

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: P881546

Luminaire Tested: **NAV-SB1A-730-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881546
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3227 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

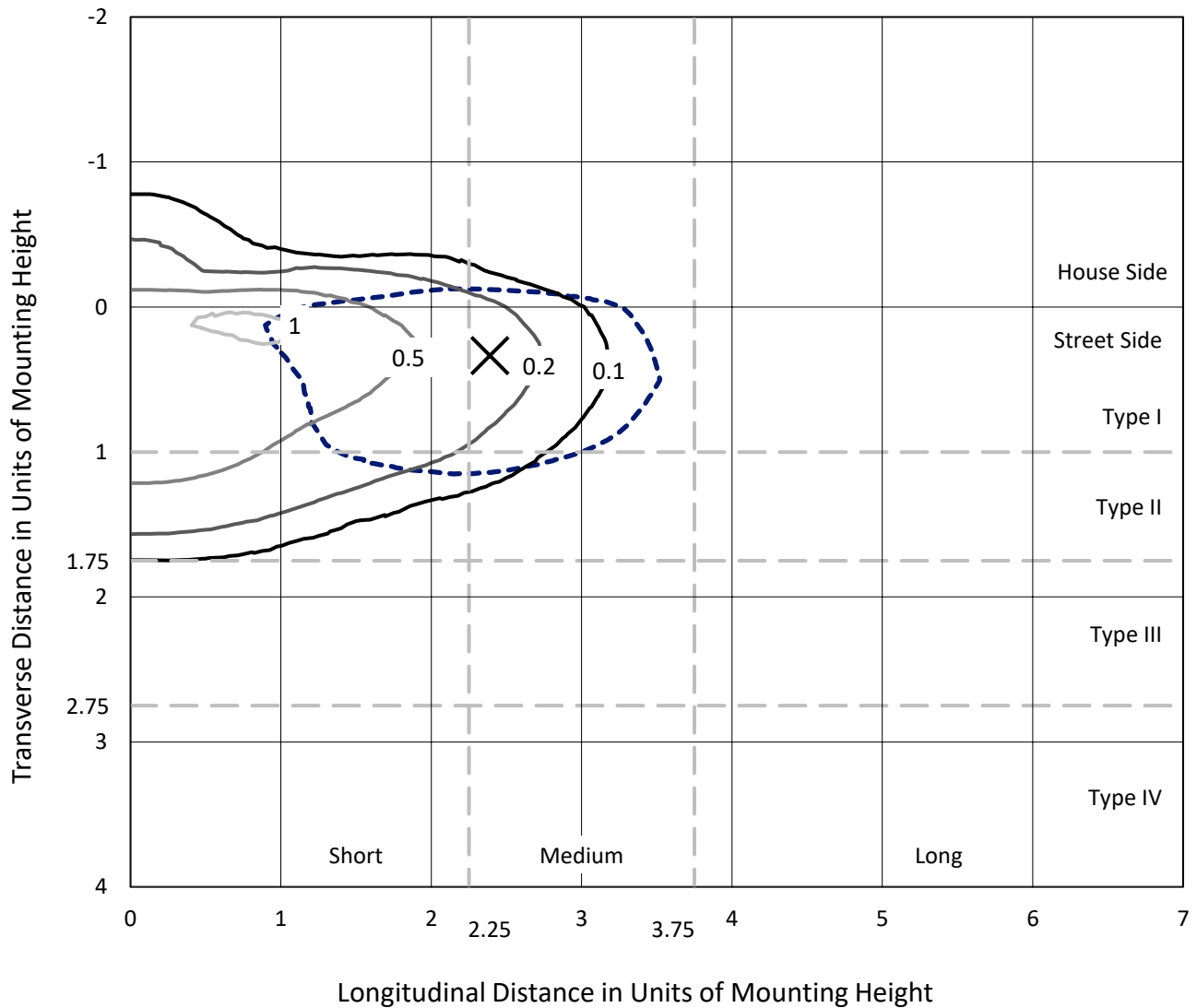
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

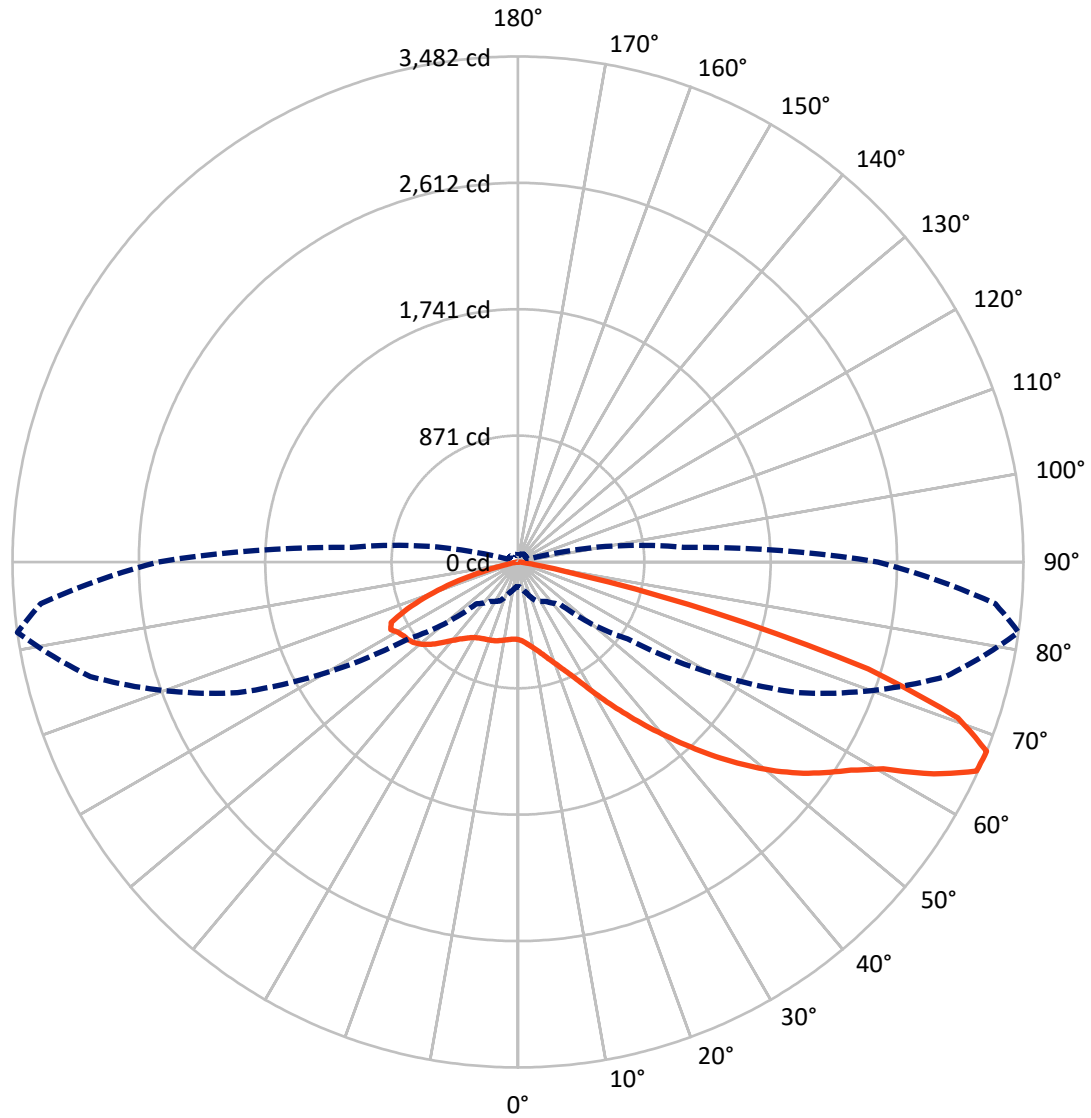
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	584.5	0.0	584.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	2642.5	0.0	2642.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	3227.0	0.0	3227.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	1.5
10°-20°	123.8	3.8
20°-30°	198.2	6.1
30°-40°	350.5	10.9
40°-50°	614.2	19.0
50°-60°	819.2	25.4
60°-70°	762.6	23.6
70°-80°	292.7	9.1
80°-90°	18.2	0.6
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°	3227.0	100.0
0°-180°	3227.0	100.0

Coefficient of Utilization



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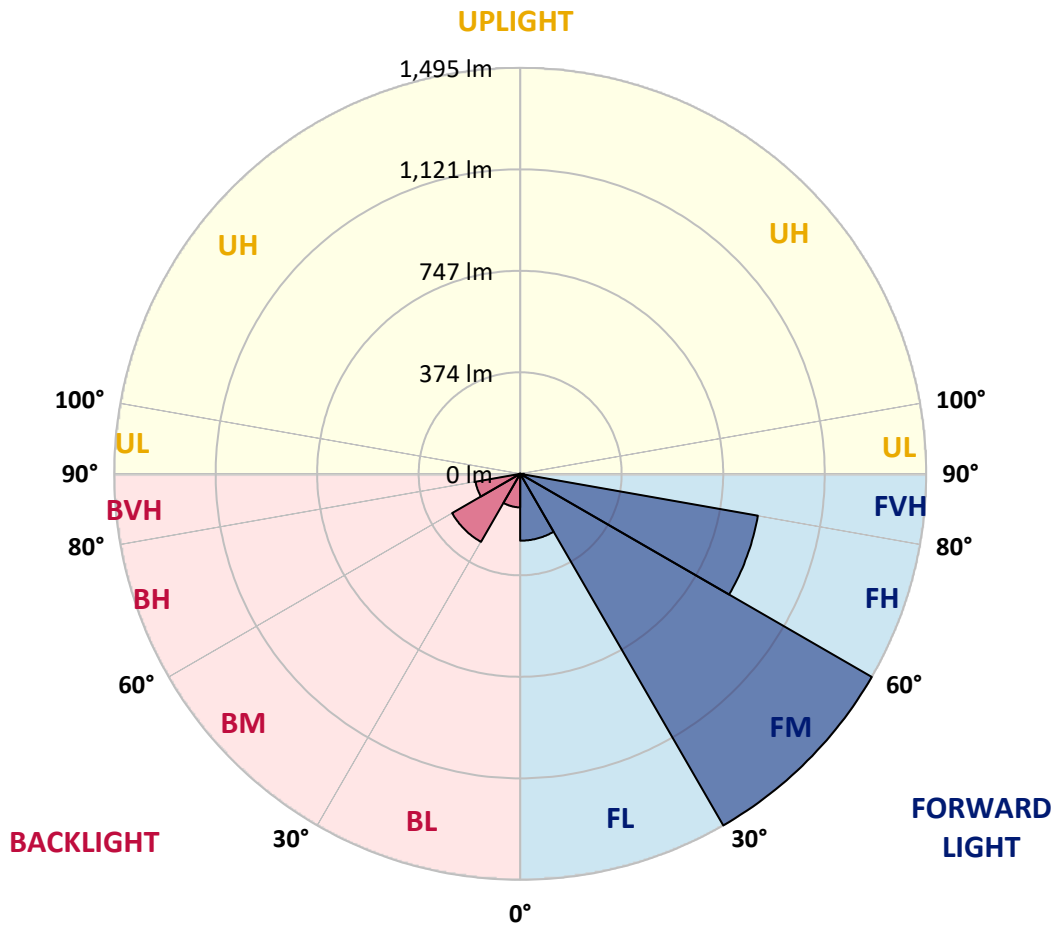
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	246.2	7.6			
FM (30°-60°)	1494.6	46.3			
FH (60°-80°)	888.4	27.5			G1/1800
FVH (80°-90°)	13.2	0.4			G1/100
BL (0°-30°)	123.5	3.8	B1/500		
BM (30°-60°)	289.3	9.0	B1/1000		
BH (60°-80°)	166.8	5.2	B1/500		G1/500
BVH (80°-90°)	5.0	0.2			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6
2.5°	565.0	568.3	566.4	565.5	563.9	561.6	559.7	553.9	547.8	543.9	542.5
5°	576.4	579.7	579.4	580.4	581.5	582.2	581.8	575.3	566.7	559.9	556.0
7.5°	566.7	570.4	573.4	578.1	586.2	594.8	599.0	597.6	588.7	579.4	574.6
10°	539.0	543.0	550.2	561.1	578.3	596.9	612.4	619.6	614.1	603.8	597.1
12.5°	488.4	492.3	506.5	530.2	559.0	591.3	621.0	640.3	641.7	631.5	623.6
15°	431.4	435.4	450.5	480.2	524.1	576.0	625.7	662.2	674.5	665.6	656.1
17.5°	396.1	399.6	411.0	434.9	480.7	545.3	624.1	685.4	713.5	706.5	695.1
20°	385.4	388.5	393.8	410.5	448.6	513.5	613.4	707.2	755.6	751.6	738.8
22.5°	396.8	399.6	401.2	408.7	432.6	492.6	599.9	729.5	804.3	804.8	789.2
25°	423.1	425.9	424.0	428.7	439.1	486.0	594.8	755.8	865.7	870.8	853.1
27.5°	466.3	466.5	462.1	461.9	463.5	495.8	600.1	783.9	943.1	952.6	930.7
30°	553.0	549.5	532.5	514.2	505.8	525.1	615.0	817.1	1034.4	1051.3	1023.9
32.5°	686.6	681.4	650.3	606.4	562.3	572.2	641.7	855.0	1133.8	1164.5	1131.0
35°	831.5	830.1	797.6	732.3	655.2	639.4	685.2	904.7	1242.3	1291.1	1251.4
37.5°	966.3	965.6	947.0	870.1	776.2	733.0	754.9	969.8	1358.5	1429.1	1382.2
40°	1089.4	1091.5	1072.9	1004.2	909.6	853.1	849.7	1050.2	1487.6	1579.4	1523.7
42.5°	1195.8	1198.2	1179.3	1128.5	1041.3	986.0	966.1	1148.7	1613.8	1740.9	1674.9
45°	1268.1	1282.5	1279.7	1239.0	1176.5	1119.2	1105.9	1272.3	1757.6	1912.1	1834.8
47.5°	1288.5	1301.8	1322.7	1328.3	1290.2	1233.7	1249.5	1421.2	1903.1	2083.6	1995.5
50°	1238.1	1250.4	1293.9	1351.7	1378.2	1360.8	1389.1	1580.8	2052.0	2254.6	2153.3
52.5°	1138.7	1151.2	1206.1	1297.6	1405.6	1460.5	1529.2	1738.1	2196.3	2416.5	2302.7
55°	994.9	1008.1	1078.5	1182.1	1353.4	1501.6	1646.1	1895.2	2328.5	2562.2	2437.4
57.5°	799.2	809.0	882.2	1027.2	1221.9	1460.7	1732.3	2066.6	2453.0	2705.3	2571.0
60°	520.9	529.5	614.5	776.2	1003.9	1324.1	1749.5	2257.8	2618.4	2891.4	2751.1
62.5°	346.4	352.2	402.6	521.4	707.0	1061.8	1648.9	2410.5	2861.0	3215.3	3059.9
65°	237.7	243.5	293.9	376.6	456.8	702.4	1359.6	2390.3	3080.8	3472.5	3288.7
67.5°	169.6	174.5	217.2	295.3	330.6	408.0	921.7	2131.9	3049.2	3482.2	3301.0
70°	121.5	124.3	159.6	230.0	262.8	245.1	512.5	1630.5	2669.8	3215.5	3049.6
72.5°	85.0	86.0	110.8	175.2	211.7	178.9	244.0	1087.1	2019.2	2523.9	2364.2
75°	57.6	58.8	74.6	128.5	169.8	136.6	129.2	582.9	1185.4	1397.0	1252.3
77.5°	35.3	35.8	48.1	87.8	127.1	104.1	83.2	247.0	458.6	450.3	383.8
80°	20.0	20.0	30.7	54.6	86.7	67.1	58.3	105.0	145.2	127.6	112.5
82.5°	11.2	11.4	22.3	33.9	57.4	39.7	32.1	48.6	62.7	55.5	48.3
85°	4.6	5.1	13.7	16.0	27.4	19.7	13.0	20.4	23.2	20.7	15.1
87.5°	0.5	0.7	4.2	3.0	3.3	3.9	1.9	3.9	3.3	3.3	2.3
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°	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6	534.6
2.5°	538.1	534.6	525.8	515.6	502.1	495.6	486.7	480.7	475.6	476.1	471.4
5°	548.5	539.7	520.0	495.3	464.7	442.8	419.6	403.6	390.6	387.8	381.5
7.5°	562.9	549.0	514.4	470.0	418.2	378.9	343.9	321.3	305.3	300.2	295.1
10°	581.5	561.3	507.2	438.2	363.6	313.7	276.0	258.4	247.4	243.7	240.9
12.5°	603.1	575.5	497.7	399.4	307.4	259.3	235.4	226.5	223.0	221.9	221.2
15°	630.3	593.2	483.3	353.4	259.8	226.1	215.8	214.7	215.1	214.7	214.4
17.5°	662.6	612.4	459.8	306.0	227.7	209.1	205.4	206.3	207.5	207.2	206.8
20°	697.9	631.5	429.8	263.9	205.8	197.0	194.9	195.9	196.8	196.3	196.1
22.5°	738.1	651.9	396.6	231.2	191.2	185.9	183.5	183.8	183.8	182.8	182.4
25°	786.2	674.5	361.7	207.9	180.1	175.9	173.1	172.2	170.8	168.0	167.5
27.5°	843.6	698.4	328.3	191.7	171.2	167.3	164.0	161.7	158.2	153.6	153.1
30°	908.2	727.4	299.9	181.5	164.3	160.3	156.6	153.1	148.0	142.2	141.7
32.5°	984.2	758.6	279.3	174.7	158.0	153.8	149.4	145.2	139.6	133.8	134.1
35°	1074.8	796.2	267.2	170.1	153.1	147.5	142.7	138.0	133.8	128.7	128.2
37.5°	1173.1	836.2	263.5	167.7	149.9	141.3	135.7	132.4	132.0	128.9	128.7
40°	1280.6	883.6	266.3	166.4	146.4	135.2	129.2	128.5	129.6	124.3	124.5
42.5°	1394.5	939.8	270.9	164.7	141.5	129.2	123.4	123.4	122.4	115.0	115.0
45°	1517.6	1004.6	275.6	160.8	135.7	123.1	118.7	117.1	113.1	105.9	105.7
47.5°	1641.7	1070.6	279.0	153.6	128.7	118.0	114.1	110.4	104.6	98.0	97.8
50°	1759.5	1129.8	275.3	142.9	120.8	113.1	109.0	103.9	97.6	93.2	92.5
52.5°	1864.7	1181.2	259.5	130.3	112.5	108.0	104.3	99.0	93.9	89.2	88.8
55°	1956.3	1222.8	231.6	118.5	105.0	103.6	99.9	93.2	86.2	82.2	81.8
57.5°	2044.1	1254.4	196.8	108.7	98.3	98.7	93.2	87.1	80.6	76.4	76.0
60°	2161.0	1296.7	161.5	99.7	91.1	92.5	86.4	82.0	73.9	68.5	67.8
62.5°	2347.8	1362.4	128.2	88.5	82.7	83.2	80.6	75.3	65.5	59.2	58.8
65°	2496.0	1338.3	101.1	76.4	73.2	73.9	73.9	68.1	57.6	50.4	49.7
67.5°	2479.3	1145.9	80.6	64.6	64.1	64.6	66.2	61.3	51.1	45.3	44.4
70°	2283.9	911.5	64.6	53.7	55.8	54.6	59.2	56.0	46.0	40.2	39.5
72.5°	1863.6	656.6	49.3	44.4	42.7	44.6	53.4	50.4	38.3	31.8	31.1
75°	1089.0	350.4	36.7	35.1	30.9	37.2	47.4	43.0	29.3	23.5	22.8
77.5°	354.5	122.2	27.0	25.8	23.0	30.0	40.4	36.2	23.9	18.6	17.9
80°	95.0	36.9	18.4	17.0	14.9	22.3	32.1	28.8	17.2	12.1	11.8
82.5°	38.1	15.6	10.7	9.5	8.1	15.3	25.3	23.2	12.8	7.7	7.7
85°	12.3	5.1	3.9	3.0	3.7	9.5	15.1	15.8	9.1	3.9	3.0
87.5°	1.6	0.7	0.7	0.9	0.7	1.6	4.6	4.4	2.6	0.5	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)