

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: P228023

Luminaire Tested: **ISC-AF-350-LED-E1-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228023
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29757)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISC-AF-350-LED-E1-T4W-7030
Description: IMPACT ELITE LED CYLINDER LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 3000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2112 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

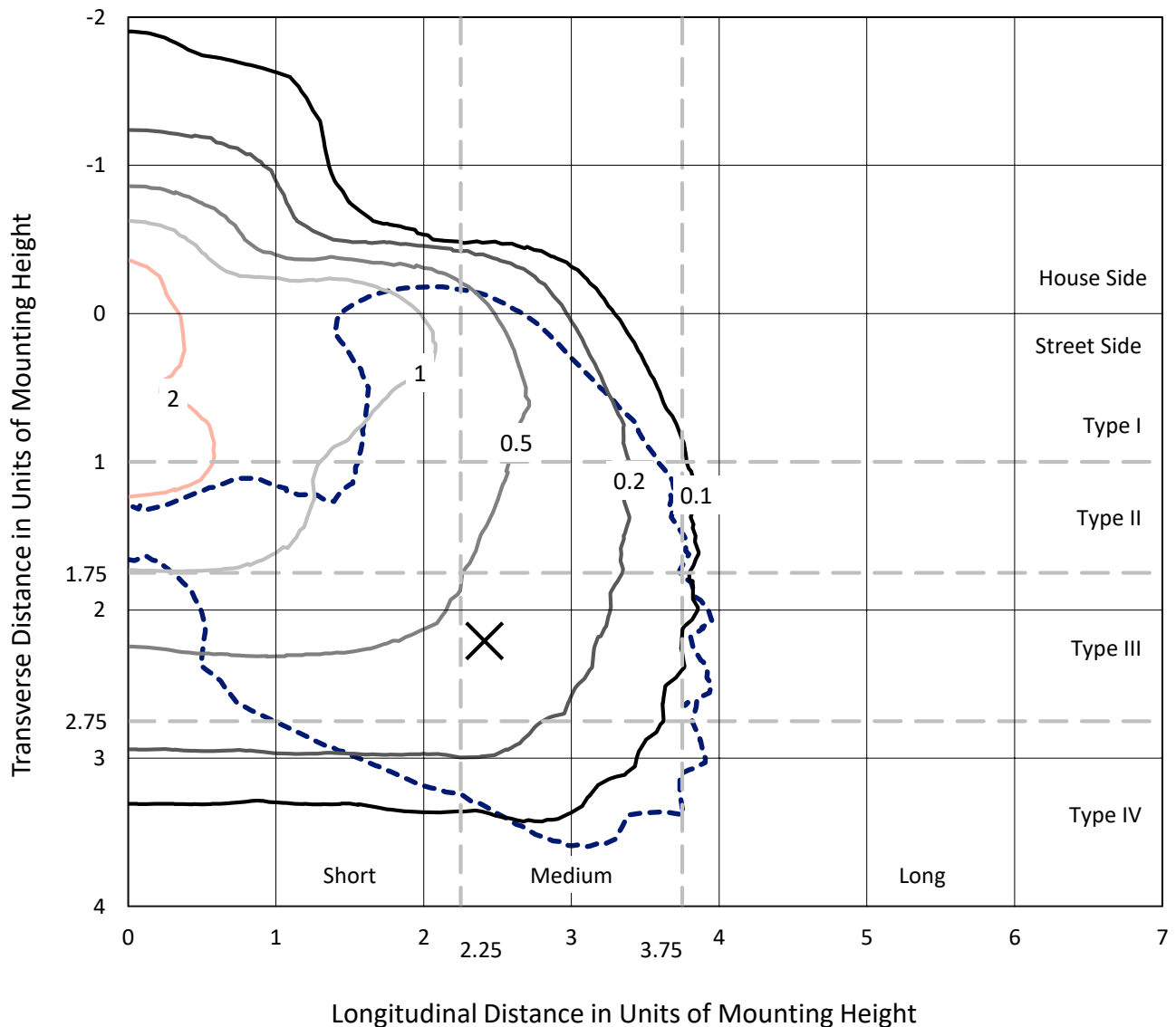
Input Watts (W): 20.09
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P228023
 CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

Iso-Footcandle Lines of Horizontal Illumination

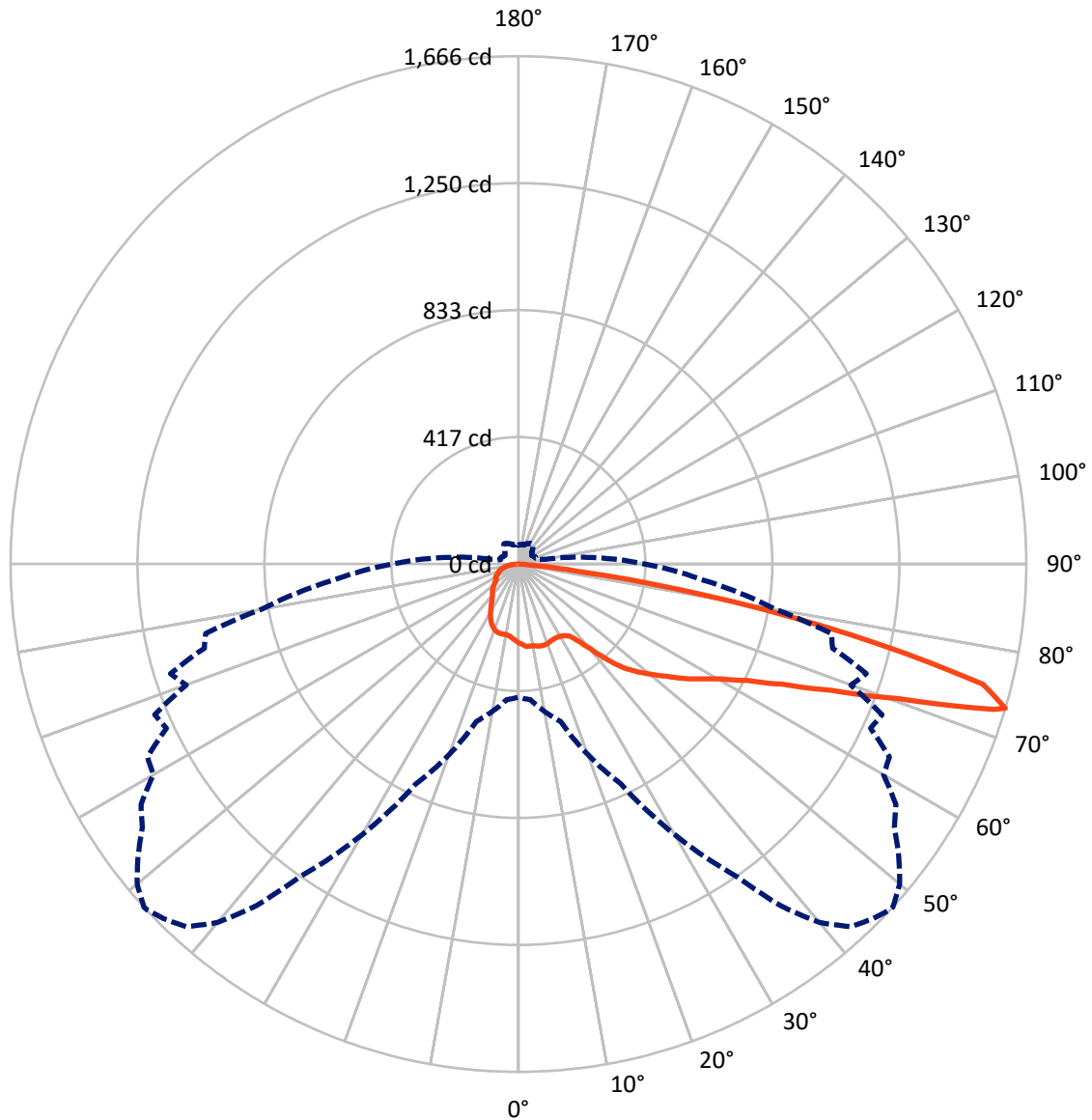
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P228023
CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P228023

CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	422.0	0.0	422.0
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	1690.0	0.0	1690.0
	% Fixture	80.0	0.0	80.0
Total	Lumens	2112.0	0.0	2112.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.7	1.2
10°-20°	73.5	3.5
20°-30°	113.0	5.3
30°-40°	164.8	7.8
40°-50°	271.7	12.9
50°-60°	425.4	20.1
60°-70°	577.1	27.3
70°-80°	427.3	20.2
80°-90°	34.5	1.6
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°	2112.0	100.0
0°-180°	2112.0	100.0



REPORT NUMBER: P228023

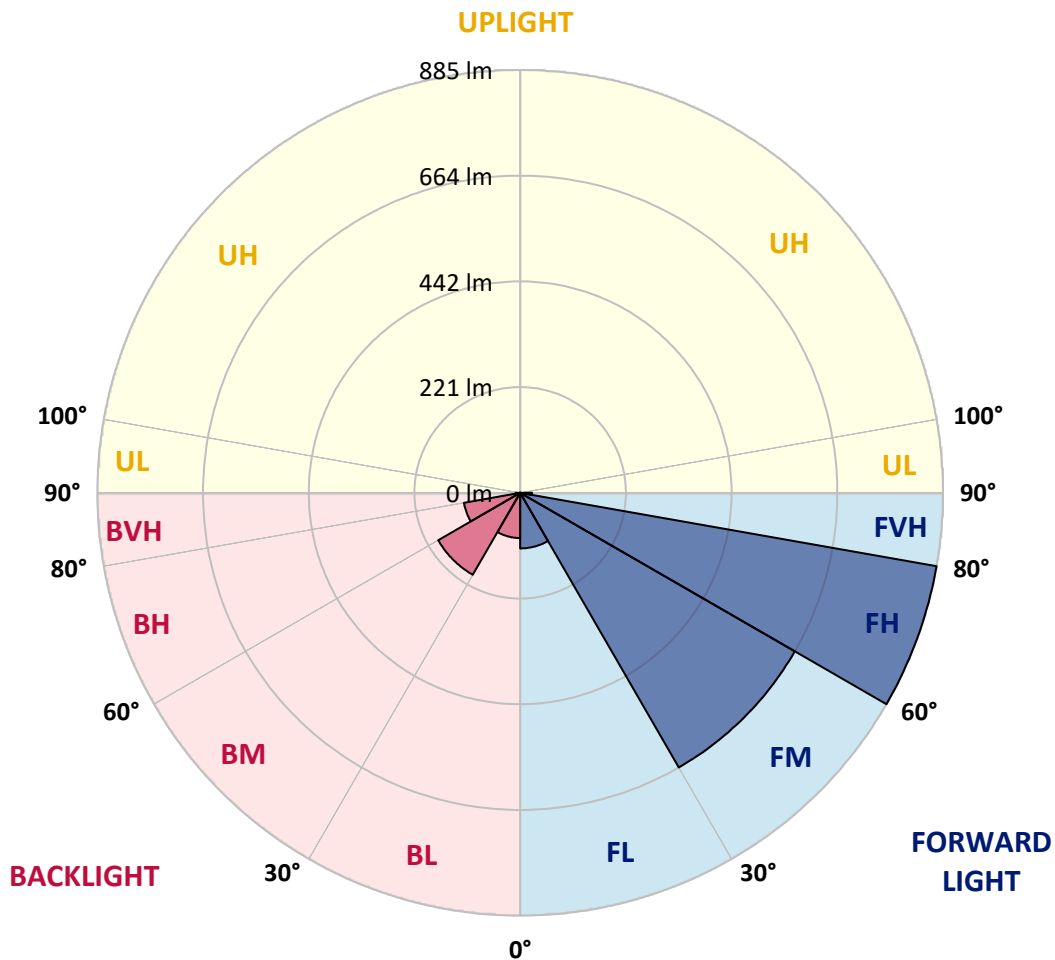
CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	116.4	5.5			
FM	(30°-60°)	663.8	31.4			
FH	(60°-80°)	884.9	41.9			G1/1800
FVH	(80°-90°)	24.9	1.2			G1/100
BL	(0°-30°)	94.7	4.5	B0/110		
BM	(30°-60°)	198.1	9.4	B0/220		
BH	(60°-80°)	119.5	5.7	B1/500		G1/500
BVH	(80°-90°)	9.6	0.5			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Medium





REPORT NUMBER: P228023

CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47°	47.5°
0°	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4
2.5°	274.7	274.0	271.9	271.2	269.1	267.7	267.0	266.3	268.4	267.0	264.9
5°	292.1	290.7	287.9	283.8	279.6	276.8	276.1	274.7	274.7	273.3	271.9
7.5°	304.7	304.0	299.8	293.5	286.5	281.7	278.9	276.8	277.5	276.1	271.9
10°	316.5	315.1	308.2	300.5	290.0	284.5	281.0	277.5	280.3	278.2	272.6
12.5°	325.6	324.2	314.4	304.7	292.8	286.5	283.1	281.0	283.8	282.4	276.1
15°	330.5	329.1	319.3	307.5	294.9	287.9	286.5	285.1	287.2	284.5	278.9
17.5°	327.7	327.7	318.6	306.1	295.6	288.6	286.5	285.1	287.9	285.1	278.9
20°	317.2	318.6	312.3	299.1	291.4	286.5	284.5	281.7	284.5	281.7	277.5
22.5°	304.0	305.4	301.9	290.0	284.5	281.0	280.3	277.5	279.6	277.5	273.3
25°	292.1	292.1	290.7	280.3	279.6	276.8	277.5	276.1	277.5	274.7	271.9
27.5°	292.8	292.8	287.2	276.8	276.1	276.1	276.1	276.1	276.8	274.7	271.9
30°	334.0	335.3	319.3	290.0	279.6	278.2	278.9	278.2	278.9	278.2	274.7
32.5°	396.0	396.0	380.7	335.3	298.4	289.3	285.8	285.1	283.1	282.4	279.6
35°	457.4	456.7	441.3	391.1	344.4	327.0	315.8	305.4	300.5	295.6	290.7
37.5°	508.9	506.9	504.8	447.6	398.8	378.6	365.3	350.0	340.2	331.9	320.7
40°	557.1	560.5	568.2	499.9	453.2	434.3	421.1	401.6	391.8	381.4	368.1
42.5°	623.3	628.2	628.9	556.4	502.7	490.1	479.7	465.0	454.6	442.0	430.2
45°	687.4	688.1	690.2	617.0	563.3	547.3	539.6	525.7	512.4	496.4	486.6
47.5°	731.4	729.3	738.3	686.7	634.4	616.3	605.2	584.2	564.0	543.8	529.2
50°	785.0	782.9	782.9	766.2	716.7	695.8	676.3	637.2	615.6	590.5	569.6
52.5°	832.4	824.8	829.7	839.4	803.2	776.7	742.5	698.6	670.0	639.3	612.8
55°	897.3	857.5	868.7	902.9	888.9	847.8	802.5	755.8	723.0	688.1	663.7
57.5°	875.0	847.8	880.5	940.5	939.8	901.5	863.1	805.9	773.2	740.4	710.4
60°	794.8	808.7	879.9	966.3	969.8	939.8	908.4	855.4	829.7	795.5	765.5
62.5°	732.7	753.0	850.6	964.2	1004.0	976.1	950.3	918.9	900.8	872.2	841.5
65°	729.3	741.1	835.9	962.1	1052.1	1037.4	1025.6	1010.9	1007.4	986.5	951.0
67.5°	762.7	773.9	861.0	1015.8	1123.2	1116.9	1134.3	1131.5	1146.9	1136.4	1107.1
70°	697.2	703.5	810.8	1034.6	1285.6	1313.5	1352.5	1350.5	1383.2	1358.1	1324.0
72.5°	489.4	502.0	596.8	854.8	1289.1	1438.3	1528.9	1605.6	1641.2	1647.5	1631.4
73°	437.1	446.9	534.7	796.2	1254.2	1413.2	1535.2	1614.0	1645.4	1664.9	1666.3
75°	152.0	156.9	233.6	482.5	1002.6	1233.3	1390.2	1461.3	1453.6	1510.8	1573.6
77.5°	48.8	49.5	60.7	124.8	483.8	765.5	940.5	1006.0	968.4	1030.4	1114.1
80°	30.0	31.4	39.7	56.5	126.9	232.2	393.2	492.2	472.0	529.9	619.1
82.5°	18.1	18.8	24.4	34.9	50.9	56.5	73.9	100.4	123.4	148.5	194.5
85°	8.4	9.1	11.9	16.0	20.9	21.6	20.9	19.5	22.3	25.8	30.0
87.5°	0.0	0.0	0.7	1.4	0.7	0.0	0.0	0.0	0.0	0.7	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P228023

CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4
2.5°	267.0	264.9	264.9	262.1	263.5	260.7	262.1	259.4	260.7	257.3	259.4
5°	271.2	267.7	267.7	263.5	264.2	259.4	261.4	255.9	258.7	252.4	256.6
7.5°	273.3	267.0	269.8	262.1	265.6	257.3	261.4	252.4	258.0	248.2	255.2
10°	276.1	267.0	271.9	263.5	267.7	258.0	263.5	252.4	259.4	247.5	253.8
12.5°	280.3	270.5	274.7	264.9	270.5	259.4	264.9	253.8	260.7	247.5	255.2
15°	283.1	273.3	277.5	267.7	271.9	259.4	266.3	253.1	260.7	246.8	255.2
17.5°	282.4	273.3	277.5	266.3	271.2	258.7	265.6	252.4	259.4	244.7	253.8
20°	279.6	271.9	274.7	264.9	269.1	256.6	262.8	249.6	257.3	242.6	251.7
22.5°	276.1	268.4	271.9	262.8	267.0	254.5	260.1	248.2	255.9	241.2	249.6
25°	274.0	267.7	269.8	260.7	266.3	255.2	260.7	247.5	255.9	241.2	251.0
27.5°	273.3	267.7	271.9	263.5	268.4	258.7	264.2	252.4	259.4	244.0	253.8
30°	277.5	272.6	276.1	269.1	273.3	263.5	269.1	258.0	264.9	250.3	261.4
32.5°	282.4	277.5	281.0	274.7	281.0	271.2	278.2	267.0	275.4	260.7	271.2
35°	292.8	287.2	292.1	285.1	292.1	284.5	292.1	280.3	290.7	276.1	287.2
37.5°	320.0	304.7	309.6	301.9	308.9	299.1	312.3	300.5	312.3	298.4	313.7
40°	363.2	336.0	340.9	324.9	335.3	320.7	336.7	327.7	343.7	326.3	345.8
42.5°	419.7	393.9	389.0	364.6	373.7	356.3	372.3	356.3	377.9	361.1	385.5
45°	471.3	444.1	436.4	412.7	419.0	396.0	416.2	393.9	422.5	403.0	433.7
47.5°	513.8	481.8	475.5	448.3	459.4	437.8	462.9	439.2	474.1	454.6	490.1
50°	552.9	513.1	511.7	482.5	501.3	479.7	515.2	499.2	533.3	513.8	555.7
52.5°	597.5	547.3	554.3	527.8	557.8	539.6	580.8	557.8	602.4	581.5	627.5
55°	644.9	591.9	610.0	594.0	629.6	617.7	652.6	631.7	675.6	654.7	703.5
57.5°	697.2	651.9	683.9	676.3	707.6	693.0	732.0	713.2	757.1	739.7	788.5
60°	765.5	735.5	766.9	766.2	793.4	792.7	817.8	806.6	848.5	840.8	885.4
62.5°	854.1	830.4	863.8	854.8	887.5	881.9	912.6	912.6	942.6	953.1	997.7
65°	973.3	941.9	981.6	967.7	1000.5	1001.9	1021.4	1024.9	1061.1	1073.0	1111.3
67.5°	1135.0	1098.8	1130.1	1103.6	1141.3	1139.2	1155.9	1162.9	1167.8	1196.4	1200.6
70°	1367.9	1313.5	1342.1	1305.8	1312.8	1317.7	1286.3	1309.3	1253.5	1298.9	1237.5
72.5°	1619.6	1557.5	1508.0	1471.8	1400.0	1389.5	1298.2	1317.7	1199.2	1238.2	1114.1
73°	1632.8	1572.9	1505.9	1468.3	1383.2	1372.1	1274.5	1291.2	1160.1	1197.1	1066.7
75°	1484.3	1500.3	1339.3	1354.6	1206.8	1224.3	1071.6	1091.1	930.0	957.9	789.9
77.5°	1000.5	1054.1	873.6	941.2	757.8	825.5	618.4	624.7	456.0	426.0	289.3
80°	495.7	541.7	384.2	419.7	281.7	276.8	168.7	140.1	119.2	122.0	125.5
82.5°	142.9	161.1	99.7	99.0	70.4	66.9	66.9	71.1	72.5	80.9	78.8
85°	27.2	32.8	28.6	38.3	34.2	37.6	34.9	40.4	37.6	46.7	40.4
87.5°	0.7	0.0	0.7	2.1	2.1	4.9	3.5	5.6	5.6	9.8	9.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P228023

CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

CANDELA DISTRIBUTION (continued):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4
2.5°	256.6	260.1	258.7	257.3	255.9	255.2	252.4	253.8	250.3	253.1	250.3
5°	251.0	255.2	253.1	250.3	248.9	247.5	242.6	246.1	240.5	245.4	241.2
7.5°	244.7	251.7	249.6	246.8	244.0	242.6	232.9	240.5	232.2	239.1	232.2
10°	242.6	250.3	247.5	244.0	241.2	239.8	228.0	237.0	228.0	235.6	226.6
12.5°	241.2	250.3	246.1	242.6	239.8	237.7	224.5	235.6	223.8	235.0	224.5
15°	239.8	250.3	244.7	240.5	237.7	235.6	221.7	234.3	221.0	233.6	221.7
17.5°	238.4	248.2	243.3	238.4	235.6	234.3	218.9	232.2	218.2	232.2	220.3
20°	236.3	246.1	240.5	235.6	232.9	230.8	215.4	229.4	214.7	228.7	215.4
22.5°	233.6	244.0	239.1	234.3	231.5	228.0	211.2	225.9	210.6	224.5	211.9
25°	234.3	245.4	239.1	234.3	230.1	226.6	208.5	224.5	207.1	221.0	207.1
27.5°	237.7	247.5	241.2	237.0	231.5	227.3	208.5	223.1	205.7	217.5	202.9
30°	244.7	254.5	248.9	242.6	237.7	232.2	211.9	223.8	205.7	213.3	198.7
32.5°	256.6	265.6	260.1	255.2	249.6	241.2	218.9	227.3	207.1	210.6	195.2
35°	271.9	283.1	280.3	276.8	269.8	255.2	230.8	232.2	209.9	207.8	190.3
37.5°	297.0	312.3	311.6	310.9	303.3	276.8	244.0	241.9	212.6	205.7	184.1
40°	329.8	347.9	352.8	357.7	341.6	302.6	259.4	251.7	214.0	201.5	174.3
42.5°	368.1	392.5	407.2	416.2	386.9	331.2	276.8	262.8	214.0	195.2	163.1
45°	415.5	444.1	472.0	481.8	437.1	361.8	294.9	271.9	211.2	185.5	148.5
47.5°	473.4	506.9	545.2	550.1	491.5	394.6	307.5	278.2	202.2	172.2	135.3
50°	537.5	578.0	634.4	631.0	549.4	428.8	315.8	282.4	186.1	156.9	119.2
52.5°	609.3	660.2	740.4	724.4	619.8	471.3	323.5	287.9	166.6	138.7	103.2
55°	699.3	759.9	860.3	826.2	697.9	518.0	334.7	288.6	140.8	117.1	91.3
57.5°	796.2	861.0	989.3	927.3	771.1	554.3	329.8	266.3	115.0	99.0	82.3
60°	912.6	991.4	1118.3	1021.4	832.4	566.8	295.6	219.6	98.3	89.2	78.1
62.5°	1043.0	1121.1	1224.3	1086.9	867.3	545.9	219.6	152.0	84.4	79.5	71.8
65°	1181.7	1255.6	1275.2	1092.5	844.3	453.9	136.0	99.7	73.2	71.1	66.2
67.5°	1309.3	1316.3	1227.1	1001.9	732.7	316.5	92.7	79.5	67.6	66.9	64.1
70°	1342.1	1221.5	1020.0	780.2	529.2	188.2	75.3	69.0	64.8	64.8	62.7
72.5°	1121.1	930.0	681.8	472.7	288.6	100.4	64.1	62.7	61.4	61.4	60.0
73°	1051.4	856.8	610.7	412.7	244.0	89.9	62.7	61.4	60.7	60.0	59.3
75°	698.6	538.2	346.5	209.2	113.6	64.8	55.8	55.8	55.1	55.8	55.1
77.5°	269.1	202.9	133.9	89.9	64.8	50.9	47.4	48.1	47.4	48.8	48.1
80°	118.5	117.1	88.5	63.4	47.4	38.3	38.3	38.3	39.0	39.7	39.7
82.5°	80.9	68.3	52.3	39.0	28.6	27.9	28.6	28.6	29.3	30.0	29.3
85°	44.6	37.6	27.9	17.4	15.3	18.8	18.8	18.8	18.1	18.1	17.4
87.5°	13.9	10.5	7.7	2.1	3.5	3.5	4.9	4.2	4.2	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P228023

CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4	259.4
2.5°	253.1	251.0	253.1	249.6	252.4	249.6	251.7	251.7	251.0	251.0	251.0
5°	244.7	241.2	244.7	242.6	244.7	241.9	244.0	244.7	245.4	247.5	246.8
7.5°	238.4	231.5	239.1	232.2	238.4	232.2	237.7	238.4	240.5	243.3	245.4
10°	235.6	226.6	235.6	227.3	235.0	228.0	235.0	235.6	237.7	241.2	244.7
12.5°	234.3	224.5	234.3	225.9	234.3	227.3	234.3	236.3	237.7	240.5	244.7
15°	232.9	223.1	234.3	225.2	234.3	227.3	235.0	236.3	238.4	241.2	244.7
17.5°	232.2	221.0	232.9	224.5	232.9	225.9	234.3	234.3	237.0	240.5	242.6
20°	229.4	218.9	229.4	221.0	229.4	223.1	230.1	230.1	232.9	234.3	237.7
22.5°	225.2	214.0	223.8	216.1	223.8	217.5	223.1	223.1	225.2	227.3	229.4
25°	218.9	208.5	216.8	209.9	215.4	209.9	214.0	213.3	214.7	216.1	217.5
27.5°	211.9	201.5	208.5	200.8	204.3	198.7	201.5	200.1	200.8	201.5	202.2
30°	204.3	193.8	197.3	190.3	191.0	185.5	186.8	184.8	184.1	183.4	182.0
32.5°	195.9	184.8	184.8	177.8	176.4	171.5	171.5	168.7	166.6	163.8	161.1
35°	185.5	175.7	170.8	165.2	162.4	157.6	156.9	153.4	148.5	143.6	140.8
37.5°	175.0	163.8	156.9	151.3	148.5	145.0	144.3	141.5	136.0	130.4	126.2
40°	161.1	149.9	142.2	140.1	138.0	135.3	136.0	132.5	126.9	120.6	117.1
42.5°	147.1	137.3	131.1	130.4	129.0	128.3	129.0	126.2	119.9	114.3	110.2
45°	135.3	125.5	119.2	118.5	117.8	120.6	121.3	120.6	113.6	108.1	102.5
47.5°	123.4	111.6	107.4	106.0	106.7	110.9	112.2	114.3	108.1	101.8	94.1
50°	109.5	98.3	96.9	95.5	96.2	99.7	103.2	107.4	101.8	92.7	82.3
52.5°	96.9	87.1	87.8	86.5	87.8	90.6	93.4	100.4	93.4	84.4	79.5
55°	87.1	79.5	80.9	79.5	80.9	84.4	86.5	92.0	92.0	89.9	85.8
57.5°	80.2	74.6	76.0	74.6	76.7	79.5	81.6	93.4	100.4	94.8	86.5
60°	76.0	71.1	71.8	70.4	71.8	76.0	80.2	94.1	105.3	94.1	87.8
62.5°	69.7	65.5	64.8	64.8	66.2	73.2	75.3	87.8	103.9	93.4	88.5
65°	65.5	62.0	61.4	60.7	62.0	66.9	69.0	81.6	100.4	88.5	80.2
67.5°	63.4	60.7	59.3	57.9	59.3	63.4	65.5	76.7	94.8	84.4	75.3
70°	61.4	58.6	57.9	56.5	57.2	60.0	62.7	70.4	89.9	79.5	70.4
72.5°	58.6	55.8	55.1	53.0	53.7	56.5	57.9	66.2	83.7	74.6	65.5
73°	57.9	55.1	54.4	52.3	53.0	55.1	56.5	64.8	82.3	73.9	64.8
75°	54.4	51.6	50.9	49.5	50.2	50.2	51.6	59.3	78.1	69.7	60.7
77.5°	48.1	46.0	45.3	43.9	43.2	42.5	44.6	52.3	71.1	62.7	48.8
80°	39.7	37.6	37.0	34.2	34.2	34.2	37.0	44.6	53.0	45.3	37.6
82.5°	29.3	27.9	27.9	25.8	25.1	24.4	26.5	30.7	41.8	35.6	29.3
85°	17.4	16.7	17.4	15.3	16.0	15.3	17.4	21.6	23.0	18.1	13.9
87.5°	4.2	4.9	4.9	4.9	4.2	4.2	3.5	2.8	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P228023

CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-7030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	259.4	259.4
2.5°	250.3	249.6
5°	246.8	246.8
7.5°	245.4	245.4
10°	246.1	246.1
12.5°	246.1	247.5
15°	248.2	247.5
17.5°	246.1	246.1
20°	240.5	241.9
22.5°	232.9	232.9
25°	220.3	221.0
27.5°	203.6	205.0
30°	182.7	184.1
32.5°	159.0	160.4
35°	140.1	140.8
37.5°	127.6	127.6
40°	117.1	117.1
42.5°	107.4	106.7
45°	97.6	96.2
47.5°	87.8	87.1
50°	79.5	79.5
52.5°	80.9	80.9
55°	87.1	87.1
57.5°	87.8	87.1
60°	95.5	94.8
62.5°	99.7	101.8
65°	87.1	84.4
67.5°	83.0	78.8
70°	74.6	68.3
72.5°	66.2	62.7
73°	64.1	61.4
75°	57.2	55.8
77.5°	43.2	42.5
80°	36.3	35.6
82.5°	24.4	23.0
85°	10.5	9.8
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)