

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: P270663

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P270663  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)  
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-RW-7027-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25838.5 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G4

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

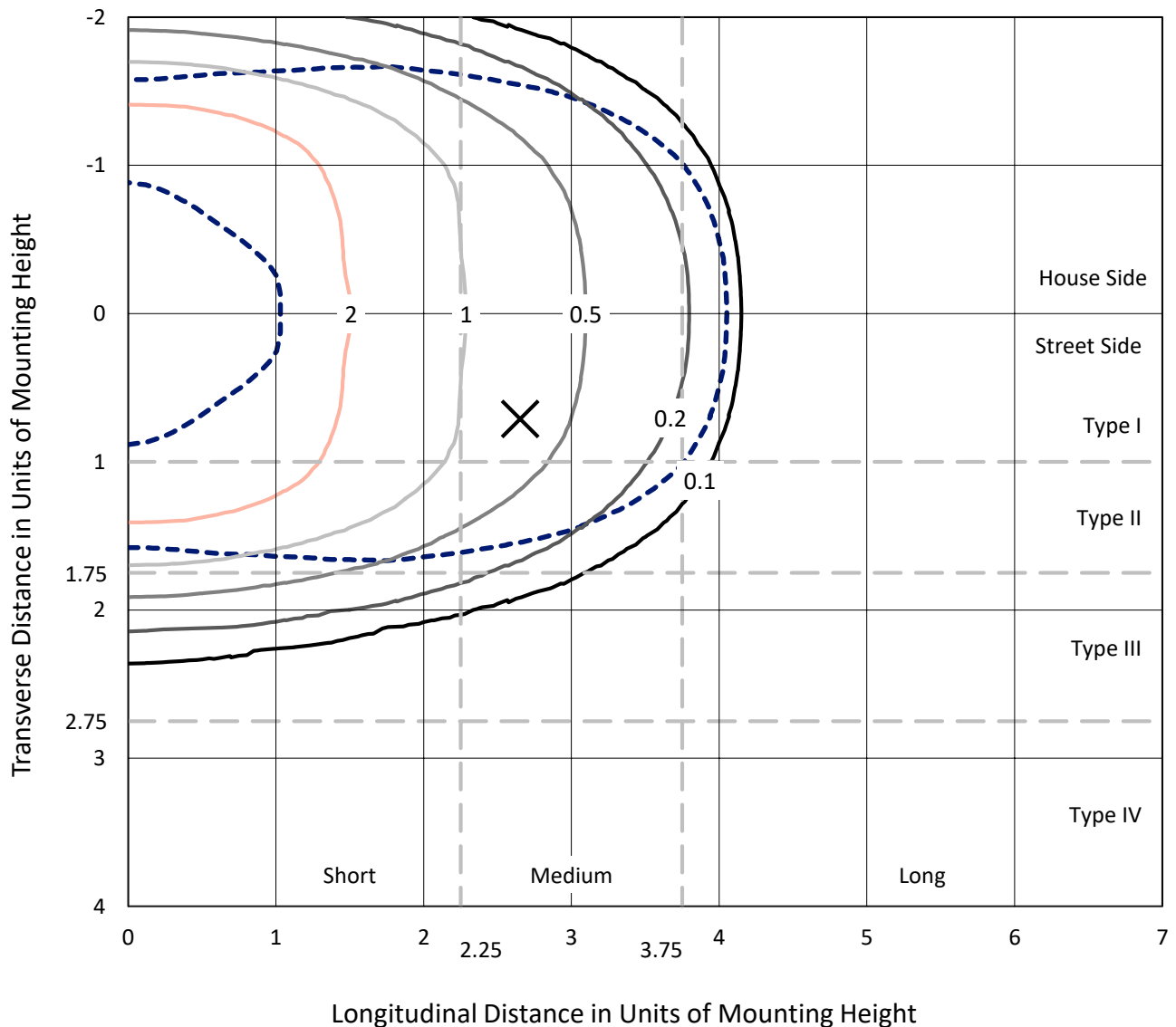


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

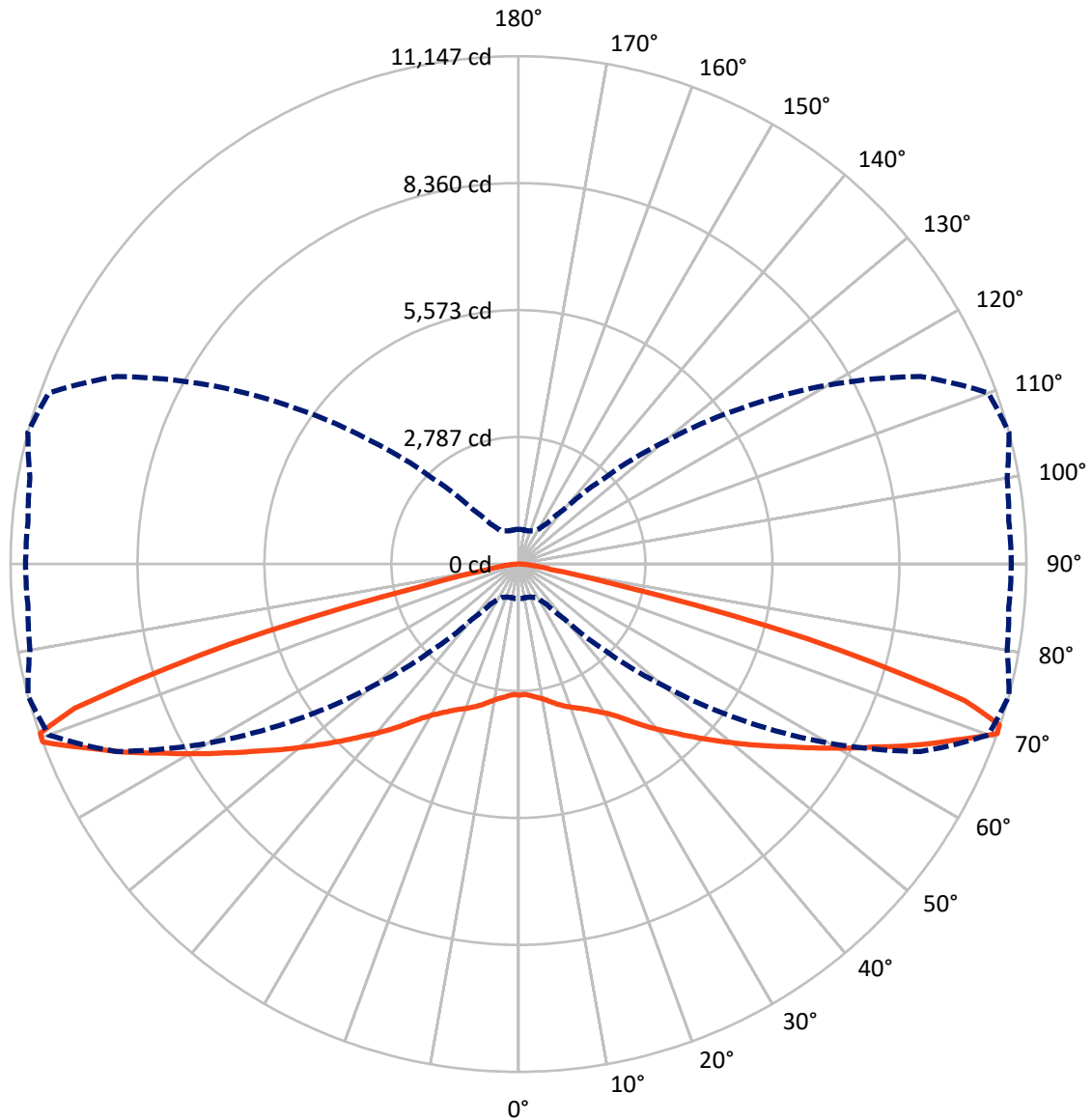


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12919.2	0.0	12919.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12919.2	0.0	12919.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	25838.5	0.0	25838.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.0	1.1
10°-20°	855.9	3.3
20°-30°	1607.6	6.2
30°-40°	2831.8	11.0
40°-50°	4693.3	18.2
50°-60°	6529.0	25.3
60°-70°	6163.5	23.9
70°-80°	2632.5	10.2
80°-90°	248.8	1.0
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°	25838.5	100.0
0°-180°	25838.5	100.0



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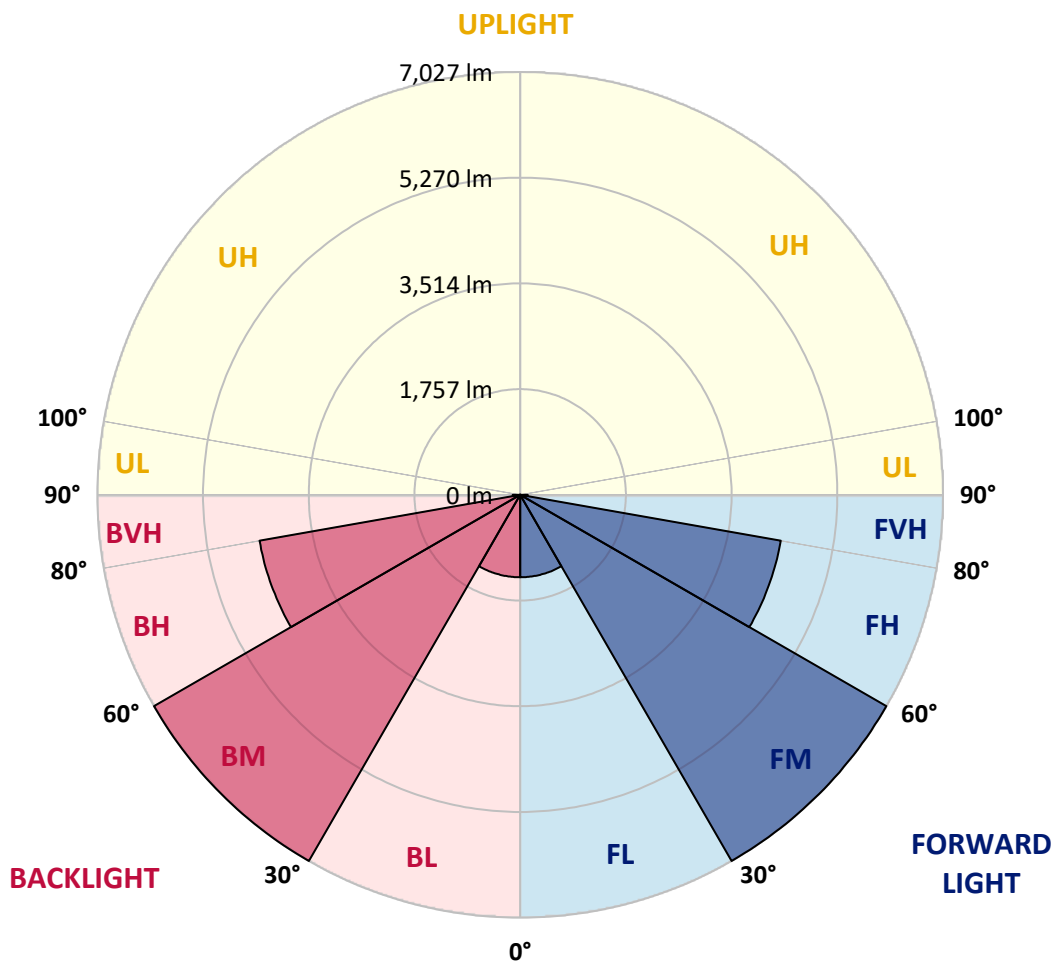
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1369.8	5.3			
FM	(30°-60°)	7027.1	27.2			
FH	(60°-80°)	4398.0	17.0			G2/5000
FVH	(80°-90°)	124.4	0.5			G2/225
BL	(0°-30°)	1369.8	5.3	B3/2500		
BM	(30°-60°)	7027.1	27.2	B4/8500		
BH	(60°-80°)	4398.0	17.0	B4/5000		G4/5000
BVH	(80°-90°)	124.4	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5
2.5°	2895.1	2893.6	2895.1	2890.3	2892.0	2890.3	2890.3	2883.9	2883.9	2880.7	2875.7
5°	2862.8	2866.0	2866.0	2866.0	2871.0	2871.0	2877.5	2879.0	2883.9	2888.7	2892.0
7.5°	2809.4	2810.9	2815.8	2819.2	2828.9	2841.8	2854.8	2869.2	2882.2	2898.4	2916.3
10°	2764.1	2767.3	2775.4	2783.5	2801.3	2817.4	2840.1	2862.8	2885.4	2913.1	2940.5
12.5°	2739.7	2744.6	2757.5	2770.6	2798.0	2819.2	2849.9	2885.4	2916.3	2942.0	2972.9
15°	2743.0	2744.6	2762.4	2780.3	2819.2	2848.3	2892.0	2934.0	2971.2	3000.3	3036.0
17.5°	2790.0	2793.2	2810.9	2836.8	2874.1	2911.3	2958.3	3002.0	3052.3	3086.2	3128.3
20°	2882.2	2887.2	2906.6	2934.0	2974.5	3013.4	3062.0	3107.2	3159.1	3199.7	3241.8
22.5°	3002.0	3010.1	3031.2	3065.1	3105.7	3152.6	3202.8	3249.8	3298.3	3338.8	3374.5
25°	3162.4	3172.1	3194.7	3228.8	3269.2	3319.3	3371.2	3419.8	3470.1	3500.8	3529.9
27.5°	3377.6	3393.8	3418.2	3445.7	3481.3	3534.8	3583.3	3623.9	3672.5	3706.3	3725.8
30°	3667.5	3690.1	3709.6	3738.7	3764.6	3821.4	3860.2	3892.6	3929.8	3949.3	3954.2
32.5°	4022.3	4043.2	4062.7	4083.6	4119.3	4171.1	4208.4	4226.2	4245.6	4242.3	4224.5
35°	4422.0	4438.3	4449.7	4486.9	4545.2	4579.2	4606.7	4613.2	4616.4	4582.4	4548.4
37.5°	4843.1	4862.5	4872.2	4930.5	4985.7	5024.5	5037.4	5052.0	5042.2	4985.7	4924.1
40°	5298.2	5319.1	5348.2	5398.5	5463.3	5500.5	5516.8	5515.1	5507.0	5440.7	5340.2
42.5°	5745.0	5770.9	5795.2	5882.6	5936.1	5999.2	6007.3	6005.7	5987.9	5911.7	5795.2
45°	6123.9	6154.6	6205.0	6302.0	6387.8	6463.9	6494.7	6506.1	6488.3	6407.3	6274.5
47.5°	6436.4	6457.5	6520.6	6638.8	6749.0	6860.6	6922.2	6965.8	6964.3	6906.0	6765.1
50°	6650.2	6674.4	6752.2	6885.0	7022.6	7153.7	7275.3	7373.9	7420.9	7378.8	7247.6
52.5°	6711.6	6742.5	6844.5	7003.1	7163.4	7340.0	7521.2	7696.1	7801.4	7827.3	7725.3
55°	6452.6	6486.7	6635.6	6855.9	7119.7	7380.5	7655.7	7905.1	8122.0	8222.5	8181.9
57.5°	5698.0	5722.4	5911.7	6196.8	6574.1	7032.3	7495.4	7952.1	8324.5	8585.1	8630.5
60°	4506.3	4537.1	4744.4	5045.5	5474.6	6054.2	6702.0	7450.1	8180.3	8777.9	9074.1
62.5°	3040.9	3062.0	3261.1	3536.4	4006.0	4564.6	5286.7	6234.0	7275.3	8342.3	9177.8
65°	1596.6	1596.6	1730.9	1923.6	2297.7	2798.0	3538.1	4509.5	5748.3	7080.9	8478.3
67.5°	926.2	924.5	955.3	999.0	1117.2	1319.7	1727.7	2441.9	3614.2	5165.3	6755.4
70°	764.3	759.3	754.5	754.5	772.4	803.2	880.9	1076.8	1575.4	2663.7	4156.5
71°	730.3	727.1	714.2	709.2	717.3	733.5	767.5	858.2	1118.8	1816.8	3104.1
72.5°	689.8	681.8	662.3	654.1	655.9	662.3	672.0	707.7	786.9	1033.1	1769.8
75°	628.3	608.8	584.5	573.2	568.4	566.7	566.7	576.4	594.3	623.5	725.4
77.5°	556.9	529.6	503.6	492.2	484.1	479.2	476.0	469.5	466.3	479.2	516.5
80°	471.3	442.1	420.9	414.5	409.6	399.9	387.0	374.1	366.0	372.3	395.1
82.5°	364.4	335.2	338.4	340.1	332.0	315.8	302.8	288.3	273.7	270.4	281.8
85°	289.9	275.3	265.5	286.6	268.9	249.4	231.6	207.2	173.3	142.6	155.4
87.5°	124.7	126.3	181.4	273.7	239.7	192.6	160.3	129.5	82.6	61.5	63.2
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°	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5	2877.5
2.5°	2874.1	2874.1	2869.2	2866.0	2866.0	2866.0	2862.8	2864.4
5°	2893.6	2896.9	2900.1	2898.4	2903.3	2908.2	2906.6	2904.8
7.5°	2926.0	2935.7	2945.4	2950.3	2956.7	2963.1	2964.8	2959.9
10°	2958.3	2977.7	2992.3	3005.3	3013.4	3019.8	3024.8	3023.1
12.5°	2998.8	3026.3	3052.3	3078.1	3096.0	3105.7	3115.4	3112.2
15°	3065.1	3096.0	3128.3	3162.4	3189.9	3204.4	3219.0	3215.8
17.5°	3155.8	3183.5	3209.4	3243.3	3277.3	3293.5	3309.6	3308.1
20°	3269.2	3290.3	3304.9	3324.3	3356.6	3374.5	3389.0	3384.2
22.5°	3398.7	3405.2	3406.8	3413.3	3439.3	3460.4	3479.8	3484.5
25°	3539.6	3534.8	3525.0	3520.2	3538.1	3560.7	3585.0	3591.5
27.5°	3714.5	3698.3	3674.0	3654.7	3659.4	3688.6	3716.1	3722.5
30°	3934.8	3897.4	3845.6	3808.5	3801.9	3832.7	3861.9	3871.5
32.5°	4185.7	4135.4	4064.2	4007.6	3983.4	4010.8	4036.8	4051.3
35°	4483.6	4428.6	4342.8	4270.0	4231.0	4248.9	4294.2	4310.3
37.5°	4836.7	4760.5	4665.0	4572.7	4508.0	4511.2	4559.7	4579.2
40°	5226.9	5116.7	4995.4	4880.3	4786.3	4779.9	4823.7	4838.2
42.5°	5633.4	5492.3	5349.9	5199.3	5082.8	5061.7	5118.5	5120.0
45°	6070.4	5889.1	5712.6	5537.7	5416.3	5379.1	5434.1	5440.7
47.5°	6536.8	6310.1	6101.3	5911.7	5780.7	5722.4	5775.8	5785.5
50°	7022.6	6787.9	6545.0	6334.4	6180.6	6109.4	6172.6	6179.0
52.5°	7503.5	7281.8	7040.3	6799.1	6613.0	6531.9	6606.5	6629.1
55°	7987.6	7773.9	7547.2	7305.9	7071.2	7000.0	7080.9	7105.1
57.5°	8491.1	8285.5	8080.0	7837.1	7608.7	7500.3	7587.8	7621.7
60°	9046.7	8865.3	8671.0	8426.5	8201.3	8075.0	8149.6	8188.4
62.5°	9592.3	9555.0	9378.6	9124.4	8839.3	8713.1	8776.3	8803.7
65°	9637.6	10241.7	10233.5	9980.9	9582.6	9370.5	9388.2	9401.2
67.5°	8411.9	9798.0	10683.6	10763.0	10319.3	9987.4	9948.5	9956.6
70°	5955.6	7858.2	9738.0	10971.9	11146.8	10889.3	10805.2	10818.1
71°	4771.8	6742.5	8811.8	10471.5	11133.9	11059.4	11012.3	11046.4
72.5°	3045.8	4967.7	6982.0	8967.3	10238.4	10602.8	10656.1	10677.2
75°	1106.0	2137.3	3617.4	5183.1	6569.2	7522.9	8047.6	8089.6
77.5°	594.3	765.9	1183.6	1768.3	2221.6	2464.5	2493.7	2505.0
80°	437.1	506.9	579.6	662.3	714.2	723.9	706.0	668.8
82.5°	309.2	349.8	378.8	408.0	429.1	411.2	341.6	260.7
85°	179.8	197.5	213.7	228.3	231.6	218.6	144.1	118.1
87.5°	71.2	77.8	76.0	85.8	82.6	76.0	56.7	48.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)