

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: IRiS

Report Number: P108839

Luminaire Tested: **PN3LED12FL40827-E3LWWH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P108839  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13686)  
Test Lab: PEACHTREE CITY  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: IRiS  
Catalog Number: PN3LED12FL40827-E3LWWH  
Description: IRIS 3 INCH LED LENSED WALL WASH FIXTURE WITH SEMI SPECULAR CLEAR OPTICAL ELEMENT AND 40 DEGREE PRIMARY OPTIC, 20 DEGREE AIMING ANGLE  
Light Source: (1) 2700K 80CRI LED  
Ballast/Driver: (1) 450mA ELECTRONIC DRIVER

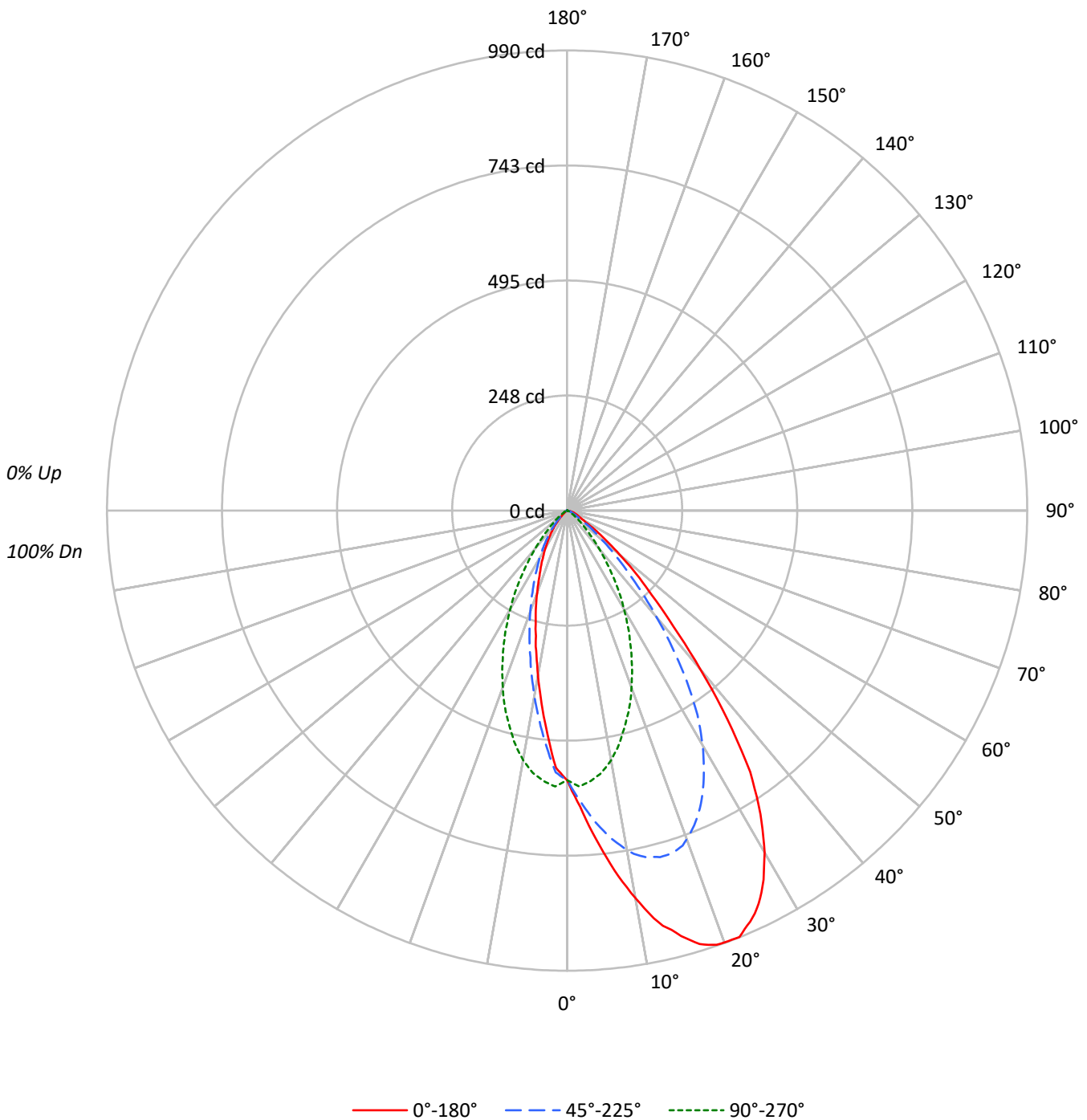
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 690.8 lumens  
Efficiency: N/A  
Efficacy: 37.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.82 / 0.99  
Luminous Opening: Circular (Dia: 0.29' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 18.5  
Input Voltage (V): NR  
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



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	105	110	108	105	103	103	102	100	100	98	97	96	95	94	92					92			
2	106	101	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84					84			
3	100	93	88	83	98	92	87	82	89	85	81	86	83	80	84	81	79	77					77			
4	94	86	80	75	93	85	79	75	83	78	74	81	76	73	79	75	72	70					70			
5	89	80	73	68	87	79	73	68	77	72	67	75	70	67	73	69	66	65					65			
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	64	61	59					59			
7	79	69	62	58	78	68	62	57	67	61	57	66	61	57	64	60	56	55					55			
8	75	64	58	53	74	64	58	53	63	57	53	62	56	53	61	56	52	51					51			
9	71	60	54	49	70	60	54	49	59	53	49	58	53	49	57	52	49	47					47			
10	67	57	50	46	66	56	50	46	55	50	46	54	49	46	54	49	46	44					44			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	93440	93440	93440
5°	114627	94412	78143
10°	138560	89189	59056
15°	158047	80124	43898
20°	169557	69297	32403
25°	169955	57647	23731
30°	158085	45465	17319
35°	134976	33473	12194
40°	93712	22734	7908
45°	58690	13488	4078
50°	36993	8246	2356
55°	21656	4747	1067
60°	12405	2417	612
65°	9683	2516	1449
70°	7961	895	424
75°	6411	560	0
80°	5195	835	0
85°	1664	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.8	8.1
10°-20°	152.1	22.0
20°-30°	196.7	28.5
30°-40°	165.4	23.9
40°-50°	81.3	11.8
50°-60°	26.4	3.8
60°-70°	8.7	1.3
70°-80°	3.7	0.5
80°-90°	0.8	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	404.7	58.6
0°-40°	570.0	82.5
0°-60°	677.7	98.1
0°-90°	690.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	690.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	580	580	580	580	580	
5°	709	670	584	510	483	72
15°	948	772	480	310	263	268
25°	956	685	324	168	134	435
35°	686	448	170	79	62	415
45°	258	179	59	25	18	209
55°	77	52	17	7	4	72
65°	25	14	7	2	4	26
75°	10	5	1	1	0	11
85°	1	0	0	0	0	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0
2.5°	637.4	637.4	637.4	635.5	634.6	632.7	630.8	628.9	627.0	624.2	621.4
5°	708.8	709.8	707.9	706.0	701.3	696.6	691.0	685.3	677.8	670.3	663.7
7.5°	781.2	779.3	776.5	771.8	766.2	756.8	747.4	735.1	722.9	709.8	694.7
10°	847.0	845.1	840.4	832.9	823.5	811.3	796.2	779.3	761.5	741.7	721.0
11°	871.5	867.7	863.9	855.5	845.1	829.1	815.0	794.4	773.7	752.1	727.6
12°	896.8	892.1	887.4	877.1	863.9	847.0	830.1	807.5	784.0	759.6	733.3
13°	916.6	913.8	906.2	895.0	881.8	863.0	842.3	818.8	792.5	766.2	738.0
14°	929.7	927.9	921.3	910.0	893.1	874.3	852.7	826.3	797.2	768.0	737.0
15°	947.6	945.7	938.2	925.0	909.1	887.4	863.0	834.8	803.8	771.8	738.0
16°	961.7	959.8	951.4	940.1	917.5	895.0	869.6	837.6	805.6	771.8	735.1
17°	974.9	972.0	962.6	946.7	926.0	903.4	874.3	843.3	807.5	770.9	732.3
18°	982.4	978.6	969.2	954.2	933.5	907.2	876.2	843.3	806.6	767.1	727.6
19°	988.0	983.3	973.0	957.0	935.4	907.2	875.2	839.5	800.9	762.4	720.1
20°	989.0	986.1	975.8	957.9	934.4	905.3	872.4	834.8	795.3	752.1	709.8
21°	989.0	984.3	973.0	955.1	930.7	900.6	865.8	827.3	785.0	741.7	699.4
22°	989.9	980.5	972.0	952.3	925.0	894.0	858.3	817.9	774.6	730.4	686.3
23°	977.7	973.0	960.8	942.0	914.7	882.7	847.0	803.8	762.4	716.3	670.3
24°	968.3	967.3	952.3	932.6	903.4	871.5	833.8	792.5	748.3	701.3	655.2
25°	956.1	951.4	938.2	917.5	890.3	856.4	818.8	775.6	731.4	685.3	637.4
26°	940.1	935.4	923.2	901.5	874.3	840.4	802.8	759.6	714.5	666.5	620.5
27°	921.3	915.6	903.4	883.7	853.6	819.7	782.1	739.8	694.7	647.7	599.8
28°	899.7	895.0	881.8	860.2	832.0	799.1	760.5	717.3	673.1	626.1	579.1
29°	874.3	869.6	858.3	836.7	810.3	777.4	737.0	694.7	651.5	605.4	559.3
30°	849.8	847.0	835.7	814.1	785.0	753.0	713.5	673.1	628.9	582.8	536.8
32.5°	774.6	769.9	759.6	739.8	713.5	681.6	645.8	606.4	564.0	521.7	478.5
35°	686.3	678.7	666.5	648.7	623.3	594.1	561.2	524.6	487.9	448.4	409.9
37.5°	565.9	563.1	552.8	536.8	518.0	491.7	467.2	436.2	404.2	372.3	340.3
40°	445.6	441.8	435.3	424.0	410.8	393.9	372.3	348.8	325.3	299.9	275.4
42.5°	338.4	337.5	331.8	325.3	314.9	301.8	286.7	269.8	253.8	235.0	215.3
45°	257.6	256.6	252.9	247.2	238.8	229.4	217.2	204.9	191.8	178.6	164.5
47.5°	201.2	196.5	193.7	188.0	181.4	173.0	165.5	155.1	145.7	134.4	123.2
50°	147.6	146.7	143.8	140.1	134.4	128.8	123.2	114.7	107.2	98.7	92.1
52.5°	105.3	107.2	105.3	101.5	99.6	93.1	89.3	83.7	78.0	71.4	64.9
55°	77.1	76.1	75.2	73.3	70.5	67.7	64.9	61.1	56.4	51.7	47.0
57.5°	49.8	48.9	49.8	47.0	45.1	45.1	40.4	38.5	33.8	31.0	30.1
60°	38.5	37.6	36.7	35.7	33.8	32.9	31.0	28.2	26.3	23.5	22.6
62.5°	30.1	30.1	29.1	28.2	27.3	25.4	24.4	22.6	20.7	18.8	16.0
65°	25.4	24.4	24.4	23.5	22.6	21.6	19.7	18.8	16.0	14.1	14.1
67.5°	21.6	18.8	19.7	17.9	16.9	16.9	15.0	12.2	11.3	9.4	9.4
70°	16.9	16.9	16.9	16.9	15.0	14.1	12.2	14.1	11.3	9.4	8.5
72.5°	15.0	14.1	15.0	15.0	13.2	12.2	11.3	11.3	8.5	7.5	7.5
75°	10.3	9.4	11.3	8.5	8.5	7.5	5.6	5.6	6.6	4.7	4.7
77.5°	6.6	6.6	6.6	6.6	5.6	5.6	5.6	3.8	3.8	2.8	1.9
80°	5.6	5.6	6.6	4.7	4.7	4.7	3.8	4.7	2.8	2.8	2.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
82.5°	1.9	2.8	2.8	1.9	2.8	2.8	1.9	1.9	0.9	0.9	1.9
85°	0.9	1.9	0.9	0.0	2.8	0.9	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.9	0.9	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
0°	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0	580.0
2.5°	618.6	614.8	612.0	609.2	604.5	600.7	597.9	594.1	578.1	564.0	555.6
5°	653.4	644.0	634.6	623.3	614.8	604.5	594.1	583.8	542.4	509.5	489.8
7.5°	680.6	663.7	647.7	632.7	616.7	599.8	582.8	568.7	503.9	456.9	429.6
10°	699.4	675.9	654.3	631.7	609.2	586.6	565.0	545.2	463.5	405.2	371.3
11°	703.2	677.8	653.4	628.0	603.5	580.0	555.6	533.0	445.6	384.5	350.6
12°	706.9	679.7	652.4	624.2	596.9	570.6	547.1	521.7	429.6	365.7	330.0
13°	707.9	677.8	648.7	618.6	590.4	561.2	534.9	508.6	411.8	346.9	310.2
14°	704.1	672.2	640.2	608.2	579.1	549.0	519.9	493.5	392.0	326.2	289.5
15°	704.1	668.4	636.4	601.7	570.6	538.7	508.6	480.4	377.0	310.2	274.5
16°	699.4	662.8	628.0	593.2	558.4	525.5	493.5	465.3	359.1	294.2	258.5
17°	693.8	656.2	620.5	583.8	548.1	512.3	481.3	452.2	343.1	277.3	243.5
18°	687.2	647.7	609.2	571.6	534.0	499.2	467.2	437.1	328.1	262.3	226.6
19°	677.8	634.6	596.0	557.5	520.8	484.1	452.2	422.1	313.0	246.3	212.5
20°	666.5	624.2	583.8	542.4	504.8	469.1	436.2	404.2	296.1	231.3	198.4
21°	655.2	609.2	567.8	526.4	488.8	452.2	419.3	388.3	280.1	217.2	186.1
22°	640.2	596.0	553.7	512.3	473.8	437.1	405.2	373.2	266.0	204.9	173.9
23°	624.2	578.1	536.8	496.4	456.9	419.3	386.4	355.3	249.1	190.8	161.7
24°	608.2	563.1	518.9	478.5	439.0	404.2	371.3	340.3	236.9	178.6	150.4
25°	592.2	545.2	503.9	461.6	422.1	387.3	354.4	324.3	222.8	168.3	140.1
26°	574.4	526.4	486.0	444.7	405.2	370.4	338.4	307.4	210.6	157.0	132.6
27°	553.7	507.6	467.2	424.9	388.3	351.6	321.5	292.4	196.5	145.7	123.2
28°	534.0	489.8	447.5	406.1	370.4	334.7	304.6	275.4	184.3	136.3	113.7
29°	516.1	470.0	428.7	390.1	351.6	317.7	287.7	260.4	172.0	126.9	106.2
30°	493.5	449.4	408.9	370.4	334.7	301.8	270.7	244.4	160.8	119.4	99.6
32.5°	436.2	394.8	356.3	320.6	287.7	255.7	230.3	207.8	133.5	97.8	81.8
35°	370.4	333.7	302.7	270.7	240.7	214.3	190.8	170.2	106.2	79.0	65.8
37.5°	309.3	277.3	249.1	221.9	196.5	173.9	154.2	136.3	83.7	62.0	50.8
40°	251.0	224.7	200.2	178.6	158.9	138.2	122.2	108.1	64.9	48.9	41.4
42.5°	195.5	175.8	157.0	138.2	121.3	106.2	92.1	80.8	49.8	35.7	30.1
45°	149.5	133.5	118.4	105.3	90.2	78.0	67.7	59.2	36.7	25.4	19.7
47.5°	111.9	99.6	90.2	78.0	68.6	59.2	51.7	44.2	28.2	19.7	14.1
50°	81.8	74.3	64.9	55.5	47.9	42.3	37.6	32.9	20.7	12.2	7.5
52.5°	58.3	50.8	46.1	41.4	34.8	30.1	25.4	22.6	14.1	7.5	7.5
55°	41.4	36.7	32.9	29.1	23.5	20.7	18.8	16.9	10.3	6.6	4.7
57.5°	24.4	21.6	16.9	14.1	12.2	11.3	9.4	7.5	1.9	0.0	0.0
60°	19.7	16.9	16.0	13.2	11.3	10.3	9.4	7.5	4.7	2.8	2.8
62.5°	15.0	13.2	12.2	11.3	10.3	9.4	8.5	6.6	3.8	2.8	2.8
65°	12.2	11.3	9.4	8.5	7.5	6.6	4.7	6.6	2.8	1.9	0.9
67.5°	7.5	4.7	4.7	3.8	2.8	2.8	2.8	0.9	0.0	0.0	0.0
70°	7.5	6.6	7.5	4.7	4.7	3.8	2.8	1.9	1.9	0.0	0.0
72.5°	5.6	4.7	5.6	3.8	3.8	2.8	2.8	1.9	0.9	1.9	1.9
75°	4.7	3.8	3.8	1.9	2.8	1.9	0.0	0.9	1.9	0.9	0.9
77.5°	2.8	0.9	1.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.9
80°	2.8	2.8	1.9	1.9	0.9	1.9	3.8	0.9	0.9	0.9	1.9





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
82.5°	0.9	0.0	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.9	0.9
85°	1.9	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.9	0.0	0.9
87.5°	0.0	0.0	0.9	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	180°
0°	580.0
2.5°	553.7
5°	483.2
7.5°	419.3
10°	361.0
11°	338.4
12°	317.7
13°	299.9
14°	278.3
15°	263.2
16°	245.4
17°	231.3
18°	218.1
19°	202.1
20°	189.0
21°	175.8
22°	164.5
23°	152.3
24°	142.0
25°	133.5
26°	125.0
27°	115.6
28°	108.1
29°	100.6
30°	93.1
32.5°	76.1
35°	62.0
37.5°	47.9
40°	37.6
42.5°	27.3
45°	17.9
47.5°	13.2
50°	9.4
52.5°	4.7
55°	3.8
57.5°	0.0
60°	1.9
62.5°	2.8
65°	3.8
67.5°	0.0
70°	0.9
72.5°	0.9
75°	0.0
77.5°	0.0
80°	0.0



TEST NUMBER: P108839

CATALOG NUMBER: PN3LED12FL40827-E3LWWH

**CANDELA DISTRIBUTION (continued):**

	180°
82.5°	0.9
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)