

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: P227099

Luminaire Tested: **IST-AF-1200-LED-E1-SL4-7030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35947)-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-1200-LED-E1-SL4-7030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV W/SPILL CONTROL, 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: 7192.3 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U5 - G2

Input Watts (W): 82.7
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

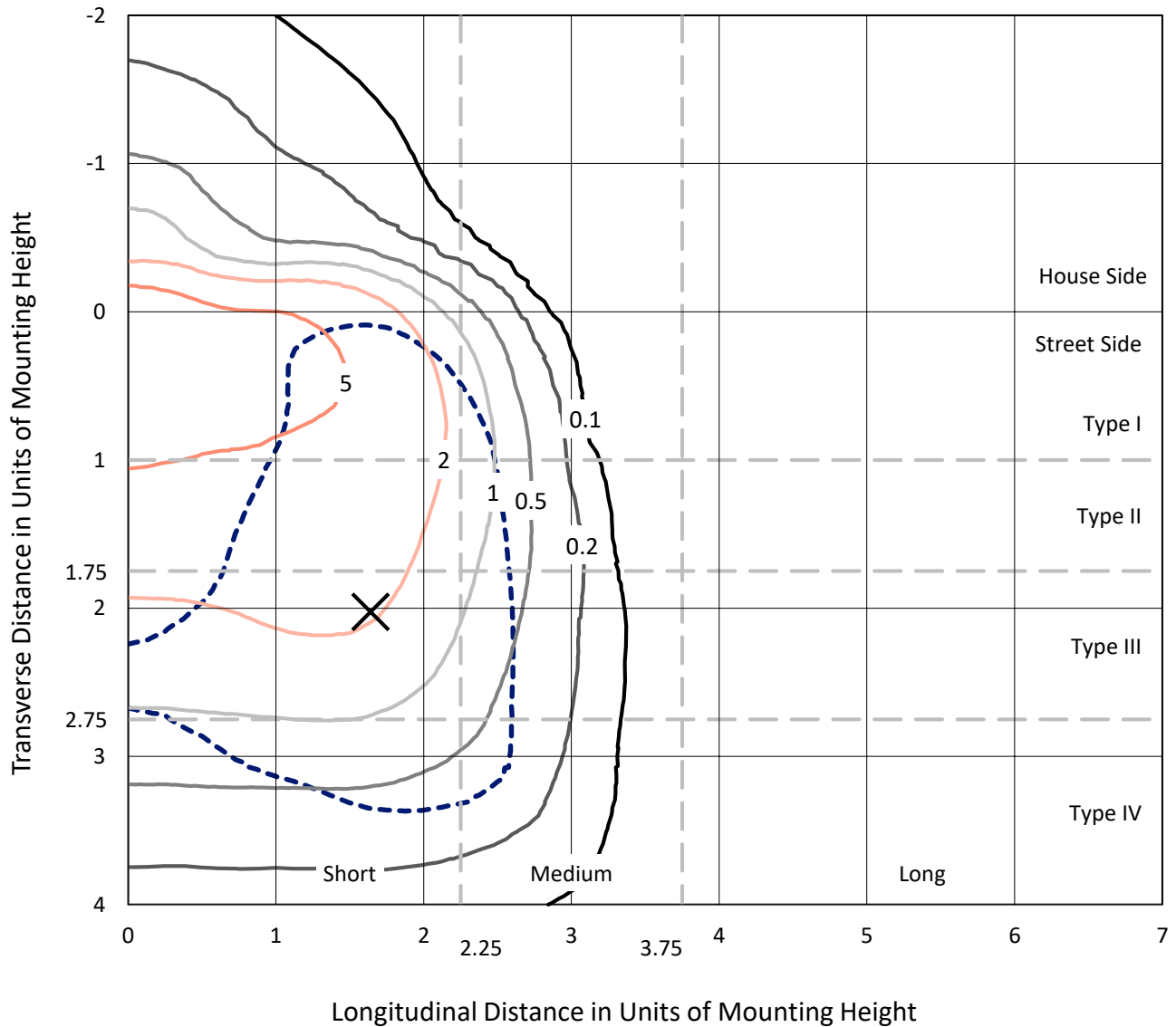


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Iso-Footcandle Lines of Horizontal Illumination

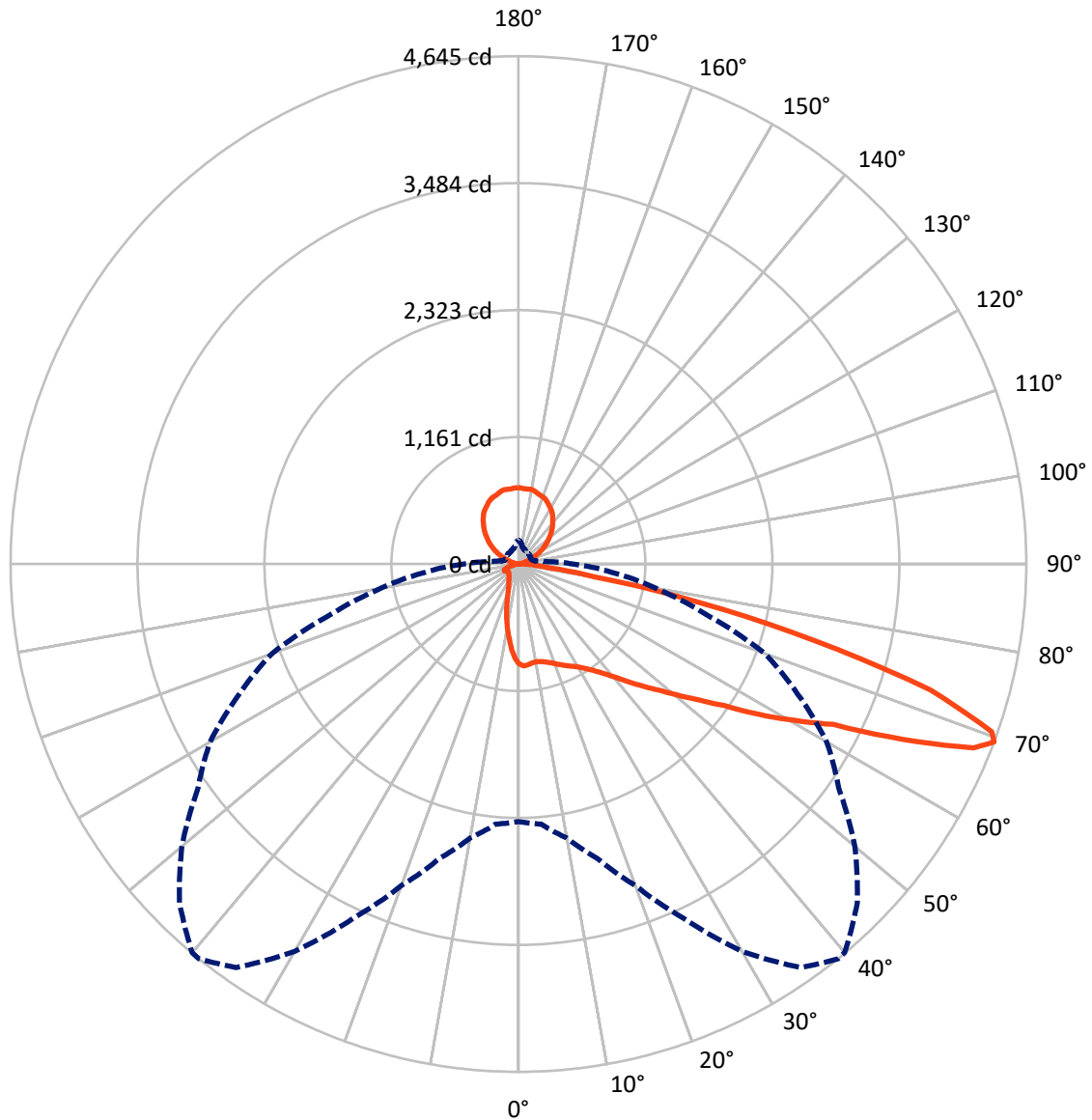
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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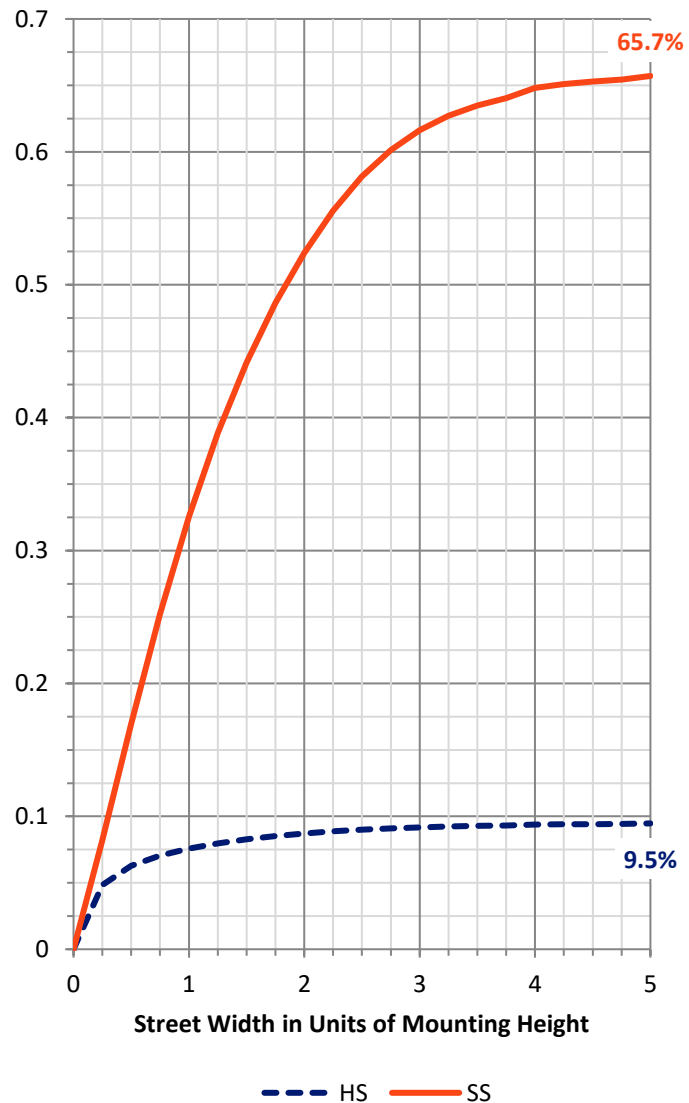
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	690.9	867.7	1558.6
	% Fixture	9.6	12.1	21.7
Street Side	Lumens	4764.8	868.9	5633.7
	% Fixture	66.2	12.1	78.3
Total	Lumens	5455.6	1736.6	7192.3
	% Fixture	75.9	24.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	1.1
10°-20°	198.9	2.8
20°-30°	309.6	4.3
30°-40°	467.9	6.5
40°-50°	748.8	10.4
50°-60°	1176.8	16.4
60°-70°	1584.5	22.0
70°-80°	786.0	10.9
80°-90°	104.3	1.4
90°-100°	10.8	0.1
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	4.8
150°-160°	290.3	4.0
160°-170°	191.2	2.7
170°-180°	66.3	0.9
0°-90°	5455.6	75.9
0°-180°	7192.3	100.0



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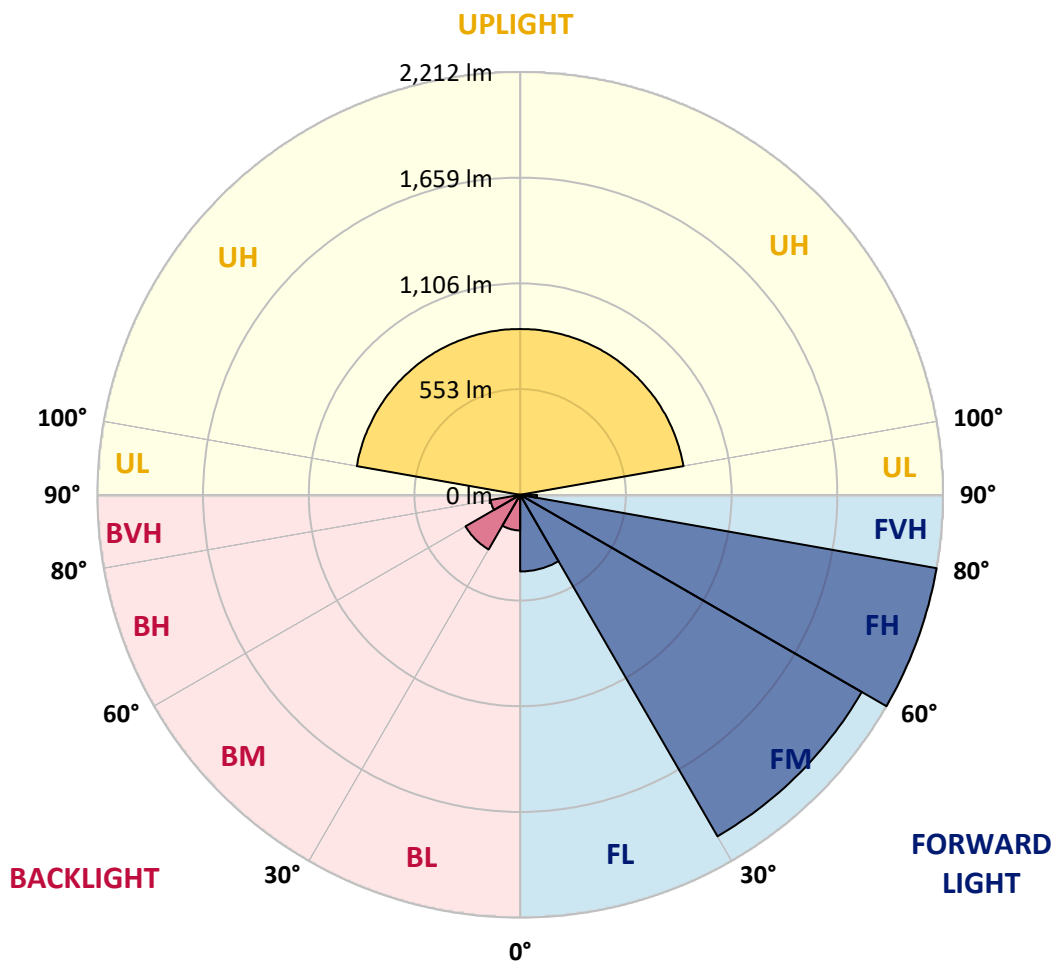
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	401.1	5.6			
FM	(30°-60°)	2063.7	28.7			
FH	(60°-80°)	2212.5	30.8			G2/5000
FVH	(80°-90°)	87.5	1.2			G1/100
BL	(0°-30°)	186.2	2.6	B1/500		
BM	(30°-60°)	329.8	4.6	B1/1000		
BH	(60°-80°)	158.0	2.2	B1/500		G1/500
BVH	(80°-90°)	16.8	0.2			G1/100
UL	(90°-100°)	10.8	0.1		U2/50	
UH	(100°-180°)	867.7	12.1		U4/1000	

BUG Rating: B1-U5-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
0°	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8
2.5°	936.0	936.9	936.9	937.8	934.2	934.2	935.1	931.6	933.3	932.4	928.0
5°	937.8	938.6	937.8	938.6	934.2	932.4	928.9	924.5	926.2	925.4	919.2
7.5°	933.3	934.2	932.4	933.3	928.0	924.5	919.2	915.6	913.0	912.1	904.1
10°	923.6	926.2	922.7	925.4	920.9	917.4	914.7	911.2	909.4	908.5	899.7
12.5°	909.4	911.2	912.1	915.6	915.6	916.5	916.5	913.8	914.7	913.8	906.8
15°	896.1	902.3	908.5	912.1	919.2	923.6	927.1	926.2	928.9	928.0	923.6
17.5°	896.1	901.5	912.1	923.6	936.9	943.1	948.4	948.4	949.3	947.5	940.4
20°	899.7	909.4	927.1	946.6	962.6	974.9	978.5	977.6	974.1	974.1	961.7
22.5°	928.9	935.1	954.6	975.8	998.0	1010.4	1011.3	1008.6	1001.5	999.7	984.7
25°	970.5	977.6	995.3	1022.8	1039.6	1049.3	1046.7	1037.8	1030.7	1024.5	1008.6
27.5°	1035.2	1040.5	1058.2	1076.8	1086.5	1090.1	1079.4	1067.0	1059.1	1056.4	1035.2
30°	1101.6	1108.7	1122.8	1134.3	1142.3	1131.7	1114.9	1100.7	1093.6	1091.8	1072.4
32.5°	1183.0	1183.9	1193.7	1196.3	1197.2	1179.5	1156.5	1143.2	1140.5	1137.0	1121.9
35°	1257.4	1261.9	1260.1	1259.2	1251.2	1229.1	1209.6	1201.6	1199.0	1198.1	1185.7
37.5°	1323.8	1330.9	1326.5	1318.5	1308.8	1291.1	1270.7	1261.9	1270.7	1265.4	1268.1
40°	1388.5	1388.5	1383.2	1378.7	1367.2	1350.4	1343.3	1344.2	1358.4	1361.9	1365.5
42.5°	1444.3	1443.4	1438.1	1434.5	1432.8	1429.2	1425.7	1442.5	1470.0	1475.3	1483.2
45°	1505.4	1504.5	1484.1	1491.2	1503.6	1506.3	1518.7	1557.6	1591.3	1593.9	1610.7
47.5°	1564.7	1557.6	1538.1	1545.2	1580.6	1599.2	1619.6	1674.5	1721.4	1731.2	1778.1
50°	1626.7	1619.6	1598.3	1611.6	1661.2	1695.8	1743.6	1819.7	1884.4	1897.7	1958.8
52.5°	1691.3	1690.4	1673.6	1694.0	1755.1	1825.0	1900.3	1986.2	2065.0	2081.8	2172.2
55°	1769.3	1764.8	1757.7	1782.5	1869.3	1963.2	2081.0	2197.8	2283.7	2313.8	2405.1
57.5°	1856.9	1855.1	1856.0	1907.4	2011.9	2154.5	2298.8	2456.4	2598.1	2619.3	2704.4
60°	1933.1	1936.6	1957.0	2037.6	2168.6	2361.7	2564.4	2777.9	2903.6	2925.7	3009.0
62.5°	2026.1	2046.4	2091.6	2193.4	2347.5	2581.3	2844.3	3070.1	3232.1	3277.3	3434.9
65°	2249.2	2265.1	2349.3	2472.3	2668.9	2968.2	3270.2	3598.7	3866.1	3906.9	4042.4
67.5°	2412.1	2452.9	2584.8	2785.8	3070.1	3452.6	3867.0	4264.6	4490.4	4509.0	4414.3
69°	2355.5	2389.1	2545.0	2787.6	3130.3	3575.7	4091.1	4506.4	4645.4	4641.9	4384.2
70°	2268.7	2299.7	2471.5	2707.0	3079.8	3561.5	4094.6	4508.1	4592.3	4560.4	4265.5
72.5°	1900.3	1927.8	2088.9	2335.1	2696.4	3174.6	3676.6	3959.1	3941.4	3914.8	3427.8
75°	1186.6	1184.8	1325.6	1468.2	1748.9	2232.4	2606.1	2832.8	2796.4	2776.1	2200.5
77.5°	443.6	474.6	526.0	679.2	808.5	1069.7	1371.7	1624.0	1694.0	1604.5	1184.8
80°	231.1	247.9	281.6	335.6	386.1	441.9	531.3	683.6	707.5	659.7	478.2
82.5°	182.4	202.8	236.4	282.5	317.9	296.6	279.8	289.6	287.8	274.5	243.5
85°	138.1	162.0	217.0	263.9	314.4	265.7	211.6	185.1	164.7	165.6	176.2
87.5°	69.1	89.4	170.9	230.2	273.6	176.2	138.1	107.1	89.4	85.9	115.1
90°	26.3	26.3	40.5	52.2	69.5	39.0	38.1	31.0	24.4	24.3	33.6
92.5°	4.0	4.0	4.5	5.0	5.5	6.0	6.0	6.0	6.0	6.0	6.0
95°	5.0	5.0	5.5	6.0	6.5	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	7.0	7.0	7.5	8.0	8.0	8.0	8.5	9.0	9.0	9.0	9.0
100°	8.0	8.0	8.5	9.0	9.5	10.0	11.0	12.0	15.6	16.5	21.0
102.5°	11.0	11.0	12.0	13.0	15.5	18.0	22.5	27.0	32.2	33.5	40.0
105°	21.0	22.0	24.5	27.0	31.5	36.0	42.0	48.0	54.0	55.5	63.0
107.5°	41.0	42.0	45.5	49.0	53.5	58.0	65.5	73.0	79.0	80.5	88.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
110°	66.0	68.0	71.0	74.0	80.5	87.0	94.5	102.0	106.8	108.0	114.0
112.5°	99.0	99.0	102.5	106.0	113.5	121.0	127.5	134.0	137.6	138.5	143.0
115°	140.0	139.0	143.0	147.0	153.0	159.0	163.5	168.0	170.4	171.0	174.0
117.5°	184.0	184.0	186.5	189.0	193.0	197.0	199.5	202.0	203.2	203.5	205.0
120°	225.0	223.0	224.5	226.0	229.5	233.0	235.0	237.0	239.4	240.0	243.0
122.5°	263.0	260.0	260.5	261.0	264.0	267.0	269.0	271.0	273.4	274.0	277.0
125°	298.0	294.0	295.0	296.0	297.5	299.0	302.0	305.0	307.0	307.5	310.0
127.5°	330.0	329.0	329.0	329.0	331.0	333.0	336.0	339.0	339.4	339.5	340.0
130°	363.0	361.0	361.5	362.0	364.0	366.0	368.0	370.0	370.8	371.0	372.0
132.5°	396.0	394.0	393.5	393.0	397.0	401.0	402.5	404.0	404.4	404.5	405.0
135°	429.0	426.0	426.0	426.0	429.0	432.0	433.5	435.0	435.8	436.0	437.0
137.5°	460.0	457.0	458.0	459.0	459.5	460.0	462.0	464.0	465.6	466.0	468.0
140°	488.0	485.0	486.0	487.0	488.0	489.0	490.0	491.0	493.4	494.0	497.0
142.5°	518.0	515.0	516.0	517.0	517.5	518.0	519.5	521.0	522.6	523.0	525.0
145°	550.0	546.0	545.0	544.0	545.5	547.0	548.5	550.0	550.4	550.5	551.0
147.5°	575.0	572.0	571.5	571.0	572.5	574.0	574.0	574.0	574.4	574.5	575.0
150°	595.0	592.0	592.5	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0
152.5°	611.0	608.0	608.0	608.0	608.5	609.0	609.5	610.0	610.0	610.0	610.0
155°	629.0	625.0	625.0	625.0	626.0	627.0	628.5	630.0	629.2	629.0	628.0
157.5°	646.0	643.0	643.0	643.0	643.5	644.0	645.0	646.0	645.6	645.5	645.0
160°	663.0	660.0	659.5	659.0	657.5	656.0	655.5	655.0	655.0	655.0	655.0
162.5°	673.0	669.0	669.0	669.0	667.0	665.0	663.0	661.0	661.8	662.0	663.0
165°	681.0	678.0	677.0	676.0	676.0	676.0	674.5	673.0	673.0	673.0	673.0
167.5°	690.0	687.0	685.5	684.0	685.0	686.0	687.0	688.0	686.8	686.5	685.0
170°	698.0	695.0	693.5	692.0	692.0	692.0	692.5	693.0	692.2	692.0	691.0
172.5°	699.0	697.0	696.0	695.0	694.0	693.0	691.5	690.0	690.0	690.0	690.0
175°	700.0	698.0	697.5	697.0	696.0	695.0	693.0	691.0	690.6	690.5	690.0
177.5°	707.0	705.0	702.5	700.0	699.5	699.0	698.0	697.0	696.2	696.0	695.0
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8
2.5°	924.5	924.5	922.7	921.8	919.2	915.6	913.0	908.5	905.9	901.5	896.1
5°	913.0	909.4	907.6	904.1	898.8	894.4	889.1	882.9	875.8	866.9	857.2
7.5°	897.9	892.6	886.4	884.6	878.4	873.1	866.9	858.1	848.3	832.4	820.0
10°	891.7	886.4	881.1	877.5	869.6	863.4	856.3	844.8	832.4	811.1	788.1
12.5°	897.9	892.6	887.3	881.1	874.0	866.9	857.2	843.0	826.2	798.7	770.4
15°	913.0	907.6	898.8	892.6	882.9	876.7	863.4	847.4	822.6	789.0	751.8
17.5°	929.8	921.8	913.8	904.1	895.3	887.3	873.1	852.7	821.8	781.9	734.1
20°	945.7	936.9	924.5	917.4	908.5	897.0	882.0	857.2	820.0	767.7	715.5
22.5°	964.3	952.8	939.5	931.6	924.5	914.7	897.0	865.1	820.0	759.8	694.2
25°	988.2	973.2	959.9	951.9	947.5	940.4	919.2	883.7	826.2	755.3	676.5
27.5°	1016.6	997.1	985.6	980.3	979.4	974.1	952.8	908.5	840.4	755.3	659.7
30°	1050.2	1033.4	1018.3	1018.3	1029.0	1025.4	1001.5	946.6	862.5	758.0	647.3
32.5°	1097.1	1080.3	1071.5	1080.3	1091.8	1095.4	1067.9	1000.6	898.8	770.4	634.9
35°	1166.2	1155.6	1149.4	1162.7	1185.7	1194.6	1160.9	1081.2	951.9	794.3	627.8
37.5°	1257.4	1249.5	1241.5	1264.5	1307.9	1325.6	1276.9	1174.2	1028.1	834.2	624.3
40°	1361.9	1362.8	1371.7	1417.7	1459.3	1496.5	1441.6	1315.0	1132.6	890.8	627.8
42.5°	1485.9	1495.6	1525.7	1589.5	1670.1	1699.3	1646.2	1485.0	1262.7	959.0	636.7
45°	1640.0	1665.6	1717.0	1811.8	1909.2	1954.3	1879.1	1699.3	1426.6	1067.9	661.5
47.5°	1803.8	1860.5	1947.2	2062.4	2175.7	2204.9	2111.9	1893.2	1586.8	1164.4	699.6
50°	2013.7	2082.7	2169.5	2307.6	2428.1	2445.8	2322.7	2073.0	1726.7	1248.6	735.9
52.5°	2209.4	2303.2	2413.9	2574.2	2696.4	2674.2	2514.9	2233.3	1837.4	1306.1	756.2
55°	2476.8	2574.2	2699.0	2839.0	2960.3	2907.1	2689.3	2369.6	1926.0	1348.6	762.4
57.5°	2782.3	2856.7	2978.9	3122.3	3202.0	3110.8	2861.1	2502.5	2010.1	1349.5	713.7
60°	3082.5	3169.2	3303.8	3444.6	3488.9	3331.3	2980.6	2522.8	1926.9	1204.3	571.2
62.5°	3527.0	3614.7	3682.8	3705.9	3626.2	3309.2	2841.6	2307.6	1661.2	950.2	404.7
65°	4023.8	3924.6	3792.6	3668.7	3451.7	2970.0	2450.2	1895.9	1289.3	634.9	278.9
67.5°	4153.9	3852.0	3565.1	3288.8	2884.1	2365.2	1848.1	1333.6	827.1	361.3	189.5
69°	4018.5	3577.5	3257.8	2819.5	2401.5	1770.1	1273.4	854.5	494.1	251.5	158.5
70°	3770.5	3311.8	2878.8	2409.5	1860.5	1352.2	846.5	559.6	322.3	183.3	142.6
72.5°	2845.2	2274.9	1753.3	1138.8	694.2	385.2	271.0	193.9	153.2	134.6	122.2
75°	1645.3	1095.4	717.3	382.5	226.7	168.2	147.0	131.1	121.3	116.9	106.3
77.5°	694.2	433.9	294.0	215.2	152.3	130.2	113.3	104.5	103.6	100.9	91.2
80°	316.1	271.0	231.1	162.0	116.0	99.2	86.8	85.0	86.8	84.1	74.4
82.5°	234.7	231.1	193.0	124.9	88.6	66.4	54.0	56.7	63.8	69.1	60.2
85°	195.7	195.7	162.0	93.0	58.4	42.5	41.6	46.9	53.1	57.6	48.7
87.5°	179.8	172.7	93.0	47.8	33.6	27.5	25.7	23.0	23.0	39.8	33.6
90°	24.7	15.0	12.4	12.5	13.4	12.5	13.3	11.4	11.4	11.4	12.4
92.5°	6.5	7.0	7.0	7.0	6.5	6.0	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.0	7.5	8.0	7.5	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	10.5	12.0	11.0	10.0	9.5	9.0	8.5	8.0	8.0	8.0	8.5
100°	25.0	29.0	27.5	26.0	24.5	23.0	21.0	19.0	19.0	19.0	21.0
102.5°	45.0	50.0	48.5	47.0	44.5	42.0	40.5	39.0	38.0	39.0	40.5
105°	67.5	72.0	71.0	70.0	67.5	65.0	63.0	61.0	61.0	61.0	63.0
107.5°	91.5	95.0	94.5	94.0	92.0	90.0	88.5	87.0	86.0	87.0	88.5



REPORT NUMBER: P227099

CATALOG NUMBER: IST-AF-1200-LED-E1-SL4-7030-ULG

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	117.0	120.0	120.5	121.0	120.0	119.0	117.5	116.0	117.0	116.0	117.5
112.5°	145.5	148.0	149.0	150.0	149.5	149.0	148.0	147.0	147.0	147.0	148.0
115°	176.5	179.0	180.5	182.0	180.5	179.0	178.0	177.0	178.0	177.0	178.0
117.5°	208.0	211.0	213.0	215.0	212.5	210.0	209.0	208.0	209.0	208.0	209.0
120°	244.5	246.0	248.0	250.0	247.5	245.0	244.0	243.0	243.0	243.0	244.0
122.5°	278.0	279.0	281.0	283.0	280.5	278.0	277.0	276.0	277.0	276.0	277.0
125°	311.5	313.0	314.0	315.0	312.5	310.0	310.0	310.0	310.0	310.0	310.0
127.5°	342.5	345.0	345.5	346.0	346.0	346.0	345.5	345.0	347.0	345.0	345.5
130°	374.5	377.0	379.0	381.0	381.0	381.0	380.0	379.0	380.0	379.0	380.0
132.5°	408.0	411.0	413.5	416.0	415.0	414.0	414.0	414.0	415.0	414.0	414.0
135°	440.0	443.0	445.5	448.0	447.5	447.0	448.5	450.0	451.0	450.0	448.5
137.5°	470.5	473.0	474.0	475.0	475.5	476.0	478.5	481.0	482.0	481.0	478.5
140°	498.5	500.0	501.0	502.0	503.0	504.0	506.5	509.0	511.0	509.0	506.5
142.5°	526.0	527.0	530.0	533.0	533.0	533.0	533.5	534.0	536.0	534.0	533.5
145°	553.5	556.0	559.0	562.0	561.5	561.0	559.5	558.0	560.0	558.0	559.5
147.5°	577.5	580.0	582.5	585.0	585.5	586.0	584.5	583.0	585.0	583.0	584.5
150°	595.0	597.0	598.5	600.0	601.5	603.0	604.5	606.0	610.0	606.0	604.5
152.5°	610.5	611.0	612.5	614.0	616.0	618.0	620.5	623.0	628.0	623.0	620.5
155°	627.0	626.0	628.5	631.0	633.5	636.0	637.0	638.0	641.0	638.0	637.0
157.5°	644.5	644.0	646.0	648.0	649.0	650.0	650.0	650.0	655.0	650.0	650.0
160°	656.5	658.0	661.0	664.0	662.5	661.0	660.5	660.0	666.0	660.0	660.5
162.5°	665.0	667.0	669.0	671.0	670.5	670.0	669.0	668.0	674.0	668.0	669.0
165°	672.5	672.0	674.5	677.0	678.5	680.0	679.0	678.0	682.0	678.0	679.0
167.5°	681.5	678.0	681.0	684.0	686.0	688.0	688.0	688.0	694.0	688.0	688.0
170°	688.5	686.0	687.5	689.0	691.5	694.0	695.0	696.0	701.0	696.0	695.0
172.5°	689.5	689.0	690.5	692.0	693.0	694.0	695.0	696.0	701.0	696.0	695.0
175°	690.0	690.0	692.5	695.0	695.5	696.0	695.0	694.0	699.0	694.0	695.0
177.5°	694.5	694.0	696.5	699.0	700.0	701.0	699.5	698.0	702.0	698.0	699.5
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



REPORT NUMBER: P227099

CATALOG NUMBER: IST-AF-1200-LED-E1-SL4-7030-ULG

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8
2.5°	891.7	888.2	879.3	877.5	874.9	871.3	870.5	866.0	857.2	855.4	856.3
5°	851.0	836.8	827.1	819.1	812.9	797.0	790.8	783.7	771.3	767.7	762.4
7.5°	803.2	786.3	766.9	752.7	735.9	719.0	705.8	688.9	675.6	667.7	653.5
10°	766.0	742.9	717.3	688.9	666.8	641.1	624.3	604.8	583.6	564.1	549.9
12.5°	737.6	705.8	668.6	634.9	603.0	575.6	545.5	518.0	491.5	464.9	441.9
15°	714.6	674.8	627.8	585.3	546.4	505.6	472.0	433.9	400.3	377.2	348.0
17.5°	689.8	638.5	582.7	533.1	482.6	440.1	397.6	357.7	325.9	295.8	271.9
20°	659.7	597.7	537.5	479.9	422.4	373.7	330.3	292.2	261.2	237.3	219.6
22.5°	626.1	553.4	483.5	420.6	363.1	315.2	274.5	246.2	223.1	209.9	204.6
25°	593.3	510.1	431.2	362.2	304.6	263.9	236.4	212.5	201.0	195.7	195.7
27.5°	563.2	465.8	378.1	310.8	255.0	223.1	201.9	192.2	186.8	186.8	189.5
30°	534.8	421.5	327.6	259.5	215.2	191.3	179.8	176.2	177.1	180.6	184.2
32.5°	502.1	379.0	284.2	223.1	186.8	170.9	162.0	162.9	167.4	173.6	179.8
35°	467.6	333.8	246.2	195.7	167.4	155.0	149.7	150.5	156.7	164.7	170.9
37.5°	436.6	297.5	217.0	174.4	153.2	145.2	140.8	141.7	146.1	155.9	163.8
40°	405.6	266.5	193.0	162.0	145.2	137.3	134.6	133.7	137.3	146.1	155.9
42.5°	379.0	240.0	178.9	153.2	139.9	132.8	129.3	129.3	131.1	138.1	147.9
45°	363.1	224.0	169.1	147.0	135.5	129.3	125.7	124.0	126.6	131.1	139.9
47.5°	363.1	216.1	162.9	142.6	131.9	126.6	122.2	121.3	122.2	126.6	135.5
50°	375.5	217.8	162.0	140.8	130.2	123.1	118.7	118.7	120.4	126.6	133.7
52.5°	386.1	221.4	164.7	142.6	130.2	121.3	116.0	115.1	117.8	124.0	130.2
55°	384.3	221.4	167.4	145.2	132.8	122.2	115.1	114.2	116.0	122.2	128.4
57.5°	343.6	208.1	164.7	147.0	136.4	126.6	119.5	116.9	118.7	124.0	129.3
60°	278.1	185.1	157.6	147.0	141.7	134.6	127.5	125.7	126.6	131.9	138.1
62.5°	217.8	164.7	148.8	146.1	144.3	140.8	138.1	136.4	136.4	140.8	146.1
65°	177.1	148.8	141.7	142.6	144.3	143.5	142.6	141.7	141.7	144.3	149.7
67.5°	147.9	133.7	131.9	134.6	136.4	137.3	138.1	137.3	138.1	140.8	147.0
69°	134.6	125.7	124.0	125.7	129.3	130.2	131.9	131.1	131.9	134.6	140.8
70°	126.6	119.5	117.8	120.4	123.1	124.0	125.7	124.9	125.7	128.4	134.6
72.5°	109.8	101.8	99.2	100.9	103.6	103.6	106.3	107.1	105.4	106.3	110.7
75°	93.9	85.0	80.6	81.5	81.5	81.5	83.2	83.2	81.5	80.6	81.5
77.5°	78.8	69.1	63.8	63.8	63.8	62.9	60.2	61.1	62.0	61.1	62.0
80°	62.0	54.0	48.7	48.7	48.7	46.9	46.0	46.0	47.8	49.6	48.7
82.5°	47.8	39.8	37.2	36.3	36.3	34.5	34.5	36.3	35.4	36.3	38.1
85°	34.5	28.3	25.7	26.6	25.7	23.9	24.8	27.5	27.5	26.6	28.3
87.5°	21.3	17.7	16.8	17.7	15.9	13.3	12.4	13.3	15.1	14.2	15.9
90°	11.7	10.8	10.8	9.8	9.7	8.8	8.8	9.3	10.7	10.7	9.8
92.5°	6.0	6.5	7.0	7.0	7.0	6.5	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.5	8.0	7.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	9.0	9.5	10.0	11.0	12.0	10.5	9.0	9.0	9.0	8.5	8.0
100°	23.0	24.5	26.0	27.5	29.0	25.0	21.0	16.5	12.0	11.0	10.0
102.5°	42.0	44.5	47.0	48.5	50.0	45.0	40.0	33.5	27.0	22.5	18.0
105°	65.0	67.5	70.0	71.0	72.0	67.5	63.0	55.5	48.0	42.0	36.0
107.5°	90.0	92.0	94.0	94.5	95.0	91.5	88.0	80.5	73.0	65.5	58.0



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	119.0	120.0	121.0	120.5	120.0	117.0	114.0	108.0	102.0	94.5	87.0	0°
112.5°	149.0	149.5	150.0	149.0	148.0	145.5	143.0	138.5	134.0	127.5	121.0	2.5°
115°	179.0	180.5	182.0	180.5	179.0	176.5	174.0	171.0	168.0	163.5	159.0	5°
117.5°	210.0	212.5	215.0	213.0	211.0	208.0	205.0	203.5	202.0	199.5	197.0	7.5°
120°	245.0	247.5	250.0	248.0	246.0	244.5	243.0	240.0	237.0	235.0	233.0	10°
122.5°	278.0	280.5	283.0	281.0	279.0	278.0	277.0	274.0	271.0	269.0	267.0	12.5°
125°	310.0	312.5	315.0	314.0	313.0	311.5	310.0	307.5	305.0	302.0	299.0	15°
127.5°	346.0	346.0	346.0	345.5	345.0	342.5	340.0	339.5	339.0	336.0	333.0	17.5°
130°	381.0	381.0	381.0	379.0	377.0	374.5	372.0	371.0	370.0	368.0	366.0	20°
132.5°	414.0	415.0	416.0	413.5	411.0	408.0	405.0	404.5	404.0	402.5	401.0	22.5°
135°	447.0	447.5	448.0	445.5	443.0	440.0	437.0	436.0	435.0	433.5	432.0	25°
137.5°	476.0	475.5	475.0	474.0	473.0	470.5	468.0	466.0	464.0	462.0	460.0	27.5°
140°	504.0	503.0	502.0	501.0	500.0	498.5	497.0	494.0	491.0	490.0	489.0	30°
142.5°	533.0	533.0	533.0	530.0	527.0	526.0	525.0	523.0	521.0	519.5	518.0	32.5°
145°	561.0	561.5	562.0	559.0	556.0	553.5	551.0	550.5	550.0	548.5	547.0	35°
147.5°	586.0	585.5	585.0	582.5	580.0	577.5	575.0	574.5	574.0	574.0	574.0	37.5°
150°	603.0	601.5	600.0	598.5	597.0	595.0	593.0	593.0	593.0	593.0	593.0	40°
152.5°	618.0	616.0	614.0	612.5	611.0	610.5	610.0	610.0	610.0	609.5	609.0	42.5°
155°	636.0	633.5	631.0	628.5	626.0	627.0	628.0	629.0	630.0	628.5	627.0	45°
157.5°	650.0	649.0	648.0	646.0	644.0	644.5	645.0	645.5	646.0	645.0	644.0	47.5°
160°	661.0	662.5	664.0	661.0	658.0	656.5	655.0	655.0	655.0	655.5	656.0	50°
162.5°	670.0	670.5	671.0	669.0	667.0	665.0	663.0	662.0	661.0	663.0	665.0	52.5°
165°	680.0	678.5	677.0	674.5	672.0	672.5	673.0	673.0	673.0	674.5	676.0	55°
167.5°	688.0	686.0	684.0	681.0	678.0	681.5	685.0	686.5	688.0	687.0	686.0	57.5°
170°	694.0	691.5	689.0	687.5	686.0	688.5	691.0	692.0	693.0	692.5	692.0	60°
172.5°	694.0	693.0	692.0	690.5	689.0	689.5	690.0	690.0	690.0	691.5	693.0	62.5°
175°	696.0	695.5	695.0	692.5	690.0	690.0	690.0	690.5	691.0	693.0	695.0	65°
177.5°	701.0	700.0	699.0	696.5	694.0	694.5	695.0	696.0	697.0	698.0	699.0	67.5°
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	69°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

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REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
913.8	913.8	913.8	913.8	913.8
850.1	852.7	841.2	846.5	843.0
757.1	752.7	751.8	749.1	743.8
648.2	644.7	634.0	637.6	629.6
535.7	534.8	515.4	516.3	506.5
432.1	416.2	408.2	396.7	402.9
334.7	321.4	304.6	300.2	306.4
252.4	239.1	231.1	224.0	221.4
209.0	201.0	196.6	193.9	192.2
201.9	200.1	199.2	197.5	196.6
197.5	199.2	199.2	199.2	197.5
193.0	196.6	197.5	196.6	194.8
188.6	191.3	191.3	190.4	187.7
182.4	185.1	185.1	184.2	182.4
175.3	177.1	178.0	178.0	178.9
170.0	171.8	173.6	175.3	178.0
163.8	166.5	167.4	170.9	174.4
155.9	159.4	161.2	163.8	167.4
147.9	152.3	153.2	156.7	160.3
144.3	147.9	147.9	150.5	153.2
139.9	141.7	140.8	142.6	143.5
135.5	137.3	136.4	138.1	139.0
131.9	133.7	135.5	137.3	138.1
133.7	136.4	137.3	139.9	140.8
141.7	145.2	148.8	152.3	155.0
149.7	154.1	162.0	178.0	184.2
154.1	160.3	178.9	206.3	214.3
151.4	159.4	181.5	210.8	220.5
146.1	152.3	176.2	206.3	215.2
139.0	145.2	169.1	201.9	209.9
112.5	116.0	142.6	173.6	178.9
82.4	85.0	105.4	117.8	116.9
63.8	67.3	74.4	75.3	74.4
50.5	52.2	55.8	55.8	56.7
39.0	39.8	41.6	39.8	39.0
29.2	28.3	27.5	26.6	25.7
16.8	16.8	14.2	12.4	11.5
9.3	9.7	8.7	6.8	5.0
5.5	5.0	4.5	4.0	4.0
6.5	6.0	5.5	5.0	5.0
8.0	8.0	7.5	7.0	7.0
9.5	9.0	8.5	8.0	8.0
15.5	13.0	12.0	11.0	11.0
31.5	27.0	24.5	22.0	21.0
53.5	49.0	45.5	42.0	41.0

CANDELA DISTRIBUTION:

	160°
110°	80.5
112.5°	113.5
115°	153.0
117.5°	193.0
120°	229.5
122.5°	264.0
125°	297.5
127.5°	331.0
130°	364.0
132.5°	397.0
135°	429.0
137.5°	459.5
140°	488.0
142.5°	517.5
145°	545.5
147.5°	572.5
150°	593.0
152.5°	608.5
155°	626.0
157.5°	643.5
160°	657.5
162.5°	667.0
165°	676.0
167.5°	685.0
170°	692.0
172.5°	694.0
175°	696.0
177.5°	699.5
180°	700.0

'227099

IST-AF-1200-LED-E1-SL4-7030-ULG

TION (continued):

165°	170°	175°	180°
74.0	71.0	68.0	66.0
106.0	102.5	99.0	99.0
147.0	143.0	139.0	140.0
189.0	186.5	184.0	184.0
226.0	224.5	223.0	225.0
261.0	260.5	260.0	263.0
296.0	295.0	294.0	298.0
329.0	329.0	329.0	330.0
362.0	361.5	361.0	363.0
393.0	393.5	394.0	396.0
426.0	426.0	426.0	429.0
459.0	458.0	457.0	460.0
487.0	486.0	485.0	488.0
517.0	516.0	515.0	518.0
544.0	545.0	546.0	550.0
571.0	571.5	572.0	575.0
593.0	592.5	592.0	595.0
608.0	608.0	608.0	611.0
625.0	625.0	625.0	629.0
643.0	643.0	643.0	646.0
659.0	659.5	660.0	663.0
669.0	669.0	669.0	673.0
676.0	677.0	678.0	681.0
684.0	685.5	687.0	690.0
692.0	693.5	695.0	698.0
695.0	696.0	697.0	699.0
697.0	697.5	698.0	700.0
700.0	702.5	705.0	707.0
700.0	700.0	700.0	700.0

(END OF REPORT)