

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: INVUE

Report Number: P401017

Luminaire Tested: **ENT-SA1A-827-U-SL2-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401017
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1A-827-U-SL2-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 16 LEDS 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: 1624 lumens
Efficiency: N/A
Efficacy: 80.8 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): 20.1
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: 25 FT

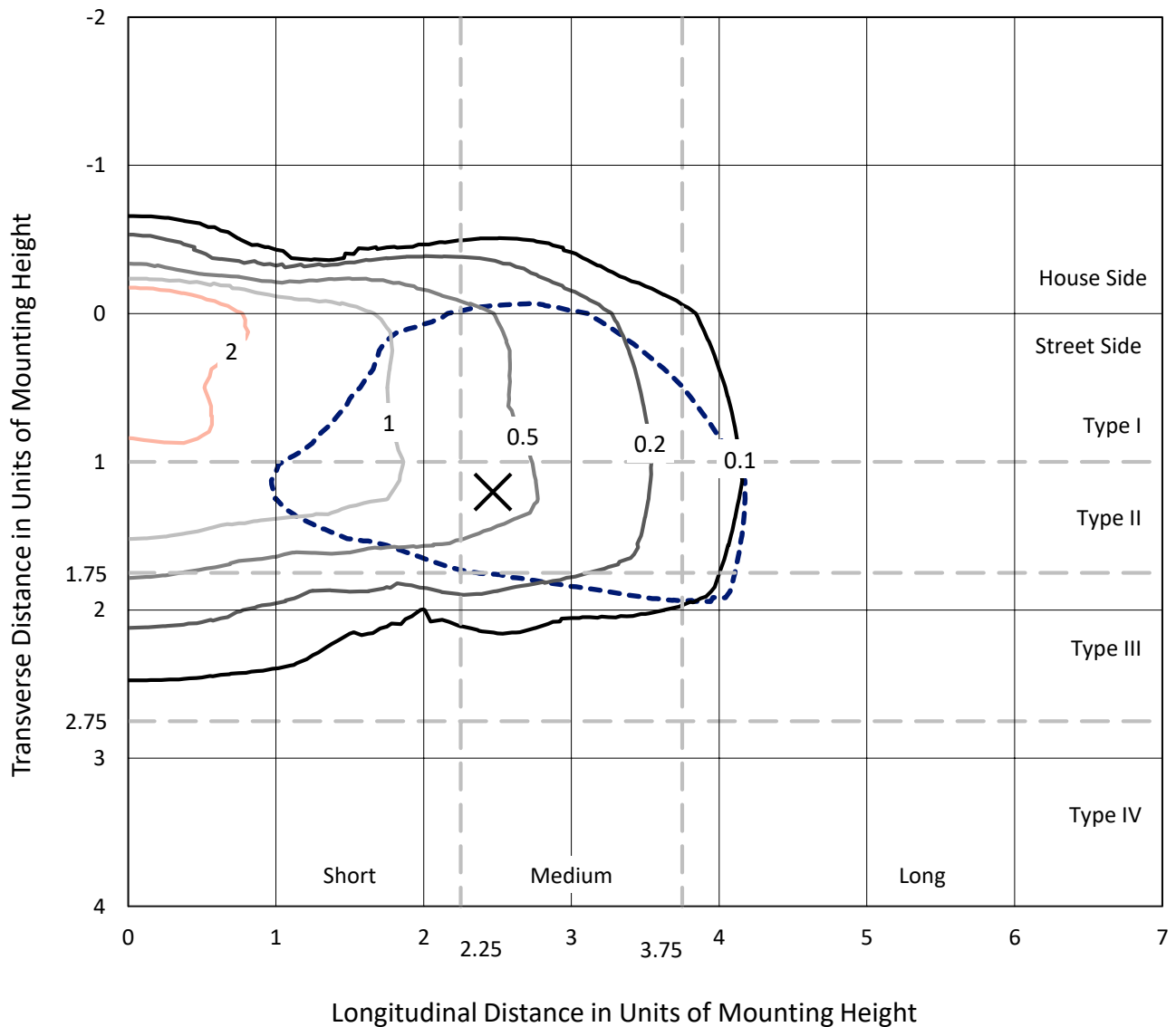


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Iso-Footcandle Lines of Horizontal Illumination

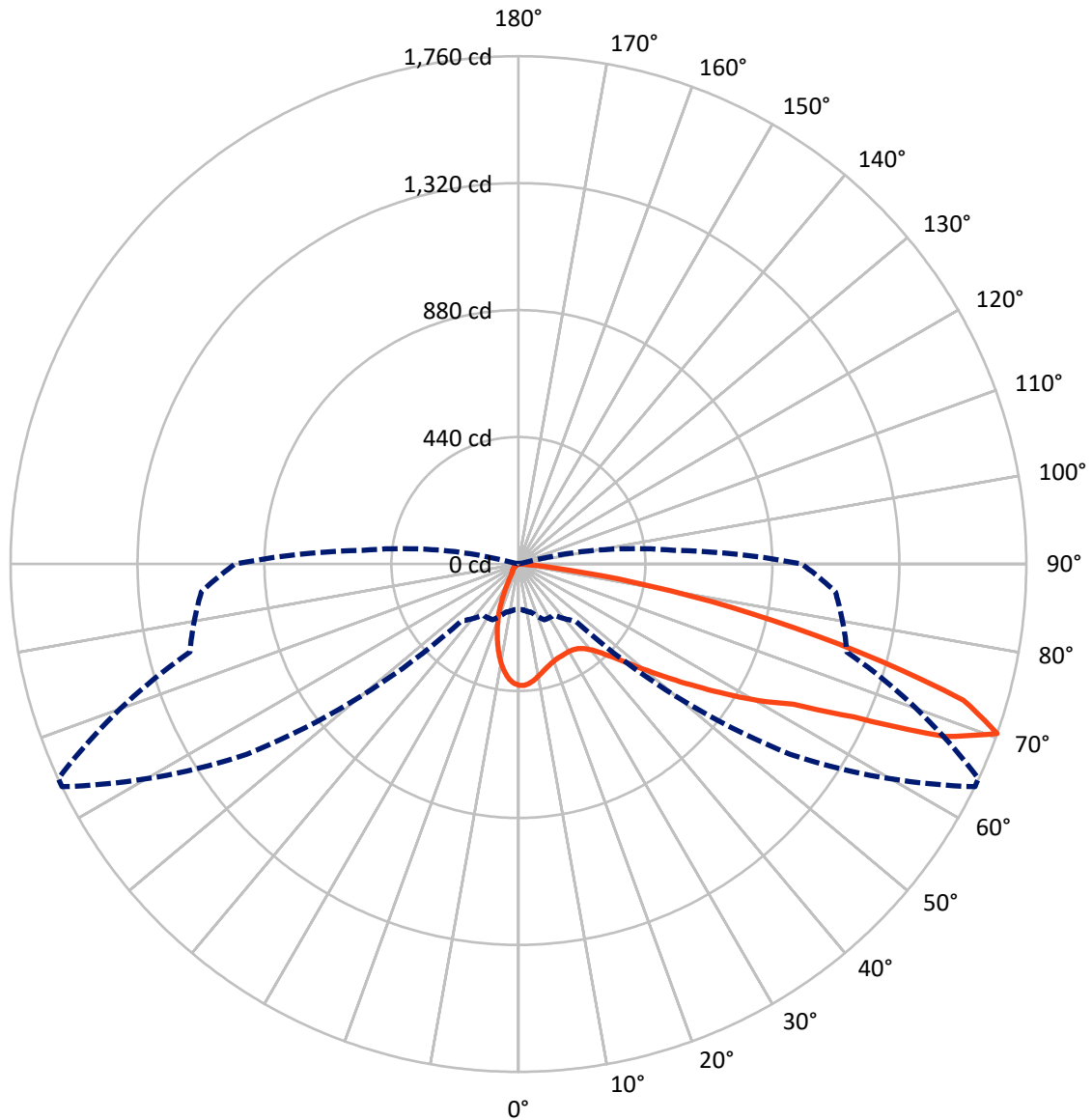
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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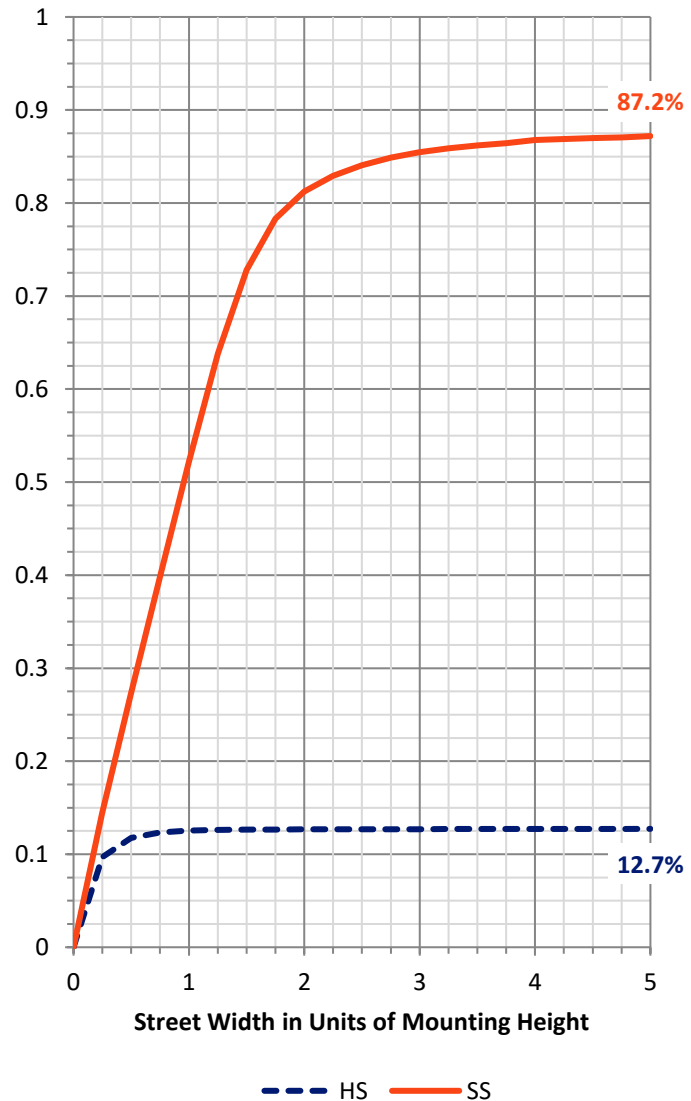
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	208.6	0.0	208.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	1415.4	0.0	1415.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	1624.0	0.0	1624.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	2.2
10°-20°	78.6	4.8
20°-30°	108.3	6.7
30°-40°	149.1	9.2
40°-50°	222.2	13.7
50°-60°	351.0	21.6
60°-70°	397.7	24.5
70°-80°	261.2	16.1
80°-90°	20.5	1.3
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°	1624.0	100.0
0°-180°	1624.0	100.0



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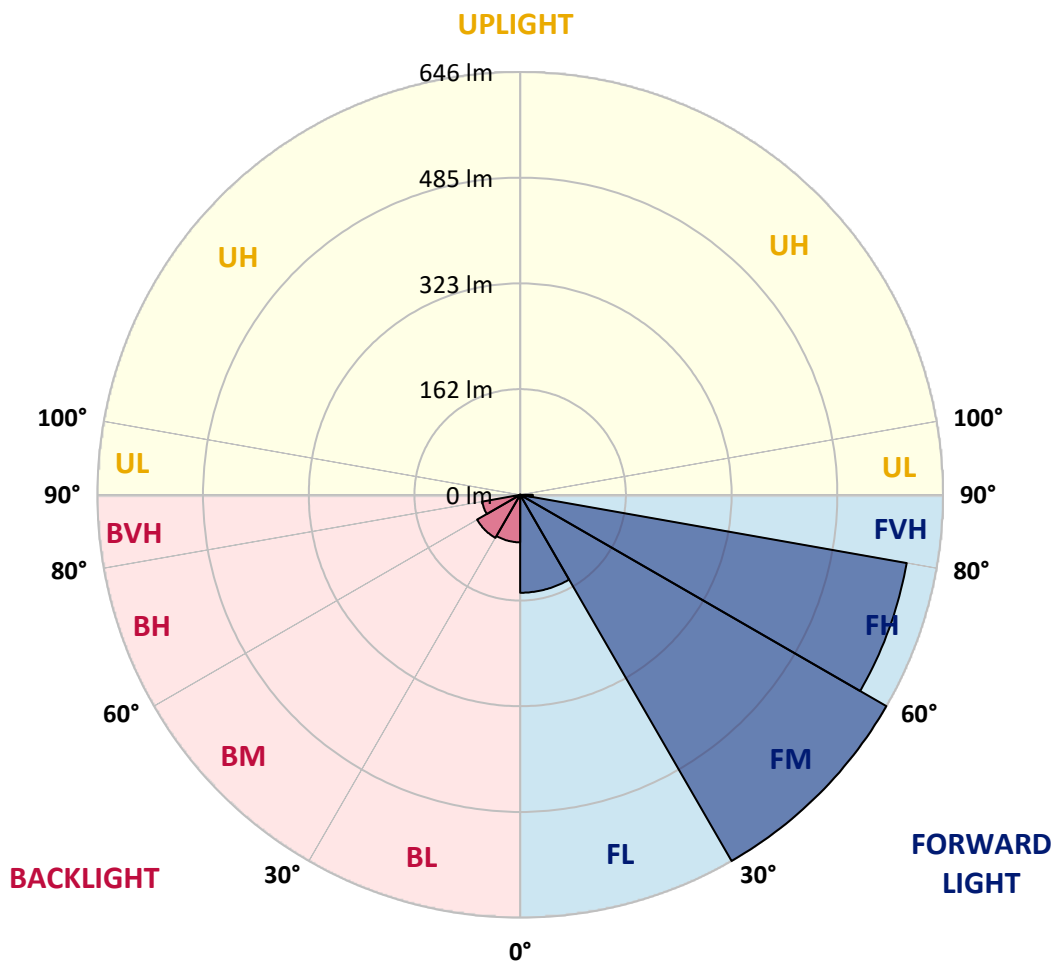
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	149.7	9.2			
FM	(30°-60°)	646.3	39.8			
FH	(60°-80°)	600.0	36.9			G0/660
FVH	(80°-90°)	19.3	1.2			G1/100
BL	(0°-30°)	72.6	4.5	B0/110		
BM	(30°-60°)	76.0	4.7	B0/220		
BH	(60°-80°)	58.9	3.6	B0/110		G0/110
BVH	(80°-90°)	1.1	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	408.7	408.7	410.7	412.7	413.8	417.0	419.2	421.0	421.0	422.1	420.1
5°	381.6	381.6	383.3	388.1	393.3	399.8	407.3	414.7	416.1	421.5	421.2
7.5°	356.4	358.7	361.6	366.4	371.8	381.6	391.8	404.7	406.1	419.2	422.1
10°	339.0	340.4	342.1	347.6	355.6	366.7	377.8	393.0	395.5	415.3	422.1
12.5°	325.0	325.3	327.9	333.9	341.6	352.4	365.0	381.6	384.7	408.1	421.0
15°	315.0	314.7	317.6	323.3	330.7	341.9	354.1	371.6	375.0	402.1	420.7
17.5°	309.0	309.3	311.6	315.9	323.0	333.6	346.1	363.3	366.7	397.3	422.1
20°	309.0	309.0	310.4	312.4	317.9	327.3	339.6	357.3	360.7	394.1	424.1
22.5°	315.0	314.4	315.6	313.9	316.4	323.0	335.6	353.3	357.0	392.7	427.2
25°	325.9	324.7	325.6	321.9	319.0	321.9	333.0	351.6	355.6	393.0	430.1
27.5°	341.0	341.0	339.3	334.1	327.0	323.9	332.7	350.4	354.4	393.0	432.1
30°	362.1	361.3	358.7	353.6	342.4	331.9	335.6	350.4	354.4	393.3	432.7
32.5°	383.3	383.8	385.3	380.1	365.0	345.6	342.4	353.0	356.4	393.0	431.8
35°	404.7	405.0	411.3	411.8	392.4	367.6	354.1	359.8	362.1	395.8	432.4
37.5°	423.5	425.0	437.2	443.2	427.2	395.8	372.7	372.7	373.8	403.5	435.8
40°	444.7	448.4	463.2	476.7	470.4	432.1	399.8	391.5	392.1	417.5	443.5
42.5°	469.2	473.8	493.2	512.6	512.4	476.7	434.1	421.5	422.1	441.8	459.2
45°	500.4	503.5	528.1	552.3	557.5	525.8	477.2	460.7	461.2	478.7	489.8
47.5°	538.3	542.1	565.8	594.9	608.0	584.9	533.2	515.2	513.5	525.8	533.8
50°	588.0	595.2	609.2	637.2	668.9	653.4	598.9	580.9	578.6	588.3	590.9
52.5°	635.4	642.0	647.7	673.4	734.8	738.5	679.4	659.7	657.4	659.7	662.9
55°	642.6	646.3	650.6	685.4	788.2	846.8	771.1	747.7	741.1	736.8	747.4
57.5°	585.8	583.5	597.7	645.2	797.1	966.4	895.0	849.6	843.4	819.7	809.1
60°	463.8	460.7	474.1	538.9	747.4	1025.8	1067.0	962.4	947.0	867.6	857.3
62.5°	325.9	322.1	339.6	377.8	579.8	1014.1	1260.9	1069.3	1038.7	910.2	896.2
65°	251.0	249.3	258.7	267.3	353.8	878.5	1367.7	1277.7	1214.6	956.4	938.5
67.5°	196.8	199.1	210.8	235.6	228.5	547.5	1357.7	1595.9	1532.8	1041.6	1030.1
70°	158.2	158.8	173.4	213.1	215.6	278.7	1149.5	1760.4	1759.5	1178.9	1103.0
72.5°	95.7	98.2	121.9	184.2	217.6	213.3	772.8	1613.0	1635.3	1210.9	994.7
75°	46.0	48.6	63.1	123.7	216.2	207.6	418.1	1221.2	1249.8	1085.8	806.5
77.5°	17.1	19.4	29.1	60.5	160.2	190.2	219.9	823.4	845.9	794.8	546.3
80°	5.4	6.3	11.4	27.7	81.4	157.1	141.7	464.4	479.5	347.9	183.6
82.5°	0.6	0.9	3.1	9.4	31.4	80.0	83.1	174.8	182.5	68.0	37.1
85°	0.0	0.0	0.0	0.0	0.6	0.6	20.6	33.4	27.4	6.6	10.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	0.9	0.9	1.1
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°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.8	419.8	417.8	414.7	410.7	405.0	403.5	399.0	399.0	395.3	394.7
5°	420.4	418.7	412.1	402.4	389.0	374.4	365.3	355.3	346.7	341.3	341.9
7.5°	420.4	416.7	403.5	382.1	357.0	331.9	312.7	290.4	280.2	273.3	276.5
10°	419.2	413.0	390.1	357.6	317.9	283.0	251.6	225.9	208.2	200.8	194.5
12.5°	416.7	407.5	373.3	327.0	276.2	230.5	187.1	153.4	129.9	118.2	116.8
15°	414.4	401.8	353.6	293.6	229.0	169.4	120.8	88.5	68.5	64.0	64.5
17.5°	413.8	396.4	334.7	258.2	183.1	112.8	69.7	56.3	53.4	52.3	52.0
20°	414.1	391.5	314.2	223.0	129.7	70.3	52.8	49.7	48.6	48.0	47.7
22.5°	415.3	386.1	293.9	186.2	88.5	51.4	47.1	45.1	43.7	42.8	42.6
25°	415.3	380.1	271.3	147.1	58.0	45.1	42.3	39.7	37.7	36.6	36.6
27.5°	414.4	373.3	247.9	111.7	46.0	40.3	37.1	33.7	31.1	29.7	29.7
30°	411.8	365.0	225.3	78.0	40.3	36.0	32.0	27.7	24.6	23.1	22.6
32.5°	408.1	356.1	199.3	54.8	36.3	31.4	26.8	22.3	19.4	17.7	17.7
35°	404.1	347.3	171.4	42.0	32.8	27.7	22.6	18.0	15.4	14.3	14.0
37.5°	402.1	337.9	143.9	36.3	29.4	23.7	18.3	14.6	12.6	11.7	11.4
40°	403.5	330.7	117.1	32.6	26.3	20.0	15.1	12.3	10.6	9.4	9.4
42.5°	412.1	326.7	91.7	29.7	23.4	16.8	12.6	10.0	8.3	7.4	7.4
45°	429.5	329.6	69.7	27.1	20.0	14.0	10.6	8.0	6.3	5.4	5.4
47.5°	458.7	341.0	52.8	24.8	17.1	11.4	8.6	6.3	4.9	4.3	4.0
50°	501.2	363.6	41.4	22.6	14.3	9.7	7.1	4.9	3.7	3.1	3.1
52.5°	562.6	402.7	35.4	20.0	11.7	8.0	5.7	3.7	2.9	2.3	2.3
55°	638.0	452.4	32.0	17.7	9.4	6.6	4.6	2.9	2.0	1.7	1.4
57.5°	699.1	491.8	30.0	15.4	8.0	5.7	3.4	2.3	1.7	1.1	1.1
60°	753.1	517.2	26.6	12.9	6.9	4.6	2.9	1.7	1.1	0.9	0.9
62.5°	796.8	533.8	22.0	10.3	5.7	3.7	2.3	1.4	1.1	0.9	0.9
65°	846.5	547.2	18.0	8.0	4.9	3.1	2.0	1.1	0.9	0.9	0.9
67.5°	943.9	577.2	13.4	6.3	3.7	2.6	1.7	1.1	0.9	0.6	0.6
70°	981.9	542.1	10.6	5.1	2.9	2.3	1.7	1.1	0.6	0.6	0.6
72.5°	835.6	405.8	8.3	4.3	2.6	2.0	1.7	1.1	0.9	0.9	0.6
75°	662.9	274.2	6.6	3.4	2.6	2.3	1.7	1.7	1.4	1.1	1.1
77.5°	423.2	121.4	5.1	2.9	2.6	2.9	2.6	1.7	1.7	1.4	1.4
80°	126.2	29.1	3.7	2.3	2.0	2.3	2.6	1.7	1.1	0.9	0.9
82.5°	27.4	6.9	2.3	1.1	1.4	1.1	1.7	1.7	1.1	0.9	0.9
85°	9.1	2.6	1.4	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.6
87.5°	0.6	0.9	0.9	0.6	0.6	0.6	0.6	0.3	0.3	0.6	0.6
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)