

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: P274443

Luminaire Tested: **LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274443
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, LENSED WALLWASH WITH HAZE FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 685.5 lumens
Efficiency: N/A
Efficacy: 49.0 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

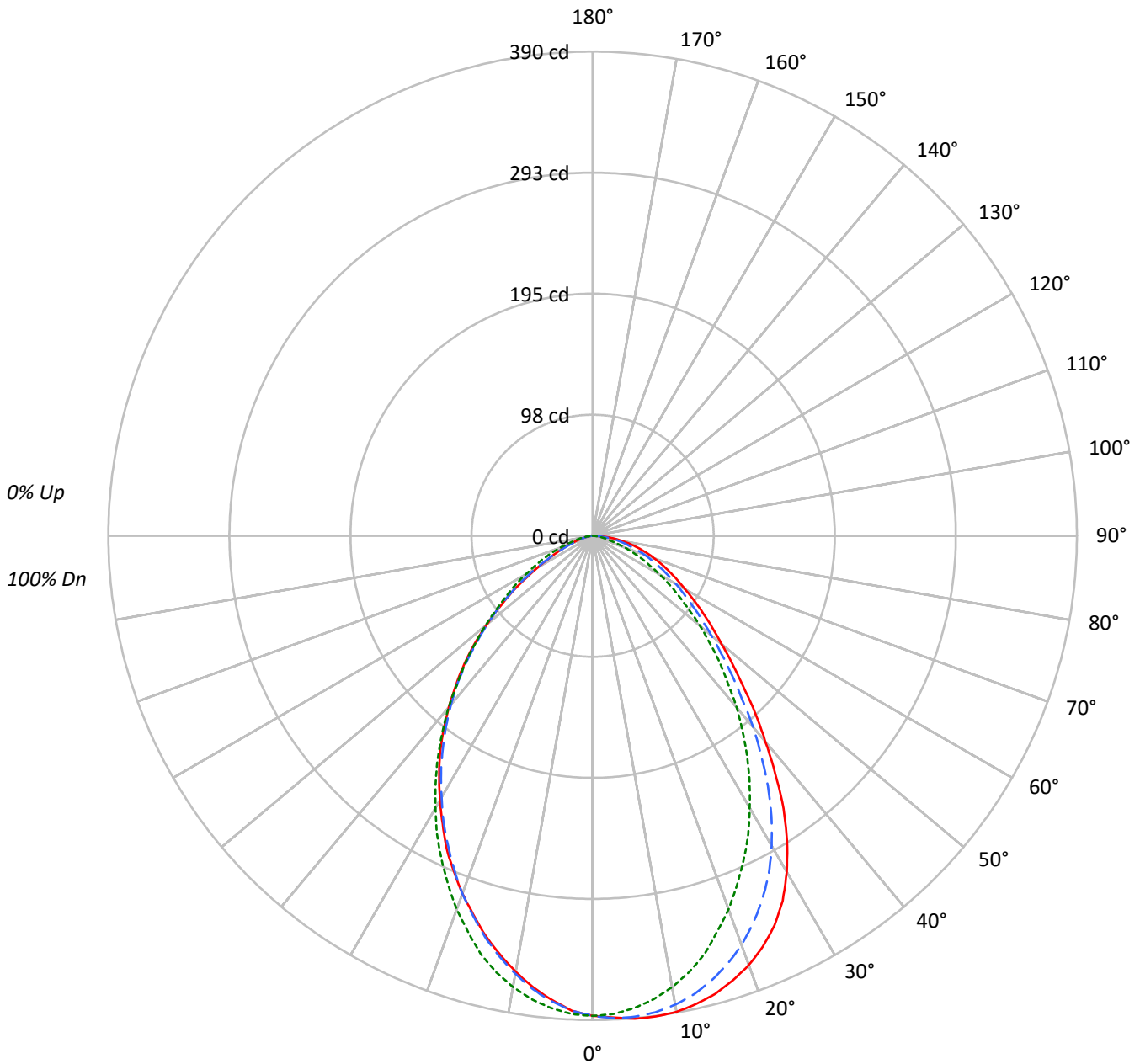
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P274443

CATALOG NUMBER: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H

Luminous Intensity Polar Plot





TEST NUMBER: P274443

CATALOG NUMBER: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H

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	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67																			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59																			
5	82	70	62	57	80	69	62	56	67	61	56	65	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	45	43																			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39																			
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35																			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	25229	25229	25229
5°	25574	25011	24585
10°	25797	24445	23624
15°	25794	23545	22525
20°	25542	22224	21293
25°	24936	20725	20026
30°	23549	19059	18532
35°	21345	17283	17068
40°	18430	15372	15321
45°	15805	13378	13480
50°	13732	11449	11286
55°	12341	9657	9043
60°	11208	8129	6655
65°	10528	6715	4894
70°	10033	5227	3586
75°	9604	3781	2445
80°	9092	2630	1616
85°	8010	1572	823



TEST NUMBER: P274443

CATALOG NUMBER: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	5.3
10°-20°	99.1	14.5
20°-30°	137.5	20.1
30°-40°	142.5	20.8
40°-50°	117.1	17.1
50°-60°	80.5	11.7
60°-70°	46.3	6.7
70°-80°	21.3	3.1
80°-90°	5.2	0.8
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°	272.8	39.8
0°-40°	415.2	60.6
0°-60°	612.8	89.4
0°-90°	685.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	685.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	387	387	387	387	387	
5°	390	389	382	376	375	37
15°	382	371	349	335	334	108
25°	346	323	288	276	278	159
35°	268	246	217	210	214	166
45°	171	158	145	143	146	133
55°	108	98	85	80	80	98
65°	68	60	44	31	32	68
75°	38	30	15	10	10	40
85°	11	8	2	1	1	12
90°	0	0	0	0	0	



TEST NUMBER: P274443

CATALOG NUMBER: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7
2.5°	388.3	391.5	389.4	388.9	389.9	389.9	389.9	388.3	389.4	387.8	388.9
5°	390.5	393.1	391.0	389.9	391.0	391.5	389.9	388.9	390.5	388.3	388.9
7.5°	390.5	393.1	391.0	390.5	391.0	391.0	390.5	388.3	389.4	387.2	387.2
10°	389.4	391.5	389.4	388.3	388.9	388.3	388.3	385.6	386.2	383.5	383.5
12.5°	386.2	388.9	386.2	385.1	385.1	385.1	383.5	381.3	381.9	378.6	378.1
15°	381.9	384.0	381.3	380.3	380.3	379.7	378.6	375.4	375.4	372.2	370.6
17.5°	375.4	377.6	375.4	373.8	373.3	372.2	371.1	367.9	366.8	363.1	361.5
20°	367.9	369.5	367.4	365.8	364.7	363.6	361.5	358.2	357.2	353.4	350.7
22.5°	358.2	360.4	357.2	355.6	354.5	352.9	350.7	347.5	345.9	341.0	337.8
25°	346.4	347.5	344.8	343.2	341.0	340.0	338.4	334.1	332.5	327.1	323.3
27.5°	331.4	332.5	329.2	328.2	325.5	324.4	322.3	318.5	316.3	311.0	307.2
30°	312.6	313.7	311.5	309.9	307.8	305.6	304.0	300.2	297.0	291.6	288.4
32.5°	291.6	293.2	291.1	289.0	285.2	285.7	283.0	279.3	276.6	271.8	268.0
35°	268.0	269.1	266.4	265.9	263.7	261.6	258.9	256.2	254.6	249.2	246.0
37.5°	241.7	244.4	241.7	239.5	238.5	236.9	235.2	231.5	230.4	227.2	222.9
40°	216.4	218.1	216.4	214.3	212.7	212.7	210.5	208.4	205.7	202.5	200.9
42.5°	193.9	192.8	192.3	191.2	189.1	188.5	188.0	185.3	183.7	180.5	177.8
45°	171.3	171.9	170.8	170.3	168.6	167.6	166.5	164.3	163.8	160.6	158.4
47.5°	152.5	152.0	150.9	150.9	149.8	148.8	147.7	146.1	145.6	142.9	140.7
50°	135.3	135.9	135.3	134.8	133.2	132.7	131.6	130.5	129.4	126.8	124.6
52.5°	121.4	120.8	120.3	120.3	118.7	118.2	117.1	116.0	114.9	112.3	110.6
55°	108.5	108.5	108.0	107.4	105.8	105.3	104.7	103.7	102.0	99.9	98.3
57.5°	96.7	96.7	96.1	95.6	94.5	94.5	93.5	92.4	91.3	89.2	87.0
60°	85.9	86.5	85.9	85.4	84.3	84.3	83.8	82.2	81.6	79.0	77.3
62.5°	76.8	76.8	76.8	76.3	75.7	74.7	74.7	73.0	72.0	70.4	68.2
65°	68.2	68.2	68.2	67.7	66.6	66.1	65.5	64.5	63.4	61.8	59.6
67.5°	60.2	60.2	60.2	59.6	58.5	58.0	57.5	56.9	55.3	53.7	51.6
70°	52.6	52.6	52.1	51.6	51.0	50.5	49.9	48.9	47.8	45.7	44.0
72.5°	45.1	45.1	45.1	44.0	43.5	43.5	42.4	41.9	40.8	38.7	37.1
75°	38.1	37.6	37.6	37.1	36.5	36.0	35.4	34.9	33.3	32.2	30.1
77.5°	31.2	31.2	30.6	30.1	30.1	29.5	29.0	27.9	27.4	25.8	24.2
80°	24.2	24.2	24.2	24.2	23.6	23.1	23.1	22.0	21.5	19.9	18.8
82.5°	18.3	17.7	17.7	17.7	17.2	16.6	16.6	16.1	15.6	14.5	13.4
85°	10.7	10.2	10.2	10.2	9.7	9.7	9.1	9.1	8.6	7.5	7.5
87.5°	3.2	3.2	3.8	3.8	3.2	3.2	3.2	3.2	3.2	2.7	2.7
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: P274443

CATALOG NUMBER: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7
2.5°	387.8	389.4	387.2	386.7	388.9	387.8	387.2	386.2	386.7	385.6	384.0
5°	387.2	389.4	386.7	385.1	387.8	386.2	385.1	384.0	384.0	381.9	380.8
7.5°	385.6	386.7	384.0	382.4	384.0	382.4	381.3	379.7	379.2	376.5	374.9
10°	381.3	382.4	379.2	377.0	378.6	376.5	374.9	373.3	372.2	369.0	366.8
12.5°	375.4	376.0	372.2	369.5	370.6	369.0	366.3	364.1	363.1	359.8	357.2
15°	367.4	367.9	363.6	359.8	360.9	358.8	355.6	353.4	351.8	348.6	344.8
17.5°	357.7	357.2	352.3	348.6	349.1	346.4	343.2	340.0	337.8	334.1	331.4
20°	347.0	345.3	340.0	335.7	336.2	333.0	329.2	326.0	323.3	320.1	316.3
22.5°	333.5	331.4	326.5	321.2	321.7	319.0	313.7	311.0	308.3	304.0	300.8
25°	319.0	315.8	311.0	305.6	305.6	302.4	298.1	294.9	292.2	287.9	284.1
27.5°	301.8	300.2	293.8	289.5	289.0	285.7	282.0	278.2	275.0	271.2	267.5
30°	283.0	280.4	275.5	270.7	269.6	266.9	263.2	258.9	256.7	253.0	249.7
32.5°	263.2	260.5	255.1	250.3	249.7	247.6	244.4	240.1	237.9	235.2	233.1
35°	240.6	239.5	234.2	230.4	230.4	228.3	225.0	221.3	219.7	217.0	214.3
37.5°	219.1	217.5	212.7	209.5	209.5	206.8	203.6	201.9	200.3	198.2	196.6
40°	196.6	195.5	191.7	188.5	189.1	186.9	184.8	182.6	181.5	180.5	178.8
42.5°	175.6	174.6	171.9	169.2	169.2	167.6	165.4	163.8	162.7	161.1	160.6
45°	156.8	155.2	153.1	150.4	150.4	148.8	147.7	146.6	146.1	145.0	143.4
47.5°	138.6	137.5	135.3	132.7	132.7	132.7	130.5	128.9	128.9	127.8	127.3
50°	123.0	121.4	119.8	117.6	117.6	116.5	114.9	113.3	113.3	112.8	111.7
52.5°	108.5	107.4	105.3	103.1	103.1	102.0	100.4	99.9	99.4	97.7	97.2
55°	96.1	95.1	93.5	90.8	90.2	89.7	88.1	87.0	86.5	84.9	84.9
57.5°	84.9	83.8	81.1	79.5	79.0	77.9	76.3	75.2	74.7	73.6	72.5
60°	75.2	73.6	71.4	69.3	68.7	67.7	66.1	65.0	64.5	62.3	61.2
62.5°	66.1	64.5	62.3	60.2	59.6	58.5	56.4	55.3	54.2	52.1	51.0
65°	57.5	55.9	53.7	51.6	50.5	49.9	47.8	46.2	45.1	43.5	41.4
67.5°	49.4	47.8	45.7	43.0	43.0	41.4	39.7	38.1	36.5	34.9	33.3
70°	41.9	40.3	38.1	36.0	35.4	34.4	32.8	30.6	29.5	27.4	25.8
72.5°	34.9	33.3	31.2	29.0	28.5	27.4	25.8	23.6	22.0	20.4	18.8
75°	28.5	26.9	24.7	23.1	22.6	21.5	19.9	17.7	16.1	15.0	13.4
77.5°	22.6	20.9	19.3	17.7	17.2	16.1	14.5	13.4	11.8	10.7	9.1
80°	17.2	16.1	14.5	13.4	12.9	11.8	10.7	9.1	8.1	7.0	6.4
82.5°	12.4	11.3	10.2	8.6	8.6	7.5	7.0	5.9	4.8	4.3	3.8
85°	7.0	5.9	5.4	4.8	4.3	4.3	3.8	3.2	2.7	2.1	2.1
87.5°	2.1	2.1	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1
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: P274443

CATALOG NUMBER: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7
2.5°	384.0	384.6	383.5	384.6	383.5	384.0	382.9	384.0	382.9	384.0	381.9
5°	380.3	380.3	378.6	379.7	378.6	379.2	377.0	377.6	376.5	377.6	375.4
7.5°	373.8	374.3	371.7	372.7	371.1	371.1	369.5	370.1	368.4	369.0	367.4
10°	366.3	365.8	363.1	364.1	362.0	362.0	360.4	360.4	358.2	358.8	356.6
12.5°	355.6	355.0	351.8	352.9	350.7	350.7	349.1	349.1	347.0	348.0	345.9
15°	343.2	342.7	339.4	340.0	337.8	337.8	335.7	336.2	334.6	335.7	333.5
17.5°	329.2	328.7	325.5	326.0	323.3	323.9	322.3	321.7	320.6	321.2	319.6
20°	314.7	313.7	310.4	311.0	309.9	308.3	307.2	307.8	306.7	307.8	306.1
22.5°	299.7	297.5	294.9	294.9	293.8	293.8	292.2	293.2	291.1	292.7	291.6
25°	282.5	280.9	278.7	279.8	277.7	277.7	276.1	276.6	275.5	276.6	275.5
27.5°	265.9	264.8	261.6	262.6	261.0	261.6	259.9	260.5	259.9	261.0	259.9
30°	248.1	247.6	245.4	245.4	244.9	244.4	243.8	243.8	243.3	244.9	243.8
32.5°	231.5	229.9	227.7	229.3	226.7	228.3	227.2	228.3	227.2	228.3	227.7
35°	214.3	213.8	211.1	211.6	211.1	211.1	210.5	210.5	210.5	212.1	212.1
37.5°	196.0	195.5	193.9	194.4	193.4	192.8	192.8	193.9	193.9	195.0	195.0
40°	178.3	178.8	177.2	177.2	176.7	176.7	176.7	177.8	177.2	178.3	177.8
42.5°	160.6	160.6	159.0	159.5	159.0	159.5	159.5	160.6	160.6	161.1	160.6
45°	143.9	143.9	143.4	143.9	142.9	143.4	142.9	143.9	143.4	143.9	143.9
47.5°	127.3	127.3	127.3	126.8	126.8	126.8	126.8	126.8	126.2	127.3	126.8
50°	111.7	112.3	111.7	111.7	111.2	111.7	111.2	111.2	110.1	110.6	110.6
52.5°	97.7	97.7	96.7	96.7	96.7	96.1	96.1	96.1	95.6	95.6	94.5
55°	84.3	84.3	83.2	83.2	82.7	82.2	81.6	81.6	80.0	80.0	78.4
57.5°	72.0	71.4	69.8	69.8	68.7	68.2	67.7	67.1	66.1	65.0	64.5
60°	60.7	59.6	58.5	58.0	56.9	55.9	54.8	53.7	52.6	52.1	51.6
62.5°	49.9	48.3	47.3	46.7	45.7	44.0	43.0	41.9	40.8	40.3	39.2
65°	40.3	38.7	37.1	36.5	35.4	34.4	32.8	31.7	30.6	30.1	30.1
67.5°	31.7	30.1	27.9	27.9	26.9	25.8	24.7	23.6	23.1	23.6	23.6
70°	23.6	22.6	20.9	20.4	19.3	18.3	17.7	17.7	17.7	18.3	17.7
72.5°	17.7	16.1	15.0	14.5	14.0	13.4	13.4	13.4	12.9	13.4	13.4
75°	12.4	11.3	10.2	10.2	9.7	9.7	9.7	9.7	9.7	9.7	9.7
77.5°	8.6	7.5	7.0	7.0	7.0	6.4	6.4	6.4	6.4	6.4	6.4
80°	5.4	5.4	4.8	4.8	4.3	4.3	4.3	4.3	4.3	4.3	4.3
82.5°	3.2	3.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
85°	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.1	1.1	1.1	1.1
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: P274443

CATALOG NUMBER: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBLWW0H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	386.7	386.7	386.7	386.7	386.7	386.7	386.7	386.7
2.5°	381.9	383.5	381.3	382.9	382.4	381.9	380.8	382.9
5°	375.4	376.0	373.8	376.0	375.4	374.3	373.3	375.4
7.5°	366.3	367.9	365.2	367.4	366.8	365.8	364.7	366.8
10°	356.1	357.7	355.6	357.2	357.2	356.1	354.5	356.6
12.5°	344.8	345.9	343.7	345.9	345.3	344.3	343.7	345.3
15°	332.5	334.1	331.9	333.5	333.0	332.5	331.9	333.5
17.5°	319.0	320.6	319.0	320.6	320.6	319.0	318.5	319.6
20°	305.6	306.7	305.1	306.7	306.1	306.1	305.1	306.7
22.5°	290.6	292.2	291.1	292.2	291.6	291.6	291.1	292.2
25°	275.5	277.1	275.5	277.1	276.6	276.6	275.5	278.2
27.5°	260.5	261.6	259.9	262.1	261.6	260.5	261.0	261.6
30°	244.4	245.4	244.4	246.0	246.0	246.0	244.9	246.0
32.5°	228.3	229.9	228.3	229.9	229.3	229.3	228.8	229.9
35°	212.1	212.7	211.6	213.2	213.2	213.8	212.7	214.3
37.5°	195.5	196.0	195.5	196.0	197.1	195.5	196.6	197.1
40°	178.3	179.4	178.8	179.4	179.4	179.9	179.4	179.9
42.5°	161.1	162.2	161.1	162.7	162.2	162.2	162.7	162.7
45°	143.4	145.0	143.9	145.0	145.6	145.0	145.0	146.1
47.5°	126.8	127.8	127.3	127.8	127.8	127.8	127.8	128.9
50°	110.1	110.6	110.6	111.2	111.2	111.7	110.6	111.2
52.5°	93.5	94.5	94.5	94.5	94.0	94.5	94.5	94.5
55°	78.4	79.0	77.9	79.0	79.0	78.4	78.4	79.5
57.5°	63.9	63.9	63.9	63.9	63.9	63.4	63.9	63.9
60°	50.5	51.0	50.5	50.5	50.5	50.5	49.9	51.0
62.5°	39.2	39.2	38.7	39.2	39.2	39.2	39.7	39.7
65°	30.6	31.2	30.6	31.2	31.2	31.2	31.2	31.7
67.5°	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
70°	18.3	18.3	18.3	18.8	18.3	18.3	18.3	18.8
72.5°	13.4	13.4	13.4	13.4	13.4	13.4	14.0	14.0
75°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
77.5°	6.4	6.4	6.4	7.0	6.4	7.0	6.4	6.4
80°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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













(END OF REPORT)