

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: P961602

Luminaire Tested: **NAV-SB2A-835-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961602
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-SB2A-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8429.6 lumens
Efficiency: N/A
Efficacy: 147.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

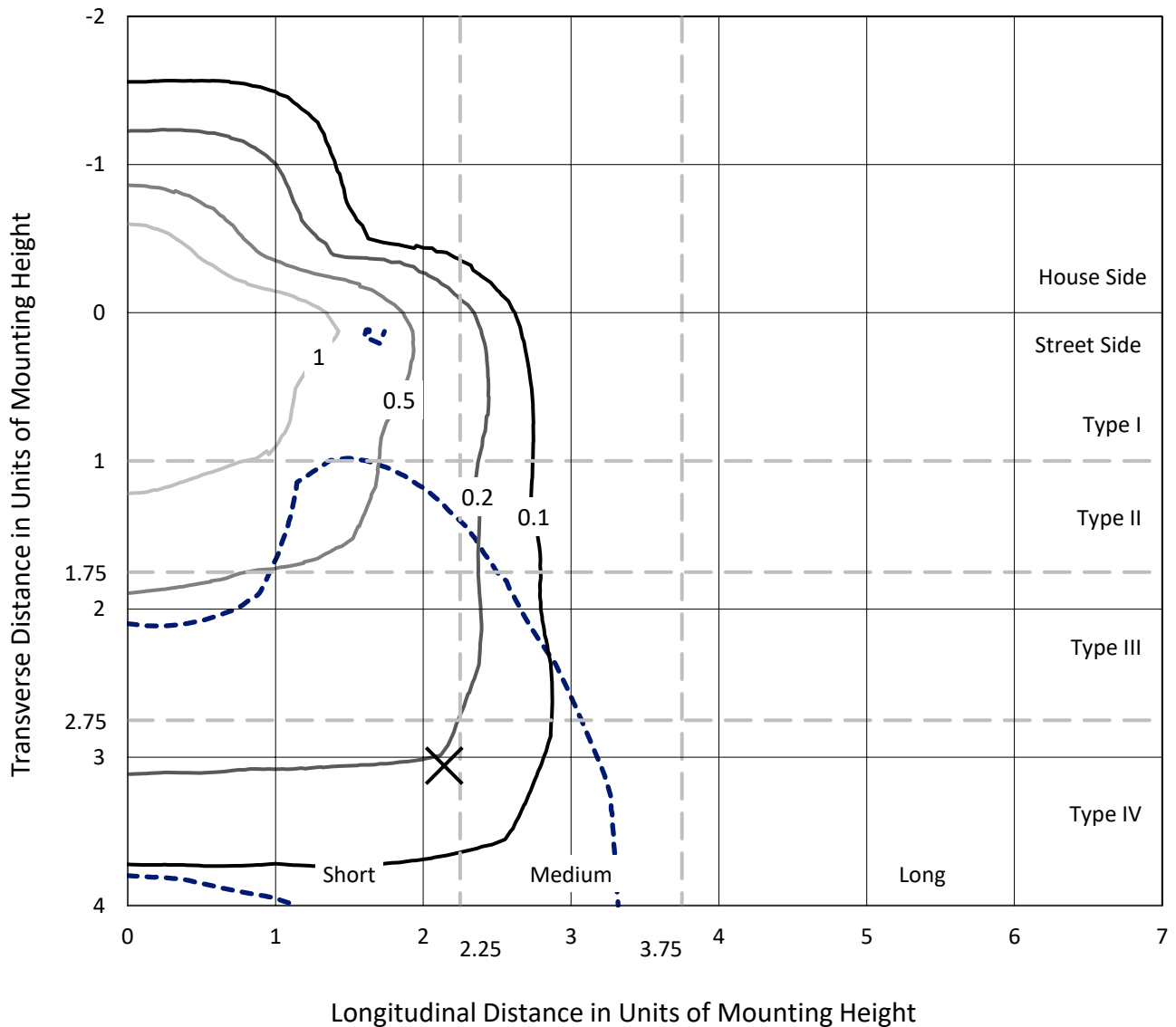
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

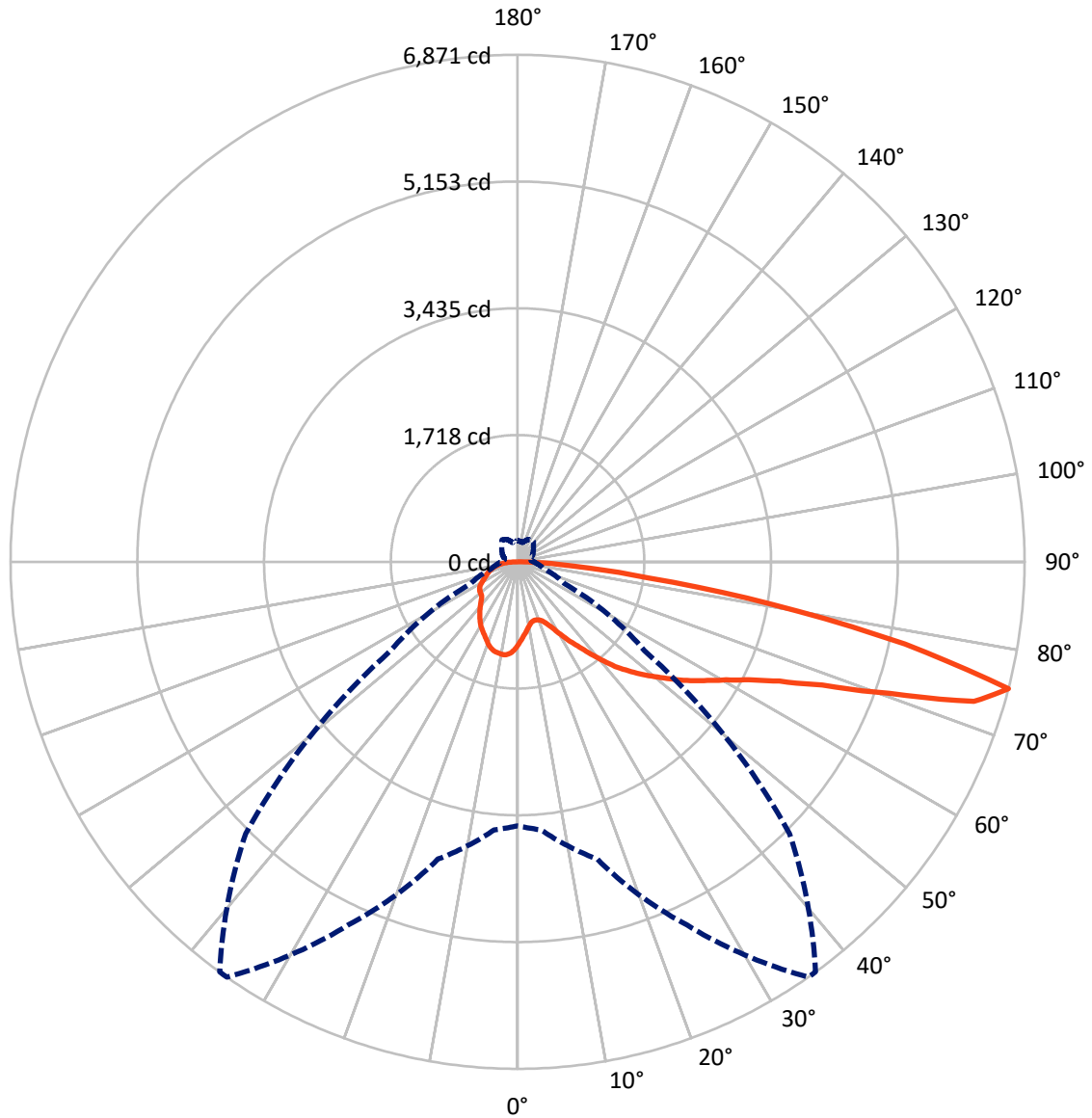
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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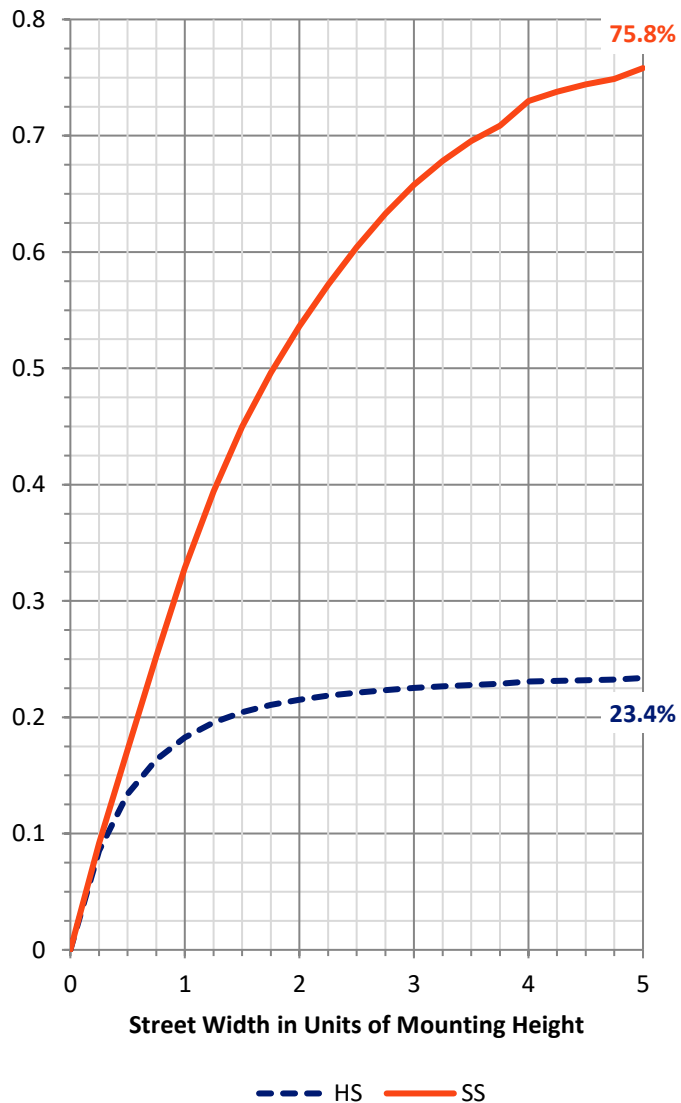
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2006.0	0.0	2006.0
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	6423.6	0.0	6423.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	8429.6	0.0	8429.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.4	1.3
10°-20°	306.8	3.6
20°-30°	515.1	6.1
30°-40°	800.6	9.5
40°-50°	1188.3	14.1
50°-60°	1640.5	19.5
60°-70°	1990.4	23.6
70°-80°	1644.9	19.5
80°-90°	236.6	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°	8429.6	100.0
0°-180°	8429.6	100.0

Coefficient of Utilization



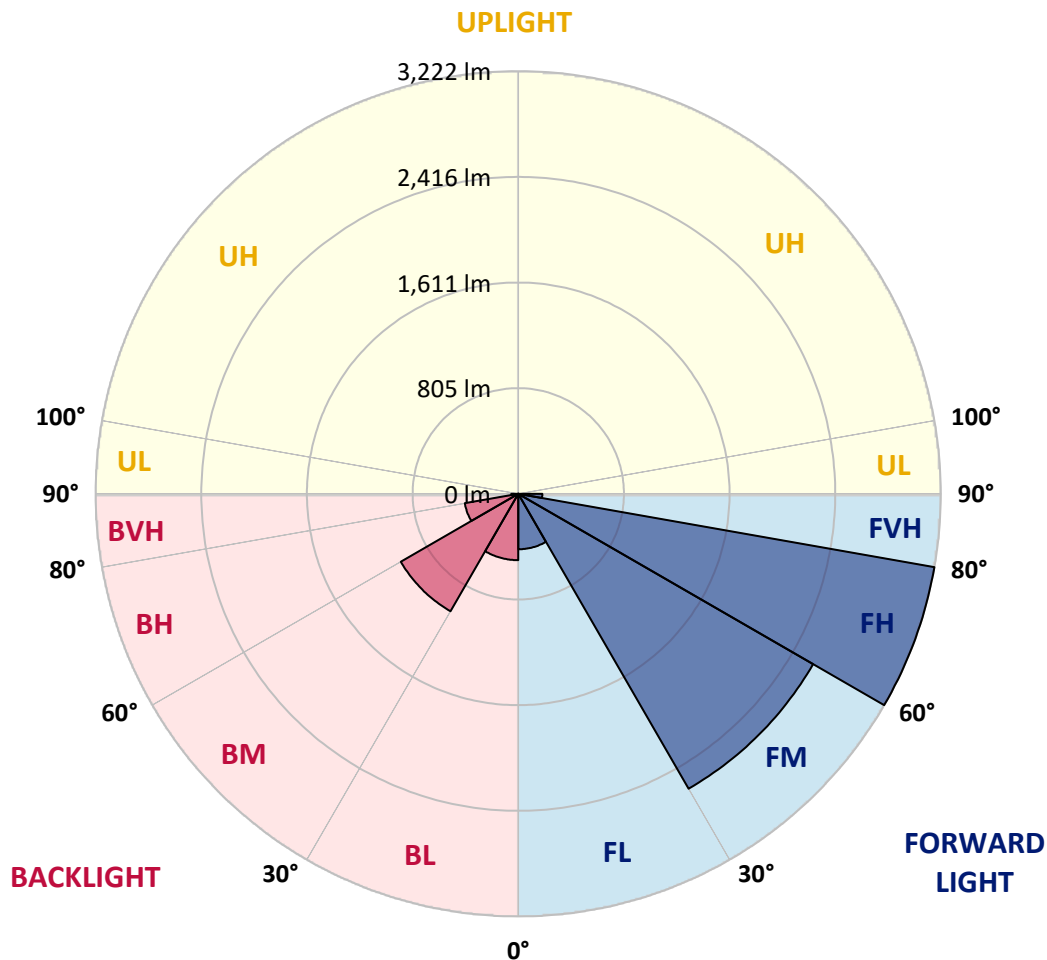
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	422.7	5.0			
FM (30°-60°)	2595.9	30.8			
FH (60°-80°)	3221.7	38.2			G2/5000
FVH (80°-90°)	183.3	2.2			G2/225
BL (0°-30°)	505.5	6.0	B2/1000		
BM (30°-60°)	1033.6	12.3	B2/2500		
BH (60°-80°)	413.6	4.9	B1/500		G1/500
BVH (80°-90°)	53.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3
2.5°	1035.8	1042.2	1044.9	1043.6	1050.4	1049.5	1059.0	1070.9	1087.3	1103.2	1126.5
5°	956.0	962.9	968.8	974.3	987.5	991.6	1006.7	1029.4	1059.5	1090.0	1128.3
7.5°	881.8	887.8	896.8	906.8	929.2	933.3	958.4	993.8	1035.8	1080.5	1133.3
10°	821.1	827.1	836.7	848.1	875.9	880.9	912.8	960.1	1014.9	1071.3	1138.8
12.5°	795.2	797.0	802.5	813.8	838.0	841.2	876.3	930.5	994.4	1064.6	1147.0
15°	793.9	797.4	798.0	803.8	823.9	825.2	857.6	911.4	981.5	1063.1	1159.3
17.5°	807.5	810.3	806.2	809.7	826.7	828.9	854.4	902.3	977.4	1069.1	1180.3
20°	844.0	846.2	833.9	828.9	841.2	843.1	868.1	908.3	981.5	1081.4	1209.0
22.5°	921.5	922.8	892.7	872.2	873.1	874.0	896.0	932.3	997.5	1103.7	1245.5
25°	1042.2	1041.3	993.4	953.8	931.0	926.0	940.5	971.6	1024.4	1133.3	1292.3
27.5°	1183.5	1176.6	1128.7	1069.5	1019.9	1012.6	1009.4	1022.6	1062.7	1172.5	1349.8
30°	1343.0	1336.6	1285.0	1207.7	1138.8	1127.0	1096.9	1090.0	1119.6	1225.8	1429.6
32.5°	1517.9	1513.8	1452.3	1358.4	1266.4	1252.8	1202.1	1183.9	1207.1	1306.5	1540.7
35°	1664.7	1661.0	1610.0	1513.4	1400.9	1384.0	1332.5	1312.0	1323.8	1409.9	1686.1
37.5°	1797.2	1795.5	1751.7	1675.6	1559.4	1538.9	1481.0	1474.2	1471.9	1546.2	1862.4
40°	1920.3	1915.7	1870.2	1830.1	1743.9	1725.3	1674.2	1668.3	1651.0	1713.9	2062.1
42.5°	2056.6	2044.8	1978.7	1960.0	1936.7	1921.3	1890.7	1891.6	1853.3	1903.0	2273.4
45°	2167.8	2160.9	2093.0	2082.1	2107.2	2100.7	2127.2	2134.0	2059.7	2101.2	2493.1
47.5°	2287.2	2280.8	2223.3	2215.6	2283.5	2285.3	2378.7	2381.1	2261.1	2307.2	2713.3
50°	2434.4	2425.3	2368.3	2377.8	2454.0	2460.8	2631.7	2616.2	2446.7	2516.4	2931.5
52.5°	2531.4	2536.9	2524.6	2540.1	2644.0	2650.3	2880.5	2840.8	2630.3	2722.8	3145.7
55°	2603.0	2613.9	2652.2	2687.8	2844.5	2850.8	3115.2	3054.6	2782.5	2914.2	3347.1
57.5°	2695.0	2679.6	2751.1	2820.3	3034.9	3051.8	3343.4	3260.5	2917.4	3079.2	3485.2
60°	2827.2	2816.2	2871.8	2974.3	3248.2	3275.1	3585.0	3446.0	3016.3	3210.0	3512.1
62.5°	3095.1	3067.8	3076.4	3167.1	3517.1	3552.6	3857.5	3607.8	3065.5	3261.0	3368.0
65°	3495.7	3448.7	3404.9	3467.9	3895.8	3930.9	4165.1	3734.9	3047.2	3162.1	2985.7
67.5°	4000.2	3953.6	3899.9	3959.2	4453.5	4481.4	4544.7	3806.4	2903.7	2781.1	2309.9
70°	4416.2	4398.9	4463.2	4706.9	5344.5	5345.4	5031.4	3747.2	2510.4	1971.8	1336.6
72.5°	4361.1	4350.6	4689.2	5442.9	6467.3	6443.2	5492.1	3298.9	1691.1	889.5	500.8
75°	3577.7	3645.6	4170.1	5429.6	6870.6	6867.4	5210.0	2097.1	699.5	368.7	258.8
77.5°	1918.5	2026.0	2707.3	4008.8	5363.6	5444.3	3662.9	733.7	300.3	236.1	179.1
80°	625.7	719.6	1079.1	2041.1	3485.2	3470.1	1569.9	288.0	205.5	167.3	123.9
82.5°	265.7	276.6	482.2	963.8	1788.6	1760.8	499.9	165.4	144.4	114.4	76.6
85°	103.9	116.2	212.8	445.7	774.7	757.8	180.5	82.0	92.6	74.7	45.6
87.5°	34.1	41.5	76.1	152.6	241.1	232.4	44.2	28.3	40.1	34.1	16.4
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°	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3	1123.3
2.5°	1132.8	1140.2	1148.8	1161.5	1172.5	1181.6	1191.2	1197.1	1199.4	1206.2	1205.8
5°	1141.0	1157.0	1178.4	1199.4	1220.0	1232.3	1243.1	1248.7	1253.7	1257.3	1258.2
7.5°	1154.8	1175.3	1209.0	1236.4	1253.7	1263.6	1270.9	1269.2	1270.9	1271.8	1273.3
10°	1166.6	1195.3	1235.4	1261.4	1274.6	1275.1	1273.3	1266.8	1263.6	1264.1	1265.1
12.5°	1180.7	1212.6	1255.9	1277.8	1281.5	1271.4	1263.6	1252.8	1248.7	1246.8	1245.9
15°	1199.9	1236.4	1278.3	1286.5	1277.4	1264.5	1251.3	1233.6	1224.5	1217.2	1219.4
17.5°	1223.1	1263.2	1295.6	1289.7	1270.1	1249.1	1227.6	1200.8	1182.1	1174.3	1174.8
20°	1255.4	1291.5	1308.7	1282.8	1253.2	1221.3	1184.8	1152.0	1134.7	1127.0	1126.1
22.5°	1294.7	1329.3	1321.5	1270.9	1229.0	1178.0	1132.4	1108.2	1099.6	1094.2	1095.0
25°	1341.6	1371.2	1330.7	1253.7	1189.4	1120.5	1085.5	1077.7	1073.6	1069.5	1069.5
27.5°	1402.6	1418.6	1337.5	1228.2	1127.4	1059.5	1046.7	1048.1	1046.7	1039.9	1041.3
30°	1483.3	1480.1	1343.9	1186.6	1056.3	1004.4	1005.3	1011.2	1012.1	1007.6	1009.8
32.5°	1589.5	1557.1	1347.1	1132.8	988.4	956.0	956.9	963.4	967.9	960.1	963.8
35°	1718.0	1646.9	1342.0	1065.4	936.0	910.0	903.2	905.0	906.4	899.1	904.2
37.5°	1868.0	1747.6	1319.7	990.7	892.7	864.9	850.3	838.0	830.8	823.9	828.5
40°	2032.5	1857.4	1278.7	917.8	844.4	817.0	795.2	771.9	747.3	738.2	742.3
42.5°	2204.7	1970.5	1229.0	848.1	788.8	766.5	743.2	709.5	672.6	653.9	656.2
45°	2383.3	2086.2	1180.3	779.2	731.8	722.3	695.4	654.9	614.7	591.0	589.2
47.5°	2558.3	2195.5	1108.7	710.0	678.6	689.0	668.1	630.7	586.0	548.7	544.6
50°	2725.6	2298.0	991.6	639.8	635.3	679.0	659.0	605.2	554.1	506.2	502.1
52.5°	2891.4	2381.1	841.6	576.0	612.0	676.3	647.1	587.8	525.4	475.3	469.9
55°	3032.3	2423.9	697.2	521.3	578.3	653.0	632.9	567.3	484.8	431.5	427.0
57.5°	3112.4	2389.3	576.9	467.5	531.8	614.7	608.8	523.6	436.5	395.5	390.1
60°	3077.8	2248.8	478.5	420.7	487.6	573.3	566.9	480.3	399.6	360.9	355.5
62.5°	2886.9	1981.4	400.6	379.6	447.5	530.8	525.0	447.0	371.4	334.0	328.1
65°	2502.2	1611.8	340.0	345.4	406.9	479.8	488.5	419.2	349.1	312.6	306.7
67.5°	1908.4	1167.5	292.5	315.8	367.3	429.7	454.8	399.2	330.4	295.7	290.3
70°	1087.7	663.1	252.5	287.1	332.2	383.2	428.9	383.2	310.4	281.7	278.0
72.5°	412.5	304.4	218.3	258.4	298.5	344.1	400.1	358.1	287.1	265.7	262.0
75°	220.1	185.4	183.7	224.7	259.7	305.8	364.1	333.5	269.8	280.7	289.9
77.5°	150.0	131.2	153.5	192.3	217.4	263.4	325.8	296.2	233.8	232.9	214.6
80°	103.9	93.0	124.8	155.0	168.2	221.5	284.3	254.3	190.4	177.7	169.9
82.5°	62.4	60.6	93.4	115.7	118.9	170.9	235.6	213.3	155.8	135.8	136.7
85°	34.1	36.0	59.7	67.9	69.3	119.4	184.6	164.9	119.8	100.8	101.6
87.5°	9.5	12.3	21.8	26.9	33.3	62.0	109.8	98.0	60.2	41.9	41.9
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)