

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: P883759

Luminaire Tested: **NAV-SB4B-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883759
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22479 lumens
Efficiency: N/A
Efficacy: 152.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

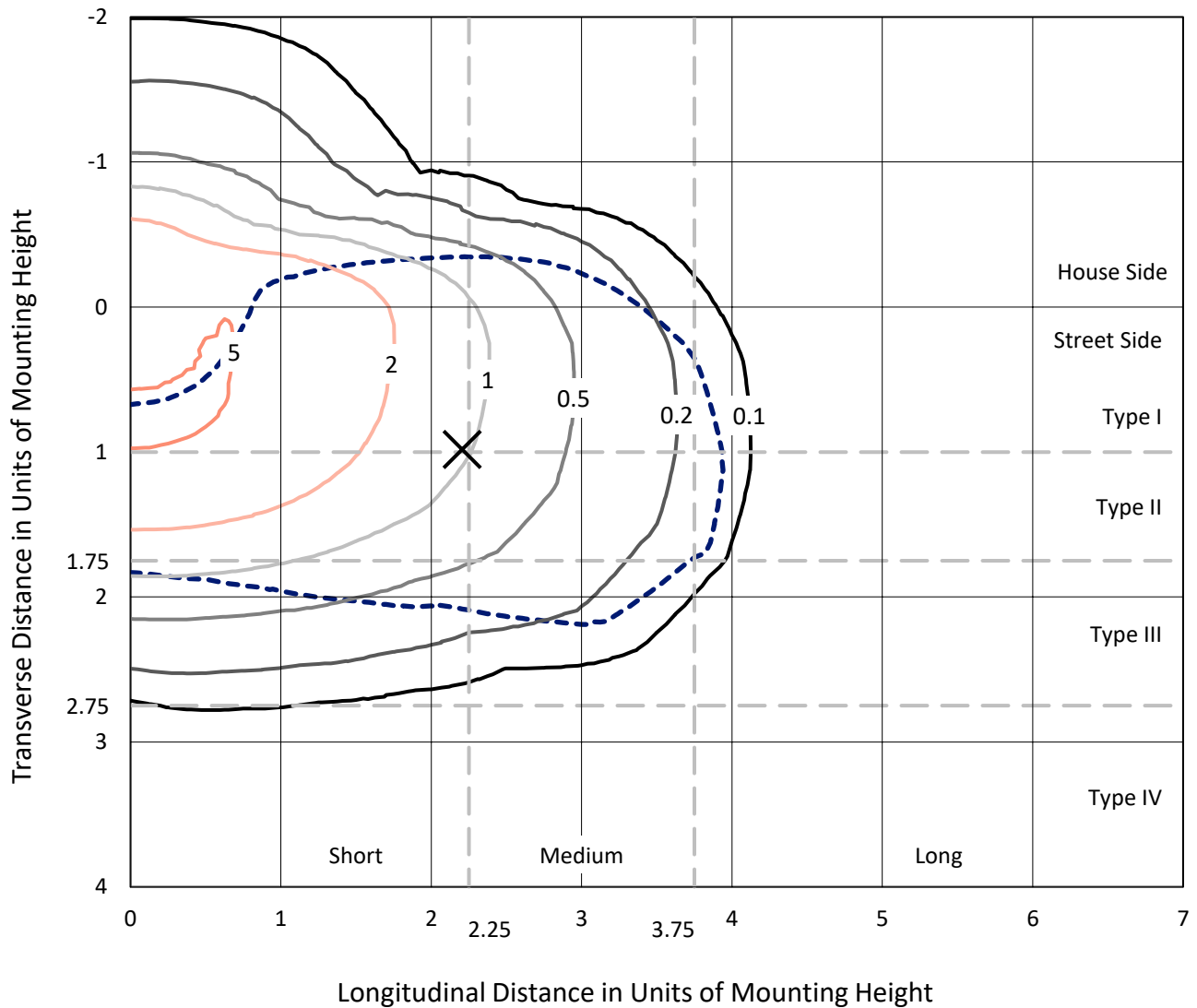
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

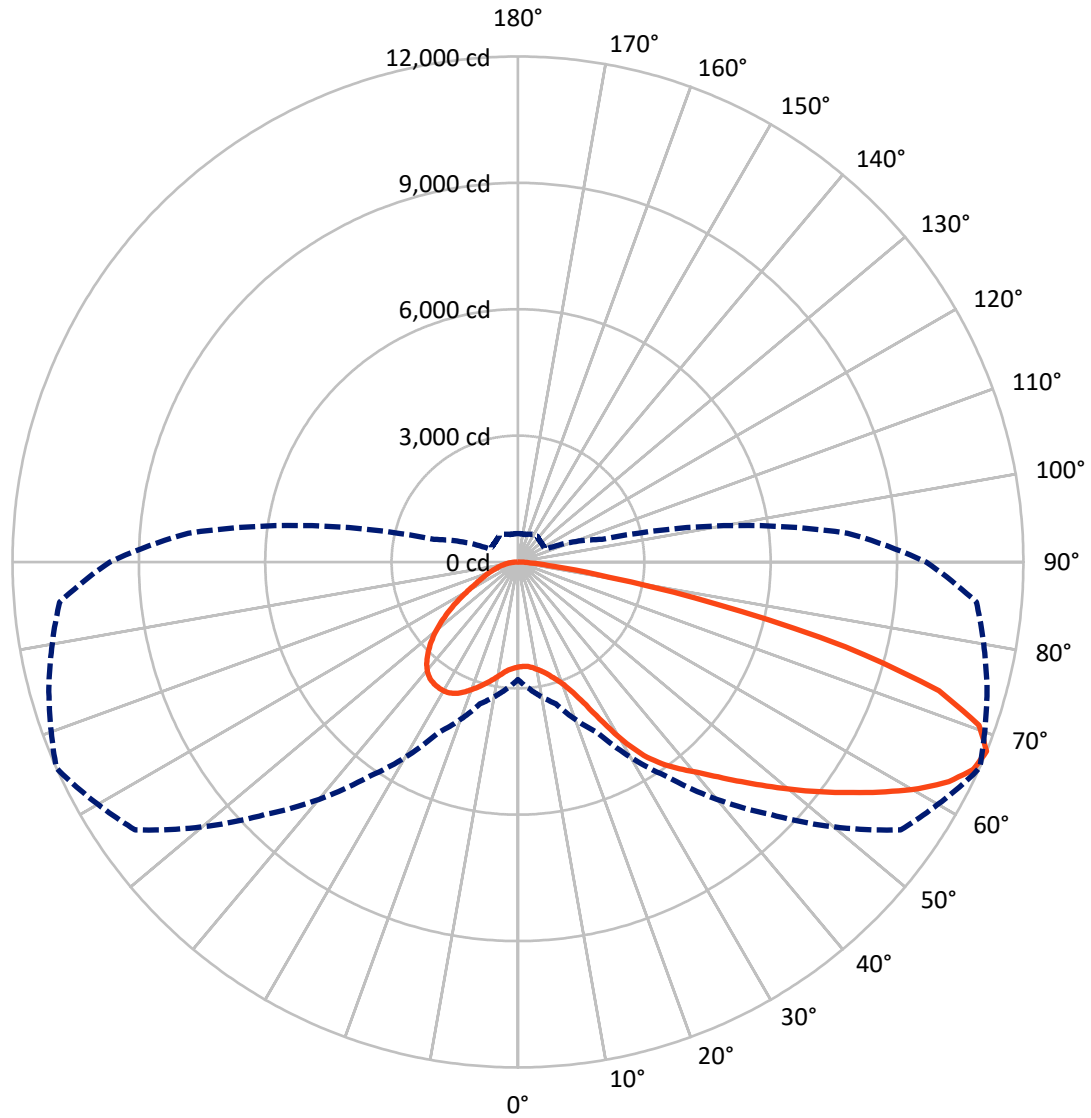
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5589.3	0.0	5589.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	16889.7	0.0	16889.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	22479.0	0.0	22479.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.2	1.1
10°-20°	816.7	3.6
20°-30°	1574.1	7.0
30°-40°	2760.0	12.3
40°-50°	4103.3	18.3
50°-60°	5201.3	23.1
60°-70°	5089.3	22.6
70°-80°	2427.7	10.8
80°-90°	259.5	1.2
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°	22479.0	100.0
0°-180°	22479.0	100.0

Coefficient of Utilization



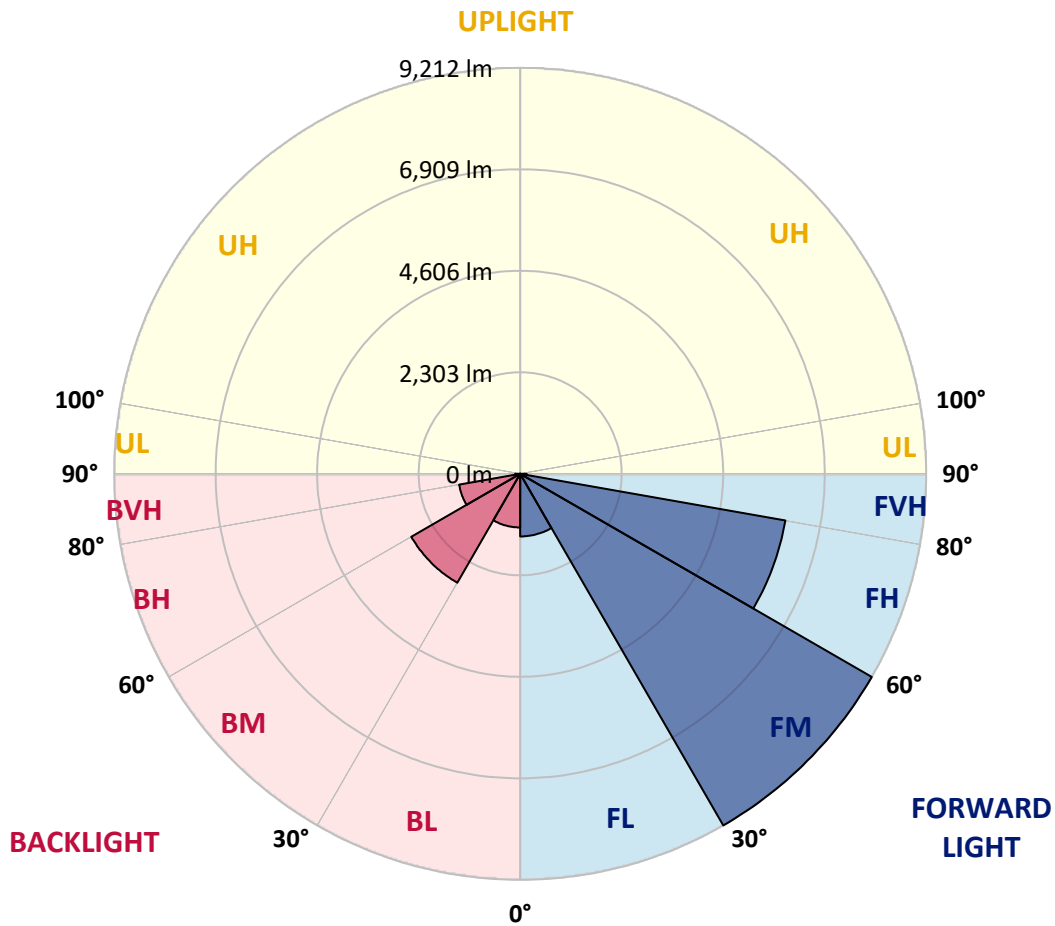
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1420.5	6.3			
FM (30°-60°)	9211.7	41.0			
FH (60°-80°)	6110.4	27.2			G3/7500
FVH (80°-90°)	147.1	0.7			G2/225
BL (0°-30°)	1217.6	5.4	B3/2500		
BM (30°-60°)	2852.9	12.7	B3/5000		
BH (60°-80°)	1406.6	6.3	B3/2500		G3/2500
BVH (80°-90°)	112.4	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2
2.5°	2467.2	2481.4	2477.9	2472.0	2470.8	2473.1	2476.7	2480.2	2479.0	2485.0	2494.4
5°	2460.1	2474.3	2473.1	2473.1	2477.9	2487.3	2493.2	2499.1	2493.2	2500.3	2513.3
7.5°	2464.9	2475.5	2480.2	2485.0	2496.8	2514.5	2528.6	2541.6	2534.6	2542.8	2559.4
10°	2525.1	2533.4	2538.1	2538.1	2546.4	2566.4	2580.6	2604.2	2598.3	2611.3	2632.6
12.5°	2634.9	2643.2	2643.2	2638.5	2644.4	2657.4	2662.1	2688.1	2677.5	2698.7	2720.0
15°	2769.6	2786.1	2773.1	2764.9	2767.2	2780.2	2779.0	2799.1	2788.5	2806.2	2825.1
17.5°	2918.4	2939.7	2918.4	2917.2	2912.5	2926.7	2927.8	2945.6	2926.7	2939.7	2952.7
20°	3094.4	3123.9	3106.2	3112.1	3101.5	3107.4	3113.3	3139.3	3109.7	3119.2	3115.6
22.5°	3342.4	3377.8	3358.9	3381.4	3374.3	3369.6	3368.4	3414.4	3368.4	3371.9	3337.7
25°	3703.8	3746.3	3713.3	3744.0	3744.0	3759.3	3777.0	3836.1	3759.3	3736.9	3648.3
27.5°	4237.6	4280.2	4215.2	4234.1	4228.2	4266.0	4247.1	4393.5	4310.9	4274.3	4095.9
30°	4880.1	4955.7	4832.9	4828.2	4822.3	4882.5	4909.7	5006.5	4922.7	4886.0	4671.1
32.5°	5574.6	5653.7	5507.3	5464.8	5442.3	5478.9	5456.5	5534.4	5476.6	5419.9	5154.1
35°	6309.2	6387.2	6247.8	6165.1	6075.4	5998.6	5918.3	5938.4	5884.0	5797.8	5522.6
37.5°	7003.7	7146.6	6999.0	6910.4	6745.0	6595.0	6370.6	6277.3	6226.5	6147.4	5869.9
40°	7711.1	7792.6	7680.4	7604.8	7425.3	7190.3	6831.3	6634.0	6565.5	6488.7	6253.7
42.5°	8232.0	8309.9	8249.7	8197.7	8057.2	7784.4	7320.2	7073.4	6974.2	6887.9	6688.3
45°	8645.4	8703.2	8665.4	8684.3	8624.1	8359.5	7826.9	7544.6	7441.9	7336.7	7179.7
47.5°	8811.9	8873.3	8933.5	9045.7	9148.5	8953.6	8371.4	8054.8	7946.2	7838.7	7684.0
50°	8793.0	8855.6	9030.4	9269.0	9587.8	9522.9	8945.4	8598.1	8497.7	8374.9	8232.0
52.5°	8641.8	8712.7	8937.1	9333.9	9841.8	9949.3	9530.0	9159.1	9064.6	8918.2	8775.3
55°	8245.0	8287.5	8624.1	9186.3	9902.0	10246.9	10102.8	9756.7	9662.3	9457.9	9302.0
57.5°	7509.2	7570.6	8060.7	8788.3	9750.8	10448.8	10605.9	10385.1	10294.1	10000.0	9837.1
60°	6549.0	6647.0	7208.0	8119.8	9365.8	10447.7	11063.0	11002.8	10927.2	10533.9	10363.8
62.5°	5462.4	5575.8	6115.5	7174.9	8692.6	10151.2	11348.8	11520.1	11481.1	11026.4	10809.1
65°	4195.1	4273.1	4810.5	5952.5	7645.0	9514.6	11381.9	11873.2	11880.3	11400.8	11041.7
67.5°	2793.2	3017.6	3484.1	4466.8	6241.9	8474.1	11091.3	11931.1	11999.6	11529.5	10924.8
70°	1362.9	1658.2	2115.3	2903.0	4466.8	6878.5	10331.9	11456.3	11608.6	11153.9	10228.0
72.5°	565.7	661.4	910.6	1432.6	2564.1	4641.6	8806.0	10168.9	10451.2	9883.1	8599.3
75°	381.5	413.4	520.8	734.6	1168.1	2288.9	6350.6	7582.4	8037.1	7464.3	6101.4
77.5°	294.1	314.2	379.1	513.8	694.5	865.7	3399.1	4569.5	4804.6	4447.9	3174.7
80°	231.5	246.8	283.5	374.4	492.5	463.0	1158.6	2070.4	2206.2	1850.7	1020.4
82.5°	200.8	206.7	203.1	253.9	327.2	270.5	380.3	764.1	843.3	611.8	333.1
85°	145.3	161.8	168.9	157.1	173.6	137.0	155.9	270.5	297.6	265.7	187.8
87.5°	59.1	87.4	107.5	101.6	63.8	39.0	48.4	79.1	90.9	99.2	61.4
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°	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2
2.5°	2495.6	2503.8	2509.8	2516.8	2521.6	2528.6	2542.8	2551.1	2552.3	2558.2	2557.0
5°	2518.0	2529.8	2542.8	2561.7	2583.0	2600.7	2627.9	2646.8	2653.8	2659.7	2658.6
7.5°	2566.4	2583.0	2606.6	2639.7	2670.4	2694.0	2727.1	2749.5	2771.9	2780.2	2781.4
10°	2638.5	2662.1	2696.4	2741.2	2774.3	2805.0	2839.3	2858.2	2880.6	2890.1	2894.8
12.5°	2728.2	2753.1	2797.9	2860.5	2891.2	2912.5	2924.3	2919.6	2924.3	2932.6	2934.9
15°	2831.0	2858.2	2909.0	2976.3	2997.5	2978.6	2952.7	2929.0	2925.5	2927.8	2936.1
17.5°	2952.7	2972.7	3031.8	3088.5	3073.1	2995.2	2938.5	2900.7	2881.8	2875.9	2884.1
20°	3122.7	3122.7	3171.1	3206.6	3103.8	2971.5	2883.0	2821.6	2782.6	2766.0	2762.5
22.5°	3329.4	3310.5	3341.2	3316.4	3097.9	2905.4	2782.6	2676.3	2617.2	2593.6	2590.1
25°	3591.6	3569.2	3560.9	3407.4	3055.4	2800.3	2600.7	2472.0	2420.0	2407.0	2409.4
27.5°	3987.3	3930.6	3823.1	3457.0	2977.5	2634.9	2388.1	2268.8	2239.3	2240.5	2244.0
30°	4514.0	4400.6	4137.3	3465.2	2849.9	2401.1	2170.8	2085.8	2071.6	2077.5	2097.6
32.5°	5001.8	4894.3	4458.5	3427.4	2653.8	2172.0	1975.9	1919.2	1898.0	1905.1	1914.5
35°	5384.5	5354.9	4756.1	3374.3	2412.9	1957.0	1801.1	1752.7	1711.4	1701.9	1709.0
37.5°	5745.9	5734.0	4979.3	3299.9	2174.3	1804.7	1660.6	1596.8	1536.6	1503.5	1504.7
40°	6142.7	6130.9	5125.8	3185.3	1962.9	1672.4	1534.2	1450.3	1375.9	1315.7	1321.6
42.5°	6589.1	6519.5	5195.5	3021.2	1783.4	1560.2	1431.4	1318.1	1220.0	1164.5	1168.1
45°	7076.9	6919.8	5194.3	2812.1	1632.2	1457.4	1321.6	1161.0	1070.0	1018.1	1015.7
47.5°	7594.2	7302.5	5130.5	2580.6	1485.8	1344.0	1151.5	1028.7	968.5	936.6	929.5
50°	8128.1	7660.4	5021.9	2314.9	1335.8	1215.3	1045.2	961.4	915.3	885.8	875.2
52.5°	8630.0	7985.1	4890.8	2013.7	1183.4	1090.1	998.0	933.0	884.6	851.5	837.4
55°	9096.5	8265.1	4705.3	1705.5	1059.4	1006.3	975.6	921.2	865.7	826.7	811.4
57.5°	9511.1	8446.9	4385.3	1416.1	970.8	948.4	951.9	901.1	837.4	804.3	783.0
60°	9855.9	8580.4	3911.7	1148.0	898.8	891.7	915.3	863.4	788.9	751.2	734.6
62.5°	10062.6	8578.0	3330.6	940.1	837.4	839.7	866.9	816.1	740.5	705.1	694.5
65°	10044.9	8367.8	2692.8	804.3	778.3	780.7	816.1	764.1	700.4	679.1	677.9
67.5°	9689.4	7855.2	2065.7	715.7	713.4	724.0	765.3	728.7	675.6	673.2	676.7
70°	8726.9	6791.1	1488.1	644.9	646.0	661.4	715.7	706.3	662.6	667.3	666.1
72.5°	6997.8	5177.8	999.2	570.5	571.6	596.4	668.5	688.6	649.6	712.2	721.6
75°	4660.5	3229.0	642.5	491.3	492.5	524.4	627.1	654.3	614.2	709.8	715.7
77.5°	2239.3	1451.5	465.3	413.4	413.4	442.9	542.1	585.8	523.2	551.6	505.5
80°	773.6	545.6	366.1	333.1	326.0	346.1	457.1	507.9	451.2	415.7	389.7
82.5°	304.7	283.5	294.1	258.7	235.0	248.0	355.5	419.3	331.9	300.0	298.8
85°	174.8	184.2	207.9	171.3	135.8	152.4	261.0	301.2	250.4	220.9	225.6
87.5°	47.2	65.0	95.7	88.6	61.4	65.0	124.0	166.5	144.1	111.0	114.6
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)