

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: P969218

Luminaire Tested: **NAV-SB5D-722-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36851.8 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G4

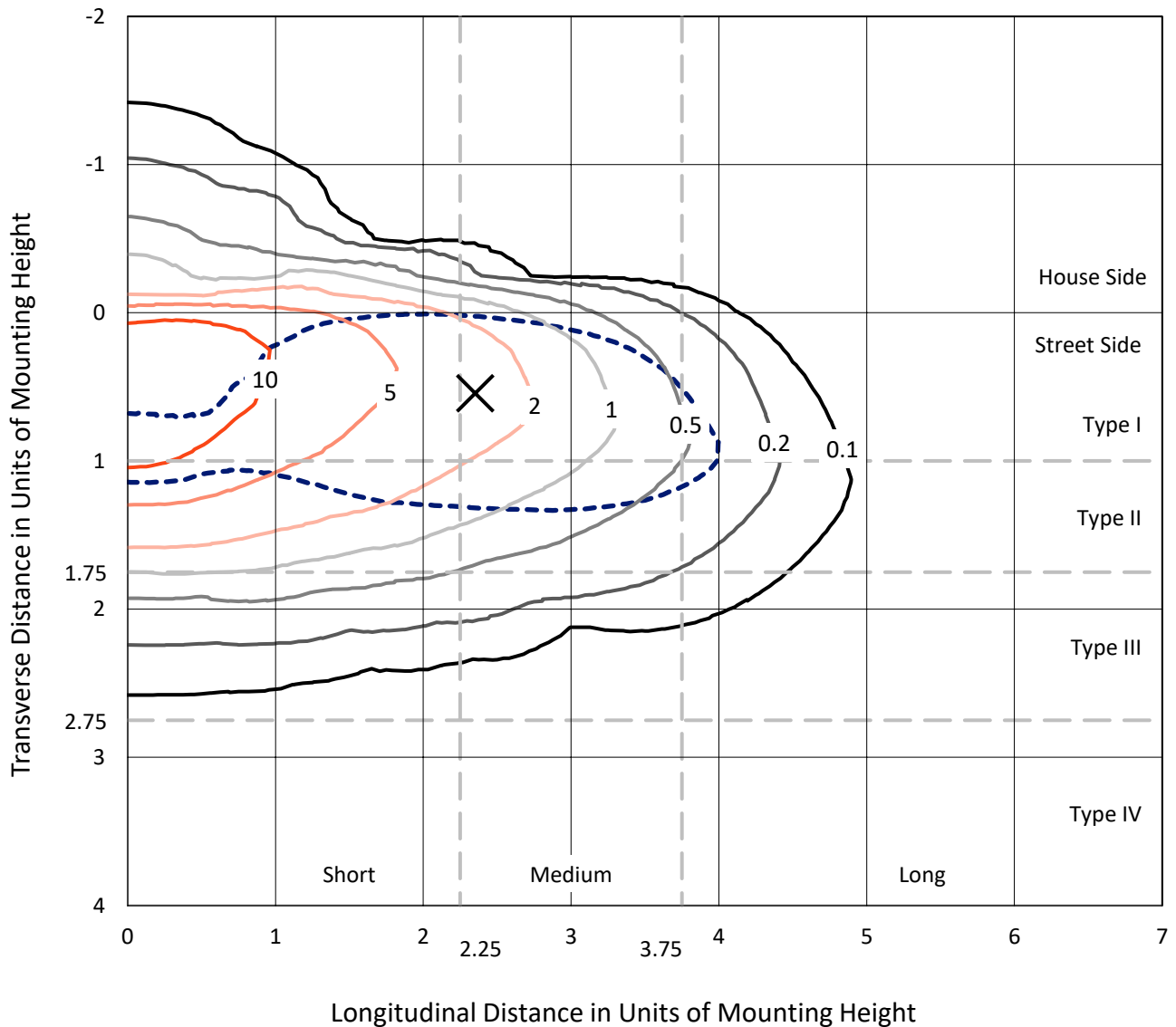
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

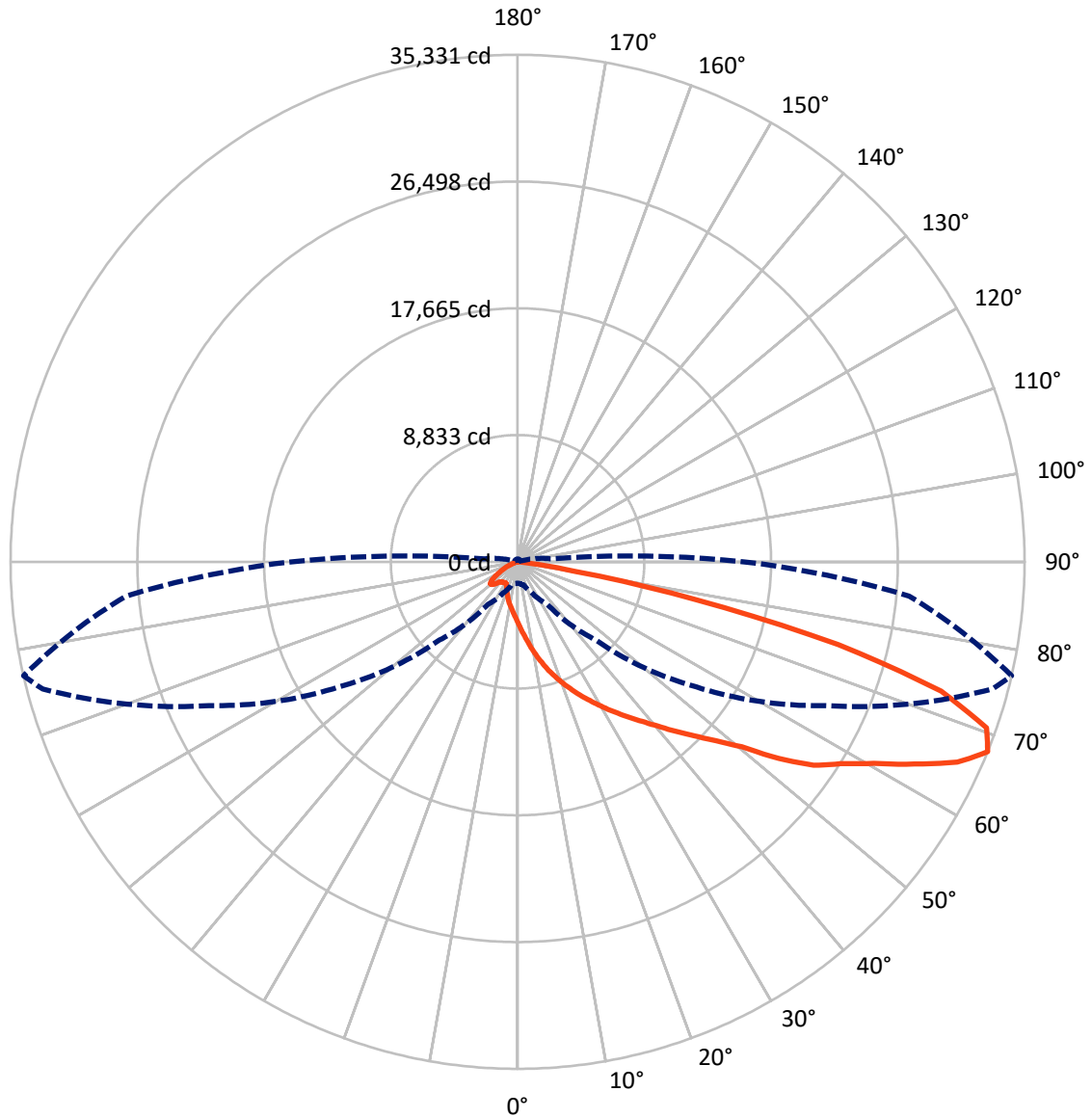
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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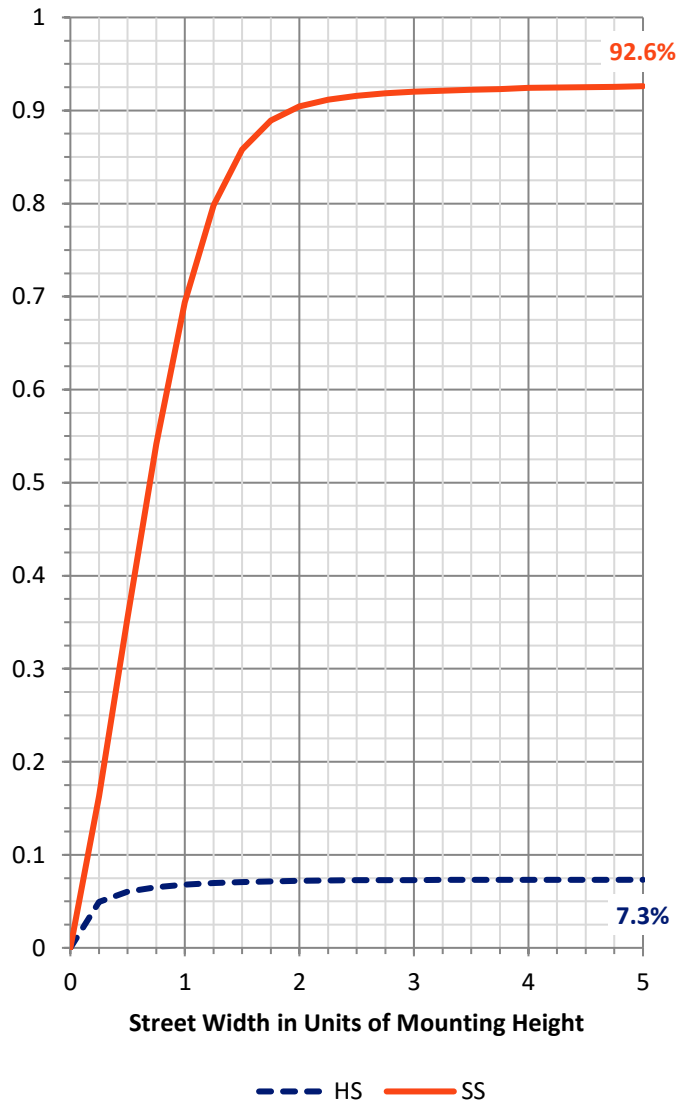
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2711.2	0.0	2711.2
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	34140.6	0.0	34140.6
	% Fixture	92.6	0.0	92.6
Total	Lumens	36851.8	0.0	36851.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.7	1.2
10°-20°	1518.9	4.1
20°-30°	2931.1	8.0
30°-40°	5088.5	13.8
40°-50°	7388.2	20.0
50°-60°	8484.4	23.0
60°-70°	7366.0	20.0
70°-80°	3469.5	9.4
80°-90°	171.6	0.5
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°	36851.8	100.0
0°-180°	36851.8	100.0

Coefficient of Utilization

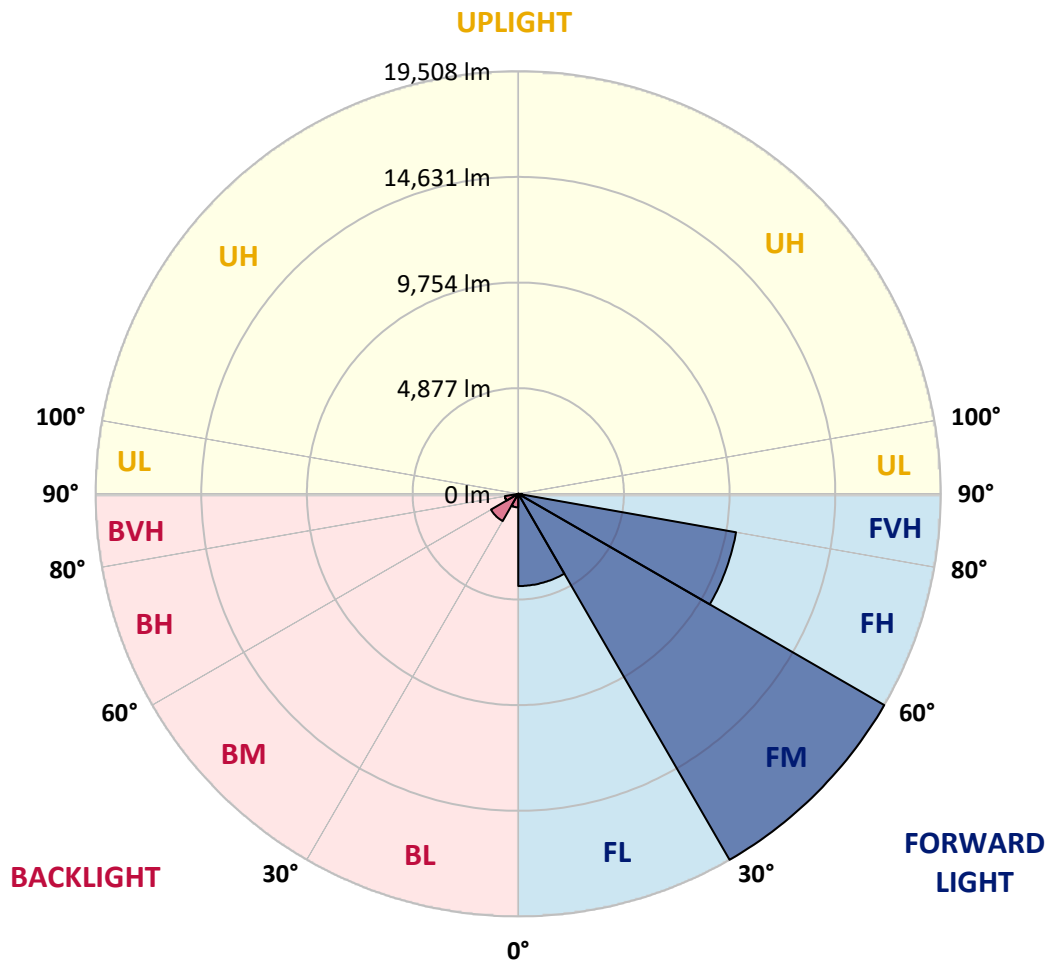


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4256.0	11.5			
FM (30°-60°)	19508.4	52.9			
FH (60°-80°)	10207.9	27.7			G4/12000
FVH (80°-90°)	168.4	0.5			G2/225
BL (0°-30°)	627.7	1.7	B2/1000		
BM (30°-60°)	1452.7	3.9	B2/2500		
BH (60°-80°)	627.7	1.7	B2/1000		G2/1000
BVH (80°-90°)	3.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5
2.5°	5883.5	5920.1	5867.4	5766.8	5615.8	5517.4	5277.0	5050.5	4798.7	4718.7	4467.0
5°	7171.8	7203.9	7144.4	7034.6	6833.2	6641.0	6325.2	5851.4	5359.4	5201.6	4755.3
7.5°	8126.1	8144.4	8121.5	8020.8	7828.6	7611.2	7258.8	6698.2	5968.2	5794.2	5110.0
10°	8812.6	8872.1	8865.2	8826.4	8698.3	8522.0	8146.7	7508.2	6650.1	6425.8	5510.5
12.5°	9268.0	9334.4	9373.3	9460.2	9453.4	9341.2	9011.7	8336.6	7329.8	7066.6	5961.3
15°	9400.8	9471.7	9620.4	9821.9	10000.3	10057.5	9826.4	9149.0	8078.0	7741.6	6423.6
17.5°	9325.2	9435.0	9613.6	9931.6	10323.0	10581.6	10556.4	9933.9	8757.7	8373.2	6876.6
20°	9492.3	9597.6	9737.1	10004.9	10460.2	10929.4	11117.0	10684.5	9432.8	9030.0	7352.6
22.5°	10416.8	10398.5	10412.3	10455.7	10728.1	11192.6	11579.3	11366.4	10101.0	9689.1	7856.1
25°	11881.4	11799.0	11659.4	11423.7	11355.1	11579.3	11982.0	11970.6	10805.9	10364.2	8371.0
27.5°	13561.1	13547.3	13220.0	12652.6	12332.2	12245.3	12437.5	12558.7	11503.8	11032.4	8888.2
30°	15169.8	15206.4	14764.7	14133.1	13545.1	13204.0	13030.1	13117.1	12213.2	11753.3	9421.4
32.5°	16570.3	16609.2	16128.7	15389.5	14661.8	14249.9	13883.7	13668.6	12986.6	12485.5	10007.2
35°	17753.4	17792.3	17240.8	16423.9	15648.1	15275.1	14860.9	14272.7	13764.7	13297.8	10659.4
37.5°	18810.6	18799.2	18060.1	17236.2	16474.2	16179.0	15961.6	15016.5	14565.7	14114.9	11382.5
40°	19435.3	19483.4	18851.8	17943.3	17204.2	16989.1	16975.3	15938.7	15490.2	15053.0	12174.2
42.5°	19618.4	19703.2	19245.4	18499.4	17829.0	17595.5	17954.8	16936.5	16565.7	16140.1	13069.1
45°	19289.0	19371.3	19163.1	18645.9	18254.5	18103.6	18796.9	17970.8	17714.5	17293.4	14078.3
47.5°	18327.8	18430.7	18481.2	18371.3	18366.7	18520.0	19552.1	19060.1	19078.4	18648.1	15247.6
50°	16467.3	16641.3	17103.5	17492.5	18094.3	18849.5	20286.7	20240.9	20616.2	20245.5	16771.7
52.5°	13085.0	13332.2	14924.9	15989.1	17341.5	18787.7	21094.5	22135.7	23314.2	22771.8	18920.5
55°	10515.2	10515.2	11810.5	13801.3	15872.3	18380.4	21446.9	23366.8	25151.8	25023.6	20433.1
57.5°	8572.4	8675.3	9501.4	11261.2	13746.4	17410.1	21664.3	24140.3	26632.4	26538.6	21911.4
60°	5290.7	5512.8	7073.4	8810.4	11327.6	15682.4	21526.9	24923.0	28428.8	28504.3	23691.7
62.5°	2979.5	3061.9	3757.5	6338.9	8808.0	13359.6	20476.6	25360.0	30726.3	31046.7	25527.1
65°	2057.3	2098.5	2366.2	3945.2	6105.4	10636.5	18423.9	25087.7	33028.5	33676.1	27083.2
67.5°	1494.3	1514.9	1681.9	2409.7	3622.6	7711.9	15206.4	23714.7	34248.2	35330.6	27380.7
70°	1148.8	1162.6	1283.8	1583.5	2139.7	4759.9	11043.9	20984.6	33364.9	34657.8	25856.6
72.5°	933.7	947.4	1041.2	1171.7	1418.8	2814.8	6693.6	17041.8	29465.5	30861.3	22012.1
75°	787.2	805.5	890.2	974.9	1112.1	1807.8	3139.7	11867.7	22158.6	23073.9	15307.1
77.5°	437.1	402.7	723.1	807.8	938.3	1144.2	1469.1	6984.1	12410.0	12664.0	6792.0
80°	272.3	281.5	574.4	650.0	720.9	576.7	672.8	2688.9	4302.2	4087.1	1315.8
82.5°	16.0	36.6	441.7	469.1	494.3	247.1	254.0	913.1	1036.7	952.0	233.4
85°	0.0	0.0	201.4	162.5	171.6	70.9	73.2	212.8	139.6	151.1	45.8
87.5°	0.0	0.0	0.0	4.6	0.0	6.9	13.7	18.3	6.9	9.1	16.0
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°	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5	4249.5
2.5°	4306.7	4146.5	3821.6	3503.6	3244.9	3004.7	2833.0	2670.5	2588.2	2583.6	2579.0
5°	4437.2	4100.8	3450.9	2876.6	2414.3	2043.5	1803.3	1631.6	1544.7	1514.9	1510.3
7.5°	4620.3	4114.6	3125.9	2327.3	1782.7	1464.6	1327.3	1272.3	1254.1	1233.5	1228.9
10°	4851.4	4146.5	2835.4	1874.2	1405.1	1244.9	1189.9	1167.1	1153.3	1139.6	1135.1
12.5°	5110.0	4176.4	2547.0	1556.2	1235.7	1153.3	1114.5	1087.0	1068.7	1052.7	1048.1
15°	5361.7	4194.6	2247.2	1334.1	1148.8	1082.4	1041.2	1011.5	986.3	968.0	965.8
17.5°	5611.2	4219.8	1965.7	1201.4	1077.8	1011.5	970.3	933.7	913.1	892.5	890.2
20°	5888.0	4215.2	1700.3	1107.6	1006.9	940.5	897.1	862.7	842.1	819.3	816.9
22.5°	6144.4	4192.4	1466.9	1027.5	933.7	869.6	821.5	787.2	766.6	748.4	746.0
25°	6439.6	4174.0	1272.3	954.3	865.0	800.9	748.4	716.3	693.4	677.3	675.1
27.5°	6723.3	4146.5	1130.5	887.9	798.7	736.9	686.5	650.0	629.3	617.9	617.9
30°	7002.5	4139.7	1077.8	823.8	739.1	677.3	627.0	592.7	576.7	572.1	569.8
32.5°	7338.9	4158.0	1100.7	800.9	684.2	622.5	574.4	549.2	533.2	533.2	533.2
35°	7698.2	4153.4	1135.1	821.5	647.6	567.5	530.9	514.9	498.9	498.9	498.9
37.5°	8149.0	4160.3	1162.6	855.9	633.9	521.7	501.1	480.5	471.4	471.4	471.4
40°	8821.8	4386.9	1148.8	885.6	629.3	489.7	448.5	441.7	434.8	434.8	434.8
42.5°	9645.6	4878.9	1167.1	887.9	627.0	466.8	411.9	425.7	409.6	407.3	405.1
45°	10547.2	5416.6	1283.8	839.9	624.7	455.4	393.6	409.6	384.5	384.5	384.5
47.5°	11442.0	5949.8	1402.8	771.2	617.9	453.2	377.6	368.4	361.5	363.9	363.9
50°	12675.5	6384.6	1448.5	677.3	601.9	448.5	347.9	350.1	345.5	350.1	350.1
52.5°	14018.7	6476.2	1393.6	572.1	556.1	434.8	327.3	336.4	334.2	338.7	338.7
55°	14856.2	6377.8	1151.1	476.0	485.1	379.9	306.7	324.9	324.9	324.9	324.9
57.5°	15721.3	5959.0	816.9	386.7	402.7	311.2	288.3	313.5	311.2	308.9	308.9
60°	16343.7	5281.6	537.8	318.1	320.4	256.2	267.7	295.2	292.9	281.5	281.5
62.5°	16808.3	4533.3	345.5	270.0	244.9	231.1	244.9	267.7	258.6	233.4	228.9
65°	16755.7	3496.7	265.5	231.1	201.4	201.4	212.8	233.4	205.9	164.7	160.2
67.5°	15778.5	2366.2	219.7	194.5	169.3	167.1	176.2	194.5	176.2	139.6	135.0
70°	14032.5	1546.9	176.2	151.1	135.0	123.6	141.9	167.1	148.7	112.1	107.5
72.5°	11389.4	942.8	132.7	109.9	98.4	80.1	112.1	137.4	119.0	82.4	77.8
75°	7368.6	480.5	91.5	70.9	52.6	48.1	82.4	103.0	82.4	50.3	43.5
77.5°	2819.3	201.4	50.3	32.1	27.5	22.9	45.8	61.8	34.3	11.5	9.1
80°	542.3	84.7	25.2	16.0	13.7	9.1	6.9	4.6	0.0	0.0	0.0
82.5°	93.8	27.5	9.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	32.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)