

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: P249547

Luminaire Tested: **LSR8B150D010 EC8B150840 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249547
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16174.0 lumens
Efficiency: N/A
Efficacy: 102.0 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

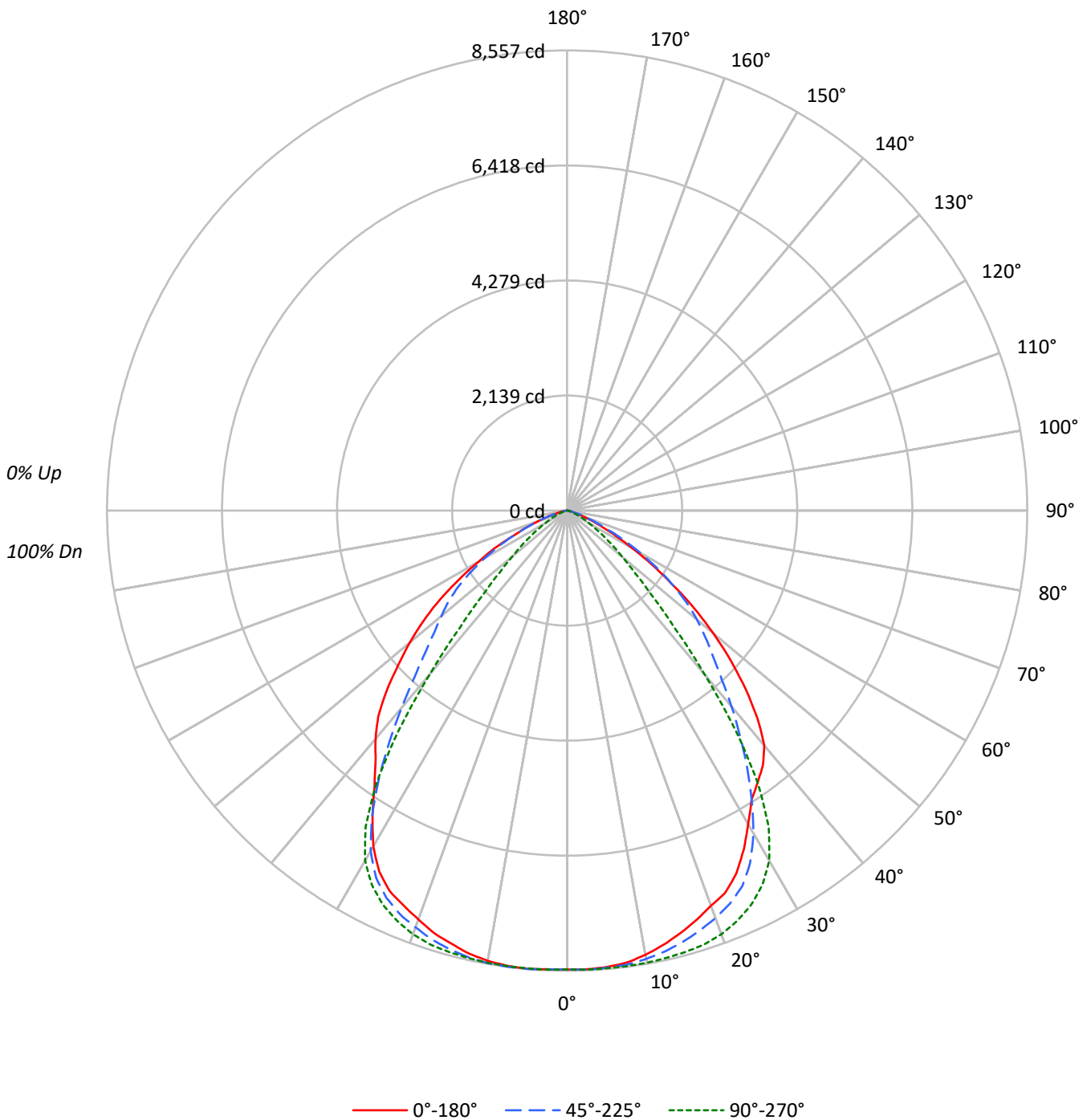
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	263148	263148	263148
5°	263726	264438	264723
10°	262617	267351	266205
15°	259709	271262	266145
20°	256590	275074	265456
25°	253258	275391	265728
30°	239598	267649	256721
35°	232445	232611	235031
40°	229564	160050	223112
45°	204553	96084	207348
50°	170088	63948	183270
55°	127565	44084	155387
60°	86447	29375	117240
65°	52141	19051	80546
70°	28914	10323	49552
75°	13106	4373	25651
80°	11383	4883	17900
85°	12985	6475	17832



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	814.4	5.0
10°-20°	2365.2	14.6
20°-30°	3589.9	22.2
30°-40°	3770.5	23.3
40°-50°	2826.9	17.5
50°-60°	1813.8	11.2
60°-70°	775.9	4.8
70°-80°	183.3	1.1
80°-90°	34.1	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°	6769.5	41.9
0°-40°	10540.0	65.2
0°-60°	15180.7	93.9
0°-90°	16174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16174.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8534	8534	8534	8534	8534	
5°	8520	8534	8543	8557	8552	809
15°	8135	8305	8497	8442	8337	2295
25°	7444	7705	8094	7947	7810	3401
35°	6175	5831	6179	6106	6244	3875
45°	4691	3834	2203	3724	4755	3592
55°	2373	2373	820	2474	2890	2152
65°	715	843	261	1086	1104	763
75°	110	128	37	220	215	160
85°	37	23	18	37	50	39
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°	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7
2.5°	8538.3	8547.5	8542.9	8542.9	8538.3	8542.9	8542.9	8552.1	8552.1	8542.9	8538.3
5°	8519.9	8529.1	8529.1	8519.9	8519.9	8542.9	8529.1	8538.3	8538.3	8533.7	8533.7
7.5°	8478.8	8478.8	8497.1	8483.4	8483.4	8497.1	8492.5	8501.7	8510.9	8515.4	8515.4
10°	8387.1	8396.3	8400.9	8400.9	8405.5	8419.2	8428.4	8446.7	8455.8	8465.0	8469.6
12.5°	8272.7	8286.4	8291.0	8286.4	8300.1	8318.4	8341.4	8364.3	8378.0	8396.3	8410.1
15°	8135.2	8135.2	8144.4	8158.1	8167.3	8194.8	8217.7	8245.1	8281.8	8304.7	8327.6
17.5°	7984.1	7993.3	8006.9	8006.9	8025.3	8071.1	8084.8	8126.1	8167.3	8190.2	8236.0
20°	7819.2	7828.3	7842.1	7851.3	7874.1	7910.8	7938.2	7974.9	8020.7	8062.0	8107.7
22.5°	7690.9	7672.6	7681.7	7690.9	7713.8	7745.9	7778.0	7823.7	7869.5	7910.8	7956.6
25°	7443.5	7448.1	7461.9	7471.0	7498.5	7526.0	7562.7	7617.6	7658.8	7704.7	7755.0
27.5°	7109.2	7113.8	7136.6	7136.6	7159.5	7205.3	7228.2	7274.0	7329.1	7374.8	7434.4
30°	6729.0	6738.1	6738.1	6756.5	6770.1	6793.1	6816.0	6861.8	6889.3	6930.5	7013.0
32.5°	6380.9	6390.0	6385.4	6380.9	6367.1	6362.5	6357.9	6367.1	6376.3	6390.0	6422.0
35°	6174.8	6151.8	6133.5	6101.5	6064.8	6019.0	5977.7	5922.8	5872.4	5831.1	5785.4
37.5°	5977.7	5973.1	5945.7	5899.8	5826.5	5744.1	5648.0	5528.8	5409.7	5281.5	5157.8
40°	5702.9	5689.1	5666.2	5602.1	5519.6	5418.9	5290.7	5144.1	4951.6	4754.7	4553.2
42.5°	5235.6	5240.2	5212.8	5162.3	5084.5	4988.3	4855.5	4695.2	4489.1	4255.4	3994.3
45°	4690.6	4690.6	4681.4	4640.1	4585.2	4507.3	4406.6	4273.8	4072.2	3834.0	3554.5
47.5°	4122.6	4127.2	4113.4	4104.3	4081.3	4031.0	3957.7	3856.9	3714.9	3485.8	3206.4
50°	3545.5	3545.5	3568.3	3563.7	3563.7	3545.5	3513.4	3453.8	3330.1	3146.9	2885.9
52.5°	2968.2	2977.4	2991.2	3009.5	3032.3	3069.0	3032.3	3004.9	2927.0	2785.0	2560.6
55°	2372.8	2381.9	2404.8	2436.9	2464.4	2501.1	2510.2	2510.2	2468.9	2372.8	2203.3
57.5°	1864.4	1850.6	1868.9	1896.4	1933.1	1969.7	1997.2	2029.2	2024.6	1960.5	1823.1
60°	1401.7	1406.3	1420.0	1447.5	1475.0	1507.0	1543.7	1571.1	1584.9	1552.9	1465.8
62.5°	1021.5	1021.5	1039.8	1067.2	1081.0	1126.9	1149.7	1163.5	1177.2	1172.6	1117.7
65°	714.6	723.7	732.9	746.7	760.4	787.8	801.6	829.1	838.3	842.8	801.6
67.5°	503.9	490.1	499.3	508.4	522.2	540.6	568.0	568.0	581.7	581.7	554.2
70°	320.7	320.7	325.3	338.9	348.1	352.7	361.9	371.0	384.8	380.2	380.2
72.5°	215.3	210.7	215.3	219.9	224.5	238.2	238.2	242.8	252.0	256.6	238.2
75°	110.0	114.5	123.6	119.1	132.8	123.6	128.2	142.0	137.4	128.2	128.2
77.5°	91.6	91.6	91.6	87.1	96.2	96.2	91.6	100.8	96.2	96.2	91.6
80°	64.1	68.7	64.1	59.5	64.1	59.5	59.5	59.5	59.5	59.5	54.9
82.5°	50.4	41.2	45.8	41.2	45.8	45.8	41.2	36.7	36.7	41.2	36.7
85°	36.7	27.5	32.1	32.1	27.5	27.5	27.5	27.5	27.5	22.9	22.9
87.5°	22.9	13.8	13.8	13.8	18.3	18.3	18.3	13.8	18.3	18.3	9.2
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°	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7
2.5°	8547.5	8542.9	8552.1	8547.5	8547.5	8542.9	8547.5	8542.9	8552.1	8533.7	8538.3
5°	8547.5	8538.3	8542.9	8547.5	8552.1	8542.9	8542.9	8542.9	8552.1	8542.9	8547.5
7.5°	8529.1	8524.5	8538.3	8547.5	8542.9	8538.3	8547.5	8542.9	8552.1	8547.5	8556.6
10°	8492.5	8497.1	8506.3	8519.9	8524.5	8529.1	8538.3	8538.3	8552.1	8533.7	8542.9
12.5°	8437.6	8455.8	8478.8	8487.9	8506.3	8506.3	8515.4	8519.9	8529.1	8524.5	8538.3
15°	8368.8	8391.7	8419.2	8442.1	8465.0	8478.8	8492.5	8497.1	8510.9	8497.1	8501.7
17.5°	8286.4	8313.8	8355.1	8382.5	8419.2	8433.0	8451.2	8460.4	8474.2	8465.0	8469.6
20°	8171.8	8204.0	8249.7	8291.0	8313.8	8345.9	8368.8	8382.5	8391.7	8382.5	8387.1
22.5°	8011.5	8057.4	8116.9	8148.9	8194.8	8222.2	8226.8	8258.9	8281.8	8258.9	8268.1
25°	7823.7	7869.5	7915.4	7984.1	8025.3	8057.4	8089.4	8094.0	8116.9	8112.3	8107.7
27.5°	7512.2	7571.8	7649.6	7704.7	7759.6	7810.0	7846.7	7855.7	7878.7	7869.5	7874.1
30°	7086.2	7150.4	7223.7	7310.7	7388.6	7438.9	7484.8	7516.8	7539.7	7526.0	7521.4
32.5°	6481.6	6545.7	6623.6	6710.6	6802.3	6875.5	6930.5	6971.8	6999.2	6990.0	6967.2
35°	5790.0	5808.3	5858.7	5927.4	6005.2	6083.1	6133.5	6179.2	6211.3	6220.5	6220.5
37.5°	5079.9	5020.4	4983.8	4983.8	5029.5	5061.6	5107.4	5134.9	5185.3	5203.6	5217.4
40°	4392.8	4255.4	4127.2	4031.0	3966.9	3962.3	3962.3	3976.0	4021.8	4081.3	4136.3
42.5°	3779.0	3559.1	3362.2	3183.5	3055.3	2982.0	2950.0	2954.6	2991.2	3046.1	3137.7
45°	3288.9	3014.1	2766.7	2551.4	2377.3	2262.8	2207.9	2203.3	2230.7	2294.9	2395.7
47.5°	2908.7	2615.5	2336.1	2088.7	1901.0	1777.3	1713.2	1694.9	1713.2	1772.7	1891.8
50°	2592.7	2290.4	2001.8	1745.2	1543.7	1415.5	1355.8	1333.0	1355.8	1406.3	1525.3
52.5°	2299.5	1988.0	1717.7	1470.4	1255.1	1145.1	1081.0	1067.2	1081.0	1140.5	1236.8
55°	1960.5	1694.9	1429.1	1181.8	994.0	884.1	833.7	820.0	833.7	888.7	989.4
57.5°	1626.2	1397.1	1163.5	939.0	778.7	682.5	636.7	618.4	650.4	687.1	806.2
60°	1314.6	1131.5	934.4	737.5	604.7	517.6	480.9	476.3	485.5	531.4	613.8
62.5°	1030.7	879.5	723.7	563.4	453.5	416.8	371.0	366.5	375.6	403.0	467.3
65°	742.1	645.9	526.8	412.2	325.3	274.8	256.6	261.1	270.2	288.6	348.1
67.5°	517.6	448.9	366.5	288.6	224.5	201.5	183.3	178.7	183.3	215.3	247.4
70°	348.1	306.9	247.4	219.9	155.8	123.6	128.2	114.5	132.8	132.8	160.3
72.5°	229.0	201.5	164.9	128.2	110.0	87.1	87.1	82.5	91.6	96.2	119.1
75°	119.1	91.6	91.6	64.1	45.8	22.9	41.2	36.7	32.1	36.7	45.8
77.5°	82.5	68.7	64.1	50.4	45.8	36.7	36.7	36.7	36.7	41.2	45.8
80°	50.4	50.4	36.7	32.1	27.5	22.9	27.5	27.5	27.5	27.5	32.1
82.5°	32.1	27.5	27.5	22.9	22.9	18.3	18.3	18.3	18.3	18.3	27.5
85°	27.5	18.3	18.3	13.8	18.3	32.1	13.8	18.3	18.3	18.3	13.8
87.5°	9.2	13.8	13.8	13.8	9.2	4.6	9.2	13.8	13.8	22.9	18.3
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°	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7	8533.7
2.5°	8547.5	8552.1	8552.1	8547.5	8547.5	8538.3	8556.6	8542.9	8547.5	8565.8	8552.1
5°	8556.6	8561.2	8561.2	8556.6	8556.6	8556.6	8561.2	8561.2	8556.6	8552.1	8561.2
7.5°	8575.0	8570.4	8570.4	8561.2	8561.2	8552.1	8561.2	8547.5	8556.6	8547.5	8561.2
10°	8552.1	8556.6	8552.1	8547.5	8547.5	8542.9	8542.9	8529.1	8533.7	8519.9	8529.1
12.5°	8538.3	8533.7	8533.7	8524.5	8515.4	8506.3	8501.7	8487.9	8487.9	8455.8	8469.6
15°	8501.7	8506.3	8492.5	8474.2	8465.0	8442.1	8433.0	8414.6	8396.3	8373.4	8378.0
17.5°	8469.6	8455.8	8437.6	8419.2	8382.5	8364.3	8345.9	8318.4	8309.2	8281.8	8272.7
20°	8373.4	8364.3	8341.4	8309.2	8286.4	8245.1	8226.8	8199.4	8176.4	8148.9	8135.2
22.5°	8249.7	8240.5	8213.1	8181.0	8144.4	8126.1	8107.7	8057.4	8034.4	8006.9	8002.3
25°	8094.0	8080.2	8052.8	8016.1	7997.8	7947.4	7929.0	7892.4	7883.3	7855.7	7851.3
27.5°	7855.7	7837.5	7805.4	7759.6	7727.5	7695.5	7677.2	7649.6	7640.5	7613.0	7608.5
30°	7498.5	7475.6	7411.5	7393.2	7338.2	7306.1	7306.1	7269.4	7274.0	7255.8	7255.8
32.5°	6935.1	6898.5	6848.0	6811.4	6774.7	6756.5	6756.5	6742.7	6751.9	6751.9	6761.0
35°	6188.4	6138.1	6110.5	6087.7	6087.7	6105.9	6161.0	6174.8	6202.2	6225.1	6243.5
37.5°	5231.0	5226.5	5258.6	5286.1	5354.8	5432.7	5528.8	5611.3	5689.1	5744.1	5799.1
40°	4195.9	4310.4	4402.0	4530.3	4635.6	4786.7	4960.8	5102.8	5235.6	5331.9	5432.7
42.5°	3275.1	3421.7	3614.2	3801.9	3989.7	4195.9	4424.9	4621.9	4795.9	4928.8	5034.1
45°	2551.4	2752.9	2986.6	3224.8	3467.6	3724.1	3962.3	4163.8	4347.1	4484.5	4589.8
47.5°	2056.7	2276.6	2542.2	2803.4	3078.2	3348.4	3614.2	3788.2	3939.3	4049.3	4145.5
50°	1699.4	1933.1	2212.5	2510.2	2785.0	3055.3	3284.3	3453.8	3577.5	3673.7	3733.2
52.5°	1420.0	1667.3	1965.1	2262.8	2537.6	2785.0	2991.2	3119.4	3220.2	3288.9	3343.8
55°	1172.6	1410.9	1690.3	1969.7	2239.9	2473.5	2643.0	2739.3	2817.0	2858.3	2890.3
57.5°	957.4	1177.2	1433.7	1690.3	1923.9	2116.3	2249.1	2345.3	2381.9	2414.0	2409.4
60°	751.3	957.4	1191.0	1410.9	1612.4	1768.1	1864.4	1919.3	1946.7	1960.5	1951.3
62.5°	590.9	778.7	957.4	1149.7	1296.3	1429.1	1520.8	1520.8	1534.5	1539.1	1552.9
65°	439.7	581.7	737.5	879.5	998.5	1085.6	1136.0	1149.7	1168.1	1163.5	1154.3
67.5°	325.3	430.6	545.1	650.4	732.9	787.8	824.5	856.6	852.0	842.8	838.3
70°	224.5	293.2	394.0	458.1	517.6	572.6	581.7	586.3	590.9	595.5	586.3
72.5°	155.8	206.1	261.1	316.1	352.7	375.6	398.6	403.0	403.0	403.0	398.6
75°	77.9	105.4	155.8	178.7	210.7	219.9	238.2	238.2	252.0	233.6	229.0
77.5°	68.7	82.5	110.0	128.2	142.0	155.8	160.3	174.1	169.5	160.3	164.9
80°	41.2	50.4	68.7	77.9	96.2	100.8	105.4	110.0	105.4	110.0	110.0
82.5°	32.1	36.7	45.8	45.8	59.5	59.5	64.1	64.1	68.7	68.7	68.7
85°	18.3	32.1	27.5	54.9	36.7	36.7	45.8	54.9	45.8	45.8	54.9
87.5°	18.3	18.3	13.8	18.3	18.3	18.3	22.9	27.5	27.5	32.1	27.5
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: P249547

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8533.7	8533.7	8533.7	8533.7
2.5°	8547.5	8556.6	8542.9	8538.3
5°	8561.2	8561.2	8552.1	8552.1
7.5°	8561.2	8561.2	8547.5	8538.3
10°	8524.5	8524.5	8510.9	8501.7
12.5°	8455.8	8455.8	8451.2	8437.6
15°	8368.8	8368.8	8350.5	8336.8
17.5°	8249.7	8258.9	8236.0	8236.0
20°	8121.5	8116.9	8098.6	8089.4
22.5°	7988.7	7979.5	7974.9	7947.4
25°	7846.7	7837.5	7823.7	7810.0
27.5°	7603.9	7599.3	7585.5	7567.2
30°	7232.8	7228.2	7209.9	7209.9
32.5°	6751.9	6747.3	6729.0	6733.6
35°	6252.5	6270.9	6261.7	6243.5
37.5°	5835.7	5849.5	5858.7	5849.5
40°	5487.6	5528.8	5533.4	5542.6
42.5°	5116.6	5171.5	5189.9	5199.0
45°	4672.2	4722.6	4763.9	4754.7
47.5°	4218.7	4255.4	4292.0	4264.6
50°	3783.6	3806.5	3820.3	3820.3
52.5°	3371.4	3371.4	3366.8	3371.4
55°	2899.5	2899.5	2881.3	2890.3
57.5°	2404.8	2414.0	2400.2	2377.3
60°	1946.7	1923.9	1914.7	1901.0
62.5°	1516.2	1516.2	1484.2	1525.3
65°	1136.0	1122.3	1108.5	1103.9
67.5°	824.5	820.0	806.2	801.6
70°	581.7	563.4	558.8	549.6
72.5°	389.4	389.4	380.2	380.2
75°	238.2	215.3	210.7	215.3
77.5°	164.9	160.3	160.3	155.8
80°	110.0	105.4	114.5	100.8
82.5°	68.7	73.3	68.7	73.3
85°	45.8	54.9	50.4	50.4
87.5°	27.5	27.5	27.5	27.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)