

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-T4FT-ULG**

Issue Date: 3/30/2022

**Test Information**

Test Method: LM-79-08  
Report Number:  
REPORT IS A COMBINATION OF REPORTS P401336 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-T4FT-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

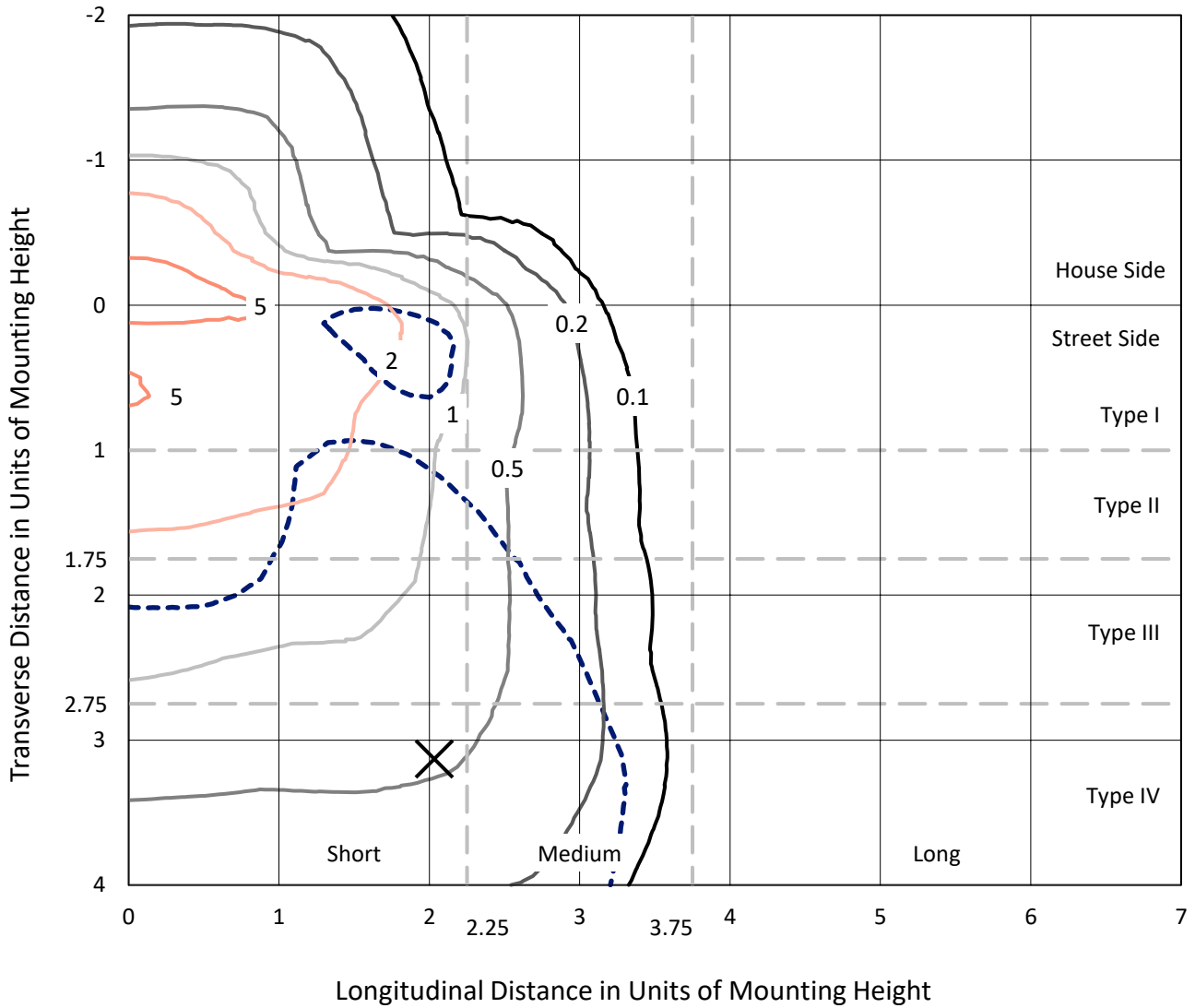
Lumens per Lamp: N/A  
Luminaire Lumens: 6092.9 lumens  
Efficiency: N/A  
Efficacy: 121.9 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U5 - G1  
  
Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (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



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### Iso-Footcandle Lines of Horizontal Illumination

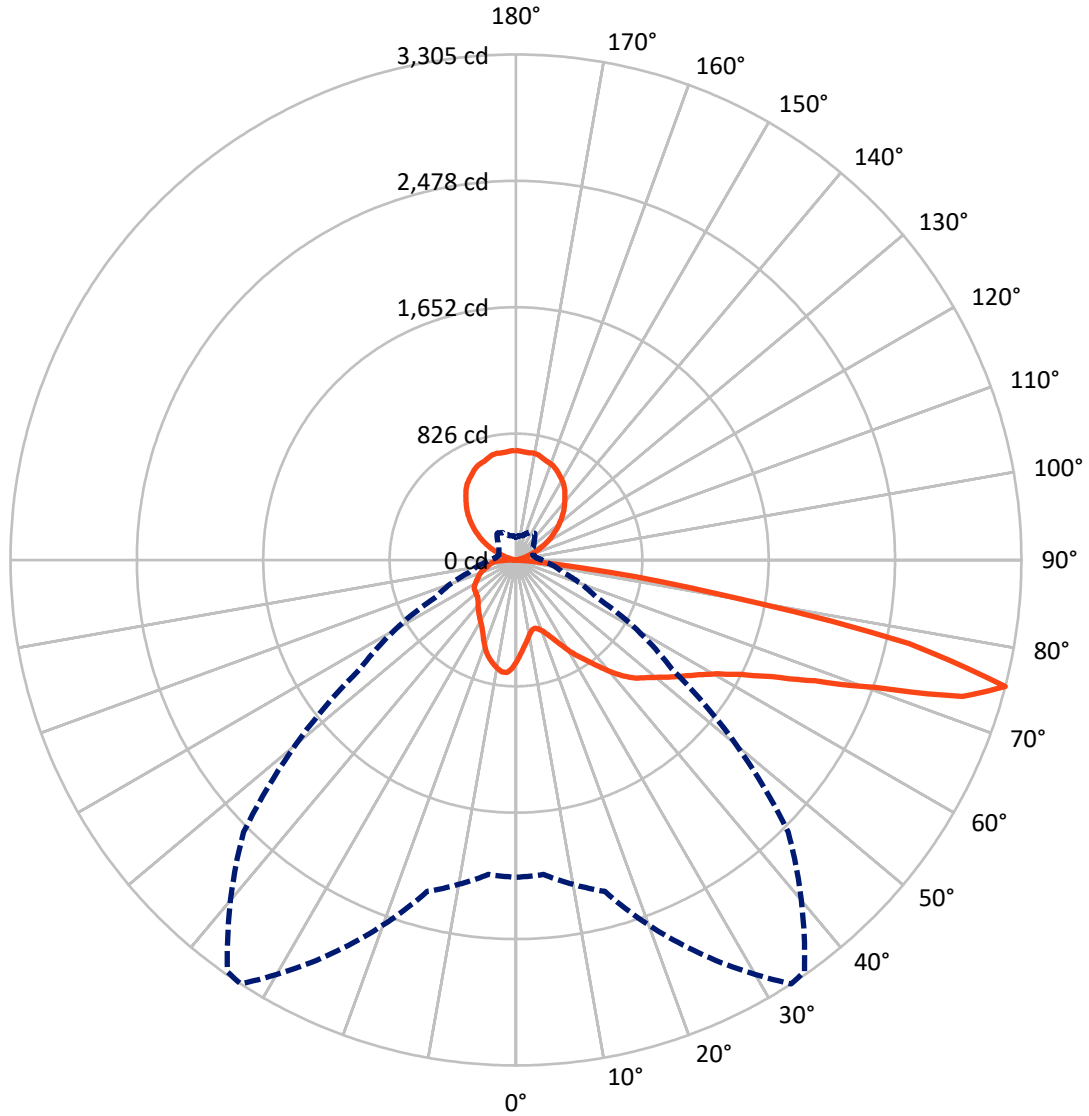
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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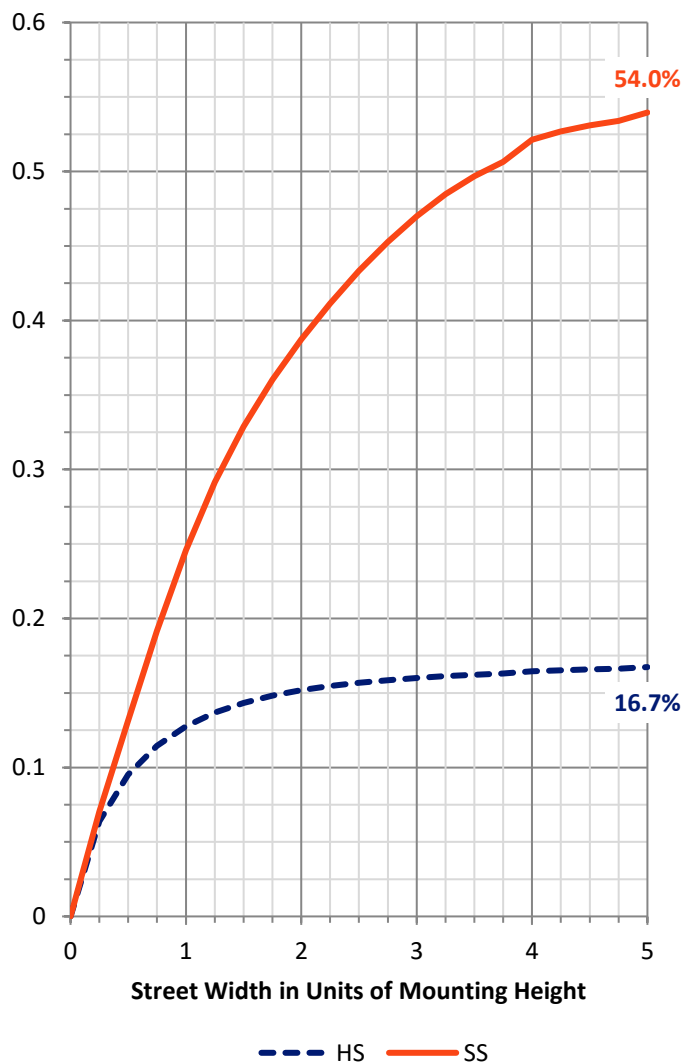
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1049.2	887.0	1936.1
	% Fixture	17.2	14.6	31.8
<b>Street Side</b>	Lumens	3269.8	887.0	4156.8
	% Fixture	53.7	14.6	68.2
<b>Total</b>	Lumens	4319.0	1773.9	6092.9
	% Fixture	70.9	29.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.8	1.0
10°-20°	173.9	2.9
20°-30°	289.1	4.7
30°-40°	431.3	7.1
40°-50°	602.6	9.9
50°-60°	804.3	13.2
60°-70°	997.3	16.4
70°-80°	862.3	14.2
80°-90°	96.4	1.6
90°-100°	8.4	0.1
100°-110°	58.7	1.0
110°-120°	169.9	2.8
120°-130°	279.4	4.6
130°-140°	344.6	5.7
140°-150°	352.5	5.8
150°-160°	297.0	4.9
160°-170°	195.5	3.2
170°-180°	67.8	1.1
0°-90°	4319.0	70.9
0°-180°	6092.9	100.0

**Coefficient of Utilization**



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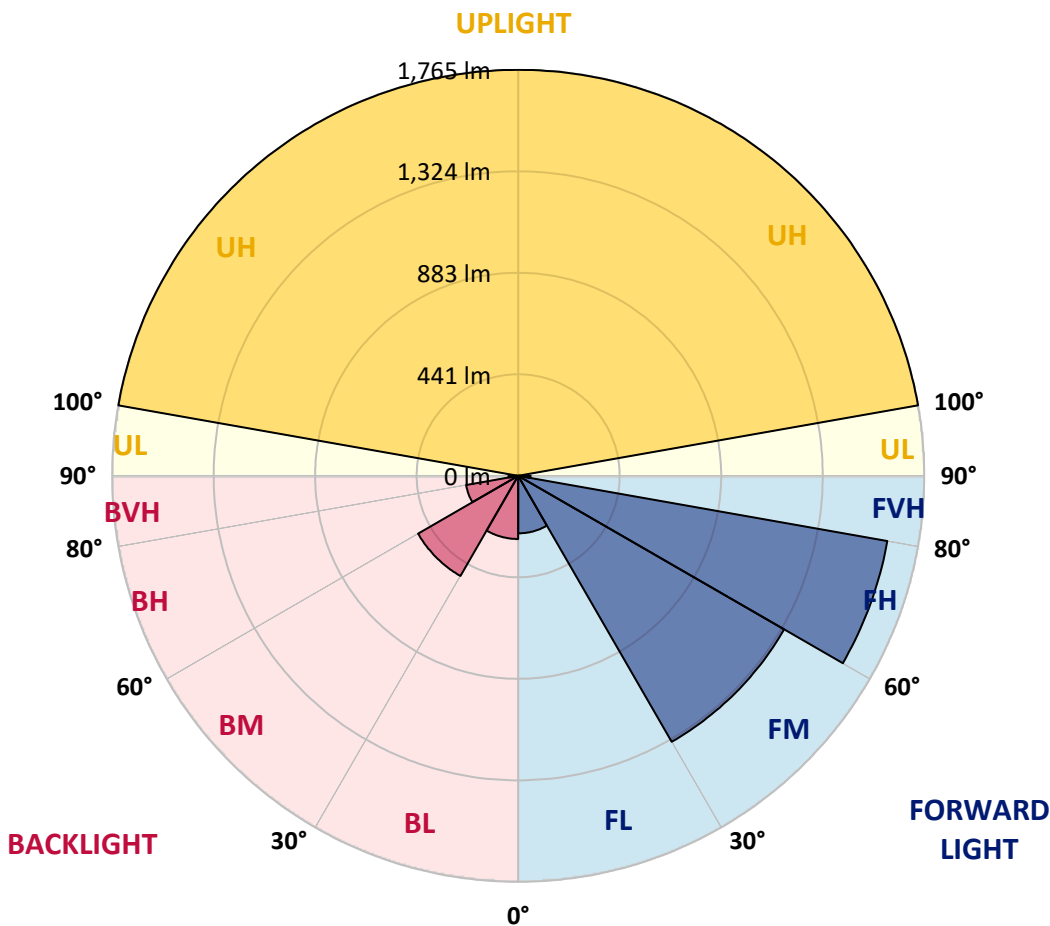
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	250.1	4.1			
FM (30°-60°)	1335.5	21.9			
FH (60°-80°)	1629.8	26.7			G1/1800
FVH (80°-90°)	54.5	0.9			G1/100
BL (0°-30°)	274.8	4.5	B1/500		
BM (30°-60°)	502.8	8.3	B1/1000		
BH (60°-80°)	229.7	3.8	B1/500		G1/500
BVH (80°-90°)	41.9	0.7			G1/100
UL (90°-100°)	8.4	0.1		U1/10	
UH (100°-180°)	1765.5	29.0		U5	

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8
2.5°	600.2	601.5	605.4	609.9	612.4	612.4	619.5	627.8	638.1	647.1	656.7
5°	550.2	552.1	555.3	561.1	568.2	569.5	583.6	598.3	616.9	636.8	656.0
7.5°	500.8	504.7	511.1	518.8	529.7	532.3	552.1	572.0	597.7	627.8	659.2
10°	463.0	465.6	468.8	479.7	493.1	497.6	523.9	548.9	584.2	621.4	663.1
12.5°	452.7	452.7	452.7	457.9	468.8	472.6	500.2	532.3	572.0	616.9	668.9
15°	467.5	466.9	459.8	455.9	462.4	465.6	489.3	520.7	565.6	618.2	679.8
17.5°	500.8	498.9	482.2	469.4	473.9	475.8	491.2	518.2	563.7	623.3	695.8
20°	544.4	540.0	514.3	495.1	494.4	495.7	507.3	525.8	566.9	632.3	713.1
22.5°	602.2	599.6	561.8	532.3	527.1	527.1	532.3	543.8	575.2	642.6	736.8
25°	676.5	669.5	624.0	584.2	572.7	569.5	568.8	568.8	590.0	658.0	766.3
27.5°	752.9	744.5	698.4	644.5	629.1	623.3	613.1	605.4	609.2	674.6	801.6
30°	821.5	809.9	770.8	715.0	691.9	683.0	664.4	648.3	638.1	697.7	848.4
32.5°	859.3	854.8	827.9	777.2	750.9	747.1	716.3	695.1	677.2	727.9	911.3
35°	910.0	904.2	886.9	845.2	813.8	804.2	781.1	756.1	727.2	768.3	990.8
37.5°	956.8	953.6	947.2	918.3	885.0	875.3	854.2	827.9	788.8	827.9	1079.9
40°	1004.2	1000.4	997.8	987.6	963.8	957.4	947.2	916.4	863.8	893.3	1167.8
42.5°	1073.5	1065.2	1038.2	1037.6	1039.5	1044.6	1045.3	1011.3	945.9	974.7	1244.7
45°	1163.9	1140.8	1080.6	1078.6	1101.1	1114.5	1147.2	1118.4	1031.2	1058.1	1330.7
47.5°	1210.1	1186.4	1124.2	1120.3	1149.8	1169.7	1250.5	1222.3	1119.7	1151.7	1419.8
50°	1232.5	1217.1	1162.6	1174.8	1205.0	1224.2	1348.6	1326.2	1211.4	1253.1	1532.0
52.5°	1264.0	1238.3	1199.8	1225.5	1270.4	1290.3	1436.5	1432.6	1289.0	1363.4	1655.1
55°	1253.1	1239.6	1246.6	1281.3	1337.7	1367.2	1525.0	1525.0	1367.8	1481.4	1777.0
57.5°	1262.0	1253.1	1311.4	1342.2	1413.4	1455.7	1631.4	1603.2	1434.5	1580.1	1859.1
60°	1338.3	1312.7	1358.2	1419.2	1510.9	1551.9	1753.3	1685.3	1489.1	1665.4	1873.8
62.5°	1473.0	1452.5	1457.0	1526.9	1645.5	1693.0	1873.8	1757.7	1525.6	1701.3	1818.7
65°	1696.2	1686.6	1631.4	1673.7	1837.3	1880.2	2024.5	1820.6	1515.3	1674.4	1673.1
67.5°	1996.3	1957.8	1883.4	1921.3	2109.8	2153.4	2206.0	1844.3	1448.6	1513.4	1344.8
70°	2245.1	2213.1	2179.1	2278.5	2495.2	2518.9	2395.2	1821.9	1286.4	1184.4	901.6
72.5°	2403.5	2380.4	2411.9	2704.3	3051.2	3006.3	2581.8	1664.8	1003.6	725.3	450.8
75°	2074.5	2063.6	2243.2	2836.4	3304.5	3287.8	2517.0	1246.0	582.3	319.4	205.2
77.5°	1043.4	1162.0	1351.2	2012.3	2629.2	2632.5	1834.1	599.0	245.0	178.9	141.1
80°	293.7	297.6	450.8	829.8	1312.7	1398.6	693.9	203.3	139.8	133.4	105.2
82.5°	69.9	64.8	115.4	245.6	440.6	458.5	208.4	73.1	78.2	83.4	64.8
85°	0.6	0.6	0.6	0.6	0.6	1.3	7.7	7.7	18.6	23.7	18.6
87.5°	0.0	0.0	0.0	0.6	0.6	0.6	0.0	0.0	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
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	6.1	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.2	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.0	9.2	9.2	12.3	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	11.9	12.3	21.5	29.7	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	25.8	27.6	40.9	51.1	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	46.6	49.1	64.4	73.7	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	71.6	74.7	90.0	97.2	96.2	92.1	89.0
110°	67.5	69.6	75.7	89.0	101.2	104.3	116.6	122.8	123.8	121.7	118.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
112.5°	101.3	101.3	108.4	123.8	134.4	137.1	146.3	151.4	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	170.0	171.9	178.0	183.1	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	205.6	206.6	209.7	215.8	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	241.6	242.4	248.6	251.6	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	276.4	277.2	283.4	285.4	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	310.8	312.0	317.1	320.2	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	345.6	346.8	347.8	352.9	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	377.7	378.5	380.5	385.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	412.7	413.3	414.3	420.4	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	444.4	445.0	447.0	453.2	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	473.8	474.6	478.7	483.9	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	501.9	502.3	508.4	511.5	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	532.4	533.0	537.0	539.1	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.0	562.6	563.6	568.8	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	587.2	588.2	593.3	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	606.6	610.7	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	623.8	624.0	624.0	625.0	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	643.9	644.5	642.4	640.4	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.4	660.8	659.8	658.8	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.2	670.0	670.0	673.1	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	677.0	676.2	678.2	682.3	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	689.0	688.4	688.4	687.4	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.4	703.8	700.7	693.6	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.7	708.9	706.9	701.7	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	706.4	705.8	705.8	704.8	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	707.7	706.9	705.8	705.8	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.4	713.0	711.0	709.9	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





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8
2.5°	661.2	667.6	677.8	686.8	694.5	700.3	709.3	710.5	713.1	714.4	715.7
5°	666.9	679.1	698.4	715.0	726.6	729.8	737.5	736.8	737.5	737.5	736.8
7.5°	674.6	691.3	718.2	736.8	743.2	741.3	739.4	732.3	726.6	724.0	720.8
10°	684.2	703.5	734.9	748.4	745.2	734.9	722.7	709.9	699.6	694.5	693.2
12.5°	693.9	718.9	748.4	752.2	739.4	720.8	700.3	686.2	672.7	665.6	665.6
15°	709.9	737.5	759.3	751.6	728.5	704.8	676.5	657.3	641.9	632.3	631.7
17.5°	729.1	758.6	770.8	748.4	715.0	681.7	647.7	622.7	602.8	593.2	587.4
20°	752.9	780.4	776.6	738.1	695.1	654.1	611.8	581.6	561.1	550.9	548.9
22.5°	779.8	802.9	778.5	721.4	668.2	615.6	569.5	539.3	525.8	518.2	518.8
25°	812.5	830.5	779.2	701.6	629.7	565.0	524.6	510.5	508.5	505.3	506.6
27.5°	853.5	859.3	776.6	674.6	580.4	511.7	488.0	493.8	498.9	497.0	498.3
30°	902.3	893.9	770.8	635.5	519.4	463.0	464.3	477.1	484.2	482.2	482.9
32.5°	959.4	928.6	759.9	588.1	461.7	433.5	443.8	456.6	463.6	463.6	464.3
35°	1023.5	970.3	738.8	526.5	421.3	415.5	424.5	434.8	439.3	436.7	438.6
37.5°	1090.8	1006.2	704.8	457.9	391.2	401.4	406.6	409.1	408.5	404.6	402.7
40°	1153.7	1034.4	643.8	389.9	366.2	386.7	389.3	382.2	373.9	366.8	362.3
42.5°	1201.8	1049.1	559.2	340.5	342.4	370.0	371.9	357.8	341.8	330.9	328.3
45°	1251.1	1054.3	475.2	300.8	316.8	353.3	358.5	339.2	317.4	304.6	302.7
47.5°	1307.6	1067.1	392.5	273.2	295.0	341.8	350.1	326.4	302.0	282.8	279.6
50°	1383.2	1091.5	330.3	252.0	279.6	336.0	347.6	316.2	285.4	264.2	261.6
52.5°	1479.4	1127.4	272.5	235.3	267.4	327.1	343.7	305.9	273.2	247.5	243.7
55°	1562.2	1140.8	235.3	221.2	254.6	316.2	340.5	302.0	259.7	230.9	226.4
57.5°	1600.0	1102.4	209.1	207.1	241.1	302.7	334.1	289.2	245.0	222.5	218.7
60°	1582.7	1006.8	189.2	194.3	225.7	285.4	317.4	276.4	234.7	216.1	212.3
62.5°	1505.7	896.5	174.4	182.1	208.4	263.6	298.2	264.8	225.7	209.1	203.9
65°	1370.4	775.3	163.5	171.2	193.0	242.4	282.8	251.4	215.5	198.8	194.3
67.5°	1118.4	616.9	152.0	160.3	180.2	225.1	268.7	240.5	203.9	193.0	189.2
70°	740.0	414.9	141.1	149.4	167.4	208.4	253.9	228.9	193.0	186.0	180.8
72.5°	339.9	223.2	129.5	137.9	152.6	189.8	235.3	211.6	178.3	173.8	166.1
75°	168.0	137.2	115.4	123.1	134.7	167.4	213.5	196.9	164.8	157.1	148.1
77.5°	122.5	102.6	99.4	107.1	116.7	148.1	190.5	181.5	151.3	140.4	135.3
80°	91.1	79.5	83.4	91.1	100.0	134.0	178.3	169.9	139.8	128.9	125.0
82.5°	55.8	53.2	64.1	73.1	84.0	123.1	169.9	155.2	125.7	115.4	110.9
85°	16.0	19.2	32.7	47.5	59.6	99.4	158.4	136.0	105.8	88.5	85.3
87.5°	0.0	1.9	10.3	21.8	35.3	66.1	121.8	106.5	80.8	65.4	62.8
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-T4FT-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)