

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: P249214

Luminaire Tested: **LSR8B150D010 EC8B150835 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249214
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: LSR8B150D010 EC8B150835 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16380.0 lumens
Efficiency: N/A
Efficacy: 103.3 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

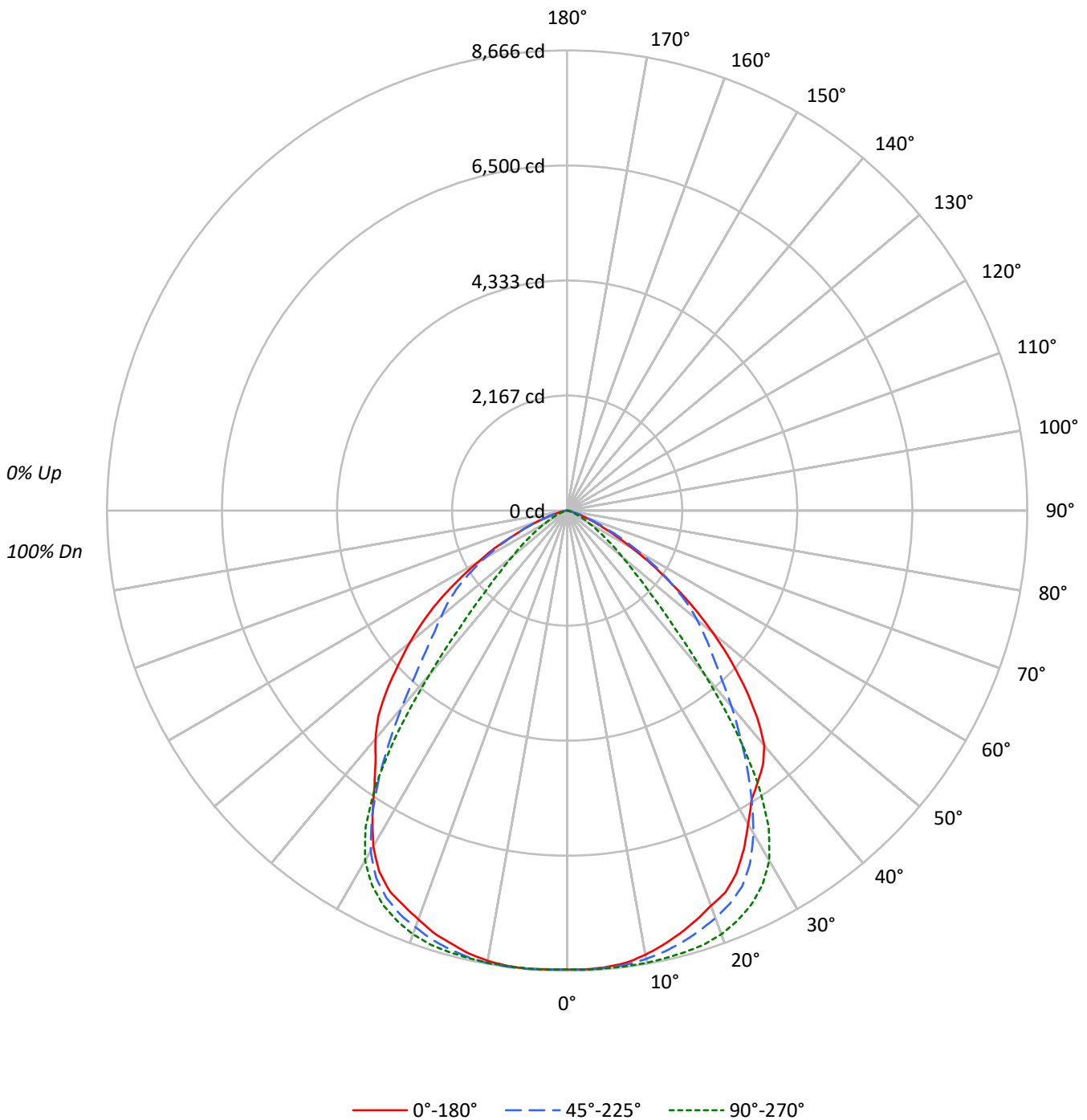
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	266500	266500	266500
5°	267087	267806	268093
10°	265961	270758	269593
15°	263016	274716	269535
20°	259858	278579	268840
25°	256484	278899	269114
30°	242649	271056	259993
35°	235404	235574	238024
40°	232487	162087	225953
45°	207156	97305	209991
50°	172251	64763	185602
55°	129189	44644	157371
60°	87544	29751	118732
65°	52805	19299	81568
70°	29275	10458	50183
75°	13272	4420	25973
80°	11525	4937	18113
85°	13126	6545	18080



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	824.8	5.0
10°-20°	2395.3	14.6
20°-30°	3635.6	22.2
30°-40°	3818.5	23.3
40°-50°	2862.9	17.5
50°-60°	1836.9	11.2
60°-70°	785.8	4.8
70°-80°	185.6	1.1
80°-90°	34.5	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°	6855.8	41.9
0°-40°	10674.3	65.2
0°-60°	15374.0	93.9
0°-90°	16380.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16380.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8642	8642	8642	8642	8642	
5°	8628	8642	8652	8666	8661	820
15°	8239	8410	8605	8550	8443	2324
25°	7538	7803	8197	8049	7910	3444
35°	6253	5905	6258	6184	6323	3925
45°	4750	3883	2231	3772	4815	3638
55°	2403	2403	830	2505	2927	2180
65°	724	854	264	1099	1118	773
75°	111	130	37	223	218	162
85°	37	23	18	37	51	39
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°	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4
2.5°	8647.1	8656.4	8651.7	8651.7	8647.1	8651.7	8651.7	8661.0	8661.0	8651.7	8647.1
5°	8628.5	8637.8	8637.8	8628.5	8628.5	8651.7	8637.8	8647.1	8647.1	8642.4	8642.4
7.5°	8586.8	8586.8	8605.3	8591.4	8591.4	8605.3	8600.6	8609.9	8619.3	8623.9	8623.9
10°	8493.9	8503.2	8507.9	8507.9	8512.6	8526.4	8535.7	8554.3	8563.5	8572.8	8577.5
12.5°	8378.0	8391.9	8396.6	8391.9	8405.9	8424.4	8447.6	8470.8	8484.7	8503.2	8517.2
15°	8238.8	8238.8	8248.1	8262.0	8271.3	8299.2	8322.3	8350.1	8387.2	8410.5	8433.7
17.5°	8085.8	8095.1	8108.9	8108.9	8127.5	8173.8	8187.8	8229.6	8271.3	8294.5	8340.9
20°	7918.8	7928.0	7941.9	7951.3	7974.4	8011.5	8039.3	8076.5	8122.9	8164.7	8211.0
22.5°	7788.8	7770.3	7779.5	7788.8	7812.1	7844.6	7877.0	7923.3	7969.8	8011.5	8058.0
25°	7538.3	7543.0	7556.9	7566.1	7594.0	7621.9	7659.0	7714.6	7756.4	7802.8	7853.8
27.5°	7199.7	7204.4	7227.5	7227.5	7250.7	7297.1	7320.3	7366.7	7422.4	7468.7	7529.1
30°	6814.7	6823.9	6823.9	6842.5	6856.4	6879.6	6902.8	6949.2	6977.0	7018.8	7102.3
32.5°	6462.1	6471.3	6466.7	6462.1	6448.2	6443.5	6438.9	6448.2	6457.5	6471.3	6503.8
35°	6253.4	6230.1	6211.6	6179.2	6142.0	6095.6	6053.9	5998.2	5947.2	5905.4	5859.1
37.5°	6053.9	6049.2	6021.4	5975.0	5900.7	5817.3	5719.9	5599.3	5478.6	5348.7	5223.5
40°	5775.5	5761.6	5738.4	5673.5	5589.9	5487.9	5358.0	5209.6	5014.7	4815.3	4611.2
42.5°	5302.3	5307.0	5279.2	5228.1	5149.3	5051.8	4917.3	4755.0	4546.2	4309.6	4045.2
45°	4750.3	4750.3	4741.0	4699.2	4643.6	4564.7	4462.7	4328.2	4124.1	3882.8	3599.8
47.5°	4175.1	4179.7	4165.8	4156.6	4133.3	4082.3	4008.1	3906.0	3762.2	3530.2	3247.2
50°	3590.6	3590.6	3613.8	3609.1	3609.1	3590.6	3558.1	3497.8	3372.6	3187.0	2922.6
52.5°	3006.0	3015.3	3029.3	3047.8	3071.0	3108.1	3071.0	3043.2	2964.3	2820.5	2593.2
55°	2403.0	2412.3	2435.4	2467.9	2495.8	2532.9	2542.1	2542.1	2500.4	2403.0	2231.3
57.5°	1888.1	1874.1	1892.7	1920.6	1957.7	1994.8	2022.6	2055.1	2050.4	1985.5	1846.3
60°	1419.5	1424.2	1438.0	1466.0	1493.8	1526.2	1563.3	1591.2	1605.1	1572.7	1484.5
62.5°	1034.5	1034.5	1053.0	1080.8	1094.8	1141.2	1164.4	1178.3	1192.2	1187.5	1131.9
65°	723.7	732.9	742.2	756.2	770.0	797.9	811.8	839.6	848.9	853.6	811.8
67.5°	510.3	496.4	505.7	514.9	528.8	547.4	575.3	575.3	589.1	589.1	561.3
70°	324.7	324.7	329.4	343.3	352.6	357.2	366.5	375.7	389.7	385.0	385.0
72.5°	218.0	213.4	218.0	222.7	227.4	241.2	241.2	245.9	255.2	259.8	241.2
75°	111.4	116.0	125.2	120.7	134.5	125.2	129.9	143.8	139.2	129.9	129.9
77.5°	92.7	92.7	92.7	88.2	97.4	97.4	92.7	102.0	97.4	97.4	92.7
80°	64.9	69.6	64.9	60.3	64.9	60.3	60.3	60.3	60.3	60.3	55.6
82.5°	51.1	41.8	46.4	41.8	46.4	46.4	41.8	37.1	37.1	41.8	37.1
85°	37.1	27.8	32.5	32.5	27.8	27.8	27.8	27.8	27.8	23.2	23.2
87.5°	23.2	14.0	14.0	14.0	18.5	18.5	18.5	14.0	18.5	18.5	9.3
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°	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4
2.5°	8656.4	8651.7	8661.0	8656.4	8656.4	8651.7	8656.4	8651.7	8661.0	8642.4	8647.1
5°	8656.4	8647.1	8651.7	8656.4	8661.0	8651.7	8651.7	8651.7	8661.0	8651.7	8656.4
7.5°	8637.8	8633.1	8647.1	8656.4	8651.7	8647.1	8656.4	8651.7	8661.0	8656.4	8665.6
10°	8600.6	8605.3	8614.6	8628.5	8633.1	8637.8	8647.1	8647.1	8661.0	8642.4	8651.7
12.5°	8545.0	8563.5	8586.8	8596.0	8614.6	8614.6	8623.9	8628.5	8637.8	8633.1	8647.1
15°	8475.4	8498.6	8526.4	8549.7	8572.8	8586.8	8600.6	8605.3	8619.3	8605.3	8609.9
17.5°	8391.9	8419.7	8461.5	8489.3	8526.4	8540.4	8558.9	8568.2	8582.1	8572.8	8577.5
20°	8275.9	8308.5	8354.8	8396.6	8419.7	8452.2	8475.4	8489.3	8498.6	8489.3	8493.9
22.5°	8113.6	8160.0	8220.3	8252.7	8299.2	8327.0	8331.6	8364.1	8387.2	8364.1	8373.4
25°	7923.3	7969.8	8016.2	8085.8	8127.5	8160.0	8192.5	8197.1	8220.3	8215.6	8211.0
27.5°	7607.9	7668.3	7747.1	7802.8	7858.4	7909.5	7946.6	7955.8	7979.1	7969.8	7974.4
30°	7176.5	7241.5	7315.7	7403.8	7482.7	7533.7	7580.1	7612.5	7635.7	7621.9	7617.2
32.5°	6564.2	6629.1	6708.0	6796.1	6888.9	6963.1	7018.8	7060.6	7088.4	7079.1	7055.9
35°	5863.7	5882.2	5933.3	6002.9	6081.7	6160.6	6211.6	6257.9	6290.4	6299.7	6299.7
37.5°	5144.7	5084.4	5047.3	5047.3	5093.6	5126.0	5172.5	5200.3	5251.3	5269.9	5283.8
40°	4448.7	4309.6	4179.7	4082.3	4017.4	4012.7	4012.7	4026.6	4073.0	4133.3	4189.0
42.5°	3827.2	3604.5	3405.0	3224.1	3094.2	3020.0	2987.5	2992.2	3029.3	3084.9	3177.7
45°	3330.8	3052.5	2802.0	2583.9	2407.6	2291.6	2236.0	2231.3	2259.2	2324.1	2426.2
47.5°	2945.8	2648.8	2365.9	2115.3	1925.2	1799.9	1735.0	1716.5	1735.0	1795.2	1915.9
50°	2625.7	2319.5	2027.3	1767.4	1563.3	1433.5	1373.1	1350.0	1373.1	1424.2	1544.7
52.5°	2328.7	2013.3	1739.6	1489.1	1271.1	1159.7	1094.8	1080.8	1094.8	1155.1	1252.6
55°	1985.5	1716.5	1447.3	1196.8	1006.7	895.4	844.3	830.4	844.3	900.0	1002.0
57.5°	1646.9	1414.9	1178.3	951.0	788.7	691.2	644.8	626.2	658.7	695.8	816.5
60°	1331.3	1145.9	946.3	746.9	612.4	524.2	487.1	482.4	491.7	538.1	621.6
62.5°	1043.8	890.7	732.9	570.6	459.3	422.1	375.7	371.2	380.4	408.2	473.2
65°	751.5	654.1	533.5	417.5	329.4	278.3	259.8	264.5	273.7	292.3	352.6
67.5°	524.2	454.6	371.2	292.3	227.4	204.1	185.6	180.9	185.6	218.0	250.5
70°	352.6	310.8	250.5	222.7	157.8	125.2	129.9	116.0	134.5	134.5	162.3
72.5°	231.9	204.1	167.0	129.9	111.4	88.2	88.2	83.5	92.7	97.4	120.7
75°	120.7	92.7	92.7	64.9	46.4	23.2	41.8	37.1	32.5	37.1	46.4
77.5°	83.5	69.6	64.9	51.1	46.4	37.1	37.1	37.1	37.1	41.8	46.4
80°	51.1	51.1	37.1	32.5	27.8	23.2	27.8	27.8	27.8	27.8	32.5
82.5°	32.5	27.8	27.8	23.2	23.2	18.5	18.5	18.5	18.5	18.5	27.8
85°	27.8	18.5	18.5	14.0	18.5	32.5	14.0	18.5	18.5	18.5	14.0
87.5°	9.3	14.0	14.0	14.0	9.3	4.7	9.3	14.0	14.0	23.2	18.5
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°	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4	8642.4
2.5°	8656.4	8661.0	8661.0	8656.4	8656.4	8647.1	8665.6	8651.7	8656.4	8674.9	8661.0
5°	8665.6	8670.2	8670.2	8665.6	8665.6	8665.6	8670.2	8670.2	8665.6	8661.0	8670.2
7.5°	8684.2	8679.5	8679.5	8670.2	8670.2	8661.0	8670.2	8656.4	8665.6	8656.4	8670.2
10°	8661.0	8665.6	8661.0	8656.4	8656.4	8651.7	8651.7	8637.8	8642.4	8628.5	8637.8
12.5°	8647.1	8642.4	8642.4	8633.1	8623.9	8614.6	8609.9	8596.0	8596.0	8563.5	8577.5
15°	8609.9	8614.6	8600.6	8582.1	8572.8	8549.7	8540.4	8521.8	8503.2	8480.1	8484.7
17.5°	8577.5	8563.5	8545.0	8526.4	8489.3	8470.8	8452.2	8424.4	8415.1	8387.2	8378.0
20°	8480.1	8470.8	8447.6	8415.1	8391.9	8350.1	8331.6	8303.8	8280.5	8252.7	8238.8
22.5°	8354.8	8345.5	8317.7	8285.2	8248.1	8229.6	8211.0	8160.0	8136.7	8108.9	8104.3
25°	8197.1	8183.2	8155.3	8118.2	8099.6	8048.6	8030.0	7992.9	7983.7	7955.8	7951.3
27.5°	7955.8	7937.3	7904.8	7858.4	7825.9	7793.5	7775.0	7747.1	7737.9	7709.9	7705.4
30°	7594.0	7570.8	7505.9	7487.3	7431.6	7399.2	7399.2	7362.0	7366.7	7348.2	7348.2
32.5°	7023.4	6986.3	6935.2	6898.1	6861.0	6842.5	6842.5	6828.5	6837.9	6837.9	6847.2
35°	6267.2	6216.3	6188.4	6165.2	6165.2	6183.7	6239.4	6253.4	6281.2	6304.4	6323.0
37.5°	5297.7	5293.1	5325.6	5353.4	5423.0	5501.9	5599.3	5682.8	5761.6	5817.3	5872.9
40°	4249.3	4365.3	4458.0	4588.0	4694.6	4847.7	5024.0	5167.8	5302.3	5399.8	5501.9
42.5°	3316.8	3465.3	3660.2	3850.3	4040.6	4249.3	4481.3	4680.7	4857.0	4991.5	5098.2
45°	2583.9	2788.0	3024.7	3265.9	3511.7	3771.5	4012.7	4216.8	4402.4	4541.6	4648.3
47.5°	2082.9	2305.6	2574.6	2839.1	3117.4	3391.1	3660.2	3836.5	3989.5	4100.8	4198.3
50°	1721.0	1957.7	2240.7	2542.1	2820.5	3094.2	3326.1	3497.8	3623.1	3720.5	3780.7
52.5°	1438.0	1688.6	1990.1	2291.6	2569.9	2820.5	3029.3	3159.2	3261.2	3330.8	3386.4
55°	1187.5	1428.8	1711.8	1994.8	2268.5	2505.0	2676.6	2774.1	2852.9	2894.7	2927.2
57.5°	969.6	1192.2	1452.0	1711.8	1948.4	2143.3	2277.8	2375.2	2412.3	2444.7	2440.1
60°	760.8	969.6	1206.1	1428.8	1632.9	1790.6	1888.1	1943.7	1971.5	1985.5	1976.2
62.5°	598.4	788.7	969.6	1164.4	1312.8	1447.3	1540.2	1540.2	1554.0	1558.7	1572.7
65°	445.3	589.1	746.9	890.7	1011.2	1099.4	1150.5	1164.4	1183.0	1178.3	1169.0
67.5°	329.4	436.1	552.0	658.7	742.2	797.9	835.0	867.5	862.9	853.6	848.9
70°	227.4	296.9	399.0	463.9	524.2	579.9	589.1	593.8	598.4	603.1	593.8
72.5°	157.8	208.7	264.5	320.1	357.2	380.4	403.6	408.2	408.2	408.2	403.6
75°	78.9	106.7	157.8	180.9	213.4	222.7	241.2	241.2	255.2	236.6	231.9
77.5°	69.6	83.5	111.4	129.9	143.8	157.8	162.3	176.3	171.6	162.3	167.0
80°	41.8	51.1	69.6	78.9	97.4	102.0	106.7	111.4	106.7	111.4	111.4
82.5°	32.5	37.1	46.4	46.4	60.3	60.3	64.9	64.9	69.6	69.6	69.6
85°	18.5	32.5	27.8	55.6	37.1	37.1	46.4	55.6	46.4	46.4	55.6
87.5°	18.5	18.5	14.0	18.5	18.5	18.5	23.2	27.8	27.8	32.5	27.8
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: P249214

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8642.4	8642.4	8642.4	8642.4
2.5°	8656.4	8665.6	8651.7	8647.1
5°	8670.2	8670.2	8661.0	8661.0
7.5°	8670.2	8670.2	8656.4	8647.1
10°	8633.1	8633.1	8619.3	8609.9
12.5°	8563.5	8563.5	8558.9	8545.0
15°	8475.4	8475.4	8456.8	8443.0
17.5°	8354.8	8364.1	8340.9	8340.9
20°	8224.9	8220.3	8201.8	8192.5
22.5°	8090.4	8081.1	8076.5	8048.6
25°	7946.6	7937.3	7923.3	7909.5
27.5°	7700.7	7696.1	7682.1	7663.6
30°	7324.9	7320.3	7301.8	7301.8
32.5°	6837.9	6833.2	6814.7	6819.4
35°	6332.2	6350.8	6341.5	6323.0
37.5°	5910.0	5924.0	5933.3	5924.0
40°	5557.5	5599.3	5603.9	5613.2
42.5°	5181.8	5237.4	5256.0	5265.2
45°	4731.7	4782.8	4824.6	4815.3
47.5°	4272.5	4309.6	4346.7	4318.9
50°	3831.8	3855.0	3868.9	3868.9
52.5°	3414.3	3414.3	3409.7	3414.3
55°	2936.5	2936.5	2918.0	2927.2
57.5°	2435.4	2444.7	2430.8	2407.6
60°	1971.5	1948.4	1939.1	1925.2
62.5°	1535.5	1535.5	1503.1	1544.7
65°	1150.5	1136.6	1122.6	1117.9
67.5°	835.0	830.4	816.5	811.8
70°	589.1	570.6	566.0	556.6
72.5°	394.3	394.3	385.0	385.0
75°	241.2	218.0	213.4	218.0
77.5°	167.0	162.3	162.3	157.8
80°	111.4	106.7	116.0	102.0
82.5°	69.6	74.2	69.6	74.2
85°	46.4	55.6	51.1	51.1
87.5°	27.8	27.8	27.8	27.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)