

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: P227263

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35948)
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-SLL-XXB
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY
BACKPACK BOX
LIGHT SQUARE WITH ACCUED OPTICS-90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 586.3 lumens
Efficiency: N/A
Efficacy: 45.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U1 - G1

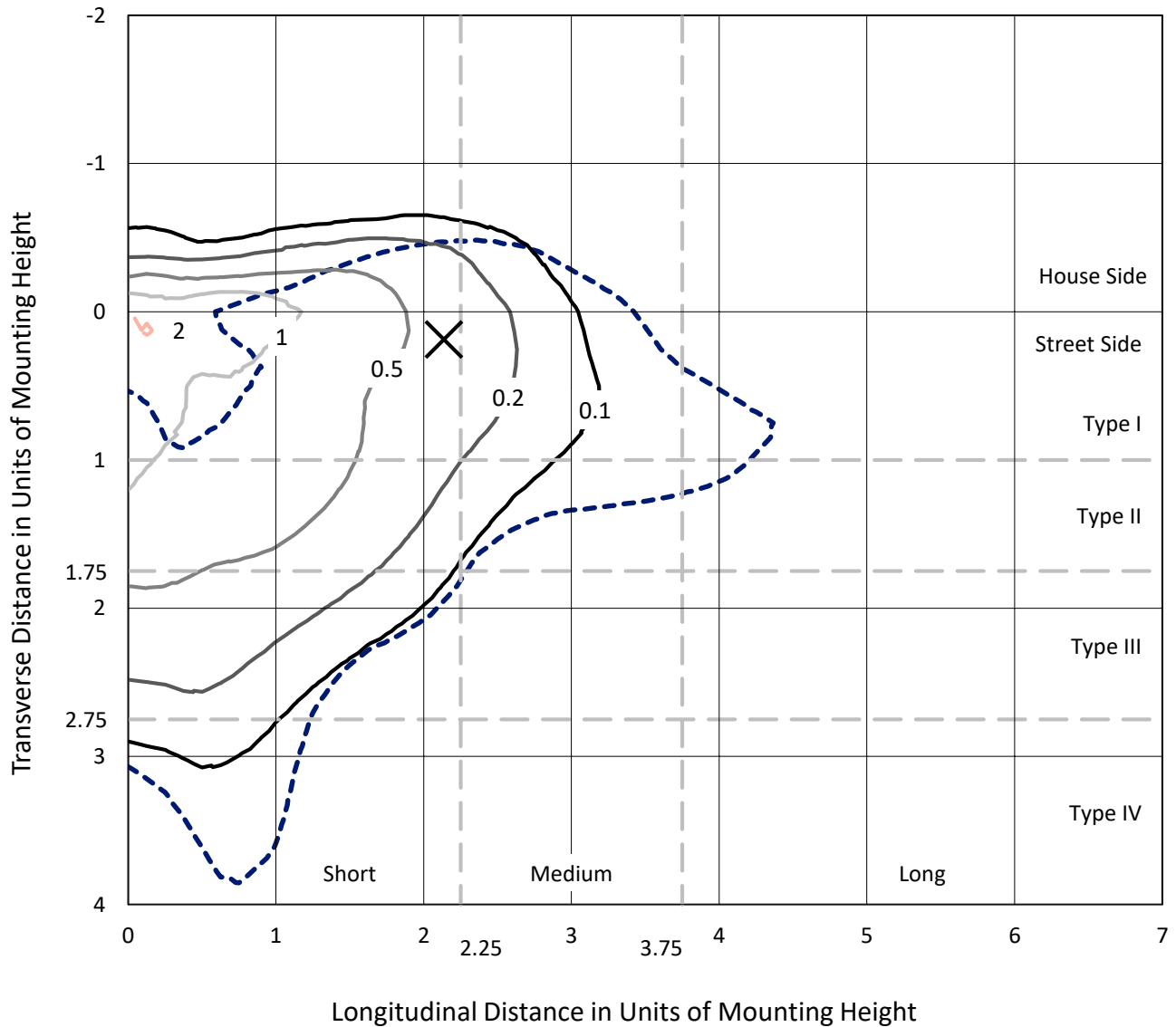
Input Watts (W): 13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

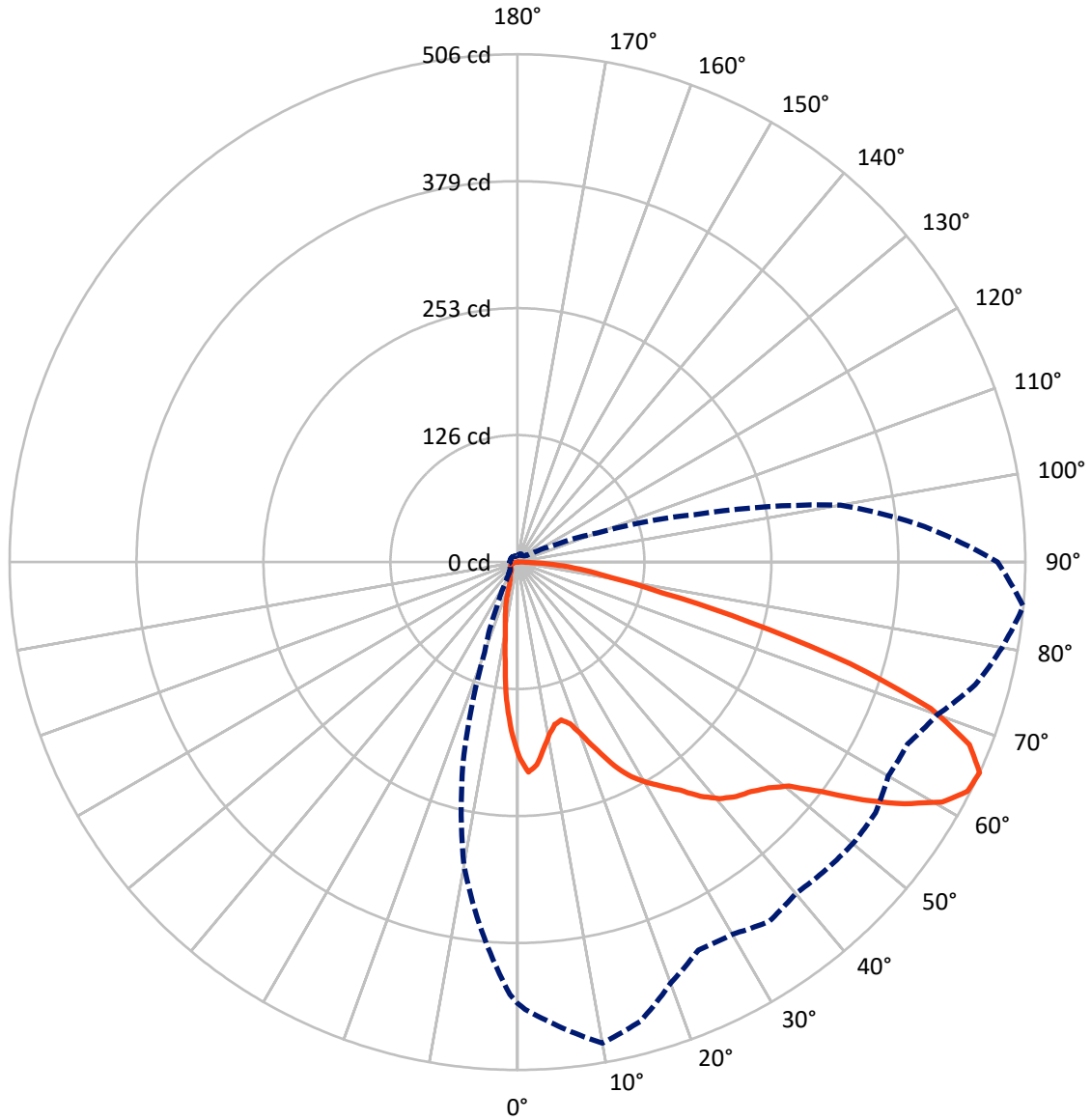
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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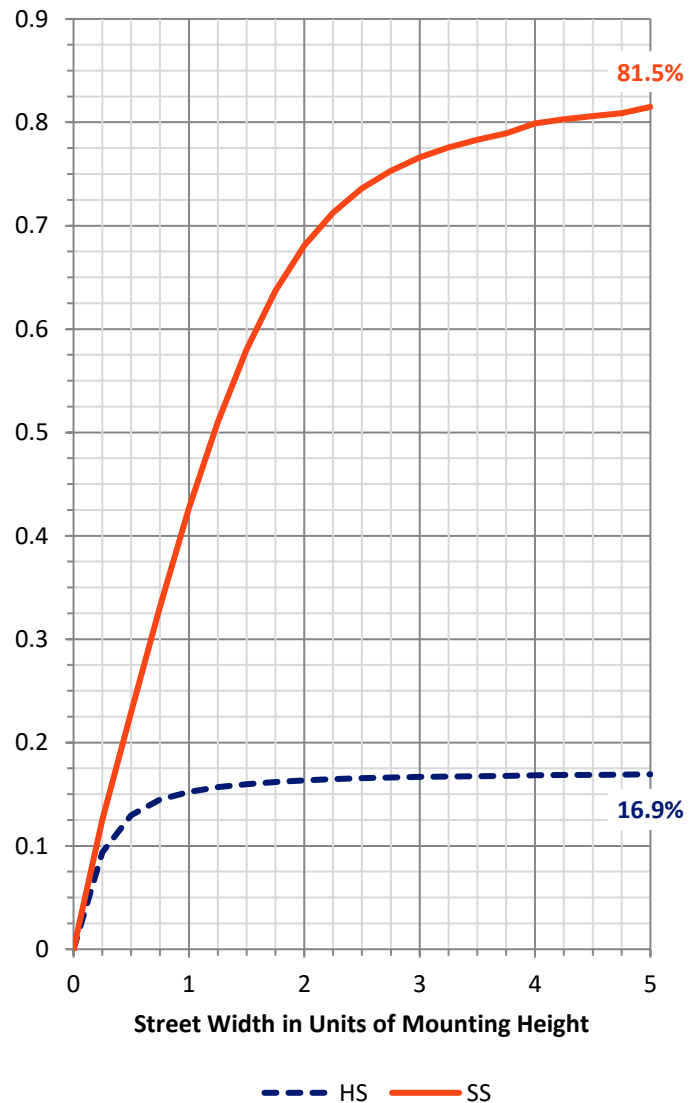
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	100.6	0.0	100.6
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	485.7	0.0	485.7
	% Fixture	82.8	0.0	82.8
Total	Lumens	586.2	0.0	586.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.3	2.4
10°-20°	27.6	4.7
20°-30°	39.4	6.7
30°-40°	57.1	9.7
40°-50°	81.7	13.9
50°-60°	125.4	21.4
60°-70°	145.2	24.8
70°-80°	74.1	12.6
80°-90°	21.4	3.6
90°-100°	0.0	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°	586.2	100.0
0°-180°	586.3	100.0



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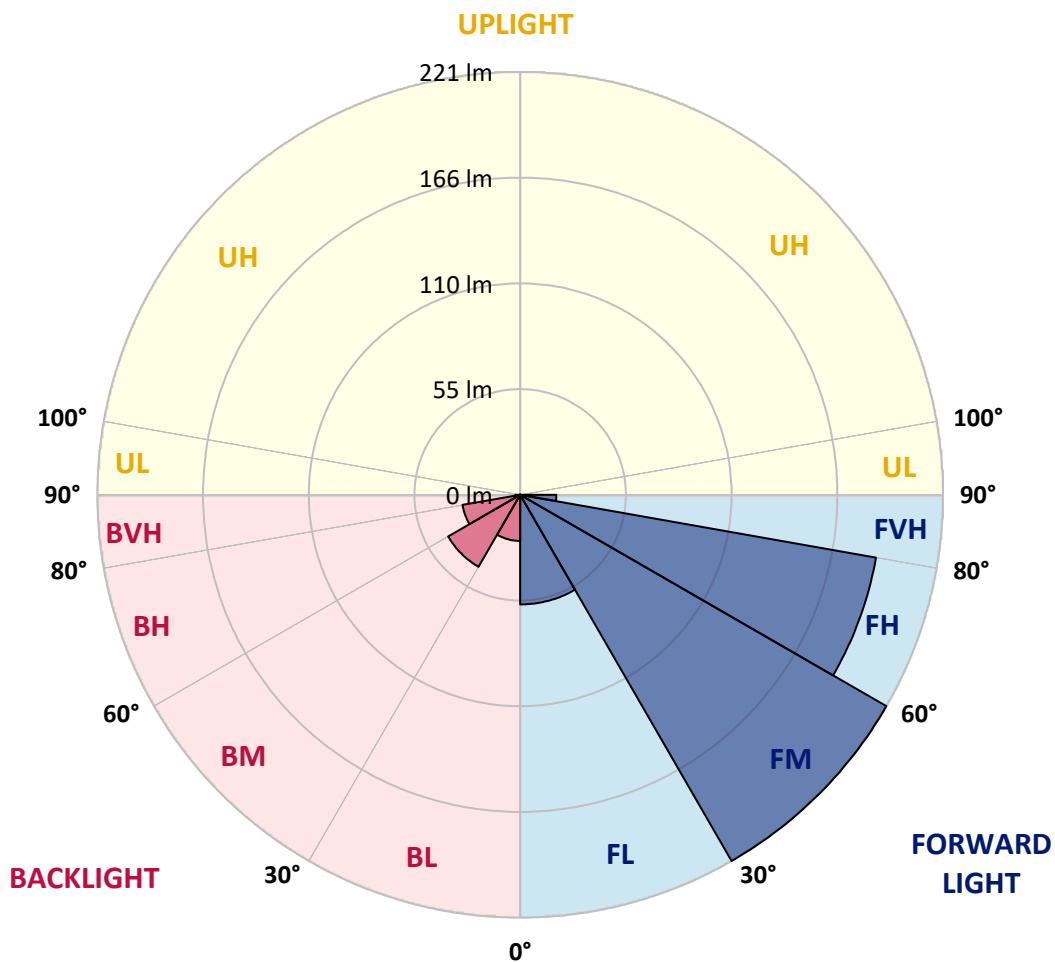
CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	57.3	9.8			
FM	(30°-60°)	220.8	37.7			
FH	(60°-80°)	188.7	32.2			G0/660
FVH	(80°-90°)	18.9	3.2			G1/100
BL	(0°-30°)	24.1	4.1	B0/110		
BM	(30°-60°)	43.4	7.4	B0/220		
BH	(60°-80°)	30.6	5.2	B0/110		G0/110
BVH	(80°-90°)	2.5	0.4			G0/10
UL	(90°-100°)	0.0	0.0		U1/10	
UH	(100°-180°)	0.0	0.0		U1/10	

BUG Rating: B0-U1-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	10°	15°	20°	25°	30°	35°	40°	45°
0°	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6
2.5°	200.5	200.7	203.5	206.1	209.5	209.0	211.8	213.8	215.6	215.9	217.4
5°	188.2	190.2	196.4	201.7	208.5	213.7	219.3	223.7	227.0	230.1	230.5
7.5°	171.0	172.6	179.7	188.1	197.8	204.7	213.2	220.7	225.9	230.8	231.8
10°	156.4	157.7	165.7	176.6	185.1	194.1	202.9	208.9	215.6	219.9	222.0
12.5°	149.2	151.0	158.6	168.4	177.1	185.8	192.4	197.6	201.4	202.2	202.9
15°	152.0	152.9	161.3	170.1	177.0	181.4	183.1	186.3	186.0	187.5	187.8
17.5°	163.2	162.8	171.7	177.8	181.2	180.7	177.9	176.3	173.3	172.4	174.9
20°	182.3	183.7	189.5	193.1	189.8	181.8	174.1	168.9	164.8	163.4	163.1
22.5°	204.7	206.5	212.7	210.7	201.9	187.4	173.5	165.2	160.0	158.6	157.9
25°	228.2	229.3	232.5	225.9	213.5	194.6	177.7	165.9	159.2	156.9	156.7
27.5°	247.1	248.4	246.8	239.2	221.3	202.6	183.4	169.5	160.6	158.5	157.4
30°	262.6	263.2	258.3	248.7	231.0	211.6	190.9	175.7	165.3	160.4	159.7
32.5°	280.0	279.6	270.1	256.9	239.2	219.7	199.5	182.7	169.9	163.9	162.8
35°	299.0	295.6	278.8	264.8	244.8	226.0	207.2	190.2	177.2	169.2	167.9
37.5°	316.0	312.4	289.9	271.1	250.4	230.8	213.4	199.7	188.3	181.1	180.4
40°	329.2	324.9	298.4	275.4	253.2	234.4	220.7	211.8	204.2	198.4	198.4
42.5°	339.9	335.1	306.7	280.3	255.6	239.8	232.6	229.6	228.0	224.7	226.0
45°	350.2	345.3	313.4	283.5	261.2	250.3	251.2	254.0	258.7	256.9	258.5
47.5°	359.9	355.2	321.1	288.5	271.8	269.2	274.4	285.0	294.3	301.6	306.8
50°	376.2	370.6	334.9	303.3	288.6	289.9	304.6	325.6	340.6	347.4	347.0
52.5°	407.3	399.4	364.7	330.9	312.5	319.7	337.2	363.5	383.2	388.4	390.5
55°	445.4	439.1	407.5	367.5	354.1	356.7	378.4	408.2	423.4	428.8	430.6
57.5°	467.7	466.0	446.2	406.7	393.7	392.8	421.0	445.5	458.6	463.7	462.2
59°	472.9	473.4	462.2	434.4	416.6	414.5	443.2	465.9	476.8	478.4	477.6
60°	472.4	475.2	473.7	449.6	431.2	428.4	452.7	474.1	483.3	485.8	483.0
62.5°	462.3	467.0	480.1	477.5	464.0	449.9	461.4	476.9	482.8	480.5	478.4
65°	439.2	445.4	463.6	486.3	473.3	446.0	426.1	427.8	436.8	430.9	433.7
67.5°	399.3	406.4	416.0	467.6	448.6	402.9	368.5	351.6	347.4	353.1	362.2
70°	324.8	329.4	353.9	426.7	393.9	331.2	288.0	265.5	258.0	271.2	280.5
72.5°	229.0	236.0	268.2	353.1	324.1	265.3	218.0	197.2	189.8	190.3	198.5
75°	139.4	148.7	187.4	279.2	255.4	203.3	166.0	151.2	148.8	147.6	146.2
77.5°	92.0	95.5	123.3	192.7	172.3	144.5	124.6	130.7	137.5	139.0	140.8
80°	62.4	63.4	79.9	135.1	113.4	106.8	100.8	115.2	128.1	130.4	129.1
82.5°	38.4	41.6	55.8	91.1	90.4	87.4	79.6	90.8	99.4	101.0	103.6
85°	13.3	13.9	34.3	80.5	92.0	93.0	65.6	51.8	58.2	57.1	41.0
87.5°	5.7	6.4	10.6	53.9	62.3	51.5	30.0	26.6	20.6	11.6	11.2
90°	0.4	0.4	0.3	0.5	1.4	1.0	0.9	0.3	0.0	0.0	0.0
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-SLL-XXB

CANDELA DISTRIBUTION (continued):

	0°	1°	5°	10°	15°	20°	25°	30°	35°	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-SLL-XXB

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6
2.5°	217.1	215.7	216.6	215.4	213.7	212.5	211.1	209.4	207.2	204.5	201.7
5°	229.6	228.6	226.2	222.6	217.7	213.5	208.6	202.7	197.9	191.7	185.9
7.5°	230.7	229.0	224.5	218.0	210.3	202.6	196.8	187.4	181.3	171.3	164.8
10°	220.8	220.9	216.4	210.1	202.2	193.1	184.7	174.4	165.4	155.4	144.3
12.5°	206.3	207.7	207.9	202.3	194.7	185.1	175.7	165.8	154.7	143.9	133.8
15°	189.9	193.7	194.1	192.7	188.6	180.6	172.0	163.1	151.7	140.0	128.6
17.5°	175.1	178.9	182.3	185.5	185.7	181.9	176.6	169.0	157.6	143.8	130.4
20°	164.0	168.0	173.9	179.7	186.2	188.1	188.5	183.7	171.5	154.7	136.6
22.5°	159.4	164.1	170.1	181.1	192.4	199.4	203.4	203.4	190.6	170.8	146.6
25°	158.4	162.2	171.3	184.9	200.2	212.4	219.9	224.9	215.7	191.7	159.1
27.5°	159.1	164.3	175.6	189.6	205.4	221.1	233.4	242.2	233.6	205.9	170.6
30°	161.8	169.6	181.4	195.7	212.2	228.7	243.6	254.7	248.5	218.8	181.6
32.5°	166.6	176.2	189.5	202.4	218.7	236.7	251.3	266.1	261.5	227.8	187.4
35°	173.8	184.9	197.1	210.2	225.9	243.8	259.5	278.8	277.0	239.1	193.1
37.5°	185.5	196.9	208.1	219.3	234.2	251.5	271.1	295.7	294.3	255.7	202.5
40°	206.0	212.7	221.0	228.2	242.1	258.8	279.7	309.6	314.7	270.1	210.8
42.5°	231.5	235.4	237.7	239.8	246.8	262.5	285.9	319.1	327.1	280.7	217.3
45°	263.9	262.7	258.0	253.5	252.7	264.7	288.8	326.0	337.1	291.0	223.7
47.5°	302.3	299.7	286.8	271.9	263.6	268.6	293.8	336.1	349.1	304.6	231.8
50°	346.6	340.5	319.5	294.3	279.1	279.8	306.6	350.3	365.1	322.4	246.9
52.5°	387.6	376.9	351.7	318.4	296.6	299.2	329.4	379.4	397.9	351.8	272.3
55°	423.8	410.0	382.9	346.5	326.6	331.3	366.0	418.1	435.6	386.9	298.0
57.5°	454.6	440.0	413.2	381.2	356.5	360.3	398.6	454.0	465.7	418.3	322.5
59°	468.6	454.1	429.4	399.9	376.8	384.8	421.8	471.9	476.9	430.5	331.8
60°	475.5	460.9	439.3	410.3	389.2	399.9	434.0	485.4	481.1	432.2	335.4
62.5°	475.0	464.8	450.5	430.8	426.9	444.7	473.7	502.8	484.0	427.1	337.7
65°	436.0	435.1	426.2	428.5	444.6	472.0	489.9	505.6	478.0	406.7	326.7
67.5°	363.7	367.3	368.5	382.4	420.0	466.6	482.2	485.3	452.2	362.9	292.8
70°	280.8	272.7	286.0	310.6	364.8	424.7	447.0	436.4	399.6	304.0	239.1
72.5°	198.8	201.2	220.3	252.2	307.3	369.5	404.4	346.3	300.6	227.5	169.5
75°	149.6	160.7	170.0	197.9	249.6	316.5	345.3	238.0	195.8	156.9	110.9
77.5°	143.3	142.5	135.3	141.3	179.9	221.7	246.3	148.5	122.7	102.6	67.0
80°	132.5	124.9	112.0	106.3	113.3	142.4	156.4	95.5	81.6	71.7	37.7
82.5°	102.8	97.7	84.1	83.7	94.5	101.2	107.5	67.7	61.4	58.1	23.2
85°	65.3	67.0	68.6	83.8	104.9	106.1	83.7	41.2	32.3	45.6	14.8
87.5°	19.3	31.5	38.2	64.9	94.5	94.8	62.9	13.5	12.2	14.2	8.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
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



REPORT NUMBER: P227263

CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-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: P227263

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

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6
2.5°	198.9	198.6	195.7	191.1	191.5	189.3	186.6	182.1	181.3	178.8	178.4
5°	181.0	176.3	170.3	163.0	160.2	156.5	152.6	149.9	146.4	143.2	147.5
7.5°	156.9	150.2	143.1	135.4	131.0	124.9	121.6	115.3	110.7	109.8	106.2
10°	137.0	128.4	120.4	113.4	105.2	99.4	95.3	91.9	88.7	84.8	82.4
12.5°	123.6	114.0	105.5	96.9	93.0	88.2	85.6	82.3	77.8	74.6	71.4
15°	117.6	107.1	97.9	90.3	84.7	80.2	75.7	71.7	66.8	63.1	59.5
17.5°	116.8	103.2	91.5	83.1	76.8	72.0	66.0	60.8	54.7	50.7	47.7
20°	117.7	100.2	85.5	74.6	68.2	59.7	54.1	47.8	41.8	36.5	31.7
22.5°	121.2	98.6	79.7	67.7	58.3	48.6	42.7	34.5	29.4	24.2	22.4
25°	126.1	97.7	74.7	60.0	48.3	38.7	30.5	23.6	21.4	20.2	19.4
27.5°	131.2	95.9	69.0	53.1	40.2	28.5	22.8	19.9	19.0	18.3	17.9
30°	135.0	92.5	62.2	45.6	31.9	24.3	20.4	18.4	17.9	17.1	16.6
32.5°	136.8	87.2	56.0	38.5	26.9	20.9	17.8	16.7	16.1	15.3	15.1
35°	136.5	81.1	52.8	35.7	24.7	18.5	15.5	14.9	14.1	13.4	12.7
37.5°	136.8	75.6	50.3	35.0	23.6	16.8	14.2	13.7	13.1	12.5	11.9
40°	137.9	72.5	49.1	33.6	22.9	16.1	13.1	12.6	12.5	11.8	11.3
42.5°	138.4	72.8	48.6	31.5	20.9	15.9	13.1	12.1	12.1	11.5	10.8
45°	137.8	75.0	48.9	30.3	19.4	14.9	13.8	12.1	11.8	11.3	10.6
47.5°	139.6	76.5	48.9	30.1	18.4	13.9	13.1	13.2	12.0	11.4	10.4
50°	146.9	78.1	48.0	29.8	18.1	12.9	12.5	13.0	13.4	11.6	10.5
52.5°	159.8	79.9	46.9	29.3	17.8	12.2	11.6	12.3	13.7	12.2	10.5
55°	173.1	83.3	46.1	28.5	17.2	11.7	10.4	11.8	12.5	12.1	10.4
57.5°	187.2	87.0	45.5	26.6	15.8	11.2	10.0	10.2	11.3	11.7	10.1
59°	191.4	88.7	44.9	25.3	14.6	10.7	9.7	9.5	10.0	11.2	9.9
60°	194.5	88.8	44.2	24.0	13.9	10.5	9.6	9.2	9.4	11.5	10.0
62.5°	194.8	88.7	42.0	21.6	12.5	10.1	9.3	8.8	8.6	9.6	10.2
65°	182.5	84.6	38.1	20.4	12.6	9.7	8.8	8.4	8.0	8.2	8.9
67.5°	159.7	73.9	34.0	20.7	13.3	9.5	8.4	8.0	7.7	7.5	7.8
70°	120.8	61.4	32.7	21.3	13.9	9.3	7.8	7.4	7.2	7.1	7.1
72.5°	83.7	50.5	31.5	21.8	14.4	9.2	7.2	6.9	6.8	6.6	6.6
75°	53.9	36.7	26.1	18.5	13.1	8.4	6.5	6.1	6.0	5.9	6.0
77.5°	31.9	25.7	19.1	13.0	9.6	6.8	5.6	5.3	5.3	5.3	5.4
80°	17.7	15.2	12.7	8.4	6.9	5.0	4.6	4.3	4.3	4.4	4.6
82.5°	10.5	8.4	7.2	5.3	4.6	3.6	3.5	3.3	3.4	3.5	3.7
85°	7.0	5.3	4.3	3.6	3.2	2.3	1.9	2.0	2.1	2.4	2.5
87.5°	3.9	3.0	2.4	2.0	1.8	1.0	0.8	0.8	1.0	1.2	1.4
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°	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: P227263
 CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-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	59°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

'227263
 IST-AF-XXX-LED-E1-SLL-XXB

REPORT NUMBER: P227263
 CATALOG NUMBER: IST-AF-XX

TION (continued):

CANDELA DISTRIBUTION (con

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°		215°	220°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	193.6	193.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	167.9	167.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	137.7	136.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	106.8	110.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	76.9	79.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	53.6	54.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	36.9	39.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	28.7	29.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	23.6	23.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	21.0	21.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	17.7	18.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	15.5	16.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	14.3	14.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	13.0	13.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	12.0	12.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	11.2	11.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	10.4	10.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	9.5	9.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	8.6	8.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	8.0	8.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	7.6	7.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	7.4	7.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	7.3	7.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	7.3	7.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°	7.2	7.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	7.2	7.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	7.0	7.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	6.8	7.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	6.4	6.8
										70°	6.1	6.4
										72.5°	5.7	6.1
										75°	5.3	5.6
										77.5°	4.8	5.1
										80°	4.2	4.3
										82.5°	3.6	3.6
										85°	2.7	2.4
										87.5°	1.4	1.5
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	0.0	0.0
										97.5°	0.0	0.0
										100°	0.0	0.0
										102.5°	0.0	0.0
										105°	0.0	0.0
										107.5°	0.0	0.0



REPORT NUMBER: P227263

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

SLL-XXB

CANDELA DISTRIBUTION (continued):

230°	235°	240°	245°	250°	255°	260°	265°		270°	275°	280°	285°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	193.6	193.6	193.6	193.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	166.3	170.0	170.5	170.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	136.8	140.3	138.3	139.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	99.8	97.5	100.6	102.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	72.9	75.7	76.8	79.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	60.5	62.3	64.4	67.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	49.0	50.3	53.1	56.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	35.7	37.5	39.4	42.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	23.9	24.8	26.9	28.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	19.2	19.5	19.9	21.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	17.3	17.5	17.8	18.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	15.7	15.8	16.1	16.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	14.3	14.2	14.3	14.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	12.8	12.8	13.0	13.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	11.0	10.9	11.2	11.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	10.1	10.2	10.4	10.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	9.7	9.7	9.9	10.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	9.2	9.4	9.6	9.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	8.9	9.1	9.4	9.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	8.8	9.0	9.3	9.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	8.6	8.9	9.2	9.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	8.6	8.8	9.1	9.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	8.3	8.6	8.9	9.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	8.1	8.3	8.7	9.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°	8.0	8.2	8.6	9.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	7.8	8.1	8.5	9.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	7.6	7.9	8.3	8.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	7.3	7.7	8.1	8.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	7.1	7.3	7.7	8.1
								70°	6.8	7.0	7.2	7.5
								72.5°	6.2	6.3	6.5	6.9
								75°	5.5	5.6	5.7	6.0
								77.5°	4.8	4.8	4.9	5.3
								80°	4.1	4.1	4.2	4.3
								82.5°	3.1	3.1	3.3	3.6
								85°	2.1	2.0	2.4	2.6
								87.5°	1.3	1.2	1.3	1.3
								90°	0.1	0.3	0.2	0.2
								92.5°	0.0	0.0	0.0	0.0
								95°	0.0	0.0	0.0	0.0
								97.5°	0.0	0.0	0.0	0.0
								100°	0.0	0.0	0.0	0.0
								102.5°	0.0	0.0	0.0	0.0
								105°	0.0	0.0	0.0	0.0
								107.5°	0.0	0.0	0.0	0.0



REPORT NUMBER: P227263

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

CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°		325°	330°	335°	340°	345°	350°
0.0	0.0	0.0	0.0	0.0	0.0	0°	193.6	193.6	193.6	193.6	193.6	193.6
0.0	0.0	0.0	0.0	0.0	0.0	2.5°	182.3	184.8	188.9	189.8	192.9	195.3
0.0	0.0	0.0	0.0	0.0	0.0	5°	154.5	160.6	162.8	167.0	174.4	178.2
0.0	0.0	0.0	0.0	0.0	0.0	7.5°	127.5	132.1	137.4	144.1	149.6	156.0
0.0	0.0	0.0	0.0	0.0	0.0	10°	104.9	111.5	118.3	123.8	131.4	139.1
0.0	0.0	0.0	0.0	0.0	0.0	12.5°	93.1	96.8	103.5	111.3	120.8	129.3
0.0	0.0	0.0	0.0	0.0	0.0	15°	87.1	91.3	98.6	106.9	116.9	127.6
0.0	0.0	0.0	0.0	0.0	0.0	17.5°	79.4	86.3	94.5	106.4	119.4	134.2
0.0	0.0	0.0	0.0	0.0	0.0	20°	71.9	80.3	91.0	106.7	124.7	143.9
0.0	0.0	0.0	0.0	0.0	0.0	22.5°	65.3	75.3	88.9	108.4	131.6	157.1
0.0	0.0	0.0	0.0	0.0	0.0	25°	57.5	70.8	87.3	112.1	142.0	174.9
0.0	0.0	0.0	0.0	0.0	0.0	27.5°	51.4	66.6	84.7	115.2	151.5	192.0
0.0	0.0	0.0	0.0	0.0	0.0	30°	44.4	61.7	81.3	116.3	163.2	206.0
0.0	0.0	0.0	0.0	0.0	0.0	32.5°	38.9	57.0	77.3	115.3	168.4	215.7
0.0	0.0	0.0	0.0	0.0	0.0	35°	36.2	53.7	74.0	111.9	172.8	226.3
0.0	0.0	0.0	0.0	0.0	0.0	37.5°	34.5	50.0	70.8	106.2	177.7	236.8
0.0	0.0	0.0	0.0	0.0	0.0	40°	32.1	47.2	68.0	102.0	181.6	245.5
0.0	0.0	0.0	0.0	0.0	0.0	42.5°	30.1	44.6	66.0	98.4	182.5	253.3
0.0	0.0	0.0	0.0	0.0	0.0	45°	28.3	43.1	64.4	98.6	183.2	264.1
0.0	0.0	0.0	0.0	0.0	0.0	47.5°	26.9	41.5	63.8	101.9	190.5	279.2
0.0	0.0	0.0	0.0	0.0	0.0	50°	25.7	40.3	62.8	108.4	202.2	299.6
0.0	0.0	0.0	0.0	0.0	0.0	52.5°	24.1	38.5	61.6	115.2	215.1	326.9
0.0	0.0	0.0	0.0	0.0	0.0	55°	22.2	36.1	60.1	120.8	232.5	360.2
0.0	0.0	0.0	0.0	0.0	0.0	57.5°	19.1	33.3	59.3	123.6	243.3	379.3
0.0	0.0	0.0	0.0	0.0	0.0	59°	17.6	30.7	58.8	122.2	246.1	382.6
0.0	0.0	0.0	0.0	0.0	0.0	60°	16.7	29.2	58.0	120.6	246.9	380.5
0.0	0.0	0.0	0.0	0.0	0.0	62.5°	15.4	25.4	54.7	112.2	235.9	355.5
0.0	0.0	0.0	0.0	0.0	0.0	65°	15.8	23.9	47.4	95.5	210.5	306.6
0.0	0.0	0.0	0.0	0.0	0.0	67.5°	16.2	23.4	40.9	77.1	167.9	253.7
						70°	15.9	23.1	37.2	61.4	125.7	190.0
						72.5°	15.4	21.8	32.2	49.3	79.7	133.0
						75°	13.7	18.3	25.4	33.9	50.3	96.9
						77.5°	10.7	14.1	18.0	21.0	25.6	68.3
						80°	7.9	10.2	11.8	12.6	14.2	46.6
						82.5°	5.6	7.0	7.5	8.0	9.5	34.9
						85°	4.2	4.8	5.2	5.2	6.4	24.7
						87.5°	2.4	2.5	2.5	2.7	3.2	6.8
						90°	0.7	0.7	0.6	0.7	0.5	0.4
						92.5°	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
						97.5°	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
						102.5°	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
						107.5°	0.0	0.0	0.0	0.0	0.0	0.0

