

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: P968374

Luminaire Tested: **NAV-SB5B-827-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968374
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-SB5B-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25131.9 lumens
Efficiency: N/A
Efficacy: 137.6 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): 182.7
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



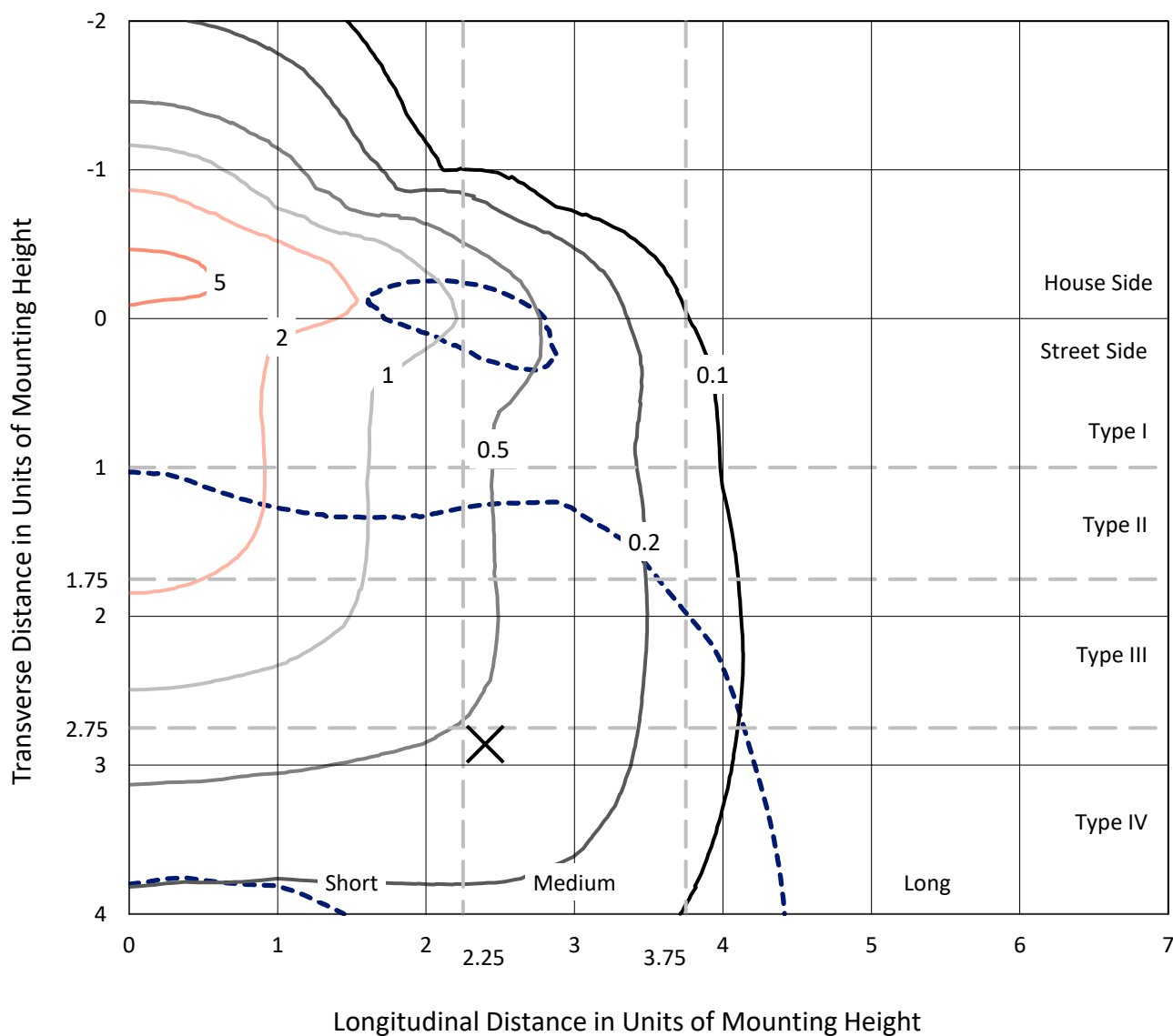
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

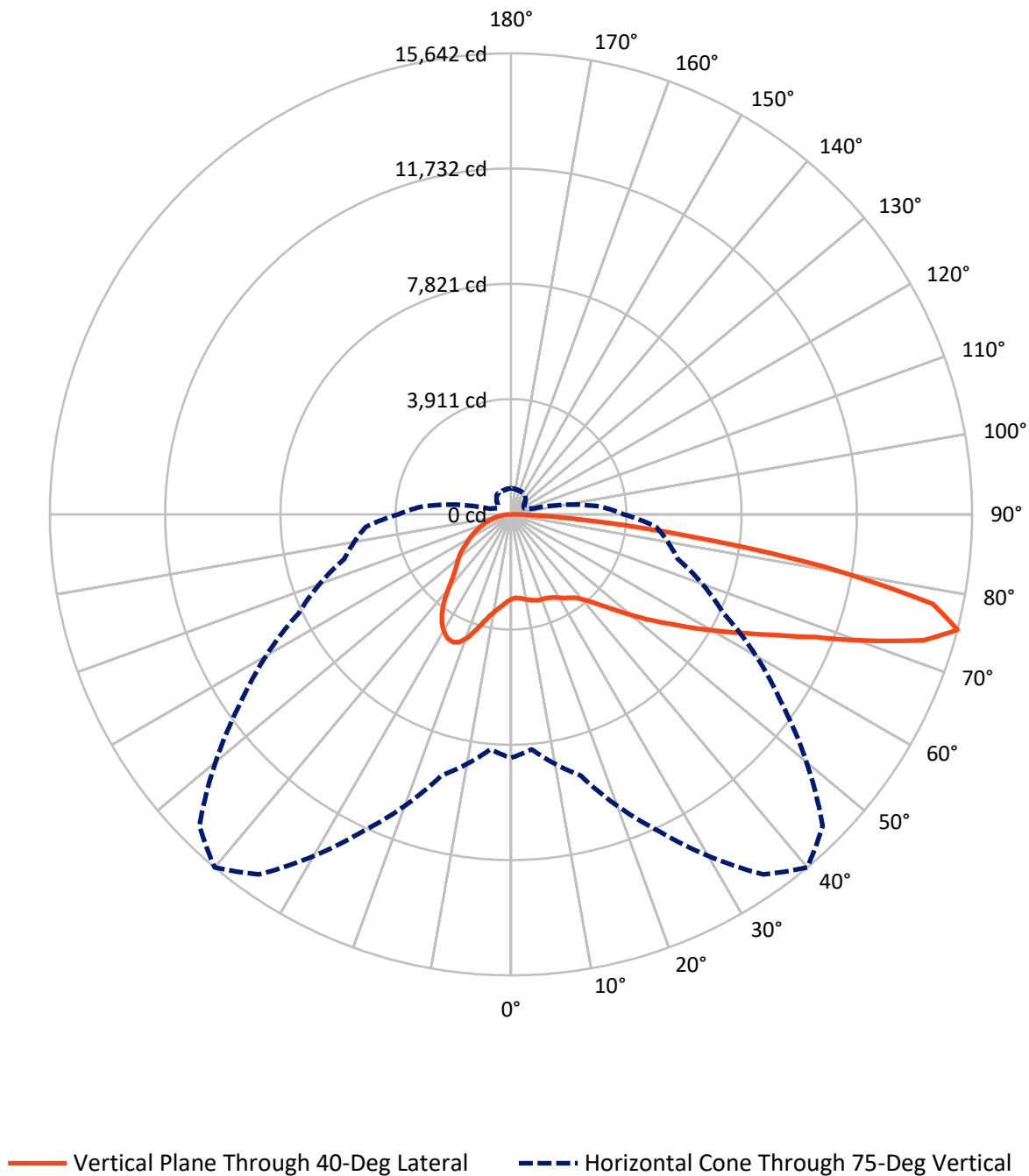
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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	7786.7	0.0	7786.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	17345.2	0.0	17345.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	25131.9	0.0	25131.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.9	1.1
10°-20°	963.1	3.8
20°-30°	1758.6	7.0
30°-40°	2494.2	9.9
40°-50°	3367.9	13.4
50°-60°	4530.8	18.0
60°-70°	5750.6	22.9
70°-80°	5219.0	20.8
80°-90°	760.8	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°	25131.9	100.0
0°-180°	25131.9	100.0

Coefficient of Utilization



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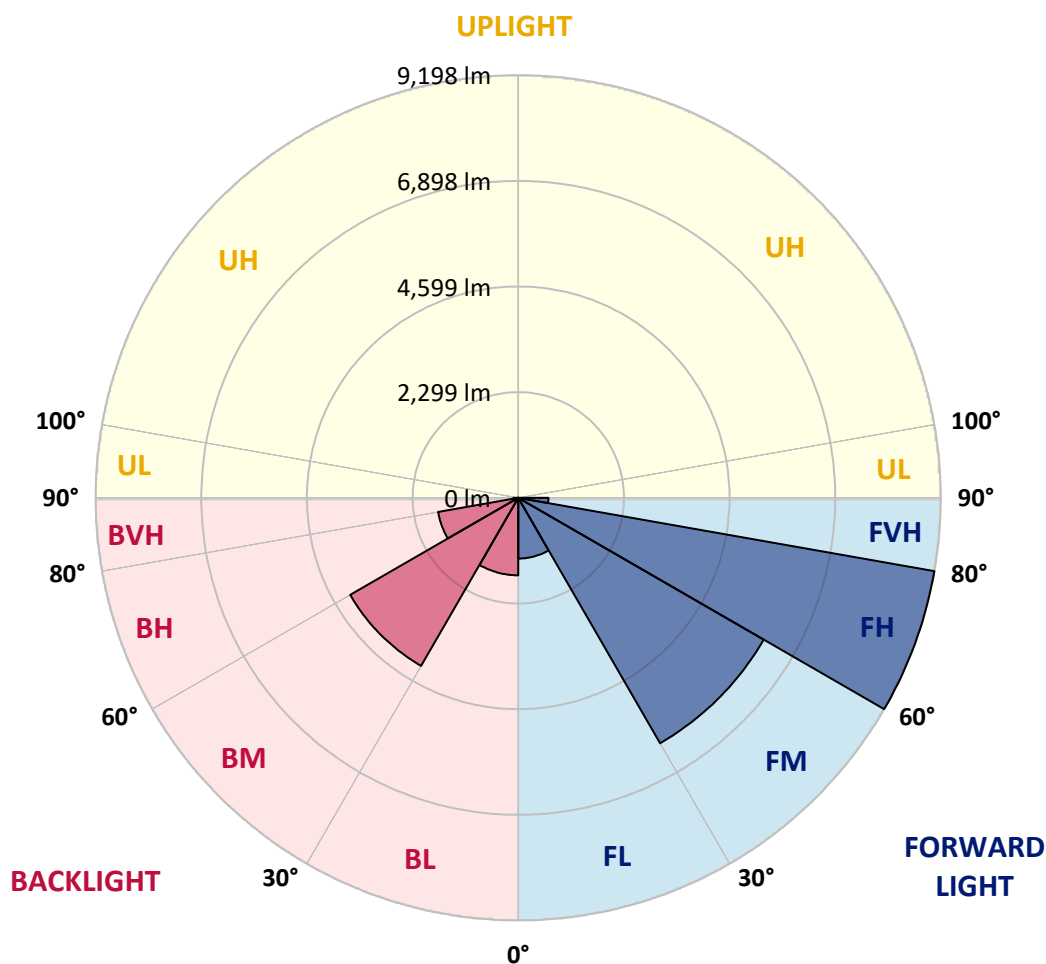
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1322.0	5.3			
FM	(30°-60°)	6169.3	24.5			
FH	(60°-80°)	9197.9	36.6			G4/12000
FVH	(80°-90°)	656.0	2.6			G4/750
BL	(0°-30°)	1686.7	6.7	B3/2500		
BM	(30°-60°)	4223.6	16.8	B3/5000		
BH	(60°-80°)	1771.7	7.0	B3/2500		G3/2500
BVH	(80°-90°)	104.7	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°	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9
2.5°	2829.9	2845.9	2841.9	2836.6	2836.6	2837.9	2836.6	2845.9	2855.2	2864.6	2879.2
5°	2859.2	2875.2	2867.2	2860.6	2855.2	2853.9	2849.9	2848.6	2853.9	2865.9	2885.9
7.5°	2916.5	2932.5	2920.5	2908.5	2897.9	2892.5	2887.2	2879.2	2875.2	2881.9	2909.9
10°	2980.5	2996.5	2981.8	2960.5	2943.2	2936.5	2931.2	2923.2	2917.9	2921.9	2952.5
12.5°	3044.5	3060.4	3040.5	3011.1	2988.5	2984.5	2977.8	2975.2	2973.8	2972.5	3003.1
15°	3104.5	3117.8	3092.5	3057.8	3033.8	3027.1	3020.5	3024.5	3031.1	3039.1	3073.8
17.5°	3151.2	3164.5	3127.2	3081.9	3059.1	3056.4	3052.4	3065.8	3084.5	3104.5	3147.2
20°	3193.8	3207.1	3159.2	3097.9	3071.1	3071.1	3072.4	3100.5	3127.2	3156.5	3215.1
22.5°	3253.8	3264.4	3205.8	3121.8	3083.2	3085.9	3096.5	3124.5	3157.8	3197.8	3279.1
25°	3343.0	3351.0	3279.1	3167.1	3123.2	3131.2	3140.5	3153.8	3185.8	3232.4	3341.7
27.5°	3487.0	3493.7	3399.1	3247.1	3180.5	3193.8	3207.1	3197.8	3212.5	3252.4	3392.4
30°	3689.7	3693.7	3573.7	3372.5	3277.7	3284.4	3287.1	3248.4	3220.4	3252.4	3428.4
32.5°	3929.5	3928.2	3785.6	3524.4	3388.4	3381.8	3359.0	3283.1	3217.8	3245.8	3460.4
35°	4301.5	4286.9	4102.9	3737.7	3513.7	3472.4	3419.1	3321.7	3231.1	3239.1	3488.4
37.5°	4917.3	4872.0	4617.4	4086.9	3700.4	3595.0	3516.4	3384.4	3260.4	3236.4	3521.7
40°	5611.8	5554.5	5274.5	4565.5	3980.3	3811.0	3684.4	3473.7	3308.4	3248.4	3571.0
42.5°	6435.6	6354.3	6053.0	5129.2	4334.8	4089.5	3898.9	3587.0	3379.1	3287.1	3637.6
45°	7447.2	7339.3	6912.8	5765.1	4781.3	4454.8	4200.1	3759.0	3487.0	3361.7	3737.7
47.5°	8469.7	8496.3	7889.8	6492.9	5317.2	4905.3	4577.4	4017.6	3644.3	3481.7	3898.9
50°	9556.1	9574.7	8861.5	7299.3	5925.0	5414.5	5001.3	4306.8	3862.9	3652.3	4140.2
52.5°	10403.8	10406.4	9744.0	8143.1	6558.2	5974.3	5458.5	4637.4	4116.2	3878.9	4461.4
55°	10934.3	10927.6	10362.4	8941.6	7286.0	6562.2	5965.0	5013.3	4425.4	4145.5	4865.4
57.5°	11319.6	11299.6	10789.0	9628.0	8061.7	7256.7	6538.2	5439.9	4790.6	4462.7	5397.1
60°	11466.2	11454.2	11078.3	10221.2	8877.5	8024.4	7199.4	5917.0	5205.3	4837.4	6081.0
62.5°	11522.1	11544.8	11362.2	10795.7	9750.6	8874.9	7925.8	6487.5	5671.7	5261.2	6802.1
65°	11719.4	11760.7	11723.4	11547.4	10737.1	9870.6	8889.5	7166.0	6181.0	5715.7	7555.3
67.5°	12110.0	12151.3	12167.4	12447.2	11942.1	11111.6	10091.8	8011.1	6776.8	6187.6	8121.8
70°	12100.6	12088.6	12371.2	13163.0	13451.0	12829.8	11712.8	9050.9	7487.3	6579.5	8193.7
72.5°	11014.3	10918.3	11586.2	13155.1	14706.6	14624.0	13692.3	10391.8	8100.5	6627.5	7110.0
75°	8263.0	8007.1	9186.8	11855.4	14915.9	15642.3	14950.5	11223.5	7955.1	5855.7	4948.0
77.5°	3533.7	3276.4	4666.7	8776.3	13349.7	14622.6	13796.2	9791.9	6350.3	3872.2	2430.0
80°	925.1	923.7	1410.3	3978.9	9078.8	10798.4	9473.4	6323.6	3628.3	1383.6	670.5
82.5°	382.5	373.2	518.5	1547.5	4436.1	6059.7	4945.3	2820.6	1310.3	374.5	222.6
85°	142.6	141.2	251.9	534.5	1564.9	2499.4	1808.8	721.1	326.6	182.7	99.9
87.5°	40.0	38.6	54.6	185.3	381.2	578.5	309.2	118.6	91.9	72.0	29.3
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°	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9	2873.9
2.5°	2883.2	2889.9	2901.9	2911.2	2923.2	2936.5	2955.2	2967.2	2979.2	2987.2	2981.8
5°	2895.2	2909.9	2940.5	2971.2	3007.1	3040.5	3079.2	3107.2	3129.8	3136.5	3139.2
7.5°	2921.9	2945.8	2997.8	3049.8	3107.2	3161.8	3217.8	3265.8	3304.4	3319.1	3320.4
10°	2968.5	3000.5	3073.8	3147.2	3223.1	3307.1	3379.1	3448.4	3503.0	3525.7	3527.0
12.5°	3027.1	3067.1	3163.1	3264.4	3369.7	3485.7	3579.0	3664.3	3732.3	3763.0	3763.0
15°	3103.2	3155.2	3277.7	3413.8	3568.3	3729.7	3848.3	3942.9	4018.9	4056.2	4053.6
17.5°	3185.8	3255.1	3409.8	3615.0	3836.3	4048.2	4186.8	4256.2	4334.8	4370.8	4369.5
20°	3265.8	3351.0	3572.3	3870.9	4165.5	4390.8	4502.7	4521.4	4526.7	4530.7	4541.4
22.5°	3348.4	3463.1	3776.3	4193.5	4509.4	4665.4	4681.4	4601.4	4489.4	4437.4	4452.1
25°	3439.1	3591.0	4042.9	4549.5	4805.3	4824.0	4701.4	4506.7	4294.9	4197.5	4212.1
27.5°	3527.0	3739.0	4362.8	4889.4	5018.6	4854.7	4590.8	4314.8	4058.9	3956.2	3968.3
30°	3615.0	3908.2	4716.0	5186.6	5115.9	4778.7	4416.1	4108.2	3850.9	3743.0	3755.0
32.5°	3704.3	4105.5	5122.5	5401.1	5098.6	4617.4	4198.8	3876.2	3649.6	3536.4	3551.0
35°	3805.6	4348.2	5507.8	5518.5	4982.6	4380.1	3912.2	3599.0	3401.8	3311.1	3331.0
37.5°	3937.5	4656.1	5847.7	5547.8	4780.0	4032.2	3556.3	3271.1	3108.5	3067.1	3096.5
40°	4101.5	5026.6	6107.7	5501.2	4480.1	3609.6	3167.1	2939.2	2847.2	2856.6	2888.6
42.5°	4314.8	5441.2	6290.2	5381.1	4062.9	3173.8	2825.9	2724.6	2768.5	2805.9	2840.6
45°	4592.1	5871.7	6403.6	5177.3	3591.0	2804.6	2624.6	2648.6	2681.9	2685.9	2712.6
47.5°	4946.6	6307.6	6478.2	4869.4	3109.8	2544.7	2496.7	2502.0	2495.4	2467.3	2488.6
50°	5389.1	6731.5	6544.8	4461.4	2700.6	2382.0	2318.0	2299.4	2207.4	2116.7	2128.7
52.5°	5893.0	7120.7	6572.8	3954.9	2382.0	2246.1	2142.0	2024.8	1852.8	1824.8	1834.1
55°	6452.9	7480.7	6500.9	3332.4	2114.1	2071.4	1914.2	1772.8	1754.2	1730.2	1734.2
57.5°	7122.0	7868.5	6354.3	2637.9	1839.5	1867.4	1714.2	1730.2	1696.9	1659.6	1652.9
60°	7853.9	8269.7	6097.0	2004.8	1555.5	1612.9	1662.2	1660.9	1651.6	1620.9	1610.2
62.5°	8512.3	8533.6	5590.5	1535.6	1306.3	1415.6	1550.2	1548.9	1540.9	1523.6	1516.9
65°	8904.2	8493.7	4745.3	1209.0	1101.1	1253.0	1398.3	1409.0	1410.3	1409.0	1409.0
67.5°	8834.9	8025.7	3585.7	962.4	931.7	1087.7	1247.6	1262.3	1272.9	1275.6	1278.3
70°	8051.1	6998.1	2338.0	767.8	781.2	942.4	1105.1	1119.7	1129.0	1139.7	1145.0
72.5°	6275.6	5145.3	1338.3	621.2	649.1	817.1	963.7	981.0	986.4	1006.3	1014.3
75°	3824.3	3025.8	722.4	489.2	533.2	698.4	823.8	843.8	853.1	877.1	879.8
77.5°	1818.1	1310.3	411.8	381.2	429.2	570.5	695.8	718.4	693.1	706.4	695.8
80°	614.5	486.6	259.9	290.6	327.9	445.3	557.2	579.8	526.5	523.9	518.5
82.5°	214.6	197.3	165.3	193.3	212.0	318.6	421.2	450.6	391.9	390.5	371.9
85°	83.9	79.9	91.9	105.3	126.6	196.0	277.3	291.9	241.3	194.6	192.0
87.5°	17.3	18.7	22.7	24.0	38.6	68.0	99.9	122.6	97.3	82.6	76.0
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)