

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: PORTFOLIO

Report Number: P252270

Luminaire Tested: **LE_6B20D010 EC6B10209730 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252270
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: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10209730 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1757.5 lumens
Efficiency: N/A
Efficacy: 84.5 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

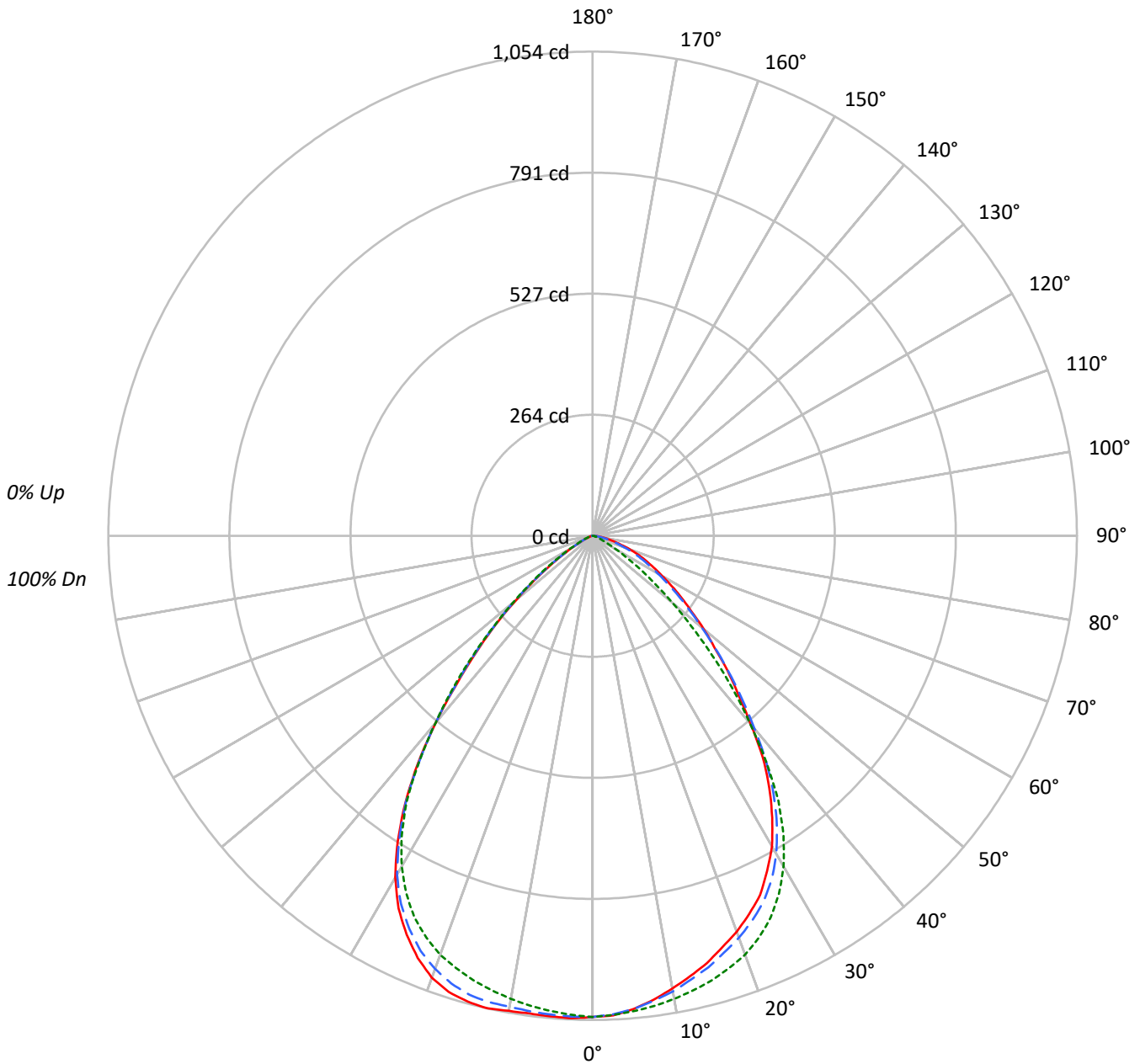
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	103	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°	68346	68346	68346
5°	67690	68031	68771
10°	66300	67804	69566
15°	65030	67677	70926
20°	63679	67373	71059
25°	62116	66025	68947
30°	58805	62617	64719
35°	53401	56133	56627
40°	45572	45359	45146
45°	38290	33962	32920
50°	31971	22989	21832
55°	26912	14104	12808
60°	22782	7424	6446
65°	19729	3890	3118
70°	16405	2403	1698
75°	12125	1613	958
80°	9468	939	451
85°	7560	898	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.7	5.6
10°-20°	282.7	16.1
20°-30°	417.4	23.8
30°-40°	430.2	24.5
40°-50°	297.1	16.9
50°-60°	146.5	8.3
60°-70°	59.3	3.4
70°-80°	21.2	1.2
80°-90°	4.3	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°	798.8	45.5
0°-40°	1229.0	69.9
0°-60°	1672.6	95.2
0°-90°	1757.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1757.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1048	1048	1048	1048	1048	
5°	1034	1034	1039	1046	1050	98
15°	963	973	1002	1035	1050	271
25°	863	879	917	944	958	394
35°	670	687	705	708	711	415
45°	415	418	368	363	357	321
55°	237	228	124	116	113	214
65°	128	115	25	20	20	127
75°	48	40	6	4	4	54
85°	10	8	1	0	0	12
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°	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6
2.5°	1045.0	1041.2	1043.8	1038.8	1045.0	1038.8	1040.0	1041.2	1040.0	1041.2	1042.5
5°	1033.6	1029.9	1033.6	1027.4	1033.6	1029.9	1029.9	1031.1	1031.1	1032.4	1033.6
7.5°	1018.5	1014.6	1018.5	1012.1	1019.8	1016.0	1016.0	1018.5	1017.2	1018.5	1021.0
10°	1000.8	995.8	999.5	995.8	1003.2	998.2	1000.8	1000.8	1000.8	1004.5	1007.1
12.5°	981.8	976.8	981.8	975.5	983.0	979.2	980.5	984.4	985.6	988.1	989.4
15°	962.8	956.5	959.0	955.2	962.8	959.0	960.2	965.4	965.4	969.1	972.9
17.5°	938.8	933.8	938.8	933.8	940.0	937.5	940.0	943.9	943.9	947.6	951.4
20°	917.2	912.2	916.0	912.2	919.8	916.0	917.2	922.4	923.6	927.4	931.1
22.5°	890.8	886.9	889.4	885.6	893.2	890.8	892.0	897.0	898.2	900.9	907.1
25°	862.9	855.2	859.1	856.5	864.1	860.4	862.9	867.9	870.5	874.2	879.2
27.5°	822.4	818.6	821.1	821.1	827.4	823.6	824.9	830.0	833.8	837.5	843.9
30°	780.6	774.2	776.9	778.1	783.1	780.6	783.1	788.2	789.5	794.5	799.6
32.5°	727.5	725.0	730.0	727.5	730.0	730.0	731.2	735.1	737.6	740.1	746.5
35°	670.5	665.5	670.5	668.0	674.4	670.5	674.4	678.1	678.1	683.2	687.0
37.5°	608.5	602.2	604.8	604.8	607.2	606.0	606.0	612.4	613.6	617.4	621.2
40°	535.1	532.6	537.8	536.5	537.8	537.8	539.0	542.8	545.2	546.6	547.9
42.5°	469.4	470.6	471.9	471.9	471.9	471.9	471.9	477.0	475.8	479.5	480.8
45°	415.0	409.9	412.5	411.1	415.0	411.1	415.0	418.8	416.2	420.0	417.5
47.5°	359.4	359.4	359.4	358.0	360.6	359.4	361.9	363.1	363.1	363.1	361.9
50°	315.0	311.2	312.5	312.5	313.8	312.5	315.0	316.2	316.2	313.8	308.8
52.5°	272.0	270.8	270.8	273.2	273.2	272.0	272.0	272.0	272.0	268.2	265.8
55°	236.6	234.0	235.4	235.4	235.4	235.4	236.6	235.4	235.4	231.5	227.8
57.5°	205.0	202.4	202.4	202.4	203.8	202.4	202.4	202.4	201.1	197.4	192.2
60°	174.6	173.4	174.6	174.6	175.9	174.6	174.6	174.6	172.1	168.2	163.2
62.5°	149.2	149.2	149.2	150.5	150.5	149.2	149.2	148.0	146.8	141.8	136.6
65°	127.8	126.5	127.8	127.8	129.0	129.0	127.8	126.5	125.2	120.2	115.1
67.5°	106.2	105.0	106.2	106.2	107.5	106.2	106.2	106.2	102.5	100.0	94.9
70°	86.0	84.8	84.8	84.8	86.0	83.5	84.8	84.8	82.2	78.5	73.4
72.5°	65.8	65.8	65.8	65.8	65.8	65.8	64.5	64.5	62.0	58.2	55.6
75°	48.1	48.1	49.4	49.4	48.1	48.1	48.1	46.8	45.5	43.0	40.5
77.5°	35.4	35.4	35.4	35.4	34.1	34.1	34.1	32.9	31.6	30.4	27.9
80°	25.2	25.2	25.2	24.0	25.2	24.0	24.0	24.0	21.5	20.2	19.0
82.5°	17.8	16.5	16.5	16.5	16.5	16.5	16.5	15.1	15.1	13.9	12.6
85°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	8.9	7.6	7.6
87.5°	5.0	6.4	6.4	6.4	6.4	6.4	6.4	5.0	5.0	5.0	3.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6
2.5°	1042.5	1042.5	1045.0	1041.2	1047.6	1043.8	1042.5	1048.9	1045.0	1043.8	1046.4
5°	1033.6	1034.9	1036.2	1033.6	1040.0	1036.2	1036.2	1042.5	1040.0	1038.8	1042.5
7.5°	1022.2	1023.5	1026.1	1024.8	1029.9	1027.4	1028.6	1034.9	1032.4	1032.4	1036.2
10°	1008.4	1010.9	1013.4	1013.4	1019.8	1017.2	1017.2	1024.8	1022.2	1023.5	1028.6
12.5°	991.9	995.8	999.5	1000.8	1007.1	1003.2	1004.5	1013.4	1012.1	1013.4	1018.5
15°	974.2	979.2	983.0	983.0	990.6	986.9	990.6	999.5	997.0	1002.0	1008.4
17.5°	954.0	959.0	964.1	965.4	972.9	970.4	975.5	984.4	984.4	986.9	994.5
20°	935.0	941.2	943.9	947.6	955.2	954.0	956.5	966.6	966.6	970.4	978.0
22.5°	909.6	916.0	921.0	924.9	931.1	931.1	935.0	943.9	943.9	946.4	954.0
25°	881.9	889.4	893.2	897.0	903.4	902.1	905.9	913.5	914.8	917.2	924.9
27.5°	846.4	852.8	857.8	860.4	869.1	864.1	867.9	876.8	875.5	878.0	884.4
30°	802.1	808.5	813.5	813.5	821.1	821.1	824.9	828.8	828.8	831.2	836.2
32.5°	750.2	757.9	757.9	761.6	766.8	761.6	766.8	771.8	769.2	773.0	776.9
35°	690.8	694.6	695.9	695.9	699.6	698.4	697.1	700.9	698.4	704.8	708.5
37.5°	618.6	623.8	621.2	623.8	622.5	618.6	618.6	625.0	620.0	621.2	625.0
40°	549.1	549.1	547.9	541.5	542.8	539.0	537.8	539.0	533.9	532.6	537.8
42.5°	477.0	475.8	471.9	463.0	464.4	458.0	453.0	453.0	450.4	449.1	450.4
45°	412.5	408.6	402.4	392.2	389.6	384.6	374.5	372.0	368.1	368.1	369.4
47.5°	353.0	347.9	337.8	326.4	320.1	313.8	303.6	299.9	293.5	291.0	293.5
50°	303.6	294.8	282.1	265.8	259.4	251.8	241.6	235.4	229.0	226.5	225.2
52.5°	258.1	245.5	232.8	212.5	207.5	199.9	186.0	179.6	173.4	168.2	168.2
55°	218.9	207.5	189.8	170.8	163.2	155.6	141.8	132.9	126.5	124.0	121.5
57.5°	183.5	170.8	154.4	134.1	126.5	118.9	105.0	96.1	89.9	86.0	83.5
60°	154.4	140.4	124.0	106.2	97.4	89.9	75.9	67.0	60.8	56.9	54.4
62.5°	126.5	115.1	98.6	82.2	74.6	67.0	55.6	46.8	40.5	38.0	34.1
65°	106.2	94.9	79.8	65.8	59.5	51.9	41.8	34.1	29.1	25.2	22.8
67.5°	86.0	77.1	64.5	51.9	45.5	40.5	31.6	25.2	20.2	17.8	16.5
70°	68.4	59.5	49.4	39.2	35.4	30.4	24.0	17.8	15.1	12.6	11.4
72.5°	50.6	44.2	36.8	29.1	25.2	22.8	16.5	13.9	10.1	8.9	7.6
75°	36.8	31.6	26.6	20.2	17.8	16.5	12.6	8.9	7.6	6.4	5.0
77.5°	25.2	22.8	17.8	13.9	12.6	11.4	8.9	6.4	5.0	3.8	3.8
80°	16.5	13.9	11.4	8.9	8.9	7.6	5.0	3.8	3.8	2.5	2.5
82.5°	10.1	8.9	7.6	6.4	5.0	5.0	3.8	2.5	2.5	1.2	1.2
85°	6.4	5.0	3.8	3.8	2.5	2.5	2.5	1.2	1.2	1.2	1.2
87.5°	2.5	2.5	2.5	1.2	1.2	1.2	1.2	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6
2.5°	1046.4	1046.4	1048.9	1045.0	1047.6	1047.6	1050.1	1045.0	1047.6	1048.9	1051.4
5°	1041.2	1042.5	1045.0	1043.8	1045.0	1045.0	1047.6	1041.2	1046.4	1046.4	1050.1
7.5°	1036.2	1036.2	1038.8	1037.5	1040.0	1041.2	1043.8	1038.8	1043.8	1043.8	1047.6
10°	1029.9	1029.9	1033.6	1032.4	1036.2	1037.5	1041.2	1036.2	1041.2	1042.5	1046.4
12.5°	1021.0	1022.2	1026.1	1026.1	1029.9	1032.4	1036.2	1033.6	1040.0	1041.2	1046.4
15°	1010.9	1013.4	1018.5	1017.2	1021.0	1024.8	1029.9	1026.1	1034.9	1037.5	1042.5
17.5°	998.2	1000.8	1004.5	1004.5	1008.4	1010.9	1017.2	1014.6	1022.2	1023.5	1029.9
20°	979.2	983.0	988.1	986.9	990.6	993.1	998.2	995.8	1003.2	1005.9	1012.1
22.5°	956.5	959.0	962.8	962.8	966.6	969.1	974.2	970.4	978.0	979.2	984.4
25°	926.1	928.6	931.1	932.5	936.2	937.5	940.0	937.5	943.9	945.1	951.4
27.5°	886.9	888.1	892.0	892.0	894.5	895.8	899.5	894.5	903.4	903.4	907.1
30°	840.1	838.9	843.9	841.4	843.9	843.9	847.6	845.1	851.5	849.0	852.8
32.5°	778.1	780.6	780.6	778.1	783.1	781.9	781.9	779.4	783.1	784.4	787.0
35°	706.0	709.8	709.8	711.0	712.2	708.5	709.8	702.1	708.5	709.8	711.0
37.5°	627.5	623.8	626.2	622.5	628.8	621.2	621.2	616.1	621.2	621.2	622.5
40°	537.8	536.5	539.0	536.5	535.1	533.9	531.4	527.6	532.6	530.1	533.9
42.5°	453.0	451.6	451.6	449.1	447.9	447.9	445.4	442.9	441.5	441.5	447.9
45°	365.6	368.1	365.6	364.4	366.9	364.4	365.6	360.6	363.1	360.6	363.1
47.5°	292.2	293.5	291.0	288.5	292.2	288.5	288.5	284.6	289.8	289.8	287.2
50°	226.5	225.2	222.6	225.2	224.0	224.0	224.0	220.1	222.6	218.9	221.4
52.5°	167.0	165.8	165.8	164.5	165.8	164.5	164.5	163.2	163.2	162.0	163.2
55°	121.5	120.2	117.6	117.6	117.6	118.9	117.6	116.4	116.4	115.1	116.4
57.5°	82.2	79.8	79.8	79.8	79.8	78.5	78.5	77.1	78.5	77.1	78.5
60°	53.1	53.1	50.6	50.6	50.6	50.6	50.6	49.4	50.6	50.6	50.6
62.5°	32.9	32.9	31.6	30.4	31.6	30.4	30.4	30.4	31.6	30.4	31.6
65°	21.5	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
67.5°	15.1	13.9	13.9	13.9	13.9	13.9	13.9	12.6	13.9	13.9	13.9
70°	10.1	10.1	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
72.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
75°	5.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	3.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
80°	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	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	1.2	1.2	1.2	1.2	1.2	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	0.0	0.0	0.0



TEST NUMBER: P252270

CATALOG NUMBER: LE_6B20D010 EC6B10209730 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6	1047.6
2.5°	1047.6	1048.9	1046.4	1047.6	1045.0	1047.6	1048.9	1051.4
5°	1045.0	1046.4	1043.8	1046.4	1043.8	1046.4	1047.6	1050.1
7.5°	1042.5	1045.0	1042.5	1045.0	1042.5	1045.0	1046.4	1048.9
10°	1042.5	1046.4	1043.8	1047.6	1043.8	1046.4	1048.9	1050.1
12.5°	1042.5	1046.4	1045.0	1047.6	1046.4	1048.9	1051.4	1053.9
15°	1040.0	1043.8	1041.2	1045.0	1043.8	1045.0	1050.1	1050.1
17.5°	1026.1	1029.9	1029.9	1032.4	1032.4	1036.2	1038.8	1041.2
20°	1008.4	1012.1	1010.9	1014.6	1014.6	1018.5	1021.0	1023.5
22.5°	981.8	986.9	985.6	989.4	988.1	990.6	995.8	994.5
25°	947.6	954.0	952.8	955.2	954.0	954.0	956.5	957.8
27.5°	905.9	909.6	908.4	911.0	908.4	911.0	913.5	914.8
30°	851.5	854.0	852.8	854.0	852.8	855.2	856.5	859.1
32.5°	785.6	789.5	785.6	788.2	787.0	787.0	792.0	789.5
35°	707.2	708.5	709.8	709.8	707.2	708.5	711.0	711.0
37.5°	620.0	626.2	618.6	622.5	621.2	621.2	621.2	625.0
40°	528.9	530.1	527.6	527.6	527.6	526.4	531.4	530.1
42.5°	442.9	444.1	442.9	439.0	440.2	440.2	444.1	439.0
45°	359.4	361.9	360.6	360.6	358.0	358.0	359.4	356.8
47.5°	284.6	287.2	283.4	284.6	282.1	284.6	283.4	285.9
50°	216.4	218.9	217.6	218.9	218.9	216.4	220.1	215.1
52.5°	162.0	163.2	162.0	160.6	159.4	159.4	162.0	160.6
55°	115.1	113.9	113.9	113.9	115.1	115.1	113.9	112.6
57.5°	77.1	77.1	75.9	75.9	77.1	74.6	75.9	74.6
60°	49.4	49.4	49.4	49.4	48.1	49.4	49.4	49.4
62.5°	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
65°	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
67.5°	12.6	13.9	13.9	13.9	12.6	12.6	12.6	12.6
70°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
72.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
75°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	1.2	1.2	1.2	1.2	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)