

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: P249106

Luminaire Tested: **LSR8B150D010 EC8B150835 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249106
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16466.0 lumens
Efficiency: N/A
Efficacy: 103.9 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

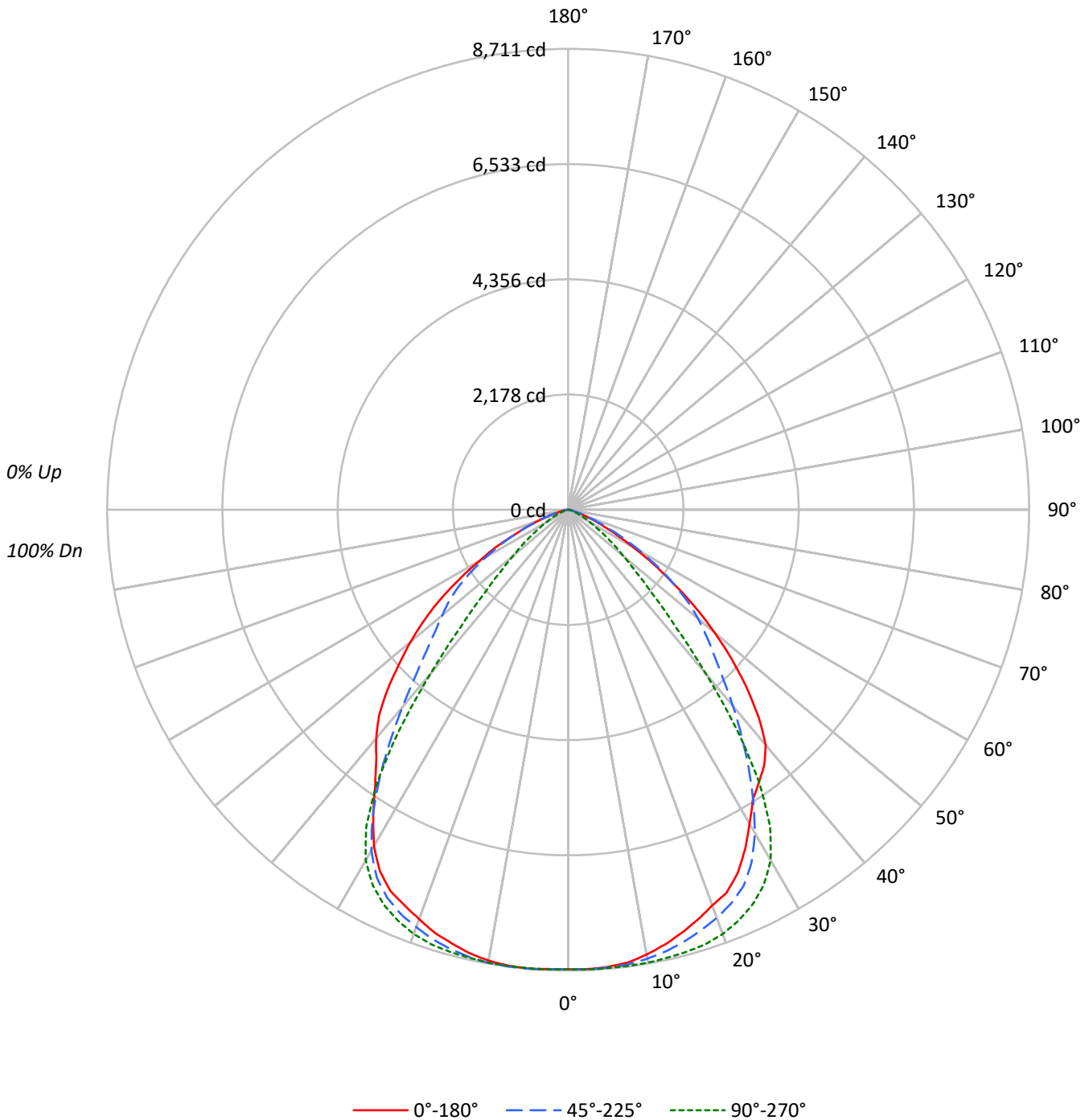
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	267900	267900	267900
5°	268490	269211	269502
10°	267358	272180	271012
15°	264395	276159	270949
20°	261223	280043	270251
25°	257831	280365	270526
30°	243924	272480	261357
35°	236639	236812	239274
40°	233710	162936	227141
45°	208247	97820	211090
50°	173158	65099	186576
55°	129866	44880	158193
60°	88007	29905	119355
65°	53082	19401	81998
70°	29437	10513	50453
75°	13332	4444	26116
80°	11596	4972	18220
85°	13197	6581	18150



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	829.1	5.0
10°-20°	2407.9	14.6
20°-30°	3654.7	22.2
30°-40°	3838.6	23.3
40°-50°	2877.9	17.5
50°-60°	1846.5	11.2
60°-70°	789.9	4.8
70°-80°	186.6	1.1
80°-90°	34.7	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°	6891.8	41.9
0°-40°	10730.3	65.2
0°-60°	15454.8	93.9
0°-90°	16466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16466.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8688	8688	8688	8688	8688	
5°	8674	8688	8697	8711	8706	824
15°	8282	8455	8650	8595	8487	2336
25°	7578	7844	8240	8091	7951	3462
35°	6286	5936	6291	6216	6356	3945
45°	4775	3903	2243	3791	4840	3657
55°	2416	2416	835	2518	2942	2191
65°	728	858	266	1105	1124	777
75°	112	130	37	224	219	163
85°	37	23	19	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°	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8
2.5°	8692.5	8701.8	8697.1	8697.1	8692.5	8697.1	8697.1	8706.5	8706.5	8697.1	8692.5
5°	8673.8	8683.1	8683.1	8673.8	8673.8	8697.1	8683.1	8692.5	8692.5	8687.8	8687.8
7.5°	8631.9	8631.9	8650.5	8636.5	8636.5	8650.5	8645.8	8655.2	8664.5	8669.2	8669.2
10°	8538.5	8547.9	8552.6	8552.6	8557.2	8571.2	8580.5	8599.2	8608.5	8617.8	8622.5
12.5°	8422.0	8436.0	8440.6	8436.0	8450.0	8468.6	8492.0	8515.3	8529.3	8547.9	8561.9
15°	8282.0	8282.0	8291.4	8305.4	8314.8	8342.7	8366.0	8394.0	8431.3	8454.7	8477.9
17.5°	8128.2	8137.6	8151.5	8151.5	8170.2	8216.8	8230.8	8272.8	8314.8	8338.1	8384.7
20°	7960.4	7969.6	7983.6	7993.0	8016.3	8053.6	8081.5	8118.9	8165.5	8207.5	8254.1
22.5°	7829.7	7811.1	7820.4	7829.7	7853.1	7885.7	7918.4	7964.9	8011.6	8053.6	8100.3
25°	7577.9	7582.6	7596.6	7605.9	7633.9	7661.9	7699.2	7755.1	7797.1	7843.8	7895.0
27.5°	7237.5	7242.2	7265.5	7265.5	7288.8	7335.4	7358.7	7405.4	7461.4	7507.9	7568.6
30°	6850.5	6859.7	6859.7	6878.4	6892.4	6915.7	6939.0	6985.7	7013.6	7055.6	7139.6
32.5°	6496.1	6505.3	6500.6	6496.1	6482.0	6477.4	6472.7	6482.0	6491.4	6505.3	6537.9
35°	6286.2	6262.8	6244.2	6211.6	6174.3	6127.6	6085.6	6029.7	5978.4	5936.4	5889.8
37.5°	6085.6	6081.0	6053.0	6006.3	5931.7	5847.8	5749.9	5628.6	5507.4	5376.8	5251.0
40°	5805.9	5791.8	5768.5	5703.3	5619.3	5516.7	5386.2	5236.9	5041.0	4840.5	4635.4
42.5°	5330.2	5334.8	5306.9	5255.5	5176.3	5078.3	4943.1	4779.9	4570.1	4332.2	4066.4
45°	4775.3	4775.3	4765.9	4723.9	4668.0	4588.7	4486.1	4350.9	4145.7	3903.2	3618.7
47.5°	4197.0	4201.7	4187.6	4178.4	4155.0	4103.8	4029.1	3926.6	3782.0	3548.8	3264.3
50°	3609.5	3609.5	3632.7	3628.1	3628.1	3609.5	3576.8	3516.1	3390.3	3203.7	2938.0
52.5°	3021.8	3031.2	3045.2	3063.8	3087.1	3124.4	3087.1	3059.1	2979.8	2835.3	2606.8
55°	2415.6	2424.9	2448.2	2480.9	2508.9	2546.2	2555.5	2555.5	2513.5	2415.6	2243.1
57.5°	1898.0	1884.0	1902.7	1930.6	1968.0	2005.3	2033.2	2065.9	2061.2	1995.9	1856.0
60°	1427.0	1431.7	1445.6	1473.7	1501.6	1534.2	1571.6	1599.5	1613.5	1580.9	1492.3
62.5°	1039.9	1039.9	1058.5	1086.5	1100.5	1147.2	1170.5	1184.5	1198.4	1193.8	1137.8
65°	727.5	736.8	746.1	760.2	774.1	802.0	816.1	844.0	853.4	858.1	816.1
67.5°	513.0	499.0	508.3	517.6	531.6	550.3	578.3	578.3	592.2	592.2	564.2
70°	326.5	326.5	331.1	345.1	354.4	359.1	368.4	377.7	391.7	387.0	387.0
72.5°	219.2	214.5	219.2	223.9	228.5	242.5	242.5	247.2	256.5	261.2	242.5
75°	111.9	116.6	125.9	121.3	135.2	125.9	130.5	144.6	139.9	130.5	130.5
77.5°	93.2	93.2	93.2	88.7	97.9	97.9	93.2	102.6	97.9	97.9	93.2
80°	65.3	69.9	65.3	60.6	65.3	60.6	60.6	60.6	60.6	60.6	55.9
82.5°	51.3	42.0	46.7	42.0	46.7	46.7	42.0	37.3	37.3	42.0	37.3
85°	37.3	28.0	32.6	32.6	28.0	28.0	28.0	28.0	28.0	23.3	23.3
87.5°	23.3	14.0	14.0	14.0	18.6	18.6	18.6	14.0	18.6	18.6	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°	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8
2.5°	8701.8	8697.1	8706.5	8701.8	8701.8	8697.1	8701.8	8697.1	8706.5	8687.8	8692.5
5°	8701.8	8692.5	8697.1	8701.8	8706.5	8697.1	8697.1	8697.1	8706.5	8697.1	8701.8
7.5°	8683.1	8678.4	8692.5	8701.8	8697.1	8692.5	8701.8	8697.1	8706.5	8701.8	8711.1
10°	8645.8	8650.5	8659.8	8673.8	8678.4	8683.1	8692.5	8692.5	8706.5	8687.8	8697.1
12.5°	8589.9	8608.5	8631.9	8641.1	8659.8	8659.8	8669.2	8673.8	8683.1	8678.4	8692.5
15°	8519.9	8543.2	8571.2	8594.6	8617.8	8631.9	8645.8	8650.5	8664.5	8650.5	8655.2
17.5°	8436.0	8463.9	8505.9	8533.9	8571.2	8585.2	8603.8	8613.2	8627.2	8617.8	8622.5
20°	8319.3	8352.1	8398.6	8440.6	8463.9	8496.5	8519.9	8533.9	8543.2	8533.9	8538.5
22.5°	8156.2	8202.8	8263.4	8296.1	8342.7	8370.7	8375.4	8408.0	8431.3	8408.0	8417.4
25°	7964.9	8011.6	8058.3	8128.2	8170.2	8202.8	8235.5	8240.2	8263.4	8258.8	8254.1
27.5°	7647.8	7708.5	7787.7	7843.8	7899.7	7951.0	7988.3	7997.6	8021.0	8011.6	8016.3
30°	7214.1	7279.5	7354.1	7442.7	7522.0	7573.2	7619.9	7652.5	7675.8	7661.9	7657.2
32.5°	6598.6	6663.9	6743.2	6831.8	6925.1	6999.6	7055.6	7097.6	7125.6	7116.2	7092.9
35°	5894.5	5913.1	5964.5	6034.4	6113.6	6192.9	6244.2	6290.8	6323.4	6332.8	6332.8
37.5°	5171.7	5111.1	5073.8	5073.8	5120.3	5153.0	5199.6	5227.6	5278.9	5297.5	5311.6
40°	4472.1	4332.2	4201.7	4103.8	4038.5	4033.8	4033.8	4047.7	4094.4	4155.0	4211.0
42.5°	3847.3	3623.4	3422.9	3241.0	3110.5	3035.9	3003.2	3007.9	3045.2	3101.1	3194.4
45°	3348.3	3068.5	2816.7	2597.5	2420.3	2303.7	2247.7	2243.1	2271.0	2336.3	2439.0
47.5°	2961.2	2662.7	2378.3	2126.4	1935.3	1809.4	1744.1	1725.5	1744.1	1804.7	1926.0
50°	2639.5	2331.7	2037.9	1776.7	1571.6	1441.0	1380.3	1357.0	1380.3	1431.7	1552.8
52.5°	2341.0	2023.9	1748.8	1496.9	1277.7	1165.8	1100.5	1086.5	1100.5	1161.1	1259.1
55°	1995.9	1725.5	1454.9	1203.1	1012.0	900.1	848.7	834.8	848.7	904.7	1007.3
57.5°	1655.5	1422.3	1184.5	956.0	792.8	694.8	648.2	629.5	662.1	699.5	820.8
60°	1338.3	1151.9	951.3	750.8	615.6	526.9	489.6	484.9	494.3	541.0	624.8
62.5°	1049.3	895.4	736.8	573.6	461.7	424.4	377.7	373.1	382.4	410.3	475.7
65°	755.5	657.6	536.3	419.7	331.1	279.8	261.2	265.9	275.1	293.8	354.4
67.5°	526.9	457.0	373.1	293.8	228.5	205.2	186.6	181.9	186.6	219.2	251.8
70°	354.4	312.4	251.8	223.9	158.6	125.9	130.5	116.6	135.2	135.2	163.2
72.5°	233.1	205.2	167.8	130.5	111.9	88.7	88.7	84.0	93.2	97.9	121.3
75°	121.3	93.2	93.2	65.3	46.7	23.3	42.0	37.3	32.6	37.3	46.7
77.5°	84.0	69.9	65.3	51.3	46.7	37.3	37.3	37.3	37.3	42.0	46.7
80°	51.3	51.3	37.3	32.6	28.0	23.3	28.0	28.0	28.0	28.0	32.6
82.5°	32.6	28.0	28.0	23.3	23.3	18.6	18.6	18.6	18.6	18.6	28.0
85°	28.0	18.6	18.6	14.0	18.6	32.6	14.0	18.6	18.6	18.6	14.0
87.5°	9.4	14.0	14.0	14.0	9.4	4.7	9.4	14.0	14.0	23.3	18.6
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°	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8	8687.8
2.5°	8701.8	8706.5	8706.5	8701.8	8701.8	8692.5	8711.1	8697.1	8701.8	8720.4	8706.5
5°	8711.1	8715.7	8715.7	8711.1	8711.1	8711.1	8715.7	8715.7	8711.1	8706.5	8715.7
7.5°	8729.8	8725.1	8725.1	8715.7	8715.7	8706.5	8715.7	8701.8	8711.1	8701.8	8715.7
10°	8706.5	8711.1	8706.5	8701.8	8701.8	8697.1	8697.1	8683.1	8687.8	8673.8	8683.1
12.5°	8692.5	8687.8	8687.8	8678.4	8669.2	8659.8	8655.2	8641.1	8641.1	8608.5	8622.5
15°	8655.2	8659.8	8645.8	8627.2	8617.8	8594.6	8585.2	8566.5	8547.9	8524.6	8529.3
17.5°	8622.5	8608.5	8589.9	8571.2	8533.9	8515.3	8496.5	8468.6	8459.2	8431.3	8422.0
20°	8524.6	8515.3	8492.0	8459.2	8436.0	8394.0	8375.4	8347.4	8324.0	8296.1	8282.0
22.5°	8398.6	8389.3	8361.3	8328.7	8291.4	8272.8	8254.1	8202.8	8179.5	8151.5	8146.8
25°	8240.2	8226.1	8198.2	8160.9	8142.1	8090.9	8072.2	8034.9	8025.6	7997.6	7993.0
27.5°	7997.6	7979.0	7946.3	7899.7	7867.0	7834.4	7815.8	7787.7	7778.5	7750.4	7745.9
30°	7633.9	7610.5	7545.3	7526.7	7470.6	7438.0	7438.0	7400.7	7405.4	7386.8	7386.8
32.5°	7060.3	7023.0	6971.7	6934.3	6897.0	6878.4	6878.4	6864.4	6873.8	6873.8	6883.1
35°	6300.2	6248.9	6220.9	6197.6	6197.6	6216.2	6272.2	6286.2	6314.2	6337.5	6356.2
37.5°	5325.5	5320.9	5353.5	5381.5	5451.4	5530.7	5628.6	5712.6	5791.8	5847.8	5903.8
40°	4271.6	4388.2	4481.4	4612.1	4719.2	4873.2	5050.4	5194.9	5330.2	5428.2	5530.7
42.5°	3334.2	3483.5	3679.4	3870.5	4061.8	4271.6	4504.8	4705.3	4882.5	5017.7	5125.0
45°	2597.5	2802.6	3040.5	3283.0	3530.2	3791.3	4033.8	4239.0	4425.5	4565.4	4672.7
47.5°	2093.8	2317.7	2588.1	2854.0	3133.8	3408.9	3679.4	3856.6	4010.4	4122.4	4220.4
50°	1730.1	1968.0	2252.4	2555.5	2835.3	3110.5	3343.6	3516.1	3642.1	3740.0	3800.6
52.5°	1445.6	1697.4	2000.6	2303.7	2583.4	2835.3	3045.2	3175.7	3278.3	3348.3	3404.2
55°	1193.8	1436.3	1720.8	2005.3	2280.4	2518.2	2690.7	2788.7	2867.9	2909.9	2942.5
57.5°	974.7	1198.4	1459.6	1720.8	1958.6	2154.5	2289.7	2387.6	2424.9	2457.6	2452.9
60°	764.8	974.7	1212.5	1436.3	1641.5	1800.0	1898.0	1953.9	1981.9	1995.9	1986.6
62.5°	601.6	792.8	974.7	1170.5	1319.7	1454.9	1548.3	1548.3	1562.2	1566.9	1580.9
65°	447.6	592.2	750.8	895.4	1016.6	1105.2	1156.6	1170.5	1189.2	1184.5	1175.2
67.5°	331.1	438.4	554.9	662.1	746.1	802.0	839.4	872.1	867.4	858.1	853.4
70°	228.5	298.5	401.1	466.3	526.9	583.0	592.2	596.9	601.6	606.2	596.9
72.5°	158.6	209.8	265.9	321.8	359.1	382.4	405.8	410.3	410.3	410.3	405.8
75°	79.3	107.3	158.6	181.9	214.5	223.9	242.5	242.5	256.5	237.8	233.1
77.5°	69.9	84.0	111.9	130.5	144.6	158.6	163.2	177.2	172.5	163.2	167.8
80°	42.0	51.3	69.9	79.3	97.9	102.6	107.3	111.9	107.3	111.9	111.9
82.5°	32.6	37.3	46.7	46.7	60.6	60.6	65.3	65.3	69.9	69.9	69.9
85°	18.6	32.6	28.0	55.9	37.3	37.3	46.7	55.9	46.7	46.7	55.9
87.5°	18.6	18.6	14.0	18.6	18.6	18.6	23.3	28.0	28.0	32.6	28.0
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: P249106

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8687.8	8687.8	8687.8	8687.8
2.5°	8701.8	8711.1	8697.1	8692.5
5°	8715.7	8715.7	8706.5	8706.5
7.5°	8715.7	8715.7	8701.8	8692.5
10°	8678.4	8678.4	8664.5	8655.2
12.5°	8608.5	8608.5	8603.8	8589.9
15°	8519.9	8519.9	8501.2	8487.3
17.5°	8398.6	8408.0	8384.7	8384.7
20°	8268.1	8263.4	8244.8	8235.5
22.5°	8132.9	8123.5	8118.9	8090.9
25°	7988.3	7979.0	7964.9	7951.0
27.5°	7741.2	7736.5	7722.5	7703.9
30°	7363.4	7358.7	7340.1	7340.1
32.5°	6873.8	6869.1	6850.5	6855.2
35°	6365.4	6384.1	6374.8	6356.2
37.5°	5941.1	5955.1	5964.5	5955.1
40°	5586.7	5628.6	5633.3	5642.7
42.5°	5209.0	5264.9	5283.6	5292.8
45°	4756.6	4807.9	4849.9	4840.5
47.5°	4294.9	4332.2	4369.5	4341.6
50°	3851.9	3875.2	3889.2	3889.2
52.5°	3432.3	3432.3	3427.6	3432.3
55°	2951.9	2951.9	2933.3	2942.5
57.5°	2448.2	2457.6	2443.5	2420.3
60°	1981.9	1958.6	1949.2	1935.3
62.5°	1543.6	1543.6	1511.0	1552.8
65°	1156.6	1142.5	1128.5	1123.8
67.5°	839.4	834.8	820.8	816.1
70°	592.2	573.6	568.9	559.6
72.5°	396.4	396.4	387.0	387.0
75°	242.5	219.2	214.5	219.2
77.5°	167.8	163.2	163.2	158.6
80°	111.9	107.3	116.6	102.6
82.5°	69.9	74.6	69.9	74.6
85°	46.7	55.9	51.3	51.3
87.5°	28.0	28.0	28.0	28.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)