

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: P249231

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249231
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 EC8B120850 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12599.0 lumens
Efficiency: N/A
Efficacy: 106.5 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

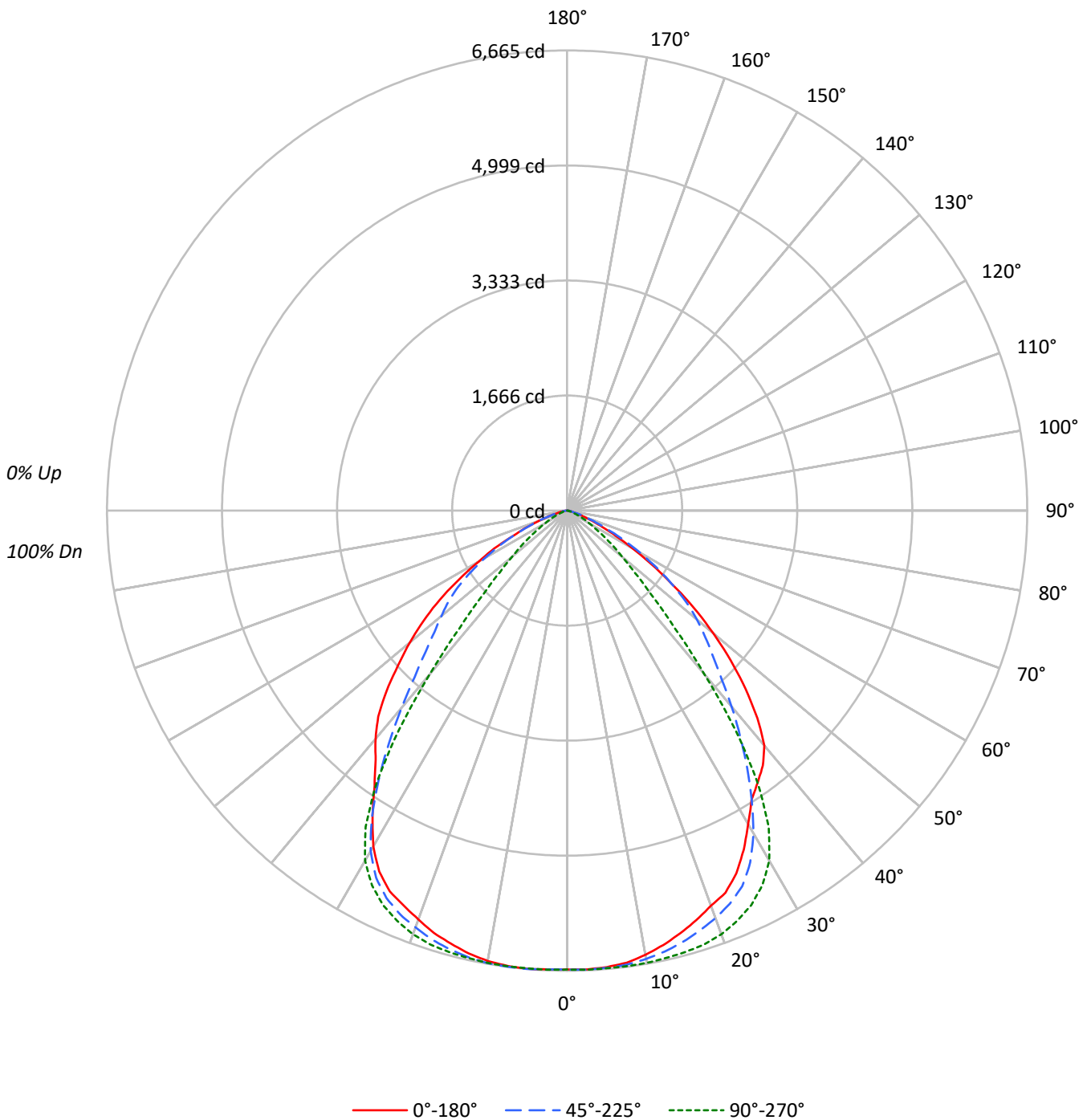
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	204984	204984	204984
5°	205433	205987	206210
10°	204571	208259	207364
15°	202303	211302	207318
20°	199875	214274	206782
25°	197279	214522	206992
30°	186640	208488	199978
35°	181065	181197	183079
40°	178824	124671	173796
45°	159339	74846	161515
50°	132491	49810	142762
55°	99367	34337	121044
60°	67340	22887	91325
65°	40620	14841	62743
70°	22522	8042	38606
75°	10199	3396	19980
80°	8861	3800	13940
85°	10084	5024	13905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	634.4	5.0
10°-20°	1842.4	14.6
20°-30°	2796.4	22.2
30°-40°	2937.1	23.3
40°-50°	2202.0	17.5
50°-60°	1412.9	11.2
60°-70°	604.4	4.8
70°-80°	142.8	1.1
80°-90°	26.6	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°	5273.3	41.9
0°-40°	8210.3	65.2
0°-60°	11825.2	93.9
0°-90°	12599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12599.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6648	6648	6648	6648	6648	
5°	6637	6648	6655	6665	6662	630
15°	6337	6469	6619	6576	6494	1787
25°	5798	6002	6305	6191	6084	2649
35°	4810	4542	4813	4756	4863	3019
45°	3654	2986	1716	2901	3704	2798
55°	1848	1848	639	1927	2252	1677
65°	557	656	203	846	860	594
75°	86	100	28	171	168	125
85°	28	18	14	28	39	30
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°	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5
2.5°	6651.1	6658.2	6654.6	6654.6	6651.1	6654.6	6654.6	6661.8	6661.8	6654.6	6651.1
5°	6636.7	6643.9	6643.9	6636.7	6636.7	6654.6	6643.9	6651.1	6651.1	6647.5	6647.5
7.5°	6604.7	6604.7	6618.9	6608.3	6608.3	6618.9	6615.4	6622.5	6629.7	6633.2	6633.2
10°	6533.3	6540.4	6544.0	6544.0	6547.6	6558.3	6565.4	6579.7	6586.8	6594.0	6597.5
12.5°	6444.1	6454.8	6458.4	6454.8	6465.5	6479.8	6497.7	6515.5	6526.2	6540.4	6551.2
15°	6337.0	6337.0	6344.2	6354.9	6362.1	6383.5	6401.3	6422.7	6451.2	6469.1	6486.9
17.5°	6219.3	6226.5	6237.1	6237.1	6251.5	6287.1	6297.8	6329.9	6362.1	6379.9	6415.6
20°	6090.9	6098.0	6108.7	6115.9	6133.7	6162.2	6183.6	6212.2	6247.9	6280.0	6315.6
22.5°	5990.9	5976.7	5983.8	5990.9	6008.8	6033.8	6058.8	6094.4	6130.1	6162.2	6197.9
25°	5798.2	5801.8	5812.6	5819.6	5841.1	5862.5	5891.1	5933.8	5966.0	6001.7	6040.9
27.5°	5537.8	5541.4	5559.2	5559.2	5577.0	5612.7	5630.5	5666.2	5709.1	5744.7	5791.2
30°	5241.7	5248.7	5248.7	5263.0	5273.7	5291.6	5309.4	5345.1	5366.5	5398.6	5462.9
32.5°	4970.5	4977.6	4974.0	4970.5	4959.7	4956.2	4952.6	4959.7	4966.9	4977.6	5002.5
35°	4809.9	4792.0	4777.8	4752.8	4724.3	4688.6	4656.4	4613.7	4574.4	4542.2	4506.6
37.5°	4656.4	4652.9	4631.5	4595.8	4538.7	4474.5	4399.6	4306.8	4214.0	4114.1	4017.8
40°	4442.4	4431.6	4413.8	4363.9	4299.6	4221.1	4121.2	4007.0	3857.1	3703.7	3546.8
42.5°	4078.4	4082.0	4060.6	4021.3	3960.7	3885.7	3782.2	3657.4	3496.8	3314.8	3111.5
45°	3653.8	3653.8	3646.6	3614.5	3571.7	3511.1	3432.6	3329.1	3172.1	2986.5	2768.9
47.5°	3211.3	3214.9	3204.2	3197.1	3179.2	3140.0	3082.9	3004.4	2893.8	2715.3	2497.7
50°	2761.8	2761.8	2779.6	2776.0	2776.0	2761.8	2736.8	2690.4	2594.1	2451.3	2248.0
52.5°	2312.2	2319.3	2330.1	2344.3	2362.1	2390.6	2362.1	2340.7	2280.0	2169.4	1994.6
55°	1848.3	1855.5	1873.3	1898.2	1919.7	1948.3	1955.3	1955.3	1923.2	1848.3	1716.3
57.5°	1452.3	1441.5	1455.8	1477.2	1505.8	1534.3	1555.7	1580.7	1577.1	1527.2	1420.1
60°	1091.9	1095.4	1106.1	1127.6	1149.0	1173.9	1202.5	1223.9	1234.6	1209.6	1141.8
62.5°	795.7	795.7	809.9	831.3	842.1	877.8	895.6	906.3	917.0	913.4	870.6
65°	556.7	563.7	570.9	581.6	592.3	613.7	624.4	645.8	653.0	656.5	624.4
67.5°	392.5	381.8	389.0	396.0	406.8	421.1	442.5	442.5	453.1	453.1	431.7
70°	249.8	249.8	253.4	264.0	271.2	274.8	281.9	289.0	299.7	296.1	296.1
72.5°	167.7	164.1	167.7	171.3	174.9	185.5	185.5	189.1	196.3	199.8	185.5
75°	85.6	89.2	96.3	92.8	103.5	96.3	99.9	110.6	107.0	99.9	99.9
77.5°	71.3	71.3	71.3	67.8	74.9	74.9	71.3	78.5	74.9	74.9	71.3
80°	49.9	53.5	49.9	46.4	49.9	46.4	46.4	46.4	46.4	46.4	42.8
82.5°	39.3	32.1	35.7	32.1	35.7	35.7	32.1	28.5	28.5	32.1	28.5
85°	28.5	21.4	25.0	25.0	21.4	21.4	21.4	21.4	21.4	17.8	17.8
87.5°	17.8	10.7	10.7	10.7	14.2	14.2	14.2	10.7	14.2	14.2	7.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5
2.5°	6658.2	6654.6	6661.8	6658.2	6658.2	6654.6	6658.2	6654.6	6661.8	6647.5	6651.1
5°	6658.2	6651.1	6654.6	6658.2	6661.8	6654.6	6654.6	6654.6	6661.8	6654.6	6658.2
7.5°	6643.9	6640.3	6651.1	6658.2	6654.6	6651.1	6658.2	6654.6	6661.8	6658.2	6665.3
10°	6615.4	6618.9	6626.1	6636.7	6640.3	6643.9	6651.1	6651.1	6661.8	6647.5	6654.6
12.5°	6572.6	6586.8	6604.7	6611.8	6626.1	6626.1	6633.2	6636.7	6643.9	6640.3	6651.1
15°	6519.1	6536.9	6558.3	6576.1	6594.0	6604.7	6615.4	6618.9	6629.7	6618.9	6622.5
17.5°	6454.8	6476.2	6508.3	6529.7	6558.3	6569.0	6583.2	6590.4	6601.1	6594.0	6597.5
20°	6365.6	6390.6	6426.2	6458.4	6476.2	6501.2	6519.1	6529.7	6536.9	6529.7	6533.3
22.5°	6240.7	6276.4	6322.8	6347.8	6383.5	6404.9	6408.4	6433.4	6451.2	6433.4	6440.6
25°	6094.4	6130.1	6165.8	6219.3	6251.5	6276.4	6301.4	6305.0	6322.8	6319.2	6315.6
27.5°	5851.8	5898.2	5958.8	6001.7	6044.5	6083.7	6112.3	6119.4	6137.3	6130.1	6133.7
30°	5519.9	5569.9	5627.0	5694.8	5755.5	5794.7	5830.4	5855.3	5873.2	5862.5	5858.9
32.5°	5049.0	5098.9	5159.6	5227.3	5298.8	5355.8	5398.6	5430.8	5452.2	5445.0	5427.2
35°	4510.2	4524.4	4563.7	4617.2	4677.8	4738.5	4777.8	4813.4	4838.4	4845.5	4845.5
37.5°	3957.1	3910.7	3882.2	3882.2	3917.8	3942.8	3978.5	3999.9	4039.2	4053.4	4064.1
40°	3421.8	3314.8	3214.9	3140.0	3090.1	3086.5	3086.5	3097.1	3132.8	3179.2	3222.1
42.5°	2943.7	2772.4	2619.0	2479.9	2380.0	2322.9	2297.9	2301.5	2330.1	2372.8	2444.2
45°	2561.9	2347.9	2155.2	1987.5	1851.9	1762.6	1719.9	1716.3	1737.7	1787.6	1866.2
47.5°	2265.8	2037.4	1819.7	1627.1	1480.8	1384.4	1334.5	1320.3	1334.5	1380.9	1473.7
50°	2019.6	1784.1	1559.3	1359.5	1202.5	1102.6	1056.2	1038.3	1056.2	1095.4	1188.2
52.5°	1791.2	1548.6	1338.1	1145.4	977.7	892.0	842.1	831.3	842.1	888.4	963.4
55°	1527.2	1320.3	1113.3	920.6	774.3	688.7	649.4	638.7	649.4	692.3	770.7
57.5°	1266.7	1088.3	906.3	731.5	606.6	531.6	496.0	481.7	506.6	535.2	628.0
60°	1024.0	881.4	727.9	574.5	471.0	403.2	374.6	371.1	378.2	413.9	478.1
62.5°	802.9	685.1	563.7	438.9	353.2	324.7	289.0	285.5	292.6	314.0	364.0
65°	578.1	503.1	410.3	321.1	253.4	214.1	199.8	203.4	210.5	224.8	271.2
67.5°	403.2	349.7	285.5	224.8	174.9	157.0	142.7	139.2	142.7	167.7	192.7
70°	271.2	239.0	192.7	171.3	121.4	96.3	99.9	89.2	103.5	103.5	124.9
72.5°	178.4	157.0	128.4	99.9	85.6	67.8	67.8	64.3	71.3	74.9	92.8
75°	92.8	71.3	71.3	49.9	35.7	17.8	32.1	28.5	25.0	28.5	35.7
77.5°	64.3	53.5	49.9	39.3	35.7	28.5	28.5	28.5	28.5	32.1	35.7
80°	39.3	39.3	28.5	25.0	21.4	17.8	21.4	21.4	21.4	21.4	25.0
82.5°	25.0	21.4	21.4	17.8	17.8	14.2	14.2	14.2	14.2	14.2	21.4
85°	21.4	14.2	14.2	10.7	14.2	25.0	10.7	14.2	14.2	14.2	10.7
87.5°	7.2	10.7	10.7	10.7	7.2	3.6	7.2	10.7	10.7	17.8	14.2
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°	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5	6647.5
2.5°	6658.2	6661.8	6661.8	6658.2	6658.2	6651.1	6665.3	6654.6	6658.2	6672.5	6661.8
5°	6665.3	6668.9	6668.9	6665.3	6665.3	6665.3	6668.9	6668.9	6665.3	6661.8	6668.9
7.5°	6679.6	6676.0	6676.0	6668.9	6668.9	6661.8	6668.9	6658.2	6665.3	6658.2	6668.9
10°	6661.8	6665.3	6661.8	6658.2	6658.2	6654.6	6654.6	6643.9	6647.5	6636.7	6643.9
12.5°	6651.1	6647.5	6647.5	6640.3	6633.2	6626.1	6622.5	6611.8	6611.8	6586.8	6597.5
15°	6622.5	6626.1	6615.4	6601.1	6594.0	6576.1	6569.0	6554.7	6540.4	6522.6	6526.2
17.5°	6597.5	6586.8	6572.6	6558.3	6529.7	6515.5	6501.2	6479.8	6472.6	6451.2	6444.1
20°	6522.6	6515.5	6497.7	6472.6	6454.8	6422.7	6408.4	6387.0	6369.1	6347.8	6337.0
22.5°	6426.2	6419.1	6397.7	6372.7	6344.2	6329.9	6315.6	6276.4	6258.5	6237.1	6233.6
25°	6305.0	6294.2	6272.8	6244.3	6230.0	6190.8	6176.5	6147.9	6140.8	6119.4	6115.9
27.5°	6119.4	6105.1	6080.2	6044.5	6019.5	5994.5	5980.3	5958.8	5951.7	5930.3	5926.8
30°	5841.1	5823.2	5773.3	5759.0	5716.2	5691.2	5691.2	5662.7	5666.2	5652.0	5652.0
32.5°	5402.2	5373.7	5334.4	5305.8	5277.3	5263.0	5263.0	5252.3	5259.5	5259.5	5266.6
35°	4820.6	4781.4	4759.9	4742.1	4742.1	4756.3	4799.2	4809.9	4831.3	4849.1	4863.4
37.5°	4074.8	4071.3	4096.3	4117.7	4171.2	4231.9	4306.8	4371.0	4431.6	4474.5	4517.3
40°	3268.4	3357.7	3429.0	3529.0	3610.9	3728.7	3864.3	3974.9	4078.4	4153.4	4231.9
42.5°	2551.2	2665.4	2815.3	2961.5	3107.9	3268.4	3446.9	3600.3	3735.9	3839.3	3921.4
45°	1987.5	2144.4	2326.5	2512.0	2701.1	2901.0	3086.5	3243.5	3386.2	3493.2	3575.3
47.5°	1602.1	1773.4	1980.3	2183.7	2397.8	2608.3	2815.3	2950.9	3068.6	3154.2	3229.2
50°	1323.8	1505.8	1723.4	1955.3	2169.4	2380.0	2558.4	2690.4	2786.8	2861.7	2908.0
52.5°	1106.1	1298.8	1530.8	1762.6	1976.7	2169.4	2330.1	2429.9	2508.4	2561.9	2604.7
55°	913.4	1099.0	1316.7	1534.3	1744.8	1926.8	2058.8	2133.8	2194.4	2226.5	2251.5
57.5°	745.8	917.0	1116.8	1316.7	1498.6	1648.5	1752.0	1826.9	1855.5	1880.4	1876.8
60°	585.2	745.8	927.7	1099.0	1256.0	1377.3	1452.3	1495.0	1516.4	1527.2	1520.0
62.5°	460.3	606.6	745.8	895.6	1009.8	1113.3	1184.7	1184.7	1195.3	1198.9	1209.6
65°	342.5	453.1	574.5	685.1	777.8	845.7	884.9	895.6	909.9	906.3	899.2
67.5°	253.4	335.4	424.6	506.6	570.9	613.7	642.2	667.3	663.7	656.5	653.0
70°	174.9	228.4	306.9	356.8	403.2	446.1	453.1	456.7	460.3	463.9	456.7
72.5°	121.4	160.6	203.4	246.2	274.8	292.6	310.5	314.0	314.0	314.0	310.5
75°	60.7	82.1	121.4	139.2	164.1	171.3	185.5	185.5	196.3	181.9	178.4
77.5°	53.5	64.3	85.6	99.9	110.6	121.4	124.9	135.6	132.0	124.9	128.4
80°	32.1	39.3	53.5	60.7	74.9	78.5	82.1	85.6	82.1	85.6	85.6
82.5°	25.0	28.5	35.7	35.7	46.4	46.4	49.9	49.9	53.5	53.5	53.5
85°	14.2	25.0	21.4	42.8	28.5	28.5	35.7	42.8	35.7	35.7	42.8
87.5°	14.2	14.2	10.7	14.2	14.2	14.2	17.8	21.4	21.4	25.0	21.4
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: P249231

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6647.5	6647.5	6647.5	6647.5
2.5°	6658.2	6665.3	6654.6	6651.1
5°	6668.9	6668.9	6661.8	6661.8
7.5°	6668.9	6668.9	6658.2	6651.1
10°	6640.3	6640.3	6629.7	6622.5
12.5°	6586.8	6586.8	6583.2	6572.6
15°	6519.1	6519.1	6504.7	6494.1
17.5°	6426.2	6433.4	6415.6	6415.6
20°	6326.4	6322.8	6308.6	6301.4
22.5°	6222.9	6215.7	6212.2	6190.8
25°	6112.3	6105.1	6094.4	6083.7
27.5°	5923.2	5919.6	5908.9	5894.6
30°	5634.1	5630.5	5616.3	5616.3
32.5°	5259.5	5255.9	5241.7	5245.2
35°	4870.5	4884.8	4877.7	4863.4
37.5°	4545.8	4556.6	4563.7	4556.6
40°	4274.6	4306.8	4310.4	4317.5
42.5°	3985.7	4028.4	4042.8	4049.8
45°	3639.5	3678.8	3710.9	3703.7
47.5°	3286.2	3314.8	3343.3	3322.0
50°	2947.3	2965.1	2975.9	2975.9
52.5°	2626.2	2626.2	2622.6	2626.2
55°	2258.6	2258.6	2244.4	2251.5
57.5°	1873.3	1880.4	1869.7	1851.9
60°	1516.4	1498.6	1491.5	1480.8
62.5°	1181.1	1181.1	1156.1	1188.2
65°	884.9	874.2	863.5	859.9
67.5°	642.2	638.7	628.0	624.4
70°	453.1	438.9	435.3	428.2
72.5°	303.3	303.3	296.1	296.1
75°	185.5	167.7	164.1	167.7
77.5°	128.4	124.9	124.9	121.4
80°	85.6	82.1	89.2	78.5
82.5°	53.5	57.1	53.5	57.1
85°	35.7	42.8	39.3	39.3
87.5°	21.4	21.4	21.4	21.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)