

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: P252238

Luminaire Tested: **LD6B10D010 EU6B10209027 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252238  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B10D010 EU6B10209027 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 807.0 lumens  
Efficiency: N/A  
Efficacy: 80.3 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

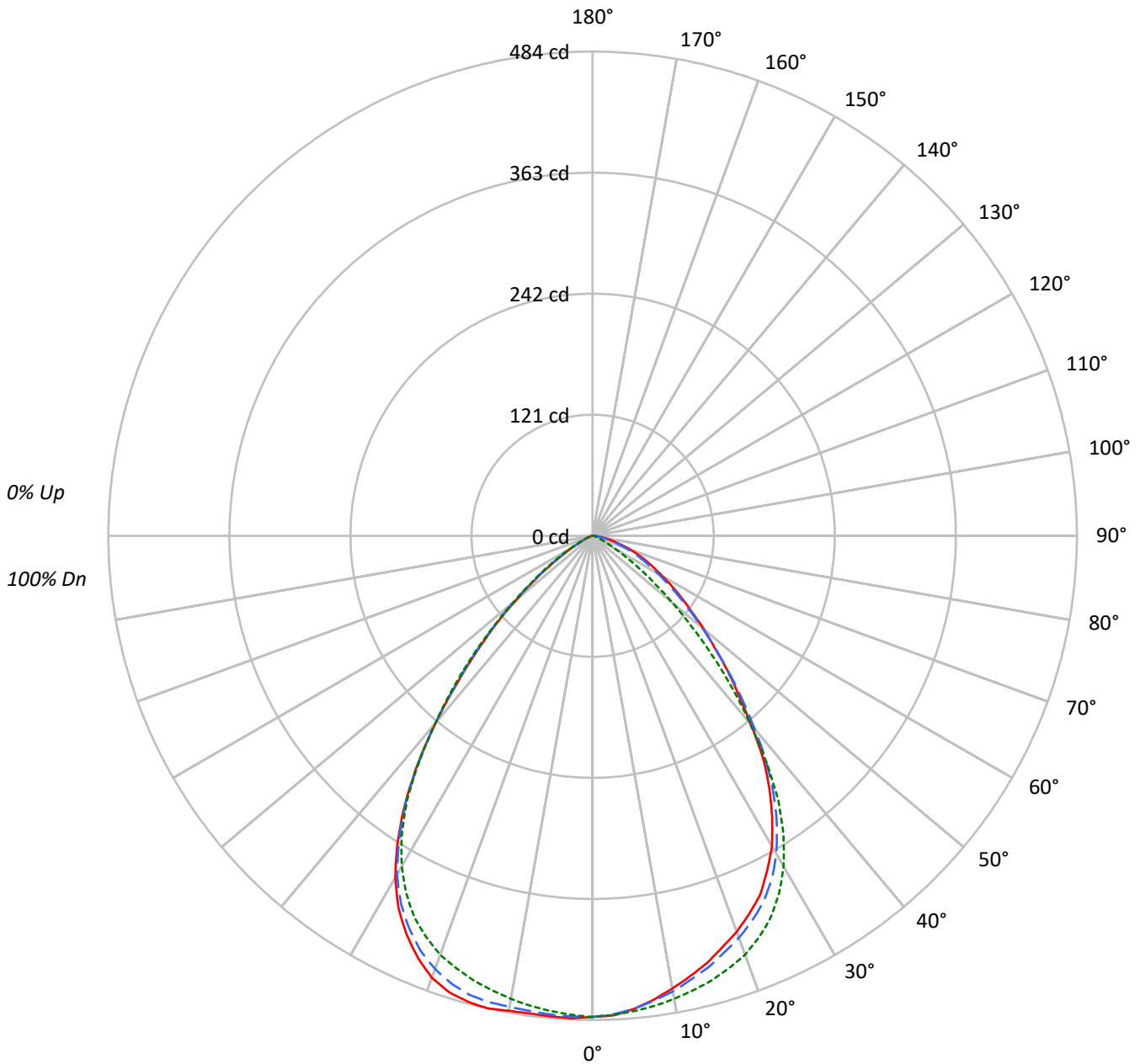
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252238

CATALOG NUMBER: LD6B10D010 EU6B10209027 6LBSW1H

### Luminous Intensity Polar Plot





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CATALOG NUMBER: LD6B10D010 EU6B10209027 6LBSW1H

**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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

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

	0°	90°	180°
0°	31381	31381	31381
5°	31081	31239	31579
10°	30441	31136	31944
15°	29860	31076	32569
20°	29243	30937	32631
25°	28520	30320	31659
30°	26999	28755	29719
35°	24522	25773	26004
40°	20925	20832	20729
45°	17576	15602	15113
50°	14687	10556	10028
55°	12353	6472	5881
60°	10465	3406	2962
65°	9062	1791	1436
70°	7535	1106	782
75°	5571	731	429
80°	4358	451	225
85°	3443	449	0



TEST NUMBER: P252238

CATALOG NUMBER: LD6B10D010 EU6B10209027 6LBSW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.3	5.6
10°-20°	129.8	16.1
20°-30°	191.7	23.8
30°-40°	197.5	24.5
40°-50°	136.4	16.9
50°-60°	67.3	8.3
60°-70°	27.3	3.4
70°-80°	9.7	1.2
80°-90°	2.0	0.2
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°	366.8	45.5
0°-40°	564.3	69.9
0°-60°	768.0	95.2
0°-90°	807.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	807.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	481	481	481	481	481	
5°	475	475	477	480	482	45
15°	442	447	460	475	482	124
25°	396	404	421	433	440	181
35°	308	316	324	325	326	191
45°	190	192	169	167	164	147
55°	109	105	57	53	52	98
65°	59	53	12	9	9	58
75°	22	19	3	2	2	25
85°	5	4	1	0	0	6
90°	0	0	0	0	0	



TEST NUMBER: P252238

CATALOG NUMBER: LD6B10D010 EU6B10209027 6LBSW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0
2.5°	479.9	478.1	479.3	477.0	479.9	477.0	477.5	478.1	477.5	478.1	478.7
5°	474.6	472.9	474.6	471.7	474.6	472.9	472.9	473.5	473.5	474.1	474.6
7.5°	467.7	465.9	467.7	464.8	468.2	466.5	466.5	467.7	467.1	467.7	468.8
10°	459.5	457.2	458.9	457.2	460.7	458.4	459.5	459.5	459.5	461.3	462.4
12.5°	450.8	448.5	450.8	447.9	451.4	449.7	450.2	452.0	452.6	453.7	454.3
15°	442.1	439.2	440.4	438.6	442.1	440.4	440.9	443.3	443.3	445.0	446.7
17.5°	431.1	428.7	431.1	428.7	431.6	430.5	431.6	433.4	433.4	435.1	436.9
20°	421.2	418.9	420.6	418.9	422.3	420.6	421.2	423.5	424.1	425.8	427.6
22.5°	409.0	407.2	408.4	406.7	410.1	409.0	409.6	411.9	412.5	413.6	416.5
25°	396.2	392.7	394.5	393.3	396.8	395.0	396.2	398.5	399.7	401.4	403.8
27.5°	377.6	375.9	377.0	377.0	379.9	378.2	378.8	381.1	382.8	384.6	387.5
30°	358.4	355.5	356.7	357.3	359.6	358.4	359.6	361.9	362.5	364.8	367.2
32.5°	334.0	332.9	335.2	334.0	335.2	335.2	335.8	337.5	338.7	339.9	342.8
35°	307.9	305.6	307.9	306.7	309.6	307.9	309.6	311.4	311.4	313.7	315.5
37.5°	279.4	276.5	277.7	277.7	278.9	278.3	278.3	281.2	281.8	283.5	285.2
40°	245.7	244.6	246.9	246.3	246.9	246.9	247.5	249.2	250.4	251.0	251.5
42.5°	215.5	216.1	216.7	216.7	216.7	216.7	216.7	219.0	218.4	220.2	220.8
45°	190.5	188.2	189.4	188.8	190.5	188.8	190.5	192.3	191.1	192.9	191.7
47.5°	165.0	165.0	165.0	164.4	165.6	165.0	166.1	166.7	166.7	166.7	166.1
50°	144.7	142.9	143.5	143.5	144.1	143.5	144.7	145.2	145.2	144.1	141.8
52.5°	124.9	124.3	124.3	125.5	125.5	124.9	124.9	124.9	124.9	123.2	122.0
55°	108.6	107.5	108.1	108.1	108.1	108.1	108.6	108.1	108.1	106.3	104.6
57.5°	94.1	93.0	93.0	93.0	93.5	93.0	93.0	93.0	92.4	90.6	88.3
60°	80.2	79.6	80.2	80.2	80.8	80.2	80.2	80.2	79.0	77.3	74.9
62.5°	68.6	68.6	68.6	69.1	69.1	68.6	68.6	68.0	67.4	65.1	62.7
65°	58.7	58.1	58.7	58.7	59.3	59.3	58.7	58.1	57.5	55.2	52.9
67.5°	48.8	48.2	48.8	48.8	49.4	48.8	48.8	48.8	47.1	45.9	43.6
70°	39.5	38.9	38.9	38.9	39.5	38.3	38.9	38.9	37.8	36.0	33.7
72.5°	30.2	30.2	30.2	30.2	30.2	30.2	29.6	29.6	28.5	26.7	25.6
75°	22.1	22.1	22.7	22.7	22.1	22.1	22.1	21.5	20.9	19.8	18.6
77.5°	16.3	16.3	16.3	16.3	15.7	15.7	15.7	15.1	14.5	13.9	12.8
80°	11.6	11.6	11.6	11.0	11.6	11.0	11.0	11.0	9.9	9.3	8.7
82.5°	8.1	7.6	7.6	7.6	7.6	7.6	7.6	7.0	7.0	6.4	5.8
85°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.1	3.5	3.5
87.5°	2.3	2.9	2.9	2.9	2.9	2.9	2.9	2.3	2.3	2.3	1.7
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: P252238

CATALOG NUMBER: LD6B10D010 EU6B10209027 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0
2.5°	478.7	478.7	479.9	478.1	481.0	479.3	478.7	481.6	479.9	479.3	480.4
5°	474.6	475.2	475.8	474.6	477.5	475.8	475.8	478.7	477.5	477.0	478.7
7.5°	469.4	470.0	471.1	470.6	472.9	471.7	472.3	475.2	474.1	474.1	475.8
10°	463.0	464.2	465.3	465.3	468.2	467.1	467.1	470.6	469.4	470.0	472.3
12.5°	455.5	457.2	458.9	459.5	462.4	460.7	461.3	465.3	464.8	465.3	467.7
15°	447.3	449.7	451.4	451.4	454.9	453.1	454.9	458.9	457.8	460.1	463.0
17.5°	438.0	440.4	442.7	443.3	446.7	445.6	447.9	452.0	452.0	453.1	456.6
20°	429.3	432.2	433.4	435.1	438.6	438.0	439.2	443.8	443.8	445.6	449.1
22.5°	417.7	420.6	422.9	424.7	427.6	427.6	429.3	433.4	433.4	434.5	438.0
25°	404.9	408.4	410.1	411.9	414.8	414.2	416.0	419.4	420.0	421.2	424.7
27.5°	388.7	391.6	393.9	395.0	399.1	396.8	398.5	402.6	402.0	403.2	406.1
30°	368.3	371.2	373.5	373.5	377.0	377.0	378.8	380.5	380.5	381.7	384.0
32.5°	344.5	348.0	348.0	349.7	352.1	349.7	352.1	354.4	353.2	355.0	356.7
35°	317.2	318.9	319.5	319.5	321.3	320.7	320.1	321.8	320.7	323.6	325.3
37.5°	284.1	286.4	285.2	286.4	285.8	284.1	284.1	287.0	284.7	285.2	287.0
40°	252.1	252.1	251.5	248.6	249.2	247.5	246.9	247.5	245.2	244.6	246.9
42.5°	219.0	218.4	216.7	212.6	213.2	210.3	208.0	208.0	206.8	206.2	206.8
45°	189.4	187.6	184.7	180.1	178.9	176.6	172.0	170.8	169.1	169.1	169.6
47.5°	162.1	159.8	155.1	149.9	147.0	144.1	139.4	137.7	134.8	133.6	134.8
50°	139.4	135.4	129.6	122.0	119.1	115.6	111.0	108.1	105.2	104.0	103.4
52.5°	118.5	112.7	106.9	97.6	95.3	91.8	85.4	82.5	79.6	77.3	77.3
55°	100.5	95.3	87.1	78.4	74.9	71.5	65.1	61.0	58.1	56.9	55.8
57.5°	84.2	78.4	70.9	61.6	58.1	54.6	48.2	44.2	41.2	39.5	38.3
60°	70.9	64.5	56.9	48.8	44.7	41.2	34.9	30.8	27.9	26.1	25.0
62.5°	58.1	52.9	45.3	37.8	34.3	30.8	25.6	21.5	18.6	17.4	15.7
65°	48.8	43.6	36.6	30.2	27.3	23.8	19.2	15.7	13.4	11.6	10.5
67.5°	39.5	35.4	29.6	23.8	20.9	18.6	14.5	11.6	9.3	8.1	7.6
70°	31.4	27.3	22.7	18.0	16.3	13.9	11.0	8.1	7.0	5.8	5.2
72.5°	23.2	20.3	16.8	13.4	11.6	10.5	7.6	6.4	4.6	4.1	3.5
75°	16.8	14.5	12.2	9.3	8.1	7.6	5.8	4.1	3.5	2.9	2.3
77.5°	11.6	10.5	8.1	6.4	5.8	5.2	4.1	2.9	2.3	1.7	1.7
80°	7.6	6.4	5.2	4.1	4.1	3.5	2.3	1.7	1.7	1.2	1.2
82.5°	4.6	4.1	3.5	2.9	2.3	2.3	1.7	1.2	1.2	0.6	0.6
85°	2.9	2.3	1.7	1.7	1.2	1.2	1.2	0.6	0.6	0.6	0.6
87.5°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	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: P252238

CATALOG NUMBER: LD6B10D010 EU6B10209027 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0
2.5°	480.4	480.4	481.6	479.9	481.0	481.0	482.2	479.9	481.0	481.6	482.8
5°	478.1	478.7	479.9	479.3	479.9	479.9	481.0	478.1	480.4	480.4	482.2
7.5°	475.8	475.8	477.0	476.4	477.5	478.1	479.3	477.0	479.3	479.3	481.0
10°	472.9	472.9	474.6	474.1	475.8	476.4	478.1	475.8	478.1	478.7	480.4
12.5°	468.8	469.4	471.1	471.1	472.9	474.1	475.8	474.6	477.5	478.1	480.4
15°	464.2	465.3	467.7	467.1	468.8	470.6	472.9	471.1	475.2	476.4	478.7
17.5°	458.4	459.5	461.3	461.3	463.0	464.2	467.1	465.9	469.4	470.0	472.9
20°	449.7	451.4	453.7	453.1	454.9	456.0	458.4	457.2	460.7	461.9	464.8
22.5°	439.2	440.4	442.1	442.1	443.8	445.0	447.3	445.6	449.1	449.7	452.0
25°	425.3	426.4	427.6	428.2	429.9	430.5	431.6	430.5	433.4	434.0	436.9
27.5°	407.2	407.8	409.6	409.6	410.7	411.3	413.1	410.7	414.8	414.8	416.5
30°	385.7	385.2	387.5	386.3	387.5	387.5	389.2	388.1	391.0	389.8	391.6
32.5°	357.3	358.4	358.4	357.3	359.6	359.0	359.0	357.9	359.6	360.2	361.3
35°	324.2	325.9	325.9	326.5	327.1	325.3	325.9	322.4	325.3	325.9	326.5
37.5°	288.1	286.4	287.6	285.8	288.7	285.2	285.2	282.9	285.2	285.2	285.8
40°	246.9	246.3	247.5	246.3	245.7	245.2	244.0	242.3	244.6	243.4	245.2
42.5°	208.0	207.4	207.4	206.2	205.7	205.7	204.5	203.3	202.7	202.7	205.7
45°	167.9	169.1	167.9	167.3	168.5	167.3	167.9	165.6	166.7	165.6	166.7
47.5°	134.2	134.8	133.6	132.5	134.2	132.5	132.5	130.7	133.0	133.0	131.9
50°	104.0	103.4	102.2	103.4	102.8	102.8	102.8	101.1	102.2	100.5	101.7
52.5°	76.7	76.1	76.1	75.5	76.1	75.5	75.5	74.9	74.9	74.4	74.9
55°	55.8	55.2	54.0	54.0	54.0	54.6	54.0	53.4	53.4	52.9	53.4
57.5°	37.8	36.6	36.6	36.6	36.6	36.0	36.0	35.4	36.0	35.4	36.0
60°	24.4	24.4	23.2	23.2	23.2	23.2	23.2	22.7	23.2	23.2	23.2
62.5°	15.1	15.1	14.5	13.9	14.5	13.9	13.9	13.9	14.5	13.9	14.5
65°	9.9	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
67.5°	7.0	6.4	6.4	6.4	6.4	6.4	6.4	5.8	6.4	6.4	6.4
70°	4.6	4.6	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	2.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	1.7	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	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	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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: P252238

CATALOG NUMBER: LD6B10D010 EU6B10209027 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	481.0	481.0	481.0	481.0	481.0	481.0	481.0	481.0
2.5°	481.0	481.6	480.4	481.0	479.9	481.0	481.6	482.8
5°	479.9	480.4	479.3	480.4	479.3	480.4	481.0	482.2
7.5°	478.7	479.9	478.7	479.9	478.7	479.9	480.4	481.6
10°	478.7	480.4	479.3	481.0	479.3	480.4	481.6	482.2
12.5°	478.7	480.4	479.9	481.0	480.4	481.6	482.8	483.9
15°	477.5	479.3	478.1	479.9	479.3	479.9	482.2	482.2
17.5°	471.1	472.9	472.9	474.1	474.1	475.8	477.0	478.1
20°	463.0	464.8	464.2	465.9	465.9	467.7	468.8	470.0
22.5°	450.8	453.1	452.6	454.3	453.7	454.9	457.2	456.6
25°	435.1	438.0	437.5	438.6	438.0	438.0	439.2	439.8
27.5°	416.0	417.7	417.1	418.3	417.1	418.3	419.4	420.0
30°	391.0	392.1	391.6	392.1	391.6	392.7	393.3	394.5
32.5°	360.8	362.5	360.8	361.9	361.3	361.3	363.7	362.5
35°	324.7	325.3	325.9	325.9	324.7	325.3	326.5	326.5
37.5°	284.7	287.6	284.1	285.8	285.2	285.2	285.2	287.0
40°	242.8	243.4	242.3	242.3	242.3	241.7	244.0	243.4
42.5°	203.3	203.9	203.3	201.6	202.2	202.2	203.9	201.6
45°	165.0	166.1	165.6	165.6	164.4	164.4	165.0	163.8
47.5°	130.7	131.9	130.1	130.7	129.6	130.7	130.1	131.3
50°	99.3	100.5	99.9	100.5	100.5	99.3	101.1	98.8
52.5°	74.4	74.9	74.4	73.8	73.2	73.2	74.4	73.8
55°	52.9	52.3	52.3	52.3	52.9	52.9	52.3	51.7
57.5°	35.4	35.4	34.9	34.9	35.4	34.3	34.9	34.3
60°	22.7	22.7	22.7	22.7	22.1	22.7	22.7	22.7
62.5°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
65°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
67.5°	5.8	6.4	6.4	6.4	5.8	5.8	5.8	5.8
70°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	0.6	0.6	0.6	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)