

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P244604

Luminaire Tested: **LD8B20D010 ER8B20835 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B20D010 ER8B20835 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2224.0 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

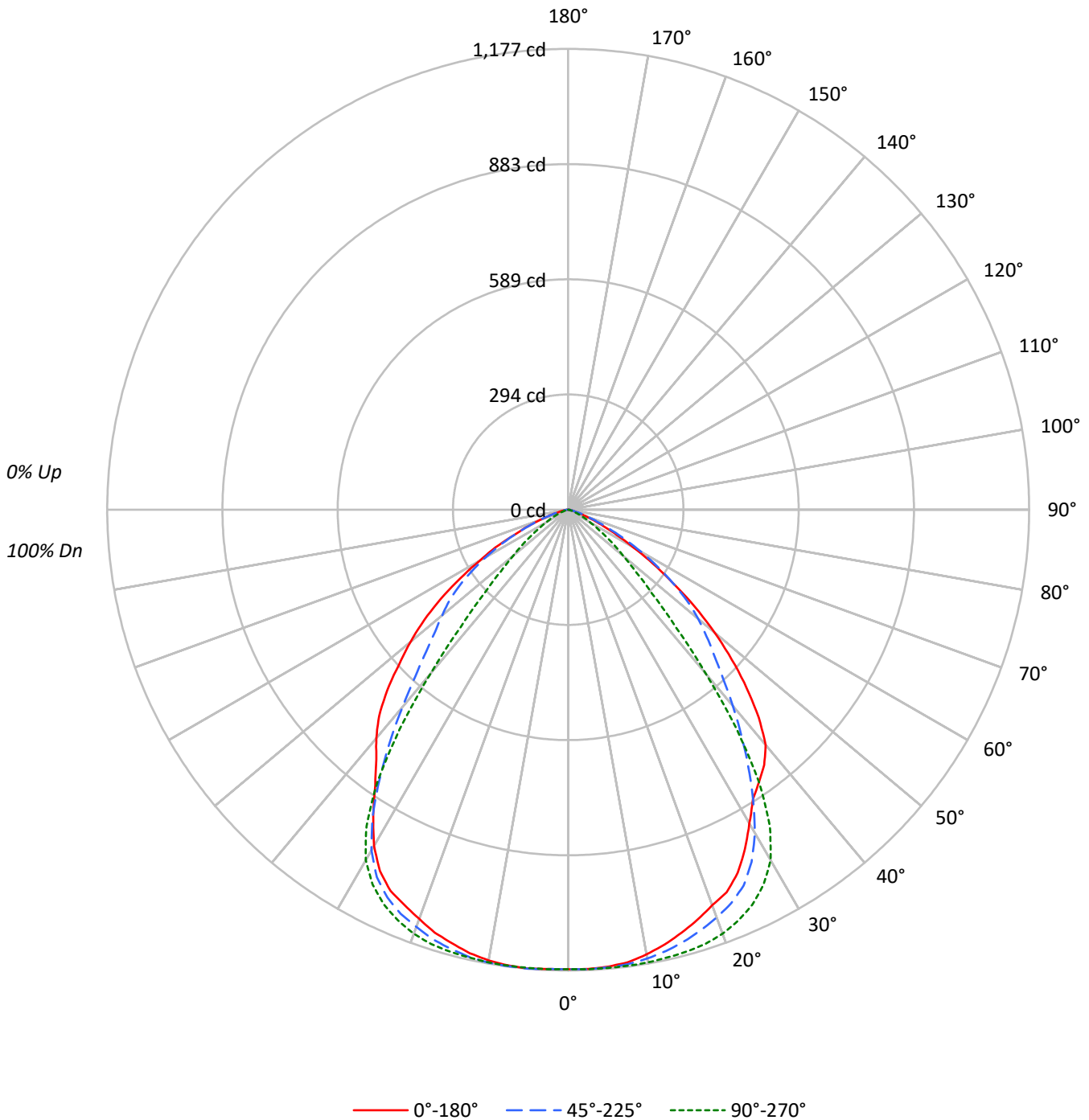
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	36183	36183	36183
5°	36263	36362	36402
10°	36112	36763	36604
15°	35710	37300	36595
20°	35283	37823	36500
25°	34824	37869	36538
30°	32947	36803	35300
35°	31964	31986	32318
40°	31567	22007	30678
45°	28128	13214	28512
50°	23387	8793	25200
55°	17542	6064	21365
60°	11884	4040	16121
65°	7172	2619	11076
70°	3976	1425	6816
75°	1799	596	3527
80°	1563	675	2468
85°	1769	885	2441



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	5.0
10°-20°	325.2	14.6
20°-30°	493.6	22.2
30°-40°	518.5	23.3
40°-50°	388.7	17.5
50°-60°	249.4	11.2
60°-70°	106.7	4.8
70°-80°	25.2	1.1
80°-90°	4.7	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°	930.8	41.9
0°-40°	1449.3	65.2
0°-60°	2087.4	93.9
0°-90°	2224.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2224.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1173	1173	1173	1173	1173	
5°	1172	1173	1175	1177	1176	111
15°	1119	1142	1168	1161	1146	316
25°	1024	1059	1113	1093	1074	468
35°	849	802	850	840	858	533
45°	645	527	303	512	654	494
55°	326	326	113	340	397	296
65°	98	116	36	149	152	105
75°	15	18	5	30	30	22
85°	5	3	2	5	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4
2.5°	1174.1	1175.3	1174.7	1174.7	1174.1	1174.7	1174.7	1176.0	1176.0	1174.7	1174.1
5°	1171.5	1172.8	1172.8	1171.5	1171.5	1174.7	1172.8	1174.1	1174.1	1173.4	1173.4
7.5°	1165.9	1165.9	1168.4	1166.5	1166.5	1168.4	1167.8	1169.0	1170.3	1170.9	1170.9
10°	1153.3	1154.5	1155.2	1155.2	1155.8	1157.7	1158.9	1161.5	1162.7	1164.0	1164.6
12.5°	1137.5	1139.4	1140.0	1139.4	1141.3	1143.8	1147.0	1150.1	1152.0	1154.5	1156.4
15°	1118.6	1118.6	1119.9	1121.8	1123.0	1126.8	1130.0	1133.7	1138.8	1141.9	1145.1
17.5°	1097.8	1099.1	1101.0	1101.0	1103.5	1109.8	1111.7	1117.4	1123.0	1126.2	1132.5
20°	1075.2	1076.4	1078.3	1079.6	1082.7	1087.8	1091.5	1096.6	1102.9	1108.6	1114.8
22.5°	1057.5	1055.0	1056.3	1057.5	1060.7	1065.1	1069.5	1075.8	1082.1	1087.8	1094.1
25°	1023.5	1024.1	1026.0	1027.3	1031.1	1034.9	1039.9	1047.5	1053.1	1059.4	1066.3
27.5°	977.5	978.2	981.3	981.3	984.5	990.8	993.9	1000.2	1007.8	1014.1	1022.3
30°	925.3	926.5	926.5	929.0	930.9	934.1	937.2	943.5	947.3	953.0	964.3
32.5°	877.4	878.6	878.0	877.4	875.5	874.9	874.2	875.5	876.8	878.6	883.1
35°	849.1	845.9	843.4	839.0	833.9	827.6	822.0	814.4	807.5	801.8	795.5
37.5°	822.0	821.3	817.6	811.3	801.2	789.8	776.6	760.2	743.9	726.2	709.2
40°	784.2	782.3	779.1	770.3	759.0	745.1	727.5	707.3	680.9	653.8	626.1
42.5°	719.9	720.6	716.8	709.8	699.1	685.9	667.6	645.6	617.3	585.1	549.2
45°	645.0	645.0	643.7	638.0	630.5	619.8	605.9	587.7	560.0	527.2	488.8
47.5°	566.9	567.5	565.6	564.4	561.2	554.3	544.2	530.3	510.8	479.3	440.9
50°	487.5	487.5	490.7	490.0	490.0	487.5	483.1	474.9	457.9	432.7	396.8
52.5°	408.1	409.4	411.3	413.8	417.0	422.0	417.0	413.2	402.5	382.9	352.1
55°	326.3	327.5	330.7	335.1	338.9	343.9	345.2	345.2	339.5	326.3	303.0
57.5°	256.4	254.5	257.0	260.8	265.8	270.8	274.6	279.0	278.4	269.6	250.7
60°	192.7	193.4	195.3	199.0	202.8	207.2	212.3	216.0	217.9	213.5	201.6
62.5°	140.5	140.5	143.0	146.7	148.6	154.9	158.1	160.0	161.9	161.2	153.7
65°	98.3	99.5	100.8	102.7	104.6	108.3	110.2	114.0	115.3	115.9	110.2
67.5°	69.3	67.4	68.7	69.9	71.8	74.3	78.1	78.1	80.0	80.0	76.2
70°	44.1	44.1	44.7	46.6	47.9	48.5	49.8	51.0	52.9	52.3	52.3
72.5°	29.6	29.0	29.6	30.2	30.9	32.7	32.7	33.4	34.6	35.3	32.7
75°	15.1	15.8	17.0	16.4	18.3	17.0	17.6	19.5	18.9	17.6	17.6
77.5°	12.6	12.6	12.6	12.0	13.2	13.2	12.6	13.9	13.2	13.2	12.6
80°	8.8	9.4	8.8	8.2	8.8	8.2	8.2	8.2	8.2	8.2	7.6
82.5°	6.9	5.7	6.3	5.7	6.3	6.3	5.7	5.0	5.0	5.7	5.0
85°	5.0	3.8	4.4	4.4	3.8	3.8	3.8	3.8	3.8	3.1	3.1
87.5°	3.1	1.9	1.9	1.9	2.5	2.5	2.5	1.9	2.5	2.5	1.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4
2.5°	1175.3	1174.7	1176.0	1175.3	1175.3	1174.7	1175.3	1174.7	1176.0	1173.4	1174.1
5°	1175.3	1174.1	1174.7	1175.3	1176.0	1174.7	1174.7	1174.7	1176.0	1174.7	1175.3
7.5°	1172.8	1172.2	1174.1	1175.3	1174.7	1174.1	1175.3	1174.7	1176.0	1175.3	1176.6
10°	1167.8	1168.4	1169.7	1171.5	1172.2	1172.8	1174.1	1174.1	1176.0	1173.4	1174.7
12.5°	1160.2	1162.7	1165.9	1167.1	1169.7	1169.7	1170.9	1171.5	1172.8	1172.2	1174.1
15°	1150.8	1153.9	1157.7	1160.8	1164.0	1165.9	1167.8	1168.4	1170.3	1168.4	1169.0
17.5°	1139.4	1143.2	1148.9	1152.6	1157.7	1159.6	1162.1	1163.3	1165.2	1164.0	1164.6
20°	1123.7	1128.1	1134.4	1140.0	1143.2	1147.6	1150.8	1152.6	1153.9	1152.6	1153.3
22.5°	1101.6	1107.9	1116.1	1120.5	1126.8	1130.6	1131.2	1135.6	1138.8	1135.6	1136.9
25°	1075.8	1082.1	1088.4	1097.8	1103.5	1107.9	1112.3	1113.0	1116.1	1115.5	1114.8
27.5°	1033.0	1041.2	1051.9	1059.4	1067.0	1073.9	1079.0	1080.2	1083.4	1082.1	1082.7
30°	974.4	983.2	993.3	1005.3	1016.0	1022.9	1029.2	1033.6	1036.7	1034.9	1034.2
32.5°	891.3	900.1	910.8	922.7	935.3	945.4	953.0	958.6	962.4	961.2	958.0
35°	796.1	798.7	805.6	815.0	825.7	836.5	843.4	849.7	854.1	855.3	855.3
37.5°	698.5	690.3	685.3	685.3	691.6	696.0	702.3	706.1	713.0	715.5	717.4
40°	604.0	585.1	567.5	554.3	545.5	544.8	544.8	546.7	553.0	561.2	568.8
42.5°	519.6	489.4	462.3	437.8	420.1	410.0	405.6	406.3	411.3	418.9	431.4
45°	452.2	414.4	380.4	350.8	326.9	311.1	303.6	303.0	306.7	315.6	329.4
47.5°	400.0	359.6	321.2	287.2	261.4	244.4	235.6	233.1	235.6	243.8	260.1
50°	356.5	314.9	275.3	240.0	212.3	194.6	186.4	183.3	186.4	193.4	209.7
52.5°	316.2	273.4	236.2	202.2	172.6	157.5	148.6	146.7	148.6	156.8	170.1
55°	269.6	233.1	196.5	162.5	136.7	121.6	114.6	112.8	114.6	122.2	136.1
57.5°	223.6	192.1	160.0	129.1	107.1	93.8	87.6	85.0	89.4	94.5	110.9
60°	180.8	155.6	128.5	101.4	83.1	71.2	66.1	65.5	66.8	73.1	84.4
62.5°	141.7	120.9	99.5	77.5	62.4	57.3	51.0	50.4	51.6	55.4	64.3
65°	102.0	88.8	72.4	56.7	44.7	37.8	35.3	35.9	37.2	39.7	47.9
67.5°	71.2	61.7	50.4	39.7	30.9	27.7	25.2	24.6	25.2	29.6	34.0
70°	47.9	42.2	34.0	30.2	21.4	17.0	17.6	15.8	18.3	18.3	22.0
72.5°	31.5	27.7	22.7	17.6	15.1	12.0	12.0	11.3	12.6	13.2	16.4
75°	16.4	12.6	12.6	8.8	6.3	3.1	5.7	5.0	4.4	5.0	6.3
77.5°	11.3	9.4	8.8	6.9	6.3	5.0	5.0	5.0	5.0	5.7	6.3
80°	6.9	6.9	5.0	4.4	3.8	3.1	3.8	3.8	3.8	3.8	4.4
82.5°	4.4	3.8	3.8	3.1	3.1	2.5	2.5	2.5	2.5	2.5	3.8
85°	3.8	2.5	2.5	1.9	2.5	4.4	1.9	2.5	2.5	2.5	1.9
87.5°	1.3	1.9	1.9	1.9	1.3	0.6	1.3	1.9	1.9	3.1	2.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4	1173.4
2.5°	1175.3	1176.0	1176.0	1175.3	1175.3	1174.1	1176.6	1174.7	1175.3	1177.8	1176.0
5°	1176.6	1177.2	1177.2	1176.6	1176.6	1176.6	1177.2	1177.2	1176.6	1176.0	1177.2
7.5°	1179.1	1178.5	1178.5	1177.2	1177.2	1176.0	1177.2	1175.3	1176.6	1175.3	1177.2
10°	1176.0	1176.6	1176.0	1175.3	1175.3	1174.7	1174.7	1172.8	1173.4	1171.5	1172.8
12.5°	1174.1	1173.4	1173.4	1172.2	1170.9	1169.7	1169.0	1167.1	1167.1	1162.7	1164.6
15°	1169.0	1169.7	1167.8	1165.2	1164.0	1160.8	1159.6	1157.0	1154.5	1151.4	1152.0
17.5°	1164.6	1162.7	1160.2	1157.7	1152.6	1150.1	1147.6	1143.8	1142.6	1138.8	1137.5
20°	1151.4	1150.1	1147.0	1142.6	1139.4	1133.7	1131.2	1127.5	1124.3	1120.5	1118.6
22.5°	1134.4	1133.1	1129.3	1124.9	1119.9	1117.4	1114.8	1107.9	1104.8	1101.0	1100.4
25°	1113.0	1111.1	1107.3	1102.3	1099.7	1092.8	1090.3	1085.2	1084.0	1080.2	1079.6
27.5°	1080.2	1077.7	1073.3	1067.0	1062.6	1058.2	1055.7	1051.9	1050.6	1046.8	1046.2
30°	1031.1	1027.9	1019.1	1016.6	1009.0	1004.6	1004.6	999.6	1000.2	997.7	997.7
32.5°	953.6	948.6	941.6	936.6	931.6	929.0	929.0	927.1	928.4	928.4	929.7
35°	850.9	844.0	840.2	837.1	837.1	839.6	847.2	849.1	852.8	856.0	858.5
37.5°	719.3	718.7	723.1	726.9	736.3	747.0	760.2	771.6	782.3	789.8	797.4
40°	576.9	592.7	605.3	622.9	637.4	658.2	682.1	701.7	719.9	733.2	747.0
42.5°	450.3	470.5	497.0	522.8	548.6	576.9	608.5	635.5	659.5	677.7	692.2
45°	350.8	378.5	410.7	443.4	476.8	512.1	544.8	572.5	597.7	616.6	631.1
47.5°	282.8	313.0	349.6	385.5	423.3	460.4	497.0	520.9	541.7	556.8	570.0
50°	233.7	265.8	304.2	345.2	382.9	420.1	451.6	474.9	491.9	505.1	513.3
52.5°	195.3	229.3	270.2	311.1	348.9	382.9	411.3	428.9	442.8	452.2	459.8
55°	161.2	194.0	232.4	270.8	308.0	340.1	363.4	376.7	387.4	393.0	397.4
57.5°	131.6	161.9	197.1	232.4	264.5	291.0	309.3	322.5	327.5	331.9	331.3
60°	103.3	131.6	163.8	194.0	221.7	243.1	256.4	263.9	267.7	269.6	268.3
62.5°	81.3	107.1	131.6	158.1	178.3	196.5	209.1	209.1	211.0	211.6	213.5
65°	60.5	80.0	101.4	120.9	137.3	149.3	156.2	158.1	160.6	160.0	158.7
67.5°	44.7	59.2	74.9	89.4	100.8	108.3	113.4	117.8	117.2	115.9	115.3
70°	30.9	40.3	54.2	63.0	71.2	78.7	80.0	80.6	81.3	81.9	80.6
72.5°	21.4	28.3	35.9	43.5	48.5	51.6	54.8	55.4	55.4	55.4	54.8
75°	10.7	14.5	21.4	24.6	29.0	30.2	32.7	32.7	34.6	32.1	31.5
77.5°	9.4	11.3	15.1	17.6	19.5	21.4	22.0	23.9	23.3	22.0	22.7
80°	5.7	6.9	9.4	10.7	13.2	13.9	14.5	15.1	14.5	15.1	15.1
82.5°	4.4	5.0	6.3	6.3	8.2	8.2	8.8	8.8	9.4	9.4	9.4
85°	2.5	4.4	3.8	7.6	5.0	5.0	6.3	7.6	6.3	6.3	7.6
87.5°	2.5	2.5	1.9	2.5	2.5	2.5	3.1	3.8	3.8	4.4	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



TEST NUMBER: P244604

CATALOG NUMBER: LD8B20D010 ER8B20835 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1173.4	1173.4	1173.4	1173.4
2.5°	1175.3	1176.6	1174.7	1174.1
5°	1177.2	1177.2	1176.0	1176.0
7.5°	1177.2	1177.2	1175.3	1174.1
10°	1172.2	1172.2	1170.3	1169.0
12.5°	1162.7	1162.7	1162.1	1160.2
15°	1150.8	1150.8	1148.2	1146.3
17.5°	1134.4	1135.6	1132.5	1132.5
20°	1116.7	1116.1	1113.6	1112.3
22.5°	1098.5	1097.2	1096.6	1092.8
25°	1079.0	1077.7	1075.8	1073.9
27.5°	1045.6	1044.9	1043.0	1040.5
30°	994.5	993.9	991.4	991.4
32.5°	928.4	927.8	925.3	925.9
35°	859.8	862.3	861.0	858.5
37.5°	802.4	804.3	805.6	804.3
40°	754.6	760.2	760.9	762.1
42.5°	703.6	711.1	713.6	714.9
45°	642.4	649.4	655.1	653.8
47.5°	580.1	585.1	590.2	586.4
50°	520.3	523.4	525.3	525.3
52.5°	463.6	463.6	462.9	463.6
55°	398.7	398.7	396.2	397.4
57.5°	330.7	331.9	330.0	326.9
60°	267.7	264.5	263.3	261.4
62.5°	208.5	208.5	204.1	209.7
65°	156.2	154.3	152.4	151.8
67.5°	113.4	112.8	110.9	110.2
70°	80.0	77.5	76.8	75.6
72.5°	53.5	53.5	52.3	52.3
75°	32.7	29.6	29.0	29.6
77.5°	22.7	22.0	22.0	21.4
80°	15.1	14.5	15.8	13.9
82.5°	9.4	10.1	9.4	10.1
85°	6.3	7.6	6.9	6.9
87.5°	3.8	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)