

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: P883989

Luminaire Tested: **NAV-SB4C-830-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26575 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

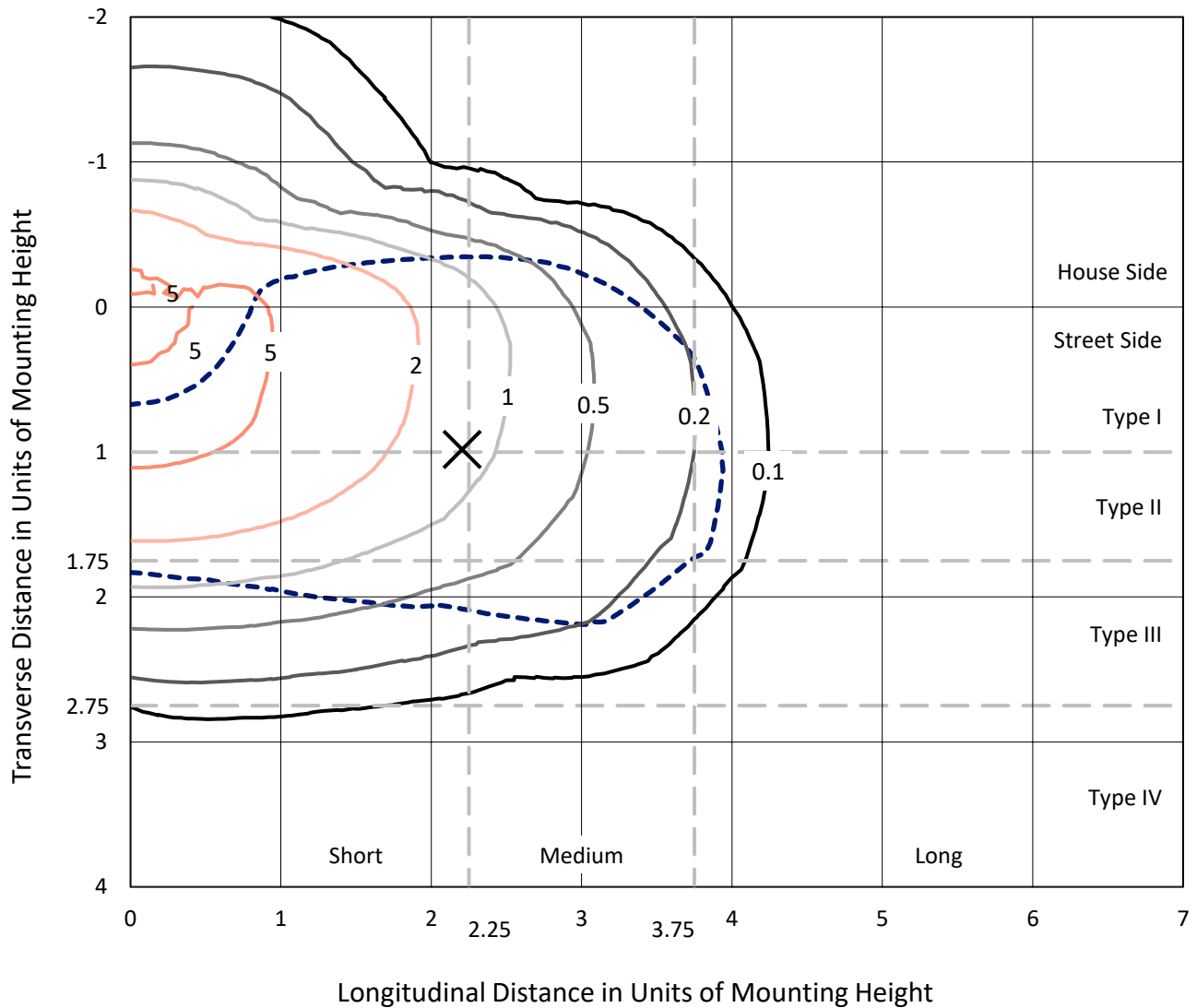
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

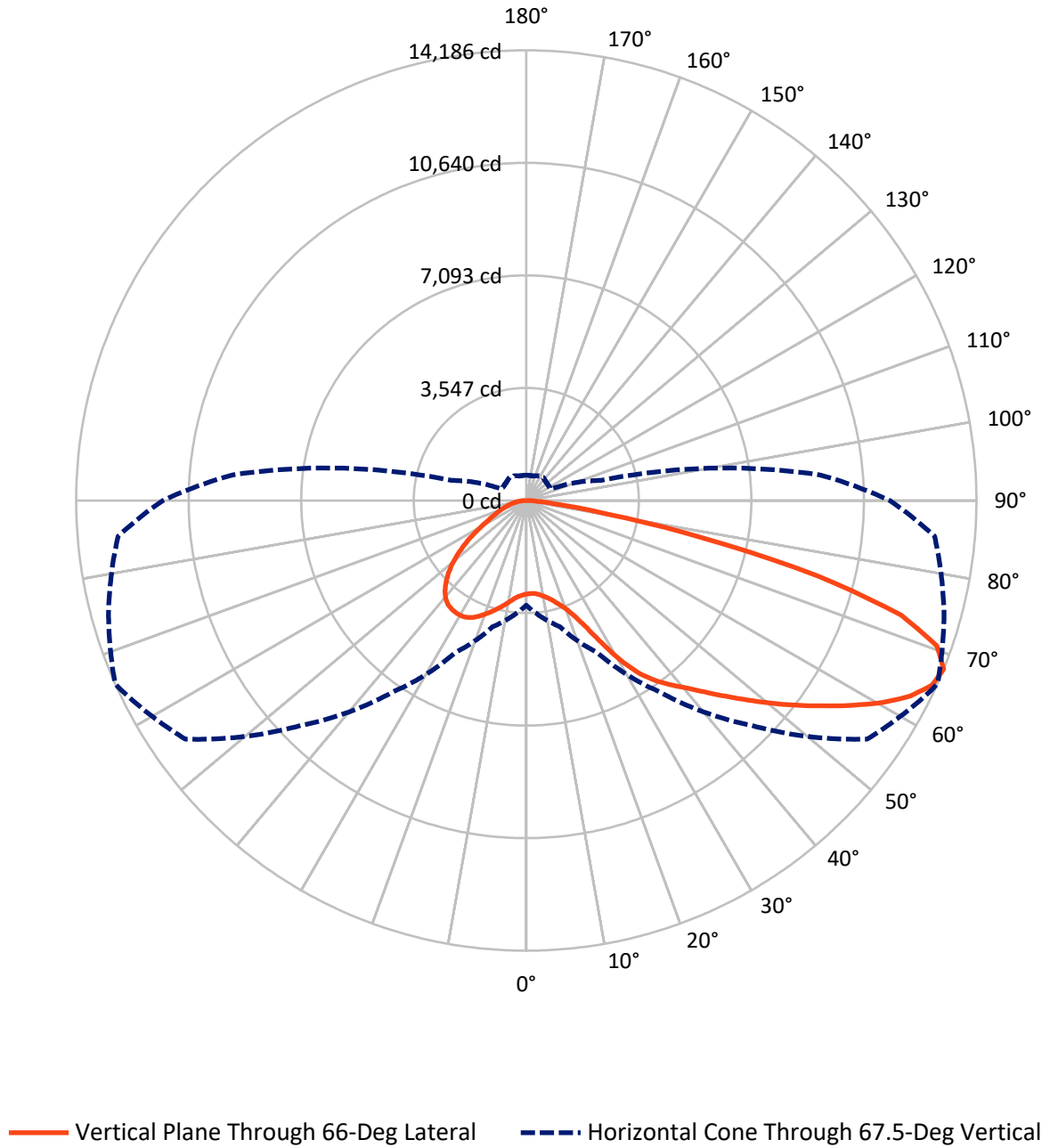
✕ Max cd
 - - - 1/2 Max cd



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	6607.8	0.0	6607.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	19967.2	0.0	19967.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	26575.0	0.0	26575.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.2	1.1
10°-20°	965.5	3.6
20°-30°	1861.0	7.0
30°-40°	3263.0	12.3
40°-50°	4850.9	18.3
50°-60°	6149.0	23.1
60°-70°	6016.7	22.6
70°-80°	2870.0	10.8
80°-90°	306.7	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°	26575.0	100.0
0°-180°	26575.0	100.0

Coefficient of Utilization



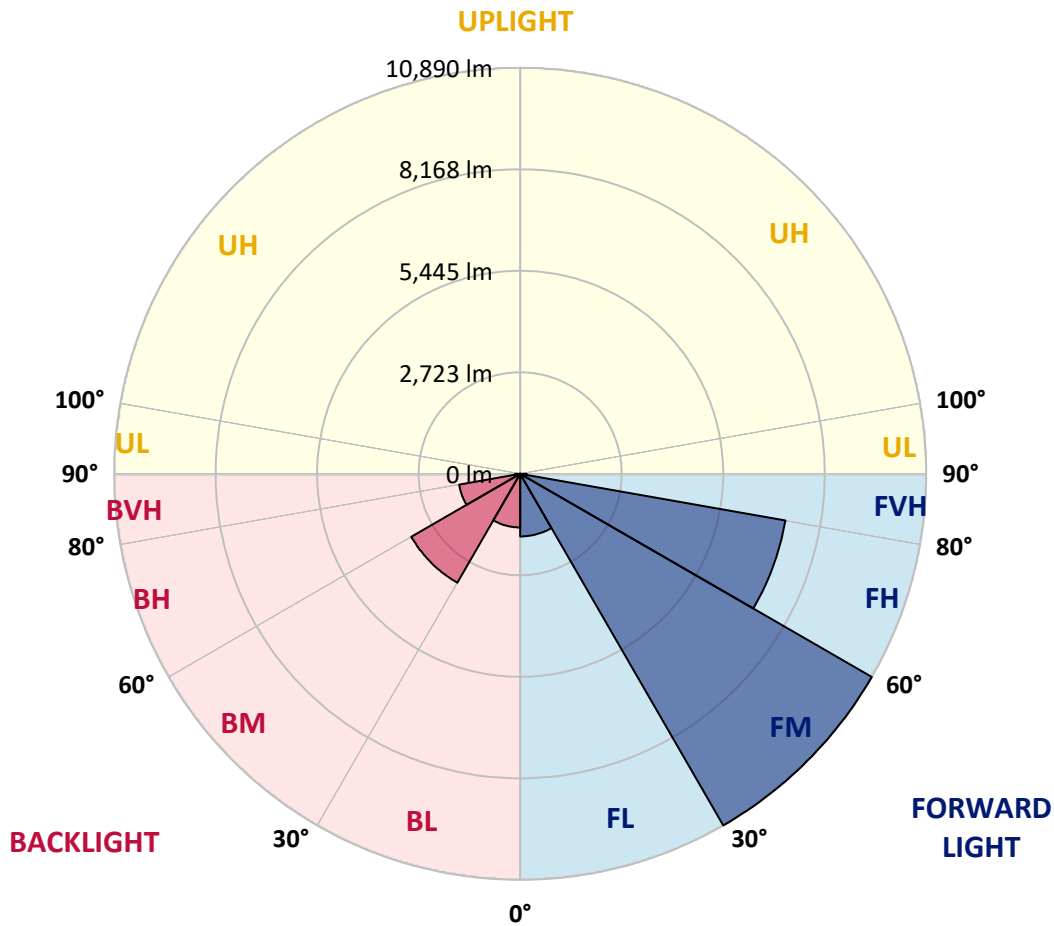
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1679.3	6.3			
FM (30°-60°)	10890.2	41.0			
FH (60°-80°)	7223.8	27.2			G3/7500
FVH (80°-90°)	173.9	0.7			G2/225
BL (0°-30°)	1439.4	5.4	B3/2500		
BM (30°-60°)	3372.7	12.7	B3/5000		
BH (60°-80°)	1662.9	6.3	B3/2500		G3/2500
BVH (80°-90°)	132.8	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°	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5
2.5°	2916.8	2933.6	2929.4	2922.4	2921.0	2923.8	2928.0	2932.2	2930.8	2937.7	2948.9
5°	2908.4	2925.2	2923.8	2923.8	2929.4	2940.5	2947.5	2954.5	2947.5	2955.9	2971.3
7.5°	2914.0	2926.6	2932.2	2937.7	2951.7	2972.7	2989.4	3004.8	2996.4	3006.2	3025.7
10°	2985.2	2995.0	3000.6	3000.6	3010.4	3034.1	3050.8	3078.8	3071.8	3087.1	3112.3
12.5°	3115.1	3124.8	3124.8	3119.3	3126.2	3141.6	3147.2	3177.9	3165.3	3190.5	3215.6
15°	3274.2	3293.8	3278.4	3268.7	3271.5	3286.8	3285.4	3309.2	3296.6	3317.5	3339.9
17.5°	3450.2	3475.3	3450.2	3448.8	3443.2	3459.9	3461.3	3482.3	3459.9	3475.3	3490.7
20°	3658.2	3693.1	3672.2	3679.2	3666.6	3673.6	3680.6	3711.3	3676.4	3687.5	3683.4
22.5°	3951.4	3993.3	3971.0	3997.5	3989.1	3983.5	3982.2	4036.6	3982.2	3986.3	3945.8
25°	4378.7	4429.0	4389.9	4426.2	4426.2	4444.3	4465.3	4535.1	4444.3	4417.8	4313.1
27.5°	5009.8	5060.1	4983.3	5005.6	4998.6	5043.3	5021.0	5194.1	5096.4	5053.1	4842.3
30°	5769.4	5858.7	5713.5	5707.9	5701.0	5772.2	5804.3	5918.8	5819.6	5776.4	5522.2
32.5°	6590.4	6683.9	6510.8	6460.5	6434.0	6477.3	6450.8	6542.9	6474.5	6407.5	6093.3
35°	7458.9	7551.0	7386.3	7288.5	7182.4	7091.6	6996.7	7020.4	6956.2	6854.3	6528.9
37.5°	8279.9	8448.8	8274.3	8169.6	7974.1	7796.8	7531.5	7421.2	7361.1	7267.6	6939.4
40°	9116.2	9212.6	9079.9	8990.6	8778.3	8500.5	8076.0	7842.8	7761.8	7671.1	7393.2
42.5°	9732.0	9824.1	9752.9	9691.5	9525.3	9202.8	8654.1	8362.2	8245.0	8143.0	7907.1
45°	10220.7	10289.1	10244.4	10266.7	10195.5	9882.8	9253.1	8919.4	8797.9	8673.6	8487.9
47.5°	10417.5	10490.2	10561.4	10694.0	10815.5	10585.1	9896.7	9522.5	9394.1	9267.0	9084.1
50°	10395.2	10469.2	10675.9	10957.9	11334.9	11258.1	10575.3	10164.8	10046.1	9900.9	9732.0
52.5°	10216.5	10300.3	10565.5	11034.7	11635.1	11762.1	11266.5	10828.0	10716.3	10543.2	10374.3
55°	9747.3	9797.6	10195.5	10860.2	11706.3	12114.0	11943.7	11534.6	11422.9	11181.3	10997.0
57.5°	8877.5	8950.1	9529.5	10389.6	11527.6	12352.8	12538.5	12277.4	12169.9	11822.2	11629.5
60°	7742.3	7858.2	8521.4	9599.3	11072.4	12351.4	13078.8	13007.6	12918.3	12453.3	12252.2
62.5°	6457.7	6591.8	7229.9	8482.3	10276.5	12000.9	13416.7	13619.2	13573.1	13035.5	12778.6
65°	4959.5	5051.7	5687.0	7037.2	9038.0	11248.3	13455.8	14036.7	14045.0	13478.2	13053.7
67.5°	3302.2	3567.5	4119.0	5280.7	7379.3	10018.2	13112.3	14105.1	14186.1	13630.4	12915.5
70°	1611.3	1960.4	2500.7	3432.0	5280.7	8131.9	12214.5	13543.8	13723.9	13186.3	12091.7
72.5°	668.8	781.9	1076.5	1693.7	3031.3	5487.3	10410.6	12021.9	12355.6	11684.0	10166.2
75°	451.0	488.7	615.8	868.5	1380.9	2706.0	7507.7	8964.0	9501.6	8824.4	7213.1
77.5°	347.7	371.4	448.2	607.4	821.0	1023.5	4018.5	5402.2	5680.0	5258.3	3753.2
80°	273.7	291.8	335.1	442.6	582.2	547.3	1369.7	2447.7	2608.2	2187.9	1206.4
82.5°	237.4	244.3	240.2	300.2	386.8	319.7	449.6	903.4	996.9	723.3	393.7
85°	171.7	191.3	199.7	185.7	205.3	162.0	184.3	319.7	351.9	314.2	222.0
87.5°	69.8	103.3	127.1	120.1	75.4	46.1	57.2	93.5	107.5	117.3	72.6
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°	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5	2947.5
2.5°	2950.3	2960.1	2967.1	2975.4	2981.0	2989.4	3006.2	3015.9	3017.3	3024.3	3022.9
5°	2976.8	2990.8	3006.2	3028.5	3053.6	3074.6	3106.7	3129.0	3137.4	3144.4	3143.0
7.5°	3034.1	3053.6	3081.6	3120.7	3157.0	3184.9	3224.0	3250.5	3277.0	3286.8	3288.2
10°	3119.3	3147.2	3187.7	3240.7	3279.8	3316.1	3356.6	3379.0	3405.5	3416.7	3422.2
12.5°	3225.4	3254.7	3307.8	3381.8	3418.1	3443.2	3457.2	3451.6	3457.2	3466.9	3469.7
15°	3346.9	3379.0	3439.0	3518.6	3543.7	3521.4	3490.7	3462.7	3458.6	3461.3	3471.1
17.5°	3490.7	3514.4	3584.2	3651.2	3633.1	3540.9	3473.9	3429.2	3406.9	3399.9	3409.7
20°	3691.7	3691.7	3749.0	3790.9	3669.4	3513.0	3408.3	3335.7	3289.6	3270.1	3265.9
22.5°	3936.1	3913.7	3950.0	3920.7	3662.4	3434.8	3289.6	3163.9	3094.1	3066.2	3062.0
25°	4246.0	4219.5	4209.7	4028.2	3612.1	3310.5	3074.6	2922.4	2861.0	2845.6	2848.4
27.5°	4713.8	4646.8	4519.7	4086.9	3520.0	3115.1	2823.3	2682.2	2647.3	2648.7	2652.9
30°	5336.5	5202.5	4891.1	4096.6	3369.2	2838.6	2566.3	2465.8	2449.1	2456.0	2479.8
32.5°	5913.2	5786.1	5270.9	4052.0	3137.4	2567.7	2336.0	2268.9	2243.8	2252.2	2263.3
35°	6365.6	6330.7	5622.8	3989.1	2852.6	2313.6	2129.3	2072.1	2023.2	2012.0	2020.4
37.5°	6792.8	6778.9	5886.7	3901.2	2570.5	2133.5	1963.2	1887.8	1816.5	1777.4	1778.8
40°	7262.0	7248.0	6059.8	3765.7	2320.6	1977.1	1813.8	1714.6	1626.7	1555.4	1562.4
42.5°	7789.8	7707.4	6142.2	3571.6	2108.4	1844.5	1692.3	1558.2	1442.3	1376.7	1380.9
45°	8366.4	8180.7	6140.8	3324.5	1929.6	1723.0	1562.4	1372.5	1265.0	1203.6	1200.8
47.5°	8978.0	8633.1	6065.4	3050.8	1756.5	1589.0	1361.4	1216.1	1144.9	1107.2	1098.9
50°	9609.1	9056.2	5936.9	2736.7	1579.2	1436.8	1235.7	1136.6	1082.1	1047.2	1034.6
52.5°	10202.5	9440.2	5781.9	2380.6	1399.1	1288.8	1179.8	1103.1	1045.8	1006.7	990.0
55°	10754.0	9771.1	5562.7	2016.2	1252.5	1189.6	1153.3	1089.1	1023.5	977.4	959.2
57.5°	11244.1	9986.1	5184.3	1674.1	1147.7	1121.2	1125.4	1065.4	990.0	950.9	925.7
60°	11651.8	10143.9	4624.4	1357.2	1062.6	1054.2	1082.1	1020.7	932.7	888.0	868.5
62.5°	11896.2	10141.1	3937.5	1111.4	990.0	992.7	1024.9	964.8	875.5	833.6	821.0
65°	11875.2	9892.5	3183.5	950.9	920.1	922.9	964.8	903.4	828.0	802.9	801.5
67.5°	11455.0	9286.6	2442.1	846.1	843.3	855.9	904.8	861.5	798.7	795.9	800.1
70°	10317.0	8028.5	1759.3	762.4	763.8	781.9	846.1	835.0	783.3	788.9	787.5
72.5°	8272.9	6121.2	1181.2	674.4	675.8	705.1	790.3	814.0	767.9	841.9	853.1
75°	5509.7	3817.4	759.6	580.8	582.2	619.9	741.4	773.5	726.1	839.2	846.1
77.5°	2647.3	1716.0	550.1	488.7	488.7	523.6	640.9	692.5	618.5	652.1	597.6
80°	914.6	645.1	432.8	393.7	385.4	409.1	540.4	600.4	533.4	491.5	460.8
82.5°	360.2	335.1	347.7	305.8	277.9	293.2	420.3	495.7	392.4	354.7	353.3
85°	206.6	217.8	245.7	202.5	160.6	180.1	308.6	356.0	296.0	261.1	266.7
87.5°	55.9	76.8	113.1	104.7	72.6	76.8	146.6	196.9	170.3	131.2	135.4
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)