

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: P965045

Luminaire Tested: **NAV-SB3D-727-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965045
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-SB3D-727-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28970.6 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

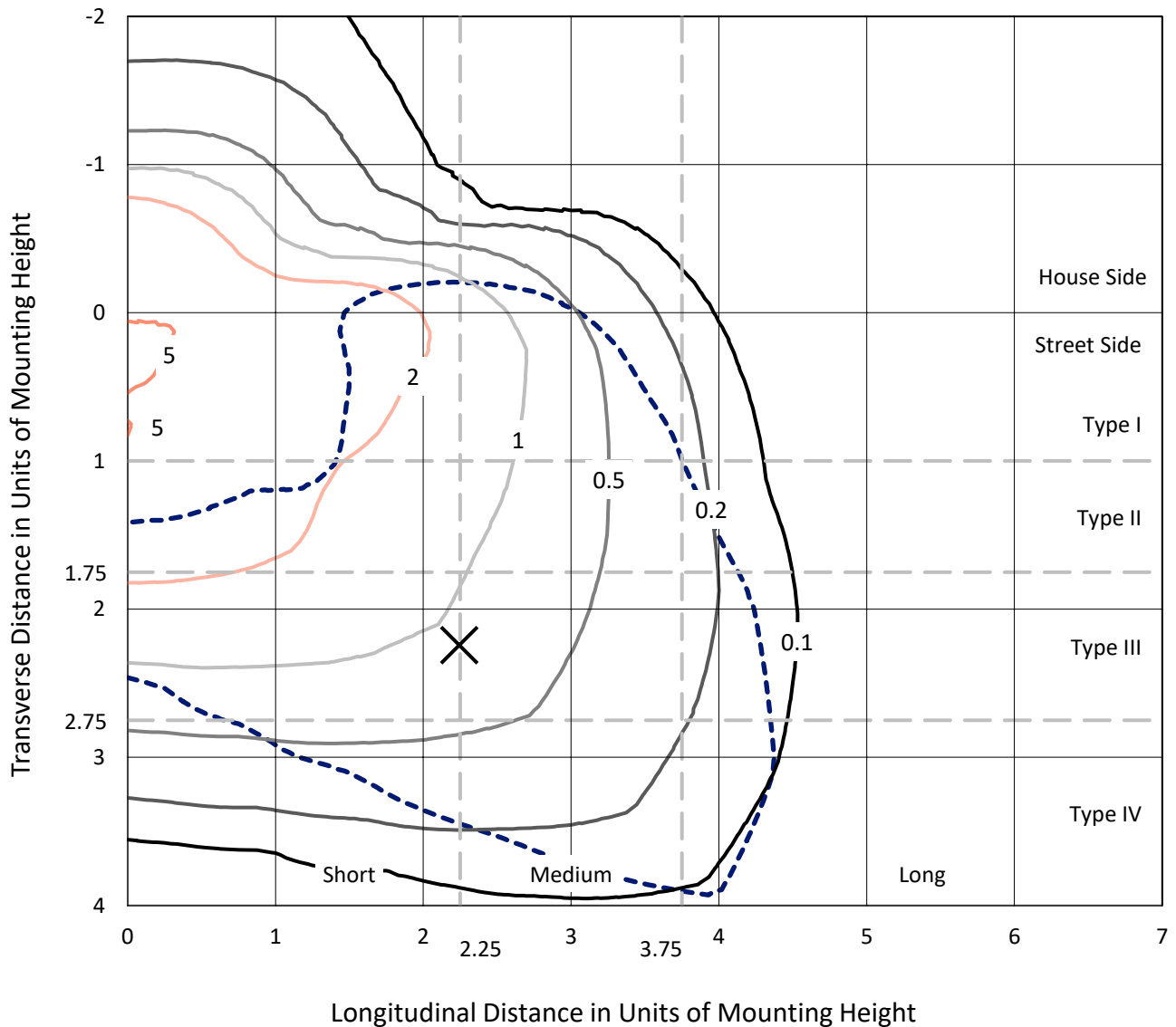
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

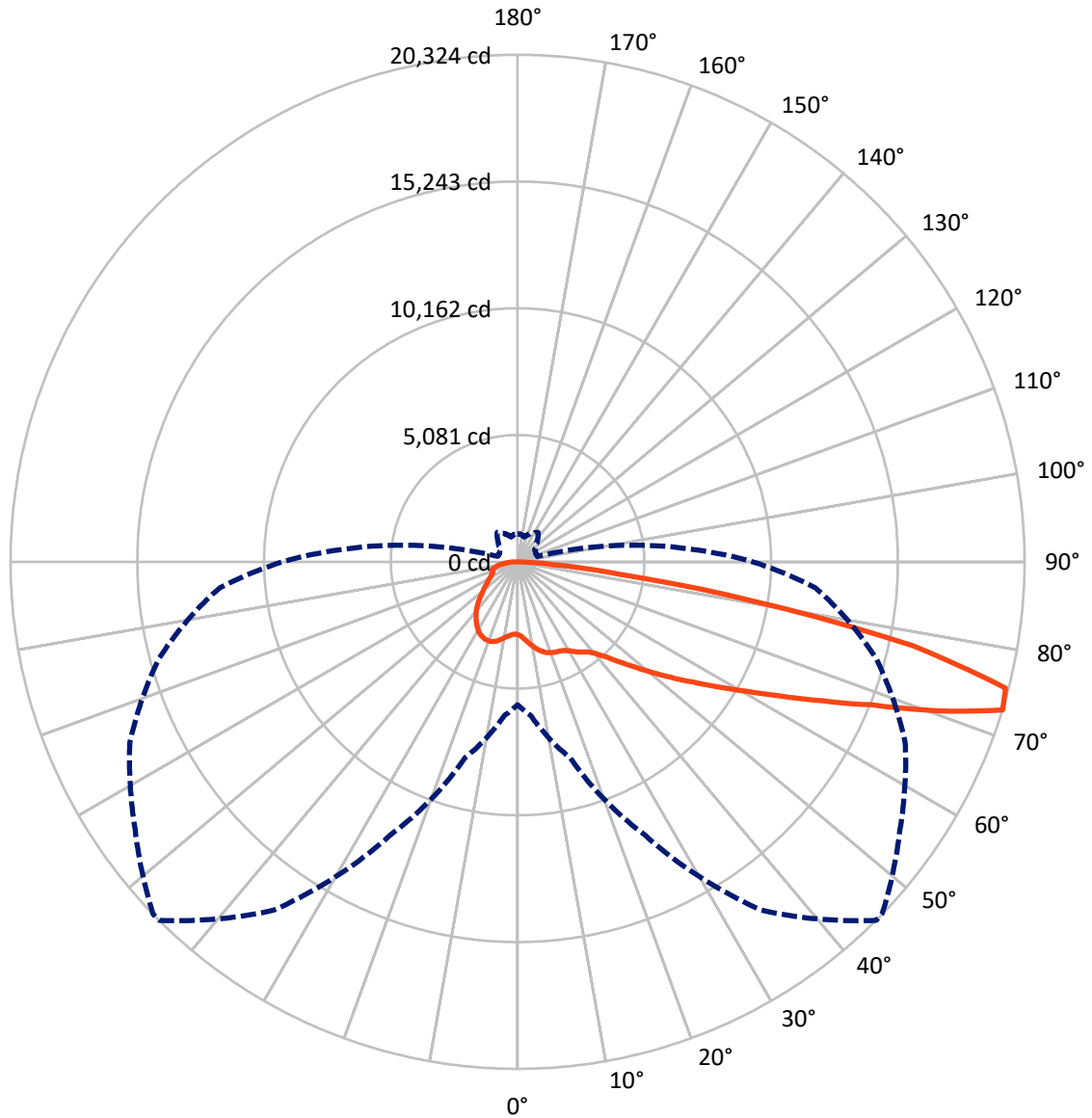
× Max cd
 - - - 1/2 Max cd



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



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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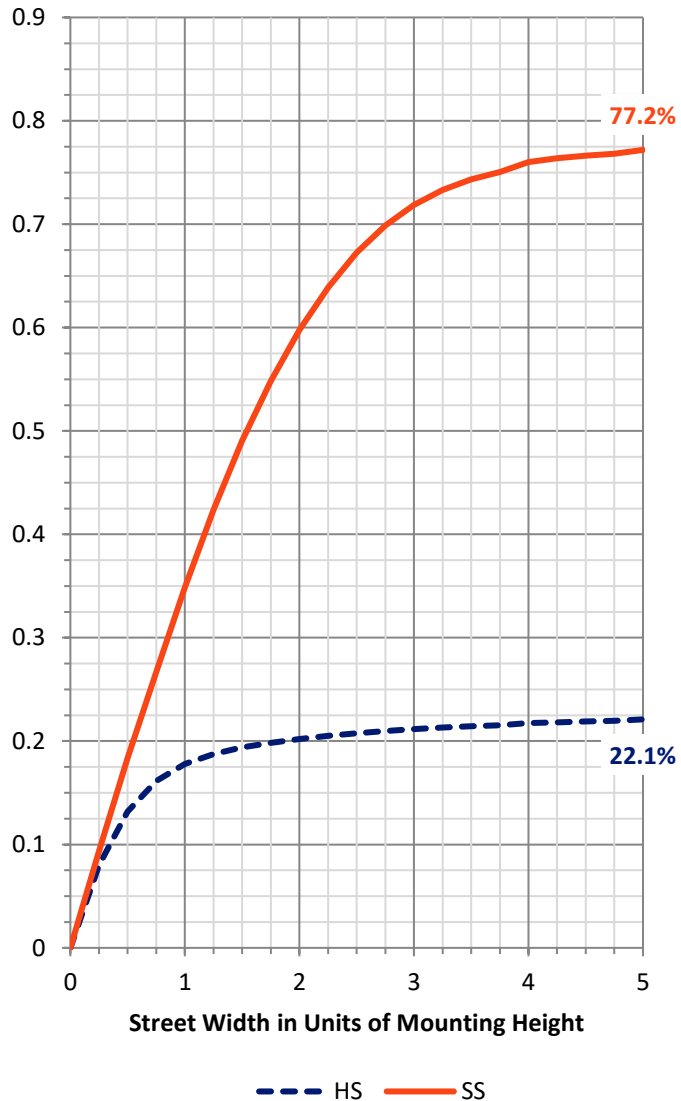
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6549.3	0.0	6549.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	22421.3	0.0	22421.3
	% Fixture	77.4	0.0	77.4
Total	Lumens	28970.6	0.0	28970.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.5	1.0
10°-20°	991.8	3.4
20°-30°	1725.2	6.0
30°-40°	2473.2	8.5
40°-50°	3482.4	12.0
50°-60°	5334.1	18.4
60°-70°	7727.2	26.7
70°-80°	6170.6	21.3
80°-90°	768.5	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°	28970.6	100.0
0°-180°	28970.6	100.0

Coefficient of Utilization

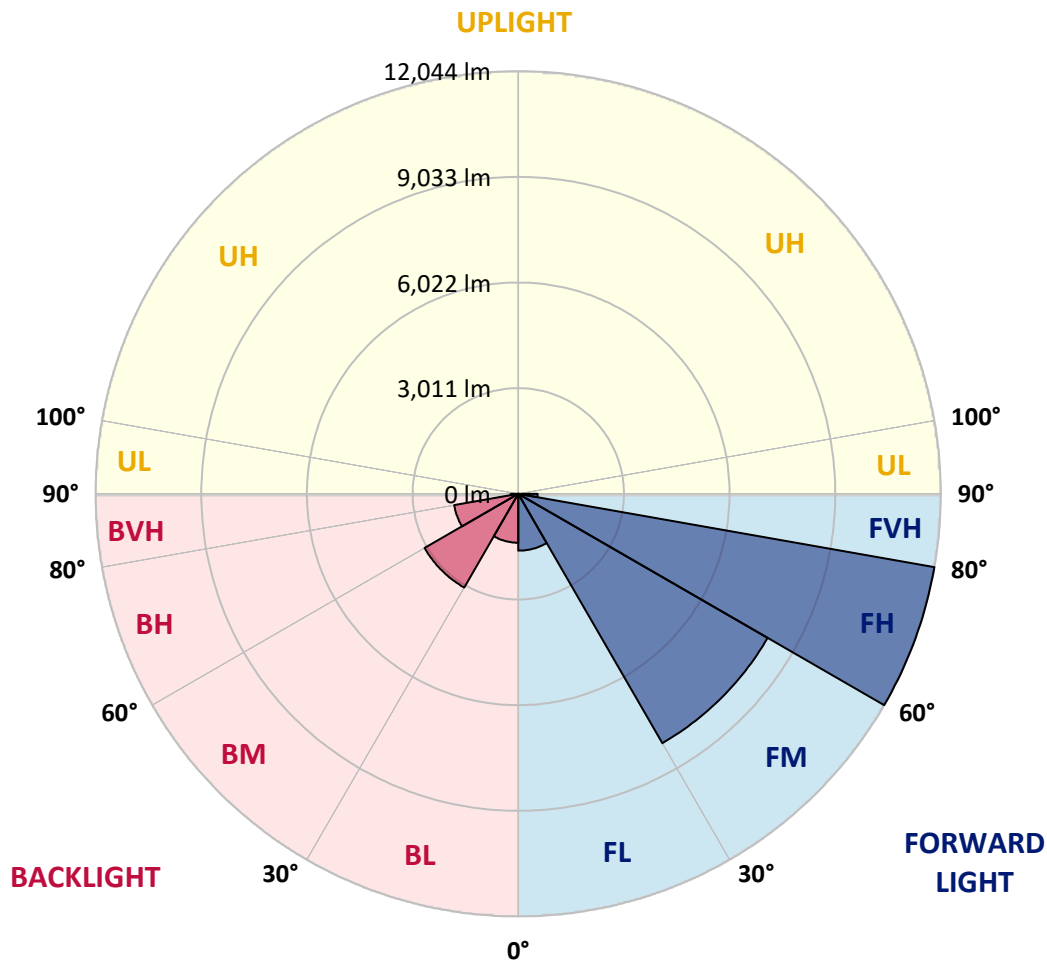


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1620.1	5.6			
FM (30°-60°)	8206.0	28.3			
FH (60°-80°)	12043.9	41.6			G5
FVH (80°-90°)	551.3	1.9			G4/750
BL (0°-30°)	1394.4	4.8	B3/2500		
BM (30°-60°)	3083.8	10.6	B3/5000		
BH (60°-80°)	1853.9	6.4	B3/2500		G3/2500
BVH (80°-90°)	217.2	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°	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6
2.5°	3037.1	3056.9	3038.5	3021.8	3014.1	2994.3	2992.8	2980.6	2972.9	2951.6	2945.4
5°	3249.1	3275.1	3244.6	3211.0	3180.5	3131.7	3125.5	3090.5	3050.8	3005.0	2979.1
7.5°	3488.8	3511.6	3476.6	3426.2	3372.8	3291.9	3290.4	3226.3	3163.7	3085.9	3041.6
10°	3697.9	3728.3	3681.1	3612.4	3545.3	3453.6	3443.0	3369.7	3290.4	3189.6	3122.5
12.5°	3882.5	3903.9	3858.1	3774.2	3696.4	3604.7	3591.0	3510.1	3421.7	3307.2	3221.7
15°	4029.1	4056.5	3995.4	3905.5	3823.0	3732.9	3720.7	3647.5	3559.0	3438.4	3328.5
17.5°	4125.2	4148.1	4085.4	3984.8	3905.5	3830.6	3821.5	3760.4	3682.6	3560.5	3443.0
20°	4161.8	4186.2	4120.6	4018.3	3945.1	3887.1	3882.5	3838.2	3784.8	3673.4	3554.4
22.5°	4198.4	4221.4	4135.9	4029.1	3964.9	3928.3	3926.8	3897.8	3876.4	3784.8	3668.9
25°	4346.5	4352.6	4238.1	4084.0	3992.4	3960.4	3958.9	3957.3	3966.4	3894.7	3792.5
27.5°	4474.6	4473.1	4375.4	4230.5	4088.5	4021.4	4019.8	4035.1	4064.1	4004.6	3920.6
30°	4662.4	4645.6	4529.6	4378.5	4248.8	4145.0	4135.9	4122.1	4145.0	4097.7	4048.9
32.5°	5060.7	5007.3	4819.5	4551.0	4381.6	4302.2	4290.0	4204.5	4213.7	4184.7	4160.3
35°	5631.5	5561.2	5311.0	4877.6	4546.4	4433.4	4427.4	4319.0	4300.7	4274.8	4283.9
37.5°	6310.6	6223.6	5932.1	5350.7	4830.2	4586.1	4576.9	4479.2	4404.4	4377.0	4428.9
40°	6992.8	6882.9	6641.8	5927.6	5248.4	4841.0	4812.0	4663.9	4578.5	4532.7	4642.5
42.5°	7655.1	7563.6	7357.6	6574.7	5764.3	5213.4	5149.2	4895.9	4831.7	4789.0	4987.4
45°	8241.2	8158.8	8007.7	7266.0	6368.6	5720.0	5657.4	5243.8	5224.0	5224.0	5510.9
47.5°	8717.3	8699.1	8538.8	7971.0	7081.3	6296.9	6188.5	5727.6	5781.0	5863.4	6254.1
50°	9245.4	9195.1	9024.1	8665.5	7919.2	6957.7	6869.1	6321.3	6521.3	6747.1	7328.5
52.5°	9730.7	9758.2	9567.5	9388.9	8865.4	7694.8	7539.2	7021.8	7453.7	7827.6	8587.7
55°	10229.8	10231.2	10177.8	10153.4	9857.4	8509.8	8338.9	7864.2	8551.0	9015.0	10055.8
57.5°	10698.2	10701.3	10780.7	10995.9	11008.1	9449.9	9256.1	8898.9	9770.4	10243.5	11569.7
60°	11116.4	11137.9	11354.5	11858.1	12020.0	10527.4	10344.2	10121.4	11030.9	11507.2	13161.5
62.5°	11256.9	11334.7	11816.9	12532.7	13019.6	11849.0	11668.9	11536.2	12355.7	12798.3	14492.3
65°	11018.7	11197.3	12129.8	13089.8	14048.1	13419.4	13240.8	13095.8	13732.2	14148.9	15585.0
67.5°	10434.3	10664.7	12111.5	13674.2	15296.6	15308.8	15142.4	14802.1	15208.0	15368.3	15940.6
70°	8894.3	9239.2	11044.7	13892.5	16729.6	17892.5	17732.3	16856.3	16680.7	15905.5	14939.5
72.5°	5730.7	6194.6	8132.9	12096.2	17048.6	20323.7	20314.6	18710.6	17146.2	14861.6	11981.7
75°	2090.8	2374.7	3778.8	7592.6	14310.6	20200.1	20259.6	18393.1	15652.2	11479.7	7464.4
77.5°	761.6	833.3	1233.1	2918.0	8801.3	16207.7	16331.3	14704.4	11140.8	5761.2	2957.6
80°	399.9	439.5	631.8	1132.4	3771.1	9625.4	9819.2	8738.7	5236.2	1735.2	886.7
82.5°	221.3	239.6	354.0	615.0	1698.6	4116.0	4232.0	3452.1	1842.0	735.6	366.2
85°	119.0	126.7	166.4	335.8	830.2	1426.9	1459.0	1031.7	734.1	431.9	177.0
87.5°	35.1	42.7	54.9	106.8	325.0	320.5	328.1	204.5	290.0	218.2	58.0
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°	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6	2922.6
2.5°	2936.3	2931.7	2914.9	2907.3	2898.2	2896.6	2904.2	2905.8	2907.3	2908.8	2914.9
5°	2963.8	2948.5	2933.2	2924.1	2927.2	2928.6	2943.9	2954.7	2962.2	2968.4	2971.4
7.5°	3017.2	3005.0	2979.1	2977.5	2982.1	2995.9	3015.7	3040.0	3053.8	3064.5	3067.5
10°	3096.5	3073.7	3043.1	3047.7	3056.9	3076.7	3117.9	3137.7	3160.7	3180.5	3175.9
12.5°	3177.4	3157.6	3122.5	3125.5	3140.8	3175.9	3215.6	3240.0	3255.3	3270.6	3276.6
15°	3282.8	3247.6	3209.5	3209.5	3237.0	3275.1	3293.4	3313.3	3322.4	3339.2	3345.3
17.5°	3391.1	3345.3	3295.0	3291.9	3325.5	3343.8	3354.5	3357.5	3360.6	3378.9	3385.0
20°	3499.5	3449.1	3377.4	3371.2	3378.9	3375.8	3374.3	3371.2	3375.8	3398.7	3407.9
22.5°	3606.3	3548.2	3449.1	3421.7	3400.2	3371.2	3369.7	3368.3	3371.2	3394.2	3409.5
25°	3731.4	3661.2	3528.5	3446.0	3374.3	3334.6	3339.2	3340.8	3343.8	3362.1	3386.5
27.5°	3867.2	3789.4	3601.7	3438.4	3308.7	3281.2	3273.5	3278.2	3288.8	3317.8	3346.8
30°	4003.0	3911.5	3668.9	3407.9	3226.3	3188.2	3163.7	3174.4	3207.9	3237.0	3269.0
32.5°	4126.6	4035.1	3722.3	3340.8	3120.9	3061.5	3029.4	3043.1	3076.7	3087.4	3125.5
35°	4271.7	4167.9	3745.1	3233.9	3006.5	2914.9	2872.3	2852.4	2869.2	2858.5	2892.0
37.5°	4433.4	4325.1	3742.1	3093.4	2872.3	2766.9	2707.3	2632.6	2597.5	2560.9	2583.7
40°	4673.1	4517.4	3705.5	2924.1	2705.9	2609.8	2502.8	2376.3	2296.8	2225.1	2229.7
42.5°	4999.6	4784.5	3638.3	2737.9	2518.1	2428.1	2283.1	2135.1	2009.9	1890.9	1880.3
45°	5486.5	5133.9	3554.4	2539.5	2315.2	2226.6	2069.5	1903.1	1761.2	1608.5	1590.3
47.5°	6188.5	5604.0	3475.1	2313.6	2101.5	2020.6	1878.7	1724.6	1556.7	1408.7	1391.8
50°	7153.1	6278.5	3401.8	2093.9	1890.9	1829.8	1716.9	1559.7	1390.3	1271.3	1263.6
52.5°	8380.1	7195.8	3371.2	1881.7	1694.0	1671.2	1581.1	1434.6	1274.4	1173.6	1165.9
55°	9788.8	8293.1	3371.2	1678.7	1521.6	1529.2	1466.7	1330.8	1191.9	1101.9	1092.8
57.5°	11226.3	9404.1	3310.2	1491.1	1375.0	1407.1	1367.5	1248.3	1123.2	1030.1	1014.9
60°	12551.0	10335.1	3063.0	1320.1	1245.4	1295.7	1269.8	1167.5	1014.9	937.1	924.9
62.5°	13569.0	10860.1	2586.8	1184.3	1138.5	1196.5	1182.7	1060.7	995.1	963.0	952.3
65°	14078.7	10774.6	1977.8	1063.7	1048.5	1138.5	1109.5	1104.9	1053.1	1016.4	1004.2
67.5°	13765.9	10039.0	1434.6	975.2	996.6	1085.1	1196.5	1214.8	1118.7	1046.9	1034.7
70°	12393.8	8708.2	1068.3	891.2	930.9	1086.6	1364.4	1271.3	1097.3	1013.3	999.6
72.5°	9428.6	6493.8	828.7	802.8	845.5	1094.3	1439.2	1245.4	1036.3	1120.2	1111.0
75°	5391.9	3565.1	665.4	694.4	738.6	1022.5	1401.0	1178.1	988.9	1028.6	1028.6
77.5°	2055.7	1370.5	549.4	587.5	593.7	892.8	1340.0	1173.6	941.7	918.7	837.8
80°	712.7	535.7	454.8	467.0	459.4	793.6	1285.0	1021.0	770.7	689.8	667.0
82.5°	291.5	267.1	360.2	344.9	326.6	616.5	1037.8	834.8	630.3	557.1	550.9
85°	126.7	169.4	238.1	209.1	189.2	427.3	831.8	706.6	532.6	459.4	457.9
87.5°	25.9	64.1	100.8	94.6	97.7	285.4	590.6	502.1	377.0	282.4	221.3
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)