

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: P882033

Luminaire Tested: **NAV-SB1D-722-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882033
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-722-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 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: 5665 lumens
Efficiency: N/A
Efficacy: 71.2 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

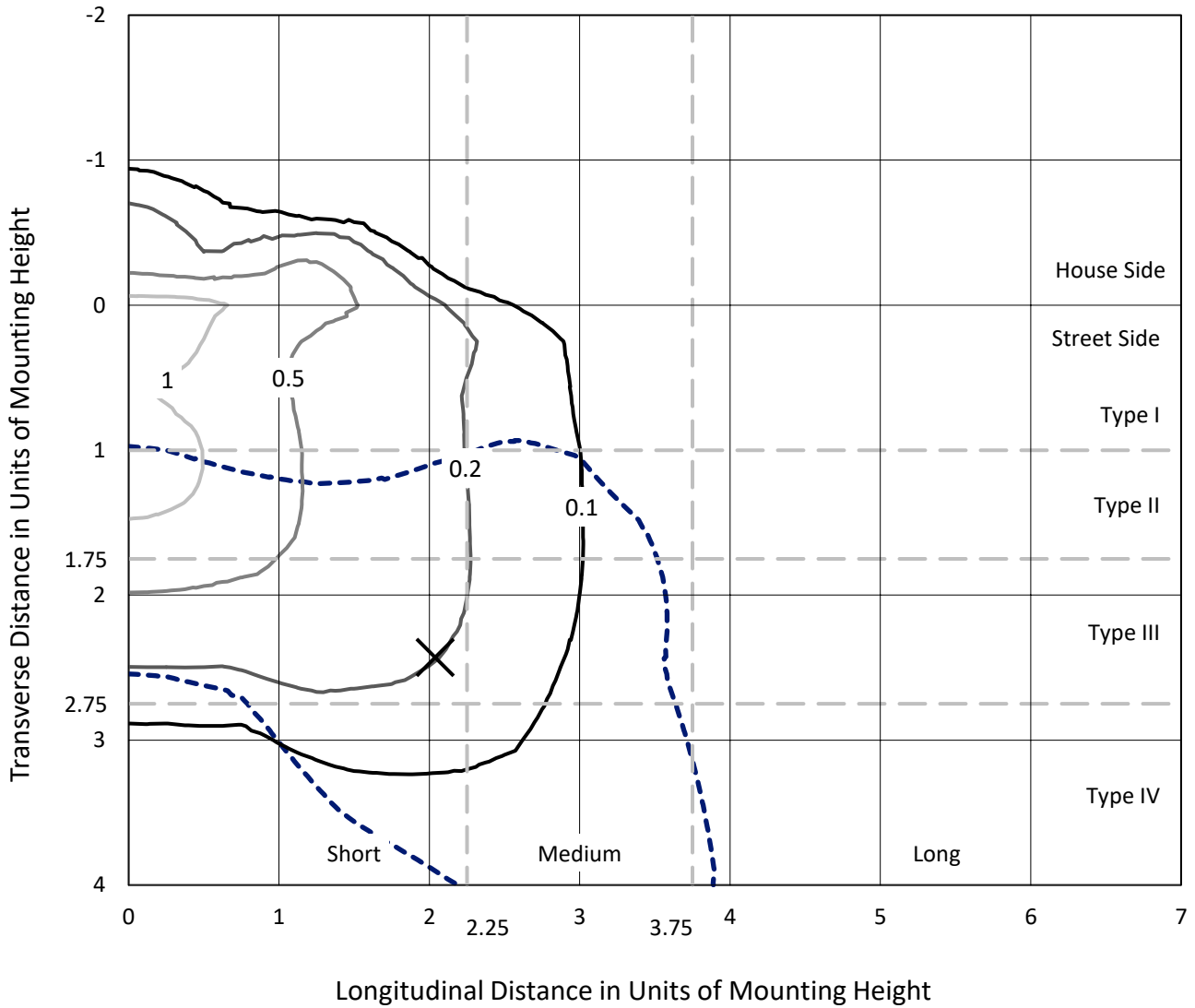
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

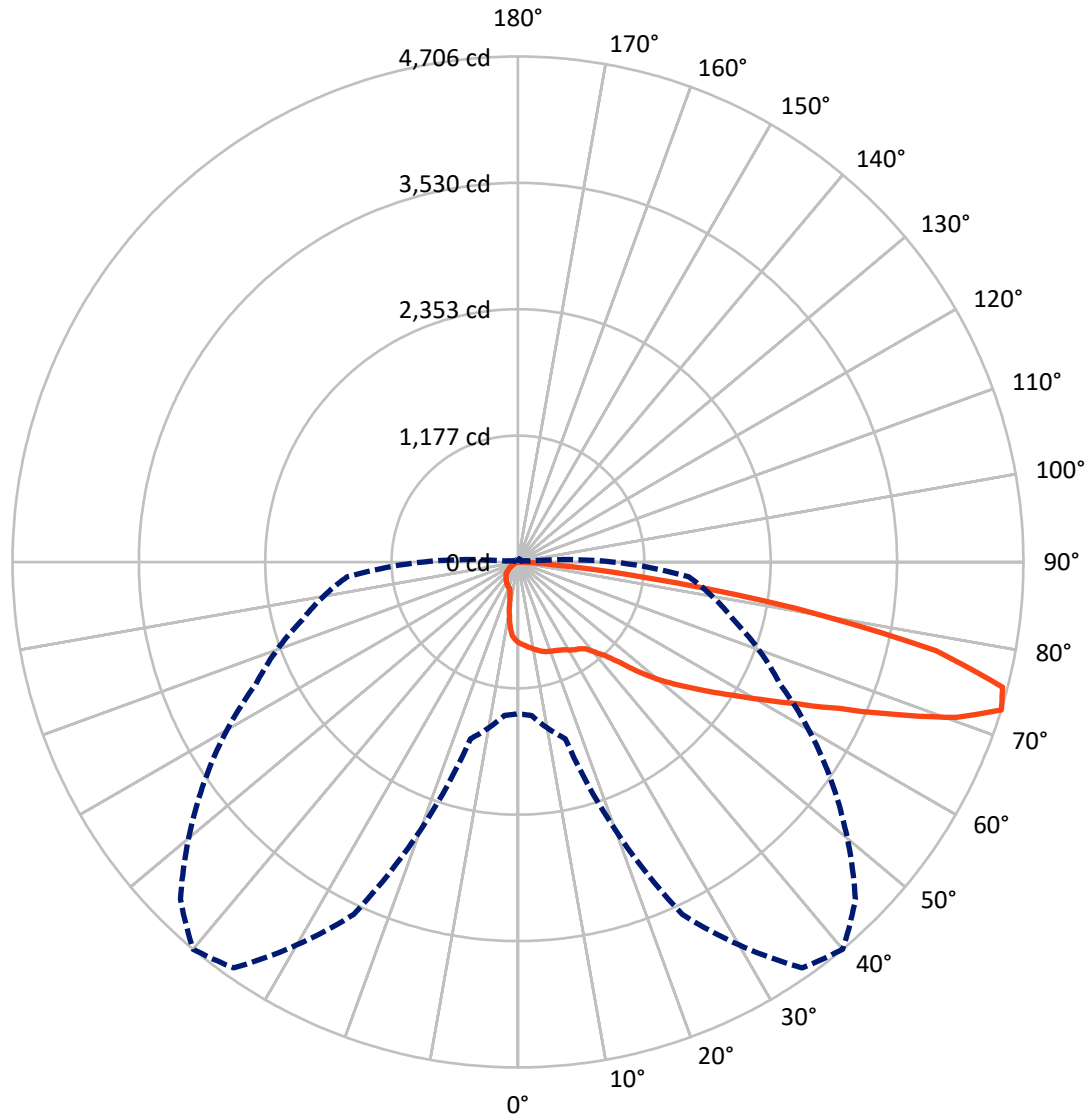
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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	731.6	0.0	731.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	4933.4	0.0	4933.4
	% Fixture	87.1	0.0	87.1
Total	Lumens	5665.0	0.0	5665.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	1.2
10°-20°	186.0	3.3
20°-30°	301.0	5.3
30°-40°	444.4	7.8
40°-50°	748.0	13.2
50°-60°	1161.4	20.5
60°-70°	1453.2	25.7
70°-80°	1189.7	21.0
80°-90°	112.8	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°	5665.0	100.0
0°-180°	5665.0	100.0

Coefficient of Utilization



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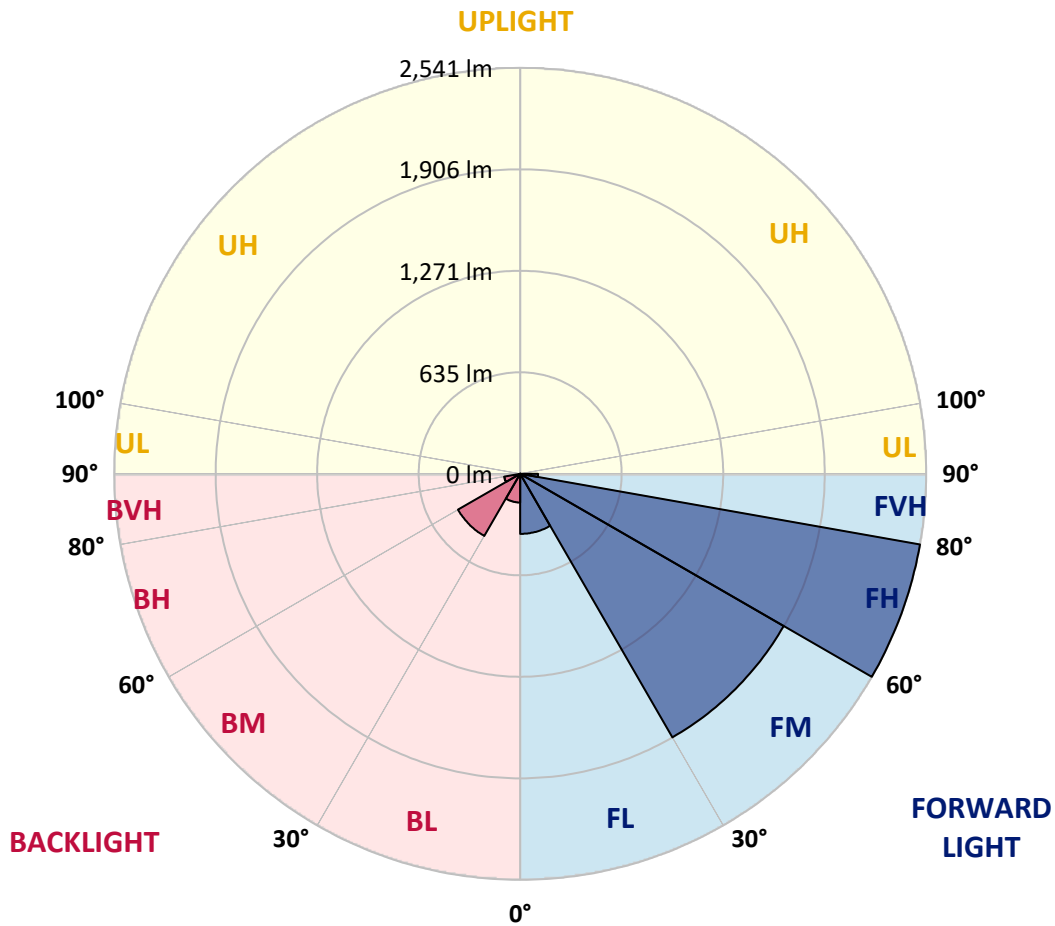
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	376.0	6.6			
FM (30°-60°)	1904.5	33.6			
FH (60°-80°)	2541.0	44.9			G2/5000
FVH (80°-90°)	112.0	2.0			G2/225
BL (0°-30°)	179.6	3.2	B1/500		
BM (30°-60°)	449.2	7.9	B1/1000		
BH (60°-80°)	101.9	1.8	B0/110		G0/110
BVH (80°-90°)	0.9	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°	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1
2.5°	772.7	775.7	774.0	770.6	769.7	768.0	765.9	765.0	762.0	759.5	756.5
5°	794.5	797.5	795.3	790.6	788.5	786.4	783.4	780.8	774.8	769.3	762.5
7.5°	818.4	820.9	818.4	811.5	808.1	805.6	801.3	797.5	790.6	782.5	774.0
10°	844.8	846.9	843.1	834.1	828.6	824.8	820.9	816.7	810.3	801.3	791.1
12.5°	869.6	872.1	866.1	855.5	849.1	845.2	841.0	837.6	831.2	822.6	812.0
15°	892.2	896.0	885.8	874.3	867.0	864.0	859.7	857.6	853.3	847.4	837.6
17.5°	909.2	911.8	901.1	887.5	879.4	877.2	874.3	875.5	874.7	871.7	865.3
20°	923.7	925.5	911.4	894.7	885.8	886.2	885.3	889.6	891.3	891.3	890.9
22.5°	941.7	942.1	924.2	903.3	892.6	895.6	896.9	901.6	905.0	908.4	916.1
25°	965.1	964.3	942.9	914.4	905.0	909.2	912.2	913.9	917.8	923.3	940.8
27.5°	1000.1	997.6	970.3	932.3	921.2	925.0	930.6	929.7	928.0	932.3	961.7
30°	1044.5	1041.1	1004.8	957.5	947.2	950.6	952.3	944.7	932.3	936.1	980.1
32.5°	1114.9	1108.9	1058.6	985.6	969.8	973.7	971.5	955.7	937.4	941.2	998.4
35°	1237.4	1222.8	1151.6	1044.5	995.4	991.2	986.0	970.7	948.1	944.2	1013.8
37.5°	1497.6	1472.0	1350.4	1159.3	1053.5	1025.7	1009.9	994.6	959.6	944.2	1031.3
40°	1791.2	1765.1	1624.8	1351.3	1149.9	1103.0	1065.4	1022.7	971.5	949.8	1058.6
42.5°	2097.5	2068.9	1924.7	1589.4	1287.7	1191.3	1121.3	1045.3	991.2	966.8	1094.8
45°	2439.7	2403.9	2215.3	1837.7	1487.8	1338.0	1211.3	1091.9	1025.3	997.1	1144.3
47.5°	2800.7	2754.2	2505.0	2078.8	1703.3	1541.1	1376.0	1175.1	1075.6	1042.4	1211.3
50°	3120.7	3074.6	2804.1	2330.9	1904.7	1734.4	1563.8	1290.3	1151.2	1106.4	1301.4
52.5°	3350.7	3315.7	3076.3	2591.2	2114.2	1915.8	1734.0	1424.2	1246.7	1188.3	1407.6
55°	3504.7	3472.7	3269.2	2837.8	2357.8	2115.4	1901.7	1569.7	1361.9	1286.4	1524.9
57.5°	3598.1	3579.8	3408.7	3058.0	2599.3	2333.9	2093.7	1729.7	1497.6	1402.0	1655.9
60°	3631.4	3616.5	3495.3	3267.9	2891.1	2596.3	2319.4	1910.2	1662.3	1533.5	1790.3
62.5°	3542.7	3545.7	3557.6	3516.6	3198.8	2903.5	2589.9	2127.0	1844.9	1682.4	1916.6
65°	3125.0	3149.7	3376.7	3792.3	3606.2	3288.4	2934.2	2391.5	2054.0	1851.8	2016.9
67.5°	2587.3	2623.2	2905.6	3953.6	4040.6	3788.0	3413.8	2728.6	2303.2	2024.1	2054.9
70°	1980.6	2019.0	2361.2	3919.8	4447.2	4334.1	4006.9	3157.4	2561.3	2143.6	1958.0
72.5°	1413.6	1433.2	1702.9	3619.9	4614.0	4706.2	4443.8	3563.6	2693.2	2077.5	1597.0
75°	993.3	989.9	1168.7	2915.0	4354.2	4661.0	4290.6	3343.8	2437.2	1650.4	984.8
77.5°	432.6	433.5	583.7	1770.3	3475.3	3980.9	3566.6	2094.5	1699.0	874.7	415.6
80°	112.2	115.6	214.2	704.9	2092.4	2627.5	2175.2	920.8	785.1	213.3	79.4
82.5°	39.7	42.2	98.6	221.4	771.9	1204.9	968.5	294.4	204.8	61.0	21.3
85°	11.5	13.7	52.9	67.8	159.6	340.5	235.1	57.2	50.3	31.6	5.5
87.5°	0.0	1.7	10.7	9.4	9.4	6.4	11.9	6.4	8.1	3.8	1.7
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°	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1
2.5°	753.9	750.9	744.5	737.7	731.3	725.3	723.6	717.2	714.3	714.7	714.3
5°	757.8	752.2	739.9	724.9	709.6	692.1	677.6	657.1	639.6	637.5	636.2
7.5°	768.0	759.1	739.0	710.0	671.6	623.4	578.6	534.2	509.0	495.4	494.5
10°	783.8	771.9	741.1	685.7	604.2	518.0	450.1	394.2	365.7	352.4	349.9
12.5°	802.6	789.3	744.5	644.3	517.1	404.1	330.7	296.5	290.6	289.7	289.3
15°	829.0	814.5	748.4	588.4	422.8	307.6	273.9	274.4	279.0	281.6	281.2
17.5°	858.5	844.0	742.8	520.1	329.8	262.8	262.0	265.8	272.6	275.2	274.8
20°	888.3	874.7	723.2	439.9	266.7	250.5	253.9	258.1	265.0	268.4	268.4
22.5°	919.1	907.1	692.1	354.6	240.6	241.5	245.8	250.0	257.7	261.6	261.6
25°	951.9	941.7	650.7	284.2	229.6	232.1	237.7	242.8	250.9	255.6	255.6
27.5°	985.2	977.5	603.7	237.2	219.3	222.3	228.7	235.5	243.6	249.2	249.6
30°	1021.5	1017.2	566.2	219.7	209.5	212.1	219.3	227.0	236.0	242.8	243.6
32.5°	1058.6	1057.7	547.8	232.5	200.5	202.2	208.6	216.3	227.4	236.0	236.8
35°	1095.3	1097.0	537.2	268.8	197.5	192.9	197.1	203.9	217.2	227.8	229.6
37.5°	1142.2	1146.5	536.8	308.1	204.8	183.5	186.5	191.1	202.7	215.0	217.2
40°	1212.2	1234.8	564.1	341.8	217.6	174.9	175.8	176.6	182.6	192.9	196.3
42.5°	1305.2	1371.3	662.6	364.8	222.7	167.3	164.3	159.6	158.7	164.3	167.3
45°	1420.8	1536.5	835.9	377.6	217.6	158.7	150.6	138.2	133.5	137.4	137.4
47.5°	1556.9	1717.4	1041.1	380.6	209.1	148.1	133.5	117.3	113.5	114.8	114.3
50°	1689.6	1853.0	1221.6	355.8	195.0	134.4	114.8	101.1	98.6	99.0	99.0
52.5°	1807.0	1899.6	1272.8	297.4	176.2	117.8	98.6	89.2	87.5	87.5	87.0
55°	1884.6	1849.2	1135.0	227.4	152.7	100.7	84.5	79.8	78.9	78.5	77.7
57.5°	1900.8	1685.4	857.2	164.3	119.5	84.9	75.1	72.5	70.8	69.1	68.3
60°	1842.8	1412.3	545.7	114.8	89.6	72.5	66.6	64.9	61.4	58.0	56.7
62.5°	1717.4	1066.7	302.1	79.8	72.1	61.9	58.9	56.7	50.3	44.8	43.1
65°	1548.8	709.1	133.5	62.3	58.9	52.1	50.3	47.4	39.7	33.3	32.0
67.5°	1379.4	408.3	60.2	49.9	47.4	42.7	41.4	39.3	33.7	27.7	26.9
70°	1186.2	206.9	41.4	39.7	36.7	32.4	33.7	33.3	27.7	22.6	21.8
72.5°	883.2	102.8	31.1	29.9	26.5	23.0	27.7	27.3	21.8	17.1	16.2
75°	500.1	50.8	22.6	20.9	15.8	17.1	22.2	20.9	14.9	11.1	10.2
77.5°	198.4	26.0	14.9	12.8	9.4	11.5	16.2	14.1	7.7	4.7	4.3
80°	45.7	12.8	7.7	5.5	4.3	6.8	8.5	5.1	2.1	0.4	0.0
82.5°	12.8	5.5	2.6	2.1	2.1	2.6	2.1	0.9	0.0	0.0	0.0
85°	4.3	2.6	0.9	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
87.5°	1.7	0.9	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)