

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: P882460

Luminaire Tested: **NAV-SB2B-830-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882460  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2B-830-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

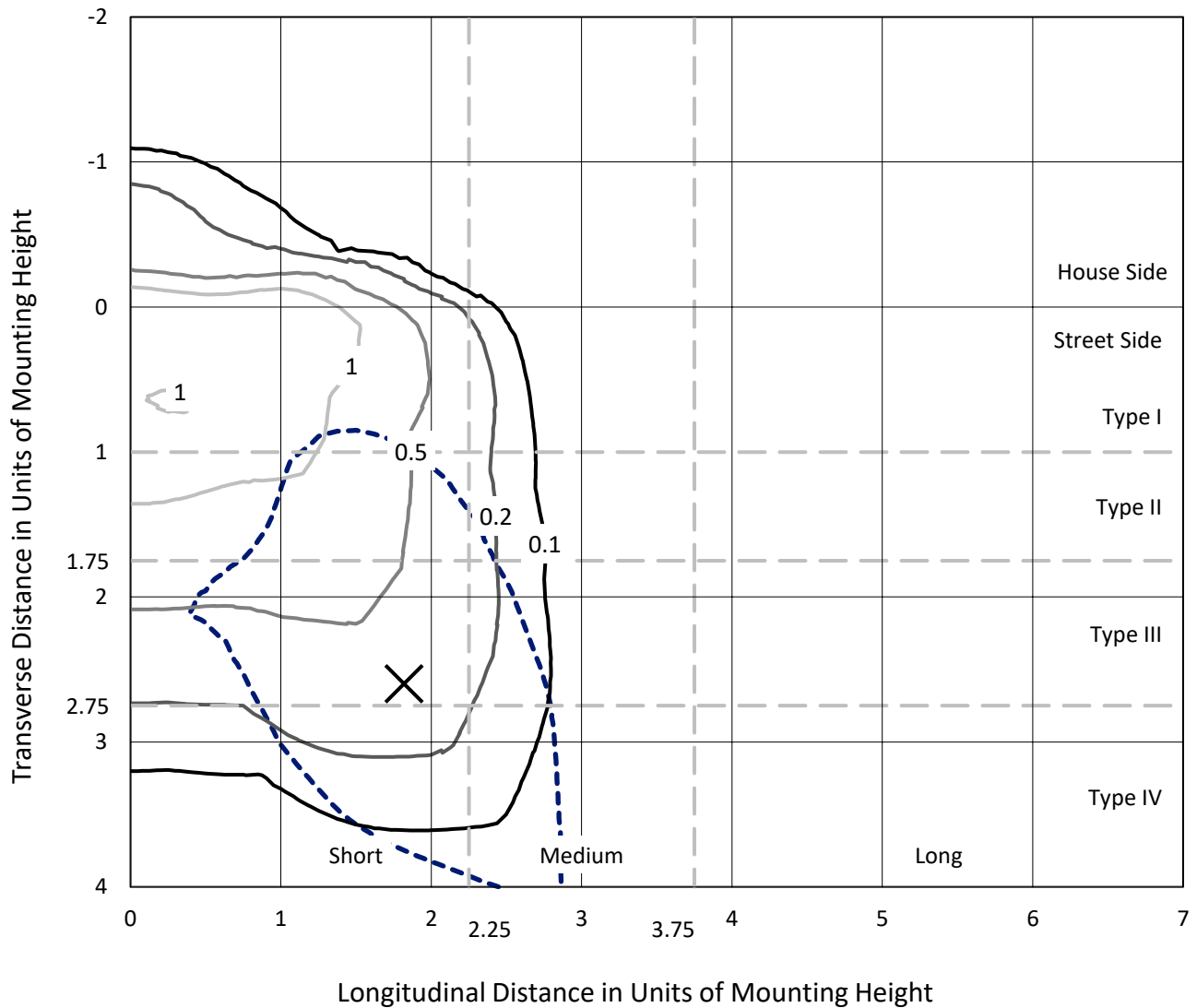
Lumens per Lamp: N/A  
Luminaire Lumens: 7603 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.627  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
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

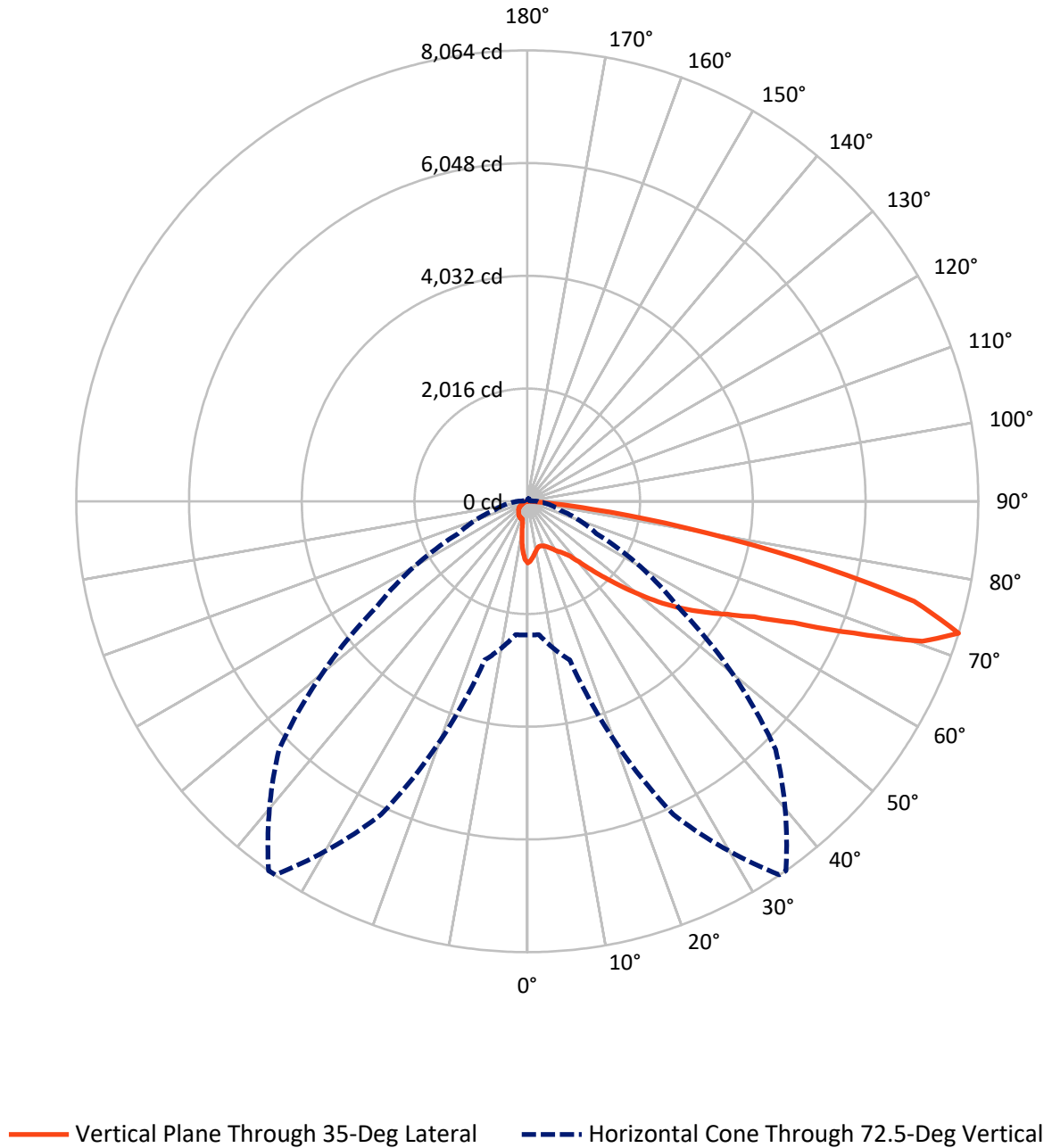
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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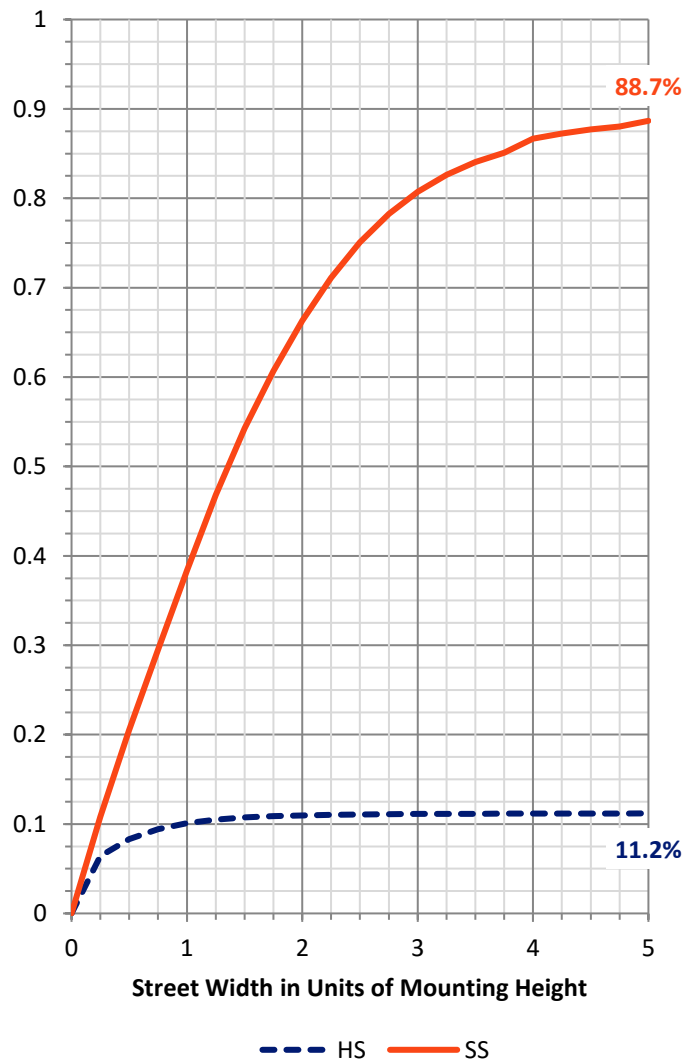
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	855.7	0.0	855.7
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	6747.3	0.0	6747.3
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	7603.0	0.0	7603.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.5	1.2
10°-20°	211.8	2.8
20°-30°	344.1	4.5
30°-40°	574.1	7.6
40°-50°	1086.3	14.3
50°-60°	1726.1	22.7
60°-70°	2135.3	28.1
70°-80°	1327.3	17.5
80°-90°	107.3	1.4
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°	7603.0	100.0
0°-180°	7603.0	100.0

**Coefficient of Utilization**



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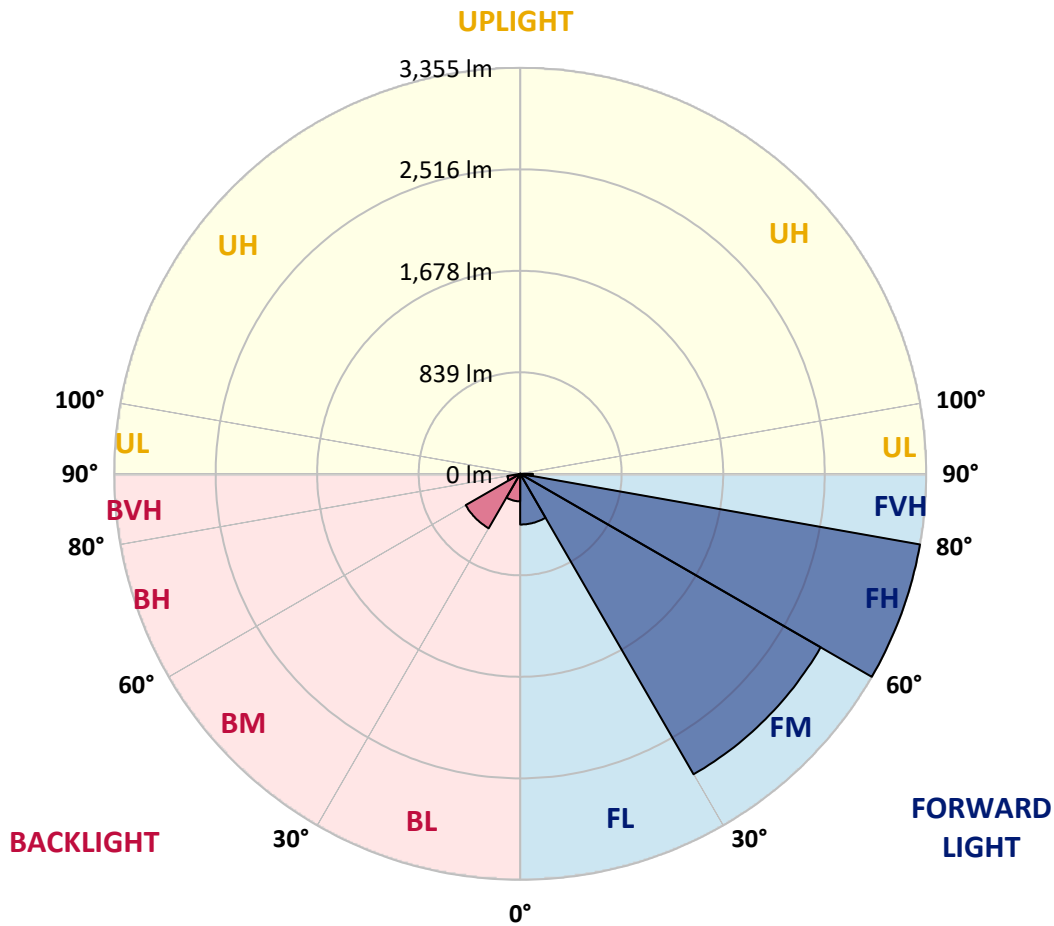
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	419.1	5.5			
FM (30°-60°)	2867.1	37.7			
FH (60°-80°)	3355.3	44.1			G2/5000
FVH (80°-90°)	105.8	1.4			G2/225
BL (0°-30°)	227.4	3.0	B1/500		
BM (30°-60°)	519.5	6.8	B1/1000		
BH (60°-80°)	107.4	1.4	B0/110		G0/110
BVH (80°-90°)	1.5	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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9
2.5°	1052.9	1061.8	1063.5	1066.3	1066.3	1069.6	1075.2	1083.0	1095.8	1102.5	1106.9
5°	970.5	977.1	985.5	992.2	1005.0	1006.7	1028.4	1049.6	1079.1	1101.4	1117.0
7.5°	887.4	895.2	906.4	922.5	939.3	944.3	977.1	1012.8	1059.6	1101.4	1127.6
10°	829.0	829.5	839.5	855.7	882.4	888.6	928.7	979.4	1037.9	1094.7	1137.6
12.5°	796.1	800.0	804.4	816.7	842.3	846.2	889.1	948.7	1016.1	1090.8	1149.3
15°	796.1	798.9	801.7	807.8	828.4	831.7	869.6	929.2	1005.0	1092.5	1168.2
17.5°	804.4	808.9	806.7	813.9	835.6	837.9	871.3	923.7	1004.4	1103.0	1197.2
20°	824.5	827.8	823.4	827.8	849.6	854.0	888.6	934.2	1013.9	1121.4	1233.4
22.5°	856.3	857.9	847.3	850.7	873.0	878.5	918.6	964.3	1036.7	1151.0	1281.9
25°	896.4	899.7	883.5	887.4	908.6	915.3	961.5	1009.5	1073.0	1191.6	1343.7
27.5°	942.6	944.3	930.3	929.8	957.1	966.6	1013.4	1065.2	1121.4	1242.9	1421.7
30°	995.5	1000.5	987.2	984.9	1019.5	1027.3	1073.5	1133.7	1192.7	1319.8	1532.6
32.5°	1037.3	1041.2	1033.4	1039.0	1074.1	1080.2	1146.5	1230.6	1304.7	1428.9	1683.5
35°	1097.5	1099.7	1081.9	1091.9	1132.0	1147.6	1246.2	1366.5	1445.7	1566.0	1880.7
37.5°	1315.3	1315.3	1239.5	1190.0	1228.4	1242.3	1382.7	1537.6	1619.5	1749.8	2129.2
40°	1616.7	1611.7	1500.8	1399.4	1394.4	1421.7	1577.1	1753.2	1844.0	1970.4	2408.9
42.5°	1938.1	1930.3	1779.4	1679.1	1662.4	1671.8	1801.6	2018.9	2111.4	2239.5	2709.7
45°	2223.4	2221.1	2083.0	1948.2	1918.1	1948.2	2081.9	2329.8	2396.1	2530.9	3010.0
47.5°	2462.4	2462.4	2361.5	2273.5	2257.9	2275.7	2461.2	2674.6	2668.5	2841.2	3302.4
50°	2737.6	2735.3	2639.5	2601.6	2617.8	2642.8	2898.0	3037.8	2950.4	3145.9	3563.7
52.5°	2930.3	2943.7	2910.8	2904.7	2987.1	3030.6	3341.4	3393.3	3202.7	3435.0	3759.3
55°	3083.0	3098.6	3136.4	3179.3	3338.1	3394.9	3771.0	3730.3	3413.9	3685.7	3871.8
57.5°	3299.1	3276.8	3335.3	3420.0	3676.8	3745.3	4187.1	4048.4	3583.8	3889.1	3884.1
60°	3561.5	3564.8	3574.9	3681.8	4015.0	4103.0	4597.1	4349.2	3693.0	4013.9	3748.1
62.5°	3876.8	3881.8	3902.4	4066.8	4469.0	4552.0	5033.9	4595.5	3743.1	3978.8	3397.2
65°	3855.1	3876.3	4106.3	4668.4	5159.2	5241.1	5543.6	4768.2	3667.3	3657.9	2766.0
67.5°	3511.9	3546.5	3931.4	5387.1	6199.9	6291.2	6159.8	4802.1	3340.3	2844.5	1804.4
70°	3061.8	3074.0	3537.0	6033.3	7404.9	7497.4	6711.3	4428.3	2534.8	1586.6	808.3
72.5°	2391.0	2393.8	2937.0	6183.2	8058.9	8063.9	6278.4	3287.4	1363.2	609.5	280.8
75°	1708.0	1691.3	1967.1	5014.4	7090.1	7146.9	4706.9	1542.0	520.9	288.0	139.8
77.5°	915.9	934.2	1113.1	2973.8	4898.0	4994.9	2568.2	444.6	265.2	196.1	92.5
80°	283.0	298.6	456.3	1361.5	2774.3	2832.8	952.1	197.8	185.0	139.8	60.7
82.5°	89.1	92.5	212.8	572.1	1151.5	1178.3	275.8	112.0	126.5	92.5	35.7
85°	25.6	26.2	94.7	213.4	284.7	290.2	77.4	43.5	72.4	57.4	18.4
87.5°	2.8	8.9	35.7	35.7	25.1	24.5	8.4	9.5	20.6	7.2	3.3
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°	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9	1101.9
2.5°	1104.2	1104.7	1097.5	1085.2	1071.8	1060.7	1046.8	1035.6	1027.8	1025.6	1029.5
5°	1112.0	1108.1	1087.4	1050.1	1005.6	967.1	924.2	890.2	868.0	858.5	861.8
7.5°	1123.7	1112.5	1067.4	993.9	908.6	832.9	756.0	696.4	658.5	639.5	642.3
10°	1133.7	1111.4	1034.0	912.5	782.2	667.4	563.8	491.9	451.8	432.9	433.4
12.5°	1143.2	1110.8	990.5	816.1	639.5	499.2	402.8	367.1	356.0	352.1	351.0
15°	1161.0	1112.5	935.9	705.8	497.5	377.2	342.1	341.5	343.7	342.6	342.1
17.5°	1185.5	1114.2	874.1	588.8	383.8	332.6	330.9	335.9	339.3	337.6	337.0
20°	1217.2	1120.9	808.3	473.0	329.8	321.4	325.3	329.8	332.6	329.8	329.2
22.5°	1261.8	1132.6	736.5	379.9	312.5	314.8	318.1	323.1	325.9	322.0	321.4
25°	1316.4	1151.0	665.7	330.4	304.2	307.0	312.0	317.5	320.9	317.0	316.4
27.5°	1387.2	1180.5	600.5	319.2	295.8	297.5	304.7	313.1	317.5	312.5	312.5
30°	1489.7	1228.9	544.3	324.2	290.8	286.9	296.9	308.6	313.6	309.2	308.6
32.5°	1625.6	1297.5	509.7	332.0	288.6	274.6	284.1	299.2	307.5	304.7	304.7
35°	1803.9	1401.6	496.4	340.9	286.9	261.8	268.5	284.7	299.2	301.9	301.9
37.5°	2020.0	1546.5	500.3	344.8	281.9	251.2	254.6	268.5	287.5	296.4	298.6
40°	2265.7	1715.3	522.6	340.9	276.3	242.3	242.9	253.5	270.2	283.6	288.0
42.5°	2519.2	1912.5	563.8	326.5	271.3	234.5	232.9	240.1	251.2	260.7	264.6
45°	2760.4	2115.3	604.4	306.4	265.2	226.7	222.8	225.6	227.9	231.8	234.0
47.5°	2971.0	2257.9	592.7	288.0	256.8	217.8	211.1	210.0	203.3	202.8	202.2
50°	3116.4	2289.1	526.5	269.6	244.6	207.8	197.2	190.5	178.8	173.3	173.8
52.5°	3162.6	2166.0	430.1	251.2	224.5	194.4	179.4	168.8	154.3	149.3	148.7
55°	3101.3	1924.8	343.7	229.0	196.7	176.6	159.9	146.0	134.3	128.1	128.1
57.5°	2951.5	1617.8	271.9	202.8	167.1	156.5	139.8	125.9	115.9	109.7	108.6
60°	2703.0	1284.7	215.0	171.6	142.6	134.8	117.5	108.6	99.7	92.5	90.8
62.5°	2325.9	917.0	168.8	135.9	119.2	110.3	100.3	93.6	83.0	73.0	71.3
65°	1815.0	561.0	130.4	99.7	95.8	91.4	85.2	79.1	66.3	56.3	54.6
67.5°	1144.8	265.7	93.0	75.2	75.8	73.5	70.8	65.7	56.3	47.4	46.2
70°	504.2	128.7	61.3	57.4	56.3	56.3	58.5	56.8	47.9	39.6	37.9
72.5°	171.6	69.1	45.7	43.5	40.7	40.1	49.0	47.4	38.4	30.6	29.0
75°	89.7	46.2	33.4	31.2	24.5	29.5	39.0	36.8	27.3	20.1	18.4
77.5°	58.5	32.9	22.8	20.1	13.9	19.5	29.0	25.6	16.2	10.0	8.9
80°	36.8	21.7	13.4	9.5	6.7	10.6	15.6	11.1	6.1	2.2	1.7
82.5°	19.5	11.1	5.0	3.3	2.8	3.3	3.9	2.8	1.1	0.0	0.0
85°	7.8	3.9	1.7	1.1	0.6	0.0	1.1	0.6	0.0	0.0	0.0
87.5°	2.8	0.6	0.0	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)