

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: P226434

Luminaire Tested: **IST-AF-600-LED-E1-T3-7030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226434
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-600-LED-E1-T3-7030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5367.7 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U5 - G1

Input Watts (W): 50.4
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

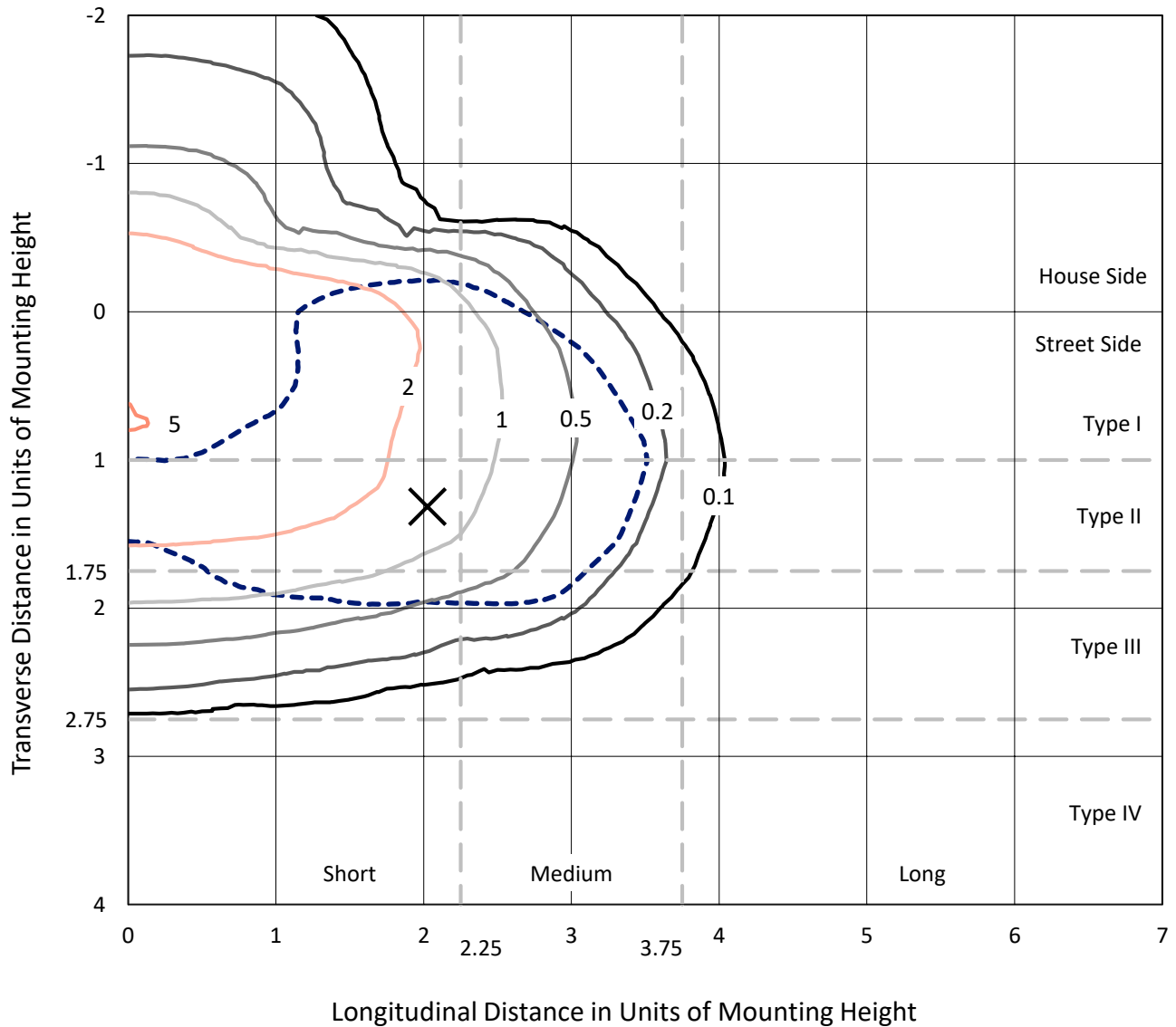


REPORT NUMBER: P226434

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

Iso-Footcandle Lines of Horizontal Illumination

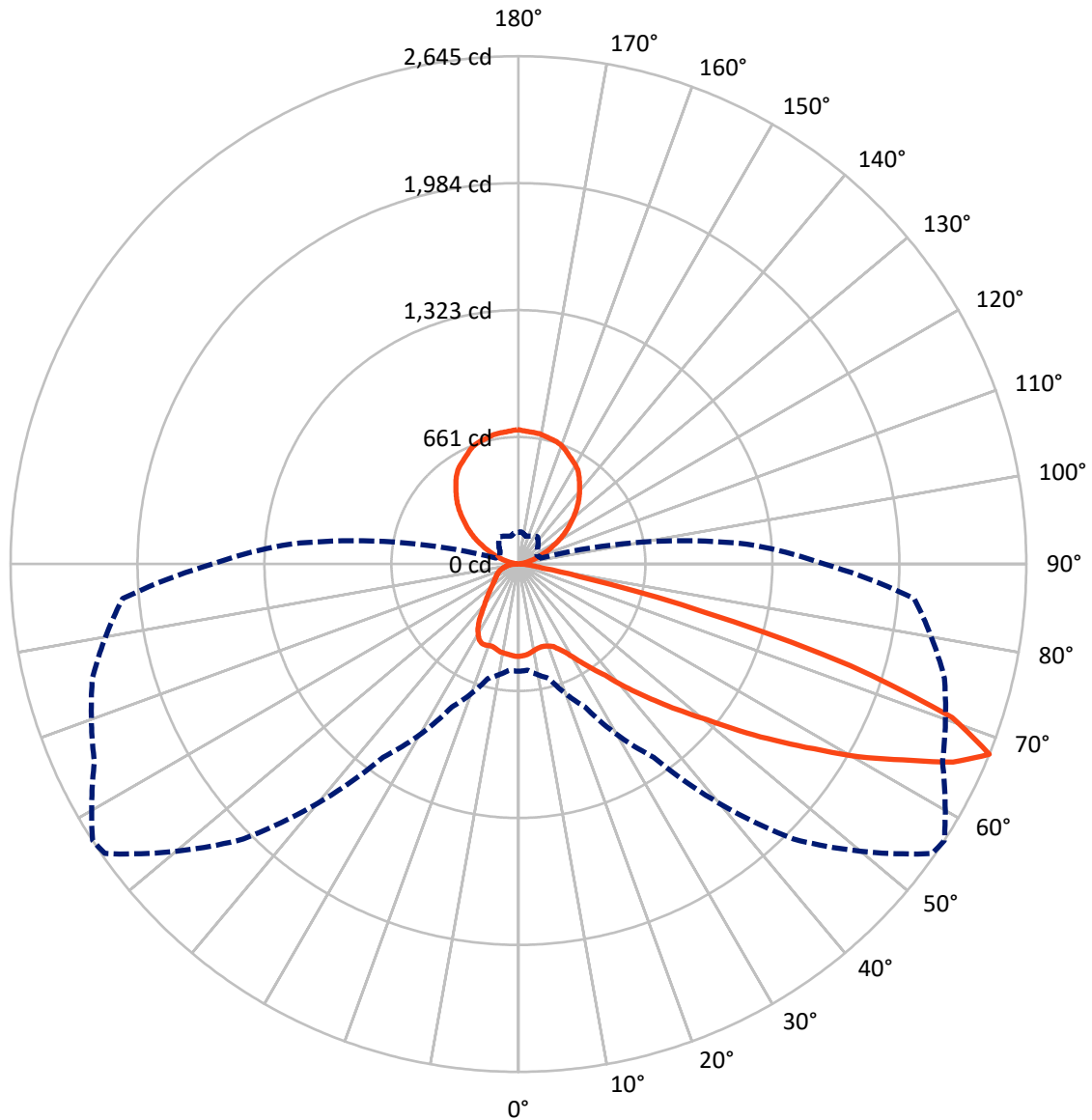
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P226434
CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P226434

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

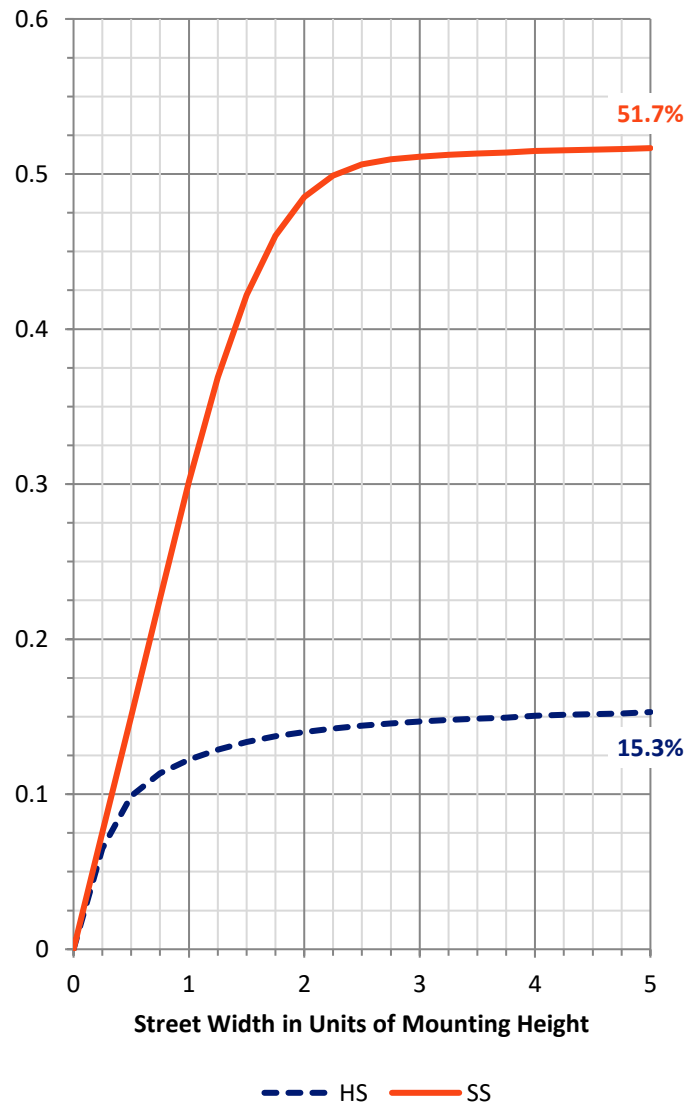
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	845.6	868.6	1714.2
	% Fixture	15.8	16.2	31.9
Street Side	Lumens	2785.6	867.9	3653.4
	% Fixture	51.9	16.2	68.1
Total	Lumens	3631.2	1736.5	5367.7
	% Fixture	67.6	32.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.8
10°-20°	129.4	2.4
20°-30°	222.6	4.1
30°-40°	362.0	6.7
40°-50°	583.9	10.9
50°-60°	870.4	16.2
60°-70°	980.3	18.3
70°-80°	378.0	7.0
80°-90°	59.6	1.1
90°-100°	10.6	0.2
100°-110°	57.4	1.1
110°-120°	166.1	3.1
120°-130°	273.2	5.1
130°-140°	336.8	6.3
140°-150°	344.6	6.4
150°-160°	290.3	5.4
160°-170°	191.2	3.6
170°-180°	66.3	1.2
0°-90°	3631.2	67.6
0°-180°	5367.7	100.0



REPORT NUMBER: P226434

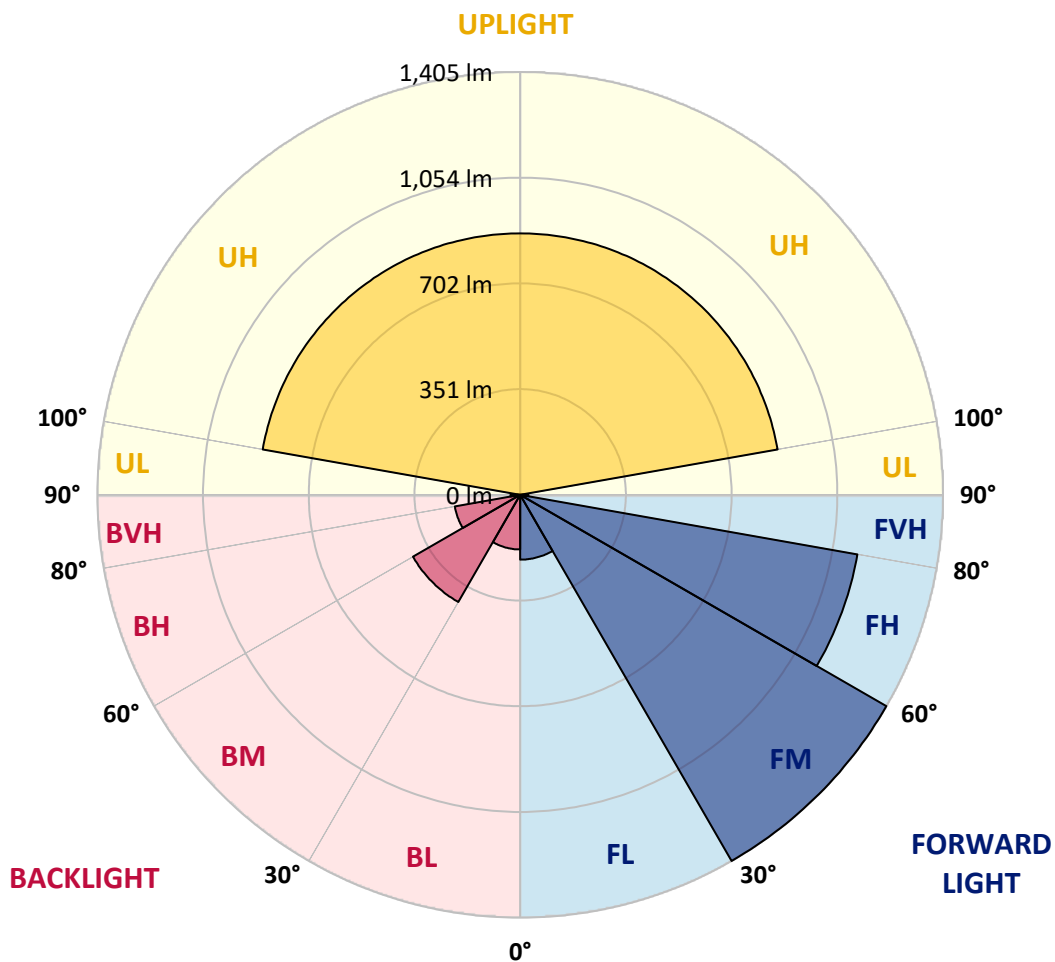
CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.4	4.0			
FM	(30°-60°)	1405.0	26.2			
FH	(60°-80°)	1137.8	21.2			G1/1800
FVH	(80°-90°)	27.4	0.5			G1/100
BL	(0°-30°)	181.6	3.4	B1/500		
BM	(30°-60°)	411.3	7.7	B1/1000		
BH	(60°-80°)	220.5	4.1	B1/500		G1/500
BVH	(80°-90°)	32.2	0.6			G1/100
UL	(90°-100°)	10.6	0.2		U2/50	
UH	(100°-180°)	868.6	16.2		U4/1000	

BUG Rating: B1-U5-G1

Type III Short





REPORT NUMBER: P226434

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2
2.5°	477.6	478.6	479.7	479.1	479.1	479.1	479.1	478.1	479.7	479.7	478.6
5°	469.7	470.2	470.7	471.8	472.8	473.9	474.4	474.4	474.9	474.4	473.4
7.5°	458.1	458.6	460.7	460.7	461.8	463.9	464.9	466.0	467.6	467.6	467.0
10°	454.4	454.4	454.4	452.8	453.9	454.4	456.0	456.0	460.2	462.3	463.4
12.5°	458.6	458.1	458.1	453.9	450.2	448.6	450.2	450.7	455.5	458.6	460.7
15°	468.1	468.1	467.0	460.7	453.4	447.6	447.1	447.1	450.7	455.5	459.2
17.5°	490.2	492.3	484.9	474.9	462.8	453.4	449.7	449.2	451.8	455.5	459.2
20°	532.3	531.7	520.7	502.8	481.8	466.0	457.0	456.0	455.5	457.6	461.8
22.5°	582.2	580.1	567.0	544.4	515.4	486.5	469.1	467.0	462.8	464.4	470.2
25°	635.9	636.4	620.1	590.6	554.3	519.6	493.3	491.2	482.3	481.2	487.6
27.5°	689.5	696.4	674.3	646.4	603.3	561.7	523.3	520.2	512.3	509.6	516.0
30°	767.9	765.3	737.9	701.6	658.5	606.4	569.6	563.8	548.0	551.7	558.6
32.5°	834.2	839.9	815.2	772.1	715.3	660.6	618.0	614.8	599.6	603.8	613.3
35°	915.2	928.8	896.2	843.1	788.4	732.1	681.1	672.7	660.6	669.0	676.4
37.5°	1007.7	1014.6	989.3	920.9	865.2	806.3	748.4	735.3	722.1	739.5	752.6
40°	1096.1	1107.1	1074.5	1016.7	952.0	895.7	832.6	829.9	799.4	818.4	852.6
42.5°	1227.0	1240.7	1188.6	1121.3	1062.9	995.1	935.1	920.9	887.8	914.6	972.0
45°	1318.6	1318.0	1282.8	1227.0	1191.3	1125.5	1044.5	1027.7	991.9	1027.7	1104.5
47.5°	1351.7	1359.6	1347.5	1340.6	1328.0	1280.2	1160.8	1145.0	1111.3	1164.5	1235.5
50°	1400.6	1398.5	1398.5	1440.6	1476.9	1466.9	1297.0	1274.4	1239.1	1302.8	1404.8
52.5°	1413.2	1394.3	1423.7	1504.2	1619.4	1627.8	1455.3	1442.7	1400.6	1462.7	1588.4
55°	1378.0	1373.3	1420.1	1536.8	1718.3	1778.2	1638.9	1621.5	1574.2	1627.3	1786.6
57.5°	1299.1	1311.2	1386.4	1530.0	1786.6	1910.8	1840.3	1815.6	1747.7	1779.8	1983.4
60°	1216.5	1222.3	1321.7	1505.8	1805.1	2002.8	2051.7	2037.5	1921.3	1940.2	2129.0
62.5°	1125.0	1111.3	1214.4	1485.8	1784.5	2129.6	2256.8	2245.8	2108.5	2102.7	2232.7
65°	869.4	888.3	976.2	1228.1	1644.1	2228.4	2501.4	2487.2	2317.3	2236.9	2221.6
67.5°	558.6	554.9	616.9	821.0	1228.6	2025.4	2629.2	2645.0	2436.7	2297.3	2069.1
70°	200.4	206.2	229.3	372.9	673.7	1349.6	2317.9	2396.2	2348.9	2184.3	1684.1
72.5°	122.0	122.0	138.9	167.8	273.0	640.1	1652.0	1807.2	1917.1	1799.8	1243.9
75°	95.7	95.2	101.0	115.7	147.3	209.9	878.3	998.3	1229.7	1243.3	707.9
77.5°	75.7	75.2	81.0	87.8	109.9	111.0	280.3	365.0	564.3	531.2	253.0
80°	61.0	60.5	64.7	66.8	80.5	76.8	112.6	130.4	197.8	173.6	109.4
82.5°	55.2	55.2	59.4	51.0	55.8	54.2	70.0	74.7	99.4	103.1	65.7
85°	35.8	36.8	55.8	49.4	36.3	33.1	44.7	47.3	62.1	67.8	32.1
87.5°	16.8	18.4	42.6	41.0	24.2	17.9	25.2	26.8	33.7	41.5	18.9
90°	8.2	8.2	12.3	13.8	11.2	10.2	11.2	11.1	12.7	14.3	12.3
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.2	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.6	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	28.4	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	49.4	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.6	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.8	94.0	90.0	87.0
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.2	121.0	119.0	116.0



REPORT NUMBER: P226434

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	148.4	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	179.6	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	211.8	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	246.8	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	279.8	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	313.4	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.2	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	377.8	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	412.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	444.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	473.4	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	500.4	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	528.2	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	557.2	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	581.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	597.6	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	611.6	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	627.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	644.8	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	659.2	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	667.8	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	673.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	679.2	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	686.6	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	689.6	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	691.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	695.0	699.0	701.0	698.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



REPORT NUMBER: P226434

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2
2.5°	480.2	479.1	479.7	480.2	480.7	482.3	482.8	482.8	482.8	482.3	483.3
5°	474.4	473.4	473.4	474.9	476.5	478.6	481.8	484.4	485.5	486.0	486.0
7.5°	468.1	467.0	467.6	470.2	472.8	474.4	477.6	479.1	483.3	483.3	484.4
10°	463.9	464.9	465.5	468.1	470.2	470.2	469.7	468.6	467.6	470.2	469.1
12.5°	461.3	462.8	462.3	465.5	466.5	462.3	456.0	447.6	446.5	447.6	448.6
15°	460.2	460.2	461.8	461.8	456.5	448.1	440.2	440.7	441.8	445.0	445.0
17.5°	460.2	460.7	461.8	458.1	448.6	441.3	439.7	438.1	432.3	430.8	429.2
20°	463.9	462.8	463.9	457.0	448.6	442.8	430.8	419.2	408.1	403.4	401.3
22.5°	472.8	471.2	470.7	463.9	453.4	433.9	410.2	392.4	373.4	367.1	365.0
25°	488.6	488.1	484.4	479.7	450.2	412.3	382.4	354.0	333.5	322.4	322.9
27.5°	516.5	516.5	514.4	493.3	433.9	385.5	345.0	316.1	295.1	284.5	283.0
30°	558.6	559.6	560.7	497.0	408.1	346.1	304.0	284.5	271.9	264.0	263.5
32.5°	610.6	616.4	609.6	492.8	372.9	298.2	271.9	265.1	258.8	253.5	253.0
35°	679.5	695.3	652.2	476.0	333.5	265.6	252.5	247.7	243.0	239.3	239.8
37.5°	772.1	787.3	679.5	447.6	283.0	247.2	241.4	234.0	226.7	218.8	217.7
40°	881.5	876.8	689.0	393.9	251.4	238.3	230.4	220.9	208.3	196.7	194.6
42.5°	990.9	959.3	681.1	327.7	230.9	230.4	219.3	207.2	194.6	184.6	184.6
45°	1113.4	1031.9	656.9	265.6	214.6	222.0	208.3	195.7	184.1	176.7	176.2
47.5°	1229.1	1099.8	616.9	221.4	198.3	210.9	199.9	188.3	177.2	170.9	169.4
50°	1364.8	1177.1	586.4	191.4	182.5	199.9	195.1	184.6	174.1	166.7	165.7
52.5°	1502.1	1252.3	563.3	170.9	168.3	191.4	193.0	186.7	175.7	161.5	160.4
55°	1645.7	1346.4	517.0	154.6	155.7	185.1	195.7	190.9	183.0	159.9	158.8
57.5°	1766.1	1433.2	436.0	143.6	145.7	180.4	196.7	187.8	178.8	160.9	159.4
60°	1860.3	1492.6	319.8	134.6	136.7	175.1	192.0	176.7	165.1	160.9	158.3
62.5°	1889.2	1494.7	212.5	124.1	129.9	166.2	183.6	170.9	157.3	159.4	158.3
65°	1816.6	1415.9	152.0	114.1	124.1	155.7	179.9	165.1	153.6	162.0	160.9
67.5°	1593.1	1192.9	122.0	106.2	116.2	144.6	173.0	159.9	150.4	167.8	164.6
70°	1241.2	855.7	103.6	98.4	107.8	134.1	163.6	154.1	146.2	163.0	158.8
72.5°	818.4	503.9	91.5	91.0	97.8	125.2	153.1	148.8	139.4	147.8	141.5
75°	427.1	233.5	79.4	82.6	86.8	117.3	143.6	139.4	128.9	132.0	129.9
77.5°	167.8	109.4	68.9	72.6	77.3	105.7	131.5	127.3	118.3	115.7	115.2
80°	92.0	73.6	57.3	62.1	65.2	95.2	118.9	114.1	104.7	103.1	101.5
82.5°	58.4	47.9	47.3	50.5	54.7	84.7	106.8	99.4	91.5	107.8	87.3
85°	27.3	28.4	33.7	37.9	42.6	72.1	93.1	85.2	77.3	75.2	66.8
87.5°	15.3	18.9	22.1	25.8	29.5	50.5	73.6	66.3	57.9	49.4	51.0
90°	10.7	10.7	15.3	14.8	13.3	14.4	44.3	40.6	35.9	18.7	13.9
92.5°	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	5.0	4.0	4.0
95°	7.0	7.0	7.0	8.0	7.0	7.0	7.0	7.0	6.0	5.0	5.0
97.5°	8.0	8.0	9.0	10.0	12.0	9.0	9.0	8.0	8.0	7.0	7.0
100°	19.0	19.0	23.0	26.0	29.0	21.0	12.0	10.0	9.0	8.0	8.0
102.5°	38.0	39.0	42.0	47.0	50.0	40.0	27.0	18.0	13.0	11.0	11.0
105°	61.0	61.0	65.0	70.0	72.0	63.0	48.0	36.0	27.0	22.0	21.0
107.5°	86.0	87.0	90.0	94.0	95.0	88.0	73.0	58.0	49.0	42.0	41.0
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0



REPORT NUMBER: P226434

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	147.0	147.0	149.0	150.0	148.0	143.0	134.0	121.0	106.0	99.0	99.0
115°	178.0	177.0	179.0	182.0	179.0	174.0	168.0	159.0	147.0	139.0	140.0
117.5°	209.0	208.0	210.0	215.0	211.0	205.0	202.0	197.0	189.0	184.0	184.0
120°	243.0	243.0	245.0	250.0	246.0	243.0	237.0	233.0	226.0	223.0	225.0
122.5°	277.0	276.0	278.0	283.0	279.0	277.0	271.0	267.0	261.0	260.0	263.0
125°	310.0	310.0	310.0	315.0	313.0	310.0	305.0	299.0	296.0	294.0	298.0
127.5°	347.0	345.0	346.0	346.0	345.0	340.0	339.0	333.0	329.0	329.0	330.0
130°	380.0	379.0	381.0	381.0	377.0	372.0	370.0	366.0	362.0	361.0	363.0
132.5°	415.0	414.0	414.0	416.0	411.0	405.0	404.0	401.0	393.0	394.0	396.0
135°	451.0	450.0	447.0	448.0	443.0	437.0	435.0	432.0	426.0	426.0	429.0
137.5°	482.0	481.0	476.0	475.0	473.0	468.0	464.0	460.0	459.0	457.0	460.0
140°	511.0	509.0	504.0	502.0	500.0	497.0	491.0	489.0	487.0	485.0	488.0
142.5°	536.0	534.0	533.0	533.0	527.0	525.0	521.0	518.0	517.0	515.0	518.0
145°	560.0	558.0	561.0	562.0	556.0	551.0	550.0	547.0	544.0	546.0	550.0
147.5°	585.0	583.0	586.0	585.0	580.0	575.0	574.0	574.0	571.0	572.0	575.0
150°	610.0	606.0	603.0	600.0	597.0	593.0	593.0	593.0	593.0	592.0	595.0
152.5°	628.0	623.0	618.0	614.0	611.0	610.0	610.0	609.0	608.0	608.0	611.0
155°	641.0	638.0	636.0	631.0	626.0	628.0	630.0	627.0	625.0	625.0	629.0
157.5°	655.0	650.0	650.0	648.0	644.0	645.0	646.0	644.0	643.0	643.0	646.0
160°	666.0	660.0	661.0	664.0	658.0	655.0	655.0	656.0	659.0	660.0	663.0
162.5°	674.0	668.0	670.0	671.0	667.0	663.0	661.0	665.0	669.0	669.0	673.0
165°	682.0	678.0	680.0	677.0	672.0	673.0	673.0	676.0	676.0	678.0	681.0
167.5°	694.0	688.0	688.0	684.0	678.0	685.0	688.0	686.0	684.0	687.0	690.0
170°	701.0	696.0	694.0	689.0	686.0	691.0	693.0	692.0	692.0	695.0	698.0
172.5°	701.0	696.0	694.0	692.0	689.0	690.0	690.0	693.0	695.0	697.0	699.0
175°	699.0	694.0	696.0	695.0	690.0	690.0	691.0	695.0	697.0	698.0	700.0
177.5°	702.0	698.0	701.0	699.0	694.0	695.0	697.0	699.0	700.0	705.0	707.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0

(END OF REPORT)