

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-T2-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number: REPORT IS A COMBINATION OF REPORTS P401328 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-T2-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6263.9 lumens
Efficiency: N/A
Efficacy: 125.3 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

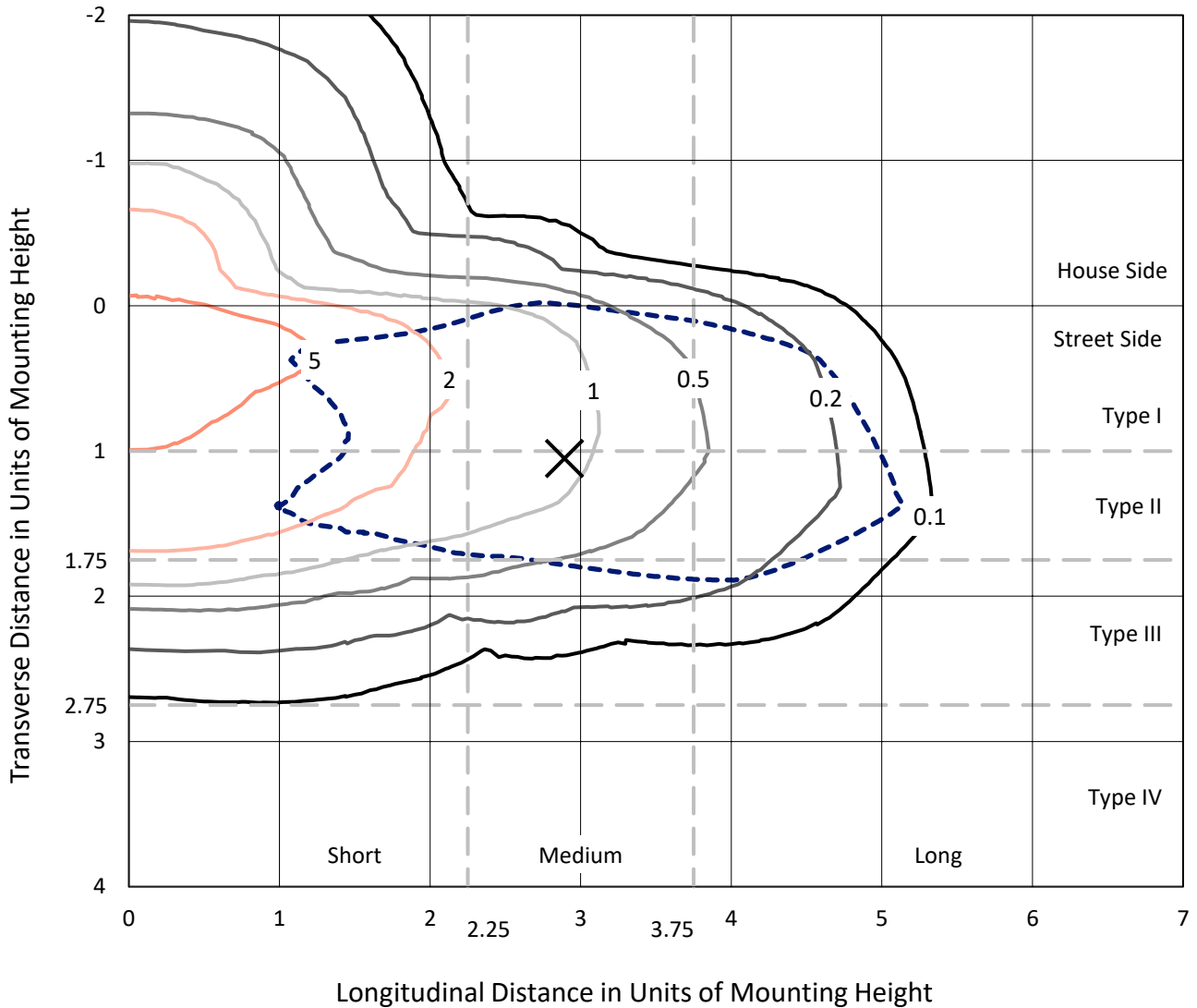
Input Watts (W): 50
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

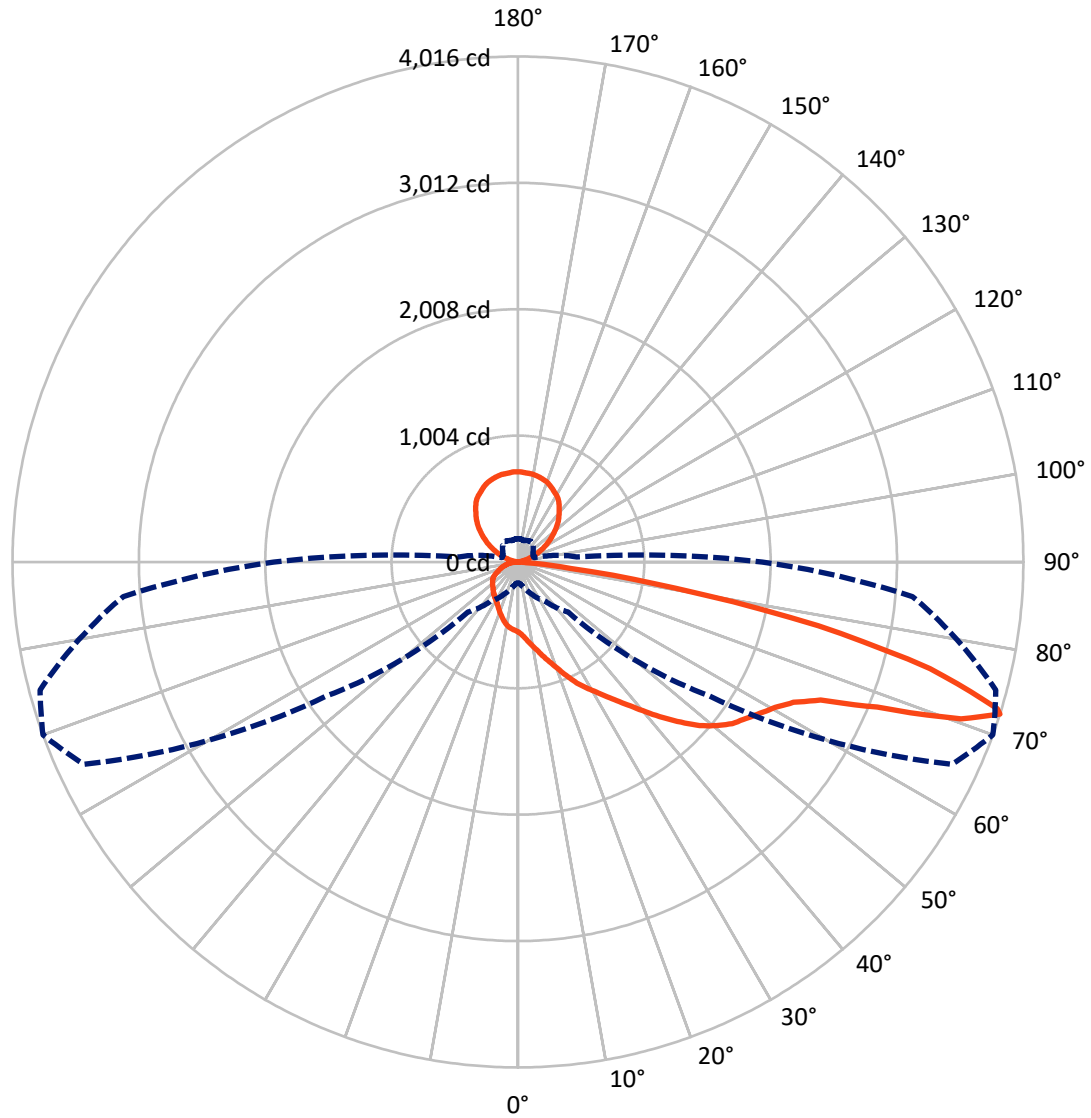
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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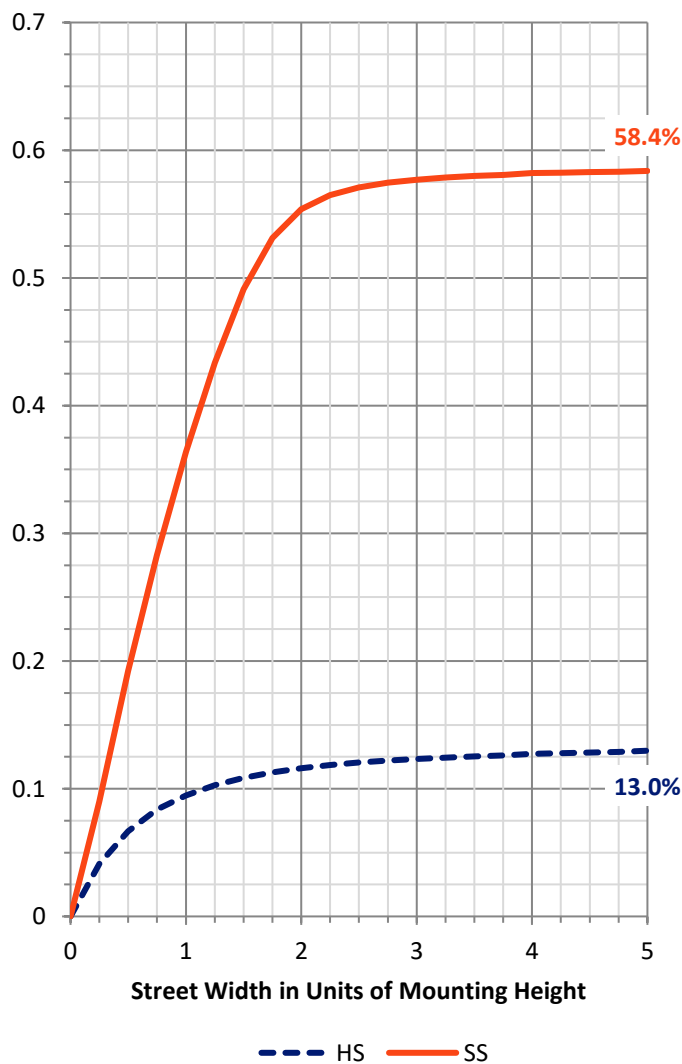
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	834.3	887.0	1721.3
	% Fixture	13.3	14.2	27.5
Street Side	Lumens	3655.7	887.0	4542.6
	% Fixture	58.4	14.2	72.5
Total	Lumens	4490.0	1773.9	6263.9
	% Fixture	71.7	28.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	0.9
10°-20°	179.3	2.9
20°-30°	317.5	5.1
30°-40°	472.1	7.5
40°-50°	684.9	10.9
50°-60°	935.7	14.9
60°-70°	1024.4	16.4
70°-80°	728.7	11.6
80°-90°	91.5	1.5
90°-100°	8.4	0.1
100°-110°	58.7	0.9
110°-120°	169.9	2.7
120°-130°	279.4	4.5
130°-140°	344.6	5.5
140°-150°	352.5	5.6
150°-160°	297.0	4.7
160°-170°	195.5	3.1
170°-180°	67.8	1.1
0°-90°	4490.0	71.7
0°-180°	6263.9	100.0

Coefficient of Utilization



REPORT NUMBER:

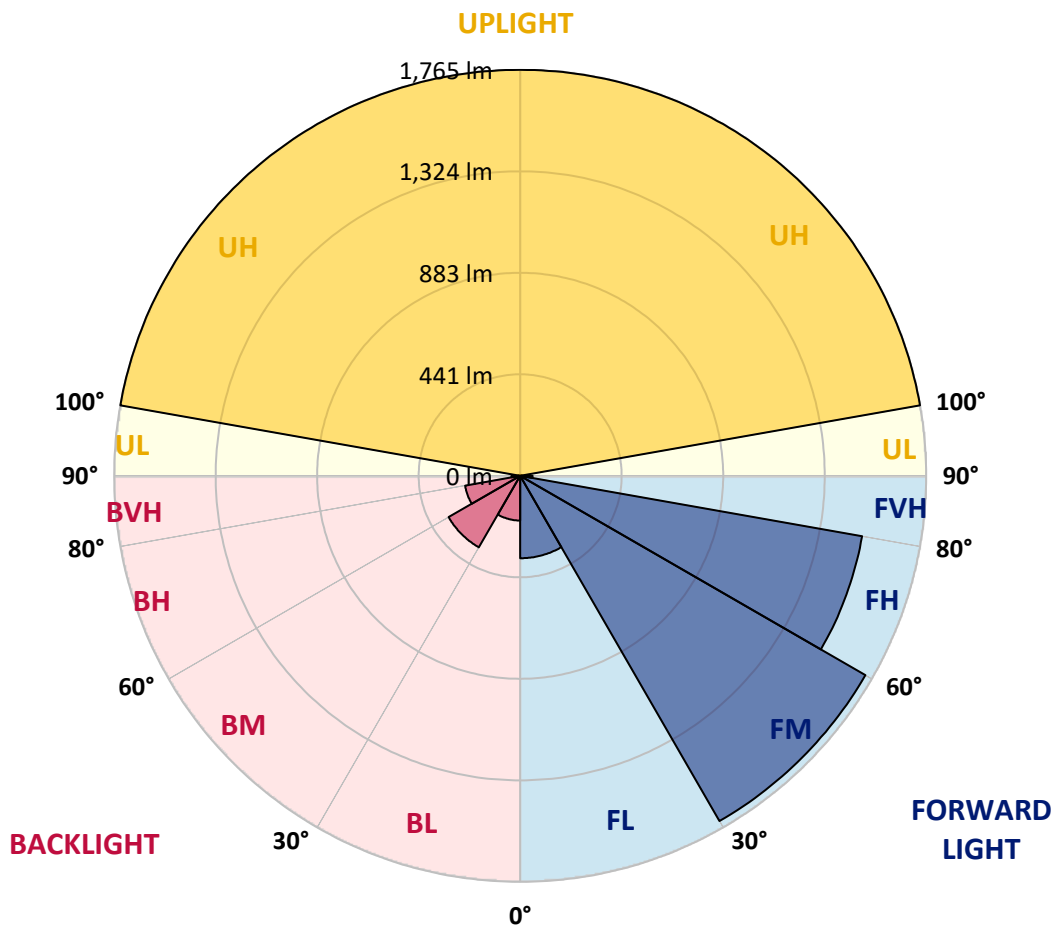
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	358.4	5.7			
FM (30°-60°)	1733.4	27.7			
FH (60°-80°)	1509.9	24.1			G1/1800
FVH (80°-90°)	54.0	0.9			G1/100
BL (0°-30°)	194.4	3.1	B1/500		
BM (30°-60°)	359.2	5.7	B1/1000		
BH (60°-80°)	243.2	3.9	B1/500		G1/500
BVH (80°-90°)	37.4	0.6			G1/100
UL (90°-100°)	8.4	0.1		U1/10	
UH (100°-180°)	1765.5	28.2		U5	

BUG Rating: B1-U5-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1
2.5°	618.3	615.1	615.7	609.9	606.7	599.0	590.7	581.7	577.2	574.0	563.1
5°	678.6	678.6	681.1	676.6	664.4	651.6	636.9	617.0	608.6	597.1	575.3
7.5°	728.6	729.9	729.9	728.6	717.7	703.6	684.3	660.0	646.5	629.8	595.8
10°	754.2	757.4	760.0	761.9	760.6	752.3	730.5	705.5	686.9	665.1	619.5
12.5°	767.1	768.3	772.8	782.5	790.1	796.6	780.5	751.0	732.4	706.1	645.2
15°	781.2	781.2	785.7	797.8	812.6	829.9	828.0	804.9	785.0	752.3	677.9
17.5°	790.1	792.7	801.1	813.9	834.4	863.3	878.0	865.2	839.5	804.9	713.2
20°	785.0	786.9	803.6	828.6	854.9	892.1	929.3	929.3	905.0	865.2	752.3
22.5°	794.6	797.8	809.4	833.1	869.0	917.1	978.1	999.2	978.1	934.5	797.8
25°	831.8	830.6	840.2	849.8	880.6	940.2	1019.8	1074.3	1055.0	1006.9	842.1
27.5°	885.7	885.7	890.8	890.2	901.1	959.5	1056.3	1140.3	1124.3	1066.6	878.7
30°	947.9	949.2	947.9	947.3	945.4	985.8	1089.0	1199.3	1191.0	1133.9	912.0
32.5°	1023.6	1026.8	1021.7	1008.9	1001.2	1023.6	1116.6	1265.4	1268.0	1200.6	944.7
35°	1118.5	1123.7	1104.4	1085.8	1066.6	1076.8	1148.7	1327.6	1353.3	1276.3	984.5
37.5°	1213.4	1221.8	1218.6	1168.5	1141.6	1141.0	1196.1	1405.2	1448.2	1375.1	1040.9
40°	1293.6	1300.7	1304.5	1259.0	1221.8	1220.5	1266.0	1486.0	1564.9	1488.6	1107.6
42.5°	1346.8	1353.3	1364.8	1337.9	1303.2	1319.3	1343.0	1566.2	1690.6	1627.1	1189.7
45°	1404.6	1409.7	1416.8	1401.4	1383.4	1429.6	1440.5	1655.3	1816.3	1775.9	1285.9
47.5°	1466.1	1471.3	1475.1	1463.6	1457.2	1521.9	1536.0	1746.4	1943.3	1929.8	1379.6
50°	1534.1	1536.0	1539.9	1534.1	1536.0	1606.0	1614.9	1826.6	2044.0	2090.2	1477.0
52.5°	1650.8	1653.4	1654.7	1627.1	1617.5	1659.2	1678.4	1911.9	2132.5	2223.6	1563.0
55°	1743.2	1752.2	1792.6	1774.6	1751.5	1697.0	1731.0	1980.5	2195.4	2348.0	1652.8
57.5°	1667.5	1688.0	1788.7	1873.4	1938.2	1808.0	1793.2	2051.1	2267.8	2455.1	1757.3
60°	1447.5	1477.7	1623.9	1800.3	2010.0	2062.6	1920.9	2138.9	2346.7	2566.7	1869.5
62.5°	1003.7	1034.5	1236.5	1518.1	1888.8	2208.2	2270.4	2294.8	2456.4	2680.9	2015.8
65°	481.0	512.4	679.2	976.1	1491.8	2114.5	2677.7	2618.0	2641.1	2825.8	2231.3
67.5°	305.9	322.6	388.0	531.7	867.8	1647.0	2823.9	3261.9	3078.5	3160.0	2660.3
70°	223.8	227.7	284.1	368.1	515.0	962.0	2493.6	3878.3	3734.6	3725.6	3177.9
72°	165.5	171.9	215.5	293.7	381.0	562.5	1855.4	3803.2	4015.5	3930.2	3147.1
72.5°	155.8	161.0	198.8	277.7	359.8	493.8	1662.4	3716.0	3980.9	3936.0	3088.1
75°	113.5	117.4	136.0	197.5	278.3	286.0	887.6	2852.1	3380.6	3757.7	2799.5
77.5°	78.2	80.8	90.4	121.2	190.5	193.7	376.5	1947.2	2439.7	3004.7	2153.0
80°	47.5	48.7	54.5	66.1	121.2	114.8	155.2	1017.8	1273.1	1633.5	998.6
82.5°	19.9	20.5	23.7	26.3	51.3	54.5	62.9	332.2	421.4	510.5	288.0
85°	0.0	0.0	0.6	0.6	1.3	5.8	9.0	41.0	62.2	74.4	51.9
87.5°	0.0	0.0	0.6	0.6	0.6	1.3	1.3	1.9	2.6	2.6	3.8
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°	4.1	4.1	5.1	6.1	6.1	6.1	7.2	7.2	6.6	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	8.2	7.7	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	10.2	9.7	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	26.6	25.1	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	48.1	45.5	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	71.6	69.0	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.2	94.1	92.1	89.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.8	122.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	153.4	152.9	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	186.2	184.6	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	219.9	217.4	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	255.7	253.2	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	289.5	286.9	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	322.2	319.7	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.9	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	389.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	425.5	424.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	458.3	457.8	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	485.9	486.4	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	513.5	514.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	545.2	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	574.9	574.4	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	598.4	598.9	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	613.8	615.3	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	628.1	630.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	645.5	648.0	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	662.9	663.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	679.2	677.7	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	686.4	685.9	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	692.5	694.1	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	699.7	701.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	704.8	707.4	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	707.9	708.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	711.0	711.5	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	715.0	716.1	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°	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1	556.1
2.5°	558.0	555.4	547.7	541.3	536.2	527.8	527.2	520.8	520.8	518.9	517.6
5°	567.0	558.6	543.2	529.1	518.9	506.7	500.9	493.8	489.4	486.8	487.4
7.5°	578.5	564.4	538.1	514.4	495.1	479.7	470.8	465.0	461.8	460.5	460.5
10°	594.5	572.7	529.8	493.8	469.5	457.9	453.4	452.8	453.4	454.1	454.7
12.5°	612.5	578.5	514.4	469.5	450.2	445.7	448.3	454.1	459.2	461.1	461.1
15°	631.1	582.3	493.2	447.0	435.5	440.0	448.9	459.9	468.2	473.3	474.6
17.5°	650.3	583.0	470.8	426.5	422.7	434.2	450.2	467.5	481.0	489.4	490.6
20°	670.9	581.7	444.5	407.9	409.8	429.1	451.5	475.2	493.2	504.1	505.4
22.5°	693.3	576.6	418.8	389.9	398.9	423.9	450.2	477.8	497.0	509.9	512.4
25°	715.1	566.3	393.2	373.9	391.2	418.8	443.8	467.5	486.1	498.3	501.5
27.5°	726.7	544.5	368.8	361.7	385.5	411.1	429.1	445.1	455.4	463.1	466.3
30°	728.6	513.7	348.9	353.4	379.0	400.2	410.5	413.0	411.1	413.7	410.5
32.5°	724.7	480.4	332.9	347.0	368.8	384.8	387.4	379.7	368.1	352.1	352.7
35°	722.2	443.8	320.0	338.0	355.3	365.6	361.1	348.9	327.1	307.9	306.6
37.5°	726.7	410.5	309.1	326.4	338.0	342.5	336.1	320.0	300.8	284.1	282.2
40°	739.5	386.1	298.9	313.6	319.4	322.6	314.9	300.8	293.1	280.9	279.0
42.5°	764.5	369.4	289.3	299.5	302.1	305.3	297.6	288.0	295.0	292.5	292.5
45°	799.1	361.7	280.9	286.0	288.6	293.7	289.3	280.9	288.6	273.9	271.3
47.5°	844.0	364.3	275.1	272.6	280.3	289.3	284.1	273.9	271.3	245.0	240.5
50°	891.5	377.8	269.4	261.7	271.3	283.5	277.1	261.0	245.6	232.2	229.6
52.5°	947.3	400.2	264.2	249.5	261.0	277.1	272.6	255.3	239.2	229.6	227.7
55°	1008.9	422.0	257.8	235.4	247.6	275.1	273.9	251.4	230.2	225.8	224.5
57.5°	1078.1	440.0	250.1	219.3	234.1	269.4	268.1	242.4	227.7	223.8	223.2
60°	1164.7	461.1	236.7	200.7	220.6	258.5	257.2	237.9	221.9	218.7	217.4
62.5°	1282.7	500.3	213.6	183.4	206.5	239.2	246.9	229.0	213.6	212.9	212.9
65°	1477.0	575.9	189.8	168.7	190.5	220.6	233.5	218.7	205.9	209.1	209.1
67.5°	1844.5	677.9	165.5	154.6	175.1	202.7	221.9	208.4	197.5	204.0	204.0
70°	2128.0	640.1	146.2	141.1	159.7	186.6	207.2	197.5	187.3	198.2	196.9
72°	1941.4	468.8	133.4	130.2	146.9	173.2	194.3	187.3	176.4	185.4	182.8
72.5°	1863.8	425.9	129.6	127.0	143.0	170.6	191.8	184.7	173.2	182.1	178.3
75°	1625.8	359.2	112.9	111.6	127.0	153.3	175.1	171.2	159.7	164.8	161.0
77.5°	1345.6	302.7	94.9	97.5	108.4	136.6	157.8	153.9	143.0	142.4	141.7
80°	631.1	168.7	78.2	80.2	91.1	116.7	136.0	133.4	123.1	121.9	119.9
82.5°	182.8	80.8	60.3	61.6	73.1	95.6	116.7	115.4	107.7	105.8	101.3
85°	34.0	26.3	32.7	38.5	53.2	79.5	106.5	103.9	92.4	84.0	77.6
87.5°	1.9	5.1	10.9	18.6	34.0	59.6	85.9	84.0	73.8	63.5	64.1
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-SA1C-740-U-T2-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)