

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: P966808

Luminaire Tested: **NAV-SB4C-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966808
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-SB4C-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26769.9 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

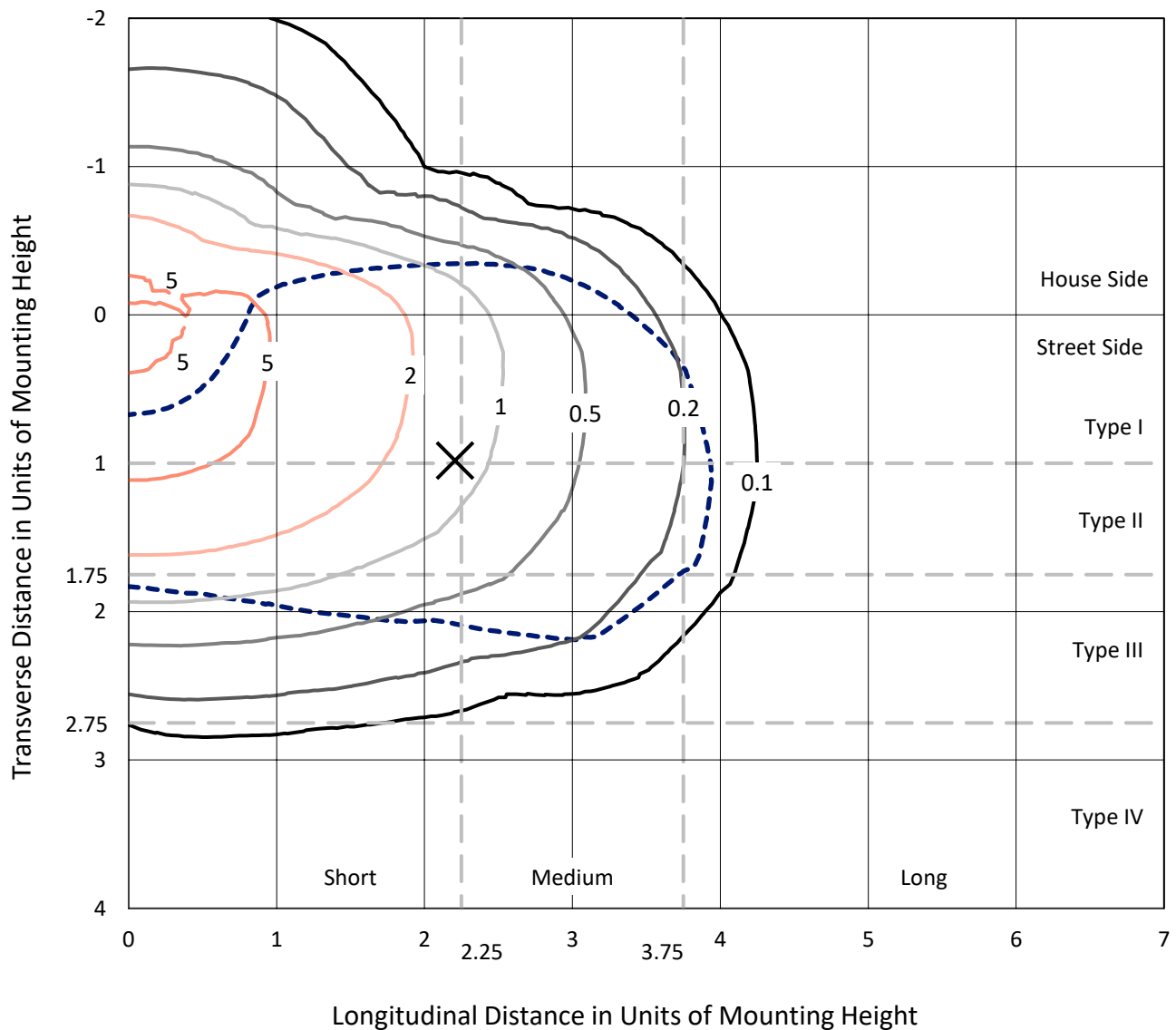
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

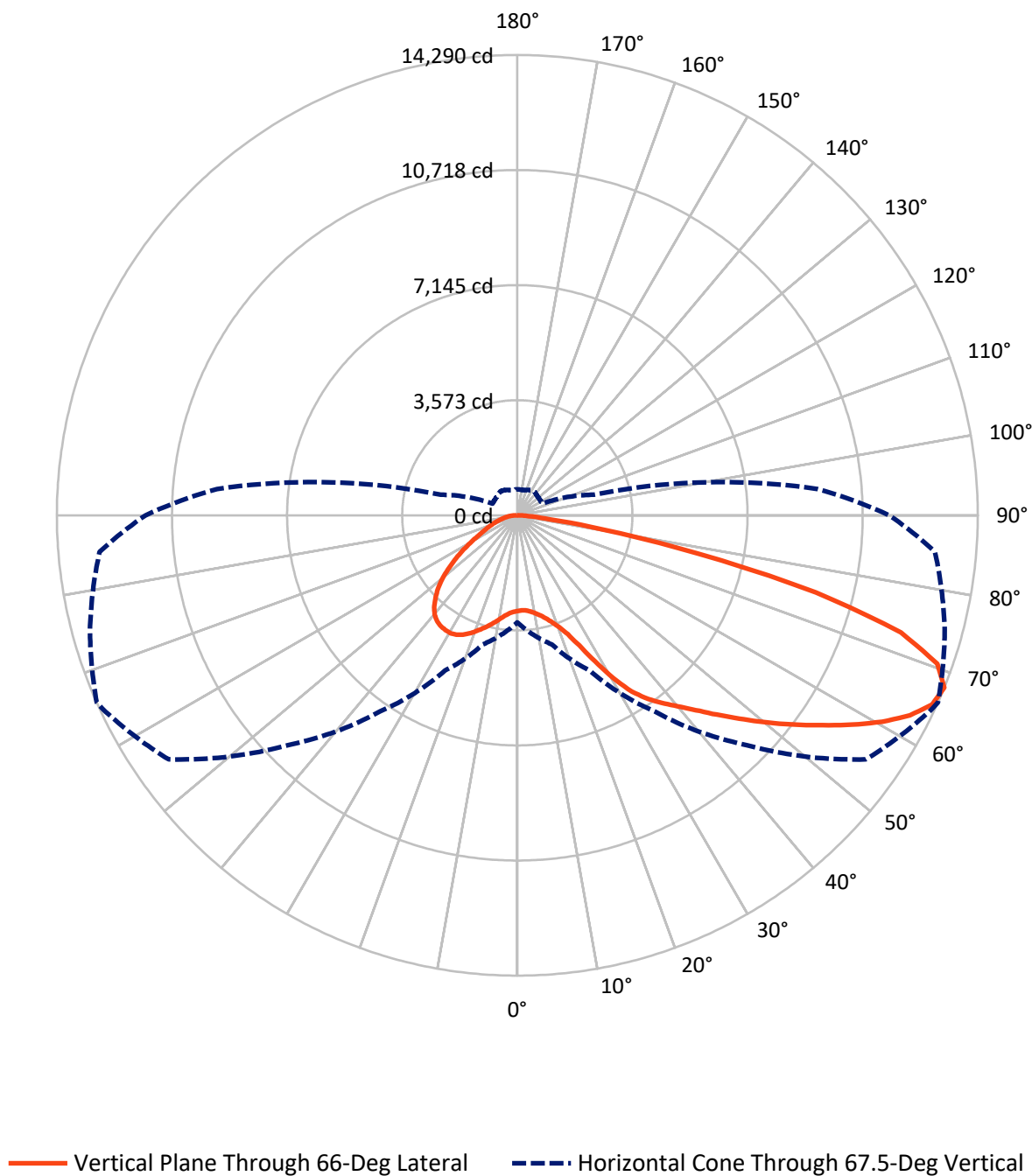
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 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	6656.3	0.0	6656.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	20113.7	0.0	20113.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	26769.9	0.0	26769.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.4	1.1
10°-20°	972.6	3.6
20°-30°	1874.6	7.0
30°-40°	3286.9	12.3
40°-50°	4886.5	18.3
50°-60°	6194.1	23.1
60°-70°	6060.8	22.6
70°-80°	2891.1	10.8
80°-90°	309.0	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°	26769.9	100.0
0°-180°	26769.9	100.0

Coefficient of Utilization



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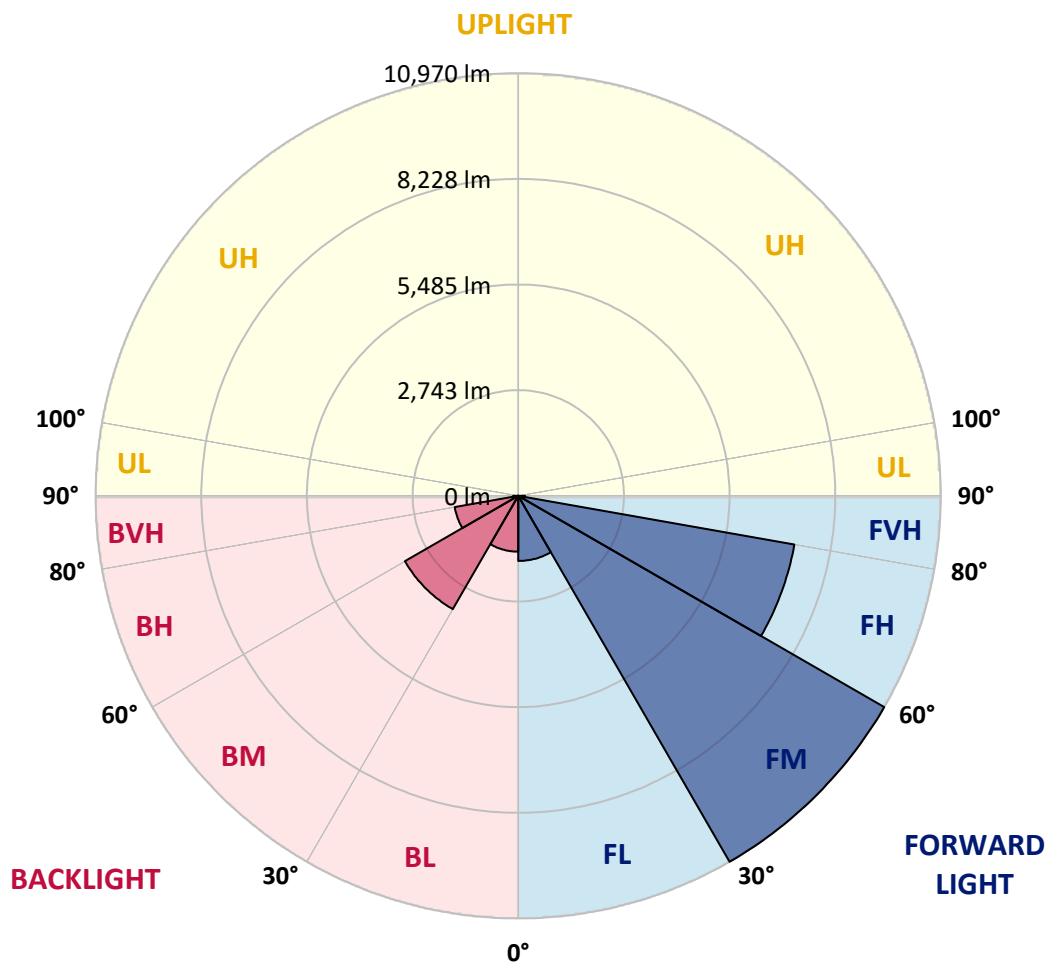
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1691.6	6.3			
FM	(30°-60°)	10970.1	41.0			
FH	(60°-80°)	7276.8	27.2			G3/7500
FVH	(80°-90°)	175.2	0.7			G2/225
BL	(0°-30°)	1450.0	5.4	B3/2500		
BM	(30°-60°)	3397.4	12.7	B3/5000		
BH	(60°-80°)	1675.1	6.3	B3/2500		G3/2500
BVH	(80°-90°)	133.8	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1
2.5°	2938.2	2955.1	2950.9	2943.8	2942.4	2945.2	2949.4	2953.6	2952.3	2959.3	2970.6
5°	2929.8	2946.7	2945.2	2945.2	2950.9	2962.1	2969.1	2976.2	2969.1	2977.6	2993.0
7.5°	2935.4	2948.0	2953.6	2959.3	2973.3	2994.4	3011.3	3026.8	3018.3	3028.3	3047.9
10°	3007.1	3017.0	3022.6	3022.6	3032.5	3056.3	3073.3	3101.3	3094.3	3109.7	3135.1
12.5°	3137.9	3147.8	3147.8	3142.1	3149.2	3164.7	3170.2	3201.2	3188.6	3213.9	3239.2
15°	3298.2	3317.9	3302.4	3292.6	3295.5	3311.0	3309.5	3333.4	3320.8	3341.9	3364.4
17.5°	3475.5	3500.8	3475.5	3474.0	3468.5	3485.3	3486.7	3507.9	3485.3	3500.8	3516.3
20°	3685.1	3720.2	3699.1	3706.2	3693.5	3700.6	3707.5	3738.5	3703.3	3714.6	3710.4
22.5°	3980.4	4022.6	4000.1	4026.8	4018.4	4012.8	4011.3	4066.2	4011.3	4015.5	3974.7
25°	4410.8	4461.4	4422.1	4458.6	4458.6	4476.9	4498.0	4568.3	4476.9	4450.2	4344.7
27.5°	5046.6	5097.2	5019.8	5042.3	5035.3	5080.3	5057.8	5232.2	5133.7	5090.2	4877.8
30°	5811.6	5901.7	5755.5	5749.8	5742.8	5814.5	5846.8	5962.2	5862.3	5818.7	5562.8
32.5°	6638.7	6732.9	6558.6	6507.9	6481.2	6524.7	6498.1	6590.9	6522.0	6454.4	6138.0
35°	7513.6	7606.4	7440.5	7342.0	7235.1	7143.6	7048.0	7071.9	7007.2	6904.5	6576.8
37.5°	8340.6	8510.8	8335.0	8229.5	8032.6	7854.0	7586.7	7475.6	7415.2	7320.9	6990.3
40°	9183.1	9280.1	9146.5	9056.5	8842.7	8562.8	8135.2	7900.4	7818.8	7727.4	7447.4
42.5°	9803.4	9896.2	9824.4	9762.6	9595.2	9270.3	8717.5	8423.6	8305.5	8202.8	7965.1
45°	10295.6	10364.6	10319.6	10342.0	10270.3	9955.3	9320.9	8984.7	8862.5	8737.2	8550.1
47.5°	10493.9	10567.1	10638.8	10772.4	10894.8	10662.8	9969.4	9592.4	9463.0	9335.0	9150.8
50°	10471.5	10546.0	10754.2	11038.2	11418.0	11340.7	10652.9	10239.3	10119.8	9973.6	9803.4
52.5°	10291.4	10375.8	10643.1	11115.6	11720.5	11848.4	11349.1	10907.4	10795.0	10620.5	10450.4
55°	9818.8	9869.4	10270.3	10939.8	11792.1	12202.8	12031.2	11619.2	11506.6	11263.3	11077.7
57.5°	8942.6	9015.7	9599.4	10465.9	11612.1	12443.4	12630.5	12367.4	12259.1	11908.9	11714.8
60°	7799.1	7915.9	8584.0	9669.7	11153.6	12442.0	13174.7	13103.0	13013.0	12544.7	12342.1
62.5°	6505.1	6640.2	7282.9	8544.5	10351.9	12089.0	13515.1	13719.1	13672.7	13131.2	12872.4
65°	4996.0	5088.7	5728.7	7088.8	9104.4	11330.9	13554.5	14139.7	14148.1	13577.0	13149.4
67.5°	3326.4	3593.6	4149.2	5319.4	7433.4	10091.7	13208.6	14208.6	14290.1	13730.3	13010.2
70°	1623.1	1974.8	2519.0	3457.2	5319.4	8191.5	12304.1	13643.2	13824.6	13283.1	12180.4
72.5°	673.7	787.6	1084.4	1706.1	3053.6	5527.6	10486.9	12110.1	12446.2	11769.7	10240.8
75°	454.3	492.3	620.2	874.8	1391.0	2725.8	7562.8	9029.7	9571.2	8889.1	7266.0
77.5°	350.2	374.1	451.5	611.8	827.1	1030.9	4047.9	5441.8	5721.7	5296.9	3780.7
80°	275.7	294.0	337.5	445.9	586.5	551.3	1379.8	2465.6	2627.4	2204.0	1215.2
82.5°	239.1	246.1	241.9	302.4	389.6	322.1	452.8	910.0	1004.3	728.6	396.7
85°	173.0	192.7	201.1	187.1	206.7	163.2	185.6	322.1	354.4	316.4	223.7
87.5°	70.3	104.0	128.0	121.0	76.0	46.4	57.7	94.2	108.3	118.2	73.2
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°	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1	2969.1
2.5°	2972.0	2981.8	2988.8	2997.3	3002.9	3011.3	3028.3	3038.1	3039.4	3046.5	3045.1
5°	2998.6	3012.8	3028.3	3050.7	3076.0	3097.1	3129.5	3152.0	3160.4	3167.5	3166.0
7.5°	3056.3	3076.0	3104.2	3143.6	3180.2	3208.2	3247.6	3274.4	3301.1	3311.0	3312.3
10°	3142.1	3170.2	3211.0	3264.5	3303.9	3340.5	3381.3	3403.7	3430.5	3441.7	3447.4
12.5°	3249.0	3278.6	3332.0	3406.6	3443.2	3468.5	3482.5	3476.9	3482.5	3492.4	3495.1
15°	3371.4	3403.7	3464.2	3544.4	3569.8	3547.2	3516.3	3488.2	3483.9	3486.7	3496.6
17.5°	3516.3	3540.1	3610.5	3678.0	3659.8	3566.9	3499.4	3454.4	3431.9	3424.8	3434.7
20°	3718.8	3718.8	3776.5	3818.6	3696.3	3538.8	3433.2	3360.2	3313.7	3294.0	3289.8
22.5°	3964.9	3942.5	3979.0	3949.4	3689.3	3460.0	3313.7	3187.1	3116.8	3088.7	3084.4
25°	4277.2	4250.5	4240.6	4057.8	3638.6	3334.8	3097.1	2943.8	2881.9	2866.4	2869.3
27.5°	4748.4	4680.9	4552.8	4116.8	3545.8	3137.9	2844.0	2701.9	2666.7	2668.2	2672.4
30°	5375.7	5240.6	4927.0	4126.6	3393.9	2859.4	2585.2	2483.9	2467.0	2474.0	2497.9
32.5°	5956.6	5828.6	5309.6	4081.7	3160.4	2586.6	2353.1	2285.5	2260.2	2268.7	2279.9
35°	6412.3	6377.1	5664.0	4018.4	2873.5	2330.5	2144.9	2087.2	2038.0	2026.7	2035.2
37.5°	6842.7	6828.6	5929.8	3929.7	2589.4	2149.1	1977.5	1901.6	1829.8	1790.5	1791.9
40°	7315.2	7301.2	6104.3	3793.3	2337.6	1991.6	1827.1	1727.2	1638.6	1566.8	1573.9
42.5°	7846.9	7764.0	6187.2	3597.9	2123.8	1858.0	1704.7	1569.7	1452.9	1386.8	1391.0
45°	8427.8	8240.7	6185.8	3348.9	1943.8	1735.6	1573.9	1382.6	1274.3	1212.4	1209.6
47.5°	9043.9	8696.4	6109.8	3073.3	1769.4	1600.6	1371.3	1225.1	1153.3	1115.4	1106.9
50°	9679.6	9122.6	5980.5	2756.7	1590.8	1447.3	1244.8	1144.9	1090.1	1054.9	1042.2
52.5°	10277.4	9509.4	5824.4	2398.1	1409.3	1298.2	1188.5	1111.1	1053.5	1014.1	997.2
55°	10832.9	9842.8	5603.6	2031.0	1261.7	1198.3	1161.7	1097.1	1030.9	984.5	966.3
57.5°	11326.7	10059.3	5222.4	1686.4	1156.2	1129.4	1133.6	1073.2	997.2	957.9	932.5
60°	11737.3	10218.3	4658.3	1367.1	1070.3	1061.9	1090.1	1028.2	939.5	894.5	874.8
62.5°	11983.5	10215.5	3966.3	1119.6	997.2	1000.0	1032.4	971.9	881.9	839.7	827.1
65°	11962.4	9965.2	3206.8	957.9	926.9	929.7	971.9	910.0	834.0	808.7	807.3
67.5°	11539.0	9354.7	2460.0	852.4	849.5	862.2	911.4	867.8	804.5	801.8	806.0
70°	10392.7	8087.5	1772.2	767.9	769.4	787.6	852.4	841.1	789.0	794.7	793.2
72.5°	8333.6	6166.1	1189.9	679.4	680.7	710.3	796.1	820.0	773.6	848.1	859.4
75°	5550.1	3845.4	765.2	585.1	586.5	624.5	746.8	779.2	731.3	845.3	852.4
77.5°	2666.7	1728.6	554.1	492.3	492.3	527.5	645.5	697.6	623.1	656.8	602.0
80°	921.3	649.8	436.0	396.7	388.2	412.2	544.3	604.8	537.3	495.1	464.1
82.5°	362.8	337.5	350.2	308.0	279.9	295.4	423.3	499.3	395.2	357.2	355.9
85°	208.2	219.5	247.5	204.0	161.7	181.4	310.9	358.6	298.2	263.0	268.7
87.5°	56.3	77.4	113.9	105.5	73.2	77.4	147.7	198.3	171.6	132.2	136.4
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)