

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: P963503

Luminaire Tested: **NAV-SB3A-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963503
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-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 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: 13711.4 lumens
Efficiency: N/A
Efficacy: 161.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

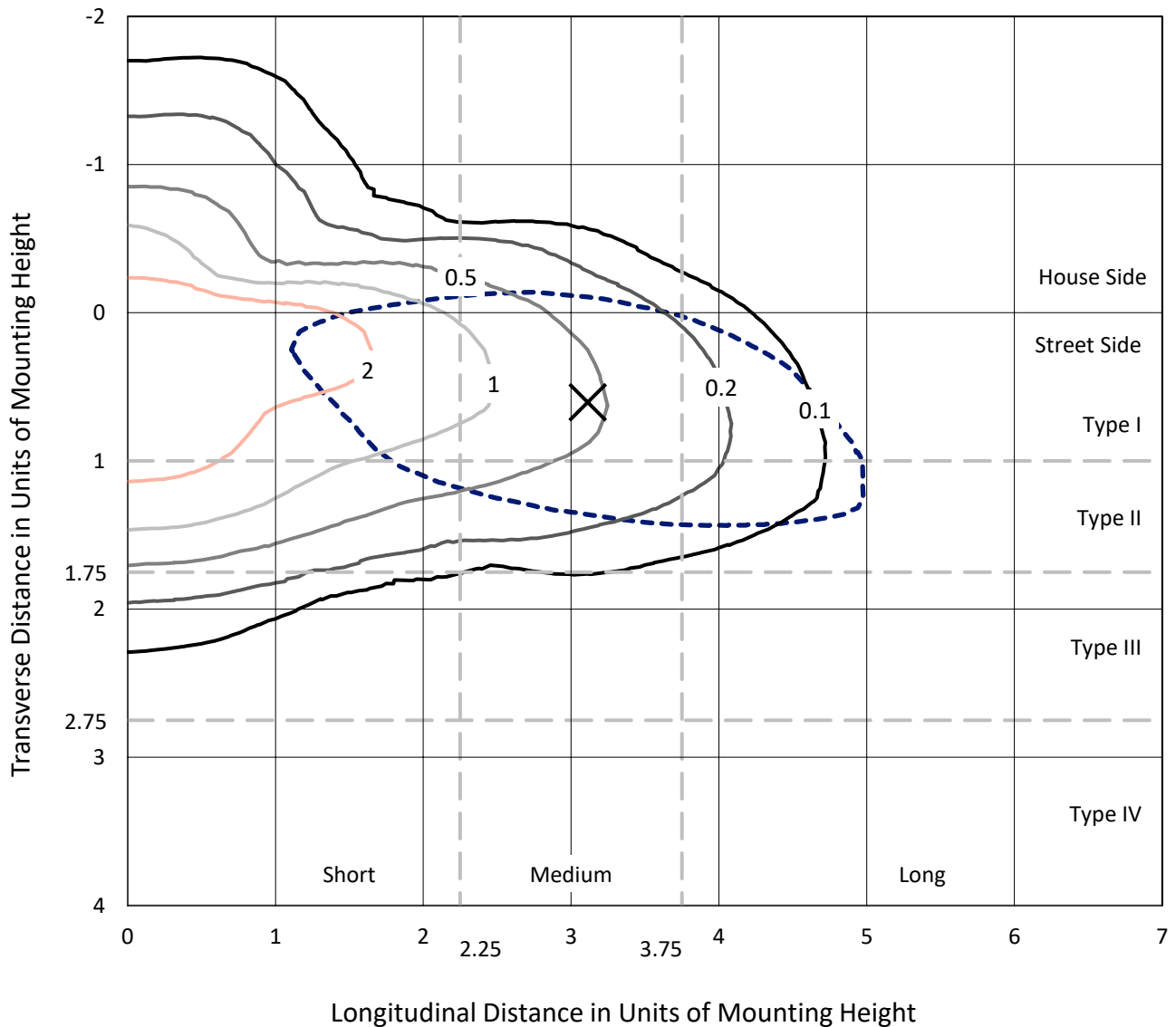
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

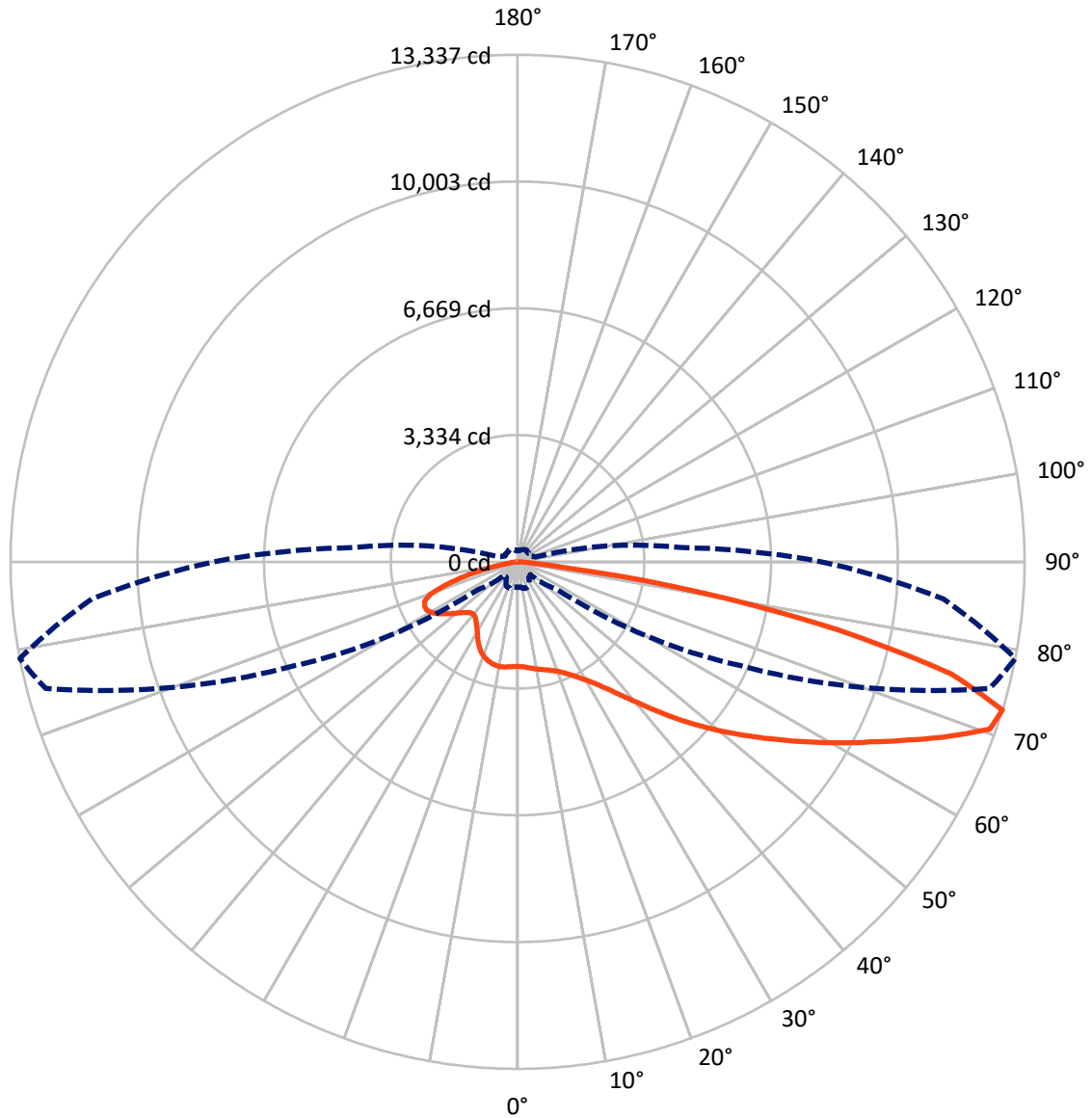
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type II - Medium - N/A

REPORT NUMBER: P963503
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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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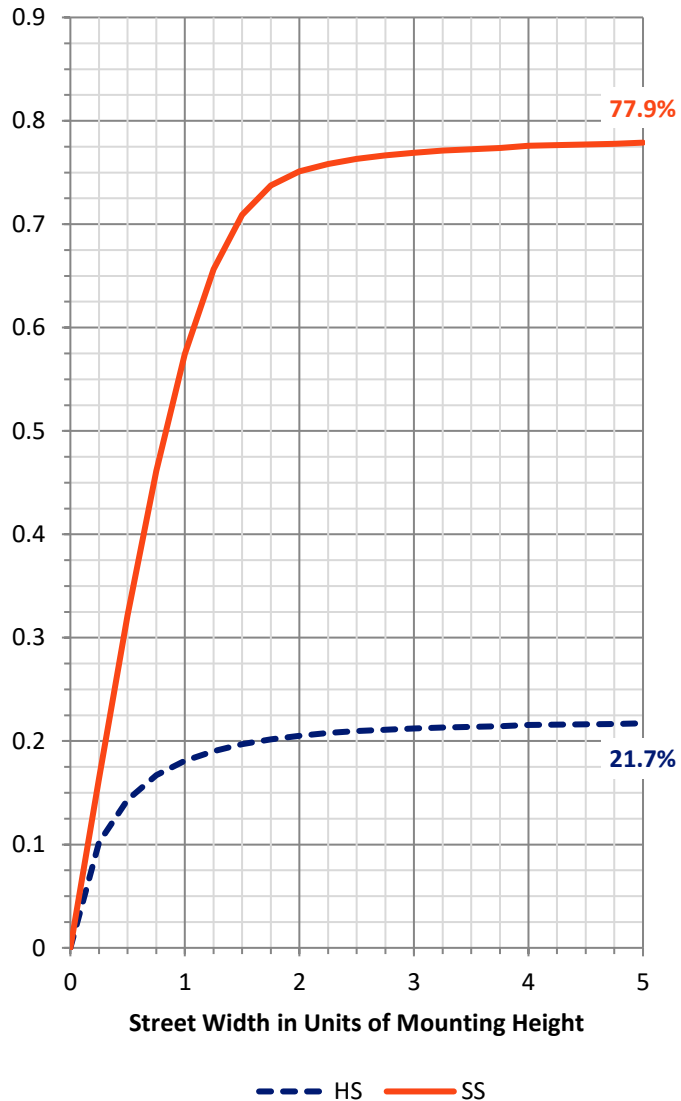
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3017.3	0.0	3017.3
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	10694.2	0.0	10694.2
	% Fixture	78.0	0.0	78.0
Total	Lumens	13711.4	0.0	13711.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.8	1.8
10°-20°	653.2	4.8
20°-30°	1054.0	7.7
30°-40°	1581.9	11.5
40°-50°	2244.1	16.4
50°-60°	2833.9	20.7
60°-70°	2878.3	21.0
70°-80°	1961.7	14.3
80°-90°	254.5	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°	13711.4	100.0
0°-180°	13711.4	100.0

Coefficient of Utilization

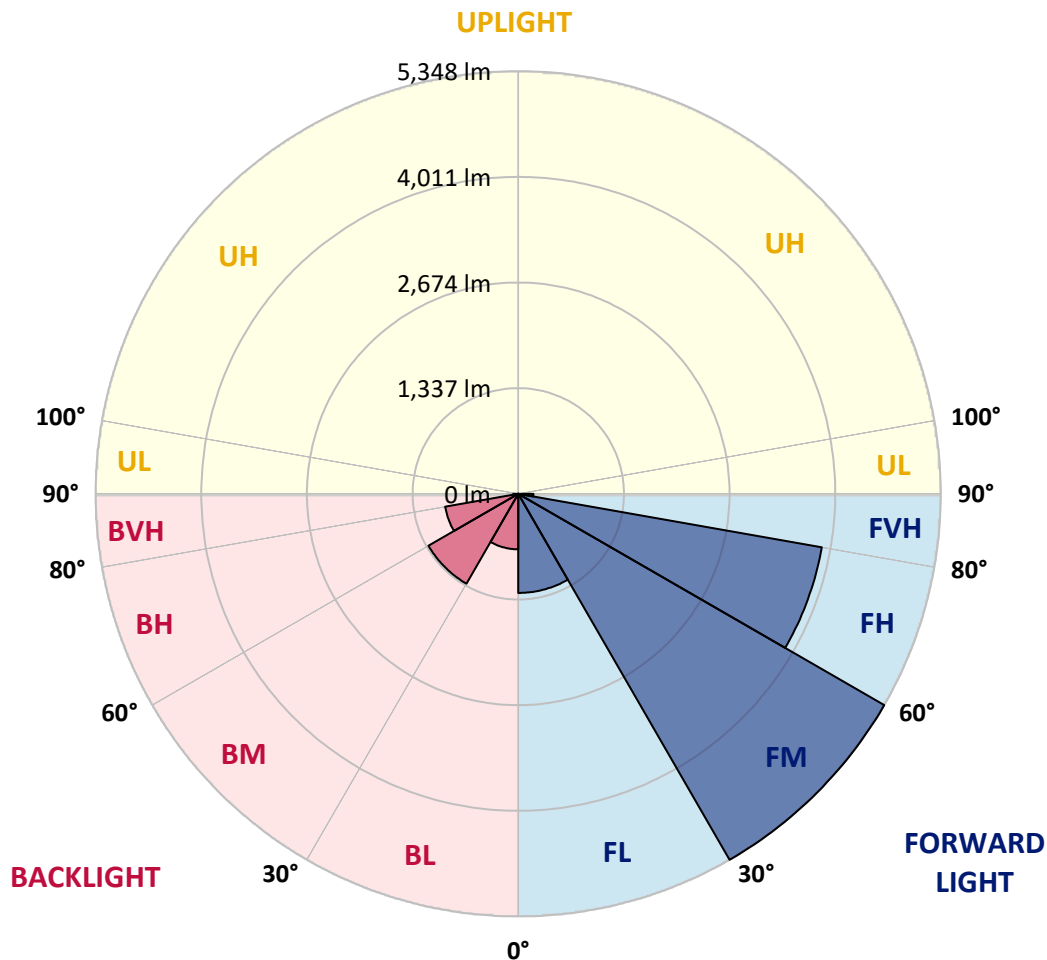


REPORT NUMBER: P963503
 CATALOG NUMBER: NAV-SB3A-735-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1254.3	9.1			
FM (30°-60°)	5347.7	39.0			
FH (60°-80°)	3900.4	28.4			G2/5000
FVH (80°-90°)	191.7	1.4			G2/225
BL (0°-30°)	702.8	5.1	B2/1000		
BM (30°-60°)	1312.2	9.6	B2/2500		
BH (60°-80°)	939.5	6.9	B2/1000		G2/1000
BVH (80°-90°)	62.8	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



REPORT NUMBER: P963503
 CATALOG NUMBER: NAV-SB3A-735-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2753.9	2740.8	2748.8	2745.9	2749.6	2753.9	2755.3	2757.6	2764.7	2764.0	2763.3
5°	2748.1	2735.0	2745.9	2742.3	2751.7	2761.9	2770.6	2778.6	2790.2	2795.3	2788.0
7.5°	2735.7	2727.0	2738.0	2748.8	2766.2	2781.4	2793.7	2811.9	2828.6	2831.5	2836.6
10°	2664.0	2657.4	2682.8	2711.1	2759.0	2800.3	2827.2	2848.2	2866.3	2869.2	2876.5
12.5°	2589.3	2581.3	2609.5	2648.0	2725.6	2800.3	2856.9	2884.5	2900.4	2909.9	2920.7
15°	2577.0	2570.4	2586.4	2619.7	2684.3	2780.7	2877.2	2927.9	2941.7	2952.6	2956.9
17.5°	2636.4	2624.1	2630.6	2642.2	2679.9	2762.6	2893.2	2977.3	2998.3	3009.9	3009.9
20°	2774.2	2756.8	2746.6	2723.4	2716.9	2765.4	2891.7	3036.8	3064.3	3078.8	3082.5
22.5°	2957.7	2946.1	2924.3	2865.6	2801.7	2801.0	2919.3	3112.9	3164.4	3178.2	3169.5
25°	3179.7	3162.2	3134.7	3054.9	2932.3	2871.4	2965.6	3210.1	3296.4	3300.0	3274.7
27.5°	3434.9	3408.8	3371.1	3266.0	3100.5	2981.6	3036.8	3321.8	3448.0	3446.6	3394.3
30°	3704.0	3677.9	3638.0	3510.3	3302.2	3130.4	3135.4	3442.2	3627.9	3619.9	3530.7
32.5°	3900.5	3881.0	3873.0	3774.4	3534.3	3305.8	3248.5	3575.6	3849.8	3842.5	3717.8
35°	4051.4	4026.0	4035.4	3985.4	3787.4	3502.4	3387.0	3734.5	4119.6	4118.9	3963.7
37.5°	4200.9	4178.3	4186.3	4153.0	4021.7	3751.9	3556.0	3928.8	4453.9	4469.9	4261.0
40°	4337.2	4313.2	4345.2	4313.9	4203.7	4017.3	3748.2	4148.6	4841.3	4871.7	4620.8
42.5°	4419.1	4400.3	4453.2	4453.9	4361.8	4241.4	3959.3	4390.9	5289.5	5357.7	5063.2
45°	4447.4	4440.9	4520.7	4537.4	4501.8	4371.2	4149.3	4654.8	5772.5	5894.4	5567.3
47.5°	4416.9	4404.6	4514.9	4576.5	4604.8	4432.2	4306.7	4940.6	6265.7	6444.1	6117.0
50°	4263.2	4239.3	4403.2	4533.0	4633.8	4472.1	4465.5	5270.7	6826.3	7021.5	6669.7
52.5°	3986.8	3968.7	4155.1	4380.6	4570.0	4491.7	4644.0	5631.0	7358.7	7611.1	7236.1
55°	3633.6	3609.7	3814.9	4109.4	4411.2	4485.1	4822.4	6034.4	7986.8	8242.8	7821.5
57.5°	3073.8	3025.9	3285.5	3633.6	4152.3	4477.2	5008.0	6435.4	8625.1	8931.8	8445.9
60°	2257.0	2186.0	2504.4	2917.0	3646.0	4399.5	5238.0	6885.1	9390.9	9667.3	9127.6
62.5°	1314.3	1272.8	1481.0	1866.1	2748.1	3942.7	5367.1	7408.0	10143.8	10433.9	9797.8
65°	1020.5	1008.9	1026.9	1056.8	1529.6	2951.9	4968.9	7917.9	11101.2	11304.2	10496.2
67.5°	933.5	924.8	932.7	876.9	776.0	1644.2	3931.0	8047.0	12126.7	12250.0	11107.6
70°	829.7	819.6	845.7	797.8	610.7	747.7	2540.0	7578.4	12942.7	13174.0	11572.6
72.5°	676.0	664.4	725.3	703.6	514.2	480.1	1275.8	6465.2	12857.1	13337.2	11239.6
75°	519.3	512.8	585.3	603.4	419.2	377.9	612.1	4805.7	11314.4	11798.2	9686.9
77.5°	403.2	398.2	435.2	501.1	337.9	293.0	376.4	3048.4	8526.4	8611.2	6675.5
80°	302.5	287.9	322.1	388.1	263.3	213.9	255.3	1777.7	5389.6	4885.5	2905.5
82.5°	189.3	182.0	210.3	258.9	185.6	147.2	166.0	982.1	2159.9	1272.1	560.7
85°	108.0	105.2	114.6	147.9	100.9	84.9	95.0	433.7	394.5	271.2	169.0
87.5°	43.6	42.0	52.2	66.0	37.0	31.2	33.3	104.4	87.0	80.5	55.9
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: P963503
 CATALOG NUMBER: NAV-SB3A-735-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2760.4	2760.4	2750.3	2734.3	2716.1	2704.6	2685.7	2680.7	2661.0	2655.3	2664.7
5°	2793.7	2788.0	2756.8	2711.8	2650.1	2593.6	2531.2	2492.1	2436.9	2417.4	2431.9
7.5°	2835.9	2819.9	2766.2	2667.6	2538.5	2411.5	2279.6	2179.5	2083.7	2049.7	2054.0
10°	2874.3	2851.8	2760.4	2587.8	2364.4	2144.6	1934.3	1787.1	1675.4	1629.7	1639.9
12.5°	2912.7	2871.4	2722.0	2455.1	2117.1	1819.0	1594.9	1480.3	1411.4	1356.3	1374.4
15°	2949.0	2891.0	2662.5	2277.3	1845.8	1543.4	1378.0	1286.7	1231.5	1195.3	1201.8
17.5°	2991.1	2907.6	2573.3	2051.8	1587.6	1352.7	1217.7	1162.7	1151.8	1147.4	1150.3
20°	3049.8	2922.9	2455.8	1799.4	1397.6	1200.4	1130.7	1125.7	1124.9	1122.7	1130.0
22.5°	3112.9	2941.0	2300.6	1570.2	1235.8	1105.4	1093.0	1082.8	1076.4	1075.6	1083.5
25°	3187.6	2946.8	2106.2	1382.4	1098.1	1060.4	1045.8	1030.6	1026.2	1026.2	1030.6
27.5°	3260.1	2927.2	1880.0	1219.2	1020.5	1019.1	1000.2	995.1	994.4	996.5	1002.3
30°	3332.7	2890.2	1655.1	1068.4	975.5	975.5	968.9	972.6	975.5	982.8	987.8
32.5°	3430.6	2851.0	1467.3	956.6	936.3	929.1	935.6	942.9	945.8	955.2	963.2
35°	3574.2	2823.5	1317.8	895.7	895.7	886.3	889.9	888.5	881.9	877.6	887.8
37.5°	3764.2	2822.0	1194.5	867.5	861.6	860.2	860.9	851.5	826.0	795.6	796.3
40°	3992.7	2861.2	1099.5	847.9	843.5	852.2	847.9	822.5	752.9	699.9	698.4
42.5°	4299.5	2972.9	1038.6	823.9	837.0	847.9	830.5	742.7	695.6	660.0	658.6
45°	4660.7	3154.2	1007.4	798.6	824.6	837.7	753.6	715.1	677.4	634.6	631.7
47.5°	5069.8	3382.7	1000.2	774.6	797.0	805.0	720.9	703.6	660.7	614.3	610.7
50°	5515.0	3653.2	1019.8	746.3	757.2	729.6	710.0	694.1	649.8	604.1	599.1
52.5°	5975.5	3951.4	1058.9	707.9	717.3	686.9	705.7	691.9	643.3	581.7	577.3
55°	6428.2	4251.6	1096.6	662.9	676.7	648.4	693.4	683.3	613.6	544.0	540.4
57.5°	6888.0	4550.4	1133.6	623.0	637.6	611.4	673.8	660.0	580.3	509.1	507.7
60°	7366.0	4840.6	1151.0	584.6	594.7	577.3	644.0	620.1	542.5	473.7	471.4
62.5°	7813.5	5082.1	1122.7	546.1	552.7	545.4	604.9	573.0	504.8	433.7	433.0
65°	8262.4	5225.7	1035.7	508.4	509.8	506.2	549.8	522.2	460.5	398.9	394.5
67.5°	8669.2	5306.1	897.2	467.8	464.2	462.7	498.3	467.1	417.8	364.1	359.8
70°	8755.6	5101.6	685.4	419.9	419.9	416.4	441.7	409.8	370.6	327.1	325.6
72.5°	7996.9	4291.5	486.7	365.5	371.4	364.1	385.1	358.2	322.8	293.8	285.1
75°	6448.5	3147.0	353.9	309.7	319.8	307.5	327.1	308.2	277.8	277.1	249.5
77.5°	4430.8	1946.0	256.8	255.3	262.5	246.6	269.1	258.9	231.3	219.0	205.2
80°	1890.8	776.0	187.2	197.3	197.3	182.8	208.9	211.8	187.9	182.0	182.0
82.5°	376.4	220.5	131.3	135.6	127.6	123.3	147.9	163.9	226.3	251.6	252.4
85°	113.2	81.3	79.0	74.0	65.3	66.0	87.0	164.6	203.1	116.0	100.0
87.5°	31.2	20.3	21.0	16.7	13.7	18.1	29.7	124.7	68.2	29.0	24.7
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)