

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: P226694

Luminaire Tested: **IST-AF-600-LED-E1-T4W-7030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226694
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-7030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, 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: 5363.3 lumens
Efficiency: N/A
Efficacy: 106.4 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

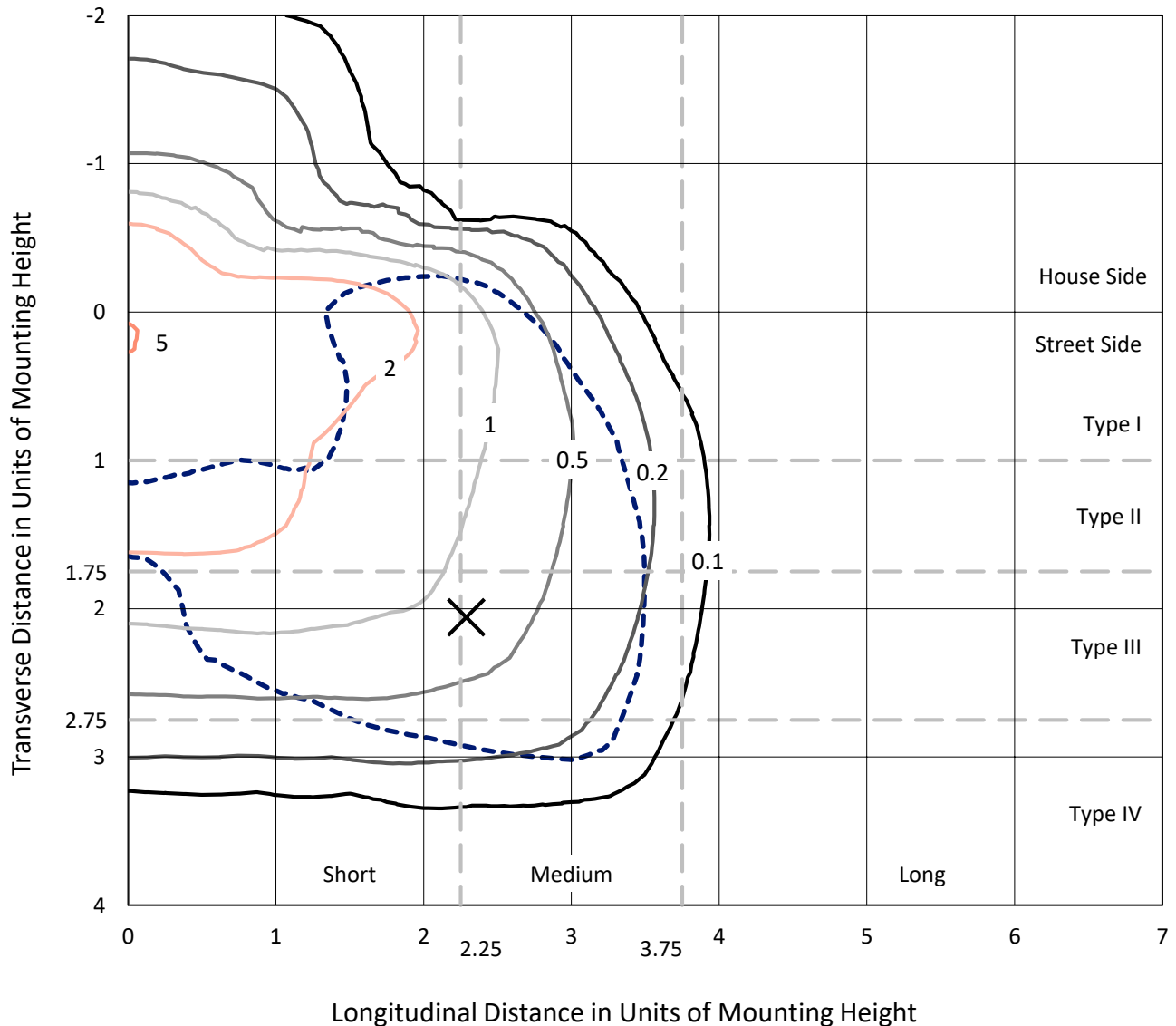


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Iso-Footcandle Lines of Horizontal Illumination

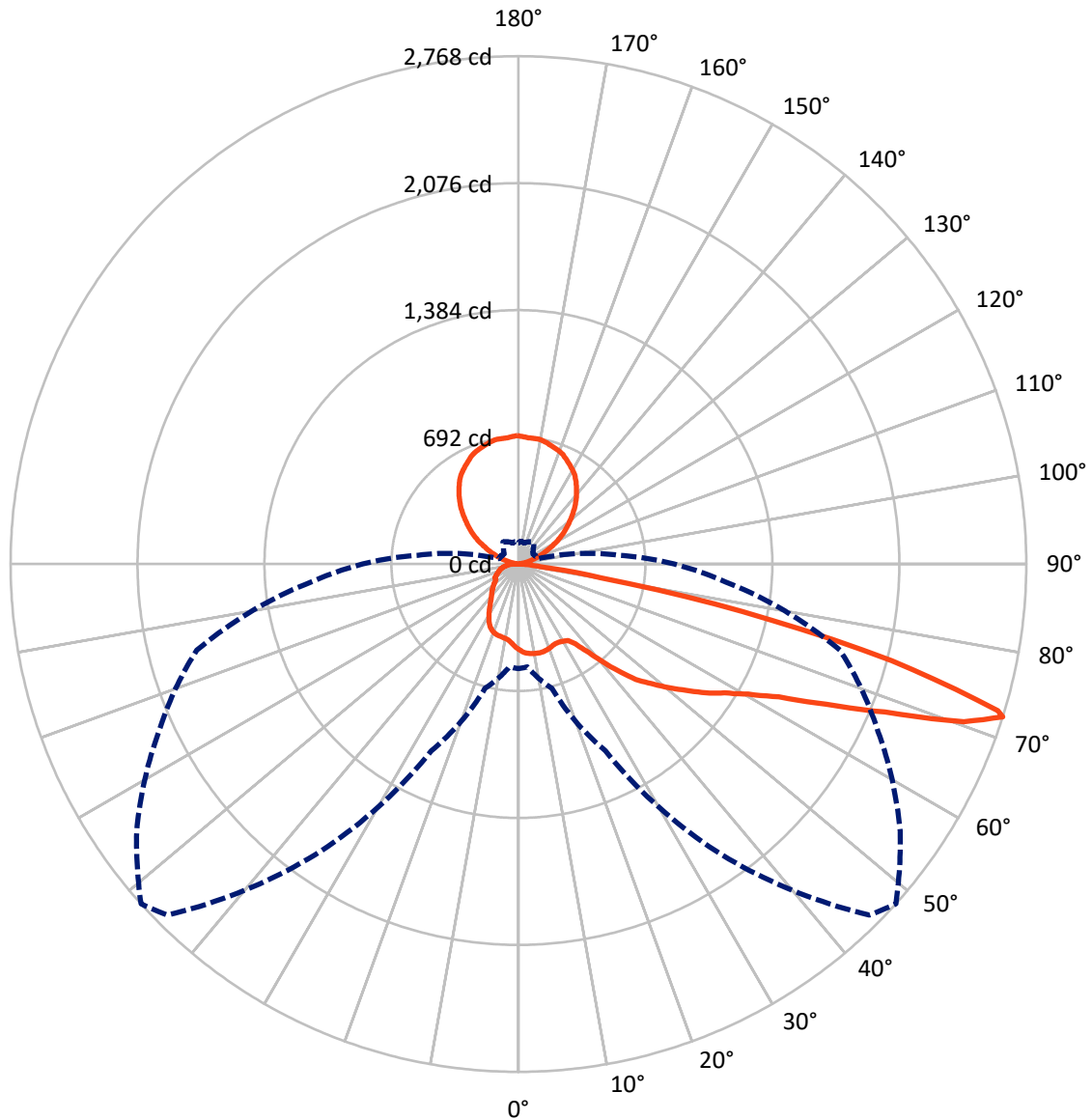
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Medium - Non-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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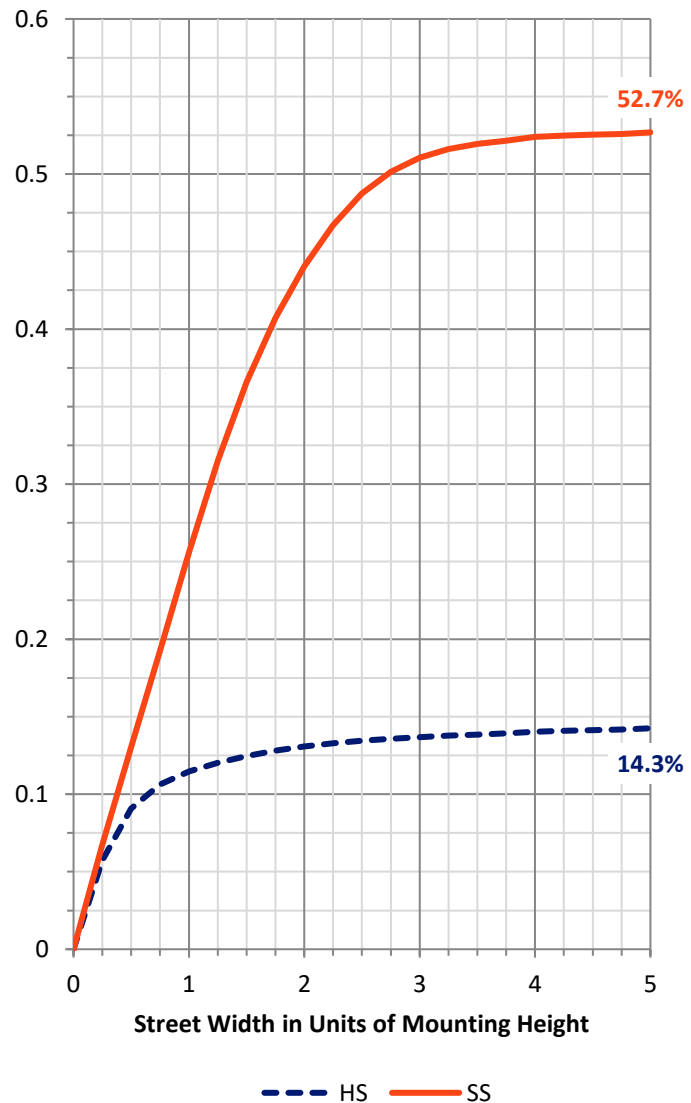
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	788.3	869.2	1657.5
	% Fixture	14.7	16.2	30.9
Street Side	Lumens	2837.6	868.1	3705.8
	% Fixture	52.9	16.2	69.1
Total	Lumens	3625.9	1737.3	5363.3
	% Fixture	67.6	32.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.1	0.8
10°-20°	128.9	2.4
20°-30°	198.7	3.7
30°-40°	297.9	5.6
40°-50°	496.0	9.2
50°-60°	775.2	14.5
60°-70°	1023.9	19.1
70°-80°	592.3	11.0
80°-90°	68.9	1.3
90°-100°	11.5	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°	3625.9	67.6
0°-180°	5363.3	100.0



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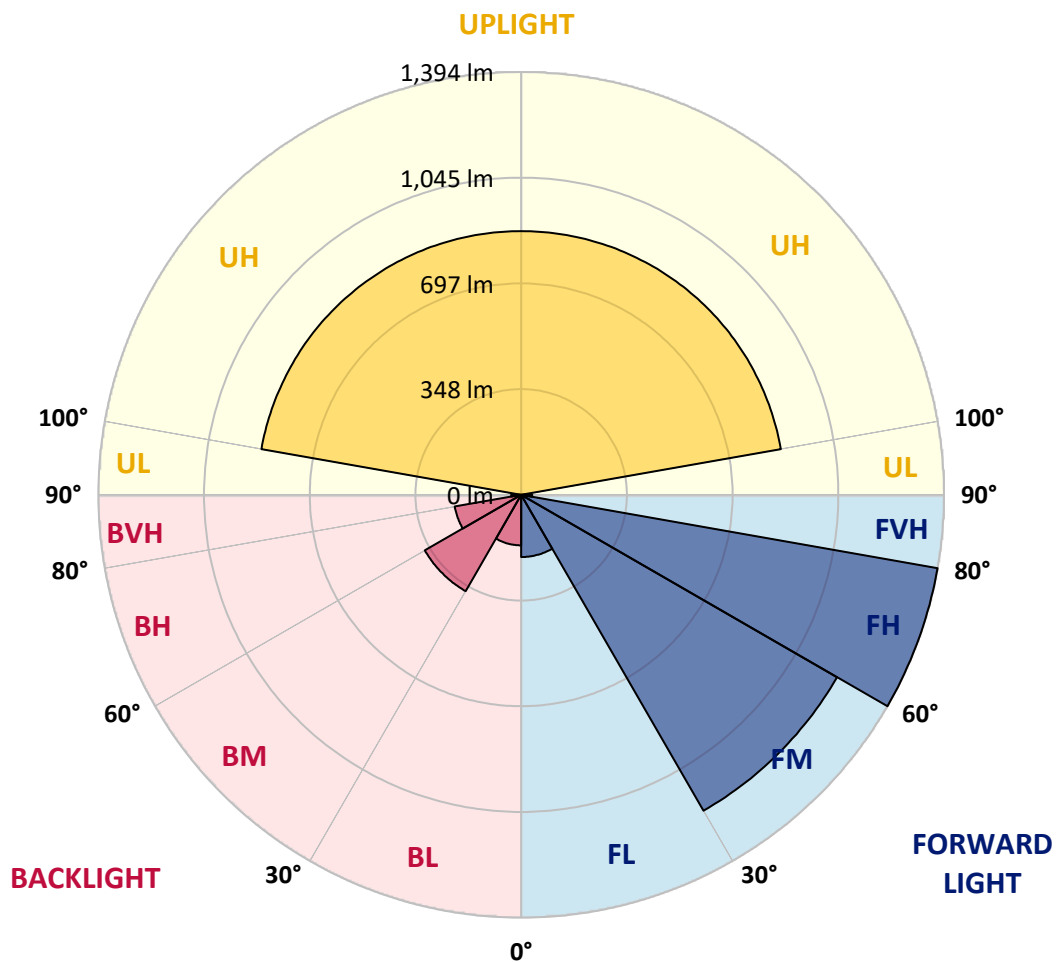
CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	205.1	3.8			
FM	(30°-60°)	1202.5	22.4			
FH	(60°-80°)	1393.9	26.0			G1/1800
FVH	(80°-90°)	36.1	0.7			G1/100
BL	(0°-30°)	166.7	3.1	B1/500		
BM	(30°-60°)	366.6	6.8	B1/1000		
BH	(60°-80°)	222.3	4.1	B1/500		G1/500
BVH	(80°-90°)	32.8	0.6			G1/100
UL	(90°-100°)	11.5	0.2		U2/50	
UH	(100°-180°)	869.2	16.2		U4/1000	

BUG Rating: B1-U5-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6
2.5°	491.3	490.8	490.8	486.6	485.0	482.4	480.3	477.1	474.0	470.3	465.6
5°	515.0	516.6	514.5	508.2	500.3	491.9	488.7	481.3	471.3	462.4	454.0
7.5°	537.6	538.2	532.4	521.8	509.7	496.6	492.4	482.4	471.3	459.2	447.1
10°	553.9	554.5	546.0	531.3	515.0	500.3	495.5	485.5	471.9	458.7	443.5
12.5°	563.4	563.9	551.3	536.0	516.6	501.9	497.6	487.1	472.9	456.1	439.3
15°	561.8	563.4	552.9	536.0	515.5	502.4	497.1	488.2	470.3	453.5	435.6
17.5°	551.3	553.4	545.0	526.6	510.3	499.8	494.0	485.0	467.7	449.8	430.3
20°	530.8	533.4	529.7	511.9	500.8	492.4	488.7	480.3	464.0	445.6	425.6
22.5°	507.6	510.3	509.2	494.5	489.2	485.0	481.3	475.0	460.8	442.4	423.5
25°	490.8	492.9	491.3	478.7	480.3	480.3	478.2	473.4	460.3	443.5	423.5
27.5°	518.7	518.7	505.0	479.2	476.6	481.3	480.3	477.7	467.1	448.7	427.7
30°	620.7	612.9	588.1	523.4	490.3	488.2	487.7	486.1	476.6	460.3	440.8
32.5°	734.9	727.0	697.5	616.5	547.6	502.4	497.6	498.2	495.5	480.3	460.8
35°	836.4	835.4	812.2	724.4	636.5	552.4	533.4	520.8	519.7	513.4	498.2
37.5°	918.5	918.5	920.6	820.6	732.8	631.8	599.7	559.7	559.7	556.0	546.6
40°	1012.1	1016.3	1021.1	908.0	835.9	726.5	690.2	629.7	611.3	617.1	619.2
42.5°	1135.2	1140.5	1137.3	1015.8	930.1	839.6	794.9	721.7	676.5	686.0	708.1
45°	1218.3	1220.4	1243.1	1128.4	1048.4	935.3	897.4	797.0	752.3	771.7	810.6
47.5°	1312.5	1317.8	1321.4	1256.2	1187.3	1043.7	974.3	870.1	841.2	870.6	932.2
50°	1404.6	1397.7	1407.7	1405.1	1318.8	1140.0	1057.4	938.5	940.6	980.6	1081.6
52.5°	1484.5	1461.4	1484.5	1513.5	1488.2	1238.9	1142.6	1019.0	1049.5	1098.4	1257.8
55°	1546.1	1490.3	1529.2	1611.3	1605.5	1326.2	1239.9	1126.3	1177.3	1244.1	1471.9
57.5°	1420.3	1427.2	1534.5	1677.1	1674.4	1414.6	1325.1	1260.4	1323.0	1397.7	1725.5
60°	1303.0	1333.5	1499.3	1687.6	1722.3	1510.8	1439.8	1413.0	1470.8	1561.9	1968.5
62.5°	1241.0	1269.9	1441.9	1668.1	1798.6	1653.4	1593.9	1573.4	1652.3	1754.4	2185.2
65°	1260.4	1278.3	1438.2	1697.6	1886.4	1869.1	1843.3	1809.1	1848.6	1944.3	2283.1
67.5°	1205.7	1235.2	1407.7	1749.7	2046.9	2132.1	2153.7	2116.8	2083.7	2070.5	2140.5
70°	897.4	925.9	1106.8	1534.5	2178.4	2588.7	2575.6	2452.5	2229.4	2043.2	1672.3
72°	570.2	562.4	700.7	1124.2	1936.4	2706.0	2768.1	2540.3	2163.1	1814.4	1135.8
72.5°	414.5	451.9	581.3	999.5	1839.6	2641.8	2732.3	2511.9	2076.3	1713.9	999.0
75°	101.0	106.8	139.4	358.2	1077.4	1988.0	2101.6	1940.6	1515.6	1017.4	442.9
77.5°	68.4	71.0	92.1	126.3	316.7	1133.6	1247.3	1071.6	678.1	346.1	197.3
80°	51.0	52.6	66.8	89.4	131.5	386.6	456.1	362.5	168.9	192.0	140.5
82.5°	35.8	36.8	50.5	65.8	87.3	90.5	120.5	133.1	109.4	125.7	82.1
85°	24.7	24.7	36.8	45.2	55.2	44.7	47.9	66.8	74.2	74.7	50.0
87.5°	13.2	14.7	21.6	28.9	28.9	20.5	22.6	34.2	41.6	44.7	30.0
90°	9.7	9.7	15.9	19.0	14.8	12.3	11.7	13.8	19.0	23.2	16.5
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



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CATALOG NUMBER: IST-AF-600-LED-E1-T4W-7030-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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6	466.6
2.5°	464.5	461.3	457.1	455.0	454.0	451.9	449.8	448.7	448.7	446.6	447.1
5°	449.8	445.0	439.3	435.0	434.5	434.5	435.6	435.6	436.1	434.5	436.6
7.5°	442.4	437.2	428.7	424.0	420.3	419.8	421.9	426.1	428.2	426.6	428.7
10°	437.2	431.4	421.9	416.1	413.5	412.4	414.0	418.2	425.1	425.1	427.2
12.5°	431.9	424.5	415.1	410.8	408.7	409.3	411.4	414.5	421.9	424.5	425.6
15°	426.6	418.2	410.3	404.5	404.5	406.1	408.7	412.4	419.3	424.0	425.1
17.5°	421.4	413.0	406.1	401.4	401.4	403.5	406.1	410.8	415.6	422.4	422.4
20°	416.6	409.8	400.9	396.6	396.1	397.7	400.9	405.6	409.3	416.1	416.6
22.5°	414.0	405.6	397.2	390.9	388.2	387.2	390.3	395.1	398.7	405.6	406.6
25°	413.0	403.5	393.0	381.4	374.6	372.4	374.0	379.8	383.0	388.2	389.8
27.5°	416.6	407.7	391.4	370.3	356.1	350.4	351.9	355.6	356.7	362.5	365.1
30°	429.3	418.7	394.5	358.8	333.0	322.5	322.5	323.0	324.6	329.3	329.8
32.5°	449.8	439.8	404.0	346.7	309.3	294.6	290.9	288.3	288.3	287.8	288.3
35°	487.7	479.2	420.3	333.0	283.5	267.2	258.3	253.6	248.8	246.7	246.2
37.5°	542.4	535.0	443.5	317.2	260.9	244.6	233.6	224.1	218.8	218.3	220.9
40°	623.9	616.5	469.2	299.3	239.4	227.3	215.7	205.7	199.9	200.4	203.1
42.5°	724.4	701.8	497.1	275.1	222.0	215.7	203.1	194.6	188.9	185.7	185.2
45°	841.7	803.8	523.4	252.5	203.1	205.7	193.6	184.1	176.8	168.3	167.3
47.5°	987.9	905.9	546.6	229.9	182.5	195.2	183.6	174.6	163.6	153.6	152.0
50°	1140.5	1023.2	566.6	205.7	164.1	183.6	173.6	161.5	146.2	137.3	137.3
52.5°	1316.7	1164.2	592.3	178.9	149.9	171.0	161.0	145.2	132.6	131.5	131.5
55°	1512.9	1312.0	610.2	157.8	138.9	157.3	152.6	147.8	143.6	144.7	145.2
57.5°	1718.1	1466.1	594.4	143.1	129.9	154.1	167.8	161.5	148.3	147.8	147.3
60°	1894.8	1586.1	507.1	133.6	123.1	159.4	179.9	161.5	148.3	155.2	155.7
62.5°	2010.6	1642.9	337.7	121.5	113.1	150.5	175.7	156.8	148.9	168.3	169.9
65°	1994.8	1579.2	194.1	113.1	106.8	138.4	169.9	151.0	138.9	149.9	146.8
67.5°	1759.6	1323.6	140.5	109.4	102.1	129.9	159.4	142.6	129.4	143.1	137.3
70°	1264.6	901.1	121.0	106.3	98.9	119.9	152.0	137.3	124.1	133.6	124.7
72°	848.5	548.1	111.0	103.6	95.7	113.6	146.8	133.1	119.4	124.7	114.7
72.5°	722.3	432.4	108.4	102.6	94.7	112.0	145.2	132.0	118.4	123.6	114.2
75°	269.9	169.4	96.3	94.7	87.3	104.2	138.9	127.3	113.1	111.5	107.3
77.5°	138.9	107.3	82.1	83.6	78.4	95.2	132.0	119.9	104.2	98.4	96.3
80°	101.0	77.9	66.3	71.0	66.8	85.7	122.6	108.9	94.7	88.4	85.7
82.5°	63.7	48.4	50.5	56.3	56.8	75.8	111.5	97.8	84.2	78.9	74.7
85°	30.5	28.9	35.8	41.6	45.8	64.2	102.1	86.8	73.6	63.1	63.7
87.5°	16.3	22.1	21.6	27.9	35.2	52.6	90.5	71.0	58.9	47.3	47.9
90°	10.7	12.8	15.3	20.0	21.2	29.6	66.4	48.5	46.5	21.8	19.7
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



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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)