

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: P249331

Luminaire Tested: **LSR8B150D010 EC8B150840 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249331
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 EC8B150840 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15990.0 lumens
Efficiency: N/A
Efficacy: 100.9 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

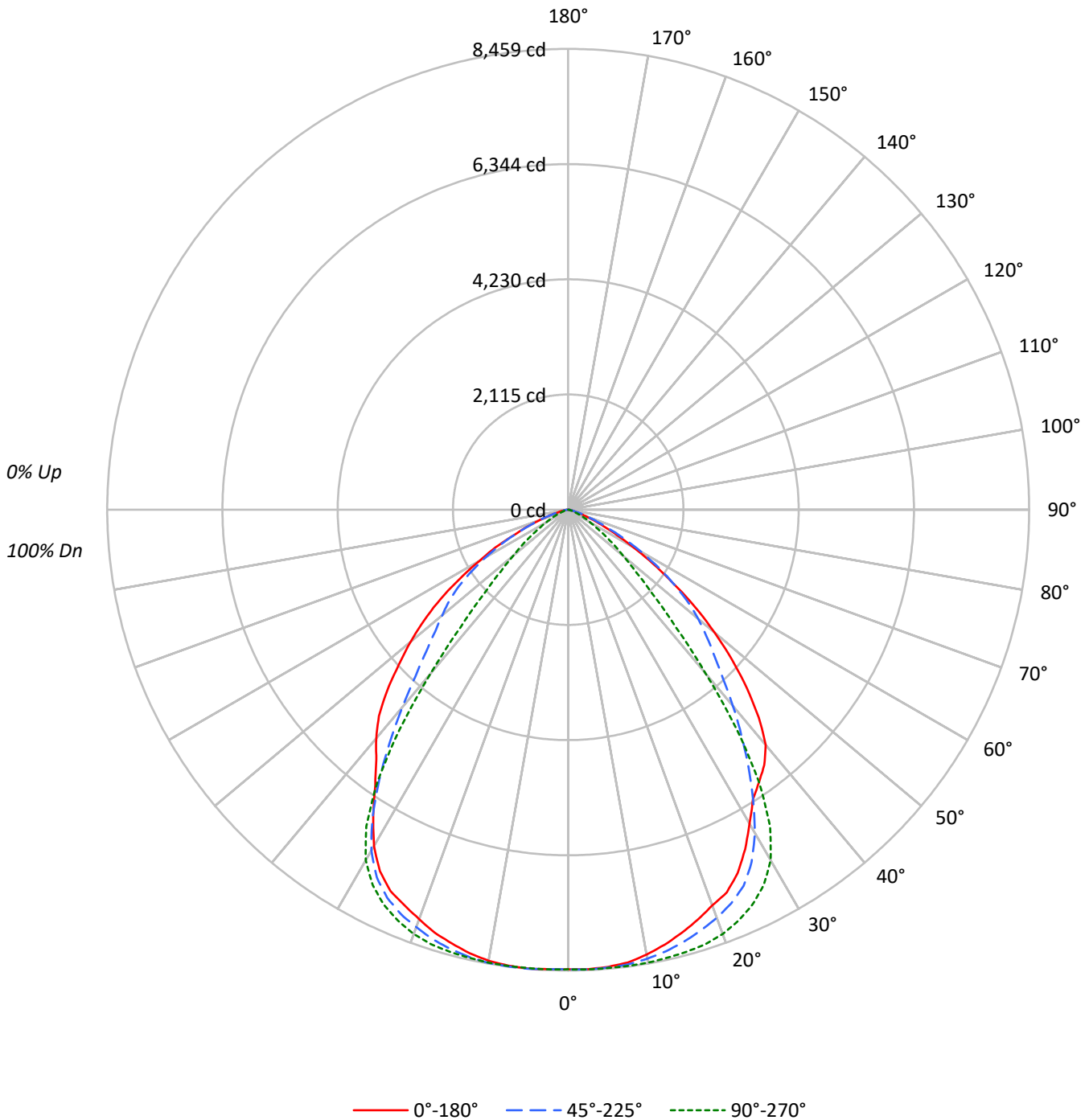
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	260154	260154	260154
5°	260726	261429	261711
10°	259630	264311	263174
15°	256753	268175	263118
20°	253669	271947	262437
25°	250377	272258	262707
30°	236870	264604	253801
35°	229799	229965	232355
40°	226952	158226	220576
45°	202224	94989	204989
50°	168149	63219	181184
55°	126114	43584	153623
60°	85460	29042	115908
65°	51550	18840	79627
70°	28581	10206	48993
75°	12951	4313	25365
80°	11259	4812	17687
85°	12808	6404	17655



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	805.2	5.0
10°-20°	2338.3	14.6
20°-30°	3549.1	22.2
30°-40°	3727.6	23.3
40°-50°	2794.7	17.5
50°-60°	1793.1	11.2
60°-70°	767.1	4.8
70°-80°	181.2	1.1
80°-90°	33.7	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°	6692.5	41.9
0°-40°	10420.1	65.2
0°-60°	15008.0	93.9
0°-90°	15990.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15990.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8437	8437	8437	8437	8437	
5°	8423	8437	8446	8459	8455	800
15°	8043	8210	8400	8346	8242	2268
25°	7359	7617	8002	7857	7721	3362
35°	6104	5765	6109	6036	6172	3831
45°	4637	3790	2178	3682	4701	3551
55°	2346	2346	811	2445	2858	2128
65°	706	833	258	1073	1091	754
75°	109	127	36	217	213	158
85°	36	23	18	36	50	38
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°	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6
2.5°	8441.2	8450.3	8445.7	8445.7	8441.2	8445.7	8445.7	8454.8	8454.8	8445.7	8441.2
5°	8423.0	8432.1	8432.1	8423.0	8423.0	8445.7	8432.1	8441.2	8441.2	8436.6	8436.6
7.5°	8382.3	8382.3	8400.4	8386.9	8386.9	8400.4	8395.9	8404.9	8414.0	8418.6	8418.6
10°	8291.7	8300.8	8305.3	8305.3	8309.9	8323.4	8332.5	8350.7	8359.6	8368.7	8373.3
12.5°	8178.6	8192.1	8196.6	8192.1	8205.7	8223.8	8246.5	8269.1	8282.7	8300.8	8314.4
15°	8042.6	8042.6	8051.7	8065.3	8074.4	8101.6	8124.2	8151.3	8187.5	8210.3	8232.9
17.5°	7893.2	7902.3	7915.9	7915.9	7934.0	7979.2	7992.9	8033.6	8074.4	8097.0	8142.3
20°	7730.2	7739.2	7752.9	7761.9	7784.5	7820.8	7847.9	7884.2	7929.5	7970.3	8015.5
22.5°	7603.4	7585.3	7594.3	7603.4	7626.1	7657.8	7689.5	7734.7	7780.0	7820.8	7866.1
25°	7358.8	7363.4	7377.0	7386.0	7413.2	7440.4	7476.6	7530.9	7571.7	7617.0	7666.8
27.5°	7028.3	7032.8	7055.4	7055.4	7078.1	7123.4	7146.0	7191.3	7245.7	7290.9	7349.9
30°	6652.4	6661.4	6661.4	6679.6	6693.1	6715.8	6738.4	6783.7	6810.9	6851.7	6933.2
32.5°	6308.3	6317.3	6312.7	6308.3	6294.7	6290.1	6285.6	6294.7	6303.7	6317.3	6348.9
35°	6104.5	6081.8	6063.7	6032.0	5995.8	5950.5	5909.7	5855.4	5805.6	5764.8	5719.6
37.5°	5909.7	5905.2	5878.0	5832.7	5760.2	5678.8	5583.7	5465.9	5348.2	5221.4	5099.2
40°	5638.0	5624.4	5601.8	5538.4	5456.9	5357.2	5230.5	5085.5	4895.3	4700.6	4501.4
42.5°	5176.1	5180.6	5153.5	5103.6	5026.7	4931.5	4800.2	4641.8	4438.0	4207.0	3948.9
45°	4637.2	4637.2	4628.1	4587.4	4533.1	4456.1	4356.4	4225.1	4025.9	3790.3	3514.1
47.5°	4075.7	4080.2	4066.6	4057.6	4034.9	3985.1	3912.7	3813.0	3672.7	3446.2	3169.9
50°	3505.1	3505.1	3527.7	3523.2	3523.2	3505.1	3473.4	3414.5	3292.3	3111.1	2853.0
52.5°	2934.5	2943.6	2957.2	2975.2	2997.9	3034.1	2997.9	2970.7	2893.7	2753.3	2531.5
55°	2345.8	2354.8	2377.4	2409.1	2436.4	2472.6	2481.6	2481.6	2440.8	2345.8	2178.2
57.5°	1843.1	1829.5	1847.7	1874.8	1911.1	1947.3	1974.4	2006.1	2001.6	1938.2	1802.4
60°	1385.7	1390.3	1403.8	1431.1	1458.2	1489.9	1526.1	1553.3	1566.9	1535.2	1449.1
62.5°	1009.9	1009.9	1027.9	1055.1	1068.7	1114.0	1136.6	1150.3	1163.8	1159.3	1105.0
65°	706.5	715.5	724.6	738.2	751.7	778.9	792.5	819.6	828.7	833.3	792.5
67.5°	498.2	484.6	493.6	502.6	516.2	534.4	561.6	561.6	575.1	575.1	547.9
70°	317.0	317.0	321.6	335.1	344.2	348.7	357.8	366.8	380.4	375.9	375.9
72.5°	212.9	208.3	212.9	217.4	221.9	235.5	235.5	240.0	249.1	253.6	235.5
75°	108.7	113.2	122.2	117.8	131.3	122.2	126.8	140.4	135.8	126.8	126.8
77.5°	90.5	90.5	90.5	86.1	95.1	95.1	90.5	99.6	95.1	95.1	90.5
80°	63.4	67.9	63.4	58.8	63.4	58.8	58.8	58.8	58.8	58.8	54.3
82.5°	49.9	40.8	45.3	40.8	45.3	45.3	40.8	36.2	36.2	40.8	36.2
85°	36.2	27.1	31.7	31.7	27.1	27.1	27.1	27.1	27.1	22.6	22.6
87.5°	22.6	13.6	13.6	13.6	18.1	18.1	18.1	13.6	18.1	18.1	9.1
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°	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6
2.5°	8450.3	8445.7	8454.8	8450.3	8450.3	8445.7	8450.3	8445.7	8454.8	8436.6	8441.2
5°	8450.3	8441.2	8445.7	8450.3	8454.8	8445.7	8445.7	8445.7	8454.8	8445.7	8450.3
7.5°	8432.1	8427.6	8441.2	8450.3	8445.7	8441.2	8450.3	8445.7	8454.8	8450.3	8459.2
10°	8395.9	8400.4	8409.5	8423.0	8427.6	8432.1	8441.2	8441.2	8454.8	8436.6	8445.7
12.5°	8341.6	8359.6	8382.3	8391.3	8409.5	8409.5	8418.6	8423.0	8432.1	8427.6	8441.2
15°	8273.6	8296.2	8323.4	8346.1	8368.7	8382.3	8395.9	8400.4	8414.0	8400.4	8404.9
17.5°	8192.1	8219.2	8260.0	8287.2	8323.4	8337.0	8355.1	8364.2	8377.8	8368.7	8373.3
20°	8078.8	8110.6	8155.9	8196.6	8219.2	8250.9	8273.6	8287.2	8296.2	8287.2	8291.7
22.5°	7920.4	7965.7	8024.6	8056.2	8101.6	8128.7	8133.3	8164.9	8187.5	8164.9	8174.0
25°	7734.7	7780.0	7825.3	7893.2	7934.0	7965.7	7997.4	8001.9	8024.6	8020.0	8015.5
27.5°	7426.8	7485.7	7562.6	7617.0	7671.3	7721.2	7757.4	7766.4	7789.1	7780.0	7784.5
30°	7005.6	7069.1	7141.5	7227.5	7304.5	7354.3	7399.6	7431.3	7453.9	7440.4	7435.8
32.5°	6407.9	6471.3	6548.3	6634.3	6724.9	6797.3	6851.7	6892.4	6919.6	6910.5	6887.9
35°	5724.1	5742.2	5792.0	5860.0	5936.9	6013.9	6063.7	6108.9	6140.6	6149.7	6149.7
37.5°	5022.2	4963.3	4927.1	4927.1	4972.3	5004.0	5049.3	5076.5	5126.3	5144.4	5158.0
40°	4342.8	4207.0	4080.2	3985.1	3921.7	3917.2	3917.2	3930.7	3976.0	4034.9	4089.3
42.5°	3736.0	3518.6	3324.0	3147.3	3020.6	2948.1	2916.4	2920.9	2957.2	3011.5	3102.0
45°	3251.5	2979.8	2735.2	2522.4	2350.3	2237.1	2182.8	2178.2	2205.4	2268.7	2368.5
47.5°	2875.6	2585.8	2309.5	2065.0	1879.4	1757.0	1693.7	1675.6	1693.7	1752.5	1870.3
50°	2563.2	2264.3	1979.0	1725.4	1526.1	1399.4	1340.4	1317.8	1340.4	1390.3	1508.0
52.5°	2273.3	1965.4	1698.2	1453.7	1240.8	1132.1	1068.7	1055.1	1068.7	1127.6	1222.7
55°	1938.2	1675.6	1412.9	1168.3	982.7	874.0	824.2	810.7	824.2	878.6	978.2
57.5°	1607.7	1381.2	1150.3	928.3	769.9	674.7	629.5	611.3	643.0	679.2	797.0
60°	1299.6	1118.6	923.8	729.1	597.8	511.7	475.5	470.9	480.0	525.3	606.8
62.5°	1019.0	869.5	715.5	557.0	448.3	412.1	366.8	362.3	371.3	398.5	461.9
65°	733.6	638.6	520.8	407.5	321.6	271.7	253.6	258.2	267.2	285.3	344.2
67.5°	511.7	443.8	362.3	285.3	221.9	199.2	181.2	176.6	181.2	212.9	244.5
70°	344.2	303.4	244.5	217.4	154.0	122.2	126.8	113.2	131.3	131.3	158.5
72.5°	226.4	199.2	163.0	126.8	108.7	86.1	86.1	81.6	90.5	95.1	117.8
75°	117.8	90.5	90.5	63.4	45.3	22.6	40.8	36.2	31.7	36.2	45.3
77.5°	81.6	67.9	63.4	49.9	45.3	36.2	36.2	36.2	36.2	40.8	45.3
80°	49.9	49.9	36.2	31.7	27.1	22.6	27.1	27.1	27.1	27.1	31.7
82.5°	31.7	27.1	27.1	22.6	22.6	18.1	18.1	18.1	18.1	18.1	27.1
85°	27.1	18.1	18.1	13.6	18.1	31.7	13.6	18.1	18.1	18.1	13.6
87.5°	9.1	13.6	13.6	13.6	9.1	4.5	9.1	13.6	13.6	22.6	18.1
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°	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6	8436.6
2.5°	8450.3	8454.8	8454.8	8450.3	8450.3	8441.2	8459.2	8445.7	8450.3	8468.3	8454.8
5°	8459.2	8463.8	8463.8	8459.2	8459.2	8459.2	8463.8	8463.8	8459.2	8454.8	8463.8
7.5°	8477.4	8472.9	8472.9	8463.8	8463.8	8454.8	8463.8	8450.3	8459.2	8450.3	8463.8
10°	8454.8	8459.2	8454.8	8450.3	8450.3	8445.7	8445.7	8432.1	8436.6	8423.0	8432.1
12.5°	8441.2	8436.6	8436.6	8427.6	8418.6	8409.5	8404.9	8391.3	8391.3	8359.6	8373.3
15°	8404.9	8409.5	8395.9	8377.8	8368.7	8346.1	8337.0	8318.9	8300.8	8278.2	8282.7
17.5°	8373.3	8359.6	8341.6	8323.4	8287.2	8269.1	8250.9	8223.8	8214.7	8187.5	8178.6
20°	8278.2	8269.1	8246.5	8214.7	8192.1	8151.3	8133.3	8106.1	8083.4	8056.2	8042.6
22.5°	8155.9	8146.8	8119.6	8087.9	8051.7	8033.6	8015.5	7965.7	7943.0	7915.9	7911.3
25°	8001.9	7988.3	7961.2	7924.9	7906.8	7857.0	7838.8	7802.6	7793.6	7766.4	7761.9
27.5°	7766.4	7748.3	7716.6	7671.3	7639.6	7607.9	7589.9	7562.6	7553.6	7526.4	7521.9
30°	7413.2	7390.5	7327.1	7309.1	7254.7	7223.0	7223.0	7186.8	7191.3	7173.2	7173.2
32.5°	6856.2	6820.0	6770.1	6733.9	6697.7	6679.6	6679.6	6666.0	6675.0	6675.0	6684.1
35°	6118.0	6068.3	6041.0	6018.4	6018.4	6036.5	6090.9	6104.5	6131.7	6154.3	6172.4
37.5°	5171.5	5167.1	5198.8	5225.9	5293.9	5370.9	5465.9	5547.5	5624.4	5678.8	5733.1
40°	4148.1	4261.4	4351.9	4478.8	4582.8	4732.3	4904.4	5044.8	5176.1	5271.2	5370.9
42.5°	3237.9	3382.8	3573.0	3758.6	3944.4	4148.1	4374.6	4569.3	4741.4	4872.7	4976.8
45°	2522.4	2721.6	2952.6	3188.1	3428.1	3681.7	3917.2	4116.4	4297.6	4433.4	4537.6
47.5°	2033.3	2250.7	2513.3	2771.5	3043.2	3310.3	3573.0	3745.1	3894.5	4003.2	4098.4
50°	1680.0	1911.1	2187.3	2481.6	2753.3	3020.6	3246.9	3414.5	3536.8	3631.9	3690.7
52.5°	1403.8	1648.3	1942.8	2237.1	2508.8	2753.3	2957.2	3083.9	3183.6	3251.5	3305.8
55°	1159.3	1394.8	1671.1	1947.3	2214.5	2445.4	2612.9	2708.1	2785.0	2825.8	2857.5
57.5°	946.5	1163.8	1417.4	1671.1	1902.0	2092.2	2223.5	2318.6	2354.8	2386.5	2382.0
60°	742.7	946.5	1177.4	1394.8	1594.1	1748.0	1843.1	1897.4	1924.6	1938.2	1929.1
62.5°	584.2	769.9	946.5	1136.6	1281.6	1412.9	1503.5	1503.5	1517.0	1521.6	1535.2
65°	434.7	575.1	729.1	869.5	987.2	1073.3	1123.1	1136.6	1154.8	1150.3	1141.2
67.5°	321.6	425.7	538.9	643.0	724.6	778.9	815.1	846.9	842.3	833.3	828.7
70°	221.9	289.9	389.5	452.9	511.7	566.1	575.1	579.6	584.2	588.7	579.6
72.5°	154.0	203.8	258.2	312.5	348.7	371.3	394.0	398.5	398.5	398.5	394.0
75°	77.0	104.2	154.0	176.6	208.3	217.4	235.5	235.5	249.1	230.9	226.4
77.5°	67.9	81.6	108.7	126.8	140.4	154.0	158.5	172.1	167.5	158.5	163.0
80°	40.8	49.9	67.9	77.0	95.1	99.6	104.2	108.7	104.2	108.7	108.7
82.5°	31.7	36.2	45.3	45.3	58.8	58.8	63.4	63.4	67.9	67.9	67.9
85°	18.1	31.7	27.1	54.3	36.2	36.2	45.3	54.3	45.3	45.3	54.3
87.5°	18.1	18.1	13.6	18.1	18.1	18.1	22.6	27.1	27.1	31.7	27.1
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: P249331

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8436.6	8436.6	8436.6	8436.6
2.5°	8450.3	8459.2	8445.7	8441.2
5°	8463.8	8463.8	8454.8	8454.8
7.5°	8463.8	8463.8	8450.3	8441.2
10°	8427.6	8427.6	8414.0	8404.9
12.5°	8359.6	8359.6	8355.1	8341.6
15°	8273.6	8273.6	8255.5	8242.0
17.5°	8155.9	8164.9	8142.3	8142.3
20°	8029.1	8024.6	8006.5	7997.4
22.5°	7897.8	7888.7	7884.2	7857.0
25°	7757.4	7748.3	7734.7	7721.2
27.5°	7517.4	7512.8	7499.2	7481.2
30°	7150.5	7146.0	7127.9	7127.9
32.5°	6675.0	6670.5	6652.4	6657.0
35°	6181.4	6199.6	6190.5	6172.4
37.5°	5769.3	5783.0	5792.0	5783.0
40°	5425.2	5465.9	5470.5	5479.6
42.5°	5058.4	5112.7	5130.9	5139.8
45°	4619.1	4668.9	4709.7	4700.6
47.5°	4170.7	4207.0	4243.2	4216.0
50°	3740.6	3763.2	3776.8	3776.8
52.5°	3333.0	3333.0	3328.5	3333.0
55°	2866.5	2866.5	2848.5	2857.5
57.5°	2377.4	2386.5	2372.9	2350.3
60°	1924.6	1902.0	1892.9	1879.4
62.5°	1499.0	1499.0	1467.3	1508.0
65°	1123.1	1109.5	1095.9	1091.3
67.5°	815.1	810.7	797.0	792.5
70°	575.1	557.0	552.5	543.4
72.5°	384.9	384.9	375.9	375.9
75°	235.5	212.9	208.3	212.9
77.5°	163.0	158.5	158.5	154.0
80°	108.7	104.2	113.2	99.6
82.5°	67.9	72.5	67.9	72.5
85°	45.3	54.3	49.9	49.9
87.5°	27.1	27.1	27.1	27.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)