

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: P965001

Luminaire Tested: **NAV-SB3D-722-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18878.4 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

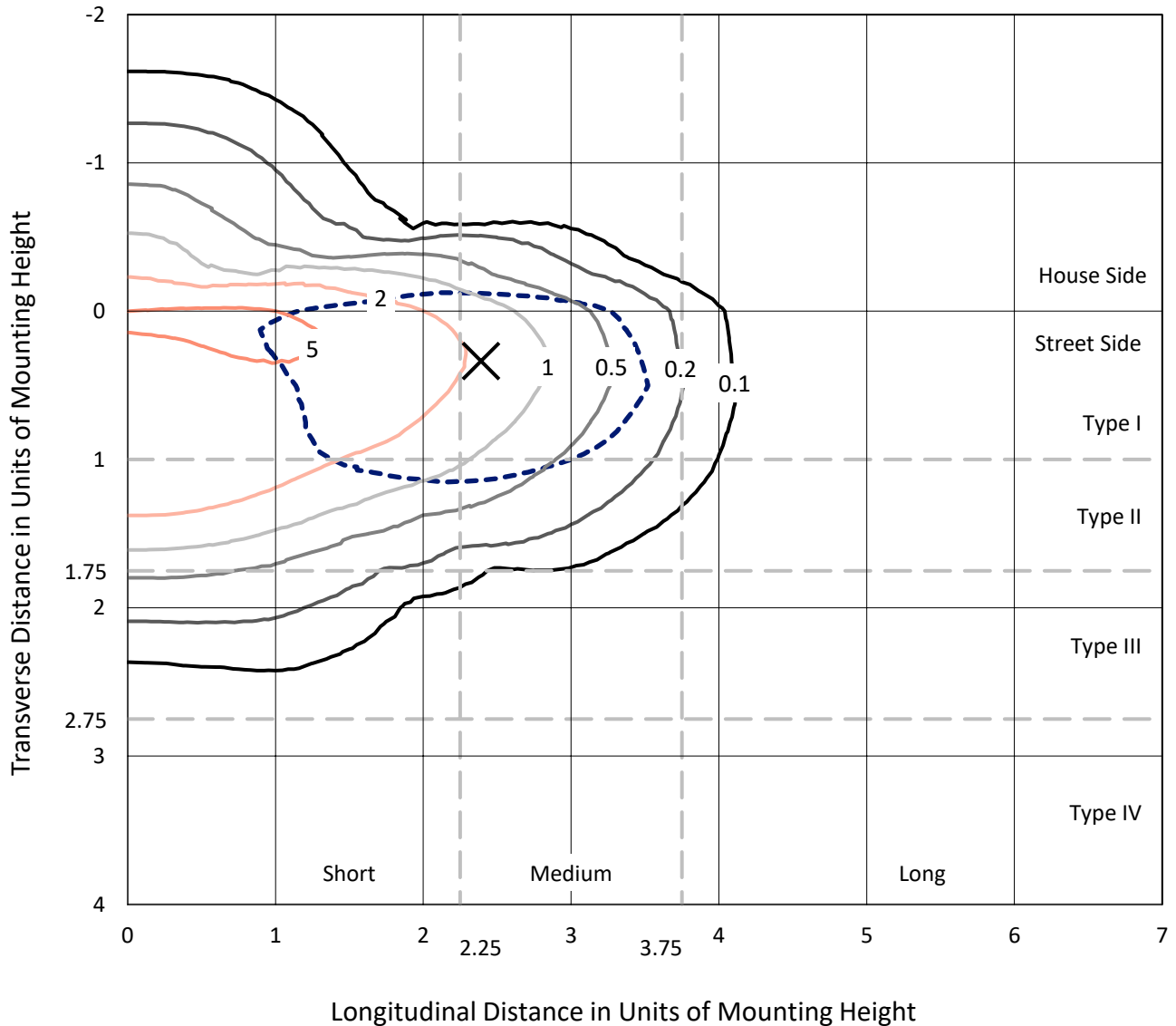
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

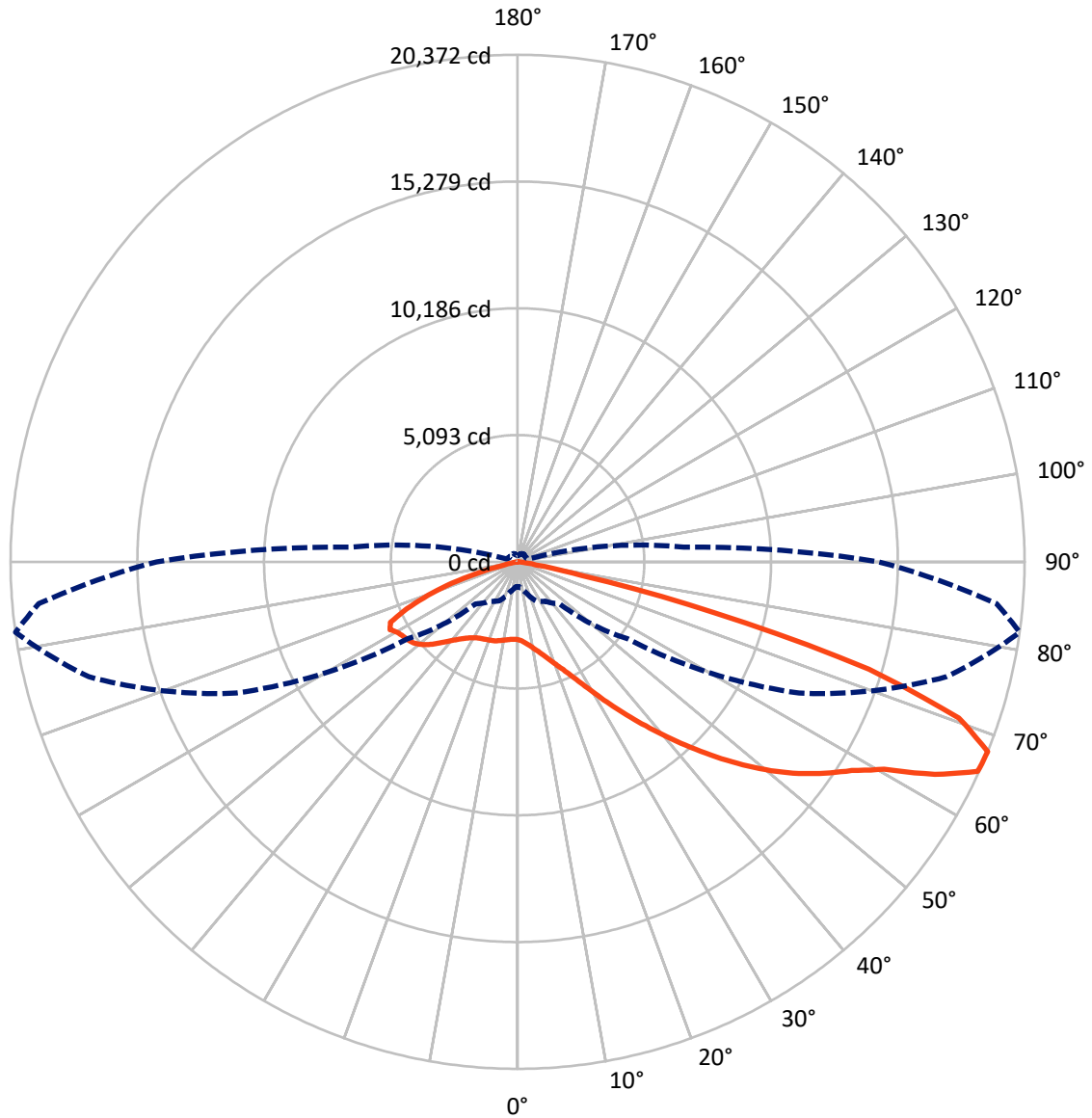
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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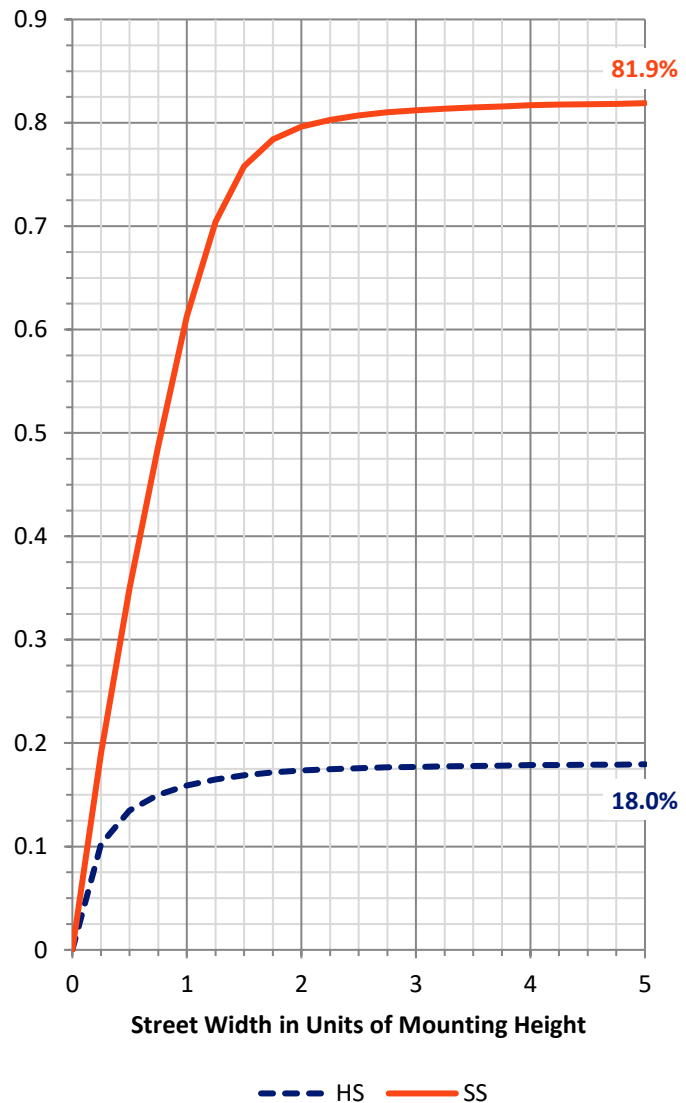
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3419.7	0.0	3419.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	15458.8	0.0	15458.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	18878.4	0.0	18878.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.6	1.5
10°-20°	724.1	3.8
20°-30°	1159.7	6.1
30°-40°	2050.8	10.9
40°-50°	3593.1	19.0
50°-60°	4792.2	25.4
60°-70°	4461.3	23.6
70°-80°	1712.2	9.1
80°-90°	106.4	0.6
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°	18878.4	100.0
0°-180°	18878.4	100.0

Coefficient of Utilization



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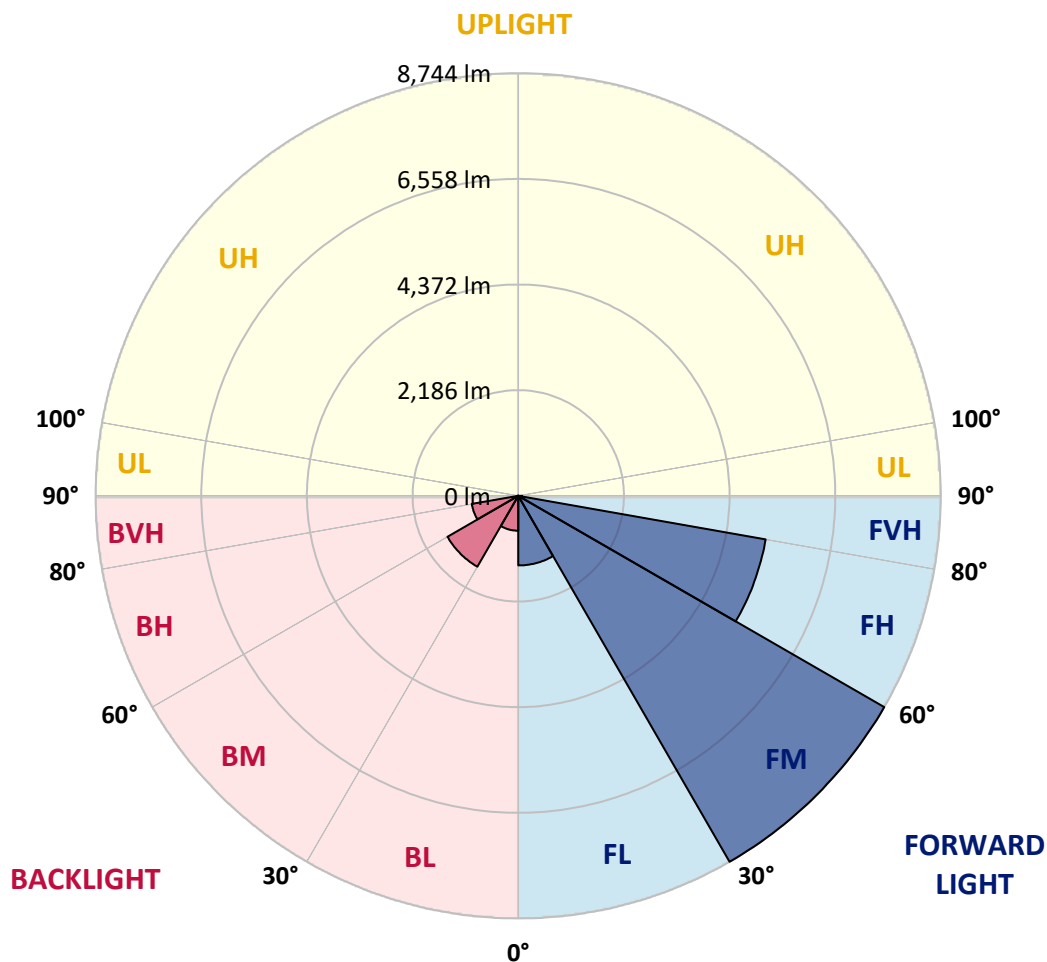
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1440.2	7.6			
FM (30°-60°)	8743.7	46.3			
FH (60°-80°)	5197.5	27.5			G3/7500
FVH (80°-90°)	77.3	0.4			G1/100
BL (0°-30°)	722.2	3.8	B2/1000		
BM (30°-60°)	1692.4	9.0	B2/2500		
BH (60°-80°)	976.0	5.2	B2/1000		G2/1000
BVH (80°-90°)	29.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5
2.5°	3305.6	3324.6	3313.7	3308.3	3298.8	3285.2	3274.4	3240.3	3205.0	3181.9	3173.7
5°	3372.1	3391.2	3389.9	3395.3	3402.1	3406.2	3403.4	3365.4	3315.1	3275.7	3252.5
7.5°	3315.1	3336.9	3354.5	3381.7	3429.2	3479.6	3504.1	3495.9	3444.2	3389.9	3361.3
10°	3153.3	3176.5	3218.6	3282.5	3383.0	3491.8	3582.9	3625.0	3592.3	3532.6	3493.1
12.5°	2857.1	2880.1	2963.1	3101.6	3270.3	3459.2	3633.1	3746.0	3754.1	3694.3	3648.1
15°	2524.1	2547.1	2635.5	2809.4	3066.4	3369.5	3660.4	3873.7	3945.7	3894.1	3838.4
17.5°	2317.4	2337.8	2404.4	2544.5	2812.2	3190.0	3650.8	4009.6	4174.1	4133.3	4066.7
20°	2254.9	2272.6	2303.9	2401.7	2624.6	3003.9	3588.3	4137.4	4420.1	4397.0	4322.2
22.5°	2321.5	2337.8	2347.4	2390.8	2530.8	2881.5	3509.5	4267.9	4705.6	4708.2	4617.2
25°	2475.1	2491.4	2480.5	2507.8	2568.9	2843.5	3479.6	4421.4	5064.4	5094.2	4991.0
27.5°	2727.9	2729.3	2703.4	2702.1	2711.6	2900.5	3510.8	4586.0	5517.0	5572.7	5445.0
30°	3234.9	3214.5	3115.3	3007.9	2959.0	3071.8	3597.9	4780.3	6051.2	6150.4	5990.0
32.5°	4016.5	3986.5	3804.4	3547.5	3289.2	3347.8	3754.1	5001.9	6632.9	6812.4	6616.6
35°	4864.5	4856.4	4666.1	4284.2	3833.0	3740.5	4008.3	5292.7	7267.7	7553.1	7320.7
37.5°	5652.9	5648.9	5540.1	5090.3	4541.1	4288.3	4416.0	5673.3	7947.2	8360.4	8085.9
40°	6373.2	6385.5	6276.8	5874.5	5321.3	4991.0	4970.6	6143.5	8703.0	9239.9	8913.6
42.5°	6995.8	7009.4	6899.3	6601.6	6092.0	5768.5	5651.5	6719.9	9441.0	10184.5	9798.5
45°	7418.5	7502.8	7486.5	7248.6	6883.0	6547.3	6469.8	7442.9	10282.4	11186.2	10733.6
47.5°	7538.2	7615.6	7737.9	7770.5	7547.7	7217.3	7309.8	8314.2	11133.2	12189.3	11674.1
50°	7243.2	7315.2	7569.4	7907.9	8062.8	7960.9	8126.6	9248.0	12004.5	13189.7	12597.0
52.5°	6661.5	6734.9	7055.6	7591.2	8223.2	8543.9	8946.3	10168.2	12848.5	14137.0	13471.1
55°	5820.1	5897.5	6309.4	6915.6	7917.3	8784.6	9630.0	11087.0	13621.9	14989.3	14259.4
57.5°	4675.6	4732.7	5160.9	6009.1	7148.0	8545.3	10134.2	12090.1	14350.4	15826.5	15041.0
60°	3047.3	3097.7	3595.1	4541.1	5873.1	7746.1	10234.8	13208.7	15318.2	16915.3	16094.2
62.5°	2026.5	2060.6	2355.4	3050.1	4136.1	6211.5	9646.3	14101.7	16737.2	18810.0	17900.7
65°	1390.4	1424.4	1719.4	2203.2	2672.2	4108.8	7954.0	13983.5	18023.0	20314.6	19239.5
67.5°	992.2	1020.8	1270.9	1727.5	1934.2	2386.7	5391.9	12472.0	17838.2	20371.7	19311.5
70°	710.8	727.1	933.8	1345.6	1537.3	1434.0	2998.4	9538.9	15618.5	18811.3	17840.8
72.5°	497.4	502.9	648.3	1024.8	1238.2	1046.6	1427.2	6359.7	11812.8	14765.0	13831.2
75°	337.1	343.9	436.3	751.6	993.5	799.2	755.7	3410.3	6934.6	8172.8	7326.1
77.5°	206.6	209.3	281.4	513.7	743.4	609.0	486.6	1444.8	2683.0	2634.1	2245.4
80°	116.8	116.8	179.4	319.4	507.0	392.8	341.1	614.4	849.5	746.2	657.8
82.5°	65.3	66.6	130.5	198.4	335.7	232.5	187.6	284.0	367.0	324.8	282.7
85°	27.2	29.9	80.2	93.8	160.4	115.5	76.2	119.6	135.9	121.0	88.4
87.5°	2.8	4.1	24.5	17.6	19.1	23.1	10.9	23.1	19.1	19.1	13.6
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°	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5	3127.5
2.5°	3147.9	3127.5	3075.8	3016.1	2937.2	2899.2	2847.6	2812.2	2782.3	2785.0	2757.9
5°	3209.1	3157.4	3041.9	2897.8	2718.4	2590.6	2454.7	2360.9	2284.8	2268.5	2231.8
7.5°	3293.3	3211.8	3009.3	2749.7	2446.6	2216.9	2011.7	1879.7	1786.0	1756.1	1726.2
10°	3402.1	3283.8	2967.2	2563.4	2127.2	1835.0	1614.7	1511.5	1447.5	1425.8	1409.5
12.5°	3528.5	3366.7	2911.4	2336.5	1798.3	1516.9	1376.9	1325.2	1304.8	1298.1	1294.0
15°	3687.5	3470.0	2827.2	2067.3	1519.6	1322.5	1262.7	1255.9	1258.6	1255.9	1254.5
17.5°	3876.4	3582.9	2689.9	1790.1	1332.0	1223.2	1201.5	1206.9	1213.8	1212.4	1209.7
20°	4083.1	3694.3	2514.5	1544.1	1204.3	1152.6	1140.4	1145.8	1151.3	1148.5	1147.2
22.5°	4318.2	3813.9	2320.2	1352.4	1118.6	1087.3	1073.8	1075.1	1075.1	1069.7	1066.9
25°	4599.6	3945.7	2116.3	1216.5	1053.4	1028.9	1012.6	1007.2	999.0	982.7	980.0
27.5°	4935.3	4085.8	1920.5	1121.4	1001.7	978.7	959.6	946.0	925.6	898.4	895.7
30°	5313.1	4255.7	1754.7	1061.5	960.9	937.9	916.1	895.7	865.8	831.8	829.1
32.5°	5757.5	4437.8	1633.7	1022.1	924.2	899.7	873.9	849.5	816.9	782.9	784.2
35°	6287.7	4658.0	1563.1	995.0	895.7	863.0	834.6	807.4	782.9	753.0	750.3
37.5°	6862.6	4891.8	1541.3	981.3	876.7	826.4	793.8	774.7	772.0	754.4	753.0
40°	7491.9	5169.1	1557.7	973.2	856.3	791.1	755.7	751.6	758.4	727.1	728.6
42.5°	8157.9	5498.0	1584.9	963.7	827.8	755.7	721.7	721.7	716.3	672.8	672.8
45°	8878.3	5877.1	1612.0	940.5	793.8	720.4	694.5	685.0	661.9	619.8	618.5
47.5°	9604.1	6263.2	1632.4	898.4	753.0	690.4	667.4	645.6	611.6	573.6	572.3
50°	10293.3	6609.8	1610.7	835.9	706.7	661.9	637.4	607.5	570.8	545.0	541.0
52.5°	10909.0	6910.1	1518.2	762.5	657.8	632.0	610.3	579.0	549.1	521.9	519.3
55°	11444.4	7153.5	1355.2	693.2	614.4	606.2	584.5	545.0	504.3	481.1	478.5
57.5°	11958.3	7338.3	1151.3	636.1	574.9	577.7	545.0	509.7	471.6	447.2	444.4
60°	12641.9	7585.7	944.6	583.1	532.8	541.0	505.6	479.8	432.2	401.0	396.9
62.5°	13734.7	7970.4	750.3	517.8	483.9	486.6	471.6	440.3	383.2	346.6	343.9
65°	14601.8	7828.9	591.2	447.2	428.1	432.2	432.2	398.2	337.1	295.0	290.9
67.5°	14504.1	6703.6	471.6	377.8	375.2	377.8	387.3	358.9	299.0	265.1	259.6
70°	13361.0	5332.2	377.8	314.0	326.3	319.4	346.6	327.6	269.2	235.1	231.0
72.5°	10902.1	3841.1	288.1	259.6	250.1	261.0	312.6	295.0	224.3	186.2	182.1
75°	6370.6	2049.7	214.7	205.2	180.8	217.5	277.3	251.4	171.3	137.2	133.2
77.5°	2074.2	714.9	157.6	150.9	134.6	175.4	236.5	212.1	140.0	108.8	104.7
80°	556.0	216.1	107.4	99.2	87.0	130.5	187.6	168.5	100.6	70.7	69.3
82.5°	222.9	91.0	62.5	55.8	47.6	89.7	148.1	135.9	74.7	44.9	44.9
85°	72.1	29.9	23.1	17.6	21.7	55.8	88.4	92.5	53.0	23.1	17.6
87.5°	9.5	4.1	4.1	5.4	4.1	9.5	27.2	25.8	15.0	2.8	0.0
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)