

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: P881604

Luminaire Tested: **NAV-SB1A-830-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-830-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

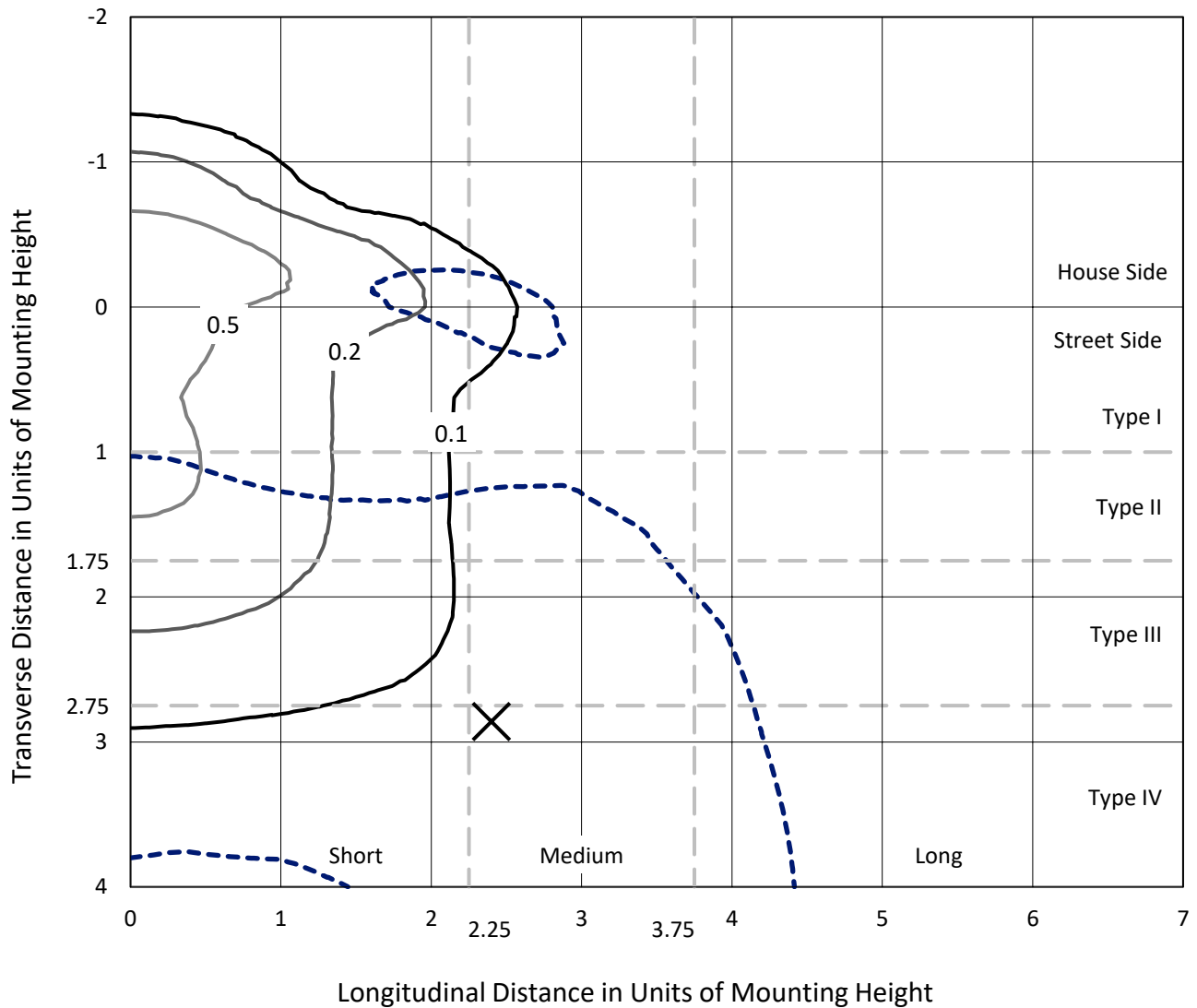
Lumens per Lamp: N/A  
Luminaire Lumens: 3894 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 6.356  
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

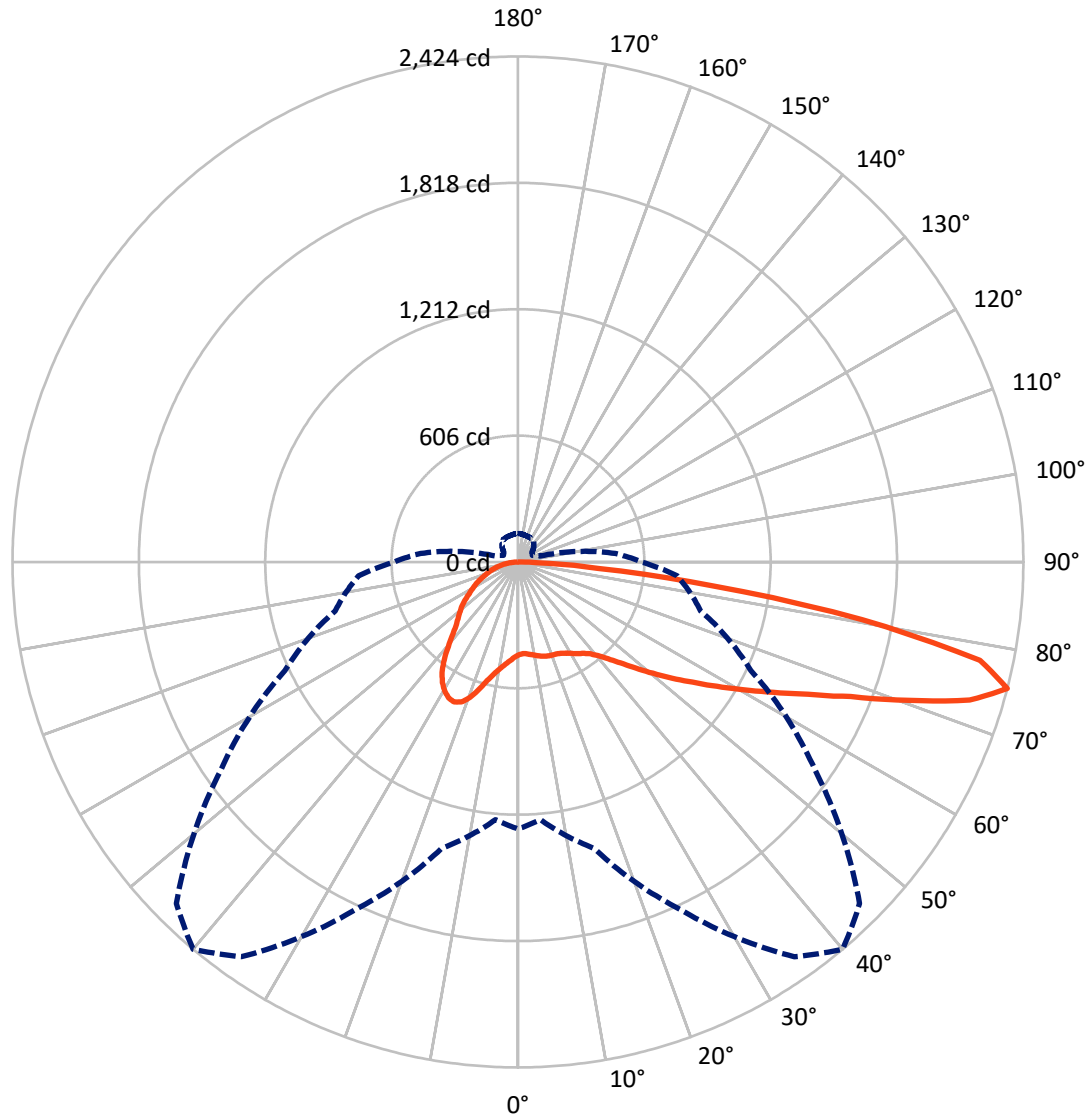
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1206.5	0.0	1206.5
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	2687.5	0.0	2687.5
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	3894.0	0.0	3894.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.4	1.1
10°-20°	149.2	3.8
20°-30°	272.5	7.0
30°-40°	386.5	9.9
40°-50°	521.8	13.4
50°-60°	702.0	18.0
60°-70°	891.0	22.9
70°-80°	808.6	20.8
80°-90°	117.9	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°	3894.0	100.0
0°-180°	3894.0	100.0

**Coefficient of Utilization**



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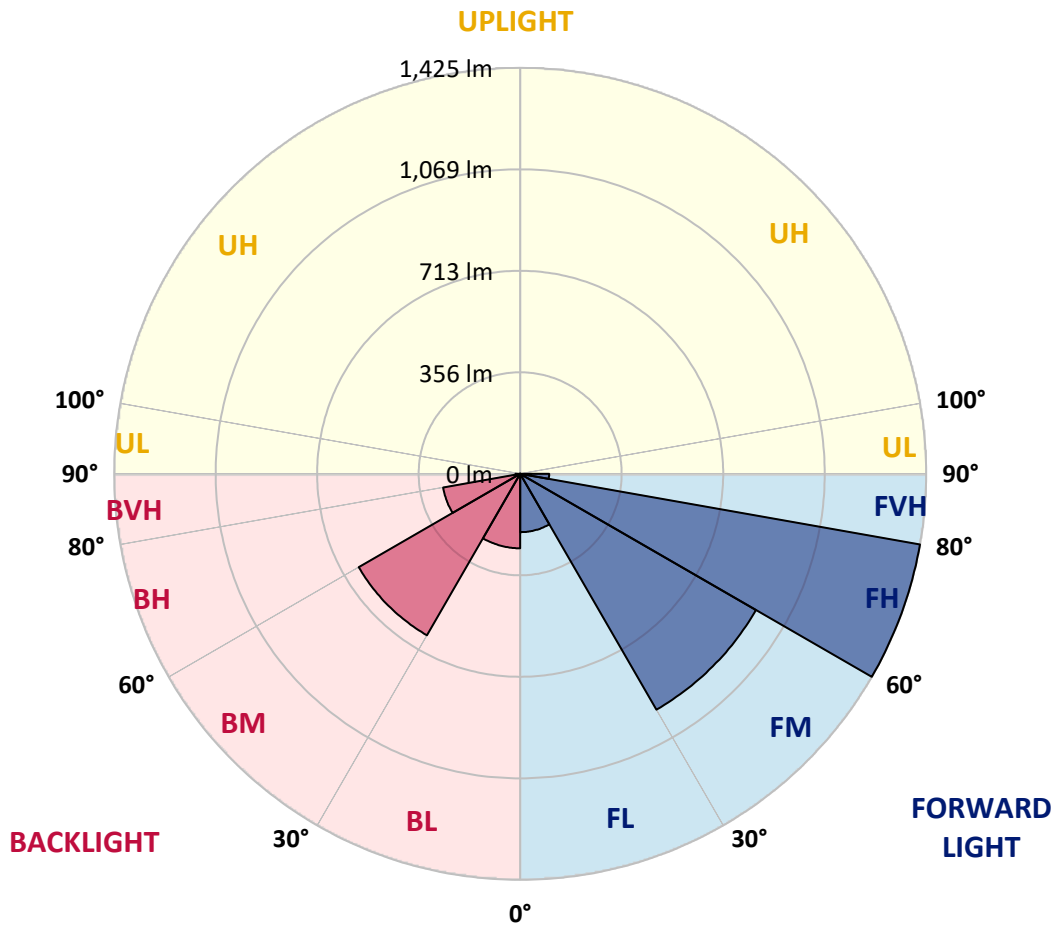
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	204.8	5.3			
FM (30°-60°)	955.9	24.5			
FH (60°-80°)	1425.1	36.6			G1/1800
FVH (80°-90°)	101.6	2.6			G2/225
BL (0°-30°)	261.3	6.7	B1/500		
BM (30°-60°)	654.4	16.8	B1/1000		
BH (60°-80°)	274.5	7.0	B1/500		G1/500
BVH (80°-90°)	16.2	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°	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3
2.5°	438.5	440.9	440.3	439.5	439.5	439.7	439.5	440.9	442.4	443.8	446.1
5°	443.0	445.5	444.3	443.2	442.4	442.2	441.6	441.4	442.2	444.0	447.1
7.5°	451.9	454.4	452.5	450.7	449.0	448.2	447.3	446.1	445.5	446.5	450.9
10°	461.8	464.3	462.0	458.7	456.0	455.0	454.2	452.9	452.1	452.7	457.5
12.5°	471.7	474.2	471.1	466.6	463.0	462.4	461.4	461.0	460.8	460.6	465.3
15°	481.0	483.1	479.2	473.8	470.1	469.0	468.0	468.6	469.7	470.9	476.3
17.5°	488.2	490.3	484.5	477.5	474.0	473.6	473.0	475.0	477.9	481.0	487.6
20°	494.9	496.9	489.5	480.0	475.9	475.9	476.1	480.4	484.5	489.1	498.2
22.5°	504.1	505.8	496.7	483.7	477.7	478.1	479.8	484.1	489.3	495.5	508.1
25°	518.0	519.2	508.1	490.7	483.9	485.1	486.6	488.7	493.6	500.8	517.8
27.5°	540.3	541.3	526.7	503.1	492.8	494.9	496.9	495.5	497.7	503.9	525.6
30°	571.7	572.3	553.7	522.5	507.9	508.9	509.3	503.3	499.0	503.9	531.2
32.5°	608.9	608.7	586.6	546.1	525.0	524.0	520.5	508.7	498.6	502.9	536.2
35°	666.5	664.2	635.7	579.1	544.4	538.0	529.8	514.7	500.6	501.9	540.5
37.5°	761.9	754.9	715.4	633.2	573.3	557.0	544.8	524.4	505.2	501.5	545.7
40°	869.5	860.6	817.2	707.4	616.7	590.5	570.9	538.2	512.6	503.3	553.3
42.5°	997.1	984.5	937.9	794.7	671.6	633.6	604.1	555.8	523.6	509.3	563.6
45°	1153.9	1137.2	1071.1	893.3	740.8	690.2	650.8	582.4	540.3	520.9	579.1
47.5°	1312.3	1316.4	1222.5	1006.0	823.9	760.0	709.2	622.5	564.7	539.5	604.1
50°	1480.6	1483.5	1373.0	1131.0	918.0	838.9	774.9	667.3	598.5	565.9	641.5
52.5°	1612.0	1612.4	1509.8	1261.7	1016.1	925.7	845.8	718.5	637.8	601.0	691.3
55°	1694.2	1693.2	1605.6	1385.4	1128.9	1016.8	924.2	776.8	685.7	642.3	753.8
57.5°	1753.9	1750.8	1671.7	1491.8	1249.1	1124.4	1013.0	842.9	742.3	691.5	836.3
60°	1776.6	1774.7	1716.5	1583.7	1375.5	1243.3	1115.5	916.8	806.5	749.5	942.2
62.5°	1785.3	1788.8	1760.5	1672.7	1510.8	1375.1	1228.0	1005.2	878.8	815.2	1053.9
65°	1815.8	1822.2	1816.5	1789.2	1663.6	1529.4	1377.4	1110.3	957.7	885.6	1170.6
67.5°	1876.3	1882.8	1885.2	1928.6	1850.3	1721.7	1563.7	1241.3	1050.0	958.7	1258.4
70°	1874.9	1873.0	1916.8	2039.5	2084.1	1987.9	1814.8	1402.4	1160.1	1019.4	1269.6
72.5°	1706.6	1691.7	1795.2	2038.3	2278.7	2265.9	2121.5	1610.1	1255.1	1026.9	1101.6
75°	1280.3	1240.6	1423.4	1836.9	2311.1	2423.7	2316.5	1739.0	1232.6	907.3	766.6
77.5°	547.5	507.7	723.1	1359.8	2068.4	2265.7	2137.6	1517.2	983.9	600.0	376.5
80°	143.3	143.1	218.5	616.5	1406.7	1673.1	1467.8	979.8	562.2	214.4	103.9
82.5°	59.3	57.8	80.3	239.8	687.3	938.9	766.2	437.0	203.0	58.0	34.5
85°	22.1	21.9	39.0	82.8	242.5	387.2	280.3	111.7	50.6	28.3	15.5
87.5°	6.2	6.0	8.5	28.7	59.1	89.6	47.9	18.4	14.3	11.2	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°	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3
2.5°	446.7	447.8	449.6	451.1	452.9	455.0	457.9	459.7	461.6	462.8	462.0
5°	448.6	450.9	455.6	460.4	465.9	471.1	477.1	481.4	484.9	486.0	486.4
7.5°	452.7	456.4	464.5	472.5	481.4	489.9	498.6	506.0	512.0	514.3	514.5
10°	459.9	464.9	476.3	487.6	499.4	512.4	523.6	534.3	542.8	546.3	546.5
12.5°	469.0	475.2	490.1	505.8	522.1	540.1	554.5	567.8	578.3	583.0	583.0
15°	480.8	488.9	507.9	528.9	552.9	577.9	596.3	610.9	622.7	628.5	628.1
17.5°	493.6	504.4	528.3	560.1	594.4	627.2	648.7	659.5	671.6	677.2	677.0
20°	506.0	519.2	553.5	599.8	645.4	680.3	697.7	700.6	701.4	702.0	703.7
22.5°	518.8	536.6	585.1	649.8	698.7	722.9	725.3	713.0	695.6	687.5	689.8
25°	532.9	556.4	626.4	704.9	744.5	747.4	728.4	698.3	665.4	650.4	652.6
27.5°	546.5	579.3	676.0	757.6	777.6	752.2	711.3	668.5	628.9	613.0	614.8
30°	560.1	605.6	730.7	803.6	792.7	740.4	684.2	636.5	596.7	579.9	581.8
32.5°	574.0	636.1	793.7	836.9	790.0	715.4	650.6	600.6	565.5	547.9	550.2
35°	589.7	673.7	853.4	855.0	772.0	678.7	606.2	557.6	527.1	513.0	516.1
37.5°	610.1	721.4	906.1	859.6	740.6	624.8	551.0	506.8	481.6	475.2	479.8
40°	635.5	778.8	946.3	852.4	694.2	559.3	490.7	455.4	441.2	442.6	447.6
42.5°	668.5	843.1	974.6	833.8	629.5	491.8	437.8	422.2	429.0	434.8	440.1
45°	711.5	909.8	992.2	802.2	556.4	434.5	406.7	410.4	415.5	416.2	420.3
47.5°	766.4	977.3	1003.7	754.5	481.8	394.3	386.8	387.7	386.6	382.3	385.6
50°	835.0	1043.0	1014.1	691.3	418.4	369.1	359.2	356.3	342.0	328.0	329.8
52.5°	913.1	1103.3	1018.4	612.8	369.1	348.0	331.9	313.7	287.1	282.7	284.2
55°	999.8	1159.1	1007.3	516.3	327.6	321.0	296.6	274.7	271.8	268.1	268.7
57.5°	1103.5	1219.2	984.5	408.7	285.0	289.4	265.6	268.1	262.9	257.1	256.1
60°	1216.9	1281.3	944.7	310.6	241.0	249.9	257.5	257.3	255.9	251.1	249.5
62.5°	1318.9	1322.2	866.2	237.9	202.4	219.3	240.2	240.0	238.8	236.1	235.0
65°	1379.6	1316.0	735.3	187.3	170.6	194.1	216.7	218.3	218.5	218.3	218.3
67.5°	1368.9	1243.5	555.6	149.1	144.4	168.5	193.3	195.6	197.2	197.7	198.1
70°	1247.5	1084.3	362.3	119.0	121.0	146.0	171.2	173.5	174.9	176.6	177.4
72.5°	972.4	797.2	207.4	96.2	100.6	126.6	149.3	152.0	152.8	155.9	157.2
75°	592.5	468.8	111.9	75.8	82.6	108.2	127.6	130.7	132.2	135.9	136.3
77.5°	281.7	203.0	63.8	59.1	66.5	88.4	107.8	111.3	107.4	109.5	107.8
80°	95.2	75.4	40.3	45.0	50.8	69.0	86.3	89.8	81.6	81.2	80.3
82.5°	33.3	30.6	25.6	29.9	32.8	49.4	65.3	69.8	60.7	60.5	57.6
85°	13.0	12.4	14.3	16.3	19.6	30.4	43.0	45.2	37.4	30.2	29.7
87.5°	2.7	2.9	3.5	3.7	6.0	10.5	15.5	19.0	15.1	12.8	11.8
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)