

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: P249712

Luminaire Tested: **LD8B175D010 ER8B175830 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249712
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 ER8B175830 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18651.0 lumens
Efficiency: N/A
Efficacy: 105.3 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

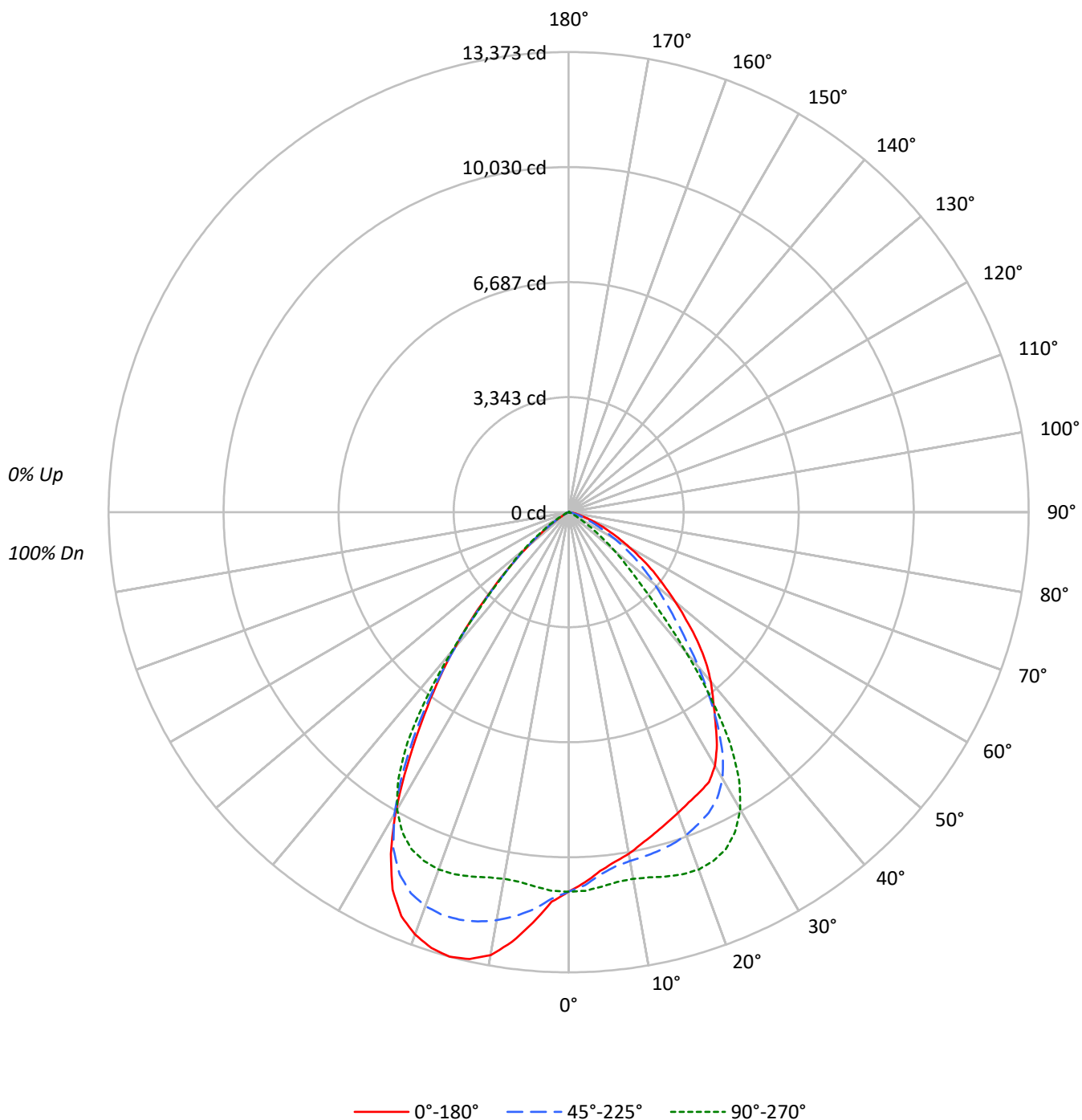
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	109	106	103	110	107	104	102		103	100	98		99	97	96		95	94	93
2	105	99	94	90	103	97	93	89		94	90	87		91	88	85		88	86	83
3	98	90	84	80	96	89	83	79		86	82	78		84	80	76		81	78	75
4	92	83	76	71	90	81	75	70		79	74	70		77	72	69		75	71	68
5	86	76	69	64	84	75	68	63		73	67	63		71	66	62		69	65	61
6	80	70	63	57	79	69	62	57		67	61	57		66	60	56		64	60	56
7	75	64	57	52	74	64	57	52		62	56	52		61	55	51		60	55	51
8	71	60	53	48	70	59	52	48		58	52	47		57	51	47		56	51	47
9	67	55	48	44	66	55	48	44		54	48	43		53	47	43		52	47	43
10	63	52	45	40	62	51	45	40		50	44	40		49	44	40		49	43	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	340075	340075	340075
5°	323987	338183	370731
10°	315631	338705	409223
15°	308473	349930	426927
20°	305077	362576	428529
25°	305795	367695	411879
30°	302956	355070	358189
35°	279941	307290	280325
40°	258688	213048	207867
45°	230352	128551	132816
50°	193824	82825	75159
55°	161252	45434	34359
60°	125862	19704	10805
65°	92877	9785	5261
70°	64581	6041	2317
75°	39293	1239	0
80°	28359	1847	0
85°	18221	1804	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1060.2	5.7
10°-20°	3173.1	17.0
20°-30°	4859.2	26.1
30°-40°	4763.7	25.5
40°-50°	2868.7	15.4
50°-60°	1320.4	7.1
60°-70°	463.8	2.5
70°-80°	121.3	0.7
80°-90°	20.7	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°	9092.5	48.8
0°-40°	13856.1	74.3
0°-60°	18045.2	96.8
0°-90°	18651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18651.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11028	11028	11028	11028	11028	
5°	10467	10565	10925	11580	11977	989
15°	9663	10183	10961	12260	13373	2730
25°	8988	9637	10807	11621	12106	4139
35°	7436	7540	8163	7694	7447	4657
45°	5282	4350	2948	2968	3046	4051
55°	2999	2376	845	665	639	2676
65°	1273	881	134	67	72	1297
75°	330	191	10	0	0	400
85°	52	26	5	0	0	71
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°	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4
2.5°	10770.6	10781.0	10781.0	10781.0	10801.6	10806.9	10801.6	10806.9	10817.1	10853.2	10868.6
5°	10466.7	10451.2	10461.6	10456.3	10482.2	10497.6	10487.3	10502.7	10538.8	10564.7	10590.3
7.5°	10250.3	10250.3	10250.3	10260.5	10276.0	10307.0	10301.9	10312.0	10348.1	10384.2	10420.2
10°	10080.2	10075.1	10075.1	10100.8	10121.3	10157.4	10167.8	10198.8	10245.0	10291.5	10332.6
12.5°	9858.5	9863.8	9889.5	9915.4	9961.6	10018.3	10049.2	10090.6	10162.7	10239.9	10286.4
15°	9662.7	9667.8	9688.6	9740.0	9796.8	9863.8	9930.7	9997.7	10085.3	10183.3	10265.8
17.5°	9472.0	9477.1	9492.6	9549.5	9621.6	9709.2	9786.4	9874.0	9987.5	10100.8	10203.9
20°	9296.8	9291.7	9317.4	9369.0	9461.9	9544.2	9621.6	9724.7	9848.3	9987.5	10105.9
22.5°	9126.7	9126.7	9152.6	9204.1	9286.7	9369.0	9451.5	9559.7	9683.3	9817.4	9956.5
25°	8987.6	8982.5	9018.5	9044.4	9106.1	9188.7	9276.3	9363.9	9487.5	9637.1	9770.9
27.5°	8838.2	8833.1	8838.2	8869.2	8925.8	8987.6	9054.6	9132.0	9235.1	9358.8	9487.5
30°	8508.4	8513.5	8513.5	8539.3	8570.3	8637.1	8673.2	8750.6	8843.3	8946.4	9059.9
32.5°	8018.8	8023.9	8023.9	8034.3	8060.0	8090.9	8121.9	8178.5	8250.7	8338.3	8441.3
35°	7436.5	7436.5	7431.2	7436.5	7452.0	7452.0	7477.7	7452.0	7488.1	7539.6	7616.8
37.5°	6900.5	6890.1	6879.9	6869.5	6854.0	6828.4	6792.3	6730.4	6714.9	6694.3	6699.4
40°	6426.4	6421.3	6390.4	6364.5	6312.9	6251.2	6163.6	6055.4	5967.8	5864.7	5777.1
42.5°	5900.8	5895.5	5869.8	5823.4	5766.7	5674.0	5534.9	5390.6	5215.4	5060.8	4901.1
45°	5282.2	5297.7	5261.7	5210.1	5143.1	5055.5	4901.1	4725.6	4550.4	4349.5	4148.4
47.5°	4638.0	4632.9	4607.3	4576.3	4519.7	4432.1	4329.0	4138.3	3952.7	3767.3	3561.1
50°	4040.3	4019.7	4009.3	3978.5	3942.5	3870.4	3762.0	3607.3	3442.5	3267.3	3076.6
52.5°	3473.5	3473.5	3447.6	3427.0	3396.1	3339.4	3246.7	3123.1	2983.9	2818.9	2618.0
55°	2999.4	2989.0	2963.3	2937.4	2906.5	2870.4	2788.1	2685.0	2535.5	2375.8	2200.5
57.5°	2494.3	2489.0	2478.8	2447.9	2432.4	2396.3	2303.6	2200.5	2071.8	1932.6	1788.2
60°	2040.8	2020.2	1999.5	1978.9	1953.2	1917.1	1855.2	1767.6	1659.4	1535.8	1391.5
62.5°	1633.8	1664.5	1602.8	1602.8	1551.2	1520.3	1463.6	1412.1	1298.6	1185.3	1061.7
65°	1272.9	1272.9	1247.1	1226.5	1195.5	1159.5	1102.8	1051.3	968.8	881.2	793.5
67.5°	974.1	968.8	943.1	922.5	896.6	876.1	834.9	773.0	711.2	639.1	566.8
70°	716.3	711.2	705.9	669.9	649.3	623.6	592.7	551.5	505.1	453.5	386.5
72.5°	515.2	515.2	500.0	484.5	463.9	443.1	412.4	386.5	345.3	309.3	262.8
75°	329.8	324.8	324.8	298.9	298.9	267.9	247.3	231.8	211.3	190.7	149.5
77.5°	237.2	231.8	226.8	216.4	206.2	195.8	180.3	159.7	144.2	123.7	108.2
80°	159.7	149.5	144.2	144.2	128.8	123.7	128.8	98.0	92.7	77.2	67.0
82.5°	98.0	98.0	92.7	92.7	87.6	82.5	67.0	67.0	61.9	56.6	46.5
85°	51.5	67.0	46.5	51.5	46.5	51.5	46.5	36.1	31.0	25.7	25.7
87.5°	31.0	20.6	20.6	31.0	25.7	20.6	20.6	20.6	15.5	10.4	10.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4
2.5°	10858.5	10894.5	10889.2	10935.7	10951.2	10987.2	10987.2	11012.9	11028.4	11064.4	11095.4
5°	10600.7	10657.4	10672.9	10729.5	10776.0	10832.6	10868.6	10925.3	10976.8	11054.3	11126.4
7.5°	10441.0	10487.3	10518.2	10585.3	10636.8	10698.5	10760.5	10837.7	10909.8	11002.7	11105.8
10°	10363.6	10425.5	10471.8	10538.8	10600.7	10667.8	10729.5	10817.1	10899.6	11018.2	11131.5
12.5°	10343.0	10415.1	10471.8	10564.7	10626.4	10698.5	10770.6	10868.6	10956.3	11079.9	11208.9
15°	10343.0	10441.0	10518.2	10621.3	10693.4	10786.1	10863.6	10961.3	11059.3	11188.1	11311.8
17.5°	10322.4	10441.0	10538.8	10657.4	10750.1	10843.0	10940.8	11033.7	11136.6	11260.4	11399.4
20°	10239.9	10389.5	10507.8	10647.0	10745.0	10848.1	10946.1	11049.0	11157.3	11286.1	11404.7
22.5°	10095.7	10270.9	10405.0	10554.3	10667.8	10770.6	10868.6	10971.7	11090.3	11214.0	11337.6
25°	9905.0	10069.8	10214.3	10368.7	10482.2	10595.4	10688.3	10806.9	10915.1	11033.7	11131.5
27.5°	9616.3	9791.5	9930.7	10090.6	10193.5	10301.9	10379.1	10477.1	10580.2	10678.0	10755.4
30°	9183.6	9343.3	9487.5	9631.8	9734.9	9812.3	9894.6	9972.0	10039.0	10105.9	10172.9
32.5°	8549.5	8694.0	8833.1	8967.0	9049.5	9116.5	9178.3	9224.7	9260.8	9296.8	9301.9
35°	7678.8	7797.1	7884.7	8003.3	8080.7	8142.5	8142.5	8163.0	8158.0	8142.5	8127.0
37.5°	6704.7	6751.0	6787.0	6833.5	6838.6	6838.6	6807.8	6781.9	6740.8	6730.4	6699.4
40°	5689.5	5627.6	5581.1	5519.4	5483.3	5405.9	5339.1	5292.6	5225.6	5215.4	5205.0
42.5°	4725.6	4581.4	4452.6	4344.4	4220.8	4112.4	4014.6	3942.5	3890.9	3885.6	3890.9
45°	3942.5	3777.4	3586.8	3437.4	3298.3	3164.2	3035.4	2947.8	2901.4	2891.0	2901.4
47.5°	3349.8	3159.1	2973.5	2803.4	2654.1	2504.5	2375.8	2257.2	2200.5	2185.1	2180.0
50°	2880.8	2685.0	2489.0	2313.8	2149.0	1999.5	1839.7	1726.5	1654.3	1628.5	1607.9
52.5°	2422.2	2247.0	2045.9	1865.6	1700.6	1525.4	1360.5	1231.6	1159.5	1128.7	1107.9
55°	2020.2	1845.0	1659.4	1484.2	1309.0	1133.8	968.8	845.1	767.9	731.8	705.9
57.5°	1613.0	1448.1	1288.4	1113.2	968.8	798.8	633.8	525.6	458.6	417.5	396.9
60°	1247.1	1118.3	979.1	834.9	695.8	556.6	422.5	319.5	267.9	237.2	211.3
62.5°	943.1	834.9	742.0	618.3	510.2	391.6	288.7	206.2	159.7	134.1	123.7
65°	680.3	597.8	515.2	438.0	360.8	273.2	195.8	134.1	92.7	77.2	72.1
67.5°	484.5	417.5	355.5	304.0	247.3	195.8	139.2	92.7	72.1	61.9	56.6
70°	340.0	288.7	247.3	201.1	164.8	128.8	108.2	67.0	41.2	46.5	36.1
72.5°	226.8	190.7	170.1	139.2	113.3	92.7	67.0	46.5	46.5	36.1	31.0
75°	123.7	113.3	87.6	67.0	56.6	51.5	20.6	10.4	5.1	15.5	5.1
77.5°	87.6	77.2	67.0	56.6	46.5	36.1	20.6	20.6	15.5	20.6	10.4
80°	56.6	46.5	41.2	41.2	25.7	15.5	10.4	10.4	15.5	5.1	5.1
82.5°	36.1	31.0	25.7	25.7	25.7	15.5	15.5	15.5	15.5	10.4	10.4
85°	20.6	15.5	10.4	10.4	5.1	10.4	0.0	5.1	5.1	0.0	0.0
87.5°	10.4	5.1	5.1	5.1	5.1	0.0	0.0	5.1	0.0	5.1	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4	11028.4
2.5°	11116.0	11136.6	11162.4	11183.0	11229.5	11239.6	11260.4	11281.0	11296.5	11311.8	11317.1
5°	11188.1	11265.5	11337.6	11414.9	11512.9	11579.9	11657.1	11724.1	11791.2	11847.8	11889.0
7.5°	11208.9	11327.3	11435.6	11569.5	11713.7	11837.6	11966.4	12095.1	12229.2	12332.3	12419.9
10°	11250.0	11394.3	11533.4	11693.2	11878.8	12043.6	12203.3	12373.4	12543.6	12687.8	12816.8
12.5°	11322.2	11481.9	11631.4	11806.6	11997.3	12182.7	12357.9	12548.6	12729.2	12888.9	13033.1
15°	11440.7	11590.1	11734.5	11899.3	12090.0	12260.2	12435.4	12620.8	12801.3	12966.1	13100.2
17.5°	11518.0	11657.1	11801.3	11950.9	12110.6	12265.3	12430.1	12595.1	12759.9	12909.5	13033.1
20°	11518.0	11652.0	11760.2	11894.3	12043.6	12177.6	12311.7	12455.9	12600.2	12723.9	12842.4
22.5°	11425.3	11554.0	11636.5	11739.6	11868.4	11981.9	12054.0	12213.7	12321.9	12430.1	12517.7
25°	11208.9	11301.6	11368.6	11440.7	11543.8	11621.0	11683.0	11775.7	11883.9	11925.2	11987.0
27.5°	10817.1	10884.1	10920.2	10935.7	10987.2	11028.4	11038.8	11079.9	11126.4	11136.6	11162.4
30°	10198.8	10203.9	10188.4	10183.3	10157.4	10126.7	10121.3	10116.3	10095.7	10075.1	10080.2
32.5°	9265.9	9240.2	9178.3	9111.4	9044.4	8972.3	8930.9	8879.4	8848.4	8817.7	8781.6
35°	8060.0	7998.2	7910.6	7828.1	7750.9	7694.0	7601.4	7570.4	7539.6	7498.3	7488.1
37.5°	6642.8	6606.7	6524.2	6462.5	6421.3	6395.4	6349.0	6318.2	6318.2	6302.7	6292.4
40°	5179.1	5169.0	5138.0	5153.5	5132.9	5143.1	5138.0	5127.6	5153.5	5153.5	5163.9
42.5°	3885.6	3890.9	3906.4	3916.6	3947.6	3952.7	3978.5	3978.5	3994.0	4009.3	4019.7
45°	2891.0	2911.8	2911.8	2932.4	2963.3	2968.4	2978.6	2983.9	2994.1	3020.0	3030.1
47.5°	2169.6	2174.7	2174.7	2180.0	2190.1	2200.5	2195.5	2200.5	2216.0	2205.6	2216.0
50°	1602.8	1607.9	1592.4	1576.9	1592.4	1592.4	1587.3	1571.8	1587.3	1566.7	1576.9
52.5°	1092.6	1087.3	1071.8	1077.1	1066.8	1061.7	1061.7	1051.3	1051.3	1051.3	1030.7
55°	690.7	690.7	680.3	680.3	675.2	664.8	659.7	654.4	649.3	644.2	644.2
57.5°	386.5	391.6	376.3	371.0	376.3	371.0	360.8	360.8	360.8	345.3	355.5
60°	211.3	206.2	201.1	195.8	190.7	195.8	195.8	185.6	185.6	185.6	190.7
62.5°	113.3	113.3	108.2	108.2	103.1	103.1	113.3	98.0	103.1	98.0	103.1
65°	61.9	77.2	56.6	56.6	72.1	67.0	61.9	61.9	67.0	56.6	61.9
67.5°	67.0	46.5	41.2	46.5	41.2	41.2	41.2	51.5	46.5	36.1	46.5
70°	31.0	36.1	36.1	25.7	41.2	20.6	36.1	20.6	31.0	25.7	31.0
72.5°	31.0	31.0	31.0	20.6	31.0	20.6	25.7	25.7	20.6	20.6	31.0
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°	10.4	10.4	5.1	5.1	5.1	5.1	10.4	10.4	10.4	0.0	5.1
80°	10.4	10.4	0.0	5.1	0.0	0.0	5.1	0.0	5.1	0.0	10.4
82.5°	5.1	10.4	5.1	5.1	10.4	10.4	10.4	5.1	5.1	5.1	5.1
85°	0.0	5.1	0.0	0.0	0.0	0.0	10.4	0.0	0.0	0.0	5.1
87.5°	0.0	5.1	0.0	0.0	0.0	0.0	5.1	5.1	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: P249712

CATALOG NUMBER: LD8B175D010 ER8B175830 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	11028.4	11028.4	11028.4	11028.4
2.5°	11322.2	11327.3	11337.6	11332.6
5°	11919.9	11961.3	11981.9	11976.8
7.5°	12481.6	12553.9	12595.1	12595.1
10°	12914.6	12997.1	13058.8	13069.2
12.5°	13146.4	13239.3	13321.8	13301.0
15°	13213.4	13306.3	13388.6	13373.2
17.5°	13136.2	13228.9	13290.9	13280.5
20°	12924.9	13002.2	13064.1	13058.8
22.5°	12595.1	12662.1	12713.7	12708.4
25°	12038.5	12084.9	12126.1	12105.5
27.5°	11183.0	11198.5	11224.2	11193.4
30°	10044.1	10054.3	10064.7	10059.6
32.5°	8766.1	8760.8	8750.6	8740.2
35°	7472.6	7472.6	7477.7	7446.7
37.5°	6297.4	6292.4	6307.8	6292.4
40°	5174.1	5169.0	5189.5	5163.9
42.5°	4035.2	4050.7	4055.8	4055.8
45°	3035.4	3040.5	3045.6	3045.6
47.5°	2216.0	2221.1	2247.0	2216.0
50°	1566.7	1571.8	1576.9	1566.7
52.5°	1035.8	1041.1	1035.8	1020.3
55°	633.8	639.1	639.1	639.1
57.5°	340.0	345.3	345.3	340.0
60°	185.6	180.3	185.6	175.2
62.5°	98.0	108.2	103.1	92.7
65°	61.9	61.9	61.9	72.1
67.5°	51.5	41.2	46.5	36.1
70°	31.0	36.1	36.1	25.7
72.5°	25.7	25.7	25.7	31.0
75°	0.0	0.0	0.0	0.0
77.5°	10.4	10.4	10.4	5.1
80°	5.1	0.0	5.1	0.0
82.5°	5.1	5.1	10.4	5.1
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)