

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: P195942

Luminaire Tested: **NAV-AF-06-D-UNV-5NQ-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P195942  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-06-D-UNV-5NQ-600  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24958 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

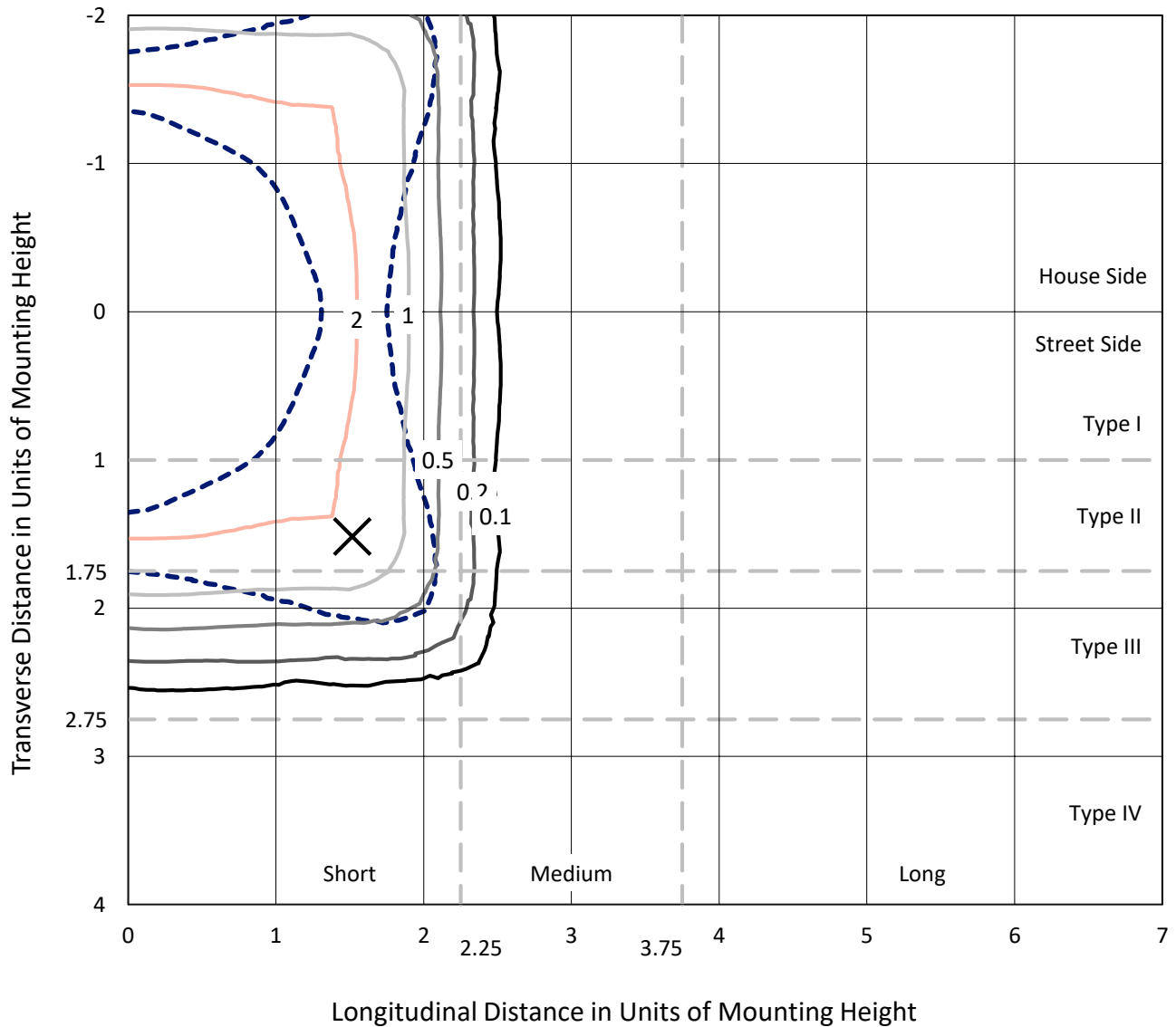
Input Watts (W): 193  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

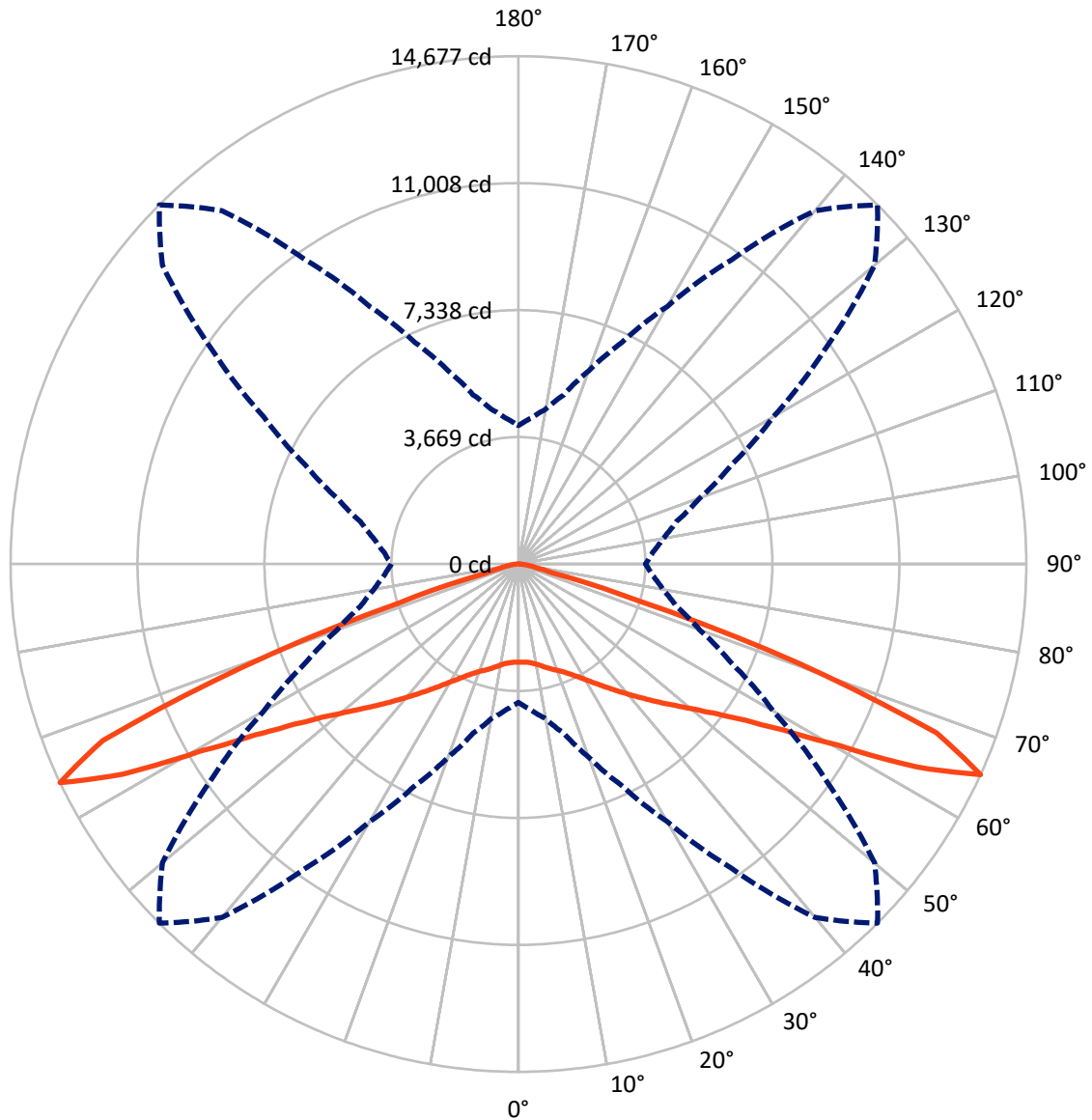
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12479.0	0.0	12479.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12479.0	0.0	12479.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	24958.0	0.0	24958.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.5	1.1
10°-20°	886.1	3.6
20°-30°	1652.9	6.6
30°-40°	2787.1	11.2
40°-50°	4527.0	18.1
50°-60°	7093.1	28.4
60°-70°	6695.5	26.8
70°-80°	902.4	3.6
80°-90°	137.4	0.6
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°	24958.0	100.0
0°-180°	24958.0	100.0

**Coefficient of Utilization**



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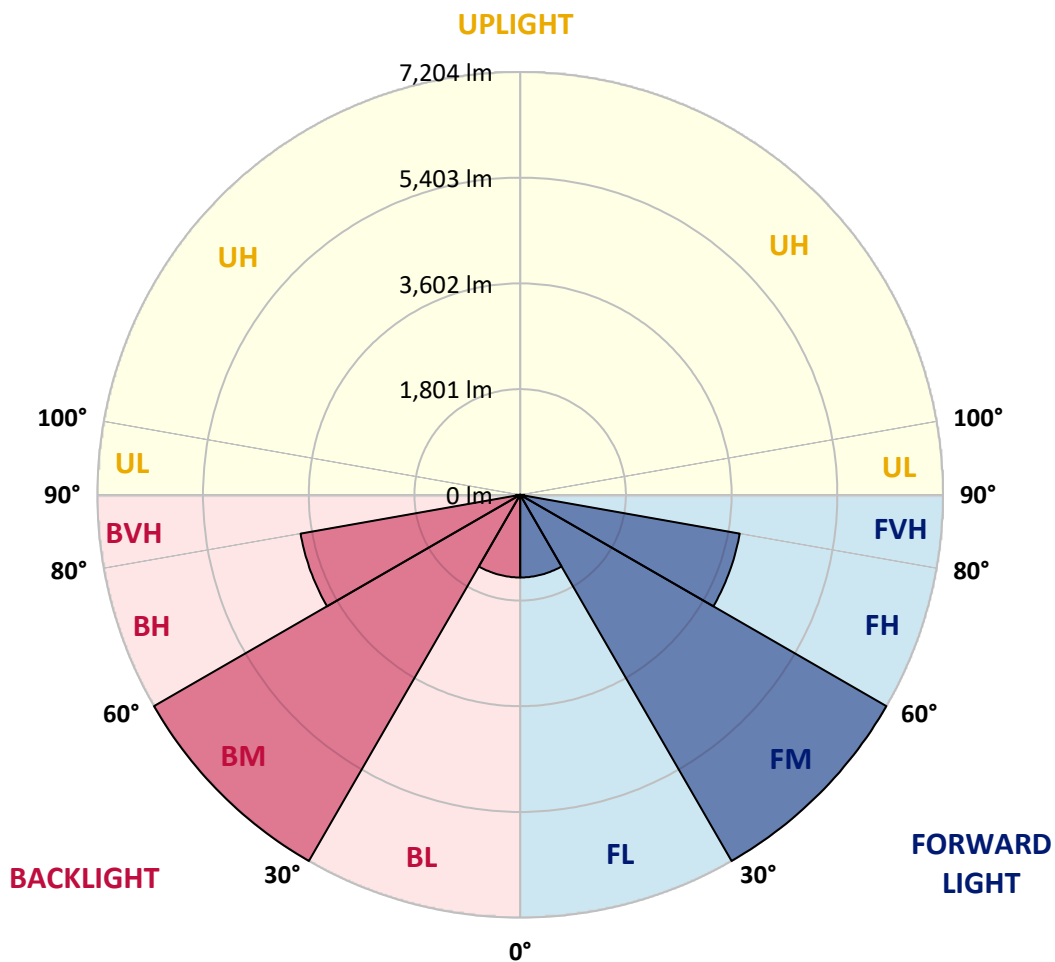
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1407.7	5.6			
FM	(30°-60°)	7203.6	28.9			
FH	(60°-80°)	3798.9	15.2			G2/5000
FVH	(80°-90°)	68.7	0.3			G1/100
BL	(0°-30°)	1407.7	5.6	B3/2500		
BM	(30°-60°)	7203.6	28.9	B4/8500		
BH	(60°-80°)	3798.9	15.2	B4/5000		G2/5000
BVH	(80°-90°)	68.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9
2.5°	2862.2	2862.2	2866.9	2865.4	2859.1	2854.4	2849.8	2843.6	2840.5	2837.4	2835.8
5°	2877.8	2877.8	2882.5	2880.9	2876.2	2870.0	2866.9	2862.2	2857.6	2854.4	2856.1
7.5°	2916.6	2918.3	2919.8	2918.3	2913.6	2908.9	2902.7	2901.1	2895.0	2890.2	2893.3
10°	2975.8	2975.8	2977.3	2978.8	2975.8	2964.9	2964.9	2961.7	2955.5	2949.4	2950.9
12.5°	3041.0	3041.0	3042.6	3042.6	3042.6	3036.4	3038.0	3036.4	3028.7	3025.5	3028.7
15°	3104.8	3106.4	3106.4	3109.5	3109.5	3111.0	3117.2	3117.2	3114.2	3112.5	3112.5
17.5°	3179.4	3182.5	3184.0	3188.7	3190.3	3193.4	3199.6	3201.2	3202.8	3198.1	3199.6
20°	3279.0	3280.5	3285.1	3286.7	3292.9	3292.9	3296.0	3294.5	3291.3	3285.1	3285.1
22.5°	3390.9	3393.9	3403.3	3403.3	3411.0	3406.4	3408.0	3403.3	3395.5	3392.4	3389.3
25°	3537.1	3541.7	3549.4	3546.4	3549.4	3541.7	3541.7	3541.7	3537.1	3532.4	3530.8
27.5°	3722.0	3714.2	3722.0	3715.8	3714.2	3708.0	3709.6	3706.5	3701.9	3700.2	3694.1
30°	3914.8	3905.5	3910.1	3911.7	3908.6	3907.1	3900.8	3896.1	3888.3	3890.0	3885.3
32.5°	4135.6	4126.3	4130.9	4132.5	4129.3	4132.5	4130.9	4120.0	4110.7	4117.0	4117.0
35°	4398.4	4392.1	4404.5	4409.2	4399.9	4395.2	4389.0	4376.6	4362.6	4371.9	4373.4
37.5°	4714.0	4706.2	4715.5	4728.0	4710.8	4701.5	4676.6	4658.0	4648.6	4653.3	4659.5
40°	5042.0	5043.6	5069.9	5073.1	5054.4	5043.6	5018.7	4990.7	4964.3	4964.3	4972.1
42.5°	5387.2	5391.8	5422.9	5433.8	5427.6	5407.3	5373.2	5339.0	5304.7	5311.0	5320.3
45°	5777.4	5771.2	5803.8	5830.2	5825.6	5819.4	5786.7	5724.5	5693.4	5691.9	5707.5
47.5°	6187.8	6200.3	6234.5	6279.6	6278.0	6262.4	6220.5	6163.0	6105.4	6110.1	6128.7
50°	6666.7	6683.8	6741.3	6786.4	6792.6	6788.0	6738.2	6671.4	6590.5	6595.2	6620.0
52.5°	7095.8	7120.7	7187.6	7280.9	7338.3	7364.7	7332.1	7269.9	7187.6	7192.2	7218.7
55°	7484.5	7523.3	7622.8	7750.3	7865.4	7972.7	8020.9	8019.3	7958.7	7972.7	8006.8
57.5°	7728.6	7783.0	7933.8	8139.0	8367.5	8583.7	8770.3	8945.9	8984.8	9057.8	9057.8
60°	7400.5	7528.0	7728.6	8080.0	8529.3	9014.3	9539.8	10051.3	10380.9	10640.5	10500.7
62.5°	6180.1	6368.2	6649.6	7112.9	7812.5	8678.5	9734.2	10923.6	12164.2	12922.9	12366.4
65°	3998.8	4235.1	4541.4	5062.2	5943.8	7058.5	8596.1	10733.8	13330.3	14676.7	13432.9
67.5°	1584.2	1744.4	1931.0	2301.0	3065.9	4160.4	5886.2	8523.0	11770.9	13041.1	11646.5
70°	757.2	783.6	819.4	898.7	1089.9	1470.8	2364.8	4199.3	7218.7	8557.2	7046.1
72.5°	547.3	551.9	569.1	595.5	651.4	729.2	886.2	1284.2	2489.1	3619.4	2492.2
75°	415.1	421.4	430.7	444.7	474.2	511.5	570.6	684.0	852.0	982.5	850.5
77.5°	315.6	321.8	329.6	343.6	359.2	385.6	407.3	452.5	524.0	551.9	548.8
80°	230.1	241.0	253.4	265.9	276.7	289.2	290.7	312.5	352.9	379.3	371.5
82.5°	146.2	155.5	188.1	202.1	203.7	206.7	205.2	206.7	228.5	247.2	241.0
85°	93.3	99.5	116.6	132.2	129.0	135.2	135.2	132.2	122.9	105.7	125.9
87.5°	46.6	48.2	56.0	70.0	66.9	59.1	57.5	57.5	41.9	35.8	38.9
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9	2838.9
2.5°	2831.1	2834.3	2829.6	2829.6	2828.0	2831.1	2826.5	2826.5
5°	2852.9	2857.6	2856.1	2856.1	2859.1	2862.2	2860.7	2859.1
7.5°	2891.8	2895.0	2898.0	2899.6	2902.7	2901.1	2904.3	2902.7
10°	2950.9	2947.7	2952.4	2947.7	2949.4	2946.2	2947.7	2947.7
12.5°	3025.5	3020.9	3017.7	3014.6	3014.6	3008.4	3008.4	3009.9
15°	3111.0	3103.2	3097.0	3093.9	3090.8	3090.8	3086.1	3089.2
17.5°	3195.0	3187.2	3176.4	3176.4	3171.7	3168.6	3165.4	3173.2
20°	3283.6	3275.8	3269.6	3268.0	3258.7	3255.6	3257.2	3266.5
22.5°	3386.2	3381.6	3381.6	3378.4	3372.3	3367.6	3367.6	3378.4
25°	3524.6	3515.3	3516.8	3518.3	3515.3	3515.3	3512.1	3519.9
27.5°	3694.1	3686.3	3690.9	3694.1	3690.9	3695.6	3690.9	3697.1
30°	3893.0	3888.3	3893.0	3897.7	3890.0	3890.0	3886.8	3891.5
32.5°	4130.9	4124.7	4127.8	4127.8	4117.0	4107.6	4095.2	4104.5
35°	4392.1	4384.4	4390.6	4395.2	4382.8	4373.4	4354.8	4362.6
37.5°	4679.7	4682.9	4690.6	4710.8	4707.7	4692.2	4678.2	4684.4
40°	5001.6	5017.2	5051.3	5065.3	5062.2	5046.6	5028.0	5031.1
42.5°	5365.4	5385.6	5421.3	5444.7	5433.8	5412.0	5388.7	5398.0
45°	5761.9	5793.0	5839.6	5862.8	5848.9	5825.6	5793.0	5810.1
47.5°	6181.6	6243.8	6306.0	6337.1	6332.4	6299.7	6257.8	6262.4
50°	6683.8	6766.2	6845.5	6876.6	6853.3	6803.5	6744.4	6742.9
52.5°	7308.8	7397.4	7462.7	7455.0	7397.4	7319.6	7252.8	7249.8
55°	8089.3	8118.8	8109.4	8042.6	7941.6	7820.3	7734.7	7720.8
57.5°	9033.0	8933.4	8787.4	8585.2	8358.2	8128.2	7972.7	7915.1
60°	10186.5	9737.3	9214.8	8664.5	8162.3	7786.1	7548.3	7403.6
62.5°	11139.6	9838.3	8670.7	7714.6	6932.5	6467.7	6142.7	5942.2
65°	10813.1	8499.7	6808.1	5575.3	4721.7	4241.3	3897.7	3669.1
67.5°	8353.5	5679.4	3952.2	2739.5	2077.1	1758.4	1536.1	1391.5
70°	4211.8	2178.2	1320.0	931.3	796.1	740.0	702.8	681.0
72.5°	1236.0	825.5	685.7	606.3	558.1	524.0	502.2	491.3
75°	684.0	558.1	492.9	447.7	416.6	393.3	379.3	370.0
77.5°	471.1	405.8	373.2	343.6	318.8	301.7	290.7	281.4
80°	329.6	297.0	282.9	267.4	248.8	234.8	219.2	213.0
82.5°	219.2	205.2	202.1	189.7	178.8	163.3	135.2	125.9
85°	129.0	127.5	127.5	122.9	115.1	101.1	80.8	80.8
87.5°	45.1	46.6	48.2	51.4	49.7	41.9	34.2	32.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)