

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: P400896

Luminaire Tested: **ENT-SA1A-727-U-SL4**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1A-727-U-SL4
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2168 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

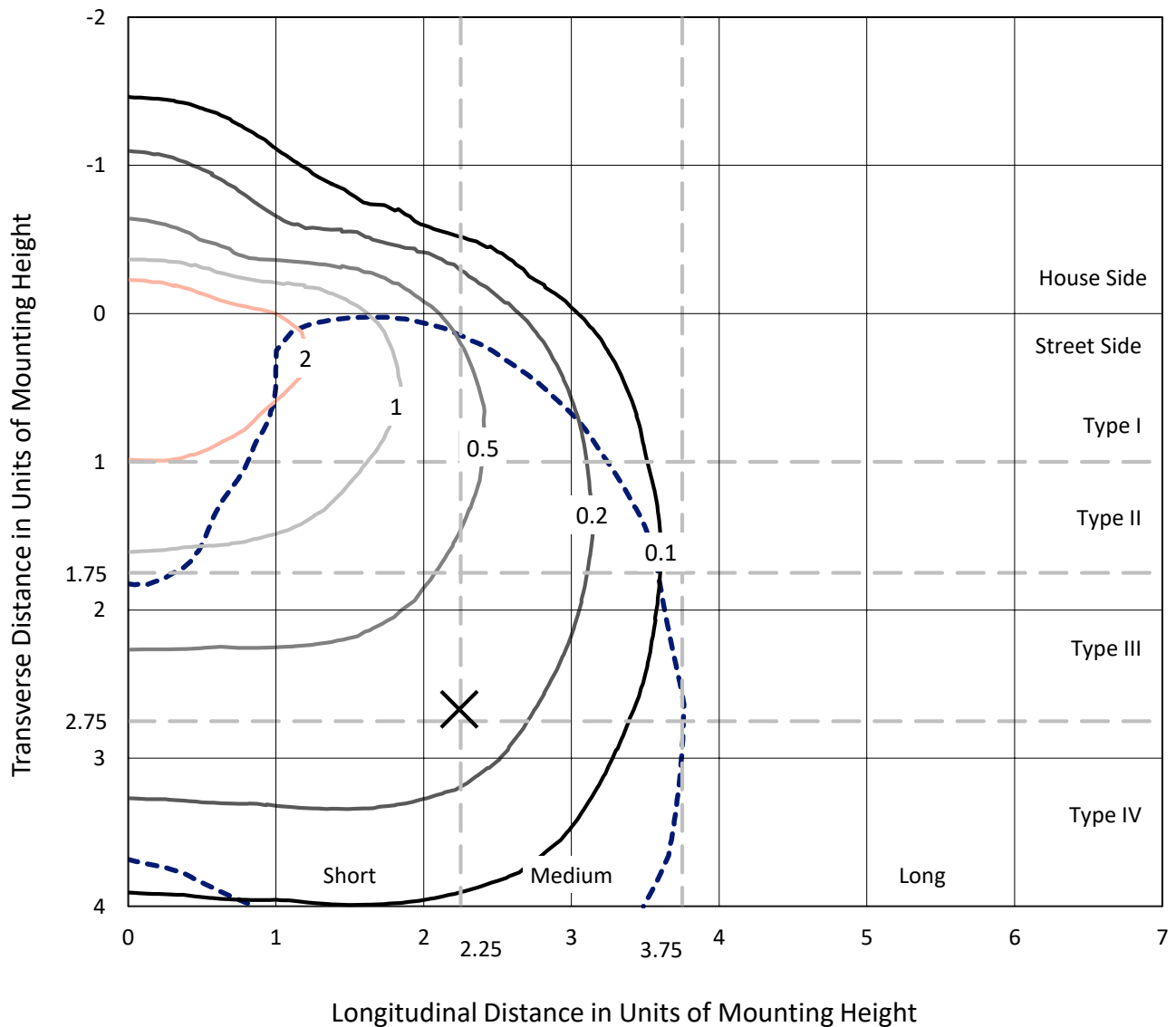
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P400896
 CATALOG NUMBER: ENT-SA1A-727-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

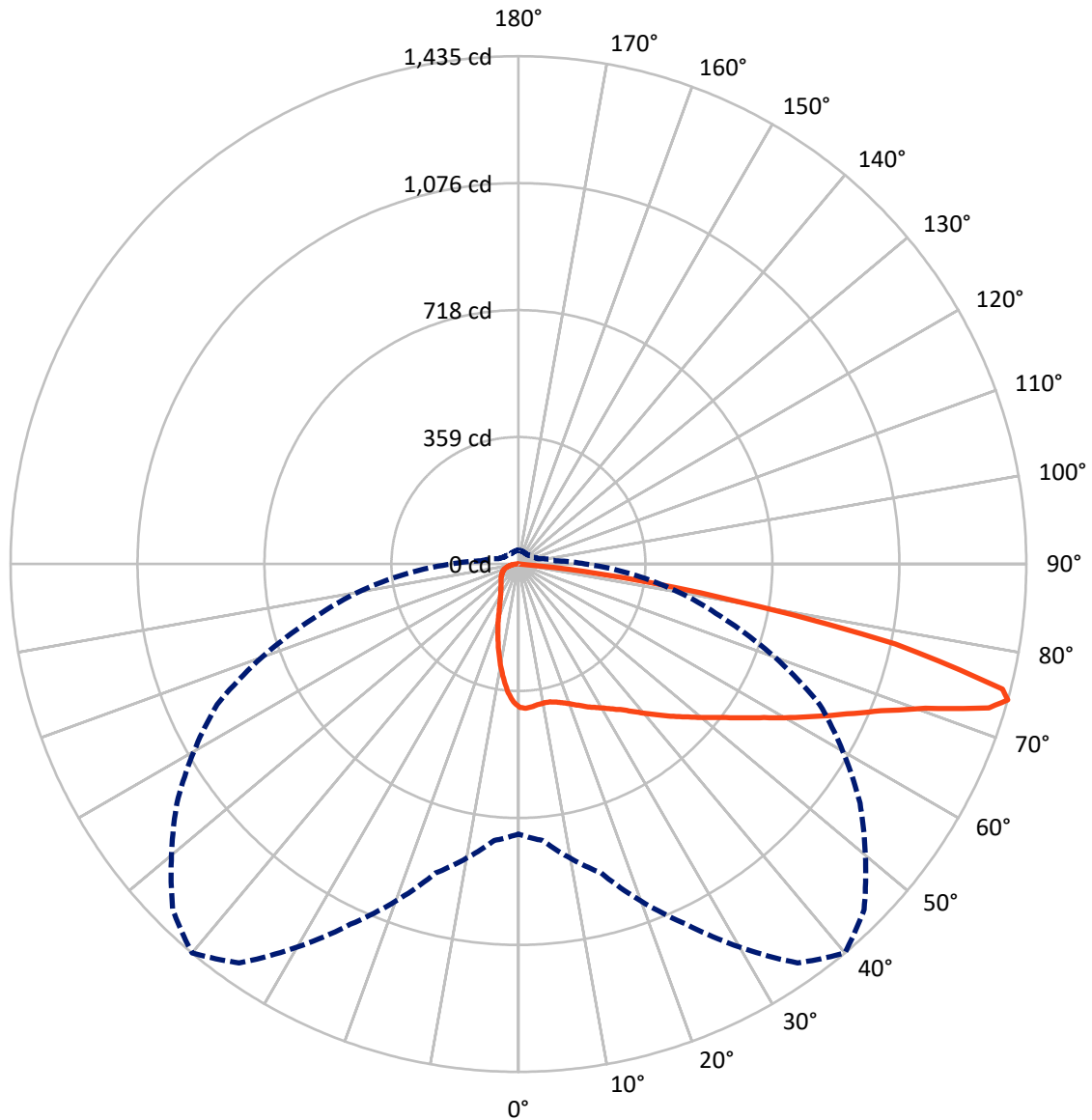
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P400896
CATALOG NUMBER: ENT-SA1A-727-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P400896

CATALOG NUMBER: ENT-SA1A-727-U-SL4

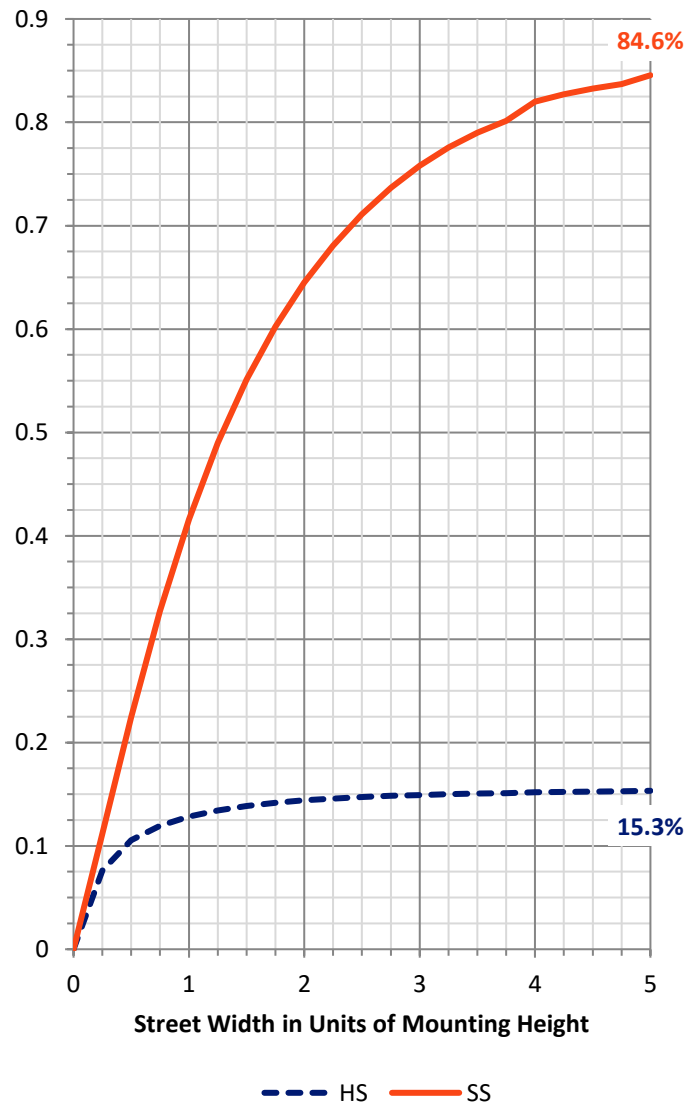
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	338.1	0.0	338.1
	% Fixture	15.6	0.0	15.6
Street Side	Lumens	1830.0	0.0	1830.0
	% Fixture	84.4	0.0	84.4
Total	Lumens	2168.0	0.0	2168.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	1.6
10°-20°	92.0	4.2
20°-30°	141.1	6.5
30°-40°	203.8	9.4
40°-50°	293.2	13.5
50°-60°	404.8	18.7
60°-70°	510.4	23.5
70°-80°	442.6	20.4
80°-90°	44.3	2.0
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°	2168.0	100.0
0°-180°	2168.0	100.0



REPORT NUMBER: P400896

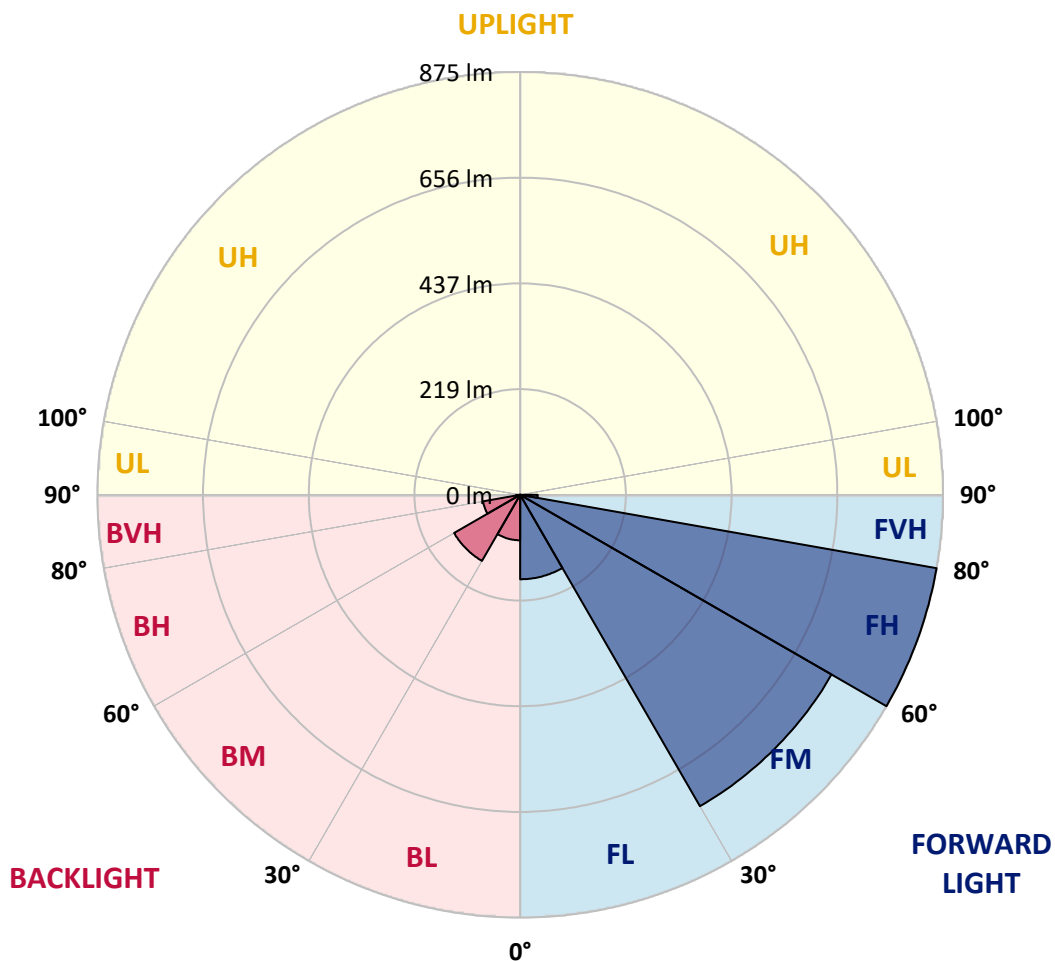
CATALOG NUMBER: ENT-SA1A-727-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	174.8	8.1			
FM	(30°-60°)	744.0	34.3			
FH	(60°-80°)	875.0	40.4			G1/1800
FVH	(80°-90°)	36.2	1.7			G1/100
BL	(0°-30°)	94.1	4.3	B0/110		
BM	(30°-60°)	157.9	7.3	B0/220		
BH	(60°-80°)	78.0	3.6	B0/110		G0/110
BVH	(80°-90°)	8.1	0.4			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 IV Short





REPORT NUMBER: P400896

CATALOG NUMBER: ENT-SA1A-727-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7
2.5°	409.9	409.6	410.5	409.9	408.9	408.3	407.9	406.0	405.3	403.4	400.8
5°	408.3	408.3	408.3	407.6	405.7	405.0	404.4	401.4	399.5	396.2	391.4
7.5°	402.7	403.7	403.4	403.1	401.4	400.8	399.8	396.2	393.6	388.8	382.6
10°	397.5	397.5	397.9	399.2	398.5	398.8	398.5	394.6	391.0	384.9	377.1
12.5°	390.1	391.4	393.3	396.9	398.5	399.8	399.8	396.9	393.0	385.5	376.4
15°	385.5	387.1	392.0	398.5	402.4	404.7	405.3	401.8	396.9	389.4	379.3
17.5°	383.6	385.5	394.6	403.7	410.5	412.5	412.8	408.9	403.7	394.6	382.9
20°	385.5	387.8	399.8	412.2	420.3	421.9	422.6	417.0	410.5	401.8	386.5
22.5°	393.0	396.2	409.6	422.9	431.3	433.6	433.0	425.2	418.7	409.2	391.0
25°	409.2	411.2	423.2	437.5	444.0	446.6	445.0	436.2	427.8	418.3	397.5
27.5°	428.1	430.7	443.4	454.1	458.3	459.0	457.3	448.2	438.8	431.0	407.6
30°	450.8	453.1	463.5	471.6	472.0	472.3	471.3	460.9	453.1	446.9	422.2
32.5°	474.9	475.2	485.9	489.8	487.2	488.2	487.2	475.9	470.3	468.4	441.4
35°	497.0	497.3	508.4	509.7	505.5	505.8	507.7	494.4	494.4	498.9	470.0
37.5°	518.1	519.1	528.9	527.6	525.9	528.9	531.5	520.1	526.6	539.6	504.8
40°	534.1	536.3	549.3	548.7	552.3	555.2	557.5	551.6	562.0	587.4	547.7
42.5°	544.5	549.0	567.5	572.1	578.3	583.5	587.4	587.0	605.2	640.3	593.2
45°	555.2	559.7	584.4	595.5	605.9	614.0	621.5	625.4	654.3	696.3	646.2
47.5°	568.2	572.1	599.7	621.5	634.8	645.9	659.2	667.6	704.4	753.1	695.3
50°	588.0	590.6	615.3	649.1	666.0	681.3	697.9	715.1	758.3	811.3	738.2
52.5°	613.7	615.3	633.5	677.1	704.1	720.3	745.0	767.8	813.3	864.0	773.3
55°	642.9	641.6	655.6	710.6	742.1	766.5	797.0	820.1	871.1	909.8	801.2
57.5°	672.2	671.2	682.3	742.7	790.2	818.8	850.3	874.7	924.1	952.7	821.4
60°	700.2	696.6	712.2	780.4	848.4	881.2	909.5	931.9	974.2	983.6	832.1
62.5°	724.9	724.9	747.6	826.9	917.9	947.5	969.9	984.9	1022.0	1006.3	827.9
65°	747.6	750.5	783.0	878.9	990.1	1020.3	1039.8	1045.7	1069.4	1007.3	792.1
67.5°	773.3	777.8	823.7	939.7	1073.3	1105.5	1122.4	1120.4	1103.2	992.4	715.4
70°	798.3	805.8	874.1	1018.1	1176.0	1219.6	1238.1	1199.8	1120.8	909.5	594.2
72.5°	816.5	829.2	915.3	1096.4	1323.3	1390.2	1382.8	1221.5	1038.5	749.6	449.5
74°	763.2	784.3	904.0	1123.4	1376.3	1435.1	1381.5	1178.3	939.4	603.6	318.5
75°	701.1	721.6	846.4	1112.6	1386.3	1412.7	1314.5	1102.2	842.5	467.7	208.0
77.5°	519.1	535.0	650.1	877.3	1096.4	1088.6	978.7	747.0	415.1	141.1	87.8
80°	229.2	241.2	320.8	441.4	593.9	591.6	551.0	343.3	133.9	73.8	53.6
82.5°	69.2	68.9	92.3	128.7	225.6	229.8	195.4	118.3	64.0	30.6	26.0
85°	0.3	0.3	0.3	0.3	1.0	8.5	7.2	22.8	11.7	5.5	9.4
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	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	0.0



REPORT NUMBER: P400896

CATALOG NUMBER: ENT-SA1A-727-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7
2.5°	399.2	398.8	397.9	395.6	394.0	389.1	390.7	387.5	387.1	386.5	386.2
5°	389.1	387.8	383.9	379.3	374.1	366.0	363.4	358.5	355.6	354.6	355.3
7.5°	378.7	375.8	368.3	358.5	348.1	336.1	327.3	320.5	315.6	314.0	311.7
10°	372.2	367.3	354.6	338.4	321.5	304.6	289.9	279.9	272.4	266.5	266.5
12.5°	369.9	363.4	344.9	321.1	296.8	272.7	251.6	238.3	225.6	219.4	218.4
15°	371.2	362.1	336.8	305.5	273.0	241.8	215.8	196.7	184.6	177.2	179.8
17.5°	372.5	361.1	328.3	289.0	250.0	213.9	183.7	161.9	147.2	143.3	141.7
20°	374.1	359.2	317.6	271.1	226.2	186.9	155.0	132.9	121.9	117.0	117.0
22.5°	376.4	356.6	306.5	251.3	201.9	160.6	131.0	114.4	105.6	102.7	102.7
25°	379.7	355.0	295.1	231.4	178.8	139.8	115.1	102.1	97.5	95.6	95.2
27.5°	385.8	355.3	284.1	211.3	156.0	122.2	103.7	95.2	91.7	90.7	90.4
30°	395.3	358.5	272.4	189.8	135.9	108.9	95.9	90.0	87.8	87.1	87.1
32.5°	408.3	364.4	262.6	170.7	120.9	98.2	89.4	85.5	84.2	83.5	83.9
35°	428.4	374.5	250.9	153.1	106.9	90.7	84.2	81.3	80.3	80.3	80.6
37.5°	454.7	390.1	239.6	136.8	97.5	84.2	79.3	77.7	76.7	77.4	77.7
40°	487.9	408.6	228.8	122.2	89.7	79.0	75.1	73.8	73.5	74.1	74.8
42.5°	523.7	431.0	219.1	110.2	83.5	74.8	71.5	70.9	70.5	70.9	71.8
45°	565.3	456.7	211.0	101.1	79.0	71.2	68.3	67.6	67.3	67.9	68.6
47.5°	603.6	479.8	204.5	94.9	75.1	68.6	65.7	64.7	64.7	64.7	65.3
50°	634.8	498.0	200.6	90.7	71.8	65.7	63.1	62.1	61.8	61.4	61.8
52.5°	661.8	511.6	199.3	88.1	69.2	63.1	60.5	59.8	59.2	58.5	58.8
55°	679.7	518.5	196.7	85.8	67.0	60.1	57.9	57.2	56.6	55.6	55.6
57.5°	690.1	517.8	190.8	84.5	65.7	57.5	55.3	55.3	54.6	53.0	53.3
60°	691.1	506.4	176.5	82.9	64.7	54.9	52.3	53.0	53.0	51.7	51.7
62.5°	674.5	476.5	148.9	78.7	63.4	53.0	50.1	51.7	52.3	51.0	51.0
65°	623.4	406.0	119.6	72.5	60.1	50.7	47.5	50.7	52.7	51.7	51.4
67.5°	525.6	321.5	98.8	65.7	56.6	47.8	44.9	49.1	51.7	51.7	51.4
70°	421.9	244.1	81.3	58.2	51.0	44.2	41.9	45.5	47.8	48.4	48.4
72.5°	290.6	149.2	66.0	50.1	44.9	40.0	38.0	40.3	41.6	42.9	42.6
74°	187.6	104.7	57.9	45.5	41.0	36.7	35.8	36.7	37.4	38.7	39.0
75°	125.5	85.5	54.0	42.3	38.7	34.5	33.8	34.8	35.4	36.4	36.4
77.5°	72.2	61.1	43.6	35.1	32.2	29.6	29.3	29.6	30.6	31.5	31.2
80°	50.1	46.5	34.5	27.3	25.4	24.1	24.4	24.7	26.3	26.7	26.3
82.5°	30.2	33.5	24.4	20.5	19.2	18.9	19.8	20.5	21.8	22.1	21.8
85°	12.0	15.9	12.0	11.4	12.7	14.0	15.6	16.6	17.2	17.2	17.2
87.5°	0.0	2.3	2.9	4.6	7.2	8.5	11.1	12.0	12.7	12.4	12.0
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)