

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: P884299

Luminaire Tested: **NAV-SB5A-750-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884299
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-750-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24557 lumens
Efficiency: N/A
Efficacy: 173.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

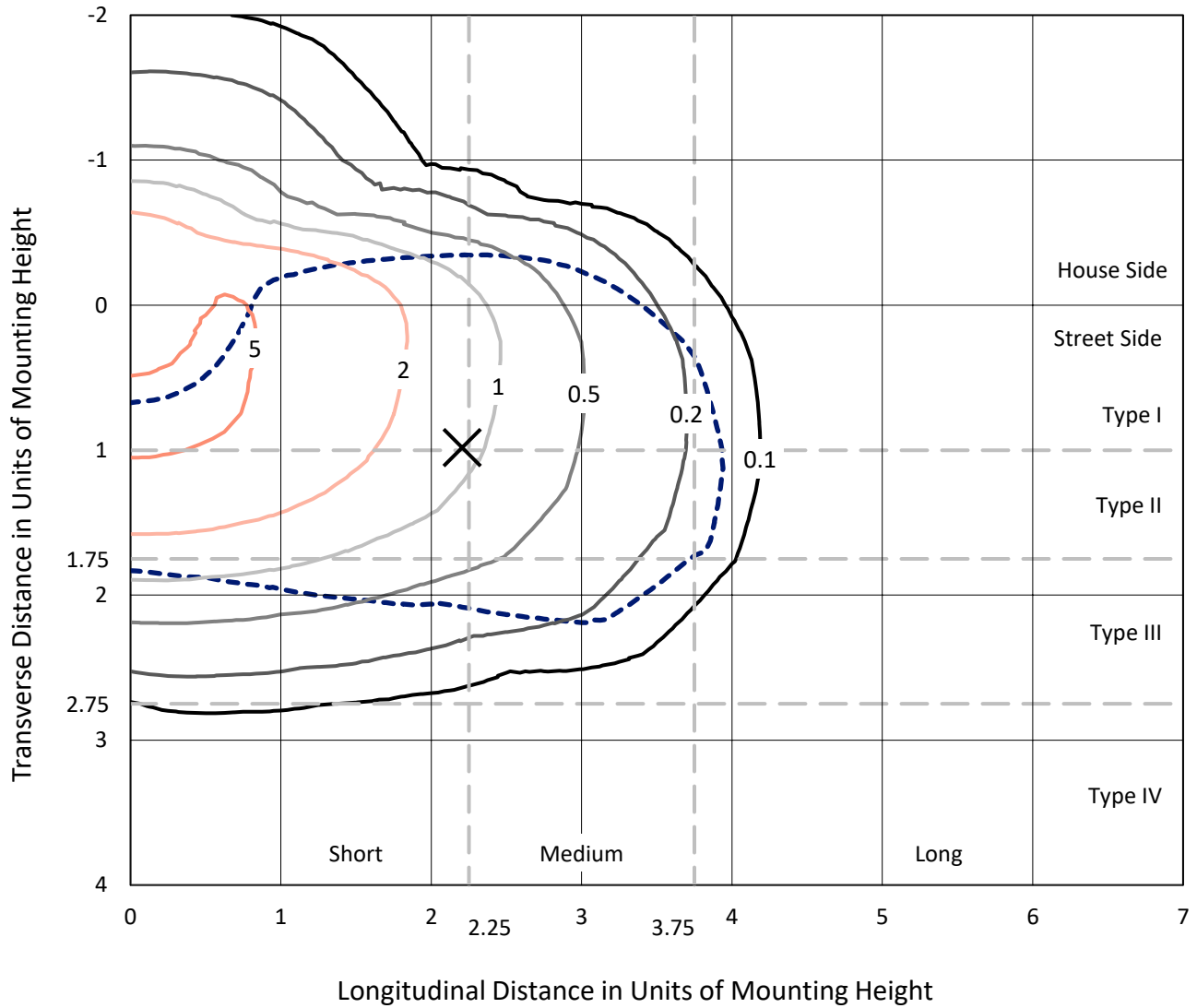
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: NAV-SB5A-750-U-T3

Iso-Footcandle Lines of Horizontal Illumination

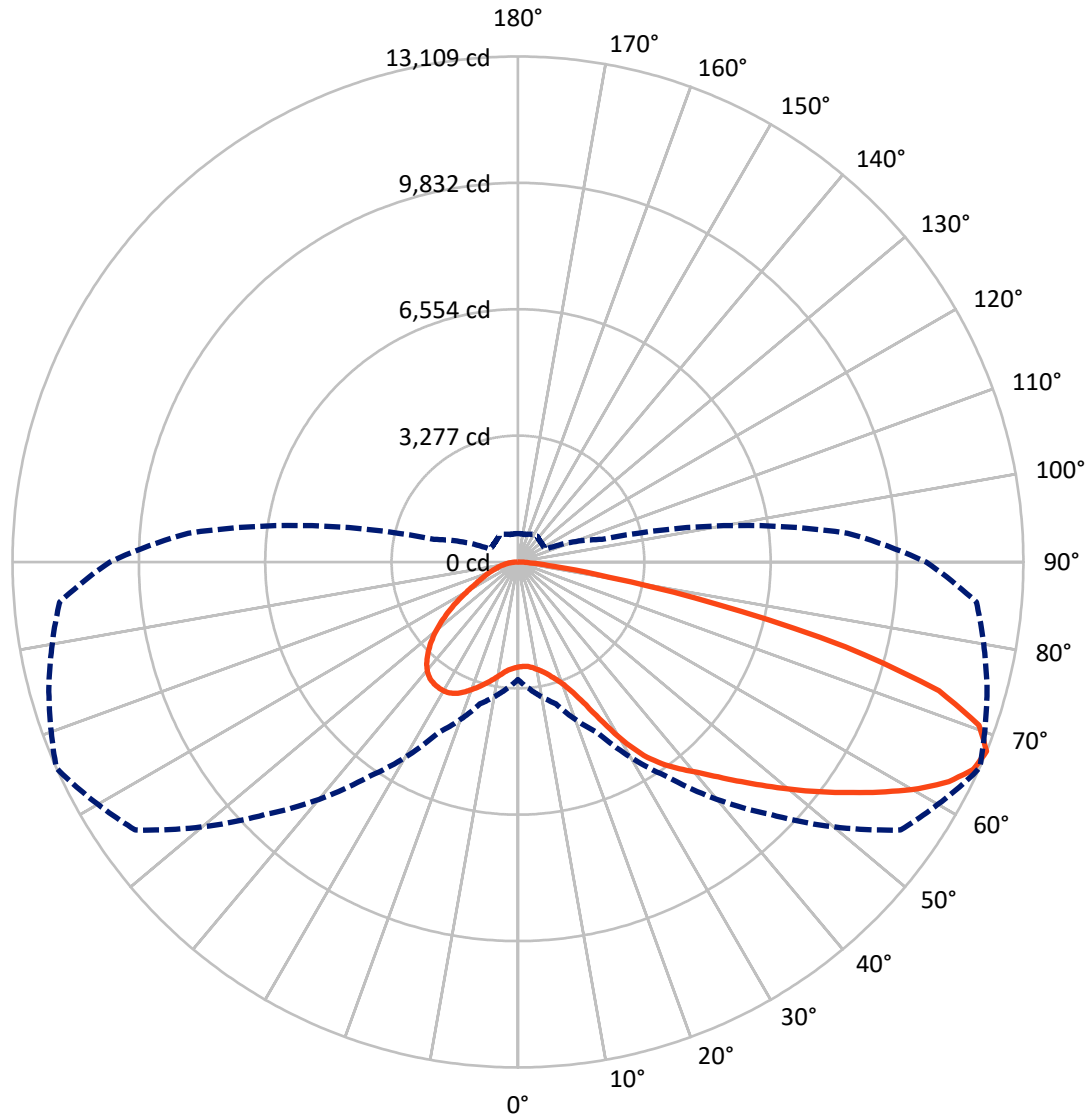
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type III - Short - N/A

REPORT NUMBER: P884299
CATALOG NUMBER: NAV-SB5A-750-U-T3

Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: NAV-SB5A-750-U-T3

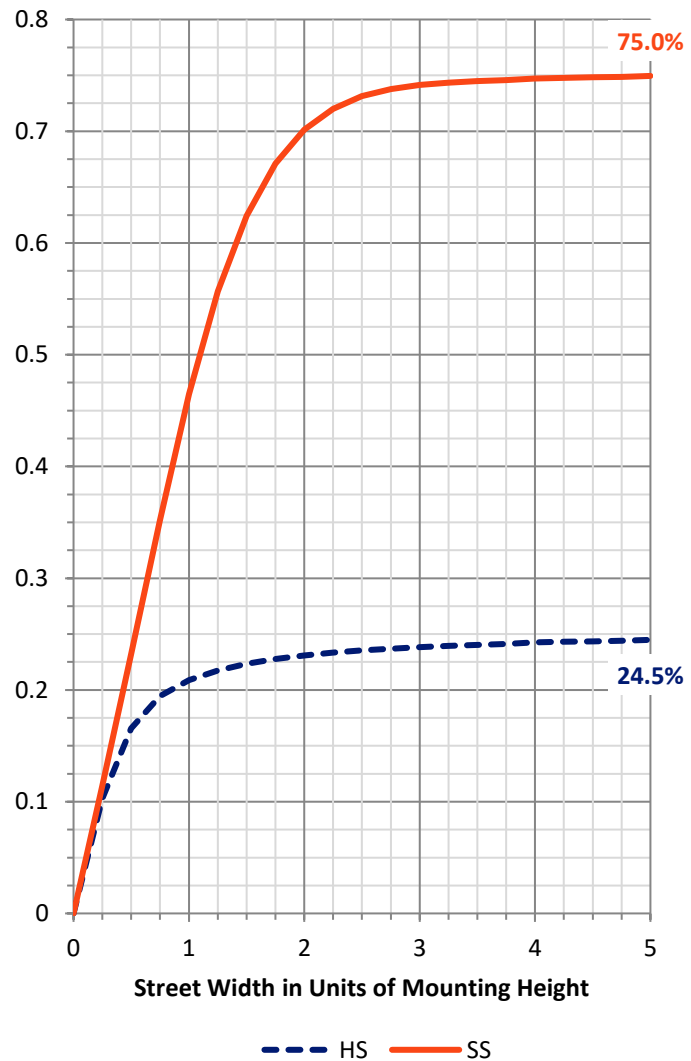
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6106.0	0.0	6106.0
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	18451.0	0.0	18451.0
	% Fixture	75.1	0.0	75.1
Total	Lumens	24557.0	0.0	24557.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.0	1.1
10°-20°	892.2	3.6
20°-30°	1719.6	7.0
30°-40°	3015.2	12.3
40°-50°	4482.6	18.3
50°-60°	5682.1	23.1
60°-70°	5559.8	22.6
70°-80°	2652.1	10.8
80°-90°	283.4	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°	24557.0	100.0
0°-180°	24557.0	100.0



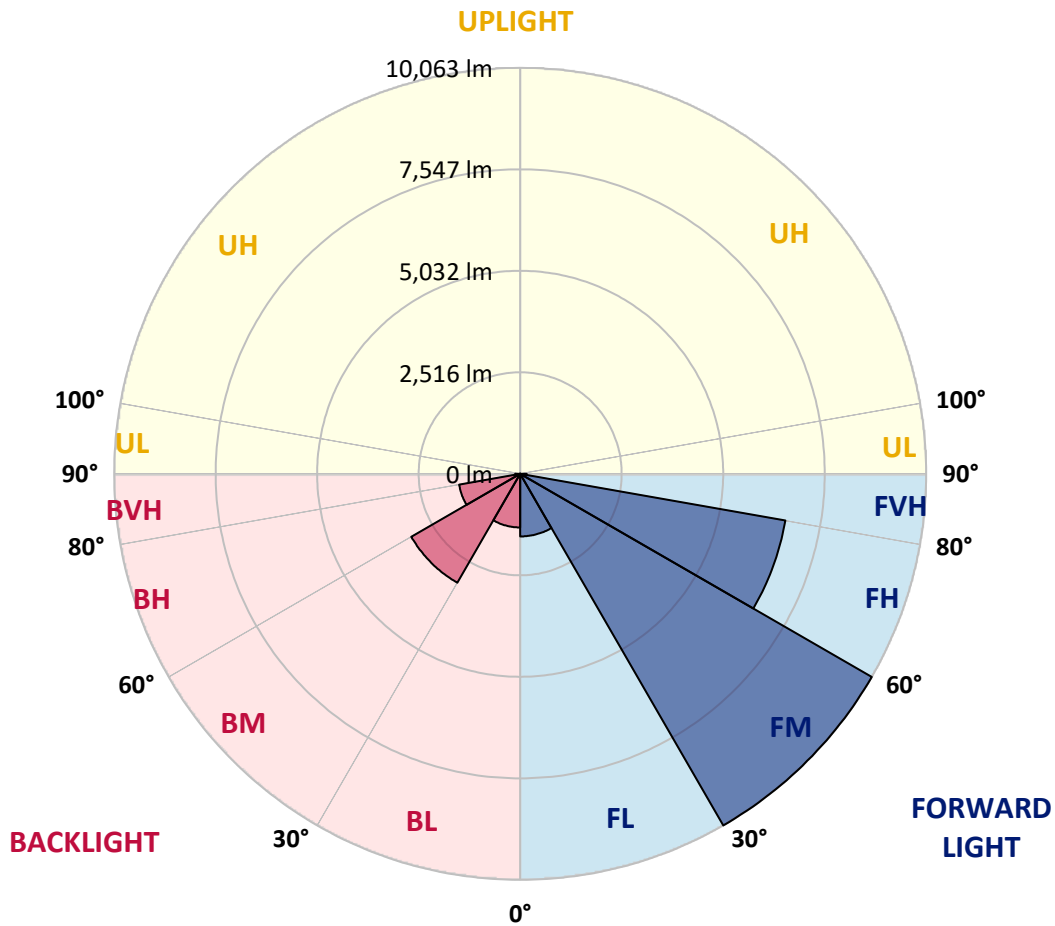
REPORT NUMBER: P884299
 CATALOG NUMBER: NAV-SB5A-750-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1551.8	6.3			
FM (30°-60°)	10063.3	41.0			
FH (60°-80°)	6675.3	27.2			G3/7500
FVH (80°-90°)	160.7	0.7			G2/225
BL (0°-30°)	1330.1	5.4	B3/2500		
BM (30°-60°)	3116.6	12.7	B3/5000		
BH (60°-80°)	1536.6	6.3	B3/2500		G3/2500
BVH (80°-90°)	122.7	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: P884299

CATALOG NUMBER: NAV-SB5A-750-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7
2.5°	2695.3	2710.8	2706.9	2700.5	2699.2	2701.8	2705.6	2709.5	2708.2	2714.7	2725.0
5°	2687.6	2703.1	2701.8	2701.8	2706.9	2717.2	2723.7	2730.1	2723.7	2731.4	2745.6
7.5°	2692.7	2704.3	2709.5	2714.7	2727.6	2746.9	2762.4	2776.6	2768.9	2777.9	2795.9
10°	2758.5	2767.6	2772.7	2772.7	2781.8	2803.7	2819.2	2845.0	2838.5	2852.7	2875.9
12.5°	2878.5	2887.6	2887.6	2882.4	2888.8	2903.0	2908.2	2936.6	2925.0	2948.2	2971.4
15°	3025.6	3043.7	3029.5	3020.5	3023.0	3037.2	3035.9	3057.9	3046.3	3065.6	3086.3
17.5°	3188.2	3211.4	3188.2	3186.9	3181.7	3197.2	3198.5	3217.9	3197.2	3211.4	3225.6
20°	3380.4	3412.7	3393.3	3399.8	3388.2	3394.6	3401.1	3429.5	3397.2	3407.5	3403.7
22.5°	3651.4	3690.1	3669.4	3694.0	3686.2	3681.1	3679.8	3730.1	3679.8	3683.6	3646.2
25°	4046.2	4092.6	4056.5	4090.1	4090.1	4106.8	4126.2	4190.7	4106.8	4082.3	3985.6
27.5°	4629.4	4675.8	4604.9	4625.5	4619.1	4660.3	4639.7	4799.7	4709.4	4669.4	4474.6
30°	5331.3	5413.8	5279.7	5274.5	5268.0	5333.9	5363.5	5469.3	5377.7	5337.7	5102.9
32.5°	6089.9	6176.4	6016.4	5969.9	5945.4	5985.4	5960.9	6046.1	5982.8	5920.9	5630.6
35°	6892.5	6977.6	6825.4	6735.1	6637.0	6553.1	6465.4	6487.3	6428.0	6333.8	6033.2
37.5°	7651.1	7807.2	7646.0	7549.2	7368.6	7204.7	6959.6	6857.6	6802.1	6715.7	6412.5
40°	8424.0	8513.0	8390.4	8307.9	8111.7	7855.0	7462.7	7247.3	7172.4	7088.6	6831.8
42.5°	8993.0	9078.1	9012.3	8955.6	8802.0	8504.0	7996.9	7727.2	7618.9	7524.7	7306.6
45°	9444.6	9507.8	9466.5	9487.1	9421.3	9132.3	8550.4	8242.1	8129.8	8015.0	7843.4
47.5°	9626.5	9693.6	9759.4	9881.9	9994.2	9781.3	9145.2	8799.4	8680.7	8563.3	8394.3
50°	9605.8	9674.2	9865.2	10125.8	10474.2	10403.2	9772.3	9392.9	9283.3	9149.1	8993.0
52.5°	9440.7	9518.1	9763.2	10196.8	10751.6	10869.0	10410.9	10005.8	9902.6	9742.6	9586.5
55°	9007.2	9053.6	9421.3	10035.5	10817.4	11194.1	11036.7	10658.7	10555.5	10332.2	10161.9
57.5°	8203.3	8270.4	8805.9	9600.7	10652.2	11414.7	11586.4	11345.1	11245.7	10924.5	10746.4
60°	7154.4	7261.5	7874.3	8870.4	10231.6	11413.5	12085.7	12019.9	11937.3	11507.6	11321.9
62.5°	5967.4	6091.2	6680.9	7838.2	9496.2	11089.6	12397.9	12585.0	12542.4	12045.7	11808.3
65°	4582.9	4668.1	5255.1	6502.8	8351.7	10394.2	12434.0	12970.8	12978.5	12454.7	12062.5
67.5°	3051.4	3296.6	3806.2	4879.7	6818.9	9257.5	12116.6	13034.0	13108.8	12595.3	11934.7
70°	1488.9	1811.5	2310.8	3171.4	4879.7	7514.4	11287.0	12515.3	12681.8	12185.0	11173.5
72.5°	618.0	722.5	994.8	1565.1	2801.1	5070.6	9620.0	11109.0	11417.3	10796.7	9394.2
75°	416.7	451.6	569.0	802.5	1276.0	2500.5	6937.6	8283.3	8780.1	8154.3	6665.4
77.5°	321.3	343.2	414.2	561.3	758.7	945.7	3713.3	4991.9	5248.7	4859.0	3468.2
80°	252.9	269.7	309.7	409.0	538.0	505.8	1265.7	2261.8	2410.2	2021.8	1114.8
82.5°	219.3	225.8	221.9	277.4	357.4	295.5	415.5	834.8	921.2	668.3	363.8
85°	158.7	176.8	184.5	171.6	189.7	149.7	170.3	295.5	325.1	290.3	205.1
87.5°	64.5	95.5	117.4	111.0	69.7	42.6	52.9	86.4	99.3	108.4	67.1
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: P884299

CATALOG NUMBER: NAV-SB5A-750-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7	2723.7
2.5°	2726.3	2735.3	2741.8	2749.5	2754.7	2762.4	2777.9	2786.9	2788.2	2794.7	2793.4
5°	2750.8	2763.7	2777.9	2798.5	2821.8	2841.1	2870.8	2891.4	2899.2	2905.6	2904.3
7.5°	2803.7	2821.8	2847.6	2883.7	2917.2	2943.0	2979.2	3003.7	3028.2	3037.2	3038.5
10°	2882.4	2908.2	2945.6	2994.6	3030.8	3064.3	3101.7	3122.4	3146.9	3157.2	3162.4
12.5°	2980.5	3007.5	3056.6	3125.0	3158.5	3181.7	3194.6	3189.5	3194.6	3203.7	3206.2
15°	3092.7	3122.4	3177.9	3251.4	3274.6	3254.0	3225.6	3199.8	3195.9	3198.5	3207.5
17.5°	3225.6	3247.5	3312.0	3374.0	3357.2	3272.0	3210.1	3168.8	3148.2	3141.7	3150.8
20°	3411.4	3411.4	3464.3	3503.0	3390.7	3246.2	3149.5	3082.4	3039.8	3021.7	3017.9
22.5°	3637.2	3616.5	3650.1	3623.0	3384.3	3174.0	3039.8	2923.7	2859.2	2833.4	2829.5
25°	3923.6	3899.1	3890.1	3722.3	3337.8	3059.2	2841.1	2700.5	2643.7	2629.5	2632.1
27.5°	4355.8	4293.9	4176.5	3776.5	3252.7	2878.5	2608.9	2478.6	2446.3	2447.6	2451.5
30°	4931.3	4807.4	4519.7	3785.6	3113.3	2623.1	2371.5	2278.6	2263.1	2269.5	2291.5
32.5°	5464.2	5346.8	4870.7	3744.3	2899.2	2372.8	2158.6	2096.6	2073.4	2081.2	2091.5
35°	5882.2	5849.9	5195.8	3686.2	2636.0	2137.9	1967.6	1914.7	1869.6	1859.2	1867.0
37.5°	6277.0	6264.1	5439.7	3604.9	2375.3	1971.5	1814.1	1744.4	1678.6	1642.5	1643.8
40°	6710.5	6697.6	5599.6	3479.8	2144.4	1827.0	1676.0	1584.4	1503.1	1437.3	1443.8
42.5°	7198.2	7122.1	5675.8	3300.4	1948.3	1704.4	1563.8	1439.9	1332.8	1272.2	1276.0
45°	7731.1	7559.5	5674.5	3072.1	1783.1	1592.2	1443.8	1268.3	1169.0	1112.2	1109.6
47.5°	8296.2	7977.6	5604.8	2819.2	1623.1	1468.3	1258.0	1123.8	1058.0	1023.2	1015.4
50°	8879.4	8368.5	5486.1	2528.9	1459.3	1327.7	1141.9	1050.3	999.9	967.7	956.1
52.5°	9427.8	8723.3	5342.9	2199.9	1292.8	1190.9	1090.3	1019.3	966.4	930.3	914.8
55°	9937.4	9029.1	5140.3	1863.1	1157.3	1099.3	1065.7	1006.4	945.7	903.2	886.4
57.5°	10390.3	9227.8	4790.7	1547.0	1060.6	1036.1	1039.9	984.5	914.8	878.7	855.4
60°	10767.0	9373.6	4273.3	1254.1	981.9	974.1	999.9	943.2	861.9	820.6	802.5
62.5°	10992.8	9371.0	3638.5	1027.0	914.8	917.4	947.0	891.6	809.0	770.3	758.7
65°	10973.5	9141.3	2941.7	878.7	850.3	852.8	891.6	834.8	765.1	741.9	740.6
67.5°	10585.1	8581.4	2256.6	781.9	779.3	790.9	836.1	796.1	738.0	735.4	739.3
70°	9533.6	7418.9	1625.7	704.5	705.8	722.5	781.9	771.6	723.8	729.0	727.7
72.5°	7644.7	5656.4	1091.5	623.2	624.5	651.6	730.3	752.2	709.6	778.0	788.3
75°	5091.3	3527.5	701.9	536.7	538.0	572.9	685.1	714.8	670.9	775.4	781.9
77.5°	2446.3	1585.7	508.4	451.6	451.6	483.8	592.2	640.0	571.6	602.5	552.2
80°	845.1	596.1	400.0	363.8	356.1	378.0	499.3	554.8	492.9	454.2	425.8
82.5°	332.9	309.7	321.3	282.6	256.8	271.0	388.4	458.0	362.6	327.7	326.4
85°	191.0	201.3	227.1	187.1	148.4	166.4	285.1	329.0	273.5	241.3	246.4
87.5°	51.6	71.0	104.5	96.8	67.1	71.0	135.5	181.9	157.4	121.3	125.2
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)