

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: P271658

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271658
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)
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
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III
Light Source: (16) 2700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4460 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Cutoff
BUG Rating: B1 - U1 - G1

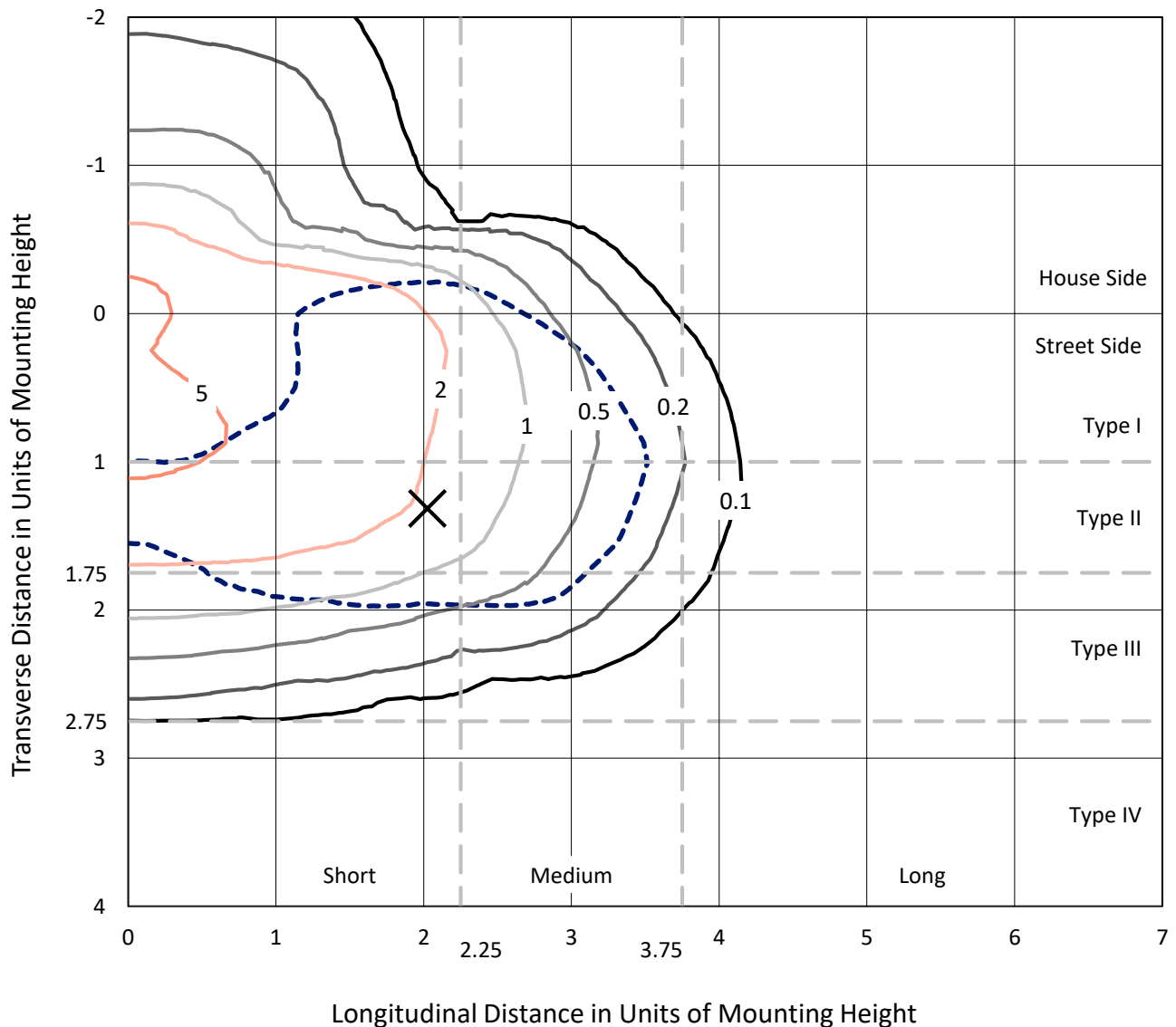
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

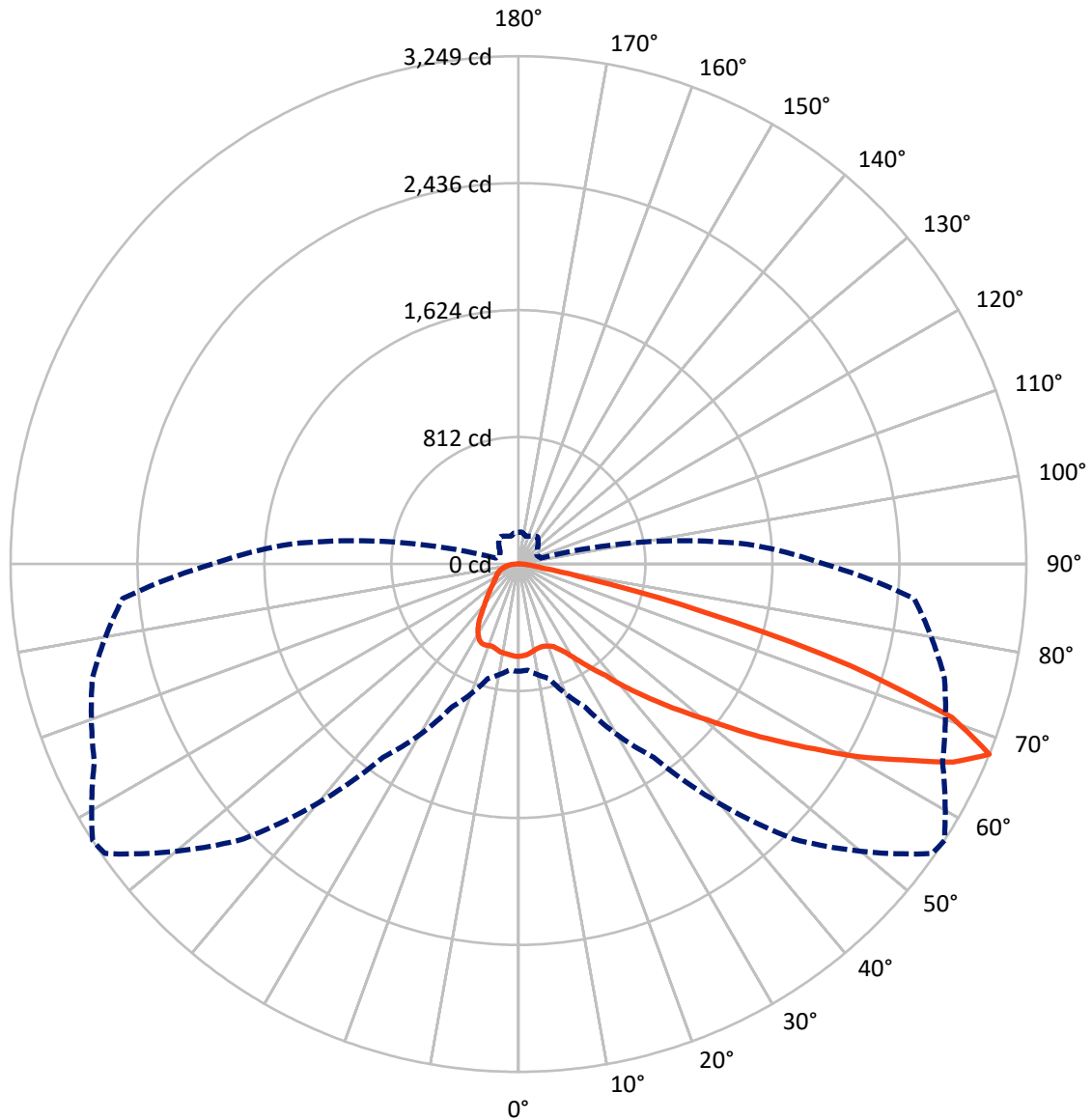
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
 Type III - Short - 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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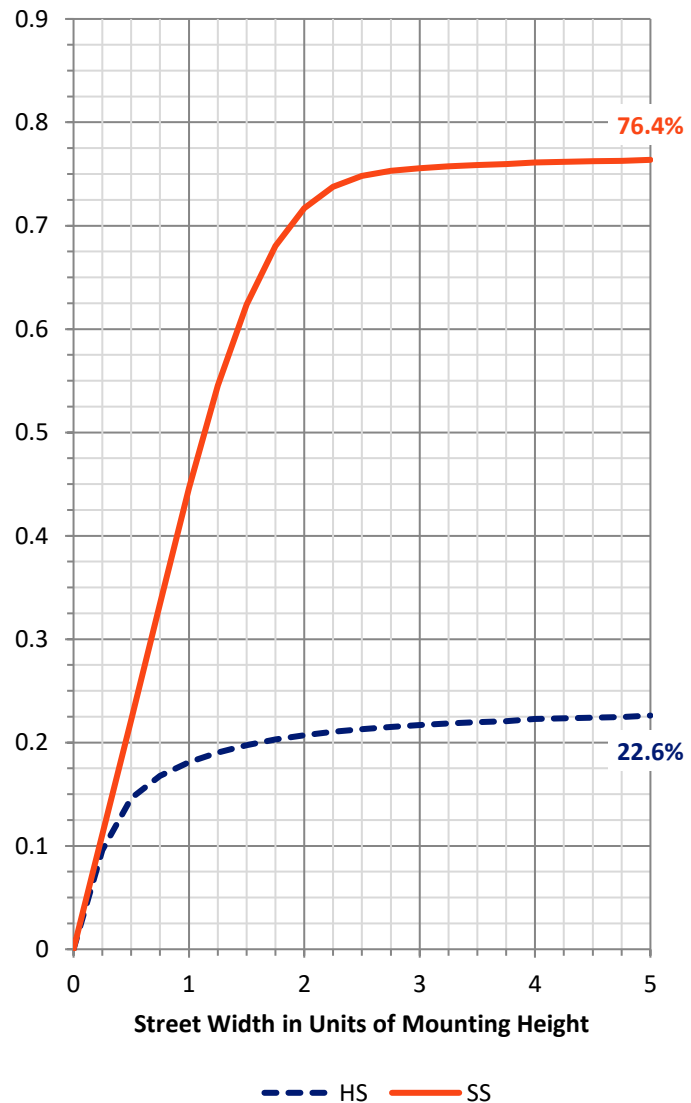
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1037.9	1.3	1039.2
	% Fixture	23.3	0.0	23.3
Street Side	Lumens	3420.4	0.4	3420.8
	% Fixture	76.7	0.0	76.7
Total	Lumens	4458.3	1.7	4460.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	1.2
10°-20°	158.9	3.6
20°-30°	273.4	6.1
30°-40°	444.5	10.0
40°-50°	717.1	16.1
50°-60°	1069.0	24.0
60°-70°	1204.0	27.0
70°-80°	464.2	10.4
80°-90°	71.9	1.6
90°-100°	1.7	0.0
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°	4458.3	100.0
0°-180°	4460.0	100.0



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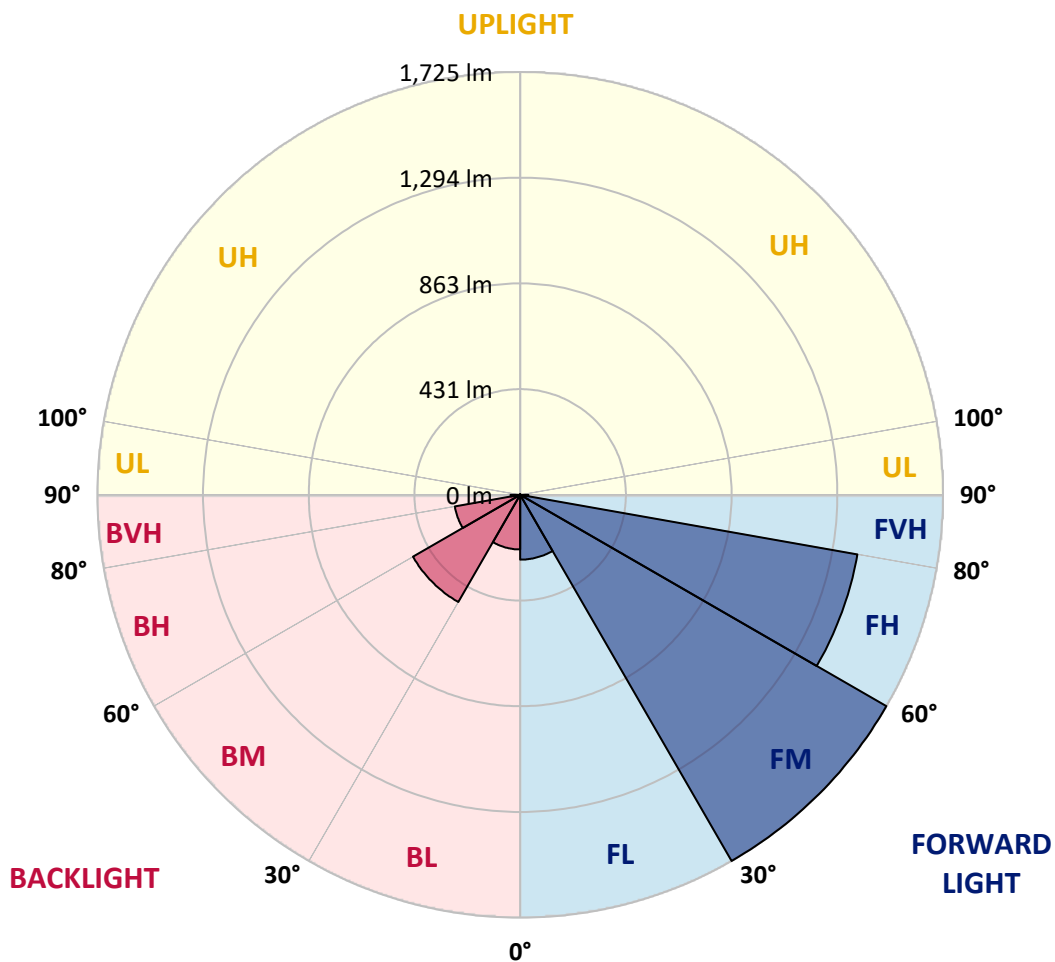
CATALOG NUMBER: IST-AF-800-LED-E1-T3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	264.6	5.9			
FM	(30°-60°)	1725.5	38.7			
FH	(60°-80°)	1397.4	31.3			G1/1800
FVH	(80°-90°)	33.0	0.7			G1/100
BL	(0°-30°)	223.0	5.0	B1/500		
BM	(30°-60°)	505.1	11.3	B1/1000		
BH	(60°-80°)	270.8	6.1	B1/500		G1/500
BVH	(80°-90°)	38.9	0.9			G1/100
UL	(90°-100°)	1.7	0.0		U1/10	
UH	(100°-180°)	1.3	0.0		U1/10	

BUG Rating: B1-U1-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	586.5	587.9	589.1	588.4	588.4	588.4	588.4	587.1	589.1	589.1	587.9
5°	576.8	577.5	578.1	579.4	580.8	582.0	582.6	582.6	583.3	582.6	581.3
7.5°	562.6	563.2	565.8	565.8	567.1	569.7	571.1	572.3	574.3	574.3	573.6
10°	558.0	558.0	558.0	556.1	557.5	558.0	560.0	560.0	565.2	567.8	569.1
12.5°	563.2	562.6	562.6	557.5	553.0	551.0	553.0	553.5	559.4	563.2	565.8
15°	574.8	574.8	573.6	565.8	556.8	549.8	549.0	549.0	553.5	559.4	563.9
17.5°	602.0	604.6	595.6	583.3	568.4	556.8	552.3	551.6	554.8	559.4	563.9
20°	653.7	653.1	639.4	617.6	591.6	572.3	561.4	560.0	559.4	562.0	567.1
22.5°	715.1	712.4	696.4	668.6	633.0	597.6	576.2	573.6	568.4	570.3	577.5
25°	781.0	781.5	761.5	725.4	680.8	638.2	605.9	603.3	592.3	591.1	598.8
27.5°	846.8	855.3	828.1	793.8	740.9	689.9	642.6	638.9	629.2	625.8	633.7
30°	943.1	939.9	906.2	861.7	808.7	744.8	699.5	692.4	673.1	677.6	685.9
32.5°	1024.4	1031.5	1001.3	948.3	878.5	811.3	759.0	755.0	736.4	741.6	753.2
35°	1123.9	1140.7	1100.6	1035.5	968.2	899.1	836.5	826.1	811.3	821.6	830.7
37.5°	1237.7	1245.9	1215.0	1131.1	1062.5	990.2	919.1	903.1	886.9	908.2	924.4
40°	1346.1	1359.7	1319.6	1248.6	1169.1	1100.1	1022.5	1019.3	981.8	1005.0	1047.1
42.5°	1507.0	1523.7	1459.8	1377.1	1305.5	1222.1	1148.4	1131.1	1090.4	1123.3	1193.7
45°	1619.4	1618.7	1575.4	1507.0	1463.0	1382.3	1282.8	1262.2	1218.2	1262.2	1356.5
47.5°	1660.1	1669.7	1654.9	1646.5	1631.1	1572.2	1425.6	1406.2	1364.9	1430.1	1517.2
50°	1720.2	1717.5	1717.5	1769.2	1813.8	1801.6	1592.9	1565.0	1521.8	1600.0	1725.3
52.5°	1735.6	1712.3	1748.6	1847.4	1988.8	1999.2	1787.3	1771.7	1720.2	1796.3	1950.7
55°	1692.4	1686.6	1744.0	1887.4	2110.3	2183.9	2012.7	1991.5	1933.3	1998.5	2194.2
57.5°	1595.5	1610.3	1702.6	1879.1	2194.2	2346.7	2260.1	2229.8	2146.4	2185.8	2435.8
60°	1494.0	1501.2	1623.2	1849.3	2216.8	2459.6	2519.7	2502.4	2359.6	2382.8	2614.8
62.5°	1381.6	1364.9	1491.5	1824.7	2191.7	2615.3	2771.7	2758.2	2589.5	2582.4	2742.0
65°	1067.7	1091.0	1198.9	1508.3	2019.2	2736.9	3072.0	3054.7	2846.0	2747.2	2728.4
67.5°	685.9	681.5	757.7	1008.3	1509.0	2487.5	3229.0	3248.5	2992.6	2821.5	2541.0
70°	246.0	253.2	281.6	458.0	827.5	1657.5	2846.5	2942.8	2884.7	2682.6	2068.3
72.5°	149.8	149.8	170.5	206.0	335.2	786.1	2028.9	2219.4	2354.5	2210.4	1527.7
75°	117.6	116.9	124.1	142.1	180.9	257.7	1078.8	1226.0	1510.2	1527.0	869.4
77.5°	93.1	92.3	99.5	107.9	134.9	136.4	344.3	448.3	693.1	652.3	310.7
80°	74.9	74.3	79.4	82.0	98.8	94.3	138.2	160.2	242.9	213.2	134.4
82.5°	67.8	67.8	73.0	62.6	68.5	66.6	85.9	91.8	122.1	126.6	80.8
85°	43.9	45.3	68.5	60.7	44.6	40.7	54.9	58.1	76.3	83.4	39.3
87.5°	20.8	22.5	52.3	50.3	29.7	22.0	31.0	33.0	41.3	51.0	23.3
90°	3.9	3.9	6.5	7.1	3.9	3.9	5.2	4.5	4.5	6.5	6.5
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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	589.7	588.4	589.1	589.7	590.4	592.3	593.0	593.0	593.0	592.3	593.6
5°	582.6	581.3	581.3	583.3	585.2	587.9	591.6	594.9	596.1	596.8	596.8
7.5°	574.8	573.6	574.3	577.5	580.8	582.6	586.5	588.4	593.6	593.6	594.9
10°	569.7	571.1	571.6	574.8	577.5	577.5	576.8	575.5	574.3	577.5	576.2
12.5°	566.5	568.4	567.8	571.6	573.0	567.8	560.0	549.8	548.3	549.8	551.0
15°	565.2	565.2	567.1	567.1	560.6	550.3	540.6	541.3	542.6	546.5	546.5
17.5°	565.2	565.8	567.1	562.6	551.0	541.9	540.0	538.1	531.0	529.0	527.0
20°	569.7	568.4	569.7	561.4	551.0	543.8	529.0	514.8	501.3	495.4	492.8
22.5°	580.8	578.8	578.1	569.7	556.8	532.9	503.8	481.9	458.7	450.9	448.3
25°	600.1	599.3	594.9	589.1	553.0	506.5	469.6	434.7	409.4	396.0	396.6
27.5°	634.3	634.3	631.7	605.9	532.9	473.5	423.7	388.2	362.4	349.4	347.6
30°	685.9	687.2	688.6	610.4	501.3	425.0	373.3	349.4	333.9	324.3	323.6
32.5°	749.9	757.0	748.6	605.3	458.0	366.3	333.9	325.5	317.8	311.4	310.7
35°	834.5	853.9	801.0	584.5	409.4	326.3	310.1	304.3	298.5	293.8	294.6
37.5°	948.3	966.9	834.5	549.8	347.6	303.5	296.5	287.5	278.5	268.8	267.4
40°	1082.5	1076.8	846.1	483.7	308.7	292.6	283.0	271.3	255.7	241.6	238.9
42.5°	1216.9	1178.1	836.5	402.4	283.5	283.0	269.3	254.5	238.9	226.7	226.7
45°	1367.4	1267.3	806.8	326.3	263.6	272.5	255.7	240.3	226.0	217.0	216.4
47.5°	1509.5	1350.6	757.7	272.0	243.5	259.0	245.5	231.2	217.7	209.9	208.0
50°	1676.1	1445.6	720.2	235.2	224.1	245.5	239.7	226.7	213.8	204.7	203.5
52.5°	1844.8	1538.0	691.8	209.9	206.7	235.2	237.1	229.2	215.8	198.3	197.0
55°	2021.2	1653.6	634.9	189.9	191.2	227.5	240.3	234.5	224.8	196.4	195.1
57.5°	2169.0	1760.2	535.5	176.3	178.9	221.5	241.6	230.5	219.6	197.6	195.7
60°	2284.7	1833.1	392.6	165.4	167.9	215.1	235.7	217.0	202.8	197.6	194.4
62.5°	2320.2	1835.8	261.0	152.4	159.6	204.2	225.5	209.9	193.1	195.7	194.4
65°	2231.1	1738.8	186.7	140.1	152.4	191.2	220.9	202.8	188.6	199.0	197.6
67.5°	1956.5	1465.0	149.8	130.4	142.7	177.7	212.4	196.4	184.7	206.0	202.2
70°	1524.4	1050.9	127.2	120.8	132.4	164.7	201.0	189.3	179.6	200.2	195.1
72.5°	1005.0	618.8	112.4	111.7	120.1	153.7	187.9	182.7	171.1	181.5	173.7
75°	524.5	286.8	97.6	101.4	106.6	144.1	176.3	171.1	158.2	162.1	159.6
77.5°	206.0	134.4	84.6	89.1	95.0	129.9	161.4	156.3	145.3	142.1	141.4
80°	113.1	90.4	70.3	76.3	80.1	116.9	146.0	140.1	128.5	126.6	124.7
82.5°	71.8	58.7	58.1	62.1	67.1	104.0	131.2	122.1	112.4	132.4	107.2
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	27.1	31.6	36.2	62.1	90.4	81.4	71.1	60.7	62.6
90°	4.5	4.5	7.7	7.1	7.7	9.1	44.6	40.1	35.6	16.8	11.0
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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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

CANDELA DISTRIBUTION (continued):

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