

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: P961950

Luminaire Tested: **NAV-SB2B-740-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961950
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12419.9 lumens
Efficiency: N/A
Efficacy: 168.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 73.9
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



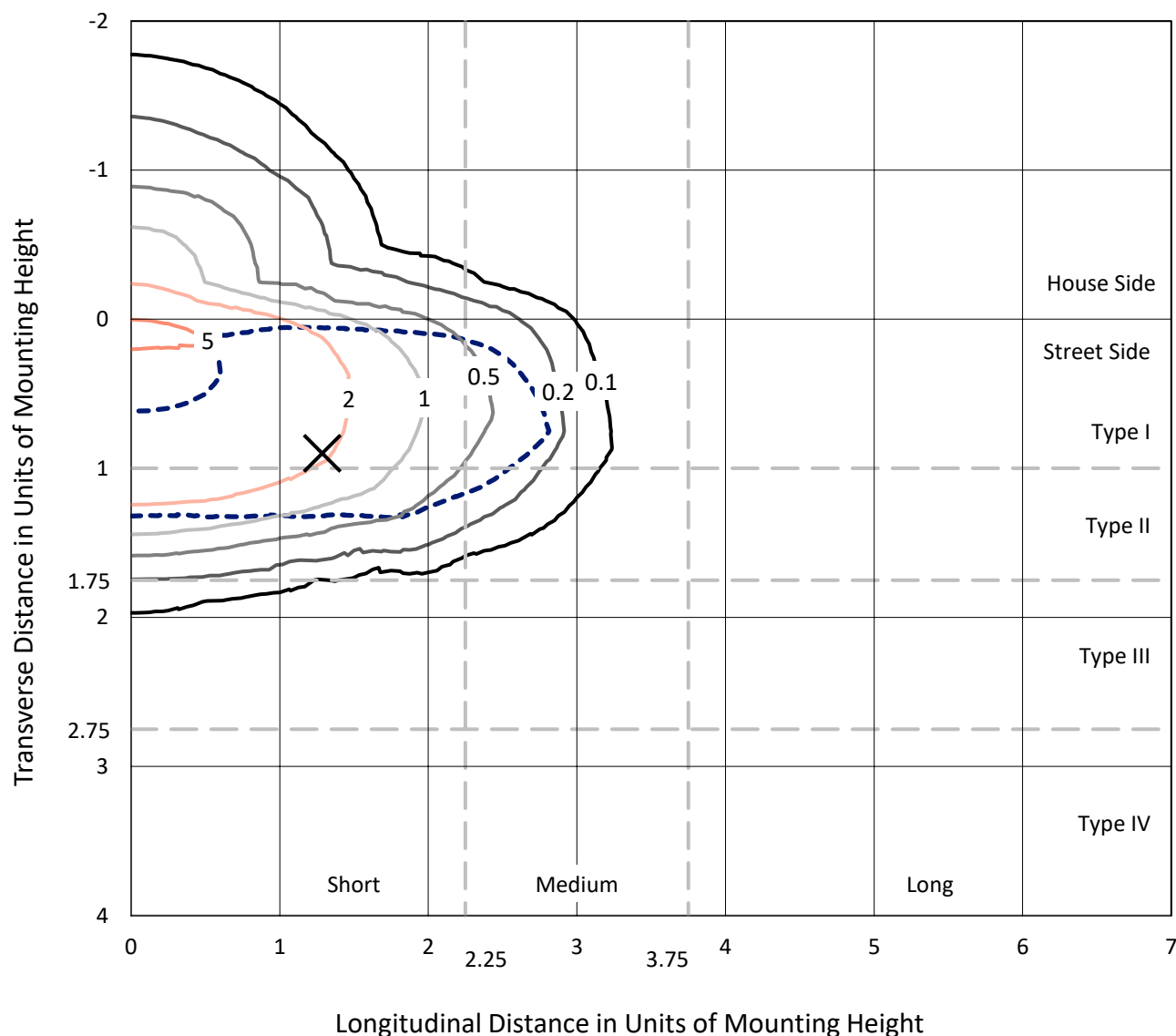
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

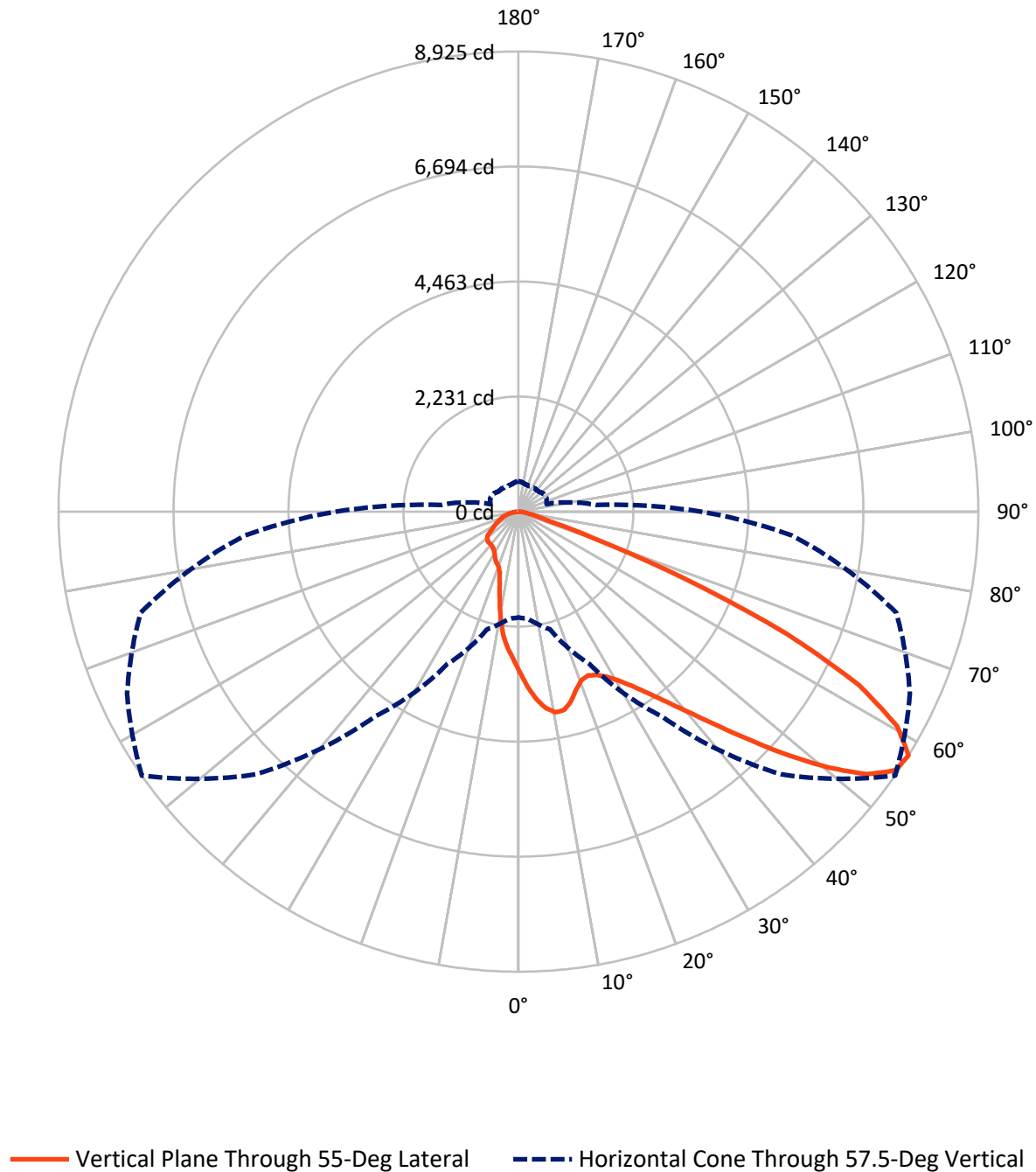


Based on 25 foot mounting height. Maximum calculated value = 6 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2247.3	0.0	2247.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10172.6	0.0	10172.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	12419.9	0.0	12419.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.8	2.3
10°-20°	728.9	5.9
20°-30°	1163.1	9.4
30°-40°	1841.5	14.8
40°-50°	2818.6	22.7
50°-60°	3018.9	24.3
60°-70°	1899.2	15.3
70°-80°	561.6	4.5
80°-90°	99.3	0.8
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°	12419.9	100.0
0°-180°	12419.9	100.0

Coefficient of Utilization



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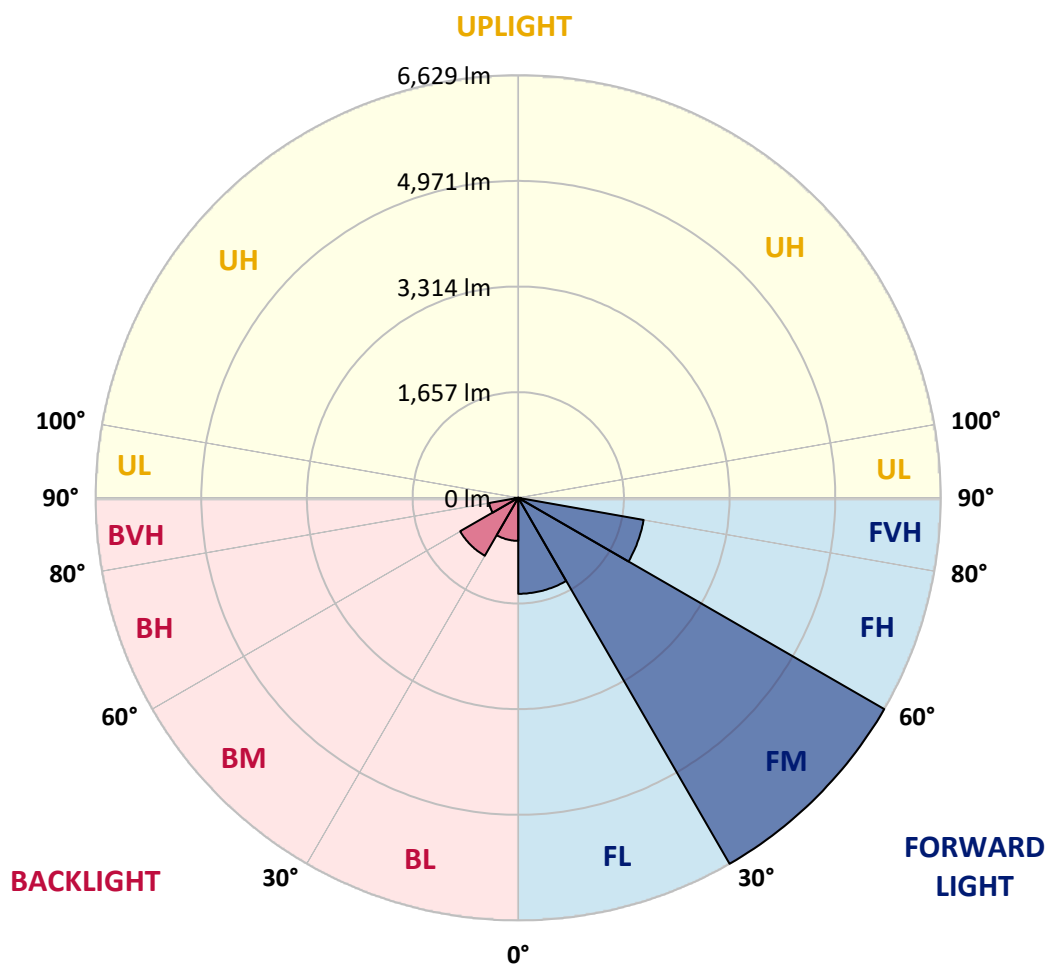
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1505.3	12.1			
FM	(30°-60°)	6628.6	53.4			
FH	(60°-80°)	1996.7	16.1			G2/5000
FVH	(80°-90°)	42.0	0.3			G1/100
BL	(0°-30°)	675.5	5.4	B2/1000		
BM	(30°-60°)	1050.4	8.5	B2/2500		
BH	(60°-80°)	464.1	3.7	B1/500		G1/500
BVH	(80°-90°)	57.3	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0
2.5°	3570.5	3567.9	3582.0	3533.9	3501.1	3456.8	3398.4	3323.9	3243.6	3158.9	3122.3
5°	3892.1	3869.7	3884.4	3848.5	3812.5	3745.8	3659.0	3537.7	3389.4	3220.5	3130.7
7.5°	3841.4	3826.0	3863.8	3896.0	3923.0	3914.6	3851.0	3723.9	3532.6	3287.3	3157.0
10°	3432.4	3415.1	3468.4	3579.4	3742.5	3884.4	3961.4	3882.5	3678.9	3360.5	3182.6
12.5°	3071.6	3063.2	3098.6	3188.5	3369.5	3641.7	3947.4	4021.2	3831.1	3447.2	3217.4
15°	2917.5	2907.2	2929.7	2975.3	3090.9	3344.5	3818.9	4116.2	3980.7	3547.3	3272.5
17.5°	2883.4	2871.9	2881.6	2905.3	2979.8	3173.0	3625.0	4163.0	4136.8	3659.0	3318.7
20°	2946.4	2936.7	2938.1	2936.7	2988.8	3142.2	3490.2	4145.1	4272.8	3761.7	3363.7
22.5°	3098.6	3082.5	3083.1	3049.1	3077.4	3196.2	3454.9	4096.9	4394.2	3851.6	3397.8
25°	3346.4	3317.5	3323.3	3236.5	3228.9	3316.8	3510.1	4059.7	4514.9	3923.6	3404.1
27.5°	3685.4	3652.6	3635.3	3506.2	3444.6	3488.3	3622.5	4072.5	4629.2	3985.8	3388.1
30°	4109.1	4069.4	4034.0	3851.0	3739.3	3723.3	3797.1	4157.3	4764.0	4051.3	3360.5
32.5°	4628.6	4582.4	4518.1	4275.5	4118.1	4034.0	4023.1	4308.2	4921.9	4134.8	3346.4
35°	5246.9	5186.5	5095.4	4781.3	4582.4	4410.3	4321.0	4525.8	5138.3	4260.6	3362.4
37.5°	5883.8	5815.7	5732.2	5358.6	5113.9	4860.3	4684.5	4821.2	5426.7	4431.5	3404.8
40°	6471.2	6394.9	6317.2	5984.6	5722.0	5416.4	5129.4	5194.8	5779.2	4635.7	3476.7
42.5°	6818.0	6761.4	6731.9	6552.1	6349.3	6039.2	5682.8	5637.9	6175.2	4870.6	3558.9
45°	6802.5	6779.5	6870.6	6945.1	6896.9	6724.8	6331.3	6127.8	6572.7	5074.2	3634.6
47.5°	6439.2	6454.5	6658.1	7076.7	7261.0	7350.9	7069.6	6608.7	6918.1	5226.3	3668.7
50°	5450.4	5463.2	5934.5	6837.3	7354.7	7861.3	7802.2	7078.0	7185.9	5319.4	3661.0
52.5°	4667.7	4676.0	4878.3	6127.1	7045.2	8118.1	8462.3	7520.3	7381.6	5345.1	3617.9
55°	3515.9	3544.8	3771.4	4807.0	6240.1	7914.5	8864.2	7976.2	7505.6	5347.6	3573.0
57.5°	2053.9	2085.4	2365.3	3262.9	4850.1	7205.1	8925.2	8380.7	7589.7	5327.1	3546.1
60°	1006.1	1019.6	1141.5	1714.9	2990.6	5838.2	8434.6	8576.6	7636.6	5316.2	3544.8
62.5°	678.0	676.1	681.2	846.2	1473.5	3750.9	7412.5	8233.7	7611.5	5274.4	3531.9
65°	583.0	575.9	556.7	593.9	763.4	1715.5	5727.1	7210.3	7420.9	5169.8	3444.0
67.5°	504.0	504.6	505.3	493.7	545.1	791.6	3499.9	5679.6	6736.4	4674.1	3104.9
70°	417.4	423.1	425.7	425.7	444.3	519.5	1494.0	3892.7	5313.6	3664.9	2500.8
72.5°	380.1	367.9	369.2	362.7	362.7	395.5	601.6	2206.7	3347.6	2061.6	1526.1
75°	310.1	317.9	319.1	314.6	299.8	301.8	357.0	925.9	1432.4	855.3	754.4
77.5°	267.7	267.7	270.3	267.1	255.5	226.0	238.2	359.0	487.3	350.5	376.9
80°	215.0	214.4	225.4	231.8	213.8	167.0	152.2	198.4	216.4	154.1	195.8
82.5°	104.7	111.1	154.8	176.6	162.5	120.7	93.1	123.3	115.6	68.1	87.9
85°	61.0	57.8	69.4	98.2	93.1	66.7	44.9	64.2	60.4	34.6	35.4
87.5°	19.3	17.9	14.1	33.4	27.0	18.7	12.2	18.7	16.7	7.7	7.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0	3112.0
2.5°	3076.7	3001.0	2925.9	2857.1	2815.4	2788.4	2761.5	2731.3	2719.7	2702.4
5°	3045.9	2899.5	2769.1	2656.8	2554.7	2474.5	2393.6	2328.1	2298.6	2318.4
7.5°	3028.0	2816.1	2615.1	2409.0	2210.6	2052.0	1914.0	1817.0	1773.4	1784.2
10°	3011.9	2721.7	2415.4	2089.9	1804.8	1608.3	1467.1	1393.3	1365.6	1371.4
12.5°	2997.1	2615.7	2174.6	1746.4	1443.3	1313.6	1273.2	1273.9	1279.0	1282.8
15°	2994.5	2488.0	1905.6	1445.9	1248.1	1239.8	1283.5	1311.1	1325.8	1330.3
17.5°	2990.6	2335.2	1631.5	1241.1	1200.7	1257.2	1297.5	1315.6	1327.2	1327.8
20°	2975.3	2141.2	1378.5	1143.5	1190.3	1239.1	1264.2	1278.3	1287.9	1291.2
22.5°	2927.8	1925.6	1181.4	1099.8	1149.2	1188.5	1218.0	1234.0	1239.8	1243.6
25°	2842.3	1684.1	1045.3	1058.1	1092.1	1141.5	1165.3	1168.5	1166.7	1172.4
27.5°	2730.6	1425.4	960.5	1001.6	1045.3	1087.6	1100.4	1098.6	1094.7	1101.2
30°	2595.8	1192.9	906.6	938.1	997.7	1036.3	1047.9	1043.3	1035.7	1042.7
32.5°	2453.2	1002.9	862.2	893.7	958.6	996.5	1008.0	1003.6	997.7	1003.6
35°	2320.4	870.0	821.2	864.2	927.7	965.0	979.8	980.4	980.4	987.5
37.5°	2198.4	792.3	787.2	845.6	906.6	939.9	961.1	962.5	934.8	936.7
40°	2085.4	759.5	771.7	833.4	886.0	918.1	919.4	847.5	796.8	795.5
42.5°	1992.9	753.2	776.2	832.1	871.2	872.6	782.0	726.2	712.1	712.7
45°	1906.3	751.2	786.5	832.1	849.4	753.8	692.8	678.0	679.3	684.4
47.5°	1809.3	743.5	788.4	820.5	786.5	670.3	652.3	646.0	643.3	644.6
50°	1703.3	715.9	764.0	797.4	678.7	634.4	611.9	610.0	613.2	615.1
52.5°	1591.6	671.0	722.3	755.7	629.2	602.9	577.9	582.3	596.4	601.0
55°	1518.4	618.3	667.1	672.2	594.5	573.4	552.2	562.4	588.8	597.1
57.5°	1499.2	562.4	604.1	598.4	550.2	547.7	534.8	543.9	577.2	589.4
60°	1493.4	512.4	542.5	538.0	507.3	519.5	516.2	520.7	532.3	536.1
62.5°	1448.4	472.5	487.3	480.9	468.7	489.8	497.6	488.0	496.9	501.4
65°	1334.1	440.4	433.4	428.9	434.0	453.3	468.7	449.5	457.8	470.6
67.5°	1145.4	396.8	377.5	382.6	398.7	409.0	428.9	407.0	414.1	435.9
70°	926.5	341.5	324.2	339.0	354.4	375.6	378.8	364.1	380.8	405.2
72.5°	655.5	285.7	273.5	303.7	308.8	336.4	329.3	322.3	345.4	353.7
75°	454.6	230.5	223.4	246.5	265.2	288.9	283.8	292.1	340.9	344.8
77.5°	287.6	179.2	174.7	189.4	215.0	241.4	249.8	344.8	582.3	605.5
80°	167.0	133.6	128.4	140.0	162.5	186.9	240.8	423.1	384.0	379.5
82.5°	93.1	91.8	85.4	88.6	108.5	134.8	340.3	297.9	242.1	249.8
85°	43.7	53.9	46.2	44.3	61.0	158.0	227.2	170.1	113.0	110.4
87.5°	11.6	10.2	10.2	11.6	25.7	136.1	90.5	72.6	43.0	41.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)