

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: PORTFOLIO

Report Number: P843525

Luminaire Tested: **LD4C25DE010B35 EU4C25B35 4LBLWWLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843525
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C25DE010B35 EU4C25B35 4LBLWWLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

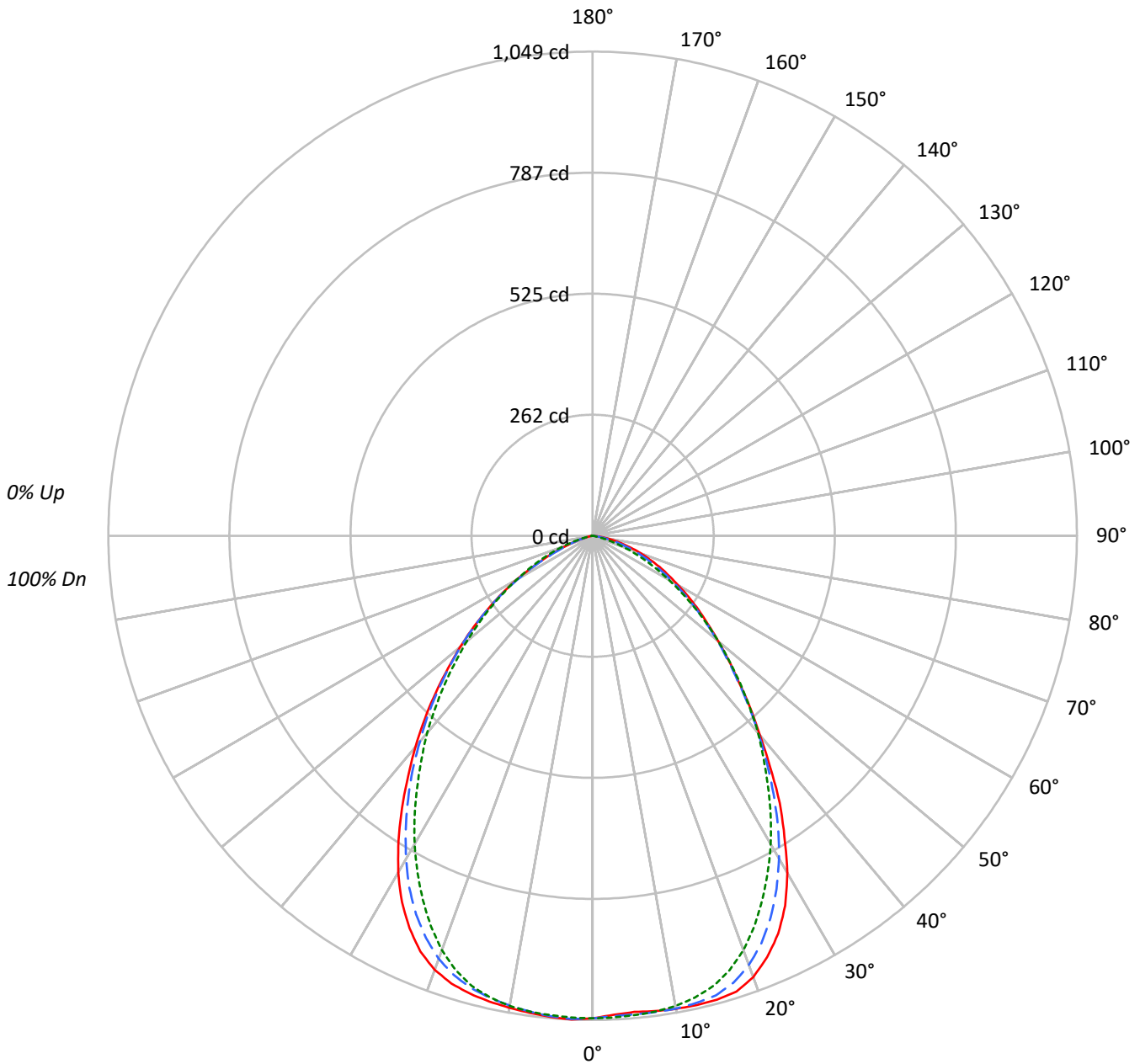
Lumens per Lamp: N/A
Luminaire Lumens: 2004.2 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 29.8
Input Voltage (V):
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				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			89
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78			78
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68			68
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60			60
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54			54
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48			48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43			43
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39			39
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36			36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33			33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	128431	128431	128431
5°	127701	128576	129057
10°	129826	129040	129527
15°	132364	128459	130621
20°	133026	124868	130816
25°	128925	117918	127177
30°	119672	109430	119459
35°	105973	99269	107968
40°	90339	89408	95759
45°	77610	78496	83413
50°	67754	67907	71500
55°	59866	57338	59287
60°	52458	46783	46586
65°	46453	36279	32296
70°	39620	24964	19181
75°	32040	13386	8734
80°	21932	3396	2264
85°	6766	987	987



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	5.0
10°-20°	287.6	14.4
20°-30°	415.6	20.7
30°-40°	429.6	21.4
40°-50°	355.0	17.7
50°-60°	245.0	12.2
60°-70°	128.3	6.4
70°-80°	40.4	2.0
80°-90°	3.4	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°	802.5	40.0
0°-40°	1232.2	61.5
0°-60°	1832.1	91.4
0°-90°	2004.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1045	1045	1045	1045	1045	
5°	1036	1041	1043	1045	1046	99
15°	1041	1031	1010	1015	1027	294
25°	951	913	870	905	938	434
35°	707	683	662	696	720	439
45°	447	445	452	473	480	348
55°	280	271	268	275	277	251
65°	160	145	125	104	111	158
75°	68	53	28	19	18	72
85°	5	2	1	1	1	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4
2.5°	1038.7	1039.1	1039.1	1039.9	1039.9	1039.9	1040.3	1040.3	1040.7	1041.0	1041.5
5°	1035.5	1035.5	1036.4	1036.8	1037.5	1038.0	1038.7	1039.1	1039.9	1040.3	1040.7
7.5°	1038.7	1038.7	1039.1	1039.5	1039.5	1039.9	1039.9	1040.3	1040.7	1041.0	1041.0
10°	1040.7	1040.7	1040.7	1040.7	1041.0	1041.0	1041.0	1040.7	1040.7	1040.7	1040.3
12.5°	1041.5	1041.5	1041.0	1040.7	1041.0	1040.7	1040.7	1039.5	1038.7	1038.0	1036.8
15°	1040.7	1040.7	1040.3	1039.9	1039.5	1038.7	1038.3	1036.4	1034.8	1032.5	1030.9
17.5°	1035.5	1034.8	1034.0	1033.2	1031.6	1030.5	1029.7	1026.1	1023.4	1019.5	1015.1
20°	1017.5	1016.7	1015.5	1013.6	1011.6	1010.0	1007.7	1002.6	999.9	994.0	989.6
22.5°	988.0	987.3	987.7	984.1	980.2	977.9	976.3	972.0	967.3	959.8	955.1
25°	951.1	948.8	948.8	943.3	941.4	939.8	937.8	932.7	925.6	919.0	912.7
27.5°	903.3	900.2	898.6	897.8	893.1	889.6	886.8	882.9	877.0	871.1	862.5
30°	843.6	843.3	841.2	837.8	834.2	832.7	829.5	822.8	817.3	813.0	807.5
32.5°	773.3	772.9	772.9	772.9	770.6	770.2	765.5	761.9	757.7	751.0	747.4
35°	706.6	706.2	706.6	700.7	699.2	697.9	697.6	695.2	689.4	686.2	683.0
37.5°	631.2	632.5	631.6	630.0	632.0	628.4	631.2	626.1	623.8	622.9	619.5
40°	563.3	566.5	563.3	563.7	565.7	562.1	562.1	561.4	559.8	559.0	558.2
42.5°	505.2	501.3	503.6	501.7	503.6	502.5	500.5	501.7	502.1	500.5	500.2
45°	446.7	447.5	448.3	447.2	447.2	446.0	449.1	447.2	447.2	447.5	444.7
47.5°	399.3	398.1	398.8	398.1	398.4	397.7	398.4	398.8	398.1	398.1	395.7
50°	354.5	353.7	356.4	354.1	354.1	353.7	354.1	353.4	352.1	352.1	352.9
52.5°	315.6	314.0	313.7	315.6	312.8	312.8	313.3	312.5	310.9	310.1	308.2
55°	279.5	279.1	279.5	277.9	277.1	277.1	275.2	274.4	274.0	272.0	270.9
57.5°	245.8	244.5	244.9	244.5	243.0	242.6	241.0	241.0	239.4	237.9	236.0
60°	213.5	213.5	214.7	213.1	211.9	211.2	210.4	209.6	206.9	204.1	201.8
62.5°	184.9	185.3	184.9	183.7	183.0	182.1	181.4	179.1	176.6	175.0	172.3
65°	159.8	159.4	158.2	157.4	155.5	155.5	153.9	152.7	150.0	147.6	144.9
67.5°	133.9	133.1	133.1	133.1	130.7	130.3	129.6	127.2	124.8	121.7	119.3
70°	110.3	111.1	109.9	108.7	107.6	107.1	106.0	103.6	100.9	97.7	95.8
72.5°	87.9	88.7	87.6	87.1	84.8	84.0	83.7	81.6	78.5	76.6	73.4
75°	67.5	67.9	67.2	66.3	64.7	64.4	62.4	60.8	58.9	55.7	53.0
77.5°	48.7	47.9	47.9	46.3	44.7	44.7	44.3	42.0	39.2	36.9	34.6
80°	31.0	30.7	29.4	28.7	27.5	27.1	26.7	24.7	22.7	21.2	19.7
82.5°	15.7	15.3	14.9	14.5	13.7	12.9	13.3	11.7	11.0	9.4	8.2
85°	4.8	5.1	5.1	4.8	4.3	4.3	4.3	3.9	3.2	2.7	2.3
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4
2.5°	1041.9	1042.3	1042.6	1043.0	1043.0	1043.5	1043.8	1044.2	1044.6	1044.6	1045.0
5°	1041.0	1041.9	1041.9	1042.3	1042.3	1042.3	1042.6	1042.6	1042.6	1042.6	1043.0
7.5°	1041.5	1041.5	1041.5	1041.0	1041.0	1040.7	1040.7	1040.7	1039.9	1039.9	1039.9
10°	1039.5	1039.1	1038.7	1038.0	1037.5	1037.1	1036.4	1035.5	1034.8	1034.4	1033.6
12.5°	1035.5	1034.0	1032.5	1030.9	1030.1	1029.7	1028.1	1027.0	1025.8	1024.6	1023.8
15°	1027.7	1025.4	1022.6	1019.5	1018.7	1017.9	1015.1	1012.8	1011.2	1010.0	1008.1
17.5°	1012.0	1007.3	1004.2	999.5	997.5	996.7	992.4	990.1	987.3	986.6	985.0
20°	984.1	979.8	974.0	969.6	967.3	964.9	961.4	958.2	955.1	955.1	953.1
22.5°	949.2	943.7	936.2	930.7	930.4	925.6	922.6	919.0	917.8	915.5	915.5
25°	905.2	900.6	892.3	887.6	885.2	884.1	879.0	874.2	871.9	869.9	871.5
27.5°	856.6	849.5	843.3	837.3	835.4	833.0	828.3	826.3	822.0	821.7	821.3
30°	800.8	793.8	787.5	784.8	780.9	778.8	775.4	772.9	771.4	771.4	770.6
32.5°	742.4	736.0	732.9	727.0	725.1	722.4	719.9	717.6	718.3	717.6	718.0
35°	679.1	677.5	671.7	668.1	668.1	667.8	663.9	662.3	661.4	661.9	663.9
37.5°	619.0	614.4	610.5	608.0	610.0	607.7	607.3	607.3	609.6	608.0	611.2
40°	555.0	554.7	553.1	553.9	554.3	551.6	552.3	552.7	554.3	557.5	557.8
42.5°	499.3	499.0	499.0	499.0	498.1	496.6	498.1	500.9	500.5	502.9	504.8
45°	445.6	444.7	446.3	445.2	447.5	448.3	447.2	447.9	450.2	451.8	455.0
47.5°	396.5	396.5	396.9	397.7	395.3	397.2	398.1	399.7	400.8	401.6	403.2
50°	350.9	350.9	350.2	350.2	350.2	351.3	349.8	351.8	352.1	355.3	357.3
52.5°	308.9	307.0	308.2	307.3	305.8	305.0	305.8	306.2	308.5	309.4	311.7
55°	269.0	269.0	265.8	264.9	266.2	265.8	265.4	265.4	266.5	267.7	269.7
57.5°	233.5	231.2	228.9	228.4	227.3	227.7	227.7	227.3	226.5	226.9	227.3
60°	200.2	198.6	195.1	195.1	194.7	194.3	192.4	192.0	190.0	190.4	188.8
62.5°	169.5	168.8	164.0	162.6	162.6	161.4	159.4	159.0	156.2	156.2	154.6
65°	142.1	139.7	137.0	134.2	134.2	132.7	131.5	128.0	126.0	124.8	122.5
67.5°	117.0	113.5	110.7	108.3	106.8	106.4	103.6	101.3	98.1	96.1	92.6
70°	92.6	89.9	87.1	84.8	83.2	81.6	78.9	75.4	73.0	69.5	67.2
72.5°	69.9	67.5	65.2	62.0	60.1	58.9	56.2	53.0	49.1	46.7	43.6
75°	50.2	47.5	44.3	41.6	40.4	39.2	36.1	33.7	31.0	28.2	25.2
77.5°	32.6	29.4	27.1	23.9	23.6	22.7	19.7	17.2	15.3	13.7	11.7
80°	17.2	15.7	13.7	11.7	11.0	9.8	8.2	7.1	5.9	4.8	3.9
82.5°	7.5	6.2	5.1	4.3	3.9	3.5	2.7	2.3	2.0	2.0	1.6
85°	2.0	1.6	1.6	1.2	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.4	0.4	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4
2.5°	1045.4	1045.8	1046.2	1046.2	1046.5	1047.0	1047.0	1047.4	1047.8	1048.1	1048.1
5°	1043.5	1043.5	1043.5	1043.8	1043.8	1043.8	1043.8	1044.6	1044.6	1045.0	1045.4
7.5°	1039.5	1039.5	1039.5	1039.5	1039.1	1039.5	1039.1	1039.1	1039.9	1040.3	1040.7
10°	1033.2	1032.9	1032.9	1032.5	1032.5	1032.5	1032.9	1033.2	1033.6	1034.0	1035.2
12.5°	1023.4	1023.0	1023.0	1022.6	1022.6	1023.0	1023.4	1024.2	1025.8	1026.5	1028.1
15°	1007.7	1007.3	1007.7	1008.1	1008.9	1010.0	1011.2	1012.5	1014.8	1016.7	1018.7
17.5°	985.0	985.3	985.7	986.6	987.7	989.3	992.4	995.6	998.3	1001.5	1004.5
20°	953.6	955.1	955.5	958.2	959.1	962.6	966.1	970.8	975.1	979.1	983.4
22.5°	915.8	917.1	918.6	921.7	923.7	928.4	932.7	938.2	943.0	948.1	954.3
25°	873.1	873.5	878.2	878.2	882.9	886.8	891.9	897.8	904.8	911.6	915.8
27.5°	824.4	826.3	829.9	831.4	835.0	841.2	845.6	852.7	859.8	865.6	870.3
30°	773.3	774.9	780.9	781.6	784.3	789.8	795.8	802.4	807.9	814.6	818.9
32.5°	719.6	723.8	727.4	730.2	730.9	739.2	742.4	747.0	753.4	760.0	764.4
35°	667.4	669.3	674.5	676.0	678.4	683.0	689.4	693.3	696.5	700.7	705.9
37.5°	612.1	617.9	619.0	623.8	624.5	628.9	632.0	636.7	640.7	644.6	645.4
40°	560.5	562.6	566.9	568.1	568.8	574.7	578.6	579.8	581.8	585.3	590.1
42.5°	508.4	510.3	515.1	513.9	517.4	520.1	522.2	526.8	528.8	530.0	530.0
45°	456.9	457.7	460.9	462.4	464.4	466.0	469.5	471.8	472.7	476.1	477.3
47.5°	407.8	408.7	411.0	413.7	413.0	414.9	418.8	420.1	420.4	422.8	424.0
50°	359.6	361.5	364.7	363.9	366.3	367.4	371.0	371.8	371.8	372.2	372.5
52.5°	314.4	316.0	316.8	317.6	318.8	320.7	322.3	321.5	323.1	324.7	323.4
55°	269.7	270.9	272.9	273.6	273.6	274.0	273.2	276.8	275.2	274.8	275.2
57.5°	228.9	227.3	226.9	228.9	229.6	229.3	228.1	229.6	229.6	228.9	227.7
60°	189.2	188.0	187.6	188.0	186.5	185.3	186.0	185.3	183.3	182.5	183.0
62.5°	153.1	151.9	148.8	148.8	148.0	147.6	144.5	144.9	143.3	141.0	141.7
65°	119.7	116.6	115.1	114.6	111.9	109.6	108.7	106.0	103.6	103.2	103.6
67.5°	89.9	86.4	83.7	82.4	80.9	78.9	76.1	73.8	74.6	74.2	75.7
70°	62.4	60.1	57.3	55.3	56.2	53.8	52.2	52.2	52.6	53.0	53.8
72.5°	41.6	38.5	37.3	36.1	35.3	33.7	34.6	34.6	34.2	34.6	33.7
75°	23.6	22.0	20.8	20.4	19.7	19.7	19.7	19.7	19.2	18.8	18.8
77.5°	10.6	9.8	9.4	9.0	9.0	9.0	8.7	8.2	8.2	8.2	7.8
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	1.6	1.6	2.0	2.0	2.0	1.6	2.0	2.0	1.6	1.6	2.0
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.0	0.4	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



TEST NUMBER: P843525

CATALOG NUMBER: LD4C25DE010B35 EU4C25B35 4LBLWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4
2.5°	1048.5	1049.0	1049.0	1049.0	1049.3	1049.3	1049.3	1049.3
5°	1045.8	1046.2	1046.2	1046.2	1046.5	1046.5	1046.5	1046.5
7.5°	1041.0	1041.5	1041.5	1041.9	1041.9	1042.3	1042.3	1042.6
10°	1035.5	1036.4	1036.8	1037.1	1037.5	1038.0	1038.0	1038.3
12.5°	1029.7	1030.5	1030.9	1031.6	1032.5	1032.9	1033.2	1033.6
15°	1021.0	1022.6	1023.4	1023.8	1025.4	1026.1	1026.5	1027.0
17.5°	1007.3	1010.5	1011.6	1012.5	1014.0	1015.5	1016.7	1017.1
20°	987.7	991.2	992.8	994.7	997.1	999.0	999.9	1000.6
22.5°	960.2	964.1	966.5	968.9	970.8	972.8	975.9	974.7
25°	921.0	927.7	930.4	931.6	935.9	938.2	939.8	938.2
27.5°	877.0	880.9	883.2	886.0	889.2	891.5	892.3	894.7
30°	824.0	830.7	830.2	833.0	836.9	839.3	840.1	842.1
32.5°	769.0	772.2	774.5	774.1	775.7	780.0	778.4	782.0
35°	710.5	710.9	714.9	714.4	717.6	717.6	717.6	719.9
37.5°	648.1	652.9	650.9	655.6	654.0	655.2	655.2	655.9
40°	591.2	592.8	592.8	594.4	595.6	594.4	595.1	597.1
42.5°	532.3	533.9	534.3	533.5	534.6	538.2	535.5	537.8
45°	477.3	478.6	480.1	478.9	480.9	479.7	480.9	480.1
47.5°	425.5	425.2	424.7	427.9	425.2	425.5	427.1	424.3
50°	372.5	374.9	373.3	374.5	375.2	375.2	374.1	374.1
52.5°	325.4	325.0	323.8	325.0	324.3	324.7	325.4	324.7
55°	276.8	278.4	277.5	277.1	277.5	277.5	279.8	276.8
57.5°	228.9	228.1	229.3	232.0	229.3	231.2	232.4	232.8
60°	183.3	183.3	185.7	184.6	186.9	188.8	190.4	189.6
62.5°	139.7	141.7	142.5	142.9	145.2	146.8	146.8	146.4
65°	103.6	106.4	106.4	108.0	108.7	108.7	109.6	111.1
67.5°	76.6	76.6	76.9	77.7	77.3	77.3	78.2	78.5
70°	53.4	52.6	53.8	53.4	53.4	53.0	53.4	53.4
72.5°	33.7	33.7	34.2	33.7	33.0	33.3	33.3	34.2
75°	18.1	18.8	18.1	18.1	18.4	17.7	18.1	18.4
77.5°	7.5	7.5	7.5	7.5	7.5	7.1	7.1	7.1
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.2	3.2
82.5°	1.6	2.0	1.6	2.0	1.6	1.6	1.6	1.6
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)