

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: P226449

Luminaire Tested: **IST-AF-1200-LED-E1-T3-7030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-1200-LED-E1-T3-7030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, 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: 7850.7 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U5 - G2

Input Watts (W): 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

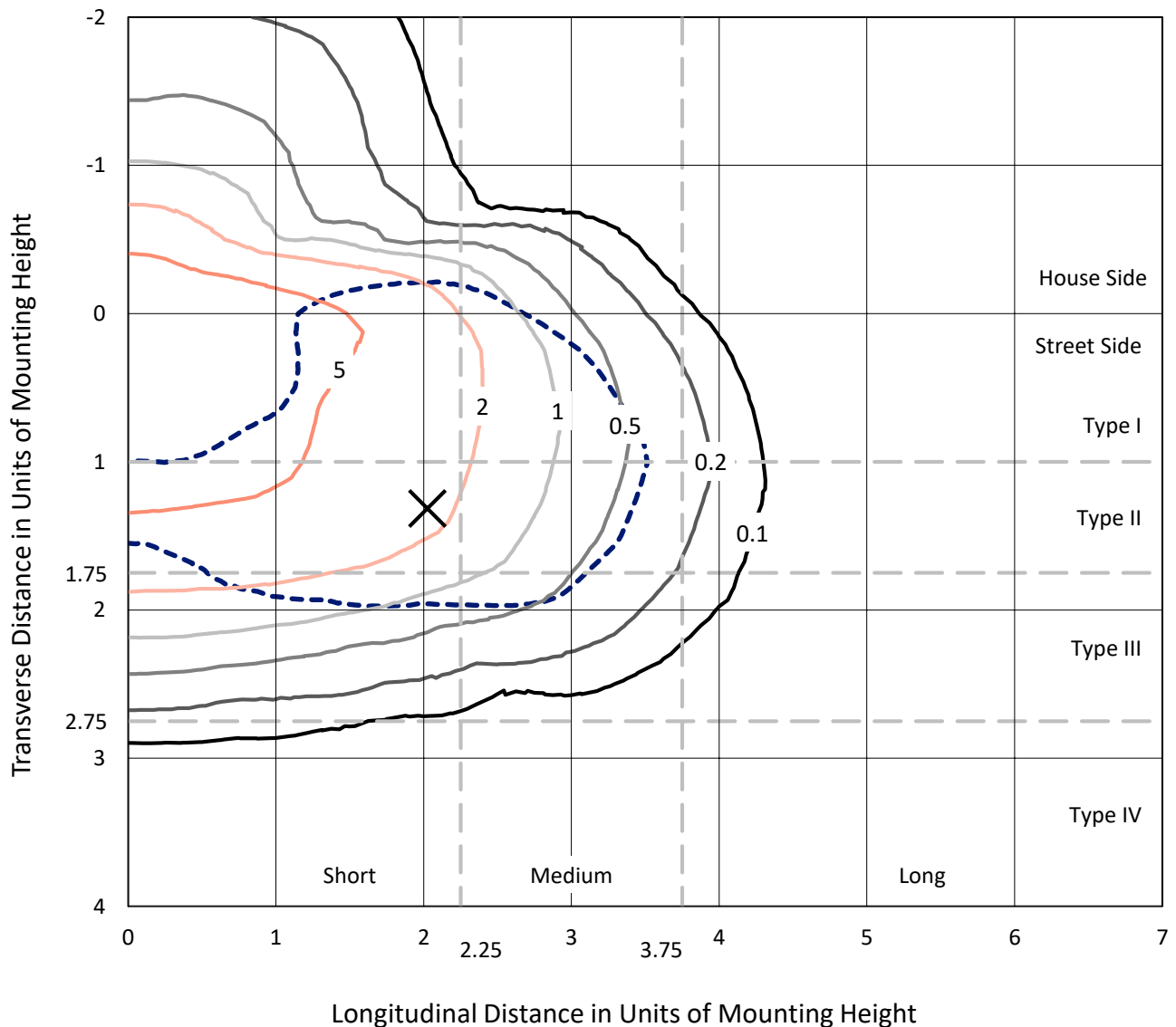


REPORT NUMBER: P226449

CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

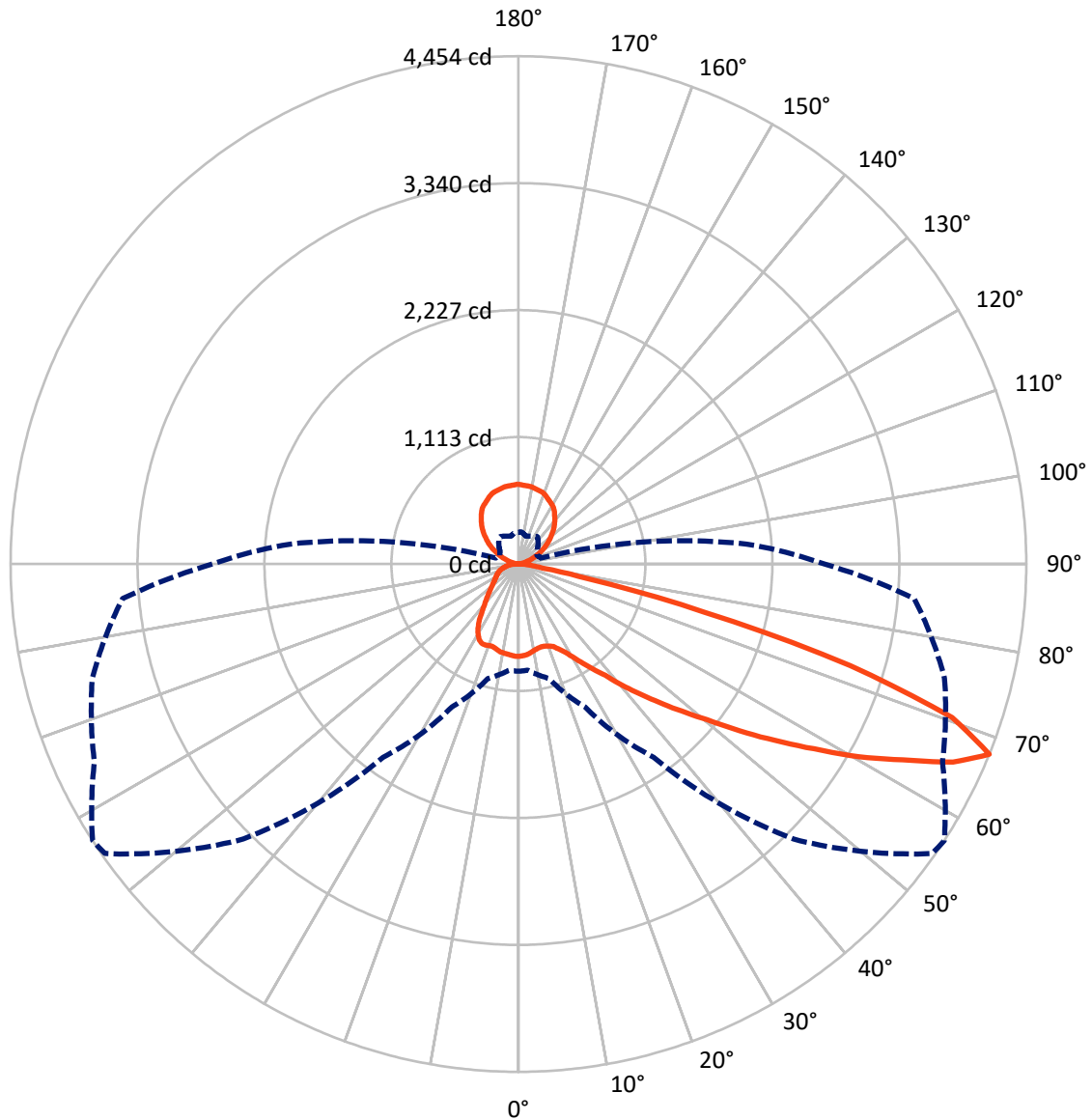


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P226449

CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P226449

CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

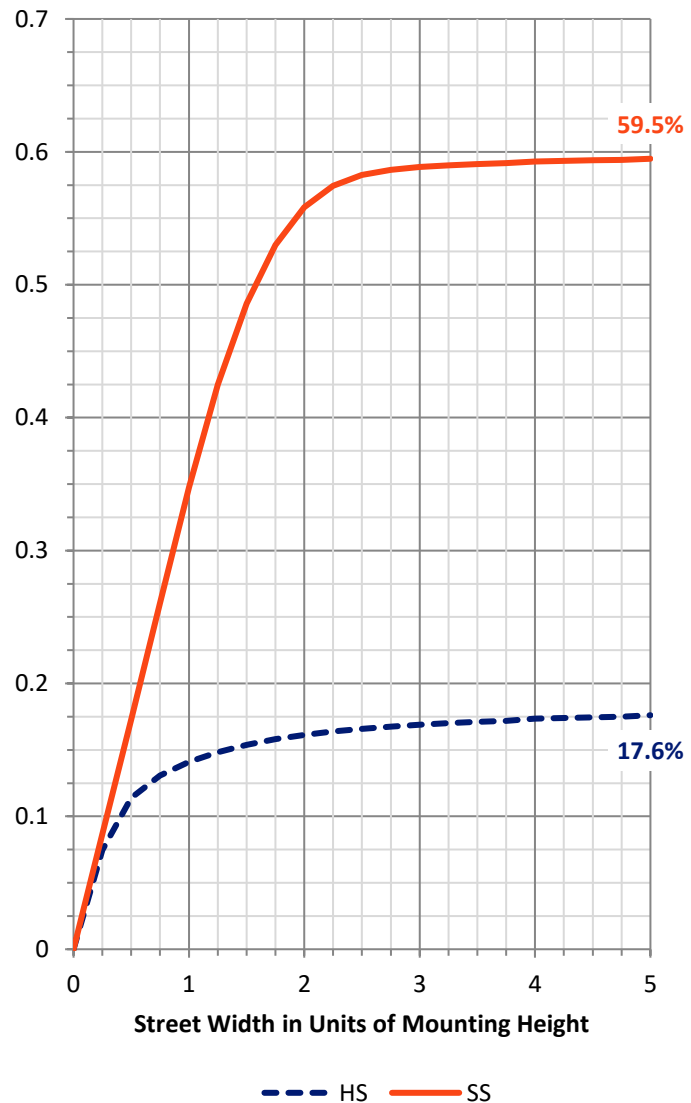
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1423.5	869.4	2292.8
	% Fixture	18.1	11.1	29.2
Street Side	Lumens	4689.9	868.1	5557.9
	% Fixture	59.7	11.1	70.8
Total	Lumens	6113.3	1737.4	7850.7
	% Fixture	77.9	22.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	1.0
10°-20°	217.8	2.8
20°-30°	374.9	4.8
30°-40°	609.5	7.8
40°-50°	983.1	12.5
50°-60°	1465.6	18.7
60°-70°	1650.7	21.0
70°-80°	636.4	8.1
80°-90°	99.6	1.3
90°-100°	11.5	0.1
100°-110°	57.4	0.7
110°-120°	166.1	2.1
120°-130°	273.2	3.5
130°-140°	336.8	4.3
140°-150°	344.6	4.4
150°-160°	290.3	3.7
160°-170°	191.2	2.4
170°-180°	66.3	0.8
0°-90°	6113.3	77.9
0°-180°	7850.7	100.0



REPORT NUMBER: P226449

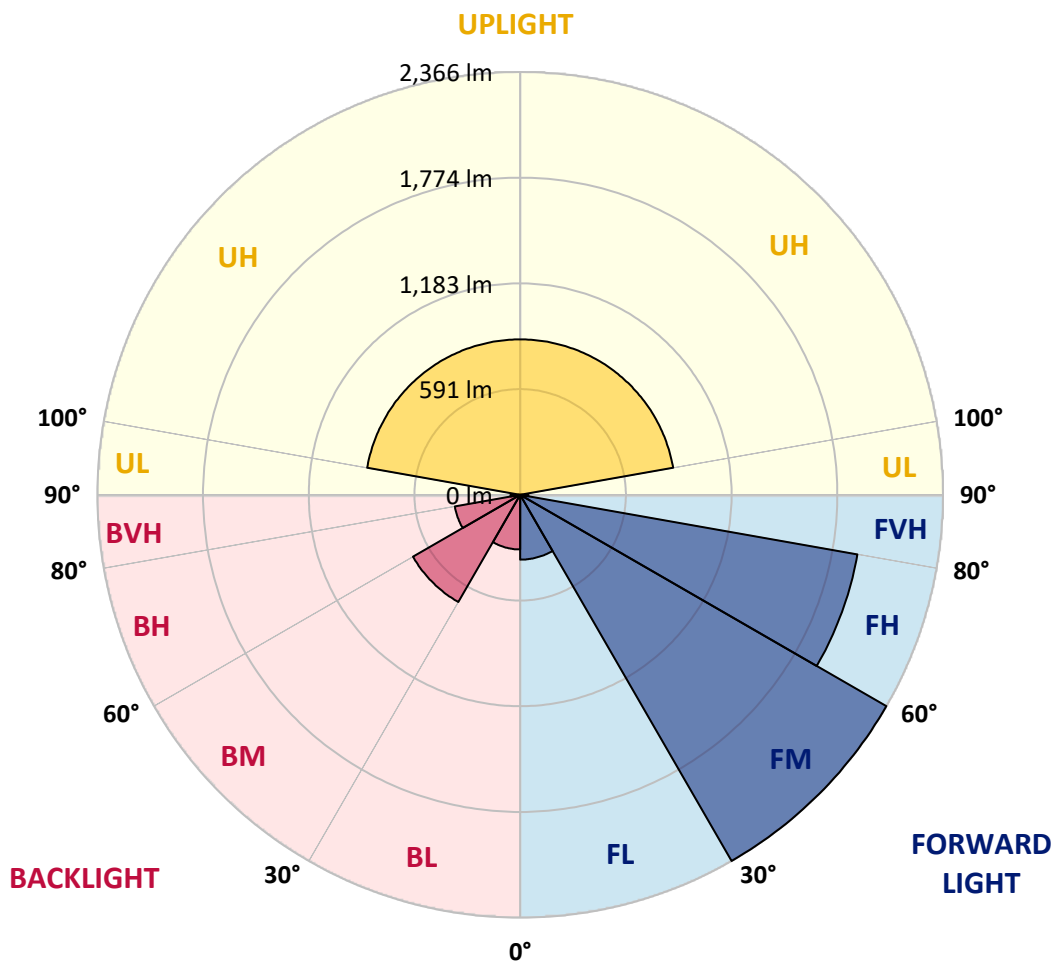
CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	362.7	4.6			
FM (30°-60°)	2365.6	30.1			
FH (60°-80°)	1915.8	24.4			G2/5000
FVH (80°-90°)	45.8	0.6			G1/100
BL (0°-30°)	305.7	3.9	B1/500		
BM (30°-60°)	692.6	8.8	B1/1000		
BH (60°-80°)	371.3	4.7	B1/500		G1/500
BVH (80°-90°)	53.9	0.7			G1/100
UL (90°-100°)	11.5	0.1		U2/50	
UH (100°-180°)	869.4	11.1		U4/1000	

BUG Rating: B1-U5-G2

Type III Short





REPORT NUMBER: P226449

CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3
2.5°	804.1	805.9	807.6	806.8	806.8	806.8	806.8	805.0	807.6	807.6	805.9
5°	790.8	791.7	792.6	794.4	796.1	797.9	798.8	798.8	799.7	798.8	797.0
7.5°	771.3	772.2	775.8	775.8	777.5	781.1	782.8	784.6	787.3	787.3	786.4
10°	765.1	765.1	765.1	762.5	764.2	765.1	767.8	767.8	774.9	778.4	780.2
12.5°	772.2	771.3	771.3	764.2	758.0	755.4	758.0	758.9	766.9	772.2	775.8
15°	788.2	788.2	786.4	775.8	763.4	753.6	752.7	752.7	758.9	766.9	773.1
17.5°	825.4	828.9	816.5	799.7	779.3	763.4	757.2	756.3	760.7	766.9	773.1
20°	896.2	895.3	876.7	846.6	811.2	784.6	769.6	767.8	766.9	770.4	777.5
22.5°	980.3	976.8	954.6	916.6	867.9	819.2	789.9	786.4	779.3	782.0	791.7
25°	1070.7	1071.5	1044.1	994.5	933.4	874.9	830.7	827.1	812.1	810.3	820.9
27.5°	1161.0	1172.5	1135.3	1088.4	1015.8	945.8	881.1	875.8	862.5	858.1	868.7
30°	1292.9	1288.5	1242.5	1181.4	1108.7	1021.1	959.1	949.3	922.8	929.0	940.5
32.5°	1404.5	1414.3	1372.6	1300.0	1204.4	1112.3	1040.5	1035.2	1009.6	1016.6	1032.6
35°	1540.9	1563.9	1509.0	1419.6	1327.5	1232.7	1146.8	1132.6	1112.3	1126.4	1138.8
37.5°	1696.8	1708.3	1665.8	1550.6	1456.8	1357.6	1260.2	1238.0	1215.9	1245.1	1267.3
40°	1845.5	1864.1	1809.2	1711.8	1602.9	1508.1	1401.9	1397.4	1346.1	1377.9	1435.5
42.5°	2066.0	2089.1	2001.4	1888.0	1789.7	1675.5	1574.5	1550.6	1494.8	1540.0	1636.5
45°	2220.1	2219.2	2159.9	2066.0	2005.8	1895.1	1758.7	1730.4	1670.2	1730.4	1859.7
47.5°	2275.9	2289.2	2268.8	2257.3	2236.1	2155.5	1954.5	1927.9	1871.2	1960.7	2080.2
50°	2358.3	2354.7	2354.7	2425.6	2486.7	2469.9	2183.8	2145.7	2086.4	2193.6	2365.4
52.5°	2379.5	2347.7	2397.2	2532.7	2726.7	2740.8	2450.4	2429.1	2358.3	2462.8	2674.4
55°	2320.2	2312.2	2391.0	2587.6	2893.2	2994.1	2759.4	2730.2	2650.5	2740.0	3008.3
57.5°	2187.4	2207.7	2334.4	2576.1	3008.3	3217.3	3098.6	3057.0	2942.8	2996.8	3339.5
60°	2048.3	2058.1	2225.4	2535.4	3039.3	3372.3	3454.6	3430.7	3235.0	3266.9	3584.8
62.5°	1894.2	1871.2	2044.8	2501.7	3004.7	3585.7	3800.0	3781.4	3550.3	3540.5	3759.3
65°	1463.8	1495.7	1643.6	2067.8	2768.3	3752.2	4211.8	4187.9	3901.8	3766.3	3740.7
67.5°	940.5	934.3	1038.8	1382.4	2068.7	3410.3	4427.0	4453.5	4102.9	3868.2	3483.8
70°	337.4	347.1	386.1	627.9	1134.4	2272.4	3902.7	4034.7	3955.0	3677.8	2835.6
72.5°	205.5	205.5	233.8	282.5	459.6	1077.7	2781.6	3042.8	3227.9	3030.4	2094.4
75°	161.2	160.3	170.0	194.8	248.0	353.3	1478.9	1680.8	2070.5	2093.5	1192.0
77.5°	127.5	126.6	136.4	147.9	185.1	186.9	472.0	614.6	950.2	894.4	426.0
80°	102.7	101.8	108.9	112.5	135.5	129.3	189.5	219.6	333.0	292.2	184.2
82.5°	93.0	93.0	100.1	85.9	93.9	91.2	117.8	125.8	167.4	173.6	110.7
85°	60.2	62.0	93.9	83.2	61.1	55.8	75.3	79.7	104.5	114.2	54.0
87.5°	28.3	31.0	71.7	69.1	40.7	30.1	42.5	45.2	56.7	70.0	31.9
90°	10.3	10.3	15.9	17.7	13.3	12.3	14.1	13.6	15.2	17.9	15.9
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.2	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.6	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	28.4	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	49.4	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.6	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.8	94.0	90.0	87.0
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.2	121.0	119.0	116.0



REPORT NUMBER: P226449

CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	148.4	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	179.6	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	211.8	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	246.8	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	279.8	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	313.4	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.2	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	377.8	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	412.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	444.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	473.4	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	500.4	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	528.2	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	557.2	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	581.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	597.6	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	611.6	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	627.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	644.8	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	659.2	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	667.8	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	673.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	679.2	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	686.6	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	689.6	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	691.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	695.0	699.0	701.0	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



REPORT NUMBER: P226449

CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3	810.3
2.5°	808.5	806.8	807.6	808.5	809.4	812.1	813.0	813.0	813.0	812.1	813.8
5°	798.8	797.0	797.0	799.7	802.3	805.9	811.2	815.6	817.4	818.3	818.3
7.5°	788.2	786.4	787.3	791.7	796.1	798.8	804.1	806.8	813.8	813.8	815.6
10°	781.1	782.8	783.7	788.2	791.7	791.7	790.8	789.0	787.3	791.7	789.9
12.5°	776.6	779.3	778.4	783.7	785.5	778.4	767.8	753.6	751.9	753.6	755.4
15°	774.9	774.9	777.5	777.5	768.7	754.5	741.2	742.1	743.9	749.2	749.2
17.5°	774.9	775.8	777.5	771.3	755.4	743.0	740.3	737.7	727.9	725.3	722.6
20°	781.1	779.3	781.1	769.6	755.4	745.7	725.3	705.8	687.2	679.2	675.7
22.5°	796.1	793.5	792.6	781.1	763.4	730.6	690.7	660.6	628.8	618.1	614.6
25°	822.7	821.8	815.6	807.6	758.0	694.3	643.8	596.0	561.5	542.9	543.7
27.5°	869.6	869.6	866.1	830.7	730.6	649.1	580.9	532.2	496.8	479.1	476.4
30°	940.5	942.2	944.0	836.9	687.2	582.7	511.9	479.1	457.8	444.6	443.7
32.5°	1028.1	1037.9	1026.4	829.8	627.9	502.1	457.8	446.3	435.7	426.8	426.0
35°	1144.2	1170.7	1098.1	801.4	561.5	447.2	425.1	417.1	409.1	402.9	403.8
37.5°	1300.0	1325.7	1144.2	753.6	476.4	416.2	406.5	394.1	381.7	368.4	366.6
40°	1484.2	1476.2	1160.1	663.3	423.3	401.2	387.9	371.9	350.7	331.2	327.7
42.5°	1668.4	1615.3	1146.8	551.7	388.8	387.9	369.3	348.9	327.7	310.8	310.8
45°	1874.8	1737.5	1106.1	447.2	361.3	373.7	350.7	329.4	310.0	297.6	296.7
47.5°	2069.6	1851.7	1038.8	372.8	333.9	355.1	336.5	317.0	298.4	287.8	285.2
50°	2298.1	1981.9	987.4	322.3	307.3	336.5	328.5	310.8	293.1	280.7	279.0
52.5°	2529.2	2108.5	948.4	287.8	283.4	322.3	325.0	314.4	295.8	271.9	270.1
55°	2771.0	2267.1	870.5	260.4	262.1	311.7	329.4	321.5	308.2	269.2	267.4
57.5°	2973.7	2413.2	734.1	241.8	245.3	303.8	331.2	316.1	301.1	271.0	268.3
60°	3132.3	2513.3	538.4	226.7	230.2	294.9	323.2	297.6	278.1	271.0	266.6
62.5°	3181.0	2516.8	357.8	209.0	218.7	279.8	309.1	287.8	264.8	268.3	266.6
65°	3058.8	2384.0	255.9	192.2	209.0	262.1	302.9	278.1	258.6	272.8	271.0
67.5°	2682.4	2008.5	205.5	178.9	195.7	243.5	291.4	269.2	253.3	282.5	277.2
70°	2089.9	1440.8	174.5	165.6	181.5	225.8	275.4	259.5	246.2	274.5	267.4
72.5°	1377.9	848.4	154.1	153.2	164.7	210.8	257.7	250.6	234.7	248.8	238.2
75°	719.1	393.2	133.7	139.0	146.1	197.5	241.8	234.7	217.0	222.3	218.7
77.5°	282.5	184.2	116.0	122.2	130.2	178.0	221.4	214.3	199.3	194.8	193.9
80°	155.0	124.0	96.5	104.5	109.8	160.3	200.1	192.2	176.2	173.6	170.9
82.5°	98.3	80.6	79.7	85.0	92.1	142.6	179.8	167.4	154.1	181.5	147.0
85°	46.0	47.8	56.7	63.8	71.7	121.3	156.7	143.5	130.2	126.6	112.5
87.5°	25.7	31.9	37.2	43.4	49.6	85.0	124.0	111.6	97.4	83.2	85.9
90°	13.2	13.2	19.6	18.7	17.6	19.4	69.1	62.9	55.7	28.0	20.1
92.5°	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	5.0	4.0	4.0
95°	7.0	7.0	7.0	8.0	7.0	7.0	7.0	7.0	6.0	5.0	5.0
97.5°	8.0	8.0	9.0	10.0	12.0	9.0	9.0	8.0	8.0	7.0	7.0
100°	19.0	19.0	23.0	26.0	29.0	21.0	12.0	10.0	9.0	8.0	8.0
102.5°	38.0	39.0	42.0	47.0	50.0	40.0	27.0	18.0	13.0	11.0	11.0
105°	61.0	61.0	65.0	70.0	72.0	63.0	48.0	36.0	27.0	22.0	21.0
107.5°	86.0	87.0	90.0	94.0	95.0	88.0	73.0	58.0	49.0	42.0	41.0
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0



REPORT NUMBER: P226449

CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7030-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	147.0	147.0	149.0	150.0	148.0	143.0	134.0	121.0	106.0	99.0	99.0
115°	178.0	177.0	179.0	182.0	179.0	174.0	168.0	159.0	147.0	139.0	140.0
117.5°	209.0	208.0	210.0	215.0	211.0	205.0	202.0	197.0	189.0	184.0	184.0
120°	243.0	243.0	245.0	250.0	246.0	243.0	237.0	233.0	226.0	223.0	225.0
122.5°	277.0	276.0	278.0	283.0	279.0	277.0	271.0	267.0	261.0	260.0	263.0
125°	310.0	310.0	310.0	315.0	313.0	310.0	305.0	299.0	296.0	294.0	298.0
127.5°	347.0	345.0	346.0	346.0	345.0	340.0	339.0	333.0	329.0	329.0	330.0
130°	380.0	379.0	381.0	381.0	377.0	372.0	370.0	366.0	362.0	361.0	363.0
132.5°	415.0	414.0	414.0	416.0	411.0	405.0	404.0	401.0	393.0	394.0	396.0
135°	451.0	450.0	447.0	448.0	443.0	437.0	435.0	432.0	426.0	426.0	429.0
137.5°	482.0	481.0	476.0	475.0	473.0	468.0	464.0	460.0	459.0	457.0	460.0
140°	511.0	509.0	504.0	502.0	500.0	497.0	491.0	489.0	487.0	485.0	488.0
142.5°	536.0	534.0	533.0	533.0	527.0	525.0	521.0	518.0	517.0	515.0	518.0
145°	560.0	558.0	561.0	562.0	556.0	551.0	550.0	547.0	544.0	546.0	550.0
147.5°	585.0	583.0	586.0	585.0	580.0	575.0	574.0	574.0	571.0	572.0	575.0
150°	610.0	606.0	603.0	600.0	597.0	593.0	593.0	593.0	593.0	592.0	595.0
152.5°	628.0	623.0	618.0	614.0	611.0	610.0	610.0	609.0	608.0	608.0	611.0
155°	641.0	638.0	636.0	631.0	626.0	628.0	630.0	627.0	625.0	625.0	629.0
157.5°	655.0	650.0	650.0	648.0	644.0	645.0	646.0	644.0	643.0	643.0	646.0
160°	666.0	660.0	661.0	664.0	658.0	655.0	655.0	656.0	659.0	660.0	663.0
162.5°	674.0	668.0	670.0	671.0	667.0	663.0	661.0	665.0	669.0	669.0	673.0
165°	682.0	678.0	680.0	677.0	672.0	673.0	673.0	676.0	676.0	678.0	681.0
167.5°	694.0	688.0	688.0	684.0	678.0	685.0	688.0	686.0	684.0	687.0	690.0
170°	701.0	696.0	694.0	689.0	686.0	691.0	693.0	692.0	692.0	695.0	698.0
172.5°	701.0	696.0	694.0	692.0	689.0	690.0	690.0	693.0	695.0	697.0	699.0
175°	699.0	694.0	696.0	695.0	690.0	690.0	691.0	695.0	697.0	698.0	700.0
177.5°	702.0	698.0	701.0	699.0	694.0	695.0	697.0	699.0	700.0	705.0	707.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0

(END OF REPORT)