

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: P249367

Luminaire Tested: **LSR8B150D010 EC8B150935 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249367
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 EC8B150935 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13726.0 lumens
Efficiency: N/A
Efficacy: 86.6 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

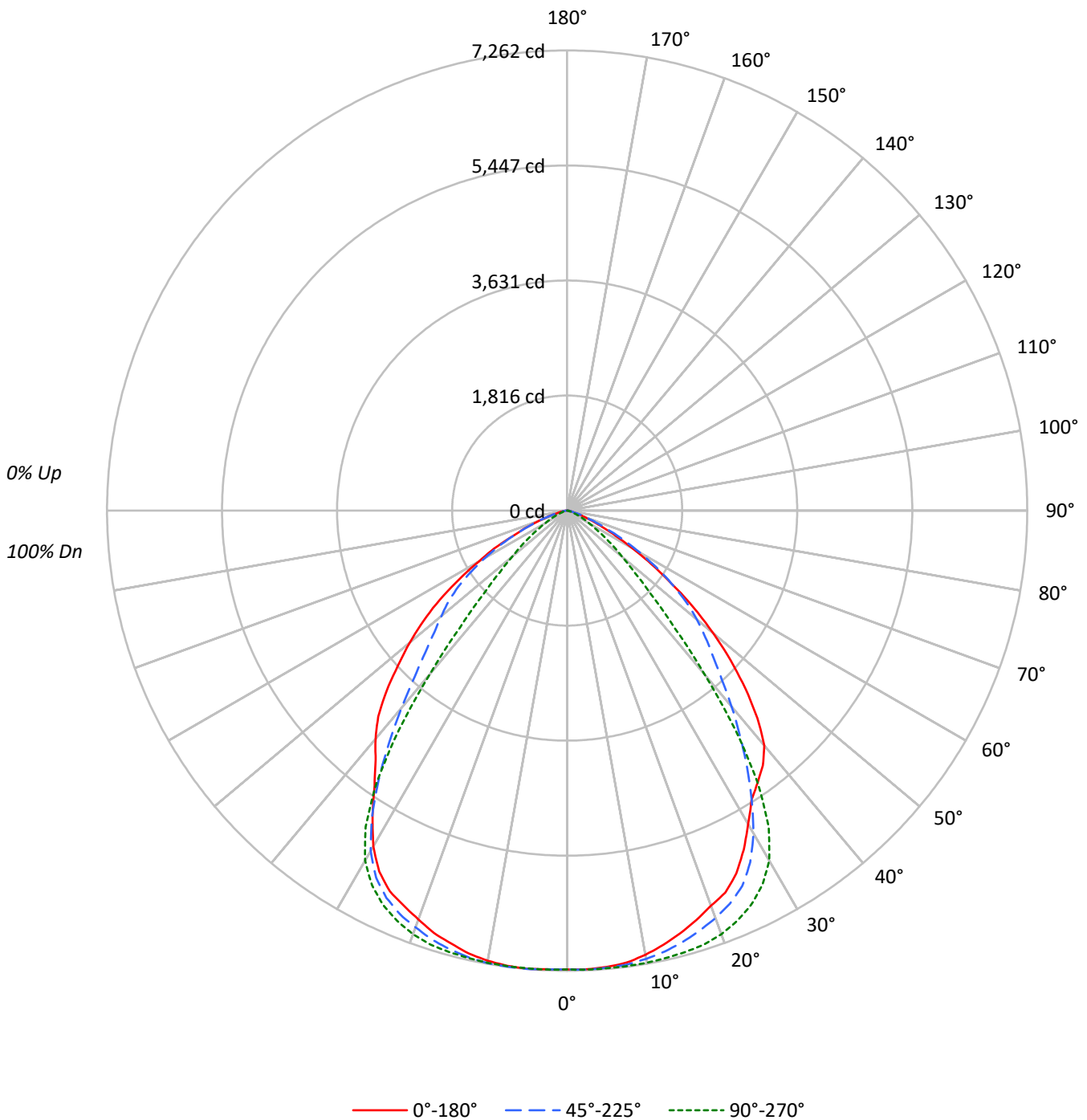
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	223320	223320	223320
5°	223811	224414	224656
10°	222870	226887	225913
15°	220401	230205	225863
20°	217753	233442	225280
25°	214927	233712	225508
30°	203332	227139	217867
35°	197263	197406	199458
40°	194817	135825	189343
45°	173591	81540	175967
50°	144341	54267	155533
55°	108254	37413	131872
60°	73360	24928	99496
65°	44253	16169	68354
70°	24532	8763	42059
75°	11116	3705	21767
80°	9660	4138	15183
85°	11003	5484	15143



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	691.2	5.0
10°-20°	2007.2	14.6
20°-30°	3046.6	22.2
30°-40°	3199.8	23.3
40°-50°	2399.0	17.5
50°-60°	1539.3	11.2
60°-70°	658.5	4.8
70°-80°	155.6	1.1
80°-90°	28.9	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°	5745.0	41.9
0°-40°	8944.8	65.2
0°-60°	12883.0	93.9
0°-90°	13726.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13726.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7242	7242	7242	7242	7242	
5°	7230	7242	7250	7262	7258	687
15°	6904	7048	7211	7164	7075	1947
25°	6317	6538	6869	6745	6628	2886
35°	5240	4949	5244	5182	5298	3289
45°	3981	3254	1870	3160	4035	3049
55°	2014	2014	696	2099	2453	1827
65°	606	715	222	921	937	647
75°	93	109	31	187	183	136
85°	31	19	16	31	43	33
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°	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1
2.5°	7246.0	7253.8	7249.9	7249.9	7246.0	7249.9	7249.9	7257.7	7257.7	7249.9	7246.0
5°	7230.4	7238.2	7238.2	7230.4	7230.4	7249.9	7238.2	7246.0	7246.0	7242.1	7242.1
7.5°	7195.5	7195.5	7211.0	7199.4	7199.4	7211.0	7207.1	7214.9	7222.7	7226.6	7226.6
10°	7117.7	7125.5	7129.4	7129.4	7133.3	7144.9	7152.7	7168.3	7176.0	7183.8	7187.7
12.5°	7020.6	7032.2	7036.1	7032.2	7043.9	7059.4	7078.9	7098.3	7110.0	7125.5	7137.2
15°	6903.9	6903.9	6911.7	6923.4	6931.2	6954.5	6973.9	6997.2	7028.3	7047.8	7067.2
17.5°	6775.7	6783.5	6795.1	6795.1	6810.7	6849.5	6861.2	6896.2	6931.2	6950.6	6989.5
20°	6635.7	6643.4	6655.1	6662.9	6682.3	6713.4	6736.8	6767.9	6806.8	6841.8	6880.6
22.5°	6526.8	6511.3	6519.0	6526.8	6546.3	6573.5	6600.7	6639.5	6678.4	6713.4	6752.3
25°	6316.9	6320.8	6332.5	6340.2	6363.6	6386.9	6418.0	6464.6	6499.6	6538.5	6581.2
27.5°	6033.2	6037.1	6056.5	6056.5	6075.9	6114.8	6134.2	6173.1	6219.8	6258.6	6309.2
30°	5710.5	5718.2	5718.2	5733.8	5745.4	5764.9	5784.3	5823.2	5846.6	5881.6	5951.6
32.5°	5415.1	5422.8	5418.9	5415.1	5403.4	5399.5	5395.6	5403.4	5411.2	5422.8	5450.0
35°	5240.2	5220.7	5205.2	5178.0	5146.9	5108.0	5073.0	5026.4	4983.6	4948.6	4909.7
37.5°	5073.0	5069.1	5045.8	5006.9	4944.7	4874.7	4793.1	4692.0	4590.9	4482.1	4377.2
40°	4839.7	4828.0	4808.6	4754.2	4684.2	4598.7	4489.9	4365.5	4202.2	4035.1	3864.0
42.5°	4443.2	4447.1	4423.8	4381.0	4315.0	4233.3	4120.6	3984.5	3809.6	3611.3	3389.8
45°	3980.6	3980.6	3972.8	3937.8	3891.2	3825.1	3739.6	3626.9	3455.9	3253.7	3016.5
47.5°	3498.6	3502.5	3490.8	3483.1	3463.6	3420.9	3358.7	3273.2	3152.6	2958.2	2721.1
50°	3008.8	3008.8	3028.2	3024.3	3024.3	3008.8	2981.6	2931.0	2826.1	2670.6	2449.1
52.5°	2519.0	2526.8	2538.5	2554.0	2573.4	2604.5	2573.4	2550.1	2484.0	2363.5	2173.0
55°	2013.6	2021.4	2040.8	2068.0	2091.4	2122.5	2130.2	2130.2	2095.2	2013.6	1869.8
57.5°	1582.2	1570.5	1586.1	1609.4	1640.5	1671.6	1694.9	1722.1	1718.2	1663.8	1547.2
60°	1189.5	1193.4	1205.0	1228.4	1251.7	1278.9	1310.0	1333.3	1345.0	1317.8	1243.9
62.5°	866.9	866.9	882.4	905.7	917.4	956.3	975.7	987.4	999.0	995.1	948.5
65°	606.5	614.2	622.0	633.7	645.3	668.6	680.3	703.6	711.4	715.3	680.3
67.5°	427.6	415.9	423.7	431.5	443.2	458.7	482.1	482.1	493.7	493.7	470.4
70°	272.1	272.1	276.0	287.6	295.4	299.3	307.1	314.8	326.5	322.6	322.6
72.5°	182.7	178.8	182.7	186.6	190.5	202.1	202.1	206.0	213.8	217.7	202.1
75°	93.3	97.2	104.9	101.1	112.7	104.9	108.8	120.5	116.6	108.8	108.8
77.5°	77.7	77.7	77.7	73.9	81.6	81.6	77.7	85.5	81.6	81.6	77.7
80°	54.4	58.3	54.4	50.5	54.4	50.5	50.5	50.5	50.5	50.5	46.6
82.5°	42.8	35.0	38.9	35.0	38.9	38.9	35.0	31.1	31.1	35.0	31.1
85°	31.1	23.3	27.2	27.2	23.3	23.3	23.3	23.3	23.3	19.4	19.4
87.5°	19.4	11.7	11.7	11.7	15.5	15.5	15.5	11.7	15.5	15.5	7.8
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°	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1
2.5°	7253.8	7249.9	7257.7	7253.8	7253.8	7249.9	7253.8	7249.9	7257.7	7242.1	7246.0
5°	7253.8	7246.0	7249.9	7253.8	7257.7	7249.9	7249.9	7249.9	7257.7	7249.9	7253.8
7.5°	7238.2	7234.3	7246.0	7253.8	7249.9	7246.0	7253.8	7249.9	7257.7	7253.8	7261.5
10°	7207.1	7211.0	7218.8	7230.4	7234.3	7238.2	7246.0	7246.0	7257.7	7242.1	7249.9
12.5°	7160.5	7176.0	7195.5	7203.2	7218.8	7218.8	7226.6	7230.4	7238.2	7234.3	7246.0
15°	7102.2	7121.6	7144.9	7164.4	7183.8	7195.5	7207.1	7211.0	7222.7	7211.0	7214.9
17.5°	7032.2	7055.5	7090.5	7113.8	7144.9	7156.6	7172.1	7179.9	7191.6	7183.8	7187.7
20°	6935.0	6962.3	7001.1	7036.1	7055.5	7082.7	7102.2	7113.8	7121.6	7113.8	7117.7
22.5°	6799.0	6837.9	6888.4	6915.6	6954.5	6977.8	6981.7	7008.9	7028.3	7008.9	7016.7
25°	6639.5	6678.4	6717.3	6775.7	6810.7	6837.9	6865.1	6869.0	6888.4	6884.5	6880.6
27.5°	6375.2	6425.8	6491.8	6538.5	6585.1	6627.9	6659.0	6666.7	6686.2	6678.4	6682.3
30°	6013.7	6068.2	6130.4	6204.2	6270.3	6313.0	6351.9	6379.1	6398.5	6386.9	6383.0
32.5°	5500.6	5555.0	5621.1	5694.9	5772.7	5834.9	5881.6	5916.6	5939.9	5932.1	5912.7
35°	4913.6	4929.1	4971.9	5030.3	5096.3	5162.4	5205.2	5244.0	5271.2	5279.0	5279.0
37.5°	4311.1	4260.6	4229.5	4229.5	4268.3	4295.5	4334.4	4357.7	4400.5	4416.0	4427.7
40°	3727.9	3611.3	3502.5	3420.9	3366.5	3362.6	3362.6	3374.2	3413.1	3463.6	3510.3
42.5°	3207.1	3020.4	2853.3	2701.7	2592.9	2530.7	2503.5	2507.4	2538.5	2585.1	2662.8
45°	2791.1	2557.9	2348.0	2165.2	2017.5	1920.3	1873.7	1869.8	1893.1	1947.5	2033.1
47.5°	2468.5	2219.6	1982.5	1772.6	1613.3	1508.3	1453.9	1438.4	1453.9	1504.4	1605.5
50°	2200.2	1943.7	1698.8	1481.1	1310.0	1201.2	1150.6	1131.2	1150.6	1193.4	1294.4
52.5°	1951.4	1687.1	1457.8	1247.8	1065.1	971.8	917.4	905.7	917.4	967.9	1049.6
55°	1663.8	1438.4	1212.8	1002.9	843.6	750.3	707.5	695.9	707.5	754.2	839.7
57.5°	1380.0	1185.6	987.4	796.9	660.9	579.2	540.4	524.8	552.0	583.1	684.2
60°	1115.6	960.2	793.0	625.9	513.2	439.3	408.1	404.2	412.0	450.9	520.9
62.5°	874.7	746.4	614.2	478.2	384.8	353.7	314.8	311.0	318.7	342.0	396.5
65°	629.8	548.2	447.0	349.8	276.0	233.2	217.7	221.6	229.3	244.9	295.4
67.5°	439.3	380.9	311.0	244.9	190.5	171.0	155.5	151.6	155.5	182.7	209.9
70°	295.4	260.4	209.9	186.6	132.2	104.9	108.8	97.2	112.7	112.7	136.0
72.5°	194.3	171.0	139.9	108.8	93.3	73.9	73.9	70.0	77.7	81.6	101.1
75°	101.1	77.7	77.7	54.4	38.9	19.4	35.0	31.1	27.2	31.1	38.9
77.5°	70.0	58.3	54.4	42.8	38.9	31.1	31.1	31.1	31.1	35.0	38.9
80°	42.8	42.8	31.1	27.2	23.3	19.4	23.3	23.3	23.3	23.3	27.2
82.5°	27.2	23.3	23.3	19.4	19.4	15.5	15.5	15.5	15.5	15.5	23.3
85°	23.3	15.5	15.5	11.7	15.5	27.2	11.7	15.5	15.5	15.5	11.7
87.5°	7.8	11.7	11.7	11.7	7.8	3.9	7.8	11.7	11.7	19.4	15.5
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°	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1	7242.1
2.5°	7253.8	7257.7	7257.7	7253.8	7253.8	7246.0	7261.5	7249.9	7253.8	7269.3	7257.7
5°	7261.5	7265.4	7265.4	7261.5	7261.5	7261.5	7265.4	7265.4	7261.5	7257.7	7265.4
7.5°	7277.1	7273.2	7273.2	7265.4	7265.4	7257.7	7265.4	7253.8	7261.5	7253.8	7265.4
10°	7257.7	7261.5	7257.7	7253.8	7253.8	7249.9	7249.9	7238.2	7242.1	7230.4	7238.2
12.5°	7246.0	7242.1	7242.1	7234.3	7226.6	7218.8	7214.9	7203.2	7203.2	7176.0	7187.7
15°	7214.9	7218.8	7207.1	7191.6	7183.8	7164.4	7156.6	7141.0	7125.5	7106.1	7110.0
17.5°	7187.7	7176.0	7160.5	7144.9	7113.8	7098.3	7082.7	7059.4	7051.6	7028.3	7020.6
20°	7106.1	7098.3	7078.9	7051.6	7032.2	6997.2	6981.7	6958.4	6938.9	6915.6	6903.9
22.5°	7001.1	6993.3	6970.0	6942.8	6911.7	6896.2	6880.6	6837.9	6818.4	6795.1	6791.2
25°	6869.0	6857.3	6834.0	6802.9	6787.3	6744.6	6729.0	6697.9	6690.1	6666.7	6662.9
27.5°	6666.7	6651.2	6624.0	6585.1	6557.9	6530.7	6515.2	6491.8	6484.1	6460.7	6456.9
30°	6363.6	6344.1	6289.7	6274.2	6227.5	6200.3	6200.3	6169.2	6173.1	6157.6	6157.6
32.5°	5885.5	5854.4	5811.6	5780.4	5749.3	5733.8	5733.8	5722.1	5729.9	5729.9	5737.7
35°	5251.8	5209.1	5185.7	5166.3	5166.3	5181.8	5228.5	5240.2	5263.5	5282.9	5298.5
37.5°	4439.3	4435.5	4462.7	4486.0	4544.3	4610.4	4692.0	4762.0	4828.0	4874.7	4921.4
40°	3560.8	3658.0	3735.7	3844.6	3933.9	4062.3	4210.0	4330.5	4443.2	4524.9	4610.4
42.5°	2779.4	2903.8	3067.1	3226.5	3385.9	3560.8	3755.2	3922.3	4070.1	4182.8	4272.2
45°	2165.2	2336.3	2534.6	2736.7	2942.7	3160.4	3362.6	3533.6	3689.1	3805.7	3895.1
47.5°	1745.4	1932.0	2157.4	2379.1	2612.3	2841.6	3067.1	3214.9	3343.1	3436.4	3518.1
50°	1442.2	1640.5	1877.6	2130.2	2363.5	2592.9	2787.2	2931.0	3036.0	3117.6	3168.2
52.5°	1205.0	1415.0	1667.7	1920.3	2153.5	2363.5	2538.5	2647.3	2732.8	2791.1	2837.7
55°	995.1	1197.3	1434.5	1671.6	1900.9	2099.1	2243.0	2324.7	2390.7	2425.7	2452.9
57.5°	812.5	999.0	1216.7	1434.5	1632.7	1796.0	1908.7	1990.3	2021.4	2048.6	2044.7
60°	637.6	812.5	1010.7	1197.3	1368.4	1500.5	1582.2	1628.8	1652.1	1663.8	1656.0
62.5°	501.5	660.9	812.5	975.7	1100.1	1212.8	1290.6	1290.6	1302.2	1306.1	1317.8
65°	373.1	493.7	625.9	746.4	847.4	921.3	964.1	975.7	991.3	987.4	979.6
67.5°	276.0	365.4	462.6	552.0	622.0	668.6	699.7	727.0	723.1	715.3	711.4
70°	190.5	248.8	334.3	388.7	439.3	486.0	493.7	497.6	501.5	505.4	497.6
72.5°	132.2	174.9	221.6	268.2	299.3	318.7	338.2	342.0	342.0	342.0	338.2
75°	66.1	89.4	132.2	151.6	178.8	186.6	202.1	202.1	213.8	198.2	194.3
77.5°	58.3	70.0	93.3	108.8	120.5	132.2	136.0	147.7	143.8	136.0	139.9
80°	35.0	42.8	58.3	66.1	81.6	85.5	89.4	93.3	89.4	93.3	93.3
82.5°	27.2	31.1	38.9	38.9	50.5	50.5	54.4	54.4	58.3	58.3	58.3
85°	15.5	27.2	23.3	46.6	31.1	31.1	38.9	46.6	38.9	38.9	46.6
87.5°	15.5	15.5	11.7	15.5	15.5	15.5	19.4	23.3	23.3	27.2	23.3
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: P249367

CATALOG NUMBER: LSR8B150D010 EC8B150935 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7242.1	7242.1	7242.1	7242.1
2.5°	7253.8	7261.5	7249.9	7246.0
5°	7265.4	7265.4	7257.7	7257.7
7.5°	7265.4	7265.4	7253.8	7246.0
10°	7234.3	7234.3	7222.7	7214.9
12.5°	7176.0	7176.0	7172.1	7160.5
15°	7102.2	7102.2	7086.6	7075.0
17.5°	7001.1	7008.9	6989.5	6989.5
20°	6892.3	6888.4	6872.9	6865.1
22.5°	6779.6	6771.8	6767.9	6744.6
25°	6659.0	6651.2	6639.5	6627.9
27.5°	6453.0	6449.1	6437.4	6421.9
30°	6138.1	6134.2	6118.7	6118.7
32.5°	5729.9	5726.0	5710.5	5714.4
35°	5306.2	5321.8	5314.0	5298.5
37.5°	4952.5	4964.2	4971.9	4964.2
40°	4657.0	4692.0	4695.9	4703.7
42.5°	4342.2	4388.8	4404.4	4412.1
45°	3965.0	4007.8	4042.8	4035.1
47.5°	3580.2	3611.3	3642.4	3619.1
50°	3211.0	3230.4	3242.1	3242.1
52.5°	2861.1	2861.1	2857.2	2861.1
55°	2460.7	2460.7	2445.2	2452.9
57.5°	2040.8	2048.6	2036.9	2017.5
60°	1652.1	1632.7	1624.9	1613.3
62.5°	1286.7	1286.7	1259.5	1294.4
65°	964.1	952.4	940.7	936.8
67.5°	699.7	695.9	684.2	680.3
70°	493.7	478.2	474.3	466.5
72.5°	330.4	330.4	322.6	322.6
75°	202.1	182.7	178.8	182.7
77.5°	139.9	136.0	136.0	132.2
80°	93.3	89.4	97.2	85.5
82.5°	58.3	62.2	58.3	62.2
85°	38.9	46.6	42.8	42.8
87.5°	23.3	23.3	23.3	23.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)