

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: P249602

Luminaire Tested: **LD8B175D010 ER8B175950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249602
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16950.0 lumens
Efficiency: N/A
Efficacy: 95.7 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

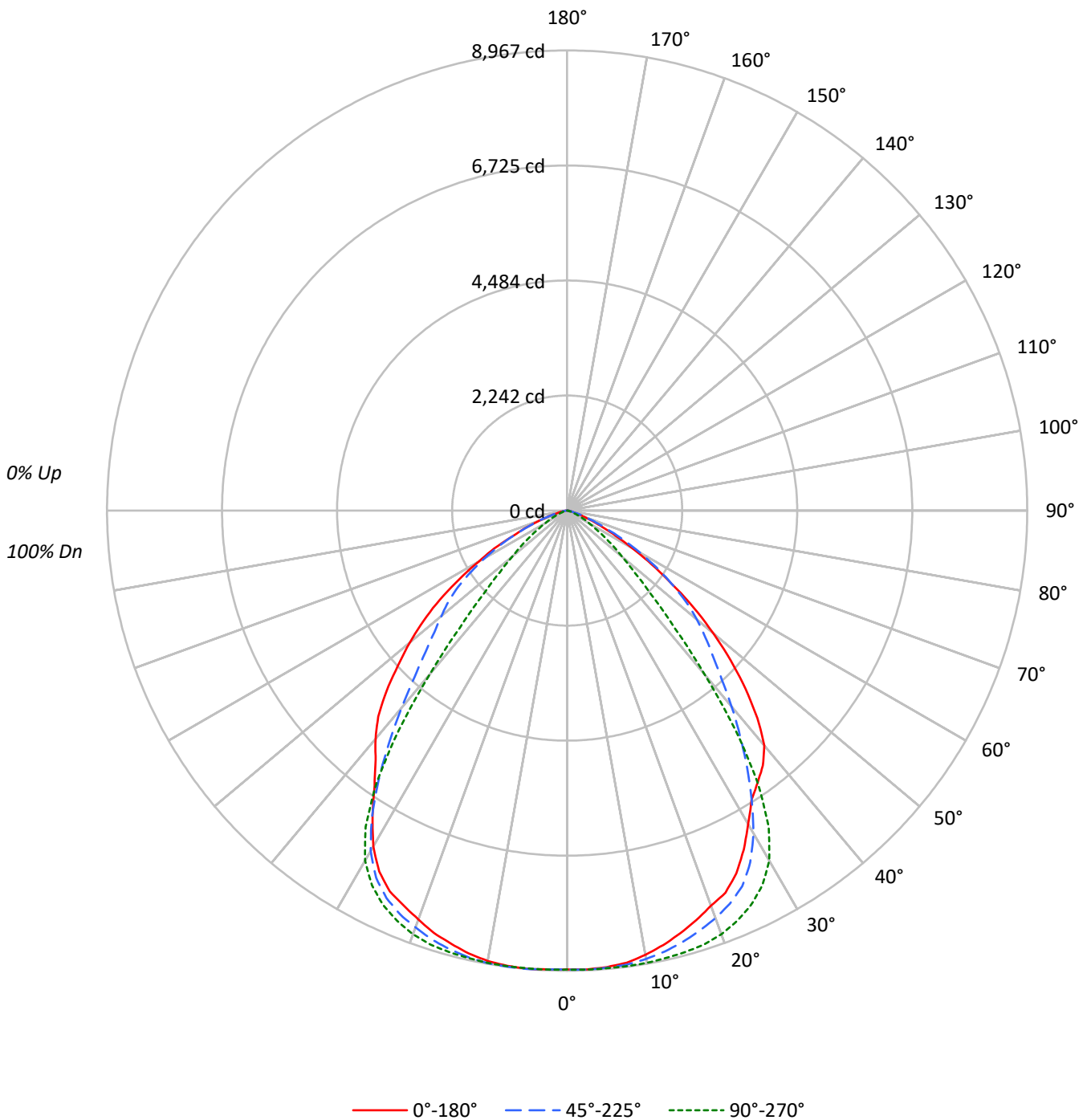
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249602

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0MW

Luminous Intensity Polar Plot





TEST NUMBER: P249602

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0MW

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°	275775	275775	275775
5°	276380	277126	277423
10°	275217	280180	278978
15°	272169	284275	278914
20°	268902	288273	278192
25°	265408	288606	278477
30°	251091	280492	269041
35°	243596	243772	246306
40°	240578	167726	233815
45°	214365	100693	217296
50°	178248	67013	192064
55°	133683	46197	162844
60°	90591	30787	122864
65°	54643	19971	84406
70°	30294	10819	51932
75°	13725	4575	26879
80°	11933	5114	18752
85°	13586	6758	18716



TEST NUMBER: P249602

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	853.5	5.0
10°-20°	2478.7	14.6
20°-30°	3762.2	22.2
30°-40°	3951.4	23.3
40°-50°	2962.5	17.5
50°-60°	1900.8	11.2
60°-70°	813.1	4.8
70°-80°	192.1	1.1
80°-90°	35.7	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°	7094.3	41.9
0°-40°	11045.7	65.2
0°-60°	15909.0	93.9
0°-90°	16950.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16950.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8943	8943	8943	8943	8943	
5°	8929	8943	8953	8967	8962	848
15°	8526	8703	8905	8847	8737	2405
25°	7801	8074	8482	8329	8185	3564
35°	6471	6111	6476	6399	6543	4061
45°	4916	4018	2309	3903	4983	3765
55°	2487	2487	859	2592	3029	2256
65°	749	883	274	1138	1157	799
75°	115	134	38	230	226	168
85°	38	24	19	38	53	41
90°	0	0	0	0	0	



TEST NUMBER: P249602

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2
2.5°	8948.0	8957.6	8952.8	8952.8	8948.0	8952.8	8952.8	8962.4	8962.4	8952.8	8948.0
5°	8928.7	8938.3	8938.3	8928.7	8928.7	8952.8	8938.3	8948.0	8948.0	8943.2	8943.2
7.5°	8885.6	8885.6	8904.7	8890.4	8890.4	8904.7	8899.9	8909.6	8919.2	8924.0	8924.0
10°	8789.5	8799.1	8804.0	8804.0	8808.8	8823.1	8832.7	8852.0	8861.5	8871.2	8876.0
12.5°	8669.6	8683.9	8688.7	8683.9	8698.4	8717.5	8741.6	8765.6	8780.0	8799.1	8813.6
15°	8525.5	8525.5	8535.1	8549.5	8559.2	8588.0	8611.9	8640.7	8679.1	8703.2	8727.1
17.5°	8367.1	8376.8	8391.1	8391.1	8410.4	8458.3	8472.7	8516.0	8559.2	8583.1	8631.2
20°	8194.4	8203.9	8218.3	8227.9	8251.9	8290.3	8319.1	8357.5	8405.5	8448.8	8496.7
22.5°	8059.9	8040.7	8050.2	8059.9	8083.9	8117.5	8151.1	8199.1	8247.1	8290.3	8338.4
25°	7800.6	7805.5	7819.9	7829.4	7858.3	7887.1	7925.5	7983.1	8026.3	8074.3	8127.1
27.5°	7450.3	7455.1	7479.0	7479.0	7503.0	7551.0	7575.0	7623.0	7680.7	7728.6	7791.1
30°	7051.8	7061.4	7061.4	7080.6	7095.0	7119.0	7143.0	7191.0	7219.8	7263.0	7349.5
32.5°	6687.0	6696.5	6691.7	6687.0	6672.6	6667.8	6662.9	6672.6	6682.2	6696.5	6730.1
35°	6471.0	6446.9	6427.8	6394.2	6355.8	6307.7	6264.5	6207.0	6154.1	6110.9	6063.0
37.5°	6264.5	6259.7	6230.9	6182.9	6106.1	6019.7	5919.0	5794.1	5669.2	5534.9	5405.3
40°	5976.5	5962.1	5938.1	5870.9	5784.5	5678.9	5544.5	5390.9	5189.2	4982.8	4771.6
42.5°	5486.8	5491.6	5462.9	5410.0	5328.5	5227.6	5088.4	4920.4	4704.4	4459.5	4186.0
45°	4915.6	4915.6	4906.0	4862.8	4805.2	4723.6	4618.0	4478.8	4267.6	4017.9	3725.1
47.5°	4320.3	4325.2	4310.7	4301.2	4277.1	4224.4	4147.6	4042.0	3893.2	3653.1	3360.2
50°	3715.6	3715.6	3739.5	3734.7	3734.7	3715.6	3682.0	3619.5	3489.9	3297.9	3024.3
52.5°	3110.6	3120.3	3134.7	3153.9	3177.8	3216.2	3177.8	3149.1	3067.4	2918.6	2683.4
55°	2486.6	2496.2	2520.2	2553.8	2582.7	2621.1	2630.6	2630.6	2587.4	2486.6	2309.0
57.5°	1953.8	1939.4	1958.6	1987.4	2025.8	2064.2	2093.0	2126.6	2121.8	2054.6	1910.6
60°	1468.9	1473.7	1488.1	1517.0	1545.7	1579.3	1617.8	1646.5	1661.0	1627.4	1536.1
62.5°	1070.5	1070.5	1089.7	1118.4	1132.9	1180.9	1204.9	1219.3	1233.7	1228.9	1171.3
65°	748.9	758.4	768.1	782.5	796.8	825.6	840.1	868.8	878.5	883.3	840.1
67.5°	528.1	513.6	523.3	532.8	547.2	566.5	595.3	595.3	609.6	609.6	580.8
70°	336.0	336.0	340.9	355.2	364.8	369.6	379.3	388.8	403.2	398.4	398.4
72.5°	225.6	220.8	225.6	230.5	235.3	249.6	249.6	254.4	264.0	268.9	249.6
75°	115.2	120.0	129.6	124.9	139.2	129.6	134.4	148.8	144.0	134.4	134.4
77.5°	96.0	96.0	96.0	91.3	100.8	100.8	96.0	105.6	100.8	100.8	96.0
80°	67.2	72.0	67.2	62.4	67.2	62.4	62.4	62.4	62.4	62.4	57.6
82.5°	52.9	43.2	48.0	43.2	48.0	48.0	43.2	38.4	38.4	43.2	38.4
85°	38.4	28.8	33.6	33.6	28.8	28.8	28.8	28.8	28.8	24.0	24.0
87.5°	24.0	14.4	14.4	14.4	19.1	19.1	19.1	14.4	19.1	19.1	9.6
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: P249602

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2
2.5°	8957.6	8952.8	8962.4	8957.6	8957.6	8952.8	8957.6	8952.8	8962.4	8943.2	8948.0
5°	8957.6	8948.0	8952.8	8957.6	8962.4	8952.8	8952.8	8952.8	8962.4	8952.8	8957.6
7.5°	8938.3	8933.5	8948.0	8957.6	8952.8	8948.0	8957.6	8952.8	8962.4	8957.6	8967.1
10°	8899.9	8904.7	8914.4	8928.7	8933.5	8938.3	8948.0	8948.0	8962.4	8943.2	8952.8
12.5°	8842.4	8861.5	8885.6	8895.1	8914.4	8914.4	8924.0	8928.7	8938.3	8933.5	8948.0
15°	8770.4	8794.3	8823.1	8847.2	8871.2	8885.6	8899.9	8904.7	8919.2	8904.7	8909.6
17.5°	8683.9	8712.7	8755.9	8784.7	8823.1	8837.6	8856.7	8866.3	8880.8	8871.2	8876.0
20°	8563.9	8597.6	8645.5	8688.7	8712.7	8746.3	8770.4	8784.7	8794.3	8784.7	8789.5
22.5°	8395.9	8444.0	8506.3	8539.9	8588.0	8616.7	8621.6	8655.1	8679.1	8655.1	8664.8
25°	8199.1	8247.1	8295.1	8367.1	8410.4	8444.0	8477.5	8482.4	8506.3	8501.5	8496.7
27.5°	7872.6	7935.1	8016.6	8074.3	8131.9	8184.7	8223.1	8232.7	8256.7	8247.1	8251.9
30°	7426.2	7493.5	7570.3	7661.4	7743.1	7795.8	7843.9	7877.5	7901.4	7887.1	7882.3
32.5°	6792.6	6859.8	6941.4	7032.6	7128.7	7205.4	7263.0	7306.3	7335.0	7325.4	7301.4
35°	6067.8	6086.9	6139.8	6211.8	6293.3	6374.9	6427.8	6475.7	6509.3	6518.9	6518.9
37.5°	5323.7	5261.3	5222.9	5222.9	5270.8	5304.4	5352.5	5381.2	5434.1	5453.2	5467.7
40°	4603.5	4459.5	4325.2	4224.4	4157.2	4152.4	4152.4	4166.7	4214.8	4277.1	4334.8
42.5°	3960.3	3729.9	3523.5	3336.3	3201.9	3125.1	3091.5	3096.3	3134.7	3192.3	3288.2
45°	3446.7	3158.7	2899.5	2673.8	2491.4	2371.4	2313.8	2309.0	2337.8	2405.0	2510.7
47.5°	3048.3	2741.0	2448.2	2189.0	1992.2	1862.5	1795.3	1776.2	1795.3	1857.7	1982.6
50°	2717.0	2400.3	2097.8	1828.9	1617.8	1483.4	1420.9	1396.9	1420.9	1473.7	1598.5
52.5°	2409.8	2083.4	1800.2	1540.9	1315.3	1200.1	1132.9	1118.4	1132.9	1195.3	1296.1
55°	2054.6	1776.2	1497.7	1238.5	1041.7	926.5	873.7	859.3	873.7	931.3	1036.9
57.5°	1704.2	1464.1	1219.3	984.1	816.1	715.2	667.3	648.0	681.6	720.0	844.9
60°	1377.7	1185.7	979.3	772.9	633.7	542.4	504.0	499.2	508.8	556.9	643.2
62.5°	1080.1	921.7	758.4	590.5	475.2	436.8	388.8	384.1	393.6	422.4	489.7
65°	777.7	676.9	552.1	432.0	340.9	288.0	268.9	273.7	283.2	302.5	364.8
67.5°	542.4	470.4	384.1	302.5	235.3	211.2	192.0	187.2	192.0	225.6	259.2
70°	364.8	321.6	259.2	230.5	163.3	129.6	134.4	120.0	139.2	139.2	168.0
72.5°	240.0	211.2	172.8	134.4	115.2	91.3	91.3	86.4	96.0	100.8	124.9
75°	124.9	96.0	96.0	67.2	48.0	24.0	43.2	38.4	33.6	38.4	48.0
77.5°	86.4	72.0	67.2	52.9	48.0	38.4	38.4	38.4	38.4	43.2	48.0
80°	52.9	52.9	38.4	33.6	28.8	24.0	28.8	28.8	28.8	28.8	33.6
82.5°	33.6	28.8	28.8	24.0	24.0	19.1	19.1	19.1	19.1	19.1	28.8
85°	28.8	19.1	19.1	14.4	19.1	33.6	14.4	19.1	19.1	19.1	14.4
87.5°	9.6	14.4	14.4	14.4	9.6	4.8	9.6	14.4	14.4	24.0	19.1
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: P249602

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2	8943.2
2.5°	8957.6	8962.4	8962.4	8957.6	8957.6	8948.0	8967.1	8952.8	8957.6	8976.7	8962.4
5°	8967.1	8971.9	8971.9	8967.1	8967.1	8967.1	8971.9	8971.9	8967.1	8962.4	8971.9
7.5°	8986.4	8981.6	8981.6	8971.9	8971.9	8962.4	8971.9	8957.6	8967.1	8957.6	8971.9
10°	8962.4	8967.1	8962.4	8957.6	8957.6	8952.8	8952.8	8938.3	8943.2	8928.7	8938.3
12.5°	8948.0	8943.2	8943.2	8933.5	8924.0	8914.4	8909.6	8895.1	8895.1	8861.5	8876.0
15°	8909.6	8914.4	8899.9	8880.8	8871.2	8847.2	8837.6	8818.3	8799.1	8775.2	8780.0
17.5°	8876.0	8861.5	8842.4	8823.1	8784.7	8765.6	8746.3	8717.5	8707.9	8679.1	8669.6
20°	8775.2	8765.6	8741.6	8707.9	8683.9	8640.7	8621.6	8592.8	8568.7	8539.9	8525.5
22.5°	8645.5	8635.9	8607.1	8573.5	8535.1	8516.0	8496.7	8444.0	8419.9	8391.1	8386.3
25°	8482.4	8467.9	8439.1	8400.7	8381.5	8328.7	8309.5	8271.1	8261.5	8232.7	8227.9
27.5°	8232.7	8213.5	8179.9	8131.9	8098.3	8064.7	8045.5	8016.6	8007.1	7978.2	7973.5
30°	7858.3	7834.2	7767.0	7747.9	7690.2	7656.6	7656.6	7618.2	7623.0	7603.9	7603.9
32.5°	7267.8	7229.4	7176.6	7138.2	7099.8	7080.6	7080.6	7066.2	7075.8	7075.8	7085.4
35°	6485.3	6432.6	6403.7	6379.7	6379.7	6398.9	6456.6	6471.0	6499.8	6523.7	6543.0
37.5°	5482.0	5477.3	5510.9	5539.7	5611.7	5693.3	5794.1	5880.5	5962.1	6019.7	6077.3
40°	4397.2	4517.2	4613.2	4747.7	4858.0	5016.4	5198.8	5347.6	5486.8	5587.7	5693.3
42.5°	3432.2	3585.9	3787.6	3984.3	4181.2	4397.2	4637.2	4843.6	5026.0	5165.2	5275.6
45°	2673.8	2885.0	3129.9	3379.5	3633.9	3902.8	4152.4	4363.6	4555.6	4699.6	4810.0
47.5°	2155.4	2385.8	2664.2	2937.9	3225.9	3509.1	3787.6	3970.0	4128.3	4243.5	4344.4
50°	1780.9	2025.8	2318.6	2630.6	2918.6	3201.9	3441.9	3619.5	3749.1	3849.9	3912.3
52.5°	1488.1	1747.3	2059.4	2371.4	2659.4	2918.6	3134.7	3269.1	3374.7	3446.7	3504.3
55°	1228.9	1478.6	1771.4	2064.2	2347.4	2592.2	2769.8	2870.7	2952.2	2995.4	3029.0
57.5°	1003.3	1233.7	1502.5	1771.4	2016.2	2217.8	2357.0	2457.8	2496.2	2529.8	2525.0
60°	787.3	1003.3	1248.1	1478.6	1689.8	1852.9	1953.8	2011.4	2040.1	2054.6	2044.9
62.5°	619.2	816.1	1003.3	1204.9	1358.5	1497.7	1593.8	1593.8	1608.1	1612.9	1627.4
65°	460.8	609.6	772.9	921.7	1046.4	1137.7	1190.6	1204.9	1224.1	1219.3	1209.7
67.5°	340.9	451.3	571.2	681.6	768.1	825.6	864.0	897.7	892.9	883.3	878.5
70°	235.3	307.3	412.9	480.1	542.4	600.1	609.6	614.4	619.2	624.1	614.4
72.5°	163.3	216.0	273.7	331.2	369.6	393.6	417.7	422.4	422.4	422.4	417.7
75°	81.6	110.4	163.3	187.2	220.8	230.5	249.6	249.6	264.0	244.8	240.0
77.5°	72.0	86.4	115.2	134.4	148.8	163.3	168.0	182.4	177.6	168.0	172.8
80°	43.2	52.9	72.0	81.6	100.8	105.6	110.4	115.2	110.4	115.2	115.2
82.5°	33.6	38.4	48.0	48.0	62.4	62.4	67.2	67.2	72.0	72.0	72.0
85°	19.1	33.6	28.8	57.6	38.4	38.4	48.0	57.6	48.0	48.0	57.6
87.5°	19.1	19.1	14.4	19.1	19.1	19.1	24.0	28.8	28.8	33.6	28.8
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: P249602

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8943.2	8943.2	8943.2	8943.2
2.5°	8957.6	8967.1	8952.8	8948.0
5°	8971.9	8971.9	8962.4	8962.4
7.5°	8971.9	8971.9	8957.6	8948.0
10°	8933.5	8933.5	8919.2	8909.6
12.5°	8861.5	8861.5	8856.7	8842.4
15°	8770.4	8770.4	8751.1	8736.8
17.5°	8645.5	8655.1	8631.2	8631.2
20°	8511.1	8506.3	8487.2	8477.5
22.5°	8372.0	8362.3	8357.5	8328.7
25°	8223.1	8213.5	8199.1	8184.7
27.5°	7968.7	7963.9	7949.5	7930.3
30°	7579.8	7575.0	7555.9	7555.9
32.5°	7075.8	7071.0	7051.8	7056.7
35°	6552.5	6571.8	6562.2	6543.0
37.5°	6115.7	6130.1	6139.8	6130.1
40°	5750.9	5794.1	5798.9	5808.5
42.5°	5362.1	5419.6	5438.9	5448.4
45°	4896.4	4949.2	4992.4	4982.8
47.5°	4421.1	4459.5	4497.9	4469.2
50°	3965.2	3989.1	4003.6	4003.6
52.5°	3533.1	3533.1	3528.3	3533.1
55°	3038.6	3038.6	3019.5	3029.0
57.5°	2520.2	2529.8	2515.4	2491.4
60°	2040.1	2016.2	2006.5	1992.2
62.5°	1589.0	1589.0	1555.4	1598.5
65°	1190.6	1176.1	1161.7	1156.8
67.5°	864.0	859.3	844.9	840.1
70°	609.6	590.5	585.6	576.0
72.5°	408.0	408.0	398.4	398.4
75°	249.6	225.6	220.8	225.6
77.5°	172.8	168.0	168.0	163.3
80°	115.2	110.4	120.0	105.6
82.5°	72.0	76.8	72.0	76.8
85°	48.0	57.6	52.9	52.9
87.5°	28.8	28.8	28.8	28.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)