

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: P252625

Luminaire Tested: **LE\_6B60D010R EC6B60708040 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252625  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B60D010R EC6B60708040 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7707.5 lumens  
Efficiency: N/A  
Efficacy: 123.3 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

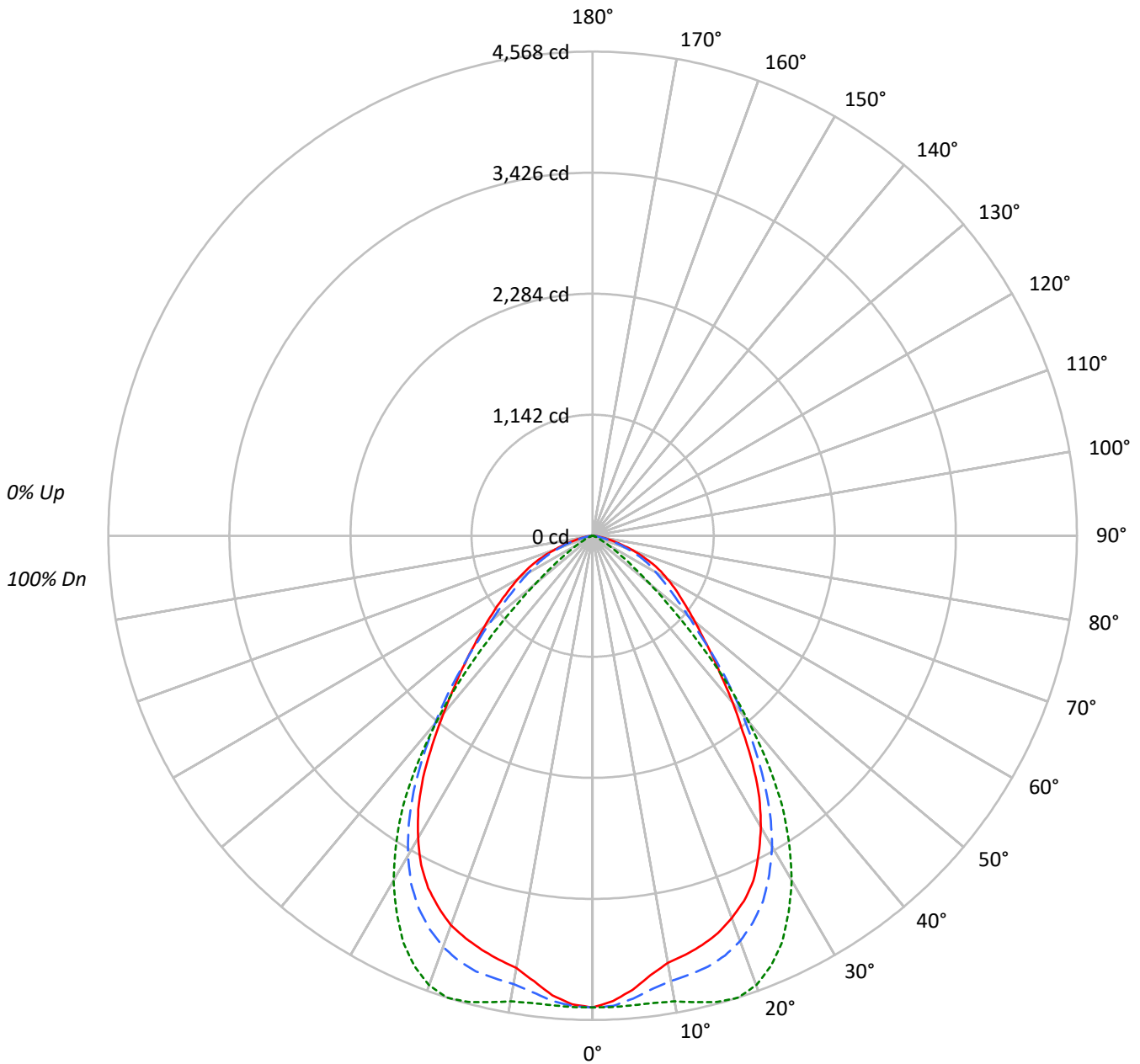
Input Watts (W): 62.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
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	100	100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89	89	89	89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70	70	70	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62	62	62	62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56	56	56	56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50	50	50	50
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46	46	46	46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42	42	42	42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38	38	38	38
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35	35	35	35

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

	0°	90°	180°
0°	290314	290314	290314
5°	281659	291089	285018
10°	270944	295475	274342
15°	269979	307506	273106
20°	266449	313230	271448
25°	258484	304410	264041
30°	239116	282907	248028
35°	209783	248697	222064
40°	174811	194961	186206
45°	147143	128625	157107
50°	127398	70489	135234
55°	115279	37444	118191
60°	106068	19468	106068
65°	96097	10328	93704
70°	77521	5894	71627
75°	53162	3882	49280
80°	34790	1916	30883
85°	23130	3818	19313



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	415.0	5.4
10°-20°	1199.9	15.6
20°-30°	1772.8	23.0
30°-40°	1790.7	23.2
40°-50°	1234.2	16.0
50°-60°	708.9	9.2
60°-70°	412.6	5.4
70°-80°	150.5	2.0
80°-90°	23.0	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°	3387.6	44.0
0°-40°	5178.3	67.2
0°-60°	7121.4	92.4
0°-90°	7707.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7707.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4450	4450	4450	4450	4450	
5°	4301	4383	4445	4404	4352	403
15°	3997	4208	4553	4254	4044	1126
25°	3591	3802	4229	3879	3668	1636
35°	2634	2814	3123	2943	2788	1635
45°	1595	1615	1394	1718	1703	1240
55°	1014	890	329	926	1039	912
65°	622	525	67	520	607	610
75°	211	170	15	165	196	238
85°	31	15	5	21	26	39
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°	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9
2.5°	4393.4	4398.5	4403.6	4398.5	4403.6	4424.2	4408.8	4419.0	4419.0	4424.2	4439.6
5°	4300.8	4300.8	4311.0	4305.9	4321.4	4341.9	4326.5	4341.9	4347.0	4357.4	4383.0
7.5°	4182.4	4182.4	4187.5	4187.5	4208.1	4228.8	4218.4	4239.0	4259.6	4280.1	4311.0
10°	4089.9	4100.1	4100.1	4105.2	4125.9	4151.5	4146.4	4172.1	4192.8	4223.6	4264.8
12.5°	4048.6	4053.8	4053.8	4064.1	4084.6	4110.4	4105.2	4131.0	4161.9	4197.9	4239.0
15°	3997.2	4007.5	4002.4	4012.6	4033.2	4059.0	4053.8	4079.5	4115.5	4151.5	4208.1
17.5°	3930.4	3935.5	3940.6	3940.6	3961.2	3981.8	3981.8	4007.5	4048.6	4089.9	4151.5
20°	3837.8	3848.0	3848.0	3853.1	3868.6	3899.5	3894.4	3920.0	3961.2	4002.4	4069.2
22.5°	3729.8	3734.9	3734.9	3740.0	3765.8	3781.1	3786.2	3806.9	3842.9	3889.1	3950.9
25°	3590.8	3596.0	3590.8	3606.2	3616.5	3647.4	3637.1	3662.9	3704.0	3740.0	3801.8
27.5°	3390.1	3400.5	3400.5	3405.6	3431.4	3457.0	3457.0	3482.8	3518.8	3544.5	3606.2
30°	3174.1	3189.5	3174.1	3199.9	3210.1	3230.8	3246.1	3261.6	3292.4	3328.5	3385.0
32.5°	2927.1	2922.0	2927.1	2937.5	2968.4	2983.8	2994.0	3009.5	3040.4	3071.2	3117.5
35°	2634.0	2644.2	2649.4	2670.0	2670.0	2695.6	2700.9	2711.1	2757.4	2778.0	2814.0
37.5°	2325.2	2335.6	2340.8	2351.0	2371.6	2381.9	2397.2	2412.8	2443.6	2479.6	2500.2
40°	2052.6	2052.6	2057.8	2068.0	2083.5	2088.6	2104.1	2124.6	2145.2	2176.1	2196.6
42.5°	1795.4	1800.5	1795.4	1805.8	1821.1	1841.8	1836.5	1862.2	1867.4	1888.0	1903.4
45°	1594.8	1594.8	1584.5	1594.8	1594.8	1615.4	1610.2	1620.5	1615.4	1625.6	1615.4
47.5°	1404.4	1409.6	1404.4	1409.6	1409.6	1409.6	1414.8	1404.4	1409.6	1394.1	1363.2
50°	1255.2	1260.4	1250.1	1255.2	1250.1	1245.0	1250.1	1234.6	1229.5	1209.0	1178.1
52.5°	1126.6	1121.5	1116.4	1116.4	1116.4	1111.2	1106.0	1090.6	1075.1	1054.6	1018.6
55°	1013.5	1008.2	1003.1	1003.1	992.9	987.8	987.8	972.2	956.9	931.1	890.0
57.5°	910.5	905.4	900.2	900.2	895.1	884.9	884.9	869.4	848.9	818.0	782.0
60°	812.9	812.9	812.9	807.6	807.6	797.4	797.4	782.0	761.4	730.5	689.4
62.5°	725.4	720.2	720.2	720.2	720.2	715.1	709.9	699.6	679.1	648.2	612.1
65°	622.5	622.5	622.5	622.5	617.4	617.4	617.4	601.9	591.6	560.8	524.8
67.5°	509.2	509.2	509.2	509.2	504.1	509.2	509.2	499.0	488.8	457.9	427.0
70°	406.4	401.2	396.1	401.2	396.1	396.1	401.2	391.0	385.9	360.1	329.2
72.5°	298.4	303.5	298.4	298.4	298.4	293.2	298.4	293.2	283.0	262.4	241.8
75°	210.9	216.1	216.1	210.9	210.9	210.9	205.8	205.8	195.5	180.0	169.8
77.5°	144.0	144.0	144.0	144.0	138.9	138.9	138.9	133.8	128.6	118.4	108.0
80°	92.6	92.6	92.6	92.6	87.5	87.5	87.5	82.2	82.2	72.0	61.8
82.5°	56.6	56.6	56.6	56.6	56.6	56.6	51.5	51.5	46.2	41.1	36.0
85°	30.9	30.9	30.9	30.9	30.9	30.9	30.9	25.8	25.8	20.6	15.4
87.5°	10.2	10.2	15.4	15.4	15.4	15.4	15.4	15.4	10.2	10.2	10.2
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°	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9
2.5°	4429.4	4434.5	4434.5	4434.5	4449.9	4455.1	4439.6	4424.2	4455.1	4449.9	4460.2
5°	4377.9	4393.4	4403.6	4408.8	4424.2	4434.5	4419.0	4413.9	4439.6	4444.8	4449.9
7.5°	4316.1	4341.9	4367.6	4377.9	4398.5	4408.8	4403.6	4403.6	4434.5	4444.8	4444.8
10°	4275.0	4311.0	4341.9	4367.6	4393.4	4408.8	4408.8	4413.9	4449.9	4460.2	4470.5
12.5°	4264.8	4311.0	4352.1	4388.2	4408.8	4434.5	4439.6	4455.1	4491.1	4506.5	4506.5
15°	4239.0	4300.8	4352.1	4398.5	4429.4	4460.2	4470.5	4501.4	4542.5	4552.8	4563.1
17.5°	4192.8	4254.4	4316.1	4372.8	4413.9	4439.6	4470.5	4501.4	4552.8	4568.2	4573.4
20°	4110.4	4182.4	4244.1	4300.8	4341.9	4377.9	4408.8	4444.8	4491.1	4511.6	4516.8
22.5°	3986.9	4059.0	4120.6	4182.4	4223.6	4254.4	4285.2	4326.5	4372.8	4393.4	4393.4
25°	3837.8	3904.6	3971.5	4017.8	4059.0	4095.0	4110.4	4156.8	4203.0	4228.8	4228.8
27.5°	3647.4	3709.1	3770.9	3822.2	3848.0	3878.9	3904.6	3945.8	3981.8	4002.4	4022.9
30°	3405.6	3467.4	3523.9	3575.4	3606.2	3637.1	3662.9	3693.8	3729.8	3755.4	3760.6
32.5°	3143.2	3194.6	3251.2	3302.8	3333.6	3343.9	3369.6	3400.5	3431.4	3451.9	3457.0
35°	2855.1	2891.1	2927.1	2973.5	3004.4	3004.4	3030.1	3050.6	3076.4	3122.6	3112.4
37.5°	2515.6	2567.1	2592.8	2608.2	2628.8	2649.4	2654.5	2680.2	2711.1	2721.4	2736.9
40°	2196.6	2212.1	2227.5	2227.5	2248.1	2248.1	2248.1	2253.2	2284.1	2289.2	2309.9
42.5°	1877.8	1877.8	1862.2	1846.9	1852.0	1846.9	1821.1	1821.1	1836.5	1857.1	1857.1
45°	1579.4	1543.4	1497.0	1461.0	1435.2	1425.0	1394.1	1394.1	1389.0	1394.1	1414.8
47.5°	1327.2	1265.5	1188.4	1116.4	1090.6	1070.0	1023.8	1003.1	992.9	998.0	1008.2
50°	1116.4	1049.5	962.0	874.5	828.2	802.5	746.0	709.9	704.8	694.5	715.1
52.5°	962.0	879.8	787.1	684.2	637.9	596.8	535.0	504.1	483.6	483.6	488.8
55°	828.2	740.8	637.9	535.0	488.8	457.9	396.1	355.0	334.4	329.2	344.6
57.5°	715.1	632.8	529.9	427.0	380.6	344.6	283.0	246.9	231.5	221.2	226.4
60°	627.6	545.2	442.4	344.6	303.5	262.4	210.9	169.8	149.2	149.2	154.4
62.5°	545.2	468.1	375.5	283.0	246.9	210.9	154.4	118.4	102.9	97.8	102.9
65°	463.0	391.0	313.8	236.6	200.6	169.8	123.5	92.6	72.0	66.9	72.0
67.5°	375.5	319.0	252.1	190.4	159.5	133.8	92.6	66.9	51.5	46.2	51.5
70°	293.2	241.8	190.4	138.9	118.4	97.8	66.9	51.5	36.0	30.9	36.0
72.5°	210.9	174.9	133.8	97.8	82.2	66.9	46.2	36.0	25.8	20.6	25.8
75°	144.0	118.4	87.5	61.8	51.5	46.2	30.9	20.6	15.4	15.4	15.4
77.5°	92.6	72.0	56.6	41.1	30.9	25.8	15.4	10.2	10.2	10.2	10.2
80°	51.5	41.1	30.9	20.6	15.4	15.4	10.2	10.2	5.1	5.1	5.1
82.5°	30.9	20.6	15.4	10.2	10.2	5.1	5.1	5.1	5.1	5.1	5.1
85°	15.4	10.2	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
87.5°	5.1	5.1	5.1	5.1	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9
2.5°	4439.6	4444.8	4429.4	4449.9	4434.5	4455.1	4455.1	4434.5	4439.6	4429.4	4449.9
5°	4429.4	4429.4	4419.0	4434.5	4413.9	4434.5	4429.4	4393.4	4403.6	4383.0	4403.6
7.5°	4429.4	4419.0	4403.6	4419.0	4393.4	4408.8	4388.2	4352.1	4341.9	4316.1	4316.1
10°	4444.8	4429.4	4408.8	4413.9	4388.2	4393.4	4362.5	4311.0	4295.6	4264.8	4254.4
12.5°	4480.8	4465.4	4434.5	4444.8	4408.8	4408.8	4367.6	4305.9	4275.0	4233.9	4223.6
15°	4532.2	4506.5	4470.5	4475.6	4439.6	4419.0	4367.6	4295.6	4254.4	4197.9	4182.4
17.5°	4542.5	4516.8	4470.5	4470.5	4424.2	4398.5	4336.8	4254.4	4203.0	4146.4	4115.5
20°	4485.9	4460.2	4408.8	4403.6	4362.5	4326.5	4259.6	4177.2	4125.9	4064.1	4038.4
22.5°	4367.6	4336.8	4290.5	4285.2	4244.1	4223.6	4151.5	4069.2	4017.8	3956.0	3935.5
25°	4192.8	4177.2	4131.0	4125.9	4089.9	4064.1	4002.4	3925.2	3878.9	3817.1	3796.6
27.5°	3986.9	3971.5	3925.2	3925.2	3884.0	3868.6	3812.0	3740.0	3704.0	3647.4	3621.6
30°	3740.0	3719.4	3693.8	3688.5	3652.5	3637.1	3585.6	3518.8	3482.8	3436.5	3426.1
32.5°	3446.8	3431.4	3415.9	3410.8	3374.8	3359.2	3323.2	3256.4	3225.5	3184.4	3169.0
35°	3107.2	3097.0	3081.5	3076.4	3060.9	3045.5	3009.5	2958.0	2942.6	2911.8	2896.2
37.5°	2716.2	2726.5	2716.2	2716.2	2700.9	2706.0	2675.1	2644.2	2628.8	2608.2	2597.9
40°	2294.4	2315.0	2330.4	2330.4	2325.2	2345.9	2340.8	2315.0	2309.9	2299.5	2294.4
42.5°	1867.4	1877.8	1908.6	1929.1	1924.0	1975.5	1980.6	2001.1	2016.6	2006.4	2011.5
45°	1419.9	1450.8	1491.9	1512.5	1538.1	1605.0	1641.1	1682.2	1718.2	1738.9	1733.6
47.5°	1023.8	1059.8	1106.0	1136.9	1183.2	1265.5	1358.1	1409.6	1461.0	1486.8	1512.5
50°	740.8	776.8	833.4	879.8	910.5	1023.8	1121.5	1188.4	1245.0	1281.0	1306.6
52.5°	519.6	560.8	622.5	663.6	709.9	818.0	931.1	1008.2	1070.0	1116.4	1142.0
55°	360.1	406.4	463.0	504.1	555.6	668.8	776.8	859.1	926.0	967.1	998.0
57.5°	252.1	293.2	349.9	385.9	437.2	545.2	653.4	735.6	802.5	843.6	879.8
60°	169.8	210.9	267.5	303.5	344.6	452.8	550.5	637.9	699.6	740.8	776.8
62.5°	118.4	154.4	210.9	246.9	283.0	375.5	468.1	545.2	607.0	653.4	684.2
65°	92.6	123.5	169.8	200.6	236.6	313.8	391.0	457.9	519.6	565.9	586.5
67.5°	66.9	97.8	133.8	159.5	185.2	252.1	319.0	370.4	427.0	463.0	488.8
70°	46.2	66.9	97.8	118.4	138.9	190.4	241.8	288.1	329.2	355.0	375.5
72.5°	36.0	46.2	66.9	82.2	97.8	133.8	174.9	210.9	241.8	262.4	283.0
75°	20.6	30.9	46.2	56.6	66.9	92.6	118.4	144.0	164.6	180.0	190.4
77.5°	10.2	15.4	25.8	30.9	41.1	56.6	77.1	92.6	108.0	118.4	128.6
80°	10.2	10.2	15.4	15.4	20.6	30.9	41.1	51.5	61.8	72.0	77.1
82.5°	5.1	5.1	10.2	10.2	10.2	15.4	20.6	30.9	36.0	41.1	46.2
85°	5.1	5.1	5.1	5.1	5.1	10.2	10.2	15.4	20.6	25.8	25.8
87.5°	0.0	0.0	5.1	5.1	5.1	5.1	5.1	10.2	10.2	10.2	15.4
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: P252625

CATALOG NUMBER: LE\_6B60D010R EC6B60708040 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9	4449.9
2.5°	4434.5	4444.8	4439.6	4449.9	4434.5	4429.4	4439.6	4424.2
5°	4377.9	4383.0	4377.9	4377.9	4367.6	4357.4	4367.6	4352.1
7.5°	4290.5	4290.5	4275.0	4275.0	4254.4	4244.1	4244.1	4239.0
10°	4218.4	4203.0	4187.5	4192.8	4161.9	4151.5	4146.4	4141.2
12.5°	4182.4	4172.1	4146.4	4146.4	4115.5	4105.2	4100.1	4095.0
15°	4141.2	4120.6	4100.1	4095.0	4069.2	4059.0	4053.8	4043.5
17.5°	4069.2	4053.8	4028.1	4028.1	4002.4	3997.2	3986.9	3981.8
20°	3992.1	3971.5	3950.9	3950.9	3920.0	3920.0	3904.6	3909.8
22.5°	3884.0	3868.6	3848.0	3848.0	3822.2	3817.1	3801.8	3796.6
25°	3755.4	3734.9	3719.4	3714.2	3693.8	3683.4	3678.2	3668.0
27.5°	3585.6	3570.2	3554.8	3544.5	3518.8	3513.6	3498.2	3503.4
30°	3374.8	3364.5	3359.2	3349.0	3318.1	3307.9	3307.9	3292.4
32.5°	3143.2	3127.8	3117.5	3102.1	3076.4	3071.2	3055.8	3060.9
35°	2860.2	2839.8	2824.2	2829.4	2798.6	2793.4	2783.1	2788.2
37.5°	2567.1	2546.5	2525.9	2520.8	2495.0	2495.0	2479.6	2479.6
40°	2263.5	2243.0	2232.6	2232.6	2201.8	2207.0	2191.5	2186.4
42.5°	1990.9	1970.4	1965.1	1960.0	1944.6	1939.5	1924.0	1929.1
45°	1733.6	1728.5	1728.5	1718.2	1702.8	1697.6	1702.8	1702.8
47.5°	1507.4	1512.5	1507.4	1507.4	1497.0	1507.4	1497.0	1502.1
50°	1317.0	1327.2	1327.2	1327.2	1322.1	1327.2	1327.2	1332.4
52.5°	1157.5	1172.9	1167.8	1172.9	1167.8	1178.1	1172.9	1178.1
55°	1018.6	1028.9	1034.0	1039.1	1039.1	1039.1	1039.1	1039.1
57.5°	890.0	905.4	910.5	915.8	915.8	926.0	915.8	915.8
60°	787.1	802.5	807.6	812.9	812.9	818.0	807.6	812.9
62.5°	694.5	709.9	709.9	715.1	715.1	715.1	704.8	709.9
65°	601.9	607.0	612.1	612.1	607.0	607.0	601.9	607.0
67.5°	499.0	504.1	499.0	499.0	493.9	493.9	483.6	488.8
70°	385.9	385.9	391.0	385.9	380.6	385.9	380.6	375.5
72.5°	288.1	288.1	288.1	283.0	283.0	277.8	283.0	283.0
75°	195.5	195.5	200.6	200.6	200.6	200.6	195.5	195.5
77.5°	128.6	128.6	128.6	128.6	133.8	128.6	128.6	128.6
80°	82.2	82.2	87.5	87.5	82.2	82.2	82.2	82.2
82.5°	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
85°	30.9	30.9	30.9	30.9	25.8	25.8	25.8	25.8
87.5°	15.4	15.4	15.4	15.4	15.4	15.4	10.2	10.2
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)