

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: P459837

Luminaire Tested: **NAV-SA1A-AMB-U-SL3**

Issue Date: 1/6/2021

Test Information

Test Method: LM-79-08
Report Number: P459837
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2003-697-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1A-AMB-U-SL3
Description: NAVION AREA AND ROADWAY LUMINAIRE
(1) NARROW BAND AMBER, 500mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1143 lumens
Efficiency: N/A
Efficacy: 50.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

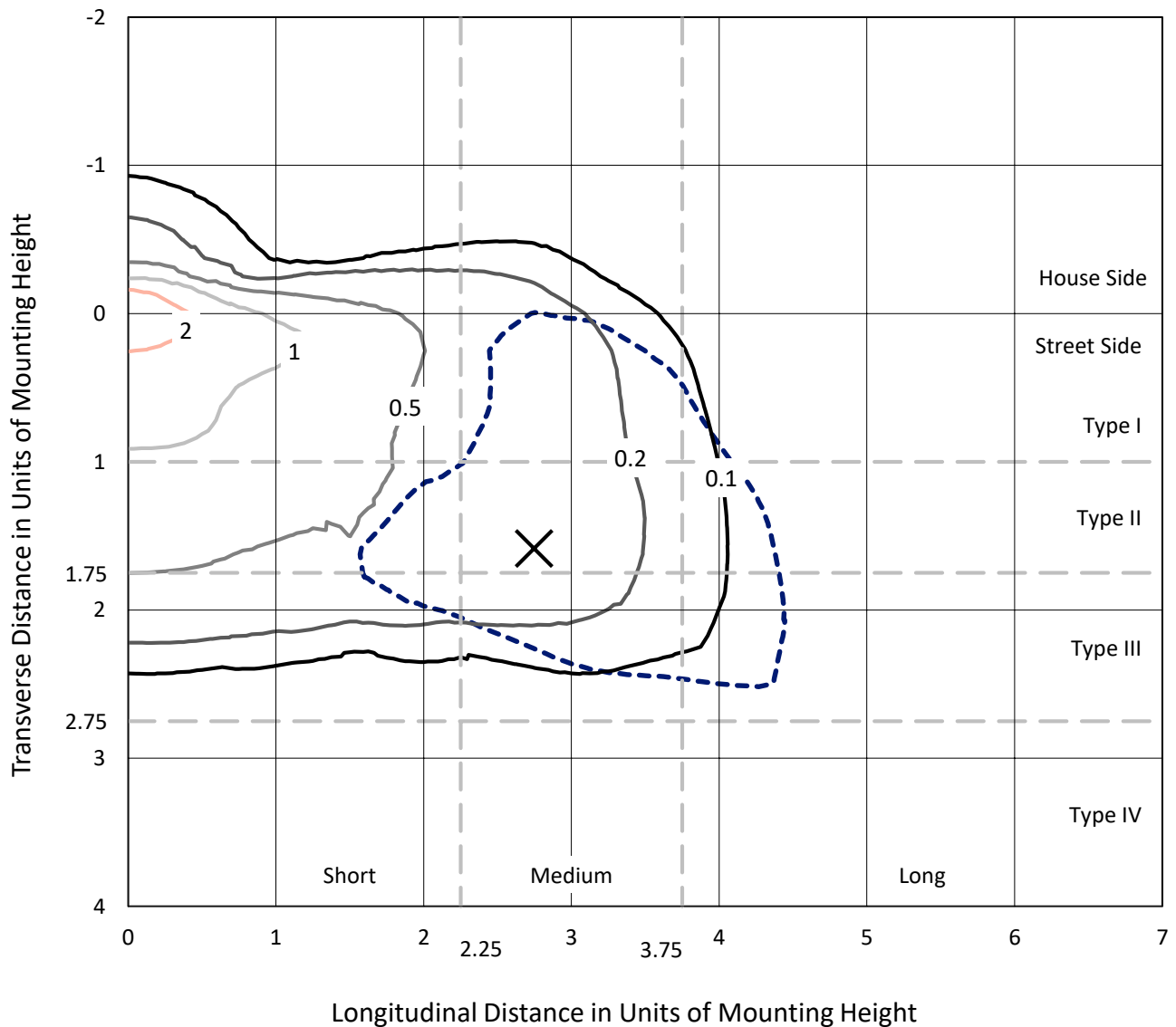
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

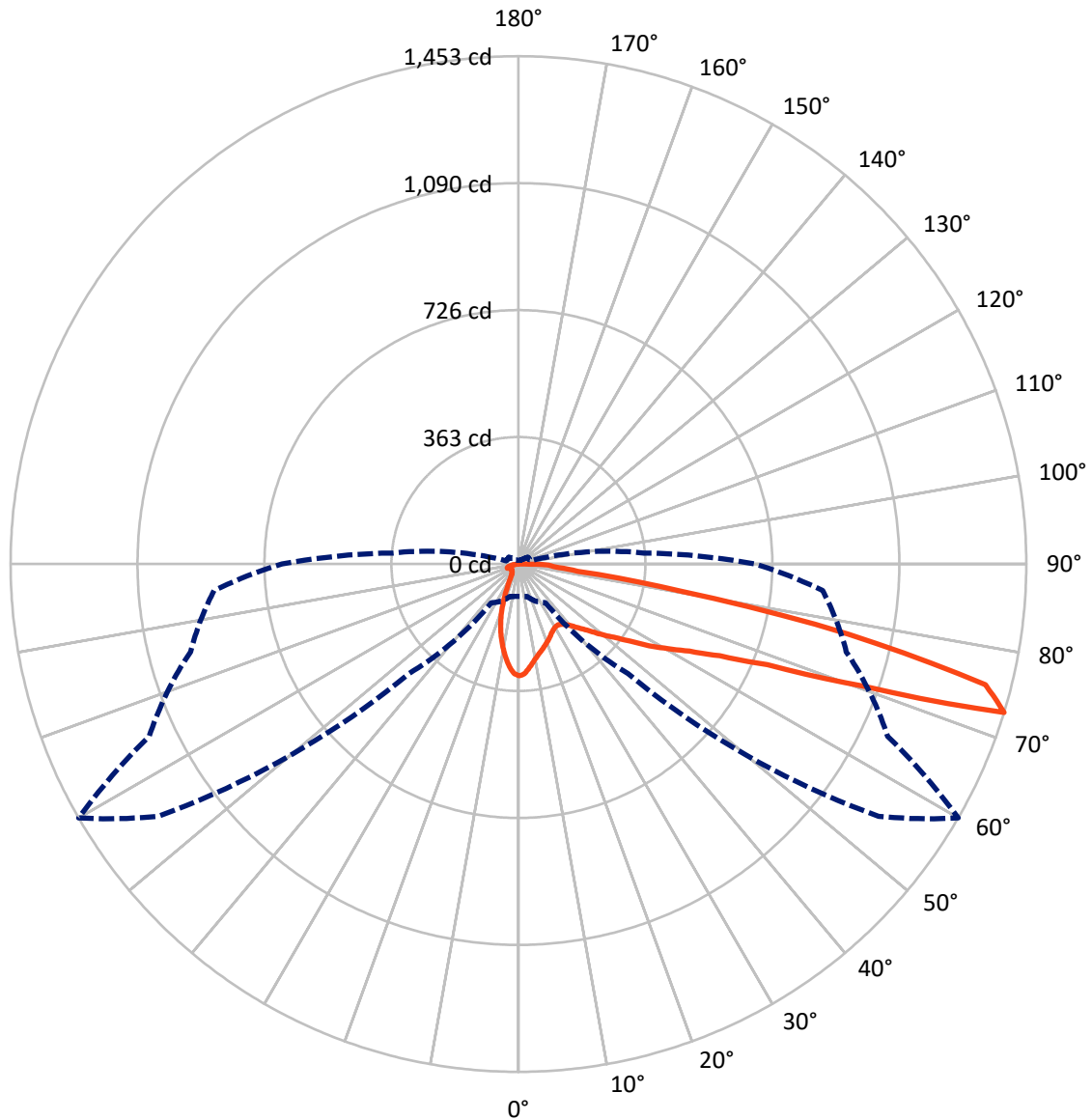


Based on 10 foot mounting height. Maximum calculated value = 3.2 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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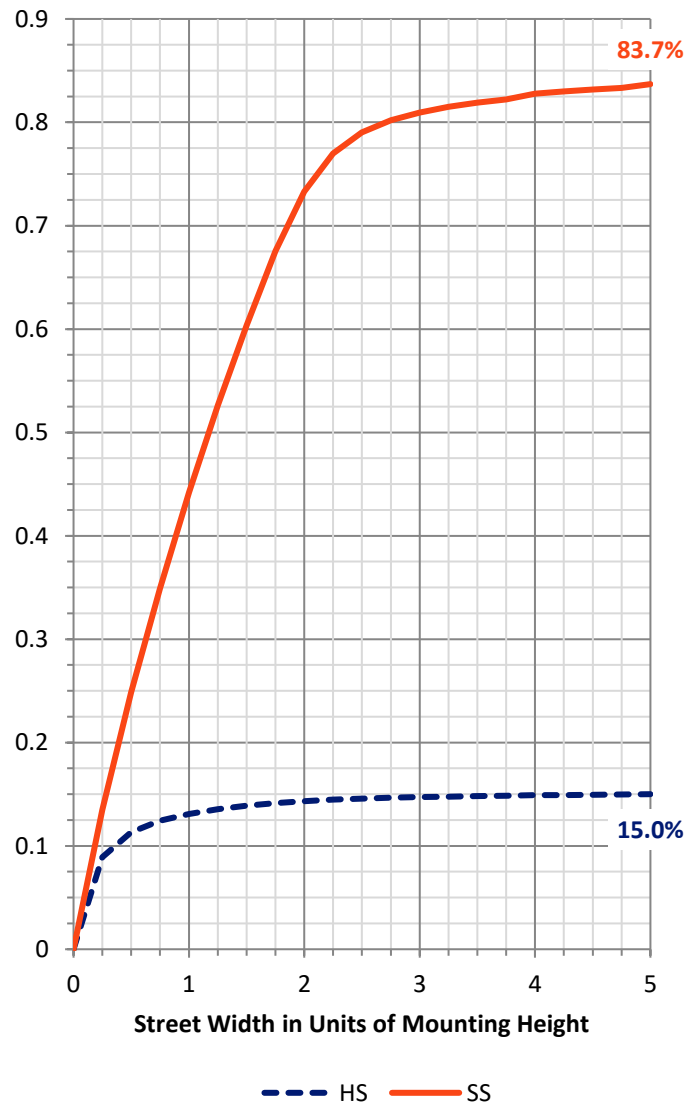
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	173.7	0.0	173.7
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	969.3	0.0	969.3
	% Fixture	84.8	0.0	84.8
Total	Lumens	1143.0	0.0	1143.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.8	2.3
10°-20°	56.9	5.0
20°-30°	70.4	6.2
30°-40°	89.0	7.8
40°-50°	126.4	11.1
50°-60°	192.7	16.9
60°-70°	290.6	25.4
70°-80°	255.7	22.4
80°-90°	34.5	3.0
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°	1143.0	100.0
0°-180°	1143.0	100.0



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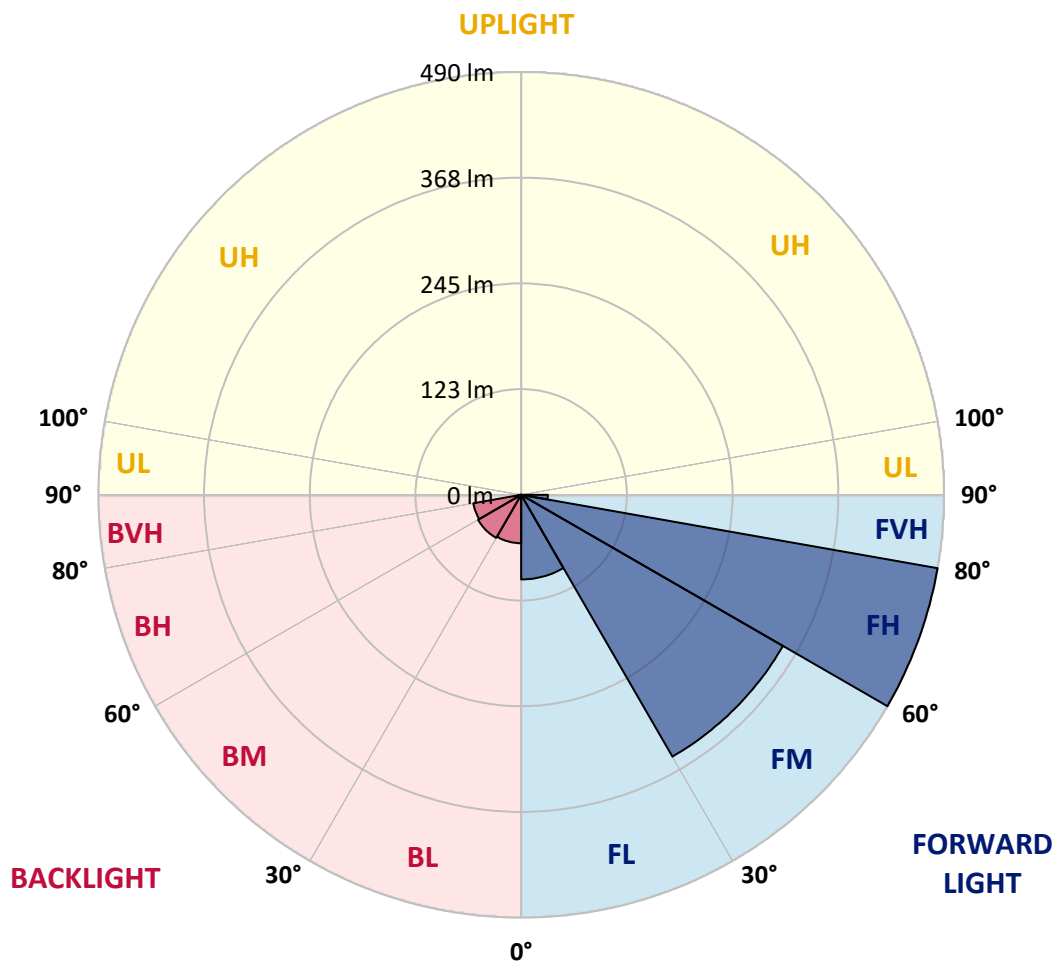
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	98.1	8.6			
FM (30°-60°)	350.3	30.6			
FH (60°-80°)	490.0	42.9			G0/660
FVH (80°-90°)	30.9	2.7			G1/100
BL (0°-30°)	56.1	4.9	B0/110		
BM (30°-60°)	57.7	5.0	B0/220		
BH (60°-80°)	56.3	4.9	B0/110		G0/110
BVH (80°-90°)	3.6	0.3			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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5
2.5°	310.7	310.7	310.7	312.7	313.2	313.2	315.1	315.1	314.6	316.6	316.1
5°	291.7	292.6	292.6	293.6	296.6	298.0	300.9	301.4	302.9	305.8	307.8
7.5°	268.2	269.7	272.1	276.0	279.0	281.4	286.8	286.8	289.2	293.6	297.0
10°	246.2	246.7	248.7	253.1	258.9	265.3	271.6	273.6	276.5	281.9	287.3
12.5°	231.1	232.1	233.0	236.9	243.3	249.6	259.4	263.3	266.7	273.1	280.4
15°	215.0	215.5	217.9	222.8	230.6	237.4	248.7	254.0	259.4	267.7	275.5
17.5°	204.2	203.7	205.7	209.1	217.4	226.7	238.9	245.3	251.6	262.8	271.1
20°	198.4	198.8	198.8	199.8	205.2	214.5	228.6	236.9	245.3	259.9	268.7
22.5°	196.9	196.9	195.4	194.9	197.4	205.2	219.4	228.6	238.4	259.4	267.2
25°	196.9	196.9	195.4	193.5	193.5	197.9	210.6	219.4	231.1	259.9	265.3
27.5°	200.3	200.3	198.4	195.4	193.0	194.0	203.7	213.0	226.2	260.9	263.8
30°	205.7	205.2	203.7	201.3	196.4	193.0	200.3	208.6	221.3	263.3	262.8
32.5°	211.1	211.5	210.6	208.6	203.2	195.9	199.8	207.6	220.3	266.7	262.8
35°	219.4	219.8	219.8	217.9	213.5	203.2	204.7	211.5	223.3	272.1	264.8
37.5°	228.6	228.6	230.1	230.1	224.7	213.5	214.0	219.4	229.1	279.5	269.7
40°	237.9	237.9	240.4	243.8	239.4	227.7	228.2	232.1	240.9	289.7	279.5
42.5°	249.6	248.7	254.0	258.4	256.5	245.7	243.3	248.2	254.5	303.9	294.1
45°	258.0	258.0	266.3	271.6	276.0	265.3	263.8	267.7	274.1	319.5	314.6
47.5°	267.7	268.2	277.0	288.2	295.1	288.7	286.8	292.2	296.6	340.0	340.5
50°	276.0	277.5	289.2	305.3	316.6	317.1	313.6	320.5	320.5	363.0	370.8
52.5°	287.3	289.7	304.9	322.4	341.0	347.4	348.3	350.3	350.8	391.3	404.5
55°	315.6	318.5	331.2	345.9	367.9	382.5	392.8	389.4	385.5	422.1	439.7
57.5°	365.9	363.5	368.4	371.8	393.3	417.2	442.6	441.2	429.4	457.8	477.3
60°	409.4	410.4	416.7	408.4	422.6	460.2	490.0	490.5	470.5	495.9	512.0
62.5°	413.3	419.7	446.5	465.1	486.6	510.0	555.5	549.1	523.2	533.0	552.6
65°	336.6	344.9	388.9	449.5	560.4	660.0	635.6	632.7	587.7	584.8	609.7
67.5°	173.4	179.8	203.2	315.1	504.2	814.9	831.0	768.0	676.6	663.9	694.2
70°	118.7	119.2	119.2	143.6	246.2	747.0	1182.3	1048.9	853.5	795.8	834.0
72.5°	92.8	92.8	96.2	117.3	135.3	443.1	1258.5	1452.9	1165.7	971.2	874.0
75°	69.4	69.9	76.2	97.7	131.9	132.4	1052.8	1380.2	1316.6	958.0	679.1
77.5°	52.8	51.8	60.1	80.6	128.5	120.7	568.2	964.4	932.2	651.2	246.2
80°	33.2	34.7	40.5	67.4	123.1	120.7	198.8	470.5	376.7	155.8	41.5
82.5°	19.1	20.0	25.4	42.0	110.4	120.2	124.1	170.5	93.3	38.6	19.5
85°	11.2	11.2	16.1	26.4	80.1	118.7	120.7	102.6	51.8	20.0	10.3
87.5°	4.9	5.9	9.3	12.7	36.2	100.2	109.4	87.0	37.6	11.2	5.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5
2.5°	315.6	315.6	314.6	314.6	315.1	312.7	312.2	310.7	311.7	311.2	309.3
5°	307.3	306.8	305.8	300.5	297.5	290.2	290.2	285.8	284.3	284.3	281.4
7.5°	297.0	295.6	289.2	280.4	272.1	264.3	257.0	251.6	247.7	244.3	244.8
10°	287.3	284.3	274.1	258.9	245.7	231.1	219.8	207.1	200.3	190.5	194.4
12.5°	279.5	275.1	258.4	236.9	217.4	195.9	173.4	154.4	138.7	129.0	123.1
15°	273.1	265.8	241.3	214.5	188.1	156.8	126.5	100.6	81.1	75.2	75.7
17.5°	267.2	257.0	226.2	191.5	155.8	117.7	83.1	66.0	59.6	56.7	56.7
20°	261.9	246.7	206.7	166.1	120.2	79.1	59.6	53.7	51.3	49.8	49.3
22.5°	255.0	237.4	187.6	139.7	86.0	57.2	49.3	46.4	45.9	45.9	45.9
25°	249.6	226.2	167.6	107.0	59.6	46.4	42.5	42.0	42.5	43.0	43.0
27.5°	243.3	215.0	147.5	75.2	45.4	39.1	37.6	38.6	39.6	40.5	40.5
30°	237.4	204.2	126.0	52.8	37.6	34.2	34.2	35.2	36.6	37.6	37.6
32.5°	233.5	196.4	100.6	41.5	33.2	31.3	31.8	32.2	33.7	34.2	34.2
35°	230.6	188.6	75.7	35.2	30.3	29.3	29.8	30.3	30.8	31.3	31.3
37.5°	231.1	184.2	54.2	31.3	28.3	27.8	28.3	28.3	28.3	28.8	28.8
40°	236.9	182.2	43.0	28.8	27.4	26.9	26.9	26.4	26.4	26.9	26.9
42.5°	245.7	182.7	38.1	27.8	26.4	25.9	25.4	24.9	24.9	24.9	24.9
45°	259.9	187.6	35.2	26.9	25.9	24.9	23.9	23.5	23.5	24.4	24.4
47.5°	280.9	194.9	32.2	26.4	24.9	23.5	23.0	22.5	23.0	23.5	23.9
50°	305.3	201.3	30.8	25.9	24.9	22.5	22.0	21.5	22.0	23.5	23.5
52.5°	333.7	210.6	30.3	25.9	24.4	22.0	21.0	21.0	21.5	23.0	23.0
55°	365.4	224.7	30.8	25.9	23.9	21.5	20.5	20.0	21.0	22.0	22.0
57.5°	398.7	243.8	31.8	25.9	23.0	21.5	20.0	19.1	19.5	20.5	20.5
60°	431.9	269.7	33.2	25.4	22.5	21.0	19.5	18.1	18.1	19.1	19.1
62.5°	471.5	301.9	38.1	26.4	22.5	20.0	18.1	16.6	16.6	17.1	17.1
65°	523.2	348.8	45.4	29.8	24.4	19.1	16.6	15.1	15.1	15.1	15.1
67.5°	608.7	423.6	48.4	33.2	27.8	19.1	15.6	14.2	13.7	13.7	13.2
70°	720.1	472.4	43.0	34.7	33.2	19.5	14.7	12.7	12.2	12.2	11.7
72.5°	676.2	360.1	36.6	33.7	33.7	20.0	14.2	12.2	11.2	10.7	10.7
75°	464.6	167.1	32.2	31.3	29.3	17.1	13.2	11.2	10.3	9.3	9.3
77.5°	136.8	44.9	26.9	27.4	22.5	14.2	12.2	10.3	9.3	8.3	8.3
80°	32.2	25.9	19.5	20.0	15.1	10.7	9.8	9.3	8.3	7.3	7.3
82.5°	18.6	16.6	13.7	12.7	9.3	7.3	7.8	7.8	7.3	6.4	5.9
85°	9.3	9.8	8.3	7.3	5.9	4.9	4.9	5.4	4.9	3.9	3.9
87.5°	5.4	4.9	5.4	3.9	2.9	2.4	2.9	2.9	2.9	2.0	2.0
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)