

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: P881896

Luminaire Tested: **NAV-SB1C-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5473 lumens
Efficiency: N/A
Efficacy: 100.6 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

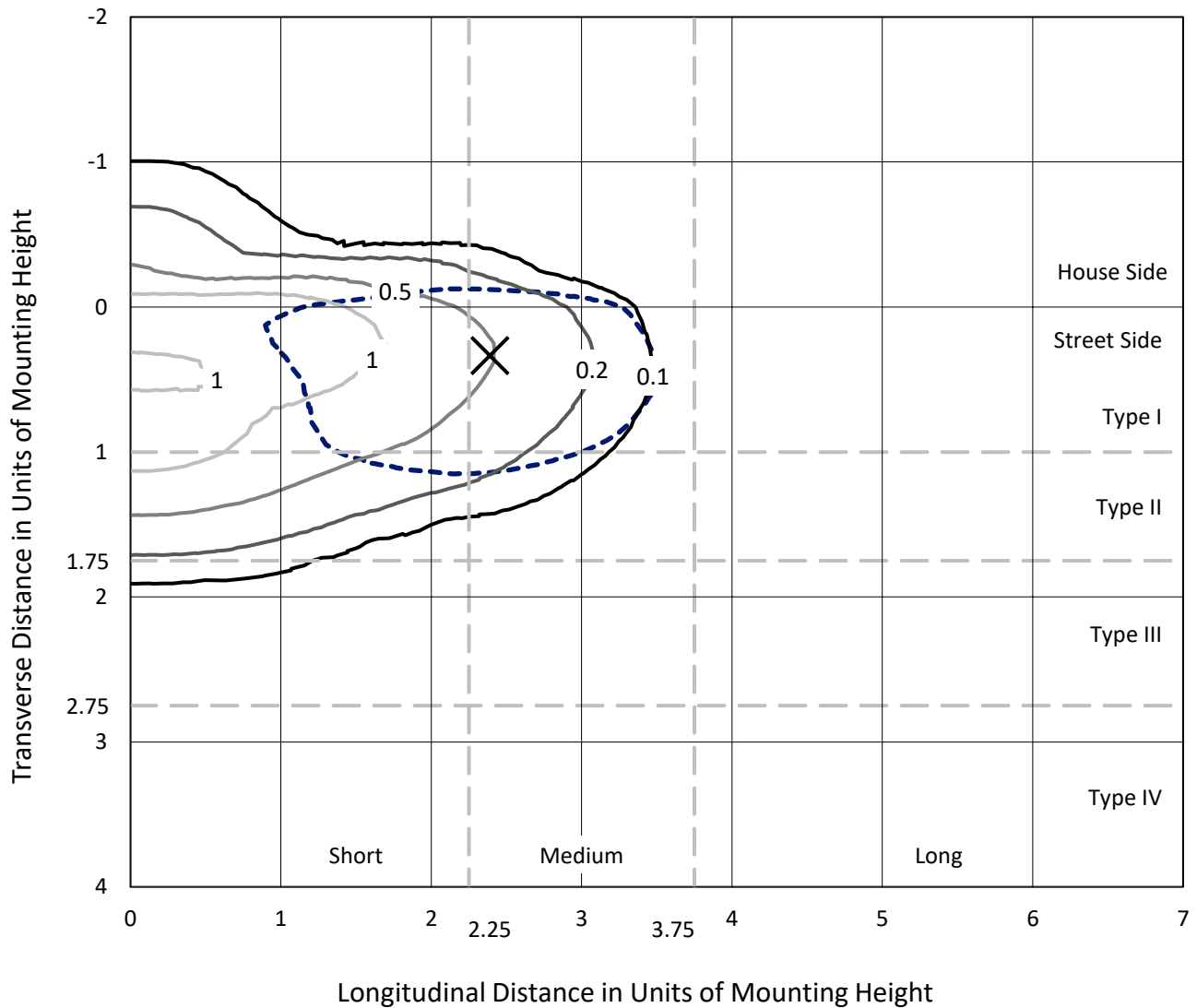
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

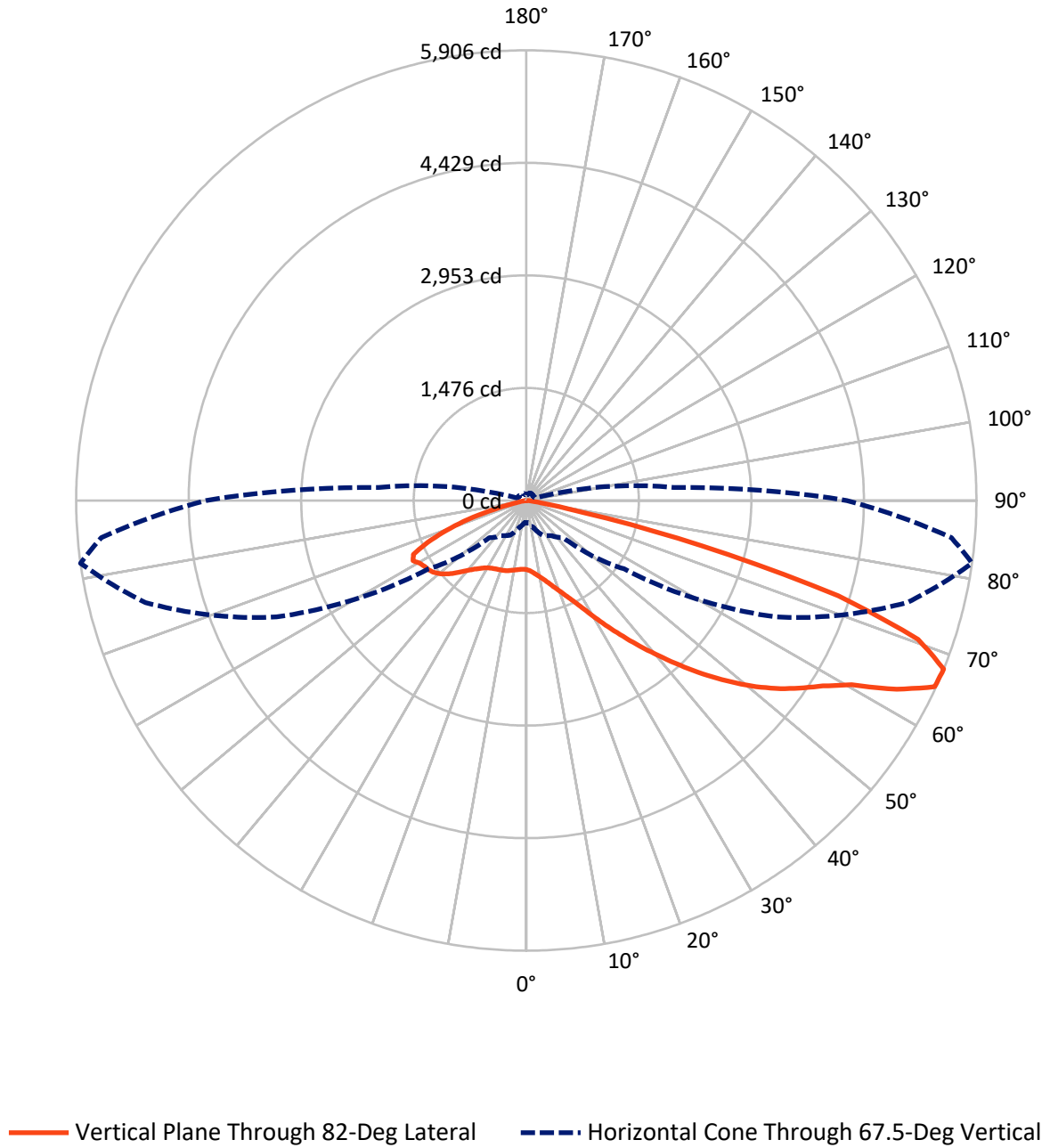
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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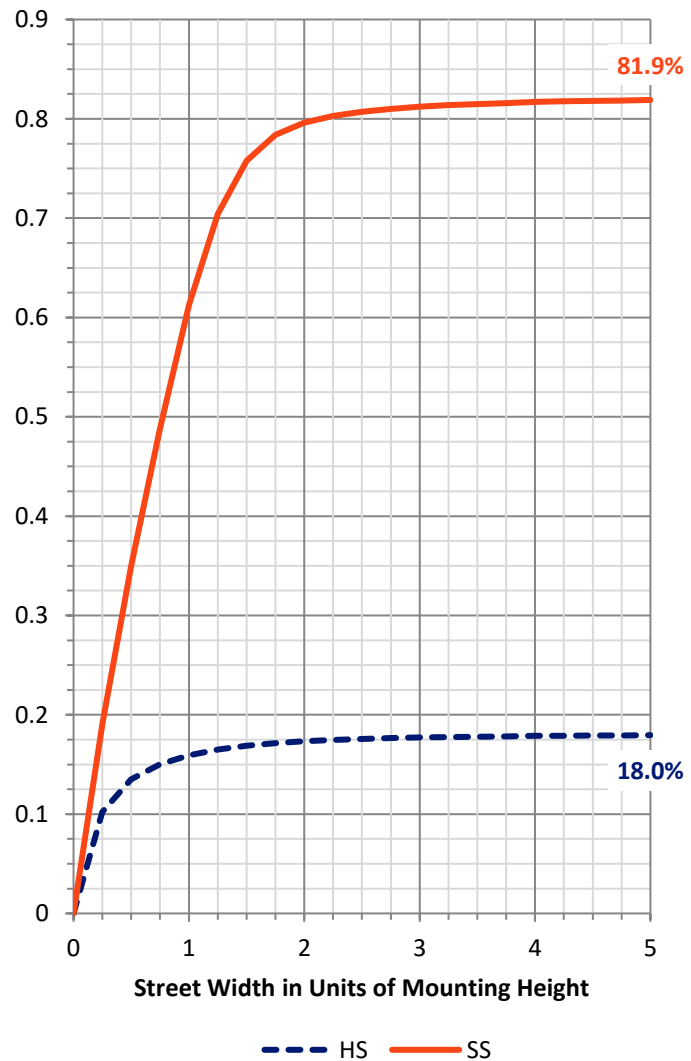
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	991.4	0.0	991.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	4481.6	0.0	4481.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	5473.0	0.0	5473.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	1.5
10°-20°	209.9	3.8
20°-30°	336.2	6.1
30°-40°	594.5	10.9
40°-50°	1041.7	19.0
50°-60°	1389.3	25.4
60°-70°	1293.4	23.6
70°-80°	496.4	9.1
80°-90°	30.8	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°	5473.0	100.0
0°-180°	5473.0	100.0

Coefficient of Utilization



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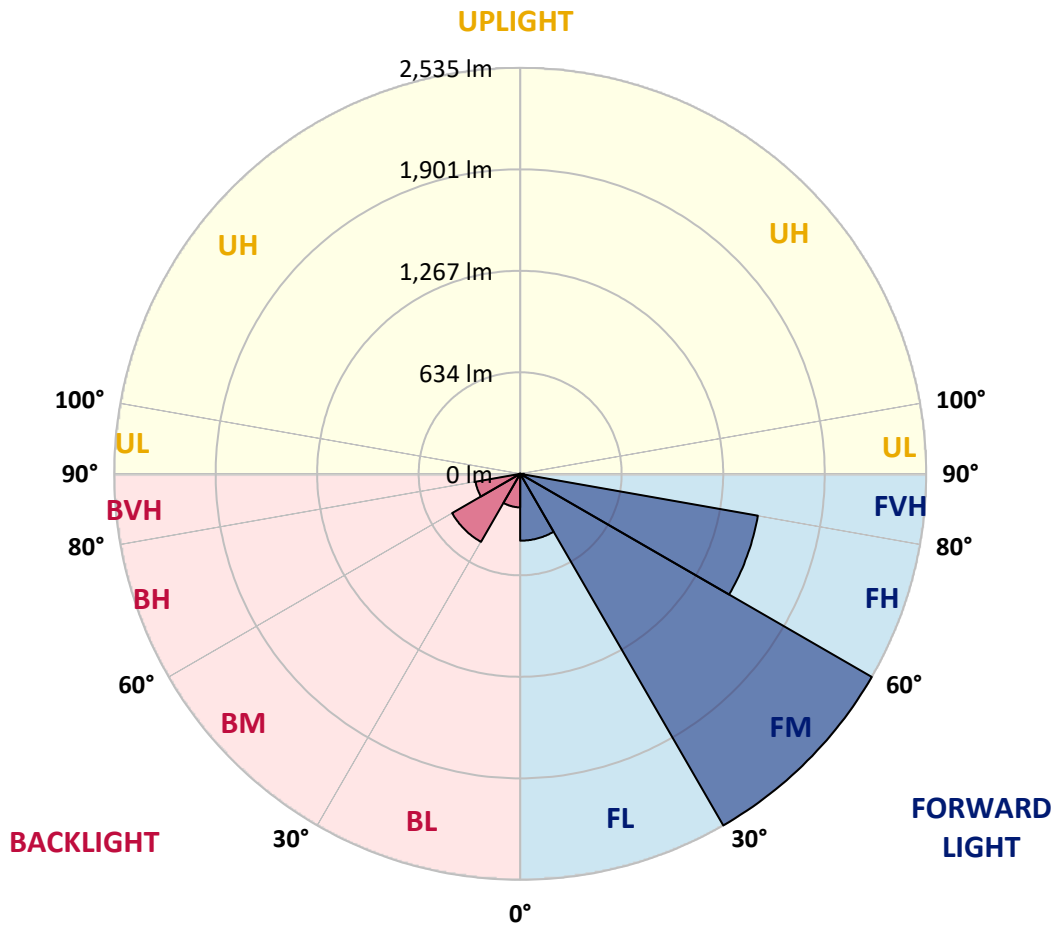
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	417.5	7.6			
FM (30°-60°)	2534.9	46.3			
FH (60°-80°)	1506.8	27.5			G1/1800
FVH (80°-90°)	22.4	0.4			G1/100
BL (0°-30°)	209.4	3.8	B1/500		
BM (30°-60°)	490.6	9.0	B1/1000		
BH (60°-80°)	283.0	5.2	B1/500		G1/500
BVH (80°-90°)	8.4	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°	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7
2.5°	958.3	963.8	960.7	959.1	956.3	952.4	949.2	939.4	929.2	922.5	920.1
5°	977.6	983.1	982.7	984.3	986.3	987.5	986.7	975.6	961.1	949.6	942.9
7.5°	961.1	967.4	972.5	980.4	994.2	1008.7	1015.8	1013.5	998.5	982.7	974.5
10°	914.2	920.9	933.1	951.6	980.8	1012.3	1038.7	1050.9	1041.5	1024.1	1012.7
12.5°	828.3	835.0	859.0	899.2	948.1	1002.8	1053.3	1086.0	1088.3	1071.0	1057.6
15°	731.7	738.4	764.0	814.5	889.0	976.8	1061.2	1123.0	1143.9	1128.9	1112.8
17.5°	671.8	677.8	697.1	737.6	815.3	924.8	1058.4	1162.4	1210.1	1198.3	1179.0
20°	653.7	658.8	667.9	696.3	760.9	870.8	1040.3	1199.5	1281.4	1274.7	1253.1
22.5°	673.0	677.8	680.5	693.1	733.7	835.4	1017.4	1237.3	1364.2	1365.0	1338.6
25°	717.6	722.3	719.1	727.0	744.7	824.3	1008.7	1281.8	1468.2	1476.9	1446.9
27.5°	790.8	791.2	783.7	783.4	786.1	840.9	1017.8	1329.5	1599.4	1615.6	1578.5
30°	937.8	931.9	903.1	872.0	857.8	890.5	1043.0	1385.8	1754.3	1783.0	1736.5
32.5°	1164.4	1155.7	1102.9	1028.4	953.6	970.5	1088.3	1450.1	1922.9	1974.9	1918.2
35°	1410.3	1407.9	1352.7	1242.0	1111.2	1084.4	1162.0	1534.4	2106.9	2189.7	2122.3
37.5°	1638.8	1637.6	1606.1	1475.7	1316.5	1243.2	1280.2	1644.7	2304.0	2423.8	2344.2
40°	1847.7	1851.2	1819.7	1703.0	1542.7	1446.9	1441.0	1781.1	2523.1	2678.7	2584.1
42.5°	2028.1	2032.1	2000.2	1913.9	1766.1	1672.3	1638.4	1948.1	2737.0	2952.6	2840.6
45°	2150.7	2175.1	2170.4	2101.4	1995.4	1898.1	1875.6	2157.8	2980.9	3243.0	3111.8
47.5°	2185.4	2207.8	2243.3	2252.7	2188.1	2092.4	2119.2	2410.4	3227.6	3533.8	3384.4
50°	2099.9	2120.7	2194.4	2292.5	2337.5	2307.9	2356.0	2681.1	3480.2	3823.8	3652.0
52.5°	1931.2	1952.5	2045.5	2200.7	2384.0	2476.9	2593.6	2947.8	3724.9	4098.4	3905.4
55°	1687.3	1709.7	1829.1	2004.9	2295.3	2546.7	2791.8	3214.2	3949.1	4345.5	4133.9
57.5°	1355.5	1372.1	1496.2	1742.1	2072.3	2477.3	2938.0	3505.0	4160.3	4588.2	4360.5
60°	883.4	898.0	1042.2	1316.5	1702.7	2245.6	2967.1	3829.3	4440.9	4903.9	4665.9
62.5°	587.5	597.4	682.9	884.2	1199.1	1800.8	2796.5	4088.2	4852.2	5453.1	5189.5
65°	403.1	413.0	498.5	638.7	774.7	1191.2	2305.9	4053.9	5225.0	5889.4	5577.7
67.5°	287.7	295.9	368.4	500.8	560.7	691.9	1563.2	3615.7	5171.4	5905.9	5598.6
70°	206.1	210.8	270.7	390.1	445.7	415.7	869.3	2765.4	4527.9	5453.5	5172.2
72.5°	144.2	145.8	188.0	297.1	359.0	303.4	413.7	1843.7	3424.6	4280.5	4009.8
75°	97.7	99.7	126.5	217.9	288.0	231.7	219.1	988.7	2010.4	2369.4	2123.9
77.5°	59.9	60.7	81.6	148.9	215.5	176.5	141.1	418.9	777.8	763.7	651.0
80°	33.9	33.9	52.0	92.6	147.0	113.9	98.9	178.1	246.3	216.3	190.7
82.5°	18.9	19.3	37.8	57.5	97.3	67.4	54.4	82.4	106.4	94.2	82.0
85°	7.9	8.7	23.2	27.2	46.5	33.5	22.1	34.7	39.4	35.1	25.6
87.5°	0.8	1.2	7.1	5.1	5.5	6.7	3.2	6.7	5.5	5.5	3.9
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°	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7	906.7
2.5°	912.6	906.7	891.7	874.4	851.5	840.5	825.5	815.3	806.6	807.4	799.5
5°	930.3	915.4	881.9	840.1	788.1	751.0	711.6	684.5	662.4	657.7	647.0
7.5°	954.8	931.1	872.4	797.1	709.3	642.7	583.2	545.0	517.8	509.1	500.4
10°	986.3	952.0	860.2	743.2	616.7	532.0	468.1	438.2	419.7	413.4	408.6
12.5°	1022.9	976.0	844.0	677.4	521.3	439.8	399.2	384.2	378.3	376.3	375.1
15°	1069.0	1006.0	819.6	599.3	440.5	383.4	366.1	364.1	364.9	364.1	363.7
17.5°	1123.8	1038.7	779.8	519.0	386.2	354.6	348.3	349.9	351.9	351.5	350.7
20°	1183.7	1071.0	729.0	447.6	349.1	334.1	330.6	332.2	333.8	333.0	332.6
22.5°	1251.9	1105.7	672.6	392.1	324.3	315.2	311.3	311.7	311.7	310.1	309.3
25°	1333.4	1143.9	613.5	352.7	305.4	298.3	293.6	292.0	289.6	284.9	284.1
27.5°	1430.8	1184.5	556.8	325.1	290.4	283.7	278.2	274.3	268.3	260.5	259.7
30°	1540.3	1233.7	508.7	307.7	278.6	271.9	265.6	259.7	251.0	241.2	240.4
32.5°	1669.2	1286.5	473.6	296.3	267.9	260.9	253.4	246.3	236.8	227.0	227.4
35°	1822.8	1350.4	453.1	288.4	259.7	250.2	241.9	234.1	227.0	218.3	217.5
37.5°	1989.5	1418.2	446.8	284.5	254.2	239.6	230.1	224.6	223.8	218.7	218.3
40°	2172.0	1498.5	451.6	282.1	248.2	229.3	219.1	217.9	219.9	210.8	211.2
42.5°	2365.0	1593.9	459.5	279.4	240.0	219.1	209.2	209.2	207.7	195.1	195.1
45°	2573.9	1703.8	467.3	272.7	230.1	208.8	201.4	198.6	191.9	179.7	179.3
47.5°	2784.3	1815.7	473.2	260.5	218.3	200.2	193.5	187.2	177.3	166.3	165.9
50°	2984.1	1916.2	466.9	242.3	204.9	191.9	184.8	176.1	165.5	158.0	156.8
52.5°	3162.6	2003.3	440.1	221.1	190.7	183.2	176.9	167.9	159.2	151.3	150.5
55°	3317.8	2073.8	392.9	201.0	178.1	175.7	169.4	158.0	146.2	139.5	138.7
57.5°	3466.8	2127.4	333.8	184.4	166.7	167.5	158.0	147.8	136.7	129.6	128.9
60°	3665.0	2199.1	273.9	169.0	154.5	156.8	146.6	139.1	125.3	116.2	115.1
62.5°	3981.8	2310.7	217.5	150.1	140.3	141.1	136.7	127.7	111.1	100.5	99.7
65°	4233.2	2269.7	171.4	129.6	124.1	125.3	125.3	115.5	97.7	85.5	84.3
67.5°	4204.8	1943.4	136.7	109.5	108.8	109.5	112.3	104.0	86.7	76.8	75.3
70°	3873.4	1545.8	109.5	91.0	94.6	92.6	100.5	95.0	78.0	68.2	67.0
72.5°	3160.6	1113.6	83.5	75.3	72.5	75.7	90.6	85.5	65.0	54.0	52.8
75°	1846.9	594.2	62.3	59.5	52.4	63.0	80.4	72.9	49.6	39.8	38.6
77.5°	601.3	207.3	45.7	43.7	39.0	50.8	68.6	61.5	40.6	31.5	30.3
80°	161.2	62.7	31.1	28.8	25.2	37.8	54.4	48.9	29.2	20.5	20.1
82.5°	64.6	26.4	18.1	16.2	13.8	26.0	43.0	39.4	21.7	13.0	13.0
85°	20.9	8.7	6.7	5.1	6.3	16.2	25.6	26.8	15.4	6.7	5.1
87.5°	2.8	1.2	1.2	1.6	1.2	2.8	7.9	7.5	4.3	0.8	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)