

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: P881763

Luminaire Tested: **NAV-SB1B-827-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881763
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-827-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3196 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

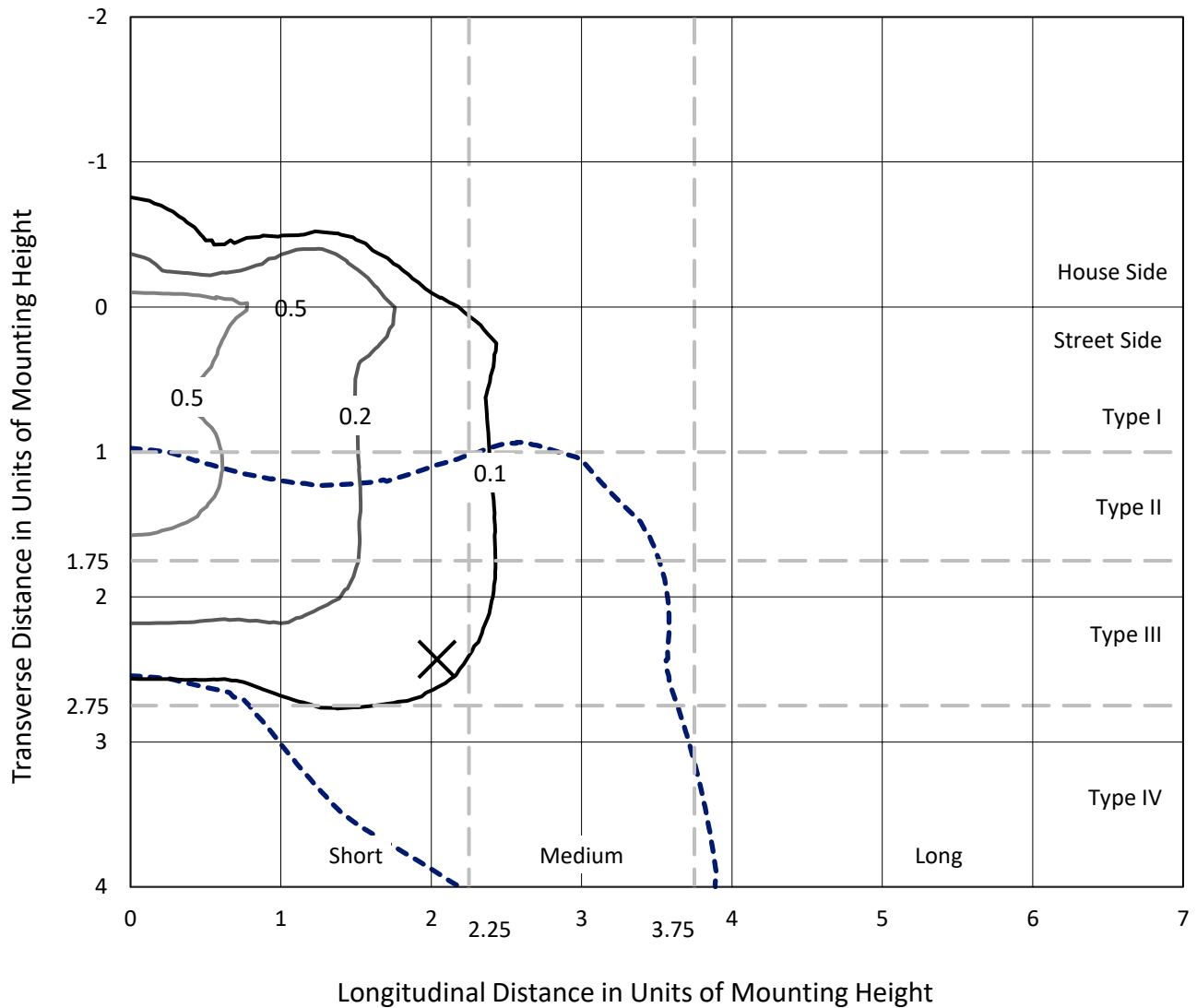
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881763
 CATALOG NUMBER: NAV-SB1B-827-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

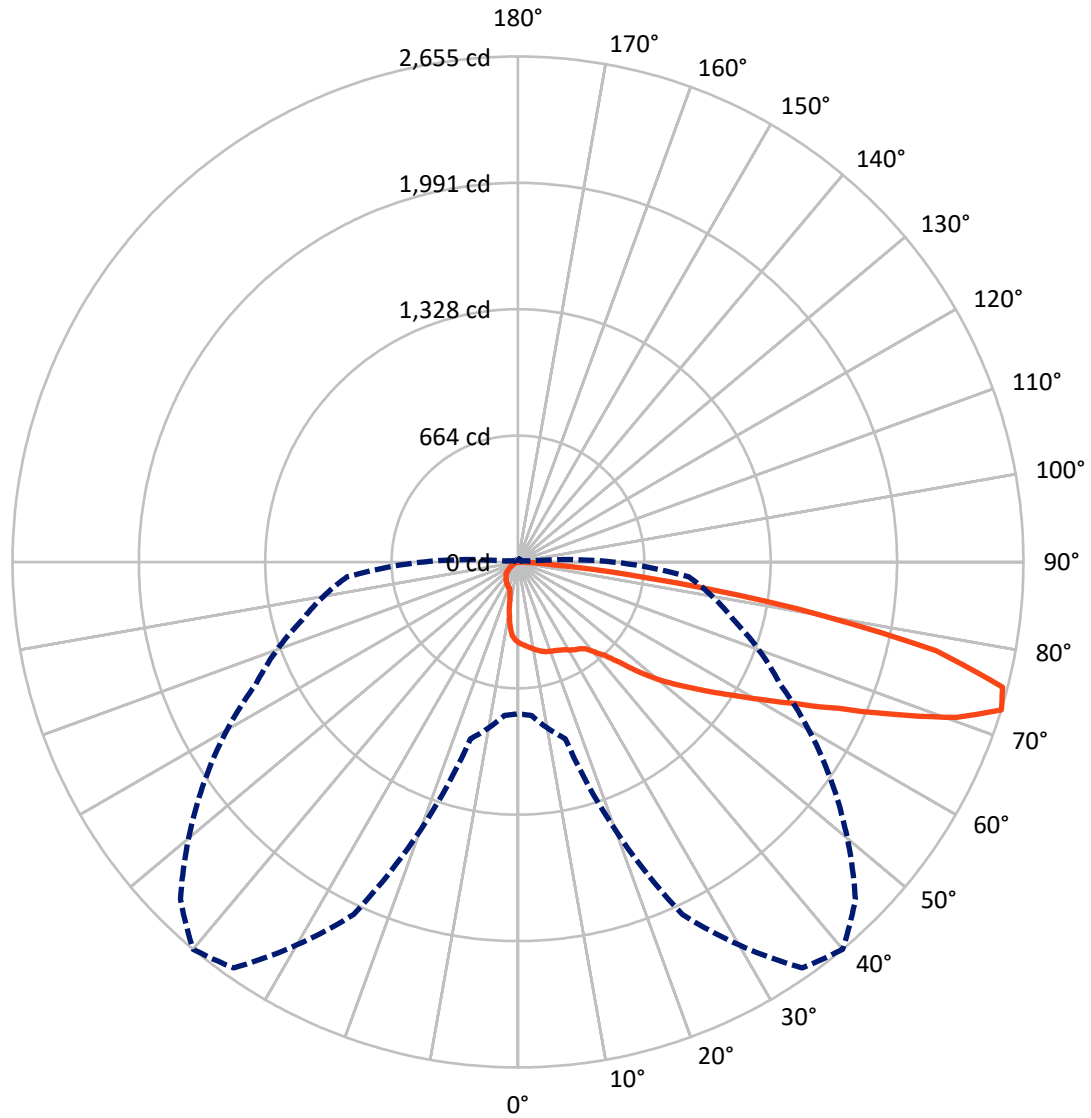
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P881763
CATALOG NUMBER: NAV-SB1B-827-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P881763

CATALOG NUMBER: NAV-SB1B-827-U-SL4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	412.7	0.0	412.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2783.3	0.0	2783.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	3196.0	0.0	3196.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	1.2
10°-20°	105.0	3.3
20°-30°	169.8	5.3
30°-40°	250.7	7.8
40°-50°	422.0	13.2
50°-60°	655.2	20.5
60°-70°	819.8	25.7
70°-80°	671.2	21.0
80°-90°	63.6	2.0
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°	3196.0	100.0
0°-180°	3196.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881763

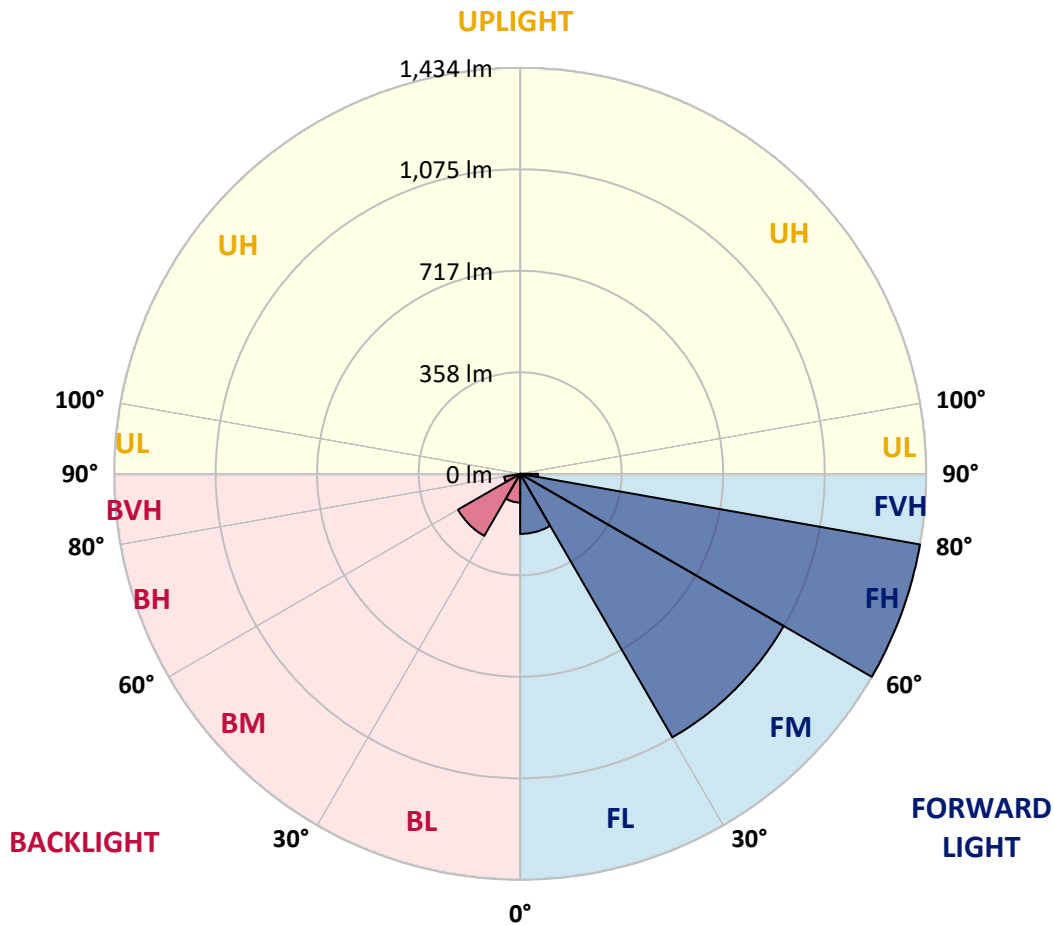
CATALOG NUMBER: NAV-SB1B-827-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	212.1	6.6			
FM (30°-60°)	1074.4	33.6			
FH (60°-80°)	1433.6	44.9			G1/1800
FVH (80°-90°)	63.2	2.0			G1/100
BL (0°-30°)	101.3	3.2	B0/110		
BM (30°-60°)	253.4	7.9	B1/1000		
BH (60°-80°)	57.5	1.8	B0/110		G0/110
BVH (80°-90°)	0.5	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 IV Short



REPORT NUMBER: P881763
 CATALOG NUMBER: NAV-SB1B-827-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2
2.5°	435.9	437.6	436.7	434.7	434.2	433.3	432.1	431.6	429.9	428.5	426.8
5°	448.2	449.9	448.7	446.0	444.8	443.6	442.0	440.5	437.1	434.0	430.2
7.5°	461.7	463.1	461.7	457.8	455.9	454.5	452.1	449.9	446.0	441.5	436.7
10°	476.6	477.8	475.7	470.6	467.5	465.3	463.1	460.7	457.1	452.1	446.3
12.5°	490.6	492.0	488.7	482.6	479.0	476.9	474.4	472.5	468.9	464.1	458.1
15°	503.3	505.5	499.7	493.2	489.1	487.4	485.0	483.8	481.4	478.1	472.5
17.5°	513.0	514.4	508.4	500.7	496.1	494.9	493.2	493.9	493.5	491.8	488.2
20°	521.1	522.1	514.2	504.8	499.7	500.0	499.5	501.9	502.9	502.9	502.6
22.5°	531.3	531.5	521.4	509.6	503.6	505.3	506.0	508.6	510.6	512.5	516.8
25°	544.5	544.0	532.0	515.9	510.6	513.0	514.6	515.6	517.8	520.9	530.8
27.5°	564.2	562.8	547.4	526.0	519.7	521.9	525.0	524.5	523.6	526.0	542.6
30°	589.3	587.3	566.9	540.2	534.4	536.3	537.3	532.9	526.0	528.1	552.9
32.5°	629.0	625.6	597.2	556.1	547.1	549.3	548.1	539.2	528.9	531.0	563.3
35°	698.1	689.9	649.7	589.3	561.6	559.2	556.3	547.6	534.9	532.7	571.9
37.5°	844.9	830.5	761.9	654.0	594.3	578.7	569.8	561.1	541.4	532.7	581.8
40°	1010.5	995.8	916.6	762.3	648.7	622.2	601.1	577.0	548.1	535.8	597.2
42.5°	1183.4	1167.2	1085.9	896.7	726.5	672.1	632.6	589.8	559.2	545.5	617.7
45°	1376.4	1356.2	1249.8	1036.8	839.4	754.9	683.4	616.0	578.4	562.6	645.6
47.5°	1580.1	1553.8	1413.2	1172.8	960.9	869.5	776.3	662.9	606.8	588.1	683.4
50°	1760.6	1734.6	1582.0	1315.0	1074.6	978.5	882.2	727.9	649.4	624.2	734.2
52.5°	1890.3	1870.6	1735.6	1461.9	1192.7	1080.8	978.3	803.5	703.4	670.4	794.1
55°	1977.2	1959.2	1844.4	1601.0	1330.2	1193.5	1072.9	885.6	768.4	725.8	860.3
57.5°	2029.9	2019.6	1923.1	1725.2	1466.4	1316.7	1181.2	975.9	844.9	791.0	934.2
60°	2048.7	2040.3	1971.9	1843.6	1631.1	1464.7	1308.5	1077.7	937.8	865.1	1010.0
62.5°	1998.7	2000.3	2007.1	1984.0	1804.6	1638.1	1461.1	1200.0	1040.9	949.1	1081.3
65°	1763.0	1777.0	1905.0	2139.5	2034.5	1855.2	1655.4	1349.2	1158.8	1044.7	1137.9
67.5°	1459.7	1479.9	1639.3	2230.5	2279.6	2137.1	1926.0	1539.4	1299.4	1142.0	1159.3
70°	1117.4	1139.1	1332.1	2211.4	2509.0	2445.2	2260.6	1781.3	1445.0	1209.4	1104.6
72.5°	797.5	808.6	960.7	2042.2	2603.1	2655.1	2507.0	2010.4	1519.4	1172.0	901.0
75°	560.4	558.5	659.3	1644.6	2456.5	2629.6	2420.6	1886.5	1375.0	931.1	555.6
77.5°	244.1	244.6	329.3	998.7	1960.6	2245.9	2012.1	1181.7	958.5	493.5	234.5
80°	63.3	65.2	120.8	397.7	1180.5	1482.3	1227.2	519.5	442.9	120.4	44.8
82.5°	22.4	23.8	55.6	124.9	435.5	679.8	546.4	166.1	115.5	34.4	12.0
85°	6.5	7.7	29.8	38.3	90.0	192.1	132.6	32.3	28.4	17.8	3.1
87.5°	0.0	1.0	6.0	5.3	5.3	3.6	6.7	3.6	4.6	2.2	1.0
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: P881763

CATALOG NUMBER: NAV-SB1B-827-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2
2.5°	425.3	423.7	420.0	416.2	412.6	409.2	408.3	404.6	403.0	403.2	403.0
5°	427.5	424.4	417.4	409.0	400.3	390.4	382.3	370.7	360.8	359.6	358.9
7.5°	433.3	428.2	416.9	400.5	378.9	351.7	326.4	301.4	287.2	279.5	279.0
10°	442.2	435.5	418.1	386.8	340.9	292.2	254.0	222.4	206.3	198.8	197.4
12.5°	452.8	445.3	420.0	363.5	291.7	228.0	186.6	167.3	163.9	163.4	163.2
15°	467.7	459.5	422.2	331.9	238.5	173.6	154.5	154.8	157.4	158.9	158.6
17.5°	484.3	476.1	419.1	293.4	186.1	148.3	147.8	150.0	153.8	155.3	155.0
20°	501.2	493.5	408.0	248.2	150.4	141.3	143.2	145.6	149.5	151.4	151.4
22.5°	518.5	511.8	390.4	200.0	135.8	136.2	138.7	141.1	145.4	147.6	147.6
25°	537.0	531.3	367.1	160.3	129.5	130.9	134.1	137.0	141.5	144.2	144.2
27.5°	555.8	551.5	340.6	133.8	123.7	125.4	129.0	132.9	137.4	140.6	140.8
30°	576.3	573.9	319.4	124.0	118.2	119.6	123.7	128.1	133.1	137.0	137.4
32.5°	597.2	596.7	309.1	131.2	113.1	114.1	117.7	122.0	128.3	133.1	133.6
35°	617.9	618.9	303.1	151.7	111.5	108.8	111.2	115.1	122.5	128.5	129.5
37.5°	644.4	646.8	302.8	173.8	115.5	103.5	105.2	107.8	114.3	121.3	122.5
40°	683.9	696.6	318.2	192.8	122.8	98.7	99.2	99.7	103.0	108.8	110.7
42.5°	736.3	773.7	373.8	205.8	125.7	94.4	92.7	90.0	89.5	92.7	94.4
45°	801.6	866.8	471.6	213.0	122.8	89.5	85.0	78.0	75.3	77.5	77.5
47.5°	878.4	968.9	587.3	214.7	118.0	83.5	75.3	66.2	64.0	64.8	64.5
50°	953.2	1045.4	689.2	200.8	110.0	75.8	64.8	57.0	55.6	55.8	55.8
52.5°	1019.4	1071.7	718.1	167.8	99.4	66.4	55.6	50.3	49.3	49.3	49.1
55°	1063.2	1043.3	640.3	128.3	86.2	56.8	47.7	45.0	44.5	44.3	43.8
57.5°	1072.4	950.8	483.6	92.7	67.4	47.9	42.4	40.9	40.0	39.0	38.5
60°	1039.6	796.8	307.9	64.8	50.6	40.9	37.6	36.6	34.7	32.7	32.0
62.5°	968.9	601.8	170.4	45.0	40.7	34.9	33.2	32.0	28.4	25.3	24.3
65°	873.8	400.1	75.3	35.1	33.2	29.4	28.4	26.7	22.4	18.8	18.1
67.5°	778.2	230.4	33.9	28.2	26.7	24.1	23.3	22.1	19.0	15.6	15.2
70°	669.2	116.7	23.3	22.4	20.7	18.3	19.0	18.8	15.6	12.8	12.3
72.5°	498.3	58.0	17.6	16.9	14.9	13.0	15.6	15.4	12.3	9.6	9.1
75°	282.1	28.6	12.8	11.8	8.9	9.6	12.5	11.8	8.4	6.3	5.8
77.5°	111.9	14.7	8.4	7.2	5.3	6.5	9.1	7.9	4.3	2.6	2.4
80°	25.8	7.2	4.3	3.1	2.4	3.9	4.8	2.9	1.2	0.2	0.0
82.5°	7.2	3.1	1.4	1.2	1.2	1.4	1.2	0.5	0.0	0.0	0.0
85°	2.4	1.4	0.5	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	0.0	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)