

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: P965611

Luminaire Tested: **NAV-SB4A-735-U-SL2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965611  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4A-735-U-SL2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18315.7 lumens  
Efficiency: N/A  
Efficacy: 160.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

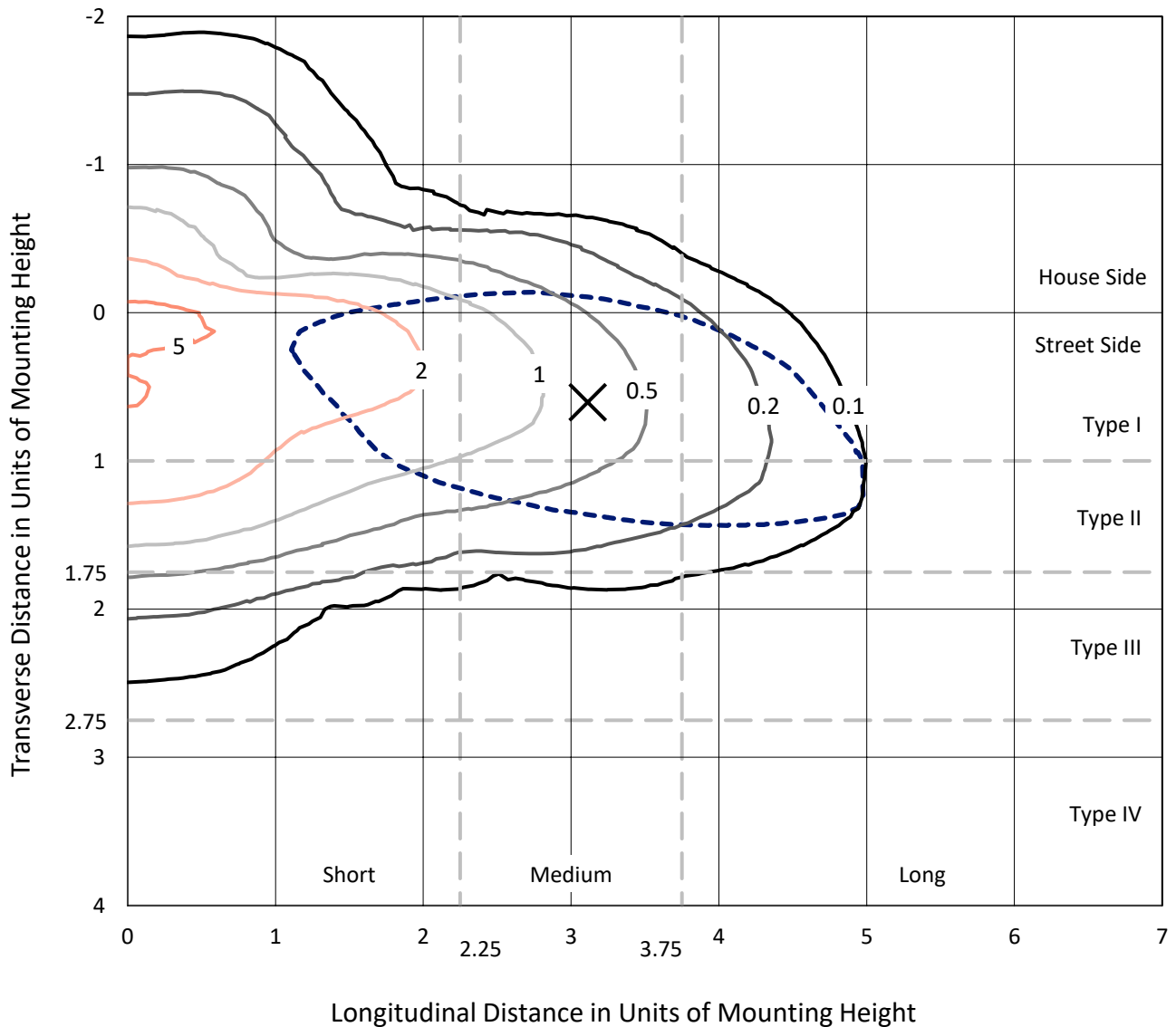
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

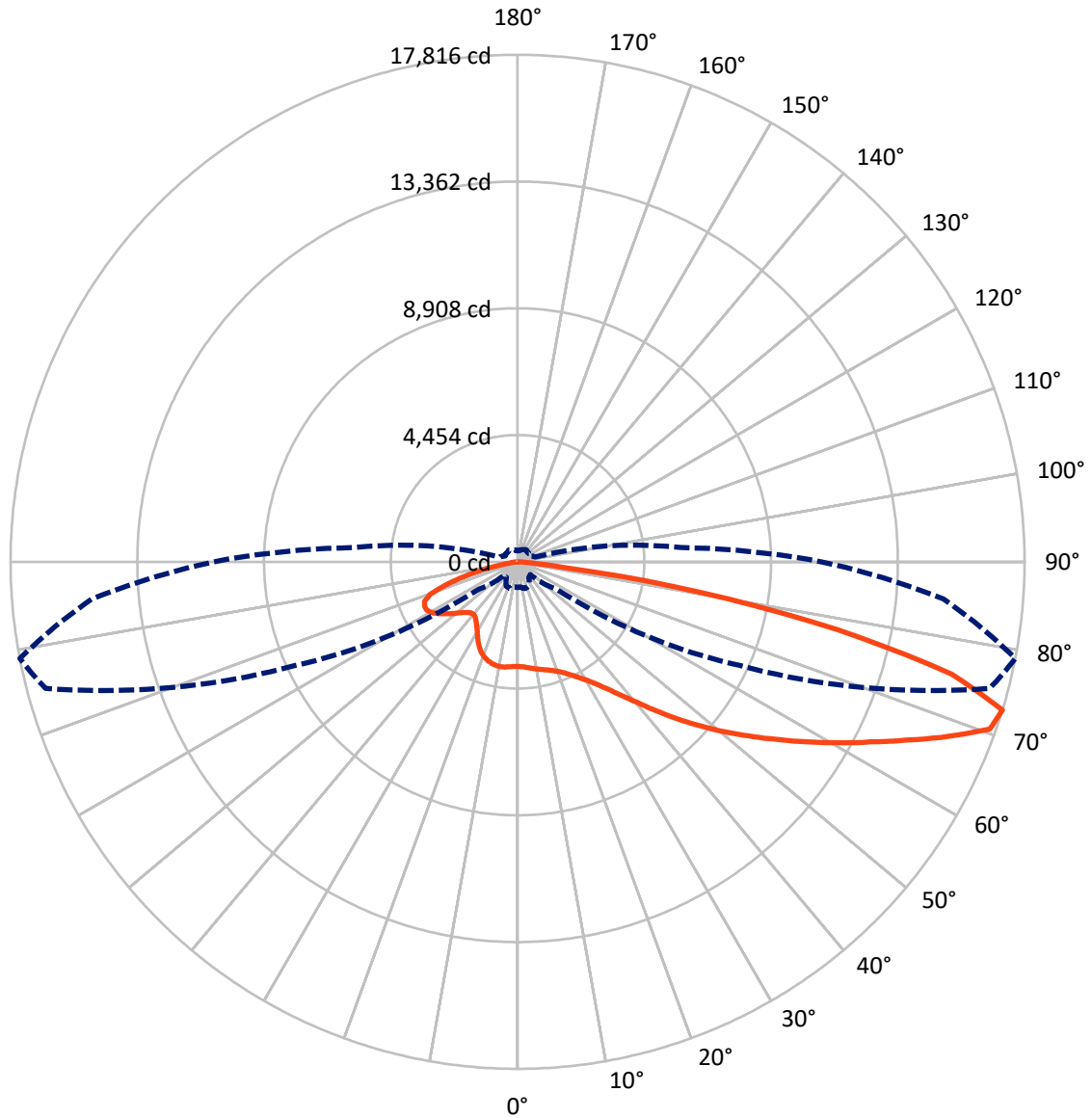
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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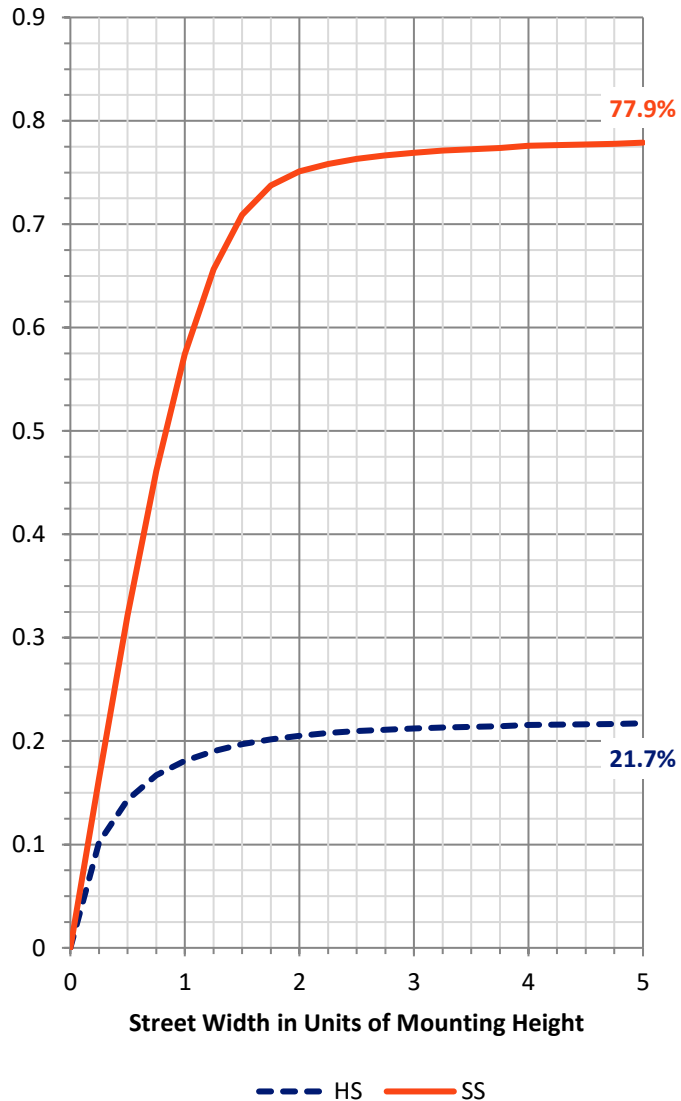
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4030.5	0.0	4030.5
	% Fixture	22.0	0.0	22.0
<b>Street Side</b>	Lumens	14285.3	0.0	14285.3
	% Fixture	78.0	0.0	78.0
<b>Total</b>	Lumens	18315.7	0.0	18315.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	333.7	1.8
10°-20°	872.6	4.8
20°-30°	1408.0	7.7
30°-40°	2113.1	11.5
40°-50°	2997.6	16.4
50°-60°	3785.6	20.7
60°-70°	3844.8	21.0
70°-80°	2620.4	14.3
80°-90°	340.0	1.9
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°	18315.7	100.0
0°-180°	18315.7	100.0

**Coefficient of Utilization**

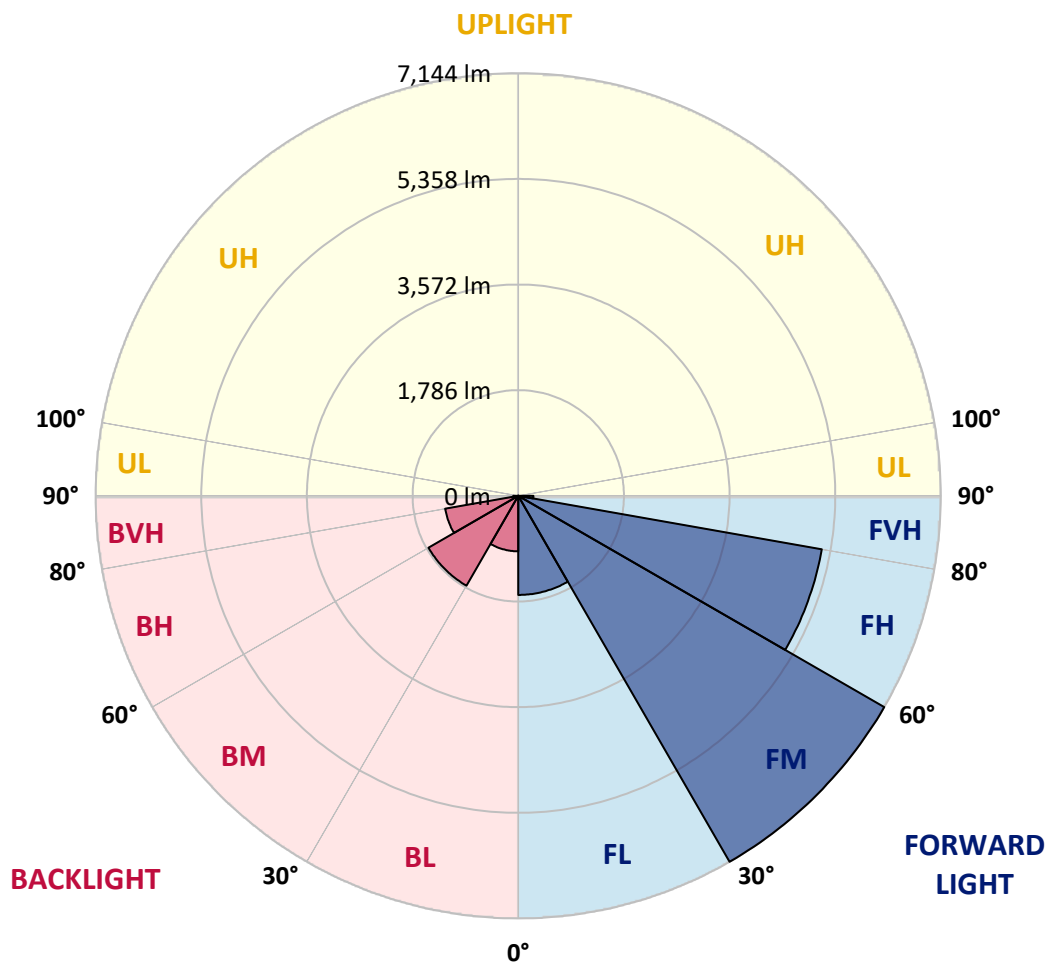


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1675.4	9.1			
FM (30°-60°)	7143.5	39.0			
FH (60°-80°)	5210.2	28.4			G3/7500
FVH (80°-90°)	256.1	1.4			G3/500
BL (0°-30°)	938.8	5.1	B2/1000		
BM (30°-60°)	1752.8	9.6	B2/2500		
BH (60°-80°)	1255.0	6.9	B3/2500		G3/2500
BVH (80°-90°)	83.9	0.5			G1/100
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°	79°	85°
0°	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7
2.5°	3678.6	3661.2	3671.9	3668.0	3672.9	3678.6	3680.6	3683.4	3693.2	3692.3	3691.2
5°	3670.9	3653.4	3668.0	3663.1	3675.8	3689.3	3701.0	3711.6	3727.1	3733.9	3724.1
7.5°	3654.4	3642.7	3657.3	3671.9	3695.1	3715.4	3731.9	3756.1	3778.5	3782.4	3789.1
10°	3558.5	3549.8	3583.7	3621.5	3685.4	3740.6	3776.5	3804.6	3828.8	3832.7	3842.4
12.5°	3458.8	3448.1	3485.8	3537.2	3640.9	3740.6	3816.2	3853.1	3874.4	3886.9	3901.5
15°	3442.3	3433.5	3454.9	3499.5	3585.7	3714.5	3843.3	3911.2	3929.5	3944.1	3949.9
17.5°	3521.7	3505.2	3513.9	3529.5	3579.8	3690.3	3864.7	3977.0	4005.2	4020.7	4020.7
20°	3705.8	3682.5	3669.0	3637.9	3629.2	3694.1	3862.7	4056.5	4093.3	4112.7	4117.5
22.5°	3950.9	3935.4	3906.3	3827.9	3742.6	3741.7	3899.5	4158.2	4227.0	4245.4	4233.8
25°	4247.4	4224.1	4187.3	4080.7	3916.9	3835.6	3961.5	4288.1	4403.3	4408.2	4374.3
27.5°	4588.4	4553.5	4503.1	4362.6	4141.7	3982.8	4056.5	4437.2	4605.8	4603.9	4534.1
30°	4947.8	4912.9	4859.6	4689.2	4411.1	4181.5	4188.3	4598.0	4846.1	4835.4	4716.2
32.5°	5210.4	5184.2	5173.6	5041.8	4721.2	4415.9	4339.3	4776.3	5142.5	5132.9	4966.2
35°	5411.9	5378.0	5390.6	5323.7	5059.2	4678.5	4524.5	4988.5	5502.9	5502.0	5294.6
37.5°	5611.5	5581.4	5592.1	5547.5	5372.1	5011.7	4750.2	5248.1	5949.6	5970.9	5691.8
40°	5793.6	5761.6	5804.3	5762.5	5615.4	5366.4	5006.9	5541.7	6466.9	6507.6	6172.4
42.5°	5903.1	5877.9	5948.6	5949.6	5826.5	5665.7	5288.8	5865.3	7065.6	7156.8	6763.4
45°	5940.9	5932.2	6038.7	6061.0	6013.6	5839.1	5542.7	6218.0	7710.9	7873.6	7436.8
47.5°	5900.2	5883.7	6031.0	6113.3	6151.1	5920.5	5752.9	6599.7	8369.7	8608.1	8171.1
50°	5694.8	5662.8	5881.8	6055.2	6189.9	5973.8	5965.1	7040.5	9118.6	9379.3	8909.4
52.5°	5325.7	5301.4	5550.4	5851.7	6104.6	5999.9	6203.4	7522.0	9829.8	10166.9	9666.1
55°	4853.8	4821.9	5096.0	5489.4	5892.4	5991.2	6441.7	8060.7	10668.7	11010.8	10447.8
57.5°	4105.9	4042.0	4388.8	4853.8	5546.6	5980.6	6689.8	8596.5	11521.3	11931.1	11282.0
60°	3015.0	2920.0	3345.4	3896.6	4870.3	5876.9	6996.9	9197.1	12544.4	12913.6	12192.7
62.5°	1755.5	1700.3	1978.4	2492.8	3670.9	5266.6	7169.4	9895.7	13550.1	13937.5	13087.9
65°	1363.1	1347.7	1371.9	1411.6	2043.2	3943.2	6637.5	10576.7	14828.9	15100.2	14020.9
67.5°	1246.9	1235.2	1245.9	1171.3	1036.7	2196.4	5251.1	10749.2	16198.8	16363.5	14837.6
70°	1108.3	1094.8	1129.7	1065.7	815.8	998.9	3392.9	10123.3	17288.8	17597.8	15458.6
72.5°	902.9	887.4	968.8	939.7	686.9	641.3	1704.2	8636.1	17174.5	17815.8	15014.0
75°	693.7	685.0	781.9	806.1	560.0	504.7	817.6	6419.5	15113.7	15760.0	12939.7
77.5°	538.6	531.9	581.3	669.4	451.5	391.4	502.9	4072.0	11389.6	11503.0	8917.1
80°	404.0	384.6	430.2	518.3	351.7	285.8	341.0	2374.6	7199.4	6526.1	3881.2
82.5°	252.9	243.1	281.0	345.8	248.0	196.7	221.9	1311.8	2885.2	1699.3	748.9
85°	144.3	140.5	153.0	197.6	134.7	113.4	126.9	579.3	527.1	362.3	225.7
87.5°	58.1	56.2	69.8	88.1	49.4	41.6	44.6	139.5	116.2	107.5	74.6
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°	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7	3676.7
2.5°	3687.3	3687.3	3673.8	3652.5	3628.3	3612.7	3587.6	3580.8	3554.6	3546.9	3559.5
5°	3731.9	3724.1	3682.5	3622.5	3540.1	3464.5	3381.2	3328.9	3255.3	3229.1	3248.5
7.5°	3788.1	3766.8	3695.1	3563.3	3390.9	3221.4	3045.1	2911.3	2783.5	2737.9	2743.7
10°	3839.4	3809.4	3687.3	3456.8	3158.4	2864.9	2583.8	2387.2	2238.0	2177.0	2190.5
12.5°	3890.8	3835.6	3636.0	3279.5	2828.0	2429.9	2130.5	1977.4	1885.4	1811.7	1836.0
15°	3939.3	3861.8	3556.5	3042.1	2465.6	2061.7	1840.8	1718.7	1645.0	1596.6	1605.4
17.5°	3995.4	3884.0	3437.4	2740.8	2120.7	1806.9	1626.7	1553.1	1538.5	1532.7	1536.6
20°	4074.0	3904.4	3280.4	2403.6	1866.9	1603.4	1510.4	1503.6	1502.6	1499.8	1509.4
22.5°	4158.2	3928.6	3073.2	2097.6	1650.9	1476.5	1460.0	1446.5	1437.8	1436.7	1447.4
25°	4258.1	3936.3	2813.5	1846.6	1466.8	1416.4	1397.1	1376.7	1370.9	1370.9	1376.7
27.5°	4354.9	3910.2	2511.2	1628.6	1363.1	1361.2	1336.0	1329.2	1328.3	1331.2	1339.0
30°	4451.8	3860.8	2210.8	1427.1	1303.1	1303.1	1294.4	1299.2	1303.1	1312.7	1319.6
32.5°	4582.6	3808.5	1959.9	1277.9	1250.8	1241.1	1249.8	1259.5	1263.3	1275.9	1286.6
35°	4774.3	3771.7	1760.3	1196.5	1196.5	1183.9	1188.8	1186.8	1178.1	1172.3	1185.8
37.5°	5028.2	3769.7	1595.6	1158.8	1151.0	1149.0	1150.0	1137.4	1103.5	1062.8	1063.7
40°	5333.4	3822.0	1468.7	1132.5	1126.8	1138.4	1132.5	1098.7	1005.6	934.9	933.0
42.5°	5743.2	3971.3	1387.3	1100.5	1118.1	1132.5	1109.4	992.1	929.1	881.6	879.7
45°	6225.7	4213.5	1345.7	1066.7	1101.6	1119.0	1006.7	955.3	904.9	847.7	843.9
47.5°	6772.1	4518.6	1336.0	1034.7	1064.8	1075.4	963.0	939.7	882.6	820.6	815.8
50°	7367.0	4880.0	1362.2	996.9	1011.5	974.7	948.5	927.2	868.1	807.1	800.2
52.5°	7982.2	5278.1	1414.5	945.6	958.2	917.5	942.7	924.2	859.4	776.9	771.2
55°	8586.7	5679.3	1464.8	885.5	903.9	866.1	926.2	912.7	819.6	726.6	721.8
57.5°	9201.0	6078.5	1514.2	832.2	851.6	816.7	900.1	881.6	775.1	680.1	678.1
60°	9839.4	6466.0	1537.5	780.8	794.5	771.2	860.3	828.3	724.7	632.6	629.8
62.5°	10437.2	6788.6	1499.8	729.5	738.2	728.6	808.0	765.4	674.3	579.3	578.4
65°	11036.9	6980.5	1383.4	679.2	681.1	676.2	734.4	697.5	615.2	532.9	527.1
67.5°	11580.4	7088.0	1198.4	624.9	620.0	618.1	665.6	623.9	558.0	486.4	480.5
70°	11695.7	6814.7	915.5	561.0	561.0	556.1	590.0	547.3	495.1	437.0	435.0
72.5°	10682.3	5732.5	650.1	488.3	496.0	486.4	514.4	478.6	431.1	392.4	380.8
75°	8613.9	4203.7	472.8	413.7	427.2	410.8	437.0	411.7	371.0	370.1	333.2
77.5°	5918.6	2599.4	343.0	341.0	350.8	329.4	359.5	345.8	309.0	292.6	274.2
80°	2525.7	1036.7	250.0	263.5	263.5	244.2	279.0	282.9	250.9	243.1	243.1
82.5°	502.9	294.5	175.4	181.2	170.6	164.7	197.6	218.9	302.3	336.2	337.1
85°	151.2	108.5	105.6	98.8	87.2	88.1	116.2	220.0	271.3	155.0	133.7
87.5°	41.6	27.2	28.1	22.2	18.4	24.2	39.8	166.7	91.0	38.7	32.9
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)