

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: P271728

Luminaire Tested: **IST-AF-800-LED-E1-T3-7027-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271728
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-T3-7027-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 2700K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6165.6 lumens
Efficiency: N/A
Efficacy: 102.4 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

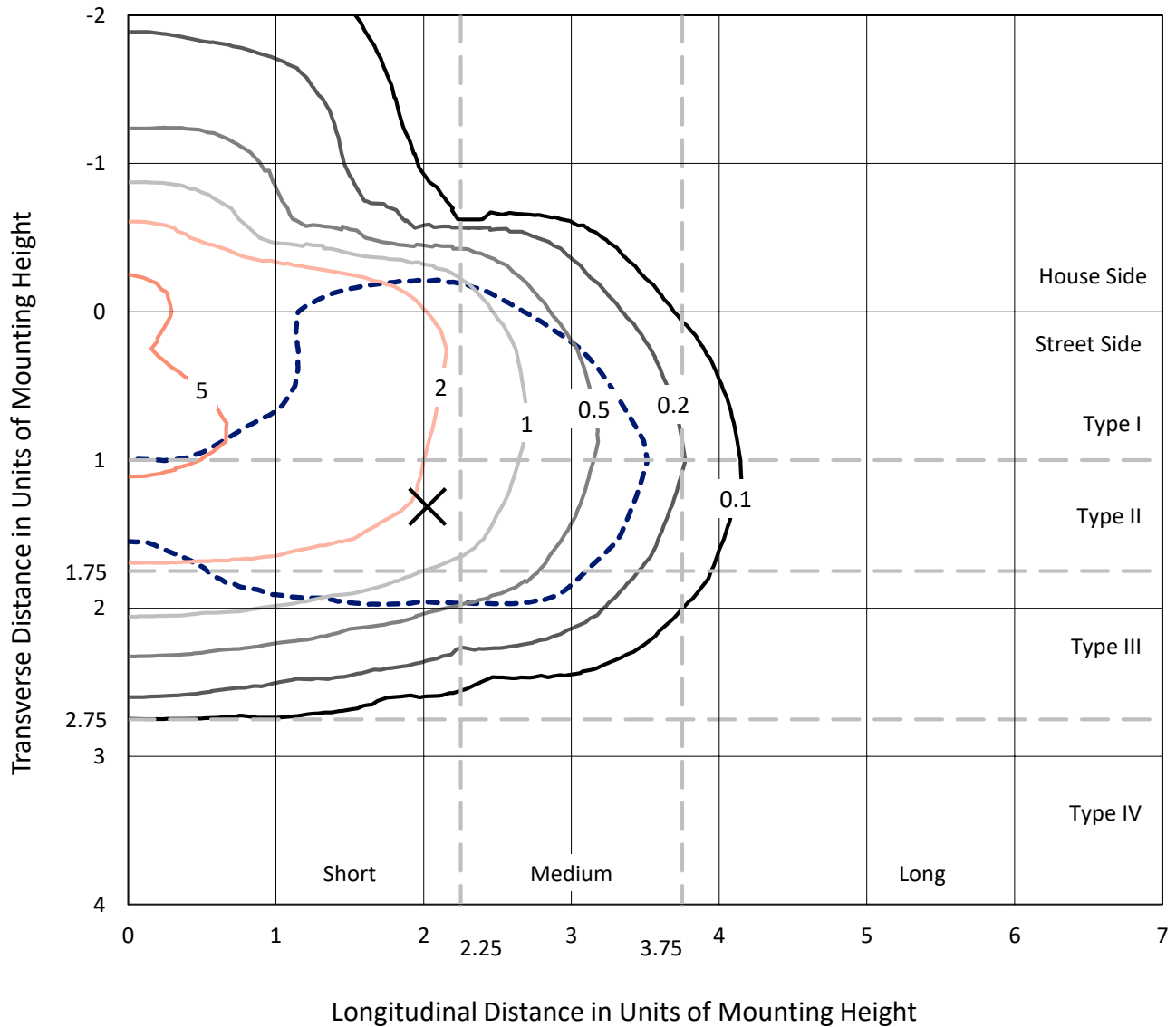
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

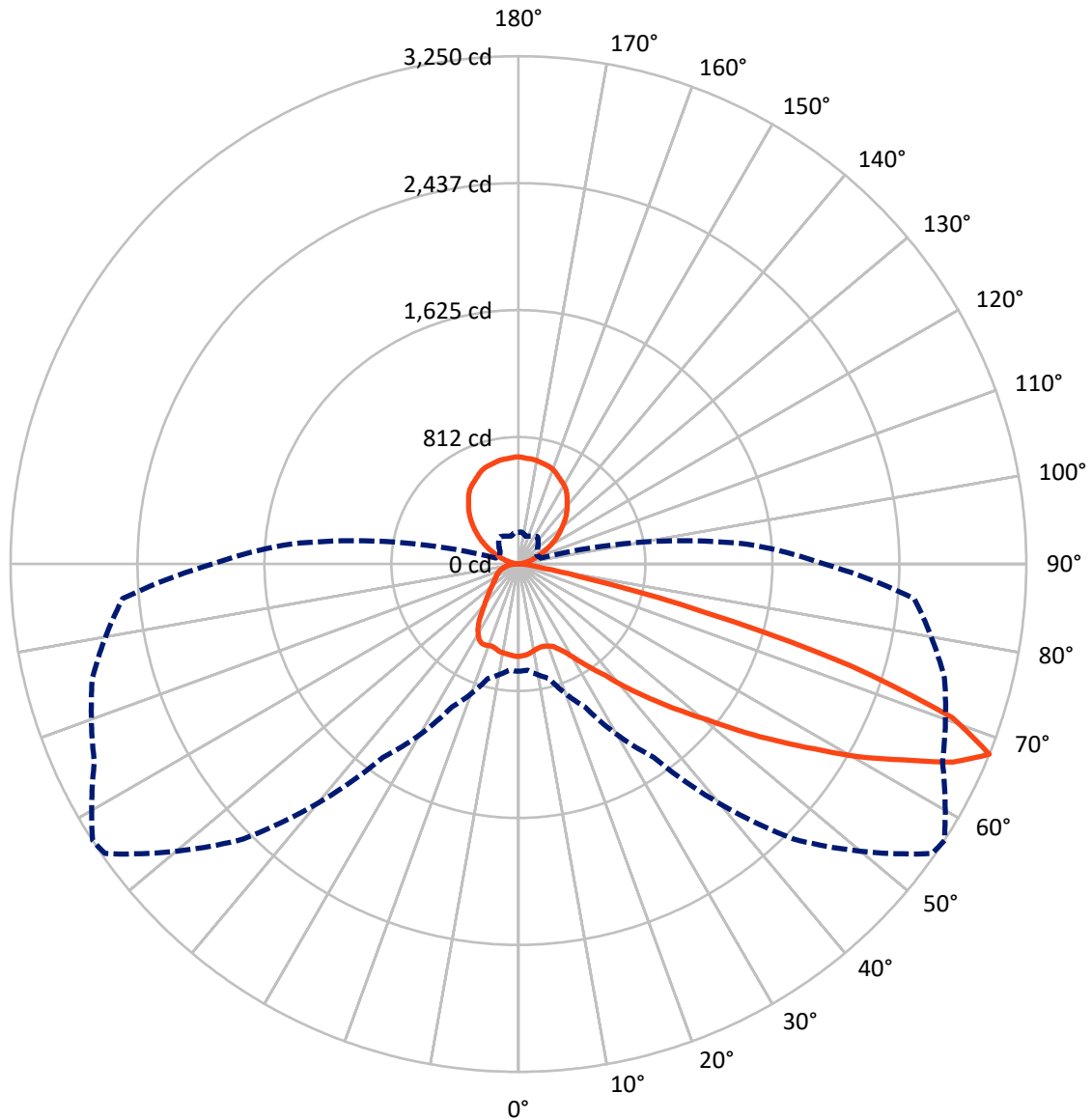
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 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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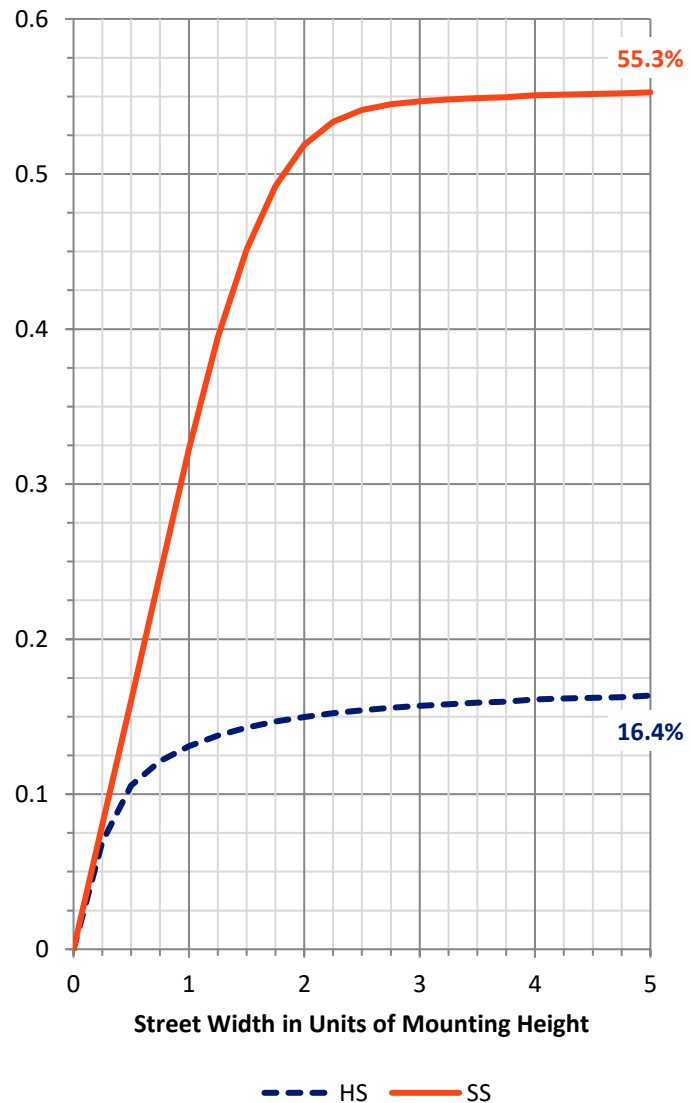
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1038.8	852.8	1891.6
	% Fixture	16.8	13.8	30.7
Street Side	Lumens	3422.2	851.8	4274.0
	% Fixture	55.5	13.8	69.3
Total	Lumens	4461.0	1704.6	6165.6
	% Fixture	72.4	27.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	0.9
10°-20°	158.9	2.6
20°-30°	273.5	4.4
30°-40°	444.7	7.2
40°-50°	717.3	11.6
50°-60°	1069.4	17.3
60°-70°	1204.5	19.5
70°-80°	464.3	7.5
80°-90°	73.0	1.2
90°-100°	10.7	0.2
100°-110°	56.3	0.9
110°-120°	163.0	2.6
120°-130°	268.1	4.3
130°-140°	330.6	5.4
140°-150°	338.2	5.5
150°-160°	284.9	4.6
160°-170°	187.6	3.0
170°-180°	65.0	1.1
0°-90°	4461.0	72.4
0°-180°	6165.6	100.0



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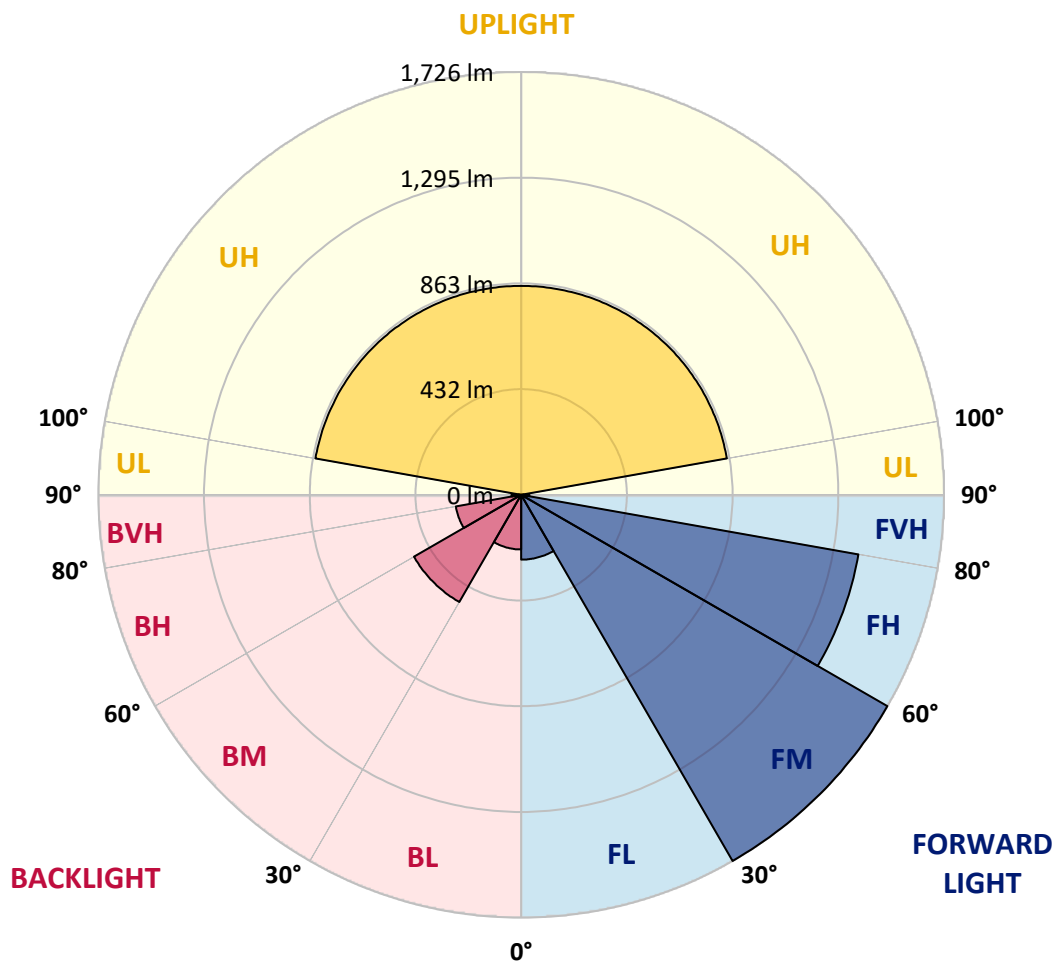
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	264.7	4.3			
FM	(30°-60°)	1726.1	28.0			
FH	(60°-80°)	1397.9	22.7			G1/1800
FVH	(80°-90°)	33.5	0.5			G1/100
BL	(0°-30°)	223.1	3.6	B1/500		
BM	(30°-60°)	505.3	8.2	B1/1000		
BH	(60°-80°)	270.9	4.4	B1/500		G1/500
BVH	(80°-90°)	39.4	0.6			G1/100
UL	(90°-100°)	10.7	0.2		U2/50	
UH	(100°-180°)	852.8	13.8		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°	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3
2.5°	586.8	588.0	589.3	588.7	588.7	588.7	588.7	587.4	589.3	589.3	588.0
5°	577.0	577.7	578.3	579.7	580.9	582.2	582.8	582.8	583.4	582.8	581.6
7.5°	562.8	563.5	566.0	566.0	567.3	570.0	571.2	572.5	574.5	574.5	573.7
10°	558.3	558.3	558.3	556.4	557.7	558.3	560.3	560.3	565.4	568.0	569.3
12.5°	563.5	562.8	562.8	557.7	553.2	551.2	553.2	553.7	559.6	563.5	566.0
15°	575.1	575.1	573.7	566.0	556.9	549.9	549.2	549.2	553.7	559.6	564.1
17.5°	602.2	604.8	595.8	583.4	568.6	556.9	552.5	551.8	555.1	559.6	564.1
20°	654.0	653.2	639.8	617.8	591.9	572.5	561.5	560.3	559.6	562.2	567.3
22.5°	715.3	712.7	696.5	668.8	633.2	597.7	576.4	573.7	568.6	570.5	577.7
25°	781.3	781.9	761.9	725.7	681.1	638.4	606.1	603.5	592.5	591.3	599.0
27.5°	847.1	855.5	828.3	794.1	741.1	690.1	643.0	639.1	629.4	626.2	633.9
30°	943.4	940.2	906.6	862.0	809.0	745.1	699.8	692.8	673.3	677.8	686.2
32.5°	1024.9	1032.0	1001.6	948.6	878.8	811.6	759.2	755.4	736.6	741.8	753.5
35°	1124.4	1141.2	1101.1	1035.8	968.6	899.5	836.8	826.5	811.6	821.9	831.0
37.5°	1238.0	1246.5	1215.5	1131.4	1063.0	990.7	919.5	903.3	887.2	908.5	924.6
40°	1346.6	1360.2	1320.1	1249.0	1169.5	1100.4	1022.9	1019.7	982.2	1005.5	1047.4
42.5°	1507.5	1524.3	1460.4	1377.6	1306.0	1222.5	1148.9	1131.4	1090.7	1123.7	1194.2
45°	1619.9	1619.4	1576.1	1507.5	1463.6	1382.9	1283.3	1262.6	1218.7	1262.6	1357.0
47.5°	1660.7	1670.4	1655.5	1647.1	1631.6	1572.8	1426.1	1406.7	1365.3	1430.6	1517.9
50°	1720.7	1718.2	1718.2	1769.9	1814.5	1802.2	1593.4	1565.7	1522.4	1600.6	1725.9
52.5°	1736.2	1713.0	1749.2	1848.0	1989.6	1999.9	1788.0	1772.4	1720.7	1797.0	1951.5
55°	1692.9	1687.2	1744.7	1888.1	2111.1	2184.7	2013.6	1992.1	1934.1	1999.3	2195.1
57.5°	1596.1	1610.9	1703.4	1879.7	2195.1	2347.5	2260.9	2230.6	2147.3	2186.7	2436.7
60°	1494.6	1501.7	1623.9	1850.0	2217.6	2460.6	2520.7	2503.3	2360.5	2383.7	2615.8
62.5°	1382.1	1365.3	1492.1	1825.4	2192.4	2616.3	2772.8	2759.1	2590.5	2583.4	2743.1
65°	1068.2	1091.4	1199.2	1508.8	2020.0	2737.9	3073.2	3055.8	2847.1	2748.2	2729.4
67.5°	686.2	681.7	758.0	1008.7	1509.4	2488.5	3230.2	3249.6	2993.7	2822.5	2542.0
70°	246.1	253.3	281.7	458.1	827.8	1658.1	2847.6	2943.9	2885.9	2683.6	2069.1
72.5°	149.8	149.8	170.6	206.1	335.3	786.4	2029.6	2220.3	2355.3	2211.2	1528.2
75°	117.6	117.0	124.1	142.1	180.9	257.8	1079.1	1226.5	1510.8	1527.6	869.8
77.5°	93.1	92.3	99.5	107.9	135.0	136.4	344.4	448.4	693.3	652.7	310.8
80°	75.0	74.3	79.5	82.0	98.8	94.3	138.2	160.3	242.9	213.3	134.4
82.5°	67.8	67.8	73.0	62.7	68.5	66.6	86.0	91.8	122.1	126.6	80.8
85°	43.9	45.3	68.5	60.7	44.6	40.7	55.0	58.2	76.3	83.4	39.4
87.5°	20.8	22.5	52.3	50.5	29.7	22.0	31.0	33.0	41.3	51.0	23.3
90°	8.8	8.8	13.4	14.9	11.8	10.8	12.0	11.8	13.4	15.3	13.4
92.5°	4.0	4.0	4.9	5.9	5.9	5.9	6.8	6.8	6.8	5.9	5.9
95°	4.9	4.9	5.9	6.8	6.8	6.8	6.8	7.1	7.8	6.8	6.8
97.5°	6.8	6.8	7.8	7.8	8.8	8.8	11.8	11.4	9.8	8.8	7.8
100°	7.8	7.8	8.8	9.8	11.8	20.6	28.5	27.8	25.5	22.5	18.7
102.5°	10.8	10.8	12.8	17.7	26.5	39.3	49.0	48.5	46.2	41.2	38.3
105°	20.6	21.6	26.5	35.3	47.1	61.8	70.7	70.2	68.7	63.8	59.8
107.5°	40.2	41.2	48.1	57.0	71.7	86.3	93.2	93.1	92.3	88.3	85.4
110°	64.8	66.7	72.7	85.4	100.1	111.9	117.8	117.9	118.8	116.8	113.8

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CATALOG NUMBER: IST-AF-800-LED-E1-T3-7027-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	97.2	97.2	104.0	118.8	131.5	140.3	145.3	145.6	147.2	146.2	144.3
115°	137.4	136.5	144.3	156.0	164.9	170.8	175.7	176.2	178.7	175.7	173.7
117.5°	180.6	180.6	185.5	193.3	198.3	201.2	207.1	207.9	211.0	206.1	204.2
120°	220.8	218.8	221.8	228.7	232.6	238.5	241.5	242.3	245.3	240.5	238.5
122.5°	258.2	255.2	256.2	262.0	266.0	271.8	273.8	274.6	277.8	272.8	270.9
125°	292.5	288.5	290.5	293.5	299.3	304.3	307.2	307.6	309.2	304.3	304.3
127.5°	323.9	322.9	322.9	326.8	332.7	333.7	338.6	338.8	339.6	339.6	338.6
130°	356.3	354.3	355.3	359.2	363.2	365.1	370.0	370.8	374.0	374.0	372.0
132.5°	388.7	386.7	385.7	393.5	396.5	397.5	403.4	404.3	408.3	406.3	406.3
135°	421.0	418.1	418.1	424.0	427.0	428.9	434.8	435.8	439.7	438.7	441.7
137.5°	451.5	448.5	450.5	451.5	455.4	459.3	464.2	464.6	466.2	467.2	472.1
140°	479.0	476.0	478.0	480.0	481.9	487.8	490.7	491.1	492.7	494.7	499.5
142.5°	508.4	505.5	507.5	508.4	511.3	515.3	517.2	518.4	523.2	523.2	524.1
145°	539.8	535.9	534.0	536.8	539.8	540.8	545.7	546.9	551.6	550.6	547.7
147.5°	564.3	561.4	560.5	563.3	563.3	564.3	569.3	570.2	574.2	575.2	572.2
150°	584.0	581.0	582.0	582.0	582.0	582.0	586.0	586.5	588.9	591.8	594.8
152.5°	599.7	596.7	596.7	597.7	598.7	598.7	599.7	600.2	602.7	606.5	611.5
155°	617.3	613.5	613.5	615.4	618.3	616.3	614.4	615.4	619.3	624.2	626.2
157.5°	634.0	631.1	631.1	632.0	634.0	633.0	632.0	632.9	636.0	638.0	638.0
160°	650.7	647.8	646.8	643.8	642.8	642.8	645.8	647.0	651.7	648.8	647.8
162.5°	660.5	656.6	656.6	652.7	648.8	650.7	654.7	655.4	658.5	657.6	655.7
165°	668.4	665.5	663.5	663.5	660.5	660.5	659.5	660.5	664.5	667.4	665.5
167.5°	677.2	674.3	671.3	673.3	675.3	672.3	665.5	666.6	671.3	675.3	675.3
170°	685.0	682.2	679.2	679.2	680.2	678.2	673.3	673.9	676.2	681.2	683.1
172.5°	686.0	684.1	682.2	680.2	677.2	677.2	676.2	676.9	679.2	681.2	683.1
175°	687.0	685.0	684.1	682.2	678.2	677.2	677.2	678.2	682.2	683.1	681.2
177.5°	693.9	692.0	687.0	686.0	684.1	682.2	681.2	682.2	686.0	688.0	685.0
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3
2.5°	590.0	588.7	589.3	590.0	590.5	592.5	593.2	593.2	593.2	592.5	593.8
5°	582.8	581.6	581.6	583.4	585.4	588.0	591.9	595.1	596.5	597.0	597.0
7.5°	575.1	573.7	574.5	577.7	580.9	582.8	586.8	588.7	593.8	593.8	595.1
10°	570.0	571.2	572.0	575.1	577.7	577.7	577.0	575.7	574.5	577.7	576.4
12.5°	566.7	568.6	568.0	572.0	573.2	568.0	560.3	549.9	548.7	549.9	551.2
15°	565.4	565.4	567.3	567.3	560.9	550.5	540.9	541.5	542.8	546.7	546.7
17.5°	565.4	566.0	567.3	562.8	551.2	542.1	540.2	538.3	531.2	529.2	527.2
20°	570.0	568.6	570.0	561.5	551.2	544.0	529.2	515.0	501.4	495.7	493.0
22.5°	580.9	579.0	578.3	570.0	556.9	533.1	503.9	482.0	458.8	450.9	448.4
25°	600.2	599.7	595.1	589.3	553.2	506.6	469.7	434.9	409.6	396.2	396.7
27.5°	634.6	634.6	632.0	606.1	533.1	473.7	423.9	388.3	362.5	349.6	347.6
30°	686.2	687.6	688.8	610.7	501.4	425.2	373.4	349.6	334.1	324.4	323.7
32.5°	750.3	757.3	748.8	605.5	458.1	366.4	334.1	325.6	317.9	311.4	310.8
35°	834.9	854.3	801.3	584.8	409.6	326.4	310.2	304.3	298.6	294.0	294.6
37.5°	948.6	967.4	834.9	549.9	347.6	303.6	296.6	287.5	278.6	268.9	267.5
40°	1083.0	1077.2	846.6	484.0	308.8	292.7	283.1	271.4	255.8	241.6	239.1
42.5°	1217.5	1178.7	836.8	402.6	283.7	283.1	269.4	254.6	239.1	226.8	226.8
45°	1368.0	1267.8	807.0	326.4	263.7	272.6	255.8	240.4	226.1	217.1	216.5
47.5°	1510.1	1351.1	758.0	272.1	243.6	259.1	245.6	231.3	217.7	210.0	208.0
50°	1676.9	1446.1	720.5	235.2	224.3	245.6	239.8	226.8	213.9	204.8	203.6
52.5°	1845.5	1538.5	692.1	210.0	206.8	235.2	237.2	229.3	215.9	198.3	197.1
55°	2021.8	1654.2	635.2	190.0	191.2	227.5	240.4	234.5	224.8	196.4	195.1
57.5°	2169.9	1760.8	535.7	176.3	179.0	221.6	241.6	230.7	219.6	197.8	195.8
60°	2285.5	1833.8	392.9	165.4	168.1	215.1	235.9	217.1	202.8	197.8	194.6
62.5°	2321.1	1836.5	261.0	152.5	159.6	204.2	225.6	210.0	193.2	195.8	194.6
65°	2231.9	1739.5	186.8	140.2	152.5	191.2	221.1	202.8	188.6	199.1	197.8
67.5°	1957.2	1465.6	149.8	130.5	142.8	177.8	212.6	196.4	184.8	206.1	202.3
70°	1525.0	1051.4	127.3	120.8	132.5	164.7	201.0	189.4	179.6	200.3	195.1
72.5°	1005.5	619.0	112.5	111.7	120.2	153.8	188.0	182.9	171.3	181.5	173.8
75°	524.7	286.9	97.6	101.5	106.6	144.1	176.3	171.3	158.3	162.2	159.6
77.5°	206.1	134.4	84.6	89.2	95.0	129.9	161.5	156.3	145.3	142.1	141.6
80°	113.1	90.5	70.4	76.3	80.1	117.0	146.1	140.2	128.5	126.6	124.8
82.5°	71.8	58.7	58.2	62.1	67.2	104.0	131.2	122.1	112.5	132.5	107.3
85°	33.6	34.9	41.3	46.5	52.3	88.6	114.4	104.7	95.0	92.3	82.0
87.5°	18.8	23.3	27.2	31.7	36.2	62.1	90.5	81.5	71.1	60.7	62.7
90°	11.4	11.4	16.6	15.9	14.6	15.9	52.4	47.9	42.4	21.6	15.9
92.5°	5.9	5.9	5.9	6.8	6.8	5.9	5.9	5.9	4.9	4.0	4.0
95°	6.8	6.8	6.8	7.8	6.8	6.8	6.8	6.8	5.9	4.9	4.9
97.5°	7.8	7.8	8.8	9.8	11.8	8.8	8.8	7.8	7.8	6.8	6.8
100°	18.7	18.7	22.5	25.5	28.5	20.6	11.8	9.8	8.8	7.8	7.8
102.5°	37.3	38.3	41.2	46.2	49.0	39.3	26.5	17.7	12.8	10.8	10.8
105°	59.8	59.8	63.8	68.7	70.7	61.8	47.1	35.3	26.5	21.6	20.6
107.5°	84.4	85.4	88.3	92.3	93.2	86.3	71.7	57.0	48.1	41.2	40.2
110°	114.8	113.8	116.8	118.8	117.8	111.9	100.1	85.4	72.7	66.7	64.8



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	144.3	144.3	146.2	147.2	145.3	140.3	131.5	118.8	104.0	97.2	97.2
115°	174.7	173.7	175.7	178.7	175.7	170.8	164.9	156.0	144.3	136.5	137.4
117.5°	205.2	204.2	206.1	211.0	207.1	201.2	198.3	193.3	185.5	180.6	180.6
120°	238.5	238.5	240.5	245.3	241.5	238.5	232.6	228.7	221.8	218.8	220.8
122.5°	271.8	270.9	272.8	277.8	273.8	271.8	266.0	262.0	256.2	255.2	258.2
125°	304.3	304.3	304.3	309.2	307.2	304.3	299.3	293.5	290.5	288.5	292.5
127.5°	340.5	338.6	339.6	339.6	338.6	333.7	332.7	326.8	322.9	322.9	323.9
130°	373.0	372.0	374.0	374.0	370.0	365.1	363.2	359.2	355.3	354.3	356.3
132.5°	407.3	406.3	406.3	408.3	403.4	397.5	396.5	393.5	385.7	386.7	388.7
135°	442.7	441.7	438.7	439.7	434.8	428.9	427.0	424.0	418.1	418.1	421.0
137.5°	473.0	472.1	467.2	466.2	464.2	459.3	455.4	451.5	450.5	448.5	451.5
140°	501.5	499.5	494.7	492.7	490.7	487.8	481.9	480.0	478.0	476.0	479.0
142.5°	526.0	524.1	523.2	523.2	517.2	515.3	511.3	508.4	507.5	505.5	508.4
145°	549.7	547.7	550.6	551.6	545.7	540.8	539.8	536.8	534.0	535.9	539.8
147.5°	574.2	572.2	575.2	574.2	569.3	564.3	563.3	563.3	560.5	561.4	564.3
150°	598.7	594.8	591.8	588.9	586.0	582.0	582.0	582.0	582.0	581.0	584.0
152.5°	616.3	611.5	606.5	602.7	599.7	598.7	598.7	597.7	596.7	596.7	599.7
155°	629.2	626.2	624.2	619.3	614.4	616.3	618.3	615.4	613.5	613.5	617.3
157.5°	642.8	638.0	638.0	636.0	632.0	633.0	634.0	632.0	631.1	631.1	634.0
160°	653.7	647.8	648.8	651.7	645.8	642.8	642.8	643.8	646.8	647.8	650.7
162.5°	661.5	655.7	657.6	658.5	654.7	650.7	648.8	652.7	656.6	656.6	660.5
165°	669.3	665.5	667.4	664.5	659.5	660.5	660.5	663.5	663.5	665.5	668.4
167.5°	681.2	675.3	675.3	671.3	665.5	672.3	675.3	673.3	671.3	674.3	677.2
170°	688.0	683.1	681.2	676.2	673.3	678.2	680.2	679.2	679.2	682.2	685.0
172.5°	688.0	683.1	681.2	679.2	676.2	677.2	677.2	680.2	682.2	684.1	686.0
175°	686.0	681.2	683.1	682.2	677.2	677.2	678.2	682.2	684.1	685.0	687.0
177.5°	689.0	685.0	688.0	686.0	681.2	682.2	684.1	686.0	687.0	692.0	693.9
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0

(END OF REPORT)