

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: P882053

Luminaire Tested: **NAV-SB1D-730-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882053
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-SB1D-730-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA 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: 6998 lumens
Efficiency: N/A
Efficacy: 87.9 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

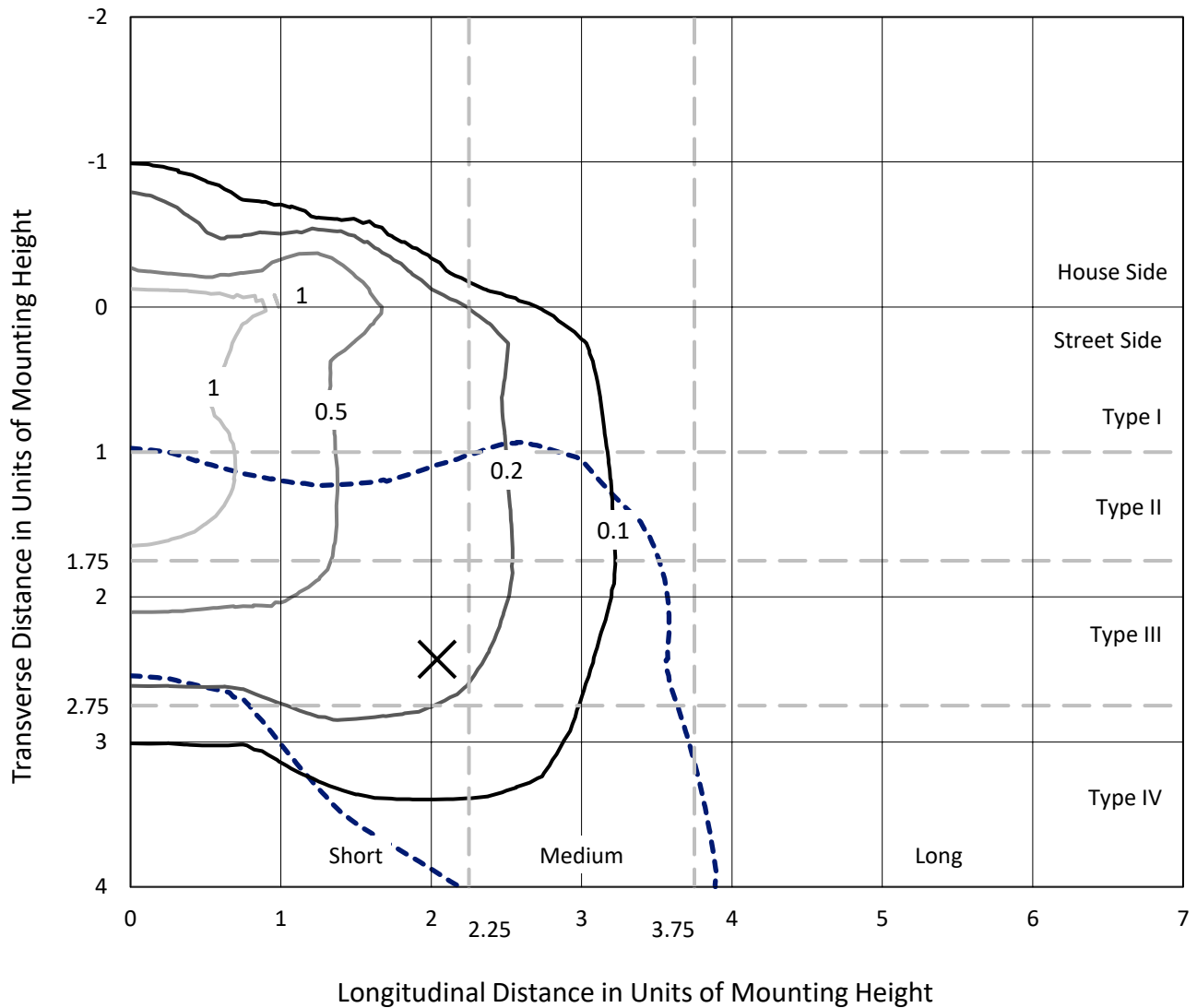
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

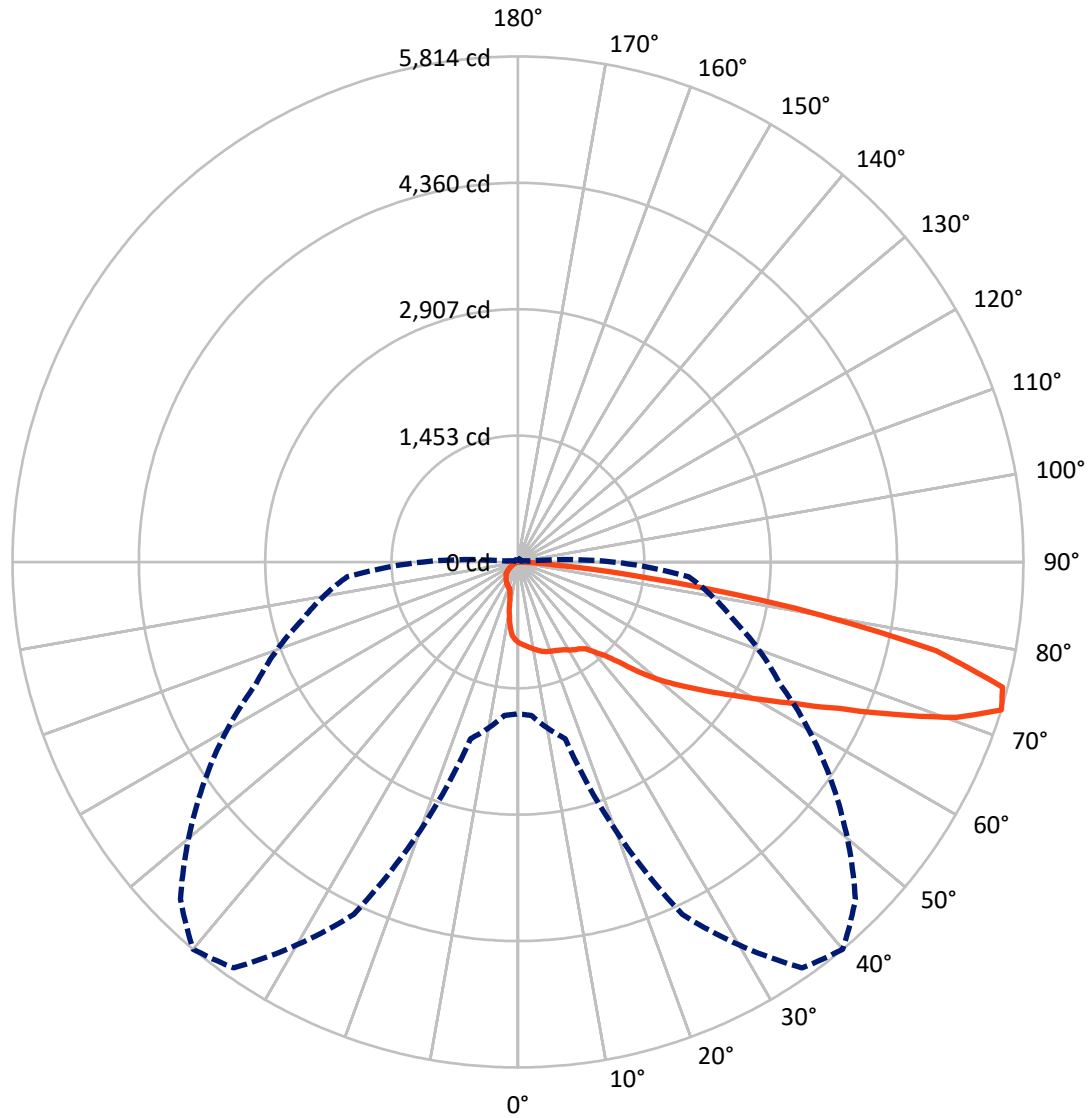
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type 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	903.7	0.0	903.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	6094.3	0.0	6094.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	6998.0	0.0	6998.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	1.2
10°-20°	229.8	3.3
20°-30°	371.8	5.3
30°-40°	549.0	7.8
40°-50°	923.9	13.2
50°-60°	1434.6	20.5
60°-70°	1795.1	25.7
70°-80°	1469.7	21.0
80°-90°	139.4	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°	6998.0	100.0
0°-180°	6998.0	100.0

Coefficient of Utilization



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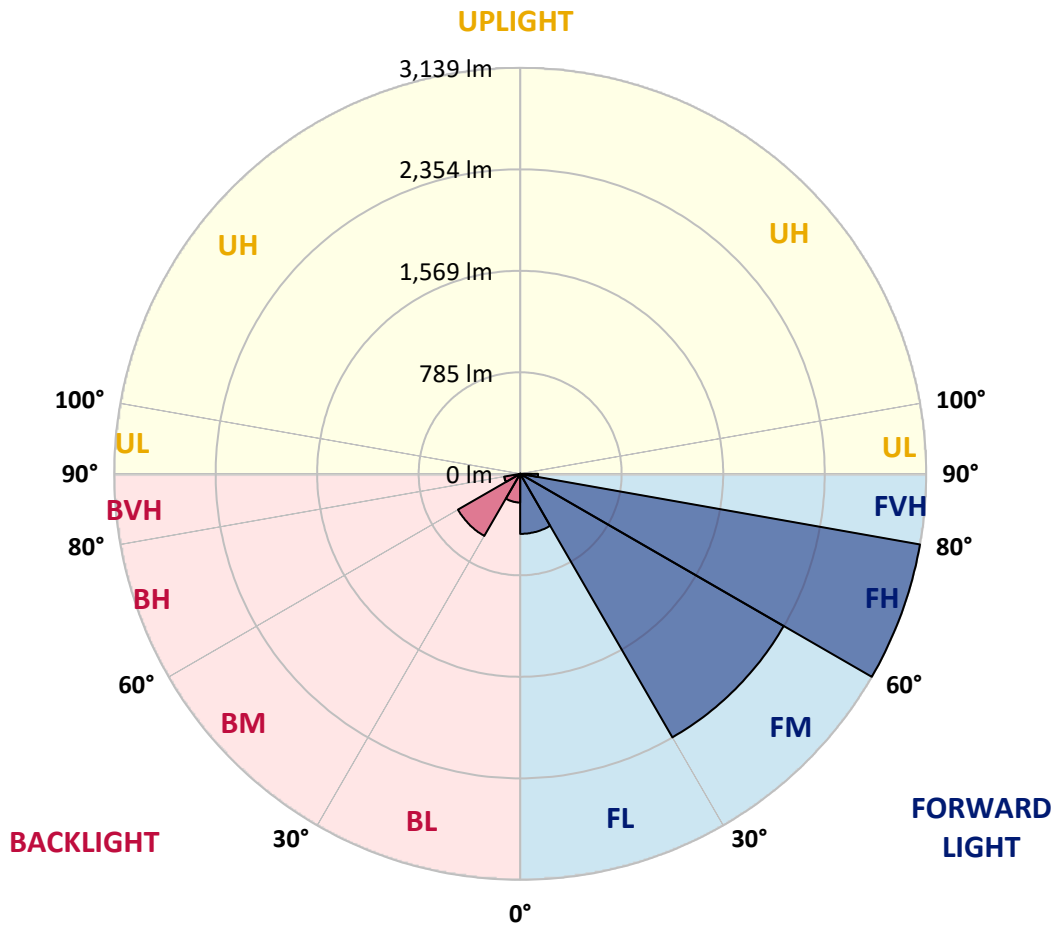
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	464.5	6.6			
FM (30°-60°)	2352.6	33.6			
FH (60°-80°)	3138.9	44.9			G2/5000
FVH (80°-90°)	138.3	2.0			G2/225
BL (0°-30°)	221.8	3.2	B1/500		
BM (30°-60°)	554.9	7.9	B1/1000		
BH (60°-80°)	125.9	1.8	B1/500		G1/500
BVH (80°-90°)	1.1	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°	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6
2.5°	954.5	958.2	956.1	951.9	950.8	948.7	946.1	945.0	941.3	938.2	934.5
5°	981.4	985.1	982.5	976.7	974.0	971.4	967.7	964.5	957.2	950.3	941.9
7.5°	1010.9	1014.1	1010.9	1002.5	998.3	995.1	989.8	985.1	976.7	966.6	956.1
10°	1043.6	1046.2	1041.5	1030.4	1023.6	1018.8	1014.1	1008.8	1000.9	989.8	977.2
12.5°	1074.2	1077.3	1070.0	1056.8	1048.9	1044.1	1038.9	1034.6	1026.7	1016.2	1003.0
15°	1102.1	1106.9	1094.2	1080.0	1071.0	1067.3	1062.0	1059.4	1054.1	1046.8	1034.6
17.5°	1123.2	1126.4	1113.2	1096.3	1086.3	1083.7	1080.0	1081.6	1080.5	1076.8	1068.9
20°	1141.1	1143.2	1125.8	1105.3	1094.2	1094.7	1093.7	1098.9	1101.1	1101.1	1100.5
22.5°	1163.2	1163.8	1141.6	1115.8	1102.6	1106.3	1107.9	1113.7	1117.9	1122.1	1131.6
25°	1192.2	1191.2	1164.8	1129.5	1117.9	1123.2	1126.9	1129.0	1133.7	1140.6	1162.2
27.5°	1235.5	1232.3	1198.6	1151.7	1137.9	1142.7	1149.5	1148.5	1146.4	1151.7	1188.0
30°	1290.3	1286.1	1241.3	1182.7	1170.1	1174.3	1176.4	1166.9	1151.7	1156.4	1210.7
32.5°	1377.2	1369.9	1307.7	1217.5	1198.0	1202.8	1200.1	1180.6	1158.0	1162.7	1233.3
35°	1528.5	1510.6	1422.6	1290.3	1229.7	1224.4	1218.1	1199.1	1171.2	1166.4	1252.3
37.5°	1850.0	1818.4	1668.2	1432.1	1301.3	1267.1	1247.6	1228.6	1185.4	1166.4	1273.9
40°	2212.6	2180.5	2007.1	1669.2	1420.5	1362.5	1316.1	1263.4	1200.1	1173.3	1307.7
42.5°	2591.1	2555.8	2377.6	1963.3	1590.7	1471.6	1385.1	1291.3	1224.4	1194.3	1352.5
45°	3013.8	2969.5	2736.6	2270.1	1837.9	1652.9	1496.4	1348.8	1266.6	1231.8	1413.6
47.5°	3459.7	3402.2	3094.4	2567.9	2104.1	1903.8	1699.8	1451.6	1328.7	1287.6	1496.4
50°	3855.0	3798.1	3463.9	2879.4	2352.8	2142.5	1931.7	1593.9	1422.0	1366.7	1607.6
52.5°	4139.1	4095.9	3800.2	3200.9	2611.6	2366.6	2142.0	1759.4	1540.1	1467.9	1738.8
55°	4329.4	4289.8	4038.4	3505.6	2912.6	2613.2	2349.2	1939.1	1682.4	1589.1	1883.8
57.5°	4444.8	4422.1	4210.8	3777.5	3210.9	2883.1	2586.3	2136.7	1850.0	1732.0	2045.6
60°	4485.9	4467.5	4317.8	4036.8	3571.4	3207.2	2865.2	2359.7	2053.5	1894.3	2211.6
62.5°	4376.3	4380.0	4394.7	4344.1	3951.5	3586.7	3199.3	2627.5	2279.1	2078.2	2367.6
65°	3860.3	3890.8	4171.2	4684.6	4454.8	4062.1	3624.7	2954.2	2537.3	2287.5	2491.5
67.5°	3196.2	3240.4	3589.4	4883.8	4991.4	4679.3	4217.1	3370.6	2845.1	2500.4	2538.4
70°	2446.7	2494.1	2916.8	4842.2	5493.7	5354.0	4949.7	3900.3	3164.0	2648.0	2418.7
72.5°	1746.2	1770.4	2103.5	4471.7	5699.8	5813.6	5489.5	4402.1	3326.9	2566.3	1972.8
75°	1227.0	1222.8	1443.6	3601.0	5378.8	5757.7	5300.2	4130.7	3010.6	2038.7	1216.5
77.5°	534.5	535.5	721.0	2186.8	4293.0	4917.6	4405.8	2587.4	2098.8	1080.5	513.4
80°	138.6	142.8	264.6	870.7	2584.8	3245.7	2687.0	1137.4	969.8	263.5	98.0
82.5°	49.0	52.2	121.8	273.6	953.5	1488.5	1196.5	363.7	253.0	75.4	26.4
85°	14.2	16.9	65.4	83.8	197.1	420.6	290.4	70.6	62.2	39.0	6.9
87.5°	0.0	2.1	13.2	11.6	11.6	7.9	14.8	7.9	10.0	4.7	2.1
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°	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6	926.6
2.5°	931.3	927.6	919.7	911.3	903.4	896.0	893.9	886.0	882.3	882.8	882.3
5°	936.1	929.2	913.9	895.5	876.5	854.9	837.0	811.7	790.1	787.4	785.9
7.5°	948.7	937.7	912.9	877.0	829.6	770.1	714.7	659.9	628.8	611.9	610.9
10°	968.2	953.5	915.5	847.0	746.3	639.9	556.1	487.0	451.7	435.4	432.2
12.5°	991.4	975.1	919.7	795.9	638.8	499.1	408.5	366.3	358.9	357.9	357.4
15°	1024.1	1006.2	924.5	726.8	522.3	380.0	338.4	338.9	344.7	347.9	347.3
17.5°	1060.5	1042.5	917.6	642.5	407.4	324.7	323.6	328.4	336.8	340.0	339.4
20°	1097.4	1080.5	893.4	543.4	329.4	309.4	313.6	318.9	327.3	331.5	331.5
22.5°	1135.3	1120.6	854.9	438.0	297.3	298.3	303.6	308.9	318.4	323.1	323.1
25°	1175.9	1163.2	803.8	351.0	283.6	286.7	293.6	299.9	309.9	315.7	315.7
27.5°	1217.0	1207.5	745.8	293.1	270.9	274.6	282.5	290.9	301.0	307.8	308.3
30°	1261.8	1256.5	699.4	271.4	258.8	262.0	270.9	280.4	291.5	299.9	301.0
32.5°	1307.7	1306.6	676.8	287.3	247.7	249.8	257.7	267.2	280.9	291.5	292.5
35°	1353.0	1355.1	663.6	332.1	244.0	238.2	243.5	251.9	268.3	281.5	283.6
37.5°	1411.0	1416.2	663.1	380.5	253.0	226.6	230.3	236.1	250.4	265.6	268.3
40°	1497.4	1525.3	696.8	422.2	268.8	216.1	217.2	218.2	225.6	238.2	242.5
42.5°	1612.3	1694.0	818.5	450.6	275.1	206.6	202.9	197.1	196.1	202.9	206.6
45°	1755.1	1898.0	1032.5	466.5	268.8	196.1	186.1	170.8	165.0	169.7	169.7
47.5°	1923.3	2121.5	1286.1	470.1	258.3	182.9	165.0	144.9	140.2	141.8	141.3
50°	2087.2	2289.1	1509.0	439.6	240.9	166.0	141.8	124.9	121.8	122.3	122.3
52.5°	2232.1	2346.5	1572.3	367.4	217.7	145.5	121.8	110.2	108.0	108.0	107.5
55°	2328.1	2284.3	1402.0	280.9	188.7	124.4	104.4	98.6	97.5	97.0	95.9
57.5°	2348.1	2081.9	1058.9	202.9	147.6	104.9	92.8	89.6	87.5	85.4	84.3
60°	2276.4	1744.6	674.1	141.8	110.7	89.6	82.2	80.1	75.9	71.7	70.1
62.5°	2121.5	1317.7	373.2	98.6	89.1	76.4	72.7	70.1	62.2	55.3	53.2
65°	1913.3	876.0	165.0	77.0	72.7	64.3	62.2	58.5	49.0	41.1	39.5
67.5°	1704.0	504.4	74.3	61.7	58.5	52.7	51.1	48.5	41.6	34.3	33.2
70°	1465.3	255.6	51.1	49.0	45.3	40.1	41.6	41.1	34.3	27.9	26.9
72.5°	1091.0	127.0	38.5	36.9	32.7	28.5	34.3	33.7	26.9	21.1	20.0
75°	617.7	62.7	27.9	25.8	19.5	21.1	27.4	25.8	18.4	13.7	12.6
77.5°	245.1	32.2	18.4	15.8	11.6	14.2	20.0	17.4	9.5	5.8	5.3
80°	56.4	15.8	9.5	6.9	5.3	8.4	10.5	6.3	2.6	0.5	0.0
82.5°	15.8	6.9	3.2	2.6	2.6	3.2	2.6	1.1	0.0	0.0	0.0
85°	5.3	3.2	1.1	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
87.5°	2.1	1.1	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)