

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: P226852

Luminaire Tested: **IST-AF-XXX-LED-E1-SL2-7030-XXB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35945)
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-SL2-7030-XXB
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY
BACKPACK BOX
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL
Light Source: (16) 3000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 568.3 lumens
Efficiency: N/A
Efficacy: 43.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B0 - U1 - G1

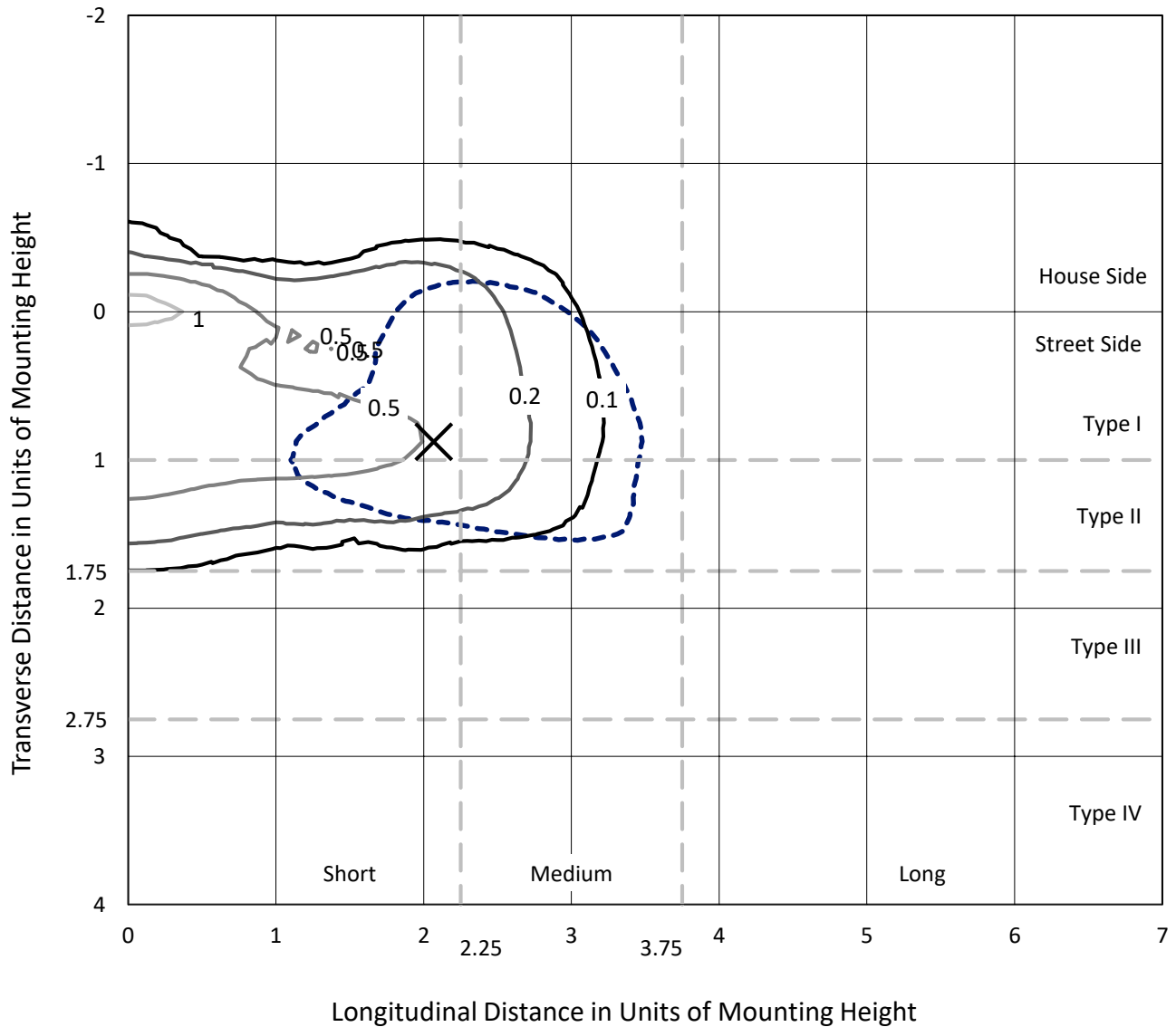
Input Watts (W): 13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

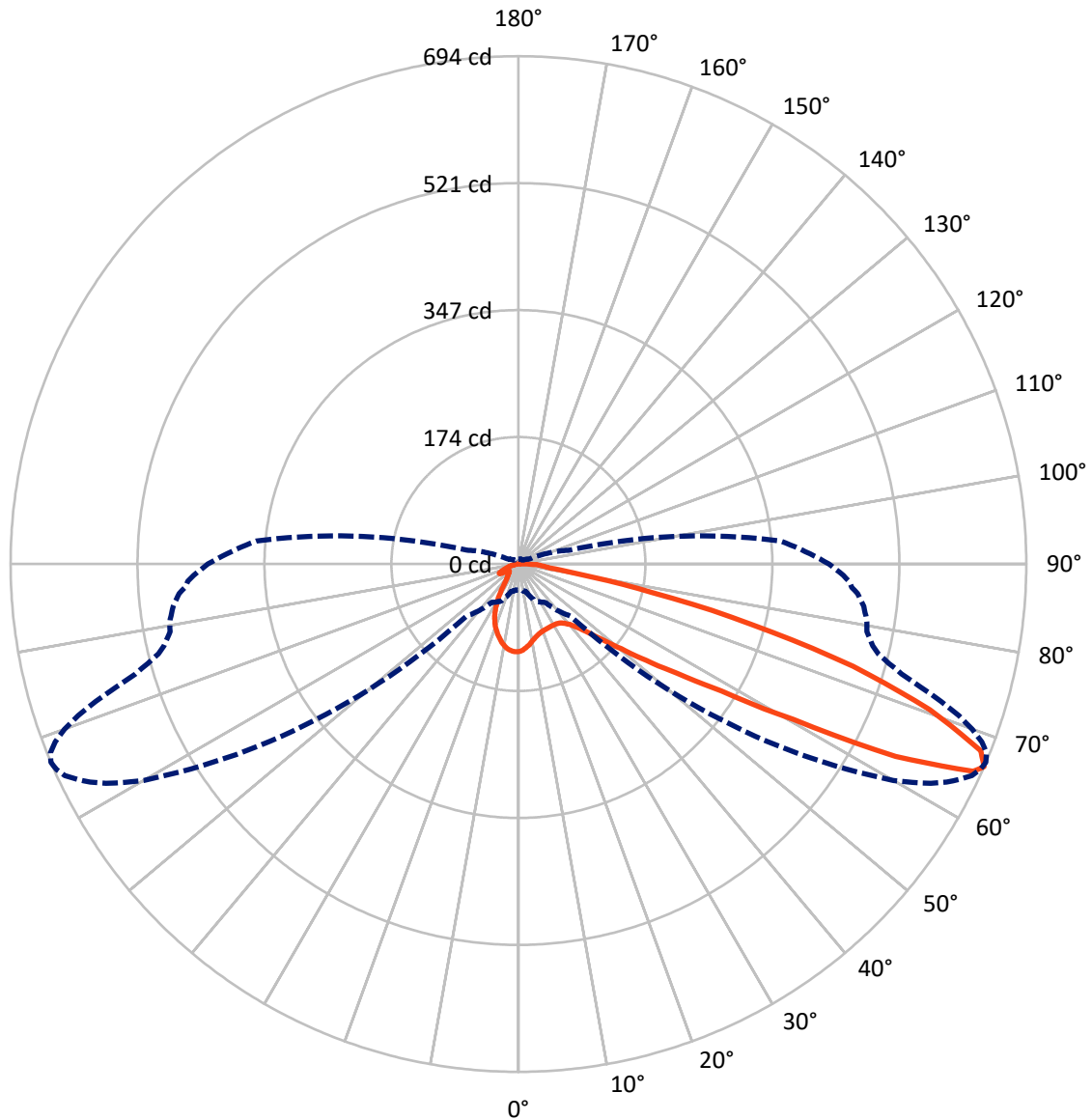
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.2 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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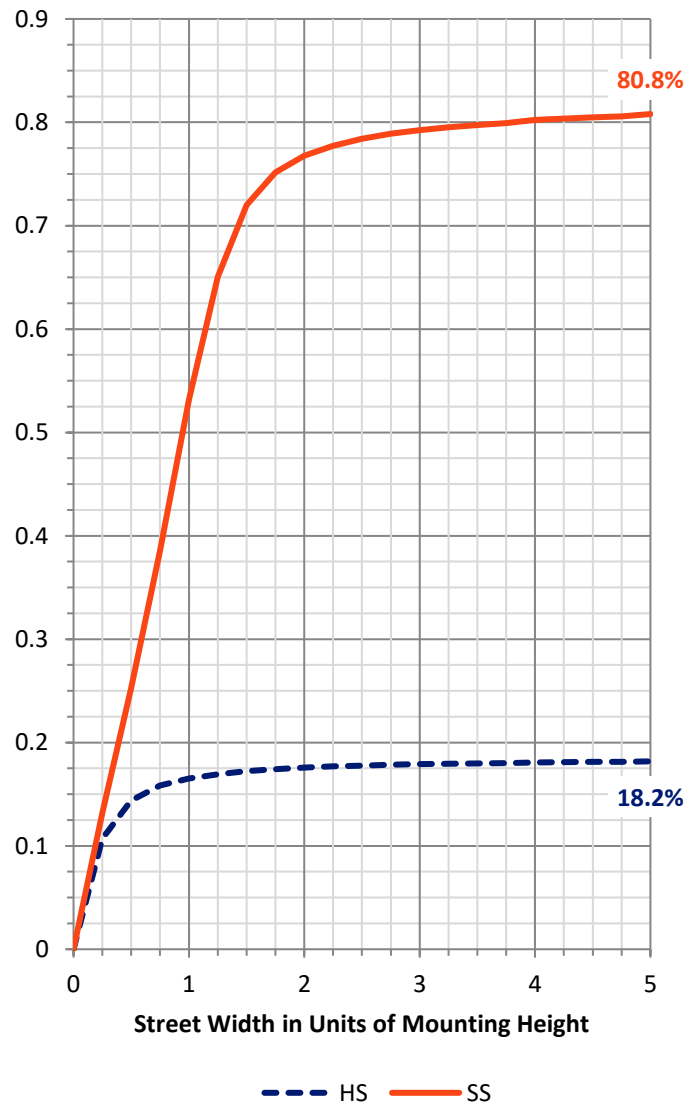
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	104.9	0.0	105.0
	% Fixture	18.5	0.0	18.5
Street Side	Lumens	463.1	0.2	463.3
	% Fixture	81.5	0.0	81.5
Total	Lumens	568.0	0.2	568.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.4	1.8
10°-20°	24.7	4.3
20°-30°	33.9	6.0
30°-40°	48.4	8.5
40°-50°	78.4	13.8
50°-60°	124.2	21.9
60°-70°	157.4	27.7
70°-80°	78.3	13.8
80°-90°	12.4	2.2
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°	568.0	100.0
0°-180°	568.3	100.0



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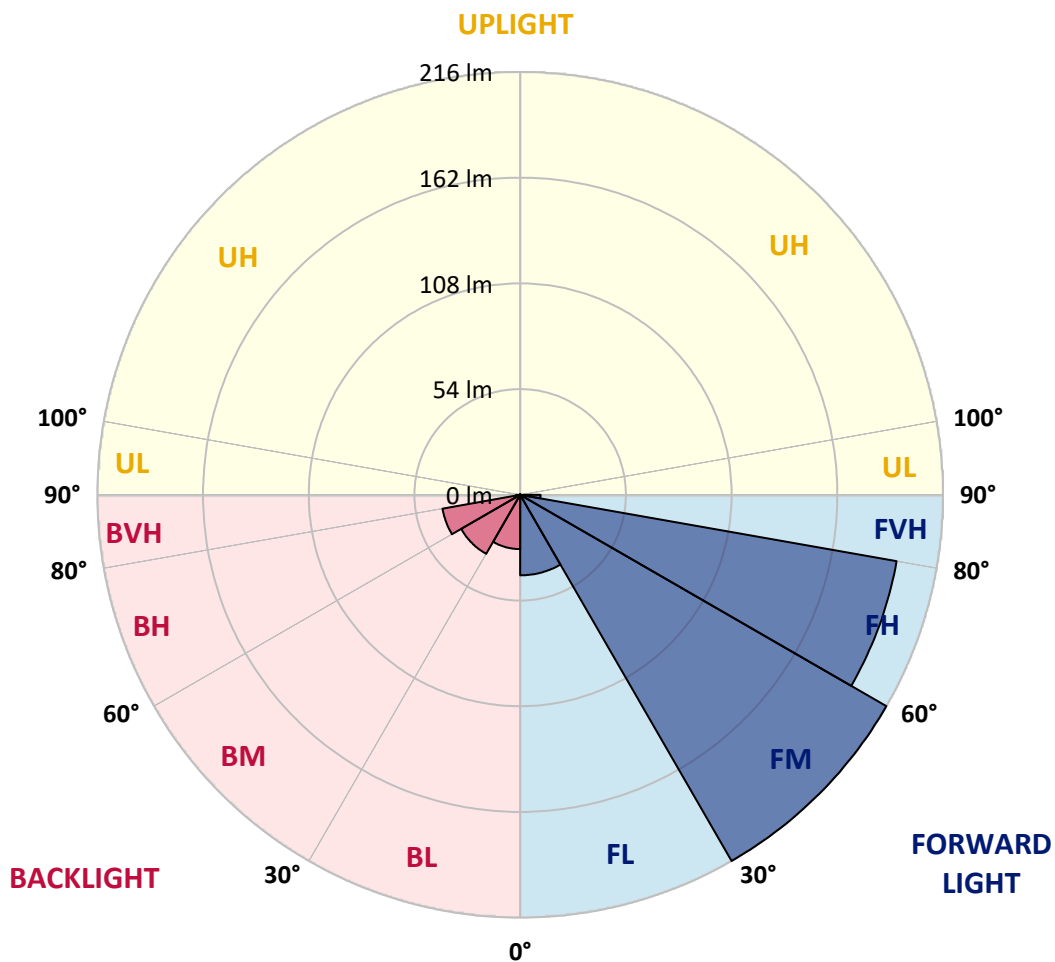
CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-7030-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	41.2	7.2			
FM	(30°-60°)	216.2	38.0			
FH	(60°-80°)	195.4	34.4			G0/660
FVH	(80°-90°)	10.4	1.8			G1/100
BL	(0°-30°)	27.7	4.9	B0/110		
BM	(30°-60°)	34.9	6.1	B0/220		
BH	(60°-80°)	40.3	7.1	B0/110		G0/110
BVH	(80°-90°)	2.0	0.4			G0/10
UL	(90°-100°)	0.2	0.0		U1/10	
UH	(100°-180°)	0.0	0.0		U1/10	

BUG Rating: B0-U1-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
0°	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6
2.5°	111.2	111.4	112.9	113.6	114.7	115.1	116.4	116.9	117.3	117.2	117.2
5°	101.2	101.9	102.6	104.2	105.8	107.7	110.2	112.1	112.4	112.9	113.1
7.5°	93.6	94.1	95.3	96.4	98.4	101.2	104.7	107.1	107.6	107.7	108.3
10°	88.2	88.5	89.6	91.0	93.4	96.0	99.7	102.2	103.0	103.3	103.8
12.5°	84.0	84.5	85.5	87.0	89.6	92.3	96.1	98.6	99.1	99.5	100.3
15°	81.4	81.7	82.6	84.3	86.6	89.3	93.1	96.0	96.4	96.8	97.5
17.5°	80.9	81.1	81.6	82.9	84.7	87.3	91.2	93.7	94.3	94.9	95.5
20°	82.9	83.1	83.2	83.4	84.4	86.1	89.9	92.5	93.1	93.6	94.4
22.5°	87.3	87.6	87.2	86.6	85.8	86.1	89.3	92.0	92.4	92.9	93.6
25°	95.0	94.8	93.5	92.5	89.8	87.6	89.5	91.8	92.2	92.7	93.5
27.5°	104.1	103.7	103.0	100.4	95.9	91.4	90.5	92.2	92.5	92.9	93.6
30°	113.8	113.9	113.2	110.4	104.6	97.0	92.8	93.2	93.4	93.7	94.2
32.5°	122.6	123.9	123.8	123.6	115.3	104.6	97.2	95.5	95.3	95.5	95.7
35°	132.8	133.0	135.4	136.6	129.9	115.7	103.7	100.0	98.9	99.0	98.9
37.5°	143.7	144.0	148.1	150.2	145.0	128.3	112.4	106.5	105.6	104.7	104.0
40°	159.6	160.9	163.1	165.4	162.8	145.3	123.7	115.9	113.5	113.3	111.9
42.5°	183.3	182.9	181.8	183.7	180.7	164.3	137.5	129.0	127.2	124.8	122.9
45°	206.6	207.5	203.1	204.0	204.1	186.4	157.3	145.5	144.5	141.7	139.7
47.5°	222.3	221.3	215.3	219.7	230.3	212.1	180.4	167.9	166.0	164.5	163.2
50°	223.2	222.3	218.5	226.2	249.0	257.7	212.5	198.0	195.2	192.6	191.8
52.5°	202.3	201.1	202.4	218.0	255.7	296.0	257.8	235.3	233.0	230.9	227.9
55°	165.2	166.6	172.6	195.1	245.4	323.1	347.0	292.9	283.0	282.9	275.6
57.5°	123.4	122.0	126.5	147.6	219.2	332.8	429.0	415.6	393.5	378.6	360.5
60°	83.2	83.6	87.8	98.6	152.6	322.3	483.9	530.6	522.8	519.7	514.8
62.5°	57.7	58.2	62.1	72.2	89.2	259.3	500.0	595.1	609.0	620.5	617.7
65°	40.4	40.5	44.3	60.0	66.8	133.2	464.5	603.6	624.3	644.2	661.9
66°	35.6	35.7	38.8	55.8	64.1	100.5	433.8	591.7	615.4	638.4	656.8
67.5°	30.5	31.0	33.5	47.5	61.5	77.5	358.3	556.3	581.1	606.4	630.7
70°	20.9	21.1	23.3	38.5	57.5	68.0	204.2	434.3	468.5	513.1	538.9
72.5°	14.9	14.8	15.0	23.8	59.1	67.6	107.3	285.8	333.7	372.8	400.8
75°	13.3	12.9	11.8	14.8	43.1	73.8	71.9	168.3	204.7	240.3	268.9
77.5°	11.9	11.2	10.6	11.4	21.3	69.6	64.5	96.4	115.0	141.6	163.6
80°	9.0	8.6	9.0	9.8	12.8	64.0	64.1	64.1	69.2	77.9	86.6
82.5°	6.0	5.5	6.2	8.1	9.6	48.2	66.3	56.6	55.7	55.3	55.9
85°	3.8	3.2	4.4	6.1	7.4	25.2	68.0	59.8	55.4	51.2	47.0
87.5°	1.4	1.5	2.2	3.5	4.9	10.9	59.6	52.7	49.7	44.5	39.6
90°	0.3	0.3	0.4	1.0	1.1	2.0	9.1	14.6	8.7	4.4	3.5
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



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CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-7030-XXB

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
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-SL2-7030-XXB

CANDELA DISTRIBUTION (continued):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
0°	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6
2.5°	117.3	117.7	117.9	117.7	117.8	118.3	118.2	118.4	118.4	118.6	118.6
5°	113.5	113.8	114.5	114.4	115.1	115.3	115.6	115.9	116.4	116.6	117.1
7.5°	108.9	109.6	110.2	110.6	111.0	111.8	112.1	112.9	113.5	114.2	114.7
10°	104.6	105.5	106.2	106.5	107.4	107.8	108.8	109.4	110.2	111.1	111.8
12.5°	100.9	101.8	102.1	103.0	103.8	104.7	105.1	106.2	107.1	108.2	109.2
15°	98.2	99.0	99.7	100.3	101.2	102.0	102.7	103.8	104.8	106.0	106.9
17.5°	96.5	97.0	97.8	98.4	99.4	100.4	101.2	102.5	103.6	104.5	105.8
20°	95.2	95.8	96.6	97.3	98.3	99.5	100.2	101.6	102.8	103.9	105.1
22.5°	94.5	95.1	95.9	96.6	97.7	98.7	99.8	101.0	102.3	103.5	104.7
25°	94.3	94.8	95.4	96.2	97.3	98.4	99.4	100.7	101.9	103.1	104.6
27.5°	94.3	94.7	95.4	96.1	97.2	98.3	99.2	100.6	101.9	103.0	104.5
30°	94.7	94.9	95.7	96.3	97.2	98.3	99.1	100.6	101.7	103.0	104.5
32.5°	95.9	96.2	96.6	97.0	97.8	98.6	99.6	100.9	101.9	103.2	104.5
35°	98.7	98.4	98.7	98.9	99.5	100.2	101.0	102.1	103.0	104.2	105.5
37.5°	103.1	102.6	102.8	102.7	102.7	103.2	104.0	104.8	105.5	106.6	108.0
40°	111.3	110.0	109.7	108.8	108.5	108.9	109.5	109.5	110.5	111.9	112.5
42.5°	121.9	120.2	120.5	118.9	118.5	118.0	118.7	118.2	118.8	119.8	121.1
45°	138.6	137.0	135.3	132.8	133.4	131.5	131.0	131.1	131.1	131.4	132.9
47.5°	158.6	156.5	155.4	154.4	152.7	151.5	150.1	148.0	148.5	149.2	150.5
50°	187.8	187.1	185.0	181.9	181.5	179.9	179.5	177.6	176.9	176.8	176.7
52.5°	226.8	222.4	221.5	218.6	216.4	214.9	214.4	211.7	209.1	210.6	210.4
55°	274.4	270.7	266.0	263.5	261.7	258.0	257.1	253.7	252.2	251.3	249.2
57.5°	354.3	341.4	331.8	327.0	320.2	313.4	311.0	304.2	298.9	295.1	295.4
60°	493.6	470.7	443.6	431.5	403.4	399.3	380.0	375.3	363.7	356.0	351.6
62.5°	615.7	609.5	596.5	578.8	550.7	518.2	503.6	474.6	451.9	442.0	428.2
65°	674.0	682.8	686.4	683.1	671.8	652.0	634.6	606.2	568.2	546.7	519.9
66°	671.0	684.1	690.7	694.1	690.0	678.3	660.0	636.7	607.3	574.5	544.5
67.5°	649.2	661.9	671.0	681.5	681.5	677.8	670.4	654.8	634.0	605.4	578.5
70°	559.9	577.1	593.3	596.4	605.3	602.6	608.5	598.6	593.6	581.7	567.2
72.5°	436.2	450.6	464.4	478.3	476.0	473.0	472.4	474.4	464.4	467.9	464.2
75°	290.1	314.9	329.1	327.8	328.7	329.5	323.1	309.1	320.0	306.2	310.8
77.5°	176.3	187.8	191.7	187.4	181.8	174.7	163.2	156.4	146.8	147.5	141.1
80°	92.5	93.9	90.8	82.2	77.5	73.3	60.1	54.2	48.7	46.7	42.1
82.5°	53.0	49.5	45.8	42.9	37.3	33.6	28.4	25.2	21.7	18.6	17.5
85°	42.9	38.2	34.7	31.5	27.7	24.4	20.1	16.8	14.3	12.4	12.0
87.5°	35.4	32.2	28.6	25.5	21.9	18.4	14.3	11.1	8.8	7.1	6.6
90°	3.2	4.3	3.1	1.7	2.6	1.4	0.8	0.9	0.7	0.7	0.8
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: P226852

CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-7030-XXB

CANDELA DISTRIBUTION (continued):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
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: P226852

CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-7030-XXB

CANDELA DISTRIBUTION (continued):

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°
0°	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6
2.5°	118.8	118.8	119.0	119.2	119.3	119.3	119.3	119.4	119.5	119.3	119.5
5°	117.4	117.8	118.2	118.4	118.5	118.8	119.0	119.2	119.4	119.4	119.6
7.5°	115.4	116.2	116.6	117.0	117.5	117.9	118.4	118.8	118.9	119.3	119.5
10°	113.0	113.9	114.7	115.4	116.0	116.9	117.6	118.1	118.8	118.9	119.5
12.5°	110.3	111.7	112.4	113.6	114.5	115.8	116.5	117.2	118.1	118.5	119.2
15°	108.4	109.6	110.9	112.1	113.5	115.0	115.9	116.9	118.1	119.0	119.9
17.5°	107.0	108.6	110.0	111.6	113.3	114.9	116.2	117.3	118.8	119.4	120.2
20°	106.5	108.3	109.8	111.4	113.2	115.3	116.9	118.1	119.6	120.5	121.2
22.5°	106.4	108.1	109.8	111.8	113.7	115.9	117.6	119.1	120.6	121.4	122.0
25°	106.2	108.0	109.9	112.1	114.2	116.5	118.4	119.9	121.3	122.1	122.6
27.5°	106.2	108.1	110.1	112.4	114.7	117.2	119.0	120.4	121.7	122.3	122.5
30°	106.1	108.1	110.0	112.5	115.0	117.6	119.6	120.9	122.0	122.4	122.3
32.5°	106.3	108.3	110.5	113.0	115.5	118.1	120.1	121.6	122.2	122.1	122.0
35°	107.1	109.0	111.5	114.0	116.6	119.0	121.0	122.0	122.5	122.3	121.9
37.5°	109.5	111.3	113.8	116.5	118.6	121.3	123.1	123.9	124.0	123.5	122.4
40°	114.2	116.1	118.3	121.3	123.8	125.7	127.4	128.2	127.7	126.8	125.7
42.5°	121.8	124.2	126.9	129.3	132.2	134.7	135.1	135.7	134.8	133.0	131.6
45°	134.0	135.5	138.9	140.7	144.5	145.7	146.7	146.9	145.1	143.6	141.2
47.5°	151.6	154.4	156.8	158.5	161.3	163.0	164.9	164.0	162.6	160.1	156.9
50°	179.3	181.1	184.2	187.2	190.1	191.3	191.3	190.5	189.5	184.8	180.9
52.5°	213.3	213.4	217.9	221.5	224.0	222.2	224.4	222.2	221.6	218.3	215.1
55°	252.6	251.0	256.4	259.6	261.8	264.0	263.6	263.3	261.1	257.3	253.5
57.5°	290.0	294.7	297.3	302.1	303.2	304.6	304.0	303.2	301.9	299.8	298.0
60°	344.0	347.1	349.4	350.4	353.5	354.0	356.1	352.6	353.5	351.0	345.6
62.5°	417.4	414.0	415.8	415.8	414.8	411.5	413.3	414.7	412.4	410.3	409.5
65°	499.6	488.6	478.0	476.2	471.4	470.2	468.9	465.5	464.0	460.4	457.5
66°	524.2	507.1	497.1	491.0	485.1	483.8	481.9	478.4	475.5	470.4	465.5
67.5°	551.8	529.8	514.7	506.0	498.8	494.0	490.2	485.1	480.5	473.0	465.2
70°	550.0	531.8	513.7	500.5	489.5	479.7	473.9	462.9	453.5	442.8	433.9
72.5°	462.1	458.9	448.4	441.0	427.6	422.4	407.0	400.0	387.0	373.1	368.8
75°	321.3	308.5	303.2	300.2	294.3	278.1	267.5	269.8	254.6	241.0	233.2
77.5°	140.4	143.0	128.1	121.5	116.4	107.6	99.4	93.7	90.5	88.4	78.7
80°	38.8	33.9	33.5	31.1	30.6	27.2	27.7	25.3	23.6	23.3	22.5
82.5°	17.0	16.6	16.1	15.9	15.6	15.3	14.9	14.8	14.3	13.8	13.9
85°	11.3	11.2	10.9	10.7	10.2	9.6	9.2	8.9	9.0	8.5	8.5
87.5°	6.6	6.4	6.3	6.0	5.9	5.4	5.5	5.0	5.0	4.9	4.6
90°	0.9	1.0	1.3	1.2	0.9	1.6	1.4	1.2	1.3	1.0	1.0
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-SL2-7030-XXB

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	
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	66°
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°

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 NUMBER: IST-AF-XXX-LED-E1-SL2-7030-XXB

REPORT NUMBER: P
 CATALOG NUMBER:

<u>DISTRIBUTION (continued):</u>											<u>CANDELA DISTRIBUTION:</u>		
86°	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	110°	86°	
119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	119.6	110°	0.0
119.8	120.0	120.0	120.0	120.1	120.0	120.1	120.0	119.6	119.5	119.4	119.4	112.5°	0.0
120.0	120.3	120.4	120.5	120.3	120.5	120.1	118.8	117.2	115.5	114.1	114.1	115°	0.0
120.1	120.5	120.8	120.8	120.9	120.7	119.4	116.5	112.9	109.3	106.5	106.5	117.5°	0.0
120.0	120.6	120.9	121.0	121.0	120.6	117.6	112.8	107.3	101.9	96.3	96.3	120°	0.0
119.8	120.3	120.7	120.7	120.8	119.6	114.8	108.0	100.2	92.0	84.6	84.6	122.5°	0.0
120.3	120.8	120.8	120.8	120.7	118.7	111.9	102.0	91.6	80.5	69.5	69.5	125°	0.0
121.1	121.3	121.1	121.1	120.8	117.7	108.7	96.1	82.5	67.8	52.4	52.4	127.5°	0.0
121.7	121.9	121.8	121.4	121.0	116.7	105.4	89.9	71.5	52.4	37.1	37.1	130°	0.0
122.4	122.6	122.2	121.5	120.9	115.3	101.3	82.0	59.2	35.9	24.6	24.6	132.5°	0.0
122.5	122.7	121.9	121.0	120.1	113.3	96.5	73.5	45.6	23.2	19.2	19.2	135°	0.0
122.4	122.3	121.0	119.8	118.8	110.8	91.1	63.0	30.4	17.5	16.7	16.7	137.5°	0.0
121.8	121.1	120.0	118.7	117.3	108.1	85.7	51.3	19.2	15.2	15.2	15.2	140°	0.0
121.0	120.2	118.9	117.1	115.6	105.4	79.6	39.4	15.4	14.0	14.2	14.2	142.5°	0.0
120.6	119.8	117.9	116.0	114.1	103.0	73.1	26.5	13.8	13.2	13.3	13.3	145°	0.0
121.3	119.9	118.0	115.9	113.5	101.0	66.3	18.4	13.1	12.4	12.6	12.6	147.5°	0.0
123.6	122.3	120.0	117.3	114.8	99.8	59.2	15.3	12.3	11.7	11.7	11.7	150°	0.0
129.2	127.4	124.4	121.1	118.2	100.6	52.8	13.9	11.7	11.1	11.1	11.1	152.5°	0.0
138.1	136.0	132.5	128.8	124.9	104.3	45.5	13.4	11.3	10.4	10.2	10.2	155°	0.0
153.5	150.7	146.1	141.7	137.0	110.8	38.2	13.1	10.8	10.0	9.6	9.6	157.5°	0.0
177.7	173.5	168.0	162.3	156.6	122.7	32.4	12.7	10.4	9.6	9.3	9.3	160°	0.0
208.7	205.9	199.1	191.6	184.8	146.3	29.0	12.5	10.2	9.2	9.0	9.0	162.5°	0.0
248.4	243.7	238.4	231.6	223.5	177.0	28.7	12.4	9.9	8.9	8.7	8.7	165°	0.0
290.2	288.4	279.3	275.1	266.3	217.8	34.9	12.6	9.7	8.6	8.4	8.4	167.5°	0.0
337.9	338.6	330.1	325.4	318.2	269.5	55.6	13.1	9.7	8.4	8.1	8.1	170°	0.0
400.3	401.4	391.4	385.9	379.7	327.5	87.3	13.9	10.0	8.1	7.9	7.9	172.5°	0.0
451.5	445.5	439.0	429.4	421.7	359.9	84.1	15.5	10.3	7.9	7.6	7.6	175°	0.0
456.8	452.5	444.3	434.0	424.5	360.0	73.4	16.0	10.4	7.8	7.5	7.5	177.5°	0.0
456.1	448.5	439.2	430.5	421.2	350.8	56.8	16.6	10.7	7.6	7.3	7.3	180°	0.0
424.5	413.8	404.8	392.7	383.0	313.9	34.9	16.6	10.3	7.1	6.9	6.9		
350.0	344.6	333.8	324.2	314.0	254.1	23.9	14.8	9.1	6.4	6.5	6.5		
226.4	220.2	209.3	203.8	198.1	162.6	18.6	12.0	7.8	5.7	6.0	6.0		
75.6	73.1	69.1	71.3	68.0	63.3	13.7	9.1	6.2	5.0	5.3	5.3		
22.6	22.1	22.9	21.5	22.8	19.3	9.0	6.4	4.8	4.3	4.7	4.7		
13.4	13.2	13.2	13.2	12.9	12.0	5.9	4.4	3.7	3.6	3.9	3.9		
8.2	8.0	8.1	8.0	8.2	7.3	4.0	3.1	2.7	2.6	3.2	3.2		
4.7	4.7	4.8	4.6	4.7	4.5	2.8	2.0	1.8	1.7	2.3	2.3		
1.1	1.1	0.9	0.8	0.9	1.2	0.8	0.6	0.5	0.4	0.8	0.8		
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	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	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		

'226852
 IST-AF-XXX-LED-E1-SL2-7030-XXB

REPORT NUMBER: P226852
 CATALOG NUMBER: IST-AF-XX

TION (continued):

CANDELA DISTRIBUTION (con

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°		155°	165°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	119.6	119.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	118.8	118.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	112.0	110.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	102.3	100.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	91.2	88.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	77.0	71.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	60.6	53.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	41.7	35.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	29.3	27.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	22.6	22.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	18.8	19.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	16.6	17.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	15.2	16.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	14.3	14.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	13.1	13.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	12.2	12.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	11.4	11.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	10.6	10.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	9.8	9.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	9.4	9.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	9.0	9.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	8.6	8.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	8.3	8.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	8.0	7.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	7.8	7.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	7.6	7.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	7.4	7.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°	7.3	7.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	7.3	7.1
										70°	6.9	6.7
										72.5°	6.4	6.3
										75°	5.9	5.7
										77.5°	5.2	5.1
										80°	4.4	4.4
										82.5°	3.8	3.6
										85°	3.0	2.8
										87.5°	2.0	1.9
										90°	0.5	0.6
										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: P226852

CATALOG NUMBER: IST-AF-XXX-LED-E1-5

X-LED-E1-SL2-7030-XXB

tinued):

175°	180°
119.6	119.6
117.6	118.4
109.9	109.6
98.9	98.9
85.5	85.7
68.3	67.3
48.9	49.3
34.1	34.0
27.3	27.5
23.4	23.4
20.8	20.8
18.4	18.4
16.6	16.8
15.1	15.2
13.6	13.7
12.3	12.3
11.4	11.5
10.8	10.8
10.2	10.2
9.7	9.9
9.2	9.3
8.7	8.8
8.2	8.2
7.8	7.8
7.4	7.3
7.2	7.0
6.9	6.8
6.8	6.7
6.7	6.7
6.6	6.5
6.3	6.2
5.8	5.6
5.3	5.1
4.9	4.6
4.1	3.9
3.0	2.8
1.8	1.8
0.4	0.4
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 (continued):

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

