

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: P960517

Luminaire Tested: **NAV-SB1C-830-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6819.3 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 54.4
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

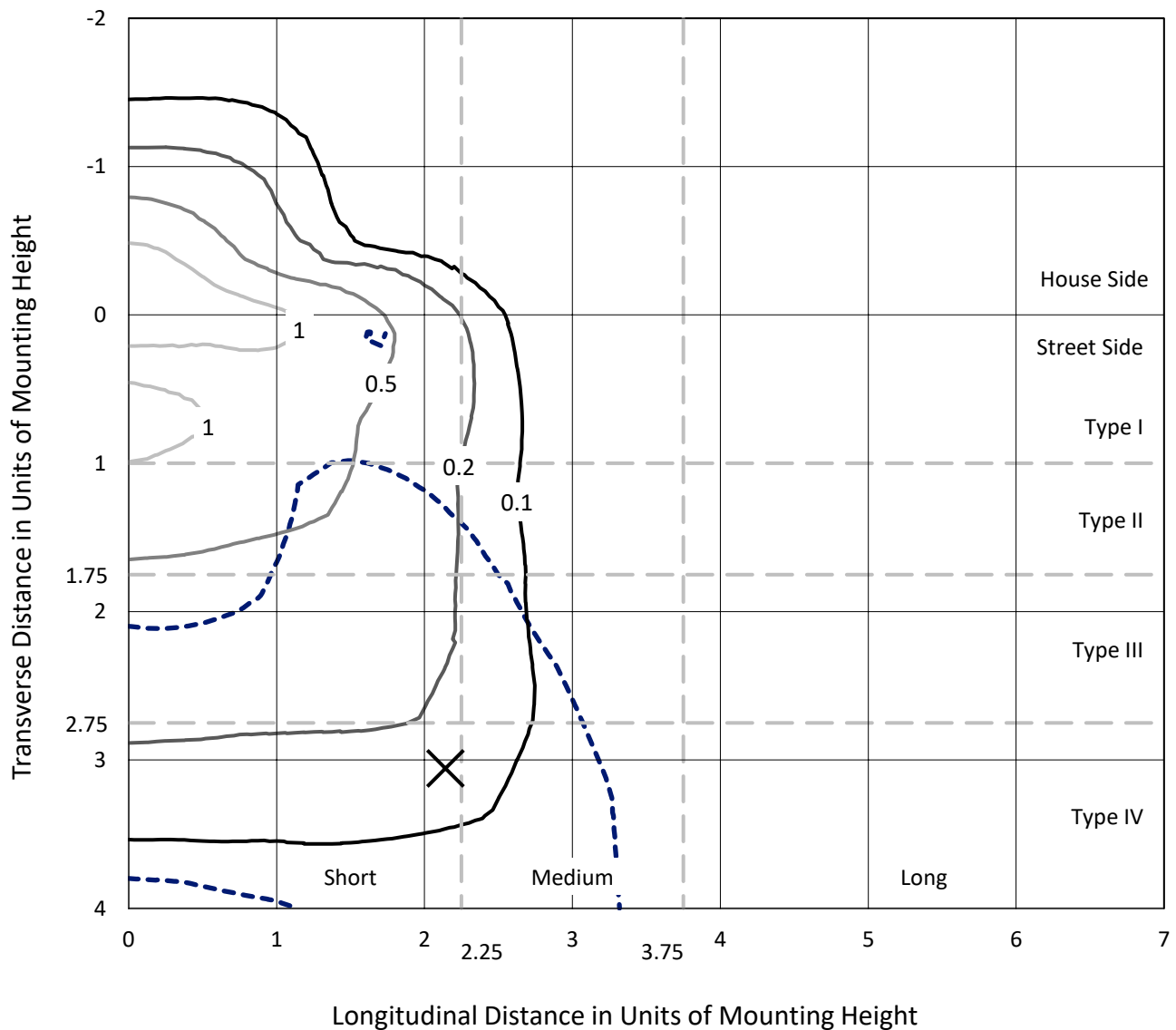


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Iso-Footcandle Lines of Horizontal Illumination

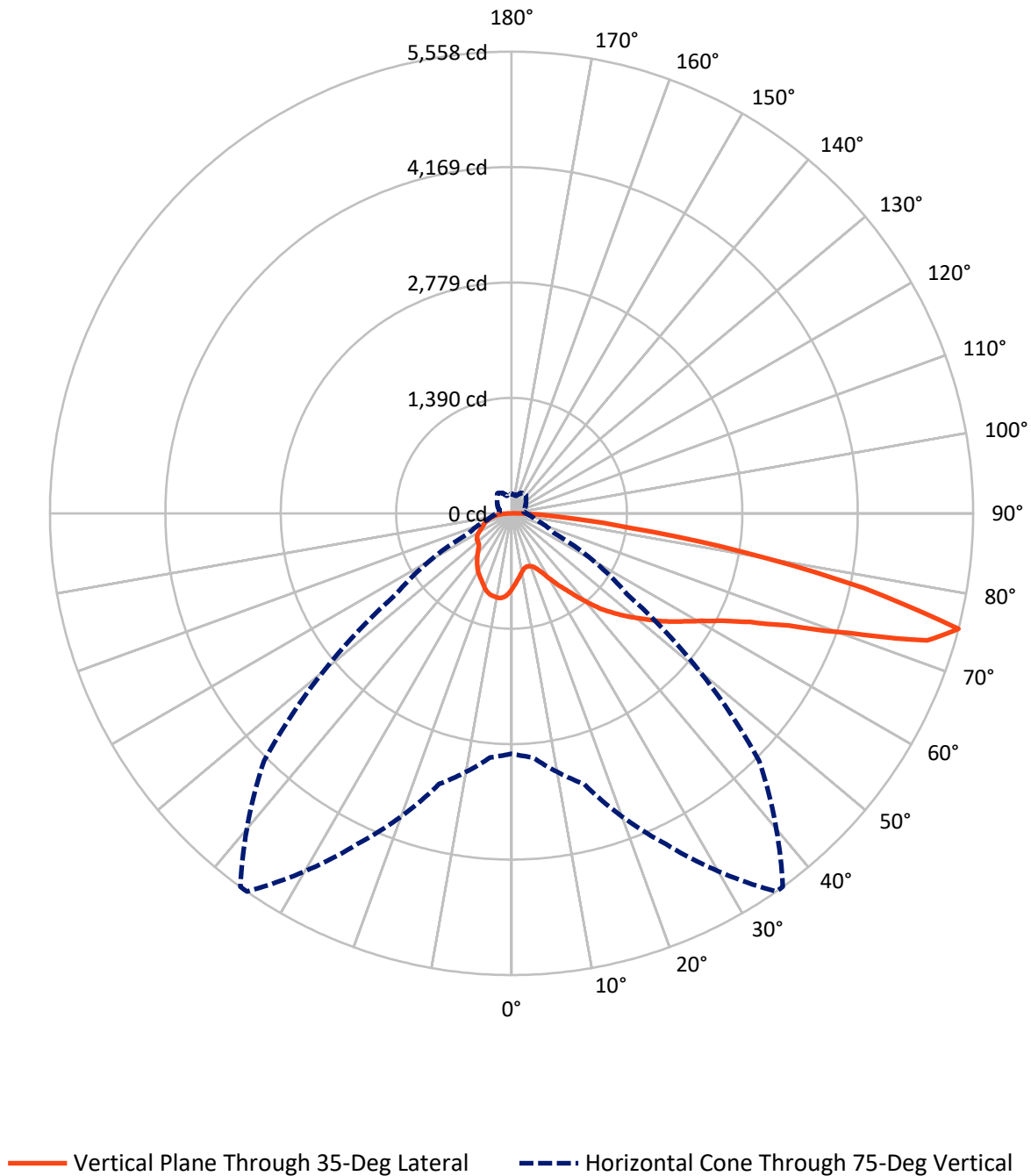
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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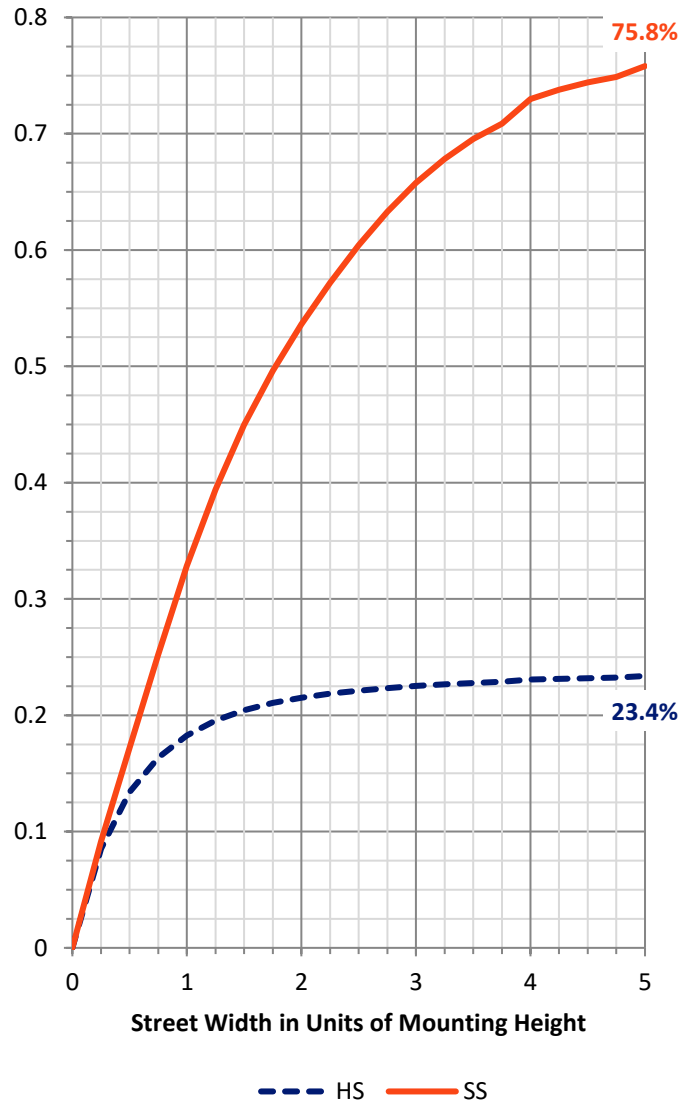
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1622.8	0.0	1622.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	5196.5	0.0	5196.5
	% Fixture	76.2	0.0	76.2
Total	Lumens	6819.3	0.0	6819.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	1.3
10°-20°	248.2	3.6
20°-30°	416.7	6.1
30°-40°	647.7	9.5
40°-50°	961.3	14.1
50°-60°	1327.2	19.5
60°-70°	1610.2	23.6
70°-80°	1330.7	19.5
80°-90°	191.4	2.8
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°	6819.3	100.0
0°-180°	6819.3	100.0

Coefficient of Utilization



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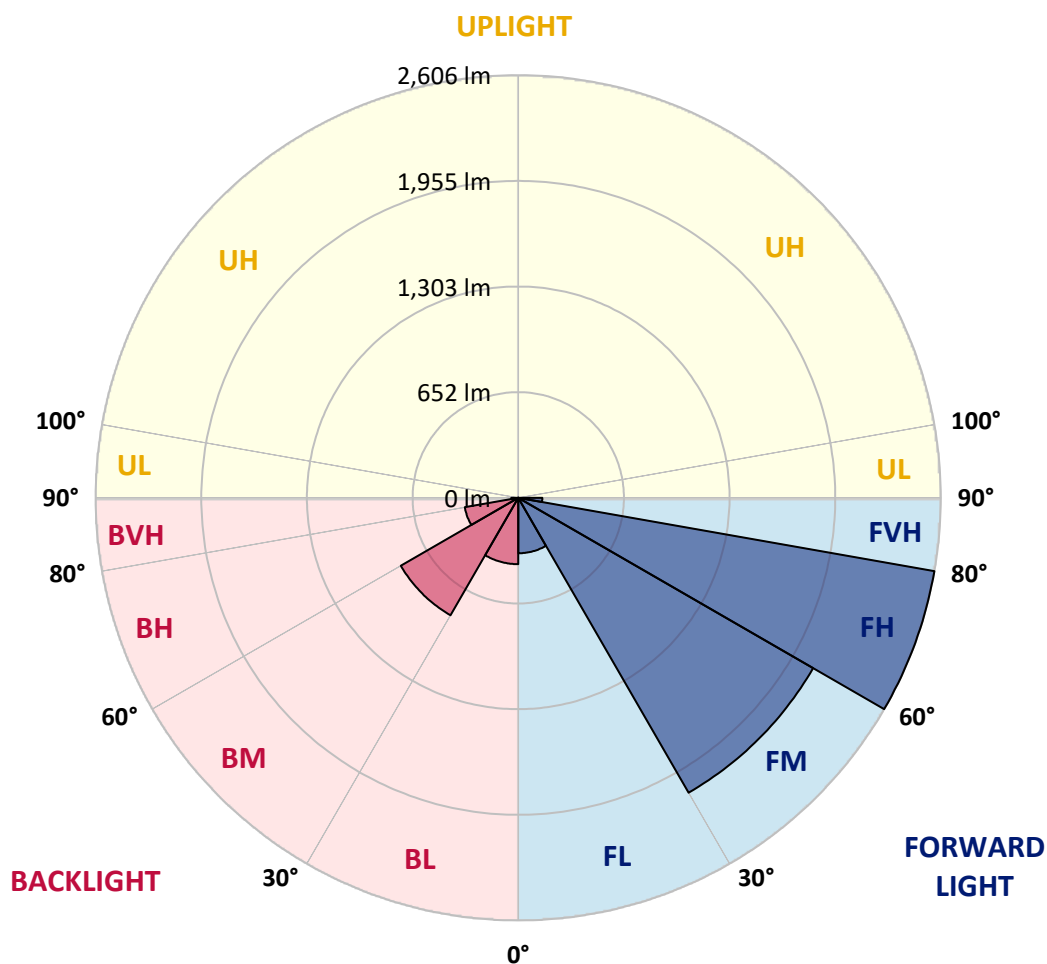
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	342.0	5.0			
FM	(30°-60°)	2100.0	30.8			
FH	(60°-80°)	2606.3	38.2			G2/5000
FVH	(80°-90°)	148.3	2.2			G2/225
BL	(0°-30°)	409.0	6.0	B1/500		
BM	(30°-60°)	836.2	12.3	B1/1000		
BH	(60°-80°)	334.6	4.9	B1/500		G1/500
BVH	(80°-90°)	43.1	0.6			G1/100
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°	35°	36°	45°	55°	65°	75°	85°
0°	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8
2.5°	837.9	843.1	845.3	844.2	849.7	849.0	856.7	866.3	879.6	892.5	911.3
5°	773.5	779.0	783.7	788.1	798.9	802.2	814.4	832.8	857.1	881.8	912.8
7.5°	713.3	718.1	725.5	733.6	751.6	755.0	775.3	804.0	837.9	874.0	916.9
10°	664.3	669.1	676.8	686.0	708.6	712.6	738.4	776.7	821.0	866.7	921.3
12.5°	643.3	644.7	649.2	658.4	677.9	680.5	708.9	752.8	804.4	861.2	927.9
15°	642.2	645.1	645.5	650.3	666.6	667.6	693.8	737.3	794.1	860.1	937.9
17.5°	653.2	655.5	652.1	655.1	668.7	670.6	691.3	729.9	790.8	864.9	954.8
20°	682.8	684.6	674.7	670.6	680.5	682.0	702.2	734.7	794.1	874.8	978.1
22.5°	745.4	746.5	722.2	705.6	706.3	707.0	724.8	754.3	807.0	892.9	1007.5
25°	843.1	842.3	803.7	771.6	753.2	749.1	760.9	786.0	828.7	916.9	1045.5
27.5°	957.4	951.8	913.2	865.2	825.0	819.2	816.5	827.3	859.7	948.5	1091.9
30°	1086.4	1081.3	1039.6	976.9	921.3	911.6	887.3	881.8	905.8	991.7	1156.4
32.5°	1227.9	1224.7	1174.9	1098.9	1024.5	1013.4	972.5	957.8	976.5	1056.9	1246.4
35°	1346.6	1343.8	1302.5	1224.3	1133.2	1119.6	1077.9	1061.4	1070.9	1140.6	1364.0
37.5°	1454.0	1452.5	1417.1	1355.6	1261.6	1245.0	1198.1	1192.6	1190.7	1250.8	1506.6
40°	1553.5	1549.8	1512.9	1480.5	1410.8	1395.7	1354.4	1349.6	1335.6	1386.5	1668.2
42.5°	1663.7	1654.1	1600.6	1585.6	1566.7	1554.2	1529.5	1530.2	1499.3	1539.4	1839.2
45°	1753.7	1748.1	1693.2	1684.4	1704.7	1699.4	1720.9	1726.4	1666.3	1699.9	2016.9
47.5°	1850.2	1845.1	1798.7	1792.4	1847.3	1848.8	1924.3	1926.2	1829.2	1866.4	2194.9
50°	1969.3	1962.0	1915.8	1923.6	1985.2	1990.8	2128.9	2116.4	1979.3	2035.6	2371.5
52.5°	2047.8	2052.3	2042.3	2054.8	2138.9	2144.1	2330.2	2298.2	2127.8	2202.7	2544.8
55°	2105.8	2114.6	2145.5	2174.3	2301.1	2306.2	2520.1	2471.1	2251.0	2357.5	2707.7
57.5°	2180.2	2167.7	2225.6	2281.5	2455.2	2468.8	2704.8	2637.7	2360.1	2491.0	2819.5
60°	2287.1	2278.3	2323.3	2406.2	2627.7	2649.5	2900.1	2787.7	2440.1	2596.7	2841.2
62.5°	2503.9	2481.7	2488.8	2562.1	2845.2	2874.0	3120.6	2918.6	2479.9	2638.0	2724.7
65°	2827.9	2789.9	2754.6	2805.4	3151.6	3180.0	3369.5	3021.5	2465.1	2558.1	2415.4
67.5°	3236.0	3198.4	3155.0	3202.8	3602.8	3625.3	3676.6	3079.3	2349.0	2249.9	1868.7
70°	3572.5	3558.6	3610.6	3807.8	4323.6	4324.3	4070.3	3031.4	2030.9	1595.1	1081.3
72.5°	3527.9	3519.5	3793.4	4403.2	5231.9	5212.3	4443.0	2668.7	1368.1	719.7	405.2
75°	2894.3	2949.2	3373.5	4392.4	5558.2	5555.5	4214.8	1696.5	565.9	298.3	209.4
77.5°	1552.1	1639.0	2190.1	3243.0	4339.0	4404.2	2963.2	593.5	242.9	191.0	144.8
80°	506.1	582.1	873.0	1651.2	2819.5	2807.3	1270.0	233.0	166.3	135.3	100.2
82.5°	214.9	223.8	390.0	779.7	1447.0	1424.4	404.4	133.9	116.8	92.6	61.9
85°	84.0	94.0	172.2	360.5	626.7	613.1	146.0	66.3	74.8	60.5	36.9
87.5°	27.7	33.5	61.6	123.5	195.1	188.0	35.8	22.9	32.4	27.7	13.2
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°	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8
2.5°	916.5	922.4	929.4	939.7	948.5	955.9	963.6	968.4	970.3	975.8	975.5
5°	923.1	936.0	953.4	970.3	986.9	996.8	1005.6	1010.1	1014.1	1017.1	1017.8
7.5°	934.2	950.8	978.1	1000.2	1014.1	1022.2	1028.2	1026.6	1028.2	1028.9	1030.0
10°	943.7	967.0	999.4	1020.4	1031.1	1031.5	1030.0	1024.8	1022.2	1022.6	1023.4
12.5°	955.2	981.0	1016.0	1033.7	1036.7	1028.5	1022.2	1013.4	1010.1	1008.6	1007.9
15°	970.7	1000.2	1034.0	1040.7	1033.3	1023.1	1012.3	997.9	990.6	984.6	986.5
17.5°	989.4	1021.9	1048.1	1043.2	1027.5	1010.4	993.1	971.4	956.3	950.0	950.4
20°	1015.7	1044.8	1058.7	1037.7	1013.8	988.0	958.5	931.9	917.9	911.6	910.9
22.5°	1047.3	1075.3	1069.1	1028.2	994.2	952.9	916.1	896.6	889.6	885.1	885.9
25°	1085.3	1109.3	1076.5	1014.1	962.2	906.5	878.1	871.9	868.6	865.2	865.2
27.5°	1134.7	1147.6	1082.0	993.5	912.0	857.1	846.8	847.9	846.8	841.2	842.3
30°	1200.0	1197.4	1087.1	959.9	854.5	812.5	813.2	818.1	818.8	815.1	816.9
32.5°	1285.9	1259.7	1089.7	916.5	799.6	773.5	774.2	779.3	783.0	776.7	779.7
35°	1389.8	1332.3	1085.7	861.9	757.2	736.2	730.6	732.2	733.3	727.3	731.4
37.5°	1511.1	1413.8	1067.6	801.4	722.2	699.7	687.9	677.9	672.1	666.6	670.2
40°	1644.2	1502.6	1034.4	742.5	683.1	661.0	643.3	624.5	604.5	597.2	600.5
42.5°	1783.5	1594.1	994.2	686.0	638.2	620.0	601.3	574.0	544.2	529.0	530.8
45°	1928.0	1687.7	954.8	630.4	592.0	584.4	562.5	529.7	497.3	478.2	476.6
47.5°	2069.6	1776.1	896.9	574.3	548.9	557.4	540.5	510.2	474.1	443.8	440.5
50°	2204.9	1859.1	802.2	517.6	513.9	549.3	533.1	489.5	448.2	409.6	406.2
52.5°	2339.0	1926.2	680.9	466.0	495.1	547.0	523.5	475.6	425.1	384.5	380.1
55°	2453.0	1960.8	564.1	421.7	467.8	528.3	512.1	459.0	392.3	349.1	345.4
57.5°	2517.9	1932.8	466.7	378.2	430.2	497.3	492.5	423.5	353.2	320.0	315.6
60°	2489.8	1819.3	387.0	340.3	394.4	463.7	458.6	388.6	323.3	291.9	287.5
62.5°	2335.4	1602.9	324.0	307.1	362.0	429.5	424.7	361.6	300.4	270.2	265.5
65°	2024.3	1303.9	275.0	279.4	329.2	388.2	395.2	339.2	282.4	252.9	248.0
67.5°	1543.9	944.4	236.7	255.4	297.1	347.7	367.9	323.0	267.3	239.2	234.8
70°	880.0	536.4	204.3	232.3	268.8	310.1	346.9	310.1	251.0	227.9	224.9
72.5°	333.6	246.3	176.6	209.0	241.5	278.3	323.7	289.8	232.3	214.9	212.0
75°	178.0	150.1	148.5	181.7	210.1	247.3	294.6	269.9	218.2	227.0	234.4
77.5°	121.3	106.2	124.2	155.6	175.9	213.1	263.6	239.6	189.1	188.4	173.6
80°	84.0	75.2	101.0	125.4	136.0	179.2	230.0	205.7	154.1	143.8	137.6
82.5°	50.5	49.0	75.5	93.7	96.2	138.3	190.5	172.5	126.1	109.9	110.6
85°	27.7	29.1	48.3	54.9	56.1	96.6	149.3	133.5	97.0	81.5	82.2
87.5°	7.8	9.9	17.7	21.7	27.0	50.1	88.9	79.2	48.7	33.9	33.9
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)