

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: P108836

Luminaire Tested: **PN3LED12NFL25840-E3LWWH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P108836
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: PN3LED12NFL25840-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) 4000K 80CRI LED
Ballast/Driver: (1) 450mA ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 839.6 lumens
Efficiency: N/A
Efficacy: 45.6 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

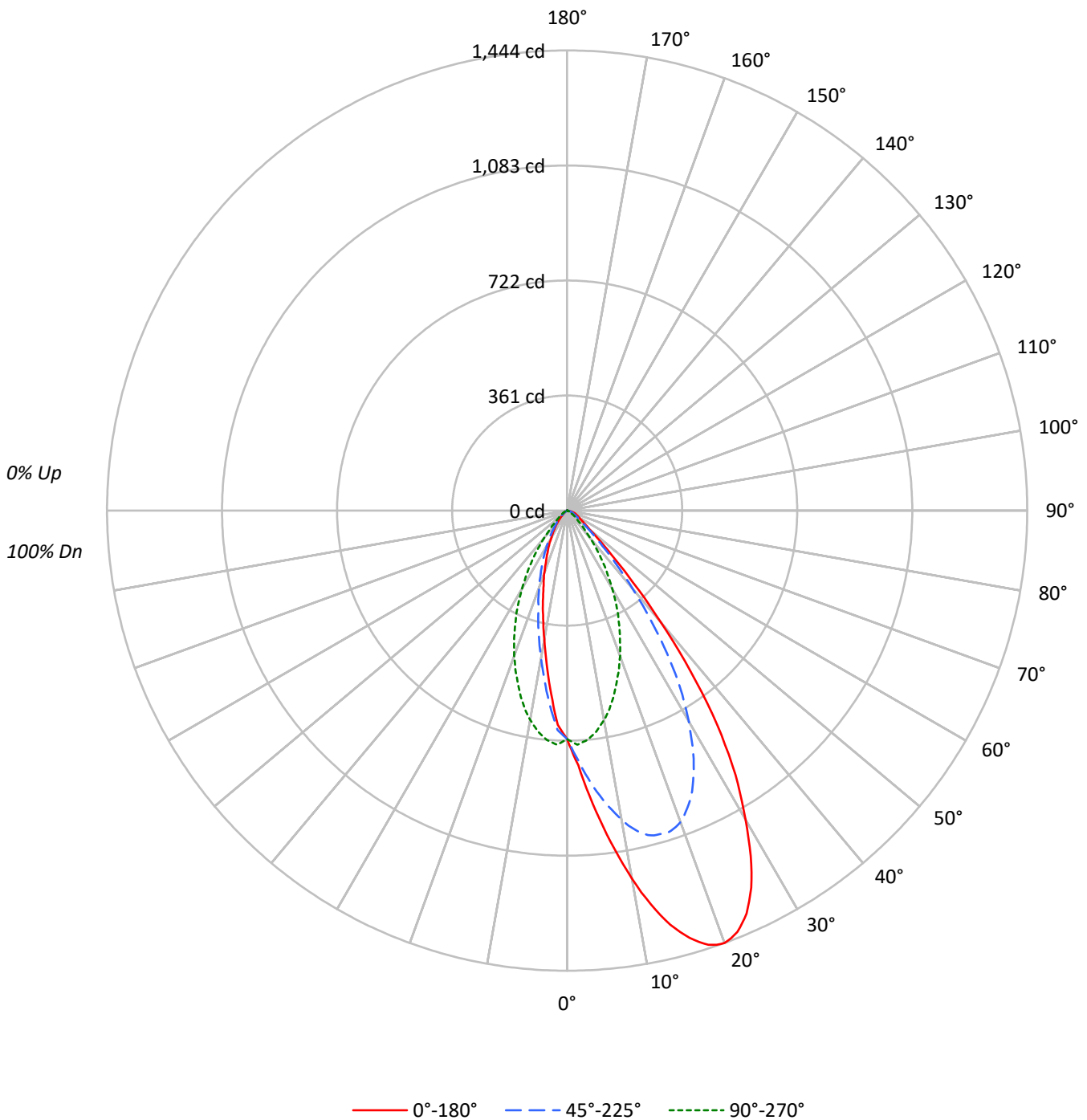
Input Watts (W): 18.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	100609	100609	100609
5°	130113	101811	81158
10°	167158	95093	58740
15°	198931	84544	42599
20°	215701	72582	31378
25°	209339	59353	22701
30°	181464	45828	16092
35°	140828	32825	11667
40°	83539	20299	7823
45°	38960	11908	4128
50°	20174	7554	2511
55°	14411	5358	1688
60°	11676	3565	982
65°	11124	1528	398
70°	11366	1436	2831
75°	8784	651	651
80°	5576	0	970
85°	3703	1932	1932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	8.3
10°-20°	197.8	23.6
20°-30°	256.4	30.5
30°-40°	195.8	23.3
40°-50°	75.4	9.0
50°-60°	25.2	3.0
60°-70°	12.1	1.4
70°-80°	5.5	0.7
80°-90°	1.4	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°	524.3	62.4
0°-40°	720.1	85.8
0°-60°	820.6	97.7
0°-90°	839.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	839.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	717	717	717	717	717	
5°	924	859	723	615	576	96
15°	1369	1055	582	351	293	387
25°	1352	935	383	185	147	610
35°	822	546	192	85	68	499
45°	196	156	60	30	21	172
55°	59	45	22	7	7	55
65°	34	20	5	1	1	33
75°	16	10	1	1	1	17
85°	2	1	1	1	1	3
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°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9
2.5°	800.1	800.1	801.2	797.7	796.6	794.3	793.1	788.5	786.2	783.9	778.1
5°	923.6	922.4	920.1	916.7	907.4	901.7	893.6	882.0	871.6	858.9	843.9
7.5°	1049.4	1047.1	1043.7	1034.4	1021.7	1007.9	990.5	972.1	950.1	925.9	904.0
10°	1173.0	1169.5	1161.4	1149.9	1130.2	1108.3	1081.8	1051.7	1020.6	985.9	950.1
11°	1220.3	1216.8	1206.4	1193.7	1171.8	1145.2	1115.2	1081.8	1044.8	1006.7	966.3
12°	1263.0	1259.5	1248.0	1231.8	1208.7	1179.9	1145.2	1107.1	1067.9	1024.0	980.2
13°	1303.4	1301.1	1287.2	1267.6	1243.4	1212.2	1174.1	1132.5	1086.4	1039.0	988.2
14°	1339.2	1336.9	1324.2	1301.1	1273.4	1236.5	1197.2	1149.9	1100.2	1049.4	994.0
15°	1369.2	1366.9	1351.9	1327.7	1297.6	1258.4	1214.5	1163.7	1111.8	1055.2	998.6
16°	1394.6	1391.2	1375.0	1350.7	1316.1	1275.7	1228.4	1174.1	1117.5	1056.4	996.3
17°	1415.4	1410.8	1394.6	1368.1	1332.3	1289.6	1239.9	1181.0	1124.5	1059.8	992.9
18°	1432.7	1428.1	1409.6	1383.1	1343.8	1297.6	1245.7	1184.5	1122.2	1056.4	989.4
19°	1440.8	1433.9	1416.5	1387.7	1348.4	1299.9	1245.7	1182.2	1117.5	1049.4	980.2
20°	1444.3	1437.3	1418.9	1388.8	1347.3	1297.6	1241.1	1177.6	1110.6	1040.2	968.6
21°	1437.3	1431.6	1413.1	1380.8	1340.4	1288.4	1230.7	1164.9	1095.6	1025.2	953.6
22°	1425.8	1418.9	1399.2	1368.1	1325.3	1275.7	1215.7	1148.7	1081.8	1006.7	936.3
23°	1406.2	1401.5	1379.6	1348.4	1306.9	1256.1	1194.9	1129.1	1059.8	987.1	915.5
24°	1384.2	1377.3	1356.5	1324.2	1283.8	1230.7	1170.6	1104.8	1034.4	964.0	893.6
25°	1351.9	1346.1	1326.5	1294.2	1252.6	1199.5	1140.6	1074.8	1006.7	935.1	864.7
26°	1317.3	1310.3	1290.7	1257.2	1216.8	1167.2	1108.3	1043.7	976.7	906.3	837.0
27°	1274.5	1267.6	1248.0	1219.1	1178.7	1127.9	1070.2	1009.0	942.1	873.9	807.0
28°	1227.2	1221.4	1203.0	1173.0	1132.5	1082.9	1029.8	972.1	906.3	839.3	773.5
29°	1174.1	1168.3	1151.0	1119.8	1082.9	1036.7	982.5	925.9	864.7	798.9	736.6
30°	1119.8	1114.1	1101.4	1069.1	1034.4	990.5	940.9	882.0	825.5	763.1	701.9
32.5°	983.6	977.8	964.0	938.6	904.0	863.6	819.7	767.7	716.9	661.5	606.1
35°	822.0	817.4	802.4	780.4	753.9	716.9	676.5	635.0	591.1	546.1	501.0
37.5°	636.1	633.8	621.1	602.6	580.7	553.0	523.0	490.7	458.3	426.0	392.5
40°	456.0	454.9	449.1	438.7	420.2	404.1	382.1	363.7	340.6	317.5	294.4
42.5°	304.8	303.6	301.3	293.2	285.2	277.1	265.5	251.7	240.1	226.3	211.3
45°	196.3	195.1	192.8	190.5	187.0	182.4	176.6	170.9	165.1	155.9	147.8
47.5°	131.6	130.5	129.3	127.0	125.8	122.4	117.8	115.4	112.0	107.4	102.7
50°	92.4	93.5	92.4	91.2	88.9	87.7	84.3	82.0	79.7	76.2	72.7
52.5°	72.7	73.9	71.6	71.6	68.1	65.8	64.7	62.3	60.0	58.9	53.1
55°	58.9	58.9	57.7	56.6	55.4	54.3	52.0	49.6	47.3	45.0	42.7
57.5°	48.5	48.5	47.3	46.2	47.3	45.0	41.6	40.4	40.4	34.6	34.6
60°	41.6	42.7	41.6	41.6	39.3	38.1	36.9	34.6	32.3	30.0	27.7
62.5°	38.1	38.1	36.9	36.9	36.9	36.9	31.2	31.2	27.7	25.4	23.1
65°	33.5	32.3	31.2	31.2	28.9	27.7	25.4	24.2	23.1	19.6	17.3
67.5°	28.9	28.9	28.9	27.7	25.4	25.4	23.1	19.6	18.5	17.3	16.2
70°	27.7	27.7	25.4	25.4	23.1	20.8	20.8	18.5	16.2	16.2	12.7
72.5°	20.8	20.8	19.6	18.5	18.5	16.2	13.9	12.7	12.7	10.4	9.2
75°	16.2	16.2	16.2	16.2	12.7	12.7	11.5	11.5	9.2	10.4	5.8
77.5°	11.5	11.5	11.5	10.4	9.2	9.2	8.1	6.9	6.9	5.8	5.8
80°	6.9	6.9	8.1	5.8	6.9	8.1	5.8	5.8	5.8	3.5	4.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
82.5°	3.5	4.6	3.5	4.6	3.5	3.5	3.5	3.5	2.3	2.3	1.2
85°	2.3	3.5	3.5	3.5	2.3	1.2	2.3	2.3	2.3	1.2	1.2
87.5°	1.2	0.0	0.0	0.0	1.2	1.2	0.0	1.2	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°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9
2.5°	772.3	768.9	764.3	757.3	752.7	747.0	740.0	735.4	712.3	689.2	678.8
5°	830.1	815.1	801.2	785.0	768.9	755.0	740.0	722.7	661.5	615.3	584.2
7.5°	878.6	852.0	825.5	798.9	774.7	749.3	722.7	699.6	604.9	540.3	502.2
10°	914.4	876.3	838.2	802.4	766.6	733.1	699.6	667.3	548.4	469.9	427.2
11°	925.9	883.2	840.5	800.1	762.0	722.7	685.8	652.3	526.4	445.6	401.8
12°	932.8	886.6	839.3	795.4	752.7	714.6	673.1	637.3	505.7	420.2	374.1
13°	937.4	886.6	837.0	788.5	743.5	699.6	659.2	618.8	482.6	396.0	351.0
14°	940.9	886.6	833.5	782.7	733.1	685.8	643.0	602.6	459.5	374.1	329.0
15°	938.6	880.9	824.3	770.0	718.1	670.8	623.4	581.9	437.5	351.0	307.1
16°	936.3	875.1	815.1	756.2	703.1	652.3	604.9	562.2	413.3	326.7	285.2
17°	928.2	864.7	802.4	743.5	686.9	633.8	585.3	542.6	392.5	308.2	266.7
18°	922.4	855.5	790.8	729.6	671.9	618.8	569.2	525.3	375.2	293.2	250.5
19°	910.9	841.6	778.1	713.5	654.6	599.2	550.7	503.4	354.4	273.6	236.7
20°	898.2	828.9	760.8	697.3	637.3	580.7	532.2	486.0	336.0	257.4	219.4
21°	880.9	809.3	742.3	677.7	617.6	561.1	510.3	464.1	318.6	241.3	205.5
22°	861.2	790.8	722.7	658.1	595.7	541.5	488.3	443.3	300.2	225.1	190.5
23°	841.6	768.9	700.8	636.1	576.1	520.7	468.7	424.8	282.8	212.4	178.9
24°	820.8	747.0	678.8	614.2	554.2	498.7	450.2	402.9	266.7	197.4	166.2
25°	793.1	721.6	653.4	589.9	531.1	475.6	427.2	383.3	249.4	184.7	154.7
26°	766.6	697.3	629.2	568.0	509.1	454.9	407.5	364.8	234.4	173.2	145.5
27°	737.7	668.4	603.8	543.8	486.0	434.1	386.8	344.0	218.2	160.5	135.1
28°	705.4	639.6	577.2	519.5	461.8	411.0	366.0	324.4	204.3	150.1	124.7
29°	670.8	608.4	546.1	490.7	435.2	385.6	342.9	301.3	187.0	136.2	113.1
30°	639.6	579.6	520.7	462.9	411.0	362.5	318.6	282.8	173.2	125.8	106.2
32.5°	551.8	497.6	443.3	394.8	348.7	304.8	267.8	235.5	143.2	105.1	90.0
35°	456.0	411.0	364.8	323.3	285.2	251.7	219.4	191.6	117.8	85.4	72.7
37.5°	356.7	322.1	288.6	256.3	225.1	196.3	170.9	148.9	90.0	67.0	58.9
40°	269.0	244.8	220.5	195.1	170.9	148.9	130.5	110.8	69.3	53.1	47.3
42.5°	195.1	177.8	160.5	143.2	124.7	108.5	93.5	82.0	53.1	40.4	33.5
45°	137.4	127.0	114.3	101.6	87.7	76.2	68.1	60.0	41.6	30.0	23.1
47.5°	97.0	91.2	82.0	71.6	62.3	56.6	49.6	45.0	33.5	23.1	16.2
50°	69.3	63.5	58.9	50.8	47.3	42.7	39.3	34.6	24.2	17.3	12.7
52.5°	52.0	47.3	45.0	38.1	35.8	33.5	30.0	27.7	17.3	11.5	8.1
55°	39.3	36.9	33.5	30.0	27.7	25.4	23.1	21.9	12.7	6.9	5.8
57.5°	31.2	27.7	26.6	23.1	20.8	18.5	19.6	16.2	11.5	4.6	3.5
60°	26.6	24.2	19.6	18.5	16.2	15.0	13.9	12.7	6.9	4.6	3.5
62.5°	20.8	19.6	16.2	15.0	13.9	11.5	11.5	10.4	4.6	3.5	3.5
65°	15.0	13.9	11.5	10.4	10.4	8.1	6.9	4.6	2.3	1.2	0.0
67.5°	13.9	10.4	11.5	9.2	6.9	5.8	4.6	5.8	2.3	2.3	2.3
70°	11.5	10.4	9.2	9.2	5.8	5.8	4.6	3.5	2.3	2.3	2.3
72.5°	8.1	6.9	5.8	3.5	3.5	2.3	3.5	1.2	1.2	1.2	1.2
75°	5.8	4.6	5.8	4.6	3.5	2.3	5.8	1.2	1.2	1.2	1.2
77.5°	4.6	3.5	2.3	2.3	1.2	2.3	1.2	1.2	1.2	0.0	1.2
80°	6.9	4.6	2.3	1.2	1.2	3.5	4.6	0.0	4.6	1.2	1.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
82.5°	2.3	1.2	1.2	0.0	0.0	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	0.0	1.2	1.2	1.2	2.3	3.5	1.2	2.3	1.2	1.2
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°	716.9
2.5°	673.1
5°	576.1
7.5°	488.3
10°	412.2
11°	385.6
12°	360.2
13°	336.0
14°	316.3
15°	293.2
16°	272.5
17°	254.0
18°	239.0
19°	225.1
20°	210.1
21°	194.0
22°	180.1
23°	168.6
24°	158.2
25°	146.6
26°	137.4
27°	128.1
28°	118.9
29°	107.4
30°	99.3
32.5°	83.1
35°	68.1
37.5°	55.4
40°	42.7
42.5°	31.2
45°	20.8
47.5°	18.5
50°	11.5
52.5°	10.4
55°	6.9
57.5°	2.3
60°	3.5
62.5°	2.3
65°	1.2
67.5°	1.2
70°	6.9
72.5°	1.2
75°	1.2
77.5°	0.0
80°	1.2



TEST NUMBER: P108836

CATALOG NUMBER: PN3LED12NFL25840-E3LWWH

CANDELA DISTRIBUTION (continued):

	180°
82.5°	0.0
85°	1.2
87.5°	0.0
90°	0.0

(END OF REPORT)