

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: P959322

Luminaire Tested: **NAV-SB1A-740-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4823.7 lumens
Efficiency: N/A
Efficacy: 156.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

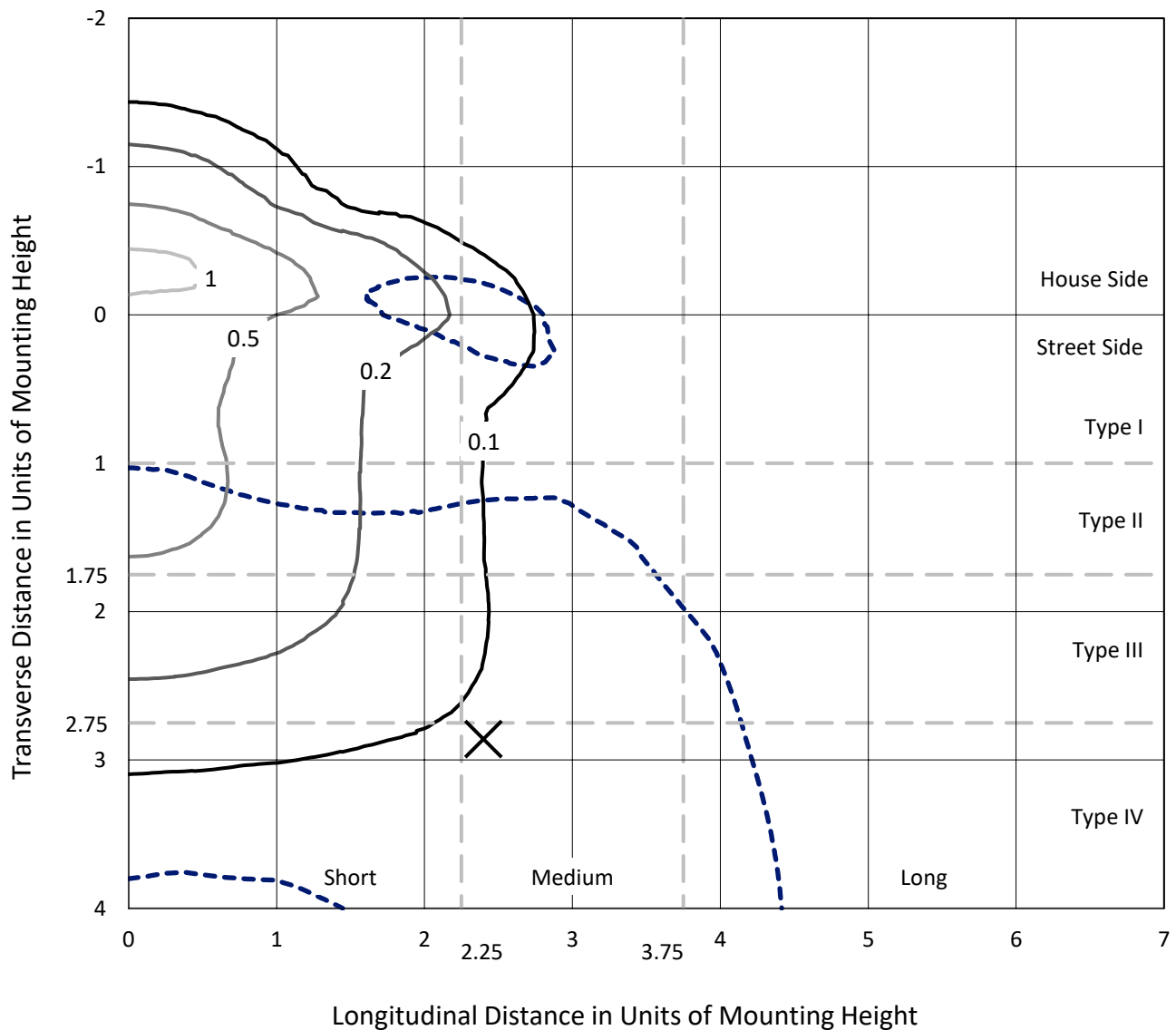
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

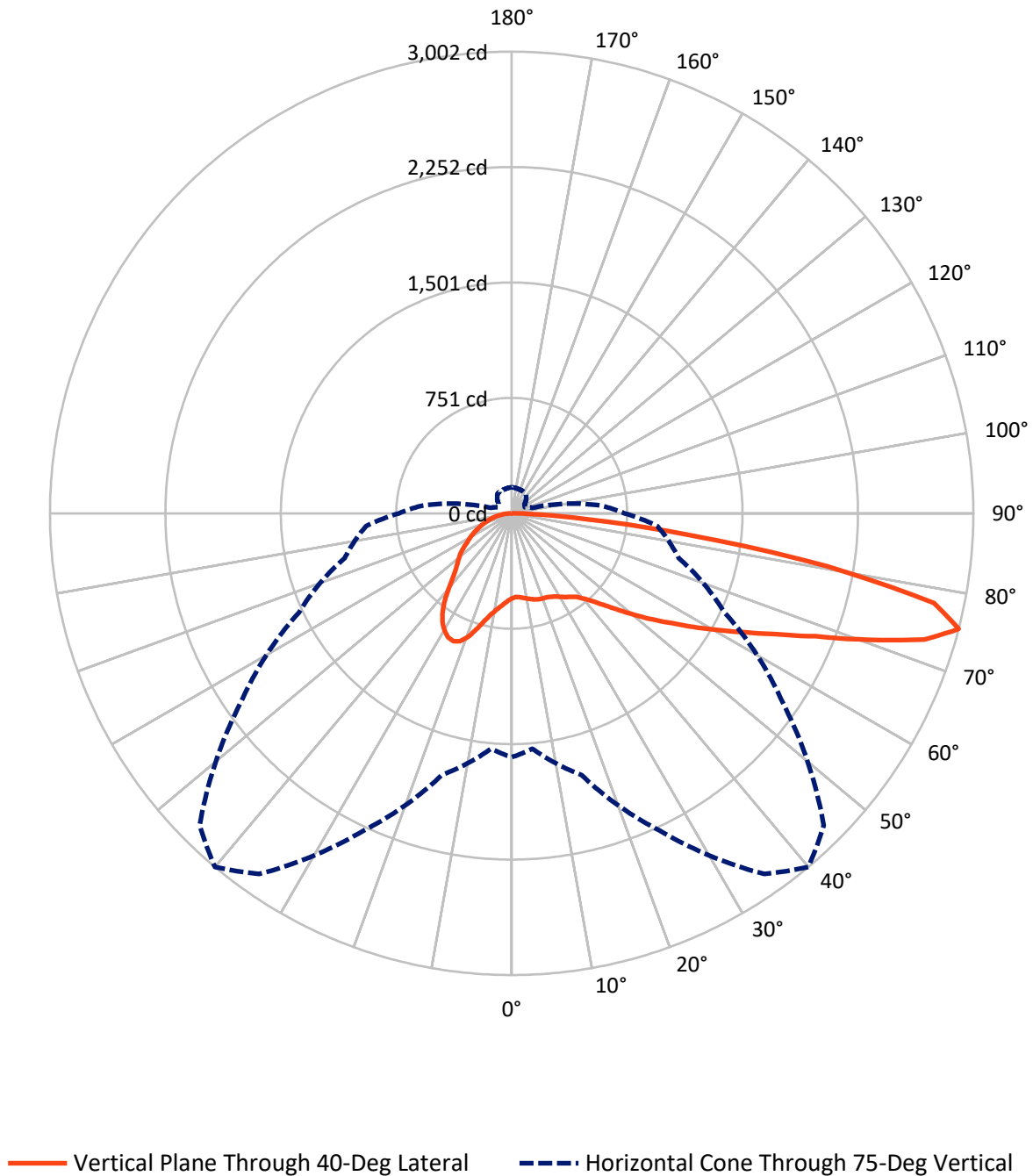
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1494.5	0.0	1494.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3329.1	0.0	3329.1
	% Fixture	69.0	0.0	69.0
Total	Lumens	4823.7	0.0	4823.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.1
10°-20°	184.9	3.8
20°-30°	337.5	7.0
30°-40°	478.7	9.9
40°-50°	646.4	13.4
50°-60°	869.6	18.0
60°-70°	1103.7	22.9
70°-80°	1001.7	20.8
80°-90°	146.0	3.0
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°	4823.7	100.0
0°-180°	4823.7	100.0

Coefficient of Utilization



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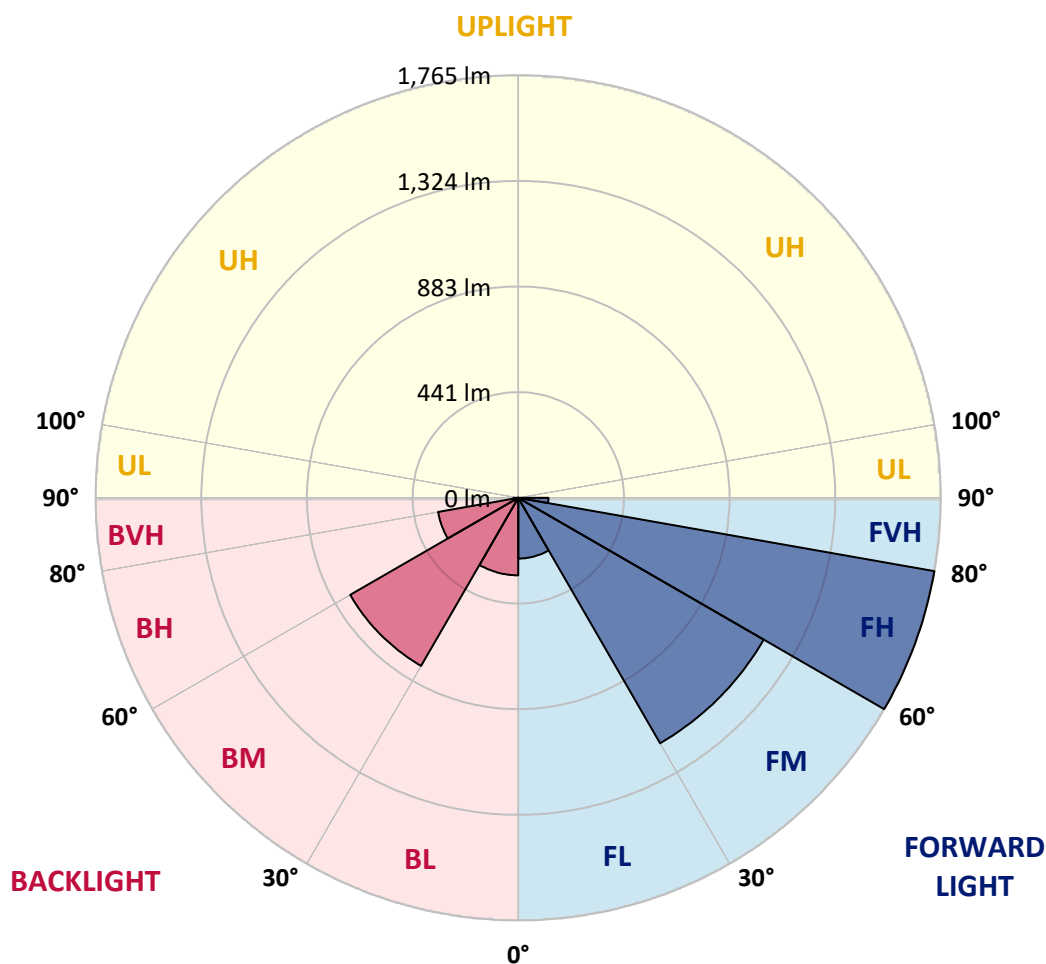
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.7	5.3			
FM	(30°-60°)	1184.1	24.5			
FH	(60°-80°)	1765.4	36.6			G1/1800
FVH	(80°-90°)	125.9	2.6			G2/225
BL	(0°-30°)	323.7	6.7	B1/500		
BM	(30°-60°)	810.7	16.8	B1/1000		
BH	(60°-80°)	340.1	7.0	B1/500		G1/500
BVH	(80°-90°)	20.1	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6
2.5°	543.1	546.2	545.4	544.4	544.4	544.7	544.4	546.2	548.0	549.8	552.6
5°	548.8	551.9	550.3	549.0	548.0	547.8	546.9	546.7	547.8	550.0	553.9
7.5°	559.8	562.8	560.6	558.2	556.2	555.1	554.1	552.6	551.9	553.1	558.5
10°	572.1	575.1	572.4	568.3	564.9	563.6	562.6	561.1	560.1	560.8	566.7
12.5°	584.4	587.4	583.5	577.9	573.6	572.9	571.5	571.0	570.8	570.5	576.4
15°	595.8	598.4	593.6	586.9	582.3	581.0	579.7	580.5	581.8	583.3	590.0
17.5°	604.9	607.4	600.2	591.5	587.1	586.6	585.9	588.5	592.0	595.8	604.0
20°	612.9	615.5	606.4	594.6	589.5	589.5	589.7	595.1	600.2	605.9	617.0
22.5°	624.5	626.6	615.3	599.2	591.7	592.2	594.3	599.7	606.1	613.8	629.3
25°	641.6	643.2	629.3	607.8	599.4	601.0	602.8	605.4	611.4	620.4	641.3
27.5°	669.3	670.6	652.4	623.2	610.4	612.9	615.5	613.8	616.5	624.2	651.1
30°	708.2	708.9	685.9	647.3	629.1	630.4	630.9	623.5	618.1	624.2	658.0
32.5°	754.2	754.0	726.6	676.4	650.4	649.0	644.7	630.2	617.6	623.0	664.2
35°	825.6	822.8	787.5	717.4	674.3	666.5	656.2	637.6	620.1	621.7	669.5
37.5°	943.8	935.1	886.2	784.4	710.2	690.0	674.9	649.5	625.8	621.2	675.9
40°	1077.1	1066.1	1012.4	876.3	763.9	731.4	707.1	666.8	635.0	623.5	685.4
42.5°	1235.2	1219.5	1161.7	984.5	832.0	784.9	748.4	688.5	648.5	630.9	698.2
45°	1429.4	1408.7	1326.8	1106.5	917.7	855.1	806.2	721.5	669.3	645.2	717.4
47.5°	1625.6	1630.7	1514.3	1246.2	1020.6	941.5	878.5	771.1	699.5	668.3	748.4
50°	1834.1	1837.7	1700.8	1401.0	1137.2	1039.2	959.9	826.7	741.4	701.0	794.7
52.5°	1996.8	1997.3	1870.2	1562.9	1258.7	1146.7	1047.7	890.1	790.1	744.5	856.3
55°	2098.7	2097.4	1988.9	1716.2	1398.4	1259.5	1144.9	962.2	849.4	795.7	933.8
57.5°	2172.6	2168.8	2070.8	1848.0	1547.3	1392.8	1254.9	1044.1	919.5	856.6	1035.9
60°	2200.8	2198.4	2126.3	1961.7	1703.9	1540.2	1381.8	1135.7	999.1	928.4	1167.2
62.5°	2211.4	2215.8	2180.8	2072.0	1871.4	1703.3	1521.2	1245.2	1088.6	1009.8	1305.5
65°	2249.4	2257.3	2250.1	2216.4	2060.8	1894.5	1706.2	1375.3	1186.3	1097.1	1450.1
67.5°	2324.3	2332.3	2335.3	2389.1	2292.1	2132.7	1936.9	1537.6	1300.7	1187.6	1558.8
70°	2322.5	2320.2	2374.4	2526.4	2581.7	2462.5	2248.0	1737.2	1437.0	1262.8	1572.7
72.5°	2114.0	2095.6	2223.7	2524.9	2822.6	2806.9	2628.0	1994.5	1554.7	1272.0	1364.7
75°	1586.0	1536.8	1763.2	2275.4	2862.8	3002.3	2869.5	2154.1	1526.8	1123.9	949.7
77.5°	678.2	628.8	895.6	1684.5	2562.2	2806.6	2648.0	1879.4	1218.8	743.2	466.4
80°	177.5	177.3	270.7	763.7	1742.5	2072.5	1818.2	1213.7	696.4	265.6	128.6
82.5°	73.4	71.6	99.5	297.0	851.5	1163.1	949.1	541.4	251.5	71.9	42.7
85°	27.4	27.2	48.4	102.6	300.3	479.7	347.2	138.4	62.7	35.1	19.2
87.5°	7.7	7.4	10.5	35.6	73.2	111.0	59.3	22.8	17.6	13.8	5.6
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°	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6
2.5°	553.4	554.6	557.0	558.7	561.1	563.6	567.2	569.5	571.8	573.4	572.4
5°	555.7	558.5	564.4	570.3	577.2	583.5	591.0	596.3	600.8	602.0	602.5
7.5°	560.8	565.4	575.4	585.4	596.3	606.9	617.6	626.8	634.3	637.0	637.3
10°	569.8	575.8	590.0	604.0	618.6	634.8	648.5	661.8	672.3	676.7	676.9
12.5°	581.0	588.7	607.1	626.6	646.8	669.0	687.0	703.4	716.4	722.2	722.2
15°	595.6	605.6	629.1	655.2	684.9	715.9	738.6	756.8	771.3	778.5	778.0
17.5°	611.4	624.7	654.5	693.8	736.3	776.9	803.6	816.9	832.0	838.9	838.7
20°	626.8	643.2	685.6	742.9	799.5	842.8	864.2	867.8	868.8	869.6	871.7
22.5°	642.7	664.7	724.8	804.8	865.5	895.4	898.5	883.1	861.7	851.7	854.5
25°	660.1	689.2	775.9	873.2	922.3	925.9	902.3	865.0	824.3	805.6	808.4
27.5°	676.9	717.6	837.3	938.4	963.2	931.7	881.1	828.2	779.0	759.3	761.7
30°	693.8	750.1	905.2	995.5	982.0	917.2	847.6	788.5	739.1	718.4	720.7
32.5°	710.9	788.0	983.2	1036.7	978.6	886.2	805.9	743.9	700.5	678.8	681.5
35°	730.4	834.6	1057.1	1059.1	956.3	840.7	750.9	690.7	652.9	635.5	639.4
37.5°	755.7	893.7	1122.4	1064.8	917.5	773.9	682.5	627.8	596.7	588.7	594.3
40°	787.2	964.7	1172.3	1055.9	859.9	692.8	607.8	564.2	546.4	548.3	554.4
42.5°	828.2	1044.4	1207.3	1032.8	779.8	609.2	542.4	523.0	531.4	538.5	545.2
45°	881.4	1127.0	1229.1	993.6	689.2	538.3	503.8	508.4	514.8	515.5	520.6
47.5°	949.5	1210.6	1243.4	934.6	596.9	488.4	479.2	480.2	479.0	473.6	477.6
50°	1034.3	1292.0	1256.1	856.3	518.3	457.2	445.0	441.4	423.6	406.3	408.6
52.5°	1131.1	1366.7	1261.6	759.1	457.2	431.1	411.1	388.6	355.6	350.2	352.0
55°	1238.5	1435.8	1247.7	639.6	405.8	397.6	367.4	340.3	336.7	332.1	332.8
57.5°	1366.9	1510.2	1219.5	506.4	353.0	358.4	329.0	332.1	325.6	318.6	317.2
60°	1507.4	1587.2	1170.2	384.8	298.6	309.5	319.1	318.8	317.0	311.1	309.0
62.5°	1633.7	1637.8	1073.0	294.7	250.7	271.7	297.6	297.2	295.7	292.4	291.1
65°	1709.0	1630.3	910.8	232.1	211.4	240.5	268.3	270.4	270.7	270.4	270.4
67.5°	1695.7	1540.4	688.2	184.7	178.9	208.8	239.4	242.3	244.4	244.9	245.4
70°	1545.3	1343.2	448.7	147.4	150.0	180.9	212.1	214.9	216.7	218.7	219.8
72.5°	1204.5	987.6	256.9	119.2	124.6	156.8	185.0	188.3	189.3	193.1	194.6
75°	734.0	580.8	138.7	93.9	102.3	134.1	158.2	162.0	163.7	168.3	168.8
77.5°	349.0	251.5	79.0	73.2	82.4	109.5	133.6	137.9	133.0	135.6	133.6
80°	118.0	93.4	49.9	55.8	62.9	85.5	106.9	111.3	101.1	100.6	99.5
82.5°	41.2	37.8	31.8	37.1	40.7	61.2	80.9	86.5	75.2	74.9	71.3
85°	16.1	15.4	17.6	20.2	24.3	37.6	53.2	56.1	46.3	37.3	36.8
87.5°	3.3	3.6	4.3	4.6	7.4	13.0	19.2	23.6	18.7	15.9	14.6
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)