

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: P882126

Luminaire Tested: **NAV-SB1D-835-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882126  
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-SB1D-835-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH  
HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

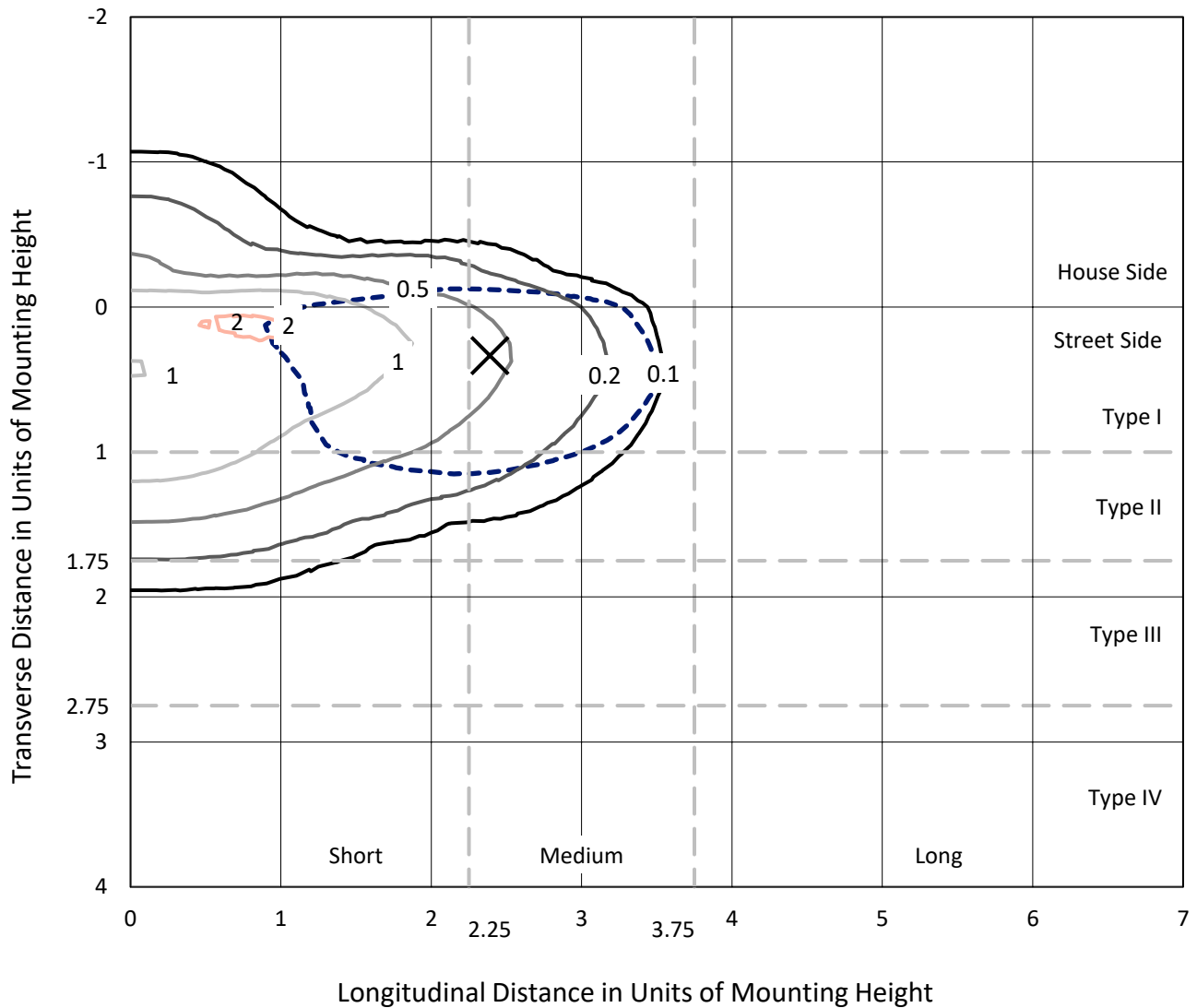
Lumens per Lamp: N/A  
Luminaire Lumens: 6275 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 79.6  
Input Voltage (V): 120.0  
Input Current (Ain): 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

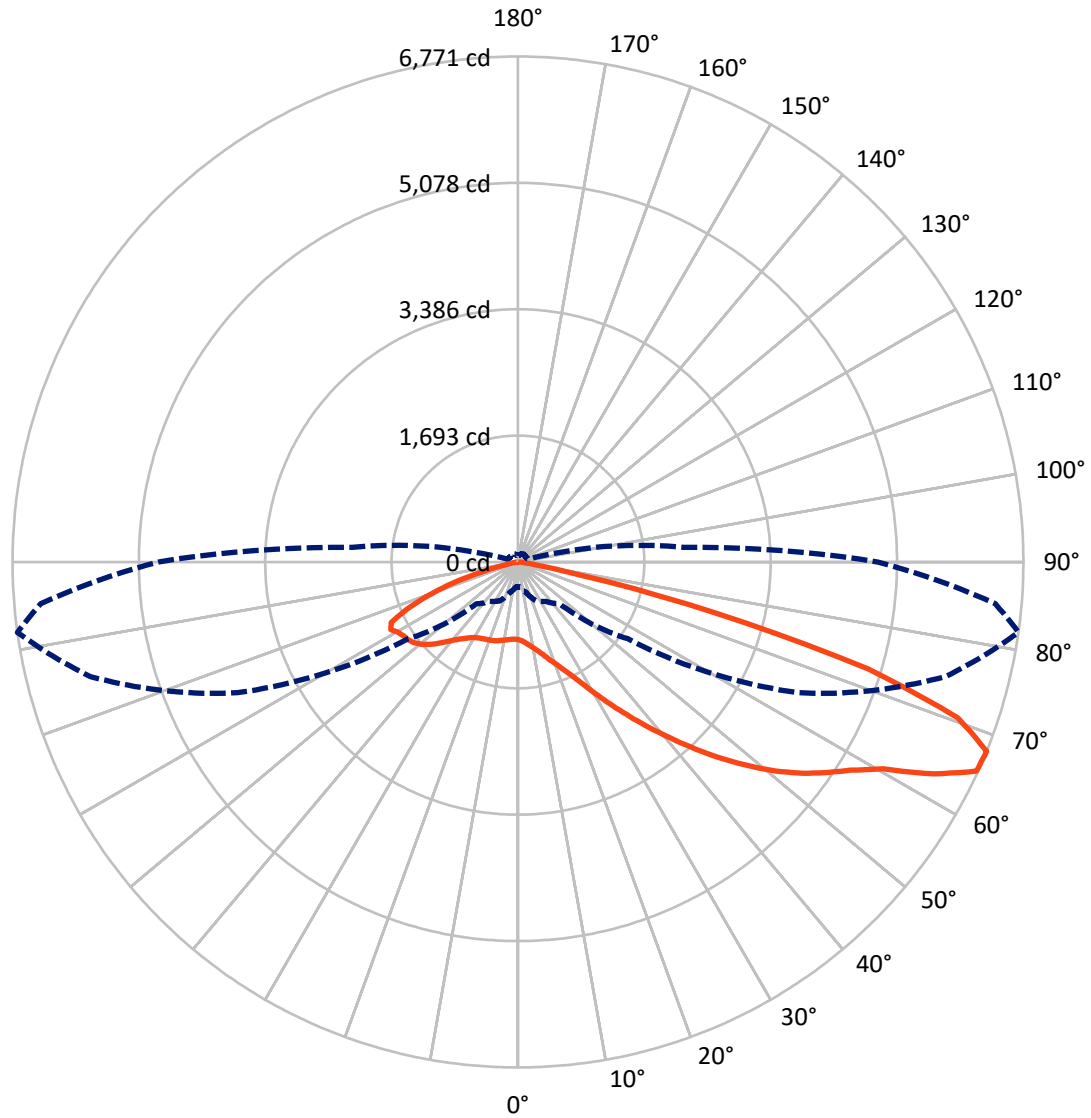
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1136.7	0.0	1136.7
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	5138.3	0.0	5138.3
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	6275.0	0.0	6275.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.6	1.5
10°-20°	240.7	3.8
20°-30°	385.5	6.1
30°-40°	681.6	10.9
40°-50°	1194.3	19.0
50°-60°	1592.9	25.4
60°-70°	1482.9	23.6
70°-80°	569.1	9.1
80°-90°	35.4	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°	6275.0	100.0
0°-180°	6275.0	100.0

**Coefficient of Utilization**



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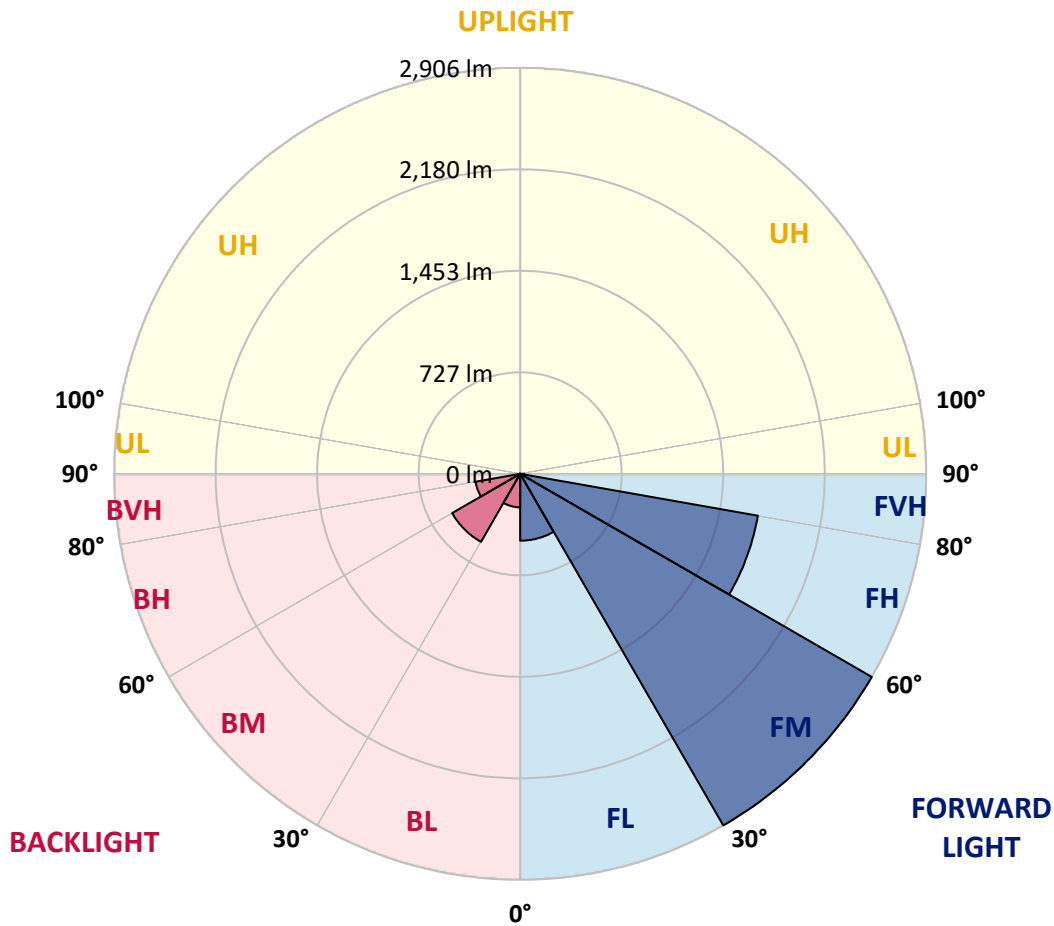
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	478.7	7.6			
FM (30°-60°)	2906.3	46.3			
FH (60°-80°)	1727.6	27.5			G1/1800
FVH (80°-90°)	25.7	0.4			G1/100
BL (0°-30°)	240.1	3.8	B1/500		
BM (30°-60°)	562.5	9.0	B1/1000		
BH (60°-80°)	324.4	5.2	B1/500		G1/500
BVH (80°-90°)	9.6	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°	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6
2.5°	1098.7	1105.1	1101.4	1099.6	1096.5	1092.0	1088.3	1077.1	1065.3	1057.6	1054.9
5°	1120.9	1127.2	1126.7	1128.6	1130.8	1132.2	1131.3	1118.6	1101.9	1088.8	1081.1
7.5°	1101.9	1109.1	1115.0	1124.0	1139.9	1156.6	1164.7	1162.0	1144.8	1126.7	1117.3
10°	1048.1	1055.8	1069.8	1091.1	1124.5	1160.6	1190.9	1204.9	1194.1	1174.2	1161.1
12.5°	949.7	957.3	984.9	1031.0	1087.0	1149.8	1207.6	1245.1	1247.8	1227.9	1212.6
15°	839.0	846.6	876.0	933.8	1019.2	1120.0	1216.7	1287.6	1311.5	1294.4	1275.8
17.5°	770.3	777.1	799.2	845.7	934.7	1060.3	1213.5	1332.8	1387.4	1373.9	1351.7
20°	749.5	755.4	765.8	798.3	872.4	998.4	1192.7	1375.2	1469.2	1461.5	1436.7
22.5°	771.6	777.1	780.2	794.7	841.2	957.8	1166.5	1418.6	1564.1	1565.0	1534.7
25°	822.7	828.1	824.5	833.5	853.9	945.1	1156.6	1469.7	1683.3	1693.3	1659.0
27.5°	906.7	907.2	898.6	898.1	901.3	964.1	1167.0	1524.3	1833.8	1852.3	1809.8
30°	1075.2	1068.5	1035.5	999.8	983.5	1021.0	1195.9	1588.9	2011.3	2044.3	1991.0
32.5°	1335.0	1325.1	1264.5	1179.2	1093.3	1112.7	1247.8	1662.6	2204.7	2264.3	2199.3
35°	1616.9	1614.2	1551.0	1424.0	1274.0	1243.3	1332.3	1759.2	2415.7	2510.6	2433.3
37.5°	1879.0	1877.6	1841.5	1691.9	1509.4	1425.4	1467.8	1885.7	2641.6	2778.9	2687.7
40°	2118.4	2122.5	2086.3	1952.6	1768.7	1659.0	1652.2	2042.1	2892.8	3071.2	2962.8
42.5°	2325.3	2329.9	2293.3	2194.3	2024.9	1917.4	1878.5	2233.6	3138.1	3385.2	3256.9
45°	2465.8	2493.8	2488.4	2409.4	2287.8	2176.2	2150.5	2474.0	3417.7	3718.2	3567.7
47.5°	2505.6	2531.3	2572.0	2582.8	2508.8	2399.0	2429.7	2763.6	3700.6	4051.6	3880.4
50°	2407.6	2431.5	2516.0	2628.5	2680.0	2646.1	2701.2	3073.9	3990.2	4384.1	4187.1
52.5°	2214.2	2238.6	2345.2	2523.2	2733.3	2839.9	2973.6	3379.8	4270.7	4699.0	4477.6
55°	1934.5	1960.3	2097.2	2298.7	2631.6	2919.9	3200.9	3685.2	4527.8	4982.3	4739.7
57.5°	1554.1	1573.1	1715.4	1997.3	2375.9	2840.4	3368.5	4018.6	4769.9	5260.6	4999.4
60°	1012.9	1029.6	1195.0	1509.4	1952.2	2574.7	3401.9	4390.4	5091.6	5622.5	5349.6
62.5°	673.6	684.9	782.9	1013.8	1374.8	2064.7	3206.3	4687.3	5563.3	6252.2	5950.0
65°	462.2	473.5	571.5	732.3	888.2	1365.7	2643.8	4648.0	5990.7	6752.4	6395.0
67.5°	329.8	339.3	422.4	574.2	642.9	793.3	1792.2	4145.6	5929.2	6771.3	6418.9
70°	236.3	241.7	310.4	447.3	511.0	476.6	996.6	3170.6	5191.5	6252.7	5930.1
72.5°	165.4	167.2	215.5	340.6	411.6	347.9	474.4	2113.9	3926.5	4907.7	4597.4
75°	112.0	114.3	145.0	249.8	330.3	265.6	251.2	1133.5	2305.0	2716.6	2435.1
77.5°	68.7	69.6	93.5	170.8	247.1	202.4	161.7	480.2	891.8	875.6	746.3
80°	38.9	38.9	59.6	106.2	168.5	130.6	113.4	204.2	282.4	248.0	218.7
82.5°	21.7	22.1	43.4	66.0	111.6	77.3	62.3	94.4	122.0	108.0	94.0
85°	9.0	9.9	26.7	31.2	53.3	38.4	25.3	39.8	45.2	40.2	29.4
87.5°	0.9	1.4	8.1	5.9	6.3	7.7	3.6	7.7	6.3	6.3	4.5
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°	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6	1039.6
2.5°	1046.3	1039.6	1022.4	1002.5	976.3	963.7	946.5	934.7	924.8	925.7	916.7
5°	1066.7	1049.5	1011.1	963.2	903.6	861.1	815.9	784.7	759.4	754.0	741.8
7.5°	1094.7	1067.6	1000.2	914.0	813.2	736.9	668.6	624.8	593.6	583.7	573.8
10°	1130.8	1091.5	986.2	852.1	707.0	609.9	536.7	502.4	481.2	473.9	468.5
12.5°	1172.8	1119.1	967.7	776.6	597.7	504.2	457.7	440.5	433.7	431.5	430.1
15°	1225.7	1153.4	939.7	687.2	505.1	439.6	419.7	417.4	418.4	417.4	417.0
17.5°	1288.5	1190.9	894.1	595.0	442.7	406.6	399.4	401.2	403.4	403.0	402.1
20°	1357.2	1227.9	835.8	513.2	400.3	383.1	379.0	380.9	382.7	381.8	381.3
22.5°	1435.3	1267.7	771.2	449.5	371.8	361.4	356.9	357.4	357.4	355.6	354.7
25°	1528.8	1311.5	703.4	404.3	350.1	342.0	336.6	334.8	332.1	326.6	325.7
27.5°	1640.4	1358.1	638.4	372.7	333.0	325.3	319.0	314.4	307.7	298.6	297.7
30°	1766.0	1414.5	583.3	352.8	319.4	311.7	304.5	297.7	287.8	276.5	275.6
32.5°	1913.8	1475.1	543.0	339.7	307.2	299.1	290.5	282.4	271.5	260.2	260.7
35°	2090.0	1548.3	519.6	330.7	297.7	286.9	277.4	268.4	260.2	250.3	249.4
37.5°	2281.1	1626.0	512.3	326.2	291.4	274.7	263.8	257.5	256.6	250.7	250.3
40°	2490.2	1718.1	517.7	323.5	284.6	262.9	251.2	249.8	252.1	241.7	242.2
42.5°	2711.6	1827.5	526.8	320.3	275.1	251.2	239.9	239.9	238.1	223.6	223.6
45°	2951.1	1953.5	535.8	312.6	263.8	239.4	230.9	227.7	220.0	206.0	205.6
47.5°	3192.3	2081.8	542.6	298.6	250.3	229.5	221.8	214.6	203.3	190.7	190.2
50°	3421.4	2197.0	535.4	277.8	234.9	220.0	211.9	201.9	189.7	181.2	179.8
52.5°	3626.0	2296.9	504.6	253.5	218.7	210.1	202.9	192.5	182.5	173.5	172.6
55°	3804.0	2377.7	450.4	230.4	204.2	201.5	194.3	181.2	167.6	159.9	159.0
57.5°	3974.8	2439.2	382.7	211.4	191.1	192.0	181.2	169.4	156.8	148.6	147.7
60°	4202.0	2521.4	314.0	193.8	177.1	179.8	168.1	159.5	143.7	133.3	131.9
62.5°	4565.3	2649.3	249.4	172.1	160.8	161.7	156.8	146.4	127.4	115.2	114.3
65°	4853.5	2602.3	196.5	148.6	142.3	143.7	143.7	132.4	112.0	98.0	96.7
67.5°	4821.0	2228.2	156.8	125.6	124.7	125.6	128.8	119.3	99.4	88.1	86.3
70°	4441.0	1772.3	125.6	104.4	108.4	106.2	115.2	108.9	89.5	78.2	76.8
72.5°	3623.8	1276.7	95.8	86.3	83.1	86.7	103.9	98.0	74.5	61.9	60.5
75°	2117.5	681.3	71.4	68.2	60.1	72.3	92.2	83.6	56.9	45.6	44.3
77.5°	689.4	237.6	52.4	50.1	44.7	58.3	78.6	70.5	46.5	36.1	34.8
80°	184.8	71.8	35.7	33.0	28.9	43.4	62.3	56.0	33.4	23.5	23.0
82.5°	74.1	30.3	20.8	18.5	15.8	29.8	49.2	45.2	24.8	14.9	14.9
85°	23.9	9.9	7.7	5.9	7.2	18.5	29.4	30.7	17.6	7.7	5.9
87.5°	3.2	1.4	1.4	1.8	1.4	3.2	9.0	8.6	5.0	0.9	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)