

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: P884434

Luminaire Tested: **NAV-SB5B-730-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884434
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-SB5B-730-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 450mA 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: 27882 lumens
Efficiency: N/A
Efficacy: 152.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

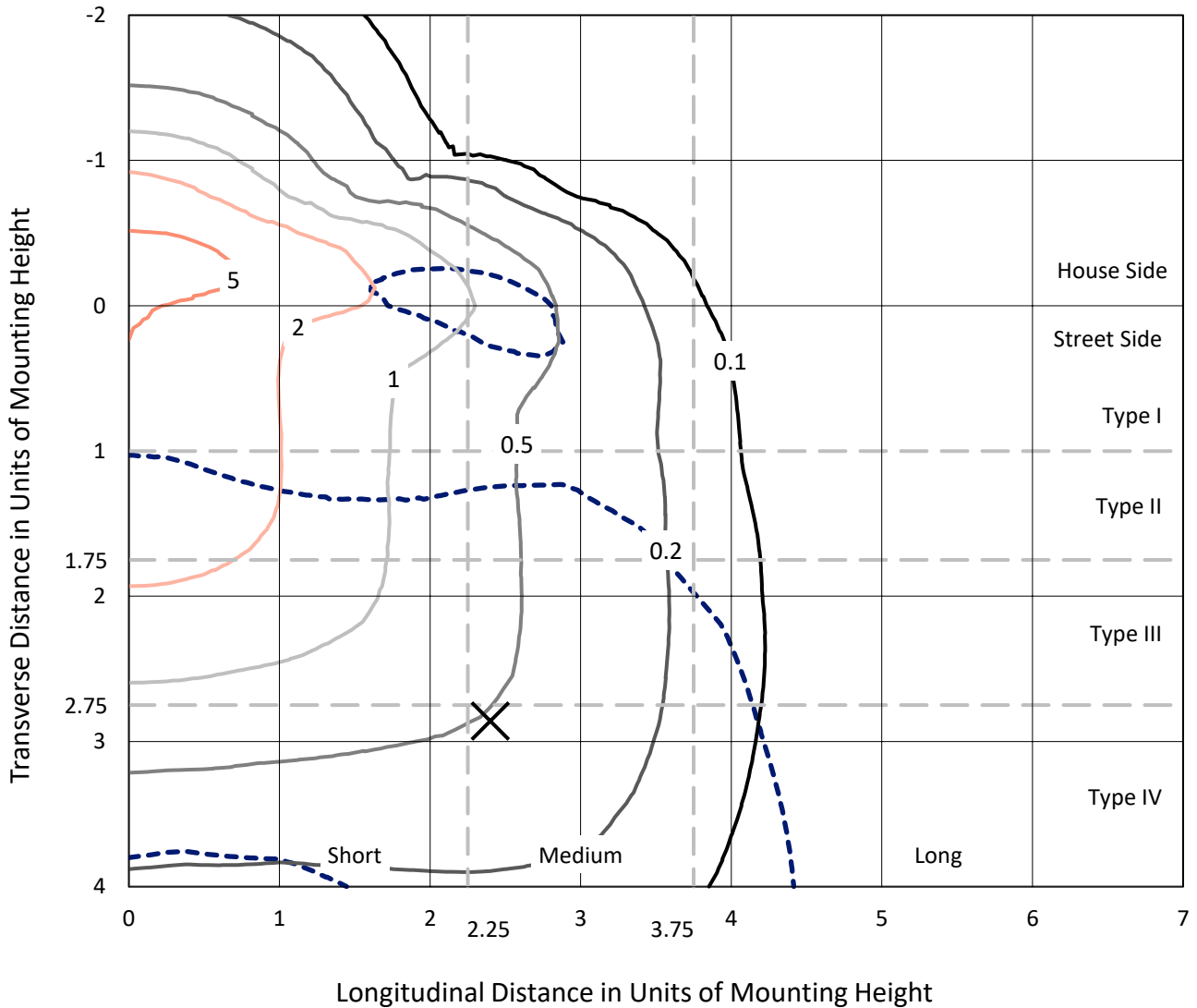
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

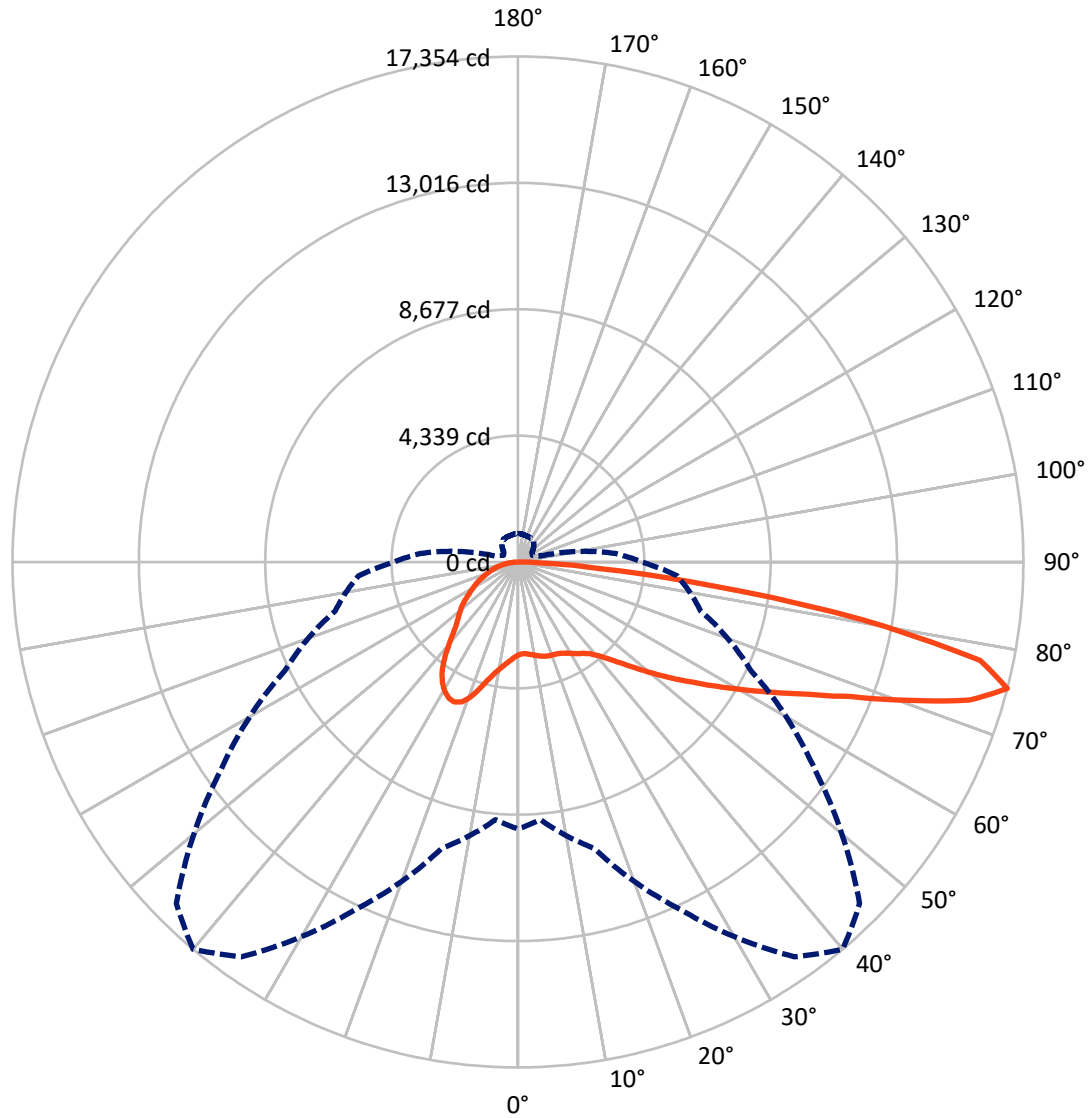
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 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	8638.8	0.0	8638.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	19243.2	0.0	19243.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	27882.0	0.0	27882.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.3	1.1
10°-20°	1068.5	3.8
20°-30°	1951.1	7.0
30°-40°	2767.1	9.9
40°-50°	3736.5	13.4
50°-60°	5026.6	18.0
60°-70°	6379.9	22.9
70°-80°	5790.1	20.8
80°-90°	844.0	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°	27882.0	100.0
0°-180°	27882.0	100.0

Coefficient of Utilization



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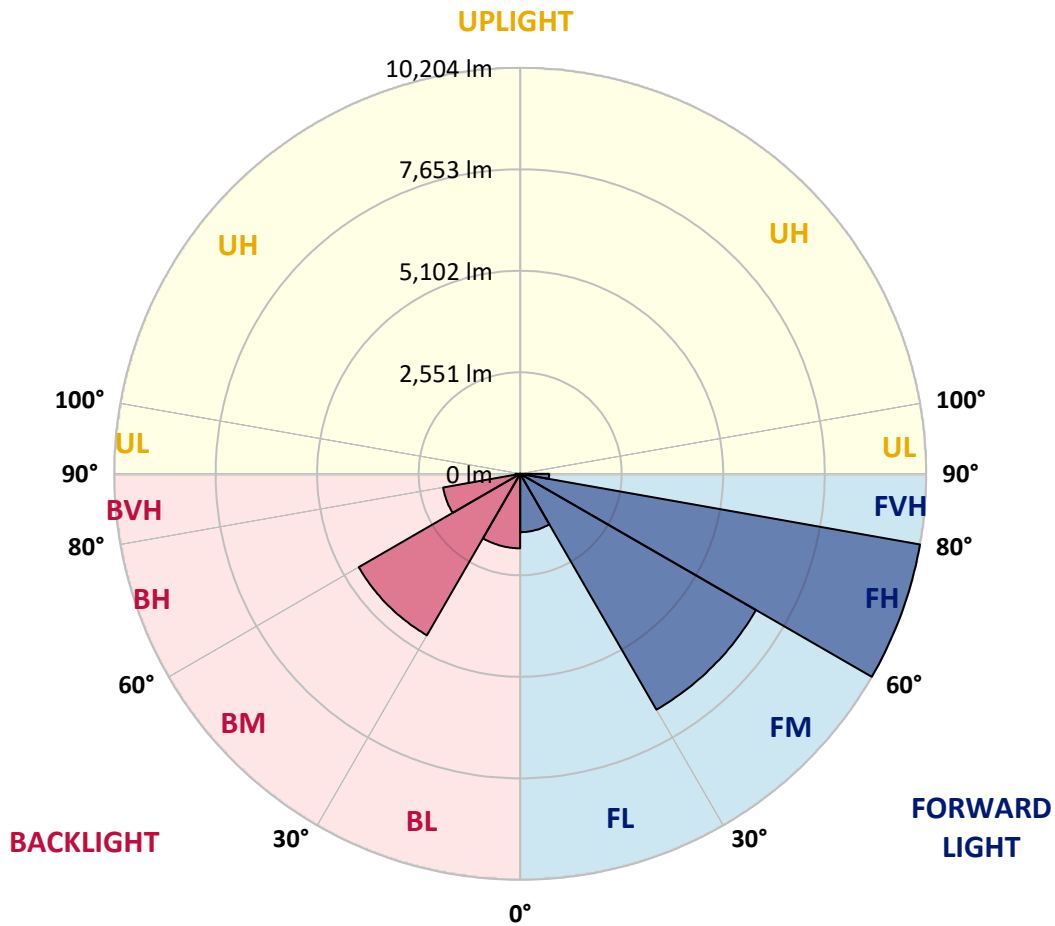
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1466.6	5.3			
FM (30°-60°)	6844.4	24.5			
FH (60°-80°)	10204.4	36.6			G4/12000
FVH (80°-90°)	727.8	2.6			G4/750
BL (0°-30°)	1871.2	6.7	B3/2500		
BM (30°-60°)	4685.8	16.8	B3/5000		
BH (60°-80°)	1965.6	7.0	B3/2500		G3/2500
BVH (80°-90°)	116.2	0.4			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 IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3
2.5°	3139.5	3157.3	3152.9	3146.9	3146.9	3148.4	3146.9	3157.3	3167.6	3178.0	3194.3
5°	3172.1	3189.8	3180.9	3173.6	3167.6	3166.2	3161.7	3160.2	3166.2	3179.5	3201.7
7.5°	3235.7	3253.4	3240.1	3226.8	3215.0	3209.0	3203.1	3194.3	3189.8	3197.2	3228.3
10°	3306.6	3324.4	3308.1	3284.5	3265.2	3257.8	3251.9	3243.1	3237.1	3241.6	3275.6
12.5°	3377.6	3395.4	3373.2	3340.7	3315.5	3311.1	3303.7	3300.7	3299.3	3297.8	3331.8
15°	3444.2	3459.0	3430.9	3392.4	3365.8	3358.4	3351.0	3355.5	3362.8	3371.7	3410.2
17.5°	3495.9	3510.7	3469.3	3419.0	3393.9	3390.9	3386.5	3401.3	3422.0	3444.2	3491.5
20°	3543.3	3558.0	3504.8	3436.8	3407.2	3407.2	3408.7	3439.7	3469.3	3501.9	3566.9
22.5°	3609.8	3621.6	3556.6	3463.4	3420.5	3423.5	3435.3	3466.4	3503.3	3547.7	3637.9
25°	3708.9	3717.8	3637.9	3513.7	3464.9	3473.8	3484.1	3498.9	3534.4	3586.1	3707.4
27.5°	3868.6	3876.0	3771.0	3602.4	3528.5	3543.3	3558.0	3547.7	3564.0	3608.3	3763.6
30°	4093.4	4097.8	3964.7	3741.4	3636.4	3643.8	3646.8	3603.9	3572.8	3608.3	3803.5
32.5°	4359.6	4358.1	4199.9	3910.0	3759.2	3751.8	3726.6	3642.3	3569.9	3600.9	3839.0
35°	4772.2	4755.9	4551.8	4146.6	3898.2	3852.3	3793.2	3685.2	3584.7	3593.5	3870.1
37.5°	5455.4	5405.1	5122.6	4534.1	4105.2	3988.4	3901.1	3754.7	3617.2	3590.6	3907.1
40°	6225.8	6162.3	5851.7	5065.0	4415.8	4228.0	4087.5	3853.8	3670.4	3603.9	3961.8
42.5°	7139.8	7049.6	6715.3	5690.5	4809.1	4537.0	4325.6	3979.5	3748.8	3646.8	4035.7
45°	8262.2	8142.4	7669.2	6395.9	5304.5	4942.2	4659.8	4170.3	3868.6	3729.6	4146.6
47.5°	9396.4	9426.0	8753.2	7203.4	5899.0	5442.1	5078.3	4457.2	4043.1	3862.7	4325.6
50°	10601.7	10622.4	9831.2	8098.0	6573.4	6007.0	5548.5	4778.1	4285.6	4052.0	4593.2
52.5°	11542.2	11545.2	10810.2	9034.1	7275.8	6628.1	6055.8	5144.8	4566.6	4303.4	4949.6
55°	12130.8	12123.4	11496.4	9919.9	8083.3	7280.2	6617.7	5561.9	4909.7	4599.1	5397.7
57.5°	12558.2	12536.0	11969.6	10681.5	8943.9	8050.7	7253.6	6035.1	5314.9	4951.1	5987.8
60°	12720.8	12707.5	12290.5	11339.6	9849.0	8902.5	7987.1	6564.5	5774.8	5366.7	6746.4
62.5°	12783.0	12808.1	12605.5	11977.0	10817.6	9846.0	8793.1	7197.4	6292.4	5836.9	7546.4
65°	13001.8	13047.7	13006.3	12811.0	11911.9	10950.7	9862.3	7950.2	6857.3	6341.2	8382.0
67.5°	13435.1	13481.0	13498.7	13809.3	13248.8	12327.5	11196.2	8887.7	7518.3	6864.7	9010.5
70°	13424.8	13411.5	13725.0	14603.4	14922.8	14233.7	12994.4	10041.2	8306.6	7299.5	9090.3
72.5°	12219.5	12113.0	12853.9	14594.5	16315.9	16224.2	15190.5	11528.9	8986.8	7352.7	7888.0
75°	9167.2	8883.3	10192.1	13152.7	16548.0	17354.0	16586.5	12451.7	8825.6	6496.5	5489.4
77.5°	3920.4	3634.9	5177.4	9736.6	14810.4	16222.7	15305.8	10863.4	7045.1	4296.0	2695.9
80°	1026.3	1024.8	1564.6	4414.3	10072.3	11980.0	10510.0	7015.5	4025.4	1535.0	743.8
82.5°	424.4	414.1	575.3	1716.9	4921.5	6722.7	5486.4	3129.2	1453.7	415.5	247.0
85°	158.2	156.8	279.5	593.0	1736.1	2772.8	2006.8	800.0	362.3	202.6	110.9
87.5°	44.4	42.9	60.6	205.6	422.9	641.8	343.1	131.6	102.0	79.9	32.5
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°	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3	3188.3
2.5°	3198.7	3206.1	3219.4	3229.8	3243.1	3257.8	3278.6	3291.9	3305.2	3314.0	3308.1
5°	3212.0	3228.3	3262.3	3296.3	3336.2	3373.2	3416.1	3447.1	3472.3	3479.7	3482.6
7.5°	3241.6	3268.2	3325.9	3383.5	3447.1	3507.8	3569.9	3623.1	3666.0	3682.3	3683.7
10°	3293.3	3328.8	3410.2	3491.5	3575.8	3669.0	3748.8	3825.7	3886.3	3911.5	3913.0
12.5°	3358.4	3402.8	3509.2	3621.6	3738.5	3867.1	3970.6	4065.3	4140.7	4174.7	4174.7
15°	3442.7	3500.4	3636.4	3787.3	3958.8	4137.7	4269.4	4374.4	4458.7	4500.1	4497.1
17.5°	3534.4	3611.3	3782.8	4010.6	4256.1	4491.2	4645.0	4721.9	4809.1	4849.1	4847.6
20°	3623.1	3717.8	3963.2	4294.5	4621.3	4871.2	4995.5	5016.2	5022.1	5026.5	5038.4
22.5°	3714.8	3842.0	4189.5	4652.4	5002.9	5175.9	5193.6	5104.9	4980.7	4923.0	4939.3
25°	3815.4	3984.0	4485.3	5047.2	5331.2	5351.9	5215.8	4999.9	4764.8	4656.8	4673.1
27.5°	3913.0	4148.1	4840.2	5424.3	5567.8	5385.9	5093.1	4787.0	4503.0	4389.1	4402.5
30°	4010.6	4335.9	5232.1	5754.1	5675.7	5301.6	4899.3	4557.7	4272.3	4152.5	4165.8
32.5°	4109.7	4554.8	5683.1	5992.2	5656.5	5122.6	4658.3	4300.4	4049.0	3923.3	3939.6
35°	4222.0	4823.9	6110.5	6122.3	5527.8	4859.4	4340.3	3992.8	3774.0	3673.4	3695.6
37.5°	4368.4	5165.5	6487.6	6154.9	5303.1	4473.4	3945.5	3629.0	3448.6	3402.8	3435.3
40°	4550.3	5576.6	6776.0	6103.1	4970.3	4004.7	3513.7	3260.8	3158.8	3169.1	3204.6
42.5°	4787.0	6036.6	6978.6	5970.0	4507.5	3521.1	3135.1	3022.7	3071.5	3112.9	3151.4
45°	5094.5	6514.2	7104.3	5743.8	3984.0	3111.4	2911.8	2938.4	2975.4	2979.8	3009.4
47.5°	5487.9	6997.8	7187.1	5402.1	3450.1	2823.1	2769.8	2775.8	2768.4	2737.3	2761.0
50°	5978.9	7468.1	7261.0	4949.6	2996.1	2642.7	2571.7	2551.0	2448.9	2348.4	2361.7
52.5°	6537.9	7899.9	7292.1	4387.7	2642.7	2491.8	2376.5	2246.3	2055.6	2024.5	2034.9
55°	7159.0	8299.2	7212.2	3697.1	2345.4	2298.1	2123.6	1966.8	1946.1	1919.5	1923.9
57.5°	7901.4	8729.5	7049.6	2926.6	2040.8	2071.8	1901.8	1919.5	1882.5	1841.1	1833.7
60°	8713.2	9174.6	6764.1	2224.2	1725.8	1789.4	1844.1	1842.6	1832.3	1798.2	1786.4
62.5°	9443.8	9467.4	6202.2	1703.6	1449.2	1570.5	1719.9	1718.4	1709.5	1690.3	1682.9
65°	9878.5	9423.1	5264.6	1341.3	1221.5	1390.1	1551.3	1563.1	1564.6	1563.1	1563.1
67.5°	9801.6	8904.0	3978.0	1067.7	1033.7	1206.7	1384.2	1400.4	1412.3	1415.2	1418.2
70°	8932.1	7763.8	2593.9	851.8	866.6	1045.5	1225.9	1242.2	1252.6	1264.4	1270.3
72.5°	6962.3	5708.3	1484.7	689.1	720.2	906.5	1069.2	1088.4	1094.3	1116.5	1125.4
75°	4242.7	3356.9	801.5	542.7	591.5	774.9	913.9	936.1	946.4	973.1	976.0
77.5°	2017.1	1453.7	457.0	422.9	476.2	632.9	771.9	797.1	769.0	783.8	771.9
80°	681.7	539.8	288.4	322.4	363.8	493.9	618.1	643.3	584.1	581.2	575.3
82.5°	238.1	218.9	183.4	214.4	235.1	353.4	467.3	499.8	434.8	433.3	412.6
85°	93.2	88.7	102.0	116.8	140.5	217.4	307.6	323.9	267.7	215.9	213.0
87.5°	19.2	20.7	25.1	26.6	42.9	75.4	110.9	136.1	108.0	91.7	84.3
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)