

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: P885007

Luminaire Tested: **NAV-SB6A-830-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885007  
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-SB6A-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

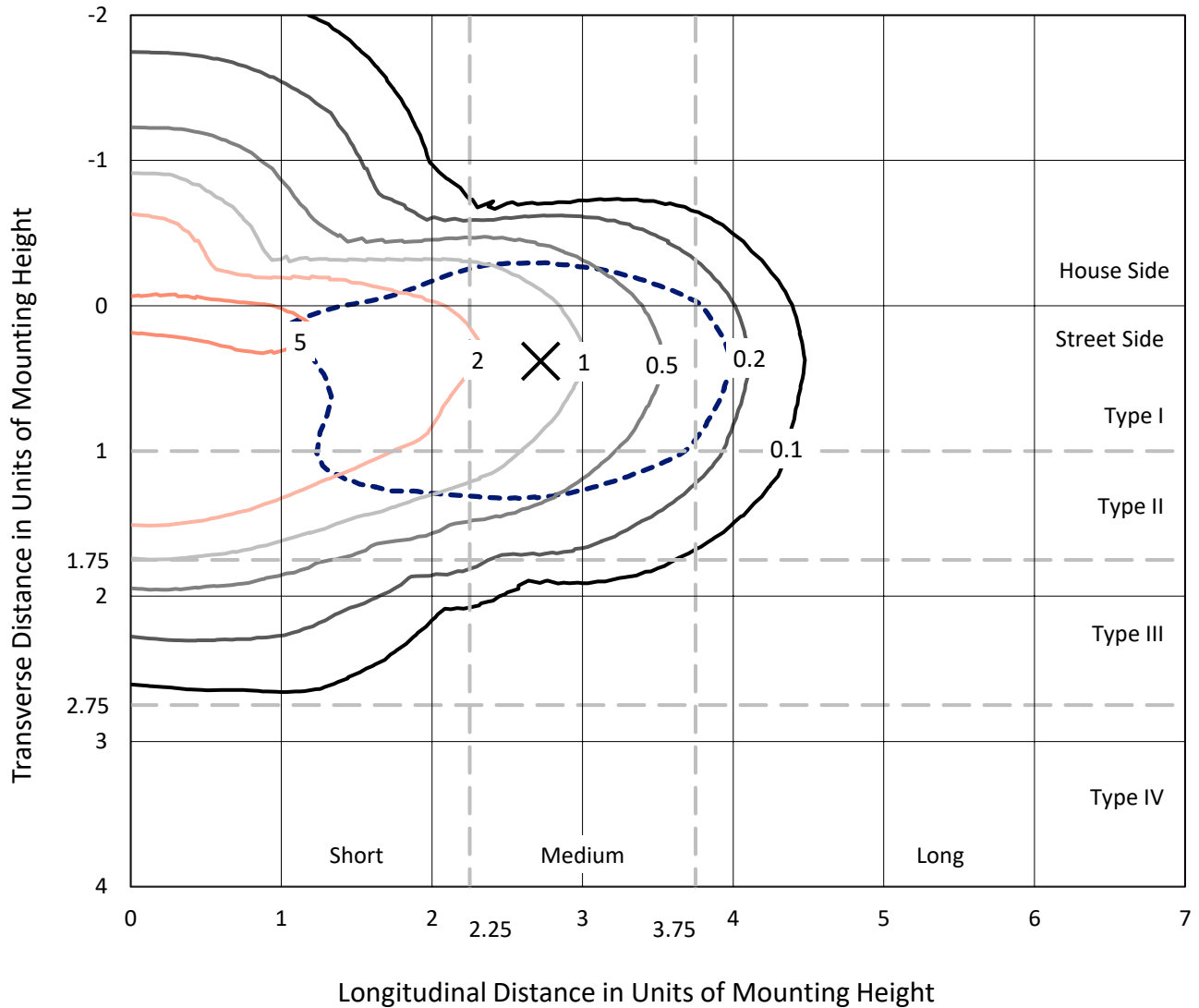
Lumens per Lamp: N/A  
Luminaire Lumens: 23606 lumens  
Efficiency: N/A  
Efficacy: 138.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 170.9  
Input Voltage (V): 120.0  
Input Current (Ain): 1.434  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
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

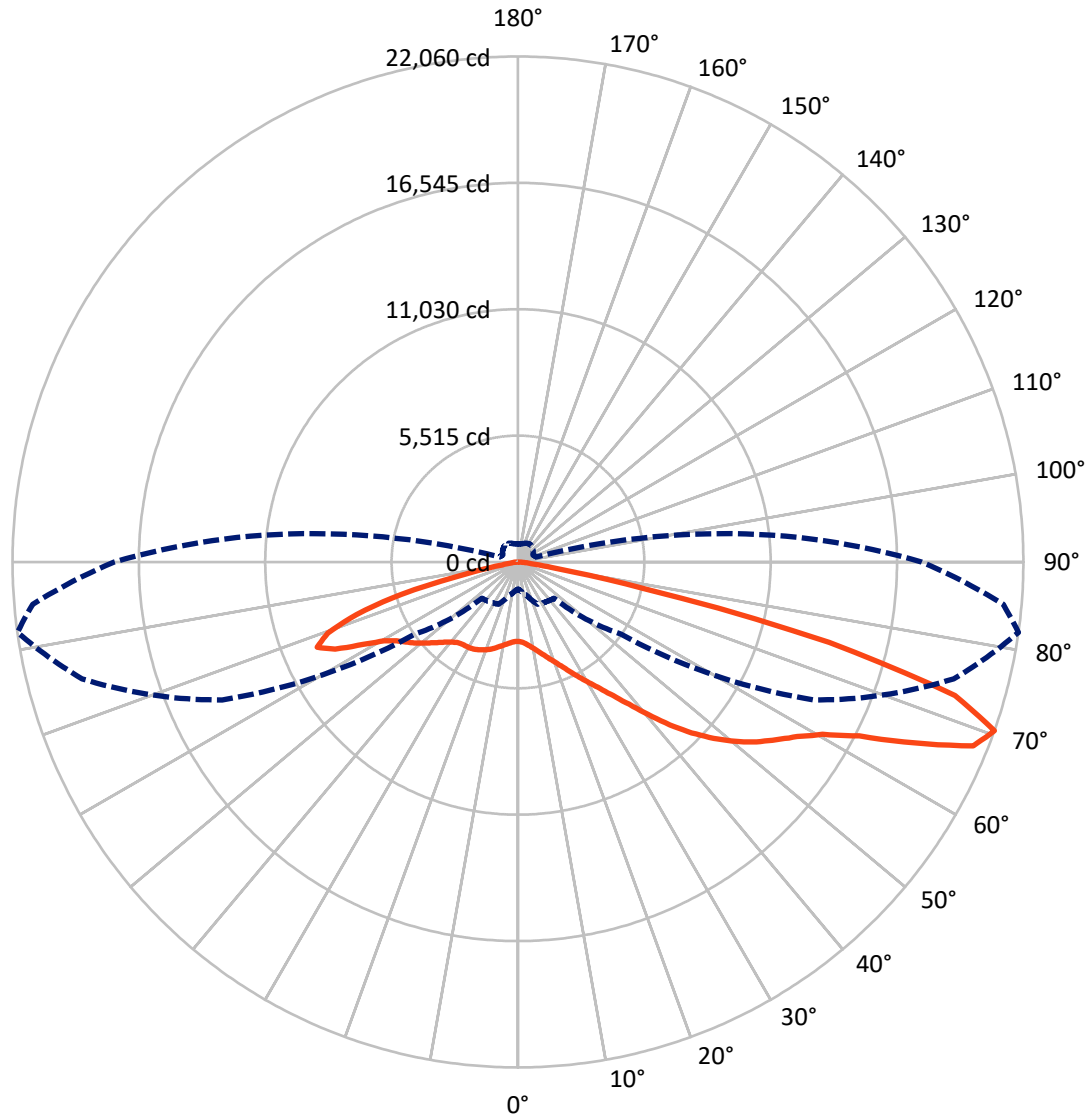
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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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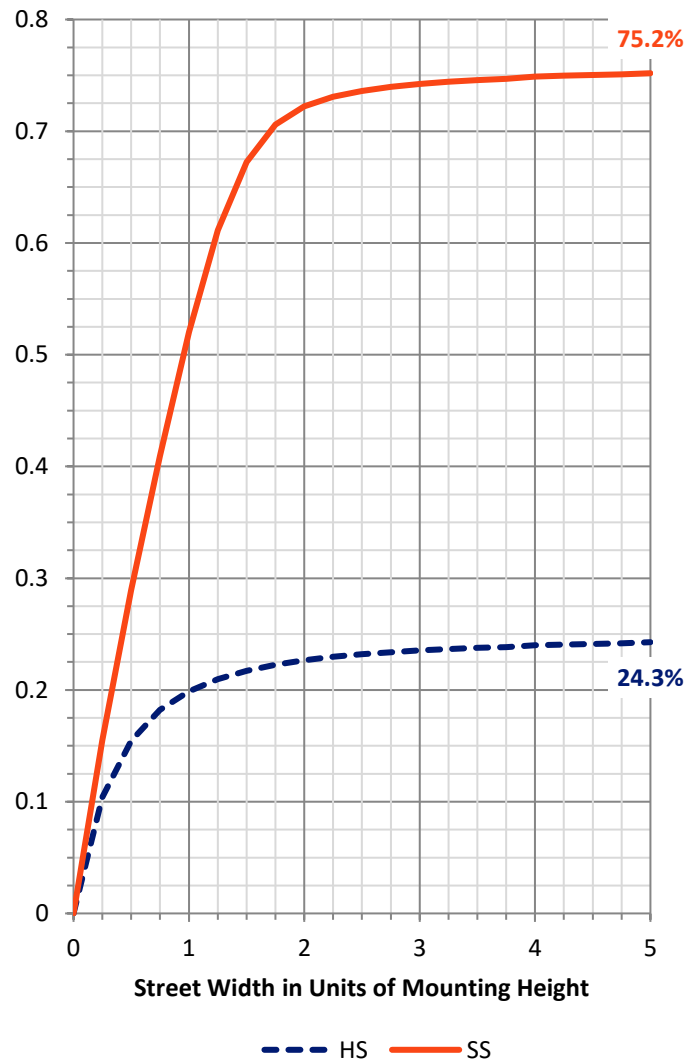
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5819.5	0.0	5819.5
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	17786.5	0.0	17786.5
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	23606.0	0.0	23606.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	326.8	1.4
10°-20°	938.8	4.0
20°-30°	1570.6	6.7
30°-40°	2453.7	10.4
40°-50°	3907.7	16.6
50°-60°	5438.1	23.0
60°-70°	5688.5	24.1
70°-80°	2973.1	12.6
80°-90°	308.7	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°	23606.0	100.0
0°-180°	23606.0	100.0



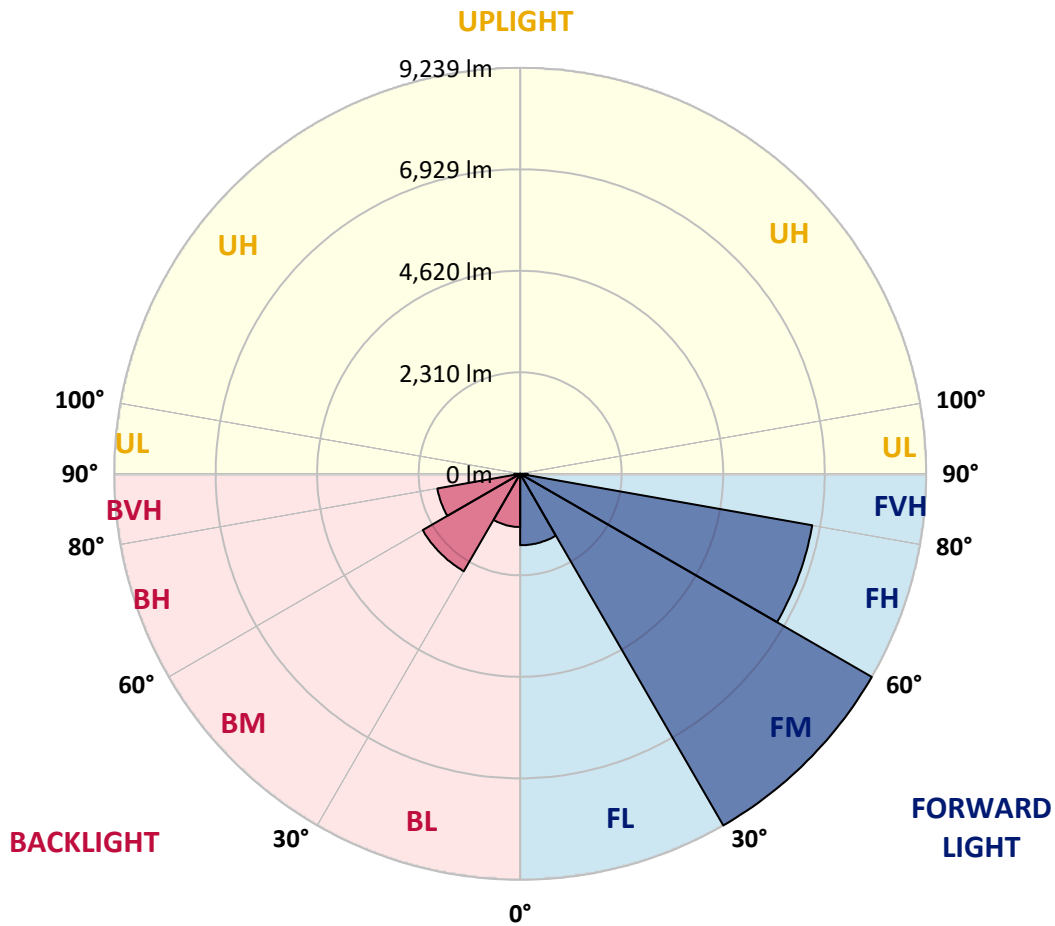
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1625.5	6.9			
FM (30°-60°)	9239.2	39.1			
FH (60°-80°)	6749.0	28.6			G3/7500
FVH (80°-90°)	172.8	0.7			G2/225
BL (0°-30°)	1210.7	5.1	B3/2500		
BM (30°-60°)	2560.3	10.8	B3/5000		
BH (60°-80°)	1912.6	8.1	B3/2500		G3/2500
BVH (80°-90°)	135.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9
2.5°	3543.6	3563.6	3557.4	3551.1	3551.1	3542.4	3541.1	3528.6	3518.6	3502.3	3498.5
5°	3588.7	3610.0	3607.5	3612.5	3628.8	3632.5	3636.3	3628.8	3608.7	3588.7	3579.9
7.5°	3548.6	3572.4	3579.9	3610.0	3660.1	3705.2	3739.0	3752.8	3734.0	3705.2	3691.4
10°	3413.3	3439.6	3465.9	3537.3	3626.3	3732.7	3822.9	3876.8	3873.0	3845.5	3821.7
12.5°	3139.0	3166.6	3222.9	3362.0	3524.8	3712.7	3880.6	3993.3	4032.1	4012.1	3970.7
15°	2919.8	2943.6	2986.2	3129.0	3340.7	3626.3	3901.9	4121.1	4220.0	4208.7	4158.6
17.5°	2913.5	2923.6	2949.9	3017.5	3180.4	3491.0	3879.3	4246.3	4435.5	4434.2	4371.6
20°	3023.8	3027.5	3042.6	3056.3	3149.0	3388.3	3821.7	4350.3	4677.2	4677.2	4609.6
22.5°	3176.6	3174.1	3189.1	3176.6	3221.7	3379.5	3785.4	4441.7	4946.5	4966.6	4881.4
25°	3405.8	3393.3	3389.5	3360.7	3369.5	3460.9	3825.4	4545.7	5265.9	5307.3	5200.8
27.5°	3711.5	3691.4	3677.6	3611.2	3588.7	3628.8	3948.2	4670.9	5621.7	5693.1	5557.8
30°	4109.8	4073.5	4053.4	3938.2	3856.8	3863.0	4133.6	4837.5	5993.7	6108.9	5937.3
32.5°	4653.4	4597.0	4543.2	4354.0	4205.0	4156.1	4372.8	5068.0	6397.0	6581.2	6360.7
35°	5262.2	5217.1	5159.5	4867.6	4638.4	4525.6	4696.0	5389.9	6869.3	7161.1	6874.3
37.5°	5848.4	5809.6	5837.1	5443.8	5148.2	4984.1	5119.4	5822.1	7451.7	7882.6	7518.1
40°	6454.6	6424.6	6428.3	6052.6	5708.1	5524.0	5632.9	6364.5	8119.4	8740.6	8292.2
42.5°	7113.5	7091.0	7015.8	6682.6	6295.6	6124.0	6224.2	6990.8	8835.8	9717.7	9141.5
45°	7851.3	7837.5	7767.4	7385.3	6941.9	6749.0	6884.3	7682.2	9556.1	10637.1	9994.5
47.5°	8488.9	8500.1	8491.4	8169.5	7709.8	7426.7	7588.3	8403.7	10226.2	11501.4	10812.4
50°	8795.8	8854.6	8941.1	8840.9	8555.3	8267.2	8298.5	9100.1	10865.1	12311.8	11596.6
52.5°	8635.4	8746.9	8982.4	9142.7	9253.0	9192.8	9108.9	9791.6	11466.3	13043.3	12338.1
55°	8037.9	8194.5	8585.3	8972.4	9534.8	9972.0	10082.2	10558.2	12052.5	13687.2	13039.6
57.5°	6949.4	7203.7	7554.4	8337.3	9284.3	10349.0	11217.0	11621.6	12673.8	14374.8	13773.6
60°	5083.1	5423.8	5859.7	7024.6	8407.5	10147.3	12182.8	13255.0	13556.9	15265.4	14729.3
62.5°	3253.0	3463.4	3864.3	4961.6	6551.1	9113.9	12478.4	15296.8	15053.8	16726.0	16162.3
65°	2227.1	2362.4	2729.4	3345.7	4235.0	6784.1	11686.8	16827.4	17431.2	19040.8	18612.4
67.5°	1618.4	1721.1	2034.2	2574.1	2759.5	4014.6	9068.8	16757.3	19742.2	21425.7	20759.3
70°	1179.9	1252.6	1515.6	2034.2	2123.2	2233.4	5493.9	14244.6	19692.1	22059.5	21261.6
72.5°	874.3	924.4	1101.0	1578.3	1718.6	1508.1	2719.4	10352.7	16921.4	19952.7	19312.6
75°	632.6	670.1	800.4	1207.5	1375.4	1148.6	1356.6	6050.1	11803.3	14035.4	14148.1
77.5°	483.5	512.3	597.5	884.3	1101.0	861.8	841.7	2783.3	5596.6	5624.2	5939.8
80°	388.3	407.1	453.4	622.5	844.3	645.1	548.6	1123.6	1768.7	1496.9	1570.8
82.5°	285.6	316.9	383.3	437.2	603.8	444.7	334.4	567.4	672.6	578.7	583.7
85°	162.8	184.1	231.7	313.2	385.8	271.8	191.6	251.8	313.2	256.8	229.2
87.5°	57.6	75.2	81.4	122.8	167.8	112.7	73.9	72.7	102.7	76.4	63.9
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°	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9	3460.9
2.5°	3486.0	3479.7	3454.7	3420.9	3385.8	3352.0	3340.7	3316.9	3300.6	3291.8	3301.9
5°	3556.1	3536.1	3477.2	3402.1	3323.1	3238.0	3177.8	3122.7	3082.6	3045.1	3060.1
7.5°	3656.3	3621.3	3519.8	3388.3	3248.0	3106.4	3001.2	2921.1	2867.2	2832.1	2839.6
10°	3772.8	3719.0	3563.6	3367.0	3150.3	2947.4	2823.4	2754.5	2720.6	2701.9	2706.9
12.5°	3906.9	3830.5	3608.7	3318.1	3001.2	2769.5	2684.3	2664.3	2665.5	2666.8	2669.3
15°	4072.2	3965.7	3645.1	3211.7	2807.1	2633.0	2617.9	2650.5	2684.3	2700.6	2699.4
17.5°	4258.8	4108.5	3651.3	3036.3	2616.7	2545.3	2592.9	2663.0	2714.4	2736.9	2741.9
20°	4459.3	4253.8	3606.2	2788.3	2460.1	2473.9	2559.1	2649.2	2705.6	2734.4	2741.9
22.5°	4688.5	4409.2	3498.5	2527.7	2332.3	2396.2	2496.4	2584.1	2643.0	2671.8	2679.3
25°	4950.3	4583.3	3329.4	2308.5	2222.1	2308.5	2408.8	2481.4	2529.0	2555.3	2562.8
27.5°	5240.9	4764.9	3103.9	2134.4	2125.7	2218.4	2301.0	2357.4	2382.4	2402.5	2410.0
30°	5532.7	4930.2	2830.9	2002.9	2041.7	2129.4	2188.3	2213.3	2220.9	2224.6	2233.4
32.5°	5848.4	5073.0	2544.0	1893.9	1961.6	2043.0	2078.1	2089.3	2054.3	2030.5	2038.0
35°	6230.4	5225.8	2263.4	1807.5	1882.7	1952.8	1964.1	1954.1	1912.7	1863.9	1866.4
37.5°	6702.7	5416.2	2039.2	1746.1	1808.8	1855.1	1841.3	1838.8	1842.6	1785.0	1788.7
40°	7281.4	5664.3	1875.1	1698.5	1748.6	1758.7	1719.8	1741.1	1759.9	1672.2	1674.7
42.5°	7923.9	5963.6	1771.2	1666.0	1698.5	1674.7	1614.6	1638.4	1635.9	1520.7	1519.4
45°	8579.1	6289.3	1734.9	1642.2	1652.2	1604.6	1538.2	1544.5	1491.8	1387.9	1391.6
47.5°	9230.4	6638.8	1757.4	1622.1	1594.6	1540.7	1489.3	1461.8	1384.1	1306.5	1306.5
50°	9869.2	7005.8	1840.1	1582.0	1515.6	1484.3	1446.8	1397.9	1315.2	1248.8	1243.8
52.5°	10461.7	7375.3	1932.8	1515.6	1416.7	1435.5	1411.7	1355.3	1273.9	1206.3	1207.5
55°	11022.9	7744.8	1969.1	1424.2	1324.0	1392.9	1379.1	1275.1	1177.4	1122.3	1117.3
57.5°	11634.2	8189.5	1929.0	1307.7	1248.8	1344.0	1291.4	1176.2	1119.8	1078.5	1074.7
60°	12480.9	8887.2	1842.6	1163.7	1177.4	1271.4	1181.2	1133.6	1072.2	1025.9	1023.4
62.5°	13887.6	10188.7	1703.5	1020.9	1093.5	1163.7	1128.6	1081.0	1018.4	973.3	973.3
65°	15966.9	11997.4	1441.7	909.4	999.6	1058.4	1072.2	1024.6	959.5	911.9	914.4
67.5°	17720.5	13132.3	1091.0	816.7	903.1	973.3	1012.1	965.8	896.9	850.5	851.8
70°	17624.1	12308.1	833.0	725.3	817.9	889.3	939.5	903.1	829.2	785.4	789.1
72.5°	15653.7	10296.4	673.9	632.6	731.5	801.7	861.8	834.2	759.1	716.5	716.5
75°	11500.1	7308.9	538.6	538.6	623.8	710.2	776.6	759.1	690.2	660.1	651.4
77.5°	4847.6	3066.4	422.1	447.2	518.6	610.0	692.7	699.0	638.8	676.4	613.8
80°	1288.9	845.5	321.9	352.0	407.1	503.5	602.5	600.0	534.9	499.8	464.7
82.5°	491.0	333.2	229.2	248.0	294.4	385.8	477.2	492.3	427.1	369.5	369.5
85°	189.1	142.8	141.5	149.1	171.6	255.5	360.7	373.3	321.9	273.1	281.8
87.5°	48.9	42.6	52.6	50.1	78.9	136.5	206.7	214.2	196.7	114.0	162.8
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)