

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: P962384

Luminaire Tested: **NAV-SB2C-727-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962384
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-SB2C-727-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14481.2 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

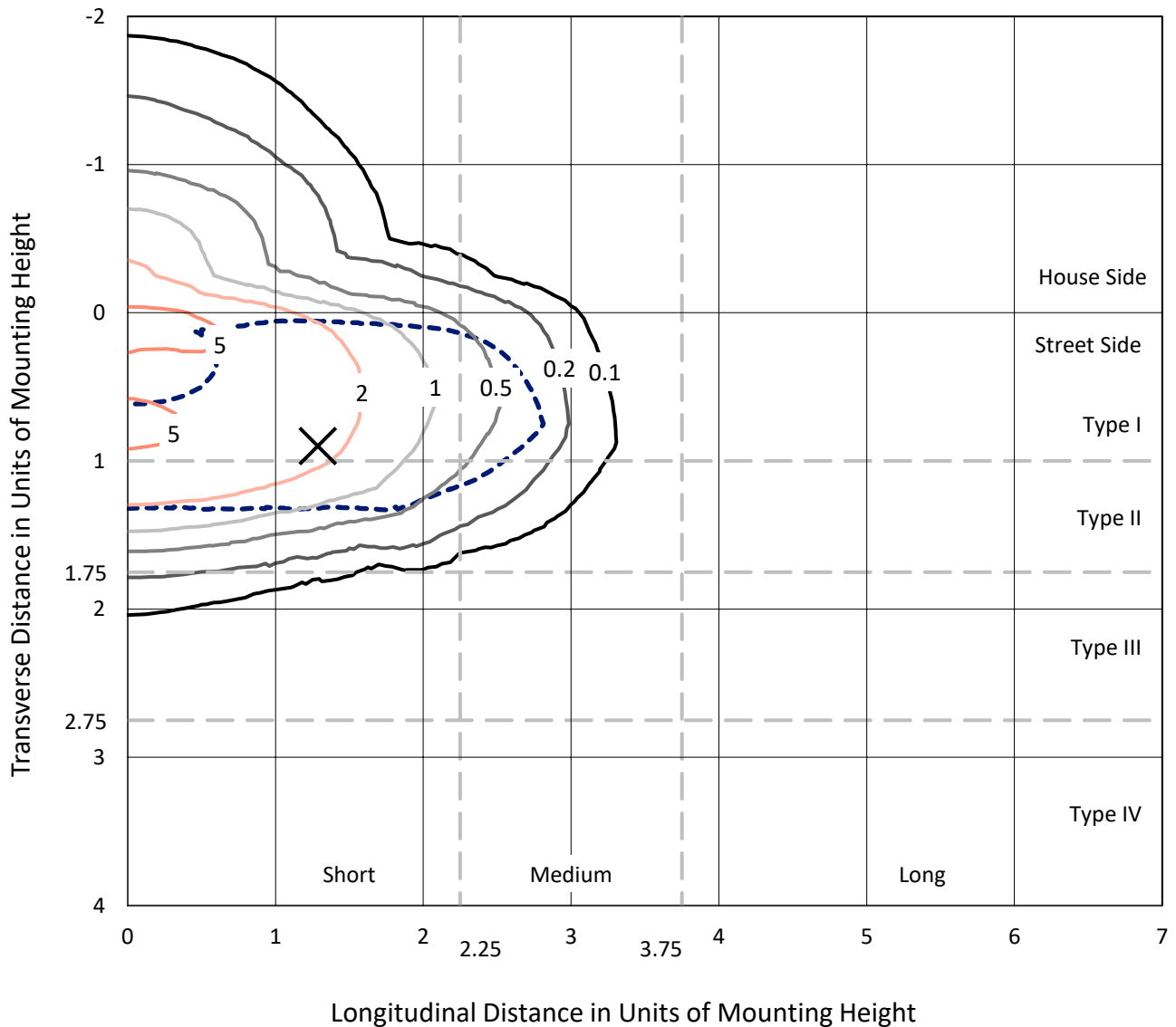
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

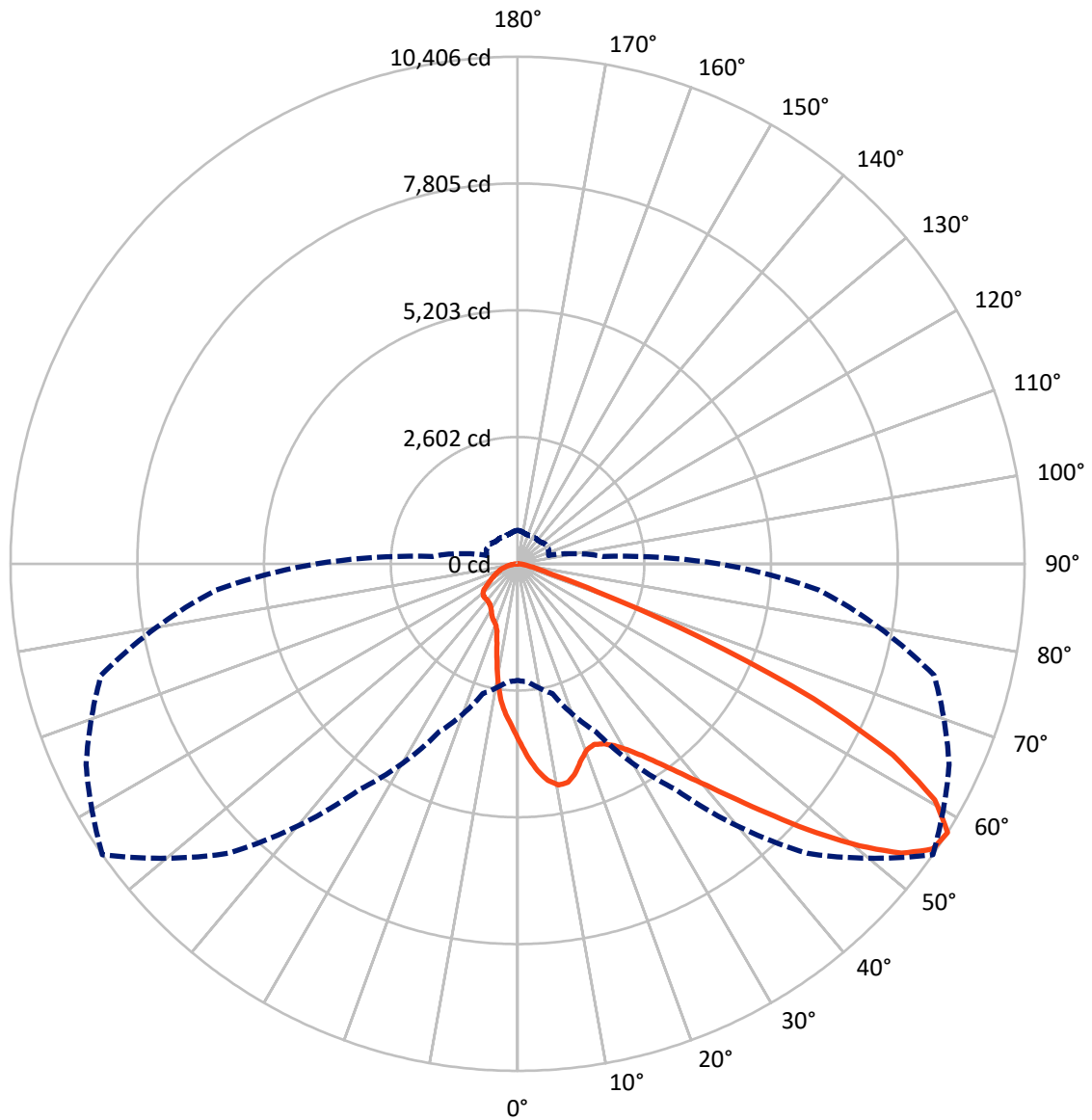
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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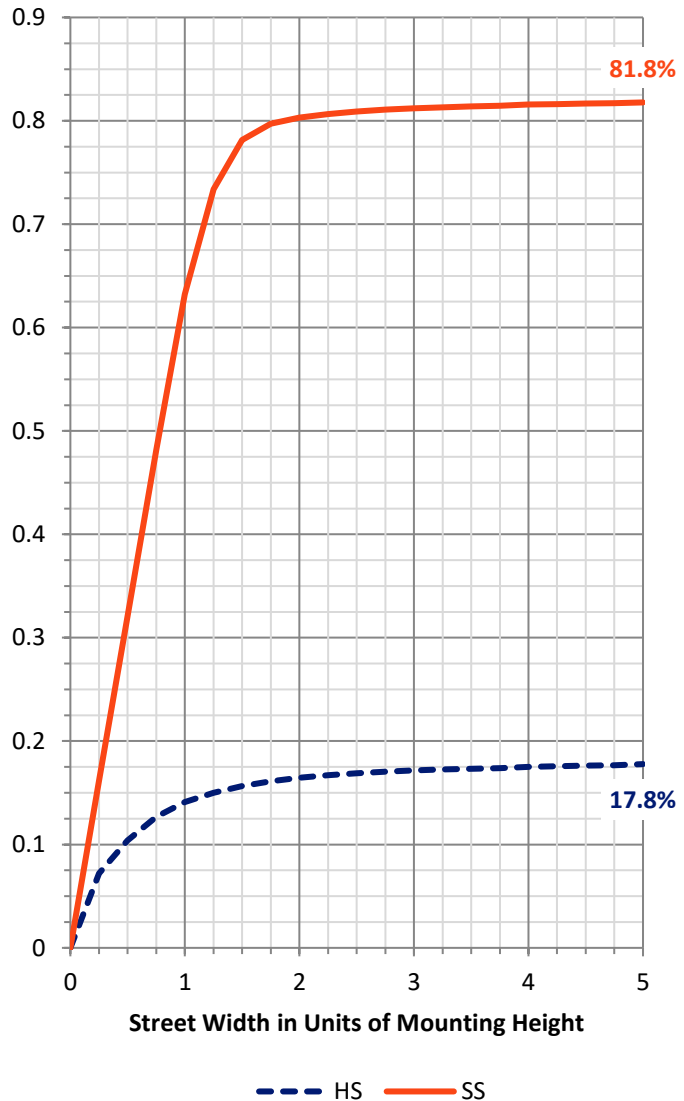
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2620.3	0.0	2620.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	11860.9	0.0	11860.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	14481.2	0.0	14481.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.7	2.3
10°-20°	849.9	5.9
20°-30°	1356.1	9.4
30°-40°	2147.1	14.8
40°-50°	3286.3	22.7
50°-60°	3520.0	24.3
60°-70°	2214.4	15.3
70°-80°	654.9	4.5
80°-90°	115.8	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°	14481.2	100.0
0°-180°	14481.2	100.0

Coefficient of Utilization



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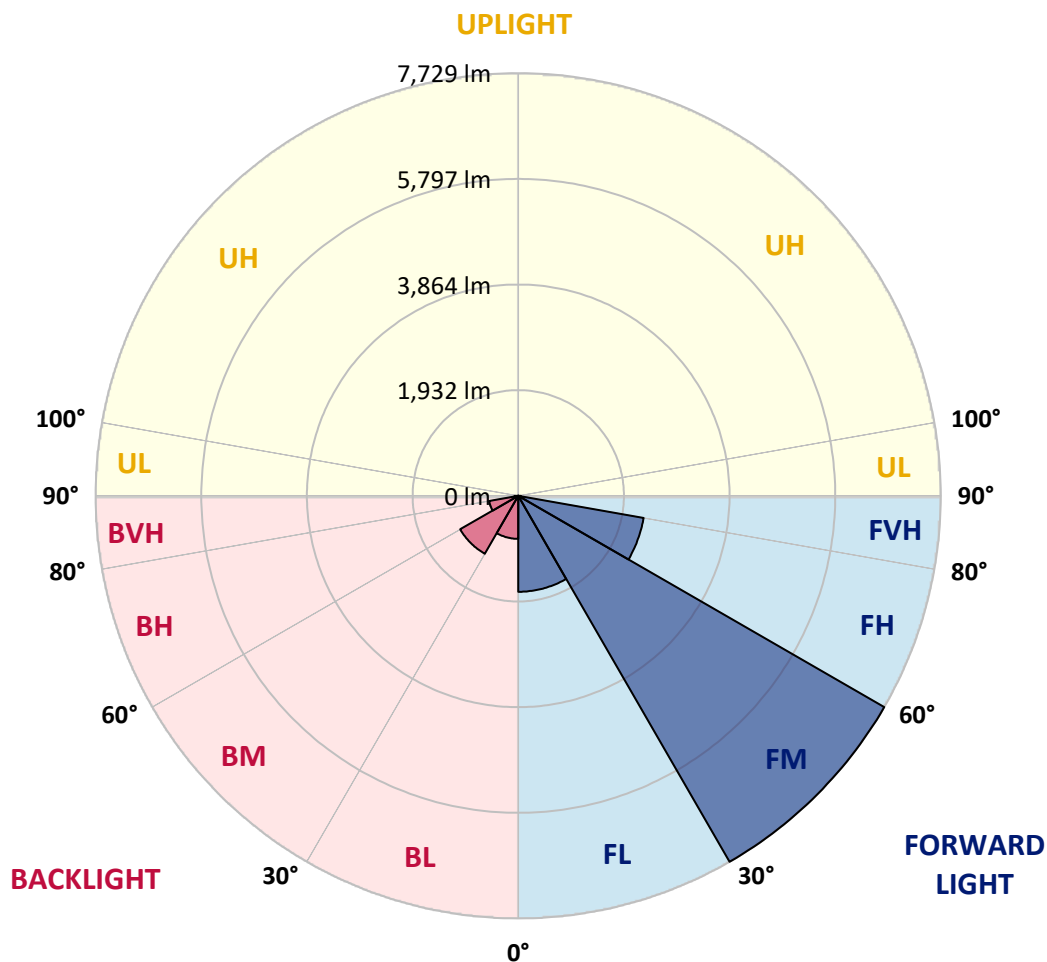
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1755.1	12.1			
FM (30°-60°)	7728.7	53.4			
FH (60°-80°)	2328.1	16.1			G2/5000
FVH (80°-90°)	48.9	0.3			G1/100
BL (0°-30°)	787.6	5.4	B2/1000		
BM (30°-60°)	1224.7	8.5	B2/2500		
BH (60°-80°)	541.2	3.7	B2/1000		G2/1000
BVH (80°-90°)	66.9	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°	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5
2.5°	4163.0	4160.1	4176.5	4120.4	4082.2	4030.5	3962.4	3875.5	3781.9	3683.1	3640.5
5°	4538.1	4511.8	4529.1	4487.1	4445.2	4367.4	4266.4	4124.8	3951.9	3755.0	3650.2
7.5°	4478.9	4461.0	4505.2	4542.6	4574.1	4564.3	4490.2	4341.9	4118.9	3832.9	3680.9
10°	4002.1	3981.8	4044.0	4173.5	4363.6	4529.1	4619.0	4526.8	4289.5	3918.3	3710.9
12.5°	3581.4	3571.6	3612.8	3717.6	3928.7	4246.2	4602.5	4688.6	4467.0	4019.3	3751.3
15°	3401.7	3389.7	3415.9	3469.1	3603.8	3899.5	4452.7	4799.4	4641.4	4136.1	3815.7
17.5°	3362.0	3348.6	3359.7	3387.4	3474.3	3699.6	4226.7	4854.0	4823.3	4266.4	3869.6
20°	3435.4	3424.1	3425.7	3424.1	3484.8	3663.7	4069.5	4833.1	4982.0	4386.1	3922.0
22.5°	3612.8	3594.1	3594.9	3555.1	3588.1	3726.6	4028.2	4776.9	5123.5	4490.9	3961.6
25°	3901.8	3868.0	3874.8	3773.7	3764.7	3867.3	4092.6	4733.4	5264.2	4574.8	3969.1
27.5°	4297.0	4258.9	4238.7	4088.2	4016.3	4067.2	4223.6	4748.4	5397.4	4647.3	3950.5
30°	4791.2	4744.7	4703.5	4490.2	4359.9	4341.2	4427.3	4847.2	5554.7	4723.7	3918.3
32.5°	5396.7	5342.8	5268.0	4985.0	4801.6	4703.5	4690.8	5023.2	5738.9	4821.1	3901.8
35°	6117.6	6047.3	5941.0	5574.9	5342.8	5142.2	5038.2	5277.0	5991.1	4967.8	3920.5
37.5°	6860.2	6780.9	6683.6	6247.9	5962.7	5667.0	5461.9	5621.3	6327.2	5166.9	3969.9
40°	7545.2	7456.2	7365.5	6977.8	6671.6	6315.3	5980.7	6057.0	6738.2	5404.9	4053.8
42.5°	7949.5	7883.6	7849.1	7639.5	7403.1	7041.4	6625.9	6573.5	7200.1	5679.0	4149.5
45°	7931.6	7904.6	8010.9	8097.7	8041.5	7840.9	7382.0	7144.8	7663.5	5916.3	4237.9
47.5°	7507.8	7525.8	7763.1	8251.1	8466.1	8570.8	8242.9	7705.4	8066.2	6093.7	4277.5
50°	6355.0	6370.0	6919.4	7971.9	8575.4	9166.0	9097.1	8252.7	8378.5	6202.3	4268.6
52.5°	5442.4	5452.2	5687.9	7144.0	8214.6	9465.5	9866.6	8768.5	8606.8	6232.2	4218.4
55°	4099.4	4133.1	4397.4	5604.8	7275.8	9228.2	10335.3	9300.0	8751.2	6235.2	4166.0
57.5°	2394.8	2431.5	2757.9	3804.5	5655.0	8400.9	10406.4	9771.6	8849.3	6211.2	4134.5
60°	1173.1	1188.8	1331.1	1999.6	3487.0	6807.1	9834.5	9999.9	8904.0	6198.5	4133.1
62.5°	790.6	788.3	794.3	986.7	1718.1	4373.4	8642.7	9600.2	8874.8	6149.8	4118.1
65°	679.8	671.5	649.0	692.5	890.1	2000.3	6677.6	8406.9	8652.4	6027.8	4015.5
67.5°	587.6	588.5	589.2	575.6	635.6	923.0	4080.7	6622.2	7854.5	5449.9	3620.3
70°	486.6	493.3	496.3	496.3	518.0	605.7	1742.0	4538.8	6195.5	4273.1	2915.8
72.5°	443.2	429.0	430.5	422.9	422.9	461.1	701.4	2573.0	3903.3	2403.8	1779.4
75°	361.6	370.5	372.1	366.8	349.6	351.9	416.3	1079.5	1670.1	997.1	879.7
77.5°	312.2	312.2	315.2	311.4	298.0	263.5	277.8	418.5	568.2	408.8	439.4
80°	250.8	250.0	262.8	270.3	249.3	194.6	177.4	231.3	252.3	179.7	228.4
82.5°	122.0	129.6	180.4	205.8	189.4	140.7	108.5	143.7	134.8	79.3	102.6
85°	71.1	67.3	80.9	114.5	108.5	77.9	52.4	74.8	70.4	40.4	41.2
87.5°	22.4	20.9	16.5	38.9	31.5	21.7	14.2	21.7	19.5	9.0	9.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5	3628.5
2.5°	3587.3	3499.0	3411.4	3331.4	3282.7	3251.2	3219.7	3184.6	3171.1	3151.0
5°	3551.4	3380.8	3228.7	3097.8	2978.8	2885.2	2790.9	2714.5	2680.1	2703.2
7.5°	3530.4	3283.4	3049.1	2808.8	2577.5	2392.6	2231.6	2118.6	2067.6	2080.3
10°	3511.8	3173.4	2816.3	2436.7	2104.3	1875.2	1710.6	1624.5	1592.3	1599.0
12.5°	3494.5	3049.9	2535.5	2036.3	1682.8	1531.7	1484.5	1485.2	1491.3	1495.7
15°	3491.6	2900.9	2221.9	1685.9	1455.3	1445.6	1496.5	1528.7	1545.9	1551.1
17.5°	3487.0	2722.7	1902.2	1447.1	1399.9	1465.7	1512.9	1533.9	1547.3	1548.2
20°	3469.1	2496.6	1607.3	1333.3	1388.0	1444.8	1474.1	1490.5	1501.7	1505.4
22.5°	3413.7	2245.1	1377.4	1282.4	1340.0	1385.7	1420.1	1438.8	1445.6	1450.1
25°	3314.1	1963.6	1218.7	1233.7	1273.4	1331.1	1358.7	1362.4	1360.3	1366.9
27.5°	3183.9	1661.9	1119.9	1167.8	1218.7	1268.1	1283.1	1280.8	1276.4	1283.9
30°	3026.6	1390.9	1057.1	1093.7	1163.4	1208.3	1221.7	1216.5	1207.6	1215.8
32.5°	2860.5	1169.3	1005.4	1042.1	1117.7	1161.8	1175.4	1170.0	1163.4	1170.0
35°	2705.5	1014.3	957.5	1007.7	1081.8	1125.1	1142.4	1143.1	1143.1	1151.4
37.5°	2563.2	923.8	917.8	985.9	1057.1	1095.9	1120.6	1122.2	1090.0	1092.2
40°	2431.5	885.6	899.8	971.7	1033.1	1070.5	1072.0	988.2	929.1	927.5
42.5°	2323.7	878.1	905.1	970.2	1015.9	1017.3	911.8	846.6	830.2	831.0
45°	2222.6	875.9	917.1	970.2	990.5	878.8	807.8	790.6	792.0	798.1
47.5°	2109.6	866.8	919.3	956.7	917.1	781.6	760.6	753.1	750.1	751.6
50°	1986.0	834.7	890.8	929.8	791.3	739.6	713.4	711.1	714.9	717.2
52.5°	1855.8	782.3	842.1	881.1	733.6	702.9	673.7	679.0	695.5	700.7
55°	1770.5	720.9	777.8	783.8	693.2	668.5	643.8	655.8	686.4	696.2
57.5°	1748.0	655.8	704.5	697.7	641.5	638.6	623.6	634.1	673.0	687.3
60°	1741.3	597.4	632.5	627.3	591.4	605.7	601.9	607.1	620.6	625.0
62.5°	1688.9	550.9	568.2	560.7	546.5	571.2	580.2	569.0	579.4	584.7
65°	1555.6	513.5	505.3	500.1	506.0	528.5	546.5	524.0	533.7	548.7
67.5°	1335.5	462.7	440.1	446.2	464.8	476.8	500.1	474.6	482.9	508.3
70°	1080.2	398.2	378.0	395.2	413.3	438.0	441.7	424.5	443.9	472.4
72.5°	764.3	333.1	318.9	354.1	360.1	392.3	384.1	375.8	402.7	412.5
75°	530.0	268.8	260.6	287.5	309.1	336.9	330.9	340.6	397.5	402.0
77.5°	335.4	208.9	203.7	220.9	250.8	281.5	291.2	402.0	679.0	705.9
80°	194.6	155.7	149.8	163.2	189.4	217.8	280.7	493.3	447.7	442.4
82.5°	108.5	107.0	99.5	103.3	126.5	157.2	396.8	347.4	282.2	291.2
85°	50.9	62.8	53.9	51.7	71.1	184.2	265.0	198.3	131.7	128.7
87.5°	13.4	12.0	12.0	13.4	29.9	158.7	105.6	84.6	50.1	48.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)