

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: P882298

Luminaire Tested: **NAV-SB2A-835-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882298
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-835-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6050 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

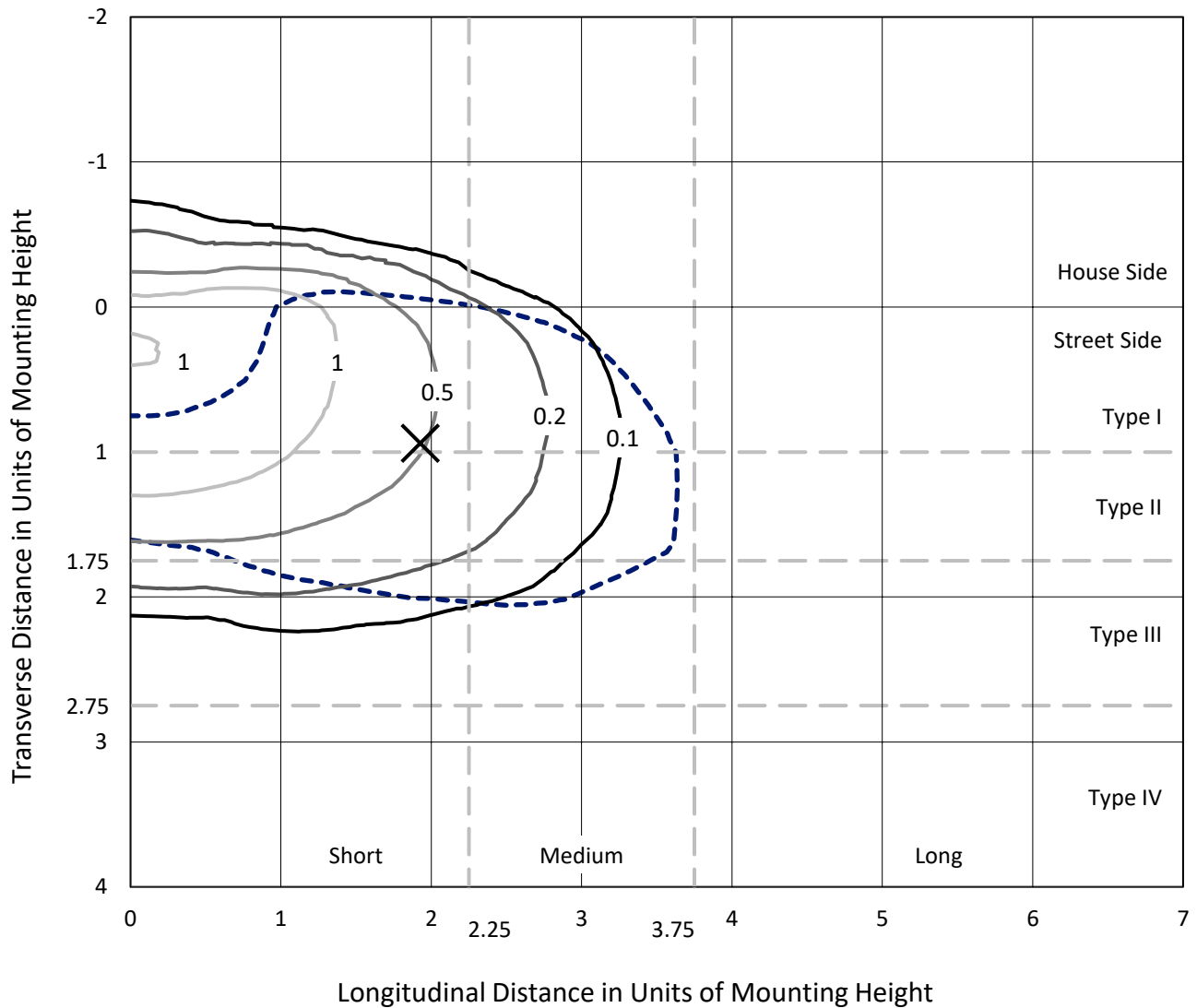
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

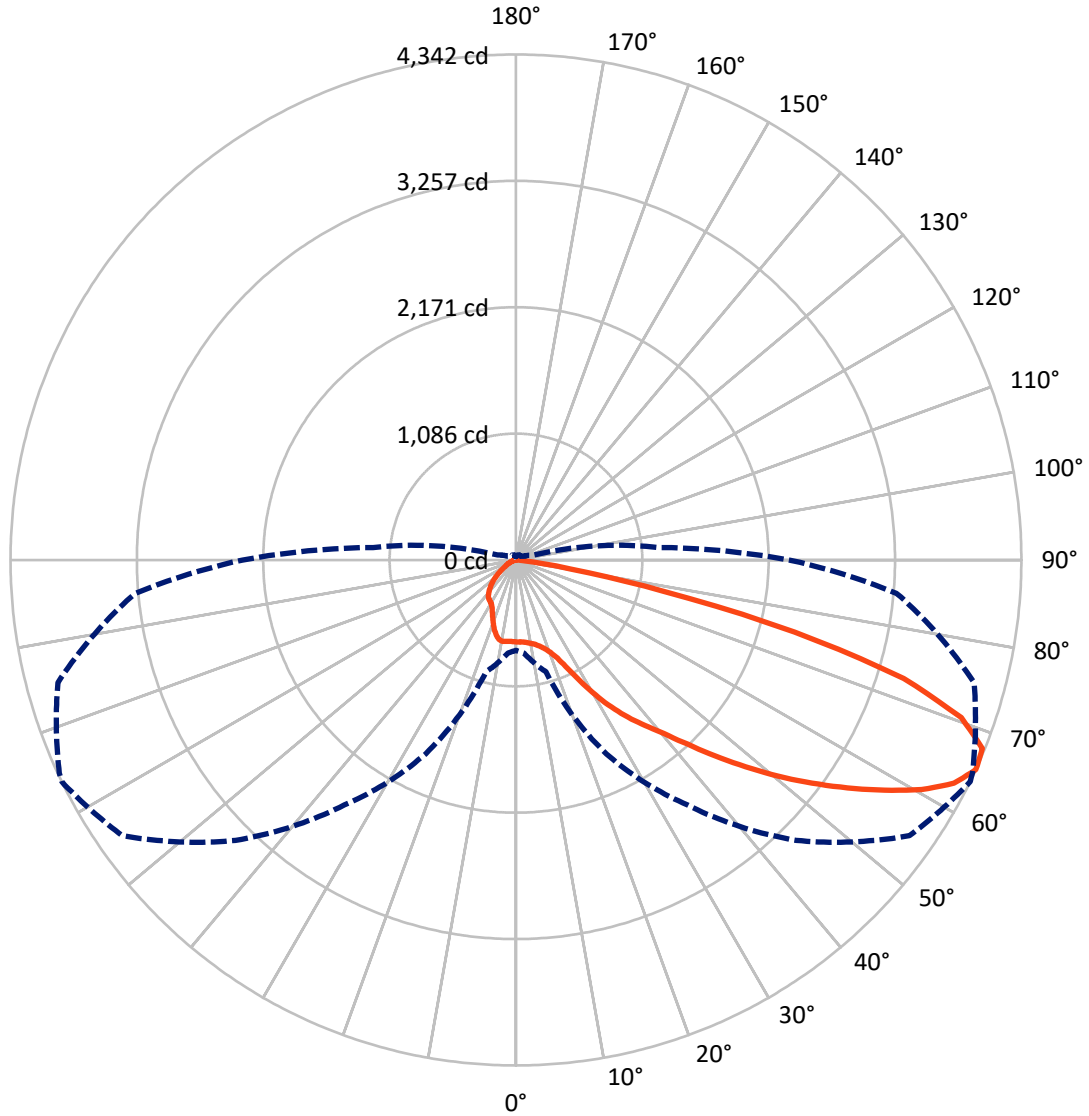
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	809.1	0.0	809.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	5240.9	0.0	5240.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	6050.0	0.0	6050.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	1.1
10°-20°	176.1	2.9
20°-30°	333.7	5.5
30°-40°	675.2	11.2
40°-50°	1150.2	19.0
50°-60°	1564.2	25.9
60°-70°	1468.8	24.3
70°-80°	588.5	9.7
80°-90°	28.5	0.5
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°	6050.0	100.0
0°-180°	6050.0	100.0

Coefficient of Utilization



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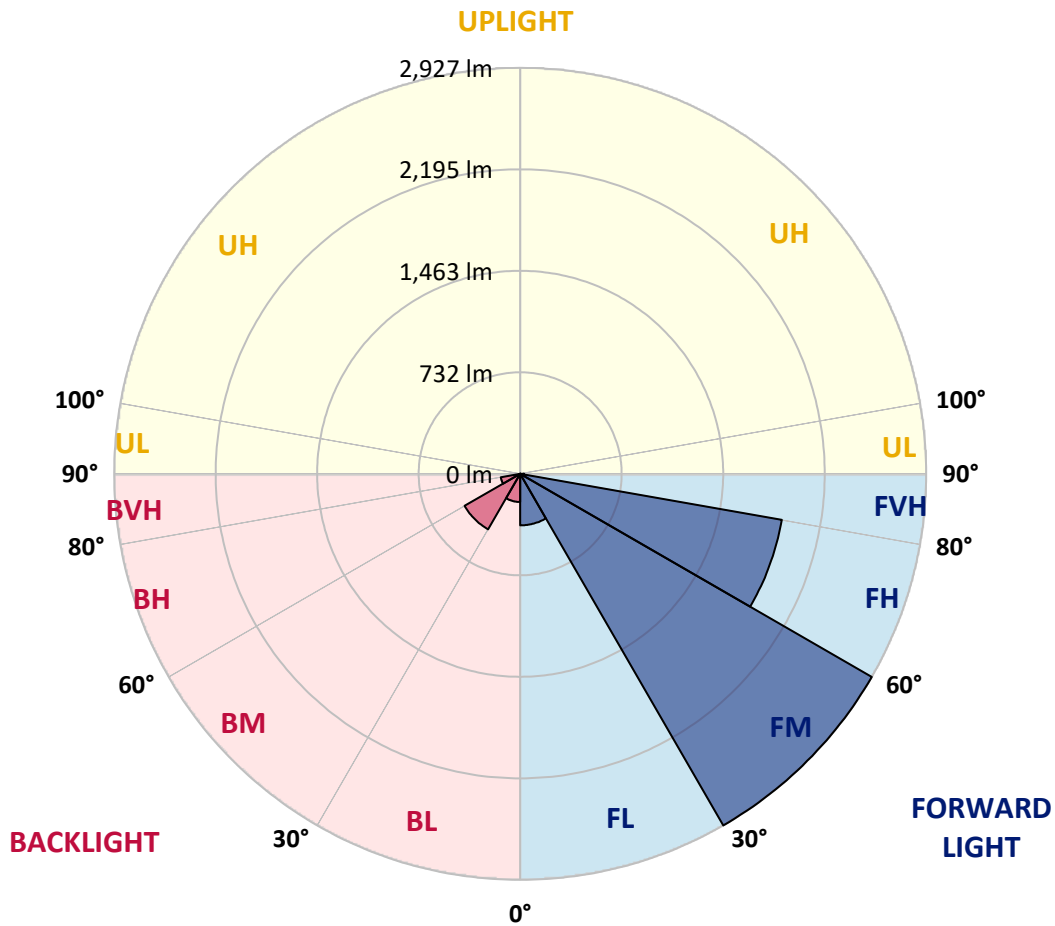
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	371.5	6.1			
FM (30°-60°)	2927.0	48.4			
FH (60°-80°)	1915.3	31.7			G2/5000
FVH (80°-90°)	27.1	0.4			G1/100
BL (0°-30°)	203.1	3.4	B1/500		
BM (30°-60°)	462.5	7.6	B1/1000		
BH (60°-80°)	142.0	2.3	B1/500		G1/500
BVH (80°-90°)	1.4	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7
2.5°	701.2	706.1	704.9	703.7	703.3	704.1	704.5	704.1	704.1	704.1	704.5
5°	687.9	691.9	691.9	694.8	698.8	703.7	707.3	708.1	709.0	710.2	709.8
7.5°	662.3	665.6	668.0	677.3	687.5	700.4	711.4	717.1	717.9	722.3	724.0
10°	644.9	648.9	653.0	662.7	677.3	696.8	715.4	729.2	731.3	741.8	746.7
12.5°	644.1	648.1	653.4	663.9	681.0	701.6	724.4	744.2	747.9	763.3	773.4
15°	652.6	657.4	662.3	675.3	693.5	718.7	743.0	767.8	771.4	793.3	804.3
17.5°	670.0	676.5	680.2	693.1	712.6	740.6	772.6	801.0	804.3	829.8	843.6
20°	704.5	712.2	713.4	724.0	743.0	773.0	811.2	846.4	850.5	879.7	895.1
22.5°	775.9	786.8	777.1	782.4	799.4	829.4	870.8	915.4	921.1	954.3	968.1
25°	901.6	917.0	891.9	882.9	890.2	921.5	973.4	1029.8	1036.3	1063.0	1069.9
27.5°	1148.6	1128.7	1090.6	1053.3	1031.4	1049.2	1107.6	1177.4	1185.5	1211.5	1203.3
30°	1419.9	1402.5	1351.0	1268.2	1216.3	1213.5	1267.4	1345.3	1354.6	1379.4	1354.6
32.5°	1691.7	1675.0	1619.1	1517.3	1427.2	1382.6	1419.9	1506.3	1511.2	1527.0	1490.5
35°	1958.9	1941.9	1885.9	1781.7	1671.0	1569.6	1562.3	1659.6	1661.2	1677.9	1623.5
37.5°	2227.8	2213.6	2154.0	2051.8	1942.7	1802.8	1735.1	1804.8	1806.8	1823.1	1766.7
40°	2419.7	2425.8	2384.8	2305.7	2212.0	2059.1	1928.9	1959.3	1947.2	1974.4	1940.7
42.5°	2584.3	2596.5	2560.8	2521.1	2466.7	2332.1	2169.0	2163.8	2144.3	2158.9	2124.0
45°	2726.7	2736.8	2704.8	2695.5	2694.3	2599.8	2431.4	2399.8	2372.6	2369.8	2328.0
47.5°	2779.0	2798.5	2812.3	2843.5	2904.3	2864.6	2702.8	2653.7	2623.3	2601.0	2534.9
50°	2798.9	2819.6	2866.6	2957.5	3101.5	3118.5	2972.9	2917.7	2880.4	2839.9	2742.5
52.5°	2772.1	2809.0	2872.3	3025.2	3234.1	3322.1	3232.1	3183.8	3141.2	3075.1	2930.7
55°	2614.4	2651.3	2780.6	3024.4	3300.2	3464.9	3477.0	3455.5	3407.7	3303.4	3082.8
57.5°	2281.8	2336.5	2541.4	2921.4	3299.0	3587.7	3717.1	3732.5	3679.0	3529.7	3202.4
60°	1821.0	1895.3	2145.1	2693.0	3197.2	3654.3	3927.6	4004.7	3947.9	3752.8	3299.4
62.5°	1270.7	1356.7	1593.1	2335.3	2964.4	3606.4	4081.3	4223.7	4180.7	3952.4	3336.7
65°	775.1	802.6	993.3	1837.7	2568.5	3406.0	4128.8	4342.1	4327.9	4074.4	3281.5
67.5°	516.3	539.4	594.2	1260.1	1993.8	3005.7	4015.2	4321.4	4325.5	4054.6	3079.6
70°	311.1	331.0	366.6	732.9	1292.2	2379.1	3663.6	4057.8	4081.3	3788.9	2696.7
72.5°	128.2	141.5	174.0	332.2	669.2	1510.0	2917.3	3483.9	3538.7	3185.8	2069.7
75°	72.6	79.5	102.2	166.7	290.4	703.7	1767.1	2473.2	2553.9	2195.8	1245.1
77.5°	48.3	51.5	66.1	107.9	163.4	240.1	755.2	1288.5	1442.6	1199.3	539.0
80°	32.4	35.3	45.4	72.2	106.3	103.0	240.5	477.4	587.3	412.1	131.4
82.5°	21.9	22.3	32.4	47.5	67.3	49.9	71.0	148.4	186.6	119.2	49.9
85°	12.6	12.2	23.9	27.6	30.0	20.7	21.5	44.6	58.4	50.3	28.4
87.5°	1.6	2.4	9.3	7.3	4.1	4.5	4.5	7.7	11.4	12.2	6.1
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°	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7
2.5°	704.5	704.1	702.9	701.6	698.8	697.2	698.0	697.2	696.8	697.2	698.8
5°	709.8	708.5	705.3	701.2	695.6	688.7	684.2	677.7	671.6	668.0	668.8
7.5°	724.0	722.7	718.3	706.9	688.7	659.9	633.5	610.4	593.0	582.8	583.2
10°	746.7	744.6	737.7	712.6	664.7	601.9	549.6	506.2	477.8	464.4	463.2
12.5°	773.4	771.0	758.8	707.3	619.3	521.2	449.0	400.7	374.3	362.6	361.4
15°	805.1	801.8	777.9	682.2	553.2	431.9	365.8	329.7	312.7	302.2	302.6
17.5°	844.4	838.7	792.1	644.5	481.4	363.8	314.7	287.6	272.5	262.4	261.6
20°	895.5	886.2	803.5	599.4	415.3	320.8	280.3	257.5	246.2	237.3	235.6
22.5°	966.9	953.5	817.2	550.8	368.7	291.2	254.7	238.1	228.7	218.6	217.0
25°	1055.3	1039.5	834.3	505.8	336.6	265.7	236.0	222.3	211.3	199.5	198.3
27.5°	1179.0	1150.6	854.6	468.8	309.1	243.8	219.0	203.6	191.0	181.3	179.3
30°	1316.9	1270.3	872.4	446.5	283.9	223.5	196.7	181.3	169.5	162.6	161.4
32.5°	1447.5	1384.2	884.2	436.8	261.2	200.4	172.4	155.7	146.8	144.8	146.0
35°	1570.8	1487.3	882.9	427.5	240.9	177.2	148.4	131.4	124.5	125.7	125.7
37.5°	1712.8	1597.2	874.4	412.9	224.3	156.1	127.8	112.8	106.7	107.1	108.7
40°	1877.8	1724.1	869.2	385.3	206.0	136.7	110.7	98.6	94.1	92.5	92.1
42.5°	2053.8	1847.0	870.0	354.1	183.3	119.2	99.0	88.8	84.8	83.5	83.1
45°	2230.7	1964.2	871.2	321.6	159.4	105.9	90.4	81.9	79.5	77.9	77.9
47.5°	2397.0	2064.0	848.5	286.7	135.9	95.7	83.5	77.9	75.8	73.8	73.8
50°	2551.9	2130.5	793.7	246.2	117.2	87.6	78.3	74.2	72.2	70.2	70.2
52.5°	2672.4	2141.0	703.3	204.4	104.2	81.5	75.0	71.4	68.9	66.9	66.5
55°	2725.9	2074.9	574.7	165.5	94.1	76.2	71.8	68.1	65.3	63.3	62.9
57.5°	2712.1	1935.8	448.2	133.0	84.4	71.0	67.7	65.3	62.1	58.8	58.4
60°	2644.4	1749.7	337.8	110.7	75.4	65.3	63.3	61.2	56.8	51.9	51.1
62.5°	2527.2	1515.6	240.9	91.7	65.7	58.8	58.0	56.4	49.9	41.0	40.2
65°	2347.9	1231.3	162.2	76.2	56.4	51.5	51.9	49.1	40.6	30.4	29.6
67.5°	2085.9	900.4	103.8	62.5	47.0	43.0	43.4	41.8	34.5	26.0	24.7
70°	1752.1	596.2	67.7	47.5	37.7	33.3	35.7	36.1	29.2	21.1	20.3
72.5°	1284.5	352.0	47.5	35.3	27.6	23.1	29.2	30.0	23.5	15.8	15.0
75°	732.1	167.1	35.7	25.6	17.0	16.2	22.7	22.7	16.2	10.5	9.7
77.5°	307.4	69.8	25.1	16.6	9.7	9.3	15.4	14.2	8.1	4.9	4.9
80°	88.8	31.2	13.4	8.1	4.1	3.7	6.1	4.5	2.0	0.8	0.8
82.5°	34.9	13.8	5.3	3.2	1.6	1.6	0.8	0.0	0.0	0.0	0.0
85°	20.7	5.7	2.4	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.3	1.2	0.8	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)