

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: P271599

Luminaire Tested: **ISS-AF-800-LED-E1-T4FT-7027-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271599
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-800-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: 5604.4 lumens
Efficiency: N/A
Efficacy: 93.1 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 - G1

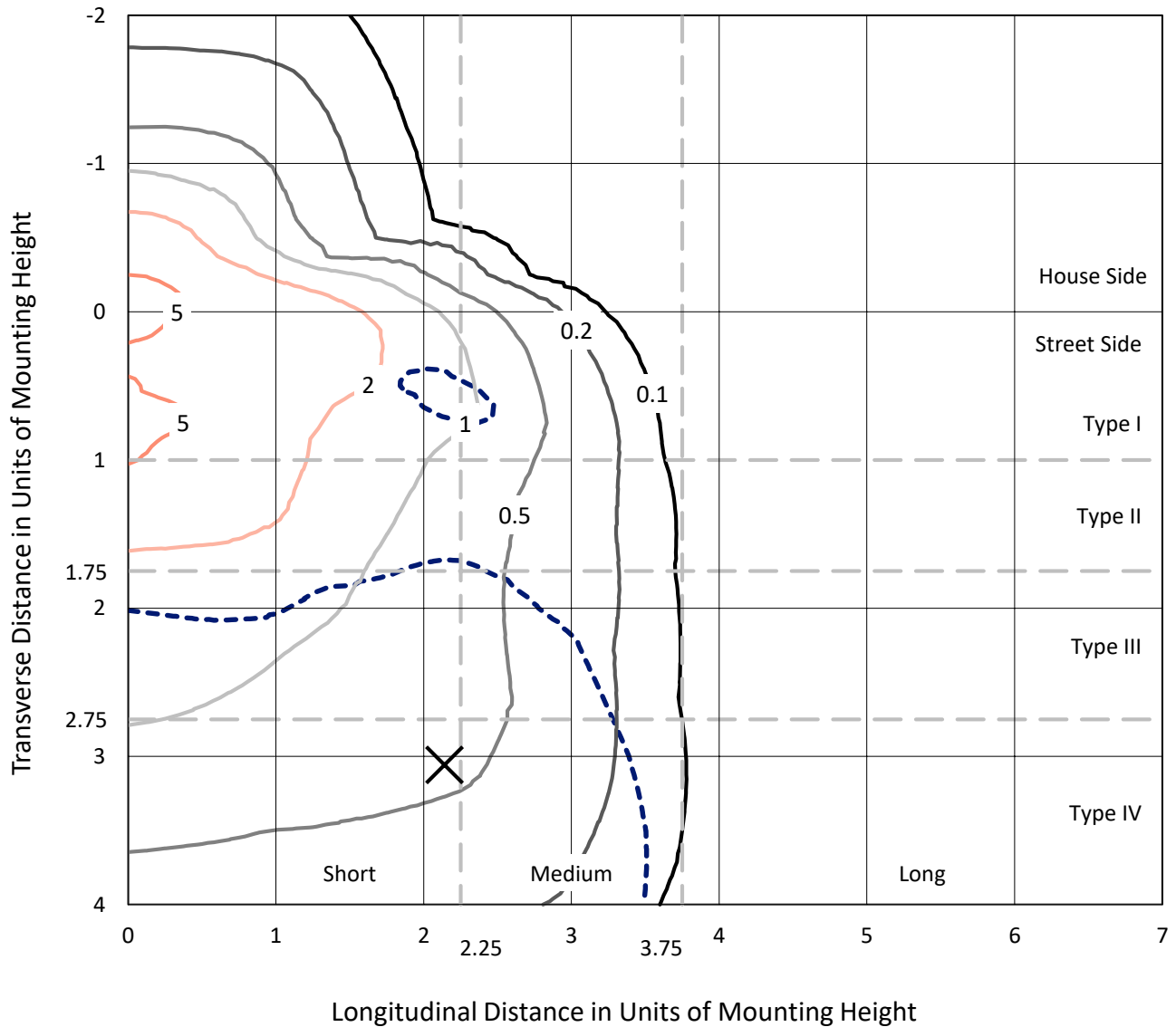
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P271599
 CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT-7027-ULG

Iso-Footcandle Lines of Horizontal Illumination

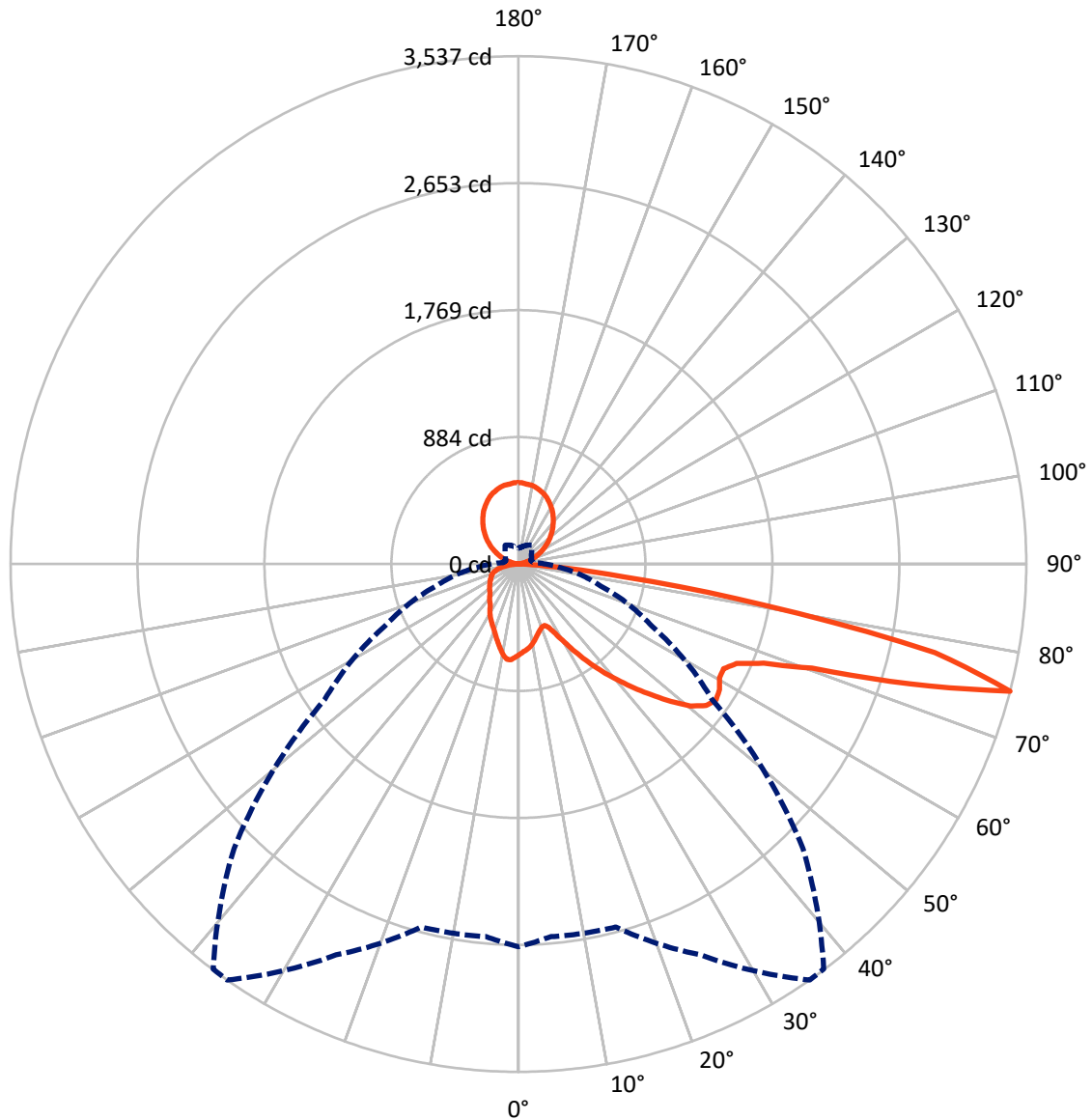
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P271599
CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT-7027-ULG

Luminous Intensity Polar Plot



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

REPORT NUMBER: P271599

CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT-7027-ULG

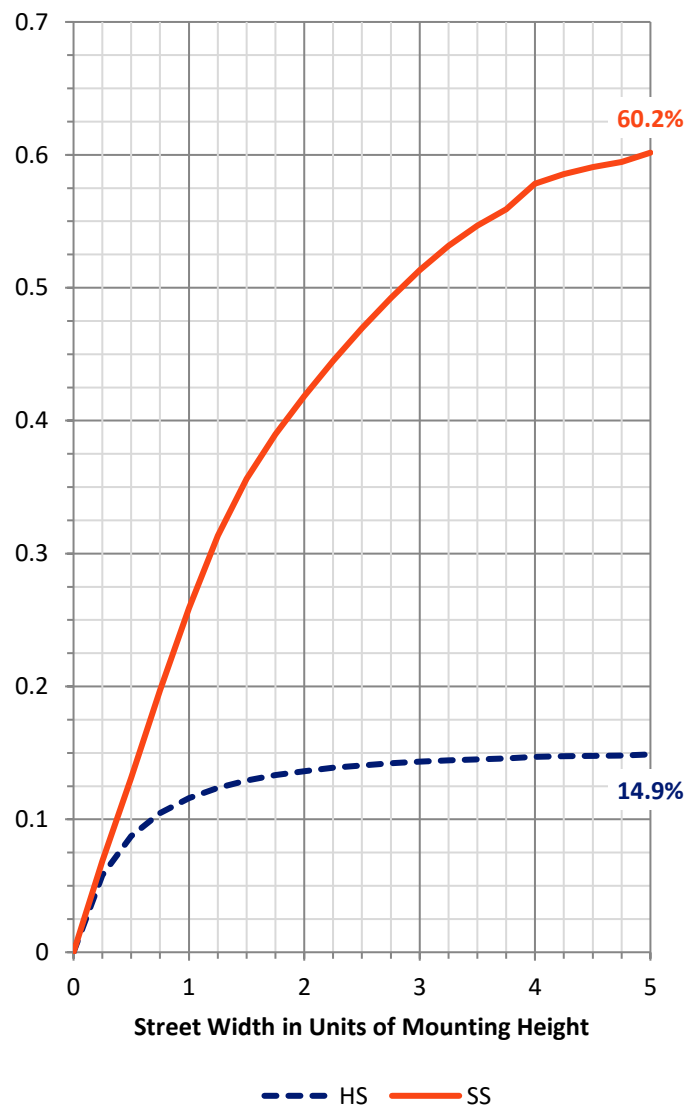
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	843.9	699.9	1543.8
	% Fixture	15.1	12.5	27.5
Street Side	Lumens	3360.8	699.9	4060.7
	% Fixture	60.0	12.5	72.5
Total	Lumens	4204.7	1399.8	5604.4
	% Fixture	75.0	25.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.3	1.1
10°-20°	156.5	2.8
20°-30°	247.6	4.4
30°-40°	399.5	7.1
40°-50°	591.1	10.5
50°-60°	760.1	13.6
60°-70°	941.1	16.8
70°-80°	948.3	16.9
80°-90°	101.3	1.8
90°-100°	4.7	0.1
100°-110°	67.7	1.2
110°-120°	150.2	2.7
120°-130°	219.7	3.9
130°-140°	260.7	4.7
140°-150°	264.3	4.7
150°-160°	226.8	4.0
160°-170°	152.2	2.7
170°-180°	53.3	1.0
0°-90°	4204.7	75.0
0°-180°	5604.4	100.0

Coefficient of Utilization



REPORT NUMBER: P271599

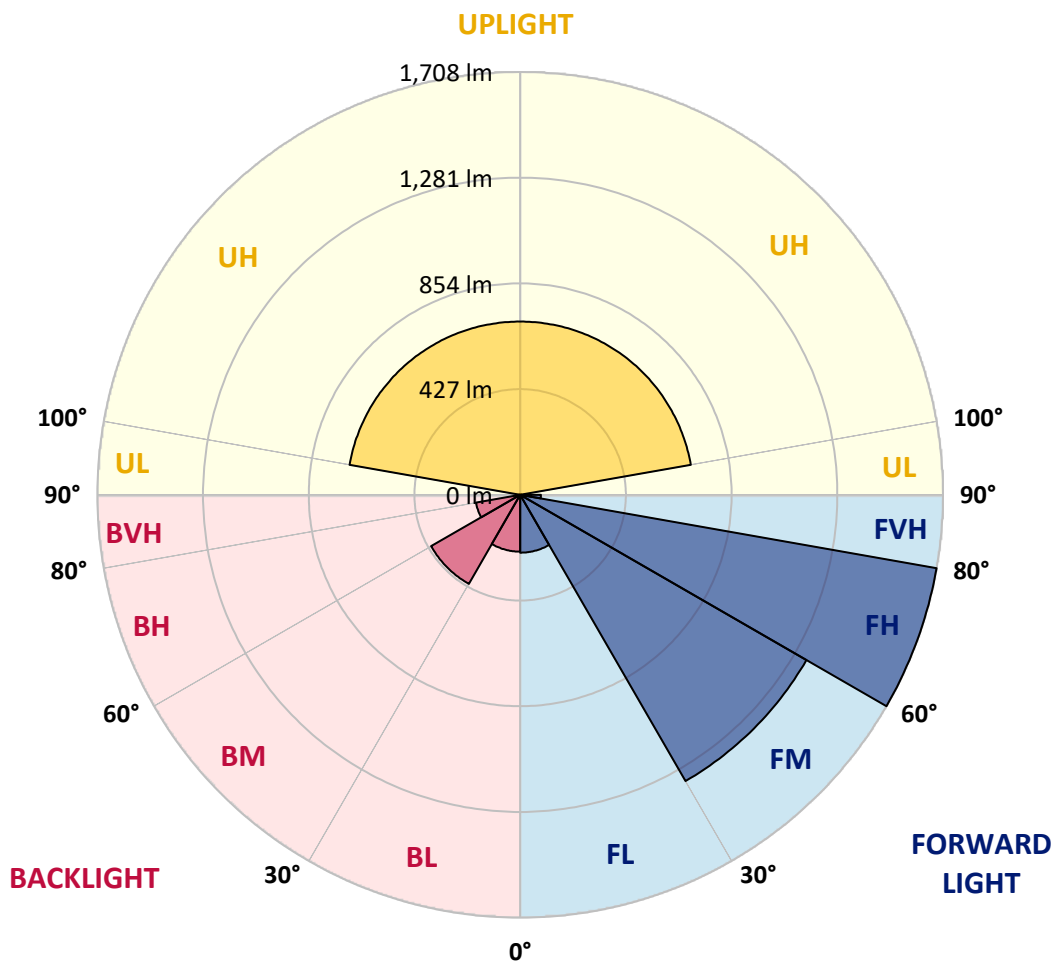
CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT-7027-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	233.8	4.2			
FM	(30°-60°)	1335.2	23.8			
FH	(60°-80°)	1708.1	30.5			G1/1800
FVH	(80°-90°)	83.7	1.5			G1/100
BL	(0°-30°)	229.5	4.1	B1/500		
BM	(30°-60°)	415.6	7.4	B1/1000		
BH	(60°-80°)	181.3	3.2	B1/500		G1/500
BVH	(80°-90°)	17.5	0.3			G1/100
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	699.9	12.5		U4/1000	

BUG Rating: B1-U5-G1

Type IV Short





REPORT NUMBER: P271599

CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT-7027-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7
2.5°	613.5	611.9	610.6	610.6	613.5	613.5	614.8	616.1	617.7	621.9	627.5
5°	596.6	595.1	593.8	595.1	599.3	599.3	603.6	606.4	609.2	616.1	623.2
7.5°	574.1	574.1	572.7	578.3	582.6	581.1	586.8	589.6	596.6	603.6	614.8
10°	544.6	544.6	544.6	551.6	558.7	558.7	562.9	569.9	575.5	585.3	599.3
12.5°	519.4	518.0	518.0	523.5	532.0	533.4	540.4	550.2	557.3	569.9	585.3
15°	511.0	508.1	501.2	501.2	505.4	505.4	516.5	530.6	541.8	554.4	572.7
17.5°	512.3	508.1	489.8	484.3	484.3	485.6	496.9	512.3	526.4	541.8	565.7
20°	525.0	518.0	484.3	471.6	468.8	470.3	480.1	495.4	512.3	533.4	560.0
22.5°	579.7	568.4	505.4	477.2	464.6	464.6	470.3	487.2	508.1	536.2	569.9
25°	706.1	687.8	575.5	525.0	487.2	482.9	473.0	489.8	515.2	548.9	597.9
27.5°	835.2	816.9	662.5	607.8	548.9	536.2	499.6	503.9	532.0	576.9	640.0
30°	943.3	927.8	772.0	708.9	630.3	616.1	560.0	533.4	561.5	616.1	703.2
32.5°	951.7	944.7	890.0	825.4	730.0	710.3	635.9	593.8	607.8	669.6	772.0
35°	1030.3	1024.7	995.2	933.4	838.0	815.5	736.9	672.3	668.1	728.4	850.7
37.5°	1107.5	1100.4	1080.8	1038.7	950.2	932.0	870.3	766.4	736.9	797.2	927.8
40°	1180.6	1170.6	1145.4	1121.5	1056.9	1056.9	991.0	856.3	802.8	857.6	992.4
42.5°	1315.2	1284.4	1216.9	1198.7	1180.6	1180.6	1083.6	918.0	856.3	923.5	1054.1
45°	1444.4	1414.9	1323.7	1287.1	1297.1	1291.3	1158.1	953.1	904.0	985.4	1113.1
47.5°	1546.8	1520.1	1427.6	1402.3	1430.3	1407.8	1219.8	981.2	964.3	1051.4	1162.2
50°	1638.1	1574.9	1485.1	1518.8	1553.9	1516.0	1274.5	1023.3	1024.7	1121.5	1233.8
52.5°	1513.1	1506.1	1525.8	1604.5	1638.1	1596.0	1323.7	1076.6	1089.3	1211.4	1315.2
55°	1363.0	1361.5	1476.6	1629.6	1670.4	1631.1	1355.9	1141.2	1156.6	1322.2	1417.6
57.5°	1333.4	1319.4	1398.0	1576.3	1650.6	1622.6	1372.8	1201.6	1221.2	1462.6	1518.8
60°	1428.9	1402.3	1389.6	1518.8	1608.5	1594.5	1393.8	1273.1	1299.8	1622.6	1612.7
62.5°	1636.6	1600.2	1510.3	1523.0	1604.5	1593.1	1444.4	1357.2	1388.2	1782.7	1666.2
65°	1911.9	1885.1	1741.9	1639.5	1670.4	1654.9	1535.7	1464.0	1480.9	1897.8	1605.8
67.5°	2213.5	2177.1	2021.3	1880.9	1841.5	1812.2	1680.2	1590.4	1530.0	1880.9	1444.4
70°	2554.7	2515.3	2380.6	2236.0	2168.7	2136.3	1932.8	1699.9	1511.8	1695.6	1139.8
72.5°	2974.4	2921.0	2846.5	2862.1	2850.8	2761.0	2335.8	1736.3	1378.4	1261.8	680.7
75°	2665.5	2605.2	2617.8	3003.8	3537.3	3533.0	2801.7	1646.5	1027.5	595.1	294.7
77.5°	955.9	1056.9	1559.5	2250.1	2965.9	2961.7	2168.7	1030.3	440.8	254.1	178.2
80°	240.0	244.2	387.3	923.5	1732.1	1718.1	1229.6	388.8	183.8	154.4	122.1
82.5°	77.3	82.8	141.8	318.6	741.1	724.3	381.8	127.6	115.2	99.6	74.4
85°	25.2	25.2	50.6	109.5	244.2	234.4	77.3	46.4	63.2	51.9	33.7
87.5°	0.0	0.0	1.3	2.9	5.6	2.9	0.0	2.9	8.4	9.8	7.1
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: P271599

CATALOG NUMBER: ISS-AF-800-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: P271599

CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT-7027-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7	631.7
2.5°	631.7	630.3	635.9	640.0	641.5	645.7	649.9	652.7	651.3	649.9	649.9
5°	630.3	631.7	641.5	649.9	656.9	663.9	669.6	672.3	670.9	670.9	670.9
7.5°	621.9	627.5	638.7	652.7	662.5	666.7	668.1	663.9	661.2	656.9	656.9
10°	607.8	616.1	634.5	649.9	654.1	648.5	640.0	631.7	620.4	613.5	613.5
12.5°	596.6	606.4	628.8	641.5	635.9	621.9	603.6	589.6	578.3	569.9	568.4
15°	586.8	599.3	623.2	626.0	613.5	589.6	565.7	550.2	537.5	532.0	532.0
17.5°	579.7	596.6	617.7	609.2	583.9	553.1	530.6	518.0	508.1	502.5	501.2
20°	581.1	602.1	611.9	588.1	551.6	519.4	498.3	491.4	484.3	481.4	481.4
22.5°	596.6	616.1	610.6	569.9	522.2	485.6	471.6	470.3	467.4	464.6	463.2
25°	630.3	644.3	614.8	551.6	491.4	454.8	447.7	451.9	450.6	447.7	447.7
27.5°	676.5	679.4	621.9	533.4	457.6	425.3	425.3	432.4	429.5	425.3	428.1
30°	732.7	717.3	624.6	503.9	418.3	397.2	401.5	405.7	402.9	397.2	397.2
32.5°	793.0	756.6	624.6	466.0	380.4	372.0	373.3	374.8	369.1	362.2	362.2
35°	852.0	794.6	617.7	421.0	350.9	346.7	345.3	350.9	346.7	336.9	336.9
37.5°	908.2	823.9	599.3	374.8	328.5	327.1	331.3	328.5	322.9	308.7	306.1
40°	947.4	843.6	562.9	336.9	310.3	318.6	315.8	300.4	291.9	282.2	282.2
42.5°	982.6	853.4	518.0	307.4	297.6	308.7	297.6	277.9	266.7	265.3	266.7
45°	1014.8	861.8	474.5	283.5	282.2	297.6	283.5	262.5	249.9	249.9	251.3
47.5°	1045.8	870.3	431.0	261.0	263.9	280.7	272.3	251.3	238.6	230.1	230.1
50°	1094.9	890.0	367.8	237.2	242.8	266.7	263.9	240.0	226.0	213.3	210.6
52.5°	1153.9	923.5	299.0	212.0	227.5	254.1	254.1	230.1	214.8	198.0	195.1
55°	1232.5	960.1	240.0	193.8	212.0	240.0	244.2	226.0	203.6	188.0	185.3
57.5°	1311.1	972.8	193.8	175.5	192.2	226.0	237.2	217.6	190.9	179.8	178.2
60°	1365.7	932.0	162.9	160.0	178.2	209.1	227.5	207.8	182.4	171.3	171.3
62.5°	1357.2	808.6	146.0	150.2	167.1	196.5	219.0	199.3	176.9	169.8	168.4
65°	1238.0	610.6	131.9	141.8	157.2	183.8	210.6	195.1	174.0	167.1	164.2
67.5°	1042.9	405.7	122.1	133.4	147.4	174.0	203.6	189.5	165.6	161.4	158.6
70°	755.1	237.2	112.3	125.0	137.6	162.9	193.8	178.2	155.8	153.0	146.0
72.5°	408.5	148.8	101.1	113.6	125.0	148.8	178.2	164.2	143.2	131.9	127.6
75°	186.7	108.1	89.8	101.1	109.5	130.5	160.0	144.5	127.6	113.6	110.9
77.5°	125.0	81.4	75.7	87.0	91.3	109.5	141.8	115.2	99.6	89.8	87.0
80°	85.6	60.4	61.7	71.5	70.2	87.0	106.7	92.6	78.6	81.4	74.4
82.5°	54.8	42.1	47.7	50.6	49.1	65.9	82.8	70.2	59.0	49.1	42.1
85°	23.9	22.5	28.0	29.5	29.5	36.5	43.5	35.1	26.7	19.7	19.7
87.5°	1.3	2.9	2.9	4.2	2.9	1.3	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: P271599

CATALOG NUMBER: ISS-AF-800-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

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