

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: P401125

Luminaire Tested: **ENV-SA1B-740-U-SL2-HSS-ULG**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401125
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#####)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1B-740-U-SL2-HSS-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 450mA 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: 4549 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U5 - G1

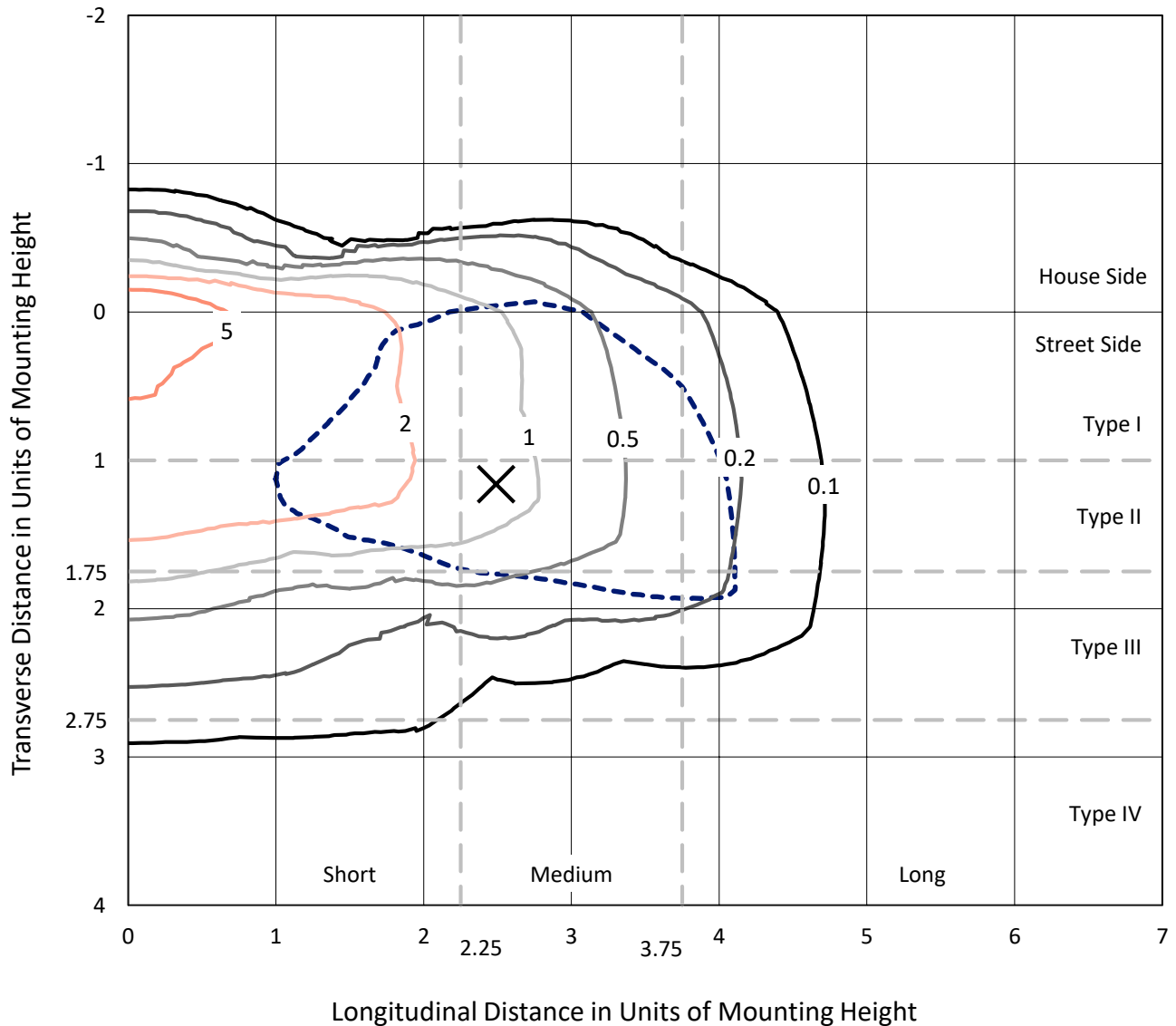
Input Watts (W): 42.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

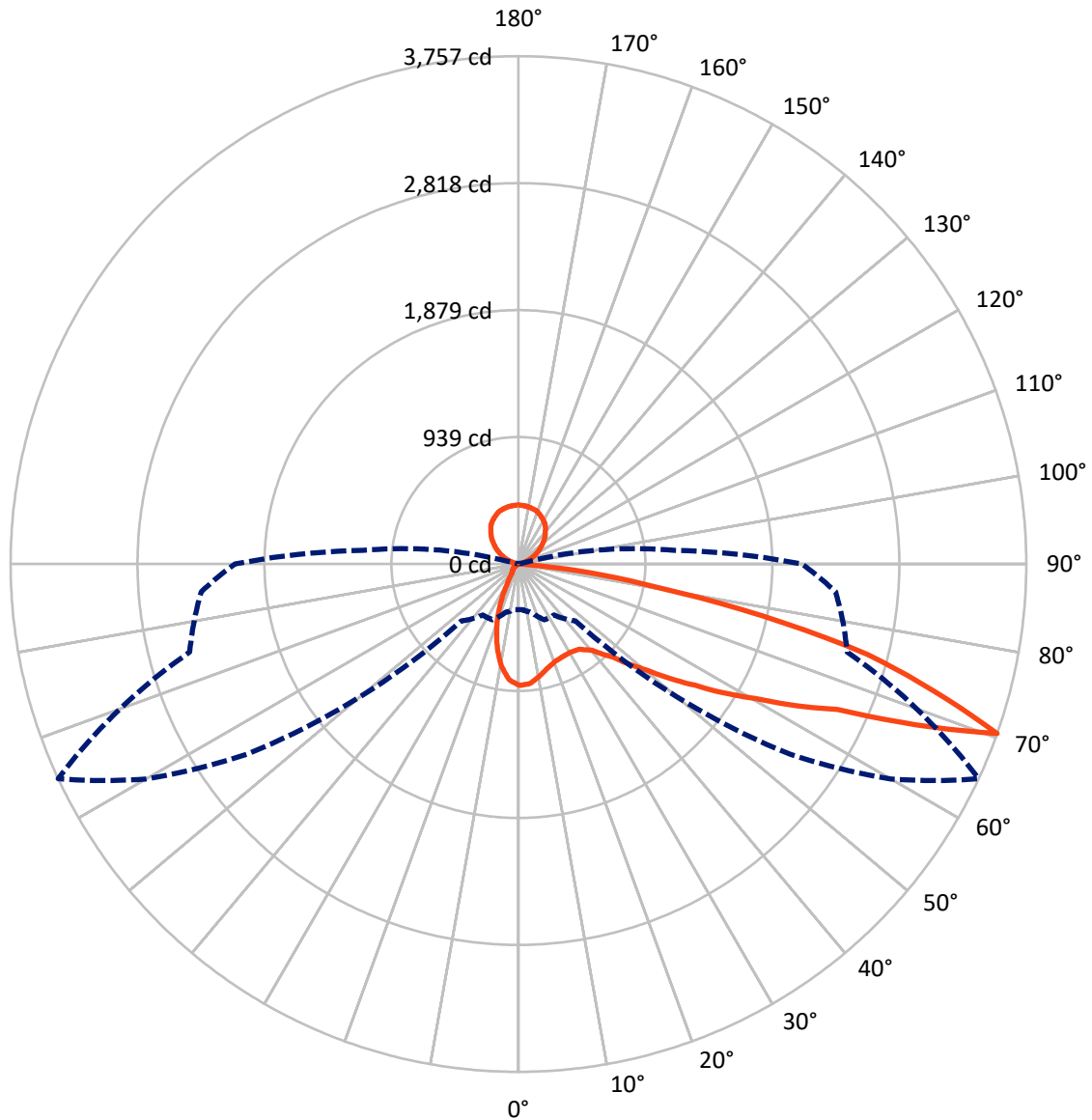
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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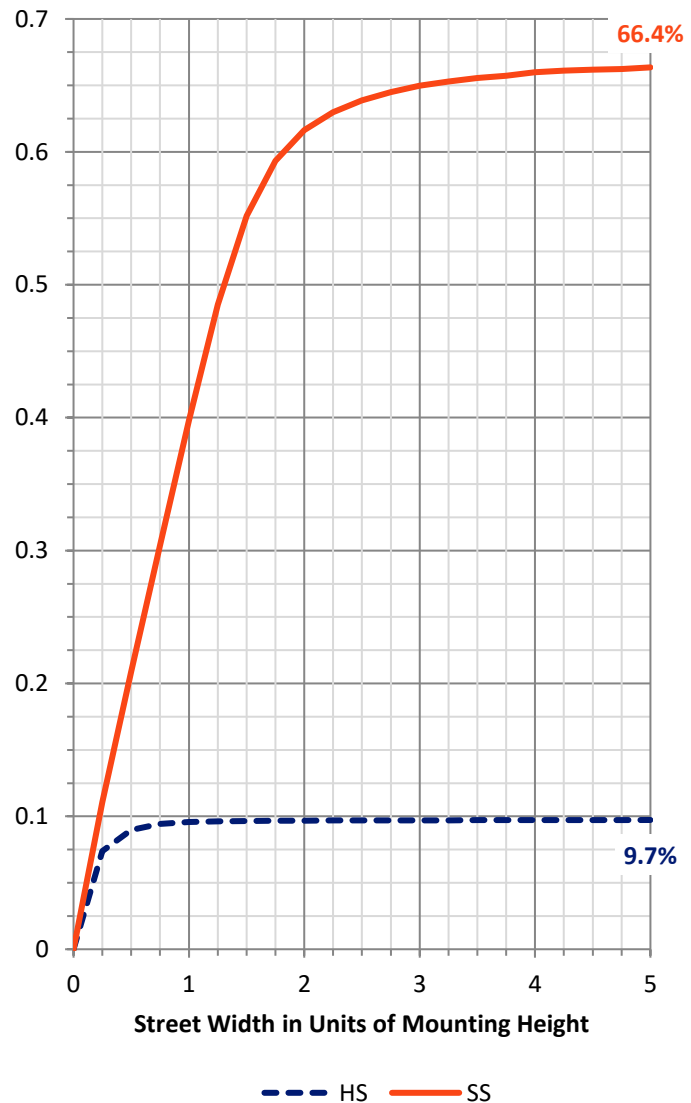
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	447.8	541.6	989.4
	% Fixture	9.8	11.9	21.7
Street Side	Lumens	3018.0	541.6	3559.6
	% Fixture	66.3	11.9	78.3
Total	Lumens	3465.8	1083.2	4549.0
	% Fixture	76.2	23.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	1.7
10°-20°	169.1	3.7
20°-30°	231.9	5.1
30°-40°	319.2	7.0
40°-50°	476.3	10.5
50°-60°	744.2	16.4
60°-70°	846.3	18.6
70°-80°	549.3	12.1
80°-90°	53.4	1.2
90°-100°	5.3	0.1
100°-110°	36.6	0.8
110°-120°	104.1	2.3
120°-130°	170.5	3.7
130°-140°	210.1	4.6
140°-150°	214.8	4.7
150°-160°	181.2	4.0
160°-170°	119.3	2.6
170°-180°	41.3	0.9
0°-90°	3465.8	76.2
0°-180°	4549.0	100.0



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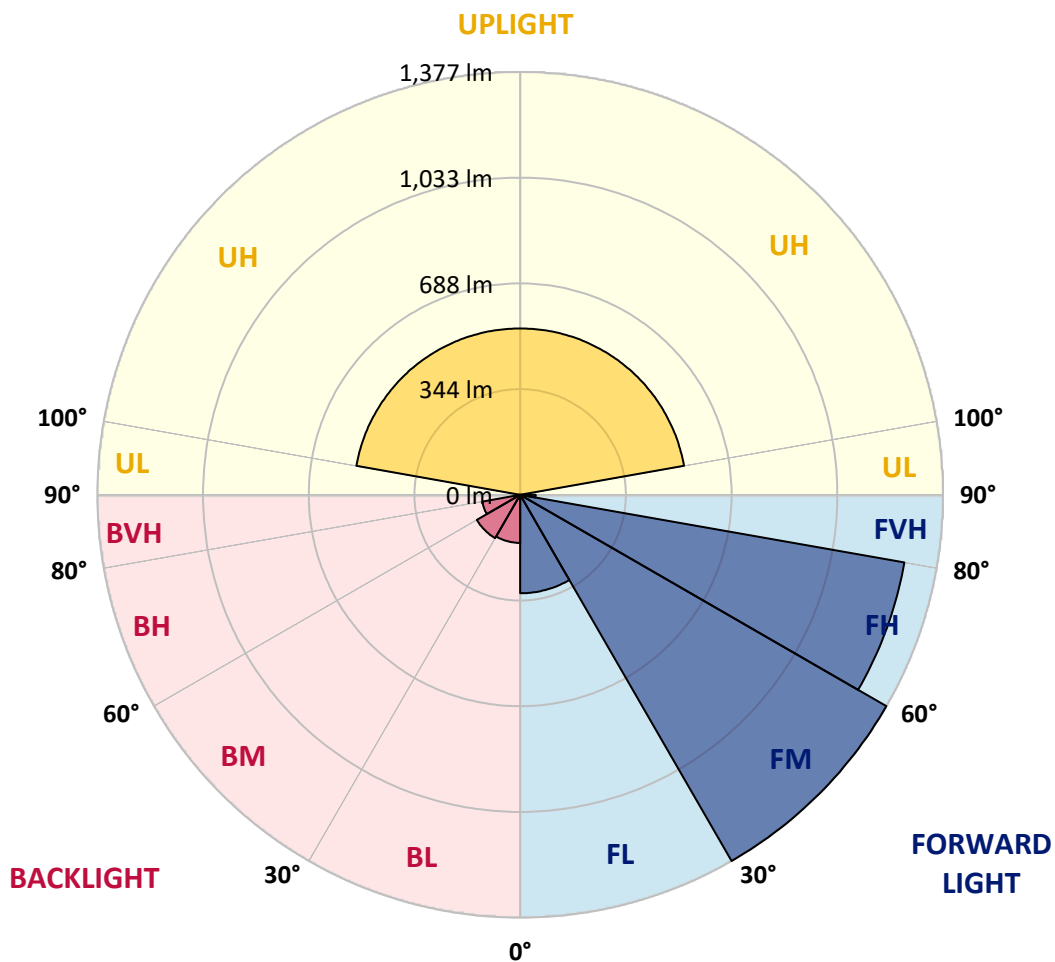
CATALOG NUMBER: ENV-SA1B-740-U-SL2-HSS-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	320.5	7.0			
FM	(30°-60°)	1376.8	30.3			
FH	(60°-80°)	1270.3	27.9			G1/1800
FVH	(80°-90°)	50.4	1.1			G1/100
BL	(0°-30°)	156.5	3.4	B1/500		
BM	(30°-60°)	162.9	3.6	B0/220		
BH	(60°-80°)	125.3	2.8	B1/500		G1/500
BVH	(80°-90°)	3.0	0.1			G0/10
UL	(90°-100°)	5.3	0.1		U1/10	
UH	(100°-180°)	541.6	11.9		U4/1000	

BUG Rating: B1-U5-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7
5°	814.8	814.8	816.6	818.4	823.6	828.8	834.3	839.8	846.8	853.8	861.7
10°	723.9	726.9	728.8	730.6	736.4	742.2	750.7	759.3	771.2	783.1	794.9
15°	672.7	672.1	675.1	678.2	684.3	690.4	698.3	706.2	718.1	730.0	743.1
20°	659.9	659.9	661.4	662.9	665.0	667.2	673.0	678.8	688.8	698.9	712.0
25°	695.8	693.4	694.3	695.2	691.3	687.3	684.3	681.2	684.3	687.3	699.2
30°	773.3	771.5	768.7	766.0	760.5	755.0	743.1	731.2	719.9	708.6	712.6
35°	864.2	864.8	871.5	878.2	878.8	879.4	858.7	837.9	811.4	784.9	770.5
40°	949.5	957.5	973.3	989.2	1003.5	1017.8	1011.1	1004.4	963.6	922.7	888.3
45°	1068.5	1075.2	1101.4	1127.6	1153.5	1179.5	1184.9	1190.4	1156.6	1122.7	1070.9
50°	1255.7	1270.9	1285.9	1300.8	1330.7	1360.6	1394.4	1428.3	1411.8	1395.3	1337.1
55°	1372.2	1380.1	1384.7	1389.2	1426.4	1463.6	1573.4	1683.2	1745.7	1808.2	1727.4
60°	990.4	983.7	998.0	1012.4	1081.6	1150.8	1373.4	1596.0	1893.3	2190.6	2234.5
65°	536.1	532.4	542.5	552.5	561.7	570.8	663.2	755.6	1315.8	1875.9	2398.2
70°	337.9	339.1	354.6	370.2	412.6	455.0	457.7	460.4	527.8	595.2	1524.9
75°	98.2	103.7	119.2	134.8	199.4	264.1	362.9	461.7	452.5	443.4	668.1
80°	11.6	13.4	18.9	24.4	41.8	59.2	116.5	173.8	254.6	335.4	319.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.2	1.2	1.2	22.6
90°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.1	3.1	3.4	3.7	4.1	4.4	4.4	4.4	4.4	4.4	4.4
100°	5.0	5.0	5.3	5.6	5.9	6.2	6.9	7.5	10.3	13.1	15.6
105°	13.1	13.7	15.3	16.8	19.6	22.4	26.2	29.9	34.6	39.3	42.1
110°	41.2	42.4	44.3	46.2	50.3	54.3	59.0	63.6	67.4	71.1	73.0
115°	87.3	86.7	89.2	91.7	95.4	99.2	102.0	104.8	106.7	108.6	110.1
120°	140.4	139.1	140.1	141.0	143.2	145.3	146.6	147.8	149.7	151.6	152.5
125°	185.9	183.4	184.1	184.7	185.6	186.6	188.4	190.3	191.9	193.4	194.4
130°	226.4	225.2	225.5	225.8	227.1	228.3	229.6	230.8	231.4	232.0	233.6
135°	267.6	265.8	265.8	265.8	267.7	269.5	270.5	271.4	272.0	272.6	274.5
140°	304.4	302.5	303.2	303.8	304.4	305.0	305.7	306.3	308.2	310.0	311.0
145°	343.1	340.6	340.0	339.4	340.4	341.3	342.2	343.1	343.4	343.7	345.3
150°	371.2	369.3	369.6	369.9	369.9	369.9	369.9	369.9	369.9	369.9	371.2
155°	392.4	389.9	389.9	389.9	390.6	391.2	392.1	393.1	392.4	391.8	391.2
160°	413.6	411.7	411.4	411.1	410.2	409.3	409.0	408.6	408.6	408.6	409.6
165°	424.8	423.0	422.4	421.7	421.7	421.7	420.8	419.8	419.8	419.8	419.5
170°	435.4	433.6	432.7	431.7	431.7	431.7	432.0	432.3	431.7	431.1	429.5
175°	436.7	435.4	435.1	434.8	434.2	433.6	432.4	431.1	430.8	430.4	430.4
180°	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7
5°	869.7	878.4	888.6	894.4	900.1	899.8	899.5	897.7	894.0	887.0	880.0
10°	806.8	824.8	844.6	865.7	886.7	894.0	901.4	895.3	881.8	857.5	833.1
15°	756.2	776.9	800.7	829.7	858.7	878.5	898.3	884.9	858.1	806.5	755.0
20°	725.1	746.1	770.2	805.9	841.6	873.6	905.6	884.3	836.1	753.5	670.8
25°	711.1	733.1	759.3	799.2	839.2	878.8	918.4	886.7	811.7	695.5	579.4
30°	716.6	734.2	756.8	798.3	839.8	881.8	923.9	879.4	779.4	630.3	481.2
35°	756.2	763.0	773.3	809.3	845.3	884.3	923.3	862.9	741.6	553.7	365.9
40°	853.8	844.0	837.3	864.5	891.6	919.4	947.1	861.7	706.2	478.1	250.0
45°	1019.1	999.4	984.9	1003.5	1022.1	1034.0	1045.9	917.2	703.8	426.3	148.8
50°	1278.9	1257.5	1235.6	1245.9	1256.3	1259.0	1261.8	1070.3	776.3	432.4	88.4
55°	1646.6	1618.8	1582.6	1578.0	1573.4	1584.7	1596.0	1362.4	966.0	517.2	68.3
60°	2278.4	2154.4	2022.3	1937.5	1852.7	1841.8	1830.8	1608.2	1104.4	580.6	56.7
65°	2920.6	2813.9	2593.7	2318.1	2042.4	2023.2	2004.0	1807.6	1168.5	603.5	38.4
70°	2454.7	3179.3	3757.3	3137.4	2517.5	2436.4	2355.3	2096.7	1157.5	590.0	22.6
75°	892.8	1845.5	2668.7	2493.7	2318.7	2020.4	1722.2	1415.5	585.5	299.7	14.0
80°	302.5	685.4	1023.9	883.4	742.8	567.5	392.1	269.6	62.2	35.1	7.9
85°	43.9	59.2	58.5	36.3	14.0	18.6	23.2	19.5	5.5	4.3	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
95°	4.4	4.7	5.0	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4
100°	18.1	17.1	16.2	15.3	14.3	13.1	11.8	11.8	11.8	13.1	14.3
105°	44.9	44.3	43.7	42.1	40.6	39.3	38.1	38.1	38.1	39.3	40.6
110°	74.9	75.2	75.5	74.9	74.2	73.3	72.4	73.0	72.4	73.3	74.2
115°	111.7	112.6	113.6	112.6	111.7	111.1	110.4	111.1	110.4	111.1	111.7
120°	153.4	154.7	155.9	154.4	152.8	152.2	151.6	151.6	151.6	152.2	152.8
125°	195.3	195.9	196.5	195.0	193.4	193.4	193.4	193.4	193.4	193.4	193.4
130°	235.2	236.4	237.7	237.7	237.7	237.1	236.4	237.1	236.4	237.1	237.7
135°	276.4	277.9	279.5	279.2	278.9	279.8	280.7	281.4	280.7	279.8	278.9
140°	311.9	312.5	313.2	313.8	314.4	316.0	317.6	318.8	317.6	316.0	314.4
145°	346.9	348.7	350.6	350.3	350.0	349.0	348.1	349.4	348.1	349.1	350.0
150°	372.4	373.4	374.3	375.2	376.2	377.1	378.0	380.5	378.0	377.1	376.2
155°	390.6	392.1	393.7	395.2	396.8	397.4	398.0	399.9	398.0	397.4	396.8
160°	410.5	412.4	414.2	413.3	412.4	412.1	411.7	415.5	411.7	412.1	412.4
165°	419.2	420.8	422.3	423.3	424.2	423.6	423.0	425.5	423.0	423.6	424.2
170°	427.9	428.9	429.8	431.4	432.9	433.6	434.2	437.3	434.2	433.6	432.9
175°	430.4	432.0	433.6	433.9	434.2	433.6	432.9	436.0	432.9	433.6	434.2
180°	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7
5°	869.7	859.3	845.0	830.6	815.1	799.5	789.8	780.0	769.3	758.7	749.5
10°	798.3	763.5	721.2	678.8	641.6	604.4	570.8	537.3	509.8	482.4	463.5
15°	691.0	626.9	558.0	489.1	425.4	361.6	309.8	258.0	223.5	189.1	167.7
20°	573.6	476.3	376.6	276.9	213.4	150.0	131.4	112.8	109.5	106.1	104.9
25°	446.7	314.1	218.9	123.8	110.1	96.4	93.3	90.3	87.5	84.8	82.6
30°	323.8	166.5	126.2	86.0	81.4	76.8	72.6	68.3	63.7	59.2	55.8
35°	227.8	89.6	79.9	70.1	64.6	59.2	53.7	48.2	43.3	38.4	35.7
40°	159.8	69.5	62.8	56.1	49.4	42.7	37.5	32.3	29.3	26.2	24.4
45°	103.4	57.9	50.3	42.7	36.3	29.9	26.2	22.6	19.8	17.1	15.2
50°	68.3	48.2	39.3	30.5	25.6	20.7	18.0	15.2	12.8	10.4	9.1
55°	53.1	37.8	29.0	20.1	17.1	14.0	11.9	9.8	7.9	6.1	5.2
60°	42.1	27.4	21.0	14.6	12.2	9.8	7.9	6.1	4.9	3.7	3.0
65°	27.7	17.1	13.7	10.4	8.5	6.7	5.5	4.3	3.4	2.4	2.1
70°	16.8	11.0	8.5	6.1	5.5	4.9	4.3	3.7	3.0	2.4	1.8
75°	10.7	7.3	6.4	5.5	5.2	4.9	4.3	3.7	3.7	3.7	3.4
80°	6.4	4.9	4.6	4.3	4.6	4.9	5.2	5.5	4.6	3.7	3.0
85°	2.7	2.4	2.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	4.7	5.0	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.1
100°	15.3	16.2	17.2	18.1	15.6	13.1	10.3	7.5	6.9	6.2	5.9
105°	42.1	43.7	44.3	44.9	42.1	39.3	34.6	29.9	26.2	22.4	19.6
110°	74.9	75.5	75.2	74.9	73.0	71.1	67.4	63.6	59.0	54.3	50.3
115°	112.6	113.6	112.6	111.7	110.1	108.6	106.7	104.8	102.0	99.2	95.4
120°	154.4	155.9	154.7	153.4	152.5	151.6	149.7	147.8	146.6	145.3	143.2
125°	195.0	196.5	195.9	195.3	194.4	193.4	191.9	190.3	188.4	186.6	185.6
130°	237.7	237.7	236.4	235.2	233.6	232.0	231.4	230.8	229.6	228.3	227.1
135°	279.2	279.5	278.0	276.4	274.5	272.6	272.0	271.4	270.5	269.5	267.7
140°	313.8	313.2	312.5	311.9	311.0	310.0	308.2	306.3	305.7	305.0	304.4
145°	350.3	350.6	348.8	346.9	345.3	343.7	343.4	343.1	342.2	341.3	340.4
150°	375.2	374.3	373.4	372.4	371.2	369.9	369.9	369.9	369.9	369.9	369.9
155°	395.2	393.7	392.1	390.6	391.2	391.8	392.4	393.1	392.1	391.2	390.6
160°	413.3	414.2	412.4	410.5	409.6	408.6	408.6	408.6	409.0	409.3	410.2
165°	423.3	422.3	420.8	419.2	419.5	419.8	419.8	419.8	420.8	421.7	421.7
170°	431.4	429.8	428.9	427.9	429.5	431.1	431.7	432.3	432.0	431.7	431.7
175°	433.9	433.6	432.0	430.4	430.4	430.4	430.8	431.1	432.4	433.6	434.2
180°	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7



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CATALOG NUMBER: ENV-SA1B-740-U-SL2-HSS-ULG

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	897.7	897.7	897.7	897.7
5°	740.4	734.6	728.8	730.0
10°	444.6	436.7	428.7	415.3
15°	146.4	141.5	136.6	137.8
20°	103.7	103.1	102.5	101.8
25°	80.5	79.3	78.1	78.1
30°	52.4	50.9	49.4	48.2
35°	32.9	31.7	30.5	29.9
40°	22.6	21.3	20.1	20.1
45°	13.4	12.5	11.6	11.6
50°	7.9	7.3	6.7	6.7
55°	4.3	4.0	3.7	3.0
60°	2.4	2.1	1.8	1.8
65°	1.8	1.8	1.8	1.8
70°	1.2	1.2	1.2	1.2
75°	3.0	2.7	2.4	2.4
80°	2.4	2.1	1.8	1.8
85°	1.8	1.8	1.8	1.2
90°	0.0	0.0	0.0	0.0
95°	3.7	3.4	3.1	3.1
100°	5.6	5.3	5.0	5.0
105°	16.8	15.3	13.7	13.1
110°	46.2	44.3	42.4	41.2
115°	91.7	89.2	86.7	87.3
120°	141.0	140.1	139.1	140.4
125°	184.7	184.1	183.4	185.9
130°	225.8	225.5	225.2	226.4
135°	265.8	265.8	265.8	267.6
140°	303.8	303.2	302.5	304.4
145°	339.4	340.0	340.6	343.1
150°	369.9	369.6	369.3	371.2
155°	389.9	389.9	389.9	392.4
160°	411.1	411.4	411.7	413.6
165°	421.7	422.4	423.0	424.8
170°	431.7	432.7	433.6	435.4
175°	434.8	435.1	435.4	436.7
180°	436.7	436.7	436.7	436.7

(END OF REPORT)