

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: P959954

Luminaire Tested: **NAV-SB1B-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959954
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-SB1B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3938 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 39.8
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

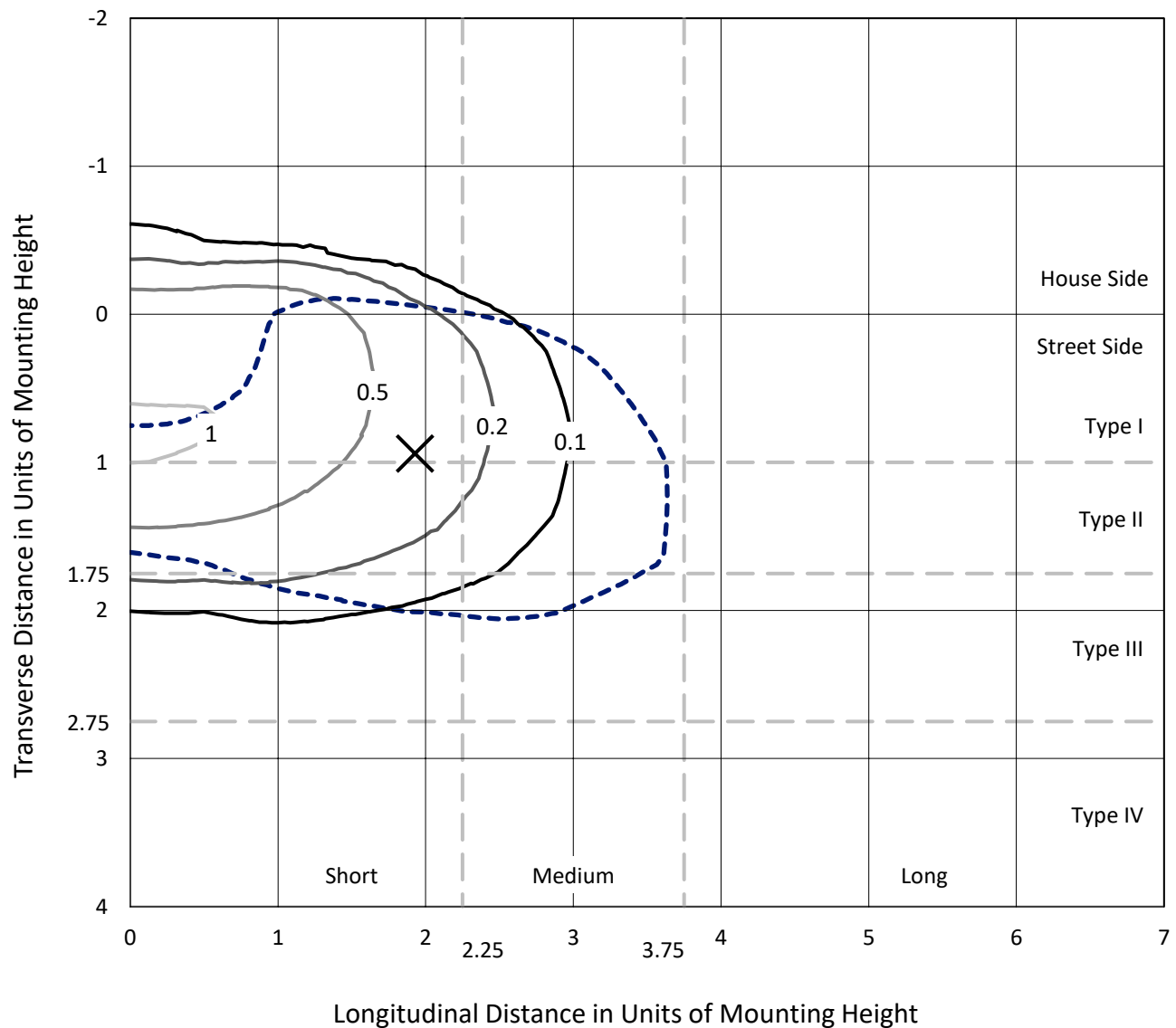


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

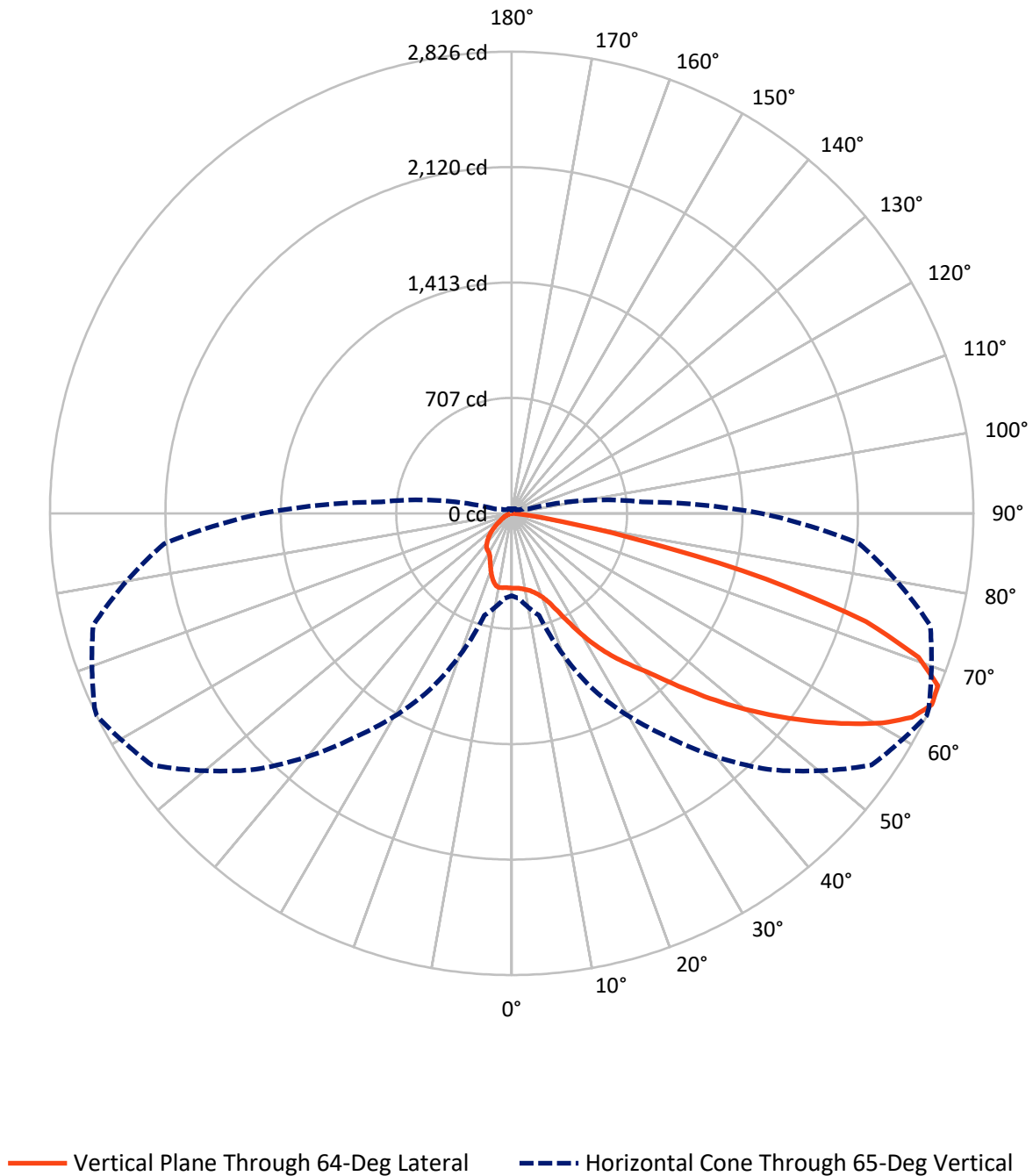


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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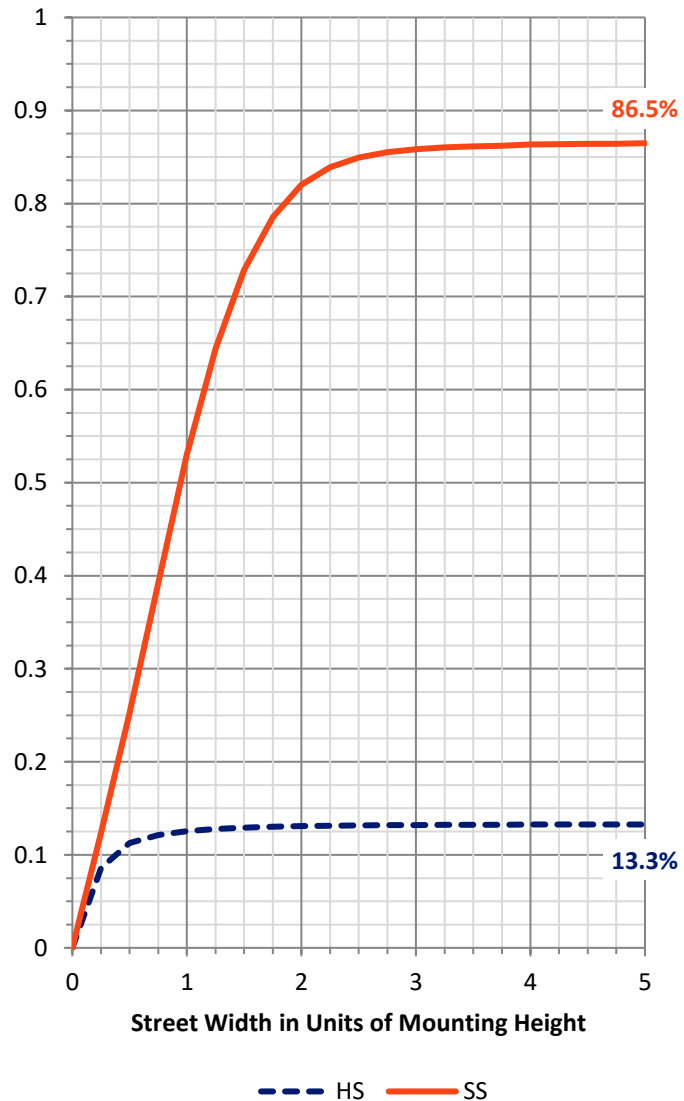
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	526.6	0.0	526.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	3411.4	0.0	3411.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	3938.0	0.0	3938.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.3	1.1
10°-20°	114.6	2.9
20°-30°	217.2	5.5
30°-40°	439.5	11.2
40°-50°	748.7	19.0
50°-60°	1018.1	25.9
60°-70°	956.1	24.3
70°-80°	383.1	9.7
80°-90°	18.6	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°	3938.0	100.0
0°-180°	3938.0	100.0

Coefficient of Utilization



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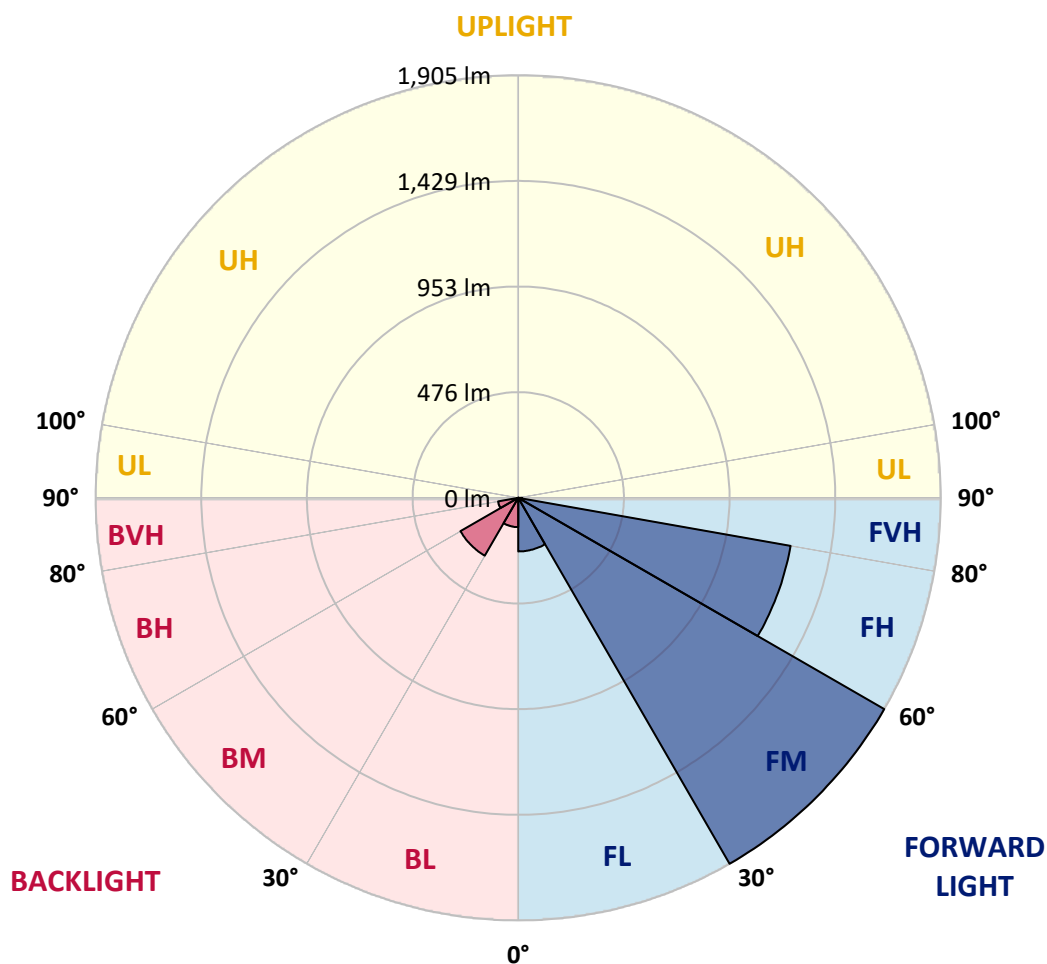
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	241.8	6.1			
FM	(30°-60°)	1905.2	48.4			
FH	(60°-80°)	1246.7	31.7			G1/1800
FVH	(80°-90°)	17.6	0.4			G1/100
BL	(0°-30°)	132.2	3.4	B1/500		
BM	(30°-60°)	301.1	7.6	B1/1000		
BH	(60°-80°)	92.4	2.3	B0/110		G0/110
BVH	(80°-90°)	0.9	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-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1
2.5°	456.4	459.6	458.8	458.1	457.8	458.3	458.6	458.3	458.3	458.3	458.6
5°	447.7	450.4	450.4	452.2	454.9	458.1	460.4	460.9	461.5	462.3	462.0
7.5°	431.1	433.3	434.8	440.9	447.5	455.9	463.1	466.8	467.3	470.2	471.2
10°	419.7	422.4	425.1	431.4	440.9	453.6	465.7	474.7	476.0	482.9	486.1
12.5°	419.2	421.9	425.3	432.1	443.2	456.7	471.5	484.4	486.8	496.8	503.5
15°	424.8	427.9	431.1	439.5	451.4	467.8	483.6	499.8	502.1	516.4	523.5
17.5°	436.1	440.3	442.7	451.2	463.8	482.1	502.9	521.4	523.5	540.2	549.1
20°	458.6	463.6	464.3	471.2	483.6	503.2	528.0	550.9	553.6	572.6	582.6
22.5°	505.0	512.2	505.8	509.2	520.3	539.9	566.8	595.8	599.5	621.2	630.2
25°	586.9	596.9	580.6	574.7	579.4	599.8	633.6	670.2	674.6	692.0	696.4
27.5°	747.6	734.7	709.9	685.6	671.4	683.0	721.0	766.4	771.6	788.5	783.3
30°	924.2	912.9	879.3	825.5	791.7	789.9	825.0	875.7	881.7	897.9	881.7
32.5°	1101.2	1090.3	1053.9	987.6	929.0	900.0	924.2	980.5	983.7	993.9	970.2
35°	1275.1	1264.0	1227.5	1159.8	1087.6	1021.7	1016.9	1080.2	1081.4	1092.1	1056.8
37.5°	1450.2	1440.9	1402.1	1335.6	1264.5	1173.4	1129.3	1174.8	1176.1	1186.6	1149.9
40°	1575.0	1579.0	1552.3	1500.8	1439.8	1340.3	1255.5	1275.4	1267.4	1285.1	1263.2
42.5°	1682.2	1690.1	1666.9	1641.0	1605.7	1518.0	1411.8	1408.5	1395.7	1405.3	1382.5
45°	1774.9	1781.4	1760.6	1754.5	1753.8	1692.3	1582.7	1562.1	1544.4	1542.5	1515.4
47.5°	1808.9	1821.6	1830.5	1850.8	1890.5	1864.6	1759.3	1727.3	1707.5	1693.0	1649.9
50°	1821.8	1835.3	1865.9	1925.1	2018.8	2029.9	1935.1	1899.2	1874.9	1848.5	1785.1
52.5°	1804.4	1828.5	1869.6	1969.1	2105.1	2162.4	2103.8	2072.3	2044.7	2001.6	1907.6
55°	1701.7	1725.8	1809.9	1968.6	2148.2	2255.3	2263.3	2249.3	2218.1	2150.2	2006.6
57.5°	1485.2	1520.9	1654.2	1901.6	2147.4	2335.4	2419.5	2429.6	2394.7	2297.5	2084.5
60°	1185.3	1233.7	1396.3	1753.0	2081.1	2378.6	2556.6	2606.7	2569.8	2442.8	2147.6
62.5°	827.1	883.0	1037.0	1520.1	1929.6	2347.5	2656.6	2749.3	2721.3	2572.6	2171.9
65°	504.5	522.4	646.6	1196.2	1671.9	2217.1	2687.4	2826.3	2817.1	2652.1	2136.0
67.5°	336.1	351.2	386.7	820.2	1297.9	1956.5	2613.5	2812.9	2815.6	2639.2	2004.5
70°	202.4	215.5	238.6	477.0	841.1	1548.6	2384.7	2641.3	2656.6	2466.3	1755.3
72.5°	83.4	92.1	113.3	216.2	435.6	982.9	1898.9	2267.7	2303.4	2073.7	1347.2
75°	47.3	51.8	66.5	108.5	189.0	458.1	1150.3	1609.9	1662.3	1429.3	810.5
77.5°	31.4	33.5	43.0	70.2	106.4	156.3	491.6	838.8	939.0	780.6	350.9
80°	21.1	23.0	29.5	46.9	69.2	67.0	156.5	310.7	382.2	268.2	85.5
82.5°	14.2	14.6	21.1	30.9	43.9	32.5	46.2	96.7	121.5	77.6	32.5
85°	8.2	7.9	15.6	17.9	19.6	13.4	14.0	29.0	38.0	32.7	18.4
87.5°	1.0	1.5	6.0	4.7	2.7	2.9	2.9	5.0	7.4	7.9	4.0
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°	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1	458.1
2.5°	458.6	458.3	457.5	456.7	454.9	453.8	454.4	453.8	453.6	453.8	454.9
5°	462.0	461.2	459.1	456.4	452.7	448.2	445.4	441.2	437.2	434.8	435.3
7.5°	471.2	470.5	467.5	460.1	448.2	429.5	412.4	397.3	386.0	379.4	379.7
10°	486.1	484.7	480.2	463.8	432.7	391.8	357.7	329.4	311.0	302.3	301.5
12.5°	503.5	501.8	493.9	460.4	403.1	339.3	292.2	260.9	243.6	236.1	235.2
15°	524.1	521.9	506.4	444.0	360.1	281.2	238.1	214.6	203.6	196.7	196.9
17.5°	549.6	545.9	515.6	419.5	313.3	236.8	204.9	187.2	177.4	170.8	170.3
20°	582.9	576.9	523.0	390.2	270.3	208.8	182.4	167.6	160.2	154.5	153.3
22.5°	629.3	620.6	532.0	358.5	240.0	189.5	165.7	155.0	148.9	142.3	141.2
25°	687.0	676.6	543.0	329.2	219.1	172.9	153.6	144.6	137.6	129.9	129.0
27.5°	767.4	749.0	556.3	305.1	201.2	158.7	142.6	132.5	124.3	118.0	116.6
30°	857.2	826.9	567.8	290.7	184.8	145.4	128.0	118.0	110.4	105.9	105.1
32.5°	942.2	901.0	575.5	284.3	170.0	130.4	112.2	101.4	95.5	94.2	95.0
35°	1022.4	968.1	574.7	278.3	156.8	115.4	96.7	85.5	81.1	81.8	81.8
37.5°	1114.9	1039.7	569.2	268.8	146.0	101.7	83.1	73.4	69.4	69.7	70.7
40°	1222.3	1122.3	565.7	250.8	134.1	89.0	72.1	64.2	61.3	60.2	60.0
42.5°	1336.9	1202.2	566.3	230.4	119.3	77.6	64.4	57.8	55.1	54.4	54.1
45°	1452.0	1278.6	567.0	209.3	103.7	68.9	58.8	53.3	51.8	50.7	50.7
47.5°	1560.3	1343.5	552.3	186.7	88.5	62.3	54.4	50.7	49.4	48.1	48.1
50°	1661.1	1386.8	516.6	160.2	76.3	57.0	50.9	48.3	46.9	45.7	45.7
52.5°	1739.5	1393.7	457.8	133.0	67.9	53.1	48.8	46.4	44.9	43.6	43.3
55°	1774.4	1350.6	374.1	107.7	61.3	49.6	46.7	44.4	42.5	41.2	40.9
57.5°	1765.4	1260.0	291.7	86.6	54.9	46.2	44.1	42.5	40.4	38.2	38.0
60°	1721.3	1138.9	219.9	72.1	49.1	42.5	41.2	39.9	37.0	33.8	33.3
62.5°	1644.9	986.6	156.8	59.7	42.7	38.2	37.7	36.7	32.5	26.6	26.1
65°	1528.3	801.4	105.6	49.6	36.7	33.5	33.8	32.0	26.4	19.8	19.3
67.5°	1357.7	586.1	67.5	40.7	30.6	28.0	28.3	27.2	22.4	16.9	16.1
70°	1140.5	388.1	44.1	30.9	24.6	21.6	23.3	23.5	19.0	13.7	13.2
72.5°	836.1	229.2	30.9	23.0	17.9	15.1	19.0	19.6	15.3	10.2	9.7
75°	476.5	108.8	23.3	16.6	11.1	10.6	14.8	14.8	10.6	6.9	6.4
77.5°	200.1	45.4	16.4	10.9	6.4	6.0	10.0	9.2	5.3	3.2	3.2
80°	57.8	20.3	8.7	5.3	2.7	2.4	4.0	2.9	1.3	0.5	0.5
82.5°	22.8	9.0	3.4	2.2	1.0	1.0	0.5	0.0	0.0	0.0	0.0
85°	13.4	3.7	1.5	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	0.8	0.5	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)