

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: P249151

Luminaire Tested: **LSR8B150D010 EC8B150935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249151
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14042.0 lumens
Efficiency: N/A
Efficacy: 88.6 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

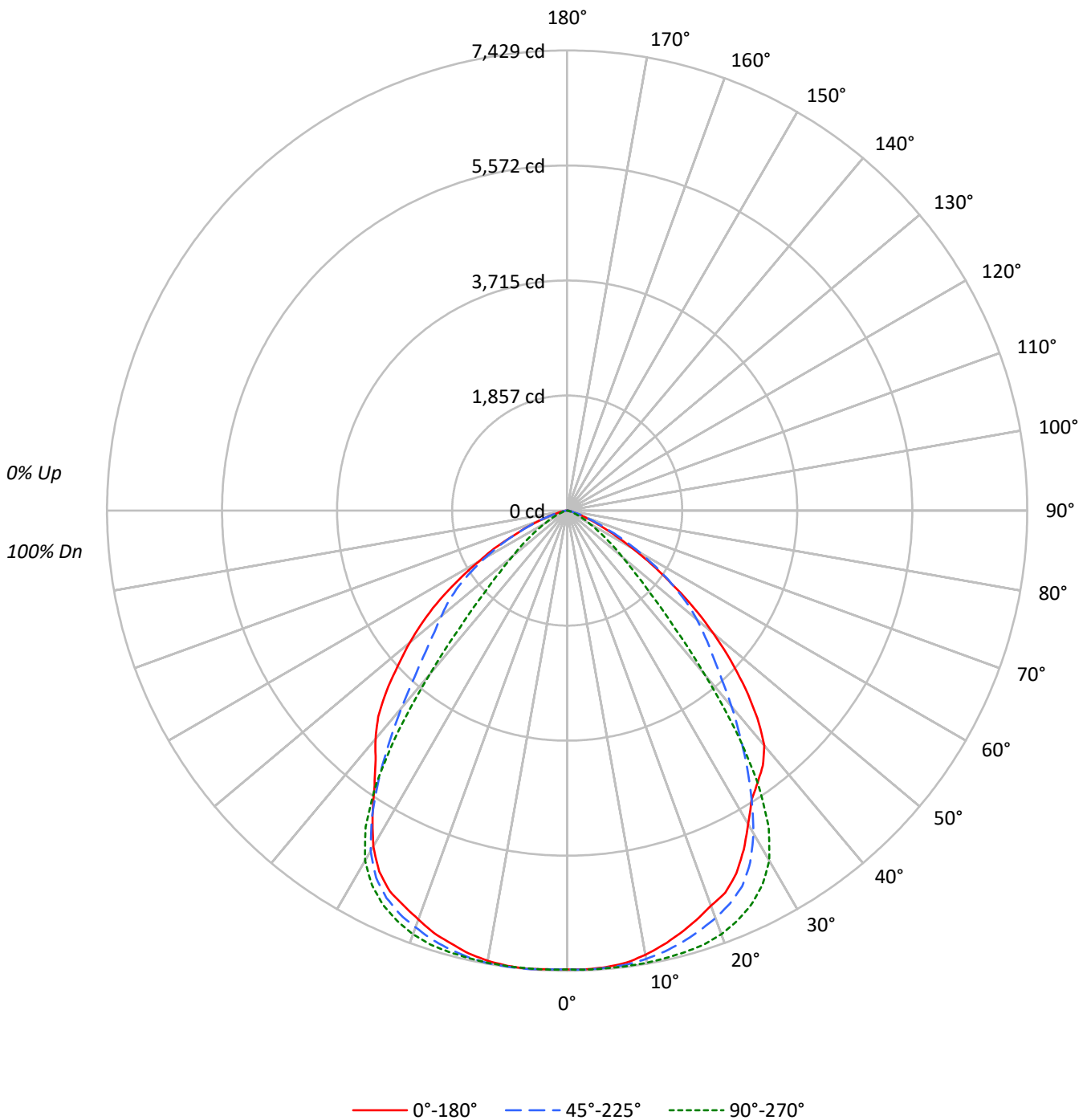
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	228460	228460	228460
5°	228964	229580	229828
10°	228002	232110	231114
15°	225474	235504	231063
20°	222767	238817	230465
25°	219874	239091	230700
30°	208014	232369	222880
35°	201803	201950	204050
40°	199305	138953	193702
45°	177589	83420	180014
50°	147665	55519	159111
55°	110749	38273	134904
60°	75049	25508	101785
65°	45267	16541	69930
70°	25100	8962	43024
75°	11378	3789	22268
80°	9891	4226	15538
85°	11251	5626	15497



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	707.1	5.0
10°-20°	2053.4	14.6
20°-30°	3116.7	22.2
30°-40°	3273.5	23.3
40°-50°	2454.2	17.5
50°-60°	1574.7	11.2
60°-70°	673.6	4.8
70°-80°	159.1	1.1
80°-90°	29.6	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°	5877.2	41.9
0°-40°	9150.7	65.2
0°-60°	13179.6	93.9
0°-90°	14042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14042.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7409	7409	7409	7409	7409	
5°	7397	7409	7417	7429	7425	703
15°	7063	7210	7377	7329	7238	1992
25°	6462	6689	7027	6900	6780	2952
35°	5361	5062	5365	5301	5420	3365
45°	4072	3329	1913	3233	4128	3119
55°	2060	2060	712	2148	2509	1869
65°	620	732	227	942	958	662
75°	96	111	32	191	187	139
85°	32	20	16	32	44	34
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°	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8
2.5°	7412.8	7420.8	7416.8	7416.8	7412.8	7416.8	7416.8	7424.8	7424.8	7416.8	7412.8
5°	7396.9	7404.8	7404.8	7396.9	7396.9	7416.8	7404.8	7412.8	7412.8	7408.8	7408.8
7.5°	7361.2	7361.2	7377.0	7365.1	7365.1	7377.0	7373.0	7381.0	7389.0	7393.0	7393.0
10°	7281.6	7289.5	7293.5	7293.5	7297.5	7309.4	7317.4	7333.3	7341.2	7349.2	7353.2
12.5°	7182.2	7194.1	7198.1	7194.1	7206.0	7221.9	7241.9	7261.7	7273.7	7289.5	7301.5
15°	7062.8	7062.8	7070.8	7082.8	7090.7	7114.6	7134.4	7158.3	7190.1	7210.0	7229.9
17.5°	6931.6	6939.6	6951.5	6951.5	6967.5	7007.2	7019.1	7054.9	7090.7	7110.6	7150.4
20°	6788.5	6796.4	6808.4	6816.3	6836.2	6868.0	6891.8	6923.7	6963.5	6999.3	7039.0
22.5°	6677.1	6661.2	6669.1	6677.1	6697.0	6724.9	6752.7	6792.4	6832.2	6868.0	6907.8
25°	6462.3	6466.3	6478.3	6486.2	6510.1	6534.0	6565.8	6613.5	6649.3	6689.1	6732.7
27.5°	6172.1	6176.1	6195.9	6195.9	6215.8	6255.6	6275.4	6315.2	6363.0	6402.7	6454.4
30°	5842.0	5849.9	5849.9	5865.8	5877.7	5897.7	5917.5	5957.3	5981.2	6017.0	6088.6
32.5°	5539.8	5547.7	5543.7	5539.8	5527.8	5523.8	5519.8	5527.8	5535.8	5547.7	5575.5
35°	5360.8	5340.9	5325.0	5297.2	5265.4	5225.6	5189.8	5142.1	5098.3	5062.5	5022.8
37.5°	5189.8	5185.8	5161.9	5122.1	5058.5	4987.0	4903.5	4800.0	4696.6	4585.3	4478.0
40°	4951.2	4939.2	4919.3	4863.7	4792.1	4704.6	4593.3	4466.0	4298.9	4127.9	3953.0
42.5°	4545.5	4549.5	4525.6	4481.9	4414.3	4330.7	4215.4	4076.3	3897.3	3694.4	3467.8
45°	4072.3	4072.3	4064.3	4028.5	3980.8	3913.2	3825.7	3710.4	3535.4	3328.6	3086.0
47.5°	3579.1	3583.1	3571.2	3563.3	3543.3	3499.6	3436.0	3348.5	3225.2	3026.3	2783.8
50°	3078.1	3078.1	3098.0	3094.0	3094.0	3078.1	3050.3	2998.5	2891.2	2732.1	2505.5
52.5°	2577.0	2585.0	2596.9	2612.8	2632.6	2664.5	2632.6	2608.8	2541.2	2417.9	2223.1
55°	2060.0	2068.0	2087.8	2115.6	2139.6	2171.4	2179.3	2179.3	2143.5	2060.0	1912.9
57.5°	1618.6	1606.6	1622.6	1646.4	1678.2	1710.1	1733.9	1761.7	1757.7	1702.1	1582.8
60°	1216.9	1220.9	1232.8	1256.7	1280.6	1308.4	1340.2	1364.0	1376.0	1348.2	1272.6
62.5°	886.9	886.9	902.7	926.6	938.5	978.3	998.2	1010.1	1022.0	1018.0	970.3
65°	620.4	628.3	636.3	648.3	660.1	684.0	695.9	719.8	727.8	731.7	695.9
67.5°	437.5	425.5	433.5	441.4	453.4	469.3	493.1	493.1	505.0	505.0	481.2
70°	278.4	278.4	282.4	294.3	302.2	306.2	314.2	322.1	334.1	330.1	330.1
72.5°	186.9	182.9	186.9	190.9	194.9	206.8	206.8	210.8	218.7	222.7	206.8
75°	95.5	99.4	107.3	103.4	115.3	107.3	111.3	123.3	119.3	111.3	111.3
77.5°	79.5	79.5	79.5	75.6	83.5	83.5	79.5	87.5	83.5	83.5	79.5
80°	55.7	59.6	55.7	51.7	55.7	51.7	51.7	51.7	51.7	51.7	47.7
82.5°	43.8	35.8	39.8	35.8	39.8	39.8	35.8	31.8	31.8	35.8	31.8
85°	31.8	23.8	27.8	27.8	23.8	23.8	23.8	23.8	23.8	19.9	19.9
87.5°	19.9	12.0	12.0	12.0	15.9	15.9	15.9	12.0	15.9	15.9	8.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8
2.5°	7420.8	7416.8	7424.8	7420.8	7420.8	7416.8	7420.8	7416.8	7424.8	7408.8	7412.8
5°	7420.8	7412.8	7416.8	7420.8	7424.8	7416.8	7416.8	7416.8	7424.8	7416.8	7420.8
7.5°	7404.8	7400.9	7412.8	7420.8	7416.8	7412.8	7420.8	7416.8	7424.8	7420.8	7428.7
10°	7373.0	7377.0	7385.0	7396.9	7400.9	7404.8	7412.8	7412.8	7424.8	7408.8	7416.8
12.5°	7325.3	7341.2	7361.2	7369.0	7385.0	7385.0	7393.0	7396.9	7404.8	7400.9	7412.8
15°	7265.7	7285.5	7309.4	7329.3	7349.2	7361.2	7373.0	7377.0	7389.0	7377.0	7381.0
17.5°	7194.1	7217.9	7253.7	7277.6	7309.4	7321.4	7337.2	7345.2	7357.2	7349.2	7353.2
20°	7094.6	7122.6	7162.3	7198.1	7217.9	7245.8	7265.7	7277.6	7285.5	7277.6	7281.6
22.5°	6955.5	6995.3	7047.0	7074.8	7114.6	7138.4	7142.4	7170.2	7190.1	7170.2	7178.2
25°	6792.4	6832.2	6872.0	6931.6	6967.5	6995.3	7023.1	7027.1	7047.0	7043.0	7039.0
27.5°	6522.0	6573.7	6641.3	6689.1	6736.7	6780.5	6812.3	6820.2	6840.2	6832.2	6836.2
30°	6152.1	6207.9	6271.5	6347.0	6414.7	6458.3	6498.1	6526.0	6545.8	6534.0	6530.0
32.5°	5627.2	5682.9	5750.5	5826.0	5905.6	5969.2	6017.0	6052.8	6076.6	6068.6	6048.8
35°	5026.8	5042.6	5086.4	5146.1	5213.6	5281.2	5325.0	5364.7	5392.5	5400.5	5400.5
37.5°	4410.3	4358.7	4326.8	4326.8	4366.5	4394.4	4434.2	4458.0	4501.8	4517.7	4529.6
40°	3813.7	3694.4	3583.1	3499.6	3444.0	3440.0	3440.0	3451.9	3491.7	3543.3	3591.1
42.5°	3280.9	3090.0	2919.0	2763.9	2652.6	2588.9	2561.1	2565.1	2596.9	2644.6	2724.1
45°	2855.4	2616.8	2402.0	2215.1	2064.0	1964.5	1916.8	1912.9	1936.7	1992.4	2079.9
47.5°	2525.3	2270.8	2028.2	1813.4	1650.4	1543.0	1487.3	1471.5	1487.3	1539.0	1642.4
50°	2250.9	1988.5	1737.9	1515.2	1340.2	1228.9	1177.1	1157.3	1177.1	1220.9	1324.2
52.5°	1996.3	1725.9	1491.3	1276.6	1089.6	994.2	938.5	926.6	938.5	990.2	1073.8
55°	1702.1	1471.5	1240.8	1026.0	863.0	767.6	723.8	711.9	723.8	771.5	859.0
57.5°	1411.8	1212.9	1010.1	815.2	676.1	592.5	552.8	536.8	564.7	596.5	699.9
60°	1141.3	982.3	811.2	640.3	525.0	449.4	417.5	413.6	421.5	461.3	532.9
62.5°	894.8	763.6	628.3	489.2	393.7	361.9	322.1	318.2	326.1	349.9	405.7
65°	644.3	560.8	457.3	357.9	282.4	238.6	222.7	226.7	234.6	250.6	302.2
67.5°	449.4	389.7	318.2	250.6	194.9	175.0	159.1	155.1	159.1	186.9	214.8
70°	302.2	266.4	214.8	190.9	135.3	107.3	111.3	99.4	115.3	115.3	139.2
72.5°	198.8	175.0	143.1	111.3	95.5	75.6	75.6	71.6	79.5	83.5	103.4
75°	103.4	79.5	79.5	55.7	39.8	19.9	35.8	31.8	27.8	31.8	39.8
77.5°	71.6	59.6	55.7	43.8	39.8	31.8	31.8	31.8	31.8	35.8	39.8
80°	43.8	43.8	31.8	27.8	23.8	19.9	23.8	23.8	23.8	23.8	27.8
82.5°	27.8	23.8	23.8	19.9	19.9	15.9	15.9	15.9	15.9	15.9	23.8
85°	23.8	15.9	15.9	12.0	15.9	27.8	12.0	15.9	15.9	15.9	12.0
87.5°	8.0	12.0	12.0	12.0	8.0	4.0	8.0	12.0	12.0	19.9	15.9
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°	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8	7408.8
2.5°	7420.8	7424.8	7424.8	7420.8	7420.8	7412.8	7428.7	7416.8	7420.8	7436.7	7424.8
5°	7428.7	7432.7	7432.7	7428.7	7428.7	7428.7	7432.7	7432.7	7428.7	7424.8	7432.7
7.5°	7444.6	7440.7	7440.7	7432.7	7432.7	7424.8	7432.7	7420.8	7428.7	7420.8	7432.7
10°	7424.8	7428.7	7424.8	7420.8	7420.8	7416.8	7416.8	7404.8	7408.8	7396.9	7404.8
12.5°	7412.8	7408.8	7408.8	7400.9	7393.0	7385.0	7381.0	7369.0	7369.0	7341.2	7353.2
15°	7381.0	7385.0	7373.0	7357.2	7349.2	7329.3	7321.4	7305.4	7289.5	7269.7	7273.7
17.5°	7353.2	7341.2	7325.3	7309.4	7277.6	7261.7	7245.8	7221.9	7213.9	7190.1	7182.2
20°	7269.7	7261.7	7241.9	7213.9	7194.1	7158.3	7142.4	7118.6	7098.6	7074.8	7062.8
22.5°	7162.3	7154.3	7130.4	7102.6	7070.8	7054.9	7039.0	6995.3	6975.3	6951.5	6947.5
25°	7027.1	7015.1	6991.3	6959.5	6943.5	6899.8	6883.9	6852.0	6844.2	6820.2	6816.3
27.5°	6820.2	6804.4	6776.5	6736.7	6708.9	6681.1	6665.2	6641.3	6633.4	6609.5	6605.6
30°	6510.1	6490.2	6434.5	6418.6	6370.9	6343.0	6343.0	6311.2	6315.2	6299.3	6299.3
32.5°	6020.9	5989.1	5945.3	5913.5	5881.7	5865.8	5865.8	5853.9	5861.9	5861.9	5869.8
35°	5372.7	5329.0	5305.1	5285.2	5285.2	5301.1	5348.9	5360.8	5384.7	5404.5	5420.5
37.5°	4541.5	4537.6	4565.4	4589.3	4648.9	4716.6	4800.0	4871.7	4939.2	4987.0	5034.7
40°	3642.8	3742.2	3821.7	3933.1	4024.5	4155.8	4306.9	4430.2	4545.5	4629.1	4716.6
42.5°	2843.4	2970.7	3137.8	3300.7	3463.8	3642.8	3841.7	4012.6	4163.8	4279.1	4370.5
45°	2215.1	2390.0	2592.9	2799.7	3010.5	3233.2	3440.0	3614.9	3774.0	3893.3	3984.8
47.5°	1785.6	1976.5	2207.1	2433.8	2672.4	2907.0	3137.8	3288.9	3420.0	3515.5	3599.1
50°	1475.4	1678.2	1920.8	2179.3	2417.9	2652.6	2851.4	2998.5	3105.9	3189.4	3241.1
52.5°	1232.8	1447.5	1706.1	1964.5	2203.1	2417.9	2596.9	2708.2	2795.7	2855.4	2903.1
55°	1018.0	1224.9	1467.5	1710.1	1944.7	2147.5	2294.6	2378.2	2445.7	2481.5	2509.3
57.5°	831.2	1022.0	1244.7	1467.5	1670.3	1837.3	1952.7	2036.1	2068.0	2095.8	2091.8
60°	652.2	831.2	1034.0	1224.9	1399.9	1535.0	1618.6	1666.3	1690.1	1702.1	1694.1
62.5°	513.0	676.1	831.2	998.2	1125.4	1240.8	1320.4	1320.4	1332.2	1336.2	1348.2
65°	381.7	505.0	640.3	763.6	866.9	942.5	986.3	998.2	1014.1	1010.1	1002.2
67.5°	282.4	373.9	473.2	564.7	636.3	684.0	715.8	743.7	739.7	731.7	727.8
70°	194.9	254.6	342.0	397.7	449.4	497.1	505.0	509.0	513.0	517.0	509.0
72.5°	135.3	178.9	226.7	274.4	306.2	326.1	346.0	349.9	349.9	349.9	346.0
75°	67.6	91.5	135.3	155.1	182.9	190.9	206.8	206.8	218.7	202.8	198.8
77.5°	59.6	71.6	95.5	111.3	123.3	135.3	139.2	151.1	147.1	139.2	143.1
80°	35.8	43.8	59.6	67.6	83.5	87.5	91.5	95.5	91.5	95.5	95.5
82.5°	27.8	31.8	39.8	39.8	51.7	51.7	55.7	55.7	59.6	59.6	59.6
85°	15.9	27.8	23.8	47.7	31.8	31.8	39.8	47.7	39.8	39.8	47.7
87.5°	15.9	15.9	12.0	15.9	15.9	15.9	19.9	23.8	23.8	27.8	23.8
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: P249151

CATALOG NUMBER: LSR8B150D010 EC8B150935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7408.8	7408.8	7408.8	7408.8
2.5°	7420.8	7428.7	7416.8	7412.8
5°	7432.7	7432.7	7424.8	7424.8
7.5°	7432.7	7432.7	7420.8	7412.8
10°	7400.9	7400.9	7389.0	7381.0
12.5°	7341.2	7341.2	7337.2	7325.3
15°	7265.7	7265.7	7249.7	7237.9
17.5°	7162.3	7170.2	7150.4	7150.4
20°	7050.9	7047.0	7031.1	7023.1
22.5°	6935.6	6927.7	6923.7	6899.8
25°	6812.3	6804.4	6792.4	6780.5
27.5°	6601.6	6597.6	6585.6	6569.8
30°	6279.4	6275.4	6259.5	6259.5
32.5°	5861.9	5857.9	5842.0	5846.0
35°	5428.4	5444.3	5436.3	5420.5
37.5°	5066.5	5078.4	5086.4	5078.4
40°	4764.2	4800.0	4804.0	4812.0
42.5°	4442.1	4489.8	4505.8	4513.7
45°	4056.3	4100.1	4135.9	4127.9
47.5°	3662.6	3694.4	3726.3	3702.4
50°	3284.9	3304.7	3316.7	3316.7
52.5°	2927.0	2927.0	2923.0	2927.0
55°	2517.3	2517.3	2501.5	2509.3
57.5°	2087.8	2095.8	2083.8	2064.0
60°	1690.1	1670.3	1662.3	1650.4
62.5°	1316.4	1316.4	1288.5	1324.2
65°	986.3	974.3	962.4	958.4
67.5°	715.8	711.9	699.9	695.9
70°	505.0	489.2	485.2	477.2
72.5°	338.0	338.0	330.1	330.1
75°	206.8	186.9	182.9	186.9
77.5°	143.1	139.2	139.2	135.3
80°	95.5	91.5	99.4	87.5
82.5°	59.6	63.6	59.6	63.6
85°	39.8	47.7	43.8	43.8
87.5°	23.8	23.8	23.8	23.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)