

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: P966568

Luminaire Tested: **NAV-SB4C-722-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966568
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-SB4C-722-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 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: 21669.5 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

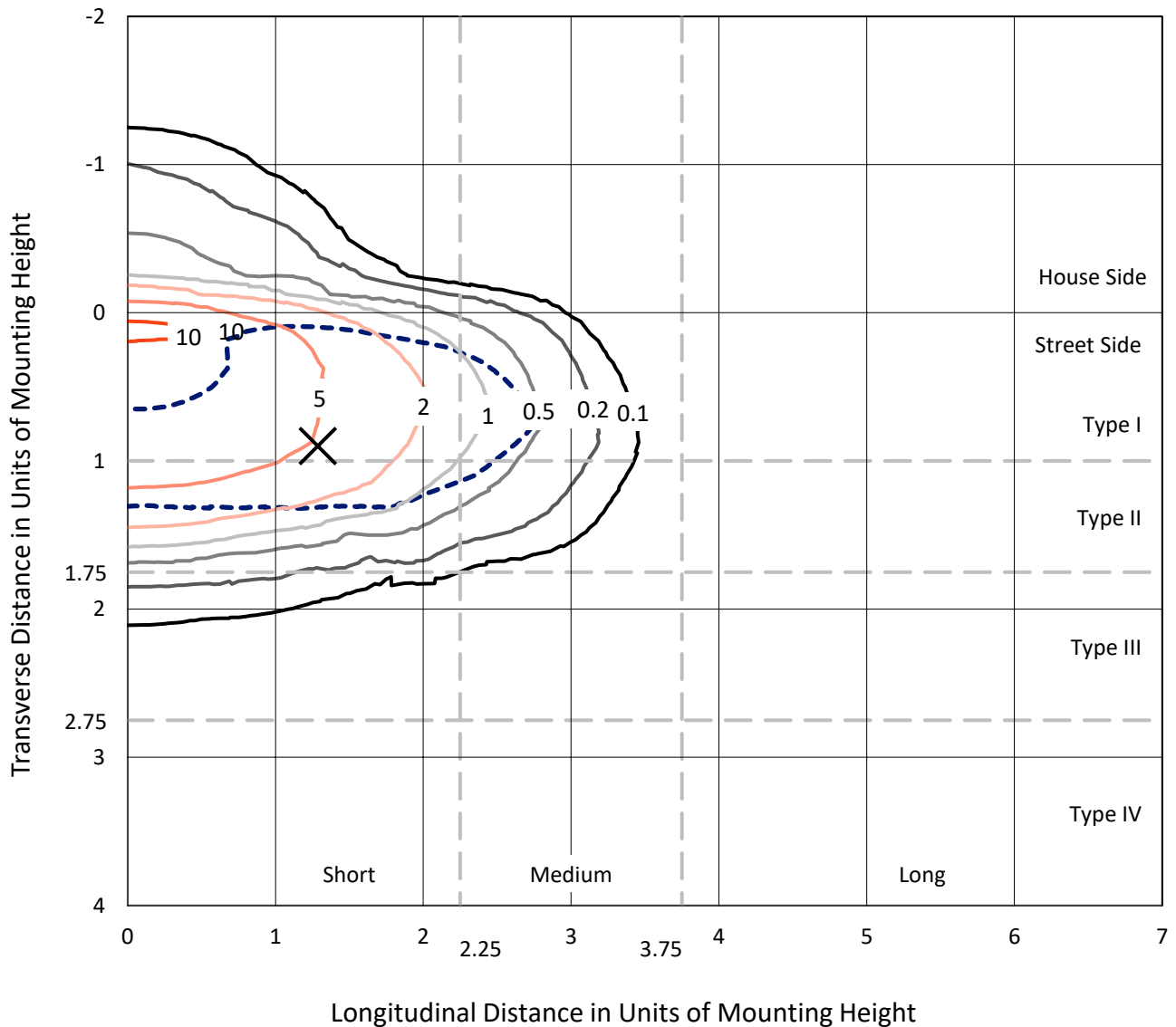
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

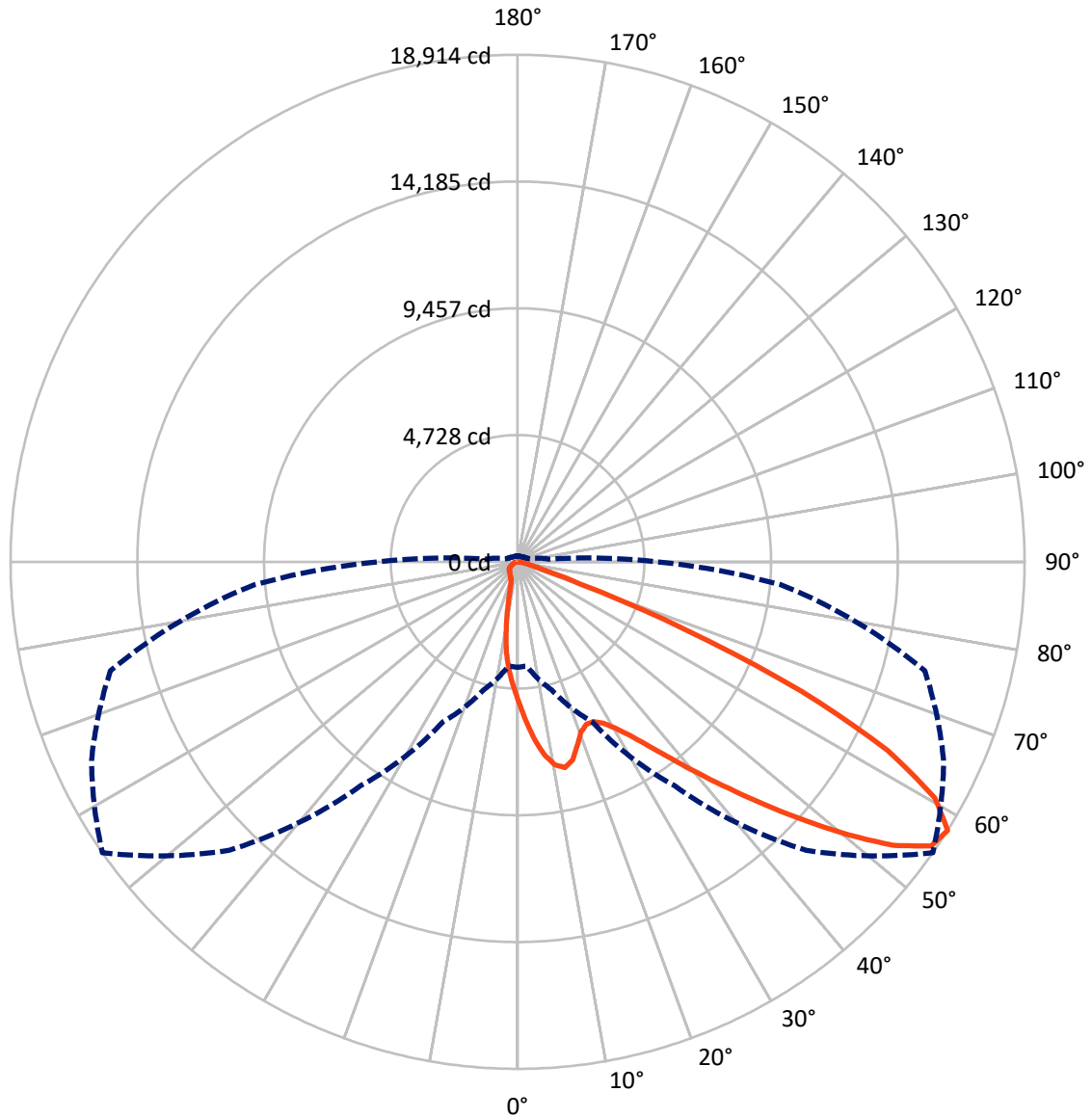
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12 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	1692.3	0.0	1692.3
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	19977.2	0.0	19977.2
	% Fixture	92.2	0.0	92.2
Total	Lumens	21669.5	0.0	21669.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	485.9	2.2
10°-20°	1173.6	5.4
20°-30°	1877.7	8.7
30°-40°	3178.2	14.7
40°-50°	5217.9	24.1
50°-60°	5734.9	26.5
60°-70°	3289.5	15.2
70°-80°	672.1	3.1
80°-90°	39.6	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°	21669.5	100.0
0°-180°	21669.5	100.0

Coefficient of Utilization

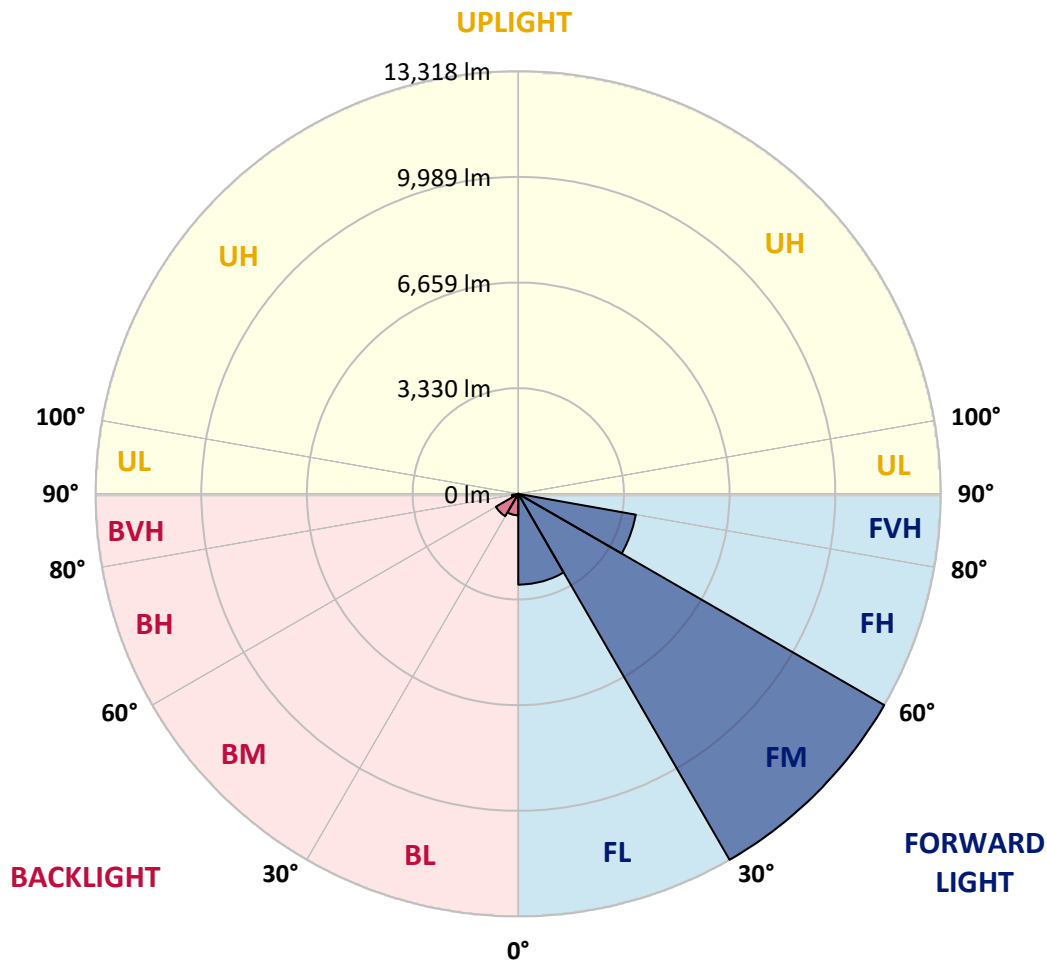


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2861.6	13.2			
FM (30°-60°)	13318.2	61.5			
FH (60°-80°)	3760.4	17.4			G2/5000
FVH (80°-90°)	37.0	0.2			G1/100
BL (0°-30°)	675.6	3.1	B2/1000		
BM (30°-60°)	812.7	3.8	B1/1000		
BH (60°-80°)	201.3	0.9	B1/500		G1/500
BVH (80°-90°)	2.7	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°	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9
2.5°	6479.1	6397.6	6385.6	6369.7	6214.6	6098.3	5930.0	5745.6	5538.5	5327.3	5233.9
5°	7485.4	7421.2	7409.1	7334.3	7158.0	6960.2	6660.9	6282.7	5896.6	5442.3	5247.2
7.5°	7680.4	7668.3	7723.2	7720.5	7696.4	7540.1	7287.5	6837.3	6257.3	5583.9	5281.9
10°	6810.5	6841.3	7004.3	7147.2	7533.4	7757.9	7703.1	7331.6	6628.8	5745.6	5320.7
12.5°	6018.2	5982.1	6098.3	6260.1	6709.0	7377.1	7875.5	7744.6	7053.7	5928.7	5378.2
15°	5521.2	5506.4	5571.9	5646.7	5988.8	6662.2	7675.1	8080.0	7462.6	6145.1	5465.0
17.5°	5362.1	5350.1	5370.2	5388.8	5610.6	6131.8	7198.1	8285.7	7854.1	6392.3	5561.2
20°	5491.7	5475.7	5473.0	5458.3	5550.5	5905.9	6766.4	8300.3	8205.5	6616.8	5644.1
22.5°	5869.9	5851.2	5785.7	5726.9	5734.9	5936.7	6574.0	8153.5	8470.1	6826.6	5696.1
25°	6555.4	6524.6	6388.3	6190.6	6064.9	6150.5	6603.5	7959.6	8722.6	6990.9	5670.8
27.5°	7413.2	7373.1	7198.1	6904.1	6616.8	6512.5	6815.9	7826.1	8932.5	7116.6	5616.0
30°	8253.6	8201.5	8029.1	7800.7	7381.1	7052.4	7199.4	7884.8	9182.3	7247.5	5543.8
32.5°	9160.9	9111.4	8883.0	8599.8	8252.3	7810.0	7724.5	8172.1	9488.2	7430.5	5493.1
35°	10308.7	10231.1	9906.5	9520.3	9151.5	8703.9	8435.3	8667.8	9895.8	7709.8	5521.2
37.5°	11615.5	11511.3	11161.2	10628.0	10147.0	9646.0	9301.2	9349.3	10493.1	8084.0	5608.0
40°	12847.5	12752.5	12429.3	11926.8	11322.9	10714.9	10347.5	10240.6	11317.5	8539.6	5760.3
42.5°	13586.4	13500.9	13364.6	13152.1	12643.0	12023.0	11559.3	11328.2	12292.9	9084.8	5946.0
45°	13627.8	13553.0	13736.0	13983.3	13883.0	13470.1	12904.9	12481.3	13272.3	9596.5	6138.4
47.5°	12965.0	12914.3	13470.1	14333.3	14763.6	14937.2	14416.1	13538.3	14080.7	9963.9	6217.2
50°	11158.5	11139.8	12283.6	13868.2	15099.0	16222.7	16010.2	14521.7	14707.4	10153.6	6142.4
52.5°	9675.4	9607.2	10274.0	12379.7	14611.2	16898.8	17568.2	15486.4	15145.7	10189.7	5967.4
55°	7338.4	7278.2	8114.6	9889.1	13038.5	16658.3	18708.0	16481.9	15459.7	10097.6	5653.4
57.5°	3936.4	3899.0	4955.9	6582.0	10192.4	15215.2	18913.7	17534.8	15724.2	9853.0	5213.8
60°	1532.6	1525.9	1921.5	3193.5	6194.6	12378.4	17875.5	18166.8	15890.0	9552.4	4846.3
62.5°	927.3	947.4	1011.5	1433.8	2736.5	7689.8	15482.4	17448.0	16000.9	9277.2	4543.0
65°	767.0	768.3	776.3	984.8	1310.8	3217.6	11655.6	15082.9	15726.9	8786.8	4112.8
67.5°	657.4	669.4	700.2	781.7	924.7	1411.0	6710.4	11683.7	14060.7	7645.7	3442.1
70°	518.4	534.4	573.2	642.7	713.5	883.2	2480.0	7773.9	10741.6	5763.0	2602.9
72.5°	437.0	435.6	455.6	522.4	566.5	621.4	954.1	4355.9	6242.7	2751.2	1288.1
75°	338.0	351.4	376.8	437.0	463.6	450.3	517.1	1591.4	2236.8	833.7	438.3
77.5°	264.6	275.2	298.0	356.8	383.5	319.4	298.0	569.2	718.8	299.3	197.7
80°	118.9	128.2	203.1	263.2	312.6	220.5	161.6	291.3	319.4	136.3	100.2
82.5°	21.4	36.1	118.9	139.0	160.3	143.0	84.2	151.0	156.3	54.7	34.7
85°	1.3	2.7	41.4	50.7	64.2	46.7	25.4	60.2	52.1	18.8	13.3
87.5°	0.0	0.0	0.0	1.3	1.3	6.7	8.0	10.7	8.0	6.7	5.3
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°	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9	5221.9
2.5°	5137.6	4947.9	4763.5	4612.5	4524.3	4374.7	4275.8	4259.8	4218.4	4254.5
5°	5038.8	4699.4	4355.9	4048.6	3796.1	3470.0	3226.9	3124.0	3034.5	3065.3
7.5°	4992.0	4456.2	3921.8	3396.5	2856.8	2335.7	1948.1	1786.5	1663.6	1680.9
10°	4929.2	4203.6	3365.9	2564.1	1841.3	1326.9	1059.6	960.7	905.9	907.2
12.5°	4881.0	3901.7	2720.5	1738.4	1121.0	847.2	764.3	740.3	724.2	725.6
15°	4857.1	3546.2	2083.1	1158.5	801.8	717.5	697.5	686.7	676.1	674.8
17.5°	4817.0	3150.7	1524.6	845.8	701.5	672.1	654.8	642.7	629.3	626.7
20°	4756.8	2701.8	1114.4	714.8	657.4	634.7	610.6	594.6	578.6	575.9
22.5°	4645.9	2227.4	856.5	661.4	625.4	599.9	570.5	551.9	535.8	533.1
25°	4440.2	1782.5	721.5	628.0	597.3	566.5	534.4	509.1	494.4	491.7
27.5°	4179.6	1400.4	654.8	597.3	561.2	533.1	497.0	473.0	459.6	456.9
30°	3872.2	1078.3	616.0	562.5	518.4	494.4	462.3	442.3	434.3	434.3
32.5°	3540.9	861.8	599.9	527.8	481.0	454.3	429.0	420.9	418.2	416.9
35°	3229.6	748.2	591.9	499.7	447.6	422.2	411.5	412.9	418.2	418.2
37.5°	2953.0	712.2	587.9	479.7	418.2	395.5	402.2	414.2	408.9	408.9
40°	2703.1	716.2	585.3	465.0	394.2	380.8	394.2	384.8	371.5	370.1
42.5°	2512.1	749.6	579.9	452.9	379.5	370.1	364.8	350.0	348.7	351.4
45°	2373.1	779.0	578.6	447.6	363.5	346.0	339.4	324.7	351.4	358.1
47.5°	2208.7	779.0	578.6	429.0	336.7	330.0	319.4	303.3	330.0	336.7
50°	1996.3	729.6	555.9	407.5	315.3	311.3	292.6	272.5	267.2	271.2
52.5°	1727.7	640.0	498.4	378.1	294.0	286.0	263.2	248.6	244.6	244.6
55°	1421.7	535.8	420.9	335.4	271.2	256.6	240.5	233.8	229.8	227.1
57.5°	1155.8	439.6	338.0	298.0	249.9	231.1	225.8	217.8	211.2	207.2
60°	948.7	346.0	279.3	264.6	228.5	211.2	209.8	199.1	181.7	179.1
62.5°	732.3	253.9	235.1	229.8	207.2	192.4	189.7	168.4	141.7	136.3
65°	517.1	197.7	189.7	201.7	184.4	171.1	164.3	132.3	104.2	100.2
67.5°	363.5	165.6	149.6	176.4	160.3	143.0	139.0	112.2	86.8	84.2
70°	259.2	135.0	122.9	151.0	128.2	125.6	117.6	93.6	70.8	68.2
72.5°	183.1	102.9	94.9	131.0	88.1	108.2	96.2	72.2	53.4	50.7
75°	135.0	73.5	66.8	76.2	64.2	81.5	68.2	48.1	33.4	32.1
77.5°	98.9	46.7	40.1	37.4	37.4	50.7	37.4	20.1	14.7	13.3
80°	69.5	21.4	18.8	16.0	14.7	12.0	5.3	2.7	1.3	1.3
82.5°	41.4	9.3	9.3	6.7	4.0	0.0	0.0	0.0	0.0	0.0
85°	9.3	4.0	4.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	1.3	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)