

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: P248453

Luminaire Tested: **LSR8B70D010 EC8B70835 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B70D010 EC8B70835 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7692.0 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

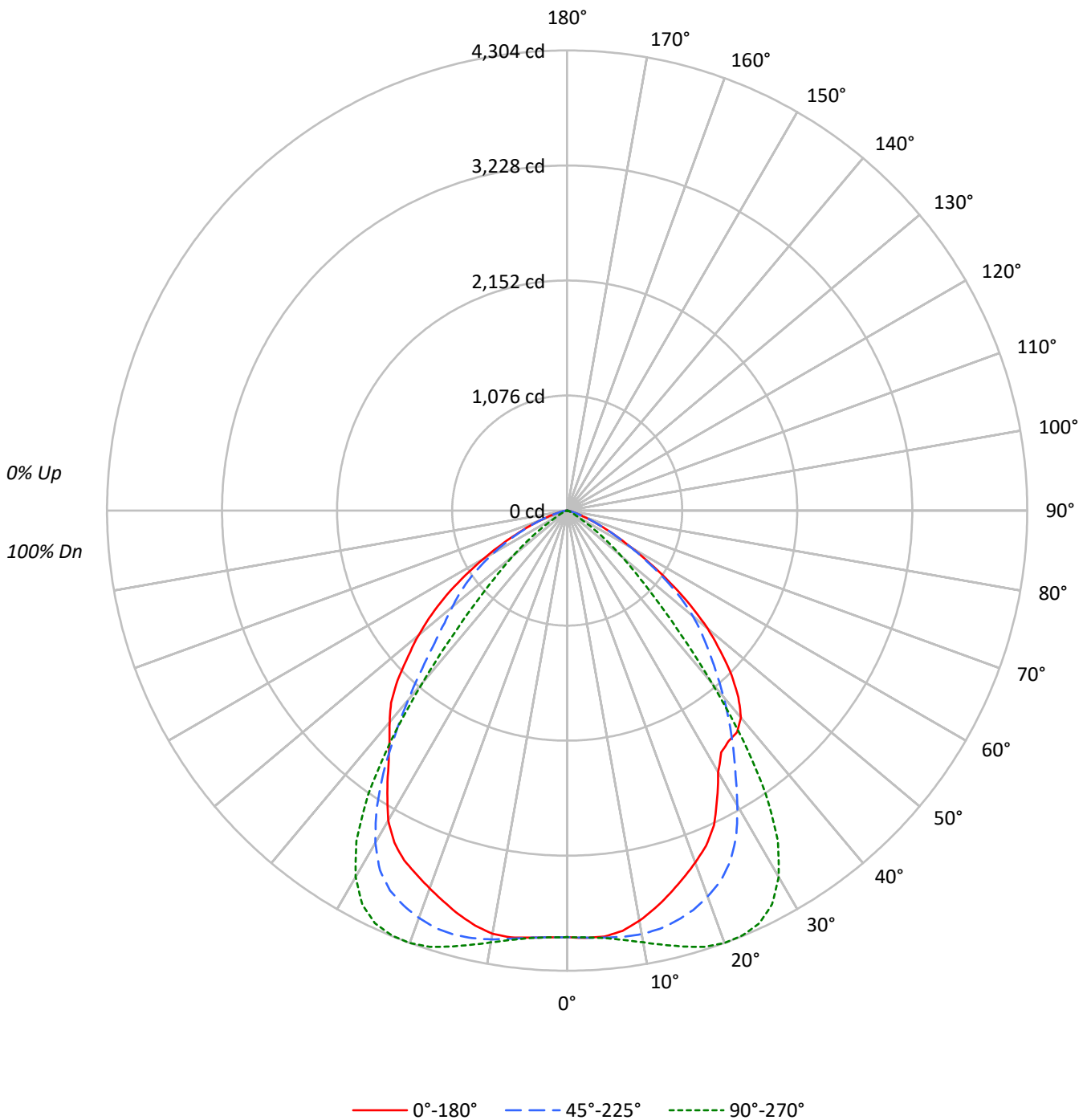
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	123046	123046	123046
5°	123779	124240	124107
10°	121960	128395	125874
15°	118397	134758	124887
20°	114959	141231	123369
25°	110544	144847	122796
30°	100603	140878	119158
35°	99106	122069	109631
40°	101798	84662	103932
45°	94767	51171	97724
50°	82201	31600	87080
55°	63084	16510	73901
60°	42973	6661	55777
65°	26734	3400	38482
70°	14516	2101	23487
75°	7566	1001	13880
80°	3392	1137	7512
85°	2264	743	6758



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.7	5.0
10°-20°	1136.8	14.8
20°-30°	1734.3	22.5
30°-40°	1809.8	23.5
40°-50°	1359.4	17.7
50°-60°	836.4	10.9
60°-70°	340.4	4.4
70°-80°	80.2	1.0
80°-90°	11.0	0.1
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°	3254.8	42.3
0°-40°	5064.6	65.8
0°-60°	7260.4	94.4
0°-90°	7692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7692.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3990	3990	3990	3990	3990	
5°	3999	4009	4014	4009	4009	378
15°	3709	3969	4221	4105	3912	1045
25°	3249	3613	4257	3920	3609	1477
35°	2633	2707	3243	2997	2912	1662
45°	2173	1881	1173	1752	2241	1658
55°	1173	1114	307	1114	1375	1055
65°	366	371	47	498	527	382
75°	64	64	8	112	116	77
85°	6	6	2	15	19	9
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°	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3
2.5°	4001.0	3994.6	4001.0	4001.0	4003.1	3998.8	4001.0	4003.1	3998.8	3998.8	3998.8
5°	3998.8	3994.6	3998.8	3996.7	4001.0	4001.0	4005.2	4005.2	4009.4	4009.4	4015.8
7.5°	3964.9	3956.5	3964.9	3971.3	3975.5	3984.0	3994.6	4003.1	4011.5	4020.0	4030.6
10°	3895.0	3895.0	3901.4	3914.1	3926.8	3941.6	3960.7	3981.9	4003.1	4022.1	4041.2
12.5°	3808.2	3801.9	3814.5	3831.5	3850.6	3873.9	3903.5	3935.3	3969.2	4007.3	4037.0
15°	3708.7	3702.3	3717.1	3734.1	3757.4	3791.3	3827.3	3869.6	3918.4	3969.2	4017.9
17.5°	3607.0	3604.9	3619.7	3643.0	3662.1	3698.0	3744.7	3795.5	3850.6	3918.4	3981.9
20°	3503.2	3501.1	3515.9	3535.0	3560.4	3594.3	3640.9	3700.2	3765.8	3842.1	3916.2
22.5°	3395.2	3397.3	3410.0	3431.2	3452.4	3488.4	3537.1	3596.4	3668.4	3751.0	3833.6
25°	3249.0	3238.5	3255.4	3276.6	3312.6	3342.2	3388.9	3452.4	3526.5	3613.4	3710.8
27.5°	3037.2	3035.1	3050.0	3069.0	3100.8	3136.8	3187.6	3253.3	3331.6	3427.0	3522.3
30°	2825.4	2829.7	2836.0	2855.1	2876.3	2912.3	2963.1	3018.2	3092.3	3183.4	3285.1
32.5°	2681.4	2681.4	2689.9	2702.6	2717.4	2736.5	2772.5	2812.7	2869.9	2933.5	3007.6
35°	2632.7	2624.2	2632.7	2634.8	2636.9	2641.2	2647.5	2660.3	2679.3	2706.8	2734.4
37.5°	2611.5	2605.2	2605.2	2596.7	2586.1	2573.4	2556.5	2537.4	2516.2	2488.7	2467.5
40°	2528.9	2524.7	2520.4	2512.0	2488.7	2463.3	2435.7	2391.2	2342.5	2274.7	2207.0
42.5°	2370.1	2365.8	2363.7	2346.8	2325.6	2295.9	2264.2	2217.6	2156.2	2069.3	1971.9
45°	2173.1	2164.6	2158.3	2143.5	2128.6	2103.2	2073.6	2031.2	1969.7	1880.8	1764.3
47.5°	1944.4	1940.1	1938.0	1931.7	1916.8	1902.0	1882.9	1849.0	1794.0	1709.2	1588.5
50°	1713.5	1705.0	1709.2	1707.2	1700.8	1690.2	1677.5	1654.2	1611.8	1535.6	1425.4
52.5°	1448.7	1448.7	1446.6	1453.0	1455.1	1453.0	1455.1	1429.7	1393.7	1336.5	1243.3
55°	1173.4	1173.4	1179.7	1188.2	1196.7	1198.8	1196.7	1186.1	1160.7	1114.1	1031.5
57.5°	915.0	910.8	923.5	936.2	944.7	953.1	946.7	938.3	923.5	885.3	821.8
60°	696.8	696.8	705.3	713.8	722.2	730.7	728.6	726.5	713.8	688.3	637.5
62.5°	512.5	514.7	514.7	521.0	529.5	538.0	544.3	538.0	531.6	514.7	480.8
65°	366.4	364.3	366.4	372.8	379.1	387.6	391.8	389.7	383.3	370.6	345.3
67.5°	245.7	243.6	252.0	254.1	258.4	266.9	264.8	266.9	264.8	254.1	233.0
70°	161.0	156.7	161.0	158.8	165.2	167.3	171.5	173.7	171.5	165.2	158.8
72.5°	99.6	97.4	99.6	101.7	103.8	105.9	110.1	110.1	108.0	103.8	95.3
75°	63.5	57.2	59.3	55.1	59.3	59.3	63.5	65.7	63.5	63.5	59.3
77.5°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	40.3	42.3	38.1	36.0
80°	19.1	19.1	21.2	21.2	21.2	23.3	21.2	21.2	21.2	23.3	16.9
82.5°	14.8	12.7	12.7	12.7	14.8	12.7	12.7	12.7	12.7	12.7	12.7
85°	6.4	8.4	6.4	4.2	6.4	6.4	8.4	6.4	6.4	6.4	8.4
87.5°	2.1	2.1	0.0	0.0	0.0	2.1	0.0	2.1	2.1	4.2	0.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3
2.5°	4001.0	3996.7	3996.7	3994.6	3998.8	3994.6	3996.7	3994.6	3994.6	3998.8	3994.6
5°	4015.8	4017.9	4013.7	4011.5	4017.9	4017.9	4017.9	4013.7	4013.7	4015.8	4013.7
7.5°	4037.0	4041.2	4043.3	4045.4	4049.7	4051.8	4051.8	4049.7	4047.6	4053.9	4045.4
10°	4060.2	4066.6	4079.3	4085.7	4096.3	4096.3	4100.5	4100.5	4096.3	4100.5	4098.4
12.5°	4051.8	4089.9	4111.1	4125.9	4140.7	4153.4	4157.7	4159.8	4157.7	4166.2	4157.7
15°	4066.6	4098.4	4132.3	4157.7	4185.2	4200.0	4204.3	4221.2	4225.5	4227.6	4214.9
17.5°	4043.3	4100.5	4136.5	4174.6	4214.9	4242.4	4267.8	4278.4	4280.6	4284.8	4267.8
20°	3990.3	4053.9	4109.0	4164.1	4210.6	4253.0	4274.2	4303.8	4295.4	4312.3	4289.0
22.5°	3918.4	3990.3	4060.2	4132.3	4181.0	4231.8	4276.3	4297.5	4308.1	4308.1	4282.6
25°	3804.0	3888.7	3964.9	4039.1	4113.2	4174.6	4225.5	4257.2	4263.6	4261.5	4231.8
27.5°	3626.1	3717.1	3806.1	3890.8	3981.9	4053.9	4113.2	4151.3	4161.9	4161.9	4130.2
30°	3380.4	3477.8	3564.6	3666.3	3759.5	3840.0	3922.6	3956.5	3975.5	3975.5	3939.5
32.5°	3088.1	3170.7	3251.2	3350.7	3452.4	3543.5	3621.8	3668.4	3691.7	3689.6	3657.8
35°	2770.4	2810.6	2872.1	2946.2	3037.2	3122.0	3198.2	3242.7	3282.9	3280.8	3251.2
37.5°	2452.7	2442.1	2448.5	2476.0	2533.1	2592.5	2651.8	2694.2	2728.0	2742.9	2736.5
40°	2141.3	2086.3	2033.3	2014.3	2018.5	2039.7	2071.4	2103.2	2141.3	2160.4	2168.9
42.5°	1861.7	1768.6	1675.3	1605.5	1565.2	1552.5	1567.3	1577.9	1601.2	1628.7	1656.3
45°	1637.2	1512.3	1389.4	1281.4	1213.6	1173.4	1164.9	1173.4	1186.1	1213.6	1249.6
47.5°	1453.0	1306.8	1169.2	1048.4	948.9	895.9	881.1	876.9	889.6	915.0	963.7
50°	1289.9	1143.7	991.2	851.4	747.7	688.3	667.2	658.7	673.5	692.6	737.1
52.5°	1111.9	967.9	811.2	675.6	567.6	506.2	482.9	470.2	478.7	504.1	548.6
55°	919.2	785.8	643.9	504.1	400.3	343.1	315.6	307.1	315.6	343.1	387.6
57.5°	726.5	614.2	495.6	364.3	271.1	213.9	186.4	177.9	201.2	211.8	258.4
60°	567.6	476.6	374.9	266.9	186.4	141.9	114.4	108.0	118.6	137.6	175.8
62.5°	425.7	368.5	288.0	190.6	137.6	91.1	76.2	69.9	76.2	91.1	120.8
65°	309.2	264.8	201.2	139.8	93.2	67.8	50.8	46.6	53.0	63.5	89.0
67.5°	211.8	177.9	139.8	97.4	63.5	42.3	36.0	36.0	38.1	46.6	65.7
70°	137.6	116.5	89.0	63.5	42.3	31.8	27.5	23.3	27.5	33.9	44.5
72.5°	86.9	74.1	57.2	44.5	31.8	23.3	19.1	16.9	21.2	25.4	33.9
75°	53.0	40.3	29.6	23.3	16.9	16.9	16.9	8.4	10.6	16.9	21.2
77.5°	31.8	27.5	23.3	19.1	14.8	8.4	8.4	8.4	10.6	12.7	19.1
80°	16.9	14.8	10.6	10.6	8.4	6.4	8.4	6.4	4.2	10.6	12.7
82.5°	10.6	8.4	8.4	8.4	10.6	4.2	6.4	4.2	6.4	8.4	6.4
85°	6.4	6.4	6.4	4.2	10.6	4.2	4.2	2.1	2.1	4.2	4.2
87.5°	0.0	2.1	2.1	0.0	2.1	0.0	2.1	2.1	2.1	2.1	2.1
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°	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3	3990.3
2.5°	3996.7	3994.6	3996.7	3994.6	3994.6	3994.6	3996.7	3996.7	3994.6	3994.6	3998.8
5°	4013.7	4013.7	4013.7	4011.5	4009.4	4009.4	4013.7	4013.7	4007.3	4013.7	4013.7
7.5°	4049.7	4043.3	4049.7	4041.2	4037.0	4039.1	4041.2	4037.0	4032.7	4034.9	4034.9
10°	4096.3	4089.9	4089.9	4083.6	4077.2	4072.9	4068.7	4058.1	4047.6	4045.4	4037.0
12.5°	4151.3	4140.7	4134.4	4121.7	4111.1	4096.3	4083.6	4066.6	4045.4	4030.6	4015.8
15°	4206.4	4189.4	4174.6	4153.4	4130.2	4104.7	4077.2	4049.7	4015.8	3986.1	3960.7
17.5°	4250.9	4227.6	4200.0	4166.2	4132.3	4094.1	4053.9	4013.7	3964.9	3926.8	3897.2
20°	4265.7	4231.8	4195.8	4151.3	4106.8	4053.9	4003.1	3950.1	3895.0	3854.8	3820.9
22.5°	4246.7	4206.4	4161.9	4115.3	4056.0	3998.8	3939.5	3878.1	3829.4	3774.3	3742.6
25°	4193.7	4145.0	4096.3	4041.2	3984.0	3920.5	3856.9	3793.4	3734.1	3704.4	3664.2
27.5°	4085.7	4032.7	3979.8	3922.6	3856.9	3793.4	3727.7	3666.3	3615.5	3575.2	3552.0
30°	3895.0	3833.6	3772.2	3710.8	3653.6	3587.9	3526.5	3475.7	3424.8	3393.1	3369.8
32.5°	3602.7	3547.7	3486.3	3427.0	3374.0	3318.9	3268.1	3223.6	3187.6	3166.4	3149.5
35°	3208.8	3153.7	3107.1	3064.8	3020.3	2997.0	2965.2	2939.8	2925.0	2916.5	2914.4
37.5°	2713.2	2681.4	2666.6	2658.1	2649.6	2643.3	2647.5	2658.1	2666.6	2681.4	2698.4
40°	2183.7	2211.2	2219.7	2249.3	2276.9	2312.9	2353.1	2399.7	2437.8	2486.5	2520.4
42.5°	1700.8	1751.6	1810.9	1874.4	1942.2	2007.9	2088.4	2162.5	2230.3	2291.7	2344.6
45°	1306.8	1385.2	1474.2	1565.2	1656.3	1751.6	1849.0	1940.1	2020.6	2086.3	2141.3
47.5°	1018.8	1105.6	1220.0	1332.3	1442.4	1554.6	1662.6	1757.9	1825.7	1889.3	1938.0
50°	807.0	906.5	1031.5	1160.7	1281.4	1400.0	1514.4	1603.3	1671.1	1722.0	1757.9
52.5°	624.8	743.4	870.5	1006.1	1135.3	1264.5	1370.3	1453.0	1508.0	1552.5	1580.0
55°	466.0	582.5	718.0	857.8	989.1	1114.1	1213.6	1285.7	1334.4	1359.8	1374.6
57.5°	336.8	442.7	578.2	718.0	836.6	955.2	1035.7	1101.4	1128.9	1143.7	1150.1
60°	245.7	343.1	463.8	584.6	696.8	792.1	862.0	906.5	927.7	936.2	934.0
62.5°	180.0	264.8	368.5	470.2	561.3	639.6	694.7	724.4	735.0	739.2	732.9
65°	137.6	203.3	292.3	370.6	440.6	497.7	538.0	557.1	563.4	561.3	557.1
67.5°	101.7	152.5	218.2	277.5	328.3	372.8	394.0	410.9	415.1	408.8	402.4
70°	72.0	112.3	158.8	199.1	237.2	262.6	285.9	288.0	288.0	285.9	281.7
72.5°	50.8	78.4	108.0	135.6	158.8	177.9	186.4	192.7	190.6	188.5	184.3
75°	33.9	48.7	78.4	84.7	105.9	112.3	120.8	120.8	122.8	116.5	116.5
77.5°	21.2	33.9	46.6	55.1	63.5	72.0	76.2	76.2	78.4	76.2	76.2
80°	12.7	21.2	25.4	38.1	38.1	44.5	46.6	48.7	44.5	50.8	44.5
82.5°	8.4	12.7	19.1	19.1	23.3	27.5	27.5	29.6	29.6	27.5	27.5
85°	6.4	8.4	10.6	12.7	12.7	14.8	12.7	12.7	14.8	16.9	14.8
87.5°	2.1	4.2	2.1	4.2	4.2	8.4	6.4	6.4	6.4	8.4	8.4
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: P248453

CATALOG NUMBER: LSR8B70D010 EC8B70835 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3990.3	3990.3	3990.3	3990.3
2.5°	3994.6	3996.7	3994.6	3994.6
5°	4013.7	4011.5	4013.7	4009.4
7.5°	4028.5	4028.5	4026.4	4026.4
10°	4028.5	4020.0	4020.0	4020.0
12.5°	3996.7	3986.1	3979.8	3975.5
15°	3941.6	3922.6	3914.1	3912.0
17.5°	3869.6	3852.7	3842.1	3835.7
20°	3787.0	3770.1	3757.4	3759.5
22.5°	3715.0	3696.0	3687.5	3683.2
25°	3643.0	3619.7	3613.4	3609.1
27.5°	3526.5	3513.8	3507.4	3501.1
30°	3348.6	3342.2	3331.6	3346.5
32.5°	3143.2	3132.5	3124.1	3130.5
35°	2916.5	2910.2	2916.5	2912.3
37.5°	2709.0	2715.3	2723.8	2728.0
40°	2545.9	2569.2	2577.7	2581.9
42.5°	2382.8	2410.3	2427.3	2437.8
45°	2181.6	2209.1	2228.1	2240.9
47.5°	1974.0	1997.3	2016.3	2014.3
50°	1785.5	1798.2	1806.7	1815.2
52.5°	1594.9	1594.9	1597.0	1597.0
55°	1378.8	1374.6	1372.5	1374.6
57.5°	1141.6	1137.4	1135.3	1128.9
60°	925.6	912.9	904.4	904.4
62.5°	724.4	709.5	703.2	701.1
65°	544.3	542.2	529.5	527.4
67.5°	394.0	385.5	377.0	379.1
70°	277.5	264.8	264.8	260.5
72.5°	180.0	173.7	171.5	171.5
75°	112.3	112.3	108.0	116.5
77.5°	74.1	74.1	72.0	74.1
80°	44.5	44.5	44.5	42.3
82.5°	27.5	29.6	27.5	27.5
85°	14.8	16.9	12.7	19.1
87.5°	8.4	10.6	8.4	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)