

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: P270647

Luminaire Tested: **NAV-AF-06-D-UNV-5NQ-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P270647  
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-7027-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25993.6 lumens  
Efficiency: N/A  
Efficacy: 104.4 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): 249  
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

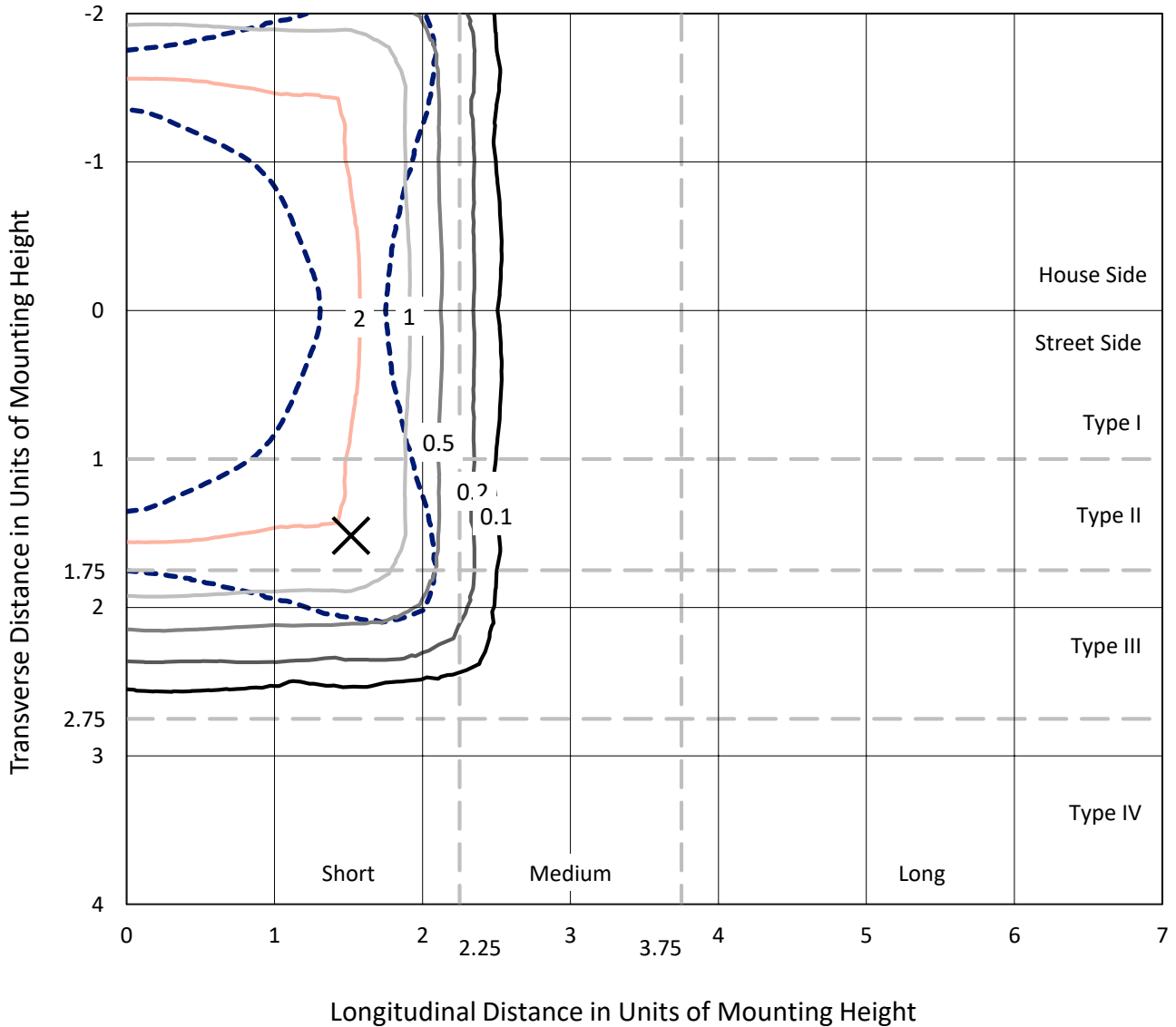


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### Iso-Footcandle Lines of Horizontal Illumination

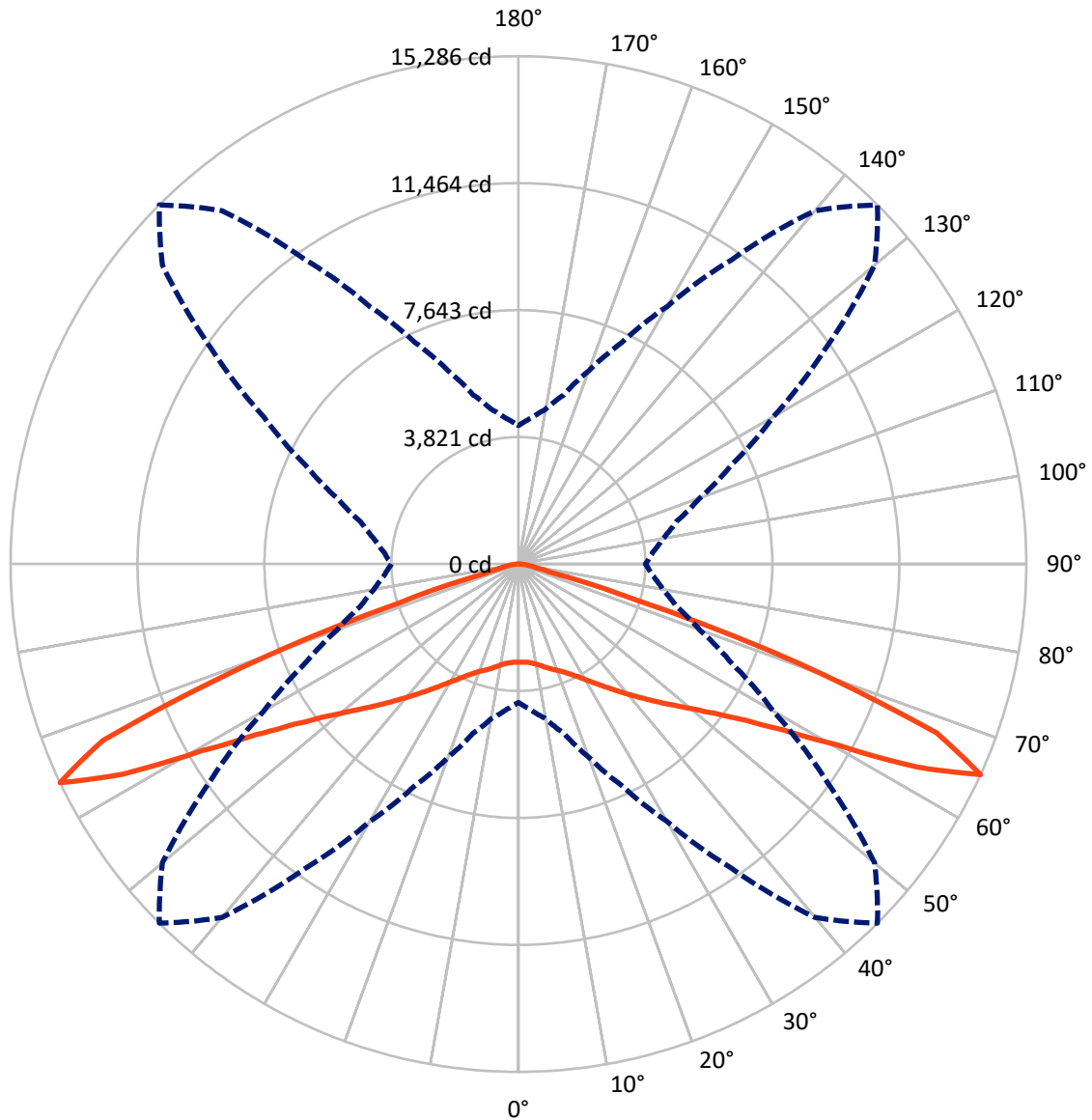
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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	12996.8	0.0	12996.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12996.8	0.0	12996.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	25993.6	0.0	25993.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	287.9	1.1
10°-20°	922.8	3.6
20°-30°	1721.5	6.6
30°-40°	2902.7	11.2
40°-50°	4714.9	18.1
50°-60°	7387.4	28.4
60°-70°	6973.3	26.8
70°-80°	939.8	3.6
80°-90°	143.2	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°	25993.6	100.0
0°-180°	25993.6	100.0



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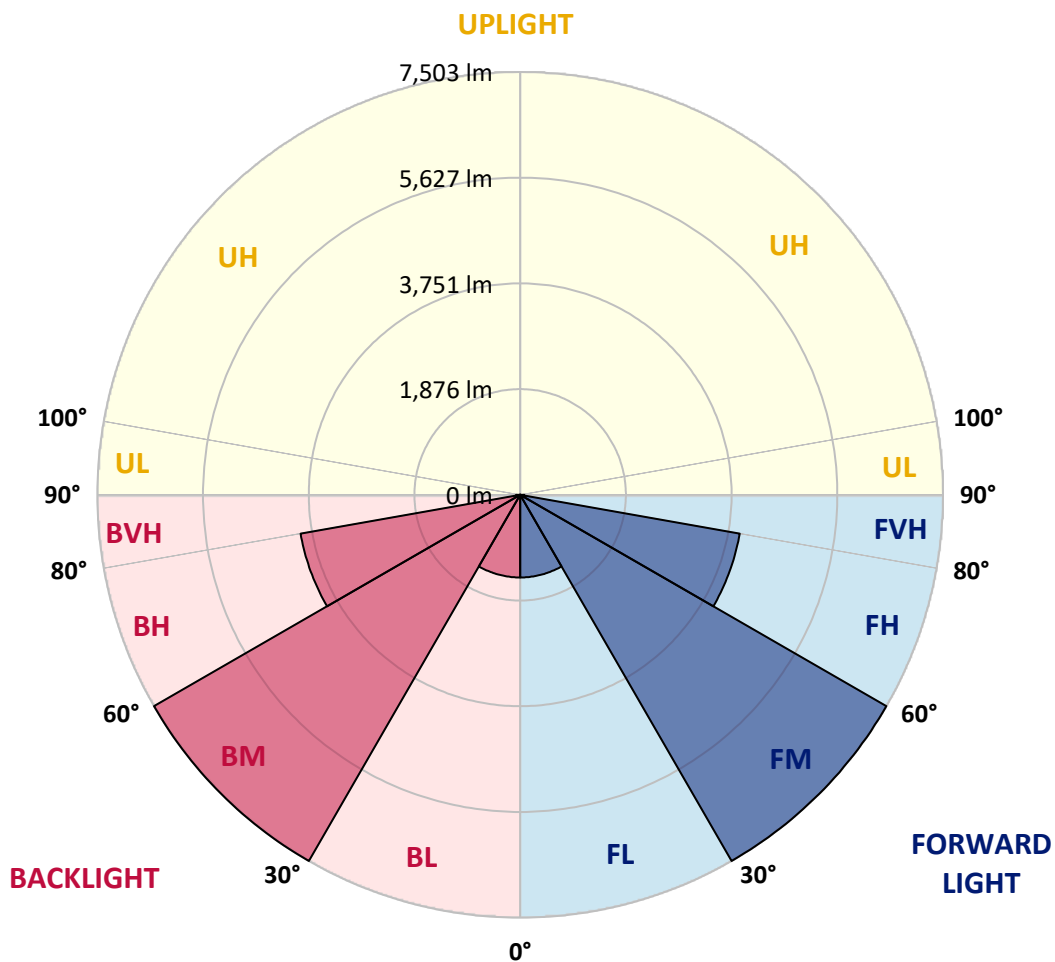
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1466.1	5.6			
FM	(30°-60°)	7502.5	28.9			
FH	(60°-80°)	3956.6	15.2			G2/5000
FVH	(80°-90°)	71.6	0.3			G1/100
BL	(0°-30°)	1466.1	5.6	B3/2500		
BM	(30°-60°)	7502.5	28.9	B4/8500		
BH	(60°-80°)	3956.6	15.2	B4/5000		G2/5000
BVH	(80°-90°)	71.6	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°	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7
2.5°	2981.0	2981.0	2985.8	2984.3	2977.8	2972.9	2968.1	2961.6	2958.4	2955.2	2953.4
5°	2997.3	2997.3	3002.0	3000.5	2995.6	2989.1	2985.8	2981.0	2976.2	2972.9	2974.6
7.5°	3037.7	3039.3	3040.9	3039.3	3034.5	3029.7	3023.2	3021.4	3015.0	3010.2	3013.5
10°	3099.2	3099.2	3100.9	3102.4	3099.2	3088.0	3088.0	3084.7	3078.2	3071.8	3073.3
12.5°	3167.2	3167.2	3168.9	3168.9	3168.9	3162.4	3164.0	3162.4	3154.3	3151.1	3154.3
15°	3233.5	3235.2	3235.2	3238.5	3238.5	3240.0	3246.6	3246.6	3243.3	3241.8	3241.8
17.5°	3311.3	3314.6	3316.3	3321.0	3322.7	3326.0	3332.4	3334.0	3335.6	3330.7	3332.4
20°	3414.9	3416.7	3421.5	3423.1	3429.5	3429.5	3432.9	3431.2	3427.9	3421.5	3421.5
22.5°	3531.5	3534.8	3544.5	3544.5	3552.5	3547.8	3549.4	3544.5	3536.4	3533.2	3530.0
25°	3683.8	3688.6	3696.7	3693.6	3696.7	3688.6	3688.6	3688.6	3683.8	3678.9	3677.3
27.5°	3876.5	3868.5	3876.5	3870.0	3868.5	3862.0	3863.5	3860.2	3855.4	3853.8	3847.4
30°	4077.2	4067.5	4072.3	4074.1	4070.8	4069.1	4062.7	4057.9	4049.6	4051.4	4046.4
32.5°	4307.3	4297.5	4302.3	4304.0	4300.7	4304.0	4302.3	4291.1	4281.3	4287.8	4287.8
35°	4580.8	4574.3	4587.4	4592.1	4582.4	4577.7	4571.1	4558.2	4543.5	4553.2	4554.9
37.5°	4909.5	4901.4	4911.2	4924.1	4906.4	4896.7	4870.7	4851.2	4841.5	4846.4	4852.9
40°	5251.2	5252.7	5280.3	5283.7	5264.2	5252.7	5226.9	5197.8	5170.3	5170.3	5178.3
42.5°	5610.6	5615.6	5648.0	5659.2	5652.8	5631.7	5596.1	5560.5	5524.8	5531.4	5541.0
45°	6017.0	6010.6	6044.6	6072.2	6067.3	6060.9	6026.8	5962.1	5929.6	5928.1	5944.3
47.5°	6444.6	6457.6	6493.2	6540.1	6538.6	6522.4	6478.5	6418.7	6358.7	6363.7	6383.0
50°	6943.3	6961.1	7021.1	7068.0	7074.4	7069.7	7017.7	6948.2	6863.9	6868.8	6894.8
52.5°	7390.3	7416.1	7485.8	7583.0	7642.8	7670.4	7636.3	7571.5	7485.8	7490.5	7518.2
55°	7795.0	7835.6	7939.1	8071.9	8191.7	8303.5	8353.7	8352.0	8288.9	8303.5	8339.1
57.5°	8049.3	8105.9	8263.0	8476.8	8714.7	8939.8	9134.1	9317.1	9357.6	9433.7	9433.7
60°	7707.5	7840.3	8049.3	8415.2	8883.2	9388.4	9935.7	10468.4	10811.7	11082.1	10936.3
62.5°	6436.4	6632.5	6925.6	7408.1	8136.7	9038.6	10138.1	11376.9	12668.9	13459.1	12879.4
65°	4164.7	4410.8	4729.8	5272.2	6190.4	7351.4	8952.8	11179.2	13883.3	15285.6	13990.3
67.5°	1649.9	1816.8	2011.0	2396.5	3193.1	4333.1	6130.5	8876.7	12259.3	13582.3	12129.8
70°	788.5	816.1	853.3	935.9	1135.1	1531.8	2462.9	4373.6	7518.2	8912.4	7338.4
72.5°	570.0	574.8	592.6	620.2	678.5	759.4	923.0	1337.4	2592.4	3769.6	2595.7
75°	432.4	438.8	448.6	463.0	493.9	532.8	594.3	712.4	887.3	1023.3	885.6
77.5°	328.7	335.2	343.3	357.9	374.1	401.5	424.2	471.3	545.7	574.8	571.6
80°	239.7	250.9	263.9	276.9	288.3	301.2	302.8	325.5	367.5	395.1	387.0
82.5°	152.3	162.0	195.9	210.6	212.1	215.4	213.7	215.4	238.1	257.5	250.9
85°	97.1	103.7	121.5	137.6	134.3	140.9	140.9	137.6	127.9	110.1	131.2
87.5°	48.6	50.1	58.3	72.9	69.6	61.5	59.8	59.8	43.7	37.2	40.5
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°	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7	2956.7
2.5°	2948.6	2951.9	2947.0	2947.0	2945.5	2948.6	2943.7	2943.7
5°	2971.4	2976.2	2974.6	2974.6	2977.8	2981.0	2979.4	2977.8
7.5°	3011.7	3015.0	3018.2	3019.9	3023.2	3021.4	3024.8	3023.2
10°	3073.3	3070.0	3075.0	3070.0	3071.8	3068.5	3070.0	3070.0
12.5°	3151.1	3146.1	3142.9	3139.8	3139.8	3133.3	3133.3	3134.8
15°	3240.0	3232.0	3225.5	3222.3	3219.0	3219.0	3214.1	3217.4
17.5°	3327.5	3319.4	3308.1	3308.1	3303.2	3300.1	3296.8	3304.9
20°	3419.8	3411.8	3405.2	3403.7	3393.9	3390.7	3392.3	3402.1
22.5°	3526.7	3521.9	3521.9	3518.7	3512.2	3507.3	3507.3	3518.7
25°	3670.8	3661.1	3662.7	3664.4	3661.1	3661.1	3657.9	3666.0
27.5°	3847.4	3839.3	3844.0	3847.4	3844.0	3849.0	3844.0	3850.6
30°	4054.6	4049.6	4054.6	4059.4	4051.4	4051.4	4048.1	4053.0
32.5°	4302.3	4295.9	4299.1	4299.1	4287.8	4278.1	4265.2	4274.9
35°	4574.3	4566.3	4572.7	4577.7	4564.6	4554.9	4535.5	4543.5
37.5°	4873.9	4877.2	4885.3	4906.4	4903.0	4886.9	4872.2	4878.8
40°	5209.1	5225.4	5261.0	5275.4	5272.2	5256.1	5236.6	5239.9
42.5°	5587.9	5609.0	5646.2	5670.6	5659.2	5636.5	5612.3	5622.0
45°	6000.9	6033.2	6081.9	6106.1	6091.5	6067.3	6033.2	6051.2
47.5°	6438.2	6502.9	6567.7	6600.0	6595.1	6561.2	6517.5	6522.4
50°	6961.1	7046.9	7129.5	7161.8	7137.7	7085.8	7024.2	7022.7
52.5°	7612.1	7704.4	7772.3	7764.3	7704.4	7623.3	7553.8	7550.6
55°	8424.9	8455.7	8446.0	8376.3	8271.1	8144.8	8055.7	8041.2
57.5°	9407.8	9304.1	9151.9	8941.5	8705.0	8465.4	8303.5	8243.6
60°	10609.3	10141.3	9597.2	9024.1	8501.0	8109.2	7861.3	7710.8
62.5°	11601.9	10246.5	9030.5	8034.7	7220.1	6736.0	6397.5	6188.8
65°	11261.8	8852.3	7090.6	5806.6	4917.6	4417.2	4059.4	3821.4
67.5°	8700.2	5915.1	4116.2	2853.0	2163.3	1831.4	1599.8	1449.2
70°	4386.6	2268.6	1374.8	969.9	829.0	770.7	731.8	709.2
72.5°	1287.4	859.8	714.2	631.5	581.4	545.7	523.1	511.7
75°	712.4	581.4	513.3	466.3	433.9	409.6	395.1	385.5
77.5°	490.7	422.7	388.6	357.9	332.0	314.1	302.8	293.0
80°	343.3	309.2	294.7	278.6	259.2	244.5	228.3	221.8
82.5°	228.3	213.7	210.6	197.5	186.2	170.0	140.9	131.2
85°	134.3	132.8	132.8	127.9	119.8	105.2	84.3	84.3
87.5°	46.9	48.6	50.1	53.4	51.8	43.7	35.7	34.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)