

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: P226425

Luminaire Tested: **IST-AF-800-LED-E1-T3-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226425
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-800-LED-E1-T3-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7029.2 lumens
Efficiency: N/A
Efficacy: 116.8 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

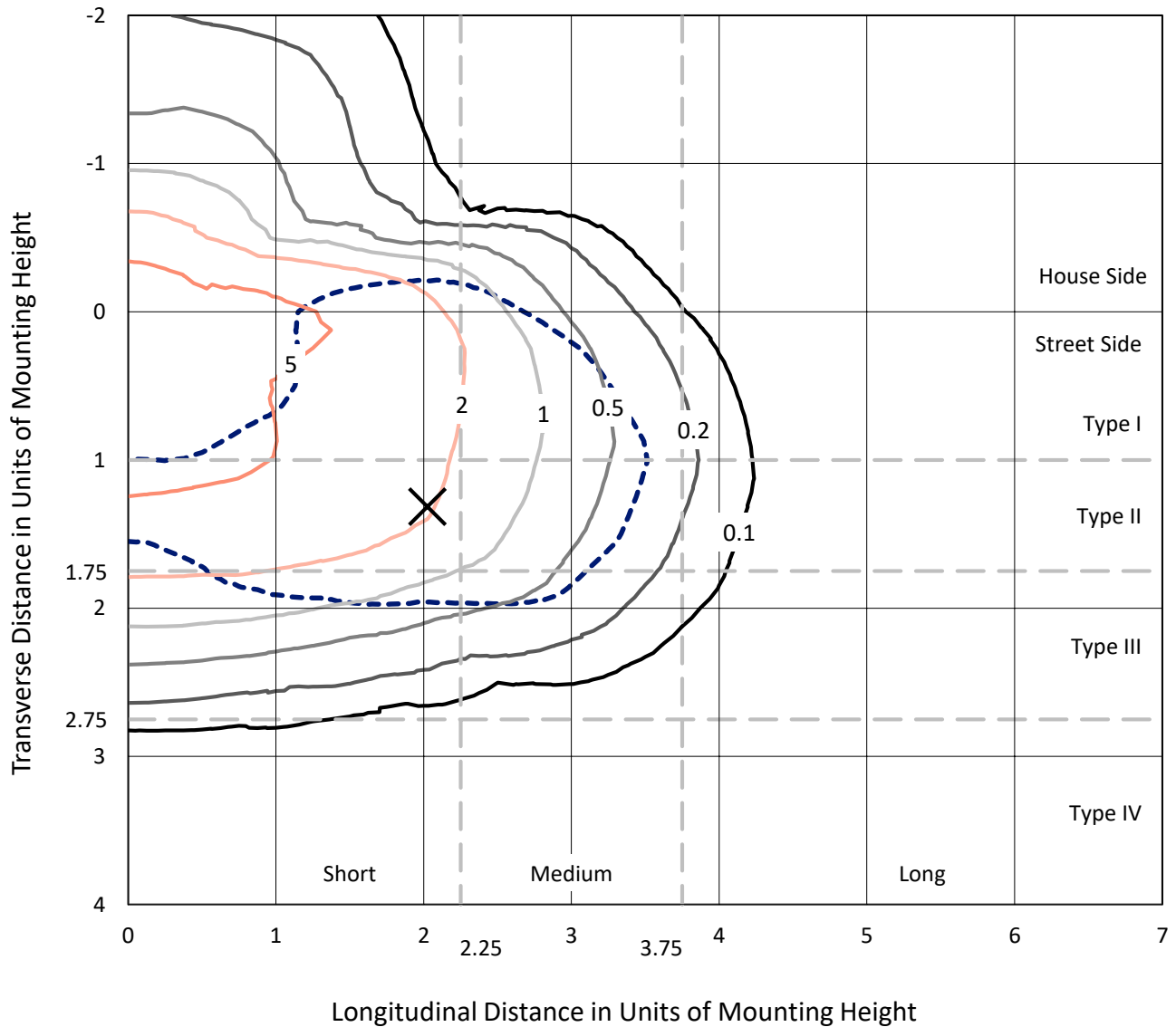
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

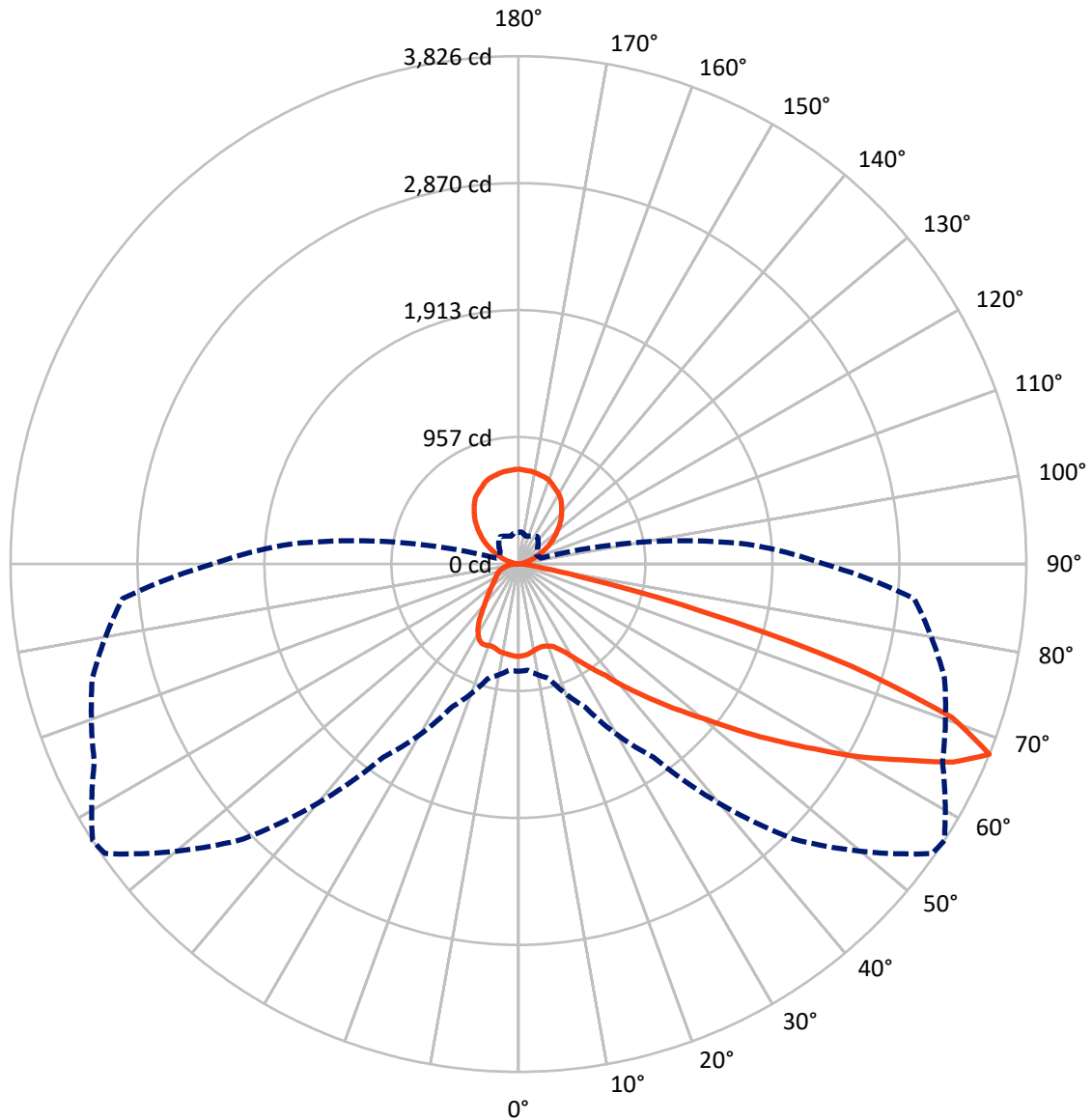
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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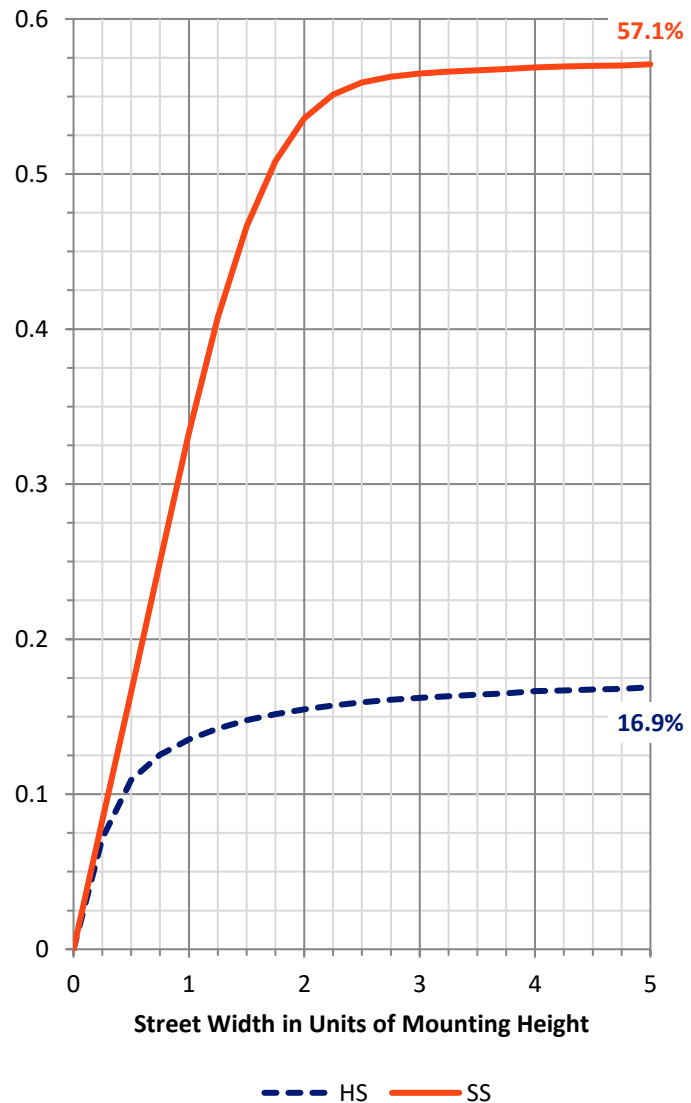
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1223.0	889.0	2112.0
	% Fixture	17.4	12.6	30.0
Street Side	Lumens	4029.3	887.9	4917.2
	% Fixture	57.3	12.6	70.0
Total	Lumens	5252.3	1776.9	7029.2
	% Fixture	74.7	25.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	0.9
10°-20°	187.1	2.7
20°-30°	322.1	4.6
30°-40°	523.6	7.4
40°-50°	844.6	12.0
50°-60°	1259.2	17.9
60°-70°	1418.1	20.2
70°-80°	546.7	7.8
80°-90°	85.8	1.2
90°-100°	11.4	0.2
100°-110°	58.7	0.8
110°-120°	169.9	2.4
120°-130°	279.4	4.0
130°-140°	344.6	4.9
140°-150°	352.5	5.0
150°-160°	297.0	4.2
160°-170°	195.5	2.8
170°-180°	67.8	1.0
0°-90°	5252.3	74.7
0°-180°	7029.2	100.0



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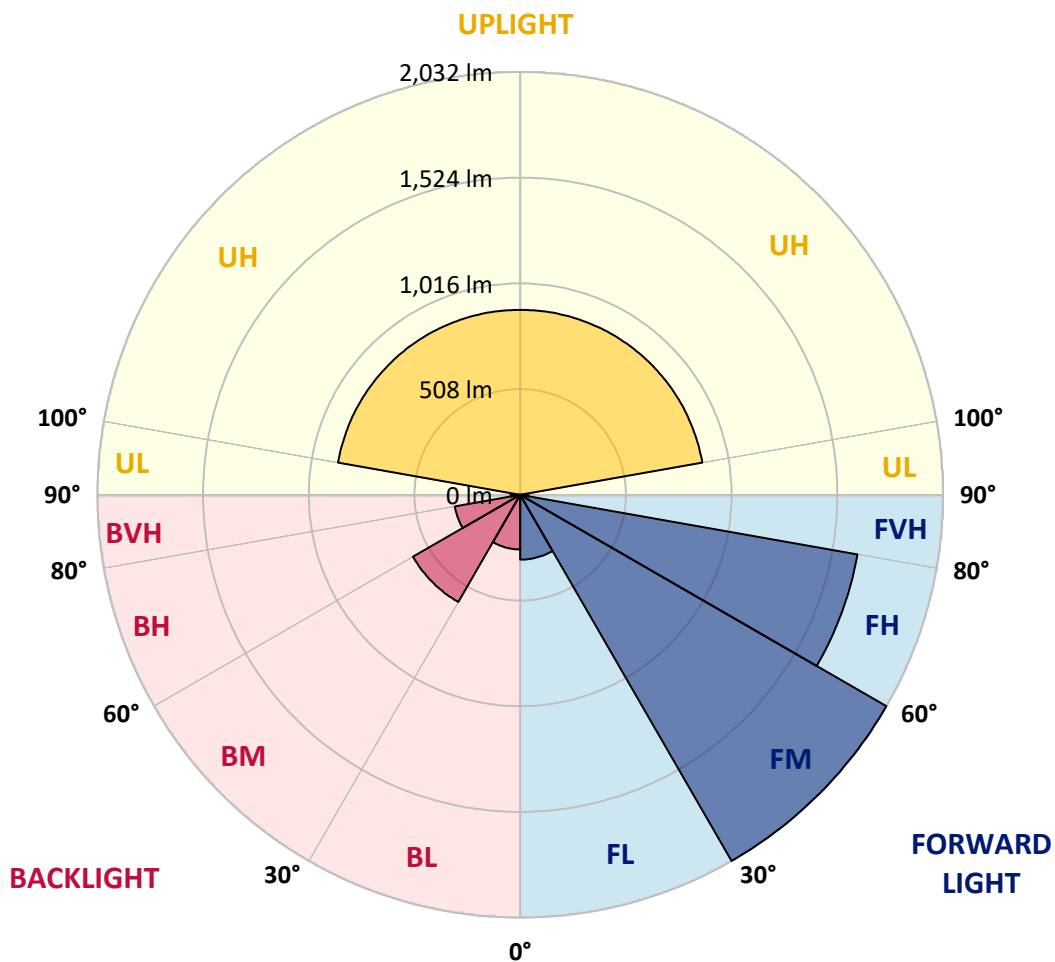
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	311.6	4.4			
FM	(30°-60°)	2032.4	28.9			
FH	(60°-80°)	1645.9	23.4			G1/1800
FVH	(80°-90°)	39.4	0.6			G1/100
BL	(0°-30°)	262.7	3.7	B1/500		
BM	(30°-60°)	595.0	8.5	B1/1000		
BH	(60°-80°)	319.0	4.5	B1/500		G1/500
BVH	(80°-90°)	46.3	0.7			G1/100
UL	(90°-100°)	11.4	0.2		U2/50	
UH	(100°-180°)	889.0	12.6		U4/1000	

BUG Rating: B1-U5-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1
2.5°	690.8	692.3	693.9	693.2	693.2	693.2	693.2	691.6	693.9	693.9	692.3
5°	679.4	680.2	681.0	682.4	683.9	685.5	686.3	686.3	687.0	686.3	684.8
7.5°	662.7	663.4	666.5	666.5	668.0	671.1	672.6	674.1	676.4	676.4	675.6
10°	657.3	657.3	657.3	655.1	656.6	657.3	659.6	659.6	665.7	668.8	670.2
12.5°	663.4	662.7	662.7	656.6	651.2	649.0	651.2	652.0	658.9	663.4	666.5
15°	677.1	677.1	675.6	666.5	655.8	647.4	646.7	646.7	652.0	658.9	664.2
17.5°	709.1	712.1	701.4	687.0	669.5	655.8	650.5	649.8	653.6	658.9	664.2
20°	770.0	769.2	753.2	727.3	696.9	674.1	661.1	659.6	658.9	662.0	668.0
22.5°	842.2	839.2	820.2	787.5	745.6	703.8	678.6	675.6	669.5	671.8	680.2
25°	919.8	920.6	897.0	854.4	801.9	751.7	713.6	710.6	697.7	696.1	705.3
27.5°	997.5	1007.3	975.4	935.1	872.7	812.5	757.0	752.5	741.0	737.2	746.3
30°	1110.8	1107.0	1067.4	1015.0	952.6	877.2	824.0	815.6	792.8	798.1	808.0
32.5°	1206.7	1215.1	1179.3	1116.9	1034.7	955.5	894.0	889.4	867.4	873.4	887.1
35°	1323.8	1343.6	1296.4	1219.6	1140.5	1059.1	985.3	973.1	955.5	967.7	978.5
37.5°	1457.7	1467.6	1431.1	1332.2	1251.6	1166.4	1082.7	1063.7	1044.6	1069.7	1088.7
40°	1585.6	1601.5	1554.4	1470.7	1377.1	1295.7	1204.4	1200.5	1156.4	1183.9	1233.3
42.5°	1775.0	1794.8	1719.5	1622.1	1537.6	1439.5	1352.8	1332.2	1284.2	1323.1	1405.9
45°	1907.4	1906.6	1855.6	1775.0	1723.3	1628.1	1511.0	1486.7	1434.9	1486.7	1597.7
47.5°	1955.3	1966.7	1949.2	1939.3	1921.1	1851.8	1679.2	1656.3	1607.6	1684.5	1787.2
50°	2026.1	2023.0	2023.0	2083.9	2136.3	2121.9	1876.2	1843.5	1792.5	1884.6	2032.2
52.5°	2044.4	2017.0	2059.5	2175.9	2342.6	2354.7	2105.2	2086.9	2026.1	2115.9	2297.6
55°	1993.3	1986.5	2054.2	2223.1	2485.6	2572.3	2370.7	2345.6	2277.1	2354.0	2584.5
57.5°	1879.3	1896.8	2005.5	2213.3	2584.5	2764.0	2662.1	2626.3	2528.2	2574.6	2869.1
60°	1759.8	1768.2	1911.9	2178.3	2611.1	2897.2	2968.0	2947.4	2779.3	2806.7	3079.8
62.5°	1627.4	1607.6	1756.7	2149.3	2581.4	3080.5	3264.6	3248.7	3050.1	3041.7	3229.7
65°	1257.6	1285.0	1412.1	1776.6	2378.4	3223.6	3618.5	3597.9	3352.2	3235.8	3213.7
67.5°	808.0	802.7	892.4	1187.6	1777.3	2929.9	3803.3	3826.1	3524.9	3323.3	2993.1
70°	289.9	298.2	331.7	539.4	974.6	1952.3	3352.9	3466.3	3397.8	3159.7	2436.2
72.5°	176.5	176.5	200.8	242.7	394.9	925.9	2389.7	2614.2	2773.2	2603.5	1799.4
75°	138.5	137.7	146.1	167.4	213.0	303.6	1270.6	1444.0	1778.8	1798.6	1024.1
77.5°	109.6	108.8	117.1	127.1	159.0	160.5	405.5	528.0	816.3	768.4	365.9
80°	88.3	87.5	93.6	96.7	116.4	111.1	162.9	188.6	286.0	251.0	158.3
82.5°	79.9	79.9	85.9	73.8	80.6	78.4	101.2	108.0	143.8	149.1	95.1
85°	51.8	53.3	80.6	71.5	52.5	48.0	64.7	68.4	89.8	98.1	46.4
87.5°	24.3	26.6	61.6	59.3	35.0	25.9	36.5	38.8	48.7	60.1	27.4
90°	9.7	9.7	14.7	16.6	12.8	11.8	13.2	12.9	14.5	16.8	14.7
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	7.2	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.4	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	11.9	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	29.1	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	50.5	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	73.2	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	97.0	96.2	92.1	89.0
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.0	123.8	121.7	118.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	151.8	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	183.7	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	216.7	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	252.5	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	286.2	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	320.6	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.1	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	386.5	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	421.5	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	454.2	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	484.3	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	511.9	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	540.3	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	570.0	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	594.3	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	611.3	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	625.6	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	641.4	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	659.6	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	674.3	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	683.1	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	688.4	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	694.8	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	702.4	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	705.4	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	706.9	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	711.0	715.0	717.1	714.0
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1	696.1
2.5°	694.6	693.2	693.9	694.6	695.4	697.7	698.5	698.5	698.5	697.7	699.2
5°	686.3	684.8	684.8	687.0	689.3	692.3	696.9	700.7	702.3	703.0	703.0
7.5°	677.1	675.6	676.4	680.2	683.9	686.3	690.8	693.2	699.2	699.2	700.7
10°	671.1	672.6	673.3	677.1	680.2	680.2	679.4	677.9	676.4	680.2	678.6
12.5°	667.3	669.5	668.8	673.3	674.8	668.8	659.6	647.4	645.9	647.4	649.0
15°	665.7	665.7	668.0	668.0	660.4	648.2	636.8	637.6	639.0	643.6	643.6
17.5°	665.7	666.5	668.0	662.7	649.0	638.3	636.1	633.7	625.4	623.1	620.8
20°	671.1	669.5	671.1	661.1	649.0	640.6	623.1	606.4	590.3	583.6	580.5
22.5°	683.9	681.7	681.0	671.1	655.8	627.7	593.4	567.5	540.2	531.0	528.0
25°	706.8	706.0	700.7	693.9	651.2	596.5	553.1	512.0	482.3	466.4	467.2
27.5°	747.2	747.2	744.1	713.6	627.7	557.7	499.1	457.3	426.8	411.6	409.3
30°	808.0	809.5	811.0	718.9	590.3	500.6	439.8	411.6	393.3	382.0	381.2
32.5°	883.3	891.7	881.8	712.9	539.4	431.4	393.3	383.4	374.3	366.7	365.9
35°	983.0	1005.8	943.4	688.5	482.3	384.2	365.2	358.3	351.5	346.2	346.9
37.5°	1116.9	1139.0	983.0	647.4	409.3	357.6	349.2	338.6	328.0	316.5	315.0
40°	1275.1	1268.3	996.7	569.9	363.7	344.6	333.3	319.6	301.3	284.6	281.5
42.5°	1433.4	1387.7	985.3	474.0	334.0	333.3	317.2	299.7	281.5	267.1	267.1
45°	1610.6	1492.7	950.2	384.2	310.4	321.1	301.3	283.1	266.3	255.6	254.9
47.5°	1778.0	1590.9	892.4	320.3	286.8	305.0	289.1	272.4	256.4	247.2	245.0
50°	1974.3	1702.7	848.3	276.9	264.0	289.1	282.2	267.1	251.9	241.2	239.7
52.5°	2172.8	1811.5	814.9	247.2	243.5	276.9	279.3	270.1	254.1	233.5	232.0
55°	2380.6	1947.7	747.9	223.7	225.2	267.8	283.1	276.2	264.7	231.3	229.8
57.5°	2554.8	2073.2	630.8	207.7	210.7	261.0	284.6	271.6	258.7	232.8	230.6
60°	2691.0	2159.2	462.6	194.8	197.8	253.4	277.7	255.6	238.9	232.8	229.0
62.5°	2732.8	2162.2	307.4	179.5	187.9	240.4	265.6	247.2	227.5	230.6	229.0
65°	2627.9	2048.2	219.8	165.1	179.5	225.2	260.2	238.9	222.2	234.4	232.8
67.5°	2304.5	1725.5	176.5	153.6	168.2	209.2	250.3	231.3	217.6	242.7	238.1
70°	1795.5	1237.9	149.9	142.3	156.0	194.1	236.6	222.9	211.5	235.9	229.8
72.5°	1183.9	728.9	132.4	131.7	141.5	181.1	221.4	215.3	201.6	213.8	204.7
75°	617.8	337.8	114.9	119.5	125.5	169.7	207.7	201.6	186.4	191.0	187.9
77.5°	242.7	158.3	99.6	105.0	111.8	152.9	190.2	184.1	171.1	167.4	166.6
80°	133.2	106.5	83.0	89.8	94.3	137.7	172.0	165.1	151.4	149.1	146.8
82.5°	84.5	69.3	68.4	73.0	79.1	122.4	154.5	143.8	132.4	156.0	126.3
85°	39.6	41.1	48.7	54.7	61.6	104.2	134.6	123.3	111.8	108.8	96.7
87.5°	22.1	27.4	31.9	37.2	42.6	73.0	106.5	95.9	83.7	71.5	73.8
90°	12.5	12.5	18.3	17.6	16.3	17.8	60.7	55.3	49.0	24.9	18.0
92.5°	6.1	6.1	6.1	7.2	7.2	6.1	6.1	6.1	5.1	4.1	4.1
95°	7.2	7.2	7.2	8.2	7.2	7.2	7.2	7.2	6.1	5.1	5.1
97.5°	8.2	8.2	9.2	10.2	12.3	9.2	9.2	8.2	8.2	7.2	7.2
100°	19.4	19.4	23.5	26.6	29.7	21.5	12.3	10.2	9.2	8.2	8.2
102.5°	38.9	39.9	43.0	48.1	51.1	40.9	27.6	18.4	13.3	11.3	11.3
105°	62.4	62.4	66.5	71.6	73.7	64.4	49.1	36.8	27.6	22.5	21.5
107.5°	88.0	89.0	92.1	96.2	97.2	90.0	74.7	59.3	50.1	43.0	41.9
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5



REPORT NUMBER: P226425

CATALOG NUMBER: IST-AF-800-LED-E1-T3-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	150.4	150.4	152.4	153.4	151.4	146.3	137.1	123.8	108.4	101.3	101.3
115°	182.1	181.1	183.1	186.2	183.1	178.0	171.9	162.6	150.4	142.2	143.2
117.5°	213.8	212.8	214.8	219.9	215.8	209.7	206.6	201.5	193.3	188.2	188.2
120°	248.6	248.6	250.6	255.7	251.6	248.6	242.4	238.3	231.2	228.1	230.2
122.5°	283.4	282.3	284.4	289.5	285.4	283.4	277.2	273.1	267.0	266.0	269.0
125°	317.1	317.1	317.1	322.2	320.2	317.1	312.0	305.9	302.8	300.7	304.8
127.5°	355.0	352.9	353.9	353.9	352.9	347.8	346.8	340.6	336.6	336.6	337.6
130°	388.7	387.7	389.7	389.7	385.7	380.5	378.5	374.4	370.3	369.3	371.3
132.5°	424.5	423.5	423.5	425.5	420.4	414.3	413.3	410.2	402.0	403.0	405.1
135°	461.4	460.3	457.3	458.3	453.2	447.0	445.0	441.9	435.8	435.8	438.8
137.5°	493.1	492.0	486.9	485.9	483.9	478.7	474.6	470.6	469.5	467.5	470.6
140°	522.7	520.7	515.6	513.5	511.5	508.4	502.3	500.2	498.2	496.1	499.2
142.5°	548.3	546.3	545.2	545.2	539.1	537.0	533.0	529.9	528.9	526.8	529.9
145°	572.9	570.8	573.9	574.9	568.8	563.6	562.6	559.6	556.5	558.5	562.6
147.5°	598.4	596.4	599.4	598.4	593.3	588.2	587.2	587.2	584.1	585.1	588.2
150°	624.0	619.9	616.8	613.8	610.7	606.6	606.6	606.6	606.6	605.6	608.7
152.5°	642.4	637.3	632.2	628.1	625.0	624.0	624.0	623.0	622.0	622.0	625.0
155°	655.7	652.6	650.6	645.5	640.4	642.4	644.5	641.4	639.3	639.3	643.4
157.5°	670.0	664.9	664.9	662.9	658.8	659.8	660.8	658.8	657.8	657.8	660.8
160°	681.3	675.1	676.2	679.2	673.1	670.0	670.0	671.1	674.1	675.1	678.2
162.5°	689.5	683.3	685.4	686.4	682.3	678.2	676.2	680.3	684.4	684.4	688.4
165°	697.7	693.6	695.6	692.5	687.4	688.4	688.4	691.5	691.5	693.6	696.6
167.5°	709.9	703.8	703.8	699.7	693.6	700.7	703.8	701.7	699.7	702.8	705.8
170°	717.1	712.0	709.9	704.8	701.7	706.9	708.9	707.9	707.9	711.0	714.0
172.5°	717.1	712.0	709.9	707.9	704.8	705.8	705.8	708.9	711.0	713.0	715.0
175°	715.0	709.9	712.0	711.0	705.8	705.8	706.9	711.0	713.0	714.0	716.1
177.5°	718.1	714.0	717.1	715.0	709.9	711.0	713.0	715.0	716.1	721.2	723.2
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1

(END OF REPORT)