

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: P969220

Luminaire Tested: **NAV-SB5D-722-U-T2U-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P969220  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-722-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

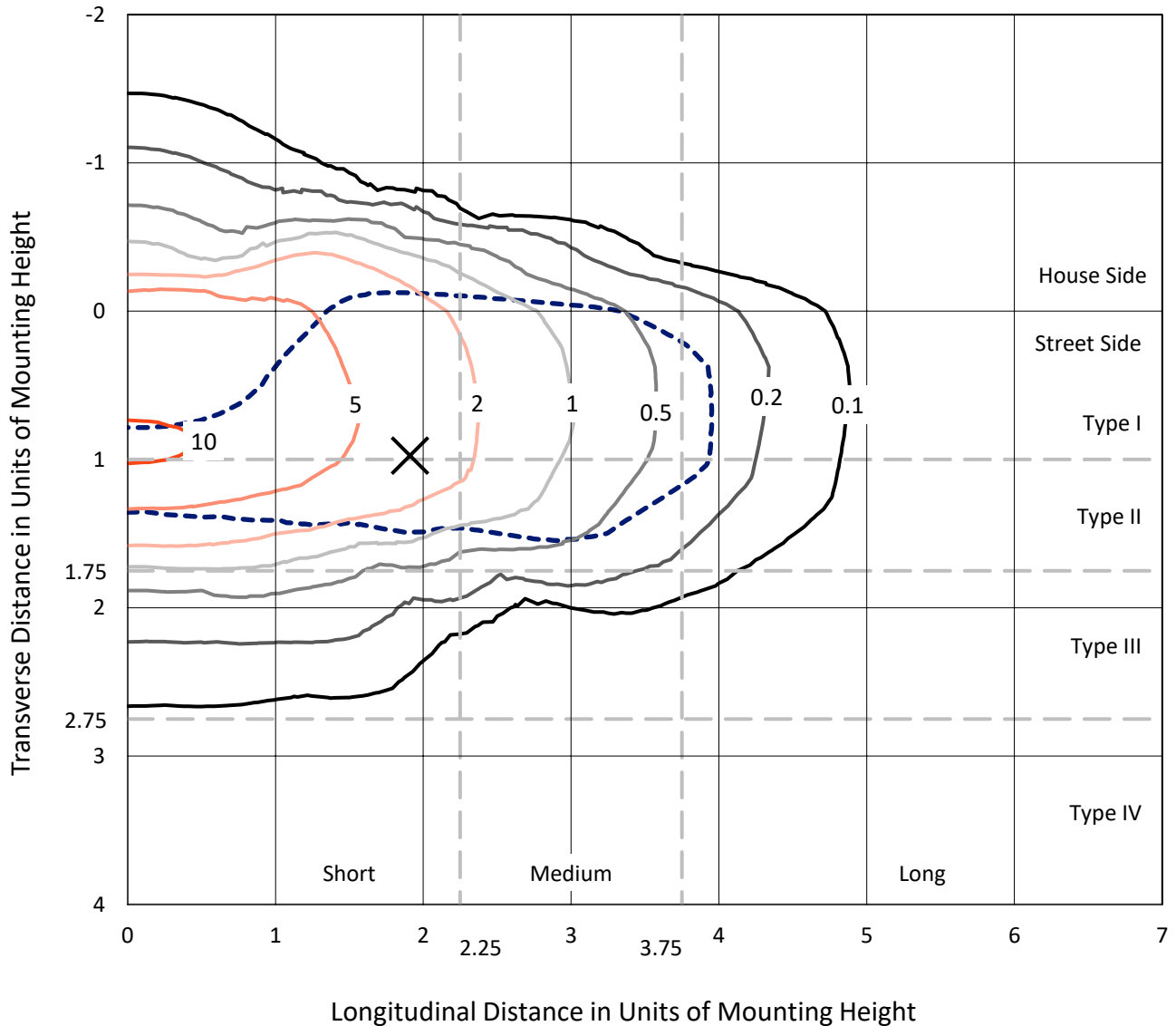
Lumens per Lamp: N/A  
Luminaire Lumens: 33264.3 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 364.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

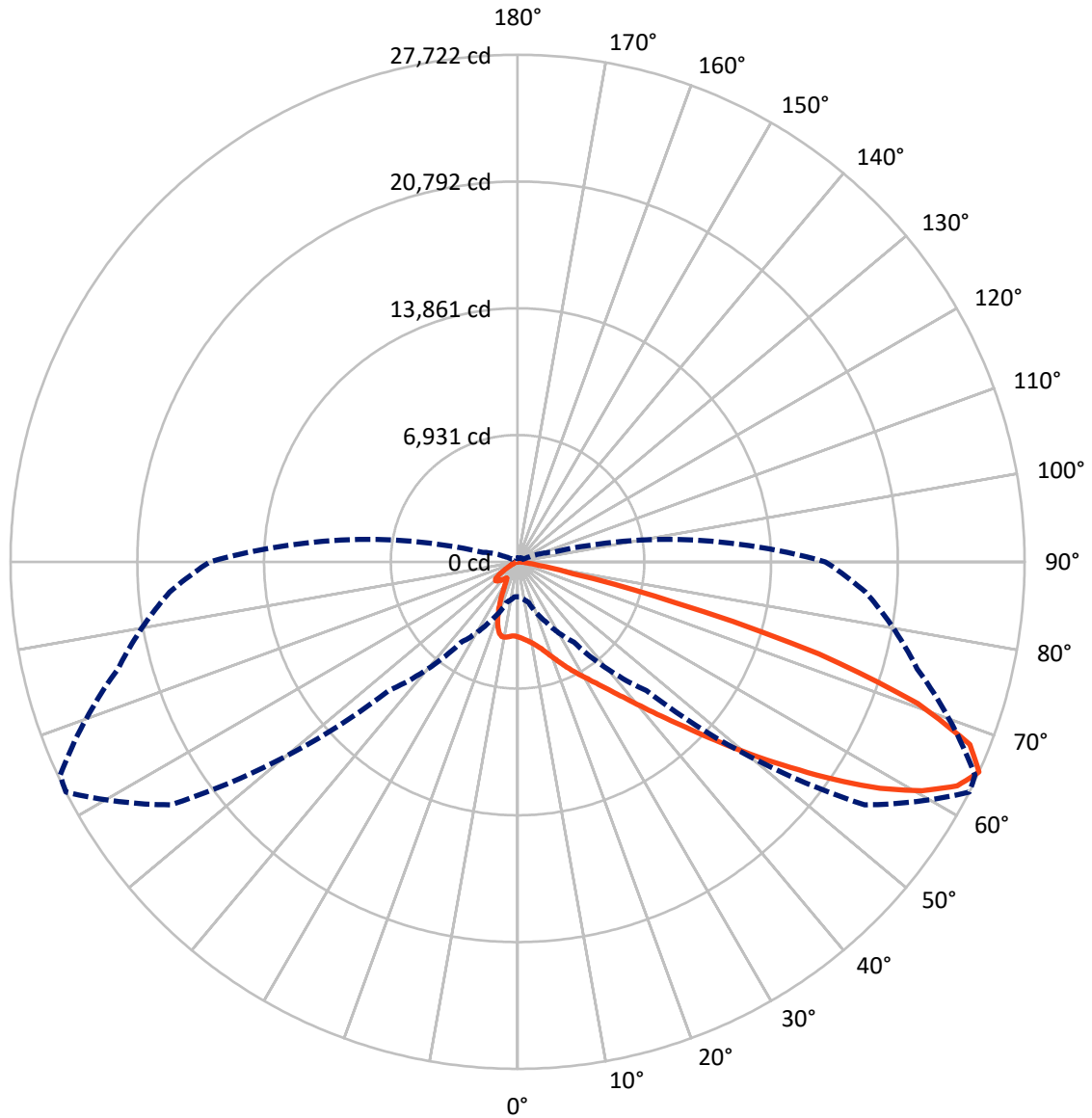
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4889.6	0.0	4889.6
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	28374.7	0.0	28374.7
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	33264.3	0.0	33264.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	386.8	1.2
10°-20°	1073.3	3.2
20°-30°	1868.8	5.6
30°-40°	3368.3	10.1
40°-50°	6680.5	20.1
50°-60°	9099.9	27.4
60°-70°	7263.5	21.8
70°-80°	3286.9	9.9
80°-90°	236.3	0.7
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°	33264.3	100.0
0°-180°	33264.3	100.0

**Coefficient of Utilization**

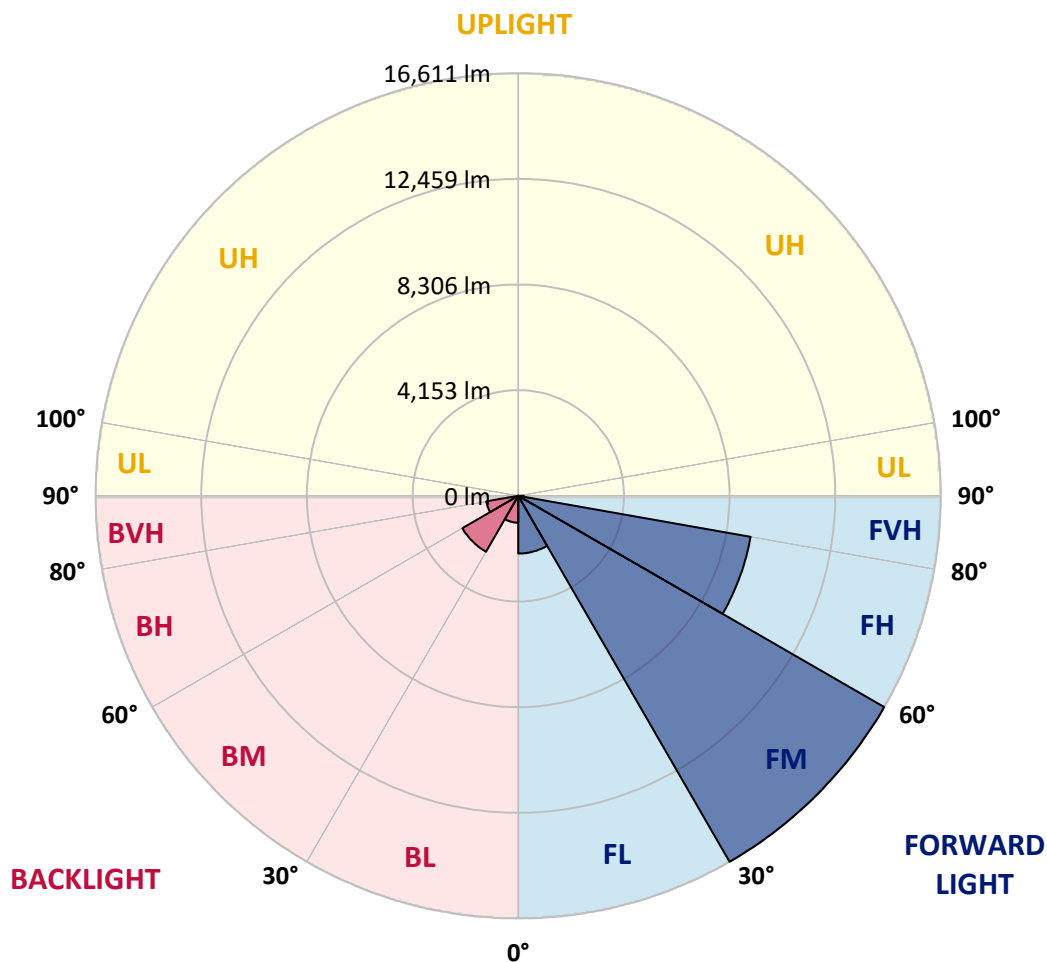


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2270.7	6.8			
FM (30°-60°)	16611.4	49.9			
FH (60°-80°)	9273.9	27.9			G4/12000
FVH (80°-90°)	218.7	0.7			G2/225
BL (0°-30°)	1058.2	3.2	B3/2500		
BM (30°-60°)	2537.4	7.6	B3/5000		
BH (60°-80°)	1276.5	3.8	B3/2500		G3/2500
BVH (80°-90°)	17.5	0.1			G1/100
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 Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4
2.5°	4201.6	4190.1	4206.1	4199.3	4194.7	4185.6	4181.0	4176.4	4167.2	4160.4	4132.9
5°	4213.0	4206.1	4222.2	4235.9	4249.6	4263.4	4270.3	4279.4	4270.3	4251.9	4224.4
7.5°	4116.9	4112.3	4146.6	4187.8	4249.6	4302.2	4359.4	4391.5	4393.8	4386.9	4357.2
10°	4110.0	4098.6	4132.9	4183.2	4263.4	4357.2	4457.8	4526.5	4535.6	4565.5	4533.4
12.5°	4217.6	4206.1	4254.2	4309.1	4391.5	4489.9	4613.5	4709.6	4723.3	4764.5	4741.6
15°	4398.4	4382.4	4437.2	4508.3	4613.5	4725.7	4856.0	4943.1	4954.4	5004.8	4963.6
17.5°	4608.9	4592.9	4657.0	4732.5	4846.9	5000.3	5151.2	5247.4	5261.1	5293.1	5217.7
20°	4878.9	4858.3	4908.7	4977.3	5098.7	5281.7	5462.5	5599.8	5597.5	5597.5	5473.9
22.5°	5192.4	5160.4	5203.9	5258.9	5373.3	5595.2	5835.5	5998.0	5998.0	5933.9	5730.3
25°	5528.8	5496.8	5544.8	5595.2	5695.9	5947.7	6229.1	6430.5	6439.7	6329.8	6004.9
27.5°	5949.9	5908.7	5945.3	6004.9	6064.3	6320.7	6654.7	6888.2	6892.7	6723.4	6265.7
30°	6760.0	6643.3	6528.9	6464.8	6492.2	6746.3	7103.2	7361.9	7384.8	7151.3	6549.4
32.5°	8242.9	8220.1	7817.3	7290.9	7016.3	7204.0	7604.5	7915.7	7929.4	7629.6	6917.9
35°	10547.4	10519.9	9872.3	8869.9	7975.2	7817.3	8213.2	8581.6	8572.5	8233.8	7396.2
37.5°	13298.0	13272.9	12419.3	11078.3	9629.7	8744.1	8998.1	9384.9	9442.1	8998.1	8014.1
40°	15648.3	15554.5	15014.4	13721.5	11826.7	10281.9	10114.9	10371.2	10430.7	9904.4	8799.0
42.5°	17428.7	17348.6	17073.9	16266.1	14485.8	12556.7	11430.7	11529.1	11595.5	10963.9	9700.7
45°	18350.9	18332.6	18442.5	18367.0	17195.3	15348.6	13311.8	12902.2	12927.3	12137.8	10723.6
47.5°	18481.4	18472.2	18973.4	19682.8	19524.9	18497.4	15726.1	14613.9	14524.7	13462.9	11835.8
50°	17712.4	17694.2	18655.3	19984.8	21081.1	21142.8	18467.6	16543.1	16346.3	14833.6	12996.0
52.5°	15257.0	15252.4	16831.4	19044.3	21628.0	23458.7	21177.1	18662.2	18332.6	16284.5	14222.6
55°	11739.6	11824.3	13634.4	16250.1	20630.2	24573.1	23609.7	21014.7	20508.9	17744.5	15353.1
57.5°	8316.1	8439.7	10229.3	12558.9	17536.2	23914.1	25255.2	23371.7	22827.1	19199.9	16499.6
60°	4467.1	4576.8	6368.7	9149.2	13046.3	21456.3	26122.4	25417.6	24902.7	20582.1	17534.0
62.5°	2661.4	2698.1	3439.5	5906.5	8824.2	16392.0	25754.0	26976.1	26552.6	21742.4	18433.3
65°	1910.8	1917.7	2290.7	3606.6	5357.3	9959.2	23170.3	27722.0	27591.7	22616.5	19099.2
67.5°	1608.7	1604.2	1759.8	2395.9	3650.0	4988.8	17758.2	26667.1	27220.9	23170.3	19476.8
70°	1380.0	1386.8	1569.9	1755.2	2743.8	2823.9	8828.7	23218.4	24399.3	23316.8	19454.0
72.5°	1027.5	1050.4	1219.8	1599.6	2071.0	1942.9	3048.1	17215.9	19351.0	21968.9	18444.8
75°	725.4	736.9	858.1	1345.6	1544.7	1414.3	1556.2	8899.7	11636.7	16842.9	15096.8
77.5°	558.4	579.0	650.0	940.5	1521.8	993.2	952.0	3080.2	4732.5	10174.4	10350.6
80°	302.1	338.7	469.1	679.7	1068.7	702.5	471.4	1226.6	1604.2	4757.6	3991.0
82.5°	155.6	173.9	327.3	489.7	608.7	613.3	233.4	510.3	661.3	1469.1	546.9
85°	61.8	75.5	219.7	270.0	313.5	302.1	105.3	205.9	238.0	407.3	167.1
87.5°	13.7	22.9	80.1	61.8	59.4	64.1	25.2	48.1	45.8	48.1	29.7
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°	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4	4105.4
2.5°	4130.6	4121.4	4096.3	4068.8	4036.8	4018.5	4007.0	4004.8	3988.7	3977.3	3988.7
5°	4199.3	4190.1	4142.0	4084.8	4023.0	3975.1	3929.2	3888.0	3828.6	3817.1	3812.5
7.5°	4336.6	4311.4	4233.6	4155.8	4039.1	3899.5	3730.2	3535.6	3361.7	3309.1	3283.9
10°	4505.9	4471.6	4373.2	4235.9	3977.3	3597.4	3187.7	2807.9	2505.8	2421.2	2389.2
12.5°	4698.2	4668.4	4538.0	4284.0	3718.7	3029.9	2402.8	1931.4	1638.6	1565.3	1544.7
15°	4927.0	4883.5	4702.7	4210.7	3256.4	2302.1	1649.9	1370.7	1265.5	1251.7	1238.0
17.5°	5169.6	5098.7	4849.2	3947.6	2633.9	1636.2	1274.7	1194.5	1148.8	1135.1	1128.2
20°	5391.5	5300.0	4936.2	3549.4	1968.0	1274.7	1142.0	1089.3	1048.1	1032.1	1023.0
22.5°	5613.5	5483.0	4936.2	3007.0	1476.0	1130.5	1048.1	1000.1	952.0	931.4	919.9
25°	5844.7	5670.7	4849.2	2402.8	1187.7	1036.7	958.9	906.2	865.0	839.9	830.7
27.5°	6068.9	5828.7	4650.1	1830.8	1057.3	954.3	876.5	826.2	787.2	769.0	769.0
30°	6281.7	5984.3	4370.9	1389.1	972.6	874.2	800.9	757.5	718.5	700.3	702.5
32.5°	6570.0	6181.1	4073.5	1139.6	899.3	798.7	732.3	691.2	656.8	643.1	643.1
35°	6970.5	6471.6	3817.1	1119.0	837.5	736.9	670.6	631.6	597.3	585.8	585.8
37.5°	7538.1	6940.8	3682.1	1256.3	787.2	681.9	620.1	579.0	546.9	537.8	535.5
40°	8238.3	7577.0	3755.3	1393.7	752.9	633.9	574.4	533.2	505.7	494.3	492.0
42.5°	9069.1	8361.9	4160.4	1499.0	730.0	592.7	530.9	485.1	466.9	462.3	462.3
45°	10023.4	9224.7	4780.5	1611.1	693.4	553.8	487.4	453.2	439.4	437.1	434.8
47.5°	11108.0	10172.1	5499.1	1750.7	656.8	517.2	453.2	430.2	418.8	414.2	414.2
50°	12183.6	11126.4	6238.3	1828.5	627.0	482.9	425.7	407.3	398.2	395.9	395.9
52.5°	13309.5	12108.1	6835.5	1755.2	601.9	455.4	402.7	389.0	379.9	377.6	377.6
55°	14382.8	12902.2	6938.5	1489.7	551.6	427.9	377.6	370.7	359.3	359.3	357.0
57.5°	15307.4	13300.4	6210.8	1093.9	501.1	386.7	352.4	345.5	336.4	334.2	331.8
60°	16156.4	13185.9	4794.2	736.9	446.3	345.5	320.4	315.8	306.7	295.2	292.9
62.5°	16634.6	12682.5	3279.3	480.5	391.3	302.1	283.7	281.5	260.9	238.0	233.4
65°	16815.4	11648.1	2045.9	350.1	327.3	258.6	244.9	240.3	210.5	185.3	183.1
67.5°	16657.5	9945.5	1032.1	276.9	258.6	215.1	201.4	201.4	180.8	158.0	155.6
70°	16025.9	7455.7	434.8	222.0	199.1	164.7	164.7	173.9	153.3	128.1	125.9
72.5°	14655.1	5016.2	231.1	169.3	148.7	116.7	135.0	141.9	121.3	96.1	96.1
75°	11650.4	3059.6	160.2	125.9	93.8	82.4	103.0	107.5	82.4	64.1	61.8
77.5°	7968.4	1757.5	107.5	80.1	59.4	48.1	70.9	66.3	43.5	29.7	32.1
80°	3499.0	732.3	61.8	36.6	22.9	18.3	25.2	18.3	13.7	9.1	9.1
82.5°	409.6	171.6	22.9	13.7	9.1	4.6	2.3	0.0	0.0	0.0	0.0
85°	84.7	20.6	11.5	4.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.0	4.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)