

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: P884619

Luminaire Tested: **NAV-SB5C-735-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884619  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

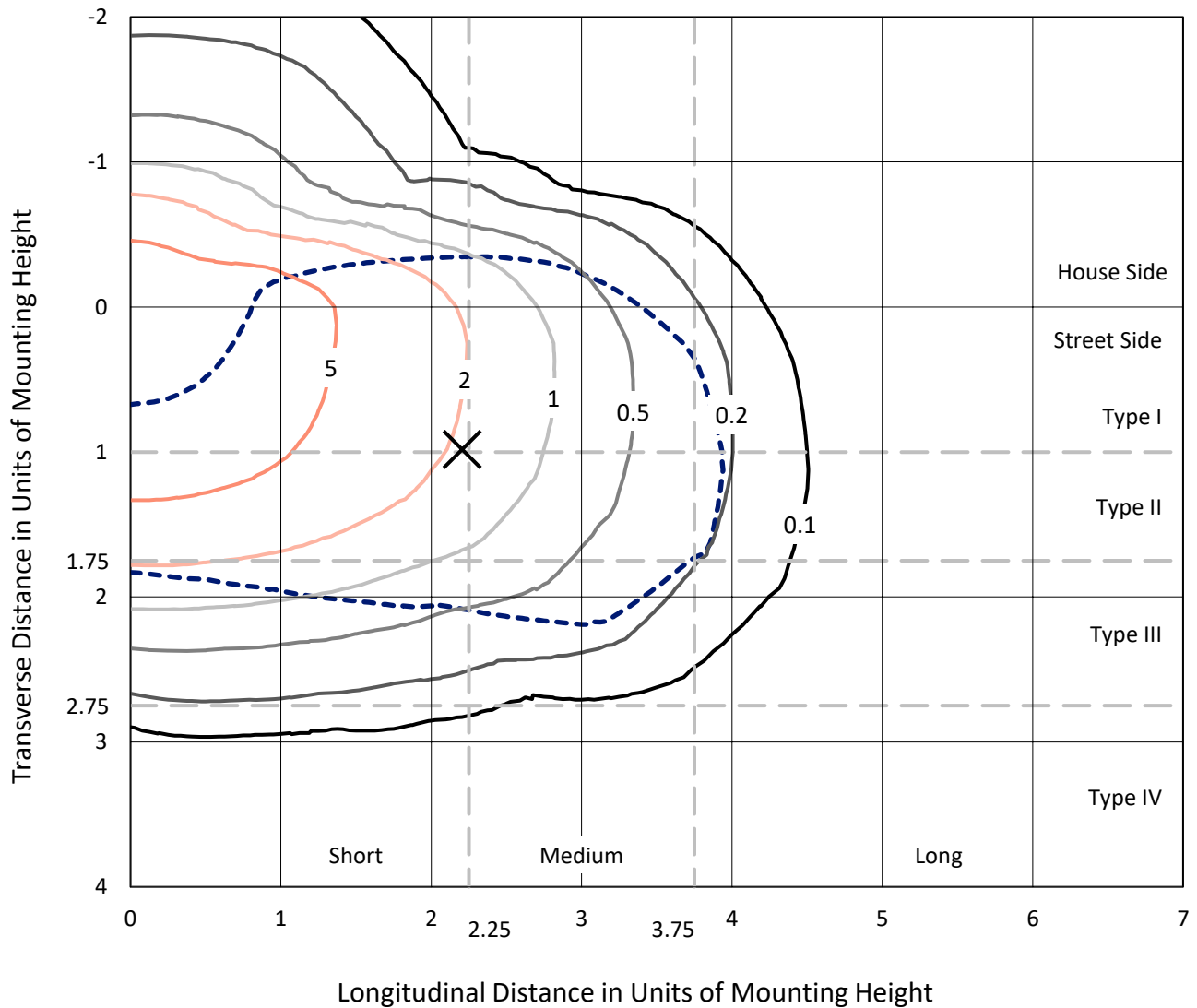
Lumens per Lamp: N/A  
Luminaire Lumens: 38028 lumens  
Efficiency: N/A  
Efficacy: 152.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 2.116  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 7.885  
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

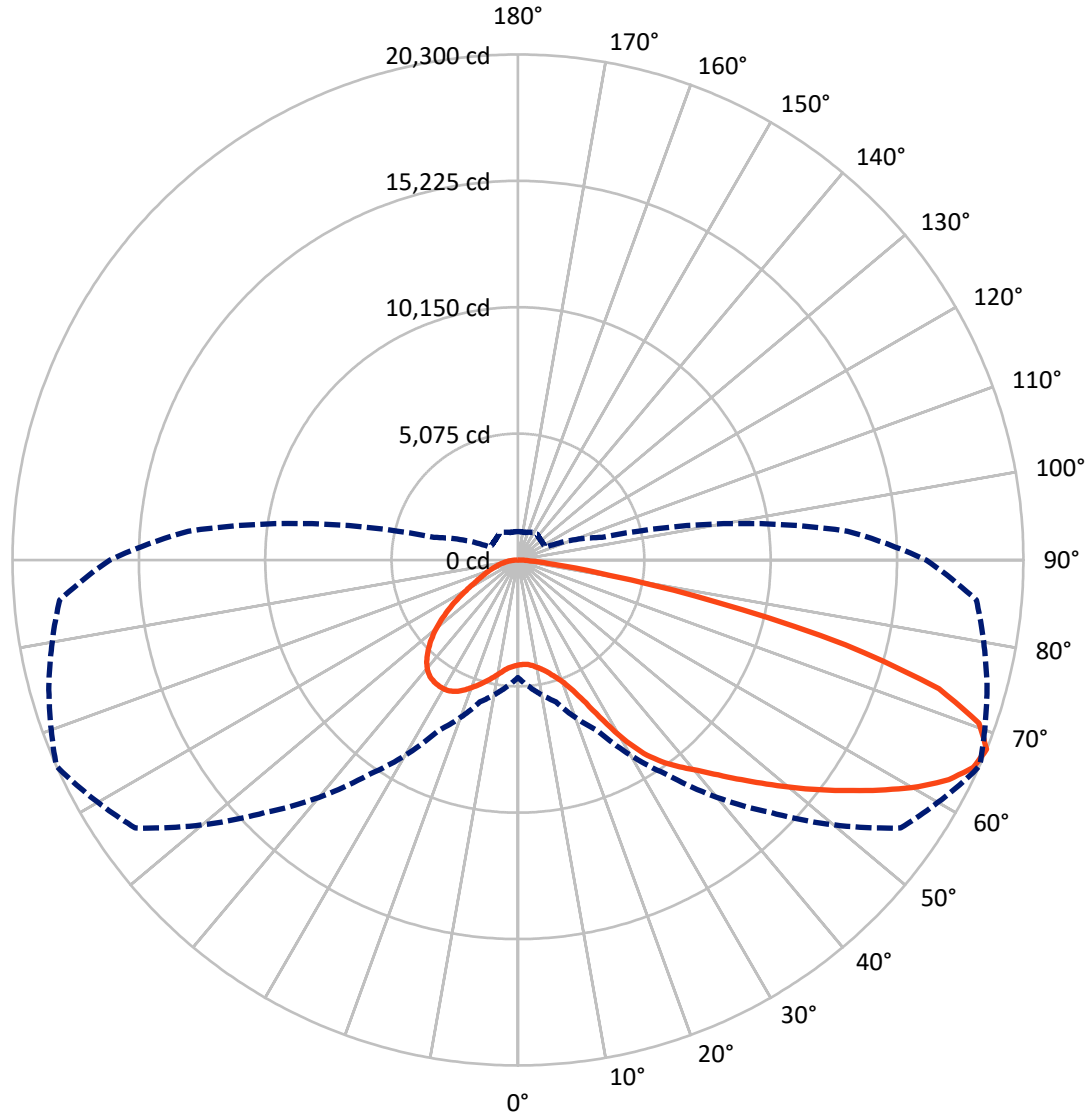
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9455.6	0.0	9455.6
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	28572.4	0.0	28572.4
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	38028.0	0.0	38028.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.2	1.1
10°-20°	1381.6	3.6
20°-30°	2663.0	7.0
30°-40°	4669.2	12.3
40°-50°	6941.5	18.3
50°-60°	8799.1	23.1
60°-70°	8609.7	22.6
70°-80°	4106.9	10.8
80°-90°	438.9	1.2
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°	38028.0	100.0
0°-180°	38028.0	100.0

**Coefficient of Utilization**



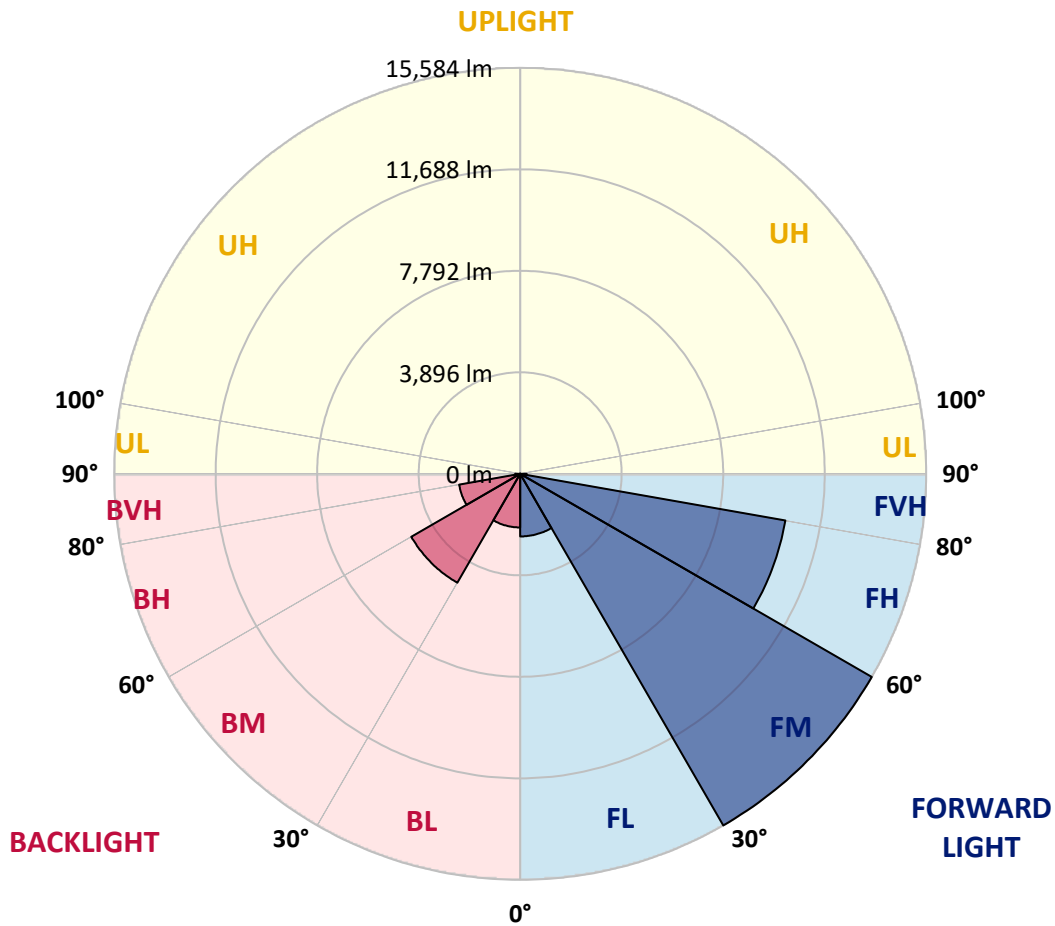
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 CATALOG NUMBER: NAV-SB5C-735-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2403.0	6.3			
FM (30°-60°)	15583.6	41.0			
FH (60°-80°)	10337.0	27.2			G4/12000
FVH (80°-90°)	248.8	0.7			G3/500
BL (0°-30°)	2059.8	5.4	B3/2500		
BM (30°-60°)	4826.2	12.7	B3/5000		
BH (60°-80°)	2379.5	6.3	B3/2500		G3/2500
BVH (80°-90°)	190.1	0.5			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 III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8
2.5°	4173.9	4197.8	4191.8	4181.8	4179.8	4183.8	4189.8	4195.8	4193.8	4203.8	4219.8
5°	4161.9	4185.8	4183.8	4183.8	4191.8	4207.8	4217.8	4227.8	4217.8	4229.8	4251.8
7.5°	4169.9	4187.8	4195.8	4203.8	4223.8	4253.8	4277.7	4299.7	4287.7	4301.7	4329.7
10°	4271.8	4285.7	4293.7	4293.7	4307.7	4341.7	4365.7	4405.6	4395.6	4417.6	4453.6
12.5°	4457.6	4471.6	4471.6	4463.6	4473.6	4495.5	4503.5	4547.5	4529.5	4565.5	4601.4
15°	4685.3	4713.3	4691.3	4677.4	4681.3	4703.3	4701.3	4735.3	4717.3	4747.3	4779.2
17.5°	4937.1	4973.1	4937.1	4935.1	4927.1	4951.1	4953.1	4983.0	4951.1	4973.1	4995.0
20°	5234.8	5284.7	5254.8	5264.8	5246.8	5256.8	5266.8	5310.7	5260.8	5276.8	5270.8
22.5°	5654.4	5714.3	5682.4	5720.3	5708.3	5700.3	5698.3	5776.3	5698.3	5704.3	5646.4
25°	6265.8	6337.7	6281.8	6333.7	6333.7	6359.7	6389.6	6489.5	6359.7	6321.7	6171.9
27.5°	7168.9	7240.8	7130.9	7162.9	7152.9	7216.8	7184.9	7432.6	7292.8	7230.8	6929.1
30°	8255.8	8383.7	8175.9	8167.9	8157.9	8259.8	8305.7	8469.6	8327.7	8265.8	7902.1
32.5°	9430.6	9564.5	9316.7	9244.8	9206.8	9268.8	9230.8	9362.7	9264.8	9168.9	8719.3
35°	10673.4	10805.3	10569.5	10429.6	10277.8	10147.9	10012.0	10046.0	9954.1	9808.3	9342.7
37.5°	11848.2	12090.0	11840.2	11690.4	11410.7	11156.9	10777.3	10619.4	10533.5	10399.7	9930.1
40°	13045.0	13182.9	12993.1	12865.2	12561.5	12163.9	11556.5	11222.8	11107.0	10977.1	10579.5
42.5°	13926.2	14058.0	13956.1	13868.2	13630.5	13168.9	12383.7	11966.1	11798.3	11652.4	11314.8
45°	14625.5	14723.4	14659.4	14691.4	14589.5	14141.9	13240.8	12763.3	12589.5	12411.7	12145.9
47.5°	14907.2	15011.1	15113.0	15302.8	15476.6	15146.9	14161.9	13626.5	13442.6	13260.8	12999.1
50°	14875.2	14981.1	15276.8	15680.4	16219.9	16110.0	15133.0	14545.5	14375.7	14167.9	13926.2
52.5°	14619.5	14739.3	15119.0	15790.3	16649.5	16831.3	16122.0	15494.6	15334.8	15087.0	14845.2
55°	13948.1	14020.1	14589.5	15540.6	16751.4	17334.8	17091.0	16505.6	16345.8	16000.1	15736.4
57.5°	12703.4	12807.3	13636.4	14867.2	16495.6	17676.4	17942.2	17568.5	17414.7	16917.2	16641.5
60°	11079.0	11244.8	12193.9	13736.3	15844.3	17674.4	18715.4	18613.5	18485.6	17820.3	17532.6
62.5°	9240.8	9432.6	10345.7	12137.9	14705.4	17172.9	19198.9	19488.6	19422.7	18653.5	18285.8
65°	7096.9	7228.8	8137.9	10070.0	12933.1	16096.0	19254.9	20086.0	20098.0	19286.8	18679.4
67.5°	4725.3	5104.9	5894.1	7556.5	10559.5	14335.8	18763.4	20183.9	20299.8	19504.6	18481.6
70°	2305.7	2805.2	3578.4	4911.1	7556.5	11636.4	17478.6	19380.7	19638.5	18869.2	17302.8
72.5°	957.0	1118.9	1540.5	2423.6	4337.7	7852.2	14897.2	17202.9	17680.4	16719.4	14547.5
75°	645.4	699.3	881.1	1242.8	1976.0	3872.2	10743.3	12827.3	13596.5	12627.4	10321.7
77.5°	497.5	531.5	641.4	869.1	1174.8	1464.5	5750.3	7730.3	8127.9	7524.5	5370.7
80°	391.6	417.6	479.5	633.4	833.2	783.2	1960.1	3502.5	3732.3	3130.9	1726.3
82.5°	339.7	349.7	343.7	429.6	553.4	457.5	643.4	1292.7	1426.6	1035.0	563.4
85°	245.8	273.7	285.7	265.7	293.7	231.8	263.7	457.5	503.5	449.6	317.7
87.5°	99.9	147.9	181.8	171.8	107.9	65.9	81.9	133.9	153.8	167.8	103.9
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°	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8	4217.8
2.5°	4221.8	4235.8	4245.8	4257.8	4265.8	4277.7	4301.7	4315.7	4317.7	4327.7	4325.7
5°	4259.8	4279.7	4301.7	4333.7	4369.7	4399.6	4445.6	4477.5	4489.5	4499.5	4497.5
7.5°	4341.7	4369.7	4409.6	4465.6	4517.5	4557.5	4613.4	4651.4	4689.3	4703.3	4705.3
10°	4463.6	4503.5	4561.5	4637.4	4693.3	4745.3	4803.2	4835.2	4873.2	4889.1	4897.1
12.5°	4615.4	4657.4	4733.3	4839.2	4891.1	4927.1	4947.1	4939.1	4947.1	4961.1	4965.1
15°	4789.2	4835.2	4921.1	5035.0	5071.0	5039.0	4995.0	4955.1	4949.1	4953.1	4967.1
17.5°	4995.0	5029.0	5128.9	5224.8	5198.8	5067.0	4971.1	4907.1	4875.2	4865.2	4879.2
20°	5282.7	5282.7	5364.7	5424.6	5250.8	5027.0	4877.2	4773.3	4707.3	4679.3	4673.4
22.5°	5632.4	5600.4	5652.4	5610.4	5240.8	4915.1	4707.3	4527.5	4427.6	4387.6	4381.6
25°	6076.0	6038.0	6024.0	5764.3	5168.9	4737.3	4399.6	4181.8	4093.9	4072.0	4075.9
27.5°	6745.3	6649.4	6467.6	5848.2	5037.0	4457.6	4040.0	3838.2	3788.2	3790.2	3796.2
30°	7636.4	7444.6	6999.0	5862.2	4821.2	4062.0	3672.3	3528.5	3504.5	3514.5	3548.5
32.5°	8461.6	8279.8	7542.5	5798.2	4489.5	3674.3	3342.7	3246.8	3210.8	3222.8	3238.8
35°	9108.9	9059.0	8046.0	5708.3	4081.9	3310.7	3047.0	2965.1	2895.1	2879.1	2891.1
37.5°	9720.3	9700.4	8423.6	5582.5	3678.3	3053.0	2809.2	2701.3	2599.4	2543.5	2545.5
40°	10391.7	10371.7	8671.4	5388.6	3320.7	2829.2	2595.4	2453.6	2327.7	2225.8	2235.8
42.5°	11146.9	11029.0	8789.3	5110.9	3017.0	2639.4	2421.6	2229.8	2063.9	1970.0	1976.0
45°	11972.1	11706.4	8787.3	4757.3	2761.3	2465.5	2235.8	1964.0	1810.2	1722.3	1718.3
47.5°	12847.2	12353.7	8679.4	4365.7	2513.5	2273.7	1948.1	1740.3	1638.4	1584.4	1572.4
50°	13750.3	12959.1	8495.6	3916.1	2259.8	2056.0	1768.2	1626.4	1548.5	1498.5	1480.5
52.5°	14599.5	13508.6	8273.8	3406.6	2002.0	1844.2	1688.3	1578.4	1496.5	1440.6	1416.6
55°	15388.7	13982.1	7960.1	2885.1	1792.2	1702.3	1650.4	1558.5	1464.5	1398.6	1372.6
57.5°	16090.0	14289.8	7418.6	2395.6	1642.4	1604.4	1610.4	1524.5	1416.6	1360.6	1324.7
60°	16673.4	14515.6	6617.4	1942.1	1520.5	1508.5	1548.5	1460.5	1334.7	1270.7	1242.8
62.5°	17023.1	14511.6	5634.4	1590.4	1416.6	1420.6	1466.5	1380.6	1252.8	1192.8	1174.8
65°	16993.1	14155.9	4555.5	1360.6	1316.7	1320.7	1380.6	1292.7	1184.8	1148.9	1146.9
67.5°	16391.7	13288.8	3494.5	1210.8	1206.8	1224.8	1294.7	1232.8	1142.9	1138.9	1144.9
70°	14763.3	11488.6	2517.5	1090.9	1092.9	1118.9	1210.8	1194.8	1120.9	1128.9	1126.9
72.5°	11838.2	8759.3	1690.3	965.0	967.0	1009.0	1130.9	1164.8	1098.9	1204.8	1220.8
75°	7884.2	5462.6	1086.9	831.2	833.2	887.1	1060.9	1106.9	1039.0	1200.8	1210.8
77.5°	3788.2	2455.6	787.2	699.3	699.3	749.3	917.1	991.0	885.1	933.1	855.2
80°	1308.7	923.1	619.4	563.4	551.5	585.4	773.2	859.1	763.2	703.3	659.3
82.5°	515.5	479.5	497.5	437.6	397.6	419.6	601.4	709.3	561.4	507.5	505.5
85°	295.7	311.7	351.7	289.7	229.8	257.7	441.6	509.5	423.6	373.6	381.6
87.5°	79.9	109.9	161.8	149.9	103.9	109.9	209.8	281.7	243.8	187.8	193.8
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)