

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: P249601

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249601
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15013.0 lumens
Efficiency: N/A
Efficacy: 94.7 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

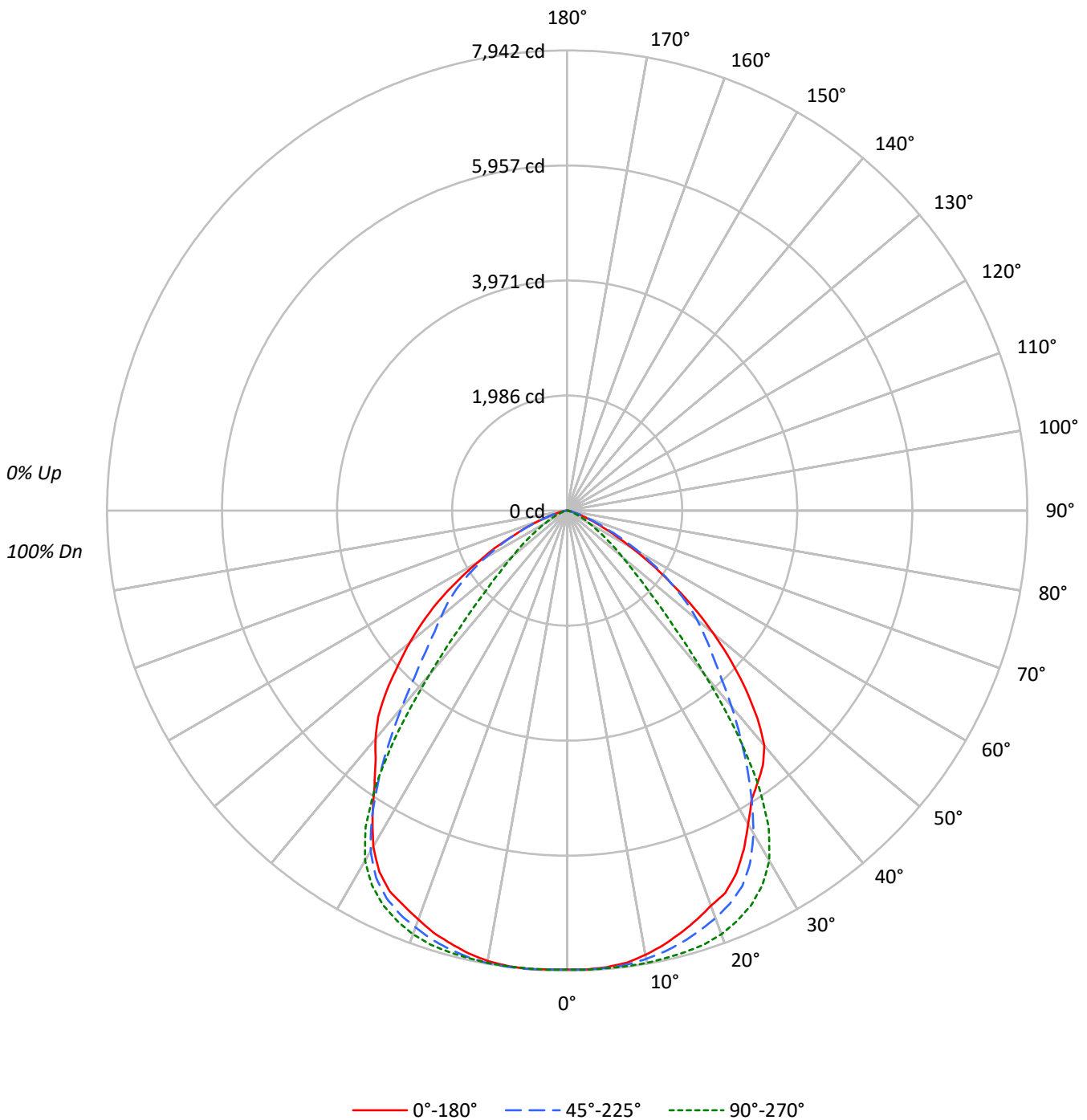
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	244261	244261	244261
5°	244797	245457	245720
10°	243767	248160	247096
15°	241065	251789	247041
20°	238170	255329	246404
25°	235079	255623	246654
30°	222400	248435	238294
35°	215758	215916	218159
40°	213084	148561	207099
45°	189870	89185	192465
50°	157878	59357	170112
55°	118404	40918	144237
60°	80242	27272	108821
65°	48398	17687	74760
70°	26831	9584	45999
75°	12164	4051	23817
80°	10566	4528	16604
85°	12029	6015	16558



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	756.0	5.0
10°-20°	2195.4	14.6
20°-30°	3332.2	22.2
30°-40°	3499.8	23.3
40°-50°	2623.9	17.5
50°-60°	1683.6	11.2
60°-70°	720.2	4.8
70°-80°	170.2	1.1
80°-90°	31.7	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°	6283.6	41.9
0°-40°	9783.5	65.2
0°-60°	14091.0	93.9
0°-90°	15013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15013.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7921	7921	7921	7921	7921	
5°	7908	7921	7930	7942	7938	751
15°	7551	7709	7887	7836	7738	2130
25°	6909	7152	7513	7377	7249	3156
35°	5732	5412	5736	5668	5795	3597
45°	4354	3559	2045	3457	4413	3334
55°	2202	2202	761	2296	2683	1998
65°	663	782	242	1008	1025	708
75°	102	119	34	204	200	149
85°	34	21	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°	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2
2.5°	7925.4	7933.9	7929.7	7929.7	7925.4	7929.7	7929.7	7938.2	7938.2	7929.7	7925.4
5°	7908.4	7916.9	7916.9	7908.4	7908.4	7929.7	7916.9	7925.4	7925.4	7921.2	7921.2
7.5°	7870.2	7870.2	7887.1	7874.4	7874.4	7887.1	7882.9	7891.4	7899.9	7904.2	7904.2
10°	7785.1	7793.6	7797.9	7797.9	7802.1	7814.8	7823.4	7840.4	7848.9	7857.4	7861.6
12.5°	7678.9	7691.5	7695.8	7691.5	7704.3	7721.3	7742.6	7763.9	7776.6	7793.6	7806.4
15°	7551.2	7551.2	7559.7	7572.5	7581.1	7606.5	7627.8	7653.3	7687.3	7708.6	7729.8
17.5°	7411.0	7419.5	7432.2	7432.2	7449.2	7491.7	7504.5	7542.8	7581.1	7602.3	7644.8
20°	7257.9	7266.4	7279.2	7287.7	7308.9	7342.9	7368.4	7402.4	7445.0	7483.3	7525.7
22.5°	7138.8	7121.8	7130.3	7138.8	7160.1	7189.9	7219.6	7262.1	7304.6	7342.9	7385.5
25°	6909.2	6913.5	6926.3	6934.7	6960.3	6985.8	7019.8	7070.8	7109.1	7151.6	7198.3
27.5°	6598.9	6603.1	6624.4	6624.4	6645.6	6688.1	6709.4	6751.9	6803.0	6845.4	6900.8
30°	6246.0	6254.4	6254.4	6271.5	6284.2	6305.5	6326.7	6369.3	6394.7	6433.0	6509.6
32.5°	5922.8	5931.3	5927.0	5922.8	5910.0	5905.8	5901.5	5910.0	5918.6	5931.3	5961.0
35°	5731.5	5710.2	5693.2	5663.5	5629.5	5586.9	5548.6	5497.6	5450.8	5412.5	5370.1
37.5°	5548.6	5544.4	5518.9	5476.3	5408.3	5331.8	5242.6	5132.0	5021.4	4902.4	4787.6
40°	5293.5	5280.7	5259.5	5200.0	5123.4	5029.9	4910.9	4774.8	4596.2	4413.4	4226.3
42.5°	4859.8	4864.1	4838.6	4791.8	4719.6	4630.2	4506.9	4358.1	4166.8	3949.9	3707.6
45°	4353.9	4353.9	4345.4	4307.1	4256.1	4183.8	4090.3	3967.0	3779.9	3558.7	3299.4
47.5°	3826.6	3830.9	3818.1	3809.7	3788.3	3741.6	3673.6	3580.1	3448.3	3235.6	2976.2
50°	3291.0	3291.0	3312.2	3307.9	3307.9	3291.0	3261.2	3205.9	3091.1	2921.0	2678.7
52.5°	2755.2	2763.7	2776.5	2793.5	2814.7	2848.7	2814.7	2789.2	2716.9	2585.1	2376.8
55°	2202.4	2211.0	2232.2	2261.9	2287.5	2321.5	2330.0	2330.0	2291.7	2202.4	2045.1
57.5°	1730.5	1717.7	1734.8	1760.3	1794.3	1828.3	1853.8	1883.6	1879.3	1819.8	1692.2
60°	1301.1	1305.3	1318.0	1343.6	1369.1	1398.9	1432.9	1458.4	1471.2	1441.4	1360.6
62.5°	948.2	948.2	965.1	990.6	1003.4	1046.0	1067.2	1080.0	1092.7	1088.4	1037.4
65°	663.3	671.8	680.3	693.1	705.8	731.3	744.1	769.6	778.1	782.3	744.1
67.5°	467.7	454.9	463.5	471.9	484.7	501.8	527.3	527.3	539.9	539.9	514.5
70°	297.6	297.6	301.9	314.6	323.1	327.4	335.9	344.4	357.2	352.9	352.9
72.5°	199.9	195.6	199.9	204.1	208.4	221.1	221.1	225.3	233.9	238.1	221.1
75°	102.1	106.3	114.8	110.6	123.3	114.8	119.0	131.8	127.5	119.0	119.0
77.5°	85.0	85.0	85.0	80.8	89.3	89.3	85.0	93.5	89.3	89.3	85.0
80°	59.5	63.8	59.5	55.2	59.5	55.2	55.2	55.2	55.2	55.2	51.0
82.5°	46.8	38.3	42.5	38.3	42.5	42.5	38.3	34.0	34.0	38.3	34.0
85°	34.0	25.5	29.8	29.8	25.5	25.5	25.5	25.5	25.5	21.2	21.2
87.5°	21.2	12.8	12.8	12.8	17.0	17.0	17.0	12.8	17.0	17.0	8.5
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°	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2
2.5°	7933.9	7929.7	7938.2	7933.9	7933.9	7929.7	7933.9	7929.7	7938.2	7921.2	7925.4
5°	7933.9	7925.4	7929.7	7933.9	7938.2	7929.7	7929.7	7929.7	7938.2	7929.7	7933.9
7.5°	7916.9	7912.6	7925.4	7933.9	7929.7	7925.4	7933.9	7929.7	7938.2	7933.9	7942.4
10°	7882.9	7887.1	7895.7	7908.4	7912.6	7916.9	7925.4	7925.4	7938.2	7921.2	7929.7
12.5°	7831.9	7848.9	7870.2	7878.6	7895.7	7895.7	7904.2	7908.4	7916.9	7912.6	7925.4
15°	7768.1	7789.3	7814.8	7836.2	7857.4	7870.2	7882.9	7887.1	7899.9	7887.1	7891.4
17.5°	7691.5	7717.0	7755.3	7780.8	7814.8	7827.6	7844.6	7853.1	7865.9	7857.4	7861.6
20°	7585.2	7615.1	7657.5	7695.8	7717.0	7746.8	7768.1	7780.8	7789.3	7780.8	7785.1
22.5°	7436.5	7479.0	7534.2	7564.0	7606.5	7632.0	7636.3	7666.1	7687.3	7666.1	7674.6
25°	7262.1	7304.6	7347.2	7411.0	7449.2	7479.0	7508.8	7513.0	7534.2	7530.0	7525.7
27.5°	6973.0	7028.3	7100.5	7151.6	7202.6	7249.4	7283.4	7291.8	7313.2	7304.6	7308.9
30°	6577.5	6637.1	6705.2	6785.9	6858.2	6904.9	6947.5	6977.2	6998.5	6985.8	6981.5
32.5°	6016.4	6075.9	6148.2	6228.9	6314.0	6382.0	6433.0	6471.3	6496.8	6488.3	6467.0
35°	5374.4	5391.3	5438.1	5501.9	5574.1	5646.4	5693.2	5735.7	5765.4	5774.0	5774.0
37.5°	4715.3	4660.1	4626.0	4626.0	4668.5	4698.2	4740.8	4766.3	4813.1	4830.1	4842.8
40°	4077.5	3949.9	3830.9	3741.6	3682.1	3677.9	3677.9	3690.6	3733.1	3788.3	3839.4
42.5°	3507.8	3303.6	3120.9	2955.0	2836.0	2768.0	2738.2	2742.5	2776.5	2827.5	2912.5
45°	3052.8	2797.7	2568.1	2368.3	2206.7	2100.4	2049.4	2045.1	2070.6	2130.1	2223.8
47.5°	2699.9	2427.8	2168.4	1938.8	1764.5	1649.7	1590.2	1573.2	1590.2	1645.4	1756.0
50°	2406.5	2126.0	1858.1	1619.9	1432.9	1313.9	1258.5	1237.3	1258.5	1305.3	1415.8
52.5°	2134.4	1845.3	1594.4	1364.8	1165.0	1062.9	1003.4	990.6	1003.4	1058.7	1148.0
55°	1819.8	1573.2	1326.6	1097.0	922.7	820.6	773.8	761.1	773.8	824.9	918.4
57.5°	1509.4	1296.8	1080.0	871.6	722.8	633.5	591.0	574.0	603.7	637.7	748.3
60°	1220.2	1050.2	867.3	684.6	561.3	480.4	446.4	442.2	450.7	493.2	569.7
62.5°	956.7	816.4	671.8	523.0	420.9	386.9	344.4	340.2	348.6	374.1	433.7
65°	688.8	599.6	489.0	382.6	301.9	255.1	238.1	242.4	250.8	267.9	323.1
67.5°	480.4	416.7	340.2	267.9	208.4	187.1	170.1	165.8	170.1	199.9	229.6
70°	323.1	284.9	229.6	204.1	144.6	114.8	119.0	106.3	123.3	123.3	148.8
72.5°	212.5	187.1	153.0	119.0	102.1	80.8	80.8	76.6	85.0	89.3	110.6
75°	110.6	85.0	85.0	59.5	42.5	21.2	38.3	34.0	29.8	34.0	42.5
77.5°	76.6	63.8	59.5	46.8	42.5	34.0	34.0	34.0	34.0	38.3	42.5
80°	46.8	46.8	34.0	29.8	25.5	21.2	25.5	25.5	25.5	25.5	29.8
82.5°	29.8	25.5	25.5	21.2	21.2	17.0	17.0	17.0	17.0	17.0	25.5
85°	25.5	17.0	17.0	12.8	17.0	29.8	12.8	17.0	17.0	17.0	12.8
87.5°	8.5	12.8	12.8	12.8	8.5	4.3	8.5	12.8	12.8	21.2	17.0
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°	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2	7921.2
2.5°	7933.9	7938.2	7938.2	7933.9	7933.9	7925.4	7942.4	7929.7	7933.9	7950.9	7938.2
5°	7942.4	7946.6	7946.6	7942.4	7942.4	7942.4	7946.6	7946.6	7942.4	7938.2	7946.6
7.5°	7959.4	7955.2	7955.2	7946.6	7946.6	7938.2	7946.6	7933.9	7942.4	7933.9	7946.6
10°	7938.2	7942.4	7938.2	7933.9	7933.9	7929.7	7929.7	7916.9	7921.2	7908.4	7916.9
12.5°	7925.4	7921.2	7921.2	7912.6	7904.2	7895.7	7891.4	7878.6	7878.6	7848.9	7861.6
15°	7891.4	7895.7	7882.9	7865.9	7857.4	7836.2	7827.6	7810.6	7793.6	7772.4	7776.6
17.5°	7861.6	7848.9	7831.9	7814.8	7780.8	7763.9	7746.8	7721.3	7712.8	7687.3	7678.9
20°	7772.4	7763.9	7742.6	7712.8	7691.5	7653.3	7636.3	7610.8	7589.5	7564.0	7551.2
22.5°	7657.5	7649.0	7623.5	7593.8	7559.7	7542.8	7525.7	7479.0	7457.7	7432.2	7427.9
25°	7513.0	7500.2	7474.7	7440.7	7423.7	7376.9	7359.9	7325.9	7317.4	7291.8	7287.7
27.5°	7291.8	7274.9	7245.1	7202.6	7172.8	7143.1	7126.1	7100.5	7092.1	7066.5	7062.3
30°	6960.3	6939.0	6879.4	6862.5	6811.4	6781.7	6781.7	6747.6	6751.9	6734.9	6734.9
32.5°	6437.3	6403.3	6356.5	6322.4	6288.4	6271.5	6271.5	6258.7	6267.2	6267.2	6275.7
35°	5744.2	5697.5	5671.9	5650.7	5650.7	5667.6	5718.7	5731.5	5757.0	5778.2	5795.3
37.5°	4855.5	4851.4	4881.1	4906.6	4970.4	5042.7	5132.0	5208.5	5280.7	5331.8	5382.8
40°	3894.7	4001.0	4086.0	4205.1	4302.8	4443.1	4604.7	4736.5	4859.8	4949.2	5042.7
42.5°	3040.0	3176.1	3354.7	3529.0	3703.3	3894.7	4107.3	4290.1	4451.7	4575.0	4672.8
45°	2368.3	2555.3	2772.2	2993.3	3218.6	3456.8	3677.9	3864.9	4035.0	4162.6	4260.4
47.5°	1909.1	2113.2	2359.7	2602.1	2857.2	3108.1	3354.7	3516.3	3656.5	3758.6	3848.0
50°	1577.4	1794.3	2053.7	2330.0	2585.1	2836.0	3048.6	3205.9	3320.7	3410.0	3465.2
52.5°	1318.0	1547.6	1824.1	2100.4	2355.5	2585.1	2776.5	2895.5	2989.0	3052.8	3103.8
55°	1088.4	1309.6	1569.0	1828.3	2079.1	2296.0	2453.3	2542.6	2614.8	2653.1	2682.9
57.5°	888.7	1092.7	1330.8	1569.0	1785.8	1964.4	2087.7	2176.9	2211.0	2240.7	2236.5
60°	697.3	888.7	1105.5	1309.6	1496.7	1641.2	1730.5	1781.5	1807.0	1819.8	1811.3
62.5°	548.5	722.8	888.7	1067.2	1203.3	1326.6	1411.7	1411.7	1424.3	1428.6	1441.4
65°	408.1	539.9	684.6	816.4	926.9	1007.7	1054.5	1067.2	1084.3	1080.0	1071.5
67.5°	301.9	399.7	505.9	603.7	680.3	731.3	765.3	795.1	790.9	782.3	778.1
70°	208.4	272.2	365.7	425.2	480.4	531.5	539.9	544.2	548.5	552.7	544.2
72.5°	144.6	191.3	242.4	293.4	327.4	348.6	369.9	374.1	374.1	374.1	369.9
75°	72.3	97.8	144.6	165.8	195.6	204.1	221.1	221.1	233.9	216.8	212.5
77.5°	63.8	76.6	102.1	119.0	131.8	144.6	148.8	161.6	157.3	148.8	153.0
80°	38.3	46.8	63.8	72.3	89.3	93.5	97.8	102.1	97.8	102.1	102.1
82.5°	29.8	34.0	42.5	42.5	55.2	55.2	59.5	59.5	63.8	63.8	63.8
85°	17.0	29.8	25.5	51.0	34.0	34.0	42.5	51.0	42.5	42.5	51.0
87.5°	17.0	17.0	12.8	17.0	17.0	17.0	21.2	25.5	25.5	29.8	25.5
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: P249601

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7921.2	7921.2	7921.2	7921.2
2.5°	7933.9	7942.4	7929.7	7925.4
5°	7946.6	7946.6	7938.2	7938.2
7.5°	7946.6	7946.6	7933.9	7925.4
10°	7912.6	7912.6	7899.9	7891.4
12.5°	7848.9	7848.9	7844.6	7831.9
15°	7768.1	7768.1	7751.1	7738.4
17.5°	7657.5	7666.1	7644.8	7644.8
20°	7538.5	7534.2	7517.3	7508.8
22.5°	7415.2	7406.7	7402.4	7376.9
25°	7283.4	7274.9	7262.1	7249.4
27.5°	7058.1	7053.8	7041.0	7024.1
30°	6713.6	6709.4	6692.4	6692.4
32.5°	6267.2	6262.9	6246.0	6250.2
35°	5803.7	5820.8	5812.3	5795.3
37.5°	5416.8	5429.6	5438.1	5429.6
40°	5093.7	5132.0	5136.2	5144.8
42.5°	4749.3	4800.3	4817.4	4825.8
45°	4336.8	4383.6	4421.9	4413.4
47.5°	3915.9	3949.9	3983.9	3958.4
50°	3512.0	3533.3	3546.0	3546.0
52.5°	3129.4	3129.4	3125.1	3129.4
55°	2691.4	2691.4	2674.4	2682.9
57.5°	2232.2	2240.7	2227.9	2206.7
60°	1807.0	1785.8	1777.2	1764.5
62.5°	1407.4	1407.4	1377.6	1415.8
65°	1054.5	1041.7	1028.9	1024.6
67.5°	765.3	761.1	748.3	744.1
70°	539.9	523.0	518.7	510.2
72.5°	361.4	361.4	352.9	352.9
75°	221.1	199.9	195.6	199.9
77.5°	153.0	148.8	148.8	144.6
80°	102.1	97.8	106.3	93.5
82.5°	63.8	68.0	63.8	68.0
85°	42.5	51.0	46.8	46.8
87.5°	25.5	25.5	25.5	25.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)