

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: P883469

Luminaire Tested: **NAV-SB3D-827-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883469
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-SB3D-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24816 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

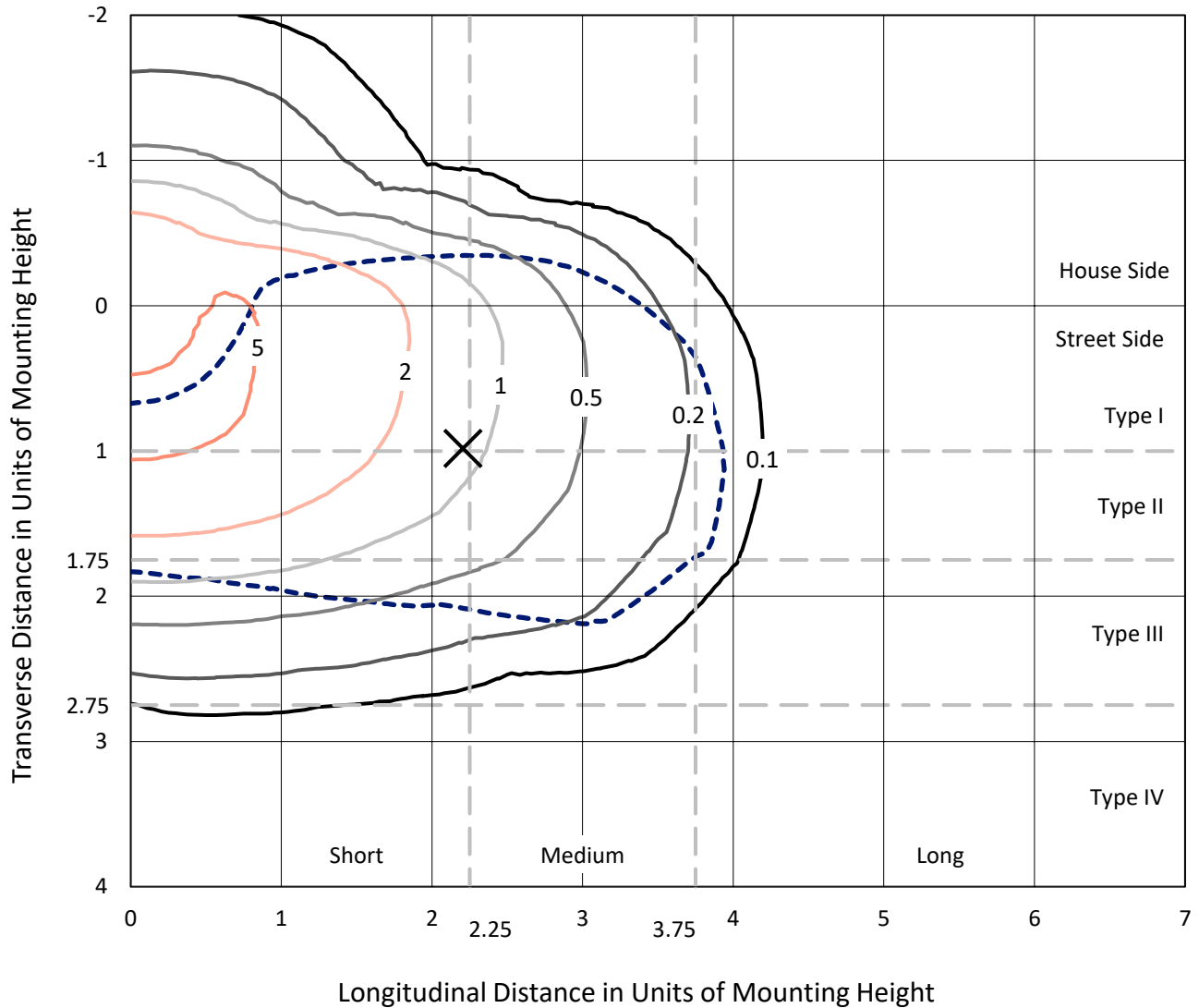
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

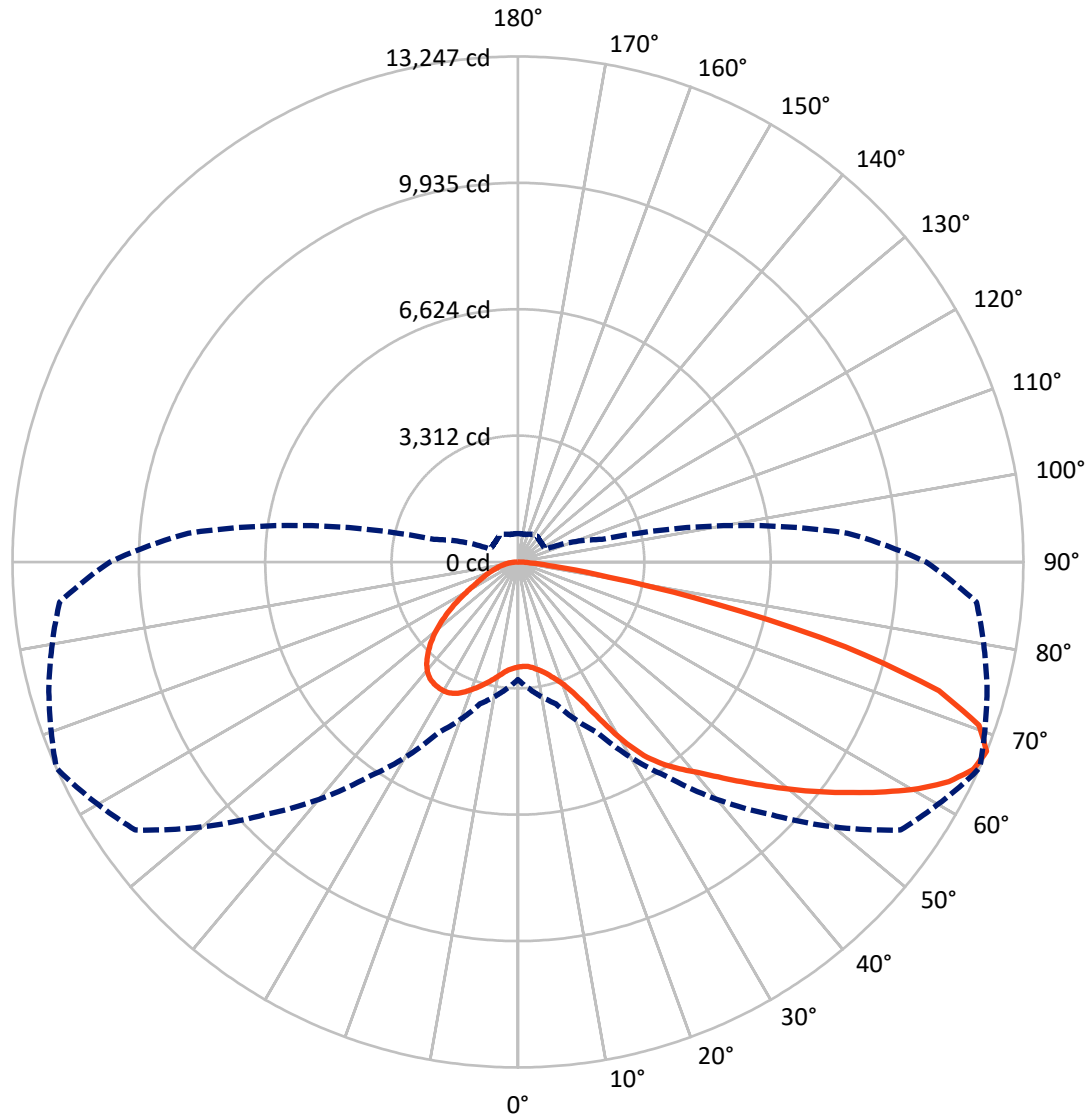
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 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	6170.4	0.0	6170.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	18645.6	0.0	18645.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	24816.0	0.0	24816.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.9	1.1
10°-20°	901.6	3.6
20°-30°	1737.8	7.0
30°-40°	3047.0	12.3
40°-50°	4529.8	18.3
50°-60°	5742.0	23.1
60°-70°	5618.4	22.6
70°-80°	2680.0	10.8
80°-90°	286.4	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°	24816.0	100.0
0°-180°	24816.0	100.0

Coefficient of Utilization



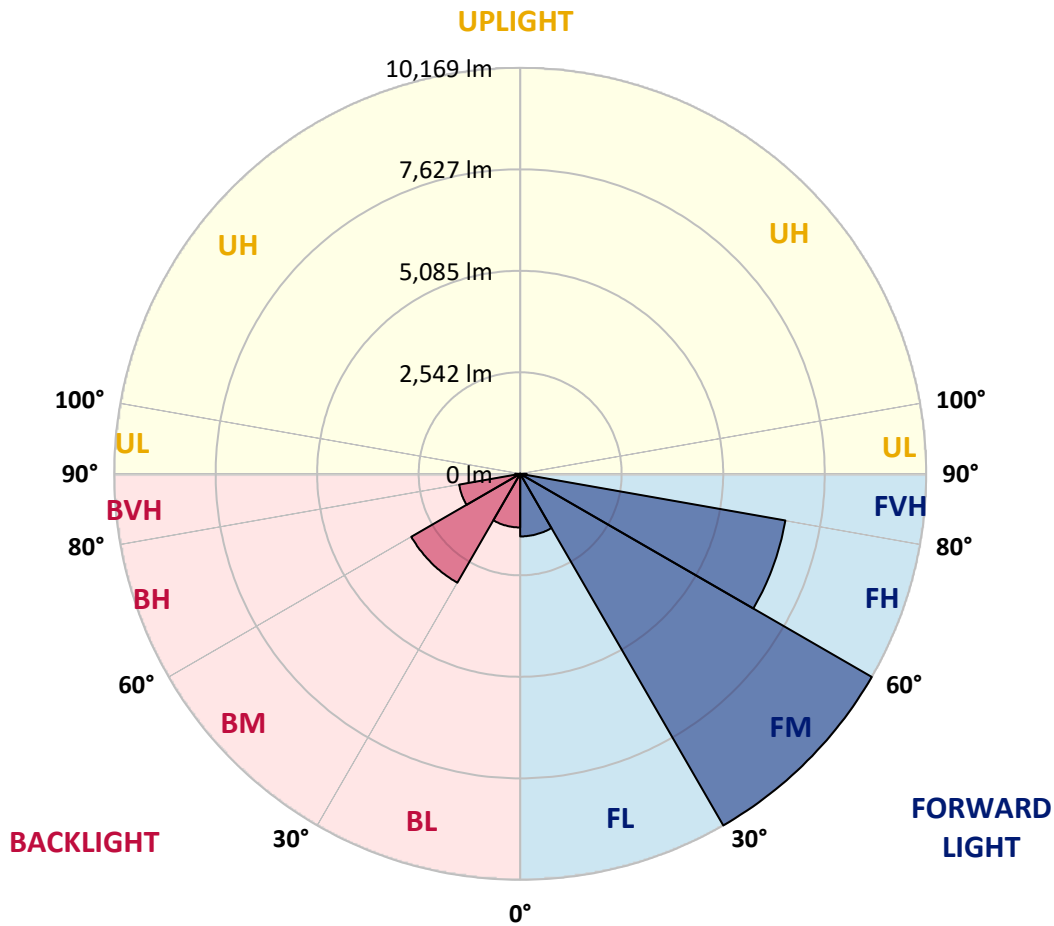
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1568.1	6.3			
FM (30°-60°)	10169.4	41.0			
FH (60°-80°)	6745.7	27.2			G3/7500
FVH (80°-90°)	162.4	0.7			G2/225
BL (0°-30°)	1344.1	5.4	B3/2500		
BM (30°-60°)	3149.5	12.7	B3/5000		
BH (60°-80°)	1552.8	6.3	B3/2500		G3/2500
BVH (80°-90°)	124.0	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°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2723.7	2739.4	2735.5	2729.0	2727.6	2730.3	2734.2	2738.1	2736.8	2743.3	2753.7
5°	2715.9	2731.6	2730.3	2730.3	2735.5	2745.9	2752.4	2758.9	2752.4	2760.2	2774.6
7.5°	2721.1	2732.9	2738.1	2743.3	2756.3	2775.9	2791.5	2805.9	2798.1	2807.2	2825.4
10°	2787.6	2796.8	2802.0	2802.0	2811.1	2833.3	2848.9	2875.0	2868.5	2882.8	2906.3
12.5°	2908.9	2918.0	2918.0	2912.8	2919.3	2933.7	2938.9	2967.6	2955.8	2979.3	3002.8
15°	3057.5	3075.8	3061.4	3052.3	3054.9	3069.3	3068.0	3090.1	3078.4	3097.9	3118.8
17.5°	3221.8	3245.3	3221.8	3220.5	3215.3	3230.9	3232.2	3251.8	3230.9	3245.3	3259.6
20°	3416.1	3448.7	3429.1	3435.6	3423.9	3430.4	3436.9	3465.6	3433.0	3443.5	3439.6
22.5°	3689.9	3729.0	3708.1	3732.9	3725.1	3719.9	3718.6	3769.4	3718.6	3722.5	3684.7
25°	4088.9	4135.8	4099.3	4133.2	4133.2	4150.1	4169.7	4234.9	4150.1	4125.4	4027.6
27.5°	4678.2	4725.1	4653.4	4674.3	4667.8	4709.5	4688.6	4850.3	4759.0	4718.6	4521.7
30°	5387.5	5470.9	5335.3	5330.1	5323.6	5390.1	5420.1	5527.0	5434.4	5394.0	5156.7
32.5°	6154.2	6241.5	6079.8	6032.9	6008.1	6048.5	6023.8	6109.8	6045.9	5983.4	5690.0
35°	6965.2	7051.2	6897.4	6806.1	6707.0	6622.2	6533.6	6555.7	6495.8	6400.6	6096.8
37.5°	7731.8	7889.6	7726.6	7628.8	7446.3	7280.7	7033.0	6930.0	6873.9	6786.5	6480.1
40°	8512.8	8602.8	8478.9	8395.5	8197.3	7937.8	7541.5	7323.7	7248.1	7163.3	6903.9
42.5°	9087.8	9173.9	9107.4	9050.0	8894.8	8593.7	8081.2	7808.7	7699.2	7604.0	7383.7
45°	9544.2	9608.1	9566.3	9587.2	9520.7	9228.6	8640.6	8329.0	8215.5	8099.5	7926.1
47.5°	9728.0	9795.8	9862.3	9986.2	10099.6	9884.5	9241.7	8892.2	8772.3	8653.6	8482.8
50°	9707.1	9776.2	9969.2	10232.6	10584.6	10512.9	9875.3	9492.0	9381.2	9245.6	9087.8
52.5°	9540.3	9618.5	9866.2	10304.3	10865.0	10983.6	10520.7	10111.3	10007.0	9845.4	9687.6
55°	9102.2	9149.1	9520.7	10141.3	10931.5	11312.2	11153.1	10771.1	10666.8	10441.2	10269.1
57.5°	8289.9	8357.7	8898.8	9701.9	10764.6	11535.1	11708.6	11464.7	11364.3	11039.7	10859.7
60°	7229.8	7338.1	7957.4	8964.0	10339.5	11533.8	12213.1	12146.6	12063.2	11629.0	11441.3
62.5°	6030.3	6155.5	6751.3	7920.9	9596.3	11206.6	12528.7	12717.7	12674.7	12172.7	11932.8
65°	4631.3	4717.3	5310.6	6571.4	8439.8	10503.8	12565.2	13107.6	13115.4	12586.0	12189.7
67.5°	3083.6	3331.3	3846.4	4931.2	6890.8	9355.1	12244.4	13171.5	13247.1	12728.2	12060.6
70°	1504.6	1830.6	2335.2	3204.9	4931.2	7593.6	11406.1	12647.3	12815.5	12313.5	11291.3
72.5°	624.5	730.2	1005.3	1581.6	2830.7	5124.1	9721.5	11226.1	11537.7	10910.6	9493.3
75°	421.1	456.3	575.0	811.0	1289.5	2526.9	7010.8	8370.7	8872.7	8240.3	6735.7
77.5°	324.7	346.8	418.5	567.2	766.7	955.7	3752.5	5044.6	5304.1	4910.3	3504.7
80°	255.6	272.5	312.9	413.3	543.7	511.1	1279.1	2285.6	2435.6	2043.1	1126.5
82.5°	221.7	228.2	224.3	280.3	361.2	298.6	419.8	843.6	930.9	675.4	367.7
85°	160.4	178.6	186.5	173.4	191.7	151.2	172.1	298.6	328.6	293.4	207.3
87.5°	65.2	96.5	118.7	112.1	70.4	43.0	53.5	87.4	100.4	109.5	67.8
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°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2755.0	2764.2	2770.7	2778.5	2783.7	2791.5	2807.2	2816.3	2817.6	2824.1	2822.8
5°	2779.8	2792.8	2807.2	2828.0	2851.5	2871.1	2901.1	2921.9	2929.7	2936.3	2935.0
7.5°	2833.3	2851.5	2877.6	2914.1	2948.0	2974.1	3010.6	3035.4	3060.1	3069.3	3070.6
10°	2912.8	2938.9	2976.7	3026.2	3062.7	3096.6	3134.4	3155.3	3180.1	3190.5	3195.7
12.5°	3011.9	3039.3	3088.8	3157.9	3191.8	3215.3	3228.3	3223.1	3228.3	3237.5	3240.1
15°	3125.3	3155.3	3211.4	3285.7	3309.2	3288.3	3259.6	3233.5	3229.6	3232.2	3241.4
17.5°	3259.6	3281.8	3347.0	3409.6	3392.6	3306.6	3244.0	3202.2	3181.4	3174.9	3184.0
20°	3447.4	3447.4	3500.8	3539.9	3426.5	3280.5	3182.7	3114.9	3071.9	3053.6	3049.7
22.5°	3675.5	3654.7	3688.6	3661.2	3420.0	3207.5	3071.9	2954.5	2889.3	2863.2	2859.3
25°	3965.0	3940.2	3931.1	3761.6	3373.1	3091.4	2871.1	2729.0	2671.6	2657.2	2659.8
27.5°	4401.8	4339.2	4220.6	3816.4	3287.0	2908.9	2636.4	2504.7	2472.1	2473.4	2477.3
30°	4983.3	4858.1	4567.4	3825.5	3146.2	2650.7	2396.5	2302.6	2286.9	2293.5	2315.6
32.5°	5521.8	5403.1	4922.0	3783.8	2929.7	2397.8	2181.3	2118.8	2095.3	2103.1	2113.5
35°	5944.2	5911.6	5250.6	3725.1	2663.8	2160.5	1988.4	1934.9	1889.3	1878.8	1886.7
37.5°	6343.2	6330.2	5497.0	3643.0	2400.4	1992.3	1833.2	1762.8	1696.3	1659.8	1661.1
40°	6781.3	6768.3	5658.7	3516.5	2167.0	1846.2	1693.7	1601.1	1519.0	1452.5	1459.0
42.5°	7274.2	7197.2	5735.6	3335.2	1968.8	1722.4	1580.3	1455.1	1346.9	1285.6	1289.5
45°	7812.7	7639.2	5734.3	3104.5	1801.9	1608.9	1459.0	1281.7	1181.3	1123.9	1121.3
47.5°	8383.7	8061.7	5663.9	2848.9	1640.2	1483.8	1271.3	1135.7	1069.2	1034.0	1026.1
50°	8973.1	8456.8	5544.0	2555.5	1474.7	1341.7	1153.9	1061.3	1010.5	977.9	966.2
52.5°	9527.2	8815.3	5399.2	2223.1	1306.5	1203.5	1101.8	1030.0	976.6	940.1	924.4
55°	10042.2	9124.3	5194.5	1882.8	1169.6	1110.9	1077.0	1017.0	955.7	912.7	895.7
57.5°	10499.9	9325.1	4841.2	1563.3	1071.8	1047.0	1050.9	994.8	924.4	887.9	864.5
60°	10880.6	9472.5	4318.3	1267.3	992.2	984.4	1010.5	953.1	871.0	829.2	811.0
62.5°	11108.8	9469.8	3676.9	1037.9	924.4	927.0	957.0	901.0	817.5	778.4	766.7
65°	11089.2	9237.8	2972.8	887.9	859.2	861.8	901.0	843.6	773.2	749.7	748.4
67.5°	10696.8	8671.9	2280.4	790.1	787.5	799.3	844.9	804.5	745.8	743.2	747.1
70°	9634.1	7497.1	1642.8	711.9	713.2	730.2	790.1	779.7	731.5	736.7	735.4
72.5°	7725.3	5716.1	1103.1	629.8	631.1	658.4	738.0	760.1	717.1	786.2	796.7
75°	5145.0	3564.7	709.3	542.4	543.7	578.9	692.3	722.3	678.0	783.6	790.1
77.5°	2472.1	1602.4	513.7	456.3	456.3	488.9	598.5	646.7	577.6	608.9	558.0
80°	854.0	602.4	404.2	367.7	359.9	382.0	504.6	560.7	498.1	459.0	430.3
82.5°	336.4	312.9	324.7	285.5	259.5	273.8	392.5	462.9	366.4	331.2	329.9
85°	193.0	203.4	229.5	189.1	149.9	168.2	288.2	332.5	276.4	243.8	249.0
87.5°	52.2	71.7	105.6	97.8	67.8	71.7	136.9	183.8	159.1	122.6	126.5
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)