

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: P881597

Luminaire Tested: **NAV-SB1A-827-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881597
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-SB1A-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3614 lumens
Efficiency: N/A
Efficacy: 117.0 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

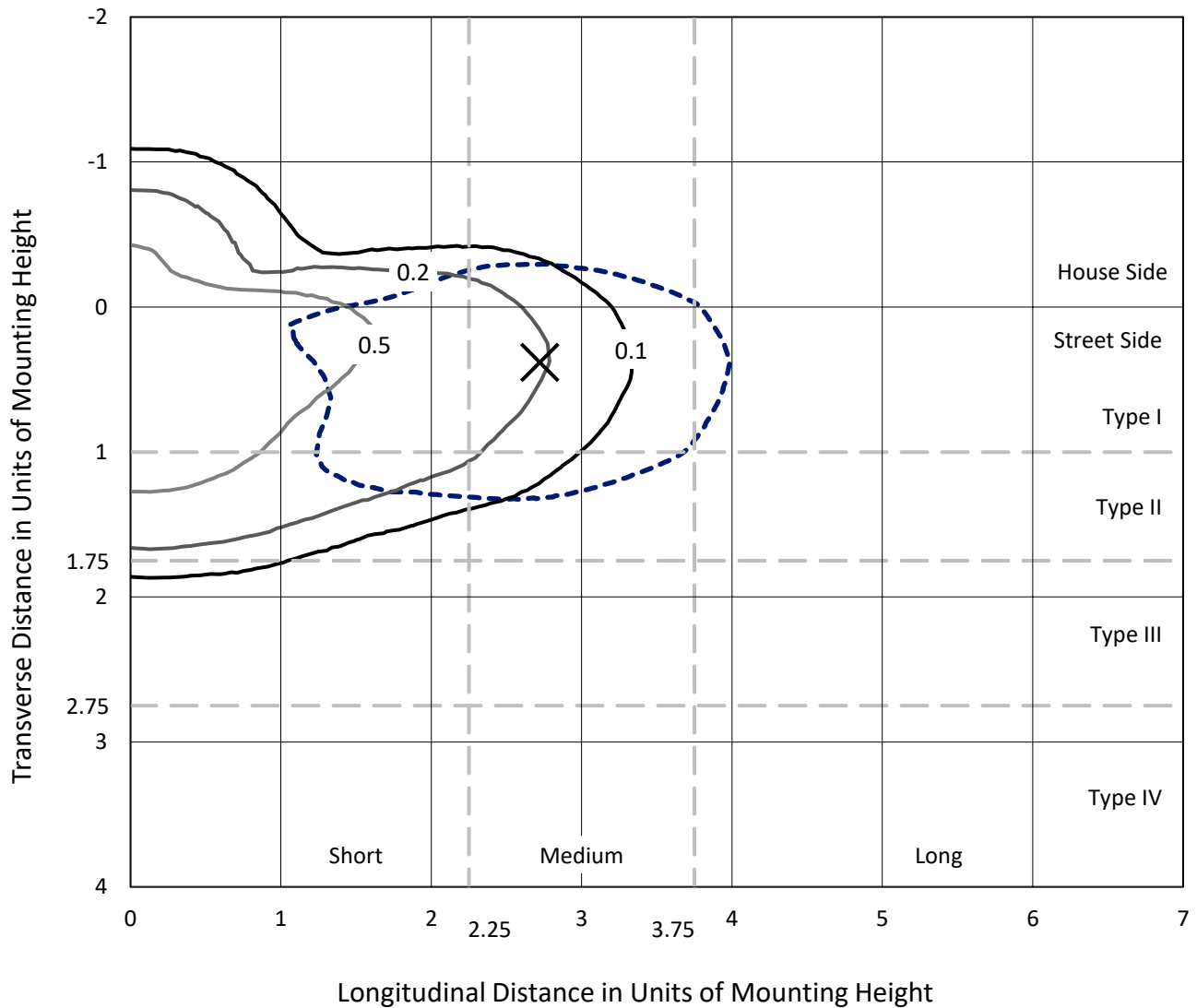
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

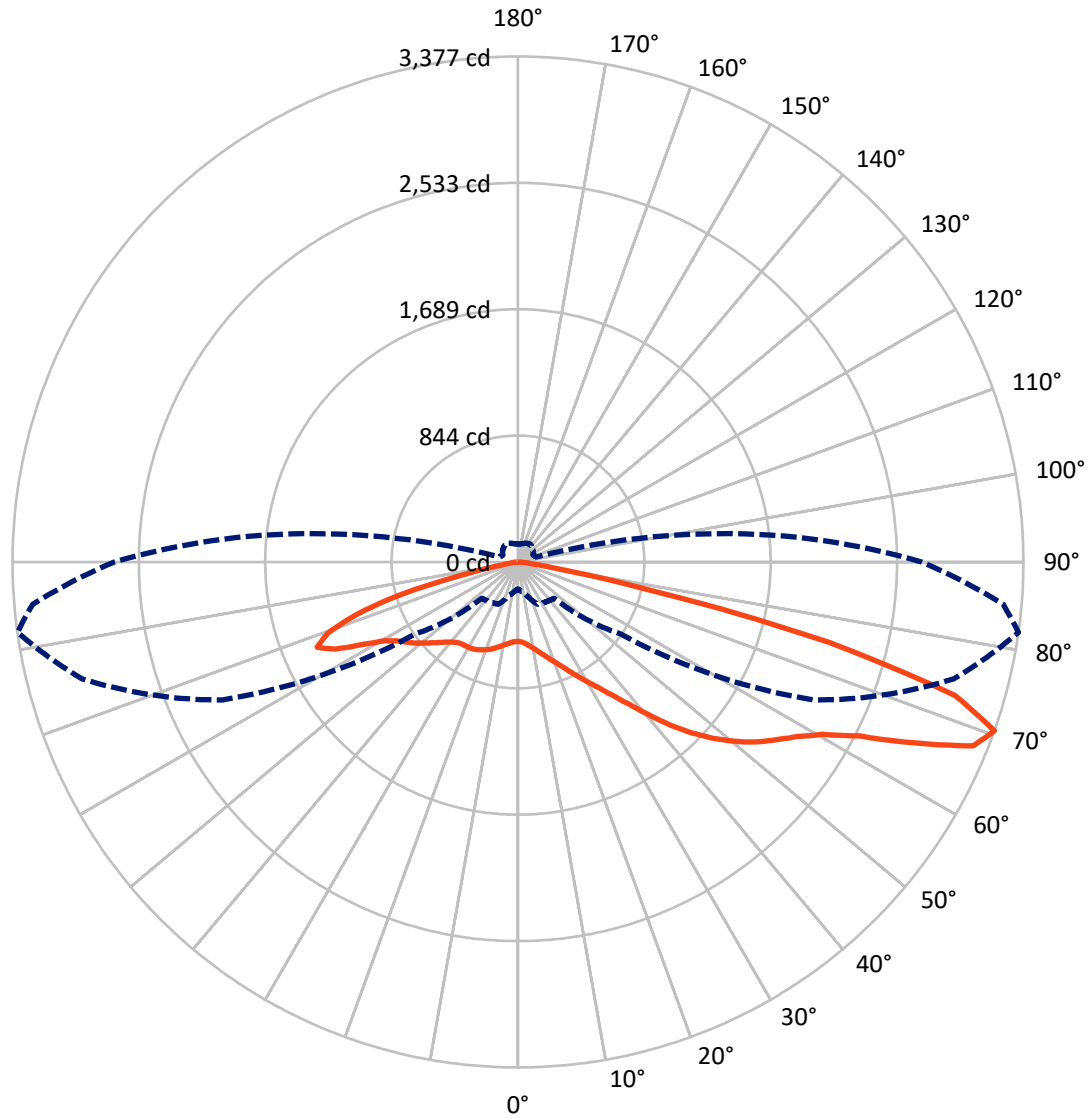
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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	890.9	0.0	890.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	2723.1	0.0	2723.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	3614.0	0.0	3614.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	1.4
10°-20°	143.7	4.0
20°-30°	240.5	6.7
30°-40°	375.6	10.4
40°-50°	598.3	16.6
50°-60°	832.6	23.0
60°-70°	870.9	24.1
70°-80°	455.2	12.6
80°-90°	47.3	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°	3614.0	100.0
0°-180°	3614.0	100.0

Coefficient of Utilization

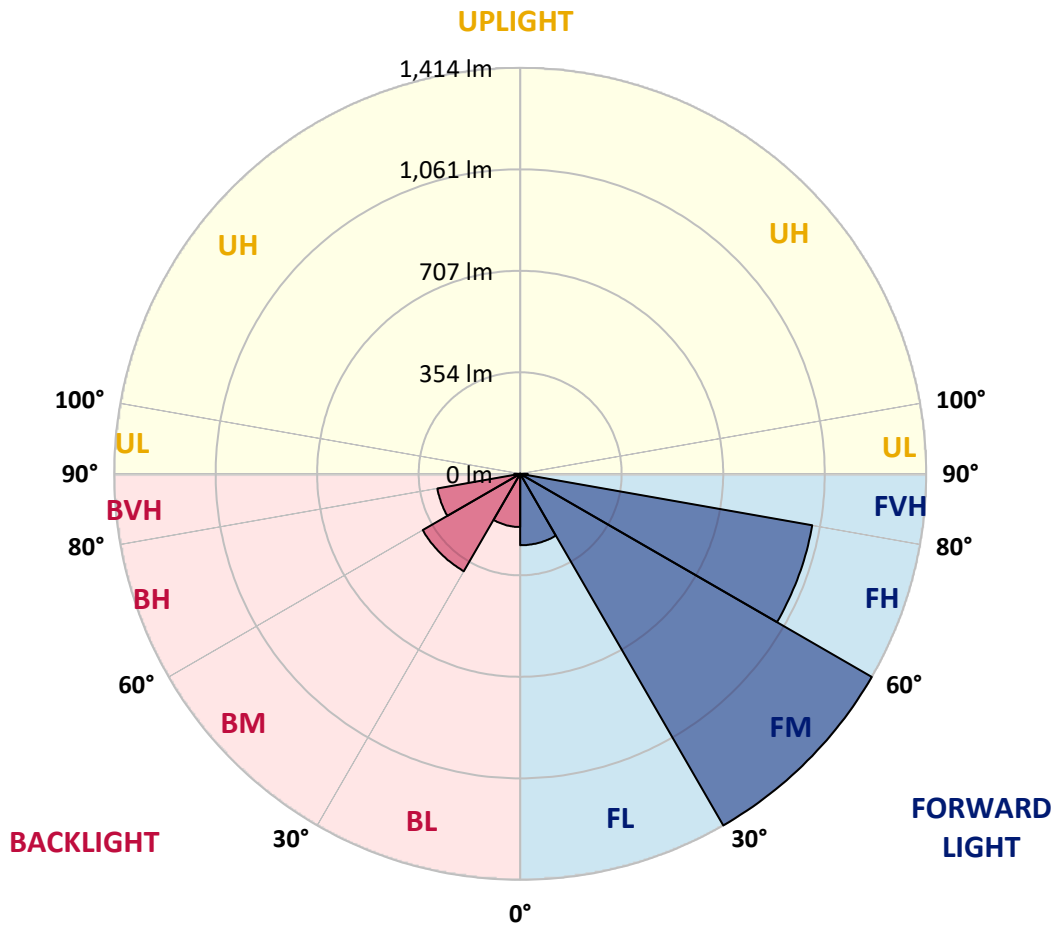


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	248.9	6.9			
FM (30°-60°)	1414.5	39.1			
FH (60°-80°)	1033.3	28.6			G1/1800
FVH (80°-90°)	26.5	0.7			G1/100
BL (0°-30°)	185.3	5.1	B1/500		
BM (30°-60°)	392.0	10.8	B1/1000		
BH (60°-80°)	292.8	8.1	B1/500		G1/500
BVH (80°-90°)	20.8	0.6			G1/100
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°	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9
2.5°	542.5	545.6	544.6	543.7	543.7	542.3	542.1	540.2	538.7	536.2	535.6
5°	549.4	552.7	552.3	553.1	555.6	556.1	556.7	555.6	552.5	549.4	548.1
7.5°	543.3	546.9	548.1	552.7	560.3	567.3	572.4	574.5	571.7	567.3	565.1
10°	522.6	526.6	530.6	541.6	555.2	571.5	585.3	593.5	592.9	588.7	585.1
12.5°	480.6	484.8	493.4	514.7	539.6	568.4	594.1	611.4	617.3	614.2	607.9
15°	447.0	450.7	457.2	479.0	511.4	555.2	597.4	630.9	646.1	644.3	636.7
17.5°	446.1	447.6	451.6	462.0	486.9	534.5	593.9	650.1	679.1	678.9	669.3
20°	462.9	463.5	465.8	467.9	482.1	518.7	585.1	666.0	716.1	716.1	705.7
22.5°	486.3	485.9	488.2	486.3	493.2	517.4	579.5	680.0	757.3	760.4	747.3
25°	521.4	519.5	518.9	514.5	515.9	529.9	585.7	695.9	806.2	812.5	796.2
27.5°	568.2	565.1	563.0	552.9	549.4	555.6	604.5	715.1	860.7	871.6	850.9
30°	629.2	623.6	620.6	602.9	590.5	591.4	632.8	740.6	917.6	935.3	909.0
32.5°	712.4	703.8	695.5	666.6	643.8	636.3	669.5	775.9	979.4	1007.6	973.8
35°	805.6	798.7	789.9	745.2	710.1	692.9	718.9	825.2	1051.7	1096.3	1052.4
37.5°	895.4	889.4	893.6	833.4	788.2	763.0	783.8	891.3	1140.8	1206.8	1151.0
40°	988.2	983.6	984.2	926.6	873.9	845.7	862.4	974.4	1243.0	1338.2	1269.5
42.5°	1089.1	1085.6	1074.1	1023.1	963.8	937.6	952.9	1070.3	1352.7	1487.7	1399.5
45°	1202.0	1199.9	1189.2	1130.7	1062.8	1033.3	1054.0	1176.1	1463.0	1628.5	1530.1
47.5°	1299.6	1301.3	1300.0	1250.7	1180.3	1137.0	1161.7	1286.6	1565.6	1760.8	1655.3
50°	1346.6	1355.6	1368.8	1353.5	1309.8	1265.7	1270.5	1393.2	1663.4	1884.9	1775.4
52.5°	1322.1	1339.1	1375.2	1399.7	1416.6	1407.4	1394.5	1499.1	1755.5	1996.9	1888.9
55°	1230.6	1254.6	1314.4	1373.6	1459.7	1526.7	1543.5	1616.4	1845.2	2095.5	1996.3
57.5°	1063.9	1102.9	1156.6	1276.4	1421.4	1584.4	1717.3	1779.2	1940.3	2200.7	2108.7
60°	778.2	830.4	897.1	1075.4	1287.2	1553.5	1865.1	2029.3	2075.5	2337.1	2255.0
62.5°	498.0	530.2	591.6	759.6	1003.0	1395.3	1910.4	2341.9	2304.7	2560.7	2474.4
65°	341.0	361.7	417.9	512.2	648.4	1038.6	1789.2	2576.2	2668.7	2915.1	2849.5
67.5°	247.8	263.5	311.4	394.1	422.5	614.6	1388.4	2565.5	3022.5	3280.2	3178.2
70°	180.6	191.8	232.0	311.4	325.0	341.9	841.1	2180.8	3014.8	3377.2	3255.1
72.5°	133.9	141.5	168.6	241.6	263.1	230.9	416.3	1585.0	2590.6	3054.7	2956.7
75°	96.8	102.6	122.5	184.9	210.6	175.9	207.7	926.2	1807.0	2148.8	2166.0
77.5°	74.0	78.4	91.5	135.4	168.6	131.9	128.9	426.1	856.8	861.0	909.4
80°	59.4	62.3	69.4	95.3	129.3	98.8	84.0	172.0	270.8	229.2	240.5
82.5°	43.7	48.5	58.7	66.9	92.4	68.1	51.2	86.9	103.0	88.6	89.4
85°	24.9	28.2	35.5	47.9	59.1	41.6	29.3	38.5	47.9	39.3	35.1
87.5°	8.8	11.5	12.5	18.8	25.7	17.3	11.3	11.1	15.7	11.7	9.8
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°	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9
2.5°	533.7	532.7	528.9	523.7	518.4	513.2	511.4	507.8	505.3	504.0	505.5
5°	544.4	541.4	532.4	520.8	508.8	495.7	486.5	478.1	471.9	466.2	468.5
7.5°	559.8	554.4	538.9	518.7	497.3	475.6	459.5	447.2	439.0	433.6	434.7
10°	577.6	569.4	545.6	515.5	482.3	451.2	432.2	421.7	416.5	413.6	414.4
12.5°	598.1	586.4	552.5	508.0	459.5	424.0	411.0	407.9	408.1	408.3	408.7
15°	623.4	607.1	558.0	491.7	429.8	403.1	400.8	405.8	411.0	413.5	413.3
17.5°	652.0	629.0	559.0	464.8	400.6	389.7	397.0	407.7	415.6	419.0	419.8
20°	682.7	651.2	552.1	426.9	376.6	378.7	391.8	405.6	414.2	418.6	419.8
22.5°	717.8	675.0	535.6	387.0	357.1	366.9	382.2	395.6	404.6	409.0	410.2
25°	757.9	701.7	509.7	353.4	340.2	353.4	368.8	379.9	387.2	391.2	392.4
27.5°	802.4	729.5	475.2	326.8	325.4	339.6	352.3	360.9	364.7	367.8	369.0
30°	847.0	754.8	433.4	306.6	312.6	326.0	335.0	338.9	340.0	340.6	341.9
32.5°	895.4	776.7	389.5	290.0	300.3	312.8	318.1	319.9	314.5	310.9	312.0
35°	953.9	800.1	346.5	276.7	288.2	299.0	300.7	299.2	292.8	285.4	285.7
37.5°	1026.2	829.2	312.2	267.3	276.9	284.0	281.9	281.5	282.1	273.3	273.8
40°	1114.8	867.2	287.1	260.0	267.7	269.2	263.3	266.6	269.4	256.0	256.4
42.5°	1213.1	913.0	271.2	255.1	260.0	256.4	247.2	250.8	250.5	232.8	232.6
45°	1313.4	962.9	265.6	251.4	252.9	245.7	235.5	236.5	228.4	212.5	213.1
47.5°	1413.1	1016.4	269.1	248.3	244.1	235.9	228.0	223.8	211.9	200.0	200.0
50°	1510.9	1072.6	281.7	242.2	232.0	227.2	221.5	214.0	201.4	191.2	190.4
52.5°	1601.7	1129.1	295.9	232.0	216.9	219.8	216.1	207.5	195.0	184.7	184.9
55°	1687.6	1185.7	301.5	218.0	202.7	213.2	211.1	195.2	180.3	171.8	171.1
57.5°	1781.1	1253.8	295.3	200.2	191.2	205.8	197.7	180.1	171.4	165.1	164.5
60°	1910.8	1360.6	282.1	178.2	180.3	194.6	180.8	173.6	164.2	157.1	156.7
62.5°	2126.1	1559.8	260.8	156.3	167.4	178.2	172.8	165.5	155.9	149.0	149.0
65°	2444.5	1836.8	220.7	139.2	153.0	162.0	164.2	156.9	146.9	139.6	140.0
67.5°	2713.0	2010.5	167.0	125.0	138.3	149.0	154.9	147.9	137.3	130.2	130.4
70°	2698.2	1884.3	127.5	111.0	125.2	136.2	143.8	138.3	127.0	120.2	120.8
72.5°	2396.5	1576.3	103.2	96.8	112.0	122.7	131.9	127.7	116.2	109.7	109.7
75°	1760.6	1119.0	82.5	82.5	95.5	108.7	118.9	116.2	105.7	101.1	99.7
77.5°	742.1	469.5	64.6	68.5	79.4	93.4	106.0	107.0	97.8	103.6	94.0
80°	197.3	129.4	49.3	53.9	62.3	77.1	92.2	91.9	81.9	76.5	71.1
82.5°	75.2	51.0	35.1	38.0	45.1	59.1	73.1	75.4	65.4	56.6	56.6
85°	29.0	21.9	21.7	22.8	26.3	39.1	55.2	57.1	49.3	41.8	43.1
87.5°	7.5	6.5	8.1	7.7	12.1	20.9	31.6	32.8	30.1	17.5	24.9
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)