

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: P249232

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249232
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 EC8B150850 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16592.0 lumens
Efficiency: N/A
Efficacy: 104.7 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

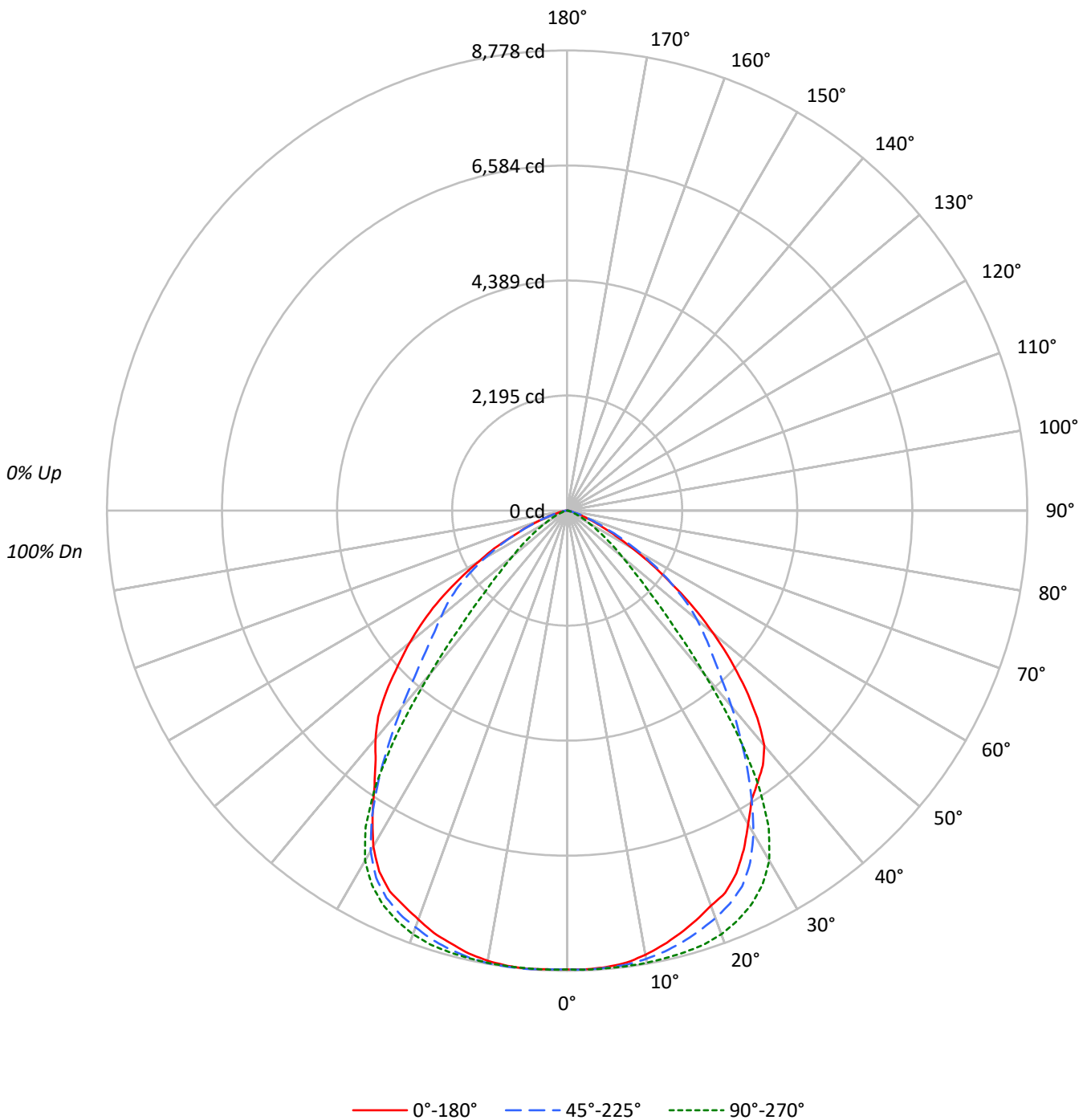
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	269950	269950	269950
5°	270542	271272	271563
10°	269405	274262	273085
15°	266419	278273	273021
20°	263222	282186	272318
25°	259805	282509	272598
30°	245790	274567	263358
35°	238450	238623	241104
40°	235498	164184	228880
45°	209838	98565	212708
50°	174482	65598	188005
55°	130861	45224	159403
60°	88679	30139	120268
65°	53491	19547	82625
70°	29653	10594	50841
75°	13439	4480	26319
80°	11685	5008	18362
85°	13303	6616	18292



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	835.5	5.0
10°-20°	2426.3	14.6
20°-30°	3682.7	22.2
30°-40°	3867.9	23.3
40°-50°	2899.9	17.5
50°-60°	1860.7	11.2
60°-70°	796.0	4.8
70°-80°	188.0	1.1
80°-90°	35.0	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°	6944.5	41.9
0°-40°	10812.4	65.2
0°-60°	15573.0	93.9
0°-90°	16592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16592.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8754	8754	8754	8754	8754	
5°	8740	8754	8764	8778	8773	830
15°	8345	8519	8717	8660	8552	2354
25°	7636	7904	8303	8153	8012	3488
35°	6334	5982	6339	6264	6405	3976
45°	4812	3933	2260	3820	4878	3685
55°	2434	2434	841	2537	2965	2208
65°	733	865	268	1114	1132	783
75°	113	132	38	226	221	164
85°	38	24	19	38	52	40
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°	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3
2.5°	8759.0	8768.4	8763.7	8763.7	8759.0	8763.7	8763.7	8773.1	8773.1	8763.7	8759.0
5°	8740.1	8749.6	8749.6	8740.1	8740.1	8763.7	8749.6	8759.0	8759.0	8754.3	8754.3
7.5°	8697.9	8697.9	8716.7	8702.6	8702.6	8716.7	8712.0	8721.4	8730.8	8735.5	8735.5
10°	8603.9	8613.3	8618.0	8618.0	8622.7	8636.8	8646.2	8665.0	8674.4	8683.8	8688.5
12.5°	8486.5	8500.5	8505.2	8500.5	8514.7	8533.4	8557.0	8580.4	8594.6	8613.3	8627.4
15°	8345.4	8345.4	8354.8	8369.0	8378.4	8406.6	8430.0	8458.2	8495.8	8519.4	8542.8
17.5°	8190.4	8199.8	8213.9	8213.9	8232.7	8279.6	8293.8	8336.1	8378.4	8401.9	8448.9
20°	8021.3	8030.6	8044.7	8054.2	8077.6	8115.2	8143.4	8181.0	8228.0	8270.3	8317.2
22.5°	7889.6	7870.9	7880.2	7889.6	7913.2	7946.1	7979.0	8025.9	8072.9	8115.2	8162.2
25°	7635.9	7640.6	7654.7	7664.1	7692.3	7720.5	7758.1	7814.4	7856.8	7903.8	7955.4
27.5°	7292.9	7297.6	7321.1	7321.1	7344.5	7391.6	7415.0	7462.0	7518.5	7565.4	7626.6
30°	6902.9	6912.2	6912.2	6931.1	6945.1	6968.7	6992.1	7039.1	7067.3	7109.6	7194.2
32.5°	6545.8	6555.1	6550.4	6545.8	6531.6	6526.9	6522.2	6531.6	6541.1	6555.1	6588.0
35°	6334.3	6310.8	6292.0	6259.1	6221.5	6174.5	6132.2	6075.9	6024.1	5981.8	5934.9
37.5°	6132.2	6127.5	6099.3	6052.3	5977.1	5892.6	5793.9	5671.7	5549.5	5418.0	5291.1
40°	5850.3	5836.1	5812.7	5746.9	5662.3	5558.9	5427.4	5277.0	5079.6	4877.6	4670.8
42.5°	5370.9	5375.7	5347.5	5295.7	5215.9	5117.2	4980.9	4816.5	4605.1	4365.3	4097.6
45°	4811.8	4811.8	4802.4	4760.1	4703.7	4623.8	4520.5	4384.2	4177.5	3933.0	3646.4
47.5°	4229.1	4233.8	4219.7	4210.4	4186.8	4135.2	4060.0	3956.6	3810.9	3575.9	3289.3
50°	3637.1	3637.1	3660.5	3655.8	3655.8	3637.1	3604.2	3543.0	3416.2	3228.2	2960.4
52.5°	3044.9	3054.4	3068.5	3087.3	3110.7	3148.3	3110.7	3082.5	3002.6	2857.0	2626.8
55°	2434.1	2443.5	2467.0	2499.8	2528.1	2565.7	2575.0	2575.0	2532.7	2434.1	2260.2
57.5°	1912.5	1898.4	1917.2	1945.4	1983.0	2020.6	2048.8	2081.7	2077.0	2011.2	1870.2
60°	1437.9	1442.6	1456.7	1484.9	1513.1	1546.0	1583.6	1611.8	1625.9	1593.0	1503.7
62.5°	1047.9	1047.9	1066.6	1094.8	1109.0	1156.0	1179.4	1193.6	1207.6	1202.9	1146.6
65°	733.1	742.4	751.8	766.0	780.0	808.2	822.3	850.5	859.9	864.6	822.3
67.5°	516.9	502.8	512.2	521.5	535.7	554.5	582.7	582.7	596.7	596.7	568.6
70°	328.9	328.9	333.7	347.7	357.1	361.8	371.3	380.6	394.7	390.0	390.0
72.5°	220.9	216.2	220.9	225.6	230.3	244.3	244.3	249.0	258.5	263.2	244.3
75°	112.8	117.5	126.8	122.2	136.2	126.8	131.5	145.7	141.0	131.5	131.5
77.5°	93.9	93.9	93.9	89.3	98.7	98.7	93.9	103.4	98.7	98.7	93.9
80°	65.8	70.5	65.8	61.1	65.8	61.1	61.1	61.1	61.1	61.1	56.3
82.5°	51.7	42.3	47.0	42.3	47.0	47.0	42.3	37.6	37.6	42.3	37.6
85°	37.6	28.2	32.9	32.9	28.2	28.2	28.2	28.2	28.2	23.5	23.5
87.5°	23.5	14.1	14.1	14.1	18.7	18.7	18.7	14.1	18.7	18.7	9.4
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°	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3
2.5°	8768.4	8763.7	8773.1	8768.4	8768.4	8763.7	8768.4	8763.7	8773.1	8754.3	8759.0
5°	8768.4	8759.0	8763.7	8768.4	8773.1	8763.7	8763.7	8763.7	8773.1	8763.7	8768.4
7.5°	8749.6	8744.8	8759.0	8768.4	8763.7	8759.0	8768.4	8763.7	8773.1	8768.4	8777.7
10°	8712.0	8716.7	8726.1	8740.1	8744.8	8749.6	8759.0	8759.0	8773.1	8754.3	8763.7
12.5°	8655.6	8674.4	8697.9	8707.2	8726.1	8726.1	8735.5	8740.1	8749.6	8744.8	8759.0
15°	8585.1	8608.6	8636.8	8660.3	8683.8	8697.9	8712.0	8716.7	8730.8	8716.7	8721.4
17.5°	8500.5	8528.7	8571.0	8599.2	8636.8	8650.9	8669.6	8679.1	8693.2	8683.8	8688.5
20°	8383.0	8416.0	8462.9	8505.2	8528.7	8561.6	8585.1	8599.2	8608.6	8599.2	8603.9
22.5°	8218.6	8265.6	8326.7	8359.5	8406.6	8434.7	8439.5	8472.3	8495.8	8472.3	8481.8
25°	8025.9	8072.9	8119.9	8190.4	8232.7	8265.6	8298.5	8303.2	8326.7	8322.0	8317.2
27.5°	7706.4	7767.5	7847.3	7903.8	7960.1	8011.9	8049.5	8058.8	8082.3	8072.9	8077.6
30°	7269.3	7335.2	7410.4	7499.6	7579.5	7631.2	7678.2	7711.1	7734.5	7720.5	7715.8
32.5°	6649.1	6714.9	6794.8	6884.0	6978.1	7053.2	7109.6	7151.9	7180.1	7170.7	7147.2
35°	5939.6	5958.4	6010.1	6080.6	6160.4	6240.3	6292.0	6338.9	6371.8	6381.2	6381.2
37.5°	5211.2	5150.2	5112.6	5112.6	5159.5	5192.4	5239.4	5267.6	5319.3	5338.1	5352.2
40°	4506.3	4365.3	4233.8	4135.2	4069.4	4064.7	4064.7	4078.7	4125.7	4186.8	4243.2
42.5°	3876.7	3651.1	3449.1	3265.8	3134.3	3059.1	3026.2	3030.9	3068.5	3124.9	3218.8
45°	3373.9	3092.0	2838.2	2617.3	2438.8	2321.3	2264.9	2260.2	2288.4	2354.2	2457.6
47.5°	2983.9	2683.1	2396.5	2142.7	1950.1	1823.2	1757.4	1738.7	1757.4	1818.5	1940.7
50°	2659.7	2349.6	2053.5	1790.3	1583.6	1452.0	1390.9	1367.4	1390.9	1442.6	1564.7
52.5°	2358.9	2039.4	1762.1	1508.4	1287.5	1174.7	1109.0	1094.8	1109.0	1170.0	1268.8
55°	2011.2	1738.7	1466.1	1212.3	1019.7	906.9	855.2	841.2	855.2	911.7	1015.0
57.5°	1668.2	1433.2	1193.6	963.3	798.9	700.1	653.2	634.3	667.2	704.8	827.0
60°	1348.6	1160.7	958.6	756.6	620.3	531.0	493.4	488.7	498.1	545.1	629.6
62.5°	1057.3	902.2	742.4	578.0	465.2	427.6	380.6	376.0	385.3	413.5	479.3
65°	761.3	662.6	540.4	422.9	333.7	281.9	263.2	267.9	277.2	296.1	357.1
67.5°	531.0	460.5	376.0	296.1	230.3	206.7	188.0	183.3	188.0	220.9	253.8
70°	357.1	314.8	253.8	225.6	159.8	126.8	131.5	117.5	136.2	136.2	164.4
72.5°	234.9	206.7	169.1	131.5	112.8	89.3	89.3	84.6	93.9	98.7	122.2
75°	122.2	93.9	93.9	65.8	47.0	23.5	42.3	37.6	32.9	37.6	47.0
77.5°	84.6	70.5	65.8	51.7	47.0	37.6	37.6	37.6	37.6	42.3	47.0
80°	51.7	51.7	37.6	32.9	28.2	23.5	28.2	28.2	28.2	28.2	32.9
82.5°	32.9	28.2	28.2	23.5	23.5	18.7	18.7	18.7	18.7	18.7	28.2
85°	28.2	18.7	18.7	14.1	18.7	32.9	14.1	18.7	18.7	18.7	14.1
87.5°	9.4	14.1	14.1	14.1	9.4	4.7	9.4	14.1	14.1	23.5	18.7
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°	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3	8754.3
2.5°	8768.4	8773.1	8773.1	8768.4	8768.4	8759.0	8777.7	8763.7	8768.4	8787.1	8773.1
5°	8777.7	8782.4	8782.4	8777.7	8777.7	8777.7	8782.4	8782.4	8777.7	8773.1	8782.4
7.5°	8796.6	8791.9	8791.9	8782.4	8782.4	8773.1	8782.4	8768.4	8777.7	8768.4	8782.4
10°	8773.1	8777.7	8773.1	8768.4	8768.4	8763.7	8763.7	8749.6	8754.3	8740.1	8749.6
12.5°	8759.0	8754.3	8754.3	8744.8	8735.5	8726.1	8721.4	8707.2	8707.2	8674.4	8688.5
15°	8721.4	8726.1	8712.0	8693.2	8683.8	8660.3	8650.9	8632.0	8613.3	8589.8	8594.6
17.5°	8688.5	8674.4	8655.6	8636.8	8599.2	8580.4	8561.6	8533.4	8524.0	8495.8	8486.5
20°	8589.8	8580.4	8557.0	8524.0	8500.5	8458.2	8439.5	8411.3	8387.7	8359.5	8345.4
22.5°	8462.9	8453.5	8425.3	8392.4	8354.8	8336.1	8317.2	8265.6	8242.0	8213.9	8209.2
25°	8303.2	8289.1	8260.9	8223.3	8204.4	8152.8	8134.0	8096.4	8087.0	8058.8	8054.2
27.5°	8058.8	8040.0	8007.1	7960.1	7927.2	7894.3	7875.6	7847.3	7838.0	7809.7	7805.1
30°	7692.3	7668.8	7603.0	7584.3	7527.8	7494.9	7494.9	7457.3	7462.0	7443.3	7443.3
32.5°	7114.3	7076.7	7025.0	6987.4	6949.8	6931.1	6931.1	6916.9	6926.4	6926.4	6935.8
35°	6348.4	6296.7	6268.5	6245.0	6245.0	6263.7	6320.2	6334.3	6362.5	6386.0	6404.8
37.5°	5366.2	5361.6	5394.5	5422.7	5493.2	5573.1	5671.7	5756.3	5836.1	5892.6	5948.9
40°	4304.3	4421.8	4515.7	4647.4	4755.4	4910.5	5089.0	5234.7	5370.9	5469.7	5573.1
42.5°	3359.8	3510.1	3707.6	3900.2	4092.9	4304.3	4539.3	4741.3	4919.9	5056.1	5164.2
45°	2617.3	2824.1	3063.8	3308.1	3557.2	3820.4	4064.7	4271.4	4459.4	4600.4	4708.4
47.5°	2109.8	2335.4	2607.9	2875.8	3157.7	3435.0	3707.6	3886.1	4041.1	4153.9	4252.7
50°	1743.3	1983.0	2269.7	2575.0	2857.0	3134.3	3369.2	3543.0	3670.0	3768.6	3829.7
52.5°	1456.7	1710.4	2015.9	2321.3	2603.2	2857.0	3068.5	3200.1	3303.4	3373.9	3430.2
55°	1202.9	1447.3	1734.0	2020.6	2297.8	2537.4	2711.3	2810.0	2889.8	2932.2	2965.0
57.5°	982.1	1207.6	1470.8	1734.0	1973.6	2171.0	2307.3	2405.9	2443.5	2476.4	2471.7
60°	770.7	982.1	1221.7	1447.3	1654.1	1813.8	1912.5	1968.9	1997.0	2011.2	2001.8
62.5°	606.2	798.9	982.1	1179.4	1329.8	1466.1	1560.1	1560.1	1574.2	1578.9	1593.0
65°	451.1	596.7	756.6	902.2	1024.3	1113.7	1165.4	1179.4	1198.3	1193.6	1184.2
67.5°	333.7	441.7	559.1	667.2	751.8	808.2	845.8	878.8	874.1	864.6	859.9
70°	230.3	300.8	404.1	469.9	531.0	587.4	596.7	601.4	606.2	610.9	601.4
72.5°	159.8	211.4	267.9	324.2	361.8	385.3	408.9	413.5	413.5	413.5	408.9
75°	79.9	108.1	159.8	183.3	216.2	225.6	244.3	244.3	258.5	239.6	234.9
77.5°	70.5	84.6	112.8	131.5	145.7	159.8	164.4	178.6	173.8	164.4	169.1
80°	42.3	51.7	70.5	79.9	98.7	103.4	108.1	112.8	108.1	112.8	112.8
82.5°	32.9	37.6	47.0	47.0	61.1	61.1	65.8	65.8	70.5	70.5	70.5
85°	18.7	32.9	28.2	56.3	37.6	37.6	47.0	56.3	47.0	47.0	56.3
87.5°	18.7	18.7	14.1	18.7	18.7	18.7	23.5	28.2	28.2	32.9	28.2
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: P249232

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8754.3	8754.3	8754.3	8754.3
2.5°	8768.4	8777.7	8763.7	8759.0
5°	8782.4	8782.4	8773.1	8773.1
7.5°	8782.4	8782.4	8768.4	8759.0
10°	8744.8	8744.8	8730.8	8721.4
12.5°	8674.4	8674.4	8669.6	8655.6
15°	8585.1	8585.1	8566.3	8552.2
17.5°	8462.9	8472.3	8448.9	8448.9
20°	8331.4	8326.7	8307.9	8298.5
22.5°	8195.1	8185.7	8181.0	8152.8
25°	8049.5	8040.0	8025.9	8011.9
27.5°	7800.4	7795.7	7781.6	7762.8
30°	7419.7	7415.0	7396.3	7396.3
32.5°	6926.4	6921.6	6902.9	6907.6
35°	6414.1	6433.0	6423.6	6404.8
37.5°	5986.5	6000.7	6010.1	6000.7
40°	5629.4	5671.7	5676.4	5685.9
42.5°	5248.8	5305.2	5324.0	5333.3
45°	4793.0	4844.7	4887.0	4877.6
47.5°	4327.8	4365.3	4402.9	4374.8
50°	3881.4	3904.9	3919.0	3919.0
52.5°	3458.5	3458.5	3453.8	3458.5
55°	2974.5	2974.5	2955.7	2965.0
57.5°	2467.0	2476.4	2462.2	2438.8
60°	1997.0	1973.6	1964.2	1950.1
62.5°	1555.4	1555.4	1522.5	1564.7
65°	1165.4	1151.3	1137.1	1132.4
67.5°	845.8	841.2	827.0	822.3
70°	596.7	578.0	573.3	563.9
72.5°	399.4	399.4	390.0	390.0
75°	244.3	220.9	216.2	220.9
77.5°	169.1	164.4	164.4	159.8
80°	112.8	108.1	117.5	103.4
82.5°	70.5	75.2	70.5	75.2
85°	47.0	56.3	51.7	51.7
87.5°	28.2	28.2	28.2	28.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)