

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: P249525

Luminaire Tested: **LSR8B80D010 EC8B80830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249525
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8070.0 lumens
Efficiency: N/A
Efficacy: 108.5 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

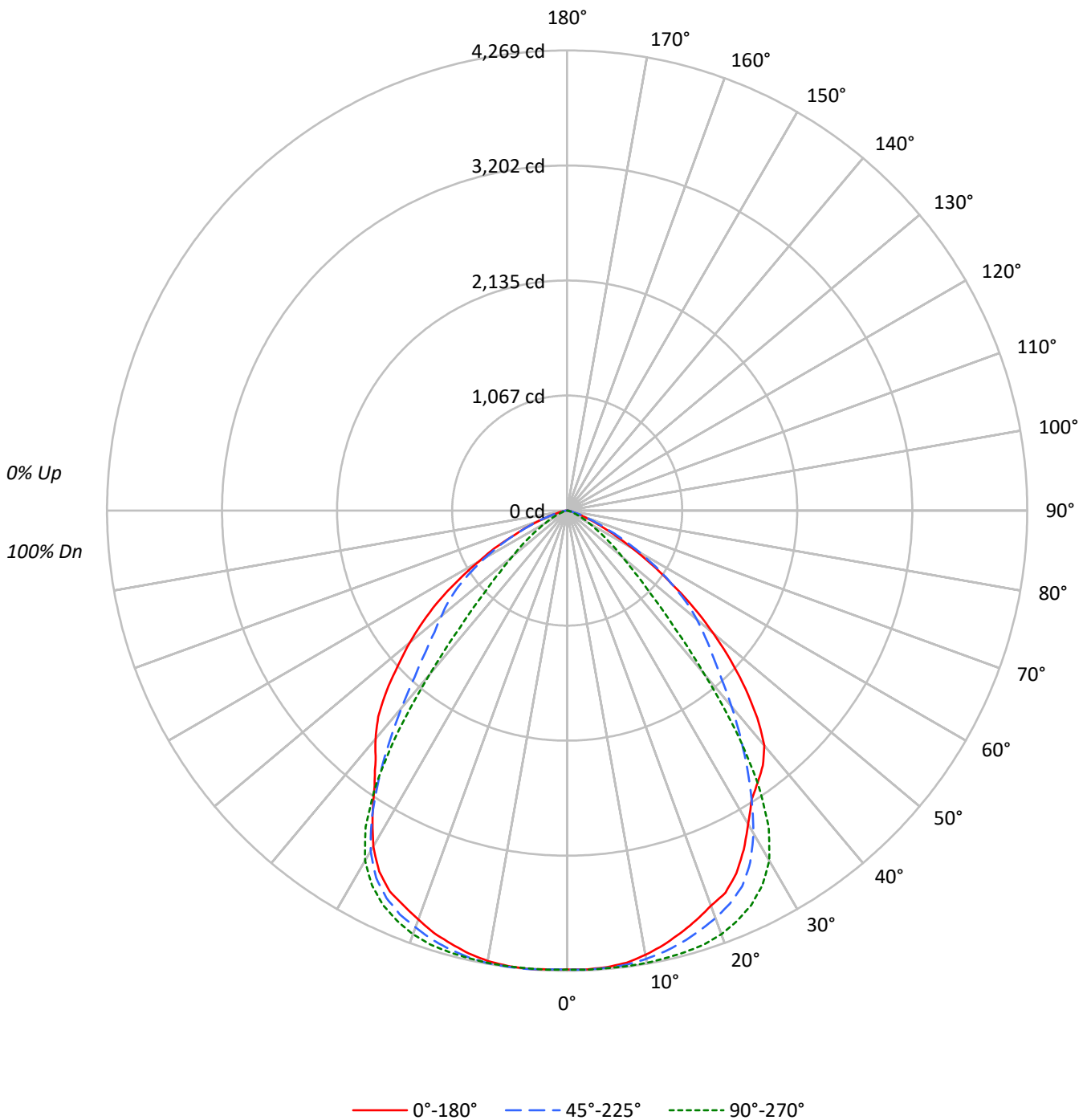
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	131298	131298	131298
5°	131586	131942	132084
10°	131031	133395	132822
15°	129580	135345	132791
20°	128026	137250	132449
25°	126362	137406	132585
30°	119546	133543	128092
35°	115978	116061	117269
40°	114543	79856	111322
45°	102063	47940	103454
50°	84864	31907	91441
55°	63648	21994	77529
60°	43134	14660	58496
65°	26019	9507	40189
70°	14425	5157	24722
75°	6541	2180	12796
80°	5683	2433	8932
85°	6475	3220	8916



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.4	5.0
10°-20°	1180.1	14.6
20°-30°	1791.2	22.2
30°-40°	1881.3	23.3
40°-50°	1410.5	17.5
50°-60°	905.0	11.2
60°-70°	387.1	4.8
70°-80°	91.5	1.1
80°-90°	17.0	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°	3377.7	41.9
0°-40°	5258.9	65.2
0°-60°	7574.4	93.9
0°-90°	8070.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8070.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4258	4258	4258	4258	4258	
5°	4251	4258	4262	4269	4267	404
15°	4059	4144	4240	4212	4160	1145
25°	3714	3844	4038	3965	3897	1697
35°	3081	2909	3083	3047	3115	1934
45°	2340	1913	1099	1858	2372	1792
55°	1184	1184	409	1234	1442	1074
65°	357	420	130	542	551	381
75°	55	64	18	110	107	80
85°	18	11	9	18	25	19
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°	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9
2.5°	4260.2	4264.8	4262.5	4262.5	4260.2	4262.5	4262.5	4267.1	4267.1	4262.5	4260.2
5°	4251.0	4255.6	4255.6	4251.0	4251.0	4262.5	4255.6	4260.2	4260.2	4257.9	4257.9
7.5°	4230.5	4230.5	4239.6	4232.8	4232.8	4239.6	4237.3	4241.9	4246.5	4248.8	4248.8
10°	4184.7	4189.3	4191.6	4191.6	4193.9	4200.7	4205.3	4214.5	4219.0	4223.6	4225.9
12.5°	4127.6	4134.5	4136.8	4134.5	4141.3	4150.5	4161.9	4173.3	4180.2	4189.3	4196.2
15°	4059.0	4059.0	4063.6	4070.5	4075.1	4088.8	4100.2	4113.9	4132.2	4143.6	4155.0
17.5°	3983.6	3988.2	3995.1	3995.1	4004.2	4027.0	4033.9	4054.5	4075.1	4086.5	4109.4
20°	3901.4	3905.9	3912.8	3917.4	3928.8	3947.1	3960.8	3979.1	4001.9	4022.5	4045.3
22.5°	3837.4	3828.2	3832.8	3837.4	3848.8	3864.8	3880.8	3903.6	3926.5	3947.1	3969.9
25°	3713.9	3716.2	3723.1	3727.6	3741.4	3755.1	3773.4	3800.8	3821.4	3844.2	3869.3
27.5°	3547.1	3549.4	3560.8	3560.8	3572.2	3595.1	3606.5	3629.4	3656.8	3679.7	3709.4
30°	3357.4	3362.0	3362.0	3371.1	3377.9	3389.4	3400.8	3423.7	3437.4	3458.0	3499.1
32.5°	3183.7	3188.3	3186.0	3183.7	3176.9	3174.6	3172.3	3176.9	3181.4	3188.3	3204.3
35°	3080.9	3069.4	3060.3	3044.3	3026.0	3003.2	2982.6	2955.2	2930.0	2909.4	2886.6
37.5°	2982.6	2980.3	2966.6	2943.7	2907.1	2866.0	2818.1	2758.6	2699.2	2635.2	2573.5
40°	2845.5	2838.6	2827.2	2795.2	2754.0	2703.7	2639.8	2566.6	2470.6	2372.3	2271.8
42.5°	2612.3	2614.6	2600.9	2575.7	2536.9	2488.9	2422.6	2342.7	2239.8	2123.2	1993.0
45°	2340.4	2340.4	2335.8	2315.2	2287.8	2248.9	2198.7	2132.4	2031.8	1912.9	1773.5
47.5°	2056.9	2059.2	2052.4	2047.8	2036.4	2011.3	1974.7	1924.4	1853.6	1739.2	1599.8
50°	1769.0	1769.0	1780.4	1778.1	1778.1	1769.0	1753.0	1723.3	1661.6	1570.1	1439.9
52.5°	1481.0	1485.6	1492.5	1501.6	1513.0	1531.3	1513.0	1499.3	1460.4	1389.6	1277.6
55°	1183.9	1188.5	1199.9	1215.9	1229.6	1247.9	1252.4	1252.4	1231.9	1183.9	1099.3
57.5°	930.2	923.3	932.5	946.2	964.5	982.8	996.5	1012.5	1010.2	978.2	909.6
60°	699.4	701.7	708.5	722.2	735.9	751.9	770.2	783.9	790.8	774.8	731.4
62.5°	509.7	509.7	518.8	532.5	539.4	562.2	573.7	580.5	587.4	585.1	557.7
65°	356.6	361.1	365.7	372.6	379.4	393.1	400.0	413.7	418.2	420.5	400.0
67.5°	251.4	244.5	249.1	253.7	260.5	269.7	283.4	283.4	290.2	290.2	276.5
70°	160.0	160.0	162.3	169.1	173.7	176.0	180.6	185.1	192.0	189.7	189.7
72.5°	107.4	105.1	107.4	109.7	112.0	118.8	118.8	121.1	125.7	128.0	118.8
75°	54.9	57.2	61.7	59.4	66.3	61.7	64.0	70.9	68.6	64.0	64.0
77.5°	45.7	45.7	45.7	43.5	48.0	48.0	45.7	50.3	48.0	48.0	45.7
80°	32.0	34.3	32.0	29.7	32.0	29.7	29.7	29.7	29.7	29.7	27.4
82.5°	25.2	20.6	22.9	20.6	22.9	22.9	20.6	18.3	18.3	20.6	18.3
85°	18.3	13.7	16.0	16.0	13.7	13.7	13.7	13.7	13.7	11.4	11.4
87.5°	11.4	6.9	6.9	6.9	9.1	9.1	9.1	6.9	9.1	9.1	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°	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9
2.5°	4264.8	4262.5	4267.1	4264.8	4264.8	4262.5	4264.8	4262.5	4267.1	4257.9	4260.2
5°	4264.8	4260.2	4262.5	4264.8	4267.1	4262.5	4262.5	4262.5	4267.1	4262.5	4264.8
7.5°	4255.6	4253.3	4260.2	4264.8	4262.5	4260.2	4264.8	4262.5	4267.1	4264.8	4269.3
10°	4237.3	4239.6	4244.2	4251.0	4253.3	4255.6	4260.2	4260.2	4267.1	4257.9	4262.5
12.5°	4209.9	4219.0	4230.5	4235.0	4244.2	4244.2	4248.8	4251.0	4255.6	4253.3	4260.2
15°	4175.6	4187.0	4200.7	4212.2	4223.6	4230.5	4237.3	4239.6	4246.5	4239.6	4241.9
17.5°	4134.5	4148.2	4168.8	4182.5	4200.7	4207.6	4216.7	4221.3	4228.2	4223.6	4225.9
20°	4077.3	4093.4	4116.2	4136.8	4148.2	4164.2	4175.6	4182.5	4187.0	4182.5	4184.7
22.5°	3997.3	4020.2	4049.9	4065.9	4088.8	4102.5	4104.8	4120.8	4132.2	4120.8	4125.4
25°	3903.6	3926.5	3949.4	3983.6	4004.2	4020.2	4036.2	4038.5	4049.9	4047.6	4045.3
27.5°	3748.2	3778.0	3816.8	3844.2	3871.6	3896.8	3915.1	3919.6	3931.1	3926.5	3928.8
30°	3535.7	3567.7	3604.3	3647.7	3686.5	3711.6	3734.5	3750.5	3761.9	3755.1	3752.8
32.5°	3234.0	3266.0	3304.9	3348.3	3394.0	3430.5	3458.0	3478.6	3492.3	3487.7	3476.3
35°	2888.9	2898.0	2923.2	2957.5	2996.3	3035.1	3060.3	3083.1	3099.1	3103.7	3103.7
37.5°	2534.6	2504.9	2486.7	2486.7	2509.5	2525.5	2548.3	2562.0	2587.2	2596.3	2603.2
40°	2191.8	2123.2	2059.2	2011.3	1979.3	1977.0	1977.0	1983.8	2006.7	2036.4	2063.8
42.5°	1885.5	1775.8	1677.6	1588.4	1524.4	1487.9	1471.9	1474.2	1492.5	1519.9	1565.6
45°	1641.0	1503.9	1380.4	1273.0	1186.2	1129.0	1101.6	1099.3	1113.0	1145.0	1195.3
47.5°	1451.3	1305.0	1165.6	1042.2	948.5	886.8	854.8	845.7	854.8	884.5	943.9
50°	1293.6	1142.8	998.8	870.8	770.2	706.2	676.5	665.1	676.5	701.7	761.1
52.5°	1147.3	991.9	857.1	733.6	626.2	571.4	539.4	532.5	539.4	569.1	617.1
55°	978.2	845.7	713.1	589.6	496.0	441.1	416.0	409.1	416.0	443.4	493.7
57.5°	811.4	697.1	580.5	468.5	388.5	340.5	317.7	308.5	324.5	342.8	402.3
60°	655.9	564.5	466.2	368.0	301.7	258.3	240.0	237.7	242.3	265.1	306.2
62.5°	514.3	438.8	361.1	281.1	226.3	208.0	185.1	182.9	187.4	201.1	233.1
65°	370.3	322.3	262.8	205.7	162.3	137.1	128.0	130.3	134.8	144.0	173.7
67.5°	258.3	224.0	182.9	144.0	112.0	100.5	91.4	89.1	91.4	107.4	123.4
70°	173.7	153.1	123.4	109.7	77.7	61.7	64.0	57.2	66.3	66.3	80.0
72.5°	114.3	100.5	82.3	64.0	54.9	43.5	43.5	41.2	45.7	48.0	59.4
75°	59.4	45.7	45.7	32.0	22.9	11.4	20.6	18.3	16.0	18.3	22.9
77.5°	41.2	34.3	32.0	25.2	22.9	18.3	18.3	18.3	18.3	20.6	22.9
80°	25.2	25.2	18.3	16.0	13.7	11.4	13.7	13.7	13.7	13.7	16.0
82.5°	16.0	13.7	13.7	11.4	11.4	9.1	9.1	9.1	9.1	9.1	13.7
85°	13.7	9.1	9.1	6.9	9.1	16.0	6.9	9.1	9.1	9.1	6.9
87.5°	4.6	6.9	6.9	6.9	4.6	2.3	4.6	6.9	6.9	11.4	9.1
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°	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9	4257.9
2.5°	4264.8	4267.1	4267.1	4264.8	4264.8	4260.2	4269.3	4262.5	4264.8	4273.9	4267.1
5°	4269.3	4271.6	4271.6	4269.3	4269.3	4269.3	4271.6	4271.6	4269.3	4267.1	4271.6
7.5°	4278.5	4276.2	4276.2	4271.6	4271.6	4267.1	4271.6	4264.8	4269.3	4264.8	4271.6
10°	4267.1	4269.3	4267.1	4264.8	4264.8	4262.5	4262.5	4255.6	4257.9	4251.0	4255.6
12.5°	4260.2	4257.9	4257.9	4253.3	4248.8	4244.2	4241.9	4235.0	4235.0	4219.0	4225.9
15°	4241.9	4244.2	4237.3	4228.2	4223.6	4212.2	4207.6	4198.4	4189.3	4177.9	4180.2
17.5°	4225.9	4219.0	4209.9	4200.7	4182.5	4173.3	4164.2	4150.5	4145.9	4132.2	4127.6
20°	4177.9	4173.3	4161.9	4145.9	4134.5	4113.9	4104.8	4091.1	4079.6	4065.9	4059.0
22.5°	4116.2	4111.6	4097.9	4081.9	4063.6	4054.5	4045.3	4020.2	4008.8	3995.1	3992.8
25°	4038.5	4031.6	4017.9	3999.6	3990.5	3965.4	3956.2	3937.9	3933.4	3919.6	3917.4
27.5°	3919.6	3910.5	3894.5	3871.6	3855.6	3839.6	3830.5	3816.8	3812.2	3798.5	3796.2
30°	3741.4	3729.9	3697.9	3688.8	3661.4	3645.4	3645.4	3627.1	3629.4	3620.3	3620.3
32.5°	3460.3	3442.0	3416.8	3398.5	3380.2	3371.1	3371.1	3364.2	3368.8	3368.8	3373.4
35°	3087.7	3062.6	3048.8	3037.4	3037.4	3046.6	3074.0	3080.9	3094.6	3106.0	3115.2
37.5°	2610.0	2607.8	2623.8	2637.5	2671.8	2710.6	2758.6	2799.8	2838.6	2866.0	2893.4
40°	2093.5	2150.7	2196.4	2260.4	2312.9	2388.3	2475.2	2546.0	2612.3	2660.3	2710.6
42.5°	1634.1	1707.3	1803.3	1897.0	1990.7	2093.5	2207.8	2306.1	2392.9	2459.2	2511.8
45°	1273.0	1373.6	1490.2	1609.0	1730.1	1858.1	1977.0	2077.5	2169.0	2237.5	2290.1
47.5°	1026.2	1135.9	1268.4	1398.7	1535.9	1670.7	1803.3	1890.1	1965.5	2020.4	2068.4
50°	847.9	964.5	1103.9	1252.4	1389.6	1524.4	1638.7	1723.3	1785.0	1833.0	1862.7
52.5°	708.5	831.9	980.5	1129.0	1266.1	1389.6	1492.5	1556.4	1606.7	1641.0	1668.4
55°	585.1	704.0	843.4	982.8	1117.6	1234.2	1318.7	1366.7	1405.6	1426.1	1442.1
57.5°	477.7	587.4	715.4	843.4	959.9	1055.9	1122.2	1170.2	1188.5	1204.5	1202.2
60°	374.8	477.7	594.2	704.0	804.5	882.2	930.2	957.6	971.3	978.2	973.6
62.5°	294.8	388.5	477.7	573.7	646.8	713.1	758.8	758.8	765.6	767.9	774.8
65°	219.4	290.2	368.0	438.8	498.2	541.7	566.8	573.7	582.8	580.5	575.9
67.5°	162.3	214.9	272.0	324.5	365.7	393.1	411.4	427.4	425.1	420.5	418.2
70°	112.0	146.3	196.6	228.6	258.3	285.7	290.2	292.5	294.8	297.1	292.5
72.5°	77.7	102.8	130.3	157.7	176.0	187.4	198.9	201.1	201.1	201.1	198.9
75°	38.9	52.6	77.7	89.1	105.1	109.7	118.8	118.8	125.7	116.5	114.3
77.5°	34.3	41.2	54.9	64.0	70.9	77.7	80.0	86.8	84.6	80.0	82.3
80°	20.6	25.2	34.3	38.9	48.0	50.3	52.6	54.9	52.6	54.9	54.9
82.5°	16.0	18.3	22.9	22.9	29.7	29.7	32.0	32.0	34.3	34.3	34.3
85°	9.1	16.0	13.7	27.4	18.3	18.3	22.9	27.4	22.9	22.9	27.4
87.5°	9.1	9.1	6.9	9.1	9.1	9.1	11.4	13.7	13.7	16.0	13.7
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: P249525

CATALOG NUMBER: LSR8B80D010 EC8B80830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4257.9	4257.9	4257.9	4257.9
2.5°	4264.8	4269.3	4262.5	4260.2
5°	4271.6	4271.6	4267.1	4267.1
7.5°	4271.6	4271.6	4264.8	4260.2
10°	4253.3	4253.3	4246.5	4241.9
12.5°	4219.0	4219.0	4216.7	4209.9
15°	4175.6	4175.6	4166.5	4159.6
17.5°	4116.2	4120.8	4109.4	4109.4
20°	4052.2	4049.9	4040.8	4036.2
22.5°	3985.9	3981.4	3979.1	3965.4
25°	3915.1	3910.5	3903.6	3896.8
27.5°	3794.0	3791.7	3784.8	3775.7
30°	3608.8	3606.5	3597.4	3597.4
32.5°	3368.8	3366.5	3357.4	3359.7
35°	3119.7	3128.9	3124.3	3115.2
37.5°	2911.7	2918.6	2923.2	2918.6
40°	2738.0	2758.6	2760.9	2765.5
42.5°	2552.9	2580.3	2589.5	2594.0
45°	2331.2	2356.4	2376.9	2372.3
47.5°	2104.9	2123.2	2141.5	2127.8
50°	1887.8	1899.2	1906.1	1906.1
52.5°	1682.2	1682.2	1679.9	1682.2
55°	1446.7	1446.7	1437.6	1442.1
57.5°	1199.9	1204.5	1197.6	1186.2
60°	971.3	959.9	955.3	948.5
62.5°	756.5	756.5	740.5	761.1
65°	566.8	560.0	553.1	550.8
67.5°	411.4	409.1	402.3	400.0
70°	290.2	281.1	278.8	274.2
72.5°	194.3	194.3	189.7	189.7
75°	118.8	107.4	105.1	107.4
77.5°	82.3	80.0	80.0	77.7
80°	54.9	52.6	57.2	50.3
82.5°	34.3	36.6	34.3	36.6
85°	22.9	27.4	25.2	25.2
87.5°	13.7	13.7	13.7	13.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)