

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: P966675

Luminaire Tested: **NAV-SB4C-735-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966675
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22464.9 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
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



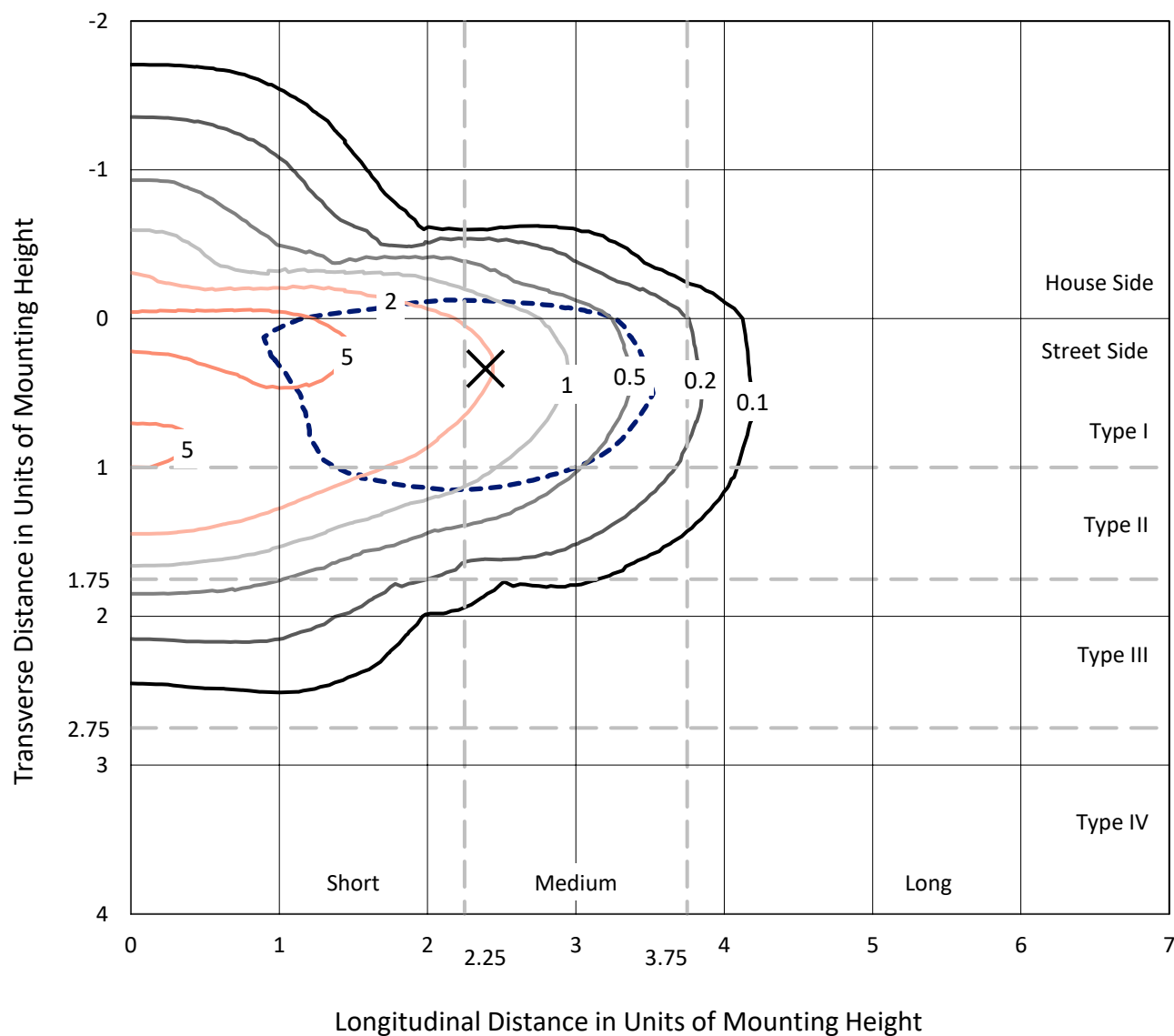
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

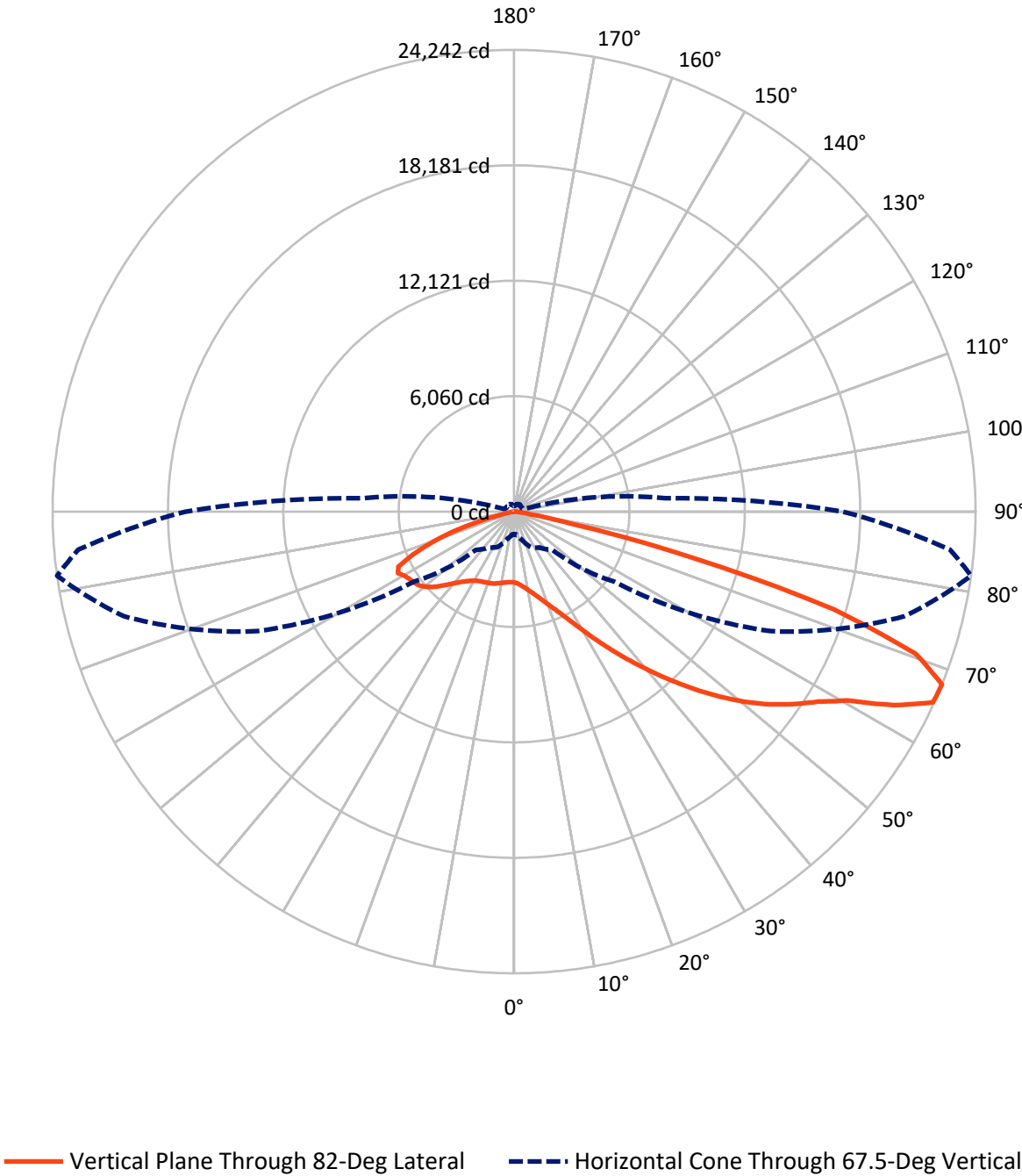
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4069.3	0.0	4069.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	18395.6	0.0	18395.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	22464.9	0.0	22464.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.6	1.5
10°-20°	861.6	3.8
20°-30°	1380.1	6.1
30°-40°	2440.4	10.9
40°-50°	4275.7	19.0
50°-60°	5702.6	25.4
60°-70°	5308.9	23.6
70°-80°	2037.5	9.1
80°-90°	126.6	0.6
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°	22464.9	100.0
0°-180°	22464.9	100.0

Coefficient of Utilization



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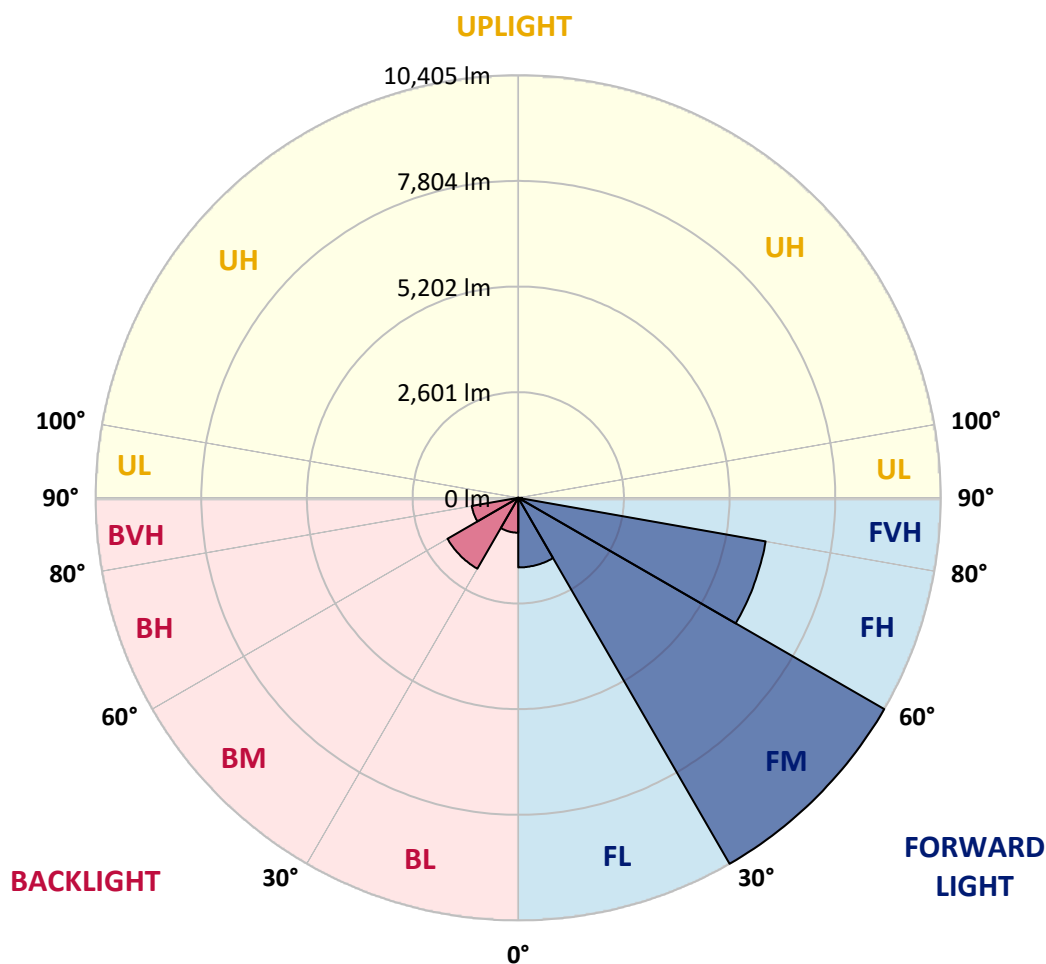
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1713.8	7.6			
FM	(30°-60°)	10404.8	46.3			
FH	(60°-80°)	6184.9	27.5			G3/7500
FVH	(80°-90°)	92.0	0.4			G1/100
BL	(0°-30°)	859.4	3.8	B2/1000		
BM	(30°-60°)	2013.9	9.0	B2/2500		
BH	(60°-80°)	1161.5	5.2	B3/2500		G3/2500
BVH	(80°-90°)	34.5	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7
2.5°	3933.5	3956.2	3943.3	3936.8	3925.4	3909.2	3896.3	3855.9	3813.8	3786.3	3776.7
5°	4012.8	4035.4	4033.9	4040.3	4048.4	4053.3	4050.0	4004.7	3944.9	3898.0	3870.5
7.5°	3944.9	3970.7	3991.8	4024.2	4080.7	4140.6	4169.7	4160.0	4098.6	4033.9	3999.9
10°	3752.4	3779.9	3830.0	3906.1	4025.8	4155.1	4263.5	4313.6	4274.9	4203.6	4156.8
12.5°	3399.8	3427.3	3526.0	3690.9	3891.5	4116.3	4323.3	4457.6	4467.3	4396.1	4341.2
15°	3003.6	3031.0	3136.2	3343.2	3648.9	4009.6	4355.7	4609.6	4695.3	4633.9	4567.6
17.5°	2757.7	2782.0	2861.2	3027.8	3346.4	3796.1	4344.4	4771.4	4967.0	4918.6	4839.3
20°	2683.2	2704.4	2741.6	2858.0	3123.3	3574.5	4269.9	4923.4	5259.9	5232.3	5143.3
22.5°	2762.6	2782.0	2793.3	2845.0	3011.7	3428.9	4176.2	5078.7	5599.5	5602.8	5494.4
25°	2945.3	2964.7	2951.8	2984.2	3057.0	3383.6	4140.6	5261.4	6026.5	6062.1	5939.2
27.5°	3246.2	3247.8	3217.1	3215.4	3226.7	3451.6	4177.8	5457.2	6565.1	6631.4	6479.3
30°	3849.5	3825.2	3707.1	3579.3	3521.1	3655.4	4281.3	5688.4	7200.7	7318.8	7128.0
32.5°	4779.5	4743.9	4527.1	4221.5	3914.2	3983.7	4467.3	5952.1	7893.0	8106.5	7873.5
35°	5788.7	5779.1	5552.6	5098.1	4561.1	4451.2	4769.7	6298.2	8648.3	8988.0	8711.4
37.5°	6726.9	6722.0	6592.6	6057.2	5403.8	5103.0	5255.0	6751.1	9457.1	9948.8	9622.0
40°	7584.1	7598.6	7469.3	6990.5	6332.1	5939.2	5914.9	7310.7	10356.3	10995.2	10607.0
42.5°	8324.8	8341.0	8210.0	7855.8	7249.3	6864.3	6725.2	7996.5	11234.6	12119.3	11660.0
45°	8827.9	8928.2	8908.7	8625.7	8190.6	7791.1	7698.9	8857.0	12235.7	13311.4	12772.7
47.5°	8970.2	9062.4	9208.0	9246.7	8981.6	8588.5	8698.5	9893.7	13248.2	14505.0	13892.0
50°	8619.2	8704.9	9007.4	9410.1	9594.5	9473.3	9670.6	11004.9	14285.0	15695.4	14990.2
52.5°	7926.9	8014.3	8396.0	9033.3	9785.4	10167.1	10645.9	12099.9	15289.4	16822.7	16030.2
55°	6925.8	7018.0	7508.0	8229.4	9421.5	10453.4	11459.4	13193.3	16209.8	17836.8	16968.4
57.5°	5563.9	5631.9	6141.3	7150.6	8506.0	10168.7	12059.4	14386.9	17076.7	18833.2	17898.3
60°	3626.2	3686.1	4278.0	5403.8	6988.9	9217.6	12179.2	15718.1	18228.3	20128.7	19151.8
62.5°	2411.6	2452.0	2803.0	3629.5	4921.8	7391.6	11478.8	16780.7	19916.9	22383.4	21301.3
65°	1654.7	1695.0	2046.0	2621.8	3179.9	4889.5	9465.2	16640.0	21447.0	24173.9	22894.5
67.5°	1180.7	1214.7	1512.3	2055.7	2301.5	2840.2	6416.3	14841.4	21227.0	24241.9	22980.3
70°	845.9	865.3	1111.2	1601.3	1829.3	1706.4	3568.0	11351.1	18585.7	22385.1	21230.2
72.5°	591.9	598.4	771.5	1219.5	1473.4	1245.4	1698.3	7567.9	14057.0	17570.0	16458.8
75°	401.1	409.2	519.2	894.4	1182.3	951.0	899.3	4058.1	8252.1	9725.5	8717.8
77.5°	245.9	249.1	334.8	611.4	884.7	724.6	579.0	1719.3	3192.8	3134.6	2672.0
80°	139.1	139.1	213.5	380.1	603.3	467.4	406.0	731.0	1010.9	888.0	782.8
82.5°	77.6	79.2	155.3	236.2	399.5	276.5	223.2	338.0	436.8	386.5	336.4
85°	32.4	35.6	95.4	111.6	190.9	137.5	90.6	142.4	161.7	143.9	105.2
87.5°	3.3	4.8	29.1	21.0	22.7	27.5	12.9	27.5	22.7	22.7	16.2
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°	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7	3721.7
2.5°	3746.0	3721.7	3660.2	3589.0	3495.2	3449.9	3388.4	3346.4	3310.9	3314.1	3281.7
5°	3818.7	3757.2	3619.8	3448.3	3234.8	3082.8	2921.0	2809.4	2718.9	2699.4	2655.8
7.5°	3919.0	3821.9	3580.9	3272.0	2911.3	2638.0	2393.8	2236.9	2125.3	2089.7	2054.1
10°	4048.4	3907.7	3530.8	3050.4	2531.2	2183.6	1921.5	1798.6	1722.5	1696.7	1677.3
12.5°	4198.8	4006.3	3464.5	2780.3	2139.9	1805.0	1638.5	1577.0	1552.7	1544.7	1539.8
15°	4388.0	4129.3	3364.3	2460.1	1808.3	1573.8	1502.5	1494.4	1497.7	1494.4	1492.9
17.5°	4612.9	4263.5	3200.9	2130.2	1585.1	1455.7	1429.8	1436.2	1444.3	1442.7	1439.5
20°	4858.7	4396.1	2992.2	1837.4	1433.1	1371.6	1357.0	1363.5	1369.9	1366.7	1365.1
22.5°	5138.5	4538.5	2760.9	1609.4	1331.2	1294.0	1277.8	1279.4	1279.4	1272.9	1269.7
25°	5473.3	4695.3	2518.3	1447.6	1253.5	1224.4	1205.0	1198.5	1188.8	1169.4	1166.1
27.5°	5872.8	4862.0	2285.4	1334.3	1192.1	1164.5	1141.8	1125.8	1101.5	1069.1	1065.9
30°	6322.5	5064.1	2088.1	1263.2	1143.5	1116.0	1090.2	1065.9	1030.3	989.8	986.7
32.5°	6851.4	5280.9	1944.1	1216.3	1099.8	1070.7	1040.0	1010.9	972.1	931.6	933.3
35°	7482.2	5542.9	1860.1	1184.0	1065.9	1027.0	993.1	960.7	931.6	896.1	892.8
37.5°	8166.4	5821.1	1834.1	1167.8	1043.2	983.4	944.5	921.9	918.7	897.7	896.1
40°	8915.2	6151.0	1853.6	1158.0	1019.0	941.4	899.3	894.4	902.5	865.3	866.9
42.5°	9707.8	6542.5	1885.9	1146.8	985.0	899.3	858.8	858.8	852.4	800.6	800.6
45°	10565.0	6993.7	1918.3	1119.3	944.5	857.2	826.5	815.2	787.7	737.6	735.9
47.5°	11428.6	7453.1	1942.5	1069.1	896.1	821.6	794.2	768.2	727.9	682.5	680.9
50°	12248.7	7865.5	1916.6	994.8	841.0	787.7	758.6	723.0	679.3	648.6	643.7
52.5°	12981.4	8223.0	1806.7	907.3	782.8	752.1	726.2	689.0	653.4	621.0	617.9
55°	13618.7	8512.4	1612.5	824.9	731.0	721.4	695.5	648.6	600.0	572.6	569.3
57.5°	14230.1	8732.5	1369.9	757.0	684.2	687.4	648.6	606.5	561.3	532.2	528.9
60°	15043.6	9026.8	1124.1	693.8	634.1	643.7	601.7	570.9	514.3	477.1	472.3
62.5°	16344.0	9484.5	892.8	616.2	575.8	579.0	561.3	524.1	456.1	412.5	409.2
65°	17375.9	9316.3	703.6	532.2	509.5	514.3	514.3	473.9	401.1	351.0	346.1
67.5°	17259.5	7977.1	561.3	449.7	446.4	449.7	460.9	427.0	355.9	315.4	308.9
70°	15899.2	6345.2	449.7	373.6	388.2	380.1	412.5	389.8	320.2	279.8	275.0
72.5°	12973.3	4570.8	342.9	308.9	297.6	310.6	372.0	351.0	266.9	221.6	216.7
75°	7580.8	2439.1	255.5	244.3	215.1	258.8	329.9	299.2	203.8	163.4	158.5
77.5°	2468.2	850.7	187.6	179.6	160.1	208.7	281.5	252.4	166.6	129.4	124.5
80°	661.5	257.2	127.8	118.1	103.5	155.3	223.2	200.6	119.7	84.2	82.5
82.5°	265.3	108.3	74.4	66.3	56.6	106.7	176.3	161.7	89.0	53.4	53.4
85°	85.7	35.6	27.5	21.0	25.8	66.3	105.2	110.0	63.0	27.5	21.0
87.5°	11.3	4.8	4.8	6.5	4.8	11.3	32.4	30.7	17.8	3.3	0.0
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)