

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: P249327

Luminaire Tested: **LSR8B80D010 EC8B80840 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249327
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: LSR8B80D010 EC8B80840 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: 8242.0 lumens
Efficiency: N/A
Efficacy: 110.8 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

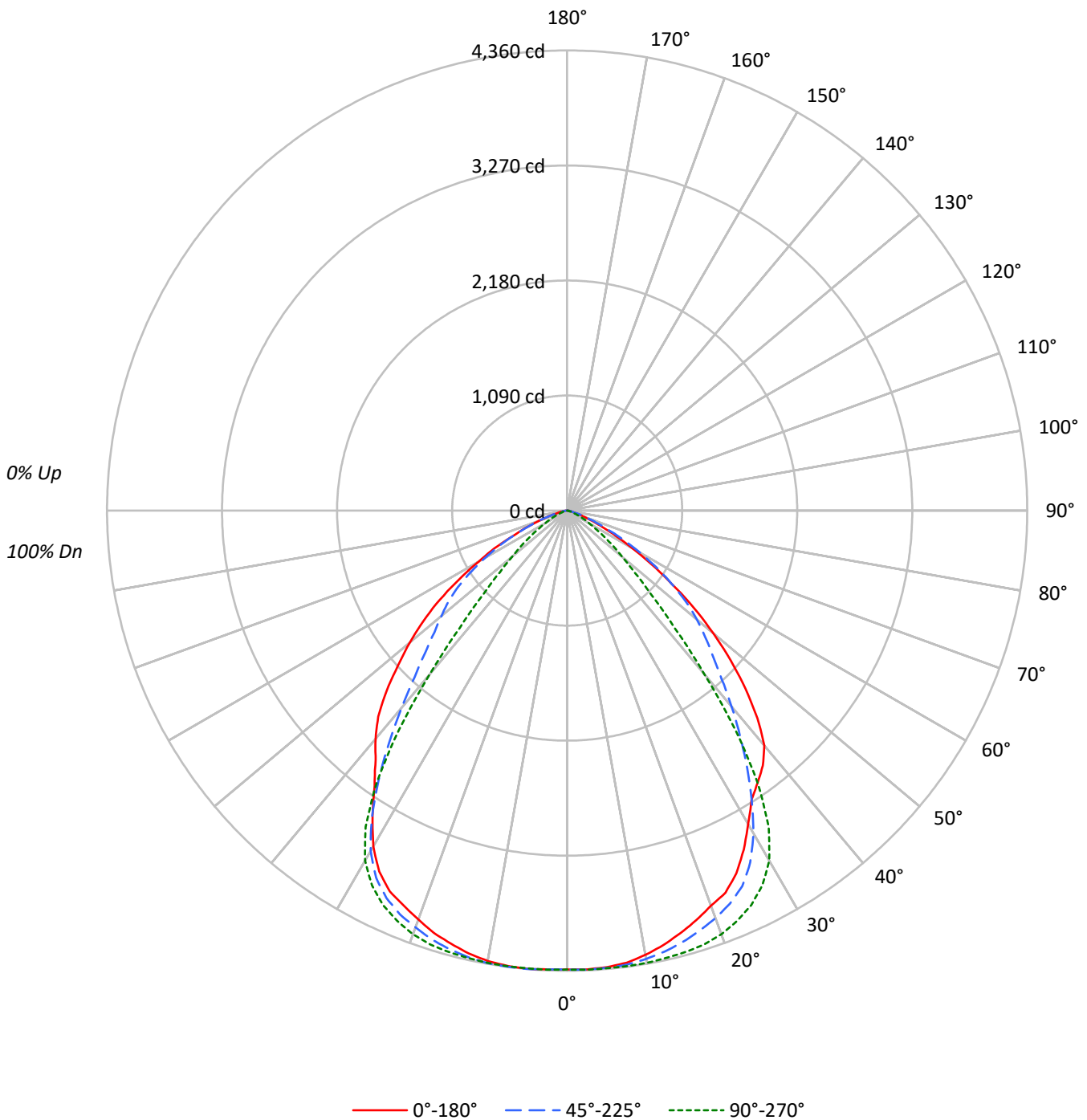
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	134095	134095	134095
5°	134390	134753	134898
10°	133824	136239	135653
15°	132341	138231	135623
20°	130753	140174	135271
25°	129057	140336	135413
30°	122095	136388	130823
35°	118451	118534	119769
40°	116982	81559	113693
45°	104235	48964	105661
50°	86672	32588	93389
55°	65003	22462	79185
60°	44053	14968	59742
65°	26574	9712	41043
70°	14732	5265	25254
75°	6672	2228	13070
80°	5807	2486	9110
85°	6616	3290	9093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	415.0	5.0
10°-20°	1205.3	14.6
20°-30°	1829.4	22.2
30°-40°	1921.4	23.3
40°-50°	1440.5	17.5
50°-60°	924.3	11.2
60°-70°	395.4	4.8
70°-80°	93.4	1.1
80°-90°	17.4	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°	3449.6	41.9
0°-40°	5371.0	65.2
0°-60°	7735.8	93.9
0°-90°	8242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8242.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4349	4349	4349	4349	4349	
5°	4342	4349	4353	4360	4358	412
15°	4146	4232	4330	4302	4248	1169
25°	3793	3926	4125	4050	3980	1733
35°	3147	2971	3149	3112	3182	1975
45°	2390	1954	1123	1898	2423	1831
55°	1209	1209	418	1260	1473	1097
65°	364	430	133	553	562	389
75°	56	65	19	112	110	82
85°	19	12	9	19	26	20
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°	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6
2.5°	4351.0	4355.7	4353.3	4353.3	4351.0	4353.3	4353.3	4358.0	4358.0	4353.3	4351.0
5°	4341.6	4346.3	4346.3	4341.6	4341.6	4353.3	4346.3	4351.0	4351.0	4348.6	4348.6
7.5°	4320.7	4320.7	4330.0	4323.0	4323.0	4330.0	4327.6	4332.3	4337.0	4339.3	4339.3
10°	4273.9	4278.6	4281.0	4281.0	4283.3	4290.3	4295.0	4304.3	4308.9	4313.6	4316.0
12.5°	4215.6	4222.6	4224.9	4222.6	4229.6	4238.9	4250.6	4262.3	4269.3	4278.6	4285.6
15°	4145.5	4145.5	4150.2	4157.3	4161.9	4175.9	4187.6	4201.6	4220.2	4232.0	4243.6
17.5°	4068.6	4073.2	4080.2	4080.2	4089.6	4112.9	4119.9	4140.9	4161.9	4173.6	4196.9
20°	3984.5	3989.2	3996.2	4000.9	4012.5	4031.2	4045.2	4063.9	4087.2	4108.2	4131.5
22.5°	3919.1	3909.8	3914.5	3919.1	3930.8	3947.2	3963.5	3986.8	4010.2	4031.2	4054.6
25°	3793.1	3795.4	3802.5	3807.1	3821.1	3835.1	3853.8	3881.8	3902.8	3926.2	3951.8
27.5°	3622.7	3625.1	3636.7	3636.7	3648.4	3671.7	3683.4	3706.7	3734.8	3758.1	3788.5
30°	3429.0	3433.6	3433.6	3443.0	3449.9	3461.7	3473.3	3496.7	3510.7	3531.7	3573.7
32.5°	3251.6	3256.2	3253.9	3251.6	3244.6	3242.2	3239.9	3244.6	3249.2	3256.2	3272.5
35°	3146.6	3134.8	3125.5	3109.2	3090.5	3067.2	3046.1	3018.2	2992.5	2971.4	2948.1
37.5°	3046.1	3043.8	3029.8	3006.5	2969.1	2927.1	2878.1	2817.4	2756.7	2691.3	2628.4
40°	2906.1	2899.1	2887.4	2854.8	2812.7	2761.4	2696.0	2621.3	2523.3	2422.9	2320.2
42.5°	2668.0	2670.3	2656.3	2630.6	2591.0	2541.9	2474.3	2392.6	2287.5	2168.5	2035.4
45°	2390.2	2390.2	2385.6	2364.5	2336.6	2296.9	2245.5	2177.8	2075.1	1953.7	1811.3
47.5°	2100.8	2103.1	2096.1	2091.5	2079.8	2054.1	2016.8	1965.4	1893.1	1776.3	1633.9
50°	1806.7	1806.7	1818.4	1816.0	1816.0	1806.7	1790.4	1760.0	1697.0	1603.6	1470.6
52.5°	1512.6	1517.2	1524.3	1533.6	1545.2	1563.9	1545.2	1531.2	1491.5	1419.2	1304.8
55°	1209.1	1213.8	1225.4	1241.8	1255.8	1274.5	1279.1	1279.1	1258.1	1209.1	1122.8
57.5°	950.0	943.0	952.4	966.4	985.1	1003.7	1017.7	1034.1	1031.7	999.0	929.0
60°	714.3	716.6	723.6	737.6	751.6	768.0	786.6	800.6	807.7	791.3	746.9
62.5°	520.5	520.5	529.9	543.8	550.9	574.2	585.9	592.9	599.9	597.5	569.5
65°	364.2	368.8	373.5	380.5	387.5	401.5	408.5	422.5	427.2	429.5	408.5
67.5°	256.8	249.8	254.4	259.1	266.1	275.5	289.5	289.5	296.4	296.4	282.4
70°	163.4	163.4	165.7	172.7	177.4	179.7	184.4	189.1	196.1	193.7	193.7
72.5°	109.7	107.4	109.7	112.1	114.4	121.4	121.4	123.7	128.4	130.7	121.4
75°	56.0	58.4	63.0	60.7	67.7	63.0	65.3	72.4	70.0	65.3	65.3
77.5°	46.7	46.7	46.7	44.4	49.0	49.0	46.7	51.3	49.0	49.0	46.7
80°	32.7	35.0	32.7	30.3	32.7	30.3	30.3	30.3	30.3	30.3	28.0
82.5°	25.7	21.0	23.4	21.0	23.4	23.4	21.0	18.7	18.7	21.0	18.7
85°	18.7	14.0	16.3	16.3	14.0	14.0	14.0	14.0	14.0	11.7	11.7
87.5°	11.7	7.0	7.0	7.0	9.3	9.3	9.3	7.0	9.3	9.3	4.7
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: P249327

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6
2.5°	4355.7	4353.3	4358.0	4355.7	4355.7	4353.3	4355.7	4353.3	4358.0	4348.6	4351.0
5°	4355.7	4351.0	4353.3	4355.7	4358.0	4353.3	4353.3	4353.3	4358.0	4353.3	4355.7
7.5°	4346.3	4344.0	4351.0	4355.7	4353.3	4351.0	4355.7	4353.3	4358.0	4355.7	4360.3
10°	4327.6	4330.0	4334.6	4341.6	4344.0	4346.3	4351.0	4351.0	4358.0	4348.6	4353.3
12.5°	4299.6	4308.9	4320.7	4325.3	4334.6	4334.6	4339.3	4341.6	4346.3	4344.0	4351.0
15°	4264.6	4276.3	4290.3	4302.0	4313.6	4320.7	4327.6	4330.0	4337.0	4330.0	4332.3
17.5°	4222.6	4236.6	4257.6	4271.6	4290.3	4297.3	4306.6	4311.3	4318.3	4313.6	4316.0
20°	4164.2	4180.6	4203.9	4224.9	4236.6	4252.9	4264.6	4271.6	4276.3	4271.6	4273.9
22.5°	4082.5	4105.9	4136.2	4152.6	4175.9	4189.9	4192.3	4208.6	4220.2	4208.6	4213.3
25°	3986.8	4010.2	4033.5	4068.6	4089.6	4105.9	4122.2	4124.6	4136.2	4133.9	4131.5
27.5°	3828.1	3858.5	3898.1	3926.2	3954.2	3979.9	3998.5	4003.2	4014.9	4010.2	4012.5
30°	3611.0	3643.7	3681.1	3725.4	3765.1	3790.7	3814.1	3830.4	3842.1	3835.1	3832.8
32.5°	3302.9	3335.6	3375.3	3419.6	3466.3	3503.6	3531.7	3552.7	3566.7	3562.0	3550.4
35°	2950.5	2959.8	2985.5	3020.5	3060.1	3099.8	3125.5	3148.8	3165.2	3169.9	3169.9
37.5°	2588.7	2558.3	2539.7	2539.7	2563.0	2579.3	2602.7	2616.6	2642.3	2651.7	2658.7
40°	2238.5	2168.5	2103.1	2054.1	2021.5	2019.1	2019.1	2026.1	2049.4	2079.8	2107.8
42.5°	1925.7	1813.7	1713.3	1622.3	1556.9	1519.6	1503.3	1505.6	1524.3	1552.3	1598.9
45°	1676.0	1535.9	1409.9	1300.2	1211.5	1153.1	1125.1	1122.8	1136.8	1169.4	1220.8
47.5°	1482.2	1332.8	1190.4	1064.4	968.7	905.7	873.0	863.7	873.0	903.3	964.0
50°	1321.2	1167.1	1020.1	889.3	786.6	721.3	690.9	679.3	690.9	716.6	777.3
52.5°	1171.8	1013.0	875.3	749.3	639.6	583.5	550.9	543.8	550.9	581.2	630.3
55°	999.0	863.7	728.3	602.2	506.5	450.5	424.8	417.8	424.8	452.9	504.2
57.5°	828.7	711.9	592.9	478.5	396.8	347.8	324.5	315.1	331.4	350.1	410.8
60°	669.9	576.6	476.2	375.8	308.1	263.8	245.1	242.7	247.4	270.8	312.8
62.5°	525.2	448.2	368.8	287.1	231.1	212.4	189.1	186.8	191.4	205.4	238.1
65°	378.2	329.1	268.4	210.1	165.7	140.0	130.7	133.1	137.7	147.1	177.4
67.5°	263.8	228.7	186.8	147.1	114.4	102.7	93.4	91.0	93.4	109.7	126.1
70°	177.4	156.4	126.1	112.1	79.4	63.0	65.3	58.4	67.7	67.7	81.7
72.5°	116.7	102.7	84.0	65.3	56.0	44.4	44.4	42.0	46.7	49.0	60.7
75°	60.7	46.7	46.7	32.7	23.4	11.7	21.0	18.7	16.3	18.7	23.4
77.5°	42.0	35.0	32.7	25.7	23.4	18.7	18.7	18.7	18.7	21.0	23.4
80°	25.7	25.7	18.7	16.3	14.0	11.7	14.0	14.0	14.0	14.0	16.3
82.5°	16.3	14.0	14.0	11.7	11.7	9.3	9.3	9.3	9.3	9.3	14.0
85°	14.0	9.3	9.3	7.0	9.3	16.3	7.0	9.3	9.3	9.3	7.0
87.5°	4.7	7.0	7.0	7.0	4.7	2.3	4.7	7.0	7.0	11.7	9.3
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°	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6	4348.6
2.5°	4355.7	4358.0	4358.0	4355.7	4355.7	4351.0	4360.3	4353.3	4355.7	4365.0	4358.0
5°	4360.3	4362.6	4362.6	4360.3	4360.3	4360.3	4362.6	4362.6	4360.3	4358.0	4362.6
7.5°	4369.7	4367.3	4367.3	4362.6	4362.6	4358.0	4362.6	4355.7	4360.3	4355.7	4362.6
10°	4358.0	4360.3	4358.0	4355.7	4355.7	4353.3	4353.3	4346.3	4348.6	4341.6	4346.3
12.5°	4351.0	4348.6	4348.6	4344.0	4339.3	4334.6	4332.3	4325.3	4325.3	4308.9	4316.0
15°	4332.3	4334.6	4327.6	4318.3	4313.6	4302.0	4297.3	4287.9	4278.6	4267.0	4269.3
17.5°	4316.0	4308.9	4299.6	4290.3	4271.6	4262.3	4252.9	4238.9	4234.2	4220.2	4215.6
20°	4267.0	4262.3	4250.6	4234.2	4222.6	4201.6	4192.3	4178.3	4166.6	4152.6	4145.5
22.5°	4203.9	4199.2	4185.2	4168.9	4150.2	4140.9	4131.5	4105.9	4094.2	4080.2	4077.9
25°	4124.6	4117.6	4103.6	4084.9	4075.5	4049.9	4040.5	4021.8	4017.2	4003.2	4000.9
27.5°	4003.2	3993.8	3977.5	3954.2	3937.8	3921.5	3912.2	3898.1	3893.5	3879.4	3877.2
30°	3821.1	3809.4	3776.8	3767.4	3739.4	3723.1	3723.1	3704.4	3706.7	3697.4	3697.4
32.5°	3534.0	3515.3	3489.6	3471.0	3452.3	3443.0	3443.0	3436.0	3440.6	3440.6	3445.3
35°	3153.5	3127.9	3113.8	3102.2	3102.2	3111.5	3139.5	3146.6	3160.5	3172.2	3181.6
37.5°	2665.6	2663.4	2679.7	2693.7	2728.7	2768.4	2817.4	2859.4	2899.1	2927.1	2955.1
40°	2138.1	2196.5	2243.2	2308.6	2362.2	2439.2	2527.9	2600.3	2668.0	2717.1	2768.4
42.5°	1668.9	1743.6	1841.7	1937.4	2033.1	2138.1	2254.9	2355.2	2443.9	2511.6	2565.3
45°	1300.2	1402.8	1521.9	1643.3	1767.0	1897.7	2019.1	2121.8	2215.2	2285.2	2338.9
47.5°	1048.1	1160.1	1295.5	1428.5	1568.6	1706.3	1841.7	1930.4	2007.4	2063.4	2112.5
50°	866.0	985.1	1127.4	1279.1	1419.2	1556.9	1673.6	1760.0	1823.0	1872.0	1902.4
52.5°	723.6	849.6	1001.4	1153.1	1293.1	1419.2	1524.3	1589.6	1641.0	1676.0	1704.0
55°	597.5	719.0	861.3	1003.7	1141.4	1260.5	1346.8	1395.9	1435.5	1456.5	1472.9
57.5°	487.9	599.9	730.6	861.3	980.4	1078.4	1146.1	1195.1	1213.8	1230.1	1227.8
60°	382.8	487.9	606.9	719.0	821.6	901.0	950.0	978.0	992.0	999.0	994.4
62.5°	301.1	396.8	487.9	585.9	660.6	728.3	775.0	775.0	782.0	784.3	791.3
65°	224.1	296.4	375.8	448.2	508.8	553.2	578.9	585.9	595.2	592.9	588.2
67.5°	165.7	219.4	277.7	331.4	373.5	401.5	420.1	436.5	434.2	429.5	427.2
70°	114.4	149.4	200.8	233.4	263.8	291.8	296.4	298.8	301.1	303.4	298.8
72.5°	79.4	105.0	133.1	161.1	179.7	191.4	203.1	205.4	205.4	205.4	203.1
75°	39.7	53.7	79.4	91.0	107.4	112.1	121.4	121.4	128.4	119.0	116.7
77.5°	35.0	42.0	56.0	65.3	72.4	79.4	81.7	88.7	86.4	81.7	84.0
80°	21.0	25.7	35.0	39.7	49.0	51.3	53.7	56.0	53.7	56.0	56.0
82.5°	16.3	18.7	23.4	23.4	30.3	30.3	32.7	32.7	35.0	35.0	35.0
85°	9.3	16.3	14.0	28.0	18.7	18.7	23.4	28.0	23.4	23.4	28.0
87.5°	9.3	9.3	7.0	9.3	9.3	9.3	11.7	14.0	14.0	16.3	14.0
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: P249327

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4348.6	4348.6	4348.6	4348.6
2.5°	4355.7	4360.3	4353.3	4351.0
5°	4362.6	4362.6	4358.0	4358.0
7.5°	4362.6	4362.6	4355.7	4351.0
10°	4344.0	4344.0	4337.0	4332.3
12.5°	4308.9	4308.9	4306.6	4299.6
15°	4264.6	4264.6	4255.3	4248.3
17.5°	4203.9	4208.6	4196.9	4196.9
20°	4138.6	4136.2	4126.9	4122.2
22.5°	4070.9	4066.2	4063.9	4049.9
25°	3998.5	3993.8	3986.8	3979.9
27.5°	3874.8	3872.5	3865.5	3856.1
30°	3685.7	3683.4	3674.1	3674.1
32.5°	3440.6	3438.3	3429.0	3431.3
35°	3186.2	3195.6	3190.9	3181.6
37.5°	2973.8	2980.8	2985.5	2980.8
40°	2796.4	2817.4	2819.7	2824.4
42.5°	2607.3	2635.3	2644.7	2649.3
45°	2380.9	2406.6	2427.6	2422.9
47.5°	2149.8	2168.5	2187.1	2173.2
50°	1928.1	1939.7	1946.7	1946.7
52.5°	1718.0	1718.0	1715.7	1718.0
55°	1477.6	1477.6	1468.2	1472.9
57.5°	1225.4	1230.1	1223.1	1211.5
60°	992.0	980.4	975.7	968.7
62.5°	772.6	772.6	756.3	777.3
65°	578.9	571.9	564.9	562.5
67.5°	420.1	417.8	410.8	408.5
70°	296.4	287.1	284.8	280.1
72.5°	198.4	198.4	193.7	193.7
75°	121.4	109.7	107.4	109.7
77.5°	84.0	81.7	81.7	79.4
80°	56.0	53.7	58.4	51.3
82.5°	35.0	37.4	35.0	37.4
85°	23.4	28.0	25.7	25.7
87.5°	14.0	14.0	14.0	14.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)