

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: P196518

Luminaire Tested: **NAV-AF-06-D-UNV-RW-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196518  
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-7030-600  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23455.8 lumens  
Efficiency: N/A  
Efficacy: 121.5 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

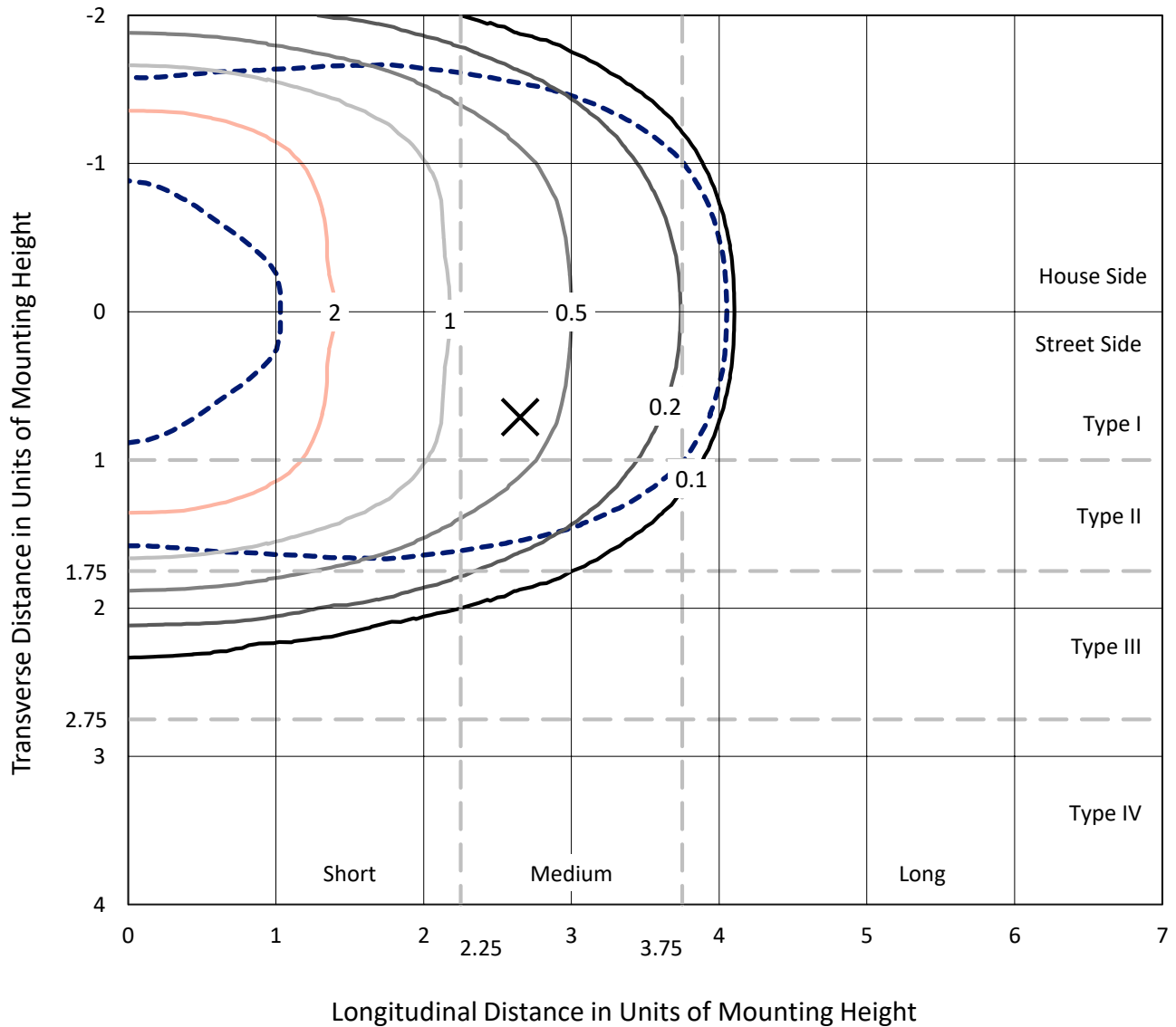
Input Watts (W): 193  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

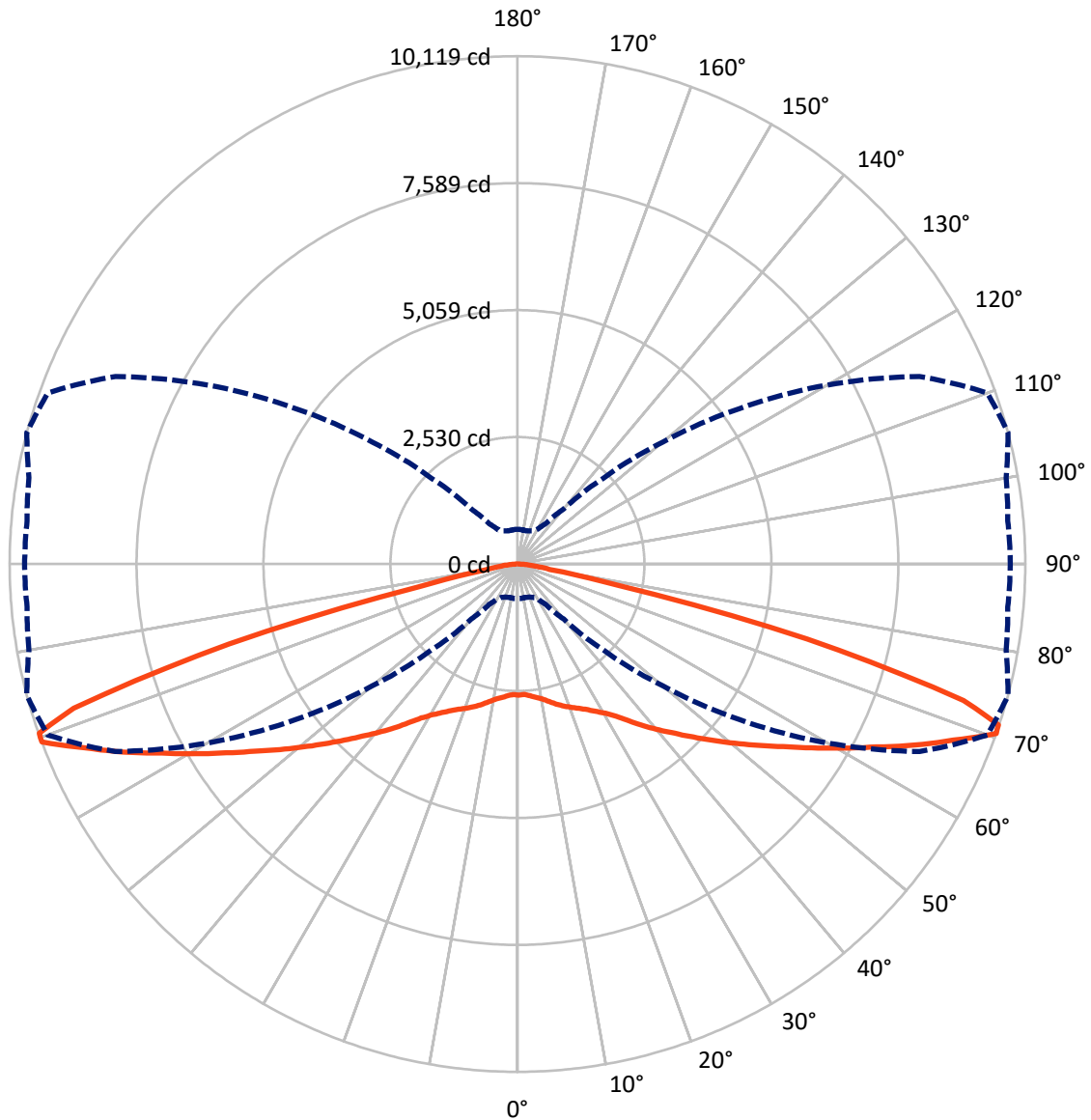
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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	11727.9	0.0	11727.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	11727.9	0.0	11727.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	23455.8	0.0	23455.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	250.5	1.1
10°-20°	777.0	3.3
20°-30°	1459.4	6.2
30°-40°	2570.7	11.0
40°-50°	4260.5	18.2
50°-60°	5926.9	25.3
60°-70°	5595.2	23.9
70°-80°	2389.7	10.2
80°-90°	225.8	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°	23455.8	100.0
0°-180°	23455.8	100.0



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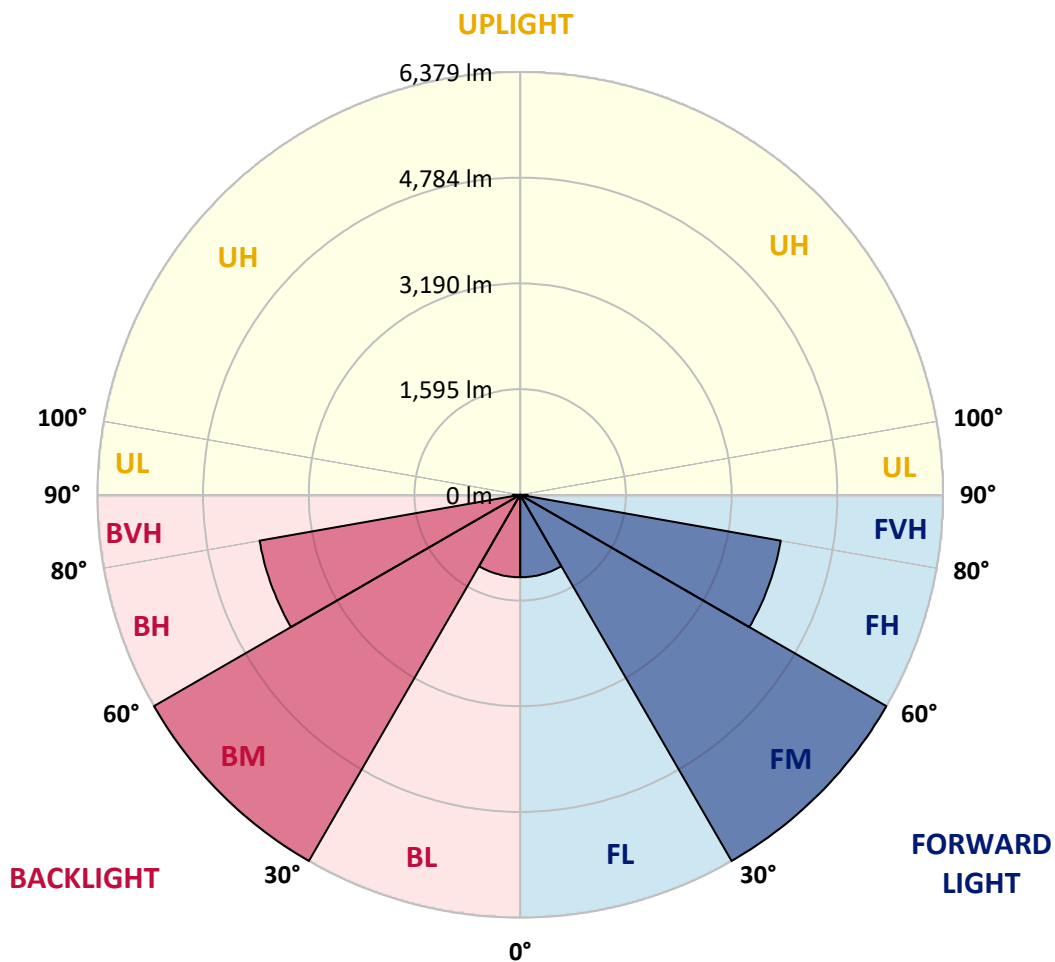
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1243.5	5.3			
FM	(30°-60°)	6379.1	27.2			
FH	(60°-80°)	3992.5	17.0			G2/5000
FVH	(80°-90°)	112.9	0.5			G2/225
BL	(0°-30°)	1243.5	5.3	B3/2500		
BM	(30°-60°)	6379.1	27.2	B4/8500		
BH	(60°-80°)	3992.5	17.0	B4/5000		G4/5000
BVH	(80°-90°)	112.9	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°	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1
2.5°	2628.2	2626.7	2628.2	2623.8	2625.3	2623.8	2623.8	2618.0	2618.0	2615.0	2610.5
5°	2598.8	2601.8	2601.8	2601.8	2606.2	2606.2	2612.1	2613.5	2618.0	2622.3	2625.3
7.5°	2550.3	2551.8	2556.1	2559.1	2567.9	2579.7	2591.4	2604.6	2616.4	2631.2	2647.4
10°	2509.1	2512.1	2519.4	2526.7	2542.9	2557.6	2578.2	2598.8	2619.4	2644.4	2669.3
12.5°	2487.1	2491.5	2503.2	2515.0	2540.0	2559.1	2587.0	2619.4	2647.4	2670.9	2698.7
15°	2490.0	2491.5	2507.7	2523.9	2559.1	2585.6	2625.3	2663.5	2697.3	2723.8	2756.1
17.5°	2532.6	2535.6	2551.8	2575.2	2609.1	2642.9	2685.5	2725.3	2770.9	2801.6	2839.8
20°	2616.4	2620.8	2638.5	2663.5	2700.3	2735.6	2779.5	2820.7	2867.8	2904.5	2942.8
22.5°	2725.3	2732.6	2751.7	2782.5	2819.3	2861.9	2907.5	2950.1	2994.2	3031.0	3063.3
25°	2870.8	2879.5	2900.2	2931.0	2967.7	3013.3	3060.4	3104.5	3150.1	3178.0	3204.3
27.5°	3066.3	3080.9	3103.0	3128.0	3160.4	3208.8	3252.8	3289.7	3333.7	3364.6	3382.2
30°	3329.3	3349.9	3367.6	3394.0	3417.5	3469.0	3504.3	3533.7	3567.5	3585.2	3589.5
32.5°	3651.2	3670.3	3688.0	3707.1	3739.4	3786.5	3820.2	3836.4	3854.1	3851.2	3835.0
35°	4014.3	4029.1	4039.4	4073.0	4126.0	4156.9	4181.9	4187.8	4190.7	4159.8	4129.0
37.5°	4396.5	4414.2	4423.0	4476.0	4525.8	4561.1	4572.9	4586.1	4577.3	4525.8	4470.1
40°	4809.6	4828.6	4855.2	4900.8	4959.5	4993.2	5008.0	5006.5	4999.1	4938.8	4847.8
42.5°	5215.3	5238.8	5260.9	5340.1	5388.6	5446.0	5453.3	5451.9	5435.7	5366.6	5260.9
45°	5559.2	5587.1	5632.7	5721.0	5798.8	5867.9	5895.8	5906.1	5889.9	5816.4	5695.9
47.5°	5842.8	5862.0	5919.3	6026.6	6126.6	6228.0	6283.8	6323.6	6322.1	6269.2	6141.3
50°	6036.9	6059.0	6129.6	6250.0	6374.9	6494.1	6604.2	6694.0	6736.6	6698.3	6579.3
52.5°	6092.8	6120.7	6213.3	6357.4	6502.9	6663.0	6827.7	6986.5	7082.0	7105.5	7013.0
55°	5857.6	5888.4	6023.7	6223.6	6463.2	6699.9	6949.8	7176.1	7373.1	7464.1	7427.5
57.5°	5172.7	5194.6	5366.6	5625.3	5967.8	6383.8	6804.2	7218.8	7556.8	7793.5	7834.7
60°	4090.7	4118.6	4306.8	4580.2	4969.7	5496.0	6084.0	6763.0	7426.1	7968.4	8237.4
62.5°	2760.6	2779.5	2960.4	3210.2	3636.5	4143.6	4799.2	5659.2	6604.2	7573.0	8331.4
65°	1449.4	1449.4	1571.3	1746.3	2085.8	2540.0	3211.7	4093.7	5218.2	6427.9	7696.4
67.5°	840.7	839.3	867.3	907.0	1014.3	1198.0	1568.4	2216.7	3280.8	4689.0	6132.5
70°	693.8	689.4	684.9	684.9	701.1	729.1	799.7	977.6	1430.2	2418.0	3773.3
71°	662.8	660.0	648.2	643.9	651.1	665.8	696.7	779.0	1015.7	1649.3	2817.8
72.5°	626.2	618.9	601.2	593.9	595.4	601.2	610.0	642.3	714.3	937.8	1606.6
75°	570.4	552.7	530.7	520.4	515.9	514.5	514.5	523.3	539.4	566.0	658.5
77.5°	505.7	480.6	457.1	446.9	439.6	435.1	432.1	426.2	423.4	435.1	468.9
80°	427.7	401.3	382.2	376.3	371.9	363.1	351.3	339.6	332.1	338.0	358.7
82.5°	330.7	304.3	307.2	308.6	301.3	286.6	274.9	261.6	248.4	245.5	255.7
85°	263.1	249.8	241.0	260.1	243.9	226.3	210.3	188.2	157.4	129.4	141.2
87.5°	113.2	114.6	164.7	248.4	217.5	175.0	145.6	117.6	75.0	55.8	57.4
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°	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1	2612.1
2.5°	2609.1	2609.1	2604.6	2601.8	2601.8	2601.8	2598.8	2600.3
5°	2626.7	2629.7	2632.6	2631.2	2635.6	2639.9	2638.5	2637.0
7.5°	2656.1	2665.0	2673.8	2678.2	2684.1	2690.0	2691.4	2687.0
10°	2685.5	2703.2	2716.4	2728.2	2735.6	2741.5	2745.8	2744.4
12.5°	2722.3	2747.3	2770.9	2794.3	2810.4	2819.3	2828.0	2825.1
15°	2782.5	2810.4	2839.8	2870.8	2895.7	2908.9	2922.1	2919.2
17.5°	2864.9	2889.8	2913.4	2944.2	2975.1	2989.8	3004.5	3003.0
20°	2967.7	2986.8	3000.0	3017.7	3047.1	3063.3	3076.5	3072.2
22.5°	3085.4	3091.3	3092.7	3098.6	3122.1	3141.2	3158.8	3163.3
25°	3213.2	3208.8	3199.9	3195.7	3211.7	3232.3	3254.4	3260.3
27.5°	3372.0	3357.3	3335.2	3317.5	3322.0	3348.5	3373.5	3379.3
30°	3571.9	3538.1	3491.1	3457.2	3451.4	3479.3	3505.7	3514.6
32.5°	3799.7	3754.1	3689.4	3638.0	3615.9	3640.9	3664.4	3677.6
35°	4070.1	4020.2	3942.3	3876.2	3840.9	3857.1	3898.2	3912.9
37.5°	4390.6	4321.5	4234.8	4151.0	4092.2	4095.1	4139.3	4156.9
40°	4744.9	4644.9	4534.7	4430.4	4345.0	4339.1	4378.9	4392.1
42.5°	5113.8	4985.9	4856.6	4719.9	4614.0	4594.9	4646.4	4647.9
45°	5510.7	5346.0	5185.9	5027.1	4916.8	4883.1	4933.0	4938.8
47.5°	5934.0	5728.3	5538.6	5366.6	5247.6	5194.6	5243.2	5252.0
50°	6374.9	6161.9	5941.4	5750.4	5610.7	5546.0	5603.3	5609.2
52.5°	6811.6	6610.1	6391.1	6172.2	6003.1	5929.6	5997.2	6017.8
55°	7251.1	7057.0	6851.2	6632.2	6419.1	6354.4	6427.9	6450.0
57.5°	7708.2	7521.5	7334.9	7114.4	6907.2	6808.6	6888.0	6918.9
60°	8212.4	8047.7	7871.4	7649.5	7445.2	7330.4	7398.1	7433.4
62.5°	8707.8	8674.0	8513.7	8283.0	8024.2	7909.6	7966.8	7991.9
65°	8748.9	9297.2	9289.9	9060.6	8698.9	8506.4	8522.6	8534.4
67.5°	7636.1	8894.5	9698.5	9770.5	9367.8	9066.5	9031.2	9038.5
70°	5406.3	7133.4	8840.0	9960.1	10118.8	9885.1	9808.8	9820.4
71°	4331.8	6120.7	7999.2	9505.9	10107.1	10039.5	9996.9	10027.7
72.5°	2765.0	4509.6	6338.2	8140.4	9294.2	9624.9	9673.5	9692.6
75°	1004.0	1940.3	3283.8	4705.1	5963.4	6829.2	7305.4	7343.7
77.5°	539.4	695.2	1074.4	1605.1	2016.7	2237.2	2263.7	2273.9
80°	396.8	460.1	526.2	601.2	648.2	657.0	641.0	607.1
82.5°	280.8	317.5	343.9	370.4	389.5	373.3	310.2	236.6
85°	163.2	179.3	194.1	207.3	210.3	198.5	130.8	107.3
87.5°	64.7	70.6	69.1	77.9	75.0	69.1	51.5	44.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)