

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: P271670

Luminaire Tested: **IST-AF-1000-LED-E1-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271670  
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-1000-LED-E1-T4W-7027  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE  
Light Source: (16) 2700K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5264.1 lumens  
Efficiency: N/A  
Efficacy: 96.4 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): 54.6  
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

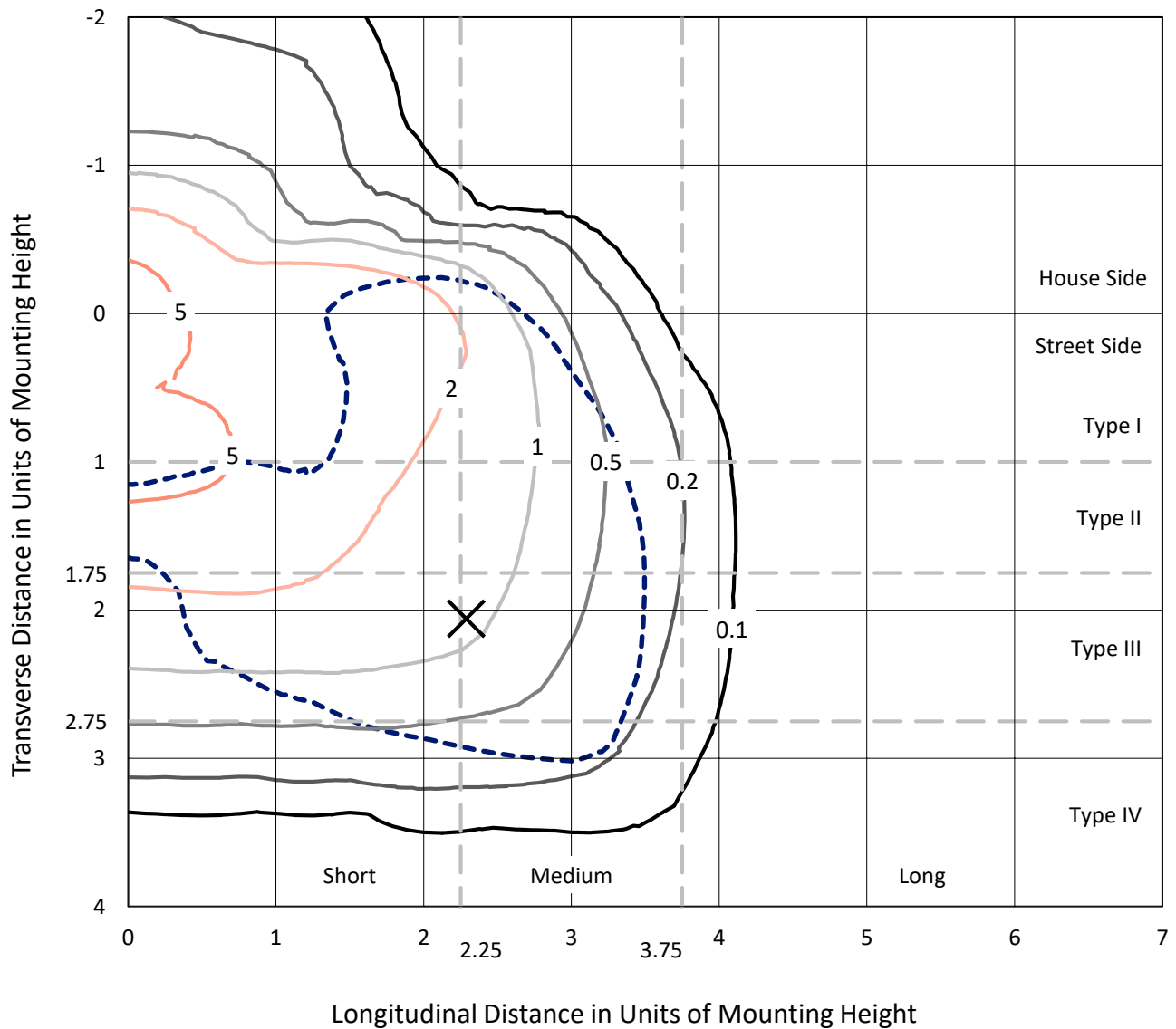


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### Iso-Footcandle Lines of Horizontal Illumination

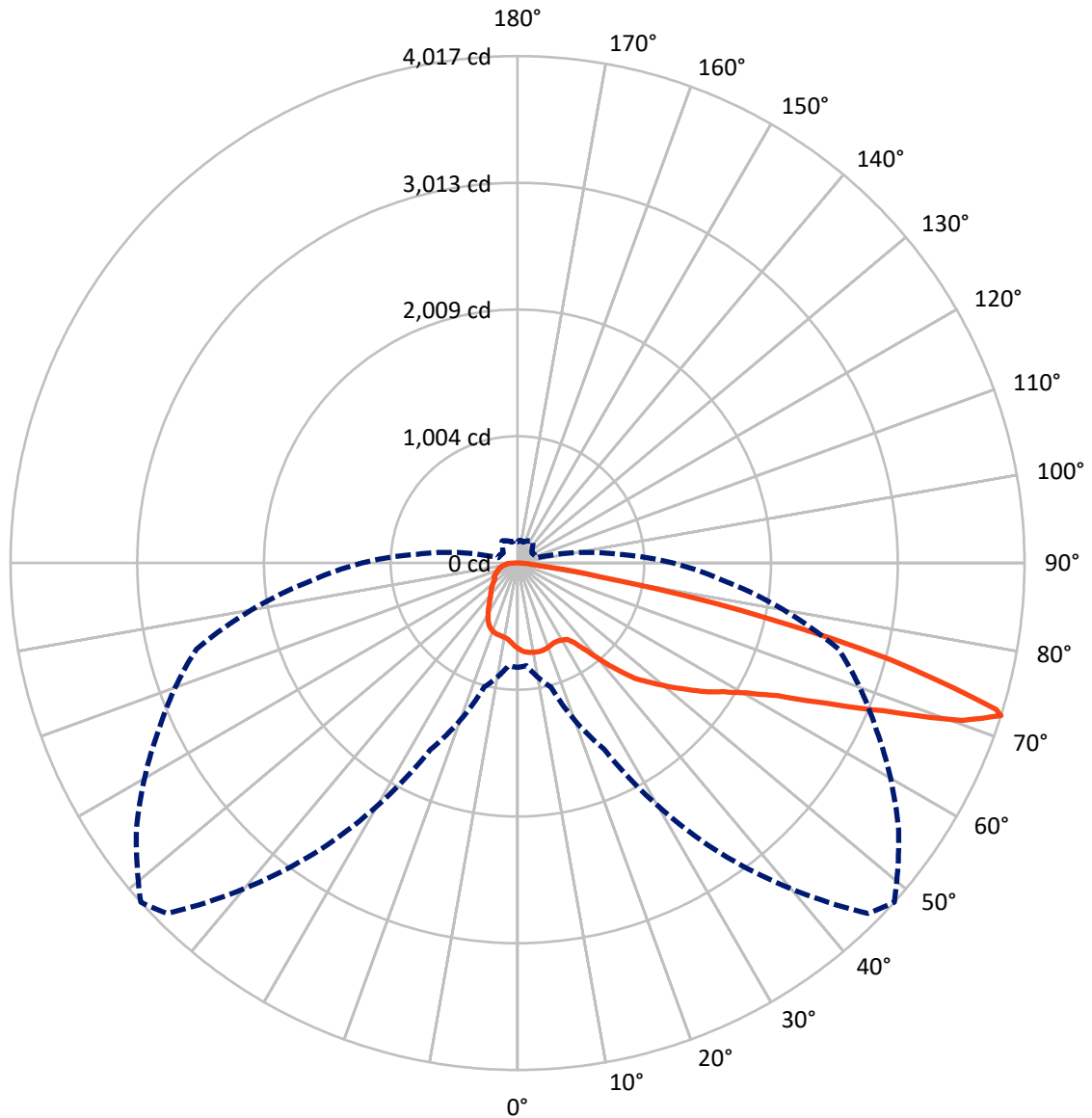
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc  
 Type IV - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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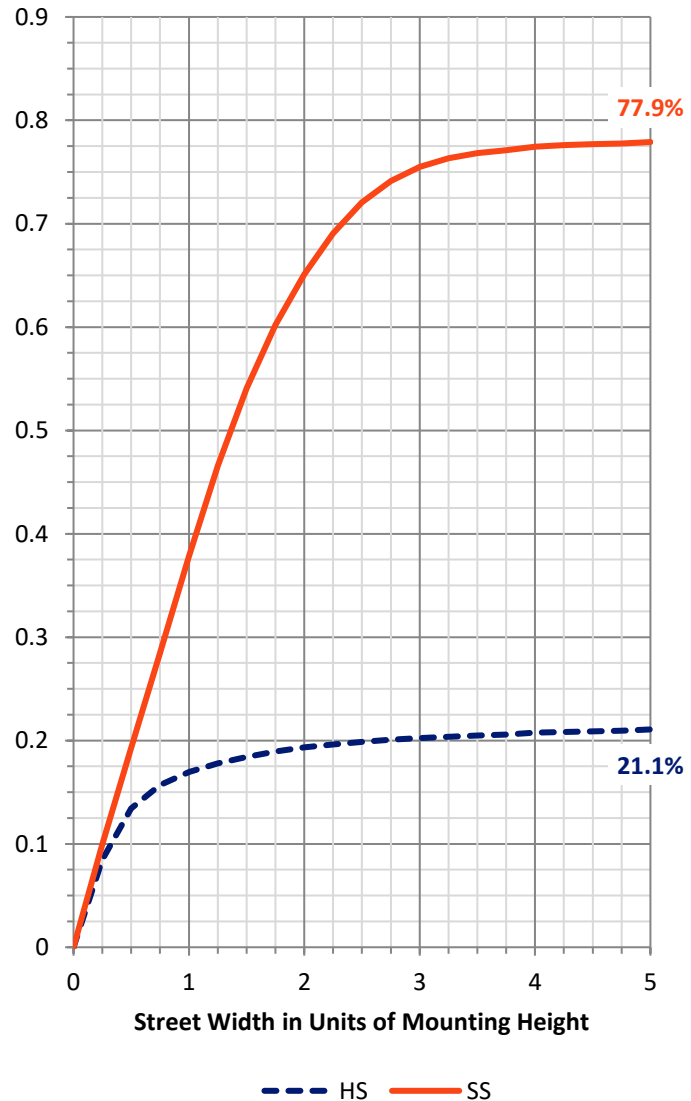
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1143.3	2.4	1145.7
	% Fixture	21.7	0.0	21.8
<b>Street Side</b>	Lumens	4117.6	0.8	4118.4
	% Fixture	78.2	0.0	78.2
<b>Total</b>	Lumens	5260.9	3.2	5264.1
	% Fixture	99.9	0.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.0	1.2
10°-20°	187.0	3.6
20°-30°	288.4	5.5
30°-40°	432.3	8.2
40°-50°	719.9	13.7
50°-60°	1125.0	21.4
60°-70°	1486.0	28.2
70°-80°	859.6	16.3
80°-90°	98.5	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°	5260.9	99.9
0°-180°	5264.1	100.0



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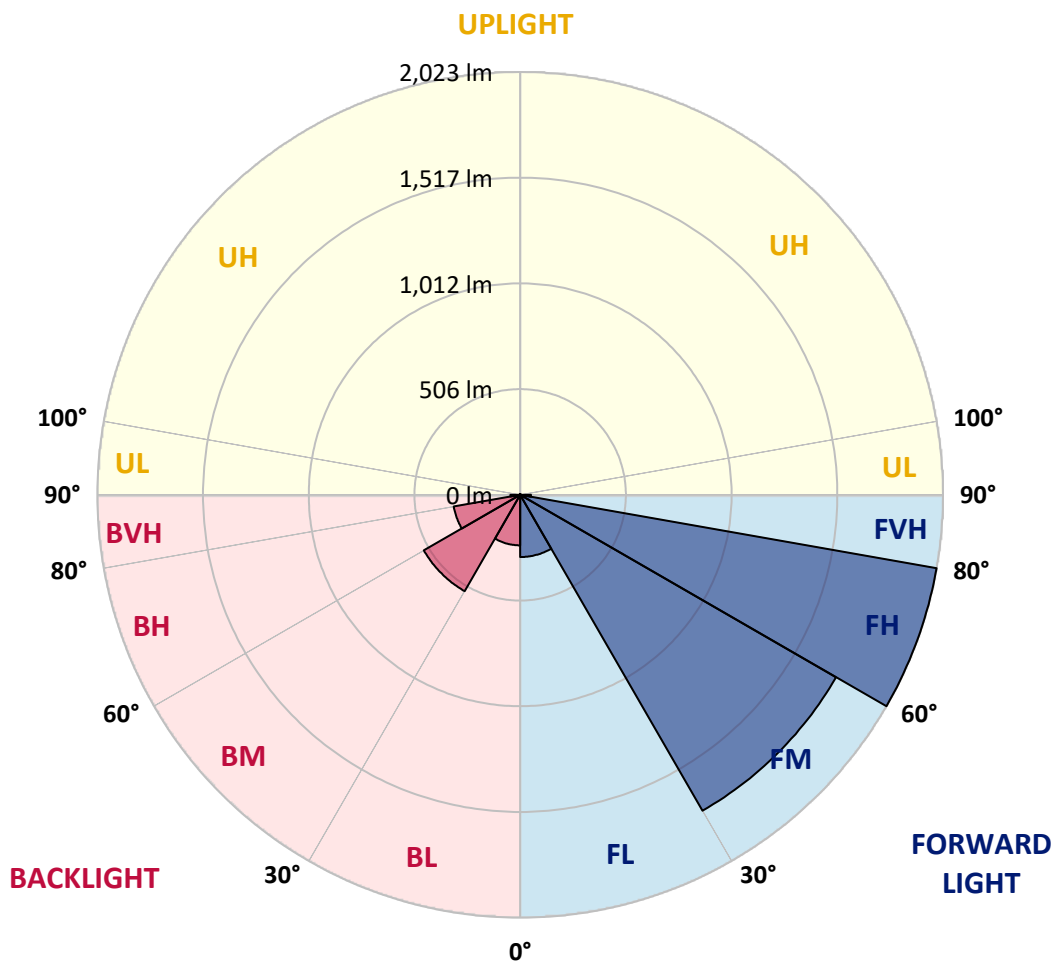
CATALOG NUMBER: IST-AF-1000-LED-E1-T4W-7027

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	297.6	5.7			
FM	(30°-60°)	1745.2	33.2			
FH	(60°-80°)	2023.0	38.4			G2/5000
FVH	(80°-90°)	51.7	1.0			G1/100
BL	(0°-30°)	241.9	4.6	B1/500		
BM	(30°-60°)	532.0	10.1	B1/1000		
BH	(60°-80°)	322.6	6.1	B1/500		G1/500
BVH	(80°-90°)	46.8	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2
2.5°	713.1	712.4	712.4	706.2	703.9	700.0	697.1	692.4	687.9	682.5	675.6
5°	747.4	749.7	746.7	737.5	726.1	713.8	709.3	698.6	684.1	671.1	658.9
7.5°	780.3	781.1	772.6	757.5	739.8	720.7	714.6	700.0	684.1	666.5	648.9
10°	803.9	804.7	792.5	771.1	747.4	726.1	719.3	704.7	684.9	665.7	643.6
12.5°	817.6	818.4	800.1	778.0	749.7	728.3	722.2	707.0	686.3	661.9	637.4
15°	815.4	817.6	802.5	778.0	748.2	729.2	721.5	708.5	682.5	658.1	632.1
17.5°	800.1	803.2	791.0	764.3	740.6	725.3	716.8	703.9	678.7	652.8	624.5
20°	770.4	774.2	768.8	742.9	726.8	714.6	709.3	697.1	673.4	646.7	617.7
22.5°	736.8	740.6	739.0	717.7	710.0	703.9	698.6	689.4	668.8	642.1	614.6
25°	712.4	715.4	713.1	694.7	697.1	697.1	694.0	687.1	668.0	643.6	614.6
27.5°	752.8	752.8	732.9	695.5	691.8	698.6	697.1	693.2	678.0	651.2	620.7
30°	900.9	889.4	853.6	759.7	711.5	708.5	707.8	705.5	691.8	668.0	639.9
32.5°	1066.6	1055.1	1012.4	894.8	794.8	729.2	722.2	723.0	719.3	697.1	668.8
35°	1213.9	1212.4	1178.8	1051.3	923.7	801.6	774.2	755.8	754.3	745.1	723.0
37.5°	1333.1	1333.1	1336.0	1191.1	1063.5	916.9	870.4	812.3	812.3	806.9	793.2
40°	1468.9	1475.1	1481.9	1317.7	1213.3	1054.4	1001.7	913.8	887.2	895.6	898.7
42.5°	1647.6	1655.1	1650.6	1474.3	1349.8	1218.6	1153.6	1047.5	981.8	995.6	1027.6
45°	1768.2	1771.3	1804.1	1637.7	1521.5	1357.5	1302.5	1156.7	1091.8	1120.1	1176.5
47.5°	1904.9	1912.5	1917.8	1823.2	1723.2	1514.7	1413.9	1262.7	1220.8	1263.6	1352.8
50°	2038.4	2028.6	2043.0	2039.2	1914.0	1654.5	1534.6	1362.0	1365.2	1423.2	1569.7
52.5°	2154.6	2121.0	2154.6	2196.5	2159.9	1798.0	1658.3	1478.9	1523.2	1594.1	1825.4
55°	2243.9	2162.8	2219.4	2338.5	2330.1	1924.7	1799.6	1634.6	1708.7	1805.6	2136.2
57.5°	2061.4	2071.3	2227.1	2434.0	2430.2	2053.0	1923.2	1829.3	1920.1	2028.6	2504.3
60°	1891.1	1935.4	2176.0	2449.2	2499.6	2192.8	2089.6	2050.7	2134.7	2266.7	2856.9
62.5°	1801.0	1843.1	2092.7	2421.0	2610.4	2399.6	2313.3	2283.5	2398.0	2546.2	3171.5
65°	1829.3	1855.3	2087.3	2463.7	2737.9	2712.6	2675.2	2625.6	2682.9	2821.8	3313.5
67.5°	1749.9	1792.7	2043.0	2539.3	2970.7	3094.4	3125.7	3072.2	3024.1	3005.0	3106.6
70°	1302.5	1343.8	1606.3	2227.1	3161.6	3757.1	3737.9	3559.4	3235.7	2965.3	2427.1
72°	827.6	816.2	1016.9	1631.5	2810.3	3927.3	4017.4	3686.8	3139.4	2633.2	1648.3
72.5°	601.7	655.9	843.7	1450.7	2669.9	3834.1	3965.5	3645.6	3013.5	2487.4	1449.9
75°	146.6	155.0	202.3	519.8	1563.6	2885.2	3050.0	2816.5	2199.6	1476.5	642.8
77.5°	99.3	103.0	133.6	183.3	459.7	1645.2	1810.3	1555.1	984.1	502.3	286.3
80°	74.1	76.4	96.9	129.7	190.9	561.1	661.9	526.0	245.1	278.7	203.8
82.5°	51.9	53.4	73.3	95.4	126.8	131.3	174.8	193.1	158.8	182.4	119.0
85°	35.9	35.9	53.4	65.7	80.2	64.9	69.5	96.9	107.7	108.4	72.5
87.5°	19.0	21.4	31.4	42.0	42.0	29.7	32.8	49.7	60.4	64.9	43.5
90°	6.8	6.8	12.9	16.0	9.9	7.6	6.8	9.9	14.6	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



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**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





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2
2.5°	674.2	669.6	663.5	660.4	658.9	655.9	652.8	651.2	651.2	648.1	648.9
5°	652.8	645.9	637.4	631.4	630.6	630.6	632.1	632.1	632.9	630.6	633.7
7.5°	642.1	634.5	622.3	615.4	609.9	609.2	612.4	618.4	621.4	619.2	622.3
10°	634.5	626.1	612.4	603.9	600.1	598.6	600.9	607.0	616.9	616.9	619.9
12.5°	626.7	616.1	602.3	596.3	593.2	594.0	597.0	601.7	612.4	616.1	617.7
15°	619.2	607.0	595.5	587.1	587.1	589.4	593.2	598.6	608.5	615.4	616.9
17.5°	611.6	599.3	589.4	582.6	582.6	585.5	589.4	596.3	603.1	613.0	613.0
20°	604.6	594.8	581.7	575.6	574.8	577.3	581.7	588.6	594.0	603.9	604.6
22.5°	600.9	588.6	576.4	567.3	563.5	561.9	566.5	573.4	578.7	588.6	590.2
25°	599.3	585.5	570.3	553.5	543.7	540.5	542.8	551.2	555.8	563.5	565.8
27.5°	604.6	591.7	568.0	537.5	516.9	508.5	510.8	516.1	517.6	526.0	529.8
30°	623.1	607.7	572.6	520.7	483.3	467.9	467.9	468.7	471.1	478.0	478.7
32.5°	652.8	638.2	586.3	503.1	449.0	427.5	422.2	418.4	418.4	417.6	418.4
35°	707.8	695.5	609.9	483.3	411.5	387.9	374.9	367.9	361.1	358.1	357.3
37.5°	787.2	776.5	643.6	460.4	378.6	355.0	339.0	325.3	317.6	316.8	320.7
40°	905.5	894.8	681.1	434.4	347.4	329.8	313.0	298.6	290.2	290.9	294.7
42.5°	1051.3	1018.5	721.5	399.3	322.2	313.0	294.7	282.4	274.2	269.5	268.8
45°	1221.5	1166.6	759.7	366.5	294.7	298.6	281.0	267.2	256.6	244.2	242.8
47.5°	1433.9	1314.7	793.2	333.6	264.9	283.2	266.4	253.5	237.4	222.9	220.6
50°	1655.1	1485.0	822.3	298.6	238.2	266.4	252.0	234.4	212.3	199.2	199.2
52.5°	1911.0	1689.6	859.7	259.6	217.6	248.1	233.6	210.7	192.3	190.9	190.9
55°	2195.7	1904.0	885.5	229.1	201.6	228.3	221.4	214.5	208.5	209.9	210.7
57.5°	2493.5	2127.8	862.7	207.7	188.6	223.7	243.5	234.4	215.3	214.5	213.8
60°	2750.0	2301.9	736.0	193.9	178.7	231.3	261.0	234.4	215.3	225.3	226.0
62.5°	2918.1	2384.3	490.1	176.3	164.1	218.4	255.0	227.5	216.0	244.2	246.7
65°	2895.1	2291.9	281.7	164.1	155.0	200.8	246.7	219.2	201.6	217.6	213.0
67.5°	2553.8	1920.8	203.8	158.8	148.1	188.6	231.3	206.9	187.8	207.7	199.2
70°	1835.3	1307.8	175.6	154.1	143.5	174.1	220.6	199.2	180.2	193.9	181.0
72°	1231.5	795.6	161.1	150.4	139.0	164.9	213.0	193.1	173.4	181.0	166.5
72.5°	1048.2	627.6	157.2	148.8	137.4	162.6	210.7	191.6	171.8	179.4	165.6
75°	391.8	245.9	139.8	137.4	126.8	151.2	201.6	184.7	164.1	161.9	155.8
77.5°	201.6	155.8	119.0	121.5	113.7	138.2	191.6	174.1	151.2	142.8	139.8
80°	146.6	113.0	96.2	103.0	96.9	124.4	177.9	158.0	137.4	128.3	124.4
82.5°	92.3	70.2	73.3	81.7	82.5	110.0	161.9	142.0	122.2	114.5	108.4
85°	44.3	42.0	51.9	60.4	66.5	93.2	148.1	126.0	106.9	91.5	92.3
87.5°	23.6	32.1	31.4	40.4	51.1	76.4	131.3	103.0	85.5	68.7	69.5
90°	5.3	8.4	9.2	16.0	20.6	32.8	84.7	58.7	57.2	24.4	21.4
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: P271670

CATALOG NUMBER: IST-AF-1000-LED-E1-T4W-7027

**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)