

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: P964491

Luminaire Tested: **NAV-SB3C-727-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P964491  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3C-727-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18214.3 lumens  
Efficiency: N/A  
Efficacy: 122.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

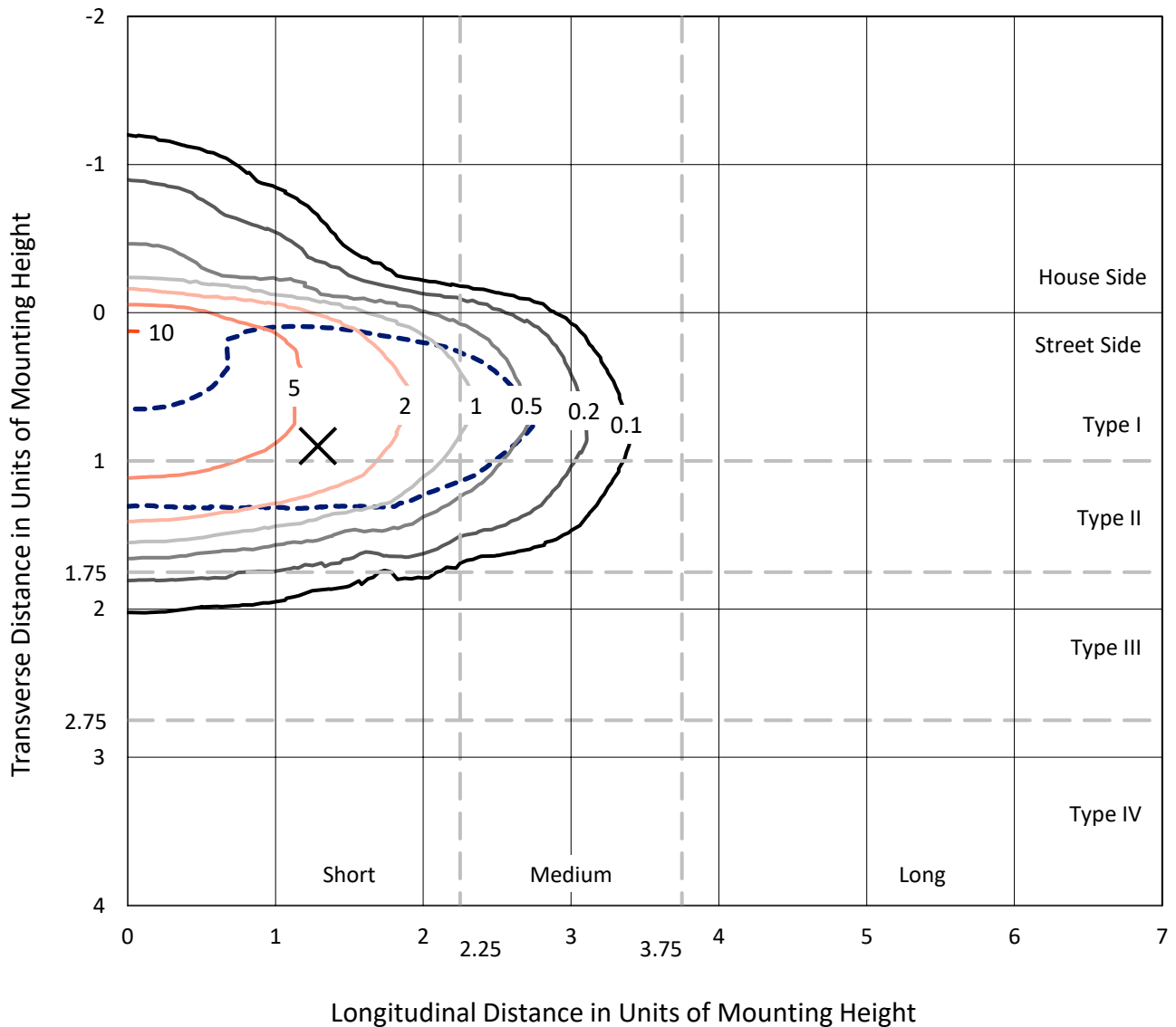
Input Watts (W): 149.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

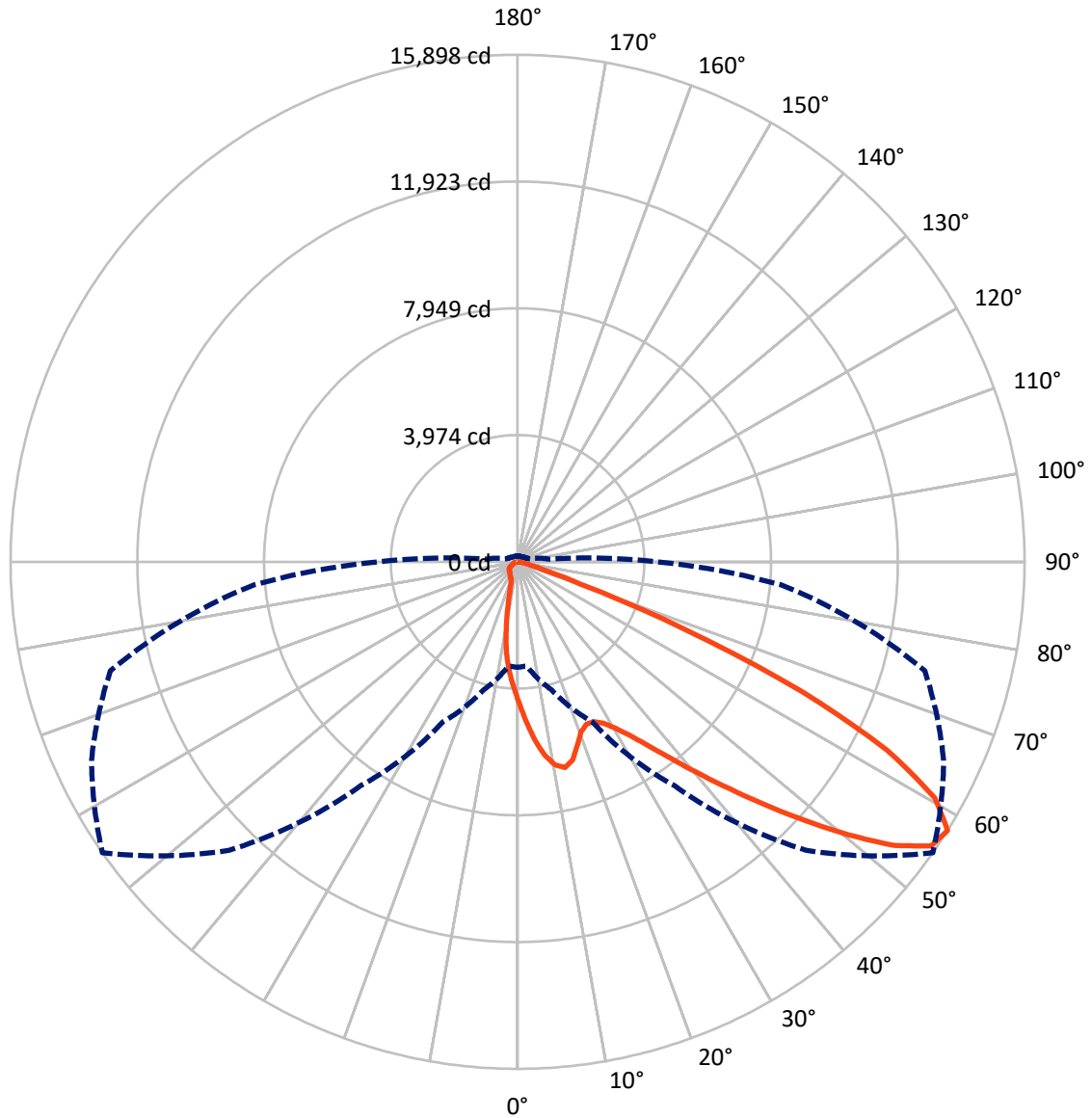
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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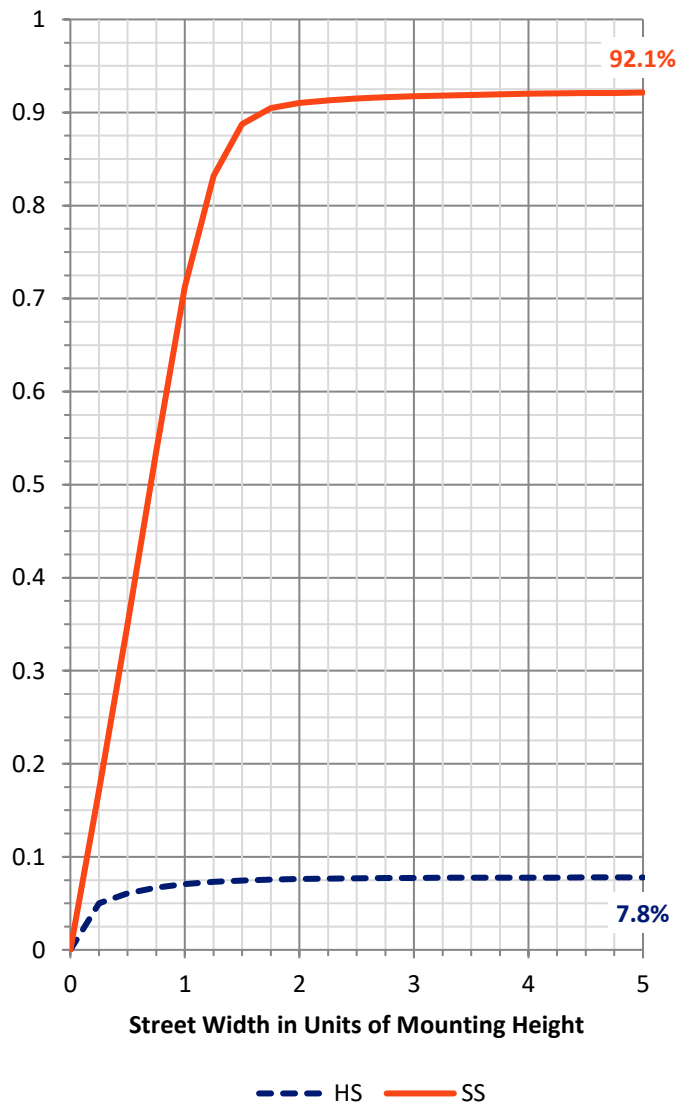
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1422.5	0.0	1422.5
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	16791.8	0.0	16791.8
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	18214.3	0.0	18214.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.4	2.2
10°-20°	986.5	5.4
20°-30°	1578.3	8.7
30°-40°	2671.4	14.7
40°-50°	4385.9	24.1
50°-60°	4820.4	26.5
60°-70°	2765.0	15.2
70°-80°	565.0	3.1
80°-90°	33.3	0.2
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°	18214.3	100.0
0°-180°	18214.3	100.0

**Coefficient of Utilization**



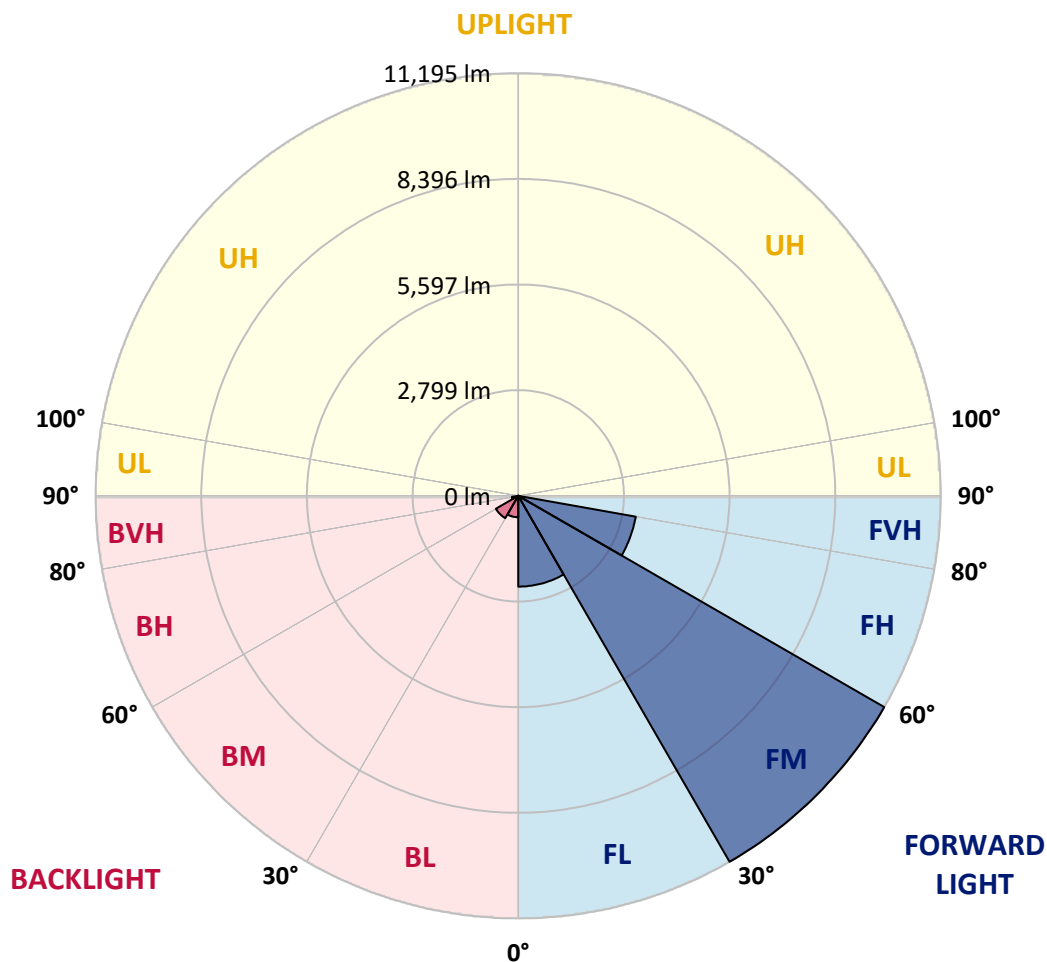
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2405.3	13.2			
FM (30°-60°)	11194.6	61.5			
FH (60°-80°)	3160.8	17.4			G2/5000
FVH (80°-90°)	31.1	0.2			G1/100
BL (0°-30°)	567.9	3.1	B2/1000		
BM (30°-60°)	683.2	3.8	B1/1000		
BH (60°-80°)	169.2	0.9	B1/500		G1/500
BVH (80°-90°)	2.2	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-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2
2.5°	5446.0	5377.6	5367.4	5354.0	5223.7	5125.9	4984.5	4829.5	4655.3	4477.9	4399.3
5°	6291.8	6237.8	6227.8	6164.9	6016.6	5850.4	5598.8	5280.9	4956.4	4574.5	4410.6
7.5°	6455.8	6445.6	6491.6	6489.5	6469.2	6337.8	6125.5	5747.1	5259.6	4693.6	4439.7
10°	5724.6	5750.5	5887.4	6007.6	6332.2	6520.8	6474.8	6162.6	5571.8	4829.5	4472.3
12.5°	5058.6	5028.2	5125.9	5261.8	5639.2	6200.8	6619.8	6509.7	5929.0	4983.3	4520.6
15°	4640.8	4628.4	4683.4	4746.4	5033.9	5599.9	6451.2	6791.5	6272.7	5165.3	4593.6
17.5°	4507.1	4497.0	4513.9	4529.6	4716.0	5154.0	6050.3	6964.6	6601.7	5373.0	4674.4
20°	4616.1	4602.6	4600.3	4588.0	4665.5	4964.2	5687.5	6976.9	6897.1	5561.8	4744.1
22.5°	4933.9	4918.2	4863.1	4813.7	4820.5	4990.1	5525.8	6853.4	7119.5	5738.1	4787.9
25°	5510.1	5484.3	5369.7	5203.4	5097.8	5169.8	5550.5	6690.5	7331.8	5876.2	4766.6
27.5°	6231.1	6197.5	6050.3	5803.2	5561.8	5474.1	5729.0	6578.1	7508.1	5981.8	4720.5
30°	6937.6	6893.7	6748.9	6556.8	6204.1	5927.9	6051.4	6627.5	7718.1	6091.9	4659.9
32.5°	7700.2	7658.6	7466.5	7228.4	6936.5	6564.7	6492.8	6869.0	7975.3	6245.7	4617.2
35°	8664.9	8599.8	8326.9	8002.3	7692.3	7316.0	7090.3	7285.7	8317.9	6480.5	4640.8
37.5°	9763.3	9675.8	9381.5	8933.4	8529.0	8107.9	7818.1	7858.6	8819.9	6794.9	4713.8
40°	10798.9	10719.1	10447.3	10025.0	9517.4	9006.4	8697.5	8607.6	9512.9	7177.9	4841.8
42.5°	11419.9	11348.1	11233.5	11054.9	10627.0	10105.9	9716.2	9521.8	10332.8	7636.1	4997.9
45°	11454.8	11391.8	11545.8	11753.6	11669.3	11322.3	10847.2	10491.2	11156.0	8066.3	5159.6
47.5°	10897.7	10855.1	11322.3	12047.7	12409.5	12555.4	12117.4	11379.6	11835.6	8375.2	5226.0
50°	9379.3	9363.5	10324.9	11656.9	12691.3	13635.9	13457.3	12206.1	12362.3	8534.7	5163.0
52.5°	8132.6	8075.3	8635.7	10405.8	12281.4	14204.2	14766.9	13017.1	12730.7	8565.0	5015.9
55°	6168.2	6117.7	6820.8	8312.2	10959.5	14002.0	15724.9	13853.8	12994.6	8487.5	4752.0
57.5°	3308.7	3277.3	4165.7	5532.5	8567.3	12789.0	15897.9	14738.8	13217.0	8281.9	4382.5
60°	1288.2	1282.6	1615.1	2684.3	5206.8	10404.7	15025.2	15270.0	13356.3	8029.2	4073.6
62.5°	779.4	796.3	850.2	1205.1	2300.2	6463.6	13013.7	14665.8	13449.4	7797.9	3818.6
65°	644.7	645.8	652.5	827.8	1101.8	2704.5	9797.1	12677.9	13219.2	7385.7	3457.0
67.5°	552.6	562.7	588.6	657.0	777.2	1186.0	5640.4	9820.6	11818.7	6426.5	2893.2
70°	435.7	449.3	481.9	540.2	599.7	742.4	2084.5	6534.4	9028.8	4844.0	2187.9
72.5°	367.3	366.1	382.9	439.1	476.2	522.2	802.0	3661.4	5247.3	2312.5	1082.7
75°	284.1	295.4	316.7	367.3	389.7	378.5	434.6	1337.6	1880.2	700.8	368.4
77.5°	222.4	231.3	250.4	299.9	322.4	268.4	250.4	478.5	604.2	251.5	166.3
80°	99.9	107.8	170.8	221.3	262.8	185.3	135.9	244.9	268.4	114.6	84.3
82.5°	17.9	30.3	99.9	116.8	134.8	120.1	70.7	126.9	131.4	46.0	29.2
85°	1.1	2.3	34.8	42.6	53.9	39.4	21.3	50.5	43.8	15.7	11.3
87.5°	0.0	0.0	0.0	1.1	1.1	5.6	6.8	9.0	6.8	5.6	4.5
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2	4389.2
2.5°	4318.4	4158.9	4004.0	3877.1	3803.0	3677.1	3594.1	3580.5	3545.7	3576.0
5°	4235.3	3950.0	3661.4	3403.1	3190.8	2916.7	2712.4	2625.8	2550.6	2576.4
7.5°	4196.0	3745.7	3296.4	2855.0	2401.3	1963.2	1637.5	1501.6	1398.3	1412.9
10°	4143.3	3533.4	2829.2	2155.3	1547.6	1115.3	890.6	807.5	761.5	762.6
12.5°	4102.8	3279.5	2286.7	1461.2	942.3	712.1	642.5	622.2	608.7	609.9
15°	4082.6	2980.8	1751.0	973.7	673.8	603.1	586.3	577.3	568.3	567.1
17.5°	4048.9	2648.3	1281.5	710.9	589.7	565.0	550.3	540.2	529.0	526.7
20°	3998.3	2271.0	936.6	600.9	552.6	533.5	513.3	499.8	486.4	484.1
22.5°	3905.1	1872.3	720.0	556.0	525.6	504.3	479.6	463.8	450.4	448.1
25°	3732.1	1498.2	606.5	527.9	502.0	476.2	449.3	427.9	415.5	413.3
27.5°	3513.2	1177.0	550.3	502.0	471.7	448.1	417.8	397.6	386.3	384.1
30°	3254.8	906.4	517.7	472.8	435.7	415.5	388.6	371.8	365.0	365.0
32.5°	2976.3	724.4	504.3	443.6	404.4	381.8	360.5	353.8	351.6	350.4
35°	2714.6	628.9	497.5	420.0	376.3	355.0	345.9	347.1	351.6	351.6
37.5°	2482.1	598.6	494.2	403.2	351.6	332.4	338.0	348.2	343.7	343.7
40°	2272.1	602.0	491.9	390.8	331.3	320.1	331.3	323.5	312.2	311.1
42.5°	2111.5	630.1	487.4	380.8	319.0	311.1	306.6	294.3	293.2	295.4
45°	1994.6	654.8	486.4	376.3	305.4	290.9	285.3	273.0	295.4	301.0
47.5°	1856.5	654.8	486.4	360.5	283.0	277.4	268.4	254.9	277.4	283.0
50°	1677.9	613.3	467.2	342.6	265.1	261.7	246.0	229.1	224.6	228.0
52.5°	1452.2	538.0	418.9	317.9	247.1	240.4	221.3	208.9	205.5	205.5
55°	1195.0	450.4	353.8	281.9	228.0	215.7	202.1	196.6	193.2	191.0
57.5°	971.5	369.5	284.1	250.4	210.0	194.3	189.8	183.1	177.4	174.0
60°	797.4	290.9	234.7	222.4	192.1	177.4	176.3	167.4	152.7	150.5
62.5°	615.5	213.4	197.6	193.2	174.0	161.7	159.5	141.6	119.0	114.6
65°	434.6	166.3	159.5	169.6	155.0	143.8	138.2	111.2	87.6	84.3
67.5°	305.4	139.3	125.8	148.2	134.8	120.1	116.8	94.3	73.0	70.7
70°	217.9	113.5	103.3	126.9	107.8	105.6	98.8	78.6	59.6	57.3
72.5°	153.9	86.5	79.7	110.1	74.1	91.0	80.9	60.7	44.9	42.6
75°	113.5	61.8	56.2	64.1	53.9	68.5	57.3	40.4	28.1	27.0
77.5°	83.1	39.4	33.7	31.5	31.5	42.6	31.5	16.8	12.4	11.3
80°	58.4	17.9	15.7	13.4	12.4	10.1	4.5	2.3	1.1	1.1
82.5°	34.8	7.9	7.9	5.6	3.4	0.0	0.0	0.0	0.0	0.0
85°	7.9	3.4	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	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

(END OF REPORT)