

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: P883428

Luminaire Tested: **NAV-SB3D-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883428
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-SB3D-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA 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: 23938 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

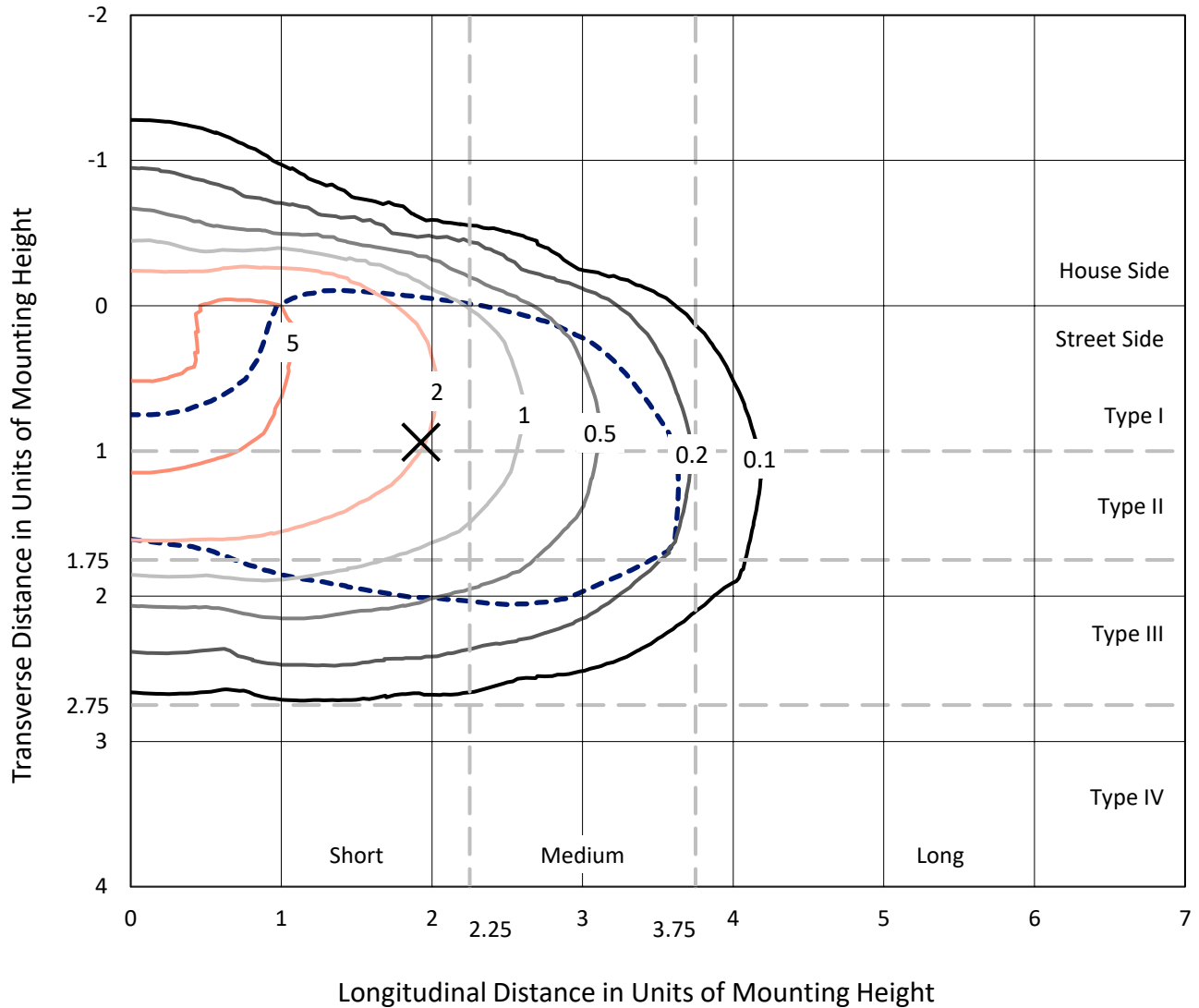
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

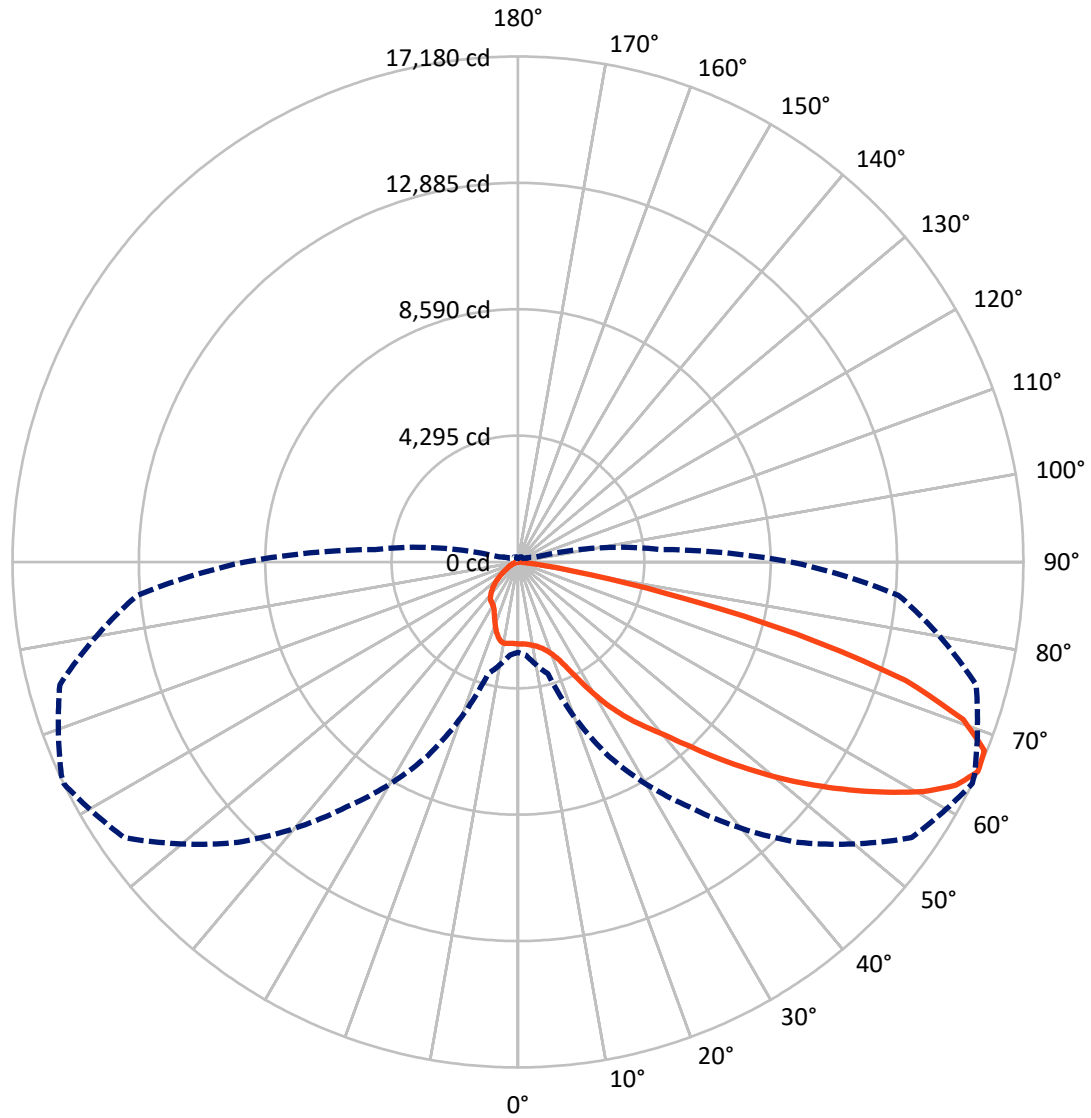
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 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	3201.2	0.0	3201.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	20736.8	0.0	20736.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	23938.0	0.0	23938.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.9	1.1
10°-20°	696.7	2.9
20°-30°	1320.2	5.5
30°-40°	2671.5	11.2
40°-50°	4550.9	19.0
50°-60°	6188.9	25.9
60°-70°	5811.7	24.3
70°-80°	2328.4	9.7
80°-90°	112.8	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°	23938.0	100.0
0°-180°	23938.0	100.0

Coefficient of Utilization



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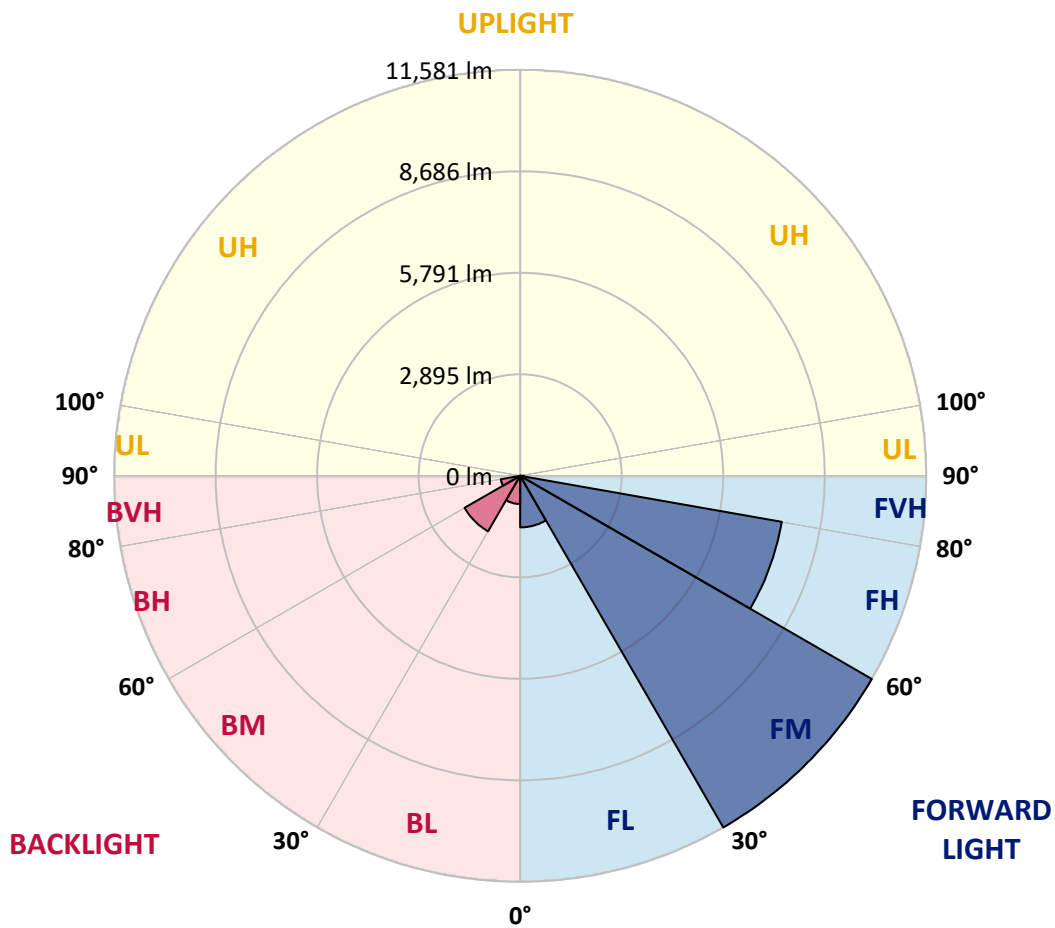
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1470.1	6.1			
FM (30°-60°)	11581.2	48.4			
FH (60°-80°)	7578.2	31.7			G4/12000
FVH (80°-90°)	107.3	0.4			G2/225
BL (0°-30°)	803.7	3.4	B2/1000		
BM (30°-60°)	1830.1	7.6	B2/2500		
BH (60°-80°)	561.9	2.3	B2/1000		G2/1000
BVH (80°-90°)	5.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2
2.5°	2774.6	2793.9	2789.1	2784.2	2782.6	2785.8	2787.4	2785.8	2785.8	2785.8	2787.4
5°	2721.7	2737.7	2737.7	2748.9	2765.0	2784.2	2798.7	2801.9	2805.1	2809.9	2808.3
7.5°	2620.6	2633.4	2643.0	2679.9	2720.0	2771.4	2814.7	2837.2	2840.4	2858.1	2864.5
10°	2551.5	2567.6	2583.6	2622.2	2679.9	2757.0	2830.8	2885.3	2893.4	2935.1	2954.3
12.5°	2548.3	2564.4	2585.2	2627.0	2694.4	2776.2	2866.1	2944.7	2959.2	3020.1	3060.3
15°	2582.0	2601.3	2620.6	2671.9	2744.1	2843.6	2939.9	3037.8	3052.2	3138.9	3182.2
17.5°	2651.0	2676.7	2691.2	2742.5	2819.5	2930.3	3057.0	3169.4	3182.2	3283.3	3337.9
20°	2787.4	2817.9	2822.8	2864.5	2939.9	3058.6	3209.5	3349.1	3365.2	3480.7	3541.7
22.5°	3069.9	3113.2	3074.7	3095.6	3163.0	3281.7	3445.4	3621.9	3644.4	3776.0	3830.5
25°	3567.4	3628.3	3528.8	3493.5	3522.4	3646.0	3851.4	4074.5	4100.1	4206.0	4233.3
27.5°	4544.6	4466.0	4315.2	4167.5	4080.9	4151.5	4382.6	4658.6	4690.7	4793.4	4761.3
30°	5618.2	5549.2	5345.4	5018.0	4812.6	4801.4	5014.8	5322.9	5359.9	5457.7	5359.9
32.5°	6693.4	6627.6	6406.2	6003.4	5647.1	5470.6	5618.2	5960.0	5979.3	6041.9	5897.4
35°	7750.9	7683.5	7462.1	7049.7	6611.6	6210.4	6181.5	6566.6	6573.0	6638.8	6423.8
37.5°	8814.9	8758.7	8522.8	8118.4	7686.7	7133.1	6865.1	7141.1	7149.2	7213.3	6990.3
40°	9573.9	9598.0	9435.9	9123.0	8752.3	8147.3	7632.2	7752.5	7704.4	7811.9	7678.7
42.5°	10225.5	10273.6	10132.4	9975.1	9760.1	9227.3	8582.2	8561.3	8484.3	8542.1	8404.1
45°	10788.7	10828.8	10702.1	10665.2	10660.3	10286.4	9620.5	9495.3	9387.8	9376.5	9211.3
47.5°	10995.7	11072.8	11127.3	11250.9	11491.6	11334.3	10694.0	10499.9	10379.5	10291.2	10029.7
50°	11074.4	11156.2	11342.4	11701.8	12271.5	12338.9	11762.8	11544.6	11396.9	11236.4	10851.3
52.5°	10968.5	11114.5	11364.8	11969.8	12796.3	13144.5	12788.2	12597.3	12428.8	12167.2	11595.9
55°	10344.2	10490.2	11002.2	11966.6	13057.8	13709.4	13757.5	13672.5	13483.1	13070.7	12197.7
57.5°	9028.3	9245.0	10055.4	11559.0	13053.0	14195.6	14707.5	14768.5	14556.7	13966.1	12671.1
60°	7205.3	7499.0	8487.5	10655.5	12650.2	14458.8	15540.4	15845.3	15620.6	14848.7	13054.6
62.5°	5027.7	5367.9	6303.5	9240.1	11729.1	14269.4	16148.6	16711.8	16541.7	15638.3	13202.3
65°	3066.7	3175.8	3930.0	7271.1	10162.9	13476.7	16336.3	17180.4	17124.3	16121.3	12984.0
67.5°	2042.8	2134.3	2351.0	4986.0	7888.9	11892.8	15887.0	17098.6	17114.6	16042.7	12184.9
70°	1230.8	1309.5	1450.7	2899.8	5112.7	9413.5	14495.7	16055.5	16148.6	14991.6	10670.0
72.5°	507.1	560.1	688.4	1314.3	2647.8	5974.5	11543.0	13784.8	14001.4	12605.3	8189.0
75°	287.2	314.5	404.4	659.6	1149.0	2784.2	6991.9	9785.8	10105.1	8688.1	4926.6
77.5°	191.0	203.8	261.6	426.9	646.7	950.0	2988.0	5098.3	5708.1	4745.2	2132.7
80°	128.4	139.6	179.7	285.6	420.4	407.6	951.6	1888.8	2323.7	1630.4	519.9
82.5°	86.7	88.3	128.4	187.8	266.4	197.4	280.8	587.3	738.2	471.8	197.4
85°	49.7	48.1	94.7	109.1	118.8	81.8	85.1	176.5	231.1	199.0	112.3
87.5°	6.4	9.6	36.9	28.9	16.0	17.7	17.7	30.5	44.9	48.1	24.1
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°	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2	2784.2
2.5°	2787.4	2785.8	2781.0	2776.2	2765.0	2758.6	2761.8	2758.6	2757.0	2758.6	2765.0
5°	2808.3	2803.5	2790.7	2774.6	2752.1	2724.9	2707.2	2681.5	2657.5	2643.0	2646.2
7.5°	2864.5	2859.7	2842.0	2797.1	2724.9	2610.9	2506.6	2415.1	2346.1	2306.0	2307.6
10°	2954.3	2946.3	2919.0	2819.5	2630.2	2381.4	2174.4	2002.7	1890.4	1837.4	1832.6
12.5°	3060.3	3050.6	3002.5	2798.7	2450.5	2062.1	1776.5	1585.5	1481.2	1434.6	1429.8
15°	3185.4	3172.6	3077.9	2699.2	2188.9	1709.1	1447.5	1304.7	1237.3	1195.5	1197.1
17.5°	3341.1	3318.6	3134.1	2549.9	1904.8	1439.5	1245.3	1137.8	1078.4	1038.3	1035.1
20°	3543.3	3506.4	3179.0	2371.8	1643.3	1269.4	1108.9	1019.0	974.1	938.8	932.4
22.5°	3825.7	3772.8	3233.6	2179.2	1458.7	1152.2	1007.8	942.0	905.1	865.0	858.5
25°	4175.6	4113.0	3301.0	2001.1	1331.9	1051.1	934.0	879.4	836.1	789.5	784.7
27.5°	4665.0	4552.7	3381.2	1855.1	1222.8	964.5	866.6	805.6	755.8	717.3	709.3
30°	5210.6	5026.1	3451.8	1766.8	1123.3	884.2	778.3	717.3	670.8	643.5	638.7
32.5°	5727.3	5477.0	3498.4	1728.3	1033.5	792.7	682.0	616.2	580.9	572.9	577.7
35°	6215.2	5884.6	3493.5	1691.4	953.2	701.3	587.3	519.9	492.7	497.5	497.5
37.5°	6776.9	6319.5	3459.8	1633.6	887.4	617.8	505.5	446.1	422.0	423.7	430.1
40°	7430.0	6821.8	3439.0	1524.5	815.2	540.8	438.1	390.0	372.3	365.9	364.3
42.5°	8126.4	7308.0	3442.2	1400.9	725.3	471.8	391.6	351.4	335.4	330.6	329.0
45°	8826.1	7771.8	3447.0	1272.6	630.7	418.8	357.9	324.2	314.5	308.1	308.1
47.5°	9484.1	8166.6	3357.1	1134.6	537.6	378.7	330.6	308.1	300.1	292.1	292.1
50°	10097.1	8429.7	3140.5	974.1	463.8	346.6	309.7	293.7	285.6	277.6	277.6
52.5°	10573.7	8471.5	2782.6	808.8	412.4	322.6	296.9	282.4	272.8	264.8	263.2
55°	10785.5	8209.9	2273.9	654.7	372.3	301.7	284.0	269.6	258.4	250.3	248.7
57.5°	10731.0	7659.5	1773.2	526.4	333.8	280.8	268.0	258.4	245.5	232.7	231.1
60°	10463.0	6922.9	1336.8	438.1	298.5	258.4	250.3	242.3	224.7	205.4	202.2
62.5°	9999.2	5996.9	953.2	362.7	260.0	232.7	229.5	223.1	197.4	162.1	158.9
65°	9289.9	4872.0	641.9	301.7	223.1	203.8	205.4	194.2	160.5	120.4	117.1
67.5°	8253.2	3562.5	410.8	247.1	186.2	170.1	171.7	165.3	136.4	102.7	97.9
70°	6932.5	2359.0	268.0	187.8	149.2	131.6	141.2	142.8	115.5	83.4	80.2
72.5°	5082.2	1392.9	187.8	139.6	109.1	91.5	115.5	118.8	93.1	62.6	59.4
75°	2896.6	661.2	141.2	101.1	67.4	64.2	89.9	89.9	64.2	41.7	38.5
77.5°	1216.4	276.0	99.5	65.8	38.5	36.9	61.0	56.2	32.1	19.3	19.3
80°	351.4	123.6	53.0	32.1	16.0	14.4	24.1	17.7	8.0	3.2	3.2
82.5°	138.0	54.6	20.9	12.8	6.4	6.4	3.2	0.0	0.0	0.0	0.0
85°	81.8	22.5	9.6	4.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.9	4.8	3.2	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)