

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: P969230

Luminaire Tested: **NAV-SB5D-722-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969230
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43440.5 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

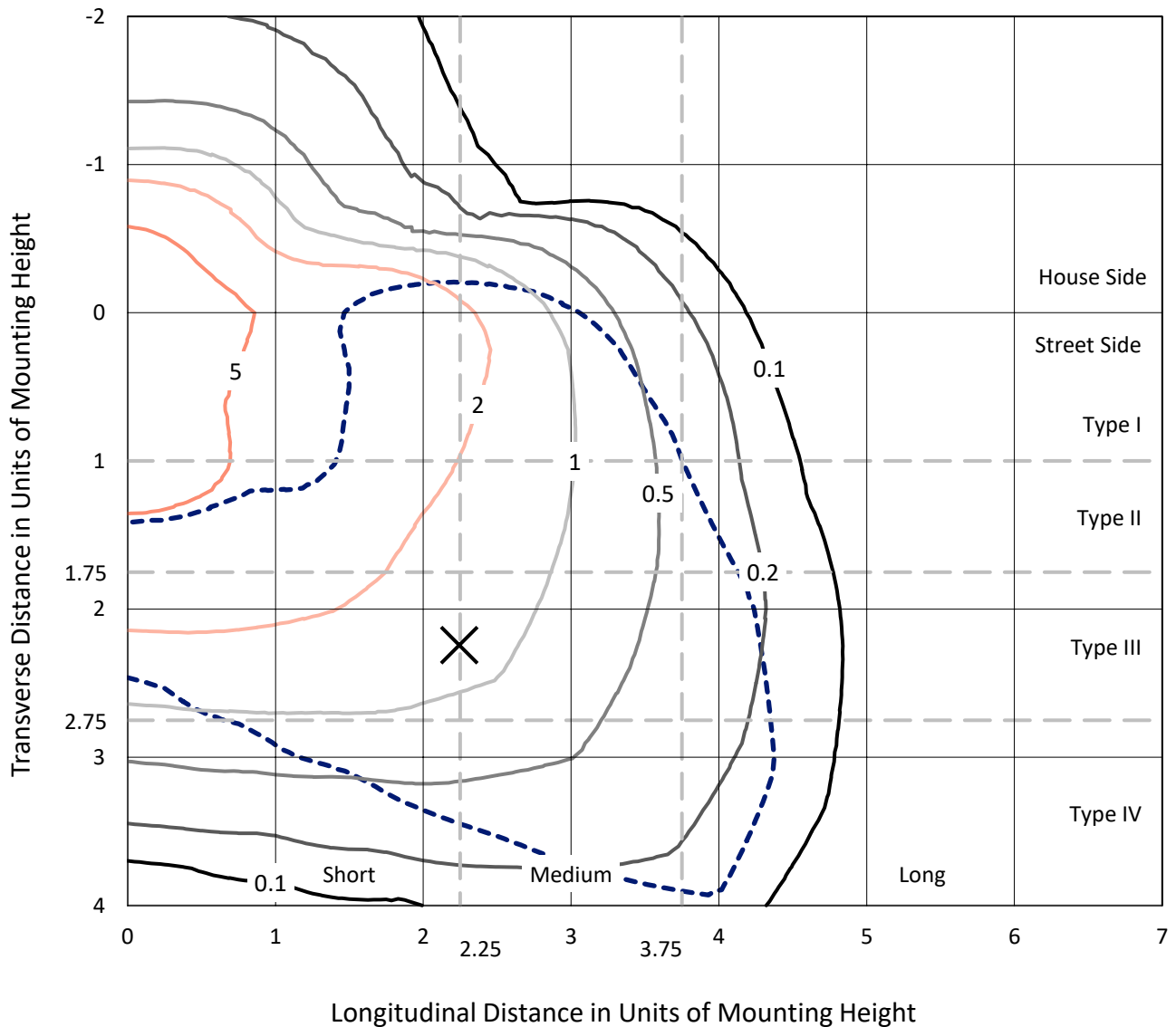
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

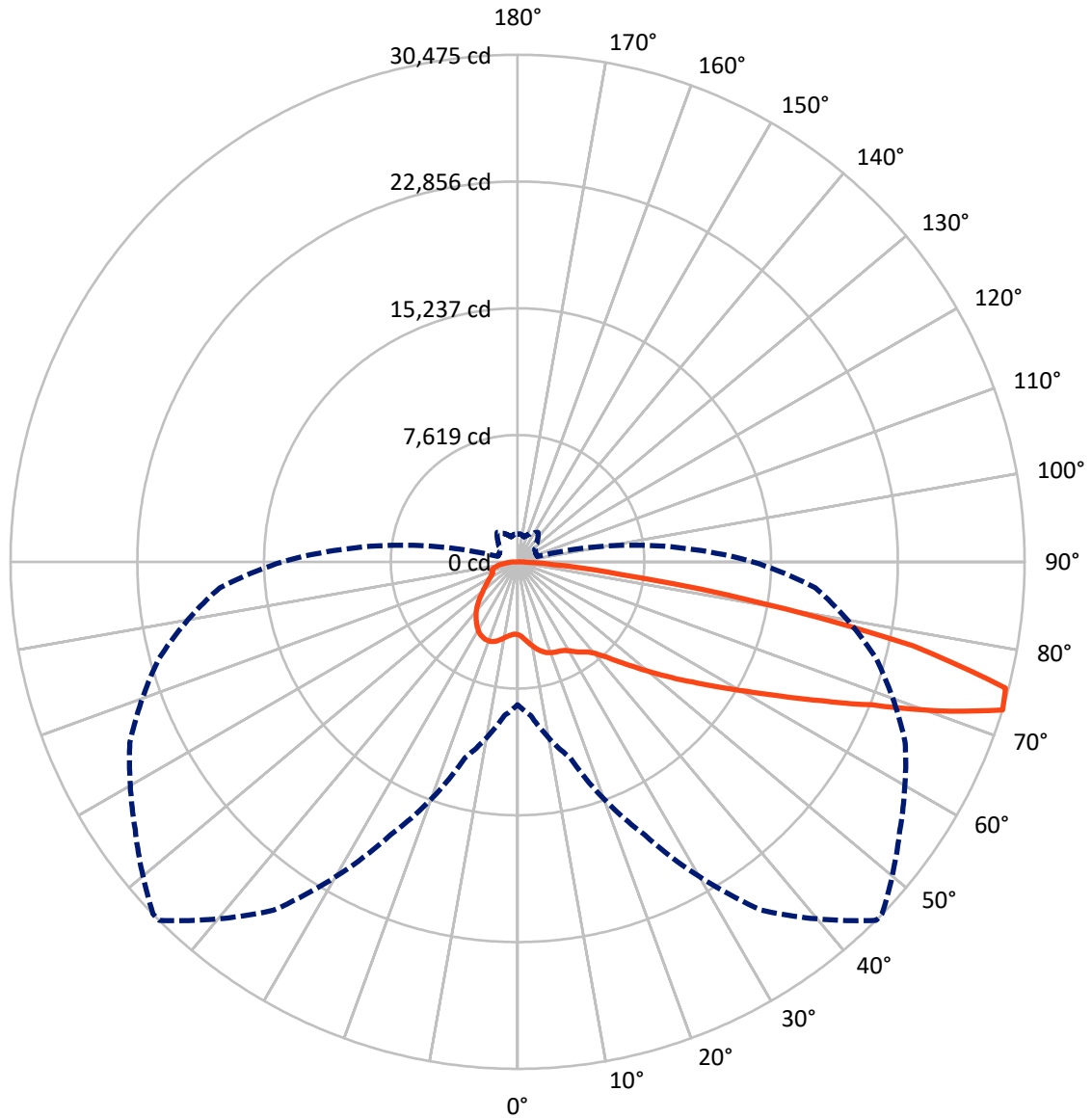
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9820.4	0.0	9820.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	33620.1	0.0	33620.1
	% Fixture	77.4	0.0	77.4
Total	Lumens	43440.5	0.0	43440.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.0	1.0
10°-20°	1487.1	3.4
20°-30°	2586.9	6.0
30°-40°	3708.5	8.5
40°-50°	5221.8	12.0
50°-60°	7998.3	18.4
60°-70°	11586.7	26.7
70°-80°	9252.7	21.3
80°-90°	1152.4	2.7
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°	43440.5	100.0
0°-180°	43440.5	100.0

Coefficient of Utilization

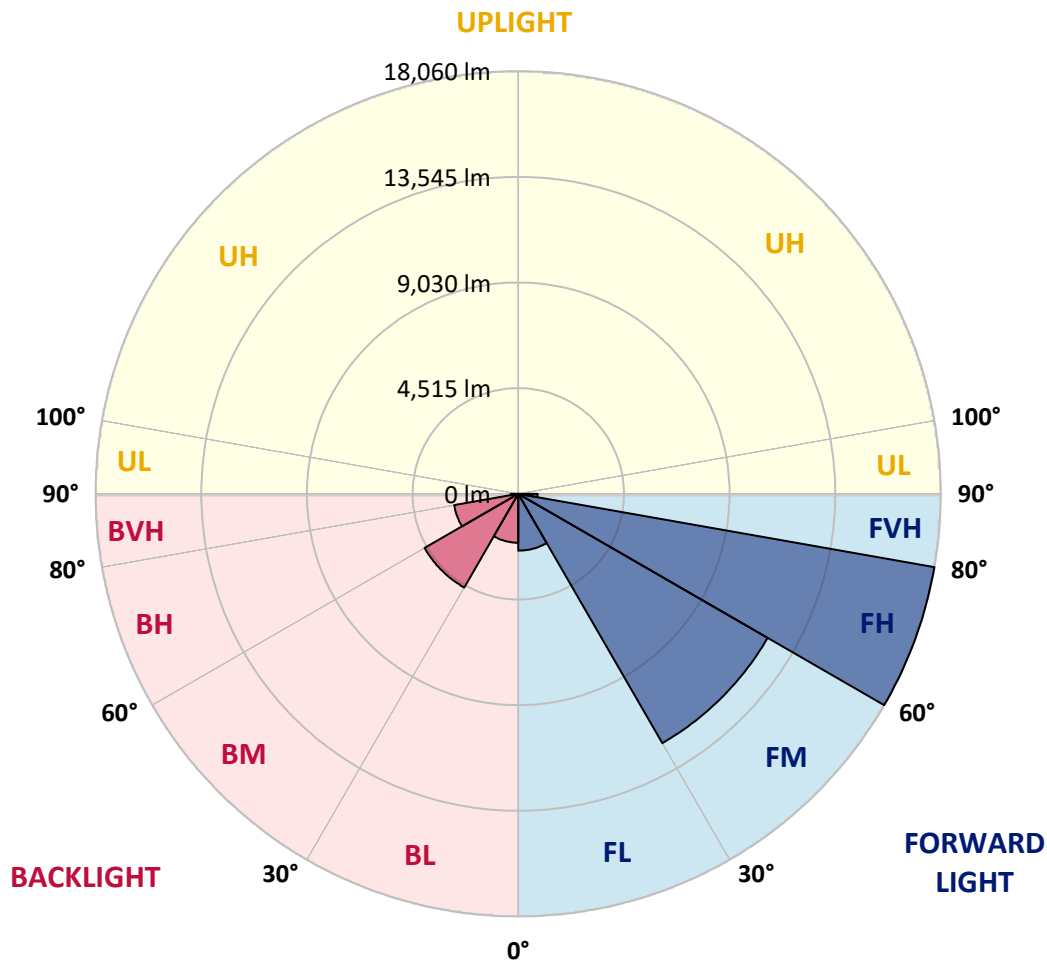


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2429.3	5.6			
FM (30°-60°)	12304.6	28.3			
FH (60°-80°)	18059.5	41.6			G5
FVH (80°-90°)	826.7	1.9			G5
BL (0°-30°)	2090.8	4.8	B3/2500		
BM (30°-60°)	4624.0	10.6	B3/5000		
BH (60°-80°)	2779.9	6.4	B4/5000		G4/5000
BVH (80°-90°)	325.7	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3
2.5°	4554.0	4583.7	4556.2	4531.0	4519.6	4489.8	4487.6	4469.3	4457.8	4425.7	4416.6
5°	4872.0	4910.9	4865.2	4814.8	4769.0	4695.8	4686.7	4634.0	4574.6	4505.9	4467.0
7.5°	5231.3	5265.6	5212.9	5137.5	5057.3	4936.1	4933.8	4837.7	4743.9	4627.2	4560.8
10°	5544.8	5590.6	5519.6	5416.7	5316.0	5178.7	5162.6	5052.8	4933.8	4782.8	4682.1
12.5°	5821.7	5853.8	5785.1	5659.2	5542.5	5405.2	5384.6	5263.4	5130.6	4959.0	4830.8
15°	6041.3	6082.6	5991.0	5856.0	5732.4	5597.4	5579.2	5469.3	5336.6	5155.8	4991.0
17.5°	6185.6	6219.9	6126.1	5975.0	5856.0	5743.9	5730.2	5638.6	5521.9	5338.8	5162.6
20°	6240.5	6277.1	6178.7	6025.4	5915.6	5828.6	5821.7	5755.4	5675.2	5508.2	5329.7
22.5°	6295.4	6329.8	6201.6	6041.3	5945.3	5890.4	5888.1	5844.5	5812.6	5675.2	5501.4
25°	6517.4	6526.6	6354.9	6123.8	5986.5	5938.4	5936.1	5933.8	5947.6	5840.0	5686.7
27.5°	6709.6	6707.3	6560.8	6343.5	6130.6	6030.0	6027.7	6050.6	6094.0	6004.8	5878.9
30°	6991.1	6965.9	6792.0	6565.4	6370.9	6215.3	6201.6	6181.0	6215.3	6144.4	6071.2
32.5°	7588.4	7508.2	7226.8	6824.0	6570.0	6451.0	6432.7	6304.6	6318.3	6274.8	6238.3
35°	8444.3	8339.0	7963.6	7313.8	6817.2	6647.8	6638.7	6476.2	6448.8	6409.8	6423.6
37.5°	9462.6	9332.1	8895.1	8023.2	7242.9	6876.6	6863.0	6716.5	6604.4	6563.2	6641.0
40°	10485.4	10320.7	9959.2	8888.2	7869.8	7258.8	7215.4	6993.4	6865.2	6796.6	6961.4
42.5°	11478.7	11341.3	11032.4	9858.4	8643.3	7817.2	7721.1	7341.3	7245.1	7181.0	7478.5
45°	12357.4	12233.8	12007.3	10895.1	9549.5	8577.0	8483.1	7863.0	7833.3	7833.3	8263.4
47.5°	13071.4	13043.9	12803.7	11952.3	10618.2	9442.0	9279.5	8588.4	8668.5	8792.0	9377.9
50°	13863.2	13787.7	13531.3	12993.6	11874.5	10432.9	10300.1	9478.6	9778.4	10117.1	10988.9
52.5°	14590.9	14632.1	14346.0	14078.3	13293.3	11538.1	11304.7	10529.0	11176.6	11737.3	12876.9
55°	15339.2	15341.5	15261.4	15224.7	14780.8	12760.1	12503.9	11792.2	12821.9	13517.6	15078.4
57.5°	16041.8	16046.4	16165.3	16487.9	16506.3	14169.8	13879.2	13343.8	14650.4	15359.8	17348.4
60°	16668.8	16700.8	17025.8	17781.0	18023.5	15785.4	15510.8	15176.8	16540.6	17254.6	19735.2
62.5°	16879.3	16996.0	17719.2	18792.5	19522.5	17767.2	17497.2	17298.1	18527.0	19190.6	21730.7
65°	16522.3	16790.0	18188.3	19627.7	21064.8	20122.0	19854.2	19636.8	20591.1	21215.9	23369.3
67.5°	15645.8	15991.4	18160.8	20504.1	22936.7	22955.1	22705.6	22195.2	22804.0	23044.3	23902.4
70°	13336.9	13854.0	16561.2	20831.4	25085.5	26829.3	26589.0	25275.5	25012.4	23849.8	22401.3
72.5°	8593.0	9288.7	12194.9	18137.9	25563.8	30474.8	30461.1	28055.9	25710.3	22284.5	17966.3
75°	3135.2	3560.7	5666.1	11384.9	21458.4	30289.4	30378.6	27579.9	23469.9	17213.4	11192.6
77.5°	1142.0	1249.5	1849.0	4375.4	13197.3	24303.0	24488.3	22048.8	16705.3	8638.7	4435.0
80°	599.5	659.1	947.4	1698.0	5654.6	14433.0	14723.6	13103.4	7851.5	2602.0	1329.5
82.5°	331.8	359.3	530.9	922.2	2547.0	6171.8	6345.8	5176.4	2762.1	1103.0	549.2
85°	178.5	189.9	249.5	503.5	1244.9	2139.7	2187.8	1546.9	1100.7	647.6	265.5
87.5°	52.6	64.1	82.4	160.2	487.4	480.5	492.0	306.7	434.8	327.3	86.9
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°	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3	4382.3
2.5°	4402.9	4396.0	4370.9	4359.4	4345.7	4343.4	4354.8	4357.2	4359.4	4361.7	4370.9
5°	4444.1	4421.2	4398.3	4384.6	4389.2	4391.4	4414.4	4430.4	4441.8	4451.0	4455.6
7.5°	4524.1	4505.9	4467.0	4464.7	4471.6	4492.2	4521.9	4558.5	4579.1	4595.1	4599.7
10°	4643.1	4608.8	4563.1	4570.0	4583.7	4613.4	4675.2	4705.0	4739.3	4769.0	4762.2
12.5°	4764.5	4734.7	4682.1	4686.7	4709.6	4762.2	4821.7	4858.3	4881.2	4904.0	4913.2
15°	4922.4	4869.8	4812.5	4812.5	4853.7	4910.9	4938.3	4968.2	4981.9	5007.0	5016.1
17.5°	5084.8	5016.1	4940.7	4936.1	4986.4	5013.9	5029.9	5034.5	5039.1	5066.6	5075.7
20°	5247.3	5171.8	5064.2	5055.1	5066.6	5062.0	5059.7	5055.1	5062.0	5096.3	5110.0
22.5°	5407.5	5320.6	5171.8	5130.6	5098.6	5055.1	5052.8	5050.5	5055.1	5089.4	5112.3
25°	5595.2	5489.9	5290.8	5167.2	5059.7	5000.2	5007.0	5009.3	5013.9	5041.4	5078.0
27.5°	5798.8	5682.1	5400.6	5155.8	4961.3	4920.1	4908.6	4915.5	4931.5	4975.0	5018.5
30°	6002.5	5865.2	5501.4	5110.0	4837.7	4780.5	4743.9	4759.9	4810.2	4853.7	4901.8
32.5°	6187.8	6050.6	5581.4	5009.3	4679.8	4590.6	4542.5	4563.1	4613.4	4629.4	4686.7
35°	6405.2	6249.6	5615.8	4849.2	4508.2	4370.9	4306.7	4277.0	4302.2	4286.1	4336.6
37.5°	6647.8	6485.4	5611.2	4638.6	4306.7	4148.9	4059.6	3947.5	3894.9	3840.0	3874.3
40°	7007.1	6773.7	5556.2	4384.6	4057.4	3913.1	3753.0	3563.0	3444.1	3336.5	3343.3
42.5°	7496.8	7174.2	5455.6	4105.4	3775.9	3640.9	3423.5	3201.5	3013.8	2835.4	2819.4
45°	8226.9	7698.2	5329.7	3807.9	3471.5	3338.8	3103.1	2853.6	2640.8	2412.0	2384.6
47.5°	9279.5	8403.1	5210.7	3469.2	3151.2	3029.9	2817.0	2585.9	2334.1	2112.2	2087.0
50°	10725.8	9414.5	5100.9	3139.7	2835.4	2743.8	2574.5	2338.7	2084.7	1906.3	1894.8
52.5°	12565.7	10789.9	5055.1	2821.6	2540.2	2505.8	2370.8	2151.1	1910.8	1759.8	1748.3
55°	14677.9	12435.2	5055.1	2517.3	2281.5	2293.0	2199.1	1995.5	1787.3	1652.2	1638.5
57.5°	16833.6	14101.1	4963.6	2235.7	2061.9	2110.0	2050.4	1872.0	1684.3	1544.7	1521.8
60°	18819.9	15497.1	4592.8	1979.5	1867.3	1942.9	1903.9	1750.6	1521.8	1405.1	1386.8
62.5°	20346.2	16284.3	3878.8	1775.8	1707.1	1794.2	1773.6	1590.5	1492.1	1444.0	1427.9
65°	21110.6	16156.2	2965.7	1595.0	1572.1	1707.1	1663.7	1656.8	1579.0	1524.1	1505.7
67.5°	20641.4	15053.1	2151.1	1462.3	1494.3	1627.1	1794.2	1821.5	1677.4	1569.9	1551.5
70°	18584.2	13057.7	1601.9	1336.4	1395.9	1629.3	2045.8	1906.3	1645.3	1519.5	1498.9
72.5°	14137.8	9737.2	1242.6	1203.7	1267.8	1640.8	2157.9	1867.3	1553.8	1679.7	1665.9
75°	8085.0	5345.7	997.7	1041.2	1107.6	1533.2	2100.7	1766.7	1482.9	1542.4	1542.4
77.5°	3082.5	2055.0	823.8	881.0	890.2	1338.8	2009.2	1759.8	1411.9	1377.6	1256.3
80°	1068.7	803.2	681.9	700.3	688.8	1189.9	1926.8	1530.9	1155.7	1034.3	1000.0
82.5°	437.1	400.5	540.1	517.2	489.7	924.6	1556.2	1251.7	945.2	835.3	826.2
85°	189.9	254.0	357.0	313.5	283.7	640.7	1247.2	1059.5	798.7	688.8	686.5
87.5°	38.9	96.1	151.1	141.9	146.5	427.9	885.6	752.9	565.3	423.3	331.8
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)