

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: P883987

Luminaire Tested: **NAV-SB4C-830-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883987  
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-SB4C-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

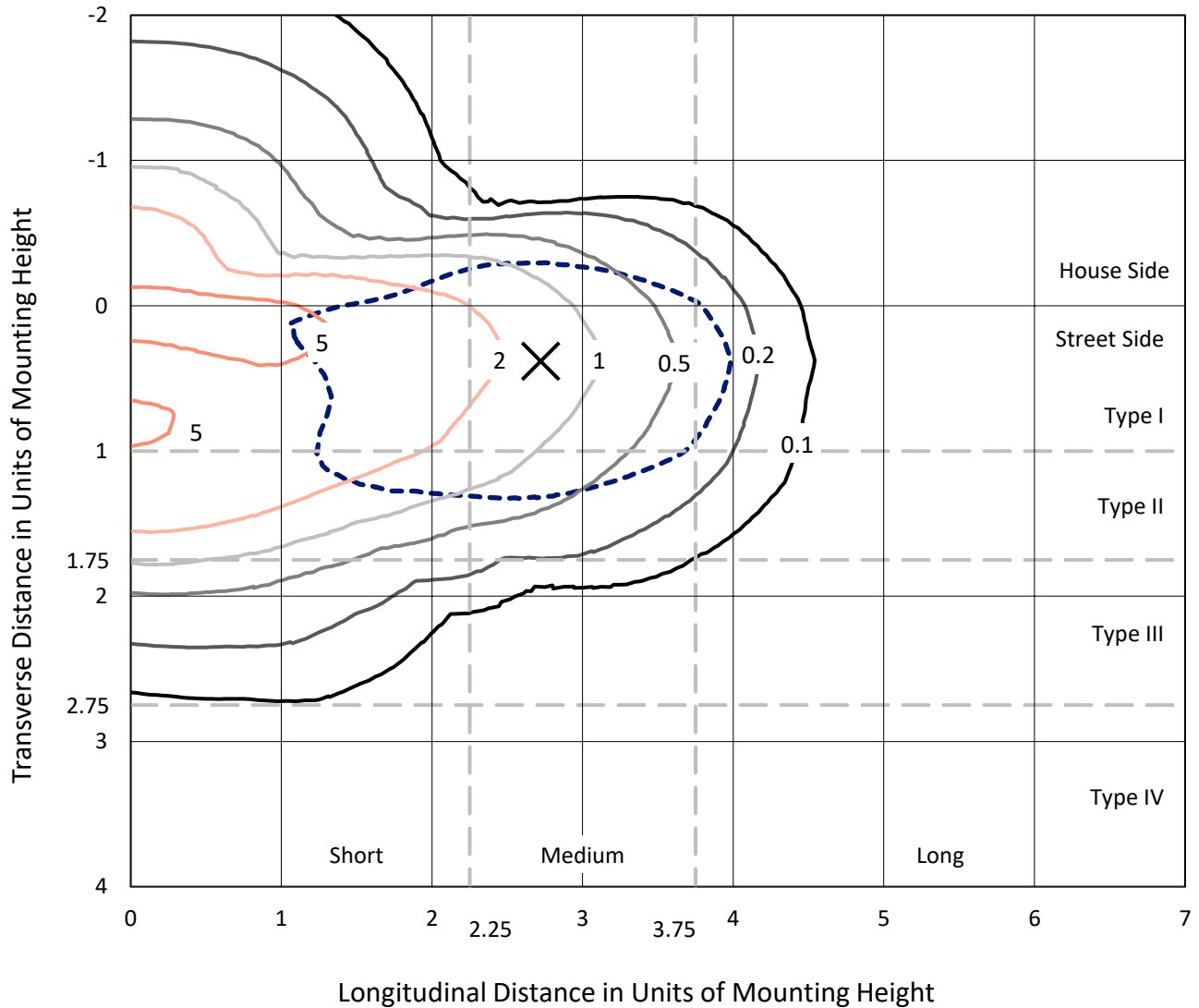
Lumens per Lamp: N/A  
Luminaire Lumens: 26314 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 200.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.714  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
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

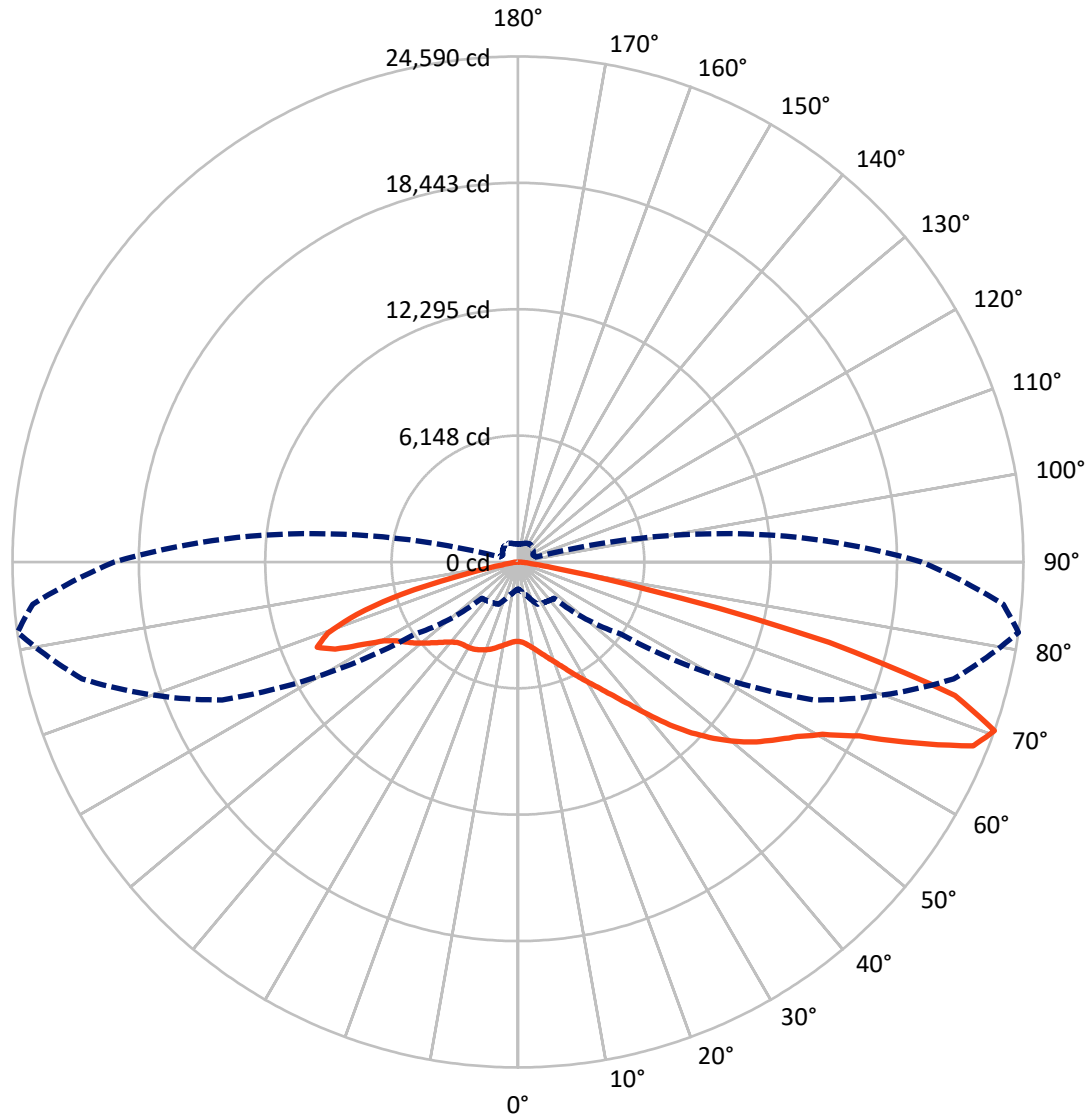
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 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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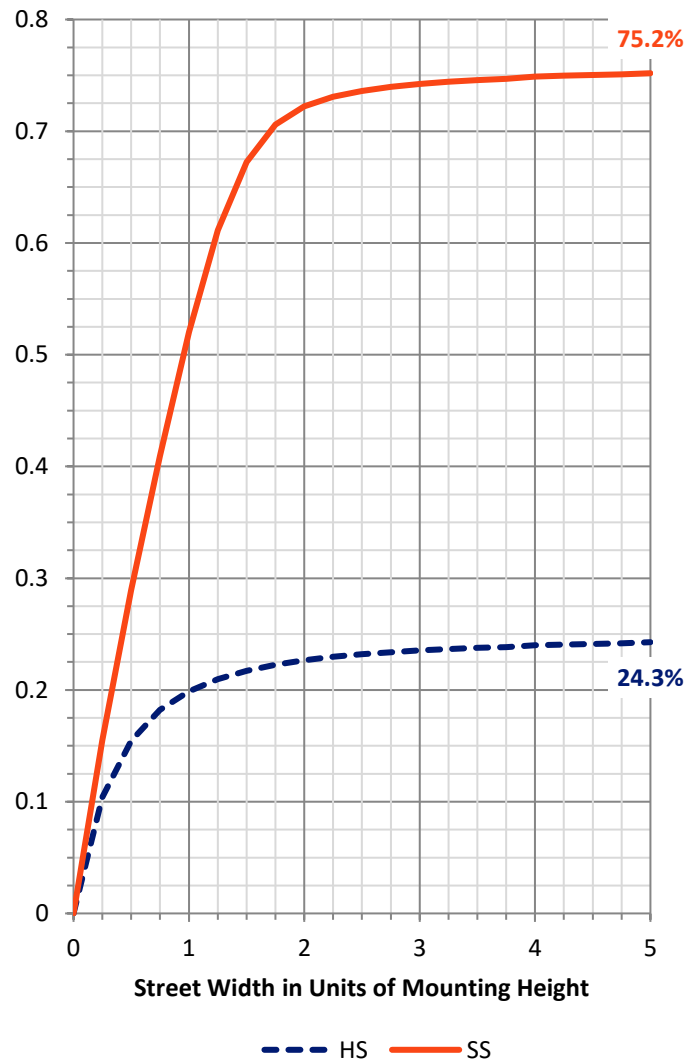
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6487.1	0.0	6487.1
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	19827.0	0.0	19827.0
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	26314.0	0.0	26314.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	364.3	1.4
10°-20°	1046.5	4.0
20°-30°	1750.8	6.7
30°-40°	2735.1	10.4
40°-50°	4356.0	16.6
50°-60°	6061.9	23.0
60°-70°	6341.1	24.1
70°-80°	3314.2	12.6
80°-90°	344.1	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°	26314.0	100.0
0°-180°	26314.0	100.0

**Coefficient of Utilization**

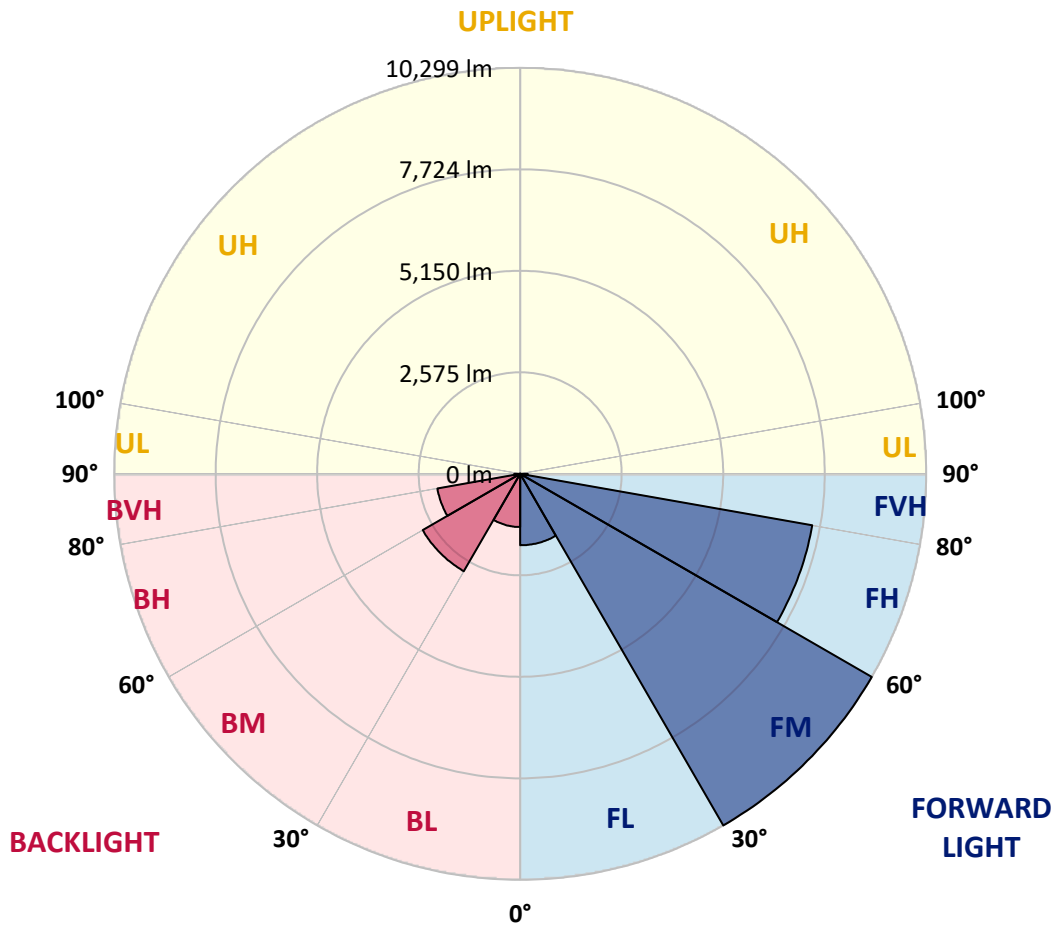


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1812.0	6.9			
FM (30°-60°)	10299.0	39.1			
FH (60°-80°)	7523.3	28.6			G4/12000
FVH (80°-90°)	192.7	0.7			G2/225
BL (0°-30°)	1349.5	5.1	B3/2500		
BM (30°-60°)	2854.0	10.8	B3/5000		
BH (60°-80°)	2132.0	8.1	B3/2500		G3/2500
BVH (80°-90°)	151.5	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-G4**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0
2.5°	3950.1	3972.5	3965.5	3958.5	3958.5	3948.7	3947.3	3933.4	3922.2	3904.0	3899.9
5°	4000.4	4024.1	4021.3	4026.9	4045.1	4049.3	4053.4	4045.1	4022.7	4000.4	3990.6
7.5°	3955.7	3982.2	3990.6	4024.1	4080.0	4130.2	4167.9	4183.3	4162.4	4130.2	4114.9
10°	3804.9	3834.2	3863.5	3943.1	4042.3	4161.0	4261.5	4321.5	4317.3	4286.6	4260.1
12.5°	3499.1	3529.8	3592.7	3747.7	3929.2	4138.6	4325.7	4451.4	4494.7	4472.3	4426.3
15°	3254.8	3281.3	3328.8	3487.9	3723.9	4042.3	4349.5	4593.8	4704.1	4691.5	4635.7
17.5°	3247.8	3259.0	3288.3	3363.7	3545.2	3891.5	4324.3	4733.4	4944.3	4942.9	4873.1
20°	3370.7	3374.8	3391.6	3407.0	3510.3	3777.0	4260.1	4849.3	5213.8	5213.8	5138.4
22.5°	3541.0	3538.2	3555.0	3541.0	3591.3	3767.2	4219.6	4951.3	5514.0	5536.3	5441.4
25°	3796.5	3782.6	3778.4	3746.3	3756.0	3858.0	4264.3	5067.2	5870.0	5916.1	5797.4
27.5°	4137.2	4114.9	4099.5	4025.5	4000.4	4045.1	4401.1	5206.8	6266.6	6346.2	6195.4
30°	4581.2	4540.7	4518.4	4389.9	4299.2	4306.2	4607.8	5392.5	6681.3	6809.7	6618.4
32.5°	5187.2	5124.4	5064.4	4853.5	4687.4	4632.9	4874.5	5649.4	7130.9	7336.1	7090.4
35°	5865.8	5815.6	5751.3	5426.0	5170.5	5044.8	5234.7	6008.3	7657.3	7982.6	7662.9
37.5°	6519.3	6476.0	6506.7	6068.3	5738.8	5555.9	5706.7	6490.0	8306.6	8786.9	8380.6
40°	7195.1	7161.6	7165.8	6746.9	6362.9	6157.7	6279.1	7094.6	9050.8	9743.3	9243.5
42.5°	7929.6	7904.4	7820.6	7449.2	7017.8	6826.5	6938.2	7792.7	9849.5	10832.5	10190.2
45°	8752.0	8736.6	8658.4	8232.6	7738.3	7523.2	7674.0	8563.5	10652.3	11857.3	11141.0
47.5°	9462.7	9475.3	9465.5	9106.6	8594.2	8278.6	8458.8	9367.7	11399.3	12820.8	12052.8
50°	9804.8	9870.4	9966.7	9855.0	9536.7	9215.5	9250.5	10144.1	12111.5	13724.2	12926.9
52.5°	9626.1	9750.3	10012.8	10191.6	10314.4	10247.4	10153.9	10914.8	12781.7	14539.6	13753.5
55°	8960.0	9134.6	9570.2	10001.7	10628.6	11115.9	11238.8	11769.4	13435.1	15257.3	14535.4
57.5°	7746.6	8030.1	8421.1	9293.7	10349.3	11536.2	12503.8	12954.8	14127.7	16023.9	15353.7
60°	5666.2	6046.0	6531.9	7830.4	9371.9	11311.4	13580.4	14775.6	15112.1	17016.6	16419.0
62.5°	3626.2	3860.8	4307.6	5530.7	7302.6	10159.4	13909.9	17051.5	16780.7	18644.7	18016.4
65°	2482.6	2633.4	3042.5	3729.5	4720.9	7562.3	13027.4	18757.8	19430.8	21225.1	20747.5
67.5°	1804.0	1918.5	2267.6	2869.4	3076.0	4475.1	10109.2	18679.6	22007.0	23883.6	23140.8
70°	1315.3	1396.3	1689.5	2267.6	2366.7	2489.6	6124.1	15878.7	21951.1	24590.1	23700.7
72.5°	974.6	1030.5	1227.3	1759.3	1915.7	1681.1	3031.4	11540.4	18862.5	22241.6	21528.1
75°	705.1	747.0	892.2	1346.0	1533.1	1280.4	1512.2	6744.1	13157.3	15645.5	15771.1
77.5°	539.0	571.1	666.0	985.8	1227.3	960.7	938.3	3102.6	6238.6	6269.4	6621.2
80°	432.9	453.8	505.5	694.0	941.1	719.1	611.6	1252.5	1971.6	1668.6	1751.0
82.5°	318.4	353.3	427.3	487.3	673.0	495.7	372.8	632.5	749.8	645.1	650.7
85°	181.5	205.3	258.3	349.1	430.1	303.0	213.6	280.7	349.1	286.2	255.5
87.5°	64.2	83.8	90.8	136.8	187.1	125.7	82.4	81.0	114.5	85.2	71.2
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°	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0	3858.0
2.5°	3885.9	3878.9	3851.0	3813.3	3774.2	3736.5	3723.9	3697.4	3679.2	3669.5	3680.6
5°	3964.1	3941.7	3876.1	3792.3	3704.4	3609.4	3542.4	3481.0	3436.3	3394.4	3411.1
7.5°	4075.8	4036.7	3923.6	3777.0	3620.6	3462.8	3345.5	3256.2	3196.1	3157.0	3165.4
10°	4205.6	4145.6	3972.5	3753.2	3511.7	3285.5	3147.2	3070.5	3032.8	3011.8	3017.4
12.5°	4355.0	4269.9	4022.7	3698.8	3345.5	3087.2	2992.3	2969.9	2971.3	2972.7	2975.5
15°	4539.4	4420.7	4063.2	3580.1	3129.1	2935.0	2918.3	2954.6	2992.3	3010.4	3009.0
17.5°	4747.4	4579.8	4070.2	3384.6	2916.9	2837.3	2890.3	2968.5	3025.8	3050.9	3056.5
20°	4970.8	4741.8	4019.9	3108.2	2742.3	2757.7	2852.6	2953.2	3016.0	3048.1	3056.5
22.5°	5226.3	4915.0	3899.9	2817.7	2599.9	2671.1	2782.8	2880.6	2946.2	2978.3	2986.7
25°	5518.2	5109.0	3711.4	2573.4	2477.0	2573.4	2685.1	2766.1	2819.1	2848.4	2856.8
27.5°	5842.1	5311.5	3460.0	2379.3	2369.5	2472.8	2565.0	2627.8	2655.8	2678.1	2686.5
30°	6167.4	5495.8	3155.6	2232.7	2276.0	2373.7	2439.3	2467.3	2475.6	2479.8	2489.6
32.5°	6519.3	5655.0	2835.9	2111.2	2186.6	2277.4	2316.5	2329.0	2289.9	2263.4	2271.8
35°	6945.2	5825.3	2523.1	2014.9	2098.6	2176.8	2189.4	2178.2	2132.1	2077.7	2080.5
37.5°	7471.6	6037.6	2273.2	1946.4	2016.2	2067.9	2052.6	2049.8	2053.9	1989.7	1993.9
40°	8116.7	6314.0	2090.3	1893.4	1949.2	1960.4	1917.1	1940.8	1961.8	1864.1	1866.8
42.5°	8833.0	6647.8	1974.4	1857.1	1893.4	1866.8	1799.8	1826.4	1823.6	1695.1	1693.7
45°	9563.2	7010.8	1933.9	1830.5	1841.7	1788.7	1714.6	1721.6	1663.0	1547.1	1551.3
47.5°	10289.3	7400.4	1959.0	1808.2	1777.5	1717.4	1660.2	1629.5	1542.9	1456.3	1456.3
50°	11001.4	7809.5	2051.2	1763.5	1689.5	1654.6	1612.7	1558.3	1466.1	1392.1	1386.5
52.5°	11661.9	8221.4	2154.5	1689.5	1579.2	1600.2	1573.6	1510.8	1420.0	1344.6	1346.0
55°	12287.4	8633.3	2195.0	1587.6	1475.9	1552.7	1537.3	1421.4	1312.5	1251.1	1245.5
57.5°	12968.8	9129.0	2150.3	1457.7	1392.1	1498.2	1439.6	1311.1	1248.3	1202.2	1198.0
60°	13912.7	9906.7	2053.9	1297.2	1312.5	1417.2	1316.7	1263.6	1195.2	1143.6	1140.8
62.5°	15480.7	11357.5	1899.0	1138.0	1219.0	1297.2	1258.1	1205.0	1135.2	1084.9	1084.9
65°	17798.6	13373.7	1607.1	1013.7	1114.2	1179.9	1195.2	1142.2	1069.6	1016.5	1019.3
67.5°	19753.4	14638.8	1216.2	910.4	1006.7	1084.9	1128.2	1076.5	999.7	948.1	949.5
70°	19645.9	13720.0	928.5	808.5	911.8	991.4	1047.2	1006.7	924.3	875.5	879.7
72.5°	17449.5	11477.5	751.2	705.1	815.4	893.6	960.7	929.9	846.2	798.7	798.7
75°	12819.4	8147.4	600.4	600.4	695.4	791.7	865.7	846.2	769.4	735.8	726.1
77.5°	5403.7	3418.1	470.6	498.5	578.1	680.0	772.2	779.1	712.1	754.0	684.2
80°	1436.8	942.5	358.8	392.4	453.8	561.3	671.6	668.8	596.2	557.1	518.0
82.5°	547.3	371.4	255.5	276.5	328.1	430.1	532.0	548.7	476.1	411.9	411.9
85°	210.8	159.2	157.8	166.2	191.3	284.8	402.1	416.1	358.8	304.4	314.2
87.5°	54.5	47.5	58.6	55.9	88.0	152.2	230.4	238.8	219.2	127.1	181.5
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)