

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: P963406

Luminaire Tested: **NAV-SB3A-722-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963406
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-SB3A-722-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2200K, 350mA 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: 9717 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

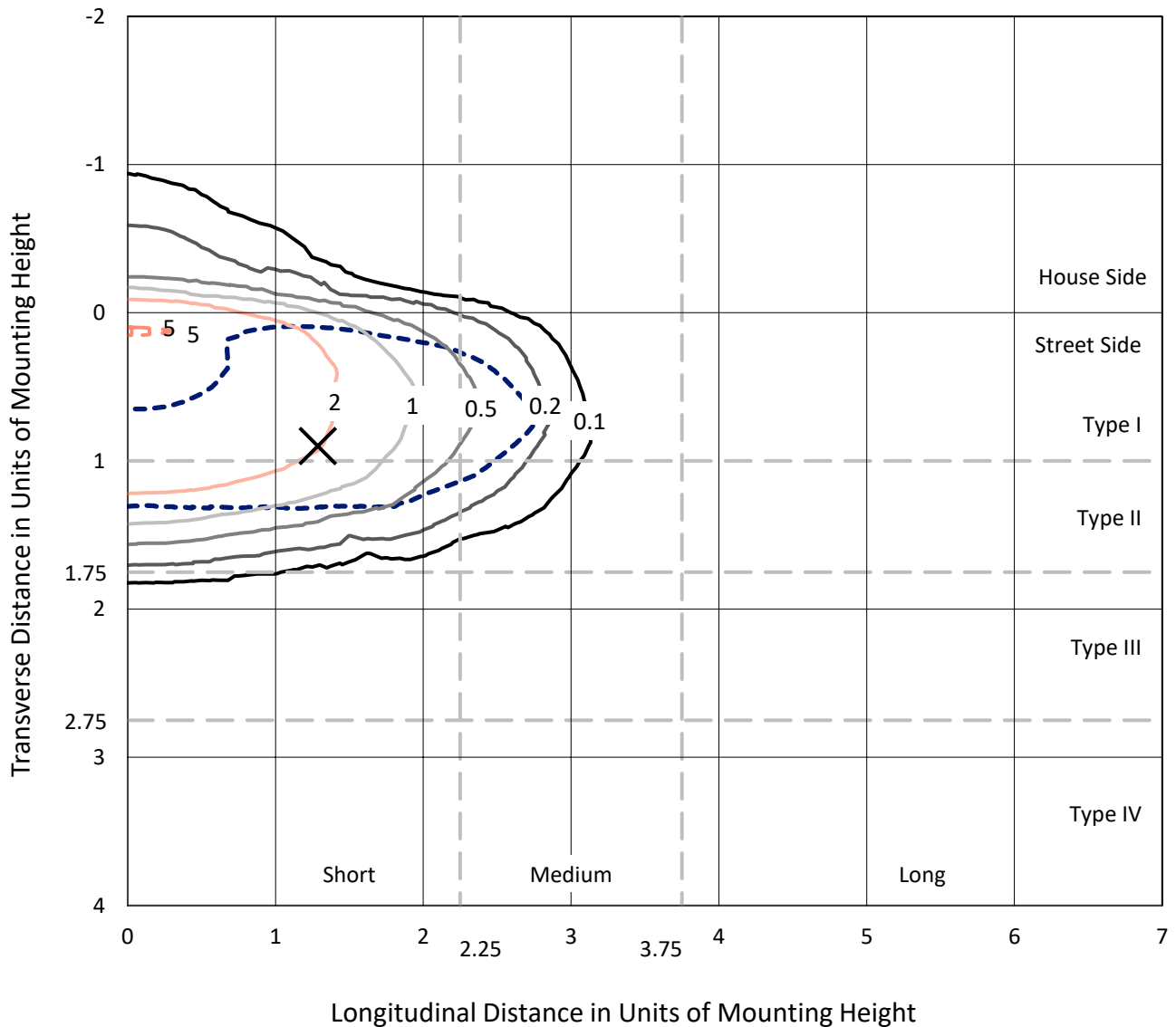
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

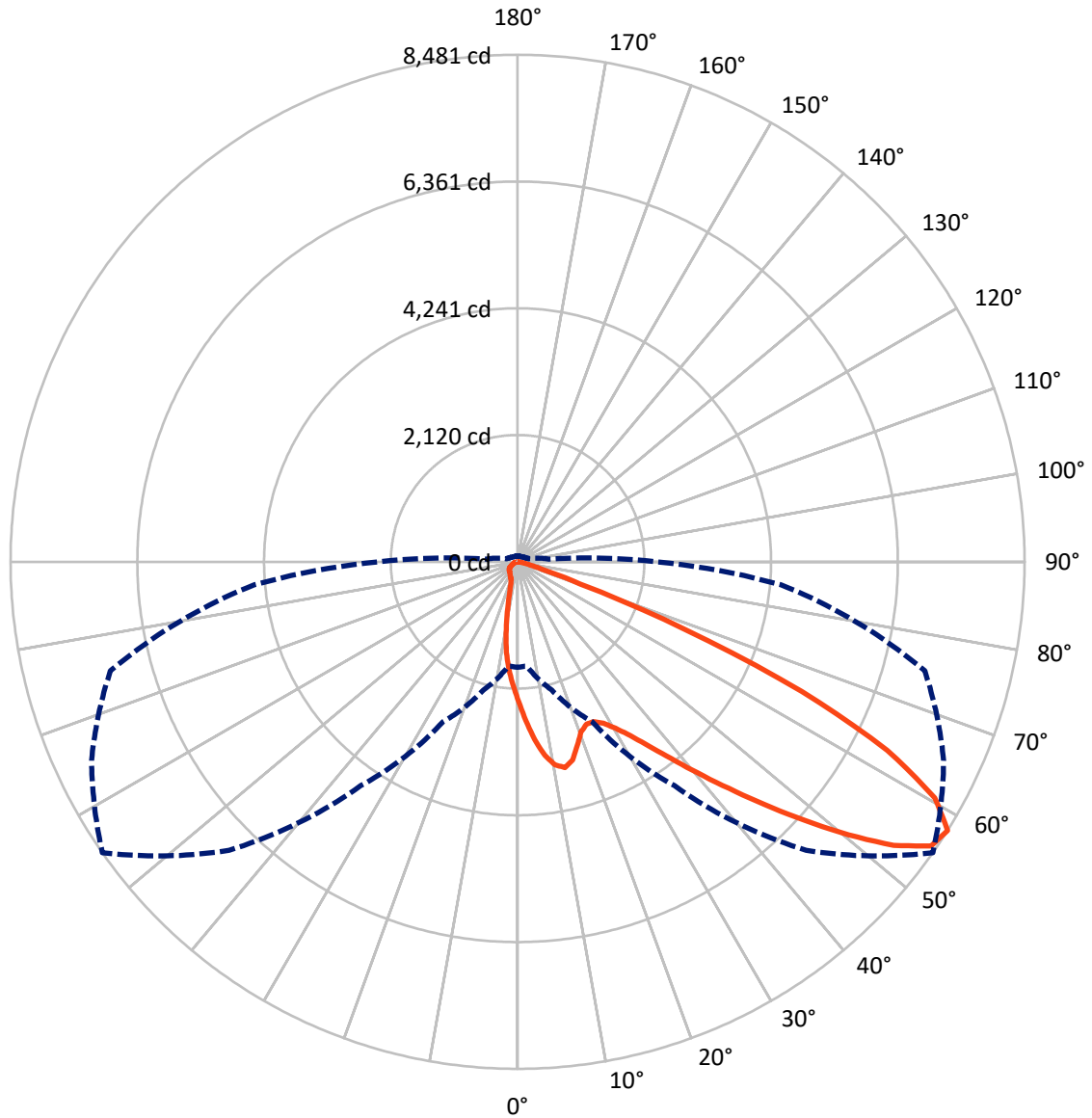
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 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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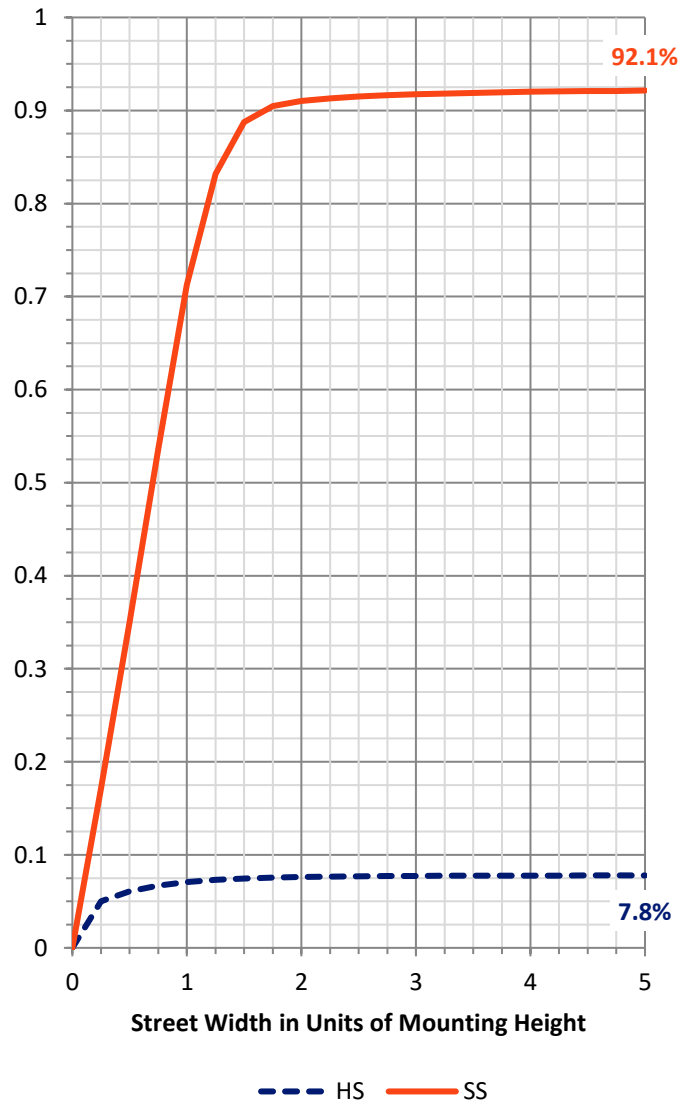
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	758.9	0.0	758.9
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	8958.1	0.0	8958.1
	% Fixture	92.2	0.0	92.2
Total	Lumens	9717.0	0.0	9717.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.9	2.2
10°-20°	526.3	5.4
20°-30°	842.0	8.7
30°-40°	1425.2	14.7
40°-50°	2339.8	24.1
50°-60°	2571.6	26.5
60°-70°	1475.1	15.2
70°-80°	301.4	3.1
80°-90°	17.8	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°	9717.0	100.0
0°-180°	9717.0	100.0

Coefficient of Utilization



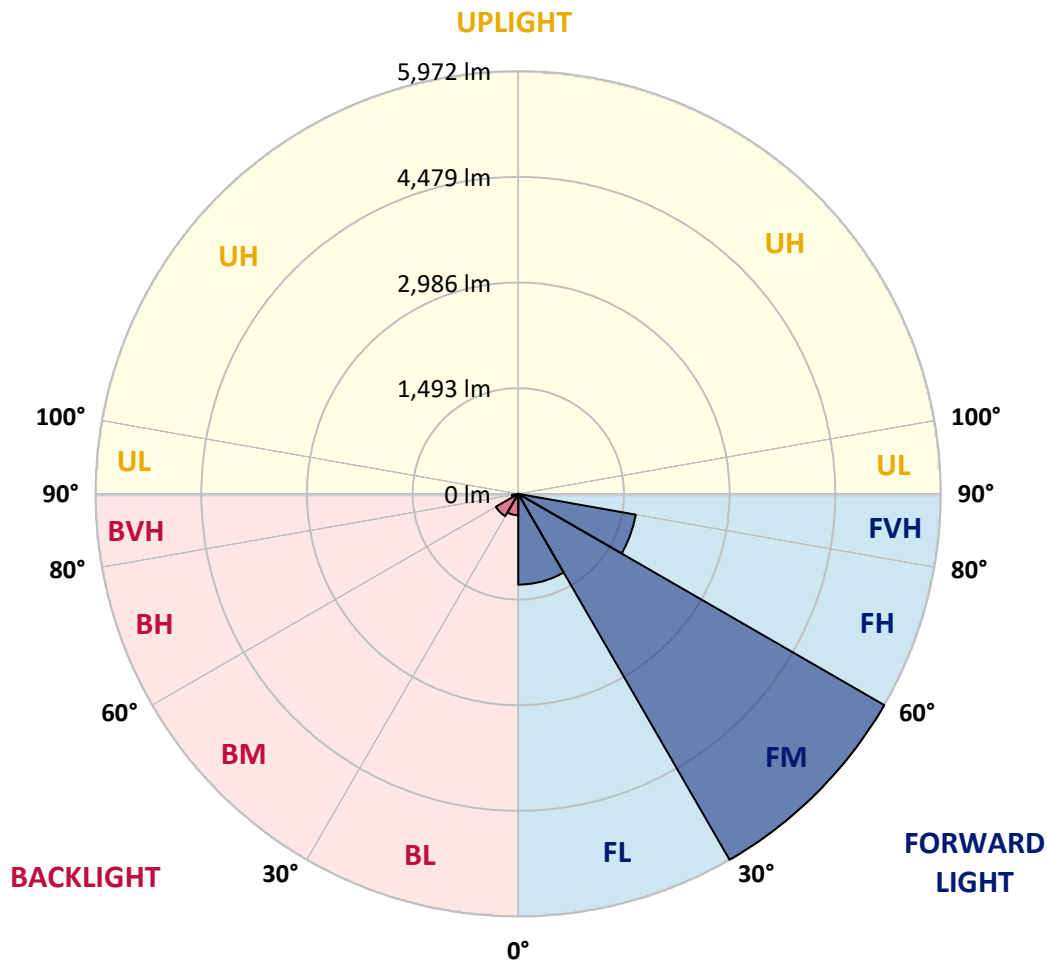
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1283.2	13.2			
FM (30°-60°)	5972.1	61.5			
FH (60°-80°)	1686.2	17.4			G1/1800
FVH (80°-90°)	16.6	0.2			G1/100
BL (0°-30°)	303.0	3.1	B1/500		
BM (30°-60°)	364.5	3.8	B1/1000		
BH (60°-80°)	90.3	0.9	B0/110		G0/110
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5
2.5°	2905.4	2868.9	2863.4	2856.3	2786.8	2734.6	2659.2	2576.4	2483.6	2388.9	2346.9
5°	3356.6	3327.8	3322.4	3288.8	3209.8	3121.1	2986.8	2817.3	2644.1	2440.4	2353.0
7.5°	3444.0	3438.7	3463.2	3462.0	3451.2	3381.2	3267.9	3066.0	2805.9	2504.0	2368.6
10°	3054.0	3067.7	3140.8	3205.0	3378.1	3478.7	3454.2	3287.7	2972.5	2576.4	2385.9
12.5°	2698.6	2682.5	2734.6	2807.1	3008.5	3308.0	3531.5	3472.8	3163.0	2658.5	2411.6
15°	2475.8	2469.2	2498.5	2532.1	2685.5	2987.5	3441.6	3623.2	3346.3	2755.6	2450.6
17.5°	2404.4	2399.1	2408.0	2416.4	2516.0	2749.6	3227.7	3715.4	3521.9	2866.4	2493.7
20°	2462.6	2455.4	2454.2	2447.6	2488.9	2648.3	3034.2	3722.1	3679.5	2967.1	2530.9
22.5°	2632.2	2623.8	2594.4	2568.0	2571.6	2662.1	2947.9	3656.2	3798.1	3061.2	2554.3
25°	2939.5	2925.8	2864.7	2775.9	2719.6	2758.0	2961.1	3569.3	3911.4	3134.9	2542.9
27.5°	3324.2	3306.2	3227.7	3095.9	2967.1	2920.3	3056.3	3509.3	4005.5	3191.1	2518.3
30°	3701.1	3677.7	3600.4	3497.9	3309.8	3162.4	3228.3	3535.7	4117.5	3249.9	2485.9
32.5°	4107.9	4085.8	3983.3	3856.3	3700.5	3502.1	3463.8	3664.5	4254.7	3332.0	2463.2
35°	4622.6	4587.8	4442.2	4269.1	4103.7	3903.0	3782.6	3886.8	4437.4	3457.2	2475.8
37.5°	5208.5	5161.9	5004.9	4765.8	4550.1	4325.4	4170.8	4192.4	4705.3	3625.0	2514.7
40°	5761.0	5718.5	5573.4	5348.2	5077.3	4804.8	4640.0	4592.0	5075.0	3829.3	2583.0
42.5°	6092.4	6054.1	5992.9	5897.6	5669.4	5391.3	5183.4	5079.8	5512.3	4073.8	2666.3
45°	6110.9	6077.4	6159.4	6270.3	6225.3	6040.2	5786.7	5596.8	5951.6	4303.3	2752.6
47.5°	5813.8	5790.9	6040.2	6427.3	6620.3	6698.2	6464.5	6070.8	6314.1	4468.0	2787.9
50°	5003.6	4995.2	5508.1	6218.8	6770.6	7274.5	7179.3	6511.8	6595.1	4553.0	2754.4
52.5°	4338.6	4308.1	4607.1	5551.3	6551.9	7577.7	7877.8	6944.4	6791.5	4569.2	2675.9
55°	3290.7	3263.7	3638.7	4434.5	5846.7	7469.9	8389.0	7390.8	6932.4	4527.9	2535.1
57.5°	1765.2	1748.3	2222.3	2951.5	4570.5	6822.7	8481.3	7862.9	7051.1	4418.3	2337.9
60°	687.3	684.3	861.6	1432.0	2777.7	5550.7	8015.7	8146.3	7125.3	4283.5	2173.2
62.5°	415.8	424.9	453.6	642.9	1227.1	3448.2	6942.6	7823.9	7175.1	4160.1	2037.2
65°	343.9	344.5	348.1	441.6	587.7	1442.8	5226.6	6763.5	7052.2	3940.1	1844.3
67.5°	294.8	300.2	314.0	350.5	414.6	632.7	3009.0	5239.2	6305.1	3428.4	1543.4
70°	232.5	239.6	257.1	288.2	320.0	396.1	1112.0	3485.9	4816.7	2584.2	1167.2
72.5°	195.9	195.4	204.3	234.3	254.1	278.6	427.8	1953.3	2799.3	1233.7	577.6
75°	151.6	157.5	168.9	195.9	207.9	201.9	231.9	713.6	1003.0	373.9	196.5
77.5°	118.6	123.4	133.7	160.0	172.0	143.2	133.7	255.2	322.4	134.2	88.7
80°	53.3	57.5	91.1	118.1	140.2	98.9	72.5	130.6	143.2	61.1	44.9
82.5°	9.6	16.2	53.3	62.3	71.9	64.1	37.7	67.8	70.1	24.6	15.6
85°	0.6	1.2	18.6	22.8	28.8	21.0	11.4	27.0	23.4	8.4	5.9
87.5°	0.0	0.0	0.0	0.6	0.6	3.0	3.6	4.8	3.6	3.0	2.4
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°	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5	2341.5
2.5°	2303.8	2218.7	2136.0	2068.3	2028.8	1961.6	1917.4	1910.2	1891.5	1907.7
5°	2259.5	2107.3	1953.3	1815.5	1702.2	1556.1	1447.0	1400.9	1360.7	1374.5
7.5°	2238.5	1998.2	1758.6	1523.0	1281.0	1047.3	873.6	801.1	746.0	753.8
10°	2210.3	1885.0	1509.3	1149.8	825.6	595.0	475.2	430.8	406.2	406.8
12.5°	2188.8	1749.6	1220.0	779.5	502.7	379.9	342.8	331.9	324.7	325.3
15°	2178.0	1590.2	934.1	519.5	359.5	321.7	312.7	308.0	303.2	302.6
17.5°	2160.0	1412.9	683.7	379.2	314.6	301.3	293.6	288.2	282.2	281.1
20°	2133.0	1211.6	499.7	320.5	294.8	284.6	273.8	266.6	259.4	258.2
22.5°	2083.3	998.9	384.1	296.6	280.4	269.1	255.8	247.4	240.3	239.0
25°	1991.1	799.3	323.6	281.6	267.8	254.1	239.6	228.3	221.7	220.5
27.5°	1874.2	627.9	293.6	267.8	251.6	239.0	222.9	212.1	206.1	204.9
30°	1736.4	483.5	276.2	252.3	232.5	221.7	207.4	198.3	194.7	194.7
32.5°	1587.8	386.4	269.1	236.7	215.7	203.7	192.3	188.7	187.6	187.0
35°	1448.2	335.6	265.5	224.1	200.7	189.3	184.5	185.1	187.6	187.6
37.5°	1324.2	319.4	263.6	215.1	187.6	177.3	180.4	185.7	183.4	183.4
40°	1212.2	321.1	262.4	208.5	176.7	170.8	176.7	172.6	166.6	165.9
42.5°	1126.5	336.1	260.0	203.2	170.1	165.9	163.6	157.0	156.4	157.5
45°	1064.2	349.3	259.4	200.7	163.0	155.2	152.2	145.5	157.5	160.6
47.5°	990.5	349.3	259.4	192.3	151.0	148.0	143.2	136.0	148.0	151.0
50°	895.1	327.2	249.3	182.8	141.4	139.6	131.2	122.2	119.8	121.7
52.5°	774.7	287.0	223.4	169.5	131.8	128.2	118.1	111.4	109.7	109.7
55°	637.6	240.3	188.7	150.4	121.7	115.0	107.8	104.9	103.0	101.9
57.5°	518.2	197.1	151.6	133.7	112.0	103.6	101.3	97.7	94.7	92.9
60°	425.4	155.2	125.3	118.6	102.5	94.7	94.1	89.3	81.5	80.3
62.5°	328.3	113.9	105.5	103.0	92.9	86.3	85.1	75.5	63.6	61.1
65°	231.9	88.7	85.1	90.5	82.7	76.7	73.7	59.3	46.7	44.9
67.5°	163.0	74.3	67.1	79.1	71.9	64.1	62.3	50.3	38.9	37.7
70°	116.2	60.5	55.1	67.8	57.5	56.3	52.7	41.9	31.8	30.5
72.5°	82.1	46.1	42.5	58.7	39.6	48.5	43.2	32.4	24.0	22.8
75°	60.5	33.0	29.9	34.1	28.8	36.6	30.5	21.5	15.0	14.3
77.5°	44.4	21.0	17.9	16.8	16.8	22.8	16.8	9.0	6.6	5.9
80°	31.2	9.6	8.4	7.2	6.6	5.4	2.4	1.2	0.6	0.6
82.5°	18.6	4.2	4.2	3.0	1.8	0.0	0.0	0.0	0.0	0.0
85°	4.2	1.8	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	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)