

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: P965514

Luminaire Tested: **NAV-SB4A-722-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965514
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-SB4A-722-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 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: 12979.6 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

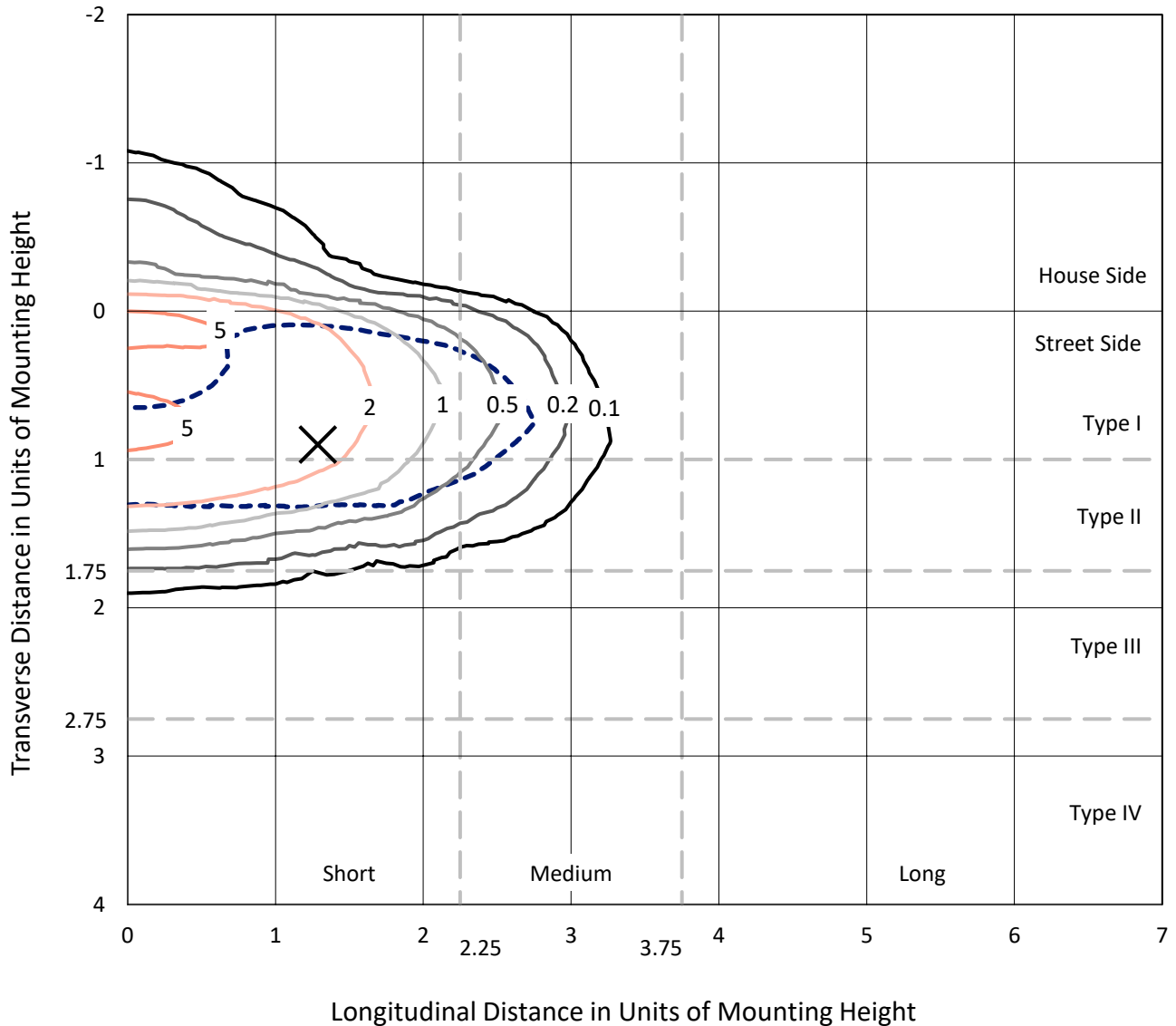
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

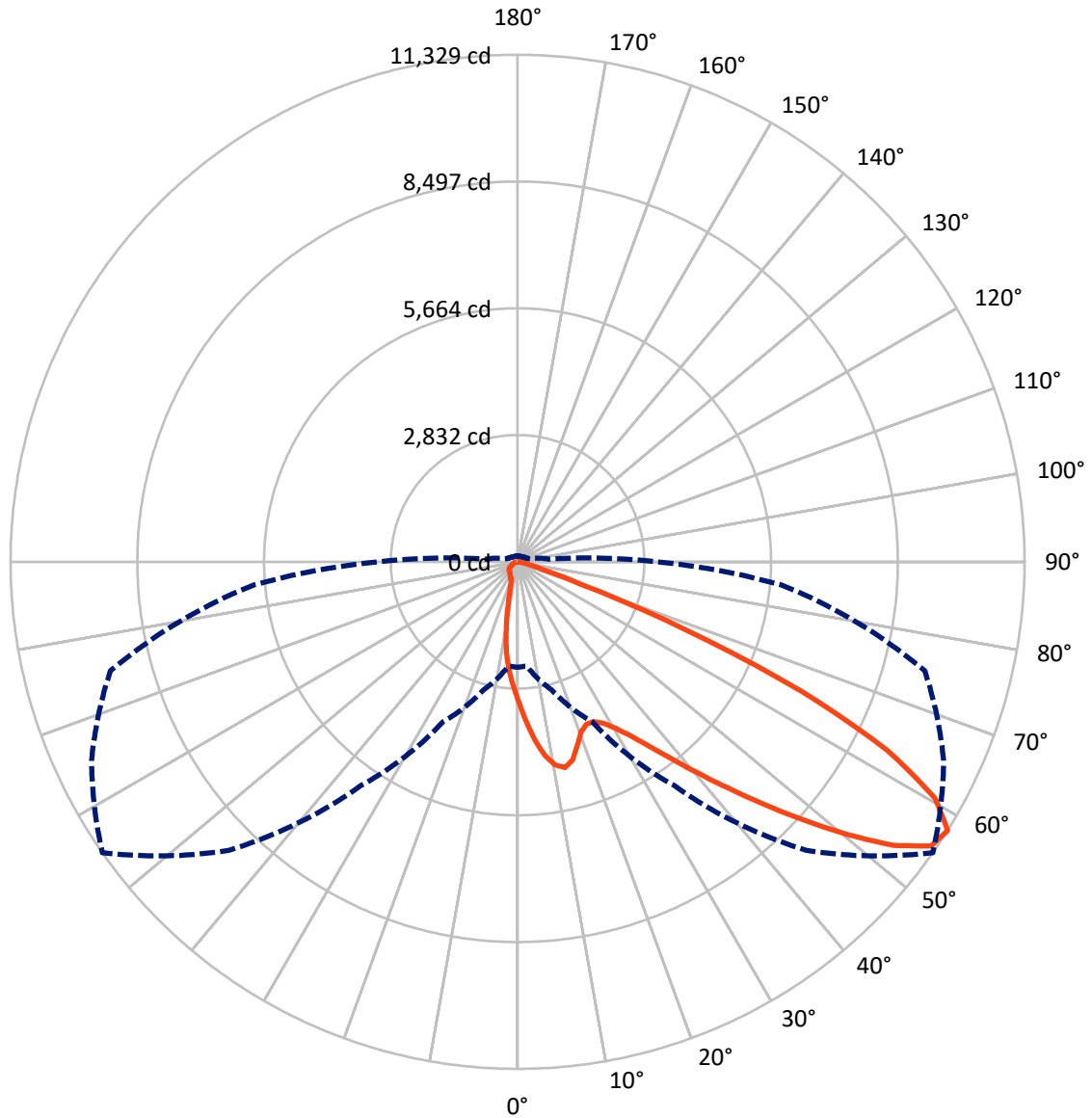
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 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	1013.7	0.0	1013.7
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	11965.9	0.0	11965.9
	% Fixture	92.2	0.0	92.2
Total	Lumens	12979.6	0.0	12979.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.0	2.2
10°-20°	703.0	5.4
20°-30°	1124.7	8.7
30°-40°	1903.7	14.7
40°-50°	3125.4	24.1
50°-60°	3435.1	26.5
60°-70°	1970.4	15.2
70°-80°	402.6	3.1
80°-90°	23.7	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°	12979.6	100.0
0°-180°	12979.6	100.0

Coefficient of Utilization

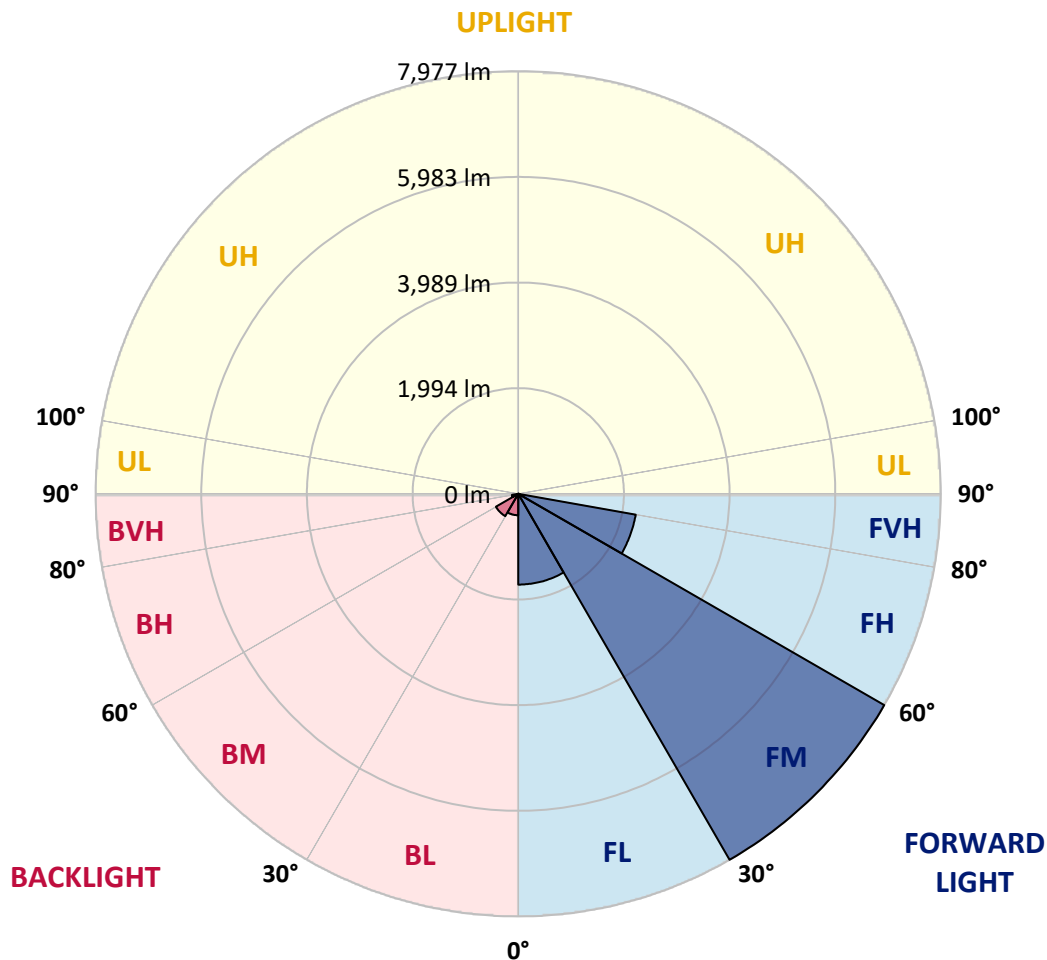


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1714.0	13.2			
FM (30°-60°)	7977.3	61.5			
FH (60°-80°)	2252.4	17.4			G2/5000
FVH (80°-90°)	22.1	0.2			G1/100
BL (0°-30°)	404.7	3.1	B1/500		
BM (30°-60°)	486.8	3.8	B1/1000		
BH (60°-80°)	120.6	0.9	B1/500		G1/500
BVH (80°-90°)	1.6	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-G2
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8
2.5°	3880.9	3832.1	3824.9	3815.3	3722.4	3652.8	3551.9	3441.5	3317.4	3191.0	3135.0
5°	4483.6	4445.1	4437.9	4393.2	4287.5	4169.0	3989.7	3763.2	3531.9	3259.8	3143.0
7.5°	4600.4	4593.2	4626.0	4624.4	4610.0	4516.4	4365.1	4095.4	3748.0	3344.7	3163.8
10°	4079.4	4097.7	4195.4	4281.0	4512.4	4646.8	4614.0	4391.5	3970.5	3441.5	3187.0
12.5°	3604.7	3583.2	3652.8	3749.7	4018.5	4418.7	4717.3	4638.8	4225.0	3551.1	3221.4
15°	3307.1	3298.2	3337.4	3382.3	3587.2	3990.5	4597.2	4839.7	4469.9	3680.8	3273.4
17.5°	3211.8	3204.6	3216.6	3227.8	3360.7	3672.8	4311.5	4962.9	4704.4	3828.9	3331.0
20°	3289.4	3279.8	3278.3	3269.4	3324.7	3537.6	4053.0	4971.8	4915.0	3963.4	3380.7
22.5°	3516.0	3504.7	3465.5	3430.3	3435.1	3555.9	3937.7	4883.7	5073.4	4088.9	3411.9
25°	3926.5	3908.1	3826.4	3708.0	3632.8	3684.0	3955.3	4767.7	5224.6	4187.4	3396.6
27.5°	4440.3	4416.3	4311.5	4135.4	3963.4	3900.8	4082.6	4687.6	5350.3	4262.7	3363.8
30°	4943.8	4912.5	4809.3	4672.5	4421.1	4224.2	4312.3	4722.9	5499.9	4341.1	3320.7
32.5°	5487.1	5457.6	5320.7	5151.0	4943.0	4678.0	4626.8	4894.9	5683.3	4450.8	3290.2
35°	6174.7	6128.3	5933.7	5702.5	5481.6	5213.5	5052.6	5191.8	5927.4	4618.0	3307.1
37.5°	6957.4	6895.0	6685.3	6366.0	6077.8	5777.7	5571.2	5600.0	6285.1	4842.1	3359.0
40°	7695.3	7638.5	7444.9	7143.9	6782.1	6417.9	6197.9	6133.9	6778.9	5115.1	3450.3
42.5°	8137.9	8086.7	8005.0	7877.8	7572.9	7201.5	6923.8	6785.3	7363.2	5441.5	3561.6
45°	8162.8	8117.9	8227.6	8375.7	8315.6	8068.3	7729.7	7476.0	7949.9	5748.1	3676.8
47.5°	7765.8	7735.4	8068.3	8585.3	8843.1	8947.1	8634.9	8109.1	8434.1	5968.2	3724.0
50°	6683.7	6672.5	7357.6	8306.8	9043.9	9717.0	9589.8	8698.2	8809.5	6081.8	3679.2
52.5°	5795.3	5754.5	6153.9	7415.3	8751.8	10122.0	10523.0	9276.0	9072.0	6103.5	3574.4
55°	4395.5	4359.5	4860.5	5923.4	7809.8	9978.0	11205.7	9872.3	9260.1	6048.2	3386.3
57.5°	2357.8	2335.5	2968.5	3942.6	6105.0	9113.6	11328.9	10503.0	9418.5	5901.7	3123.0
60°	918.0	914.0	1150.9	1912.9	3710.4	7414.4	10707.0	10881.5	9517.7	5721.7	2902.9
62.5°	555.4	567.4	605.9	858.7	1639.1	4606.0	9273.6	10450.9	9584.2	5556.8	2721.2
65°	459.4	460.2	465.0	589.9	785.2	1927.2	6981.5	9034.3	9420.1	5263.1	2463.5
67.5°	393.8	401.0	419.4	468.2	553.8	845.2	4019.3	6998.2	8422.0	4579.6	2061.7
70°	310.6	320.1	343.4	385.0	427.4	529.0	1485.4	4656.4	6434.0	3451.9	1559.1
72.5°	261.7	260.9	273.0	312.9	339.4	372.2	571.4	2609.1	3739.2	1647.9	771.5
75°	202.4	210.5	225.7	261.7	277.7	269.7	309.8	953.2	1339.8	499.4	262.5
77.5°	158.5	164.9	178.5	213.7	229.7	191.3	178.5	340.9	430.6	179.3	118.5
80°	71.2	76.9	121.7	157.6	187.3	132.0	96.9	174.5	191.3	81.6	60.1
82.5°	12.8	21.6	71.2	83.2	96.0	85.6	50.4	90.4	93.7	32.8	20.8
85°	0.8	1.6	24.8	30.4	38.4	28.0	15.2	36.0	31.3	11.2	8.0
87.5°	0.0	0.0	0.0	0.8	0.8	4.0	4.8	6.4	4.8	4.0	3.2
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°	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8
2.5°	3077.4	2963.7	2853.2	2762.8	2710.0	2620.3	2561.1	2551.5	2526.7	2548.4
5°	3018.1	2814.9	2609.1	2425.0	2273.8	2078.5	1932.8	1871.2	1817.6	1836.0
7.5°	2990.1	2669.2	2349.0	2034.5	1711.1	1399.0	1166.9	1070.1	996.4	1006.9
10°	2952.5	2517.9	2016.1	1535.9	1102.9	794.8	634.7	575.4	542.6	543.5
12.5°	2923.7	2337.0	1629.5	1041.3	671.5	507.4	457.8	443.4	433.8	434.6
15°	2909.3	2124.1	1247.7	693.9	480.2	429.8	417.8	411.3	405.0	404.2
17.5°	2885.3	1887.2	913.2	506.7	420.1	402.6	392.2	385.0	377.0	375.4
20°	2849.2	1618.3	667.5	428.1	393.8	380.2	365.7	356.2	346.6	344.9
22.5°	2782.8	1334.1	513.0	396.2	374.5	359.4	341.7	330.6	320.9	319.3
25°	2659.6	1067.6	432.1	376.2	357.7	339.4	320.1	304.9	296.1	294.5
27.5°	2503.5	838.8	392.2	357.7	336.1	319.3	297.8	283.3	275.3	273.7
30°	2319.4	645.9	369.0	336.9	310.6	296.1	277.0	265.0	260.1	260.1
32.5°	2120.9	516.2	359.4	316.1	288.1	272.1	256.9	252.2	250.5	249.7
35°	1934.5	448.2	354.5	299.3	268.1	252.9	246.5	247.3	250.5	250.5
37.5°	1768.7	426.6	352.2	287.3	250.5	236.9	240.9	248.2	244.9	244.9
40°	1619.1	429.0	350.5	278.5	236.1	228.1	236.1	230.5	222.5	221.7
42.5°	1504.7	449.0	347.4	271.3	227.3	221.7	218.5	209.7	208.9	210.5
45°	1421.4	466.6	346.6	268.1	217.7	207.3	203.3	194.4	210.5	214.5
47.5°	1323.0	466.6	346.6	256.9	201.7	197.7	191.3	181.6	197.7	201.7
50°	1195.8	437.0	332.9	244.2	188.9	186.4	175.3	163.3	160.1	162.5
52.5°	1034.8	383.3	298.5	226.5	176.1	171.3	157.6	148.8	146.5	146.5
55°	851.6	320.9	252.2	200.9	162.5	153.6	144.0	140.0	137.7	136.0
57.5°	692.3	263.3	202.4	178.5	149.6	138.5	135.3	130.5	126.5	124.0
60°	568.3	207.3	167.3	158.5	136.8	126.5	125.7	119.2	108.9	107.2
62.5°	438.6	152.1	140.8	137.7	124.0	115.2	113.7	100.9	84.9	81.6
65°	309.8	118.5	113.7	120.8	110.5	102.4	98.4	79.2	62.4	60.1
67.5°	217.7	99.2	89.7	105.7	96.0	85.6	83.2	67.2	52.1	50.4
70°	155.3	80.9	73.6	90.4	76.9	75.2	70.4	56.1	42.4	40.8
72.5°	109.7	61.6	56.8	78.4	52.8	64.8	57.6	43.3	32.0	30.4
75°	80.9	44.0	40.0	45.6	38.4	48.8	40.8	28.8	20.0	19.2
77.5°	59.2	28.0	24.0	22.4	22.4	30.4	22.4	12.0	8.8	8.0
80°	41.6	12.8	11.2	9.6	8.8	7.2	3.2	1.6	0.8	0.8
82.5°	24.8	5.6	5.6	4.0	2.4	0.0	0.0	0.0	0.0	0.0
85°	5.6	2.4	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	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)