

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: P881946

Luminaire Tested: **NAV-SB1C-830-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881946
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-SB1C-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA 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: 4789 lumens
Efficiency: N/A
Efficacy: 88.0 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

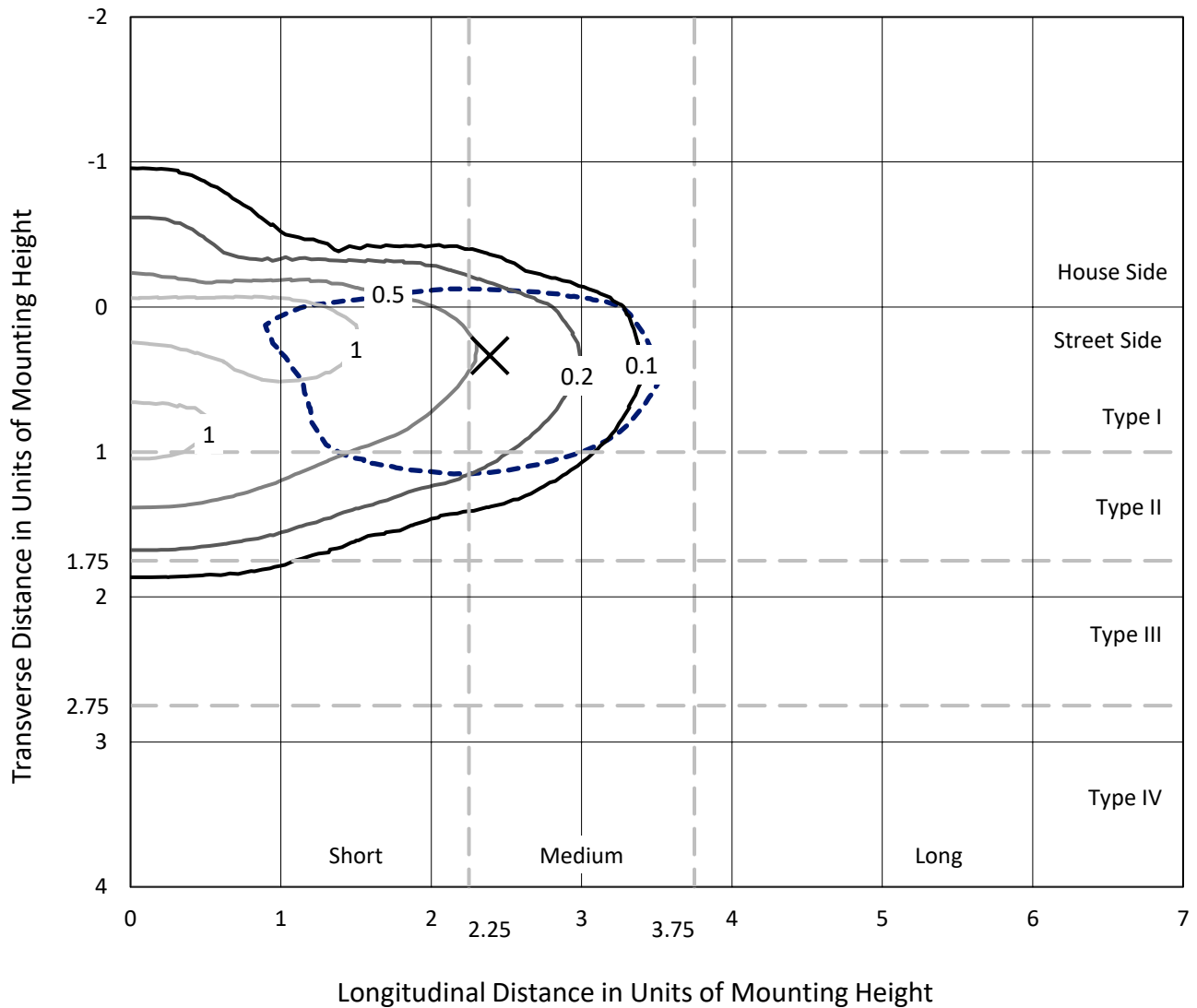
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

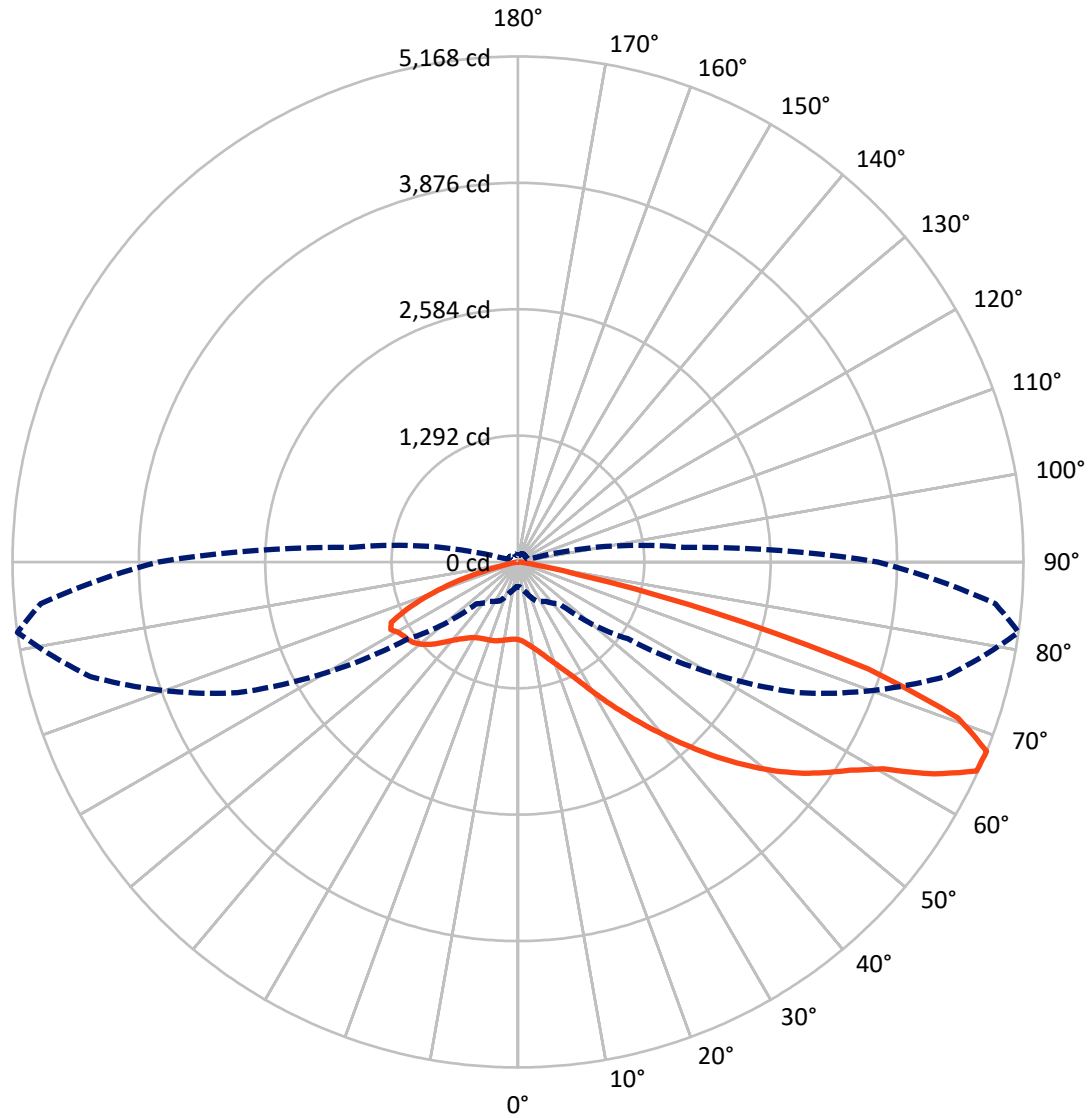
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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	867.5	0.0	867.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3921.5	0.0	3921.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	4789.0	0.0	4789.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	1.5
10°-20°	183.7	3.8
20°-30°	294.2	6.1
30°-40°	520.2	10.9
40°-50°	911.5	19.0
50°-60°	1215.7	25.4
60°-70°	1131.7	23.6
70°-80°	434.4	9.1
80°-90°	27.0	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°	4789.0	100.0
0°-180°	4789.0	100.0

Coefficient of Utilization



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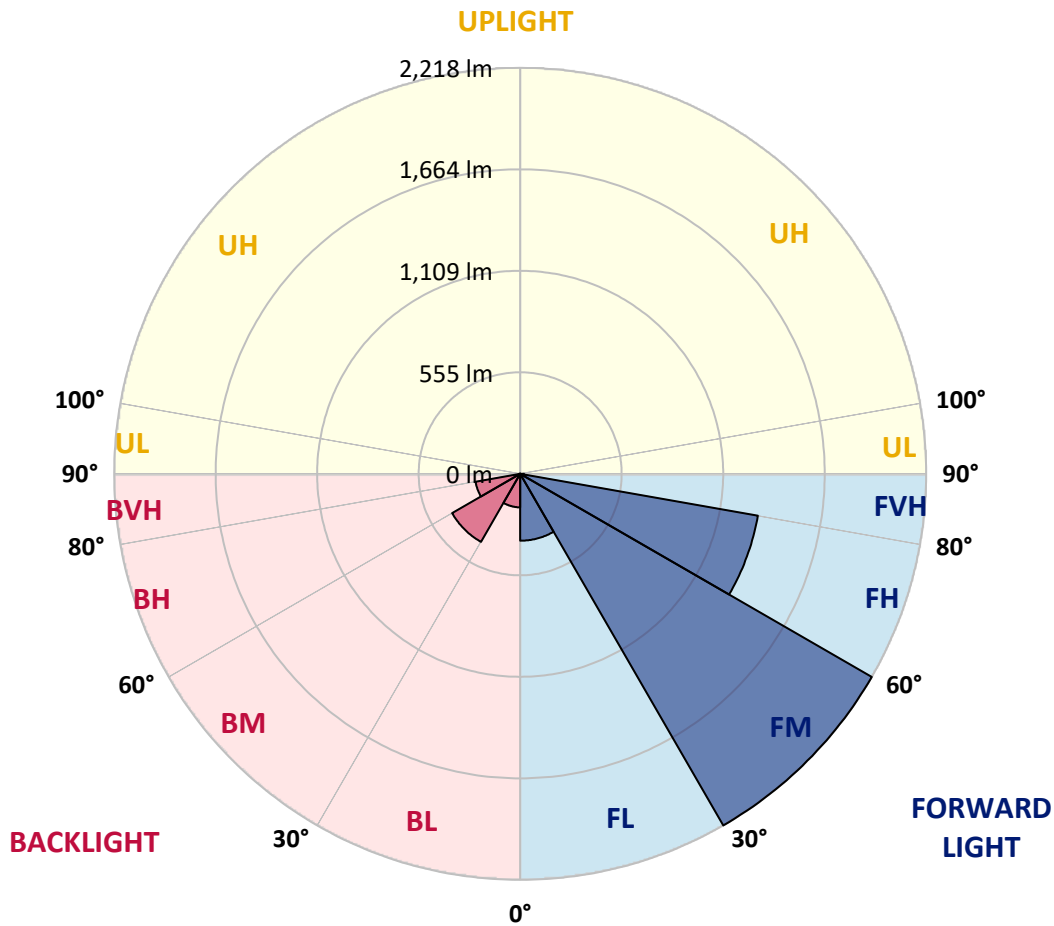
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	365.3	7.6			
FM	(30°-60°)	2218.1	46.3			
FH	(60°-80°)	1318.5	27.5			G1/1800
FVH	(80°-90°)	19.6	0.4			G1/100
BL	(0°-30°)	183.2	3.8	B1/500		
BM	(30°-60°)	429.3	9.0	B1/1000		
BH	(60°-80°)	247.6	5.2	B1/500		G1/500
BVH	(80°-90°)	7.4	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°	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4
2.5°	838.5	843.4	840.6	839.2	836.8	833.4	830.6	822.0	813.0	807.2	805.1
5°	855.4	860.3	859.9	861.3	863.0	864.1	863.4	853.7	841.0	831.0	825.1
7.5°	841.0	846.5	851.0	857.9	869.9	882.7	888.9	886.8	873.7	859.9	852.7
10°	799.9	805.8	816.5	832.7	858.2	885.8	908.9	919.6	911.3	896.1	886.1
12.5°	724.8	730.6	751.7	786.8	829.6	877.5	921.6	950.3	952.3	937.2	925.4
15°	640.3	646.1	668.6	712.7	777.9	854.7	928.5	982.7	1000.9	987.8	973.7
17.5°	587.9	593.0	609.9	645.5	713.4	809.2	926.1	1017.1	1058.9	1048.5	1031.6
20°	572.0	576.5	584.4	609.3	665.8	762.0	910.3	1049.6	1121.3	1115.4	1096.5
22.5°	588.9	593.0	595.5	606.5	642.0	731.0	890.3	1082.7	1193.7	1194.4	1171.3
25°	627.9	632.0	629.3	636.1	651.7	721.3	882.7	1121.6	1284.7	1292.3	1266.1
27.5°	692.0	692.4	685.8	685.5	687.9	735.8	890.6	1163.3	1399.5	1413.7	1381.3
30°	820.6	815.4	790.3	763.0	750.6	779.2	912.7	1212.6	1535.0	1560.2	1519.5
32.5°	1018.9	1011.3	965.1	899.9	834.4	849.2	952.3	1268.8	1682.6	1728.1	1678.5
35°	1234.0	1232.0	1183.7	1086.8	972.3	948.9	1016.8	1342.6	1843.6	1916.0	1857.1
37.5°	1434.0	1433.0	1405.4	1291.3	1152.0	1087.8	1120.2	1439.2	2016.0	2120.8	2051.2
40°	1616.7	1619.9	1592.3	1490.2	1349.9	1266.1	1260.9	1558.5	2207.7	2343.9	2261.2
42.5°	1774.7	1778.1	1750.2	1674.7	1545.4	1463.3	1433.7	1704.7	2395.0	2583.6	2485.6
45°	1881.9	1903.3	1899.1	1838.8	1746.0	1660.9	1641.2	1888.1	2608.4	2837.7	2722.9
47.5°	1912.2	1931.9	1962.9	1971.2	1914.7	1830.9	1854.3	2109.1	2824.2	3092.1	2961.5
50°	1837.4	1855.7	1920.2	2006.0	2045.3	2019.5	2061.5	2346.0	3045.2	3345.9	3195.6
52.5°	1689.8	1708.5	1789.8	1925.7	2086.0	2167.4	2269.4	2579.4	3259.4	3586.2	3417.3
55°	1476.4	1496.1	1600.5	1754.3	2008.4	2228.4	2442.9	2812.5	3455.5	3802.4	3617.3
57.5°	1186.1	1200.6	1309.2	1524.3	1813.3	2167.7	2570.8	3067.0	3640.4	4014.8	3815.5
60°	773.0	785.8	912.0	1152.0	1489.9	1965.0	2596.3	3350.7	3885.8	4291.0	4082.7
62.5°	514.1	522.7	597.5	773.7	1049.2	1575.7	2447.0	3577.3	4245.8	4771.6	4541.0
65°	352.7	361.3	436.2	558.9	677.9	1042.3	2017.7	3547.3	4572.0	5153.3	4880.6
67.5°	251.7	258.9	322.4	438.2	490.6	605.5	1367.8	3163.8	4525.1	5167.8	4898.9
70°	180.3	184.5	236.9	341.3	390.0	363.8	760.6	2419.8	3962.0	4772.0	4525.8
72.5°	126.2	127.6	164.5	260.0	314.1	265.5	362.0	1613.3	2996.6	3745.5	3508.6
75°	85.5	87.2	110.7	190.7	252.0	202.7	191.7	865.1	1759.1	2073.3	1858.4
77.5°	52.4	53.1	71.4	130.3	188.6	154.5	123.4	366.5	680.6	668.2	569.6
80°	29.7	29.7	45.5	81.0	128.6	99.6	86.5	155.8	215.5	189.3	166.9
82.5°	16.6	16.9	33.1	50.3	85.2	59.0	47.6	72.1	93.1	82.4	71.7
85°	6.9	7.6	20.3	23.8	40.7	29.3	19.3	30.3	34.5	30.7	22.4
87.5°	0.7	1.0	6.2	4.5	4.8	5.9	2.8	5.9	4.8	4.8	3.4
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°	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4	793.4
2.5°	798.5	793.4	780.3	765.1	745.1	735.4	722.3	713.4	705.8	706.5	699.6
5°	814.1	801.0	771.7	735.1	689.6	657.2	622.7	598.9	579.6	575.5	566.2
7.5°	835.4	814.8	763.4	697.5	620.6	562.4	510.3	476.9	453.1	445.5	437.9
10°	863.0	833.0	752.7	650.3	539.6	465.5	409.6	383.4	367.2	361.7	357.6
12.5°	895.1	854.1	738.6	592.7	456.2	384.8	349.3	336.2	331.0	329.3	328.2
15°	935.4	880.3	717.2	524.4	385.5	335.5	320.3	318.6	319.3	318.6	318.2
17.5°	983.4	908.9	682.4	454.1	337.9	310.3	304.8	306.2	307.9	307.6	306.9
20°	1035.8	937.2	637.9	391.7	305.5	292.4	289.3	290.7	292.0	291.4	291.0
22.5°	1095.4	967.5	588.6	343.1	283.8	275.8	272.4	272.7	272.7	271.4	270.7
25°	1166.8	1000.9	536.8	308.6	267.2	261.0	256.9	255.5	253.4	249.3	248.6
27.5°	1252.0	1036.5	487.2	284.5	254.1	248.3	243.4	240.0	234.8	227.9	227.2
30°	1347.8	1079.6	445.1	269.3	243.8	237.9	232.4	227.2	219.6	211.0	210.3
32.5°	1460.6	1125.8	414.4	259.3	234.5	228.3	221.7	215.5	207.2	198.6	198.9
35°	1595.0	1181.6	396.5	252.4	227.2	218.9	211.7	204.8	198.6	191.0	190.3
37.5°	1740.9	1240.9	391.0	248.9	222.4	209.6	201.4	196.5	195.8	191.4	191.0
40°	1900.5	1311.3	395.1	246.9	217.2	200.7	191.7	190.7	192.4	184.5	184.8
42.5°	2069.5	1394.7	402.0	244.5	210.0	191.7	183.1	183.1	181.7	170.7	170.7
45°	2252.2	1490.9	408.9	238.6	201.4	182.7	176.2	173.8	167.9	157.2	156.9
47.5°	2436.3	1588.8	414.1	227.9	191.0	175.2	169.3	163.8	155.2	145.5	145.2
50°	2611.1	1676.7	408.6	212.0	179.3	167.9	161.7	154.1	144.8	138.3	137.2
52.5°	2767.3	1752.9	385.1	193.4	166.9	160.3	154.8	146.9	139.3	132.4	131.7
55°	2903.2	1814.7	343.8	175.8	155.8	153.8	148.3	138.3	127.9	122.1	121.4
57.5°	3033.5	1861.6	292.0	161.4	145.8	146.5	138.3	129.3	119.6	113.4	112.7
60°	3206.9	1924.3	239.6	147.9	135.2	137.2	128.3	121.7	109.6	101.7	100.7
62.5°	3484.2	2021.9	190.3	131.4	122.7	123.4	119.6	111.7	97.2	87.9	87.2
65°	3704.1	1986.0	150.0	113.4	108.6	109.6	109.6	101.0	85.5	74.8	73.8
67.5°	3679.3	1700.5	119.6	95.9	95.2	95.9	98.3	91.0	75.9	67.2	65.9
70°	3389.3	1352.6	95.9	79.6	82.8	81.0	87.9	83.1	68.3	59.6	58.6
72.5°	2765.6	974.4	73.1	65.9	63.4	66.2	79.3	74.8	56.9	47.2	46.2
75°	1616.1	520.0	54.5	52.1	45.9	55.2	70.3	63.8	43.4	34.8	33.8
77.5°	526.2	181.4	40.0	38.3	34.1	44.5	60.0	53.8	35.5	27.6	26.5
80°	141.0	54.8	27.2	25.2	22.1	33.1	47.6	42.8	25.5	17.9	17.6
82.5°	56.5	23.1	15.9	14.1	12.1	22.8	37.6	34.5	19.0	11.4	11.4
85°	18.3	7.6	5.9	4.5	5.5	14.1	22.4	23.4	13.4	5.9	4.5
87.5°	2.4	1.0	1.0	1.4	1.0	2.4	6.9	6.6	3.8	0.7	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)