

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: P967622

Luminaire Tested: **NAV-SB5A-722-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967622
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-SB5A-722-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 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: 16359 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

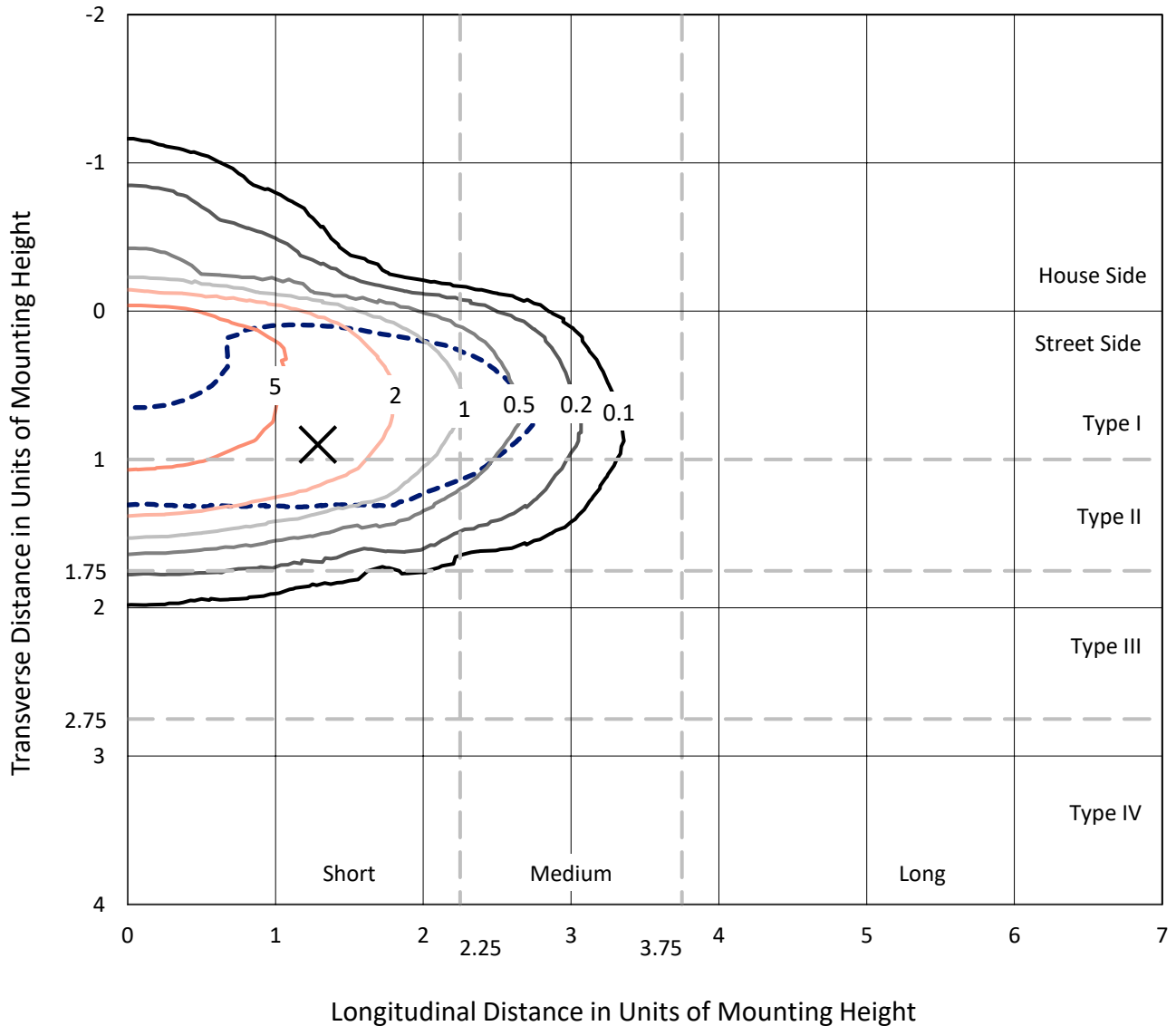
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

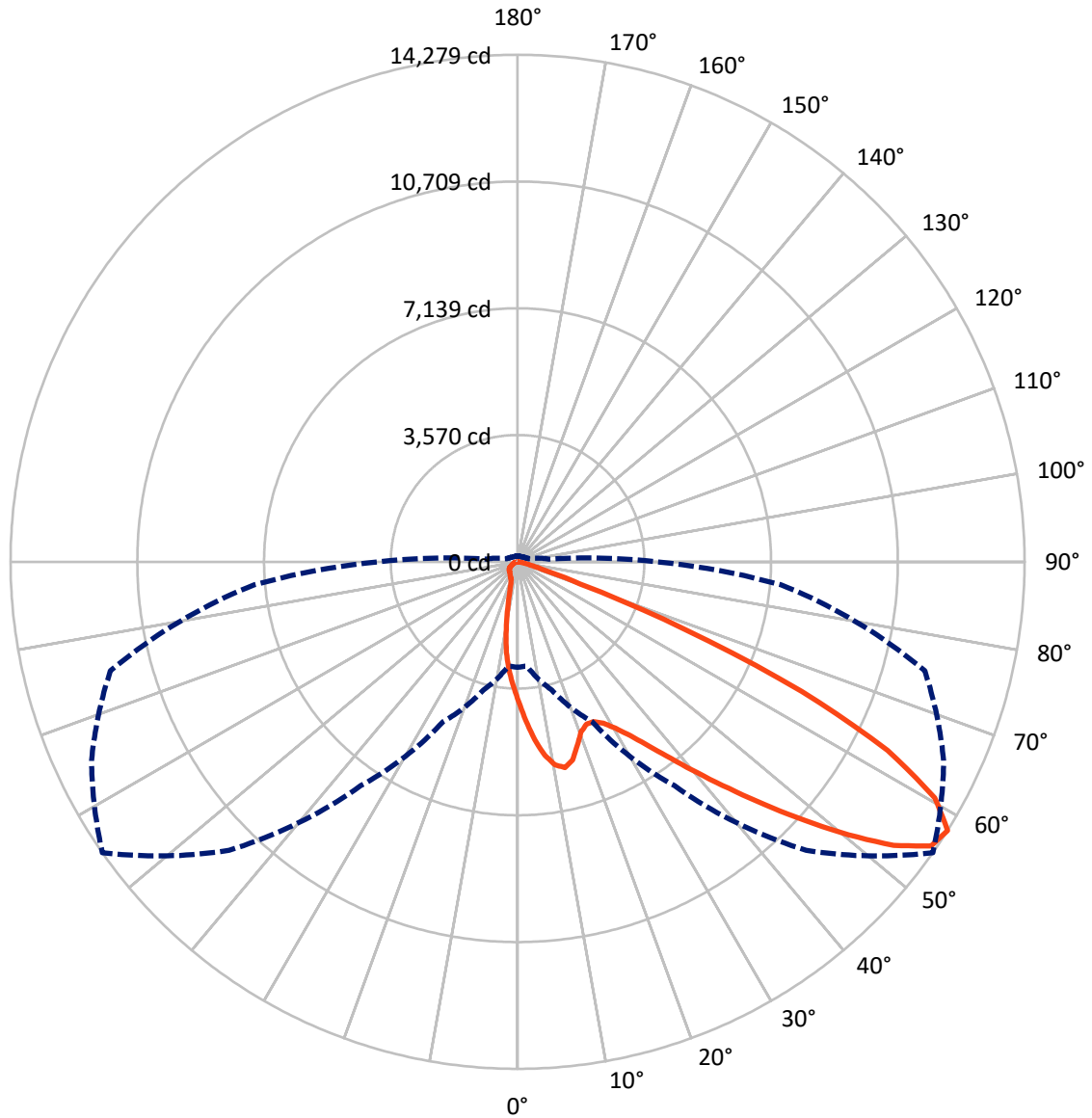
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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	1277.6	0.0	1277.6
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	15081.4	0.0	15081.4
	% Fixture	92.2	0.0	92.2
Total	Lumens	16359.0	0.0	16359.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	366.8	2.2
10°-20°	886.0	5.4
20°-30°	1417.6	8.7
30°-40°	2399.3	14.7
40°-50°	3939.2	24.1
50°-60°	4329.4	26.5
60°-70°	2483.4	15.2
70°-80°	507.4	3.1
80°-90°	29.9	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°	16359.0	100.0
0°-180°	16359.0	100.0

Coefficient of Utilization

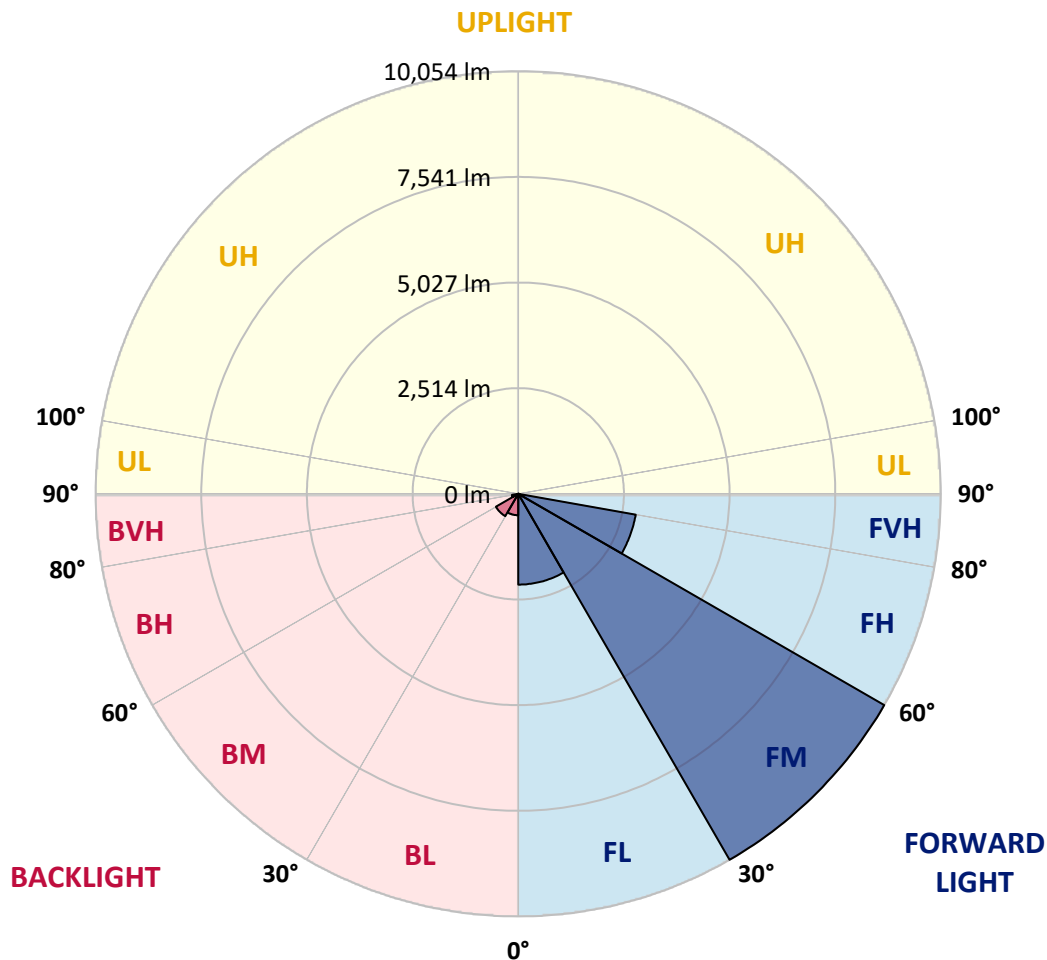


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2160.3	13.2			
FM (30°-60°)	10054.4	61.5			
FH (60°-80°)	2838.8	17.4			G2/5000
FVH (80°-90°)	27.9	0.2			G1/100
BL (0°-30°)	510.0	3.1	B2/1000		
BM (30°-60°)	613.6	3.8	B1/1000		
BH (60°-80°)	151.9	0.9	B1/500		G1/500
BVH (80°-90°)	2.0	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°	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2
2.5°	4891.3	4829.8	4820.7	4808.6	4691.6	4603.9	4476.8	4337.5	4181.2	4021.8	3951.2
5°	5650.9	5602.4	5593.4	5536.9	5403.8	5254.5	5028.5	4743.1	4451.6	4108.5	3961.3
7.5°	5798.2	5789.1	5830.5	5828.5	5810.3	5692.2	5501.6	5161.7	4723.9	4215.5	3987.6
10°	5141.5	5164.7	5287.8	5395.7	5687.2	5856.6	5815.3	5534.9	5004.4	4337.5	4016.8
12.5°	4543.3	4516.0	4603.9	4725.9	5064.8	5569.2	5945.4	5846.6	5325.1	4475.8	4060.1
15°	4168.1	4157.0	4206.4	4262.9	4521.2	5029.6	5794.1	6099.8	5633.7	4639.2	4125.7
17.5°	4048.0	4038.9	4054.1	4068.2	4235.6	4629.1	5434.0	6255.2	5929.3	4825.8	4198.3
20°	4145.9	4133.8	4131.8	4120.7	4190.3	4458.5	5108.2	6266.2	6194.6	4995.2	4260.9
22.5°	4431.4	4417.2	4367.8	4323.4	4329.5	4481.8	4962.9	6155.2	6394.4	5153.6	4300.2
25°	4948.8	4925.6	4822.7	4673.5	4578.7	4643.1	4985.2	6009.0	6585.0	5277.7	4281.0
27.5°	5596.4	5566.2	5434.0	5212.1	4995.2	4916.5	5145.5	5908.1	6743.4	5372.5	4239.7
30°	6230.9	6191.6	6061.4	5888.9	5572.2	5324.1	5435.1	5952.5	6932.0	5471.3	4185.2
32.5°	6915.9	6878.6	6706.1	6492.1	6230.0	5896.0	5831.4	6169.4	7163.0	5609.5	4146.8
35°	7782.3	7723.9	7478.7	7187.2	6908.8	6570.9	6368.1	6543.6	7470.6	5820.4	4168.1
37.5°	8768.9	8690.3	8425.9	8023.4	7660.3	7282.0	7021.8	7058.0	7921.5	6102.8	4233.7
40°	9699.0	9627.3	9383.2	9003.9	8548.0	8089.0	7811.6	7730.9	8544.0	6446.8	4348.7
42.5°	10256.8	10192.2	10089.3	9929.0	9544.6	9076.6	8726.5	8552.0	9280.3	6858.4	4488.9
45°	10288.0	10231.6	10369.7	10556.4	10480.7	10169.0	9742.3	9422.5	10019.7	7244.7	4634.1
47.5°	9787.7	9749.4	10169.0	10820.6	11145.4	11276.6	10883.1	10220.5	10630.0	7522.1	4693.6
50°	8423.9	8409.8	9273.3	10469.6	11398.6	12247.0	12086.6	10962.9	11103.1	7665.4	4637.1
52.5°	7304.3	7252.8	7756.1	9345.8	11030.4	12757.4	13262.8	11691.2	11434.0	7692.5	4505.0
55°	5539.9	5494.5	6126.0	7465.6	9843.2	12575.8	14123.3	12442.7	11671.0	7622.9	4267.9
57.5°	2971.7	2943.5	3741.4	4969.0	7694.6	11486.4	14278.6	13237.6	11870.7	7438.3	3936.1
60°	1157.0	1152.0	1450.6	2410.9	4676.5	9344.8	13494.7	13714.7	11995.8	7211.4	3658.6
62.5°	700.1	715.1	763.6	1082.4	2065.9	5805.2	11688.2	13172.0	12079.5	7003.6	3429.6
65°	579.0	580.0	586.1	743.4	989.5	2429.0	8799.1	11386.5	11872.8	6633.4	3104.8
67.5°	496.3	505.3	528.6	590.1	698.0	1065.2	5065.9	8820.3	10614.9	5772.0	2598.5
70°	391.3	403.5	432.8	485.2	538.6	666.8	1872.2	5868.7	8109.2	4350.6	1965.0
72.5°	329.8	328.8	344.0	394.4	427.7	469.0	720.3	3288.5	4712.7	2077.0	972.4
75°	255.2	265.3	284.4	329.8	350.0	340.0	390.4	1201.4	1688.6	629.5	330.9
77.5°	199.8	207.8	225.0	269.4	289.5	241.1	225.0	429.7	542.7	225.9	149.3
80°	89.8	96.9	153.3	198.7	236.1	166.5	122.1	219.9	241.1	102.9	75.6
82.5°	16.1	27.3	89.8	104.9	121.1	107.9	63.6	114.0	118.0	41.3	26.2
85°	1.0	2.0	31.3	38.3	48.4	35.3	19.2	45.4	39.4	14.1	10.0
87.5°	0.0	0.0	0.0	1.0	1.0	5.0	6.0	8.1	6.0	5.0	4.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2	3942.2
2.5°	3878.6	3735.3	3596.1	3482.1	3415.6	3302.6	3227.9	3215.8	3184.6	3211.8
5°	3803.9	3547.7	3288.5	3056.4	2865.8	2619.7	2436.1	2358.4	2290.9	2314.0
7.5°	3768.6	3364.2	2960.6	2564.1	2156.7	1763.3	1470.8	1348.7	1255.8	1268.9
10°	3721.2	3173.5	2541.0	1935.7	1390.0	1001.6	799.9	725.3	683.9	684.9
12.5°	3684.9	2945.4	2053.8	1312.3	846.3	639.5	577.0	558.8	546.7	547.8
15°	3666.7	2677.2	1572.7	874.5	605.3	541.7	526.5	518.4	510.4	509.4
17.5°	3636.5	2378.6	1151.0	638.6	529.6	507.4	494.3	485.2	475.1	473.1
20°	3591.1	2039.6	841.3	539.7	496.3	479.2	460.9	448.8	436.8	434.8
22.5°	3507.3	1681.5	646.6	499.3	472.1	452.9	430.7	416.6	404.5	402.5
25°	3352.1	1345.6	544.7	474.1	450.9	427.7	403.5	384.4	373.2	371.3
27.5°	3155.3	1057.2	494.3	450.9	423.6	402.5	375.3	357.1	347.0	345.0
30°	2923.3	814.1	465.0	424.7	391.3	373.2	349.0	333.8	327.8	327.8
32.5°	2673.1	650.7	452.9	398.4	363.2	343.0	323.8	317.8	315.7	314.7
35°	2438.1	564.9	446.9	377.3	337.9	318.8	310.7	311.7	315.7	315.7
37.5°	2229.3	537.6	443.8	362.1	315.7	298.6	303.6	312.7	308.6	308.6
40°	2040.7	540.7	441.8	351.1	297.6	287.5	297.6	290.5	280.4	279.4
42.5°	1896.5	565.9	437.8	341.9	286.5	279.4	275.4	264.2	263.3	265.3
45°	1791.5	588.0	436.8	337.9	274.4	261.3	256.2	245.1	265.3	270.3
47.5°	1667.5	588.0	436.8	323.8	254.2	249.2	241.1	229.0	249.2	254.2
50°	1507.1	550.7	419.6	307.7	238.1	235.0	220.9	205.8	201.7	204.8
52.5°	1304.3	483.2	376.3	285.5	221.9	215.9	198.7	187.6	184.6	184.6
55°	1073.3	404.5	317.8	253.2	204.8	193.7	181.5	176.5	173.5	171.5
57.5°	872.6	331.9	255.2	225.0	188.6	174.6	170.5	164.4	159.4	156.3
60°	716.2	261.3	210.8	199.8	172.5	159.4	158.4	150.3	137.1	135.2
62.5°	552.8	191.7	177.5	173.5	156.3	145.2	143.2	127.1	106.9	102.9
65°	390.4	149.3	143.2	152.3	139.2	129.1	124.0	99.8	78.7	75.6
67.5°	274.4	125.0	113.0	133.1	121.1	107.9	104.9	84.8	65.6	63.6
70°	195.7	101.9	92.8	114.0	96.9	94.8	88.8	70.6	53.5	51.5
72.5°	138.2	77.7	71.6	98.8	66.6	81.7	72.7	54.4	40.4	38.3
75°	101.9	55.5	50.4	57.5	48.4	61.5	51.5	36.3	25.2	24.2
77.5°	74.6	35.3	30.2	28.3	28.3	38.3	28.3	15.2	11.1	10.0
80°	52.5	16.1	14.1	12.1	11.1	9.1	4.0	2.0	1.0	1.0
82.5°	31.3	7.1	7.1	5.0	3.1	0.0	0.0	0.0	0.0	0.0
85°	7.1	3.1	3.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	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

(END OF REPORT)