

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: P400895

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

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400895
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)
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-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1876 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

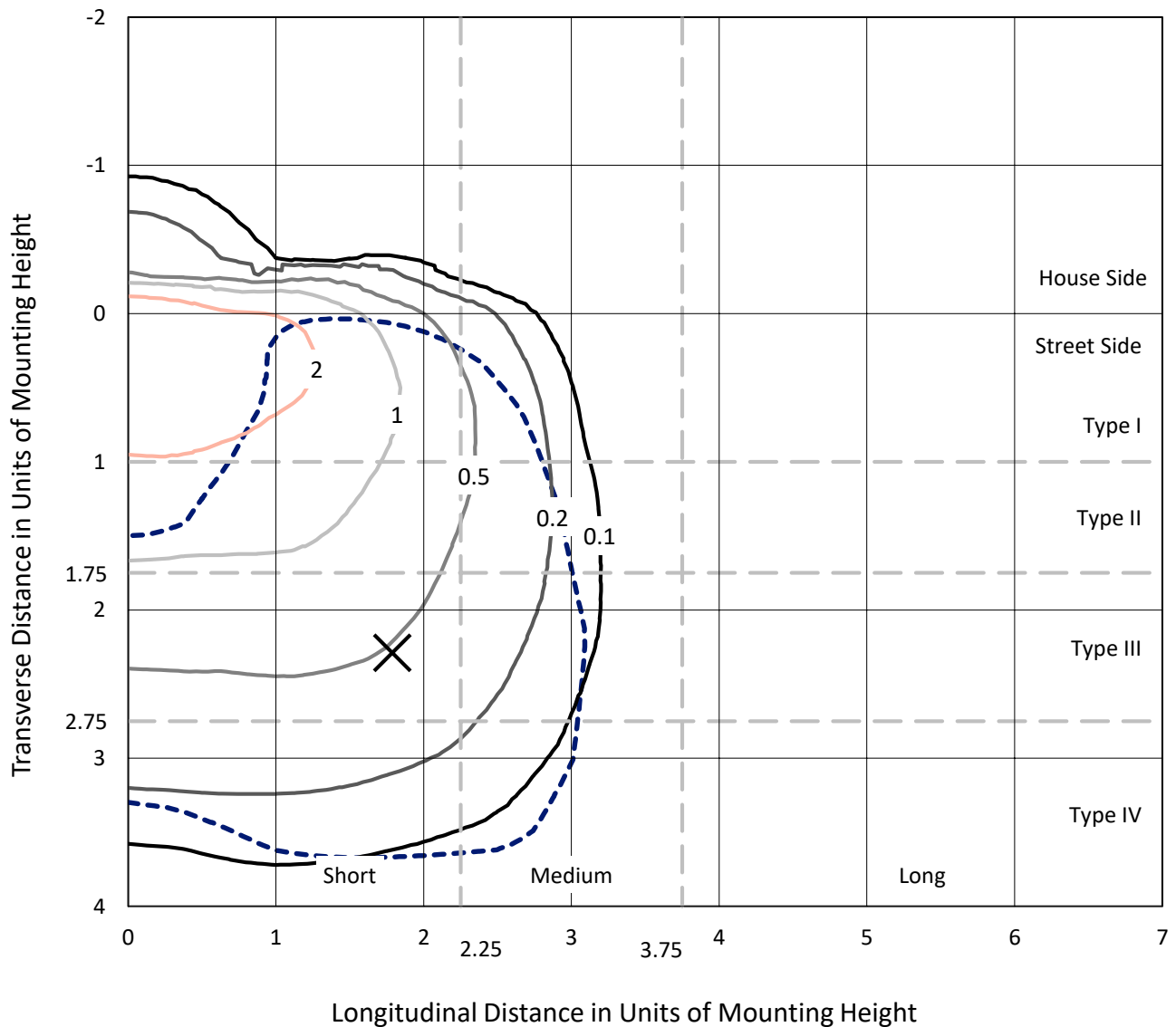
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P400895
 CATALOG NUMBER: ENT-SA1A-727-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

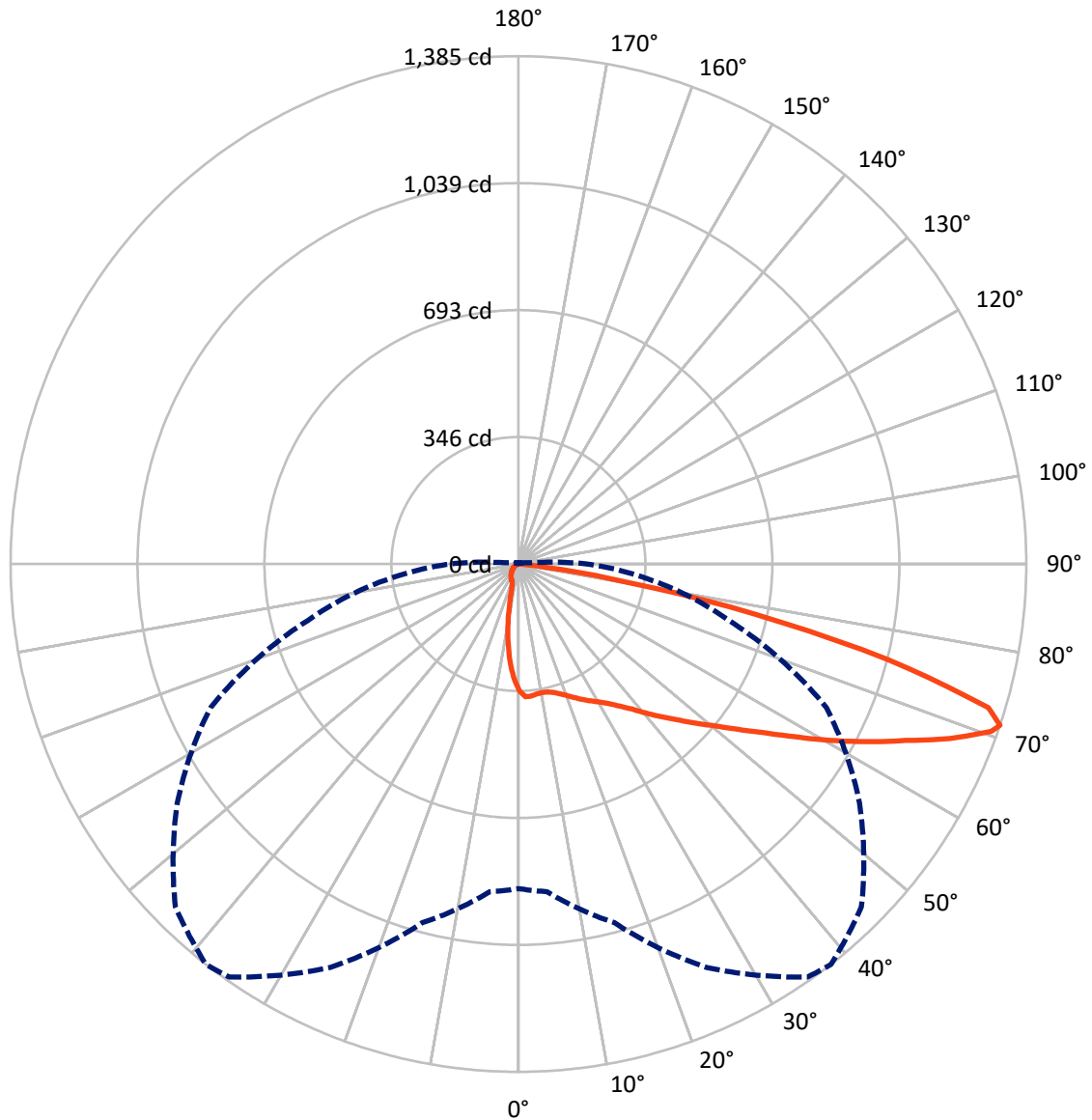
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P400895
CATALOG NUMBER: ENT-SA1A-727-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P400895

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

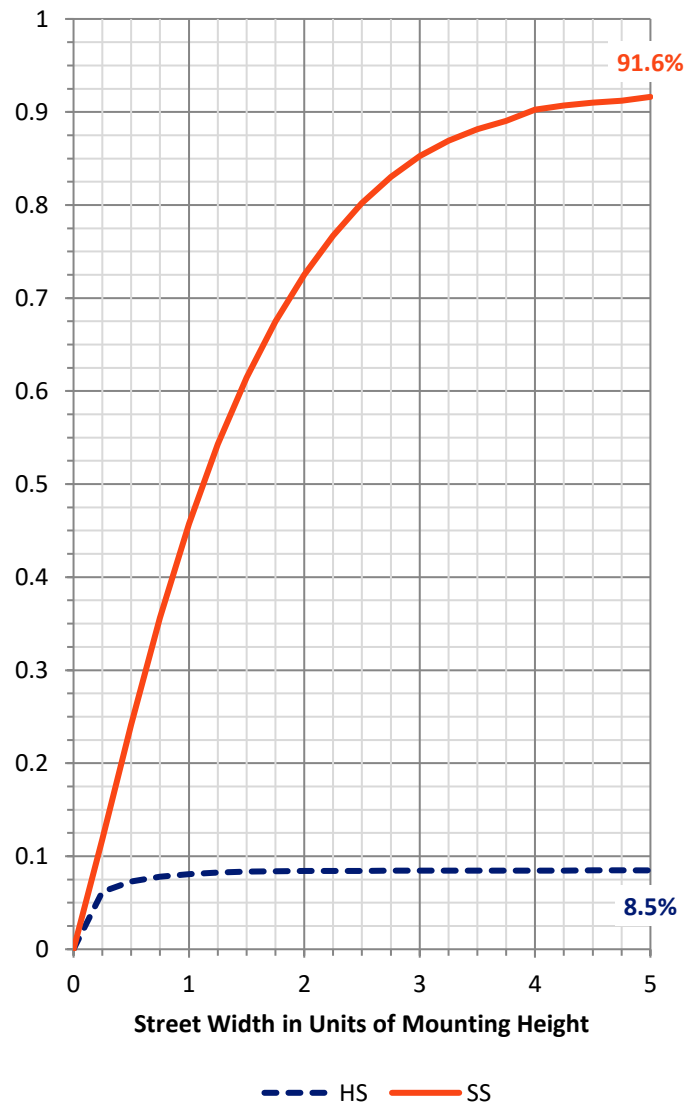
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	160.3	0.0	160.3
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	1715.7	0.0	1715.7
	% Fixture	91.5	0.0	91.5
Total	Lumens	1876.0	0.0	1876.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.2	1.6
10°-20°	70.7	3.8
20°-30°	113.4	6.0
30°-40°	172.5	9.2
40°-50°	268.9	14.3
50°-60°	393.2	21.0
60°-70°	504.3	26.9
70°-80°	308.3	16.4
80°-90°	15.5	0.8
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°	1876.0	100.0
0°-180°	1876.0	100.0



REPORT NUMBER: P400895

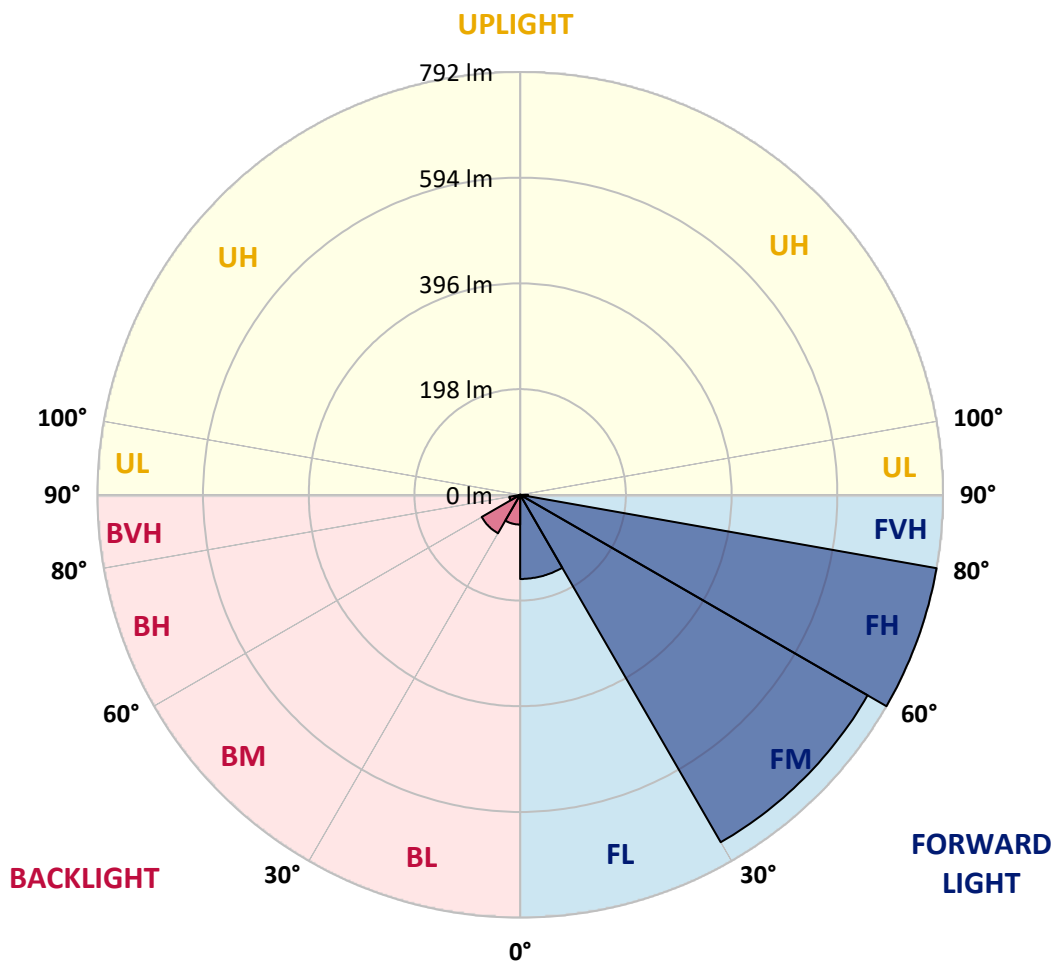
CATALOG NUMBER: ENT-SA1A-727-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	157.6	8.4			
FM (30°-60°)	751.4	40.1			
FH (60°-80°)	792.0	42.2			G1/1800
FVH (80°-90°)	14.8	0.8			G1/100
BL (0°-30°)	55.7	3.0	B0/110		
BM (30°-60°)	83.2	4.4	B0/220		
BH (60°-80°)	20.6	1.1	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			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: P400895

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8
2.5°	366.3	365.3	366.3	365.3	363.4	362.4	361.1	357.5	354.3	350.4	344.5
5°	367.0	366.3	366.3	365.0	362.7	361.8	360.5	356.9	352.7	346.8	338.0
7.5°	363.4	363.1	362.4	361.1	358.5	357.9	356.9	352.7	348.4	342.3	331.5
10°	357.5	358.2	357.9	357.9	356.9	356.2	355.6	350.7	346.2	339.0	327.6
12.5°	352.0	352.7	354.3	356.9	357.9	358.2	358.2	353.3	347.8	340.0	328.3
15°	348.4	349.7	354.3	359.5	362.4	363.4	364.4	359.2	352.7	344.2	331.9
17.5°	347.5	349.4	358.2	366.3	371.8	372.5	372.5	366.0	359.2	349.4	336.1
20°	350.7	353.3	364.7	376.1	382.9	383.5	382.2	373.8	365.7	354.9	339.7
22.5°	360.5	362.7	375.7	389.1	395.6	396.2	393.3	381.6	372.8	364.0	344.5
25°	377.4	378.7	392.7	405.3	408.9	409.9	405.0	391.0	380.9	372.8	351.4
27.5°	399.8	400.5	413.1	422.6	423.2	422.9	417.7	403.1	393.0	386.1	361.8
30°	423.2	424.2	434.6	440.8	438.2	436.9	432.3	416.7	407.6	402.4	376.7
32.5°	445.0	446.0	457.3	460.6	454.7	453.8	450.5	433.9	426.1	428.7	398.2
35°	466.4	466.4	479.4	481.1	475.9	475.9	475.9	456.0	454.7	463.5	428.1
37.5°	485.6	488.9	502.5	501.9	500.9	501.5	503.5	488.5	493.1	508.0	467.4
40°	501.9	506.1	524.3	525.9	530.1	533.7	536.6	528.8	539.6	563.9	517.8
42.5°	516.5	521.4	544.8	552.2	563.9	568.8	574.3	572.4	596.1	640.7	582.1
45°	535.3	540.5	564.6	582.5	598.7	605.2	617.6	626.0	665.4	716.1	651.7
47.5°	560.4	563.9	586.1	614.3	636.4	648.1	667.3	689.1	736.9	796.0	713.8
50°	594.5	594.8	611.4	648.1	681.0	693.6	726.8	755.1	814.9	866.6	758.6
52.5°	632.2	630.3	643.3	689.7	731.3	748.6	787.6	826.9	887.0	917.6	778.8
55°	668.0	668.9	677.1	733.9	794.7	811.3	860.7	900.7	953.0	948.8	789.9
57.5°	709.2	708.9	719.3	782.4	868.8	888.0	939.7	972.5	993.0	971.2	791.8
60°	748.2	747.3	763.2	840.2	947.8	976.1	1022.6	1021.3	1033.0	985.5	790.2
62.5°	783.0	785.3	813.3	907.5	1036.2	1066.8	1090.2	1073.9	1077.2	1002.1	770.0
65°	825.3	829.5	874.7	989.1	1145.4	1160.1	1169.2	1142.8	1110.3	988.8	708.9
67.5°	878.6	891.3	955.0	1109.4	1259.2	1269.3	1269.6	1184.5	1109.0	921.5	596.1
70°	899.7	913.0	1014.5	1204.6	1355.1	1367.8	1328.1	1178.0	1021.6	721.6	402.4
71°	885.1	897.1	1012.8	1213.7	1374.9	1385.0	1322.9	1135.4	926.4	594.5	311.7
72.5°	779.4	810.7	950.4	1156.5	1339.5	1339.8	1238.7	1034.9	736.9	371.2	156.7
75°	420.9	458.6	696.6	880.2	1033.3	1041.4	953.0	718.7	356.6	96.2	38.0
77.5°	138.8	156.3	312.4	457.0	648.1	660.8	582.8	319.2	112.5	32.5	19.8
80°	87.1	89.1	105.6	192.1	288.3	299.0	239.9	129.4	50.7	17.9	13.7
82.5°	14.6	17.6	49.7	56.6	101.7	80.6	54.6	66.0	23.7	8.1	11.7
85°	0.0	0.0	0.3	0.3	1.6	0.3	0.3	13.3	1.3	1.3	6.2
87.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	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	0.0



REPORT NUMBER: P400895

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8
2.5°	341.9	339.3	334.1	328.6	321.8	315.9	314.0	309.8	307.8	306.2	306.2
5°	332.5	328.0	316.9	305.5	294.5	282.8	272.1	262.0	257.1	250.3	253.5
7.5°	324.7	316.9	301.3	283.4	260.7	237.6	219.7	204.1	191.1	186.9	184.0
10°	319.2	309.4	286.7	259.4	226.2	193.4	165.8	140.1	125.1	116.0	116.0
12.5°	318.5	306.2	276.6	234.7	186.9	142.4	108.2	83.9	71.8	66.3	66.0
15°	320.8	305.9	267.5	212.3	150.8	98.8	67.6	56.9	54.0	53.3	53.3
17.5°	322.8	305.5	256.8	186.9	111.2	65.0	53.6	51.7	51.0	50.7	50.7
20°	324.7	303.9	244.4	158.3	78.7	53.0	50.1	49.1	48.8	48.4	48.4
22.5°	327.3	302.3	231.8	125.8	58.2	49.4	47.8	46.8	46.5	46.5	46.5
25°	330.9	301.3	216.2	95.2	50.1	46.8	45.2	44.5	44.5	44.2	44.2
27.5°	337.7	302.3	199.3	68.3	46.8	44.2	43.2	42.6	42.6	42.3	42.3
30°	347.1	305.2	178.1	53.3	44.2	41.6	40.6	40.3	40.0	40.0	40.0
32.5°	360.5	309.8	155.0	45.5	41.0	39.0	38.0	37.7	37.7	37.7	37.4
35°	380.9	319.2	126.8	41.6	38.0	36.1	35.1	35.1	35.1	34.8	35.1
37.5°	412.2	334.5	98.2	38.4	34.8	33.2	32.5	32.2	32.2	32.2	32.2
40°	451.5	359.2	71.5	35.4	31.9	30.2	29.6	29.3	28.9	28.9	28.9
42.5°	502.2	386.5	52.0	32.2	29.3	27.6	27.0	26.3	25.7	25.4	25.4
45°	554.8	419.0	40.6	29.6	26.7	25.4	24.7	23.7	22.8	21.8	21.8
47.5°	605.9	444.0	34.8	26.7	24.4	23.1	22.4	21.1	19.5	18.5	18.5
50°	638.1	451.8	31.2	24.1	22.1	21.1	20.2	18.5	16.3	15.3	15.3
52.5°	648.1	437.5	28.0	21.8	20.2	19.2	17.9	15.6	13.3	12.0	12.0
55°	652.0	409.9	24.7	20.2	18.2	16.9	15.3	13.0	10.7	9.4	9.4
57.5°	647.2	370.9	22.1	18.2	16.3	15.0	13.0	10.4	8.1	7.2	7.2
60°	630.6	314.3	19.8	16.3	14.3	12.7	10.7	8.1	6.2	4.9	5.2
62.5°	585.7	243.1	17.2	13.7	12.4	10.7	8.5	6.2	3.9	3.3	3.3
65°	514.2	168.4	14.6	11.4	10.4	8.8	6.5	4.2	2.3	2.0	2.0
67.5°	417.7	108.9	11.4	9.4	8.8	7.2	4.9	2.6	1.3	1.3	1.0
70°	262.3	54.0	9.1	7.2	7.2	5.5	3.6	1.6	1.0	1.0	1.0
71°	185.6	36.7	8.1	6.5	6.5	5.2	3.3	1.3	1.0	1.0	1.0
72.5°	83.9	23.1	6.8	5.9	5.5	4.2	2.9	1.3	1.3	1.3	1.3
75°	26.3	12.7	4.9	4.6	4.6	3.6	2.6	1.6	1.6	1.6	1.6
77.5°	17.6	9.8	3.3	2.9	3.6	3.6	2.6	2.0	2.0	2.0	2.0
80°	14.3	5.2	2.0	2.0	2.6	3.3	2.6	2.0	2.3	2.0	2.0
82.5°	14.0	2.6	0.7	1.0	1.6	2.0	2.0	1.6	2.0	2.0	2.0
85°	5.9	0.7	0.3	0.7	0.7	1.0	1.0	1.3	1.6	1.6	1.6
87.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.7	0.7	1.0	1.3	1.3
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)