

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: P252474

Luminaire Tested: **LD6B20D010 EU6B10209035 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252474  
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: LD6B20D010 EU6B10209035 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1499.0 lumens  
Efficiency: N/A  
Efficacy: 72.1 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

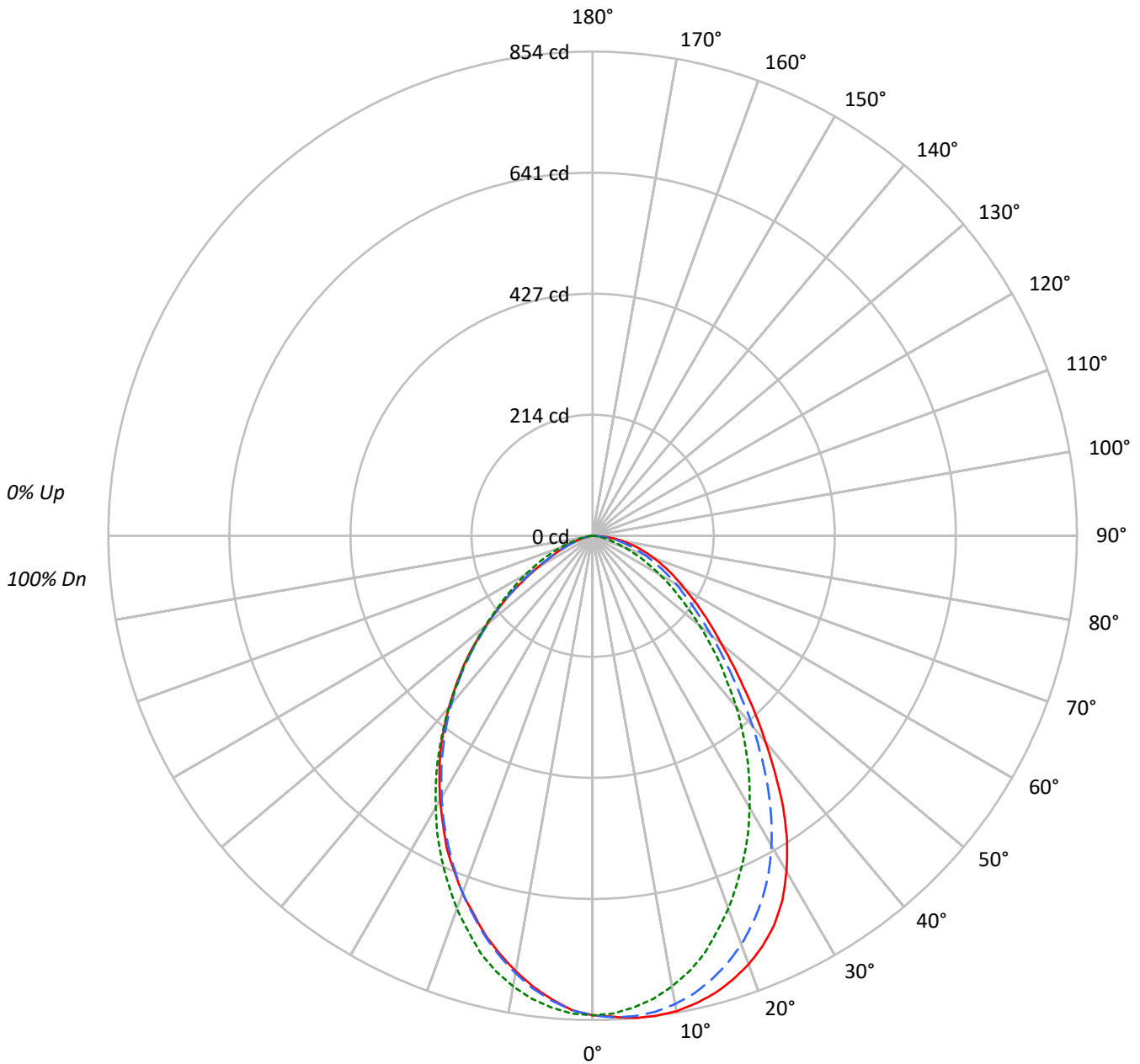
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252474

CATALOG NUMBER: LD6B20D010 EU6B10209035 6LBLWW1H

### Luminous Intensity Polar Plot





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CATALOG NUMBER: LD6B20D010 EU6B10209035 6LBLWW1H

**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°	55174	55174	55174
5°	55922	54691	53767
10°	56409	53455	51666
15°	56404	51487	49265
20°	55855	48599	46565
25°	54536	45315	43796
30°	51498	41674	40522
35°	46679	37791	37321
40°	40309	33606	33513
45°	34571	29257	29478
50°	30043	25039	24674
55°	26991	21111	19769
60°	24517	17772	14562
65°	23032	14681	10698
70°	21955	11426	7840
75°	21023	8293	5319
80°	19875	5748	3532
85°	17591	3518	1722



TEST NUMBER: P252474

CATALOG NUMBER: LD6B20D010 EU6B10209035 6LBLWW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.1	5.3
10°-20°	216.7	14.5
20°-30°	300.8	20.1
30°-40°	311.5	20.8
40°-50°	256.0	17.1
50°-60°	176.0	11.7
60°-70°	101.1	6.7
70°-80°	46.5	3.1
80°-90°	11.3	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°	596.5	39.8
0°-40°	908.1	60.6
0°-60°	1340.0	89.4
0°-90°	1499.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1499.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	846	846	846	846	846	
5°	854	850	835	823	821	81
15°	835	810	762	732	729	235
25°	758	707	630	602	608	347
35°	586	538	474	460	469	363
45°	375	346	317	314	320	292
55°	237	215	186	175	174	214
65°	149	130	95	67	69	148
75°	83	66	33	21	21	88
85°	24	16	5	2	2	26
90°	0	0	0	0	0	



TEST NUMBER: P252474

CATALOG NUMBER: LD6B20D010 EU6B10209035 6LBLWW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	849.2	856.2	851.5	850.4	852.7	852.7	852.7	849.2	851.5	848.0	850.4
5°	853.9	859.8	855.1	852.7	855.1	856.2	852.7	850.4	853.9	849.2	850.4
7.5°	853.9	859.8	855.1	853.9	855.1	855.1	853.9	849.2	851.5	846.8	846.8
10°	851.5	856.2	851.5	849.2	850.4	849.2	849.2	843.3	844.5	838.6	838.6
12.5°	844.5	850.4	844.5	842.1	842.1	842.1	838.6	833.9	835.1	828.0	826.9
15°	835.1	839.8	833.9	831.6	831.6	830.4	828.0	821.0	821.0	813.9	810.4
17.5°	821.0	825.7	821.0	817.5	816.3	813.9	811.6	804.5	802.2	794.0	790.5
20°	804.5	808.1	803.4	799.9	797.5	795.2	790.5	783.4	781.1	772.8	767.0
22.5°	783.4	788.1	781.1	777.5	775.2	771.7	767.0	759.9	756.4	745.8	738.8
25°	757.6	759.9	754.0	750.5	745.8	743.5	740.0	730.6	727.0	715.3	707.1
27.5°	724.7	727.0	720.0	717.6	711.8	709.4	704.7	696.5	691.8	680.0	671.8
30°	683.6	685.9	681.2	677.7	673.0	668.3	664.8	656.6	649.5	637.8	630.7
32.5°	637.8	641.3	636.6	631.9	623.7	624.8	619.0	610.8	604.9	594.3	586.1
35°	586.1	588.4	582.6	581.4	576.7	572.0	566.1	560.2	556.7	545.0	537.9
37.5°	528.5	534.4	528.5	523.8	521.5	518.0	514.4	506.2	503.9	496.8	487.4
40°	473.3	476.9	473.3	468.6	465.1	465.1	460.4	455.7	449.8	442.8	439.3
42.5°	424.0	421.7	420.5	418.1	413.4	412.3	411.1	405.2	401.7	394.6	388.8
45°	374.7	375.8	373.5	372.3	368.8	366.5	364.1	359.4	358.2	351.2	346.5
47.5°	333.6	332.4	330.0	330.0	327.7	325.3	323.0	319.5	318.3	312.4	307.7
50°	296.0	297.2	296.0	294.8	291.3	290.1	287.8	285.4	283.1	277.2	272.5
52.5°	265.4	264.3	263.1	263.1	259.6	258.4	256.0	253.7	251.3	245.5	242.0
55°	237.3	237.3	236.1	234.9	231.4	230.2	229.0	226.7	223.2	218.5	214.9
57.5°	211.4	211.4	210.2	209.1	206.7	206.7	204.4	202.0	199.7	195.0	190.3
60°	187.9	189.1	187.9	186.7	184.4	184.4	183.2	179.7	178.5	172.7	169.1
62.5°	168.0	168.0	168.0	166.8	165.6	163.3	163.3	159.7	157.4	153.9	149.2
65°	149.2	149.2	149.2	148.0	145.6	144.5	143.3	140.9	138.6	135.1	130.4
67.5°	131.5	131.5	131.5	130.4	128.0	126.8	125.7	124.5	121.0	117.5	112.8
70°	115.1	115.1	113.9	112.8	111.6	110.4	109.2	106.9	104.5	99.8	96.3
72.5°	98.7	98.7	98.7	96.3	95.1	95.1	92.8	91.6	89.3	84.6	81.0
75°	83.4	82.2	82.2	81.0	79.9	78.7	77.5	76.3	72.8	70.5	65.8
77.5°	68.1	68.1	66.9	65.8	65.8	64.6	63.4	61.1	59.9	56.4	52.9
80°	52.9	52.9	52.9	52.9	51.7	50.5	50.5	48.2	47.0	43.5	41.1
82.5°	39.9	38.8	38.8	38.8	37.6	36.4	36.4	35.2	34.1	31.7	29.4
85°	23.5	22.3	22.3	22.3	21.1	21.1	20.0	20.0	18.8	16.4	16.4
87.5°	7.0	7.0	8.2	8.2	7.0	7.0	7.0	7.0	7.0	5.9	5.9
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: P252474

CATALOG NUMBER: LD6B20D010 EU6B10209035 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	848.0	851.5	846.8	845.7	850.4	848.0	846.8	844.5	845.7	843.3	839.8
5°	846.8	851.5	845.7	842.1	848.0	844.5	842.1	839.8	839.8	835.1	832.7
7.5°	843.3	845.7	839.8	836.3	839.8	836.3	833.9	830.4	829.2	823.3	819.8
10°	833.9	836.3	829.2	824.5	828.0	823.3	819.8	816.3	813.9	806.9	802.2
12.5°	821.0	822.2	813.9	808.1	810.4	806.9	801.0	796.3	794.0	786.9	781.1
15°	803.4	804.5	795.2	786.9	789.3	784.6	777.5	772.8	769.3	762.3	754.0
17.5°	782.2	781.1	770.5	762.3	763.4	757.6	750.5	743.5	738.8	730.6	724.7
20°	758.7	755.2	743.5	734.1	735.3	728.2	720.0	712.9	707.1	700.0	691.8
22.5°	729.4	724.7	714.1	702.4	703.5	697.7	685.9	680.0	674.2	664.8	657.7
25°	697.7	690.6	680.0	668.3	668.3	661.3	651.9	644.8	638.9	629.5	621.3
27.5°	660.1	656.6	642.5	633.1	631.9	624.8	616.6	608.4	601.4	593.1	584.9
30°	619.0	613.1	602.5	592.0	589.6	583.7	575.5	566.1	561.4	553.2	546.2
32.5°	575.5	569.6	557.9	547.3	546.2	541.5	534.4	525.0	520.3	514.4	509.7
35°	526.2	523.8	512.1	503.9	503.9	499.2	492.1	483.9	480.4	474.5	468.6
37.5°	479.2	475.7	465.1	458.1	458.1	452.2	445.1	441.6	438.1	433.4	429.9
40°	429.9	427.5	419.3	412.3	413.4	408.7	404.0	399.3	397.0	394.6	391.1
42.5°	384.1	381.7	375.8	370.0	370.0	366.5	361.8	358.2	355.9	352.4	351.2
45°	343.0	339.4	334.7	328.9	328.9	325.3	323.0	320.6	319.5	317.1	313.6
47.5°	303.0	300.7	296.0	290.1	290.1	290.1	285.4	281.9	281.9	279.5	278.4
50°	269.0	265.4	261.9	257.2	257.2	254.9	251.3	247.8	247.8	246.7	244.3
52.5°	237.3	234.9	230.2	225.5	225.5	223.2	219.6	218.5	217.3	213.8	212.6
55°	210.2	207.9	204.4	198.5	197.3	196.1	192.6	190.3	189.1	185.6	185.6
57.5°	185.6	183.2	177.4	173.8	172.7	170.3	166.8	164.4	163.3	160.9	158.6
60°	164.4	160.9	156.2	151.5	150.3	148.0	144.5	142.1	140.9	136.2	133.9
62.5°	144.5	140.9	136.2	131.5	130.4	128.0	123.3	121.0	118.6	113.9	111.6
65°	125.7	122.2	117.5	112.8	110.4	109.2	104.5	101.0	98.7	95.1	90.4
67.5°	108.1	104.5	99.8	94.0	94.0	90.4	86.9	83.4	79.9	76.3	72.8
70°	91.6	88.1	83.4	78.7	77.5	75.2	71.6	66.9	64.6	59.9	56.4
72.5°	76.3	72.8	68.1	63.4	62.2	59.9	56.4	51.7	48.2	44.6	41.1
75°	62.2	58.7	54.0	50.5	49.3	47.0	43.5	38.8	35.2	32.9	29.4
77.5°	49.3	45.8	42.3	38.8	37.6	35.2	31.7	29.4	25.8	23.5	20.0
80°	37.6	35.2	31.7	29.4	28.2	25.8	23.5	20.0	17.6	15.3	14.1
82.5°	27.0	24.7	22.3	18.8	18.8	16.4	15.3	12.9	10.6	9.4	8.2
85°	15.3	12.9	11.7	10.6	9.4	9.4	8.2	7.0	5.9	4.7	4.7
87.5°	4.7	4.7	3.5	3.5	3.5	3.5	2.3	2.3	2.3	2.3	2.3
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: P252474

CATALOG NUMBER: LD6B20D010 EU6B10209035 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	839.8	841.0	838.6	841.0	838.6	839.8	837.4	839.8	837.4	839.8	835.1
5°	831.6	831.6	828.0	830.4	828.0	829.2	824.5	825.7	823.3	825.7	821.0
7.5°	817.5	818.6	812.8	815.1	811.6	811.6	808.1	809.2	805.7	806.9	803.4
10°	801.0	799.9	794.0	796.3	791.6	791.6	788.1	788.1	783.4	784.6	779.9
12.5°	777.5	776.4	769.3	771.7	767.0	767.0	763.4	763.4	758.7	761.1	756.4
15°	750.5	749.3	742.3	743.5	738.8	738.8	734.1	735.3	731.7	734.1	729.4
17.5°	720.0	718.8	711.8	712.9	707.1	708.2	704.7	703.5	701.2	702.4	698.8
20°	688.3	685.9	678.9	680.0	677.7	674.2	671.8	673.0	670.7	673.0	669.5
22.5°	655.4	650.7	644.8	644.8	642.5	642.5	638.9	641.3	636.6	640.1	637.8
25°	617.8	614.3	609.6	611.9	607.2	607.2	603.7	604.9	602.5	604.9	602.5
27.5°	581.4	579.0	572.0	574.3	570.8	572.0	568.5	569.6	568.5	570.8	568.5
30°	542.6	541.5	536.8	536.8	535.6	534.4	533.2	533.2	532.1	535.6	533.2
32.5°	506.2	502.7	498.0	501.5	495.6	499.2	496.8	499.2	496.8	499.2	498.0
35°	468.6	467.5	461.6	462.8	461.6	461.6	460.4	460.4	460.4	463.9	463.9
37.5°	428.7	427.5	424.0	425.2	422.8	421.7	421.7	424.0	424.0	426.4	426.4
40°	389.9	391.1	387.6	387.6	386.4	386.4	386.4	388.8	387.6	389.9	388.8
42.5°	351.2	351.2	347.7	348.8	347.7	348.8	348.8	351.2	351.2	352.4	351.2
45°	314.8	314.8	313.6	314.8	312.4	313.6	312.4	314.8	313.6	314.8	314.8
47.5°	278.4	278.4	278.4	277.2	277.2	277.2	277.2	277.2	276.0	278.4	277.2
50°	244.3	245.5	244.3	244.3	243.1	244.3	243.1	243.1	240.8	242.0	242.0
52.5°	213.8	213.8	211.4	211.4	211.4	210.2	210.2	210.2	209.1	209.1	206.7
55°	184.4	184.4	182.1	182.1	180.9	179.7	178.5	178.5	175.0	175.0	171.5
57.5°	157.4	156.2	152.7	152.7	150.3	149.2	148.0	146.8	144.5	142.1	140.9
60°	132.7	130.4	128.0	126.8	124.5	122.2	119.8	117.5	115.1	113.9	112.8
62.5°	109.2	105.7	103.4	102.2	99.8	96.3	94.0	91.6	89.3	88.1	85.7
65°	88.1	84.6	81.0	79.9	77.5	75.2	71.6	69.3	66.9	65.8	65.8
67.5°	69.3	65.8	61.1	61.1	58.7	56.4	54.0	51.7	50.5	51.7	51.7
70°	51.7	49.3	45.8	44.6	42.3	39.9	38.8	38.8	38.8	39.9	38.8
72.5°	38.8	35.2	32.9	31.7	30.5	29.4	29.4	29.4	28.2	29.4	29.4
75°	27.0	24.7	22.3	22.3	21.1	21.1	21.1	21.1	21.1	21.1	21.1
77.5°	18.8	16.4	15.3	15.3	15.3	14.1	14.1	14.1	14.1	14.1	14.1
80°	11.7	11.7	10.6	10.6	9.4	9.4	9.4	9.4	9.4	9.4	9.4
82.5°	7.0	7.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
85°	3.5	3.5	3.5	3.5	3.5	2.3	2.3	2.3	2.3	2.3	2.3
87.5°	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3	2.3
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: P252474

CATALOG NUMBER: LD6B20D010 EU6B10209035 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	835.1	838.6	833.9	837.4	836.3	835.1	832.7	837.4
5°	821.0	822.2	817.5	822.2	821.0	818.6	816.3	821.0
7.5°	801.0	804.5	798.7	803.4	802.2	799.9	797.5	802.2
10°	778.7	782.2	777.5	781.1	781.1	778.7	775.2	779.9
12.5°	754.0	756.4	751.7	756.4	755.2	752.9	751.7	755.2
15°	727.0	730.6	725.9	729.4	728.2	727.0	725.9	729.4
17.5°	697.7	701.2	697.7	701.2	701.2	697.7	696.5	698.8
20°	668.3	670.7	667.1	670.7	669.5	669.5	667.1	670.7
22.5°	635.4	638.9	636.6	638.9	637.8	637.8	636.6	638.9
25°	602.5	606.1	602.5	606.1	604.9	604.9	602.5	608.4
27.5°	569.6	572.0	568.5	573.2	572.0	569.6	570.8	572.0
30°	534.4	536.8	534.4	537.9	537.9	537.9	535.6	537.9
32.5°	499.2	502.7	499.2	502.7	501.5	501.5	500.3	502.7
35°	463.9	465.1	462.8	466.3	466.3	467.5	465.1	468.6
37.5°	427.5	428.7	427.5	428.7	431.1	427.5	429.9	431.1
40°	389.9	392.3	391.1	392.3	392.3	393.5	392.3	393.5
42.5°	352.4	354.7	352.4	355.9	354.7	354.7	355.9	355.9
45°	313.6	317.1	314.8	317.1	318.3	317.1	317.1	319.5
47.5°	277.2	279.5	278.4	279.5	279.5	279.5	279.5	281.9
50°	240.8	242.0	242.0	243.1	243.1	244.3	242.0	243.1
52.5°	204.4	206.7	206.7	206.7	205.5	206.7	206.7	206.7
55°	171.5	172.7	170.3	172.7	172.7	171.5	171.5	173.8
57.5°	139.8	139.8	139.8	139.8	139.8	138.6	139.8	139.8
60°	110.4	111.6	110.4	110.4	110.4	110.4	109.2	111.6
62.5°	85.7	85.7	84.6	85.7	85.7	85.7	86.9	86.9
65°	66.9	68.1	66.9	68.1	68.1	68.1	68.1	69.3
67.5°	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
70°	39.9	39.9	39.9	41.1	39.9	39.9	39.9	41.1
72.5°	29.4	29.4	29.4	29.4	29.4	29.4	30.5	30.5
75°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
77.5°	14.1	14.1	14.1	15.3	14.1	15.3	14.1	14.1
80°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
82.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
87.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2
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)