

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: P226841

Luminaire Tested: **IST-AF-1000-LED-E1-SL2-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35945)-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-SL2-8030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL, WITH UPLIGHT
GLOW
Light Source: (16) 3000K CCT, 80 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6510.7 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U5 - G1

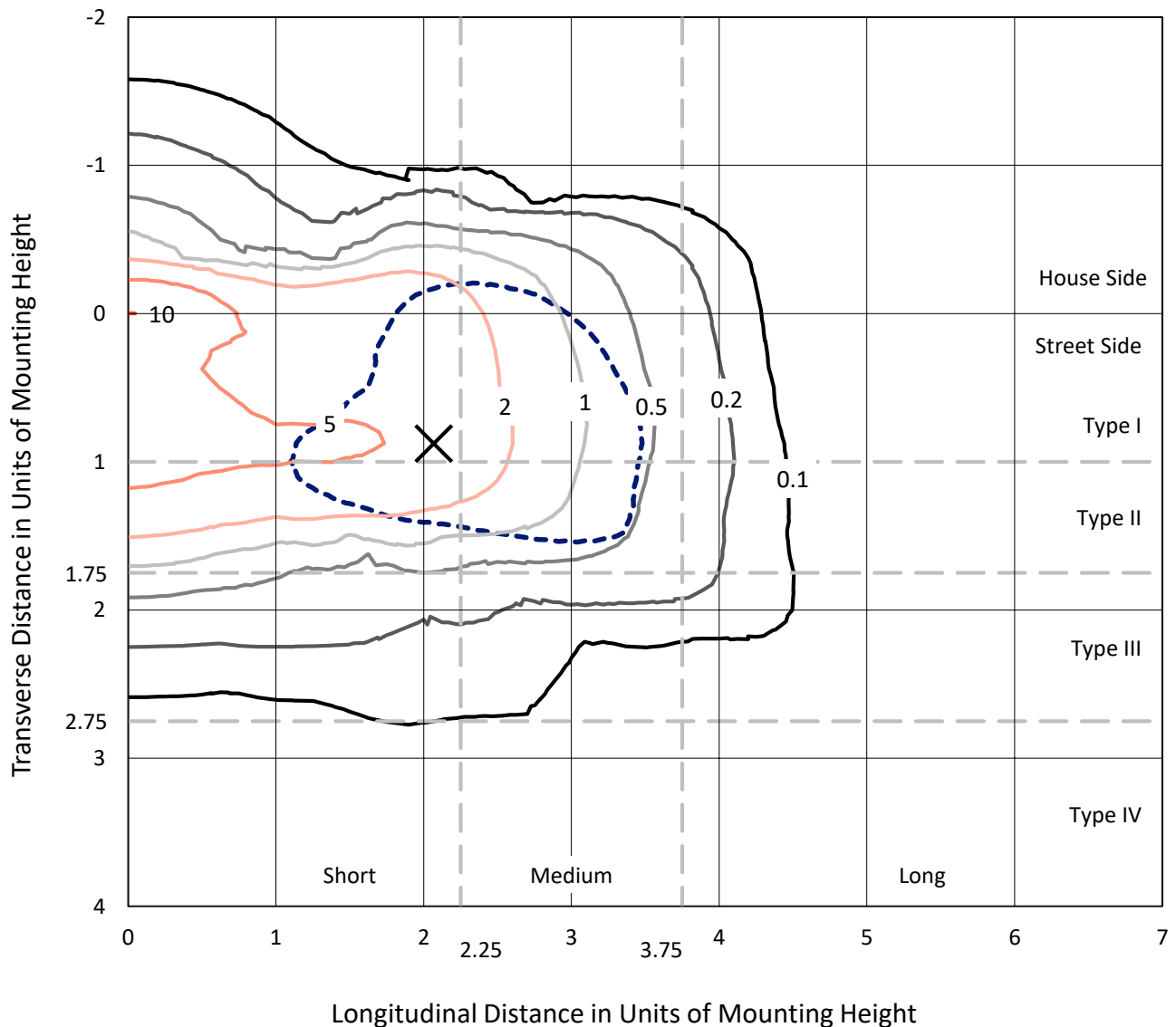
Input Watts (W): 71.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

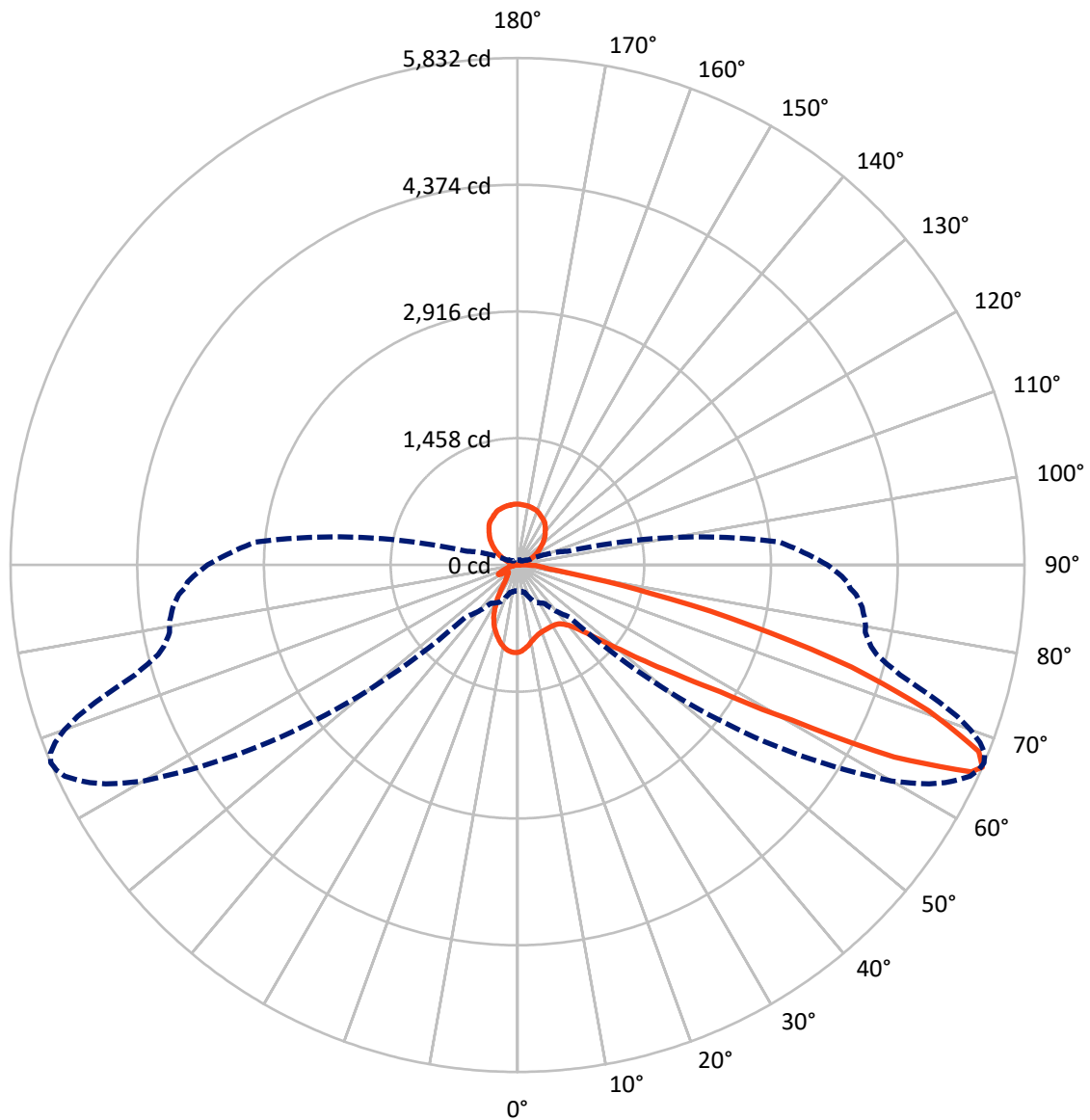


Based on 10 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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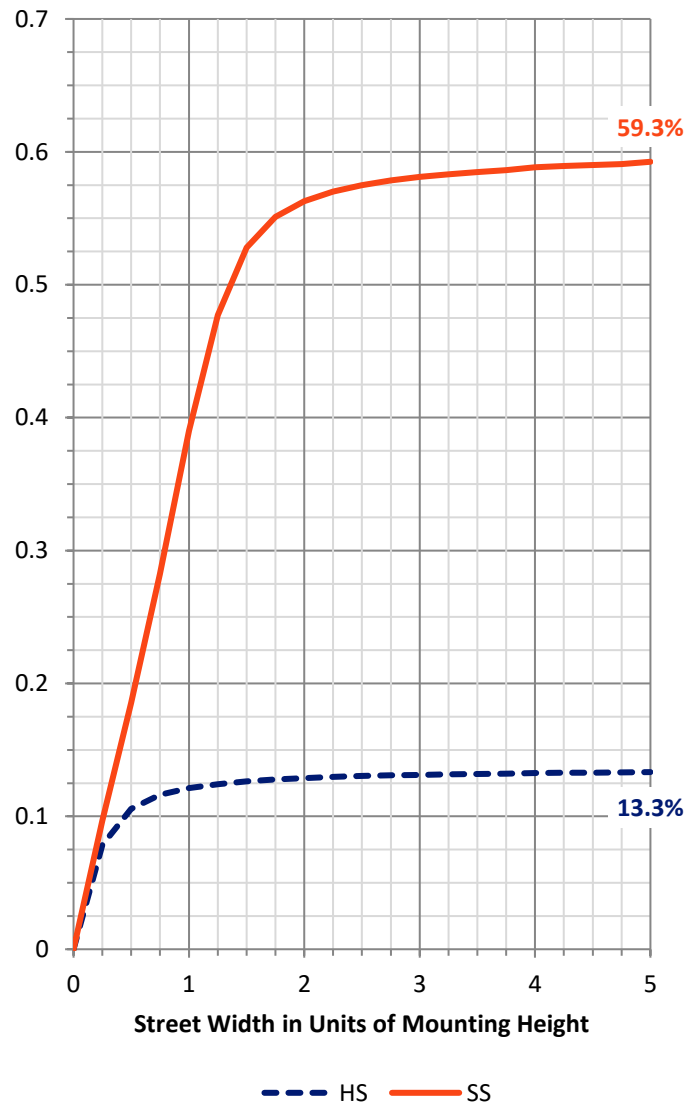
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	882.1	867.9	1750.0
	% Fixture	13.5	13.3	26.9
Street Side	Lumens	3891.7	868.9	4760.7
	% Fixture	59.8	13.3	73.1
Total	Lumens	4773.8	1736.9	6510.7
	% Fixture	73.3	26.7	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	1.3
10°-20°	207.4	3.2
20°-30°	284.4	4.4
30°-40°	406.3	6.2
40°-50°	658.9	10.1
50°-60°	1043.9	16.0
60°-70°	1322.9	20.3
70°-80°	657.6	10.1
80°-90°	105.2	1.6
90°-100°	11.0	0.2
100°-110°	57.4	0.9
110°-120°	166.1	2.6
120°-130°	273.2	4.2
130°-140°	336.8	5.2
140°-150°	344.6	5.3
150°-160°	290.3	4.5
160°-170°	191.2	2.9
170°-180°	66.3	1.0
0°-90°	4773.8	73.3
0°-180°	6510.7	100.0



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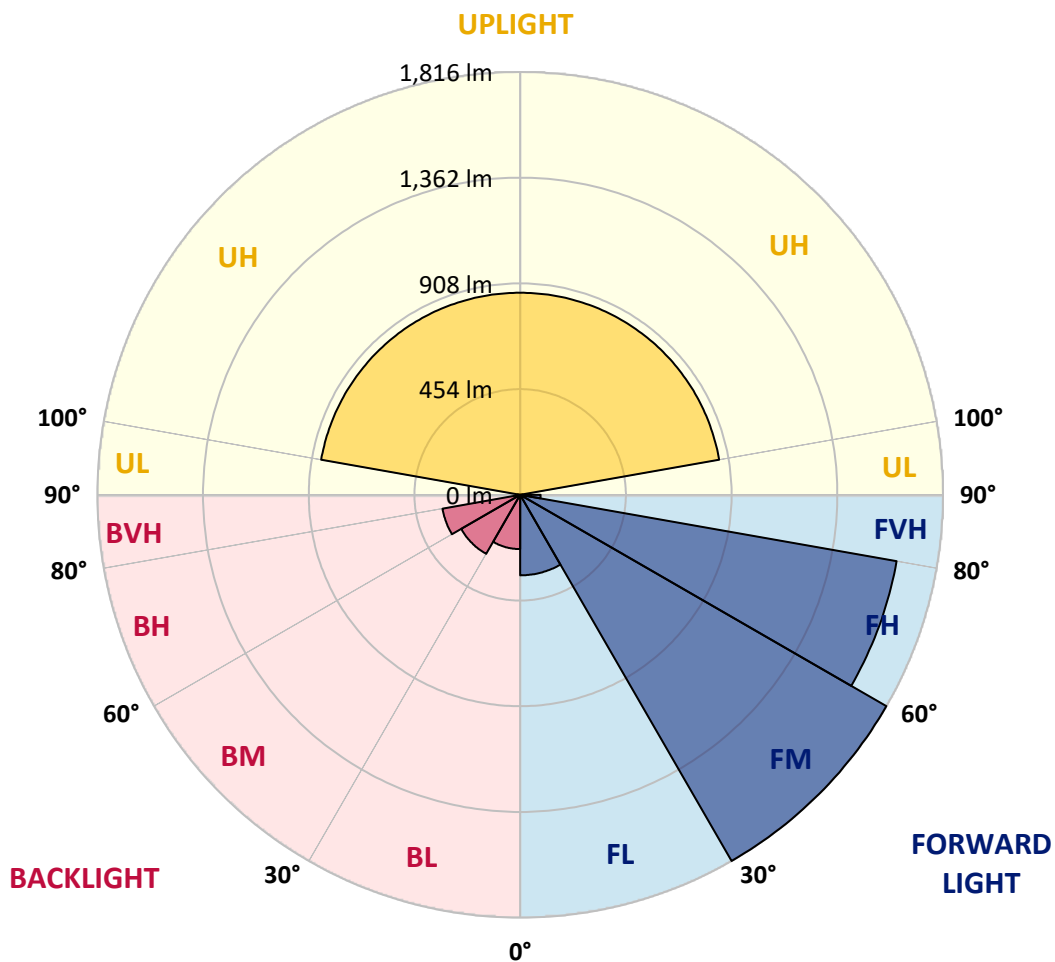
CATALOG NUMBER: IST-AF-1000-LED-E1-SL2-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	345.9	5.3			
FM (30°-60°)	1816.3	27.9			
FH (60°-80°)	1641.7	25.2			G1/1800
FVH (80°-90°)	87.9	1.3			G1/100
BL (0°-30°)	233.1	3.6	B1/500		
BM (30°-60°)	292.9	4.5	B1/1000		
BH (60°-80°)	338.8	5.2	B1/500		G1/500
BVH (80°-90°)	17.3	0.3			G1/100
UL (90°-100°)	11.0	0.2		U2/50	
UH (100°-180°)	867.9	13.3		U4/1000	

BUG Rating: B1-U5-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
0°	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0
2.5°	934.0	936.1	948.3	954.8	964.1	967.0	977.7	982.0	985.6	984.9	984.9
5°	850.0	856.5	862.2	875.1	888.8	905.3	926.1	941.9	944.7	948.3	950.5
7.5°	786.2	790.5	800.5	809.9	827.1	850.0	879.4	899.5	903.8	905.3	910.3
10°	741.0	743.9	752.5	764.7	784.8	807.0	837.8	858.6	865.1	868.0	872.3
12.5°	705.8	710.2	718.0	731.0	752.5	775.4	807.7	828.5	832.8	836.4	842.9
15°	683.6	686.5	693.7	708.0	727.4	750.3	781.9	807.0	809.9	813.4	819.2
17.5°	679.3	681.5	685.8	696.5	711.6	733.8	766.1	786.9	791.9	797.0	802.7
20°	696.5	698.0	699.4	700.8	709.4	723.8	755.3	777.6	781.9	786.2	793.4
22.5°	733.8	736.0	732.4	727.4	720.9	723.8	750.3	773.3	776.1	780.5	786.2
25°	798.4	796.2	785.5	777.6	754.6	736.0	751.8	771.1	774.7	779.0	785.5
27.5°	874.4	871.6	865.1	843.6	805.6	767.5	760.4	774.7	776.9	780.5	786.2
30°	956.2	956.9	951.2	927.5	878.7	814.9	779.7	783.3	784.8	787.6	791.2
32.5°	1030.1	1040.8	1040.1	1038.7	969.1	878.7	817.0	802.7	800.5	802.7	804.1
35°	1115.4	1117.6	1137.7	1147.7	1091.1	972.0	871.6	840.0	831.4	832.1	830.7
37.5°	1207.3	1210.1	1244.6	1261.8	1218.0	1078.1	944.0	895.2	887.3	879.4	873.7
40°	1340.7	1352.2	1370.1	1389.5	1367.9	1220.9	1039.4	973.4	953.3	951.9	940.4
42.5°	1540.1	1536.5	1527.9	1543.7	1517.9	1380.9	1154.9	1083.9	1068.8	1048.7	1033.0
45°	1735.9	1743.8	1706.5	1713.7	1715.1	1565.9	1322.0	1222.3	1214.4	1190.8	1173.5
47.5°	1867.9	1859.3	1809.1	1845.7	1935.3	1781.8	1515.7	1411.0	1394.5	1382.3	1371.5
50°	1875.1	1867.9	1835.6	1900.2	2091.7	2165.6	1785.4	1663.5	1639.8	1618.3	1611.8
52.5°	1700.1	1690.0	1700.8	1832.1	2148.4	2487.0	2166.3	1977.0	1957.6	1939.7	1914.5
55°	1388.0	1399.5	1450.4	1639.1	2061.6	2715.1	2915.9	2461.1	2377.9	2377.2	2315.5
57.5°	1036.5	1025.1	1063.1	1240.3	1842.1	2796.1	3604.6	3491.9	3306.2	3180.6	3029.3
60°	699.4	702.3	737.4	828.5	1281.9	2707.9	4065.8	4458.2	4392.9	4366.4	4325.5
62.5°	484.9	489.2	521.5	606.9	749.6	2178.5	4200.7	4999.8	5116.7	5213.5	5189.9
65°	339.3	340.0	372.3	504.3	561.7	1119.0	3903.0	5071.5	5245.8	5412.2	5561.4
66°	299.1	299.8	326.4	469.1	538.7	844.3	3644.7	4971.8	5170.5	5364.2	5518.4
67.5°	256.1	260.4	281.2	398.8	516.5	651.3	3010.6	4674.1	4882.1	5095.2	5298.9
70°	175.7	177.2	195.8	323.5	483.5	571.7	1715.8	3649.0	3936.7	4311.1	4527.8
72.5°	125.5	124.1	126.2	200.1	496.4	568.1	901.7	2401.6	2804.0	3132.6	3367.1
75°	111.9	108.3	99.0	124.1	362.3	620.5	604.0	1413.9	1720.1	2019.3	2259.6
77.5°	99.7	94.0	88.9	95.4	179.3	584.6	542.3	809.9	966.2	1189.3	1374.4
80°	76.0	72.5	75.3	82.5	107.6	538.0	538.7	538.7	581.0	654.2	727.4
82.5°	50.2	45.9	52.4	68.1	81.1	405.3	556.6	475.6	467.7	464.8	469.8
85°	31.6	27.3	36.6	50.9	62.4	211.6	571.0	502.1	465.5	430.4	395.2
87.5°	11.5	12.9	18.7	29.4	40.9	91.8	500.7	442.6	417.5	373.7	332.8
90°	7.9	7.2	10.6	16.6	17.3	24.2	83.8	130.7	81.4	45.0	38.0
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.5	7.6	7.7	7.8
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.0	10.8	10.6	10.4
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	27.5	27.2	26.9	26.6
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	48.5	48.2	47.9	47.6
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.0	70.8	70.6	70.4
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.5	94.4	94.3	94.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.5	120.6	120.7	120.8
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	149.0	149.2	149.4	149.6
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	180.5	180.8	181.1	181.4
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	213.0	213.4	213.8	214.2
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	248.0	248.4	248.8	249.2
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	281.0	281.4	281.8	282.2
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	314.0	314.2	314.4	314.6
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.5	345.6	345.7	345.8
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	379.0	379.4	379.8	380.2
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	413.5	414.0	414.5	415.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	445.5	446.0	446.5	447.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	474.0	474.2	474.4	474.6
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	501.0	501.2	501.4	501.6
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	530.0	530.6	531.2	531.8
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	559.0	559.6	560.2	560.8
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	582.5	583.0	583.5	584.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	598.5	598.8	599.1	599.4
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	612.5	612.8	613.1	613.4
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	628.5	629.0	629.5	630.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	646.0	646.4	646.8	647.2
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	661.0	661.6	662.2	662.8
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	669.0	669.4	669.8	670.2
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	674.5	675.0	675.5	676.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	681.0	681.6	682.2	682.8
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	687.5	687.8	688.1	688.4
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	690.5	690.8	691.1	691.4
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	692.5	693.0	693.5	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	696.5	697.0	697.5	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):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
0°	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0
2.5°	985.6	989.2	990.6	989.2	989.9	994.2	992.8	994.9	994.9	996.4	996.4
5°	953.3	956.2	961.9	961.2	967.0	969.1	971.3	974.1	977.7	979.9	984.2
7.5°	915.3	921.0	926.1	928.9	932.5	939.7	941.9	948.3	954.0	959.8	964.1
10°	878.7	886.6	892.4	894.5	902.4	906.0	913.9	918.9	926.1	933.2	939.7
12.5°	847.9	855.1	857.9	865.1	872.3	879.4	883.0	892.4	899.5	908.9	917.5
15°	824.9	832.1	837.8	842.9	850.0	857.2	862.9	872.3	880.9	890.2	898.1
17.5°	810.6	814.9	822.1	826.4	835.0	843.6	850.0	860.8	870.1	878.0	888.8
20°	799.8	804.8	811.3	817.8	825.6	836.4	842.1	853.6	863.7	873.0	883.0
22.5°	794.1	799.1	805.6	812.0	820.6	829.2	838.6	848.6	859.4	869.4	879.4
25°	791.9	796.2	802.0	808.4	817.8	827.1	835.0	846.4	855.8	866.5	878.7
27.5°	792.6	795.5	802.0	807.7	817.0	825.6	833.5	845.0	855.8	865.8	878.0
30°	795.5	797.7	804.1	809.1	817.0	825.6	832.8	845.0	854.3	865.1	878.0
32.5°	805.6	808.4	811.3	814.9	822.1	828.5	837.1	847.9	856.5	867.2	878.0
35°	829.2	827.1	829.2	830.7	835.7	842.1	848.6	857.9	865.8	875.1	886.6
37.5°	866.5	862.2	863.7	862.9	862.9	867.2	873.7	880.2	886.6	895.9	907.4
40°	935.4	924.6	921.8	913.9	911.7	915.3	919.6	920.3	928.2	940.4	945.4
42.5°	1024.3	1010.0	1012.1	999.2	995.6	991.3	997.1	993.5	998.5	1006.4	1017.2
45°	1164.9	1151.3	1137.0	1116.2	1120.5	1104.7	1100.4	1101.8	1101.1	1104.0	1116.9
47.5°	1332.8	1314.9	1305.5	1297.6	1282.6	1273.3	1261.1	1243.1	1247.4	1253.2	1264.6
50°	1578.1	1572.4	1554.4	1528.6	1525.0	1511.4	1507.8	1492.0	1486.3	1485.6	1484.9
52.5°	1905.9	1868.6	1861.5	1837.1	1818.4	1805.5	1801.2	1779.0	1756.7	1769.6	1768.2
55°	2305.5	2274.6	2235.2	2213.7	2198.6	2167.8	2159.9	2131.9	2119.0	2111.8	2093.9
57.5°	2976.9	2868.6	2787.5	2747.4	2690.7	2633.3	2613.2	2555.8	2511.4	2479.8	2482.0
60°	4147.6	3954.6	3727.2	3625.4	3389.4	3354.9	3192.8	3153.4	3055.8	2991.3	2954.0
62.5°	5173.4	5121.0	5012.0	4863.5	4626.8	4354.2	4231.5	3987.6	3796.8	3713.6	3598.1
65°	5663.3	5737.2	5767.3	5739.3	5644.6	5478.2	5331.9	5093.7	4773.8	4593.0	4368.5
66°	5638.2	5747.9	5803.2	5831.9	5797.4	5699.2	5545.7	5349.8	5102.3	4826.9	4575.1
67.5°	5454.6	5561.4	5638.2	5725.7	5725.7	5694.9	5632.4	5501.9	5326.9	5086.6	4860.6
70°	4704.2	4849.1	4984.7	5011.2	5085.8	5062.9	5112.4	5029.2	4987.6	4887.1	4765.9
72.5°	3664.8	3786.1	3902.3	4018.5	3999.1	3974.0	3969.0	3986.2	3901.5	3931.7	3900.1
75°	2437.5	2646.2	2765.3	2753.8	2761.7	2768.2	2715.1	2596.7	2688.5	2572.3	2611.1
77.5°	1481.3	1578.1	1610.4	1574.5	1527.9	1467.7	1370.8	1314.1	1233.1	1239.5	1185.7
80°	776.9	789.1	763.2	690.8	651.3	615.5	505.0	455.5	409.6	392.4	353.6
82.5°	445.5	416.0	384.5	360.1	313.5	281.9	238.9	211.6	182.2	156.4	147.1
85°	360.8	321.4	292.0	264.7	233.1	205.2	169.3	141.3	119.8	104.0	100.4
87.5°	297.7	270.4	240.3	214.5	183.6	154.9	119.8	93.3	73.9	59.5	55.2
90°	35.3	44.9	34.8	23.3	30.5	20.5	15.5	16.2	14.7	14.7	15.5
92.5°	7.0	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1
95°	7.9	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1
97.5°	10.2	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1
100°	26.3	26.0	25.7	25.4	25.1	24.8	24.5	24.2	23.9	23.6	23.3
102.5°	47.3	47.0	46.5	46.0	45.5	45.0	44.5	44.0	43.5	43.0	42.5
105°	70.2	70.0	69.5	69.0	68.5	68.0	67.5	67.0	66.5	66.0	65.5
107.5°	94.1	94.0	93.6	93.2	92.8	92.4	92.0	91.6	91.2	90.8	90.4



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CATALOG NUMBER: IST-AF-1000-LED-E1-SL2-8030-ULG

CANDELA DISTRIBUTION (continued):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
110°	120.9	121.0	120.8	120.6	120.4	120.2	120.0	119.8	119.6	119.4	119.2
112.5°	149.8	150.0	149.9	149.8	149.7	149.6	149.5	149.4	149.3	149.2	149.1
115°	181.7	182.0	181.7	181.4	181.1	180.8	180.5	180.2	179.9	179.6	179.3
117.5°	214.6	215.0	214.5	214.0	213.5	213.0	212.5	212.0	211.5	211.0	210.5
120°	249.6	250.0	249.5	249.0	248.5	248.0	247.5	247.0	246.5	246.0	245.5
122.5°	282.6	283.0	282.5	282.0	281.5	281.0	280.5	280.0	279.5	279.0	278.5
125°	314.8	315.0	314.5	314.0	313.5	313.0	312.5	312.0	311.5	311.0	310.5
127.5°	345.9	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0
130°	380.6	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0
132.5°	415.5	416.0	415.8	415.6	415.4	415.2	415.0	414.8	414.6	414.4	414.2
135°	447.5	448.0	447.9	447.8	447.7	447.6	447.5	447.4	447.3	447.2	447.1
137.5°	474.8	475.0	475.1	475.2	475.3	475.4	475.5	475.6	475.7	475.8	475.9
140°	501.8	502.0	502.2	502.4	502.6	502.8	503.0	503.2	503.4	503.6	503.8
142.5°	532.4	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
145°	561.4	562.0	561.9	561.8	561.7	561.6	561.5	561.4	561.3	561.2	561.1
147.5°	584.5	585.0	585.1	585.2	585.3	585.4	585.5	585.6	585.7	585.8	585.9
150°	599.7	600.0	600.3	600.6	600.9	601.2	601.5	601.8	602.1	602.4	602.7
152.5°	613.7	614.0	614.4	614.8	615.2	615.6	616.0	616.4	616.8	617.2	617.6
155°	630.5	631.0	631.5	632.0	632.5	633.0	633.5	634.0	634.5	635.0	635.5
157.5°	647.6	648.0	648.2	648.4	648.6	648.8	649.0	649.2	649.4	649.6	649.8
160°	663.4	664.0	663.7	663.4	663.1	662.8	662.5	662.2	661.9	661.6	661.3
162.5°	670.6	671.0	670.9	670.8	670.7	670.6	670.5	670.4	670.3	670.2	670.1
165°	676.5	677.0	677.3	677.6	677.9	678.2	678.5	678.8	679.1	679.4	679.7
167.5°	683.4	684.0	684.4	684.8	685.2	685.6	686.0	686.4	686.8	687.2	687.6
170°	688.7	689.0	689.5	690.0	690.5	691.0	691.5	692.0	692.5	693.0	693.5
172.5°	691.7	692.0	692.2	692.4	692.6	692.8	693.0	693.2	693.4	693.6	693.8
175°	694.5	695.0	695.1	695.2	695.3	695.4	695.5	695.6	695.7	695.8	695.9
177.5°	698.5	699.0	699.2	699.4	699.6	699.8	700.0	700.2	700.4	700.6	700.8
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):

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°
0°	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0
2.5°	998.5	998.5	1000.0	1001.4	1002.1	1002.1	1002.1	1003.5	1004.3	1002.1	1004.3
5°	986.3	989.9	992.8	994.9	995.6	997.8	1000.0	1001.4	1003.5	1003.5	1005.0
7.5°	969.8	976.3	979.9	983.5	987.0	990.6	994.9	997.8	999.2	1002.1	1004.3
10°	949.0	956.9	964.1	969.8	974.8	982.0	987.8	992.1	998.5	999.2	1004.3
12.5°	926.8	938.3	944.0	954.8	961.9	972.7	978.4	984.9	992.1	995.6	1001.4
15°	911.0	921.0	931.8	941.9	953.3	966.2	973.4	982.0	992.1	1000.0	1007.1
17.5°	898.8	912.4	924.6	937.5	951.9	965.5	976.3	985.6	998.5	1002.8	1010.0
20°	895.2	910.3	922.5	936.1	951.2	969.1	982.0	992.1	1005.0	1012.1	1018.6
22.5°	893.8	908.1	922.5	939.0	955.5	974.1	987.8	1000.7	1013.6	1020.0	1025.1
25°	892.4	907.4	923.2	941.9	959.8	979.2	994.9	1007.1	1019.3	1025.8	1030.1
27.5°	892.4	908.1	925.4	944.0	963.4	984.9	1000.0	1011.4	1022.2	1027.9	1029.4
30°	891.6	908.1	924.6	945.4	966.2	988.5	1005.0	1015.7	1025.1	1028.6	1027.2
32.5°	893.1	910.3	928.2	949.0	970.5	992.1	1009.3	1021.5	1026.5	1025.8	1025.1
35°	900.2	916.0	936.8	957.6	979.9	1000.0	1016.5	1025.1	1029.4	1027.9	1024.3
37.5°	919.6	935.4	956.2	979.2	996.4	1019.3	1034.4	1040.8	1041.6	1037.3	1028.6
40°	959.8	975.6	994.2	1019.3	1040.1	1055.9	1070.3	1077.4	1073.1	1065.2	1055.9
42.5°	1023.6	1043.7	1065.9	1086.0	1110.4	1131.9	1135.5	1139.8	1132.7	1117.6	1106.1
45°	1126.2	1138.4	1167.1	1182.2	1213.7	1224.5	1232.4	1234.5	1218.7	1206.5	1186.5
47.5°	1274.0	1297.6	1317.7	1332.1	1355.0	1369.4	1385.2	1378.0	1365.8	1345.0	1318.4
50°	1506.4	1521.5	1547.3	1573.1	1597.5	1607.5	1607.5	1600.4	1592.5	1552.3	1520.0
52.5°	1791.9	1793.3	1830.6	1861.5	1882.3	1867.2	1885.1	1867.2	1862.2	1834.2	1807.7
55°	2122.6	2108.9	2154.1	2181.4	2200.0	2218.0	2214.4	2212.2	2193.6	2162.0	2129.7
57.5°	2436.8	2476.2	2497.7	2537.9	2547.2	2559.4	2554.4	2547.2	2536.5	2518.5	2504.2
60°	2890.1	2916.7	2936.0	2943.9	2970.5	2974.0	2992.0	2962.6	2969.7	2948.9	2903.7
62.5°	3507.0	3478.3	3493.4	3493.4	3485.5	3457.5	3472.6	3484.1	3464.7	3447.5	3440.3
65°	4197.8	4105.3	4016.3	4001.2	3960.4	3951.0	3939.6	3910.9	3898.7	3868.5	3844.2
66°	4404.4	4260.9	4177.0	4125.3	4075.9	4065.1	4049.3	4019.2	3994.8	3952.5	3911.6
67.5°	4636.1	4451.0	4324.8	4251.6	4190.6	4150.5	4118.9	4075.9	4037.1	3974.0	3908.7
70°	4621.0	4468.2	4316.2	4205.0	4113.2	4030.7	3981.9	3889.3	3810.4	3720.1	3645.5
72.5°	3882.9	3855.6	3767.4	3705.0	3592.4	3548.6	3419.5	3360.7	3251.6	3134.7	3098.9
75°	2699.3	2592.4	2547.2	2522.1	2472.6	2336.3	2247.4	2266.8	2139.1	2025.0	1959.7
77.5°	1180.0	1201.5	1076.7	1020.8	977.7	903.8	835.0	787.6	760.4	742.4	661.4
80°	326.4	284.8	281.2	261.1	256.8	228.8	232.4	212.3	198.7	195.8	189.4
82.5°	142.7	139.9	135.6	133.4	131.3	128.4	124.8	124.1	119.8	116.2	116.9
85°	94.7	94.0	91.8	89.7	86.1	81.1	77.5	74.6	75.3	71.7	71.0
87.5°	55.2	53.8	53.1	50.2	49.5	45.2	45.9	42.3	41.6	40.9	38.7
90°	16.9	17.4	19.4	18.4	15.4	21.6	19.3	17.6	18.2	15.8	15.6
92.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0
100°	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.4	19.0
102.5°	42.0	41.7	41.4	41.1	40.8	40.5	40.2	39.9	39.6	39.3	39.0
105°	65.0	64.6	64.2	63.8	63.4	63.0	62.6	62.2	61.8	61.4	61.0
107.5°	90.0	89.7	89.4	89.1	88.8	88.5	88.2	87.9	87.6	87.3	87.0



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	
110°	119.0	118.7	118.4	118.1	117.8	117.5	117.2	116.9	116.6	116.3	116.0	0°
112.5°	149.0	148.8	148.6	148.4	148.2	148.0	147.8	147.6	147.4	147.2	147.0	2.5°
115°	179.0	178.8	178.6	178.4	178.2	178.0	177.8	177.6	177.4	177.2	177.0	5°
117.5°	210.0	209.8	209.6	209.4	209.2	209.0	208.8	208.6	208.4	208.2	208.0	7.5°
120°	245.0	244.8	244.6	244.4	244.2	244.0	243.8	243.6	243.4	243.2	243.0	10°
122.5°	278.0	277.8	277.6	277.4	277.2	277.0	276.8	276.6	276.4	276.2	276.0	12.5°
125°	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	15°
127.5°	346.0	345.9	345.8	345.7	345.6	345.5	345.4	345.3	345.2	345.1	345.0	17.5°
130°	381.0	380.8	380.6	380.4	380.2	380.0	379.8	379.6	379.4	379.2	379.0	20°
132.5°	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	22.5°
135°	447.0	447.3	447.6	447.9	448.2	448.5	448.8	449.1	449.4	449.7	450.0	25°
137.5°	476.0	476.5	477.0	477.5	478.0	478.5	479.0	479.5	480.0	480.5	481.0	27.5°
140°	504.0	504.5	505.0	505.5	506.0	506.5	507.0	507.5	508.0	508.5	509.0	30°
142.5°	533.0	533.1	533.2	533.3	533.4	533.5	533.6	533.7	533.8	533.9	534.0	32.5°
145°	561.0	560.7	560.4	560.1	559.8	559.5	559.2	558.9	558.6	558.3	558.0	35°
147.5°	586.0	585.7	585.4	585.1	584.8	584.5	584.2	583.9	583.6	583.3	583.0	37.5°
150°	603.0	603.3	603.6	603.9	604.2	604.5	604.8	605.1	605.4	605.7	606.0	40°
152.5°	618.0	618.5	619.0	619.5	620.0	620.5	621.0	621.5	622.0	622.5	623.0	42.5°
155°	636.0	636.2	636.4	636.6	636.8	637.0	637.2	637.4	637.6	637.8	638.0	45°
157.5°	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	47.5°
160°	661.0	660.9	660.8	660.7	660.6	660.5	660.4	660.3	660.2	660.1	660.0	50°
162.5°	670.0	669.8	669.6	669.4	669.2	669.0	668.8	668.6	668.4	668.2	668.0	52.5°
165°	680.0	679.8	679.6	679.4	679.2	679.0	678.8	678.6	678.4	678.2	678.0	55°
167.5°	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	57.5°
170°	694.0	694.2	694.4	694.6	694.8	695.0	695.2	695.4	695.6	695.8	696.0	60°
172.5°	694.0	694.2	694.4	694.6	694.8	695.0	695.2	695.4	695.6	695.8	696.0	62.5°
175°	696.0	695.8	695.6	695.4	695.2	695.0	694.8	694.6	694.4	694.2	694.0	65°
177.5°	701.0	700.7	700.4	700.1	699.8	699.5	699.2	698.9	698.6	698.3	698.0	66°
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	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°

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REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

86°	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	86°	
1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	1005.0	110°	116.2
1006.4	1007.8	1008.6	1007.8	1009.3	1008.6	1009.3	1008.6	1005.0	1004.3	1003.5	112.5°	147.0
1007.8	1010.7	1011.4	1012.1	1010.7	1012.1	1009.3	997.8	984.9	970.5	959.1	115°	177.2
1009.3	1012.9	1015.0	1015.0	1015.7	1014.3	1003.5	978.4	948.3	918.2	895.2	117.5°	208.2
1008.6	1013.6	1015.7	1016.5	1016.5	1013.6	987.8	947.6	901.7	855.8	809.1	120°	243.0
1006.4	1010.7	1014.3	1014.3	1015.0	1005.0	964.8	907.4	842.1	773.3	710.9	122.5°	276.2
1010.7	1015.0	1015.0	1015.0	1014.3	997.1	940.4	857.2	769.7	676.4	583.9	125°	310.0
1017.2	1019.3	1017.9	1017.9	1015.0	989.2	913.2	807.7	692.9	569.6	440.4	127.5°	345.4
1022.9	1024.3	1023.6	1020.0	1016.5	980.6	885.2	755.3	601.1	440.4	312.0	130°	379.2
1028.6	1030.1	1026.5	1020.8	1015.7	969.1	851.5	688.6	497.1	301.3	206.6	132.5°	414.2
1029.4	1030.8	1024.3	1016.5	1009.3	951.9	810.6	617.6	383.1	195.1	161.4	135°	450.2
1028.6	1027.2	1016.5	1006.4	998.5	931.1	765.4	529.4	255.4	147.1	140.6	137.5°	481.2
1023.6	1017.2	1008.6	997.1	985.6	908.1	720.2	431.1	161.4	127.7	127.7	140°	509.4
1016.5	1010.0	999.2	984.2	971.3	885.9	668.5	330.7	129.1	117.6	119.1	142.5°	534.4
1013.6	1006.4	990.6	974.8	958.3	865.8	614.0	222.4	116.2	111.2	111.9	145°	558.4
1019.3	1007.1	991.3	973.4	954.0	848.6	557.4	154.9	109.8	104.0	105.4	147.5°	583.4
1038.7	1027.2	1008.6	985.6	964.8	838.6	497.1	128.4	103.3	98.3	98.3	150°	606.8
1085.3	1070.3	1045.1	1017.9	992.8	845.0	443.3	116.9	98.3	93.3	93.3	152.5°	624.0
1160.6	1142.7	1113.3	1082.4	1049.4	876.6	382.3	112.6	94.7	87.5	86.1	155°	638.6
1289.8	1266.1	1227.3	1190.8	1151.3	931.1	320.6	109.8	90.4	83.9	81.1	157.5°	651.0
1492.8	1457.6	1411.7	1363.6	1315.6	1030.8	271.9	106.9	87.5	81.1	78.2	160°	661.2
1753.9	1730.2	1672.8	1609.7	1552.3	1229.5	243.9	104.7	85.4	77.5	75.3	162.5°	669.2
2086.7	2048.0	2002.8	1946.1	1878.0	1487.0	241.0	104.0	83.2	74.6	73.2	165°	678.8
2438.2	2423.1	2346.4	2311.2	2237.3	1829.9	293.4	105.4	81.8	72.5	70.3	167.5°	689.2
2839.2	2844.9	2773.2	2734.4	2673.5	2264.6	467.0	109.8	81.8	70.3	68.1	170°	697.0
3363.5	3372.9	3288.2	3242.3	3190.7	2751.7	733.8	116.9	83.9	68.1	66.0	172.5°	697.0
3793.2	3743.0	3688.5	3608.2	3542.9	3023.5	706.6	129.8	86.8	66.0	63.8	175°	695.0
3837.7	3801.8	3733.0	3646.2	3566.5	3025.0	616.9	134.1	87.5	65.3	63.1	177.5°	698.8
3832.0	3768.1	3689.9	3616.8	3538.6	2947.5	477.0	139.9	89.7	63.8	61.7	180°	700.0
3566.5	3476.9	3400.8	3299.7	3217.9	2637.6	293.4	139.2	86.8	59.5	58.1		
2941.0	2895.1	2804.7	2723.7	2638.3	2134.8	200.9	124.1	76.8	53.8	54.5		
1902.4	1850.0	1758.2	1712.3	1664.2	1365.8	156.4	101.1	65.3	48.1	50.2		
634.8	614.0	580.3	599.0	571.0	532.3	114.8	76.8	52.4	41.6	44.5		
190.1	185.8	192.2	180.8	191.5	162.1	75.3	53.8	40.2	35.9	39.5		
112.6	111.2	111.2	111.2	108.3	101.1	49.5	37.3	30.8	30.1	33.0		
68.9	67.4	68.1	67.4	68.9	61.7	33.7	25.8	23.0	22.2	26.5		
39.5	39.5	40.2	38.7	39.5	38.0	23.7	16.5	15.1	14.3	19.4		
16.3	16.3	14.2	13.5	14.2	17.0	15.5	14.0	11.3	10.6	14.5		
6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0		
7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0	7.0		
8.0	8.0	8.0	8.0	8.0	8.0	9.0	10.0	12.0	9.0	9.0		
19.0	19.0	19.0	19.0	19.0	19.0	23.0	26.0	29.0	21.0	12.0		
38.8	38.6	38.4	38.2	38.0	39.0	42.0	47.0	50.0	40.0	27.0		
61.0	61.0	61.0	61.0	61.0	61.0	65.0	70.0	72.0	63.0	48.0		
86.8	86.6	86.4	86.2	86.0	87.0	90.0	94.0	95.0	88.0	73.0		

'226841
 IST-AF-1000-LED-E1-SL2-8030-ULG

REPORT NUMBER: P226841
 CATALOG NUMBER: IST-AF-10

TION (continued):

CANDELA DISTRIBUTION (con

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°		155°	165°
116.4	116.6	116.8	117.0	116.0	119.0	121.0	120.0	114.0	102.0	0°	1005.0	1005.0
147.0	147.0	147.0	147.0	147.0	149.0	150.0	148.0	143.0	134.0	2.5°	997.8	992.8
177.4	177.6	177.8	178.0	177.0	179.0	182.0	179.0	174.0	168.0	5°	941.1	927.5
208.4	208.6	208.8	209.0	208.0	210.0	215.0	211.0	205.0	202.0	7.5°	859.4	843.6
243.0	243.0	243.0	243.0	243.0	245.0	250.0	246.0	243.0	237.0	10°	766.1	742.4
276.4	276.6	276.8	277.0	276.0	278.0	283.0	279.0	277.0	271.0	12.5°	647.0	600.4
310.0	310.0	310.0	310.0	310.0	310.0	315.0	313.0	310.0	305.0	15°	509.3	446.9
345.8	346.2	346.6	347.0	345.0	346.0	346.0	345.0	340.0	339.0	17.5°	350.8	300.6
379.4	379.6	379.8	380.0	379.0	381.0	381.0	377.0	372.0	370.0	20°	246.0	227.4
414.4	414.6	414.8	415.0	414.0	414.0	416.0	411.0	405.0	404.0	22.5°	190.1	190.8
450.4	450.6	450.8	451.0	450.0	447.0	448.0	443.0	437.0	435.0	25°	157.8	165.0
481.4	481.6	481.8	482.0	481.0	476.0	475.0	473.0	468.0	464.0	27.5°	139.2	146.3
509.8	510.2	510.6	511.0	509.0	504.0	502.0	500.0	497.0	491.0	30°	127.7	134.1
534.8	535.2	535.6	536.0	534.0	533.0	533.0	527.0	525.0	521.0	32.5°	119.8	122.7
558.8	559.2	559.6	560.0	558.0	561.0	562.0	556.0	551.0	550.0	35°	110.5	111.9
583.8	584.2	584.6	585.0	583.0	586.0	585.0	580.0	575.0	574.0	37.5°	102.6	102.6
607.6	608.4	609.2	610.0	606.0	603.0	600.0	597.0	593.0	593.0	40°	95.4	94.7
625.0	626.0	627.0	628.0	623.0	618.0	614.0	611.0	610.0	610.0	42.5°	88.9	88.2
639.2	639.8	640.4	641.0	638.0	636.0	631.0	626.0	628.0	630.0	45°	82.5	83.2
652.0	653.0	654.0	655.0	650.0	650.0	648.0	644.0	645.0	646.0	47.5°	78.9	79.6
662.4	663.6	664.8	666.0	660.0	661.0	664.0	658.0	655.0	655.0	50°	75.3	76.0
670.4	671.6	672.8	674.0	668.0	670.0	671.0	667.0	663.0	661.0	52.5°	72.5	72.5
679.6	680.4	681.2	682.0	678.0	680.0	677.0	672.0	673.0	673.0	55°	69.6	68.9
690.4	691.6	692.8	694.0	688.0	688.0	684.0	678.0	685.0	688.0	57.5°	67.4	66.0
698.0	699.0	700.0	701.0	696.0	694.0	689.0	686.0	691.0	693.0	60°	65.3	63.8
698.0	699.0	700.0	701.0	696.0	694.0	692.0	689.0	690.0	690.0	62.5°	63.8	61.7
696.0	697.0	698.0	699.0	694.0	696.0	695.0	690.0	690.0	691.0	65°	62.4	61.0
699.6	700.4	701.2	702.0	698.0	701.0	699.0	694.0	695.0	697.0	66°	61.7	60.3
700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	67.5°	61.0	59.5
										70°	58.1	56.7
										72.5°	53.8	53.1
										75°	49.5	48.1
										77.5°	43.8	43.0
										80°	37.3	36.6
										82.5°	31.6	30.1
										85°	25.1	23.7
										87.5°	17.2	15.8
										90°	12.3	12.0
										92.5°	6.0	5.0
										95°	7.0	6.0
										97.5°	8.0	8.0
										100°	10.0	9.0
										102.5°	18.0	13.0
										105°	36.0	27.0
										107.5°	58.0	49.0

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REPORT NUMBER: P226841

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tinued):

175°	180°
1005.0	1005.0
988.5	994.9
923.2	921.0
830.7	831.4
718.8	720.2
573.9	565.3
411.0	414.6
286.2	285.5
229.5	231.0
196.5	196.5
175.0	175.0
154.2	154.9
139.9	141.3
127.0	127.7
114.1	114.8
103.3	103.3
96.1	96.8
91.1	91.1
86.1	86.1
81.8	83.2
77.5	78.2
73.2	73.9
68.9	68.9
65.3	65.3
62.4	61.7
60.3	58.8
58.1	57.4
57.4	56.7
56.7	56.0
55.2	54.5
53.1	52.4
48.8	47.3
44.5	43.0
40.9	38.7
34.4	33.0
25.1	23.7
15.1	15.1
8.6	8.6
4.0	4.0
5.0	5.0
7.0	7.0
8.0	8.0
11.0	11.0
22.0	21.0
42.0	41.0

CANDELA DISTRIBUTION (continued):

	155°	165°	175°
110°	87.0	74.0	68.0
112.5°	121.0	106.0	99.0
115°	159.0	147.0	139.0
117.5°	197.0	189.0	184.0
120°	233.0	226.0	223.0
122.5°	267.0	261.0	260.0
125°	299.0	296.0	294.0
127.5°	333.0	329.0	329.0
130°	366.0	362.0	361.0
132.5°	401.0	393.0	394.0
135°	432.0	426.0	426.0
137.5°	460.0	459.0	457.0
140°	489.0	487.0	485.0
142.5°	518.0	517.0	515.0
145°	547.0	544.0	546.0
147.5°	574.0	571.0	572.0
150°	593.0	593.0	592.0
152.5°	609.0	608.0	608.0
155°	627.0	625.0	625.0
157.5°	644.0	643.0	643.0
160°	656.0	659.0	660.0
162.5°	665.0	669.0	669.0
165°	676.0	676.0	678.0
167.5°	686.0	684.0	687.0
170°	692.0	692.0	695.0
172.5°	693.0	695.0	697.0
175°	695.0	697.0	698.0
177.5°	699.0	700.0	705.0
180°	700.0	700.0	700.0



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<u>180°</u>
66.0
99.0
140.0
184.0
225.0
263.0
298.0
330.0
363.0
396.0
429.0
460.0
488.0
518.0
550.0
575.0
595.0
611.0
629.0
646.0
663.0
673.0
681.0
690.0
698.0
699.0
700.0
707.0
700.0

(END OF REPORT)