

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: P963457

Luminaire Tested: **NAV-SB3A-727-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963457
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10035.8 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

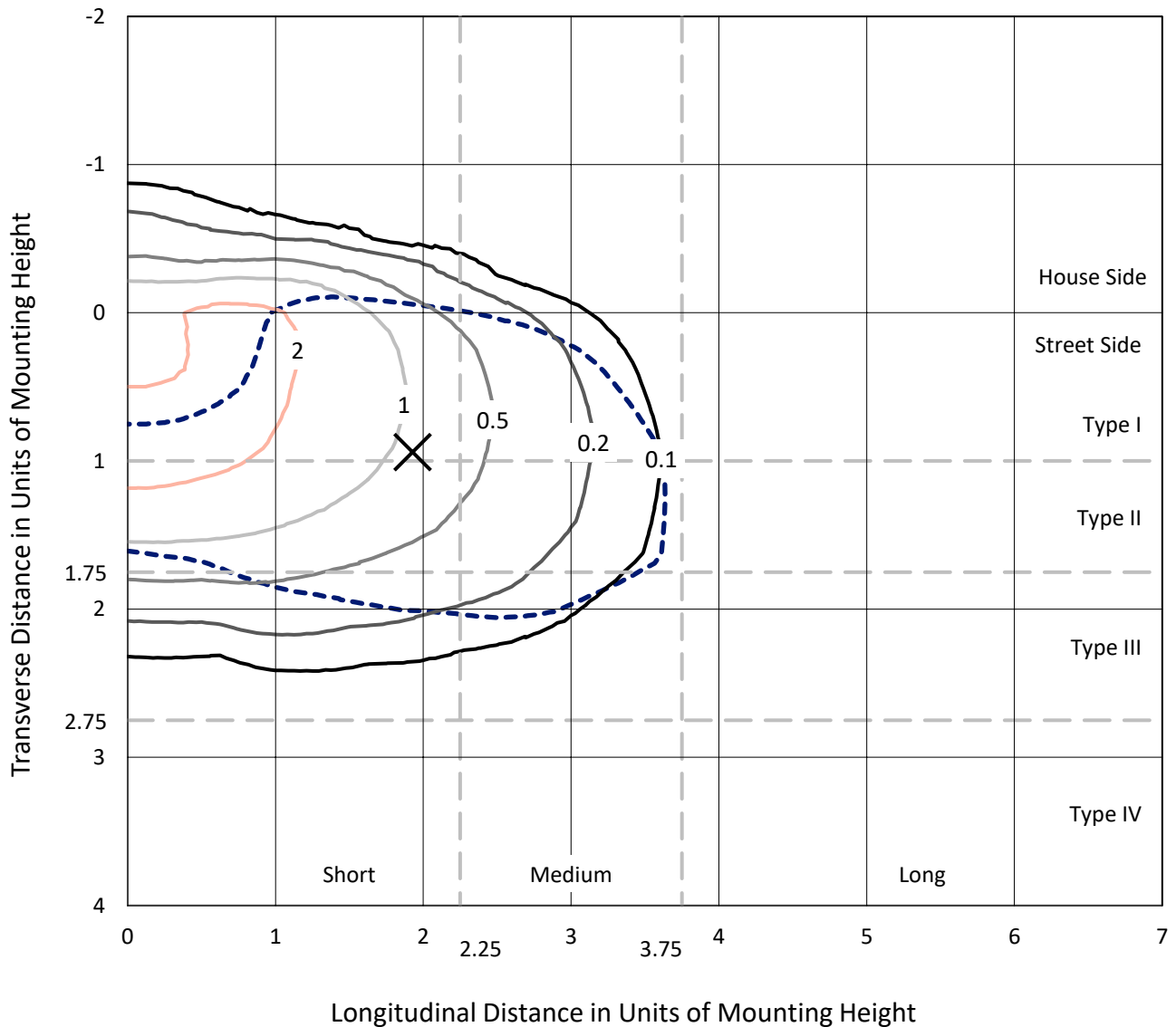
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

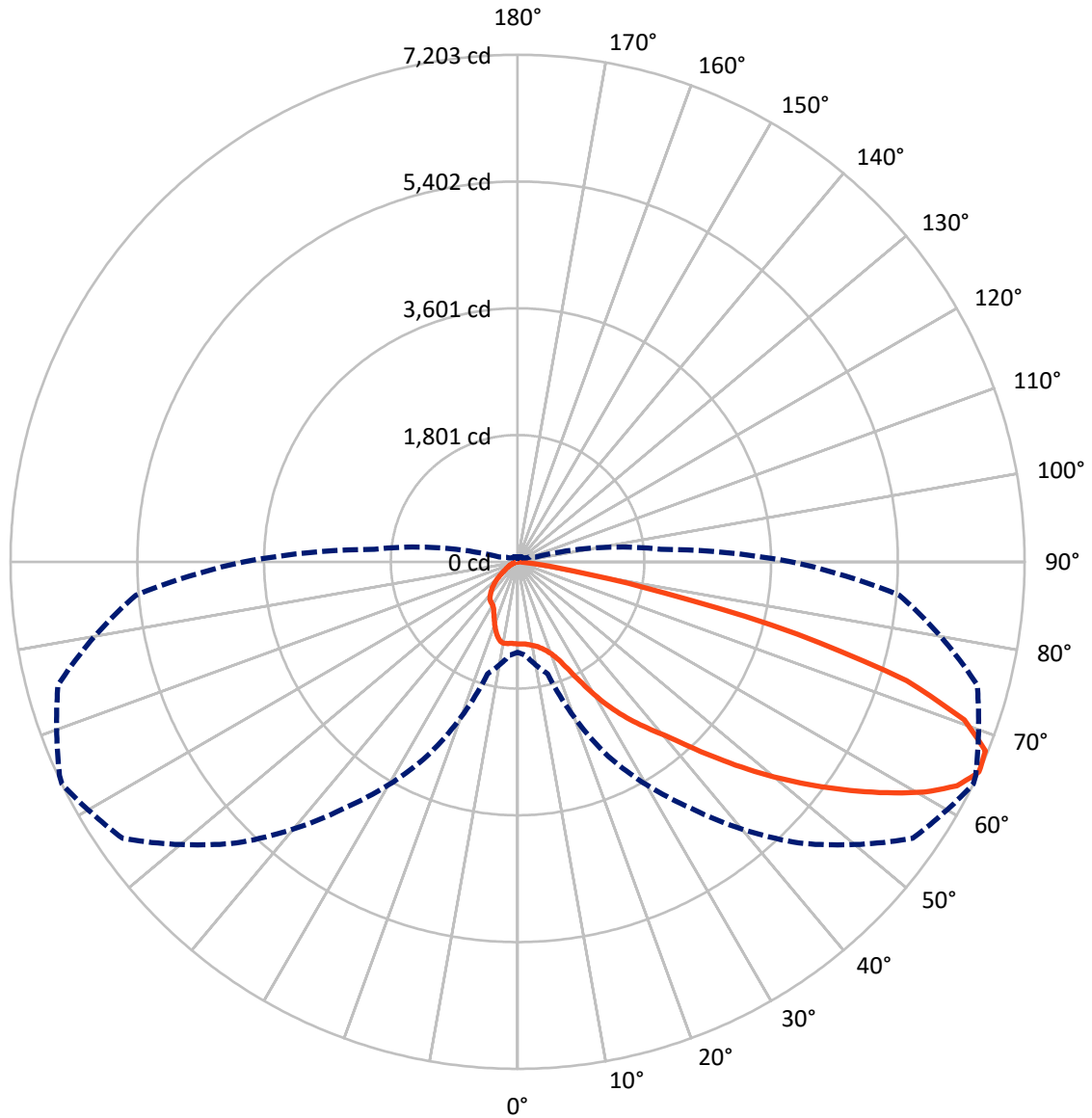
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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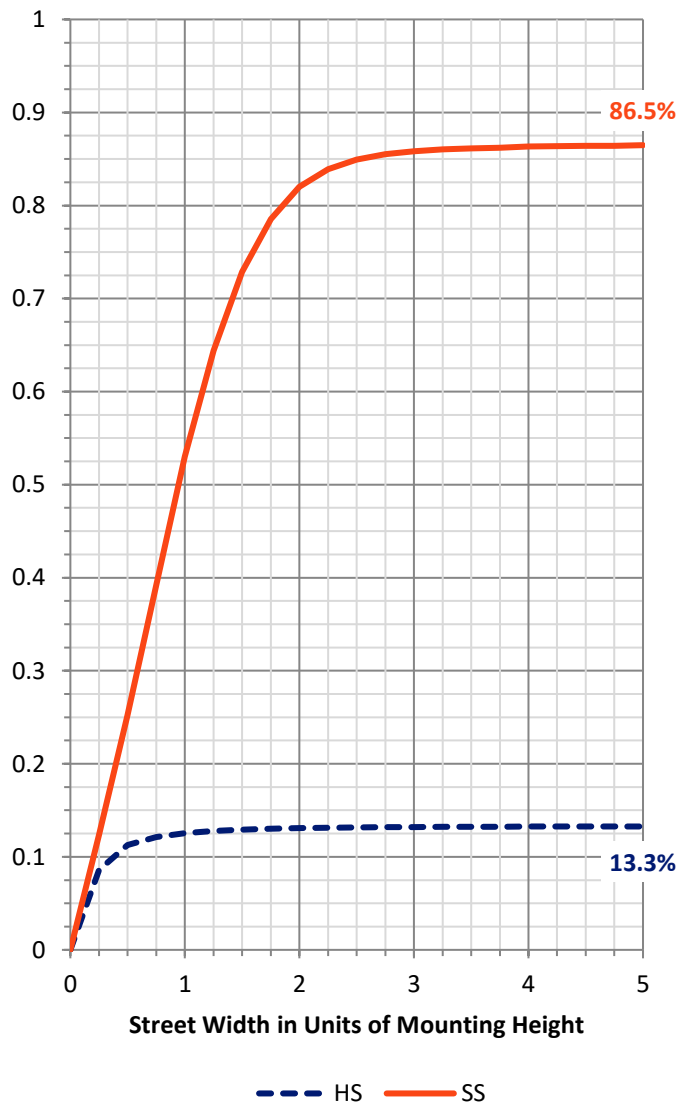
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1342.1	0.0	1342.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	8693.7	0.0	8693.7
	% Fixture	86.6	0.0	86.6
Total	Lumens	10035.8	0.0	10035.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.7	1.1
10°-20°	292.1	2.9
20°-30°	553.5	5.5
30°-40°	1120.0	11.2
40°-50°	1907.9	19.0
50°-60°	2594.6	25.9
60°-70°	2436.5	24.3
70°-80°	976.2	9.7
80°-90°	47.3	0.5
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°	10035.8	100.0
0°-180°	10035.8	100.0

Coefficient of Utilization



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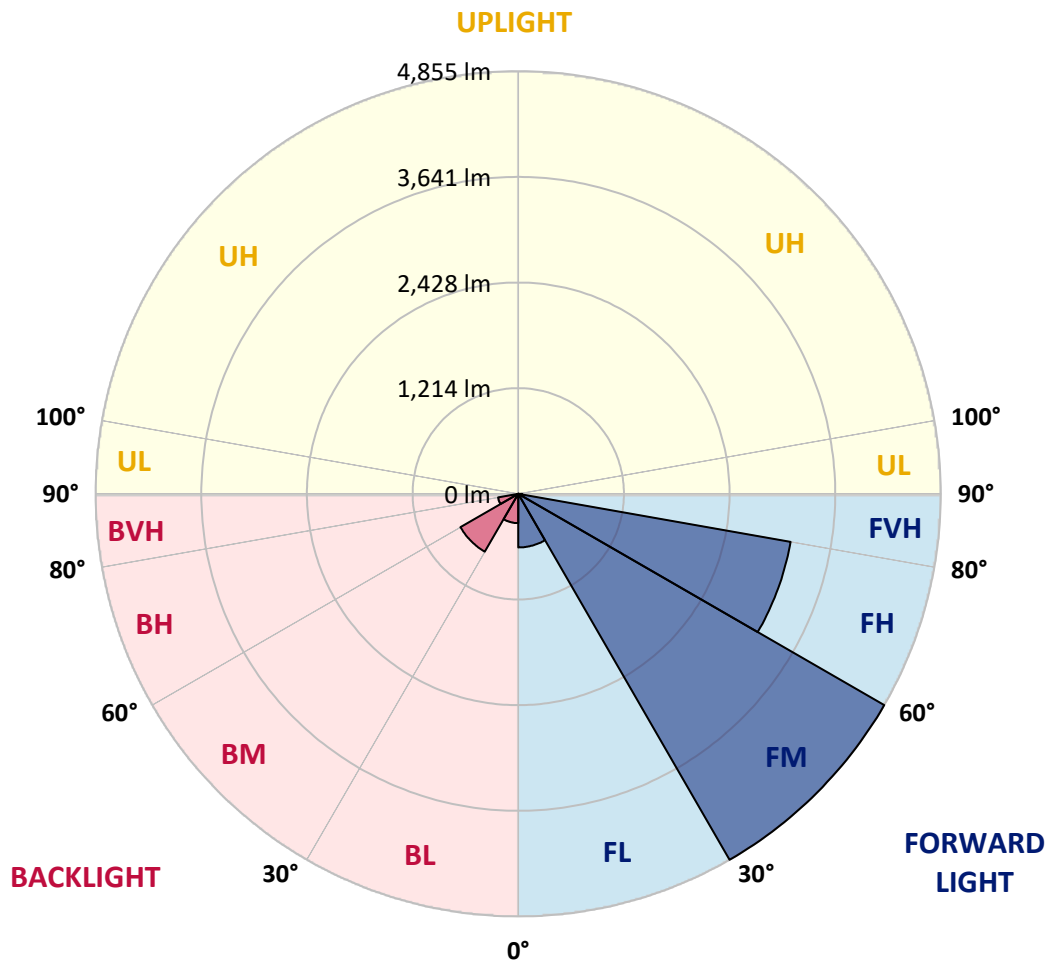
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	616.3	6.1			
FM (30°-60°)	4855.3	48.4			
FH (60°-80°)	3177.1	31.7			G2/5000
FVH (80°-90°)	45.0	0.4			G1/100
BL (0°-30°)	337.0	3.4	B1/500		
BM (30°-60°)	767.3	7.6	B1/1000		
BH (60°-80°)	235.6	2.3	B1/500		G1/500
BVH (80°-90°)	2.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3
2.5°	1163.3	1171.3	1169.3	1167.3	1166.6	1168.0	1168.6	1168.0	1168.0	1168.0	1168.6
5°	1141.0	1147.8	1147.8	1152.5	1159.2	1167.3	1173.3	1174.6	1176.0	1178.0	1177.3
7.5°	1098.6	1104.0	1108.0	1123.5	1140.3	1161.8	1180.1	1189.5	1190.8	1198.2	1200.9
10°	1069.7	1076.5	1083.1	1099.3	1123.5	1155.8	1186.7	1209.6	1213.0	1230.5	1238.6
12.5°	1068.4	1075.1	1083.8	1101.4	1129.6	1163.9	1201.6	1234.5	1240.6	1266.2	1283.0
15°	1082.5	1090.6	1098.6	1120.1	1150.5	1192.2	1232.6	1273.6	1279.6	1316.0	1334.1
17.5°	1111.4	1122.2	1128.2	1149.7	1182.0	1228.5	1281.7	1328.7	1334.1	1376.5	1399.3
20°	1168.6	1181.4	1183.4	1200.9	1232.6	1282.3	1345.5	1404.0	1410.8	1459.3	1484.8
22.5°	1287.0	1305.1	1289.0	1297.8	1326.0	1375.9	1444.4	1518.4	1527.9	1583.0	1605.9
25°	1495.6	1521.1	1479.4	1464.6	1476.7	1528.6	1614.7	1708.2	1718.9	1763.3	1774.8
27.5°	1905.3	1872.4	1809.1	1747.2	1710.8	1740.4	1837.3	1953.0	1966.6	2009.6	1996.1
30°	2355.3	2326.4	2241.1	2103.8	2017.6	2012.9	2102.4	2231.6	2247.1	2288.1	2247.1
32.5°	2806.1	2778.6	2685.7	2516.9	2367.5	2293.5	2355.3	2498.6	2506.7	2533.0	2472.4
35°	3249.5	3221.3	3128.4	2955.5	2771.8	2603.6	2591.5	2752.9	2755.7	2783.3	2693.1
37.5°	3695.5	3672.0	3573.2	3403.6	3222.6	2990.4	2878.1	2993.8	2997.2	3024.2	2930.6
40°	4013.8	4023.8	3955.9	3824.7	3669.3	3415.7	3199.7	3250.2	3230.0	3275.1	3219.2
42.5°	4287.0	4307.2	4247.9	4182.0	4091.8	3868.5	3598.0	3589.2	3557.0	3581.1	3523.3
45°	4523.0	4539.9	4486.7	4471.3	4469.2	4312.5	4033.3	3980.8	3935.7	3931.0	3861.7
47.5°	4609.8	4642.1	4665.0	4716.8	4817.7	4751.8	4483.3	4402.0	4351.5	4314.5	4204.9
50°	4642.8	4677.2	4755.2	4905.9	5144.7	5173.0	4931.5	4839.9	4778.0	4710.8	4549.3
52.5°	4598.5	4659.6	4764.6	5018.2	5364.7	5510.7	5361.4	5281.3	5210.7	5101.0	4861.5
55°	4336.7	4398.0	4612.5	5016.9	5474.3	5747.5	5767.7	5732.0	5652.7	5479.8	5113.7
57.5°	3785.0	3875.8	4215.6	4846.0	5472.4	5951.4	6166.0	6191.5	6102.7	5855.2	5312.3
60°	3020.8	3143.9	3558.3	4467.3	5303.5	6061.7	6515.1	6643.0	6548.8	6225.2	5473.0
62.5°	2107.8	2250.4	2642.7	3873.9	4917.3	5982.3	6770.1	7006.3	6934.9	6556.2	5534.9
65°	1285.7	1331.4	1647.6	3048.4	4260.7	5650.0	6848.8	7202.8	7179.2	6758.7	5443.5
67.5°	856.5	894.8	985.6	2090.3	3307.4	4985.9	6660.4	7168.4	7175.1	6725.7	5108.4
70°	516.0	549.0	608.2	1215.8	2143.5	3946.5	6077.2	6731.1	6770.1	6285.1	4473.3
72.5°	212.6	234.8	288.6	551.0	1110.1	2504.8	4839.2	5779.2	5870.0	5284.7	3433.1
75°	120.4	131.8	169.5	276.5	481.7	1167.3	2931.3	4102.6	4236.4	3642.4	2065.4
77.5°	80.1	85.5	109.7	179.0	271.1	398.3	1252.8	2137.4	2393.1	1989.4	894.1
80°	53.8	58.5	75.3	119.7	176.3	170.9	398.9	791.8	974.2	683.6	218.0
82.5°	36.3	37.0	53.8	78.7	111.7	82.7	117.8	246.2	309.4	197.8	82.7
85°	20.8	20.2	39.7	45.7	49.8	34.3	35.7	74.0	96.9	83.4	47.0
87.5°	2.7	4.0	15.5	12.1	6.8	7.4	7.4	12.8	18.9	20.2	10.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3	1167.3
2.5°	1168.6	1168.0	1165.9	1163.9	1159.2	1156.5	1157.8	1156.5	1155.8	1156.5	1159.2
5°	1177.3	1175.4	1169.9	1163.3	1153.8	1142.4	1135.0	1124.2	1114.1	1108.0	1109.4
7.5°	1200.9	1198.8	1191.5	1172.6	1142.4	1094.6	1050.8	1012.5	983.6	966.8	967.5
10°	1238.6	1235.2	1223.7	1182.0	1102.7	998.4	911.6	839.6	792.5	770.3	768.3
12.5°	1283.0	1279.0	1258.8	1173.3	1027.4	864.5	744.8	664.7	620.9	601.5	599.4
15°	1335.5	1330.0	1290.4	1131.6	917.7	716.5	606.8	546.9	518.8	501.2	501.8
17.5°	1400.8	1391.3	1313.9	1069.1	798.6	603.5	522.0	477.0	452.1	435.3	434.0
20°	1485.5	1470.1	1332.8	994.4	688.9	532.2	464.8	427.2	408.4	393.6	390.8
22.5°	1603.9	1581.7	1355.7	913.6	611.5	483.1	422.5	394.9	379.5	362.6	360.0
25°	1750.6	1724.4	1383.9	839.0	558.4	440.6	391.5	368.7	350.5	331.0	329.0
27.5°	1955.8	1908.7	1417.6	777.8	512.7	404.4	363.3	337.7	316.8	300.7	297.4
30°	2184.5	2107.1	1447.1	740.8	471.0	370.7	326.3	300.7	281.3	269.8	267.7
32.5°	2401.2	2296.2	1466.7	724.6	433.3	332.3	286.0	258.3	243.5	240.2	242.2
35°	2605.7	2467.1	1464.6	709.1	399.6	294.0	246.2	218.0	206.5	208.6	208.6
37.5°	2841.1	2649.4	1450.5	684.9	372.1	259.0	212.0	187.1	176.9	177.6	180.3
40°	3115.0	2860.0	1441.8	639.1	341.7	226.7	183.7	163.5	156.1	153.4	152.7
42.5°	3406.9	3063.8	1443.1	587.3	304.1	197.8	164.2	147.3	140.6	138.6	138.0
45°	3700.2	3258.3	1445.1	533.5	264.4	175.6	150.1	135.9	131.8	129.1	129.1
47.5°	3976.1	3423.7	1407.4	475.7	225.4	158.8	138.6	129.1	125.8	122.5	122.5
50°	4233.1	3534.1	1316.6	408.4	194.4	145.3	129.9	123.1	119.7	116.4	116.4
52.5°	4432.9	3551.6	1166.6	339.1	172.9	135.2	124.4	118.4	114.4	111.0	110.3
55°	4521.7	3442.0	953.4	274.5	156.1	126.5	119.1	113.1	108.3	105.0	104.2
57.5°	4498.8	3211.1	743.4	220.7	139.9	117.8	112.3	108.3	102.9	97.6	96.9
60°	4386.5	2902.4	560.5	183.7	125.2	108.3	105.0	101.6	94.2	86.1	84.8
62.5°	4192.0	2514.1	399.6	152.0	109.0	97.6	96.2	93.5	82.7	68.0	66.6
65°	3894.7	2042.5	269.1	126.5	93.5	85.5	86.1	81.4	67.2	50.4	49.1
67.5°	3460.1	1493.5	172.2	103.6	78.0	71.3	72.0	69.3	57.2	43.0	41.0
70°	2906.4	989.0	112.3	78.7	62.5	55.1	59.2	59.9	48.5	35.0	33.6
72.5°	2130.7	583.9	78.7	58.5	45.7	38.3	48.5	49.8	39.1	26.2	24.9
75°	1214.3	277.2	59.2	42.4	28.3	27.0	37.7	37.7	27.0	17.5	16.2
77.5°	509.9	115.7	41.7	27.6	16.2	15.5	25.5	23.6	13.4	8.1	8.1
80°	147.3	51.8	22.2	13.4	6.8	6.0	10.0	7.4	3.4	1.3	1.3
82.5°	57.8	22.9	8.7	5.4	2.7	2.7	1.3	0.0	0.0	0.0	0.0
85°	34.3	9.4	4.0	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	2.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)