

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: P884674

Luminaire Tested: **NAV-SB5C-835-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31784 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

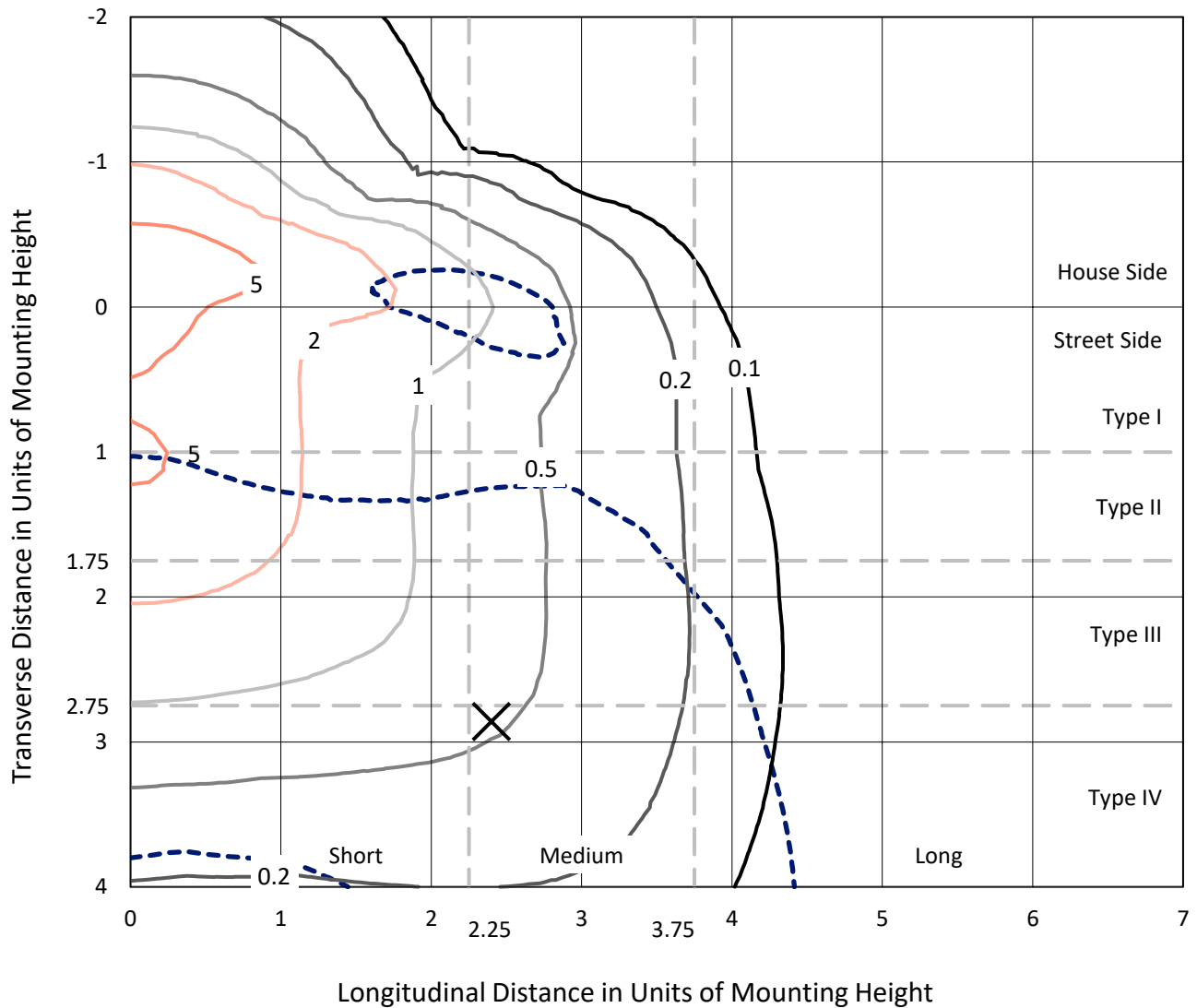
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

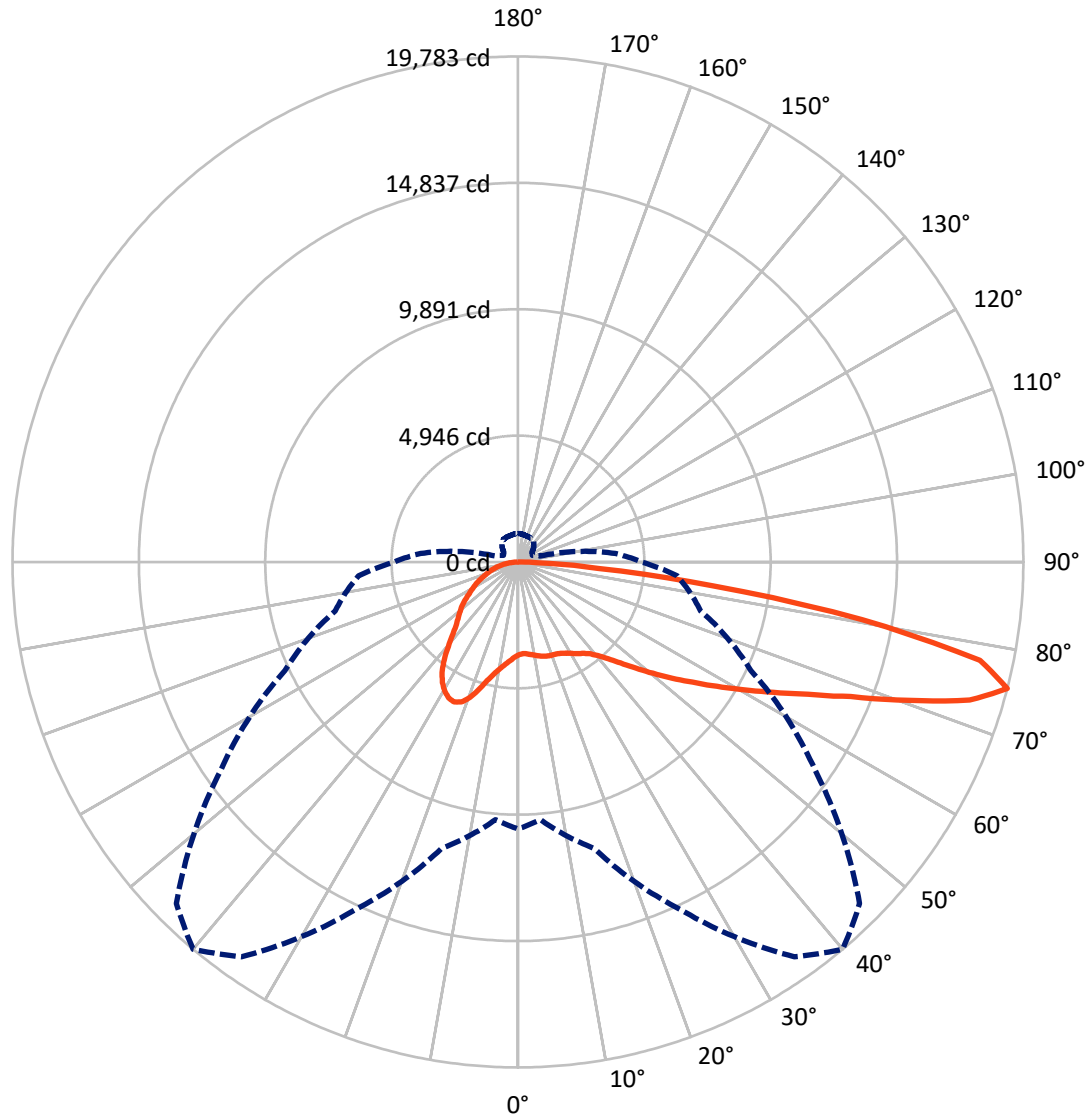
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9847.7	0.0	9847.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	21936.2	0.0	21936.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	31784.0	0.0	31784.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.8	1.1
10°-20°	1218.1	3.8
20°-30°	2224.1	7.0
30°-40°	3154.4	9.9
40°-50°	4259.4	13.4
50°-60°	5730.0	18.0
60°-70°	7272.7	22.9
70°-80°	6600.4	20.8
80°-90°	962.1	3.0
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°	31784.0	100.0
0°-180°	31784.0	100.0

Coefficient of Utilization



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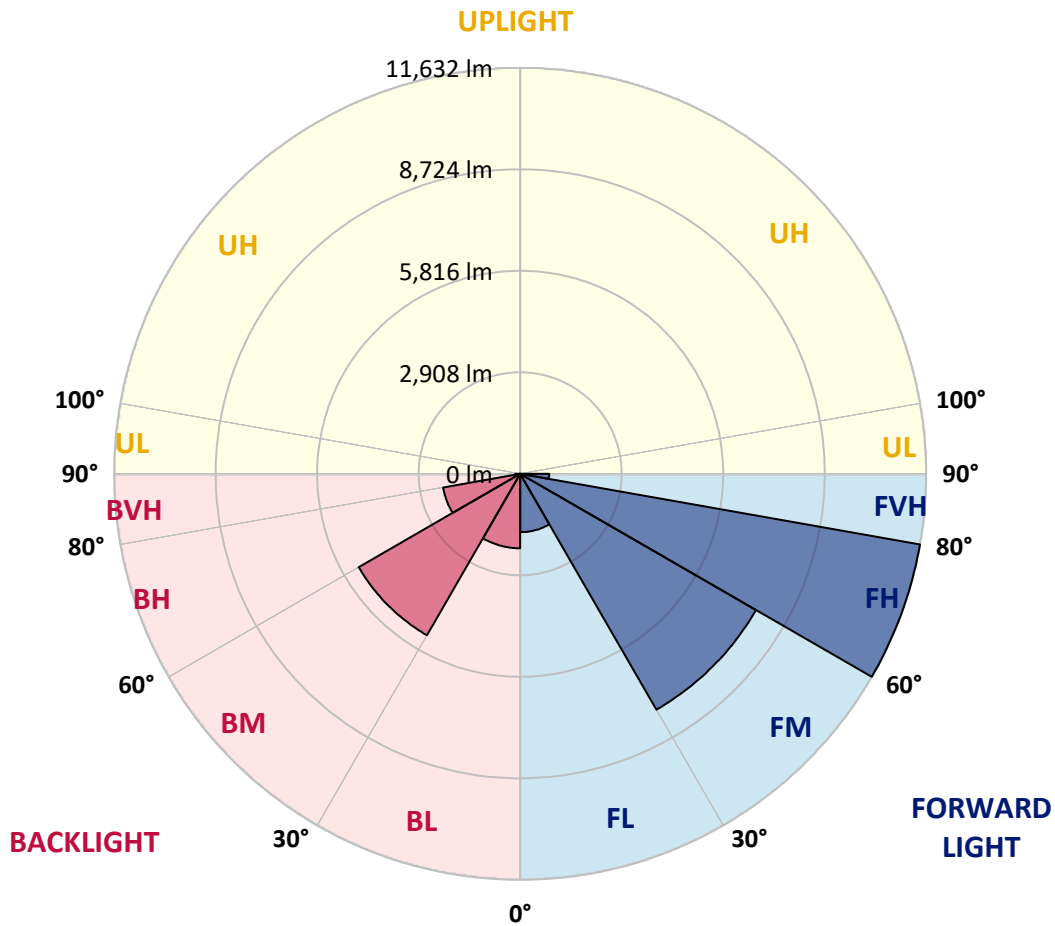
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1671.9	5.3			
FM (30°-60°)	7802.3	24.5			
FH (60°-80°)	11632.5	36.6			G4/12000
FVH (80°-90°)	829.7	2.6			G5
BL (0°-30°)	2133.1	6.7	B3/2500		
BM (30°-60°)	5341.5	16.8	B4/8500		
BH (60°-80°)	2240.7	7.0	B3/2500		G3/2500
BVH (80°-90°)	132.5	0.4			G2/225
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5
2.5°	3578.9	3599.1	3594.1	3587.3	3587.3	3589.0	3587.3	3599.1	3610.9	3622.7	3641.3
5°	3616.0	3636.2	3626.1	3617.7	3610.9	3609.3	3604.2	3602.5	3609.3	3624.4	3649.7
7.5°	3688.5	3708.7	3693.5	3678.4	3664.9	3658.1	3651.4	3641.3	3636.2	3644.7	3680.1
10°	3769.4	3789.6	3771.1	3744.1	3722.2	3713.8	3707.0	3696.9	3690.2	3695.2	3734.0
12.5°	3850.3	3870.6	3845.3	3808.2	3779.5	3774.5	3766.0	3762.7	3761.0	3759.3	3798.1
15°	3926.2	3943.0	3911.0	3867.2	3836.8	3828.4	3820.0	3825.0	3833.5	3843.6	3887.4
17.5°	3985.2	4002.0	3954.8	3897.5	3868.9	3865.5	3860.4	3877.3	3900.9	3926.2	3980.1
20°	4039.1	4056.0	3995.3	3917.8	3884.0	3884.0	3885.7	3921.1	3954.8	3991.9	4066.1
22.5°	4115.0	4128.5	4054.3	3948.1	3899.2	3902.6	3916.1	3951.5	3993.6	4044.2	4147.0
25°	4227.9	4238.1	4147.0	4005.4	3949.8	3959.9	3971.7	3988.6	4029.0	4088.0	4226.3
27.5°	4410.0	4418.4	4298.7	4106.6	4022.3	4039.1	4056.0	4044.2	4062.7	4113.3	4290.3
30°	4666.2	4671.3	4519.6	4265.0	4145.3	4153.8	4157.1	4108.2	4072.8	4113.3	4335.8
32.5°	4969.7	4968.0	4787.6	4457.2	4285.3	4276.8	4248.2	4152.1	4069.5	4104.9	4376.3
35°	5440.0	5421.5	5188.8	4726.9	4443.7	4391.5	4324.0	4201.0	4086.3	4096.4	4411.7
37.5°	6218.8	6161.5	5839.5	5168.6	4679.7	4546.6	4447.1	4280.2	4123.4	4093.1	4453.8
40°	7097.1	7024.6	6670.6	5773.8	5033.7	4819.6	4659.5	4393.1	4184.1	4108.2	4516.2
42.5°	8138.9	8036.1	7655.1	6486.9	5482.2	5172.0	4930.9	4536.4	4273.5	4157.1	4600.5
45°	9418.5	9281.9	8742.5	7291.0	6046.9	5633.9	5311.9	4753.9	4410.0	4251.5	4726.9
47.5°	10711.4	10745.2	9978.1	8211.4	6724.6	6203.7	5789.0	5080.9	4608.9	4403.3	4930.9
50°	12085.4	12109.0	11207.1	9231.3	7493.3	6847.6	6325.0	5446.8	4885.4	4619.0	5236.0
52.5°	13157.5	13160.9	12323.1	10298.4	8294.0	7555.7	6903.3	5864.8	5205.7	4905.6	5642.3
55°	13828.5	13820.0	13105.3	11308.2	9214.5	8299.1	7543.9	6340.2	5596.8	5242.8	6153.1
57.5°	14315.6	14290.4	13644.7	12176.4	10195.6	9177.4	8268.8	6879.7	6058.7	5644.0	6825.7
60°	14501.1	14485.9	14010.5	12926.6	11227.3	10148.4	9104.9	7483.2	6583.0	6117.7	7690.5
62.5°	14571.9	14600.5	14369.6	13653.1	12331.5	11223.9	10023.7	8204.7	7173.0	6653.8	8602.5
65°	14821.4	14873.6	14826.4	14603.9	13579.0	12483.2	11242.5	9062.8	7817.0	7228.6	9555.0
67.5°	15315.3	15367.6	15387.8	15741.8	15102.9	14052.7	12763.0	10131.5	8570.5	7825.4	10271.5
70°	15303.5	15288.3	15645.7	16647.1	17011.2	16225.6	14813.0	11446.4	9469.0	8321.0	10362.5
72.5°	13929.6	13808.2	14652.8	16637.0	18599.2	18494.7	17316.3	13142.3	10244.5	8381.7	8992.0
75°	10450.2	10126.5	11618.4	14993.3	18863.9	19782.6	18907.7	14194.3	10060.7	7405.6	6257.6
77.5°	4469.0	4143.6	5901.9	11099.2	16883.1	18493.0	17447.8	12383.7	8031.1	4897.2	3073.2
80°	1169.9	1168.2	1783.6	5032.1	11481.9	13656.5	11980.8	7997.3	4588.7	1749.8	847.9
82.5°	483.8	472.0	655.8	1957.2	5610.3	7663.6	6254.2	3567.1	1657.1	473.7	281.5
85°	180.4	178.7	318.6	676.0	1979.1	3160.8	2287.6	912.0	413.0	231.0	126.4
87.5°	50.6	48.9	69.1	234.3	482.1	731.6	391.1	150.0	116.3	91.0	37.1
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°	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5	3634.5
2.5°	3646.3	3654.8	3669.9	3681.7	3696.9	3713.8	3737.4	3752.5	3767.7	3777.8	3771.1
5°	3661.5	3680.1	3718.8	3757.6	3803.1	3845.3	3894.2	3929.6	3958.2	3966.6	3970.0
7.5°	3695.2	3725.6	3791.3	3857.1	3929.6	3998.7	4069.5	4130.2	4179.0	4197.6	4199.3
10°	3754.2	3794.7	3887.4	3980.1	4076.2	4182.4	4273.5	4361.1	4430.2	4458.9	4460.6
12.5°	3828.4	3879.0	4000.4	4128.5	4261.7	4408.3	4526.3	4634.2	4720.2	4759.0	4759.0
15°	3924.5	3990.2	4145.3	4317.3	4512.8	4716.8	4866.8	4986.5	5082.6	5129.8	5126.5
17.5°	4029.0	4116.7	4312.2	4571.8	4851.7	5119.7	5295.0	5382.7	5482.2	5527.7	5526.0
20°	4130.2	4238.1	4517.9	4895.5	5268.1	5553.0	5694.6	5718.2	5724.9	5730.0	5743.5
22.5°	4234.7	4379.7	4775.8	5303.5	5703.0	5900.2	5920.5	5819.3	5677.7	5612.0	5630.5
25°	4349.3	4541.5	5113.0	5753.6	6077.2	6100.8	5945.7	5699.6	5431.6	5308.5	5327.1
27.5°	4460.6	4728.6	5517.6	6183.4	6347.0	6139.6	5805.8	5456.9	5133.2	5003.4	5018.6
30°	4571.8	4942.7	5964.3	6559.4	6470.0	6043.5	5585.0	5195.6	4870.2	4733.7	4748.8
32.5°	4684.8	5192.2	6478.5	6830.8	6448.1	5839.5	5310.2	4902.2	4615.7	4472.4	4490.9
35°	4812.9	5499.0	6965.6	6979.1	6301.4	5539.5	4947.8	4551.6	4302.1	4187.5	4212.8
37.5°	4979.8	5888.4	7395.5	7016.2	6045.2	5099.5	4497.7	4136.9	3931.2	3879.0	3916.1
40°	5187.1	6357.1	7724.2	6957.2	5665.9	4565.1	4005.4	3717.1	3600.8	3612.6	3653.1
42.5°	5456.9	6881.4	7955.2	6805.5	5138.3	4013.8	3573.9	3445.7	3501.4	3548.6	3592.4
45°	5807.5	7425.9	8098.5	6547.6	4541.5	3546.9	3319.3	3349.6	3391.8	3396.8	3430.6
47.5°	6255.9	7977.1	8192.9	6158.2	3932.9	3218.2	3157.5	3164.2	3155.8	3120.4	3147.4
50°	6815.6	8513.2	8277.2	5642.3	3415.4	3012.5	2931.6	2908.0	2791.7	2677.0	2692.2
52.5°	7452.8	9005.4	8312.6	5001.7	3012.5	2840.5	2709.0	2560.7	2343.2	2307.8	2319.6
55°	8160.9	9460.6	8221.6	4214.5	2673.6	2619.7	2420.8	2242.1	2218.5	2188.1	2193.2
57.5°	9007.1	9951.2	8036.1	3336.2	2326.4	2361.8	2167.9	2188.1	2146.0	2098.8	2090.4
60°	9932.6	10458.6	7710.8	2535.4	1967.3	2039.8	2102.2	2100.5	2088.7	2049.9	2036.4
62.5°	10765.4	10792.4	7070.2	1942.0	1652.1	1790.3	1960.6	1958.9	1948.8	1926.8	1918.4
65°	11261.0	10741.8	6001.4	1529.0	1392.5	1584.6	1768.4	1781.9	1783.6	1781.9	1781.9
67.5°	11173.4	10150.1	4534.7	1217.1	1178.4	1375.6	1577.9	1596.4	1609.9	1613.3	1616.7
70°	10182.1	8850.3	2956.9	971.0	987.9	1191.8	1397.5	1416.1	1427.9	1441.3	1448.1
72.5°	7936.7	6507.1	1692.5	785.6	821.0	1033.4	1218.8	1240.7	1247.5	1272.8	1282.9
75°	4836.5	3826.7	913.7	618.7	674.3	883.3	1041.8	1067.1	1078.9	1109.2	1112.6
77.5°	2299.4	1657.1	520.9	482.1	542.8	721.5	880.0	908.6	876.6	893.5	880.0
80°	777.1	615.3	328.7	367.5	414.7	563.1	704.7	733.3	665.9	662.5	655.8
82.5°	271.4	249.5	209.0	244.4	268.0	402.9	532.7	569.8	495.6	493.9	470.3
85°	106.2	101.1	116.3	133.2	160.1	247.8	350.6	369.2	305.1	246.1	242.8
87.5°	21.9	23.6	28.7	30.3	48.9	86.0	126.4	155.1	123.1	104.5	96.1
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)