

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: P881706

Luminaire Tested: **NAV-SB1B-727-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881706
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-SB1B-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA 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: 3730 lumens
Efficiency: N/A
Efficacy: 93.7 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

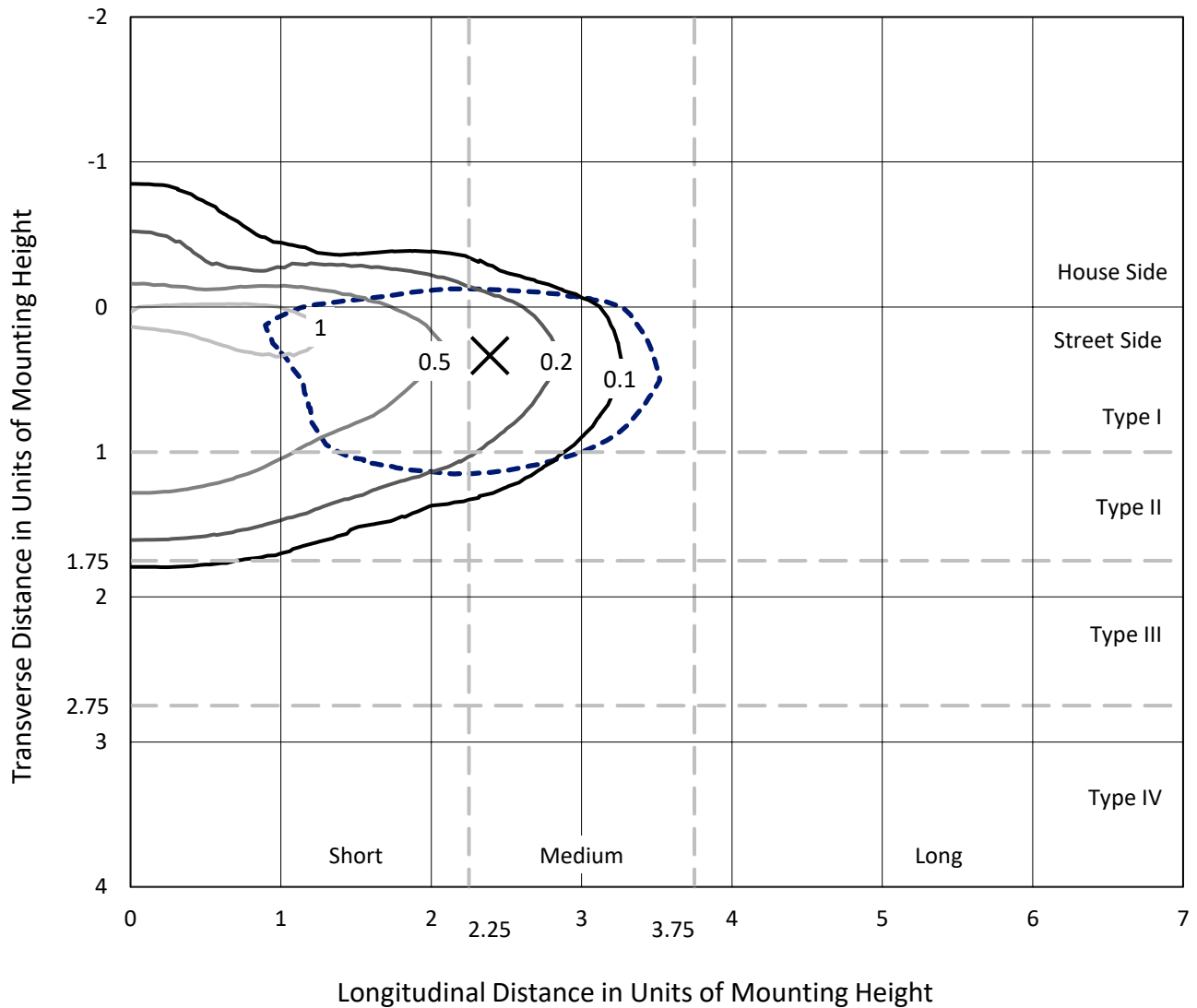
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

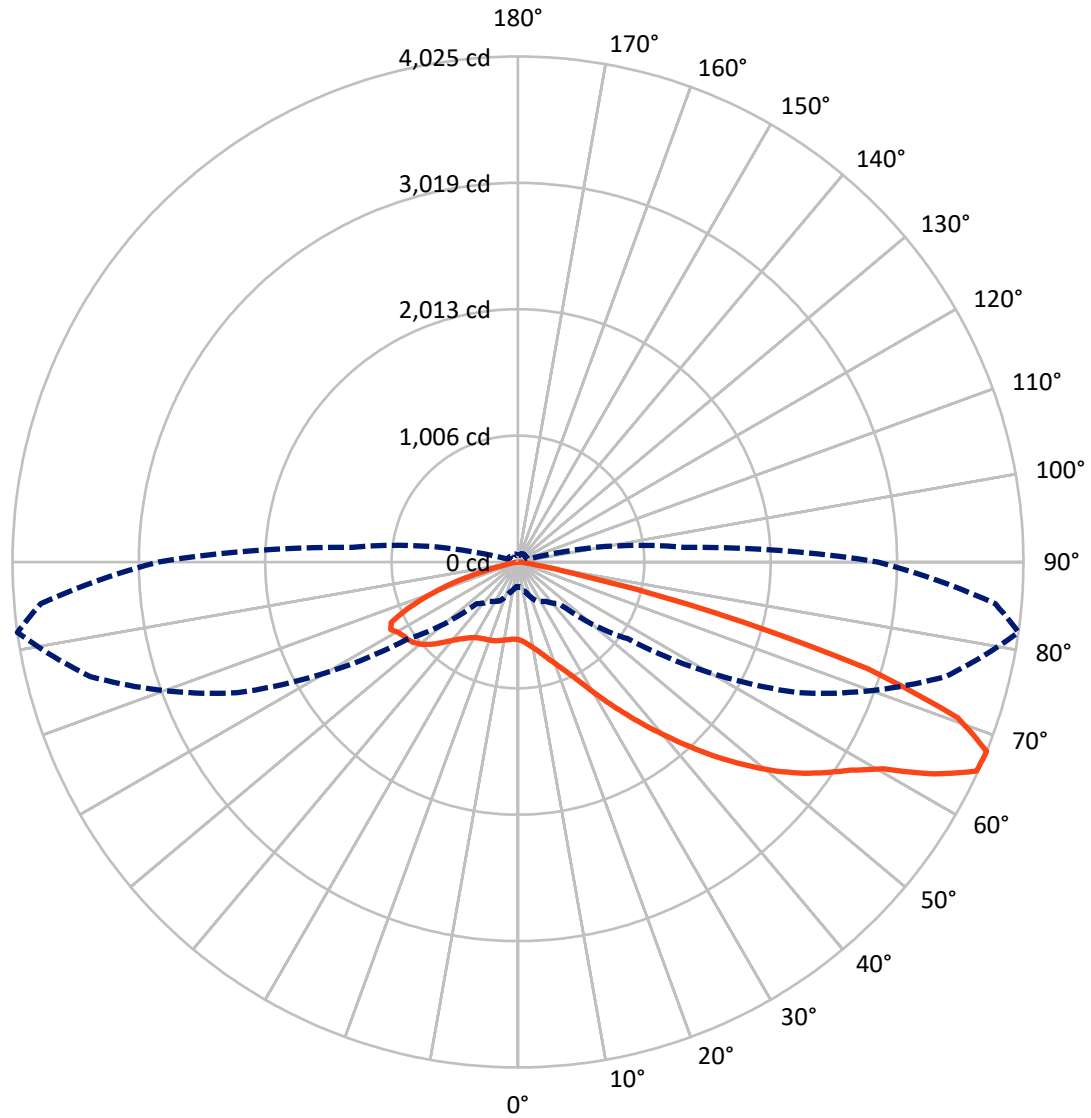
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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
House Side	Lumens	675.7	0.0	675.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3054.3	0.0	3054.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	3730.0	0.0	3730.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.5
10°-20°	143.1	3.8
20°-30°	229.1	6.1
30°-40°	405.2	10.9
40°-50°	709.9	19.0
50°-60°	946.9	25.4
60°-70°	881.5	23.6
70°-80°	338.3	9.1
80°-90°	21.0	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°	3730.0	100.0
0°-180°	3730.0	100.0

Coefficient of Utilization



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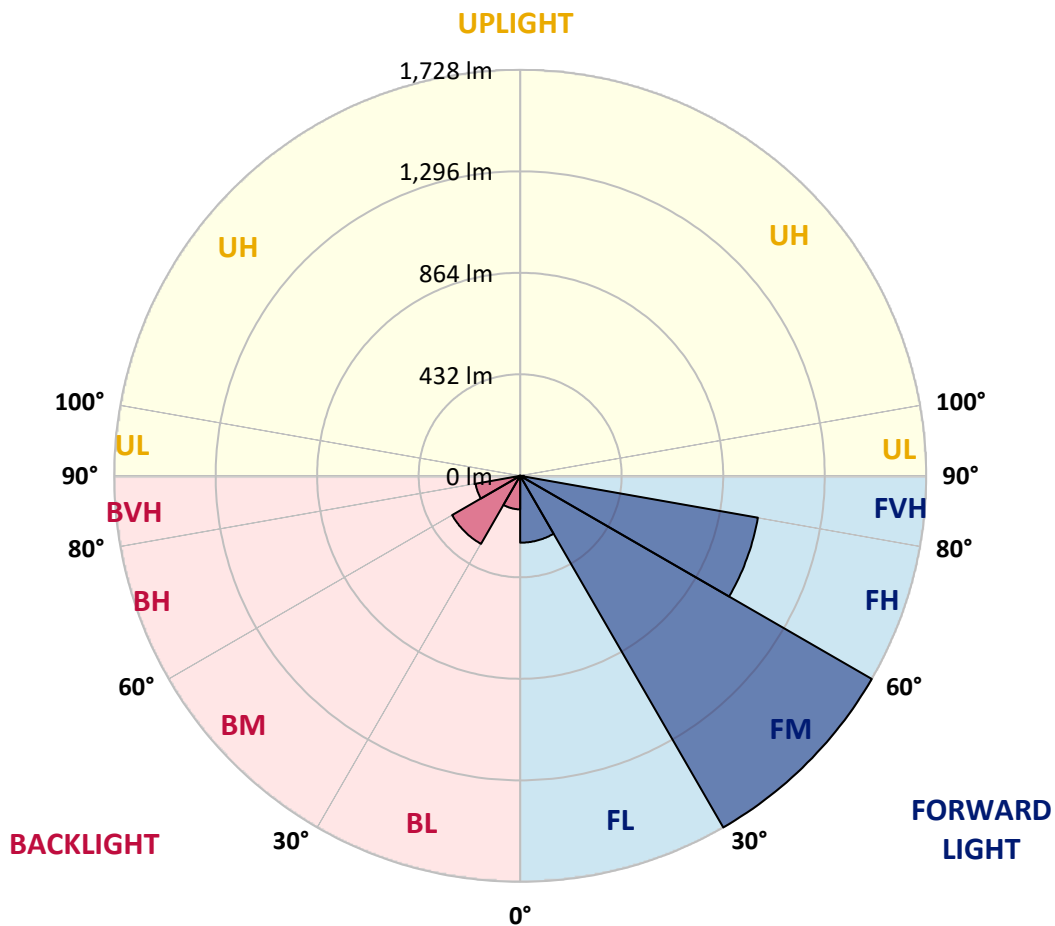
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	284.6	7.6			
FM (30°-60°)	1727.6	46.3			
FH (60°-80°)	1026.9	27.5			G1/1800
FVH (80°-90°)	15.3	0.4			G1/100
BL (0°-30°)	142.7	3.8	B1/500		
BM (30°-60°)	334.4	9.0	B1/1000		
BH (60°-80°)	192.9	5.2	B1/500		G1/500
BVH (80°-90°)	5.7	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°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	653.1	656.9	654.7	653.7	651.8	649.1	646.9	640.2	633.2	628.7	627.1
5°	666.3	670.0	669.8	670.8	672.2	673.0	672.5	664.9	655.0	647.2	642.6
7.5°	655.0	659.3	662.8	668.2	677.6	687.5	692.3	690.7	680.5	669.8	664.1
10°	623.0	627.6	635.9	648.5	668.4	689.9	707.9	716.2	709.8	698.0	690.2
12.5°	564.5	569.1	585.4	612.8	646.1	683.5	717.8	740.1	741.7	729.9	720.8
15°	498.7	503.3	520.7	555.1	605.8	665.7	723.2	765.4	779.6	769.4	758.4
17.5°	457.9	461.9	475.1	502.7	555.6	630.3	721.3	792.2	824.7	816.7	803.5
20°	445.5	449.0	455.2	474.5	518.6	593.5	709.0	817.5	873.3	868.8	854.0
22.5°	458.7	461.9	463.8	472.4	500.0	569.3	693.4	843.2	929.7	930.3	912.3
25°	489.0	492.3	490.1	495.5	507.6	561.8	687.5	873.6	1000.6	1006.5	986.1
27.5°	539.0	539.2	534.1	533.9	535.8	573.1	693.7	906.1	1090.0	1101.1	1075.8
30°	639.2	635.1	615.5	594.3	584.6	606.9	710.9	944.5	1195.6	1215.2	1183.5
32.5°	793.6	787.7	751.7	700.9	649.9	661.4	741.7	988.3	1310.5	1346.0	1307.3
35°	961.1	959.5	921.9	846.5	757.3	739.1	792.0	1045.7	1435.9	1492.3	1446.4
37.5°	1116.9	1116.1	1094.6	1005.7	897.2	847.3	872.5	1120.9	1570.2	1651.9	1597.6
40°	1259.2	1261.7	1240.2	1160.7	1051.4	986.1	982.1	1213.8	1719.5	1825.6	1761.2
42.5°	1382.2	1384.9	1363.2	1304.3	1203.6	1139.7	1116.6	1327.7	1865.4	2012.2	1936.0
45°	1465.7	1482.4	1479.2	1432.2	1359.9	1293.6	1278.3	1470.6	2031.6	2210.2	2120.7
47.5°	1489.4	1504.7	1528.9	1535.3	1491.3	1426.0	1444.3	1642.7	2199.7	2408.4	2306.6
50°	1431.1	1445.3	1495.6	1562.4	1593.0	1572.9	1605.7	1827.2	2371.8	2606.0	2488.9
52.5°	1316.2	1330.7	1394.0	1499.9	1624.7	1688.1	1767.6	2009.0	2538.6	2793.2	2661.6
55°	1149.9	1165.2	1246.6	1366.4	1564.3	1735.6	1902.7	2190.6	2691.4	2961.6	2817.4
57.5°	923.8	935.1	1019.7	1187.3	1412.3	1688.4	2002.3	2388.8	2835.4	3127.0	2971.8
60°	602.1	612.0	710.3	897.2	1160.4	1530.5	2022.2	2609.8	3026.6	3342.1	3179.9
62.5°	400.4	407.1	465.4	602.6	817.2	1227.3	1905.9	2786.2	3306.9	3716.5	3536.8
65°	274.7	281.4	339.7	435.3	528.0	811.8	1571.6	2762.8	3561.0	4013.8	3801.3
67.5°	196.0	201.7	251.1	341.3	382.1	471.6	1065.3	2464.2	3524.5	4025.0	3815.6
70°	140.5	143.7	184.5	265.9	303.7	283.3	592.4	1884.7	3085.9	3716.7	3525.0
72.5°	98.3	99.4	128.1	202.5	244.6	206.8	282.0	1256.5	2334.0	2917.3	2732.8
75°	66.6	67.9	86.2	148.5	196.3	157.9	149.3	673.8	1370.1	1614.8	1447.5
77.5°	40.8	41.4	55.6	101.5	146.9	120.3	96.1	285.5	530.1	520.5	443.6
80°	23.1	23.1	35.4	63.1	100.2	77.6	67.4	121.4	167.8	147.4	130.0
82.5°	12.9	13.2	25.8	39.2	66.3	45.9	37.1	56.1	72.5	64.2	55.9
85°	5.4	5.9	15.8	18.5	31.7	22.8	15.0	23.6	26.9	23.9	17.5
87.5°	0.5	0.8	4.8	3.5	3.8	4.6	2.1	4.6	3.8	3.8	2.7
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°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	622.0	617.9	607.7	595.9	580.3	572.8	562.6	555.6	549.7	550.3	544.9
5°	634.0	623.8	601.0	572.5	537.1	511.9	485.0	466.5	451.4	448.2	441.0
7.5°	650.7	634.6	594.6	543.3	483.4	438.0	397.5	371.4	352.9	347.0	341.1
10°	672.2	648.8	586.2	506.5	420.3	362.5	319.0	298.6	286.0	281.7	278.5
12.5°	697.2	665.2	575.2	461.6	355.3	299.7	272.0	261.8	257.8	256.5	255.7
15°	728.6	685.6	558.6	408.5	300.2	261.3	249.5	248.1	248.7	248.1	247.9
17.5°	765.9	707.9	531.5	353.7	263.2	241.7	237.4	238.5	239.8	239.5	239.0
20°	806.7	729.9	496.8	305.1	237.9	227.7	225.3	226.4	227.5	226.9	226.7
22.5°	853.2	753.6	458.4	267.2	221.0	214.8	212.2	212.4	212.4	211.3	210.8
25°	908.8	779.6	418.1	240.4	208.1	203.3	200.1	199.0	197.4	194.2	193.6
27.5°	975.1	807.3	379.5	221.6	197.9	193.4	189.6	186.9	182.9	177.5	177.0
30°	1049.8	840.8	346.7	209.7	189.9	185.3	181.0	177.0	171.1	164.4	163.8
32.5°	1137.6	876.8	322.8	201.9	182.6	177.8	172.7	167.8	161.4	154.7	155.0
35°	1242.3	920.3	308.8	196.6	177.0	170.5	164.9	159.5	154.7	148.8	148.2
37.5°	1355.9	966.5	304.5	193.9	173.2	163.3	156.8	153.1	152.5	149.0	148.8
40°	1480.3	1021.3	307.8	192.3	169.2	156.3	149.3	148.5	149.9	143.7	143.9
42.5°	1611.8	1086.3	313.1	190.4	163.5	149.3	142.6	142.6	141.5	132.9	132.9
45°	1754.2	1161.2	318.5	185.8	156.8	142.3	137.2	135.3	130.8	122.5	122.2
47.5°	1897.6	1237.5	322.5	177.5	148.8	136.4	131.9	127.6	120.8	113.3	113.1
50°	2033.7	1306.0	318.2	165.2	139.6	130.8	126.0	120.0	112.8	107.7	106.9
52.5°	2155.4	1365.3	300.0	150.7	130.0	124.9	120.6	114.4	108.5	103.1	102.6
55°	2261.2	1413.4	267.7	137.0	121.4	119.8	115.5	107.7	99.6	95.1	94.5
57.5°	2362.7	1449.9	227.5	125.7	113.6	114.1	107.7	100.7	93.2	88.4	87.8
60°	2497.8	1498.8	186.6	115.2	105.3	106.9	99.9	94.8	85.4	79.2	78.4
62.5°	2713.7	1574.8	148.2	102.3	95.6	96.1	93.2	87.0	75.7	68.5	67.9
65°	2885.0	1546.9	116.8	88.4	84.6	85.4	85.4	78.7	66.6	58.3	57.5
67.5°	2865.7	1324.5	93.2	74.7	74.1	74.7	76.5	70.9	59.1	52.4	51.3
70°	2639.9	1053.5	74.7	62.0	64.5	63.1	68.5	64.7	53.2	46.5	45.7
72.5°	2154.0	758.9	56.9	51.3	49.4	51.6	61.8	58.3	44.3	36.8	36.0
75°	1258.7	405.0	42.4	40.6	35.7	43.0	54.8	49.7	33.8	27.1	26.3
77.5°	409.8	141.3	31.2	29.8	26.6	34.6	46.7	41.9	27.7	21.5	20.7
80°	109.8	42.7	21.2	19.6	17.2	25.8	37.1	33.3	19.9	14.0	13.7
82.5°	44.0	18.0	12.4	11.0	9.4	17.7	29.3	26.9	14.8	8.9	8.9
85°	14.2	5.9	4.6	3.5	4.3	11.0	17.5	18.3	10.5	4.6	3.5
87.5°	1.9	0.8	0.8	1.1	0.8	1.9	5.4	5.1	3.0	0.5	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)