

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: P227095

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227095
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-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCUELED OPTICS-TYPE IV W/SPILL CONTROL, 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: 8081.2 lumens
Efficiency: N/A
Efficacy: 97.7 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

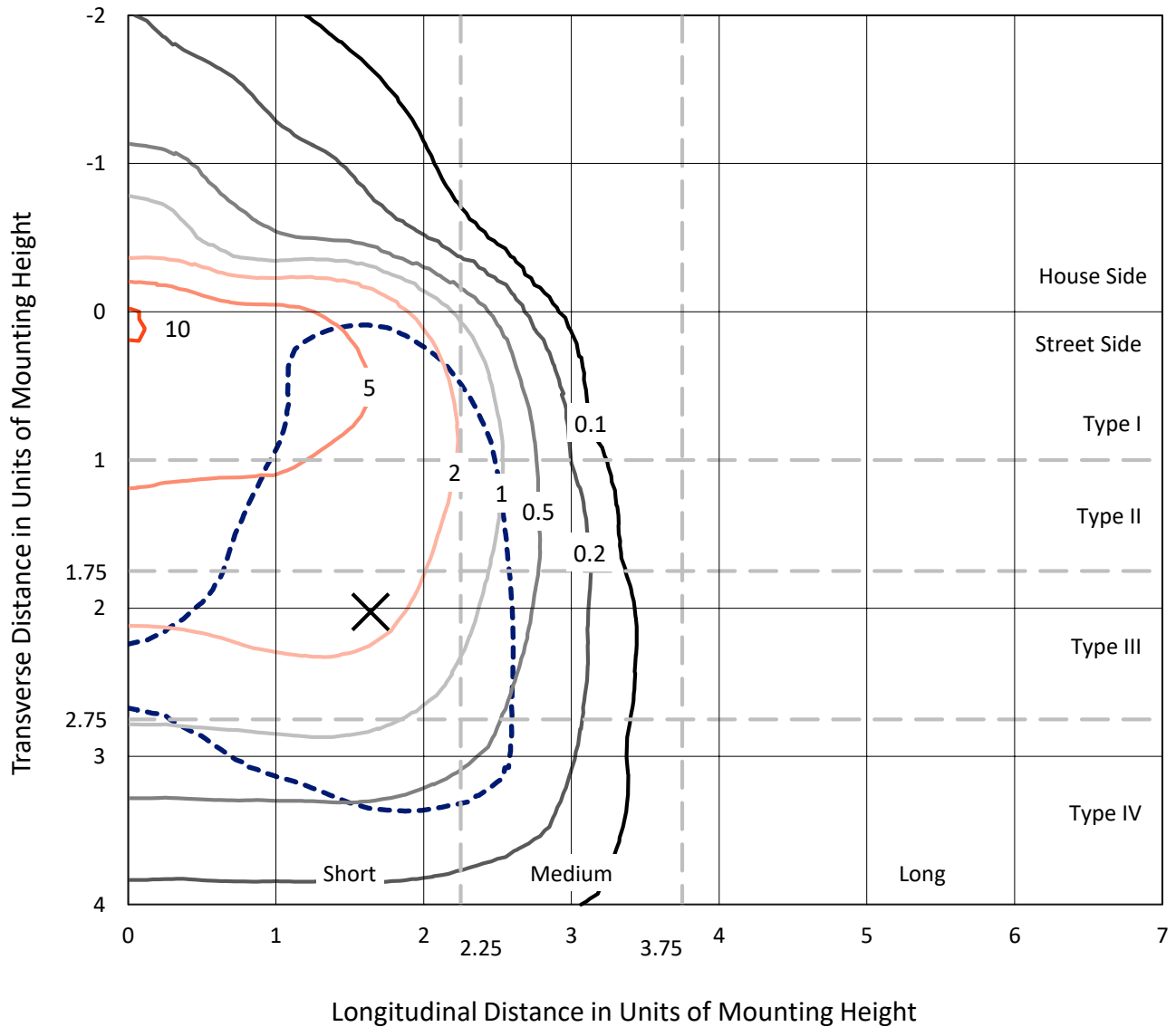
Input Watts (W): 82.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

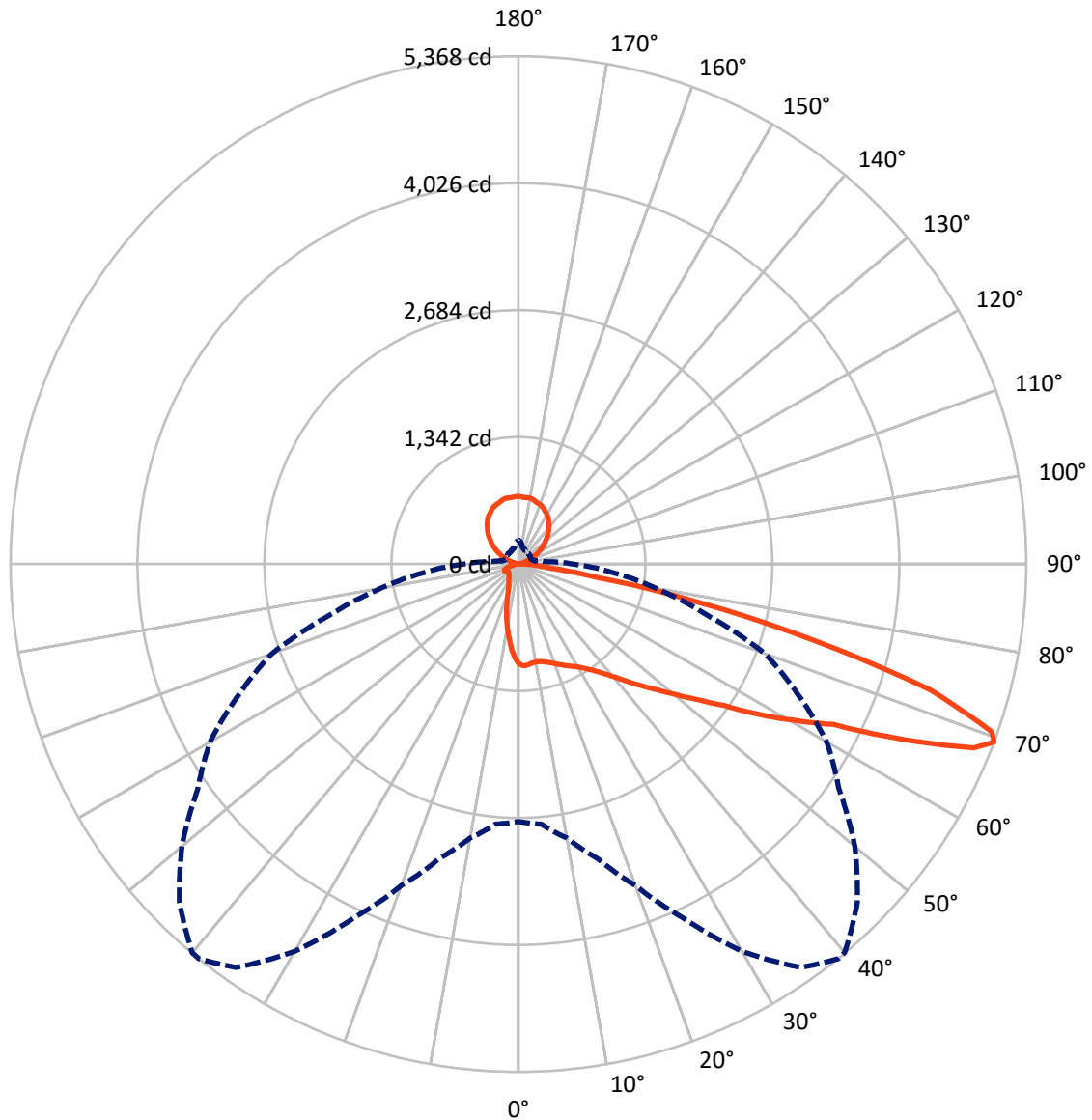
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.6 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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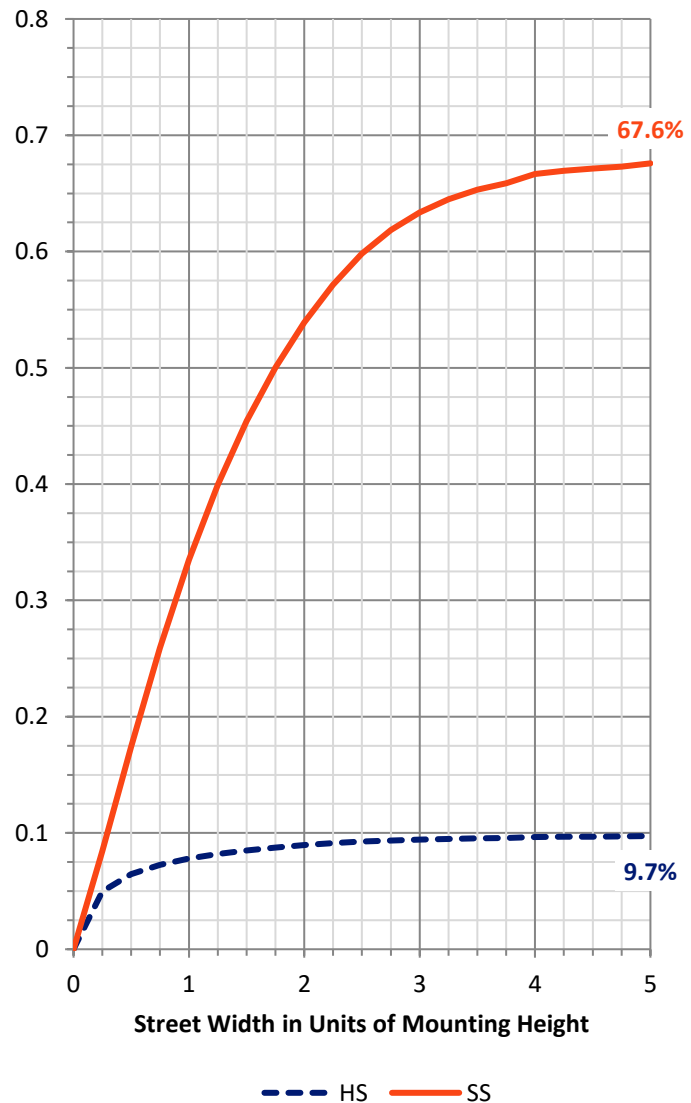
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	798.3	887.7	1686.0
	% Fixture	9.9	11.0	20.9
Street Side	Lumens	5506.2	889.0	6395.2
	% Fixture	68.1	11.0	79.1
Total	Lumens	6304.5	1776.7	8081.2
	% Fixture	78.0	22.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	1.1
10°-20°	229.9	2.8
20°-30°	357.8	4.4
30°-40°	540.7	6.7
40°-50°	865.3	10.7
50°-60°	1359.9	16.8
60°-70°	1831.1	22.7
70°-80°	908.3	11.2
80°-90°	120.4	1.5
90°-100°	11.2	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°	6304.5	78.0
0°-180°	8081.2	100.0

Coefficient of Utilization



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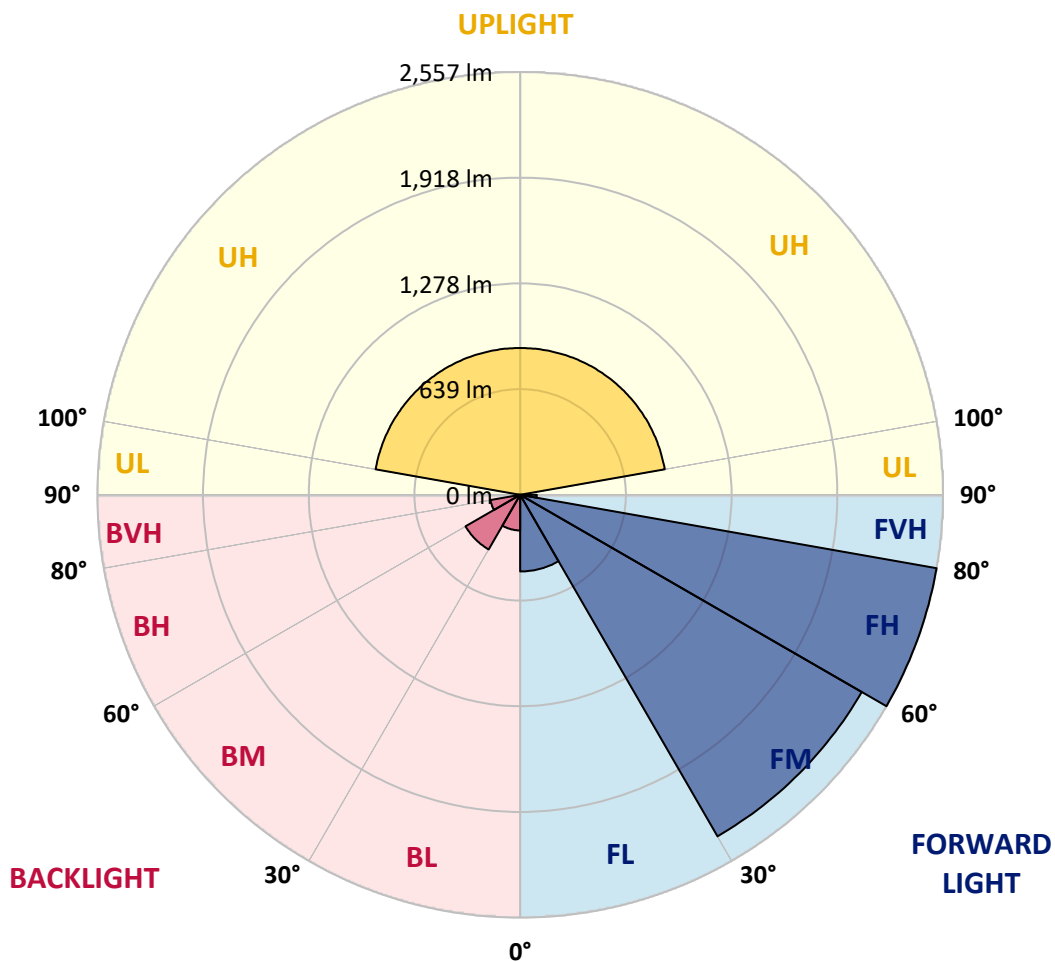
CATALOG NUMBER: IST-AF-1200-LED-E1-SL4-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	463.6	5.7			
FM	(30°-60°)	2384.8	29.5			
FH	(60°-80°)	2556.8	31.6			G2/5000
FVH	(80°-90°)	101.0	1.3			G2/225
BL	(0°-30°)	215.2	2.7	B1/500		
BM	(30°-60°)	381.2	4.7	B1/1000		
BH	(60°-80°)	182.6	2.3	B1/500		G1/500
BVH	(80°-90°)	19.3	0.2			G1/100
UL	(90°-100°)	11.2	0.1		U2/50	
UH	(100°-180°)	887.7	11.0		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°	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1
2.5°	1081.7	1082.7	1082.7	1083.7	1079.6	1079.6	1080.6	1076.6	1078.6	1077.6	1072.5
5°	1083.7	1084.7	1083.7	1084.7	1079.6	1077.6	1073.5	1068.4	1070.4	1069.4	1062.2
7.5°	1078.6	1079.6	1077.6	1078.6	1072.5	1068.4	1062.2	1058.1	1055.1	1054.0	1044.8
10°	1067.3	1070.4	1066.3	1069.4	1064.3	1060.2	1057.1	1053.0	1051.0	1050.0	1039.7
12.5°	1051.0	1053.0	1054.0	1058.1	1058.1	1059.2	1059.2	1056.1	1057.1	1056.1	1047.9
15°	1035.6	1042.8	1050.0	1054.0	1062.2	1067.3	1071.4	1070.4	1073.5	1072.5	1067.3
17.5°	1035.6	1041.8	1054.0	1067.3	1082.7	1089.9	1096.0	1096.0	1097.0	1095.0	1086.8
20°	1039.7	1051.0	1071.4	1093.9	1112.4	1126.7	1130.8	1129.7	1125.7	1125.7	1111.3
22.5°	1073.5	1080.6	1103.2	1127.7	1153.3	1167.6	1168.6	1165.6	1157.4	1155.3	1137.9
25°	1121.6	1129.7	1150.2	1181.9	1201.4	1212.6	1209.5	1199.3	1191.1	1184.0	1165.6
27.5°	1196.2	1202.4	1222.8	1244.3	1255.6	1259.7	1247.4	1233.1	1223.9	1220.8	1196.2
30°	1273.0	1281.1	1297.5	1310.9	1320.1	1307.8	1288.3	1271.9	1263.8	1261.7	1239.2
32.5°	1367.2	1368.2	1379.4	1382.5	1383.5	1363.1	1336.5	1321.1	1318.1	1314.0	1296.5
35°	1453.1	1458.2	1456.2	1455.1	1445.9	1420.4	1397.9	1388.7	1385.6	1384.6	1370.2
37.5°	1529.8	1538.0	1532.9	1523.7	1512.4	1492.0	1468.4	1458.2	1468.4	1462.3	1465.4
40°	1604.6	1604.6	1598.5	1593.2	1579.9	1560.5	1552.3	1553.4	1569.7	1573.8	1577.9
42.5°	1669.0	1668.0	1661.9	1657.8	1655.7	1651.7	1647.6	1667.0	1698.7	1704.8	1714.1
45°	1739.6	1738.6	1715.1	1723.3	1737.6	1740.7	1755.0	1800.0	1838.9	1841.9	1861.4
47.5°	1808.2	1800.0	1777.5	1785.7	1826.6	1848.1	1871.6	1935.1	1989.3	2000.6	2054.8
50°	1879.8	1871.6	1847.0	1862.4	1919.8	1959.7	2014.9	2102.9	2177.7	2193.0	2263.6
52.5°	1954.6	1953.5	1934.1	1957.6	2028.2	2109.0	2196.1	2295.3	2386.3	2405.8	2510.2
55°	2044.6	2039.5	2031.3	2059.9	2160.2	2268.7	2404.8	2539.9	2639.1	2673.9	2779.4
57.5°	2145.8	2143.8	2144.8	2204.3	2325.0	2489.8	2656.5	2838.7	3002.4	3026.9	3125.2
60°	2233.9	2238.0	2261.5	2354.6	2506.1	2729.1	2963.5	3210.1	3355.5	3381.1	3477.2
62.5°	2341.3	2364.9	2417.0	2534.8	2712.8	2982.9	3286.8	3547.8	3735.1	3787.3	3969.5
65°	2599.2	2617.6	2714.8	2857.1	3084.3	3430.2	3779.1	4158.7	4467.7	4514.9	4671.4
67.5°	2787.5	2834.6	2987.0	3219.3	3547.8	3989.9	4468.8	4928.3	5189.2	5210.7	5101.3
69°	2722.0	2760.9	2941.0	3221.4	3617.4	4132.1	4727.7	5207.6	5368.2	5364.1	5066.4
70°	2621.7	2657.5	2856.1	3128.3	3559.1	4115.7	4731.8	5209.7	5306.9	5270.0	4929.3
72.5°	2196.1	2227.8	2414.0	2698.4	3116.0	3668.6	4248.8	4575.2	4554.8	4524.1	3961.3
75°	1371.3	1369.2	1531.9	1696.7	2021.0	2579.8	3011.6	3273.5	3231.6	3208.1	2543.0
77.5°	512.7	548.5	607.8	784.9	934.3	1236.1	1585.1	1876.7	1957.6	1854.2	1369.2
80°	267.1	286.5	325.4	387.8	446.2	510.7	614.0	790.0	817.6	762.4	552.6
82.5°	210.8	234.4	273.2	326.4	367.3	342.8	323.4	334.6	332.6	317.2	281.4
85°	159.7	187.3	250.7	304.9	363.2	307.0	244.6	213.9	190.4	191.4	203.7
87.5°	79.8	103.3	197.5	266.1	316.2	203.7	159.7	123.8	103.3	99.2	133.0
90°	29.7	29.7	46.0	59.3	79.3	44.0	43.0	34.8	27.2	27.1	37.8
92.5°	4.1	4.1	4.6	5.1	5.6	6.1	6.1	6.1	6.1	6.1	6.1
95°	5.1	5.1	5.6	6.1	6.6	7.2	7.2	7.2	7.2	7.2	7.2
97.5°	7.2	7.2	7.7	8.2	8.2	8.2	8.7	9.2	9.2	9.2	9.2
100°	8.2	8.2	8.7	9.2	9.7	10.2	11.3	12.3	16.0	16.9	21.5
102.5°	11.3	11.3	12.3	13.3	15.9	18.4	23.0	27.6	32.9	34.3	40.9
105°	21.5	22.5	25.1	27.6	32.2	36.8	43.0	49.1	55.2	56.8	64.4
107.5°	41.9	43.0	46.5	50.1	54.7	59.3	67.0	74.7	80.8	82.3	90.0



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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
110°	67.5	69.6	72.6	75.7	82.3	89.0	96.7	104.3	109.3	110.5	116.6
112.5°	101.3	101.3	104.9	108.4	116.1	123.8	130.4	137.1	140.8	141.7	146.3
115°	143.2	142.2	146.3	150.4	156.5	162.6	167.3	171.9	174.3	174.9	178.0
117.5°	188.2	188.2	190.8	193.3	197.4	201.5	204.1	206.6	207.9	208.2	209.7
120°	230.2	228.1	229.7	231.2	234.8	238.3	240.4	242.4	244.9	245.5	248.6
122.5°	269.0	266.0	266.5	267.0	270.1	273.1	275.2	277.2	279.7	280.3	283.4
125°	304.8	300.7	301.8	302.8	304.3	305.9	308.9	312.0	314.0	314.6	317.1
127.5°	337.6	336.6	336.6	336.6	338.6	340.6	343.7	346.8	347.2	347.3	347.8
130°	371.3	369.3	369.8	370.3	372.4	374.4	376.4	378.5	379.3	379.5	380.5
132.5°	405.1	403.0	402.5	402.0	406.1	410.2	411.7	413.3	413.7	413.8	414.3
135°	438.8	435.8	435.8	435.8	438.8	441.9	443.4	445.0	445.8	446.0	447.0
137.5°	470.6	467.5	468.5	469.5	470.0	470.6	472.6	474.6	476.3	476.7	478.7
140°	499.2	496.1	497.2	498.2	499.2	500.2	501.2	502.3	504.7	505.3	508.4
142.5°	529.9	526.8	527.8	528.9	529.4	529.9	531.4	533.0	534.6	535.0	537.0
145°	562.6	558.5	557.5	556.5	558.0	559.6	561.1	562.6	563.0	563.1	563.6
147.5°	588.2	585.1	584.6	584.1	585.6	587.2	587.2	587.2	587.6	587.7	588.2
150°	608.7	605.6	606.1	606.6	606.6	606.6	606.6	606.6	606.6	606.6	606.6
152.5°	625.0	622.0	622.0	622.0	622.5	623.0	623.5	624.0	624.0	624.0	624.0
155°	643.4	639.3	639.3	639.3	640.4	641.4	642.9	644.5	643.6	643.4	642.4
157.5°	660.8	657.8	657.8	657.8	658.3	658.8	659.8	660.8	660.4	660.3	659.8
160°	678.2	675.1	674.6	674.1	672.6	671.1	670.5	670.0	670.0	670.0	670.0
162.5°	688.4	684.4	684.4	684.4	682.3	680.3	678.2	676.2	677.0	677.2	678.2
165°	696.6	693.6	692.5	691.5	691.5	691.5	690.0	688.4	688.4	688.4	688.4
167.5°	705.8	702.8	701.2	699.7	700.7	701.7	702.8	703.8	702.6	702.3	700.7
170°	714.0	711.0	709.4	707.9	707.9	707.9	708.4	708.9	708.1	707.9	706.9
172.5°	715.0	713.0	712.0	711.0	709.9	708.9	707.4	705.8	705.8	705.8	705.8
175°	716.1	714.0	713.5	713.0	712.0	711.0	708.9	706.9	706.4	706.3	705.8
177.5°	723.2	721.2	718.6	716.1	715.6	715.0	714.0	713.0	712.2	712.0	711.0
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1
2.5°	1068.4	1068.4	1066.3	1065.3	1062.2	1058.1	1055.1	1050.0	1046.9	1041.8	1035.6
5°	1055.1	1051.0	1048.9	1044.8	1038.7	1033.6	1027.5	1020.3	1012.0	1001.8	990.5
7.5°	1037.7	1031.5	1024.4	1022.3	1015.1	1008.9	1001.8	991.5	980.3	961.9	947.6
10°	1030.5	1024.4	1018.2	1014.1	1004.8	997.7	989.5	976.2	961.9	937.3	910.7
12.5°	1037.7	1031.5	1025.4	1018.2	1010.0	1001.8	990.5	974.2	954.7	923.0	890.3
15°	1055.1	1048.9	1038.7	1031.5	1020.3	1013.0	997.7	979.3	950.6	911.8	868.8
17.5°	1074.5	1065.3	1056.1	1044.8	1034.6	1025.4	1008.9	985.4	949.6	903.6	848.3
20°	1092.9	1082.7	1068.4	1060.2	1050.0	1036.7	1019.3	990.5	947.6	887.2	826.9
22.5°	1114.4	1101.1	1085.8	1076.6	1068.4	1057.1	1036.7	999.7	947.6	878.0	802.3
25°	1142.0	1124.6	1109.3	1100.1	1095.0	1086.8	1062.2	1021.3	954.7	872.9	781.8
27.5°	1174.8	1152.3	1139.0	1132.8	1131.8	1125.7	1101.1	1050.0	971.1	872.9	762.4
30°	1213.6	1194.2	1176.8	1176.8	1189.1	1185.0	1157.4	1093.9	996.7	876.0	748.1
32.5°	1267.8	1248.4	1238.2	1248.4	1261.7	1265.8	1234.1	1156.3	1038.7	890.3	733.8
35°	1347.7	1335.5	1328.3	1343.6	1370.2	1380.5	1341.6	1249.4	1100.1	917.9	725.5
37.5°	1453.1	1443.9	1434.7	1461.3	1511.4	1531.9	1475.6	1356.9	1188.1	963.9	721.4
40°	1573.8	1574.8	1585.1	1638.4	1686.4	1729.4	1666.0	1519.6	1308.9	1029.5	725.5
42.5°	1717.1	1728.4	1763.2	1836.8	1930.0	1963.8	1902.4	1716.1	1459.2	1108.3	735.8
45°	1895.2	1924.9	1984.2	2093.7	2206.3	2258.5	2171.4	1963.8	1648.6	1234.1	764.5
47.5°	2084.5	2149.9	2250.3	2383.3	2514.3	2548.1	2440.6	2187.9	1833.7	1345.7	808.4
50°	2327.0	2406.8	2507.2	2666.7	2806.0	2826.4	2684.1	2395.5	1995.5	1442.9	850.4
52.5°	2553.2	2661.6	2789.6	2974.7	3116.0	3090.4	2906.2	2580.8	2123.3	1509.4	873.9
55°	2862.2	2974.7	3119.1	3280.7	3421.0	3359.6	3107.8	2738.3	2225.7	1558.5	881.1
57.5°	3215.2	3301.2	3442.4	3608.2	3700.3	3594.9	3306.3	2891.9	2322.9	1559.5	824.8
60°	3562.1	3662.5	3818.0	3980.7	4031.9	3849.7	3444.5	2915.4	2226.8	1391.7	660.0
62.5°	4075.8	4177.1	4256.0	4282.6	4190.4	3824.1	3283.8	2666.7	1919.8	1098.0	467.7
65°	4649.9	4535.4	4382.8	4239.6	3988.9	3432.2	2831.5	2191.0	1489.9	733.8	322.3
67.5°	4800.4	4451.4	4119.8	3800.6	3332.9	2733.2	2135.6	1541.1	955.7	417.5	219.0
69°	4643.8	4134.2	3764.8	3258.2	2775.3	2045.6	1471.5	987.5	571.0	290.6	183.2
70°	4357.3	3827.2	3326.7	2784.5	2149.9	1562.6	978.2	646.7	372.5	211.9	164.8
72.5°	3287.9	2628.9	2026.2	1316.0	802.3	445.2	313.1	224.1	177.1	155.6	141.2
75°	1901.4	1265.8	828.9	442.1	262.0	194.5	169.9	151.5	140.1	135.0	122.8
77.5°	802.3	501.5	339.7	248.7	176.0	150.5	130.9	120.7	119.7	116.6	105.4
80°	365.3	313.1	267.1	187.3	134.0	114.6	100.2	98.2	100.2	97.2	85.9
82.5°	271.2	267.1	223.1	144.2	102.3	76.7	62.4	65.5	73.7	79.8	69.6
85°	226.2	226.2	187.3	107.4	67.5	49.1	48.1	54.2	61.4	66.5	56.3
87.5°	207.8	199.6	107.4	55.2	38.9	31.7	29.7	26.6	26.6	46.0	38.9
90°	27.6	16.4	13.3	13.3	14.3	13.3	14.3	12.3	12.3	12.3	13.3
92.5°	6.6	7.2	7.2	7.2	6.6	6.1	6.1	6.1	6.1	6.1	6.1
95°	7.2	7.2	7.7	8.2	7.7	7.2	7.2	7.2	7.2	7.2	7.2
97.5°	10.7	12.3	11.3	10.2	9.7	9.2	8.7	8.2	8.2	8.2	8.7
100°	25.6	29.7	28.1	26.6	25.1	23.5	21.5	19.4	19.4	19.4	21.5
102.5°	46.0	51.1	49.6	48.1	45.5	43.0	41.4	39.9	38.9	39.9	41.4
105°	69.0	73.7	72.6	71.6	69.0	66.5	64.4	62.4	62.4	62.4	64.4
107.5°	93.6	97.2	96.7	96.2	94.1	92.1	90.5	89.0	88.0	89.0	90.5



REPORT NUMBER: P227095

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	119.7	122.8	123.3	123.8	122.8	121.7	120.2	118.7	119.7	118.7	120.2
112.5°	148.8	151.4	152.4	153.4	152.9	152.4	151.4	150.4	150.4	150.4	151.4
115°	180.6	183.1	184.6	186.2	184.6	183.1	182.1	181.1	182.1	181.1	182.1
117.5°	212.8	215.8	217.9	219.9	217.4	214.8	213.8	212.8	213.8	212.8	213.8
120°	250.1	251.6	253.7	255.7	253.2	250.6	249.6	248.6	248.6	248.6	249.6
122.5°	284.4	285.4	287.4	289.5	286.9	284.4	283.4	282.3	283.4	282.3	283.4
125°	318.6	320.2	321.2	322.2	319.7	317.1	317.1	317.1	317.1	317.1	317.1
127.5°	350.4	352.9	353.4	353.9	353.9	353.9	353.4	352.9	355.0	352.9	353.4
130°	383.1	385.7	387.7	389.7	389.7	389.7	388.7	387.7	388.7	387.7	388.7
132.5°	417.4	420.4	423.0	425.5	424.5	423.5	423.5	423.5	424.5	423.5	423.5
135°	450.1	453.2	455.7	458.3	457.8	457.3	458.8	460.3	461.4	460.3	458.8
137.5°	481.3	483.9	484.9	485.9	486.4	486.9	489.5	492.0	493.1	492.0	489.5
140°	509.9	511.5	512.5	513.5	514.5	515.6	518.1	520.7	522.7	520.7	518.1
142.5°	538.1	539.1	542.2	545.2	545.2	545.2	545.7	546.3	548.3	546.3	545.7
145°	566.2	568.8	571.8	574.9	574.4	573.9	572.3	570.8	572.9	570.8	572.3
147.5°	590.8	593.3	595.9	598.4	598.9	599.4	597.9	596.4	598.4	596.4	597.9
150°	608.7	610.7	612.2	613.8	615.3	616.8	618.4	619.9	624.0	619.9	618.4
152.5°	624.5	625.0	626.6	628.1	630.1	632.2	634.7	637.3	642.4	637.3	634.7
155°	641.4	640.4	642.9	645.5	648.0	650.6	651.6	652.6	655.7	652.6	651.6
157.5°	659.3	658.8	660.8	662.9	663.9	664.9	664.9	664.9	670.0	664.9	664.9
160°	671.6	673.1	676.2	679.2	677.7	676.2	675.7	675.1	681.3	675.1	675.7
162.5°	680.3	682.3	684.4	686.4	685.9	685.4	684.4	683.3	689.5	683.3	684.4
165°	687.9	687.4	690.0	692.5	694.1	695.6	694.6	693.6	697.7	693.6	694.6
167.5°	697.1	693.6	696.6	699.7	701.7	703.8	703.8	703.8	709.9	703.8	703.8
170°	704.3	701.7	703.3	704.8	707.4	709.9	711.0	712.0	717.1	712.0	711.0
172.5°	705.3	704.8	706.3	707.9	708.9	709.9	711.0	712.0	717.1	712.0	711.0
175°	705.8	705.8	708.4	711.0	711.5	712.0	711.0	709.9	715.0	709.9	711.0
177.5°	710.4	709.9	712.5	715.0	716.1	717.1	715.6	714.0	718.1	714.0	715.6
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1



REPORT NUMBER: P227095

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

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1
2.5°	1030.5	1026.4	1016.2	1014.1	1011.0	1006.9	1005.9	1000.8	990.5	988.5	989.5
5°	983.4	967.0	955.7	946.5	939.4	921.0	913.8	905.6	891.3	887.2	881.1
7.5°	928.1	908.7	886.2	869.8	850.4	830.9	815.6	796.2	780.8	771.6	755.2
10°	885.2	858.6	828.9	796.2	770.6	740.9	721.4	698.9	674.3	651.8	635.5
12.5°	852.4	815.6	772.6	733.8	696.8	665.1	630.3	598.6	567.9	537.3	510.7
15°	825.8	779.8	725.5	676.4	631.4	584.3	545.4	501.5	462.6	436.0	402.1
17.5°	797.2	737.9	673.3	616.0	557.7	508.6	459.5	413.4	376.5	341.8	314.1
20°	762.4	690.7	621.1	554.6	488.2	431.8	381.7	337.7	301.9	274.3	253.8
22.5°	723.4	639.5	558.7	486.1	419.5	364.3	317.2	284.5	257.9	242.5	236.4
25°	685.6	589.4	498.4	418.5	352.0	304.9	273.2	245.6	232.3	226.2	226.2
27.5°	650.8	538.3	437.0	359.2	294.7	257.9	233.3	222.1	215.9	215.9	219.0
30°	618.1	487.1	378.6	299.8	248.7	221.1	207.8	203.7	204.7	208.8	212.9
32.5°	580.2	438.0	328.5	257.9	215.9	197.5	187.3	188.3	193.4	200.6	207.8
35°	540.3	385.8	284.5	226.2	193.4	179.1	173.0	174.0	181.2	190.4	197.5
37.5°	504.5	343.8	250.7	201.6	177.1	167.9	162.8	163.8	168.9	180.1	189.3
40°	468.7	308.0	223.1	187.3	167.9	158.7	155.6	154.6	158.7	168.9	180.1
42.5°	438.0	277.3	206.7	177.1	161.7	153.5	149.5	149.5	151.5	159.7	170.9
45°	419.5	258.9	195.5	169.9	156.6	149.5	145.4	143.2	146.4	151.5	161.7
47.5°	419.5	249.7	188.3	164.8	152.5	146.4	141.2	140.1	141.2	146.4	156.6
50°	433.8	251.7	187.3	162.8	150.5	142.2	137.1	137.1	139.1	146.4	154.6
52.5°	446.2	255.8	190.4	164.8	150.5	140.1	134.0	133.0	136.1	143.2	150.5
55°	444.2	255.8	193.4	167.9	153.5	141.2	133.0	132.0	134.0	141.2	148.4
57.5°	397.0	240.5	190.4	169.9	157.6	146.4	138.1	135.0	137.1	143.2	149.5
60°	321.3	213.9	182.2	169.9	163.8	155.6	147.4	145.4	146.4	152.5	159.7
62.5°	251.7	190.4	172.0	168.9	166.8	162.8	159.7	157.6	157.6	162.8	168.9
65°	204.7	172.0	163.8	164.8	166.8	165.8	164.8	163.8	163.8	166.8	173.0
67.5°	170.9	154.6	152.5	155.6	157.6	158.7	159.7	158.7	159.7	162.8	169.9
69°	155.6	145.4	143.2	145.4	149.5	150.5	152.5	151.5	152.5	155.6	162.8
70°	146.4	138.1	136.1	139.1	142.2	143.2	145.4	144.2	145.4	148.4	155.6
72.5°	126.8	117.6	114.6	116.6	119.7	119.7	122.8	123.8	121.7	122.8	127.9
75°	108.4	98.2	93.1	94.1	94.1	94.1	96.2	96.2	94.1	93.1	94.1
77.5°	91.0	79.8	73.7	73.7	73.7	72.6	69.6	70.6	71.6	70.6	71.6
80°	71.6	62.4	56.3	56.3	56.3	54.2	53.2	53.2	55.2	57.3	56.3
82.5°	55.2	46.0	43.0	41.9	41.9	39.9	39.9	41.9	40.9	41.9	44.0
85°	39.9	32.7	29.7	30.7	29.7	27.6	28.6	31.7	31.7	30.7	32.7
87.5°	24.6	20.5	19.4	20.5	18.4	15.3	14.3	15.3	17.4	16.4	18.4
90°	12.3	11.3	11.3	10.2	10.2	9.2	9.2	9.7	11.3	11.3	10.2
92.5°	6.1	6.6	7.2	7.2	7.2	6.6	6.1	6.1	6.1	6.1	6.1
95°	7.2	7.7	8.2	7.7	7.2	7.2	7.2	7.2	7.2	7.2	7.2
97.5°	9.2	9.7	10.2	11.3	12.3	10.7	9.2	9.2	9.2	8.7	8.2
100°	23.5	25.1	26.6	28.1	29.7	25.6	21.5	16.9	12.3	11.3	10.2
102.5°	43.0	45.5	48.1	49.6	51.1	46.0	40.9	34.3	27.6	23.0	18.4
105°	66.5	69.0	71.6	72.6	73.7	69.0	64.4	56.8	49.1	43.0	36.8
107.5°	92.1	94.1	96.2	96.7	97.2	93.6	90.0	82.3	74.7	67.0	59.3



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

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	121.7	122.8	123.8	123.3	122.8	119.7	116.6	110.5	104.3	96.7	89.0	0°
112.5°	152.4	152.9	153.4	152.4	151.4	148.8	146.3	141.7	137.1	130.4	123.8	2.5°
115°	183.1	184.6	186.2	184.6	183.1	180.6	178.0	174.9	171.9	167.3	162.6	5°
117.5°	214.8	217.4	219.9	217.9	215.8	212.8	209.7	208.2	206.6	204.1	201.5	7.5°
120°	250.6	253.2	255.7	253.7	251.6	250.1	248.6	245.5	242.4	240.4	238.3	10°
122.5°	284.4	286.9	289.5	287.4	285.4	284.4	283.4	280.3	277.2	275.2	273.1	12.5°
125°	317.1	319.7	322.2	321.2	320.2	318.6	317.1	314.6	312.0	308.9	305.9	15°
127.5°	353.9	353.9	353.9	353.4	352.9	350.4	347.8	347.3	346.8	343.7	340.6	17.5°
130°	389.7	389.7	389.7	387.7	385.7	383.1	380.5	379.5	378.5	376.4	374.4	20°
132.5°	423.5	424.5	425.5	423.0	420.4	417.4	414.3	413.8	413.3	411.7	410.2	22.5°
135°	457.3	457.8	458.3	455.7	453.2	450.1	447.0	446.0	445.0	443.4	441.9	25°
137.5°	486.9	486.4	485.9	484.9	483.9	481.3	478.7	476.7	474.6	472.6	470.6	27.5°
140°	515.6	514.5	513.5	512.5	511.5	509.9	508.4	505.3	502.3	501.2	500.2	30°
142.5°	545.2	545.2	545.2	542.2	539.1	538.1	537.0	535.0	533.0	531.4	529.9	32.5°
145°	573.9	574.4	574.9	571.8	568.8	566.2	563.6	563.1	562.6	561.1	559.6	35°
147.5°	599.4	598.9	598.4	595.9	593.3	590.8	588.2	587.7	587.2	587.2	587.2	37.5°
150°	616.8	615.3	613.8	612.2	610.7	608.7	606.6	606.6	606.6	606.6	606.6	40°
152.5°	632.2	630.1	628.1	626.6	625.0	624.5	624.0	624.0	624.0	623.5	623.0	42.5°
155°	650.6	648.0	645.5	642.9	640.4	641.4	642.4	643.4	644.5	642.9	641.4	45°
157.5°	664.9	663.9	662.9	660.8	658.8	659.3	659.8	660.3	660.8	659.8	658.8	47.5°
160°	676.2	677.7	679.2	676.2	673.1	671.6	670.0	670.0	670.0	670.5	671.1	50°
162.5°	685.4	685.9	686.4	684.4	682.3	680.3	678.2	677.2	676.2	678.2	680.3	52.5°
165°	695.6	694.1	692.5	690.0	687.4	687.9	688.4	688.4	688.4	690.0	691.5	55°
167.5°	703.8	701.7	699.7	696.6	693.6	697.1	700.7	702.3	703.8	702.8	701.7	57.5°
170°	709.9	707.4	704.8	703.3	701.7	704.3	706.9	707.9	708.9	708.4	707.9	60°
172.5°	709.9	708.9	707.9	706.3	704.8	705.3	705.8	705.8	705.8	707.4	708.9	62.5°
175°	712.0	711.5	711.0	708.4	705.8	705.8	705.8	706.3	706.9	708.9	711.0	65°
177.5°	717.1	716.1	715.0	712.5	709.9	710.4	711.0	712.0	713.0	714.0	715.0	67.5°
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	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°
1056.1	1056.1	1056.1	1056.1	1056.1
982.3	985.4	972.1	978.2	974.2
874.9	869.8	868.8	865.7	859.6
749.1	745.0	732.7	736.8	727.6
619.1	618.1	595.6	596.6	585.3
499.4	481.0	471.8	458.5	465.6
386.8	371.4	352.0	346.9	354.0
291.6	276.3	267.1	258.9	255.8
241.5	232.3	227.2	224.1	222.1
233.3	231.3	230.3	228.2	227.2
228.2	230.3	230.3	230.3	228.2
223.1	227.2	228.2	227.2	225.2
218.0	221.1	221.1	220.0	217.0
210.8	213.9	213.9	212.9	210.8
202.6	204.7	205.7	205.7	206.7
196.5	198.6	200.6	202.6	205.7
189.3	192.4	193.4	197.5	201.6
180.1	184.2	186.3	189.3	193.4
170.9	176.0	177.1	181.2	185.3
166.8	170.9	170.9	174.0	177.1
161.7	163.8	162.8	164.8	165.8
156.6	158.7	157.6	159.7	160.7
152.5	154.6	156.6	158.7	159.7
154.6	157.6	158.7	161.7	162.8
163.8	167.9	172.0	176.0	179.1
173.0	178.1	187.3	205.7	212.9
178.1	185.3	206.7	238.4	247.7
175.0	184.2	209.8	243.6	254.8
168.9	176.0	203.7	238.4	248.7
160.7	167.9	195.5	233.3	242.5
129.9	134.0	164.8	200.6	206.7
95.1	98.2	121.7	136.1	135.0
73.7	77.7	85.9	87.0	85.9
58.3	60.4	64.4	64.4	65.5
45.0	46.0	48.1	46.0	45.0
33.8	32.7	31.7	30.7	29.7
19.4	19.4	16.4	14.3	13.3
9.7	10.2	9.2	7.2	5.1
5.6	5.1	4.6	4.1	4.1
6.6	6.1	5.6	5.1	5.1
8.2	8.2	7.7	7.2	7.2
9.7	9.2	8.7	8.2	8.2
15.9	13.3	12.3	11.3	11.3
32.2	27.6	25.1	22.5	21.5
54.7	50.1	46.5	43.0	41.9

CANDELA DISTRIBUTION:

	160°
110°	82.3
112.5°	116.1
115°	156.5
117.5°	197.4
120°	234.8
122.5°	270.1
125°	304.3
127.5°	338.6
130°	372.4
132.5°	406.1
135°	438.8
137.5°	470.0
140°	499.2
142.5°	529.4
145°	558.0
147.5°	585.6
150°	606.6
152.5°	622.5
155°	640.4
157.5°	658.3
160°	672.6
162.5°	682.3
165°	691.5
167.5°	700.7
170°	707.9
172.5°	709.9
175°	712.0
177.5°	715.6
180°	716.1

'227095

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TION (continued):

165°	170°	175°	180°
75.7	72.6	69.6	67.5
108.4	104.9	101.3	101.3
150.4	146.3	142.2	143.2
193.3	190.8	188.2	188.2
231.2	229.7	228.1	230.2
267.0	266.5	266.0	269.0
302.8	301.8	300.7	304.8
336.6	336.6	336.6	337.6
370.3	369.8	369.3	371.3
402.0	402.5	403.0	405.1
435.8	435.8	435.8	438.8
469.5	468.5	467.5	470.6
498.2	497.2	496.1	499.2
528.9	527.8	526.8	529.9
556.5	557.5	558.5	562.6
584.1	584.6	585.1	588.2
606.6	606.1	605.6	608.7
622.0	622.0	622.0	625.0
639.3	639.3	639.3	643.4
657.8	657.8	657.8	660.8
674.1	674.6	675.1	678.2
684.4	684.4	684.4	688.4
691.5	692.5	693.6	696.6
699.7	701.2	702.8	705.8
707.9	709.4	711.0	714.0
711.0	712.0	713.0	715.0
713.0	713.5	714.0	716.1
716.1	718.6	721.2	723.2
716.1	716.1	716.1	716.1

(END OF REPORT)