

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: P884757

Luminaire Tested: **NAV-SB5D-722-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884757  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-722-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 40771 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G4

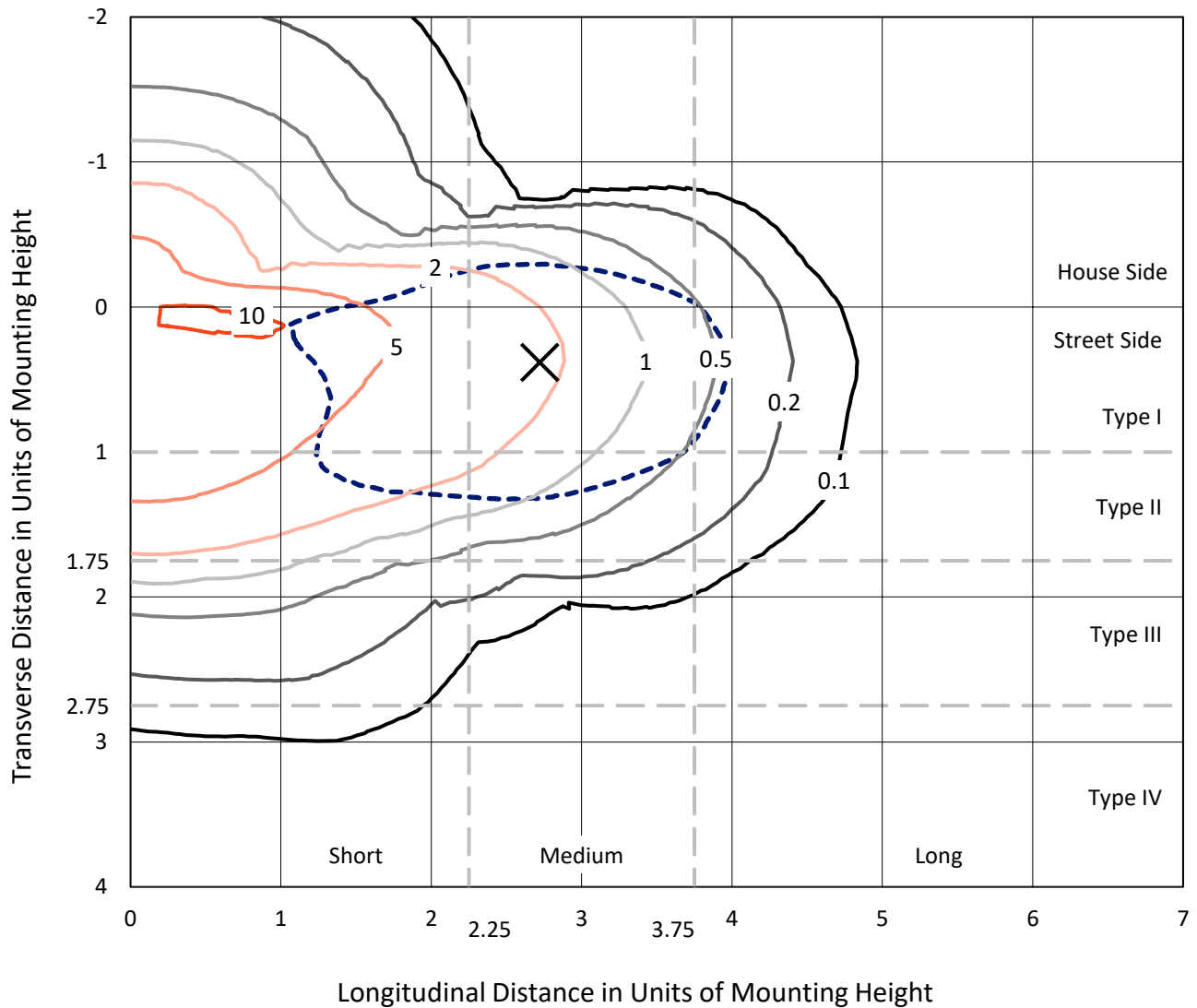
Input Watts (W): 364.9  
Input Voltage (V): 120.0  
Input Current (Ain): 3.094  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 3.28  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

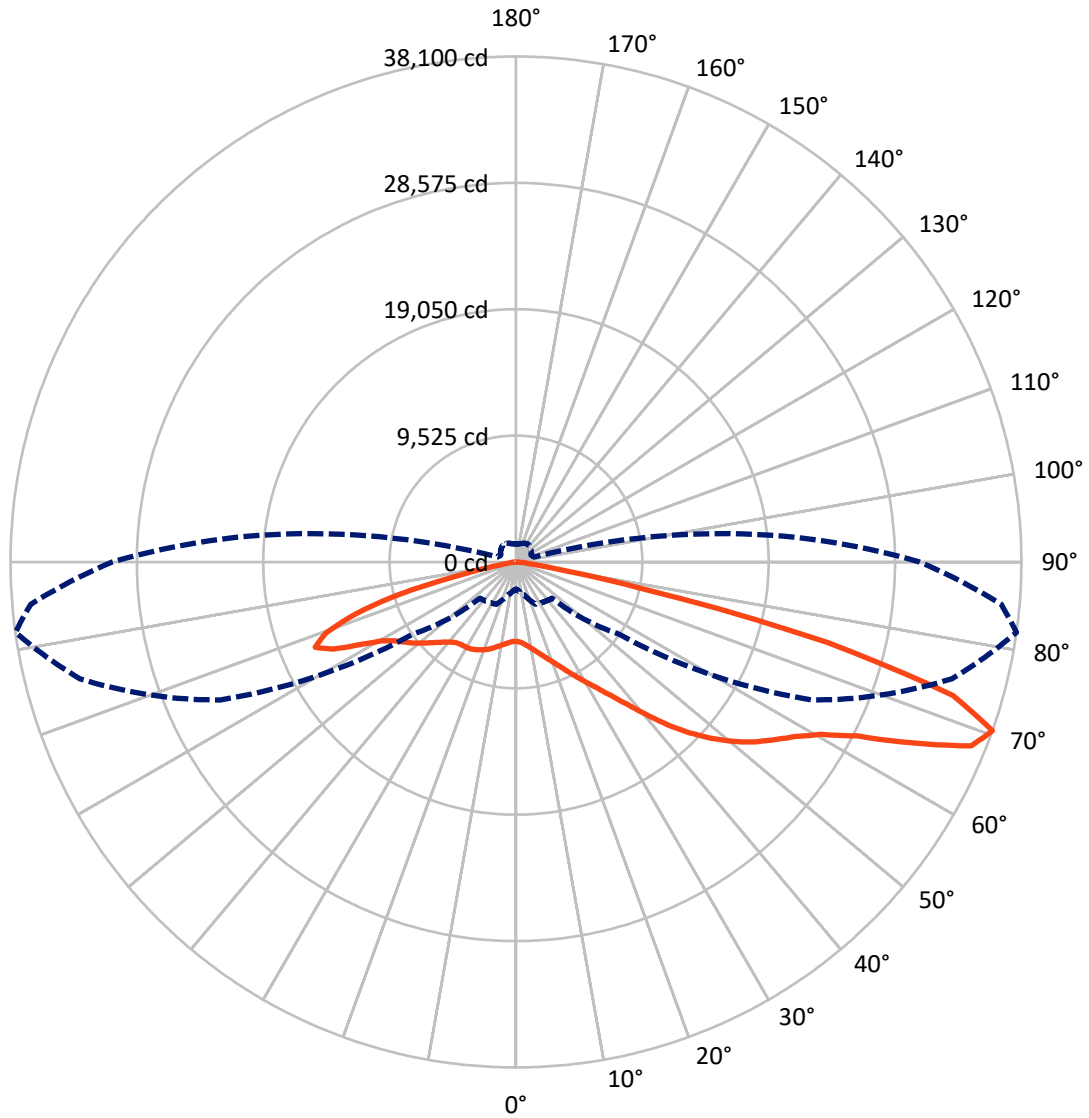
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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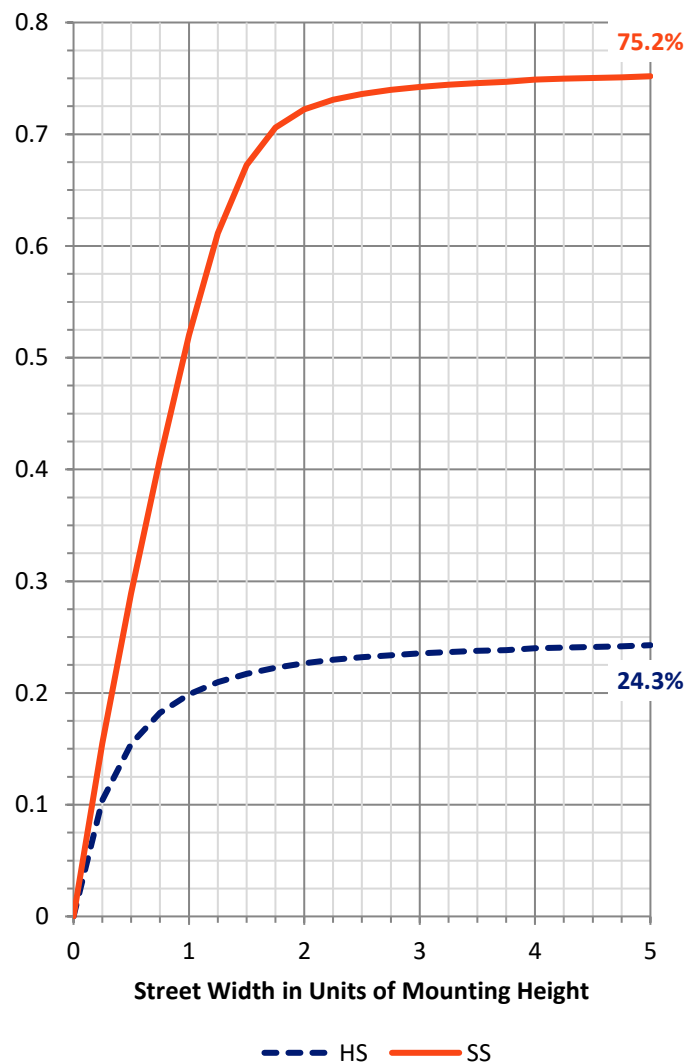
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10051.0	0.0	10051.0
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	30719.9	0.0	30719.9
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	40771.0	0.0	40771.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	564.4	1.4
10°-20°	1621.5	4.0
20°-30°	2712.6	6.7
30°-40°	4237.8	10.4
40°-50°	6749.2	16.6
50°-60°	9392.4	23.0
60°-70°	9824.8	24.1
70°-80°	5135.0	12.6
80°-90°	533.2	1.3
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°	40771.0	100.0
0°-180°	40771.0	100.0

**Coefficient of Utilization**



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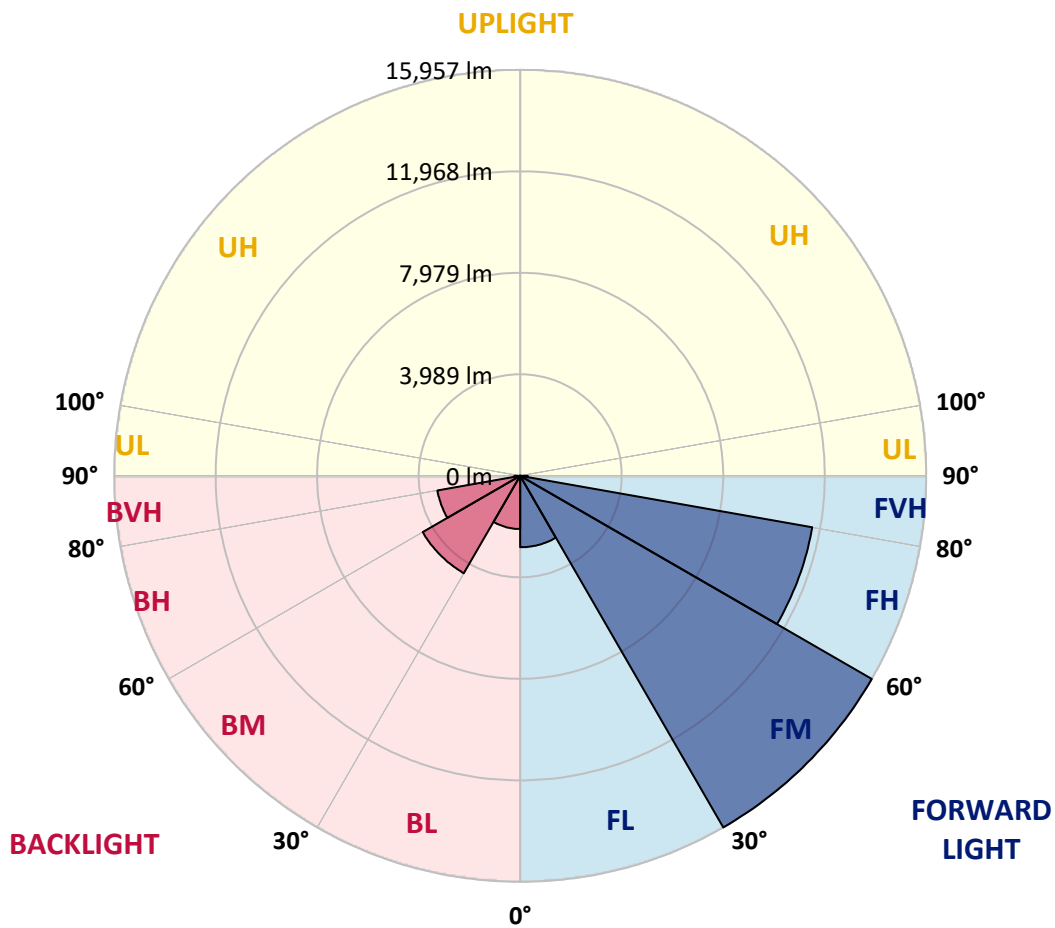
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2807.5	6.9			
FM (30°-60°)	15957.4	39.1			
FH (60°-80°)	11656.6	28.6			G4/12000
FVH (80°-90°)	298.5	0.7			G3/500
BL (0°-30°)	2091.0	5.1	B3/2500		
BM (30°-60°)	4422.1	10.8	B3/5000		
BH (60°-80°)	3303.3	8.1	B4/5000		G4/5000
BVH (80°-90°)	234.7	0.6			G3/500
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°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5
2.5°	6120.3	6154.9	6144.1	6133.3	6133.3	6118.2	6116.0	6094.4	6077.1	6048.9	6042.4
5°	6198.2	6235.0	6230.7	6239.3	6267.4	6273.9	6280.4	6267.4	6232.8	6198.2	6183.1
7.5°	6129.0	6170.1	6183.1	6235.0	6321.5	6399.4	6457.8	6481.6	6449.2	6399.4	6375.6
10°	5895.3	5940.8	5986.2	6109.5	6263.1	6447.0	6602.8	6695.8	6689.3	6641.7	6600.6
12.5°	5421.5	5469.1	5566.5	5806.6	6087.9	6412.4	6702.3	6897.0	6964.1	6929.4	6858.1
15°	5042.9	5084.0	5157.6	5404.2	5769.8	6263.1	6739.1	7117.7	7288.6	7269.1	7182.6
17.5°	5032.1	5049.4	5094.9	5211.7	5492.9	6029.5	6700.1	7334.0	7660.7	7658.5	7550.3
20°	5222.5	5229.0	5255.0	5278.8	5438.8	5852.1	6600.6	7513.6	8078.2	8078.2	7961.4
22.5°	5486.4	5482.1	5508.1	5486.4	5564.3	5836.9	6537.9	7671.5	8543.4	8578.0	8430.9
25°	5882.3	5860.7	5854.2	5804.5	5819.6	5977.5	6607.1	7851.1	9095.0	9166.4	8982.5
27.5°	6410.2	6375.6	6351.8	6237.1	6198.2	6267.4	6819.1	8067.4	9709.4	9832.8	9599.1
30°	7098.2	7035.5	7000.8	6801.8	6661.2	6672.0	7139.3	8355.1	10352.0	10551.0	10254.6
32.5°	8037.1	7939.8	7846.7	7520.1	7262.6	7178.2	7552.5	8753.2	11048.6	11366.6	10985.9
35°	9088.5	9010.7	8911.1	8407.1	8011.2	7816.4	8110.7	9309.2	11864.2	12368.3	11872.9
37.5°	10101.0	10034.0	10081.6	9402.2	8891.7	8608.3	8841.9	10055.6	12870.2	13614.4	12984.9
40°	11148.1	11096.2	11102.7	10453.7	9858.7	9540.7	9728.9	10992.4	14023.3	15096.4	14321.9
42.5°	12286.1	12247.1	12117.3	11541.9	10873.4	10577.0	10750.1	12074.1	15260.8	16783.8	15788.7
45°	13560.3	13536.5	13415.4	12755.5	11989.7	11656.5	11890.2	13268.3	16504.8	18371.8	17262.0
47.5°	14661.5	14681.0	14665.8	14109.8	13315.9	12826.9	13106.0	14514.4	17662.2	19864.6	18674.7
50°	15191.6	15293.2	15442.5	15269.4	14776.2	14278.6	14332.7	15717.3	18765.5	21264.3	20029.0
52.5°	14914.6	15107.2	15513.9	15790.8	15981.2	15877.4	15732.4	16911.5	19804.0	22527.7	21309.7
55°	13882.7	14153.1	14828.1	15496.6	16468.0	17223.0	17413.4	18235.5	20816.5	23639.7	22521.2
57.5°	12002.7	12441.8	13047.6	14399.7	16035.3	17874.2	19373.5	20072.2	21889.5	24827.4	23789.0
60°	8779.2	9367.6	10120.5	12132.5	14520.9	17525.9	21041.5	22893.3	23414.7	26365.6	25439.7
62.5°	5618.4	5981.9	6674.2	8569.3	11314.7	15741.1	21552.0	26419.7	26000.0	28888.2	27914.7
65°	3846.6	4080.2	4714.1	5778.5	7314.5	11717.1	20184.7	29063.4	30106.2	32886.2	32146.3
67.5°	2795.1	2972.5	3513.4	4445.8	4766.0	6933.8	15663.2	28942.3	34097.7	37005.4	35854.4
70°	2037.9	2163.4	2617.7	3513.4	3667.0	3857.4	9488.8	24602.4	34011.2	38100.0	36721.9
72.5°	1510.1	1596.6	1901.6	2725.9	2968.2	2604.8	4696.8	17880.7	29225.7	34461.2	33355.7
75°	1092.5	1157.4	1382.4	2085.5	2375.4	1983.9	2343.0	10449.3	20385.9	24241.2	24435.9
77.5°	835.1	884.8	1032.0	1527.4	1901.6	1488.4	1453.8	4807.1	9666.2	9713.8	10259.0
80°	670.7	703.1	783.2	1075.2	1458.1	1114.2	947.6	1940.6	3054.8	2585.3	2712.9
82.5°	493.3	547.3	662.0	755.0	1042.8	768.0	577.6	980.0	1161.8	999.5	1008.2
85°	281.2	318.0	400.2	540.9	666.3	469.5	331.0	434.8	540.9	443.5	395.9
87.5°	99.5	129.8	140.6	212.0	289.9	194.7	127.6	125.5	177.4	132.0	110.3
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5	5977.5
2.5°	6020.8	6010.0	5966.7	5908.3	5847.7	5789.3	5769.8	5728.7	5700.6	5685.5	5702.8
5°	6142.0	6107.3	6005.7	5875.9	5739.6	5592.4	5488.6	5393.4	5324.2	5259.3	5285.2
7.5°	6315.0	6254.5	6079.2	5852.1	5609.8	5365.3	5183.6	5045.1	4952.1	4891.5	4904.5
10°	6516.2	6423.2	6154.9	5815.3	5441.0	5090.5	4876.4	4757.4	4699.0	4666.5	4675.2
12.5°	6747.7	6615.7	6232.8	5730.9	5183.6	4783.3	4636.2	4601.6	4603.8	4605.9	4610.3
15°	7033.3	6849.4	6295.6	5547.0	4848.2	4547.5	4521.6	4577.8	4636.2	4664.3	4662.2
17.5°	7355.6	7096.0	6306.4	5244.1	4519.4	4396.1	4478.3	4599.4	4688.1	4727.1	4735.7
20°	7701.8	7347.0	6228.5	4815.8	4249.0	4272.8	4419.9	4575.6	4673.0	4722.8	4735.7
22.5°	8097.7	7615.2	6042.4	4365.8	4028.3	4138.6	4311.7	4463.1	4564.8	4614.6	4627.6
25°	8549.8	7916.0	5750.4	3987.2	3837.9	3987.2	4160.3	4285.7	4368.0	4413.4	4426.4
27.5°	9051.8	8229.7	5361.0	3686.5	3671.3	3831.4	3974.2	4071.6	4114.8	4149.4	4162.4
30°	9555.8	8515.2	4889.3	3459.3	3526.4	3677.8	3779.5	3822.8	3835.7	3842.2	3857.4
32.5°	10101.0	8761.9	4393.9	3271.1	3387.9	3528.5	3589.1	3608.6	3548.0	3506.9	3519.9
35°	10760.9	9025.8	3909.3	3121.8	3251.6	3372.8	3392.2	3374.9	3303.5	3219.2	3223.5
37.5°	11576.5	9354.6	3522.1	3015.8	3124.0	3204.0	3180.2	3175.9	3182.4	3082.9	3089.4
40°	12576.0	9783.0	3238.6	2933.6	3020.1	3037.4	2970.4	3007.2	3039.6	2888.2	2892.5
42.5°	13685.8	10300.1	3059.1	2877.4	2933.6	2892.5	2788.7	2829.8	2825.4	2626.4	2624.2
45°	14817.3	10862.5	2996.3	2836.2	2853.6	2771.3	2656.7	2667.5	2576.6	2397.1	2403.6
47.5°	15942.3	11466.1	3035.3	2801.6	2754.0	2661.0	2572.3	2524.7	2390.6	2256.5	2256.5
50°	17045.6	12100.0	3178.1	2732.4	2617.7	2563.7	2498.8	2414.4	2271.6	2156.9	2148.3
52.5°	18068.9	12738.2	3338.2	2617.7	2446.8	2479.3	2438.2	2340.8	2200.2	2083.4	2085.5
55°	19038.1	13376.4	3400.9	2459.8	2286.7	2405.7	2381.9	2202.4	2033.6	1938.4	1929.8
57.5°	20093.9	14144.5	3331.7	2258.6	2156.9	2321.4	2230.5	2031.5	1934.1	1862.7	1856.2
60°	21556.3	15349.5	3182.4	2009.8	2033.6	2195.9	2040.1	1957.9	1851.9	1771.8	1767.5
62.5°	23985.9	17597.3	2942.3	1763.2	1888.7	2009.8	1949.2	1867.0	1758.9	1681.0	1681.0
65°	27577.2	20721.3	2490.1	1570.6	1726.4	1828.1	1851.9	1769.7	1657.2	1575.0	1579.3
67.5°	30605.9	22681.3	1884.3	1410.6	1559.8	1681.0	1748.0	1668.0	1549.0	1469.0	1471.1
70°	30439.4	21257.8	1438.7	1252.6	1412.7	1536.0	1622.6	1559.8	1432.2	1356.5	1363.0
72.5°	27036.3	17783.3	1163.9	1092.5	1263.4	1384.6	1488.4	1440.8	1311.0	1237.5	1237.5
75°	19862.4	12623.6	930.3	930.3	1077.4	1226.7	1341.3	1311.0	1192.0	1140.1	1125.0
77.5°	8372.4	5296.1	729.1	772.3	895.7	1053.6	1196.4	1207.2	1103.3	1168.2	1060.1
80°	2226.2	1460.3	556.0	607.9	703.1	869.7	1040.6	1036.3	923.8	863.2	802.6
82.5°	848.1	575.5	395.9	428.4	508.4	666.3	824.3	850.2	737.7	638.2	638.2
85°	326.7	246.6	244.5	257.4	296.4	441.3	623.1	644.7	556.0	471.6	486.8
87.5°	84.4	73.6	90.9	86.5	136.3	235.8	357.0	369.9	339.7	196.9	281.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)