

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: P881953

Luminaire Tested: **NAV-SB1C-835-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881953
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-SB1C-835-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 615mA 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: 4415 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

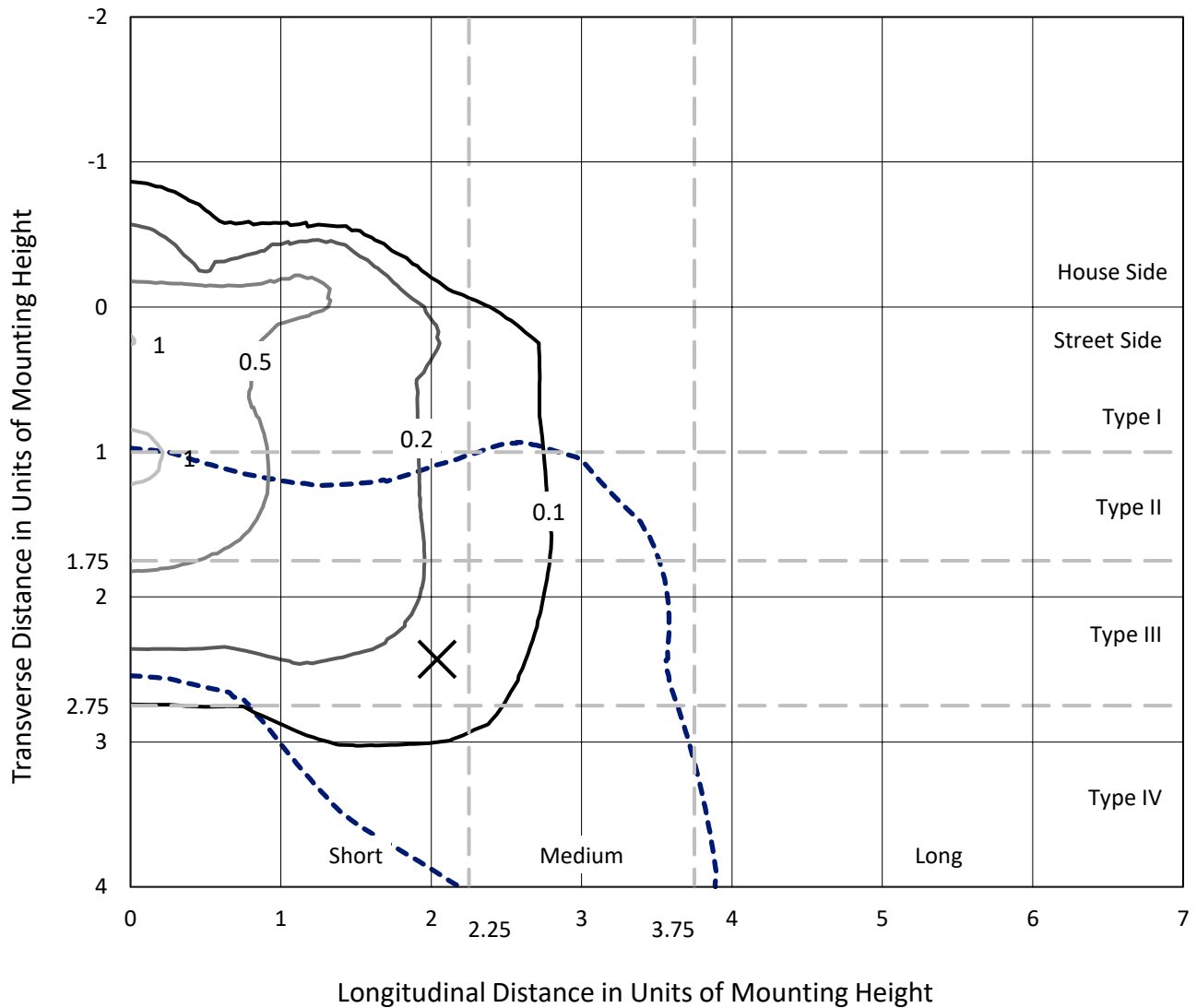
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

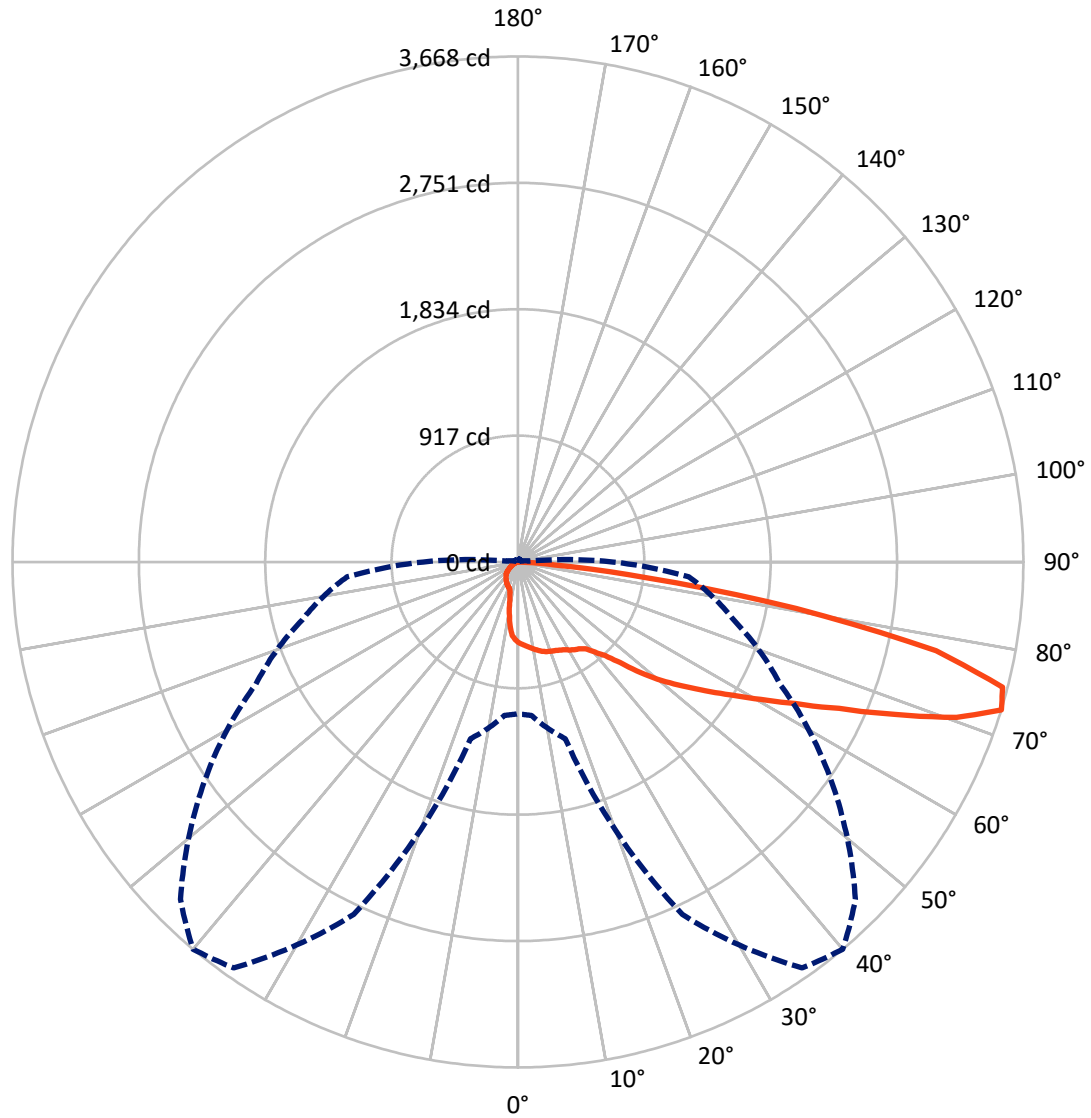
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	570.2	0.0	570.2
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3844.9	0.0	3844.9
	% Fixture	87.1	0.0	87.1
Total	Lumens	4415.0	0.0	4415.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	1.2
10°-20°	145.0	3.3
20°-30°	234.6	5.3
30°-40°	346.4	7.8
40°-50°	582.9	13.2
50°-60°	905.1	20.5
60°-70°	1132.5	25.7
70°-80°	927.2	21.0
80°-90°	87.9	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°	4415.0	100.0
0°-180°	4415.0	100.0

Coefficient of Utilization



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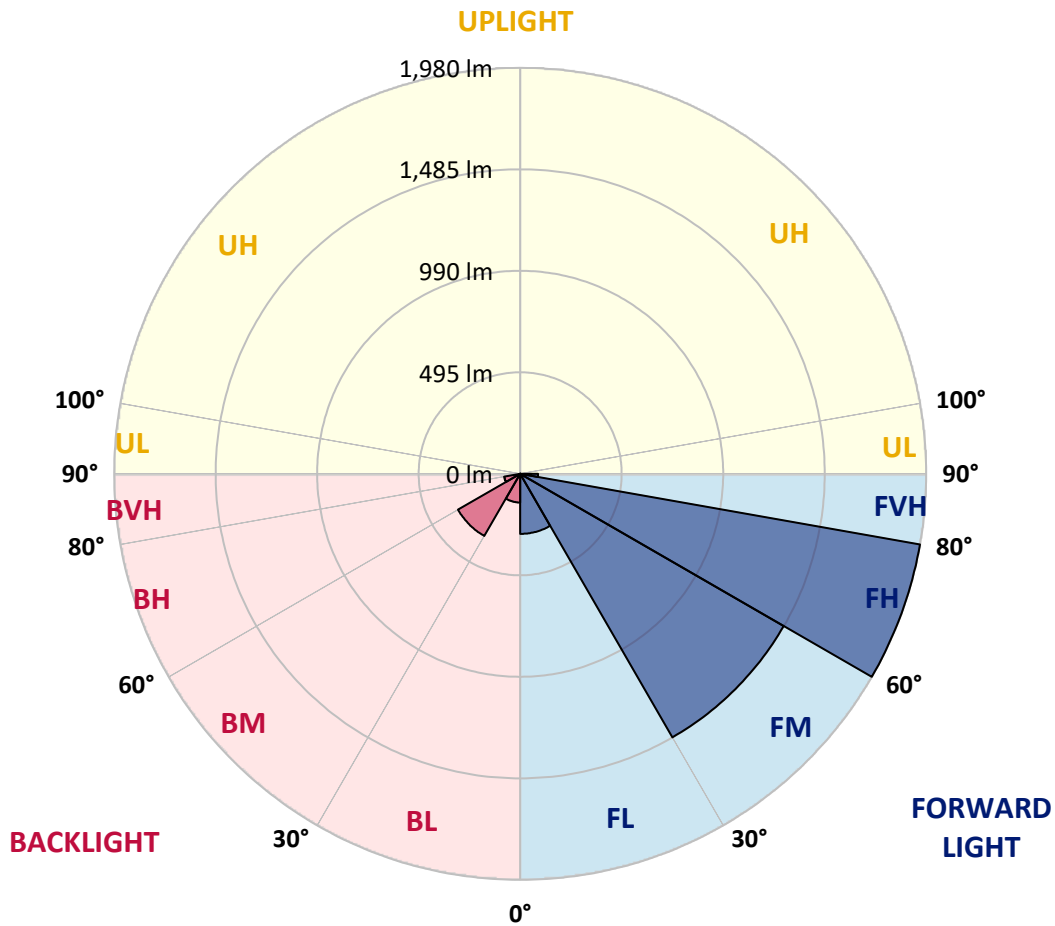
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	293.0	6.6			
FM (30°-60°)	1484.3	33.6			
FH (60°-80°)	1980.3	44.9			G2/5000
FVH (80°-90°)	87.2	2.0			G1/100
BL (0°-30°)	139.9	3.2	B1/500		
BM (30°-60°)	350.1	7.9	B1/1000		
BH (60°-80°)	79.4	1.8	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: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6
2.5°	602.2	604.5	603.2	600.5	599.9	598.5	596.9	596.2	593.9	591.9	589.6
5°	619.2	621.5	619.8	616.2	614.5	612.8	610.5	608.5	603.9	599.5	594.2
7.5°	637.8	639.8	637.8	632.5	629.8	627.8	624.5	621.5	616.2	609.9	603.2
10°	658.4	660.1	657.1	650.1	645.8	642.8	639.8	636.5	631.5	624.5	616.5
12.5°	677.7	679.7	675.0	666.7	661.7	658.7	655.4	652.7	647.8	641.1	632.8
15°	695.3	698.3	690.3	681.3	675.7	673.4	670.0	668.4	665.1	660.4	652.7
17.5°	708.6	710.6	702.3	691.7	685.3	683.7	681.3	682.3	681.7	679.4	674.4
20°	719.9	721.3	710.3	697.3	690.3	690.7	690.0	693.3	694.6	694.6	694.3
22.5°	733.9	734.2	720.3	704.0	695.6	698.0	699.0	702.6	705.3	707.9	713.9
25°	752.2	751.5	734.9	712.6	705.3	708.6	710.9	712.3	715.3	719.6	733.2
27.5°	779.4	777.4	756.2	726.6	717.9	720.9	725.2	724.6	723.2	726.6	749.5
30°	814.0	811.4	783.1	746.2	738.2	740.9	742.2	736.2	726.6	729.6	763.8
32.5°	868.9	864.2	825.0	768.1	755.8	758.8	757.2	744.9	730.6	733.6	778.1
35°	964.3	953.0	897.5	814.0	775.8	772.5	768.5	756.5	738.9	735.9	790.1
37.5°	1167.2	1147.2	1052.4	903.5	821.0	799.4	787.1	775.1	747.9	735.9	803.7
40°	1395.9	1375.7	1266.3	1053.1	896.2	859.6	830.3	797.1	757.2	740.2	825.0
42.5°	1634.7	1612.4	1500.0	1238.7	1003.6	928.4	873.9	814.7	772.5	753.5	853.3
45°	1901.4	1873.5	1726.5	1432.2	1159.5	1042.8	944.0	850.9	799.1	777.1	891.8
47.5°	2182.7	2146.5	1952.3	1620.1	1327.4	1201.1	1072.4	915.8	838.3	812.4	944.0
50°	2432.1	2396.2	2185.4	1816.6	1484.4	1351.7	1218.7	1005.6	897.2	862.2	1014.2
52.5°	2611.3	2584.1	2397.5	2019.4	1647.7	1493.0	1351.4	1110.0	971.6	926.1	1097.0
55°	2731.4	2706.4	2547.8	2211.6	1837.5	1648.7	1482.1	1223.4	1061.4	1002.6	1188.5
57.5°	2804.2	2789.9	2656.6	2383.2	2025.8	1818.9	1631.7	1348.1	1167.2	1092.7	1290.5
60°	2830.1	2818.5	2724.1	2546.8	2253.2	2023.4	1807.6	1488.7	1295.5	1195.1	1395.3
62.5°	2761.0	2763.3	2772.6	2740.7	2493.0	2262.8	2018.4	1657.6	1437.8	1311.2	1493.7
65°	2435.4	2454.7	2631.6	2955.5	2810.5	2562.8	2286.8	1863.8	1600.8	1443.2	1571.9
67.5°	2016.4	2044.4	2264.5	3081.2	3149.0	2952.2	2660.5	2126.5	1795.0	1577.5	1601.4
70°	1543.6	1573.5	1840.2	3054.9	3465.9	3377.8	3122.8	2460.7	1996.2	1670.6	1526.0
72.5°	1101.7	1117.0	1327.1	2821.2	3595.9	3667.8	3463.3	2777.3	2098.9	1619.1	1244.6
75°	774.1	771.5	910.8	2271.8	3393.4	3632.5	3343.9	2606.0	1899.4	1286.2	767.5
77.5°	337.2	337.8	454.9	1379.7	2708.4	3102.5	2779.6	1632.4	1324.1	681.7	323.9
80°	87.5	90.1	166.9	549.3	1630.7	2047.7	1695.2	717.6	611.8	166.3	61.8
82.5°	30.9	32.9	76.8	172.6	601.5	939.1	754.8	229.4	159.6	47.6	16.6
85°	9.0	10.6	41.2	52.9	124.4	265.4	183.2	44.6	39.2	24.6	4.3
87.5°	0.0	1.3	8.3	7.3	7.3	5.0	9.3	5.0	6.3	3.0	1.3
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°	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6	584.6
2.5°	587.6	585.2	580.3	574.9	570.0	565.3	564.0	559.0	556.6	557.0	556.6
5°	590.6	586.2	576.6	565.0	553.0	539.4	528.1	512.1	498.5	496.8	495.8
7.5°	598.5	591.6	575.9	553.3	523.4	485.8	450.9	416.3	396.7	386.1	385.4
10°	610.9	601.5	577.6	534.4	470.9	403.7	350.8	307.3	285.0	274.7	272.7
12.5°	625.5	615.2	580.3	502.1	403.0	314.9	257.7	231.1	226.5	225.8	225.5
15°	646.1	634.8	583.3	458.6	329.5	239.8	213.5	213.8	217.5	219.5	219.1
17.5°	669.0	657.7	578.9	405.3	257.0	204.8	204.2	207.2	212.5	214.5	214.1
20°	692.3	681.7	563.6	342.8	207.8	195.2	197.9	201.2	206.5	209.2	209.2
22.5°	716.3	707.0	539.4	276.3	187.5	188.2	191.5	194.9	200.8	203.8	203.8
25°	741.9	733.9	507.1	221.5	178.9	180.9	185.2	189.2	195.5	199.2	199.2
27.5°	767.8	761.8	470.5	184.9	170.9	173.2	178.2	183.6	189.9	194.2	194.5
30°	796.1	792.7	441.3	171.3	163.3	165.3	170.9	176.9	183.9	189.2	189.9
32.5°	825.0	824.3	427.0	181.2	156.3	157.6	162.6	168.6	177.2	183.9	184.6
35°	853.6	854.9	418.7	209.5	154.0	150.3	153.6	158.9	169.3	177.6	178.9
37.5°	890.2	893.5	418.3	240.1	159.6	143.0	145.3	149.0	158.0	167.6	169.3
40°	944.7	962.3	439.6	266.4	169.6	136.3	137.0	137.7	142.3	150.3	153.0
42.5°	1017.2	1068.7	516.4	284.3	173.6	130.4	128.0	124.4	123.7	128.0	130.4
45°	1107.3	1197.4	651.4	294.3	169.6	123.7	117.4	107.7	104.1	107.1	107.1
47.5°	1213.4	1338.4	811.4	296.6	162.9	115.4	104.1	91.4	88.5	89.4	89.1
50°	1316.8	1444.2	952.0	277.3	152.0	104.7	89.4	78.8	76.8	77.1	77.1
52.5°	1408.3	1480.4	991.9	231.8	137.3	91.8	76.8	69.5	68.2	68.2	67.8
55°	1468.8	1441.2	884.5	177.2	119.0	78.5	65.8	62.2	61.5	61.2	60.5
57.5°	1481.4	1313.5	668.0	128.0	93.1	66.2	58.5	56.5	55.2	53.9	53.2
60°	1436.2	1100.7	425.3	89.4	69.8	56.5	51.9	50.5	47.9	45.2	44.2
62.5°	1338.4	831.3	235.4	62.2	56.2	48.2	45.9	44.2	39.2	34.9	33.6
65°	1207.1	552.7	104.1	48.5	45.9	40.6	39.2	36.9	30.9	25.9	24.9
67.5°	1075.1	318.2	46.9	38.9	36.9	33.3	32.3	30.6	26.3	21.6	20.9
70°	924.4	161.3	32.3	30.9	28.6	25.3	26.3	25.9	21.6	17.6	17.0
72.5°	688.3	80.1	24.3	23.3	20.6	18.0	21.6	21.3	17.0	13.3	12.6
75°	389.7	39.6	17.6	16.3	12.3	13.3	17.3	16.3	11.6	8.6	8.0
77.5°	154.6	20.3	11.6	10.0	7.3	9.0	12.6	11.0	6.0	3.7	3.3
80°	35.6	10.0	6.0	4.3	3.3	5.3	6.7	4.0	1.7	0.3	0.0
82.5°	10.0	4.3	2.0	1.7	1.7	2.0	1.7	0.7	0.0	0.0	0.0
85°	3.3	2.0	0.7	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.3	0.7	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)