

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: P249326

Luminaire Tested: **LSR8B70D010 EC8B70840 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249326
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: LSR8B70D010 EC8B70840 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: 7412.0 lumens
Efficiency: N/A
Efficacy: 97.7 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

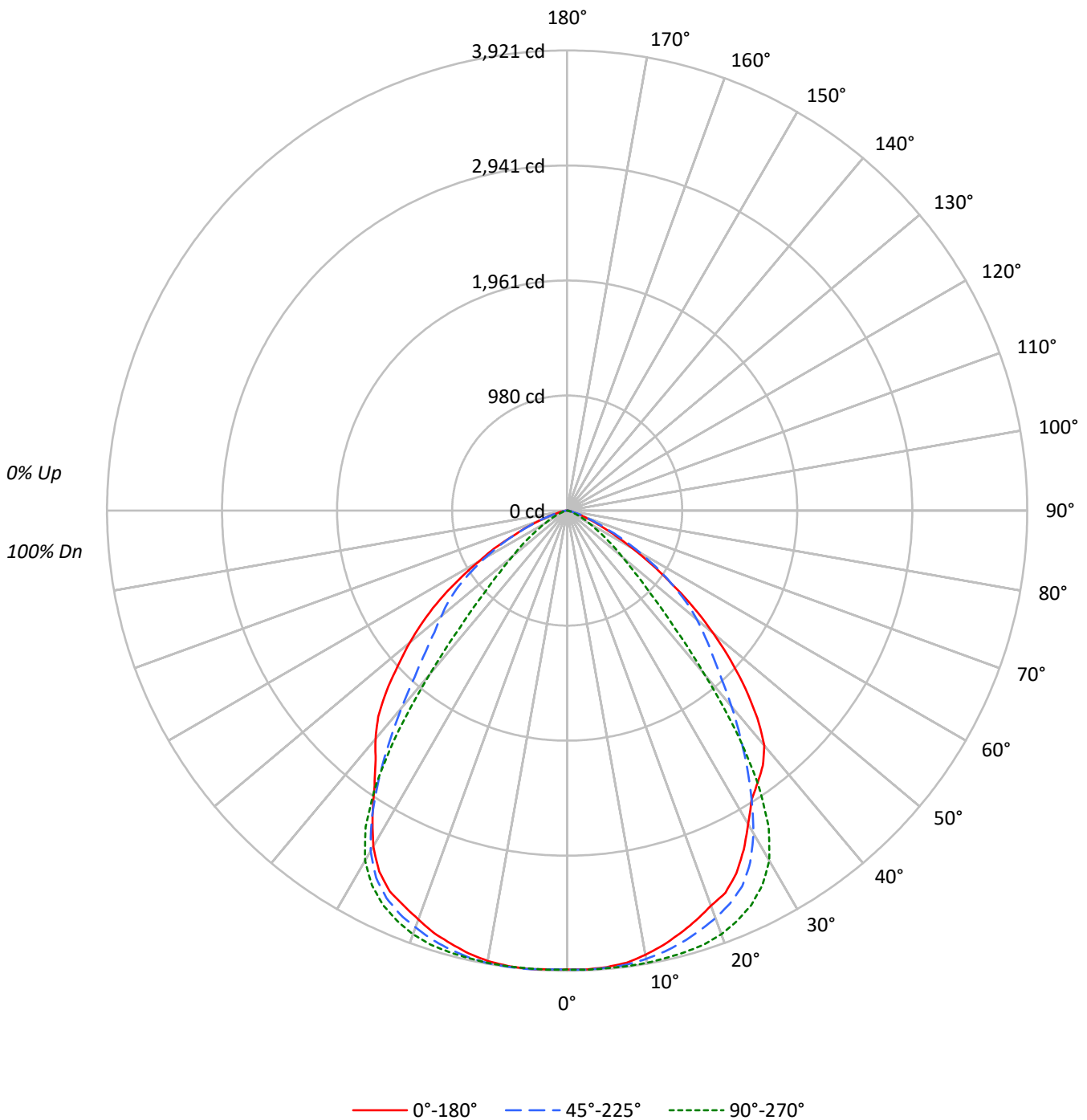
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	120592	120592	120592
5°	120857	121182	121312
10°	120348	122518	121992
15°	119016	124309	121966
20°	117587	126057	121650
25°	116060	126202	121776
30°	109800	122654	117648
35°	106522	106597	107708
40°	105200	73343	102245
45°	93738	44032	95020
50°	77946	29307	83986
55°	58460	20204	71207
60°	39612	13463	53729
65°	23896	8734	36913
70°	13244	4733	22711
75°	6005	2002	11759
80°	5221	2237	8204
85°	5944	2972	8173



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	373.2	5.0
10°-20°	1083.9	14.6
20°-30°	1645.1	22.2
30°-40°	1727.9	23.3
40°-50°	1295.5	17.5
50°-60°	831.2	11.2
60°-70°	355.6	4.8
70°-80°	84.0	1.1
80°-90°	15.6	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°	3102.3	41.9
0°-40°	4830.1	65.2
0°-60°	6956.8	93.9
0°-90°	7412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7412.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3911	3911	3911	3911	3911	
5°	3904	3911	3915	3921	3919	371
15°	3728	3806	3894	3869	3820	1052
25°	3411	3531	3709	3642	3579	1558
35°	2830	2672	2832	2798	2861	1776
45°	2150	1757	1010	1707	2179	1646
55°	1087	1087	376	1134	1324	986
65°	328	386	120	498	506	350
75°	50	59	17	101	99	73
85°	17	10	8	17	23	18
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°	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7
2.5°	3912.8	3917.0	3914.9	3914.9	3912.8	3914.9	3914.9	3919.1	3919.1	3914.9	3912.8
5°	3904.4	3908.6	3908.6	3904.4	3904.4	3914.9	3908.6	3912.8	3912.8	3910.7	3910.7
7.5°	3885.5	3885.5	3893.9	3887.7	3887.7	3893.9	3891.8	3896.0	3900.2	3902.3	3902.3
10°	3843.5	3847.7	3849.9	3849.9	3852.0	3858.2	3862.4	3870.9	3875.0	3879.2	3881.3
12.5°	3791.1	3797.4	3799.5	3797.4	3803.7	3812.0	3822.6	3833.1	3839.4	3847.7	3854.1
15°	3728.1	3728.1	3732.3	3738.6	3742.8	3755.4	3765.9	3778.5	3795.3	3805.8	3816.3
17.5°	3658.8	3663.0	3669.3	3669.3	3677.7	3698.7	3705.0	3723.9	3742.8	3753.3	3774.3
20°	3583.3	3587.4	3593.8	3598.0	3608.4	3625.2	3637.8	3654.6	3675.6	3694.5	3715.5
22.5°	3524.5	3516.1	3520.3	3524.5	3535.0	3549.7	3564.4	3585.3	3606.3	3625.2	3646.2
25°	3411.1	3413.2	3419.5	3423.7	3436.3	3448.9	3465.7	3490.9	3509.8	3530.8	3553.8
27.5°	3257.9	3260.0	3270.5	3270.5	3281.0	3302.0	3312.4	3333.4	3358.7	3379.6	3406.9
30°	3083.7	3087.8	3087.8	3096.3	3102.5	3113.1	3123.5	3144.5	3157.1	3176.0	3213.8
32.5°	2924.1	2928.3	2926.2	2924.1	2917.8	2915.7	2913.6	2917.8	2922.0	2928.3	2943.0
35°	2829.7	2819.2	2810.8	2796.1	2779.3	2758.3	2739.4	2714.2	2691.1	2672.2	2651.2
37.5°	2739.4	2737.3	2724.7	2703.7	2670.1	2632.3	2588.3	2533.7	2479.1	2420.3	2363.7
40°	2613.4	2607.1	2596.6	2567.3	2529.5	2483.3	2424.5	2357.3	2269.2	2178.9	2086.6
42.5°	2399.3	2401.4	2388.8	2365.7	2330.1	2286.0	2225.1	2151.6	2057.2	1950.1	1830.5
45°	2149.5	2149.5	2145.3	2126.4	2101.3	2065.6	2019.4	1958.5	1866.2	1757.0	1628.9
47.5°	1889.2	1891.3	1885.0	1880.9	1870.3	1847.3	1813.7	1767.5	1702.4	1597.4	1469.4
50°	1624.8	1624.8	1635.2	1633.1	1633.1	1624.8	1610.1	1582.7	1526.1	1442.1	1322.5
52.5°	1360.2	1364.5	1370.8	1379.1	1389.6	1406.4	1389.6	1377.0	1341.3	1276.3	1173.4
55°	1087.4	1091.6	1102.0	1116.7	1129.4	1146.2	1150.3	1150.3	1131.4	1087.4	1009.7
57.5°	854.4	848.1	856.5	869.1	885.9	902.7	915.2	929.9	927.8	898.4	835.5
60°	642.3	644.4	650.7	663.4	675.9	690.6	707.4	720.0	726.3	711.6	671.7
62.5°	468.1	468.1	476.5	489.1	495.4	516.4	526.9	533.2	539.5	537.4	512.2
65°	327.5	331.7	335.9	342.2	348.4	361.0	367.3	379.9	384.1	386.2	367.3
67.5°	230.9	224.6	228.8	233.0	239.3	247.7	260.3	260.3	266.6	266.6	254.0
70°	146.9	146.9	149.1	155.3	159.5	161.6	165.8	170.0	176.3	174.2	174.2
72.5°	98.7	96.6	98.7	100.8	102.9	109.1	109.1	111.3	115.5	117.6	109.1
75°	50.4	52.5	56.7	54.6	60.9	56.7	58.8	65.1	63.0	58.8	58.8
77.5°	42.0	42.0	42.0	39.9	44.1	44.1	42.0	46.2	44.1	44.1	42.0
80°	29.4	31.5	29.4	27.3	29.4	27.3	27.3	27.3	27.3	27.3	25.2
82.5°	23.1	18.9	21.0	18.9	21.0	21.0	18.9	16.8	16.8	18.9	16.8
85°	16.8	12.6	14.7	14.7	12.6	12.6	12.6	12.6	12.6	10.5	10.5
87.5°	10.5	6.3	6.3	6.3	8.4	8.4	8.4	6.3	8.4	8.4	4.2
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: P249326

CATALOG NUMBER: LSR8B70D010 EC8B70840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7
2.5°	3917.0	3914.9	3919.1	3917.0	3917.0	3914.9	3917.0	3914.9	3919.1	3910.7	3912.8
5°	3917.0	3912.8	3914.9	3917.0	3919.1	3914.9	3914.9	3914.9	3919.1	3914.9	3917.0
7.5°	3908.6	3906.5	3912.8	3917.0	3914.9	3912.8	3917.0	3914.9	3919.1	3917.0	3921.2
10°	3891.8	3893.9	3898.1	3904.4	3906.5	3908.6	3912.8	3912.8	3919.1	3910.7	3914.9
12.5°	3866.6	3875.0	3885.5	3889.7	3898.1	3898.1	3902.3	3904.4	3908.6	3906.5	3912.8
15°	3835.2	3845.6	3858.2	3868.8	3879.2	3885.5	3891.8	3893.9	3900.2	3893.9	3896.0
17.5°	3797.4	3809.9	3828.8	3841.4	3858.2	3864.5	3872.9	3877.1	3883.4	3879.2	3881.3
20°	3744.9	3759.6	3780.6	3799.5	3809.9	3824.6	3835.2	3841.4	3845.6	3841.4	3843.5
22.5°	3671.4	3692.4	3719.7	3734.4	3755.4	3768.0	3770.1	3784.8	3795.3	3784.8	3789.0
25°	3585.3	3606.3	3627.3	3658.8	3677.7	3692.4	3707.1	3709.2	3719.7	3717.6	3715.5
27.5°	3442.6	3469.9	3505.6	3530.8	3556.0	3579.1	3595.9	3600.0	3610.6	3606.3	3608.4
30°	3247.4	3276.8	3310.4	3350.2	3385.9	3409.0	3430.0	3444.7	3455.2	3448.9	3446.8
32.5°	2970.3	2999.7	3035.4	3075.2	3117.3	3150.8	3176.0	3194.9	3207.5	3203.3	3192.8
35°	2653.4	2661.7	2684.8	2716.3	2752.0	2787.7	2810.8	2831.7	2846.4	2850.6	2850.6
37.5°	2328.0	2300.7	2283.9	2283.9	2304.9	2319.5	2340.6	2353.1	2376.3	2384.6	2390.9
40°	2013.1	1950.1	1891.3	1847.3	1817.9	1815.8	1815.8	1822.0	1843.1	1870.3	1895.5
42.5°	1731.8	1631.0	1540.8	1458.9	1400.2	1366.6	1351.9	1354.0	1370.8	1395.9	1437.9
45°	1507.2	1381.2	1267.9	1169.2	1089.5	1037.0	1011.8	1009.7	1022.3	1051.7	1097.9
47.5°	1333.0	1198.6	1070.6	957.2	871.2	814.5	785.1	776.7	785.1	812.4	867.0
50°	1188.1	1049.6	917.3	799.8	707.4	648.7	621.3	610.9	621.3	644.4	699.0
52.5°	1053.8	911.0	787.2	673.8	575.2	524.8	495.4	489.1	495.4	522.7	566.8
55°	898.4	776.7	654.9	541.6	455.5	405.1	382.0	375.8	382.0	407.3	453.4
57.5°	745.2	640.2	533.2	430.3	356.9	312.7	291.8	283.4	298.1	314.9	369.5
60°	602.4	518.5	428.2	338.0	277.1	237.2	220.4	218.3	222.5	243.5	281.3
62.5°	472.3	403.0	331.7	258.2	207.8	191.0	170.0	168.0	172.1	184.7	214.1
65°	340.1	296.0	241.4	188.9	149.1	125.9	117.6	119.7	123.8	132.3	159.5
67.5°	237.2	205.7	168.0	132.3	102.9	92.4	84.0	81.9	84.0	98.7	113.4
70°	159.5	140.6	113.4	100.8	71.4	56.7	58.8	52.5	60.9	60.9	73.4
72.5°	104.9	92.4	75.6	58.8	50.4	39.9	39.9	37.8	42.0	44.1	54.6
75°	54.6	42.0	42.0	29.4	21.0	10.5	18.9	16.8	14.7	16.8	21.0
77.5°	37.8	31.5	29.4	23.1	21.0	16.8	16.8	16.8	16.8	18.9	21.0
80°	23.1	23.1	16.8	14.7	12.6	10.5	12.6	12.6	12.6	12.6	14.7
82.5°	14.7	12.6	12.6	10.5	10.5	8.4	8.4	8.4	8.4	8.4	12.6
85°	12.6	8.4	8.4	6.3	8.4	14.7	6.3	8.4	8.4	8.4	6.3
87.5°	4.2	6.3	6.3	6.3	4.2	2.1	4.2	6.3	6.3	10.5	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: P249326

CATALOG NUMBER: LSR8B70D010 EC8B70840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7	3910.7
2.5°	3917.0	3919.1	3919.1	3917.0	3917.0	3912.8	3921.2	3914.9	3917.0	3925.4	3919.1
5°	3921.2	3923.3	3923.3	3921.2	3921.2	3921.2	3923.3	3923.3	3921.2	3919.1	3923.3
7.5°	3929.6	3927.5	3927.5	3923.3	3923.3	3919.1	3923.3	3917.0	3921.2	3917.0	3923.3
10°	3919.1	3921.2	3919.1	3917.0	3917.0	3914.9	3914.9	3908.6	3910.7	3904.4	3908.6
12.5°	3912.8	3910.7	3910.7	3906.5	3902.3	3898.1	3896.0	3889.7	3889.7	3875.0	3881.3
15°	3896.0	3898.1	3891.8	3883.4	3879.2	3868.8	3864.5	3856.1	3847.7	3837.3	3839.4
17.5°	3881.3	3875.0	3866.6	3858.2	3841.4	3833.1	3824.6	3812.0	3807.8	3795.3	3791.1
20°	3837.3	3833.1	3822.6	3807.8	3797.4	3778.5	3770.1	3757.5	3747.0	3734.4	3728.1
22.5°	3780.6	3776.4	3763.8	3749.1	3732.3	3723.9	3715.5	3692.4	3681.9	3669.3	3667.2
25°	3709.2	3702.9	3690.3	3673.5	3665.1	3642.0	3633.6	3616.8	3612.7	3600.0	3598.0
27.5°	3600.0	3591.7	3577.0	3556.0	3541.3	3526.6	3518.2	3505.6	3501.4	3488.8	3486.7
30°	3436.3	3425.8	3396.4	3388.0	3362.8	3348.1	3348.1	3331.3	3333.4	3325.1	3325.1
32.5°	3178.1	3161.3	3138.2	3121.4	3104.6	3096.3	3096.3	3089.9	3094.2	3094.2	3098.4
35°	2835.9	2812.9	2800.3	2789.8	2789.8	2798.1	2823.4	2829.7	2842.3	2852.7	2861.2
37.5°	2397.2	2395.2	2409.8	2422.4	2453.9	2489.6	2533.7	2571.5	2607.1	2632.3	2657.5
40°	1922.8	1975.3	2017.3	2076.1	2124.3	2193.6	2273.4	2338.4	2399.3	2443.4	2489.6
42.5°	1500.9	1568.1	1656.2	1742.3	1828.4	1922.8	2027.8	2118.1	2197.8	2258.7	2307.0
45°	1169.2	1261.6	1368.7	1477.8	1589.1	1706.6	1815.8	1908.1	1992.1	2055.1	2103.4
47.5°	942.5	1043.3	1165.0	1284.7	1410.6	1534.5	1656.2	1736.0	1805.3	1855.6	1899.8
50°	778.8	885.9	1013.9	1150.3	1276.3	1400.2	1505.1	1582.7	1639.5	1683.5	1710.8
52.5°	650.7	764.1	900.5	1037.0	1162.9	1276.3	1370.8	1429.5	1475.7	1507.2	1532.4
55°	537.4	646.6	774.6	902.7	1026.5	1133.5	1211.2	1255.3	1291.0	1309.9	1324.5
57.5°	438.7	539.5	657.0	774.6	881.6	969.8	1030.7	1074.8	1091.6	1106.3	1104.1
60°	344.3	438.7	545.8	646.6	738.9	810.3	854.4	879.5	892.1	898.4	894.2
62.5°	270.8	356.9	438.7	526.9	594.1	654.9	696.9	696.9	703.2	705.3	711.6
65°	201.5	266.6	338.0	403.0	457.6	497.5	520.6	526.9	535.3	533.2	529.0
67.5°	149.1	197.3	249.8	298.1	335.9	361.0	377.8	392.6	390.5	386.2	384.1
70°	102.9	134.4	180.5	209.9	237.2	262.4	266.6	268.7	270.8	272.9	268.7
72.5°	71.4	94.5	119.7	144.8	161.6	172.1	182.6	184.7	184.7	184.7	182.6
75°	35.7	48.3	71.4	81.9	96.6	100.8	109.1	109.1	115.5	107.0	104.9
77.5°	31.5	37.8	50.4	58.8	65.1	71.4	73.4	79.8	77.7	73.4	75.6
80°	18.9	23.1	31.5	35.7	44.1	46.2	48.3	50.4	48.3	50.4	50.4
82.5°	14.7	16.8	21.0	21.0	27.3	27.3	29.4	29.4	31.5	31.5	31.5
85°	8.4	14.7	12.6	25.2	16.8	16.8	21.0	25.2	21.0	21.0	25.2
87.5°	8.4	8.4	6.3	8.4	8.4	8.4	10.5	12.6	12.6	14.7	12.6
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: P249326

CATALOG NUMBER: LSR8B70D010 EC8B70840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3910.7	3910.7	3910.7	3910.7
2.5°	3917.0	3921.2	3914.9	3912.8
5°	3923.3	3923.3	3919.1	3919.1
7.5°	3923.3	3923.3	3917.0	3912.8
10°	3906.5	3906.5	3900.2	3896.0
12.5°	3875.0	3875.0	3872.9	3866.6
15°	3835.2	3835.2	3826.7	3820.5
17.5°	3780.6	3784.8	3774.3	3774.3
20°	3721.8	3719.7	3711.3	3707.1
22.5°	3660.9	3656.7	3654.6	3642.0
25°	3595.9	3591.7	3585.3	3579.1
27.5°	3484.6	3482.5	3476.2	3467.8
30°	3314.5	3312.4	3304.1	3304.1
32.5°	3094.2	3092.0	3083.7	3085.8
35°	2865.3	2873.8	2869.5	2861.2
37.5°	2674.3	2680.6	2684.8	2680.6
40°	2514.8	2533.7	2535.8	2540.0
42.5°	2344.8	2369.9	2378.4	2382.5
45°	2141.1	2164.2	2183.1	2178.9
47.5°	1933.3	1950.1	1966.9	1954.3
50°	1733.9	1744.4	1750.7	1750.7
52.5°	1545.0	1545.0	1542.9	1545.0
55°	1328.8	1328.8	1320.4	1324.5
57.5°	1102.0	1106.3	1099.9	1089.5
60°	892.1	881.6	877.4	871.2
62.5°	694.8	694.8	680.1	699.0
65°	520.6	514.3	508.0	505.9
67.5°	377.8	375.8	369.5	367.3
70°	266.6	258.2	256.1	251.9
72.5°	178.4	178.4	174.2	174.2
75°	109.1	98.7	96.6	98.7
77.5°	75.6	73.4	73.4	71.4
80°	50.4	48.3	52.5	46.2
82.5°	31.5	33.6	31.5	33.6
85°	21.0	25.2	23.1	23.1
87.5°	12.6	12.6	12.6	12.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)