

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: P226450

Luminaire Tested: **IST-AF-1000-LED-E1-T3-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226450
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-1000-LED-E1-T3-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7985.4 lumens
Efficiency: N/A
Efficacy: 112.0 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 - G2

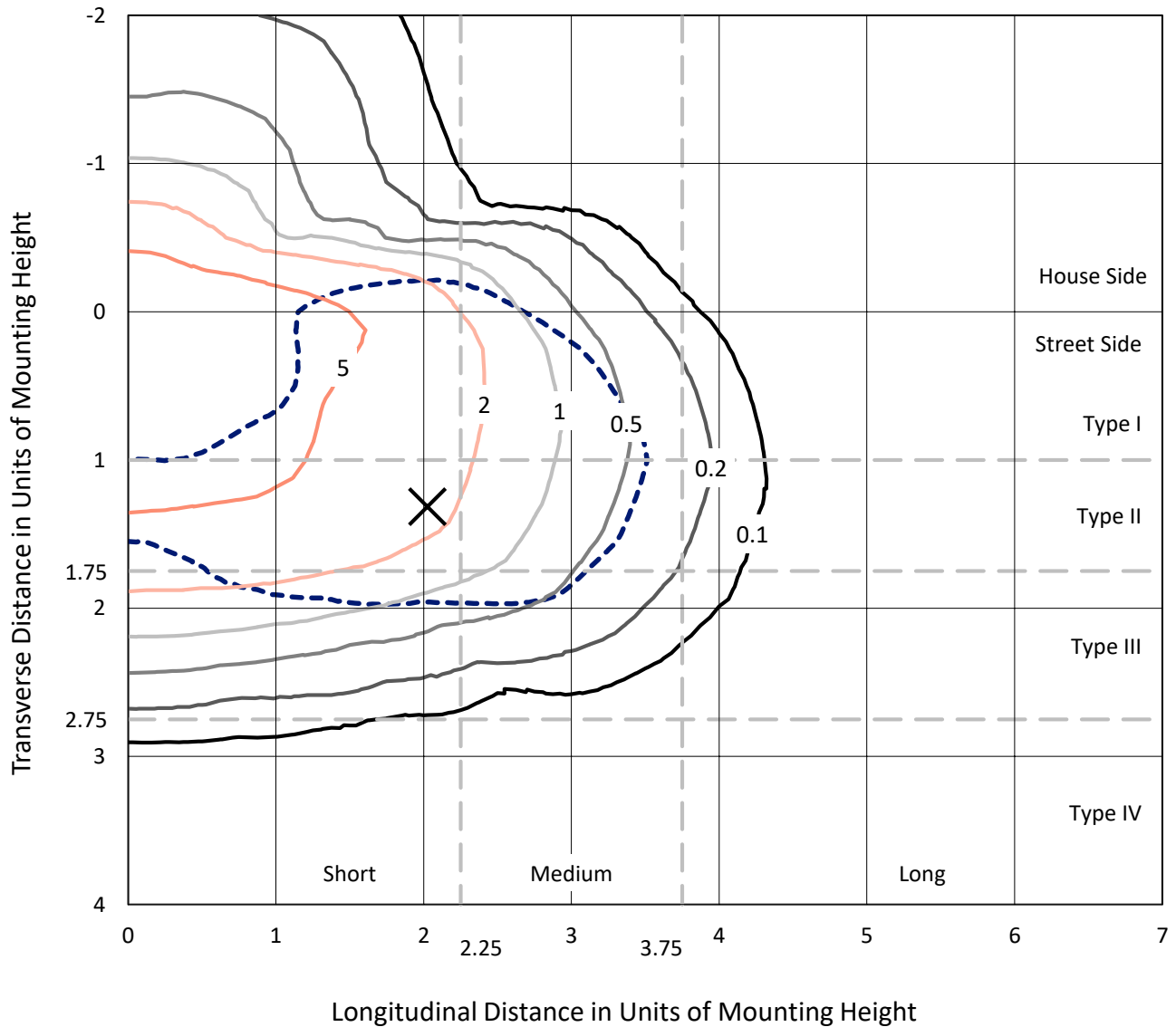
Input Watts (W): 71.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

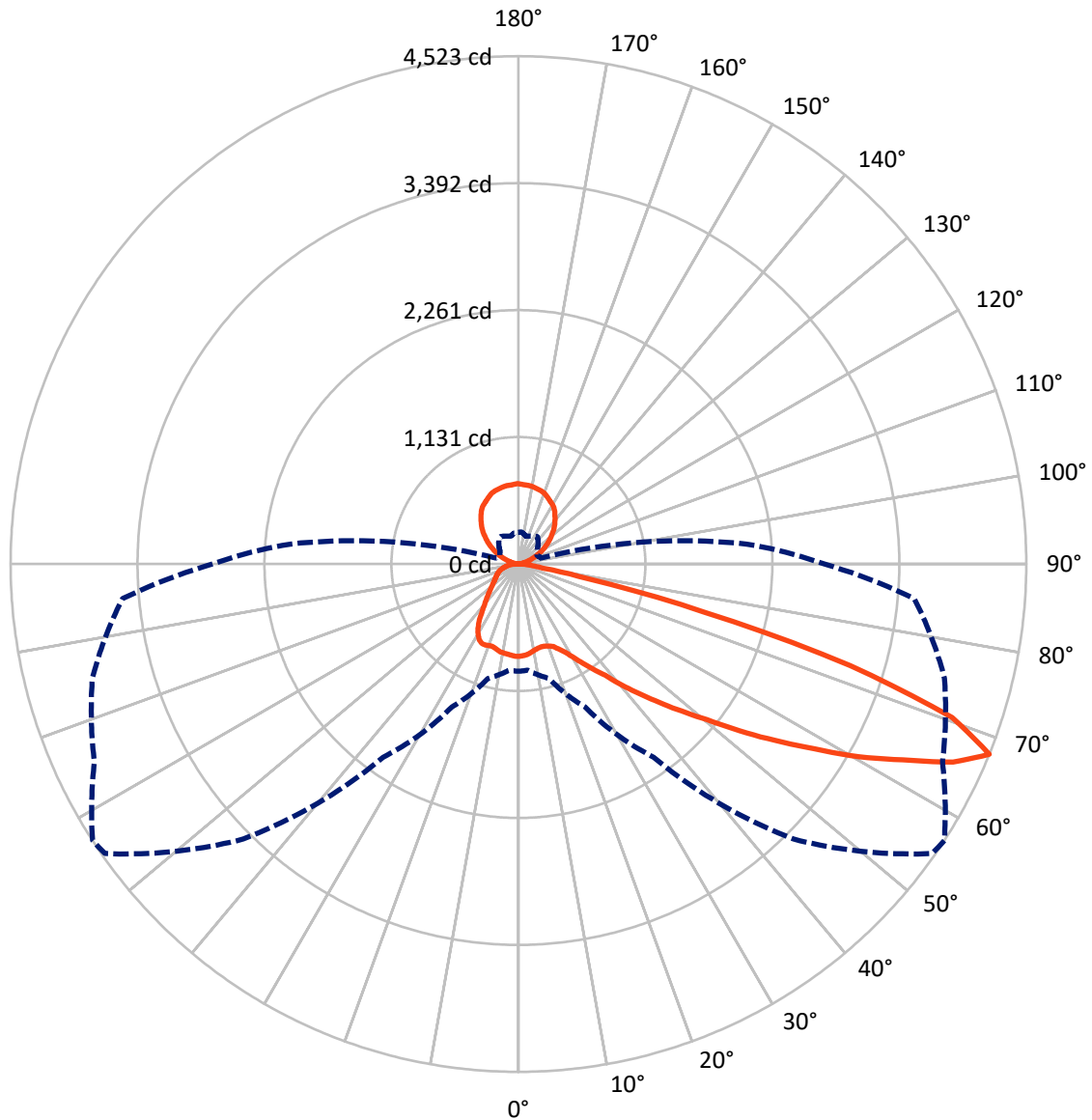
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 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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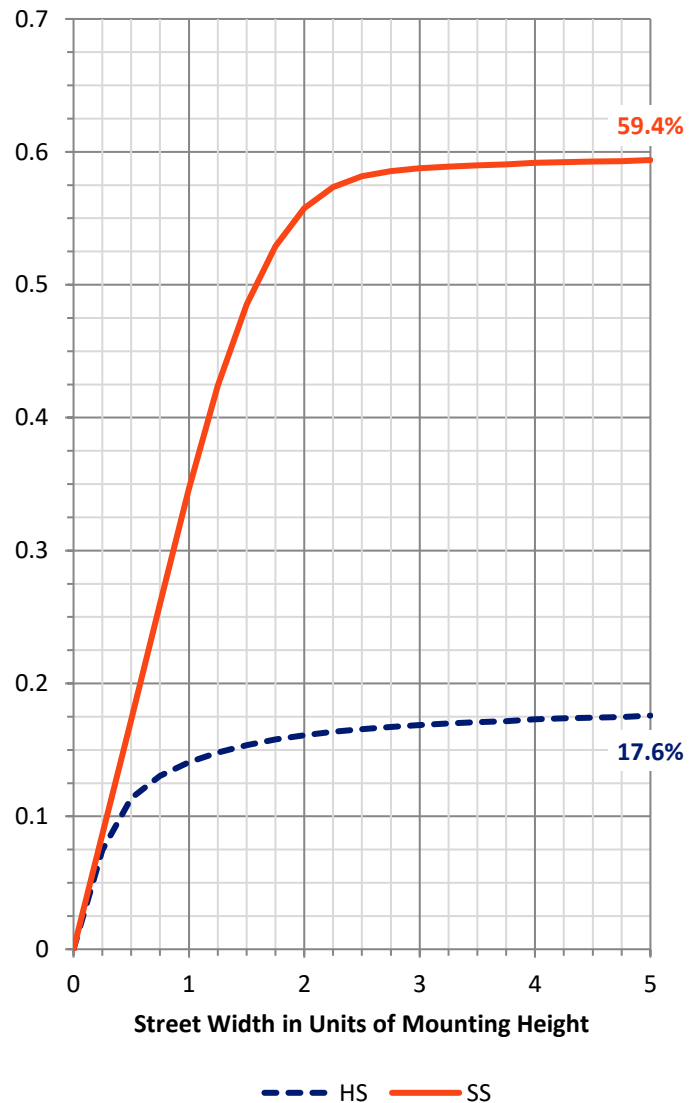
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1445.5	889.3	2334.8
	% Fixture	18.1	11.1	29.2
Street Side	Lumens	4762.6	888.0	5650.5
	% Fixture	59.6	11.1	70.8
Total	Lumens	6208.1	1777.3	7985.4
	% Fixture	77.7	22.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	1.0
10°-20°	221.2	2.8
20°-30°	380.7	4.8
30°-40°	618.9	7.8
40°-50°	998.3	12.5
50°-60°	1488.3	18.6
60°-70°	1676.3	21.0
70°-80°	646.2	8.1
80°-90°	101.2	1.3
90°-100°	11.8	0.1
100°-110°	58.7	0.7
110°-120°	169.9	2.1
120°-130°	279.4	3.5
130°-140°	344.6	4.3
140°-150°	352.5	4.4
150°-160°	297.0	3.7
160°-170°	195.5	2.4
170°-180°	67.8	0.8
0°-90°	6208.1	77.7
0°-180°	7985.4	100.0



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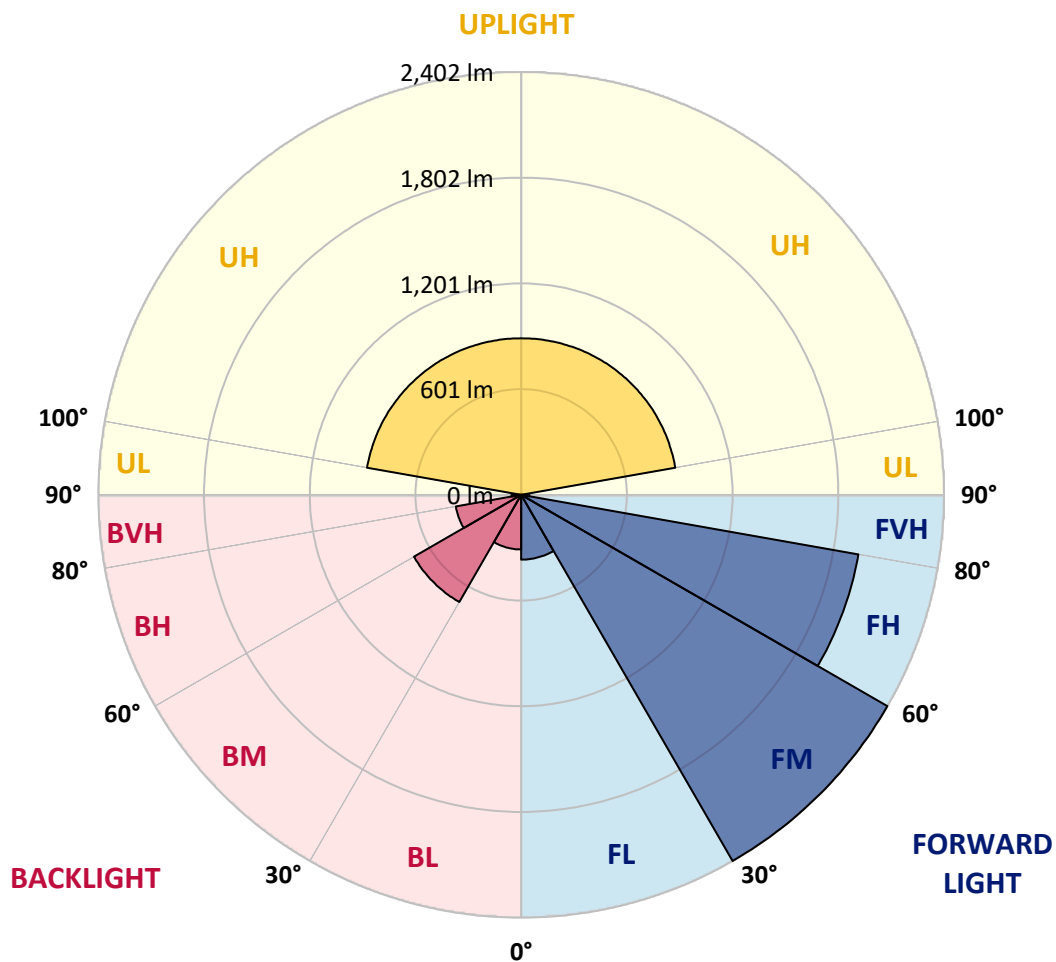
CATALOG NUMBER: IST-AF-1000-LED-E1-T3-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	368.3	4.6			
FM (30°-60°)	2402.3	30.1			
FH (60°-80°)	1945.5	24.4			G2/5000
FVH (80°-90°)	46.5	0.6			G1/100
BL (0°-30°)	310.5	3.9	B1/500		
BM (30°-60°)	703.3	8.8	B1/1000		
BH (60°-80°)	377.1	4.7	B1/500		G1/500
BVH (80°-90°)	54.7	0.7			G1/100
UL (90°-100°)	11.8	0.1		U2/50	
UH (100°-180°)	889.3	11.1		U4/1000	

BUG Rating: B1-U5-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9
2.5°	816.5	818.4	820.2	819.3	819.3	819.3	819.3	817.4	820.2	820.2	818.4
5°	803.1	803.9	804.9	806.7	808.4	810.3	811.2	811.2	812.0	811.2	809.4
7.5°	783.3	784.2	787.8	787.8	789.6	793.2	794.9	796.8	799.4	799.4	798.6
10°	777.0	777.0	777.0	774.3	776.1	777.0	779.7	779.7	786.9	790.4	792.3
12.5°	784.2	783.3	783.3	776.1	769.8	767.1	769.8	770.7	778.8	784.2	787.8
15°	800.4	800.4	798.6	787.8	775.2	765.3	764.5	764.5	770.7	778.8	785.1
17.5°	838.1	841.8	829.2	812.0	791.4	775.2	768.8	768.0	772.5	778.8	785.1
20°	910.1	909.2	890.3	859.7	823.8	796.8	781.5	779.7	778.8	782.4	789.6
22.5°	995.5	992.0	969.5	930.8	881.3	831.9	802.2	798.6	791.4	794.1	803.9
25°	1087.3	1088.1	1060.3	1010.0	947.9	888.5	843.5	839.9	824.7	822.9	833.6
27.5°	1179.0	1190.7	1152.9	1105.2	1031.5	960.4	894.8	889.5	876.0	871.5	882.2
30°	1313.0	1308.5	1261.7	1199.6	1126.0	1036.9	974.0	964.0	937.0	943.4	955.0
32.5°	1426.3	1436.2	1393.9	1320.2	1223.0	1129.5	1056.7	1051.3	1025.2	1032.4	1048.6
35°	1564.8	1588.1	1532.4	1441.5	1348.0	1251.8	1164.6	1150.2	1129.5	1143.9	1156.5
37.5°	1723.1	1734.7	1691.6	1574.6	1479.4	1378.6	1279.7	1257.2	1234.7	1264.4	1286.9
40°	1874.1	1893.1	1837.2	1738.3	1627.7	1531.5	1423.5	1419.1	1367.0	1399.3	1457.8
42.5°	2098.1	2121.4	2032.4	1917.3	1817.5	1701.5	1599.0	1574.6	1518.1	1563.9	1661.9
45°	2254.6	2253.7	2193.4	2098.1	2036.9	1924.5	1786.0	1757.2	1696.1	1757.2	1888.6
47.5°	2311.2	2324.7	2304.0	2292.3	2270.7	2188.9	1984.7	1957.7	1900.2	1991.1	2112.5
50°	2394.8	2391.2	2391.2	2463.2	2525.3	2508.2	2217.7	2179.0	2118.7	2227.6	2402.0
52.5°	2416.4	2384.1	2434.4	2572.0	2768.9	2783.3	2488.3	2466.7	2394.8	2500.9	2715.8
55°	2356.2	2348.1	2428.1	2627.8	2938.0	3040.5	2802.2	2772.5	2691.6	2782.4	3054.9
57.5°	2221.2	2242.0	2370.6	2616.1	3054.9	3267.1	3146.6	3104.3	2988.3	3043.2	3391.3
60°	2080.1	2090.0	2259.9	2574.7	3086.3	3424.5	3508.2	3483.9	3285.1	3317.5	3640.4
62.5°	1923.6	1900.2	2076.5	2540.5	3051.4	3641.3	3858.9	3840.0	3605.3	3595.4	3817.6
65°	1486.6	1518.9	1669.0	2099.8	2811.2	3810.3	4277.1	4252.8	3962.3	3824.7	3798.6
67.5°	955.0	948.8	1054.9	1403.8	2100.7	3463.2	4495.6	4522.6	4166.5	3928.1	3537.9
70°	342.6	352.5	392.1	637.6	1152.0	2307.6	3963.2	4097.2	4016.3	3734.8	2879.5
72.5°	208.7	208.7	237.4	286.8	466.8	1094.5	2824.7	3090.0	3277.9	3077.4	2126.8
75°	163.7	162.8	172.7	197.8	251.9	358.9	1501.8	1706.9	2102.6	2125.9	1210.5
77.5°	129.5	128.6	138.5	150.2	187.9	189.8	479.4	624.1	964.9	908.3	432.6
80°	104.3	103.4	110.6	114.2	137.6	131.3	192.4	223.0	338.1	296.8	187.1
82.5°	94.4	94.4	101.6	87.3	95.3	92.6	119.6	127.7	170.0	176.3	112.4
85°	61.2	62.9	95.3	84.5	62.1	56.7	76.4	80.9	106.1	116.0	54.8
87.5°	28.7	31.5	72.8	70.2	41.3	30.6	43.2	45.8	57.6	71.1	32.3
90°	10.5	10.5	16.2	18.1	13.6	12.6	14.3	13.9	15.5	18.2	16.2
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	7.2	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.4	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	11.9	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	29.1	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	50.5	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	73.2	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	97.0	96.2	92.1	89.0
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.0	123.8	121.7	118.7



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CATALOG NUMBER: IST-AF-1000-LED-E1-T3-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	151.8	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	183.7	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	216.7	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	252.5	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	286.2	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	320.6	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.1	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	386.5	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	421.5	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	454.2	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	484.3	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	511.9	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	540.3	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	570.0	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	594.3	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	611.3	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	625.6	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	641.4	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	659.6	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	674.3	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	683.1	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	688.4	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	694.8	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	702.4	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	705.4	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	706.9	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	711.0	715.0	717.1	714.0
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9	822.9
2.5°	821.0	819.3	820.2	821.0	821.9	824.7	825.5	825.5	825.5	824.7	826.4
5°	811.2	809.4	809.4	812.0	814.8	818.4	823.8	828.3	830.0	830.9	830.9
7.5°	800.4	798.6	799.4	803.9	808.4	811.2	816.5	819.3	826.4	826.4	828.3
10°	793.2	794.9	795.9	800.4	803.9	803.9	803.1	801.3	799.4	803.9	802.2
12.5°	788.7	791.4	790.4	795.9	797.7	790.4	779.7	765.3	763.5	765.3	767.1
15°	786.9	786.9	789.6	789.6	780.6	766.2	752.7	753.6	755.4	760.8	760.8
17.5°	786.9	787.8	789.6	783.3	767.1	754.5	751.8	749.1	739.2	736.5	733.9
20°	793.2	791.4	793.2	781.5	767.1	757.2	736.5	716.8	697.9	689.8	686.2
22.5°	808.4	805.8	804.9	793.2	775.2	741.9	701.4	670.9	638.5	627.7	624.1
25°	835.4	834.5	828.3	820.2	769.8	705.0	653.8	605.2	570.2	551.3	552.2
27.5°	883.1	883.1	879.5	843.5	741.9	659.2	589.9	540.5	504.5	486.5	483.9
30°	955.0	956.9	958.6	849.9	697.9	591.8	519.8	486.5	464.9	451.4	450.5
32.5°	1044.1	1053.9	1042.3	842.6	637.6	509.9	464.9	453.3	442.4	433.4	432.6
35°	1161.9	1188.9	1115.1	813.9	570.2	454.2	431.7	423.6	415.5	409.2	410.1
37.5°	1320.2	1346.2	1161.9	765.3	483.9	422.7	412.8	400.2	387.6	374.1	372.4
40°	1507.2	1499.1	1178.0	673.6	429.8	407.3	393.9	377.7	356.1	336.3	332.8
42.5°	1694.3	1640.3	1164.6	560.3	394.8	393.9	375.0	354.4	332.8	315.7	315.7
45°	1903.8	1764.4	1123.2	454.2	366.9	379.5	356.1	334.5	314.8	302.2	301.3
47.5°	2101.7	1880.4	1054.9	378.6	339.0	360.6	341.8	321.9	303.1	292.3	289.6
50°	2333.7	2012.7	1002.7	327.3	312.1	341.8	333.7	315.7	297.7	285.1	283.3
52.5°	2568.4	2141.2	963.1	292.3	287.8	327.3	330.0	319.3	300.3	276.1	274.3
55°	2813.9	2302.3	884.0	264.4	266.2	316.6	334.5	326.4	312.9	273.4	271.6
57.5°	3019.9	2450.6	745.5	245.5	249.1	308.4	336.3	321.0	305.8	275.2	272.5
60°	3180.9	2552.2	546.8	230.3	233.8	299.4	328.3	302.2	282.3	275.2	270.7
62.5°	3230.3	2555.8	363.4	212.3	222.1	284.2	313.8	292.3	268.9	272.5	270.7
65°	3106.2	2420.9	259.9	195.2	212.3	266.2	307.6	282.3	262.6	277.0	275.2
67.5°	2724.0	2039.6	208.7	181.7	198.8	247.3	295.8	273.4	257.2	286.8	281.5
70°	2122.3	1463.1	177.2	168.2	184.3	229.3	279.7	263.5	250.0	278.8	271.6
72.5°	1399.3	861.5	156.5	155.6	167.3	214.0	261.7	254.5	238.3	252.7	241.9
75°	730.2	399.3	135.7	141.2	148.4	200.5	245.5	238.3	220.3	225.8	222.1
77.5°	286.8	187.1	117.8	124.1	132.2	180.8	224.8	217.6	202.3	197.8	196.9
80°	157.3	125.9	98.0	106.1	111.5	162.8	203.3	195.2	178.9	176.3	173.6
82.5°	99.8	81.8	80.9	86.3	93.5	144.7	182.6	170.0	156.5	184.3	149.2
85°	46.7	48.6	57.6	64.8	72.8	123.2	159.2	145.7	132.2	128.6	114.2
87.5°	26.1	32.3	37.7	44.1	50.3	86.3	125.9	113.3	98.9	84.5	87.3
90°	13.5	13.5	19.9	19.1	17.9	19.7	70.3	63.9	56.7	28.5	20.4
92.5°	6.1	6.1	6.1	7.2	7.2	6.1	6.1	6.1	5.1	4.1	4.1
95°	7.2	7.2	7.2	8.2	7.2	7.2	7.2	7.2	6.1	5.1	5.1
97.5°	8.2	8.2	9.2	10.2	12.3	9.2	9.2	8.2	8.2	7.2	7.2
100°	19.4	19.4	23.5	26.6	29.7	21.5	12.3	10.2	9.2	8.2	8.2
102.5°	38.9	39.9	43.0	48.1	51.1	40.9	27.6	18.4	13.3	11.3	11.3
105°	62.4	62.4	66.5	71.6	73.7	64.4	49.1	36.8	27.6	22.5	21.5
107.5°	88.0	89.0	92.1	96.2	97.2	90.0	74.7	59.3	50.1	43.0	41.9
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	150.4	150.4	152.4	153.4	151.4	146.3	137.1	123.8	108.4	101.3	101.3
115°	182.1	181.1	183.1	186.2	183.1	178.0	171.9	162.6	150.4	142.2	143.2
117.5°	213.8	212.8	214.8	219.9	215.8	209.7	206.6	201.5	193.3	188.2	188.2
120°	248.6	248.6	250.6	255.7	251.6	248.6	242.4	238.3	231.2	228.1	230.2
122.5°	283.4	282.3	284.4	289.5	285.4	283.4	277.2	273.1	267.0	266.0	269.0
125°	317.1	317.1	317.1	322.2	320.2	317.1	312.0	305.9	302.8	300.7	304.8
127.5°	355.0	352.9	353.9	353.9	352.9	347.8	346.8	340.6	336.6	336.6	337.6
130°	388.7	387.7	389.7	389.7	385.7	380.5	378.5	374.4	370.3	369.3	371.3
132.5°	424.5	423.5	423.5	425.5	420.4	414.3	413.3	410.2	402.0	403.0	405.1
135°	461.4	460.3	457.3	458.3	453.2	447.0	445.0	441.9	435.8	435.8	438.8
137.5°	493.1	492.0	486.9	485.9	483.9	478.7	474.6	470.6	469.5	467.5	470.6
140°	522.7	520.7	515.6	513.5	511.5	508.4	502.3	500.2	498.2	496.1	499.2
142.5°	548.3	546.3	545.2	545.2	539.1	537.0	533.0	529.9	528.9	526.8	529.9
145°	572.9	570.8	573.9	574.9	568.8	563.6	562.6	559.6	556.5	558.5	562.6
147.5°	598.4	596.4	599.4	598.4	593.3	588.2	587.2	587.2	584.1	585.1	588.2
150°	624.0	619.9	616.8	613.8	610.7	606.6	606.6	606.6	606.6	605.6	608.7
152.5°	642.4	637.3	632.2	628.1	625.0	624.0	624.0	623.0	622.0	622.0	625.0
155°	655.7	652.6	650.6	645.5	640.4	642.4	644.5	641.4	639.3	639.3	643.4
157.5°	670.0	664.9	664.9	662.9	658.8	659.8	660.8	658.8	657.8	657.8	660.8
160°	681.3	675.1	676.2	679.2	673.1	670.0	670.0	671.1	674.1	675.1	678.2
162.5°	689.5	683.3	685.4	686.4	682.3	678.2	676.2	680.3	684.4	684.4	688.4
165°	697.7	693.6	695.6	692.5	687.4	688.4	688.4	691.5	691.5	693.6	696.6
167.5°	709.9	703.8	703.8	699.7	693.6	700.7	703.8	701.7	699.7	702.8	705.8
170°	717.1	712.0	709.9	704.8	701.7	706.9	708.9	707.9	707.9	711.0	714.0
172.5°	717.1	712.0	709.9	707.9	704.8	705.8	705.8	708.9	711.0	713.0	715.0
175°	715.0	709.9	712.0	711.0	705.8	705.8	706.9	711.0	713.0	714.0	716.1
177.5°	718.1	714.0	717.1	715.0	709.9	711.0	713.0	715.0	716.1	721.2	723.2
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1

(END OF REPORT)