

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: P271653

Luminaire Tested: **IST-AF-800-LED-E1-SL3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271653
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35946)
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-SL3-7027
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III W/SPILL CONTROL
Light Source: (16) 2700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4213.2 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U1 - G1

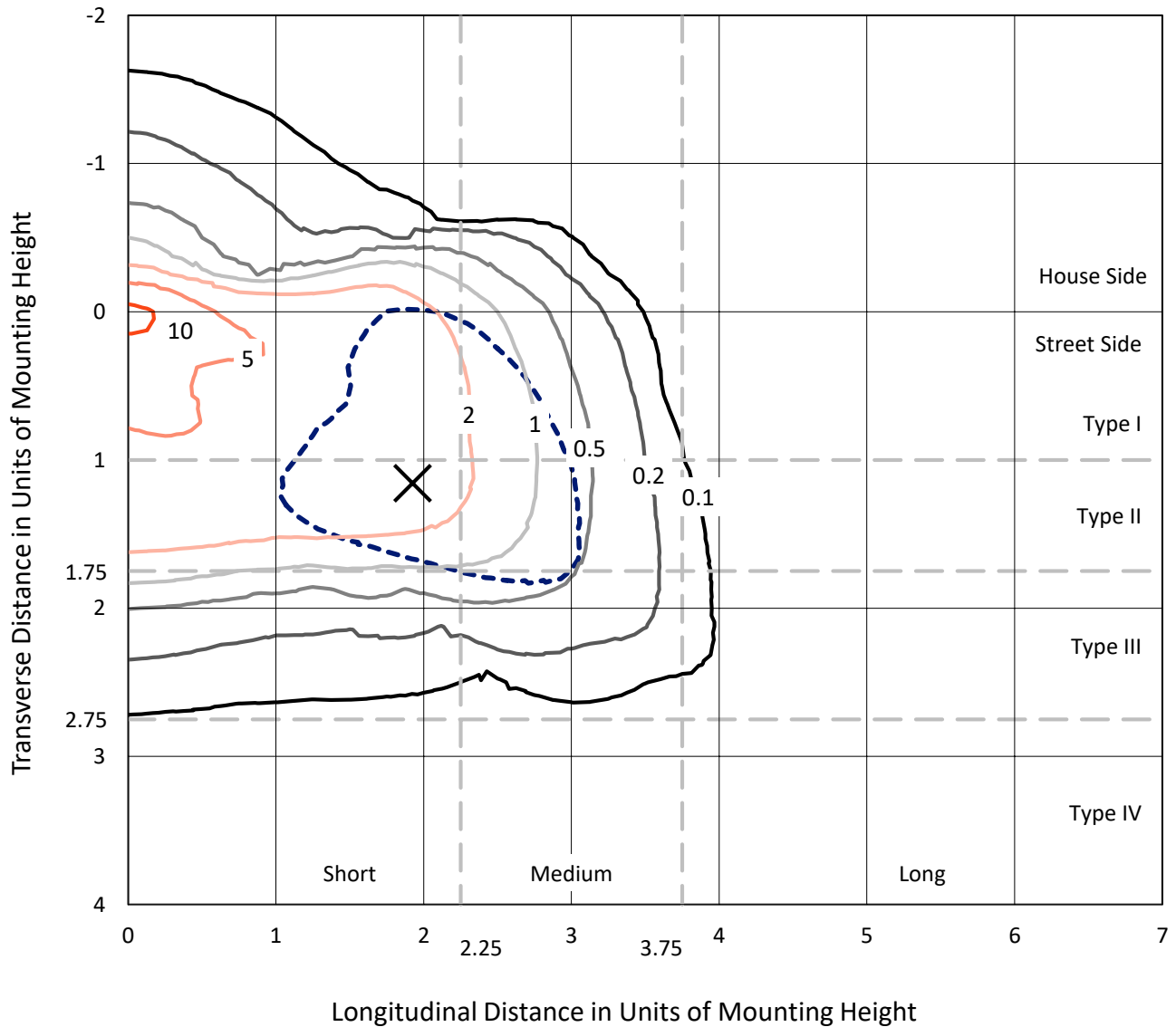
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P271653
 CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

Iso-Footcandle Lines of Horizontal Illumination

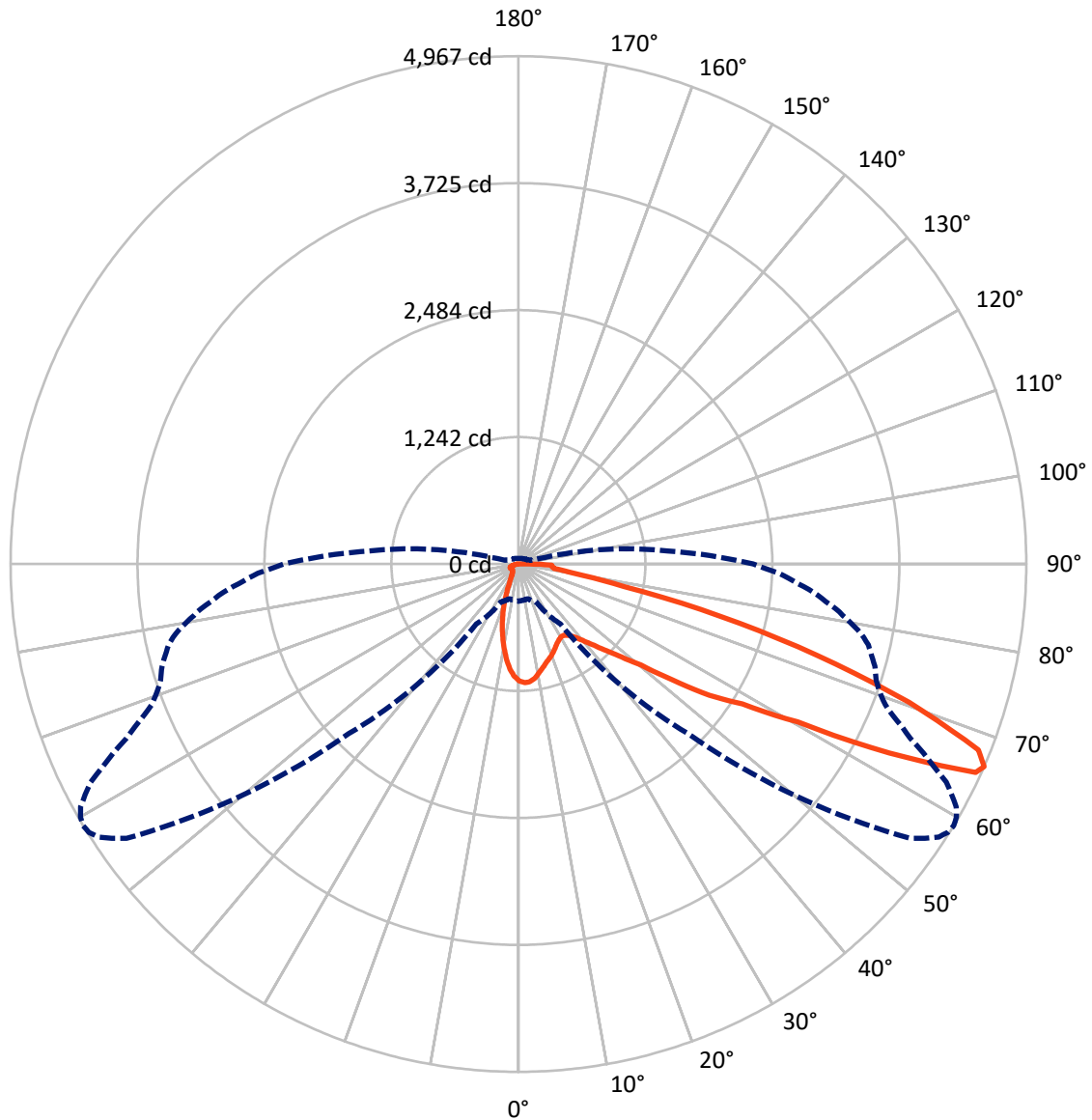
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P271653
CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P271653

CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

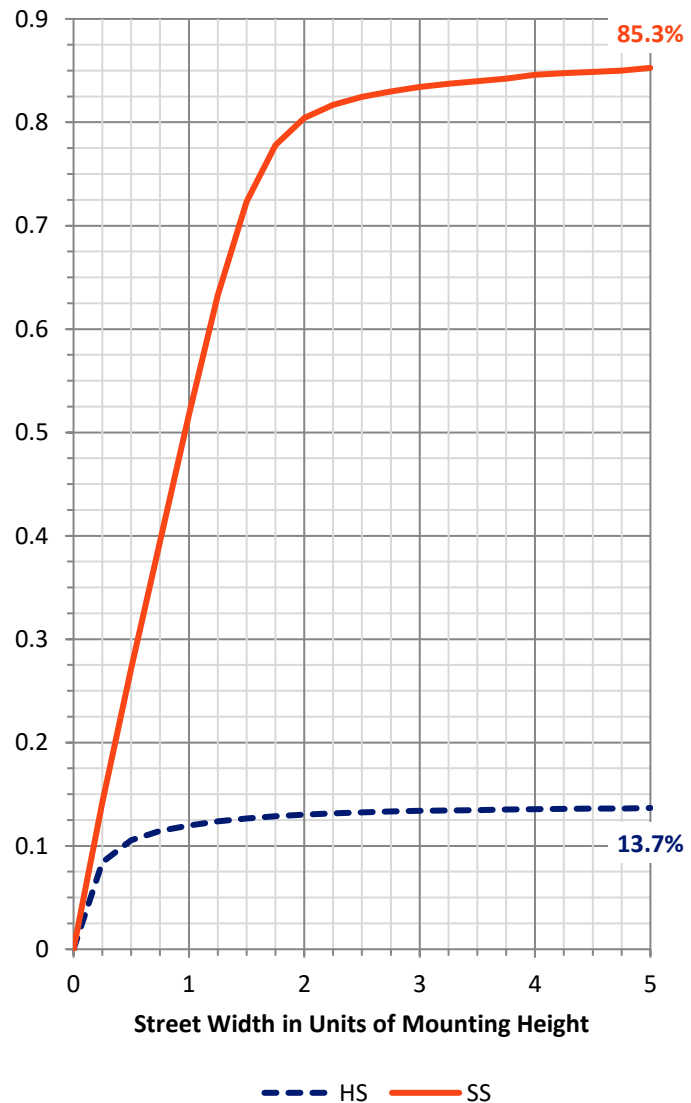
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	584.6	0.3	584.8
	% Fixture	13.9	0.0	13.9
Street Side	Lumens	3626.9	1.5	3628.4
	% Fixture	86.1	0.0	86.1
Total	Lumens	4211.4	1.8	4213.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.6	2.3
10°-20°	206.1	4.9
20°-30°	258.5	6.1
30°-40°	353.7	8.4
40°-50°	569.0	13.5
50°-60°	988.8	23.5
60°-70°	1201.4	28.5
70°-80°	448.2	10.6
80°-90°	88.2	2.1
90°-100°	1.8	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°	4211.4	100.0
0°-180°	4213.2	100.0



REPORT NUMBER: P271653

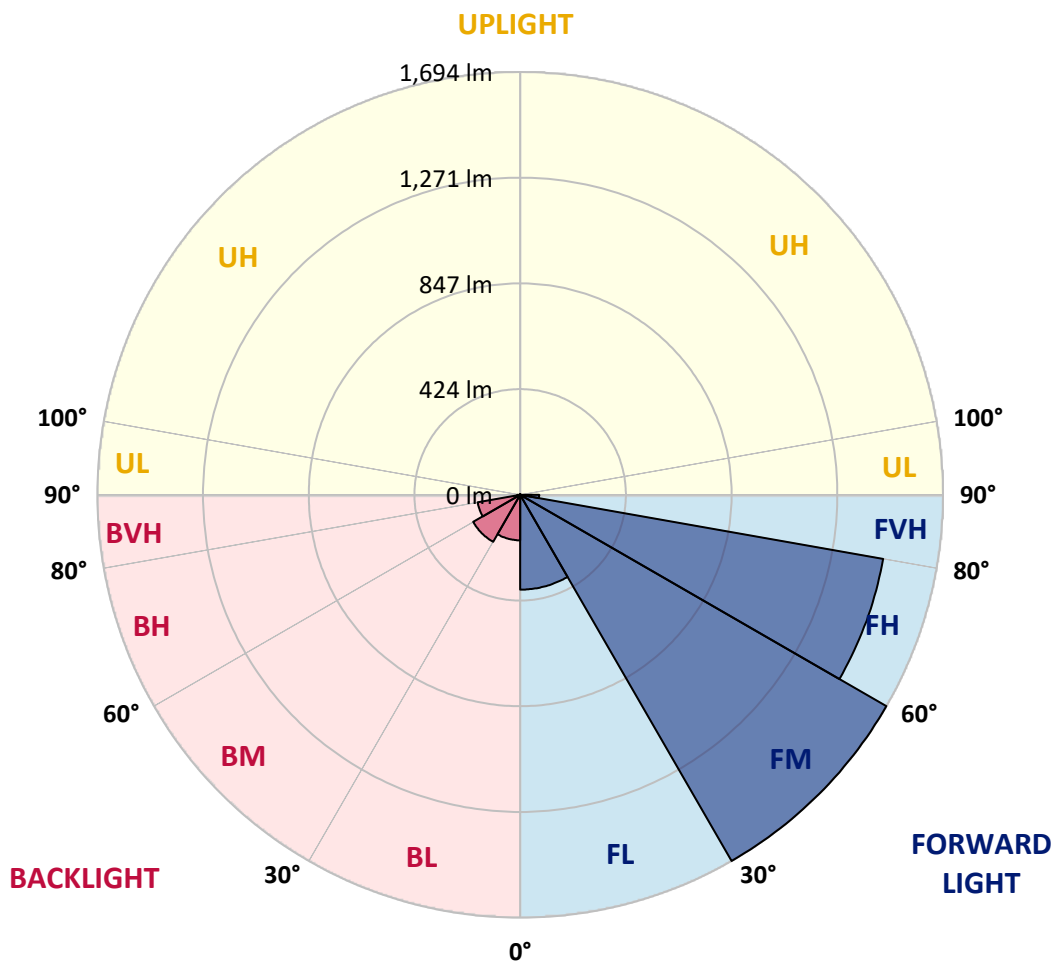
CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	379.9	9.0			
FM	(30°-60°)	1694.2	40.2			
FH	(60°-80°)	1476.7	35.0			G1/1800
FVH	(80°-90°)	76.1	1.8			G1/100
BL	(0°-30°)	182.3	4.3	B1/500		
BM	(30°-60°)	217.3	5.2	B0/220		
BH	(60°-80°)	172.8	4.1	B1/500		G1/500
BVH	(80°-90°)	12.1	0.3			G1/100
UL	(90°-100°)	1.8	0.0		U1/10	
UH	(100°-180°)	0.3	0.0		U1/10	

BUG Rating: B1-U1-G1

Type II Short





REPORT NUMBER: P271653

CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6
2.5°	1174.4	1170.4	1177.6	1174.9	1176.9	1167.2	1165.3	1163.3	1164.7	1162.7	1162.7
5°	1146.6	1144.6	1153.1	1157.6	1161.4	1160.1	1159.4	1159.4	1160.1	1155.6	1156.3
7.5°	1065.2	1063.9	1075.5	1083.9	1102.6	1113.6	1127.8	1128.5	1129.8	1127.8	1131.7
10°	978.6	982.5	992.8	1006.4	1034.2	1050.9	1078.1	1083.3	1085.2	1085.8	1086.5
12.5°	895.9	892.1	905.0	930.8	968.2	995.4	1029.6	1032.2	1035.5	1040.0	1044.5
15°	822.3	826.8	837.1	864.3	903.7	941.9	986.4	988.9	995.4	999.3	1005.7
17.5°	771.9	771.9	783.5	808.7	845.6	894.0	950.1	954.7	959.9	965.0	972.1
20°	746.7	746.7	751.3	766.1	798.3	844.9	912.7	917.9	926.9	932.7	942.4
22.5°	744.8	744.2	743.4	746.7	766.1	802.3	872.6	879.8	887.5	896.6	905.0
25°	765.4	767.4	759.7	754.5	756.5	773.2	834.5	838.5	853.3	859.0	869.4
27.5°	795.2	798.3	791.9	784.2	772.5	761.5	802.3	808.7	818.4	828.1	841.0
30°	837.8	837.1	836.5	831.3	808.7	774.5	792.6	797.1	805.5	813.2	824.3
32.5°	883.7	888.9	892.6	890.1	866.9	808.7	806.0	810.0	817.7	822.3	829.3
35°	943.1	945.6	960.5	960.5	937.2	870.1	844.2	847.6	851.3	853.3	858.5
37.5°	1008.3	1017.4	1039.2	1052.3	1016.1	946.4	904.3	904.3	906.3	907.6	910.8
40°	1083.9	1096.8	1127.1	1151.6	1128.5	1041.2	983.1	988.9	987.0	984.5	991.5
42.5°	1171.7	1185.9	1222.8	1245.9	1232.5	1155.6	1089.0	1085.2	1091.0	1083.3	1085.8
45°	1273.8	1284.8	1322.2	1346.8	1357.8	1295.7	1227.9	1220.2	1220.2	1203.4	1210.5
47.5°	1365.5	1368.7	1404.9	1448.2	1483.7	1485.0	1389.4	1384.3	1372.0	1361.0	1358.3
50°	1450.9	1460.5	1483.7	1530.9	1605.2	1669.8	1611.6	1595.5	1581.9	1541.2	1553.5
52.5°	1598.7	1617.5	1632.3	1660.8	1748.6	1879.7	1951.4	1926.1	1923.0	1886.1	1877.7
55°	1626.5	1628.4	1677.6	1841.5	2048.2	2142.5	2280.2	2279.4	2289.9	2278.2	2267.2
57.5°	1495.9	1480.5	1562.5	1778.9	2194.3	2678.7	2636.7	2641.3	2627.7	2592.1	2581.2
60°	1165.3	1178.1	1266.7	1542.5	2089.0	3025.0	3302.1	3220.1	3278.8	3186.5	3136.7
62.5°	655.7	640.9	700.9	990.9	1713.7	3043.1	4208.3	4217.4	4245.7	4194.1	4072.6
65°	423.1	416.6	410.9	501.3	1027.0	2661.9	4709.5	4820.7	4887.2	4914.4	4916.2
66°	363.6	358.5	351.3	410.2	715.7	2345.5	4677.3	4796.1	4902.1	4952.4	4967.3
67.5°	309.4	301.7	300.3	339.8	498.0	1819.7	4369.2	4555.8	4649.4	4780.0	4851.0
70°	236.4	232.5	244.2	293.3	382.4	856.5	3481.7	3725.1	3886.7	3988.7	4054.6
72.5°	198.3	197.0	213.2	268.1	362.4	485.7	2437.1	2698.8	2867.3	2964.9	3055.3
75°	155.0	156.3	177.7	255.7	360.4	423.1	1415.9	1665.3	1763.5	1917.2	2034.8
77.5°	116.3	114.9	131.8	206.7	351.3	428.9	735.7	839.1	946.9	1025.1	1053.5
80°	81.4	82.6	94.3	142.1	273.8	441.2	458.7	482.5	505.2	530.3	535.5
82.5°	54.3	54.9	69.8	97.6	189.9	421.1	428.2	417.4	399.8	377.8	354.0
85°	33.0	34.2	49.8	65.8	147.3	381.2	443.1	414.1	387.6	358.5	329.4
87.5°	16.8	18.8	29.7	38.8	87.1	187.9	461.2	439.9	403.7	359.1	326.8
90°	4.5	4.5	6.5	9.7	17.4	38.1	116.3	104.7	52.3	99.5	49.0
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



REPORT NUMBER: P271653

CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
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



REPORT NUMBER: P271653

CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6
2.5°	1162.0	1163.3	1162.0	1160.1	1162.0	1160.1	1159.4	1158.8	1159.4	1158.2	1157.6
5°	1156.3	1157.6	1157.6	1153.6	1153.1	1155.6	1151.6	1153.1	1151.6	1150.4	1147.9
7.5°	1128.5	1129.1	1129.8	1127.1	1129.1	1129.1	1127.8	1127.8	1126.6	1127.1	1124.6
10°	1089.7	1092.2	1094.9	1093.6	1093.0	1098.8	1096.1	1098.1	1098.1	1096.1	1096.8
12.5°	1047.7	1052.3	1055.5	1055.5	1058.0	1064.5	1063.9	1065.2	1070.3	1070.3	1068.4
15°	1009.0	1013.5	1018.7	1022.5	1027.8	1032.2	1035.5	1040.6	1043.2	1043.2	1046.4
17.5°	978.6	985.0	990.9	992.8	999.9	1007.7	1009.7	1016.1	1019.9	1021.9	1025.8
20°	948.9	956.0	963.2	969.6	976.0	985.0	989.7	993.4	999.9	1003.8	1009.7
22.5°	914.0	925.0	934.1	941.9	952.7	960.5	969.6	976.0	983.7	989.7	994.2
25°	881.1	895.9	908.2	915.9	930.8	941.9	952.7	962.4	972.1	980.5	987.0
27.5°	850.8	867.5	882.3	894.6	910.8	928.2	939.2	955.3	968.2	979.9	987.7
30°	835.9	850.1	865.6	879.8	895.9	917.9	935.9	956.7	972.8	987.7	999.3
32.5°	839.1	852.0	865.6	877.8	894.6	919.1	937.9	961.8	985.7	1005.1	1019.9
35°	864.9	876.6	885.5	896.6	911.4	930.1	950.1	975.4	1005.1	1031.0	1050.3
37.5°	919.1	922.4	931.5	939.9	947.6	965.0	983.7	1005.1	1039.2	1066.5	1093.6
40°	986.4	994.7	1003.1	1007.0	1016.1	1027.0	1035.5	1058.0	1088.4	1123.9	1153.6
42.5°	1086.5	1089.7	1091.0	1092.2	1095.6	1103.3	1115.5	1136.3	1165.9	1197.6	1230.5
45°	1198.9	1202.7	1206.6	1208.6	1204.1	1208.6	1221.4	1231.1	1260.2	1290.0	1332.0
47.5°	1354.6	1343.0	1337.0	1344.9	1341.0	1350.7	1356.5	1362.3	1397.1	1432.7	1468.2
50°	1554.2	1547.0	1538.0	1538.7	1545.7	1539.2	1543.2	1564.5	1576.1	1605.8	1653.0
52.5°	1873.2	1851.2	1817.0	1802.2	1810.5	1805.4	1807.3	1811.9	1804.2	1831.9	1872.0
55°	2267.2	2238.8	2216.2	2203.4	2155.6	2151.6	2120.0	2108.3	2083.2	2109.7	2100.6
57.5°	2548.2	2530.2	2518.5	2479.8	2457.9	2413.8	2401.0	2385.4	2350.5	2368.0	2383.6
60°	3090.9	3026.2	3004.3	2936.5	2913.8	2871.8	2818.3	2791.8	2773.7	2790.5	2780.2
62.5°	3996.5	3906.7	3889.2	3728.3	3689.0	3592.1	3491.4	3477.8	3420.9	3385.4	3377.0
65°	4880.7	4752.2	4655.9	4480.3	4361.5	4223.2	4069.4	3957.0	3841.4	3783.3	3706.5
66°	4946.7	4895.7	4798.7	4696.0	4522.9	4371.7	4197.3	4075.9	3946.1	3843.9	3778.1
67.5°	4834.2	4807.1	4772.9	4703.1	4594.7	4453.8	4288.4	4133.4	3977.1	3857.0	3751.6
70°	4086.2	4115.9	4154.8	4136.7	4074.6	4019.6	3873.7	3787.2	3669.6	3512.0	3447.3
72.5°	3084.4	3163.8	3136.7	3034.7	2986.9	2948.8	2895.8	2837.7	2669.0	2649.6	2573.5
75°	1984.4	1957.9	1975.4	1851.2	1766.7	1731.8	1605.8	1554.2	1427.6	1345.5	1282.8
77.5°	1045.8	994.2	954.1	844.9	766.7	720.9	659.5	587.1	476.0	469.6	368.1
80°	485.2	445.6	409.5	371.4	333.3	283.0	245.5	200.2	177.0	151.8	141.4
82.5°	329.4	304.3	282.2	257.1	228.0	193.1	166.6	141.4	120.8	108.5	98.8
85°	298.5	271.3	246.8	215.1	184.7	155.7	127.3	105.3	85.9	74.9	68.5
87.5°	290.1	256.5	230.7	196.4	166.6	136.9	109.9	85.2	66.6	54.3	46.5
90°	36.8	39.3	28.5	27.1	11.6	14.8	11.0	6.5	7.1	5.2	5.7
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



REPORT NUMBER: P271653

CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
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



REPORT NUMBER: P271653

CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°
0°	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6
2.5°	1156.3	1154.3	1156.3	1155.6	1153.1	1153.6	1154.3	1151.6	1150.4	1150.4	1149.8
5°	1145.9	1144.6	1145.9	1145.2	1141.4	1140.8	1140.8	1138.8	1136.3	1134.3	1133.0
7.5°	1121.4	1122.6	1122.1	1120.1	1118.1	1118.1	1116.1	1111.7	1109.0	1106.5	1103.8
10°	1093.6	1093.6	1094.2	1093.6	1090.4	1089.0	1086.5	1083.9	1084.5	1078.1	1072.9
12.5°	1069.1	1069.1	1068.4	1067.1	1065.2	1064.5	1064.5	1056.8	1054.8	1052.9	1047.1
15°	1045.8	1047.1	1047.1	1047.1	1043.8	1043.8	1040.6	1035.5	1035.5	1029.6	1023.8
17.5°	1027.8	1029.6	1029.0	1029.6	1030.3	1026.4	1020.6	1017.4	1013.5	1010.2	1002.5
20°	1012.2	1013.5	1014.2	1014.2	1012.2	1009.7	1004.5	999.3	996.7	990.2	980.5
22.5°	997.9	1000.5	1001.3	1001.3	998.6	996.7	991.5	983.7	978.6	970.9	961.8
25°	992.2	995.4	993.4	994.7	992.2	987.7	980.5	974.1	966.4	956.7	946.9
27.5°	994.2	998.6	997.4	996.7	993.4	990.2	981.2	973.4	964.4	952.7	940.4
30°	1005.7	1013.5	1010.2	1007.7	1007.0	999.3	990.9	979.9	969.6	956.0	941.9
32.5°	1027.8	1031.5	1032.2	1030.3	1027.0	1020.6	1009.0	994.7	983.1	966.9	950.1
35°	1063.9	1067.7	1066.5	1066.5	1063.2	1052.9	1038.7	1024.4	1008.3	990.2	972.8
37.5°	1114.3	1121.4	1120.1	1117.5	1113.6	1101.3	1090.4	1072.9	1054.8	1031.0	1011.0
40°	1177.6	1188.5	1198.2	1196.4	1187.2	1176.3	1165.9	1145.9	1127.8	1101.3	1079.3
42.5°	1262.7	1277.7	1290.0	1298.9	1295.2	1280.9	1262.7	1254.4	1228.6	1201.4	1178.8
45°	1372.0	1403.1	1413.9	1424.9	1424.9	1415.9	1412.0	1395.2	1368.1	1332.0	1310.5
47.5°	1516.0	1557.4	1569.7	1588.3	1599.3	1589.7	1582.5	1554.2	1536.0	1486.3	1481.1
50°	1691.1	1732.4	1766.0	1788.0	1784.8	1793.2	1776.4	1760.2	1735.0	1694.3	1680.1
52.5°	1914.6	1947.5	1977.9	1990.8	2004.4	2002.4	1998.5	1987.6	1955.9	1933.9	1897.8
55°	2143.9	2171.0	2207.9	2229.1	2246.6	2243.3	2228.4	2202.0	2207.9	2162.0	2142.0
57.5°	2404.9	2434.6	2474.7	2494.6	2502.4	2541.8	2532.1	2528.9	2517.9	2501.7	2481.1
60°	2853.7	2862.2	2895.1	2945.5	3007.5	2995.2	3010.7	3021.1	3028.8	2992.6	2990.1
62.5°	3388.7	3399.0	3427.3	3437.7	3446.8	3448.1	3427.3	3427.3	3391.8	3345.4	3309.2
65°	3680.5	3659.2	3639.9	3629.0	3605.0	3583.7	3552.7	3510.7	3450.6	3379.0	3314.4
66°	3722.6	3679.3	3654.0	3626.3	3588.2	3548.8	3512.0	3454.5	3384.1	3298.8	3213.6
67.5°	3681.8	3622.4	3563.7	3523.0	3470.1	3399.0	3334.4	3267.1	3200.6	3083.7	3004.3
70°	3310.4	3239.4	3174.8	3085.7	3001.7	2932.0	2820.9	2703.9	2607.7	2484.9	2406.8
72.5°	2458.4	2374.5	2290.5	2165.3	2043.1	2025.0	1885.5	1747.9	1674.4	1575.4	1495.9
75°	1214.4	1108.5	958.0	890.8	793.2	745.4	718.9	619.4	595.6	498.0	496.8
77.5°	343.1	294.6	261.6	228.0	213.8	203.5	167.9	160.9	146.0	143.4	134.9
80°	129.9	122.7	119.6	116.3	113.1	111.1	109.9	104.7	102.0	98.2	96.3
82.5°	93.6	91.1	85.2	83.4	80.8	76.9	76.3	73.0	71.1	67.1	65.8
85°	63.3	60.1	56.9	53.6	52.3	51.7	49.8	48.5	47.1	45.3	44.6
87.5°	42.6	39.3	35.6	34.2	33.6	34.2	34.9	33.6	33.0	31.6	31.0
90°	5.2	7.1	6.5	6.5	7.7	6.5	6.5	7.1	6.5	6.5	5.7
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



REPORT NUMBER: P271653
 CATALOG NUMBER: IST-AF-800-LED-E1-SL3-7027

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	71°	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	
110°	0.0	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	2.5°
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°



NUMBER: P271653
 NUMBER: IST-AF-800-LED-E1-SL3-7027

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

82°	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	110°	82°	
1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	110°	0.0
1148.6	1146.6	1147.1	1144.6	1143.9	1145.2	1145.9	1145.9	1143.9	1132.3	1118.7	1118.7	112.5°	0.0
1131.7	1127.8	1127.1	1125.3	1122.1	1125.8	1123.9	1120.7	1116.9	1103.3	1076.8	1076.8	115°	0.0
1100.7	1098.1	1094.9	1092.2	1090.4	1089.0	1088.4	1085.2	1078.1	1052.9	1008.3	1008.3	117.5°	0.0
1071.0	1067.7	1063.9	1058.0	1055.5	1051.6	1051.6	1043.8	1038.7	1007.0	941.2	941.2	120°	0.0
1041.9	1036.0	1034.2	1030.3	1023.2	1019.9	1015.4	1007.7	999.9	961.8	875.3	875.3	122.5°	0.0
1019.9	1014.2	1005.7	1003.1	995.4	988.2	982.5	972.1	963.7	913.4	806.0	806.0	125°	0.0
996.0	991.5	982.5	976.6	968.2	959.9	950.1	937.2	931.5	867.5	740.2	740.2	127.5°	0.0
976.6	966.4	956.0	950.9	940.4	930.8	921.1	905.6	894.0	822.3	670.5	670.5	130°	0.0
954.1	944.9	934.1	925.0	910.8	899.8	888.9	872.6	858.5	776.5	600.1	600.1	132.5°	0.0
938.5	925.6	914.0	903.7	887.5	874.6	859.0	841.6	827.5	732.5	522.5	522.5	135°	0.0
929.5	916.6	901.7	888.9	870.1	855.3	838.5	819.1	801.0	696.9	449.6	449.6	137.5°	0.0
926.9	911.4	895.9	879.8	860.4	841.6	821.6	802.3	779.0	662.7	370.1	370.1	140°	0.0
934.7	915.9	898.6	879.1	856.5	835.2	815.2	790.0	766.7	633.0	291.9	291.9	142.5°	0.0
956.0	933.4	913.4	892.1	866.2	843.0	819.1	790.7	764.7	612.4	223.5	223.5	145°	0.0
989.7	968.2	944.9	923.6	894.0	868.1	841.6	811.3	780.3	604.0	168.6	168.6	147.5°	0.0
1057.5	1029.0	1005.1	982.5	948.3	921.8	891.4	854.6	819.7	611.7	140.9	140.9	150°	0.0
1152.3	1116.9	1094.9	1074.8	1032.2	1003.1	968.2	926.3	886.9	633.7	124.1	124.1	152.5°	0.0
1283.5	1256.4	1216.9	1185.9	1142.6	1110.3	1071.6	1021.2	977.4	664.7	115.6	115.6	155°	0.0
1447.6	1412.0	1373.3	1341.6	1294.5	1238.2	1197.6	1136.9	1087.1	713.2	111.7	111.7	157.5°	0.0
1648.4	1605.8	1553.5	1527.0	1461.7	1417.9	1363.5	1298.3	1235.0	788.0	113.6	113.6	160°	0.0
1866.8	1821.0	1780.2	1729.9	1670.4	1621.4	1569.7	1500.5	1421.1	930.1	121.5	121.5	162.5°	0.0
2097.4	2067.7	2028.9	1963.7	1931.4	1869.4	1803.4	1727.2	1669.8	1114.9	140.1	140.1	165°	0.0
2433.3	2401.0	2396.5	2332.4	2283.4	2227.2	2175.5	2112.3	2044.5	1443.0	184.2	184.2	167.5°	0.0
2950.0	2916.4	2878.3	2828.7	2770.5	2700.7	2636.7	2551.5	2475.9	1771.9	204.7	204.7	170°	0.0
3256.2	3194.2	3125.7	3050.1	2965.6	2879.0	2793.1	2683.9	2574.0	1791.8	184.7	184.7	172.5°	0.0
3230.3	3153.5	3066.3	2963.6	2874.5	2767.9	2675.5	2534.7	2434.6	1595.5	150.5	150.5	175°	0.0
3134.7	3029.4	2947.4	2853.2	2741.4	2645.8	2548.2	2409.3	2295.0	1463.1	137.6	137.6	177.5°	0.0
2889.9	2800.2	2686.5	2596.0	2513.4	2399.0	2307.3	2177.5	2098.7	1268.7	123.3	123.3	180°	0.0
2309.9	2185.8	2089.6	2019.2	1925.6	1822.2	1740.8	1631.6	1562.0	839.7	106.6	106.6		
1345.5	1314.5	1206.6	1145.9	1089.0	1005.1	940.4	888.2	796.4	406.9	94.3	94.3		
414.7	385.6	381.8	324.3	343.1	293.3	285.5	259.7	259.7	156.3	74.3	74.3		
132.4	129.9	124.7	117.6	114.9	114.9	111.7	111.1	105.9	84.0	55.5	55.5		
93.6	91.8	89.8	87.9	86.6	87.1	84.6	83.4	82.0	60.7	43.9	43.9		
64.6	62.6	58.7	58.7	57.5	56.9	57.5	54.9	54.3	42.6	36.8	36.8		
43.9	43.3	42.6	42.0	41.3	40.7	40.1	38.1	36.8	29.7	25.8	25.8		
29.0	24.5	24.0	20.8	20.0	19.3	18.1	19.3	21.3	21.3	16.8	16.8		
6.5	5.7	6.5	6.5	5.2	5.7	5.7	4.5	4.5	6.5	5.7	5.7		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

'271653
 IST-AF-800-LED-E1-SL3-7027

REPORT NUMBER: P271653
 CATALOG NUMBER: IST-AF-800

TION (continued):

CANDELA DISTRIBUTION (con

83°	84°	85°	86°	87°	88°	89°	90°	95°	105°		115°	125°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	1144.6	1144.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	1107.1	1096.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	1048.3	1025.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	968.9	923.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	877.8	812.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	783.5	700.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	695.6	585.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	603.3	467.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	514.8	352.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	414.7	247.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	304.3	179.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	217.0	143.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	162.1	120.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	129.9	104.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	110.4	95.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	98.8	88.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	92.3	85.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	88.6	82.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	86.6	80.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	85.2	77.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	84.0	77.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	84.6	78.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	87.9	78.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	93.1	78.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	96.8	80.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	98.2	82.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	96.8	84.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°	95.6	84.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	93.6	82.6
										70°	89.1	77.5
										72.5°	80.1	69.8
										75°	68.5	56.2
										77.5°	55.5	45.3
										80°	41.3	34.2
										82.5°	30.4	26.5
										85°	21.3	18.8
										87.5°	12.9	11.6
										90°	3.2	3.2
										92.5°	0.0	0.0
										95°	0.0	0.0
										97.5°	0.0	0.0
										100°	0.0	0.0
										102.5°	0.0	0.0
										105°	0.0	0.0
										107.5°	0.0	0.0



REPORT NUMBER: P271653

CATALOG NUMBER: IST-AF-800-LED-E1-S

0-LED-E1-SL3-7027

tinued):

135°	145°	155°	165°	175°	180°
1144.6	1144.6	1144.6	1144.6	1144.6	1144.6
1089.7	1089.0	1072.9	1069.7	1058.7	1064.5
997.4	986.4	957.2	951.5	939.2	935.9
886.9	856.5	833.3	807.5	783.0	795.2
757.7	706.7	655.7	622.1	608.5	604.0
634.9	543.3	479.2	413.4	390.1	398.6
486.4	381.8	296.5	258.4	236.4	232.5
343.1	244.8	205.4	195.7	191.2	191.2
232.5	186.7	171.8	167.4	167.4	167.9
177.0	156.9	150.5	151.2	153.7	154.4
146.6	138.9	135.6	140.1	145.3	146.0
126.6	124.7	125.3	131.2	136.4	136.9
111.1	113.1	115.6	120.8	125.3	126.6
100.1	103.3	105.3	108.5	111.1	111.7
92.3	96.3	95.6	97.6	99.5	100.1
87.9	89.8	87.9	89.1	89.1	90.4
84.0	84.6	81.4	82.0	83.4	83.4
80.1	79.5	76.3	77.5	79.5	80.1
76.3	74.9	72.3	74.9	78.2	78.8
73.0	71.8	70.3	73.6	77.5	78.2
71.8	70.3	69.1	73.6	77.5	78.2
71.8	70.3	69.1	72.3	76.3	76.9
72.3	71.1	68.5	71.8	74.3	74.9
73.0	71.8	67.1	69.1	70.3	71.1
73.0	70.3	65.8	66.6	66.6	67.1
71.8	68.5	63.3	63.3	62.6	62.6
71.8	65.8	60.7	59.4	58.1	58.1
71.1	65.3	60.1	58.1	56.2	56.2
69.8	64.0	58.7	56.2	54.3	54.3
65.3	61.4	55.5	53.0	51.0	50.3
58.1	56.2	51.7	49.8	47.8	47.1
49.0	49.8	47.1	45.8	43.9	43.3
41.3	42.6	41.3	40.7	39.3	38.8
33.0	35.6	34.2	34.2	34.9	33.6
25.2	28.5	27.1	28.5	29.7	27.8
17.4	20.8	20.8	21.3	22.0	20.8
11.0	13.6	12.9	13.6	13.6	12.9
2.5	4.5	2.5	3.9	3.2	2.5
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0

CANDELA DISTRIBUTION (continued):

	115°	125°	135°
110°	0.0	0.0	0.0
112.5°	0.0	0.0	0.0
115°	0.0	0.0	0.0
117.5°	0.0	0.0	0.0
120°	0.0	0.0	0.0
122.5°	0.0	0.0	0.0
125°	0.0	0.0	0.0
127.5°	0.0	0.0	0.0
130°	0.0	0.0	0.0
132.5°	0.0	0.0	0.0
135°	0.0	0.0	0.0
137.5°	0.0	0.0	0.0
140°	0.0	0.0	0.0
142.5°	0.0	0.0	0.0
145°	0.0	0.0	0.0
147.5°	0.0	0.0	0.0
150°	0.0	0.0	0.0
152.5°	0.0	0.0	0.0
155°	0.0	0.0	0.0
157.5°	0.0	0.0	0.0
160°	0.0	0.0	0.0
162.5°	0.0	0.0	0.0
165°	0.0	0.0	0.0
167.5°	0.0	0.0	0.0
170°	0.0	0.0	0.0
172.5°	0.0	0.0	0.0
175°	0.0	0.0	0.0
177.5°	0.0	0.0	0.0
180°	0.0	0.0	0.0

