

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: P963441

Luminaire Tested: **NAV-SB3A-727-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-727-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12718.2 lumens
Efficiency: N/A
Efficacy: 150.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

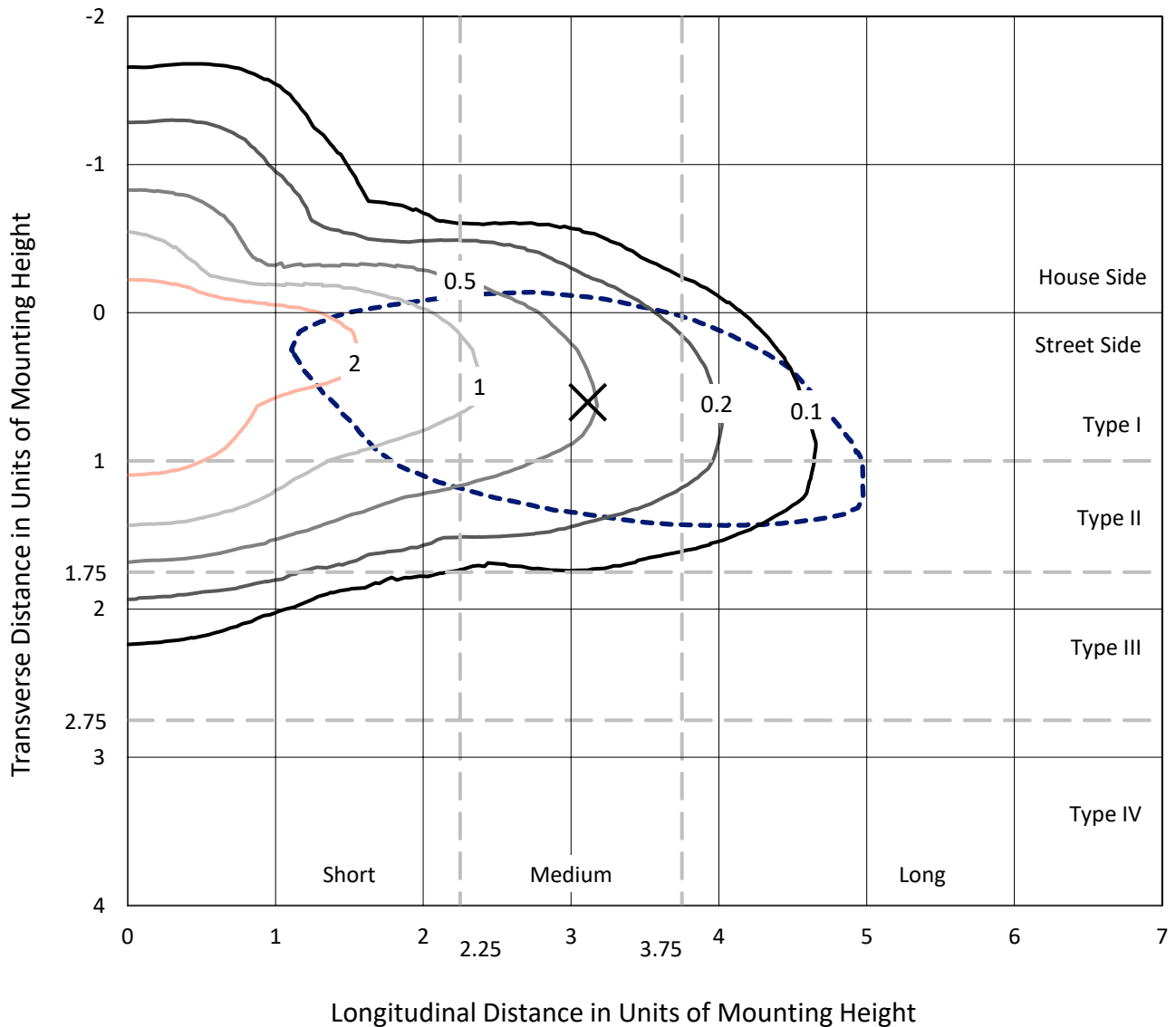
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

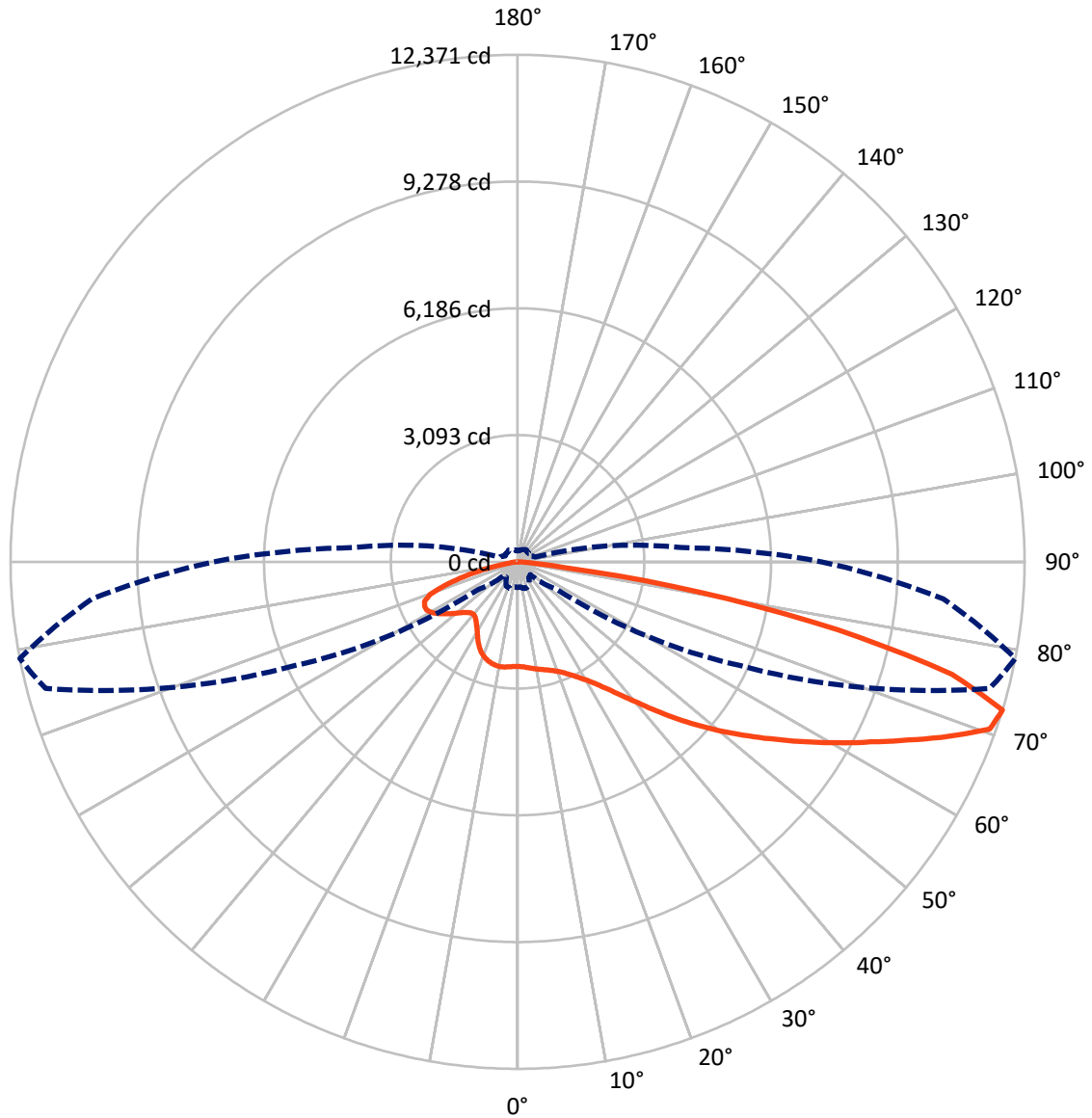
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2798.7	0.0	2798.7
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	9919.5	0.0	9919.5
	% Fixture	78.0	0.0	78.0
Total	Lumens	12718.2	0.0	12718.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.7	1.8
10°-20°	605.9	4.8
20°-30°	977.7	7.7
30°-40°	1467.3	11.5
40°-50°	2081.5	16.4
50°-60°	2628.7	20.7
60°-70°	2669.8	21.0
70°-80°	1819.6	14.3
80°-90°	236.1	1.9
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°	12718.2	100.0
0°-180°	12718.2	100.0

Coefficient of Utilization

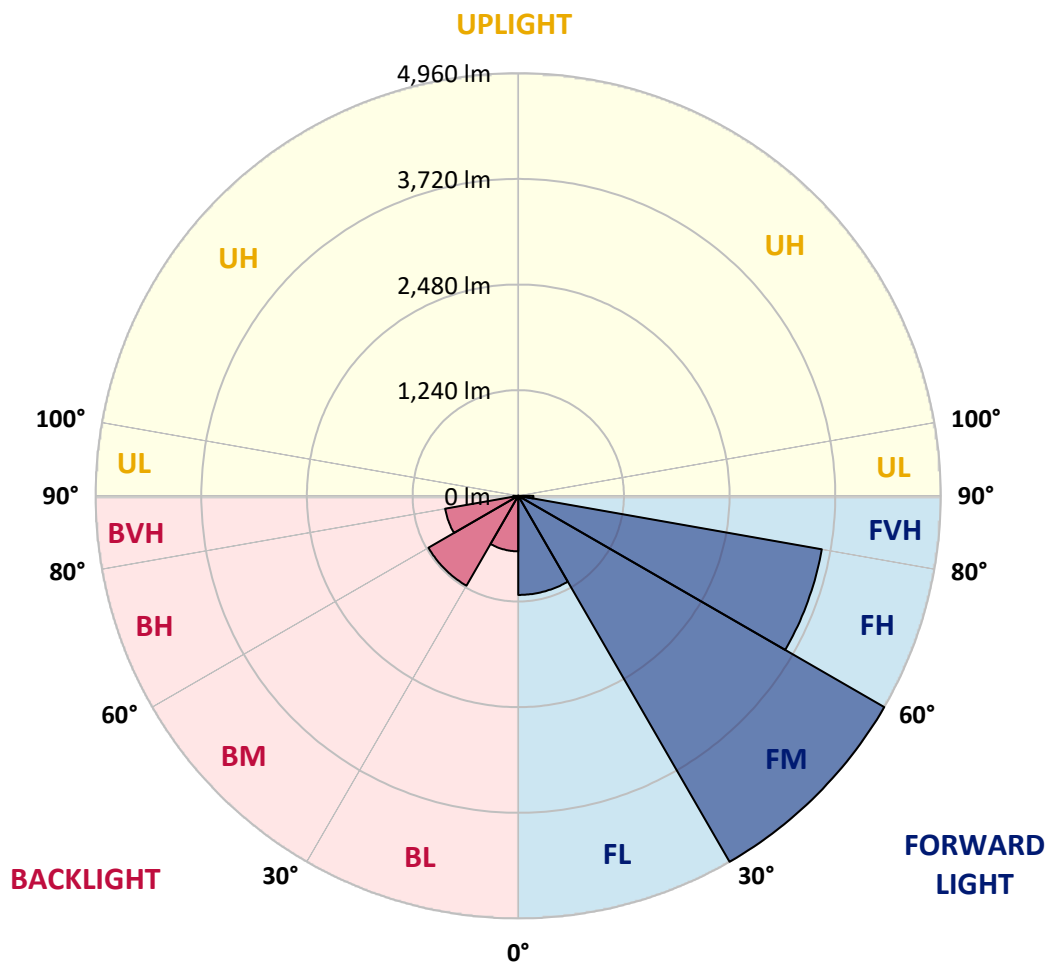


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1163.4	9.1			
FM (30°-60°)	4960.4	39.0			
FH (60°-80°)	3617.9	28.4			G2/5000
FVH (80°-90°)	177.8	1.4			G2/225
BL (0°-30°)	651.9	5.1	B2/1000		
BM (30°-60°)	1217.1	9.6	B2/2500		
BH (60°-80°)	871.4	6.9	B2/1000		G2/1000
BVH (80°-90°)	58.2	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1
2.5°	2554.4	2542.3	2549.7	2547.0	2550.4	2554.4	2555.7	2557.8	2564.4	2563.8	2563.1
5°	2549.1	2536.9	2547.0	2543.6	2552.4	2561.8	2569.9	2577.3	2588.0	2592.7	2586.0
7.5°	2537.6	2529.5	2539.6	2549.7	2565.9	2579.9	2591.4	2608.2	2623.7	2626.4	2631.1
10°	2471.0	2464.9	2488.5	2514.7	2559.1	2597.5	2622.4	2641.8	2658.6	2661.4	2668.1
12.5°	2401.7	2394.3	2420.5	2456.2	2528.2	2597.5	2649.9	2675.5	2690.3	2699.0	2709.2
15°	2390.3	2384.1	2399.0	2430.0	2489.8	2579.3	2668.8	2715.8	2728.7	2738.7	2742.8
17.5°	2445.4	2434.0	2440.0	2450.8	2485.8	2562.5	2683.6	2761.7	2781.1	2791.9	2791.9
20°	2573.3	2557.1	2547.6	2526.1	2520.1	2565.2	2682.2	2816.8	2842.3	2855.8	2859.1
22.5°	2743.4	2732.6	2712.5	2658.0	2598.8	2598.2	2707.7	2887.4	2935.2	2948.0	2939.9
25°	2949.3	2933.1	2907.6	2833.6	2719.9	2663.4	2750.9	2977.5	3057.6	3061.0	3037.4
27.5°	3186.1	3161.9	3126.9	3029.4	2875.9	2765.7	2816.8	3081.1	3198.2	3196.9	3148.4
30°	3435.7	3411.5	3374.5	3256.1	3063.0	2903.5	2908.2	3192.9	3365.1	3357.7	3274.9
32.5°	3618.0	3599.8	3592.4	3501.0	3278.3	3066.4	3013.2	3316.6	3570.9	3564.2	3448.5
35°	3758.0	3734.4	3743.1	3696.8	3513.1	3248.6	3141.7	3464.0	3821.2	3820.5	3676.6
37.5°	3896.5	3875.6	3883.1	3852.2	3730.4	3480.1	3298.4	3644.3	4131.3	4146.1	3952.4
40°	4023.0	4000.8	4030.4	4001.5	3899.2	3726.3	3476.7	3848.1	4490.5	4518.8	4286.0
42.5°	4099.0	4081.6	4130.6	4131.3	4045.9	3934.2	3672.5	4072.7	4906.3	4969.5	4696.4
45°	4125.2	4119.2	4193.2	4208.6	4175.7	4054.6	3848.8	4317.7	5354.4	5467.3	5164.0
47.5°	4097.0	4085.5	4187.8	4245.0	4271.3	4111.2	3994.7	4582.7	5811.9	5977.3	5673.9
50°	3954.3	3932.2	4084.2	4204.7	4298.1	4148.2	4142.0	4888.8	6331.8	6512.8	6186.5
52.5°	3698.1	3681.3	3854.1	4063.4	4239.0	4166.3	4307.6	5223.2	6825.7	7059.8	6711.9
55°	3370.4	3348.3	3538.6	3811.8	4091.6	4160.3	4473.1	5597.2	7408.3	7645.7	7254.8
57.5°	2851.0	2806.7	3047.5	3370.4	3851.4	4152.9	4645.3	5969.3	8000.2	8284.9	7834.1
60°	2093.6	2027.7	2323.0	2705.8	3381.9	4080.8	4858.5	6386.4	8710.7	8967.0	8466.5
62.5°	1219.0	1180.7	1373.7	1730.9	2549.1	3657.0	4978.3	6871.4	9409.0	9678.0	9088.1
65°	946.6	935.8	952.6	980.2	1418.8	2738.1	4608.9	7344.3	10297.0	10485.3	9736.0
67.5°	865.8	857.7	865.1	813.3	719.9	1525.1	3646.2	7464.0	11248.2	11362.6	10303.1
70°	769.6	760.2	784.4	740.0	566.4	693.6	2356.0	7029.4	12005.1	12219.7	10734.3
72.5°	627.0	616.2	672.7	652.5	476.9	445.4	1183.4	5996.9	11925.7	12371.0	10425.5
75°	481.6	475.6	542.9	559.8	388.9	350.5	567.7	4457.6	10494.8	10943.5	8985.2
77.5°	374.0	369.3	403.6	464.8	313.5	271.8	349.1	2827.6	7908.8	7987.5	6191.9
80°	280.5	267.1	298.7	359.9	244.2	198.4	236.8	1648.9	4999.1	4531.6	2695.0
82.5°	175.6	168.8	195.1	240.2	172.2	136.5	154.1	910.9	2003.5	1180.0	520.0
85°	100.2	97.6	106.3	137.2	93.5	78.7	88.1	402.3	365.9	251.6	156.7
87.5°	40.4	39.1	48.5	61.2	34.3	28.9	31.0	96.9	80.8	74.7	51.8
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°	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1	2553.1
2.5°	2560.4	2560.4	2551.0	2536.3	2519.4	2508.7	2491.2	2486.4	2468.3	2462.9	2471.7
5°	2591.4	2586.0	2557.1	2515.4	2458.2	2405.8	2347.9	2311.6	2260.4	2242.3	2255.7
7.5°	2630.5	2615.6	2565.9	2474.4	2354.6	2236.9	2114.5	2021.6	1932.7	1901.2	1905.2
10°	2666.1	2645.2	2560.4	2400.3	2193.1	1989.3	1794.2	1657.6	1554.0	1511.7	1521.1
12.5°	2701.7	2663.4	2524.8	2277.2	1963.7	1687.3	1479.4	1373.1	1309.1	1258.0	1274.9
15°	2735.4	2681.5	2469.6	2112.4	1712.2	1431.6	1278.2	1193.4	1142.4	1108.6	1114.7
17.5°	2774.4	2697.0	2386.9	1903.2	1472.6	1254.7	1129.6	1078.4	1068.4	1064.3	1066.9
20°	2828.9	2711.1	2277.9	1669.1	1296.4	1113.4	1048.8	1044.1	1043.4	1041.4	1048.2
22.5°	2887.4	2727.9	2133.9	1456.5	1146.4	1025.3	1013.8	1004.4	998.4	997.6	1005.1
25°	2956.7	2733.4	1953.6	1282.3	1018.5	983.6	970.1	956.0	951.9	951.9	956.0
27.5°	3024.0	2715.2	1743.7	1130.9	946.6	945.2	927.7	923.0	922.3	924.3	929.8
30°	3091.3	2680.9	1535.2	991.0	904.9	904.9	898.8	902.1	904.9	911.5	916.2
32.5°	3182.1	2644.5	1361.0	887.3	868.5	861.8	867.9	874.5	877.3	886.0	893.4
35°	3315.3	2619.0	1222.4	830.9	830.9	822.0	825.4	824.1	818.1	814.1	823.5
37.5°	3491.6	2617.6	1108.0	804.6	799.2	797.9	798.6	789.8	766.3	738.0	738.7
40°	3703.4	2653.9	1019.9	786.5	782.4	790.5	786.5	762.9	698.3	649.2	647.8
42.5°	3988.0	2757.6	963.4	764.2	776.3	786.5	770.3	688.9	645.1	612.2	610.9
45°	4323.0	2925.8	934.4	740.7	765.0	777.1	698.9	663.3	628.3	588.7	586.0
47.5°	4702.5	3137.6	927.7	718.5	739.3	746.7	668.7	652.5	612.8	569.8	566.4
50°	5115.6	3388.6	945.9	692.3	702.3	676.8	658.7	643.8	602.8	560.4	555.7
52.5°	5542.7	3665.1	982.2	656.6	665.3	637.0	654.6	641.8	596.8	539.6	535.5
55°	5962.5	3943.6	1017.2	614.9	627.7	601.5	643.2	633.8	569.2	504.6	501.2
57.5°	6389.0	4220.7	1051.5	577.9	591.3	567.1	624.9	612.2	538.2	472.2	470.9
60°	6832.3	4489.9	1067.6	542.2	551.7	535.5	597.4	575.2	503.2	439.3	437.3
62.5°	7247.5	4713.9	1041.4	506.6	512.6	505.9	561.1	531.5	468.2	402.3	401.6
65°	7663.9	4847.1	960.6	471.6	472.9	469.6	509.9	484.4	427.2	370.0	365.9
67.5°	8041.3	4921.7	832.2	433.9	430.6	429.2	462.2	433.3	387.4	337.7	333.6
70°	8121.4	4732.1	635.7	389.5	389.5	386.1	409.7	380.1	343.8	303.4	302.1
72.5°	7417.6	3980.6	451.4	339.1	344.4	337.7	357.2	332.3	299.4	272.4	264.3
75°	5981.4	2919.0	328.3	287.3	296.6	285.3	303.4	285.9	257.7	257.0	231.4
77.5°	4109.7	1804.9	238.1	236.8	243.5	228.8	249.6	240.2	214.6	203.2	190.3
80°	1753.9	719.9	173.5	183.0	183.0	169.5	193.7	196.4	174.2	168.8	168.8
82.5°	349.1	204.5	121.8	125.8	118.4	114.4	137.2	152.0	209.9	233.4	234.1
85°	105.0	75.3	73.3	68.6	60.6	61.2	80.8	152.7	188.4	107.6	92.9
87.5°	28.9	18.9	19.5	15.5	12.8	16.8	27.6	115.7	63.2	27.0	22.9
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)