

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: P963407

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

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963407  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)  
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  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

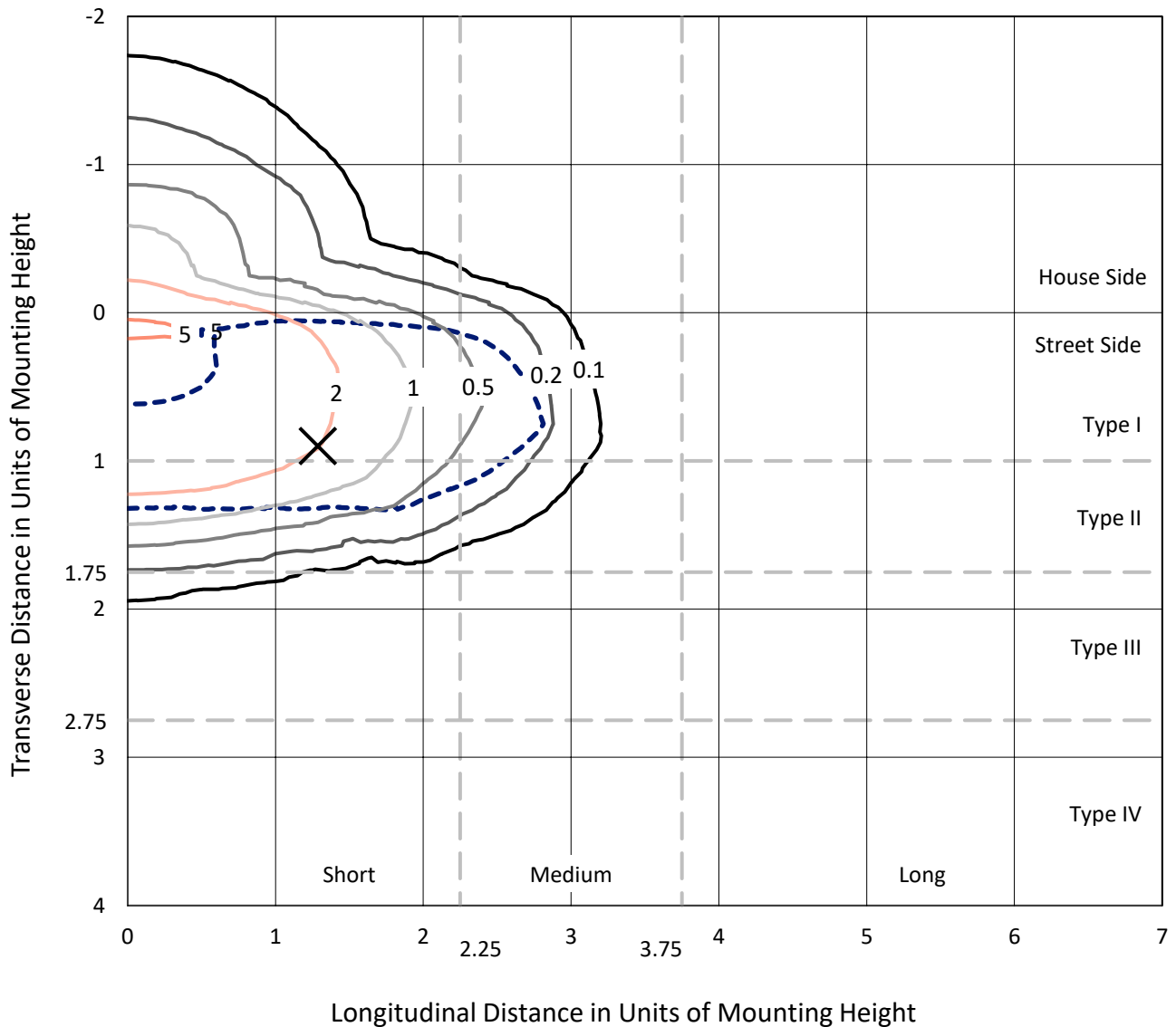
Lumens per Lamp: N/A  
Luminaire Lumens: 11590.7 lumens  
Efficiency: N/A  
Efficacy: 136.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

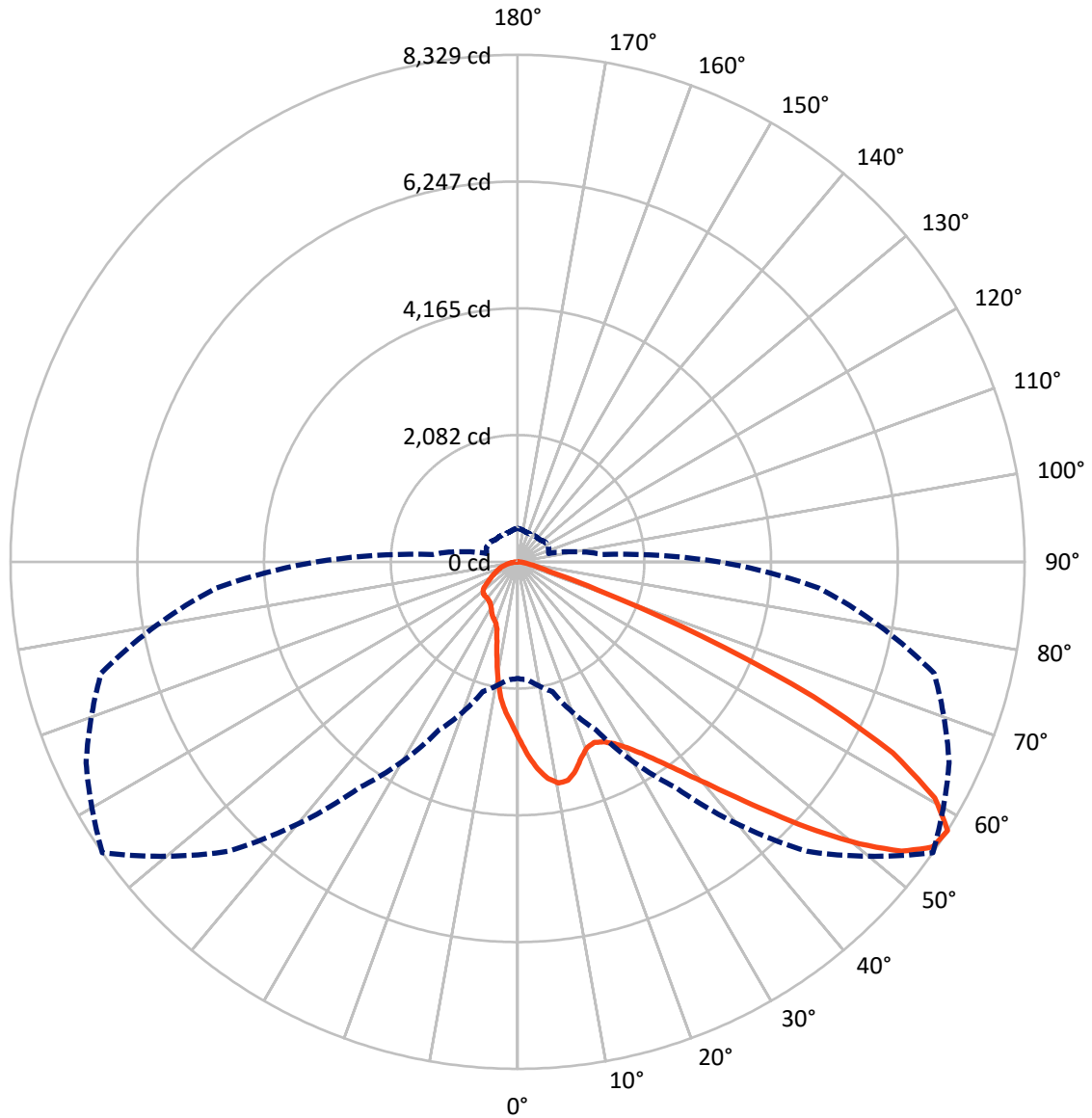
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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	2097.3	0.0	2097.3
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	9493.4	0.0	9493.4
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	11590.7	0.0	11590.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.5	2.3
10°-20°	680.2	5.9
20°-30°	1085.4	9.4
30°-40°	1718.5	14.8
40°-50°	2630.4	22.7
50°-60°	2817.4	24.3
60°-70°	1772.4	15.3
70°-80°	524.1	4.5
80°-90°	92.7	0.8
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°	11590.7	100.0
0°-180°	11590.7	100.0

**Coefficient of Utilization**

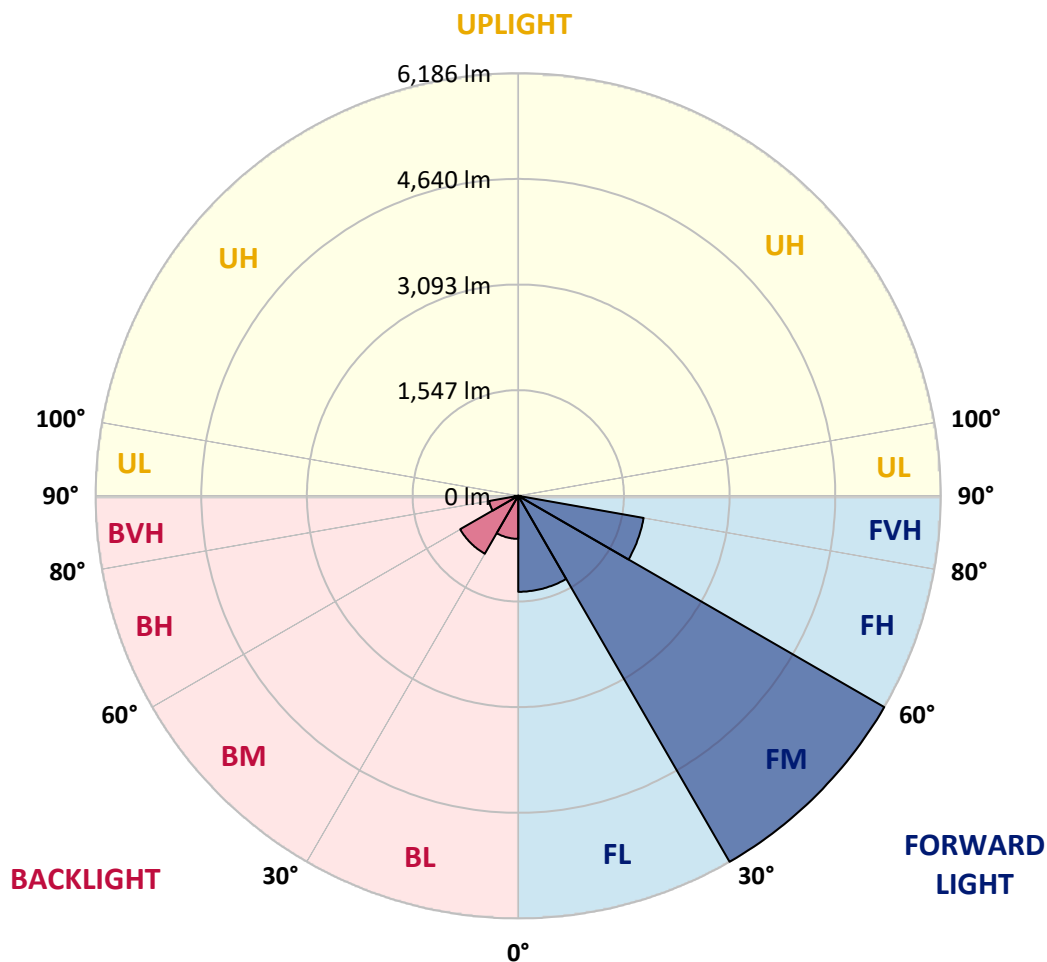


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 CATALOG NUMBER: NAV-SB3A-722-U-AFL

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1404.8	12.1			
FM (30°-60°)	6186.0	53.4			
FH (60°-80°)	1863.4	16.1			G2/5000
FVH (80°-90°)	39.2	0.3			G1/100
BL (0°-30°)	630.4	5.4	B2/1000		
BM (30°-60°)	980.2	8.5	B1/1000		
BH (60°-80°)	433.1	3.7	B1/500		G1/500
BVH (80°-90°)	53.5	0.5			G1/100
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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 CATALOG NUMBER: NAV-SB3A-722-U-AFL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2
2.5°	3332.1	3329.7	3342.8	3297.9	3267.4	3226.0	3171.5	3102.0	3027.1	2948.0	2913.9
5°	3632.3	3611.3	3625.1	3591.5	3558.0	3495.7	3414.8	3301.5	3163.1	3005.5	2921.7
7.5°	3584.9	3570.6	3606.0	3635.9	3661.0	3653.2	3594.0	3475.3	3296.7	3067.8	2946.2
10°	3203.2	3187.0	3236.8	3340.5	3492.7	3625.1	3697.0	3623.3	3433.3	3136.1	2970.1
12.5°	2866.5	2858.7	2891.6	2975.6	3144.5	3398.6	3683.7	3752.7	3575.3	3217.1	3002.5
15°	2722.7	2713.1	2734.1	2776.6	2884.5	3121.1	3563.9	3841.4	3714.9	3310.5	3054.1
17.5°	2690.9	2680.2	2689.2	2711.3	2780.8	2961.2	3383.0	3885.2	3860.6	3414.8	3097.1
20°	2749.7	2740.6	2741.9	2740.6	2789.2	2932.4	3257.1	3868.3	3987.6	3510.6	3139.2
22.5°	2891.6	2876.7	2877.3	2845.5	2871.9	2982.7	3224.2	3823.5	4100.8	3594.5	3170.9
25°	3123.0	3096.0	3101.3	3020.5	3013.3	3095.4	3275.8	3788.6	4213.5	3661.6	3176.9
27.5°	3439.3	3408.7	3392.5	3272.1	3214.6	3255.4	3380.7	3800.6	4320.2	3719.7	3161.9
30°	3834.8	3797.6	3764.7	3594.0	3489.6	3474.6	3543.6	3879.7	4445.9	3780.8	3136.1
32.5°	4319.6	4276.4	4216.4	3990.0	3843.1	3764.7	3754.5	4020.6	4593.3	3858.7	3123.0
35°	4896.5	4840.3	4755.2	4462.1	4276.4	4115.8	4032.6	4223.6	4795.3	3976.2	3137.9
37.5°	5490.9	5427.4	5349.6	5000.8	4772.5	4535.8	4371.6	4499.2	5064.3	4135.6	3177.5
40°	6039.2	5967.9	5895.4	5585.0	5339.9	5054.7	4786.9	4848.0	5393.2	4326.1	3244.6
42.5°	6362.8	6310.0	6282.4	6114.7	5925.3	5636.0	5303.3	5261.4	5763.0	4545.5	3321.3
45°	6348.3	6326.8	6411.9	6481.4	6436.5	6275.9	5908.6	5718.6	6133.9	4735.4	3392.0
47.5°	6009.3	6023.6	6213.5	6604.2	6776.2	6860.1	6597.6	6167.4	6456.3	4877.4	3423.7
50°	5086.5	5098.5	5538.3	6380.7	6863.7	7336.4	7281.3	6605.4	6706.1	4964.3	3416.5
52.5°	4356.0	4363.8	4552.6	5718.1	6574.9	7576.1	7897.3	7018.3	6888.8	4988.3	3376.5
55°	3281.1	3308.1	3519.6	4486.1	5823.4	7386.2	8272.4	7443.7	7004.4	4990.6	3334.4
57.5°	1916.7	1946.2	2207.4	3045.1	4526.3	6724.1	8329.3	7821.2	7083.0	4971.5	3309.3
60°	938.9	951.5	1065.4	1600.4	2791.0	5448.4	7871.5	8003.9	7126.7	4961.3	3308.1
62.5°	632.7	631.0	635.7	789.8	1375.1	3500.5	6917.6	7683.9	7103.4	4922.4	3296.1
65°	544.1	537.5	519.5	554.2	712.5	1601.0	5344.8	6728.8	6925.4	4824.7	3214.0
67.5°	470.4	471.0	471.6	460.7	508.7	738.8	3266.2	5300.4	6286.6	4362.1	2897.7
70°	389.5	394.8	397.3	397.3	414.6	484.7	1394.3	3632.9	4958.8	3420.1	2333.8
72.5°	354.8	343.4	344.5	338.6	338.6	369.1	561.4	2059.4	3124.2	1924.0	1424.2
75°	289.4	296.6	297.8	293.6	279.8	281.6	333.1	864.1	1336.8	798.1	704.1
77.5°	249.9	249.9	252.3	249.3	238.5	210.9	222.3	335.0	454.8	327.2	351.7
80°	200.7	200.1	210.3	216.3	199.6	155.8	142.0	185.1	201.9	143.8	182.8
82.5°	97.7	103.6	144.4	164.8	151.6	112.6	86.9	115.0	107.8	63.6	82.1
85°	56.9	53.9	64.7	91.6	86.9	62.3	41.9	60.0	56.3	32.4	33.0
87.5°	17.9	16.8	13.2	31.2	25.2	17.4	11.4	17.4	15.6	7.2	7.2
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°	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2	2904.2
2.5°	2871.3	2800.6	2730.5	2666.3	2627.4	2602.3	2577.1	2549.0	2538.1	2522.0
5°	2842.5	2705.9	2584.3	2479.5	2384.1	2309.2	2233.8	2172.7	2145.1	2163.7
7.5°	2825.7	2628.0	2440.5	2248.1	2063.0	1915.0	1786.2	1695.7	1655.0	1665.1
10°	2810.8	2540.0	2254.2	1950.4	1684.3	1501.0	1369.1	1300.2	1274.5	1279.8
12.5°	2797.0	2441.0	2029.4	1629.7	1347.0	1225.9	1188.2	1188.8	1193.6	1197.2
15°	2794.6	2321.8	1778.4	1349.4	1164.8	1157.0	1197.8	1223.5	1237.3	1241.5
17.5°	2791.0	2179.3	1522.5	1158.2	1120.4	1173.2	1210.9	1227.7	1238.5	1239.1
20°	2776.6	1998.2	1286.5	1067.1	1110.9	1156.4	1179.8	1193.0	1202.0	1205.0
22.5°	2732.2	1796.9	1102.5	1026.4	1072.6	1109.0	1136.6	1151.6	1157.0	1160.6
25°	2652.6	1571.6	975.5	987.5	1019.3	1065.4	1087.5	1090.5	1088.8	1094.1
27.5°	2548.4	1330.1	896.4	934.7	975.5	1015.1	1027.0	1025.2	1021.6	1027.6
30°	2422.5	1113.3	846.0	875.5	931.1	967.1	977.8	973.6	966.5	973.0
32.5°	2289.4	935.9	804.7	834.0	894.6	930.0	940.7	936.5	931.1	936.5
35°	2165.4	811.9	766.4	806.5	865.8	900.6	914.4	914.9	914.9	921.6
37.5°	2051.6	739.4	734.6	789.1	846.0	877.2	897.0	898.2	872.4	874.2
40°	1946.2	708.8	720.3	777.8	826.9	856.8	858.0	790.9	743.6	742.4
42.5°	1859.9	702.8	724.4	776.5	813.1	814.3	729.8	677.7	664.5	665.1
45°	1779.0	701.0	734.0	776.5	792.7	703.5	646.6	632.7	634.0	638.8
47.5°	1688.5	693.8	735.8	765.8	734.0	625.6	608.7	602.8	600.3	601.6
50°	1589.7	668.1	713.0	744.2	633.3	592.0	571.0	569.2	572.3	574.0
52.5°	1485.4	626.2	674.0	705.2	587.2	562.6	539.3	543.5	556.7	560.9
55°	1417.1	577.0	622.6	627.3	554.8	535.0	515.3	524.9	549.5	557.3
57.5°	1399.1	524.9	563.9	558.4	513.5	511.1	499.1	507.5	538.6	550.0
60°	1393.7	478.2	506.4	502.1	473.3	484.7	481.7	486.0	496.7	500.3
62.5°	1351.8	441.0	454.8	448.7	437.4	457.2	464.3	455.4	463.8	468.0
65°	1245.1	411.0	404.5	400.3	405.1	423.0	437.4	419.4	427.2	439.2
67.5°	1069.0	370.3	352.3	357.1	372.1	381.7	400.3	379.9	386.4	406.8
70°	864.6	318.8	302.6	316.4	330.8	350.5	353.5	339.8	355.4	378.1
72.5°	611.7	266.6	255.2	283.4	288.2	314.0	307.4	300.8	322.4	330.2
75°	424.2	215.1	208.5	230.1	247.4	269.7	264.9	272.6	318.2	321.7
77.5°	268.4	167.2	163.0	176.7	200.7	225.3	233.1	321.7	543.5	565.1
80°	155.8	124.6	119.8	130.6	151.6	174.4	224.7	394.8	358.3	354.1
82.5°	86.9	85.7	79.6	82.7	101.3	125.9	317.5	278.0	225.9	233.1
85°	40.8	50.3	43.2	41.3	56.9	147.4	212.1	158.8	105.5	103.0
87.5°	10.8	9.6	9.6	10.8	24.0	127.0	84.5	67.8	40.2	38.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)