

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: P881598

Luminaire Tested: **NAV-SB1A-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881598
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2861 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G1

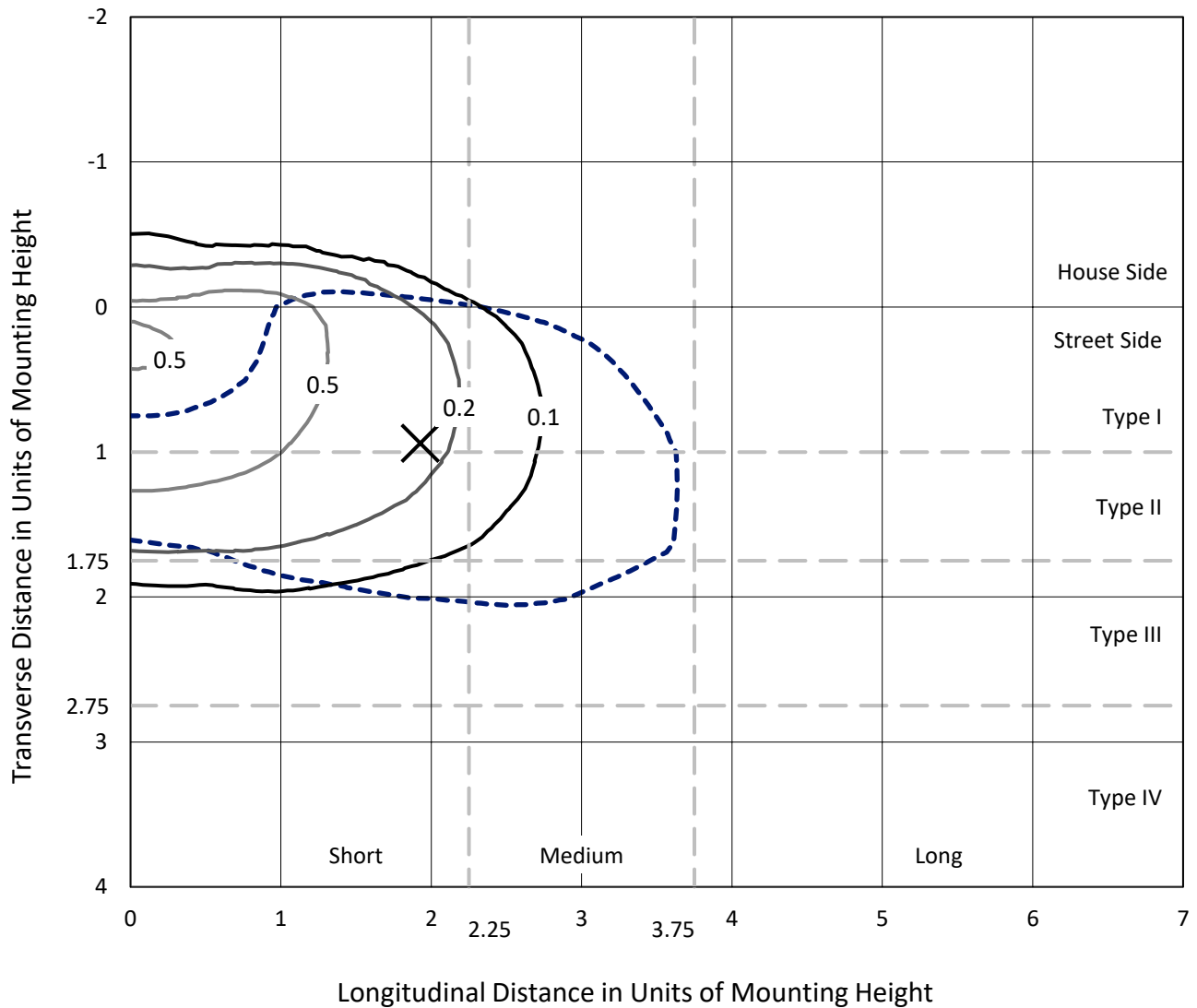
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

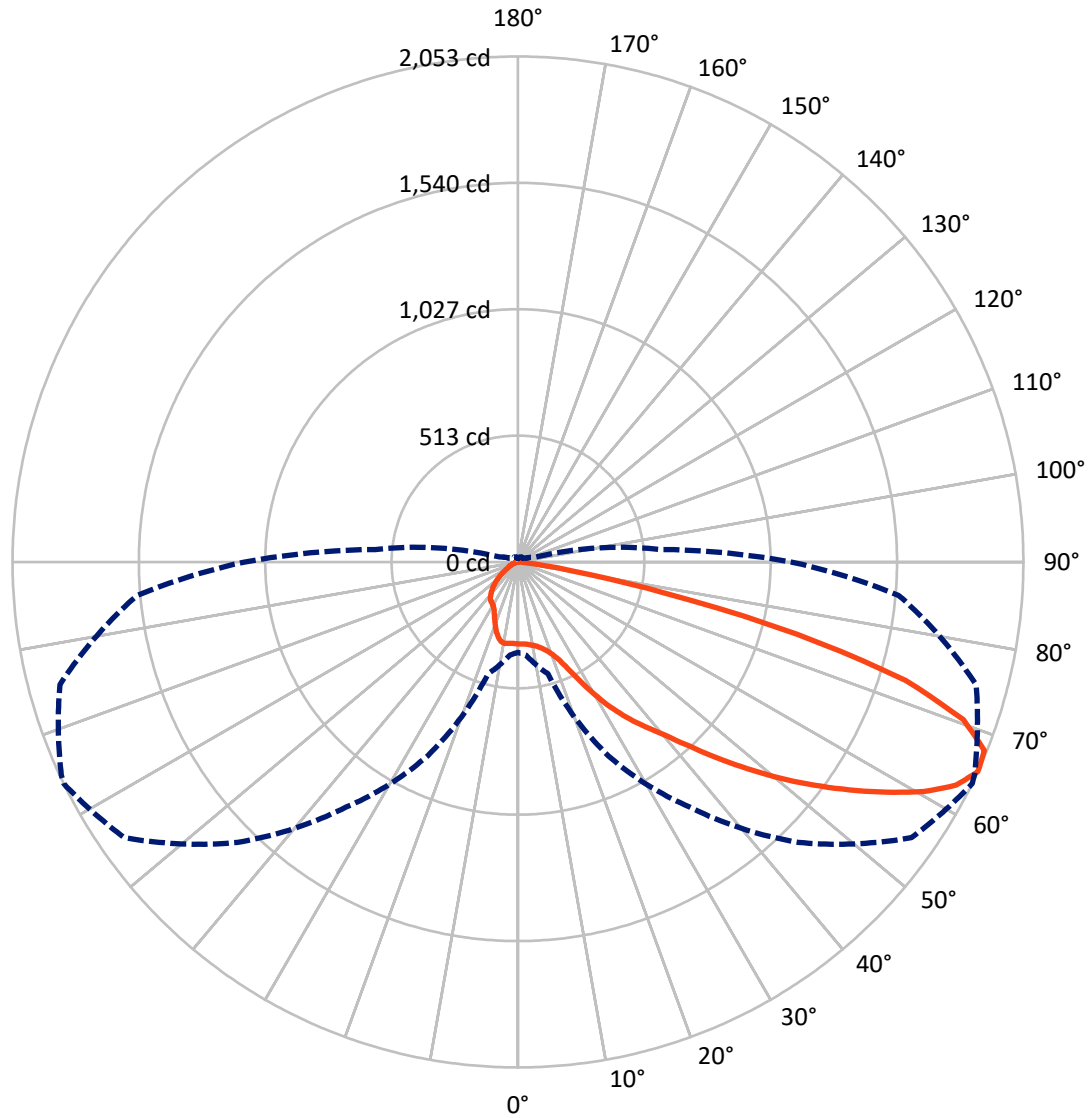
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	382.6	0.0	382.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	2478.4	0.0	2478.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	2861.0	0.0	2861.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.7	1.1
10°-20°	83.3	2.9
20°-30°	157.8	5.5
30°-40°	319.3	11.2
40°-50°	543.9	19.0
50°-60°	739.7	25.9
60°-70°	694.6	24.3
70°-80°	278.3	9.7
80°-90°	13.5	0.5
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°	2861.0	100.0
0°-180°	2861.0	100.0

Coefficient of Utilization



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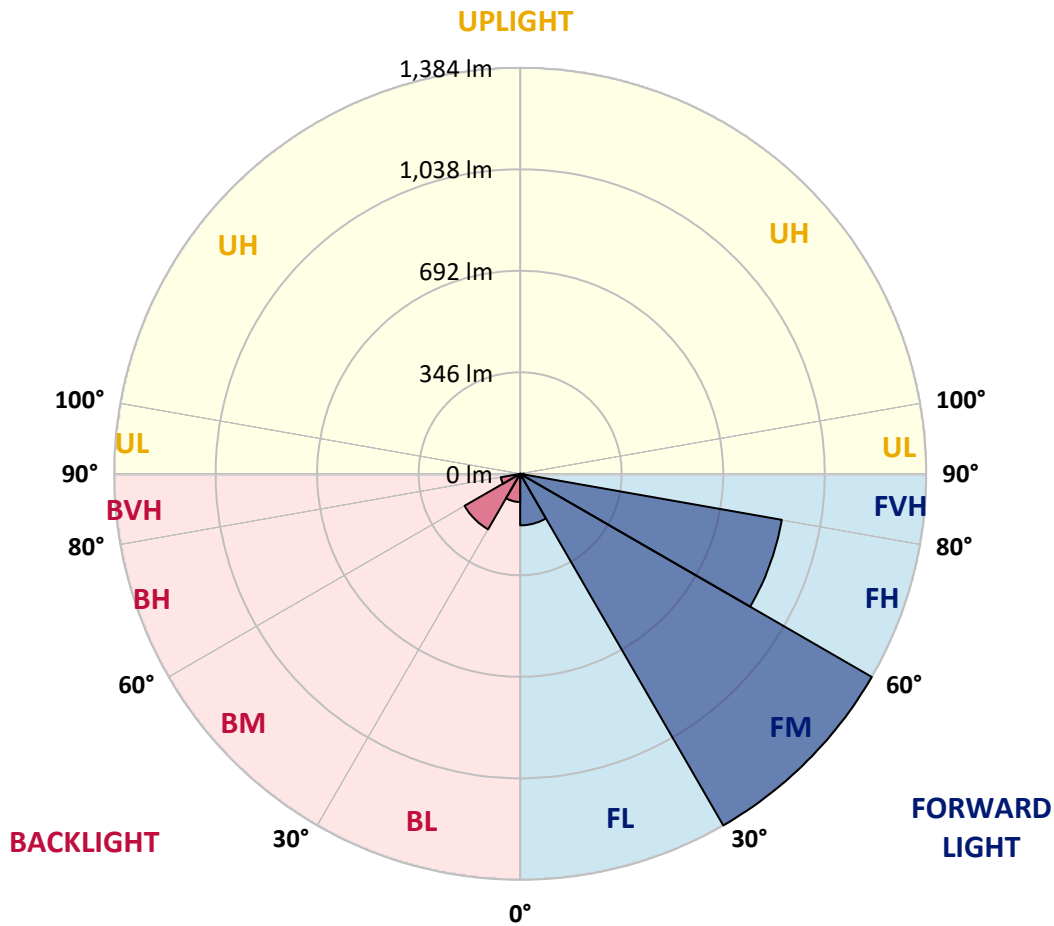
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	175.7	6.1			
FM (30°-60°)	1384.1	48.4			
FH (60°-80°)	905.7	31.7			G1/1800
FVH (80°-90°)	12.8	0.4			G1/100
BL (0°-30°)	96.1	3.4	B0/110		
BM (30°-60°)	218.7	7.6	B0/220		
BH (60°-80°)	67.2	2.3	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8
2.5°	331.6	333.9	333.3	332.8	332.6	333.0	333.1	333.0	333.0	333.0	333.1
5°	325.3	327.2	327.2	328.5	330.5	332.8	334.5	334.9	335.3	335.8	335.6
7.5°	313.2	314.7	315.9	320.3	325.1	331.2	336.4	339.1	339.5	341.6	342.4
10°	305.0	306.9	308.8	313.4	320.3	329.5	338.3	344.8	345.8	350.8	353.1
12.5°	304.6	306.5	309.0	314.0	322.0	331.8	342.5	351.9	353.7	361.0	365.8
15°	308.6	310.9	313.2	319.3	328.0	339.9	351.4	363.1	364.8	375.2	380.3
17.5°	316.8	319.9	321.6	327.8	337.0	350.2	365.4	378.8	380.3	392.4	398.9
20°	333.1	336.8	337.4	342.4	351.4	365.6	383.6	400.3	402.2	416.0	423.3
22.5°	366.9	372.1	367.5	370.0	378.0	392.2	411.8	432.9	435.6	451.3	457.8
25°	426.4	433.6	421.8	417.5	421.0	435.8	460.3	487.0	490.0	502.7	506.0
27.5°	543.2	533.8	515.7	498.1	487.7	496.2	523.8	556.8	560.6	572.9	569.1
30°	671.5	663.2	638.9	599.7	575.2	573.9	599.4	636.2	640.6	652.3	640.6
32.5°	800.0	792.1	765.6	717.5	674.9	653.8	671.5	712.3	714.6	722.1	704.8
35°	926.4	918.3	891.8	842.6	790.2	742.2	738.8	784.8	785.6	793.5	767.8
37.5°	1053.5	1046.8	1018.6	970.3	918.7	852.5	820.5	853.5	854.4	862.1	835.5
40°	1144.2	1147.1	1127.8	1090.4	1046.0	973.7	912.2	926.6	920.8	933.7	917.7
42.5°	1222.1	1227.9	1211.0	1192.2	1166.5	1102.8	1025.7	1023.2	1014.0	1020.9	1004.4
45°	1289.4	1294.2	1279.1	1274.7	1274.1	1229.4	1149.8	1134.8	1122.0	1120.7	1100.9
47.5°	1314.2	1323.4	1329.9	1344.7	1373.4	1354.6	1278.1	1254.9	1240.5	1230.0	1198.7
50°	1323.6	1333.4	1355.6	1398.6	1466.7	1474.7	1405.9	1379.8	1362.1	1342.9	1296.9
52.5°	1310.9	1328.4	1358.3	1430.6	1529.4	1571.0	1528.4	1505.6	1485.5	1454.2	1385.9
55°	1236.3	1253.8	1314.9	1430.2	1560.6	1638.5	1644.3	1634.1	1611.5	1562.2	1457.8
57.5°	1079.0	1104.9	1201.8	1381.5	1560.1	1696.6	1757.8	1765.1	1739.8	1669.2	1514.4
60°	861.2	896.3	1014.4	1273.5	1511.9	1728.1	1857.3	1893.8	1866.9	1774.7	1560.3
62.5°	600.9	641.6	753.4	1104.4	1401.8	1705.4	1930.0	1997.4	1977.0	1869.0	1577.9
65°	366.5	379.6	469.7	869.0	1214.6	1610.7	1952.5	2053.4	2046.6	1926.8	1551.8
67.5°	244.2	255.1	281.0	595.9	942.9	1421.4	1898.8	2043.6	2045.5	1917.4	1456.3
70°	147.1	156.5	173.4	346.6	611.1	1125.1	1732.5	1918.9	1930.0	1791.7	1275.2
72.5°	60.6	66.9	82.3	157.1	316.5	714.1	1379.6	1647.5	1673.4	1506.5	978.7
75°	34.3	37.6	48.3	78.8	137.3	332.8	835.7	1169.6	1207.7	1038.4	588.8
77.5°	22.8	24.4	31.3	51.0	77.3	113.5	357.1	609.3	682.2	567.1	254.9
80°	15.3	16.7	21.5	34.1	50.3	48.7	113.7	225.7	277.7	194.9	62.1
82.5°	10.4	10.5	15.3	22.4	31.8	23.6	33.6	70.2	88.2	56.4	23.6
85°	5.9	5.8	11.3	13.0	14.2	9.8	10.2	21.1	27.6	23.8	13.4
87.5°	0.8	1.2	4.4	3.5	1.9	2.1	2.1	3.6	5.4	5.8	2.9
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°	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8	332.8
2.5°	333.1	333.0	332.4	331.8	330.5	329.7	330.1	329.7	329.5	329.7	330.5
5°	335.6	335.1	333.5	331.6	328.9	325.7	323.6	320.5	317.6	315.9	316.3
7.5°	342.4	341.8	339.7	334.3	325.7	312.1	299.6	288.7	280.4	275.6	275.8
10°	353.1	352.1	348.9	337.0	314.4	284.6	259.9	239.4	225.9	219.6	219.0
12.5°	365.8	364.6	358.8	334.5	292.9	246.5	212.3	189.5	177.0	171.5	170.9
15°	380.7	379.2	367.9	322.6	261.6	204.3	173.0	155.9	147.9	142.9	143.1
17.5°	399.3	396.6	374.6	304.8	227.7	172.0	148.8	136.0	128.9	124.1	123.7
20°	423.5	419.1	379.9	283.5	196.4	151.7	132.5	121.8	116.4	112.2	111.4
22.5°	457.2	450.9	386.5	260.5	174.3	137.7	120.4	112.6	108.2	103.4	102.6
25°	499.1	491.6	394.5	239.2	159.2	125.6	111.6	105.1	99.9	94.4	93.8
27.5°	557.5	544.1	404.1	221.7	146.1	115.3	103.6	96.3	90.3	85.7	84.8
30°	622.8	600.7	412.6	211.2	134.3	105.7	93.0	85.7	80.2	76.9	76.3
32.5°	684.5	654.6	418.1	206.6	123.5	94.7	81.5	73.6	69.4	68.5	69.0
35°	742.8	703.3	417.5	202.2	113.9	83.8	70.2	62.1	58.9	59.5	59.5
37.5°	809.9	755.3	413.5	195.2	106.1	73.8	60.4	53.3	50.4	50.6	51.4
40°	888.0	815.3	411.0	182.2	97.4	64.6	52.4	46.6	44.5	43.7	43.5
42.5°	971.2	873.4	411.4	167.4	86.7	56.4	46.8	42.0	40.1	39.5	39.3
45°	1054.9	928.9	412.0	152.1	75.4	50.1	42.8	38.7	37.6	36.8	36.8
47.5°	1133.5	976.0	401.2	135.6	64.3	45.3	39.5	36.8	35.9	34.9	34.9
50°	1206.8	1007.5	375.3	116.4	55.4	41.4	37.0	35.1	34.1	33.2	33.2
52.5°	1263.7	1012.5	332.6	96.7	49.3	38.6	35.5	33.8	32.6	31.6	31.5
55°	1289.1	981.2	271.8	78.3	44.5	36.1	33.9	32.2	30.9	29.9	29.7
57.5°	1282.5	915.4	211.9	62.9	39.9	33.6	32.0	30.9	29.3	27.8	27.6
60°	1250.5	827.4	159.8	52.4	35.7	30.9	29.9	29.0	26.9	24.5	24.2
62.5°	1195.1	716.7	113.9	43.3	31.1	27.8	27.4	26.7	23.6	19.4	19.0
65°	1110.3	582.3	76.7	36.1	26.7	24.4	24.5	23.2	19.2	14.4	14.0
67.5°	986.4	425.8	49.1	29.5	22.2	20.3	20.5	19.8	16.3	12.3	11.7
70°	828.6	281.9	32.0	22.4	17.8	15.7	16.9	17.1	13.8	10.0	9.6
72.5°	607.4	166.5	22.4	16.7	13.0	10.9	13.8	14.2	11.1	7.5	7.1
75°	346.2	79.0	16.9	12.1	8.1	7.7	10.7	10.7	7.7	5.0	4.6
77.5°	145.4	33.0	11.9	7.9	4.6	4.4	7.3	6.7	3.8	2.3	2.3
80°	42.0	14.8	6.3	3.8	1.9	1.7	2.9	2.1	1.0	0.4	0.4
82.5°	16.5	6.5	2.5	1.5	0.8	0.8	0.4	0.0	0.0	0.0	0.0
85°	9.8	2.7	1.2	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)