

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: P226714

Luminaire Tested: **IST-AF-1000-LED-E1-T4W-7030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226714
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-7030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, WITH UPLIGHT GLOW
Light Source: (16) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7102.8 lumens
Efficiency: N/A
Efficacy: 99.6 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

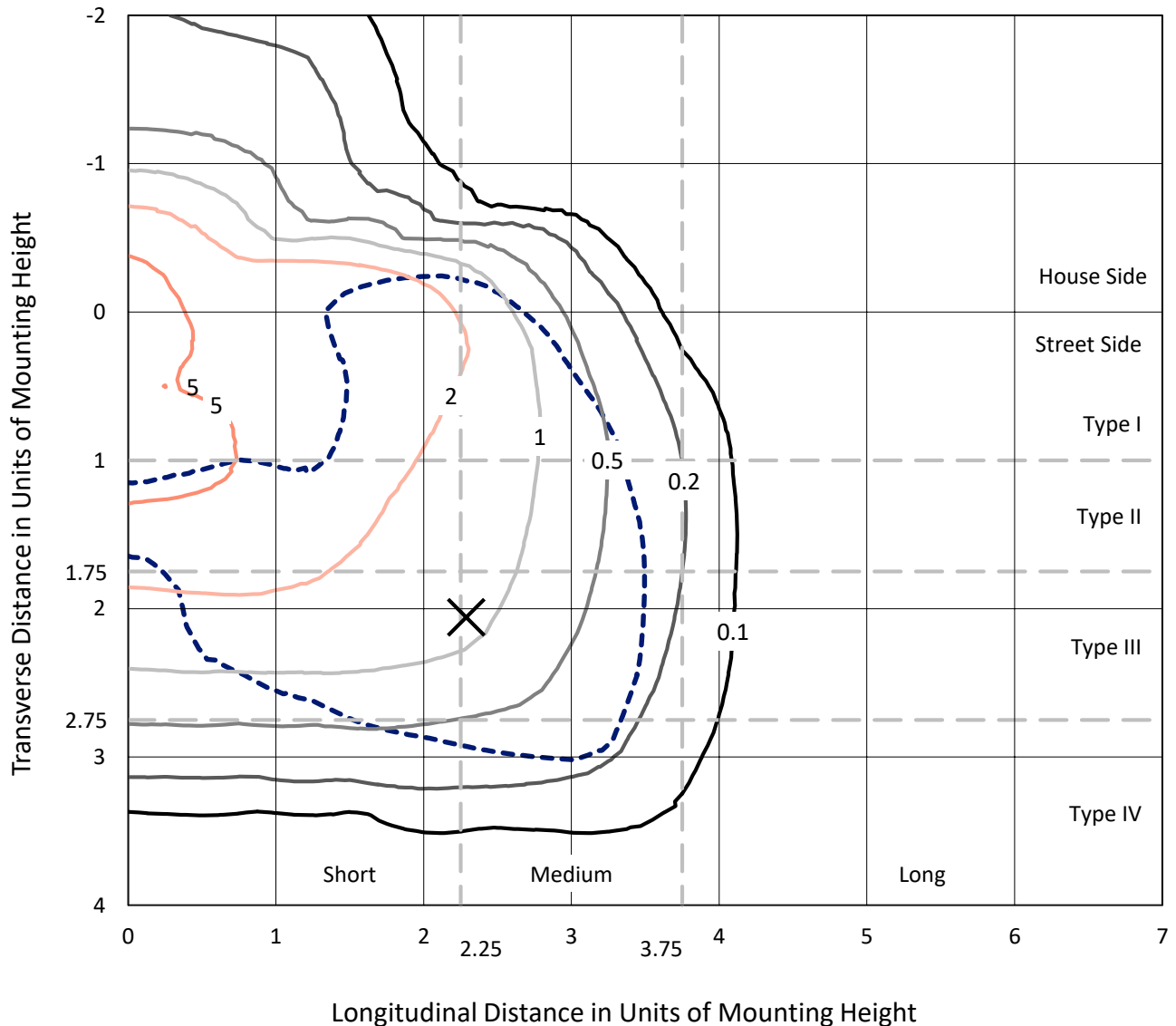


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

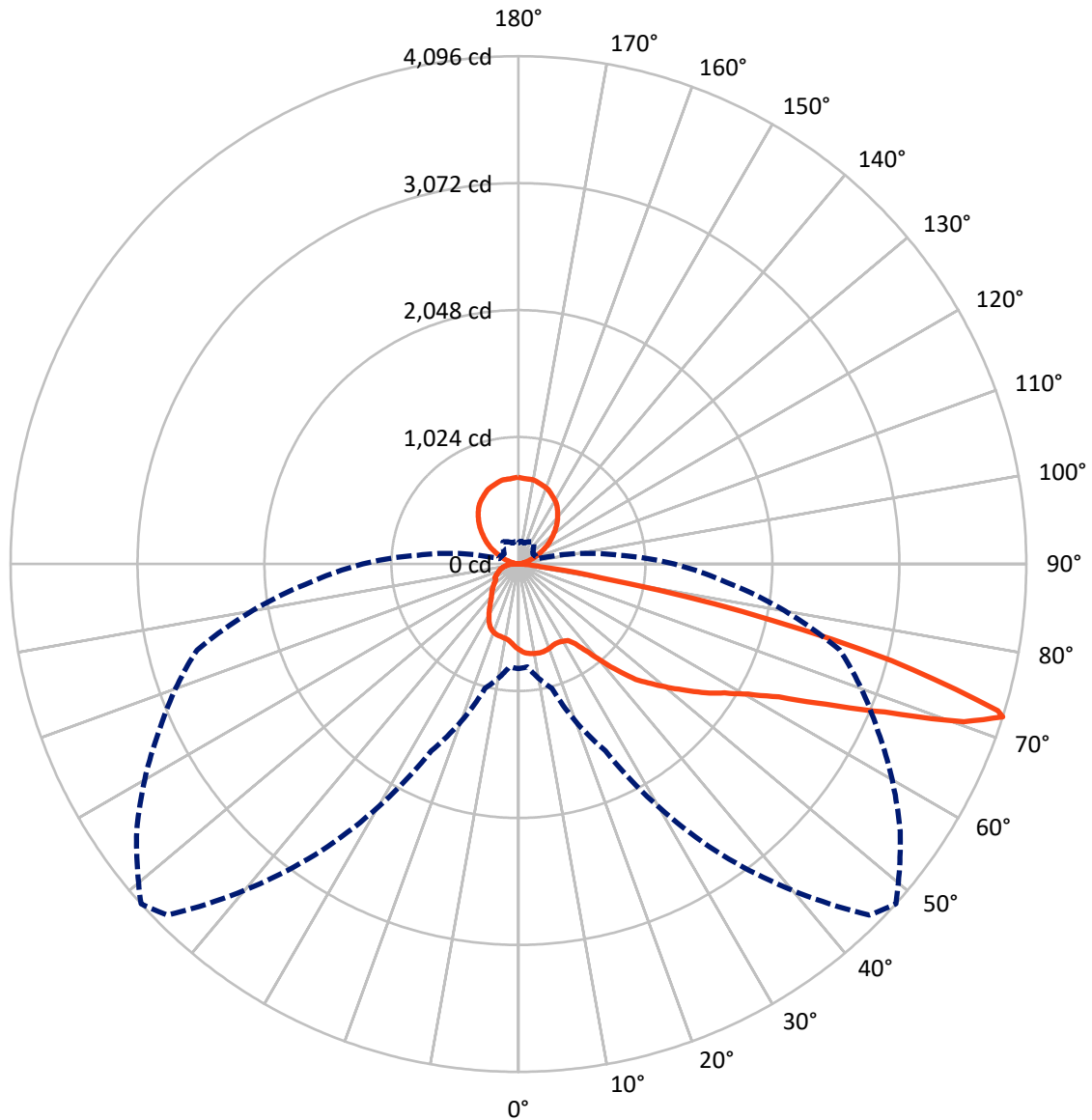


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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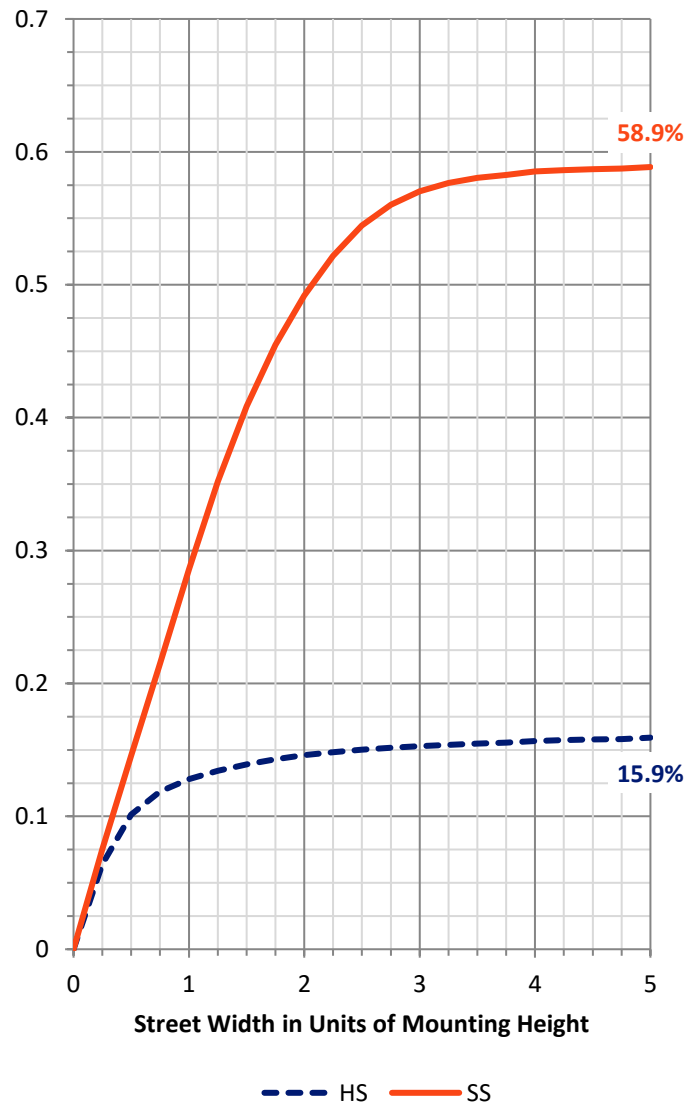
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1166.1	870.0	2036.1
	% Fixture	16.4	12.2	28.7
Street Side	Lumens	4198.3	868.4	5066.8
	% Fixture	59.1	12.2	71.3
Total	Lumens	5364.4	1738.4	7102.8
	% Fixture	75.5	24.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	0.9
10°-20°	190.7	2.7
20°-30°	294.1	4.1
30°-40°	440.7	6.2
40°-50°	733.9	10.3
50°-60°	1146.9	16.1
60°-70°	1515.0	21.3
70°-80°	876.4	12.3
80°-90°	101.5	1.4
90°-100°	12.5	0.2
100°-110°	57.4	0.8
110°-120°	166.1	2.3
120°-130°	273.2	3.8
130°-140°	336.8	4.7
140°-150°	344.6	4.9
150°-160°	290.3	4.1
160°-170°	191.2	2.7
170°-180°	66.3	0.9
0°-90°	5364.4	75.5
0°-180°	7102.8	100.0



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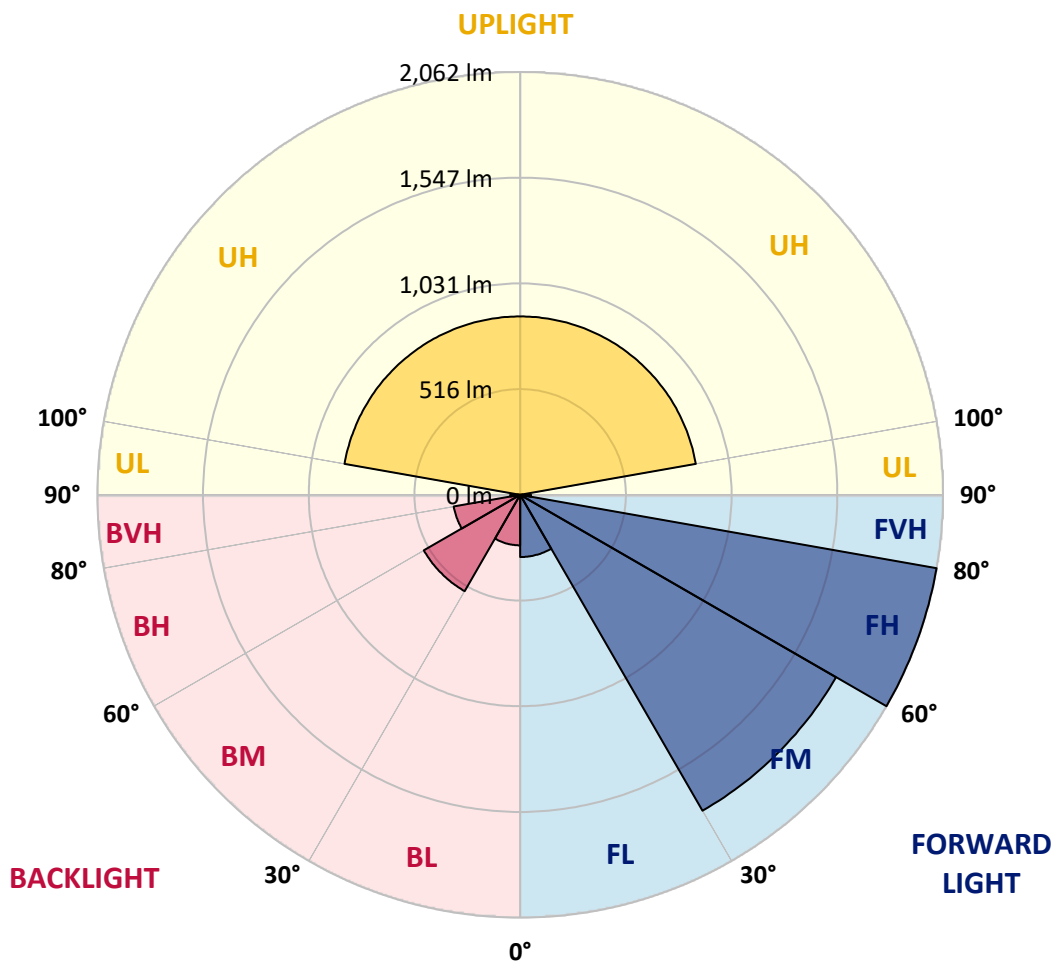
CATALOG NUMBER: IST-AF-1000-LED-E1-T4W-7030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	303.4	4.3			
FM	(30°-60°)	1779.2	25.0			
FH	(60°-80°)	2062.5	29.0			G2/5000
FVH	(80°-90°)	53.2	0.7			G1/100
BL	(0°-30°)	246.6	3.5	B1/500		
BM	(30°-60°)	542.4	7.6	B1/1000		
BH	(60°-80°)	328.9	4.6	B1/500		G1/500
BVH	(80°-90°)	48.3	0.7			G1/100
UL	(90°-100°)	12.5	0.2		U2/50	
UH	(100°-180°)	870.0	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°	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4
2.5°	727.0	726.2	726.2	720.0	717.6	713.8	710.6	706.0	701.3	695.8	688.8
5°	762.0	764.3	761.2	751.9	740.2	727.8	723.1	712.2	697.4	684.2	671.7
7.5°	795.5	796.3	787.7	772.1	754.2	734.8	728.5	713.8	697.4	679.5	661.6
10°	819.6	820.4	807.9	786.1	762.0	740.2	733.2	718.4	698.2	678.7	656.2
12.5°	833.6	834.4	815.7	793.1	764.3	742.5	736.3	720.8	699.7	674.8	649.9
15°	831.3	833.6	818.1	793.1	762.8	743.3	735.5	722.3	695.8	670.9	644.5
17.5°	815.7	818.8	806.4	779.1	755.0	739.4	730.9	717.6	692.0	665.5	636.7
20°	785.4	789.3	783.8	757.3	741.0	728.5	723.1	710.6	686.5	659.3	629.7
22.5°	751.1	755.0	753.4	731.7	723.9	717.6	712.2	702.9	681.8	654.6	626.6
25°	726.2	729.3	727.0	708.3	710.6	710.6	707.5	700.5	681.1	656.2	626.6
27.5°	767.5	767.5	747.2	709.1	705.2	712.2	710.6	706.7	691.2	663.9	632.8
30°	918.5	906.8	870.2	774.5	725.4	722.3	721.5	719.2	705.2	681.1	652.3
32.5°	1087.4	1075.7	1032.1	912.2	810.3	743.3	736.3	737.1	733.2	710.6	681.8
35°	1237.6	1236.0	1201.8	1071.8	941.8	817.3	789.3	770.6	769.0	759.7	737.1
37.5°	1359.0	1359.0	1362.1	1214.2	1084.2	934.8	887.3	828.2	828.2	822.7	808.7
40°	1497.6	1503.8	1510.8	1343.4	1236.8	1074.9	1021.2	931.7	904.4	913.0	916.1
42.5°	1679.7	1687.5	1682.8	1503.0	1376.1	1242.3	1176.1	1067.9	1001.0	1015.0	1047.7
45°	1802.7	1805.8	1839.3	1669.6	1551.3	1383.9	1327.9	1179.2	1113.0	1141.8	1199.4
47.5°	1942.0	1949.8	1955.2	1858.7	1756.7	1544.3	1441.5	1287.4	1244.6	1288.2	1379.2
50°	2078.2	2068.1	2082.9	2079.0	1951.3	1686.7	1564.5	1388.6	1391.7	1450.9	1600.3
52.5°	2196.5	2162.3	2196.5	2239.3	2202.0	1833.0	1690.6	1507.7	1552.8	1625.2	1861.0
55°	2287.6	2205.1	2262.7	2384.1	2375.5	1962.2	1834.6	1666.5	1742.0	1840.8	2177.8
57.5°	2101.6	2111.7	2270.5	2481.4	2477.5	2093.0	1960.7	1864.9	1957.6	2068.1	2553.0
60°	1928.0	1973.1	2218.3	2497.0	2548.3	2235.4	2130.4	2090.7	2176.3	2310.9	2912.6
62.5°	1836.1	1878.9	2133.5	2468.2	2661.2	2446.4	2358.4	2328.1	2444.8	2595.8	3233.3
65°	1864.9	1891.4	2128.0	2511.7	2791.2	2765.5	2727.4	2676.8	2735.1	2876.8	3378.1
67.5°	1784.0	1827.6	2082.9	2588.8	3028.6	3154.7	3186.6	3132.1	3083.1	3063.6	3167.1
70°	1327.9	1369.9	1637.7	2270.5	3223.2	3830.3	3810.8	3628.7	3298.7	3023.1	2474.4
72°	843.7	832.1	1036.8	1663.3	2865.1	4003.9	4095.7	3758.7	3200.6	2684.5	1680.5
72.5°	613.3	668.6	860.1	1478.9	2721.9	3908.9	4042.8	3716.6	3072.2	2535.9	1478.1
75°	149.4	158.0	206.3	530.1	1594.1	2941.4	3109.5	2871.3	2242.4	1505.3	655.4
77.5°	101.2	105.1	136.2	186.8	468.6	1677.4	1845.5	1585.5	1003.3	512.2	291.9
80°	75.5	77.8	98.9	132.3	194.6	572.1	674.8	536.3	249.9	284.1	207.8
82.5°	52.9	54.5	74.7	97.3	129.2	133.9	178.2	196.9	161.9	186.0	121.4
85°	36.6	36.6	54.5	66.9	81.7	66.2	70.8	98.9	109.7	110.5	73.9
87.5°	19.5	21.8	31.9	42.8	42.8	30.4	33.5	50.6	61.5	66.2	44.4
90°	12.0	12.0	20.2	24.3	18.1	14.8	14.0	17.1	23.8	30.0	21.0
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	6.3	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	9.9	12.0	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	23.4	29.0	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	43.0	50.0	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	65.7	72.0	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	90.1	95.0	94.0	90.0	87.0



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CATALOG NUMBER: IST-AF-1000-LED-E1-T4W-7030-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	66.0	68.0	74.0	87.0	102.0	114.0	115.8	120.0	121.0	119.0	116.0
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	144.5	148.0	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	175.5	179.0	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	206.8	211.0	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	243.9	246.0	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	277.6	279.0	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	310.9	313.0	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	341.5	345.0	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	373.5	377.0	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	406.8	411.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	438.8	443.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	469.5	473.0	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	497.9	500.0	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	525.6	527.0	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	552.5	556.0	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	576.5	580.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	594.2	597.0	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	610.3	611.0	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	627.4	626.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.7	644.0	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	655.9	658.0	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	664.2	667.0	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.7	672.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	682.9	678.0	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	689.5	686.0	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.7	689.0	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	690.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.7	694.0	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°	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4
2.5°	687.3	682.6	676.4	673.3	671.7	668.6	665.5	663.9	663.9	660.8	661.6
5°	665.5	658.5	649.9	643.7	642.9	642.9	644.5	644.5	645.3	642.9	646.0
7.5°	654.6	646.8	634.4	627.4	621.9	621.1	624.2	630.5	633.6	631.2	634.4
10°	646.8	638.3	624.2	615.7	611.8	610.2	612.6	618.8	628.9	628.9	632.0
12.5°	639.0	628.1	614.1	607.9	604.8	605.6	608.7	613.3	624.2	628.1	629.7
15°	631.2	618.8	607.1	598.6	598.6	600.9	604.8	610.2	620.3	627.4	628.9
17.5°	623.5	611.0	600.9	593.9	593.9	597.0	600.9	607.9	614.9	625.0	625.0
20°	616.5	606.3	593.1	586.9	586.1	588.4	593.1	600.1	605.6	615.7	616.5
22.5°	612.6	600.1	587.7	578.3	574.4	572.9	577.5	584.5	590.0	600.1	601.7
25°	611.0	597.0	581.4	564.3	554.2	551.1	553.4	562.0	566.6	574.4	576.8
27.5°	616.5	603.2	579.1	548.0	526.9	518.4	520.7	526.2	527.7	536.3	540.2
30°	635.1	619.6	583.8	530.8	492.7	477.1	477.1	477.9	480.2	487.2	488.0
32.5°	665.5	650.7	597.8	512.9	457.7	435.9	430.4	426.5	426.5	425.8	426.5
35°	721.5	709.1	621.9	492.7	419.5	395.4	382.2	375.2	368.2	365.0	364.3
37.5°	802.5	791.6	656.2	469.3	386.1	361.9	345.6	331.6	323.8	323.0	326.9
40°	923.1	912.2	694.3	442.9	354.2	336.2	319.1	304.3	295.8	296.6	300.4
42.5°	1071.8	1038.3	735.5	407.1	328.5	319.1	300.4	288.0	279.4	274.8	274.0
45°	1245.4	1189.3	774.5	373.6	300.4	304.3	286.4	272.4	261.5	249.1	247.5
47.5°	1461.7	1340.3	808.7	340.1	270.1	288.8	271.6	258.4	242.1	227.3	224.9
50°	1687.5	1513.9	838.3	304.3	242.8	271.6	256.9	239.0	216.4	203.2	203.2
52.5°	1948.2	1722.5	876.4	264.6	221.8	253.0	238.2	214.8	196.1	194.6	194.6
55°	2238.5	1941.2	902.9	233.5	205.5	232.7	225.7	218.7	212.5	214.0	214.8
57.5°	2542.1	2169.3	879.5	211.7	192.3	228.1	248.3	239.0	219.5	218.7	217.9
60°	2803.6	2346.7	750.3	197.7	182.1	235.8	266.2	239.0	219.5	229.6	230.4
62.5°	2974.9	2430.8	499.7	179.8	167.3	222.6	260.0	231.9	220.3	249.1	251.4
65°	2951.5	2336.6	287.2	167.3	158.0	204.7	251.4	223.4	205.5	221.8	217.2
67.5°	2603.6	1958.3	207.8	161.9	151.0	192.3	235.8	210.9	191.5	211.7	203.2
70°	1871.2	1333.3	179.0	157.2	146.3	177.5	224.9	203.2	183.7	197.7	184.5
72°	1255.5	811.0	164.2	153.3	141.7	168.1	217.2	196.9	176.7	184.5	169.7
72.5°	1068.7	639.8	160.3	151.8	140.1	165.8	214.8	195.4	175.1	182.9	168.9
75°	399.3	250.6	142.4	140.1	129.2	154.1	205.5	188.4	167.3	165.0	158.8
77.5°	205.5	158.8	121.4	123.8	116.0	140.9	195.4	177.5	154.1	145.6	142.4
80°	149.4	115.2	98.1	105.1	98.9	126.9	181.4	161.1	140.1	130.8	126.9
82.5°	94.2	71.6	74.7	83.3	84.1	112.1	165.0	144.8	124.5	116.8	110.5
85°	45.1	42.8	52.9	61.5	67.7	95.0	151.0	128.4	109.0	93.4	94.2
87.5°	24.1	32.7	31.9	41.3	52.1	77.8	133.9	105.1	87.2	70.1	70.8
90°	12.4	15.6	18.3	25.3	28.0	40.5	94.4	67.9	65.4	29.9	26.8
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0
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)