

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252203

Luminaire Tested: **LE_6B50D010R EC6B30509050 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252203
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B50D010R EC6B30509050 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7412.5 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

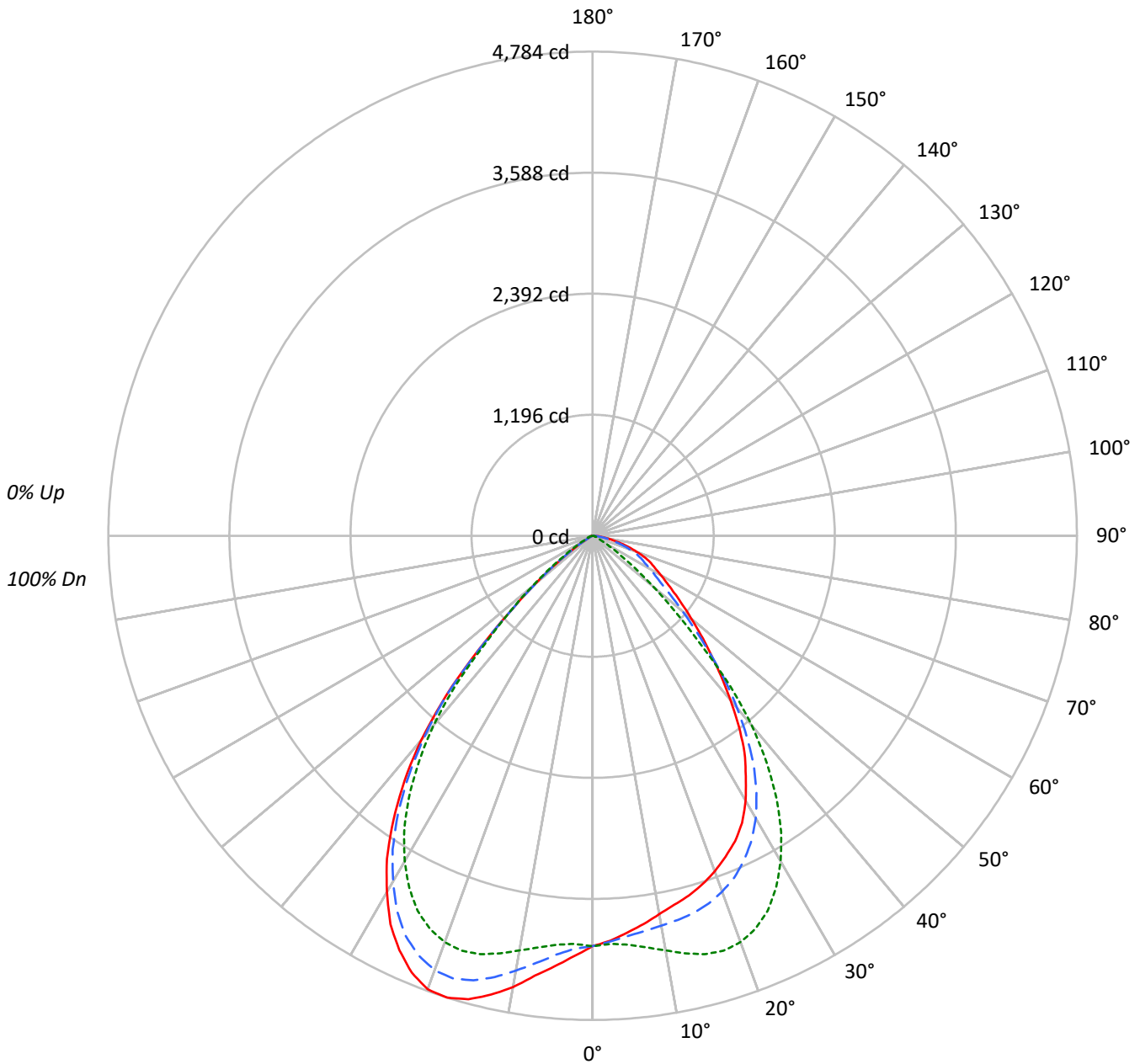
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65				65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53				53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40				40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	264564	264564	264564
5°	257703	265574	279543
10°	251441	275581	299980
15°	248494	289087	320244
20°	244941	296623	331073
25°	239725	294426	325128
30°	227808	279788	306080
35°	208421	252265	273259
40°	180279	208349	224190
45°	152014	136643	146654
50°	129063	79086	74377
55°	112015	37922	28663
60°	101175	17719	7072
65°	98150	10173	2393
70°	88012	8126	2213
75°	72319	5848	983
80°	53914	2931	0
85°	46410	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.7	5.3
10°-20°	1193.8	16.1
20°-30°	1823.9	24.6
30°-40°	1907.7	25.7
40°-50°	1237.5	16.7
50°-60°	491.4	6.6
60°-70°	233.1	3.1
70°-80°	110.8	1.5
80°-90°	22.6	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°	3409.4	46.0
0°-40°	5317.1	71.7
0°-60°	7045.9	95.1
0°-90°	7412.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7412.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4055	4055	4055	4055	4055	
5°	3935	3970	4055	4156	4268	372
15°	3679	3858	4280	4548	4741	1037
25°	3330	3540	4090	4365	4517	1525
35°	2617	2776	3167	3354	3431	1618
45°	1648	1632	1481	1570	1590	1282
55°	985	837	333	260	252	892
65°	636	527	66	16	16	621
75°	287	233	23	8	4	309
85°	62	39	0	0	0	72
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°	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2
2.5°	4004.9	4012.6	3969.9	3958.2	3989.4	4001.0	4004.9	3993.2	3997.1	4012.6	4012.6
5°	3935.0	3942.8	3904.0	3892.4	3923.4	3931.1	3942.8	3938.9	3950.5	3973.8	3969.9
7.5°	3869.1	3880.8	3838.1	3822.6	3861.4	3880.8	3888.5	3888.5	3904.0	3935.0	3938.9
10°	3795.5	3811.0	3772.2	3764.5	3807.1	3826.5	3830.4	3838.1	3861.4	3904.0	3911.8
12.5°	3733.5	3749.0	3721.8	3710.1	3756.8	3776.1	3783.9	3799.4	3826.5	3880.8	3888.5
15°	3679.1	3690.8	3659.8	3652.0	3698.5	3721.8	3725.6	3749.0	3783.9	3845.9	3857.5
17.5°	3609.4	3617.1	3593.9	3586.1	3632.6	3655.9	3659.8	3686.9	3729.6	3791.6	3811.0
20°	3528.0	3535.8	3512.5	3504.8	3551.2	3578.4	3582.2	3605.5	3655.9	3721.8	3741.2
22.5°	3431.0	3446.5	3419.4	3411.6	3458.1	3481.5	3493.1	3512.5	3562.9	3628.8	3655.9
25°	3330.2	3330.2	3310.9	3307.0	3349.6	3376.8	3372.9	3400.0	3450.4	3516.4	3539.6
27.5°	3198.4	3194.5	3175.1	3171.2	3217.9	3241.1	3233.4	3260.5	3307.0	3372.9	3396.1
30°	3024.0	3031.8	3004.6	2996.9	3035.6	3074.4	3070.5	3097.6	3144.1	3206.1	3221.8
32.5°	2814.6	2822.4	2818.5	2806.9	2841.8	2861.1	2872.8	2892.1	2930.9	2996.9	3012.4
35°	2616.9	2605.2	2589.8	2589.8	2624.6	2655.6	2644.0	2667.2	2706.1	2772.0	2775.9
37.5°	2372.6	2368.8	2361.0	2353.2	2392.0	2399.8	2403.6	2419.1	2454.1	2508.4	2500.6
40°	2116.8	2120.6	2116.8	2101.2	2124.5	2155.5	2151.6	2159.4	2190.5	2229.2	2217.6
42.5°	1876.4	1876.4	1876.4	1860.9	1888.0	1903.5	1911.2	1907.4	1915.1	1950.1	1934.6
45°	1647.6	1651.5	1647.6	1643.8	1647.6	1655.4	1647.6	1643.8	1643.8	1655.4	1632.1
47.5°	1450.0	1450.0	1438.4	1426.8	1438.4	1442.2	1430.6	1419.0	1415.1	1411.1	1372.4
50°	1271.6	1267.8	1263.9	1244.5	1256.1	1260.0	1244.5	1236.8	1221.2	1201.9	1155.2
52.5°	1116.5	1112.6	1108.8	1089.4	1097.1	1101.0	1085.5	1070.0	1050.6	1035.1	977.0
55°	984.8	980.9	980.9	969.2	961.5	969.2	953.8	942.1	915.0	895.5	837.4
57.5°	872.2	872.2	864.5	852.9	856.8	856.8	841.2	825.8	802.5	779.2	732.8
60°	775.4	775.4	775.4	763.8	763.8	763.8	756.0	740.5	721.1	697.9	651.4
62.5°	697.9	697.9	694.0	682.4	686.2	686.2	678.5	663.0	643.6	628.0	581.5
65°	635.8	635.8	635.8	624.1	624.1	628.0	620.2	604.8	589.2	569.9	527.2
67.5°	558.2	554.4	554.4	546.6	550.5	554.4	546.6	535.0	515.6	504.0	465.2
70°	461.4	465.2	469.1	457.5	461.4	461.4	457.5	445.9	434.2	422.6	387.8
72.5°	376.0	376.0	372.1	368.2	368.2	372.1	364.4	352.8	345.0	337.2	310.1
75°	286.9	283.0	286.9	279.1	279.1	279.1	271.4	267.5	263.6	252.0	232.6
77.5°	209.4	205.5	205.5	197.8	201.6	201.6	197.8	190.0	182.2	178.4	162.9
80°	143.5	143.5	143.5	139.6	139.6	135.8	135.8	131.9	124.0	120.1	112.4
82.5°	96.9	96.9	96.9	93.0	93.0	93.0	89.1	85.2	81.4	77.5	69.8
85°	62.0	62.0	62.0	58.1	58.1	58.1	54.2	54.2	50.4	46.5	38.8
87.5°	34.9	34.9	34.9	31.0	31.0	31.0	31.0	31.0	27.1	23.2	19.4
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°	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2
2.5°	4039.8	3985.5	4020.4	4020.4	4008.8	4039.8	4059.1	4074.6	4070.8	4035.9	4032.0
5°	4008.8	3962.1	4001.0	4004.9	3993.2	4035.9	4063.0	4082.4	4086.2	4055.2	4059.1
7.5°	3985.5	3946.6	3997.1	4012.6	4008.8	4047.5	4078.5	4109.5	4125.0	4101.8	4105.6
10°	3973.8	3942.8	3997.1	4020.4	4024.2	4066.9	4113.4	4156.0	4175.4	4159.9	4171.5
12.5°	3958.2	3938.9	4001.0	4035.9	4051.4	4094.0	4152.1	4202.5	4233.5	4225.8	4249.1
15°	3942.8	3927.2	4001.0	4051.4	4070.8	4109.5	4175.4	4249.1	4284.0	4280.1	4311.1
17.5°	3904.0	3900.1	3977.6	4032.0	4059.1	4105.6	4167.6	4256.9	4291.8	4299.5	4338.2
20°	3842.0	3842.0	3927.2	3985.5	4016.5	4059.1	4136.6	4221.9	4264.6	4272.4	4315.0
22.5°	3756.8	3764.5	3845.9	3904.0	3950.5	3981.5	4063.0	4152.1	4190.9	4202.5	4249.1
25°	3644.2	3652.0	3729.6	3787.8	3838.1	3873.0	3950.5	4032.0	4078.5	4090.1	4125.0
27.5°	3497.0	3512.5	3586.1	3644.2	3686.9	3710.1	3791.6	3876.9	3911.8	3923.4	3958.2
30°	3326.4	3330.2	3403.9	3454.2	3497.0	3516.4	3586.1	3675.2	3702.4	3714.0	3764.5
32.5°	3117.0	3113.1	3182.9	3229.5	3264.4	3287.6	3361.2	3419.4	3446.5	3465.9	3493.1
35°	2865.0	2861.1	2911.5	2965.9	2993.0	3000.8	3074.4	3136.4	3151.9	3167.4	3202.2
37.5°	2582.0	2582.0	2624.6	2651.8	2682.8	2694.4	2729.4	2799.1	2826.2	2822.4	2849.5
40°	2283.5	2268.0	2299.0	2326.1	2333.9	2337.8	2372.6	2426.9	2446.4	2446.4	2465.8
42.5°	1969.5	1946.2	1950.1	1965.6	1973.4	1946.2	1969.5	2004.4	1992.8	2008.2	2012.1
45°	1636.0	1601.1	1585.6	1550.8	1558.5	1531.4	1515.9	1523.6	1519.8	1481.0	1488.8
47.5°	1364.6	1302.6	1275.5	1225.1	1213.5	1182.5	1163.1	1128.1	1097.1	1097.1	1077.8
50°	1135.9	1073.9	1019.6	961.5	942.1	915.0	872.2	825.8	802.5	779.2	759.9
52.5°	953.8	887.8	821.9	759.9	732.8	697.9	639.6	593.1	550.5	527.2	504.0
55°	806.4	732.8	663.0	597.0	562.1	527.2	469.1	414.9	364.4	333.4	314.0
57.5°	694.0	624.1	550.5	480.8	449.8	411.0	348.9	290.8	244.2	209.4	190.0
60°	612.5	542.8	476.9	403.2	372.1	333.4	267.5	213.2	166.8	135.8	112.4
62.5°	542.8	480.8	411.0	345.0	314.0	275.2	213.2	159.0	116.2	85.2	65.9
65°	492.4	430.4	372.1	306.2	279.1	240.4	182.2	131.9	93.0	65.9	46.5
67.5°	434.2	379.9	321.8	267.5	240.4	209.4	155.1	112.4	77.5	54.2	38.8
70°	364.4	321.8	271.4	221.0	201.6	174.5	127.9	93.0	62.0	42.6	31.0
72.5°	290.8	255.9	217.1	178.4	162.9	135.8	104.6	73.6	46.5	31.0	23.2
75°	221.0	193.9	162.9	135.8	120.1	104.6	77.5	54.2	34.9	23.2	15.5
77.5°	151.2	139.6	116.2	93.0	85.2	73.6	50.4	34.9	23.2	15.5	7.8
80°	104.6	93.0	77.5	62.0	54.2	46.5	31.0	23.2	11.6	7.8	3.9
82.5°	65.9	54.2	46.5	38.8	34.9	27.1	19.4	11.6	7.8	3.9	3.9
85°	34.9	31.0	27.1	19.4	19.4	15.5	11.6	7.8	3.9	0.0	0.0
87.5°	19.4	15.5	11.6	7.8	7.8	3.9	3.9	3.9	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2
2.5°	4078.5	4078.5	4074.6	4121.1	4066.9	4121.1	4094.0	4121.1	4082.4	4078.5	4082.4
5°	4109.5	4121.1	4125.0	4167.6	4117.2	4183.1	4159.9	4183.1	4156.0	4163.8	4175.4
7.5°	4171.5	4190.9	4187.0	4241.4	4190.9	4264.6	4249.1	4284.0	4256.9	4264.6	4280.1
10°	4241.4	4264.6	4268.5	4322.8	4276.2	4365.4	4346.0	4384.8	4361.5	4373.1	4392.5
12.5°	4322.8	4349.9	4353.8	4415.8	4365.4	4458.4	4446.8	4485.5	4466.1	4477.8	4501.1
15°	4384.8	4423.5	4431.2	4493.2	4439.0	4536.0	4528.2	4578.6	4547.6	4567.0	4586.4
17.5°	4415.8	4450.6	4466.1	4524.4	4477.8	4574.8	4567.0	4609.6	4586.4	4605.8	4629.0
20°	4396.4	4439.0	4450.6	4508.9	4462.2	4559.2	4547.6	4590.2	4567.0	4582.5	4605.8
22.5°	4326.6	4369.2	4384.8	4439.0	4396.4	4485.5	4481.6	4520.5	4489.4	4508.9	4528.2
25°	4202.5	4249.1	4256.9	4307.2	4260.8	4353.8	4346.0	4388.6	4365.4	4377.0	4404.1
27.5°	4024.2	4078.5	4090.1	4132.8	4097.9	4175.4	4175.4	4210.2	4183.1	4183.1	4210.2
30°	3811.0	3865.2	3873.0	3907.9	3876.9	3946.6	3950.5	3985.5	3942.8	3966.0	3969.9
32.5°	3551.2	3586.1	3609.4	3640.4	3593.9	3683.0	3671.4	3698.5	3675.2	3675.2	3694.6
35°	3237.2	3279.9	3291.5	3330.2	3291.5	3361.2	3361.2	3376.8	3353.5	3353.5	3384.5
37.5°	2896.0	2927.0	2930.9	2969.8	2938.6	2996.9	2993.0	3004.6	2981.4	2996.9	2996.9
40°	2496.8	2520.0	2527.8	2547.1	2543.2	2585.9	2582.0	2589.8	2578.1	2582.0	2589.8
42.5°	2031.5	2062.5	2078.0	2093.5	2070.2	2128.4	2116.8	2128.4	2124.5	2128.4	2140.0
45°	1496.5	1519.8	1531.4	1535.2	1527.5	1562.4	1589.5	1566.2	1570.1	1562.4	1577.9
47.5°	1081.6	1085.5	1077.8	1101.0	1081.6	1097.1	1104.9	1108.8	1085.5	1081.6	1097.1
50°	740.5	759.9	732.8	744.4	740.5	756.0	748.2	752.1	728.9	740.5	732.8
52.5°	492.4	488.5	480.8	484.6	476.9	476.9	476.9	484.6	469.1	461.4	453.6
55°	298.5	290.8	275.2	271.4	271.4	275.2	267.5	259.8	259.8	255.9	255.9
57.5°	174.5	162.9	155.1	151.2	143.5	139.6	135.8	135.8	127.9	127.9	127.9
60°	96.9	85.2	77.5	69.8	69.8	65.9	62.0	58.1	58.1	58.1	54.2
62.5°	50.4	42.6	34.9	31.0	31.0	27.1	23.2	23.2	23.2	23.2	19.4
65°	34.9	27.1	23.2	19.4	19.4	15.5	15.5	15.5	15.5	15.5	15.5
67.5°	27.1	23.2	19.4	15.5	15.5	15.5	11.6	11.6	11.6	11.6	11.6
70°	23.2	15.5	15.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
72.5°	15.5	15.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
75°	11.6	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
77.5°	3.9	3.9	3.9	3.9	3.9	3.9	0.0	0.0	0.0	0.0	0.0
80°	3.9	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: P252203

CATALOG NUMBER: LE_6B50D010R EC6B30509050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2	4055.2
2.5°	4117.2	4113.4	4117.2	4125.0	4109.5	4156.0	4132.8	4156.0
5°	4206.4	4210.2	4214.1	4225.8	4206.4	4264.6	4233.5	4268.5
7.5°	4322.8	4326.6	4330.5	4342.1	4330.5	4388.6	4353.8	4384.8
10°	4442.9	4450.6	4450.6	4470.0	4458.4	4512.8	4489.4	4528.2
12.5°	4555.4	4563.1	4570.9	4582.5	4574.8	4632.9	4613.5	4644.5
15°	4644.5	4660.0	4663.9	4679.4	4671.6	4733.6	4710.4	4741.4
17.5°	4687.1	4702.6	4702.6	4722.0	4714.2	4780.2	4749.1	4784.1
20°	4663.9	4675.5	4679.4	4698.8	4691.0	4757.0	4725.9	4768.6
22.5°	4590.2	4594.1	4598.0	4617.4	4613.5	4671.6	4644.5	4671.6
25°	4454.5	4466.1	4462.2	4477.8	4477.8	4524.4	4493.2	4516.6
27.5°	4260.8	4272.4	4272.4	4291.8	4276.2	4322.8	4291.8	4326.6
30°	4024.2	4035.9	4028.1	4043.6	4028.1	4074.6	4051.4	4063.0
32.5°	3741.2	3741.2	3745.1	3749.0	3741.2	3783.9	3760.6	3783.9
35°	3403.9	3411.6	3415.5	3419.4	3411.6	3442.6	3415.5	3431.0
37.5°	3024.0	3043.4	3039.5	3043.4	3031.8	3070.5	3047.2	3055.0
40°	2616.9	2616.9	2613.0	2620.8	2609.1	2640.1	2624.6	2632.4
42.5°	2143.9	2155.5	2140.0	2159.4	2128.4	2171.0	2155.5	2143.9
45°	1608.9	1593.4	1589.5	1593.4	1581.8	1585.6	1597.2	1589.5
47.5°	1097.1	1097.1	1089.4	1077.8	1093.2	1097.1	1081.6	1081.6
50°	736.6	736.6	728.9	725.0	732.8	728.9	721.1	732.8
52.5°	469.1	453.6	453.6	461.4	453.6	445.9	457.5	449.8
55°	255.9	248.1	248.1	255.9	248.1	248.1	244.2	252.0
57.5°	124.0	127.9	124.0	124.0	124.0	124.0	120.1	124.0
60°	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
62.5°	23.2	23.2	19.4	19.4	19.4	19.4	19.4	19.4
65°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
67.5°	11.6	11.6	11.6	11.6	11.6	15.5	11.6	11.6
70°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
72.5°	11.6	11.6	15.5	15.5	15.5	15.5	15.5	15.5
75°	7.8	7.8	7.8	3.9	3.9	3.9	3.9	3.9
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



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













(END OF REPORT)