

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: P249096

Luminaire Tested: **LSR8B120D010 EC8B120830 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249096
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: LSR8B120D010 EC8B120830 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12024.0 lumens
Efficiency: N/A
Efficacy: 101.6 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

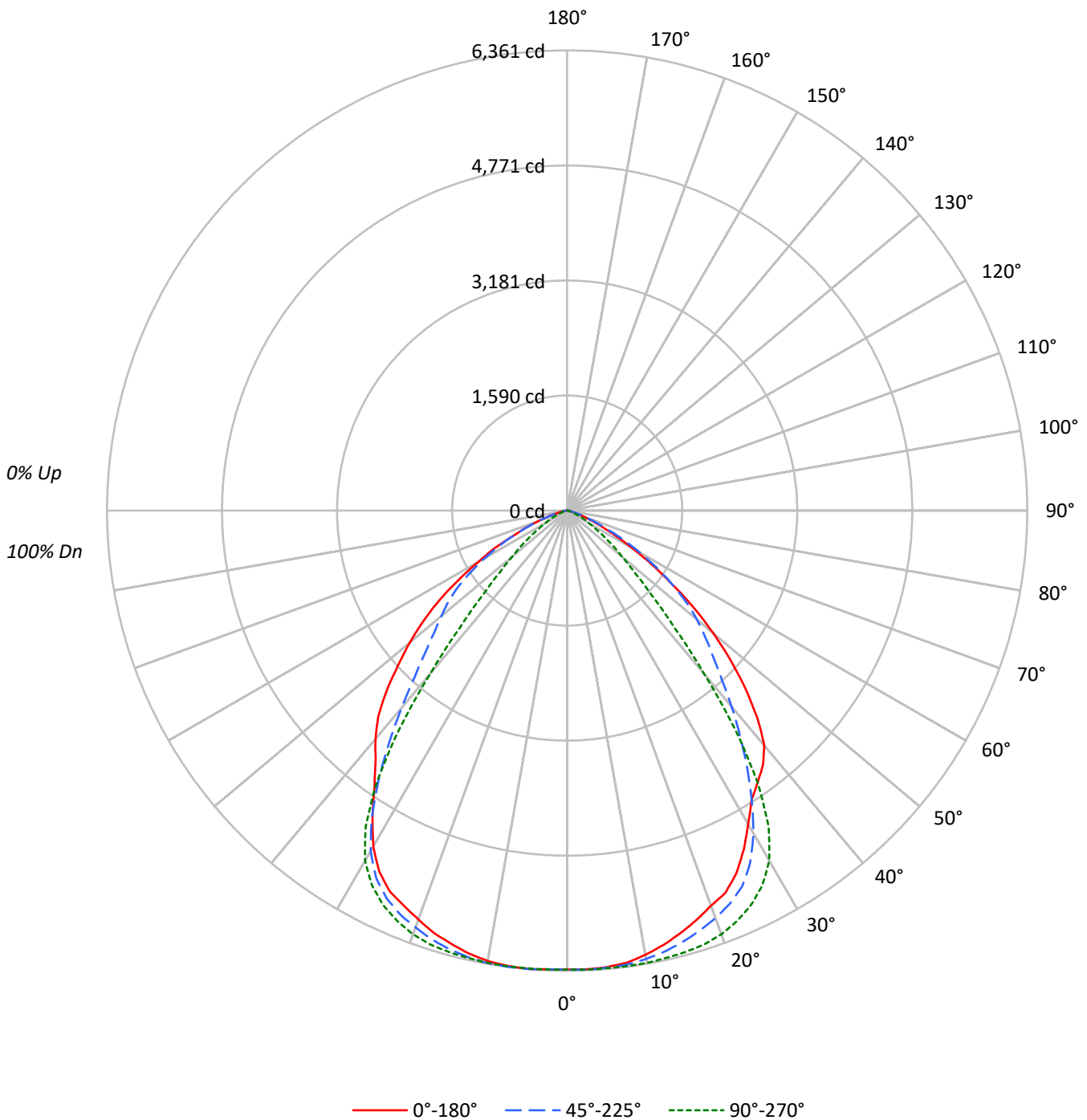
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	195629	195629	195629
5°	196060	196586	196800
10°	195234	198753	197901
15°	193071	201661	197856
20°	190752	204495	197345
25°	188276	204730	197547
30°	178119	198974	190852
35°	172802	172926	174726
40°	170661	118983	165866
45°	152069	71432	154145
50°	126442	47541	136243
55°	94830	32773	115517
60°	64263	21838	87156
65°	38766	14162	59875
70°	21494	7682	36839
75°	9734	3241	19075
80°	8471	3623	13301
85°	9624	4812	13268



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	605.5	5.0
10°-20°	1758.3	14.6
20°-30°	2668.8	22.2
30°-40°	2803.0	23.3
40°-50°	2101.5	17.5
50°-60°	1348.4	11.2
60°-70°	576.8	4.8
70°-80°	136.3	1.1
80°-90°	25.3	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°	5032.6	41.9
0°-40°	7835.6	65.2
0°-60°	11285.5	93.9
0°-90°	12024.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12024.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6344	6344	6344	6344	6344	
5°	6334	6344	6351	6361	6358	602
15°	6048	6174	6317	6276	6198	1706
25°	5534	5728	6017	5908	5806	2528
35°	4590	4335	4594	4539	4642	2881
45°	3487	2850	1638	2769	3535	2671
55°	1764	1764	610	1839	2149	1600
65°	531	627	194	807	821	567
75°	82	95	27	164	160	119
85°	27	17	14	27	38	29
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°	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1
2.5°	6347.5	6354.3	6350.9	6350.9	6347.5	6350.9	6350.9	6357.8	6357.8	6350.9	6347.5
5°	6333.9	6340.7	6340.7	6333.9	6333.9	6350.9	6340.7	6347.5	6347.5	6344.1	6344.1
7.5°	6303.3	6303.3	6316.9	6306.7	6306.7	6316.9	6313.4	6320.3	6327.1	6330.5	6330.5
10°	6235.1	6241.9	6245.4	6245.4	6248.8	6258.9	6265.8	6279.4	6286.2	6293.0	6296.4
12.5°	6150.0	6160.2	6163.6	6160.2	6170.5	6184.0	6201.1	6218.1	6228.4	6241.9	6252.2
15°	6047.8	6047.8	6054.6	6064.9	6071.7	6092.1	6109.1	6129.5	6156.8	6173.9	6190.9
17.5°	5935.5	5942.3	5952.5	5952.5	5966.1	6000.1	6010.4	6041.1	6071.7	6088.7	6122.8
20°	5812.9	5819.7	5829.9	5836.7	5853.7	5881.0	5901.4	5928.7	5962.7	5993.4	6027.4
22.5°	5717.5	5703.9	5710.7	5717.5	5734.6	5758.4	5782.3	5816.3	5850.3	5881.0	5915.1
25°	5533.6	5537.0	5547.3	5554.0	5574.5	5594.9	5622.2	5663.0	5693.7	5727.8	5765.2
27.5°	5285.1	5288.5	5305.5	5305.5	5322.5	5356.6	5373.6	5407.6	5448.5	5482.5	5526.9
30°	5002.4	5009.2	5009.2	5022.9	5033.0	5050.1	5067.1	5101.2	5121.6	5152.3	5213.6
32.5°	4743.6	4750.4	4747.0	4743.6	4733.4	4730.0	4726.6	4733.4	4740.2	4750.4	4774.2
35°	4590.4	4573.3	4559.7	4535.9	4508.7	4474.6	4443.9	4403.1	4365.6	4334.9	4300.9
37.5°	4443.9	4440.5	4420.1	4386.0	4331.5	4270.3	4198.8	4110.2	4021.6	3926.3	3834.4
40°	4239.6	4229.4	4212.4	4164.7	4103.4	4028.5	3933.2	3824.2	3681.1	3534.7	3384.9
42.5°	3892.2	3895.7	3875.3	3837.8	3779.9	3708.4	3609.6	3490.5	3337.2	3163.5	2969.4
45°	3487.1	3487.1	3480.2	3449.6	3408.7	3350.8	3275.9	3177.2	3027.4	2850.2	2642.5
47.5°	3064.8	3068.2	3057.9	3051.2	3034.1	2996.7	2942.2	2867.3	2761.7	2591.4	2383.7
50°	2635.7	2635.7	2652.7	2649.3	2649.3	2635.7	2611.9	2567.6	2475.7	2339.4	2145.4
52.5°	2206.6	2213.5	2223.7	2237.3	2254.3	2281.5	2254.3	2233.9	2176.0	2070.4	1903.6
55°	1763.9	1770.8	1787.8	1811.6	1832.1	1859.3	1866.1	1866.1	1835.4	1763.9	1638.0
57.5°	1386.0	1375.7	1389.4	1409.8	1437.1	1464.3	1484.7	1508.6	1505.1	1457.5	1355.3
60°	1042.0	1045.4	1055.6	1076.1	1096.5	1120.4	1147.6	1168.0	1178.3	1154.4	1089.7
62.5°	759.4	759.4	773.0	793.4	803.6	837.7	854.7	865.0	875.1	871.7	830.9
65°	531.3	538.0	544.8	555.1	565.3	585.7	595.9	616.3	623.2	626.6	595.9
67.5°	374.6	364.4	371.2	378.0	388.2	401.9	422.3	422.3	432.4	432.4	412.0
70°	238.4	238.4	241.8	252.0	258.8	262.2	269.0	275.8	286.0	282.6	282.6
72.5°	160.1	156.6	160.1	163.5	166.9	177.1	177.1	180.5	187.3	190.7	177.1
75°	81.7	85.2	91.9	88.6	98.7	91.9	95.3	105.6	102.2	95.3	95.3
77.5°	68.1	68.1	68.1	64.7	71.5	71.5	68.1	74.9	71.5	71.5	68.1
80°	47.7	51.1	47.7	44.2	47.7	44.2	44.2	44.2	44.2	44.2	40.8
82.5°	37.5	30.7	34.1	30.7	34.1	34.1	30.7	27.2	27.2	30.7	27.2
85°	27.2	20.4	23.8	23.8	20.4	20.4	20.4	20.4	20.4	17.0	17.0
87.5°	17.0	10.2	10.2	10.2	13.6	13.6	13.6	10.2	13.6	13.6	6.8
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°	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1
2.5°	6354.3	6350.9	6357.8	6354.3	6354.3	6350.9	6354.3	6350.9	6357.8	6344.1	6347.5
5°	6354.3	6347.5	6350.9	6354.3	6357.8	6350.9	6350.9	6350.9	6357.8	6350.9	6354.3
7.5°	6340.7	6337.3	6347.5	6354.3	6350.9	6347.5	6354.3	6350.9	6357.8	6354.3	6361.1
10°	6313.4	6316.9	6323.7	6333.9	6337.3	6340.7	6347.5	6347.5	6357.8	6344.1	6350.9
12.5°	6272.6	6286.2	6303.3	6310.0	6323.7	6323.7	6330.5	6333.9	6340.7	6337.3	6347.5
15°	6221.5	6238.5	6258.9	6276.0	6293.0	6303.3	6313.4	6316.9	6327.1	6316.9	6320.3
17.5°	6160.2	6180.6	6211.3	6231.7	6258.9	6269.2	6282.8	6289.6	6299.9	6293.0	6296.4
20°	6075.1	6099.0	6133.0	6163.6	6180.6	6204.5	6221.5	6231.7	6238.5	6231.7	6235.1
22.5°	5955.9	5990.0	6034.2	6058.1	6092.1	6112.5	6116.0	6139.8	6156.8	6139.8	6146.6
25°	5816.3	5850.3	5884.4	5935.5	5966.1	5990.0	6013.8	6017.2	6034.2	6030.8	6027.4
27.5°	5584.7	5629.0	5686.9	5727.8	5768.6	5806.1	5833.3	5840.1	5857.2	5850.3	5853.7
30°	5268.0	5315.7	5370.2	5434.9	5492.8	5530.2	5564.3	5588.1	5605.1	5594.9	5591.5
32.5°	4818.5	4866.2	4924.1	4988.8	5056.9	5111.3	5152.3	5182.9	5203.3	5196.5	5179.5
35°	4304.4	4317.9	4355.4	4406.5	4464.3	4522.3	4559.7	4593.7	4617.6	4624.4	4624.4
37.5°	3776.5	3732.3	3705.0	3705.0	3739.0	3762.8	3796.9	3817.3	3854.8	3868.4	3878.7
40°	3265.7	3163.5	3068.2	2996.7	2949.0	2945.6	2945.6	2955.8	2989.9	3034.1	3075.0
42.5°	2809.4	2645.9	2499.5	2366.7	2271.4	2216.9	2193.0	2196.5	2223.7	2264.5	2332.6
45°	2445.0	2240.7	2056.8	1896.8	1767.4	1682.2	1641.4	1638.0	1658.4	1706.0	1781.0
47.5°	2162.4	1944.4	1736.7	1552.8	1413.2	1321.2	1273.6	1260.0	1273.6	1317.8	1406.4
50°	1927.4	1702.7	1488.1	1297.4	1147.6	1052.3	1008.0	991.0	1008.0	1045.4	1133.9
52.5°	1709.4	1477.9	1277.0	1093.1	933.0	851.3	803.6	793.4	803.6	847.9	919.5
55°	1457.5	1260.0	1062.4	878.6	739.0	657.2	619.8	609.6	619.8	660.7	735.6
57.5°	1208.9	1038.6	865.0	698.1	578.9	507.4	473.4	459.7	483.5	510.8	599.3
60°	977.3	841.1	694.7	548.3	449.5	384.8	357.5	354.1	361.0	395.0	456.3
62.5°	766.2	653.8	538.0	418.9	337.1	309.9	275.8	272.5	279.2	299.6	347.4
65°	551.7	480.2	391.6	306.5	241.8	204.3	190.7	194.1	200.9	214.6	258.8
67.5°	384.8	333.7	272.5	214.6	166.9	149.8	136.2	132.8	136.2	160.1	183.9
70°	258.8	228.1	183.9	163.5	115.8	91.9	95.3	85.2	98.7	98.7	119.2
72.5°	170.2	149.8	122.6	95.3	81.7	64.7	64.7	61.3	68.1	71.5	88.6
75°	88.6	68.1	68.1	47.7	34.1	17.0	30.7	27.2	23.8	27.2	34.1
77.5°	61.3	51.1	47.7	37.5	34.1	27.2	27.2	27.2	27.2	30.7	34.1
80°	37.5	37.5	27.2	23.8	20.4	17.0	20.4	20.4	20.4	20.4	23.8
82.5°	23.8	20.4	20.4	17.0	17.0	13.6	13.6	13.6	13.6	13.6	20.4
85°	20.4	13.6	13.6	10.2	13.6	23.8	10.2	13.6	13.6	13.6	10.2
87.5°	6.8	10.2	10.2	10.2	6.8	3.4	6.8	10.2	10.2	17.0	13.6
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°	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1	6344.1
2.5°	6354.3	6357.8	6357.8	6354.3	6354.3	6347.5	6361.1	6350.9	6354.3	6367.9	6357.8
5°	6361.1	6364.5	6364.5	6361.1	6361.1	6361.1	6364.5	6364.5	6361.1	6357.8	6364.5
7.5°	6374.8	6371.3	6371.3	6364.5	6364.5	6357.8	6364.5	6354.3	6361.1	6354.3	6364.5
10°	6357.8	6361.1	6357.8	6354.3	6354.3	6350.9	6350.9	6340.7	6344.1	6333.9	6340.7
12.5°	6347.5	6344.1	6344.1	6337.3	6330.5	6323.7	6320.3	6310.0	6310.0	6286.2	6296.4
15°	6320.3	6323.7	6313.4	6299.9	6293.0	6276.0	6269.2	6255.5	6241.9	6224.9	6228.4
17.5°	6296.4	6286.2	6272.6	6258.9	6231.7	6218.1	6204.5	6184.0	6177.2	6156.8	6150.0
20°	6224.9	6218.1	6201.1	6177.2	6160.2	6129.5	6116.0	6095.5	6078.5	6058.1	6047.8
22.5°	6133.0	6126.1	6105.7	6081.9	6054.6	6041.1	6027.4	5990.0	5972.9	5952.5	5949.1
25°	6017.2	6007.0	5986.6	5959.3	5945.7	5908.2	5894.6	5867.3	5860.6	5840.1	5836.7
27.5°	5840.1	5826.5	5802.7	5768.6	5744.8	5720.9	5707.3	5686.9	5680.1	5659.6	5656.3
30°	5574.5	5557.5	5509.8	5496.2	5455.3	5431.5	5431.5	5404.2	5407.6	5394.1	5394.1
32.5°	5155.7	5128.4	5090.9	5063.7	5036.4	5022.9	5022.9	5012.6	5019.4	5019.4	5026.3
35°	4600.6	4563.2	4542.7	4525.7	4525.7	4539.2	4580.2	4590.4	4610.8	4627.8	4641.5
37.5°	3888.8	3885.5	3909.3	3929.7	3980.8	4038.7	4110.2	4171.5	4229.4	4270.3	4311.1
40°	3119.3	3204.4	3272.5	3367.9	3446.1	3558.5	3687.9	3793.5	3892.2	3963.8	4038.7
42.5°	2434.8	2543.8	2686.8	2826.4	2966.0	3119.3	3289.6	3436.0	3565.4	3664.1	3742.4
45°	1896.8	2046.6	2220.3	2397.4	2577.8	2768.6	2945.6	3095.4	3231.7	3333.8	3412.1
47.5°	1529.0	1692.4	1889.9	2084.1	2288.4	2489.3	2686.8	2816.2	2928.5	3010.3	3081.9
50°	1263.3	1437.1	1644.8	1866.1	2070.4	2271.4	2441.6	2567.6	2659.6	2731.1	2775.3
52.5°	1055.6	1239.5	1460.9	1682.2	1886.5	2070.4	2223.7	2319.0	2393.9	2445.0	2485.8
55°	871.7	1048.9	1256.6	1464.3	1665.2	1838.8	1964.8	2036.4	2094.2	2124.9	2148.7
57.5°	711.7	875.1	1065.9	1256.6	1430.2	1573.3	1672.0	1743.5	1770.8	1794.6	1791.2
60°	558.5	711.7	885.4	1048.9	1198.7	1314.4	1386.0	1426.8	1447.2	1457.5	1450.6
62.5°	439.3	578.9	711.7	854.7	963.7	1062.4	1130.6	1130.6	1140.8	1144.2	1154.4
65°	326.9	432.4	548.3	653.8	742.3	807.1	844.6	854.7	868.4	865.0	858.1
67.5°	241.8	320.1	405.2	483.5	544.8	585.7	612.9	636.8	633.4	626.6	623.2
70°	166.9	218.0	292.9	340.5	384.8	425.7	432.4	435.9	439.3	442.7	435.9
72.5°	115.8	153.2	194.1	235.0	262.2	279.2	296.3	299.6	299.6	299.6	296.3
75°	57.9	78.3	115.8	132.8	156.6	163.5	177.1	177.1	187.3	173.6	170.2
77.5°	51.1	61.3	81.7	95.3	105.6	115.8	119.2	129.4	126.0	119.2	122.6
80°	30.7	37.5	51.1	57.9	71.5	74.9	78.3	81.7	78.3	81.7	81.7
82.5°	23.8	27.2	34.1	34.1	44.2	44.2	47.7	47.7	51.1	51.1	51.1
85°	13.6	23.8	20.4	40.8	27.2	27.2	34.1	40.8	34.1	34.1	40.8
87.5°	13.6	13.6	10.2	13.6	13.6	13.6	17.0	20.4	20.4	23.8	20.4
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: P249096

CATALOG NUMBER: LSR8B120D010 EC8B120830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6344.1	6344.1	6344.1	6344.1
2.5°	6354.3	6361.1	6350.9	6347.5
5°	6364.5	6364.5	6357.8	6357.8
7.5°	6364.5	6364.5	6354.3	6347.5
10°	6337.3	6337.3	6327.1	6320.3
12.5°	6286.2	6286.2	6282.8	6272.6
15°	6221.5	6221.5	6207.9	6197.7
17.5°	6133.0	6139.8	6122.8	6122.8
20°	6037.6	6034.2	6020.6	6013.8
22.5°	5938.9	5932.1	5928.7	5908.2
25°	5833.3	5826.5	5816.3	5806.1
27.5°	5652.9	5649.4	5639.2	5625.6
30°	5377.0	5373.6	5360.0	5360.0
32.5°	5019.4	5016.0	5002.4	5005.9
35°	4648.2	4661.9	4655.1	4641.5
37.5°	4338.4	4348.6	4355.4	4348.6
40°	4079.6	4110.2	4113.6	4120.5
42.5°	3803.8	3844.6	3858.3	3865.0
45°	3473.4	3510.9	3541.5	3534.7
47.5°	3136.3	3163.5	3190.8	3170.3
50°	2812.8	2829.8	2840.0	2840.0
52.5°	2506.3	2506.3	2502.9	2506.3
55°	2155.6	2155.6	2142.0	2148.7
57.5°	1787.8	1794.6	1784.4	1767.4
60°	1447.2	1430.2	1423.4	1413.2
62.5°	1127.2	1127.2	1103.4	1133.9
65°	844.6	834.3	824.1	820.6
67.5°	612.9	609.6	599.3	595.9
70°	432.4	418.9	415.4	408.6
72.5°	289.5	289.5	282.6	282.6
75°	177.1	160.1	156.6	160.1
77.5°	122.6	119.2	119.2	115.8
80°	81.7	78.3	85.2	74.9
82.5°	51.1	54.5	51.1	54.5
85°	34.1	40.8	37.5	37.5
87.5°	20.4	20.4	20.4	20.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)