	4765.9	4722.0	4475.3	3961.0	3586.4	3484.3	3408.1	3280.2	3160.1	3136.8	3413.2
40°	5439.0	5383.4	5112.1	4424.8	3857.7	3693.6	3570.9	3366.7	3206.5	3148.4	3461.0
42.5°	6237.4	6158.6	5866.6	4971.4	4201.4	3963.6	3778.9	3476.6	3275.0	3185.9	3525.7
45°	7217.9	7113.3	6699.9	5587.6	4634.1	4317.6	4070.9	3643.3	3379.6	3258.3	3622.6
47.5°	8208.8	8234.7	7646.9	6293.0	5153.5	4754.3	4436.4	3893.9	3532.2	3374.5	3778.9
50°	9261.8	9279.8	8588.7	7074.6	5742.6	5247.8	4847.3	4174.2	3744.0	3539.8	4012.7
52.5°	10083.4	10086.0	9443.9	7892.3	6356.2	5790.4	5290.4	4494.6	3989.4	3759.5	4324.1
55°	10597.6	10591.1	10043.4	8666.2	7061.6	6360.1	5781.3	4858.9	4289.2	4017.9	4715.5
57.5°	10971.0	10951.6	10456.8	9331.5	7813.6	7033.2	6336.9	5272.3	4643.1	4325.4	5231.0
60°	11113.2	11101.5	10737.2	9906.4	8604.2	7777.4	6977.7	5734.9	5044.9	4688.3	5893.7
62.5°	11167.4	11189.3	11012.3	10463.3	9450.4	8601.6	7681.8	6287.8	5497.1	5099.2	6592.7
65°	11358.5	11398.6	11362.4	11191.9	10406.4	9566.6	8615.8	6945.4	5990.6	5539.7	7322.6
67.5°	11737.1	11777.1	11792.6	12063.9	11574.3	10769.5	9781.2	7764.5	6568.1	5997.1	7871.7
70°	11728.0	11716.5	11990.3	12757.8	13036.8	12434.8	11352.1	8772.2	7256.7	6376.9	7941.4
72.5°	10675.2	10582.1	11229.4	12750.0	14253.8	14173.7	13270.6	10071.9	7851.0	6423.5	6891.1
75°	8008.6	7760.6	8903.9	11490.4	14456.6	15160.7	14490.2	10878.0	7710.2	5675.4	4795.6
77.5°	3424.8	3175.6	4523.0	8506.0	12938.6	14172.4	13371.3	9490.5	6154.7	3753.0	2355.1
80°	896.6	895.3	1366.8	3856.4	8799.3	10465.9	9181.6	6128.9	3516.6	1341.0	649.8
82.5°	370.7	361.7	502.6	1499.9	4299.5	5873.0	4793.0	2733.7	1270.0	363.1	215.8
85°	138.3	136.9	244.2	518.0	1516.7	2422.4	1753.2	698.9	316.5	177.0	96.9
87.5°	38.7	37.5	53.0	179.6	369.5	560.7	299.7	115.0	89.2	69.8	28.4
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°	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3	2785.3
2.5°	2794.5	2800.9	2812.5	2821.5	2833.2	2846.1	2864.2	2875.8	2887.4	2895.2	2890.0
5°	2806.0	2820.3	2850.0	2879.7	2914.6	2946.9	2984.3	3011.4	3033.4	3039.8	3042.5
7.5°	2831.9	2855.1	2905.6	2955.9	3011.4	3064.4	3118.7	3165.2	3202.7	3216.9	3218.2
10°	2877.1	2908.1	2979.2	3050.2	3123.9	3205.3	3275.0	3342.2	3395.2	3417.1	3418.4
12.5°	2934.0	2972.7	3065.8	3163.9	3266.0	3378.4	3468.8	3551.5	3617.3	3647.1	3647.1
15°	3007.6	3058.0	3176.8	3308.6	3458.5	3614.8	3729.8	3821.5	3895.1	3931.3	3928.7
17.5°	3087.7	3154.8	3304.7	3503.7	3718.2	3923.6	4057.9	4125.1	4201.4	4236.2	4234.9
20°	3165.2	3247.9	3462.3	3751.7	4037.3	4255.6	4364.1	4382.2	4387.4	4391.2	4401.6
22.5°	3245.4	3356.4	3660.0	4064.4	4370.6	4521.7	4537.3	4459.7	4351.2	4300.8	4315.0
25°	3333.2	3480.4	3918.4	4409.3	4657.4	4675.4	4556.6	4367.9	4162.5	4068.2	4082.5
27.5°	3418.4	3623.9	4228.4	4738.8	4864.0	4705.2	4449.4	4181.9	3934.0	3834.4	3846.0
30°	3503.7	3787.9	4570.8	5026.9	4958.4	4631.6	4280.1	3981.7	3732.3	3627.7	3639.4
32.5°	3590.3	3979.2	4964.9	5234.9	4941.6	4475.3	4069.6	3756.9	3537.3	3427.5	3441.6
35°	3688.5	4214.3	5338.2	5348.6	4829.2	4245.2	3791.8	3488.2	3297.0	3209.2	3228.5
37.5°	3816.4	4512.7	5667.6	5376.9	4632.8	3908.0	3446.9	3170.3	3012.8	2972.7	3001.1
40°	3975.3	4871.8	5919.6	5331.7	4342.1	3498.5	3069.6	2848.7	2759.5	2768.6	2799.6
42.5°	4181.9	5273.6	6096.6	5215.5	3937.7	3076.0	2738.9	2640.7	2683.3	2719.5	2753.0
45°	4450.7	5690.9	6206.4	5017.8	3480.4	2718.2	2543.7	2567.0	2599.3	2603.2	2629.0
47.5°	4794.3	6113.4	6278.7	4719.4	3014.0	2466.3	2419.7	2424.9	2418.5	2391.3	2412.0
50°	5223.2	6524.2	6343.3	4324.1	2617.4	2308.7	2246.7	2228.6	2139.4	2051.5	2063.2
52.5°	5711.6	6901.4	6370.5	3833.1	2308.7	2176.9	2076.1	1962.5	1795.8	1768.6	1777.7
55°	6254.1	7250.2	6300.7	3229.8	2049.0	2007.7	1855.1	1718.2	1700.2	1676.9	1680.8
57.5°	6902.8	7626.2	6158.6	2556.8	1782.9	1809.9	1661.4	1676.9	1644.6	1608.4	1602.0
60°	7612.0	8015.1	5909.2	1943.1	1507.7	1563.2	1611.0	1609.8	1600.6	1571.0	1560.7
62.5°	8250.2	8270.8	5418.4	1488.3	1266.1	1372.1	1502.5	1501.2	1493.4	1476.6	1470.2
65°	8630.0	8232.1	4599.3	1171.8	1067.1	1214.4	1355.3	1365.6	1366.8	1365.6	1365.6
67.5°	8562.8	7778.6	3475.3	932.7	903.0	1054.2	1209.2	1223.4	1233.8	1236.4	1238.9
70°	7803.2	6782.6	2266.1	744.2	757.1	913.4	1071.0	1085.2	1094.3	1104.6	1109.8
72.5°	6082.3	4986.8	1297.1	602.1	629.1	791.9	934.1	950.9	956.0	975.4	983.2
75°	3706.5	2932.6	700.2	474.2	516.8	677.0	798.4	817.7	826.9	850.1	852.7
77.5°	1762.2	1270.0	399.2	369.5	416.0	553.0	674.3	696.4	671.8	684.7	674.3
80°	595.5	471.5	251.9	281.7	317.9	431.5	540.1	562.0	510.3	507.7	502.6
82.5°	208.0	191.2	160.2	187.4	205.4	308.7	408.3	436.6	379.9	378.5	360.5
85°	81.4	77.5	89.2	102.1	122.7	189.9	268.8	282.9	233.8	188.6	186.0
87.5°	16.8	18.0	21.9	23.3	37.5	65.9	96.9	118.9	94.3	80.1	73.6
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)