

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: P274438

Luminaire Tested: **LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWWOLI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274438
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, LENSED WALLWASH WITH SPECULAR FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1046.6 lumens
Efficiency: N/A
Efficacy: 47.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

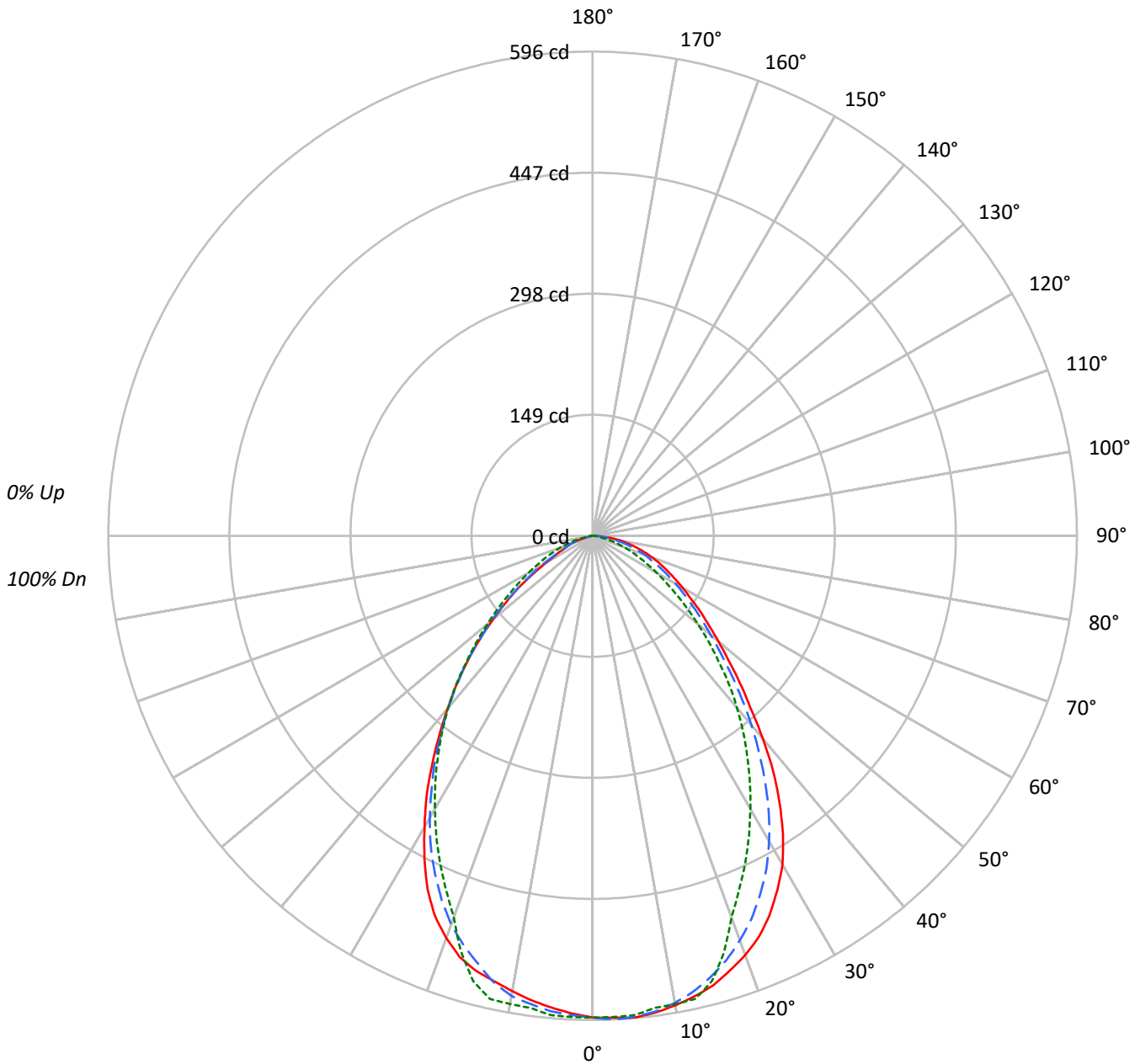
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P274438

CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P274438

CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI

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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	38688	38688	38688
5°	38986	38783	38181
10°	38874	38774	37701
15°	38702	38337	37452
20°	38123	34700	36574
25°	37087	31990	34596
30°	35218	29237	31158
35°	31953	26434	27421
40°	27747	23548	23608
45°	23666	20252	20040
50°	20482	17122	16179
55°	18313	14275	12523
60°	16676	11861	8442
65°	15576	9756	6298
70°	14840	7935	5284
75°	13965	5621	1739
80°	13300	2893	564
85°	10929	1722	0



TEST NUMBER: P274438

CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	5.4
10°-20°	156.6	15.0
20°-30°	216.2	20.7
30°-40°	220.0	21.0
40°-50°	176.8	16.9
50°-60°	117.6	11.2
60°-70°	67.0	6.4
70°-80°	30.1	2.9
80°-90°	6.3	0.6
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°	428.8	41.0
0°-40°	648.8	62.0
0°-60°	943.2	90.1
0°-90°	1046.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1046.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	593	593	593	593	593	
5°	595	594	592	588	583	57
15°	573	562	568	545	554	161
25°	515	488	444	459	481	236
35°	401	370	332	338	344	249
45°	256	241	220	217	217	199
55°	161	150	126	112	110	145
65°	101	90	63	41	41	100
75°	55	46	22	9	7	59
85°	15	10	2	1	0	17
90°	0	0	0	0	0	



TEST NUMBER: P274438

CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0
2.5°	593.8	596.9	596.1	595.3	596.1	595.3	593.8	593.8	592.2	592.2	596.1
5°	595.3	596.9	596.1	595.3	595.3	596.1	593.0	593.0	591.5	590.7	594.5
7.5°	592.2	594.5	593.0	593.0	592.2	593.0	589.9	589.9	587.6	586.8	590.7
10°	586.8	589.9	588.4	588.4	588.4	586.8	585.3	584.5	582.2	581.5	583.8
12.5°	580.7	583.0	582.2	580.7	580.7	580.7	577.6	576.8	573.8	572.2	574.5
15°	573.0	574.5	573.8	573.0	571.4	571.4	568.4	566.8	563.7	560.7	562.2
17.5°	561.4	563.7	562.2	561.4	559.1	559.1	556.0	554.5	549.9	546.8	547.6
20°	549.1	549.9	549.1	547.6	545.3	544.5	541.4	538.3	534.5	530.6	529.9
22.5°	534.5	535.2	532.9	531.4	529.1	528.3	524.5	522.2	516.0	511.4	510.6
25°	515.2	516.0	516.0	512.1	510.6	509.1	505.2	501.4	496.0	489.8	487.5
27.5°	492.1	494.4	492.9	489.0	486.0	485.2	481.3	478.3	471.3	465.9	462.9
30°	467.5	466.7	465.9	463.6	459.0	458.2	454.4	450.5	445.1	438.2	434.4
32.5°	435.9	435.9	435.1	432.8	428.2	426.7	423.6	419.0	412.8	407.4	403.6
35°	401.2	402.0	401.2	396.6	393.5	392.0	390.5	385.1	379.7	373.5	370.4
37.5°	365.0	362.7	363.5	359.7	355.8	357.3	352.7	350.4	344.3	339.6	336.5
40°	325.8	327.3	324.2	322.7	320.4	318.1	318.1	314.2	311.1	305.7	304.2
42.5°	287.3	289.6	288.8	287.3	284.2	285.0	281.1	279.6	275.7	273.4	271.1
45°	256.5	256.5	256.5	254.9	254.1	252.6	250.3	248.0	245.7	242.6	241.1
47.5°	226.4	226.4	227.2	225.6	224.1	223.3	221.8	221.8	217.9	214.9	213.3
50°	201.8	201.8	201.8	200.2	198.7	198.7	197.2	195.6	193.3	191.0	189.5
52.5°	179.4	179.4	179.4	177.9	177.1	176.4	175.6	174.8	171.7	170.2	168.7
55°	161.0	160.2	160.2	159.4	157.9	157.9	157.1	155.6	153.3	150.9	150.2
57.5°	142.5	143.2	142.5	142.5	140.9	140.9	139.4	138.6	136.3	134.8	133.2
60°	127.8	127.8	127.8	127.1	125.5	126.3	124.8	124.0	121.7	119.4	117.8
62.5°	113.2	114.0	114.0	113.2	111.7	111.7	110.9	110.1	107.8	105.5	103.2
65°	100.9	100.9	100.9	100.1	99.3	99.3	98.6	97.8	95.5	92.4	90.1
67.5°	89.3	88.6	88.6	88.6	87.8	87.0	86.3	85.5	83.2	80.9	77.8
70°	77.8	77.8	77.8	77.0	75.5	76.2	75.5	74.7	72.4	70.1	67.8
72.5°	67.0	67.0	66.2	65.5	65.5	64.7	64.7	63.9	61.6	58.5	56.2
75°	55.4	55.4	55.4	55.4	53.9	54.7	53.1	52.4	50.8	48.5	46.2
77.5°	45.4	45.4	45.4	44.7	43.9	43.9	43.1	42.4	40.0	38.5	35.4
80°	35.4	35.4	35.4	35.4	34.7	33.9	33.1	32.3	30.8	28.5	26.2
82.5°	26.2	26.2	25.4	25.4	25.4	24.6	23.9	23.1	21.6	20.0	18.5
85°	14.6	15.4	15.4	13.9	14.6	13.9	13.9	12.3	12.3	10.8	10.0
87.5°	5.4	4.6	4.6	4.6	4.6	4.6	4.6	3.9	3.9	3.9	3.1
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: P274438

CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0
2.5°	593.0	592.2	595.3	595.3	590.7	593.0	593.8	592.2	592.2	593.0	590.7
5°	591.5	589.9	593.0	593.8	589.2	591.5	592.2	590.7	591.5	592.2	589.2
7.5°	586.1	586.1	588.4	589.2	584.5	586.8	586.8	585.3	586.1	586.1	583.8
10°	580.7	578.4	580.7	580.7	576.8	577.6	579.1	578.4	581.5	585.3	585.3
12.5°	570.7	568.4	572.2	572.2	569.9	573.0	576.8	579.1	582.2	583.8	579.1
15°	558.3	559.1	566.1	571.4	569.1	573.8	577.6	576.1	572.2	567.6	560.7
17.5°	542.2	539.9	546.0	549.1	546.0	547.6	550.6	547.6	541.4	537.6	528.3
20°	523.7	517.5	517.5	516.0	510.6	510.6	509.8	504.4	502.1	499.8	496.0
22.5°	502.9	496.0	493.7	489.0	484.4	483.6	481.3	475.9	472.9	471.3	466.7
25°	479.0	472.9	469.0	464.4	457.5	455.9	453.6	448.2	446.7	444.4	440.5
27.5°	454.4	446.7	441.3	436.7	430.5	429.7	425.1	421.3	418.2	416.6	413.6
30°	425.9	417.4	413.6	407.4	402.8	401.2	397.4	392.0	389.7	388.1	385.8
32.5°	394.3	387.4	383.5	378.1	372.0	372.7	368.1	363.5	362.0	360.4	358.1
35°	363.5	356.6	352.0	347.3	343.5	341.9	338.9	335.0	332.7	331.9	330.4
37.5°	329.6	324.2	320.4	315.8	312.7	311.1	309.6	305.7	304.2	304.2	301.1
40°	296.5	291.9	288.8	286.5	282.6	281.9	280.3	278.0	277.2	276.5	274.2
42.5°	266.5	260.3	258.0	256.5	254.1	252.6	251.8	250.3	249.5	248.8	246.4
45°	238.0	232.6	230.3	228.7	226.4	225.6	224.9	222.6	221.0	219.5	218.7
47.5°	210.2	206.4	205.6	201.8	200.2	198.7	197.2	195.6	194.8	194.1	191.0
50°	186.4	184.1	180.2	177.9	176.4	175.6	172.5	170.2	169.4	168.7	166.3
52.5°	164.8	161.7	159.4	155.6	154.8	153.3	151.7	148.6	147.1	146.3	144.0
55°	145.6	143.2	140.2	137.1	134.8	134.0	131.7	128.6	127.1	125.5	124.0
57.5°	129.4	125.5	122.5	119.4	117.8	115.5	113.2	111.7	109.4	107.0	104.7
60°	114.0	110.9	107.0	104.0	102.4	100.9	97.8	95.5	93.2	90.9	88.6
62.5°	99.3	96.3	92.4	89.3	87.8	86.3	83.2	80.9	78.6	76.2	73.2
65°	86.3	83.2	80.1	77.0	75.5	73.9	70.9	67.8	65.5	63.2	60.1
67.5°	75.5	71.6	68.5	65.5	63.9	62.4	59.3	57.0	53.9	51.6	48.5
70°	63.9	60.8	58.5	55.4	53.9	52.4	49.3	46.2	43.9	41.6	38.5
72.5°	53.9	50.1	47.7	44.7	43.1	42.4	39.3	37.0	34.7	31.6	29.3
75°	43.1	40.0	37.0	34.7	33.1	32.3	29.3	27.0	24.6	22.3	20.0
77.5°	33.1	30.8	27.7	25.4	23.9	23.1	20.0	17.7	15.4	13.9	11.6
80°	24.6	21.6	20.0	17.7	16.9	15.4	13.9	11.6	10.0	7.7	6.2
82.5°	16.9	14.6	13.1	11.6	10.8	10.0	8.5	6.9	5.4	4.6	3.9
85°	9.2	7.7	6.9	6.2	5.4	5.4	4.6	3.9	3.1	2.3	1.5
87.5°	3.1	2.3	2.3	2.3	2.3	1.5	1.5	1.5	0.8	0.8	0.8
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: P274438

CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0
2.5°	592.2	592.2	592.2	591.5	591.5	591.5	590.7	593.8	590.7	589.9	592.2
5°	591.5	589.9	589.9	589.9	589.9	589.2	588.4	589.9	587.6	586.8	586.8
7.5°	586.8	586.1	586.1	585.3	584.5	583.8	583.0	583.8	581.5	580.7	580.7
10°	587.6	586.1	586.1	583.8	582.2	579.9	577.6	578.4	575.3	573.0	573.0
12.5°	578.4	574.5	572.2	569.9	568.4	567.6	564.5	566.1	563.0	562.2	562.2
15°	557.6	553.0	549.1	547.6	547.6	546.0	543.7	546.8	545.3	546.0	549.9
17.5°	525.2	522.9	520.6	519.8	520.6	522.2	523.7	528.3	528.3	530.6	534.5
20°	496.7	495.2	496.7	496.7	497.5	500.6	503.7	507.5	509.1	511.4	516.8
22.5°	469.0	469.0	470.6	472.9	472.1	477.5	478.3	485.2	485.2	489.8	494.4
25°	442.1	442.1	443.6	444.4	445.9	449.0	452.1	457.5	459.0	463.6	467.5
27.5°	415.9	415.1	415.1	415.9	417.4	421.3	422.8	429.0	431.3	434.4	438.2
30°	386.6	385.8	387.4	388.9	388.1	392.0	394.3	398.9	400.5	403.6	406.6
32.5°	358.9	358.9	358.9	360.4	360.4	363.5	363.5	368.9	368.9	371.2	374.3
35°	330.4	330.4	331.2	331.9	332.7	333.5	334.2	337.3	338.1	338.9	340.4
37.5°	303.4	302.7	303.4	303.4	301.9	305.0	305.0	308.1	305.7	308.1	308.8
40°	275.7	275.7	274.9	274.9	274.9	276.5	274.9	277.2	275.7	277.2	276.5
42.5°	247.2	247.2	245.7	247.2	246.4	246.4	246.4	248.0	245.7	247.2	248.0
45°	218.7	217.9	217.9	217.2	217.2	217.2	217.9	217.9	217.2	218.7	218.7
47.5°	191.0	190.2	190.2	190.2	190.2	191.0	188.7	190.2	188.7	188.7	188.7
50°	167.1	166.3	165.6	164.8	164.0	164.0	163.3	163.3	161.7	161.0	160.2
52.5°	144.0	143.2	141.7	141.7	140.9	140.2	137.9	137.9	135.5	134.8	134.8
55°	123.2	120.9	120.1	118.6	118.6	117.1	115.5	114.0	111.7	110.1	110.1
57.5°	104.0	101.7	100.1	99.3	98.6	97.0	94.0	93.2	90.1	89.3	88.6
60°	87.0	84.7	82.4	80.9	80.1	77.8	74.7	73.2	71.6	69.3	67.0
62.5°	70.9	68.5	65.5	64.7	63.2	60.8	58.5	56.2	54.7	52.4	50.8
65°	57.0	54.7	52.4	50.8	49.3	47.0	44.7	42.4	40.8	40.0	39.3
67.5°	46.2	43.1	40.8	40.0	38.5	37.0	34.7	33.9	32.3	32.3	32.3
70°	36.2	33.9	31.6	30.8	30.0	28.5	27.0	27.0	27.0	27.0	27.0
72.5°	27.0	25.4	23.1	22.3	21.6	20.8	19.3	20.0	19.3	19.3	19.3
75°	16.9	15.4	13.9	13.1	12.3	11.6	10.8	10.0	9.2	8.5	8.5
77.5°	9.2	7.7	6.9	6.2	6.2	5.4	4.6	4.6	3.9	3.9	3.9
80°	5.4	4.6	3.9	3.1	3.1	2.3	2.3	2.3	2.3	1.5	1.5
82.5°	3.1	2.3	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	0.8
85°	1.5	1.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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: P274438

CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBLWW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0
2.5°	588.4	590.7	588.4	590.7	590.7	590.7	590.7	588.4
5°	584.5	586.1	583.8	585.3	586.1	585.3	585.3	583.0
7.5°	577.6	579.1	576.8	579.1	579.9	579.1	578.4	576.8
10°	570.7	571.4	569.1	570.7	572.2	572.2	571.4	569.1
12.5°	559.9	562.2	559.9	561.4	563.0	563.7	563.7	561.4
15°	547.6	551.4	549.9	552.2	554.5	555.3	555.3	554.5
17.5°	535.2	539.1	536.8	540.6	542.9	544.5	545.3	543.7
20°	517.5	522.2	520.6	523.7	526.8	529.1	529.1	526.8
22.5°	494.4	500.6	499.8	502.1	506.0	506.7	508.3	506.7
25°	469.0	473.6	472.9	475.2	479.8	479.8	480.6	480.6
27.5°	439.7	444.4	443.6	445.1	448.2	449.0	449.8	448.2
30°	408.2	410.5	410.5	412.8	415.1	415.9	415.9	413.6
32.5°	373.5	376.6	378.1	377.4	379.7	381.2	380.4	380.4
35°	341.9	342.7	343.5	344.3	345.0	346.6	345.0	344.3
37.5°	308.1	310.4	308.8	310.4	311.9	311.1	310.4	310.4
40°	277.2	278.0	276.5	278.0	278.8	278.8	278.8	277.2
42.5°	246.4	248.0	246.4	248.0	248.0	248.0	248.0	247.2
45°	215.6	217.2	217.2	217.9	217.9	217.2	217.2	217.2
47.5°	187.1	188.7	187.1	188.7	189.5	187.9	187.9	187.9
50°	160.2	159.4	159.4	160.2	160.2	160.2	160.2	159.4
52.5°	132.5	133.2	133.2	133.2	134.0	133.2	134.0	134.0
55°	108.6	108.6	108.6	109.4	108.6	108.6	109.4	110.1
57.5°	87.0	86.3	85.5	85.5	86.3	85.5	85.5	85.5
60°	67.0	66.2	65.5	65.5	65.5	65.5	65.5	64.7
62.5°	50.1	50.1	50.1	50.8	50.8	50.8	50.8	51.6
65°	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.8
67.5°	32.3	32.3	32.3	33.1	33.1	33.1	33.1	33.1
70°	27.0	27.0	27.7	27.0	27.7	27.7	27.7	27.7
72.5°	18.5	18.5	18.5	18.5	18.5	17.7	18.5	17.7
75°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.9
77.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	0.8	0.8	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 E9808895 / USPTCWHP6082093





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













(END OF REPORT)