

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: P227539

Luminaire Tested: **ISS-AF-600-LED-E1-T2-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227539  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29758)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-600-LED-E1-T2-ULG  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II, 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: 5373.7 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U5 - G1

Input Watts (W): 50.4  
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

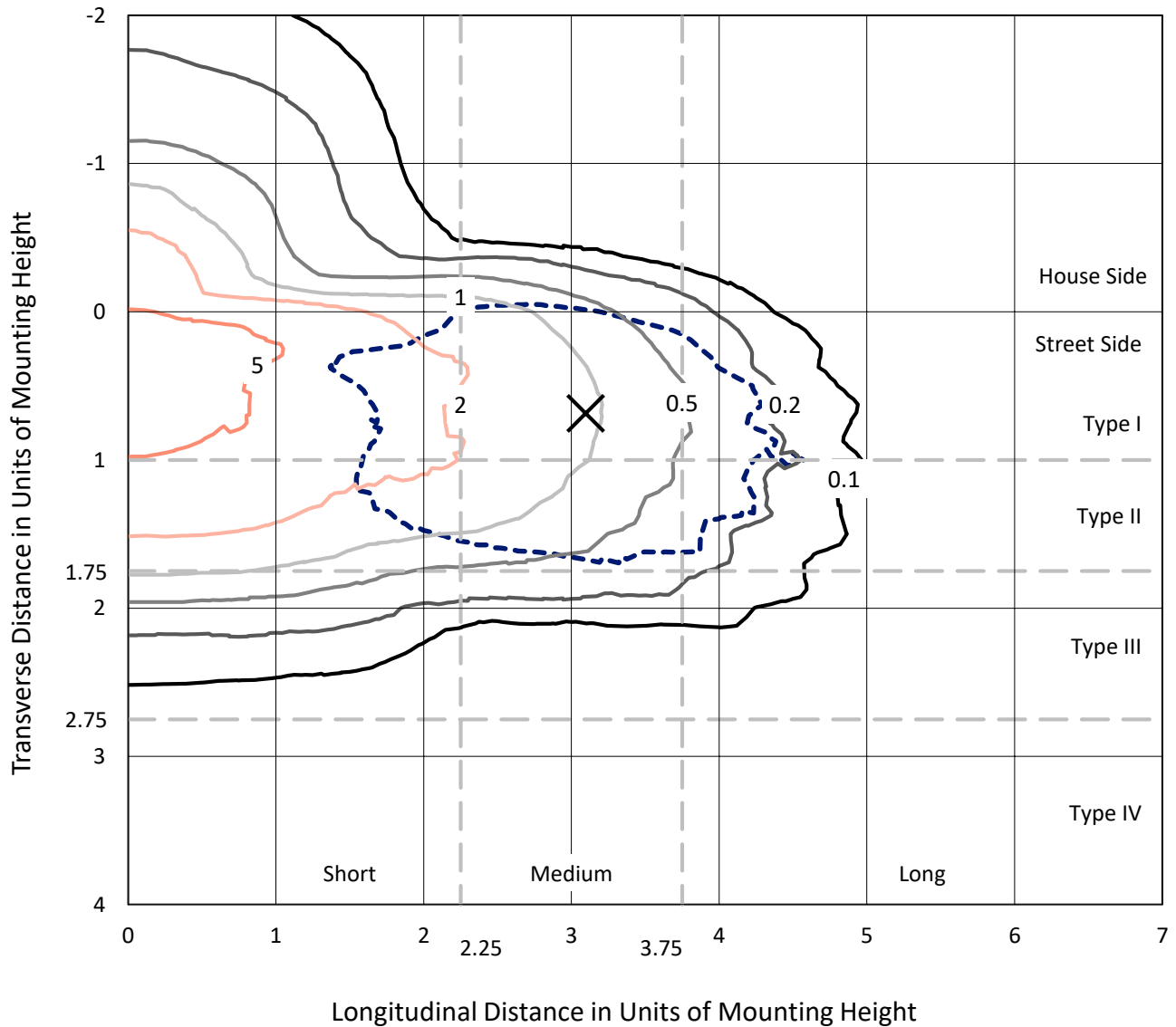


REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

### Iso-Footcandle Lines of Horizontal Illumination

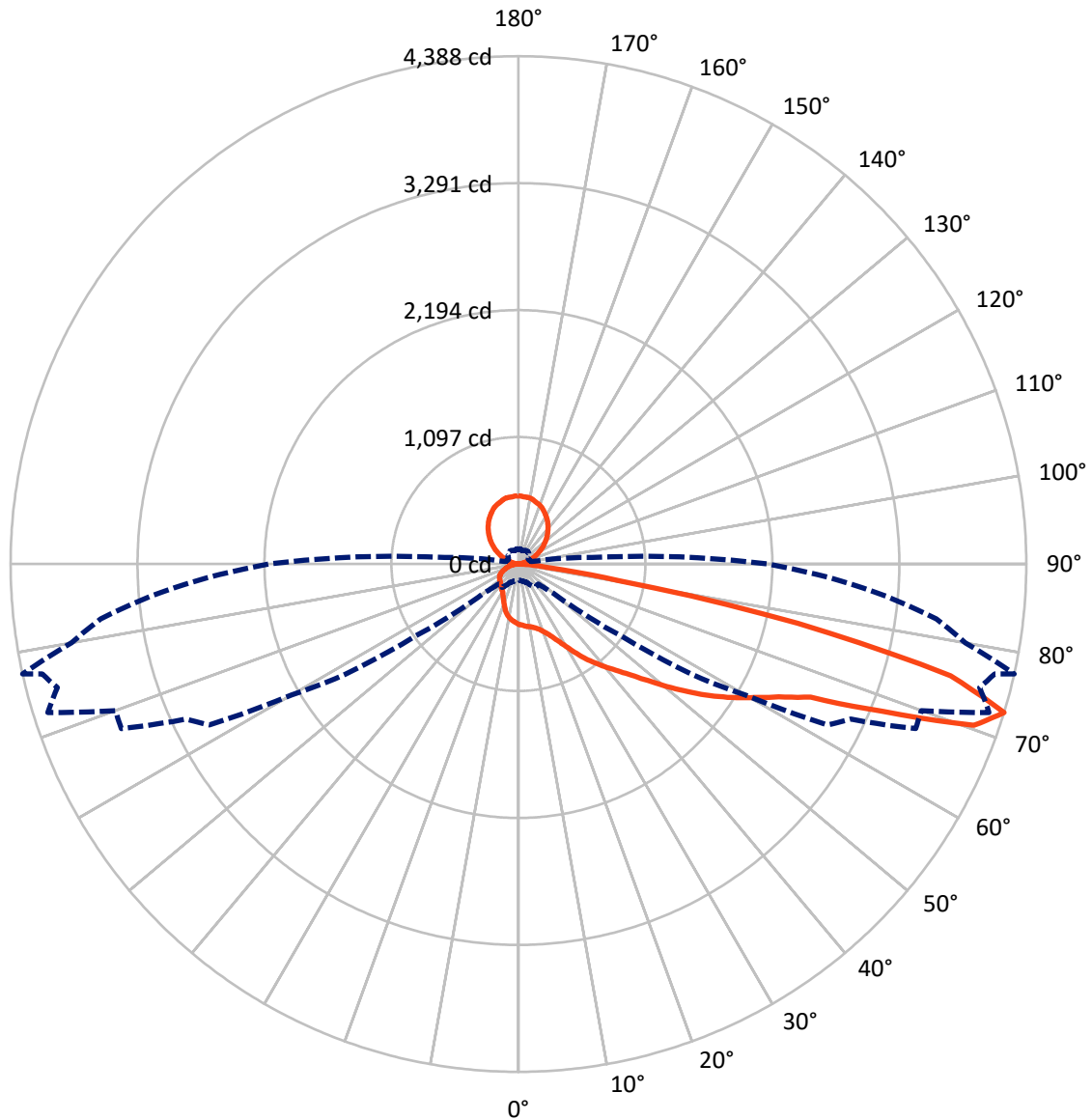
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type II - Medium - Non-Cutoff

REPORT NUMBER: P227539  
CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

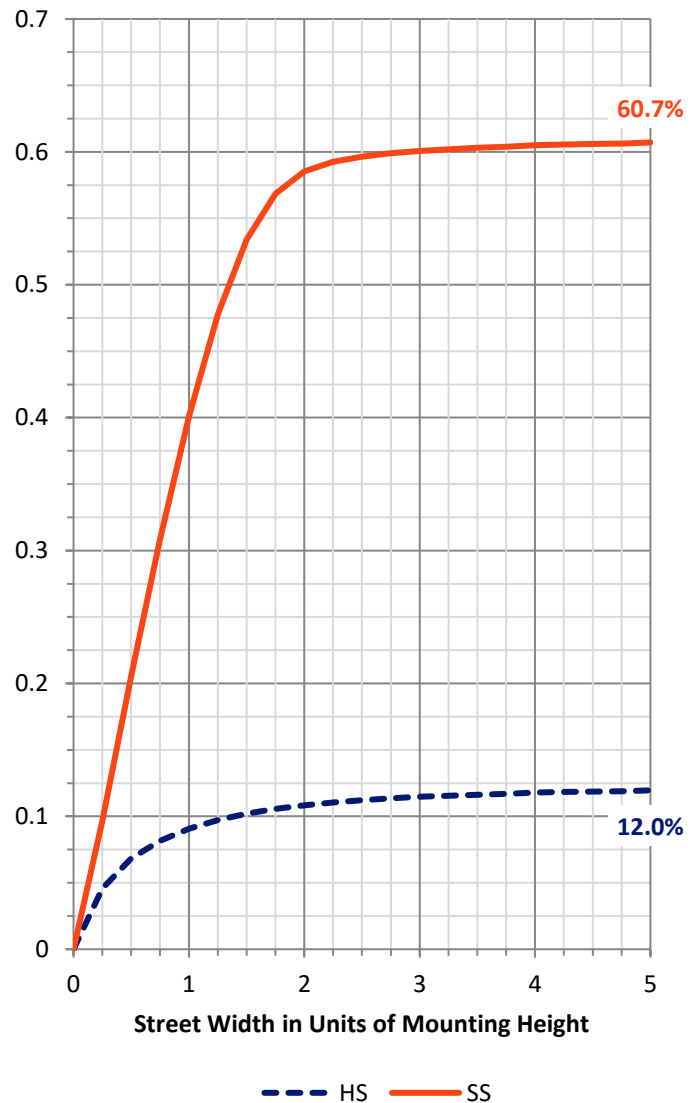
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	648.7	729.4	1378.1
	% Fixture	12.1	13.6	25.6
<b>Street Side</b>	Lumens	3266.1	729.4	3995.6
	% Fixture	60.8	13.6	74.4
<b>Total</b>	Lumens	3914.8	1458.9	5373.7
	% Fixture	72.9	27.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	0.9
10°-20°	148.9	2.8
20°-30°	264.3	4.9
30°-40°	418.7	7.8
40°-50°	628.1	11.7
50°-60°	814.0	15.1
60°-70°	924.9	17.2
70°-80°	613.7	11.4
80°-90°	53.7	1.0
90°-100°	4.8	0.1
100°-110°	70.6	1.3
110°-120°	156.6	2.9
120°-130°	229.0	4.3
130°-140°	271.7	5.1
140°-150°	275.5	5.1
150°-160°	236.4	4.4
160°-170°	158.7	3.0
170°-180°	55.6	1.0
0°-90°	3914.8	72.9
0°-180°	5373.7	100.0



REPORT NUMBER: P227539

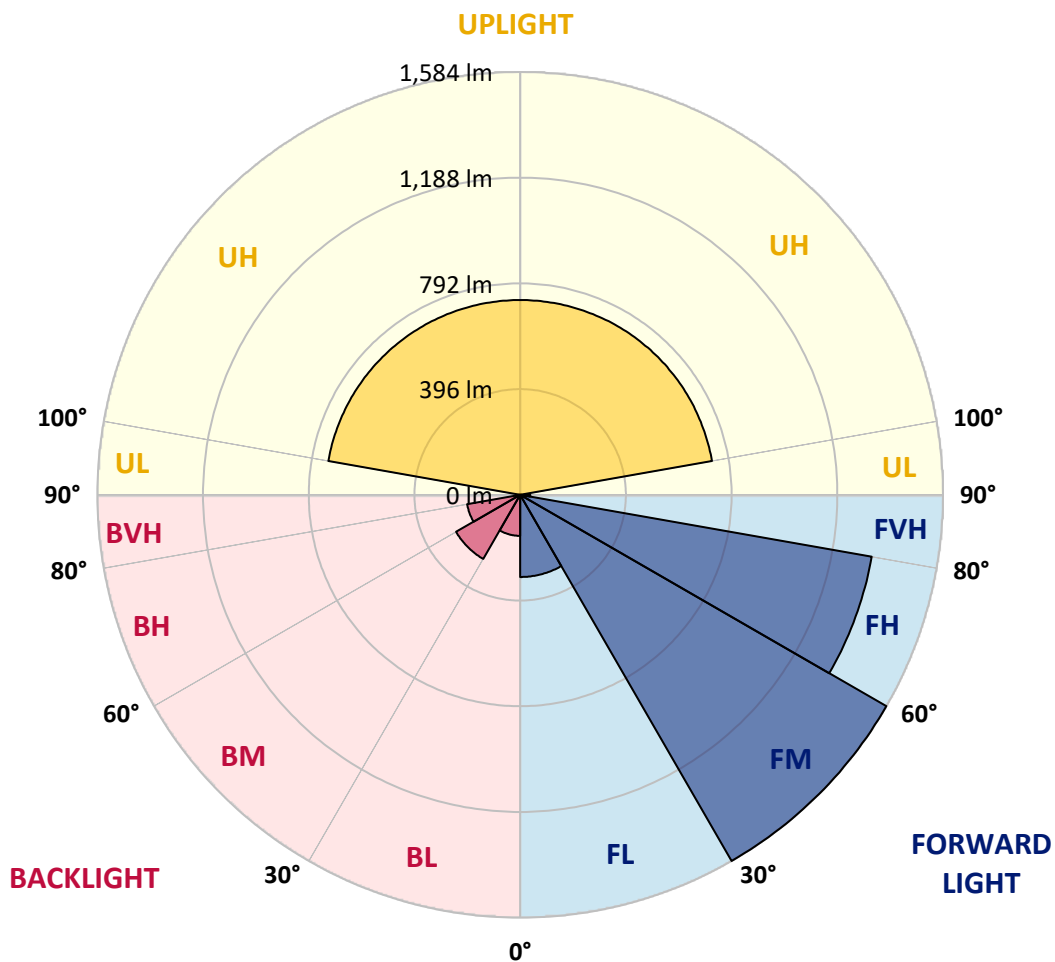
CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	308.0	5.7			
FM (30°-60°)	1583.7	29.5			
FH (60°-80°)	1336.9	24.9			G1/1800
FVH (80°-90°)	37.5	0.7			G1/100
BL (0°-30°)	153.7	2.9	B1/500		
BM (30°-60°)	277.1	5.2	B1/1000		
BH (60°-80°)	201.7	3.8	B1/500		G1/500
BVH (80°-90°)	16.2	0.3			G1/100
UL (90°-100°)	4.8	0.1		U1/10	
UH (100°-180°)	729.4	13.6		U4/1000	

**BUG Rating: B1-U5-G1**

Type II Medium





REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7
2.5°	566.3	563.6	562.3	559.7	557.0	555.7	551.8	549.1	553.0	551.8	551.8
5°	608.5	605.9	601.9	597.9	592.7	588.7	584.7	580.7	583.4	580.7	578.2
7.5°	642.8	640.2	634.9	631.0	625.6	620.4	615.1	613.8	611.1	607.2	605.9
10°	662.6	660.0	657.3	654.7	646.8	642.8	636.2	632.3	633.6	628.3	628.3
12.5°	681.1	678.4	677.1	677.1	670.5	666.6	663.9	660.0	662.6	654.7	652.0
15°	698.3	695.6	691.6	695.6	694.3	692.9	691.6	690.3	694.3	686.4	687.7
17.5°	726.0	724.7	716.8	711.5	712.8	716.8	719.3	718.0	718.0	714.1	715.5
20°	769.6	769.6	758.9	749.7	735.2	735.2	736.5	735.2	737.9	740.5	744.4
22.5°	802.5	799.8	796.0	788.0	772.1	758.9	758.9	753.7	757.7	758.9	766.9
25°	844.8	842.1	832.9	832.9	817.0	799.8	797.3	789.3	798.6	781.4	794.6
27.5°	896.2	893.6	881.7	876.5	868.5	847.4	842.1	843.4	852.7	827.6	840.8
30°	961.0	958.3	943.8	929.2	916.1	893.6	891.0	889.7	910.7	881.7	898.9
32.5°	1042.8	1042.8	1026.9	1007.1	980.7	950.3	939.8	941.1	970.2	938.5	967.5
35°	1166.9	1151.0	1122.0	1091.6	1063.9	1028.3	1013.7	1011.1	1037.5	1005.8	1038.8
37.5°	1246.1	1235.5	1209.0	1186.6	1156.2	1122.0	1111.4	1115.3	1137.8	1091.6	1139.2
40°	1317.4	1316.0	1298.8	1284.3	1253.9	1219.7	1232.9	1285.6	1345.0	1255.3	1256.6
42.5°	1364.8	1367.5	1366.2	1367.5	1350.3	1314.7	1337.1	1411.1	1512.6	1459.9	1411.1
45°	1372.7	1382.0	1385.9	1412.4	1429.5	1408.4	1420.3	1498.1	1701.4	1783.2	1562.9
47.5°	1392.5	1401.7	1393.9	1425.6	1504.8	1503.4	1550.9	1579.9	1607.7	1620.9	1787.2
50°	1418.9	1436.1	1428.1	1454.5	1519.3	1556.2	1597.1	1634.1	1611.7	1528.5	1573.4
52.5°	1420.3	1440.1	1483.6	1510.0	1573.4	1565.4	1593.1	1573.4	1607.7	1521.9	1565.4
55°	1304.1	1308.0	1434.8	1568.1	1679.0	1656.6	1639.4	1594.5	1638.1	1531.2	1586.6
57.5°	1120.6	1133.8	1265.8	1490.2	1727.8	1747.6	1742.3	1738.4	1772.7	1630.2	1690.8
60°	918.7	934.6	1059.9	1323.9	1626.2	1677.6	1748.9	1792.5	1880.9	1824.1	1924.5
62.5°	572.9	584.7	723.3	1053.3	1434.8	1536.4	1640.7	1692.2	1820.2	1846.6	2016.8
65°	273.2	277.2	331.3	572.9	1042.8	1234.2	1388.6	1498.1	1655.2	1774.0	2003.7
67.5°	212.5	213.8	233.6	304.9	534.6	662.6	838.2	983.4	1151.0	1475.7	1760.8
70°	170.3	170.3	186.1	224.4	331.3	348.4	393.3	442.2	513.4	774.8	1005.8
72.5°	142.6	142.6	153.1	176.9	245.5	249.5	246.8	242.8	242.8	306.3	390.7
75°	120.1	118.8	125.4	141.3	182.2	187.4	184.7	175.5	165.0	165.0	186.1
77.5°	97.7	97.7	102.9	110.9	132.0	134.6	134.6	126.7	117.4	118.8	128.1
80°	76.5	76.5	80.5	85.8	92.4	91.0	91.0	83.2	76.5	75.2	80.5
82.5°	55.4	56.8	66.0	62.0	59.4	55.4	55.4	54.1	48.8	44.9	47.6
85°	17.2	18.5	31.7	36.9	30.4	25.1	23.7	19.8	21.1	17.2	19.8
87.5°	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.3	0.0	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.1	4.1	5.3	6.6	8.0	9.2	10.2	11.3
100°	8.2	8.2	10.2	14.3	22.5	24.6	26.6	28.6	30.7	31.2	31.7
102.5°	28.6	28.6	32.7	38.9	46.0	47.3	48.6	49.9	51.1	51.4	51.7
105°	55.2	55.2	57.3	62.4	67.5	68.5	69.6	70.6	71.6	71.8	72.1
107.5°	79.8	78.8	81.8	85.9	90.0	90.8	91.6	92.3	93.1	93.6	94.1
110°	103.3	104.3	105.4	108.4	112.5	113.0	113.5	114.1	114.6	115.1	115.6



REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
112.5°	126.8	126.8	128.9	132.0	135.0	135.5	136.1	136.6	137.1	137.6	138.1
115°	149.4	150.4	152.4	154.5	157.5	158.0	158.6	159.1	159.6	160.1	160.6
117.5°	172.9	173.9	175.9	178.0	181.1	181.6	182.1	182.6	183.1	183.3	183.6
120°	197.4	199.5	200.5	202.5	205.6	205.8	206.1	206.4	206.6	207.1	207.7
122.5°	224.0	225.0	226.1	228.1	231.2	231.4	231.7	232.0	232.2	232.4	232.7
125°	249.6	251.6	252.7	253.7	256.8	257.0	257.3	257.6	257.8	258.0	258.3
127.5°	273.1	275.2	276.2	278.2	280.3	280.8	281.3	281.8	282.3	282.8	283.4
130°	296.7	298.7	299.7	300.7	304.8	305.0	305.4	305.7	305.9	306.4	306.9
132.5°	320.2	321.2	324.3	325.3	328.4	328.6	328.9	329.2	329.4	330.2	330.9
135°	343.7	344.7	346.8	348.8	352.9	352.9	352.9	352.9	352.9	353.7	354.5
137.5°	367.2	368.3	371.3	372.4	375.4	375.4	375.4	375.4	375.4	375.9	376.4
140°	390.8	391.8	393.8	394.9	396.9	397.1	397.4	397.7	397.9	398.1	398.4
142.5°	413.3	415.3	417.4	416.3	419.4	419.4	419.4	419.4	419.4	419.9	420.4
145°	434.8	435.8	437.8	437.8	440.9	441.1	441.4	441.7	441.9	442.4	442.9
147.5°	454.2	454.2	457.3	458.3	462.4	462.6	462.9	463.2	463.4	463.6	463.9
150°	471.6	472.6	474.6	475.7	479.8	480.0	480.3	480.6	480.8	481.0	481.3
152.5°	490.0	491.0	494.1	493.1	496.1	496.3	496.6	496.9	497.2	497.4	497.7
155°	510.5	511.5	513.5	512.5	514.5	514.5	514.5	514.5	514.5	514.7	515.1
157.5°	524.8	526.8	528.9	527.8	530.9	530.9	530.9	530.9	530.9	530.9	530.9
160°	537.0	539.1	541.1	541.1	544.2	544.2	544.2	544.2	544.2	544.2	544.2
162.5°	547.3	548.3	551.4	550.3	553.4	553.4	553.4	553.4	553.4	553.6	553.9
165°	558.5	559.6	561.6	560.6	564.7	564.7	564.7	564.7	564.7	564.9	565.2
167.5°	567.7	568.8	571.8	570.8	573.9	573.7	573.4	573.1	572.9	572.9	572.9
170°	574.9	575.9	579.0	578.0	580.0	579.8	579.5	579.2	579.0	578.8	578.5
172.5°	578.0	579.0	582.1	580.0	582.1	581.9	581.5	581.2	581.0	581.2	581.5
175°	580.0	582.1	583.1	582.1	585.1	585.1	585.1	585.1	585.1	585.3	585.6
177.5°	585.1	586.2	588.2	587.2	591.3	591.1	590.8	590.4	590.2	590.2	590.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2





REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

**CANDELA DISTRIBUTION (continued):**

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77°
0°	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7
2.5°	545.1	547.8	542.5	542.5	535.9	539.8	533.3	534.6	527.9	530.6	530.6
5°	571.5	572.9	566.3	563.6	557.0	557.0	550.4	550.4	541.1	543.8	541.1
7.5°	596.6	596.6	590.0	584.7	578.2	575.5	567.5	563.6	555.7	554.3	550.4
10°	617.8	617.8	608.5	603.2	595.3	591.4	580.7	576.8	567.5	561.0	557.0
12.5°	644.2	641.5	631.0	625.6	612.4	611.1	595.3	592.7	579.5	575.5	568.9
15°	675.9	678.4	661.3	660.0	641.5	640.2	619.1	617.8	597.9	596.6	587.4
17.5°	710.1	715.5	700.9	699.6	677.1	677.1	652.0	650.7	624.3	623.0	611.1
20°	740.5	747.1	737.9	740.5	720.7	722.0	694.3	694.3	657.3	654.7	644.2
22.5°	768.2	781.4	773.5	788.0	768.2	777.4	740.5	747.1	703.5	698.3	682.4
25°	796.0	813.0	810.5	834.2	819.7	835.5	797.3	810.5	753.7	757.7	736.5
27.5°	823.7	846.1	843.4	877.8	872.5	904.2	871.1	885.7	823.7	827.6	803.8
30°	869.8	894.9	885.7	921.4	921.4	972.8	947.8	970.2	901.5	909.4	881.7
32.5°	931.9	961.0	933.2	979.4	976.7	1044.1	1024.3	1062.5	995.2	1005.8	971.5
35°	999.2	1045.4	1000.5	1052.0	1044.1	1114.0	1100.8	1162.9	1091.6	1103.5	1069.2
37.5°	1087.6	1143.0	1083.7	1128.5	1092.9	1173.4	1165.6	1249.9	1177.4	1207.8	1166.9
40°	1191.9	1235.5	1161.6	1199.8	1140.4	1223.6	1210.4	1326.6	1259.3	1308.0	1271.1
42.5°	1288.3	1318.6	1221.0	1268.5	1197.2	1281.7	1257.9	1397.9	1339.8	1414.9	1374.0
45°	1375.4	1409.7	1280.3	1333.1	1253.9	1346.3	1305.4	1466.5	1426.8	1540.4	1499.4
47.5°	1499.4	1449.3	1334.4	1403.1	1314.7	1416.3	1362.2	1547.0	1532.5	1693.5	1645.9
50°	1458.5	1491.6	1379.3	1450.6	1370.1	1494.2	1434.8	1643.4	1647.3	1859.8	1832.1
52.5°	1462.5	1518.0	1413.6	1512.6	1434.8	1602.5	1540.4	1759.5	1778.0	2020.8	1982.6
55°	1486.2	1568.1	1465.2	1598.5	1525.8	1722.5	1679.0	1884.9	1916.6	2172.6	2150.2
57.5°	1545.7	1659.1	1553.6	1727.8	1652.6	1859.8	1820.2	2014.2	2057.8	2324.5	2317.8
60°	1774.0	1908.6	1723.9	1916.6	1816.2	2015.5	1962.7	2150.2	2193.7	2469.6	2486.8
62.5°	2028.7	2262.4	2152.8	2353.5	2088.1	2290.1	2134.4	2317.8	2320.5	2625.4	2679.5
65°	2094.8	2453.8	2547.5	2921.0	2782.4	2989.7	2573.8	2696.7	2538.2	2909.2	2987.0
67.5°	2069.6	2509.2	2769.2	3190.3	3347.4	3709.0	3639.0	3596.9	3229.9	3496.5	3590.3
70°	1519.3	1985.2	2621.4	3049.1	3501.9	3739.4	4115.6	4153.9	4138.0	4101.1	4163.1
72.5°	691.6	1085.0	1774.0	2262.4	3009.5	3169.2	3714.3	3703.8	4263.5	4124.8	4222.5
75°	271.9	418.4	844.8	1263.1	2081.6	2278.2	2896.0	2742.8	3441.1	3237.8	3446.4
77.5°	149.1	187.4	316.8	542.5	1136.5	1240.7	1772.7	1516.6	2134.4	1781.9	1851.8
80°	89.7	112.2	145.2	205.9	483.1	510.9	756.4	609.8	872.5	662.6	642.8
82.5°	48.8	60.8	72.6	101.7	179.5	199.3	261.4	235.0	279.9	239.0	233.6
85°	19.8	26.4	27.7	40.9	59.4	68.6	83.2	89.7	109.6	100.4	97.7
87.5°	0.0	1.3	0.0	2.7	0.0	2.7	0.0	4.0	4.0	6.6	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	12.3	13.3	11.8	10.2	8.7	7.2	6.6	6.1	5.6	5.1	4.9
100°	32.2	32.7	32.2	31.7	31.2	30.7	29.9	29.2	28.4	27.6	27.4
102.5°	52.0	52.2	52.0	51.7	51.4	51.1	50.6	50.1	49.6	49.1	49.3
105°	72.4	72.6	72.6	72.6	72.6	72.6	72.1	71.6	71.1	70.6	71.0
107.5°	94.6	95.1	94.9	94.6	94.3	94.1	93.9	93.6	93.3	93.1	93.3
110°	116.1	116.6	116.6	116.6	116.6	116.6	116.4	116.1	115.8	115.6	115.8



REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

**CANDELA DISTRIBUTION (continued):**

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77°
112.5°	138.6	139.1	139.1	139.1	139.1	139.1	138.9	138.6	138.3	138.1	138.5
115°	161.1	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	162.0
117.5°	183.9	184.1	184.3	184.6	184.9	185.2	184.9	184.6	184.3	184.1	184.5
120°	208.2	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	209.1
122.5°	233.0	233.2	233.2	233.2	233.2	233.2	233.4	233.7	234.1	234.3	235.1
125°	258.6	258.8	259.0	259.3	259.6	259.8	259.8	259.8	259.8	259.8	260.4
127.5°	283.9	284.4	284.2	283.9	283.6	283.4	283.6	283.9	284.2	284.4	285.0
130°	307.4	307.9	307.9	307.9	307.9	307.9	308.1	308.4	308.7	308.9	309.5
132.5°	331.6	332.5	332.5	332.5	332.5	332.5	332.7	333.0	333.3	333.5	334.1
135°	355.2	356.0	356.0	356.0	356.0	356.0	356.2	356.5	356.8	357.0	357.4
137.5°	377.0	377.5	377.5	377.5	377.5	377.5	377.7	378.0	378.3	378.5	379.3
140°	398.7	399.0	399.0	399.0	399.0	399.0	399.5	400.0	400.5	401.0	401.8
142.5°	420.9	421.5	421.5	421.5	421.5	421.5	421.7	422.0	422.3	422.5	423.1
145°	443.4	444.0	443.8	443.4	443.1	442.9	443.1	443.4	443.8	444.0	444.6
147.5°	464.2	464.4	463.9	463.4	462.9	462.4	462.6	462.9	463.2	463.4	464.0
150°	481.6	481.8	481.3	480.8	480.3	479.8	479.8	479.8	479.8	479.8	480.6
152.5°	498.0	498.2	498.0	497.7	497.4	497.2	497.2	497.2	497.2	497.2	497.8
155°	515.4	515.6	515.4	515.1	514.7	514.5	514.7	515.1	515.4	515.6	516.2
157.5°	530.9	530.9	530.4	529.9	529.4	528.9	529.1	529.4	529.7	529.9	530.9
160°	544.2	544.2	543.7	543.2	542.7	542.2	542.2	542.2	542.2	542.2	542.8
162.5°	554.2	554.4	553.9	553.4	552.9	552.4	551.9	551.4	550.9	550.3	550.8
165°	565.5	565.7	564.9	564.2	563.4	562.6	562.1	561.6	561.1	560.6	561.0
167.5°	572.9	572.9	572.3	571.8	571.3	570.8	571.0	571.3	571.6	571.8	572.6
170°	578.2	578.0	577.8	577.5	577.1	576.9	577.5	578.0	578.5	579.0	580.0
172.5°	581.9	582.1	581.5	581.0	580.5	580.0	580.2	580.5	580.8	581.0	581.6
175°	585.9	586.2	585.3	584.6	583.9	583.1	582.6	582.1	581.5	581.0	581.6
177.5°	590.2	590.2	589.4	588.7	588.0	587.2	587.2	587.2	587.2	587.2	587.8
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2



REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

**CANDELA DISTRIBUTION (continued):**

	77.5°	80°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°
0°	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7
2.5°	526.6	530.6	525.4	525.4	518.7	522.7	518.7	514.7	508.2	509.5	500.2
5°	535.9	538.6	531.9	529.3	525.4	524.1	516.1	508.2	498.9	498.9	488.4
7.5°	545.1	545.1	535.9	535.9	526.6	524.1	512.1	498.9	485.7	484.5	468.6
10°	550.4	549.1	537.3	537.3	524.1	522.7	508.2	488.4	469.9	464.6	442.2
12.5°	561.0	559.7	545.1	542.5	525.4	525.4	504.2	477.8	451.4	442.2	410.5
15°	574.2	575.5	558.3	554.3	534.6	533.3	504.2	464.6	429.0	414.5	376.1
17.5°	595.3	596.6	572.9	568.9	545.1	541.1	505.5	448.8	398.6	382.8	348.4
20°	623.0	619.1	587.4	586.0	554.3	550.4	504.2	425.0	368.3	352.4	322.0
22.5°	657.3	653.4	612.4	608.5	571.5	565.0	502.9	400.0	340.5	323.4	303.6
25°	704.8	699.6	649.4	644.2	597.9	587.4	501.6	373.6	316.8	303.6	291.7
27.5°	764.2	753.7	692.9	687.7	625.6	612.4	496.3	343.2	293.1	283.8	278.5
30°	835.5	826.2	748.4	740.5	662.6	645.5	491.0	315.5	275.9	271.9	267.9
32.5°	920.0	910.7	815.7	806.5	710.1	685.1	481.8	293.1	265.4	265.4	260.0
35°	1008.4	1000.5	888.3	881.7	762.9	730.0	469.9	273.2	256.0	256.0	250.8
37.5°	1087.6	1094.3	967.5	962.3	815.7	774.8	456.7	260.0	248.2	245.5	240.2
40°	1173.4	1189.3	1041.5	1045.4	871.1	822.4	440.9	249.5	239.0	236.3	235.0
42.5°	1260.6	1290.9	1119.3	1133.8	926.6	871.1	429.0	242.8	235.0	229.7	228.3
45°	1368.8	1412.4	1215.7	1243.4	991.2	930.6	425.0	235.0	223.1	216.5	212.5
47.5°	1503.4	1561.5	1334.4	1366.2	1077.1	1001.9	432.9	232.3	215.1	207.2	199.3
50°	1663.1	1718.6	1475.7	1488.9	1173.4	1079.7	450.1	236.3	212.5	200.6	188.7
52.5°	1832.1	1874.4	1624.9	1610.3	1273.8	1156.2	469.9	237.6	205.9	194.1	179.5
55°	2006.3	2030.0	1763.5	1725.2	1364.8	1232.9	496.3	236.3	200.6	187.4	169.0
57.5°	2176.6	2184.5	1886.2	1849.3	1454.5	1323.9	529.3	232.3	192.7	179.5	159.7
60°	2342.9	2356.1	2022.2	1987.8	1552.2	1441.3	576.8	225.7	182.2	172.9	151.8
62.5°	2525.1	2568.6	2184.5	2189.8	1686.8	1624.9	666.6	217.8	171.5	161.0	139.9
65°	2773.2	2939.6	2452.4	2576.5	1945.7	1970.7	838.2	195.4	157.0	143.8	129.4
67.5°	3394.9	3577.1	3103.2	3153.3	2551.4	2402.3	946.4	166.3	138.6	129.4	120.1
70°	4173.6	4043.0	3706.5	3402.8	2905.2	2469.6	832.9	139.9	122.8	117.4	112.2
72.5°	4387.5	3918.9	3641.7	3186.4	2686.1	2154.1	637.5	120.1	109.6	106.9	102.9
75°	3855.6	3177.1	3192.9	2531.7	2226.8	1642.0	435.6	102.9	95.0	93.7	92.4
77.5°	2465.6	1632.7	1987.8	1251.3	1285.6	760.3	212.5	85.8	81.8	81.8	79.2
80°	876.5	543.8	615.1	394.7	359.1	241.5	114.9	68.6	66.0	67.3	66.0
82.5°	262.7	208.6	204.6	159.7	124.1	101.7	63.3	52.8	50.1	51.5	48.8
85°	105.6	81.8	68.6	52.8	43.6	39.6	34.3	35.6	31.7	34.3	30.4
87.5°	6.6	5.3	4.0	5.3	0.0	2.7	6.6	5.3	1.3	5.3	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	4.9	4.6	4.3	4.1	4.1	4.1	4.1	4.6	4.9	5.1	5.6
100°	27.4	27.1	26.8	26.6	26.1	25.6	26.6	27.1	27.4	27.6	28.4
102.5°	49.3	49.6	49.9	50.1	49.6	49.1	50.1	49.6	49.3	49.1	49.6
105°	71.1	71.6	72.1	72.6	71.6	70.6	72.6	71.6	71.1	70.6	71.1
107.5°	93.3	93.6	93.9	94.1	93.6	93.1	94.1	93.6	93.3	93.1	93.3
110°	115.8	116.1	116.4	116.6	116.1	115.6	116.6	116.1	115.8	115.6	115.8



REPORT NUMBER: P227539  
 CATALOG NUMBER: ISS-AF-600-LED-E1-T2-ULG

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	77.5°	80°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°	
112.5°	138.6	139.1	139.6	140.1	139.1	138.1	140.1	139.1	138.6	138.1	138.3	0°
115°	162.1	162.6	163.2	163.7	163.2	162.6	163.7	162.6	162.1	161.6	161.6	2.5°
117.5°	184.6	185.2	185.7	186.2	185.2	184.1	186.2	185.2	184.6	184.1	184.3	5°
120°	209.2	209.7	210.2	210.7	209.7	208.7	210.7	209.7	209.2	208.7	208.7	7.5°
122.5°	235.3	236.3	237.3	238.3	237.8	237.3	238.3	236.3	235.3	234.3	234.1	10°
125°	260.6	261.4	262.1	262.9	262.4	261.9	262.9	261.4	260.6	259.8	259.8	12.5°
127.5°	285.2	285.9	286.6	287.4	285.9	284.4	287.4	285.9	285.2	284.4	284.2	15°
130°	309.7	310.5	311.2	312.0	311.0	310.0	312.0	310.5	309.7	308.9	308.7	17.5°
132.5°	334.3	335.0	335.7	336.6	335.5	334.5	336.6	335.0	334.3	333.5	333.3	20°
135°	357.5	358.0	358.5	359.1	358.5	358.0	359.1	358.0	357.5	357.0	356.8	22.5°
137.5°	379.5	380.5	381.6	382.6	381.6	380.5	382.6	380.5	379.5	378.5	378.3	25°
140°	402.0	403.0	404.1	405.1	404.1	403.0	405.1	403.0	402.0	401.0	400.5	27.5°
142.5°	423.3	424.0	424.7	425.5	425.0	424.5	425.5	424.0	423.3	422.5	422.3	30°
145°	444.8	445.5	446.2	447.0	446.0	445.0	447.0	445.5	444.8	444.0	443.8	32.5°
147.5°	464.2	464.9	465.6	466.5	464.9	463.4	466.5	464.9	464.2	463.4	463.2	35°
150°	480.8	481.8	482.8	483.9	482.3	480.8	483.9	481.8	480.8	479.8	479.8	37.5°
152.5°	498.0	498.7	499.4	500.2	498.7	497.2	500.2	498.7	498.0	497.2	497.2	40°
155°	516.4	517.1	517.8	518.6	517.6	516.6	518.6	517.1	516.4	515.6	515.4	42.5°
157.5°	531.1	532.4	533.8	535.0	533.5	531.9	535.0	532.4	531.1	529.9	529.7	45°
160°	543.0	543.7	544.4	545.2	544.2	543.2	545.2	543.7	543.0	542.2	542.2	47.5°
162.5°	550.9	551.4	551.9	552.4	550.9	549.3	552.4	551.4	550.9	550.3	550.9	50°
165°	561.1	561.6	562.1	562.6	561.6	560.6	562.6	561.6	561.1	560.6	561.1	52.5°
167.5°	572.9	573.9	574.9	575.9	574.9	573.9	575.9	573.9	572.9	571.8	571.6	55°
170°	580.2	581.5	582.9	584.1	583.1	582.1	584.1	581.5	580.2	579.0	578.5	57.5°
172.5°	581.9	582.6	583.3	584.1	582.6	581.0	584.1	582.6	581.9	581.0	580.8	60°
175°	581.9	582.6	583.3	584.1	582.6	581.0	584.1	582.6	581.9	581.0	581.5	62.5°
177.5°	588.0	588.7	589.4	590.2	588.7	587.2	590.2	588.7	588.0	587.2	587.2	65°
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	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°
												110°

NUMBER: P227539  
 NUMBER: ISS-AF-600-LED-E1-T2-ULG

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	110°	
522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	112.5°	138.6
506.9	497.7	501.6	497.7	500.2	492.3	495.0	488.4	488.4	487.0	480.5	115°	161.6
489.7	480.5	479.2	469.9	471.2	460.6	459.3	447.4	447.4	436.9	417.1	117.5°	184.6
466.0	451.4	450.1	431.6	430.3	415.8	410.5	397.3	396.0	384.1	372.3	120°	208.7
435.6	413.2	409.2	385.4	386.8	370.9	369.6	360.4	360.4	355.1	355.1	122.5°	233.7
401.3	376.1	373.6	355.1	356.4	345.9	347.2	341.9	344.5	347.2	356.4	125°	259.8
369.6	349.7	347.2	335.2	336.6	334.0	337.9	337.9	341.9	348.4	364.3	127.5°	283.9
343.2	326.0	327.3	322.0	327.3	326.0	334.0	332.7	340.5	348.4	368.3	130°	308.4
319.5	310.2	314.1	312.8	319.5	319.5	326.0	327.3	334.0	344.5	366.9	132.5°	333.0
303.6	301.0	304.9	304.9	310.2	311.5	318.1	322.0	326.0	336.6	356.4	135°	356.5
294.3	293.1	297.0	298.3	302.3	303.6	310.2	310.2	316.8	323.4	334.0	137.5°	378.0
281.1	278.5	283.8	283.8	289.1	287.8	295.6	293.1	299.6	302.3	304.9	140°	400.0
271.9	267.9	271.9	270.6	274.6	270.6	274.6	270.6	274.6	274.6	270.6	142.5°	422.0
262.7	258.7	260.0	254.7	258.7	253.4	254.7	249.5	252.2	249.5	250.8	145°	443.4
253.4	248.2	248.2	241.5	241.5	235.0	237.6	232.3	237.6	241.5	240.2	147.5°	462.9
240.2	236.3	236.3	231.0	233.6	231.0	236.3	233.6	235.0	229.7	220.4	150°	479.8
232.3	235.0	233.6	237.6	235.0	231.0	227.0	219.1	217.8	215.1	209.9	152.5°	497.2
220.4	223.1	216.5	221.8	217.8	219.1	216.5	212.5	209.9	207.2	201.9	155°	515.1
203.3	203.3	197.9	205.9	201.9	209.9	207.2	207.2	204.6	200.6	196.7	157.5°	529.4
188.7	190.1	184.7	191.4	188.7	199.3	197.9	201.9	201.9	199.3	188.7	160°	542.2
179.5	176.9	172.9	179.5	178.2	187.4	188.7	196.7	195.4	196.7	187.4	162.5°	551.4
171.5	166.3	162.3	166.3	166.3	174.2	176.9	186.1	187.4	190.1	184.7	165°	561.6
162.3	155.8	153.1	155.8	155.8	163.7	167.7	174.2	178.2	186.1	183.5	167.5°	571.3
154.5	145.2	142.6	145.2	146.5	154.5	158.4	165.0	170.3	180.9	179.5	170°	578.0
145.2	137.3	134.6	138.6	139.9	147.8	151.8	158.4	162.3	174.2	174.2	172.5°	580.5
134.6	128.1	128.1	129.4	132.0	139.9	142.6	151.8	153.1	167.7	169.0	175°	582.1
125.4	121.4	121.4	122.8	125.4	132.0	133.3	142.6	143.8	158.4	162.3	177.5°	587.2
117.4	114.9	114.9	116.1	117.4	122.8	124.1	133.3	136.0	149.1	155.8	180°	589.2
109.6	106.9	105.6	105.6	109.6	113.5	116.1	125.4	126.7	138.6	146.5		
100.4	97.7	97.7	96.4	100.4	102.9	108.2	113.5	116.1	128.1	133.3		
91.0	88.5	88.5	87.2	89.7	95.0	96.4	101.7	102.9	113.5	118.8		
79.2	76.5	76.5	76.5	79.2	80.5	81.8	87.2	89.7	99.0	104.2		
66.0	63.3	64.7	63.3	67.3	62.0	66.0	71.3	74.0	79.2	76.5		
50.1	46.2	47.6	47.6	48.8	44.9	47.6	50.1	52.8	56.8	55.4		
31.7	27.7	30.4	27.7	30.4	26.4	29.1	29.1	31.7	29.1	27.7		
6.6	2.7	6.6	2.7	7.9	0.0	4.0	0.0	2.7	1.3	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
6.1	6.6	7.2	8.7	10.2	11.8	13.3	12.3	11.3	9.2	4.1		
29.2	29.9	30.7	31.2	31.7	32.2	32.7	32.2	31.7	30.7	22.5		
50.1	50.6	51.1	51.4	51.7	52.0	52.2	52.0	51.7	51.1	46.0		
71.6	72.1	72.6	72.6	72.6	72.6	72.6	72.4	72.1	71.6	67.5		
93.6	93.9	94.1	94.3	94.6	94.9	95.1	94.6	94.1	93.1	90.0		
116.1	116.4	116.6	116.6	116.6	116.6	116.6	116.1	115.6	114.6	112.5		

'227539  
 ISS-AF-600-LED-E1-T2-ULG

REPORT NUMBER: P227539  
 CATALOG NUMBER: ISS-AF-600

**TION (continued):**

**CANDELA DISTRIBUTION (con**

112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°		155°	165°
138.9	139.1	139.1	139.1	139.1	139.1	138.6	138.1	137.1	135.0	0°	522.7	522.7
161.6	161.6	161.6	161.6	161.6	161.6	161.1	160.6	159.6	157.5	2.5°	473.8	468.6
184.9	185.2	184.9	184.6	184.3	184.1	183.9	183.6	183.1	181.1	5°	406.5	397.3
208.7	208.7	208.7	208.7	208.7	208.7	208.2	207.7	206.6	205.6	7.5°	365.6	362.9
233.4	233.2	233.2	233.2	233.2	233.2	233.0	232.7	232.2	231.2	10°	357.7	361.7
259.8	259.8	259.6	259.3	259.0	258.8	258.6	258.3	257.8	256.8	12.5°	366.9	373.6
283.6	283.4	283.6	283.9	284.2	284.4	283.9	283.4	282.3	280.3	15°	378.8	390.7
308.1	307.9	307.9	307.9	307.9	307.9	307.4	306.9	305.9	304.8	17.5°	388.1	403.9
332.7	332.5	332.5	332.5	332.5	332.5	331.6	330.9	329.4	328.4	20°	389.3	405.2
356.2	356.0	356.0	356.0	356.0	356.0	355.2	354.5	352.9	352.9	22.5°	377.5	388.1
377.7	377.5	377.5	377.5	377.5	377.5	377.0	376.4	375.4	375.4	25°	347.2	352.4
399.5	399.0	399.0	399.0	399.0	399.0	398.7	398.4	397.9	396.9	27.5°	308.8	307.5
421.7	421.5	421.5	421.5	421.5	421.5	420.9	420.4	419.4	419.4	30°	269.2	266.6
443.1	442.9	443.1	443.4	443.8	444.0	443.4	442.9	441.9	440.9	32.5°	254.7	245.5
462.6	462.4	462.9	463.4	463.9	464.4	464.2	463.9	463.4	462.4	35°	232.3	229.7
479.8	479.8	480.3	480.8	481.3	481.8	481.6	481.3	480.8	479.8	37.5°	224.4	246.8
497.2	497.2	497.4	497.7	498.0	498.2	498.0	497.7	497.2	496.1	40°	215.1	242.8
514.7	514.5	514.7	515.1	515.4	515.6	515.4	515.1	514.5	514.5	42.5°	207.2	223.1
529.1	528.9	529.4	529.9	530.4	530.9	530.9	530.9	530.9	530.9	45°	192.7	199.3
542.2	542.2	542.7	543.2	543.7	544.2	544.2	544.2	544.2	544.2	47.5°	186.1	183.5
551.9	552.4	552.9	553.4	553.9	554.4	554.2	553.9	553.4	553.4	50°	180.9	180.9
562.1	562.6	563.4	564.2	564.9	565.7	565.5	565.2	564.7	564.7	52.5°	176.9	174.2
571.0	570.8	571.3	571.8	572.3	572.9	572.9	572.9	572.9	573.9	55°	171.5	169.0
577.5	576.9	577.1	577.5	577.8	578.0	578.2	578.5	579.0	580.0	57.5°	167.7	161.0
580.2	580.0	580.5	581.0	581.5	582.1	581.9	581.5	581.0	582.1	60°	163.7	157.0
582.6	583.1	583.9	584.6	585.3	586.2	585.9	585.6	585.1	585.1	62.5°	161.0	153.1
587.2	587.2	588.0	588.7	589.4	590.2	590.2	590.2	590.2	591.3	65°	157.0	149.1
589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	67.5°	151.8	141.3
										70°	141.3	132.0
										72.5°	130.6	120.1
										75°	114.9	105.6
										77.5°	96.4	85.8
										80°	72.6	66.0
										82.5°	52.8	44.9
										85°	23.7	17.2
										87.5°	0.0	0.0
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	1.0	1.0
										97.5°	3.1	2.0
										100°	14.3	10.2
										102.5°	38.9	32.7
										105°	62.4	57.3
										107.5°	85.9	81.8
										110°	108.4	105.4

REPORT NUMBER: P227539

CATALOG NUMBER: ISS-AF-600-LED-E1-T

0-LED-E1-T2-ULG

**tinued):**

175°	180°
522.7	522.7
466.0	464.6
394.7	392.0
362.9	361.7
362.9	362.9
378.8	378.8
397.3	397.3
410.5	411.8
414.5	415.8
394.7	394.7
356.4	356.4
306.3	311.5
261.4	266.6
232.3	236.3
223.1	224.4
245.5	246.8
241.5	244.2
207.2	208.6
186.1	186.1
178.2	176.9
178.2	175.5
183.5	182.2
175.5	175.5
171.5	171.5
167.7	167.7
166.3	165.0
166.3	163.7
163.7	159.7
154.5	143.8
132.0	122.8
106.9	105.6
83.2	84.5
63.3	63.3
46.2	38.3
13.2	13.2
0.0	0.0
0.0	0.0
0.0	0.0
1.0	1.0
2.0	2.0
8.2	8.2
28.6	28.6
55.2	55.2
78.8	79.8
104.3	103.3

**CANDELA DISTRIBUTION (continued):**

	155°	165°	175°
112.5°	132.0	128.9	126.8
115°	154.5	152.4	150.4
117.5°	178.0	175.9	173.9
120°	202.5	200.5	199.5
122.5°	228.1	226.1	225.0
125°	253.7	252.7	251.6
127.5°	278.2	276.2	275.2
130°	300.7	299.7	298.7
132.5°	325.3	324.3	321.2
135°	348.8	346.8	344.7
137.5°	372.4	371.3	368.3
140°	394.9	393.8	391.8
142.5°	416.3	417.4	415.3
145°	437.8	437.8	435.8
147.5°	458.3	457.3	454.2
150°	475.7	474.6	472.6
152.5°	493.1	494.1	491.0
155°	512.5	513.5	511.5
157.5°	527.8	528.9	526.8
160°	541.1	541.1	539.1
162.5°	550.3	551.4	548.3
165°	560.6	561.6	559.6
167.5°	570.8	571.8	568.8
170°	578.0	579.0	575.9
172.5°	580.0	582.1	579.0
175°	582.1	583.1	582.1
177.5°	587.2	588.2	586.2
180°	589.2	589.2	589.2



12-ULG

<u>180°</u>
126.8
149.4
172.9
197.4
224.0
249.6
273.1
296.7
320.2
343.7
367.2
390.8
413.3
434.8
454.2
471.6
490.0
510.5
524.8
537.0
547.3
558.5
567.7
574.9
578.0
580.0
585.1
589.2

(END OF REPORT)