

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: P271630

Luminaire Tested: **IST-AF-350-LED-E1-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271630
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-350-LED-E1-T4W-7027
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
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: 2172 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Semi-Cutoff
BUG Rating: B1 - U1 - G1

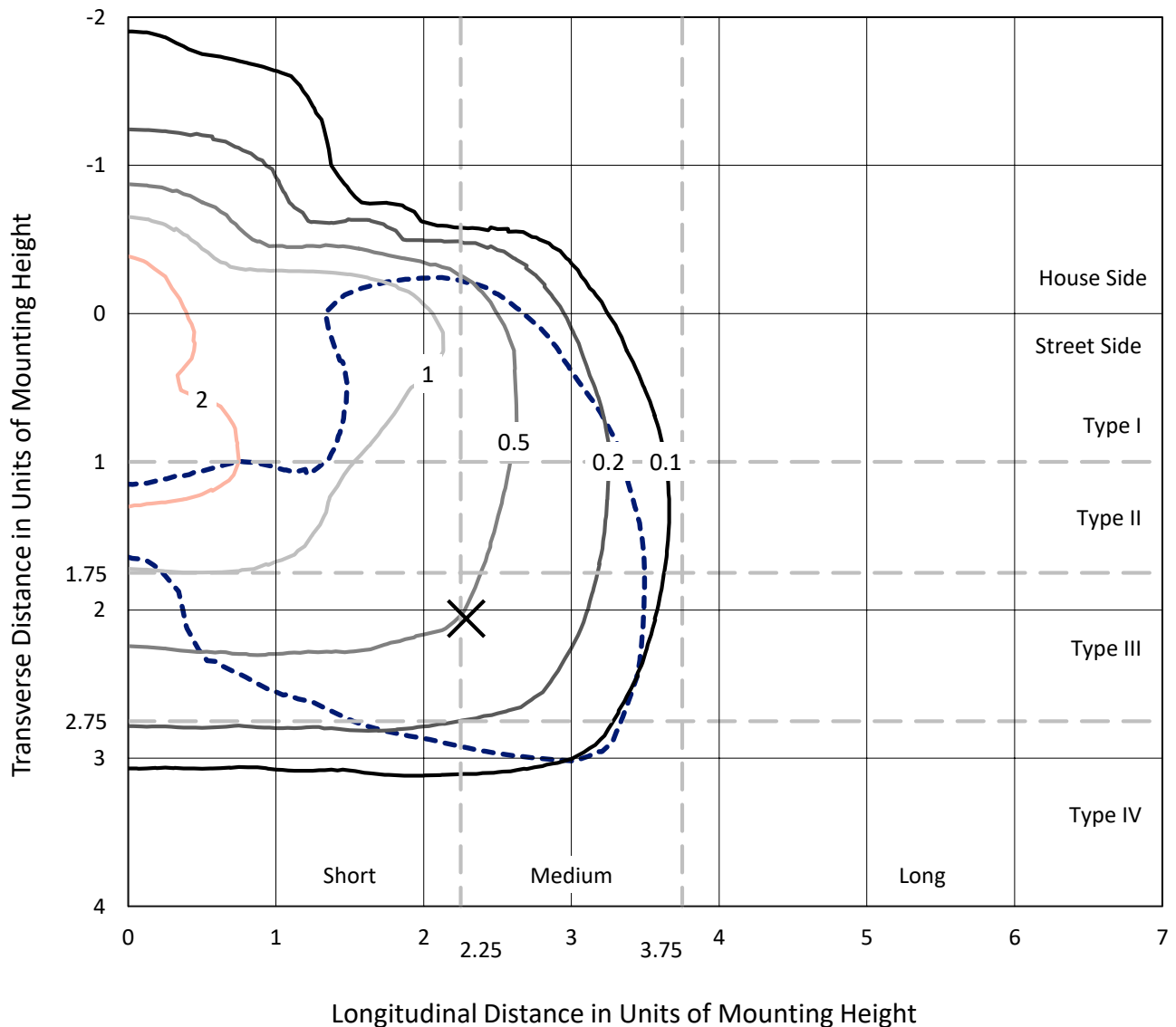
Input Watts (W): 20.09
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

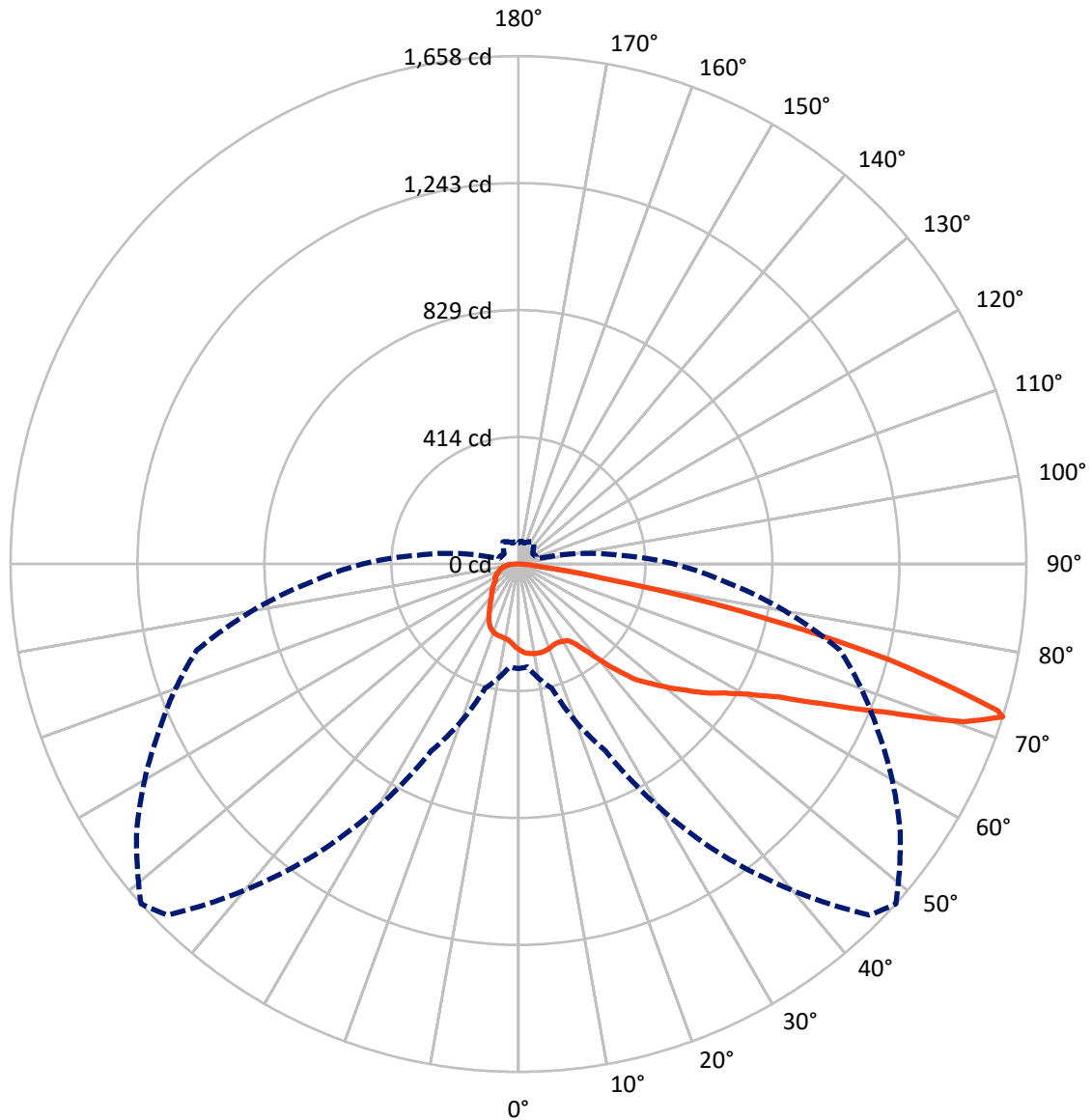
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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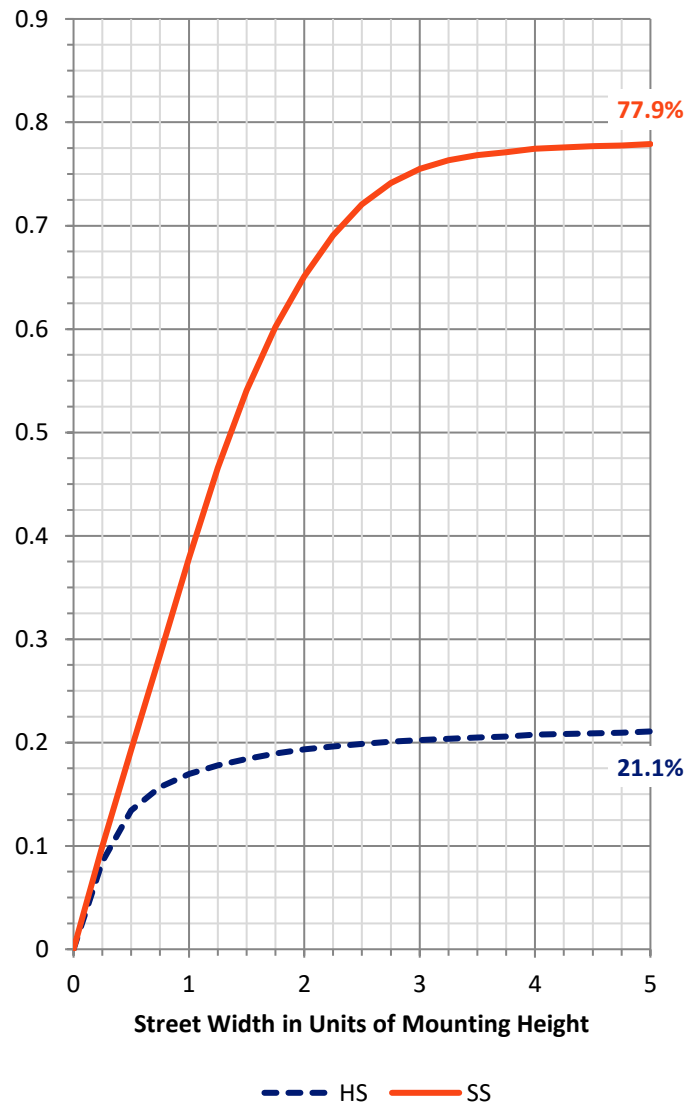
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	471.8	1.0	472.7
	% Fixture	21.7	0.0	21.8
Street Side	Lumens	1698.9	0.3	1699.3
	% Fixture	78.2	0.0	78.2
Total	Lumens	2170.7	1.3	2172.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	1.2
10°-20°	77.2	3.6
20°-30°	119.0	5.5
30°-40°	178.4	8.2
40°-50°	297.0	13.7
50°-60°	464.2	21.4
60°-70°	613.1	28.2
70°-80°	354.7	16.3
80°-90°	40.7	1.9
90°-100°	1.3	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°	2170.7	99.9
0°-180°	2172.0	100.0



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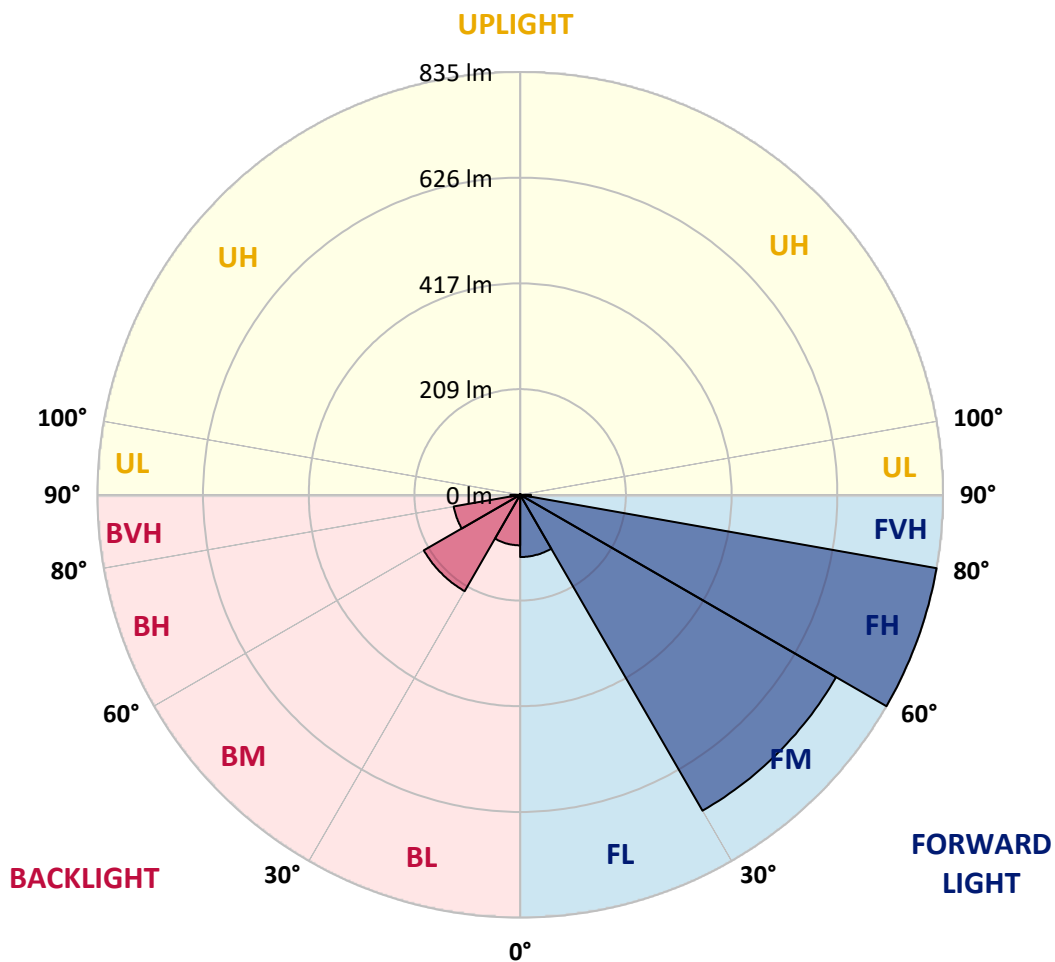
CATALOG NUMBER: IST-AF-350-LED-E1-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	122.8	5.7			
FM	(30°-60°)	720.1	33.2			
FH	(60°-80°)	834.7	38.4			G1/1800
FVH	(80°-90°)	21.3	1.0			G1/100
BL	(0°-30°)	99.8	4.6	B0/110		
BM	(30°-60°)	219.5	10.1	B0/220		
BH	(60°-80°)	133.1	6.1	B1/500		G1/500
BVH	(80°-90°)	19.3	0.9			G1/100
UL	(90°-100°)	1.3	0.1		U1/10	
UH	(100°-180°)	1.0	0.0		U1/10	

BUG Rating: B1-U1-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5
2.5°	294.3	293.9	293.9	291.4	290.4	288.9	287.5	285.8	283.9	281.6	278.8
5°	308.4	309.4	308.1	304.3	299.6	294.6	292.7	288.3	282.2	276.9	271.8
7.5°	322.0	322.2	318.8	312.5	305.2	297.4	294.8	288.9	282.2	275.0	267.8
10°	331.7	332.0	327.1	318.2	308.4	299.6	296.7	290.7	282.6	274.7	265.6
12.5°	337.3	337.8	330.1	321.1	309.4	300.6	298.0	291.7	283.1	273.2	263.0
15°	336.4	337.3	331.0	321.1	308.7	300.8	297.7	292.4	281.6	271.6	260.9
17.5°	330.1	331.5	326.4	315.3	305.5	299.2	295.8	290.4	280.0	269.3	257.6
20°	317.8	319.4	317.2	306.5	299.9	294.8	292.7	287.5	277.8	266.9	254.8
22.5°	304.0	305.5	305.0	296.1	292.9	290.4	288.3	284.4	276.0	264.9	253.6
25°	293.9	295.1	294.3	286.6	287.5	287.5	286.4	283.5	275.6	265.6	253.6
27.5°	310.6	310.6	302.4	287.0	285.4	288.3	287.5	286.0	279.7	268.8	256.1
30°	371.7	367.0	352.1	313.5	293.6	292.4	291.9	291.1	285.4	275.6	264.0
32.5°	440.1	435.4	417.7	369.2	327.9	300.8	298.0	298.3	296.7	287.5	276.0
35°	500.9	500.3	486.4	433.8	381.2	330.8	319.4	311.9	311.3	307.5	298.3
37.5°	550.0	550.0	551.3	491.5	438.8	378.4	359.1	335.2	335.2	333.0	327.3
40°	606.1	608.6	611.5	543.7	500.5	435.0	413.3	377.1	366.1	369.6	370.8
42.5°	679.7	682.9	681.1	608.3	556.9	502.8	476.0	432.3	405.1	410.7	424.0
45°	729.5	730.8	744.3	675.7	627.8	560.1	537.5	477.3	450.5	462.1	485.4
47.5°	785.9	789.1	791.4	752.3	711.0	625.0	583.4	521.1	503.7	521.4	558.2
50°	841.2	837.0	843.0	841.4	789.7	682.6	633.1	562.0	563.2	587.2	647.7
52.5°	889.1	875.1	889.1	906.3	891.2	741.9	684.1	610.2	628.5	657.8	753.2
55°	925.8	892.5	915.7	964.9	961.5	794.1	742.4	674.4	705.0	745.1	881.3
57.5°	850.5	854.6	918.9	1004.2	1002.7	847.1	793.6	754.8	792.2	837.0	1033.3
60°	780.3	798.5	897.8	1010.5	1031.3	904.8	862.2	846.1	880.8	935.2	1178.8
62.5°	743.1	760.4	863.5	998.9	1077.1	990.1	954.4	942.2	989.4	1050.6	1308.7
65°	754.8	765.4	861.3	1016.5	1129.7	1119.3	1103.7	1083.4	1107.0	1164.3	1367.2
67.5°	722.0	739.7	843.0	1047.7	1225.7	1276.9	1289.7	1267.6	1247.7	1239.9	1281.8
70°	537.5	554.4	662.8	918.9	1304.5	1550.1	1542.3	1468.5	1335.0	1223.5	1001.4
72°	341.4	336.8	419.6	673.2	1159.6	1620.5	1657.6	1521.2	1295.4	1086.5	680.2
72.5°	248.2	270.6	348.1	598.5	1101.6	1582.1	1636.3	1504.2	1243.3	1026.3	598.2
75°	60.5	64.0	83.5	214.5	645.2	1190.4	1258.4	1162.0	907.6	609.2	265.2
77.5°	41.0	42.5	55.2	75.5	189.6	678.8	746.9	641.7	406.0	207.3	118.1
80°	30.5	31.5	40.1	53.6	78.7	231.5	273.2	217.0	101.1	115.1	84.1
82.5°	21.4	22.1	30.3	39.3	52.3	54.2	72.1	79.7	65.6	75.3	49.1
85°	14.8	14.8	22.1	27.1	33.1	26.8	28.7	40.1	44.5	44.7	29.9
87.5°	7.8	8.8	12.9	17.3	17.3	12.3	13.6	20.5	25.0	26.8	18.0
90°	2.9	2.9	5.4	6.6	4.1	3.1	2.9	4.1	6.0	8.5	5.7
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°	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5
2.5°	278.1	276.3	273.7	272.5	271.8	270.6	269.3	268.8	268.8	267.4	267.8
5°	269.3	266.4	263.0	260.5	260.1	260.1	260.9	260.9	261.1	260.1	261.5
7.5°	264.9	261.8	256.7	254.0	251.6	251.3	252.6	255.2	256.5	255.5	256.7
10°	261.8	258.4	252.6	249.2	247.7	246.9	247.9	250.4	254.5	254.5	255.7
12.5°	258.6	254.2	248.5	246.0	244.8	245.1	246.3	248.2	252.6	254.2	254.8
15°	255.5	250.4	245.7	242.3	242.3	243.2	244.8	246.9	251.1	254.0	254.5
17.5°	252.3	247.3	243.2	240.4	240.4	241.6	243.2	246.0	248.9	253.0	253.0
20°	249.5	245.3	240.0	237.5	237.2	238.1	240.0	242.9	245.1	249.2	249.5
22.5°	247.9	242.9	237.8	234.1	232.5	231.9	233.8	236.5	238.8	242.9	243.5
25°	247.3	241.6	235.4	228.3	224.3	223.0	223.9	227.5	229.3	232.5	233.4
27.5°	249.5	244.1	234.4	221.8	213.3	209.8	210.7	213.0	213.5	217.0	218.6
30°	257.1	250.8	236.3	214.9	199.4	193.0	193.0	193.5	194.3	197.2	197.4
32.5°	269.3	263.3	241.9	207.6	185.2	176.3	174.2	172.7	172.7	172.4	172.7
35°	291.9	287.0	251.6	199.4	169.8	160.0	154.7	151.8	149.0	147.7	147.4
37.5°	324.7	320.3	265.6	189.9	156.2	146.4	139.9	134.2	131.1	130.7	132.3
40°	373.7	369.2	281.0	179.2	143.3	136.1	129.2	123.2	119.7	120.0	121.6
42.5°	433.8	420.2	297.7	164.7	132.9	129.2	121.6	116.6	113.1	111.2	110.9
45°	503.9	481.3	313.5	151.3	121.6	123.2	115.9	110.2	105.8	100.8	100.3
47.5°	591.6	542.5	327.3	137.7	109.3	116.9	110.0	104.7	97.9	92.0	91.1
50°	682.9	612.7	339.3	123.2	98.3	110.0	103.9	96.7	87.6	82.3	82.3
52.5°	788.5	697.2	354.7	107.1	89.8	102.4	96.4	87.0	79.4	78.7	78.7
55°	906.0	785.7	365.4	94.5	83.1	94.2	91.4	88.6	86.0	86.7	87.0
57.5°	1028.9	877.9	356.0	85.7	77.8	92.3	100.5	96.7	88.8	88.6	88.2
60°	1134.6	949.8	303.6	79.9	73.8	95.5	107.8	96.7	88.8	93.0	93.2
62.5°	1204.0	983.8	202.3	72.8	67.7	90.1	105.2	93.9	89.1	100.8	101.8
65°	1194.6	945.6	116.2	67.7	64.0	82.8	101.8	90.4	83.1	89.8	87.9
67.5°	1053.7	792.6	84.1	65.6	61.2	77.8	95.5	85.4	77.5	85.7	82.3
70°	757.3	539.6	72.4	63.6	59.2	71.9	91.1	82.3	74.3	79.9	74.6
72°	508.1	328.2	66.5	62.1	57.3	68.0	87.9	79.7	71.5	74.6	68.7
72.5°	432.5	258.9	64.9	61.4	56.8	67.1	87.0	79.1	70.9	74.0	68.3
75°	161.7	101.4	57.6	56.8	52.3	62.4	83.1	76.3	67.7	66.7	64.3
77.5°	83.1	64.3	49.1	50.0	46.9	57.0	79.1	71.9	62.4	58.9	57.6
80°	60.5	46.6	39.6	42.5	40.1	51.3	73.4	65.1	56.8	52.9	51.3
82.5°	38.1	28.9	30.3	33.7	34.0	45.4	66.7	58.6	50.5	47.3	44.7
85°	18.2	17.3	21.4	25.0	27.4	38.4	61.2	52.0	44.1	37.8	38.1
87.5°	9.7	13.3	12.9	16.7	21.1	31.5	54.2	42.5	35.2	28.4	28.7
90°	2.2	3.4	3.9	6.6	8.5	13.6	34.9	24.3	23.6	10.2	8.8
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



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CATALOG NUMBER: IST-AF-350-LED-E1-T4W-7027

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)