

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: P271690

Luminaire Tested: **IST-AF-XXX-LED-E1-T4W-7027-XXB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271690
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)
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-T4W-7027-XXB
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY
BACKPACK BOX
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 2700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 577.8 lumens
Efficiency: N/A
Efficacy: 44.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - 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

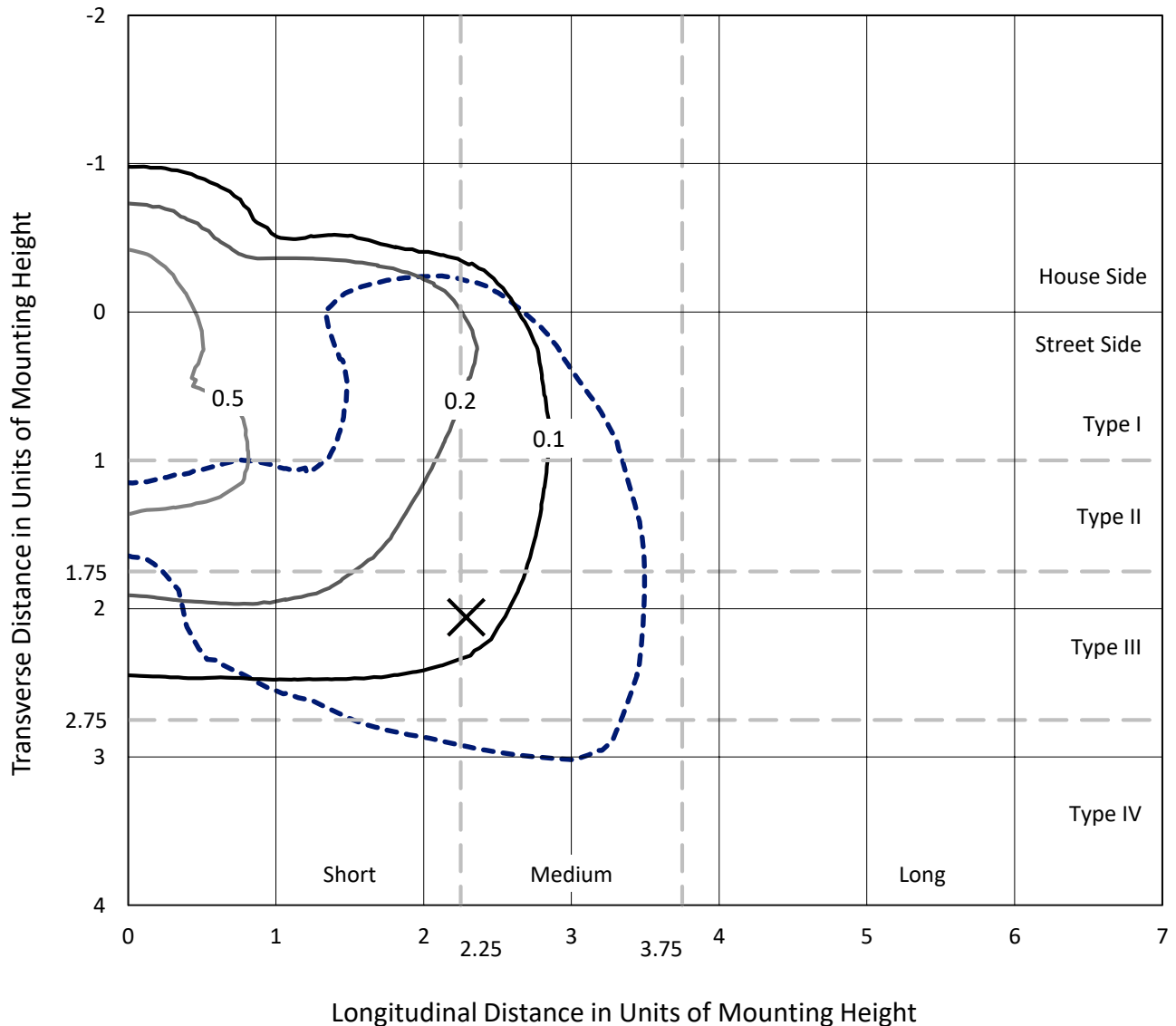


REPORT NUMBER: P271690

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-7027-XXB

Iso-Footcandle Lines of Horizontal Illumination

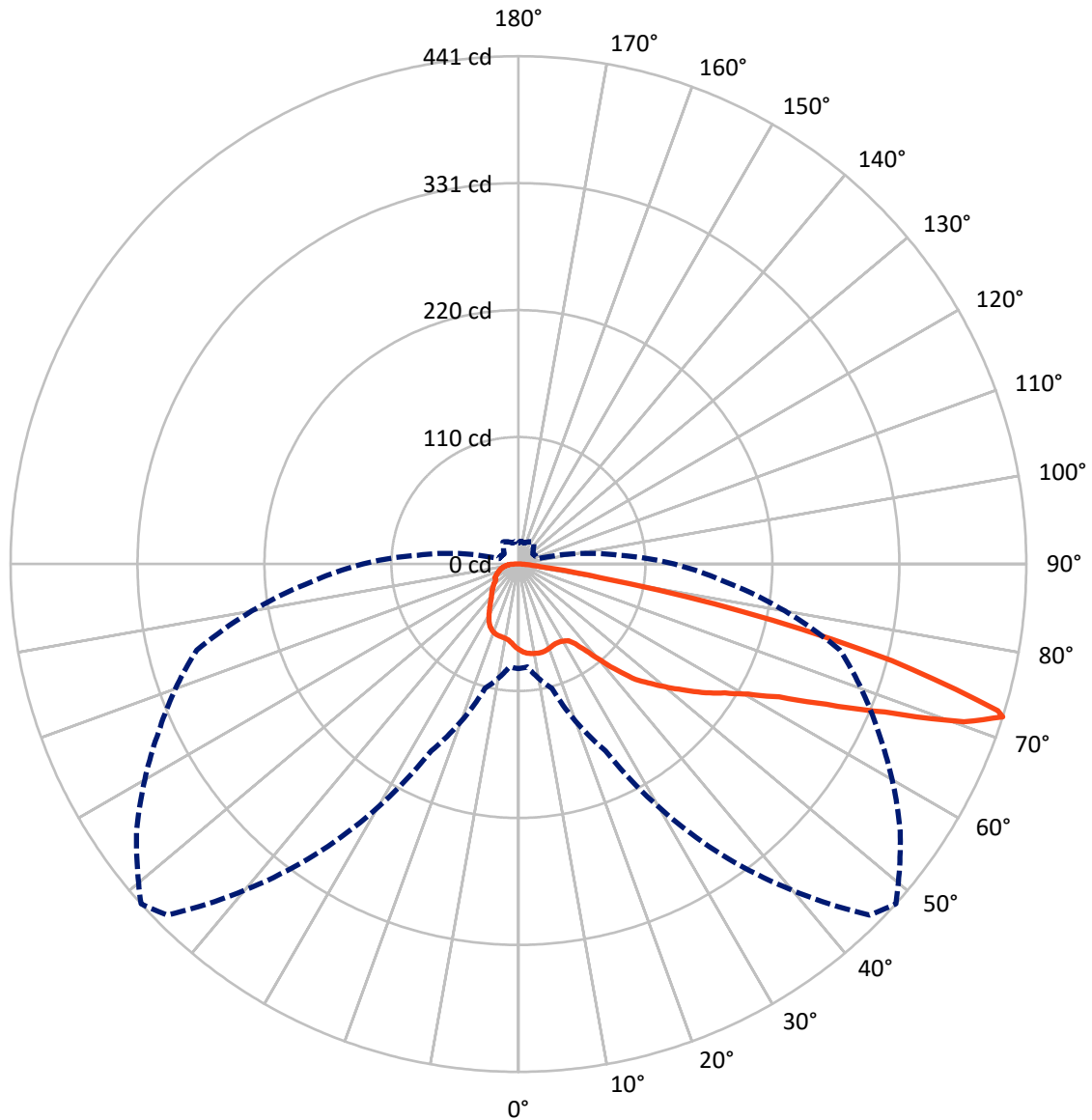
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Medium - Semi-Cutoff

REPORT NUMBER: P271690
CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-7027-XXB

Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P271690

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-7027-XXB

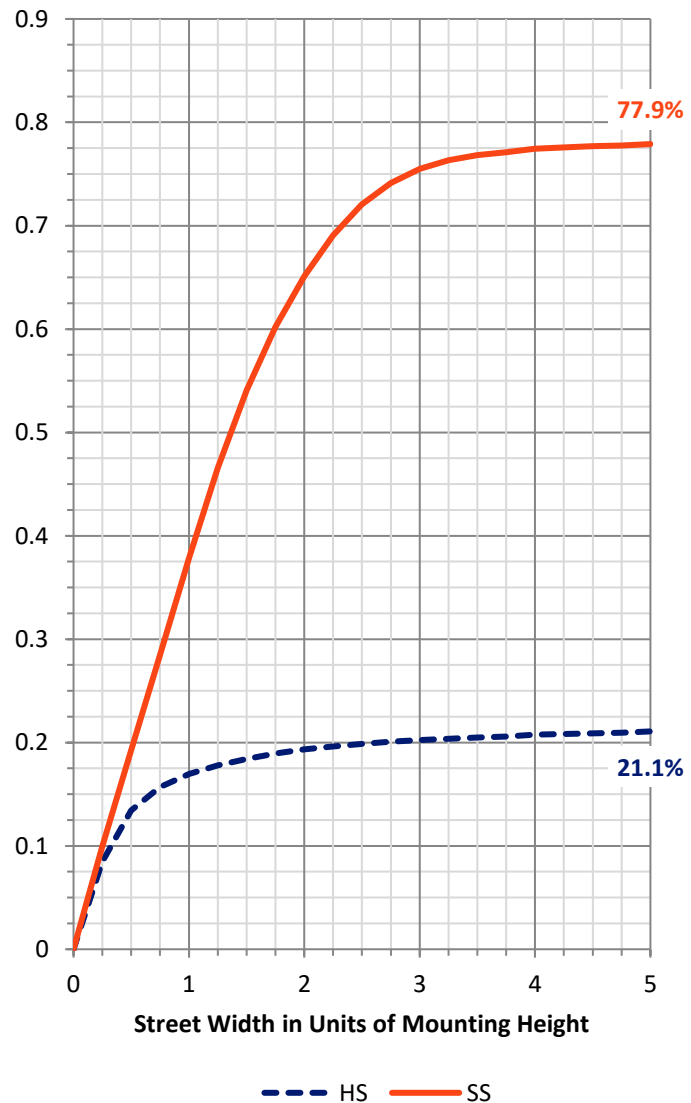
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	125.5	0.3	125.7
	% Fixture	21.7	0.0	21.8
Street Side	Lumens	451.9	0.1	452.0
	% Fixture	78.2	0.0	78.2
Total	Lumens	577.4	0.4	577.8
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	1.2
10°-20°	20.5	3.6
20°-30°	31.7	5.5
30°-40°	47.4	8.2
40°-50°	79.0	13.7
50°-60°	123.5	21.4
60°-70°	163.1	28.2
70°-80°	94.4	16.3
80°-90°	10.8	1.9
90°-100°	0.4	0.1
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°	577.4	99.9
0°-180°	577.8	100.0



REPORT NUMBER: P271690

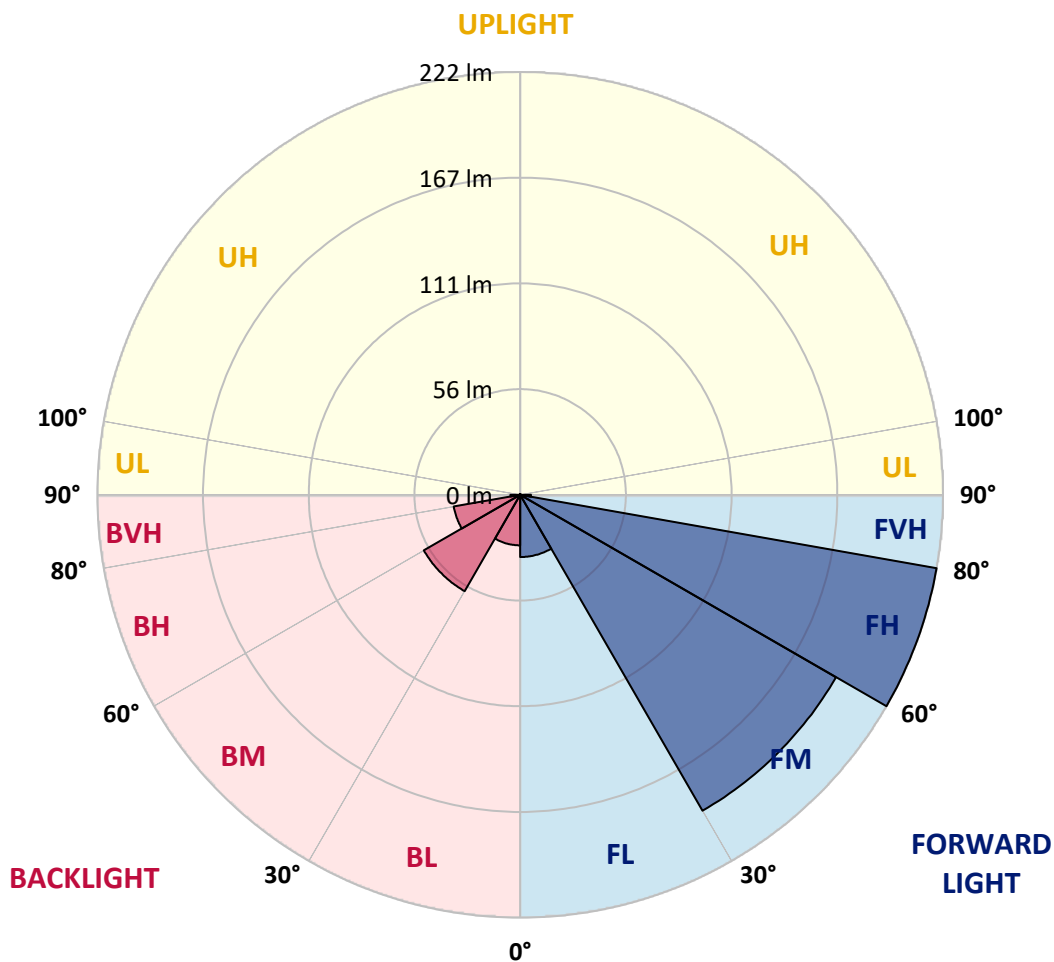
CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-7027-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	32.7	5.7			
FM	(30°-60°)	191.5	33.2			
FH	(60°-80°)	222.0	38.4			G0/660
FVH	(80°-90°)	5.7	1.0			G0/10
BL	(0°-30°)	26.5	4.6	B0/110		
BM	(30°-60°)	58.4	10.1	B0/220		
BH	(60°-80°)	35.4	6.1	B0/110		G0/110
BVH	(80°-90°)	5.1	0.9			G0/10
UL	(90°-100°)	0.4	0.1		U1/10	
UH	(100°-180°)	0.3	0.0		U1/10	

BUG Rating: B0-U1-G0

Type IV Medium





REPORT NUMBER: P271690

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-7027-XXB

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	78.2	78.2	78.2	77.5	77.3	76.9	76.4	76.0	75.5	74.9	74.2
5°	82.0	82.3	81.9	80.9	79.7	78.3	77.8	76.6	75.1	73.6	72.3
7.5°	85.7	85.7	84.8	83.1	81.2	79.1	78.4	76.9	75.1	73.1	71.2
10°	88.2	88.3	87.0	84.6	82.0	79.7	78.9	77.3	75.2	73.0	70.7
12.5°	89.7	89.8	87.9	85.4	82.3	79.9	79.3	77.6	75.4	72.7	70.0
15°	89.5	89.7	88.0	85.4	82.1	79.9	79.2	77.7	74.9	72.2	69.3
17.5°	87.9	88.1	86.8	83.9	81.3	79.6	78.7	77.3	74.5	71.7	68.5
20°	84.5	85.0	84.4	81.6	79.8	78.4	77.8	76.4	73.9	71.0	67.8
22.5°	80.8	81.3	81.0	78.8	78.0	77.3	76.6	75.6	73.4	70.4	67.5
25°	78.2	78.5	78.2	76.3	76.4	76.4	76.2	75.4	73.3	70.7	67.5
27.5°	82.6	82.6	80.5	76.4	76.0	76.6	76.4	76.1	74.4	71.4	68.1
30°	98.8	97.6	93.6	83.4	78.2	77.7	77.6	77.4	76.0	73.3	70.2
32.5°	117.0	115.8	111.1	98.3	87.2	79.9	79.3	79.4	78.9	76.4	73.4
35°	133.2	133.1	129.4	115.4	101.4	87.9	85.0	82.9	82.8	81.7	79.4
37.5°	146.3	146.3	146.6	130.7	116.7	100.6	95.5	89.1	89.1	88.6	87.0
40°	161.2	161.9	162.6	144.6	133.2	115.7	110.0	100.3	97.4	98.3	98.6
42.5°	180.8	181.6	181.2	161.9	148.1	133.8	126.6	114.9	107.8	109.2	112.7
45°	194.0	194.4	198.0	179.8	167.1	149.0	143.0	126.9	119.8	122.9	129.2
47.5°	209.0	209.9	210.6	200.1	189.1	166.3	155.1	138.6	133.9	138.7	148.5
50°	223.8	222.6	224.3	223.8	210.0	181.5	168.4	149.5	149.8	156.1	172.3
52.5°	236.4	232.8	236.4	241.0	237.1	197.4	182.0	162.3	167.2	175.0	200.3
55°	246.2	237.4	243.6	256.6	255.7	211.2	197.4	179.4	187.6	198.2	234.5
57.5°	226.2	227.3	244.4	267.2	266.8	225.4	211.1	200.8	210.7	222.6	274.8
60°	207.6	212.4	238.8	268.9	274.3	240.7	229.3	225.0	234.3	248.8	313.6
62.5°	197.6	202.3	229.7	265.7	286.5	263.3	254.0	250.6	263.2	279.5	348.1
65°	200.8	203.6	229.1	270.4	300.6	297.7	293.7	288.2	294.5	309.6	363.6
67.5°	192.1	196.8	224.3	278.7	326.1	339.6	343.1	337.2	331.9	329.8	341.0
70°	143.0	147.5	176.2	244.4	346.9	412.3	410.3	390.7	355.1	325.5	266.3
72°	90.8	89.7	111.6	179.0	308.5	431.1	440.9	404.7	344.6	289.1	180.9
72.5°	66.0	72.0	92.5	159.2	293.0	420.9	435.2	400.1	330.8	273.1	159.1
75°	16.1	17.0	22.2	57.0	171.6	316.7	334.8	309.2	241.5	162.1	70.6
77.5°	10.9	11.3	14.6	20.1	50.5	180.6	198.6	170.7	108.0	55.2	31.4
80°	8.2	8.4	10.6	14.2	20.9	61.6	72.7	57.7	26.9	30.6	22.4
82.5°	5.7	5.9	8.1	10.5	13.9	14.5	19.2	21.2	17.4	20.0	13.0
85°	4.0	4.0	5.9	7.2	8.8	7.2	7.6	10.6	11.8	11.9	7.9
87.5°	2.1	2.3	3.4	4.6	4.6	3.2	3.6	5.4	6.6	7.2	4.9
90°	0.8	0.8	1.4	1.8	1.1	0.9	0.8	1.1	1.5	2.2	1.4
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°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	74.0	73.5	72.9	72.4	72.3	72.0	71.7	71.4	71.4	71.1	71.2
5°	71.7	70.9	70.0	69.3	69.2	69.2	69.3	69.3	69.5	69.2	69.6
7.5°	70.4	69.6	68.3	67.6	66.9	66.8	67.2	67.9	68.2	67.9	68.3
10°	69.6	68.7	67.2	66.3	65.8	65.7	65.9	66.7	67.7	67.7	68.0
12.5°	68.8	67.6	66.1	65.5	65.0	65.1	65.6	66.0	67.2	67.6	67.8
15°	67.9	66.7	65.4	64.5	64.5	64.7	65.0	65.7	66.7	67.6	67.7
17.5°	67.1	65.8	64.7	63.9	63.9	64.3	64.7	65.5	66.1	67.4	67.4
20°	66.4	65.3	63.9	63.2	63.2	63.3	63.9	64.6	65.1	66.3	66.4
22.5°	65.9	64.6	63.3	62.3	61.8	61.6	62.2	62.9	63.5	64.6	64.8
25°	65.8	64.3	62.6	60.7	59.6	59.3	59.6	60.5	61.1	61.8	62.2
27.5°	66.4	64.9	62.3	59.0	56.8	55.9	56.1	56.6	56.9	57.7	58.2
30°	68.5	66.7	62.8	57.1	53.0	51.3	51.3	51.5	51.7	52.4	52.6
32.5°	71.7	70.1	64.4	55.2	49.2	46.9	46.4	45.9	45.9	45.8	45.9
35°	77.6	76.4	66.9	53.0	45.2	42.6	41.1	40.4	39.6	39.3	39.3
37.5°	86.3	85.2	70.7	50.6	41.5	39.0	37.2	35.8	34.9	34.8	35.2
40°	99.4	98.3	74.8	47.7	38.1	36.2	34.3	32.8	31.8	31.9	32.4
42.5°	115.4	111.7	79.2	43.8	35.3	34.3	32.4	31.0	30.0	29.6	29.6
45°	134.0	128.1	83.4	40.2	32.4	32.8	30.8	29.4	28.2	26.8	26.6
47.5°	157.3	144.3	87.0	36.7	29.0	31.1	29.3	27.8	26.1	24.4	24.3
50°	181.6	163.0	90.2	32.8	26.1	29.3	27.7	25.7	23.3	21.9	21.9
52.5°	209.8	185.4	94.3	28.5	23.9	27.2	25.6	23.2	21.1	20.9	20.9
55°	240.9	208.9	97.2	25.2	22.1	25.1	24.3	23.5	22.9	23.1	23.2
57.5°	273.6	233.5	94.7	22.7	20.8	24.5	26.7	25.7	23.6	23.5	23.4
60°	301.8	252.6	80.8	21.3	19.7	25.4	28.7	25.7	23.6	24.7	24.8
62.5°	320.2	261.7	53.8	19.3	18.1	24.0	27.9	25.0	23.7	26.8	27.1
65°	317.7	251.5	30.9	18.1	17.0	22.1	27.1	24.1	22.1	23.9	23.4
67.5°	280.3	210.8	22.4	17.4	16.3	20.8	25.4	22.6	20.6	22.7	21.9
70°	201.4	143.5	19.2	16.9	15.8	19.1	24.3	21.9	19.8	21.3	19.9
72°	135.1	87.3	17.7	16.5	15.2	18.1	23.4	21.2	19.0	19.9	18.2
72.5°	115.1	68.9	17.2	16.3	15.1	17.9	23.2	21.0	18.9	19.8	18.1
75°	43.0	26.9	15.3	15.1	13.9	16.6	22.1	20.3	18.1	17.8	17.1
77.5°	22.1	17.1	13.0	13.4	12.5	15.2	21.0	19.1	16.6	15.7	15.3
80°	16.1	12.4	10.6	11.3	10.6	13.7	19.5	17.3	15.1	14.0	13.7
82.5°	10.2	7.7	8.1	8.9	9.1	12.0	17.8	15.6	13.5	12.6	11.9
85°	4.9	4.6	5.7	6.6	7.3	10.2	16.3	13.8	11.8	10.0	10.2
87.5°	2.5	3.5	3.4	4.4	5.6	8.4	14.5	11.3	9.4	7.5	7.6
90°	0.6	0.9	1.0	1.8	2.2	3.6	9.3	6.5	6.3	2.7	2.3
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-T4W-7027-XXB

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
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

(END OF REPORT)