

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: P883414

Luminaire Tested: **NAV-SB3D-730-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883414
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-SB3D-730-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3000K, 900mA 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: 29783 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

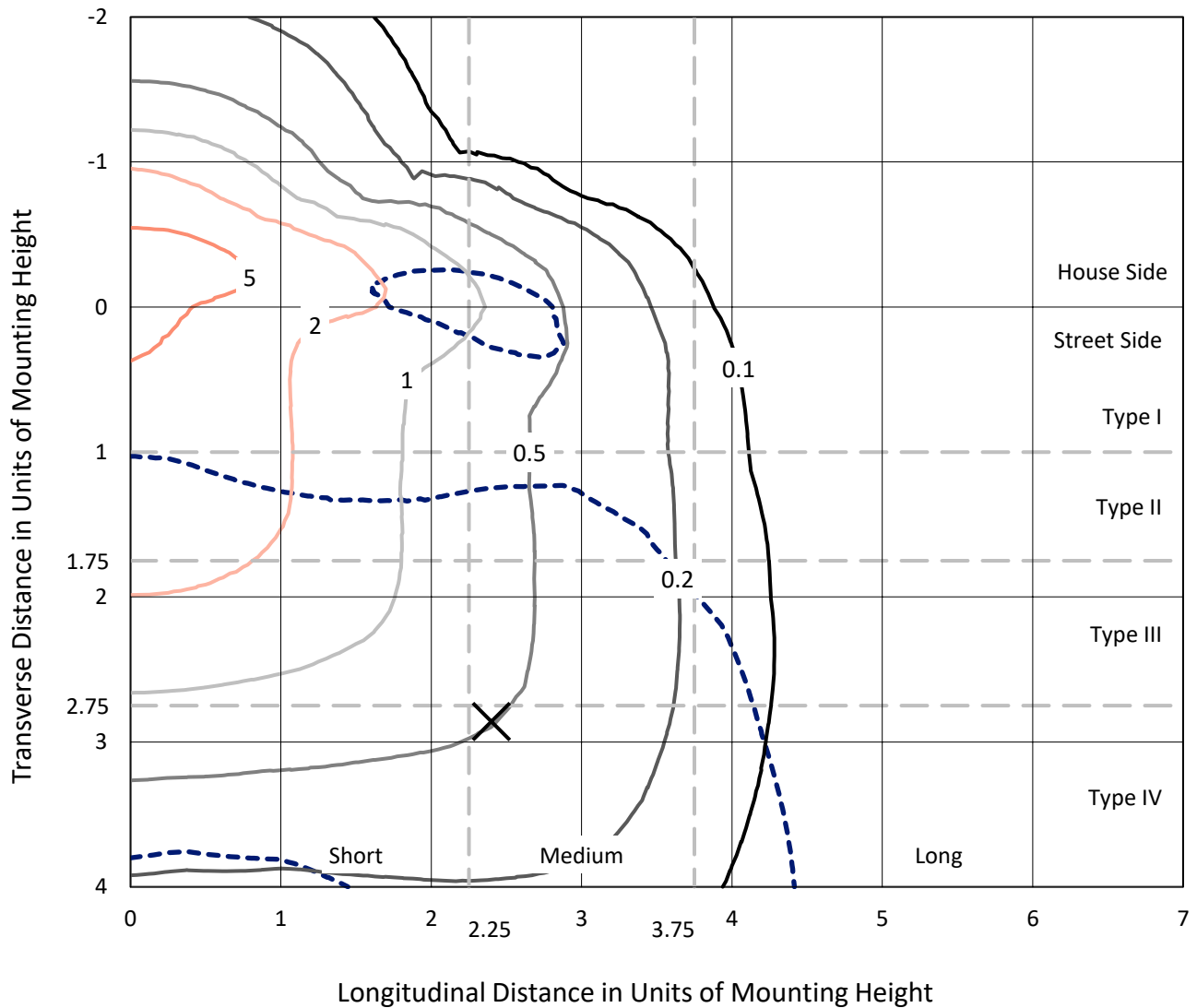
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

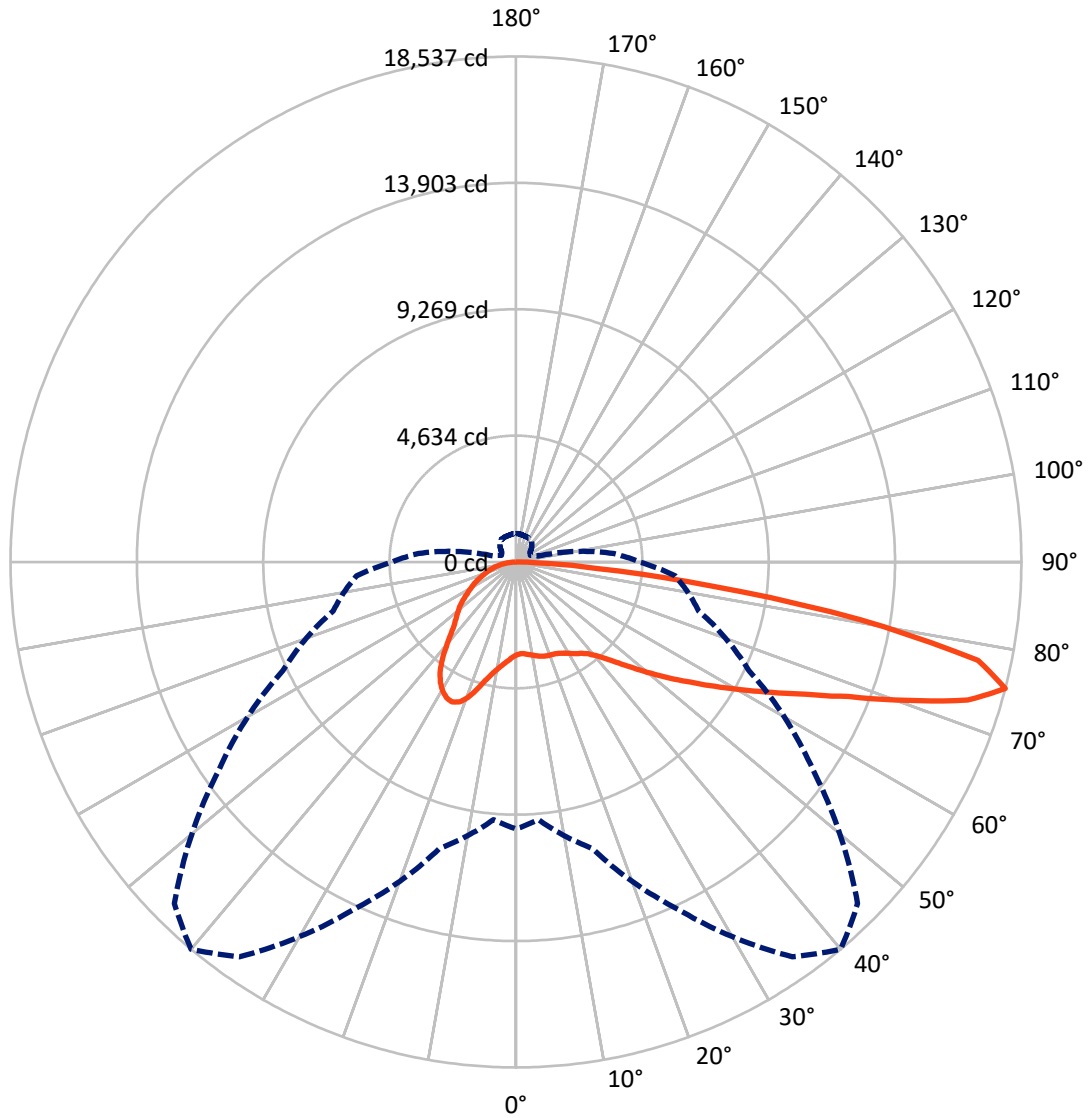
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 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	9227.8	0.0	9227.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	20555.2	0.0	20555.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	29783.0	0.0	29783.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.0	1.1
10°-20°	1141.4	3.8
20°-30°	2084.1	7.0
30°-40°	2955.8	9.9
40°-50°	3991.2	13.4
50°-60°	5369.3	18.0
60°-70°	6814.8	22.9
70°-80°	6184.9	20.8
80°-90°	901.6	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°	29783.0	100.0
0°-180°	29783.0	100.0

Coefficient of Utilization



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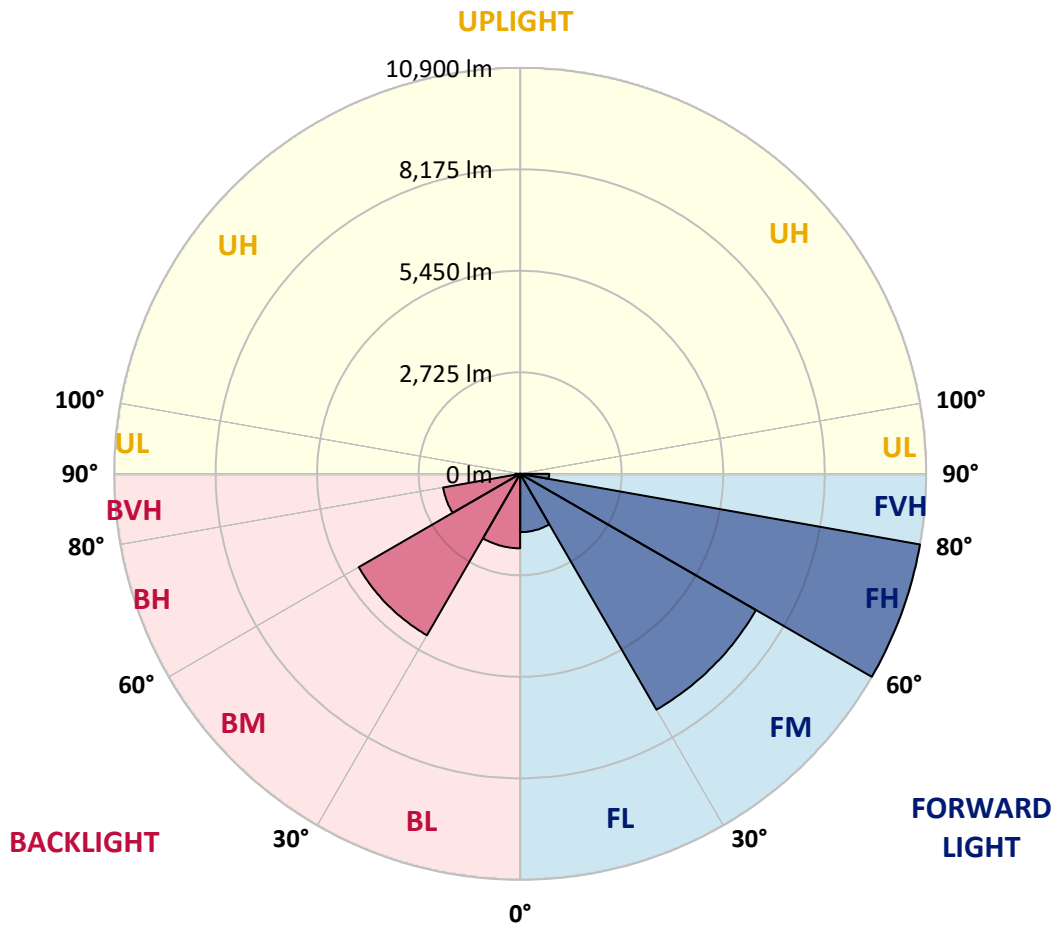
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1566.6	5.3			
FM	(30°-60°)	7311.1	24.5			
FH	(60°-80°)	10900.1	36.6			G4/12000
FVH	(80°-90°)	777.4	2.6			G5
BL	(0°-30°)	1998.8	6.7	B3/2500		
BM	(30°-60°)	5005.2	16.8	B4/8500		
BH	(60°-80°)	2099.6	7.0	B3/2500		G3/2500
BVH	(80°-90°)	124.1	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°	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7
2.5°	3353.6	3372.6	3367.8	3361.5	3361.5	3363.1	3361.5	3372.6	3383.6	3394.7	3412.0
5°	3388.3	3407.3	3397.8	3389.9	3383.6	3382.0	3377.3	3375.7	3382.0	3396.2	3419.9
7.5°	3456.3	3475.2	3461.0	3446.8	3434.2	3427.8	3421.5	3412.0	3407.3	3415.2	3448.4
10°	3532.1	3551.1	3533.7	3508.4	3487.9	3480.0	3473.7	3464.2	3457.9	3462.6	3498.9
12.5°	3607.9	3626.9	3603.2	3568.4	3541.6	3536.8	3528.9	3525.8	3524.2	3522.6	3559.0
15°	3679.0	3694.8	3664.8	3623.7	3595.3	3587.4	3579.5	3584.2	3592.1	3601.6	3642.7
17.5°	3734.3	3750.1	3705.9	3652.2	3625.3	3622.1	3617.4	3633.2	3655.3	3679.0	3729.6
20°	3784.8	3800.6	3743.8	3671.1	3639.5	3639.5	3641.1	3674.3	3705.9	3740.6	3810.1
22.5°	3855.9	3868.6	3799.1	3699.5	3653.7	3656.9	3669.5	3702.7	3742.2	3789.6	3885.9
25°	3961.8	3971.2	3885.9	3753.2	3701.1	3710.6	3721.7	3737.5	3775.4	3830.7	3960.2
27.5°	4132.4	4140.3	4028.1	3848.0	3769.0	3784.8	3800.6	3789.6	3807.0	3854.3	4020.2
30°	4372.5	4377.2	4235.0	3996.5	3884.4	3892.3	3895.4	3849.6	3816.4	3854.3	4062.9
32.5°	4656.8	4655.2	4486.2	4176.6	4015.5	4007.6	3980.7	3890.7	3813.3	3846.4	4100.8
35°	5097.5	5080.2	4862.2	4429.3	4164.0	4115.0	4051.8	3936.5	3829.1	3838.5	4133.9
37.5°	5827.3	5773.6	5471.9	4843.2	4385.1	4260.3	4167.1	4010.7	3863.8	3835.4	4173.4
40°	6650.3	6582.4	6250.7	5410.3	4716.8	4516.2	4366.2	4116.6	3920.7	3849.6	4231.9
42.5°	7626.6	7530.2	7173.2	6078.5	5137.0	4846.4	4620.5	4250.8	4004.4	3895.4	4310.9
45°	8825.5	8697.6	8192.1	6832.0	5666.2	5279.2	4977.5	4454.6	4132.4	3983.9	4429.3
47.5°	10037.1	10068.7	9349.9	7694.5	6301.2	5813.1	5424.5	4761.1	4318.8	4126.0	4620.5
50°	11324.5	11346.6	10501.5	8650.2	7021.5	6416.5	5926.8	5103.8	4577.8	4328.2	4906.4
52.5°	12329.2	12332.3	11547.2	9650.1	7771.9	7080.0	6468.7	5495.6	4878.0	4596.8	5287.1
55°	12957.9	12950.0	12280.2	10596.3	8634.4	7776.6	7068.9	5941.1	5244.4	4912.7	5765.7
57.5°	13414.4	13390.7	12785.7	11409.8	9553.7	8599.6	7748.2	6446.6	5677.3	5288.7	6396.0
60°	13588.2	13573.9	13128.5	12112.8	10520.5	9509.5	8531.7	7012.1	6168.5	5732.6	7206.4
62.5°	13654.5	13681.4	13464.9	12793.6	11555.1	10517.3	9392.6	7688.2	6721.4	6234.9	8061.0
65°	13888.3	13937.3	13893.0	13684.5	12724.1	11697.3	10534.7	8492.2	7324.8	6773.5	8953.5
67.5°	14351.1	14400.1	14419.0	14750.8	14152.1	13168.0	11959.5	9493.7	8030.9	7332.7	9624.8
70°	14340.1	14325.8	14660.7	15599.0	15940.2	15204.1	13880.4	10725.8	8872.9	7797.2	9710.1
72.5°	13052.6	12938.9	13730.3	15589.6	17428.3	17330.3	16226.2	12315.0	9599.5	7854.0	8425.9
75°	9792.3	9489.0	10886.9	14049.4	17676.3	18537.2	17717.4	13300.7	9427.4	6939.4	5863.7
77.5°	4187.7	3882.8	5530.4	10400.4	15820.2	17328.8	16349.4	11604.1	7525.5	4588.9	2879.7
80°	1096.3	1094.7	1671.3	4715.3	10759.0	12796.7	11226.6	7493.9	4299.8	1639.7	794.6
82.5°	453.4	442.3	614.5	1834.0	5257.1	7181.1	5860.5	3342.5	1552.8	443.9	263.8
85°	169.0	167.4	298.6	633.4	1854.5	2961.8	2143.6	854.6	387.0	216.4	118.5
87.5°	47.4	45.8	64.8	219.6	451.8	685.6	366.5	140.6	109.0	85.3	34.8
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°	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7	3405.7
2.5°	3416.8	3424.7	3438.9	3450.0	3464.2	3480.0	3502.1	3516.3	3530.5	3540.0	3533.7
5°	3431.0	3448.4	3484.7	3521.0	3563.7	3603.2	3649.0	3682.2	3709.0	3716.9	3720.1
7.5°	3462.6	3491.0	3552.6	3614.2	3682.2	3746.9	3813.3	3870.1	3916.0	3933.3	3934.9
10°	3517.9	3555.8	3642.7	3729.6	3819.6	3919.1	4004.4	4086.6	4151.3	4178.2	4179.8
12.5°	3587.4	3634.8	3748.5	3868.6	3993.4	4130.8	4241.4	4342.5	4423.0	4459.4	4459.4
15°	3677.4	3739.0	3884.4	4045.5	4228.7	4419.9	4560.5	4672.6	4762.6	4806.9	4803.7
17.5°	3775.4	3857.5	4040.7	4284.0	4546.2	4797.4	4961.7	5043.8	5137.0	5179.7	5178.1
20°	3870.1	3971.2	4233.5	4587.3	4936.4	5203.4	5336.1	5358.2	5364.5	5369.2	5381.9
22.5°	3968.1	4103.9	4475.1	4969.6	5344.0	5528.8	5547.7	5453.0	5320.3	5258.7	5276.0
25°	4075.5	4255.6	4791.1	5391.3	5694.6	5716.8	5571.4	5340.8	5089.6	4974.3	4991.7
27.5°	4179.8	4430.9	5170.2	5794.2	5947.4	5753.1	5440.3	5113.3	4810.0	4688.4	4702.6
30°	4284.0	4631.5	5588.8	6146.4	6062.7	5663.0	5233.4	4868.5	4563.6	4435.7	4449.9
32.5°	4389.8	4865.3	6070.6	6400.7	6042.2	5471.9	4975.9	4593.6	4325.1	4190.8	4208.2
35°	4509.9	5152.8	6527.1	6539.8	5904.7	5190.7	4636.3	4265.1	4031.3	3923.9	3947.5
37.5°	4666.3	5517.7	6929.9	6574.5	5664.6	4778.4	4214.5	3876.5	3683.7	3634.8	3669.5
40°	4860.6	5956.9	7238.0	6519.2	5309.2	4277.7	3753.2	3483.1	3374.1	3385.2	3423.1
42.5°	5113.3	6448.1	7454.4	6377.0	4814.8	3761.1	3348.9	3228.8	3280.9	3325.2	3366.2
45°	5441.9	6958.4	7588.6	6135.4	4255.6	3323.6	3110.3	3138.8	3178.3	3183.0	3214.6
47.5°	5862.1	7474.9	7677.1	5770.5	3685.3	3015.6	2958.7	2965.0	2957.1	2923.9	2949.2
50°	6386.5	7977.2	7756.1	5287.1	3200.4	2822.8	2747.0	2724.9	2615.9	2508.5	2522.7
52.5°	6983.6	8438.5	7789.3	4686.8	2822.8	2661.7	2538.5	2399.5	2195.7	2162.5	2173.6
55°	7647.1	8865.0	7704.0	3949.1	2505.3	2454.8	2268.4	2100.9	2078.8	2050.4	2055.1
57.5°	8440.1	9324.7	7530.2	3126.1	2179.9	2213.1	2031.4	2050.4	2010.9	1966.7	1958.8
60°	9307.3	9800.1	7225.3	2375.8	1843.5	1911.4	1969.8	1968.2	1957.2	1920.9	1908.2
62.5°	10087.6	10112.9	6625.1	1819.8	1548.1	1677.6	1837.1	1835.6	1826.1	1805.5	1797.6
65°	10552.1	10065.5	5623.6	1432.7	1304.8	1484.9	1657.1	1669.7	1671.3	1669.7	1669.7
67.5°	10469.9	9511.1	4249.3	1140.5	1104.2	1289.0	1478.6	1495.9	1508.6	1511.7	1514.9
70°	9541.1	8293.2	2770.7	909.9	925.7	1116.8	1309.5	1326.9	1338.0	1350.6	1356.9
72.5°	7437.0	6097.4	1586.0	736.1	769.3	968.3	1142.1	1162.6	1168.9	1192.6	1202.1
75°	4532.0	3585.8	856.2	579.7	631.9	827.7	976.2	999.9	1011.0	1039.4	1042.6
77.5°	2154.6	1552.8	488.1	451.8	508.6	676.1	824.6	851.4	821.4	837.2	824.6
80°	728.2	576.6	308.0	344.4	388.6	527.6	660.3	687.1	624.0	620.8	614.5
82.5°	254.3	233.8	195.9	229.0	251.2	377.5	499.2	533.9	464.4	462.8	440.7
85°	99.5	94.8	109.0	124.8	150.1	232.2	328.6	345.9	285.9	230.6	227.5
87.5°	20.5	22.1	26.9	28.4	45.8	80.6	118.5	145.3	115.3	97.9	90.0
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)