

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: P249170

Luminaire Tested: **LD8B175D010 ER8B175950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249170
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: LD8B175D010 ER8B175950 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17143.0 lumens
Efficiency: N/A
Efficacy: 96.7 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

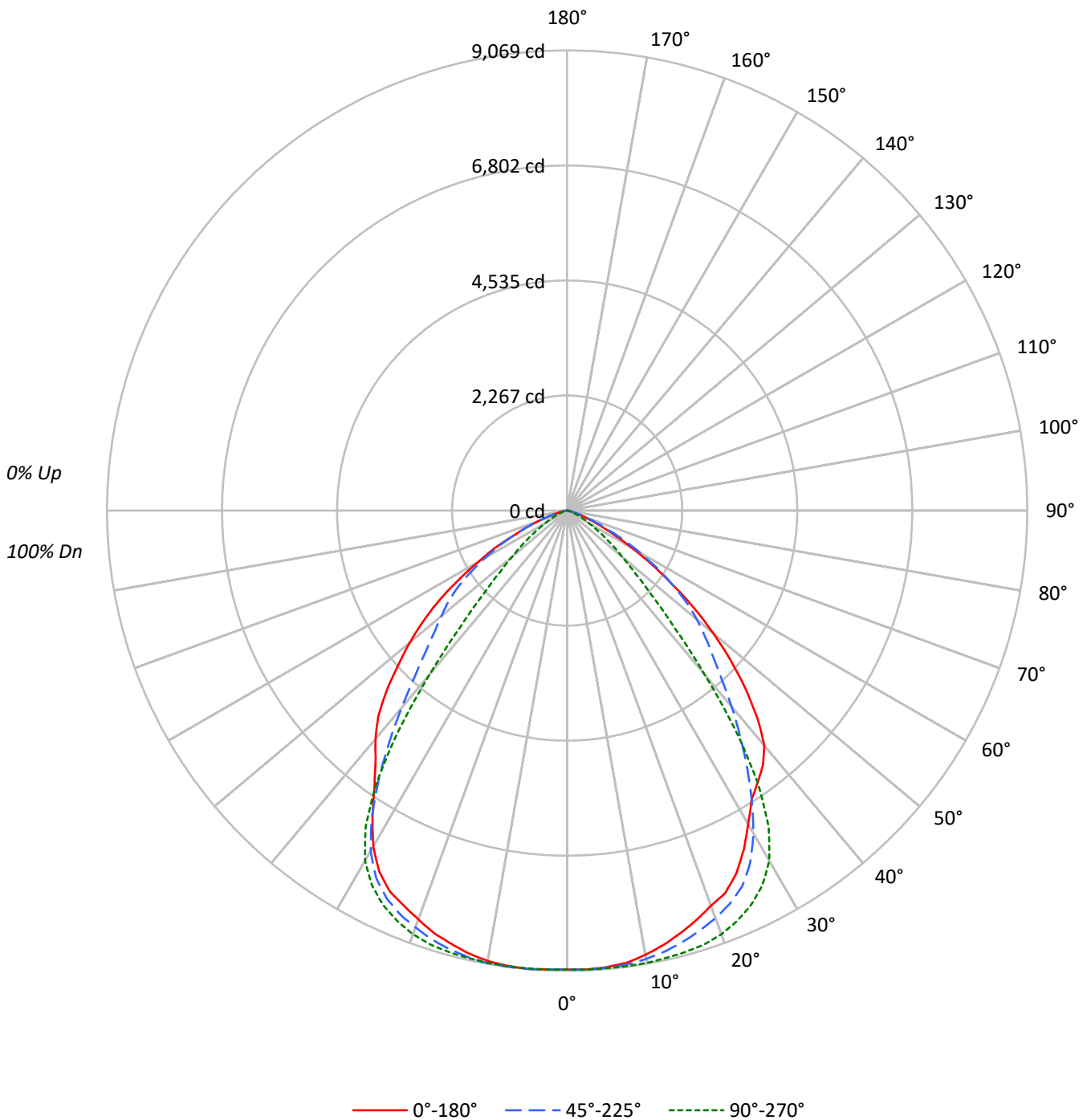
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	51	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°	278914	278914	278914
5°	279528	280280	280583
10°	278351	283371	282153
15°	275266	287512	282091
20°	271964	291554	281362
25°	268433	291889	281648
30°	253951	283686	272103
35°	246370	246547	249110
40°	243319	169638	236480
45°	216807	101840	219773
50°	180277	67776	194247
55°	135205	46724	164698
60°	91627	31139	124264
65°	55264	20197	85369
70°	30645	10945	52527
75°	13880	4623	27188
80°	12075	5168	18965
85°	13728	6864	18929



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	863.2	5.0
10°-20°	2506.9	14.6
20°-30°	3805.0	22.2
30°-40°	3996.4	23.3
40°-50°	2996.2	17.5
50°-60°	1922.4	11.2
60°-70°	822.4	4.8
70°-80°	194.3	1.1
80°-90°	36.1	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°	7175.1	41.9
0°-40°	11171.5	65.2
0°-60°	16090.2	93.9
0°-90°	17143.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17143.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9045	9045	9045	9045	9045	
5°	9030	9045	9055	9069	9064	858
15°	8622	8802	9006	8948	8836	2432
25°	7890	8166	8579	8424	8278	3604
35°	6545	6180	6549	6472	6618	4108
45°	4972	4064	2335	3947	5040	3807
55°	2515	2515	869	2622	3064	2281
65°	757	893	277	1151	1170	809
75°	116	136	39	233	228	170
85°	39	24	19	39	54	41
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°	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0
2.5°	9049.9	9059.6	9054.7	9054.7	9049.9	9054.7	9054.7	9064.5	9064.5	9054.7	9049.9
5°	9030.4	9040.1	9040.1	9030.4	9030.4	9054.7	9040.1	9049.9	9049.9	9045.0	9045.0
7.5°	8986.8	8986.8	9006.1	8991.6	8991.6	9006.1	9001.3	9011.0	9020.7	9025.6	9025.6
10°	8889.6	8899.3	8904.2	8904.2	8909.1	8923.6	8933.3	8952.8	8962.4	8972.2	8977.0
12.5°	8768.3	8782.8	8787.7	8782.8	8797.4	8816.8	8841.1	8865.4	8880.0	8899.3	8913.9
15°	8622.5	8622.5	8632.3	8646.9	8656.6	8685.7	8710.0	8739.1	8777.9	8802.3	8826.5
17.5°	8462.4	8472.1	8486.6	8486.6	8506.1	8554.6	8569.2	8612.9	8656.6	8680.9	8729.5
20°	8287.7	8297.3	8311.9	8321.6	8345.9	8384.7	8413.8	8452.7	8501.3	8545.0	8593.4
22.5°	8151.6	8132.3	8141.9	8151.6	8176.0	8210.0	8243.9	8292.4	8341.0	8384.7	8433.3
25°	7889.5	7894.3	7908.9	7918.6	7947.8	7976.9	8015.7	8073.9	8117.7	8166.3	8219.6
27.5°	7535.1	7540.0	7564.2	7564.2	7588.4	7637.0	7661.3	7709.8	7768.2	7816.6	7879.8
30°	7132.1	7141.8	7141.8	7161.2	7175.7	7200.1	7224.3	7272.9	7302.0	7345.7	7433.2
32.5°	6763.2	6772.8	6767.9	6763.2	6748.5	6743.7	6738.8	6748.5	6758.3	6772.8	6806.8
35°	6544.7	6520.3	6501.0	6467.0	6428.2	6379.6	6335.8	6277.6	6224.2	6180.5	6132.0
37.5°	6335.8	6331.0	6301.9	6253.3	6175.6	6088.3	5986.3	5860.1	5733.8	5597.9	5466.9
40°	6044.6	6030.0	6005.7	5937.8	5850.3	5743.5	5607.6	5452.2	5248.3	5039.6	4826.0
42.5°	5549.3	5554.2	5525.1	5471.6	5389.2	5287.1	5146.3	4976.5	4758.0	4510.3	4233.6
45°	4971.6	4971.6	4961.9	4918.1	4859.9	4777.4	4670.6	4529.8	4316.2	4063.6	3767.5
47.5°	4369.5	4374.4	4359.8	4350.2	4325.8	4272.5	4194.8	4088.0	3937.5	3694.7	3398.5
50°	3757.9	3757.9	3782.1	3777.2	3777.2	3757.9	3723.9	3660.7	3529.7	3335.4	3058.7
52.5°	3146.1	3155.8	3170.4	3189.8	3214.0	3252.9	3214.0	3184.9	3102.4	2951.8	2714.0
55°	2514.9	2524.6	2548.9	2582.9	2612.1	2650.9	2660.5	2660.5	2616.8	2514.9	2335.3
57.5°	1976.0	1961.4	1980.9	2010.0	2048.9	2087.7	2116.8	2150.8	2145.9	2078.0	1932.3
60°	1485.7	1490.5	1505.0	1534.2	1563.4	1597.3	1636.2	1665.3	1679.9	1645.9	1553.6
62.5°	1082.7	1082.7	1102.1	1131.2	1145.8	1194.4	1218.6	1233.2	1247.7	1242.8	1184.6
65°	757.4	767.1	776.8	791.4	805.9	835.0	849.6	878.7	888.5	893.3	849.6
67.5°	534.1	519.5	529.2	538.9	553.5	572.9	602.1	602.1	616.6	616.6	587.4
70°	339.9	339.9	344.7	359.2	369.0	373.8	383.6	393.2	407.8	403.0	403.0
72.5°	228.2	223.3	228.2	233.1	237.9	252.4	252.4	257.3	267.1	271.9	252.4
75°	116.5	121.4	131.0	126.3	140.8	131.0	135.9	150.5	145.6	135.9	135.9
77.5°	97.1	97.1	97.1	92.3	101.9	101.9	97.1	106.8	101.9	101.9	97.1
80°	68.0	72.8	68.0	63.1	68.0	63.1	63.1	63.1	63.1	63.1	58.2
82.5°	53.5	43.7	48.6	43.7	48.6	48.6	43.7	38.8	38.8	43.7	38.8
85°	38.8	29.1	34.0	34.0	29.1	29.1	29.1	29.1	29.1	24.2	24.2
87.5°	24.2	14.6	14.6	14.6	19.4	19.4	19.4	14.6	19.4	19.4	9.7
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°	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0
2.5°	9059.6	9054.7	9064.5	9059.6	9059.6	9054.7	9059.6	9054.7	9064.5	9045.0	9049.9
5°	9059.6	9049.9	9054.7	9059.6	9064.5	9054.7	9054.7	9054.7	9064.5	9054.7	9059.6
7.5°	9040.1	9035.2	9049.9	9059.6	9054.7	9049.9	9059.6	9054.7	9064.5	9059.6	9069.2
10°	9001.3	9006.1	9015.9	9030.4	9035.2	9040.1	9049.9	9049.9	9064.5	9045.0	9054.7
12.5°	8943.1	8962.4	8986.8	8996.4	9015.9	9015.9	9025.6	9030.4	9040.1	9035.2	9049.9
15°	8870.2	8894.5	8923.6	8947.9	8972.2	8986.8	9001.3	9006.1	9020.7	9006.1	9011.0
17.5°	8782.8	8811.9	8855.6	8884.7	8923.6	8938.2	8957.6	8967.3	8981.9	8972.2	8977.0
20°	8661.4	8695.5	8744.0	8787.7	8811.9	8845.9	8870.2	8884.7	8894.5	8884.7	8889.6
22.5°	8491.5	8540.1	8603.2	8637.2	8685.7	8714.9	8719.7	8753.7	8777.9	8753.7	8763.4
25°	8292.4	8341.0	8389.6	8462.4	8506.1	8540.1	8574.1	8578.9	8603.2	8598.3	8593.4
27.5°	7962.3	8025.5	8107.9	8166.3	8224.5	8277.9	8316.8	8326.4	8350.7	8341.0	8345.9
30°	7510.7	7578.8	7656.5	7748.7	7831.2	7884.6	7933.2	7967.2	7991.4	7976.9	7972.0
32.5°	6870.0	6937.9	7020.5	7112.7	7209.8	7287.4	7345.7	7389.4	7418.6	7408.8	7384.6
35°	6136.9	6156.2	6209.7	6282.5	6365.0	6447.5	6501.0	6549.4	6583.4	6593.2	6593.2
37.5°	5384.3	5321.2	5282.4	5282.4	5330.8	5364.8	5413.4	5442.5	5496.0	5515.3	5529.9
40°	4656.0	4510.3	4374.4	4272.5	4204.5	4199.7	4199.7	4214.2	4262.7	4325.8	4384.2
42.5°	4005.4	3772.4	3563.6	3374.3	3238.4	3160.7	3126.7	3131.6	3170.4	3228.6	3325.7
45°	3485.9	3194.7	2932.5	2704.3	2519.8	2398.4	2340.2	2335.3	2364.4	2432.3	2539.3
47.5°	3083.0	2772.2	2476.1	2213.9	2014.9	1883.7	1815.8	1796.4	1815.8	1878.9	2005.2
50°	2748.0	2427.6	2121.7	1849.8	1636.2	1500.3	1437.1	1412.8	1437.1	1490.5	1616.7
52.5°	2437.2	2107.1	1820.7	1558.5	1330.3	1213.7	1145.8	1131.2	1145.8	1208.9	1310.9
55°	2078.0	1796.4	1514.8	1252.6	1053.6	937.1	883.6	869.1	883.6	941.9	1048.7
57.5°	1723.6	1480.8	1233.2	995.3	825.4	723.3	674.9	655.4	689.4	728.2	854.5
60°	1393.4	1199.2	990.4	781.7	640.9	548.6	509.8	504.9	514.6	563.2	650.5
62.5°	1092.4	932.2	767.1	597.2	480.6	441.8	393.2	388.5	398.1	427.2	495.3
65°	786.5	684.6	558.3	436.9	344.7	291.3	271.9	276.8	286.4	305.9	369.0
67.5°	548.6	475.8	388.5	305.9	237.9	213.6	194.2	189.4	194.2	228.2	262.2
70°	369.0	325.3	262.2	233.1	165.1	131.0	135.9	121.4	140.8	140.8	169.9
72.5°	242.7	213.6	174.8	135.9	116.5	92.3	92.3	87.4	97.1	101.9	126.3
75°	126.3	97.1	97.1	68.0	48.6	24.2	43.7	38.8	34.0	38.8	48.6
77.5°	87.4	72.8	68.0	53.5	48.6	38.8	38.8	38.8	38.8	43.7	48.6
80°	53.5	53.5	38.8	34.0	29.1	24.2	29.1	29.1	29.1	29.1	34.0
82.5°	34.0	29.1	29.1	24.2	24.2	19.4	19.4	19.4	19.4	19.4	29.1
85°	29.1	19.4	19.4	14.6	19.4	34.0	14.6	19.4	19.4	19.4	14.6
87.5°	9.7	14.6	14.6	14.6	9.7	4.9	9.7	14.6	14.6	24.2	19.4
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°	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0	9045.0
2.5°	9059.6	9064.5	9064.5	9059.6	9059.6	9049.9	9069.2	9054.7	9059.6	9079.0	9064.5
5°	9069.2	9074.1	9074.1	9069.2	9069.2	9069.2	9074.1	9074.1	9069.2	9064.5	9074.1
7.5°	9088.7	9083.8	9083.8	9074.1	9074.1	9064.5	9074.1	9059.6	9069.2	9059.6	9074.1
10°	9064.5	9069.2	9064.5	9059.6	9059.6	9054.7	9054.7	9040.1	9045.0	9030.4	9040.1
12.5°	9049.9	9045.0	9045.0	9035.2	9025.6	9015.9	9011.0	8996.4	8996.4	8962.4	8977.0
15°	9011.0	9015.9	9001.3	8981.9	8972.2	8947.9	8938.2	8918.7	8899.3	8875.1	8880.0
17.5°	8977.0	8962.4	8943.1	8923.6	8884.7	8865.4	8845.9	8816.8	8807.0	8777.9	8768.3
20°	8875.1	8865.4	8841.1	8807.0	8782.8	8739.1	8719.7	8690.6	8666.3	8637.2	8622.5
22.5°	8744.0	8734.2	8705.1	8671.1	8632.3	8612.9	8593.4	8540.1	8515.8	8486.6	8481.8
25°	8578.9	8564.3	8535.2	8496.4	8476.9	8423.6	8404.1	8365.2	8355.6	8326.4	8321.6
27.5°	8326.4	8307.0	8273.0	8224.5	8190.5	8156.5	8137.1	8107.9	8098.3	8069.1	8064.3
30°	7947.8	7923.4	7855.5	7836.1	7777.8	7743.8	7743.8	7705.0	7709.8	7690.5	7690.5
32.5°	7350.6	7311.8	7258.3	7219.5	7180.6	7161.2	7161.2	7146.6	7156.4	7156.4	7166.1
35°	6559.2	6505.8	6476.6	6452.4	6452.4	6471.8	6530.1	6544.7	6573.8	6598.0	6617.5
37.5°	5544.4	5539.7	5573.7	5602.8	5675.6	5758.1	5860.1	5947.5	6030.0	6088.3	6146.5
40°	4447.2	4568.6	4665.7	4801.7	4913.3	5073.5	5258.0	5408.5	5549.3	5651.3	5758.1
42.5°	3471.3	3626.7	3830.7	4029.7	4228.8	4447.2	4690.1	4898.8	5083.3	5224.0	5335.7
45°	2704.3	2917.9	3165.5	3418.0	3675.3	3947.2	4199.7	4413.3	4607.5	4753.1	4864.8
47.5°	2179.9	2413.0	2694.5	2971.3	3262.6	3549.0	3830.7	4015.2	4175.3	4291.9	4393.9
50°	1801.2	2048.9	2345.0	2660.5	2951.8	3238.4	3481.1	3660.7	3791.8	3893.8	3956.8
52.5°	1505.0	1767.2	2082.8	2398.4	2689.7	2951.8	3170.4	3306.3	3413.1	3485.9	3544.2
55°	1242.8	1495.4	1791.6	2087.7	2374.1	2621.7	2801.3	2903.4	2985.8	3029.5	3063.5
57.5°	1014.8	1247.7	1519.6	1791.6	2039.1	2243.1	2383.9	2485.8	2524.6	2558.6	2553.8
60°	796.3	1014.8	1262.3	1495.4	1709.0	1874.0	1976.0	2034.3	2063.4	2078.0	2068.2
62.5°	626.3	825.4	1014.8	1218.6	1374.0	1514.8	1611.9	1611.9	1626.4	1631.3	1645.9
65°	466.0	616.6	781.7	932.2	1058.4	1150.7	1204.1	1218.6	1238.1	1233.2	1223.5
67.5°	344.7	456.4	577.7	689.4	776.8	835.0	873.9	908.0	903.1	893.3	888.5
70°	237.9	310.8	417.6	485.5	548.6	606.9	616.6	621.4	626.3	631.2	621.4
72.5°	165.1	218.5	276.8	335.0	373.8	398.1	422.4	427.2	427.2	427.2	422.4
75°	82.6	111.7	165.1	189.4	223.3	233.1	252.4	252.4	267.1	247.6	242.7
77.5°	72.8	87.4	116.5	135.9	150.5	165.1	169.9	184.5	179.6	169.9	174.8
80°	43.7	53.5	72.8	82.6	101.9	106.8	111.7	116.5	111.7	116.5	116.5
82.5°	34.0	38.8	48.6	48.6	63.1	63.1	68.0	68.0	72.8	72.8	72.8
85°	19.4	34.0	29.1	58.2	38.8	38.8	48.6	58.2	48.6	48.6	58.2
87.5°	19.4	19.4	14.6	19.4	19.4	19.4	24.2	29.1	29.1	34.0	29.1
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: P249170

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9045.0	9045.0	9045.0	9045.0
2.5°	9059.6	9069.2	9054.7	9049.9
5°	9074.1	9074.1	9064.5	9064.5
7.5°	9074.1	9074.1	9059.6	9049.9
10°	9035.2	9035.2	9020.7	9011.0
12.5°	8962.4	8962.4	8957.6	8943.1
15°	8870.2	8870.2	8850.8	8836.3
17.5°	8744.0	8753.7	8729.5	8729.5
20°	8608.1	8603.2	8583.8	8574.1
22.5°	8467.3	8457.5	8452.7	8423.6
25°	8316.8	8307.0	8292.4	8277.9
27.5°	8059.5	8054.6	8040.0	8020.6
30°	7666.1	7661.3	7641.9	7641.9
32.5°	7156.4	7151.5	7132.1	7137.0
35°	6627.1	6646.6	6636.9	6617.5
37.5°	6185.3	6199.9	6209.7	6199.9
40°	5816.4	5860.1	5864.9	5874.7
42.5°	5423.1	5481.4	5500.8	5510.5
45°	4952.1	5005.6	5049.3	5039.6
47.5°	4471.5	4510.3	4549.2	4520.1
50°	4010.3	4034.5	4049.1	4049.1
52.5°	3573.4	3573.4	3568.5	3573.4
55°	3073.2	3073.2	3053.9	3063.5
57.5°	2548.9	2558.6	2544.0	2519.8
60°	2063.4	2039.1	2029.4	2014.9
62.5°	1607.1	1607.1	1573.1	1616.7
65°	1204.1	1189.5	1174.9	1170.0
67.5°	873.9	869.1	854.5	849.6
70°	616.6	597.2	592.3	582.6
72.5°	412.7	412.7	403.0	403.0
75°	252.4	228.2	223.3	228.2
77.5°	174.8	169.9	169.9	165.1
80°	116.5	111.7	121.4	106.8
82.5°	72.8	77.7	72.8	77.7
85°	48.6	58.2	53.5	53.5
87.5°	29.1	29.1	29.1	29.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)