

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: P196452

Luminaire Tested: **NAV-AF-06-D-UNV-5WQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196452  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24131)  
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-5WQ-7030-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29284.8 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G4

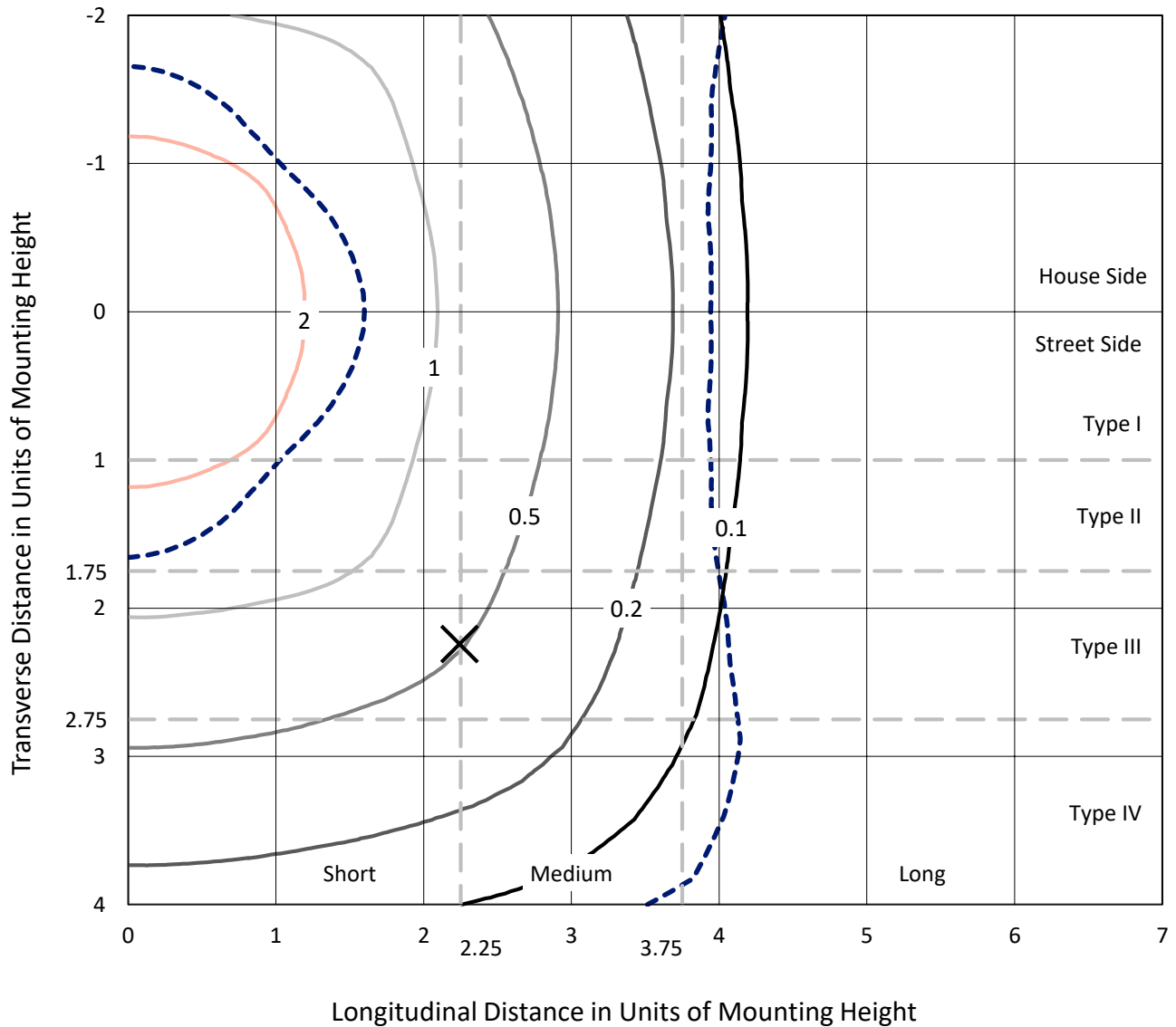
Input Watts (W): 249  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

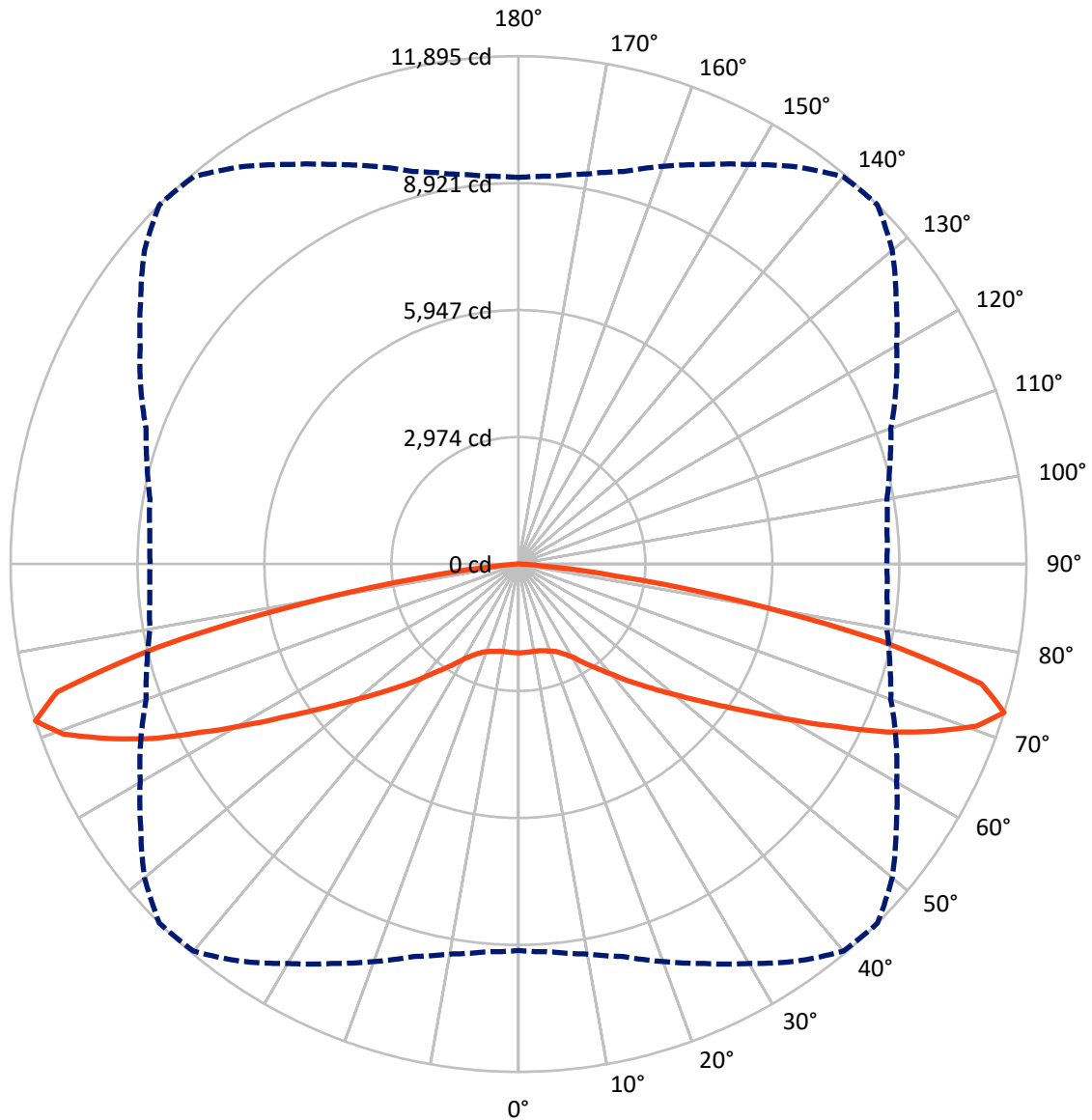


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14642.4	0.0	14642.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	14642.4	0.0	14642.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	29284.8	0.0	29284.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.7	0.7
10°-20°	601.4	2.1
20°-30°	1085.7	3.7
30°-40°	1851.9	6.3
40°-50°	3152.9	10.8
50°-60°	5074.1	17.3
60°-70°	8438.4	28.8
70°-80°	8163.2	27.9
80°-90°	718.5	2.5
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°	29284.8	100.0
0°-180°	29284.8	100.0



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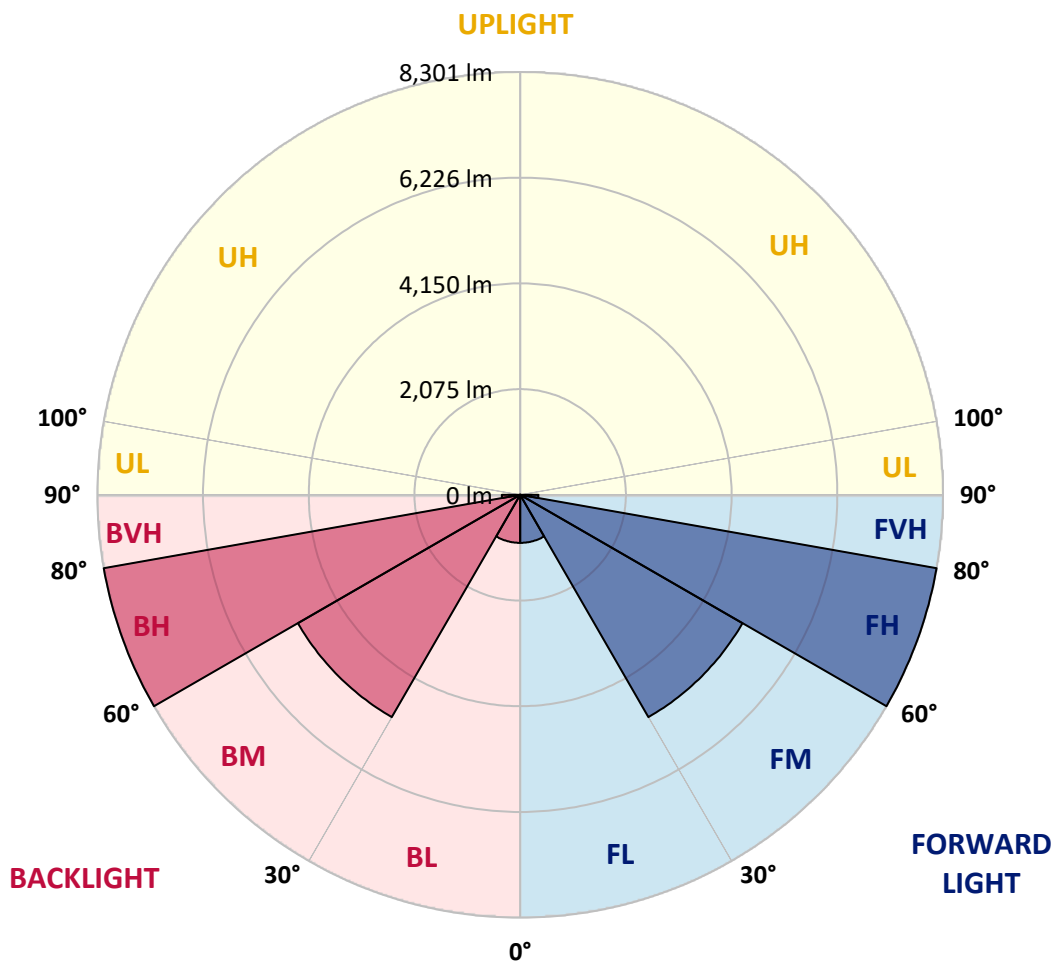
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	942.9	3.2			
FM	(30°-60°)	5039.5	17.2			
FH	(60°-80°)	8300.8	28.3			G4/12000
FVH	(80°-90°)	359.2	1.2			G3/500
BL	(0°-30°)	942.9	3.2	B2/1000		
BM	(30°-60°)	5039.5	17.2	B4/8500		
BH	(60°-80°)	8300.8	28.3	B5		G4/12000
BVH	(80°-90°)	359.2	1.2			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9
2.5°	2098.1	2098.1	2100.0	2098.1	2094.5	2092.8	2087.3	2083.7	2080.1	2078.3	2074.8
5°	2100.0	2100.0	2101.7	2100.0	2096.3	2092.8	2089.1	2083.7	2080.1	2076.5	2074.8
7.5°	2107.2	2108.9	2110.8	2108.9	2101.7	2098.1	2092.8	2087.3	2080.1	2076.5	2072.8
10°	2121.6	2121.6	2121.6	2119.7	2114.3	2107.2	2100.0	2094.5	2085.5	2076.5	2071.1
12.5°	2132.4	2134.2	2134.2	2130.5	2123.4	2114.3	2107.2	2101.7	2094.5	2087.3	2081.9
15°	2148.6	2148.6	2146.8	2139.7	2128.8	2121.6	2118.0	2116.2	2114.3	2110.8	2105.3
17.5°	2181.1	2179.2	2173.8	2163.0	2150.4	2145.0	2141.4	2141.4	2141.4	2139.7	2136.0
20°	2227.9	2227.9	2220.7	2202.6	2191.8	2186.5	2181.1	2181.1	2181.1	2175.7	2170.2
22.5°	2303.6	2305.5	2294.7	2273.0	2258.6	2247.8	2240.6	2235.1	2229.8	2226.1	2217.1
25°	2406.4	2404.6	2392.0	2364.9	2354.1	2343.3	2328.9	2319.9	2312.7	2307.2	2296.4
27.5°	2514.5	2512.8	2498.3	2474.8	2467.6	2451.4	2440.7	2428.0	2419.0	2410.0	2399.3
30°	2653.4	2644.3	2633.4	2615.4	2611.9	2599.3	2584.8	2566.8	2552.4	2538.0	2525.3
32.5°	2777.7	2777.7	2761.5	2752.5	2759.7	2754.3	2756.1	2745.2	2736.3	2730.8	2718.3
35°	2950.8	2950.8	2943.6	2932.7	2934.4	2921.9	2920.1	2921.9	2929.1	2929.1	2914.7
37.5°	3181.5	3185.1	3161.6	3158.0	3149.1	3131.1	3122.0	3125.6	3141.9	3150.8	3131.1
40°	3468.1	3475.3	3468.1	3444.6	3433.8	3403.2	3385.2	3385.2	3397.8	3406.8	3399.6
42.5°	3751.1	3763.7	3751.1	3733.1	3724.0	3700.6	3691.6	3698.8	3715.1	3725.8	3715.1
45°	4066.5	4075.5	4059.3	4037.6	4026.9	4014.3	4008.8	4014.3	4032.3	4043.0	4039.5
47.5°	4376.6	4389.2	4369.4	4360.3	4360.3	4347.8	4362.1	4376.6	4392.8	4418.0	4407.2
50°	4679.3	4695.6	4683.0	4684.8	4699.2	4722.6	4749.7	4778.6	4807.4	4834.4	4838.0
52.5°	4949.8	4975.0	4976.8	5009.2	5054.4	5090.4	5166.1	5229.1	5297.7	5321.0	5310.2
55°	5234.6	5268.8	5313.9	5364.3	5436.4	5510.4	5638.4	5751.9	5842.0	5898.0	5888.8
57.5°	5641.9	5676.1	5723.0	5805.9	5914.1	6015.0	6189.9	6366.5	6503.5	6588.3	6546.9
60°	6170.1	6206.2	6267.4	6355.7	6496.3	6633.3	6873.1	7127.2	7339.9	7437.3	7361.6
62.5°	6869.4	6903.6	6943.3	7060.6	7217.3	7394.0	7695.0	8021.3	8291.6	8385.4	8279.0
65°	7866.2	7907.7	7920.3	8016.0	8169.1	8333.1	8657.6	9025.3	9333.5	9486.8	9274.0
67.5°	8989.2	9005.4	9056.0	9167.7	9324.5	9472.3	9728.2	10076.2	10371.8	10456.5	10229.4
70°	9647.1	9679.6	9767.9	9922.9	10110.5	10342.9	10622.3	10997.3	11332.5	11372.1	11083.8
72.5°	9052.3	9119.0	9275.9	9517.3	9910.4	10323.2	10804.4	11357.7	11839.0	11894.9	11431.7
75°	7260.6	7336.3	7523.8	7788.8	8253.8	8866.7	9562.5	10393.4	11114.4	11206.4	10593.4
77.5°	3870.1	3963.8	4236.0	4592.8	5256.1	6067.2	6905.5	7853.7	8466.5	8673.8	8232.1
80°	975.1	1025.6	1157.3	1366.3	1815.2	2469.5	3192.3	4212.5	4973.2	5295.8	4973.2
82.5°	378.6	416.4	452.5	477.7	520.9	611.1	843.6	1375.3	1853.0	2282.0	1975.6
85°	146.0	155.0	223.6	254.1	254.1	279.3	320.9	378.6	468.6	511.9	429.0
87.5°	57.7	63.1	77.5	119.0	122.6	108.1	115.4	129.8	99.1	82.9	93.8
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°	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9
2.5°	2072.8	2071.1	2067.5	2069.3	2067.5	2067.5	2067.5	2067.5
5°	2071.1	2071.1	2067.5	2067.5	2067.5	2069.3	2067.5	2067.5
7.5°	2069.3	2067.5	2063.9	2062.0	2062.0	2060.3	2060.3	2060.3
10°	2065.6	2062.0	2058.5	2056.7	2056.7	2053.1	2053.1	2053.1
12.5°	2074.8	2069.3	2065.6	2063.9	2063.9	2063.9	2065.6	2065.6
15°	2100.0	2089.1	2083.7	2081.9	2083.7	2087.3	2089.1	2090.9
17.5°	2127.0	2116.2	2107.2	2103.6	2105.3	2110.8	2116.2	2119.7
20°	2161.2	2152.2	2141.4	2137.7	2137.7	2145.0	2148.6	2154.0
22.5°	2209.9	2202.6	2193.7	2188.3	2184.6	2193.7	2199.1	2202.6
25°	2287.5	2280.2	2273.0	2267.5	2265.8	2274.8	2278.4	2280.2
27.5°	2390.1	2383.0	2379.3	2377.6	2372.1	2375.8	2381.2	2379.3
30°	2523.6	2529.0	2523.6	2523.6	2514.5	2518.1	2514.5	2510.9
32.5°	2702.0	2696.6	2680.3	2669.5	2656.9	2656.9	2651.5	2646.2
35°	2880.4	2862.4	2853.5	2858.8	2853.5	2857.0	2848.0	2839.0
37.5°	3091.4	3080.6	3078.7	3095.0	3091.4	3095.0	3095.0	3082.3
40°	3370.7	3363.5	3376.1	3403.2	3414.1	3412.1	3415.8	3399.6
42.5°	3691.6	3679.0	3684.3	3707.8	3720.4	3724.0	3722.3	3707.8
45°	4012.4	4016.1	4016.1	4041.3	4053.8	4061.0	4048.5	4043.0
47.5°	4374.7	4380.2	4367.5	4383.8	4387.5	4400.0	4389.2	4380.2
50°	4792.9	4773.1	4744.2	4749.7	4749.7	4746.1	4733.4	4722.6
52.5°	5259.7	5214.7	5160.7	5142.7	5122.8	5103.0	5077.8	5057.9
55°	5791.5	5714.0	5616.7	5571.6	5533.8	5488.7	5431.1	5411.2
57.5°	6408.0	6274.6	6144.8	6063.7	5966.4	5906.9	5833.1	5829.4
60°	7139.9	6959.6	6730.7	6609.8	6512.5	6442.3	6386.4	6364.8
62.5°	7985.2	7675.1	7428.2	7298.4	7184.9	7141.6	7071.4	7080.3
65°	8852.3	8536.8	8297.0	8192.5	8086.2	8057.4	7992.5	8016.0
67.5°	9791.4	9531.8	9268.7	9171.3	9074.0	9045.1	8978.4	8998.3
70°	10633.1	10303.2	10004.1	9813.0	9647.1	9513.8	9429.1	9394.7
72.5°	10800.9	10229.4	9758.9	9281.2	9005.4	8763.9	8664.8	8626.9
75°	9704.9	8818.0	8147.5	7586.9	7276.7	6925.3	6887.4	6835.3
77.5°	7549.0	6539.6	5728.5	5007.5	4591.1	4162.0	4014.3	3902.5
80°	4502.7	3460.9	2682.2	1880.1	1534.0	1234.7	1160.9	1083.3
82.5°	1611.5	1032.8	695.8	542.6	484.9	447.0	418.1	380.3
85°	389.4	328.1	310.1	281.3	277.6	236.1	167.6	149.5
87.5°	124.3	113.5	115.4	110.0	115.4	86.6	70.3	63.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)