

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: P274447

Luminaire Tested: **LD6B15DE010W2N2765 EU6B1020W2N902765 6LBSW0H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P274447  
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: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBSW0H  
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, SINGLE WALLWASH WITH HAZE FINISH  
Light Source: W2N 2700K-6500K CCT TUNING RANGE  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1322.3 lumens  
Efficiency: N/A  
Efficacy: 60.1 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

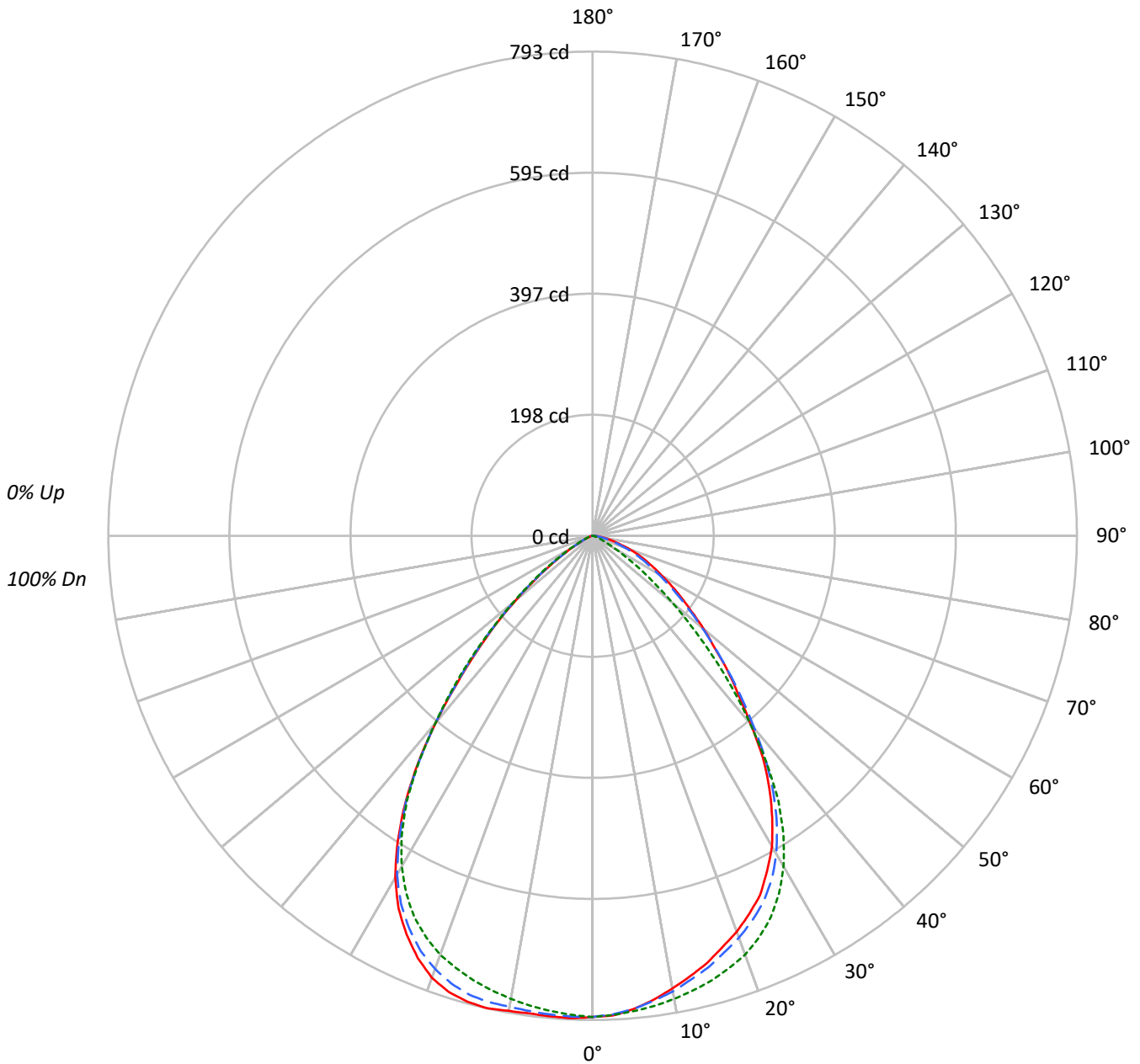
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P274447

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBSW0H

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

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

	0°	90°	180°
0°	51423	51423	51423
5°	50931	51180	51744
10°	49877	51017	52342
15°	48927	50920	53365
20°	47912	50689	53466
25°	46733	49677	51872
30°	44243	47114	48688
35°	40180	42227	42610
40°	34288	34126	33964
45°	28805	25557	24764
50°	24055	17295	16422
55°	20246	10612	9634
60°	17145	5585	4841
65°	14835	2933	2346
70°	12342	1812	1278
75°	9125	1210	731
80°	7138	714	376
85°	5689	749	0



TEST NUMBER: P274447

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBSW0H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.3	5.6
10°-20°	212.7	16.1
20°-30°	314.1	23.8
30°-40°	323.7	24.5
40°-50°	223.6	16.9
50°-60°	110.2	8.3
60°-70°	44.6	3.4
70°-80°	15.9	1.2
80°-90°	3.3	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°	601.0	45.5
0°-40°	924.7	69.9
0°-60°	1258.4	95.2
0°-90°	1322.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1322.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	788	788	788	788	788	
5°	778	778	782	787	790	73
15°	724	732	754	779	790	204
25°	649	662	690	710	721	297
35°	504	517	530	533	535	313
45°	312	314	277	273	268	241
55°	178	171	93	88	85	161
65°	96	87	19	15	15	95
75°	36	30	5	3	3	41
85°	8	6	1	0	0	9
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°	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2
2.5°	786.3	783.4	785.3	781.5	786.3	781.5	782.4	783.4	782.4	783.4	784.3
5°	777.7	774.8	777.7	772.9	777.7	774.8	774.8	775.8	775.8	776.7	777.7
7.5°	766.3	763.4	766.3	761.5	767.2	764.4	764.4	766.3	765.3	766.3	768.2
10°	752.9	749.1	752.0	749.1	754.8	751.0	752.9	752.9	752.9	755.8	757.7
12.5°	738.7	734.8	738.7	733.9	739.6	736.8	737.7	740.6	741.5	743.4	744.4
15°	724.4	719.6	721.5	718.7	724.4	721.5	722.5	726.3	726.3	729.1	732.0
17.5°	706.3	702.5	706.3	702.5	707.2	705.3	707.2	710.1	710.1	713.0	715.8
20°	690.1	686.3	689.2	686.3	692.0	689.2	690.1	693.9	694.9	697.7	700.6
22.5°	670.1	667.3	669.2	666.3	672.0	670.1	671.1	674.9	675.8	677.7	682.5
25°	649.2	643.5	646.3	644.4	650.1	647.3	649.2	653.0	654.9	657.7	661.6
27.5°	618.7	615.9	617.8	617.8	622.5	619.7	620.6	624.4	627.3	630.1	634.9
30°	587.3	582.5	584.5	585.4	589.2	587.3	589.2	593.0	594.0	597.8	601.6
32.5°	547.3	545.4	549.2	547.3	549.2	549.2	550.2	553.0	554.9	556.8	561.6
35°	504.5	500.7	504.5	502.6	507.4	504.5	507.4	510.2	510.2	514.0	516.9
37.5°	457.9	453.1	455.0	455.0	456.9	455.9	455.9	460.7	461.7	464.5	467.4
40°	402.6	400.7	404.5	403.6	404.5	404.5	405.5	408.4	410.3	411.2	412.2
42.5°	353.1	354.1	355.1	355.1	355.1	355.1	355.1	358.9	357.9	360.8	361.7
45°	312.2	308.4	310.3	309.4	312.2	309.4	312.2	315.1	313.2	316.0	314.1
47.5°	270.3	270.3	270.3	269.4	271.3	270.3	272.2	273.2	273.2	273.2	272.2
50°	237.0	234.2	235.1	235.1	236.1	235.1	237.0	238.0	238.0	236.1	232.3
52.5°	204.7	203.7	203.7	205.6	205.6	204.7	204.7	204.7	204.7	201.8	199.9
55°	178.0	176.1	177.0	177.0	177.0	177.0	178.0	177.0	177.0	174.2	171.3
57.5°	154.2	152.3	152.3	152.3	153.3	152.3	152.3	152.3	151.3	148.5	144.7
60°	131.4	130.4	131.4	131.4	132.3	131.4	131.4	131.4	129.5	126.6	122.8
62.5°	112.3	112.3	112.3	113.3	113.3	112.3	112.3	111.4	110.4	106.6	102.8
65°	96.1	95.2	96.1	96.1	97.1	97.1	96.1	95.2	94.2	90.4	86.6
67.5°	80.0	79.0	80.0	80.0	80.9	80.0	80.0	80.0	77.1	75.2	71.4
70°	64.7	63.8	63.8	63.8	64.7	62.8	63.8	63.8	61.9	59.0	55.2
72.5°	49.5	49.5	49.5	49.5	49.5	49.5	48.5	48.5	46.6	43.8	41.9
75°	36.2	36.2	37.1	37.1	36.2	36.2	36.2	35.2	34.3	32.4	30.5
77.5°	26.7	26.7	26.7	26.7	25.7	25.7	25.7	24.7	23.8	22.8	20.9
80°	19.0	19.0	19.0	18.1	19.0	18.1	18.1	18.1	16.2	15.2	14.3
82.5°	13.3	12.4	12.4	12.4	12.4	12.4	12.4	11.4	11.4	10.5	9.5
85°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	6.7	5.7	5.7
87.5°	3.8	4.8	4.8	4.8	4.8	4.8	4.8	3.8	3.8	3.8	2.9
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: P274447

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBSW0H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2
2.5°	784.3	784.3	786.3	783.4	788.2	785.3	784.3	789.1	786.3	785.3	787.2
5°	777.7	778.6	779.6	777.7	782.4	779.6	779.6	784.3	782.4	781.5	784.3
7.5°	769.1	770.1	772.0	771.0	774.8	772.9	773.9	778.6	776.7	776.7	779.6
10°	758.6	760.6	762.5	762.5	767.2	765.3	765.3	771.0	769.1	770.1	773.9
12.5°	746.3	749.1	752.0	752.9	757.7	754.8	755.8	762.5	761.5	762.5	766.3
15°	732.9	736.8	739.6	739.6	745.3	742.5	745.3	752.0	750.1	753.9	758.6
17.5°	717.7	721.5	725.3	726.3	732.0	730.1	733.9	740.6	740.6	742.5	748.2
20°	703.4	708.2	710.1	713.0	718.7	717.7	719.6	727.2	727.2	730.1	735.8
22.5°	684.4	689.2	693.0	695.8	700.6	700.6	703.4	710.1	710.1	712.0	717.7
25°	663.5	669.2	672.0	674.9	679.6	678.7	681.5	687.3	688.2	690.1	695.8
27.5°	636.8	641.6	645.4	647.3	653.9	650.1	653.0	659.7	658.7	660.6	665.4
30°	603.5	608.2	612.1	612.1	617.8	617.8	620.6	623.5	623.5	625.4	629.2
32.5°	564.5	570.2	570.2	573.0	576.8	573.0	576.8	580.6	578.7	581.6	584.5
35°	519.7	522.6	523.5	523.5	526.4	525.4	524.5	527.3	525.4	530.2	533.1
37.5°	465.5	469.3	467.4	469.3	468.3	465.5	465.5	470.2	466.4	467.4	470.2
40°	413.1	413.1	412.2	407.4	408.4	405.5	404.5	405.5	401.7	400.7	404.5
42.5°	358.9	357.9	355.1	348.4	349.3	344.6	340.8	340.8	338.9	337.9	338.9
45°	310.3	307.5	302.7	295.1	293.2	289.4	281.8	279.9	277.0	277.0	277.9
47.5°	265.6	261.8	254.2	245.6	240.8	236.1	228.5	225.6	220.8	218.9	220.8
50°	228.5	221.8	212.3	199.9	195.1	189.4	181.8	177.0	172.3	170.4	169.4
52.5°	194.2	184.7	175.1	159.9	156.1	150.4	139.9	135.2	130.4	126.6	126.6
55°	164.7	156.1	142.8	128.5	122.8	117.1	106.6	99.9	95.2	93.3	91.4
57.5°	138.0	128.5	116.1	100.9	95.2	89.5	79.0	72.3	67.6	64.7	62.8
60°	116.1	105.7	93.3	80.0	73.3	67.6	57.1	50.4	45.7	42.8	40.9
62.5°	95.2	86.6	74.2	61.9	56.2	50.4	41.9	35.2	30.5	28.6	25.7
65°	80.0	71.4	60.0	49.5	44.7	39.0	31.4	25.7	21.9	19.0	17.1
67.5°	64.7	58.1	48.5	39.0	34.3	30.5	23.8	19.0	15.2	13.3	12.4
70°	51.4	44.7	37.1	29.5	26.7	22.8	18.1	13.3	11.4	9.5	8.6
72.5°	38.1	33.3	27.6	21.9	19.0	17.1	12.4	10.5	7.6	6.7	5.7
75°	27.6	23.8	20.0	15.2	13.3	12.4	9.5	6.7	5.7	4.8	3.8
77.5°	19.0	17.1	13.3	10.5	9.5	8.6	6.7	4.8	3.8	2.9	2.9
80°	12.4	10.5	8.6	6.7	6.7	5.7	3.8	2.9	2.9	1.9	1.9
82.5°	7.6	6.7	5.7	4.8	3.8	3.8	2.9	1.9	1.9	1.0	1.0
85°	4.8	3.8	2.9	2.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0
87.5°	1.9	1.9	1.9	1.0	1.0	1.0	1.0	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: P274447

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBSW0H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2
2.5°	787.2	787.2	789.1	786.3	788.2	788.2	790.1	786.3	788.2	789.1	791.0
5°	783.4	784.3	786.3	785.3	786.3	786.3	788.2	783.4	787.2	787.2	790.1
7.5°	779.6	779.6	781.5	780.5	782.4	783.4	785.3	781.5	785.3	785.3	788.2
10°	774.8	774.8	777.7	776.7	779.6	780.5	783.4	779.6	783.4	784.3	787.2
12.5°	768.2	769.1	772.0	772.0	774.8	776.7	779.6	777.7	782.4	783.4	787.2
15°	760.6	762.5	766.3	765.3	768.2	771.0	774.8	772.0	778.6	780.5	784.3
17.5°	751.0	752.9	755.8	755.8	758.6	760.6	765.3	763.4	769.1	770.1	774.8
20°	736.8	739.6	743.4	742.5	745.3	747.2	751.0	749.1	754.8	756.7	761.5
22.5°	719.6	721.5	724.4	724.4	727.2	729.1	732.9	730.1	735.8	736.8	740.6
25°	696.8	698.7	700.6	701.5	704.4	705.3	707.2	705.3	710.1	711.1	715.8
27.5°	667.3	668.2	671.1	671.1	673.0	673.9	676.8	673.0	679.6	679.6	682.5
30°	632.0	631.1	634.9	633.0	634.9	634.9	637.8	635.9	640.6	638.7	641.6
32.5°	585.4	587.3	587.3	585.4	589.2	588.3	588.3	586.4	589.2	590.2	592.1
35°	531.1	534.0	534.0	535.0	535.9	533.1	534.0	528.3	533.1	534.0	535.0
37.5°	472.1	469.3	471.2	468.3	473.1	467.4	467.4	463.6	467.4	467.4	468.3
40°	404.5	403.6	405.5	403.6	402.6	401.7	399.8	396.9	400.7	398.8	401.7
42.5°	340.8	339.8	339.8	337.9	337.0	337.0	335.1	333.2	332.2	332.2	337.0
45°	275.1	277.0	275.1	274.1	276.0	274.1	275.1	271.3	273.2	271.3	273.2
47.5°	219.9	220.8	218.9	217.0	219.9	217.0	217.0	214.2	218.0	218.0	216.1
50°	170.4	169.4	167.5	169.4	168.5	168.5	168.5	165.6	167.5	164.7	166.6
52.5°	125.6	124.7	124.7	123.7	124.7	123.7	123.7	122.8	122.8	121.8	122.8
55°	91.4	90.4	88.5	88.5	88.5	89.5	88.5	87.6	87.6	86.6	87.6
57.5°	61.9	60.0	60.0	60.0	60.0	59.0	59.0	58.1	59.0	58.1	59.0
60°	40.0	40.0	38.1	38.1	38.1	38.1	38.1	37.1	38.1	38.1	38.1
62.5°	24.7	24.7	23.8	22.8	23.8	22.8	22.8	22.8	23.8	22.8	23.8
65°	16.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
67.5°	11.4	10.5	10.5	10.5	10.5	10.5	10.5	9.5	10.5	10.5	10.5
70°	7.6	7.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	3.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	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	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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: P274447

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBSW0H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	788.2	788.2	788.2	788.2	788.2	788.2	788.2	788.2
2.5°	788.2	789.1	787.2	788.2	786.3	788.2	789.1	791.0
5°	786.3	787.2	785.3	787.2	785.3	787.2	788.2	790.1
7.5°	784.3	786.3	784.3	786.3	784.3	786.3	787.2	789.1
10°	784.3	787.2	785.3	788.2	785.3	787.2	789.1	790.1
12.5°	784.3	787.2	786.3	788.2	787.2	789.1	791.0	792.9
15°	782.4	785.3	783.4	786.3	785.3	786.3	790.1	790.1
17.5°	772.0	774.8	774.8	776.7	776.7	779.6	781.5	783.4
20°	758.6	761.5	760.6	763.4	763.4	766.3	768.2	770.1
22.5°	738.7	742.5	741.5	744.4	743.4	745.3	749.1	748.2
25°	713.0	717.7	716.8	718.7	717.7	717.7	719.6	720.6
27.5°	681.5	684.4	683.4	685.4	683.4	685.4	687.3	688.2
30°	640.6	642.5	641.6	642.5	641.6	643.5	644.4	646.3
32.5°	591.1	594.0	591.1	593.0	592.1	592.1	595.9	594.0
35°	532.1	533.1	534.0	534.0	532.1	533.1	535.0	535.0
37.5°	466.4	471.2	465.5	468.3	467.4	467.4	467.4	470.2
40°	397.9	398.8	396.9	396.9	396.9	396.0	399.8	398.8
42.5°	333.2	334.1	333.2	330.3	331.3	331.3	334.1	330.3
45°	270.3	272.2	271.3	271.3	269.4	269.4	270.3	268.4
47.5°	214.2	216.1	213.2	214.2	212.3	214.2	213.2	215.1
50°	162.8	164.7	163.7	164.7	164.7	162.8	165.6	161.8
52.5°	121.8	122.8	121.8	120.9	119.9	119.9	121.8	120.9
55°	86.6	85.7	85.7	85.7	86.6	86.6	85.7	84.7
57.5°	58.1	58.1	57.1	57.1	58.1	56.2	57.1	56.2
60°	37.1	37.1	37.1	37.1	36.2	37.1	37.1	37.1
62.5°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
65°	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
67.5°	9.5	10.5	10.5	10.5	9.5	9.5	9.5	9.5
70°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	1.0	1.0	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)