

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: P882129

Luminaire Tested: **NAV-SB1D-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8599 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

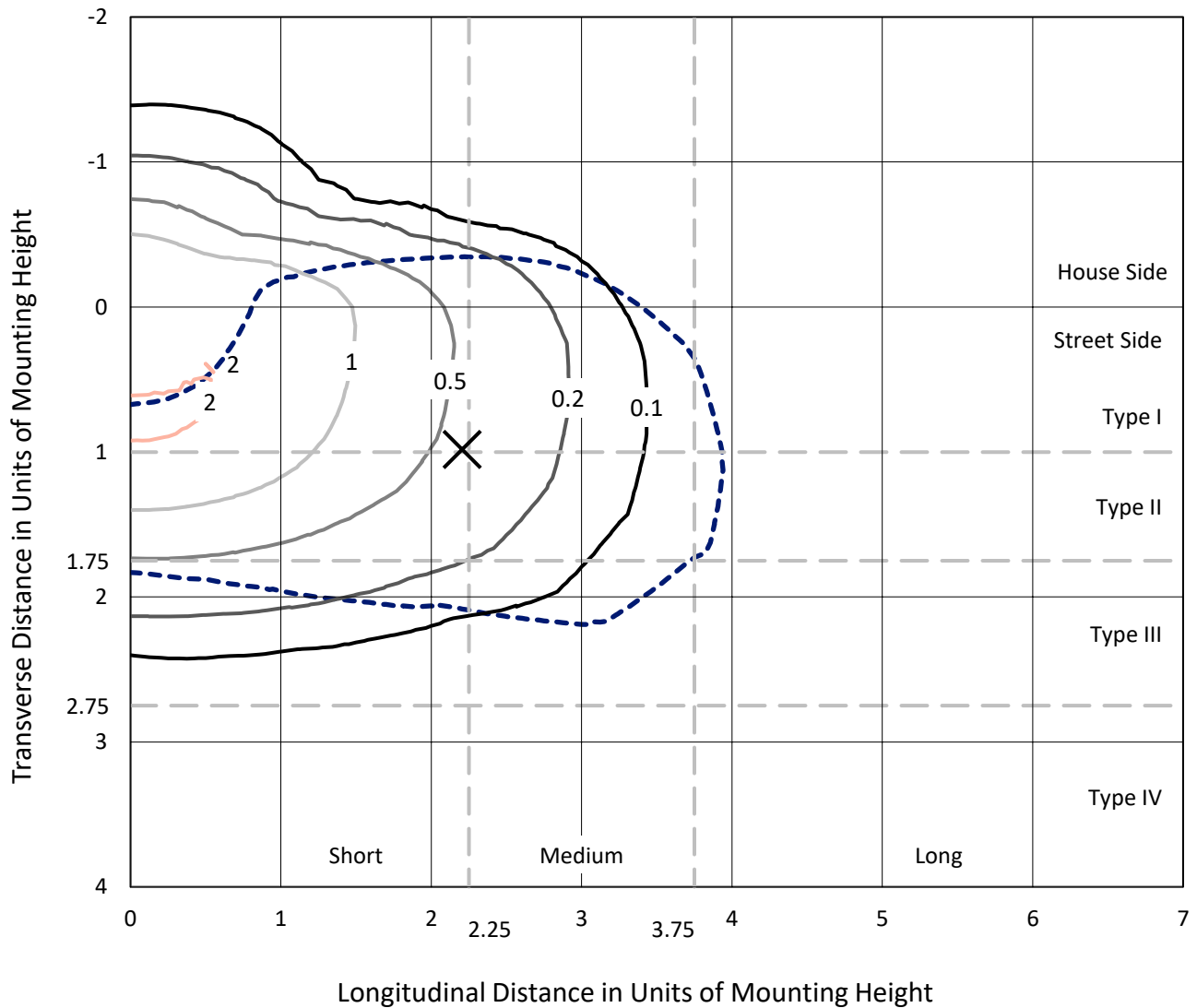
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

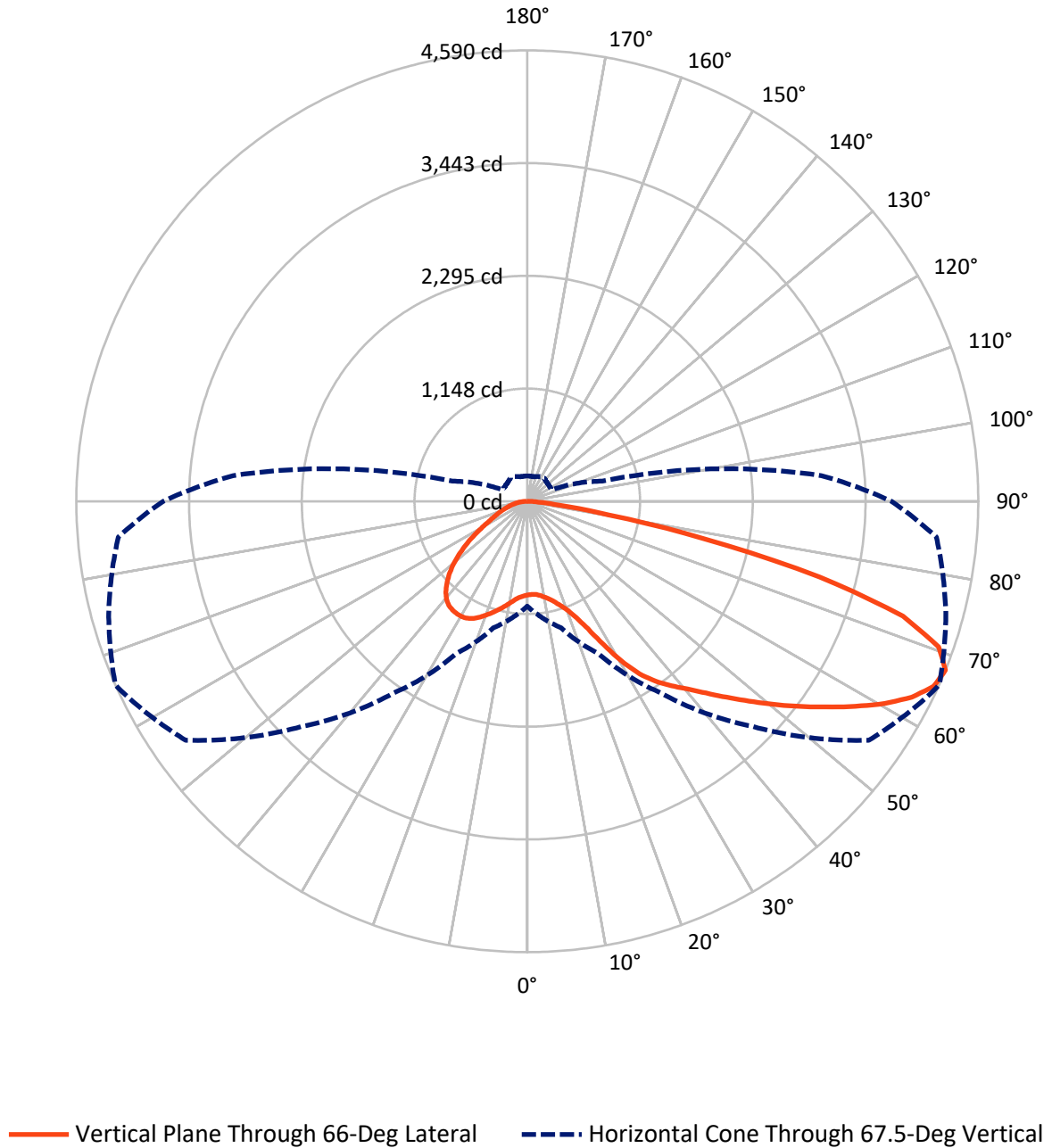
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 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	2138.1	0.0	2138.1
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6460.9	0.0	6460.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	8599.0	0.0	8599.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	1.1
10°-20°	312.4	3.6
20°-30°	602.2	7.0
30°-40°	1055.8	12.3
40°-50°	1569.6	18.3
50°-60°	1989.7	23.1
60°-70°	1946.8	22.6
70°-80°	928.7	10.8
80°-90°	99.2	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°	8599.0	100.0
0°-180°	8599.0	100.0

Coefficient of Utilization



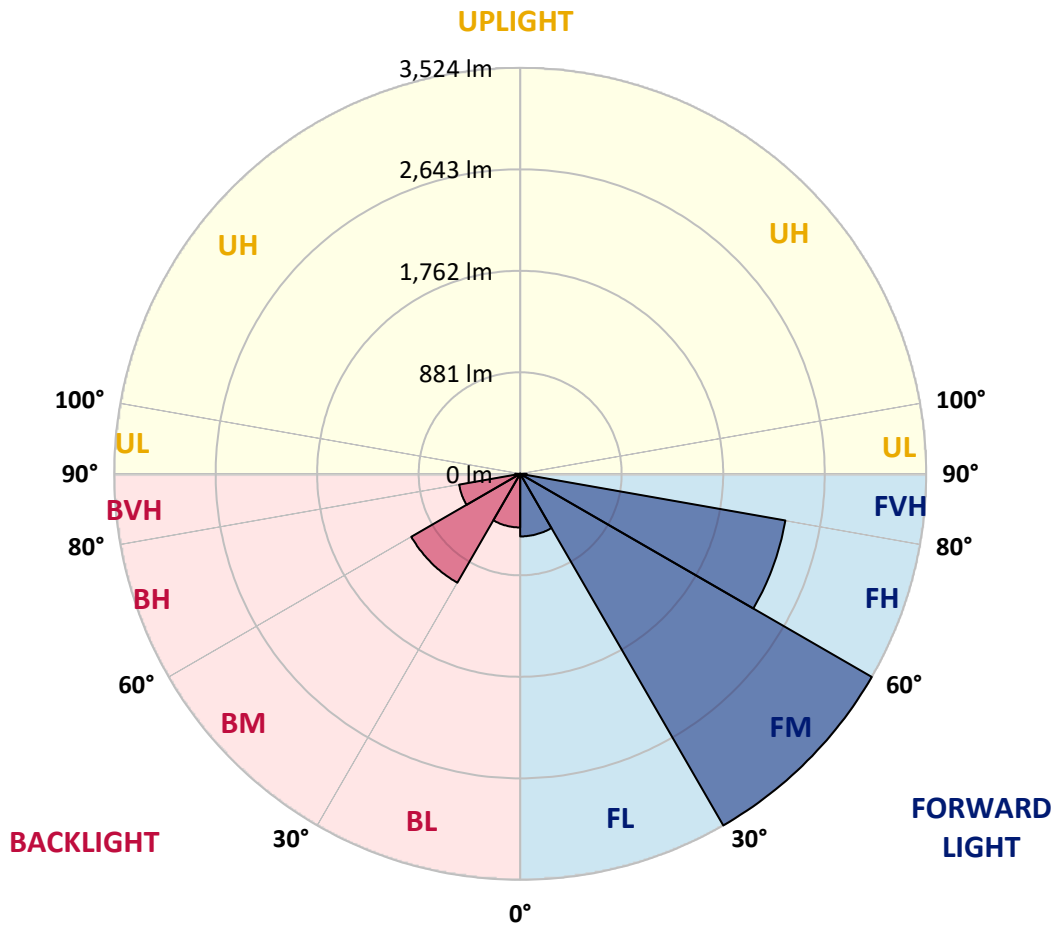
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	543.4	6.3			
FM (30°-60°)	3523.8	41.0			
FH (60°-80°)	2337.4	27.2			G2/5000
FVH (80°-90°)	56.3	0.7			G1/100
BL (0°-30°)	465.8	5.4	B1/500		
BM (30°-60°)	1091.3	12.7	B2/2500		
BH (60°-80°)	538.1	6.3	B2/1000		G2/1000
BVH (80°-90°)	43.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7
2.5°	943.8	949.2	947.9	945.6	945.2	946.1	947.4	948.8	948.3	950.6	954.2
5°	941.1	946.5	946.1	946.1	947.9	951.5	953.7	956.0	953.7	956.5	961.4
7.5°	942.9	947.0	948.8	950.6	955.1	961.9	967.3	972.3	969.6	972.7	979.0
10°	965.9	969.1	970.9	970.9	974.1	981.8	987.2	996.2	994.0	998.9	1007.1
12.5°	1008.0	1011.1	1011.1	1009.3	1011.6	1016.5	1018.3	1028.3	1024.2	1032.4	1040.5
15°	1059.5	1065.8	1060.8	1057.7	1058.6	1063.5	1063.1	1070.8	1066.7	1073.5	1080.7
17.5°	1116.4	1124.5	1116.4	1115.9	1114.1	1119.6	1120.0	1126.8	1119.6	1124.5	1129.5
20°	1183.7	1195.0	1188.2	1190.5	1186.4	1188.7	1190.9	1200.9	1189.6	1193.2	1191.8
22.5°	1278.6	1292.1	1284.9	1293.5	1290.8	1289.0	1288.5	1306.1	1288.5	1289.9	1276.8
25°	1416.8	1433.1	1420.4	1432.2	1432.2	1438.1	1444.8	1467.4	1438.1	1429.5	1395.6
27.5°	1621.0	1637.3	1612.5	1619.7	1617.4	1631.9	1624.7	1680.7	1649.1	1635.1	1566.8
30°	1866.8	1895.7	1848.8	1846.9	1844.7	1867.7	1878.1	1915.2	1883.1	1869.1	1786.9
32.5°	2132.5	2162.8	2106.7	2090.5	2081.9	2095.9	2087.3	2117.1	2095.0	2073.3	1971.6
35°	2413.5	2443.3	2390.0	2358.4	2324.0	2294.7	2264.0	2271.6	2250.9	2217.9	2112.6
37.5°	2679.2	2733.8	2677.3	2643.5	2580.2	2522.8	2437.0	2401.3	2381.9	2351.6	2245.4
40°	2949.8	2981.0	2938.0	2909.1	2840.4	2750.5	2613.2	2537.7	2511.5	2482.2	2392.3
42.5°	3149.0	3178.8	3155.8	3135.9	3082.2	2977.8	2800.2	2705.8	2667.9	2634.9	2558.5
45°	3307.2	3329.3	3314.8	3322.1	3299.0	3197.8	2994.1	2886.1	2846.8	2806.6	2746.5
47.5°	3370.9	3394.3	3417.4	3460.3	3499.6	3425.1	3202.3	3081.3	3039.7	2998.6	2939.4
50°	3363.6	3387.6	3454.4	3545.7	3667.7	3642.8	3421.9	3289.1	3250.7	3203.7	3149.0
52.5°	3305.8	3332.9	3418.7	3570.5	3764.8	3805.9	3645.5	3503.7	3467.5	3411.5	3356.8
55°	3154.0	3170.3	3299.0	3514.1	3787.9	3919.8	3864.7	3732.3	3696.1	3618.0	3558.4
57.5°	2872.5	2896.0	3083.5	3361.8	3730.0	3997.0	4057.1	3972.6	3937.9	3825.4	3763.0
60°	2505.2	2542.7	2757.3	3106.1	3582.7	3996.6	4232.0	4208.9	4180.0	4029.6	3964.5
62.5°	2089.6	2132.9	2339.4	2744.7	3325.2	3883.2	4341.3	4406.8	4391.9	4218.0	4134.8
65°	1604.8	1634.6	1840.2	2277.1	2924.5	3639.7	4354.0	4541.9	4544.6	4361.2	4223.8
67.5°	1068.5	1154.3	1332.8	1708.7	2387.7	3241.6	4242.8	4564.0	4590.3	4410.4	4179.1
70°	521.4	634.3	809.2	1110.5	1708.7	2631.3	3952.3	4382.4	4440.7	4266.8	3912.6
72.5°	216.4	253.0	348.3	548.0	980.9	1775.6	3368.6	3890.0	3997.9	3780.6	3289.5
75°	145.9	158.1	199.2	281.0	446.8	875.6	2429.3	2900.5	3074.5	2855.4	2334.0
77.5°	112.5	120.2	145.0	196.5	265.7	331.2	1300.3	1748.0	1837.9	1701.5	1214.4
80°	88.6	94.4	108.4	143.2	188.4	177.1	443.2	792.0	844.0	708.0	390.4
82.5°	76.8	79.1	77.7	97.1	125.1	103.5	145.5	292.3	322.6	234.0	127.4
85°	55.6	61.9	64.6	60.1	66.4	52.4	59.6	103.5	113.9	101.7	71.8
87.5°	22.6	33.4	41.1	38.9	24.4	14.9	18.5	30.3	34.8	38.0	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7
2.5°	954.6	957.8	960.1	962.8	964.6	967.3	972.7	975.9	976.3	978.6	978.1
5°	963.2	967.7	972.7	979.9	988.1	994.9	1005.2	1012.5	1015.2	1017.4	1017.0
7.5°	981.8	988.1	997.1	1009.8	1021.5	1030.5	1043.2	1051.8	1060.4	1063.5	1064.0
10°	1009.3	1018.3	1031.5	1048.6	1061.3	1073.0	1086.1	1093.3	1101.9	1105.5	1107.4
12.5°	1043.7	1053.1	1070.3	1094.3	1106.0	1114.1	1118.6	1116.8	1118.6	1121.8	1122.7
15°	1083.0	1093.3	1112.8	1138.5	1146.7	1139.4	1129.5	1120.5	1119.1	1120.0	1123.2
17.5°	1129.5	1137.2	1159.8	1181.4	1175.6	1145.8	1124.1	1109.6	1102.4	1100.1	1103.3
20°	1194.6	1194.6	1213.1	1226.6	1187.3	1136.7	1102.8	1079.3	1064.4	1058.1	1056.8
22.5°	1273.6	1266.4	1278.1	1268.6	1185.1	1111.4	1064.4	1023.8	1001.2	992.1	990.8
25°	1373.9	1365.3	1362.2	1303.4	1168.8	1071.2	994.9	945.6	925.7	920.8	921.7
27.5°	1525.3	1503.6	1462.5	1322.4	1139.0	1008.0	913.5	867.9	856.6	857.1	858.4
30°	1726.8	1683.4	1582.6	1325.6	1090.2	918.5	830.4	797.9	792.5	794.7	802.4
32.5°	1913.4	1872.2	1705.5	1311.1	1015.2	830.9	755.9	734.2	726.0	728.7	732.4
35°	2059.7	2048.4	1819.4	1290.8	923.0	748.6	689.0	670.5	654.7	651.0	653.7
37.5°	2198.0	2193.5	1904.8	1262.3	831.8	690.3	635.2	610.8	587.8	575.1	575.6
40°	2349.8	2345.3	1960.8	1218.5	750.9	639.7	586.9	554.8	526.3	503.3	505.6
42.5°	2520.6	2493.9	1987.5	1155.7	682.2	596.8	547.6	504.2	466.7	445.5	446.8
45°	2707.2	2647.1	1987.0	1075.7	624.4	557.5	505.6	444.1	409.3	389.4	388.5
47.5°	2905.1	2793.5	1962.6	987.2	568.4	514.1	440.5	393.5	370.5	358.3	355.6
50°	3109.3	2930.4	1921.0	885.5	511.0	464.9	399.8	367.8	350.1	338.8	334.8
52.5°	3301.3	3054.6	1870.9	770.3	452.7	417.0	381.8	356.9	338.4	325.7	320.3
55°	3479.7	3161.7	1800.0	652.4	405.3	384.9	373.2	352.4	331.2	316.3	310.4
57.5°	3638.3	3231.2	1677.5	541.7	371.4	362.8	364.1	344.7	320.3	307.7	299.5
60°	3770.2	3282.3	1496.4	439.1	343.8	341.1	350.1	330.3	301.8	287.3	281.0
62.5°	3849.3	3281.4	1274.1	359.6	320.3	321.2	331.6	312.2	283.3	269.7	265.7
65°	3842.5	3201.0	1030.1	307.7	297.7	298.6	312.2	292.3	267.9	259.8	259.3
67.5°	3706.5	3004.9	790.2	273.8	272.9	277.0	292.8	278.8	258.4	257.5	258.9
70°	3338.3	2597.8	569.3	246.7	247.1	253.0	273.8	270.2	253.5	255.3	254.8
72.5°	2676.9	1980.7	382.2	218.2	218.7	228.2	255.7	263.4	248.5	272.4	276.0
75°	1782.8	1235.2	245.8	187.9	188.4	200.6	239.9	250.3	234.9	271.5	273.8
77.5°	856.6	555.3	178.0	158.1	158.1	169.4	207.4	224.1	200.1	211.0	193.4
80°	295.9	208.7	140.1	127.4	124.7	132.4	174.8	194.3	172.6	159.0	149.1
82.5°	116.6	108.4	112.5	98.9	89.9	94.9	136.0	160.4	127.0	114.8	114.3
85°	66.9	70.5	79.5	65.5	52.0	58.3	99.8	115.2	95.8	84.5	86.3
87.5°	18.1	24.8	36.6	33.9	23.5	24.8	47.4	63.7	55.1	42.5	43.8
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)