

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: P196524

Luminaire Tested: **NAV-AF-06-D-UNV-RW-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196524  
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-7030-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28763.6 lumens  
Efficiency: N/A  
Efficacy: 115.5 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

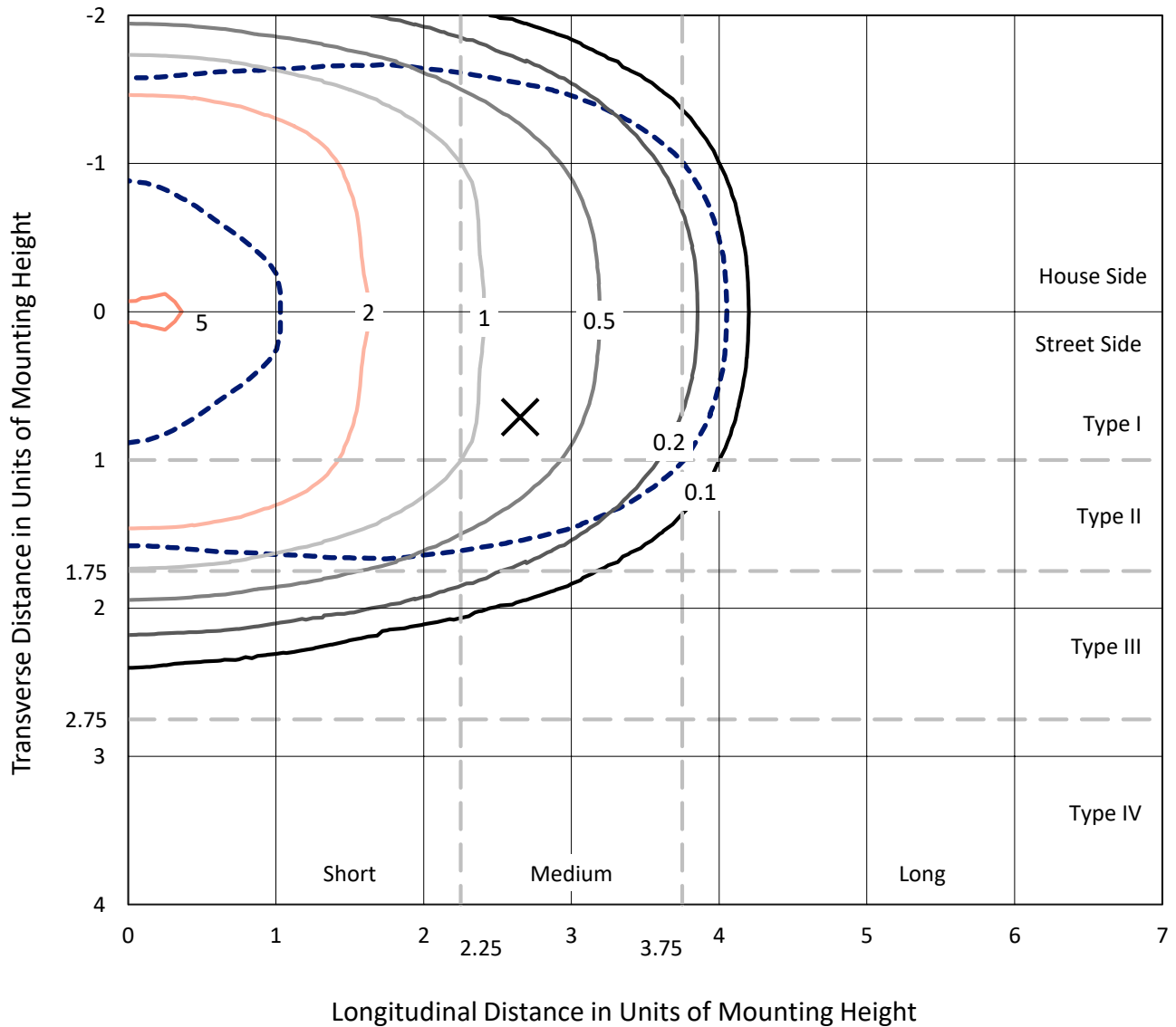


REPORT NUMBER: P196524

CATALOG NUMBER: NAV-AF-06-D-UNV-RW-7030-800

### Iso-Footcandle Lines of Horizontal Illumination

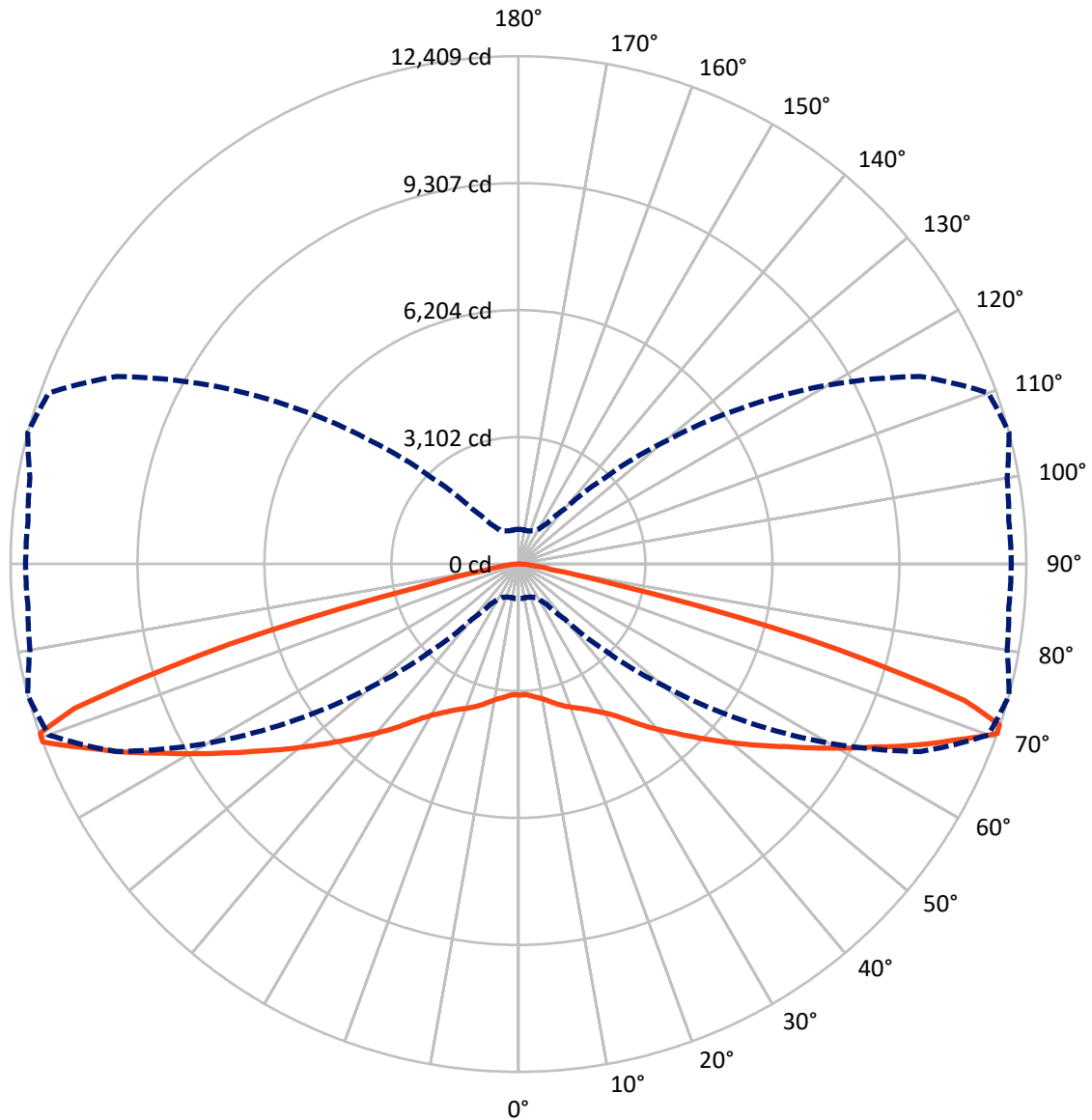
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P196524  
CATALOG NUMBER: NAV-AF-06-D-UNV-RW-7030-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P196524

CATALOG NUMBER: NAV-AF-06-D-UNV-RW-7030-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14381.8	0.0	14381.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	14381.8	0.0	14381.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	28763.6	0.0	28763.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.2	1.1
10°-20°	952.8	3.3
20°-30°	1789.6	6.2
30°-40°	3152.4	11.0
40°-50°	5224.6	18.2
50°-60°	7268.2	25.3
60°-70°	6861.3	23.9
70°-80°	2930.5	10.2
80°-90°	276.9	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°	28763.6	100.0
0°-180°	28763.6	100.0



REPORT NUMBER: P196524

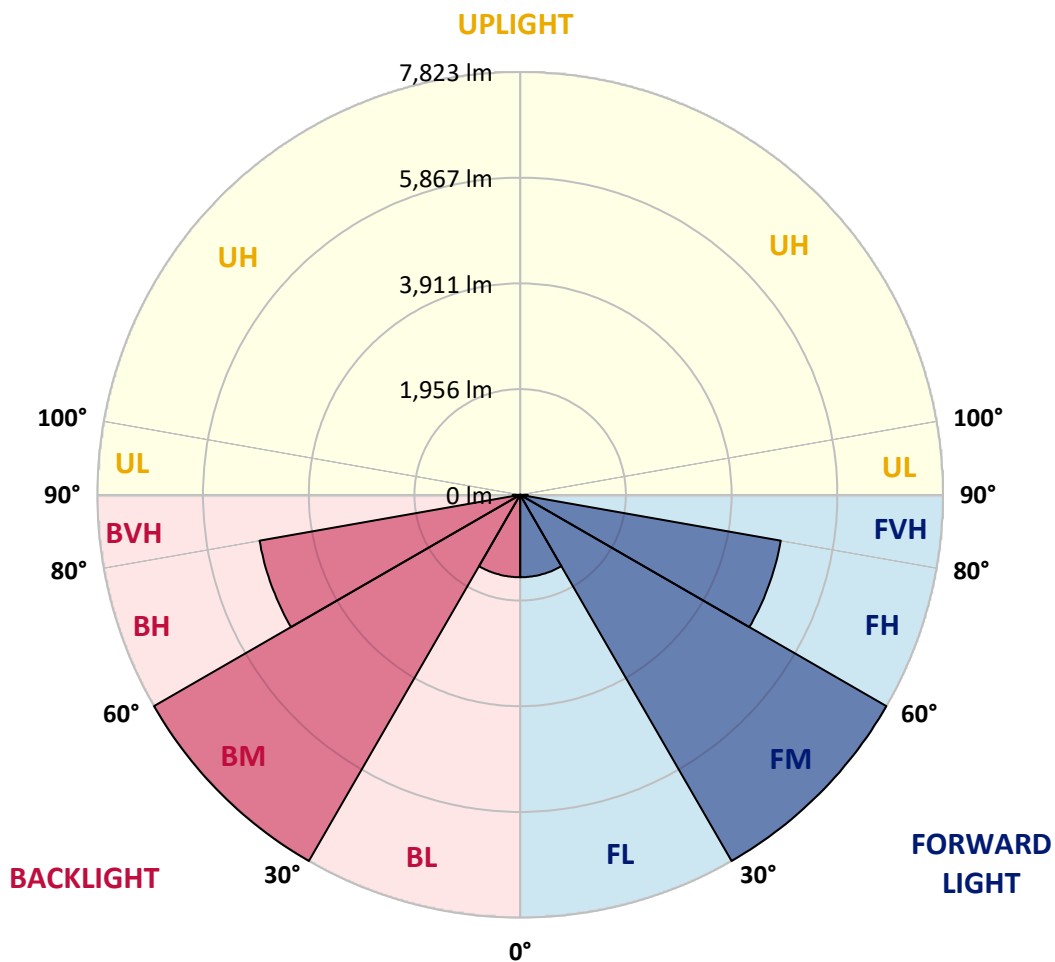
CATALOG NUMBER: NAV-AF-06-D-UNV-RW-7030-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1524.8	5.3			
FM	(30°-60°)	7822.6	27.2			
FH	(60°-80°)	4895.9	17.0			G2/5000
FVH	(80°-90°)	138.5	0.5			G2/225
BL	(0°-30°)	1524.8	5.3	B3/2500		
BM	(30°-60°)	7822.6	27.2	B4/8500		
BH	(60°-80°)	4895.9	17.0	B4/5000		G4/5000
BVH	(80°-90°)	138.5	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





REPORT NUMBER: P196524

CATALOG NUMBER: NAV-AF-06-D-UNV-RW-7030-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2
2.5°	3222.9	3221.2	3222.9	3217.5	3219.4	3217.5	3217.5	3210.4	3210.4	3206.8	3201.3
5°	3186.9	3190.5	3190.5	3190.5	3196.0	3196.0	3203.2	3204.9	3210.4	3215.7	3219.4
7.5°	3127.4	3129.1	3134.6	3138.3	3149.1	3163.5	3178.0	3194.0	3208.5	3226.5	3246.4
10°	3077.0	3080.6	3089.6	3098.6	3118.4	3136.4	3161.6	3186.9	3212.1	3242.9	3273.4
12.5°	3049.9	3055.3	3069.7	3084.2	3114.8	3138.3	3172.5	3212.1	3246.4	3275.1	3309.5
15°	3053.5	3055.3	3075.1	3095.0	3138.3	3170.7	3219.4	3266.2	3307.6	3340.0	3379.7
17.5°	3105.8	3109.4	3129.1	3158.0	3199.5	3240.9	3293.2	3341.9	3397.8	3435.6	3482.5
20°	3208.5	3214.0	3235.6	3266.2	3311.2	3354.5	3408.6	3459.0	3516.7	3561.9	3608.8
22.5°	3341.9	3350.9	3374.4	3412.1	3457.3	3509.5	3565.4	3617.7	3671.7	3716.8	3756.5
25°	3520.4	3531.2	3556.4	3594.3	3639.3	3695.1	3752.8	3806.9	3862.9	3897.1	3929.5
27.5°	3760.0	3778.0	3805.2	3835.8	3875.4	3935.0	3989.0	4034.1	4088.2	4125.9	4147.6
30°	4082.7	4107.9	4129.6	4162.0	4190.8	4254.0	4297.2	4333.3	4374.7	4396.4	4401.8
32.5°	4477.6	4500.9	4522.6	4545.9	4585.6	4643.3	4684.8	4704.6	4726.2	4722.6	4702.8
35°	4922.6	4940.7	4953.4	4994.8	5059.7	5097.6	5128.2	5135.4	5139.0	5101.2	5063.3
37.5°	5391.4	5413.0	5423.8	5488.7	5550.1	5593.3	5607.7	5623.9	5613.0	5550.1	5481.5
40°	5898.0	5921.3	5953.7	6009.7	6081.8	6123.2	6141.3	6139.4	6130.4	6056.6	5944.8
42.5°	6395.4	6424.2	6451.3	6548.6	6608.1	6678.4	6687.4	6685.6	6665.8	6581.0	6451.3
45°	6817.2	6851.4	6907.4	7015.4	7111.0	7195.7	7230.0	7242.6	7222.8	7132.7	6984.8
47.5°	7165.1	7188.5	7258.8	7390.4	7513.0	7637.3	7705.8	7754.4	7752.7	7687.8	7531.0
50°	7403.0	7430.0	7516.6	7664.4	7817.6	7963.6	8098.9	8208.7	8261.0	8214.1	8068.1
52.5°	7471.4	7505.8	7619.3	7795.9	7974.4	8170.9	8372.7	8567.4	8684.6	8713.4	8599.9
55°	7183.1	7221.0	7386.8	7632.0	7925.7	8216.0	8522.4	8800.0	9041.5	9153.3	9108.2
57.5°	6343.1	6370.2	6581.0	6898.3	7318.3	7828.4	8343.9	8852.3	9266.9	9557.0	9607.5
60°	5016.4	5050.7	5281.5	5616.7	6094.4	6739.6	7460.7	8293.5	9106.4	9771.6	10101.4
62.5°	3385.2	3408.6	3630.3	3936.7	4459.5	5081.3	5885.2	6939.7	8098.9	9286.7	10216.8
65°	1777.3	1777.3	1926.9	2141.4	2557.8	3114.8	3938.6	5020.0	6399.0	7882.5	9438.1
67.5°	1031.1	1029.2	1063.5	1112.1	1243.7	1469.1	1923.3	2718.3	4023.3	5750.1	7520.2
70°	850.8	845.3	839.9	839.9	859.8	894.1	980.6	1198.7	1753.8	2965.2	4627.1
71°	813.0	809.4	795.0	789.5	798.5	816.5	854.4	955.4	1245.5	2022.5	3455.5
72.5°	767.9	759.0	737.3	728.2	730.1	737.3	748.1	787.8	876.0	1150.1	1970.2
75°	699.4	677.7	650.7	638.1	632.7	630.9	630.9	641.7	661.6	694.1	807.5
77.5°	620.0	589.5	560.6	547.9	538.9	533.5	529.9	522.7	519.1	533.5	575.0
80°	524.6	492.1	468.6	461.4	456.0	445.2	430.8	416.4	407.4	414.5	439.8
82.5°	405.6	373.1	376.7	378.6	369.6	351.5	337.1	320.9	304.7	301.0	313.7
85°	322.7	306.5	295.6	319.0	299.3	277.6	257.8	230.7	192.9	158.7	173.0
87.5°	138.8	140.6	201.9	304.7	266.8	214.4	178.4	144.2	91.9	68.5	70.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P196524

CATALOG NUMBER: NAV-AF-06-D-UNV-RW-7030-800

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2	3203.2
2.5°	3199.5	3199.5	3194.0	3190.5	3190.5	3190.5	3186.9	3188.7
5°	3221.2	3224.8	3228.4	3226.5	3232.0	3237.4	3235.6	3233.7
7.5°	3257.2	3268.0	3278.8	3284.3	3291.4	3298.6	3300.4	3295.0
10°	3293.2	3314.8	3331.1	3345.5	3354.5	3361.7	3367.2	3365.3
12.5°	3338.3	3368.9	3397.8	3426.6	3446.5	3457.3	3468.1	3464.5
15°	3412.1	3446.5	3482.5	3520.4	3551.0	3567.2	3583.4	3579.9
17.5°	3513.1	3543.9	3572.7	3610.5	3648.3	3666.4	3684.3	3682.6
20°	3639.3	3662.8	3679.0	3700.6	3736.6	3756.5	3772.7	3767.3
22.5°	3783.5	3790.7	3792.5	3799.7	3828.6	3852.1	3873.7	3879.0
25°	3940.3	3935.0	3924.1	3918.7	3938.6	3963.8	3990.8	3998.1
27.5°	4135.0	4117.0	4089.9	4068.4	4073.7	4106.2	4136.8	4143.9
30°	4380.2	4338.6	4281.0	4239.6	4232.3	4266.6	4299.1	4309.8
32.5°	4659.6	4603.6	4524.3	4461.3	4434.3	4464.9	4493.8	4509.9
35°	4991.2	4929.9	4834.4	4753.4	4710.0	4729.9	4780.3	4798.3
37.5°	5384.2	5299.4	5193.1	5090.4	5018.3	5021.9	5075.9	5097.6
40°	5818.6	5696.0	5560.9	5432.8	5328.2	5321.0	5369.8	5385.9
42.5°	6271.1	6114.1	5955.6	5787.9	5658.2	5634.7	5697.9	5699.6
45°	6757.6	6555.8	6359.3	6164.6	6029.5	5988.1	6049.3	6056.6
47.5°	7276.8	7024.5	6792.0	6581.0	6435.1	6370.2	6429.7	6440.5
50°	7817.6	7556.3	7285.9	7051.5	6880.3	6801.0	6871.4	6878.5
52.5°	8353.0	8106.1	7837.3	7568.8	7361.6	7271.4	7354.4	7379.6
55°	8891.9	8654.0	8401.6	8133.0	7871.7	7792.4	7882.5	7909.5
57.5°	9452.4	9223.5	8994.7	8724.3	8470.1	8349.4	8446.8	8484.5
60°	10070.8	9868.9	9652.6	9380.4	9129.8	8989.2	9072.2	9115.4
62.5°	10678.2	10636.7	10440.3	10157.3	9840.0	9699.5	9769.8	9800.3
65°	10728.7	11401.1	11392.0	11110.8	10667.4	10431.3	10451.0	10465.5
67.5°	9364.2	10907.2	11893.1	11981.5	11487.5	11118.0	11074.7	11083.8
70°	6629.8	8747.8	10840.4	12214.0	12408.7	12122.1	12028.4	12042.8
71°	5312.0	7505.8	9809.4	11657.0	12394.3	12311.4	12259.0	12296.9
72.5°	3390.6	5530.1	7772.4	9982.5	11397.5	11803.1	11862.5	11885.9
75°	1231.2	2379.3	4026.9	5769.9	7312.9	8374.6	8958.6	9005.4
77.5°	661.6	852.6	1317.6	1968.5	2473.1	2743.5	2776.0	2788.6
80°	486.6	564.3	645.2	737.3	795.0	805.8	785.9	744.5
82.5°	344.2	389.4	421.7	454.2	477.7	457.8	380.3	290.2
85°	200.1	219.9	237.9	254.1	257.8	243.3	160.4	131.5
87.5°	79.3	86.6	84.6	95.5	91.9	84.6	63.1	54.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)