

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: P882467

Luminaire Tested: **NAV-SB2B-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9595 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

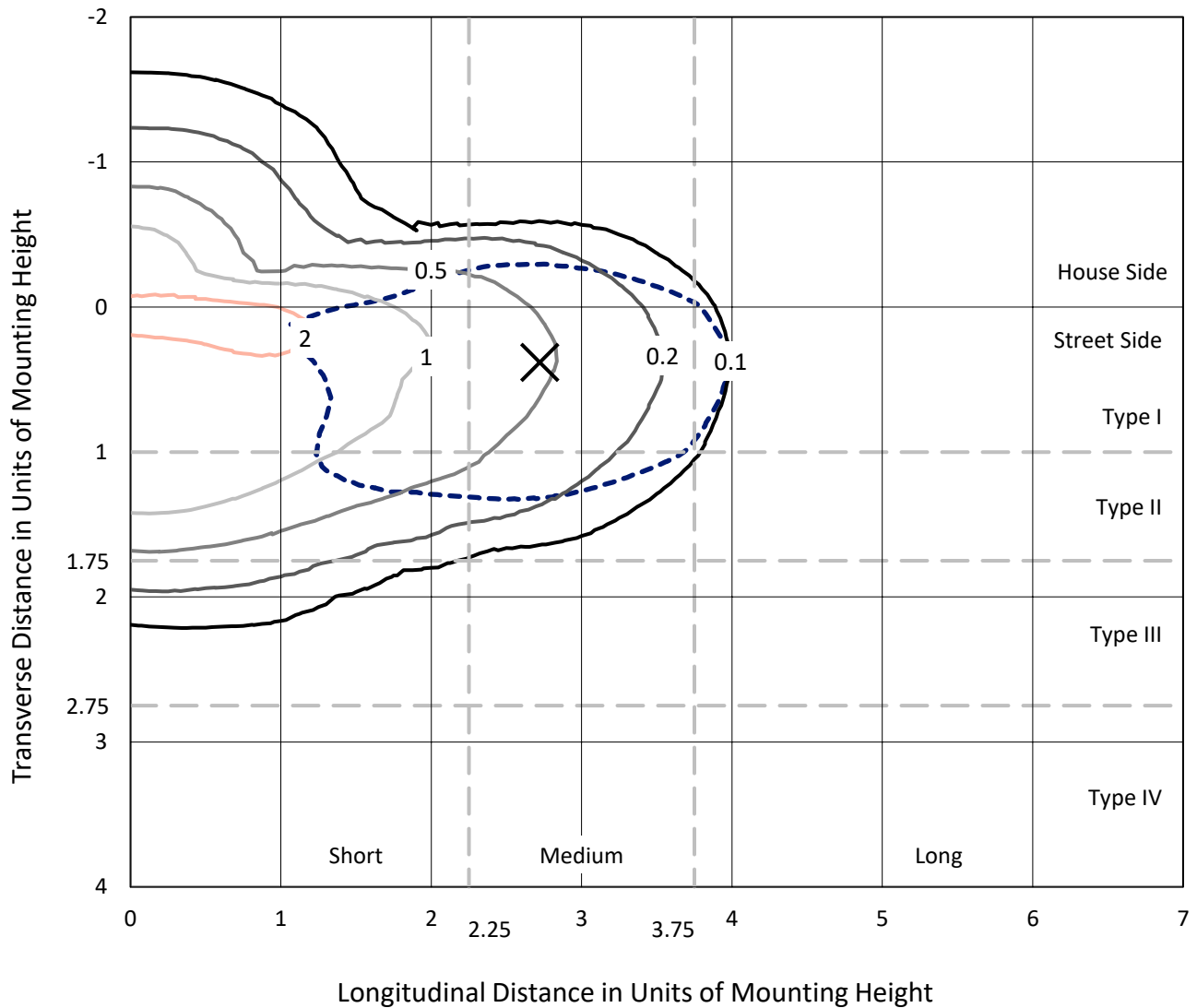
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

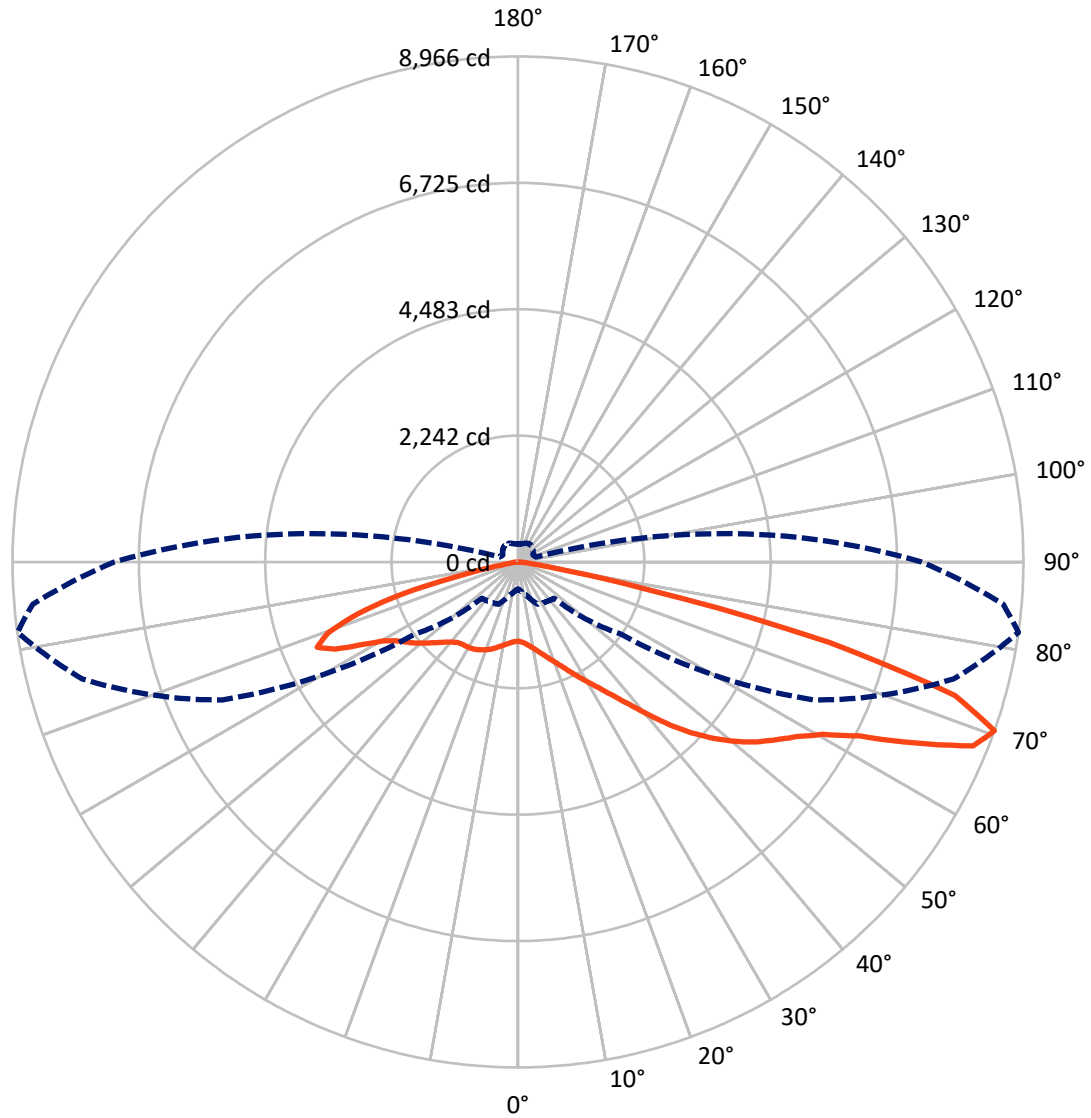
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2365.4	0.0	2365.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	7229.6	0.0	7229.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	9595.0	0.0	9595.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.8	1.4
10°-20°	381.6	4.0
20°-30°	638.4	6.7
30°-40°	997.3	10.4
40°-50°	1588.4	16.6
50°-60°	2210.4	23.0
60°-70°	2312.2	24.1
70°-80°	1208.5	12.6
80°-90°	125.5	1.3
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°	9595.0	100.0
0°-180°	9595.0	100.0

Coefficient of Utilization

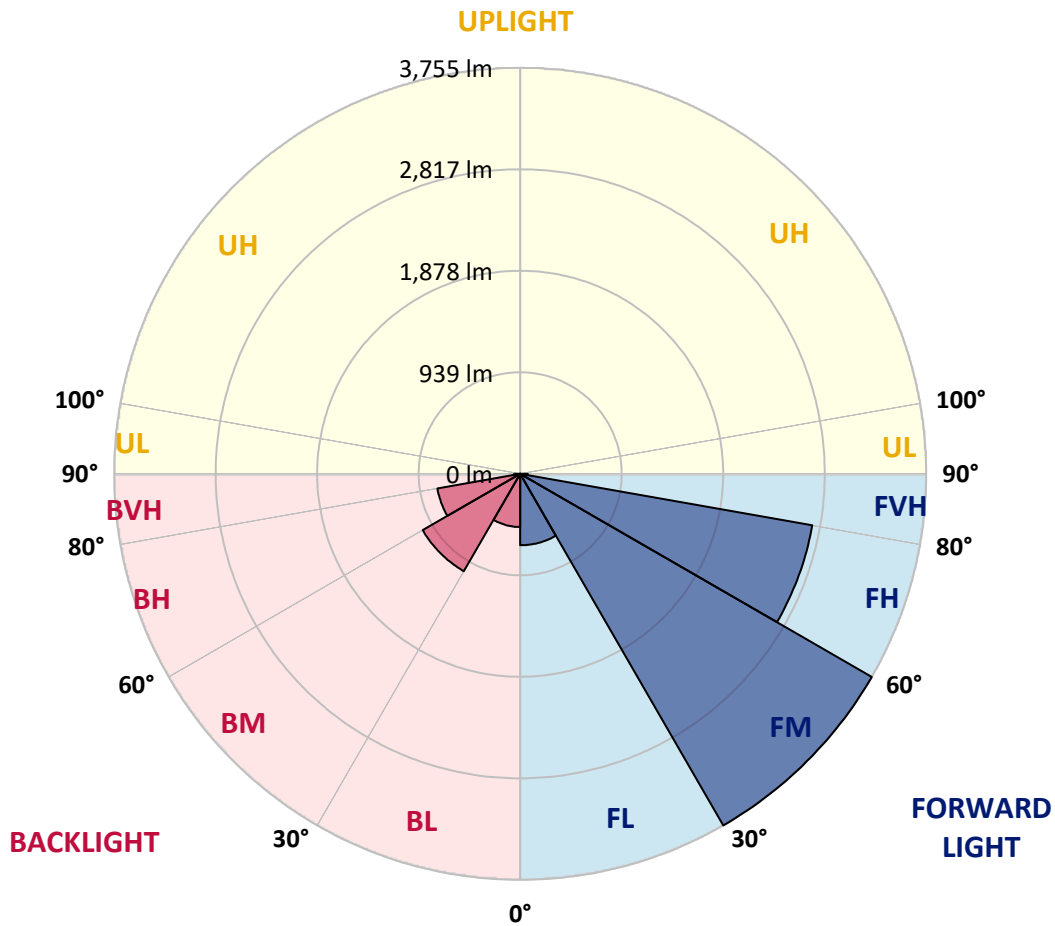


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	660.7	6.9			
FM (30°-60°)	3755.4	39.1			
FH (60°-80°)	2743.2	28.6			G2/5000
FVH (80°-90°)	70.2	0.7			G1/100
BL (0°-30°)	492.1	5.1	B1/500		
BM (30°-60°)	1040.7	10.8	B2/2500		
BH (60°-80°)	777.4	8.1	B2/1000		G2/1000
BVH (80°-90°)	55.2	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 II Medium



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CATALOG NUMBER: NAV-SB2B-835-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7
2.5°	1440.4	1448.5	1446.0	1443.4	1443.4	1439.8	1439.3	1434.2	1430.2	1423.5	1422.0
5°	1458.7	1467.3	1466.3	1468.4	1475.0	1476.5	1478.0	1475.0	1466.8	1458.7	1455.1
7.5°	1442.4	1452.1	1455.1	1467.3	1487.7	1506.0	1519.8	1525.4	1517.7	1506.0	1500.4
10°	1387.4	1398.1	1408.8	1437.8	1474.0	1517.2	1553.9	1575.8	1574.3	1563.1	1553.4
12.5°	1275.9	1287.1	1310.0	1366.5	1432.7	1509.1	1577.3	1623.1	1638.9	1630.8	1614.0
15°	1186.8	1196.5	1213.8	1271.8	1357.9	1474.0	1586.0	1675.1	1715.3	1710.7	1690.3
17.5°	1184.3	1188.3	1199.0	1226.5	1292.7	1419.0	1576.8	1726.0	1802.9	1802.3	1776.9
20°	1229.1	1230.6	1236.7	1242.3	1280.0	1377.2	1553.4	1768.2	1901.1	1901.1	1873.6
22.5°	1291.2	1290.2	1296.3	1291.2	1309.5	1373.7	1538.6	1805.4	2010.6	2018.7	1984.1
25°	1384.3	1379.3	1377.7	1366.0	1369.6	1406.7	1554.9	1847.7	2140.4	2157.2	2113.9
27.5°	1508.6	1500.4	1494.8	1467.8	1458.7	1475.0	1604.8	1898.6	2285.0	2314.0	2259.0
30°	1670.5	1655.7	1647.6	1600.7	1567.6	1570.2	1680.2	1966.3	2436.2	2483.1	2413.3
32.5°	1891.4	1868.5	1846.6	1769.8	1709.2	1689.3	1777.4	2060.0	2600.2	2675.0	2585.4
35°	2138.9	2120.6	2097.1	1978.5	1885.3	1839.5	1908.8	2190.8	2792.1	2910.7	2794.1
37.5°	2377.2	2361.4	2372.6	2212.7	2092.6	2025.9	2080.8	2366.5	3028.9	3204.0	3055.8
40°	2623.6	2611.4	2612.9	2460.2	2320.1	2245.3	2289.6	2586.9	3300.2	3552.8	3370.5
42.5°	2891.4	2882.2	2851.7	2716.2	2558.9	2489.2	2529.9	2841.5	3591.5	3949.9	3715.7
45°	3191.3	3185.7	3157.2	3001.9	2821.6	2743.2	2798.2	3122.5	3884.2	4323.6	4062.4
47.5°	3450.4	3455.0	3451.4	3320.6	3133.7	3018.7	3084.4	3415.8	4156.6	4674.9	4394.9
50°	3575.2	3599.1	3634.2	3593.5	3477.4	3360.3	3373.0	3698.9	4416.3	5004.3	4713.6
52.5°	3510.0	3555.3	3651.0	3716.2	3761.0	3736.6	3702.4	3979.9	4660.6	5301.6	5015.0
55°	3267.1	3330.8	3489.6	3647.0	3875.6	4053.2	4098.0	4291.5	4898.9	5563.3	5300.1
57.5°	2824.7	2928.0	3070.6	3388.8	3773.7	4206.5	4559.3	4723.8	5151.5	5842.9	5598.5
60°	2066.1	2204.6	2381.7	2855.2	3417.3	4124.5	4951.9	5387.7	5510.4	6204.9	5986.9
62.5°	1322.2	1407.8	1570.7	2016.7	2662.8	3704.5	5072.0	6217.6	6118.8	6798.5	6569.4
65°	905.2	960.2	1109.4	1359.9	1721.4	2757.5	4750.3	6839.8	7085.2	7739.4	7565.3
67.5°	657.8	699.6	826.8	1046.3	1121.6	1631.8	3686.2	6811.2	8024.5	8708.8	8437.9
70°	479.6	509.1	616.1	826.8	863.0	907.8	2233.1	5789.9	8004.2	8966.4	8642.1
72.5°	355.4	375.7	447.5	641.5	698.5	613.0	1105.3	4208.0	6877.9	8110.1	7849.9
75°	257.1	272.4	325.3	490.8	559.0	466.9	551.4	2459.1	4797.6	5704.9	5750.7
77.5°	196.5	208.2	242.9	359.5	447.5	350.3	342.1	1131.3	2274.8	2286.0	2414.3
80°	157.8	165.5	184.3	253.0	343.2	262.2	223.0	456.7	718.9	608.4	638.5
82.5°	116.1	128.8	155.8	177.7	245.4	180.7	135.9	230.6	273.4	235.2	237.3
85°	66.2	74.8	94.2	127.3	156.8	110.5	77.9	102.3	127.3	104.4	93.2
87.5°	23.4	30.5	33.1	49.9	68.2	45.8	30.0	29.5	41.7	31.1	26.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P882467
 CATALOG NUMBER: NAV-SB2B-835-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7	1406.7
2.5°	1416.9	1414.4	1404.2	1390.5	1376.2	1362.5	1357.9	1348.2	1341.6	1338.0	1342.1
5°	1445.4	1437.3	1413.4	1382.8	1350.7	1316.1	1291.7	1269.3	1253.0	1237.7	1243.8
7.5°	1486.2	1471.9	1430.7	1377.2	1320.2	1262.7	1219.9	1187.3	1165.4	1151.2	1154.2
10°	1533.5	1511.6	1448.5	1368.6	1280.5	1198.0	1147.6	1119.6	1105.8	1098.2	1100.2
12.5°	1588.0	1556.9	1466.8	1348.7	1219.9	1125.7	1091.1	1082.9	1083.4	1084.0	1085.0
15°	1655.2	1611.9	1481.6	1305.4	1141.0	1070.2	1064.1	1077.3	1091.1	1097.7	1097.2
17.5°	1731.1	1670.0	1484.1	1234.1	1063.6	1034.6	1053.9	1082.4	1103.3	1112.5	1114.5
20°	1812.5	1729.0	1465.8	1133.3	999.9	1005.5	1040.2	1076.8	1099.7	1111.4	1114.5
22.5°	1905.7	1792.2	1422.0	1027.4	948.0	974.0	1014.7	1050.4	1074.3	1086.0	1089.0
25°	2012.1	1862.9	1353.3	938.3	903.2	938.3	979.1	1008.6	1027.9	1038.6	1041.7
27.5°	2130.2	1936.8	1261.6	867.6	864.0	901.7	935.3	958.2	968.4	976.5	979.6
30°	2248.9	2004.0	1150.7	814.1	829.9	865.5	889.5	899.6	902.7	904.2	907.8
32.5°	2377.2	2062.0	1034.1	769.8	797.3	830.4	844.7	849.2	835.0	825.3	828.4
35°	2532.5	2124.1	920.0	734.7	765.2	793.7	798.3	794.3	777.5	757.6	758.6
37.5°	2724.4	2201.5	828.9	709.7	735.2	754.0	748.4	747.4	748.9	725.5	727.0
40°	2959.6	2302.3	762.2	690.4	710.8	714.8	699.0	707.7	715.3	679.7	680.7
42.5°	3220.8	2424.0	719.9	677.2	690.4	680.7	656.3	666.0	664.9	618.1	617.6
45°	3487.1	2556.4	705.2	667.5	671.6	652.2	625.2	627.8	606.4	564.1	565.7
47.5°	3751.8	2698.4	714.3	659.3	648.1	626.2	605.4	594.2	562.6	531.0	531.0
50°	4011.5	2847.6	747.9	643.0	616.1	603.3	588.1	568.2	534.6	507.6	505.6
52.5°	4252.3	2997.8	785.6	616.1	575.8	583.5	573.8	550.9	517.8	490.3	490.8
55°	4480.4	3148.0	800.4	578.9	538.2	566.2	560.6	518.3	478.6	456.2	454.2
57.5°	4728.9	3328.7	784.1	531.5	507.6	546.3	524.9	478.1	455.2	438.4	436.8
60°	5073.0	3612.3	748.9	473.0	478.6	516.8	480.1	460.8	435.8	417.0	416.0
62.5°	5644.8	4141.3	692.4	414.9	444.5	473.0	458.7	439.4	413.9	395.6	395.6
65°	6490.0	4876.5	586.0	369.6	406.3	430.2	435.8	416.5	390.0	370.7	371.7
67.5°	7202.8	5337.8	443.5	332.0	367.1	395.6	411.4	392.5	364.5	345.7	346.2
70°	7163.6	5002.8	338.6	294.8	332.5	361.5	381.9	367.1	337.0	319.2	320.8
72.5°	6362.7	4185.1	273.9	257.1	297.3	325.8	350.3	339.1	308.5	291.2	291.2
75°	4674.4	2970.8	218.9	218.9	253.6	288.7	315.7	308.5	280.5	268.3	264.8
77.5°	1970.4	1246.4	171.6	181.8	210.8	247.9	281.6	284.1	259.7	274.9	249.5
80°	523.9	343.7	130.8	143.1	165.5	204.7	244.9	243.9	217.4	203.1	188.9
82.5°	199.6	135.4	93.2	100.8	119.6	156.8	194.0	200.1	173.6	150.2	150.2
85°	76.9	58.0	57.5	60.6	69.8	103.9	146.6	151.7	130.8	111.0	114.6
87.5°	19.9	17.3	21.4	20.4	32.1	55.5	84.0	87.1	79.9	46.3	66.2
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)