

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: P226428

Luminaire Tested: **IST-AF-800-LED-E1-T3-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226428
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-T3-7050-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, 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: 6871.5 lumens
Efficiency: N/A
Efficacy: 114.1 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

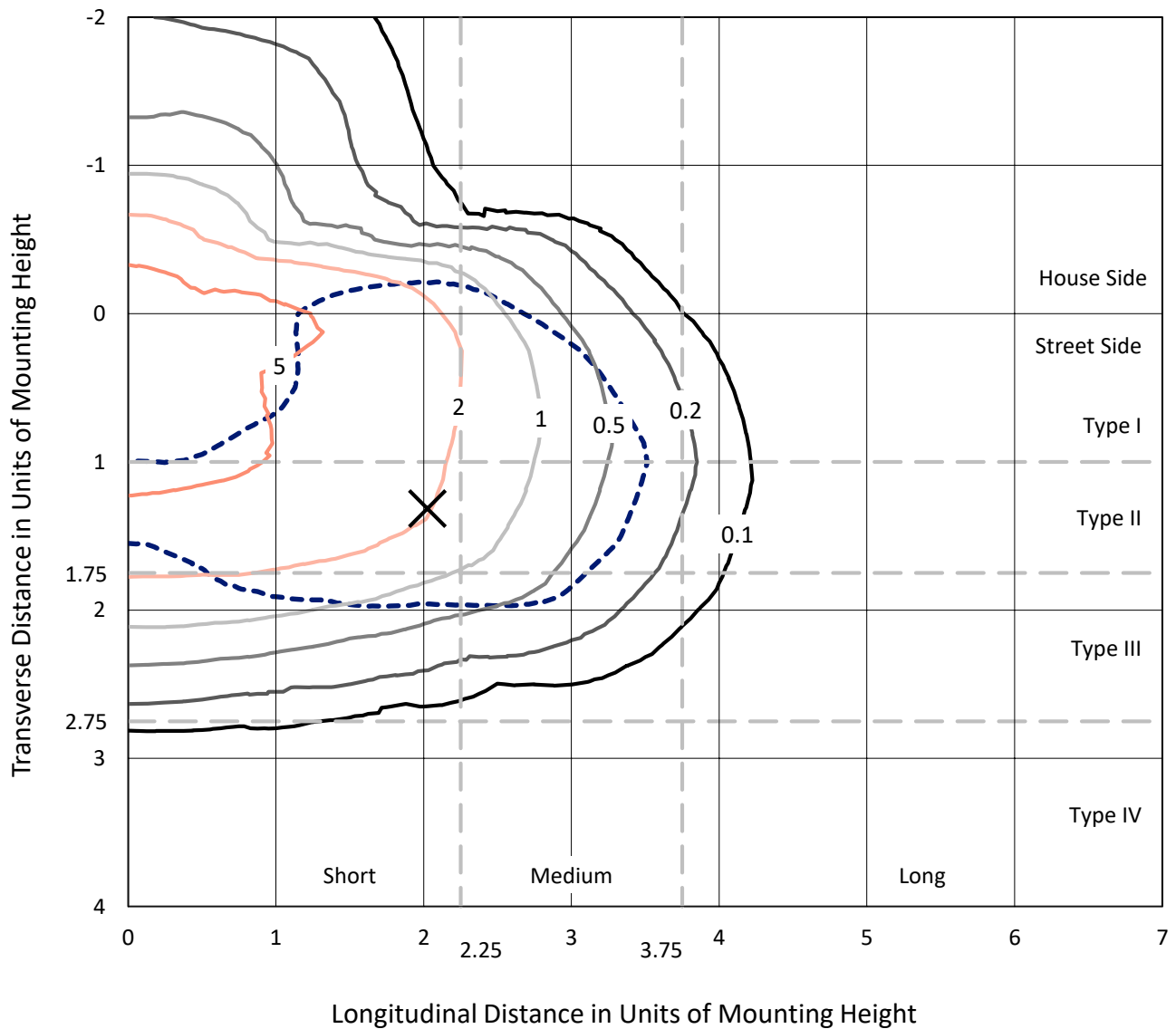
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

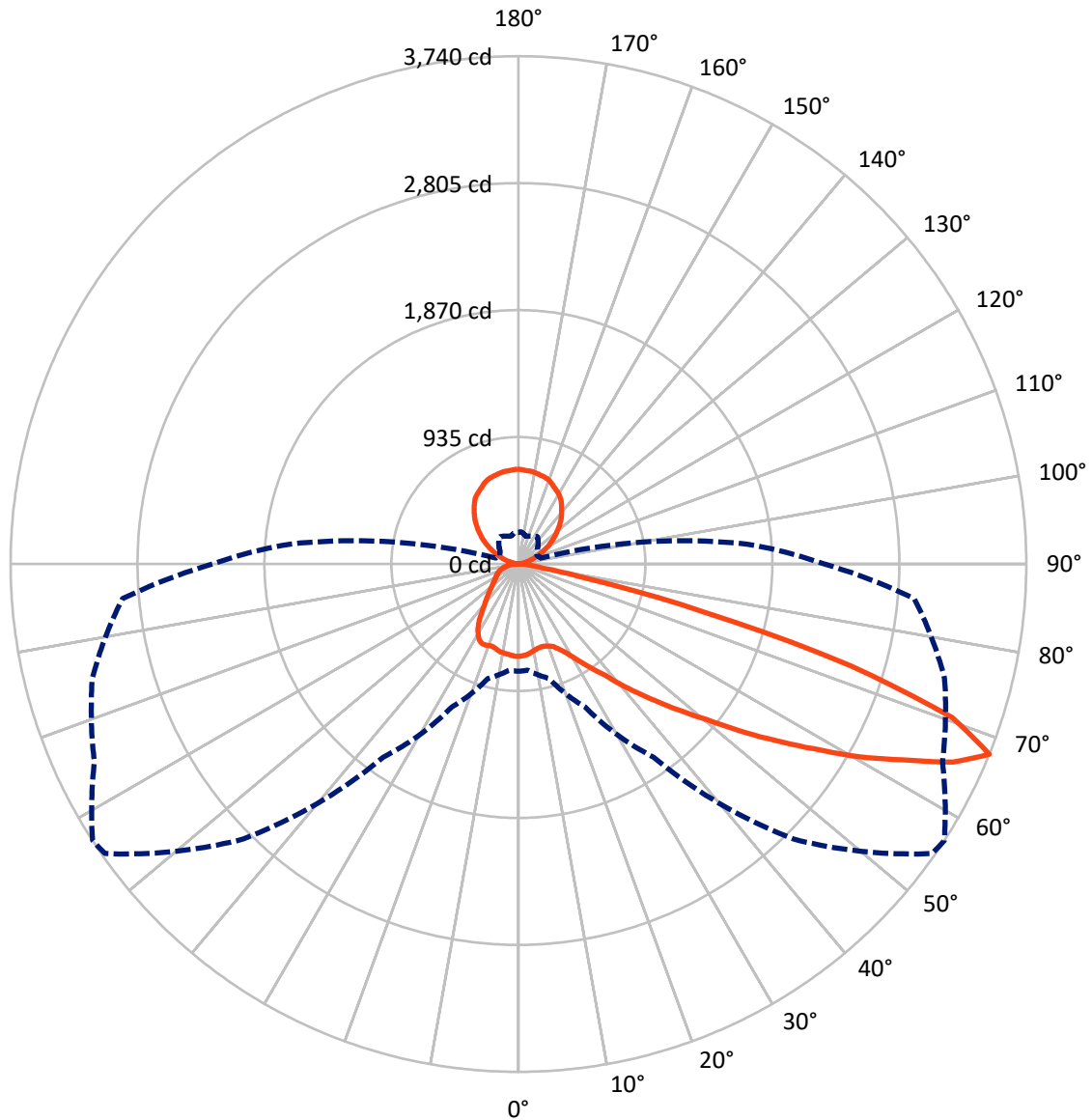
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.1 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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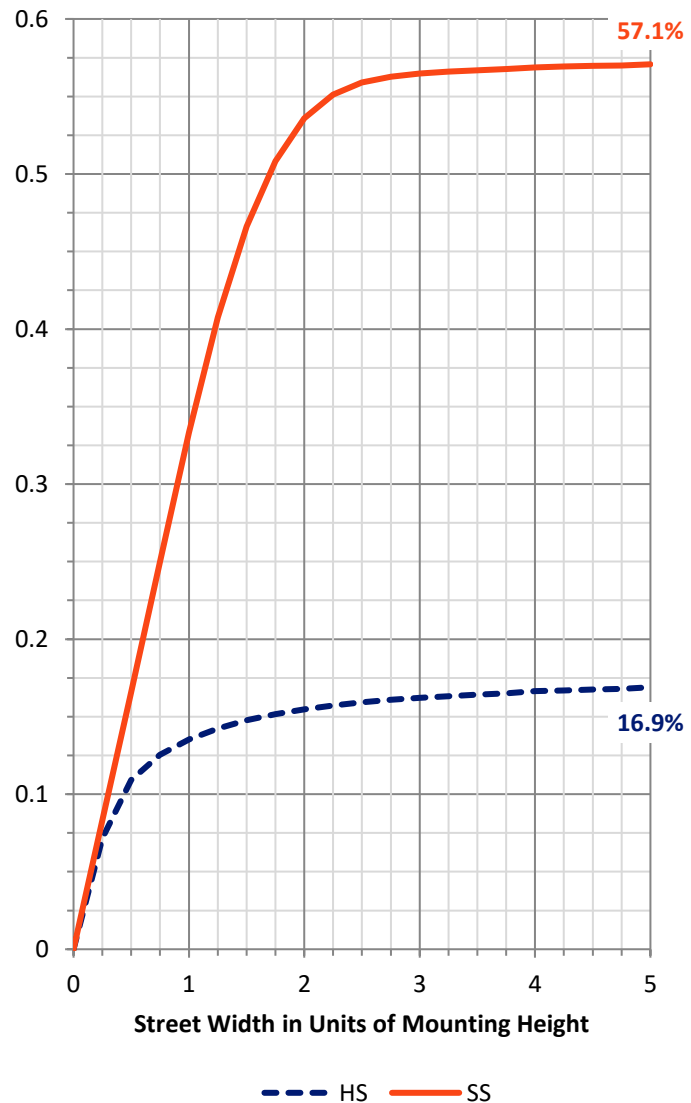
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1195.6	869.1	2064.6
	% Fixture	17.4	12.6	30.0
Street Side	Lumens	3938.9	868.0	4806.9
	% Fixture	57.3	12.6	70.0
Total	Lumens	5134.4	1737.1	6871.5
	% Fixture	74.7	25.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	0.9
10°-20°	182.9	2.7
20°-30°	314.8	4.6
30°-40°	511.9	7.4
40°-50°	825.6	12.0
50°-60°	1230.9	17.9
60°-70°	1386.3	20.2
70°-80°	534.5	7.8
80°-90°	83.8	1.2
90°-100°	11.2	0.2
100°-110°	57.4	0.8
110°-120°	166.1	2.4
120°-130°	273.2	4.0
130°-140°	336.8	4.9
140°-150°	344.6	5.0
150°-160°	290.3	4.2
160°-170°	191.2	2.8
170°-180°	66.3	1.0
0°-90°	5134.4	74.7
0°-180°	6871.5	100.0



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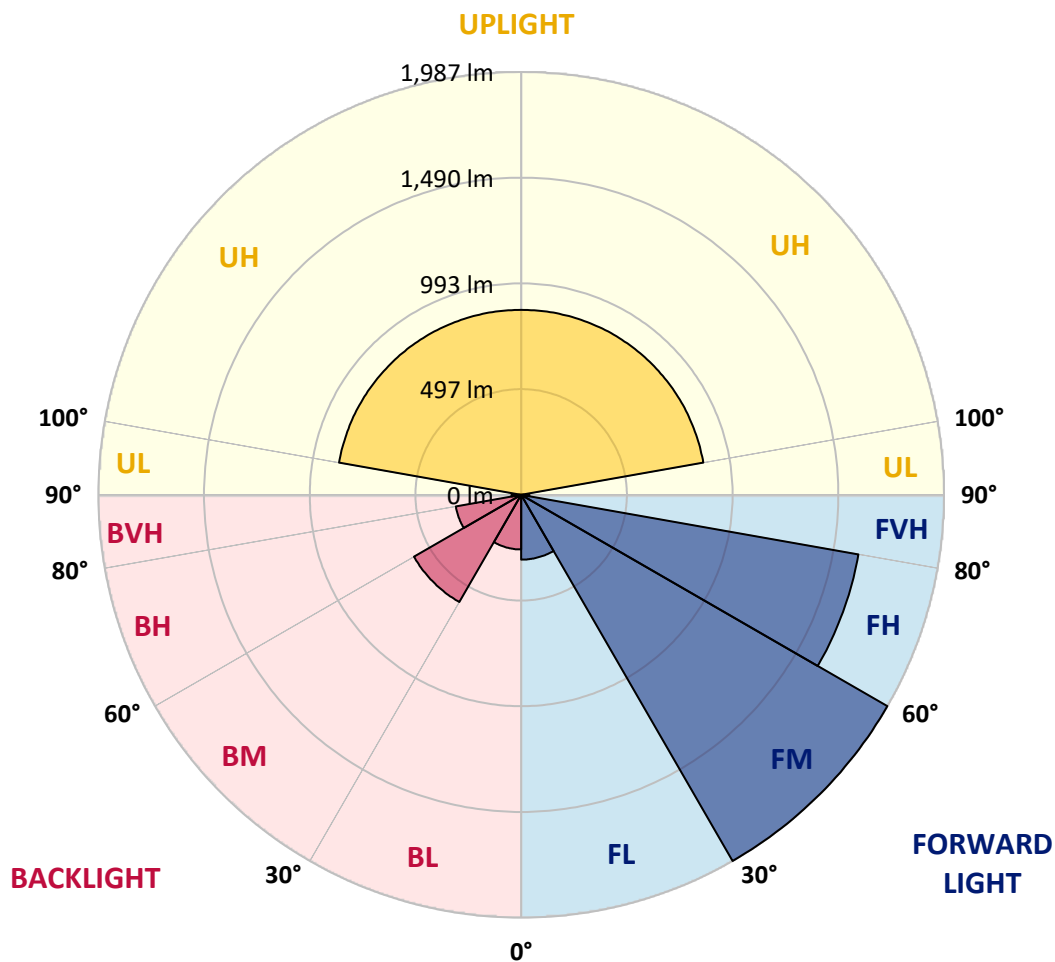
CATALOG NUMBER: IST-AF-800-LED-E1-T3-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	304.6	4.4			
FM (30°-60°)	1986.8	28.9			
FH (60°-80°)	1609.0	23.4			G1/1800
FVH (80°-90°)	38.5	0.6			G1/100
BL (0°-30°)	256.8	3.7	B1/500		
BM (30°-60°)	581.6	8.5	B1/1000		
BH (60°-80°)	311.8	4.5	B1/500		G1/500
BVH (80°-90°)	45.3	0.7			G1/100
UL (90°-100°)	11.2	0.2		U2/50	
UH (100°-180°)	869.1	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°	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5
2.5°	675.3	676.8	678.3	677.6	677.6	677.6	677.6	676.1	678.3	678.3	676.8
5°	664.2	664.9	665.7	667.1	668.6	670.1	670.9	670.9	671.6	670.9	669.4
7.5°	647.8	648.5	651.5	651.5	653.0	656.0	657.5	659.0	661.2	661.2	660.4
10°	642.6	642.6	642.6	640.4	641.9	642.6	644.8	644.8	650.8	653.8	655.2
12.5°	648.5	647.8	647.8	641.9	636.6	634.4	636.6	637.4	644.1	648.5	651.5
15°	661.9	661.9	660.4	651.5	641.1	632.9	632.2	632.2	637.4	644.1	649.3
17.5°	693.2	696.1	685.7	671.6	654.5	641.1	635.9	635.2	638.9	644.1	649.3
20°	752.7	751.9	736.3	711.0	681.3	659.0	646.3	644.8	644.1	647.1	653.0
22.5°	823.3	820.4	801.8	769.8	728.9	688.0	663.4	660.4	654.5	656.7	664.9
25°	899.2	899.9	876.9	835.2	783.9	734.8	697.6	694.7	682.0	680.5	689.5
27.5°	975.1	984.7	953.5	914.1	853.1	794.3	740.0	735.6	724.4	720.7	729.6
30°	1085.9	1082.2	1043.5	992.2	931.2	857.5	805.5	797.3	775.0	780.2	789.9
32.5°	1179.6	1187.8	1152.8	1091.8	1011.5	934.1	873.9	869.4	847.9	853.8	867.2
35°	1294.1	1313.5	1267.3	1192.2	1114.9	1035.3	963.2	951.3	934.1	946.0	956.5
37.5°	1425.0	1434.7	1399.0	1302.3	1223.5	1140.2	1058.4	1039.8	1021.2	1045.7	1064.3
40°	1550.0	1565.6	1519.5	1437.7	1346.2	1266.6	1177.4	1173.6	1130.5	1157.3	1205.6
42.5°	1735.2	1754.5	1680.9	1585.7	1503.1	1407.2	1322.4	1302.3	1255.4	1293.4	1374.4
45°	1864.6	1863.8	1814.0	1735.2	1684.6	1591.6	1477.1	1453.3	1402.7	1453.3	1561.9
47.5°	1911.4	1922.6	1905.5	1895.8	1878.0	1810.3	1641.5	1619.1	1571.5	1646.7	1747.1
50°	1980.6	1977.6	1977.6	2037.1	2088.4	2074.3	1834.1	1802.1	1752.3	1842.3	1986.6
52.5°	1998.5	1971.7	2013.3	2127.1	2290.0	2301.9	2058.0	2040.1	1980.6	2068.4	2246.1
55°	1948.6	1941.9	2008.1	2173.2	2429.8	2514.6	2317.5	2293.0	2226.0	2301.2	2526.5
57.5°	1837.1	1854.2	1960.5	2163.6	2526.5	2702.0	2602.4	2567.4	2471.5	2516.8	2804.7
60°	1720.3	1728.5	1869.0	2129.4	2552.5	2832.2	2901.4	2881.3	2716.9	2743.7	3010.7
62.5°	1590.9	1571.5	1717.3	2101.1	2523.5	3011.4	3191.4	3175.8	2981.7	2973.5	3157.2
65°	1229.4	1256.2	1380.4	1736.7	2325.0	3151.3	3537.3	3517.2	3277.0	3163.2	3141.6
67.5°	789.9	784.7	872.4	1161.0	1737.4	2864.2	3718.0	3740.3	3445.8	3248.7	2925.9
70°	283.4	291.5	324.3	527.3	952.7	1908.5	3277.7	3388.5	3321.6	3088.8	2381.5
72.5°	172.5	172.5	196.3	237.3	386.0	905.1	2336.1	2555.5	2711.0	2545.1	1759.0
75°	135.4	134.6	142.8	163.6	208.2	296.8	1242.1	1411.6	1738.9	1758.2	1001.1
77.5°	107.1	106.4	114.5	124.2	155.4	156.9	396.4	516.2	798.0	751.2	357.7
80°	86.3	85.5	91.5	94.5	113.8	108.6	159.2	184.4	279.6	245.4	154.7
82.5°	78.1	78.1	84.0	72.1	78.8	76.6	98.9	105.6	140.6	145.8	93.0
85°	50.6	52.1	78.8	69.9	51.3	46.9	63.2	66.9	87.8	95.9	45.4
87.5°	23.8	26.0	60.2	58.0	34.2	25.3	35.7	37.9	47.6	58.8	26.8
90°	9.5	9.5	14.4	16.2	12.5	11.5	12.9	12.6	14.2	16.4	14.4
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.2	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.6	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	28.4	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	49.4	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.6	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.8	94.0	90.0	87.0
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.2	121.0	119.0	116.0



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CATALOG NUMBER: IST-AF-800-LED-E1-T3-7050-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	148.4	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	179.6	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	211.8	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	246.8	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	279.8	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	313.4	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.2	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	377.8	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	412.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	444.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	473.4	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	500.4	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	528.2	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	557.2	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	581.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	597.6	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	611.6	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	627.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	644.8	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	659.2	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	667.8	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	673.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	679.2	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	686.6	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	689.6	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	691.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	695.0	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°	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5	680.5
2.5°	679.0	677.6	678.3	679.0	679.8	682.0	682.8	682.8	682.8	682.0	683.5
5°	670.9	669.4	669.4	671.6	673.8	676.8	681.3	685.0	686.5	687.2	687.2
7.5°	661.9	660.4	661.2	664.9	668.6	670.9	675.3	677.6	683.5	683.5	685.0
10°	656.0	657.5	658.2	661.9	664.9	664.9	664.2	662.7	661.2	664.9	663.4
12.5°	652.3	654.5	653.8	658.2	659.7	653.8	644.8	632.9	631.4	632.9	634.4
15°	650.8	650.8	653.0	653.0	645.6	633.7	622.5	623.3	624.7	629.2	629.2
17.5°	650.8	651.5	653.0	647.8	634.4	624.0	621.8	619.5	611.4	609.1	606.9
20°	656.0	654.5	656.0	646.3	634.4	626.2	609.1	592.8	577.1	570.5	567.5
22.5°	668.6	666.4	665.7	656.0	641.1	613.6	580.1	554.8	528.1	519.1	516.2
25°	690.9	690.2	685.0	678.3	636.6	583.1	540.7	500.5	471.5	455.9	456.7
27.5°	730.4	730.4	727.4	697.6	613.6	545.2	487.9	447.0	417.2	402.4	400.1
30°	789.9	791.3	792.8	702.8	577.1	489.4	429.9	402.4	384.5	373.4	372.6
32.5°	863.5	871.7	862.0	696.9	527.3	421.7	384.5	374.8	365.9	358.5	357.7
35°	960.9	983.2	922.2	673.1	471.5	375.6	357.0	350.3	343.6	338.4	339.1
37.5°	1091.8	1113.4	960.9	632.9	400.1	349.6	341.4	331.0	320.6	309.4	307.9
40°	1246.5	1239.8	974.3	557.1	355.5	336.9	325.8	312.4	294.5	278.2	275.2
42.5°	1401.2	1356.6	963.2	463.4	326.5	325.8	310.1	293.0	275.2	261.1	261.1
45°	1574.5	1459.2	928.9	375.6	303.4	313.9	294.5	276.7	260.3	249.9	249.2
47.5°	1738.1	1555.2	872.4	313.1	280.4	298.2	282.6	266.3	250.6	241.7	239.5
50°	1930.0	1664.5	829.3	270.7	258.1	282.6	275.9	261.1	246.2	235.8	234.3
52.5°	2124.1	1770.9	796.6	241.7	238.0	270.7	273.0	264.0	248.4	228.3	226.8
55°	2327.2	1904.0	731.1	218.7	220.1	261.8	276.7	270.0	258.8	226.1	224.6
57.5°	2497.5	2026.7	616.6	203.0	206.0	255.1	278.2	265.5	252.9	227.6	225.4
60°	2630.6	2110.8	452.2	190.4	193.4	247.7	271.5	249.9	233.5	227.6	223.9
62.5°	2671.5	2113.7	300.5	175.5	183.7	235.0	259.6	241.7	222.4	225.4	223.9
65°	2568.9	2002.2	214.9	161.4	175.5	220.1	254.4	233.5	217.2	229.1	227.6
67.5°	2252.8	1686.8	172.5	150.2	164.4	204.5	244.7	226.1	212.7	237.3	232.8
70°	1755.2	1210.1	146.5	139.1	152.5	189.7	231.3	217.9	206.8	230.6	224.6
72.5°	1157.3	712.5	129.4	128.7	138.3	177.0	216.4	210.5	197.1	209.0	200.1
75°	603.9	330.2	112.3	116.8	122.7	165.9	203.0	197.1	182.2	186.7	183.7
77.5°	237.3	154.7	97.4	102.6	109.3	149.5	185.9	180.0	167.3	163.6	162.9
80°	130.2	104.1	81.1	87.8	92.2	134.6	168.1	161.4	148.0	145.8	143.5
82.5°	82.6	67.7	66.9	71.4	77.3	119.7	151.0	140.6	129.4	152.5	123.5
85°	38.7	40.2	47.6	53.5	60.2	101.9	131.6	120.5	109.3	106.4	94.5
87.5°	21.6	26.8	31.2	36.4	41.6	71.4	104.1	93.7	81.8	69.9	72.1
90°	12.2	12.2	17.9	17.2	15.9	17.4	59.3	54.1	47.9	24.3	17.6
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
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
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)