

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: P271740

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271740
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)-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-1000-LED-E1-T4W-7027-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, 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: 6971.3 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U5 - G2

Input Watts (W): 71.3
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

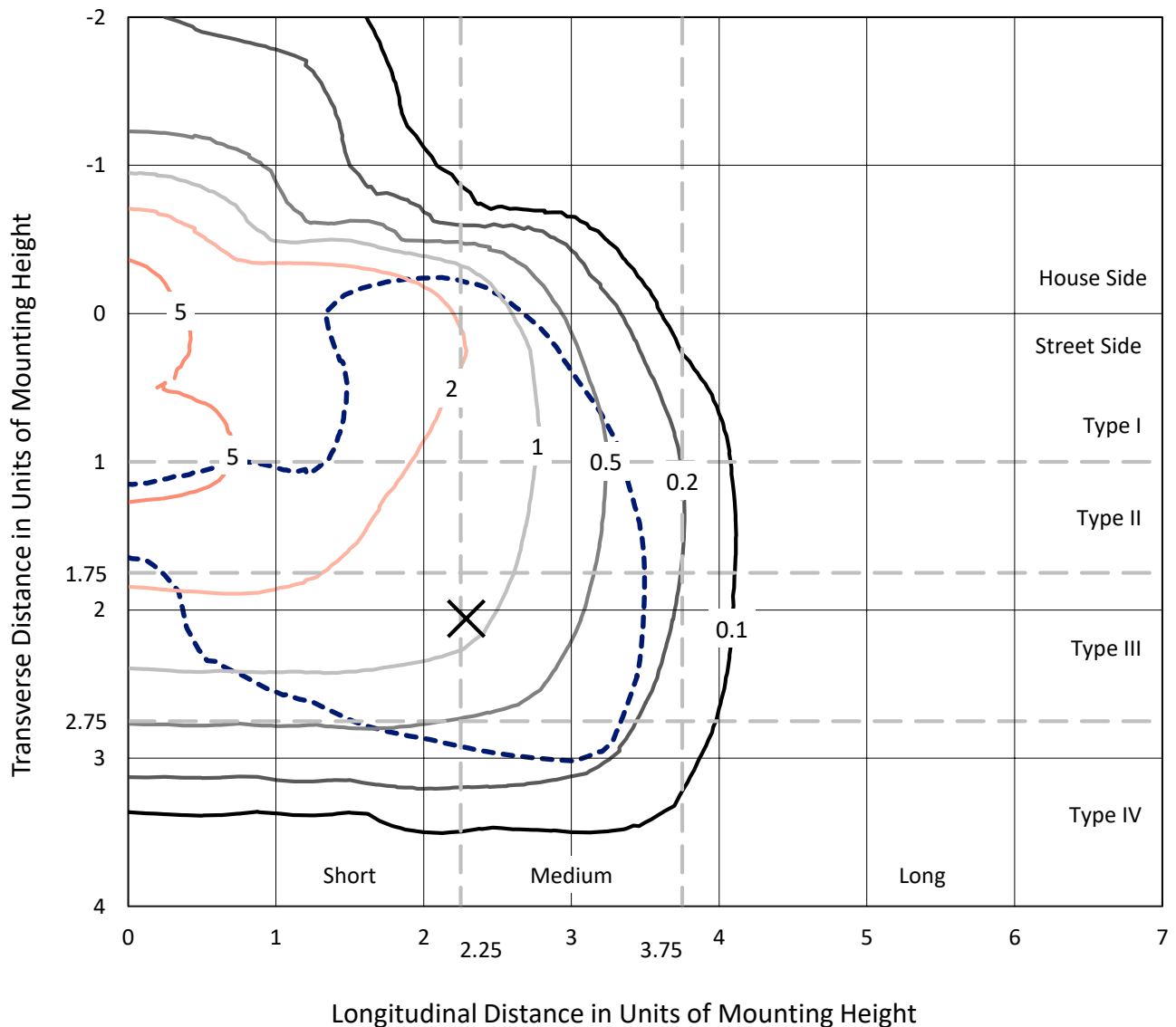


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Iso-Footcandle Lines of Horizontal Illumination

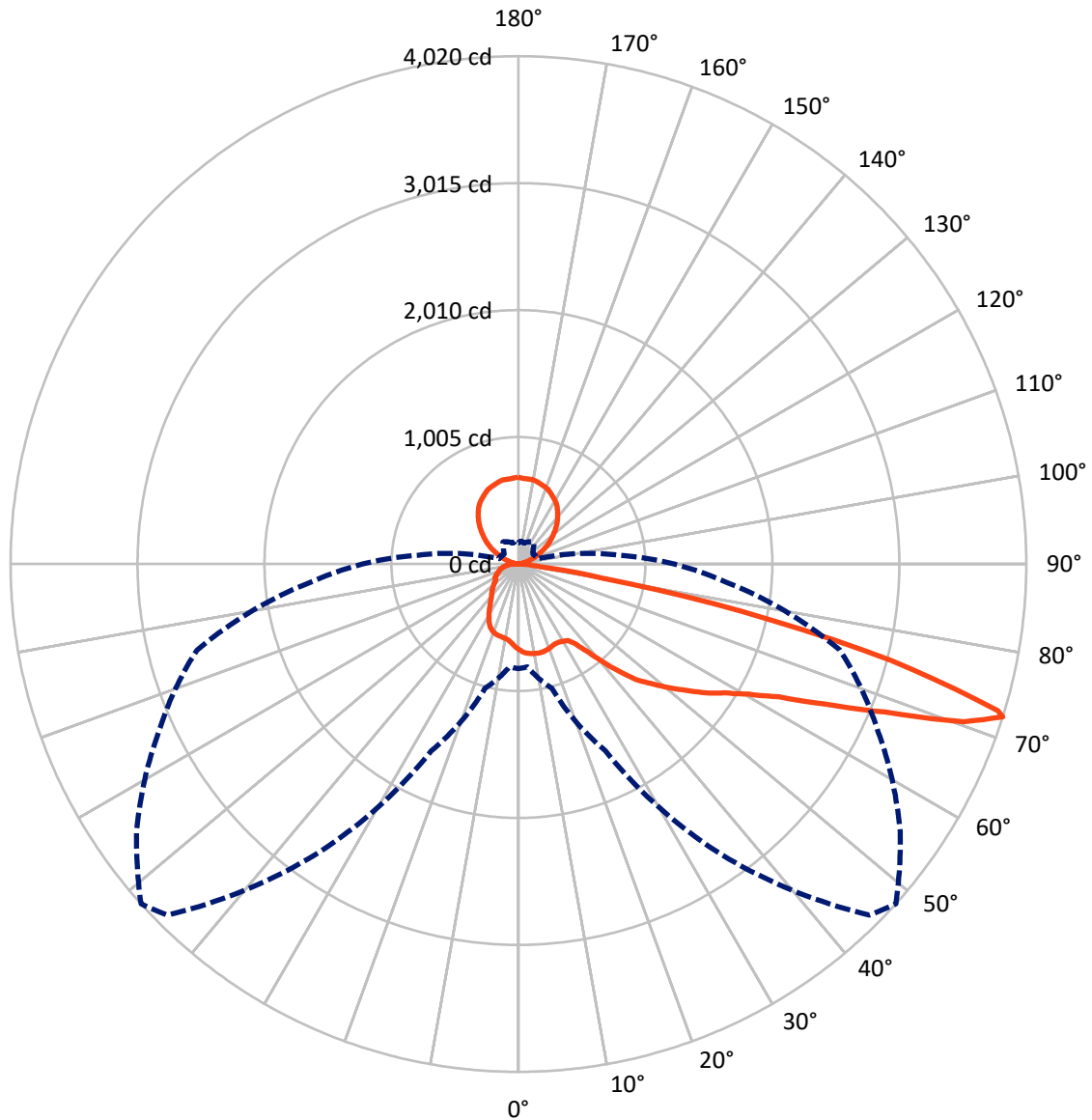
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Medium - Non-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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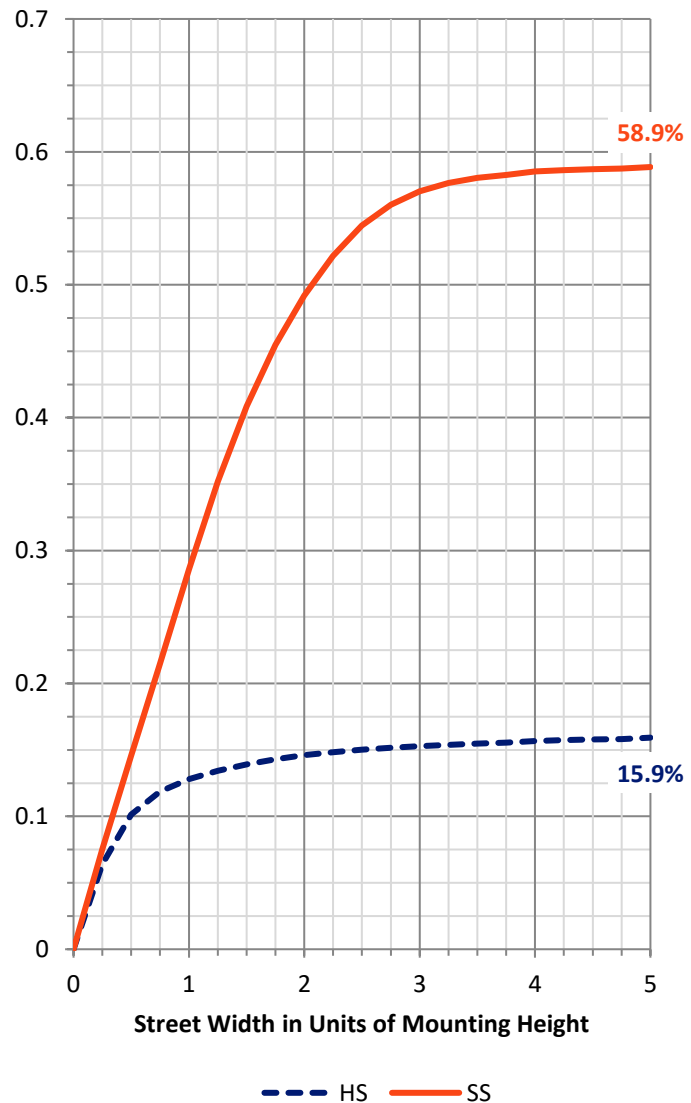
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1144.5	853.9	1998.4
	% Fixture	16.4	12.2	28.7
Street Side	Lumens	4120.6	852.3	4972.9
	% Fixture	59.1	12.2	71.3
Total	Lumens	5265.1	1706.2	6971.3
	% Fixture	75.5	24.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	0.9
10°-20°	187.2	2.7
20°-30°	288.6	4.1
30°-40°	432.6	6.2
40°-50°	720.3	10.3
50°-60°	1125.7	16.1
60°-70°	1486.9	21.3
70°-80°	860.1	12.3
80°-90°	99.6	1.4
90°-100°	12.3	0.2
100°-110°	56.3	0.8
110°-120°	163.1	2.3
120°-130°	268.1	3.8
130°-140°	330.6	4.7
140°-150°	338.2	4.9
150°-160°	284.9	4.1
160°-170°	187.6	2.7
170°-180°	65.0	0.9
0°-90°	5265.1	75.5
0°-180°	6971.3	100.0



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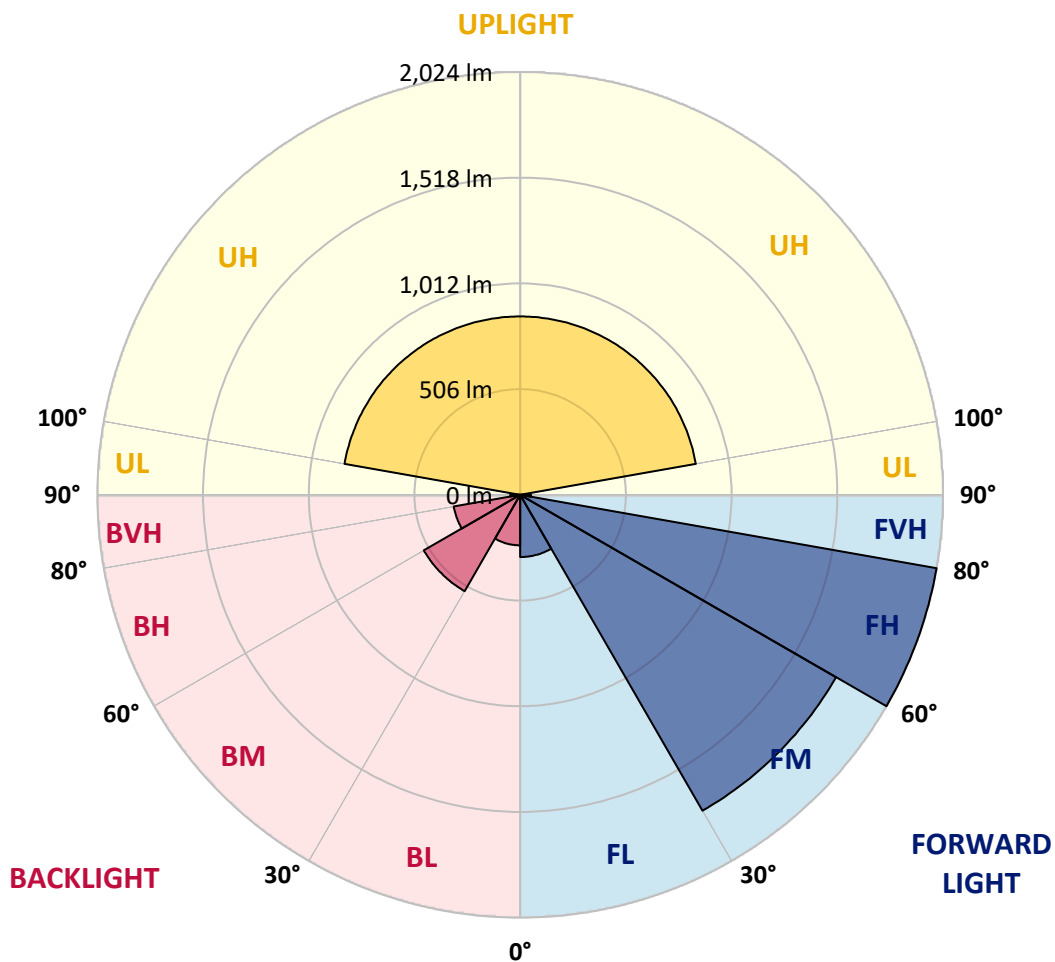
CATALOG NUMBER: IST-AF-1000-LED-E1-T4W-7027-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	297.8	4.3			
FM	(30°-60°)	1746.3	25.0			
FH	(60°-80°)	2024.3	29.0			G2/5000
FVH	(80°-90°)	52.2	0.7			G1/100
BL	(0°-30°)	242.0	3.5	B1/500		
BM	(30°-60°)	532.3	7.6	B1/1000		
BH	(60°-80°)	322.8	4.6	B1/500		G1/500
BVH	(80°-90°)	47.4	0.7			G1/100
UL	(90°-100°)	12.3	0.2		U2/50	
UH	(100°-180°)	853.9	12.2		U4/1000	

BUG Rating: B1-U5-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6
2.5°	713.5	712.7	712.7	706.7	704.3	700.6	697.4	693.0	688.3	682.9	676.1
5°	747.9	750.2	747.1	738.0	726.5	714.3	709.8	699.0	684.5	671.6	659.3
7.5°	780.8	781.5	773.1	757.8	740.2	721.2	715.1	700.6	684.5	666.9	649.4
10°	804.4	805.2	792.9	771.6	747.9	726.5	719.6	705.1	685.2	666.1	644.1
12.5°	818.2	819.0	800.6	778.4	750.2	728.7	722.7	707.4	686.8	662.3	637.9
15°	815.9	818.2	802.9	778.4	748.6	729.5	721.9	708.9	682.9	658.5	632.6
17.5°	800.6	803.6	791.5	764.6	741.0	725.7	717.4	704.3	679.2	653.2	625.0
20°	770.8	774.7	769.3	743.3	727.3	715.1	709.8	697.4	673.8	647.0	618.0
22.5°	737.1	741.0	739.5	718.1	710.5	704.3	699.0	689.9	669.1	642.5	615.0
25°	712.7	715.8	713.5	695.2	697.4	697.4	694.4	687.6	668.5	644.1	615.0
27.5°	753.3	753.3	733.4	696.0	692.1	699.0	697.4	693.6	678.4	651.6	621.1
30°	901.4	890.0	854.1	760.1	712.0	708.9	708.1	705.9	692.1	668.5	640.2
32.5°	1067.3	1055.8	1013.0	895.3	795.3	729.5	722.7	723.5	719.6	697.4	669.1
35°	1214.7	1213.1	1179.6	1051.9	924.4	802.2	774.7	756.4	754.8	745.6	723.5
37.5°	1333.8	1333.8	1336.9	1191.7	1064.1	917.5	870.9	812.9	812.9	807.5	793.7
40°	1469.9	1475.9	1482.8	1318.5	1213.9	1055.0	1002.3	914.5	887.6	896.1	899.1
42.5°	1648.6	1656.3	1651.6	1475.2	1350.6	1219.3	1154.3	1048.1	982.5	996.2	1028.3
45°	1769.3	1772.4	1805.2	1638.7	1522.5	1358.2	1303.4	1157.4	1092.4	1120.6	1177.2
47.5°	1906.0	1913.7	1919.0	1824.3	1724.2	1515.7	1414.8	1263.6	1221.5	1264.4	1353.7
50°	2039.7	2029.8	2044.4	2040.5	1915.2	1655.5	1535.6	1362.9	1366.0	1424.0	1570.7
52.5°	2155.8	2122.2	2155.8	2197.8	2161.2	1799.0	1659.3	1479.8	1524.1	1595.1	1826.5
55°	2245.2	2164.3	2220.8	2339.9	2331.6	1925.9	1800.7	1635.6	1709.7	1806.7	2137.4
57.5°	2062.7	2072.6	2228.4	2435.5	2431.6	2054.2	1924.3	1830.4	1921.4	2029.8	2505.7
60°	1892.3	1936.6	2177.2	2450.8	2501.2	2194.0	2091.0	2052.0	2136.0	2268.1	2858.7
62.5°	1802.1	1844.1	2093.9	2422.5	2611.9	2401.1	2314.8	2285.0	2399.6	2547.8	3173.4
65°	1830.4	1856.3	2088.6	2465.2	2739.5	2714.3	2676.9	2627.3	2684.5	2823.6	3315.6
67.5°	1751.0	1793.7	2044.4	2540.9	2972.5	3096.3	3127.6	3074.1	3026.0	3006.9	3108.5
70°	1303.4	1344.5	1607.3	2228.4	3163.5	3759.4	3740.3	3561.5	3237.6	2967.1	2428.6
72°	828.1	816.6	1017.6	1632.5	2812.1	3929.7	4019.8	3689.1	3141.4	2634.8	1649.4
72.5°	602.0	656.2	844.1	1451.5	2671.5	3836.5	3967.9	3647.7	3015.3	2488.9	1450.8
75°	146.6	155.0	202.5	520.3	1564.6	2887.0	3051.9	2818.2	2200.8	1477.4	643.3
77.5°	99.4	103.1	133.7	183.3	459.9	1646.3	1811.3	1556.1	984.7	502.7	286.5
80°	74.1	76.4	97.1	129.9	191.0	561.5	662.3	526.4	245.2	278.8	203.9
82.5°	51.9	53.4	73.3	95.5	126.8	131.4	174.9	193.2	158.9	182.5	119.1
85°	35.9	35.9	53.4	65.7	80.2	64.9	69.5	97.1	107.7	108.4	72.5
87.5°	19.1	21.4	31.4	42.0	42.0	29.8	32.9	49.7	60.4	64.9	43.6
90°	11.8	11.8	19.9	23.9	17.8	14.6	13.7	16.8	23.4	29.5	20.6
92.5°	4.0	4.0	4.9	5.9	5.9	5.9	6.2	6.8	6.8	5.9	5.9
95°	4.9	4.9	5.9	6.8	6.8	6.8	6.8	6.8	7.8	6.8	6.8
97.5°	6.8	6.8	7.8	7.8	8.8	8.8	9.7	11.8	9.8	8.8	7.8
100°	7.8	7.8	8.8	9.8	11.8	20.6	23.0	28.5	25.5	22.5	18.7
102.5°	10.8	10.8	12.8	17.7	26.5	39.3	42.2	49.0	46.2	41.2	38.3
105°	20.6	21.6	26.5	35.3	47.1	61.8	64.5	70.7	68.7	63.8	59.8
107.5°	40.2	41.2	48.1	57.0	71.7	86.3	88.4	93.2	92.3	88.3	85.4

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

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	64.8	66.7	72.7	85.4	100.1	111.9	113.6	117.8	118.8	116.8	113.8
112.5°	97.2	97.2	104.0	118.8	131.5	140.3	141.8	145.3	147.2	146.2	144.3
115°	137.4	136.5	144.3	156.0	164.9	170.8	172.3	175.7	178.7	175.7	173.7
117.5°	180.6	180.6	185.5	193.3	198.3	201.2	202.9	207.1	211.0	206.1	204.2
120°	220.8	218.8	221.8	228.7	232.6	238.5	239.4	241.5	245.3	240.5	238.5
122.5°	258.2	255.2	256.2	262.0	266.0	271.8	272.5	273.8	277.8	272.8	270.9
125°	292.5	288.5	290.5	293.5	299.3	304.3	305.2	307.2	309.2	304.3	304.3
127.5°	323.9	322.9	322.9	326.8	332.7	333.7	335.2	338.6	339.6	339.6	338.6
130°	356.3	354.3	355.3	359.2	363.2	365.1	366.6	370.0	374.0	374.0	372.0
132.5°	388.7	386.7	385.7	393.5	396.5	397.5	399.3	403.4	408.3	406.3	406.3
135°	421.0	418.1	418.1	424.0	427.0	428.9	430.6	434.8	439.7	438.7	441.7
137.5°	451.5	448.5	450.5	451.5	455.4	459.3	460.8	464.2	466.2	467.2	472.1
140°	479.0	476.0	478.0	480.0	481.9	487.8	488.7	490.7	492.7	494.7	499.5
142.5°	508.4	505.5	507.5	508.4	511.3	515.3	515.9	517.2	523.2	523.2	524.1
145°	539.8	535.9	534.0	536.8	539.8	540.8	542.3	545.7	551.6	550.6	547.7
147.5°	564.3	561.4	560.5	563.3	563.3	564.3	565.8	569.3	574.2	575.2	572.2
150°	584.0	581.0	582.0	582.0	582.0	582.0	583.2	586.0	588.9	591.8	594.8
152.5°	599.7	596.7	596.7	597.7	598.7	598.7	599.0	599.7	602.7	606.5	611.5
155°	617.3	613.5	613.5	615.4	618.3	616.3	615.8	614.4	619.3	624.2	626.2
157.5°	634.0	631.1	631.1	632.0	634.0	633.0	632.8	632.0	636.0	638.0	638.0
160°	650.7	647.8	646.8	643.8	642.8	642.8	643.7	645.8	651.7	648.8	647.8
162.5°	660.5	656.6	656.6	652.7	648.8	650.7	651.9	654.7	658.5	657.6	655.7
165°	668.4	665.5	663.5	663.5	660.5	660.5	660.3	659.5	664.5	667.4	665.5
167.5°	677.2	674.3	671.3	673.3	675.3	672.3	670.2	665.5	671.3	675.3	675.3
170°	685.0	682.2	679.2	679.2	680.2	678.2	676.7	673.3	676.2	681.2	683.1
172.5°	686.0	684.1	682.2	680.2	677.2	677.2	677.0	676.2	679.2	681.2	683.1
175°	687.0	685.0	684.1	682.2	678.2	677.2	677.2	677.2	682.2	683.1	681.2
177.5°	693.9	692.0	687.0	686.0	684.1	682.2	681.8	681.2	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°	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6
2.5°	674.5	670.0	663.8	660.8	659.3	656.2	653.2	651.6	651.6	648.6	649.4
5°	653.2	646.3	637.9	631.8	631.0	631.0	632.6	632.6	633.3	631.0	634.0
7.5°	642.5	634.8	622.6	615.8	610.4	609.6	612.6	618.8	621.9	619.5	622.6
10°	634.8	626.5	612.6	604.3	600.4	598.9	601.2	607.3	617.2	617.2	620.3
12.5°	627.2	616.5	602.8	596.7	593.6	594.4	597.5	602.0	612.6	616.5	618.0
15°	619.5	607.3	595.8	587.5	587.5	589.7	593.6	598.9	608.8	615.8	617.2
17.5°	611.9	599.7	589.7	582.9	582.9	586.0	589.7	596.7	603.5	613.5	613.5
20°	605.1	595.0	582.1	576.0	575.3	577.5	582.1	589.0	594.4	604.3	605.1
22.5°	601.2	589.0	576.8	567.5	563.8	562.2	566.8	573.7	579.0	589.0	590.5
25°	599.7	586.0	570.6	553.9	543.9	540.9	543.1	551.6	556.1	563.8	566.1
27.5°	605.1	592.1	568.4	537.8	517.2	508.8	511.0	516.4	518.0	526.4	530.2
30°	623.3	608.2	573.0	520.9	483.6	468.3	468.3	469.1	471.3	478.2	479.0
32.5°	653.2	638.7	586.8	503.4	449.2	427.9	422.5	418.6	418.6	417.9	418.6
35°	708.1	696.0	610.4	483.6	411.7	388.1	375.1	368.2	361.4	358.2	357.5
37.5°	787.6	776.9	644.1	460.7	378.9	355.2	339.2	325.5	317.8	317.0	320.9
40°	906.0	895.3	681.5	434.7	347.6	329.9	313.1	298.7	290.3	291.1	294.8
42.5°	1051.9	1019.0	721.9	399.6	322.4	313.1	294.8	282.7	274.3	269.7	269.0
45°	1222.3	1167.3	760.1	366.7	294.8	298.7	281.1	267.3	256.6	244.5	242.9
47.5°	1434.6	1315.5	793.7	333.8	265.1	283.4	266.5	253.6	237.6	223.0	220.7
50°	1656.3	1485.9	822.8	298.7	238.3	266.5	252.2	234.5	212.4	199.4	199.4
52.5°	1912.1	1690.6	860.1	259.7	217.7	248.3	233.8	210.8	192.5	191.0	191.0
55°	2197.1	1905.2	886.2	229.2	201.7	228.3	221.5	214.7	208.6	210.0	210.8
57.5°	2495.0	2129.2	863.2	207.8	188.7	223.9	243.7	234.5	215.4	214.7	213.9
60°	2751.7	2303.3	736.4	194.0	178.8	231.4	261.2	234.5	215.4	225.4	226.1
62.5°	2919.9	2385.8	490.5	176.4	164.2	218.5	255.2	227.6	216.2	244.5	246.8
65°	2896.9	2293.4	281.9	164.2	155.0	201.0	246.8	219.3	201.7	217.7	213.2
67.5°	2555.4	1922.0	203.9	158.9	148.2	188.7	231.4	207.0	187.9	207.8	199.4
70°	1836.6	1308.7	175.7	154.3	143.5	174.2	220.7	199.4	180.3	194.0	181.1
72°	1232.3	796.0	161.2	150.5	139.1	165.0	213.2	193.2	173.5	181.1	166.5
72.5°	1049.0	627.9	157.3	149.0	137.5	162.8	210.8	191.8	171.8	179.5	165.7
75°	391.9	246.0	139.8	137.5	126.8	151.3	201.7	184.9	164.2	162.0	155.9
77.5°	201.7	155.9	119.1	121.5	113.8	138.2	191.8	174.2	151.3	142.9	139.8
80°	146.6	113.1	96.3	103.1	97.1	124.5	178.0	158.1	137.5	128.4	124.5
82.5°	92.4	70.2	73.3	81.7	82.6	110.0	162.0	142.1	122.2	114.6	108.4
85°	44.3	42.0	51.9	60.4	66.5	93.2	148.2	126.0	107.0	91.6	92.4
87.5°	23.6	32.1	31.4	40.5	51.1	76.4	131.4	103.1	85.6	68.8	69.5
90°	12.1	15.3	18.0	24.8	27.5	39.7	92.6	66.7	64.2	29.4	26.3
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	114.8	113.8	116.8	118.8	117.8	111.9	100.1	85.4	72.7	66.7	64.8
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)