

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: P963438

Luminaire Tested: **NAV-SB3A-727-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963438
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-727-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13013.4 lumens
Efficiency: N/A
Efficacy: 153.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

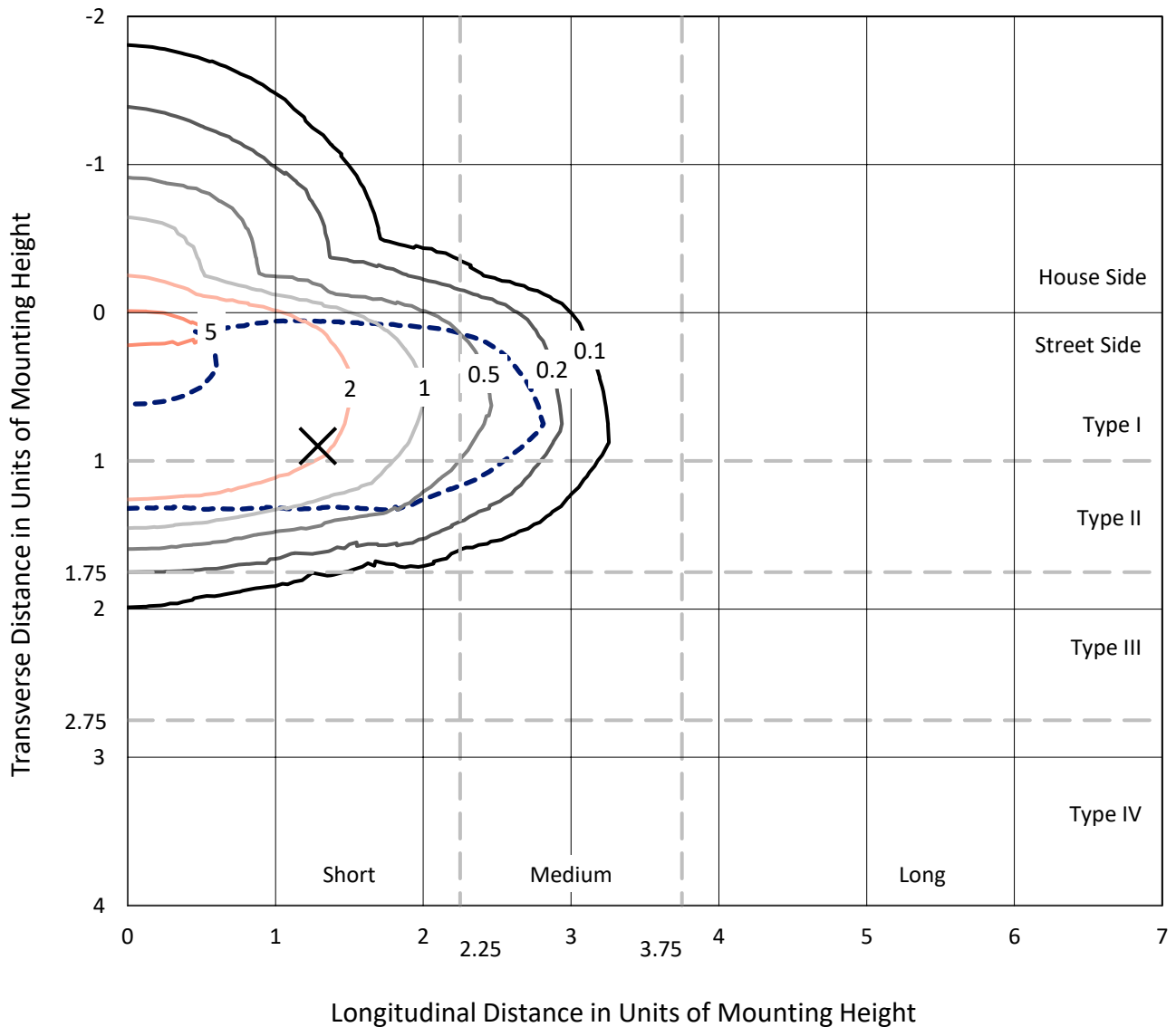
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P963438
 CATALOG NUMBER: NAV-SB3A-727-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

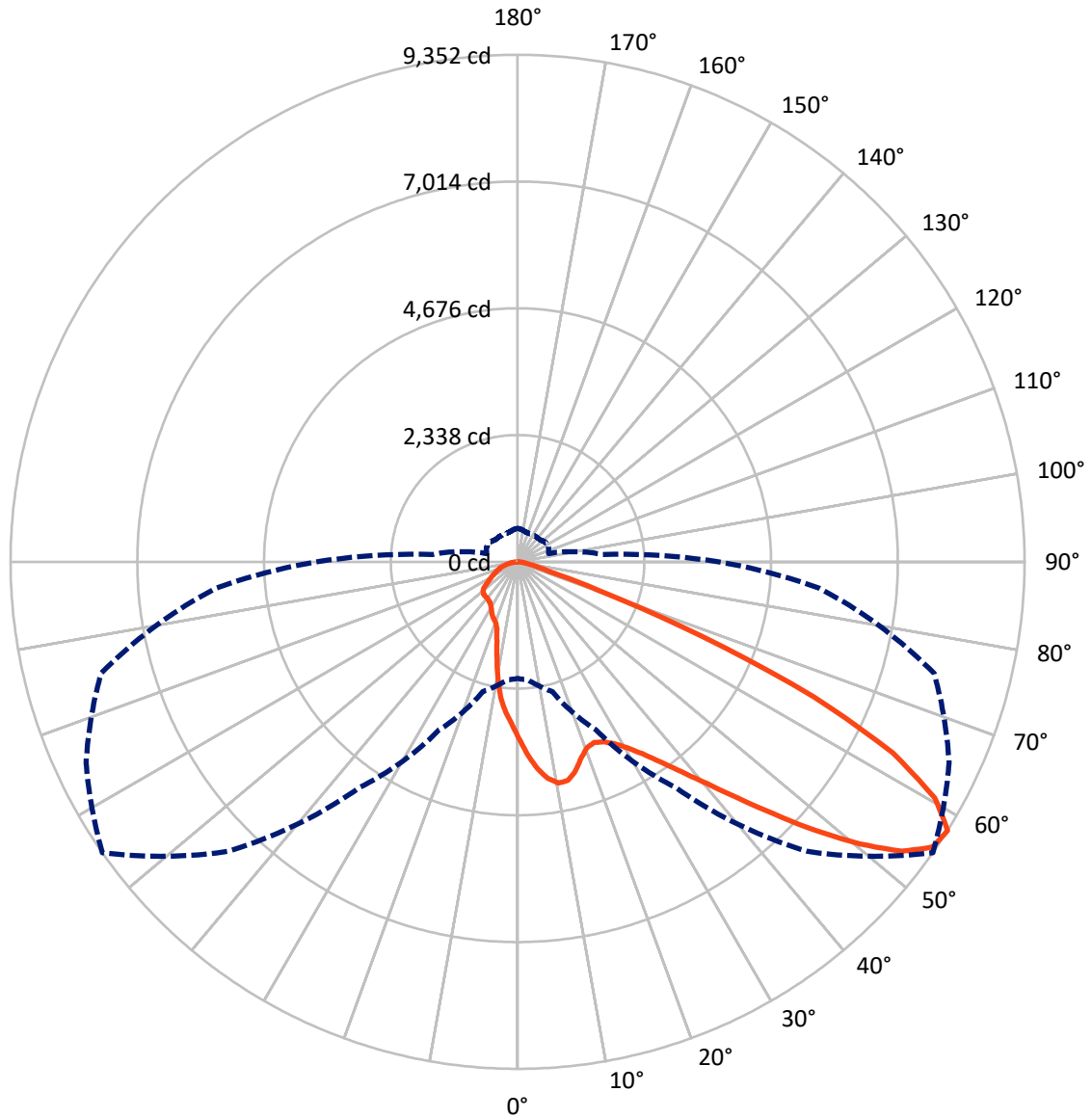
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - N/A

REPORT NUMBER: P963438
CATALOG NUMBER: NAV-SB3A-727-U-AFL

Luminous Intensity Polar Plot



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

REPORT NUMBER: P963438
 CATALOG NUMBER: NAV-SB3A-727-U-AFL

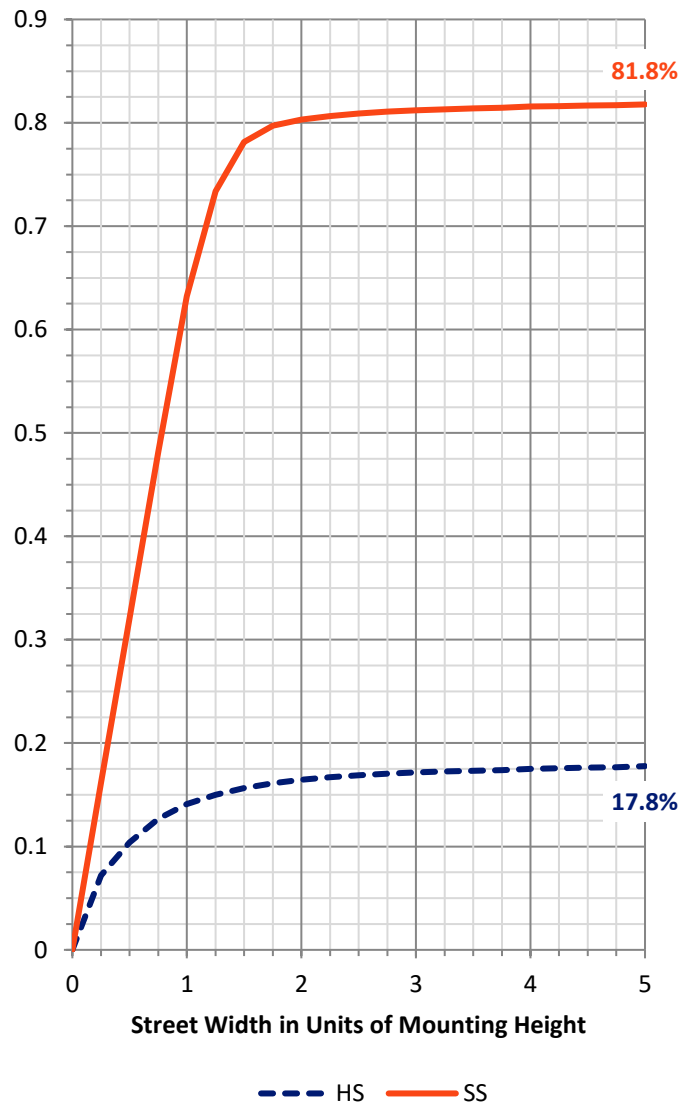
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2354.7	0.0	2354.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10658.7	0.0	10658.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	13013.4	0.0	13013.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.6	2.3
10°-20°	763.7	5.9
20°-30°	1218.7	9.4
30°-40°	1929.5	14.8
40°-50°	2953.2	22.7
50°-60°	3163.2	24.3
60°-70°	1990.0	15.3
70°-80°	588.5	4.5
80°-90°	104.1	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°	13013.4	100.0
0°-180°	13013.4	100.0

Coefficient of Utilization

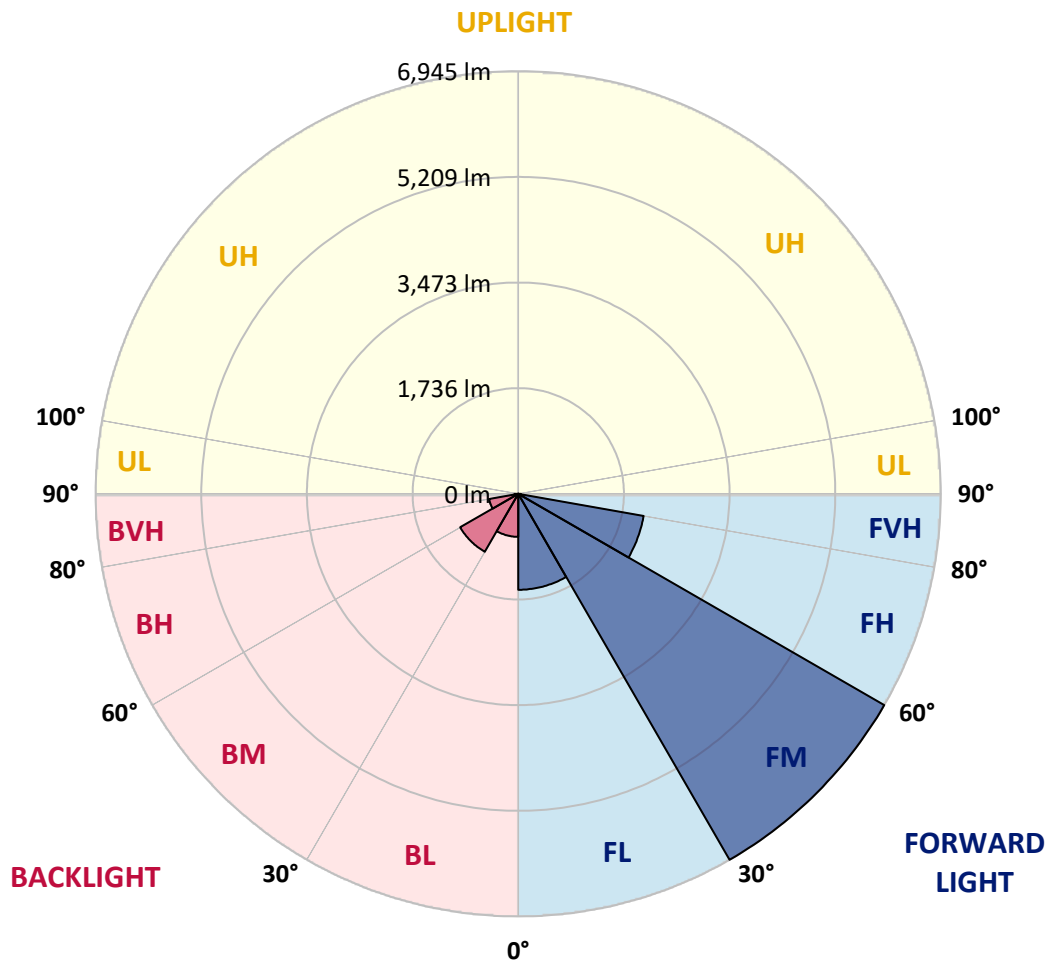


REPORT NUMBER: P963438
 CATALOG NUMBER: NAV-SB3A-727-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1577.2	12.1			
FM (30°-60°)	6945.4	53.4			
FH (60°-80°)	2092.2	16.1			G2/5000
FVH (80°-90°)	44.0	0.3			G1/100
BL (0°-30°)	707.7	5.4	B2/1000		
BM (30°-60°)	1100.6	8.5	B2/2500		
BH (60°-80°)	486.3	3.7	B1/500		G1/500
BVH (80°-90°)	60.1	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



REPORT NUMBER: P963438
 CATALOG NUMBER: NAV-SB3A-727-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7
2.5°	3741.0	3738.4	3753.1	3702.7	3668.4	3622.0	3560.7	3482.7	3398.7	3309.8	3271.5
5°	4078.1	4054.6	4070.1	4032.3	3994.7	3924.7	3833.9	3706.7	3551.3	3374.4	3280.2
7.5°	4025.0	4008.8	4048.5	4082.2	4110.4	4101.6	4035.0	3901.9	3701.4	3444.4	3307.8
10°	3596.4	3578.3	3634.1	3750.5	3921.3	4070.1	4150.7	4068.0	3854.7	3521.1	3334.7
12.5°	3218.4	3209.6	3246.6	3340.8	3530.5	3815.8	4136.0	4213.4	4014.2	3611.9	3371.0
15°	3056.9	3046.1	3069.7	3117.4	3238.5	3504.3	4001.4	4312.9	4170.9	3716.9	3428.9
17.5°	3021.3	3009.1	3019.2	3044.1	3122.1	3324.7	3798.2	4362.0	4334.4	3833.9	3477.3
20°	3087.2	3077.0	3078.4	3077.0	3131.6	3292.4	3657.0	4343.1	4477.0	3941.5	3524.5
22.5°	3246.6	3229.8	3230.5	3194.8	3224.4	3348.9	3620.0	4292.7	4604.2	4035.7	3560.1
25°	3506.3	3476.0	3482.0	3391.2	3383.2	3475.4	3677.8	4253.6	4730.7	4111.1	3566.8
27.5°	3861.5	3827.1	3809.0	3673.8	3609.2	3654.9	3795.6	4267.2	4850.4	4176.4	3550.0
30°	4305.5	4263.8	4226.8	4035.0	3918.0	3901.2	3978.5	4355.9	4991.6	4244.9	3521.1
32.5°	4849.7	4801.3	4734.1	4479.8	4314.9	4226.8	4215.3	4514.0	5157.2	4332.4	3506.3
35°	5497.6	5434.3	5338.8	5009.8	4801.3	4621.0	4527.5	4742.1	5383.9	4464.3	3523.1
37.5°	6165.0	6093.6	6006.2	5614.6	5358.3	5092.6	4908.2	5051.5	5686.0	4643.2	3567.5
40°	6780.5	6700.4	6619.0	6270.5	5995.4	5675.2	5374.5	5443.1	6055.3	4857.2	3642.8
42.5°	7143.7	7084.6	7053.6	6865.2	6652.7	6327.7	5954.3	5907.3	6470.3	5103.4	3729.0
45°	7127.6	7103.4	7198.9	7277.0	7226.5	7046.2	6633.8	6420.6	6886.8	5316.6	3808.4
47.5°	6746.9	6763.0	6976.3	7414.8	7608.0	7702.2	7407.5	6924.4	7248.7	5476.1	3844.0
50°	5710.8	5724.3	6218.1	7163.9	7706.2	8236.9	8175.1	7416.2	7529.2	5573.5	3836.0
52.5°	4890.8	4899.5	5111.5	6419.9	7381.9	8506.1	8866.7	7879.7	7734.4	5600.5	3790.9
55°	3683.8	3714.2	3951.7	5036.7	6538.3	8292.8	9287.7	8357.3	7864.2	5603.2	3743.7
57.5°	2152.1	2185.0	2478.3	3418.8	5081.8	7549.4	9351.7	8781.2	7952.4	5581.6	3715.5
60°	1054.2	1068.3	1196.1	1796.8	3133.6	6117.2	8837.7	8986.4	8001.5	5570.3	3714.2
62.5°	710.4	708.4	713.8	886.6	1544.0	3930.1	7766.7	8627.1	7975.2	5526.5	3700.7
65°	610.8	603.4	583.2	622.3	799.9	1797.5	6000.8	7554.8	7775.4	5416.8	3608.5
67.5°	528.1	528.8	529.4	517.3	571.1	829.4	3667.0	5950.9	7058.4	4897.4	3253.4
70°	437.3	443.3	446.0	446.0	465.6	544.3	1565.5	4078.8	5567.5	3840.0	2620.3
72.5°	398.2	385.5	386.8	380.1	380.1	414.4	630.4	2312.2	3507.7	2160.2	1599.1
75°	324.9	333.0	334.4	329.6	314.2	316.2	374.0	970.1	1500.9	896.1	790.5
77.5°	280.5	280.5	283.2	279.8	267.7	236.8	249.6	376.1	510.7	367.4	394.9
80°	225.4	224.7	236.2	242.8	224.1	174.9	159.4	207.9	226.7	161.4	205.2
82.5°	109.7	116.3	162.2	185.0	170.3	126.5	97.6	129.1	121.1	71.3	92.1
85°	64.0	60.6	72.7	102.9	97.6	70.0	47.0	67.2	63.2	36.3	37.0
87.5°	20.2	18.9	14.8	35.0	28.3	19.5	12.8	19.5	17.5	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P963438
 CATALOG NUMBER: NAV-SB3A-727-U-AFL

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7
2.5°	3223.7	3144.4	3065.7	2993.6	2950.0	2921.7	2893.5	2861.8	2849.7	2831.6
5°	3191.4	3038.1	2901.5	2783.8	2676.8	2592.7	2508.0	2439.3	2408.3	2429.2
7.5°	3172.6	2950.6	2740.0	2524.1	2316.2	2150.0	2005.4	1903.8	1858.1	1869.5
10°	3155.8	2851.8	2530.8	2189.7	1891.0	1685.2	1537.2	1459.8	1430.9	1436.9
12.5°	3140.3	2740.7	2278.6	1829.8	1512.3	1376.4	1334.0	1334.7	1340.1	1344.1
15°	3137.6	2606.9	1996.7	1514.9	1307.8	1299.1	1344.8	1373.7	1389.2	1393.9
17.5°	3133.6	2446.8	1709.4	1300.4	1258.0	1317.2	1359.6	1378.4	1390.5	1391.2
20°	3117.4	2243.5	1444.3	1198.1	1247.2	1298.4	1324.6	1339.4	1349.5	1352.9
22.5°	3067.6	2017.5	1237.8	1152.4	1204.2	1245.3	1276.1	1293.0	1299.1	1303.1
25°	2978.1	1764.5	1095.2	1108.6	1144.3	1196.1	1221.0	1224.4	1222.3	1228.4
27.5°	2861.1	1493.4	1006.4	1049.5	1095.2	1139.6	1153.0	1151.1	1147.0	1153.7
30°	2719.8	1250.0	949.9	982.9	1045.4	1085.8	1097.9	1093.2	1085.2	1092.5
32.5°	2570.5	1050.8	903.4	936.4	1004.4	1044.1	1056.2	1051.4	1045.4	1051.4
35°	2431.3	911.5	860.4	905.5	972.1	1011.2	1026.6	1027.3	1027.3	1034.6
37.5°	2303.5	830.1	824.8	886.0	949.9	984.9	1007.1	1008.4	979.5	981.5
40°	2185.0	795.8	808.6	873.2	928.3	962.0	963.4	888.0	834.9	833.5
42.5°	2088.1	789.1	813.3	871.9	912.9	914.2	819.4	760.9	746.1	746.7
45°	1997.3	787.1	824.1	871.9	890.0	789.8	725.9	710.4	711.8	717.1
47.5°	1895.7	779.0	826.2	859.8	824.1	702.3	683.5	676.8	674.0	675.4
50°	1784.7	750.1	800.5	835.6	711.0	664.6	641.1	639.1	642.5	644.5
52.5°	1667.7	703.0	756.9	791.8	659.3	631.7	605.5	610.2	624.9	629.7
55°	1591.0	647.8	698.9	704.4	623.0	600.8	578.5	589.3	616.8	625.7
57.5°	1570.8	589.3	633.0	627.0	576.6	573.8	560.4	569.8	604.8	617.6
60°	1564.8	536.8	568.5	563.8	531.5	544.3	540.9	545.6	557.7	561.7
62.5°	1517.7	495.2	510.7	503.9	491.1	513.3	521.4	511.3	520.7	525.4
65°	1397.9	461.5	454.1	449.4	454.8	475.0	491.1	470.9	479.7	493.1
67.5°	1200.2	415.7	395.5	401.0	417.8	428.6	449.4	426.5	433.9	456.7
70°	970.8	357.9	339.7	355.2	371.4	393.5	396.9	381.4	398.9	424.5
72.5°	686.9	299.4	286.6	318.2	323.6	352.5	345.1	337.7	361.9	370.6
75°	476.3	241.5	234.1	258.3	277.9	302.7	297.4	306.1	357.2	361.2
77.5°	301.3	187.7	183.0	198.4	225.4	253.0	261.7	361.2	610.2	634.4
80°	174.9	139.9	134.6	146.7	170.3	195.8	252.3	443.3	402.3	397.6
82.5°	97.6	96.2	89.5	92.9	113.7	141.2	356.6	312.1	253.6	261.7
85°	45.7	56.5	48.5	46.4	64.0	165.5	238.1	178.2	118.4	115.7
87.5°	12.1	10.8	10.8	12.1	27.0	142.6	94.8	76.1	45.1	43.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)