

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: P226693

Luminaire Tested: **IST-AF-600-LED-E1-T4W-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226693
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)-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-T4W-7050-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, WITH UPLIGHT GLOW
Light Source: (16) 5000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5833.7 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Medium - 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

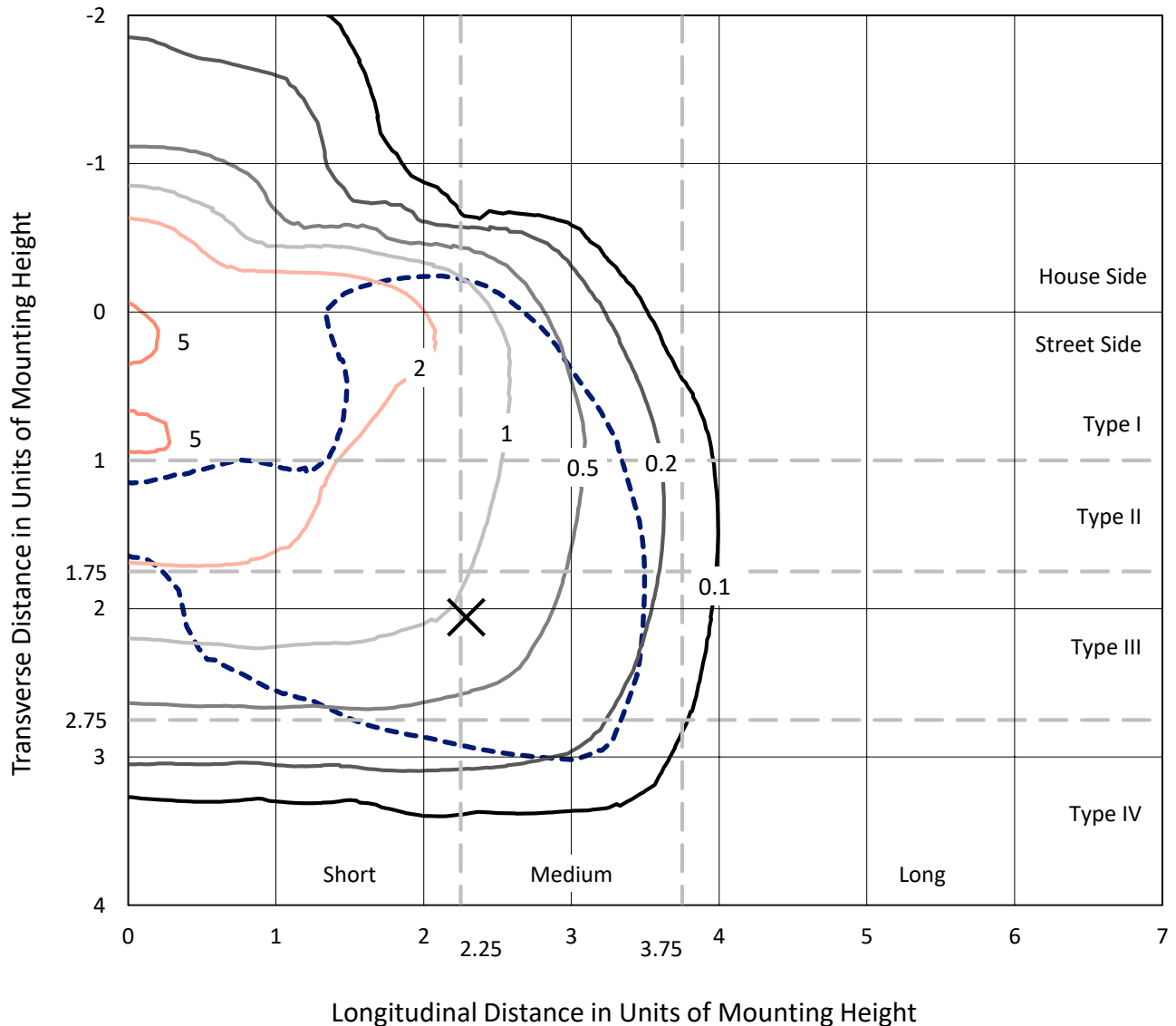


REPORT NUMBER: P226693

CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

Iso-Footcandle Lines of Horizontal Illumination

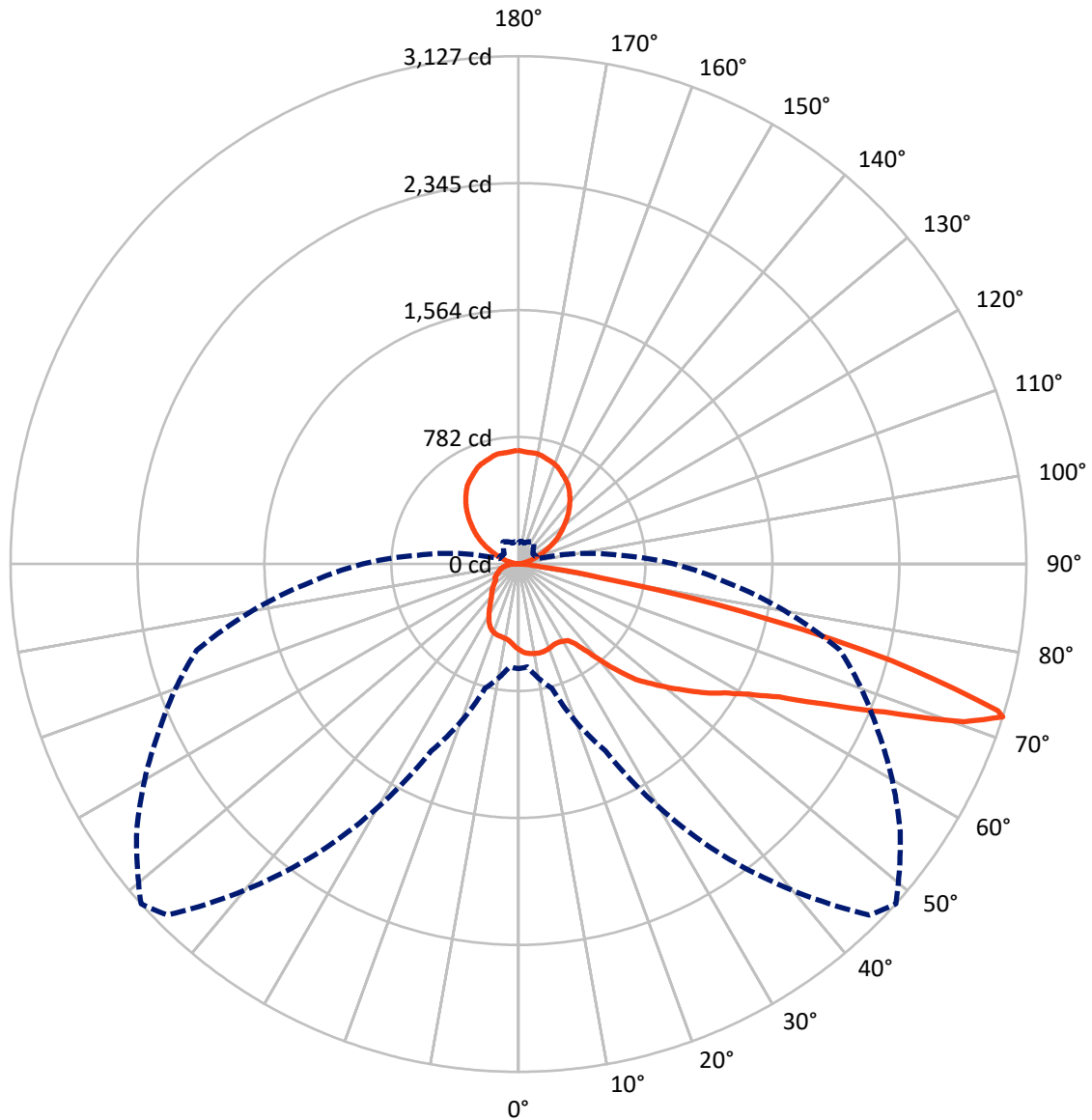
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P226693
CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

Luminous Intensity Polar Plot



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

REPORT NUMBER: P226693

CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

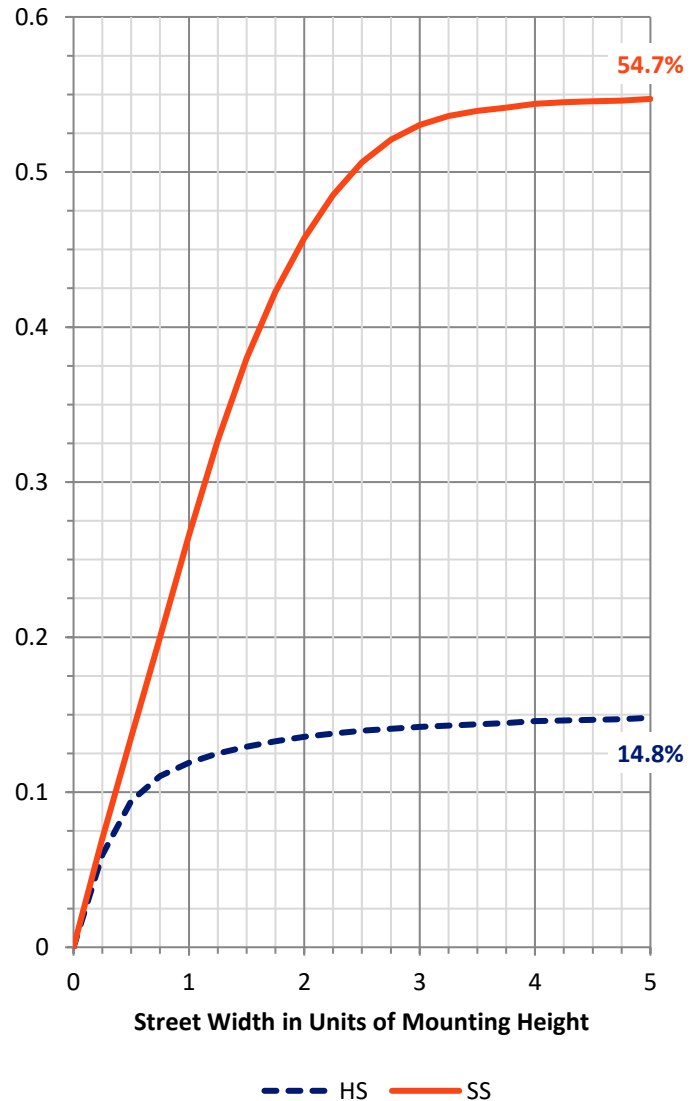
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	890.5	869.4	1759.9
	% Fixture	15.3	14.9	30.2
Street Side	Lumens	3205.6	868.2	4073.8
	% Fixture	54.9	14.9	69.8
Total	Lumens	4096.0	1737.6	5833.7
	% Fixture	70.2	29.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.8	0.9
10°-20°	145.6	2.5
20°-30°	224.5	3.8
30°-40°	336.5	5.8
40°-50°	560.4	9.6
50°-60°	875.7	15.0
60°-70°	1156.7	19.8
70°-80°	669.1	11.5
80°-90°	77.7	1.3
90°-100°	11.8	0.2
100°-110°	57.4	1.0
110°-120°	166.1	2.8
120°-130°	273.2	4.7
130°-140°	336.8	5.8
140°-150°	344.6	5.9
150°-160°	290.3	5.0
160°-170°	191.2	3.3
170°-180°	66.3	1.1
0°-90°	4096.0	70.2
0°-180°	5833.7	100.0



REPORT NUMBER: P226693

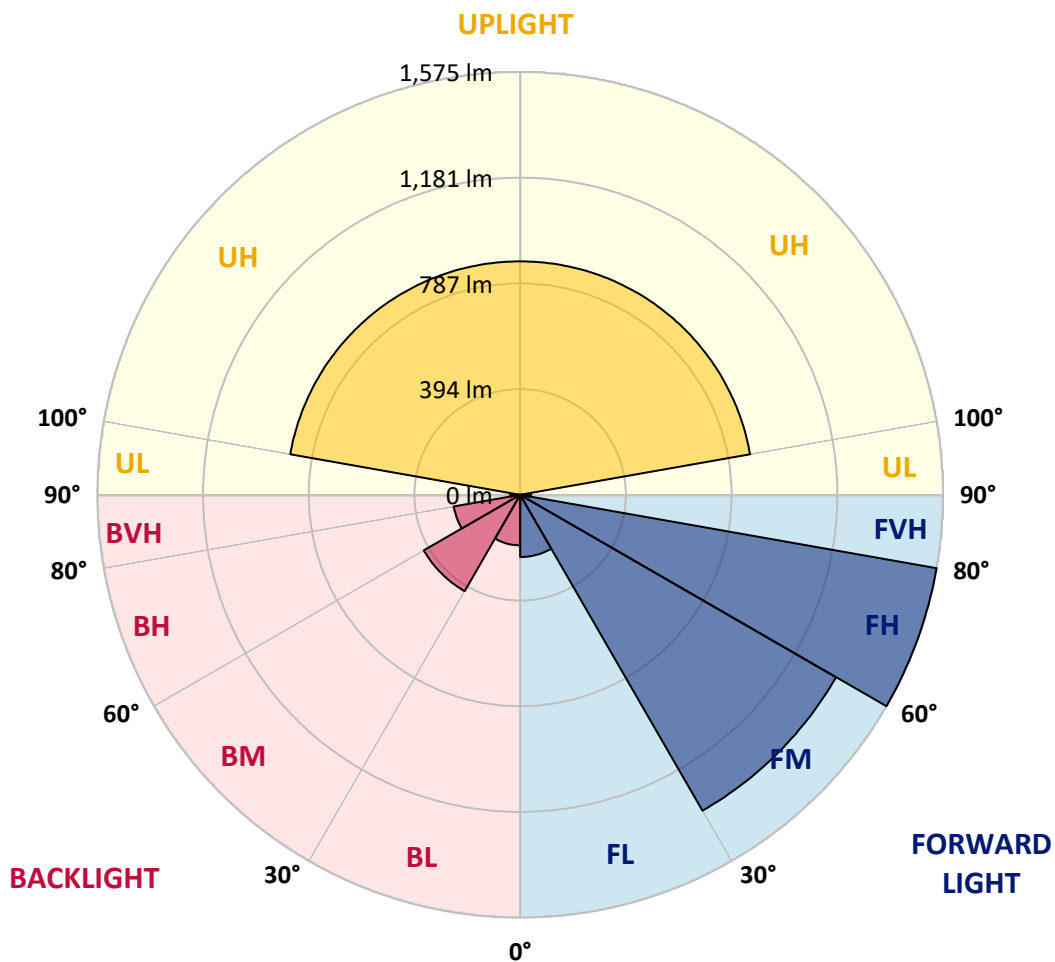
CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	231.7	4.0			
FM	(30°-60°)	1358.4	23.3			
FH	(60°-80°)	1574.7	27.0			G1/1800
FVH	(80°-90°)	40.8	0.7			G1/100
BL	(0°-30°)	188.3	3.2	B1/500		
BM	(30°-60°)	414.1	7.1	B1/1000		
BH	(60°-80°)	251.1	4.3	B1/500		G1/500
BVH	(80°-90°)	37.0	0.6			G1/100
UL	(90°-100°)	11.8	0.2		U2/50	
UH	(100°-180°)	869.4	14.9		U4/1000	

BUG Rating: B1-U5-G1

Type IV Medium





REPORT NUMBER: P226693

CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	555.1	554.5	554.5	549.7	547.9	545.0	542.6	539.0	535.4	531.3	525.9
5°	581.8	583.6	581.2	574.1	565.2	555.6	552.1	543.8	532.5	522.4	512.9
7.5°	607.4	607.9	601.4	589.5	575.9	561.0	556.2	545.0	532.5	518.8	505.1
10°	625.8	626.4	616.9	600.2	581.8	565.2	559.8	548.5	533.1	518.2	501.0
12.5°	636.5	637.1	622.8	605.6	583.6	566.9	562.2	550.3	534.3	515.2	496.2
15°	634.7	636.5	624.6	605.6	582.4	567.5	561.6	551.5	531.3	512.3	492.1
17.5°	622.8	625.2	615.7	594.9	576.4	564.6	558.0	547.9	528.3	508.1	486.1
20°	599.6	602.6	598.4	578.2	565.8	556.2	552.1	542.6	524.2	503.4	480.8
22.5°	573.5	576.4	575.3	558.6	552.7	547.9	543.8	536.6	520.6	499.8	478.4
25°	554.5	556.8	555.1	540.8	542.6	542.6	540.2	534.8	520.0	501.0	478.4
27.5°	586.0	586.0	570.5	541.4	538.4	543.8	542.6	539.6	527.7	506.9	483.1
30°	701.2	692.3	664.4	591.3	553.9	551.5	550.9	549.1	538.4	520.0	498.0
32.5°	830.2	821.3	788.0	696.5	618.6	567.5	562.2	562.8	559.8	542.6	520.6
35°	944.9	943.7	917.6	818.3	719.1	624.0	602.6	588.3	587.1	580.0	562.8
37.5°	1037.6	1037.6	1040.0	927.1	827.8	713.7	677.5	632.3	632.3	628.2	617.5
40°	1143.4	1148.1	1153.5	1025.7	944.3	820.7	779.7	711.3	690.5	697.1	699.5
42.5°	1282.4	1288.4	1284.8	1147.5	1050.7	948.5	898.0	815.3	764.2	774.9	799.9
45°	1376.3	1378.7	1404.3	1274.7	1184.4	1056.6	1013.8	900.3	849.8	871.8	915.8
47.5°	1482.7	1488.7	1492.8	1419.1	1341.3	1179.0	1100.6	982.9	950.2	983.5	1053.1
50°	1586.7	1579.0	1590.3	1587.3	1489.9	1287.8	1194.5	1060.2	1062.6	1107.7	1221.8
52.5°	1677.0	1650.9	1677.0	1709.7	1681.2	1399.5	1290.8	1151.1	1185.6	1240.8	1420.9
55°	1746.6	1683.6	1727.6	1820.3	1813.7	1498.2	1400.7	1272.3	1330.0	1405.5	1662.8
57.5°	1604.5	1612.3	1733.5	1894.6	1891.6	1598.0	1497.0	1423.9	1494.6	1579.0	1949.2
60°	1472.0	1506.5	1693.7	1906.4	1945.7	1706.8	1626.5	1596.2	1661.6	1764.4	2223.8
62.5°	1401.9	1434.6	1628.9	1884.5	2031.8	1867.8	1800.7	1777.5	1866.6	1981.9	2468.6
65°	1423.9	1444.1	1624.8	1917.7	2131.1	2111.5	2082.3	2043.7	2088.3	2196.4	2579.2
67.5°	1362.1	1395.4	1590.3	1976.6	2312.3	2408.6	2433.0	2391.4	2353.9	2339.1	2418.1
70°	1013.8	1045.9	1250.4	1733.5	2460.9	2924.4	2909.6	2770.5	2518.5	2308.2	1889.2
72°	644.2	635.3	791.6	1270.0	2187.5	3057.0	3127.1	2869.8	2443.7	2049.7	1283.0
72.5°	468.3	510.5	656.7	1129.1	2078.2	2984.5	3086.7	2837.7	2345.6	1936.2	1128.5
75°	114.1	120.6	157.5	404.7	1217.1	2245.8	2374.1	2192.3	1712.1	1149.3	500.4
77.5°	77.3	80.2	104.0	142.6	357.8	1280.7	1409.0	1210.5	766.0	391.0	222.9
80°	57.6	59.4	75.5	101.0	148.6	436.8	515.2	409.5	190.8	216.9	158.7
82.5°	40.4	41.6	57.1	74.3	98.6	102.2	136.1	150.4	123.6	142.0	92.7
85°	27.9	27.9	41.6	51.1	62.4	50.5	54.1	75.5	83.8	84.4	56.5
87.5°	14.9	16.6	24.4	32.7	32.7	23.2	25.6	38.6	46.9	50.5	33.9
90°	10.3	10.3	17.1	20.5	15.7	12.9	12.3	14.7	20.3	25.0	17.7
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	6.3	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	9.9	12.0	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	23.4	29.0	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	43.0	50.0	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	65.7	72.0	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	90.1	95.0	94.0	90.0	87.0



REPORT NUMBER: P226693

CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	66.0	68.0	74.0	87.0	102.0	114.0	115.8	120.0	121.0	119.0	116.0
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	144.5	148.0	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	175.5	179.0	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	206.8	211.0	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	243.9	246.0	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	277.6	279.0	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	310.9	313.0	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	341.5	345.0	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	373.5	377.0	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	406.8	411.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	438.8	443.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	469.5	473.0	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	497.9	500.0	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	525.6	527.0	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	552.5	556.0	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	576.5	580.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	594.2	597.0	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	610.3	611.0	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	627.4	626.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.7	644.0	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	655.9	658.0	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	664.2	667.0	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.7	672.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	682.9	678.0	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	689.5	686.0	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.7	689.0	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	690.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.7	694.0	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: P226693

CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	524.7	521.2	516.4	514.0	512.9	510.5	508.1	506.9	506.9	504.5	505.1
5°	508.1	502.8	496.2	491.5	490.9	490.9	492.1	492.1	492.7	490.9	493.2
7.5°	499.8	493.8	484.3	479.0	474.8	474.2	476.6	481.4	483.7	482.0	484.3
10°	493.8	487.3	476.6	470.1	467.1	465.9	467.7	472.5	480.2	480.2	482.6
12.5°	487.9	479.6	468.9	464.1	461.8	462.3	464.7	468.3	476.6	479.6	480.8
15°	482.0	472.5	463.5	457.0	457.0	458.8	461.8	465.9	473.6	479.0	480.2
17.5°	476.0	466.5	458.8	453.4	453.4	455.8	458.8	464.1	469.5	477.2	477.2
20°	470.7	462.9	452.8	448.1	447.5	449.3	452.8	458.2	462.3	470.1	470.7
22.5°	467.7	458.2	448.7	441.5	438.6	437.4	441.0	446.3	450.5	458.2	459.4
25°	466.5	455.8	443.9	430.9	423.1	420.7	422.5	429.1	432.6	438.6	440.4
27.5°	470.7	460.6	442.1	418.4	402.3	395.8	397.6	401.7	402.9	409.5	412.4
30°	484.9	473.0	445.7	405.3	376.2	364.3	364.3	364.9	366.7	372.0	372.6
32.5°	508.1	496.8	456.4	391.6	349.4	332.8	328.6	325.7	325.7	325.1	325.7
35°	550.9	541.4	474.8	376.2	320.3	301.9	291.8	286.4	281.1	278.7	278.1
37.5°	612.7	604.4	501.0	358.3	294.8	276.3	263.9	253.2	247.2	246.6	249.6
40°	704.8	696.5	530.1	338.1	270.4	256.7	243.7	232.4	225.8	226.4	229.4
42.5°	818.3	792.8	561.6	310.8	250.8	243.7	229.4	219.9	213.3	209.8	209.2
45°	950.8	908.1	591.3	285.3	229.4	232.4	218.7	208.0	199.7	190.2	189.0
47.5°	1116.1	1023.3	617.5	259.7	206.2	220.5	207.4	197.3	184.8	173.5	171.7
50°	1288.4	1155.9	640.0	232.4	185.4	207.4	196.1	182.4	165.2	155.1	155.1
52.5°	1487.5	1315.1	669.2	202.1	169.4	193.1	181.8	164.0	149.8	148.6	148.6
55°	1709.1	1482.1	689.4	178.3	156.9	177.7	172.3	167.0	162.2	163.4	164.0
57.5°	1940.9	1656.2	671.5	161.6	146.8	174.1	189.6	182.4	167.6	167.0	166.4
60°	2140.6	1791.7	572.9	150.9	139.1	180.1	203.2	182.4	167.6	175.3	175.9
62.5°	2271.3	1855.9	381.5	137.3	127.8	170.0	198.5	177.1	168.2	190.2	192.0
65°	2253.5	1784.0	219.3	127.8	120.6	156.3	192.0	170.6	156.9	169.4	165.8
67.5°	1987.9	1495.2	158.7	123.6	115.3	146.8	180.1	161.0	146.2	161.6	155.1
70°	1428.6	1018.0	136.7	120.0	111.7	135.5	171.7	155.1	140.2	150.9	140.8
72°	958.6	619.2	125.4	117.1	108.2	128.4	165.8	150.4	134.9	140.8	129.6
72.5°	815.9	488.5	122.4	115.9	107.0	126.6	164.0	149.2	133.7	139.7	129.0
75°	304.9	191.4	108.8	107.0	98.6	117.7	156.9	143.8	127.8	126.0	121.2
77.5°	156.9	121.2	92.7	94.5	88.5	107.6	149.2	135.5	117.7	111.1	108.8
80°	114.1	88.0	74.9	80.2	75.5	96.9	138.5	123.0	107.0	99.8	96.9
82.5°	71.9	54.7	57.1	63.6	64.2	85.6	126.0	110.5	95.1	89.1	84.4
85°	34.5	32.7	40.4	46.9	51.7	72.5	115.3	98.1	83.2	71.3	71.9
87.5°	18.4	25.0	24.4	31.5	39.8	59.4	102.2	80.2	66.6	53.5	54.1
90°	11.2	13.5	16.1	21.5	23.0	32.6	74.0	53.8	51.6	24.0	21.6
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



REPORT NUMBER: P226693

CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7050-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0
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)