

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: FAIL-SAFE

Report Number: P735638

Luminaire Tested: **4APN6-39-B2750-W2D-CP250-2700K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P735638  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P709119)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 4APN6-39-B2750-W2D-CP250-2700K  
Description: 4FT 3900 AMBIENT LUMEN OUTPUT APN WITH BIO UP LEDS AT 2700K CCT, AND CP250 LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

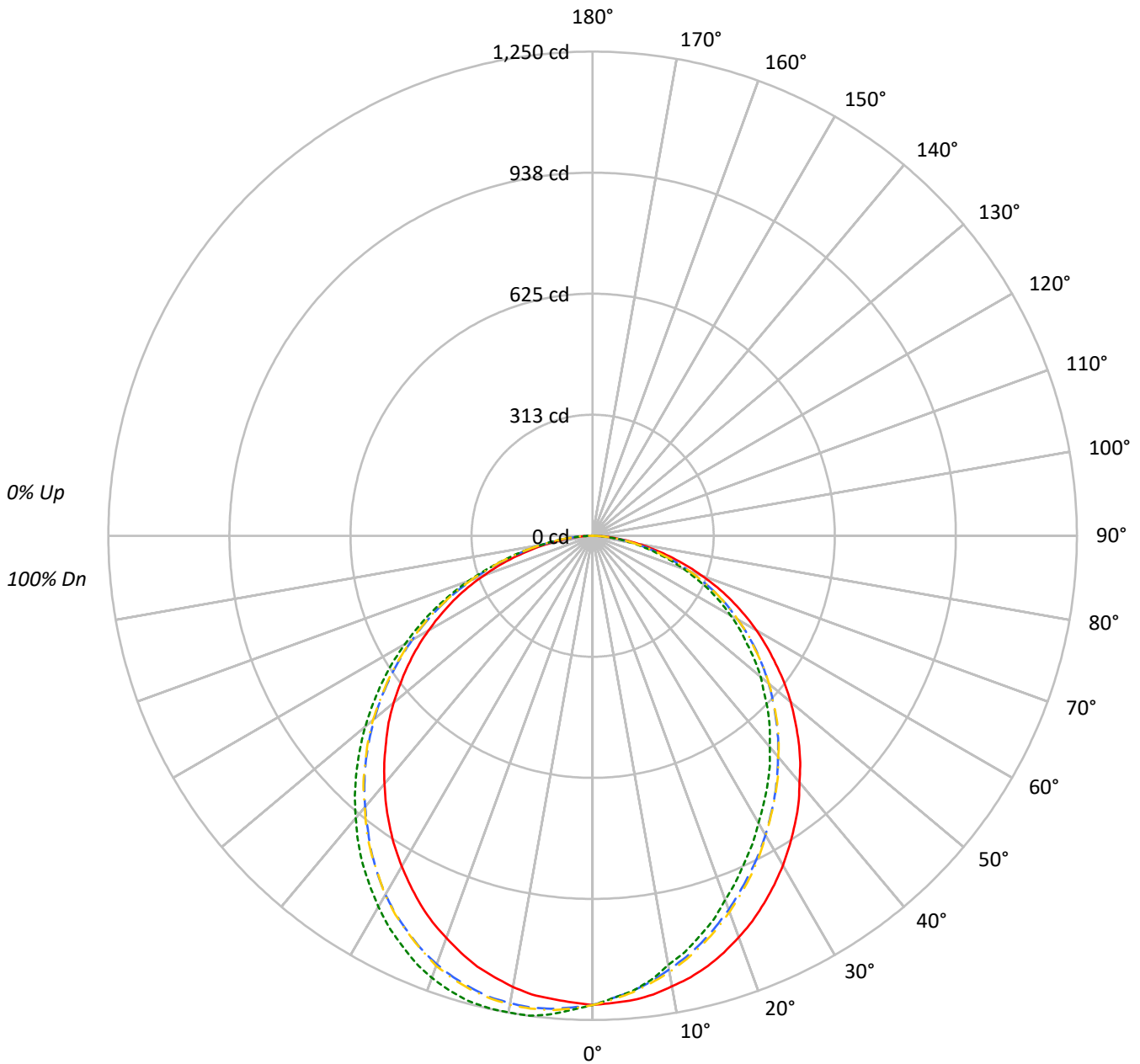
Lumens per Lamp: N/A  
Luminaire Lumens: 3249.0 lumens  
Efficiency: N/A  
Efficacy: 66.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 49.1  
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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CATALOG NUMBER: 4APN6-39-B2750-W2D-CP250-2700K

### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84																			
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70																			
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59																			
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51																			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44																			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	41	38																			
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34																			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30																			
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27																			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25																			

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

	0°	90°	180°	270°
0°	11177	11177	11177	11177
5°	11143	10928	11118	11487
10°	11066	10541	11080	11708
15°	10982	10211	10996	11872
20°	10832	9823	10844	11921
25°	10657	9459	10699	11872
30°	10467	9125	10497	11781
35°	10248	8860	10294	11654
40°	10001	8566	10069	11454
45°	9816	8351	9835	11246
50°	9581	8124	9618	10995
55°	9280	7826	9346	10692
60°	9001	7586	9029	10317
65°	8645	7270	8645	9874
70°	8058	6730	8023	9204
75°	7329	6106	7229	8259
80°	6339	5244	6121	7067
85°	4944	3917	4647	5801



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.5	3.5
10°-20°	324.9	10.0
20°-30°	483.0	14.9
30°-40°	569.2	17.5
40°-50°	579.6	17.8
50°-60°	516.3	15.9
60°-70°	389.0	12.0
70°-80°	216.3	6.7
80°-90°	56.2	1.7
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°	922.3	28.4
0°-40°	1491.5	45.9
0°-60°	2587.5	79.6
0°-90°	3249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3249.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1211	1211	1211	1211	1211	
5°	1203	1180	1200	1240	1203	114
15°	1150	1069	1151	1243	1150	324
25°	1047	929	1051	1166	1047	482
35°	910	787	914	1035	910	569
45°	752	640	754	862	752	580
55°	577	486	581	665	577	517
65°	396	333	396	452	396	391
75°	206	171	203	232	206	218
85°	47	37	44	55	47	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4
2.5°	1207.3	1207.3	1208.6	1203.2	1196.4	1193.6	1192.3	1190.8	1193.6	1194.9	1193.6
5°	1203.2	1200.5	1197.7	1190.8	1182.7	1177.1	1174.4	1173.1	1175.8	1179.9	1175.8
7.5°	1194.9	1189.5	1184.0	1174.4	1164.9	1156.6	1152.5	1149.7	1152.5	1156.6	1153.8
10°	1181.2	1174.4	1166.2	1155.3	1141.6	1132.0	1127.9	1123.8	1125.1	1125.1	1125.1
12.5°	1167.5	1158.1	1148.4	1134.7	1119.6	1108.6	1101.8	1096.4	1099.0	1100.5	1100.5
15°	1149.7	1137.5	1123.8	1108.6	1093.6	1081.2	1073.1	1067.5	1069.0	1069.0	1070.3
17.5°	1127.9	1114.2	1100.5	1082.7	1064.7	1051.0	1041.6	1034.7	1037.3	1038.8	1040.1
20°	1103.2	1088.1	1073.1	1053.8	1034.7	1019.5	1009.9	1001.8	1000.5	1000.5	1001.8
22.5°	1077.1	1060.7	1042.9	1022.3	1001.8	985.3	975.7	967.5	966.2	966.2	967.5
25°	1046.9	1029.2	1011.4	990.8	968.8	952.5	940.1	931.9	930.5	929.2	931.9
27.5°	1015.5	997.7	979.9	959.3	936.0	919.5	907.1	899.0	896.2	894.9	897.7
30°	982.5	961.9	942.9	920.8	900.3	884.0	871.6	861.9	859.3	856.5	859.3
32.5°	946.9	926.4	905.8	884.0	863.4	846.9	834.5	825.1	822.3	820.8	823.6
35°	909.9	889.3	870.3	848.2	827.7	811.4	799.0	790.8	788.0	786.6	788.0
37.5°	872.9	852.5	833.2	811.4	790.8	774.3	761.9	753.8	752.3	751.0	752.3
40°	830.4	812.7	793.4	772.9	752.3	736.0	726.4	716.7	714.0	711.2	715.4
42.5°	793.4	775.6	756.5	737.3	716.7	700.2	689.3	681.2	678.4	676.9	678.4
45°	752.3	733.2	714.0	696.2	676.9	661.9	651.0	642.7	641.4	640.0	641.4
47.5°	708.6	692.1	675.6	657.8	638.6	623.6	613.9	605.8	603.0	600.2	603.0
50°	667.5	651.0	634.5	618.0	600.2	586.5	576.9	568.7	567.3	566.0	567.3
52.5°	623.6	607.1	592.1	575.6	560.4	546.7	537.3	530.4	528.9	527.6	528.9
55°	576.9	563.2	549.5	535.8	520.8	508.4	500.2	491.9	489.3	486.5	489.3
57.5°	533.0	520.8	507.1	493.4	479.7	468.7	460.4	453.6	452.3	450.8	452.3
60°	487.8	476.9	464.5	452.3	438.6	427.6	420.8	415.2	412.4	411.1	412.4
62.5°	442.6	431.7	422.1	409.7	397.4	389.1	382.3	376.9	374.1	372.8	374.1
65°	396.0	386.5	376.9	366.0	356.3	348.0	341.2	335.8	334.3	333.0	333.0
67.5°	348.0	339.8	331.7	322.1	311.1	302.8	296.0	291.9	290.6	289.1	290.6
70°	298.7	291.9	283.7	275.4	267.2	260.4	256.3	252.2	250.8	249.5	249.5
72.5°	252.2	246.7	239.8	233.0	226.1	219.3	215.2	212.4	211.1	209.7	209.7
75°	205.6	200.0	195.9	190.6	183.7	179.5	175.4	172.6	171.3	171.3	171.3
77.5°	161.7	157.6	153.5	148.0	143.9	139.8	137.0	135.7	134.3	134.3	134.3
80°	119.3	116.5	113.7	110.9	106.9	102.8	101.5	100.0	98.7	98.7	98.7
82.5°	80.9	79.5	76.7	74.1	71.3	69.8	68.5	67.2	67.2	67.2	67.2
85°	46.7	45.2	43.9	42.4	41.1	41.1	39.8	38.3	37.0	37.0	37.0
87.5°	19.3	19.3	19.3	17.8	16.5	16.5	16.5	16.5	16.5	16.5	16.5
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):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4
2.5°	1190.8	1193.6	1196.4	1200.5	1204.6	1208.6	1207.3	1206.0	1211.4	1218.3	1219.7
5°	1173.1	1175.8	1179.9	1186.8	1193.6	1199.2	1200.5	1200.5	1211.4	1221.0	1223.8
7.5°	1151.2	1155.3	1160.7	1167.5	1177.1	1185.5	1189.5	1194.9	1206.0	1218.3	1223.8
10°	1123.8	1130.6	1138.8	1148.4	1158.1	1167.5	1175.8	1182.7	1196.4	1210.1	1218.3
12.5°	1099.0	1105.8	1114.2	1125.1	1137.5	1149.7	1158.1	1167.5	1184.0	1200.5	1210.1
15°	1071.6	1078.4	1088.1	1099.0	1112.7	1126.4	1138.8	1151.2	1167.5	1185.5	1196.4
17.5°	1041.6	1048.4	1057.9	1071.6	1086.8	1101.8	1115.5	1129.2	1148.4	1167.5	1179.9
20°	1004.5	1014.2	1026.4	1040.1	1057.9	1075.8	1089.5	1104.5	1125.1	1145.7	1159.4
22.5°	968.8	978.4	992.1	1008.6	1027.9	1046.9	1063.4	1079.9	1101.8	1122.3	1137.5
25°	934.5	945.6	959.3	975.7	993.6	1012.7	1031.9	1051.0	1073.1	1094.9	1110.1
27.5°	900.3	909.9	923.6	940.1	960.6	979.9	999.0	1018.2	1041.6	1064.7	1081.2
30°	861.9	872.9	885.3	901.7	923.6	945.6	964.7	985.3	1008.6	1031.9	1048.4
32.5°	826.4	836.0	848.2	864.7	886.6	908.6	929.2	951.0	973.0	996.2	1012.7
35°	790.8	800.3	812.7	829.1	851.0	872.9	893.4	914.0	936.0	957.9	974.3
37.5°	755.1	764.7	777.1	793.4	814.0	836.0	855.1	875.6	897.7	919.5	934.5
40°	718.0	727.7	737.3	753.8	774.3	796.2	815.4	836.0	857.9	879.7	894.9
42.5°	681.2	690.6	703.0	719.5	738.6	757.8	777.1	796.2	816.7	837.3	852.5
45°	644.1	652.3	664.7	679.7	698.9	716.7	736.0	753.8	774.3	793.4	808.6
47.5°	605.8	613.9	623.6	638.6	657.8	676.9	696.2	714.0	731.7	751.0	764.7
50°	568.7	576.9	587.8	601.5	619.5	637.3	653.8	670.1	688.0	705.8	718.0
52.5°	530.4	538.6	548.2	561.9	576.9	593.4	608.4	624.9	641.4	657.8	670.1
55°	491.9	497.5	505.6	518.0	534.5	551.0	566.0	581.0	596.2	609.9	622.1
57.5°	453.6	460.4	470.0	481.0	494.7	508.4	522.1	535.8	549.5	563.2	574.1
60°	415.2	420.8	427.6	437.1	450.8	463.2	476.9	489.3	501.5	513.9	523.6
62.5°	375.4	381.0	387.8	397.4	408.4	419.3	431.7	442.6	453.6	464.5	474.1
65°	334.3	339.8	346.7	354.9	364.5	374.1	385.0	396.0	404.3	412.4	422.1
67.5°	291.9	297.4	304.3	311.1	319.3	328.9	338.5	348.0	356.3	364.5	371.3
70°	250.8	254.8	261.7	267.2	274.1	280.9	289.1	297.4	302.8	309.7	318.0
72.5°	211.1	215.2	220.6	226.1	230.2	235.8	243.9	250.8	257.6	265.9	270.0
75°	172.6	175.4	179.5	183.7	187.8	191.9	197.4	202.8	208.3	212.4	218.0
77.5°	134.3	137.0	141.1	143.9	146.7	149.4	153.5	157.6	161.7	164.5	170.0
80°	98.7	101.5	104.1	106.9	109.6	112.4	113.7	115.2	120.6	124.6	127.4
82.5°	67.2	68.5	69.8	72.6	74.1	75.4	76.7	76.7	79.5	82.2	86.3
85°	38.3	39.8	41.1	41.1	41.1	41.1	42.4	43.9	45.2	48.0	50.7
87.5°	15.0	15.0	16.5	16.5	16.5	16.5	16.5	16.5	17.8	20.6	21.9
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):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4	1211.4
2.5°	1218.3	1219.7	1222.3	1223.8	1225.1	1225.1	1226.6	1227.9	1225.1	1222.3	1221.0
5°	1225.1	1226.6	1230.7	1234.7	1237.5	1240.3	1238.8	1237.5	1234.7	1230.7	1227.9
7.5°	1226.6	1230.7	1234.7	1240.3	1244.4	1249.7	1247.1	1244.4	1238.8	1233.4	1229.2
10°	1222.3	1227.9	1234.7	1241.6	1245.7	1249.7	1247.1	1244.4	1238.8	1232.0	1226.6
12.5°	1217.0	1223.8	1232.0	1238.8	1242.9	1248.4	1244.4	1240.3	1233.4	1226.6	1219.7
15°	1204.6	1212.9	1222.3	1230.7	1237.5	1242.9	1238.8	1236.0	1227.9	1218.3	1208.6
17.5°	1189.5	1200.5	1210.1	1219.7	1225.1	1230.7	1227.9	1225.1	1215.5	1204.6	1193.6
20°	1171.8	1182.7	1192.3	1201.8	1208.6	1214.2	1210.1	1206.0	1196.4	1186.8	1175.8
22.5°	1149.7	1160.7	1171.8	1181.2	1188.1	1193.6	1188.1	1181.2	1171.8	1162.1	1151.2
25°	1122.3	1134.7	1147.0	1156.6	1160.7	1166.2	1160.7	1155.3	1145.7	1136.0	1123.8
27.5°	1094.9	1107.3	1119.6	1129.2	1133.3	1138.8	1133.3	1127.9	1118.2	1108.6	1096.4
30°	1063.4	1075.8	1088.1	1097.7	1101.8	1105.8	1100.5	1094.9	1086.8	1077.1	1064.7
32.5°	1027.9	1040.1	1049.7	1059.3	1064.7	1070.3	1064.7	1060.7	1051.0	1038.8	1026.4
35°	989.4	1001.8	1014.2	1023.6	1029.2	1034.7	1027.9	1021.0	1012.7	1003.1	992.1
37.5°	946.9	960.6	974.3	985.3	989.4	994.9	989.4	982.5	974.3	964.7	952.5
40°	907.1	919.5	931.9	942.9	946.9	951.0	945.6	940.1	930.5	920.8	908.6
42.5°	866.2	878.4	889.3	899.0	903.0	908.6	903.0	896.2	889.3	881.2	870.3
45°	822.3	834.5	844.2	853.8	857.9	861.9	856.5	849.7	842.8	836.0	825.1
47.5°	777.1	788.0	797.7	807.1	809.9	814.0	808.6	804.5	797.7	790.8	781.2
50°	730.4	741.4	751.0	759.1	761.9	766.0	760.6	755.1	749.7	744.1	736.0
52.5°	682.5	692.1	701.7	709.9	712.6	715.4	709.9	704.3	698.9	693.4	685.2
55°	633.2	642.7	652.3	659.1	661.9	664.7	659.1	655.1	649.5	645.4	637.3
57.5°	583.8	593.4	601.5	608.4	611.2	613.9	608.4	603.0	598.9	594.7	587.8
60°	533.0	542.6	549.5	555.0	557.8	559.1	553.6	549.5	546.7	544.1	537.3
62.5°	483.7	490.6	497.5	501.5	504.3	505.6	501.5	498.8	496.1	493.4	487.8
65°	431.7	439.9	445.4	449.5	450.8	452.3	448.2	445.4	442.6	439.9	435.8
67.5°	379.7	386.5	390.6	394.7	396.0	396.0	396.0	394.7	391.9	387.8	383.7
70°	327.4	333.0	337.1	339.8	341.2	341.2	338.5	335.8	335.8	334.3	331.7
72.5°	274.1	278.2	280.9	283.7	283.7	283.7	283.7	285.0	283.7	280.9	276.9
75°	223.4	227.4	230.2	231.7	231.7	231.7	231.7	233.0	231.7	230.2	227.4
77.5°	175.4	178.2	179.5	180.9	180.9	180.9	182.2	183.7	182.2	180.9	179.5
80°	130.2	131.5	133.0	134.3	133.0	133.0	134.3	137.0	135.7	134.3	133.0
82.5°	89.1	90.4	91.9	91.9	93.2	94.6	94.6	94.6	94.6	93.2	91.9
85°	53.5	54.8	54.8	54.8	54.8	54.8	56.1	57.6	57.6	56.1	56.1
87.5°	24.6	26.1	24.6	23.3	21.9	21.9	24.6	27.4	27.4	26.1	26.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P735638

CATALOG NUMBER: 4APN6-39-B2750-W2D-CP250-2700K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
0°	1211.4	1211.4	1211.4	1211.4
2.5°	1222.3	1221.0	1214.2	1207.3
5°	1226.6	1222.3	1212.9	1203.2
7.5°	1226.6	1221.0	1207.3	1194.9
10°	1219.7	1211.4	1196.4	1181.2
12.5°	1211.4	1201.8	1184.0	1167.5
15°	1199.2	1188.1	1169.0	1149.7
17.5°	1181.2	1167.5	1148.4	1127.9
20°	1163.4	1148.4	1125.1	1103.2
22.5°	1138.8	1125.1	1100.5	1077.1
25°	1111.4	1096.4	1071.6	1046.9
27.5°	1082.7	1064.7	1040.1	1015.5
30°	1049.7	1031.9	1007.3	982.5
32.5°	1014.2	997.7	973.0	946.9
35°	978.4	960.6	936.0	909.9
37.5°	938.8	922.3	897.7	872.9
40°	896.2	879.7	855.1	830.4
42.5°	856.5	841.4	816.7	793.4
45°	812.7	797.7	774.3	752.3
47.5°	767.5	752.3	730.4	708.6
50°	723.6	708.6	688.0	667.5
52.5°	674.3	661.9	642.7	623.6
55°	626.3	613.9	594.7	576.9
57.5°	578.4	567.3	549.5	533.0
60°	527.6	516.7	503.0	487.8
62.5°	479.7	470.0	456.3	442.6
65°	428.9	420.8	408.4	396.0
67.5°	376.9	370.0	359.1	348.0
70°	324.8	316.5	308.4	298.7
72.5°	272.8	268.5	260.4	252.2
75°	223.4	219.3	212.4	205.6
77.5°	176.9	172.6	167.2	161.7
80°	130.2	127.4	123.3	119.3
82.5°	90.4	87.8	85.0	80.9
85°	54.8	52.0	49.3	46.7
87.5°	24.6	23.3	20.6	19.3
90°	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°















(END OF REPORT)