

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: P226747

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)
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
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5243.7 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Semi-Cutoff
BUG Rating: B1 - U1 - G2

Input Watts (W): 43.5
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

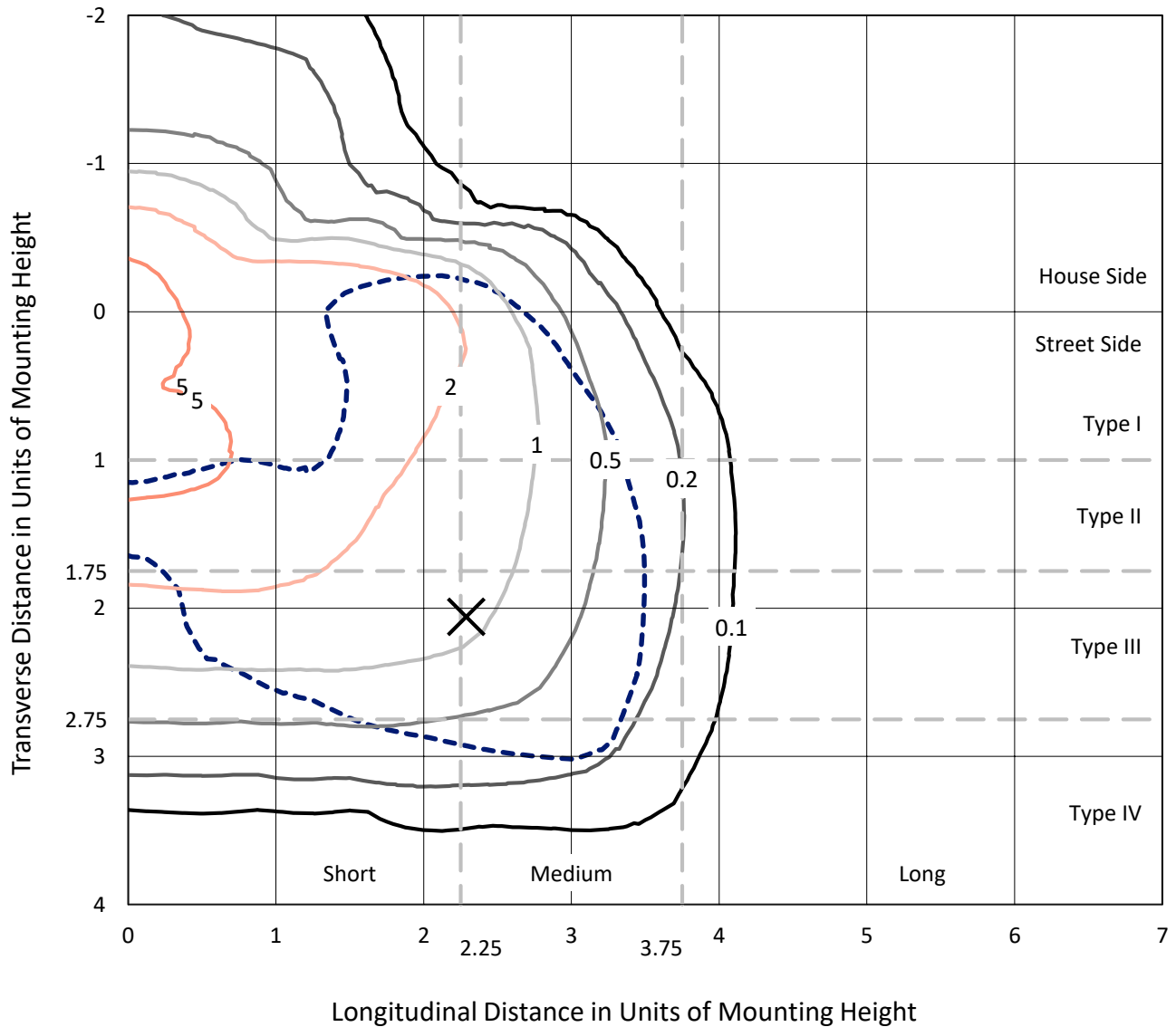


REPORT NUMBER: P226747

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

Iso-Footcandle Lines of Horizontal Illumination

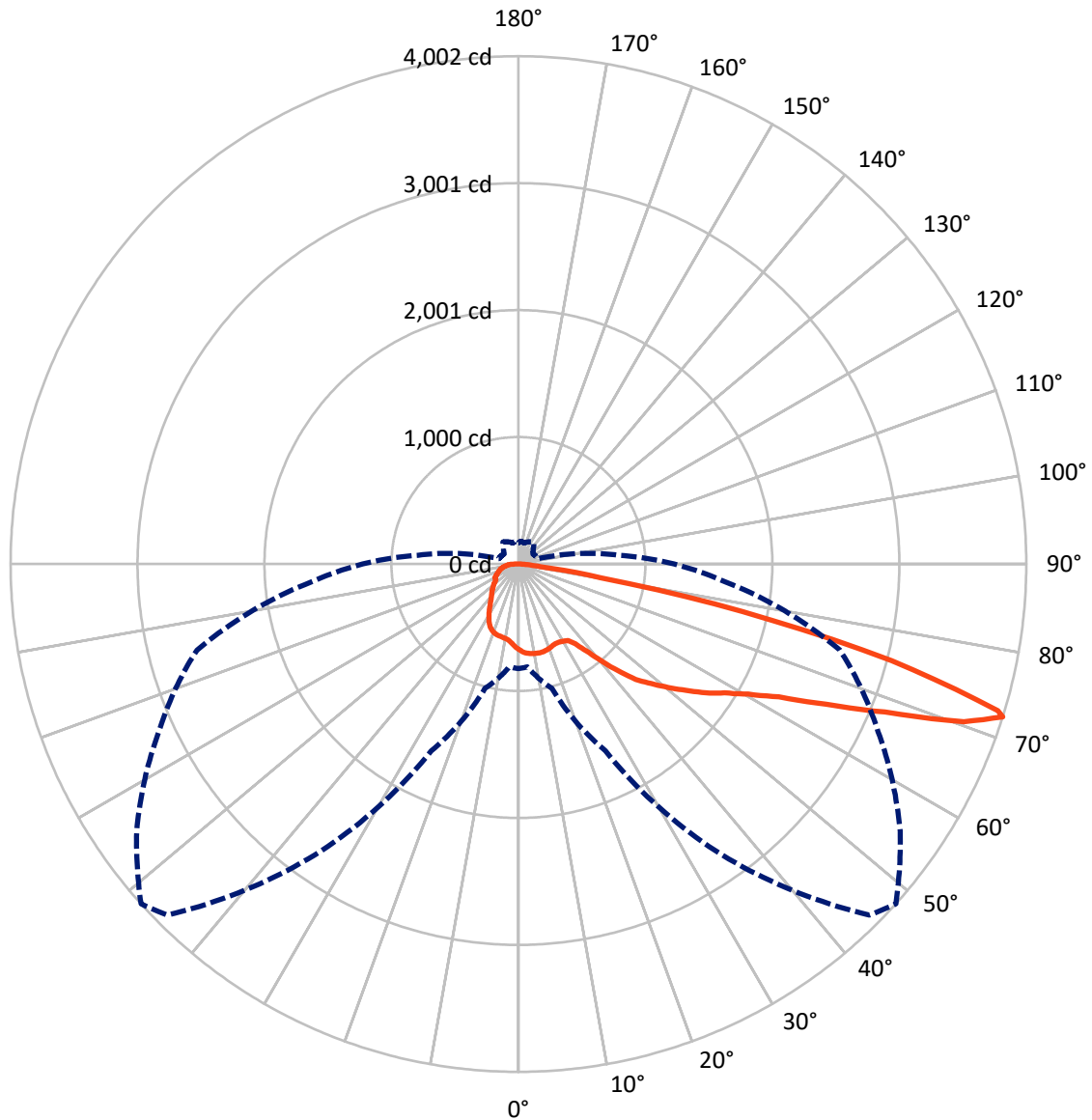
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Medium - Semi-Cutoff

REPORT NUMBER: P226747
CATALOG NUMBER: IST-AF-800-LED-E1-T4W

Luminous Intensity Polar Plot



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

REPORT NUMBER: P226747

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

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1138.9	2.4	1141.2
	% Fixture	21.7	0.0	21.8
Street Side	Lumens	4101.6	0.8	4102.4
	% Fixture	78.2	0.0	78.2
Total	Lumens	5240.5	3.2	5243.7
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	1.2
10°-20°	186.3	3.6
20°-30°	287.3	5.5
30°-40°	430.6	8.2
40°-50°	717.1	13.7
50°-60°	1120.6	21.4
60°-70°	1480.2	28.2
70°-80°	856.3	16.3
80°-90°	98.2	1.9
90°-100°	3.2	0.1
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°	5240.5	99.9
0°-180°	5243.7	100.0

Coefficient of Utilization



REPORT NUMBER: P226747

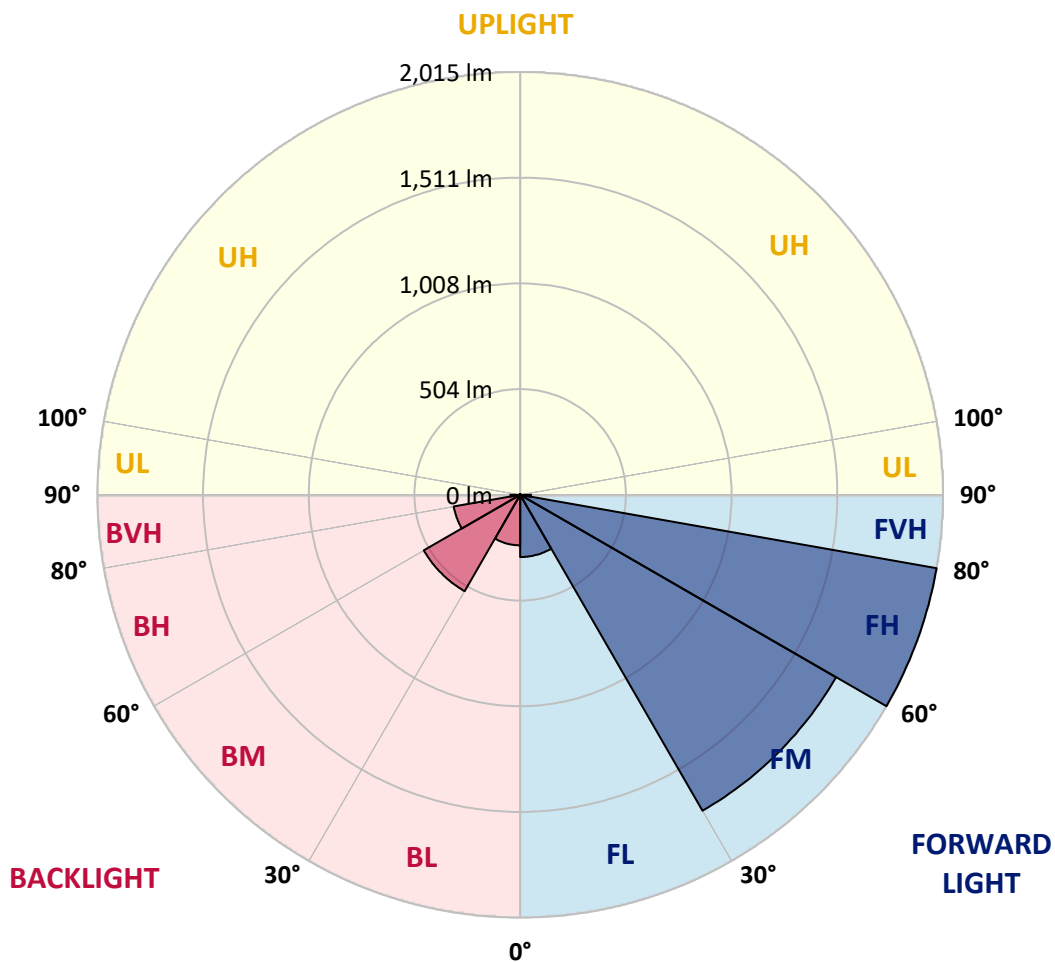
CATALOG NUMBER: IST-AF-800-LED-E1-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	296.5	5.7			
FM	(30°-60°)	1738.4	33.2			
FH	(60°-80°)	2015.2	38.4			G2/5000
FVH	(80°-90°)	51.5	1.0			G1/100
BL	(0°-30°)	240.9	4.6	B1/500		
BM	(30°-60°)	530.0	10.1	B1/1000		
BH	(60°-80°)	321.3	6.1	B1/500		G1/500
BVH	(80°-90°)	46.7	0.9			G1/100
UL	(90°-100°)	3.2	0.1		U1/10	
UH	(100°-180°)	2.4	0.0		U1/10	

BUG Rating: B1-U1-G2

Type IV Medium





REPORT NUMBER: P226747

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5
2.5°	710.3	709.5	709.5	703.5	701.2	697.3	694.4	689.8	685.2	679.9	673.0
5°	744.5	746.9	743.8	734.7	723.2	711.1	706.6	695.9	681.4	668.5	656.3
7.5°	777.2	778.0	769.7	754.4	736.9	717.9	711.9	697.3	681.4	663.9	646.4
10°	800.8	801.6	789.4	768.1	744.5	723.2	716.4	701.9	682.2	663.2	641.1
12.5°	814.5	815.3	797.0	775.0	746.9	725.5	719.4	704.2	683.7	659.4	635.0
15°	812.2	814.5	799.3	775.0	745.3	726.3	718.7	705.7	679.9	655.6	629.7
17.5°	797.0	800.0	787.9	761.3	737.6	722.5	714.1	701.2	676.1	650.2	622.1
20°	767.3	771.2	765.9	740.0	724.0	711.9	706.6	694.4	670.7	644.2	615.2
22.5°	733.9	737.6	736.2	714.8	707.3	701.2	695.9	686.7	666.2	639.5	612.2
25°	709.5	712.6	710.3	692.0	694.4	694.4	691.3	684.5	665.4	641.1	612.2
27.5°	749.8	749.8	730.1	692.8	689.1	695.9	694.4	690.5	675.4	648.8	618.3
30°	897.4	886.0	850.3	756.7	708.8	705.7	705.0	702.7	689.1	665.4	637.3
32.5°	1062.4	1051.0	1008.4	891.3	791.7	726.3	719.4	720.2	716.4	694.4	666.2
35°	1209.2	1207.7	1174.2	1047.2	920.2	798.5	771.2	752.9	751.4	742.3	720.2
37.5°	1327.9	1327.9	1330.9	1186.4	1059.4	913.4	867.0	809.2	809.2	803.8	790.1
40°	1463.2	1469.3	1476.1	1312.7	1208.4	1050.3	997.8	910.3	883.7	892.1	895.1
42.5°	1641.2	1648.8	1644.2	1468.5	1344.6	1213.7	1149.1	1043.4	978.0	991.8	1023.7
45°	1761.3	1764.4	1797.1	1631.3	1515.7	1352.1	1297.4	1152.1	1087.5	1115.6	1172.0
47.5°	1897.5	1905.0	1910.4	1816.0	1716.5	1508.9	1408.5	1257.9	1216.1	1258.6	1347.6
50°	2030.6	2020.6	2035.2	2031.3	1906.6	1648.0	1528.6	1356.7	1359.8	1417.6	1563.6
52.5°	2146.2	2112.7	2146.2	2188.0	2151.5	1791.0	1651.9	1473.2	1517.2	1587.9	1818.4
55°	2235.1	2154.5	2210.8	2329.5	2321.1	1917.2	1792.5	1628.2	1702.0	1798.7	2127.9
57.5°	2053.4	2063.3	2218.4	2424.5	2420.7	2045.0	1915.7	1822.2	1912.7	2020.6	2494.5
60°	1883.8	1927.9	2167.4	2439.7	2489.9	2184.2	2081.5	2042.7	2126.4	2258.0	2845.8
62.5°	1794.1	1835.9	2084.6	2411.6	2600.1	2390.3	2304.3	2274.6	2388.8	2536.3	3159.2
65°	1822.2	1848.1	2079.2	2454.2	2727.2	2702.1	2664.8	2615.4	2672.5	2810.9	3300.7
67.5°	1743.1	1785.7	2035.2	2529.5	2959.1	3082.4	3113.6	3060.3	3012.4	2993.4	3094.5
70°	1297.4	1338.5	1600.1	2218.4	3149.3	3742.5	3723.4	3545.4	3223.0	2953.8	2417.6
72°	824.4	812.9	1013.0	1625.2	2799.4	3912.1	4001.8	3672.5	3127.3	2622.9	1641.9
72.5°	599.2	653.3	840.4	1444.9	2659.5	3819.3	3950.1	3631.5	3001.7	2477.7	1444.2
75°	146.0	154.4	201.5	517.9	1557.5	2874.0	3038.3	2805.5	2191.1	1470.8	640.4
77.5°	98.8	102.7	133.1	182.5	457.9	1638.9	1803.2	1549.2	980.3	500.4	285.2
80°	73.8	76.0	96.6	129.3	190.2	558.9	659.4	524.0	244.1	277.6	203.1
82.5°	51.8	53.2	73.0	95.0	126.2	130.8	174.1	192.4	158.1	181.8	118.7
85°	35.7	35.7	53.2	65.4	79.9	64.7	69.3	96.6	107.2	108.0	72.2
87.5°	19.0	21.3	31.2	41.8	41.8	29.7	32.7	49.4	60.0	64.7	43.4
90°	6.9	6.9	12.9	16.0	9.9	7.6	6.9	9.9	14.4	20.6	13.7
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226747

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

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226747

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5	674.5
2.5°	671.6	667.0	660.9	657.9	656.3	653.3	650.2	648.8	648.8	645.7	646.4
5°	650.2	643.4	635.0	628.9	628.2	628.2	629.7	629.7	630.4	628.2	631.3
7.5°	639.5	632.0	619.8	613.0	607.6	606.9	609.9	616.0	619.1	616.7	619.8
10°	632.0	623.6	609.9	601.6	597.7	596.3	598.5	604.6	614.5	614.5	617.6
12.5°	624.4	613.8	600.1	593.9	591.0	591.7	594.7	599.2	609.9	613.8	615.2
15°	616.7	604.6	593.2	584.8	584.8	587.1	591.0	596.3	606.1	613.0	614.5
17.5°	609.2	597.0	587.1	580.2	580.2	583.3	587.1	593.9	600.8	610.7	610.7
20°	602.3	592.4	579.5	573.5	572.6	574.9	579.5	586.4	591.7	601.6	602.3
22.5°	598.5	586.4	574.2	565.1	561.3	559.8	564.3	571.1	576.4	586.4	587.9
25°	597.0	583.3	568.1	551.4	541.4	538.5	540.7	549.1	553.6	561.3	563.5
27.5°	602.3	589.4	565.8	535.4	514.9	506.5	508.8	514.1	515.7	524.0	527.8
30°	620.6	605.4	570.4	518.6	481.4	466.2	466.2	467.0	469.2	476.1	476.8
32.5°	650.2	635.8	584.1	501.1	447.1	425.9	420.5	416.8	416.8	416.0	416.8
35°	705.0	692.8	607.6	481.4	409.9	386.4	373.4	366.5	359.8	356.7	355.9
37.5°	784.1	773.5	641.1	458.6	377.2	353.6	337.7	324.0	316.4	315.6	319.4
40°	901.9	891.3	678.4	432.7	346.1	328.6	311.8	297.4	289.0	289.8	293.6
42.5°	1047.2	1014.6	718.7	397.7	320.9	311.8	293.6	281.4	273.0	268.4	267.7
45°	1216.8	1162.1	756.7	365.1	293.6	297.4	279.9	266.2	255.5	243.4	241.8
47.5°	1428.2	1309.6	790.1	332.4	263.9	282.1	265.5	252.5	236.5	222.1	219.8
50°	1648.8	1479.2	819.1	297.4	237.3	265.5	250.9	233.4	211.4	198.5	198.5
52.5°	1903.5	1683.0	856.3	258.6	216.8	247.1	232.7	209.9	191.6	190.2	190.2
55°	2187.3	1896.8	882.2	228.1	200.8	227.4	220.5	213.7	207.7	209.1	209.9
57.5°	2483.8	2119.6	859.4	206.8	187.8	222.8	242.6	233.4	214.5	213.7	213.0
60°	2739.4	2292.9	733.1	193.1	178.0	230.5	260.1	233.4	214.5	224.3	225.2
62.5°	2906.7	2375.1	488.3	175.6	163.5	217.5	254.0	226.6	215.2	243.4	245.6
65°	2883.8	2283.0	280.6	163.5	154.4	200.0	245.6	218.3	200.8	216.8	212.2
67.5°	2543.9	1913.4	203.1	158.1	147.5	187.8	230.5	206.1	187.1	206.8	198.5
70°	1828.2	1302.7	174.9	153.6	143.0	173.4	219.8	198.5	179.5	193.1	180.2
72°	1226.7	792.5	160.5	149.9	138.4	164.3	212.2	192.4	172.7	180.2	165.8
72.5°	1044.2	625.1	156.6	148.3	136.9	162.0	209.9	190.9	171.1	178.7	165.0
75°	390.2	244.9	139.2	136.9	126.2	150.6	200.8	184.0	163.5	161.2	155.2
77.5°	200.8	155.2	118.7	120.9	113.3	137.7	190.9	173.4	150.6	142.2	139.2
80°	146.0	112.5	95.9	102.7	96.6	124.0	177.2	157.4	136.9	127.8	124.0
82.5°	92.1	70.0	73.0	81.3	82.1	109.6	161.2	141.5	121.7	114.1	108.0
85°	44.1	41.8	51.8	60.0	66.2	92.8	147.5	125.5	106.5	91.2	92.1
87.5°	23.5	31.9	31.2	40.3	50.9	76.0	130.8	102.7	85.2	68.4	69.3
90°	5.3	8.4	9.1	16.0	20.6	32.7	84.4	58.5	57.1	24.3	21.3
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226747

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)