

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: P226744

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226744
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
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2557.4 lumens
Efficiency: N/A
Efficacy: 127.3 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

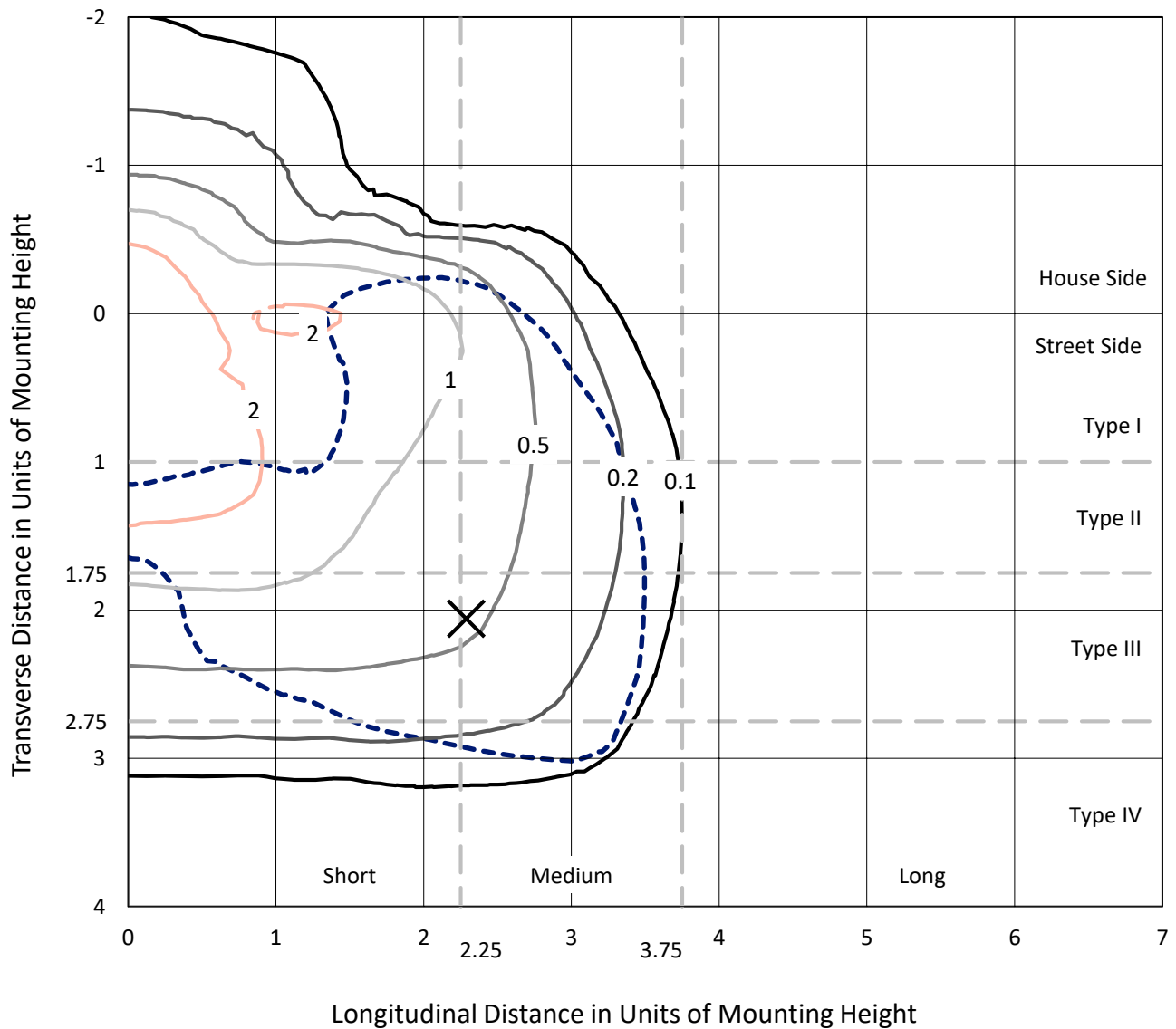


REPORT NUMBER: P226744

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

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

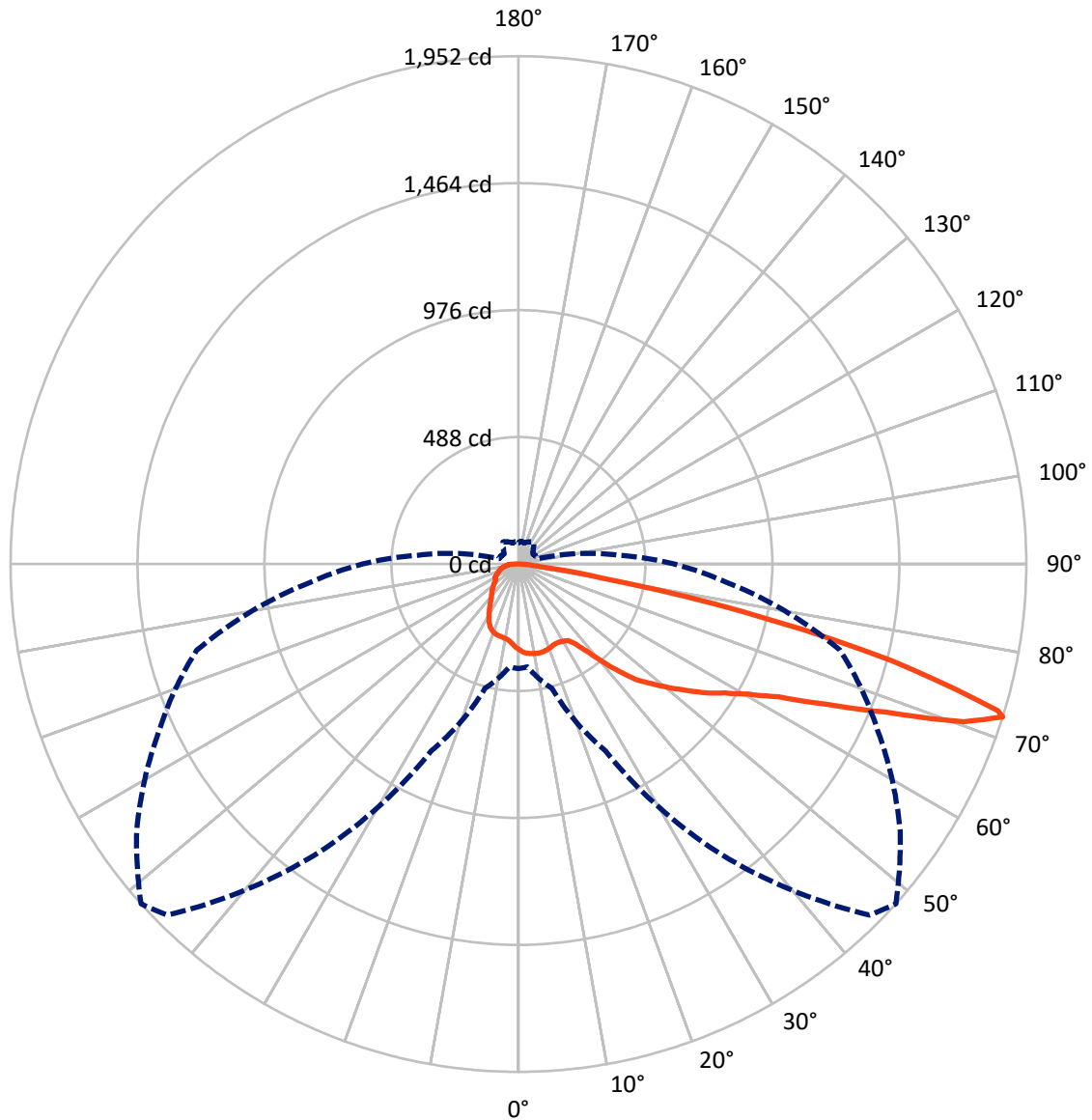


Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - Semi-Cutoff

REPORT NUMBER: P226744

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

Luminous Intensity Polar Plot



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

REPORT NUMBER: P226744

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

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	555.5	1.1	556.6
	% Fixture	21.7	0.0	21.8
Street Side	Lumens	2000.4	0.4	2000.8
	% Fixture	78.2	0.0	78.2
Total	Lumens	2555.8	1.6	2557.4
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	1.2
10°-20°	90.9	3.6
20°-30°	140.1	5.5
30°-40°	210.0	8.2
40°-50°	349.7	13.7
50°-60°	546.6	21.4
60°-70°	721.9	28.2
70°-80°	417.6	16.3
80°-90°	47.9	1.9
90°-100°	1.6	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°	2555.8	99.9
0°-180°	2557.4	100.0



REPORT NUMBER: P226744

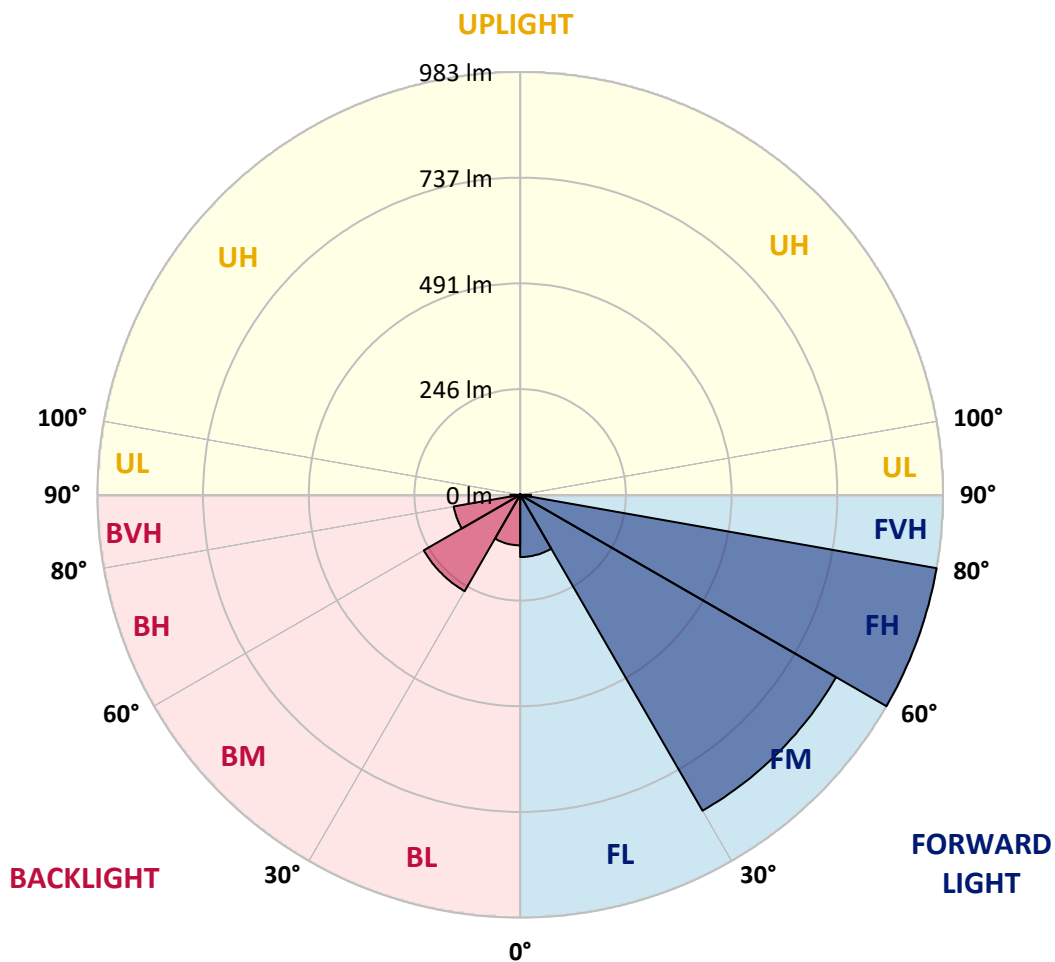
CATALOG NUMBER: IST-AF-350-LED-E1-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	144.6	5.7			
FM	(30°-60°)	847.9	33.2			
FH	(60°-80°)	982.8	38.4			G1/1800
FVH	(80°-90°)	25.1	1.0			G1/100
BL	(0°-30°)	117.5	4.6	B1/500		
BM	(30°-60°)	258.5	10.1	B1/1000		
BH	(60°-80°)	156.7	6.1	B1/500		G1/500
BVH	(80°-90°)	22.7	0.9			G1/100
UL	(90°-100°)	1.6	0.1		U1/10	
UH	(100°-180°)	1.1	0.0		U1/10	

BUG Rating: B1-U1-G1

Type IV Medium





REPORT NUMBER: P226744

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0
2.5°	346.5	346.1	346.1	343.1	342.0	340.1	338.6	336.4	334.2	331.6	328.3
5°	363.1	364.3	362.7	358.3	352.7	346.8	344.5	339.4	332.4	326.0	320.1
7.5°	379.1	379.4	375.3	368.0	359.4	350.2	347.2	340.1	332.4	323.8	315.3
10°	390.6	391.0	385.0	374.6	363.1	352.7	349.4	342.4	332.7	323.5	312.7
12.5°	397.2	397.6	388.7	378.0	364.3	353.8	350.9	343.5	333.5	321.6	309.7
15°	396.1	397.2	389.8	378.0	363.5	354.2	350.5	344.2	331.6	319.7	307.1
17.5°	388.7	390.2	384.2	371.2	359.8	352.4	348.3	342.0	329.7	317.1	303.4
20°	374.2	376.1	373.5	360.9	353.1	347.2	344.5	338.6	327.1	314.1	300.0
22.5°	357.9	359.8	359.1	348.6	344.9	342.0	339.4	334.9	324.9	311.9	298.6
25°	346.1	347.5	346.5	337.6	338.6	338.6	337.2	333.8	324.6	312.7	298.6
27.5°	365.7	365.7	356.1	337.9	336.0	339.4	338.6	336.8	329.4	316.4	301.6
30°	437.7	432.1	414.7	369.1	345.7	344.2	343.8	342.7	336.0	324.6	310.8
32.5°	518.1	512.6	491.8	434.8	386.2	354.2	350.9	351.3	349.4	338.6	324.9
35°	589.7	589.0	572.6	510.8	448.8	389.4	376.1	367.2	366.4	362.0	351.3
37.5°	647.6	647.6	649.1	578.6	516.7	445.5	422.8	394.7	394.7	392.1	385.3
40°	713.6	716.6	720.0	640.2	589.3	512.2	486.6	444.0	431.0	435.1	436.6
42.5°	800.5	804.1	801.9	716.3	655.8	592.0	560.5	508.9	477.0	483.7	499.2
45°	859.0	860.5	876.5	795.5	739.2	659.5	632.8	561.9	530.4	544.1	571.5
47.5°	925.5	929.1	931.7	885.8	837.2	735.9	686.9	613.5	593.1	613.9	657.2
50°	990.3	985.5	992.6	990.7	929.9	803.7	745.5	661.7	663.2	691.4	762.6
52.5°	1046.7	1030.4	1046.7	1067.1	1049.3	873.5	805.6	718.4	740.0	774.5	886.8
55°	1090.1	1050.8	1078.2	1136.1	1132.0	935.1	874.2	794.1	830.1	877.2	1037.8
57.5°	1001.5	1006.3	1082.0	1182.4	1180.6	997.4	934.4	888.7	932.8	985.5	1216.6
60°	918.7	940.3	1057.1	1189.9	1214.3	1065.2	1015.2	996.3	1037.1	1101.2	1387.9
62.5°	874.9	895.4	1016.6	1176.2	1268.2	1165.8	1123.8	1109.4	1165.0	1237.0	1540.8
65°	888.7	901.3	1014.1	1197.0	1330.0	1317.9	1299.7	1275.5	1303.3	1370.9	1609.7
67.5°	850.1	870.9	992.6	1233.7	1443.2	1503.3	1518.5	1492.5	1469.2	1459.9	1509.3
70°	632.8	652.8	780.4	1082.0	1536.0	1825.3	1815.9	1729.2	1571.9	1440.6	1179.2
72°	402.0	396.5	494.1	792.6	1365.3	1907.9	1951.7	1791.1	1525.2	1279.3	800.8
72.5°	292.3	318.6	409.9	704.7	1297.1	1862.7	1926.5	1771.0	1463.9	1208.4	704.4
75°	71.2	75.3	98.3	252.6	759.6	1401.6	1481.7	1368.3	1068.6	717.3	312.3
77.5°	48.2	50.0	65.0	89.0	223.3	799.3	879.4	755.6	478.1	244.1	139.1
80°	36.0	37.1	47.1	63.0	92.7	272.6	321.6	255.5	119.1	135.3	99.0
82.5°	25.3	26.0	35.6	46.3	61.6	63.8	84.9	93.8	77.1	88.7	57.9
85°	17.4	17.4	26.0	31.9	39.0	31.5	33.8	47.1	52.3	52.7	35.2
87.5°	9.3	10.4	15.2	20.4	20.4	14.4	16.0	24.1	29.3	31.5	21.2
90°	3.4	3.4	6.3	7.8	4.8	3.7	3.4	4.8	7.1	10.0	6.6
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

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0
2.5°	327.5	325.3	322.3	320.8	320.1	318.6	317.1	316.4	316.4	314.9	315.3
5°	317.1	313.7	309.7	306.8	306.4	306.4	307.1	307.1	307.5	306.4	307.8
7.5°	311.9	308.2	302.3	298.9	296.3	295.9	297.5	300.4	301.9	300.8	302.3
10°	308.2	304.1	297.5	293.4	291.5	290.8	292.0	294.9	299.7	299.7	301.2
12.5°	304.5	299.3	292.7	289.7	288.2	288.6	290.0	292.3	297.5	299.3	300.0
15°	300.8	294.9	289.3	285.2	285.2	286.3	288.2	290.8	295.6	298.9	299.7
17.5°	297.1	291.1	286.3	283.1	283.1	284.5	286.3	289.7	293.0	297.9	297.9
20°	293.8	289.0	282.6	279.7	279.3	280.4	282.6	286.0	288.6	293.4	293.8
22.5°	292.0	286.0	280.1	275.6	273.7	273.0	275.2	278.5	281.1	286.0	286.7
25°	291.1	284.5	277.1	268.9	264.1	262.6	263.7	267.8	270.1	273.7	274.9
27.5°	293.8	287.4	276.0	261.2	251.1	247.0	248.2	250.7	251.4	255.5	257.4
30°	302.7	295.2	278.1	253.0	234.8	227.4	227.4	227.7	228.8	232.2	232.5
32.5°	317.1	310.1	284.9	244.4	218.1	207.7	205.1	203.3	203.3	202.9	203.3
35°	343.8	337.9	296.3	234.8	199.9	188.4	182.1	178.8	175.4	174.0	173.6
37.5°	382.4	377.2	312.7	223.6	183.9	172.5	164.7	158.0	154.3	154.0	155.8
40°	439.9	434.8	330.8	211.0	168.8	160.2	152.1	145.1	141.0	141.3	143.2
42.5°	510.8	494.8	350.5	194.0	156.5	152.1	143.2	137.3	133.2	130.9	130.5
45°	593.4	566.7	369.1	178.0	143.2	145.1	136.5	129.8	124.6	118.7	117.9
47.5°	696.5	638.7	385.3	162.1	128.7	137.6	129.4	123.2	115.4	108.3	107.2
50°	804.1	721.4	399.5	145.1	115.7	129.4	122.4	113.9	103.1	96.8	96.8
52.5°	928.4	820.8	417.7	126.1	105.7	120.5	113.5	102.4	93.5	92.7	92.7
55°	1066.7	925.1	430.3	111.3	97.9	110.9	107.5	104.2	101.3	102.0	102.4
57.5°	1211.4	1033.7	419.1	100.9	91.7	108.6	118.4	113.9	104.5	104.2	103.8
60°	1336.0	1118.3	357.5	94.2	86.7	112.4	126.8	113.9	104.5	109.5	109.8
62.5°	1417.6	1158.4	238.1	85.7	79.8	106.1	123.9	110.6	105.0	118.7	119.8
65°	1406.5	1113.5	136.9	79.8	75.3	97.6	119.8	106.5	97.9	105.7	103.5
67.5°	1240.6	933.2	99.0	77.1	71.9	91.7	112.4	100.6	91.2	100.9	96.8
70°	891.7	635.4	85.3	74.9	69.8	84.6	107.2	96.8	87.6	94.2	87.9
72°	598.3	386.5	78.3	73.0	67.5	80.1	103.5	93.8	84.2	87.9	80.8
72.5°	509.2	304.8	76.4	72.3	66.8	79.0	102.4	93.1	83.5	87.2	80.5
75°	190.3	119.5	67.9	66.8	61.6	73.4	97.9	89.7	79.8	78.7	75.7
77.5°	97.9	75.7	57.9	59.0	55.2	67.1	93.1	84.6	73.4	69.4	67.9
80°	71.2	54.9	46.7	50.0	47.1	60.5	86.4	76.8	66.8	62.3	60.5
82.5°	44.9	34.2	35.6	39.7	40.1	53.4	78.7	68.9	59.3	55.6	52.7
85°	21.5	20.4	25.3	29.3	32.2	45.2	71.9	61.2	52.0	44.5	44.9
87.5°	11.5	15.5	15.2	19.6	24.9	37.1	63.8	50.0	41.5	33.3	33.8
90°	2.6	4.1	4.5	7.8	10.0	16.0	41.1	28.5	27.8	11.9	10.4
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



REPORT NUMBER: P226744

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

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)