

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: io LED

Report Number: P252193

Luminaire Tested: **LD6B50D010TE EU6B30508027 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252193
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: io LED
Catalog Number: LD6B50D010TE EU6B30508027 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6508.0 lumens
Efficiency: N/A
Efficacy: 110.7 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

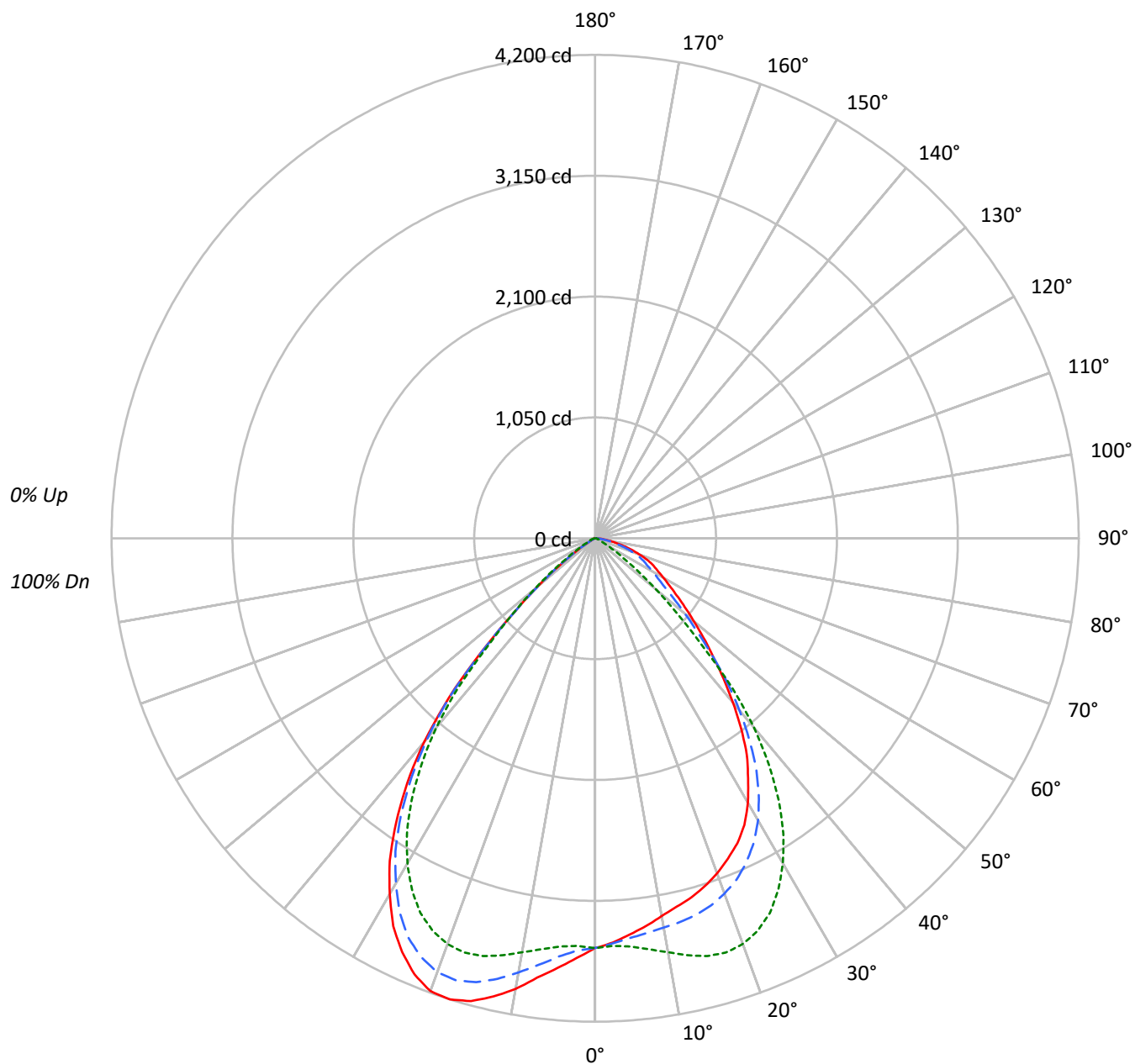
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	103	109	106	103	101		102	100	98		98	96	95		95	93	92
2	105	98	93	89	102	97	92	88		93	89	86		90	87	84		87	85	82
3	98	89	83	78	95	88	82	78		85	80	76		83	78	75		80	77	74
4	91	82	75	69	89	80	74	69		78	72	68		76	71	67		74	70	66
5	85	75	67	62	83	74	67	62		72	66	61		70	65	61		68	64	60
6	80	69	61	56	78	68	61	56		66	60	55		64	59	55		63	58	54
7	74	63	56	51	73	62	55	50		61	55	50		60	54	50		58	53	50
8	70	58	51	46	69	58	51	46		57	50	46		55	50	46		54	49	45
9	66	54	47	42	64	54	47	42		53	46	42		52	46	42		51	45	42
10	62	50	43	39	61	50	43	39		49	43	39		48	43	39		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	232283	232283	232283
5°	226261	233170	245430
10°	220755	241954	263378
15°	218174	253810	281171
20°	215052	260423	290673
25°	210477	258498	285450
30°	200010	245655	268729
35°	182990	221482	239920
40°	158280	182919	196835
45°	133469	119971	128764
50°	113321	69444	65293
55°	98343	33293	25160
60°	88832	15540	6224
65°	86171	8938	2099
70°	77273	7134	1946
75°	63497	5142	857
80°	47301	2555	0
85°	40796	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.9	5.3
10°-20°	1048.1	16.1
20°-30°	1601.4	24.6
30°-40°	1674.9	25.7
40°-50°	1086.5	16.7
50°-60°	431.4	6.6
60°-70°	204.6	3.1
70°-80°	97.3	1.5
80°-90°	19.8	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°	2993.4	46.0
0°-40°	4668.3	71.7
0°-60°	6186.2	95.1
0°-90°	6508.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6508.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3560	3560	3560	3560	3560	
5°	3455	3486	3560	3649	3748	326
15°	3230	3387	3758	3993	4163	910
25°	2924	3108	3591	3833	3965	1339
35°	2298	2437	2781	2944	3012	1421
45°	1447	1433	1300	1378	1396	1126
55°	865	735	293	228	221	783
65°	558	463	58	14	14	545
75°	252	204	20	7	3	272
85°	54	34	0	0	0	63
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°	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4
2.5°	3516.1	3522.9	3485.5	3475.3	3502.5	3512.7	3516.1	3505.9	3509.3	3522.9	3522.9
5°	3454.9	3461.7	3427.6	3417.4	3444.7	3451.5	3461.7	3458.3	3468.5	3488.9	3485.5
7.5°	3397.0	3407.2	3369.8	3356.2	3390.2	3407.2	3414.0	3414.0	3427.6	3454.9	3458.3
10°	3332.3	3345.9	3311.9	3305.1	3342.5	3359.6	3363.0	3369.8	3390.2	3427.6	3434.4
12.5°	3277.9	3291.5	3267.7	3257.5	3298.3	3315.3	3322.1	3335.7	3359.6	3407.2	3414.0
15°	3230.2	3240.4	3213.2	3206.4	3247.2	3267.7	3271.1	3291.5	3322.1	3376.6	3386.8
17.5°	3169.0	3175.8	3155.3	3148.5	3189.4	3209.8	3213.2	3237.0	3274.5	3328.9	3345.9
20°	3097.5	3104.3	3083.9	3077.0	3117.9	3141.7	3145.1	3165.5	3209.8	3267.7	3284.7
22.5°	3012.4	3026.0	3002.2	2995.4	3036.2	3056.6	3066.8	3083.9	3128.1	3186.0	3209.8
25°	2923.9	2923.9	2906.9	2903.5	2940.9	2964.7	2961.3	2985.1	3029.4	3087.3	3107.7
27.5°	2808.1	2804.7	2787.7	2784.3	2825.2	2845.6	2838.8	2862.6	2903.5	2961.3	2981.7
30°	2655.0	2661.8	2638.0	2631.1	2665.2	2699.2	2695.8	2719.6	2760.5	2815.0	2828.6
32.5°	2471.2	2478.0	2474.6	2464.4	2495.0	2512.0	2522.2	2539.2	2573.3	2631.1	2644.8
35°	2297.6	2287.4	2273.7	2273.7	2304.4	2331.6	2321.4	2341.8	2375.9	2433.7	2437.1
37.5°	2083.1	2079.7	2072.9	2066.1	2100.2	2107.0	2110.4	2124.0	2154.6	2202.3	2195.5
40°	1858.5	1861.9	1858.5	1844.9	1865.3	1892.5	1889.1	1895.9	1923.2	1957.2	1947.0
42.5°	1647.4	1647.4	1647.4	1633.8	1657.7	1671.3	1678.1	1674.7	1681.5	1712.1	1698.5
45°	1446.6	1450.0	1446.6	1443.2	1446.6	1453.4	1446.6	1443.2	1443.2	1453.4	1433.0
47.5°	1273.0	1273.0	1262.8	1252.6	1262.8	1266.2	1256.0	1245.8	1242.4	1239.0	1205.0
50°	1116.5	1113.0	1109.6	1092.6	1102.8	1106.2	1092.6	1085.8	1072.2	1055.2	1014.3
52.5°	980.3	976.9	973.5	956.5	963.3	966.7	953.1	939.5	922.4	908.8	857.8
55°	864.6	861.2	861.2	851.0	844.1	851.0	837.3	827.1	803.3	786.3	735.2
57.5°	765.9	765.9	759.1	748.8	752.2	752.2	738.6	725.0	704.6	684.2	643.3
60°	680.8	680.8	680.8	670.6	670.6	670.6	663.7	650.1	633.1	612.7	571.8
62.5°	612.7	612.7	609.3	599.1	602.5	602.5	595.7	582.1	565.0	551.4	510.6
65°	558.2	558.2	558.2	548.0	548.0	551.4	544.6	531.0	517.4	500.4	462.9
67.5°	490.1	486.7	486.7	479.9	483.3	486.7	479.9	469.7	452.7	442.5	408.5
70°	405.1	408.5	411.9	401.7	405.1	405.1	401.7	391.4	381.2	371.0	340.4
72.5°	330.2	330.2	326.8	323.4	323.4	326.8	320.0	309.7	302.9	296.1	272.3
75°	251.9	248.5	251.9	245.1	245.1	245.1	238.3	234.9	231.5	221.2	204.2
77.5°	183.8	180.4	180.4	173.6	177.0	177.0	173.6	166.8	160.0	156.6	143.0
80°	125.9	125.9	125.9	122.5	122.5	119.1	119.1	115.7	108.9	105.5	98.7
82.5°	85.1	85.1	85.1	81.7	81.7	81.7	78.3	74.9	71.5	68.1	61.3
85°	54.5	54.5	54.5	51.1	51.1	51.1	47.7	47.7	44.2	40.8	34.0
87.5°	30.6	30.6	30.6	27.2	27.2	27.2	27.2	27.2	23.8	20.4	17.0
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°	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4
2.5°	3546.8	3499.1	3529.8	3529.8	3519.5	3546.8	3563.8	3577.4	3574.0	3543.4	3540.0
5°	3519.5	3478.7	3512.7	3516.1	3505.9	3543.4	3567.2	3584.2	3587.6	3560.4	3563.8
7.5°	3499.1	3465.1	3509.3	3522.9	3519.5	3553.6	3580.8	3608.0	3621.7	3601.2	3604.6
10°	3488.9	3461.7	3509.3	3529.8	3533.2	3570.6	3611.4	3648.9	3665.9	3652.3	3662.5
12.5°	3475.3	3458.3	3512.7	3543.4	3557.0	3594.4	3645.5	3689.7	3717.0	3710.2	3730.6
15°	3461.7	3448.1	3512.7	3557.0	3574.0	3608.0	3665.9	3730.6	3761.2	3757.8	3785.0
17.5°	3427.6	3424.2	3492.3	3540.0	3563.8	3604.6	3659.1	3737.4	3768.0	3774.8	3808.9
20°	3373.2	3373.2	3448.1	3499.1	3526.4	3563.8	3631.9	3706.8	3744.2	3751.0	3788.4
22.5°	3298.3	3305.1	3376.6	3427.6	3468.5	3495.7	3567.2	3645.5	3679.5	3689.7	3730.6
25°	3199.6	3206.4	3274.5	3325.5	3369.8	3400.4	3468.5	3540.0	3580.8	3591.0	3621.7
27.5°	3070.2	3083.9	3148.5	3199.6	3237.0	3257.5	3328.9	3403.8	3434.4	3444.7	3475.3
30°	2920.5	2923.9	2988.5	3032.8	3070.2	3087.3	3148.5	3226.8	3250.6	3260.9	3305.1
32.5°	2736.7	2733.3	2794.5	2835.4	2866.0	2886.4	2951.1	3002.2	3026.0	3043.0	3066.8
35°	2515.4	2512.0	2556.3	2603.9	2627.7	2634.6	2699.2	2753.7	2767.3	2780.9	2811.6
37.5°	2266.9	2266.9	2304.4	2328.2	2355.4	2365.7	2396.3	2457.6	2481.4	2478.0	2501.8
40°	2004.8	1991.2	2018.5	2042.3	2049.1	2052.5	2083.1	2130.8	2147.8	2147.8	2164.8
42.5°	1729.1	1708.7	1712.1	1725.7	1732.5	1708.7	1729.1	1759.8	1749.6	1763.2	1766.6
45°	1436.4	1405.8	1392.2	1361.5	1368.3	1344.5	1330.9	1337.7	1334.3	1300.3	1307.1
47.5°	1198.1	1143.7	1119.9	1075.6	1065.4	1038.2	1021.1	990.5	963.3	963.3	946.3
50°	997.3	942.9	895.2	844.1	827.1	803.3	765.9	725.0	704.6	684.2	667.1
52.5°	837.3	779.5	721.6	667.1	643.3	612.7	561.6	520.8	483.3	462.9	442.5
55°	708.0	643.3	582.1	524.2	493.6	462.9	411.9	364.2	320.0	292.7	275.7
57.5°	609.3	548.0	483.3	422.1	394.8	360.8	306.3	255.3	214.4	183.8	166.8
60°	537.8	476.5	418.7	354.0	326.8	292.7	234.9	187.2	146.4	119.1	98.7
62.5°	476.5	422.1	360.8	302.9	275.7	241.7	187.2	139.6	102.1	74.9	57.9
65°	432.3	377.8	326.8	268.9	245.1	211.0	160.0	115.7	81.7	57.9	40.8
67.5°	381.2	333.6	282.5	234.9	211.0	183.8	136.2	98.7	68.1	47.7	34.0
70°	320.0	282.5	238.3	194.0	177.0	153.2	112.3	81.7	54.5	37.4	27.2
72.5°	255.3	224.7	190.6	156.6	143.0	119.1	91.9	64.7	40.8	27.2	20.4
75°	194.0	170.2	143.0	119.1	105.5	91.9	68.1	47.7	30.6	20.4	13.6
77.5°	132.7	122.5	102.1	81.7	74.9	64.7	44.2	30.6	20.4	13.6	6.8
80°	91.9	81.7	68.1	54.5	47.7	40.8	27.2	20.4	10.2	6.8	3.4
82.5°	57.9	47.7	40.8	34.0	30.6	23.8	17.0	10.2	6.8	3.4	3.4
85°	30.6	27.2	23.8	17.0	17.0	13.6	10.2	6.8	3.4	0.0	0.0
87.5°	17.0	13.6	10.2	6.8	6.8	3.4	3.4	3.4	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°	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4
2.5°	3580.8	3580.8	3577.4	3618.3	3570.6	3618.3	3594.4	3618.3	3584.2	3580.8	3584.2
5°	3608.0	3618.3	3621.7	3659.1	3614.9	3672.7	3652.3	3672.7	3648.9	3655.7	3665.9
7.5°	3662.5	3679.5	3676.1	3723.8	3679.5	3744.2	3730.6	3761.2	3737.4	3744.2	3757.8
10°	3723.8	3744.2	3747.6	3795.3	3754.4	3832.7	3815.7	3849.7	3829.3	3839.5	3856.5
12.5°	3795.3	3819.1	3822.5	3876.9	3832.7	3914.4	3904.2	3938.2	3921.2	3931.4	3951.8
15°	3849.7	3883.8	3890.6	3945.0	3897.4	3982.5	3975.7	4019.9	3992.7	4009.7	4026.7
17.5°	3876.9	3907.6	3921.2	3972.3	3931.4	4016.5	4009.7	4047.1	4026.7	4043.7	4064.2
20°	3859.9	3897.4	3907.6	3958.6	3917.8	4002.9	3992.7	4030.1	4009.7	4023.3	4043.7
22.5°	3798.7	3836.1	3849.7	3897.4	3859.9	3938.2	3934.8	3968.8	3941.6	3958.6	3975.7
25°	3689.7	3730.6	3737.4	3781.6	3740.8	3822.5	3815.7	3853.1	3832.7	3842.9	3866.7
27.5°	3533.2	3580.8	3591.0	3628.5	3597.8	3665.9	3665.9	3696.5	3672.7	3672.7	3696.5
30°	3345.9	3393.6	3400.4	3431.0	3403.8	3465.1	3468.5	3499.1	3461.7	3482.1	3485.5
32.5°	3117.9	3148.5	3169.0	3196.2	3155.3	3233.6	3223.4	3247.2	3226.8	3226.8	3243.8
35°	2842.2	2879.6	2889.8	2923.9	2889.8	2951.1	2951.1	2964.7	2944.3	2944.3	2971.5
37.5°	2542.6	2569.9	2573.3	2607.3	2580.1	2631.1	2627.7	2638.0	2617.5	2631.1	2631.1
40°	2192.1	2212.5	2219.3	2236.3	2232.9	2270.3	2266.9	2273.7	2263.5	2266.9	2273.7
42.5°	1783.6	1810.8	1824.4	1838.1	1817.6	1868.7	1858.5	1868.7	1865.3	1868.7	1878.9
45°	1313.9	1334.3	1344.5	1347.9	1341.1	1371.7	1395.6	1375.1	1378.5	1371.7	1385.4
47.5°	949.7	953.1	946.3	966.7	949.7	963.3	970.1	973.5	953.1	949.7	963.3
50°	650.1	667.1	643.3	653.5	650.1	663.7	656.9	660.3	639.9	650.1	643.3
52.5°	432.3	428.9	422.1	425.5	418.7	418.7	418.7	425.5	411.9	405.1	398.2
55°	262.1	255.3	241.7	238.3	238.3	241.7	234.9	228.1	228.1	224.7	224.7
57.5°	153.2	143.0	136.2	132.7	125.9	122.5	119.1	119.1	112.3	112.3	112.3
60°	85.1	74.9	68.1	61.3	61.3	57.9	54.5	51.1	51.1	51.1	47.7
62.5°	44.2	37.4	30.6	27.2	27.2	23.8	20.4	20.4	20.4	20.4	17.0
65°	30.6	23.8	20.4	17.0	17.0	13.6	13.6	13.6	13.6	13.6	13.6
67.5°	23.8	20.4	17.0	13.6	13.6	13.6	10.2	10.2	10.2	10.2	10.2
70°	20.4	13.6	13.6	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
72.5°	13.6	13.6	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
75°	10.2	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0
80°	3.4	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: P252193

CATALOG NUMBER: LD6B50D010TE EU6B30508027 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4	3560.4
2.5°	3614.9	3611.4	3614.9	3621.7	3608.0	3648.9	3628.5	3648.9
5°	3693.1	3696.5	3699.9	3710.2	3693.1	3744.2	3717.0	3747.6
7.5°	3795.3	3798.7	3802.1	3812.3	3802.1	3853.1	3822.5	3849.7
10°	3900.8	3907.6	3907.6	3924.6	3914.4	3962.0	3941.6	3975.7
12.5°	3999.5	4006.3	4013.1	4023.3	4016.5	4067.6	4050.5	4077.8
15°	4077.8	4091.4	4094.8	4108.4	4101.6	4156.1	4135.6	4162.9
17.5°	4115.2	4128.8	4128.8	4145.8	4139.0	4196.9	4169.7	4200.3
20°	4094.8	4105.0	4108.4	4125.4	4118.6	4176.5	4149.2	4186.7
22.5°	4030.1	4033.5	4036.9	4053.9	4050.5	4101.6	4077.8	4101.6
25°	3911.0	3921.2	3917.8	3931.4	3931.4	3972.3	3945.0	3965.4
27.5°	3740.8	3751.0	3751.0	3768.0	3754.4	3795.3	3768.0	3798.7
30°	3533.2	3543.4	3536.6	3550.2	3536.6	3577.4	3557.0	3567.2
32.5°	3284.7	3284.7	3288.1	3291.5	3284.7	3322.1	3301.7	3322.1
35°	2988.5	2995.4	2998.8	3002.2	2995.4	3022.6	2998.8	3012.4
37.5°	2655.0	2672.0	2668.6	2672.0	2661.8	2695.8	2675.4	2682.2
40°	2297.6	2297.6	2294.2	2301.0	2290.8	2318.0	2304.4	2311.2
42.5°	1882.3	1892.5	1878.9	1895.9	1868.7	1906.1	1892.5	1882.3
45°	1412.6	1399.0	1395.6	1399.0	1388.8	1392.2	1402.4	1395.6
47.5°	963.3	963.3	956.5	946.3	959.9	963.3	949.7	949.7
50°	646.7	646.7	639.9	636.5	643.3	639.9	633.1	643.3
52.5°	411.9	398.2	398.2	405.1	398.2	391.4	401.7	394.8
55°	224.7	217.8	217.8	224.7	217.8	217.8	214.4	221.2
57.5°	108.9	112.3	108.9	108.9	108.9	108.9	105.5	108.9
60°	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
62.5°	20.4	20.4	17.0	17.0	17.0	17.0	17.0	17.0
65°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
67.5°	10.2	10.2	10.2	10.2	10.2	13.6	10.2	10.2
70°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
72.5°	10.2	10.2	13.6	13.6	13.6	13.6	13.6	13.6
75°	6.8	6.8	6.8	3.4	3.4	3.4	3.4	3.4
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)