

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: P968269

Luminaire Tested: **NAV-SB5B-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968269
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29098.7 lumens
Efficiency: N/A
Efficacy: 159.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

Input Watts (W): 182.7
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

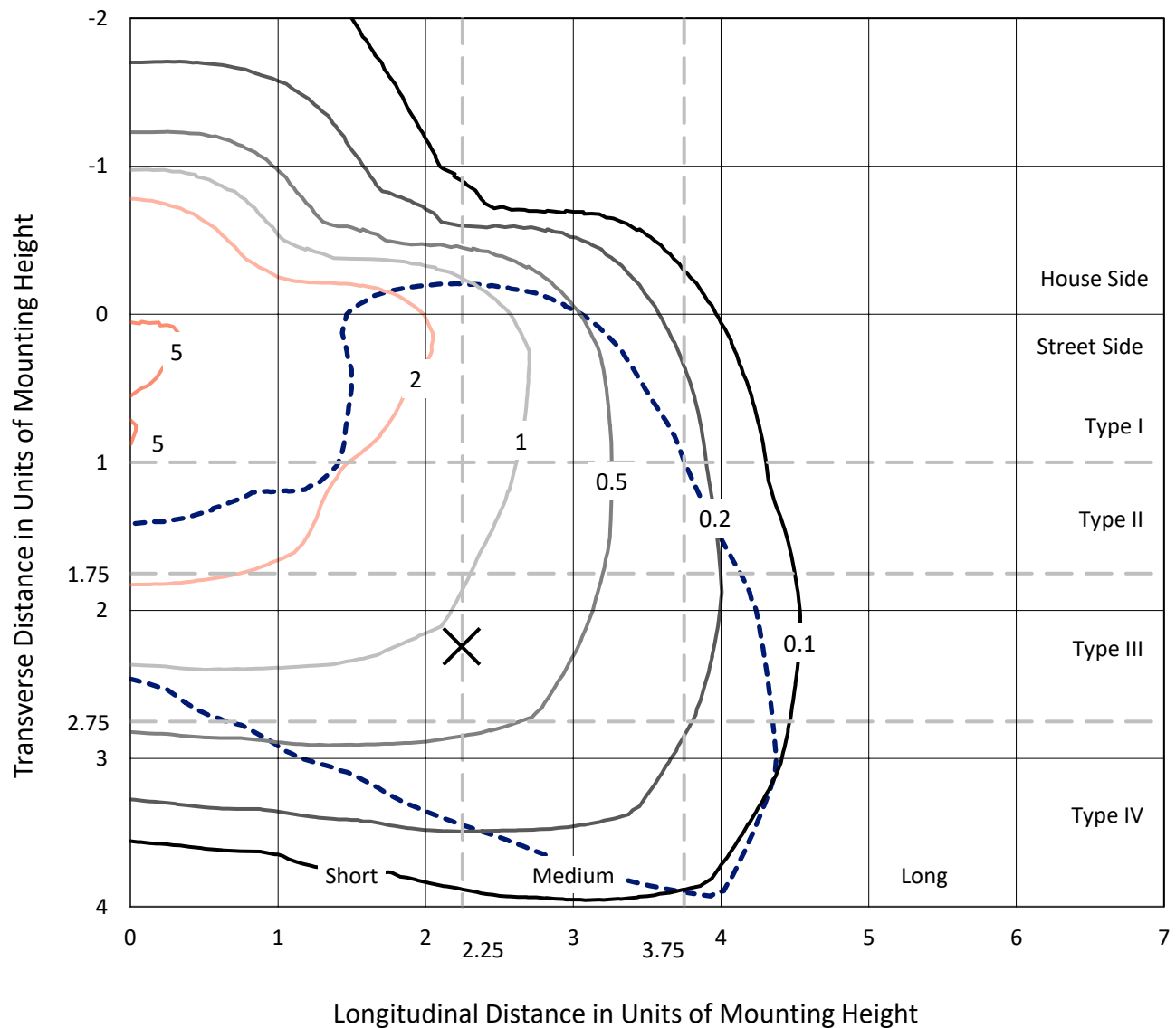


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Iso-Footcandle Lines of Horizontal Illumination

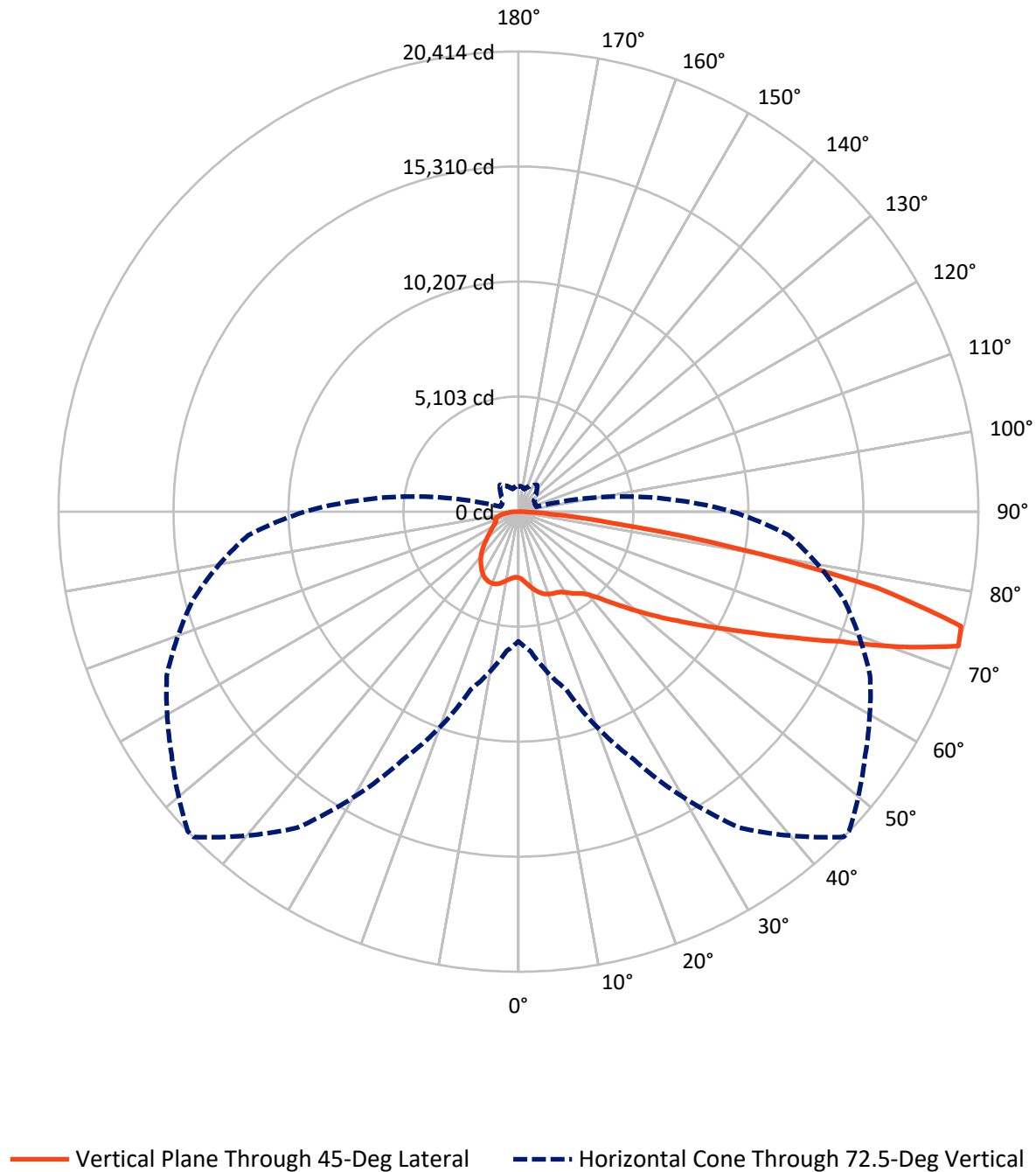
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6578.2	0.0	6578.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	22520.5	0.0	22520.5
	% Fixture	77.4	0.0	77.4
Total	Lumens	29098.7	0.0	29098.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.8	1.0
10°-20°	996.2	3.4
20°-30°	1732.9	6.0
30°-40°	2484.2	8.5
40°-50°	3497.8	12.0
50°-60°	5357.7	18.4
60°-70°	7761.4	26.7
70°-80°	6197.9	21.3
80°-90°	771.9	2.7
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°	29098.7	100.0
0°-180°	29098.7	100.0

Coefficient of Utilization



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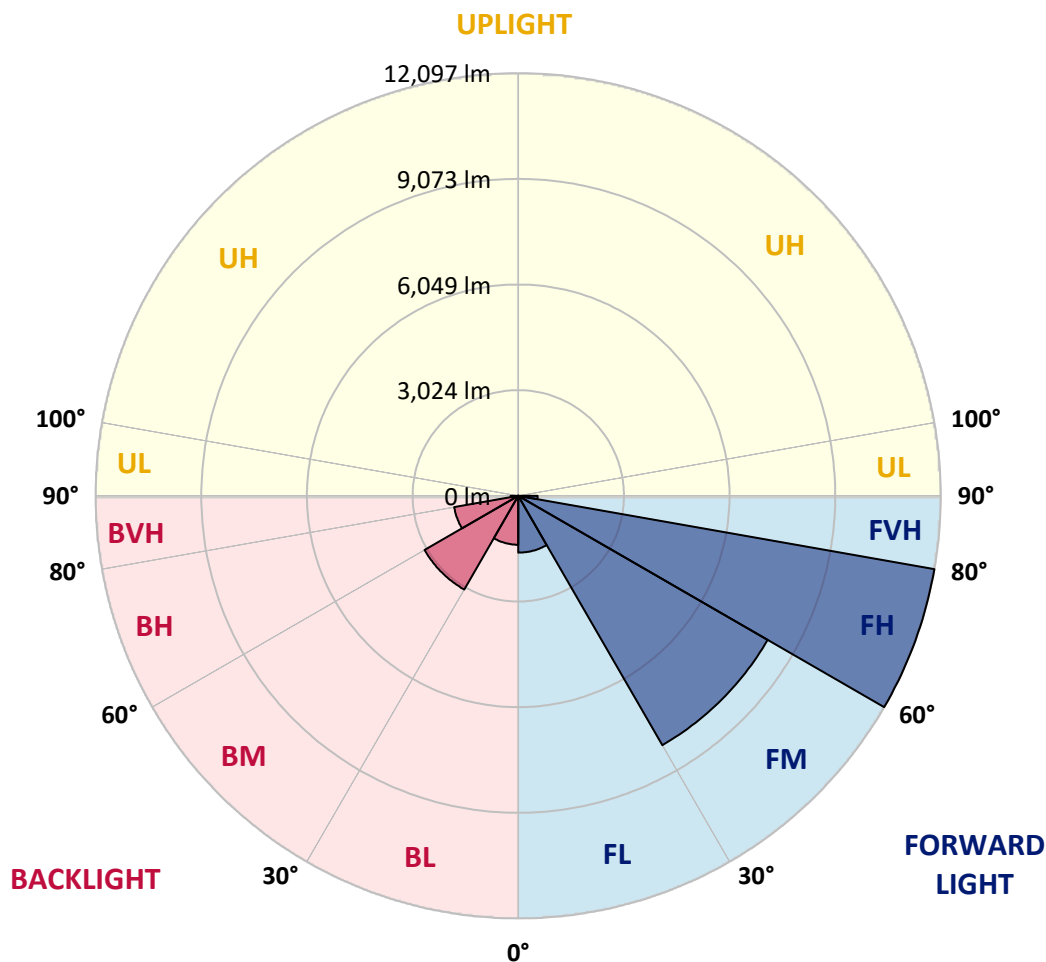
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1627.2	5.6			
FM	(30°-60°)	8242.3	28.3			
FH	(60°-80°)	12097.2	41.6			G5
FVH	(80°-90°)	553.8	1.9			G4/750
BL	(0°-30°)	1400.6	4.8	B3/2500		
BM	(30°-60°)	3097.4	10.6	B3/5000		
BH	(60°-80°)	1862.1	6.4	B3/2500		G3/2500
BVH	(80°-90°)	218.1	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5
2.5°	3050.5	3070.4	3052.0	3035.1	3027.4	3007.6	3006.0	2993.7	2986.0	2964.6	2958.5
5°	3263.5	3289.6	3258.9	3225.2	3194.5	3145.5	3139.4	3104.1	3064.2	3018.3	2992.2
7.5°	3504.2	3527.2	3492.0	3441.3	3387.7	3306.4	3304.9	3240.5	3177.7	3099.5	3055.0
10°	3714.2	3744.8	3697.4	3628.4	3561.0	3468.9	3458.2	3384.7	3304.9	3203.7	3136.3
12.5°	3899.7	3921.1	3875.1	3790.9	3712.7	3620.7	3606.9	3525.7	3436.7	3321.8	3235.9
15°	4046.8	4074.5	4013.1	3922.7	3839.9	3749.4	3737.2	3663.7	3574.7	3453.6	3343.2
17.5°	4143.5	4166.4	4103.6	4002.4	3922.7	3847.5	3838.4	3777.0	3698.9	3576.2	3458.2
20°	4180.2	4204.8	4138.8	4036.1	3962.5	3904.3	3899.7	3855.2	3801.6	3689.7	3570.1
22.5°	4217.0	4240.0	4154.1	4046.8	3982.4	3945.6	3944.1	3915.0	3893.6	3801.6	3685.1
25°	4365.7	4371.8	4256.8	4102.0	4010.0	3977.8	3976.3	3974.8	3984.0	3911.9	3809.2
27.5°	4494.4	4492.9	4394.8	4249.1	4106.7	4039.2	4037.7	4053.0	4082.1	4022.3	3938.0
30°	4683.0	4666.1	4549.7	4397.9	4267.6	4163.3	4154.1	4140.4	4163.3	4115.8	4066.8
32.5°	5083.1	5029.5	4840.9	4571.1	4400.9	4321.2	4309.0	4223.1	4232.3	4203.2	4178.7
35°	5656.4	5585.8	5334.5	4899.1	4566.5	4453.1	4447.0	4338.1	4319.7	4293.6	4302.8
37.5°	6338.5	6251.2	5958.3	5374.4	4851.6	4606.3	4597.1	4499.0	4423.9	4396.3	4448.5
40°	7023.7	6913.3	6671.2	5953.8	5271.7	4862.4	4833.2	4684.6	4598.7	4552.7	4663.0
42.5°	7689.0	7597.0	7390.0	6603.7	5789.7	5236.4	5171.9	4917.5	4853.2	4810.2	5009.5
45°	8277.6	8194.9	8043.1	7298.1	6396.8	5745.3	5682.4	5267.1	5247.1	5247.1	5535.3
47.5°	8755.9	8737.5	8576.6	8006.3	7112.7	6324.8	6215.9	5752.9	5806.6	5889.3	6281.8
50°	9286.3	9235.7	9064.0	8703.8	7954.2	6988.4	6899.6	6349.3	6550.1	6776.9	7360.9
52.5°	9773.8	9801.4	9609.7	9430.4	8904.6	7728.9	7572.5	7052.8	7486.7	7862.3	8625.6
55°	10275.0	10276.5	10222.8	10198.3	9901.0	8547.5	8375.8	7899.1	8588.8	9054.8	10100.2
57.5°	10745.6	10748.7	10828.4	11044.5	11056.8	9491.7	9297.1	8938.3	9813.6	10288.7	11620.8
60°	11165.6	11187.1	11404.8	11910.6	12073.1	10573.9	10390.0	10166.2	11079.7	11558.0	13219.7
62.5°	11306.7	11384.8	11869.2	12588.1	13077.2	11901.4	11720.6	11587.1	12410.3	12854.8	14556.3
65°	11067.5	11246.8	12183.5	13147.7	14110.3	13478.7	13299.4	13153.8	13793.0	14211.5	15653.9
67.5°	10480.4	10711.9	12165.1	13734.8	15364.2	15376.4	15209.4	14867.5	15275.3	15436.3	16011.1
70°	8933.7	9280.1	11093.6	13953.9	16803.6	17971.6	17810.7	16930.8	16754.5	15975.9	15005.5
72.5°	5756.0	6222.1	8168.8	12149.7	17124.0	20413.6	20404.4	18793.3	17222.0	14927.4	12034.7
75°	2100.0	2385.2	3795.5	7626.2	14374.0	20289.4	20349.2	18474.5	15721.3	11530.4	7497.4
77.5°	765.0	836.9	1238.6	2930.9	8840.2	16279.4	16403.5	14769.4	11190.1	5786.6	2970.8
80°	401.6	441.5	634.6	1137.4	3787.8	9668.0	9862.7	8777.4	5259.4	1742.9	890.6
82.5°	222.2	240.7	355.7	617.8	1706.1	4134.2	4250.7	3467.4	1850.2	738.8	367.9
85°	119.5	127.2	167.1	337.2	833.9	1433.3	1465.4	1036.3	737.3	433.8	177.8
87.5°	35.3	42.9	55.1	107.3	326.5	322.0	329.5	205.4	291.2	219.2	58.2
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°	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5	2935.5
2.5°	2949.3	2944.7	2927.8	2920.1	2911.0	2909.5	2917.1	2918.6	2920.1	2921.7	2927.8
5°	2976.9	2961.5	2946.3	2937.0	2940.1	2941.6	2956.9	2967.7	2975.4	2981.5	2984.6
7.5°	3030.5	3018.3	2992.2	2990.6	2995.3	3009.1	3029.0	3053.6	3067.3	3078.1	3081.1
10°	3110.3	3087.3	3056.5	3061.2	3070.4	3090.3	3131.7	3151.7	3174.6	3194.5	3190.0
12.5°	3191.4	3171.6	3136.3	3139.4	3154.7	3190.0	3229.8	3254.4	3269.6	3285.0	3291.2
15°	3297.2	3262.0	3223.7	3223.7	3251.3	3289.6	3308.0	3327.9	3337.1	3354.0	3360.2
17.5°	3406.1	3360.2	3309.5	3306.4	3340.2	3358.6	3369.3	3372.4	3375.4	3393.9	3399.9
20°	3514.9	3464.3	3392.3	3386.2	3393.9	3390.8	3389.3	3386.2	3390.8	3413.8	3423.0
22.5°	3622.2	3564.0	3464.3	3436.7	3415.3	3386.2	3384.7	3383.1	3386.2	3409.2	3424.5
25°	3747.9	3677.4	3544.0	3461.3	3389.3	3349.4	3354.0	3355.5	3358.6	3377.0	3401.5
27.5°	3884.3	3806.1	3617.6	3453.6	3323.4	3295.7	3288.1	3292.7	3303.4	3332.5	3361.6
30°	4020.8	3928.8	3685.1	3423.0	3240.5	3202.2	3177.7	3188.5	3222.2	3251.3	3283.5
32.5°	4145.0	4053.0	3738.7	3355.5	3134.8	3075.0	3042.8	3056.5	3090.3	3101.0	3139.4
35°	4290.5	4186.3	3761.7	3248.2	3019.9	2927.8	2884.9	2865.0	2881.9	2871.1	2904.8
37.5°	4453.1	4344.3	3758.7	3107.2	2884.9	2779.2	2719.3	2644.3	2609.0	2572.2	2595.2
40°	4693.7	4537.4	3721.9	2937.0	2717.8	2621.2	2513.9	2386.7	2307.0	2235.0	2239.5
42.5°	5021.8	4805.6	3654.4	2750.0	2529.3	2438.9	2293.2	2144.5	2018.8	1899.2	1888.6
45°	5510.8	5156.7	3570.1	2550.7	2325.4	2236.4	2078.6	1911.5	1768.9	1615.7	1597.3
47.5°	6215.9	5628.8	3490.4	2323.9	2110.8	2029.6	1887.0	1732.1	1563.5	1414.9	1398.0
50°	7184.6	6306.3	3416.8	2103.1	1899.2	1837.9	1724.5	1566.6	1396.5	1276.9	1269.3
52.5°	8417.1	7227.6	3386.2	1890.1	1701.5	1678.5	1588.0	1440.9	1279.9	1178.8	1171.2
55°	9832.0	8329.8	3386.2	1686.2	1528.3	1536.0	1473.1	1336.7	1197.2	1106.8	1097.6
57.5°	11276.0	9445.7	3324.9	1497.6	1381.2	1413.4	1373.5	1253.9	1128.2	1034.7	1019.4
60°	12606.6	10380.8	3076.5	1325.9	1250.8	1301.4	1275.4	1172.7	1019.4	941.2	929.0
62.5°	13629.0	10908.0	2598.3	1189.5	1143.5	1201.8	1188.0	1065.4	999.5	967.3	956.5
65°	14141.0	10822.3	1986.7	1068.5	1053.1	1143.5	1114.4	1109.8	1057.7	1020.9	1008.6
67.5°	13826.7	10083.4	1440.9	979.5	1001.0	1089.9	1201.8	1220.2	1123.6	1051.5	1039.4
70°	12448.6	8746.7	1073.1	895.2	935.1	1091.4	1370.4	1276.9	1102.2	1017.8	1004.1
72.5°	9470.2	6522.5	832.4	806.3	849.2	1099.1	1445.6	1250.8	1040.8	1125.1	1115.9
75°	5415.7	3580.8	668.3	697.5	741.9	1027.0	1407.2	1183.4	993.3	1033.2	1033.2
77.5°	2064.8	1376.6	551.9	590.2	596.3	896.8	1345.9	1178.8	945.8	922.8	841.5
80°	715.9	538.0	456.8	469.0	461.4	797.1	1290.7	1025.5	774.1	692.9	669.8
82.5°	292.7	268.2	361.7	346.4	328.0	619.3	1042.3	838.4	633.0	559.5	553.4
85°	127.2	170.1	239.1	210.0	190.0	429.2	835.5	709.7	534.9	461.4	459.9
87.5°	26.0	64.4	101.2	95.0	98.1	286.7	593.3	504.3	378.6	283.6	222.2
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)