

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: P966870

Luminaire Tested: **NAV-SB4C-835-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966870
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-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28554.5 lumens
Efficiency: N/A
Efficacy: 142.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

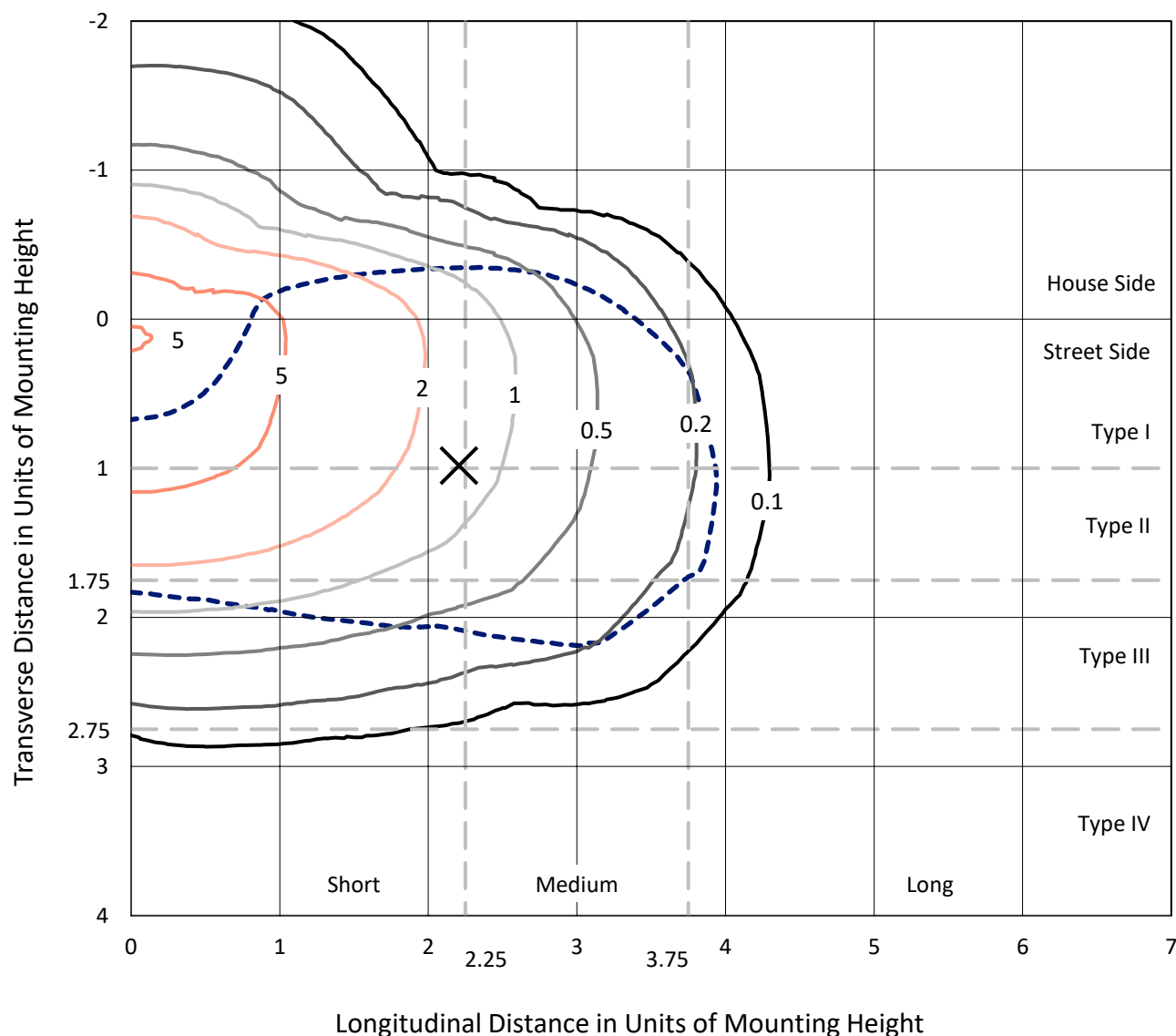
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

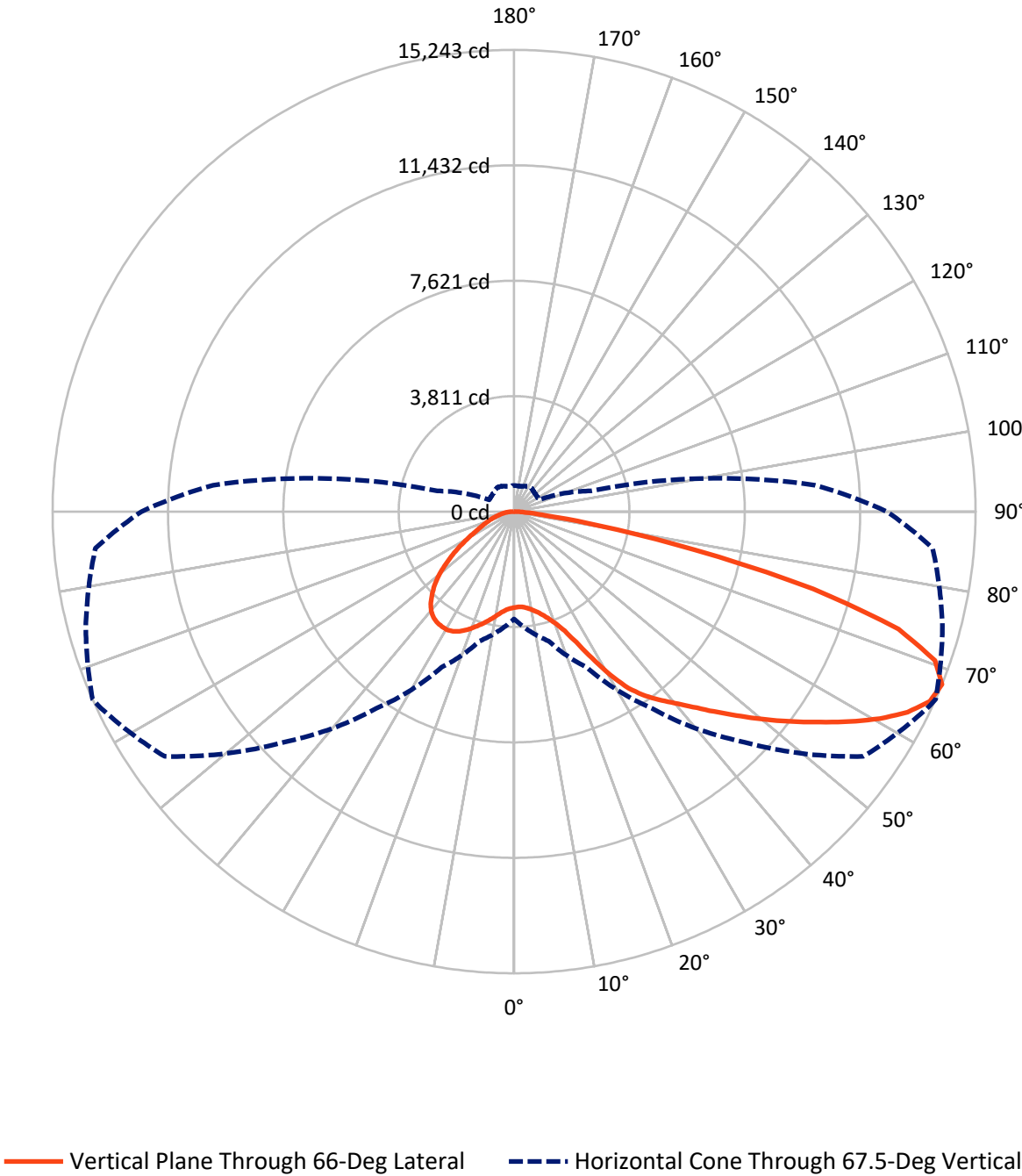
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 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	7100.0	0.0	7100.0
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	21454.5	0.0	21454.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	28554.5	0.0	28554.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.0	1.1
10°-20°	1037.4	3.6
20°-30°	1999.6	7.0
30°-40°	3506.0	12.3
40°-50°	5212.3	18.3
50°-60°	6607.0	23.1
60°-70°	6464.8	22.6
70°-80°	3083.8	10.8
80°-90°	329.6	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°	28554.5	100.0
0°-180°	28554.5	100.0

Coefficient of Utilization



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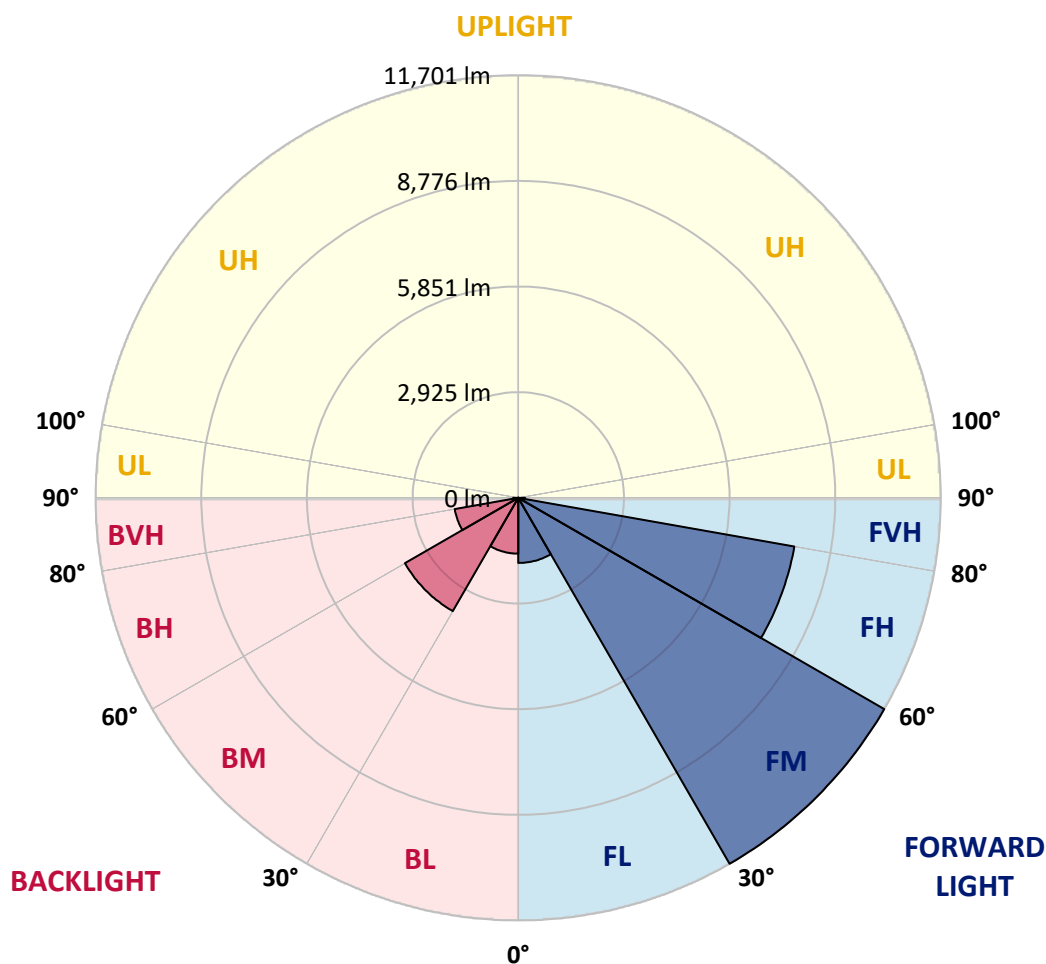
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1804.4	6.3			
FM	(30°-60°)	11701.4	41.0			
FH	(60°-80°)	7761.9	27.2			G4/12000
FVH	(80°-90°)	186.9	0.7			G2/225
BL	(0°-30°)	1546.6	5.4	B3/2500		
BM	(30°-60°)	3623.9	12.7	B3/5000		
BH	(60°-80°)	1786.7	6.3	B3/2500		G3/2500
BVH	(80°-90°)	142.7	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°	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0
2.5°	3134.0	3152.1	3147.6	3140.1	3138.5	3141.5	3146.0	3150.5	3149.1	3156.6	3168.6
5°	3125.0	3143.1	3141.5	3141.5	3147.6	3159.6	3167.0	3174.5	3167.0	3176.1	3192.6
7.5°	3131.1	3144.6	3150.5	3156.6	3171.6	3194.1	3212.0	3228.5	3219.5	3230.1	3251.1
10°	3207.5	3218.1	3224.0	3224.0	3234.6	3260.1	3278.1	3308.1	3300.6	3317.1	3344.1
12.5°	3347.1	3357.6	3357.6	3351.6	3359.1	3375.6	3381.6	3414.6	3401.2	3428.1	3455.1
15°	3518.1	3539.1	3522.6	3512.2	3515.1	3531.6	3530.1	3555.6	3542.1	3564.6	3588.6
17.5°	3707.1	3734.2	3707.1	3705.7	3699.6	3717.7	3719.2	3741.7	3717.7	3734.2	3750.7
20°	3930.7	3968.2	3945.7	3953.2	3939.7	3947.2	3954.8	3987.8	3950.2	3962.2	3957.7
22.5°	4245.8	4290.8	4266.8	4295.3	4286.2	4280.3	4278.8	4337.3	4278.8	4283.3	4239.7
25°	4704.9	4758.9	4716.8	4755.9	4755.9	4775.4	4797.8	4872.8	4775.4	4746.9	4634.3
27.5°	5383.0	5437.0	5354.5	5378.5	5371.0	5419.0	5395.0	5581.0	5476.0	5429.4	5202.9
30°	6199.1	6295.1	6139.1	6133.1	6125.6	6202.1	6236.6	6359.6	6253.1	6206.6	5933.5
32.5°	7081.3	7181.8	6995.7	6941.7	6913.2	6959.7	6931.3	7030.3	6956.8	6884.7	6547.2
35°	8014.5	8113.5	7936.4	7831.4	7717.4	7619.8	7517.9	7543.4	7474.3	7364.8	7015.2
37.5°	8896.6	9078.1	8890.5	8778.1	8568.1	8377.5	8092.5	7973.9	7909.4	7808.9	7456.4
40°	9795.2	9898.7	9756.3	9660.2	9432.2	9133.7	8677.5	8427.0	8340.0	8242.4	7944.0
42.5°	10456.8	10555.9	10479.4	10413.4	10234.8	9888.3	9298.7	8985.2	8859.1	8749.6	8496.0
45°	10982.0	11055.4	11007.5	11031.5	10955.0	10618.9	9942.3	9583.8	9453.2	9319.7	9120.1
47.5°	11193.5	11271.5	11348.0	11490.6	11621.0	11373.5	10633.9	10231.9	10093.8	9957.3	9760.8
50°	11169.5	11249.0	11471.1	11774.1	12179.2	12096.6	11363.0	10922.0	10794.4	10638.4	10456.8
52.5°	10977.4	11067.4	11352.5	11856.6	12501.7	12638.2	12105.7	11634.6	11514.5	11328.5	11147.0
55°	10473.3	10527.4	10955.0	11669.1	12578.3	13016.4	12833.3	12393.7	12273.7	12014.1	11816.1
57.5°	9538.8	9616.8	10239.3	11163.5	12386.2	13272.8	13472.4	13191.9	13076.3	12702.7	12495.8
60°	8319.0	8443.5	9156.1	10314.4	11897.2	13271.4	14053.1	13976.5	13880.4	13380.9	13164.9
62.5°	6938.7	7082.7	7768.4	9114.1	11042.0	12894.8	14416.1	14633.6	14584.1	14006.5	13730.5
65°	5329.0	5428.0	6110.6	7561.3	9711.3	12086.2	14458.0	15082.2	15091.2	14482.1	14026.0
67.5°	3548.1	3833.2	4425.7	5674.0	7928.9	10764.4	14089.0	15155.8	15242.7	14645.6	13877.5
70°	1731.3	2106.4	2686.9	3687.6	5674.0	8737.5	13124.3	14552.6	14746.2	14168.6	12992.3
72.5°	718.6	840.2	1156.7	1819.8	3257.0	5896.0	11186.0	12917.4	13275.9	12554.2	10923.4
75°	484.6	525.1	661.6	933.2	1483.8	2907.5	8067.0	9631.7	10209.3	9481.7	7750.4
77.5°	373.6	399.0	481.5	652.6	882.1	1099.7	4317.8	5804.6	6103.1	5650.0	4032.8
80°	294.1	313.5	360.1	475.6	625.7	588.1	1471.8	2629.9	2802.5	2350.9	1296.2
82.5°	255.0	262.5	258.1	322.6	415.5	343.6	483.1	970.7	1071.2	777.2	423.1
85°	184.5	205.5	214.5	199.6	220.6	174.0	198.0	343.6	378.0	337.5	238.5
87.5°	75.0	111.0	136.5	129.0	81.0	49.5	61.5	100.6	115.5	126.0	78.0
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°	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0	3167.0
2.5°	3170.0	3180.6	3188.1	3197.1	3203.0	3212.0	3230.1	3240.5	3242.1	3249.6	3248.1
5°	3198.6	3213.6	3230.1	3254.1	3281.1	3303.6	3338.1	3362.1	3371.1	3378.6	3377.1
7.5°	3260.1	3281.1	3311.1	3353.1	3392.1	3422.1	3464.1	3492.6	3521.1	3531.6	3533.2
10°	3351.6	3381.6	3425.1	3482.1	3524.2	3563.1	3606.7	3630.7	3659.1	3671.1	3677.2
12.5°	3465.6	3497.1	3554.1	3633.6	3672.7	3699.6	3714.7	3708.7	3714.7	3725.2	3728.1
15°	3596.1	3630.7	3695.1	3780.7	3807.7	3783.7	3750.7	3720.6	3716.1	3719.2	3729.7
17.5°	3750.7	3776.2	3851.2	3923.2	3903.7	3804.7	3732.6	3684.7	3660.7	3653.2	3663.7
20°	3966.7	3966.7	4028.2	4073.2	3942.7	3774.7	3662.1	3584.1	3534.6	3513.6	3509.1
22.5°	4229.3	4205.3	4244.2	4212.8	3935.2	3690.6	3534.6	3399.6	3324.6	3294.6	3290.0
25°	4562.3	4533.8	4523.3	4328.3	3881.2	3557.2	3303.6	3140.1	3074.1	3057.6	3060.5
27.5°	5064.9	4992.9	4856.3	4391.3	3782.1	3347.1	3033.6	2882.0	2844.5	2846.0	2850.5
30°	5734.1	5590.0	5255.5	4401.8	3620.2	3050.1	2757.5	2649.5	2631.5	2639.0	2664.5
32.5°	6353.7	6217.1	5663.5	4353.8	3371.1	2759.0	2509.9	2438.0	2410.9	2419.9	2431.9
35°	6839.7	6802.2	6041.6	4286.2	3065.1	2485.9	2287.9	2226.4	2173.9	2161.9	2170.8
37.5°	7298.8	7283.8	6325.2	4191.7	2762.0	2292.4	2109.3	2028.4	1951.8	1909.9	1911.3
40°	7802.9	7787.8	6511.2	4046.2	2493.4	2124.4	1948.8	1842.3	1747.8	1671.3	1678.8
42.5°	8369.9	8281.5	6599.7	3837.7	2265.5	1981.8	1818.4	1674.3	1549.8	1479.3	1483.8
45°	8989.6	8790.1	6598.1	3572.1	2073.4	1851.4	1678.8	1474.8	1359.3	1293.2	1290.3
47.5°	9646.7	9276.1	6517.2	3278.1	1887.3	1707.3	1462.8	1306.8	1230.2	1189.7	1180.7
50°	10324.8	9730.7	6379.2	2940.5	1696.8	1543.8	1327.8	1221.2	1162.7	1125.2	1111.7
52.5°	10962.5	10143.3	6212.6	2558.0	1503.3	1384.8	1267.7	1185.2	1123.7	1081.7	1063.6
55°	11555.0	10498.9	5977.1	2166.3	1345.7	1278.3	1239.2	1170.2	1099.7	1050.2	1030.6
57.5°	12081.7	10729.9	5570.5	1798.8	1233.2	1204.7	1209.2	1144.7	1063.6	1021.7	994.7
60°	12519.8	10899.4	4968.9	1458.3	1141.7	1132.7	1162.7	1096.6	1002.1	954.2	933.2
62.5°	12782.3	10896.5	4230.8	1194.2	1063.6	1066.7	1101.2	1036.7	940.6	895.6	882.1
65°	12759.8	10629.4	3420.6	1021.7	988.7	991.7	1036.7	970.7	889.7	862.6	861.2
67.5°	12308.2	9978.3	2624.0	909.2	906.2	919.6	972.2	925.7	858.1	855.2	859.7
70°	11085.5	8626.5	1890.3	819.2	820.6	840.2	909.2	897.2	841.6	847.7	846.1
72.5°	8889.1	6577.2	1269.3	724.7	726.1	757.7	849.1	874.6	825.1	904.7	916.7
75°	5920.1	4101.7	816.1	624.1	625.7	666.1	796.6	831.2	780.1	901.7	909.2
77.5°	2844.5	1843.9	591.1	525.1	525.1	562.6	688.6	744.2	664.6	700.6	642.2
80°	982.7	693.1	465.0	423.1	414.1	439.6	580.6	645.1	573.1	528.1	495.1
82.5°	387.0	360.1	373.6	328.5	298.6	315.1	451.6	532.6	421.6	381.1	379.6
85°	222.0	234.0	264.0	217.5	172.5	193.5	331.6	382.5	318.1	280.5	286.6
87.5°	60.0	82.5	121.6	112.5	78.0	82.5	157.5	211.6	183.1	141.0	145.5
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)