

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: P249165

Luminaire Tested: **LSR8B80D010 EC8B80950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249165
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 EC8B80950 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7827.0 lumens
Efficiency: N/A
Efficacy: 105.2 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

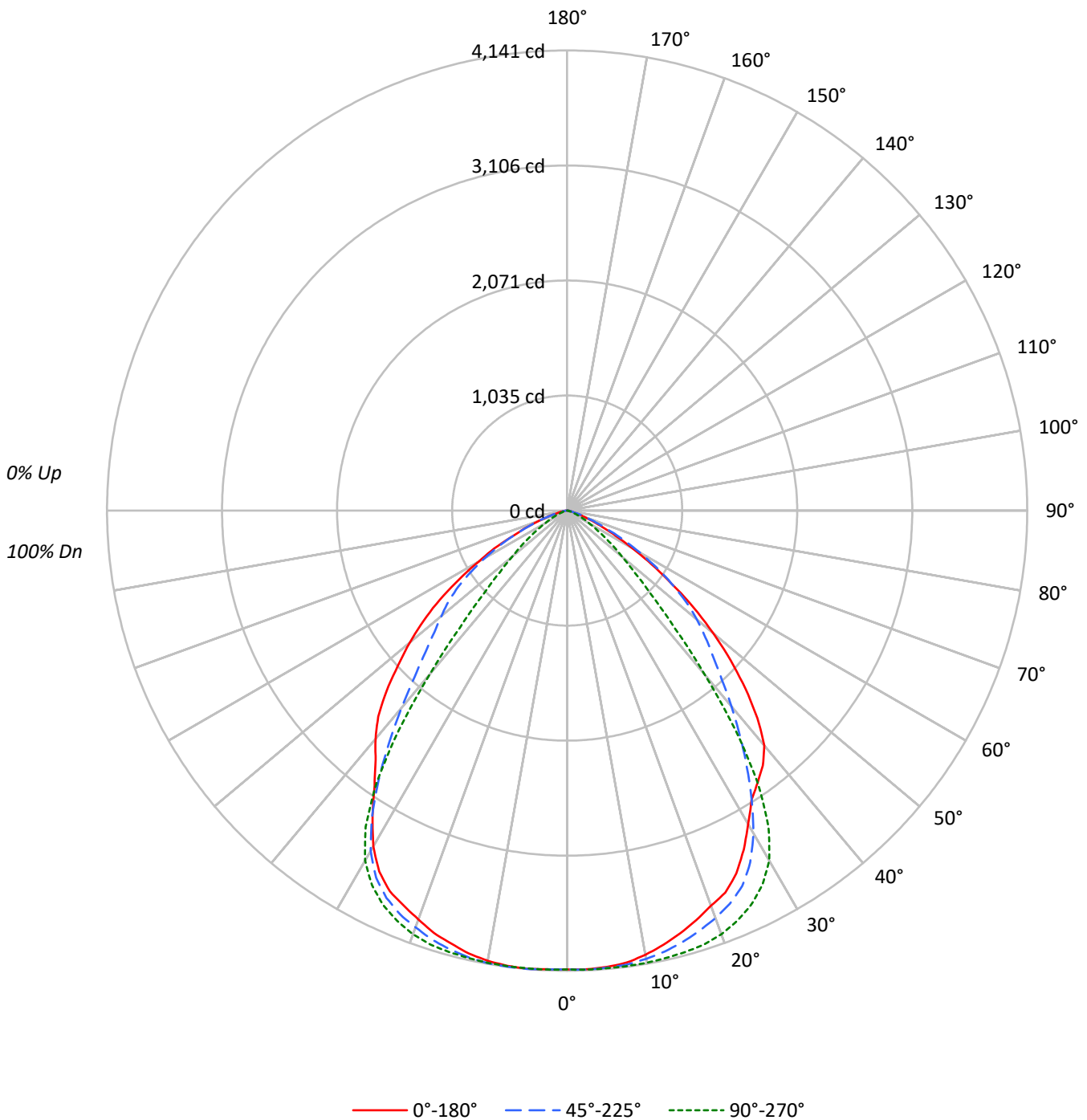
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	127345	127345	127345
5°	127624	127967	128107
10°	127086	129378	128824
15°	125679	131269	128795
20°	124170	133115	128462
25°	122558	133269	128594
30°	115946	129523	124235
35°	112485	112567	113738
40°	111093	77453	107969
45°	98988	46496	100340
50°	82307	30947	88687
55°	61729	21333	75196
60°	41833	14216	56733
65°	25231	9223	38978
70°	13993	4995	23982
75°	6338	2109	12415
80°	5505	2362	8666
85°	6262	3114	8633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.1	5.0
10°-20°	1144.6	14.6
20°-30°	1737.3	22.2
30°-40°	1824.6	23.3
40°-50°	1368.0	17.5
50°-60°	877.7	11.2
60°-70°	375.5	4.8
70°-80°	88.7	1.1
80°-90°	16.5	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°	3276.0	41.9
0°-40°	5100.6	65.2
0°-60°	7346.3	93.9
0°-90°	7827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7827.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4130	4130	4130	4130	4130	
5°	4123	4130	4134	4141	4139	392
15°	3937	4019	4112	4085	4034	1110
25°	3602	3728	3917	3846	3780	1646
35°	2988	2822	2990	2955	3021	1875
45°	2270	1855	1066	1802	2301	1738
55°	1148	1148	397	1197	1399	1042
65°	346	408	126	525	534	369
75°	53	62	18	106	104	77
85°	18	11	9	18	24	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°	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7
2.5°	4131.9	4136.3	4134.1	4134.1	4131.9	4134.1	4134.1	4138.6	4138.6	4134.1	4131.9
5°	4123.0	4127.5	4127.5	4123.0	4123.0	4134.1	4127.5	4131.9	4131.9	4129.7	4129.7
7.5°	4103.1	4103.1	4111.9	4105.3	4105.3	4111.9	4109.7	4114.2	4118.6	4120.8	4120.8
10°	4058.7	4063.2	4065.4	4065.4	4067.6	4074.2	4078.7	4087.6	4092.0	4096.4	4098.7
12.5°	4003.4	4010.0	4012.2	4010.0	4016.6	4025.5	4036.6	4047.7	4054.3	4063.2	4069.9
15°	3936.8	3936.8	3941.3	3947.9	3952.4	3965.7	3976.7	3990.0	4007.8	4018.9	4029.9
17.5°	3863.7	3868.1	3874.8	3874.8	3883.7	3905.8	3912.5	3932.4	3952.4	3963.4	3985.6
20°	3783.9	3788.3	3795.0	3799.4	3810.5	3828.2	3841.5	3859.2	3881.4	3901.4	3923.5
22.5°	3721.8	3713.0	3717.4	3721.8	3732.9	3748.4	3763.9	3786.1	3808.3	3828.2	3850.4
25°	3602.1	3604.3	3611.0	3615.4	3628.7	3642.0	3659.8	3686.3	3706.3	3728.5	3752.8
27.5°	3440.3	3442.5	3453.6	3453.6	3464.7	3486.8	3497.9	3520.1	3546.7	3568.9	3597.7
30°	3256.3	3260.7	3260.7	3269.6	3276.2	3287.4	3298.4	3320.6	3333.9	3353.8	3393.8
32.5°	3087.9	3092.3	3090.0	3087.9	3081.2	3079.0	3076.7	3081.2	3085.6	3092.3	3107.8
35°	2988.1	2977.0	2968.2	2952.6	2934.9	2912.7	2892.8	2866.2	2841.8	2821.8	2799.7
37.5°	2892.8	2890.5	2877.3	2855.1	2819.6	2779.7	2733.2	2675.5	2617.9	2555.8	2496.0
40°	2759.8	2753.1	2742.0	2711.0	2671.1	2622.3	2560.3	2489.3	2396.2	2300.9	2203.4
42.5°	2533.7	2535.9	2522.6	2498.2	2460.5	2413.9	2349.7	2272.1	2172.4	2059.3	1933.0
45°	2269.9	2269.9	2265.4	2245.5	2218.9	2181.2	2132.4	2068.2	1970.7	1855.3	1720.1
47.5°	1995.0	1997.2	1990.6	1986.2	1975.0	1950.7	1915.2	1866.5	1797.7	1686.9	1551.7
50°	1715.7	1715.7	1726.8	1724.6	1724.6	1715.7	1700.2	1671.4	1611.5	1522.9	1396.5
52.5°	1436.4	1440.9	1447.5	1456.4	1467.4	1485.2	1467.4	1454.1	1416.4	1347.7	1239.1
55°	1148.2	1152.7	1163.7	1179.3	1192.6	1210.3	1214.7	1214.7	1194.8	1148.2	1066.2
57.5°	902.2	895.5	904.4	917.7	935.5	953.2	966.5	982.0	979.8	948.7	882.2
60°	678.3	680.5	687.2	700.5	713.8	729.3	747.0	760.3	767.0	751.5	709.3
62.5°	494.3	494.3	503.2	516.5	523.1	545.3	556.4	563.1	569.7	567.4	540.9
65°	345.8	350.2	354.7	361.3	368.0	381.2	387.9	401.2	405.7	407.9	387.9
67.5°	243.9	237.2	241.6	246.0	252.7	261.6	274.9	274.9	281.5	281.5	268.2
70°	155.2	155.2	157.4	164.0	168.5	170.7	175.1	179.5	186.2	184.0	184.0
72.5°	104.2	102.0	104.2	106.4	108.6	115.3	115.3	117.5	121.9	124.2	115.3
75°	53.2	55.4	59.8	57.7	64.3	59.8	62.0	68.7	66.5	62.0	62.0
77.5°	44.3	44.3	44.3	42.1	46.5	46.5	44.3	48.8	46.5	46.5	44.3
80°	31.0	33.2	31.0	28.8	31.0	28.8	28.8	28.8	28.8	28.8	26.6
82.5°	24.4	20.0	22.2	20.0	22.2	22.2	20.0	17.7	17.7	20.0	17.7
85°	17.7	13.3	15.5	15.5	13.3	13.3	13.3	13.3	13.3	11.1	11.1
87.5°	11.1	6.7	6.7	6.7	8.8	8.8	8.8	6.7	8.8	8.8	4.4
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°	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7
2.5°	4136.3	4134.1	4138.6	4136.3	4136.3	4134.1	4136.3	4134.1	4138.6	4129.7	4131.9
5°	4136.3	4131.9	4134.1	4136.3	4138.6	4134.1	4134.1	4134.1	4138.6	4134.1	4136.3
7.5°	4127.5	4125.2	4131.9	4136.3	4134.1	4131.9	4136.3	4134.1	4138.6	4136.3	4140.7
10°	4109.7	4111.9	4116.4	4123.0	4125.2	4127.5	4131.9	4131.9	4138.6	4129.7	4134.1
12.5°	4083.1	4092.0	4103.1	4107.5	4116.4	4116.4	4120.8	4123.0	4127.5	4125.2	4131.9
15°	4049.9	4061.0	4074.2	4085.4	4096.4	4103.1	4109.7	4111.9	4118.6	4111.9	4114.2
17.5°	4010.0	4023.3	4043.2	4056.5	4074.2	4080.9	4089.8	4094.2	4100.9	4096.4	4098.7
20°	3954.5	3970.1	3992.2	4012.2	4023.3	4038.8	4049.9	4056.5	4061.0	4056.5	4058.7
22.5°	3877.0	3899.2	3928.0	3943.5	3965.7	3978.9	3981.2	3996.7	4007.8	3996.7	4001.1
25°	3786.1	3808.3	3830.4	3863.7	3883.7	3899.2	3914.7	3916.9	3928.0	3925.7	3923.5
27.5°	3635.3	3664.2	3701.8	3728.5	3755.1	3779.5	3797.2	3801.6	3812.7	3808.3	3810.5
30°	3429.2	3460.3	3495.7	3537.8	3575.5	3599.9	3622.1	3637.6	3648.6	3642.0	3639.8
32.5°	3136.6	3167.6	3205.3	3247.4	3291.8	3327.2	3353.8	3373.8	3387.1	3382.7	3371.6
35°	2801.9	2810.8	2835.2	2868.4	2906.1	2943.8	2968.2	2990.3	3005.8	3010.2	3010.2
37.5°	2458.3	2429.5	2411.8	2411.8	2433.9	2449.4	2471.6	2484.9	2509.3	2518.1	2524.8
40°	2125.8	2059.3	1997.2	1950.7	1919.7	1917.4	1917.4	1924.1	1946.2	1975.0	2001.7
42.5°	1828.8	1722.4	1627.1	1540.6	1478.5	1443.1	1427.6	1429.8	1447.5	1474.1	1518.4
45°	1591.6	1458.6	1338.9	1234.7	1150.5	1095.0	1068.4	1066.2	1079.5	1110.5	1159.4
47.5°	1407.6	1265.7	1130.5	1010.8	919.9	860.1	829.0	820.2	829.0	857.8	915.5
50°	1254.6	1108.4	968.7	844.6	747.0	685.0	656.1	645.1	656.1	680.5	738.1
52.5°	1112.8	962.0	831.3	711.6	607.4	554.2	523.1	516.5	523.1	551.9	598.5
55°	948.7	820.2	691.6	571.9	481.0	427.8	403.4	396.8	403.4	430.1	478.8
57.5°	786.9	676.1	563.1	454.4	376.8	330.3	308.1	299.2	314.7	332.5	390.1
60°	636.2	547.5	452.2	356.9	292.6	250.5	232.7	230.5	235.0	257.1	297.0
62.5°	498.8	425.6	350.2	272.7	219.4	201.7	179.5	177.4	181.8	195.0	226.1
65°	359.1	312.6	254.9	199.5	157.4	133.0	124.2	126.4	130.8	139.7	168.5
67.5°	250.5	217.2	177.4	139.7	108.6	97.5	88.7	86.5	88.7	104.2	119.7
70°	168.5	148.5	119.7	106.4	75.4	59.8	62.0	55.4	64.3	64.3	77.6
72.5°	110.8	97.5	79.8	62.0	53.2	42.1	42.1	39.9	44.3	46.5	57.7
75°	57.7	44.3	44.3	31.0	22.2	11.1	20.0	17.7	15.5	17.7	22.2
77.5°	39.9	33.2	31.0	24.4	22.2	17.7	17.7	17.7	17.7	20.0	22.2
80°	24.4	24.4	17.7	15.5	13.3	11.1	13.3	13.3	13.3	13.3	15.5
82.5°	15.5	13.3	13.3	11.1	11.1	8.8	8.8	8.8	8.8	8.8	13.3
85°	13.3	8.8	8.8	6.7	8.8	15.5	6.7	8.8	8.8	8.8	6.7
87.5°	4.4	6.7	6.7	6.7	4.4	2.2	4.4	6.7	6.7	11.1	8.8
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°	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7	4129.7
2.5°	4136.3	4138.6	4138.6	4136.3	4136.3	4131.9	4140.7	4134.1	4136.3	4145.2	4138.6
5°	4140.7	4143.0	4143.0	4140.7	4140.7	4140.7	4143.0	4143.0	4140.7	4138.6	4143.0
7.5°	4149.6	4147.4	4147.4	4143.0	4143.0	4138.6	4143.0	4136.3	4140.7	4136.3	4143.0
10°	4138.6	4140.7	4138.6	4136.3	4136.3	4134.1	4134.1	4127.5	4129.7	4123.0	4127.5
12.5°	4131.9	4129.7	4129.7	4125.2	4120.8	4116.4	4114.2	4107.5	4107.5	4092.0	4098.7
15°	4114.2	4116.4	4109.7	4100.9	4096.4	4085.4	4080.9	4072.0	4063.2	4052.1	4054.3
17.5°	4098.7	4092.0	4083.1	4074.2	4056.5	4047.7	4038.8	4025.5	4021.0	4007.8	4003.4
20°	4052.1	4047.7	4036.6	4021.0	4010.0	3990.0	3981.2	3967.9	3956.8	3943.5	3936.8
22.5°	3992.2	3987.8	3974.5	3959.0	3941.3	3932.4	3923.5	3899.2	3888.0	3874.8	3872.5
25°	3916.9	3910.2	3896.9	3879.2	3870.3	3846.0	3837.1	3819.3	3814.9	3801.6	3799.4
27.5°	3801.6	3792.7	3777.2	3755.1	3739.5	3724.0	3715.2	3701.8	3697.4	3684.1	3681.9
30°	3628.7	3617.6	3586.6	3577.7	3551.1	3535.6	3535.6	3517.9	3520.1	3511.2	3511.2
32.5°	3356.1	3338.3	3313.9	3296.2	3278.5	3269.6	3269.6	3262.9	3267.4	3267.4	3271.8
35°	2994.7	2970.4	2957.0	2946.0	2946.0	2954.8	2981.4	2988.1	3001.4	3012.5	3021.4
37.5°	2531.4	2529.3	2544.8	2558.1	2591.3	2629.0	2675.5	2715.5	2753.1	2779.7	2806.3
40°	2030.5	2085.9	2130.2	2192.3	2243.3	2316.4	2400.7	2469.4	2533.7	2580.2	2629.0
42.5°	1584.9	1655.9	1749.0	1839.8	1930.7	2030.5	2141.3	2236.6	2320.9	2385.1	2436.1
45°	1234.7	1332.2	1445.3	1560.6	1678.0	1802.2	1917.4	2015.0	2103.6	2170.1	2221.1
47.5°	995.3	1101.7	1230.2	1356.6	1489.6	1620.4	1749.0	1833.2	1906.3	1959.5	2006.1
50°	822.4	935.5	1070.7	1214.7	1347.7	1478.5	1589.4	1671.4	1731.2	1777.8	1806.6
52.5°	687.2	806.9	951.0	1095.0	1228.0	1347.7	1447.5	1509.6	1558.3	1591.6	1618.2
55°	567.4	682.8	818.0	953.2	1084.0	1197.0	1279.0	1325.6	1363.2	1383.2	1398.7
57.5°	463.3	569.7	693.8	818.0	931.0	1024.1	1088.4	1134.9	1152.7	1168.2	1166.0
60°	363.6	463.3	576.3	682.8	780.3	855.6	902.2	928.8	942.1	948.7	944.3
62.5°	285.9	376.8	463.3	556.4	627.3	691.6	736.0	736.0	742.6	744.8	751.5
65°	212.8	281.5	356.9	425.6	483.2	525.4	549.8	556.4	565.3	563.1	558.6
67.5°	157.4	208.4	263.8	314.7	354.7	381.2	399.0	414.5	412.3	407.9	405.7
70°	108.6	141.9	190.6	221.7	250.5	277.1	281.5	283.7	285.9	288.2	283.7
72.5°	75.4	99.7	126.4	153.0	170.7	181.8	192.9	195.0	195.0	195.0	192.9
75°	37.7	51.0	75.4	86.5	102.0	106.4	115.3	115.3	121.9	113.0	110.8
77.5°	33.2	39.9	53.2	62.0	68.7	75.4	77.6	84.2	82.0	77.6	79.8
80°	20.0	24.4	33.2	37.7	46.5	48.8	51.0	53.2	51.0	53.2	53.2
82.5°	15.5	17.7	22.2	22.2	28.8	28.8	31.0	31.0	33.2	33.2	33.2
85°	8.8	15.5	13.3	26.6	17.7	17.7	22.2	26.6	22.2	22.2	26.6
87.5°	8.8	8.8	6.7	8.8	8.8	8.8	11.1	13.3	13.3	15.5	13.3
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: P249165

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4129.7	4129.7	4129.7	4129.7
2.5°	4136.3	4140.7	4134.1	4131.9
5°	4143.0	4143.0	4138.6	4138.6
7.5°	4143.0	4143.0	4136.3	4131.9
10°	4125.2	4125.2	4118.6	4114.2
12.5°	4092.0	4092.0	4089.8	4083.1
15°	4049.9	4049.9	4041.0	4034.4
17.5°	3992.2	3996.7	3985.6	3985.6
20°	3930.2	3928.0	3919.1	3914.7
22.5°	3865.9	3861.5	3859.2	3846.0
25°	3797.2	3792.7	3786.1	3779.5
27.5°	3679.7	3677.5	3670.8	3662.0
30°	3500.1	3497.9	3489.1	3489.1
32.5°	3267.4	3265.2	3256.3	3258.6
35°	3025.8	3034.7	3030.2	3021.4
37.5°	2824.0	2830.7	2835.2	2830.7
40°	2655.6	2675.5	2677.8	2682.2
42.5°	2476.0	2502.6	2511.5	2515.9
45°	2261.0	2285.4	2305.4	2300.9
47.5°	2041.5	2059.3	2077.0	2063.7
50°	1831.0	1842.1	1848.7	1848.7
52.5°	1631.5	1631.5	1629.3	1631.5
55°	1403.2	1403.2	1394.3	1398.7
57.5°	1163.7	1168.2	1161.5	1150.5
60°	942.1	931.0	926.6	919.9
62.5°	733.7	733.7	718.2	738.1
65°	549.8	543.1	536.4	534.2
67.5°	399.0	396.8	390.1	387.9
70°	281.5	272.7	270.4	266.0
72.5°	188.4	188.4	184.0	184.0
75°	115.3	104.2	102.0	104.2
77.5°	79.8	77.6	77.6	75.4
80°	53.2	51.0	55.4	48.8
82.5°	33.2	35.5	33.2	35.5
85°	22.2	26.6	24.4	24.4
87.5°	13.3	13.3	13.3	13.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)