

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: P959824

Luminaire Tested: **NAV-SB1B-735-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959824
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4215.8 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
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



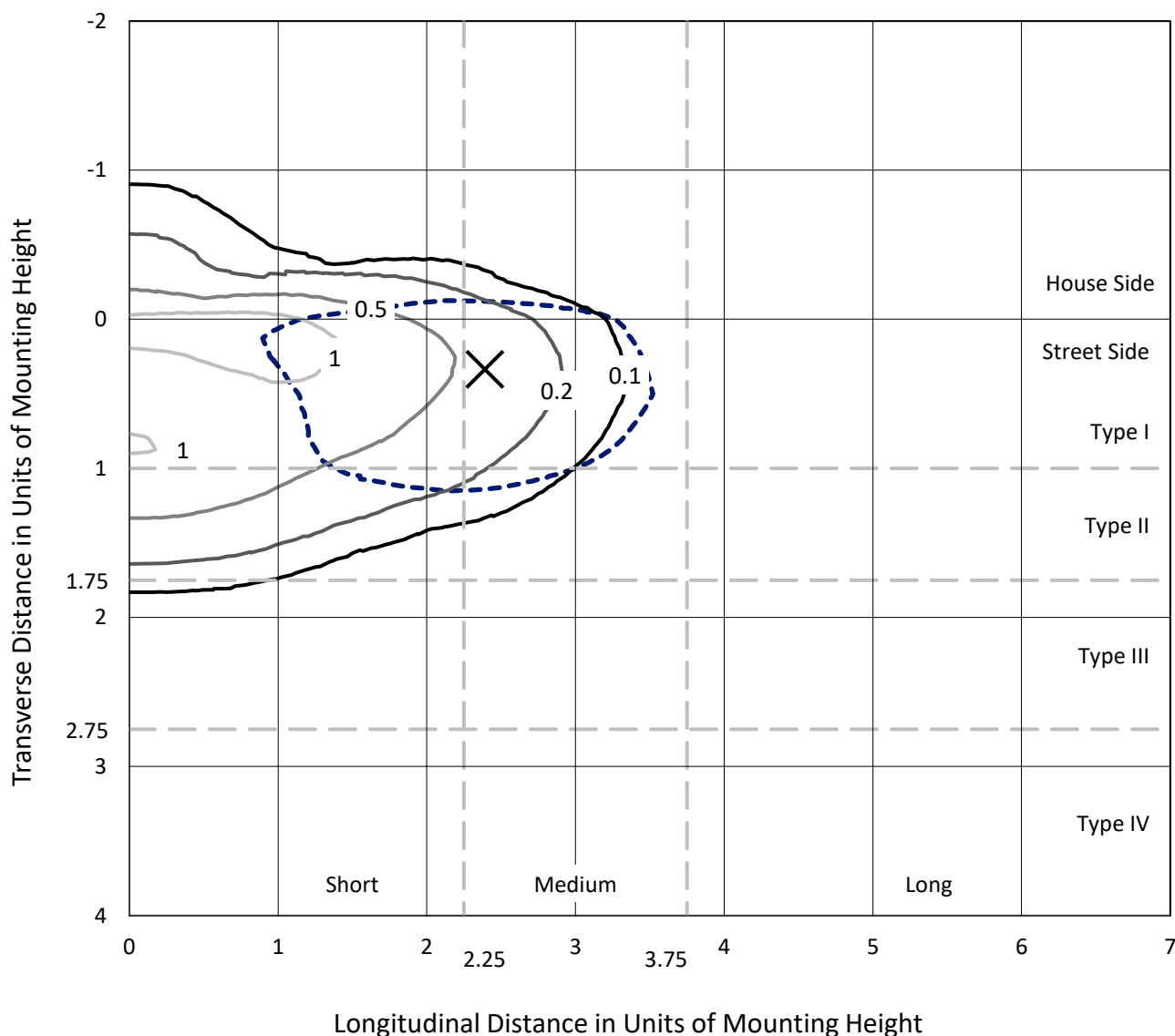
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

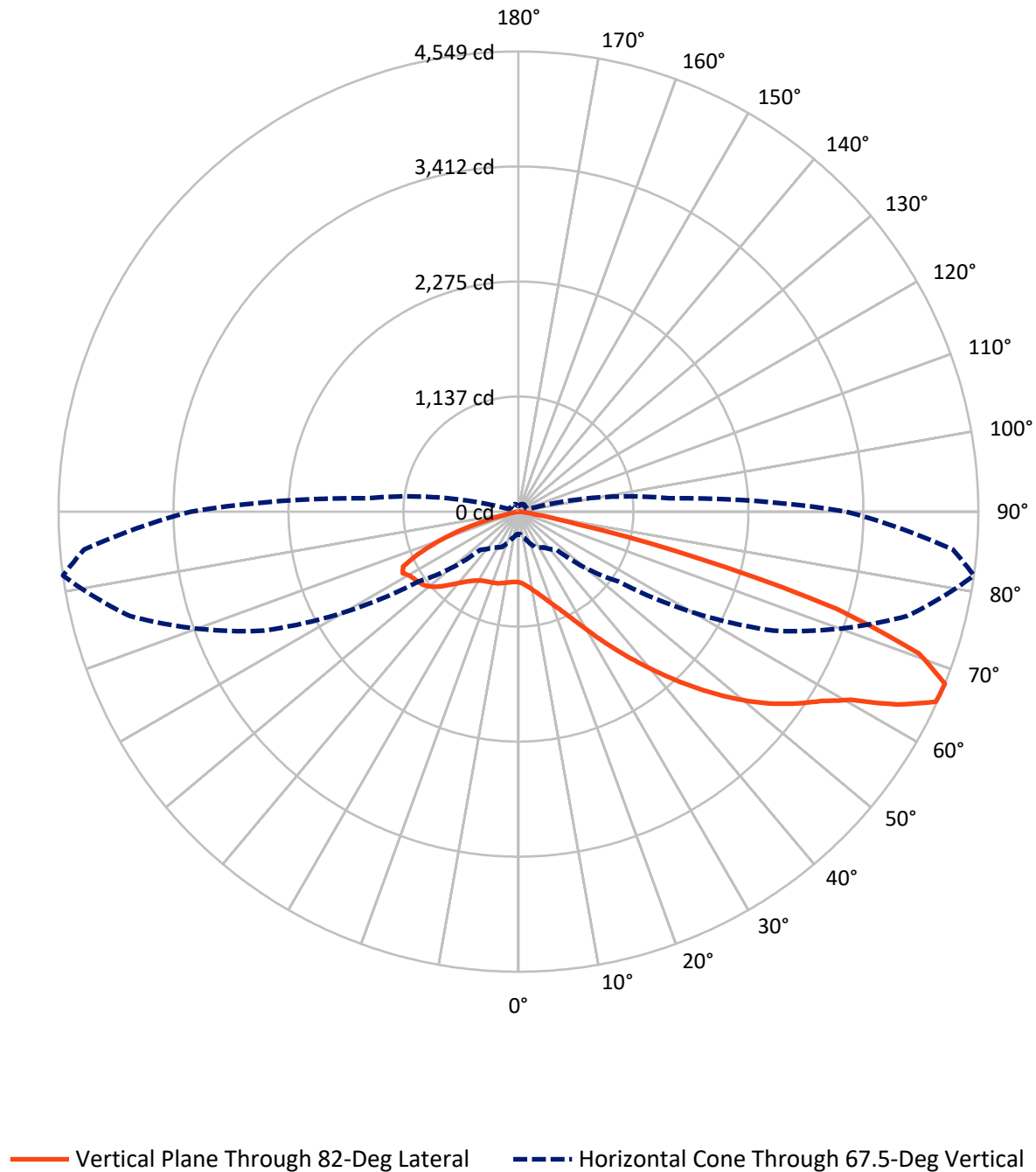


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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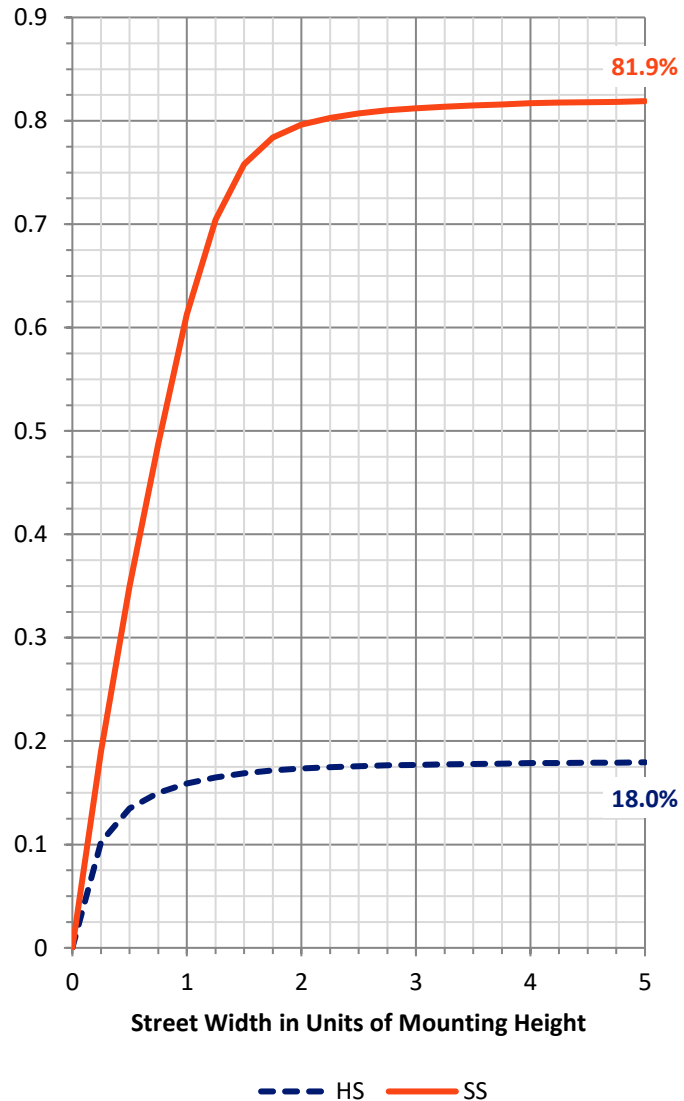
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	763.7	0.0	763.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3452.2	0.0	3452.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	4215.8	0.0	4215.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.2	1.5
10°-20°	161.7	3.8
20°-30°	259.0	6.1
30°-40°	458.0	10.9
40°-50°	802.4	19.0
50°-60°	1070.2	25.4
60°-70°	996.3	23.6
70°-80°	382.4	9.1
80°-90°	23.7	0.6
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°	4215.8	100.0
0°-180°	4215.8	100.0

Coefficient of Utilization



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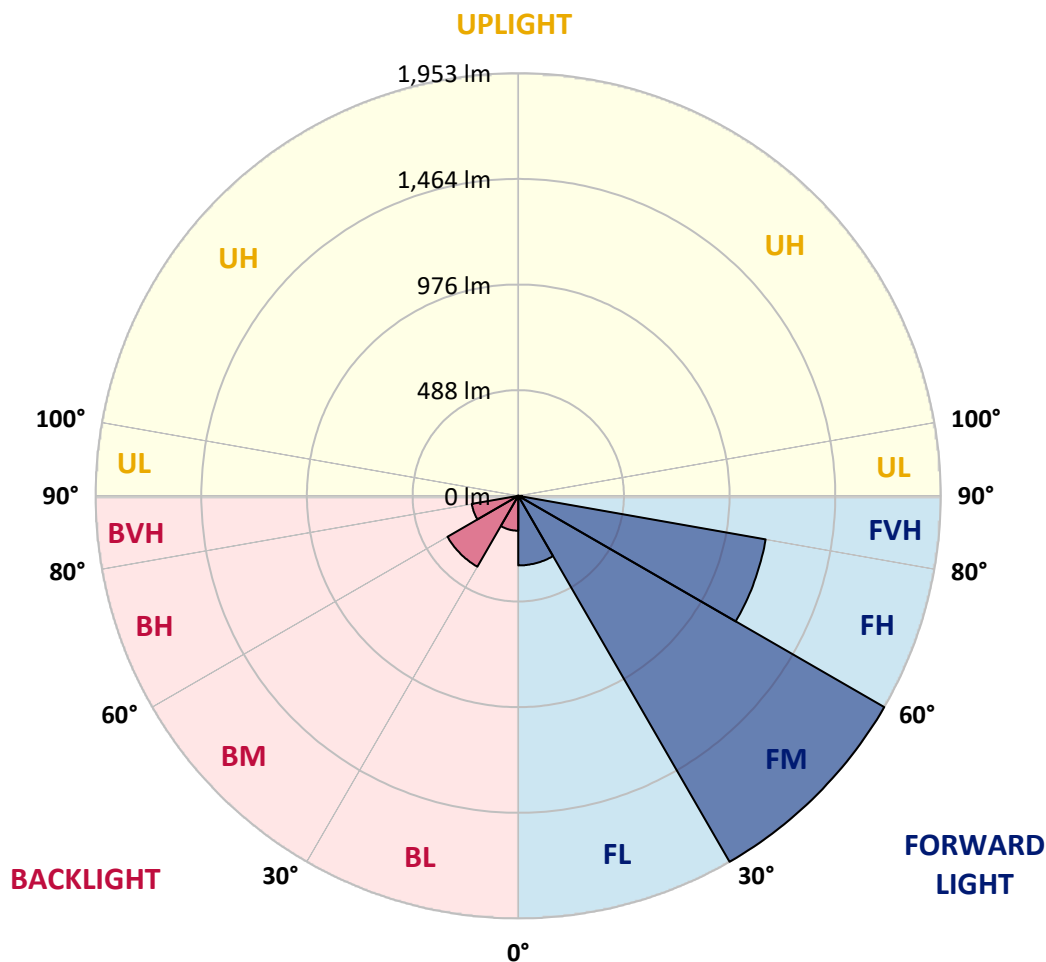
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	321.6	7.6			
FM	(30°-60°)	1952.6	46.3			
FH	(60°-80°)	1160.7	27.5			G1/1800
FVH	(80°-90°)	17.3	0.4			G1/100
BL	(0°-30°)	161.3	3.8	B1/500		
BM	(30°-60°)	377.9	9.0	B1/1000		
BH	(60°-80°)	218.0	5.2	B1/500		G1/500
BVH	(80°-90°)	6.5	0.2			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4
2.5°	738.2	742.4	740.0	738.8	736.7	733.6	731.2	723.6	715.8	710.5	708.8
5°	753.1	757.3	757.0	758.2	759.7	760.7	760.0	751.5	740.4	731.5	726.3
7.5°	740.4	745.2	749.1	755.2	765.8	777.1	782.5	780.6	769.2	757.0	750.6
10°	704.2	709.3	718.7	733.0	755.5	779.7	800.1	809.5	802.3	788.8	780.0
12.5°	638.1	643.2	661.7	692.7	730.3	772.4	811.3	836.5	838.3	825.0	814.7
15°	563.6	568.8	588.6	627.4	684.8	752.5	817.4	865.1	881.2	869.6	857.2
17.5°	517.5	522.0	536.9	568.2	628.0	712.4	815.3	895.4	932.1	923.0	908.2
20°	503.6	507.5	514.4	536.4	586.1	670.8	801.3	923.9	987.1	982.0	965.2
22.5°	518.4	522.0	524.2	533.9	565.2	643.5	783.7	953.0	1050.8	1051.4	1031.0
25°	552.7	556.4	553.9	560.1	573.7	635.0	777.1	987.4	1131.0	1137.6	1114.6
27.5°	609.2	609.5	603.7	603.4	605.6	647.7	784.0	1024.1	1232.0	1244.5	1216.0
30°	722.4	717.8	695.7	671.7	660.8	685.9	803.4	1067.5	1351.4	1373.5	1337.6
32.5°	897.0	890.2	849.6	792.2	734.5	747.6	838.3	1116.9	1481.2	1521.3	1477.5
35°	1086.3	1084.6	1042.0	956.7	856.0	835.3	895.1	1181.9	1623.0	1686.7	1634.8
37.5°	1262.4	1261.5	1237.2	1136.7	1014.1	957.7	986.2	1266.9	1774.7	1867.0	1805.7
40°	1423.2	1426.0	1401.7	1311.9	1188.3	1114.6	1110.0	1372.0	1943.5	2063.4	1990.5
42.5°	1562.3	1565.3	1540.7	1474.3	1360.4	1288.2	1262.1	1500.6	2108.3	2274.4	2188.2
45°	1656.7	1675.5	1671.9	1618.7	1537.1	1462.1	1444.8	1662.1	2296.2	2498.0	2397.0
47.5°	1683.4	1700.7	1727.9	1735.2	1685.5	1611.7	1632.4	1856.7	2486.2	2722.1	2607.0
50°	1617.6	1633.5	1690.3	1766.0	1800.5	1777.8	1814.8	2065.2	2680.8	2945.4	2813.1
52.5°	1487.6	1504.0	1575.6	1695.2	1836.4	1907.9	1997.8	2270.7	2869.3	3157.0	3008.3
55°	1299.7	1317.0	1409.0	1544.4	1768.0	1961.7	2150.4	2475.9	3042.0	3347.3	3184.4
57.5°	1044.2	1056.9	1152.5	1341.9	1596.2	1908.2	2263.1	2699.8	3204.7	3534.3	3358.8
60°	680.5	691.8	802.9	1014.1	1311.6	1729.8	2285.5	2949.6	3420.7	3777.4	3594.1
62.5°	452.5	460.1	526.0	681.1	923.6	1387.1	2154.1	3149.1	3737.7	4200.6	3997.5
65°	310.5	318.1	384.0	492.0	596.8	917.6	1776.2	3122.7	4024.8	4536.5	4296.5
67.5°	221.6	228.0	283.8	385.8	431.9	533.0	1204.1	2785.1	3983.6	4549.3	4312.6
70°	158.8	162.4	208.5	300.5	343.3	320.2	669.6	2130.2	3487.9	4200.9	3984.1
72.5°	111.1	112.3	144.8	228.9	276.5	233.7	318.7	1420.2	2637.9	3297.2	3088.7
75°	75.2	76.8	97.5	167.9	221.9	178.5	168.7	761.6	1548.6	1825.1	1636.0
77.5°	46.1	46.7	62.8	114.7	166.0	136.0	108.6	322.7	599.2	588.2	501.4
80°	26.1	26.1	40.1	71.3	113.3	87.7	76.2	137.1	189.7	166.7	146.9
82.5°	14.6	14.9	29.1	44.3	74.9	51.9	41.9	63.4	82.0	72.6	63.1
85°	6.0	6.7	17.9	20.9	35.8	25.8	17.0	26.8	30.3	27.1	19.7
87.5°	0.6	0.9	5.4	3.9	4.2	5.1	2.5	5.1	4.2	4.2	3.1
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°	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4	698.4
2.5°	702.9	698.4	686.9	673.5	655.9	647.4	635.9	628.0	621.4	622.0	615.8
5°	716.7	705.1	679.3	647.1	607.1	578.5	548.2	527.3	510.2	506.6	498.4
7.5°	735.4	717.2	672.0	614.1	546.3	495.1	449.3	419.7	398.8	392.2	385.5
10°	759.7	733.3	662.6	572.5	475.0	409.8	360.6	337.5	323.3	318.4	314.8
12.5°	787.9	751.8	650.2	521.7	401.6	338.8	307.5	295.9	291.4	289.9	288.9
15°	823.5	774.9	631.3	461.7	339.4	295.3	282.0	280.4	281.1	280.4	280.1
17.5°	865.7	800.1	600.6	399.7	297.5	273.2	268.3	269.6	271.0	270.7	270.2
20°	911.8	825.0	561.5	344.8	269.0	257.4	254.6	255.8	257.1	256.5	256.1
22.5°	964.3	851.7	518.1	302.0	249.8	242.8	239.7	240.1	240.1	238.9	238.3
25°	1027.2	881.2	472.6	271.6	235.2	229.8	226.1	224.9	223.1	219.5	218.8
27.5°	1102.1	912.5	428.9	250.4	223.7	218.5	214.3	211.3	206.7	200.6	200.0
30°	1186.5	950.4	391.9	237.1	214.6	209.4	204.6	200.0	193.3	185.7	185.1
32.5°	1285.8	991.0	364.8	228.3	206.4	200.9	195.2	189.7	182.4	174.9	175.2
35°	1404.1	1040.2	349.0	222.2	200.0	192.7	186.3	180.3	174.9	168.2	167.6
37.5°	1532.5	1092.4	344.2	219.1	195.8	184.5	177.2	173.0	172.4	168.4	168.2
40°	1673.0	1154.4	347.9	217.3	191.3	176.6	168.7	167.9	169.3	162.4	162.7
42.5°	1821.7	1227.7	353.9	215.2	184.8	168.7	161.1	161.1	160.0	150.3	150.3
45°	1982.7	1312.4	360.0	210.0	177.2	160.8	155.1	152.9	147.8	138.4	138.1
47.5°	2144.7	1398.6	364.5	200.6	168.2	154.2	149.0	144.2	136.6	128.1	127.8
50°	2298.7	1476.1	359.7	186.7	157.8	147.8	142.4	135.7	127.5	121.7	120.8
52.5°	2436.1	1543.1	339.1	170.3	146.9	141.1	136.3	129.3	122.6	116.5	115.9
55°	2555.7	1597.5	302.6	154.8	137.1	135.4	130.5	121.7	112.6	107.4	106.8
57.5°	2670.4	1638.8	257.1	142.1	128.4	129.0	121.7	113.8	105.4	99.8	99.2
60°	2823.2	1694.0	210.9	130.2	119.0	120.8	113.0	107.1	96.6	89.6	88.7
62.5°	3067.1	1779.9	167.6	115.6	108.0	108.6	105.4	98.3	85.6	77.4	76.8
65°	3260.8	1748.3	132.0	99.8	95.6	96.6	96.6	89.0	75.2	65.9	65.0
67.5°	3239.0	1497.0	105.4	84.4	83.7	84.4	86.5	80.2	66.7	59.1	58.0
70°	2983.7	1190.7	84.4	70.1	72.9	71.3	77.4	73.2	60.1	52.5	51.6
72.5°	2434.6	857.8	64.4	58.0	55.9	58.3	69.8	65.9	50.1	41.6	40.7
75°	1422.6	457.8	48.0	45.8	40.4	48.6	61.9	56.2	38.2	30.6	29.7
77.5°	463.2	159.7	35.3	33.7	30.0	39.2	52.8	47.4	31.3	24.3	23.4
80°	124.1	48.3	24.0	22.1	19.5	29.1	41.9	37.6	22.4	15.8	15.5
82.5°	49.8	20.3	13.9	12.4	10.7	20.0	33.1	30.3	16.7	10.0	10.0
85°	16.1	6.7	5.1	3.9	4.8	12.4	19.7	20.6	11.8	5.1	3.9
87.5°	2.2	0.9	0.9	1.2	0.9	2.2	6.0	5.7	3.4	0.6	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)