

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:

Luminaire Tested: **ENT-SA1A-740-U-SL3-HSS-ULG**

Issue Date: 3/30/2022

**Test Information**

Test Method: LM-79-08  
Report Number:  
REPORT IS A COMBINATION OF REPORTS P400950 AND P226775  
Test Lab: INNOVATION CENTER  
Issue Date: 3/30/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-740-U-SL3-HSS-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

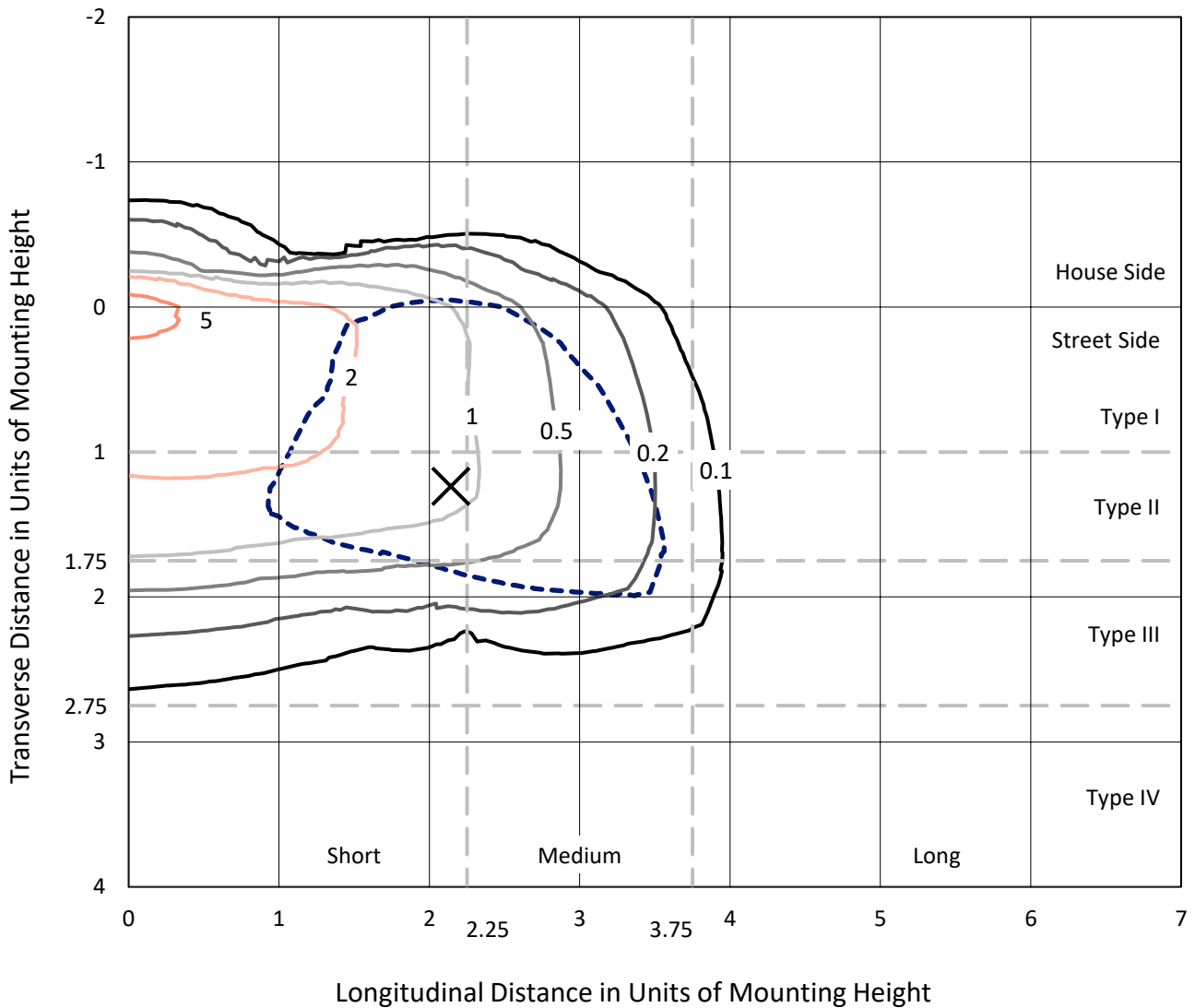
Lumens per Lamp: N/A  
Luminaire Lumens: 4063.9 lumens  
Efficiency: N/A  
Efficacy: 110.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')  
IES Classification: Type III - Short  
BUG Rating: B0 - U5 - G1  
  
Input Watts (W): 36.8  
Input Voltage (V): NR  
Input Current (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: 24 FT



REPORT NUMBER:  
 CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

### Iso-Footcandle Lines of Horizontal Illumination

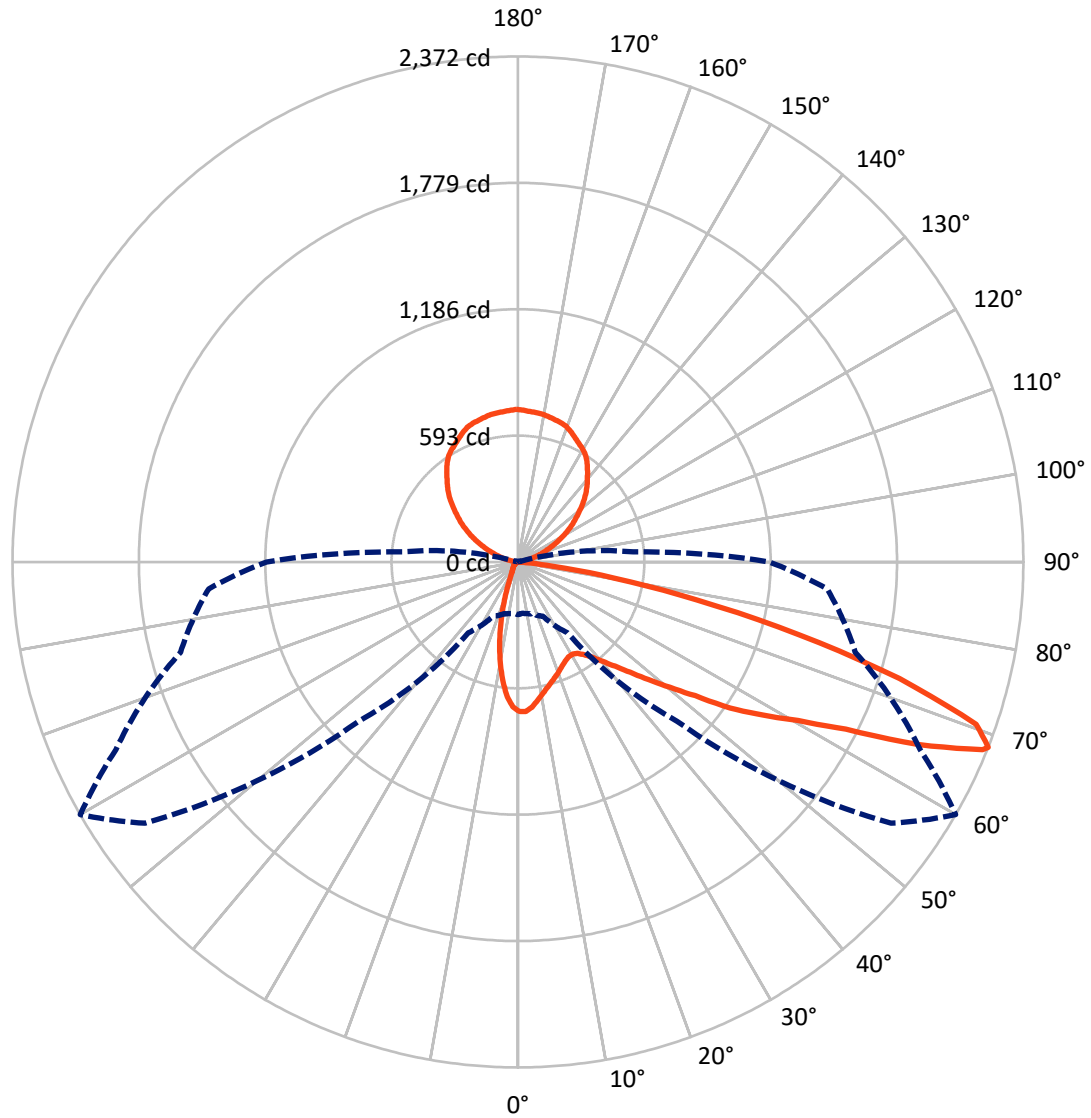
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc  
 Type III - Short - N/A

REPORT NUMBER:  
CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

### Luminous Intensity Polar Plot



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

REPORT NUMBER:

CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

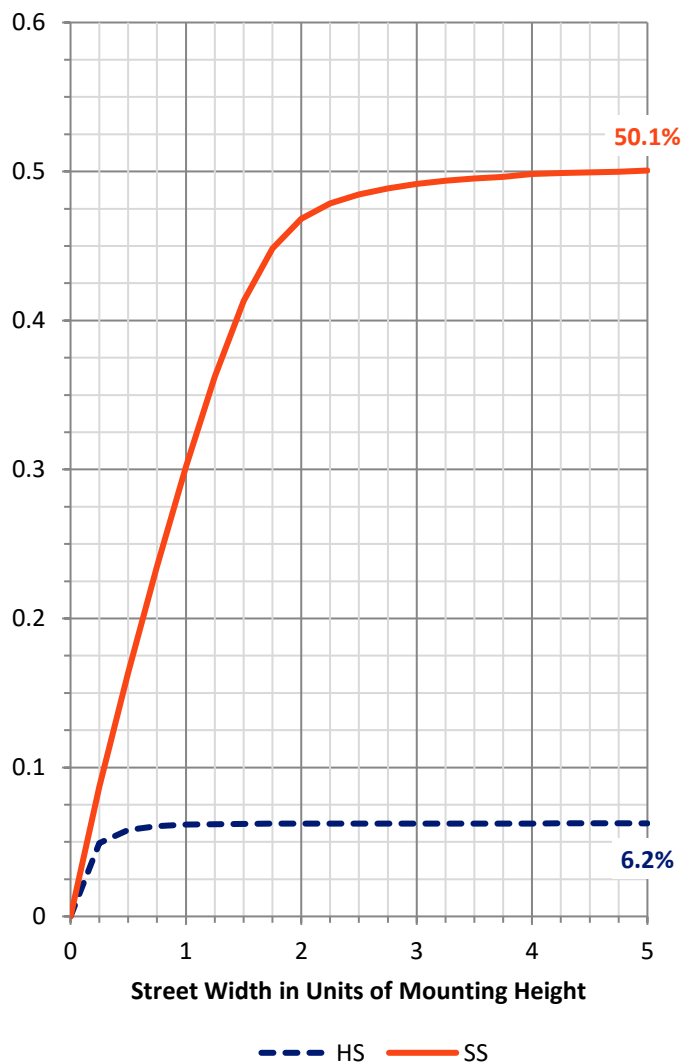
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	256.0	887.0	1143.0
	% Fixture	6.3	21.8	28.1
<b>Street Side</b>	Lumens	2034.0	887.0	2920.9
	% Fixture	50.0	21.8	71.9
<b>Total</b>	Lumens	2290.0	1773.9	4063.9
	% Fixture	56.3	43.7	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.9	1.4
10°-20°	116.0	2.9
20°-30°	152.7	3.8
30°-40°	210.8	5.2
40°-50°	319.5	7.9
50°-60°	515.6	12.7
60°-70°	612.5	15.1
70°-80°	288.7	7.1
80°-90°	17.3	0.4
90°-100°	8.4	0.2
100°-110°	58.7	1.4
110°-120°	169.9	4.2
120°-130°	279.4	6.9
130°-140°	344.6	8.5
140°-150°	352.5	8.7
150°-160°	297.0	7.3
160°-170°	195.5	4.8
170°-180°	67.8	1.7
0°-90°	2290.0	56.3
0°-180°	4063.9	100.0

**Coefficient of Utilization**



REPORT NUMBER:

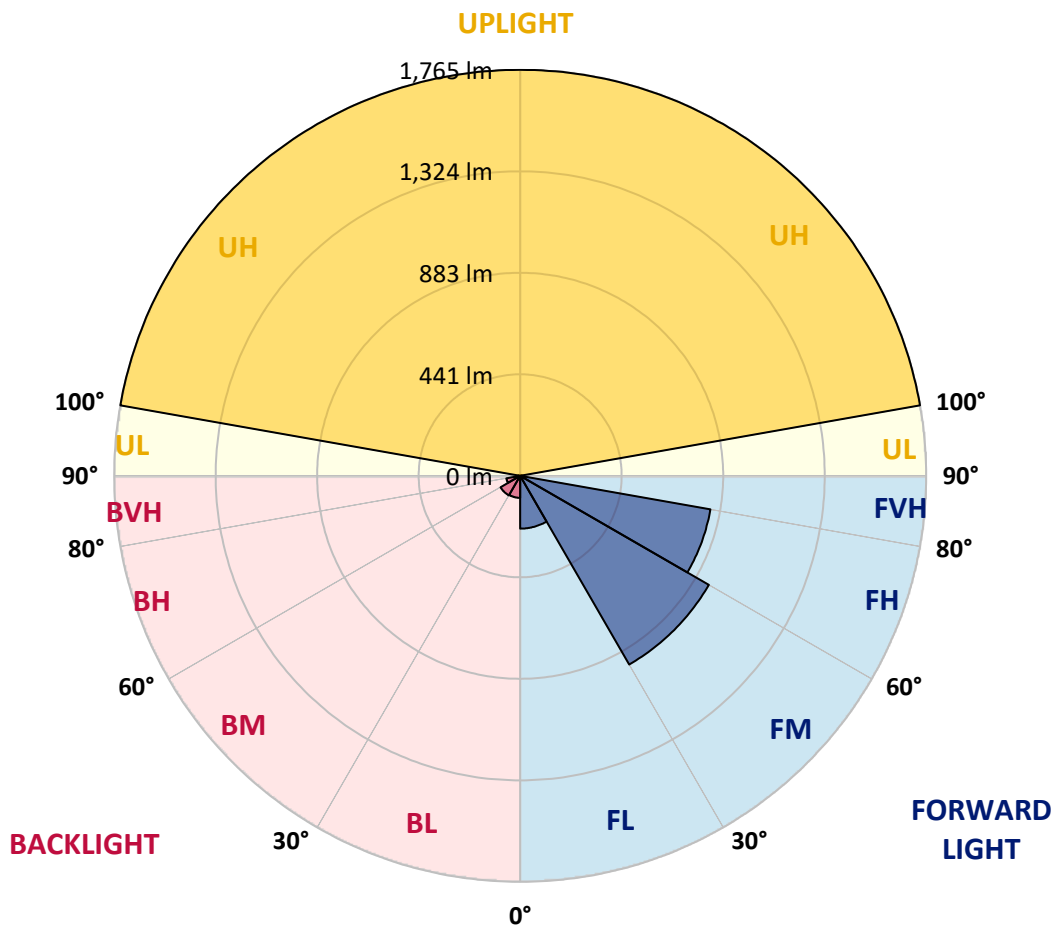
CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.8	5.7			
FM (30°-60°)	947.5	23.3			
FH (60°-80°)	840.1	20.7			G1/1800
FVH (80°-90°)	16.5	0.4			G1/100
BL (0°-30°)	95.8	2.4	B0/110		
BM (30°-60°)	98.4	2.4	B0/220		
BH (60°-80°)	61.1	1.5	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			G0/10
UL (90°-100°)	8.4	0.2		U1/10	
UH (100°-180°)	1765.5	43.4		U5	

**BUG Rating: B0-U5-G1**

Type III Short





REPORT NUMBER:

CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9
2.5°	694.7	693.2	697.4	698.6	699.8	702.1	701.7	702.1	702.5	701.7	697.1
5°	647.3	650.0	653.9	659.0	664.0	675.7	680.4	685.0	688.1	690.5	686.2
7.5°	600.7	606.1	609.2	618.6	626.3	638.4	648.5	656.6	664.4	673.0	668.7
10°	563.4	565.3	568.1	576.6	588.3	606.5	619.7	629.8	639.2	653.5	650.0
12.5°	526.9	528.0	533.5	542.8	554.8	577.4	594.9	606.5	617.0	634.9	635.3
15°	500.1	500.5	503.9	512.5	526.5	550.6	573.1	585.9	600.7	622.5	623.6
17.5°	482.6	482.2	483.0	488.4	501.6	524.5	551.7	566.9	584.4	612.4	613.5
20°	477.1	476.4	474.8	473.6	481.8	501.6	532.3	549.0	569.6	605.0	605.4
22.5°	481.8	480.2	476.8	470.1	472.5	485.3	510.9	531.1	556.4	601.1	598.4
25°	493.1	493.1	488.4	477.9	472.5	475.2	495.8	515.2	543.2	599.1	593.3
27.5°	511.7	510.9	504.7	493.8	483.7	476.4	486.5	504.7	533.5	601.5	591.0
30°	534.3	531.9	525.3	517.5	505.1	489.2	488.4	502.0	528.8	608.9	592.5
32.5°	555.6	555.6	552.9	545.5	533.5	512.5	500.5	511.3	534.6	620.9	597.6
35°	582.0	581.7	582.4	579.7	569.2	547.1	527.7	533.1	552.5	641.1	609.6
37.5°	603.0	603.4	610.0	614.7	610.0	586.7	566.5	566.5	582.8	671.4	630.2
40°	623.6	624.4	636.8	650.4	651.6	632.9	613.5	613.1	622.5	708.7	662.1
42.5°	642.3	645.4	663.3	686.6	700.2	687.7	673.4	668.7	673.4	765.1	713.8
45°	662.1	668.3	693.2	727.0	749.1	749.5	744.1	738.6	741.0	828.4	782.9
47.5°	687.7	694.7	725.8	767.4	809.3	820.2	825.3	823.3	817.1	908.4	872.3
50°	729.3	735.9	765.1	811.7	869.2	908.4	922.0	924.4	916.2	997.0	973.7
52.5°	800.0	803.9	831.1	868.0	932.5	1006.0	1041.7	1042.1	1023.8	1100.8	1083.3
55°	875.8	885.9	917.8	960.5	1026.9	1109.3	1198.7	1208.4	1152.0	1191.7	1163.3
57.5°	877.0	886.7	939.5	1021.5	1160.6	1269.8	1349.4	1356.4	1293.9	1264.7	1238.7
60°	784.5	789.5	863.0	983.0	1208.4	1486.2	1521.2	1510.7	1393.3	1340.1	1333.1
62.5°	553.7	556.0	643.0	801.2	1102.7	1589.6	1782.7	1726.3	1534.8	1451.2	1474.5
65°	348.5	347.4	383.5	509.8	820.2	1487.8	2105.9	2064.8	1794.7	1590.3	1584.9
67.5°	257.2	251.0	260.7	300.0	468.6	1168.0	2165.4	2351.1	2042.2	1648.2	1489.3
68°	246.7	241.3	251.4	281.7	405.3	1057.2	2136.6	2371.7	2081.5	1638.9	1456.7
70°	209.4	204.4	212.9	235.8	282.1	686.2	1885.2	2280.4	2117.2	1559.6	1283.8
72.5°	148.8	151.5	174.1	202.4	239.0	352.0	1388.3	1872.8	1821.1	1387.1	976.8
75°	88.2	93.3	122.8	163.2	219.5	232.4	895.6	1361.5	1336.2	960.5	529.2
77.5°	31.1	33.0	61.0	108.8	181.1	184.2	498.9	856.0	796.1	392.4	156.2
80°	11.3	11.3	22.5	60.6	117.0	140.7	265.0	456.9	314.3	101.8	43.1
82.5°	1.9	1.9	5.1	20.6	51.7	75.0	123.2	162.4	93.3	22.5	21.4
85°	0.0	0.0	0.0	0.0	0.8	0.8	36.1	36.5	17.1	3.1	9.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.8	0.8	0.8	1.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	7.2	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.7	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	11.3	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	28.1	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	49.6	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	72.6	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.7	96.2	92.1	89.0



REPORT NUMBER:

CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.3	123.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	152.4	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	184.6	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	217.9	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	253.7	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	287.4	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	321.2	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.4	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	387.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	423.0	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	455.7	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	484.9	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	512.5	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	542.2	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	571.8	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	595.9	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	612.2	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	626.6	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	642.9	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	660.8	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	676.2	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	684.4	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	690.0	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	696.6	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	703.3	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	706.3	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	708.4	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	712.5	715.0	717.1	714.0
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1





REPORT NUMBER:

CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9
2.5°	695.1	694.3	690.1	682.3	675.7	664.8	662.9	652.4	648.5	645.4	648.5
5°	683.1	678.8	664.4	646.9	623.2	595.3	578.9	556.4	551.7	539.3	546.7
7.5°	663.3	653.5	626.7	589.0	545.5	502.8	470.1	438.7	411.9	402.5	399.8
10°	642.3	628.7	583.6	525.3	462.4	396.7	348.1	302.7	277.4	253.7	252.9
12.5°	622.5	601.9	536.6	455.4	367.6	289.5	226.5	178.7	148.8	132.5	136.8
15°	606.5	578.9	489.2	385.4	274.3	186.5	128.2	97.5	87.0	82.0	82.8
17.5°	591.0	554.5	443.3	312.4	195.4	115.0	83.1	72.7	69.6	68.4	67.6
20°	577.0	530.8	395.2	246.3	129.0	79.7	68.4	64.9	63.7	62.9	62.9
22.5°	563.0	505.9	347.0	182.6	88.2	65.3	61.4	59.8	59.1	57.9	57.9
25°	550.2	481.8	298.8	127.8	67.6	58.3	55.6	54.0	52.5	51.3	51.3
27.5°	540.5	463.5	254.1	90.5	56.7	52.5	49.7	47.0	45.1	43.5	43.5
30°	534.3	445.7	211.0	68.4	50.5	46.6	43.1	39.6	36.5	34.6	34.2
32.5°	530.8	430.9	171.0	56.0	45.1	40.8	36.5	32.6	29.1	26.8	26.8
35°	532.3	419.2	130.9	47.4	40.8	35.7	31.1	26.4	23.3	21.4	21.0
37.5°	542.4	412.6	97.5	42.0	36.5	31.1	26.4	21.8	18.7	17.1	16.7
40°	561.5	414.2	74.2	38.1	33.4	27.2	21.8	17.9	15.2	13.6	13.6
42.5°	599.9	425.5	58.7	35.0	29.9	23.3	18.3	14.8	12.4	11.3	10.9
45°	650.8	446.8	48.2	32.2	26.4	19.8	15.5	12.4	10.1	8.9	8.9
47.5°	727.8	481.0	41.6	29.5	22.9	16.7	12.8	10.1	7.8	7.0	6.6
50°	816.7	528.8	36.5	26.4	20.2	14.0	10.9	7.8	6.2	5.1	5.1
52.5°	907.7	582.0	33.0	23.7	17.5	12.0	8.5	5.8	4.3	3.5	3.5
55°	991.2	626.7	29.5	21.4	14.8	10.1	7.0	4.7	3.1	2.3	2.3
57.5°	1072.0	667.5	25.6	18.7	12.0	8.2	5.4	3.5	2.3	1.6	1.6
60°	1173.4	720.4	22.1	15.9	9.7	6.6	4.3	2.7	1.6	1.2	0.8
62.5°	1295.8	758.8	18.7	12.8	7.8	5.1	3.1	1.9	1.2	0.4	0.4
65°	1340.9	707.9	15.5	10.5	6.2	3.9	2.3	1.6	0.8	0.4	0.4
67.5°	1215.0	570.4	12.4	8.2	4.7	2.7	1.9	1.2	0.8	0.4	0.4
68°	1180.0	542.4	12.0	7.8	4.3	2.7	1.6	1.2	0.4	0.4	0.0
70°	996.2	435.6	9.7	5.8	3.5	2.3	1.6	0.8	0.4	0.4	0.0
72.5°	738.6	300.3	7.0	3.9	2.3	1.6	1.2	0.8	0.4	0.4	0.0
75°	389.7	117.0	5.4	3.1	1.9	1.6	1.2	1.2	0.8	0.4	0.4
77.5°	111.9	36.9	4.3	2.3	1.9	1.9	1.9	1.6	1.6	1.2	0.8
80°	32.6	12.0	2.7	1.6	1.9	1.9	2.3	1.9	1.9	1.6	1.6
82.5°	17.5	4.7	1.6	1.2	1.2	1.6	1.9	1.6	1.2	0.8	0.4
85°	7.4	1.6	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4
87.5°	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	6.1	6.1	6.1	7.2	7.2	6.1	6.1	6.1	5.1	4.1	4.1
95°	7.2	7.2	7.2	8.2	7.2	7.2	7.2	7.2	6.1	5.1	5.1
97.5°	8.2	8.2	9.2	10.2	12.3	9.2	9.2	8.2	8.2	7.2	7.2
100°	19.4	19.4	23.5	26.6	29.7	21.5	12.3	10.2	9.2	8.2	8.2
102.5°	38.9	39.9	43.0	48.1	51.1	40.9	27.6	18.4	13.3	11.3	11.3
105°	62.4	62.4	66.5	71.6	73.7	64.4	49.1	36.8	27.6	22.5	21.5
107.5°	88.0	89.0	92.1	96.2	97.2	90.0	74.7	59.3	50.1	43.0	41.9



REPORT NUMBER:

CATALOG NUMBER: ENT-SA1A-740-U-SL3-HSS-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5
112.5°	150.4	150.4	152.4	153.4	151.4	146.3	137.1	123.8	108.4	101.3	101.3
115°	182.1	181.1	183.1	186.2	183.1	178.0	171.9	162.6	150.4	142.2	143.2
117.5°	213.8	212.8	214.8	219.9	215.8	209.7	206.6	201.5	193.3	188.2	188.2
120°	248.6	248.6	250.6	255.7	251.6	248.6	242.4	238.3	231.2	228.1	230.2
122.5°	283.4	282.3	284.4	289.5	285.4	283.4	277.2	273.1	267.0	266.0	269.0
125°	317.1	317.1	317.1	322.2	320.2	317.1	312.0	305.9	302.8	300.7	304.8
127.5°	355.0	352.9	353.9	353.9	352.9	347.8	346.8	340.6	336.6	336.6	337.6
130°	388.7	387.7	389.7	389.7	385.7	380.5	378.5	374.4	370.3	369.3	371.3
132.5°	424.5	423.5	423.5	425.5	420.4	414.3	413.3	410.2	402.0	403.0	405.1
135°	461.4	460.3	457.3	458.3	453.2	447.0	445.0	441.9	435.8	435.8	438.8
137.5°	493.1	492.0	486.9	485.9	483.9	478.7	474.6	470.6	469.5	467.5	470.6
140°	522.7	520.7	515.6	513.5	511.5	508.4	502.3	500.2	498.2	496.1	499.2
142.5°	548.3	546.3	545.2	545.2	539.1	537.0	533.0	529.9	528.9	526.8	529.9
145°	572.9	570.8	573.9	574.9	568.8	563.6	562.6	559.6	556.5	558.5	562.6
147.5°	598.4	596.4	599.4	598.4	593.3	588.2	587.2	587.2	584.1	585.1	588.2
150°	624.0	619.9	616.8	613.8	610.7	606.6	606.6	606.6	606.6	605.6	608.7
152.5°	642.4	637.3	632.2	628.1	625.0	624.0	624.0	623.0	622.0	622.0	625.0
155°	655.7	652.6	650.6	645.5	640.4	642.4	644.5	641.4	639.3	639.3	643.4
157.5°	670.0	664.9	664.9	662.9	658.8	659.8	660.8	658.8	657.8	657.8	660.8
160°	681.3	675.1	676.2	679.2	673.1	670.0	670.0	671.1	674.1	675.1	678.2
162.5°	689.5	683.3	685.4	686.4	682.3	678.2	676.2	680.3	684.4	684.4	688.4
165°	697.7	693.6	695.6	692.5	687.4	688.4	688.4	691.5	691.5	693.6	696.6
167.5°	709.9	703.8	703.8	699.7	693.6	700.7	703.8	701.7	699.7	702.8	705.8
170°	717.1	712.0	709.9	704.8	701.7	706.9	708.9	707.9	707.9	711.0	714.0
172.5°	717.1	712.0	709.9	707.9	704.8	705.8	705.8	708.9	711.0	713.0	715.0
175°	715.0	709.9	712.0	711.0	705.8	705.8	706.9	711.0	713.0	714.0	716.1
177.5°	718.1	714.0	717.1	715.0	709.9	711.0	713.0	715.0	716.1	721.2	723.2
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1

(END OF REPORT)