

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: P959306

Luminaire Tested: **NAV-SB1A-735-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959306
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4602.2 lumens
Efficiency: N/A
Efficacy: 148.9 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

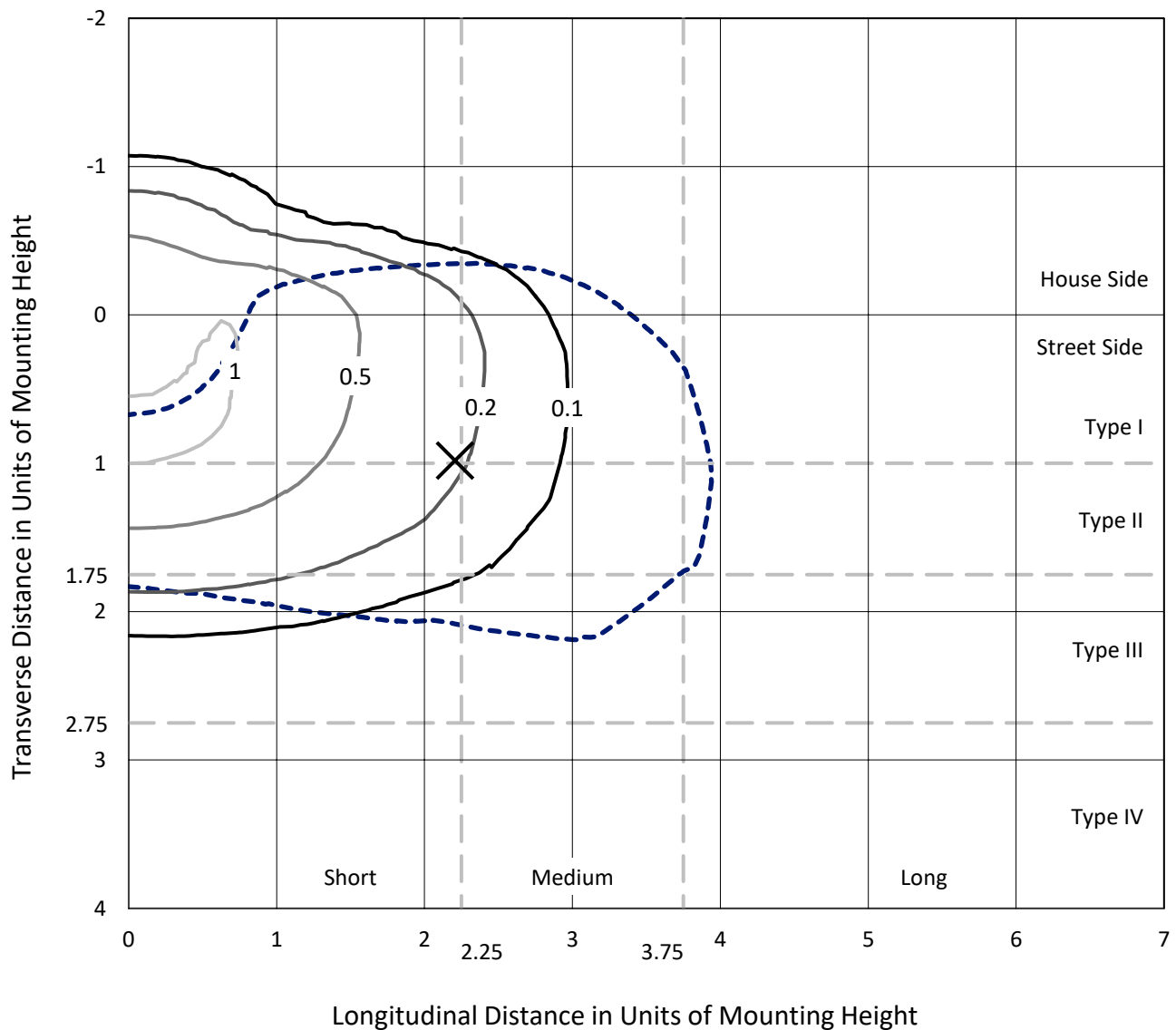
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

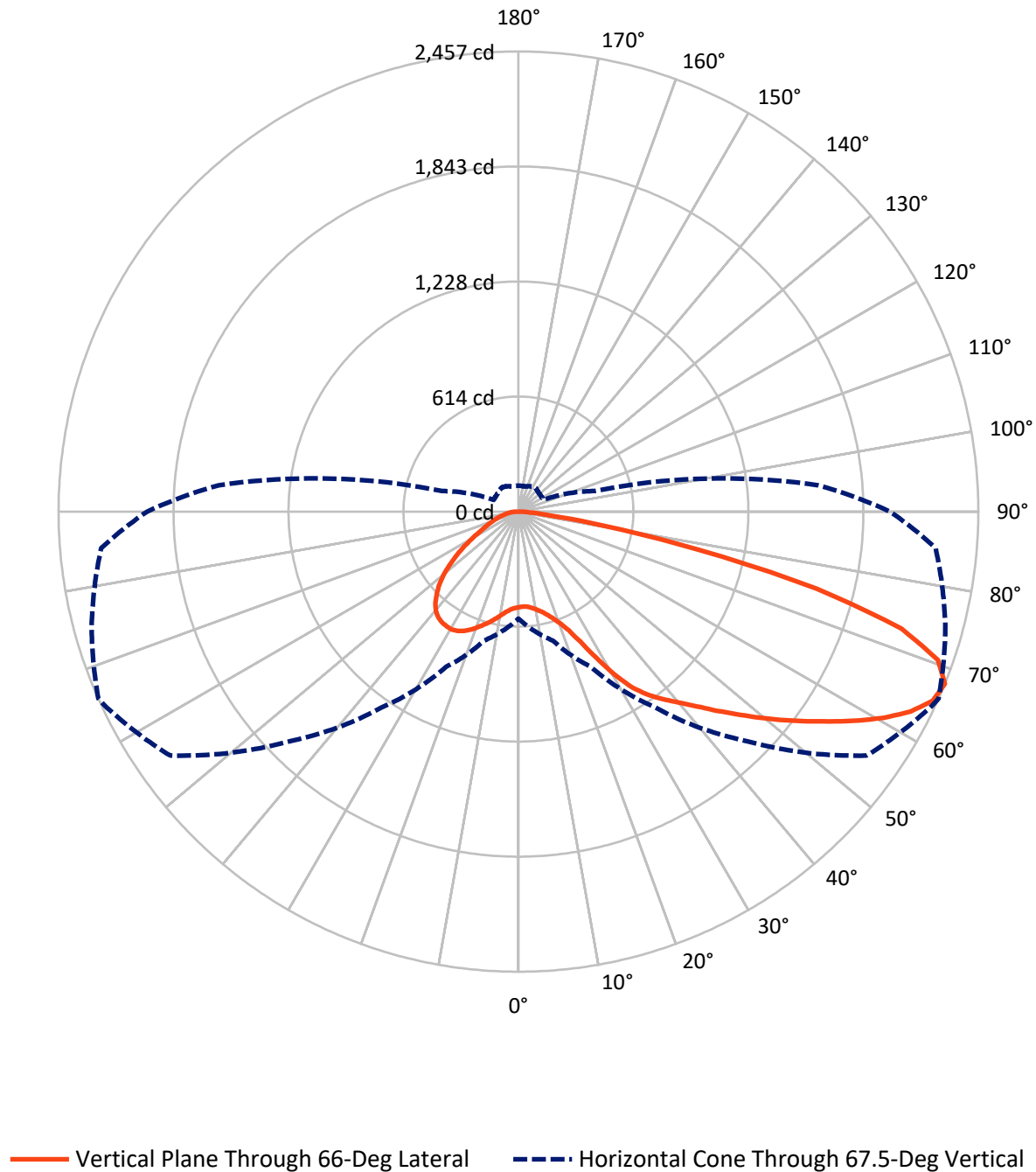
× Max cd
- - - 1/2 Max cd



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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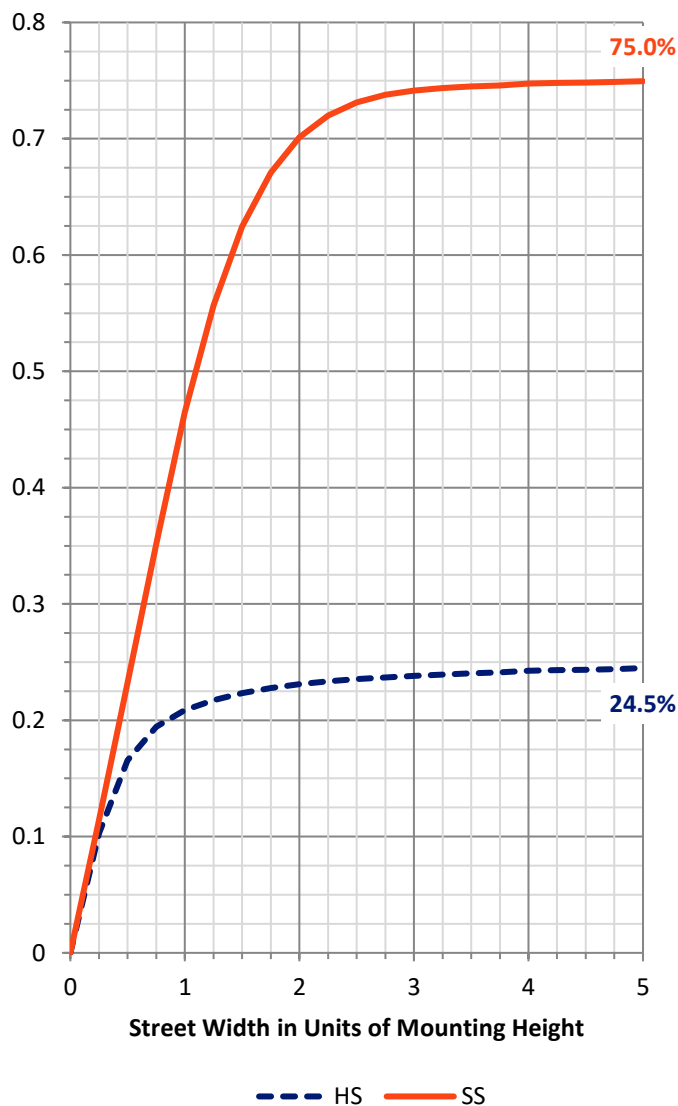
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1144.3	0.0	1144.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3457.9	0.0	3457.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	4602.2	0.0	4602.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	1.1
10°-20°	167.2	3.6
20°-30°	322.3	7.0
30°-40°	565.1	12.3
40°-50°	840.1	18.3
50°-60°	1064.9	23.1
60°-70°	1042.0	22.6
70°-80°	497.0	10.8
80°-90°	53.1	1.2
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°	4602.2	100.0
0°-180°	4602.2	100.0

Coefficient of Utilization



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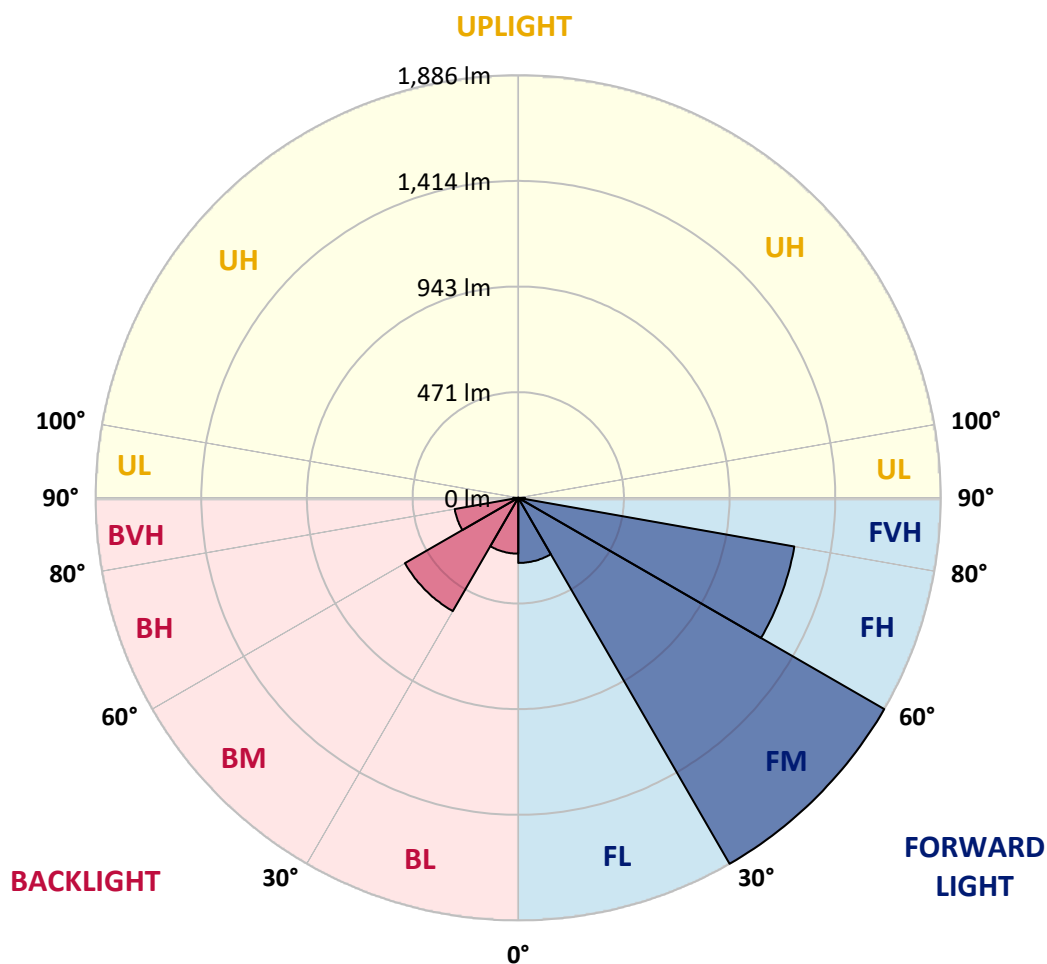
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	290.8	6.3			
FM	(30°-60°)	1886.0	41.0			
FH	(60°-80°)	1251.0	27.2			G1/1800
FVH	(80°-90°)	30.1	0.7			G1/100
BL	(0°-30°)	249.3	5.4	B1/500		
BM	(30°-60°)	584.1	12.7	B1/1000		
BH	(60°-80°)	288.0	6.3	B1/500		G1/500
BVH	(80°-90°)	23.0	0.5			G1/100
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°	65°	66°	75°	85°
0°	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4
2.5°	505.1	508.0	507.3	506.1	505.8	506.4	507.1	507.8	507.6	508.7	510.7
5°	503.7	506.6	506.4	506.4	507.3	509.2	510.4	511.7	510.4	511.9	514.6
7.5°	504.6	506.9	507.8	508.7	511.2	514.8	517.7	520.4	519.0	520.6	524.0
10°	517.0	518.6	519.7	519.7	521.3	525.4	528.4	533.2	532.0	534.6	538.9
12.5°	539.5	541.2	541.2	540.2	541.4	544.1	545.0	550.3	548.2	552.5	556.9
15°	567.0	570.4	567.7	566.1	566.5	569.2	569.0	573.1	570.9	574.5	578.4
17.5°	597.5	601.9	597.5	597.3	596.2	599.2	599.4	603.1	599.2	601.9	604.5
20°	633.6	639.6	635.9	637.1	635.0	636.2	637.4	642.7	636.6	638.6	637.9
22.5°	684.3	691.6	687.7	692.3	690.8	689.8	689.6	699.0	689.6	690.3	683.4
25°	758.3	767.0	760.2	766.5	766.5	769.7	773.3	785.4	769.7	765.1	746.9
27.5°	867.6	876.3	863.0	866.8	865.6	873.4	869.5	899.5	882.6	875.0	838.6
30°	999.2	1014.6	989.4	988.5	987.3	999.6	1005.2	1025.0	1007.9	1000.3	956.3
32.5°	1141.3	1157.5	1127.5	1118.8	1114.3	1121.8	1117.1	1133.1	1121.2	1109.7	1055.2
35°	1291.7	1307.7	1279.1	1262.2	1243.8	1228.2	1211.7	1215.8	1204.7	1187.1	1130.7
37.5°	1433.9	1463.2	1432.9	1414.8	1381.0	1350.2	1304.3	1285.1	1274.8	1258.6	1201.8
40°	1578.7	1595.4	1572.5	1557.0	1520.2	1472.1	1398.6	1358.2	1344.2	1328.5	1280.3
42.5°	1685.4	1701.3	1689.0	1678.3	1649.6	1593.8	1498.8	1448.1	1427.8	1410.2	1369.3
45°	1770.0	1781.9	1774.2	1778.0	1765.7	1711.5	1602.5	1544.7	1523.7	1502.1	1470.0
47.5°	1804.1	1816.7	1829.0	1852.0	1873.0	1833.1	1713.9	1649.1	1626.9	1604.8	1573.2
50°	1800.2	1813.0	1848.8	1897.7	1963.0	1949.7	1831.5	1760.3	1739.8	1714.6	1685.4
52.5°	1769.3	1783.8	1829.7	1911.0	2014.9	2037.0	1951.1	1875.2	1855.9	1825.8	1796.6
55°	1688.1	1696.8	1765.7	1880.8	2027.2	2097.9	2068.4	1997.5	1978.2	1936.3	1904.4
57.5°	1537.4	1550.0	1650.4	1799.3	1996.4	2139.3	2171.4	2126.2	2107.6	2047.3	2014.0
60°	1340.8	1360.9	1475.7	1662.4	1917.5	2139.0	2264.9	2252.6	2237.2	2156.7	2121.9
62.5°	1118.4	1141.5	1252.0	1468.9	1779.7	2078.3	2323.5	2358.5	2350.6	2257.5	2213.0
65°	858.8	874.8	984.9	1218.7	1565.2	1948.0	2330.2	2430.9	2432.3	2334.1	2260.6
67.5°	571.8	617.8	713.3	914.5	1278.0	1734.9	2270.8	2442.7	2456.7	2360.5	2236.7
70°	279.0	339.5	433.1	594.4	914.5	1408.2	2115.3	2345.5	2376.7	2283.6	2094.1
72.5°	115.8	135.4	186.4	293.4	525.0	950.3	1802.9	2082.0	2139.7	2023.5	1760.5
75°	78.1	84.7	106.6	150.4	239.1	468.6	1300.2	1552.4	1645.4	1528.2	1249.2
77.5°	60.2	64.4	77.6	105.2	142.2	177.2	695.9	935.5	983.7	910.6	650.0
80°	47.4	50.5	58.0	76.7	100.9	94.8	237.2	423.8	451.7	378.9	208.9
82.5°	41.1	42.3	41.6	52.0	66.9	55.4	77.9	156.4	172.6	125.3	68.2
85°	29.7	33.1	34.5	32.2	35.6	28.1	31.9	55.4	60.9	54.4	38.4
87.5°	12.1	17.9	22.0	20.8	13.0	8.0	9.9	16.2	18.7	20.3	12.6
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°	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4	510.4
2.5°	511.0	512.6	513.8	515.3	516.3	517.7	520.6	522.3	522.5	523.8	523.5
5°	515.6	517.9	520.6	524.5	528.8	532.5	538.0	541.9	543.4	544.6	544.3
7.5°	525.4	528.8	533.6	540.5	546.7	551.6	558.3	562.9	567.5	569.2	569.5
10°	540.2	545.0	552.1	561.2	568.0	574.3	581.3	585.2	589.8	591.7	592.7
12.5°	558.5	563.6	572.9	585.7	591.9	596.2	598.7	597.8	598.7	600.4	600.9
15°	579.6	585.2	595.5	609.4	613.7	609.9	604.5	599.7	598.9	599.4	601.2
17.5°	604.5	608.6	620.7	632.3	629.1	613.3	601.6	593.9	590.0	588.8	590.5
20°	639.3	639.3	649.2	656.5	635.5	608.3	590.2	577.7	569.7	566.3	565.6
22.5°	681.6	677.7	684.1	679.0	634.3	594.8	569.7	548.0	535.9	531.1	530.2
25°	735.3	730.7	729.1	697.6	625.6	573.3	532.5	506.1	495.5	492.8	493.3
27.5°	816.3	804.7	782.7	707.8	609.6	539.5	488.9	464.5	458.5	458.7	459.4
30°	924.1	901.0	847.1	709.5	583.4	491.6	444.4	427.0	424.1	425.4	429.5
32.5°	1024.1	1002.0	912.9	701.7	543.4	444.6	404.6	392.9	388.6	390.0	392.0
35°	1102.4	1096.3	973.7	690.8	494.0	400.7	368.8	358.9	350.3	348.4	349.9
37.5°	1176.4	1173.9	1019.5	675.6	445.2	369.5	340.0	326.9	314.6	307.8	308.0
40°	1257.7	1255.2	1049.4	652.1	401.9	342.3	314.1	296.9	281.7	269.4	270.6
42.5°	1349.0	1334.8	1063.7	618.6	365.1	319.4	293.0	269.9	249.8	238.4	239.1
45°	1448.9	1416.8	1063.4	575.7	334.2	298.4	270.6	237.7	219.0	208.5	208.0
47.5°	1554.8	1495.1	1050.4	528.4	304.2	275.2	235.7	210.6	198.2	191.8	190.3
50°	1664.1	1568.4	1028.2	474.0	273.5	248.8	214.0	196.8	187.4	181.3	179.2
52.5°	1766.9	1634.9	1001.3	412.3	242.3	223.1	204.3	191.1	181.1	174.4	171.5
55°	1862.4	1692.2	963.4	349.2	216.9	206.0	199.8	188.6	177.2	169.2	166.2
57.5°	1947.3	1729.4	897.8	290.0	198.7	194.1	194.9	184.5	171.5	164.7	160.3
60°	2017.8	1756.7	800.8	235.0	184.0	182.6	187.4	176.7	161.5	153.8	150.4
62.5°	2060.1	1756.2	681.9	192.5	171.5	171.9	177.5	167.1	151.6	144.3	142.2
65°	2056.6	1713.2	551.3	164.7	159.4	159.8	167.1	156.4	143.4	139.0	138.8
67.5°	1983.8	1608.2	422.9	146.6	146.1	148.2	156.7	149.2	138.3	137.9	138.6
70°	1786.7	1390.4	304.6	132.0	132.2	135.4	146.6	144.6	135.6	136.6	136.4
72.5°	1432.7	1060.1	204.6	116.7	117.1	122.1	136.8	140.9	132.9	145.9	147.7
75°	954.2	661.1	131.5	100.6	100.9	107.3	128.4	134.0	125.8	145.3	146.6
77.5°	458.5	297.1	95.2	84.7	84.7	90.7	111.0	119.9	107.1	113.0	103.5
80°	158.4	111.7	74.9	68.2	66.7	70.8	93.6	103.9	92.4	85.1	79.7
82.5°	62.4	58.0	60.2	53.0	48.1	50.7	72.8	85.8	68.0	61.4	61.2
85°	35.8	37.7	42.5	35.1	27.8	31.2	53.4	61.7	51.2	45.2	46.2
87.5°	9.6	13.3	19.6	18.1	12.6	13.3	25.4	34.1	29.5	22.8	23.5
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)