

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: P968405

Luminaire Tested: **NAV-SB5B-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25969.4 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

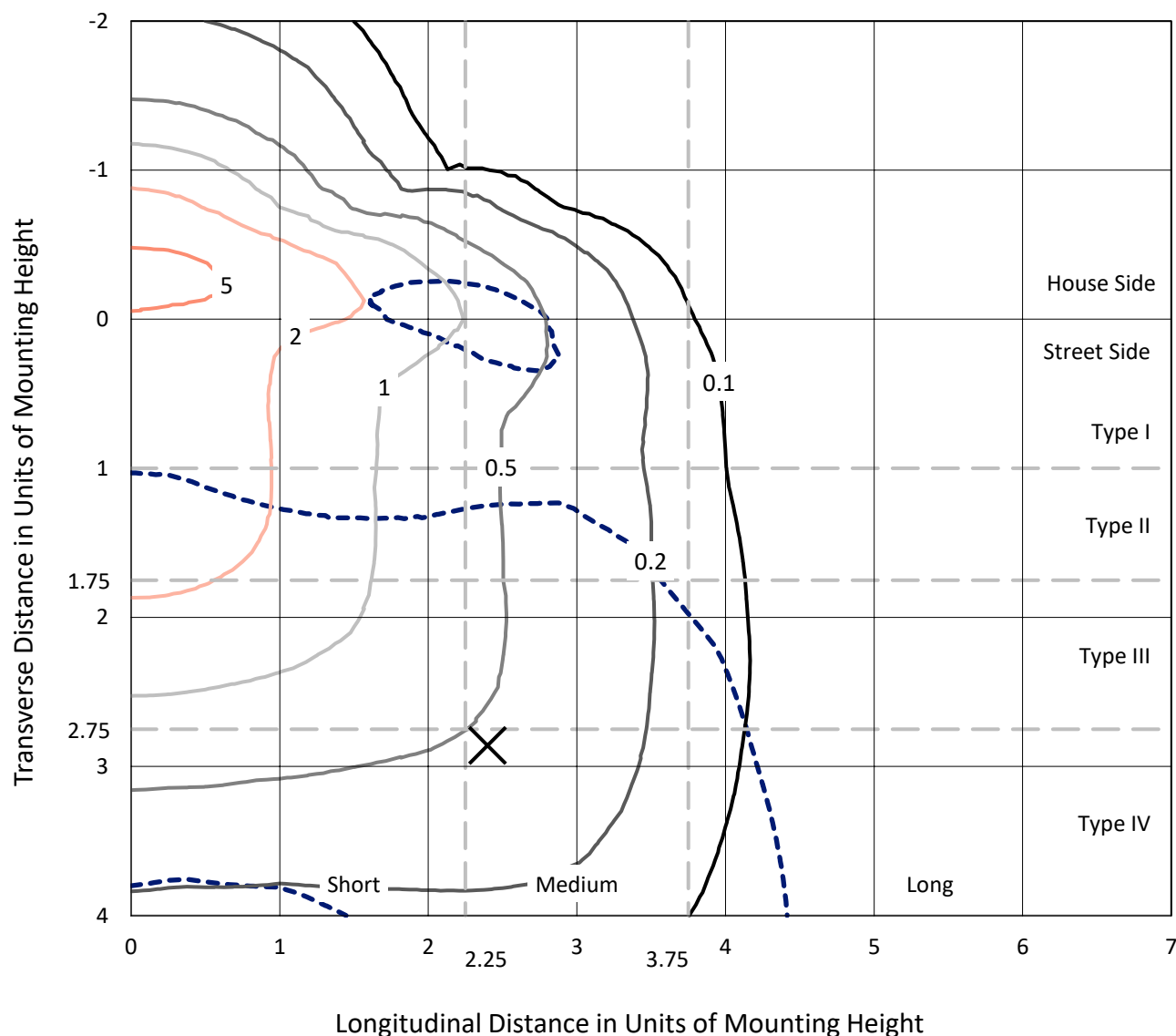
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

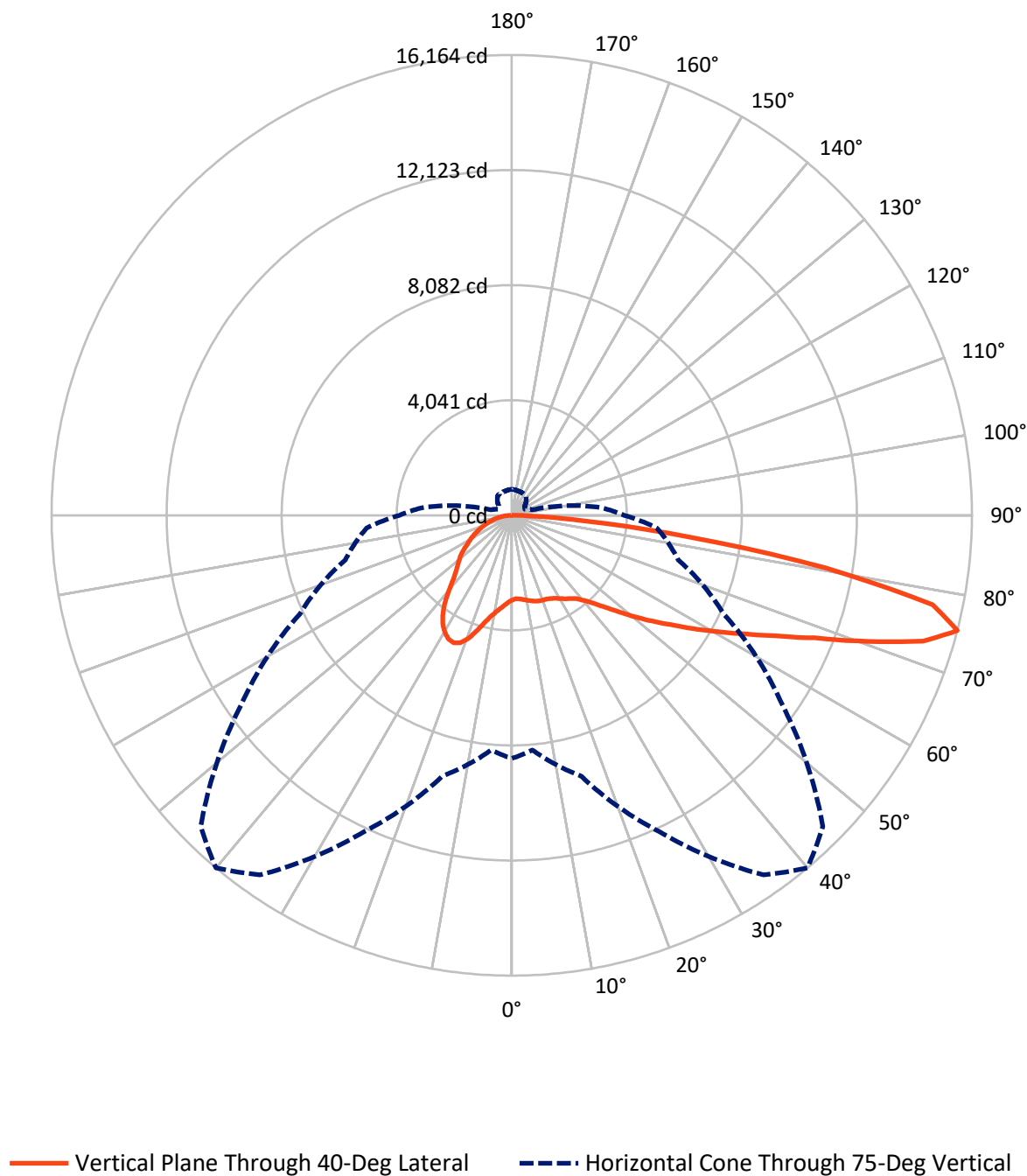
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8046.2	0.0	8046.2
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	17923.2	0.0	17923.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	25969.4	0.0	25969.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.4	1.1
10°-20°	995.2	3.8
20°-30°	1817.2	7.0
30°-40°	2577.3	9.9
40°-50°	3480.2	13.4
50°-60°	4681.7	18.0
60°-70°	5942.2	22.9
70°-80°	5392.9	20.8
80°-90°	786.1	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°	25969.4	100.0
0°-180°	25969.4	100.0

Coefficient of Utilization



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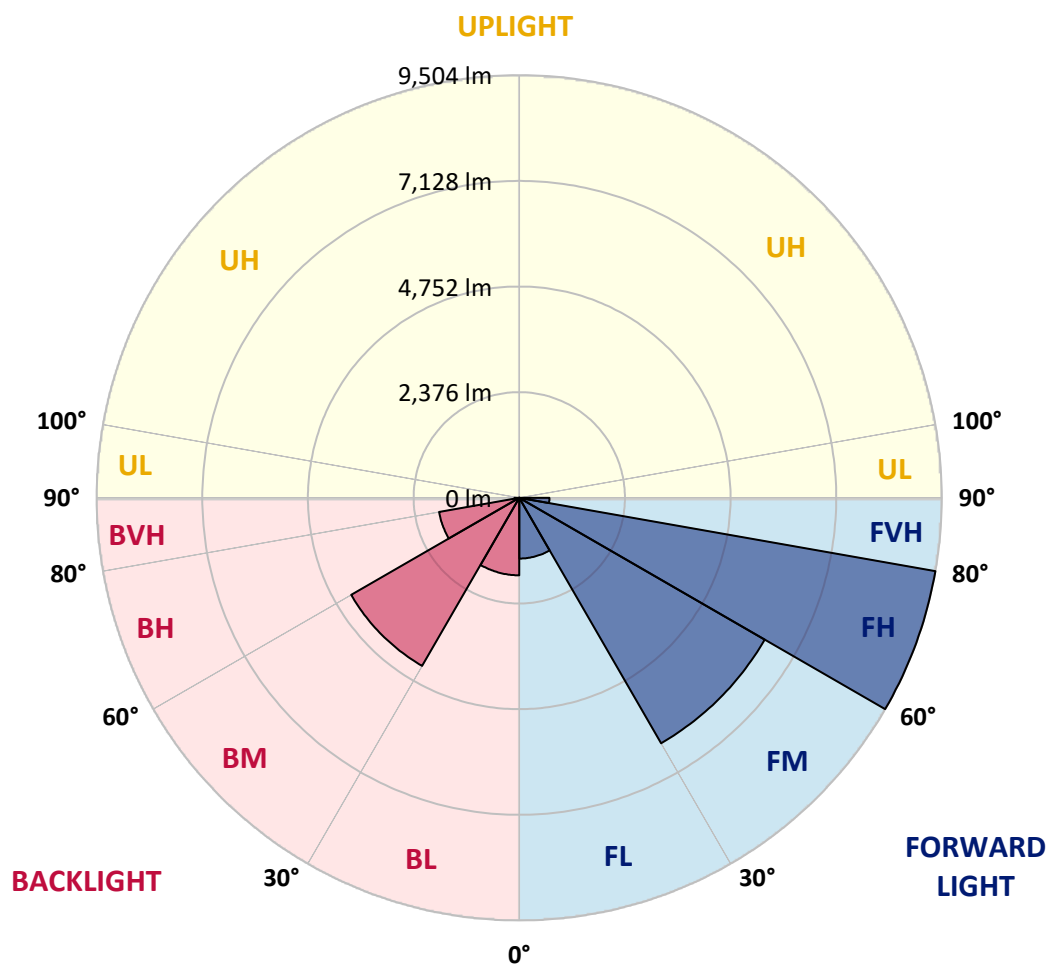
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1366.0	5.3			
FM	(30°-60°)	6374.9	24.5			
FH	(60°-80°)	9504.4	36.6			G4/12000
FVH	(80°-90°)	677.9	2.6			G4/750
BL	(0°-30°)	1742.9	6.7	B3/2500		
BM	(30°-60°)	4364.3	16.8	B3/5000		
BH	(60°-80°)	1830.7	7.0	B3/2500		G3/2500
BVH	(80°-90°)	108.2	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°	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6
2.5°	2924.2	2940.7	2936.6	2931.1	2931.1	2932.4	2931.1	2940.7	2950.4	2960.0	2975.2
5°	2954.5	2971.0	2962.8	2955.9	2950.4	2948.9	2944.8	2943.5	2948.9	2961.3	2982.0
7.5°	3013.7	3030.2	3017.8	3005.4	2994.4	2988.9	2983.4	2975.2	2971.0	2977.9	3006.8
10°	3079.8	3096.3	3081.3	3059.2	3041.3	3034.4	3028.9	3020.6	3015.1	3019.2	3050.9
12.5°	3145.9	3162.4	3141.8	3111.5	3088.1	3083.9	3077.0	3074.3	3073.0	3071.5	3103.3
15°	3207.9	3221.7	3195.5	3159.7	3135.0	3128.0	3121.1	3125.3	3132.2	3140.4	3176.3
17.5°	3256.1	3270.0	3231.3	3184.5	3161.1	3158.3	3154.2	3168.0	3187.2	3207.9	3252.0
20°	3300.2	3314.0	3264.4	3201.1	3173.5	3173.5	3174.8	3203.7	3231.3	3261.7	3322.2
22.5°	3362.2	3373.2	3312.6	3225.8	3185.9	3188.7	3199.6	3228.5	3263.0	3304.3	3388.3
25°	3454.5	3462.8	3388.3	3272.6	3227.2	3235.5	3245.1	3258.9	3292.0	3340.2	3453.1
27.5°	3603.2	3610.2	3512.4	3355.3	3286.5	3300.2	3314.0	3304.3	3319.5	3360.8	3505.4
30°	3812.6	3816.7	3692.8	3484.8	3387.0	3393.9	3396.6	3356.7	3327.8	3360.8	3542.6
32.5°	4060.5	4059.1	3911.8	3641.8	3501.3	3494.4	3471.0	3392.4	3325.0	3353.9	3575.7
35°	4444.8	4429.6	4239.6	3862.2	3630.8	3588.1	3533.0	3432.4	3338.7	3347.0	3604.6
37.5°	5081.1	5034.3	4771.3	4223.1	3823.7	3714.8	3633.5	3497.2	3369.1	3344.3	3639.1
40°	5798.7	5739.6	5450.3	4717.6	4112.8	3937.9	3807.1	3589.4	3418.7	3356.7	3690.0
42.5°	6650.0	6565.9	6254.7	5300.2	4479.2	4225.8	4028.9	3706.5	3491.7	3396.6	3758.9
45°	7695.4	7583.9	7143.1	5957.2	4940.7	4603.2	4340.2	3884.2	3603.2	3473.7	3862.2
47.5°	8751.9	8779.4	8152.7	6709.2	5494.4	5068.7	4730.0	4151.5	3765.7	3597.7	4028.9
50°	9874.4	9893.7	9156.8	7542.6	6122.4	5595.0	5167.9	4450.3	3991.7	3774.0	4278.1
52.5°	10750.5	10753.2	10068.7	8414.4	6776.7	6173.5	5640.4	4791.9	4253.3	4008.2	4610.1
55°	11298.7	11291.8	10707.8	9239.5	7528.7	6780.9	6163.7	5180.3	4572.9	4283.7	5027.4
57.5°	11696.7	11676.1	11148.5	9948.9	8330.4	7498.5	6756.1	5621.1	4950.3	4611.5	5577.0
60°	11848.3	11835.9	11447.4	10561.8	9173.3	8291.8	7439.2	6114.2	5378.7	4998.5	6283.7
62.5°	11906.1	11929.5	11740.8	11155.4	10075.5	9170.6	8190.0	6703.7	5860.7	5436.5	7028.7
65°	12110.0	12152.6	12114.1	11932.2	11094.8	10199.5	9185.7	7404.8	6386.9	5906.3	7807.0
67.5°	12513.5	12556.2	12572.8	12862.0	12340.0	11481.8	10428.1	8278.1	7002.6	6393.8	8392.4
70°	12503.9	12491.5	12783.5	13601.6	13899.2	13257.4	12103.1	9352.4	7736.8	6798.7	8466.8
72.5°	11381.3	11282.2	11972.2	13593.3	15196.6	15111.3	14148.5	10738.1	8370.4	6848.3	7347.0
75°	8538.4	8273.9	9492.9	12250.4	15412.9	16163.5	15448.7	11597.6	8220.2	6050.9	5112.8
77.5°	3651.5	3385.6	4822.2	9068.7	13794.4	15109.8	14255.9	10118.3	6561.8	4001.3	2510.9
80°	955.9	954.5	1457.2	4111.5	9381.3	11158.2	9789.1	6534.3	3749.2	1429.8	692.8
82.5°	395.3	385.7	535.8	1599.1	4583.9	6261.6	5110.1	2914.6	1353.9	387.0	230.0
85°	147.4	146.0	260.3	552.4	1617.0	2582.6	1869.1	745.2	337.4	188.7	103.3
87.5°	41.3	40.0	56.5	191.5	393.9	597.8	319.6	122.6	95.0	74.4	30.3
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°	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6	2969.6
2.5°	2979.3	2986.1	2998.5	3008.2	3020.6	3034.4	3053.7	3066.1	3078.5	3086.7	3081.3
5°	2991.7	3006.8	3038.5	3070.2	3107.4	3141.8	3181.7	3210.7	3234.1	3240.9	3243.7
7.5°	3019.2	3044.0	3097.8	3151.5	3210.7	3267.2	3325.0	3374.6	3414.5	3429.6	3431.1
10°	3067.4	3100.5	3176.3	3252.0	3330.5	3417.2	3491.7	3563.3	3619.8	3643.2	3644.6
12.5°	3128.0	3169.4	3268.5	3373.2	3482.0	3601.8	3698.3	3786.5	3856.7	3888.3	3888.3
15°	3206.5	3260.2	3387.0	3527.4	3687.2	3853.9	3976.5	4074.3	4152.8	4191.3	4188.7
17.5°	3292.0	3363.5	3523.3	3735.5	3964.1	4183.1	4326.3	4398.0	4479.2	4516.5	4515.0
20°	3374.6	3462.8	3691.3	4000.0	4304.3	4537.1	4652.8	4672.1	4677.6	4681.7	4692.8
22.5°	3460.0	3578.5	3902.1	4333.3	4659.6	4820.9	4837.4	4754.8	4639.0	4585.3	4600.4
25°	3553.7	3710.7	4177.6	4701.0	4965.5	4984.8	4858.0	4656.9	4437.9	4337.4	4352.6
27.5°	3644.6	3863.5	4508.2	5052.2	5185.9	5016.5	4743.7	4458.5	4194.1	4088.1	4100.5
30°	3735.5	4038.5	4873.2	5359.4	5286.4	4937.9	4563.3	4245.1	3979.3	3867.7	3880.0
32.5°	3827.8	4242.4	5293.3	5581.1	5268.5	4771.3	4338.7	4005.4	3771.3	3654.2	3669.3
35°	3932.4	4493.0	5691.3	5702.4	5148.7	4526.1	4042.6	3718.9	3515.0	3421.4	3442.1
37.5°	4068.7	4811.1	6042.6	5732.6	4939.3	4166.6	3674.8	3380.1	3212.0	3169.4	3199.6
40°	4238.2	5194.1	6311.1	5684.4	4629.4	3730.0	3272.6	3037.2	2942.1	2951.7	2984.8
42.5°	4458.5	5622.4	6499.8	5560.5	4198.3	3279.6	2920.0	2815.4	2860.8	2899.4	2935.2
45°	4745.0	6067.4	6617.0	5349.8	3710.7	2898.0	2712.0	2736.9	2771.3	2775.4	2803.0
47.5°	5111.5	6517.8	6694.1	5031.6	3213.5	2629.4	2579.8	2585.4	2578.5	2549.6	2571.6
50°	5568.7	6955.8	6763.0	4610.1	2790.6	2461.3	2395.2	2376.0	2280.9	2187.2	2199.6
52.5°	6089.4	7358.0	6791.9	4086.7	2461.3	2320.9	2213.5	2092.2	1914.6	1885.6	1895.3
55°	6667.9	7729.8	6717.5	3443.5	2184.5	2140.4	1977.9	1831.9	1812.6	1787.8	1792.0
57.5°	7359.4	8130.7	6565.9	2725.9	1900.8	1929.7	1771.3	1787.8	1753.4	1714.8	1708.0
60°	8115.5	8545.3	6300.2	2071.6	1607.4	1666.6	1717.6	1716.3	1706.6	1674.8	1663.9
62.5°	8795.9	8818.0	5776.7	1586.7	1349.8	1462.8	1601.9	1600.5	1592.2	1574.3	1567.4
65°	9200.9	8776.7	4903.5	1249.3	1137.8	1294.8	1444.8	1455.9	1457.2	1455.9	1455.9
67.5°	9129.3	8293.2	3705.2	994.5	962.8	1123.9	1289.2	1304.4	1315.4	1318.1	1320.9
70°	8319.4	7231.3	2415.9	793.3	807.2	973.9	1141.8	1157.0	1166.7	1177.6	1183.2
72.5°	6484.8	5316.7	1382.9	641.9	670.8	844.3	995.9	1013.7	1019.3	1040.0	1048.2
75°	3951.7	3126.7	746.5	505.5	550.9	721.7	851.3	871.9	881.5	906.3	909.1
77.5°	1878.7	1353.9	425.6	393.9	443.5	589.5	719.0	742.4	716.3	730.0	719.0
80°	635.0	502.8	268.5	300.2	338.9	460.0	575.7	599.1	544.1	541.3	535.8
82.5°	221.7	203.9	170.8	199.7	219.0	329.2	435.2	465.6	405.0	403.5	384.3
85°	86.8	82.6	95.0	108.9	130.9	202.4	286.5	301.7	249.3	201.1	198.3
87.5°	17.9	19.3	23.4	24.8	40.0	70.2	103.3	126.7	100.6	85.4	78.5
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)