

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: P963500

Luminaire Tested: **NAV-SB3A-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963500
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-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14030.2 lumens
Efficiency: N/A
Efficacy: 165.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

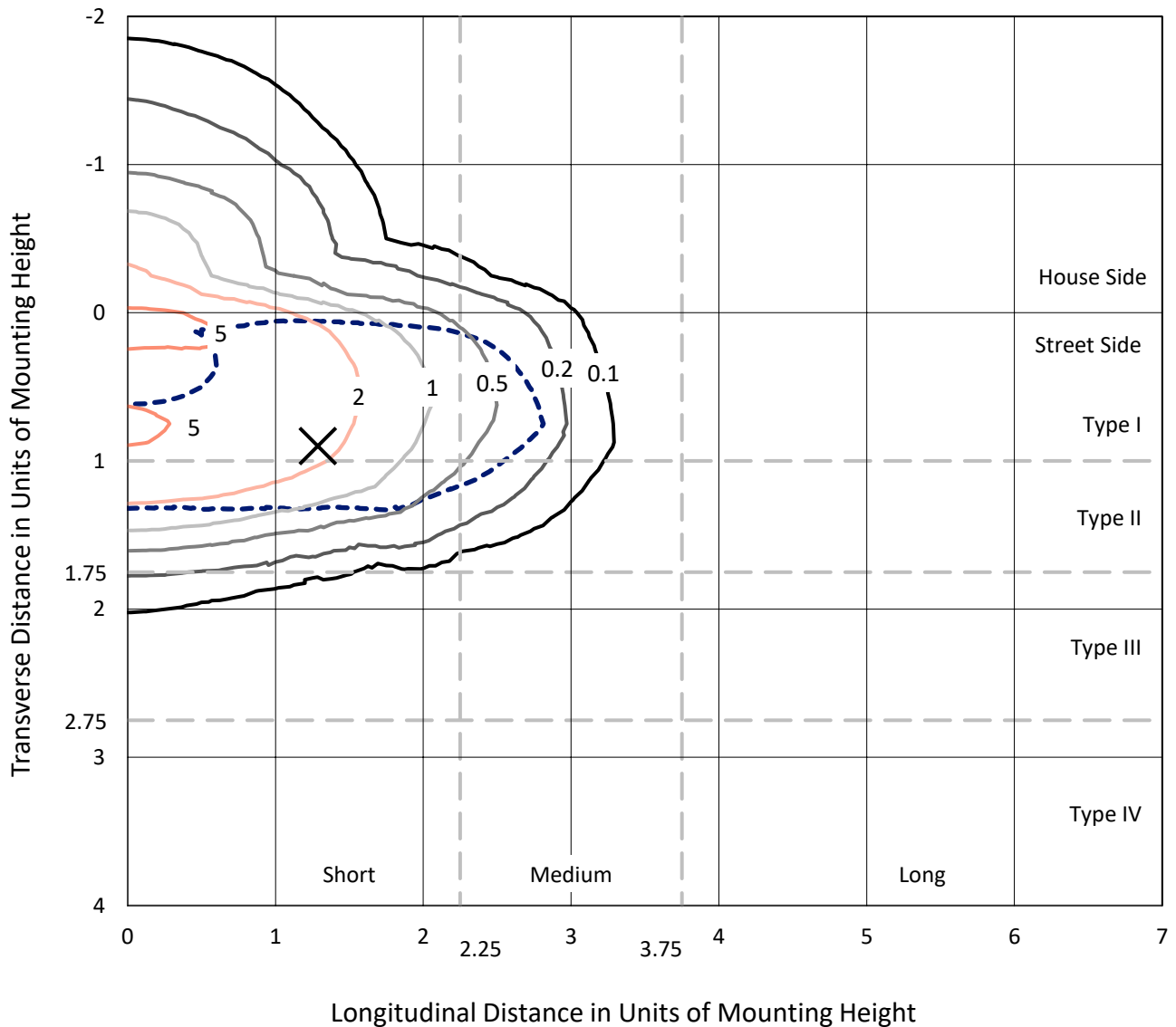
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

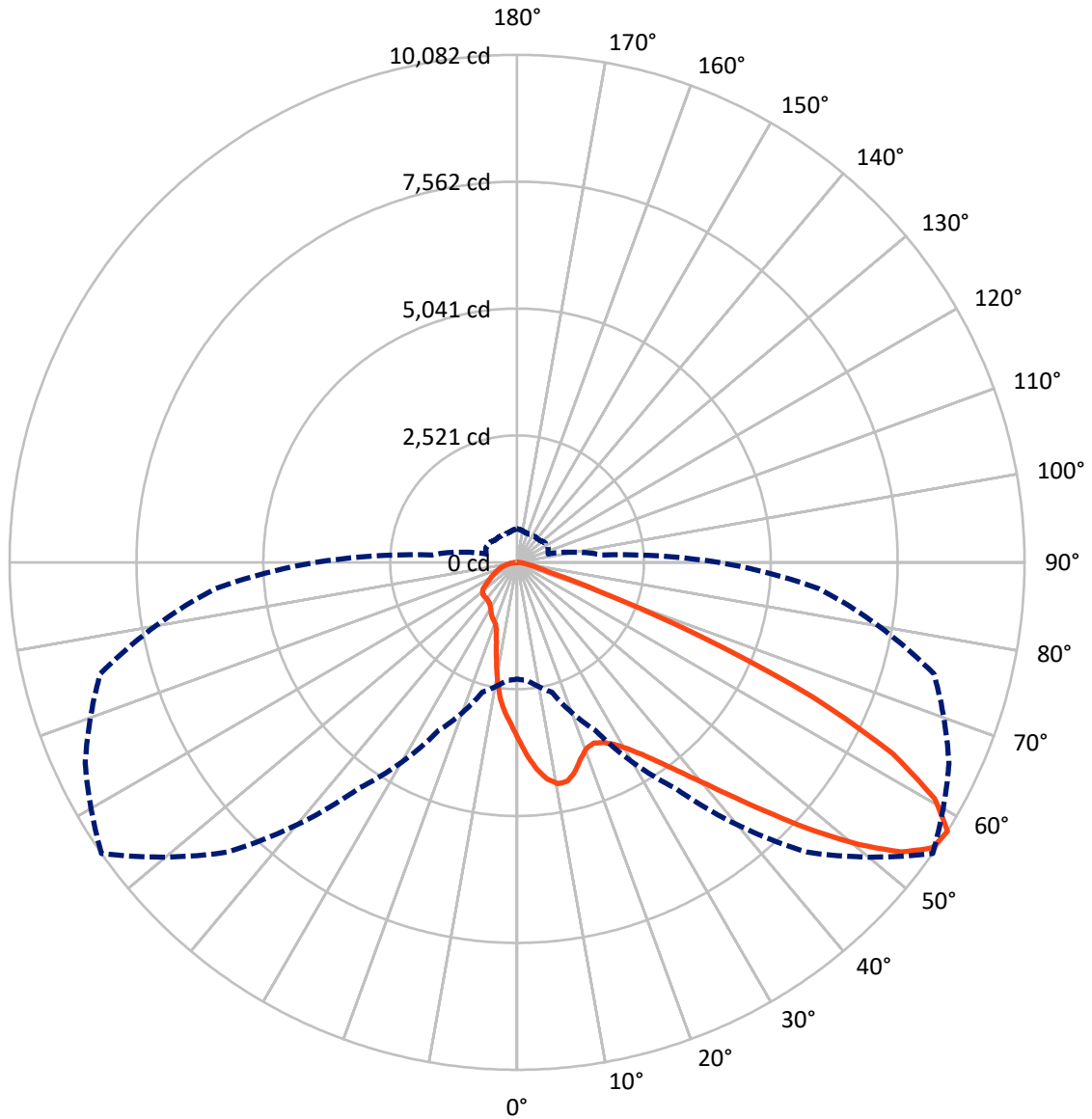
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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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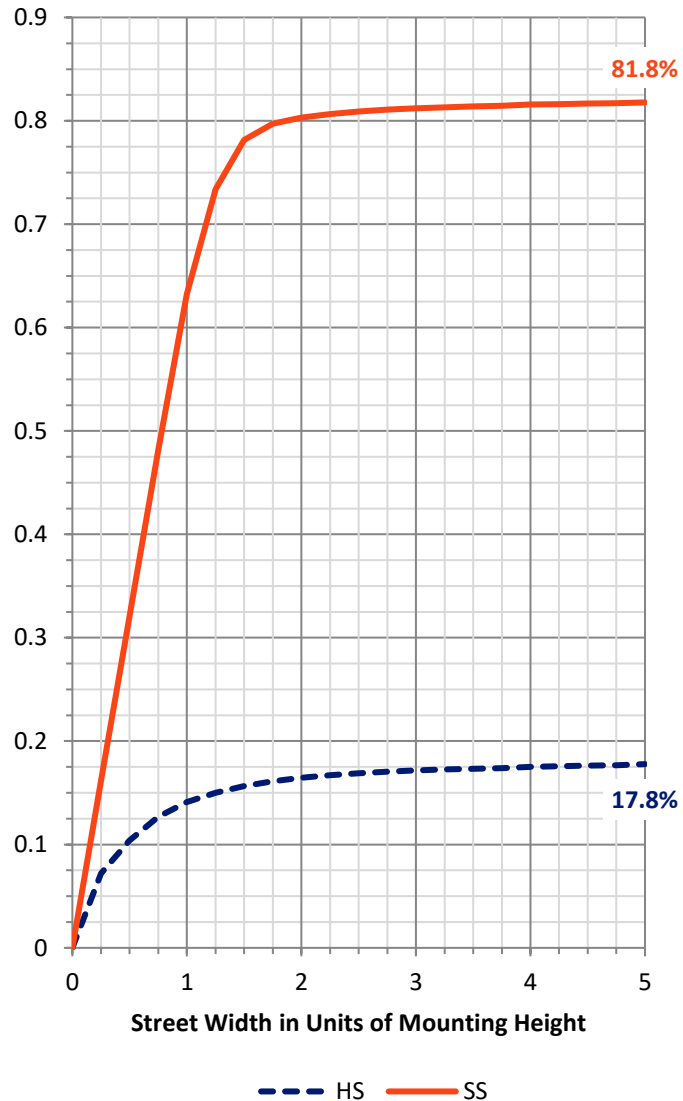
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2538.7	0.0	2538.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	11491.5	0.0	11491.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	14030.2	0.0	14030.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.2	2.3
10°-20°	823.4	5.9
20°-30°	1313.9	9.4
30°-40°	2080.2	14.8
40°-50°	3184.0	22.7
50°-60°	3410.4	24.3
60°-70°	2145.5	15.3
70°-80°	634.5	4.5
80°-90°	112.2	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°	14030.2	100.0
0°-180°	14030.2	100.0

Coefficient of Utilization

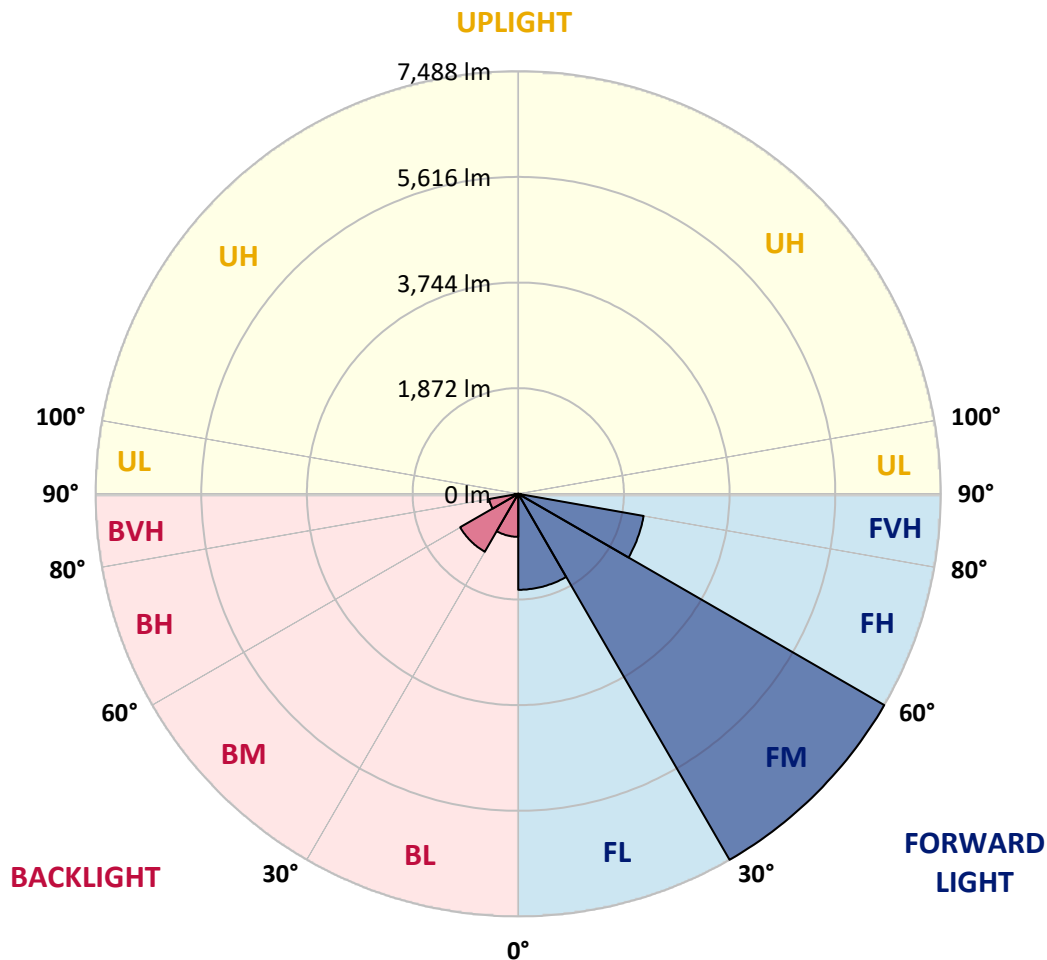


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1700.5	12.1			
FM (30°-60°)	7488.0	53.4			
FH (60°-80°)	2255.6	16.1			G2/5000
FVH (80°-90°)	47.4	0.3			G1/100
BL (0°-30°)	763.0	5.4	B2/1000		
BM (30°-60°)	1186.6	8.5	B2/2500		
BH (60°-80°)	524.3	3.7	B2/1000		G2/1000
BVH (80°-90°)	64.8	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°	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5
2.5°	4033.4	4030.5	4046.4	3992.1	3955.1	3905.0	3839.0	3754.9	3664.2	3568.4	3527.1
5°	4396.7	4371.3	4388.0	4347.4	4306.8	4231.4	4133.4	3996.4	3828.9	3638.1	3536.6
7.5°	4339.4	4322.0	4364.9	4401.1	4431.6	4422.2	4350.3	4206.7	3990.6	3713.5	3566.3
10°	3877.5	3857.9	3918.1	4043.5	4227.7	4388.0	4475.0	4385.9	4156.0	3796.2	3595.3
12.5°	3469.8	3460.4	3500.3	3601.8	3806.3	4113.8	4459.2	4542.5	4327.9	3894.1	3634.4
15°	3295.8	3284.1	3309.5	3361.0	3491.6	3778.0	4314.0	4649.9	4496.9	4007.2	3696.9
17.5°	3257.3	3244.2	3255.1	3281.9	3366.1	3584.4	4095.0	4702.8	4673.1	4133.4	3749.0
20°	3328.4	3317.5	3319.0	3317.5	3376.2	3549.6	3942.7	4682.5	4826.8	4249.5	3799.9
22.5°	3500.3	3482.1	3482.8	3444.4	3476.4	3610.6	3902.8	4628.1	4964.0	4351.0	3838.3
25°	3780.2	3747.6	3754.2	3656.2	3647.6	3746.9	3965.2	4586.1	5100.3	4432.3	3845.5
27.5°	4163.2	4126.2	4106.7	3960.8	3891.2	3940.5	4092.1	4600.5	5229.3	4502.6	3827.3
30°	4641.9	4596.9	4557.0	4350.3	4224.1	4206.0	4289.4	4696.3	5381.7	4576.6	3796.2
32.5°	5228.6	5176.5	5103.9	4829.8	4652.1	4557.0	4544.7	4866.7	5560.1	4670.9	3780.2
35°	5927.2	5858.9	5756.0	5401.2	5176.5	4982.0	4881.3	5112.6	5804.6	4813.1	3798.3
37.5°	6646.6	6569.7	6475.4	6053.3	5777.0	5490.5	5291.8	5446.2	6130.2	5006.0	3846.2
40°	7310.3	7224.0	7136.2	6760.5	6463.9	6118.6	5794.4	5868.3	6528.4	5236.6	3927.5
42.5°	7702.0	7638.1	7604.8	7401.6	7172.4	6822.1	6419.6	6368.8	6975.9	5502.1	4020.4
45°	7684.5	7658.4	7761.4	7845.6	7791.1	7596.8	7152.1	6922.2	7424.9	5732.0	4105.9
47.5°	7274.0	7291.4	7521.3	7994.2	8202.4	8303.9	7986.3	7465.5	7815.1	5903.9	4144.4
50°	6157.1	6171.5	6703.9	7723.7	8308.2	8880.5	8813.8	7995.7	8117.5	6009.1	4135.7
52.5°	5272.9	5282.3	5510.8	6921.5	7958.7	9170.7	9559.5	8495.4	8338.8	6038.1	4087.1
55°	3971.8	4004.4	4260.4	5430.2	7049.1	8940.8	10013.4	9010.4	8478.7	6041.0	4036.2
57.5°	2320.2	2355.8	2672.0	3686.0	5478.9	8139.3	10082.3	9467.3	8573.7	6017.8	4005.8
60°	1136.5	1151.8	1289.6	1937.2	3378.4	6595.2	9528.2	9688.5	8626.7	6005.5	4004.4
62.5°	765.9	763.7	769.6	955.9	1664.6	4237.1	8373.5	9301.2	8598.4	5958.3	3989.8
65°	658.6	650.6	628.8	670.9	862.3	1938.0	6469.6	8145.1	8383.0	5840.0	3890.5
67.5°	569.4	570.1	570.8	557.7	615.8	894.3	3953.6	6416.0	7609.8	5280.2	3507.6
70°	471.4	478.0	480.8	480.8	501.9	586.8	1687.8	4397.5	6002.6	4140.0	2825.0
72.5°	429.4	415.6	417.1	409.8	409.8	446.8	679.6	2492.8	3781.7	2328.9	1724.0
75°	350.3	359.1	360.5	355.4	338.8	340.9	403.2	1045.9	1618.2	966.1	852.2
77.5°	302.5	302.5	305.3	301.8	288.6	255.3	269.1	405.5	550.5	396.1	425.8
80°	242.9	242.2	254.6	261.8	241.5	188.6	171.9	224.2	244.5	174.0	221.2
82.5°	118.2	125.5	174.8	199.5	183.5	136.3	105.2	139.3	130.6	76.9	99.3
85°	68.9	65.3	78.3	111.0	105.2	75.4	50.7	72.6	68.2	39.2	39.9
87.5°	21.7	20.3	16.0	37.7	30.4	21.0	13.7	21.0	18.9	8.7	8.7
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°	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5	3515.5
2.5°	3475.7	3390.1	3305.2	3227.5	3180.5	3149.9	3119.5	3085.5	3072.3	3052.8
5°	3440.8	3275.5	3128.2	3001.3	2886.0	2795.3	2704.0	2629.9	2596.5	2619.1
7.5°	3420.5	3181.2	2954.2	2721.3	2497.2	2318.0	2162.1	2052.6	2003.3	2015.6
10°	3402.4	3074.5	2728.5	2360.9	2038.8	1816.9	1657.3	1573.9	1542.7	1549.2
12.5°	3385.7	2954.9	2456.6	1972.8	1630.5	1484.0	1438.3	1439.0	1444.8	1449.1
15°	3382.8	2810.5	2152.7	1633.3	1410.0	1400.6	1449.9	1481.0	1497.7	1502.9
17.5°	3378.4	2637.9	1843.0	1402.0	1356.3	1420.1	1465.9	1486.1	1499.2	1499.9
20°	3361.0	2418.9	1557.2	1291.7	1344.7	1399.8	1428.1	1444.0	1455.0	1458.6
22.5°	3307.4	2175.2	1334.6	1242.4	1298.3	1342.5	1375.9	1394.0	1400.6	1404.9
25°	3210.9	1902.5	1180.8	1195.3	1233.7	1289.6	1316.4	1320.0	1317.8	1324.4
27.5°	3084.7	1610.2	1085.1	1131.5	1180.8	1228.7	1243.1	1241.0	1236.7	1243.8
30°	2932.4	1347.6	1024.1	1059.6	1127.1	1170.7	1183.7	1178.6	1169.9	1177.9
32.5°	2771.4	1132.9	974.1	1009.6	1082.9	1125.7	1138.7	1133.6	1127.1	1133.6
35°	2621.2	982.8	927.6	976.2	1048.1	1090.1	1106.8	1107.5	1107.5	1115.5
37.5°	2483.4	895.0	889.2	955.2	1024.1	1061.8	1085.8	1087.2	1056.1	1058.2
40°	2355.8	858.0	871.8	941.5	1000.9	1037.2	1038.6	957.4	900.1	898.6
42.5°	2251.3	850.7	876.9	940.0	984.2	985.6	883.4	820.3	804.3	805.0
45°	2153.4	848.6	888.5	940.0	959.6	851.5	782.6	765.9	767.3	773.2
47.5°	2043.8	839.9	890.6	926.9	888.5	757.2	736.9	729.7	726.7	728.2
50°	1924.2	808.7	863.2	900.8	766.6	716.6	691.2	689.0	692.7	694.8
52.5°	1798.1	757.9	816.0	853.7	710.8	681.0	652.7	657.8	673.8	678.9
55°	1715.3	698.4	753.6	759.4	671.6	647.7	623.7	635.4	665.1	674.6
57.5°	1693.6	635.4	682.5	676.0	621.6	618.7	604.1	614.3	652.0	665.8
60°	1687.0	578.8	612.8	607.8	573.0	586.8	583.1	588.2	601.3	605.7
62.5°	1636.3	533.8	550.5	543.2	529.5	553.4	562.1	551.2	561.4	566.4
65°	1507.2	497.5	489.5	484.5	490.3	512.1	529.5	507.7	517.1	531.7
67.5°	1294.0	448.2	426.5	432.2	450.4	462.0	484.5	459.8	467.8	492.5
70°	1046.6	385.8	366.2	382.9	400.4	424.2	427.9	411.2	430.1	457.7
72.5°	740.6	322.8	308.9	343.1	348.9	380.1	372.1	364.1	390.2	399.6
75°	513.5	260.3	252.4	278.5	299.5	326.4	320.6	330.0	385.1	389.5
77.5°	324.9	202.3	197.3	213.9	242.9	272.8	282.2	389.5	657.8	684.0
80°	188.6	150.9	145.0	158.2	183.5	211.0	272.0	478.0	433.7	428.7
82.5°	105.2	103.7	96.5	100.0	122.6	152.3	384.4	336.5	273.5	282.2
85°	49.3	60.9	52.2	50.0	68.9	178.5	256.8	192.2	127.6	124.7
87.5°	13.0	11.6	11.6	13.0	29.0	153.8	102.3	82.0	48.6	47.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)