

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: P400770

Luminaire Tested: **ENT-SA1-740-U-SL3-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400770  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1-740-U-SL3-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 647 lumens  
Efficiency: N/A  
Efficacy: 49.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G0

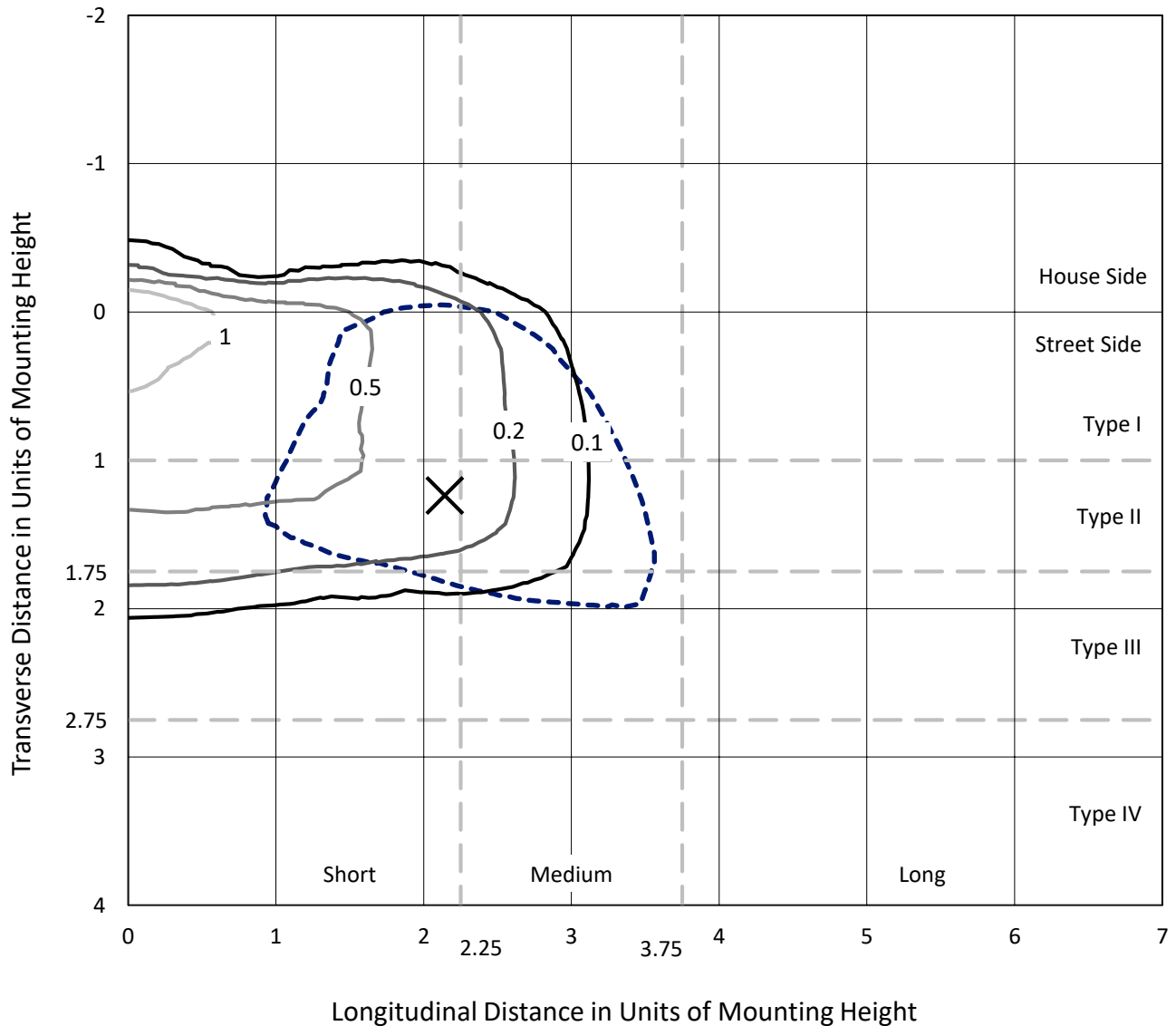
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P400770  
 CATALOG NUMBER: ENT-SA1-740-U-SL3-HSS-XXB

### Iso-Footcandle Lines of Horizontal Illumination

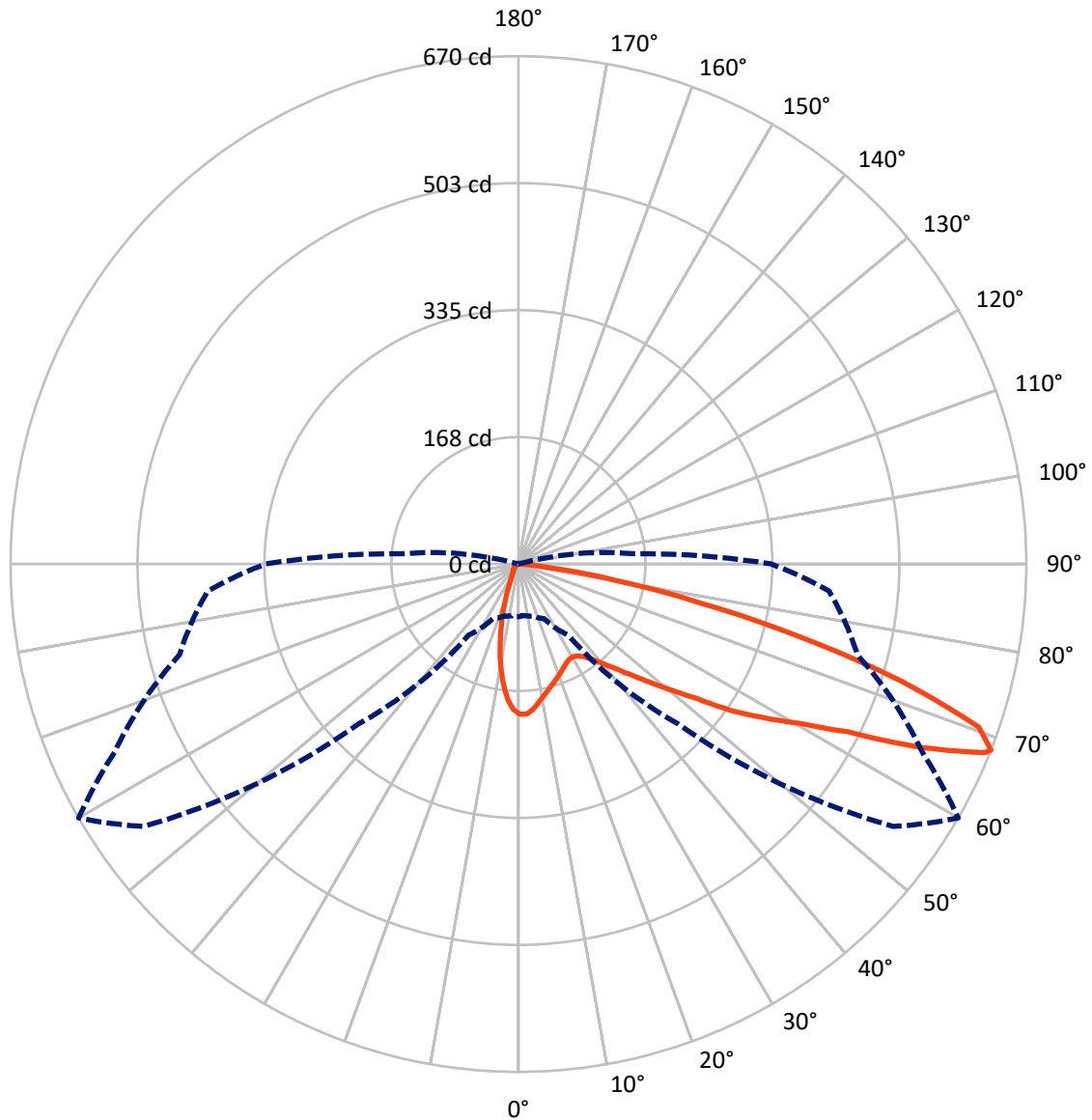
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2 fc  
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P400770  
CATALOG NUMBER: ENT-SA1-740-U-SL3-HSS-XXB

### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P400770

CATALOG NUMBER: ENT-SA1-740-U-SL3-HSS-XXB

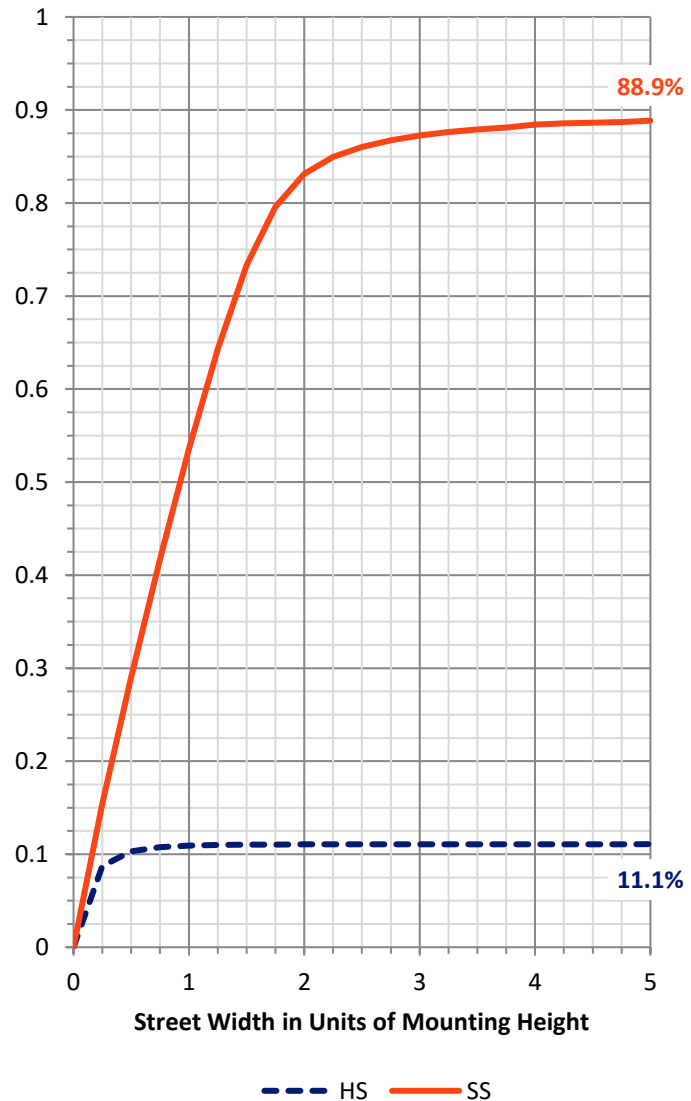
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	72.3	0.0	72.3
	% Fixture	11.2	0.0	11.2
<b>Street Side</b>	Lumens	574.7	0.0	574.7
	% Fixture	88.8	0.0	88.8
<b>Total</b>	Lumens	647.0	0.0	647.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	16.1	2.5
10°-20°	32.8	5.1
20°-30°	43.2	6.7
30°-40°	59.6	9.2
40°-50°	90.3	14.0
50°-60°	145.7	22.5
60°-70°	173.0	26.7
70°-80°	81.6	12.6
80°-90°	4.9	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°	647.0	100.0
0°-180°	647.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P400770

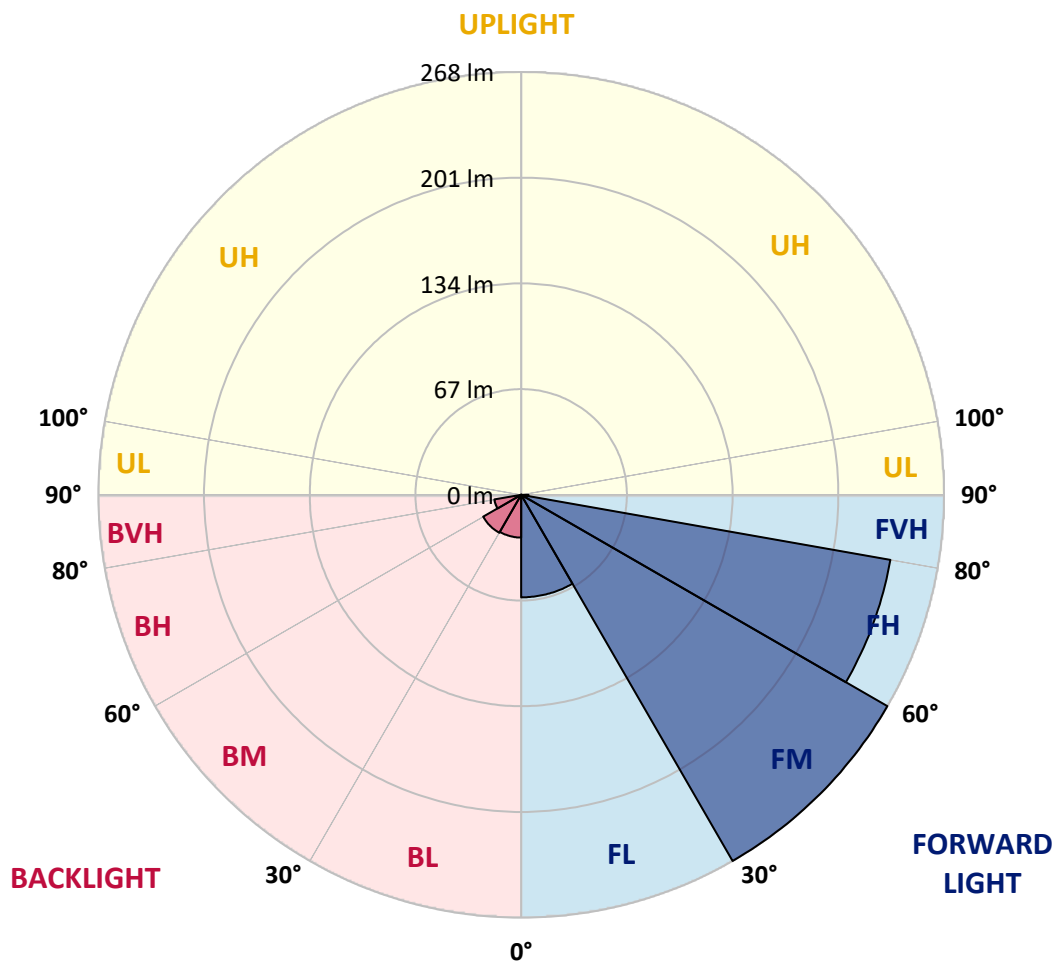
CATALOG NUMBER: ENT-SA1-740-U-SL3-HSS-XXB

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	64.9	10.0			
FM	(30°-60°)	267.7	41.4			
FH	(60°-80°)	237.4	36.7			G0/660
FVH	(80°-90°)	4.7	0.7			G0/10
BL	(0°-30°)	27.1	4.2	B0/110		
BM	(30°-60°)	27.8	4.3	B0/220		
BH	(60°-80°)	17.2	2.7	B0/110		G0/110
BVH	(80°-90°)	0.2	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-G0**

Type III Short





REPORT NUMBER: P400770

CATALOG NUMBER: ENT-SA1-740-U-SL3-HSS-XXB

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
2.5°	196.3	195.8	197.1	197.4	197.7	198.4	198.3	198.4	198.5	198.3	196.9
5°	182.9	183.7	184.8	186.2	187.6	190.9	192.2	193.5	194.4	195.1	193.9
7.5°	169.7	171.3	172.1	174.8	177.0	180.4	183.2	185.5	187.7	190.1	188.9
10°	159.2	159.7	160.5	162.9	166.2	171.4	175.1	178.0	180.6	184.6	183.7
12.5°	148.9	149.2	150.7	153.4	156.8	163.1	168.1	171.4	174.3	179.4	179.5
15°	141.3	141.4	142.4	144.8	148.7	155.6	161.9	165.5	169.7	175.9	176.2
17.5°	136.3	136.2	136.5	138.0	141.7	148.2	155.9	160.2	165.1	173.0	173.3
20°	134.8	134.6	134.1	133.8	136.1	141.7	150.4	155.1	160.9	170.9	171.0
22.5°	136.1	135.7	134.7	132.8	133.5	137.1	144.4	150.1	157.2	169.8	169.1
25°	139.3	139.3	138.0	135.0	133.5	134.3	140.1	145.6	153.5	169.3	167.6
27.5°	144.6	144.4	142.6	139.5	136.7	134.6	137.4	142.6	150.7	169.9	167.0
30°	150.9	150.3	148.4	146.2	142.7	138.2	138.0	141.8	149.4	172.0	167.4
32.5°	157.0	157.0	156.2	154.1	150.7	144.8	141.4	144.5	151.1	175.4	168.8
35°	164.4	164.3	164.6	163.8	160.8	154.6	149.1	150.6	156.1	181.1	172.2
37.5°	170.4	170.5	172.4	173.7	172.4	165.8	160.1	160.1	164.7	189.7	178.1
40°	176.2	176.4	179.9	183.8	184.1	178.8	173.3	173.2	175.9	200.2	187.1
42.5°	181.5	182.3	187.4	194.0	197.8	194.3	190.2	188.9	190.2	216.2	201.7
45°	187.1	188.8	195.8	205.4	211.7	211.8	210.2	208.7	209.3	234.0	221.2
47.5°	194.3	196.3	205.1	216.8	228.7	231.7	233.2	232.6	230.9	256.7	246.5
50°	206.1	207.9	216.2	229.3	245.6	256.7	260.5	261.2	258.9	281.7	275.1
52.5°	226.0	227.1	234.8	245.2	263.5	284.2	294.3	294.4	289.3	311.0	306.1
55°	247.4	250.3	259.3	271.4	290.1	313.4	338.7	341.4	325.5	336.7	328.7
57.5°	247.8	250.5	265.4	288.6	327.9	358.8	381.3	383.2	365.6	357.3	350.0
60°	221.6	223.1	243.8	277.7	341.4	419.9	429.8	426.8	393.7	378.6	376.6
62.5°	156.4	157.1	181.7	226.4	311.5	449.1	503.7	487.7	433.6	410.0	416.6
65°	98.5	98.1	108.4	144.0	231.7	420.3	595.0	583.4	507.1	449.3	447.8
67.5°	72.7	70.9	73.7	84.7	132.4	330.0	611.8	664.3	577.0	465.7	420.8
68°	69.7	68.2	71.0	79.6	114.5	298.7	603.7	670.1	588.1	463.0	411.6
70°	59.2	57.7	60.2	66.6	79.7	193.9	532.6	644.3	598.2	440.6	362.7
72.5°	42.0	42.8	49.2	57.2	67.5	99.5	392.2	529.1	514.5	391.9	276.0
75°	24.9	26.3	34.7	46.1	62.0	65.6	253.0	384.7	377.5	271.4	149.5
77.5°	8.8	9.3	17.2	30.7	51.2	52.0	141.0	241.8	224.9	110.9	44.1
80°	3.2	3.2	6.4	17.1	33.0	39.7	74.9	129.1	88.8	28.8	12.2
82.5°	0.5	0.5	1.4	5.8	14.6	21.2	34.8	45.9	26.3	6.4	6.0
85°	0.0	0.0	0.0	0.0	0.2	0.2	10.2	10.3	4.8	0.9	2.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.3
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: P400770

CATALOG NUMBER: ENT-SA1-740-U-SL3-HSS-XXB

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
2.5°	196.4	196.2	195.0	192.8	190.9	187.8	187.3	184.3	183.2	182.3	183.2
5°	193.0	191.8	187.7	182.8	176.1	168.2	163.6	157.2	155.9	152.4	154.5
7.5°	187.4	184.6	177.1	166.4	154.1	142.1	132.8	123.9	116.4	113.7	113.0
10°	181.5	177.6	164.9	148.4	130.6	112.1	98.4	85.5	78.4	71.7	71.5
12.5°	175.9	170.0	151.6	128.7	103.8	81.8	64.0	50.5	42.0	37.4	38.6
15°	171.4	163.6	138.2	108.9	77.5	52.7	36.2	27.6	24.6	23.2	23.4
17.5°	167.0	156.7	125.3	88.3	55.2	32.5	23.5	20.5	19.7	19.3	19.1
20°	163.0	150.0	111.6	69.6	36.4	22.5	19.3	18.3	18.0	17.8	17.8
22.5°	159.1	142.9	98.0	51.6	24.9	18.4	17.3	16.9	16.7	16.4	16.4
25°	155.4	136.1	84.4	36.1	19.1	16.5	15.7	15.3	14.8	14.5	14.5
27.5°	152.7	131.0	71.8	25.6	16.0	14.8	14.1	13.3	12.7	12.3	12.3
30°	150.9	125.9	59.6	19.3	14.3	13.2	12.2	11.2	10.3	9.8	9.7
32.5°	150.0	121.7	48.3	15.8	12.7	11.5	10.3	9.2	8.2	7.6	7.6
35°	150.4	118.5	37.0	13.4	11.5	10.1	8.8	7.5	6.6	6.0	5.9
37.5°	153.3	116.6	27.6	11.9	10.3	8.8	7.5	6.1	5.3	4.8	4.7
40°	158.6	117.0	21.0	10.8	9.4	7.7	6.1	5.0	4.3	3.8	3.8
42.5°	169.5	120.2	16.6	9.9	8.5	6.6	5.2	4.2	3.5	3.2	3.1
45°	183.9	126.2	13.6	9.1	7.5	5.6	4.4	3.5	2.9	2.5	2.5
47.5°	205.6	135.9	11.7	8.3	6.5	4.7	3.6	2.9	2.2	2.0	1.9
50°	230.8	149.4	10.3	7.5	5.7	4.0	3.1	2.2	1.8	1.4	1.4
52.5°	256.4	164.4	9.3	6.7	4.9	3.4	2.4	1.6	1.2	1.0	1.0
55°	280.0	177.1	8.3	6.0	4.2	2.9	2.0	1.3	0.9	0.7	0.7
57.5°	302.9	188.6	7.2	5.3	3.4	2.3	1.5	1.0	0.7	0.4	0.4
60°	331.5	203.5	6.3	4.5	2.7	1.9	1.2	0.8	0.4	0.3	0.2
62.5°	366.1	214.4	5.3	3.6	2.2	1.4	0.9	0.5	0.3	0.1	0.1
65°	378.8	200.0	4.4	3.0	1.8	1.1	0.7	0.4	0.2	0.1	0.1
67.5°	343.3	161.2	3.5	2.3	1.3	0.8	0.5	0.3	0.2	0.1	0.1
68°	333.4	153.3	3.4	2.2	1.2	0.8	0.4	0.3	0.1	0.1	0.0
70°	281.5	123.1	2.7	1.6	1.0	0.7	0.4	0.2	0.1	0.1	0.0
72.5°	208.7	84.9	2.0	1.1	0.7	0.4	0.3	0.2	0.1	0.1	0.0
75°	110.1	33.0	1.5	0.9	0.5	0.4	0.3	0.3	0.2	0.1	0.1
77.5°	31.6	10.4	1.2	0.7	0.5	0.5	0.5	0.4	0.4	0.3	0.2
80°	9.2	3.4	0.8	0.4	0.5	0.5	0.7	0.5	0.5	0.4	0.4
82.5°	4.9	1.3	0.4	0.3	0.3	0.4	0.5	0.4	0.3	0.2	0.1
85°	2.1	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
87.5°	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
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)