

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: P881613

Luminaire Tested: **NAV-SB1A-835-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881613
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-SB1A-835-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 350mA 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: 2644 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

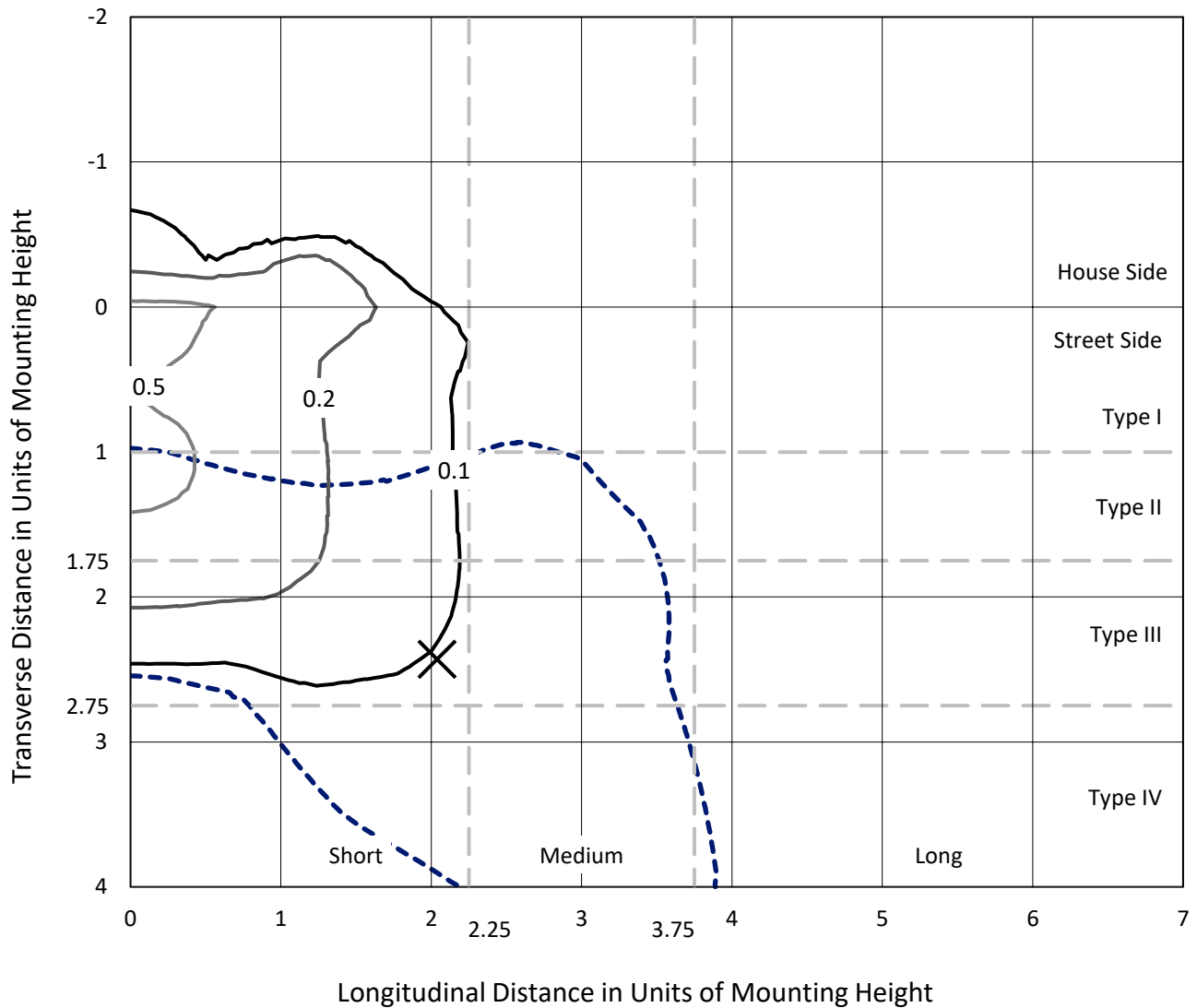
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881613
 CATALOG NUMBER: NAV-SB1A-835-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

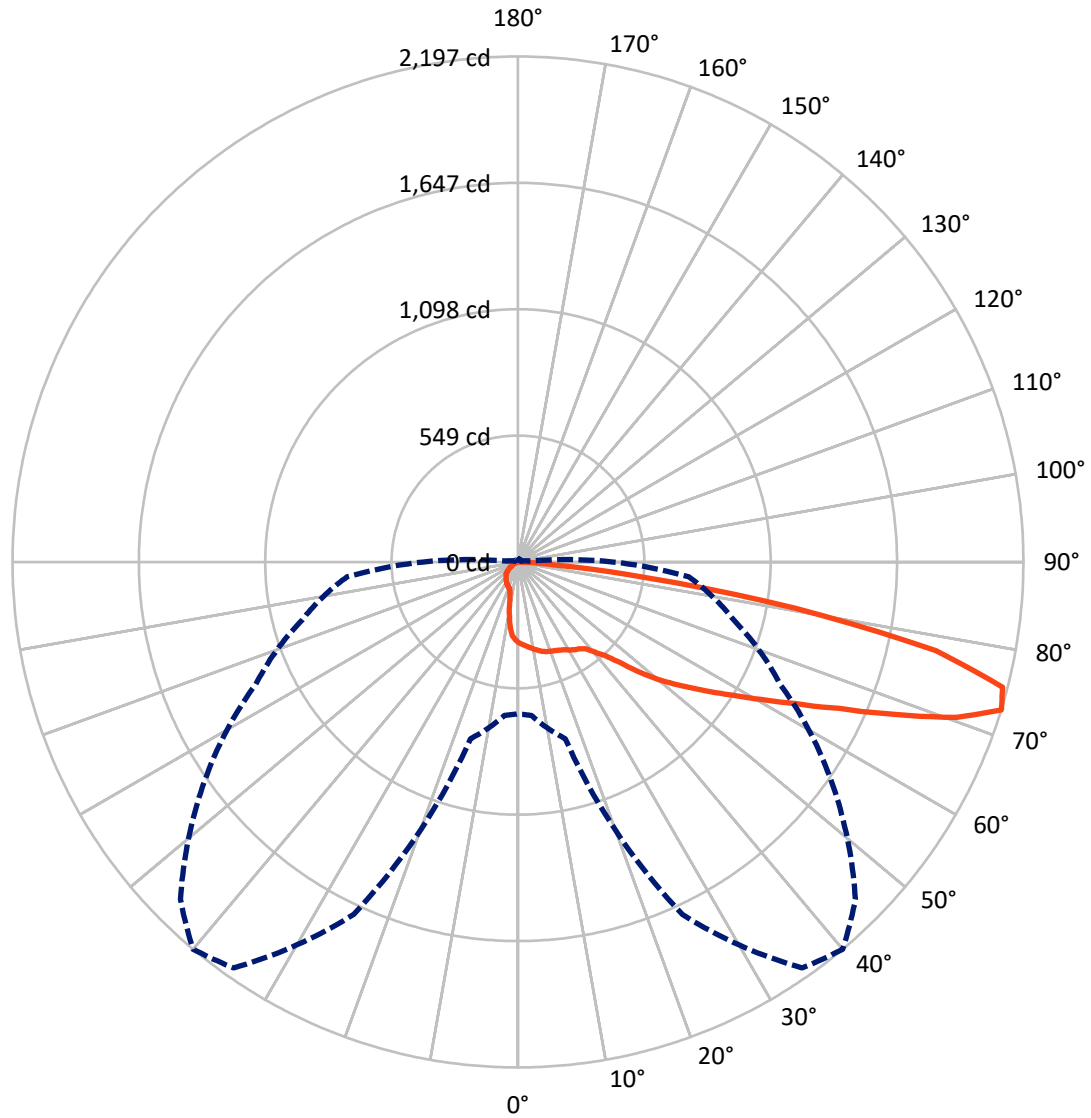
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P881613
CATALOG NUMBER: NAV-SB1A-835-U-SL4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P881613
 CATALOG NUMBER: NAV-SB1A-835-U-SL4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	341.5	0.0	341.5
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2302.6	0.0	2302.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	2644.0	0.0	2644.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.0	1.2
10°-20°	86.8	3.3
20°-30°	140.5	5.3
30°-40°	207.4	7.8
40°-50°	349.1	13.2
50°-60°	542.0	20.5
60°-70°	678.2	25.7
70°-80°	555.3	21.0
80°-90°	52.7	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°	2644.0	100.0
0°-180°	2644.0	100.0

Coefficient of Utilization



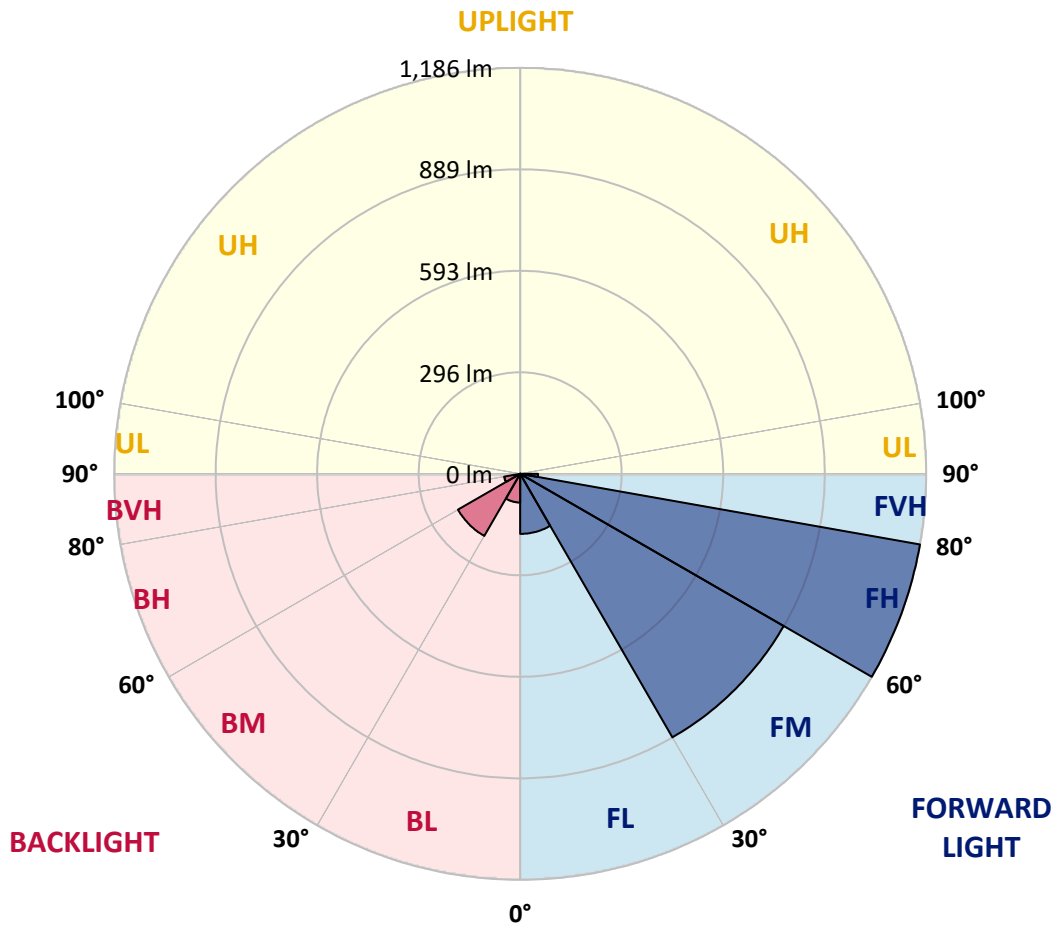
REPORT NUMBER: P881613
 CATALOG NUMBER: NAV-SB1A-835-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	175.5	6.6			
FM (30°-60°)	888.9	33.6			
FH (60°-80°)	1185.9	44.9			G1/1800
FVH (80°-90°)	52.3	2.0			G1/100
BL (0°-30°)	83.8	3.2	B0/110		
BM (30°-60°)	209.7	7.9	B0/220		
BH (60°-80°)	47.6	1.8	B0/110		G0/110
BVH (80°-90°)	0.4	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 IV Short



REPORT NUMBER: P881613

CATALOG NUMBER: NAV-SB1A-835-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1
2.5°	360.6	362.0	361.2	359.6	359.2	358.5	357.5	357.1	355.7	354.5	353.1
5°	370.8	372.2	371.2	369.0	368.0	367.0	365.6	364.4	361.6	359.0	355.9
7.5°	381.9	383.1	381.9	378.8	377.2	376.0	374.0	372.2	369.0	365.2	361.2
10°	394.3	395.3	393.5	389.3	386.7	384.9	383.1	381.2	378.2	374.0	369.2
12.5°	405.8	407.0	404.3	399.3	396.3	394.5	392.5	390.9	387.9	383.9	379.0
15°	416.4	418.2	413.4	408.0	404.7	403.3	401.3	400.3	398.3	395.5	390.9
17.5°	424.4	425.6	420.6	414.2	410.4	409.4	408.0	408.6	408.2	406.8	403.9
20°	431.1	431.9	425.4	417.6	413.4	413.6	413.2	415.2	416.0	416.0	415.8
22.5°	439.5	439.7	431.3	421.6	416.6	418.0	418.6	420.8	422.4	424.0	427.6
25°	450.5	450.1	440.1	426.8	422.4	424.4	425.8	426.6	428.3	430.9	439.1
27.5°	466.8	465.6	452.8	435.1	429.9	431.7	434.3	433.9	433.1	435.1	448.9
30°	487.5	485.9	469.0	446.9	442.1	443.7	444.5	440.9	435.1	436.9	457.4
32.5°	520.4	517.6	494.1	460.0	452.6	454.4	453.4	446.1	437.5	439.3	466.0
35°	577.5	570.7	537.5	487.5	464.6	462.6	460.2	453.0	442.5	440.7	473.2
37.5°	699.0	687.0	630.3	541.1	491.7	478.7	471.4	464.2	447.9	440.7	481.3
40°	836.0	823.8	758.3	630.7	536.7	514.8	497.3	477.3	453.4	443.3	494.1
42.5°	979.0	965.6	898.3	741.8	601.0	556.0	523.3	487.9	462.6	451.2	511.0
45°	1138.7	1122.0	1033.9	857.7	694.4	624.5	565.4	509.6	478.5	465.4	534.1
47.5°	1307.2	1285.4	1169.1	970.2	795.0	719.3	642.2	548.4	502.0	486.5	565.4
50°	1456.5	1435.0	1308.7	1087.9	889.0	809.5	729.8	602.2	537.3	516.4	607.4
52.5°	1563.8	1547.5	1435.8	1209.4	986.7	894.1	809.3	664.7	581.9	554.6	657.0
55°	1635.7	1620.8	1525.8	1324.5	1100.4	987.3	887.6	732.6	635.7	600.4	711.7
57.5°	1679.3	1670.8	1590.9	1427.2	1213.2	1089.3	977.2	807.3	699.0	654.4	772.9
60°	1694.9	1687.9	1631.3	1525.2	1349.4	1211.8	1082.5	891.5	775.8	715.7	835.6
62.5°	1653.5	1654.8	1660.4	1641.3	1492.9	1355.1	1208.8	992.7	861.1	785.2	894.5
65°	1458.5	1470.0	1576.0	1770.0	1683.1	1534.8	1369.5	1116.2	958.7	864.3	941.3
67.5°	1207.6	1224.3	1356.1	1845.2	1885.8	1768.0	1593.3	1273.5	1075.0	944.7	959.1
70°	924.4	942.3	1102.0	1829.5	2075.6	2022.9	1870.1	1473.6	1195.4	1000.5	913.9
72.5°	659.7	668.9	794.8	1689.5	2153.5	2196.5	2074.0	1663.2	1257.0	969.6	745.4
75°	463.6	462.0	545.4	1360.5	2032.2	2175.4	2002.5	1560.7	1137.5	770.3	459.6
77.5°	201.9	202.3	272.4	826.2	1622.0	1858.0	1664.6	977.6	793.0	408.2	194.0
80°	52.4	54.0	100.0	329.0	976.6	1226.3	1015.2	429.7	366.4	99.6	37.0
82.5°	18.5	19.7	46.0	103.4	360.2	562.4	452.0	137.4	95.6	28.5	10.0
85°	5.4	6.4	24.7	31.7	74.5	158.9	109.7	26.7	23.5	14.7	2.6
87.5°	0.0	0.8	5.0	4.4	4.4	3.0	5.6	3.0	3.8	1.8	0.8
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: P881613
 CATALOG NUMBER: NAV-SB1A-835-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1
2.5°	351.9	350.5	347.5	344.3	341.3	338.5	337.7	334.8	333.4	333.6	333.4
5°	353.7	351.1	345.3	338.3	331.2	323.0	316.2	306.7	298.5	297.5	296.9
7.5°	358.5	354.3	344.9	331.4	313.4	290.9	270.0	249.3	237.6	231.2	230.8
10°	365.8	360.2	345.9	320.0	282.0	241.8	210.1	184.0	170.7	164.5	163.3
12.5°	374.6	368.4	347.5	300.7	241.4	188.6	154.3	138.4	135.6	135.2	135.0
15°	386.9	380.2	349.3	274.6	197.3	143.6	127.8	128.0	130.2	131.4	131.2
17.5°	400.7	393.9	346.7	242.8	153.9	122.7	122.3	124.1	127.3	128.4	128.2
20°	414.6	408.2	337.5	205.3	124.5	116.9	118.5	120.5	123.7	125.3	125.3
22.5°	428.9	423.4	323.0	165.5	112.3	112.7	114.7	116.7	120.3	122.1	122.1
25°	444.3	439.5	303.7	132.6	107.1	108.3	110.9	113.3	117.1	119.3	119.3
27.5°	459.8	456.2	281.8	110.7	102.4	103.8	106.7	109.9	113.7	116.3	116.5
30°	476.7	474.7	264.3	102.6	97.8	99.0	102.4	105.9	110.1	113.3	113.7
32.5°	494.1	493.7	255.7	108.5	93.6	94.4	97.4	101.0	106.1	110.1	110.5
35°	511.2	512.0	250.7	125.5	92.2	90.0	92.0	95.2	101.4	106.3	107.1
37.5°	533.1	535.1	250.5	143.8	95.6	85.6	87.0	89.2	94.6	100.4	101.4
40°	565.8	576.3	263.3	159.5	101.6	81.6	82.0	82.4	85.2	90.0	91.6
42.5°	609.2	640.0	309.3	170.3	104.0	78.1	76.7	74.5	74.1	76.7	78.1
45°	663.1	717.1	390.1	176.2	101.6	74.1	70.3	64.5	62.3	64.1	64.1
47.5°	726.7	801.5	485.9	177.6	97.6	69.1	62.3	54.8	53.0	53.6	53.4
50°	788.6	864.9	570.1	166.1	91.0	62.7	53.6	47.2	46.0	46.2	46.2
52.5°	843.4	886.6	594.0	138.8	82.2	55.0	46.0	41.6	40.8	40.8	40.6
55°	879.6	863.1	529.7	106.1	71.3	47.0	39.4	37.2	36.8	36.6	36.2
57.5°	887.2	786.6	400.1	76.7	55.8	39.6	35.0	33.9	33.1	32.3	31.9
60°	860.1	659.2	254.7	53.6	41.8	33.9	31.1	30.3	28.7	27.1	26.5
62.5°	801.5	497.8	141.0	37.2	33.7	28.9	27.5	26.5	23.5	20.9	20.1
65°	722.9	331.0	62.3	29.1	27.5	24.3	23.5	22.1	18.5	15.5	14.9
67.5°	643.8	190.6	28.1	23.3	22.1	19.9	19.3	18.3	15.7	12.9	12.5
70°	553.6	96.6	19.3	18.5	17.1	15.1	15.7	15.5	12.9	10.6	10.2
72.5°	412.2	48.0	14.5	13.9	12.3	10.8	12.9	12.7	10.2	8.0	7.6
75°	233.4	23.7	10.6	9.8	7.4	8.0	10.4	9.8	7.0	5.2	4.8
77.5°	92.6	12.1	7.0	6.0	4.4	5.4	7.6	6.6	3.6	2.2	2.0
80°	21.3	6.0	3.6	2.6	2.0	3.2	4.0	2.4	1.0	0.2	0.0
82.5°	6.0	2.6	1.2	1.0	1.0	1.2	1.0	0.4	0.0	0.0	0.0
85°	2.0	1.2	0.4	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	0.8	0.4	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)