

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: P881524

Luminaire Tested: **NAV-SB1A-722-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881524
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-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 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: 3546 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G1

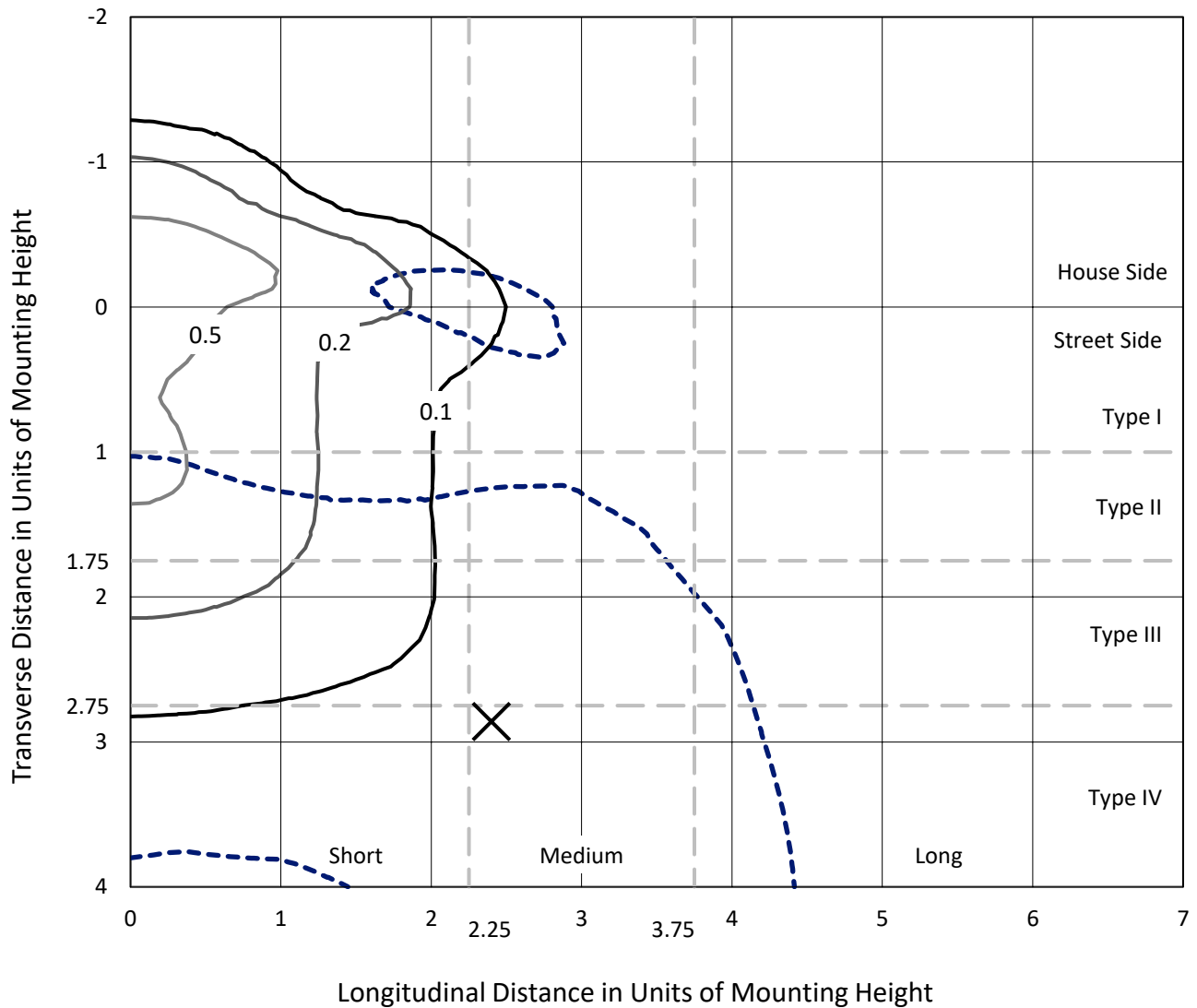
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

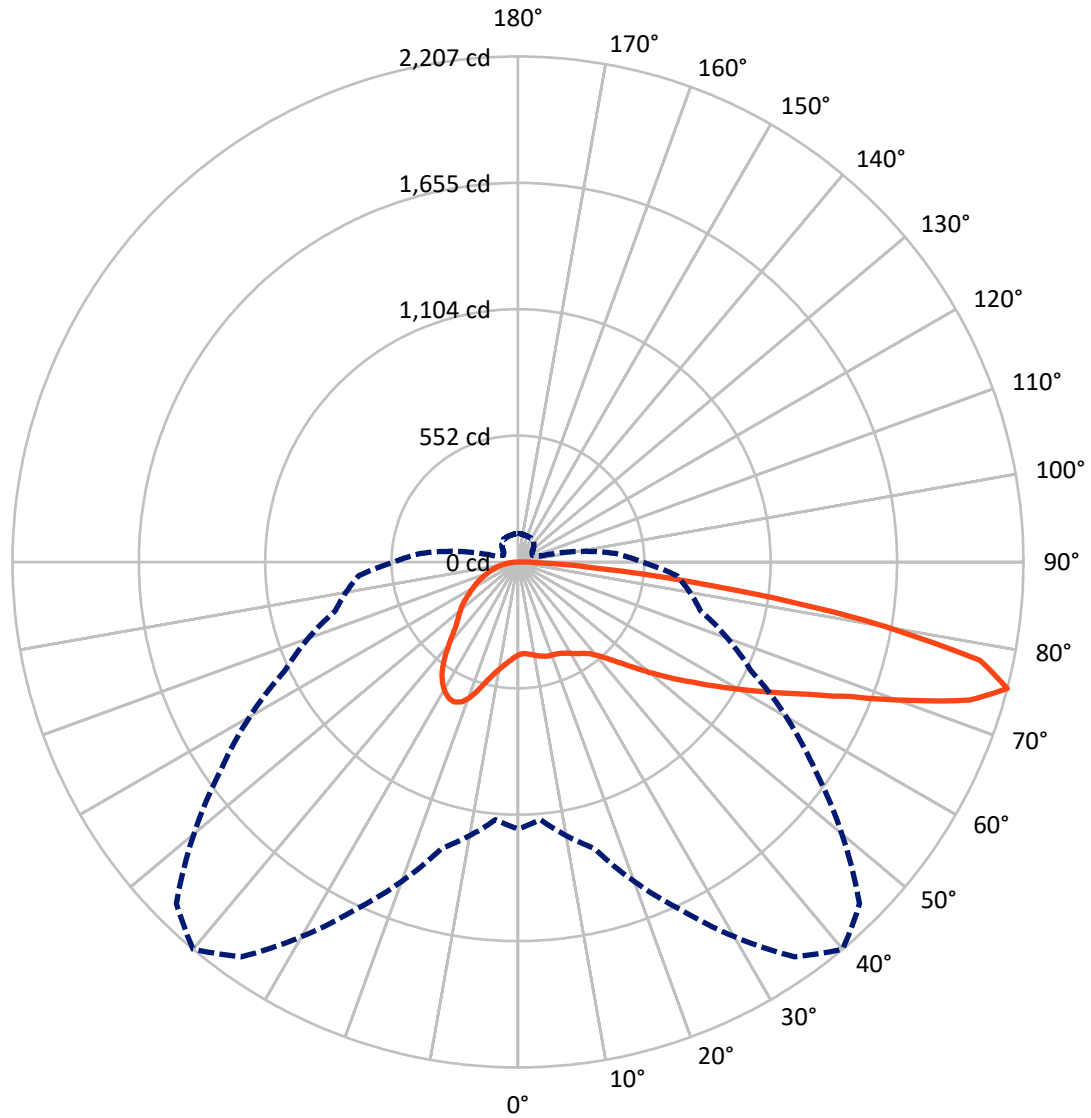
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 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
House Side	Lumens	1098.7	0.0	1098.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	2447.3	0.0	2447.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	3546.0	0.0	3546.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	1.1
10°-20°	135.9	3.8
20°-30°	248.1	7.0
30°-40°	351.9	9.9
40°-50°	475.2	13.4
50°-60°	639.3	18.0
60°-70°	811.4	22.9
70°-80°	736.4	20.8
80°-90°	107.3	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°	3546.0	100.0
0°-180°	3546.0	100.0

Coefficient of Utilization



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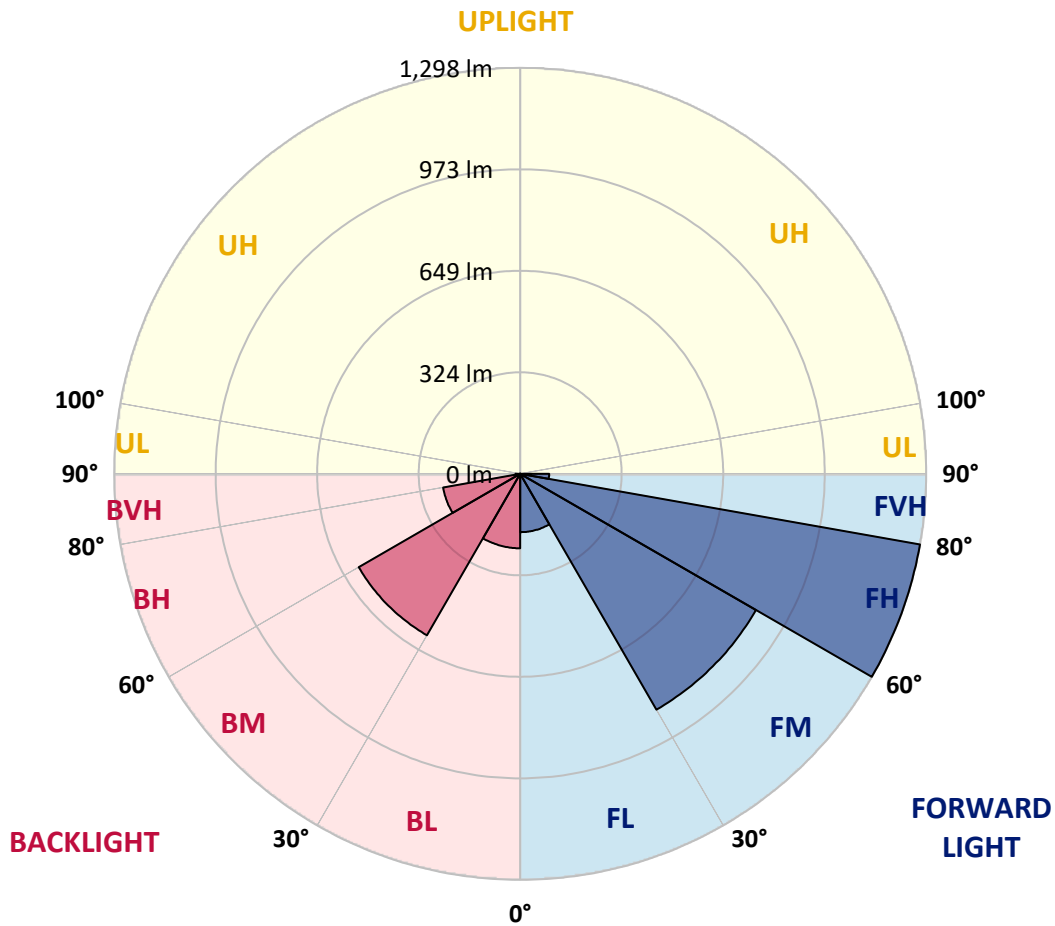
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	186.5	5.3			
FM	(30°-60°)	870.5	24.5			
FH	(60°-80°)	1297.8	36.6			G1/1800
FVH	(80°-90°)	92.6	2.6			G1/100
BL	(0°-30°)	238.0	6.7	B1/500		
BM	(30°-60°)	595.9	16.8	B1/1000		
BH	(60°-80°)	250.0	7.0	B1/500		G1/500
BVH	(80°-90°)	14.8	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-G1

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5
2.5°	399.3	401.5	401.0	400.2	400.2	400.4	400.2	401.5	402.9	404.2	406.2
5°	403.4	405.7	404.5	403.6	402.9	402.7	402.1	401.9	402.7	404.4	407.2
7.5°	411.5	413.8	412.1	410.4	408.9	408.1	407.4	406.2	405.7	406.6	410.6
10°	420.5	422.8	420.7	417.7	415.3	414.3	413.6	412.4	411.7	412.3	416.6
12.5°	429.6	431.8	429.0	424.9	421.7	421.1	420.2	419.8	419.6	419.4	423.7
15°	438.0	439.9	436.3	431.4	428.1	427.1	426.2	426.7	427.7	428.8	433.7
17.5°	444.6	446.5	441.2	434.8	431.6	431.3	430.7	432.6	435.2	438.0	444.0
20°	450.6	452.5	445.7	437.1	433.3	433.3	433.5	437.5	441.2	445.4	453.6
22.5°	459.1	460.6	452.3	440.5	435.0	435.4	436.9	440.8	445.5	451.2	462.7
25°	471.7	472.8	462.7	446.9	440.7	441.8	443.1	445.0	449.5	456.1	471.5
27.5°	492.0	492.9	479.6	458.2	448.7	450.6	452.5	451.2	453.3	458.9	478.7
30°	520.6	521.2	504.2	475.8	462.5	463.4	463.8	458.3	454.4	458.9	483.7
32.5°	554.4	554.3	534.1	497.3	478.1	477.1	473.9	463.2	454.0	458.0	488.2
35°	606.9	604.8	578.9	527.4	495.8	489.9	482.4	468.7	455.9	457.0	492.2
37.5°	693.8	687.4	651.5	576.6	522.1	507.2	496.1	477.5	460.0	456.6	496.9
40°	791.8	783.7	744.2	644.2	561.6	537.7	519.8	490.1	466.8	458.3	503.9
42.5°	908.0	896.6	854.0	723.7	611.6	577.0	550.1	506.1	476.8	463.8	513.3
45°	1050.8	1035.5	975.4	813.4	674.6	628.5	592.6	530.4	492.0	474.3	527.4
47.5°	1195.0	1198.8	1113.2	916.1	750.2	692.1	645.8	566.9	514.2	491.3	550.1
50°	1348.3	1350.9	1250.3	1029.9	836.0	764.0	705.7	607.7	545.0	515.3	584.2
52.5°	1467.9	1468.3	1374.8	1149.0	925.3	843.0	770.2	654.3	580.8	547.3	629.5
55°	1542.8	1541.8	1462.1	1261.6	1028.0	925.9	841.6	707.4	624.4	584.9	686.5
57.5°	1597.1	1594.3	1522.3	1358.5	1137.5	1023.9	922.5	767.5	675.9	629.7	761.5
60°	1617.8	1616.1	1563.1	1442.2	1252.6	1132.2	1015.8	834.9	734.4	682.5	858.0
62.5°	1625.7	1628.9	1603.2	1523.2	1375.8	1252.2	1118.3	915.4	800.3	742.3	959.7
65°	1653.6	1659.4	1654.1	1629.3	1514.9	1392.7	1254.3	1011.1	872.1	806.5	1066.0
67.5°	1708.7	1714.5	1716.7	1756.2	1685.0	1567.8	1423.9	1130.3	956.2	873.0	1145.9
70°	1707.3	1705.7	1745.5	1857.2	1897.9	1810.2	1652.6	1277.0	1056.4	928.3	1156.1
72.5°	1554.1	1540.5	1634.7	1856.1	2075.0	2063.4	1931.9	1466.2	1142.9	935.1	1003.2
75°	1165.9	1129.8	1296.2	1672.7	2104.6	2207.1	2109.4	1583.6	1122.4	826.2	698.1
77.5°	498.6	462.3	658.5	1238.3	1883.6	2063.2	1946.6	1381.6	896.0	546.4	342.9
80°	130.5	130.3	199.0	561.4	1281.0	1523.6	1336.6	892.2	511.9	195.2	94.6
82.5°	54.0	52.7	73.2	218.4	625.9	855.0	697.8	398.0	184.9	52.8	31.4
85°	20.1	19.9	35.5	75.4	220.8	352.6	255.2	101.7	46.1	25.8	14.1
87.5°	5.6	5.5	7.7	26.1	53.8	81.6	43.6	16.7	13.0	10.2	4.1
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°	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5	405.5
2.5°	406.8	407.7	409.4	410.8	412.4	414.3	417.0	418.7	420.3	421.5	420.7
5°	408.5	410.6	414.9	419.2	424.3	429.0	434.5	438.4	441.6	442.5	442.9
7.5°	412.3	415.6	423.0	430.3	438.4	446.1	454.0	460.8	466.2	468.3	468.5
10°	418.8	423.4	433.7	444.0	454.8	466.6	476.8	486.6	494.3	497.5	497.6
12.5°	427.1	432.8	446.3	460.6	475.5	491.8	505.0	517.0	526.6	530.9	530.9
15°	437.8	445.2	462.5	481.7	503.5	526.2	543.0	556.3	567.0	572.3	571.9
17.5°	449.5	459.3	481.1	510.1	541.3	571.2	590.7	600.5	611.6	616.7	616.5
20°	460.8	472.8	504.0	546.2	587.7	619.5	635.3	638.0	638.7	639.3	640.8
22.5°	472.4	488.6	532.8	591.7	636.3	658.3	660.5	649.2	633.4	626.1	628.2
25°	485.2	506.7	570.4	641.9	678.0	680.6	663.3	635.9	606.0	592.2	594.3
27.5°	497.6	527.6	615.6	689.9	708.1	685.0	647.7	608.8	572.7	558.2	559.9
30°	510.1	551.4	665.4	731.8	721.8	674.2	623.1	579.6	543.3	528.1	529.8
32.5°	522.7	579.3	722.8	762.1	719.4	651.5	592.4	546.9	514.9	499.0	501.0
35°	537.0	613.5	777.1	778.6	703.0	618.0	552.0	507.8	480.0	467.2	470.0
37.5°	555.6	656.9	825.1	782.8	674.4	568.9	501.8	461.5	438.6	432.8	436.9
40°	578.7	709.2	861.8	776.2	632.1	509.3	446.9	414.7	401.7	403.0	407.6
42.5°	608.8	767.7	887.5	759.3	573.3	447.8	398.7	384.4	390.6	395.9	400.8
45°	647.9	828.5	903.5	730.5	506.7	395.7	370.3	373.7	378.4	379.0	382.7
47.5°	697.9	890.0	914.0	687.0	438.8	359.0	352.3	353.0	352.1	348.1	351.1
50°	760.4	949.8	923.4	629.5	381.0	336.1	327.1	324.4	311.5	298.7	300.4
52.5°	831.5	1004.7	927.4	558.0	336.1	316.9	302.2	285.7	261.4	257.5	258.8
55°	910.5	1055.5	917.2	470.2	298.3	292.3	270.1	250.1	247.5	244.1	244.7
57.5°	1004.9	1110.2	896.6	372.2	259.5	263.5	241.9	244.1	239.4	234.2	233.2
60°	1108.1	1166.8	860.3	282.9	219.5	227.6	234.5	234.3	233.0	228.7	227.2
62.5°	1201.0	1204.1	788.8	216.7	184.3	199.7	218.7	218.5	217.4	215.0	214.0
65°	1256.3	1198.4	669.5	170.6	155.3	176.8	197.3	198.8	199.0	198.8	198.8
67.5°	1246.6	1132.4	505.9	135.8	131.5	153.5	176.0	178.1	179.6	180.0	180.4
70°	1136.0	987.4	329.9	108.3	110.2	133.0	155.9	158.0	159.3	160.8	161.6
72.5°	885.5	726.0	188.8	87.6	91.6	115.3	136.0	138.4	139.2	142.0	143.1
75°	539.6	426.9	101.9	69.0	75.2	98.6	116.2	119.1	120.4	123.8	124.1
77.5°	256.5	184.9	58.1	53.8	60.6	80.5	98.2	101.4	97.8	99.7	98.2
80°	86.7	68.6	36.7	41.0	46.3	62.8	78.6	81.8	74.3	73.9	73.2
82.5°	30.3	27.8	23.3	27.3	29.9	44.9	59.4	63.6	55.3	55.1	52.5
85°	11.8	11.3	13.0	14.9	17.9	27.6	39.1	41.2	34.0	27.5	27.1
87.5°	2.4	2.6	3.2	3.4	5.5	9.6	14.1	17.3	13.7	11.7	10.7
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)