

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-T3-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number: REPORT IS A COMBINATION OF REPORTS P401332 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-T3-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6366.9 lumens
Efficiency: N/A
Efficacy: 127.3 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: B1 - U5 - G1

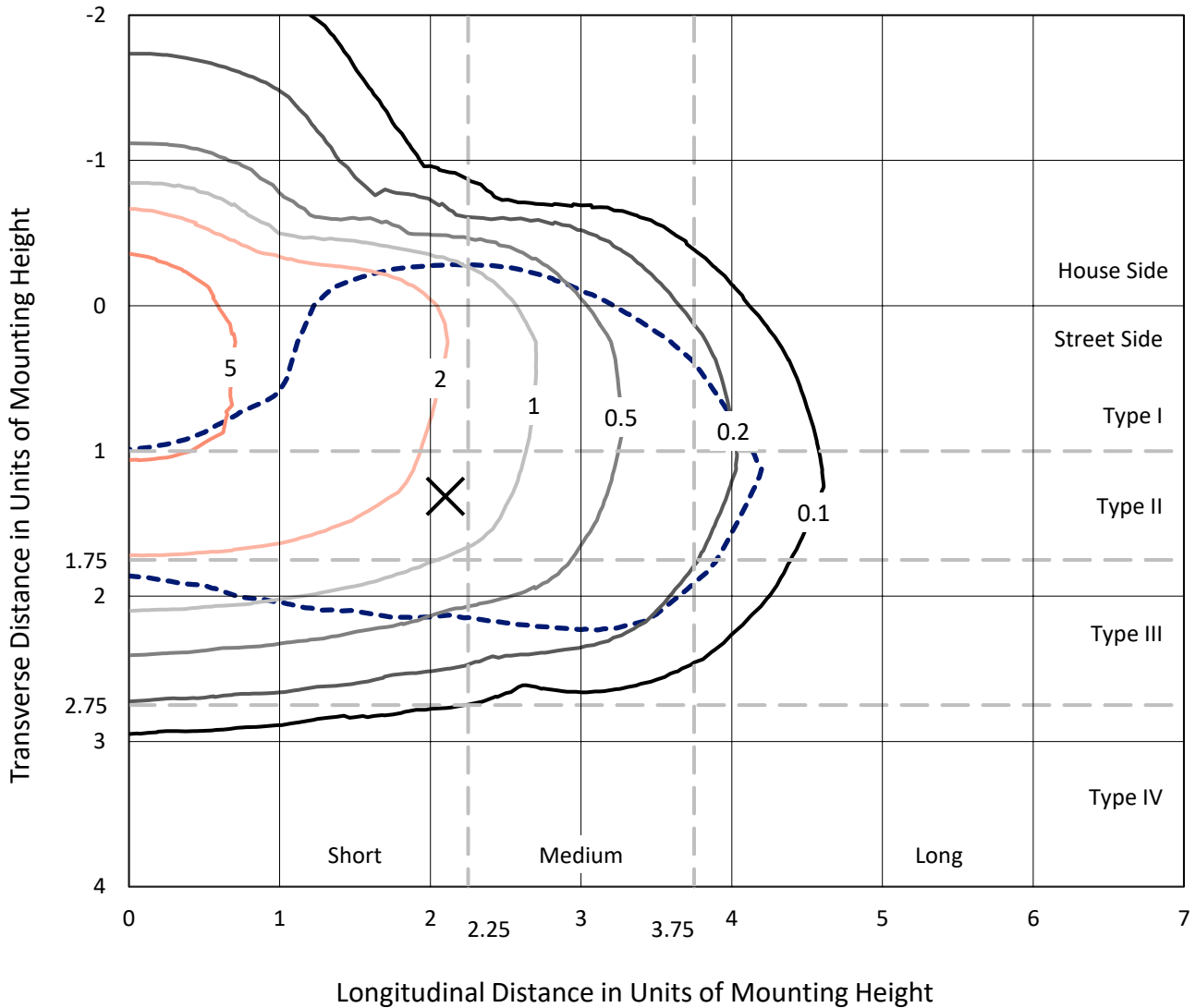
Input Watts (W): 50
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

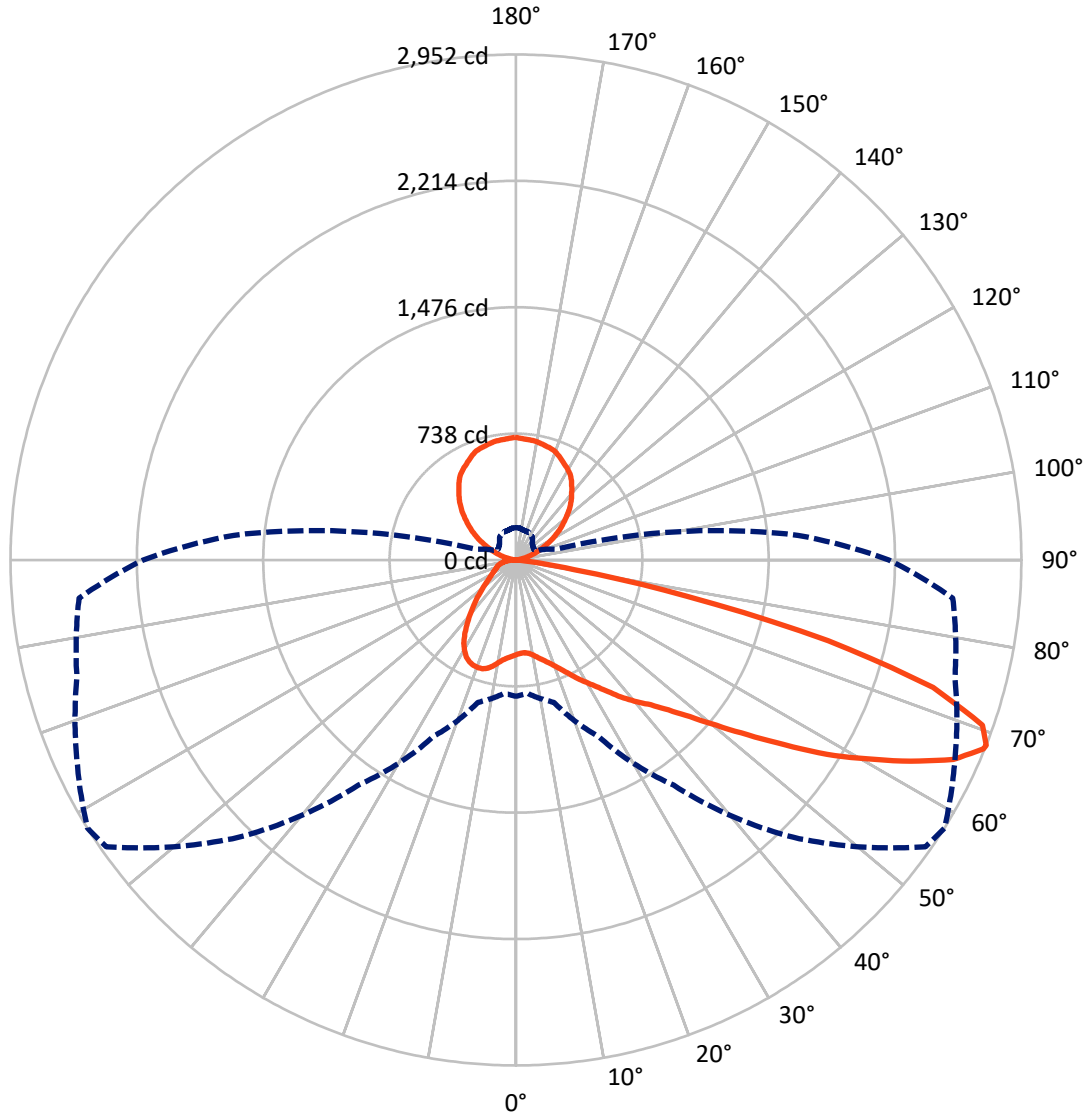
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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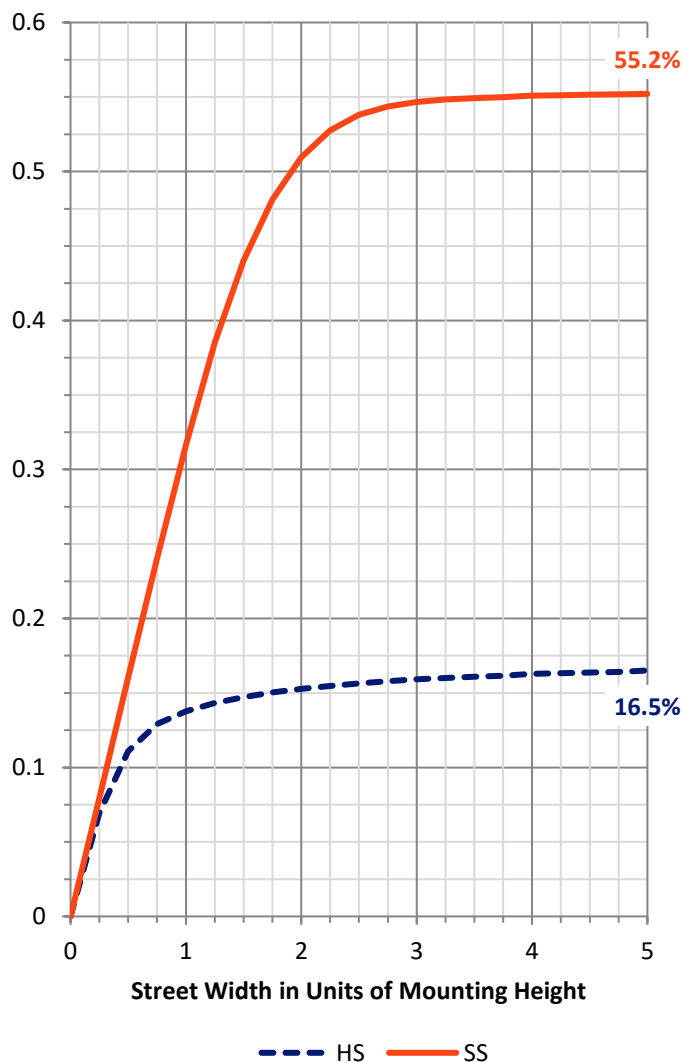
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1075.4	887.0	1962.4
	% Fixture	16.9	13.9	30.8
Street Side	Lumens	3517.6	887.0	4404.5
	% Fixture	55.2	13.9	69.2
Total	Lumens	4593.0	1773.9	6366.9
	% Fixture	72.1	27.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	0.9
10°-20°	177.7	2.8
20°-30°	319.5	5.0
30°-40°	469.4	7.4
40°-50°	688.5	10.8
50°-60°	1029.1	16.2
60°-70°	1203.3	18.9
70°-80°	593.3	9.3
80°-90°	57.9	0.9
90°-100°	8.4	0.1
100°-110°	58.7	0.9
110°-120°	169.9	2.7
120°-130°	279.4	4.4
130°-140°	344.6	5.4
140°-150°	352.5	5.5
150°-160°	297.0	4.7
160°-170°	195.5	3.1
170°-180°	67.8	1.1
0°-90°	4593.0	72.1
0°-180°	6366.9	100.0

Coefficient of Utilization

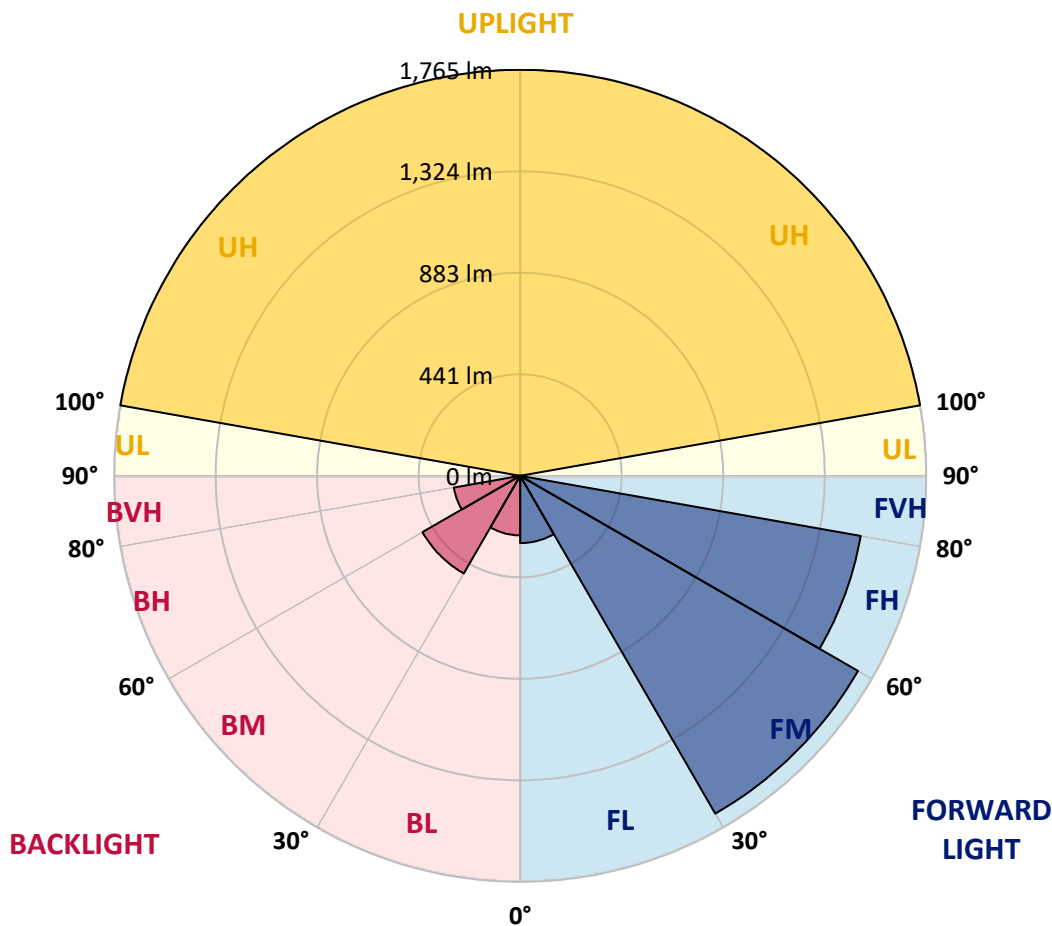


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	292.6	4.6			
FM (30°-60°)	1696.5	26.6			
FH (60°-80°)	1503.6	23.6			G1/1800
FVH (80°-90°)	24.9	0.4			G1/100
BL (0°-30°)	259.0	4.1	B1/500		
BM (30°-60°)	490.5	7.7	B1/1000		
BH (60°-80°)	293.0	4.6	B1/500		G1/500
BVH (80°-90°)	33.0	0.5			G1/100
UL (90°-100°)	8.4	0.1		U1/10	
UH (100°-180°)	1765.5	27.7		U5	

BUG Rating: B1-U5-G1
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6
2.5°	538.1	538.1	540.0	540.7	541.9	543.2	544.5	545.1	547.1	549.6	550.9
5°	533.6	534.2	535.5	536.2	538.1	540.7	542.6	543.9	547.1	552.2	555.4
7.5°	543.9	545.8	546.4	547.1	547.7	549.6	549.6	550.3	553.5	558.6	563.1
10°	560.5	561.8	563.7	565.7	567.6	568.9	565.0	565.7	566.9	572.1	578.5
12.5°	581.7	581.7	582.3	584.9	586.8	590.7	586.8	586.8	586.8	591.3	599.0
15°	605.4	604.1	604.1	606.7	607.4	609.9	608.0	608.0	610.6	615.1	622.7
17.5°	632.4	634.3	632.4	631.1	629.2	630.4	631.7	633.0	638.1	645.2	649.7
20°	671.5	674.7	673.4	668.3	659.9	656.1	660.6	663.2	673.4	681.8	682.4
22.5°	733.7	731.8	729.9	720.9	704.2	693.9	694.6	698.4	714.5	727.3	720.9
25°	791.4	793.3	793.3	780.5	758.7	737.5	739.5	741.4	757.4	769.0	751.7
27.5°	861.3	860.0	859.4	842.1	815.8	795.3	784.4	789.5	801.0	805.5	772.2
30°	933.8	938.9	933.8	909.4	884.4	858.1	836.3	835.0	840.8	840.2	796.6
32.5°	1021.0	1016.5	1014.6	986.4	955.0	920.3	892.8	888.3	885.1	880.6	825.4
35°	1088.4	1094.1	1094.1	1069.8	1032.6	998.6	955.6	951.8	944.1	929.3	863.3
37.5°	1167.9	1166.6	1171.1	1142.9	1105.7	1073.0	1033.2	1022.3	1005.0	983.2	908.1
40°	1245.5	1248.7	1259.0	1225.0	1191.0	1165.3	1108.9	1089.0	1062.7	1042.8	973.6
42.5°	1351.3	1355.8	1359.7	1331.4	1291.0	1267.9	1180.7	1155.7	1141.0	1137.1	1060.1
45°	1479.6	1487.3	1490.5	1464.8	1441.7	1386.6	1271.1	1248.1	1232.0	1248.7	1178.2
47.5°	1602.7	1598.9	1613.6	1613.0	1615.5	1549.5	1401.3	1366.7	1351.3	1393.6	1313.5
50°	1672.0	1677.8	1709.8	1742.5	1788.1	1740.6	1552.1	1517.4	1499.5	1552.1	1472.5
52.5°	1707.9	1715.6	1758.6	1850.3	1947.1	1924.7	1733.6	1695.1	1679.7	1731.0	1643.1
55°	1711.1	1715.6	1773.3	1915.7	2068.3	2075.4	1940.7	1904.2	1883.0	1916.3	1829.1
57.5°	1657.9	1644.4	1743.8	1925.3	2145.9	2232.5	2168.4	2142.1	2082.4	2118.4	2060.0
60°	1563.0	1576.4	1673.9	1885.6	2178.7	2355.0	2396.7	2356.9	2287.7	2302.4	2308.8
62.5°	1419.3	1436.6	1537.9	1793.2	2152.4	2458.9	2607.7	2587.8	2494.8	2487.1	2498.7
65°	1214.7	1204.4	1317.3	1591.2	2027.9	2493.6	2814.9	2806.5	2695.6	2605.1	2609.6
67.5°	876.1	866.5	945.3	1228.2	1691.2	2364.6	2925.2	2943.8	2816.8	2657.1	2587.8
68°	795.3	781.8	860.7	1135.2	1604.6	2290.2	2919.4	2951.5	2825.8	2653.9	2560.9
70°	457.9	436.1	512.4	740.8	1181.4	1927.9	2801.4	2889.9	2804.6	2591.7	2384.5
72.5°	143.7	143.7	198.2	299.5	579.8	1219.8	2396.7	2547.4	2565.4	2355.7	1981.8
75°	89.8	89.8	103.3	141.7	230.9	517.6	1653.4	1883.0	2038.2	1983.0	1445.0
77.5°	60.9	59.6	68.6	87.9	128.9	166.1	829.9	1019.7	1246.8	1353.9	845.3
80°	33.3	34.0	42.3	52.6	73.1	77.0	243.7	344.4	549.0	643.3	320.7
82.5°	19.2	18.6	20.5	23.1	32.1	33.3	69.9	85.9	143.7	133.4	85.9
85°	0.0	0.6	0.6	0.6	1.3	3.2	9.0	13.5	21.8	30.1	21.2
87.5°	0.0	0.0	0.0	0.0	0.6	0.6	1.3	1.3	1.3	1.3	1.9
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	7.5	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	11.7	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	28.7	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	50.2	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	73.0	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.9	96.2	92.1	89.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.1	123.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	152.0	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	184.0	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	217.1	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	252.9	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	286.6	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	320.8	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.2	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	386.9	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	422.0	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	454.7	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	484.5	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	512.1	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	541.0	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	570.6	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	594.9	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	611.6	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	626.0	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	641.9	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	660.0	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	675.0	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	683.6	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	689.0	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	695.4	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	702.7	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	705.7	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	707.4	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	711.5	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6	551.6
2.5°	552.2	554.1	557.3	559.9	561.2	559.9	564.4	563.7	565.0	565.0	566.3
5°	558.0	560.5	566.3	569.5	572.7	574.0	579.1	580.4	583.0	584.3	583.6
7.5°	566.3	569.5	576.6	582.3	586.8	590.0	598.4	602.2	606.1	607.4	608.6
10°	581.7	586.2	593.9	600.9	607.4	611.8	618.9	624.0	627.9	629.2	630.4
12.5°	602.2	607.4	617.0	626.6	633.6	636.2	635.6	634.3	634.3	633.6	634.3
15°	626.0	631.1	643.3	652.2	652.9	644.6	633.0	627.2	626.0	626.0	626.6
17.5°	653.5	659.9	667.6	672.8	660.6	640.1	626.6	620.8	619.5	618.9	617.6
20°	685.0	688.8	691.4	685.0	658.0	634.3	618.9	610.6	604.1	603.5	600.9
22.5°	718.3	717.0	713.8	690.7	651.0	620.8	599.7	584.3	575.9	575.3	572.7
25°	742.7	737.5	727.9	692.0	638.1	599.0	568.9	544.5	533.6	528.5	529.8
27.5°	758.7	747.8	731.1	685.6	615.7	565.7	523.3	491.3	475.2	472.7	474.6
30°	778.0	760.6	733.7	669.6	583.6	518.8	463.7	431.6	422.6	418.2	419.4
32.5°	801.0	778.6	742.0	645.2	543.2	464.3	404.7	382.2	372.0	363.6	366.2
35°	831.2	803.0	755.5	610.6	491.9	406.6	362.4	341.8	323.2	314.3	314.9
37.5°	866.5	834.4	767.0	570.2	436.1	363.0	325.8	301.4	278.3	261.0	257.8
40°	922.9	896.6	776.7	525.3	382.9	327.1	289.9	262.3	240.5	223.2	221.3
42.5°	1017.2	971.6	777.3	471.4	337.3	296.3	260.4	230.2	205.9	191.1	190.5
45°	1128.1	1057.6	763.8	413.7	297.6	265.5	234.1	200.1	186.0	176.4	175.1
47.5°	1259.6	1156.3	734.3	359.8	263.6	235.4	207.2	186.6	176.4	169.3	169.3
50°	1409.7	1272.4	704.8	313.6	230.9	211.0	191.8	180.9	173.2	166.7	166.1
52.5°	1579.0	1409.7	695.2	266.8	203.9	188.6	186.6	176.4	170.0	165.5	164.2
55°	1781.0	1563.6	704.2	230.2	182.8	179.6	183.4	175.1	170.6	163.5	161.6
57.5°	2014.5	1713.7	694.6	199.5	168.0	171.2	179.6	175.1	171.2	162.3	159.7
60°	2234.4	1847.7	629.2	173.8	153.9	161.0	174.4	169.3	163.5	161.6	160.3
62.5°	2352.5	1891.3	501.5	153.9	143.0	150.7	166.1	159.7	155.8	160.3	161.0
65°	2353.7	1841.9	368.8	139.2	134.0	141.7	157.8	155.8	158.4	168.7	170.6
67.5°	2222.9	1691.9	260.4	125.7	125.1	134.7	161.6	174.4	176.4	186.6	186.6
68°	2178.0	1654.7	241.8	123.8	123.1	134.7	164.8	177.7	178.9	188.6	187.9
70°	1931.7	1398.8	175.1	116.1	119.9	144.3	182.1	186.6	178.9	189.8	189.2
72.5°	1509.7	1034.5	130.8	107.7	114.2	142.4	183.4	178.9	167.4	170.0	166.7
75°	1020.4	659.3	107.7	98.8	101.3	120.6	166.7	168.7	155.2	152.6	148.8
77.5°	534.2	309.1	87.2	87.9	90.4	104.5	148.8	153.3	141.1	133.4	132.1
80°	196.9	122.5	71.2	77.6	78.9	91.7	127.6	134.7	123.1	117.4	116.1
82.5°	71.8	60.9	59.0	68.0	66.7	78.2	111.6	116.7	104.5	98.8	95.6
85°	19.9	22.4	37.2	53.2	51.9	60.9	89.8	94.3	84.0	69.3	67.3
87.5°	1.3	4.5	14.8	31.4	32.7	37.8	64.8	71.2	62.2	51.3	50.7
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-T3-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)