

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: P882206

Luminaire Tested: **NAV-SB2A-722-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882206
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-SB2A-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5320 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

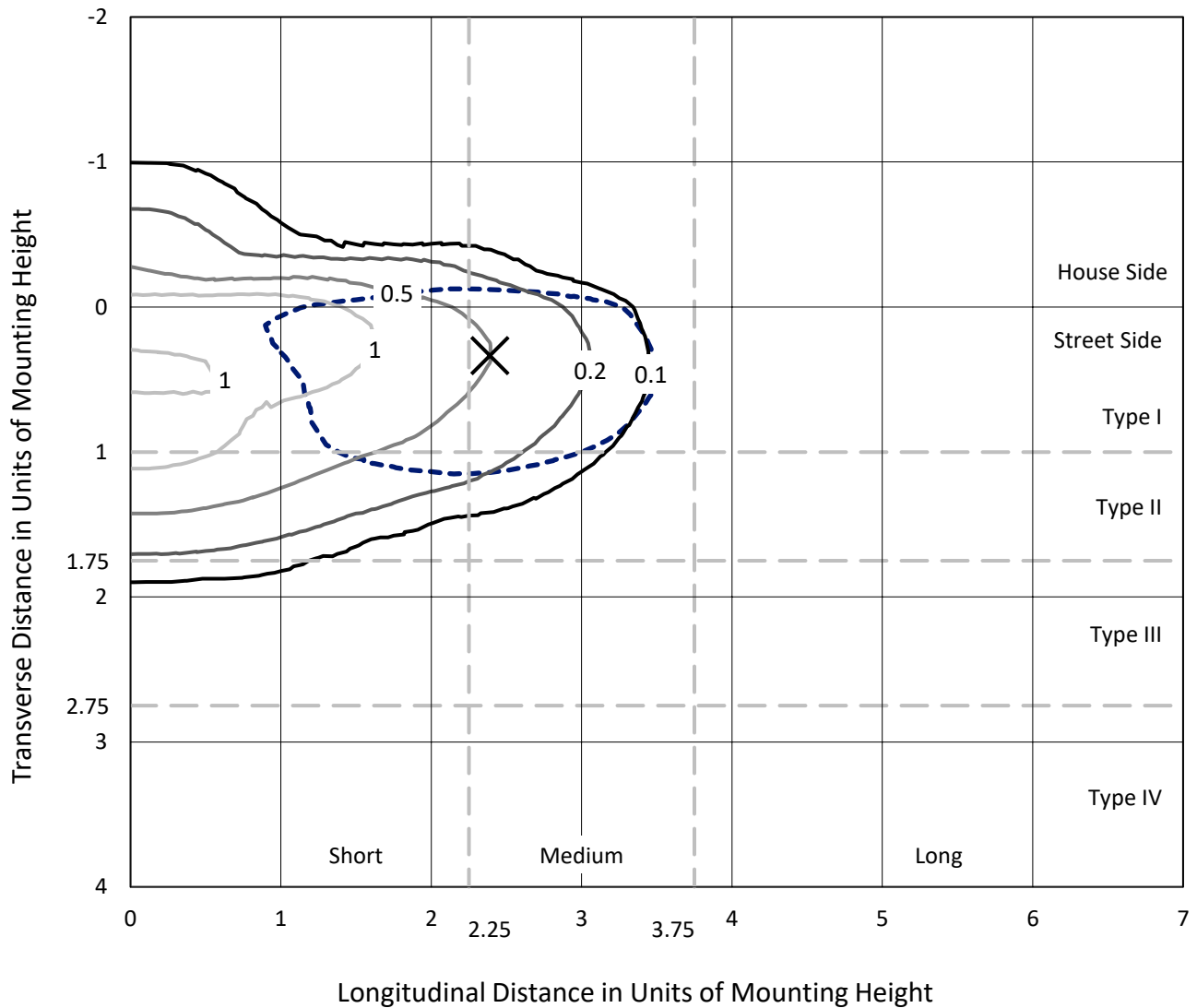
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

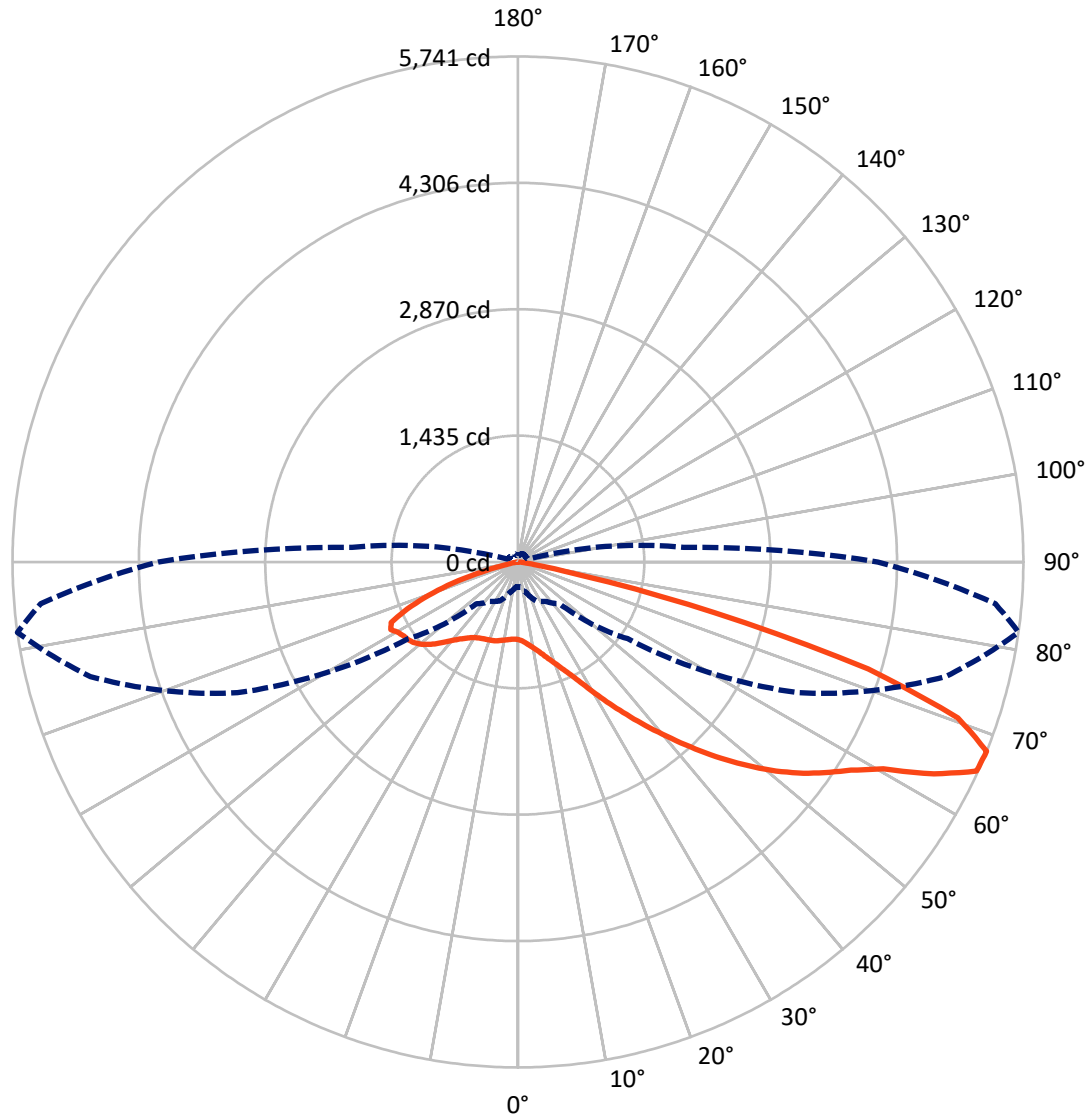
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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	963.7	0.0	963.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	4356.3	0.0	4356.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	5320.0	0.0	5320.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.5	1.5
10°-20°	204.0	3.8
20°-30°	326.8	6.1
30°-40°	577.9	10.9
40°-50°	1012.6	19.0
50°-60°	1350.5	25.4
60°-70°	1257.2	23.6
70°-80°	482.5	9.1
80°-90°	30.0	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°	5320.0	100.0
0°-180°	5320.0	100.0

Coefficient of Utilization



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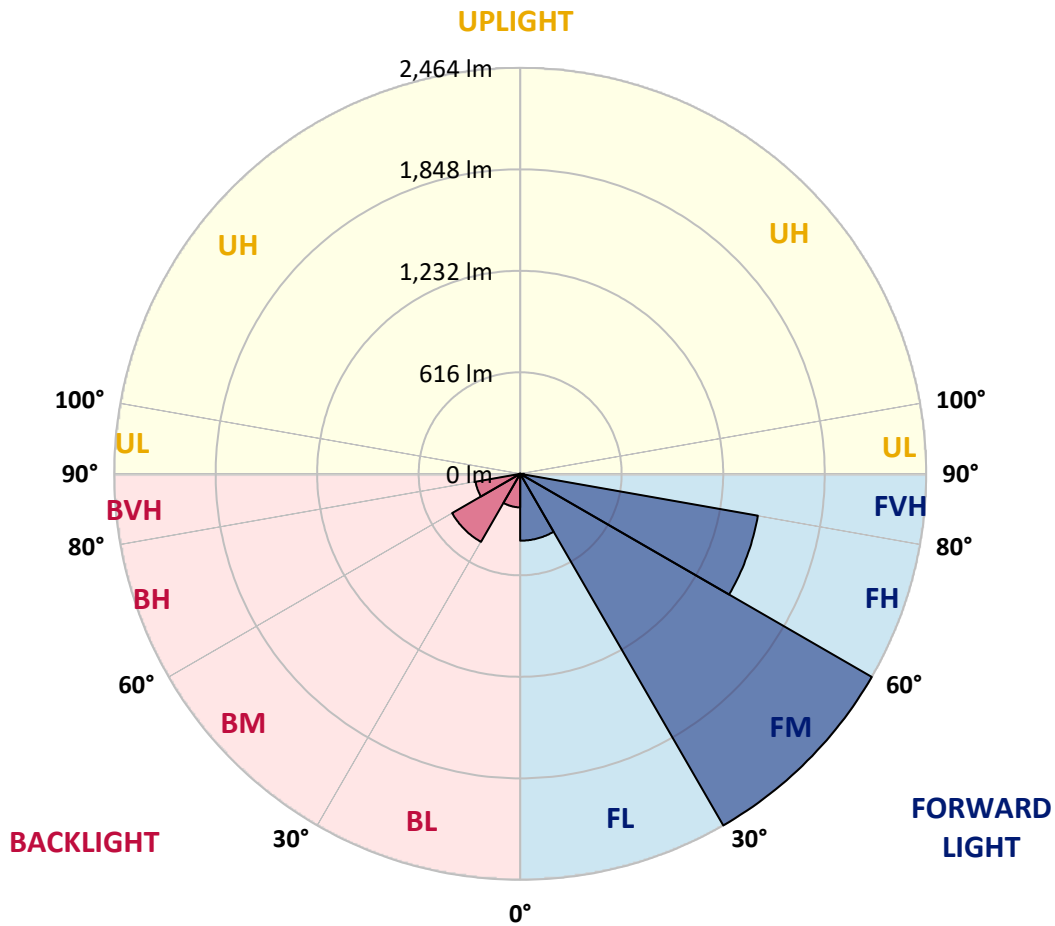
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	405.9	7.6			
FM (30°-60°)	2464.0	46.3			
FH (60°-80°)	1464.7	27.5			G1/1800
FVH (80°-90°)	21.8	0.4			G1/100
BL (0°-30°)	203.5	3.8	B1/500		
BM (30°-60°)	476.9	9.0	B1/1000		
BH (60°-80°)	275.0	5.2	B1/500		G1/500
BVH (80°-90°)	8.2	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°	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3
2.5°	931.5	936.9	933.8	932.3	929.6	925.8	922.7	913.1	903.2	896.7	894.4
5°	950.3	955.7	955.3	956.8	958.7	959.9	959.1	948.4	934.2	923.1	916.6
7.5°	934.2	940.3	945.3	953.0	966.4	980.5	987.4	985.1	970.6	955.3	947.2
10°	888.6	895.1	907.0	925.0	953.4	984.0	1009.7	1021.5	1012.3	995.5	984.4
12.5°	805.1	811.6	835.0	874.1	921.6	974.8	1023.8	1055.6	1057.9	1041.1	1028.0
15°	711.3	717.8	742.7	791.7	864.1	949.5	1031.5	1091.6	1111.9	1097.4	1081.7
17.5°	653.1	658.8	677.6	717.0	792.5	899.0	1028.8	1129.9	1176.3	1164.8	1146.0
20°	635.4	640.4	649.2	676.8	739.6	846.5	1011.2	1165.9	1245.6	1239.1	1218.0
22.5°	654.2	658.8	661.5	673.7	713.2	812.0	989.0	1202.7	1326.0	1326.8	1301.1
25°	697.5	702.1	699.0	706.7	723.9	801.3	980.5	1246.0	1427.2	1435.6	1406.5
27.5°	768.7	769.1	761.8	761.5	764.1	817.4	989.4	1292.3	1554.7	1570.4	1534.4
30°	911.6	905.9	877.9	847.6	833.8	865.6	1013.9	1347.1	1705.2	1733.2	1688.0
32.5°	1131.8	1123.4	1072.1	999.7	926.9	943.4	1057.9	1409.5	1869.2	1919.7	1864.6
35°	1370.9	1368.6	1314.9	1207.3	1080.1	1054.1	1129.5	1491.5	2048.0	2128.5	2063.0
37.5°	1593.0	1591.9	1561.2	1434.4	1279.7	1208.4	1244.5	1598.8	2239.6	2356.0	2278.6
40°	1796.0	1799.5	1768.8	1655.4	1499.5	1406.5	1400.7	1731.3	2452.5	2603.8	2511.9
42.5°	1971.4	1975.3	1944.2	1860.4	1716.7	1625.6	1592.6	1893.7	2660.5	2870.0	2761.2
45°	2090.6	2114.3	2109.7	2042.7	1939.6	1845.0	1823.2	2097.5	2897.6	3152.3	3024.8
47.5°	2124.3	2146.1	2180.6	2189.8	2126.9	2033.9	2059.9	2343.0	3137.4	3435.0	3289.8
50°	2041.1	2061.4	2133.1	2228.4	2272.1	2243.4	2290.1	2606.1	3382.9	3716.9	3549.9
52.5°	1877.2	1897.9	1988.3	2139.2	2317.3	2407.7	2521.1	2865.4	3620.7	3983.9	3796.2
55°	1640.1	1662.0	1778.0	1948.8	2231.1	2475.5	2713.7	3124.3	3838.7	4224.0	4018.3
57.5°	1317.6	1333.7	1454.4	1693.4	2014.3	2408.1	2855.8	3407.0	4044.0	4460.0	4238.6
60°	858.7	872.9	1013.1	1279.7	1655.1	2182.9	2884.2	3722.3	4316.7	4766.8	4535.4
62.5°	571.1	580.7	663.8	859.5	1165.5	1750.4	2718.3	3973.9	4716.6	5300.7	5044.5
65°	391.8	401.4	484.5	620.9	753.0	1157.9	2241.5	3940.6	5078.9	5724.7	5421.7
67.5°	279.6	287.7	358.1	486.8	545.0	672.6	1519.5	3514.7	5026.8	5740.8	5442.0
70°	200.3	204.9	263.1	379.2	433.2	404.1	845.0	2688.1	4401.4	5301.1	5027.6
72.5°	140.2	141.7	182.7	288.8	348.9	294.9	402.2	1792.2	3328.9	4160.8	3897.7
75°	95.0	96.9	123.0	211.8	280.0	225.2	213.0	961.0	1954.2	2303.1	2064.5
77.5°	58.2	59.0	79.3	144.8	209.5	171.6	137.1	407.2	756.1	742.3	632.8
80°	32.9	32.9	50.6	90.0	142.9	110.7	96.1	173.1	239.4	210.3	185.4
82.5°	18.4	18.8	36.8	55.9	94.6	65.5	52.9	80.1	103.4	91.5	79.7
85°	7.7	8.4	22.6	26.4	45.2	32.6	21.4	33.7	38.3	34.1	24.9
87.5°	0.8	1.1	6.9	5.0	5.4	6.5	3.1	6.5	5.4	5.4	3.8
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°	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3	881.3
2.5°	887.1	881.3	866.8	849.9	827.7	817.0	802.4	792.5	784.1	784.8	777.2
5°	904.3	889.8	857.2	816.6	766.1	730.0	691.7	665.3	643.9	639.3	628.9
7.5°	928.1	905.1	848.0	774.9	689.4	624.7	566.9	529.7	503.3	494.9	486.4
10°	958.7	925.4	836.1	722.4	599.4	517.1	455.0	425.9	407.9	401.8	397.2
12.5°	994.3	948.8	820.4	658.4	506.7	427.5	388.0	373.5	367.7	365.8	364.6
15°	1039.2	977.9	796.7	582.6	428.2	372.7	355.8	353.9	354.7	353.9	353.5
17.5°	1092.4	1009.7	758.0	504.4	375.4	344.7	338.6	340.1	342.0	341.7	340.9
20°	1150.6	1041.1	708.6	435.1	339.4	324.8	321.4	322.9	324.4	323.7	323.3
22.5°	1216.9	1074.8	653.8	381.1	315.2	306.4	302.6	303.0	303.0	301.4	300.7
25°	1296.2	1111.9	596.4	342.8	296.8	290.0	285.4	283.8	281.5	276.9	276.2
27.5°	1390.8	1151.4	541.2	316.0	282.3	275.8	270.4	266.6	260.8	253.2	252.4
30°	1497.3	1199.3	494.5	299.1	270.8	264.3	258.2	252.4	244.0	234.4	233.6
32.5°	1622.5	1250.6	460.4	288.0	260.5	253.6	246.3	239.4	230.2	220.6	221.0
35°	1771.9	1312.6	440.5	280.4	252.4	243.2	235.2	227.5	220.6	212.2	211.4
37.5°	1933.9	1378.5	434.4	276.5	247.1	232.9	223.7	218.3	217.6	212.6	212.2
40°	2111.2	1456.6	438.9	274.2	241.3	222.9	213.0	211.8	213.7	204.9	205.3
42.5°	2298.9	1549.3	446.6	271.6	233.3	213.0	203.4	203.4	201.9	189.6	189.6
45°	2501.9	1656.2	454.3	265.1	223.7	203.0	195.7	193.0	186.5	174.7	174.3
47.5°	2706.5	1765.0	460.0	253.2	212.2	194.6	188.1	181.9	172.4	161.6	161.3
50°	2900.7	1862.7	453.9	235.6	199.2	186.5	179.6	171.2	160.9	153.6	152.4
52.5°	3074.2	1947.3	427.8	214.9	185.4	178.1	172.0	163.2	154.7	147.1	146.3
55°	3225.1	2015.9	381.9	195.3	173.1	170.8	164.7	153.6	142.1	135.6	134.8
57.5°	3369.9	2068.0	324.4	179.3	162.0	162.8	153.6	143.6	132.9	126.0	125.2
60°	3562.5	2137.7	266.2	164.3	150.1	152.4	142.5	135.2	121.8	113.0	111.8
62.5°	3870.5	2246.1	211.4	145.9	136.4	137.1	132.9	124.1	108.0	97.7	96.9
65°	4114.9	2206.2	166.6	126.0	120.7	121.8	121.8	112.2	95.0	83.1	82.0
67.5°	4087.3	1889.1	132.9	106.5	105.7	106.5	109.2	101.1	84.3	74.7	73.2
70°	3765.2	1502.6	106.5	88.5	91.9	90.0	97.7	92.3	75.8	66.3	65.1
72.5°	3072.3	1082.4	81.2	73.2	70.5	73.5	88.1	83.1	63.2	52.5	51.3
75°	1795.2	577.6	60.5	57.8	50.9	61.3	78.1	70.9	48.3	38.7	37.5
77.5°	584.5	201.5	44.4	42.5	37.9	49.4	66.6	59.8	39.5	30.6	29.5
80°	156.7	60.9	30.3	28.0	24.5	36.8	52.9	47.5	28.3	19.9	19.5
82.5°	62.8	25.7	17.6	15.7	13.4	25.3	41.7	38.3	21.1	12.6	12.6
85°	20.3	8.4	6.5	5.0	6.1	15.7	24.9	26.0	14.9	6.5	5.0
87.5°	2.7	1.1	1.1	1.5	1.1	2.7	7.7	7.3	4.2	0.8	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)