

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: McGRAW-EDISON

Report Number: P227133

Luminaire Tested: **IST-AF-XXX-LED-E1-SL4-XXB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227133  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35947)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: IST-AF-XXX-LED-E1-SL4-XXB  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY  
BACKPACK BOX  
LIGHT SQUARE WITH ACCUED OPTICS-TYPE IV W/SPILL CONTROL  
Light Source: (16) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 608 lumens  
Efficiency: N/A  
Efficacy: 46.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U1 - G0

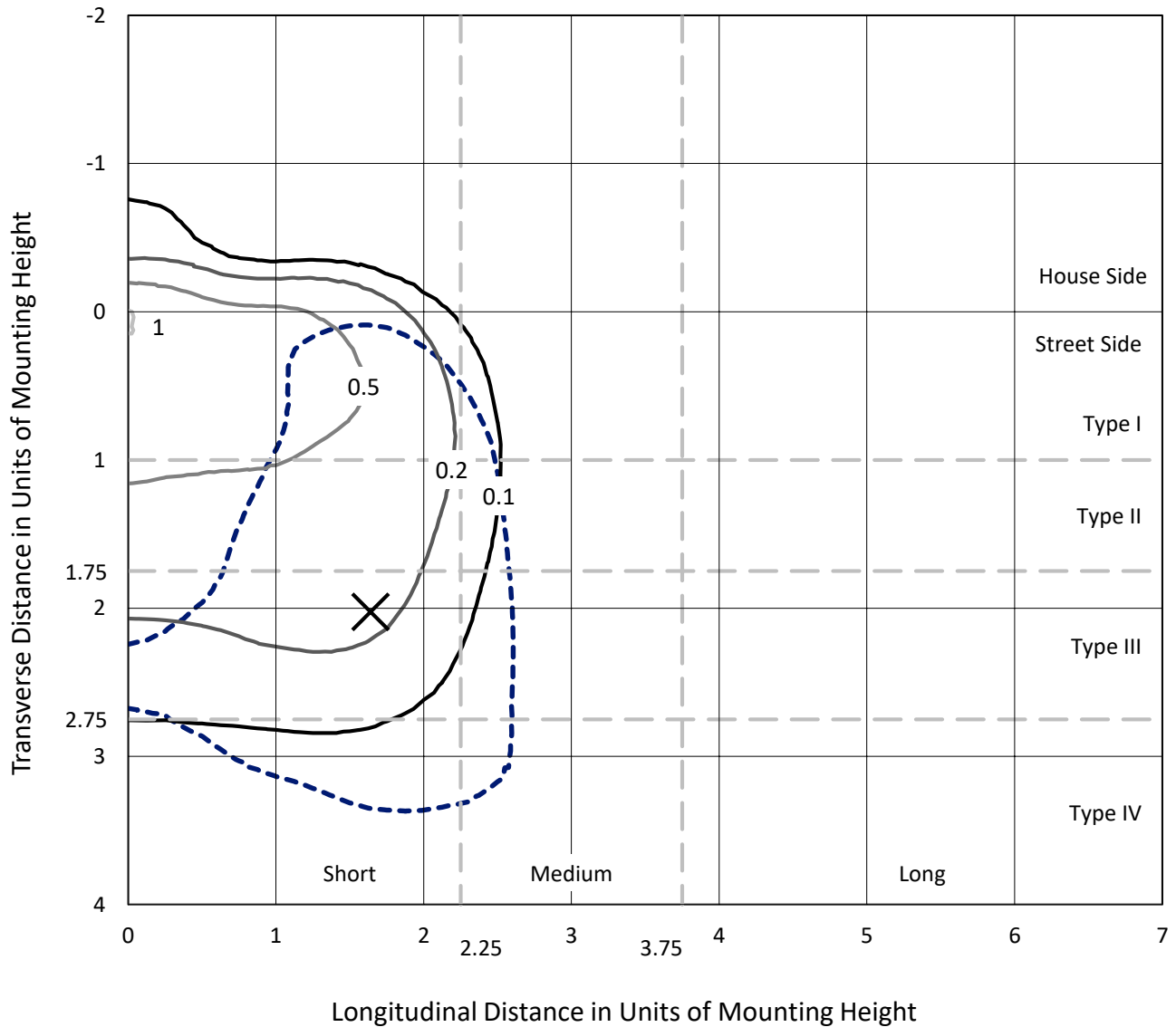
Input Watts (W): 13  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

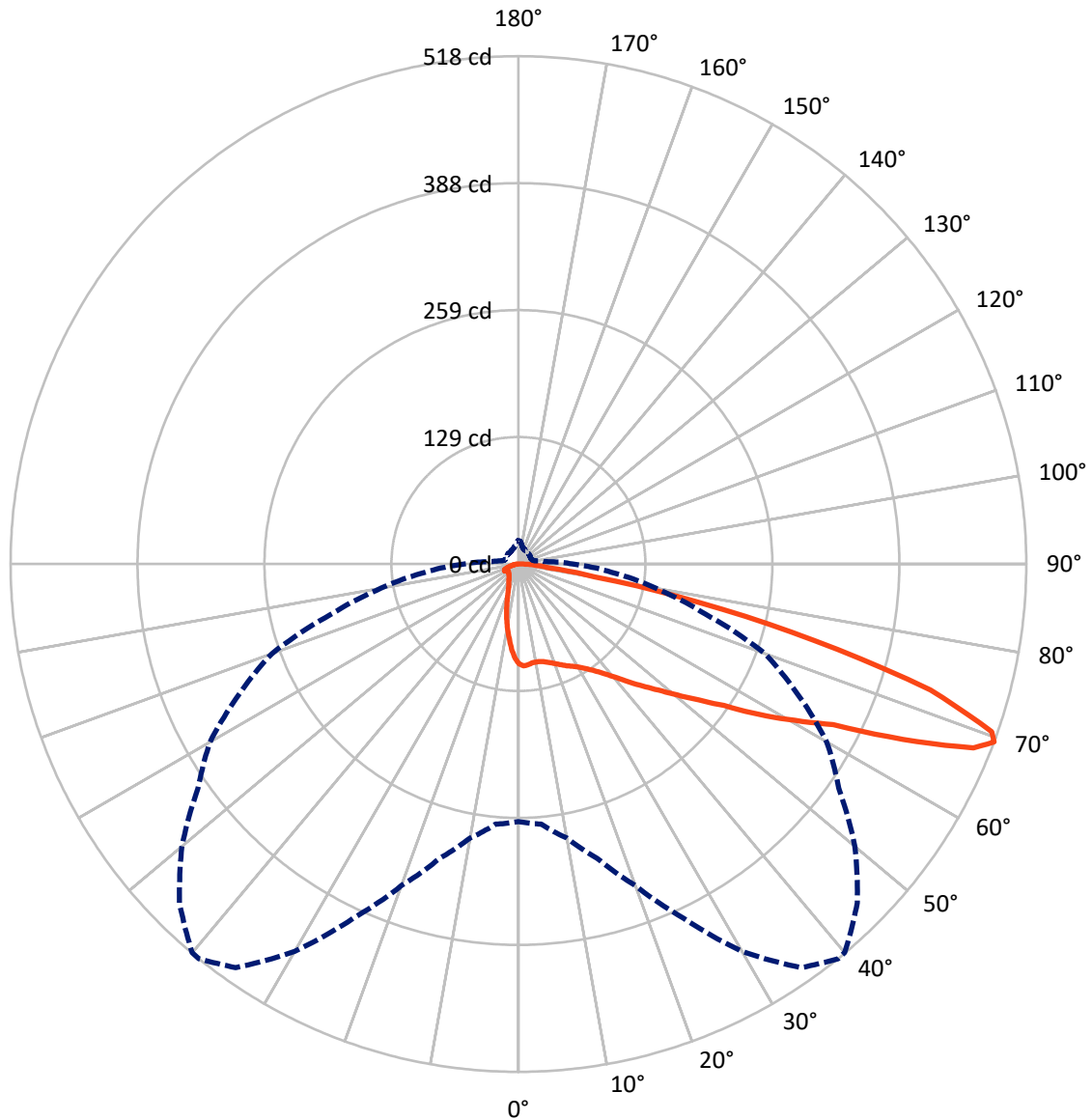
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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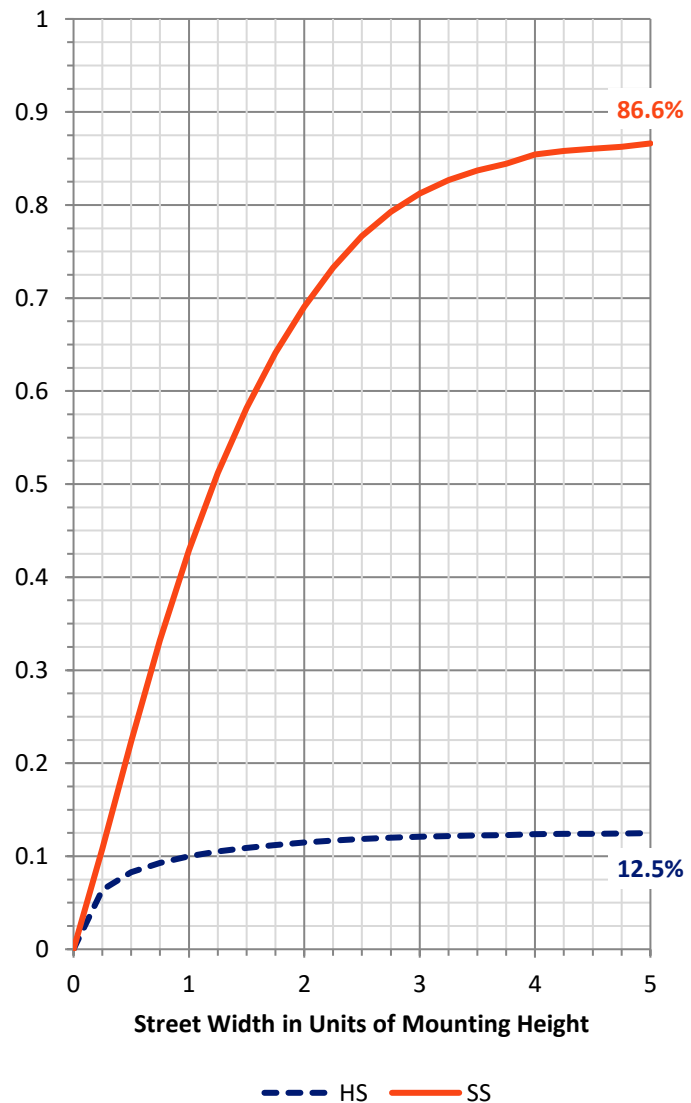
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	76.9	0.0	76.9
	% Fixture	12.7	0.0	12.7
<b>Street Side</b>	Lumens	530.9	0.2	531.0
	% Fixture	87.3	0.0	87.3
<b>Total</b>	Lumens	607.8	0.2	608.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.8	1.4
10°-20°	22.2	3.6
20°-30°	34.5	5.7
30°-40°	52.1	8.6
40°-50°	83.4	13.7
50°-60°	131.1	21.6
60°-70°	176.6	29.0
70°-80°	87.6	14.4
80°-90°	11.5	1.9
90°-100°	0.2	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	607.8	100.0
0°-180°	608.0	100.0

**Coefficient of Utilization**



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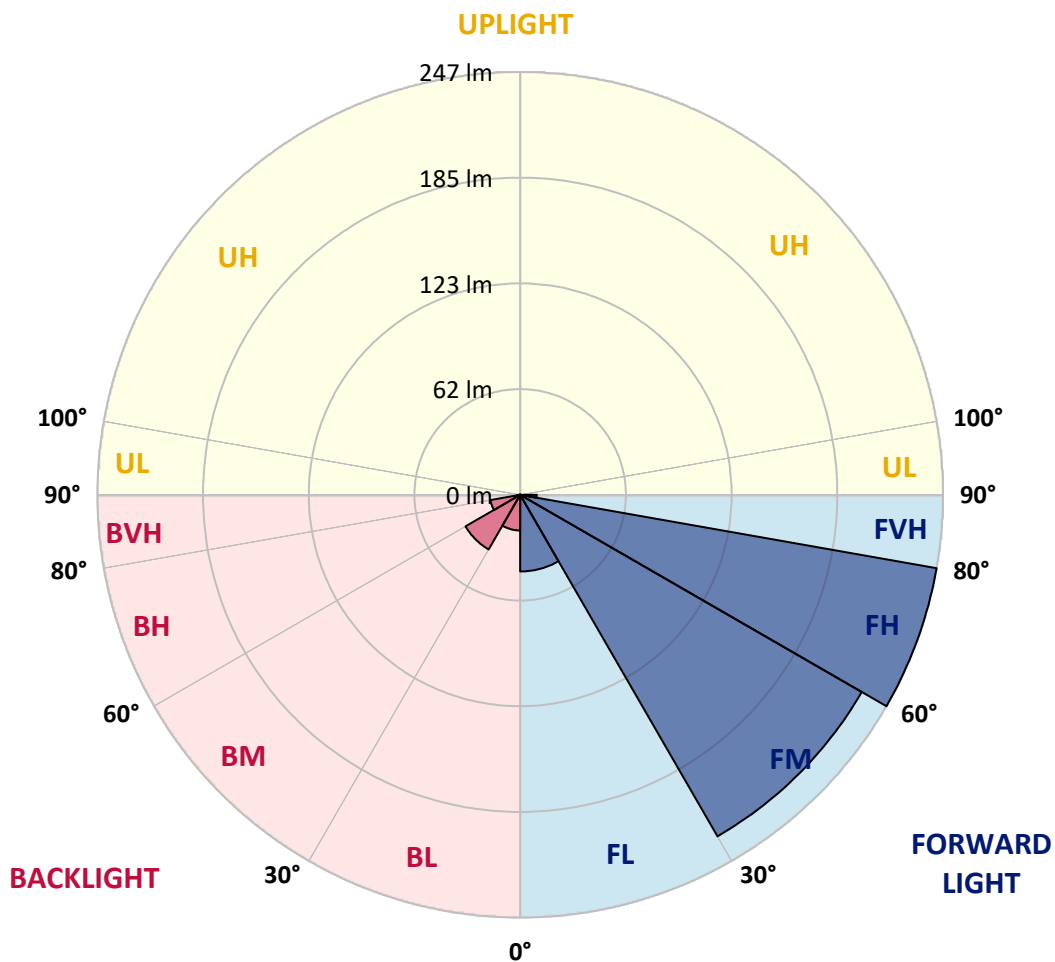
CATALOG NUMBER: IST-AF-XXX-LED-E1-SL4-XXB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	44.7	7.4			
FM	(30°-60°)	229.9	37.8			
FH	(60°-80°)	246.5	40.6			G0/660
FVH	(80°-90°)	9.7	1.6			G0/10
BL	(0°-30°)	20.8	3.4	B0/110		
BM	(30°-60°)	36.7	6.0	B0/220		
BH	(60°-80°)	17.6	2.9	B0/110		G0/110
BVH	(80°-90°)	1.8	0.3			G0/10
UL	(90°-100°)	0.2	0.0		U1/10	
UH	(100°-180°)	0.0	0.0		U1/10	

**BUG Rating: B0-U1-G0**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
0°	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8
2.5°	104.3	104.3	104.3	104.4	104.1	104.1	104.2	103.8	104.0	103.9	103.4
5°	104.4	104.5	104.4	104.5	104.1	103.9	103.5	103.0	103.2	103.1	102.4
7.5°	104.0	104.1	103.9	104.0	103.4	103.0	102.4	102.0	101.7	101.6	100.8
10°	102.9	103.2	102.8	103.1	102.6	102.2	101.9	101.6	101.4	101.3	100.2
12.5°	101.4	101.6	101.6	102.0	102.0	102.1	102.1	101.8	101.9	101.8	101.1
15°	99.8	100.6	101.3	101.6	102.4	102.9	103.3	103.2	103.5	103.4	102.9
17.5°	99.8	100.5	101.6	102.9	104.3	105.1	105.7	105.7	105.8	105.6	104.8
20°	100.2	101.4	103.3	105.5	107.2	108.6	109.0	108.9	108.5	108.5	107.1
22.5°	103.5	104.2	106.4	108.7	111.2	112.6	112.7	112.4	111.6	111.4	109.8
25°	108.1	108.9	110.9	114.0	115.8	116.9	116.6	115.6	114.9	114.2	112.4
27.5°	115.4	115.9	117.9	120.0	121.0	121.4	120.3	118.9	118.0	117.7	115.4
30°	122.8	123.6	125.1	126.4	127.3	126.1	124.2	122.7	121.8	121.6	119.5
32.5°	131.9	132.0	133.0	133.3	133.4	131.4	128.9	127.4	127.1	126.6	125.0
35°	140.1	140.6	140.5	140.3	139.4	137.0	134.8	133.9	133.6	133.5	132.2
37.5°	147.5	148.3	147.8	146.9	145.9	143.8	141.6	140.6	141.6	141.0	141.3
40°	154.7	154.7	154.2	153.6	152.3	150.5	149.7	149.8	151.4	151.7	152.1
42.5°	160.9	160.8	160.2	159.9	159.7	159.3	158.9	160.7	163.8	164.4	165.3
45°	167.8	167.7	165.4	166.1	167.6	167.9	169.2	173.6	177.3	177.6	179.4
47.5°	174.3	173.6	171.3	172.2	176.2	178.2	180.4	186.6	191.8	192.9	198.1
50°	181.3	180.4	178.1	179.5	185.1	188.9	194.3	202.7	210.0	211.4	218.3
52.5°	188.4	188.3	186.5	188.7	195.6	203.4	211.8	221.3	230.1	232.0	242.0
55°	197.1	196.6	195.9	198.7	208.3	218.7	231.9	244.9	254.5	257.8	268.0
57.5°	206.9	206.7	206.8	212.6	224.1	240.1	256.1	273.7	289.5	291.8	301.4
60°	215.4	215.7	218.1	227.0	241.6	263.1	285.7	309.5	323.6	326.0	335.3
62.5°	225.8	228.0	233.0	244.4	261.6	287.7	316.9	342.1	360.2	365.2	382.7
65°	250.6	252.4	261.8	275.5	297.4	330.7	364.4	401.0	430.8	435.4	450.4
67.5°	268.7	273.3	288.0	310.4	342.1	384.7	430.9	475.2	500.3	502.4	491.8
69°	262.5	266.2	283.6	310.6	348.8	398.4	455.8	502.2	517.6	517.2	488.5
70°	252.8	256.2	275.4	301.7	343.2	396.8	456.2	502.3	511.7	508.1	475.3
72.5°	211.8	214.8	232.7	260.1	300.4	353.7	409.7	441.1	439.2	436.2	382.0
75°	132.2	132.1	147.7	163.6	194.9	248.8	290.4	315.7	311.6	309.3	245.2
77.5°	49.4	52.9	58.6	75.7	90.1	119.2	152.8	181.0	188.7	178.8	132.1
80°	25.8	27.6	31.4	37.4	43.1	49.2	59.2	76.2	78.9	73.6	53.3
82.5°	20.4	22.6	26.4	31.5	35.4	33.0	31.2	32.2	32.0	30.6	27.1
85°	15.3	18.1	24.1	29.4	35.0	29.6	23.6	20.7	18.3	18.4	19.6
87.5°	7.7	9.9	19.0	25.7	30.5	19.6	15.3	12.0	9.9	9.6	12.8
90°	2.4	2.4	3.9	5.0	7.0	3.5	3.4	2.6	1.8	1.8	3.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: IST-AF-XXX-LED-E1-SL4-XXB

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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CATALOG NUMBER: IST-AF-XXX-LED-E1-SL4-XXB

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8
2.5°	103.0	103.0	102.8	102.7	102.4	102.0	101.7	101.3	101.0	100.5	99.8
5°	101.7	101.4	101.2	100.8	100.1	99.6	99.0	98.4	97.6	96.6	95.5
7.5°	100.0	99.4	98.8	98.6	97.9	97.3	96.6	95.6	94.5	92.8	91.3
10°	99.3	98.8	98.2	97.8	96.9	96.2	95.4	94.1	92.8	90.4	87.8
12.5°	100.0	99.4	98.8	98.2	97.4	96.6	95.5	93.9	92.1	89.0	85.8
15°	101.7	101.2	100.1	99.4	98.4	97.7	96.2	94.4	91.7	87.9	83.8
17.5°	103.6	102.7	101.8	100.8	99.7	98.8	97.3	95.0	91.6	87.2	81.8
20°	105.4	104.3	103.0	102.2	101.3	99.9	98.3	95.5	91.3	85.5	79.7
22.5°	107.4	106.2	104.6	103.8	103.0	101.9	99.9	96.4	91.3	84.7	77.3
25°	110.1	108.4	107.0	106.1	105.6	104.8	102.4	98.5	92.1	84.2	75.4
27.5°	113.2	111.1	109.9	109.3	109.1	108.5	106.2	101.3	93.6	84.2	73.6
30°	117.0	115.2	113.4	113.4	114.7	114.3	111.6	105.5	96.1	84.5	72.1
32.5°	122.2	120.4	119.4	120.4	121.6	122.0	119.0	111.5	100.1	85.8	70.8
35°	129.9	128.8	128.1	129.5	132.2	133.1	129.4	120.5	106.1	88.5	70.0
37.5°	140.1	139.2	138.3	140.9	145.8	147.7	142.3	130.8	114.6	93.0	69.6
40°	151.7	151.8	152.8	157.9	162.6	166.7	160.6	146.5	126.2	99.2	70.0
42.5°	165.5	166.6	170.0	177.1	186.1	189.3	183.4	165.5	140.7	106.9	71.0
45°	182.7	185.6	191.3	201.8	212.8	217.8	209.4	189.3	159.0	119.0	73.8
47.5°	201.0	207.2	217.0	229.8	242.4	245.7	235.3	210.9	176.8	129.7	77.9
50°	224.3	232.1	241.7	257.2	270.6	272.5	258.8	231.0	192.4	139.1	82.0
52.5°	246.2	256.7	268.9	286.8	300.4	298.0	280.2	248.9	204.7	145.6	84.3
55°	276.0	286.8	300.7	316.3	329.8	324.0	299.6	264.0	214.6	150.3	84.9
57.5°	310.1	318.3	331.9	347.9	356.8	346.6	318.8	278.9	224.0	150.4	79.5
60°	343.5	353.1	368.2	383.8	388.7	371.2	332.2	281.1	214.7	134.2	63.6
62.5°	393.0	402.7	410.4	413.0	404.1	368.7	316.6	257.2	185.1	105.9	45.1
65°	448.4	437.3	422.6	408.8	384.6	330.9	273.0	211.2	143.6	70.8	31.1
67.5°	462.9	429.2	397.2	366.4	321.4	263.5	205.9	148.6	92.2	40.3	21.1
69°	447.7	398.6	363.0	314.1	267.6	197.2	141.9	95.2	55.0	28.0	17.7
70°	420.1	369.0	320.8	268.5	207.2	150.7	94.3	62.4	35.9	20.5	15.9
72.5°	317.0	253.5	195.4	126.8	77.3	43.0	30.2	21.6	17.1	15.0	13.6
75°	183.3	122.0	79.9	42.7	25.3	18.7	16.4	14.6	13.5	13.0	11.9
77.5°	77.3	48.4	32.7	23.9	17.0	14.5	12.6	11.7	11.6	11.3	10.1
80°	35.2	30.2	25.8	18.1	12.9	11.0	9.7	9.5	9.7	9.4	8.3
82.5°	26.2	25.8	21.5	13.9	9.8	7.4	6.0	6.3	7.1	7.7	6.8
85°	21.8	21.8	18.1	10.3	6.5	4.7	4.6	5.2	5.9	6.4	5.4
87.5°	20.0	19.2	10.3	5.3	3.8	3.1	2.9	2.6	2.6	4.4	3.8
90°	1.9	0.9	0.5	0.4	0.5	0.4	0.6	0.5	0.5	0.5	0.5
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227133

CATALOG NUMBER: IST-AF-XXX-LED-E1-SL4-XXB

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227133

CATALOG NUMBER: IST-AF-XXX-LED-E1-SL4-XXB

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8	101.8
2.5°	99.3	98.9	98.0	97.8	97.5	97.1	97.0	96.5	95.5	95.3	95.4
5°	94.8	93.2	92.2	91.2	90.5	88.8	88.1	87.4	85.9	85.5	84.9
7.5°	89.5	87.7	85.4	83.9	82.0	80.1	78.7	76.7	75.3	74.4	72.8
10°	85.3	82.8	79.9	76.7	74.3	71.4	69.6	67.4	65.1	62.8	61.3
12.5°	82.1	78.7	74.5	70.8	67.2	64.1	60.8	57.7	54.7	51.8	49.2
15°	79.6	75.2	70.0	65.3	60.9	56.4	52.6	48.4	44.6	42.0	38.8
17.5°	76.8	71.1	65.0	59.4	53.8	49.0	44.3	39.9	36.3	32.9	30.3
20°	73.6	66.6	59.8	53.5	47.1	41.6	36.8	32.5	29.2	26.4	24.4
22.5°	69.8	61.7	53.9	46.9	40.4	35.1	30.6	27.4	24.9	23.4	22.8
25°	66.1	56.9	48.1	40.3	34.0	29.4	26.4	23.6	22.4	21.8	21.8
27.5°	62.7	51.9	42.1	34.7	28.4	24.9	22.5	21.4	20.9	20.9	21.1
30°	59.6	47.0	36.5	28.9	23.9	21.3	20.0	19.6	19.7	20.2	20.6
32.5°	56.0	42.2	31.7	24.9	20.9	19.0	18.1	18.1	18.6	19.3	20.0
35°	52.1	37.2	27.4	21.8	18.6	17.3	16.7	16.8	17.5	18.3	19.0
37.5°	48.7	33.1	24.1	19.4	17.1	16.2	15.7	15.8	16.3	17.4	18.2
40°	45.2	29.7	21.5	18.1	16.2	15.3	15.0	14.9	15.3	16.3	17.4
42.5°	42.2	26.7	19.9	17.1	15.5	14.8	14.4	14.4	14.6	15.3	16.5
45°	40.4	25.0	18.8	16.4	15.1	14.4	14.0	13.8	14.1	14.6	15.5
47.5°	40.4	24.0	18.1	15.9	14.7	14.1	13.6	13.5	13.6	14.1	15.1
50°	41.8	24.2	18.1	15.7	14.5	13.7	13.2	13.2	13.4	14.1	14.9
52.5°	43.1	24.7	18.3	15.9	14.5	13.5	12.9	12.8	13.1	13.8	14.5
55°	42.9	24.7	18.6	16.2	14.8	13.6	12.8	12.7	12.9	13.6	14.3
57.5°	38.3	23.2	18.3	16.4	15.2	14.1	13.3	13.0	13.2	13.8	14.4
60°	31.0	20.7	17.6	16.4	15.8	15.0	14.2	14.0	14.1	14.7	15.3
62.5°	24.2	18.3	16.6	16.3	16.1	15.7	15.3	15.2	15.2	15.7	16.3
65°	19.7	16.6	15.8	15.9	16.1	16.0	15.9	15.8	15.8	16.1	16.7
67.5°	16.5	14.9	14.7	15.0	15.2	15.3	15.3	15.3	15.3	15.7	16.4
69°	15.0	14.0	13.8	14.0	14.4	14.5	14.7	14.6	14.7	15.0	15.7
70°	14.1	13.3	13.1	13.4	13.7	13.8	14.0	13.9	14.0	14.3	15.0
72.5°	12.3	11.4	11.0	11.3	11.6	11.6	11.9	12.0	11.8	11.9	12.4
75°	10.4	9.5	9.0	9.1	9.1	9.1	9.3	9.3	9.1	9.0	9.1
77.5°	8.8	7.7	7.1	7.1	7.1	7.0	6.8	6.9	7.0	6.9	7.0
80°	7.0	6.0	5.4	5.4	5.4	5.2	5.1	5.1	5.3	5.5	5.4
82.5°	5.3	4.4	4.2	4.1	4.1	3.9	3.9	4.1	4.0	4.1	4.2
85°	3.9	3.2	2.9	3.0	2.9	2.7	2.8	3.1	3.1	3.0	3.2
87.5°	2.4	1.9	1.8	1.9	1.7	1.4	1.4	1.4	1.6	1.5	1.7
90°	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227133  
 CATALOG NUMBER: IST-AF-XXX-LED-E1-SL4-XXB

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

NUMBER: P227133  
 NUMBER: IST-AF-XXX-LED-E1-SL4-XXB

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

160°	165°	170°	175°	180°
101.8	101.8	101.8	101.8	101.8
94.7	95.0	93.7	94.3	93.9
84.4	83.9	83.8	83.5	82.9
72.2	71.8	70.7	71.0	70.2
59.7	59.6	57.4	57.5	56.5
48.2	46.3	45.5	44.2	44.9
37.3	35.8	34.0	33.5	34.2
28.1	26.6	25.8	25.0	24.7
23.3	22.4	21.9	21.6	21.4
22.5	22.3	22.2	22.0	21.9
22.0	22.2	22.2	22.2	22.0
21.5	21.9	22.0	21.9	21.7
21.0	21.3	21.3	21.2	20.9
20.4	20.7	20.7	20.6	20.4
19.5	19.7	19.8	19.8	19.9
18.9	19.1	19.3	19.5	19.8
18.2	18.5	18.6	19.0	19.4
17.4	17.8	18.0	18.2	18.6
16.5	17.0	17.1	17.5	17.9
16.1	16.5	16.5	16.8	17.1
15.5	15.8	15.7	15.9	16.0
15.1	15.3	15.2	15.3	15.4
14.7	14.9	15.1	15.3	15.3
14.9	15.2	15.3	15.5	15.7
15.8	16.2	16.6	17.0	17.3
16.7	17.2	18.1	19.8	20.6
17.2	17.9	19.9	23.0	23.8
16.9	17.8	20.3	23.5	24.6
<b>16.3</b>	<b>17.0</b>	<b>19.6</b>	<b>23.0</b>	<b>23.9</b>
15.4	16.2	18.8	22.5	23.4
12.5	12.9	15.9	19.3	19.9
9.2	9.5	11.8	13.1	13.0
7.1	7.5	8.3	8.4	8.3
5.6	5.8	6.2	6.2	6.3
4.3	4.4	4.6	4.4	4.3
3.3	3.2	3.1	3.0	2.9
1.8	1.8	1.5	1.4	1.3
0.2	0.3	0.3	0.2	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0

**CANDELA DISTRIBUTION**

	160°
110°	0.0
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

