

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: P226686

Luminaire Tested: **IST-AF-800-LED-E1-T4W-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226686
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-800-LED-E1-T4W-8030-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, 80 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5921.5 lumens
Efficiency: N/A
Efficacy: 98.4 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): 60.2
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

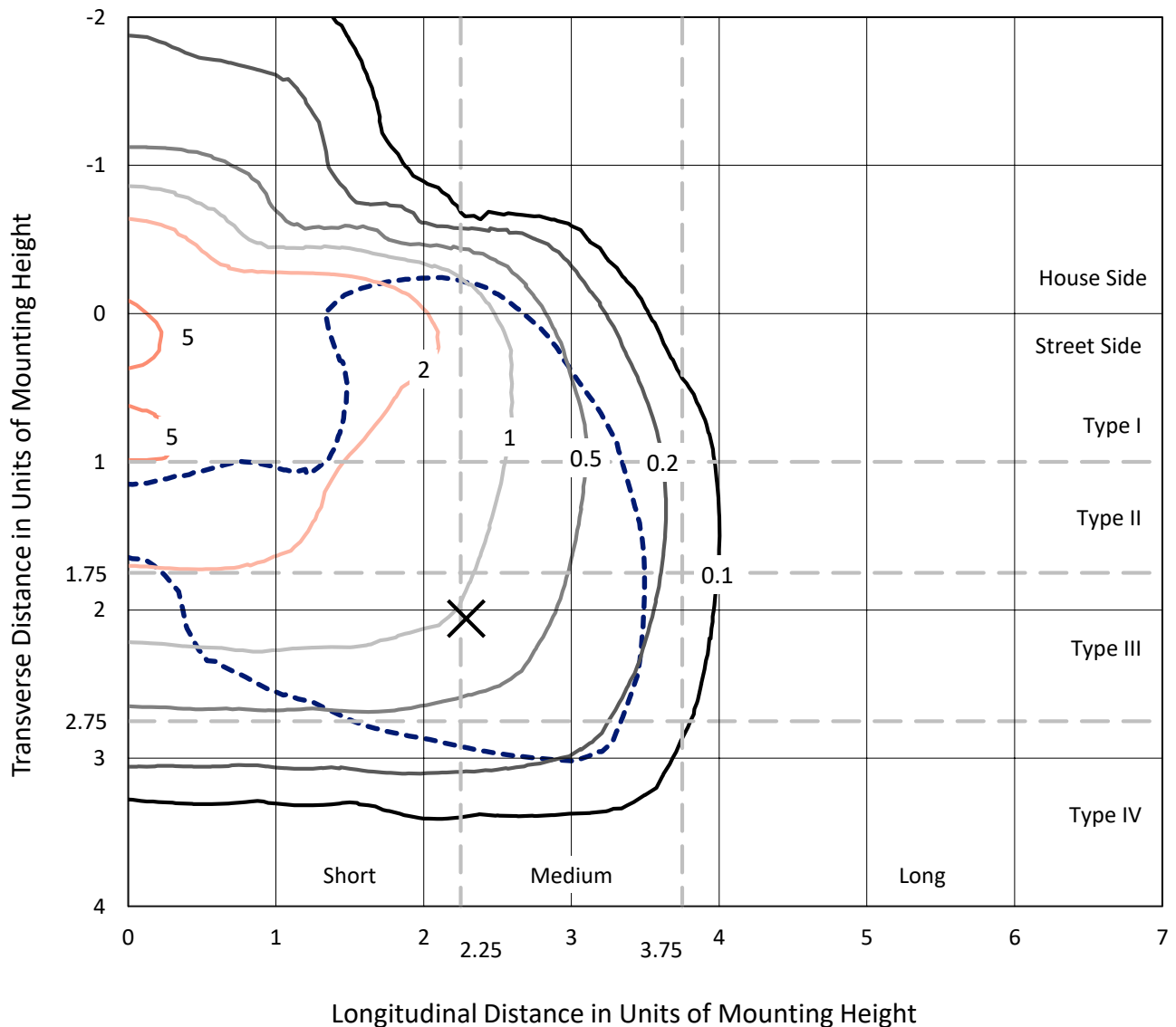


REPORT NUMBER: P226686

CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-ULG

Iso-Footcandle Lines of Horizontal Illumination

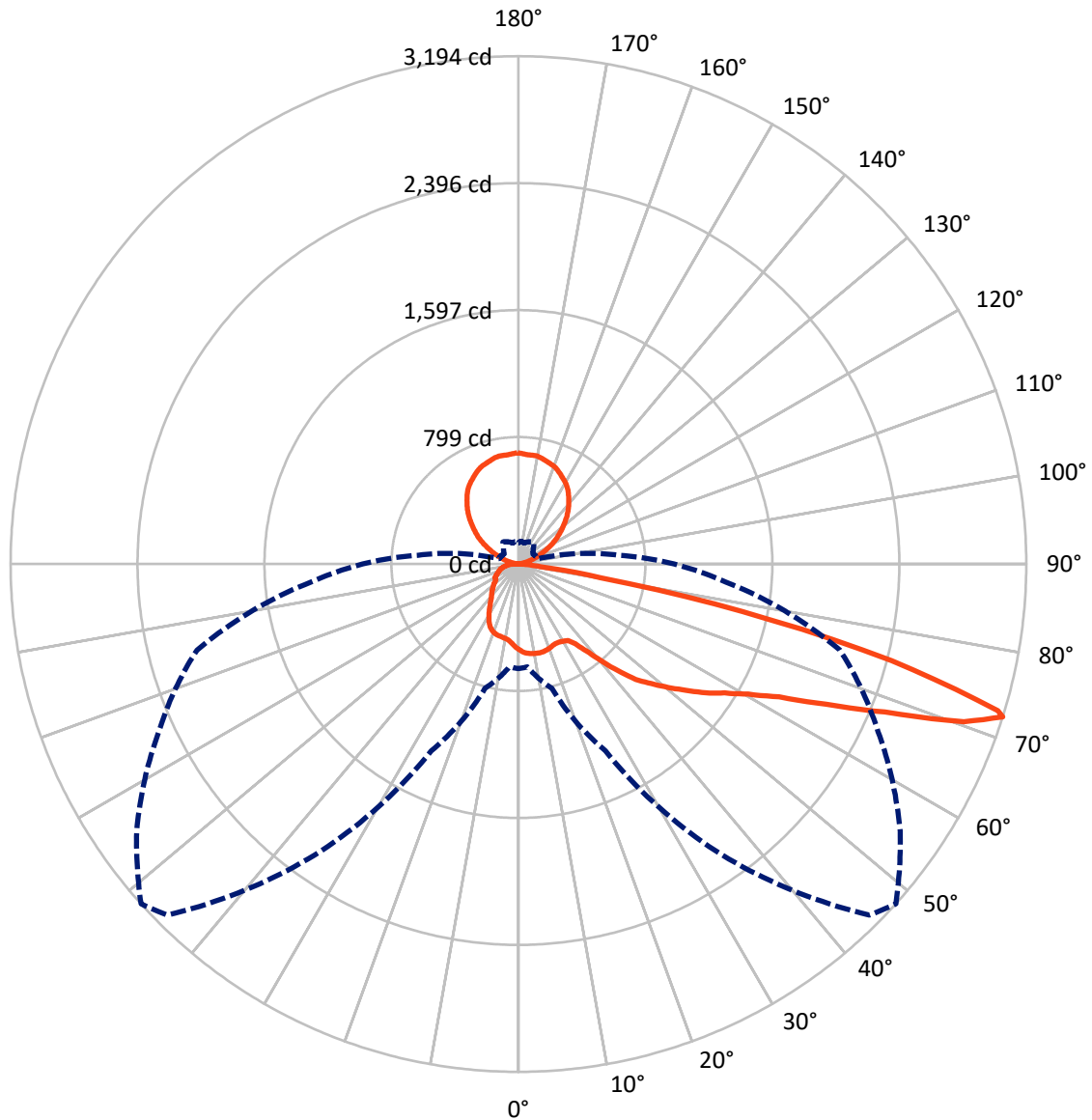
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P226686
CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-ULG

Luminous Intensity Polar Plot



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

REPORT NUMBER: P226686

CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-ULG

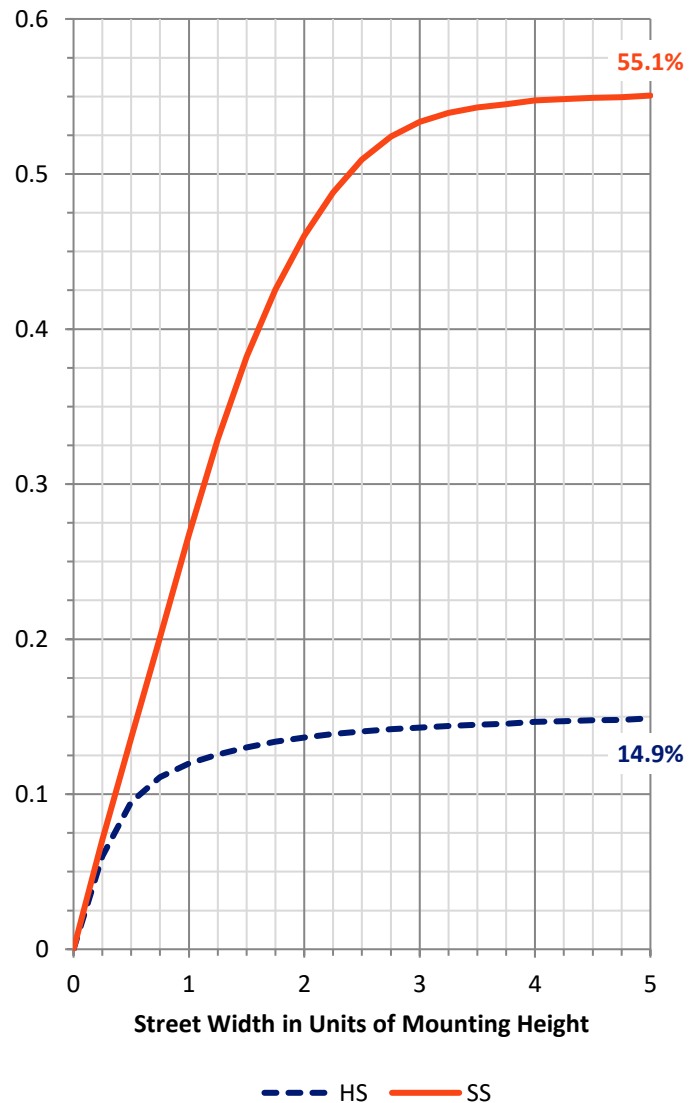
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	909.5	869.4	1779.0
	% Fixture	15.4	14.7	30.0
Street Side	Lumens	3274.3	868.2	4142.5
	% Fixture	55.3	14.7	70.0
Total	Lumens	4183.8	1737.7	5921.5
	% Fixture	70.7	29.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.9	0.9
10°-20°	148.7	2.5
20°-30°	229.3	3.9
30°-40°	343.7	5.8
40°-50°	572.4	9.7
50°-60°	894.5	15.1
60°-70°	1181.5	20.0
70°-80°	683.5	11.5
80°-90°	79.4	1.3
90°-100°	11.8	0.2
100°-110°	57.4	1.0
110°-120°	166.1	2.8
120°-130°	273.2	4.6
130°-140°	336.8	5.7
140°-150°	344.6	5.8
150°-160°	290.3	4.9
160°-170°	191.2	3.2
170°-180°	66.3	1.1
0°-90°	4183.8	70.7
0°-180°	5921.5	100.0



REPORT NUMBER: P226686

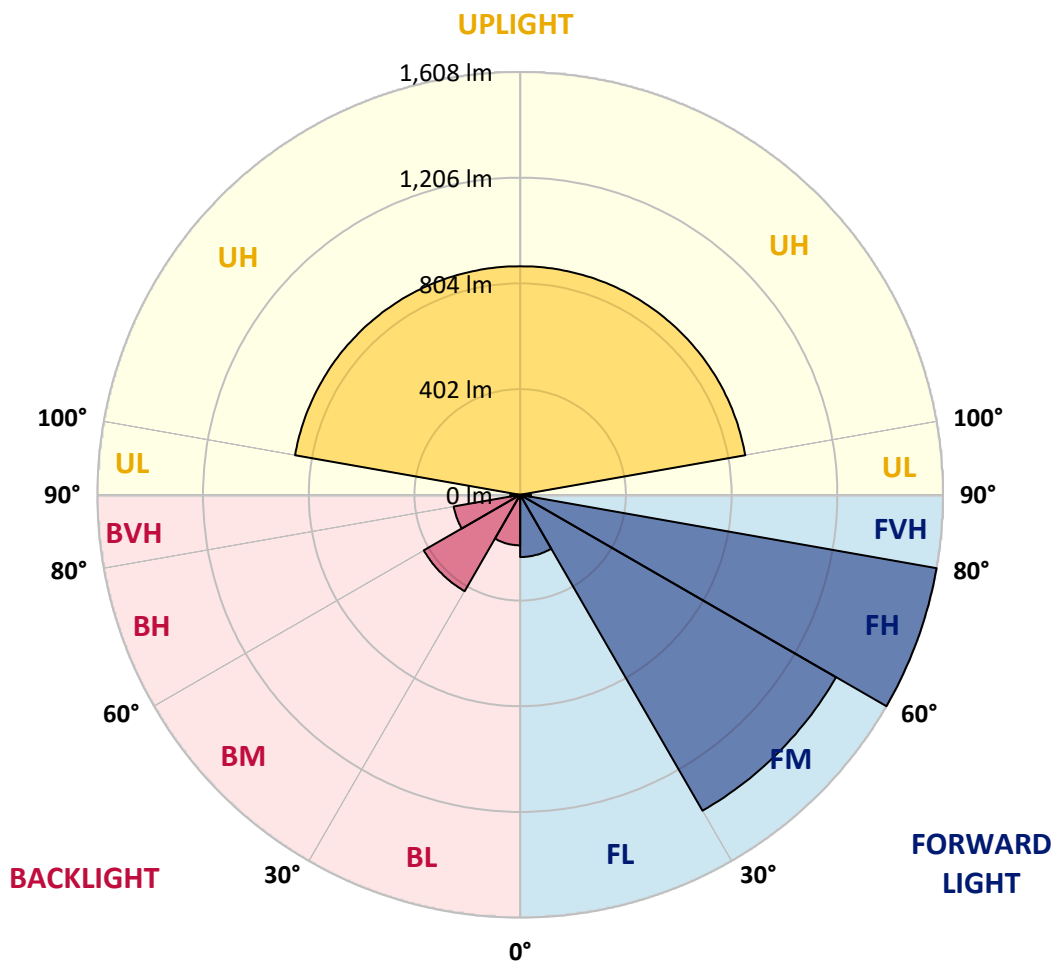
CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	236.6	4.0			
FM	(30°-60°)	1387.6	23.4			
FH	(60°-80°)	1608.5	27.2			G1/1800
FVH	(80°-90°)	41.6	0.7			G1/100
BL	(0°-30°)	192.3	3.2	B1/500		
BM	(30°-60°)	423.0	7.1	B1/1000		
BH	(60°-80°)	256.5	4.3	B1/500		G1/500
BVH	(80°-90°)	37.7	0.6			G1/100
UL	(90°-100°)	11.8	0.2		U2/50	
UH	(100°-180°)	869.4	14.7		U4/1000	

BUG Rating: B1-U5-G1

Type IV Medium





REPORT NUMBER: P226686

CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4
2.5°	567.0	566.4	566.4	561.5	559.7	556.6	554.2	550.6	546.9	542.7	537.2
5°	594.3	596.1	593.7	586.4	577.3	567.6	563.9	555.4	543.9	533.6	523.9
7.5°	620.4	621.0	614.3	602.2	588.2	573.0	568.2	556.6	543.9	529.9	516.0
10°	639.2	639.8	630.1	613.1	594.3	577.3	571.8	560.3	544.5	529.3	511.7
12.5°	650.1	650.7	636.2	618.6	596.1	579.1	574.2	562.1	545.7	526.3	506.9
15°	648.3	650.1	638.0	618.6	594.9	579.7	573.6	563.3	542.7	523.3	502.6
17.5°	636.2	638.6	628.9	607.6	588.8	576.7	570.0	559.7	539.6	519.0	496.5
20°	612.5	615.5	611.3	590.6	577.9	568.2	563.9	554.2	535.4	514.1	491.1
22.5°	585.8	588.8	587.6	570.6	564.5	559.7	555.4	548.1	531.8	510.5	488.7
25°	566.4	568.8	567.0	552.4	554.2	554.2	551.8	546.3	531.1	511.7	488.7
27.5°	598.5	598.5	582.7	553.0	550.0	555.4	554.2	551.2	539.0	517.8	493.5
30°	716.3	707.2	678.6	604.0	565.7	563.3	562.7	560.9	550.0	531.1	508.7
32.5°	848.0	838.9	804.9	711.4	631.9	579.7	574.2	574.8	571.8	554.2	531.8
35°	965.2	963.9	937.2	835.9	734.5	637.4	615.5	601.0	599.7	592.5	574.8
37.5°	1059.9	1059.9	1062.3	947.0	845.6	729.0	692.0	645.9	645.9	641.6	630.7
40°	1167.9	1172.8	1178.2	1047.7	964.6	838.3	796.4	726.6	705.4	712.0	714.5
42.5°	1310.0	1316.0	1312.4	1172.2	1073.2	968.8	917.2	832.8	780.6	791.6	817.1
45°	1405.9	1408.3	1434.4	1302.1	1209.8	1079.3	1035.6	919.6	868.0	890.5	935.4
47.5°	1514.5	1520.6	1524.8	1449.6	1370.0	1204.3	1124.2	1004.0	970.6	1004.6	1075.6
50°	1620.7	1612.9	1624.4	1621.4	1521.8	1315.4	1220.1	1082.9	1085.4	1131.5	1248.0
52.5°	1713.0	1686.3	1713.0	1746.4	1717.3	1429.5	1318.4	1175.8	1211.0	1267.5	1451.4
55°	1784.0	1719.7	1764.6	1859.3	1852.6	1530.3	1430.7	1299.6	1358.5	1435.6	1698.4
57.5°	1639.0	1646.8	1770.7	1935.2	1932.1	1632.3	1529.1	1454.4	1526.7	1612.9	1991.0
60°	1503.6	1538.8	1730.0	1947.3	1987.4	1743.4	1661.4	1630.5	1697.2	1802.2	2271.5
62.5°	1432.0	1465.3	1663.8	1924.9	2075.4	1907.9	1839.3	1815.6	1906.7	2024.4	2521.6
65°	1454.4	1475.1	1659.6	1958.9	2176.8	2156.7	2127.0	2087.5	2133.1	2243.5	2634.5
67.5°	1391.3	1425.3	1624.4	2019.0	2361.9	2460.3	2485.1	2442.7	2404.4	2389.2	2470.0
70°	1035.6	1068.4	1277.2	1770.7	2513.7	2987.1	2972.0	2829.9	2572.6	2357.7	1929.7
72°	658.0	648.9	808.6	1297.2	2234.4	3122.5	3194.1	2931.3	2496.1	2093.6	1310.6
72.5°	478.3	521.4	670.8	1153.3	2122.8	3048.5	3152.9	2898.5	2395.9	1977.7	1152.7
75°	116.5	123.2	160.9	413.4	1243.2	2293.9	2425.0	2239.3	1748.8	1174.0	511.1
77.5°	78.9	81.9	106.2	145.7	365.4	1308.1	1439.2	1236.5	782.4	399.4	227.6
80°	58.9	60.7	77.1	103.2	151.8	446.2	526.3	418.2	194.9	221.6	162.1
82.5°	41.3	42.5	58.3	75.9	100.8	104.4	139.0	153.6	126.3	145.1	94.7
85°	28.5	28.5	42.5	52.2	63.7	51.6	55.2	77.1	85.6	86.2	57.7
87.5°	15.2	17.0	24.9	33.4	33.4	23.7	26.1	39.5	48.0	51.6	34.6
90°	10.5	10.5	17.3	20.7	15.9	13.1	12.5	14.9	20.5	25.4	17.9
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: P226686

CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-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: P226686

CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4
2.5°	536.0	532.4	527.5	525.1	523.9	521.4	519.0	517.8	517.8	515.4	516.0
5°	519.0	513.5	506.9	502.0	501.4	501.4	502.6	502.6	503.2	501.4	503.8
7.5°	510.5	504.4	494.7	489.3	485.0	484.4	486.8	491.7	494.1	492.3	494.7
10°	504.4	497.8	486.8	480.2	477.1	475.9	477.7	482.6	490.5	490.5	492.9
12.5°	498.4	489.9	478.9	474.1	471.7	472.3	474.7	478.3	486.8	489.9	491.1
15°	492.3	482.6	473.5	466.8	466.8	468.6	471.7	475.9	483.8	489.3	490.5
17.5°	486.2	476.5	468.6	463.2	463.2	465.6	468.6	474.1	479.5	487.4	487.4
20°	480.8	472.9	462.5	457.7	457.1	458.9	462.5	468.0	472.3	480.2	480.8
22.5°	477.7	468.0	458.3	451.0	448.0	446.8	450.4	455.9	460.1	468.0	469.2
25°	476.5	465.6	453.4	440.1	432.2	429.8	431.6	438.3	441.9	448.0	449.8
27.5°	480.8	470.4	451.6	427.3	411.0	404.3	406.1	410.3	411.6	418.2	421.3
30°	495.3	483.2	455.3	414.0	384.2	372.1	372.1	372.7	374.5	380.0	380.6
32.5°	519.0	507.5	466.2	400.0	356.9	339.9	335.7	332.6	332.6	332.0	332.6
35°	562.7	553.0	485.0	384.2	327.2	308.4	298.0	292.6	287.1	284.7	284.1
37.5°	625.8	617.3	511.7	366.0	301.1	282.3	269.5	258.6	252.5	251.9	254.9
40°	719.9	711.4	541.5	345.4	276.2	262.2	248.9	237.3	230.7	231.3	234.3
42.5°	835.9	809.8	573.6	317.5	256.2	248.9	234.3	224.6	217.9	214.3	213.7
45°	971.2	927.5	604.0	291.4	234.3	237.3	223.4	212.5	204.0	194.2	193.0
47.5°	1140.0	1045.3	630.7	265.3	210.6	225.2	211.9	201.5	188.8	177.3	175.4
50°	1316.0	1180.7	653.8	237.3	189.4	211.9	200.3	186.4	168.8	158.4	158.4
52.5°	1519.4	1343.3	683.5	206.4	173.0	197.3	185.7	167.5	153.0	151.8	151.8
55°	1745.8	1513.9	704.1	182.1	160.3	181.5	176.0	170.6	165.7	166.9	167.5
57.5°	1982.5	1691.8	685.9	165.1	149.9	177.9	193.6	186.4	171.2	170.6	170.0
60°	2186.5	1830.2	585.2	154.2	142.0	183.9	207.6	186.4	171.2	179.1	179.7
62.5°	2320.0	1895.7	389.7	140.2	130.5	173.6	202.7	180.9	171.8	194.2	196.1
65°	2301.8	1822.3	224.0	130.5	123.2	159.6	196.1	174.2	160.3	173.0	169.4
67.5°	2030.5	1527.3	162.1	126.3	117.8	149.9	183.9	164.5	149.3	165.1	158.4
70°	1459.3	1039.8	139.6	122.6	114.1	138.4	175.4	158.4	143.3	154.2	143.9
72°	979.1	632.5	128.1	119.6	110.5	131.1	169.4	153.6	137.8	143.9	132.3
72.5°	833.4	499.0	125.0	118.4	109.3	129.3	167.5	152.4	136.6	142.6	131.7
75°	311.4	195.5	111.1	109.3	100.8	120.2	160.3	146.9	130.5	128.7	123.8
77.5°	160.3	123.8	94.7	96.5	90.4	109.9	152.4	138.4	120.2	113.5	111.1
80°	116.5	89.8	76.5	81.9	77.1	98.9	141.4	125.7	109.3	102.0	98.9
82.5°	73.4	55.8	58.3	65.0	65.6	87.4	128.7	112.9	97.1	91.1	86.2
85°	35.2	33.4	41.3	48.0	52.8	74.1	117.8	100.2	85.0	72.8	73.4
87.5°	18.8	25.5	24.9	32.2	40.7	60.7	104.4	81.9	68.0	54.6	55.2
90°	11.2	13.7	16.3	21.7	23.4	33.1	75.4	54.7	52.5	24.4	22.0
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: P226686

CATALOG NUMBER: IST-AF-800-LED-E1-T4W-8030-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)