

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: P884269

Luminaire Tested: **NAV-SB5A-730-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884269  
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-SB5A-730-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

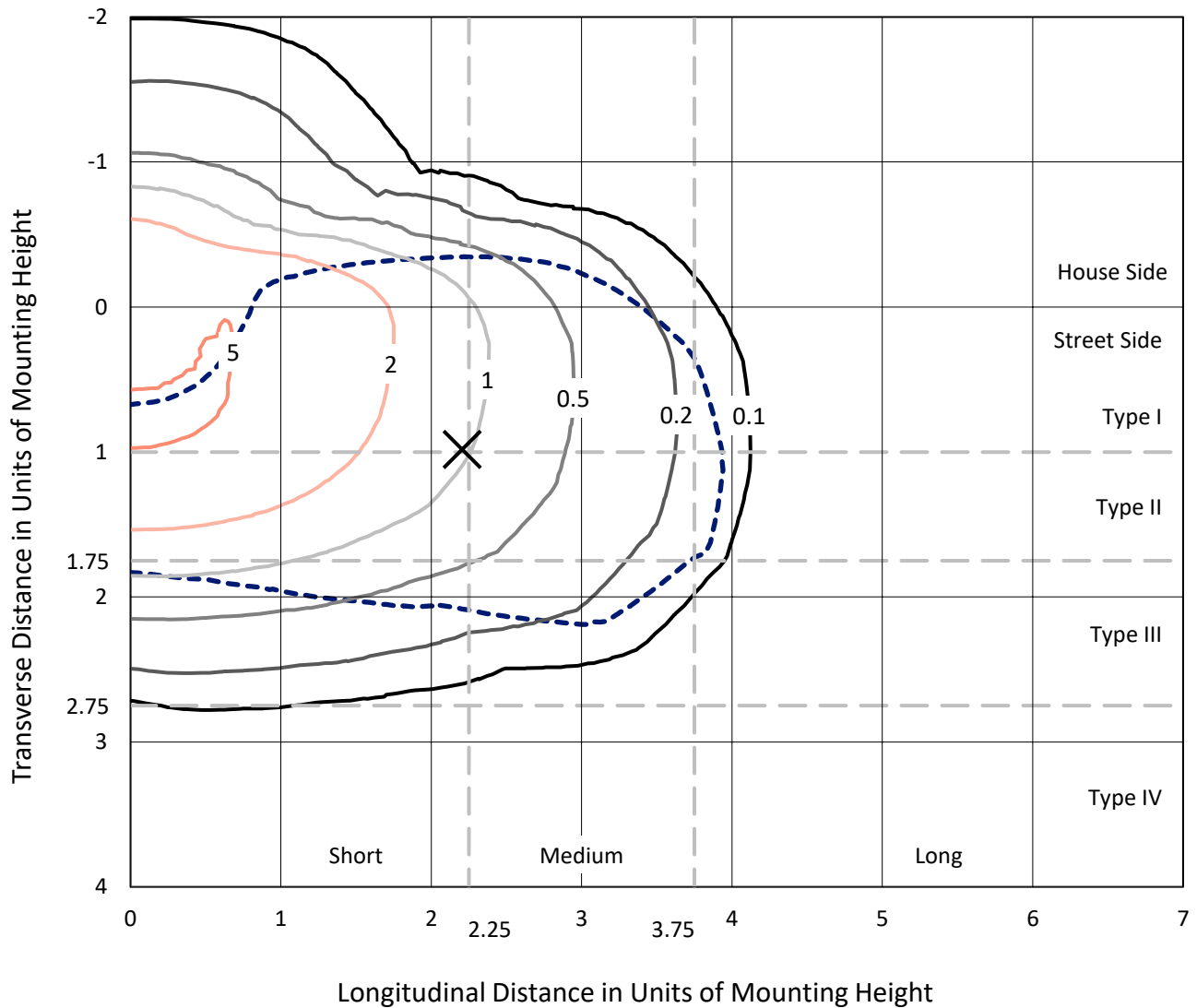
Lumens per Lamp: N/A  
Luminaire Lumens: 22422 lumens  
Efficiency: N/A  
Efficacy: 158.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P884269  
 CATALOG NUMBER: NAV-SB5A-730-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

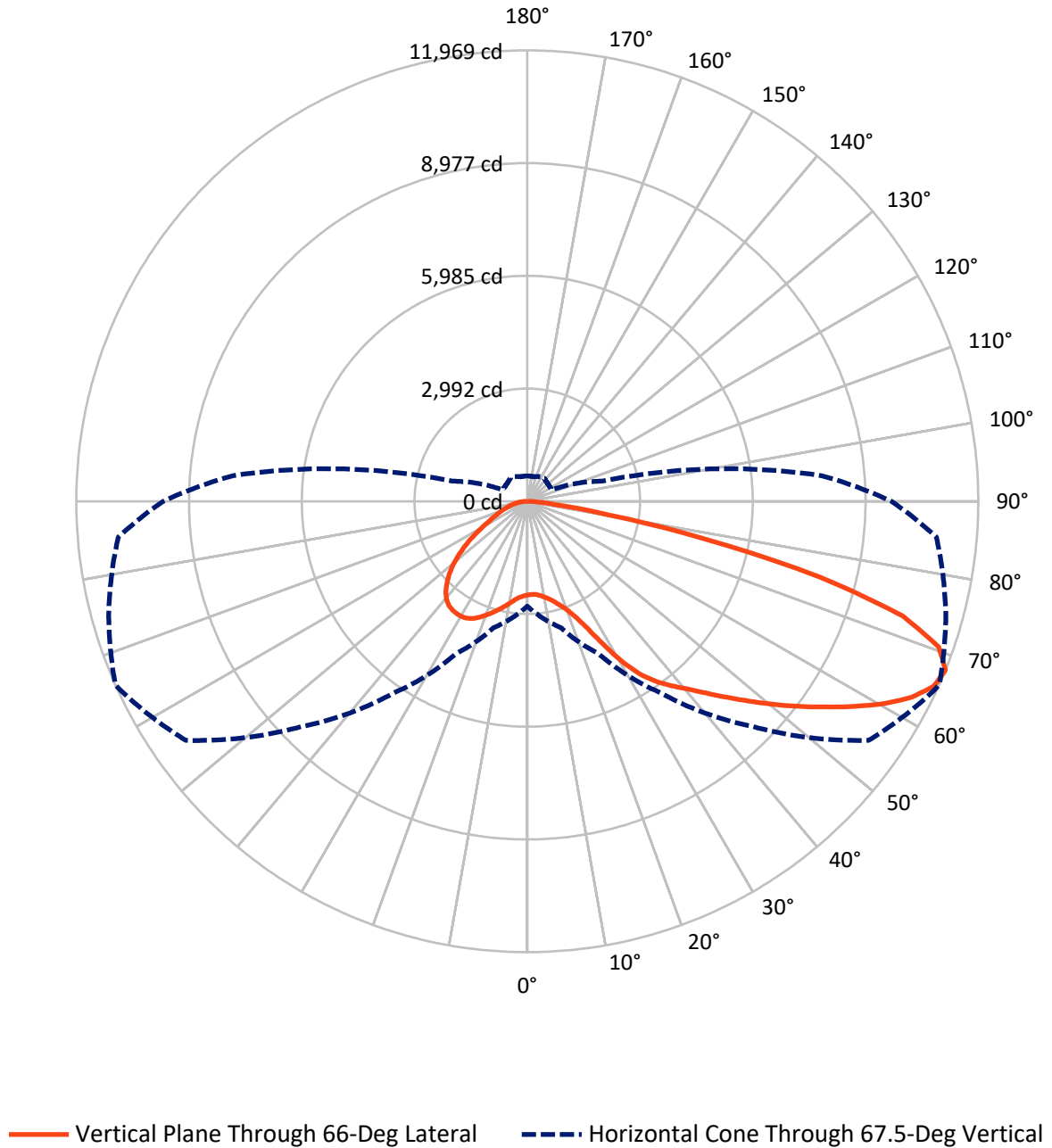
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc  
 Type III - Short - N/A

REPORT NUMBER: P884269  
CATALOG NUMBER: NAV-SB5A-730-U-T3

### Luminous Intensity Polar Plot



REPORT NUMBER: P884269  
 CATALOG NUMBER: NAV-SB5A-730-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5575.2	0.0	5575.2
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	16846.8	0.0	16846.8
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	22422.0	0.0	22422.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.6	1.1
10°-20°	814.6	3.6
20°-30°	1570.1	7.0
30°-40°	2753.0	12.3
40°-50°	4092.8	18.3
50°-60°	5188.1	23.1
60°-70°	5076.4	22.6
70°-80°	2421.5	10.8
80°-90°	258.8	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°	22422.0	100.0
0°-180°	22422.0	100.0

**Coefficient of Utilization**



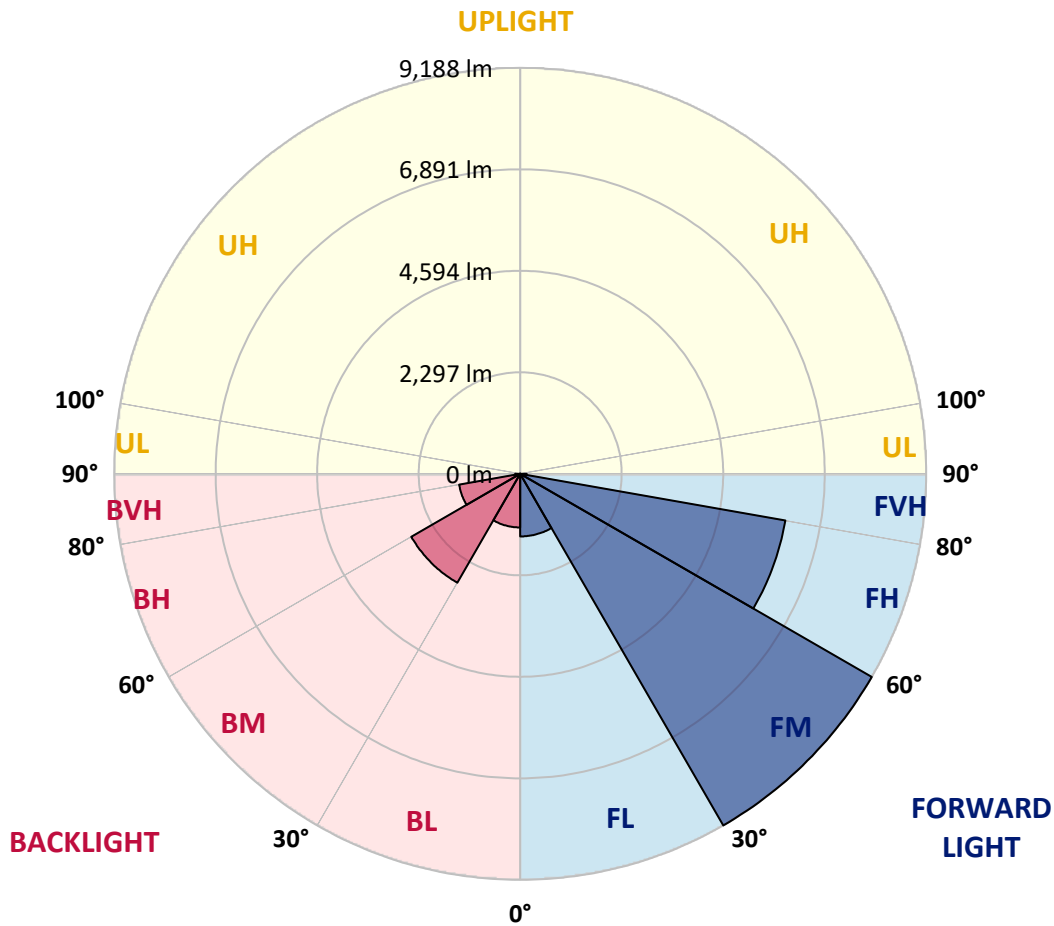
REPORT NUMBER: P884269  
 CATALOG NUMBER: NAV-SB5A-730-U-T3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1416.8	6.3			
FM (30°-60°)	9188.3	41.0			
FH (60°-80°)	6094.9	27.2			G3/7500
FVH (80°-90°)	146.7	0.7			G2/225
BL (0°-30°)	1214.5	5.4	B3/2500		
BM (30°-60°)	2845.6	12.7	B3/5000		
BH (60°-80°)	1403.0	6.3	B3/2500		G3/2500
BVH (80°-90°)	112.1	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



REPORT NUMBER: P884269  
 CATALOG NUMBER: NAV-SB5A-730-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9
2.5°	2461.0	2475.1	2471.6	2465.7	2464.5	2466.9	2470.4	2473.9	2472.8	2478.6	2488.1
5°	2453.9	2468.0	2466.9	2466.9	2471.6	2481.0	2486.9	2492.8	2486.9	2494.0	2506.9
7.5°	2458.6	2469.2	2473.9	2478.6	2490.4	2508.1	2522.2	2535.2	2528.1	2536.4	2552.9
10°	2518.7	2527.0	2531.7	2531.7	2539.9	2559.9	2574.1	2597.6	2591.7	2604.7	2625.9
12.5°	2628.3	2636.5	2636.5	2631.8	2637.7	2650.6	2655.4	2681.3	2670.7	2691.9	2713.1
15°	2762.6	2779.1	2766.1	2757.9	2760.2	2773.2	2772.0	2792.0	2781.4	2799.1	2817.9
17.5°	2911.0	2932.2	2911.0	2909.8	2905.1	2919.2	2920.4	2938.1	2919.2	2932.2	2945.2
20°	3086.5	3116.0	3098.3	3104.2	3093.6	3099.5	3105.4	3131.3	3101.8	3111.3	3107.7
22.5°	3333.9	3369.3	3350.4	3372.8	3365.7	3361.0	3359.8	3405.8	3359.8	3363.4	3329.2
25°	3694.4	3736.8	3703.8	3734.5	3734.5	3749.8	3767.5	3826.4	3749.8	3727.4	3639.0
27.5°	4226.9	4269.3	4204.5	4223.4	4217.5	4255.2	4236.3	4382.4	4299.9	4263.4	4085.5
30°	4867.8	4943.2	4820.6	4815.9	4810.0	4870.1	4897.2	4993.8	4910.2	4873.7	4659.2
32.5°	5560.5	5639.4	5493.3	5450.9	5428.5	5465.0	5442.7	5520.4	5462.7	5406.1	5141.1
35°	6293.2	6371.0	6232.0	6149.5	6060.0	5983.4	5903.3	5923.3	5869.1	5783.1	5508.6
37.5°	6985.9	7128.5	6981.2	6892.9	6727.9	6578.3	6354.5	6261.4	6210.8	6131.8	5855.0
40°	7691.6	7772.9	7661.0	7585.6	7406.5	7172.1	6813.9	6617.2	6548.9	6472.3	6237.9
42.5°	8211.1	8288.9	8228.8	8177.0	8036.8	7764.6	7301.6	7055.4	6956.5	6870.5	6671.4
45°	8623.4	8681.2	8643.5	8662.3	8602.2	8338.3	7807.0	7525.5	7423.0	7318.1	7161.5
47.5°	8789.5	8850.8	8910.9	9022.8	9125.3	8930.9	8350.1	8034.4	7926.0	7818.8	7664.5
50°	8770.7	8833.1	9007.5	9245.5	9563.5	9498.7	8922.7	8576.3	8476.2	8353.7	8211.1
52.5°	8619.9	8690.6	8914.4	9310.3	9816.8	9924.0	9505.8	9135.9	9041.7	8895.6	8753.0
55°	8224.1	8266.5	8602.2	9163.0	9876.9	10220.9	10077.2	9732.0	9637.8	9433.9	9278.4
57.5°	7490.1	7551.4	8040.3	8766.0	9726.1	10422.3	10579.0	10358.7	10268.0	9974.7	9812.1
60°	6532.4	6630.2	7189.7	8099.2	9342.1	10421.2	11034.9	10974.9	10899.5	10507.2	10337.5
62.5°	5448.6	5561.6	6100.0	7156.7	8670.6	10125.5	11320.0	11490.9	11452.0	10998.4	10781.7
65°	4184.5	4262.2	4798.3	5937.4	7625.6	9490.5	11353.0	11843.1	11850.2	11371.9	11013.7
67.5°	2786.1	3010.0	3475.3	4455.4	6226.1	8452.6	11063.2	11900.8	11969.1	11500.3	10897.1
70°	1359.5	1654.0	2109.9	2895.7	4455.4	6861.1	10305.7	11427.2	11579.2	11125.6	10202.0
72.5°	564.3	659.7	908.3	1429.0	2557.6	4629.8	8783.7	10143.1	10424.7	9858.1	8577.5
75°	380.5	412.3	519.5	732.8	1165.1	2283.1	6334.5	7563.2	8016.7	7445.4	6085.9
77.5°	293.3	313.4	378.2	512.5	692.7	863.5	3390.5	4557.9	4792.4	4436.6	3166.6
80°	230.9	246.2	282.7	373.4	491.3	461.8	1155.7	2065.1	2200.6	1846.0	1017.8
82.5°	200.3	206.2	202.6	253.3	326.3	269.8	379.3	762.2	841.1	610.2	332.2
85°	144.9	161.4	168.5	156.7	173.2	136.7	155.5	269.8	296.9	265.1	187.3
87.5°	58.9	87.2	107.2	101.3	63.6	38.9	48.3	78.9	90.7	99.0	61.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884269  
 CATALOG NUMBER: NAV-SB5A-730-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9	2486.9
2.5°	2489.3	2497.5	2503.4	2510.5	2515.2	2522.2	2536.4	2544.6	2545.8	2551.7	2550.5
5°	2511.6	2523.4	2536.4	2555.2	2576.4	2594.1	2621.2	2640.0	2647.1	2653.0	2651.8
7.5°	2559.9	2576.4	2600.0	2633.0	2663.6	2687.2	2720.2	2742.5	2764.9	2773.2	2774.3
10°	2631.8	2655.4	2689.5	2734.3	2767.3	2797.9	2832.1	2850.9	2873.3	2882.7	2887.4
12.5°	2721.3	2746.1	2790.8	2853.3	2883.9	2905.1	2916.9	2912.2	2916.9	2925.1	2927.5
15°	2823.8	2850.9	2901.6	2968.7	2989.9	2971.1	2945.2	2921.6	2918.1	2920.4	2928.7
17.5°	2945.2	2965.2	3024.1	3080.6	3065.3	2987.6	2931.0	2893.3	2874.5	2868.6	2876.8
20°	3114.8	3114.8	3163.1	3198.4	3096.0	2964.0	2875.7	2814.4	2775.5	2759.0	2755.5
22.5°	3321.0	3302.1	3332.7	3308.0	3090.1	2898.0	2775.5	2669.5	2610.6	2587.0	2583.5
25°	3582.5	3560.1	3551.9	3398.7	3047.7	2793.2	2594.1	2465.7	2413.9	2400.9	2403.3
27.5°	3977.1	3920.6	3813.4	3448.2	2969.9	2628.3	2382.0	2263.1	2233.6	2234.8	2238.3
30°	4502.6	4389.5	4126.8	3456.4	2842.7	2395.0	2165.3	2080.5	2066.3	2072.2	2092.2
32.5°	4989.1	4881.9	4447.2	3418.7	2647.1	2166.5	1970.9	1914.4	1893.2	1900.2	1909.6
35°	5370.8	5341.3	4744.1	3365.7	2406.8	1952.1	1796.5	1748.2	1707.0	1697.6	1704.7
37.5°	5731.3	5719.5	4966.7	3291.5	2168.8	1800.1	1656.4	1592.7	1532.7	1499.7	1500.9
40°	6127.1	6115.3	5112.8	3177.2	1957.9	1668.1	1530.3	1446.7	1372.4	1312.4	1318.3
42.5°	6572.4	6502.9	5182.3	3013.5	1778.9	1556.2	1427.8	1314.7	1216.9	1161.6	1165.1
45°	7059.0	6902.3	5181.1	2805.0	1628.1	1453.7	1318.3	1158.0	1067.3	1015.5	1013.1
47.5°	7575.0	7284.0	5117.5	2574.1	1482.0	1340.6	1148.6	1026.1	966.0	934.2	927.1
50°	8107.4	7640.9	5009.1	2309.0	1332.4	1212.2	1042.6	958.9	913.0	883.5	872.9
52.5°	8608.1	7964.9	4878.4	2008.6	1180.4	1087.4	995.5	930.7	882.4	849.4	835.2
55°	9073.5	8244.1	4693.4	1701.1	1056.7	1003.7	973.1	918.9	863.5	824.6	809.3
57.5°	9487.0	8425.5	4374.2	1412.5	968.4	946.0	949.5	898.9	835.2	802.3	781.1
60°	9831.0	8558.6	3901.8	1145.1	896.5	889.4	913.0	861.2	786.9	749.2	732.8
62.5°	10037.1	8556.3	3322.1	937.7	835.2	837.6	864.7	814.0	738.6	703.3	692.7
65°	10019.4	8346.6	2686.0	802.3	776.3	778.7	814.0	762.2	698.6	677.4	676.2
67.5°	9664.8	7835.3	2060.4	713.9	711.6	722.2	763.4	726.9	673.9	671.5	675.0
70°	8704.7	6773.9	1484.4	643.2	644.4	659.7	713.9	704.5	660.9	665.6	664.4
72.5°	6980.0	5164.6	996.6	569.0	570.2	594.9	666.8	686.8	647.9	710.4	719.8
75°	4648.6	3220.8	640.9	490.1	491.3	523.1	625.6	652.6	612.6	708.0	713.9
77.5°	2233.6	1447.8	464.2	412.3	412.3	441.8	540.7	584.3	521.9	550.2	504.2
80°	771.6	544.3	365.2	332.2	325.1	345.2	455.9	506.6	450.0	414.7	388.8
82.5°	303.9	282.7	293.3	258.0	234.4	247.4	354.6	418.2	331.0	299.2	298.1
85°	174.4	183.8	207.3	170.8	135.5	152.0	260.4	300.4	249.7	220.3	225.0
87.5°	47.1	64.8	95.4	88.4	61.3	64.8	123.7	166.1	143.7	110.7	114.3
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)