

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: P967335

Luminaire Tested: **NAV-SB4D-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36375.2 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 293.6
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



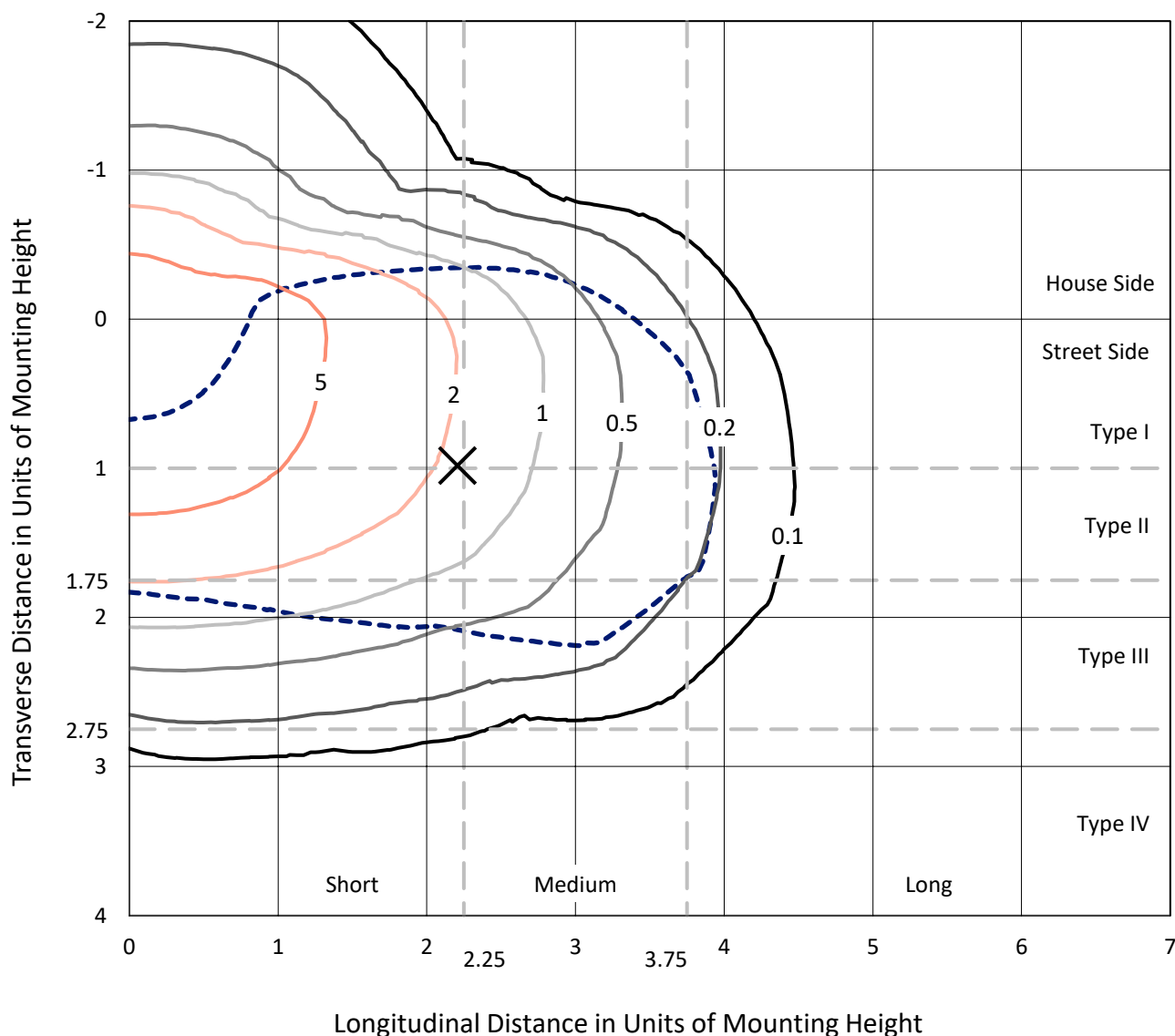
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

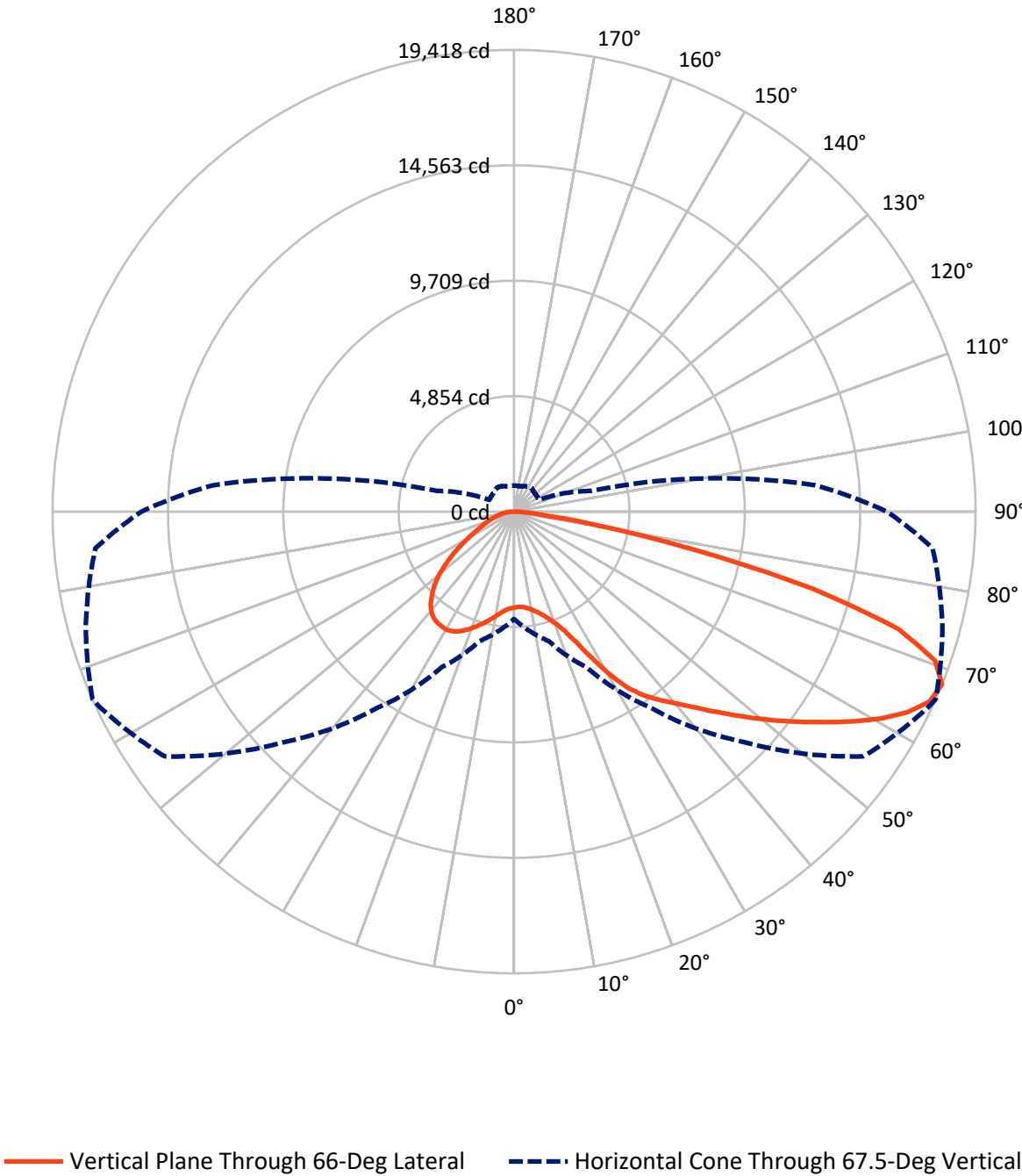


Based on 25 foot mounting height. Maximum calculated value = 9.1 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9044.6	0.0	9044.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	27330.6	0.0	27330.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	36375.2	0.0	36375.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.0	1.1
10°-20°	1321.6	3.6
20°-30°	2547.2	7.0
30°-40°	4466.2	12.3
40°-50°	6639.8	18.3
50°-60°	8416.6	23.1
60°-70°	8235.5	22.6
70°-80°	3928.4	10.8
80°-90°	419.8	1.2
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°	36375.2	100.0
0°-180°	36375.2	100.0

Coefficient of Utilization



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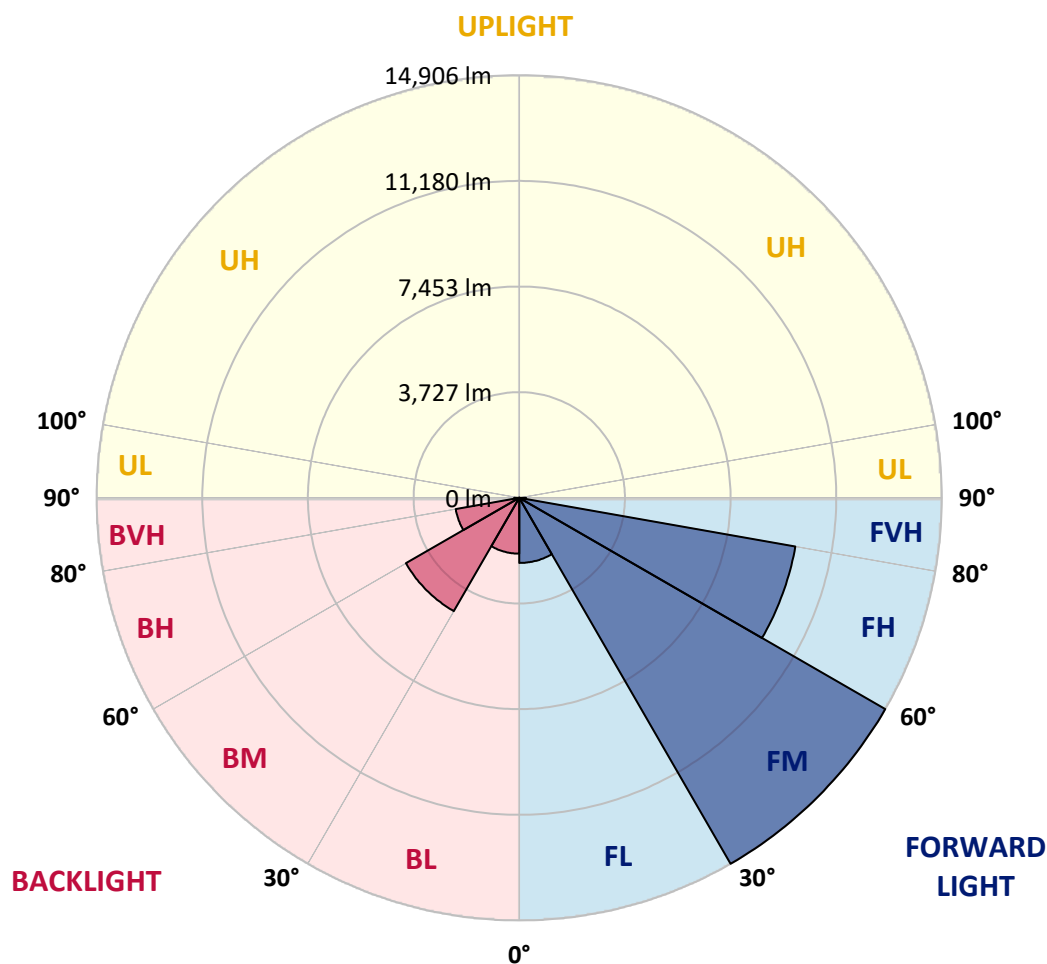
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2298.6	6.3			
FM	(30°-60°)	14906.2	41.0			
FH	(60°-80°)	9887.8	27.2			G4/12000
FVH	(80°-90°)	238.0	0.7			G3/500
BL	(0°-30°)	1970.2	5.4	B3/2500		
BM	(30°-60°)	4616.5	12.7	B3/5000		
BH	(60°-80°)	2276.1	6.3	B3/2500		G3/2500
BVH	(80°-90°)	181.8	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5
2.5°	3992.5	4015.3	4009.6	4000.1	3998.2	4002.0	4007.7	4013.5	4011.5	4021.1	4036.4
5°	3981.0	4004.0	4002.0	4002.0	4009.6	4025.0	4034.5	4044.0	4034.5	4046.0	4067.0
7.5°	3988.6	4005.8	4013.5	4021.1	4040.2	4068.9	4091.8	4112.8	4101.3	4114.8	4141.5
10°	4086.1	4099.5	4107.1	4107.1	4120.5	4153.0	4176.0	4214.2	4204.5	4225.6	4260.0
12.5°	4263.8	4277.2	4277.2	4269.5	4279.2	4300.2	4307.8	4349.8	4332.7	4367.0	4401.5
15°	4481.7	4508.5	4487.4	4474.0	4477.9	4498.9	4497.0	4529.5	4512.3	4541.0	4571.5
17.5°	4722.5	4756.9	4722.5	4720.6	4713.0	4735.9	4737.8	4766.5	4735.9	4756.9	4777.9
20°	5007.2	5055.1	5026.4	5035.9	5018.7	5028.3	5037.9	5079.9	5032.1	5047.4	5041.7
22.5°	5408.6	5465.9	5435.4	5471.7	5460.3	5452.6	5450.6	5525.2	5450.6	5456.4	5400.9
25°	5993.5	6062.3	6008.8	6058.5	6058.5	6083.3	6112.0	6207.5	6083.3	6047.0	5903.6
27.5°	6857.2	6926.1	6821.0	6851.6	6842.0	6903.2	6872.6	7109.6	6975.7	6916.5	6628.0
30°	7897.0	8019.3	7820.5	7812.9	7803.3	7900.8	7944.8	8101.5	7965.8	7906.5	7558.7
32.5°	9020.7	9148.8	8911.8	8843.0	8806.7	8865.9	8829.7	8955.7	8862.2	8770.4	8340.3
35°	10209.5	10335.6	10110.1	9976.3	9831.1	9706.9	9576.9	9609.4	9521.4	9381.9	8936.7
37.5°	11333.2	11564.6	11325.6	11182.2	10914.7	10672.0	10308.8	10157.9	10075.8	9947.6	9498.6
40°	12478.0	12610.0	12428.3	12306.0	12015.6	11635.2	11054.2	10735.0	10624.2	10500.0	10119.7
42.5°	13320.9	13447.1	13349.6	13265.4	13038.0	12596.5	11845.4	11446.1	11285.5	11146.0	10823.0
45°	13989.8	14083.4	14022.3	14052.9	13955.4	13527.3	12665.3	12208.6	12042.3	11872.3	11618.1
47.5°	14259.3	14358.6	14456.1	14637.7	14804.0	14488.6	13546.4	13034.2	12858.4	12684.5	12434.1
50°	14228.7	14330.0	14612.8	14998.9	15514.9	15409.8	14475.3	13913.4	13750.9	13552.1	13320.9
52.5°	13984.1	14098.8	14461.8	15104.0	15925.8	16099.8	15421.2	14821.2	14668.3	14431.3	14200.0
55°	13341.9	13410.7	13955.4	14865.2	16023.3	16581.3	16348.2	15788.2	15635.4	15304.7	15052.4
57.5°	12151.3	12250.6	13043.7	14221.1	15778.6	16908.2	17162.4	16805.0	16657.8	16181.9	15918.1
60°	10597.5	10756.0	11663.9	13139.4	15155.6	16906.2	17901.9	17804.5	17682.2	17045.8	16770.5
62.5°	8839.2	9022.7	9896.1	11610.4	14066.3	16426.5	18364.5	18641.6	18578.5	17842.7	17491.1
65°	6788.5	6914.6	7784.3	9632.3	12371.0	15396.4	18418.0	19213.0	19224.5	18448.6	17867.6
67.5°	4519.9	4883.1	5638.0	7228.1	10100.6	13712.7	17947.9	19306.7	19417.5	18656.8	17678.4
70°	2205.5	2683.2	3422.9	4697.7	7228.1	11130.7	16719.0	18538.4	18785.0	18049.1	16550.8
72.5°	915.4	1070.3	1473.5	2318.2	4149.2	7510.9	14249.8	16455.2	16912.0	15992.7	13915.3
75°	617.4	668.9	842.9	1188.8	1890.2	3703.8	10276.3	12269.8	13005.5	12078.6	9873.1
77.5°	475.9	508.4	613.5	831.4	1123.8	1400.9	5500.4	7394.4	7774.6	7197.4	5137.2
80°	374.6	399.4	458.7	605.9	796.9	749.2	1874.8	3350.3	3570.1	2994.8	1651.3
82.5°	324.9	334.5	328.7	410.9	529.4	437.7	615.4	1236.6	1364.6	989.9	538.9
85°	235.0	261.8	273.3	254.2	281.0	221.7	252.3	437.7	481.6	430.0	303.9
87.5°	95.5	141.4	173.9	164.4	103.2	63.0	78.3	128.0	147.2	160.5	99.4
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°	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5	4034.5
2.5°	4038.3	4051.7	4061.3	4072.7	4080.3	4091.8	4114.8	4128.2	4130.0	4139.6	4137.7
5°	4074.6	4093.7	4114.8	4145.3	4179.7	4208.4	4252.3	4283.0	4294.4	4304.0	4302.0
7.5°	4153.0	4179.7	4218.0	4271.5	4321.2	4359.4	4412.9	4449.2	4485.5	4498.9	4500.8
10°	4269.5	4307.8	4363.2	4435.8	4489.4	4539.0	4594.5	4625.0	4661.4	4676.7	4684.2
12.5°	4414.8	4455.0	4527.5	4628.9	4678.5	4713.0	4732.1	4724.4	4732.1	4745.4	4749.2
15°	4581.1	4625.0	4707.2	4816.2	4850.6	4820.0	4777.9	4739.7	4734.0	4737.8	4751.2
17.5°	4777.9	4810.4	4906.0	4997.7	4972.9	4846.7	4755.0	4693.9	4663.2	4653.7	4667.1
20°	5053.1	5053.1	5131.5	5188.9	5022.6	4808.5	4665.2	4565.8	4502.7	4476.0	4470.2
22.5°	5387.6	5357.1	5406.7	5366.6	5013.0	4701.5	4502.7	4330.7	4235.2	4197.0	4191.2
25°	5811.9	5775.6	5762.2	5513.8	4944.2	4531.4	4208.4	4000.1	3916.0	3895.0	3898.8
27.5°	6452.2	6360.4	6186.5	5594.0	4818.1	4263.8	3864.4	3671.3	3623.6	3625.5	3631.3
30°	7304.6	7121.1	6694.9	5607.4	4611.7	3885.5	3512.8	3375.1	3352.2	3361.8	3394.3
32.5°	8093.8	7919.9	7214.7	5546.3	4294.4	3514.6	3197.4	3105.6	3071.2	3082.7	3098.1
35°	8713.0	8665.2	7696.3	5460.3	3904.5	3166.8	2914.6	2836.2	2769.2	2754.0	2765.4
37.5°	9297.9	9278.7	8057.5	5339.8	3518.5	2920.2	2687.1	2583.9	2486.4	2432.9	2434.9
40°	9940.0	9920.9	8294.5	5154.4	3176.4	2706.2	2482.7	2346.9	2226.5	2129.0	2138.6
42.5°	10662.5	10549.7	8407.3	4888.7	2885.9	2524.7	2316.3	2132.9	1974.3	1884.5	1890.2
45°	11451.7	11197.6	8405.3	4550.5	2641.2	2358.4	2138.6	1878.7	1731.5	1647.5	1643.6
47.5°	12288.8	11816.8	8302.2	4176.0	2404.2	2174.9	1863.3	1664.6	1567.1	1515.6	1504.1
50°	13152.7	12395.8	8126.3	3745.9	2161.5	1966.6	1691.4	1555.7	1481.1	1433.4	1416.1
52.5°	13964.9	12921.5	7914.1	3258.6	1915.0	1764.0	1615.0	1509.8	1431.5	1377.9	1355.0
55°	14719.8	13374.4	7614.1	2759.7	1714.3	1628.3	1578.6	1490.8	1400.9	1337.8	1313.0
57.5°	15390.7	13668.7	7096.2	2291.5	1571.0	1534.6	1540.4	1458.3	1355.0	1301.5	1267.1
60°	15948.8	13884.6	6329.8	1857.7	1454.4	1442.9	1481.1	1397.1	1276.6	1215.5	1188.8
62.5°	16283.3	13880.9	5389.6	1521.3	1355.0	1358.8	1402.8	1320.6	1198.3	1140.9	1123.8
65°	16254.6	13540.7	4357.5	1301.5	1259.4	1263.3	1320.6	1236.6	1133.3	1098.9	1097.1
67.5°	15679.3	12711.2	3342.6	1158.1	1154.4	1171.6	1238.4	1179.2	1093.2	1089.4	1095.1
70°	14121.6	10989.2	2408.0	1043.6	1045.4	1070.3	1158.1	1142.9	1072.1	1079.8	1077.9
72.5°	11323.7	8378.6	1616.8	923.1	925.0	965.1	1081.7	1114.2	1051.1	1152.4	1167.7
75°	7541.5	5225.1	1039.7	795.1	796.9	848.6	1014.9	1058.8	993.8	1148.6	1158.1
77.5°	3623.6	2348.8	753.0	668.9	668.9	716.7	877.2	947.9	846.6	892.5	817.9
80°	1251.8	882.9	592.4	538.9	527.5	560.0	739.6	821.8	730.1	672.7	630.7
82.5°	493.1	458.7	475.9	418.5	380.3	401.4	575.2	678.4	537.0	485.4	483.5
85°	282.9	298.2	336.4	277.2	219.8	246.5	422.4	487.4	405.2	357.4	365.0
87.5°	76.5	105.2	154.8	143.3	99.4	105.2	200.7	269.5	233.2	179.7	185.4
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)