

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: P843497

Luminaire Tested: **LD4C25DE010B2750 EU4C25B27 4LBLWWLI**

Issue Date: 5/7/2024



Test Information

Test Method: LM-79-08
Report Number: P843497
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: LD4C25DE010B2750 EU4C25B27 4LBLWWLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

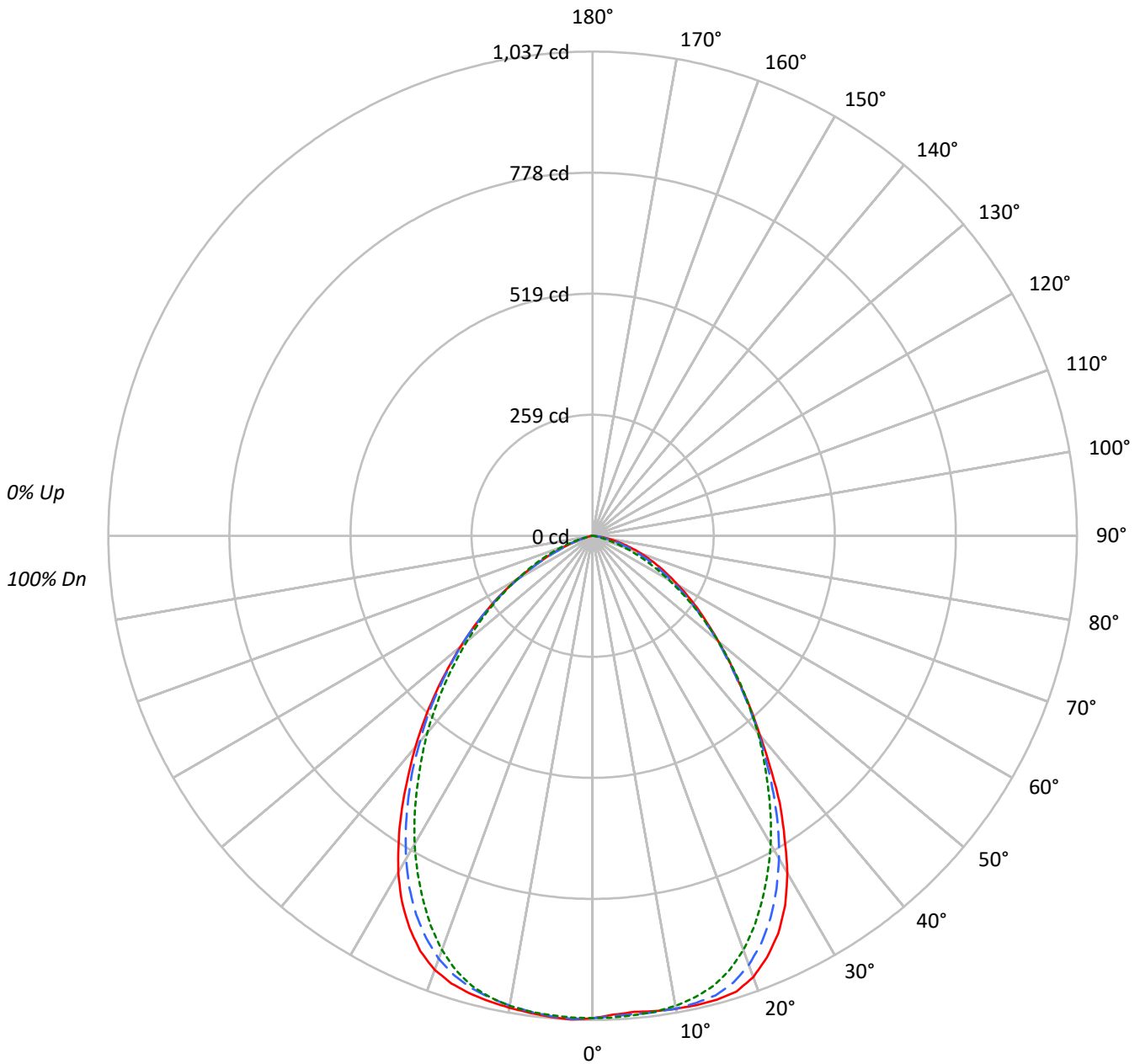
Lumens per Lamp: N/A
Luminaire Lumens: 1980.9 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	126944	126944	126944
5°	126233	127096	127577
10°	128329	127543	128030
15°	130838	126971	129095
20°	131483	123417	129300
25°	127434	116563	125699
30°	118282	108153	118069
35°	104759	98100	106723
40°	89280	88350	94653
45°	76724	77593	82458
50°	66971	67104	70659
55°	59180	56674	58581
60°	51869	46242	46045
65°	45901	35872	31918
70°	39153	24641	18966
75°	31660	13243	8639
80°	21720	3325	2193
85°	6625	987	987



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.2	5.0
10°-20°	284.3	14.4
20°-30°	410.8	20.7
30°-40°	424.6	21.4
40°-50°	350.9	17.7
50°-60°	242.2	12.2
60°-70°	126.8	6.4
70°-80°	39.9	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°	793.2	40.0
0°-40°	1217.9	61.5
0°-60°	1810.9	91.4
0°-90°	1980.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1980.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1033	1033	1033	1033	1033	
5°	1024	1029	1031	1032	1034	98
15°	1029	1019	998	1003	1015	290
25°	940	902	860	894	927	429
35°	698	675	654	688	712	434
45°	442	440	447	467	475	344
55°	276	268	265	272	274	248
65°	158	143	123	102	110	156
75°	67	52	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°	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3
2.5°	1026.6	1027.1	1027.1	1027.8	1027.8	1027.8	1028.2	1028.2	1028.7	1029.0	1029.4
5°	1023.6	1023.6	1024.3	1024.7	1025.5	1025.9	1026.6	1027.1	1027.8	1028.2	1028.7
7.5°	1026.6	1026.6	1027.1	1027.5	1027.5	1027.8	1027.8	1028.2	1028.7	1029.0	1029.0
10°	1028.7	1028.7	1028.7	1028.7	1029.0	1029.0	1029.0	1028.7	1028.7	1028.7	1028.2
12.5°	1029.4	1029.4	1029.0	1028.7	1029.0	1028.7	1028.7	1027.5	1026.6	1025.9	1024.7
15°	1028.7	1028.7	1028.2	1027.8	1027.5	1026.6	1026.3	1024.3	1022.7	1020.4	1018.9
17.5°	1023.6	1022.7	1022.0	1021.3	1019.7	1018.5	1017.8	1014.3	1011.5	1007.6	1003.4
20°	1005.7	1005.0	1003.8	1001.8	999.9	998.3	996.0	991.0	988.3	982.4	978.2
22.5°	976.6	975.9	976.2	972.7	968.9	966.6	965.0	960.8	956.0	948.7	944.0
25°	940.1	937.8	937.8	932.4	930.4	928.9	926.9	921.9	915.0	908.3	902.2
27.5°	892.7	889.7	888.1	887.4	882.7	879.2	876.5	872.7	866.8	861.0	852.5
30°	833.8	833.4	831.5	828.0	824.5	822.9	819.9	813.2	807.8	803.6	798.1
32.5°	764.4	764.0	764.0	764.0	761.7	761.3	756.6	753.1	748.8	742.2	738.8
35°	698.5	698.0	698.5	692.5	691.1	689.9	689.5	687.1	681.3	678.3	675.1
37.5°	623.9	625.1	624.3	622.7	624.6	621.1	623.9	618.8	616.5	615.8	612.3
40°	556.7	559.9	556.7	557.2	559.1	555.6	555.6	554.8	553.2	552.5	551.8
42.5°	499.4	495.5	497.8	495.8	497.8	496.7	494.7	495.8	496.2	494.7	494.3
45°	441.6	442.3	443.1	442.0	442.0	440.8	443.9	442.0	442.0	442.3	439.7
47.5°	394.6	393.4	394.2	393.4	393.9	393.0	393.9	394.2	393.4	393.4	391.1
50°	350.4	349.5	352.3	350.0	350.0	349.5	350.0	349.2	348.1	348.1	348.8
52.5°	312.0	310.4	310.0	312.0	309.3	309.3	309.7	308.8	307.3	306.5	304.6
55°	276.3	275.8	276.3	274.7	273.9	273.9	272.0	271.2	270.9	268.9	267.7
57.5°	242.9	241.8	242.1	241.8	240.2	239.8	238.3	238.3	236.7	235.1	233.2
60°	211.1	211.1	212.3	210.7	209.5	208.8	207.9	207.2	204.4	201.8	199.5
62.5°	182.8	183.2	182.8	181.6	180.9	180.0	179.3	176.9	174.6	173.0	170.4
65°	157.9	157.5	156.3	155.6	153.7	153.7	152.1	150.9	148.2	145.8	143.2
67.5°	132.3	131.6	131.6	131.6	129.2	128.8	128.1	125.8	123.4	120.3	117.9
70°	109.0	109.8	108.6	107.5	106.3	106.0	104.8	102.5	99.7	96.6	94.7
72.5°	86.9	87.7	86.5	86.1	83.8	83.0	82.6	80.7	77.6	75.6	72.6
75°	66.7	67.2	66.3	65.6	64.0	63.7	61.7	60.2	58.2	55.1	52.4
77.5°	48.1	47.4	47.4	45.8	44.2	44.2	43.9	41.6	38.8	36.5	34.2
80°	30.7	30.2	29.1	28.3	27.2	26.8	26.3	24.4	22.5	20.9	19.4
82.5°	15.5	15.1	14.7	14.4	13.5	12.8	13.2	11.6	10.9	9.3	8.1
85°	4.7	5.1	5.1	4.7	4.2	4.2	4.2	3.9	3.1	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°	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3
2.5°	1029.8	1030.1	1030.6	1031.0	1031.0	1031.3	1031.7	1032.1	1032.5	1032.5	1032.9
5°	1029.0	1029.8	1029.8	1030.1	1030.1	1030.1	1030.6	1030.6	1030.6	1030.6	1031.0
7.5°	1029.4	1029.4	1029.4	1029.0	1029.0	1028.7	1028.7	1028.7	1027.8	1027.8	1027.8
10°	1027.5	1027.1	1026.6	1025.9	1025.5	1025.1	1024.3	1023.6	1022.7	1022.4	1021.6
12.5°	1023.6	1022.0	1020.4	1018.9	1018.1	1017.8	1016.2	1015.0	1013.8	1012.7	1011.9
15°	1015.8	1013.4	1010.8	1007.6	1006.9	1006.1	1003.4	1001.1	999.5	998.3	996.4
17.5°	1000.3	995.7	992.5	987.8	985.9	985.2	980.8	978.5	975.9	975.0	973.6
20°	972.7	968.5	962.7	958.3	956.0	953.7	950.2	947.1	944.0	944.0	942.0
22.5°	938.2	932.7	925.4	919.9	919.6	915.0	911.8	908.3	907.1	904.8	904.8
25°	894.8	890.1	882.0	877.3	875.0	873.8	868.7	864.1	861.8	859.9	861.3
27.5°	846.6	839.7	833.4	827.6	825.7	823.4	818.7	816.7	812.5	812.1	811.7
30°	791.5	784.6	778.3	775.7	771.8	769.9	766.4	764.0	762.4	762.4	761.7
32.5°	733.7	727.5	724.4	718.6	716.7	713.9	711.6	709.2	710.1	709.2	709.7
35°	671.3	669.7	663.9	660.4	660.4	660.0	656.2	654.6	653.8	654.1	656.2
37.5°	611.8	607.2	603.4	601.1	603.0	600.6	600.2	600.2	602.5	601.1	604.1
40°	548.6	548.3	546.7	547.4	547.9	545.1	546.0	546.3	547.9	550.9	551.3
42.5°	493.5	493.2	493.2	493.2	492.3	490.8	492.3	495.1	494.7	497.1	499.0
45°	440.4	439.7	441.1	440.0	442.3	443.1	442.0	442.7	445.1	446.6	449.7
47.5°	391.9	391.9	392.3	393.0	390.7	392.7	393.4	395.0	396.2	396.9	398.5
50°	346.9	346.9	346.1	346.1	346.1	347.2	345.7	347.6	348.1	351.1	353.0
52.5°	305.3	303.4	304.6	303.9	302.3	301.5	302.3	302.7	305.0	305.8	308.1
55°	265.8	265.8	262.7	261.9	263.0	262.7	262.3	262.3	263.5	264.6	266.5
57.5°	230.9	228.6	226.2	225.8	224.6	225.1	225.1	224.6	223.9	224.2	224.6
60°	197.9	196.3	192.8	192.8	192.5	192.1	190.2	189.7	187.8	188.2	186.7
62.5°	167.6	166.9	162.1	160.7	160.7	159.5	157.5	157.2	154.4	154.4	152.8
65°	140.5	138.1	135.4	132.7	132.7	131.1	130.0	126.5	124.6	123.4	121.1
67.5°	115.6	112.1	109.5	107.1	105.6	105.1	102.5	100.2	97.0	95.1	91.6
70°	91.6	88.8	86.1	83.8	82.3	80.7	77.9	74.5	72.1	68.6	66.3
72.5°	69.1	66.7	64.4	61.3	59.3	58.2	55.5	52.4	48.5	46.2	43.0
75°	49.7	47.0	43.9	41.1	40.0	38.8	35.7	33.4	30.7	27.9	24.9
77.5°	32.2	29.1	26.8	23.7	23.3	22.5	19.4	17.0	15.1	13.5	11.6
80°	17.0	15.5	13.5	11.6	10.9	9.7	8.1	7.0	5.8	4.7	3.9
82.5°	7.4	6.2	5.1	4.2	3.9	3.5	2.7	2.3	1.9	1.9	1.6
85°	1.9	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°	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3
2.5°	1033.3	1033.6	1034.0	1034.0	1034.5	1034.8	1034.8	1035.2	1035.6	1036.0	1036.0
5°	1031.3	1031.3	1031.3	1031.7	1031.7	1031.7	1031.7	1032.5	1032.5	1032.9	1033.3
7.5°	1027.5	1027.5	1027.5	1027.5	1027.1	1027.5	1027.1	1027.1	1027.8	1028.2	1028.7
10°	1021.3	1020.8	1020.8	1020.4	1020.4	1020.4	1020.8	1021.3	1021.6	1022.0	1023.2
12.5°	1011.5	1011.1	1011.1	1010.8	1010.8	1011.1	1011.5	1012.3	1013.8	1014.6	1016.2
15°	996.0	995.7	996.0	996.4	997.1	998.3	999.5	1000.6	1003.0	1005.0	1006.9
17.5°	973.6	973.9	974.3	975.0	976.2	977.8	980.8	984.0	986.7	989.8	992.9
20°	942.5	944.0	944.4	947.1	947.9	951.3	954.8	959.6	963.8	967.7	972.0
22.5°	905.2	906.4	908.0	911.0	912.9	917.6	921.9	927.3	932.0	937.1	943.2
25°	862.9	863.3	868.0	868.0	872.7	876.5	881.5	887.4	894.3	901.0	905.2
27.5°	814.8	816.7	820.2	821.8	825.3	831.5	835.7	842.7	849.7	855.5	860.2
30°	764.4	765.9	771.8	772.5	775.2	780.6	786.5	793.1	798.5	805.1	809.4
32.5°	711.3	715.5	719.0	721.7	722.5	730.6	733.7	738.3	744.6	751.1	755.5
35°	659.6	661.5	666.6	668.1	670.4	675.1	681.3	685.2	688.3	692.5	697.6
37.5°	604.9	610.7	611.8	616.5	617.3	621.6	624.6	629.4	633.2	637.1	637.9
40°	554.1	556.0	560.2	561.4	562.2	568.1	572.0	573.1	575.0	578.5	583.2
42.5°	502.5	504.4	509.0	507.9	511.4	514.1	516.0	520.7	522.7	523.8	523.8
45°	451.6	452.5	455.5	457.1	459.0	460.6	464.1	466.4	467.2	470.6	471.8
47.5°	403.2	403.9	406.2	409.0	408.1	410.2	414.0	415.1	415.5	417.9	419.0
50°	355.4	357.4	360.4	359.7	362.0	363.2	366.7	367.4	367.4	367.8	368.3
52.5°	310.8	312.3	313.2	313.9	315.1	317.0	318.6	317.8	319.3	320.9	319.7
55°	266.5	267.7	269.7	270.4	270.4	270.9	270.0	273.5	272.0	271.6	272.0
57.5°	226.2	224.6	224.2	226.2	227.0	226.5	225.4	227.0	227.0	226.2	225.1
60°	187.0	185.8	185.5	185.8	184.3	183.2	183.9	183.2	181.2	180.4	180.9
62.5°	151.3	150.2	147.0	147.0	146.3	145.8	142.8	143.2	141.6	139.3	140.0
65°	118.3	115.3	113.7	113.3	110.6	108.3	107.5	104.8	102.5	102.1	102.5
67.5°	88.8	85.4	82.6	81.4	80.0	77.9	75.3	73.0	73.7	73.3	74.9
70°	61.7	59.3	56.7	54.7	55.5	53.2	51.6	51.6	52.0	52.4	53.2
72.5°	41.1	38.1	36.9	35.7	34.9	33.4	34.2	34.2	33.7	34.2	33.4
75°	23.3	21.7	20.5	20.2	19.4	19.4	19.4	19.4	19.0	18.6	18.6
77.5°	10.5	9.7	9.3	8.9	8.9	8.9	8.6	8.1	8.1	8.1	7.7
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	1.9	1.9	1.9	1.6	1.9	1.9	1.6	1.6	1.9
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: P843497

CATALOG NUMBER: LD4C25DE010B2750 EU4C25B27 4LBLWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3	1033.3
2.5°	1036.4	1036.8	1036.8	1036.8	1037.1	1037.1	1037.1	1037.1
5°	1033.6	1034.0	1034.0	1034.0	1034.5	1034.5	1034.5	1034.5
7.5°	1029.0	1029.4	1029.4	1029.8	1029.8	1030.1	1030.1	1030.6
10°	1023.6	1024.3	1024.7	1025.1	1025.5	1025.9	1025.9	1026.3
12.5°	1017.8	1018.5	1018.9	1019.7	1020.4	1020.8	1021.3	1021.6
15°	1009.2	1010.8	1011.5	1011.9	1013.4	1014.3	1014.6	1015.0
17.5°	995.7	998.7	999.9	1000.6	1002.2	1003.8	1005.0	1005.3
20°	976.2	979.7	981.3	983.2	985.5	987.5	988.3	989.0
22.5°	949.0	952.9	955.3	957.6	959.6	961.5	964.6	963.4
25°	910.3	916.9	919.6	920.8	925.0	927.3	928.9	927.3
27.5°	866.8	870.6	873.0	875.7	878.8	881.1	882.0	884.3
30°	814.4	821.0	820.6	823.4	827.3	829.6	830.3	832.3
32.5°	760.1	763.2	765.5	765.2	766.7	771.0	769.4	772.9
35°	702.3	702.7	706.6	706.2	709.2	709.2	709.2	711.6
37.5°	640.6	645.3	643.4	648.0	646.4	647.6	647.6	648.3
40°	584.3	585.9	585.9	587.4	588.6	587.4	588.3	590.2
42.5°	526.2	527.7	528.1	527.3	528.5	532.0	529.2	531.6
45°	471.8	473.0	474.6	473.4	475.3	474.1	475.3	474.6
47.5°	420.6	420.2	419.8	422.9	420.2	420.6	422.1	419.5
50°	368.3	370.6	369.0	370.2	370.9	370.9	369.7	369.7
52.5°	321.6	321.3	320.1	321.3	320.5	320.9	321.6	320.9
55°	273.5	275.1	274.4	273.9	274.4	274.4	276.7	273.5
57.5°	226.2	225.4	226.5	229.3	226.5	228.6	229.7	230.0
60°	181.2	181.2	183.5	182.3	184.7	186.7	188.2	187.4
62.5°	138.1	140.0	140.9	141.2	143.5	145.1	145.1	144.7
65°	102.5	105.1	105.1	106.7	107.5	107.5	108.3	109.8
67.5°	75.6	75.6	76.0	76.8	76.5	76.5	77.2	77.6
70°	52.8	52.0	53.2	52.8	52.8	52.4	52.8	52.8
72.5°	33.4	33.4	33.7	33.4	32.6	33.0	33.0	33.7
75°	17.9	18.6	17.9	17.9	18.2	17.5	17.9	18.2
77.5°	7.4	7.4	7.4	7.4	7.4	7.0	7.0	7.0
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.1	3.1
82.5°	1.6	1.9	1.6	1.9	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)