

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: P227249

Luminaire Tested: **IST-AF-XXX-LED-E1-SLL-7060-XXB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227249
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-7060-XXB
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY
BACKPACK BOX
LIGHT SQUARE WITH ACCULED OPTICS-90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (16) 5700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 573.1 lumens
Efficiency: N/A
Efficacy: 44.1 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

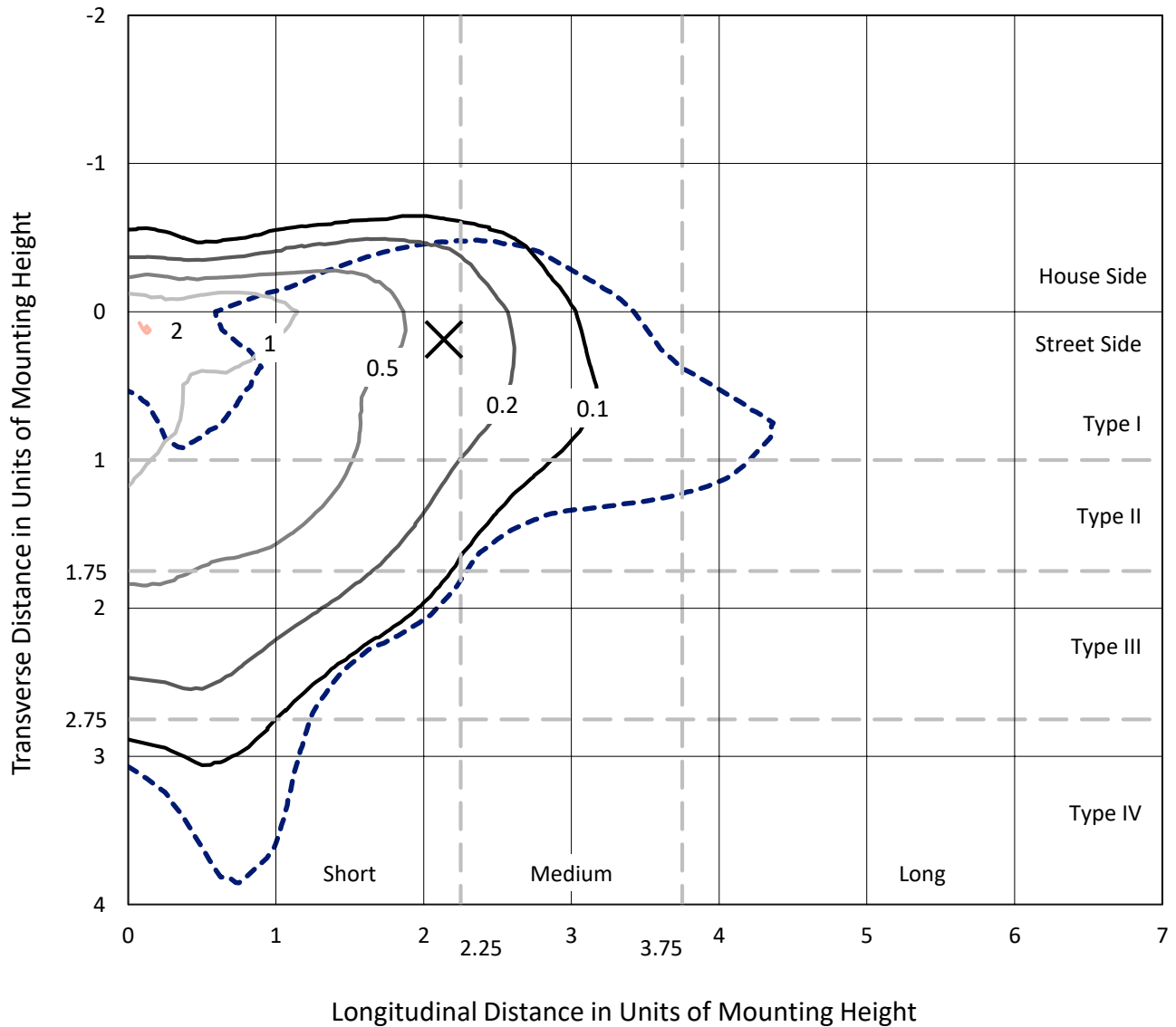


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Iso-Footcandle Lines of Horizontal Illumination

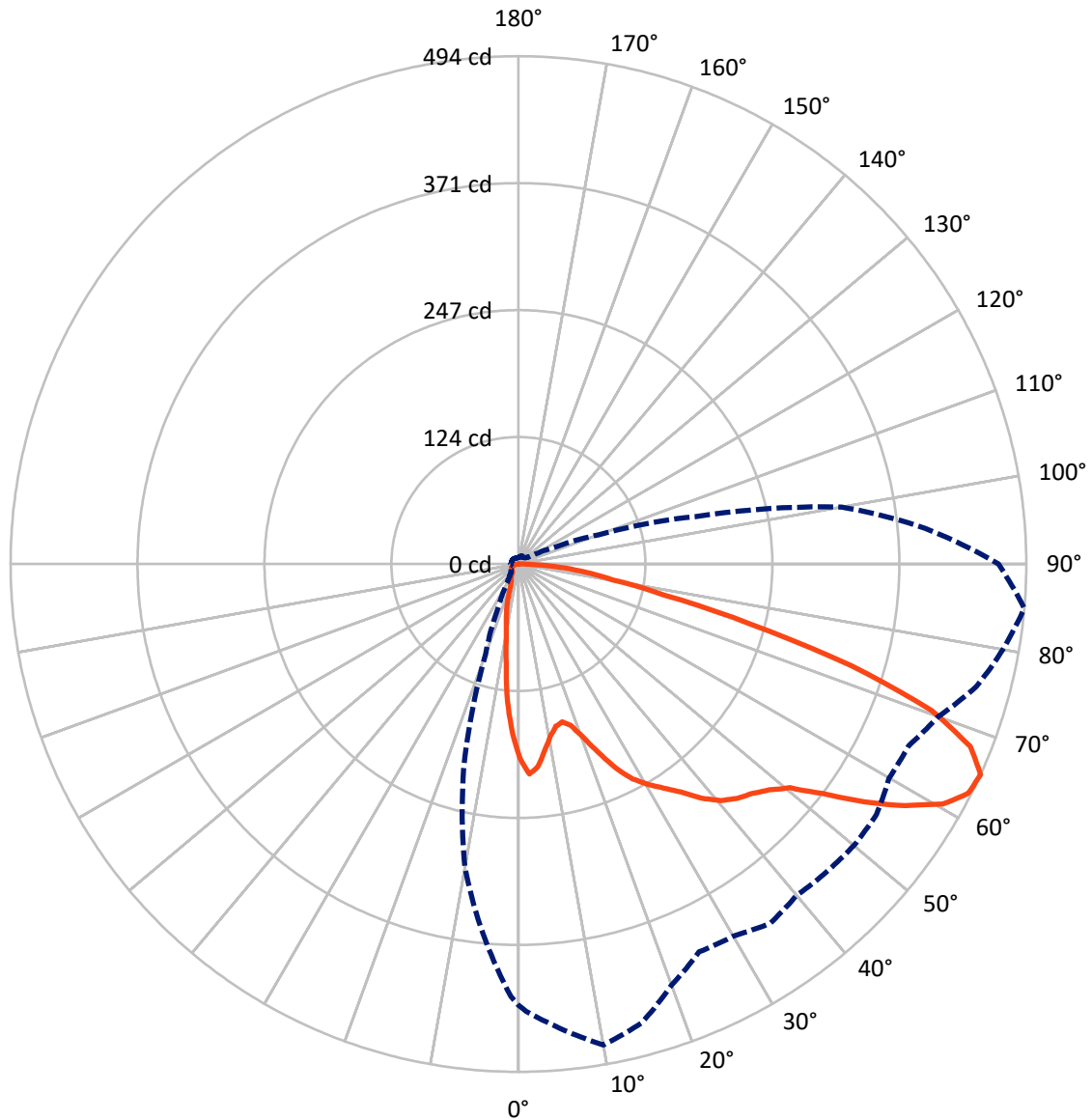
× Max cd
 - - - 1/2 Max cd



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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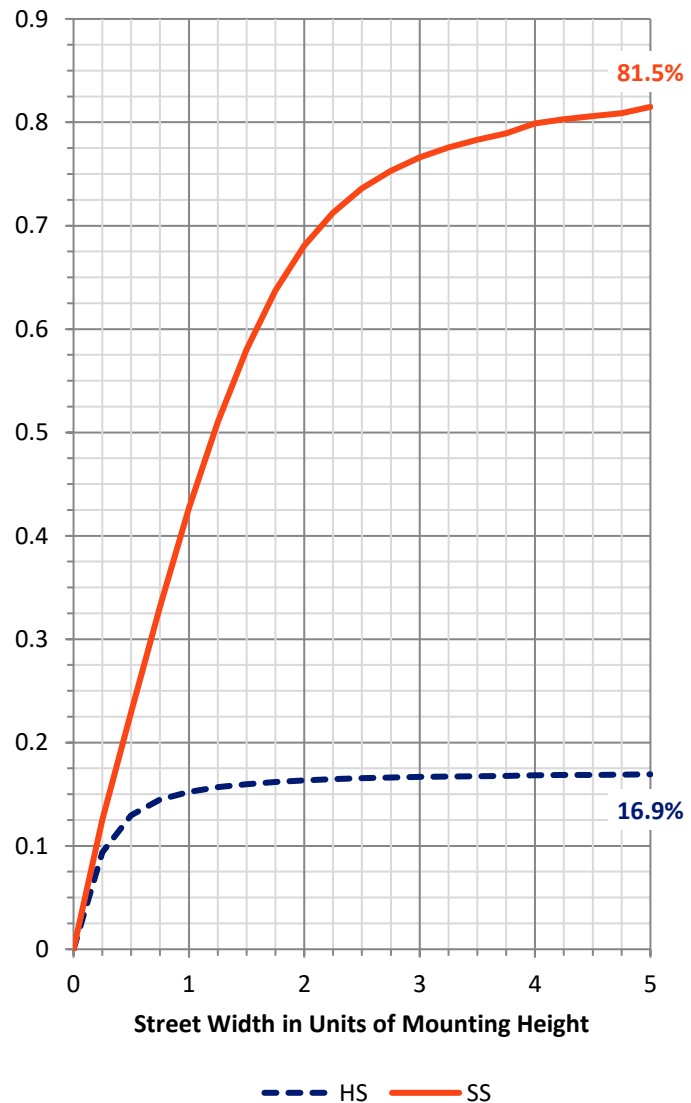
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	98.3	0.0	98.3
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	474.8	0.0	474.8
	% Fixture	82.8	0.0	82.8
Total	Lumens	573.1	0.0	573.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.0	2.4
10°-20°	27.0	4.7
20°-30°	38.5	6.7
30°-40°	55.8	9.7
40°-50°	79.9	13.9
50°-60°	122.6	21.4
60°-70°	141.9	24.8
70°-80°	72.4	12.6
80°-90°	20.9	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°	573.1	100.0
0°-180°	573.1	100.0



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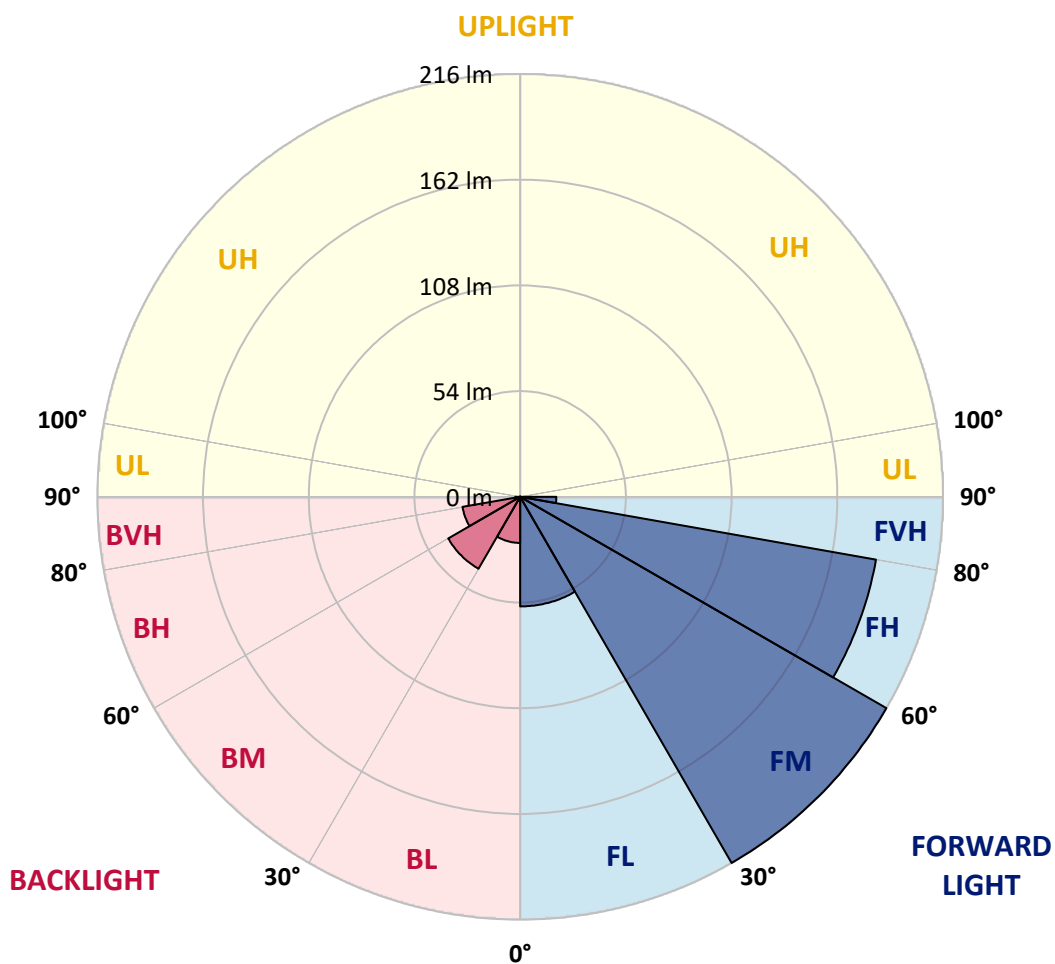
CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-7060-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	56.0	9.8			
FM	(30°-60°)	215.9	37.7			
FH	(60°-80°)	184.4	32.2			G0/660
FVH	(80°-90°)	18.5	3.2			G1/100
BL	(0°-30°)	23.5	4.1	B0/110		
BM	(30°-60°)	42.4	7.4	B0/220		
BH	(60°-80°)	29.9	5.2	B0/110		G0/110
BVH	(80°-90°)	2.4	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°	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3
2.5°	196.0	196.2	198.9	201.5	204.8	204.3	207.0	209.0	210.8	211.1	212.5
5°	184.0	185.9	192.0	197.2	203.8	208.9	214.4	218.7	221.9	224.9	225.3
7.5°	167.2	168.7	175.7	183.9	193.4	200.1	208.4	215.7	220.8	225.6	226.6
10°	152.9	154.2	162.0	172.6	180.9	189.7	198.3	204.2	210.8	215.0	217.0
12.5°	145.9	147.6	155.0	164.6	173.1	181.6	188.1	193.2	196.9	197.7	198.3
15°	148.6	149.5	157.7	166.3	173.0	177.3	179.0	182.1	181.8	183.3	183.6
17.5°	159.5	159.1	167.8	173.8	177.1	176.6	173.9	172.3	169.4	168.5	171.0
20°	178.2	179.6	185.2	188.8	185.5	177.7	170.2	165.1	161.1	159.7	159.4
22.5°	200.1	201.9	207.9	206.0	197.4	183.2	169.6	161.5	156.4	155.0	154.4
25°	223.1	224.2	227.3	220.8	208.7	190.2	173.7	162.2	155.6	153.4	153.2
27.5°	241.6	242.8	241.3	233.8	216.3	198.1	179.3	165.7	157.0	154.9	153.9
30°	256.7	257.3	252.5	243.1	225.8	206.9	186.6	171.8	161.6	156.8	156.1
32.5°	273.7	273.3	264.0	251.1	233.8	214.8	195.0	178.6	166.1	160.2	159.1
35°	292.3	289.0	272.5	258.9	239.3	220.9	202.6	185.9	173.2	165.4	164.1
37.5°	308.9	305.4	283.4	265.0	244.8	225.6	208.6	195.2	184.1	177.0	176.4
40°	321.8	317.6	291.7	269.2	247.5	229.1	215.7	207.0	199.6	193.9	193.9
42.5°	332.3	327.6	299.8	274.0	249.9	234.4	227.4	224.4	222.9	219.7	220.9
45°	342.3	337.6	306.4	277.1	255.3	244.7	245.6	248.3	252.9	251.1	252.7
47.5°	351.8	347.2	313.9	282.0	265.7	263.2	268.2	278.6	287.7	294.8	299.9
50°	367.8	362.3	327.4	296.5	282.1	283.4	297.8	318.3	333.0	339.6	339.2
52.5°	398.2	390.4	356.5	323.5	305.5	312.5	329.6	355.3	374.6	379.7	381.7
55°	435.4	429.2	398.4	359.3	346.2	348.7	369.9	399.0	413.9	419.2	420.9
57.5°	457.2	455.5	436.2	397.6	384.9	384.0	411.6	435.5	448.3	453.3	451.8
59°	462.3	462.8	451.8	424.7	407.3	405.2	433.3	455.4	466.1	467.7	466.9
60°	461.8	464.5	463.1	439.5	421.5	418.8	442.5	463.5	472.5	474.9	472.2
62.5°	451.9	456.5	469.3	466.8	453.6	439.8	451.0	466.2	472.0	469.7	467.7
65°	429.3	435.4	453.2	475.4	462.7	436.0	416.5	418.2	427.0	421.2	424.0
67.5°	390.3	397.3	406.7	457.1	438.5	393.9	360.2	343.7	339.6	345.2	354.1
70°	317.5	322.0	346.0	417.1	385.1	323.8	281.5	259.5	252.2	265.1	274.2
72.5°	223.9	230.7	262.2	345.2	316.8	259.3	213.1	192.8	185.5	186.0	194.0
75°	136.3	145.4	183.2	272.9	249.7	198.7	162.3	147.8	145.5	144.3	142.9
77.5°	89.9	93.4	120.5	188.4	168.4	141.3	121.8	127.8	134.4	135.9	137.6
80°	61.0	62.0	78.1	132.1	110.9	104.4	98.5	112.6	125.2	127.5	126.2
82.5°	37.5	40.7	54.5	89.1	88.4	85.4	77.8	88.8	97.2	98.7	101.3
85°	13.0	13.6	33.5	78.7	89.9	90.9	64.1	50.6	56.9	55.8	40.1
87.5°	5.6	6.3	10.4	52.7	60.9	50.3	29.3	26.0	20.1	11.3	10.9
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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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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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3
2.5°	212.2	210.9	211.7	210.6	208.9	207.7	206.4	204.7	202.6	199.9	197.2
5°	224.4	223.5	221.1	217.6	212.8	208.7	203.9	198.2	193.5	187.4	181.7
7.5°	225.5	223.9	219.5	213.1	205.6	198.1	192.4	183.2	177.2	167.5	161.1
10°	215.8	215.9	211.5	205.4	197.7	188.8	180.6	170.5	161.7	151.9	141.1
12.5°	201.7	203.0	203.2	197.8	190.3	180.9	171.8	162.1	151.2	140.7	130.8
15°	185.6	189.4	189.7	188.4	184.4	176.5	168.1	159.4	148.3	136.9	125.7
17.5°	171.2	174.9	178.2	181.3	181.5	177.8	172.6	165.2	154.1	140.6	127.5
20°	160.3	164.2	170.0	175.7	182.0	183.9	184.3	179.6	167.7	151.2	133.5
22.5°	155.8	160.4	166.3	177.0	188.1	194.9	198.8	198.8	186.3	167.0	143.3
25°	154.8	158.6	167.5	180.8	195.7	207.6	215.0	219.9	210.9	187.4	155.5
27.5°	155.5	160.6	171.7	185.3	200.8	216.1	228.2	236.8	228.4	201.3	166.8
30°	158.2	165.8	177.3	191.3	207.4	223.6	238.1	249.0	242.9	213.9	177.5
32.5°	162.9	172.2	185.2	197.9	213.8	231.4	245.7	260.1	255.6	222.7	183.2
35°	169.9	180.8	192.7	205.5	220.8	238.3	253.7	272.5	270.8	233.7	188.8
37.5°	181.3	192.5	203.4	214.4	228.9	245.9	265.0	289.1	287.7	250.0	198.0
40°	201.4	207.9	216.0	223.1	236.7	253.0	273.4	302.7	307.6	264.0	206.1
42.5°	226.3	230.1	232.4	234.4	241.3	256.6	279.5	311.9	319.8	274.4	212.4
45°	258.0	256.8	252.2	247.8	247.0	258.8	282.3	318.7	329.5	284.5	218.7
47.5°	295.5	293.0	280.4	265.8	257.7	262.6	287.2	328.6	341.3	297.8	226.6
50°	338.8	332.9	312.3	287.7	272.8	273.5	299.7	342.4	356.9	315.2	241.4
52.5°	378.9	368.4	343.8	311.3	289.9	292.5	322.0	370.9	389.0	343.9	266.2
55°	414.3	400.8	374.3	338.7	319.3	323.9	357.8	408.7	425.8	378.2	291.3
57.5°	444.4	430.1	403.9	372.6	348.5	352.2	389.7	443.8	455.3	408.9	315.3
59°	458.1	443.9	419.8	390.9	368.3	376.2	412.3	461.3	466.2	420.8	324.4
60°	464.8	450.6	429.4	401.1	380.5	390.9	424.3	474.5	470.3	422.5	327.9
62.5°	464.3	454.4	440.4	421.1	417.3	434.7	463.1	491.5	473.1	417.5	330.1
65°	426.2	425.3	416.6	418.9	434.6	461.4	478.9	494.3	467.3	397.6	319.4
67.5°	355.5	359.1	360.2	373.8	410.6	456.1	471.4	474.4	442.1	354.8	286.2
70°	274.5	266.6	279.6	303.6	356.6	415.2	437.0	426.6	390.6	297.2	233.7
72.5°	194.3	196.7	215.4	246.5	300.4	361.2	395.3	338.5	293.9	222.4	165.7
75°	146.2	157.1	166.2	193.5	244.0	309.4	337.6	232.7	191.4	153.4	108.4
77.5°	140.1	139.3	132.3	138.1	175.9	216.7	240.8	145.2	119.9	100.3	65.5
80°	129.5	122.1	109.5	103.9	110.8	139.2	152.9	93.4	79.8	70.1	36.9
82.5°	100.5	95.5	82.2	81.8	92.4	98.9	105.1	66.2	60.0	56.8	22.7
85°	63.8	65.5	67.1	81.9	102.5	103.7	81.8	40.3	31.6	44.6	14.5
87.5°	18.9	30.8	37.3	63.4	92.4	92.7	61.5	13.2	11.9	13.9	8.4
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



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CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-7060-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: P227249

CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-7060-XXB

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3	189.3
2.5°	194.4	194.1	191.3	186.8	187.2	185.1	182.4	178.0	177.2	174.8	174.4
5°	176.9	172.3	166.5	159.3	156.6	153.0	149.2	146.5	143.1	140.0	144.2
7.5°	153.4	146.8	139.9	132.4	128.1	122.1	118.9	112.7	108.2	107.3	103.8
10°	133.9	125.5	117.7	110.9	102.8	97.2	93.2	89.8	86.7	82.9	80.6
12.5°	120.8	111.4	103.1	94.7	90.9	86.2	83.7	80.5	76.1	72.9	69.8
15°	115.0	104.7	95.7	88.3	82.8	78.4	74.0	70.1	65.3	61.7	58.2
17.5°	114.2	100.9	89.4	81.2	75.1	70.4	64.5	59.4	53.5	49.6	46.6
20°	115.1	98.0	83.6	72.9	66.7	58.4	52.9	46.7	40.9	35.7	31.0
22.5°	118.5	96.4	77.9	66.2	57.0	47.5	41.7	33.7	28.7	23.7	21.9
25°	123.3	95.5	73.0	58.7	47.2	37.8	29.8	23.1	20.9	19.7	19.0
27.5°	128.3	93.7	67.5	51.9	39.3	27.9	22.3	19.5	18.6	17.9	17.5
30°	132.0	90.4	60.8	44.6	31.2	23.8	19.9	18.0	17.5	16.7	16.2
32.5°	133.7	85.2	54.7	37.6	26.3	20.4	17.4	16.3	15.7	15.0	14.8
35°	133.4	79.3	51.6	34.9	24.1	18.1	15.2	14.6	13.8	13.1	12.4
37.5°	133.7	73.9	49.2	34.2	23.1	16.4	13.9	13.4	12.8	12.2	11.6
40°	134.8	70.9	48.0	32.8	22.4	15.7	12.8	12.3	12.2	11.5	11.0
42.5°	135.3	71.2	47.5	30.8	20.4	15.5	12.8	11.8	11.8	11.2	10.6
45°	134.7	73.3	47.8	29.6	19.0	14.6	13.5	11.8	11.5	11.0	10.4
47.5°	136.5	74.8	47.8	29.4	18.0	13.6	12.8	12.9	11.7	11.1	10.2
50°	143.6	76.3	46.9	29.1	17.7	12.6	12.2	12.7	13.1	11.3	10.3
52.5°	156.2	78.1	45.8	28.6	17.4	11.9	11.3	12.0	13.4	11.9	10.3
55°	169.2	81.4	45.1	27.9	16.8	11.4	10.2	11.5	12.2	11.8	10.2
57.5°	183.0	85.0	44.5	26.0	15.4	10.9	9.8	10.0	11.0	11.4	9.9
59°	187.1	86.7	43.9	24.7	14.3	10.5	9.5	9.3	9.8	10.9	9.7
60°	190.1	86.8	43.2	23.5	13.6	10.3	9.4	9.0	9.2	11.2	9.8
62.5°	190.4	86.7	41.1	21.1	12.2	9.9	9.1	8.6	8.4	9.4	10.0
65°	178.4	82.7	37.2	19.9	12.3	9.5	8.6	8.2	7.8	8.0	8.7
67.5°	156.1	72.2	33.2	20.2	13.0	9.3	8.2	7.8	7.5	7.3	7.6
70°	118.1	60.0	32.0	20.8	13.6	9.1	7.6	7.2	7.0	6.9	6.9
72.5°	81.8	49.4	30.8	21.3	14.1	9.0	7.0	6.7	6.6	6.5	6.5
75°	52.7	35.9	25.5	18.1	12.8	8.2	6.4	6.0	5.9	5.8	5.9
77.5°	31.2	25.1	18.7	12.7	9.4	6.6	5.5	5.2	5.2	5.2	5.3
80°	17.3	14.9	12.4	8.2	6.7	4.9	4.5	4.2	4.2	4.3	4.5
82.5°	10.3	8.2	7.0	5.2	4.5	3.5	3.4	3.2	3.3	3.4	3.6
85°	6.8	5.2	4.2	3.5	3.1	2.2	1.9	2.0	2.1	2.3	2.4
87.5°	3.8	2.9	2.3	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: P227249
 CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-7060-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°

'227249
 IST-AF-XXX-LED-E1-SLL-7060-XXB

REPORT NUMBER: P227249
 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°	189.3	189.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	164.1	164.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	134.6	133.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	104.4	107.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	75.2	77.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	52.4	53.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	36.1	38.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	28.1	28.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	23.1	23.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	20.5	20.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	17.3	17.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	15.2	15.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	14.0	14.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	12.7	12.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	11.7	11.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	10.9	11.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	10.2	10.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	9.3	9.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	8.4	8.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	7.8	7.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	7.4	7.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	7.2	7.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	7.1	7.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	7.1	7.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°	7.0	7.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	7.0	7.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	6.8	6.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	6.6	6.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	6.3	6.6
										70°	6.0	6.3
										72.5°	5.6	6.0
										75°	5.2	5.5
										77.5°	4.7	5.0
										80°	4.1	4.2
										82.5°	3.5	3.5
										85°	2.6	2.3
										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: P227249

CATALOG NUMBER: IST-AF-XXX-LED-E1-SLL-7060-X

SLL-7060-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°	189.3	189.3	189.3	189.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	162.6	166.2	166.7	167.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	133.7	137.2	135.2	136.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	97.6	95.3	98.3	100.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	71.3	74.0	75.1	77.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	59.1	60.9	63.0	66.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	47.9	49.2	51.9	55.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	34.9	36.7	38.5	41.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	23.4	24.2	26.3	27.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	18.8	19.1	19.5	20.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	16.9	17.1	17.4	17.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	15.3	15.4	15.7	15.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	14.0	13.9	14.0	14.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	12.5	12.5	12.7	12.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	10.8	10.7	10.9	11.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	9.9	10.0	10.2	10.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	9.5	9.5	9.7	9.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	9.0	9.2	9.4	9.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	8.7	8.9	9.2	9.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	8.6	8.8	9.1	9.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	8.4	8.7	9.0	9.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	8.4	8.6	8.9	9.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	8.1	8.4	8.7	9.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	7.9	8.1	8.5	9.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°	7.8	8.0	8.4	9.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	7.6	7.9	8.3	8.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	7.4	7.7	8.1	8.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	7.1	7.5	7.9	8.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	6.9	7.1	7.5	7.9
								70°	6.6	6.8	7.0	7.3
								72.5°	6.1	6.2	6.4	6.7
								75°	5.4	5.5	5.6	5.9
								77.5°	4.7	4.7	4.8	5.2
								80°	4.0	4.0	4.1	4.2
								82.5°	3.0	3.0	3.2	3.5
								85°	2.1	2.0	2.3	2.5
								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



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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°	189.3	189.3	189.3	189.3	189.3	189.3
0.0	0.0	0.0	0.0	0.0	0.0	2.5°	178.2	180.7	184.7	185.5	188.6	190.9
0.0	0.0	0.0	0.0	0.0	0.0	5°	151.0	157.0	159.1	163.3	170.5	174.2
0.0	0.0	0.0	0.0	0.0	0.0	7.5°	124.6	129.1	134.3	140.9	146.2	152.5
0.0	0.0	0.0	0.0	0.0	0.0	10°	102.5	109.0	115.6	121.0	128.5	136.0
0.0	0.0	0.0	0.0	0.0	0.0	12.5°	91.0	94.6	101.2	108.8	118.1	126.4
0.0	0.0	0.0	0.0	0.0	0.0	15°	85.1	89.3	96.4	104.5	114.3	124.7
0.0	0.0	0.0	0.0	0.0	0.0	17.5°	77.6	84.4	92.4	104.0	116.7	131.2
0.0	0.0	0.0	0.0	0.0	0.0	20°	70.3	78.5	89.0	104.3	121.9	140.7
0.0	0.0	0.0	0.0	0.0	0.0	22.5°	63.8	73.6	86.9	106.0	128.6	153.6
0.0	0.0	0.0	0.0	0.0	0.0	25°	56.2	69.2	85.3	109.6	138.8	171.0
0.0	0.0	0.0	0.0	0.0	0.0	27.5°	50.2	65.1	82.8	112.6	148.1	187.7
0.0	0.0	0.0	0.0	0.0	0.0	30°	43.4	60.3	79.5	113.7	159.5	201.4
0.0	0.0	0.0	0.0	0.0	0.0	32.5°	38.0	55.7	75.6	112.7	164.6	210.9
0.0	0.0	0.0	0.0	0.0	0.0	35°	35.4	52.5	72.3	109.4	168.9	221.2
0.0	0.0	0.0	0.0	0.0	0.0	37.5°	33.7	48.9	69.2	103.8	173.7	231.5
0.0	0.0	0.0	0.0	0.0	0.0	40°	31.4	46.1	66.5	99.7	177.5	240.0
0.0	0.0	0.0	0.0	0.0	0.0	42.5°	29.4	43.6	64.5	96.2	178.4	247.6
0.0	0.0	0.0	0.0	0.0	0.0	45°	27.7	42.1	63.0	96.4	179.1	258.2
0.0	0.0	0.0	0.0	0.0	0.0	47.5°	26.3	40.6	62.4	99.6	186.2	272.9
0.0	0.0	0.0	0.0	0.0	0.0	50°	25.1	39.4	61.4	106.0	197.7	292.9
0.0	0.0	0.0	0.0	0.0	0.0	52.5°	23.6	37.6	60.2	112.6	210.3	319.6
0.0	0.0	0.0	0.0	0.0	0.0	55°	21.7	35.3	58.8	118.1	227.3	352.1
0.0	0.0	0.0	0.0	0.0	0.0	57.5°	18.7	32.6	58.0	120.8	237.8	370.8
0.0	0.0	0.0	0.0	0.0	0.0	59°	17.2	30.0	57.5	119.5	240.6	374.0
0.0	0.0	0.0	0.0	0.0	0.0	60°	16.3	28.5	56.7	117.9	241.4	372.0
0.0	0.0	0.0	0.0	0.0	0.0	62.5°	15.1	24.8	53.5	109.7	230.6	347.5
0.0	0.0	0.0	0.0	0.0	0.0	65°	15.4	23.4	46.3	93.4	205.8	299.7
0.0	0.0	0.0	0.0	0.0	0.0	67.5°	15.8	22.9	40.0	75.4	164.1	248.0
						70°	15.5	22.6	36.4	60.0	122.9	185.7
						72.5°	15.1	21.3	31.5	48.2	77.9	130.0
						75°	13.4	17.9	24.8	33.1	49.2	94.7
						77.5°	10.5	13.8	17.6	20.5	25.0	66.8
						80°	7.7	10.0	11.5	12.3	13.9	45.6
						82.5°	5.5	6.8	7.3	7.8	9.3	34.1
						85°	4.1	4.7	5.1	5.1	6.3	24.1
						87.5°	2.3	2.4	2.4	2.6	3.1	6.6
						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



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CANDELA DISTRIBUTION (continued):

355°	359°	360°		325°	330°	335°	340°	345°	350°	355°
189.3	189.3	189.3	110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
193.4	194.8	196.0	112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179.8	183.3	184.0	115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159.4	165.2	167.2	117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144.5	150.7	152.9	120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136.3	143.6	145.9	122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136.5	145.2	148.6	125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145.3	155.4	159.5	127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160.6	175.1	178.2	130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
181.2	195.5	200.1	132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.6	219.5	223.1	135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
219.7	238.4	241.6	137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
234.5	254.0	256.7	140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
248.6	270.7	273.7	142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
264.5	288.9	292.3	145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
278.7	306.7	308.9	147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
294.5	321.3	321.8	150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
307.5	332.1	332.3	152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320.0	342.2	342.3	155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
333.1	353.3	351.8	157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
353.9	366.4	367.8	160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
385.4	396.6	398.2	162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
422.1	437.6	435.4	165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
437.6	455.3	457.2	167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
435.0	459.2	462.3	170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
430.8	458.0	461.8	172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
407.3	446.0	451.9	175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
367.8	421.0	429.3	177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
316.9	383.7	390.3	180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
247.3	311.8	317.5								
164.3	214.1	223.9								
104.5	138.1	136.3								
77.1	89.8	89.9								
55.9	61.6	61.0								
43.3	37.6	37.5								
15.1	13.3	13.0								
6.6	5.5	5.6								
0.3	0.3	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								
0.0	0.0	0.0								
0.0	0.0	0.0								
0.0	0.0	0.0								

