

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: P246050

Luminaire Tested: **LD8B20D010 ER8B20840 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246050
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 ER8B20840 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2160.0 lumens
Efficiency: N/A
Efficacy: 101.4 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

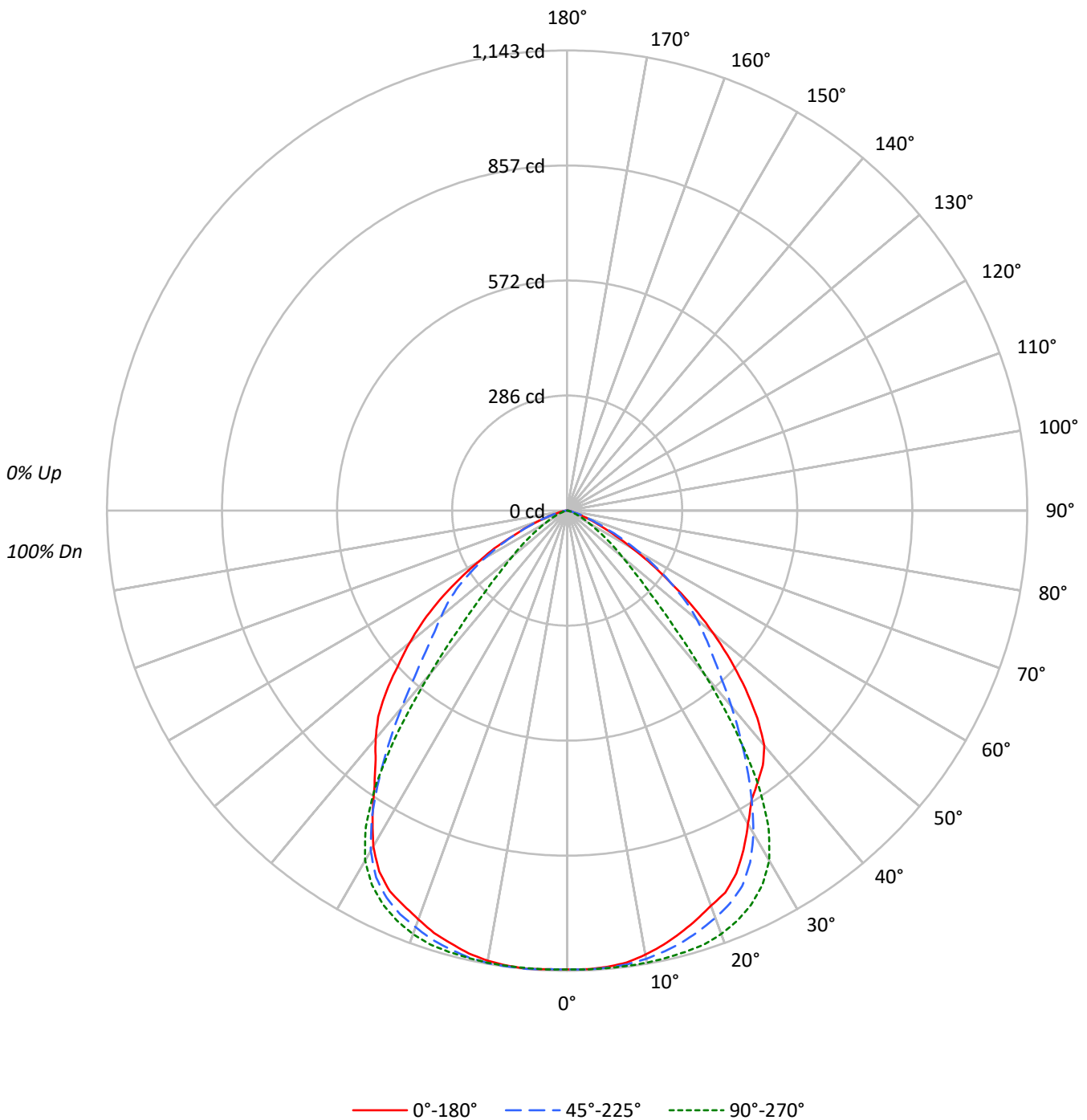
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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°	35144	35144	35144
5°	35220	35316	35353
10°	35073	35705	35552
15°	34682	36227	35544
20°	34266	36737	35450
25°	33823	36777	35487
30°	31996	35746	34286
35°	31041	31064	31388
40°	30657	21375	29796
45°	27317	12830	27692
50°	22715	8539	24476
55°	17037	5887	20752
60°	11545	3922	15659
65°	6961	2546	10755
70°	3859	1379	6618
75°	1751	584	3431
80°	1527	657	2397
85°	1734	849	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	5.0
10°-20°	315.9	14.6
20°-30°	479.4	22.2
30°-40°	503.5	23.3
40°-50°	377.5	17.5
50°-60°	242.2	11.2
60°-70°	103.6	4.8
70°-80°	24.5	1.1
80°-90°	4.5	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°	904.1	41.9
0°-40°	1407.6	65.2
0°-60°	2027.3	93.9
0°-90°	2160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2160.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1140	1140	1140	1140	1140	
5°	1138	1140	1141	1143	1142	108
15°	1086	1109	1135	1127	1113	306
25°	994	1029	1081	1061	1043	454
35°	825	779	825	815	834	518
45°	626	512	294	497	635	480
55°	317	317	110	330	386	287
65°	95	113	35	145	147	102
75°	15	17	5	29	29	21
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°	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7
2.5°	1140.3	1141.5	1140.9	1140.9	1140.3	1140.9	1140.9	1142.1	1142.1	1140.9	1140.3
5°	1137.8	1139.0	1139.0	1137.8	1137.8	1140.9	1139.0	1140.3	1140.3	1139.7	1139.7
7.5°	1132.3	1132.3	1134.8	1132.9	1132.9	1134.8	1134.2	1135.4	1136.6	1137.2	1137.2
10°	1120.1	1121.3	1121.9	1121.9	1122.5	1124.4	1125.6	1128.0	1129.3	1130.5	1131.1
12.5°	1104.8	1106.6	1107.2	1106.6	1108.5	1110.9	1114.0	1117.0	1118.9	1121.3	1123.1
15°	1086.4	1086.4	1087.7	1089.5	1090.7	1094.4	1097.4	1101.1	1106.0	1109.1	1112.1
17.5°	1066.3	1067.5	1069.3	1069.3	1071.8	1077.9	1079.7	1085.2	1090.7	1093.8	1099.9
20°	1044.2	1045.4	1047.3	1048.5	1051.6	1056.5	1060.1	1065.0	1071.1	1076.7	1082.8
22.5°	1027.1	1024.7	1025.9	1027.1	1030.2	1034.4	1038.7	1044.8	1051.0	1056.5	1062.6
25°	994.1	994.7	996.5	997.7	1001.4	1005.1	1010.0	1017.3	1022.8	1028.9	1035.7
27.5°	949.4	950.0	953.1	953.1	956.1	962.3	965.3	971.4	978.8	984.9	992.9
30°	898.6	899.9	899.9	902.3	904.1	907.2	910.3	916.4	920.0	925.6	936.6
32.5°	852.2	853.4	852.7	852.2	850.3	849.7	849.1	850.3	851.5	853.4	857.6
35°	824.6	821.6	819.1	814.8	809.9	803.8	798.3	791.0	784.2	778.7	772.6
37.5°	798.3	797.7	794.0	787.9	778.1	767.1	754.3	738.4	722.5	705.3	688.8
40°	761.6	759.8	756.7	748.2	737.1	723.7	706.6	687.0	661.3	635.0	608.1
42.5°	699.2	699.8	696.2	689.4	679.0	666.2	648.4	627.0	599.5	568.3	533.4
45°	626.4	626.4	625.2	619.7	612.3	601.9	588.5	570.7	543.8	512.0	474.7
47.5°	550.6	551.2	549.3	548.1	545.0	538.3	528.5	515.1	496.1	465.5	428.2
50°	473.5	473.5	476.5	475.9	475.9	473.5	469.2	461.2	444.7	420.3	385.4
52.5°	396.4	397.6	399.5	401.9	405.0	409.9	405.0	401.3	390.9	371.9	342.0
55°	316.9	318.1	321.2	325.4	329.1	334.0	335.2	335.2	329.7	316.9	294.2
57.5°	249.0	247.1	249.6	253.3	258.2	263.0	266.7	271.0	270.4	261.8	243.5
60°	187.2	187.8	189.6	193.3	197.0	201.3	206.2	209.8	211.7	207.4	195.8
62.5°	136.4	136.4	138.9	142.5	144.4	150.5	153.5	155.4	157.2	156.6	149.3
65°	95.4	96.6	97.9	99.7	101.5	105.2	107.1	110.7	111.9	112.6	107.1
67.5°	67.3	65.5	66.7	67.9	69.7	72.2	75.9	75.9	77.7	77.7	74.0
70°	42.8	42.8	43.4	45.3	46.5	47.1	48.3	49.5	51.4	50.8	50.8
72.5°	28.8	28.1	28.8	29.4	30.0	31.8	31.8	32.4	33.6	34.3	31.8
75°	14.7	15.3	16.5	15.9	17.7	16.5	17.1	19.0	18.4	17.1	17.1
77.5°	12.2	12.2	12.2	11.6	12.8	12.8	12.2	13.5	12.8	12.8	12.2
80°	8.6	9.2	8.6	7.9	8.6	7.9	7.9	7.9	7.9	7.9	7.3
82.5°	6.7	5.5	6.1	5.5	6.1	6.1	5.5	4.9	4.9	5.5	4.9
85°	4.9	3.7	4.3	4.3	3.7	3.7	3.7	3.7	3.7	3.1	3.1
87.5°	3.1	1.8	1.8	1.8	2.4	2.4	2.4	1.8	2.4	2.4	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7
2.5°	1141.5	1140.9	1142.1	1141.5	1141.5	1140.9	1141.5	1140.9	1142.1	1139.7	1140.3
5°	1141.5	1140.3	1140.9	1141.5	1142.1	1140.9	1140.9	1140.9	1142.1	1140.9	1141.5
7.5°	1139.0	1138.4	1140.3	1141.5	1140.9	1140.3	1141.5	1140.9	1142.1	1141.5	1142.7
10°	1134.2	1134.8	1136.0	1137.8	1138.4	1139.0	1140.3	1140.3	1142.1	1139.7	1140.9
12.5°	1126.8	1129.3	1132.3	1133.5	1136.0	1136.0	1137.2	1137.8	1139.0	1138.4	1140.3
15°	1117.6	1120.7	1124.4	1127.4	1130.5	1132.3	1134.2	1134.8	1136.6	1134.8	1135.4
17.5°	1106.6	1110.3	1115.8	1119.5	1124.4	1126.2	1128.6	1129.9	1131.7	1130.5	1131.1
20°	1091.3	1095.6	1101.7	1107.2	1110.3	1114.6	1117.6	1119.5	1120.7	1119.5	1120.1
22.5°	1069.9	1076.0	1084.0	1088.3	1094.4	1098.1	1098.7	1103.0	1106.0	1103.0	1104.2
25°	1044.8	1051.0	1057.1	1066.3	1071.8	1076.0	1080.3	1080.9	1084.0	1083.4	1082.8
27.5°	1003.2	1011.2	1021.6	1028.9	1036.3	1043.0	1047.9	1049.1	1052.2	1051.0	1051.6
30°	946.3	954.9	964.7	976.3	986.7	993.5	999.6	1003.9	1006.9	1005.1	1004.5
32.5°	865.6	874.2	884.6	896.2	908.4	918.2	925.6	931.1	934.7	933.5	930.4
35°	773.2	775.7	782.4	791.6	802.0	812.4	819.1	825.2	829.5	830.7	830.7
37.5°	678.4	670.5	665.6	665.6	671.7	676.0	682.1	685.8	692.5	694.9	696.8
40°	586.6	568.3	551.2	538.3	529.8	529.2	529.2	531.0	537.1	545.0	552.4
42.5°	504.7	475.3	449.0	425.2	408.0	398.2	394.0	394.6	399.5	406.8	419.0
45°	439.2	402.5	369.5	340.7	317.5	302.2	294.9	294.2	297.9	306.5	319.9
47.5°	388.5	349.3	312.0	278.9	253.9	237.3	228.8	226.3	228.8	236.7	252.6
50°	346.2	305.9	267.3	233.1	206.2	189.0	181.1	178.0	181.1	187.8	203.7
52.5°	307.1	265.5	229.4	196.4	167.6	152.9	144.4	142.5	144.4	152.3	165.2
55°	261.8	226.3	190.9	157.8	132.8	118.1	111.3	109.5	111.3	118.7	132.1
57.5°	217.2	186.6	155.4	125.4	104.0	91.1	85.0	82.6	86.9	91.8	107.7
60°	175.6	151.1	124.8	98.5	80.8	69.1	64.2	63.6	64.8	71.0	82.0
62.5°	137.6	117.5	96.6	75.2	60.6	55.7	49.5	48.9	50.2	53.8	62.4
65°	99.1	86.3	70.4	55.1	43.4	36.7	34.3	34.9	36.1	38.5	46.5
67.5°	69.1	59.9	48.9	38.5	30.0	26.9	24.5	23.9	24.5	28.8	33.0
70°	46.5	41.0	33.0	29.4	20.8	16.5	17.1	15.3	17.7	17.7	21.4
72.5°	30.6	26.9	22.0	17.1	14.7	11.6	11.6	11.0	12.2	12.8	15.9
75°	15.9	12.2	12.2	8.6	6.1	3.1	5.5	4.9	4.3	4.9	6.1
77.5°	11.0	9.2	8.6	6.7	6.1	4.9	4.9	4.9	4.9	5.5	6.1
80°	6.7	6.7	4.9	4.3	3.7	3.1	3.7	3.7	3.7	3.7	4.3
82.5°	4.3	3.7	3.7	3.1	3.1	2.4	2.4	2.4	2.4	2.4	3.7
85°	3.7	2.4	2.4	1.8	2.4	4.3	1.8	2.4	2.4	2.4	1.8
87.5°	1.2	1.8	1.8	1.8	1.2	0.6	1.2	1.8	1.8	3.1	2.4
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°	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7	1139.7
2.5°	1141.5	1142.1	1142.1	1141.5	1141.5	1140.3	1142.7	1140.9	1141.5	1143.9	1142.1
5°	1142.7	1143.3	1143.3	1142.7	1142.7	1142.7	1143.3	1143.3	1142.7	1142.1	1143.3
7.5°	1145.2	1144.6	1144.6	1143.3	1143.3	1142.1	1143.3	1141.5	1142.7	1141.5	1143.3
10°	1142.1	1142.7	1142.1	1141.5	1141.5	1140.9	1140.9	1139.0	1139.7	1137.8	1139.0
12.5°	1140.3	1139.7	1139.7	1138.4	1137.2	1136.0	1135.4	1133.5	1133.5	1129.3	1131.1
15°	1135.4	1136.0	1134.2	1131.7	1130.5	1127.4	1126.2	1123.7	1121.3	1118.3	1118.9
17.5°	1131.1	1129.3	1126.8	1124.4	1119.5	1117.0	1114.6	1110.9	1109.7	1106.0	1104.8
20°	1118.3	1117.0	1114.0	1109.7	1106.6	1101.1	1098.7	1095.0	1091.9	1088.3	1086.4
22.5°	1101.7	1100.5	1096.8	1092.6	1087.7	1085.2	1082.8	1076.0	1073.0	1069.3	1068.7
25°	1080.9	1079.1	1075.4	1070.5	1068.1	1061.4	1058.9	1054.0	1052.8	1049.1	1048.5
27.5°	1049.1	1046.7	1042.4	1036.3	1032.0	1027.7	1025.3	1021.6	1020.4	1016.7	1016.1
30°	1001.4	998.3	989.8	987.3	980.0	975.7	975.7	970.8	971.4	969.0	969.0
32.5°	926.2	921.3	914.5	909.6	904.7	902.3	902.3	900.5	901.7	901.7	902.9
35°	826.5	819.7	816.0	813.0	813.0	815.4	822.8	824.6	828.3	831.3	833.8
37.5°	698.6	698.0	702.3	705.9	715.1	725.5	738.4	749.4	759.8	767.1	774.5
40°	560.3	575.6	587.9	605.0	619.1	639.3	662.5	681.5	699.2	712.1	725.5
42.5°	437.4	457.0	482.7	507.7	532.8	560.3	590.9	617.2	640.5	658.2	672.3
45°	340.7	367.6	398.9	430.7	463.1	497.3	529.2	556.1	580.5	598.9	613.0
47.5°	274.7	304.0	339.5	374.4	411.1	447.2	482.7	505.9	526.1	540.8	553.6
50°	226.9	258.2	295.5	335.2	371.9	408.0	438.6	461.2	477.8	490.6	498.6
52.5°	189.6	222.7	262.4	302.2	338.9	371.9	399.5	416.6	430.0	439.2	446.6
55°	156.6	188.4	225.7	263.0	299.1	330.3	353.0	365.8	376.2	381.7	386.0
57.5°	127.9	157.2	191.5	225.7	256.9	282.6	300.4	313.2	318.1	322.4	321.8
60°	100.3	127.9	159.1	188.4	215.3	236.1	249.0	256.3	260.0	261.8	260.6
62.5°	78.9	104.0	127.9	153.5	173.1	190.9	203.1	203.1	204.9	205.5	207.4
65°	58.7	77.7	98.5	117.5	133.4	145.0	151.7	153.5	156.0	155.4	154.2
67.5°	43.4	57.5	72.8	86.9	97.9	105.2	110.1	114.4	113.8	112.6	111.9
70°	30.0	39.2	52.6	61.2	69.1	76.5	77.7	78.3	78.9	79.5	78.3
72.5°	20.8	27.5	34.9	42.2	47.1	50.2	53.2	53.8	53.8	53.8	53.2
75°	10.4	14.1	20.8	23.9	28.1	29.4	31.8	31.8	33.6	31.2	30.6
77.5°	9.2	11.0	14.7	17.1	19.0	20.8	21.4	23.2	22.6	21.4	22.0
80°	5.5	6.7	9.2	10.4	12.8	13.5	14.1	14.7	14.1	14.7	14.7
82.5°	4.3	4.9	6.1	6.1	7.9	7.9	8.6	8.6	9.2	9.2	9.2
85°	2.4	4.3	3.7	7.3	4.9	4.9	6.1	7.3	6.1	6.1	7.3
87.5°	2.4	2.4	1.8	2.4	2.4	2.4	3.1	3.7	3.7	4.3	3.7
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: P246050

CATALOG NUMBER: LD8B20D010 ER8B20840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1139.7	1139.7	1139.7	1139.7
2.5°	1141.5	1142.7	1140.9	1140.3
5°	1143.3	1143.3	1142.1	1142.1
7.5°	1143.3	1143.3	1141.5	1140.3
10°	1138.4	1138.4	1136.6	1135.4
12.5°	1129.3	1129.3	1128.6	1126.8
15°	1117.6	1117.6	1115.2	1113.4
17.5°	1101.7	1103.0	1099.9	1099.9
20°	1084.6	1084.0	1081.6	1080.3
22.5°	1066.9	1065.6	1065.0	1061.4
25°	1047.9	1046.7	1044.8	1043.0
27.5°	1015.5	1014.9	1013.0	1010.6
30°	965.9	965.3	962.9	962.9
32.5°	901.7	901.1	898.6	899.3
35°	835.0	837.5	836.2	833.8
37.5°	779.3	781.2	782.4	781.2
40°	732.9	738.4	739.0	740.2
42.5°	683.3	690.6	693.1	694.3
45°	624.0	630.7	636.2	635.0
47.5°	563.4	568.3	573.2	569.5
50°	505.3	508.3	510.2	510.2
52.5°	450.2	450.2	449.6	450.2
55°	387.2	387.2	384.8	386.0
57.5°	321.2	322.4	320.5	317.5
60°	260.0	256.9	255.7	253.9
62.5°	202.5	202.5	198.2	203.7
65°	151.7	149.9	148.0	147.4
67.5°	110.1	109.5	107.7	107.1
70°	77.7	75.2	74.6	73.4
72.5°	52.0	52.0	50.8	50.8
75°	31.8	28.8	28.1	28.8
77.5°	22.0	21.4	21.4	20.8
80°	14.7	14.1	15.3	13.5
82.5°	9.2	9.8	9.2	9.8
85°	6.1	7.3	6.7	6.7
87.5°	3.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)