

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: P735614

Luminaire Tested: **4APN6-34-B2750-W2D-3000K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P735614
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: 4APN6-34-B2750-W2D-3000K
Description: 4FT 3400 AMBIENT LUMEN OUTPUT APN WITH BIO UP LEDS AT 3000K CCT

Light Source: -
Ballast/Driver: -

Summary

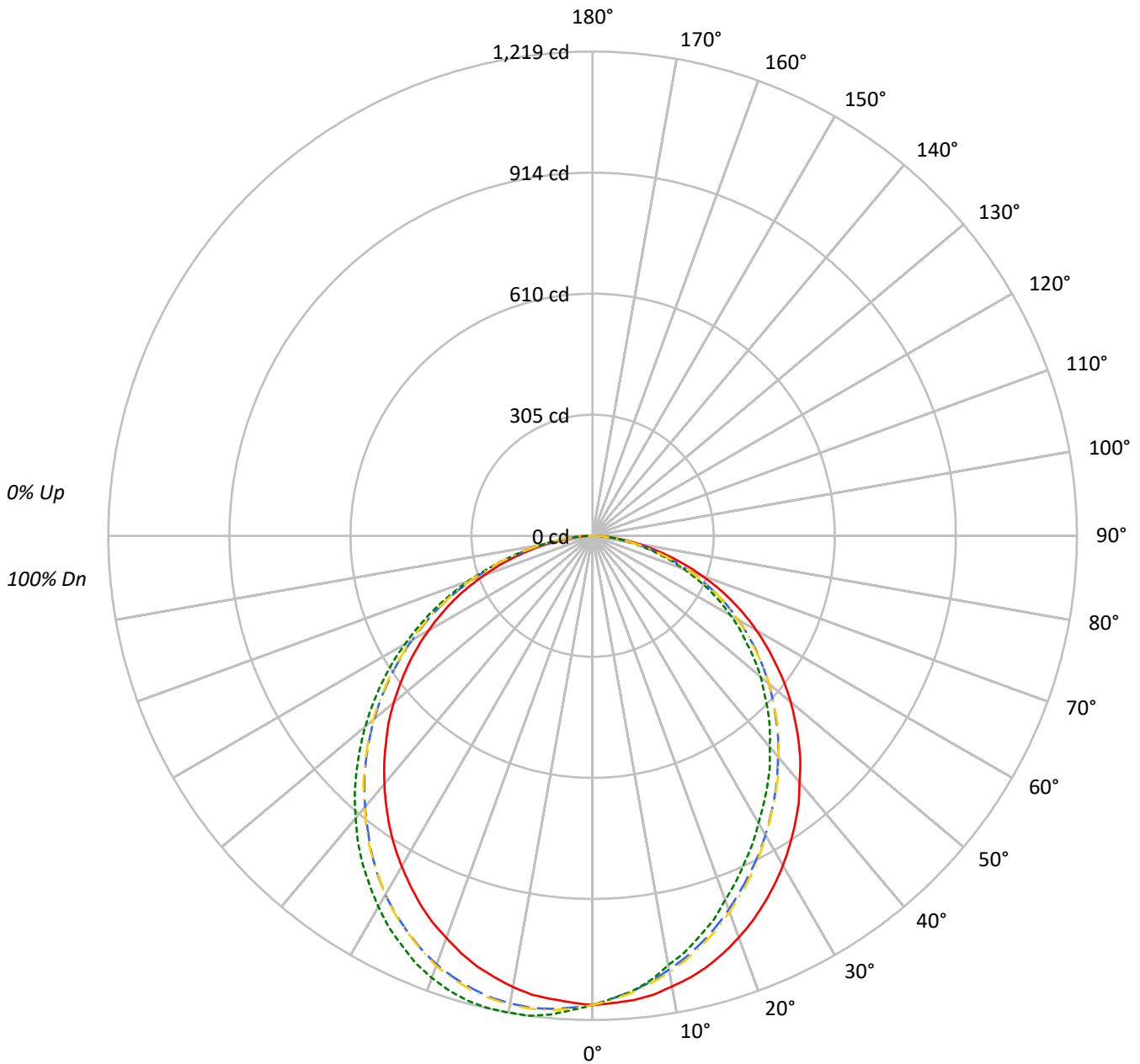
Lumens per Lamp: N/A
Luminaire Lumens: 3169.0 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 42.7
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									
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°	10902	10902	10902	10902
5°	10869	10659	10844	11204
10°	10793	10281	10808	11420
15°	10711	9960	10726	11579
20°	10565	9581	10577	11628
25°	10396	9226	10436	11580
30°	10209	8901	10238	11491
35°	9996	8641	10041	11367
40°	9756	8355	9821	11172
45°	9574	8146	9593	10969
50°	9344	7923	9381	10723
55°	9051	7633	9116	10428
60°	8780	7399	8805	10064
65°	8431	7091	8431	9630
70°	7861	6563	7826	8977
75°	7147	5957	7051	8056
80°	6179	5117	5967	6891
85°	4817	3822	4531	5663



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	3.5
10°-20°	316.9	10.0
20°-30°	471.1	14.9
30°-40°	555.2	17.5
40°-50°	565.3	17.8
50°-60°	503.6	15.9
60°-70°	379.4	12.0
70°-80°	211.0	6.7
80°-90°	54.8	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°	899.6	28.4
0°-40°	1454.8	45.9
0°-60°	2523.7	79.6
0°-90°	3169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3169.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1182	1182	1182	1182	1182	
5°	1174	1151	1171	1210	1174	111
15°	1121	1043	1123	1212	1121	316
25°	1021	906	1025	1138	1021	470
35°	888	767	892	1009	888	555
45°	734	624	735	841	734	565
55°	563	474	567	648	563	504
65°	386	325	386	441	386	381
75°	200	167	198	226	200	213
85°	46	36	43	54	46	55
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°	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6
2.5°	1177.6	1177.6	1178.9	1173.6	1166.9	1164.2	1163.0	1161.5	1164.2	1165.5	1164.2
5°	1173.6	1170.9	1168.2	1161.5	1153.6	1148.2	1145.5	1144.2	1146.9	1150.9	1146.9
7.5°	1165.5	1160.3	1154.8	1145.5	1136.2	1128.1	1124.1	1121.4	1124.1	1128.1	1125.4
10°	1152.1	1145.5	1137.5	1126.8	1113.5	1104.1	1100.1	1096.1	1097.4	1097.4	1097.4
12.5°	1138.8	1129.5	1120.2	1106.8	1092.0	1081.3	1074.6	1069.4	1071.9	1073.4	1073.4
15°	1121.4	1109.5	1096.1	1081.3	1066.7	1054.6	1046.6	1041.2	1042.7	1042.7	1043.9
17.5°	1100.1	1086.7	1073.4	1056.0	1038.5	1025.1	1015.9	1009.2	1011.8	1013.2	1014.5
20°	1076.1	1061.3	1046.6	1027.9	1009.2	994.4	985.0	977.1	975.8	975.8	977.1
22.5°	1050.6	1034.5	1017.2	997.1	977.1	961.0	951.6	943.7	942.4	942.4	943.7
25°	1021.2	1003.8	986.5	966.4	944.9	929.0	916.9	909.0	907.5	906.3	909.0
27.5°	990.5	973.1	955.8	935.7	913.0	896.9	884.8	876.8	874.1	872.9	875.6
30°	958.3	938.3	919.6	898.2	878.1	862.2	850.1	840.7	838.2	835.5	838.2
32.5°	923.6	903.6	883.5	862.2	842.1	826.1	814.0	804.7	802.0	800.6	803.3
35°	887.5	867.4	848.8	827.3	807.3	791.4	779.3	771.3	768.6	767.2	768.6
37.5°	851.4	831.5	812.7	791.4	771.3	755.3	743.2	735.2	733.8	732.5	733.8
40°	810.0	792.7	773.9	753.8	733.8	717.9	708.5	699.1	696.4	693.7	697.8
42.5°	773.9	756.5	737.9	719.1	699.1	683.0	672.3	664.4	661.7	660.3	661.7
45°	733.8	715.2	696.4	679.0	660.3	645.6	634.9	626.8	625.6	624.3	625.6
47.5°	691.1	675.1	659.0	641.6	622.9	608.2	598.8	590.9	588.2	585.5	588.2
50°	651.0	634.9	618.9	602.8	585.5	572.1	562.7	554.7	553.3	552.0	553.3
52.5°	608.2	592.1	577.5	561.4	546.6	533.3	524.0	517.3	515.9	514.6	515.9
55°	562.7	549.3	536.0	522.6	508.0	495.9	487.9	479.8	477.2	474.5	477.2
57.5°	519.9	508.0	494.6	481.2	467.9	457.2	449.1	442.4	441.1	439.7	441.1
60°	475.8	465.2	453.1	441.1	427.8	417.1	410.4	405.0	402.3	401.0	402.3
62.5°	431.7	421.1	411.7	399.6	387.7	379.5	372.9	367.6	364.9	363.6	364.9
65°	386.2	377.0	367.6	356.9	347.6	339.4	332.8	327.5	326.1	324.8	324.8
67.5°	339.4	331.5	323.5	314.1	303.5	295.4	288.7	284.7	283.4	282.0	283.4
70°	291.4	284.7	276.7	268.6	260.7	254.0	250.0	246.0	244.6	243.3	243.3
72.5°	246.0	240.6	233.9	227.2	220.6	213.9	209.9	207.2	205.9	204.5	204.5
75°	200.5	195.1	191.1	185.9	179.2	175.0	171.1	168.4	167.1	167.1	167.1
77.5°	157.7	153.7	149.7	144.3	140.4	136.4	133.7	132.4	131.0	131.0	131.0
80°	116.3	113.6	110.9	108.2	104.2	100.3	99.0	97.5	96.3	96.3	96.3
82.5°	78.9	77.5	74.8	72.2	69.5	68.1	66.8	65.6	65.6	65.6	65.6
85°	45.5	44.1	42.8	41.4	40.1	40.1	38.8	37.4	36.1	36.1	36.1
87.5°	18.8	18.8	18.8	17.3	16.1	16.1	16.1	16.1	16.1	16.1	16.1
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°	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6
2.5°	1161.5	1164.2	1166.9	1170.9	1174.9	1178.9	1177.6	1176.3	1181.6	1188.3	1189.7
5°	1144.2	1146.9	1150.9	1157.5	1164.2	1169.6	1170.9	1170.9	1181.6	1191.0	1193.7
7.5°	1122.9	1126.8	1132.1	1138.8	1148.2	1156.3	1160.3	1165.5	1176.3	1188.3	1193.7
10°	1096.1	1102.8	1110.8	1120.2	1129.5	1138.8	1146.9	1153.6	1166.9	1180.3	1188.3
12.5°	1071.9	1078.6	1086.7	1097.4	1109.5	1121.4	1129.5	1138.8	1154.8	1170.9	1180.3
15°	1045.2	1051.9	1061.3	1071.9	1085.3	1098.7	1110.8	1122.9	1138.8	1156.3	1166.9
17.5°	1015.9	1022.6	1031.8	1045.2	1060.0	1074.6	1088.0	1101.4	1120.2	1138.8	1150.9
20°	979.8	989.2	1001.1	1014.5	1031.8	1049.3	1062.7	1077.3	1097.4	1117.4	1130.8
22.5°	944.9	954.3	967.7	983.8	1002.6	1021.2	1037.2	1053.3	1074.6	1094.7	1109.5
25°	911.5	922.3	935.7	951.6	969.1	987.8	1006.5	1025.1	1046.6	1068.0	1082.8
27.5°	878.1	887.5	900.9	916.9	937.0	955.8	974.4	993.2	1015.9	1038.5	1054.6
30°	840.7	851.4	863.5	879.5	900.9	922.3	941.0	961.0	983.8	1006.5	1022.6
32.5°	806.0	815.4	827.3	843.4	864.7	886.2	906.3	927.6	949.1	971.7	987.8
35°	771.3	780.6	792.7	808.7	830.0	851.4	871.4	891.5	913.0	934.3	950.4
37.5°	736.5	745.9	758.0	773.9	793.9	815.4	834.0	854.1	875.6	896.9	911.5
40°	700.4	709.7	719.1	735.2	755.3	776.6	795.4	815.4	836.7	858.1	872.9
42.5°	664.4	673.6	685.7	701.8	720.4	739.2	758.0	776.6	796.6	816.7	831.5
45°	628.3	636.2	648.3	663.0	681.7	699.1	717.9	735.2	755.3	773.9	788.7
47.5°	590.9	598.8	608.2	622.9	641.6	660.3	679.0	696.4	713.7	732.5	745.9
50°	554.7	562.7	573.4	586.7	604.2	621.6	637.7	653.6	671.1	688.4	700.4
52.5°	517.3	525.3	534.7	548.1	562.7	578.8	593.4	609.5	625.6	641.6	653.6
55°	479.8	485.2	493.2	505.3	521.3	537.4	552.0	566.7	581.5	594.8	606.8
57.5°	442.4	449.1	458.5	469.1	482.5	495.9	509.2	522.6	536.0	549.3	560.0
60°	405.0	410.4	417.1	426.3	439.7	451.8	465.2	477.2	489.2	501.3	510.7
62.5°	366.2	371.6	378.3	387.7	398.3	409.0	421.1	431.7	442.4	453.1	462.4
65°	326.1	331.5	338.2	346.1	355.5	364.9	375.6	386.2	394.3	402.3	411.7
67.5°	284.7	290.1	296.8	303.5	311.4	320.8	330.2	339.4	347.6	355.5	362.2
70°	244.6	248.6	255.3	260.7	267.3	274.0	282.0	290.1	295.4	302.0	310.2
72.5°	205.9	209.9	215.2	220.6	224.5	230.0	237.9	244.6	251.3	259.4	263.4
75°	168.4	171.1	175.0	179.2	183.2	187.1	192.6	197.8	203.2	207.2	212.6
77.5°	131.0	133.7	137.7	140.4	143.1	145.8	149.7	153.7	157.7	160.4	165.8
80°	96.3	99.0	101.5	104.2	106.9	109.6	110.9	112.3	117.6	121.6	124.3
82.5°	65.6	66.8	68.1	70.8	72.2	73.5	74.8	74.8	77.5	80.2	84.2
85°	37.4	38.8	40.1	40.1	40.1	40.1	41.4	42.8	44.1	46.8	49.5
87.5°	14.6	14.6	16.1	16.1	16.1	16.1	16.1	16.1	17.3	20.1	21.3
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°	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6	1181.6
2.5°	1188.3	1189.7	1192.2	1193.7	1194.9	1194.9	1196.4	1197.7	1194.9	1192.2	1191.0
5°	1194.9	1196.4	1200.4	1204.3	1207.0	1209.7	1208.3	1207.0	1204.3	1200.4	1197.7
7.5°	1196.4	1200.4	1204.3	1209.7	1213.7	1219.0	1216.4	1213.7	1208.3	1203.1	1198.9
10°	1192.2	1197.7	1204.3	1211.0	1215.0	1219.0	1216.4	1213.7	1208.3	1201.6	1196.4
12.5°	1187.0	1193.7	1201.6	1208.3	1212.3	1217.7	1213.7	1209.7	1203.1	1196.4	1189.7
15°	1174.9	1183.0	1192.2	1200.4	1207.0	1212.3	1208.3	1205.6	1197.7	1188.3	1178.9
17.5°	1160.3	1170.9	1180.3	1189.7	1194.9	1200.4	1197.7	1194.9	1185.6	1174.9	1164.2
20°	1142.9	1153.6	1163.0	1172.2	1178.9	1184.3	1180.3	1176.3	1166.9	1157.5	1146.9
22.5°	1121.4	1132.1	1142.9	1152.1	1158.8	1164.2	1158.8	1152.1	1142.9	1133.5	1122.9
25°	1094.7	1106.8	1118.7	1128.1	1132.1	1137.5	1132.1	1126.8	1117.4	1108.1	1096.1
27.5°	1068.0	1080.0	1092.0	1101.4	1105.4	1110.8	1105.4	1100.1	1090.7	1081.3	1069.4
30°	1037.2	1049.3	1061.3	1070.7	1074.6	1078.6	1073.4	1068.0	1060.0	1050.6	1038.5
32.5°	1002.6	1014.5	1023.9	1033.3	1038.5	1043.9	1038.5	1034.5	1025.1	1013.2	1001.1
35°	965.0	977.1	989.2	998.4	1003.8	1009.2	1002.6	995.9	987.8	978.4	967.7
37.5°	923.6	937.0	950.4	961.0	965.0	970.4	965.0	958.3	950.4	941.0	929.0
40°	884.8	896.9	909.0	919.6	923.6	927.6	922.3	916.9	907.5	898.2	886.2
42.5°	844.8	856.8	867.4	876.8	880.8	886.2	880.8	874.1	867.4	859.5	848.8
45°	802.0	814.0	823.4	832.8	836.7	840.7	835.5	828.8	822.1	815.4	804.7
47.5°	758.0	768.6	778.0	787.2	789.9	793.9	788.7	784.7	778.0	771.3	761.9
50°	712.4	723.1	732.5	740.5	743.2	747.1	741.9	736.5	731.2	725.8	717.9
52.5°	665.7	675.1	684.4	692.4	695.1	697.8	692.4	687.0	681.7	676.3	668.4
55°	617.6	626.8	636.2	642.9	645.6	648.3	642.9	638.9	633.5	629.5	621.6
57.5°	569.4	578.8	586.7	593.4	596.1	598.8	593.4	588.2	584.2	580.0	573.4
60°	519.9	529.3	536.0	541.4	544.1	545.4	539.9	536.0	533.3	530.7	524.0
62.5°	471.8	478.5	485.2	489.2	491.9	493.2	489.2	486.5	483.9	481.2	475.8
65°	421.1	429.0	434.4	438.4	439.7	441.1	437.1	434.4	431.7	429.0	425.0
67.5°	370.3	377.0	381.0	384.9	386.2	386.2	386.2	384.9	382.2	378.3	374.3
70°	319.4	324.8	328.8	331.5	332.8	332.8	330.2	327.5	327.5	326.1	323.5
72.5°	267.3	271.3	274.0	276.7	276.7	276.7	276.7	278.0	276.7	274.0	270.1
75°	217.9	221.8	224.5	226.0	226.0	226.0	226.0	227.2	226.0	224.5	221.8
77.5°	171.1	173.8	175.0	176.5	176.5	176.5	177.8	179.2	177.8	176.5	175.0
80°	127.0	128.3	129.7	131.0	129.7	129.7	131.0	133.7	132.4	131.0	129.7
82.5°	86.9	88.2	89.6	89.6	90.9	92.3	92.3	92.3	92.3	90.9	89.6
85°	52.2	53.5	53.5	53.5	53.5	53.5	54.7	56.2	56.2	54.7	54.7
87.5°	24.0	25.5	24.0	22.8	21.3	21.3	24.0	26.7	26.7	25.5	25.5
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: P735614

CATALOG NUMBER: 4APN6-34-B2750-W2D-3000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1181.6	1181.6	1181.6	1181.6
2.5°	1192.2	1191.0	1184.3	1177.6
5°	1196.4	1192.2	1183.0	1173.6
7.5°	1196.4	1191.0	1177.6	1165.5
10°	1189.7	1181.6	1166.9	1152.1
12.5°	1181.6	1172.2	1154.8	1138.8
15°	1169.6	1158.8	1140.2	1121.4
17.5°	1152.1	1138.8	1120.2	1100.1
20°	1134.8	1120.2	1097.4	1076.1
22.5°	1110.8	1097.4	1073.4	1050.6
25°	1084.0	1069.4	1045.2	1021.2
27.5°	1056.0	1038.5	1014.5	990.5
30°	1023.9	1006.5	982.5	958.3
32.5°	989.2	973.1	949.1	923.6
35°	954.3	937.0	913.0	887.5
37.5°	915.7	899.6	875.6	851.4
40°	874.1	858.1	834.0	810.0
42.5°	835.5	820.7	796.6	773.9
45°	792.7	778.0	755.3	733.8
47.5°	748.6	733.8	712.4	691.1
50°	705.8	691.1	671.1	651.0
52.5°	657.7	645.6	626.8	608.2
55°	610.9	598.8	580.0	562.7
57.5°	564.1	553.3	536.0	519.9
60°	514.6	504.0	490.6	475.8
62.5°	467.9	458.5	445.1	431.7
65°	418.4	410.4	398.3	386.2
67.5°	367.6	360.9	350.3	339.4
70°	316.8	308.7	300.8	291.4
72.5°	266.1	261.9	254.0	246.0
75°	217.9	213.9	207.2	200.5
77.5°	172.5	168.4	163.1	157.7
80°	127.0	124.3	120.3	116.3
82.5°	88.2	85.6	82.9	78.9
85°	53.5	50.8	48.1	45.5
87.5°	24.0	22.8	20.1	18.8
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)