

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: P735626

Luminaire Tested: **4APN6-34-B2750-W2D-CP250-4000K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P735626
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-CP250-4000K
Description: 4FT 3400 AMBIENT LUMEN OUTPUT APN WITH BIO UP LEDS AT 4000K CCT, AND CP250 LENS

Light Source: -
Ballast/Driver: -

Summary

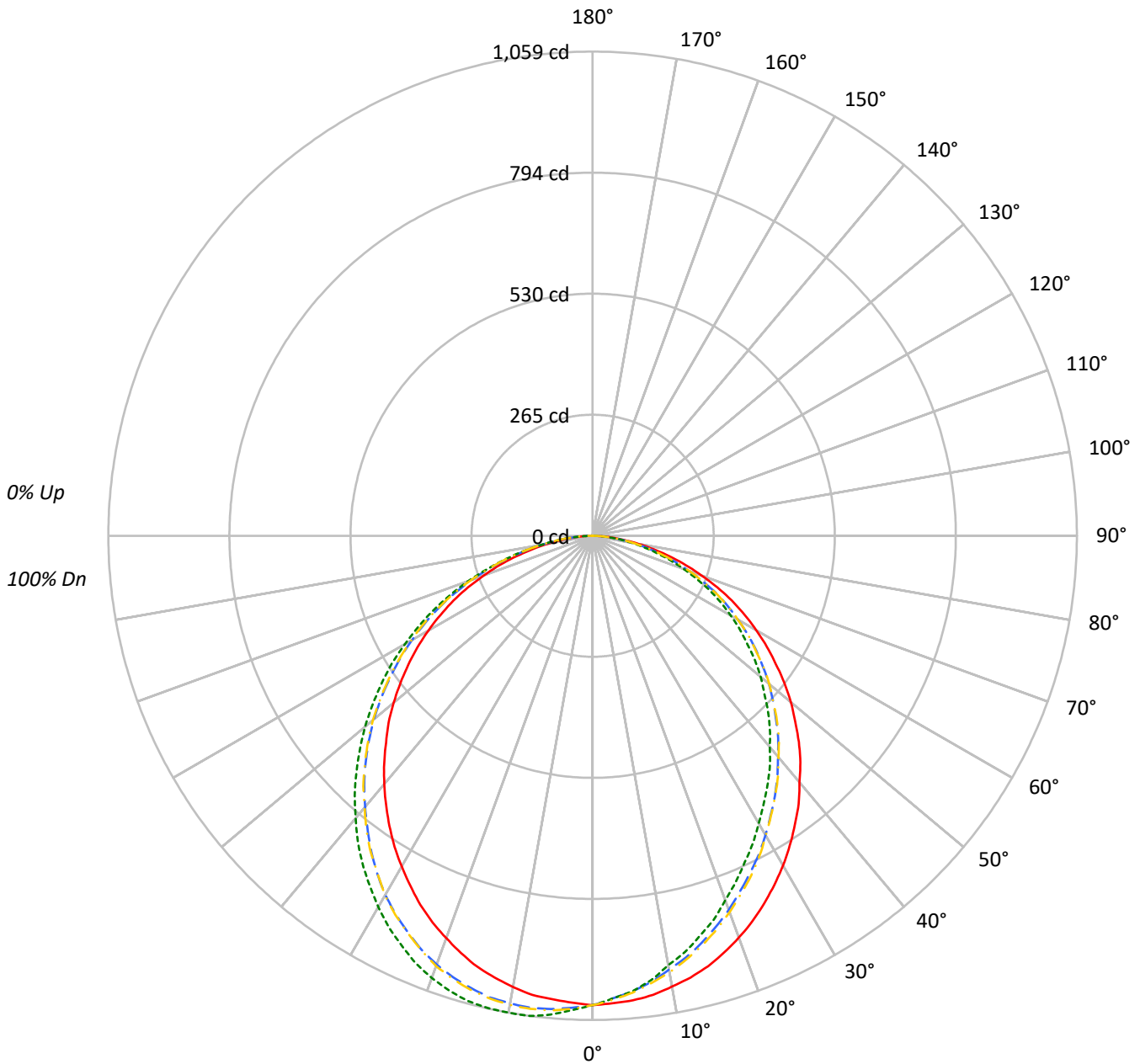
Lumens per Lamp: N/A
Luminaire Lumens: 2754.0 lumens
Efficiency: N/A
Efficacy: 64.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 42.7
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P735626

CATALOG NUMBER: 4APN6-34-B2750-W2D-CP250-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P735626

CATALOG NUMBER: 4APN6-34-B2750-W2D-CP250-4000K

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°	9473	9473	9473	9473
5°	9446	9263	9424	9737
10°	9381	8935	9392	9924
15°	9309	8655	9321	10063
20°	9182	8326	9193	10105
25°	9034	8018	9069	10063
30°	8872	7736	8898	9987
35°	8687	7509	8726	9879
40°	8478	7260	8534	9709
45°	8321	7078	8336	9533
50°	8121	6885	8153	9320
55°	7866	6634	7922	9063
60°	7630	6431	7652	8745
65°	7327	6163	7327	8370
70°	6830	5705	6801	7801
75°	6213	5176	6128	7001
80°	5372	4447	5186	5988
85°	4192	3324	3938	4922



TEST NUMBER: P735626

CATALOG NUMBER: 4APN6-34-B2750-W2D-CP250-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	3.5
10°-20°	275.4	10.0
20°-30°	409.4	14.9
30°-40°	482.5	17.5
40°-50°	491.3	17.8
50°-60°	437.7	15.9
60°-70°	329.7	12.0
70°-80°	183.4	6.7
80°-90°	47.7	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°	781.8	28.4
0°-40°	1264.3	45.9
0°-60°	2193.2	79.6
0°-90°	2754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2754.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1027	1027	1027	1027	1027	
5°	1020	1000	1018	1051	1020	97
15°	975	906	976	1054	975	275
25°	887	788	891	988	887	409
35°	771	667	775	877	771	483
45°	638	542	639	731	638	491
55°	489	412	492	563	489	438
65°	336	282	336	383	336	331
75°	174	145	172	196	174	185
85°	40	31	37	46	40	48
90°	0	0	0	0	0	



TEST NUMBER: P735626

CATALOG NUMBER: 4APN6-34-B2750-W2D-CP250-4000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8
2.5°	1023.4	1023.4	1024.5	1019.9	1014.1	1011.8	1010.7	1009.4	1011.8	1012.9	1011.8
5°	1019.9	1017.6	1015.2	1009.4	1002.5	997.8	995.5	994.3	996.7	1000.2	996.7
7.5°	1012.9	1008.3	1003.6	995.5	987.4	980.4	976.9	974.6	976.9	980.4	978.0
10°	1001.3	995.5	988.5	979.3	967.7	959.5	956.0	952.6	953.7	953.7	953.7
12.5°	989.6	981.6	973.5	961.8	949.0	939.7	933.9	929.3	931.6	932.8	932.8
15°	974.6	964.2	952.6	939.7	927.0	916.5	909.6	904.9	906.1	906.1	907.2
17.5°	956.0	944.4	932.8	917.7	902.5	890.9	882.9	877.1	879.3	880.5	881.6
20°	935.2	922.3	909.6	893.2	877.1	864.2	856.0	849.1	848.0	848.0	849.1
22.5°	913.0	899.1	884.0	866.6	849.1	835.2	827.0	820.1	819.0	819.0	820.1
25°	887.4	872.4	857.3	839.9	821.2	807.4	796.9	789.9	788.7	787.6	789.9
27.5°	860.8	845.7	830.6	813.2	793.4	779.4	768.9	762.0	759.7	758.6	760.9
30°	832.8	815.4	799.2	780.5	763.1	749.3	738.8	730.6	728.4	726.1	728.4
32.5°	802.7	785.2	767.8	749.3	731.9	717.9	707.4	699.4	697.0	695.8	698.1
35°	771.3	753.8	737.7	719.0	701.6	687.7	677.2	670.3	668.0	666.7	668.0
37.5°	739.9	722.6	706.3	687.7	670.3	656.3	645.8	638.9	637.7	636.6	637.7
40°	703.9	688.8	672.5	655.1	637.7	623.9	615.7	607.5	605.2	602.8	606.4
42.5°	672.5	657.5	641.3	625.0	607.5	593.6	584.3	577.4	575.0	573.8	575.0
45°	637.7	621.5	605.2	590.1	573.8	561.1	551.8	544.7	543.6	542.5	543.6
47.5°	600.6	586.6	572.7	557.6	541.3	528.6	520.4	513.5	511.1	508.8	511.1
50°	565.8	551.8	537.8	523.9	508.8	497.2	489.0	482.1	480.9	479.7	480.9
52.5°	528.6	514.6	501.9	487.9	475.0	463.4	455.4	449.6	448.4	447.2	448.4
55°	489.0	477.4	465.8	454.2	441.4	430.9	424.0	417.0	414.7	412.4	414.7
57.5°	451.8	441.4	429.8	418.2	406.6	397.3	390.3	384.5	383.4	382.1	383.4
60°	413.5	404.2	393.7	383.4	371.7	362.5	356.7	352.0	349.6	348.5	349.6
62.5°	375.2	365.9	357.8	347.3	336.9	329.8	324.0	319.5	317.1	316.0	317.1
65°	335.6	327.6	319.5	310.2	302.0	295.0	289.2	284.6	283.4	282.3	282.3
67.5°	295.0	288.1	281.2	273.0	263.7	256.7	250.9	247.4	246.3	245.1	246.3
70°	253.2	247.4	240.5	233.4	226.5	220.7	217.3	213.8	212.6	211.5	211.5
72.5°	213.8	209.1	203.3	197.5	191.7	185.9	182.4	180.1	179.0	177.7	177.7
75°	174.3	169.6	166.1	161.5	155.7	152.1	148.7	146.3	145.2	145.2	145.2
77.5°	137.1	133.6	130.1	125.4	122.0	118.5	116.2	115.1	113.8	113.8	113.8
80°	101.1	98.7	96.4	94.0	90.6	87.1	86.0	84.8	83.7	83.7	83.7
82.5°	68.6	67.3	65.0	62.8	60.4	59.2	58.1	57.0	57.0	57.0	57.0
85°	39.6	38.3	37.2	36.0	34.9	34.9	33.7	32.5	31.4	31.4	31.4
87.5°	16.3	16.3	16.3	15.1	14.0	14.0	14.0	14.0	14.0	14.0	14.0
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: P735626

CATALOG NUMBER: 4APN6-34-B2750-W2D-CP250-4000K

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8
2.5°	1009.4	1011.8	1014.1	1017.6	1021.0	1024.5	1023.4	1022.3	1026.8	1032.7	1033.9
5°	994.3	996.7	1000.2	1006.0	1011.8	1016.5	1017.6	1017.6	1026.8	1035.0	1037.4
7.5°	975.8	979.3	983.8	989.6	997.8	1004.9	1008.3	1012.9	1022.3	1032.7	1037.4
10°	952.6	958.4	965.3	973.5	981.6	989.6	996.7	1002.5	1014.1	1025.7	1032.7
12.5°	931.6	937.4	944.4	953.7	964.2	974.6	981.6	989.6	1003.6	1017.6	1025.7
15°	908.3	914.1	922.3	931.6	943.2	954.8	965.3	975.8	989.6	1004.9	1014.1
17.5°	882.9	888.7	896.7	908.3	921.2	933.9	945.5	957.1	973.5	989.6	1000.2
20°	851.5	859.6	870.0	881.6	896.7	911.9	923.5	936.3	953.7	971.1	982.7
22.5°	821.2	829.4	841.0	854.9	871.3	887.4	901.4	915.4	933.9	951.3	964.2
25°	792.2	801.6	813.2	827.0	842.2	858.4	874.7	890.9	909.6	928.1	941.0
27.5°	763.1	771.3	782.9	796.9	814.3	830.6	846.8	863.1	882.9	902.5	916.5
30°	730.6	739.9	750.4	764.4	782.9	801.6	817.7	835.2	854.9	874.7	888.7
32.5°	700.5	708.6	719.0	733.0	751.5	770.2	787.6	806.1	824.8	844.4	858.4
35°	670.3	678.3	688.8	702.8	721.3	739.9	757.3	774.7	793.4	811.9	825.9
37.5°	640.0	648.2	658.7	672.5	690.0	708.6	724.8	742.2	760.9	779.4	792.2
40°	608.6	616.8	625.0	638.9	656.3	674.9	691.2	708.6	727.2	745.7	758.6
42.5°	577.4	585.4	595.9	609.9	626.1	642.4	658.7	674.9	692.3	709.7	722.6
45°	546.0	552.9	563.4	576.1	592.5	607.5	623.9	638.9	656.3	672.5	685.4
47.5°	513.5	520.4	528.6	541.3	557.6	573.8	590.1	605.2	620.3	636.6	648.2
50°	482.1	489.0	498.3	509.9	525.1	540.2	554.1	568.0	583.2	598.3	608.6
52.5°	449.6	456.5	464.7	476.3	489.0	503.0	515.7	529.7	543.6	557.6	568.0
55°	417.0	421.7	428.6	439.1	453.1	467.0	479.7	492.5	505.3	516.9	527.3
57.5°	384.5	390.3	398.4	407.7	419.3	430.9	442.5	454.2	465.8	477.4	486.7
60°	352.0	356.7	362.5	370.5	382.1	392.6	404.2	414.7	425.1	435.6	443.8
62.5°	318.2	322.9	328.7	336.9	346.2	355.4	365.9	375.2	384.5	393.7	401.9
65°	283.4	288.1	293.9	300.8	309.0	317.1	326.4	335.6	342.7	349.6	357.8
67.5°	247.4	252.1	257.9	263.7	270.6	278.8	287.0	295.0	302.0	309.0	314.8
70°	212.6	216.0	221.8	226.5	232.3	238.1	245.1	252.1	256.7	262.5	269.5
72.5°	179.0	182.4	187.0	191.7	195.1	199.8	206.8	212.6	218.4	225.4	228.9
75°	146.3	148.7	152.1	155.7	159.2	162.6	167.3	171.9	176.6	180.1	184.8
77.5°	113.8	116.2	119.6	122.0	124.3	126.7	130.1	133.6	137.1	139.4	144.1
80°	83.7	86.0	88.2	90.6	92.9	95.3	96.4	97.6	102.2	105.7	108.0
82.5°	57.0	58.1	59.2	61.5	62.8	63.9	65.0	65.0	67.3	69.7	73.2
85°	32.5	33.7	34.9	34.9	34.9	34.9	36.0	37.2	38.3	40.7	43.0
87.5°	12.7	12.7	14.0	14.0	14.0	14.0	14.0	14.0	15.1	17.4	18.5
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: P735626

CATALOG NUMBER: 4APN6-34-B2750-W2D-CP250-4000K

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8
2.5°	1032.7	1033.9	1036.1	1037.4	1038.5	1038.5	1039.7	1040.8	1038.5	1036.1	1035.0
5°	1038.5	1039.7	1043.2	1046.6	1049.0	1051.3	1050.1	1049.0	1046.6	1043.2	1040.8
7.5°	1039.7	1043.2	1046.6	1051.3	1054.8	1059.3	1057.1	1054.8	1050.1	1045.5	1041.9
10°	1036.1	1040.8	1046.6	1052.4	1055.9	1059.3	1057.1	1054.8	1050.1	1044.3	1039.7
12.5°	1031.5	1037.4	1044.3	1050.1	1053.5	1058.2	1054.8	1051.3	1045.5	1039.7	1033.9
15°	1021.0	1028.1	1036.1	1043.2	1049.0	1053.5	1050.1	1047.7	1040.8	1032.7	1024.5
17.5°	1008.3	1017.6	1025.7	1033.9	1038.5	1043.2	1040.8	1038.5	1030.3	1021.0	1011.8
20°	993.2	1002.5	1010.7	1018.7	1024.5	1029.2	1025.7	1022.3	1014.1	1006.0	996.7
22.5°	974.6	983.8	993.2	1001.3	1007.1	1011.8	1007.1	1001.3	993.2	985.1	975.8
25°	951.3	961.8	972.2	980.4	983.8	988.5	983.8	979.3	971.1	963.0	952.6
27.5°	928.1	938.6	949.0	957.1	960.6	965.3	960.6	956.0	947.9	939.7	929.3
30°	901.4	911.9	922.3	930.5	933.9	937.4	932.8	928.1	921.2	913.0	902.5
32.5°	871.3	881.6	889.8	898.0	902.5	907.2	902.5	899.1	890.9	880.5	870.0
35°	838.6	849.1	859.6	867.7	872.4	877.1	871.3	865.5	858.4	850.2	841.0
37.5°	802.7	814.3	825.9	835.2	838.6	843.3	838.6	832.8	825.9	817.7	807.4
40°	768.9	779.4	789.9	799.2	802.7	806.1	801.6	796.9	788.7	780.5	770.2
42.5°	734.2	744.6	753.8	762.0	765.5	770.2	765.5	759.7	753.8	746.9	737.7
45°	697.0	707.4	715.5	723.7	727.2	730.6	726.1	720.2	714.4	708.6	699.4
47.5°	658.7	668.0	676.1	684.1	686.5	690.0	685.4	681.9	676.1	670.3	662.2
50°	619.1	628.4	636.6	643.5	645.8	649.3	644.7	640.0	635.5	630.8	623.9
52.5°	578.5	586.6	594.8	601.7	604.1	606.4	601.7	597.0	592.5	587.8	580.8
55°	536.7	544.7	552.9	558.7	561.1	563.4	558.7	555.3	550.6	547.1	540.2
57.5°	494.8	503.0	509.9	515.7	518.1	520.4	515.7	511.1	507.7	504.1	498.3
60°	451.8	460.0	465.8	470.5	472.8	473.9	469.2	465.8	463.4	461.2	455.4
62.5°	410.0	415.9	421.7	425.1	427.5	428.6	425.1	422.8	420.6	418.2	413.5
65°	365.9	372.8	377.5	381.0	382.1	383.4	379.9	377.5	375.2	372.8	369.4
67.5°	321.8	327.6	331.1	334.5	335.6	335.6	335.6	334.5	332.2	328.7	325.3
70°	277.6	282.3	285.7	288.1	289.2	289.2	287.0	284.6	284.6	283.4	281.2
72.5°	232.3	235.8	238.1	240.5	240.5	240.5	240.5	241.6	240.5	238.1	234.7
75°	189.3	192.8	195.1	196.4	196.4	196.4	196.4	197.5	196.4	195.1	192.8
77.5°	148.7	151.0	152.1	153.4	153.4	153.4	154.5	155.7	154.5	153.4	152.1
80°	110.4	111.5	112.7	113.8	112.7	112.7	113.8	116.2	115.1	113.8	112.7
82.5°	75.5	76.6	77.9	77.9	79.0	80.2	80.2	80.2	80.2	79.0	77.9
85°	45.4	46.5	46.5	46.5	46.5	46.5	47.6	48.8	48.8	47.6	47.6
87.5°	20.9	22.1	20.9	19.8	18.5	18.5	20.9	23.2	23.2	22.1	22.1
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: P735626

CATALOG NUMBER: 4APN6-34-B2750-W2D-CP250-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1026.8	1026.8	1026.8	1026.8
2.5°	1036.1	1035.0	1029.2	1023.4
5°	1039.7	1036.1	1028.1	1019.9
7.5°	1039.7	1035.0	1023.4	1012.9
10°	1033.9	1026.8	1014.1	1001.3
12.5°	1026.8	1018.7	1003.6	989.6
15°	1016.5	1007.1	990.9	974.6
17.5°	1001.3	989.6	973.5	956.0
20°	986.2	973.5	953.7	935.2
22.5°	965.3	953.7	932.8	913.0
25°	942.1	929.3	908.3	887.4
27.5°	917.7	902.5	881.6	860.8
30°	889.8	874.7	853.8	832.8
32.5°	859.6	845.7	824.8	802.7
35°	829.4	814.3	793.4	771.3
37.5°	795.8	781.8	760.9	739.9
40°	759.7	745.7	724.8	703.9
42.5°	726.1	713.2	692.3	672.5
45°	688.8	676.1	656.3	637.7
47.5°	650.5	637.7	619.1	600.6
50°	613.3	600.6	583.2	565.8
52.5°	571.6	561.1	544.7	528.6
55°	530.9	520.4	504.1	489.0
57.5°	490.3	480.9	465.8	451.8
60°	447.2	438.0	426.4	413.5
62.5°	406.6	398.4	386.8	375.2
65°	363.6	356.7	346.2	335.6
67.5°	319.5	313.7	304.4	295.0
70°	275.3	268.3	261.4	253.2
72.5°	231.2	227.6	220.7	213.8
75°	189.3	185.9	180.1	174.3
77.5°	149.9	146.3	141.8	137.1
80°	110.4	108.0	104.6	101.1
82.5°	76.6	74.4	72.1	68.6
85°	46.5	44.1	41.8	39.6
87.5°	20.9	19.8	17.4	16.3
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)