

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: P968291

Luminaire Tested: **NAV-SB5B-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968291
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31259.4 lumens
Efficiency: N/A
Efficacy: 171.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

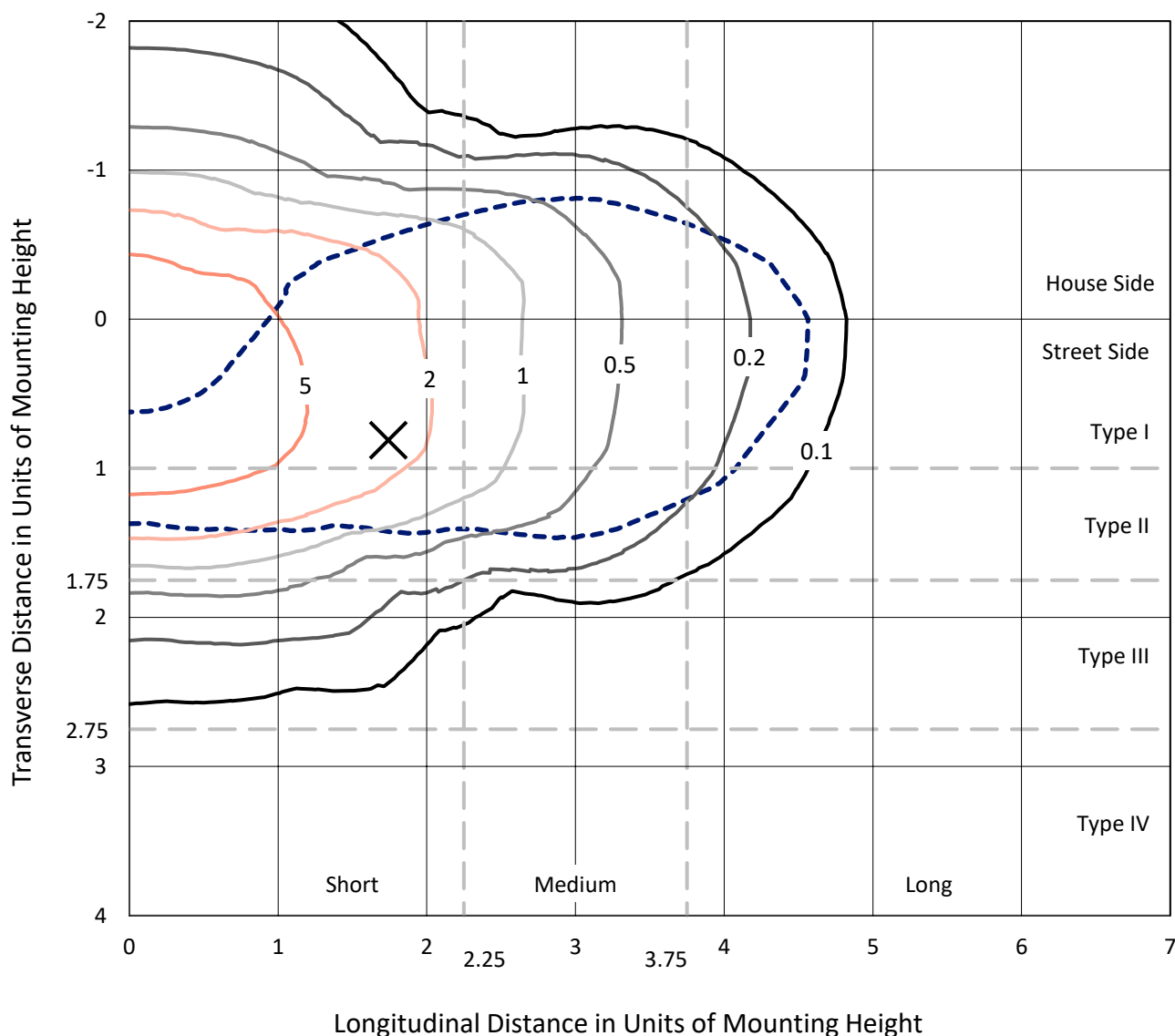
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

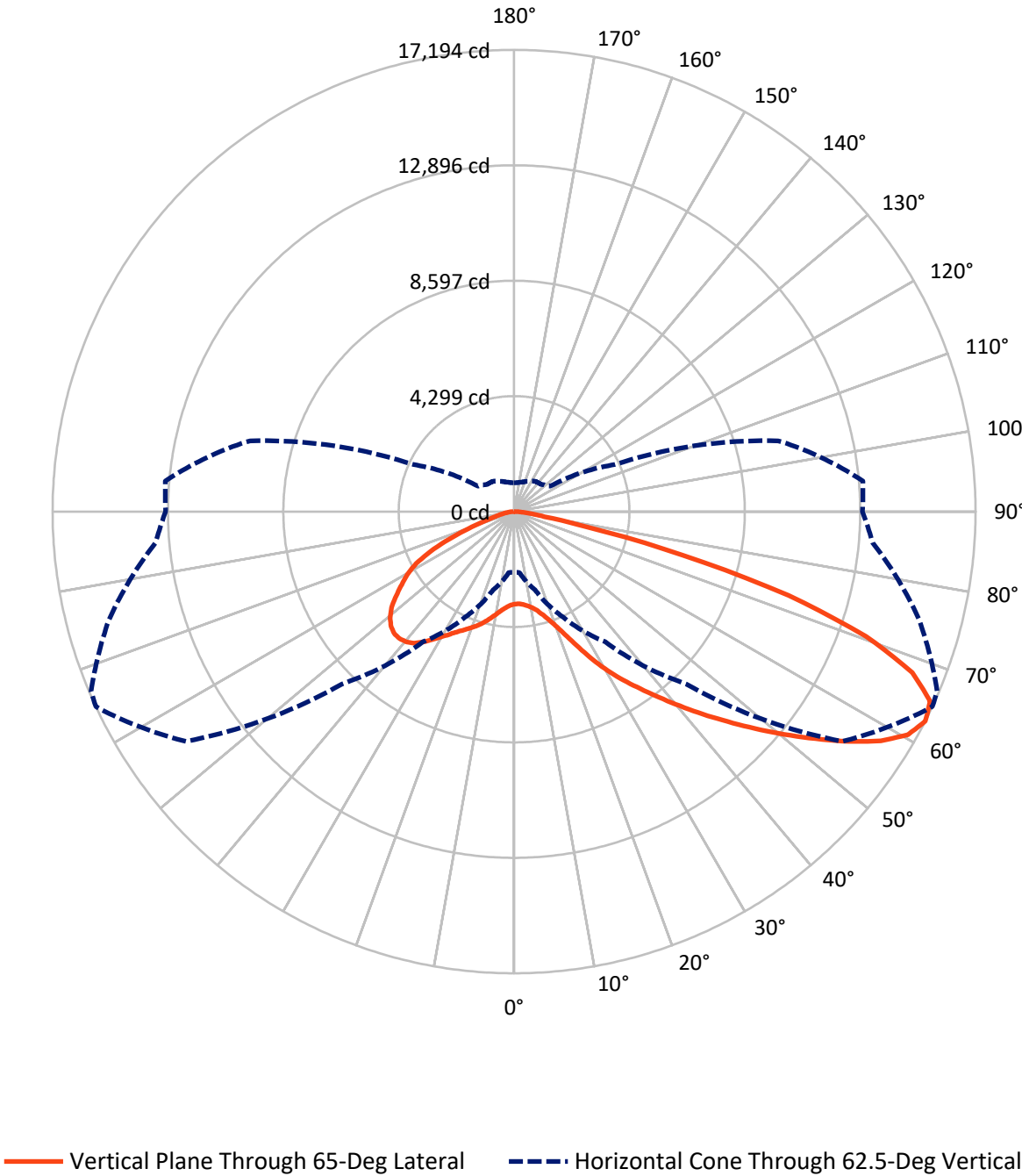
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9864.1	0.0	9864.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	21395.3	0.0	21395.3
	% Fixture	68.4	0.0	68.4
Total	Lumens	31259.4	0.0	31259.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.4	1.1
10°-20°	1164.6	3.7
20°-30°	2361.3	7.6
30°-40°	4086.3	13.1
40°-50°	6183.8	19.8
50°-60°	7250.1	23.2
60°-70°	6078.3	19.4
70°-80°	3355.7	10.7
80°-90°	435.9	1.4
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°	31259.4	100.0
0°-180°	31259.4	100.0

Coefficient of Utilization



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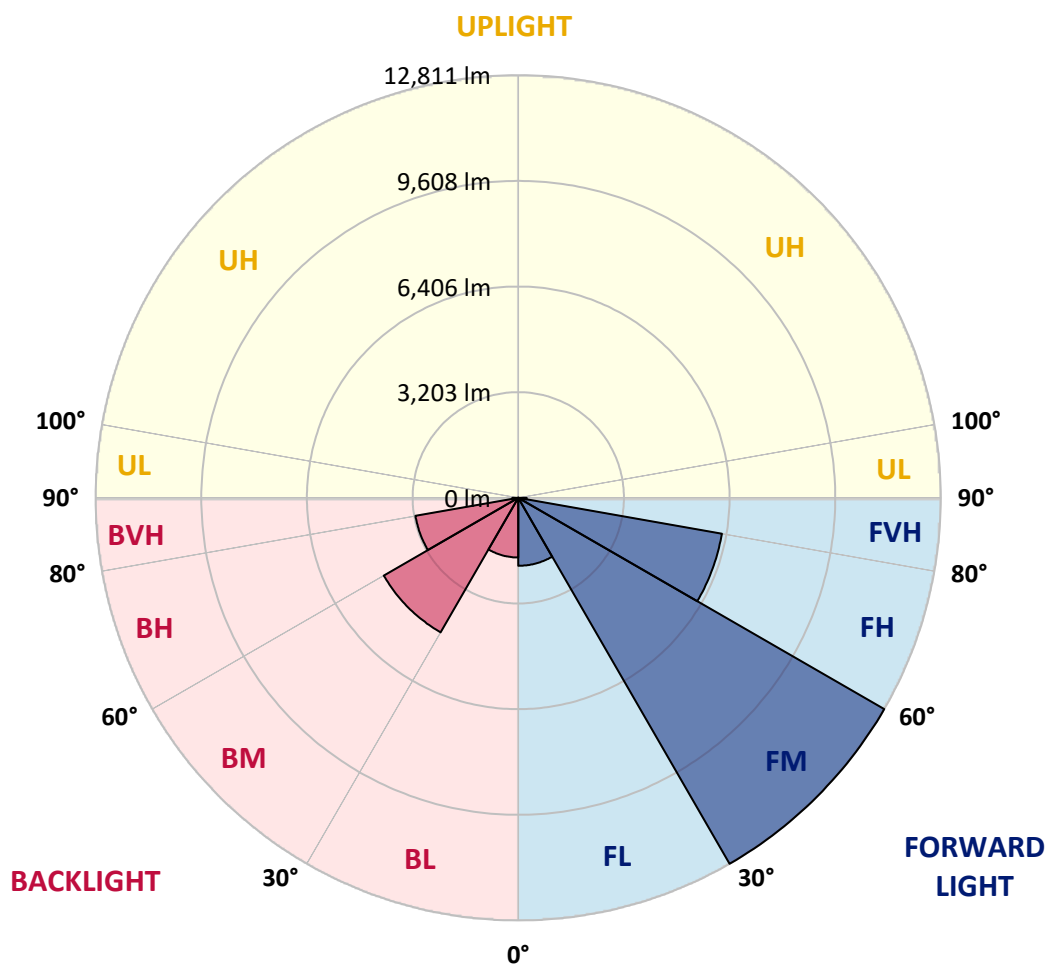
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2060.4	6.6			
FM	(30°-60°)	12811.1	41.0			
FH	(60°-80°)	6269.7	20.1			G3/7500
FVH	(80°-90°)	254.1	0.8			G3/500
BL	(0°-30°)	1809.0	5.8	B3/2500		
BM	(30°-60°)	4709.0	15.1	B3/5000		
BH	(60°-80°)	3164.3	10.1	B4/5000		G4/5000
BVH	(80°-90°)	181.8	0.6			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6
2.5°	3422.0	3412.2	3420.3	3420.3	3423.6	3422.0	3433.3	3436.5	3441.4	3451.2	3451.2
5°	3387.9	3386.3	3400.8	3413.9	3426.8	3438.2	3452.7	3473.8	3477.1	3488.5	3503.0
7.5°	3376.6	3366.8	3389.5	3405.8	3436.5	3464.1	3503.0	3538.7	3553.3	3558.2	3585.8
10°	3464.1	3447.9	3469.0	3478.7	3504.7	3532.3	3577.7	3634.4	3650.6	3670.1	3700.9
12.5°	3613.3	3595.5	3626.2	3640.9	3665.2	3689.6	3720.3	3775.5	3783.6	3819.3	3848.5
15°	3817.6	3796.6	3816.1	3833.9	3874.4	3897.2	3927.9	3981.5	3981.5	4009.1	4030.1
17.5°	4095.0	4067.4	4082.0	4088.5	4114.5	4148.5	4200.4	4247.4	4271.8	4262.1	4232.8
20°	4508.6	4474.4	4474.4	4442.0	4432.3	4459.9	4528.0	4592.8	4618.9	4568.5	4497.2
22.5°	5129.7	5081.0	5053.5	4943.2	4899.4	4902.7	4970.7	5050.2	5071.3	4982.1	4821.5
25°	5919.5	5843.2	5806.0	5643.8	5544.8	5458.9	5512.4	5614.5	5643.8	5533.5	5274.0
27.5°	6709.2	6714.2	6678.5	6483.8	6320.0	6162.7	6135.1	6242.2	6273.0	6148.2	5827.0
30°	7817.0	7701.8	7633.7	7400.2	7166.6	6946.1	6832.5	6876.3	6884.4	6735.3	6362.3
32.5°	8772.2	8743.0	8597.1	8392.7	8092.7	7747.3	7557.4	7487.7	7474.8	7262.3	6819.5
35°	9860.4	9844.2	9690.1	9446.8	9122.5	8642.5	8300.2	8100.8	8084.6	7786.1	7272.1
37.5°	10966.5	10966.5	10815.6	10549.6	10213.9	9613.9	9093.3	8777.1	8725.1	8335.9	7732.6
40°	11848.7	11795.2	11822.8	11710.8	11326.5	10689.1	9974.0	9515.0	9445.3	8978.2	8222.4
42.5°	12349.8	12332.0	12497.4	12622.3	12464.9	11955.7	10943.7	10314.5	10217.2	9685.2	8786.8
45°	12461.7	12442.3	12737.5	13194.7	13415.3	13206.1	11997.9	11156.2	11037.8	10424.8	9391.7
47.5°	12203.9	12164.9	12598.0	13319.7	14026.7	14394.9	13139.7	12069.3	11897.4	11144.8	10012.8
50°	11428.6	11391.3	12046.5	13005.0	14232.7	15202.5	14378.7	13037.5	12774.8	11916.9	10640.5
52.5°	9743.6	9761.5	10788.0	12104.9	13961.8	15705.3	15445.8	14057.6	13741.4	12706.6	11229.2
55°	7589.9	7628.9	8890.5	10340.4	12878.5	15629.1	16174.0	15108.5	14793.8	13449.4	11837.3
57.5°	5434.5	5606.4	6788.8	8224.0	10797.8	14420.8	16332.9	16107.5	15802.6	14260.3	12432.5
60°	3522.5	3553.3	4769.6	6216.3	8222.4	12273.6	16010.2	16864.8	16626.4	15087.4	12930.4
62.5°	2257.6	2278.6	3019.8	4347.9	5917.8	9080.4	14923.6	17194.1	17121.1	15633.9	13408.8
65°	1659.1	1642.9	2028.9	2873.8	3986.3	5600.0	12813.6	17035.1	17179.5	15976.2	13804.6
67.5°	1385.0	1362.3	1552.1	1989.9	2937.0	3180.3	9480.9	16002.1	16530.8	15937.2	14094.9
70°	1261.8	1242.3	1357.4	1477.4	2291.6	2129.4	4779.4	13911.6	14725.8	15494.4	14047.8
72.5°	1068.8	1034.7	1192.0	1312.0	1782.4	1633.1	1975.3	10685.9	11678.4	14075.4	13386.2
75°	828.7	806.1	940.6	1154.7	1339.6	1274.7	1248.8	6488.8	7572.1	10885.4	11710.8
77.5°	656.8	626.0	749.3	900.1	1205.0	961.8	909.8	2794.4	3867.9	6949.3	8762.4
80°	494.7	467.1	569.3	712.0	926.0	725.0	588.7	1140.1	1458.0	3520.9	4406.4
82.5°	351.9	327.6	397.3	522.2	622.8	650.4	361.6	639.0	718.4	1357.4	984.4
85°	225.4	210.8	266.0	327.6	395.8	418.4	220.6	334.0	366.5	559.5	410.3
87.5°	123.2	100.6	142.7	152.4	183.3	167.1	105.4	121.7	131.4	202.7	173.5
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°	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6	3444.6
2.5°	3457.6	3462.4	3478.7	3483.6	3494.9	3509.5	3519.2	3529.0	3529.0	3538.7	3538.7
5°	3504.7	3516.1	3550.1	3567.9	3597.1	3626.2	3644.2	3665.2	3678.2	3684.7	3688.0
7.5°	3595.5	3613.3	3662.0	3692.8	3743.1	3783.6	3811.2	3840.4	3846.8	3864.7	3858.2
10°	3718.7	3739.8	3795.0	3853.4	3913.3	3963.6	3989.6	4010.6	4018.7	4022.0	4013.9
12.5°	3859.8	3890.6	3962.0	4033.4	4096.6	4140.4	4146.8	4142.0	4119.3	4099.9	4099.9
15°	4033.4	4060.9	4140.4	4218.3	4279.9	4288.0	4247.4	4221.5	4193.9	4189.1	4189.1
17.5°	4240.9	4255.5	4328.5	4404.7	4409.7	4382.1	4322.0	4297.7	4271.8	4254.0	4255.5
20°	4482.6	4477.7	4529.6	4562.1	4528.0	4443.7	4352.9	4312.3	4286.3	4265.2	4266.9
22.5°	4771.3	4734.0	4727.5	4719.4	4628.6	4451.8	4328.5	4276.6	4236.1	4206.9	4216.6
25°	5191.3	5048.6	4949.6	4894.5	4690.2	4408.0	4250.7	4135.6	4059.3	4009.1	4028.5
27.5°	5716.7	5476.8	5227.0	5092.4	4690.2	4318.8	4062.6	3876.0	3751.2	3699.2	3725.3
30°	6217.9	5966.5	5598.3	5330.8	4678.8	4172.9	3759.3	3499.8	3353.8	3301.9	3332.8
32.5°	6646.0	6371.9	5992.5	5591.9	4651.2	3936.1	3383.0	3096.0	2954.9	2893.3	2924.0
35°	7043.4	6751.5	6388.2	5879.0	4578.3	3589.0	2969.4	2750.5	2593.2	2494.3	2526.7
37.5°	7450.4	7103.4	6762.8	6138.4	4446.9	3183.5	2651.6	2465.1	2280.2	2147.3	2182.9
40°	7893.2	7478.0	7163.4	6292.5	4231.2	2797.5	2405.1	2234.8	2038.6	1897.5	1925.1
42.5°	8410.5	7927.2	7609.4	6371.9	3936.1	2523.4	2244.5	2077.5	1892.7	1777.5	1800.2
45°	8950.6	8421.9	8016.4	6370.4	3606.9	2395.3	2192.7	2027.2	1822.9	1702.8	1722.3
47.5°	9516.6	8939.2	8368.4	6266.5	3321.4	2413.2	2163.5	1918.6	1693.1	1576.3	1592.5
50°	10084.2	9505.2	8708.9	6071.9	3199.7	2374.3	2054.8	1766.1	1500.2	1394.7	1401.2
52.5°	10647.0	10106.9	9002.5	5794.6	3076.5	2230.0	1915.3	1568.2	1420.6	1347.7	1347.7
55°	11213.0	10702.1	9322.0	5390.8	2768.4	2061.3	1681.8	1493.6	1357.4	1290.9	1284.4
57.5°	11780.6	11389.7	9625.3	4986.9	2380.8	1853.7	1553.7	1402.8	1294.2	1237.4	1227.6
60°	12370.9	12176.3	9938.2	4615.6	1998.0	1587.7	1459.6	1329.8	1219.5	1156.3	1151.5
62.5°	12979.1	13042.3	10183.2	4137.1	1646.2	1425.6	1375.2	1242.3	1135.3	1075.2	1073.6
65°	13592.1	13877.6	10343.7	3473.8	1334.8	1271.5	1284.4	1146.6	1037.9	986.0	984.4
67.5°	14054.3	14479.3	10298.3	2628.9	1094.7	1125.6	1171.0	1046.0	943.9	903.3	905.0
70°	14106.3	14407.9	9850.7	1800.2	916.4	982.8	1044.5	947.1	841.7	812.5	814.2
72.5°	13415.3	13434.8	8603.5	1175.8	775.2	862.7	911.4	846.5	744.4	715.2	713.6
75°	11603.8	11110.8	6316.9	775.2	648.7	741.2	786.6	741.2	642.3	648.7	626.0
77.5°	8791.6	7868.8	3835.6	551.4	541.7	622.8	684.4	652.0	567.6	637.3	561.1
80°	4529.6	4257.1	1710.9	411.9	428.1	497.8	562.7	520.6	449.3	428.1	390.8
82.5°	1037.9	1206.6	674.7	295.2	309.8	358.4	429.8	390.8	322.8	272.4	269.2
85°	363.3	397.3	298.4	184.9	181.6	223.8	291.9	261.1	218.9	175.2	184.9
87.5°	115.1	150.8	111.9	74.6	77.8	100.6	134.6	123.2	102.2	66.5	69.7
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)