

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: P884849

Luminaire Tested: **NAV-SB5D-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884849
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-SB5D-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43598 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

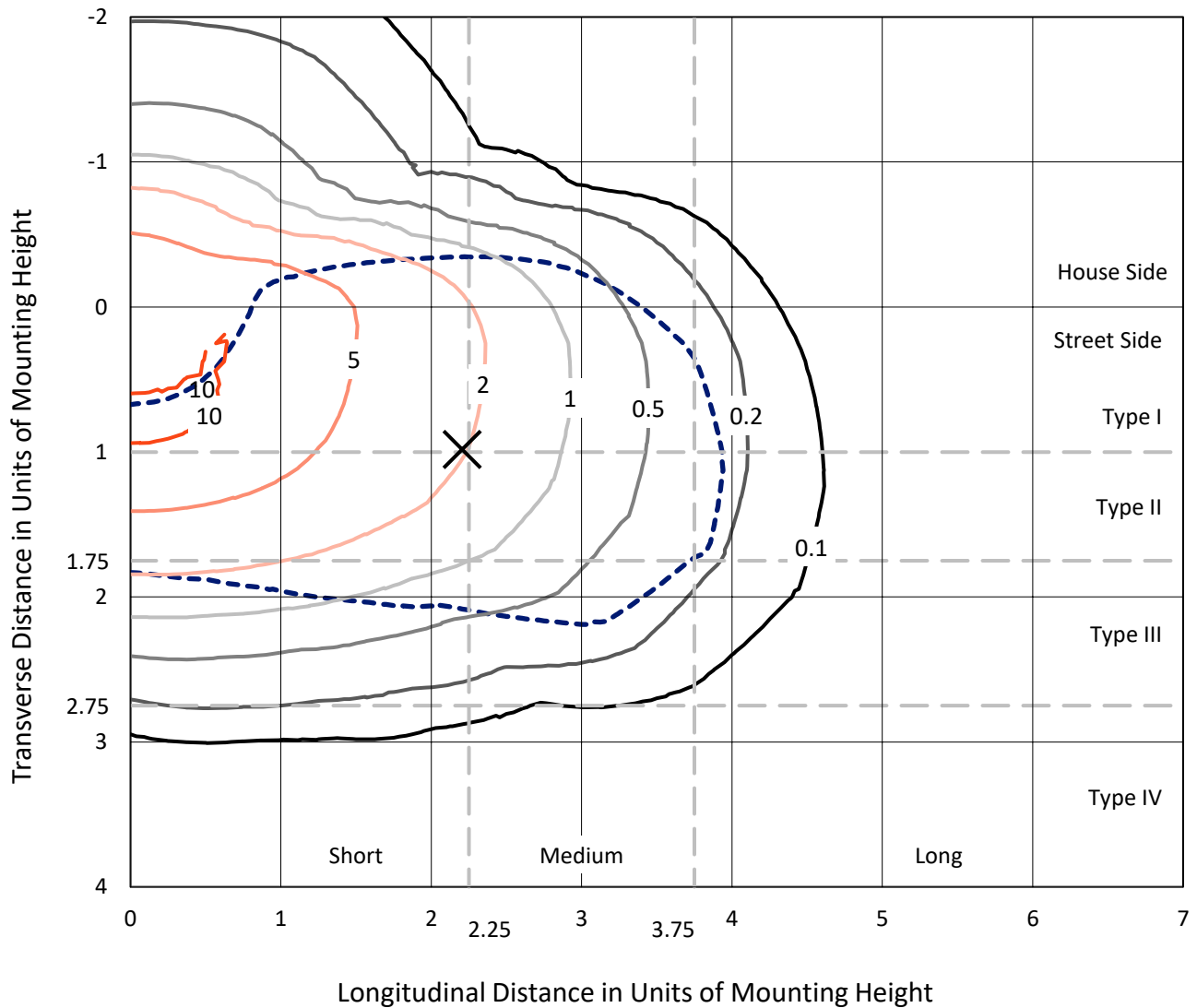
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

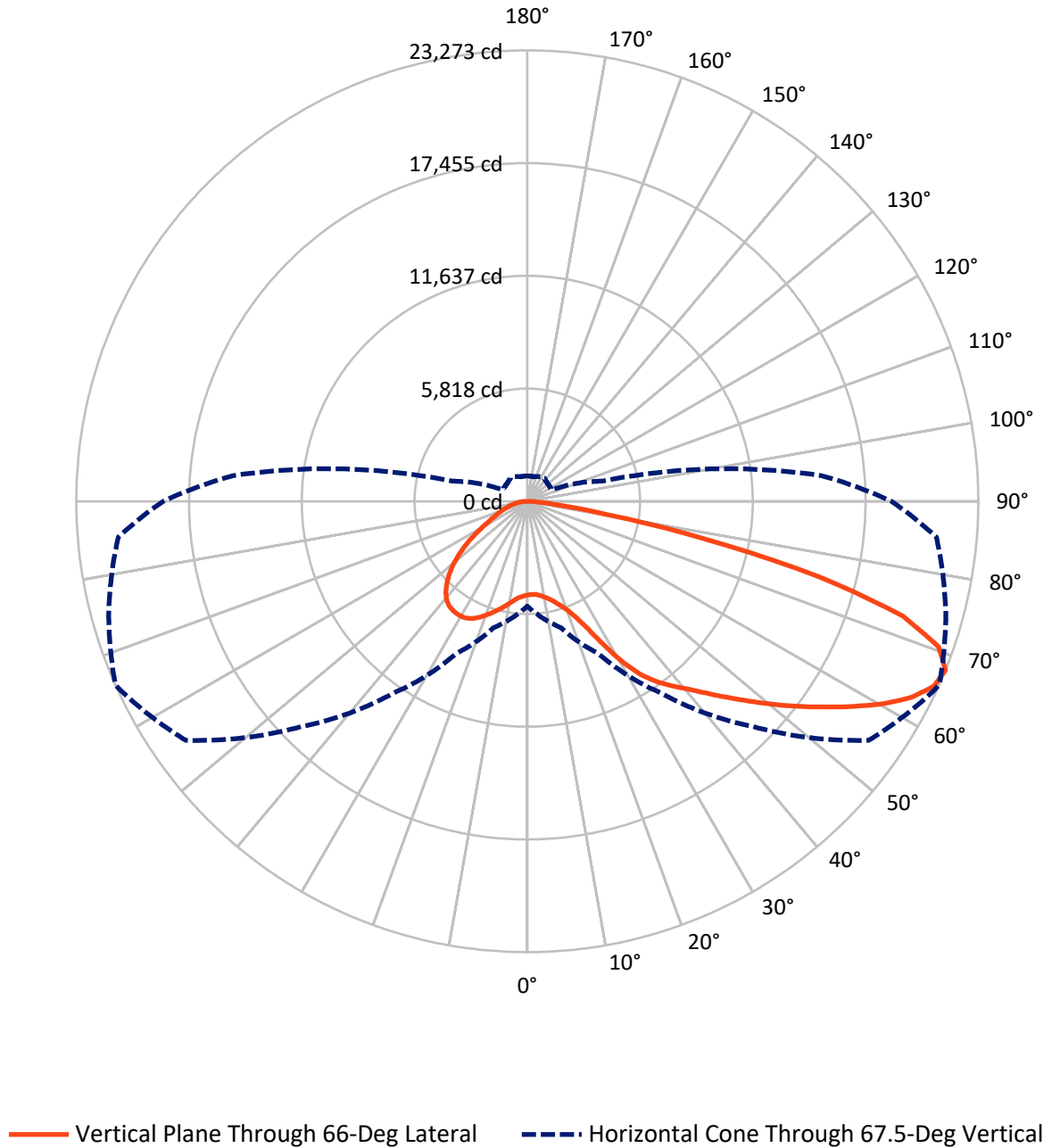
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10840.5	0.0	10840.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	32757.5	0.0	32757.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	43598.0	0.0	43598.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	479.4	1.1
10°-20°	1584.0	3.6
20°-30°	3053.0	7.0
30°-40°	5353.1	12.3
40°-50°	7958.3	18.3
50°-60°	10087.9	23.1
60°-70°	9870.7	22.6
70°-80°	4708.4	10.8
80°-90°	503.2	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°	43598.0	100.0
0°-180°	43598.0	100.0

Coefficient of Utilization



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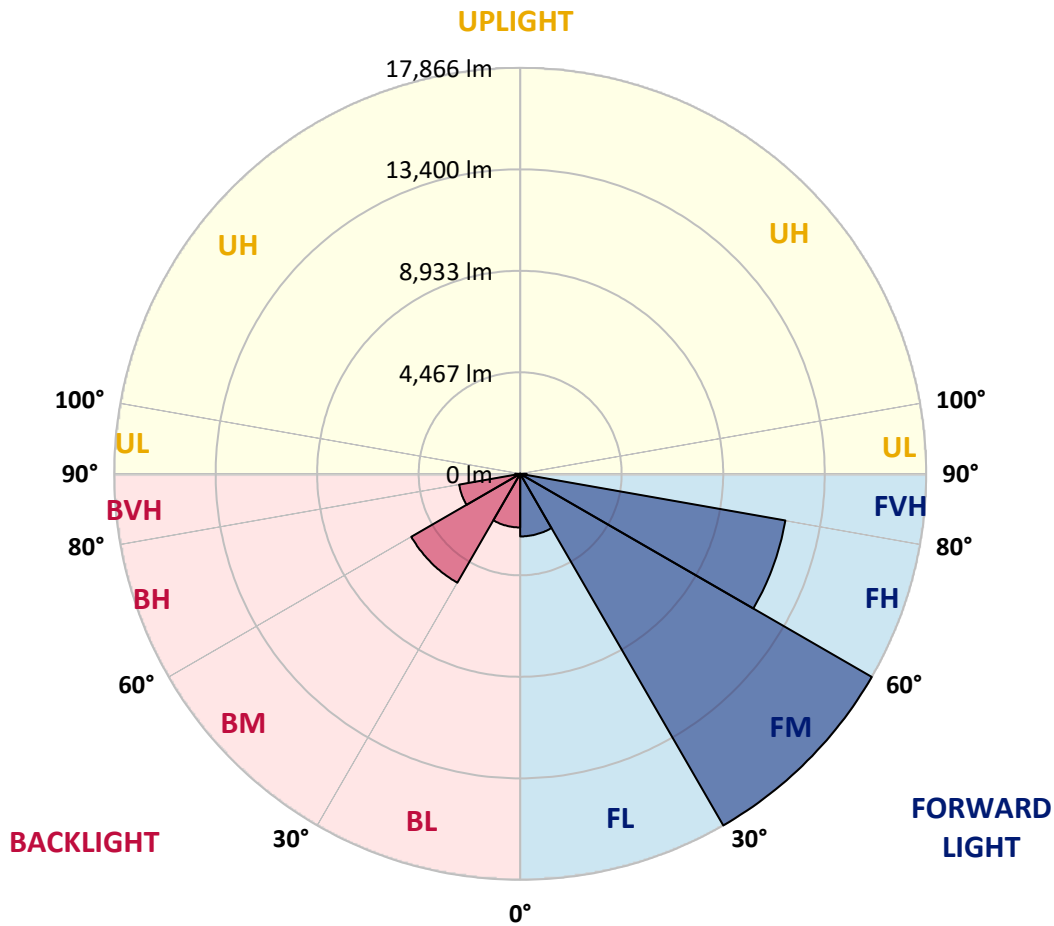
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2755.0	6.3			
FM (30°-60°)	17866.1	41.0			
FH (60°-80°)	11851.1	27.2			G4/12000
FVH (80°-90°)	285.3	0.7			G3/500
BL (0°-30°)	2361.5	5.4	B3/2500		
BM (30°-60°)	5533.1	12.7	B4/8500		
BH (60°-80°)	2728.0	6.3	B4/5000		G4/5000
BVH (80°-90°)	217.9	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6
2.5°	4785.2	4812.7	4805.8	4794.4	4792.1	4796.7	4803.5	4810.4	4808.1	4819.6	4837.9
5°	4771.5	4798.9	4796.7	4796.7	4805.8	4824.1	4835.6	4847.0	4835.6	4849.3	4874.5
7.5°	4780.6	4801.2	4810.4	4819.6	4842.5	4876.8	4904.3	4929.5	4915.8	4931.8	4963.9
10°	4897.4	4913.5	4922.6	4922.6	4938.7	4977.6	5005.1	5050.9	5039.5	5064.7	5105.9
12.5°	5110.5	5126.5	5126.5	5117.3	5128.8	5154.0	5163.2	5213.6	5192.9	5234.2	5275.4
15°	5371.6	5403.7	5378.5	5362.4	5367.0	5392.2	5389.9	5428.9	5408.3	5442.6	5479.3
17.5°	5660.2	5701.5	5660.2	5657.9	5648.8	5676.3	5678.6	5712.9	5676.3	5701.5	5726.7
20°	6001.5	6058.8	6024.4	6035.9	6015.3	6026.7	6038.2	6088.6	6031.3	6049.6	6042.8
22.5°	6482.6	6551.3	6514.7	6558.2	6544.4	6535.3	6533.0	6622.3	6533.0	6539.8	6473.4
25°	7183.5	7266.0	7201.9	7261.4	7261.4	7291.2	7325.5	7440.1	7291.2	7247.7	7075.9
27.5°	8218.9	8301.4	8175.4	8212.0	8200.6	8273.9	8237.2	8521.3	8360.9	8289.9	7944.0
30°	9465.0	9611.6	9373.4	9364.2	9352.8	9469.6	9522.3	9710.1	9547.5	9476.5	9059.6
32.5°	10811.9	10965.4	10681.4	10598.9	10555.4	10626.4	10582.9	10734.1	10621.8	10511.9	9996.5
35°	12236.7	12387.9	12117.6	11957.3	11783.2	11634.3	11478.5	11517.5	11412.1	11244.9	10711.2
37.5°	13583.6	13860.8	13574.5	13402.7	13082.0	12791.1	12355.8	12174.9	12076.4	11922.9	11384.6
40°	14955.8	15113.8	14896.2	14749.6	14401.4	13945.6	13249.2	12866.7	12733.8	12584.9	12129.1
42.5°	15965.9	16117.1	16000.3	15899.5	15626.9	15097.8	14197.5	13718.8	13526.4	13359.2	12972.0
45°	16767.7	16879.9	16806.6	16843.3	16726.4	16213.3	15180.2	14632.8	14433.5	14229.6	13925.0
47.5°	17090.7	17209.8	17326.6	17544.2	17743.5	17365.5	16236.2	15622.3	15411.6	15203.1	14903.1
50°	17054.0	17175.4	17514.4	17977.1	18595.6	18469.6	17349.5	16676.0	16481.3	16243.1	15965.9
52.5°	16760.8	16898.2	17333.5	18103.1	19088.1	19296.6	18483.4	17764.1	17580.9	17296.8	17019.6
55°	15991.1	16073.6	16726.4	17816.8	19204.9	19873.8	19594.4	18923.2	18739.9	18343.6	18041.3
57.5°	14564.0	14683.2	15633.8	17044.8	18911.7	20265.5	20570.2	20141.8	19965.4	19395.1	19079.0
60°	12701.7	12891.9	13979.9	15748.3	18165.0	20263.2	21456.7	21339.8	21193.2	20430.4	20100.6
62.5°	10594.3	10814.2	11861.1	13915.8	16859.3	19688.3	22011.0	22343.1	22267.6	21385.7	20964.2
65°	8136.4	8287.6	9329.9	11545.0	14827.5	18453.6	22075.1	23028.1	23041.8	22111.8	21415.4
67.5°	5417.4	5852.6	6757.5	8663.3	12106.2	16435.5	21511.6	23140.3	23273.2	22361.5	21188.7
70°	2643.4	3216.1	4102.6	5630.5	8663.3	13340.8	20038.7	22219.5	22514.9	21633.0	19837.2
72.5°	1097.2	1282.8	1766.1	2778.6	4973.0	9002.3	17079.2	19722.6	20270.1	19168.3	16678.3
75°	739.9	801.7	1010.2	1424.8	2265.5	4439.3	12316.9	14706.1	15588.0	14477.0	11833.6
77.5°	570.4	609.3	735.3	996.4	1346.9	1679.1	6592.5	8862.6	9318.4	8626.6	6157.3
80°	449.0	478.7	549.8	726.1	955.2	897.9	2247.1	4015.5	4279.0	3589.5	1979.1
82.5°	389.4	400.9	394.0	492.5	634.5	524.6	737.6	1482.1	1635.5	1186.6	646.0
85°	281.8	313.8	327.6	304.7	336.7	265.7	302.4	524.6	577.2	515.4	364.2
87.5°	114.5	169.5	208.5	197.0	123.7	75.6	93.9	153.5	176.4	192.4	119.1
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°	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6	4835.6
2.5°	4840.2	4856.2	4867.7	4881.4	4890.6	4904.3	4931.8	4947.8	4950.1	4961.6	4959.3
5°	4883.7	4906.6	4931.8	4968.5	5009.7	5044.0	5096.7	5133.4	5147.1	5158.6	5156.3
7.5°	4977.6	5009.7	5055.5	5119.6	5179.2	5225.0	5289.1	5332.7	5376.2	5392.2	5394.5
10°	5117.3	5163.2	5229.6	5316.6	5380.8	5440.3	5506.8	5543.4	5586.9	5605.3	5614.4
12.5°	5291.4	5339.5	5426.6	5548.0	5607.5	5648.8	5671.7	5662.5	5671.7	5687.7	5692.3
15°	5490.7	5543.4	5641.9	5772.5	5813.7	5777.1	5726.7	5680.8	5674.0	5678.6	5694.6
17.5°	5726.7	5765.6	5880.1	5990.1	5960.3	5809.1	5699.2	5625.9	5589.2	5577.8	5593.8
20°	6056.5	6056.5	6150.4	6219.2	6019.9	5763.3	5591.5	5472.4	5396.8	5364.7	5357.9
22.5°	6457.4	6420.7	6480.3	6432.2	6008.4	5635.0	5396.8	5190.6	5076.1	5030.3	5023.4
25°	6965.9	6922.4	6906.4	6608.6	5926.0	5431.2	5044.0	4794.4	4693.6	4668.4	4673.0
27.5°	7733.3	7623.3	7414.9	6704.8	5774.8	5110.5	4631.7	4400.4	4343.1	4345.4	4352.3
30°	8754.9	8535.0	8024.2	6720.8	5527.4	4656.9	4210.2	4045.3	4017.8	4029.3	4068.2
32.5°	9701.0	9492.5	8647.3	6647.5	5147.1	4212.5	3832.3	3722.3	3681.1	3694.8	3713.2
35°	10443.1	10385.9	9224.5	6544.4	4679.8	3795.6	3493.3	3399.3	3319.2	3300.8	3314.6
37.5°	11144.1	11121.2	9657.4	6400.1	4217.1	3500.1	3220.7	3097.0	2980.2	2916.0	2918.3
40°	11913.8	11890.8	9941.5	6177.9	3807.1	3243.6	2975.6	2812.9	2668.6	2551.8	2563.3
42.5°	12779.6	12644.5	10076.6	5859.5	3458.9	3026.0	2776.3	2556.4	2366.3	2258.6	2265.5
45°	13725.7	13421.0	10074.3	5454.1	3165.7	2826.7	2563.3	2251.7	2075.3	1974.6	1970.0
47.5°	14729.0	14163.2	9950.6	5005.1	2881.7	2606.8	2233.4	1995.2	1878.3	1816.5	1802.8
50°	15764.4	14857.3	9739.9	4489.7	2590.7	2357.1	2027.2	1864.6	1775.3	1718.0	1697.4
52.5°	16737.9	15487.2	9485.6	3905.6	2295.2	2114.3	1935.6	1809.6	1715.7	1651.6	1624.1
55°	17642.7	16030.1	9126.0	3307.7	2054.7	1951.6	1892.1	1786.7	1679.1	1603.5	1573.7
57.5°	18446.7	16382.8	8505.2	2746.5	1882.9	1839.4	1846.3	1747.8	1624.1	1559.9	1518.7
60°	19115.6	16641.7	7586.7	2226.5	1743.2	1729.5	1775.3	1674.5	1530.2	1456.9	1424.8
62.5°	19516.5	16637.1	6459.7	1823.4	1624.1	1628.7	1681.3	1582.8	1436.2	1367.5	1346.9
65°	19482.1	16229.4	5222.7	1559.9	1509.5	1514.1	1582.8	1482.1	1358.4	1317.1	1314.8
67.5°	18792.6	15235.2	4006.4	1388.1	1383.6	1404.2	1484.4	1413.3	1310.3	1305.7	1312.6
70°	16925.7	13171.3	2886.2	1250.7	1253.0	1282.8	1388.1	1369.8	1285.1	1294.2	1291.9
72.5°	13572.2	10042.3	1937.9	1106.4	1108.7	1156.8	1296.5	1335.5	1259.9	1381.3	1399.6
75°	9039.0	6262.7	1246.1	952.9	955.2	1017.1	1216.3	1269.0	1191.1	1376.7	1388.1
77.5°	4343.1	2815.2	902.5	801.7	801.7	859.0	1051.4	1136.2	1014.8	1069.7	980.4
80°	1500.4	1058.3	710.1	646.0	632.2	671.2	886.5	985.0	875.0	806.3	755.9
82.5°	591.0	549.8	570.4	501.7	455.8	481.0	689.5	813.2	643.7	581.8	579.5
85°	339.0	357.3	403.2	332.1	263.4	295.5	506.2	584.1	485.6	428.4	437.5
87.5°	91.6	126.0	185.5	171.8	119.1	126.0	240.5	323.0	279.5	215.3	222.2
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)