

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-SA1E-740-U-T2-HSS-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number:
REPORT IS A COMBINATION OF REPORTS P401686 AND P226775
Test Lab: INNOVATION CENTER
Issue Date: 3/30/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1E-740-U-T2-HSS-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7096.9 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')
IES Classification: Type II - Medium
BUG Rating: B1 - U5 - G2

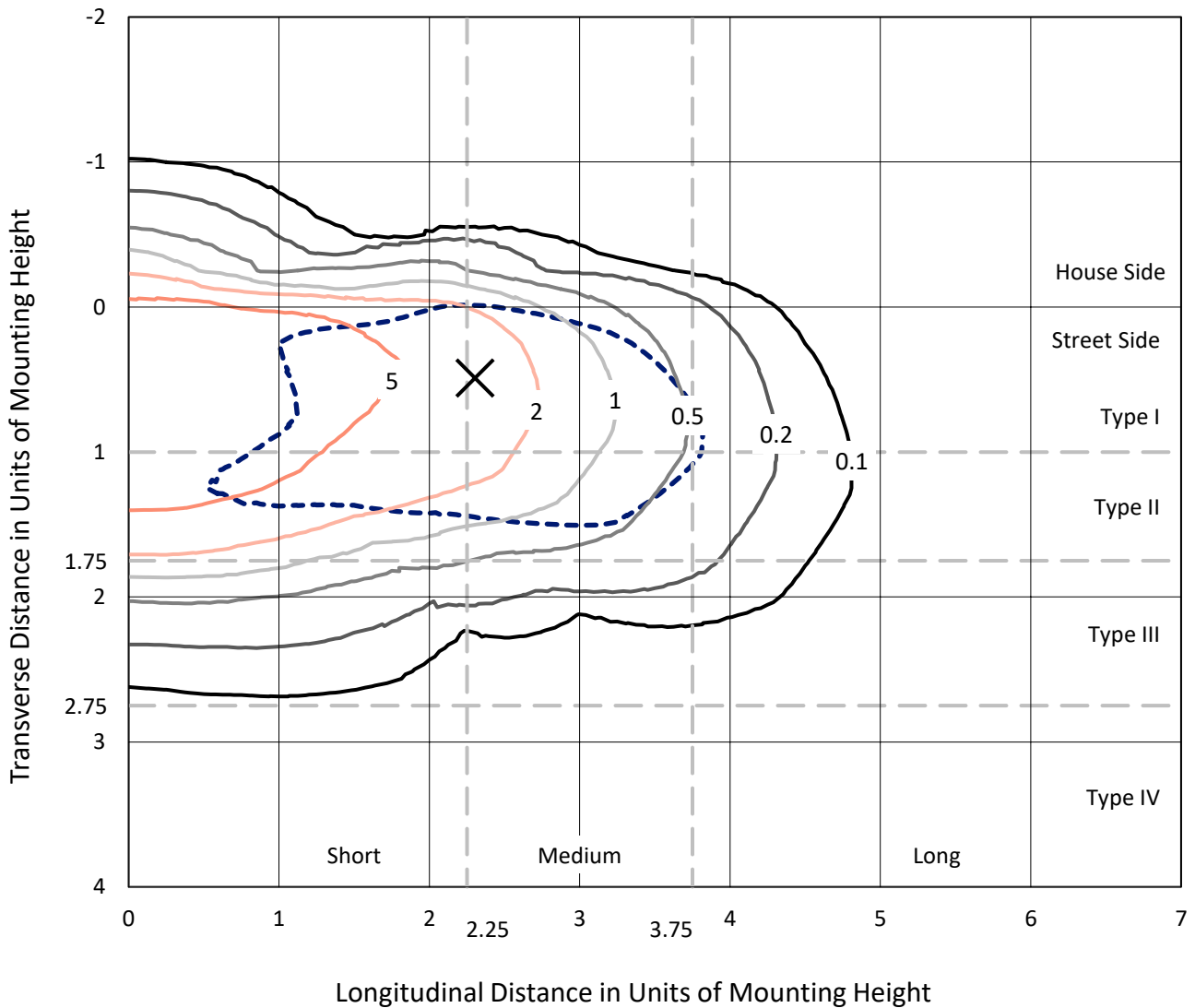
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER:
 CATALOG NUMBER: ENT-SA1E-740-U-T2-HSS-ULG

Iso-Footcandle Lines of Horizontal Illumination

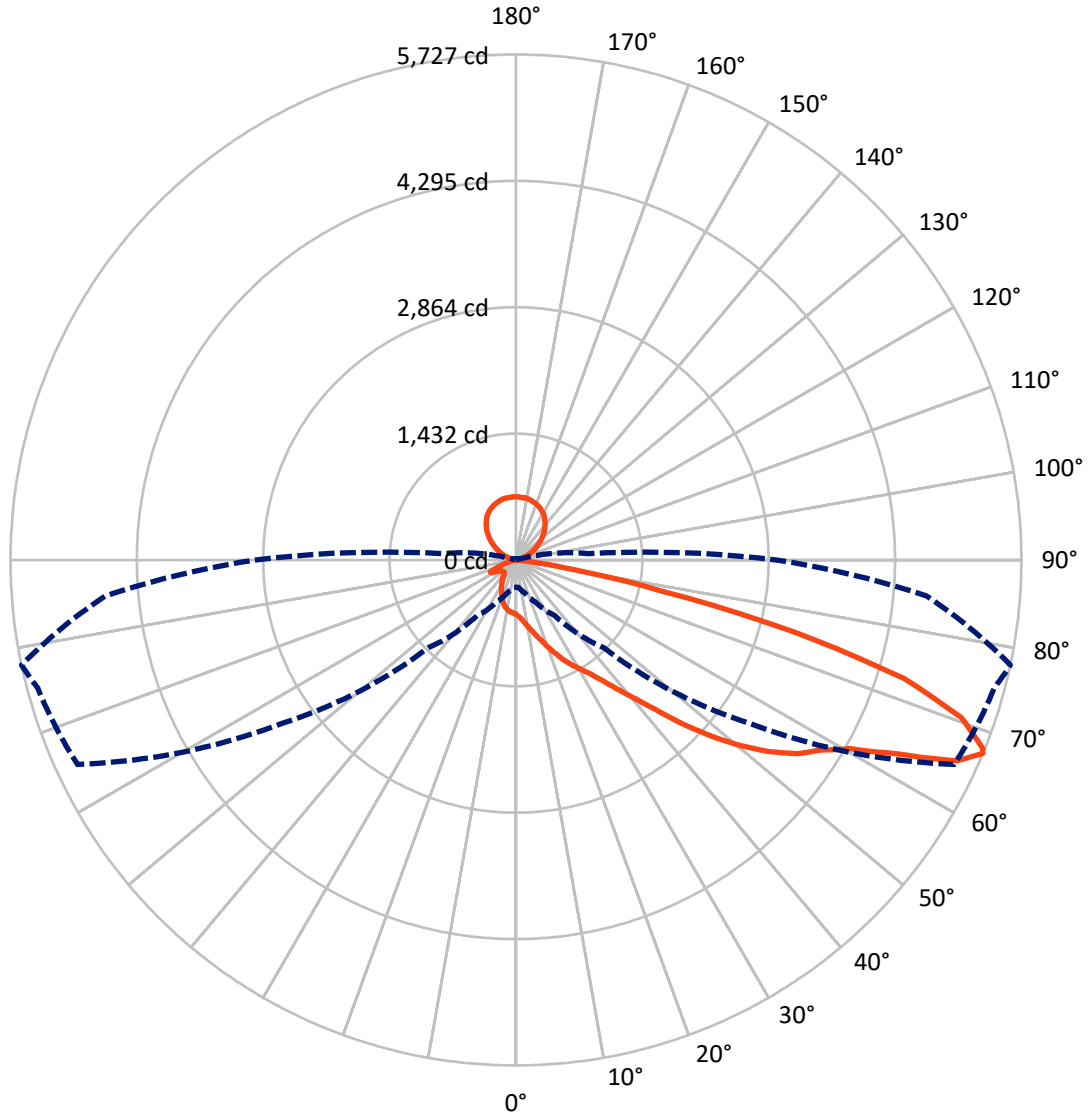
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.7 fc
 Type II - Medium - N/A

REPORT NUMBER:
CATALOG NUMBER: ENT-SA1E-740-U-T2-HSS-ULG

Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER:
 CATALOG NUMBER: ENT-SA1E-740-U-T2-HSS-ULG

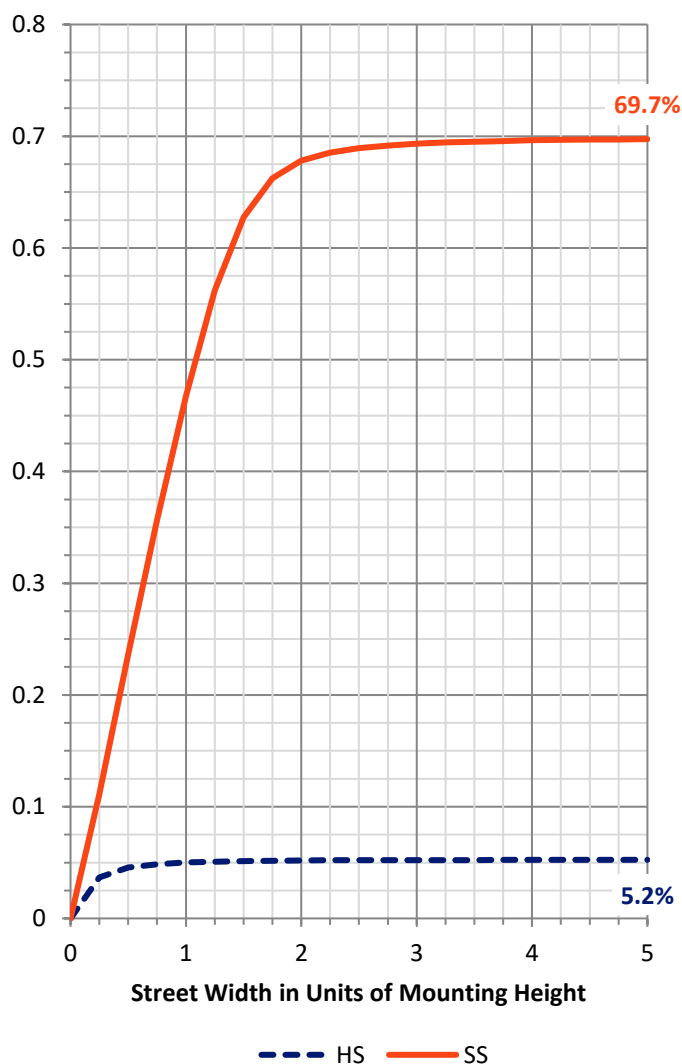
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	375.5	887.0	1262.5
	% Fixture	5.3	12.5	17.8
Street Side	Lumens	4947.4	887.0	5834.4
	% Fixture	69.7	12.5	82.2
Total	Lumens	5323.0	1773.9	7096.9
	% Fixture	75.0	25.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	0.8
10°-20°	170.6	2.4
20°-30°	301.5	4.2
30°-40°	531.6	7.5
40°-50°	913.6	12.9
50°-60°	1375.2	19.4
60°-70°	1353.3	19.1
70°-80°	591.3	8.3
80°-90°	26.2	0.4
90°-100°	8.4	0.1
100°-110°	58.7	0.8
110°-120°	169.9	2.4
120°-130°	279.4	3.9
130°-140°	344.6	4.9
140°-150°	352.5	5.0
150°-160°	297.0	4.2
160°-170°	195.5	2.8
170°-180°	67.8	1.0
0°-90°	5323.0	75.0
0°-180°	7096.9	100.0

Coefficient of Utilization

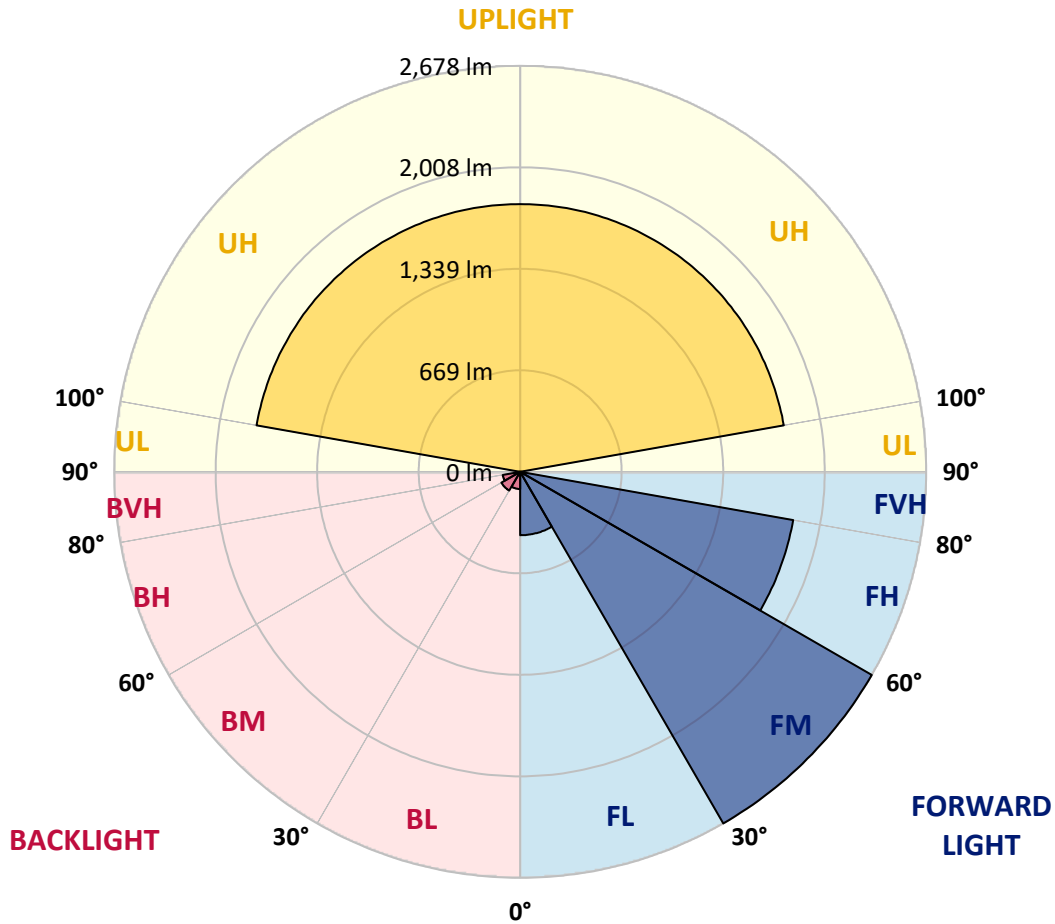


REPORT NUMBER:
 CATALOG NUMBER: ENT-SA1E-740-U-T2-HSS-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	418.2	5.9			
FM (30°-60°)	2677.5	37.7			
FH (60°-80°)	1828.2	25.8			G2/5000
FVH (80°-90°)	23.5	0.3			G1/100
BL (0°-30°)	113.5	1.6	B1/500		
BM (30°-60°)	142.9	2.0	B0/220		
BH (60°-80°)	116.5	1.6	B1/500		G1/500
BVH (80°-90°)	2.7	0.0			G0/10
UL (90°-100°)	8.4	0.1		U1/10	
UH (100°-180°)	1765.5	24.9		U5	

BUG Rating: B1-U5-G2
 Type II Medium





REPORT NUMBER:

CATALOG NUMBER: ENT-SA1E-740-U-T2-HSS-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0
2.5°	709.0	712.0	708.0	705.0	697.0	687.0	677.0	662.0	646.0	640.0	630.0
5°	796.0	796.0	796.0	788.0	781.0	762.0	739.0	716.0	686.0	675.0	652.0
7.5°	842.0	843.0	846.0	846.0	842.0	829.0	804.0	778.0	733.0	718.0	681.0
10°	847.0	851.0	859.0	871.0	880.0	887.0	872.0	844.0	790.0	772.0	718.0
12.5°	834.0	836.0	849.0	871.0	900.0	929.0	930.0	913.0	853.0	828.0	763.0
15°	804.0	807.0	826.0	861.0	906.0	958.0	988.0	983.0	927.0	898.0	813.0
17.5°	756.0	759.0	783.0	835.0	901.0	977.0	1041.1	1066.1	1000.0	972.0	864.0
20°	754.0	755.0	764.0	803.0	881.0	988.0	1093.1	1152.1	1089.1	1059.1	924.0
22.5°	882.0	874.0	854.0	829.0	863.0	985.0	1140.1	1243.1	1199.1	1152.1	993.0
25°	1025.1	1028.1	1006.0	947.0	904.0	980.0	1176.1	1346.1	1302.1	1255.1	1064.1
27.5°	1175.1	1170.1	1151.1	1097.1	1025.1	1016.1	1202.1	1429.1	1401.1	1344.1	1127.1
30°	1321.1	1317.1	1303.1	1248.1	1170.1	1109.1	1222.1	1504.1	1495.1	1432.1	1178.1
32.5°	1488.1	1495.1	1477.1	1405.1	1310.1	1235.1	1265.1	1583.1	1609.1	1532.1	1231.1
35°	1682.1	1682.1	1645.1	1579.1	1481.1	1376.1	1351.1	1670.1	1754.1	1671.1	1315.1
37.5°	1842.1	1855.1	1833.1	1738.1	1646.1	1536.1	1482.1	1777.1	1933.1	1849.1	1428.1
40°	1968.1	1990.1	1991.1	1897.1	1812.1	1740.1	1665.1	1928.1	2158.1	2050.1	1563.1
42.5°	2085.1	2089.1	2106.1	2052.1	1967.1	1948.1	1871.1	2107.1	2439.1	2312.1	1743.1
45°	2234.1	2242.1	2232.1	2192.1	2119.1	2144.1	2101.1	2334.1	2755.1	2648.1	1955.1
47.5°	2453.1	2472.1	2457.1	2385.1	2296.1	2343.1	2312.1	2560.1	3112.2	2982.1	2185.1
50°	2658.1	2673.1	2689.1	2666.1	2577.1	2532.1	2494.1	2799.1	3418.2	3308.2	2411.1
52.5°	2680.1	2694.1	2782.1	2863.1	2922.1	2804.1	2685.1	3041.2	3701.2	3609.2	2618.1
55°	2537.1	2546.1	2693.1	2853.1	3124.2	3164.2	2966.1	3280.2	3938.2	3875.2	2757.1
57.5°	2139.1	2177.1	2386.1	2631.1	3074.2	3378.2	3365.2	3558.2	4092.2	4063.2	2936.1
60°	1405.1	1447.1	1697.1	2068.1	2706.1	3321.2	3803.2	3975.2	4308.2	4340.2	3250.2
62.5°	728.0	777.0	997.0	1326.1	1961.1	2892.1	3952.2	4660.2	4722.2	4831.2	3810.2
65°	416.0	426.0	536.0	777.0	1214.1	2071.1	3773.2	5338.3	5267.3	5488.3	4525.2
67°	309.0	309.0	386.0	528.0	769.0	1408.1	3218.2	5481.3	5610.3	5727.3	4669.2
67.5°	277.0	292.0	358.0	487.0	690.0	1249.1	3011.1	5443.3	5632.3	5705.3	4619.2
70°	190.0	200.0	257.0	349.0	465.0	650.0	1974.1	4814.2	5426.3	5352.3	4186.2
72.5°	114.0	118.0	170.0	251.0	347.0	348.0	1077.1	3654.2	4598.2	4597.2	3419.2
75°	71.0	75.0	100.0	168.0	243.0	218.0	498.0	2486.1	3302.2	3238.2	2291.1
77.5°	40.0	46.0	60.0	92.0	154.0	139.0	210.0	1393.1	1784.1	1674.1	1138.1
80°	16.0	19.0	34.0	44.0	87.0	83.0	86.0	490.0	722.0	651.0	381.0
82.5°	4.0	5.0	12.0	21.0	34.0	34.0	27.0	134.0	171.0	159.0	98.0
85°	0.0	0.0	1.0	1.0	1.0	2.0	7.0	15.0	18.0	21.0	16.0
87.5°	0.0	0.0	0.0	1.0	1.0	1.0	2.0	3.0	3.0	3.0	3.0
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	7.2	7.2	6.1	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	8.2	7.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	10.2	9.2	8.9	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	26.6	23.5	22.3	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	48.1	43.0	42.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	71.6	66.5	65.3	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.2	92.1	91.1	89.0



REPORT NUMBER:

CATALOG NUMBER: ENT-SA1E-740-U-T2-HSS-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.8	121.7	120.8	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	153.4	152.4	151.8	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	186.2	183.1	182.5	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	219.9	214.8	214.2	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	255.7	250.6	250.0	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	289.5	284.4	283.8	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	322.2	317.1	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.9	353.9	353.6	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	389.7	389.7	389.1	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	425.5	423.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	458.3	457.3	458.2	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	485.9	486.9	488.5	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	513.5	515.6	517.1	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	545.2	545.2	545.5	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	574.9	573.9	573.0	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	598.4	599.4	598.5	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	613.8	616.8	617.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	628.1	632.2	633.7	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	645.5	650.6	651.2	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	662.9	664.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	679.2	676.2	675.9	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	686.4	685.4	684.8	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	692.5	695.6	695.0	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	699.7	703.8	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	704.8	709.9	710.5	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	707.9	709.9	710.5	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	711.0	712.0	711.4	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	715.0	717.1	716.2	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-SA1E-740-U-T2-HSS-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0	618.0
2.5°	622.0	615.0	601.0	586.0	571.0	559.0	549.0	535.0	533.0	533.0	533.0
5°	635.0	619.0	587.0	555.0	523.0	494.0	473.0	456.0	441.0	436.0	440.0
7.5°	654.0	625.0	569.0	513.0	463.0	422.0	392.0	368.0	357.0	351.0	346.0
10°	679.0	634.0	545.0	463.0	400.0	351.0	319.0	296.0	285.0	278.0	279.0
12.5°	706.0	641.0	515.0	409.0	339.0	294.0	267.0	248.0	230.0	219.0	222.0
15°	733.0	646.0	478.0	359.0	292.0	252.0	214.0	180.0	168.0	166.0	165.0
17.5°	763.0	645.0	437.0	312.0	252.0	196.0	158.0	154.0	153.0	153.0	152.0
20°	794.0	640.0	390.0	273.0	212.0	149.0	143.0	141.0	138.0	137.0	136.0
22.5°	828.0	631.0	347.0	239.0	158.0	136.0	128.0	122.0	117.0	114.0	115.0
25°	859.0	614.0	305.0	207.0	135.0	122.0	111.0	102.0	97.0	93.0	94.0
27.5°	880.0	584.0	269.0	167.0	124.0	108.0	95.0	86.0	79.0	76.0	76.0
30°	882.0	541.0	237.0	137.0	113.0	95.0	81.0	71.0	67.0	65.0	64.0
32.5°	880.0	497.0	213.0	126.0	103.0	83.0	69.0	62.0	58.0	56.0	56.0
35°	890.0	452.0	191.0	116.0	92.0	73.0	61.0	54.0	51.0	49.0	49.0
37.5°	920.0	421.0	168.0	106.0	82.0	64.0	55.0	49.0	46.0	44.0	44.0
40°	961.0	395.0	140.0	96.0	72.0	58.0	50.0	45.0	41.0	39.0	39.0
42.5°	1033.1	385.0	117.0	86.0	63.0	52.0	46.0	40.0	36.0	34.0	34.0
45°	1140.1	390.0	107.0	77.0	57.0	47.0	41.0	35.0	31.0	30.0	30.0
47.5°	1258.1	411.0	100.0	69.0	52.0	44.0	37.0	31.0	27.0	26.0	26.0
50°	1390.1	444.0	94.0	61.0	47.0	40.0	33.0	27.0	24.0	23.0	23.0
52.5°	1516.1	486.0	88.0	55.0	44.0	36.0	29.0	24.0	22.0	21.0	21.0
55°	1612.1	513.0	83.0	51.0	41.0	33.0	26.0	23.0	20.0	19.0	19.0
57.5°	1746.1	558.0	77.0	46.0	37.0	30.0	24.0	21.0	18.0	18.0	18.0
60°	2018.1	679.0	68.0	42.0	33.0	27.0	23.0	19.0	17.0	16.0	16.0
62.5°	2508.1	879.0	59.0	39.0	29.0	24.0	20.0	17.0	15.0	13.0	13.0
65°	2980.1	962.0	50.0	34.0	26.0	21.0	18.0	15.0	11.0	9.0	9.0
67°	2954.1	823.0	42.0	29.0	22.0	19.0	15.0	12.0	8.0	5.0	5.0
67.5°	2884.1	766.0	41.0	28.0	21.0	18.0	15.0	11.0	7.0	4.0	4.0
70°	2451.1	536.0	32.0	22.0	18.0	16.0	12.0	8.0	4.0	2.0	2.0
72.5°	1991.1	425.0	25.0	18.0	15.0	12.0	10.0	5.0	3.0	1.0	1.0
75°	1408.1	261.0	22.0	16.0	12.0	9.0	8.0	5.0	3.0	2.0	1.0
77.5°	695.0	120.0	18.0	14.0	11.0	9.0	7.0	6.0	5.0	4.0	2.0
80°	204.0	39.0	12.0	10.0	10.0	9.0	8.0	7.0	6.0	5.0	3.0
82.5°	46.0	14.0	4.0	5.0	7.0	7.0	7.0	5.0	4.0	2.0	1.0
85°	6.0	3.0	3.0	3.0	4.0	4.0	3.0	2.0	2.0	0.0	0.0
87.5°	2.0	2.0	2.0	3.0	3.0	3.0	2.0	1.0	1.0	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°	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-SA1E-740-U-T2-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)