

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: P843496

Luminaire Tested: **LD4C25DE010B2750 EU4C25B27 4LBLWWH**

Issue Date: 5/7/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843496  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C25DE010B2750 EU4C25B27 4LBLWWH  
Description: 4in Downlight with BioUp LEDs  
Light Source: -  
Ballast/Driver:

**Summary**

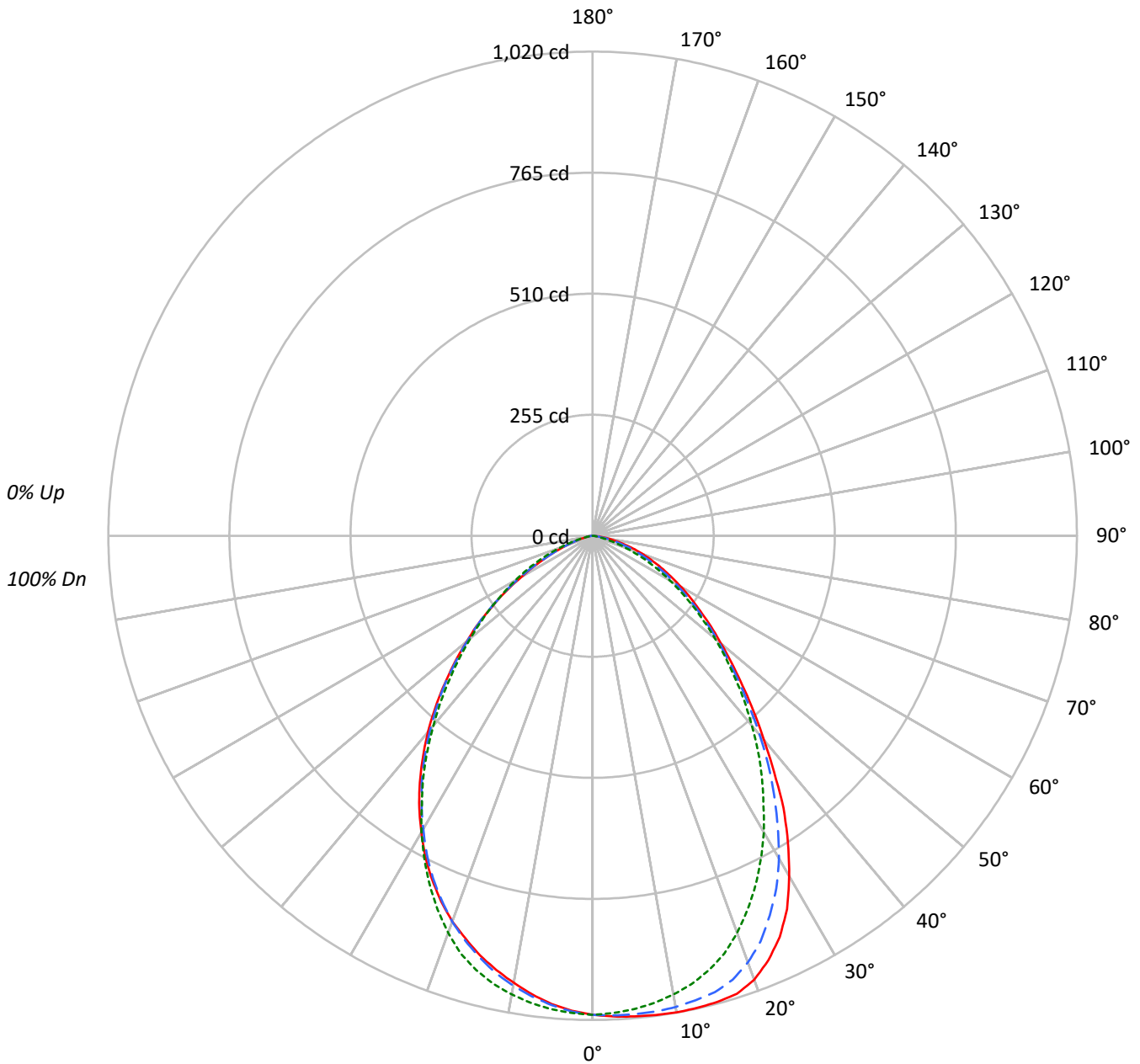
Lumens per Lamp: N/A  
Luminaire Lumens: 1901.6 lumens  
Efficiency: N/A  
Efficacy: 63.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	108	105	102	99	101	98	96	97	95	93	94	92	90	88																			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77																			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68																			
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60																			
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53																			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47																			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43																			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39																			
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35																			
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32																			

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

	0°	90°	180°
0°	123971	123971	123971
5°	125345	123434	122102
10°	127194	122391	119297
15°	129273	120446	116440
20°	130097	116344	112997
25°	126363	110056	108375
30°	117431	102295	102351
35°	105118	93240	95220
40°	90002	83587	86634
45°	77471	73701	76463
50°	67353	64161	66072
55°	59266	55196	54704
60°	52729	46045	42434
65°	46250	36889	30698
70°	39727	26078	20798
75°	32230	15094	12152
80°	23064	6580	6084
85°	8739	2678	2678



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	5.0
10°-20°	269.2	14.2
20°-30°	384.4	20.2
30°-40°	402.1	21.1
40°-50°	336.9	17.7
50°-60°	235.8	12.4
60°-70°	128.4	6.8
70°-80°	44.6	2.3
80°-90°	5.1	0.3
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°	748.7	39.4
0°-40°	1150.8	60.5
0°-60°	1723.5	90.6
0°-90°	1901.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1901.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1009	1009	1009	1009	1009	
5°	1016	1012	1001	992	990	97
15°	1016	995	947	920	916	287
25°	932	882	812	796	800	426
35°	701	666	622	626	635	435
45°	446	436	424	438	440	347
55°	277	267	258	258	255	250
65°	159	145	127	107	106	158
75°	68	55	32	26	26	73
85°	6	4	2	2	2	11
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°	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1
2.5°	1013.7	1012.6	1012.9	1012.9	1012.9	1012.6	1012.9	1012.6	1012.6	1012.2	1011.4
5°	1016.4	1015.6	1015.6	1015.6	1015.2	1014.9	1014.9	1014.5	1013.7	1013.3	1011.7
7.5°	1018.4	1017.5	1017.5	1017.2	1016.8	1016.4	1016.1	1014.9	1013.7	1012.9	1011.0
10°	1019.6	1018.4	1018.4	1017.5	1016.8	1016.4	1015.6	1014.1	1012.6	1010.6	1007.9
12.5°	1018.7	1017.5	1017.2	1016.4	1014.9	1014.1	1013.3	1011.4	1008.7	1005.9	1002.4
15°	1016.4	1015.6	1014.9	1013.7	1011.7	1010.6	1009.8	1006.8	1003.3	999.4	995.1
17.5°	1011.7	1010.6	1009.1	1007.5	1004.8	1003.6	1001.7	997.8	992.8	987.3	980.7
20°	995.1	994.3	992.8	990.1	985.7	984.2	981.5	976.4	969.9	963.3	956.3
22.5°	967.5	966.4	964.0	961.7	957.8	955.1	952.8	945.8	938.4	931.5	924.8
25°	932.2	931.0	928.0	924.8	921.0	916.3	914.0	908.5	901.2	892.2	882.5
27.5°	886.8	882.9	881.7	878.3	872.4	870.9	867.4	860.4	853.4	845.7	837.5
30°	827.8	827.8	825.5	823.9	818.5	816.9	813.1	805.7	801.8	790.9	784.8
32.5°	765.3	764.6	762.7	761.5	758.3	755.6	751.8	747.9	739.3	733.9	725.3
35°	700.9	696.2	697.0	694.7	692.8	689.7	689.3	685.0	677.2	674.1	666.3
37.5°	627.6	625.6	628.3	624.8	622.9	623.3	620.2	617.4	614.4	608.9	607.4
40°	561.2	562.8	562.3	559.3	560.8	558.9	555.8	553.0	551.5	548.0	546.8
42.5°	501.8	499.5	498.7	498.7	499.1	499.1	497.5	495.6	495.6	492.1	488.6
45°	445.9	445.9	445.2	447.5	444.0	444.0	442.8	442.4	440.9	440.1	435.9
47.5°	397.8	397.5	397.0	396.6	396.3	396.3	394.0	392.0	391.5	389.2	386.9
50°	352.4	354.7	354.0	352.0	351.2	351.7	350.1	348.9	348.5	344.6	345.0
52.5°	314.3	314.0	314.8	313.6	311.7	312.0	310.5	308.9	307.3	305.4	303.9
55°	276.7	278.7	277.8	276.7	276.4	275.5	274.4	272.4	272.0	267.8	267.4
57.5°	245.3	244.8	244.1	242.2	241.8	240.6	240.6	239.0	236.7	234.4	232.5
60°	214.6	214.6	213.4	213.1	211.5	211.1	210.8	209.2	206.5	204.5	201.4
62.5°	185.1	185.9	185.1	183.9	182.8	181.3	180.4	179.3	176.9	175.0	172.3
65°	159.1	158.8	158.3	156.7	156.4	154.8	154.4	152.1	149.8	148.3	145.1
67.5°	134.3	133.2	133.2	132.3	131.6	130.4	129.7	127.3	124.6	123.0	119.9
70°	110.6	109.8	109.8	109.8	107.9	106.7	106.3	105.1	101.3	99.7	96.7
72.5°	88.8	88.5	88.1	86.9	85.8	85.8	84.2	81.9	80.0	78.1	75.7
75°	67.9	68.6	67.9	66.3	66.0	65.2	64.0	62.1	60.2	57.9	55.1
77.5°	49.7	48.9	48.1	48.1	47.4	45.8	45.4	43.9	41.6	40.0	37.2
80°	32.6	32.3	31.4	30.7	30.2	29.9	29.5	27.9	25.6	24.4	22.1
82.5°	17.9	17.5	17.5	17.0	15.9	15.9	15.5	14.0	12.8	12.1	10.9
85°	6.2	6.2	6.2	5.8	5.8	5.8	5.4	5.1	4.7	4.2	3.5
87.5°	0.7	0.4	0.7	0.4	0.7	0.4	0.4	0.4	0.4	0.4	0.4
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°	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1
2.5°	1010.6	1009.8	1009.4	1009.1	1008.7	1008.2	1007.9	1007.1	1006.8	1006.3	1005.6
5°	1010.6	1009.1	1008.2	1007.1	1006.3	1005.6	1004.4	1003.3	1002.1	1000.9	999.8
7.5°	1009.1	1006.8	1005.2	1002.8	1002.1	1000.9	998.6	997.0	995.1	992.8	990.1
10°	1005.2	1002.4	999.4	996.3	995.1	993.1	990.1	987.3	984.2	981.1	978.4
12.5°	998.9	994.7	990.8	986.6	984.2	982.2	978.0	974.1	970.3	966.8	962.1
15°	989.6	984.6	979.6	973.8	971.0	968.7	962.4	957.8	951.7	947.0	942.2
17.5°	974.5	966.8	960.5	953.1	949.3	946.6	941.1	933.8	928.0	922.9	917.5
20°	948.5	941.1	932.6	924.5	920.1	916.7	908.9	901.2	895.3	889.9	884.1
22.5°	914.3	905.0	898.8	888.7	885.2	881.0	871.7	864.7	858.1	852.7	847.2
25°	872.9	864.7	856.2	846.8	842.5	837.5	829.7	822.4	818.1	811.9	805.3
27.5°	825.1	818.5	808.0	799.9	795.6	791.7	784.3	777.8	771.5	767.3	761.1
30°	774.6	766.9	757.6	749.0	746.7	742.0	735.5	730.4	723.8	721.1	718.3
32.5°	719.2	710.2	703.2	697.8	693.2	689.3	685.8	677.6	676.5	669.5	668.6
35°	658.6	654.7	648.1	643.5	639.6	636.9	631.1	627.2	622.9	621.7	619.0
37.5°	601.6	596.9	590.7	586.5	583.7	583.3	579.1	576.7	573.6	572.1	568.9
40°	541.8	539.8	534.4	533.7	529.3	528.9	526.6	524.0	521.2	521.2	521.6
42.5°	486.7	484.4	482.0	479.3	477.0	477.0	475.8	475.0	474.2	473.1	475.0
45°	435.0	431.9	430.4	427.7	428.9	426.5	425.7	425.7	424.5	424.2	426.9
47.5°	386.9	383.4	381.9	381.1	381.1	381.5	378.0	379.2	378.7	379.6	380.7
50°	343.1	339.9	337.6	337.6	338.0	336.4	335.0	336.1	335.0	335.7	338.4
52.5°	302.4	299.2	298.0	298.0	295.7	295.3	296.1	294.6	295.0	295.3	296.9
55°	264.7	262.7	260.8	258.9	259.2	258.5	256.9	256.6	257.3	257.7	259.6
57.5°	230.9	228.2	225.5	224.7	223.9	223.9	222.0	221.6	222.4	220.4	220.4
60°	198.7	197.1	193.7	192.5	192.5	190.6	189.0	189.7	187.8	187.4	187.8
62.5°	168.8	167.6	165.3	163.0	162.2	161.5	159.5	158.8	157.9	156.4	154.1
65°	142.8	140.1	137.4	135.8	134.6	132.7	131.6	130.0	127.7	126.9	124.6
67.5°	116.9	114.1	111.4	110.2	109.0	107.9	106.0	104.0	101.3	98.1	95.5
70°	93.9	90.4	88.8	85.8	85.0	83.4	80.7	78.8	76.0	72.6	69.9
72.5°	71.8	69.5	67.2	64.4	62.5	61.3	59.0	55.8	52.8	50.9	48.1
75°	51.6	50.4	47.4	44.2	43.5	41.9	39.2	37.2	34.9	31.8	29.5
77.5°	34.9	32.6	30.7	27.9	27.2	25.6	24.1	22.1	20.5	18.6	17.0
80°	20.5	18.6	17.5	15.5	14.7	14.0	12.8	11.2	10.0	9.3	8.9
82.5°	10.0	8.6	8.1	7.0	6.6	6.2	5.4	5.1	4.2	4.2	4.2
85°	3.5	2.7	2.7	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.4
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°	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1
2.5°	1005.2	1004.8	1004.4	1004.0	1004.0	1003.6	1003.6	1003.3	1003.3	1002.8	1002.8
5°	998.2	997.0	996.3	995.4	995.4	994.3	993.5	992.8	992.4	992.4	991.6
7.5°	988.5	986.9	985.4	984.2	983.8	981.9	980.3	980.3	978.7	978.0	977.3
10°	975.7	972.9	970.6	969.4	967.9	966.8	964.8	963.6	962.4	960.5	960.1
12.5°	958.2	956.3	952.8	951.2	950.5	948.2	945.0	943.4	943.1	941.5	940.3
15°	938.4	934.1	931.0	929.1	929.1	925.2	923.6	921.3	919.8	918.7	918.2
17.5°	912.8	908.5	905.4	902.7	902.0	898.8	896.5	895.7	893.8	894.5	892.6
20°	879.8	876.4	874.0	870.5	870.5	868.5	867.8	865.9	865.0	864.3	865.0
22.5°	844.5	840.2	836.4	836.0	836.0	833.2	832.9	832.5	830.9	832.0	831.7
25°	803.0	799.9	797.6	797.1	797.1	795.6	794.1	794.8	796.0	795.6	796.7
27.5°	759.9	756.7	756.0	755.6	754.8	754.4	755.3	755.3	756.4	757.9	759.5
30°	713.3	712.5	711.4	710.9	710.2	712.1	713.0	714.1	713.7	716.0	717.6
32.5°	666.7	665.1	664.8	665.6	666.7	666.3	668.6	669.5	670.2	673.0	674.1
35°	619.8	619.4	618.6	618.6	619.0	622.1	622.1	624.8	626.4	627.2	630.2
37.5°	569.3	570.9	571.7	572.8	573.2	574.4	575.1	577.9	579.5	581.0	582.5
40°	523.1	522.4	525.9	523.5	524.3	527.8	529.3	528.9	531.4	533.7	535.2
42.5°	473.8	475.0	475.8	476.6	478.5	478.9	480.8	483.6	484.4	487.0	487.9
45°	426.1	426.5	428.0	429.6	430.8	433.8	434.7	435.9	438.2	438.2	439.3
47.5°	381.1	382.7	382.7	385.0	386.9	386.6	389.2	390.1	389.6	391.5	392.4
50°	338.0	340.3	339.9	341.5	342.3	342.7	345.0	345.7	344.3	346.2	346.6
52.5°	296.9	298.0	299.6	300.1	299.2	301.2	300.4	302.0	301.5	303.1	301.5
55°	259.2	258.9	258.9	259.6	258.9	259.6	260.4	258.9	257.7	259.2	258.9
57.5°	221.6	221.6	220.8	222.0	220.8	219.7	219.2	218.1	216.9	216.9	216.6
60°	186.2	185.5	183.9	183.6	183.6	181.6	180.9	179.3	179.3	177.8	176.2
62.5°	153.3	151.3	150.2	150.2	149.4	147.4	143.9	141.6	140.9	138.6	138.1
65°	122.3	120.4	119.2	116.9	114.9	114.1	110.6	107.9	106.7	104.4	104.8
67.5°	93.9	90.9	87.4	85.8	84.6	81.9	80.7	78.8	77.6	77.6	77.6
70°	67.5	64.8	61.3	60.2	59.3	57.0	55.8	55.5	56.7	56.3	56.7
72.5°	45.4	42.7	41.1	40.4	39.6	38.4	39.2	39.6	38.8	39.2	39.6
75°	27.6	26.8	25.6	25.3	25.3	25.6	25.3	25.3	25.6	25.6	26.0
77.5°	15.9	15.1	15.1	14.7	15.5	15.1	15.1	15.1	15.5	15.5	15.5
80°	8.6	8.6	8.6	8.6	8.9	8.6	8.9	8.9	8.9	8.9	8.9
82.5°	4.2	4.2	4.2	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.2
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
87.5°	0.4	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4
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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CATALOG NUMBER: LD4C25DE010B2750 EU4C25B27 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1
2.5°	1002.1	1002.1	1002.1	1001.3	1001.7	1001.7	1001.3	1001.3
5°	991.2	990.8	990.1	990.1	989.2	990.1	989.6	990.1
7.5°	976.4	976.4	975.2	975.2	974.9	974.5	974.1	974.5
10°	959.0	959.0	958.2	957.8	958.2	956.6	956.6	956.3
12.5°	939.6	938.8	938.0	938.4	938.0	936.9	936.4	936.9
15°	917.1	915.9	916.3	915.2	915.2	914.7	915.5	915.5
17.5°	892.2	891.5	890.6	891.1	890.3	890.6	890.3	889.9
20°	864.7	864.3	864.3	862.7	863.1	862.7	863.1	864.3
22.5°	832.9	832.5	832.9	831.7	832.5	832.5	833.6	833.6
25°	797.9	797.6	798.3	798.7	799.0	800.2	799.0	799.5
27.5°	759.1	760.2	761.5	761.8	763.4	762.2	761.5	762.7
30°	719.9	719.9	719.5	721.1	722.3	723.4	721.5	721.5
32.5°	674.9	676.9	676.9	677.2	678.4	678.4	678.4	680.0
35°	631.8	633.0	633.4	631.8	632.6	632.3	634.9	634.9
37.5°	583.7	583.7	584.1	586.8	586.8	585.6	586.5	586.5
40°	537.9	538.3	536.7	537.5	539.5	538.7	539.5	540.2
42.5°	487.9	490.5	489.0	489.8	489.4	489.8	490.2	490.2
45°	440.1	440.9	440.9	441.2	442.1	442.8	440.5	440.1
47.5°	393.5	394.0	395.1	393.1	395.4	393.1	395.4	392.8
50°	346.6	348.2	347.0	347.7	346.6	346.6	346.2	345.7
52.5°	302.0	301.5	301.5	301.2	301.2	302.0	301.2	302.4
55°	257.3	257.7	256.9	256.6	256.2	257.3	256.2	255.4
57.5°	215.0	215.8	214.3	215.0	212.3	213.4	213.9	214.3
60°	175.8	174.6	174.6	173.1	173.1	174.3	172.7	172.7
62.5°	136.2	137.0	135.8	137.4	137.4	139.0	138.1	139.0
65°	104.4	104.8	105.1	105.1	105.1	107.5	106.7	105.6
67.5°	78.8	79.2	79.5	79.2	80.4	79.5	79.5	80.0
70°	57.0	57.4	57.9	57.9	57.4	57.9	57.9	57.9
72.5°	39.6	40.0	39.6	40.0	40.4	40.0	40.0	40.4
75°	26.0	26.0	25.6	25.6	25.6	25.6	26.0	25.6
77.5°	15.1	15.5	15.1	15.5	15.5	15.5	15.5	15.5
80°	8.9	8.9	8.9	8.6	8.9	8.9	8.9	8.6
82.5°	4.7	4.7	4.2	4.2	4.7	4.7	4.7	4.7
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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)