

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: P249169

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249169
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 EC8B150950 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15184.0 lumens
Efficiency: N/A
Efficacy: 95.8 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

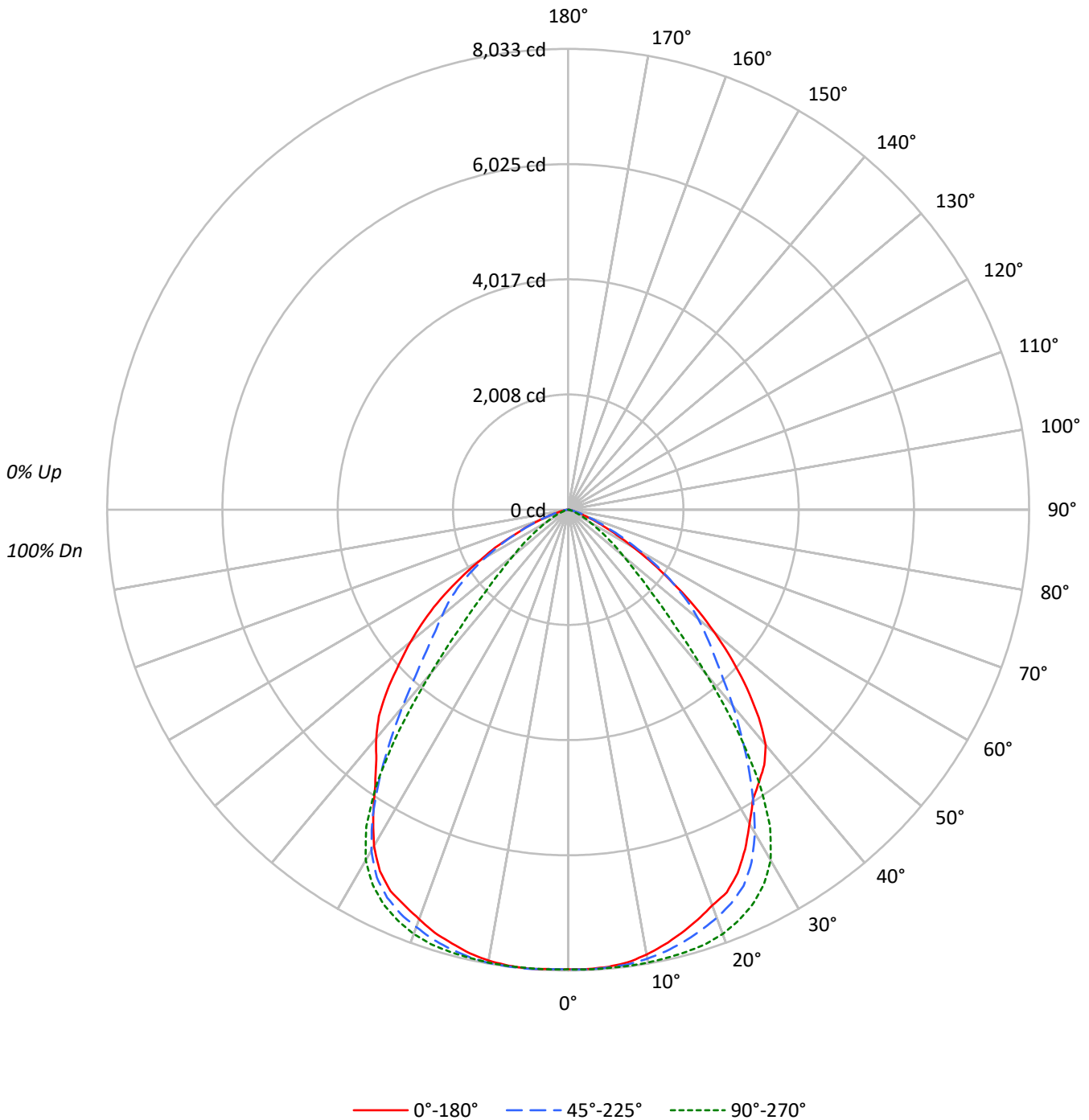
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	247042	247042	247042
5°	247583	248252	248518
10°	246541	250988	249911
15°	243811	254659	249854
20°	240884	258237	249209
25°	237757	258536	249465
30°	224931	251266	241008
35°	218216	218374	220644
40°	215512	150252	209457
45°	192033	90201	194658
50°	159673	60033	172050
55°	119754	41386	145876
60°	81155	27580	110061
65°	48952	17891	75614
70°	27138	9692	46522
75°	12295	4098	24079
80°	10690	4582	16799
85°	12171	6085	16735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	764.6	5.0
10°-20°	2220.4	14.6
20°-30°	3370.2	22.2
30°-40°	3539.7	23.3
40°-50°	2653.8	17.5
50°-60°	1702.8	11.2
60°-70°	728.4	4.8
70°-80°	172.1	1.1
80°-90°	32.0	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°	6355.2	41.9
0°-40°	9894.9	65.2
0°-60°	14251.5	93.9
0°-90°	15184.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15184.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8011	8011	8011	8011	8011	
5°	7998	8011	8020	8033	8029	760
15°	7637	7796	7977	7925	7826	2154
25°	6988	7233	7599	7461	7332	3192
35°	5797	5474	5801	5732	5861	3638
45°	4404	3599	2068	3496	4464	3372
55°	2228	2228	770	2322	2713	2021
65°	671	791	245	1019	1036	716
75°	103	120	34	206	202	150
85°	34	22	17	34	47	36
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°	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4
2.5°	8015.7	8024.3	8020.0	8020.0	8015.7	8020.0	8020.0	8028.6	8028.6	8020.0	8015.7
5°	7998.4	8007.1	8007.1	7998.4	7998.4	8020.0	8007.1	8015.7	8015.7	8011.4	8011.4
7.5°	7959.8	7959.8	7977.0	7964.1	7964.1	7977.0	7972.7	7981.3	7989.9	7994.2	7994.2
10°	7873.7	7882.4	7886.7	7886.7	7891.0	7903.8	7912.5	7929.7	7938.3	7946.9	7951.2
12.5°	7766.3	7779.2	7783.5	7779.2	7792.1	7809.2	7830.8	7852.3	7865.2	7882.4	7895.3
15°	7637.2	7637.2	7645.8	7658.8	7667.4	7693.2	7714.7	7740.4	7774.8	7796.4	7817.9
17.5°	7495.4	7504.0	7516.8	7516.8	7534.1	7577.0	7590.0	7628.7	7667.4	7688.9	7731.9
20°	7340.6	7349.1	7362.1	7370.7	7392.2	7426.6	7452.3	7486.7	7529.8	7568.5	7611.4
22.5°	7220.1	7203.0	7211.5	7220.1	7241.7	7271.8	7301.9	7344.8	7387.8	7426.6	7469.6
25°	6987.9	6992.2	7005.2	7013.7	7039.6	7065.3	7099.7	7151.3	7190.0	7233.1	7280.3
27.5°	6674.0	6678.3	6699.8	6699.8	6721.3	6764.3	6785.8	6828.8	6880.5	6923.4	6979.4
30°	6317.1	6325.6	6325.6	6342.9	6355.7	6377.3	6398.8	6441.8	6467.6	6506.3	6583.7
32.5°	5990.3	5998.8	5994.5	5990.3	5977.4	5973.0	5968.7	5977.4	5986.0	5998.8	6028.9
35°	5796.8	5775.2	5758.1	5728.0	5693.6	5650.5	5611.8	5560.3	5512.9	5474.2	5431.3
37.5°	5611.8	5607.5	5581.7	5538.7	5469.9	5392.5	5302.3	5190.4	5078.6	4958.2	4842.1
40°	5353.8	5340.9	5319.4	5259.2	5181.8	5087.2	4966.8	4829.2	4648.5	4463.7	4274.5
42.5°	4915.2	4919.5	4893.7	4846.3	4773.3	4682.9	4558.3	4407.8	4214.3	3994.9	3749.8
45°	4403.5	4403.5	4394.8	4356.1	4304.6	4231.4	4136.8	4012.2	3823.0	3599.3	3337.0
47.5°	3870.2	3874.5	3861.6	3853.1	3831.5	3784.3	3715.4	3620.8	3487.5	3272.5	3010.1
50°	3328.4	3328.4	3349.9	3345.6	3345.6	3328.4	3298.3	3242.4	3126.3	2954.3	2709.2
52.5°	2786.6	2795.2	2808.1	2825.3	2846.7	2881.1	2846.7	2821.0	2747.8	2614.5	2403.9
55°	2227.5	2236.1	2257.6	2287.7	2313.6	2348.0	2356.5	2356.5	2317.8	2227.5	2068.4
57.5°	1750.2	1737.3	1754.5	1780.3	1814.7	1849.1	1874.9	1905.0	1900.7	1840.5	1711.5
60°	1315.9	1320.2	1333.0	1358.9	1384.7	1414.8	1449.2	1475.0	1487.9	1457.8	1376.1
62.5°	959.0	959.0	976.1	1001.9	1014.9	1057.9	1079.4	1092.3	1105.1	1100.8	1049.3
65°	670.9	679.4	688.0	701.0	713.8	739.6	752.5	778.3	786.9	791.3	752.5
67.5°	473.1	460.1	468.8	477.3	490.2	507.5	533.3	533.3	546.1	546.1	520.3
70°	301.0	301.0	305.3	318.2	326.8	331.1	339.8	348.3	361.2	356.9	356.9
72.5°	202.1	197.8	202.1	206.4	210.8	223.6	223.6	227.9	236.5	240.8	223.6
75°	103.2	107.5	116.1	111.8	124.7	116.1	120.4	133.3	129.0	120.4	120.4
77.5°	86.0	86.0	86.0	81.8	90.3	90.3	86.0	94.6	90.3	90.3	86.0
80°	60.2	64.5	60.2	55.9	60.2	55.9	55.9	55.9	55.9	55.9	51.6
82.5°	47.3	38.7	43.0	38.7	43.0	43.0	38.7	34.4	34.4	38.7	34.4
85°	34.4	25.8	30.1	30.1	25.8	25.8	25.8	25.8	25.8	21.5	21.5
87.5°	21.5	12.9	12.9	12.9	17.2	17.2	17.2	12.9	17.2	17.2	8.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4
2.5°	8024.3	8020.0	8028.6	8024.3	8024.3	8020.0	8024.3	8020.0	8028.6	8011.4	8015.7
5°	8024.3	8015.7	8020.0	8024.3	8028.6	8020.0	8020.0	8020.0	8028.6	8020.0	8024.3
7.5°	8007.1	8002.8	8015.7	8024.3	8020.0	8015.7	8024.3	8020.0	8028.6	8024.3	8032.8
10°	7972.7	7977.0	7985.6	7998.4	8002.8	8007.1	8015.7	8015.7	8028.6	8011.4	8020.0
12.5°	7921.1	7938.3	7959.8	7968.3	7985.6	7985.6	7994.2	7998.4	8007.1	8002.8	8015.7
15°	7856.6	7878.1	7903.8	7925.4	7946.9	7959.8	7972.7	7977.0	7989.9	7977.0	7981.3
17.5°	7779.2	7804.9	7843.7	7869.4	7903.8	7916.8	7933.9	7942.6	7955.5	7946.9	7951.2
20°	7671.6	7701.8	7744.7	7783.5	7804.9	7835.0	7856.6	7869.4	7878.1	7869.4	7873.7
22.5°	7521.2	7564.2	7620.1	7650.2	7693.2	7719.0	7723.3	7753.4	7774.8	7753.4	7762.0
25°	7344.8	7387.8	7430.9	7495.4	7534.1	7564.2	7594.3	7598.6	7620.1	7615.7	7611.4
27.5°	7052.4	7108.4	7181.4	7233.1	7284.6	7332.0	7366.4	7374.9	7396.5	7387.8	7392.2
30°	6652.5	6712.7	6781.6	6863.2	6936.3	6983.6	7026.6	7056.7	7078.2	7065.3	7061.0
32.5°	6084.9	6145.1	6218.2	6299.9	6385.9	6454.6	6506.3	6545.0	6570.8	6562.2	6540.7
35°	5435.6	5452.7	5500.1	5564.6	5637.6	5710.7	5758.1	5801.0	5831.1	5839.7	5839.7
37.5°	4769.0	4713.1	4678.7	4678.7	4721.7	4751.8	4794.8	4820.6	4867.9	4885.1	4898.0
40°	4123.9	3994.9	3874.5	3784.3	3724.1	3719.8	3719.8	3732.6	3775.6	3831.5	3883.2
42.5°	3547.7	3341.3	3156.4	2988.7	2868.3	2799.5	2769.4	2773.7	2808.1	2859.7	2945.6
45°	3087.6	2829.6	2597.4	2395.2	2231.8	2124.3	2072.7	2068.4	2094.2	2154.4	2249.1
47.5°	2730.7	2455.4	2193.1	1960.9	1784.6	1668.5	1608.3	1591.1	1608.3	1664.2	1776.0
50°	2434.0	2150.2	1879.2	1638.4	1449.2	1328.8	1272.9	1251.4	1272.9	1320.2	1431.9
52.5°	2158.7	1866.3	1612.6	1380.4	1178.3	1075.0	1014.9	1001.9	1014.9	1070.7	1161.1
55°	1840.5	1591.1	1341.7	1109.4	933.2	830.0	782.6	769.8	782.6	834.3	928.9
57.5°	1526.6	1311.6	1092.3	881.5	731.1	640.7	597.8	580.5	610.6	645.0	756.9
60°	1234.1	1062.2	877.2	692.3	567.7	485.9	451.5	447.2	455.8	498.8	576.2
62.5°	967.6	825.7	679.4	528.9	425.7	391.3	348.3	344.1	352.6	378.4	438.7
65°	696.7	606.4	494.5	387.0	305.3	258.0	240.8	245.2	253.7	270.9	326.8
67.5°	485.9	421.4	344.1	270.9	210.8	189.2	172.0	167.7	172.0	202.1	232.2
70°	326.8	288.1	232.2	206.4	146.3	116.1	120.4	107.5	124.7	124.7	150.5
72.5°	215.0	189.2	154.8	120.4	103.2	81.8	81.8	77.4	86.0	90.3	111.8
75°	111.8	86.0	86.0	60.2	43.0	21.5	38.7	34.4	30.1	34.4	43.0
77.5°	77.4	64.5	60.2	47.3	43.0	34.4	34.4	34.4	34.4	38.7	43.0
80°	47.3	47.3	34.4	30.1	25.8	21.5	25.8	25.8	25.8	25.8	30.1
82.5°	30.1	25.8	25.8	21.5	21.5	17.2	17.2	17.2	17.2	17.2	25.8
85°	25.8	17.2	17.2	12.9	17.2	30.1	12.9	17.2	17.2	17.2	12.9
87.5°	8.6	12.9	12.9	12.9	8.6	4.3	8.6	12.9	12.9	21.5	17.2
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°	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4	8011.4
2.5°	8024.3	8028.6	8028.6	8024.3	8024.3	8015.7	8032.8	8020.0	8024.3	8041.5	8028.6
5°	8032.8	8037.2	8037.2	8032.8	8032.8	8032.8	8037.2	8037.2	8032.8	8028.6	8037.2
7.5°	8050.1	8045.8	8045.8	8037.2	8037.2	8028.6	8037.2	8024.3	8032.8	8024.3	8037.2
10°	8028.6	8032.8	8028.6	8024.3	8024.3	8020.0	8020.0	8007.1	8011.4	7998.4	8007.1
12.5°	8015.7	8011.4	8011.4	8002.8	7994.2	7985.6	7981.3	7968.3	7968.3	7938.3	7951.2
15°	7981.3	7985.6	7972.7	7955.5	7946.9	7925.4	7916.8	7899.5	7882.4	7860.9	7865.2
17.5°	7951.2	7938.3	7921.1	7903.8	7869.4	7852.3	7835.0	7809.2	7800.6	7774.8	7766.3
20°	7860.9	7852.3	7830.8	7800.6	7779.2	7740.4	7723.3	7697.5	7675.9	7650.2	7637.2
22.5°	7744.7	7736.1	7710.3	7680.2	7645.8	7628.7	7611.4	7564.2	7542.6	7516.8	7512.5
25°	7598.6	7585.7	7559.9	7525.5	7508.2	7461.0	7443.7	7409.3	7400.8	7374.9	7370.7
27.5°	7374.9	7357.7	7327.7	7284.6	7254.5	7224.4	7207.3	7181.4	7172.9	7147.0	7142.8
30°	7039.6	7018.0	6957.8	6940.7	6889.0	6858.9	6858.9	6824.5	6828.8	6811.7	6811.7
32.5°	6510.6	6476.2	6428.9	6394.5	6360.0	6342.9	6342.9	6330.0	6338.6	6338.6	6347.2
35°	5809.6	5762.4	5736.5	5715.0	5715.0	5732.2	5783.9	5796.8	5822.6	5844.0	5861.3
37.5°	4910.8	4906.6	4936.7	4962.5	5027.0	5100.1	5190.4	5267.9	5340.9	5392.5	5444.1
40°	3939.0	4046.6	4132.5	4253.0	4351.8	4493.8	4657.2	4790.5	4915.2	5005.5	5100.1
42.5°	3074.6	3212.3	3392.9	3569.2	3745.5	3939.0	4154.1	4339.0	4502.4	4627.1	4726.0
45°	2395.2	2584.4	2803.8	3027.4	3255.3	3496.2	3719.8	3908.9	4081.0	4210.0	4308.9
47.5°	1930.8	2137.2	2386.6	2631.8	2889.8	3143.5	3392.9	3556.3	3698.2	3801.4	3891.8
50°	1595.4	1814.7	2077.0	2356.5	2614.5	2868.3	3083.3	3242.4	3358.5	3448.8	3504.7
52.5°	1333.0	1565.3	1844.8	2124.3	2382.3	2614.5	2808.1	2928.5	3023.1	3087.6	3139.1
55°	1100.8	1324.5	1586.8	1849.1	2102.8	2322.1	2481.2	2571.6	2644.6	2683.3	2713.4
57.5°	898.8	1105.1	1346.0	1586.8	1806.1	1986.8	2111.5	2201.7	2236.1	2266.2	2261.9
60°	705.3	898.8	1118.1	1324.5	1513.7	1659.9	1750.2	1801.8	1827.6	1840.5	1831.9
62.5°	554.7	731.1	898.8	1079.4	1217.0	1341.7	1427.7	1427.7	1440.6	1444.9	1457.8
65°	412.8	546.1	692.3	825.7	937.4	1019.2	1066.5	1079.4	1096.6	1092.3	1083.7
67.5°	305.3	404.3	511.7	610.6	688.0	739.6	774.0	804.2	799.9	791.3	786.9
70°	210.8	275.3	369.8	430.0	485.9	537.6	546.1	550.4	554.7	559.0	550.4
72.5°	146.3	193.5	245.2	296.7	331.1	352.6	374.2	378.4	378.4	378.4	374.2
75°	73.1	98.9	146.3	167.7	197.8	206.4	223.6	223.6	236.5	219.3	215.0
77.5°	64.5	77.4	103.2	120.4	133.3	146.3	150.5	163.4	159.1	150.5	154.8
80°	38.7	47.3	64.5	73.1	90.3	94.6	98.9	103.2	98.9	103.2	103.2
82.5°	30.1	34.4	43.0	43.0	55.9	55.9	60.2	60.2	64.5	64.5	64.5
85°	17.2	30.1	25.8	51.6	34.4	34.4	43.0	51.6	43.0	43.0	51.6
87.5°	17.2	17.2	12.9	17.2	17.2	17.2	21.5	25.8	25.8	30.1	25.8
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: P249169

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8011.4	8011.4	8011.4	8011.4
2.5°	8024.3	8032.8	8020.0	8015.7
5°	8037.2	8037.2	8028.6	8028.6
7.5°	8037.2	8037.2	8024.3	8015.7
10°	8002.8	8002.8	7989.9	7981.3
12.5°	7938.3	7938.3	7933.9	7921.1
15°	7856.6	7856.6	7839.3	7826.5
17.5°	7744.7	7753.4	7731.9	7731.9
20°	7624.4	7620.1	7602.9	7594.3
22.5°	7499.7	7491.1	7486.7	7461.0
25°	7366.4	7357.7	7344.8	7332.0
27.5°	7138.5	7134.2	7121.2	7104.1
30°	6790.1	6785.8	6768.6	6768.6
32.5°	6338.6	6334.3	6317.1	6321.4
35°	5869.8	5887.1	5878.5	5861.3
37.5°	5478.5	5491.5	5500.1	5491.5
40°	5151.7	5190.4	5194.7	5203.4
42.5°	4803.4	4855.0	4872.2	4880.8
45°	4386.2	4433.6	4472.3	4463.7
47.5°	3960.5	3994.9	4029.3	4003.5
50°	3552.0	3573.5	3586.4	3586.4
52.5°	3165.0	3165.0	3160.7	3165.0
55°	2722.1	2722.1	2704.9	2713.4
57.5°	2257.6	2266.2	2253.3	2231.8
60°	1827.6	1806.1	1797.5	1784.6
62.5°	1423.4	1423.4	1393.3	1431.9
65°	1066.5	1053.6	1040.6	1036.3
67.5°	774.0	769.8	756.9	752.5
70°	546.1	528.9	524.6	516.0
72.5°	365.5	365.5	356.9	356.9
75°	223.6	202.1	197.8	202.1
77.5°	154.8	150.5	150.5	146.3
80°	103.2	98.9	107.5	94.6
82.5°	64.5	68.8	64.5	68.8
85°	43.0	51.6	47.3	47.3
87.5°	25.8	25.8	25.8	25.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)