

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: P881768

Luminaire Tested: **NAV-SB1B-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881768
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-SB1B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA 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: 3591 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

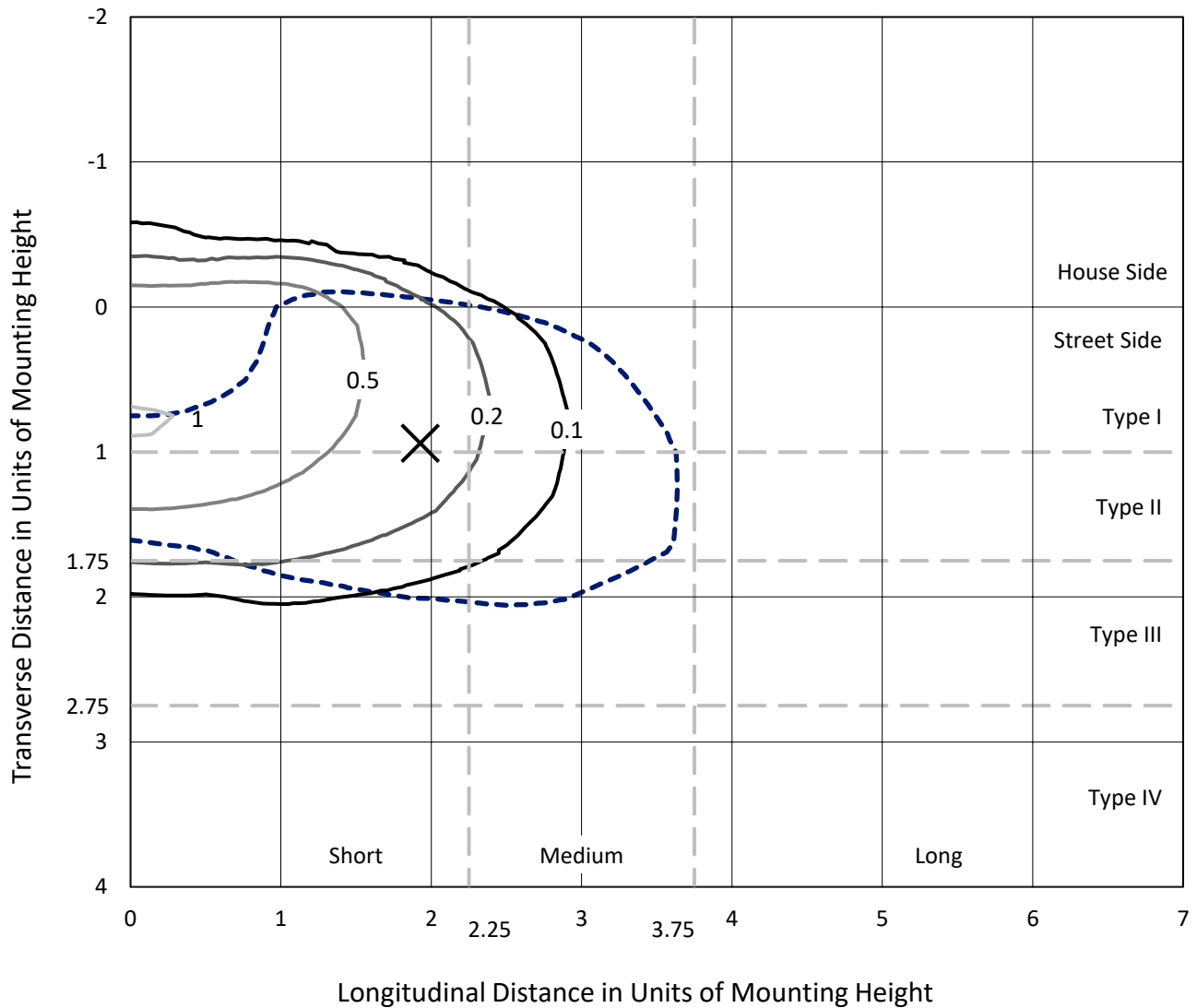
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881768
 CATALOG NUMBER: NAV-SB1B-827-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

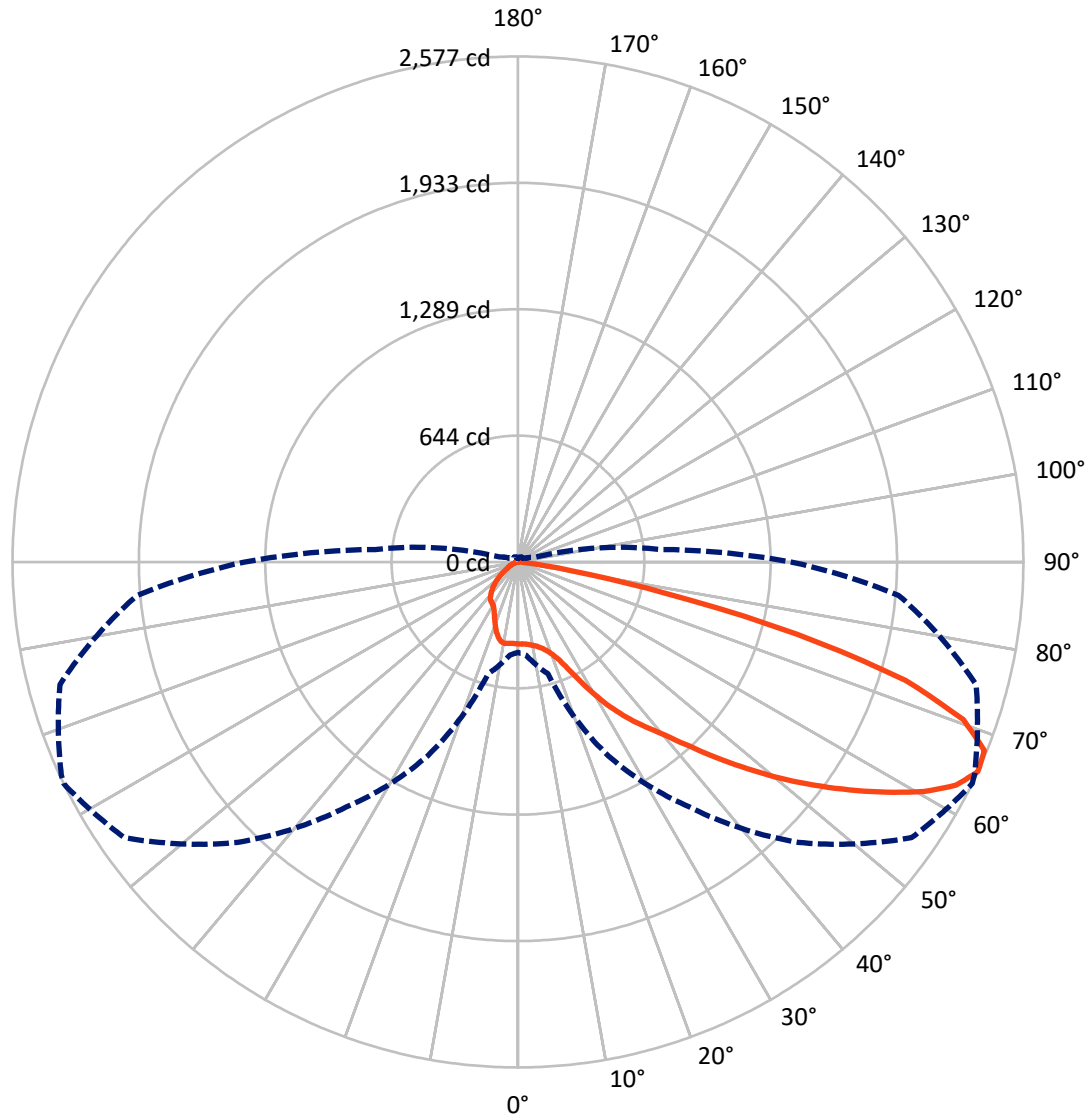
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

REPORT NUMBER: P881768
CATALOG NUMBER: NAV-SB1B-827-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P881768

CATALOG NUMBER: NAV-SB1B-827-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	480.2	0.0	480.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	3110.8	0.0	3110.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	3591.0	0.0	3591.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	1.1
10°-20°	104.5	2.9
20°-30°	198.0	5.5
30°-40°	400.8	11.2
40°-50°	682.7	19.0
50°-60°	928.4	25.9
60°-70°	871.8	24.3
70°-80°	349.3	9.7
80°-90°	16.9	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°	3591.0	100.0
0°-180°	3591.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881768

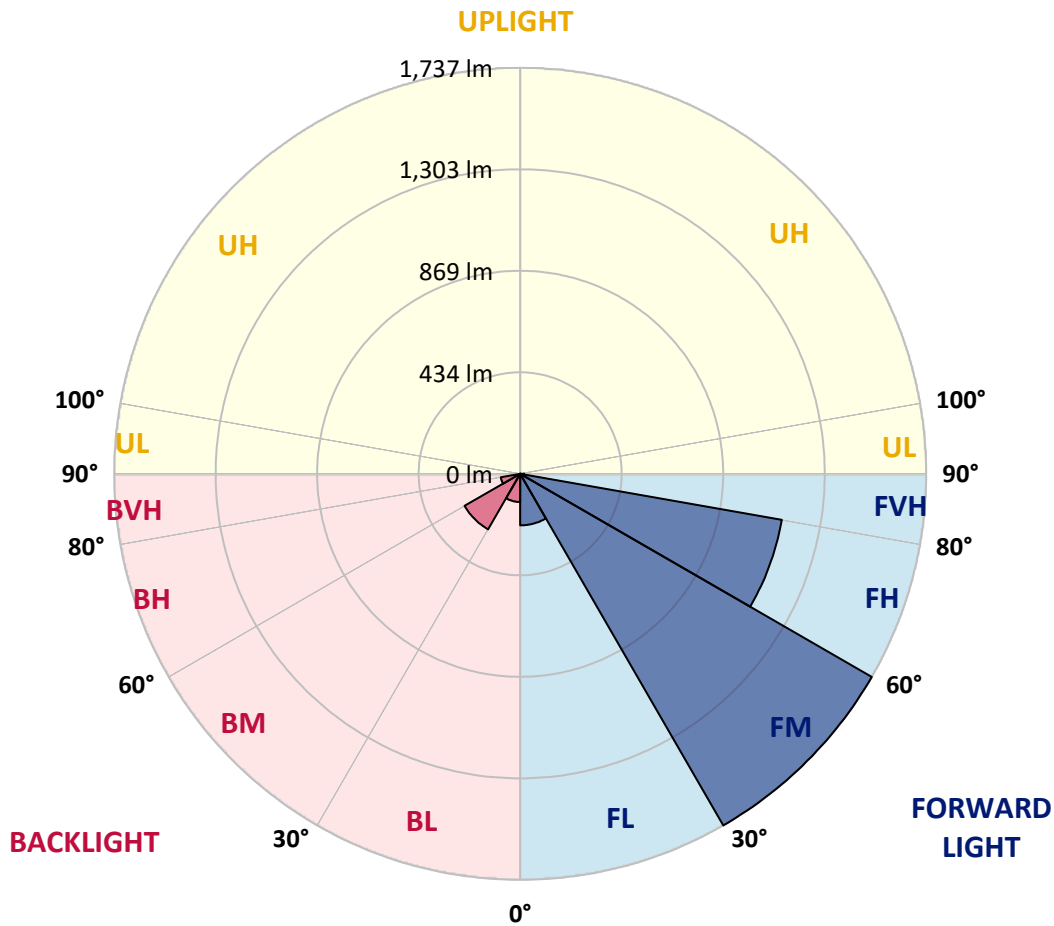
CATALOG NUMBER: NAV-SB1B-827-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	220.5	6.1			
FM (30°-60°)	1737.3	48.4			
FH (60°-80°)	1136.8	31.7			G1/1800
FVH (80°-90°)	16.1	0.4			G1/100
BL (0°-30°)	120.6	3.4	B1/500		
BM (30°-60°)	274.5	7.6	B1/1000		
BH (60°-80°)	84.3	2.3	B0/110		G0/110
BVH (80°-90°)	0.8	0.0			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 III Short



REPORT NUMBER: P881768

CATALOG NUMBER: NAV-SB1B-827-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
2.5°	416.2	419.1	418.4	417.7	417.4	417.9	418.2	417.9	417.9	417.9	418.2
5°	408.3	410.7	410.7	412.4	414.8	417.7	419.8	420.3	420.8	421.5	421.3
7.5°	393.1	395.0	396.5	402.0	408.0	415.7	422.2	425.6	426.1	428.7	429.7
10°	382.8	385.2	387.6	393.4	402.0	413.6	424.7	432.8	434.0	440.3	443.2
12.5°	382.3	384.7	387.8	394.1	404.2	416.5	429.9	441.7	443.9	453.1	459.1
15°	387.3	390.2	393.1	400.8	411.7	426.6	441.0	455.7	457.9	470.9	477.4
17.5°	397.7	401.5	403.7	411.4	423.0	439.6	458.6	475.4	477.4	492.5	500.7
20°	418.2	422.7	423.4	429.7	441.0	458.8	481.5	502.4	504.8	522.1	531.3
22.5°	460.5	467.0	461.2	464.4	474.5	492.3	516.9	543.3	546.7	566.4	574.6
25°	535.1	544.3	529.4	524.1	528.4	546.9	577.8	611.2	615.1	631.0	635.1
27.5°	681.8	670.0	647.3	625.2	612.2	622.8	657.4	698.8	703.7	719.1	714.3
30°	842.8	832.5	801.9	752.8	722.0	720.3	752.3	798.5	804.0	818.7	804.0
32.5°	1004.1	994.2	961.0	900.6	847.1	820.7	842.8	894.1	897.0	906.4	884.7
35°	1162.7	1152.6	1119.4	1057.5	991.8	931.6	927.3	985.1	986.0	995.9	963.7
37.5°	1322.3	1313.9	1278.5	1217.9	1153.1	1070.1	1029.9	1071.3	1072.5	1082.1	1048.6
40°	1436.2	1439.8	1415.5	1368.6	1313.0	1222.2	1144.9	1163.0	1155.8	1171.9	1151.9
42.5°	1533.9	1541.2	1520.0	1496.4	1464.1	1384.2	1287.4	1284.3	1272.8	1281.4	1260.7
45°	1618.4	1624.5	1605.4	1599.9	1599.2	1543.1	1443.2	1424.4	1408.3	1406.6	1381.8
47.5°	1649.5	1661.1	1669.2	1687.8	1723.9	1700.3	1604.2	1575.1	1557.1	1543.8	1504.6
50°	1661.3	1673.6	1701.5	1755.4	1840.9	1851.0	1764.6	1731.8	1709.7	1685.6	1627.8
52.5°	1645.4	1667.3	1704.9	1795.6	1919.6	1971.8	1918.4	1889.7	1864.5	1825.2	1739.5
55°	1551.8	1573.7	1650.5	1795.1	1958.8	2056.6	2063.8	2051.0	2022.6	1960.8	1829.8
57.5°	1354.4	1386.9	1508.4	1734.0	1958.1	2129.5	2206.3	2215.5	2183.7	2095.1	1900.8
60°	1080.9	1124.9	1273.2	1598.5	1897.7	2169.0	2331.3	2377.0	2343.3	2227.5	1958.4
62.5°	754.2	805.2	945.6	1386.1	1759.5	2140.6	2422.5	2507.0	2481.5	2345.9	1980.5
65°	460.0	476.4	589.6	1090.8	1524.6	2021.7	2450.7	2577.3	2568.9	2418.4	1947.8
67.5°	306.5	320.2	352.7	748.0	1183.4	1784.1	2383.3	2565.0	2567.4	2406.6	1827.9
70°	184.6	196.4	217.6	435.0	767.0	1412.1	2174.5	2408.5	2422.5	2248.9	1600.6
72.5°	76.1	84.0	103.3	197.2	397.2	896.2	1731.6	2067.9	2100.4	1891.0	1228.5
75°	43.1	47.2	60.7	98.9	172.4	417.7	1048.9	1468.0	1515.9	1303.3	739.0
77.5°	28.6	30.6	39.2	64.0	97.0	142.5	448.2	764.8	856.3	711.8	319.9
80°	19.3	20.9	27.0	42.9	63.1	61.1	142.8	283.3	348.6	244.6	78.0
82.5°	13.0	13.2	19.3	28.2	40.0	29.6	42.1	88.1	110.7	70.8	29.6
85°	7.5	7.2	14.2	16.4	17.8	12.3	12.8	26.5	34.7	29.9	16.9
87.5°	1.0	1.4	5.5	4.3	2.4	2.6	2.6	4.6	6.7	7.2	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P881768

CATALOG NUMBER: NAV-SB1B-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
2.5°	418.2	417.9	417.2	416.5	414.8	413.8	414.3	413.8	413.6	413.8	414.8
5°	421.3	420.6	418.6	416.2	412.9	408.8	406.1	402.3	398.7	396.5	397.0
7.5°	429.7	429.0	426.3	419.6	408.8	391.7	376.0	362.3	352.0	345.9	346.2
10°	443.2	442.0	437.9	423.0	394.6	357.2	326.2	300.4	283.6	275.6	274.9
12.5°	459.1	457.6	450.4	419.8	367.6	309.3	266.5	237.8	222.2	215.2	214.5
15°	477.9	475.9	461.7	404.9	328.4	256.4	217.1	195.7	185.6	179.3	179.6
17.5°	501.2	497.8	470.2	382.5	285.7	215.9	186.8	170.7	161.8	155.8	155.3
20°	531.5	526.0	476.9	355.8	246.5	190.4	166.3	152.9	146.1	140.8	139.9
22.5°	573.9	566.0	485.1	326.9	218.8	172.8	151.2	141.3	135.8	129.8	128.8
25°	626.4	617.0	495.2	300.2	199.8	157.7	140.1	131.9	125.4	118.4	117.7
27.5°	699.8	683.0	507.2	278.3	183.4	144.7	130.0	120.8	113.4	107.6	106.4
30°	781.7	754.0	517.8	265.0	168.5	132.6	116.8	107.6	100.6	96.5	95.8
32.5°	859.2	821.6	524.8	259.3	155.0	118.9	102.3	92.4	87.1	85.9	86.7
35°	932.4	882.8	524.1	253.7	143.0	105.2	88.1	78.0	73.9	74.6	74.6
37.5°	1016.6	948.0	519.0	245.1	133.1	92.7	75.8	66.9	63.3	63.6	64.5
40°	1114.6	1023.4	515.9	228.7	122.3	81.1	65.7	58.5	55.8	54.9	54.6
42.5°	1219.1	1096.3	516.4	210.2	108.8	70.8	58.7	52.7	50.3	49.6	49.4
45°	1324.0	1165.9	517.1	190.9	94.6	62.8	53.7	48.6	47.2	46.2	46.2
47.5°	1422.7	1225.1	503.6	170.2	80.6	56.8	49.6	46.2	45.0	43.8	43.8
50°	1514.7	1264.6	471.1	146.1	69.6	52.0	46.5	44.1	42.9	41.6	41.6
52.5°	1586.2	1270.8	417.4	121.3	61.9	48.4	44.5	42.4	40.9	39.7	39.5
55°	1618.0	1231.6	341.1	98.2	55.8	45.3	42.6	40.4	38.8	37.6	37.3
57.5°	1609.8	1149.0	266.0	79.0	50.1	42.1	40.2	38.8	36.8	34.9	34.7
60°	1569.6	1038.5	200.5	65.7	44.8	38.8	37.6	36.4	33.7	30.8	30.3
62.5°	1500.0	899.6	143.0	54.4	39.0	34.9	34.4	33.5	29.6	24.3	23.8
65°	1393.6	730.9	96.3	45.3	33.5	30.6	30.8	29.1	24.1	18.1	17.6
67.5°	1238.1	534.4	61.6	37.1	27.9	25.5	25.8	24.8	20.5	15.4	14.7
70°	1040.0	353.9	40.2	28.2	22.4	19.7	21.2	21.4	17.3	12.5	12.0
72.5°	762.4	209.0	28.2	20.9	16.4	13.7	17.3	17.8	14.0	9.4	8.9
75°	434.5	99.2	21.2	15.2	10.1	9.6	13.5	13.5	9.6	6.3	5.8
77.5°	182.5	41.4	14.9	9.9	5.8	5.5	9.1	8.4	4.8	2.9	2.9
80°	52.7	18.5	7.9	4.8	2.4	2.2	3.6	2.6	1.2	0.5	0.5
82.5°	20.7	8.2	3.1	1.9	1.0	1.0	0.5	0.0	0.0	0.0	0.0
85°	12.3	3.4	1.4	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	0.7	0.5	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)