

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: P960786

Luminaire Tested: **NAV-SB1D-722-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960786
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-722-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7298 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

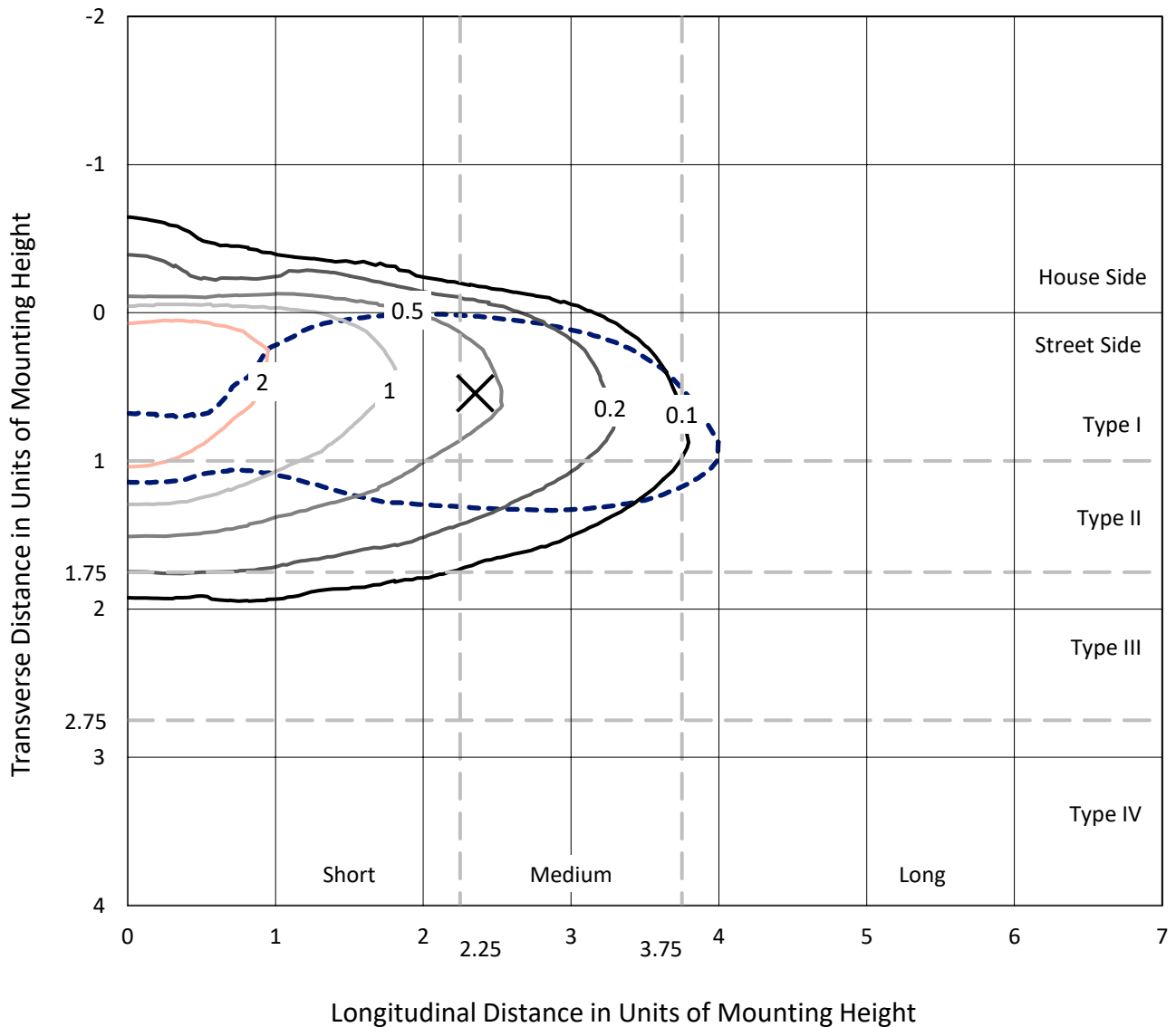
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

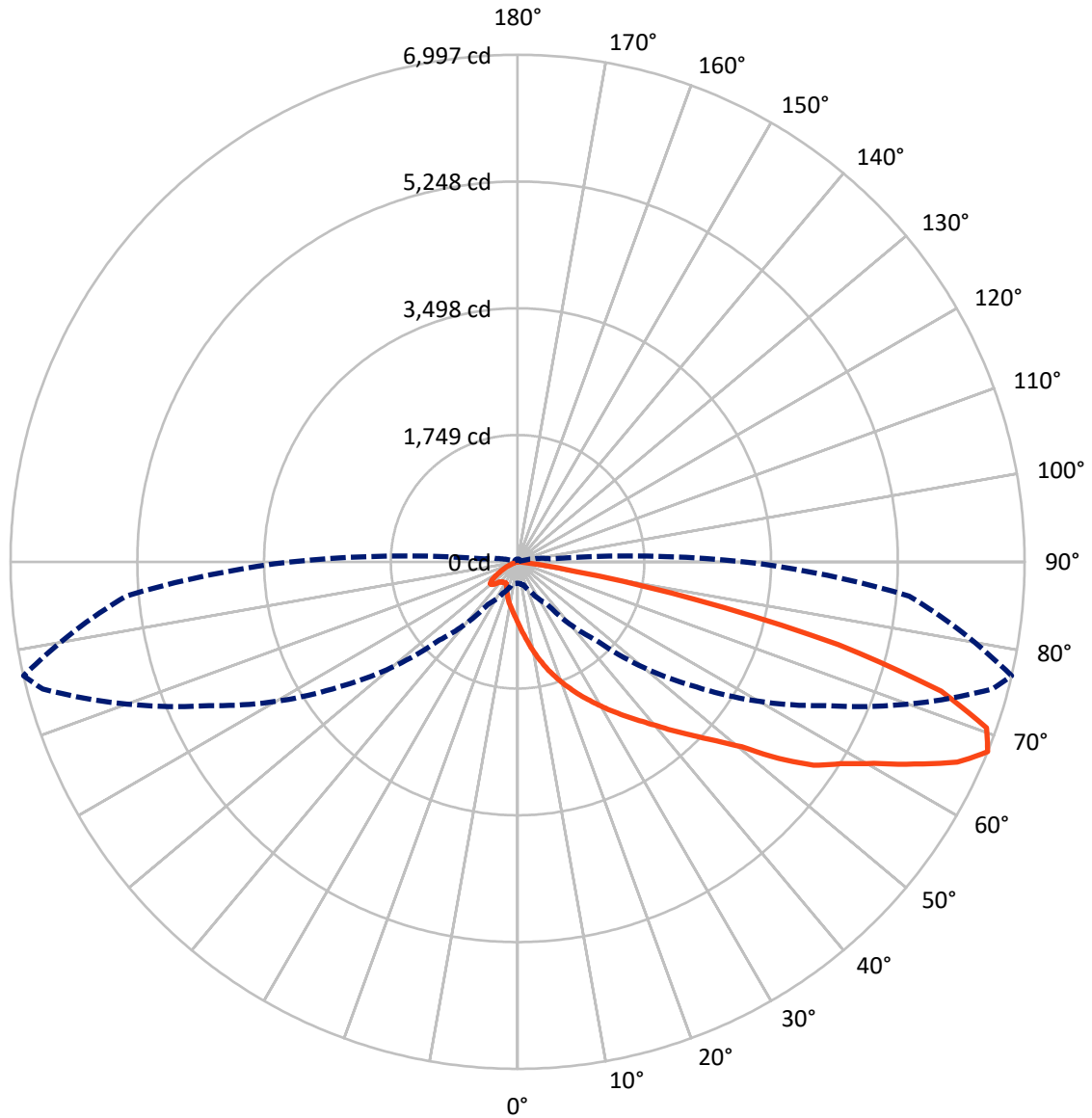
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	536.9	0.0	536.9
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	6761.1	0.0	6761.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	7298.0	0.0	7298.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	1.2
10°-20°	300.8	4.1
20°-30°	580.5	8.0
30°-40°	1007.7	13.8
40°-50°	1463.1	20.0
50°-60°	1680.2	23.0
60°-70°	1458.7	20.0
70°-80°	687.1	9.4
80°-90°	34.0	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°	7298.0	100.0
0°-180°	7298.0	100.0

Coefficient of Utilization

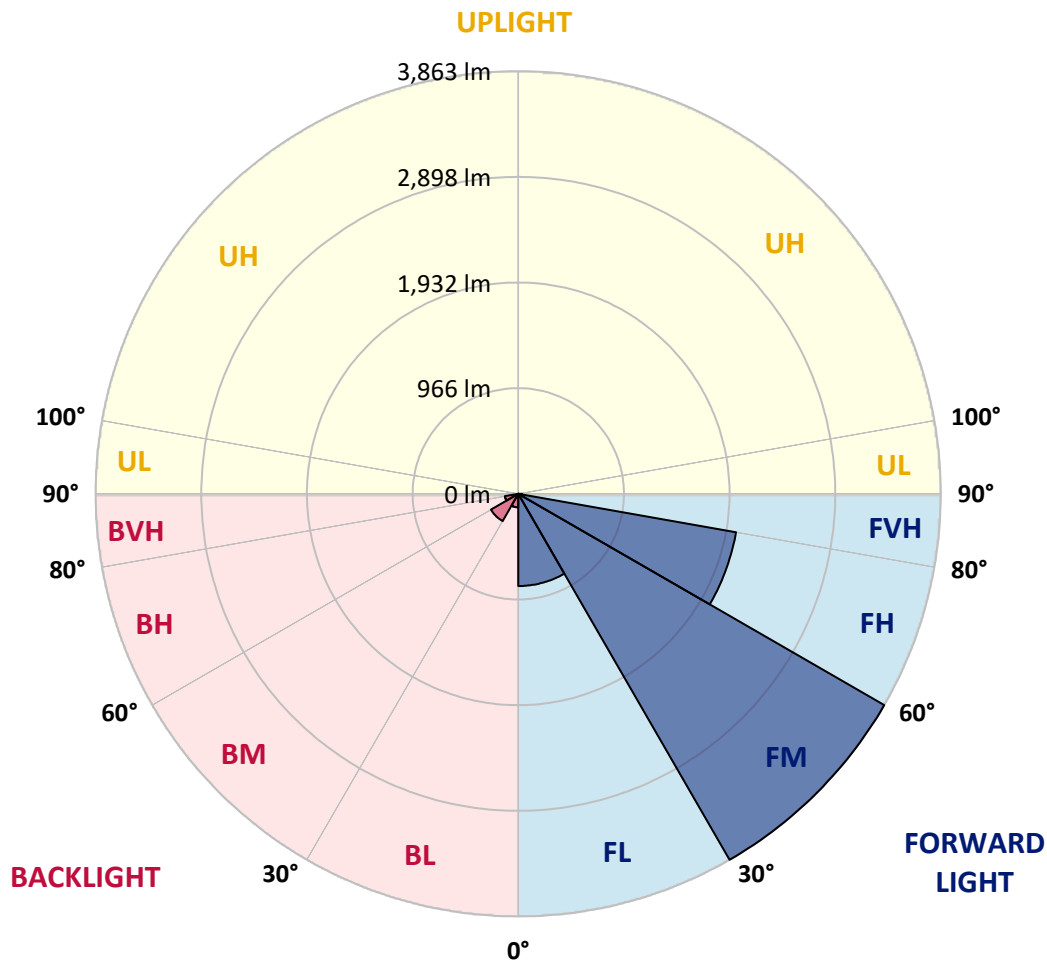


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	842.8	11.5			
FM (30°-60°)	3863.4	52.9			
FH (60°-80°)	2021.5	27.7			G2/5000
FVH (80°-90°)	33.4	0.5			G1/100
BL (0°-30°)	124.3	1.7	B1/500		
BM (30°-60°)	287.7	3.9	B1/1000		
BH (60°-80°)	124.3	1.7	B1/500		G1/500
BVH (80°-90°)	0.6	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5
2.5°	1165.1	1172.4	1161.9	1142.1	1112.1	1092.6	1045.1	1000.2	950.4	934.5	884.6
5°	1420.2	1426.6	1414.8	1393.1	1353.2	1315.2	1252.7	1158.8	1061.4	1030.1	941.8
7.5°	1609.2	1612.9	1608.3	1588.4	1550.3	1507.3	1437.5	1326.5	1181.9	1147.5	1012.0
10°	1745.3	1757.0	1755.6	1747.9	1722.5	1687.7	1613.4	1486.9	1316.9	1272.5	1091.3
12.5°	1835.4	1848.6	1856.3	1873.5	1872.2	1849.9	1784.6	1651.0	1451.6	1399.4	1180.6
15°	1861.7	1875.7	1905.2	1945.0	1980.4	1991.8	1946.0	1811.8	1599.7	1533.1	1272.1
17.5°	1846.7	1868.5	1903.8	1966.9	2044.4	2095.5	2090.6	1967.3	1734.3	1658.2	1361.8
20°	1879.8	1900.7	1928.3	1981.3	2071.5	2164.4	2201.6	2115.9	1868.1	1788.3	1456.1
22.5°	2062.9	2059.3	2062.0	2070.6	2124.5	2216.6	2293.1	2251.0	2000.4	1918.8	1555.7
25°	2353.0	2336.6	2309.0	2262.3	2248.7	2293.1	2372.9	2370.6	2140.0	2052.5	1657.7
27.5°	2685.6	2682.8	2618.1	2505.7	2442.3	2425.0	2463.1	2487.1	2278.2	2184.8	1760.1
30°	3004.2	3011.4	2923.9	2798.9	2682.4	2614.9	2580.4	2597.7	2418.7	2327.6	1865.8
32.5°	3281.5	3289.2	3194.1	3047.6	2903.5	2822.0	2749.5	2706.9	2571.8	2472.6	1981.7
35°	3515.9	3523.5	3414.3	3252.5	3098.9	3025.0	2943.0	2826.5	2725.9	2633.4	2111.0
37.5°	3725.2	3722.9	3576.5	3413.4	3262.5	3204.0	3161.0	2973.8	2884.6	2795.3	2254.2
40°	3848.9	3858.4	3733.4	3553.5	3407.1	3364.5	3361.7	3156.5	3067.6	2981.0	2410.9
42.5°	3885.2	3902.0	3811.3	3663.6	3530.8	3484.6	3555.7	3354.0	3280.6	3196.4	2588.1
45°	3819.9	3836.3	3795.0	3692.6	3615.1	3585.1	3722.5	3558.9	3508.2	3424.7	2788.0
47.5°	3629.5	3649.9	3660.0	3638.1	3637.3	3667.7	3872.0	3774.6	3778.3	3693.0	3019.5
50°	3261.1	3295.6	3387.1	3464.2	3583.3	3732.8	4017.5	4008.5	4082.8	4009.3	3321.4
52.5°	2591.3	2640.3	2955.7	3166.4	3434.3	3720.6	4177.5	4383.7	4617.0	4509.7	3747.0
55°	2082.4	2082.4	2338.8	2733.2	3143.3	3640.0	4247.3	4627.5	4981.0	4955.6	4046.5
57.5°	1697.6	1718.0	1881.6	2230.1	2722.3	3447.8	4290.3	4780.7	5274.1	5255.6	4339.2
60°	1047.8	1091.7	1400.8	1744.8	2243.3	3105.6	4263.1	4935.7	5629.9	5644.9	4691.8
62.5°	590.1	606.4	744.2	1255.3	1744.3	2645.7	4055.1	5022.2	6084.9	6148.4	5055.3
65°	407.4	415.5	468.6	781.3	1209.1	2106.4	3648.6	4968.3	6540.8	6669.1	5363.4
67.5°	295.9	300.0	333.1	477.2	717.4	1527.2	3011.4	4696.3	6782.4	6996.8	5422.4
70°	227.6	230.2	254.2	313.6	423.7	942.6	2187.0	4155.8	6607.5	6863.5	5120.6
72.5°	184.9	187.6	206.2	232.1	281.0	557.4	1325.5	3374.9	5835.2	6111.7	4359.2
75°	155.9	159.5	176.3	193.0	220.3	358.0	621.8	2350.2	4388.2	4569.4	3031.3
77.5°	86.5	79.7	143.2	160.0	185.8	226.6	290.9	1383.1	2457.6	2508.0	1345.1
80°	53.9	55.8	113.8	128.7	142.8	114.2	133.2	532.5	852.0	809.3	260.6
82.5°	3.2	7.3	87.4	92.9	97.9	49.0	50.3	180.8	205.3	188.5	46.2
85°	0.0	0.0	39.9	32.2	34.0	14.0	14.5	42.1	27.7	29.9	9.0
87.5°	0.0	0.0	0.0	0.9	0.0	1.3	2.8	3.6	1.3	1.8	3.2
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°	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5
2.5°	852.9	821.1	756.9	693.8	642.6	595.0	561.1	528.9	512.6	511.7	510.8
5°	878.7	812.1	683.4	569.7	478.2	404.7	357.1	323.1	305.9	300.0	299.1
7.5°	915.0	814.9	619.1	460.8	353.0	290.1	262.8	251.9	248.4	244.3	243.3
10°	960.7	821.1	561.5	371.2	278.3	246.5	235.6	231.1	228.4	225.7	224.8
12.5°	1012.0	827.1	504.4	308.2	244.8	228.4	220.7	215.2	211.7	208.5	207.6
15°	1061.8	830.7	445.1	264.2	227.6	214.3	206.2	200.3	195.4	191.7	191.3
17.5°	1111.2	835.7	389.3	237.9	213.4	200.3	192.2	184.9	180.8	176.7	176.3
20°	1166.0	834.8	336.7	219.4	199.4	186.2	177.6	170.9	166.8	162.3	161.7
22.5°	1216.8	830.2	290.5	203.5	184.9	172.2	162.7	155.9	151.8	148.2	147.7
25°	1275.3	826.7	251.9	189.0	171.3	158.6	148.2	141.9	137.4	134.2	133.7
27.5°	1331.5	821.1	223.9	175.8	158.2	146.0	135.9	128.7	124.6	122.4	122.4
30°	1386.7	819.8	213.4	163.2	146.4	134.2	124.1	117.4	114.2	113.3	112.9
32.5°	1453.3	823.5	218.0	158.6	135.5	123.3	113.8	108.8	105.6	105.6	105.6
35°	1524.5	822.6	224.8	162.7	128.2	112.3	105.2	102.0	98.8	98.8	98.8
37.5°	1613.8	823.9	230.2	169.5	125.6	103.3	99.2	95.1	93.4	93.4	93.4
40°	1747.0	868.8	227.6	175.4	124.6	97.0	88.9	87.4	86.1	86.1	86.1
42.5°	1910.2	966.2	231.1	175.8	124.1	92.5	81.6	84.3	81.1	80.7	80.3
45°	2088.7	1072.7	254.2	166.4	123.7	90.2	77.9	81.1	76.2	76.2	76.2
47.5°	2266.0	1178.2	277.8	152.7	122.4	89.7	74.8	73.0	71.6	72.1	72.1
50°	2510.2	1264.4	286.9	134.2	119.2	88.9	68.9	69.3	68.5	69.3	69.3
52.5°	2776.2	1282.5	276.0	113.3	110.1	86.1	64.8	66.6	66.2	67.0	67.0
55°	2942.1	1263.0	228.0	94.3	96.0	75.2	60.7	64.4	64.4	64.4	64.4
57.5°	3113.4	1180.1	161.7	76.6	79.7	61.6	57.1	62.1	61.6	61.2	61.2
60°	3236.6	1045.9	106.5	63.0	63.4	50.7	53.0	58.4	58.0	55.8	55.8
62.5°	3328.7	897.8	68.5	53.5	48.5	45.8	48.5	53.0	51.2	46.2	45.3
65°	3318.2	692.5	52.6	45.8	39.9	39.9	42.1	46.2	40.8	32.6	31.7
67.5°	3124.7	468.6	43.5	38.5	33.5	33.1	34.8	38.5	34.8	27.7	26.8
70°	2779.0	306.4	34.8	29.9	26.8	24.5	28.1	33.1	29.4	22.2	21.3
72.5°	2255.5	186.8	26.2	21.7	19.5	15.9	22.2	27.2	23.6	16.3	15.4
75°	1459.3	95.1	18.1	14.0	10.5	9.5	16.3	20.4	16.3	9.9	8.6
77.5°	558.3	39.9	9.9	6.4	5.4	4.5	9.0	12.2	6.8	2.3	1.8
80°	107.4	16.8	5.0	3.2	2.8	1.8	1.3	0.9	0.0	0.0	0.0
82.5°	18.6	5.4	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	0.0	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)