

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: P271619

Luminaire Tested: **ISS-AF-1200-LED-E1-T4FT-7027-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271619  
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-7027-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) 2700K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7055.1 lumens  
Efficiency: N/A  
Efficacy: 85.3 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

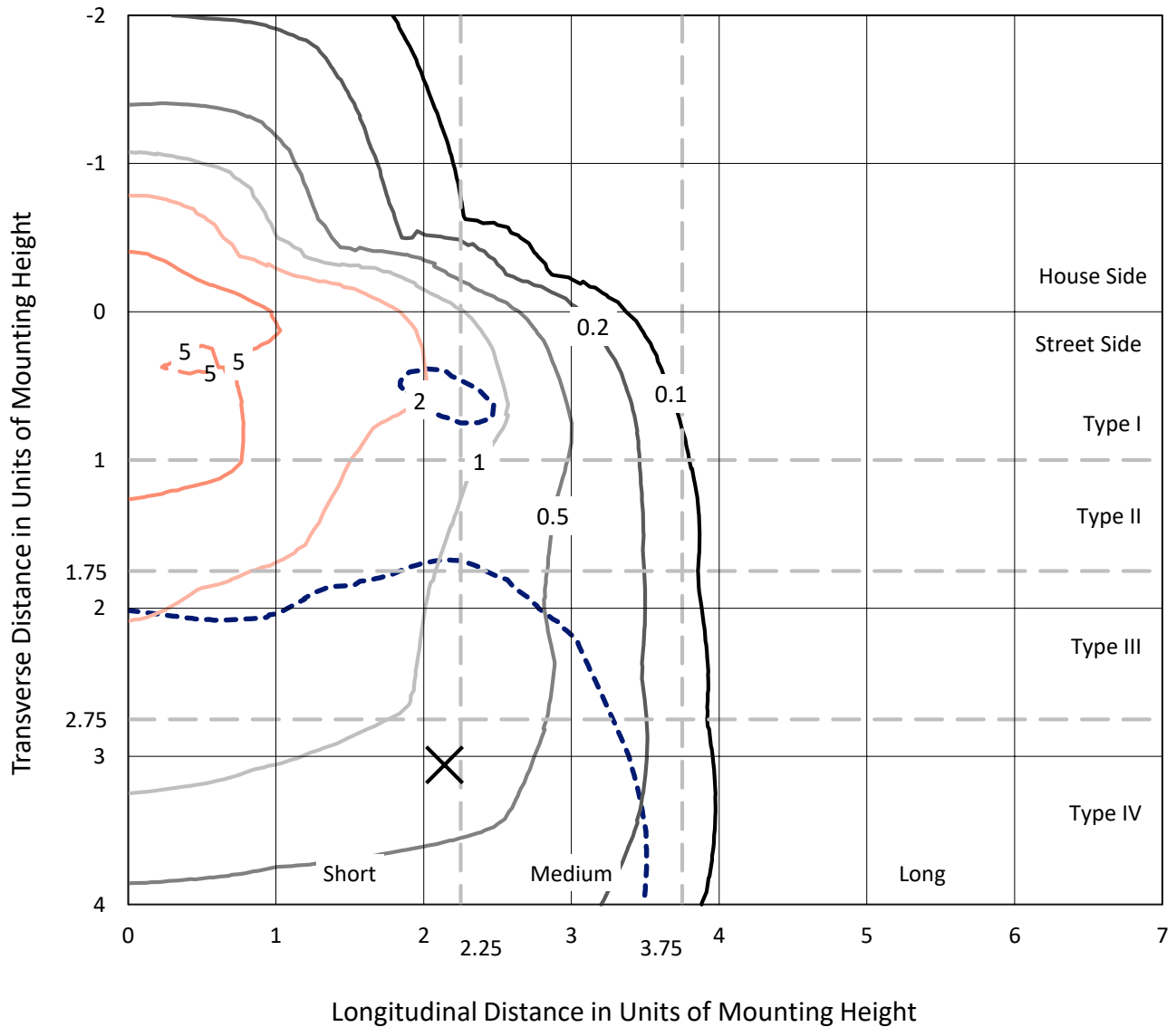


REPORT NUMBER: P271619

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

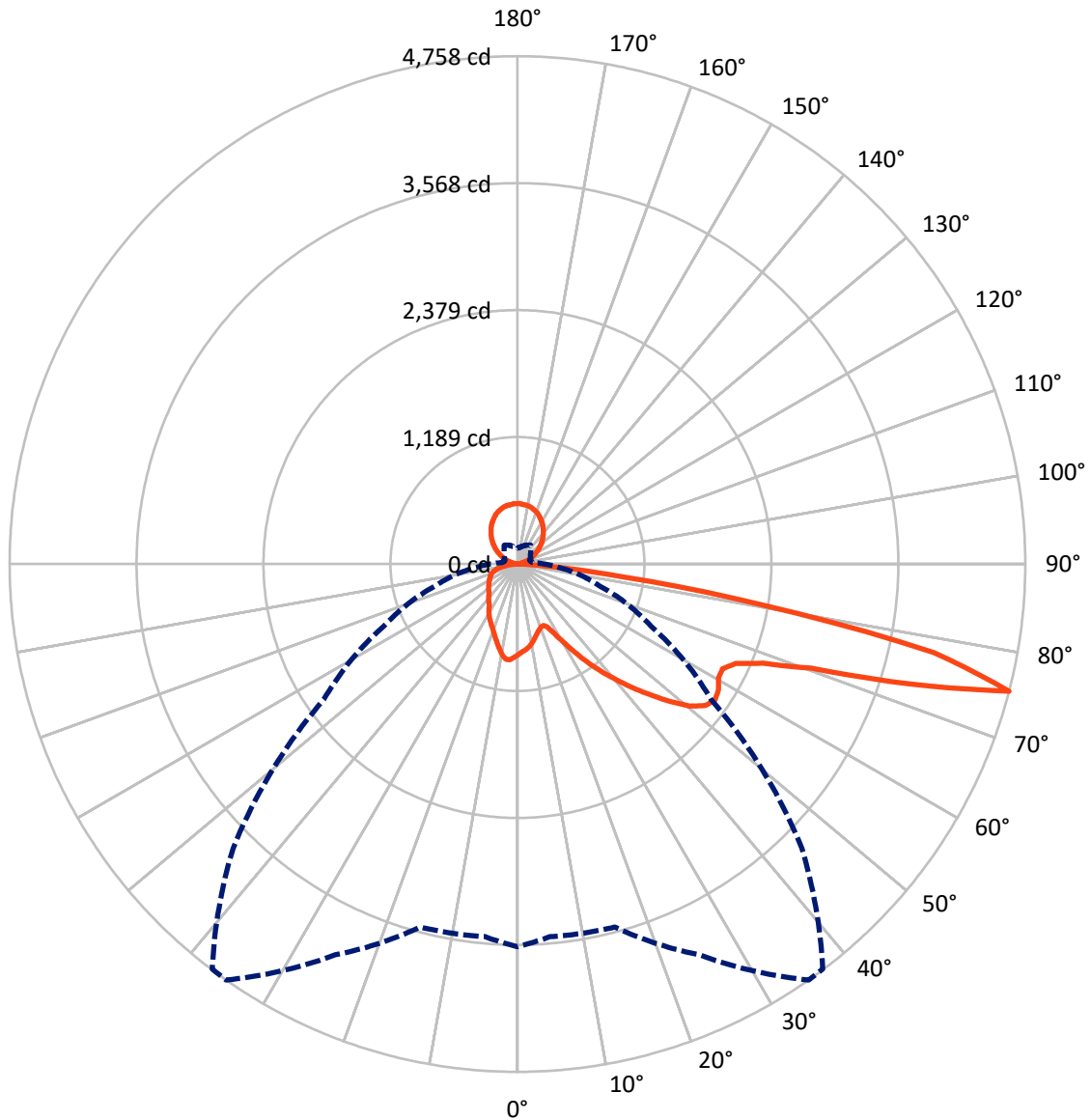


Based on 10 foot mounting height. Maximum calculated value = 8.7 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P271619

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P271619

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

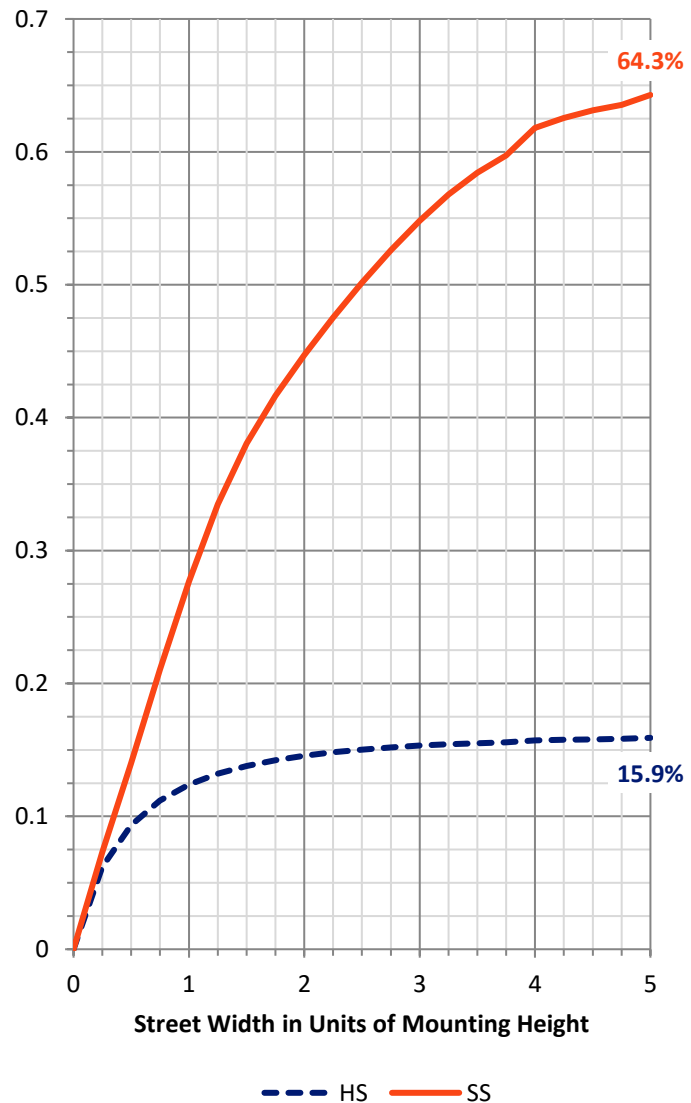
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1135.1	699.9	1834.9
	% Fixture	16.1	9.9	26.0
<b>Street Side</b>	Lumens	4520.2	699.9	5220.1
	% Fixture	64.1	9.9	74.0
<b>Total</b>	Lumens	5655.3	1399.8	7055.1
	% Fixture	80.2	19.8	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.7	1.1
10°-20°	210.5	3.0
20°-30°	333.0	4.7
30°-40°	537.4	7.6
40°-50°	795.1	11.3
50°-60°	1022.3	14.5
60°-70°	1265.7	17.9
70°-80°	1275.5	18.1
80°-90°	136.2	1.9
90°-100°	4.7	0.1
100°-110°	67.7	1.0
110°-120°	150.2	2.1
120°-130°	219.7	3.1
130°-140°	260.7	3.7
140°-150°	264.3	3.7
150°-160°	226.8	3.2
160°-170°	152.2	2.2
170°-180°	53.3	0.8
0°-90°	5655.3	80.2
0°-180°	7055.1	100.0



REPORT NUMBER: P271619

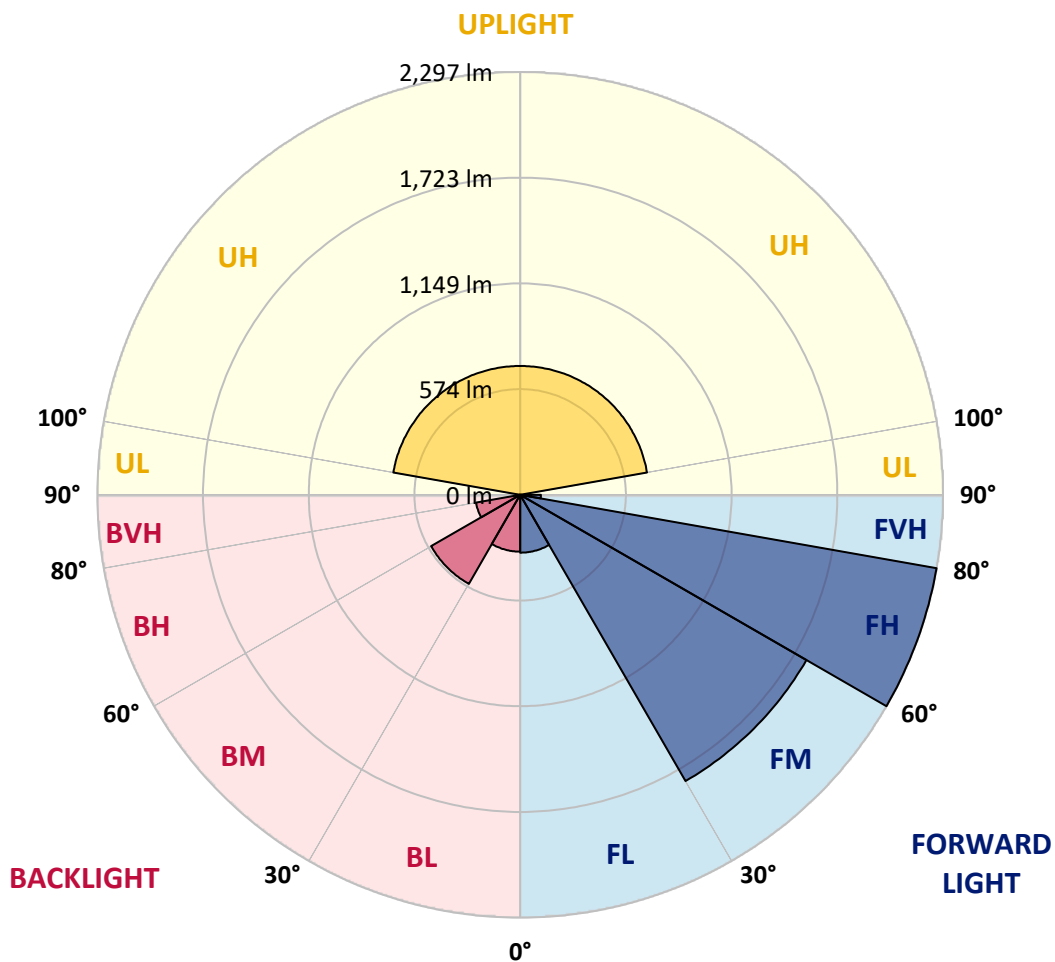
CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	314.5	4.5			
FM (30°-60°)	1795.8	25.5			
FH (60°-80°)	2297.4	32.6			G2/5000
FVH (80°-90°)	112.6	1.6			G2/225
BL (0°-30°)	308.7	4.4	B1/500		
BM (30°-60°)	558.9	7.9	B1/1000		
BH (60°-80°)	243.8	3.5	B1/500		G1/500
BVH (80°-90°)	23.6	0.3			G1/100
UL (90°-100°)	4.7	0.1		U1/10	
UH (100°-180°)	699.9	9.9		U4/1000	

**BUG Rating: B1-U5-G2**

Type IV Short





REPORT NUMBER: P271619

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5
2.5°	825.0	823.2	821.2	821.2	825.0	825.0	826.9	828.8	830.8	836.3	843.9
5°	802.4	800.5	798.6	800.5	806.2	806.2	811.8	815.6	819.3	828.8	838.3
7.5°	772.1	772.1	770.3	777.8	783.5	781.6	789.1	792.9	802.4	811.8	826.9
10°	732.5	732.5	732.5	742.0	751.4	751.4	757.0	766.5	774.1	787.3	806.2
12.5°	698.5	696.6	696.6	704.2	715.5	717.4	726.9	740.0	749.5	766.5	787.3
15°	687.2	683.4	674.0	674.0	679.7	679.7	694.7	713.6	728.7	745.8	770.3
17.5°	689.1	683.4	658.9	651.3	651.3	653.2	668.2	689.1	708.0	728.7	760.9
20°	706.1	696.6	651.3	634.3	630.6	632.5	645.7	666.5	689.1	717.4	753.3
22.5°	779.7	764.5	679.7	641.9	625.0	625.0	632.5	655.1	683.4	721.2	766.5
25°	949.6	925.1	774.1	706.1	655.1	649.5	636.2	658.9	692.9	738.1	804.3
27.5°	1123.3	1098.8	891.1	817.5	738.1	721.2	672.1	677.8	715.5	776.0	860.8
30°	1268.7	1247.9	1038.4	953.4	847.7	828.8	753.3	717.4	755.1	828.8	945.8
32.5°	1280.1	1270.6	1196.9	1110.0	981.7	955.3	855.3	798.6	817.5	900.6	1038.4
35°	1385.7	1378.2	1338.6	1255.5	1127.1	1096.9	991.2	904.3	898.7	979.8	1144.1
37.5°	1489.6	1480.1	1453.6	1397.0	1278.1	1253.6	1170.5	1030.9	991.2	1072.4	1247.9
40°	1587.8	1574.5	1540.5	1508.4	1421.6	1421.6	1332.8	1151.6	1079.9	1153.5	1334.8
42.5°	1769.0	1727.4	1636.8	1612.3	1587.8	1587.8	1457.5	1234.7	1151.6	1242.3	1417.9
45°	1942.7	1903.0	1780.4	1731.2	1744.5	1737.0	1557.5	1281.9	1215.9	1325.3	1497.1
47.5°	2080.6	2044.6	1920.0	1886.0	1923.8	1893.5	1640.7	1319.7	1297.1	1414.0	1563.2
50°	2203.3	2118.2	1997.4	2042.7	2090.0	2039.0	1714.2	1376.3	1378.2	1508.4	1659.5
52.5°	2035.2	2025.8	2052.2	2157.9	2203.3	2146.6	1780.4	1448.1	1465.0	1629.3	1769.0
55°	1833.2	1831.3	1986.2	2191.9	2246.6	2193.8	1823.8	1534.8	1555.7	1778.5	1906.8
57.5°	1793.6	1774.6	1880.4	2120.1	2220.3	2182.4	1846.4	1616.1	1642.6	1967.2	2042.7
60°	1921.9	1886.0	1869.0	2042.7	2163.6	2144.7	1874.8	1712.3	1748.2	2182.4	2169.2
62.5°	2201.4	2152.2	2031.3	2048.5	2157.9	2142.7	1942.7	1825.6	1867.1	2397.7	2241.0
65°	2571.4	2535.5	2342.9	2205.1	2246.6	2225.9	2065.5	1969.2	1991.7	2552.4	2159.7
67.5°	2977.3	2928.1	2718.6	2529.9	2477.0	2437.3	2259.9	2139.0	2057.8	2529.9	1942.7
70°	3436.1	3383.2	3201.9	3007.4	2916.9	2873.4	2599.7	2286.3	2033.3	2280.5	1533.0
72.5°	4000.5	3928.7	3828.8	3849.5	3834.3	3713.5	3141.6	2335.3	1853.9	1697.3	915.6
75°	3585.1	3504.0	3521.0	4040.1	4757.5	4751.9	3768.3	2214.5	1382.0	800.5	396.4
77.5°	1285.7	1421.6	2097.5	3026.4	3989.2	3983.5	2916.9	1385.7	592.8	341.7	239.8
80°	322.9	328.5	521.1	1242.3	2329.8	2310.8	1653.8	522.9	247.3	207.7	164.2
82.5°	103.8	111.4	190.7	428.5	996.8	974.2	513.5	171.8	154.8	134.0	100.0
85°	34.0	34.0	67.9	147.2	328.5	315.2	103.8	62.3	85.0	69.9	45.4
87.5°	0.0	0.0	1.9	3.8	7.5	3.8	0.0	3.8	11.3	13.3	9.4
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	4.9	8.8	12.8	6.8	4.9	4.0
100°	7.8	7.8	9.8	13.7	21.6	23.2	29.5	31.4	29.5	26.5	25.5
102.5°	27.5	27.5	31.4	37.3	44.2	45.2	49.0	50.0	49.0	47.1	48.1
105°	53.0	53.0	55.0	59.8	64.8	65.6	68.7	69.7	69.7	67.7	69.7
107.5°	76.5	75.5	78.5	82.5	86.3	87.0	89.3	91.3	90.3	89.3	90.3
110°	99.2	100.1	101.1	104.0	108.0	108.3	110.0	111.9	111.9	110.9	111.9

REPORT NUMBER: P271619

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
112.5°	121.7	121.7	123.7	126.6	129.5	130.0	131.5	133.5	133.5	132.5	134.5
115°	143.3	144.3	146.2	148.2	151.2	151.5	153.1	155.0	155.0	155.0	157.0
117.5°	165.8	166.8	168.8	170.8	173.7	174.1	175.7	176.7	177.7	176.7	178.7
120°	189.5	191.4	192.3	194.3	197.3	197.4	198.3	200.2	200.2	200.2	202.2
122.5°	215.0	216.0	216.9	218.8	221.8	222.0	222.8	223.8	223.8	224.8	228.7
125°	239.5	241.5	242.5	243.4	246.3	246.6	247.3	248.3	249.3	249.3	252.2
127.5°	262.0	264.0	265.0	267.0	269.0	269.3	270.9	272.8	271.8	272.8	275.8
130°	284.7	286.6	287.5	288.5	292.5	292.7	293.5	295.5	295.5	296.4	299.3
132.5°	307.2	308.2	311.2	312.1	315.0	315.2	316.0	319.0	319.0	320.0	322.9
135°	329.8	330.8	332.7	334.7	338.6	338.6	338.6	341.5	341.5	342.5	344.5
137.5°	352.3	353.3	356.3	357.3	360.2	360.2	360.2	362.2	362.2	363.2	367.0
140°	375.0	375.9	377.8	378.8	380.8	381.0	381.8	382.8	382.8	384.7	388.7
142.5°	396.5	398.5	400.5	399.5	402.4	402.4	402.4	404.3	404.3	405.3	408.3
145°	417.2	418.1	420.0	420.0	423.0	423.2	424.0	426.0	425.0	426.0	428.9
147.5°	435.8	435.8	438.7	439.7	443.7	443.9	444.6	445.6	443.7	444.6	447.5
150°	452.5	453.5	455.4	456.4	460.3	460.5	461.3	462.3	460.3	460.3	464.2
152.5°	470.2	471.1	474.0	473.0	476.0	476.2	477.0	478.0	477.0	477.0	480.0
155°	489.8	490.7	492.7	491.7	493.7	493.7	493.7	494.7	493.7	494.7	497.6
157.5°	503.5	505.5	507.5	506.5	509.4	509.4	509.4	509.4	507.5	508.4	513.3
160°	515.3	517.2	519.2	519.2	522.2	522.2	522.2	522.2	520.2	520.2	523.2
162.5°	525.1	526.0	529.0	528.0	531.0	531.0	531.0	532.0	530.0	528.0	530.0
165°	535.9	536.8	538.8	537.8	541.8	541.8	541.8	542.8	539.8	537.8	539.8
167.5°	544.7	545.7	548.7	547.7	550.6	550.4	549.7	549.7	547.7	548.7	552.5
170°	551.6	552.5	555.5	554.5	556.5	556.3	555.5	554.5	553.5	555.5	560.5
172.5°	554.5	555.5	558.5	556.5	558.5	558.3	557.5	558.5	556.5	557.5	560.5
175°	556.5	558.5	559.5	558.5	561.4	561.4	561.4	562.4	559.5	557.5	560.5
177.5°	561.4	562.4	564.3	563.3	567.3	567.1	566.3	566.3	563.3	563.3	566.3
180°	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3





REPORT NUMBER: P271619

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5	849.5
2.5°	849.5	847.7	855.3	860.8	862.8	868.4	874.1	877.9	875.9	874.1	874.1
5°	847.7	849.5	862.8	874.1	883.6	892.9	900.6	904.3	902.4	902.4	902.4
7.5°	836.3	843.9	859.0	877.9	891.1	896.8	898.7	892.9	889.2	883.6	883.6
10°	817.5	828.8	853.3	874.1	879.8	872.3	860.8	849.5	834.4	825.0	825.0
12.5°	802.4	815.6	845.8	862.8	855.3	836.3	811.8	792.9	777.8	766.5	764.5
15°	789.1	806.2	838.3	842.0	825.0	792.9	760.9	740.0	723.0	715.5	715.5
17.5°	779.7	802.4	830.8	819.3	785.4	743.9	713.6	696.6	683.4	675.9	674.0
20°	781.6	809.9	823.2	791.0	742.0	698.5	670.2	660.7	651.3	647.6	647.6
22.5°	802.4	828.8	821.2	766.5	702.4	653.2	634.3	632.5	628.6	625.0	623.1
25°	847.7	866.5	826.9	742.0	660.7	611.7	602.2	608.0	606.1	602.2	602.2
27.5°	910.1	913.8	836.3	717.4	615.5	572.0	572.0	581.6	577.7	572.0	575.8
30°	985.5	964.7	840.2	677.8	562.6	534.3	539.9	545.6	541.9	534.3	534.3
32.5°	1066.6	1017.6	840.2	626.7	511.7	500.3	502.2	504.1	496.5	487.2	487.2
35°	1146.0	1068.5	830.8	566.4	472.0	466.3	464.4	472.0	466.3	453.1	453.1
37.5°	1221.4	1108.1	806.2	504.1	441.8	439.9	445.6	441.8	434.2	415.4	411.5
40°	1274.3	1134.6	757.0	453.1	417.3	428.5	424.8	404.0	392.6	379.4	379.4
42.5°	1321.6	1147.9	696.6	413.5	400.3	415.4	400.3	373.9	358.7	356.9	358.7
45°	1365.0	1159.3	638.2	381.4	379.4	400.3	381.4	353.0	336.1	336.1	337.9
47.5°	1406.5	1170.5	579.6	351.1	354.9	377.6	366.3	337.9	321.0	309.6	309.6
50°	1472.6	1196.9	494.7	319.1	326.6	358.7	354.9	322.9	304.0	287.0	283.1
52.5°	1551.9	1242.3	402.1	285.1	305.9	341.7	341.7	309.6	288.9	266.2	262.5
55°	1657.6	1291.3	322.9	260.6	285.1	322.9	328.5	304.0	273.7	253.1	249.2
57.5°	1763.4	1308.3	260.6	236.0	258.6	304.0	319.1	292.7	256.7	241.6	239.8
60°	1836.9	1253.6	219.0	215.2	239.8	281.3	305.9	279.5	245.5	230.3	230.3
62.5°	1825.6	1087.5	196.3	202.0	224.7	264.3	294.6	268.1	237.9	228.3	226.6
65°	1665.2	821.2	177.4	190.7	211.4	247.3	283.1	262.5	234.1	224.7	220.9
67.5°	1402.7	545.6	164.2	179.3	198.3	234.1	273.7	254.8	222.8	217.1	213.3
70°	1015.7	319.1	151.1	168.1	185.1	219.0	260.6	239.8	209.6	205.8	196.3
72.5°	549.4	200.1	135.9	152.9	168.1	200.1	239.8	220.9	192.6	177.4	171.8
75°	251.1	145.3	120.8	135.9	147.2	175.6	215.2	194.4	171.8	152.9	149.2
77.5°	168.1	109.5	102.0	117.0	122.7	147.2	190.7	154.8	134.0	120.8	117.0
80°	115.2	81.2	83.0	96.3	94.4	117.0	143.5	124.7	105.7	109.5	100.0
82.5°	73.6	56.6	64.2	67.9	66.0	88.8	111.4	94.4	79.3	66.0	56.6
85°	32.1	30.3	37.8	39.6	39.6	49.0	58.5	47.3	35.8	26.4	26.4
87.5°	1.9	3.8	3.8	5.7	3.8	1.9	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	4.9	6.8	12.8	8.8	4.0	3.0	2.0	2.0	2.0
100°	24.5	25.5	26.5	29.5	31.4	29.5	21.6	13.7	9.8	7.8	7.8
102.5°	47.1	48.1	47.1	49.0	50.0	49.0	44.2	37.3	31.4	27.5	27.5
105°	67.7	69.7	67.7	69.7	69.7	68.7	64.8	59.8	55.0	53.0	53.0
107.5°	89.3	90.3	89.3	90.3	91.3	89.3	86.3	82.5	78.5	75.5	76.5
110°	110.9	111.9	110.9	111.9	111.9	110.0	108.0	104.0	101.1	100.1	99.2



REPORT NUMBER: P271619

CATALOG NUMBER: ISS-AF-1200-LED-E1-T4FT-7027-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	132.5	134.5	132.5	133.5	133.5	131.5	129.5	126.6	123.7	121.7	121.7
115°	156.0	157.0	155.0	155.0	155.0	153.1	151.2	148.2	146.2	144.3	143.3
117.5°	176.7	178.7	176.7	177.7	176.7	175.7	173.7	170.8	168.8	166.8	165.8
120°	200.2	202.2	200.2	200.2	200.2	198.3	197.3	194.3	192.3	191.4	189.5
122.5°	227.7	228.7	224.8	223.8	223.8	222.8	221.8	218.8	216.9	216.0	215.0
125°	251.3	252.2	249.3	249.3	248.3	247.3	246.3	243.4	242.5	241.5	239.5
127.5°	272.8	275.8	272.8	271.8	272.8	270.9	269.0	267.0	265.0	264.0	262.0
130°	297.4	299.3	296.4	295.5	295.5	293.5	292.5	288.5	287.5	286.6	284.7
132.5°	321.0	322.9	320.0	319.0	319.0	316.0	315.0	312.1	311.2	308.2	307.2
135°	343.5	344.5	342.5	341.5	341.5	338.6	338.6	334.7	332.7	330.8	329.8
137.5°	365.1	367.0	363.2	362.2	362.2	360.2	360.2	357.3	356.3	353.3	352.3
140°	386.7	388.7	384.7	382.8	382.8	381.8	380.8	378.8	377.8	375.9	375.0
142.5°	407.3	408.3	405.3	404.3	404.3	402.4	402.4	399.5	400.5	398.5	396.5
145°	427.0	428.9	426.0	425.0	426.0	424.0	423.0	420.0	420.0	418.1	417.2
147.5°	444.6	447.5	444.6	443.7	445.6	444.6	443.7	439.7	438.7	435.8	435.8
150°	461.3	464.2	460.3	460.3	462.3	461.3	460.3	456.4	455.4	453.5	452.5
152.5°	477.0	480.0	477.0	477.0	478.0	477.0	476.0	473.0	474.0	471.1	470.2
155°	495.7	497.6	494.7	493.7	494.7	493.7	493.7	491.7	492.7	490.7	489.8
157.5°	510.3	513.3	508.4	507.5	509.4	509.4	509.4	506.5	507.5	505.5	503.5
160°	521.2	523.2	520.2	520.2	522.2	522.2	522.2	519.2	519.2	517.2	515.3
162.5°	527.0	530.0	528.0	530.0	532.0	531.0	531.0	528.0	529.0	526.0	525.1
165°	537.8	539.8	537.8	539.8	542.8	541.8	541.8	537.8	538.8	536.8	535.9
167.5°	550.6	552.5	548.7	547.7	549.7	549.7	550.6	547.7	548.7	545.7	544.7
170°	558.5	560.5	555.5	553.5	554.5	555.5	556.5	554.5	555.5	552.5	551.6
172.5°	557.5	560.5	557.5	556.5	558.5	557.5	558.5	556.5	558.5	555.5	554.5
175°	557.5	560.5	557.5	559.5	562.4	561.4	561.4	558.5	559.5	558.5	556.5
177.5°	563.3	566.3	563.3	563.3	566.3	566.3	567.3	563.3	564.3	562.4	561.4
180°	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3

(END OF REPORT)