

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: P963531

Luminaire Tested: **NAV-SB3A-740-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963531
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-SB3A-740-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14844.1 lumens
Efficiency: N/A
Efficacy: 175.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 84.7
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

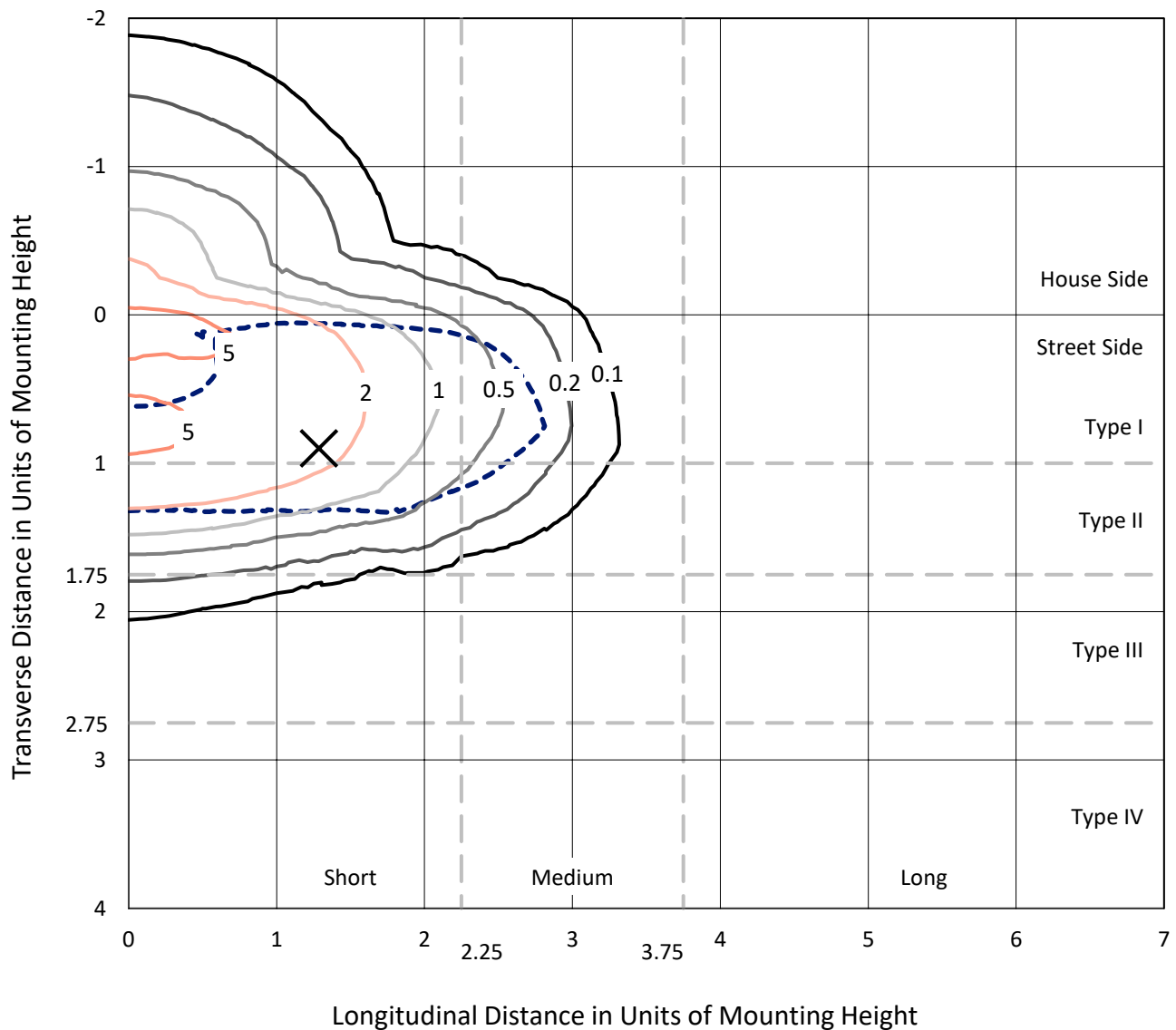


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Iso-Footcandle Lines of Horizontal Illumination

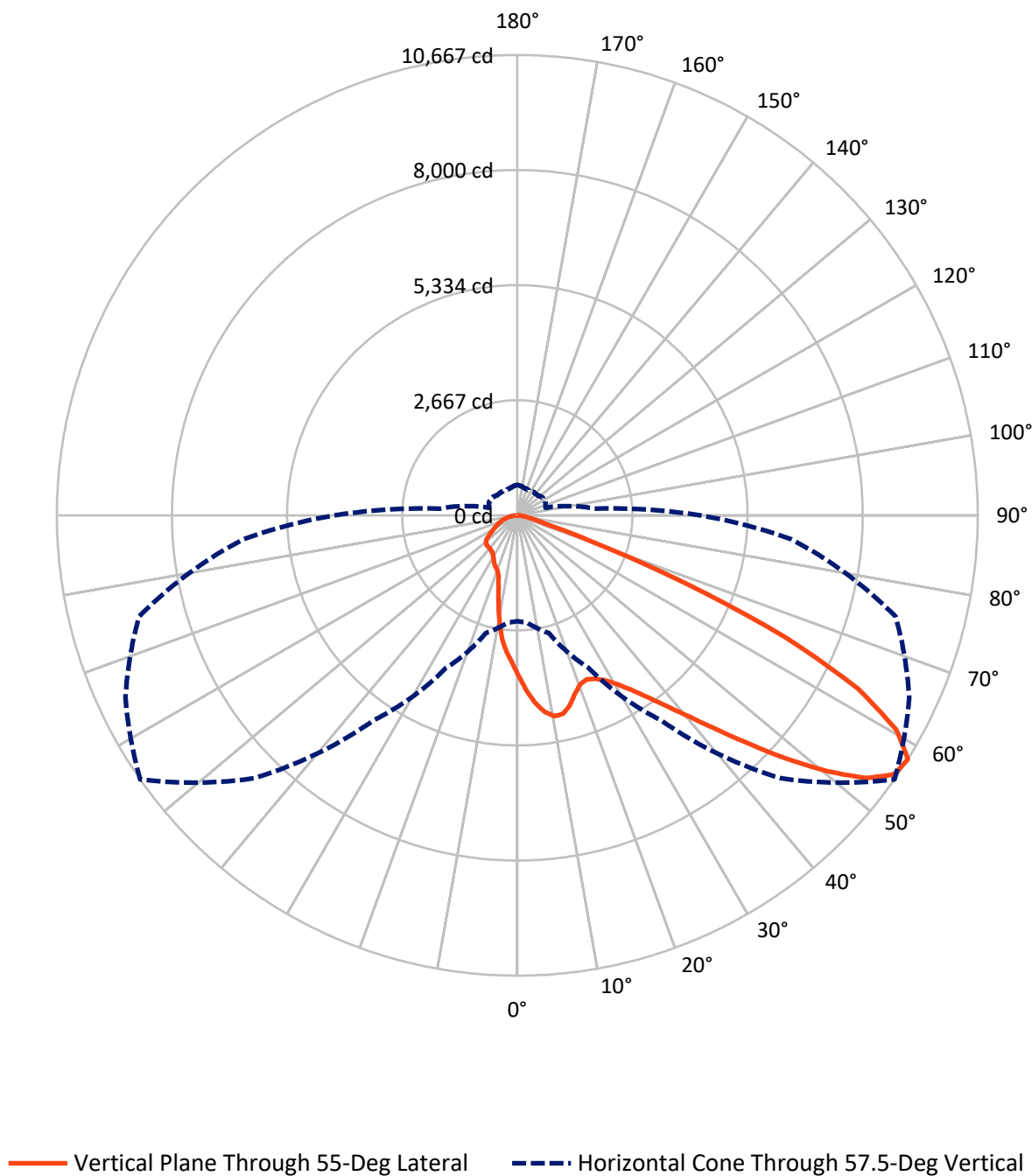
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2686.0	0.0	2686.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	12158.1	0.0	12158.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	14844.1	0.0	14844.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.1	2.3
10°-20°	871.2	5.9
20°-30°	1390.1	9.4
30°-40°	2200.9	14.8
40°-50°	3368.7	22.7
50°-60°	3608.2	24.3
60°-70°	2269.9	15.3
70°-80°	671.3	4.5
80°-90°	118.7	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°	14844.1	100.0
0°-180°	14844.1	100.0

Coefficient of Utilization



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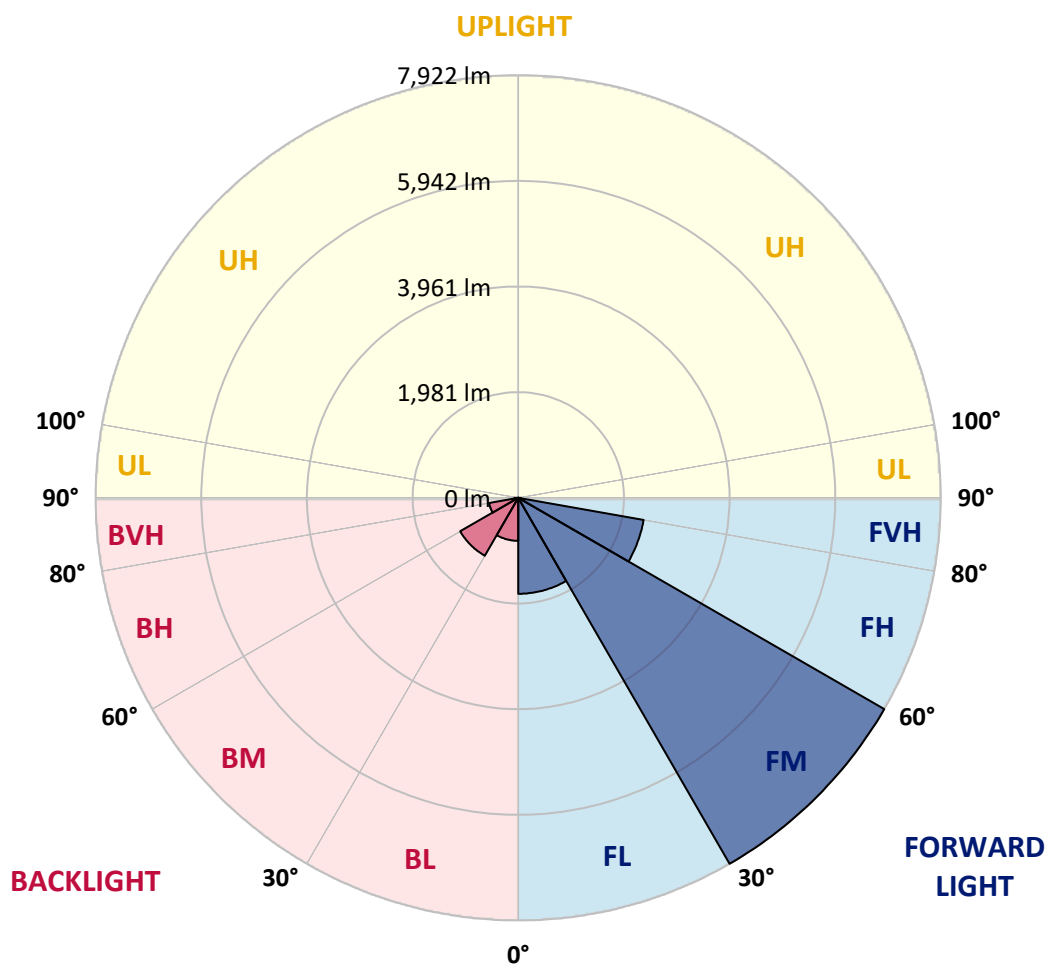
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1799.1	12.1			
FM	(30°-60°)	7922.4	53.4			
FH	(60°-80°)	2386.5	16.1			G2/5000
FVH	(80°-90°)	50.1	0.3			G1/100
BL	(0°-30°)	807.3	5.4	B2/1000		
BM	(30°-60°)	1255.4	8.5	B2/2500		
BH	(60°-80°)	554.7	3.7	B2/1000		G2/1000
BVH	(80°-90°)	68.5	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°	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4
2.5°	4267.4	4264.3	4281.1	4223.6	4184.5	4131.5	4061.7	3972.7	3876.8	3775.5	3731.7
5°	4651.8	4624.9	4642.5	4599.6	4556.6	4476.8	4373.3	4228.2	4050.9	3849.1	3741.7
7.5°	4591.2	4572.7	4618.0	4656.4	4688.7	4678.6	4602.7	4450.8	4222.1	3928.9	3773.1
10°	4102.4	4081.7	4145.3	4278.0	4473.0	4642.5	4734.7	4640.3	4397.0	4016.4	3803.9
12.5°	3671.1	3661.1	3703.3	3810.7	4027.1	4352.6	4717.8	4806.0	4578.9	4120.0	3845.3
15°	3486.9	3474.6	3501.5	3556.0	3694.1	3997.2	4564.3	4919.6	4757.6	4239.7	3911.3
17.5°	3446.3	3432.4	3444.0	3472.4	3561.4	3792.3	4332.6	4975.7	4944.2	4373.3	3966.5
20°	3521.5	3509.9	3511.4	3509.9	3572.1	3755.5	4171.4	4954.1	5106.9	4496.1	4020.3
22.5°	3703.3	3684.2	3684.9	3644.3	3678.0	3820.0	4129.2	4896.6	5251.9	4603.5	4060.9
25°	3999.6	3965.0	3971.9	3868.3	3859.1	3964.2	4195.2	4852.0	5396.1	4689.4	4068.6
27.5°	4404.7	4365.6	4344.9	4190.6	4116.9	4169.1	4329.5	4867.4	5532.7	4763.8	4049.4
30°	4911.2	4863.6	4821.4	4602.7	4469.2	4449.9	4538.2	4968.7	5693.9	4842.1	4016.4
32.5°	5531.9	5476.7	5400.0	5109.9	4921.9	4821.4	4808.4	5149.1	5882.7	4941.8	3999.6
35°	6271.0	6198.8	6089.8	5714.6	5476.7	5271.1	5164.4	5409.2	6141.3	5092.3	4018.7
37.5°	7032.2	6950.8	6851.1	6404.5	6112.1	5809.0	5598.8	5762.1	6485.8	5296.4	4069.4
40°	7734.3	7643.0	7550.2	7152.7	6838.8	6473.5	6130.5	6208.7	6907.1	5540.4	4155.3
42.5°	8148.6	8081.2	8045.8	7831.0	7588.5	7217.8	6792.0	6738.2	7380.5	5821.3	4253.5
45°	8130.3	8102.6	8211.6	8300.7	8243.0	8037.4	7567.1	7323.7	7855.6	6064.5	4344.1
47.5°	7695.9	7714.4	7957.6	8457.9	8678.2	8785.6	8449.5	7898.5	8268.4	6246.3	4384.7
50°	6514.2	6529.6	7092.8	8171.7	8790.2	9395.7	9325.0	8459.4	8588.4	6357.7	4375.5
52.5°	5578.8	5588.7	5830.5	7323.0	8420.4	9702.6	10113.9	8988.2	8822.5	6388.3	4324.2
55°	4202.1	4236.6	4507.5	5745.3	7458.1	9459.3	10594.3	9533.0	8970.5	6391.4	4270.5
57.5°	2454.8	2492.4	2827.0	3899.8	5796.7	8611.4	10667.2	10016.5	9071.0	6366.9	4238.2
60°	1202.4	1218.6	1364.4	2049.7	3574.4	6977.7	10080.9	10250.5	9127.1	6353.8	4236.6
62.5°	810.4	808.0	814.2	1011.4	1761.2	4482.9	8859.3	9840.7	9097.2	6304.0	4221.3
65°	696.8	688.3	665.3	709.8	912.4	2050.4	6845.0	8617.6	8869.2	6178.9	4116.2
67.5°	602.4	603.1	603.9	590.1	651.5	946.2	4182.9	6788.2	8051.3	5586.5	3711.0
70°	498.8	505.7	508.8	508.8	531.1	620.8	1785.7	4652.6	6350.7	4380.1	2988.9
72.5°	454.3	439.7	441.3	433.6	433.6	472.7	719.0	2637.4	4001.1	2464.0	1824.0
75°	370.6	379.9	381.4	376.0	358.3	360.7	426.7	1106.6	1712.0	1022.1	901.7
77.5°	320.0	320.0	323.1	319.2	305.4	270.1	284.7	429.0	582.4	419.0	450.5
80°	257.1	256.2	269.4	277.1	255.5	199.5	181.8	237.1	258.6	184.2	234.0
82.5°	125.0	132.7	184.9	211.0	194.1	144.2	111.3	147.3	138.2	81.4	105.2
85°	72.9	69.1	82.9	117.4	111.3	79.8	53.7	76.8	72.2	41.4	42.2
87.5°	23.1	21.5	16.9	39.9	32.2	22.2	14.6	22.2	20.0	9.2	9.2
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4	3719.4
2.5°	3677.2	3586.7	3496.9	3414.8	3364.9	3332.7	3300.5	3264.4	3250.6	3229.9
5°	3640.4	3465.4	3309.6	3175.3	3053.4	2957.4	2860.8	2782.5	2747.2	2771.0
7.5°	3618.9	3365.7	3125.5	2879.1	2642.0	2452.5	2287.5	2171.7	2119.5	2132.5
10°	3599.7	3252.8	2886.8	2497.8	2157.1	1922.3	1753.5	1665.2	1632.2	1639.1
12.5°	3582.1	3126.2	2599.1	2087.2	1725.1	1570.0	1521.7	1522.4	1528.6	1533.2
15°	3579.0	2973.5	2277.5	1728.2	1491.8	1481.7	1534.0	1566.9	1584.6	1590.0
17.5°	3574.4	2790.9	1949.9	1483.3	1435.0	1502.5	1550.8	1572.4	1586.2	1586.9
20°	3556.0	2559.2	1647.6	1366.7	1422.7	1481.0	1511.0	1527.9	1539.3	1543.1
22.5°	3499.2	2301.3	1411.9	1314.5	1373.6	1420.4	1455.7	1474.9	1481.7	1486.4
25°	3397.2	2012.8	1249.3	1264.6	1305.3	1364.4	1392.8	1396.6	1394.3	1401.2
27.5°	3263.6	1703.6	1148.0	1197.1	1249.3	1299.9	1315.3	1312.9	1308.4	1316.0
30°	3102.5	1425.8	1083.5	1121.1	1192.5	1238.5	1252.3	1247.0	1237.8	1246.2
32.5°	2932.1	1198.6	1030.5	1068.2	1145.6	1190.9	1204.8	1199.4	1192.5	1199.4
35°	2773.2	1039.8	981.4	1032.9	1108.8	1153.3	1171.0	1171.8	1171.8	1180.2
37.5°	2627.5	946.9	940.7	1010.6	1083.5	1123.4	1148.7	1150.3	1117.2	1119.6
40°	2492.4	907.8	922.4	996.1	1058.9	1097.4	1098.9	1012.9	952.3	950.8
42.5°	2381.9	900.2	927.7	994.6	1041.3	1042.8	934.7	867.9	851.1	851.8
45°	2278.3	897.8	940.0	994.6	1015.3	900.9	828.0	810.4	811.9	818.1
47.5°	2162.4	888.6	942.3	980.7	940.0	801.1	779.6	771.9	768.9	770.4
50°	2035.9	855.6	913.2	953.0	811.1	758.2	731.3	729.0	732.9	735.1
52.5°	1902.3	801.9	863.3	903.2	752.0	720.6	690.6	696.0	712.9	718.2
55°	1814.9	739.0	797.3	803.4	710.6	685.2	659.9	672.2	703.7	713.6
57.5°	1791.8	672.2	722.1	715.1	657.6	654.6	639.2	650.0	689.8	704.5
60°	1784.9	612.3	648.4	643.1	606.2	620.8	616.9	622.4	636.1	640.7
62.5°	1731.2	564.8	582.4	574.7	560.2	585.5	594.7	583.2	594.0	599.3
65°	1594.6	526.4	517.9	512.6	518.8	541.7	560.2	537.2	547.1	562.5
67.5°	1369.0	474.3	451.2	457.4	476.5	488.8	512.6	486.5	495.0	521.0
70°	1107.3	408.3	387.6	405.2	423.6	449.0	452.7	435.1	455.1	484.2
72.5°	783.5	341.5	326.9	363.0	369.1	402.1	393.7	385.2	412.9	422.8
75°	543.2	275.5	267.0	294.7	316.9	345.3	339.2	349.1	407.4	412.0
77.5°	343.8	214.1	208.7	226.4	257.1	288.5	298.5	412.0	696.0	723.6
80°	199.5	159.6	153.4	167.3	194.1	223.3	287.7	505.7	458.9	453.6
82.5°	111.3	109.8	102.1	105.9	129.7	161.1	406.7	356.1	289.3	298.5
85°	52.2	64.5	55.2	53.0	72.9	188.8	271.6	203.4	135.1	132.0
87.5°	13.8	12.3	12.3	13.8	30.6	162.7	108.2	86.7	51.5	49.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)