

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: P685200

Luminaire Tested: **LX6C75D010 EX6759035 6LCSWLI**

Issue Date: 2/15/2022



Test Information

Test Method: LM-79-08
Report Number: P685200
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P252180)
Test Lab: INNOVATION CENTER
Issue Date: 2/15/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX6C75D010 EX6759035 6LCSWLI
Description: 6 INCH 7500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 6LCSW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Summary

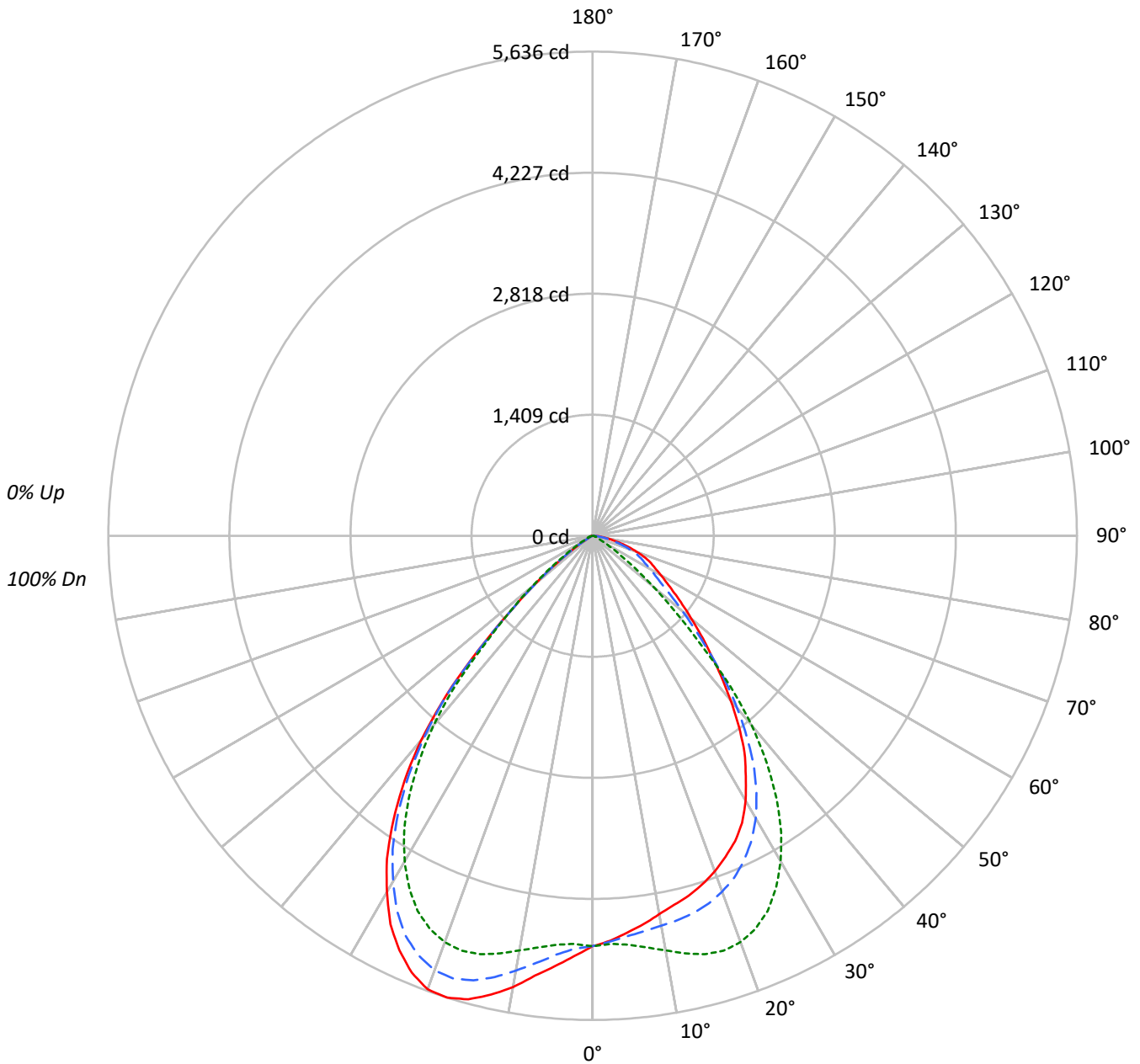
Lumens per Lamp: N/A
Luminaire Lumens: 8733.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 81.5
Input Voltage (V):
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: P685200

CATALOG NUMBER: LX6C75D010 EX6759035 6LCSWLI

Luminous Intensity Polar Plot





TEST NUMBER: P685200

CATALOG NUMBER: LX6C75D010 EX6759035 6LCSWLI

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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72																			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40																			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	261914	261914	261914
5°	255117	262915	276733
10°	248915	272813	296972
15°	246006	286182	317034
20°	242478	293641	327745
25°	237328	291470	321865
30°	225522	276992	303009
35°	206331	249737	270516
40°	178470	206244	221937
45°	150504	135278	145178
50°	127774	78300	73627
55°	110887	37542	28367
60°	100156	17521	7006
65°	97157	10066	2361
70°	87114	8062	2196
75°	71591	5825	974
80°	53321	2873	0
85°	45979	0	0



TEST NUMBER: P685200

CATALOG NUMBER: LX6C75D010 EX6759035 6LCSWLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.5	5.3
10°-20°	1406.4	16.1
20°-30°	2148.9	24.6
30°-40°	2247.5	25.7
40°-50°	1458.0	16.7
50°-60°	578.9	6.6
60°-70°	274.6	3.1
70°-80°	130.6	1.5
80°-90°	26.6	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°	4016.8	46.0
0°-40°	6264.3	71.7
0°-60°	8301.1	95.1
0°-90°	8733.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8733.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4778	4778	4778	4778	4778	
5°	4636	4677	4778	4896	5029	438
15°	4335	4545	5042	5358	5586	1222
25°	3924	4170	4819	5143	5321	1797
35°	3083	3270	3732	3951	4042	1907
45°	1941	1923	1745	1850	1873	1510
55°	1160	987	393	306	297	1051
65°	749	621	78	18	18	732
75°	338	274	28	9	5	365
85°	73	46	0	0	0	85
90°	0	0	0	0	0	



TEST NUMBER: P685200

CATALOG NUMBER: LX6C75D010 EX6759035 6LCSWLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7
2.5°	4718.3	4727.4	4677.2	4663.5	4700.1	4713.6	4718.3	4704.5	4709.2	4727.4	4727.4
5°	4636.0	4645.1	4599.5	4585.7	4622.3	4631.6	4645.1	4640.7	4654.4	4681.7	4677.2
7.5°	4558.4	4572.2	4521.9	4503.7	4549.3	4572.2	4581.3	4581.3	4599.5	4636.0	4640.7
10°	4471.6	4489.9	4444.3	4435.0	4485.3	4508.1	4512.8	4521.9	4549.3	4599.5	4608.6
12.5°	4398.6	4416.8	4384.9	4371.1	4425.9	4448.7	4457.8	4476.2	4508.1	4572.2	4581.3
15°	4334.6	4348.3	4311.7	4302.6	4357.4	4384.9	4389.3	4416.8	4457.8	4531.0	4544.7
17.5°	4252.3	4261.4	4234.1	4225.0	4279.8	4307.1	4311.7	4343.7	4394.0	4467.1	4489.9
20°	4156.4	4165.6	4138.2	4129.1	4183.8	4215.8	4220.4	4247.9	4307.1	4384.9	4407.7
22.5°	4042.2	4060.6	4028.6	4019.4	4074.3	4101.6	4115.3	4138.2	4197.6	4275.2	4307.1
25°	3923.6	3923.6	3900.7	3896.1	3946.4	3978.3	3973.7	4005.6	4065.0	4142.8	4170.1
27.5°	3768.2	3763.6	3740.8	3736.3	3791.1	3818.5	3809.2	3841.4	3896.1	3973.7	4001.2
30°	3562.7	3571.8	3539.9	3530.6	3576.5	3622.1	3617.5	3649.4	3704.2	3777.3	3795.7
32.5°	3316.0	3325.1	3320.7	3306.9	3348.0	3370.8	3384.5	3407.4	3453.0	3530.6	3549.0
35°	3083.1	3069.3	3051.1	3051.1	3092.2	3128.7	3115.0	3142.5	3188.1	3265.7	3270.4
37.5°	2795.3	2790.7	2781.6	2772.5	2818.2	2827.3	2831.9	2850.1	2891.3	2955.2	2946.1
40°	2493.9	2498.4	2493.9	2475.5	2503.0	2539.6	2534.9	2544.2	2580.6	2626.3	2612.7
42.5°	2210.6	2210.6	2210.6	2192.4	2224.4	2242.7	2251.8	2247.2	2256.3	2297.5	2279.1
45°	1941.3	1945.7	1941.3	1936.6	1941.3	1950.4	1941.3	1936.6	1936.6	1950.4	1922.9
47.5°	1708.3	1708.3	1694.6	1680.8	1694.6	1699.0	1685.5	1671.7	1667.1	1662.7	1617.0
50°	1498.2	1493.6	1489.1	1466.3	1479.8	1484.5	1466.3	1457.0	1438.8	1416.0	1361.2
52.5°	1315.5	1310.9	1306.3	1283.4	1292.7	1297.2	1279.0	1260.6	1237.8	1219.6	1151.1
55°	1160.2	1155.5	1155.5	1142.0	1132.7	1142.0	1123.6	1109.9	1077.9	1055.1	986.6
57.5°	1027.6	1027.6	1018.5	1004.8	1009.4	1009.4	991.2	972.9	945.4	918.1	863.3
60°	913.5	913.5	913.5	899.7	899.7	899.7	890.6	872.4	849.6	822.1	767.4
62.5°	822.1	822.1	817.5	803.9	808.4	808.4	799.3	781.1	758.3	739.9	685.1
65°	749.0	749.0	749.0	735.4	735.4	739.9	730.8	712.6	694.2	671.4	621.1
67.5°	657.7	653.2	653.2	643.9	648.6	653.2	643.9	630.4	607.6	593.8	548.2
70°	543.5	548.2	552.6	539.1	543.5	543.5	539.1	525.3	511.6	497.9	456.8
72.5°	443.1	443.1	438.5	434.0	434.0	438.5	429.4	415.6	406.5	397.4	365.3
75°	338.0	333.4	338.0	328.9	328.9	328.9	319.7	315.2	310.6	296.8	274.0
77.5°	246.7	242.1	242.1	233.0	237.6	237.6	233.0	223.9	214.6	210.1	191.8
80°	168.9	168.9	168.9	164.5	164.5	159.8	159.8	155.4	146.1	141.6	132.5
82.5°	114.2	114.2	114.2	109.7	109.7	109.7	105.1	100.4	96.0	91.3	82.2
85°	73.1	73.1	73.1	68.5	68.5	68.5	63.9	63.9	59.4	54.8	45.7
87.5°	41.0	41.0	41.0	36.6	36.6	36.6	36.6	36.6	31.9	27.5	22.8
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: P685200

CATALOG NUMBER: LX6C75D010 EX6759035 6LCSWLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7
2.5°	4759.3	4695.4	4736.5	4736.5	4722.9	4759.3	4782.3	4800.5	4795.9	4754.8	4750.2
5°	4722.9	4668.0	4713.6	4718.3	4704.5	4754.8	4786.8	4809.6	4814.2	4777.7	4782.3
7.5°	4695.4	4649.8	4709.2	4727.4	4722.9	4768.6	4805.1	4841.5	4859.9	4832.4	4837.1
10°	4681.7	4645.1	4709.2	4736.5	4741.1	4791.4	4846.2	4896.5	4919.3	4900.9	4914.6
12.5°	4663.5	4640.7	4713.6	4754.8	4773.0	4823.3	4891.8	4951.2	4987.8	4978.7	5006.0
15°	4645.1	4626.9	4713.6	4773.0	4795.9	4841.5	4919.3	5006.0	5047.2	5042.5	5079.1
17.5°	4599.5	4595.0	4686.3	4750.2	4782.3	4837.1	4910.0	5015.1	5056.3	5065.4	5111.0
20°	4526.5	4526.5	4626.9	4695.4	4732.0	4782.3	4873.6	4974.0	5024.3	5033.4	5083.7
22.5°	4425.9	4435.0	4531.0	4599.5	4654.4	4690.8	4786.8	4891.8	4937.5	4951.2	5006.0
25°	4293.5	4302.6	4394.0	4462.5	4521.9	4562.9	4654.4	4750.2	4805.1	4818.7	4859.9
27.5°	4120.0	4138.2	4225.0	4293.5	4343.7	4371.1	4467.1	4567.5	4608.6	4622.3	4663.5
30°	3918.9	3923.6	4010.3	4069.7	4120.0	4142.8	4225.0	4330.1	4362.0	4375.8	4435.0
32.5°	3672.3	3667.8	3750.0	3804.8	3845.8	3873.3	3960.0	4028.6	4060.6	4083.4	4115.3
35°	3375.4	3370.8	3430.2	3494.2	3526.2	3535.3	3622.1	3695.1	3713.5	3731.7	3772.9
37.5°	3042.0	3042.0	3092.2	3124.3	3160.7	3174.4	3215.6	3297.8	3329.8	3325.1	3357.1
40°	2690.3	2672.1	2708.5	2740.6	2749.7	2754.1	2795.3	2859.2	2882.0	2882.0	2904.9
42.5°	2320.3	2292.9	2297.5	2315.7	2324.8	2292.9	2320.3	2361.4	2347.6	2366.0	2370.6
45°	1927.5	1886.3	1868.1	1826.9	1836.2	1804.1	1785.9	1795.0	1790.5	1744.9	1754.0
47.5°	1607.7	1534.8	1502.7	1443.4	1429.7	1393.1	1370.3	1329.1	1292.7	1292.7	1269.7
50°	1338.4	1265.2	1201.2	1132.7	1109.9	1077.9	1027.6	972.9	945.4	918.1	895.3
52.5°	1123.6	1046.0	968.2	895.3	863.3	822.1	753.6	698.9	648.6	621.1	593.8
55°	950.0	863.3	781.1	703.3	662.3	621.1	552.6	488.8	429.4	392.8	370.0
57.5°	817.5	735.4	648.6	566.3	529.8	484.1	411.2	342.5	287.7	246.7	223.9
60°	721.7	639.5	561.9	475.0	438.5	392.8	315.2	251.2	196.4	159.8	132.5
62.5°	639.5	566.3	484.1	406.5	370.0	324.3	251.2	187.3	137.0	100.4	77.6
65°	580.1	506.9	438.5	360.9	328.9	283.3	214.6	155.4	109.7	77.6	54.8
67.5°	511.6	447.6	379.1	315.2	283.3	246.7	182.7	132.5	91.3	63.9	45.7
70°	429.4	379.1	319.7	260.4	237.6	205.5	150.7	109.7	73.1	50.3	36.6
72.5°	342.5	301.5	255.8	210.1	191.8	159.8	123.3	86.9	54.8	36.6	27.5
75°	260.4	228.3	191.8	159.8	141.6	123.3	91.3	63.9	41.0	27.5	18.2
77.5°	178.2	164.5	137.0	109.7	100.4	86.9	59.4	41.0	27.5	18.2	9.1
80°	123.3	109.7	91.3	73.1	63.9	54.8	36.6	27.5	13.7	9.1	4.6
82.5°	77.6	63.9	54.8	45.7	41.0	31.9	22.8	13.7	9.1	4.6	4.6
85°	41.0	36.6	31.9	22.8	22.8	18.2	13.7	9.1	4.6	0.0	0.0
87.5°	22.8	18.2	13.7	9.1	9.1	4.6	4.6	4.6	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



TEST NUMBER: P685200

CATALOG NUMBER: LX6C75D010 EX6759035 6LCSWLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7
2.5°	4805.1	4805.1	4800.5	4855.3	4791.4	4855.3	4823.3	4855.3	4809.6	4805.1	4809.6
5°	4841.5	4855.3	4859.9	4910.0	4850.8	4928.4	4900.9	4928.4	4896.5	4905.6	4919.3
7.5°	4914.6	4937.5	4933.0	4996.9	4937.5	5024.3	5006.0	5047.2	5015.1	5024.3	5042.5
10°	4996.9	5024.3	5028.8	5092.8	5037.9	5143.0	5120.1	5165.8	5138.5	5152.2	5175.1
12.5°	5092.8	5124.8	5129.4	5202.4	5143.0	5252.7	5238.9	5284.6	5261.8	5275.5	5303.0
15°	5165.8	5211.5	5220.7	5293.7	5229.8	5344.0	5334.9	5394.3	5357.7	5380.6	5403.4
17.5°	5202.4	5243.6	5261.8	5330.3	5275.5	5389.7	5380.6	5430.9	5403.4	5426.2	5453.7
20°	5179.5	5229.8	5243.6	5312.1	5257.3	5371.5	5357.7	5408.0	5380.6	5398.8	5426.2
22.5°	5097.3	5147.6	5165.8	5229.8	5179.5	5284.6	5280.1	5325.8	5289.2	5312.1	5334.9
25°	4951.2	5006.0	5015.1	5074.5	5019.7	5129.4	5120.1	5170.4	5143.0	5156.7	5188.6
27.5°	4741.1	4805.1	4818.7	4869.0	4828.0	4919.3	4919.3	4960.3	4928.4	4928.4	4960.3
30°	4489.9	4553.8	4562.9	4604.1	4567.5	4649.8	4654.4	4695.4	4645.1	4672.6	4677.2
32.5°	4183.8	4225.0	4252.3	4288.9	4234.1	4339.2	4325.5	4357.4	4330.1	4330.1	4352.9
35°	3813.9	3864.2	3877.9	3923.6	3877.9	3960.0	3960.0	3978.3	3950.9	3950.9	3987.4
37.5°	3412.0	3448.6	3453.0	3498.7	3462.1	3530.6	3526.2	3539.9	3512.4	3530.6	3530.6
40°	2941.4	2968.9	2978.0	3000.8	2996.4	3046.5	3042.0	3051.1	3037.4	3042.0	3051.1
42.5°	2393.5	2429.9	2448.2	2466.4	2439.1	2507.6	2493.9	2507.6	2503.0	2507.6	2521.4
45°	1763.1	1790.5	1804.1	1808.7	1799.6	1840.7	1872.6	1845.3	1849.8	1840.7	1859.0
47.5°	1274.3	1279.0	1269.7	1297.2	1274.3	1292.7	1301.8	1306.3	1279.0	1274.3	1292.7
50°	872.4	895.3	863.3	876.9	872.4	890.6	881.5	886.2	858.7	872.4	863.3
52.5°	580.1	575.4	566.3	571.0	561.9	561.9	561.9	571.0	552.6	543.5	534.4
55°	351.8	342.5	324.3	319.7	319.7	324.3	315.2	306.1	306.1	301.5	301.5
57.5°	205.5	191.8	182.7	178.2	168.9	164.5	159.8	159.8	150.7	150.7	150.7
60°	114.2	100.4	91.3	82.2	82.2	77.6	73.1	68.5	68.5	68.5	63.9
62.5°	59.4	50.3	41.0	36.6	36.6	31.9	27.5	27.5	27.5	27.5	22.8
65°	41.0	31.9	27.5	22.8	22.8	18.2	18.2	18.2	18.2	18.2	18.2
67.5°	31.9	27.5	22.8	18.2	18.2	18.2	13.7	13.7	13.7	13.7	13.7
70°	27.5	18.2	18.2	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
72.5°	18.2	18.2	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
75°	13.7	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	0.0	0.0	0.0	0.0	0.0
80°	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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



TEST NUMBER: P685200

CATALOG NUMBER: LX6C75D010 EX6759035 6LCSWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7	4777.7
2.5°	4850.8	4846.2	4850.8	4859.9	4841.5	4896.5	4869.0	4896.5
5°	4955.9	4960.3	4964.9	4978.7	4955.9	5024.3	4987.8	5028.8
7.5°	5092.8	5097.3	5101.9	5115.7	5101.9	5170.4	5129.4	5165.8
10°	5234.5	5243.6	5243.6	5266.4	5252.7	5316.5	5289.2	5334.9
12.5°	5366.8	5375.9	5385.2	5398.8	5389.7	5458.2	5435.3	5471.9
15°	5471.9	5490.1	5494.7	5512.9	5503.8	5577.0	5549.5	5586.1
17.5°	5522.2	5540.4	5540.4	5563.2	5554.1	5631.7	5595.2	5636.4
20°	5494.7	5508.5	5512.9	5535.9	5526.7	5604.4	5567.9	5618.0
22.5°	5408.0	5412.5	5417.1	5440.0	5435.3	5503.8	5471.9	5503.8
25°	5248.0	5261.8	5257.3	5275.5	5275.5	5330.3	5293.7	5321.2
27.5°	5019.7	5033.4	5033.4	5056.3	5037.9	5092.8	5056.3	5097.3
30°	4741.1	4754.8	4745.7	4763.9	4745.7	4800.5	4773.0	4786.8
32.5°	4407.7	4407.7	4412.2	4416.8	4407.7	4457.8	4430.5	4457.8
35°	4010.3	4019.4	4024.0	4028.6	4019.4	4055.9	4024.0	4042.2
37.5°	3562.7	3585.6	3580.9	3585.6	3571.8	3617.5	3590.0	3599.3
40°	3083.1	3083.1	3078.4	3087.7	3074.0	3110.5	3092.2	3101.3
42.5°	2525.8	2539.6	2521.4	2544.2	2507.6	2557.8	2539.6	2525.8
45°	1895.6	1877.2	1872.6	1877.2	1863.5	1868.1	1881.9	1872.6
47.5°	1292.7	1292.7	1283.4	1269.7	1288.1	1292.7	1274.3	1274.3
50°	867.8	867.8	858.7	854.1	863.3	858.7	849.6	863.3
52.5°	552.6	534.4	534.4	543.5	534.4	525.3	539.1	529.8
55°	301.5	292.4	292.4	301.5	292.4	292.4	287.7	296.8
57.5°	146.1	150.7	146.1	146.1	146.1	146.1	141.6	146.1
60°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
62.5°	27.5	27.5	22.8	22.8	22.8	22.8	22.8	22.8
65°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
67.5°	13.7	13.7	13.7	13.7	13.7	18.2	13.7	13.7
70°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
72.5°	13.7	13.7	18.2	18.2	18.2	18.2	18.2	18.2
75°	9.1	9.1	9.1	4.6	4.6	4.6	4.6	4.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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



Report Generated By 670246072 / DESKTOP-50001EG





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













(END OF REPORT)