

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-SA1C-740-U-SL2-HSS-ULG**

Issue Date: 3/30/2022

**Test Information**

Test Method: LM-79-08  
Report Number: REPORT IS A COMBINATION OF REPORTS P401306 AND P226775  
Test Lab: INNOVATION CENTER  
Issue Date: 3/30/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1C-740-U-SL2-HSS-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

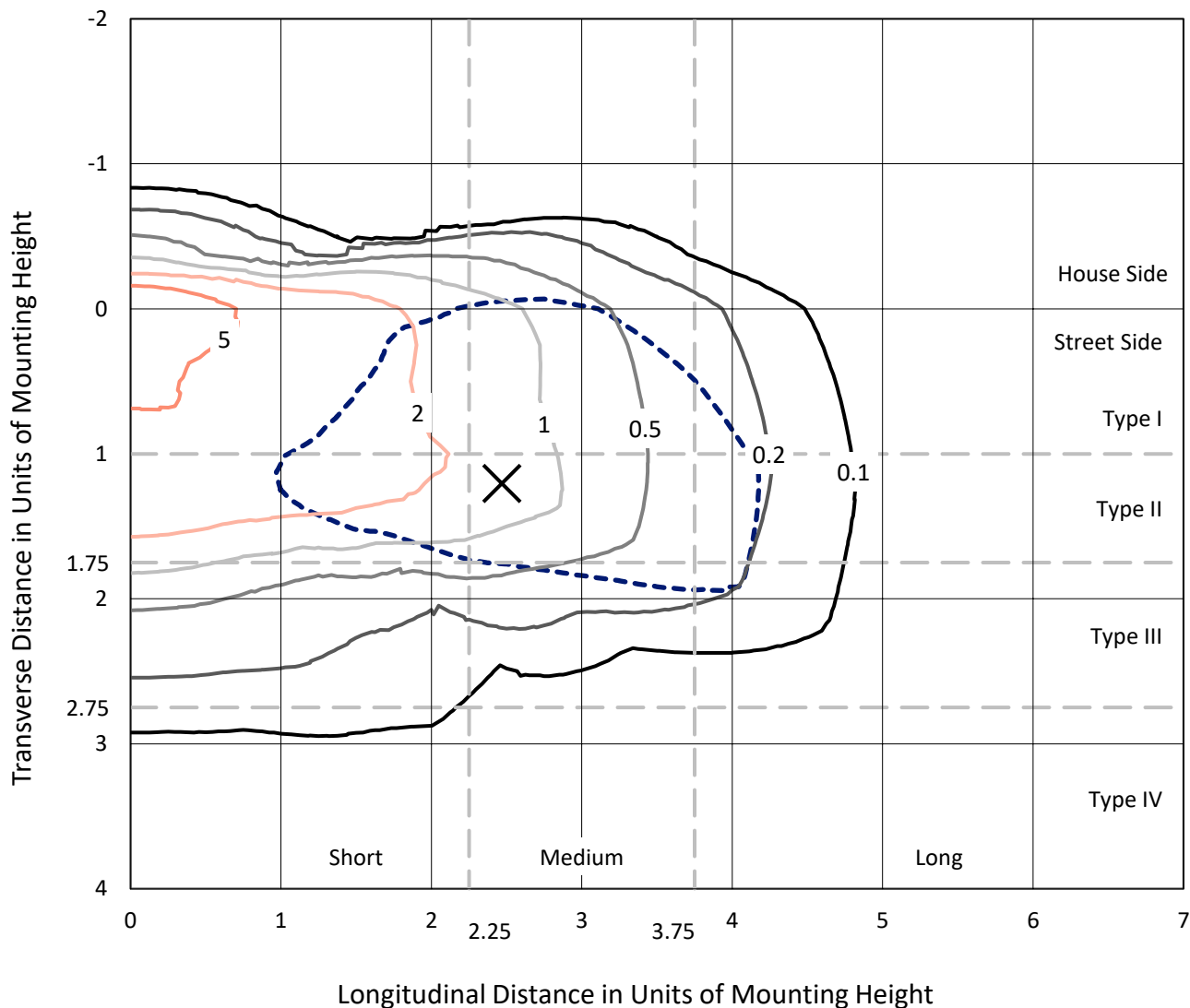
Lumens per Lamp: N/A  
Luminaire Lumens: 5419.9 lumens  
Efficiency: N/A  
Efficacy: 108.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U5 - G1  
  
Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (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-SA1C-740-U-SL2-HSS-ULG

### Iso-Footcandle Lines of Horizontal Illumination

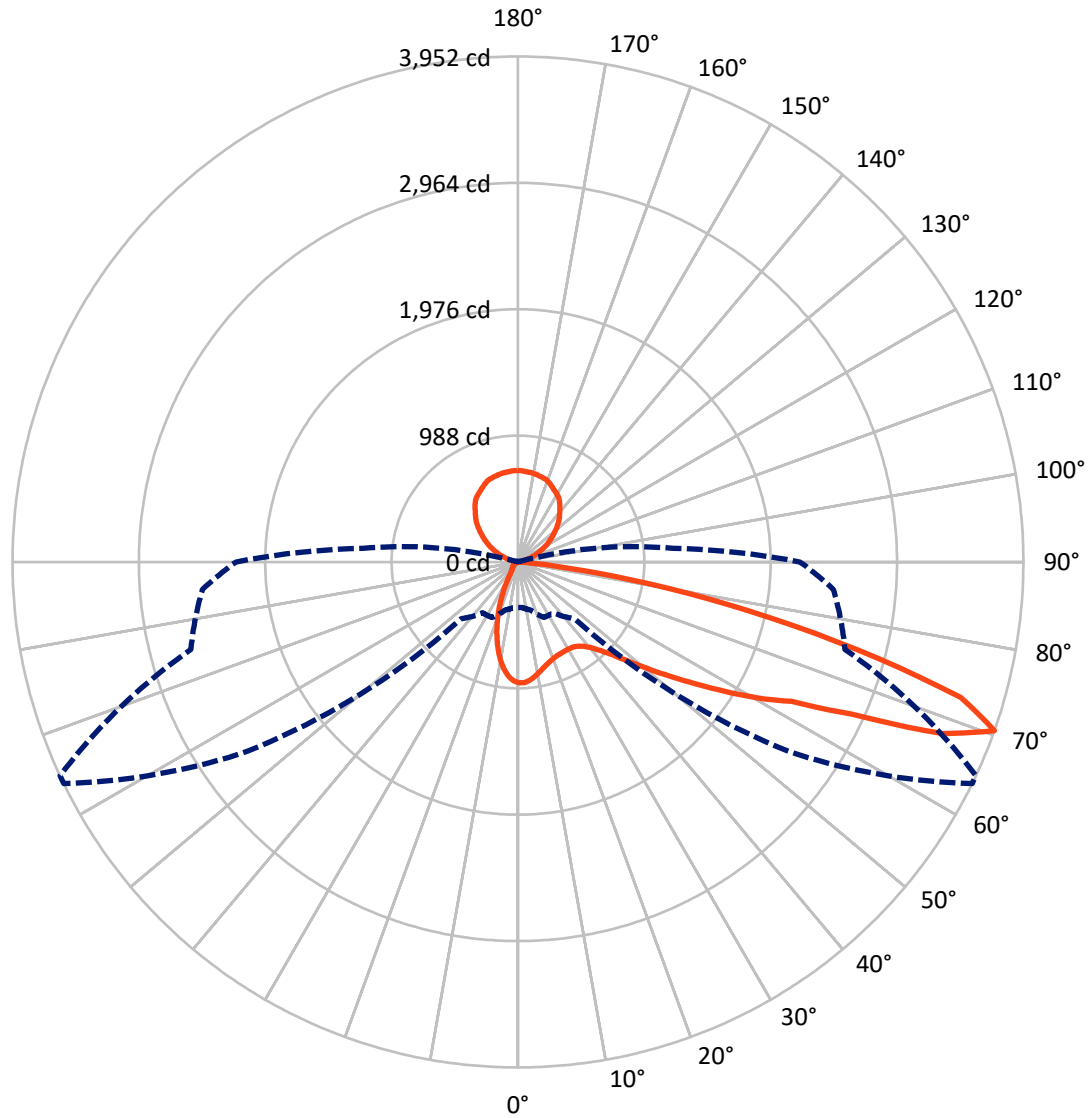
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.4 fc  
 Type III - Medium - N/A

REPORT NUMBER:  
CATALOG NUMBER: ENT-SA1C-740-U-SL2-HSS-ULG

### Luminous Intensity Polar Plot



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

REPORT NUMBER:

CATALOG NUMBER: ENT-SA1C-740-U-SL2-HSS-ULG

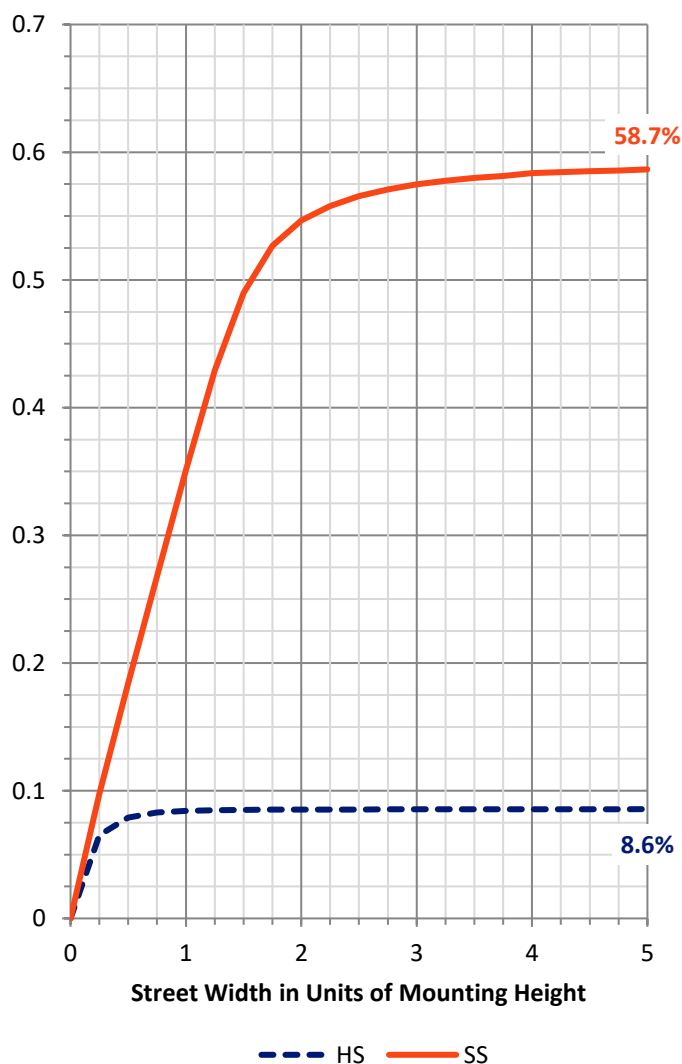
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	468.4	887.0	1355.3
	% Fixture	8.6	16.4	25.0
<b>Street Side</b>	Lumens	3177.6	887.0	4064.6
	% Fixture	58.6	16.4	75.0
<b>Total</b>	Lumens	3646.0	1773.9	5419.9
	% Fixture	67.3	32.7	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.5	1.5
10°-20°	176.5	3.3
20°-30°	243.1	4.5
30°-40°	334.7	6.2
40°-50°	498.9	9.2
50°-60°	788.1	14.5
60°-70°	893.0	16.5
70°-80°	586.3	10.8
80°-90°	46.0	0.8
90°-100°	8.4	0.2
100°-110°	58.7	1.1
110°-120°	169.9	3.1
120°-130°	279.4	5.2
130°-140°	344.6	6.4
140°-150°	352.5	6.5
150°-160°	297.0	5.5
160°-170°	195.5	3.6
170°-180°	67.8	1.3
0°-90°	3646.0	67.3
0°-180°	5419.9	100.0

**Coefficient of Utilization**



REPORT NUMBER:

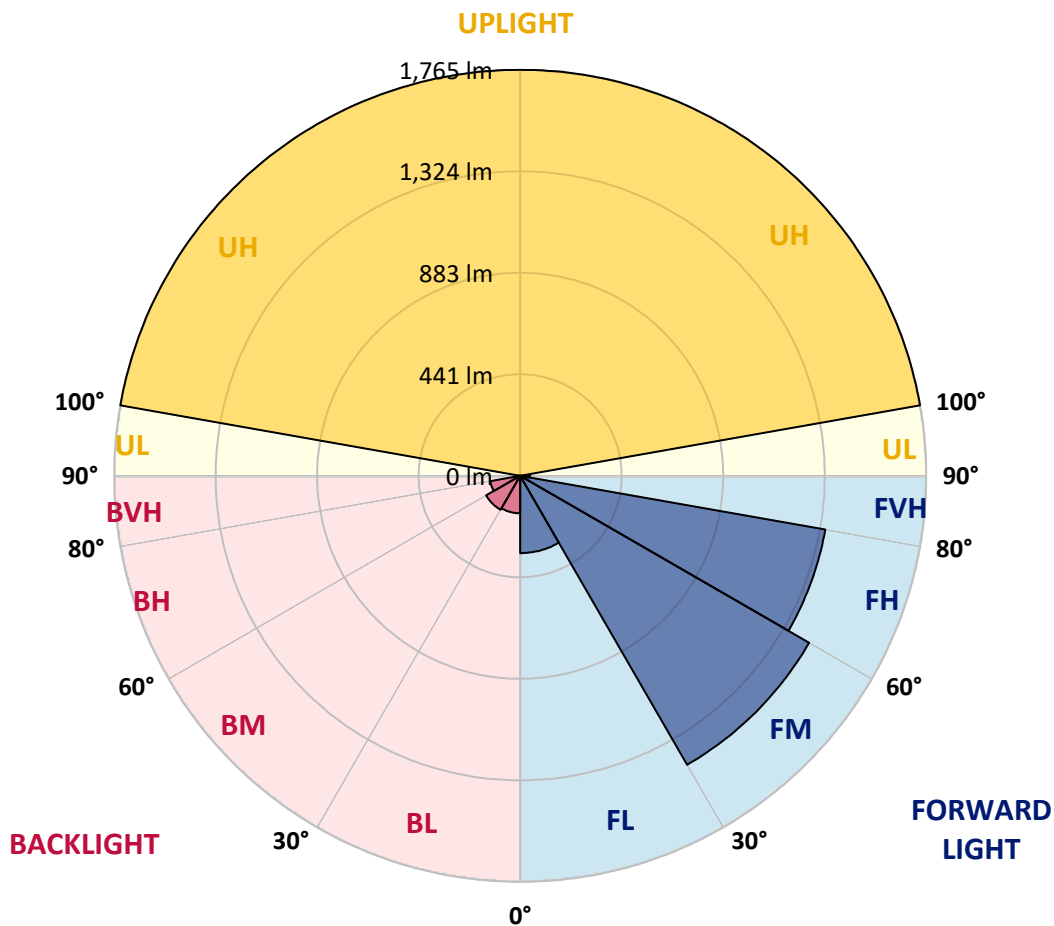
CATALOG NUMBER: ENT-SA1C-740-U-SL2-HSS-ULG

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	336.1	6.2			
FM (30°-60°)	1451.1	26.8			
FH (60°-80°)	1347.1	24.9			G1/1800
FVH (80°-90°)	43.4	0.8			G1/100
BL (0°-30°)	163.0	3.0	B1/500		
BM (30°-60°)	170.6	3.1	B0/220		
BH (60°-80°)	132.2	2.4	B1/500		G1/500
BVH (80°-90°)	2.5	0.0			G0/10
UL (90°-100°)	8.4	0.2		U1/10	
UH (100°-180°)	1765.5	32.6		U5	

**BUG Rating: B1-U5-G1**

Type III Medium





REPORT NUMBER:

CATALOG NUMBER: ENT-SA1C-740-U-SL2-HSS-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8
2.5°	917.5	917.5	922.0	926.5	929.1	936.1	941.2	945.1	945.1	947.7	943.2
5°	856.6	856.6	860.5	871.4	882.9	897.6	914.3	931.0	934.2	946.4	945.7
7.5°	800.2	805.3	811.7	822.6	834.8	856.6	879.7	908.5	911.8	941.2	947.7
10°	761.1	764.3	768.1	780.3	798.3	823.3	848.3	882.3	888.0	932.3	947.7
12.5°	729.7	730.3	736.1	749.5	766.8	791.2	819.4	856.6	863.7	916.2	945.1
15°	707.2	706.6	713.0	725.8	742.5	767.5	795.1	834.2	841.9	902.8	944.5
17.5°	693.8	694.4	699.5	709.1	725.2	748.9	777.1	815.6	823.3	891.9	947.7
20°	693.8	693.8	697.0	701.4	713.6	734.8	762.4	802.1	809.8	884.8	952.1
22.5°	707.2	705.9	708.5	704.7	710.4	725.2	753.4	793.1	801.5	881.6	959.2
25°	731.6	729.0	730.9	722.6	716.2	722.6	747.6	789.3	798.3	882.3	965.6
27.5°	765.6	765.6	761.7	750.2	734.1	727.1	747.0	786.7	795.7	882.3	970.1
30°	813.0	811.1	805.3	793.8	768.8	745.0	753.4	786.7	795.7	882.9	971.4
32.5°	860.5	861.7	864.9	853.4	819.4	775.8	768.8	792.5	800.2	882.3	969.5
35°	908.5	909.2	923.3	924.6	881.0	825.2	795.1	807.9	813.0	888.7	970.7
37.5°	950.9	954.1	981.6	995.1	959.2	888.7	836.7	836.7	839.3	906.0	978.4
40°	998.3	1006.6	1040.0	1070.1	1056.0	970.1	897.6	879.1	880.3	937.4	995.7
42.5°	1053.5	1063.7	1107.3	1150.9	1150.3	1070.1	974.6	946.4	947.7	991.9	1031.0
45°	1123.3	1130.4	1185.5	1240.0	1251.6	1180.4	1071.4	1034.2	1035.5	1074.6	1099.6
47.5°	1208.6	1217.0	1270.2	1335.6	1365.1	1313.1	1197.1	1156.7	1152.8	1180.4	1198.4
50°	1320.2	1336.2	1367.6	1430.5	1501.6	1467.0	1344.5	1304.2	1299.0	1320.8	1326.6
52.5°	1426.6	1441.4	1454.2	1511.9	1649.7	1658.1	1525.4	1481.1	1476.0	1481.1	1488.2
55°	1442.6	1451.0	1460.6	1538.8	1769.6	1901.1	1731.2	1678.6	1663.9	1654.2	1678.0
57.5°	1315.1	1309.9	1342.0	1448.4	1789.5	2169.7	2009.4	1907.5	1893.4	1840.2	1816.5
60°	1041.3	1034.2	1064.4	1209.9	1678.0	2303.1	2395.4	2160.8	2126.1	1947.9	1924.8
62.5°	731.6	723.2	762.4	848.3	1301.6	2276.8	2830.8	2400.6	2332.0	2043.4	2012.0
65°	563.6	559.7	580.9	600.1	794.4	1972.3	3070.6	2868.6	2726.9	2147.3	2106.9
67.5°	441.8	446.9	473.2	529.0	512.9	1229.1	3048.2	3582.9	3441.2	2338.4	2312.7
70°	355.2	356.5	389.2	478.3	484.1	625.8	2580.7	3952.2	3950.3	2646.8	2476.2
72.5°	214.8	220.6	273.8	413.6	488.6	479.0	1735.0	3621.4	3671.4	2718.6	2233.2
75°	103.2	109.0	141.7	277.6	485.4	466.1	938.7	2741.7	2805.8	2437.8	1810.7
77.5°	38.5	43.6	65.4	135.9	359.7	427.0	493.7	1848.5	1899.2	1784.4	1226.6
80°	12.2	14.1	25.6	62.2	182.7	352.6	318.0	1042.6	1076.5	781.0	412.3
82.5°	1.3	1.9	7.1	21.2	70.5	179.5	186.6	392.4	409.7	152.6	83.4
85°	0.0	0.0	0.0	0.0	1.3	1.3	46.2	75.0	61.6	14.7	24.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.9	1.9	1.9	2.6
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	8.1	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	10.4	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	26.9	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	48.4	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	71.8	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.3	96.2	92.1	89.0
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.7	123.8	121.7	118.7



REPORT NUMBER:

CATALOG NUMBER: ENT-SA1C-740-U-SL2-HSS-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	153.2	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	185.9	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	219.5	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	255.3	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	289.1	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	322.0	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.8	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	389.3	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	425.0	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	457.8	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	485.7	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	513.3	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	544.6	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	574.3	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	597.9	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	613.5	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	627.8	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	645.0	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	662.5	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	678.6	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	686.0	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	692.0	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	699.1	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	704.5	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	707.6	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	710.4	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	714.5	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-SA1C-740-U-SL2-HSS-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8	943.8
2.5°	942.5	942.5	938.0	931.0	922.0	909.2	906.0	895.7	895.7	887.4	886.1
5°	943.8	940.0	925.2	903.4	873.3	840.6	820.1	797.6	778.4	766.2	767.5
7.5°	943.8	935.5	906.0	857.9	801.5	745.0	702.1	652.1	629.0	613.6	620.7
10°	941.2	927.1	875.8	802.8	713.6	635.4	564.9	507.2	467.4	450.7	436.6
12.5°	935.5	915.0	838.0	734.1	620.0	517.4	420.0	344.3	291.7	265.4	262.2
15°	930.3	902.1	793.8	659.1	514.2	380.2	271.2	198.8	153.9	143.6	144.9
17.5°	929.1	890.0	751.5	579.6	411.0	253.3	156.4	126.3	119.9	117.3	116.7
20°	929.7	879.1	705.3	500.8	291.1	157.7	118.6	111.6	109.0	107.7	107.1
22.5°	932.3	866.9	659.8	418.0	198.8	115.4	105.8	101.3	98.1	96.2	95.5
25°	932.3	853.4	609.1	330.2	130.2	101.3	94.9	89.1	84.6	82.1	82.1
27.5°	930.3	838.0	556.5	250.7	103.2	90.4	83.4	75.7	69.9	66.7	66.7
30°	924.6	819.4	505.9	175.0	90.4	80.8	71.8	62.2	55.1	51.9	50.7
32.5°	916.2	799.5	447.5	123.1	81.4	70.5	60.3	50.0	43.6	39.8	39.8
35°	907.3	779.7	384.7	94.3	73.7	62.2	50.7	40.4	34.6	32.1	31.4
37.5°	902.8	758.5	323.2	81.4	66.0	53.2	41.0	32.7	28.2	26.3	25.6
40°	906.0	742.5	262.9	73.1	59.0	44.9	34.0	27.6	23.7	21.2	21.2
42.5°	925.2	733.5	205.8	66.7	52.6	37.8	28.2	22.4	18.6	16.7	16.7
45°	964.3	739.9	156.4	60.9	44.9	31.4	23.7	18.0	14.1	12.2	12.2
47.5°	1029.7	765.6	118.6	55.8	38.5	25.6	19.2	14.1	10.9	9.6	9.0
50°	1125.3	816.2	93.0	50.7	32.1	21.8	16.0	10.9	8.3	7.1	7.1
52.5°	1263.1	904.1	79.5	44.9	26.3	18.0	12.8	8.3	6.4	5.1	5.1
55°	1432.4	1015.6	71.8	39.8	21.2	14.7	10.3	6.4	4.5	3.8	3.2
57.5°	1569.6	1104.1	67.3	34.6	18.0	12.8	7.7	5.1	3.8	2.6	2.6
60°	1690.8	1161.2	59.6	28.9	15.4	10.3	6.4	3.8	2.6	1.9	1.9
62.5°	1788.9	1198.4	49.4	23.1	12.8	8.3	5.1	3.2	2.6	1.9	1.9
65°	1900.4	1228.5	40.4	18.0	10.9	7.1	4.5	2.6	1.9	1.9	1.9
67.5°	2119.1	1295.8	30.1	14.1	8.3	5.8	3.8	2.6	1.9	1.3	1.3
70°	2204.4	1217.0	23.7	11.5	6.4	5.1	3.8	2.6	1.3	1.3	1.3
72.5°	1876.1	911.1	18.6	9.6	5.8	4.5	3.8	2.6	1.9	1.9	1.3
75°	1488.2	615.5	14.7	7.7	5.8	5.1	3.8	3.8	3.2	2.6	2.6
77.5°	950.2	272.5	11.5	6.4	5.8	6.4	5.8	3.8	3.8	3.2	3.2
80°	283.4	65.4	8.3	5.1	4.5	5.1	5.8	3.8	2.6	1.9	1.9
82.5°	61.6	15.4	5.1	2.6	3.2	2.6	3.8	3.8	2.6	1.9	1.9
85°	20.5	5.8	3.2	2.6	1.9	1.9	1.9	1.9	1.9	1.9	1.3
87.5°	1.3	1.9	1.9	1.3	1.3	1.3	1.3	0.6	0.6	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
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
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5



REPORT NUMBER:

CATALOG NUMBER: ENT-SA1C-740-U-SL2-HSS-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
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)