

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: P108841

Luminaire Tested: **PN3LED12FL40835-E3LWWH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P108841  
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: PN3LED12FL40835-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) 3500K 80CRI LED  
Ballast/Driver: (1) 450mA ELECTRONIC DRIVER

**Summary**

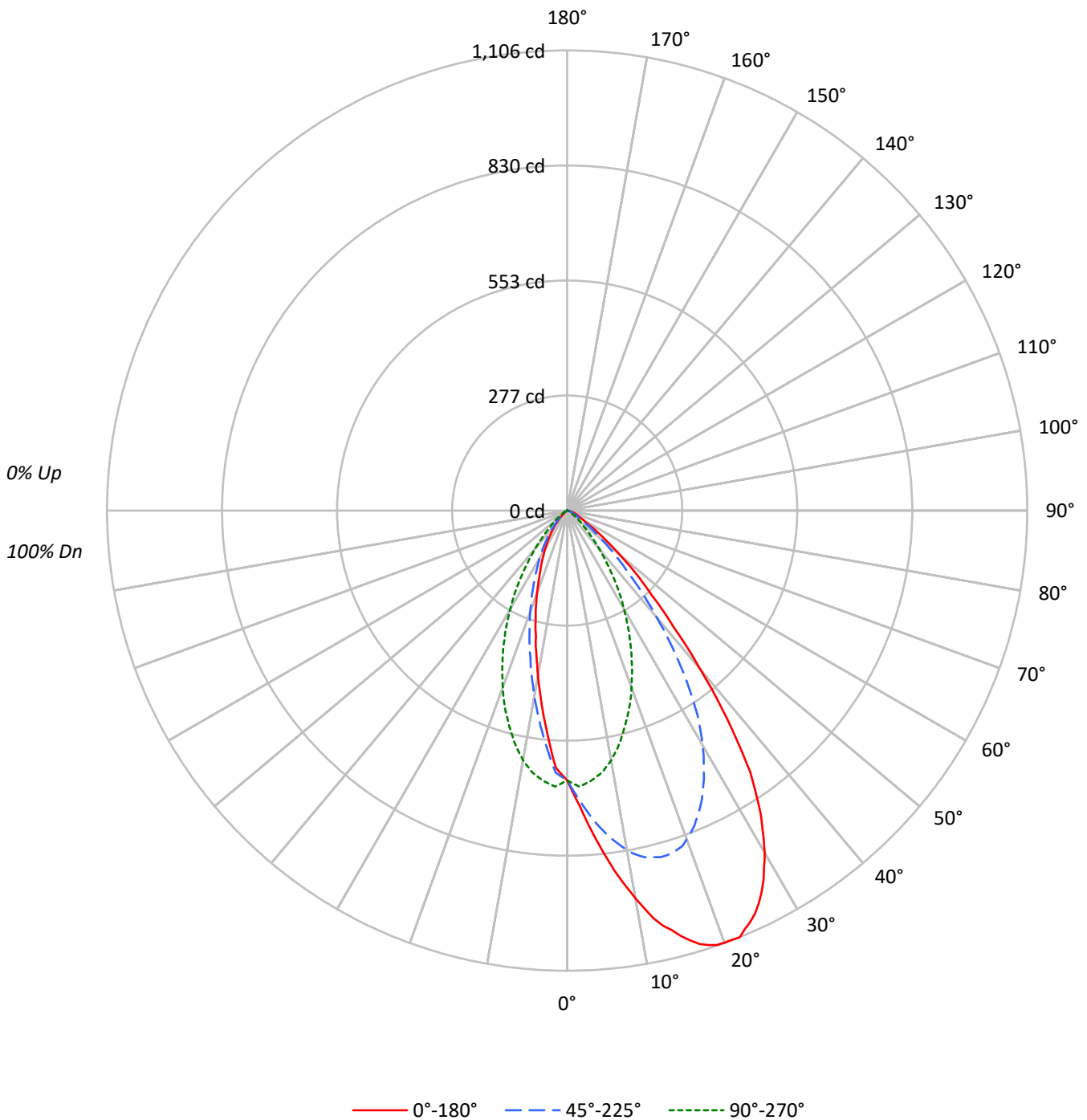
Lumens per Lamp: N/A  
Luminaire Lumens: 772.1 lumens  
Efficiency: N/A  
Efficacy: 41.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.82 / 0.99  
Luminous Opening: Circular (Dia: 0.29' x H: 0')  
CIE Type: Direct

Input Watts (W): 18.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	101	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	92	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	61	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°	104427	104427	104427
5°	128098	105506	87328
10°	154853	99675	65992
15°	176627	89531	49069
20°	189479	77441	36209
25°	189917	64420	26522
30°	176670	50822	19347
35°	150827	37407	13629
40°	104732	25405	8833
45°	65594	15083	4557
50°	41329	9223	2632
55°	24183	5309	1180
60°	13887	2707	677
65°	10826	2821	1601
70°	8903	989	518
75°	7221	685	0
80°	5845	1021	0
85°	2033	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.4	8.1
10°-20°	170.0	22.0
20°-30°	219.9	28.5
30°-40°	184.8	23.9
40°-50°	90.9	11.8
50°-60°	29.5	3.8
60°-70°	9.7	1.3
70°-80°	4.1	0.5
80°-90°	0.9	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°	452.2	58.6
0°-40°	637.0	82.5
0°-60°	757.4	98.1
0°-90°	772.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	772.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	648	648	648	648	648	
5°	792	749	652	569	540	80
15°	1059	862	537	347	294	300
25°	1068	766	362	188	149	486
35°	767	501	190	88	69	464
45°	288	200	66	28	20	233
55°	86	58	19	7	4	80
65°	28	16	7	2	4	29
75°	12	5	1	1	0	13
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°	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2
2.5°	712.3	712.3	712.3	710.2	709.1	707.0	704.9	702.8	700.7	697.6	694.4
5°	792.1	793.2	791.1	789.0	783.7	778.5	772.2	765.9	757.5	749.1	741.7
7.5°	873.0	870.9	867.8	862.5	856.2	845.7	835.2	821.6	807.9	793.2	776.4
10°	946.6	944.5	939.2	930.8	920.3	906.6	889.8	870.9	851.0	828.9	805.8
11°	973.9	969.7	965.5	956.0	944.5	926.6	910.9	887.7	864.6	840.5	813.1
12°	1002.3	997.0	991.7	980.2	965.5	946.6	927.7	902.4	876.2	848.9	819.5
13°	1024.3	1021.2	1012.8	1000.2	985.4	964.4	941.3	915.1	885.6	856.2	824.7
14°	1039.0	1036.9	1029.6	1017.0	998.0	977.0	952.9	923.5	890.9	858.3	823.7
15°	1059.0	1056.9	1048.5	1033.8	1015.9	991.7	964.4	932.9	898.2	862.5	824.7
16°	1074.7	1072.6	1063.2	1050.6	1025.4	1000.2	971.8	936.1	900.3	862.5	821.6
17°	1089.5	1086.3	1075.8	1057.9	1034.8	1009.6	977.0	942.4	902.4	861.5	818.4
18°	1097.9	1093.7	1083.1	1066.3	1043.2	1013.8	979.1	942.4	901.4	857.3	813.1
19°	1104.2	1098.9	1087.3	1069.5	1045.3	1013.8	978.1	938.2	895.1	852.0	804.7
20°	1105.2	1102.1	1090.5	1070.5	1044.3	1011.7	974.9	932.9	888.8	840.5	793.2
21°	1105.2	1100.0	1087.3	1067.4	1040.1	1006.5	967.6	924.5	877.2	828.9	781.6
22°	1106.3	1095.8	1086.3	1064.2	1033.8	999.1	959.2	914.0	865.7	816.3	766.9
23°	1092.6	1087.3	1073.7	1052.7	1022.2	986.5	946.6	898.2	852.0	800.5	749.1
24°	1082.1	1081.0	1064.2	1042.2	1009.6	973.9	931.9	885.6	836.3	783.7	732.3
25°	1068.4	1063.2	1048.5	1025.4	994.9	957.1	915.1	866.7	817.4	765.9	712.3
26°	1050.6	1045.3	1031.7	1007.5	977.0	939.2	897.2	848.9	798.4	744.9	693.4
27°	1029.6	1023.3	1009.6	987.5	953.9	916.1	874.1	826.8	776.4	723.8	670.3
28°	1005.4	1000.2	985.4	961.3	929.8	893.0	849.9	801.6	752.2	699.7	647.2
29°	977.0	971.8	959.2	935.0	905.6	868.8	823.7	776.4	728.1	676.6	625.1
30°	949.7	946.6	934.0	909.8	877.2	841.5	797.4	752.2	702.8	651.4	599.9
32.5°	865.7	860.4	848.9	826.8	797.4	761.7	721.7	677.6	630.3	583.1	534.7
35°	766.9	758.5	744.9	724.9	696.5	664.0	627.2	586.2	545.3	501.1	458.1
37.5°	632.4	629.3	617.7	599.9	578.9	549.5	522.1	487.5	451.7	416.0	380.3
40°	498.0	493.8	486.4	473.8	459.1	440.2	416.0	389.8	363.5	335.1	307.8
42.5°	378.2	377.2	370.9	363.5	351.9	337.2	320.4	301.5	283.7	262.6	240.6
45°	287.9	286.8	282.6	276.3	266.8	256.3	242.7	229.0	214.3	199.6	183.9
47.5°	224.8	219.6	216.4	210.1	202.8	193.3	184.9	173.3	162.8	150.2	137.6
50°	164.9	163.9	160.7	156.5	150.2	143.9	137.6	128.2	119.8	110.3	103.0
52.5°	117.7	119.8	117.7	113.5	111.4	104.0	99.8	93.5	87.2	79.8	72.5
55°	86.1	85.1	84.0	81.9	78.8	75.6	72.5	68.3	63.0	57.8	52.5
57.5°	55.7	54.6	55.7	52.5	50.4	50.4	45.2	43.1	37.8	34.7	33.6
60°	43.1	42.0	41.0	39.9	37.8	36.8	34.7	31.5	29.4	26.3	25.2
62.5°	33.6	33.6	32.6	31.5	30.5	28.4	27.3	25.2	23.1	21.0	17.9
65°	28.4	27.3	27.3	26.3	25.2	24.2	22.1	21.0	17.9	15.8	15.8
67.5°	24.2	21.0	22.1	20.0	18.9	18.9	16.8	13.7	12.6	10.5	10.5
70°	18.9	18.9	18.9	18.9	16.8	15.8	13.7	15.8	12.6	10.5	9.5
72.5°	16.8	15.8	16.8	16.8	14.7	13.7	12.6	12.6	9.5	8.4	8.4
75°	11.6	10.5	12.6	9.5	9.5	8.4	6.3	6.3	7.4	5.3	5.3
77.5°	7.4	7.4	7.4	7.4	6.3	6.3	6.3	4.2	4.2	3.2	2.1
80°	6.3	6.3	7.4	5.3	5.3	5.3	4.2	5.3	3.2	3.2	3.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
82.5°	2.1	3.2	3.2	2.1	3.2	3.2	2.1	2.1	1.1	1.1	2.1
85°	1.1	2.1	1.1	0.0	3.2	1.1	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	1.1	1.1	0.0	1.1	1.1	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°	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2	648.2
2.5°	691.3	687.1	683.9	680.8	675.5	671.3	668.2	664.0	646.1	630.3	620.9
5°	730.2	719.6	709.1	696.5	687.1	675.5	664.0	652.4	606.2	569.4	547.4
7.5°	760.6	741.7	723.8	707.0	689.2	670.3	651.4	635.6	563.1	510.6	480.1
10°	781.6	755.4	731.2	706.0	680.8	655.6	631.4	609.3	517.9	452.8	415.0
11°	785.8	757.5	730.2	701.8	674.5	648.2	620.9	595.7	498.0	429.7	391.9
12°	790.0	759.6	729.1	697.6	667.1	637.7	611.4	583.1	480.1	408.7	368.8
13°	791.1	757.5	724.9	691.3	659.8	627.2	597.8	568.4	460.2	387.7	346.7
14°	786.9	751.2	715.4	679.7	647.2	613.5	581.0	551.6	438.1	364.6	323.6
15°	786.9	747.0	711.2	672.4	637.7	602.0	568.4	536.8	421.3	346.7	306.8
16°	781.6	740.7	701.8	662.9	624.0	587.3	551.6	520.0	401.3	328.8	288.9
17°	775.3	733.3	693.4	652.4	612.5	572.6	537.9	505.3	383.5	309.9	272.1
18°	768.0	723.8	680.8	638.8	596.7	557.9	522.1	488.5	366.7	293.1	253.2
19°	757.5	709.1	666.1	623.0	582.0	541.0	505.3	471.7	349.8	275.3	237.4
20°	744.9	697.6	652.4	606.2	564.2	524.2	487.5	451.7	330.9	258.4	221.7
21°	732.3	680.8	634.5	588.3	546.3	505.3	468.6	433.9	313.1	242.7	208.0
22°	715.4	666.1	618.8	572.6	529.5	488.5	452.8	417.1	297.3	229.0	194.4
23°	697.6	646.1	599.9	554.7	510.6	468.6	431.8	397.1	278.4	213.3	180.7
24°	679.7	629.3	579.9	534.7	490.6	451.7	415.0	380.3	264.7	199.6	168.1
25°	661.9	609.3	563.1	515.8	471.7	432.8	396.1	362.4	249.0	188.1	156.5
26°	641.9	588.3	543.1	496.9	452.8	413.9	378.2	343.5	235.3	175.4	148.1
27°	618.8	567.3	522.1	474.9	433.9	392.9	359.3	326.7	219.6	162.8	137.6
28°	596.7	547.4	500.1	453.9	413.9	374.0	340.4	307.8	205.9	152.3	127.1
29°	576.8	525.3	479.1	436.0	392.9	355.1	321.5	291.0	192.3	141.8	118.7
30°	551.6	502.2	457.0	413.9	374.0	337.2	302.6	273.2	179.6	133.4	111.4
32.5°	487.5	441.2	398.2	358.2	321.5	285.8	257.4	232.2	149.2	109.3	91.4
35°	413.9	373.0	338.3	302.6	268.9	239.5	213.3	190.2	118.7	88.2	73.5
37.5°	345.6	309.9	278.4	247.9	219.6	194.4	172.3	152.3	93.5	69.3	56.7
40°	280.5	251.1	223.8	199.6	177.5	154.4	136.6	120.8	72.5	54.6	46.2
42.5°	218.5	196.5	175.4	154.4	135.5	118.7	103.0	90.3	55.7	39.9	33.6
45°	167.0	149.2	132.4	117.7	100.9	87.2	75.6	66.2	41.0	28.4	22.1
47.5°	125.0	111.4	100.9	87.2	76.7	66.2	57.8	49.4	31.5	22.1	15.8
50°	91.4	83.0	72.5	62.0	53.6	47.3	42.0	36.8	23.1	13.7	8.4
52.5°	65.1	56.7	51.5	46.2	38.9	33.6	28.4	25.2	15.8	8.4	8.4
55°	46.2	41.0	36.8	32.6	26.3	23.1	21.0	18.9	11.6	7.4	5.3
57.5°	27.3	24.2	18.9	15.8	13.7	12.6	10.5	8.4	2.1	0.0	0.0
60°	22.1	18.9	17.9	14.7	12.6	11.6	10.5	8.4	5.3	3.2	3.2
62.5°	16.8	14.7	13.7	12.6	11.6	10.5	9.5	7.4	4.2	3.2	3.2
65°	13.7	12.6	10.5	9.5	8.4	7.4	5.3	7.4	3.2	2.1	1.1
67.5°	8.4	5.3	5.3	4.2	3.2	3.2	3.2	1.1	0.0	0.0	0.0
70°	8.4	7.4	8.4	5.3	5.3	4.2	3.2	2.1	2.1	0.0	0.0
72.5°	6.3	5.3	6.3	4.2	4.2	3.2	3.2	2.1	1.1	2.1	2.1
75°	5.3	4.2	4.2	2.1	3.2	2.1	0.0	1.1	2.1	1.1	1.1
77.5°	3.2	1.1	2.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	1.1
80°	3.2	3.2	2.1	2.1	1.1	2.1	4.2	1.1	1.1	1.1	2.1





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
82.5°	1.1	0.0	1.1	1.1	1.1	1.1	0.0	0.0	0.0	1.1	1.1
85°	2.1	0.0	0.0	3.2	0.0	0.0	0.0	0.0	1.1	0.0	1.1
87.5°	0.0	0.0	1.1	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°	648.2
2.5°	618.8
5°	540.0
7.5°	468.6
10°	403.4
11°	378.2
12°	355.1
13°	335.1
14°	311.0
15°	294.2
16°	274.2
17°	258.4
18°	243.7
19°	225.9
20°	211.2
21°	196.5
22°	183.9
23°	170.2
24°	158.6
25°	149.2
26°	139.7
27°	129.2
28°	120.8
29°	112.4
30°	104.0
32.5°	85.1
35°	69.3
37.5°	53.6
40°	42.0
42.5°	30.5
45°	20.0
47.5°	14.7
50°	10.5
52.5°	5.3
55°	4.2
57.5°	0.0
60°	2.1
62.5°	3.2
65°	4.2
67.5°	0.0
70°	1.1
72.5°	1.1
75°	0.0
77.5°	0.0
80°	0.0



TEST NUMBER: P108841

CATALOG NUMBER: PN3LED12FL40835-E3LWWH

**CANDELA DISTRIBUTION (continued):**

	180°
82.5°	1.1
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)