

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: P249733

Luminaire Tested: **LD8B175D010 ER8B175850 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249733
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B175D010 ER8B175850 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19646.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

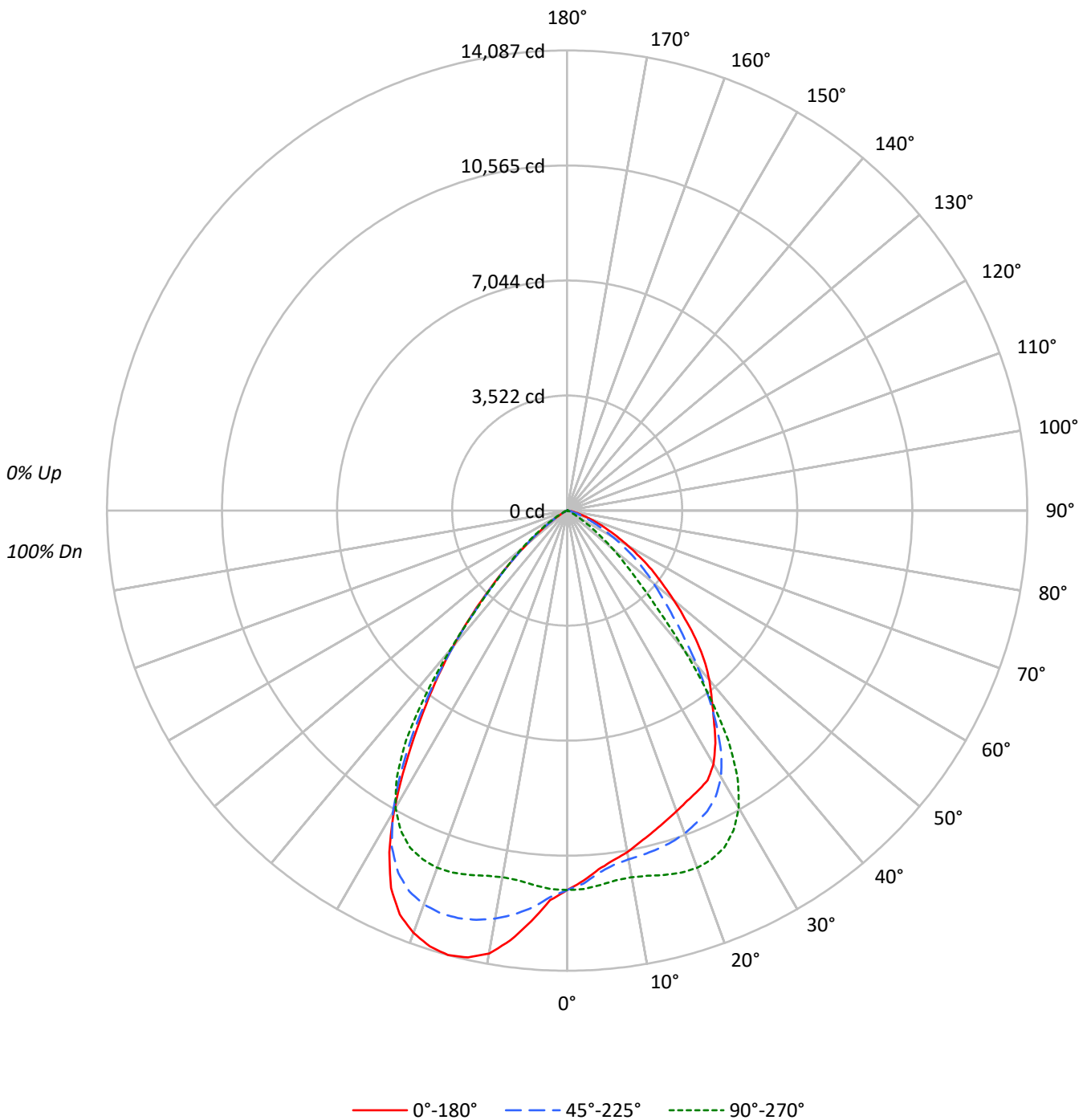
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249733

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P249733

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0LI

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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	358216	358216	358216
5°	341272	356223	390508
10°	332471	356775	431054
15°	324930	368599	449702
20°	321354	381918	451391
25°	322106	387313	433852
30°	319118	374013	377299
35°	294878	323684	295281
40°	272491	224416	218957
45°	242641	135411	139902
50°	204163	87243	79169
55°	169854	47858	36192
60°	132578	20753	11385
65°	97831	10303	5545
70°	68025	6365	2434
75°	41390	1299	0
80°	29869	1936	0
85°	19212	1911	0



TEST NUMBER: P249733

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1116.8	5.7
10°-20°	3342.3	17.0
20°-30°	5118.5	26.1
30°-40°	5017.8	25.5
40°-50°	3021.7	15.4
50°-60°	1390.8	7.1
60°-70°	488.6	2.5
70°-80°	127.8	0.7
80°-90°	21.8	0.1
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°	9577.6	48.8
0°-40°	14595.3	74.3
0°-60°	19007.9	96.8
0°-90°	19646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19646.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11617	11617	11617	11617	11617	
5°	11025	11128	11508	12198	12616	###
15°	10178	10726	11546	12914	14087	2876
25°	9467	10151	11384	12241	12751	4360
35°	7833	7942	8598	8104	7844	4906
45°	5564	4582	3105	3127	3208	4267
55°	3159	2502	890	700	673	2819
65°	1341	928	141	71	76	1366
75°	347	201	11	0	0	421
85°	54	27	5	0	0	75
90°	0	0	0	0	0	



TEST NUMBER: P249733

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7
2.5°	11345.2	11356.2	11356.2	11356.2	11377.9	11383.5	11377.9	11383.5	11394.2	11432.2	11448.5
5°	11025.1	11008.7	11019.7	11014.1	11041.4	11057.7	11046.7	11063.0	11101.0	11128.3	11155.3
7.5°	10797.2	10797.2	10797.2	10807.9	10824.2	10856.8	10851.4	10862.2	10900.2	10938.1	10976.1
10°	10618.0	10612.6	10612.6	10639.6	10661.3	10699.3	10710.2	10742.9	10791.6	10840.5	10883.8
12.5°	10384.5	10390.1	10417.1	10444.3	10493.1	10552.7	10585.3	10628.9	10704.9	10786.2	10835.1
15°	10178.2	10183.6	10205.5	10259.6	10319.4	10390.1	10460.4	10531.0	10623.3	10726.5	10813.5
17.5°	9977.4	9982.7	9999.0	10058.9	10134.9	10227.2	10308.5	10400.8	10520.3	10639.6	10748.2
20°	9792.8	9787.4	9814.5	9868.8	9966.6	10053.3	10134.9	10243.5	10373.7	10520.3	10645.0
22.5°	9613.6	9613.6	9640.9	9695.2	9782.1	9868.8	9955.7	10069.6	10199.9	10341.1	10487.7
25°	9467.0	9461.7	9499.7	9526.9	9591.9	9678.9	9771.1	9863.4	9993.7	10151.2	10292.2
27.5°	9309.7	9304.4	9309.7	9342.4	9402.0	9467.0	9537.6	9619.2	9727.8	9858.0	9993.7
30°	8962.3	8967.7	8967.7	8994.9	9027.5	9097.9	9135.9	9217.5	9315.1	9423.7	9543.2
32.5°	8446.6	8452.0	8452.0	8462.9	8489.9	8522.6	8555.2	8614.8	8690.8	8783.1	8891.7
35°	7833.3	7833.3	7827.7	7833.3	7849.6	7849.6	7876.6	7849.6	7887.6	7941.9	8023.2
37.5°	7268.6	7257.7	7247.0	7236.0	7219.7	7192.7	7154.7	7089.4	7073.1	7051.5	7056.8
40°	6769.3	6763.9	6731.3	6704.0	6649.7	6584.7	6492.4	6378.5	6286.2	6177.6	6085.3
42.5°	6215.6	6210.0	6183.0	6134.0	6074.4	5976.7	5830.1	5678.2	5493.6	5330.8	5162.5
45°	5564.0	5580.3	5542.4	5488.1	5417.5	5325.2	5162.5	4977.7	4793.2	4581.6	4369.8
47.5°	4885.5	4880.1	4853.1	4820.4	4760.8	4668.5	4559.9	4359.0	4163.5	3968.2	3751.1
50°	4255.8	4234.1	4223.2	4190.8	4152.8	4076.8	3962.7	3799.8	3626.2	3441.6	3240.7
52.5°	3658.8	3658.8	3631.5	3609.9	3577.2	3517.6	3419.9	3289.7	3143.1	2969.3	2757.7
55°	3159.4	3148.5	3121.4	3094.2	3061.5	3023.6	2936.9	2828.3	2670.7	2502.5	2317.9
57.5°	2627.4	2621.8	2611.1	2578.5	2562.2	2524.2	2426.5	2317.9	2182.3	2035.7	1883.6
60°	2149.7	2128.0	2106.1	2084.4	2057.4	2019.4	1954.2	1861.9	1747.9	1617.7	1465.7
62.5°	1720.9	1753.3	1688.3	1688.3	1634.0	1601.4	1541.7	1487.4	1367.9	1248.6	1118.3
65°	1340.8	1340.8	1313.6	1291.9	1259.3	1221.3	1161.6	1107.4	1020.4	928.2	835.9
67.5°	1026.0	1020.4	993.4	971.7	944.5	922.8	879.4	814.2	749.2	673.2	597.0
70°	754.5	749.2	743.6	705.6	683.9	656.9	624.3	580.9	532.0	477.7	407.1
72.5°	542.7	542.7	526.6	510.3	488.7	466.8	434.4	407.1	363.8	325.8	276.8
75°	347.4	342.1	342.1	314.8	314.8	282.2	260.5	244.2	222.5	200.9	157.5
77.5°	249.8	244.2	238.9	227.9	217.2	206.2	189.9	168.2	151.9	130.3	114.0
80°	168.2	157.5	151.9	151.9	135.6	130.3	135.6	103.2	97.6	81.3	70.6
82.5°	103.2	103.2	97.6	97.6	92.3	86.9	70.6	70.6	65.2	59.7	48.9
85°	54.3	70.6	48.9	54.3	48.9	54.3	48.9	38.0	32.6	27.0	27.0
87.5°	32.6	21.7	21.7	32.6	27.0	21.7	21.7	21.7	16.3	10.9	10.9
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: P249733

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7
2.5°	11437.7	11475.7	11470.1	11519.1	11535.4	11573.4	11573.4	11600.4	11616.7	11654.7	11687.3
5°	11166.3	11225.9	11242.2	11301.9	11350.8	11410.5	11448.5	11508.1	11562.4	11644.0	11719.9
7.5°	10998.0	11046.7	11079.4	11150.0	11204.3	11269.3	11334.5	11415.9	11491.8	11589.7	11698.3
10°	10916.5	10981.7	11030.4	11101.0	11166.3	11236.9	11301.9	11394.2	11481.1	11606.0	11725.3
12.5°	10894.8	10970.8	11030.4	11128.3	11193.3	11269.3	11345.2	11448.5	11540.8	11671.0	11806.9
15°	10894.8	10998.0	11079.4	11187.9	11263.9	11361.6	11443.1	11546.1	11649.3	11785.0	11915.2
17.5°	10873.1	10998.0	11101.0	11225.9	11323.6	11421.4	11524.4	11622.3	11730.7	11861.2	12007.5
20°	10786.2	10943.7	11068.4	11215.0	11318.2	11426.8	11530.0	11638.4	11752.6	11888.2	12013.1
22.5°	10634.3	10818.8	10960.0	11117.3	11236.9	11345.2	11448.5	11557.1	11682.0	11812.2	11942.5
25°	10433.4	10607.0	10759.2	10921.8	11041.4	11160.7	11258.6	11383.5	11497.4	11622.3	11725.3
27.5°	10129.3	10313.9	10460.4	10628.9	10737.3	10851.4	10932.8	11036.0	11144.6	11247.6	11329.2
30°	9673.5	9841.7	9993.7	10145.6	10254.2	10335.8	10422.4	10504.0	10574.6	10645.0	10715.6
32.5°	9005.6	9157.8	9304.4	9445.4	9532.3	9602.9	9667.9	9716.8	9754.8	9792.8	9798.2
35°	8088.4	8213.1	8305.4	8430.3	8511.8	8576.9	8576.9	8598.5	8593.2	8576.9	8560.5
37.5°	7062.4	7111.1	7149.1	7198.0	7203.4	7203.4	7171.0	7143.7	7100.4	7089.4	7056.8
40°	5993.0	5927.8	5878.9	5813.8	5775.9	5694.3	5623.9	5575.0	5504.4	5493.6	5482.7
42.5°	4977.7	4825.8	4690.2	4576.2	4446.0	4331.8	4228.8	4152.8	4098.5	4092.9	4098.5
45°	4152.8	3979.0	3778.1	3620.8	3474.2	3333.0	3197.4	3105.1	3056.2	3045.2	3056.2
47.5°	3528.5	3327.6	3132.1	2952.9	2795.6	2638.1	2502.5	2377.6	2317.9	2301.6	2296.3
50°	3034.5	2828.3	2621.8	2437.3	2263.6	2106.1	1937.9	1818.6	1742.6	1715.3	1693.7
52.5°	2551.4	2366.9	2155.1	1965.1	1791.3	1606.7	1433.1	1297.3	1221.3	1188.9	1167.0
55°	2128.0	1943.5	1747.9	1563.4	1378.8	1194.3	1020.4	890.2	808.8	770.9	743.6
57.5°	1699.0	1525.4	1357.2	1172.6	1020.4	841.5	667.6	553.7	483.1	439.7	418.1
60°	1313.6	1178.0	1031.4	879.4	732.9	586.3	445.1	336.5	282.2	249.8	222.5
62.5°	993.4	879.4	781.6	651.3	537.4	412.5	304.1	217.2	168.2	141.2	130.3
65°	716.6	629.6	542.7	461.4	380.1	287.8	206.2	141.2	97.6	81.3	76.0
67.5°	510.3	439.7	374.5	320.2	260.5	206.2	146.6	97.6	76.0	65.2	59.7
70°	358.2	304.1	260.5	211.8	173.6	135.6	114.0	70.6	43.3	48.9	38.0
72.5°	238.9	200.9	179.2	146.6	119.3	97.6	70.6	48.9	48.9	38.0	32.6
75°	130.3	119.3	92.3	70.6	59.7	54.3	21.7	10.9	5.4	16.3	5.4
77.5°	92.3	81.3	70.6	59.7	48.9	38.0	21.7	21.7	16.3	21.7	10.9
80°	59.7	48.9	43.3	43.3	27.0	16.3	10.9	10.9	16.3	5.4	5.4
82.5°	38.0	32.6	27.0	27.0	27.0	16.3	16.3	16.3	16.3	10.9	10.9
85°	21.7	16.3	10.9	10.9	5.4	10.9	0.0	5.4	5.4	0.0	0.0
87.5°	10.9	5.4	5.4	5.4	5.4	0.0	0.0	5.4	0.0	5.4	0.0
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: P249733

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7	11616.7
2.5°	11709.0	11730.7	11757.9	11779.6	11828.5	11839.3	11861.2	11882.8	11899.1	11915.2	11920.8
5°	11785.0	11866.5	11942.5	12023.8	12127.1	12197.7	12279.0	12349.6	12420.2	12479.9	12523.2
7.5°	11806.9	11931.5	12045.7	12186.7	12338.6	12469.1	12604.8	12740.4	12881.6	12990.2	13082.5
10°	11850.2	12002.2	12148.7	12317.0	12512.5	12686.1	12854.3	13033.5	13212.7	13364.7	13500.5
12.5°	11926.2	12094.4	12252.0	12436.5	12637.4	12832.7	13017.2	13218.1	13408.2	13576.5	13728.4
15°	12051.1	12208.4	12360.5	12534.2	12735.0	12914.2	13098.8	13294.1	13484.2	13657.8	13799.0
17.5°	12132.4	12279.0	12430.9	12588.4	12756.7	12919.6	13093.2	13267.0	13440.6	13598.2	13728.4
20°	12132.4	12273.6	12387.6	12528.8	12686.1	12827.3	12968.5	13120.5	13272.4	13402.7	13527.6
22.5°	12034.8	12170.4	12257.3	12365.9	12501.5	12621.1	12697.0	12865.3	12979.2	13093.2	13185.5
25°	11806.9	11904.5	11975.1	12051.1	12159.7	12241.0	12306.2	12403.9	12517.8	12561.4	12626.4
27.5°	11394.2	11464.8	11502.8	11519.1	11573.4	11616.7	11627.7	11671.0	11719.9	11730.7	11757.9
30°	10742.9	10748.2	10731.9	10726.5	10699.3	10666.9	10661.3	10655.9	10634.3	10612.6	10618.0
32.5°	9760.2	9733.1	9667.9	9597.5	9526.9	9450.9	9407.4	9353.1	9320.5	9288.1	9250.1
35°	8489.9	8424.9	8332.6	8245.7	8164.4	8104.5	8006.9	7974.2	7941.9	7898.3	7887.6
37.5°	6997.2	6959.2	6872.3	6807.2	6763.9	6736.6	6687.7	6655.3	6655.3	6639.0	6628.0
40°	5455.4	5444.7	5412.1	5428.4	5406.7	5417.5	5412.1	5401.1	5428.4	5428.4	5439.4
42.5°	4092.9	4098.5	4114.8	4125.5	4158.2	4163.5	4190.8	4190.8	4207.1	4223.2	4234.1
45°	3045.2	3067.1	3067.1	3088.8	3121.4	3126.8	3137.5	3143.1	3153.8	3181.1	3191.8
47.5°	2285.3	2290.7	2290.7	2296.3	2307.0	2317.9	2312.6	2317.9	2334.2	2323.3	2334.2
50°	1688.3	1693.7	1677.3	1661.0	1677.3	1677.3	1672.0	1655.7	1672.0	1650.3	1661.0
52.5°	1150.9	1145.3	1129.0	1134.6	1123.7	1118.3	1118.3	1107.4	1107.4	1107.4	1085.7
55°	727.5	727.5	716.6	716.6	711.2	700.3	694.9	689.3	683.9	678.6	678.6
57.5°	407.1	412.5	396.4	390.8	396.4	390.8	380.1	380.1	380.1	363.8	374.5
60°	222.5	217.2	211.8	206.2	200.9	206.2	206.2	195.5	195.5	195.5	200.9
62.5°	119.3	119.3	114.0	114.0	108.6	108.6	119.3	103.2	108.6	103.2	108.6
65°	65.2	81.3	59.7	59.7	76.0	70.6	65.2	65.2	70.6	59.7	65.2
67.5°	70.6	48.9	43.3	48.9	43.3	43.3	43.3	54.3	48.9	38.0	48.9
70°	32.6	38.0	38.0	27.0	43.3	21.7	38.0	21.7	32.6	27.0	32.6
72.5°	32.6	32.6	32.6	21.7	32.6	21.7	27.0	27.0	21.7	21.7	32.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	10.9	10.9	5.4	5.4	5.4	5.4	10.9	10.9	10.9	0.0	5.4
80°	10.9	10.9	0.0	5.4	0.0	0.0	5.4	0.0	5.4	0.0	10.9
82.5°	5.4	10.9	5.4	5.4	10.9	10.9	10.9	5.4	5.4	5.4	5.4
85°	0.0	5.4	0.0	0.0	0.0	0.0	10.9	0.0	0.0	0.0	5.4
87.5°	0.0	5.4	0.0	0.0	0.0	0.0	5.4	5.4	0.0	0.0	0.0
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: P249733

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	11616.7	11616.7	11616.7	11616.7
2.5°	11926.2	11931.5	11942.5	11937.1
5°	12555.8	12599.4	12621.1	12615.7
7.5°	13147.5	13223.7	13267.0	13267.0
10°	13603.5	13690.4	13755.5	13766.4
12.5°	13847.7	13945.6	14032.5	14010.6
15°	13918.3	14016.2	14102.9	14086.6
17.5°	13837.0	13934.7	13999.9	13989.0
20°	13614.5	13695.8	13761.0	13755.5
22.5°	13267.0	13337.6	13391.9	13386.3
25°	12680.7	12729.7	12773.0	12751.3
27.5°	11779.6	11795.9	11823.0	11790.6
30°	10580.0	10590.7	10601.6	10596.3
32.5°	9233.8	9228.2	9217.5	9206.5
35°	7871.2	7871.2	7876.6	7844.0
37.5°	6633.4	6628.0	6644.4	6628.0
40°	5450.1	5444.7	5466.4	5439.4
42.5°	4250.4	4266.8	4272.1	4272.1
45°	3197.4	3202.7	3208.1	3208.1
47.5°	2334.2	2339.6	2366.9	2334.2
50°	1650.3	1655.7	1661.0	1650.3
52.5°	1091.0	1096.6	1091.0	1074.7
55°	667.6	673.2	673.2	673.2
57.5°	358.2	363.8	363.8	358.2
60°	195.5	189.9	195.5	184.6
62.5°	103.2	114.0	108.6	97.6
65°	65.2	65.2	65.2	76.0
67.5°	54.3	43.3	48.9	38.0
70°	32.6	38.0	38.0	27.0
72.5°	27.0	27.0	27.0	32.6
75°	0.0	0.0	0.0	0.0
77.5°	10.9	10.9	10.9	5.4
80°	5.4	0.0	5.4	0.0
82.5°	5.4	5.4	10.9	5.4
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)