

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: P227811

Luminaire Tested: **ISS-AF-1200-LED-E1-T4FT-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227811
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29760)-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-1200-LED-E1-T4FT-8030-ULG
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV FORWARD THROW, 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: 6738.2 lumens
Efficiency: N/A
Efficacy: 81.5 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

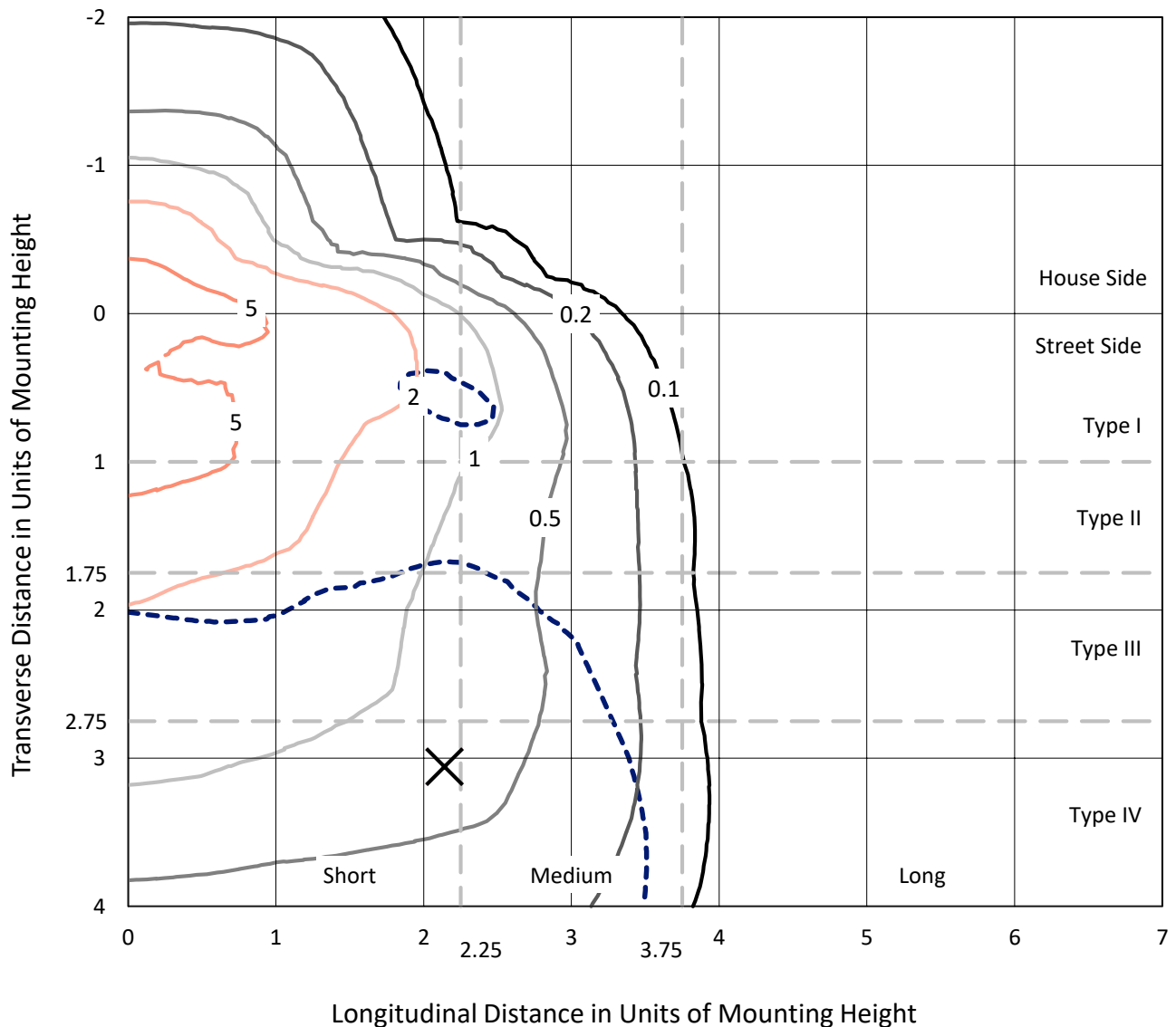


REPORT NUMBER: P227811

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

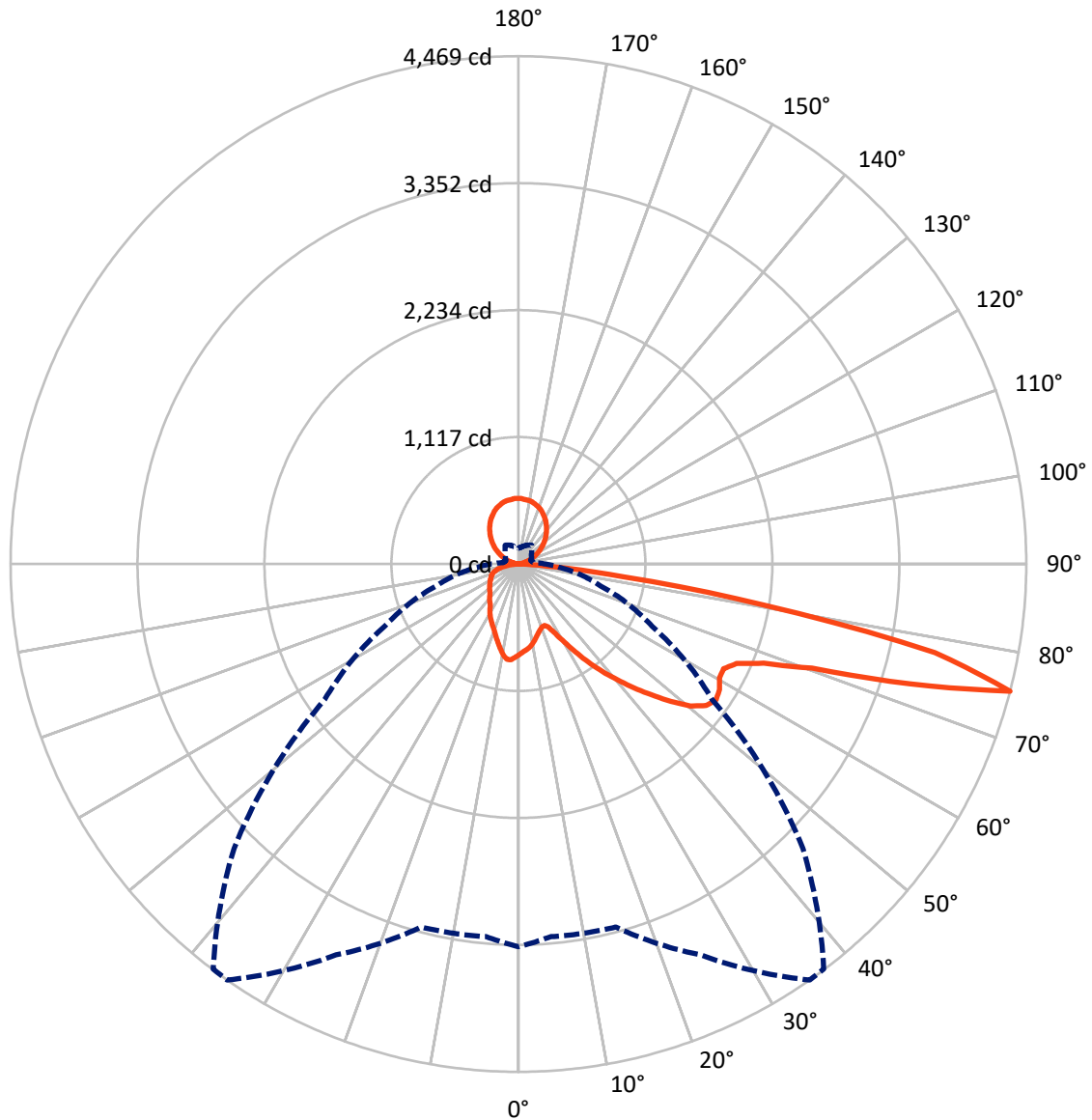


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P227811

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P227811

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

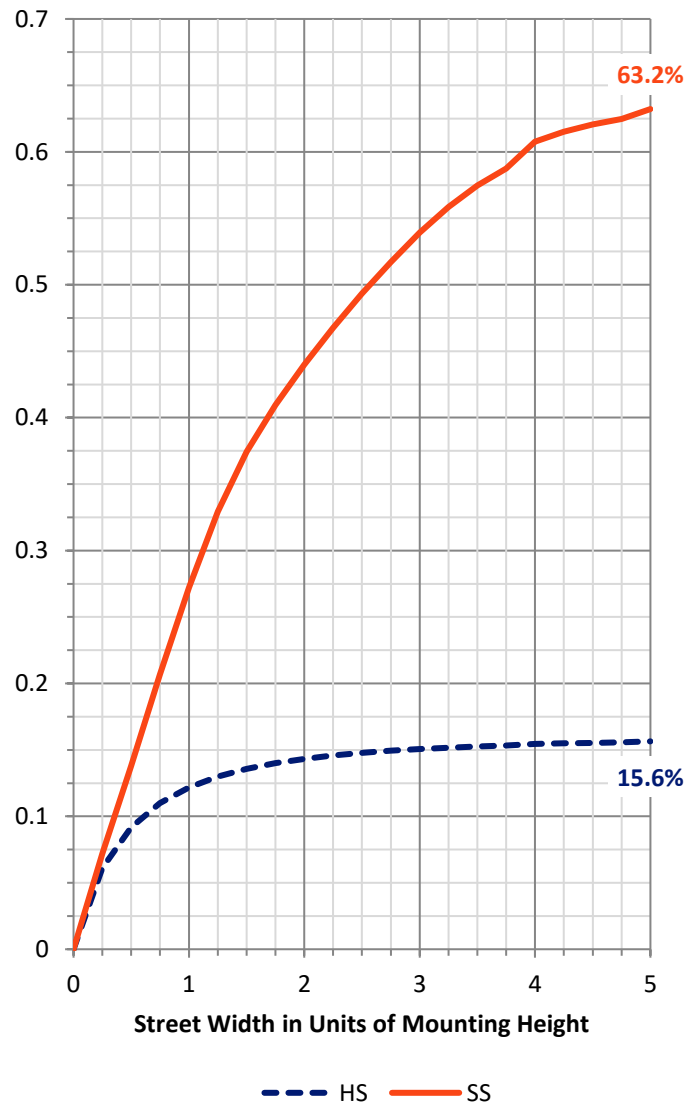
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1066.1	713.1	1779.2
	% Fixture	15.8	10.6	26.4
Street Side	Lumens	4245.9	713.1	4958.9
	% Fixture	63.0	10.6	73.6
Total	Lumens	5312.0	1426.2	6738.2
	% Fixture	78.8	21.2	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.1
10°-20°	197.7	2.9
20°-30°	312.7	4.6
30°-40°	504.7	7.5
40°-50°	746.8	11.1
50°-60°	960.2	14.3
60°-70°	1188.9	17.6
70°-80°	1198.1	17.8
80°-90°	127.9	1.9
90°-100°	4.7	0.1
100°-110°	69.0	1.0
110°-120°	153.0	2.3
120°-130°	223.9	3.3
130°-140°	265.6	3.9
140°-150°	269.3	4.0
150°-160°	231.1	3.4
160°-170°	155.1	2.3
170°-180°	54.3	0.8
0°-90°	5312.0	78.8
0°-180°	6738.2	100.0



REPORT NUMBER: P227811

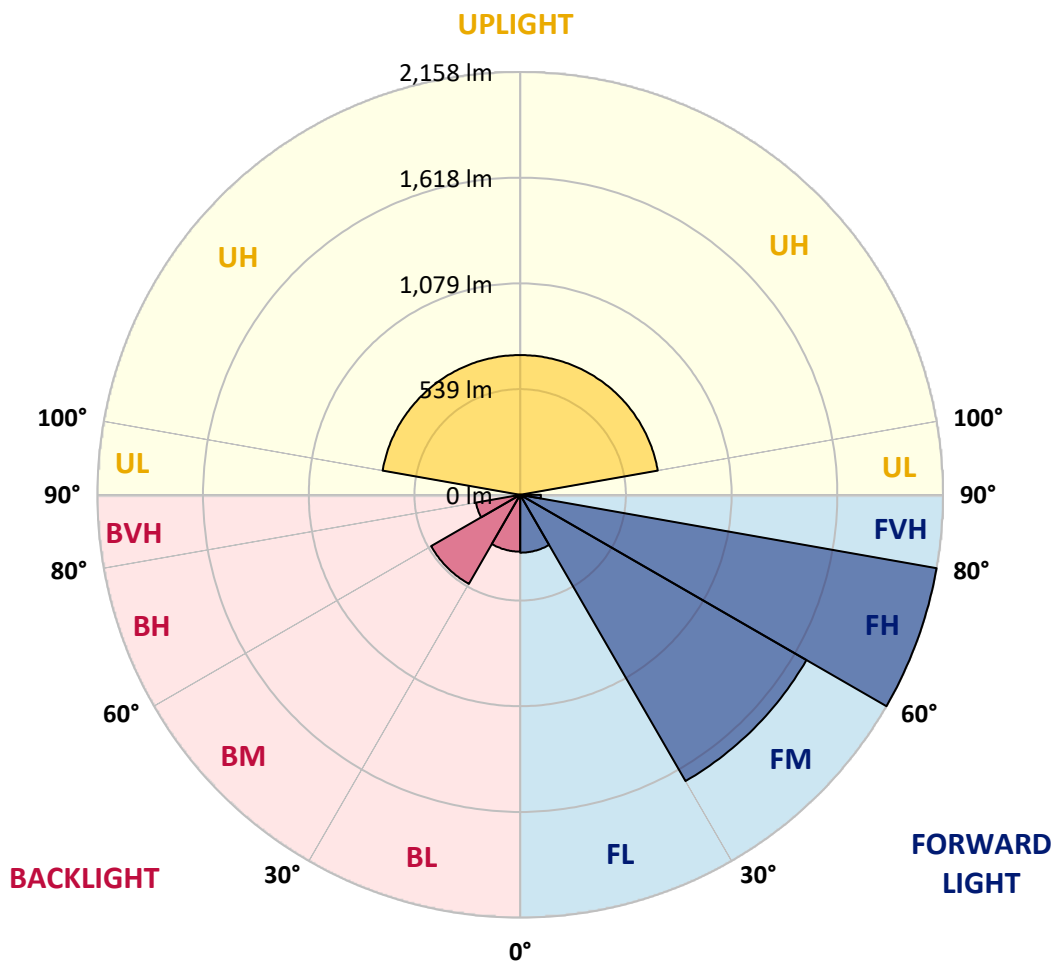
CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	295.4	4.4			
FM (30°-60°)	1686.8	25.0			
FH (60°-80°)	2157.9	32.0			G2/5000
FVH (80°-90°)	105.8	1.6			G2/225
BL (0°-30°)	290.0	4.3	B1/500		
BM (30°-60°)	525.0	7.8	B1/1000		
BH (60°-80°)	229.0	3.4	B1/500		G1/500
BVH (80°-90°)	22.1	0.3			G1/100
UL (90°-100°)	4.7	0.1		U1/10	
UH (100°-180°)	713.1	10.6		U4/1000	

BUG Rating: B1-U5-G2

Type IV Short





REPORT NUMBER: P227811

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0
2.5°	774.9	773.2	771.4	771.4	774.9	774.9	776.7	778.5	780.3	785.6	792.7
5°	753.7	751.9	750.1	751.9	757.2	757.2	762.5	766.1	769.6	778.5	787.4
7.5°	725.3	725.3	723.5	730.6	735.9	734.2	741.3	744.8	753.7	762.5	776.7
10°	688.1	688.1	688.1	696.9	705.8	705.8	711.1	720.0	727.1	739.5	757.2
12.5°	656.1	654.4	654.4	661.5	672.1	673.9	682.7	695.1	704.0	720.0	739.5
15°	645.5	641.9	633.1	633.1	638.4	638.4	652.6	670.3	684.5	700.5	723.5
17.5°	647.3	641.9	618.9	611.8	611.8	613.6	627.8	647.3	665.0	684.5	714.7
20°	663.2	654.4	611.8	595.8	592.3	594.1	606.5	626.0	647.3	673.9	707.6
22.5°	732.4	718.2	638.4	602.9	587.0	587.0	594.1	615.3	641.9	677.4	720.0
25°	892.0	868.9	727.1	663.2	615.3	610.0	597.6	618.9	650.8	693.4	755.4
27.5°	1055.1	1032.1	837.0	767.8	693.4	677.4	631.3	636.6	672.1	728.8	808.6
30°	1191.7	1172.2	975.3	895.5	796.2	778.5	707.6	673.9	709.3	778.5	888.4
32.5°	1202.3	1193.4	1124.3	1042.7	922.1	897.3	803.3	750.1	767.8	845.9	975.3
35°	1301.6	1294.5	1257.3	1179.3	1058.7	1030.3	931.0	849.4	844.1	920.4	1074.6
37.5°	1399.2	1390.3	1365.5	1312.3	1200.5	1177.5	1099.5	968.2	931.0	1007.2	1172.2
40°	1491.4	1479.0	1447.0	1416.9	1335.3	1335.3	1252.0	1081.7	1014.3	1083.5	1253.7
42.5°	1661.6	1622.6	1537.5	1514.4	1491.4	1491.4	1369.0	1159.8	1081.7	1166.8	1331.8
45°	1824.8	1787.5	1672.2	1626.1	1638.6	1631.5	1463.0	1204.1	1142.0	1244.9	1406.2
47.5°	1954.2	1920.5	1803.5	1771.6	1807.0	1778.6	1541.0	1239.6	1218.3	1328.2	1468.3
50°	2069.5	1989.7	1876.2	1918.7	1963.1	1915.2	1610.2	1292.8	1294.5	1416.9	1558.8
52.5°	1911.6	1902.8	1927.6	2026.9	2069.5	2016.3	1672.2	1360.1	1376.1	1530.4	1661.6
55°	1721.9	1720.1	1865.5	2058.8	2110.3	2060.6	1713.0	1441.7	1461.2	1670.5	1791.1
57.5°	1684.7	1666.9	1766.2	1991.4	2085.4	2050.0	1734.3	1518.0	1542.8	1847.8	1918.7
60°	1805.2	1771.6	1755.6	1918.7	2032.2	2014.5	1760.9	1608.4	1642.1	2050.0	2037.6
62.5°	2067.7	2021.6	1908.1	1924.1	2026.9	2012.7	1824.8	1714.8	1753.8	2252.1	2104.9
65°	2415.3	2381.6	2200.7	2071.2	2110.3	2090.8	1940.0	1849.6	1870.9	2397.5	2028.7
67.5°	2796.5	2750.4	2553.6	2376.3	2326.6	2289.4	2122.7	2009.2	1932.9	2376.3	1824.8
70°	3227.5	3177.8	3007.6	2824.9	2739.8	2699.0	2441.9	2147.5	1909.9	2142.2	1439.9
72.5°	3757.7	3690.3	3596.3	3615.8	3601.6	3488.1	2950.8	2193.6	1741.4	1594.2	860.1
75°	3367.5	3291.3	3307.3	3794.9	4468.8	4463.5	3539.6	2080.1	1298.1	751.9	372.4
77.5°	1207.6	1335.3	1970.2	2842.6	3747.0	3741.7	2739.8	1301.6	556.8	321.0	225.2
80°	303.2	308.6	489.4	1166.8	2188.3	2170.6	1553.4	491.2	232.3	195.1	154.3
82.5°	97.5	104.6	179.1	402.5	936.3	915.0	482.3	161.4	145.4	125.9	94.0
85°	31.9	31.9	63.8	138.3	308.6	296.1	97.5	58.5	79.8	65.6	42.6
87.5°	0.0	0.0	1.8	3.5	7.1	3.5	0.0	3.5	10.6	12.4	8.9
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°	2.0	2.0	2.0	3.0	4.0	5.0	9.0	13.0	7.0	5.0	4.0
100°	8.0	8.0	10.0	14.0	22.0	23.6	30.0	32.0	30.0	27.0	26.0
102.5°	28.0	28.0	32.0	38.0	45.0	46.0	50.0	51.0	50.0	48.0	49.0
105°	54.0	54.0	56.0	61.0	66.0	66.8	70.0	71.0	71.0	69.0	71.0
107.5°	78.0	77.0	80.0	84.0	88.0	88.6	91.0	93.0	92.0	91.0	92.0
110°	101.0	102.0	103.0	106.0	110.0	110.4	112.0	114.0	114.0	113.0	114.0



REPORT NUMBER: P227811

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
112.5°	124.0	124.0	126.0	129.0	132.0	132.4	134.0	136.0	136.0	135.0	137.0
115°	146.0	147.0	149.0	151.0	154.0	154.4	156.0	158.0	158.0	158.0	160.0
117.5°	169.0	170.0	172.0	174.0	177.0	177.4	179.0	180.0	181.0	180.0	182.0
120°	193.0	195.0	196.0	198.0	201.0	201.2	202.0	204.0	204.0	204.0	206.0
122.5°	219.0	220.0	221.0	223.0	226.0	226.2	227.0	228.0	228.0	229.0	233.0
125°	244.0	246.0	247.0	248.0	251.0	251.2	252.0	253.0	254.0	254.0	257.0
127.5°	267.0	269.0	270.0	272.0	274.0	274.4	276.0	278.0	277.0	278.0	281.0
130°	290.0	292.0	293.0	294.0	298.0	298.2	299.0	301.0	301.0	302.0	305.0
132.5°	313.0	314.0	317.0	318.0	321.0	321.2	322.0	325.0	325.0	326.0	329.0
135°	336.0	337.0	339.0	341.0	345.0	345.0	345.0	348.0	348.0	349.0	351.0
137.5°	359.0	360.0	363.0	364.0	367.0	367.0	367.0	369.0	369.0	370.0	374.0
140°	382.0	383.0	385.0	386.0	388.0	388.2	389.0	390.0	390.0	392.0	396.0
142.5°	404.0	406.0	408.0	407.0	410.0	410.0	410.0	412.0	412.0	413.0	416.0
145°	425.0	426.0	428.0	428.0	431.0	431.2	432.0	434.0	433.0	434.0	437.0
147.5°	444.0	444.0	447.0	448.0	452.0	452.2	453.0	454.0	452.0	453.0	456.0
150°	461.0	462.0	464.0	465.0	469.0	469.2	470.0	471.0	469.0	469.0	473.0
152.5°	479.0	480.0	483.0	482.0	485.0	485.2	486.0	487.0	486.0	486.0	489.0
155°	499.0	500.0	502.0	501.0	503.0	503.0	503.0	504.0	503.0	504.0	507.0
157.5°	513.0	515.0	517.0	516.0	519.0	519.0	519.0	519.0	517.0	518.0	523.0
160°	525.0	527.0	529.0	529.0	532.0	532.0	532.0	532.0	530.0	530.0	533.0
162.5°	535.0	536.0	539.0	538.0	541.0	541.0	541.0	542.0	540.0	538.0	540.0
165°	546.0	547.0	549.0	548.0	552.0	552.0	552.0	553.0	550.0	548.0	550.0
167.5°	555.0	556.0	559.0	558.0	561.0	560.8	560.0	560.0	558.0	559.0	563.0
170°	562.0	563.0	566.0	565.0	567.0	566.8	566.0	565.0	564.0	566.0	571.0
172.5°	565.0	566.0	569.0	567.0	569.0	568.8	568.0	569.0	567.0	568.0	571.0
175°	567.0	569.0	570.0	569.0	572.0	572.0	572.0	573.0	570.0	568.0	571.0
177.5°	572.0	573.0	575.0	574.0	578.0	577.8	577.0	577.0	574.0	574.0	577.0
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0



REPORT NUMBER: P227811

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0
2.5°	798.0	796.2	803.3	808.6	810.4	815.7	821.0	824.6	822.8	821.0	821.0
5°	796.2	798.0	810.4	821.0	829.9	838.8	845.9	849.4	847.6	847.6	847.6
7.5°	785.6	792.7	806.9	824.6	837.0	842.3	844.1	838.8	835.2	829.9	829.9
10°	767.8	778.5	801.5	821.0	826.4	819.3	808.6	798.0	783.8	774.9	774.9
12.5°	753.7	766.1	794.4	810.4	803.3	785.6	762.5	744.8	730.6	720.0	718.2
15°	741.3	757.2	787.4	790.9	774.9	744.8	714.7	695.1	679.2	672.1	672.1
17.5°	732.4	753.7	780.3	769.6	737.7	698.7	670.3	654.4	641.9	634.9	633.1
20°	734.2	760.8	773.2	743.0	696.9	656.1	629.5	620.7	611.8	608.3	608.3
22.5°	753.7	778.5	771.4	720.0	659.7	613.6	595.8	594.1	590.5	587.0	585.2
25°	796.2	814.0	776.7	696.9	620.7	574.6	565.7	571.0	569.2	565.7	565.7
27.5°	854.7	858.3	785.6	673.9	578.1	537.3	537.3	546.2	542.6	537.3	540.9
30°	925.7	906.2	789.1	636.6	528.5	501.9	507.2	512.5	508.9	501.9	501.9
32.5°	1001.9	955.8	789.1	588.7	480.6	469.9	471.7	473.5	466.4	457.5	457.5
35°	1076.4	1003.7	780.3	532.0	443.3	438.0	436.2	443.3	438.0	425.6	425.6
37.5°	1147.3	1040.9	757.2	473.5	415.0	413.2	418.5	415.0	407.9	390.1	386.6
40°	1197.0	1065.8	711.1	425.6	391.9	402.5	399.0	379.5	368.9	356.4	356.4
42.5°	1241.3	1078.2	654.4	388.4	375.9	390.1	375.9	351.1	336.9	335.2	336.9
45°	1282.1	1088.8	599.4	358.2	356.4	375.9	358.2	331.6	315.7	315.7	317.4
47.5°	1321.1	1099.5	544.4	329.8	333.4	354.7	344.0	317.4	301.5	290.8	290.8
50°	1383.2	1124.3	464.6	299.7	306.8	336.9	333.4	303.2	285.5	269.5	266.0
52.5°	1457.7	1166.8	377.7	267.8	287.3	321.0	321.0	290.8	271.3	250.0	246.5
55°	1557.0	1213.0	303.2	244.7	267.8	303.2	308.6	285.5	257.1	237.6	234.1
57.5°	1656.3	1228.9	244.7	221.7	242.9	285.5	299.7	274.9	241.2	227.0	225.2
60°	1725.4	1177.5	205.7	202.2	225.2	264.2	287.3	262.5	230.5	216.3	216.3
62.5°	1714.8	1021.4	184.4	189.7	211.0	248.3	276.6	251.8	223.4	214.6	212.8
65°	1564.1	771.4	166.7	179.1	198.6	232.3	266.0	246.5	219.9	211.0	207.5
67.5°	1317.6	512.5	154.3	168.5	186.2	219.9	257.1	239.4	209.3	203.9	200.4
70°	954.0	299.7	141.9	157.8	173.8	205.7	244.7	225.2	196.8	193.3	184.4
72.5°	516.0	188.0	127.7	143.6	157.8	188.0	225.2	207.5	180.9	166.7	161.4
75°	235.9	136.5	113.5	127.7	138.3	164.9	202.2	182.7	161.4	143.6	140.1
77.5°	157.8	102.9	95.8	109.9	115.3	138.3	179.1	145.4	125.9	113.5	109.9
80°	108.2	76.3	78.0	90.4	88.7	109.9	134.8	117.0	99.3	102.9	94.0
82.5°	69.2	53.2	60.3	63.8	62.1	83.3	104.6	88.7	74.5	62.1	53.2
85°	30.1	28.4	35.5	37.2	37.2	46.1	55.0	44.3	33.7	24.8	24.8
87.5°	1.8	3.5	3.5	5.3	3.5	1.8	0.0	0.0	0.0	0.0	0.0
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°	4.0	4.0	5.0	7.0	13.0	9.0	4.0	3.0	2.0	2.0	2.0
100°	25.0	26.0	27.0	30.0	32.0	30.0	22.0	14.0	10.0	8.0	8.0
102.5°	48.0	49.0	48.0	50.0	51.0	50.0	45.0	38.0	32.0	28.0	28.0
105°	69.0	71.0	69.0	71.0	71.0	70.0	66.0	61.0	56.0	54.0	54.0
107.5°	91.0	92.0	91.0	92.0	93.0	91.0	88.0	84.0	80.0	77.0	78.0
110°	113.0	114.0	113.0	114.0	114.0	112.0	110.0	106.0	103.0	102.0	101.0



REPORT NUMBER: P227811

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-8030-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	135.0	137.0	135.0	136.0	136.0	134.0	132.0	129.0	126.0	124.0	124.0
115°	159.0	160.0	158.0	158.0	158.0	156.0	154.0	151.0	149.0	147.0	146.0
117.5°	180.0	182.0	180.0	181.0	180.0	179.0	177.0	174.0	172.0	170.0	169.0
120°	204.0	206.0	204.0	204.0	204.0	202.0	201.0	198.0	196.0	195.0	193.0
122.5°	232.0	233.0	229.0	228.0	228.0	227.0	226.0	223.0	221.0	220.0	219.0
125°	256.0	257.0	254.0	254.0	253.0	252.0	251.0	248.0	247.0	246.0	244.0
127.5°	278.0	281.0	278.0	277.0	278.0	276.0	274.0	272.0	270.0	269.0	267.0
130°	303.0	305.0	302.0	301.0	301.0	299.0	298.0	294.0	293.0	292.0	290.0
132.5°	327.0	329.0	326.0	325.0	325.0	322.0	321.0	318.0	317.0	314.0	313.0
135°	350.0	351.0	349.0	348.0	348.0	345.0	345.0	341.0	339.0	337.0	336.0
137.5°	372.0	374.0	370.0	369.0	369.0	367.0	367.0	364.0	363.0	360.0	359.0
140°	394.0	396.0	392.0	390.0	390.0	389.0	388.0	386.0	385.0	383.0	382.0
142.5°	415.0	416.0	413.0	412.0	412.0	410.0	410.0	407.0	408.0	406.0	404.0
145°	435.0	437.0	434.0	433.0	434.0	432.0	431.0	428.0	428.0	426.0	425.0
147.5°	453.0	456.0	453.0	452.0	454.0	453.0	452.0	448.0	447.0	444.0	444.0
150°	470.0	473.0	469.0	469.0	471.0	470.0	469.0	465.0	464.0	462.0	461.0
152.5°	486.0	489.0	486.0	486.0	487.0	486.0	485.0	482.0	483.0	480.0	479.0
155°	505.0	507.0	504.0	503.0	504.0	503.0	503.0	501.0	502.0	500.0	499.0
157.5°	520.0	523.0	518.0	517.0	519.0	519.0	519.0	516.0	517.0	515.0	513.0
160°	531.0	533.0	530.0	530.0	532.0	532.0	532.0	529.0	529.0	527.0	525.0
162.5°	537.0	540.0	538.0	540.0	542.0	541.0	541.0	538.0	539.0	536.0	535.0
165°	548.0	550.0	548.0	550.0	553.0	552.0	552.0	548.0	549.0	547.0	546.0
167.5°	561.0	563.0	559.0	558.0	560.0	560.0	561.0	558.0	559.0	556.0	555.0
170°	569.0	571.0	566.0	564.0	565.0	566.0	567.0	565.0	566.0	563.0	562.0
172.5°	568.0	571.0	568.0	567.0	569.0	568.0	569.0	567.0	569.0	566.0	565.0
175°	568.0	571.0	568.0	570.0	573.0	572.0	572.0	569.0	570.0	569.0	567.0
177.5°	574.0	577.0	574.0	574.0	577.0	577.0	578.0	574.0	575.0	573.0	572.0
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0

(END OF REPORT)