

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: P249513

Luminaire Tested: **LD8B200D010 ER8B200930 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249513
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: LD8B200D010 ER8B200930 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16013.5 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

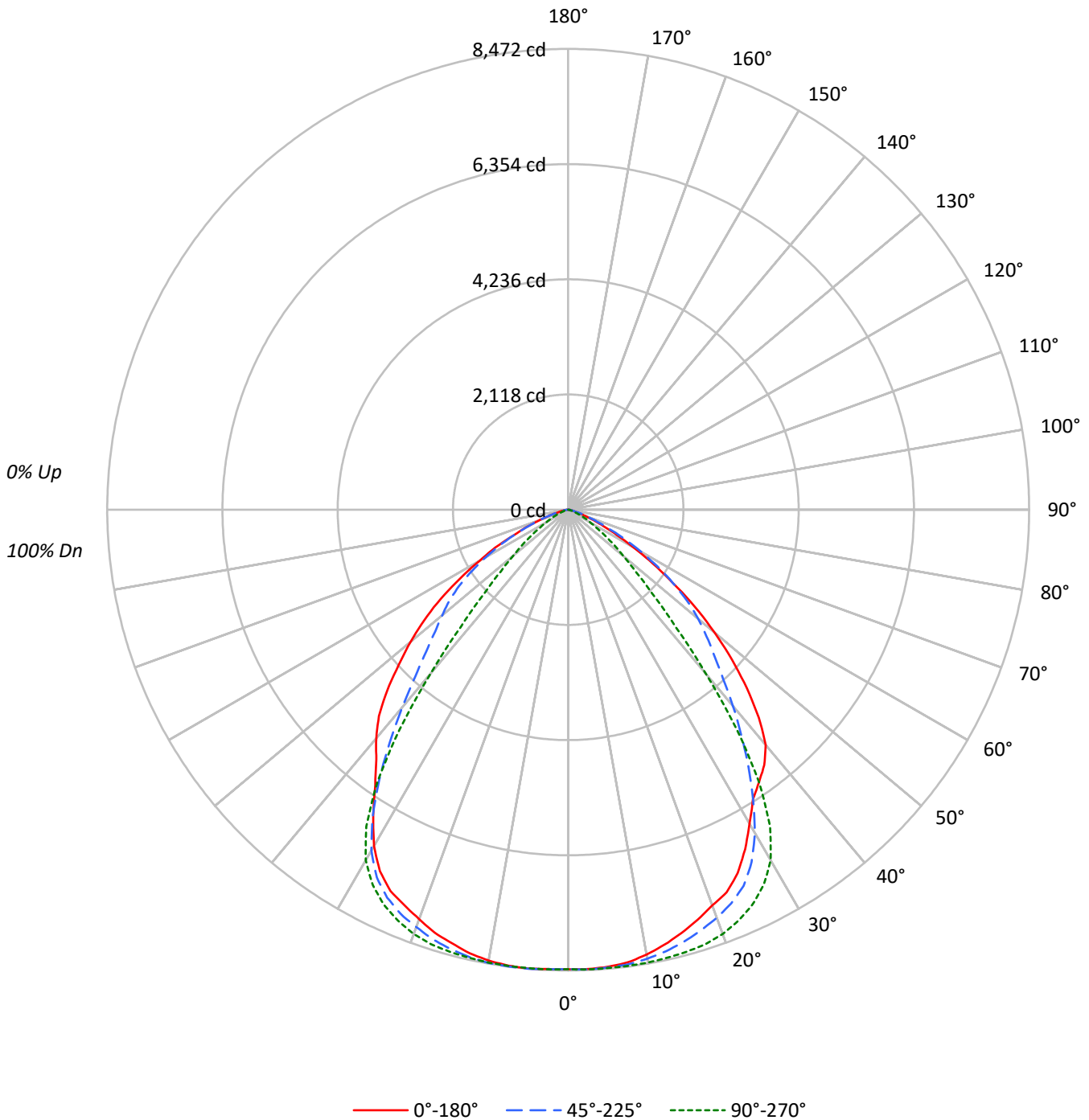
Input Watts (W): 223.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249513

CATALOG NUMBER: LD8B200D010 ER8B200930 8LBDW0B

Luminous Intensity Polar Plot





TEST NUMBER: P249513

CATALOG NUMBER: LD8B200D010 ER8B200930 8LBDW0B

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	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	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: P249513

CATALOG NUMBER: LD8B200D010 ER8B200930 8LBDW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	806.3	5.0
10°-20°	2341.7	14.6
20°-30°	3554.3	22.2
30°-40°	3733.1	23.3
40°-50°	2798.8	17.5
50°-60°	1795.8	11.2
60°-70°	768.2	4.8
70°-80°	181.5	1.1
80°-90°	33.7	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°	6702.4	41.9
0°-40°	10435.4	65.2
0°-60°	15030.0	93.9
0°-90°	16013.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16013.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8449	8449	8449	8449	8449	
5°	8435	8449	8458	8472	8467	801
15°	8054	8222	8413	8358	8254	2272
25°	7370	7628	8014	7868	7732	3367
35°	6114	5773	6118	6045	6182	3837
45°	4644	3796	2182	3687	4708	3557
55°	2349	2349	812	2449	2862	2131
65°	708	834	258	1075	1093	755
75°	109	127	36	218	213	159
85°	36	23	18	36	50	38
90°	0	0	0	0	0	



TEST NUMBER: P249513

CATALOG NUMBER: LD8B200D010 ER8B200930 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0
2.5°	8453.6	8462.7	8458.2	8458.2	8453.6	8458.2	8458.2	8467.2	8467.2	8458.2	8453.6
5°	8435.4	8444.5	8444.5	8435.4	8435.4	8458.2	8444.5	8453.6	8453.6	8449.0	8449.0
7.5°	8394.6	8394.6	8412.8	8399.2	8399.2	8412.8	8408.2	8417.3	8426.4	8430.9	8430.9
10°	8303.9	8313.0	8317.5	8317.5	8322.1	8335.6	8344.7	8362.9	8371.9	8381.0	8385.5
12.5°	8190.6	8204.2	8208.6	8204.2	8217.7	8235.9	8258.6	8281.3	8294.8	8313.0	8326.7
15°	8054.4	8054.4	8063.6	8077.1	8086.2	8113.5	8136.1	8163.2	8199.6	8222.3	8245.0
17.5°	7904.8	7913.9	7927.5	7927.5	7945.6	7990.9	8004.6	8045.4	8086.2	8108.9	8154.3
20°	7741.6	7750.6	7764.3	7773.4	7796.0	7832.3	7859.4	7895.8	7941.2	7982.0	8027.3
22.5°	7614.5	7596.5	7605.4	7614.5	7637.3	7669.0	7700.8	7746.0	7791.4	7832.3	7877.6
25°	7369.7	7374.2	7387.8	7396.8	7424.2	7451.3	7487.6	7542.0	7582.8	7628.2	7678.1
27.5°	7038.6	7043.1	7065.8	7065.8	7088.4	7133.8	7156.5	7201.9	7256.3	7301.6	7360.6
30°	6662.2	6671.2	6671.2	6689.5	6702.9	6725.7	6748.3	6793.7	6820.9	6861.8	6943.4
32.5°	6317.5	6326.6	6322.0	6317.5	6303.9	6299.3	6294.8	6303.9	6313.0	6326.6	6358.3
35°	6113.5	6090.7	6072.7	6040.8	6004.6	5959.2	5918.4	5864.1	5814.1	5773.3	5728.0
37.5°	5918.4	5913.8	5886.7	5841.3	5768.7	5687.2	5591.9	5474.0	5356.0	5229.0	5106.6
40°	5646.3	5632.7	5610.0	5546.5	5464.9	5365.1	5238.2	5093.0	4902.5	4707.5	4508.0
42.5°	5183.7	5188.2	5161.1	5111.1	5034.1	4938.8	4807.3	4648.6	4444.5	4213.2	3954.7
45°	4644.1	4644.1	4634.9	4594.1	4539.7	4462.6	4362.8	4231.3	4031.8	3795.9	3519.3
47.5°	4081.7	4086.2	4072.6	4063.5	4040.8	3991.0	3918.5	3818.7	3678.0	3451.2	3174.6
50°	3510.3	3510.3	3532.9	3528.3	3528.3	3510.3	3478.6	3419.5	3297.1	3115.7	2857.2
52.5°	2938.8	2947.9	2961.6	2979.6	3002.3	3038.6	3002.3	2975.0	2897.9	2757.3	2535.1
55°	2349.2	2358.2	2380.9	2412.7	2440.0	2476.3	2485.3	2485.3	2444.5	2349.2	2181.5
57.5°	1845.8	1832.2	1850.4	1877.6	1913.9	1950.2	1977.3	2009.1	2004.6	1941.0	1805.0
60°	1387.8	1392.3	1405.8	1433.2	1460.3	1492.1	1528.4	1555.6	1569.2	1537.5	1451.2
62.5°	1011.4	1011.4	1029.4	1056.7	1070.3	1115.7	1138.3	1151.9	1165.5	1160.9	1106.5
65°	707.6	716.5	725.6	739.3	752.9	780.0	793.7	820.8	830.0	834.5	793.7
67.5°	499.0	485.3	494.4	503.3	517.0	535.2	562.4	562.4	576.0	576.0	548.7
70°	317.5	317.5	322.1	335.5	344.7	349.2	358.3	367.4	380.9	376.4	376.4
72.5°	213.2	208.6	213.2	217.7	222.3	235.9	235.9	240.3	249.4	254.0	235.9
75°	108.8	113.4	122.4	117.9	131.5	122.4	126.9	140.6	136.1	126.9	126.9
77.5°	90.7	90.7	90.7	86.2	95.2	95.2	90.7	99.8	95.2	95.2	90.7
80°	63.4	68.0	63.4	59.0	63.4	59.0	59.0	59.0	59.0	59.0	54.4
82.5°	49.9	40.8	45.4	40.8	45.4	45.4	40.8	36.3	36.3	40.8	36.3
85°	36.3	27.2	31.7	31.7	27.2	27.2	27.2	27.2	27.2	22.6	22.6
87.5°	22.6	13.7	13.7	13.7	18.0	18.0	18.0	13.7	18.0	18.0	9.1
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: P249513

CATALOG NUMBER: LD8B200D010 ER8B200930 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0
2.5°	8462.7	8458.2	8467.2	8462.7	8462.7	8458.2	8462.7	8458.2	8467.2	8449.0	8453.6
5°	8462.7	8453.6	8458.2	8462.7	8467.2	8458.2	8458.2	8458.2	8467.2	8458.2	8462.7
7.5°	8444.5	8439.9	8453.6	8462.7	8458.2	8453.6	8462.7	8458.2	8467.2	8462.7	8471.6
10°	8408.2	8412.8	8421.8	8435.4	8439.9	8444.5	8453.6	8453.6	8467.2	8449.0	8458.2
12.5°	8353.8	8371.9	8394.6	8403.7	8421.8	8421.8	8430.9	8435.4	8444.5	8439.9	8453.6
15°	8285.8	8308.4	8335.6	8358.4	8381.0	8394.6	8408.2	8412.8	8426.4	8412.8	8417.3
17.5°	8204.2	8231.3	8272.2	8299.3	8335.6	8349.3	8367.4	8376.4	8390.1	8381.0	8385.5
20°	8090.7	8122.5	8167.8	8208.6	8231.3	8263.0	8285.8	8299.3	8308.4	8299.3	8303.9
22.5°	7932.0	7977.4	8036.3	8068.1	8113.5	8140.7	8145.2	8176.9	8199.6	8176.9	8186.0
25°	7746.0	7791.4	7836.8	7904.8	7945.6	7977.4	8009.1	8013.7	8036.3	8031.7	8027.3
27.5°	7437.6	7496.7	7573.7	7628.2	7682.5	7732.5	7768.8	7777.8	7800.5	7791.4	7796.0
30°	7015.9	7079.5	7152.0	7238.2	7315.3	7365.1	7410.5	7442.2	7464.9	7451.3	7446.8
32.5°	6417.3	6480.7	6557.8	6644.1	6734.7	6807.3	6861.8	6902.6	6929.8	6920.6	6898.1
35°	5732.6	5750.6	5800.5	5868.5	5945.6	6022.7	6072.7	6118.0	6149.7	6158.8	6158.8
37.5°	5029.5	4970.6	4934.3	4934.3	4979.6	5011.3	5056.7	5084.0	5133.8	5151.9	5165.6
40°	4349.1	4213.2	4086.2	3991.0	3927.5	3922.9	3922.9	3936.5	3981.9	4040.8	4095.2
42.5°	3741.6	3523.8	3328.8	3151.9	3025.0	2952.4	2920.7	2925.2	2961.6	3015.9	3106.5
45°	3256.3	2984.2	2739.3	2526.1	2353.8	2240.3	2186.0	2181.5	2208.6	2272.0	2371.9
47.5°	2879.8	2589.5	2313.0	2068.0	1882.2	1759.6	1696.2	1678.0	1696.2	1755.0	1873.1
50°	2567.0	2267.7	1981.9	1727.9	1528.4	1401.5	1342.4	1319.8	1342.4	1392.3	1510.2
52.5°	2276.6	1968.3	1700.7	1455.8	1242.6	1133.8	1070.3	1056.7	1070.3	1129.2	1224.6
55°	1941.0	1678.0	1414.9	1170.1	984.1	875.3	825.4	811.8	825.4	879.9	979.6
57.5°	1610.1	1383.2	1151.9	929.6	771.0	675.7	630.5	612.2	643.9	680.2	798.2
60°	1301.6	1120.2	925.2	730.2	598.7	512.4	476.2	471.6	480.7	526.1	607.7
62.5°	1020.4	870.8	716.5	557.8	449.0	412.6	367.4	362.9	371.8	399.1	462.6
65°	734.7	639.5	521.6	408.2	322.1	272.1	254.0	258.5	267.6	285.7	344.7
67.5°	512.4	444.5	362.9	285.7	222.3	199.5	181.4	176.9	181.4	213.2	244.9
70°	344.7	303.8	244.9	217.7	154.2	122.4	126.9	113.4	131.5	131.5	158.7
72.5°	226.7	199.5	163.2	126.9	108.8	86.2	86.2	81.7	90.7	95.2	117.9
75°	117.9	90.7	90.7	63.4	45.4	22.6	40.8	36.3	31.7	36.3	45.4
77.5°	81.7	68.0	63.4	49.9	45.4	36.3	36.3	36.3	36.3	40.8	45.4
80°	49.9	49.9	36.3	31.7	27.2	22.6	27.2	27.2	27.2	27.2	31.7
82.5°	31.7	27.2	27.2	22.6	22.6	18.0	18.0	18.0	18.0	18.0	27.2
85°	27.2	18.0	18.0	13.7	18.0	31.7	13.7	18.0	18.0	18.0	13.7
87.5°	9.1	13.7	13.7	13.7	9.1	4.6	9.1	13.7	13.7	22.6	18.0
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: P249513

CATALOG NUMBER: LD8B200D010 ER8B200930 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0	8449.0
2.5°	8462.7	8467.2	8467.2	8462.7	8462.7	8453.6	8471.6	8458.2	8462.7	8480.8	8467.2
5°	8471.6	8476.2	8476.2	8471.6	8471.6	8471.6	8476.2	8476.2	8471.6	8467.2	8476.2
7.5°	8489.9	8485.3	8485.3	8476.2	8476.2	8467.2	8476.2	8462.7	8471.6	8462.7	8476.2
10°	8467.2	8471.6	8467.2	8462.7	8462.7	8458.2	8458.2	8444.5	8449.0	8435.4	8444.5
12.5°	8453.6	8449.0	8449.0	8439.9	8430.9	8421.8	8417.3	8403.7	8403.7	8371.9	8385.5
15°	8417.3	8421.8	8408.2	8390.1	8381.0	8358.4	8349.3	8331.0	8313.0	8290.4	8294.8
17.5°	8385.5	8371.9	8353.8	8335.6	8299.3	8281.3	8263.0	8235.9	8226.8	8199.6	8190.6
20°	8290.4	8281.3	8258.6	8226.8	8204.2	8163.2	8145.2	8118.1	8095.3	8068.1	8054.4
22.5°	8167.8	8158.8	8131.5	8099.8	8063.6	8045.4	8027.3	7977.4	7954.6	7927.5	7922.9
25°	8013.7	8000.0	7972.9	7936.6	7918.4	7868.5	7850.4	7814.0	7805.1	7777.8	7773.4
27.5°	7777.8	7759.7	7727.9	7682.5	7650.8	7619.1	7601.1	7573.7	7564.7	7537.4	7533.0
30°	7424.2	7401.4	7338.0	7319.8	7265.3	7233.6	7233.6	7197.3	7201.9	7183.8	7183.8
32.5°	6866.2	6830.0	6780.0	6743.8	6707.5	6689.5	6689.5	6675.8	6684.9	6684.9	6693.9
35°	6127.0	6077.2	6049.9	6027.3	6027.3	6045.3	6099.8	6113.5	6140.6	6163.3	6181.5
37.5°	5179.1	5174.6	5206.4	5233.6	5301.7	5378.8	5474.0	5555.7	5632.7	5687.2	5741.5
40°	4154.2	4267.6	4358.3	4485.3	4589.6	4739.3	4911.5	5052.1	5183.7	5279.0	5378.8
42.5°	3242.6	3387.8	3578.3	3764.2	3950.2	4154.2	4381.0	4576.0	4748.3	4879.8	4984.2
45°	2526.1	2725.6	2957.0	3192.8	3433.2	3687.2	3922.9	4122.5	4304.0	4439.9	4544.3
47.5°	2036.3	2254.0	2517.0	2775.6	3047.7	3315.1	3578.3	3750.6	3900.2	4009.0	4104.4
50°	1682.5	1913.9	2190.5	2485.3	2757.3	3025.0	3251.7	3419.5	3542.0	3637.2	3696.2
52.5°	1405.8	1650.8	1945.6	2240.3	2512.4	2757.3	2961.6	3088.5	3188.2	3256.3	3310.6
55°	1160.9	1396.9	1673.5	1950.2	2217.7	2448.9	2616.8	2712.0	2789.0	2830.0	2861.7
57.5°	947.9	1165.5	1419.5	1673.5	1904.8	2095.3	2226.8	2322.0	2358.2	2390.1	2385.5
60°	743.8	947.9	1179.2	1396.9	1596.4	1750.6	1845.8	1900.2	1927.4	1941.0	1931.9
62.5°	585.0	771.0	947.9	1138.3	1283.4	1414.9	1505.7	1505.7	1519.3	1523.8	1537.5
65°	435.3	576.0	730.2	870.8	988.6	1074.8	1124.8	1138.3	1156.5	1151.9	1142.9
67.5°	322.1	426.3	539.6	643.9	725.6	780.0	816.3	848.1	843.6	834.5	830.0
70°	222.3	290.3	390.1	453.6	512.4	566.9	576.0	580.5	585.0	589.5	580.5
72.5°	154.2	204.0	258.5	313.0	349.2	371.8	394.6	399.1	399.1	399.1	394.6
75°	77.1	104.4	154.2	176.9	208.6	217.7	235.9	235.9	249.4	231.3	226.7
77.5°	68.0	81.7	108.8	126.9	140.6	154.2	158.7	172.3	167.8	158.7	163.2
80°	40.8	49.9	68.0	77.1	95.2	99.8	104.4	108.8	104.4	108.8	108.8
82.5°	31.7	36.3	45.4	45.4	59.0	59.0	63.4	63.4	68.0	68.0	68.0
85°	18.0	31.7	27.2	54.4	36.3	36.3	45.4	54.4	45.4	45.4	54.4
87.5°	18.0	18.0	13.7	18.0	18.0	18.0	22.6	27.2	27.2	31.7	27.2
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: P249513

CATALOG NUMBER: LD8B200D010 ER8B200930 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8449.0	8449.0	8449.0	8449.0
2.5°	8462.7	8471.6	8458.2	8453.6
5°	8476.2	8476.2	8467.2	8467.2
7.5°	8476.2	8476.2	8462.7	8453.6
10°	8439.9	8439.9	8426.4	8417.3
12.5°	8371.9	8371.9	8367.4	8353.8
15°	8285.8	8285.8	8267.6	8254.0
17.5°	8167.8	8176.9	8154.3	8154.3
20°	8040.9	8036.3	8018.3	8009.1
22.5°	7909.4	7900.2	7895.8	7868.5
25°	7768.8	7759.7	7746.0	7732.5
27.5°	7528.4	7523.9	7510.3	7492.1
30°	7161.1	7156.5	7138.4	7138.4
32.5°	6684.9	6680.3	6662.2	6666.8
35°	6190.5	6208.7	6199.6	6181.5
37.5°	5777.7	5791.4	5800.5	5791.4
40°	5433.2	5474.0	5478.6	5487.6
42.5°	5065.8	5120.2	5138.4	5147.4
45°	4625.8	4675.8	4716.6	4707.5
47.5°	4176.8	4213.2	4249.4	4222.2
50°	3746.0	3768.7	3782.4	3782.4
52.5°	3337.9	3337.9	3333.4	3337.9
55°	2870.8	2870.8	2852.7	2861.7
57.5°	2380.9	2390.1	2376.4	2353.8
60°	1927.4	1904.8	1895.7	1882.2
62.5°	1501.1	1501.1	1469.4	1510.2
65°	1124.8	1111.1	1097.5	1093.0
67.5°	816.3	811.8	798.2	793.7
70°	576.0	557.8	553.3	544.2
72.5°	385.5	385.5	376.4	376.4
75°	235.9	213.2	208.6	213.2
77.5°	163.2	158.7	158.7	154.2
80°	108.8	104.4	113.4	99.8
82.5°	68.0	72.5	68.0	72.5
85°	45.4	54.4	49.9	49.9
87.5°	27.2	27.2	27.2	27.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)