

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: P108833

Luminaire Tested: **PN3LED12NFL25827-E3LWWH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P108833
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13685)
Test Lab: PEACHTREE CITY
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: IRiS
Catalog Number: PN3LED12NFL25827-E3LWWH
Description: IRIS 3 INCH LED LENSED WALL WASH FIXTURE WITH
SEMI SPECULAR CLEAR OPTICAL ELEMENT
AND 25 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: 683.6 lumens
Efficiency: N/A
Efficacy: 37.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.8 / 0.98
Luminous Opening: Circular (Dia: 0.31' x H: 0')
CIE Type: Direct

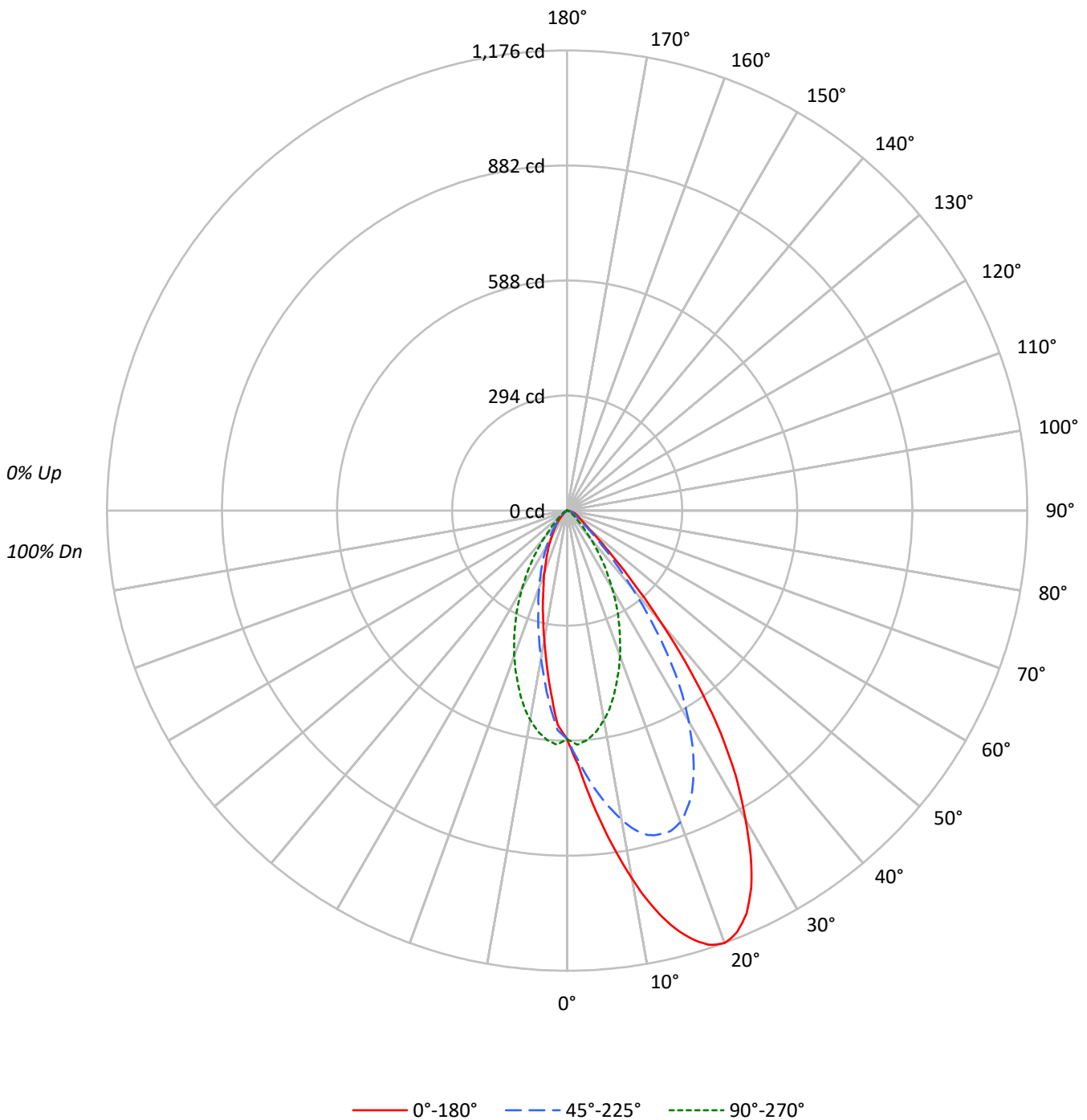
Input Watts (W): 18.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	102	100	100	98	97	96	95	94	92					92			
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85					85			
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78					78			
4	95	87	81	76	93	86	80	76	83	79	75	81	77	74	79	76	73	71					71			
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	67	66					66			
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61					61			
7	80	70	64	59	79	69	63	59	68	63	59	67	62	58	66	61	58	56					56			
8	76	66	59	55	75	65	59	55	64	58	54	63	58	54	62	57	54	53					53			
9	72	62	55	51	71	61	55	51	60	55	51	59	54	51	58	54	50	49					49			
10	68	58	52	48	67	58	52	48	57	51	47	56	51	47	55	51	47	46					46			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	81930	81930	81930
5°	105953	82905	66085
10°	136106	77437	47825
15°	161984	68839	34695
20°	175631	59111	25553
25°	170456	48328	18489
30°	147774	37320	13094
35°	114667	26744	9508
40°	68022	16525	6375
45°	31716	9705	3354
50°	16418	6157	2052
55°	11720	4380	1370
60°	9487	2891	786
65°	9066	1262	299
70°	9273	1149	2298
75°	7157	488	488
80°	4526	0	727
85°	3059	1449	1449



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.1	8.3
10°-20°	161.1	23.6
20°-30°	208.8	30.5
30°-40°	159.4	23.3
40°-50°	61.4	9.0
50°-60°	20.5	3.0
60°-70°	9.8	1.4
70°-80°	4.5	0.7
80°-90°	1.1	0.2
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°	426.9	62.4
0°-40°	586.3	85.8
0°-60°	668.2	97.7
0°-90°	683.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	683.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	584	584	584	584	584	
5°	752	699	588	501	469	78
15°	1115	859	474	286	239	315
25°	1101	762	312	150	119	497
35°	669	445	156	70	56	406
45°	160	127	49	24	17	140
55°	48	37	18	6	6	45
65°	27	16	4	1	1	27
75°	13	8	1	1	1	14
85°	2	1	1	1	1	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°	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8
2.5°	651.5	651.5	652.4	649.6	648.7	646.8	645.8	642.1	640.2	638.3	633.6
5°	752.1	751.1	749.2	746.4	738.9	734.2	727.6	718.2	709.8	699.4	687.2
7.5°	854.5	852.7	849.8	842.3	832.0	820.7	806.6	791.5	773.7	753.9	736.1
10°	955.1	952.3	945.7	936.3	920.3	902.5	880.9	856.4	831.0	802.8	773.7
11°	993.7	990.8	982.4	972.0	954.2	932.6	908.1	880.9	850.8	819.7	786.8
12°	1028.4	1025.6	1016.2	1003.1	984.3	960.8	932.6	901.5	869.6	833.8	798.1
13°	1061.3	1059.5	1048.2	1032.2	1012.5	987.1	956.1	922.2	884.6	846.1	804.7
14°	1090.5	1088.6	1078.3	1059.5	1036.9	1006.8	974.9	936.3	895.9	854.5	809.4
15°	1114.9	1113.1	1100.8	1081.1	1056.6	1024.7	989.0	947.6	905.3	859.2	813.2
16°	1135.6	1132.8	1119.6	1099.9	1071.7	1038.8	1000.2	956.1	910.0	860.2	811.3
17°	1152.5	1148.8	1135.6	1114.0	1084.9	1050.1	1009.6	961.7	915.6	863.0	808.5
18°	1166.6	1162.9	1147.8	1126.2	1094.3	1056.6	1014.3	964.5	913.8	860.2	805.6
19°	1173.2	1167.6	1153.5	1130.0	1098.0	1058.5	1014.3	962.6	910.0	854.5	798.1
20°	1176.0	1170.4	1155.4	1130.9	1097.1	1056.6	1010.6	958.9	904.4	847.0	788.7
21°	1170.4	1165.7	1150.7	1124.3	1091.4	1049.1	1002.1	948.5	892.1	834.8	776.5
22°	1161.0	1155.4	1139.4	1114.0	1079.2	1038.8	989.9	935.4	880.9	819.7	762.4
23°	1145.0	1141.3	1123.4	1098.0	1064.2	1022.8	973.0	919.4	863.0	803.8	745.5
24°	1127.2	1121.5	1104.6	1078.3	1045.4	1002.1	953.2	899.7	842.3	785.0	727.6
25°	1100.8	1096.1	1080.2	1053.8	1020.0	976.7	928.8	875.2	819.7	761.5	704.1
26°	1072.6	1067.0	1051.0	1023.7	990.8	950.4	902.5	849.8	795.3	738.0	681.6
27°	1037.8	1032.2	1016.2	992.7	959.8	918.5	871.5	821.6	767.1	711.6	657.1
28°	999.3	994.6	979.6	955.1	922.2	881.8	838.6	791.5	738.0	683.4	629.9
29°	956.1	951.4	937.3	911.9	881.8	844.2	800.0	753.9	704.1	650.5	599.8
30°	911.9	907.2	896.8	870.5	842.3	806.6	766.2	718.2	672.2	621.4	571.6
32.5°	800.9	796.2	785.0	764.3	736.1	703.2	667.5	625.2	583.8	538.7	493.5
35°	669.3	665.6	653.4	635.5	613.9	583.8	550.9	517.0	481.3	444.7	408.0
37.5°	518.0	516.1	505.8	490.7	472.9	450.3	425.9	399.5	373.2	346.9	319.6
40°	371.3	370.4	365.7	357.2	342.2	329.0	311.2	296.1	277.3	258.5	239.7
42.5°	248.2	247.2	245.4	238.8	232.2	225.6	216.2	204.9	195.5	184.3	172.0
45°	159.8	158.9	157.0	155.1	152.3	148.5	143.8	139.1	134.4	126.9	120.3
47.5°	107.2	106.2	105.3	103.4	102.5	99.6	95.9	94.0	91.2	87.4	83.7
50°	75.2	76.1	75.2	74.3	72.4	71.4	68.6	66.7	64.9	62.0	59.2
52.5°	59.2	60.2	58.3	58.3	55.5	53.6	52.6	50.8	48.9	47.9	43.2
55°	47.9	47.9	47.0	46.1	45.1	44.2	42.3	40.4	38.5	36.7	34.8
57.5°	39.5	39.5	38.5	37.6	38.5	36.7	33.8	32.9	32.9	28.2	28.2
60°	33.8	34.8	33.8	33.8	32.0	31.0	30.1	28.2	26.3	24.4	22.6
62.5°	31.0	31.0	30.1	30.1	30.1	30.1	25.4	25.4	22.6	20.7	18.8
65°	27.3	26.3	25.4	25.4	23.5	22.6	20.7	19.7	18.8	16.0	14.1
67.5°	23.5	23.5	23.5	22.6	20.7	20.7	18.8	16.0	15.0	14.1	13.2
70°	22.6	22.6	20.7	20.7	18.8	16.9	16.9	15.0	13.2	13.2	10.3
72.5°	16.9	16.9	16.0	15.0	15.0	13.2	11.3	10.3	10.3	8.5	7.5
75°	13.2	13.2	13.2	13.2	10.3	10.3	9.4	9.4	7.5	8.5	4.7
77.5°	9.4	9.4	9.4	8.5	7.5	7.5	6.6	5.6	5.6	4.7	4.7
80°	5.6	5.6	6.6	4.7	5.6	6.6	4.7	4.7	4.7	2.8	3.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
82.5°	2.8	3.8	2.8	3.8	2.8	2.8	2.8	2.8	1.9	1.9	0.9
85°	1.9	2.8	2.8	2.8	1.9	0.9	1.9	1.9	1.9	0.9	0.9
87.5°	0.9	0.0	0.0	0.0	0.9	0.9	0.0	0.9	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):

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
0°	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8
2.5°	628.9	626.1	622.3	616.7	612.9	608.2	602.6	598.8	580.0	561.2	552.8
5°	675.9	663.7	652.4	639.3	626.1	614.8	602.6	588.5	538.7	501.1	475.7
7.5°	715.4	693.8	672.2	650.5	630.8	610.1	588.5	569.7	492.6	440.0	408.9
10°	744.5	713.5	682.5	653.4	624.2	596.9	569.7	543.4	446.5	382.6	347.8
11°	753.9	719.2	684.4	651.5	620.5	588.5	558.4	531.1	428.7	362.9	327.1
12°	759.6	722.0	683.4	647.7	612.9	581.9	548.1	518.9	411.8	342.2	304.6
13°	763.3	722.0	681.6	642.1	605.4	569.7	536.8	503.9	393.0	322.4	285.8
14°	766.2	722.0	678.7	637.4	596.9	558.4	523.6	490.7	374.2	304.6	267.9
15°	764.3	717.3	671.2	627.0	584.7	546.2	507.6	473.8	356.3	285.8	250.1
16°	762.4	712.6	663.7	615.8	572.5	531.1	492.6	457.8	336.5	266.0	232.2
17°	755.8	704.1	653.4	605.4	559.3	516.1	476.6	441.8	319.6	251.0	217.2
18°	751.1	696.6	644.0	594.1	547.1	503.9	463.5	427.7	305.5	238.8	204.0
19°	741.7	685.3	633.6	581.0	533.0	487.9	448.4	409.9	288.6	222.8	192.7
20°	731.4	675.0	619.5	567.8	518.9	472.9	433.4	395.8	273.6	209.6	178.6
21°	717.3	659.0	604.5	551.8	502.9	456.9	415.5	377.9	259.5	196.5	167.3
22°	701.3	644.0	588.5	535.8	485.1	440.9	397.7	361.0	244.4	183.3	155.1
23°	685.3	626.1	570.6	518.0	469.1	424.0	381.7	345.9	230.3	173.0	145.7
24°	668.4	608.2	552.8	500.1	451.2	406.1	366.6	328.1	217.2	160.8	135.4
25°	645.8	587.5	532.1	480.4	432.4	387.3	347.8	312.1	203.1	150.4	126.0
26°	624.2	567.8	512.3	462.5	414.6	370.4	331.8	297.1	190.8	141.0	118.4
27°	600.7	544.3	491.7	442.8	395.8	353.5	314.9	280.1	177.7	130.7	110.0
28°	574.4	520.8	470.0	423.0	376.0	334.7	298.0	264.2	166.4	122.2	101.5
29°	546.2	495.4	444.7	399.5	354.4	314.0	279.2	245.4	152.3	110.9	92.1
30°	520.8	471.9	424.0	377.0	334.7	295.2	259.5	230.3	141.0	102.5	86.5
32.5°	449.4	405.2	361.0	321.5	283.9	248.2	218.1	191.8	116.6	85.5	73.3
35°	371.3	334.7	297.1	263.2	232.2	204.9	178.6	156.1	95.9	69.6	59.2
37.5°	290.5	262.3	235.0	208.7	183.3	159.8	139.1	121.3	73.3	54.5	47.9
40°	219.0	199.3	179.6	158.9	139.1	121.3	106.2	90.2	56.4	43.2	38.5
42.5°	158.9	144.8	130.7	116.6	101.5	88.4	76.1	66.7	43.2	32.9	27.3
45°	111.9	103.4	93.1	82.7	71.4	62.0	55.5	48.9	33.8	24.4	18.8
47.5°	79.0	74.3	66.7	58.3	50.8	46.1	40.4	36.7	27.3	18.8	13.2
50°	56.4	51.7	47.9	41.4	38.5	34.8	32.0	28.2	19.7	14.1	10.3
52.5°	42.3	38.5	36.7	31.0	29.1	27.3	24.4	22.6	14.1	9.4	6.6
55°	32.0	30.1	27.3	24.4	22.6	20.7	18.8	17.9	10.3	5.6	4.7
57.5°	25.4	22.6	21.6	18.8	16.9	15.0	16.0	13.2	9.4	3.8	2.8
60°	21.6	19.7	16.0	15.0	13.2	12.2	11.3	10.3	5.6	3.8	2.8
62.5°	16.9	16.0	13.2	12.2	11.3	9.4	9.4	8.5	3.8	2.8	2.8
65°	12.2	11.3	9.4	8.5	8.5	6.6	5.6	3.8	1.9	0.9	0.0
67.5°	11.3	8.5	9.4	7.5	5.6	4.7	3.8	4.7	1.9	1.9	1.9
70°	9.4	8.5	7.5	7.5	4.7	4.7	3.8	2.8	1.9	1.9	1.9
72.5°	6.6	5.6	4.7	2.8	2.8	1.9	2.8	0.9	0.9	0.9	0.9
75°	4.7	3.8	4.7	3.8	2.8	1.9	4.7	0.9	0.9	0.9	0.9
77.5°	3.8	2.8	1.9	1.9	0.9	1.9	0.9	0.9	0.9	0.0	0.9
80°	5.6	3.8	1.9	0.9	0.9	2.8	3.8	0.0	3.8	0.9	0.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
82.5°	1.9	0.9	0.9	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.0	0.9	0.9	0.9	1.9	2.8	0.9	1.9	0.9	0.9
87.5°	0.0	0.0	0.0	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°	583.8
2.5°	548.1
5°	469.1
7.5°	397.7
10°	335.6
11°	314.0
12°	293.3
13°	273.6
14°	257.6
15°	238.8
16°	221.9
17°	206.8
18°	194.6
19°	183.3
20°	171.1
21°	157.9
22°	146.7
23°	137.3
24°	128.8
25°	119.4
26°	111.9
27°	104.3
28°	96.8
29°	87.4
30°	80.8
32.5°	67.7
35°	55.5
37.5°	45.1
40°	34.8
42.5°	25.4
45°	16.9
47.5°	15.0
50°	9.4
52.5°	8.5
55°	5.6
57.5°	1.9
60°	2.8
62.5°	1.9
65°	0.9
67.5°	0.9
70°	5.6
72.5°	0.9
75°	0.9
77.5°	0.0
80°	0.9



TEST NUMBER: P108833

CATALOG NUMBER: PN3LED12NFL25827-E3LWWH

CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)