

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: P459850

Luminaire Tested: **NAV-SA3A-AMB-U-SL2-HSS**

Issue Date: 1/6/2021

Test Information

Test Method: LM-79-08
Report Number: P459850
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2003-697-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA3A-AMB-U-SL2-HSS
Description: NAVION AREA AND ROADWAY LUMINAIRE
(3) NARROW BAND AMBER, 500mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2455 lumens
Efficiency: N/A
Efficacy: 40.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

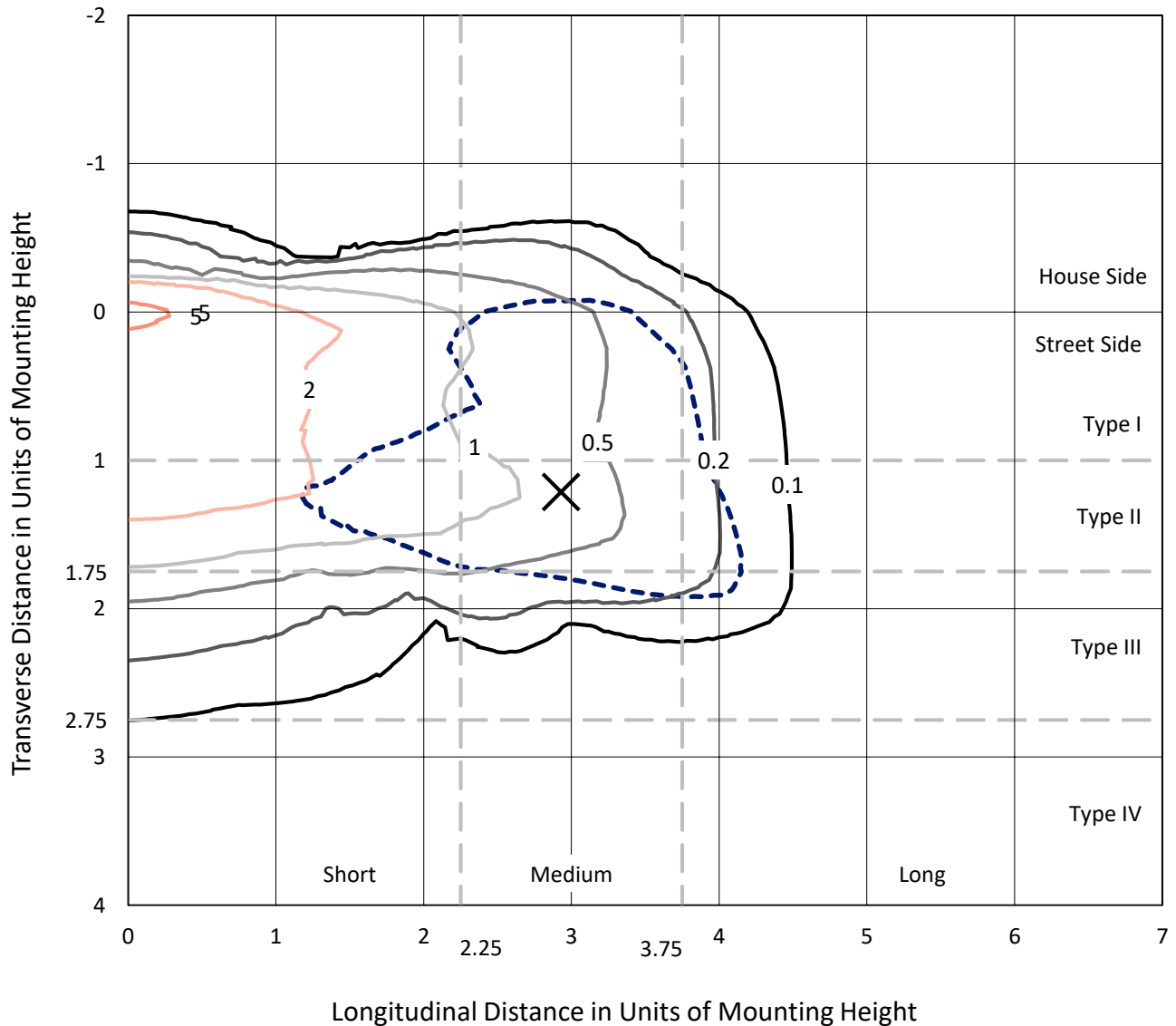
Input Watts (W): 61.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P459850
 CATALOG NUMBER: NAV-SA3A-AMB-U-SL2-HSS

Iso-Footcandle Lines of Horizontal Illumination

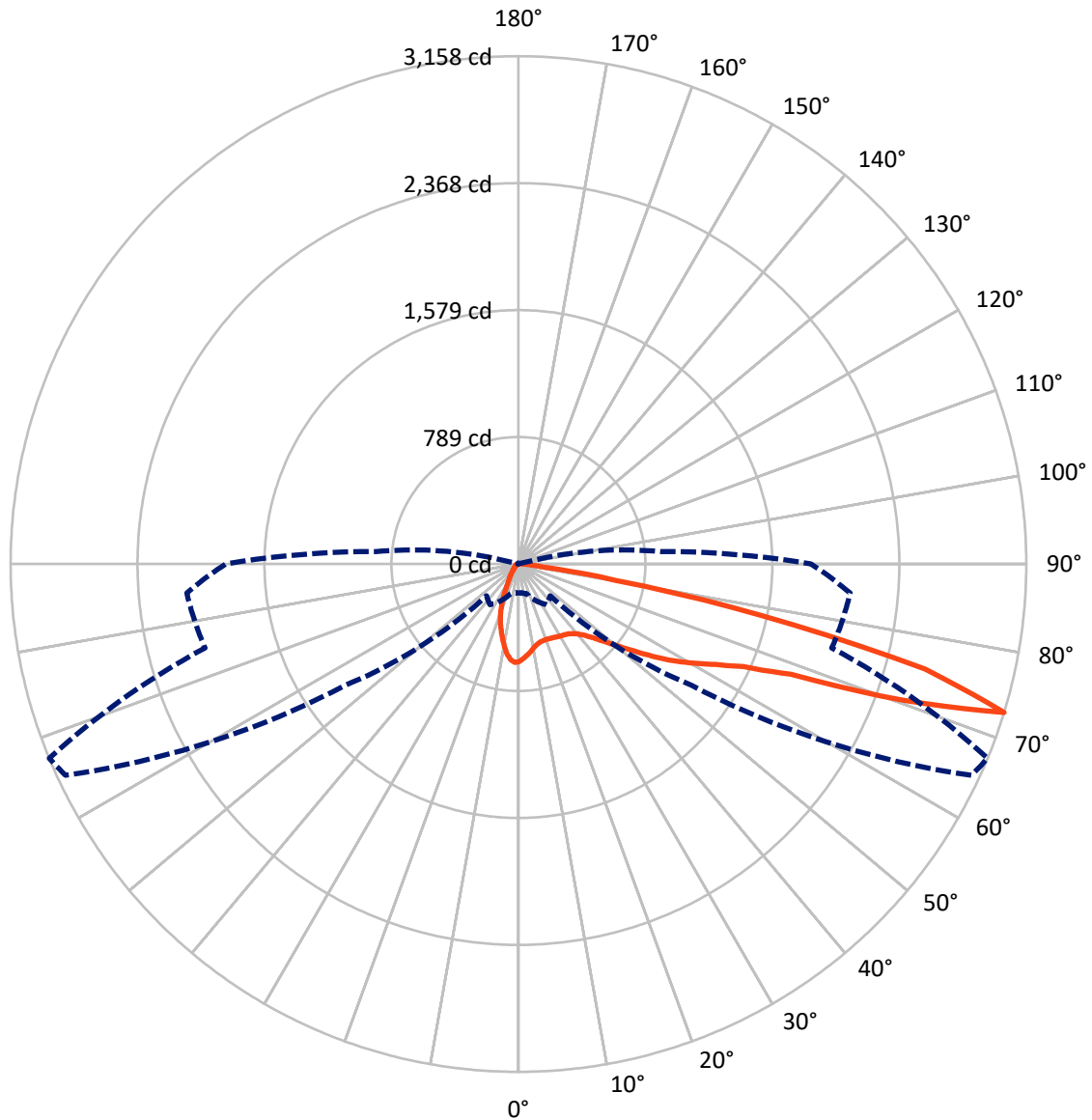
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P459850
CATALOG NUMBER: NAV-SA3A-AMB-U-SL2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P459850

CATALOG NUMBER: NAV-SA3A-AMB-U-SL2-HSS

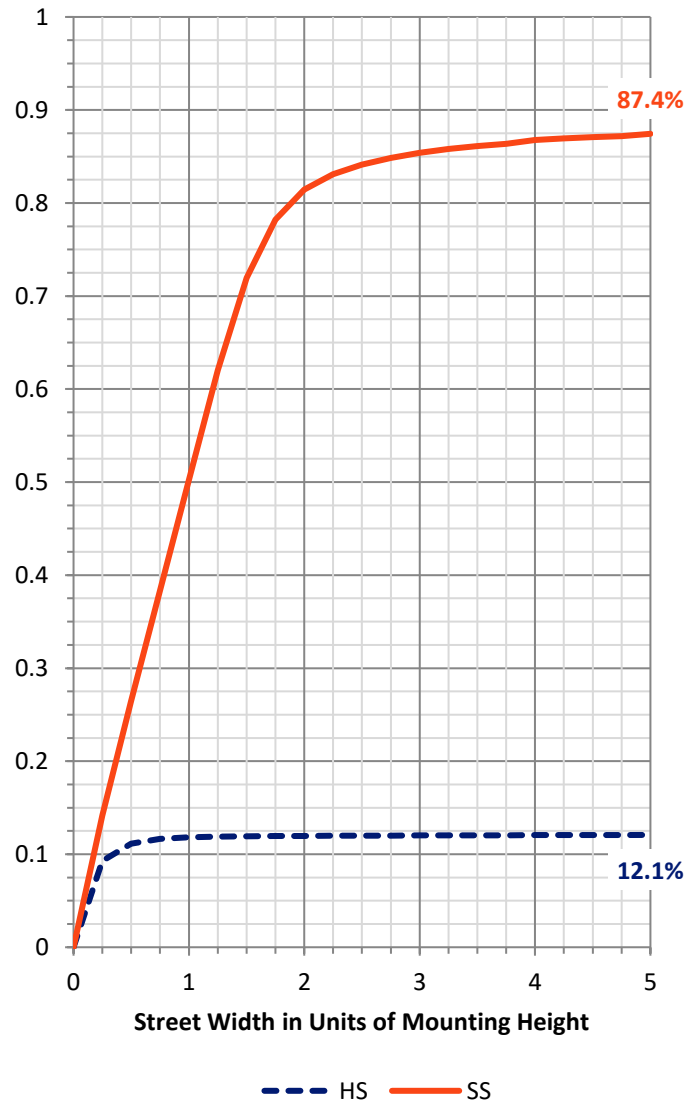
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	299.5	0.0	299.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	2155.6	0.0	2155.6
	% Fixture	87.8	0.0	87.8
Total	Lumens	2455.0	0.0	2455.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	2.0
10°-20°	105.6	4.3
20°-30°	149.1	6.1
30°-40°	213.6	8.7
40°-50°	322.2	13.1
50°-60°	516.6	21.0
60°-70°	610.7	24.9
70°-80°	446.1	18.2
80°-90°	41.3	1.7
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°	2455.0	100.0
0°-180°	2455.0	100.0



REPORT NUMBER: P459850

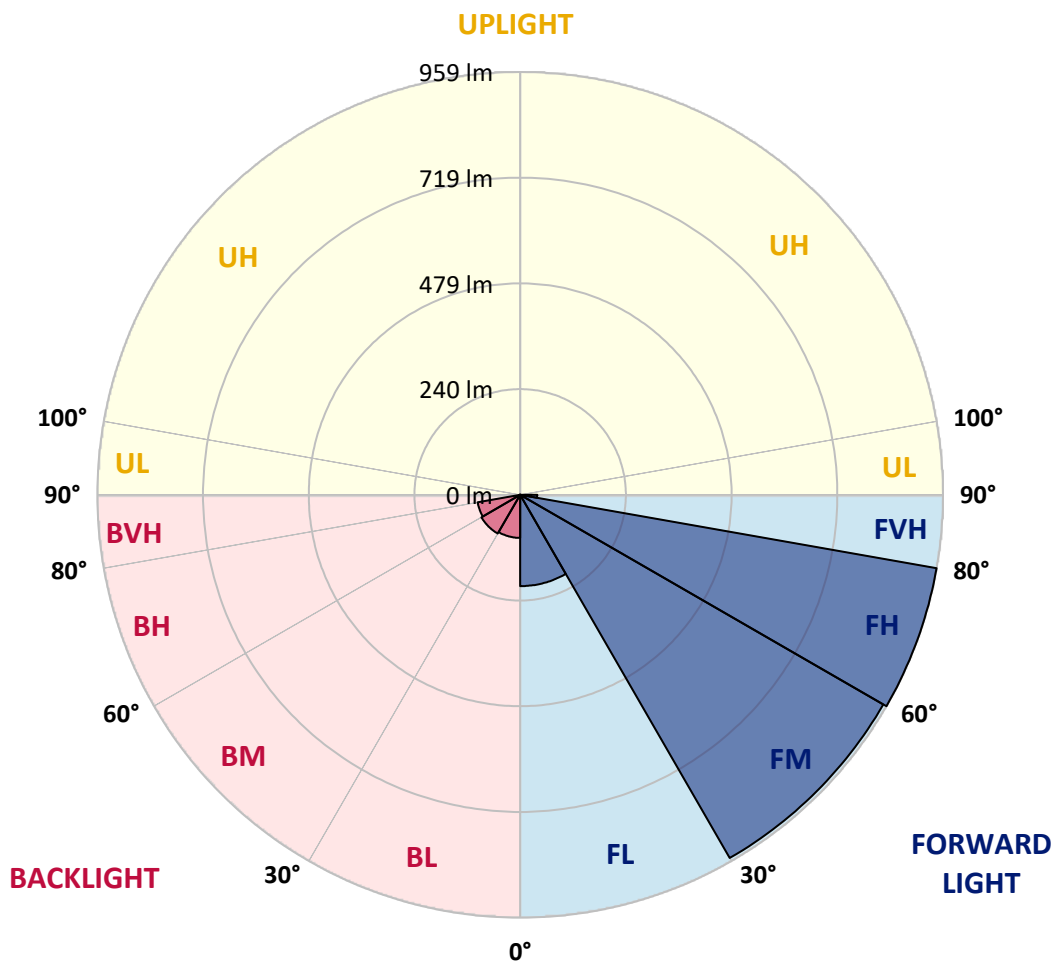
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	207.1	8.4			
FM	(30°-60°)	950.9	38.7			
FH	(60°-80°)	958.9	39.1			G1/1800
FVH	(80°-90°)	38.7	1.6			G1/100
BL	(0°-30°)	97.6	4.0	B0/110		
BM	(30°-60°)	101.4	4.1	B0/220		
BH	(60°-80°)	97.9	4.0	B0/110		G0/110
BVH	(80°-90°)	2.6	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Medium





REPORT NUMBER: P459850

CATALOG NUMBER: NAV-SA3A-AMB-U-SL2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67.5°	75°	85°
0°	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7
2.5°	568.9	571.6	571.6	575.6	577.0	578.3	586.4	589.1	587.8	595.9	601.3
5°	531.0	531.0	533.7	540.5	545.9	550.0	559.4	567.5	568.9	578.3	593.2
7.5°	500.0	502.7	502.7	506.7	514.8	521.6	533.7	547.3	550.0	562.1	579.7
10°	475.6	474.3	478.3	482.4	489.2	495.9	509.4	524.3	529.7	543.2	563.5
12.5°	452.7	454.0	455.4	462.1	470.2	477.0	490.5	508.1	513.5	531.0	555.4
15°	439.2	439.2	440.5	444.6	452.7	462.1	478.3	497.3	504.0	524.3	552.7
17.5°	435.1	435.1	433.7	435.1	441.9	451.3	470.2	493.2	500.0	521.6	556.7
20°	436.5	436.5	433.7	432.4	436.5	445.9	467.5	491.9	500.0	525.6	567.5
22.5°	444.6	443.2	440.5	436.5	436.5	445.9	468.9	494.6	502.7	531.0	577.0
25°	464.8	459.4	456.7	448.6	443.2	447.3	470.2	498.6	506.7	535.1	590.5
27.5°	483.7	482.4	482.4	474.3	456.7	452.7	475.6	505.4	512.1	540.5	608.1
30°	516.2	513.5	513.5	504.0	482.4	463.5	481.0	510.8	518.9	544.6	625.6
32.5°	556.7	558.1	555.4	543.2	516.2	483.7	490.5	517.5	524.3	547.3	643.2
35°	601.3	602.7	609.4	595.9	560.8	514.8	505.4	529.7	533.7	552.7	656.7
37.5°	637.8	637.8	655.4	658.1	614.8	552.7	529.7	550.0	548.6	559.4	670.2
40°	678.3	678.3	698.6	714.8	683.7	604.0	560.8	574.3	571.6	574.3	689.1
42.5°	721.6	724.3	745.9	774.3	758.0	670.2	605.4	612.1	606.7	598.6	709.4
45°	763.5	770.2	799.9	837.8	836.4	748.6	663.5	664.8	655.4	639.1	751.3
47.5°	812.1	817.5	859.4	906.7	918.8	837.8	737.8	732.4	720.2	694.5	808.0
50°	894.5	897.2	927.0	982.4	1005.3	936.4	821.6	812.1	798.6	766.2	885.1
52.5°	993.2	991.8	1005.3	1063.4	1125.6	1051.3	931.0	917.5	895.9	854.0	979.7
55°	1036.4	1040.5	1060.7	1131.0	1251.3	1218.8	1054.0	1035.1	1012.1	958.0	1076.9
57.5°	960.7	960.7	1001.3	1112.1	1321.5	1440.4	1191.8	1162.1	1133.7	1064.8	1187.7
60°	768.9	767.5	816.2	949.9	1268.8	1633.7	1383.7	1294.5	1251.3	1159.4	1298.5
62.5°	539.1	528.3	550.0	662.1	1039.1	1636.4	1741.8	1432.3	1374.2	1256.7	1416.1
65°	386.5	379.7	383.8	414.8	595.9	1479.6	2137.7	1641.8	1537.7	1359.4	1558.0
67.5°	316.2	308.1	306.7	344.6	343.2	979.7	2256.6	2055.2	1828.2	1509.3	1718.8
70°	252.7	248.6	247.3	301.3	317.5	318.9	2103.9	2939.0	2536.3	1732.3	1933.6
72.5°	179.7	179.7	190.5	250.0	308.1	279.7	1316.1	3107.9	3157.9	2017.4	2070.1
75°	108.1	106.7	133.8	198.6	297.3	270.2	406.7	2564.7	2610.6	1889.0	1601.2
77.5°	51.3	51.3	74.3	133.8	263.5	254.0	232.4	1533.7	1544.5	1147.2	812.1
80°	20.3	20.3	32.4	82.4	200.0	251.3	216.2	632.4	609.4	316.2	112.2
82.5°	8.1	8.1	13.5	45.9	124.3	206.7	191.9	209.4	156.7	36.5	29.7
85°	1.4	2.7	5.4	27.0	70.3	109.5	155.4	129.7	82.4	21.6	21.6
87.5°	0.0	1.4	2.7	8.1	20.3	45.9	78.4	59.5	37.8	6.8	9.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P459850

CATALOG NUMBER: NAV-SA3A-AMB-U-SL2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7
2.5°	602.7	605.4	610.8	613.5	614.8	609.4	609.4	604.0	602.7	602.7	602.7
5°	595.9	601.3	605.4	595.9	581.0	562.1	540.5	527.0	513.5	516.2	510.8
7.5°	587.8	594.5	589.1	558.1	520.2	485.1	447.3	425.6	400.0	397.3	390.5
10°	575.6	582.4	562.1	508.1	450.0	398.6	343.2	309.4	282.4	260.8	255.4
12.5°	572.9	577.0	529.7	455.4	379.7	306.7	235.1	171.6	133.8	114.9	114.9
15°	574.3	574.3	500.0	402.7	304.0	202.7	113.5	82.4	68.9	67.6	66.2
17.5°	581.0	572.9	470.2	351.3	223.0	105.4	67.6	62.2	59.5	59.5	59.5
20°	593.2	572.9	444.6	297.3	140.5	66.2	58.1	55.4	54.0	52.7	52.7
22.5°	605.4	567.5	412.1	235.1	81.1	55.4	51.3	50.0	47.3	45.9	45.9
25°	618.9	562.1	381.1	168.9	56.8	48.6	44.6	41.9	39.2	37.8	37.8
27.5°	631.0	556.7	344.6	106.7	50.0	43.2	39.2	35.1	31.1	29.7	29.7
30°	639.1	547.3	309.4	67.6	44.6	39.2	33.8	28.4	24.3	23.0	23.0
32.5°	640.5	535.1	266.2	50.0	40.5	33.8	27.0	23.0	20.3	18.9	18.9
35°	636.4	520.2	218.9	44.6	36.5	29.7	23.0	18.9	16.2	16.2	16.2
37.5°	631.0	505.4	170.3	40.5	32.4	25.7	18.9	16.2	14.9	13.5	13.5
40°	629.7	490.5	113.5	37.8	29.7	21.6	16.2	13.5	12.2	10.8	10.8
42.5°	633.7	479.7	79.7	35.1	25.7	18.9	14.9	12.2	9.5	9.5	8.1
45°	654.0	477.0	58.1	32.4	23.0	16.2	12.2	9.5	8.1	6.8	6.8
47.5°	687.8	482.4	47.3	29.7	20.3	13.5	10.8	8.1	6.8	5.4	5.4
50°	736.4	502.7	43.2	27.0	16.2	12.2	8.1	6.8	5.4	5.4	5.4
52.5°	812.1	535.1	40.5	24.3	13.5	9.5	6.8	5.4	4.1	4.1	4.1
55°	893.2	572.9	39.2	21.6	12.2	8.1	5.4	4.1	4.1	2.7	2.7
57.5°	986.4	622.9	36.5	18.9	10.8	8.1	5.4	4.1	2.7	2.7	2.7
60°	1104.0	690.5	32.4	16.2	9.5	6.8	4.1	2.7	2.7	2.7	2.7
62.5°	1225.6	760.8	28.4	13.5	8.1	5.4	4.1	2.7	2.7	2.7	2.7
65°	1374.2	841.8	24.3	10.8	6.8	5.4	4.1	2.7	2.7	1.4	1.4
67.5°	1553.9	924.3	18.9	9.5	6.8	4.1	4.1	2.7	2.7	1.4	1.4
70°	1783.6	1029.6	16.2	8.1	5.4	4.1	4.1	2.7	2.7	1.4	1.4
72.5°	1818.8	889.1	13.5	8.1	5.4	4.1	4.1	2.7	2.7	1.4	1.4
75°	1243.1	424.3	12.2	6.8	5.4	5.4	4.1	2.7	2.7	1.4	1.4
77.5°	541.8	100.0	10.8	6.8	5.4	5.4	5.4	4.1	2.7	1.4	1.4
80°	63.5	18.9	9.5	6.8	5.4	6.8	5.4	4.1	2.7	1.4	1.4
82.5°	25.7	12.2	9.5	8.1	6.8	5.4	5.4	4.1	2.7	1.4	1.4
85°	18.9	9.5	9.5	9.5	6.8	4.1	4.1	2.7	2.7	1.4	1.4
87.5°	9.5	4.1	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)