

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: P884509

Luminaire Tested: **NAV-SB5B-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24125 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

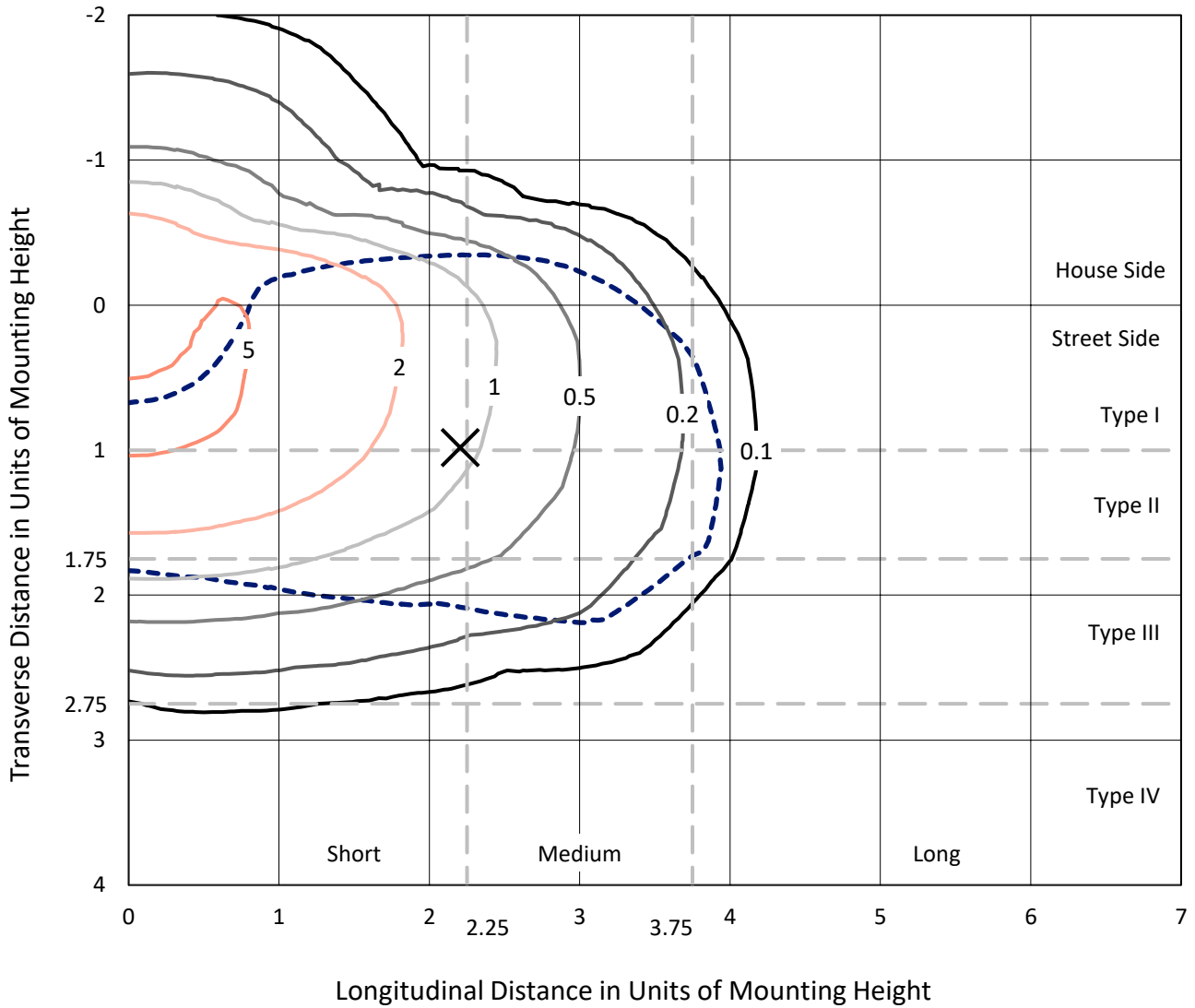
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

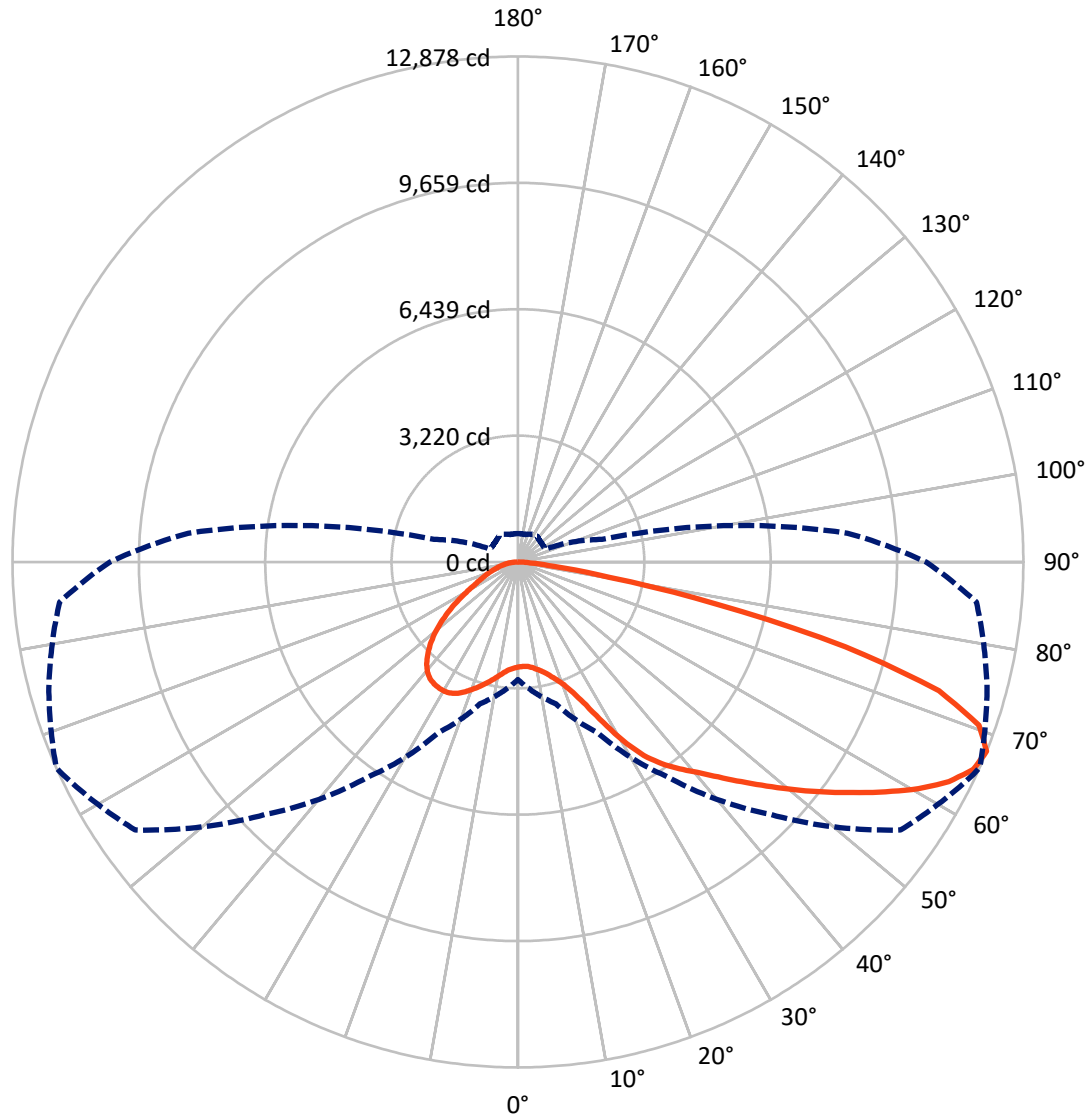
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5998.6	0.0	5998.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	18126.4	0.0	18126.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	24125.0	0.0	24125.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.3	1.1
10°-20°	876.5	3.6
20°-30°	1689.4	7.0
30°-40°	2962.1	12.3
40°-50°	4403.7	18.3
50°-60°	5582.1	23.1
60°-70°	5462.0	22.6
70°-80°	2605.4	10.8
80°-90°	278.4	1.2
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°	24125.0	100.0
0°-180°	24125.0	100.0

Coefficient of Utilization



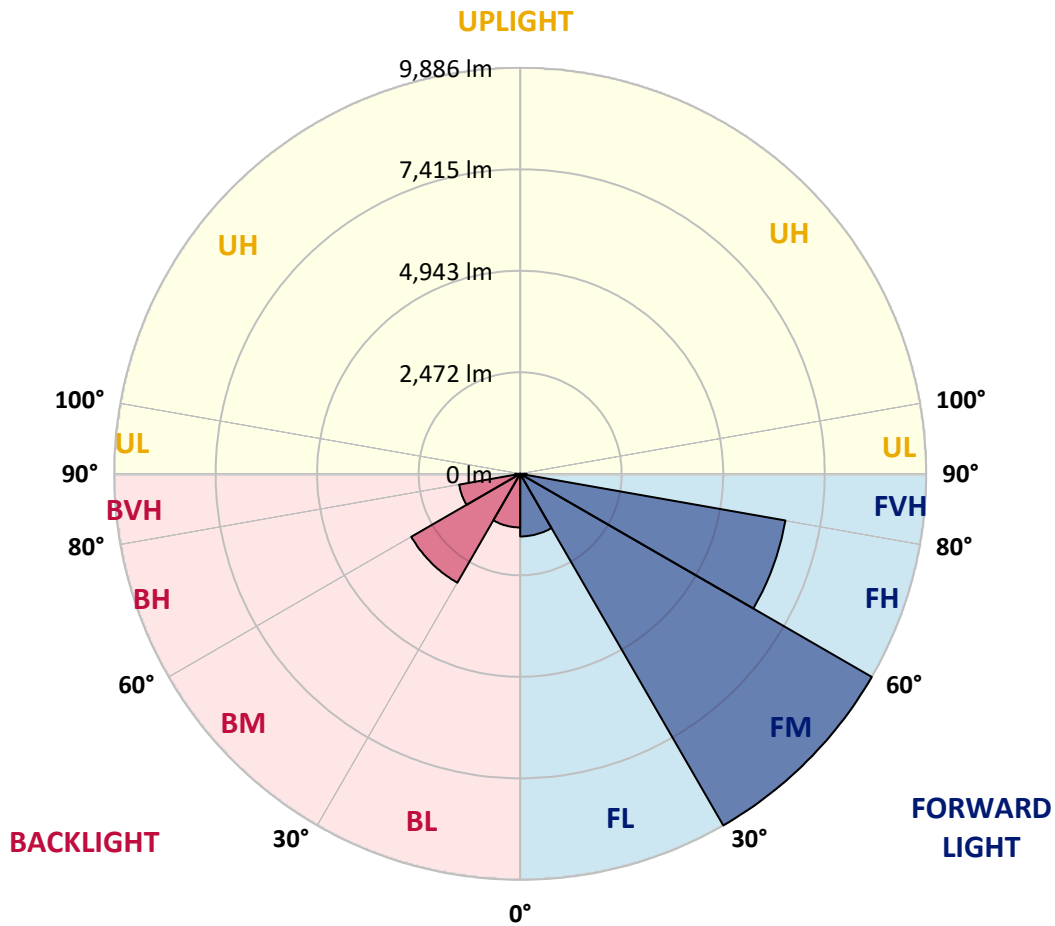
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1524.5	6.3			
FM (30°-60°)	9886.2	41.0			
FH (60°-80°)	6557.8	27.2			G3/7500
FVH (80°-90°)	157.9	0.7			G2/225
BL (0°-30°)	1306.7	5.4	B3/2500		
BM (30°-60°)	3061.8	12.7	B3/5000		
BH (60°-80°)	1509.6	6.3	B3/2500		G3/2500
BVH (80°-90°)	120.6	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8
2.5°	2647.9	2663.1	2659.3	2653.0	2651.7	2654.2	2658.0	2661.8	2660.6	2666.9	2677.0
5°	2640.3	2655.5	2654.2	2654.2	2659.3	2669.4	2675.8	2682.1	2675.8	2683.4	2697.3
7.5°	2645.4	2656.8	2661.8	2666.9	2679.6	2698.6	2713.8	2727.8	2720.1	2729.0	2746.8
10°	2710.0	2718.9	2723.9	2723.9	2732.8	2754.4	2769.6	2794.9	2788.6	2802.5	2825.4
12.5°	2827.9	2836.8	2836.8	2831.7	2838.0	2852.0	2857.0	2884.9	2873.5	2896.3	2919.1
15°	2972.4	2990.1	2976.2	2967.3	2969.9	2983.8	2982.5	3004.1	2992.7	3011.7	3032.0
17.5°	3132.1	3154.9	3132.1	3130.8	3125.8	3141.0	3142.2	3161.2	3141.0	3154.9	3168.9
20°	3321.0	3352.6	3333.6	3340.0	3328.6	3334.9	3341.2	3369.1	3337.4	3347.6	3343.8
22.5°	3587.1	3625.2	3604.9	3629.0	3621.4	3616.3	3615.0	3664.5	3615.0	3618.8	3582.1
25°	3975.0	4020.6	3985.2	4018.1	4018.1	4034.6	4053.6	4117.0	4034.6	4010.5	3915.4
27.5°	4547.9	4593.6	4523.9	4544.1	4537.8	4578.4	4558.1	4715.3	4626.5	4587.2	4395.8
30°	5237.5	5318.6	5186.8	5181.7	5175.4	5240.0	5269.2	5373.1	5283.1	5243.8	5013.1
32.5°	5982.8	6067.7	5910.5	5864.9	5840.8	5880.1	5856.0	5939.7	5877.6	5816.8	5531.6
35°	6771.2	6854.9	6705.3	6616.6	6520.2	6437.8	6351.7	6373.2	6314.9	6222.4	5927.0
37.5°	7516.5	7669.9	7511.5	7416.4	7238.9	7078.0	6837.1	6737.0	6682.5	6597.6	6299.7
40°	8275.8	8363.2	8242.8	8161.7	7969.0	7716.8	7331.5	7119.8	7046.3	6963.9	6711.6
42.5°	8834.8	8918.4	8853.8	8798.0	8647.2	8354.4	7856.2	7591.3	7484.8	7392.3	7178.1
45°	9278.4	9340.5	9300.0	9320.2	9255.6	8971.7	8400.0	8097.1	7986.8	7874.0	7705.4
47.5°	9457.1	9523.0	9587.7	9708.1	9818.4	9609.2	8984.3	8644.6	8528.0	8412.7	8246.6
50°	9436.9	9504.0	9691.6	9947.7	10289.9	10220.2	9600.4	9227.7	9120.0	8988.1	8834.8
52.5°	9274.6	9350.7	9591.5	10017.4	10562.4	10677.8	10227.8	9829.8	9728.4	9571.2	9417.8
55°	8848.7	8894.3	9255.6	9858.9	10627.1	10997.2	10842.6	10471.2	10369.8	10150.5	9983.2
57.5°	8059.0	8124.9	8651.0	9431.8	10464.8	11213.9	11382.5	11145.5	11047.9	10732.3	10557.4
60°	7028.5	7133.7	7735.8	8714.4	10051.6	11212.7	11873.1	11808.4	11727.3	11305.2	11122.7
62.5°	5862.4	5984.1	6563.3	7700.3	9329.1	10894.5	12179.8	12363.6	12321.8	11833.8	11600.5
65°	4502.3	4586.0	5162.7	6388.4	8204.8	10211.3	12215.3	12742.6	12750.2	12235.6	11850.3
67.5°	2997.7	3238.6	3739.2	4793.8	6699.0	9094.6	11903.5	12804.7	12878.2	12373.7	11724.8
70°	1462.7	1779.6	2270.2	3115.6	4793.8	7382.2	11088.5	12295.2	12458.7	11970.7	10976.9
72.5°	607.2	709.8	977.3	1537.5	2751.8	4981.4	9450.8	10913.5	11216.5	10606.8	9229.0
75°	409.4	443.6	559.0	788.4	1253.6	2456.5	6815.6	8137.6	8625.6	8010.9	6548.1
77.5°	315.6	337.2	406.9	551.4	745.3	929.1	3648.0	4904.1	5156.4	4773.6	3407.2
80°	248.4	264.9	304.2	401.8	528.6	496.9	1243.5	2222.0	2367.8	1986.2	1095.2
82.5°	215.5	221.8	218.0	272.5	351.1	290.3	408.1	820.1	905.0	656.6	357.4
85°	155.9	173.7	181.3	168.6	186.3	147.0	167.3	290.3	319.4	285.2	201.5
87.5°	63.4	93.8	115.3	109.0	68.4	41.8	52.0	84.9	97.6	106.5	65.9
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°	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8	2675.8
2.5°	2678.3	2687.2	2693.5	2701.1	2706.2	2713.8	2729.0	2737.9	2739.2	2745.5	2744.2
5°	2702.4	2715.1	2729.0	2749.3	2772.1	2791.1	2820.3	2840.6	2848.2	2854.5	2853.2
7.5°	2754.4	2772.1	2797.5	2833.0	2865.9	2891.3	2926.8	2950.8	2974.9	2983.8	2985.1
10°	2831.7	2857.0	2893.8	2942.0	2977.5	3010.4	3047.2	3067.5	3091.5	3101.7	3106.7
12.5°	2928.0	2954.6	3002.8	3070.0	3102.9	3125.8	3138.4	3133.4	3138.4	3147.3	3149.8
15°	3038.3	3067.5	3122.0	3194.2	3217.0	3196.7	3168.9	3143.5	3139.7	3142.2	3151.1
17.5°	3168.9	3190.4	3253.8	3314.6	3298.1	3214.5	3153.6	3113.1	3092.8	3086.5	3095.3
20°	3351.4	3351.4	3403.4	3441.4	3331.1	3189.1	3094.1	3028.2	2986.3	2968.6	2964.8
22.5°	3573.2	3552.9	3585.9	3559.3	3324.8	3118.2	2986.3	2872.3	2808.9	2783.5	2779.7
25°	3854.6	3830.5	3821.6	3656.9	3279.1	3005.3	2791.1	2653.0	2597.2	2583.3	2585.8
27.5°	4279.2	4218.4	4103.0	3710.1	3195.5	2827.9	2563.0	2434.9	2403.3	2404.5	2408.3
30°	4844.5	4722.9	4440.2	3719.0	3058.6	2576.9	2329.7	2238.5	2223.3	2229.6	2251.2
32.5°	5368.0	5252.7	4785.0	3678.4	2848.2	2331.0	2120.6	2059.8	2036.9	2044.5	2054.7
35°	5778.7	5747.0	5104.4	3621.4	2589.6	2100.3	1933.0	1881.0	1836.7	1826.5	1834.1
37.5°	6166.6	6153.9	5344.0	3541.5	2333.5	1936.8	1782.2	1713.7	1649.1	1613.6	1614.8
40°	6592.5	6579.8	5501.1	3418.6	2106.7	1794.8	1646.5	1556.5	1476.7	1412.0	1418.4
42.5°	7071.6	6996.8	5575.9	3242.4	1914.0	1674.4	1536.3	1414.6	1309.4	1249.8	1253.6
45°	7595.1	7426.5	5574.7	3018.0	1751.7	1564.1	1418.4	1246.0	1148.4	1092.6	1090.1
47.5°	8150.3	7837.2	5506.2	2769.6	1594.6	1442.5	1235.9	1104.0	1039.4	1005.2	997.6
50°	8723.2	8221.3	5389.6	2484.4	1433.6	1304.3	1121.8	1031.8	982.3	950.7	939.2
52.5°	9261.9	8569.9	5248.9	2161.2	1270.1	1169.9	1071.1	1001.4	949.4	913.9	898.7
55°	9762.6	8870.3	5049.9	1830.3	1137.0	1079.9	1047.0	988.7	929.1	887.3	870.8
57.5°	10207.5	9065.5	4706.4	1519.8	1041.9	1017.8	1021.6	967.1	898.7	863.2	840.4
60°	10577.6	9208.7	4198.1	1232.1	964.6	957.0	982.3	926.6	846.7	806.2	788.4
62.5°	10799.5	9206.2	3574.5	1009.0	898.7	901.2	930.4	875.9	794.7	756.7	745.3
65°	10780.4	8980.5	2890.0	863.2	835.3	837.8	875.9	820.1	751.7	728.8	727.6
67.5°	10398.9	8430.4	2216.9	768.1	765.6	777.0	821.4	782.1	725.0	722.5	726.3
70°	9365.9	7288.4	1597.1	692.1	693.3	709.8	768.1	758.0	711.1	716.2	714.9
72.5°	7510.2	5556.9	1072.3	612.2	613.5	640.1	717.4	739.0	697.1	764.3	774.5
75°	5001.7	3465.5	689.5	527.3	528.6	562.8	673.1	702.2	659.1	761.8	768.1
77.5°	2403.3	1557.8	499.4	443.6	443.6	475.3	581.8	628.7	561.5	591.9	542.5
80°	830.2	585.6	392.9	357.4	349.8	371.4	490.5	545.0	484.2	446.2	418.3
82.5°	327.0	304.2	315.6	277.6	252.2	266.2	381.5	450.0	356.2	322.0	320.7
85°	187.6	197.7	223.1	183.8	145.8	163.5	280.1	323.2	268.7	237.0	242.1
87.5°	50.7	69.7	102.7	95.1	65.9	69.7	133.1	178.7	154.6	119.1	123.0
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)