

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: P249093

Luminaire Tested: **LSR8B80D010 EC8B80830 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249093
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 EC8B80830 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8162.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

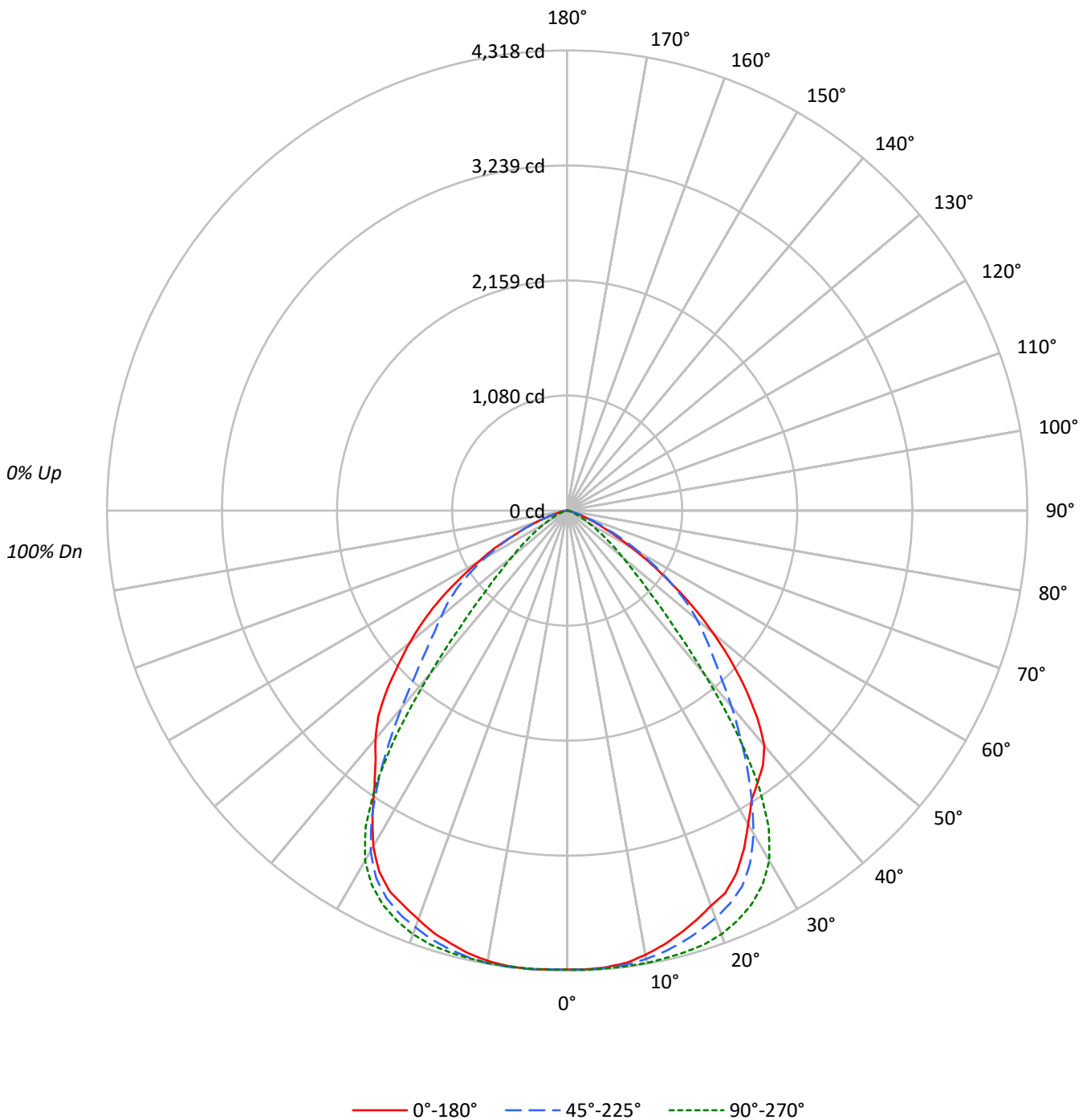
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	132794	132794	132794
5°	133087	133446	133589
10°	132528	134917	134338
15°	131058	136887	134308
20°	129486	138812	133959
25°	127805	138971	134096
30°	120910	135067	129551
35°	117299	117386	118606
40°	115847	80766	112590
45°	103223	48489	104636
50°	85833	32271	92487
55°	64374	22246	78416
60°	43621	14826	59163
65°	26311	9617	40649
70°	14588	5211	25010
75°	6612	2204	12951
80°	5754	2468	9021
85°	6545	3255	9022



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.0	5.0
10°-20°	1193.6	14.6
20°-30°	1811.6	22.2
30°-40°	1902.7	23.3
40°-50°	1426.5	17.5
50°-60°	915.3	11.2
60°-70°	391.6	4.8
70°-80°	92.5	1.1
80°-90°	17.2	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°	3416.2	41.9
0°-40°	5318.9	65.2
0°-60°	7660.7	93.9
0°-90°	8162.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8162.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4306	4306	4306	4306	4306	
5°	4300	4306	4311	4318	4316	408
15°	4105	4191	4288	4260	4207	1158
25°	3756	3888	4084	4011	3941	1716
35°	3116	2943	3118	3081	3151	1956
45°	2367	1935	1112	1879	2399	1813
55°	1197	1197	414	1248	1459	1086
65°	361	425	132	548	557	385
75°	56	65	18	111	109	81
85°	18	12	9	18	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°	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4
2.5°	4308.8	4313.4	4311.1	4311.1	4308.8	4311.1	4311.1	4315.7	4315.7	4311.1	4308.8
5°	4299.5	4304.1	4304.1	4299.5	4299.5	4311.1	4304.1	4308.8	4308.8	4306.4	4306.4
7.5°	4278.7	4278.7	4287.9	4281.0	4281.0	4287.9	4285.6	4290.3	4294.9	4297.2	4297.2
10°	4232.5	4237.1	4239.4	4239.4	4241.7	4248.6	4253.3	4262.5	4267.1	4271.8	4274.1
12.5°	4174.7	4181.6	4183.9	4181.6	4188.6	4197.8	4209.4	4220.9	4227.9	4237.1	4244.0
15°	4105.3	4105.3	4109.9	4116.9	4121.5	4135.4	4146.9	4160.8	4179.3	4190.9	4202.4
17.5°	4029.1	4033.7	4040.6	4040.6	4049.9	4073.0	4079.9	4100.7	4121.5	4133.1	4156.2
20°	3945.9	3950.4	3957.4	3962.0	3973.6	3992.1	4005.9	4024.4	4047.6	4068.4	4091.4
22.5°	3881.1	3871.9	3876.5	3881.1	3892.7	3908.9	3925.0	3948.1	3971.3	3992.1	4015.2
25°	3756.3	3758.6	3765.5	3770.1	3784.0	3797.9	3816.4	3844.1	3864.9	3888.1	3913.5
27.5°	3587.6	3589.9	3601.4	3601.4	3612.9	3636.1	3647.6	3670.8	3698.5	3721.6	3751.7
30°	3395.7	3400.3	3400.3	3409.6	3416.5	3428.1	3439.6	3462.7	3476.6	3497.4	3539.0
32.5°	3220.0	3224.6	3222.3	3220.0	3213.1	3210.7	3208.4	3213.1	3217.7	3224.6	3240.8
35°	3116.0	3104.4	3095.2	3079.0	3060.5	3037.4	3016.6	2988.9	2963.4	2942.6	2919.5
37.5°	3016.6	3014.3	3000.4	2977.3	2940.3	2898.7	2850.2	2790.1	2729.9	2665.2	2602.8
40°	2877.9	2870.9	2859.4	2827.0	2785.4	2734.6	2669.9	2595.9	2498.8	2399.4	2297.7
42.5°	2642.1	2644.4	2630.6	2605.1	2565.8	2517.3	2450.2	2369.4	2265.3	2147.4	2015.7
45°	2367.0	2367.0	2362.4	2341.6	2313.9	2274.6	2223.7	2156.7	2055.0	1934.8	1793.7
47.5°	2080.4	2082.7	2075.8	2071.2	2059.6	2034.2	1997.2	1946.3	1874.7	1759.1	1618.1
50°	1789.2	1789.2	1800.7	1798.4	1798.4	1789.2	1773.0	1742.9	1680.5	1588.0	1456.3
52.5°	1497.9	1502.5	1509.5	1518.7	1530.2	1548.7	1530.2	1516.4	1477.1	1405.4	1292.2
55°	1197.4	1202.0	1213.6	1229.7	1243.6	1262.1	1266.7	1266.7	1245.9	1197.4	1111.9
57.5°	940.8	933.9	943.1	957.0	975.5	994.0	1007.8	1024.0	1021.7	989.3	920.0
60°	707.3	709.7	716.6	730.5	744.3	760.5	779.0	792.9	799.8	783.6	739.7
62.5°	515.5	515.5	524.7	538.6	545.5	568.7	580.2	587.2	594.1	591.7	564.0
65°	360.6	365.2	369.8	376.8	383.7	397.6	404.5	418.4	423.0	425.3	404.5
67.5°	254.3	247.3	252.0	256.6	263.5	272.8	286.6	286.6	293.5	293.5	279.7
70°	161.8	161.8	164.1	171.0	175.7	178.0	182.6	187.2	194.2	191.9	191.9
72.5°	108.7	106.3	108.7	111.0	113.3	120.2	120.2	122.5	127.1	129.5	120.2
75°	55.5	57.8	62.4	60.1	67.0	62.4	64.7	71.7	69.3	64.7	64.7
77.5°	46.2	46.2	46.2	43.9	48.5	48.5	46.2	50.8	48.5	48.5	46.2
80°	32.4	34.7	32.4	30.0	32.4	30.0	30.0	30.0	30.0	30.0	27.7
82.5°	25.5	20.8	23.1	20.8	23.1	23.1	20.8	18.5	18.5	20.8	18.5
85°	18.5	13.9	16.2	16.2	13.9	13.9	13.9	13.9	13.9	11.5	11.5
87.5°	11.5	7.0	7.0	7.0	9.2	9.2	9.2	7.0	9.2	9.2	4.6
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°	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4
2.5°	4313.4	4311.1	4315.7	4313.4	4313.4	4311.1	4313.4	4311.1	4315.7	4306.4	4308.8
5°	4313.4	4308.8	4311.1	4313.4	4315.7	4311.1	4311.1	4311.1	4315.7	4311.1	4313.4
7.5°	4304.1	4301.8	4308.8	4313.4	4311.1	4308.8	4313.4	4311.1	4315.7	4313.4	4318.0
10°	4285.6	4287.9	4292.6	4299.5	4301.8	4304.1	4308.8	4308.8	4315.7	4306.4	4311.1
12.5°	4257.9	4267.1	4278.7	4283.3	4292.6	4292.6	4297.2	4299.5	4304.1	4301.8	4308.8
15°	4223.2	4234.8	4248.6	4260.2	4271.8	4278.7	4285.6	4287.9	4294.9	4287.9	4290.3
17.5°	4181.6	4195.5	4216.3	4230.1	4248.6	4255.6	4264.8	4269.4	4276.4	4271.8	4274.1
20°	4123.8	4140.0	4163.1	4183.9	4195.5	4211.6	4223.2	4230.1	4234.8	4230.1	4232.5
22.5°	4042.9	4066.1	4096.1	4112.3	4135.4	4149.3	4151.6	4167.7	4179.3	4167.7	4172.4
25°	3948.1	3971.3	3994.4	4029.1	4049.9	4066.1	4082.2	4084.5	4096.1	4093.8	4091.4
27.5°	3790.9	3821.0	3860.3	3888.1	3915.8	3941.2	3959.7	3964.3	3975.9	3971.3	3973.6
30°	3576.0	3608.4	3645.4	3689.2	3728.6	3754.0	3777.1	3793.3	3804.8	3797.9	3795.6
32.5°	3270.9	3303.2	3342.5	3386.4	3432.7	3469.6	3497.4	3518.2	3532.1	3527.4	3515.9
35°	2921.8	2931.1	2956.5	2991.2	3030.4	3069.7	3095.2	3118.3	3134.5	3139.1	3139.1
37.5°	2563.5	2533.5	2515.0	2515.0	2538.1	2554.3	2577.4	2591.2	2616.7	2625.9	2632.9
40°	2216.8	2147.4	2082.7	2034.2	2001.8	1999.5	1999.5	2006.4	2029.5	2059.6	2087.4
42.5°	1907.0	1796.1	1696.7	1606.5	1541.8	1504.8	1488.7	1491.0	1509.5	1537.2	1583.4
45°	1659.7	1521.0	1396.2	1287.5	1199.7	1141.9	1114.2	1111.9	1125.7	1158.1	1209.0
47.5°	1467.8	1319.9	1178.9	1054.1	959.3	896.9	864.5	855.3	864.5	894.6	954.7
50°	1308.3	1155.8	1010.2	880.7	779.0	714.3	684.2	672.7	684.2	709.7	769.7
52.5°	1160.4	1003.2	866.8	742.0	633.4	577.9	545.5	538.6	545.5	575.6	624.1
55°	989.3	855.3	721.2	596.4	501.6	446.1	420.7	413.8	420.7	448.5	499.3
57.5°	820.6	705.0	587.2	473.9	393.0	344.4	321.3	312.0	328.2	346.7	406.8
60°	663.4	571.0	471.5	372.2	305.1	261.2	242.7	240.4	245.0	268.2	309.7
62.5°	520.1	443.8	365.2	284.3	228.8	210.3	187.2	185.0	189.5	203.4	235.8
65°	374.5	326.0	265.8	208.0	164.1	138.7	129.5	131.8	136.4	145.6	175.7
67.5°	261.2	226.5	185.0	145.6	113.3	101.7	92.5	90.2	92.5	108.7	124.8
70°	175.7	154.9	124.8	111.0	78.6	62.4	64.7	57.8	67.0	67.0	80.9
72.5°	115.6	101.7	83.2	64.7	55.5	43.9	43.9	41.6	46.2	48.5	60.1
75°	60.1	46.2	46.2	32.4	23.1	11.5	20.8	18.5	16.2	18.5	23.1
77.5°	41.6	34.7	32.4	25.5	23.1	18.5	18.5	18.5	18.5	20.8	23.1
80°	25.5	25.5	18.5	16.2	13.9	11.5	13.9	13.9	13.9	13.9	16.2
82.5°	16.2	13.9	13.9	11.5	11.5	9.2	9.2	9.2	9.2	9.2	13.9
85°	13.9	9.2	9.2	7.0	9.2	16.2	7.0	9.2	9.2	9.2	7.0
87.5°	4.6	7.0	7.0	7.0	4.6	2.3	4.6	7.0	7.0	11.5	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4	4306.4
2.5°	4313.4	4315.7	4315.7	4313.4	4313.4	4308.8	4318.0	4311.1	4313.4	4322.6	4315.7
5°	4318.0	4320.3	4320.3	4318.0	4318.0	4318.0	4320.3	4320.3	4318.0	4315.7	4320.3
7.5°	4327.2	4324.9	4324.9	4320.3	4320.3	4315.7	4320.3	4313.4	4318.0	4313.4	4320.3
10°	4315.7	4318.0	4315.7	4313.4	4313.4	4311.1	4311.1	4304.1	4306.4	4299.5	4304.1
12.5°	4308.8	4306.4	4306.4	4301.8	4297.2	4292.6	4290.3	4283.3	4283.3	4267.1	4274.1
15°	4290.3	4292.6	4285.6	4276.4	4271.8	4260.2	4255.6	4246.3	4237.1	4225.5	4227.9
17.5°	4274.1	4267.1	4257.9	4248.6	4230.1	4220.9	4211.6	4197.8	4193.1	4179.3	4174.7
20°	4225.5	4220.9	4209.4	4193.1	4181.6	4160.8	4151.6	4137.7	4126.1	4112.3	4105.3
22.5°	4163.1	4158.5	4144.6	4128.4	4109.9	4100.7	4091.4	4066.1	4054.5	4040.6	4038.3
25°	4084.5	4077.6	4063.7	4045.2	4036.0	4010.6	4001.3	3982.8	3978.2	3964.3	3962.0
27.5°	3964.3	3955.1	3938.9	3915.8	3899.6	3883.4	3874.2	3860.3	3855.7	3841.8	3839.5
30°	3784.0	3772.4	3740.1	3730.9	3703.1	3686.9	3686.9	3668.4	3670.8	3661.5	3661.5
32.5°	3499.7	3481.2	3455.8	3437.3	3418.8	3409.6	3409.6	3402.6	3407.2	3407.2	3411.9
35°	3122.9	3097.5	3083.6	3072.1	3072.1	3081.3	3109.1	3116.0	3129.9	3141.4	3150.7
37.5°	2639.8	2637.5	2653.7	2667.5	2702.2	2741.5	2790.1	2831.7	2870.9	2898.7	2926.4
40°	2117.4	2175.2	2221.4	2286.2	2339.3	2415.6	2503.4	2575.1	2642.1	2690.7	2741.5
42.5°	1652.7	1726.7	1823.8	1918.6	2013.4	2117.4	2233.0	2332.4	2420.2	2487.2	2540.4
45°	1287.5	1389.2	1507.2	1627.3	1749.9	1879.3	1999.5	2101.2	2193.7	2263.0	2316.2
47.5°	1037.9	1148.8	1282.9	1414.7	1553.4	1689.7	1823.8	1911.7	1987.9	2043.4	2092.0
50°	857.6	975.5	1116.5	1266.7	1405.4	1541.8	1657.4	1742.9	1805.3	1853.9	1883.9
52.5°	716.6	841.4	991.7	1141.9	1280.6	1405.4	1509.5	1574.2	1625.0	1659.7	1687.4
55°	591.7	712.0	853.0	994.0	1130.4	1248.2	1333.7	1382.3	1421.6	1442.4	1458.6
57.5°	483.1	594.1	723.5	853.0	970.9	1068.0	1135.0	1183.5	1202.0	1218.2	1215.9
60°	379.1	483.1	601.0	712.0	813.7	892.2	940.8	968.5	982.4	989.3	984.7
62.5°	298.2	393.0	483.1	580.2	654.2	721.2	767.5	767.5	774.4	776.7	783.6
65°	221.9	293.5	372.2	443.8	503.9	547.8	573.3	580.2	589.5	587.2	582.5
67.5°	164.1	217.3	275.1	328.2	369.8	397.6	416.1	432.3	430.0	425.3	423.0
70°	113.3	148.0	198.8	231.2	261.2	289.0	293.5	295.9	298.2	300.5	295.9
72.5°	78.6	104.0	131.8	159.5	178.0	189.5	201.1	203.4	203.4	203.4	201.1
75°	39.3	53.2	78.6	90.2	106.3	111.0	120.2	120.2	127.1	117.9	115.6
77.5°	34.7	41.6	55.5	64.7	71.7	78.6	80.9	87.8	85.5	80.9	83.2
80°	20.8	25.5	34.7	39.3	48.5	50.8	53.2	55.5	53.2	55.5	55.5
82.5°	16.2	18.5	23.1	23.1	30.0	30.0	32.4	32.4	34.7	34.7	34.7
85°	9.2	16.2	13.9	27.7	18.5	18.5	23.1	27.7	23.1	23.1	27.7
87.5°	9.2	9.2	7.0	9.2	9.2	9.2	11.5	13.9	13.9	16.2	13.9
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: P249093

CATALOG NUMBER: LSR8B80D010 EC8B80830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4306.4	4306.4	4306.4	4306.4
2.5°	4313.4	4318.0	4311.1	4308.8
5°	4320.3	4320.3	4315.7	4315.7
7.5°	4320.3	4320.3	4313.4	4308.8
10°	4301.8	4301.8	4294.9	4290.3
12.5°	4267.1	4267.1	4264.8	4257.9
15°	4223.2	4223.2	4214.0	4207.1
17.5°	4163.1	4167.7	4156.2	4156.2
20°	4098.4	4096.1	4086.9	4082.2
22.5°	4031.4	4026.7	4024.4	4010.6
25°	3959.7	3955.1	3948.1	3941.2
27.5°	3837.2	3834.9	3827.9	3818.7
30°	3649.9	3647.6	3638.4	3638.4
32.5°	3407.2	3404.9	3395.7	3398.0
35°	3155.3	3164.5	3159.9	3150.7
37.5°	2944.9	2951.9	2956.5	2951.9
40°	2769.2	2790.1	2792.4	2797.0
42.5°	2582.0	2609.7	2619.0	2623.6
45°	2357.8	2383.2	2404.0	2399.4
47.5°	2128.9	2147.4	2165.9	2152.1
50°	1909.4	1920.9	1927.9	1927.9
52.5°	1701.3	1701.3	1699.0	1701.3
55°	1463.2	1463.2	1454.0	1458.6
57.5°	1213.6	1218.2	1211.2	1199.7
60°	982.4	970.9	966.2	959.3
62.5°	765.1	765.1	749.0	769.7
65°	573.3	566.3	559.4	557.1
67.5°	416.1	413.8	406.8	404.5
70°	293.5	284.3	282.0	277.4
72.5°	196.5	196.5	191.9	191.9
75°	120.2	108.7	106.3	108.7
77.5°	83.2	80.9	80.9	78.6
80°	55.5	53.2	57.8	50.8
82.5°	34.7	37.0	34.7	37.0
85°	23.1	27.7	25.5	25.5
87.5°	13.9	13.9	13.9	13.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)