

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: P965105

Luminaire Tested: **NAV-SB3D-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965105
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30931.4 lumens
Efficiency: N/A
Efficacy: 141.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
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



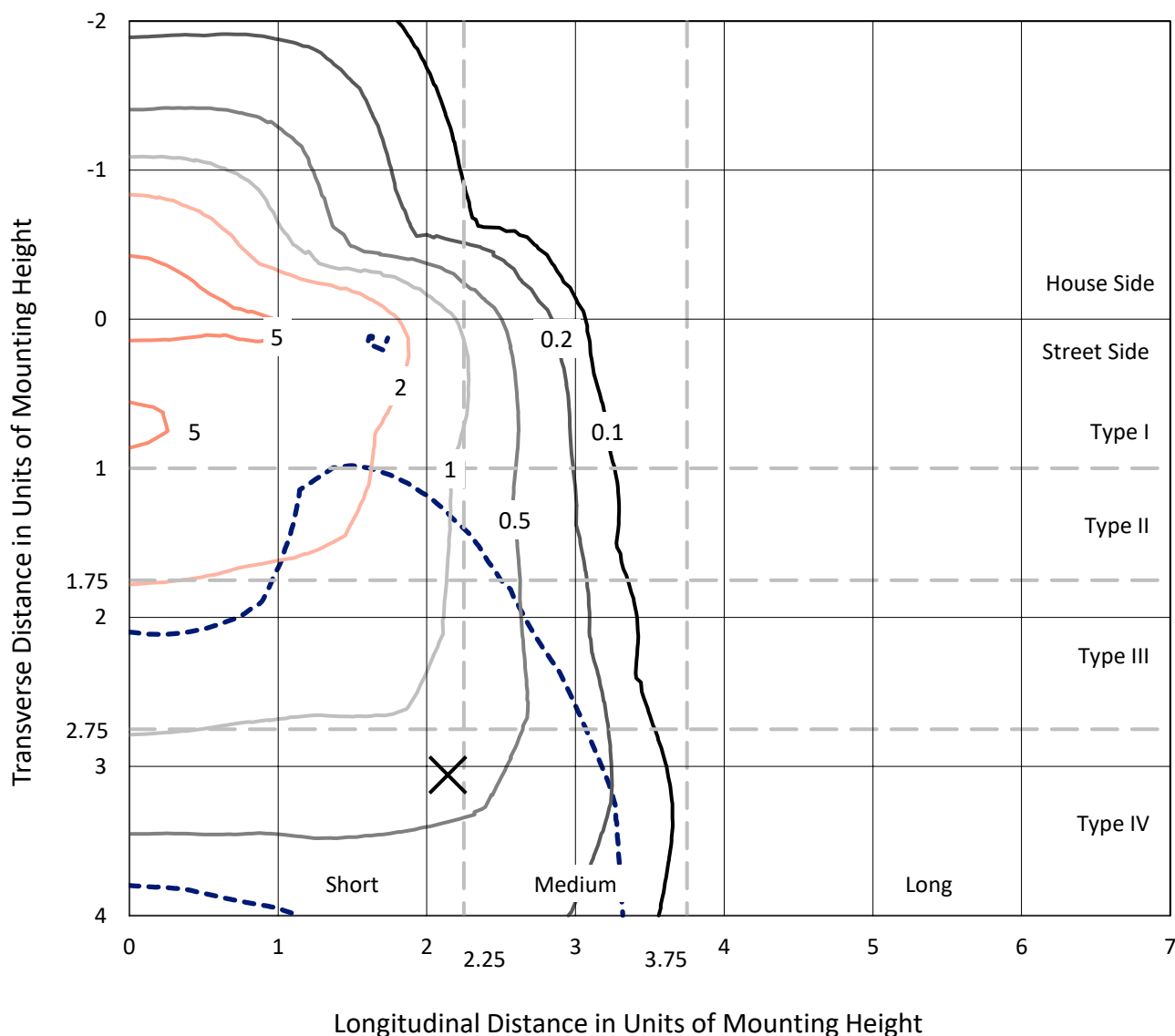
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

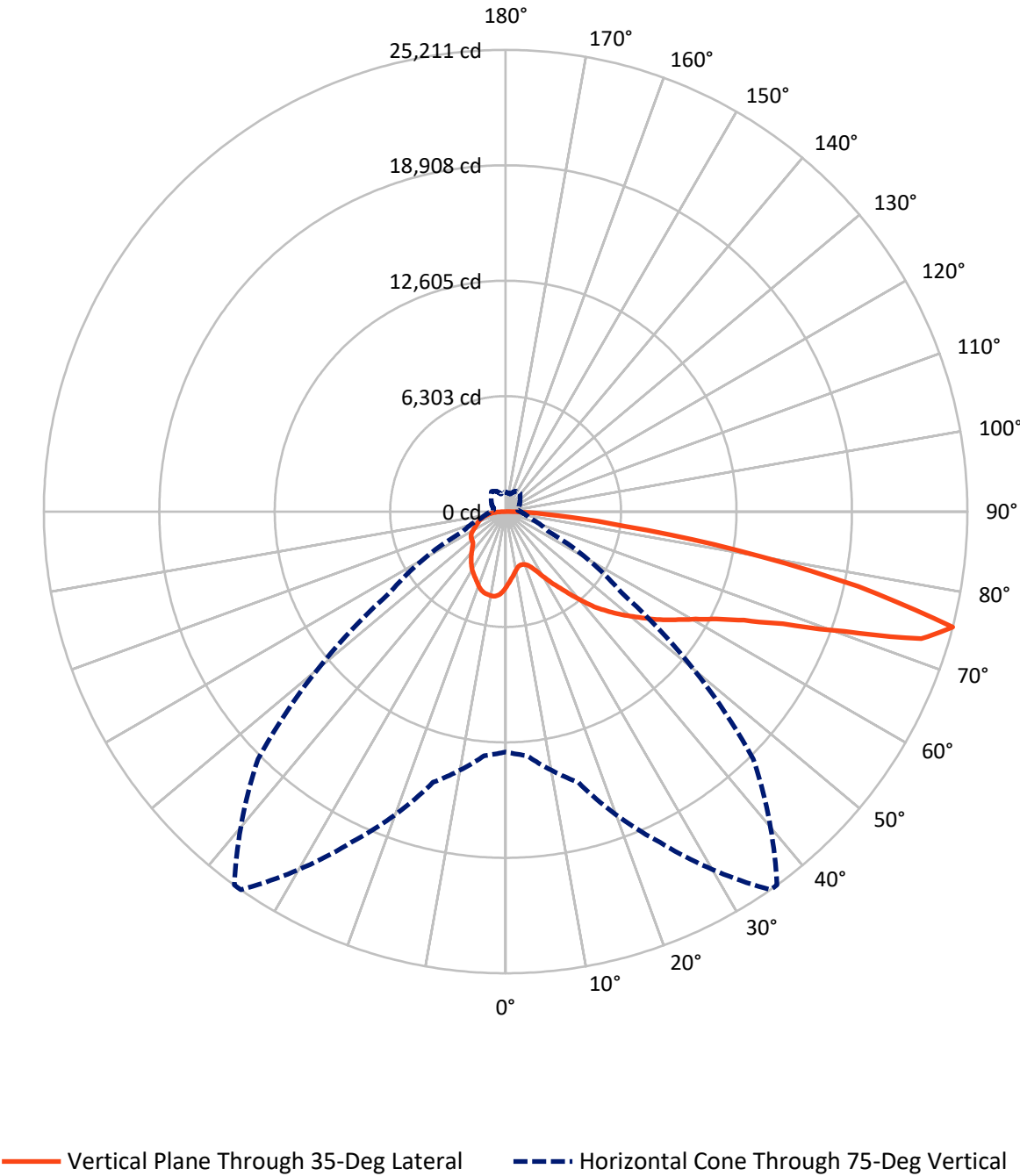


Based on 25 foot mounting height. Maximum calculated value = 7.3 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7360.9	0.0	7360.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	23570.5	0.0	23570.5
	% Fixture	76.2	0.0	76.2
Total	Lumens	30931.4	0.0	30931.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.3	1.3
10°-20°	1125.7	3.6
20°-30°	1890.3	6.1
30°-40°	2937.8	9.5
40°-50°	4360.4	14.1
50°-60°	6019.8	19.5
60°-70°	7303.4	23.6
70°-80°	6035.7	19.5
80°-90°	868.1	2.8
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°	30931.4	100.0
0°-180°	30931.4	100.0

Coefficient of Utilization



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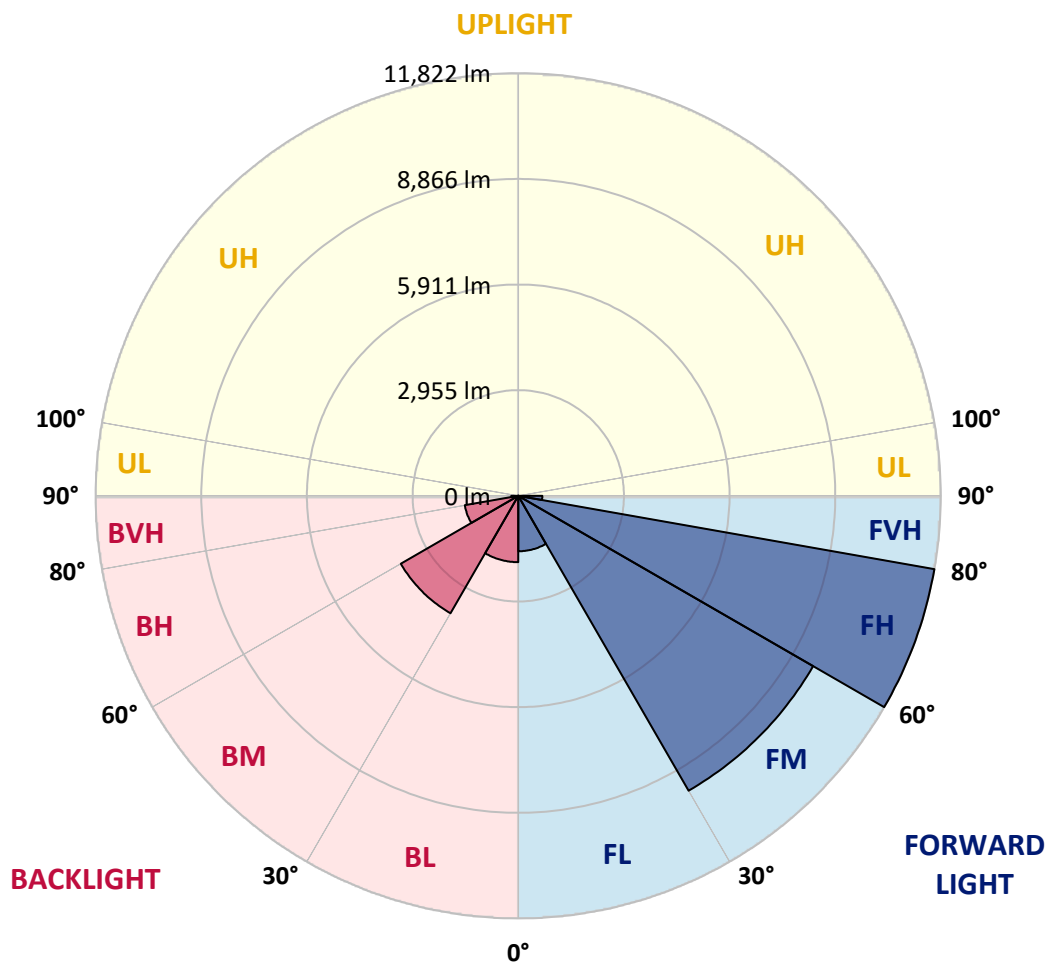
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1551.2	5.0			
FM	(30°-60°)	9525.2	30.8			
FH	(60°-80°)	11821.5	38.2			G4/12000
FVH	(80°-90°)	672.6	2.2			G4/750
BL	(0°-30°)	1855.0	6.0	B3/2500		
BM	(30°-60°)	3792.8	12.3	B3/5000		
BH	(60°-80°)	1517.6	4.9	B3/2500		G3/2500
BVH	(80°-90°)	195.5	0.6			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8
2.5°	3800.8	3824.2	3834.2	3829.2	3854.3	3850.9	3886.1	3929.5	3989.7	4048.2	4133.5
5°	3508.2	3533.3	3555.0	3575.0	3623.5	3638.5	3693.8	3777.3	3887.7	3999.8	4140.2
7.5°	3235.6	3257.3	3290.8	3327.6	3409.5	3424.5	3516.5	3647.0	3800.8	3964.6	4158.6
10°	3013.2	3034.9	3070.1	3111.9	3213.9	3232.2	3349.3	3523.2	3723.8	3931.2	4178.7
12.5°	2917.9	2924.5	2944.6	2986.4	3075.1	3086.8	3215.5	3414.5	3648.6	3906.1	4208.8
15°	2912.8	2926.3	2927.9	2949.6	3023.2	3028.3	3147.0	3344.3	3601.7	3901.2	4254.0
17.5°	2963.1	2973.0	2958.0	2971.4	3033.3	3041.6	3135.3	3310.9	3586.8	3922.9	4330.8
20°	3096.8	3105.1	3060.0	3041.6	3086.8	3093.4	3185.4	3332.6	3601.7	3968.0	4436.2
22.5°	3381.1	3386.1	3275.7	3200.5	3203.8	3207.1	3287.4	3421.2	3660.3	4049.9	4570.0
25°	3824.2	3820.8	3645.3	3499.8	3416.2	3397.8	3451.3	3565.0	3759.0	4158.6	4742.2
27.5°	4342.5	4317.5	4141.9	3924.5	3742.3	3715.5	3703.8	3752.3	3899.4	4302.4	4952.9
30°	4927.8	4904.4	4715.4	4431.2	4178.7	4135.2	4024.9	3999.8	4108.4	4498.0	5245.5
32.5°	5569.8	5554.9	5329.1	4984.7	4646.8	4596.7	4411.1	4344.3	4429.5	4794.0	5653.5
35°	6108.3	6095.0	5907.7	5553.1	5140.2	5078.3	4889.4	4814.1	4857.6	5173.6	6186.9
37.5°	6595.0	6588.2	6427.7	6148.5	5722.1	5646.8	5434.4	5409.3	5401.0	5673.6	6834.0
40°	7046.4	7029.7	6862.5	6715.3	6399.3	6330.7	6143.4	6121.7	6058.2	6288.9	7566.4
42.5°	7546.4	7502.9	7260.4	7191.9	7106.6	7049.7	6937.7	6941.1	6800.6	6982.8	8342.3
45°	7954.4	7929.3	7680.1	7640.0	7732.0	7708.5	7805.6	7830.6	7558.0	7710.3	9148.2
47.5°	8392.5	8369.0	8158.4	8129.9	8379.1	8385.7	8728.6	8736.9	8297.2	8466.0	9955.9
50°	8932.6	8899.2	8690.2	8725.2	9004.4	9029.5	9656.6	9599.7	8977.7	9233.5	10756.9
52.5°	9288.8	9308.8	9263.6	9320.5	9701.7	9725.2	10569.6	10424.1	9651.6	9991.0	11542.7
55°	9551.3	9591.4	9731.9	9862.2	10437.5	10460.9	11430.7	11208.4	10210.1	10693.3	12281.9
57.5°	9889.0	9832.2	10094.7	10348.9	11136.4	11198.3	12268.4	11964.1	10705.0	11298.7	12788.5
60°	10373.9	10333.8	10537.8	10914.1	11919.0	12017.6	13154.7	12644.7	11067.8	11778.6	12887.2
62.5°	11357.2	11256.9	11288.6	11621.3	12905.6	13035.9	14154.6	13238.3	11248.5	11965.8	12358.7
65°	12827.0	12654.8	12494.2	12725.0	14295.2	14423.9	15283.4	13704.9	11181.6	11603.0	10955.8
67.5°	14678.0	14507.4	14310.1	14527.5	16341.8	16443.8	16676.2	13967.4	10654.9	10205.1	8476.0
70°	16204.7	16141.2	16376.9	17271.6	19610.8	19614.2	18462.1	13750.0	9211.8	7235.4	4904.4
72.5°	16002.4	15963.9	17206.3	19972.0	23731.0	23642.3	20152.6	12104.6	6205.3	3264.0	1837.7
75°	13128.0	13377.1	15301.7	19923.5	25210.8	25199.1	19117.6	7695.2	2566.7	1352.8	949.8
77.5°	7039.7	7434.3	9934.2	14709.8	19681.0	19977.0	13440.6	2692.2	1102.0	866.1	657.1
80°	2295.9	2640.3	3959.6	7489.5	12788.5	12733.4	5760.5	1056.8	754.1	613.7	454.8
82.5°	974.9	1015.0	1769.2	3536.6	6563.2	6461.2	1834.3	607.0	530.0	419.7	281.0
85°	381.2	426.4	780.8	1635.4	2842.6	2780.7	662.2	300.9	339.5	274.2	167.2
87.5°	125.5	152.2	279.2	560.2	884.6	852.8	162.2	103.6	147.2	125.5	60.2
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°	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8	4121.8
2.5°	4156.9	4183.6	4215.4	4262.3	4302.4	4335.9	4371.0	4392.7	4401.0	4426.2	4424.5
5°	4187.0	4245.5	4324.2	4401.0	4476.3	4521.5	4561.6	4581.6	4600.1	4613.4	4616.8
7.5°	4237.2	4312.5	4436.2	4536.5	4600.1	4636.8	4663.5	4656.9	4663.5	4666.9	4672.0
10°	4280.7	4386.0	4533.2	4628.5	4677.0	4678.6	4672.0	4648.6	4636.8	4638.5	4641.8
12.5°	4332.5	4449.5	4608.4	4688.7	4702.1	4665.3	4636.8	4596.7	4581.6	4575.0	4571.6
15°	4402.8	4536.5	4690.3	4720.4	4687.0	4640.2	4591.7	4526.5	4493.1	4466.2	4474.6
17.5°	4488.1	4635.2	4753.8	4732.1	4660.3	4583.3	4504.8	4406.1	4337.5	4309.1	4310.7
20°	4606.8	4738.9	4802.4	4707.1	4598.4	4481.3	4347.5	4227.2	4163.7	4135.2	4131.9
22.5°	4750.6	4877.7	4849.2	4663.5	4509.8	4322.5	4155.2	4066.7	4034.9	4014.8	4018.1
25°	4922.8	5031.4	4882.7	4600.1	4364.2	4111.8	3983.0	3954.7	3939.6	3924.5	3924.5
27.5°	5146.8	5205.4	4907.7	4506.4	4136.9	3887.7	3840.9	3845.9	3840.9	3815.9	3820.8
30°	5442.9	5431.1	4931.2	4354.2	3876.0	3685.4	3688.8	3710.5	3713.8	3697.1	3705.5
32.5°	5832.5	5713.7	4942.9	4156.9	3626.9	3508.2	3511.4	3534.9	3551.6	3523.2	3536.6
35°	6304.0	6043.1	4924.4	3909.5	3434.6	3339.2	3314.1	3320.9	3325.9	3299.2	3317.5
37.5°	6854.1	6412.6	4842.5	3635.3	3275.7	3173.7	3120.2	3075.1	3048.4	3023.2	3039.9
40°	7457.7	6815.6	4692.0	3367.6	3098.5	2998.1	2917.9	2832.6	2742.3	2708.9	2723.9
42.5°	8089.8	7230.4	4509.8	3111.9	2894.5	2812.5	2727.2	2603.5	2468.1	2399.5	2407.9
45°	8745.3	7655.0	4330.8	2859.3	2685.5	2650.3	2551.6	2402.9	2255.7	2168.8	2162.0
47.5°	9387.4	8056.4	4068.3	2605.2	2489.8	2528.3	2451.4	2314.2	2150.3	2013.3	1998.2
50°	10001.0	8432.6	3638.5	2347.7	2331.0	2491.5	2417.9	2220.6	2033.3	1857.7	1842.7
52.5°	10609.7	8736.9	3088.4	2113.5	2245.7	2481.4	2374.4	2157.0	1928.0	1744.0	1723.9
55°	11126.4	8894.1	2558.4	1913.0	2122.0	2396.1	2322.6	2081.8	1779.2	1583.5	1566.8
57.5°	11420.8	8767.0	2116.9	1715.6	1951.4	2255.7	2234.0	1921.3	1601.9	1451.4	1431.3
60°	11293.7	8252.0	1755.7	1543.3	1789.1	2103.5	2080.1	1762.4	1466.5	1324.3	1304.3
62.5°	10593.0	7270.4	1469.8	1392.9	1642.0	1948.0	1926.3	1640.4	1362.8	1225.7	1204.0
65°	9181.7	5914.4	1247.4	1267.5	1493.2	1760.7	1792.5	1538.3	1280.8	1147.1	1125.3
67.5°	7002.9	4284.0	1073.5	1158.8	1347.8	1576.9	1668.8	1464.8	1212.3	1085.2	1065.2
70°	3991.3	2432.9	926.4	1053.5	1219.0	1406.3	1573.5	1406.3	1138.8	1033.4	1020.0
72.5°	1513.3	1116.9	800.9	948.1	1095.2	1262.5	1468.1	1314.3	1053.5	974.9	961.4
75°	807.6	680.6	673.8	824.4	953.1	1122.0	1336.1	1224.1	989.9	1030.0	1063.4
77.5°	550.1	481.5	563.5	705.6	797.7	966.5	1195.6	1086.9	857.8	854.4	787.6
80°	381.2	341.1	458.2	568.6	617.0	812.6	1043.4	933.1	698.9	652.1	623.7
82.5°	229.1	222.4	342.8	424.8	436.4	627.1	864.5	782.6	571.8	498.3	501.6
85°	125.5	132.1	219.0	249.2	254.2	438.1	677.2	605.4	439.7	369.5	372.9
87.5°	35.2	45.1	80.3	98.6	122.1	227.4	403.0	359.5	220.7	153.9	153.9
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)