

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: P246128

Luminaire Tested: **LSR8B20D010 EC8B20850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246128
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: LSR8B20D010 EC8B20850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1994.0 lumens
Efficiency: N/A
Efficacy: 93.6 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

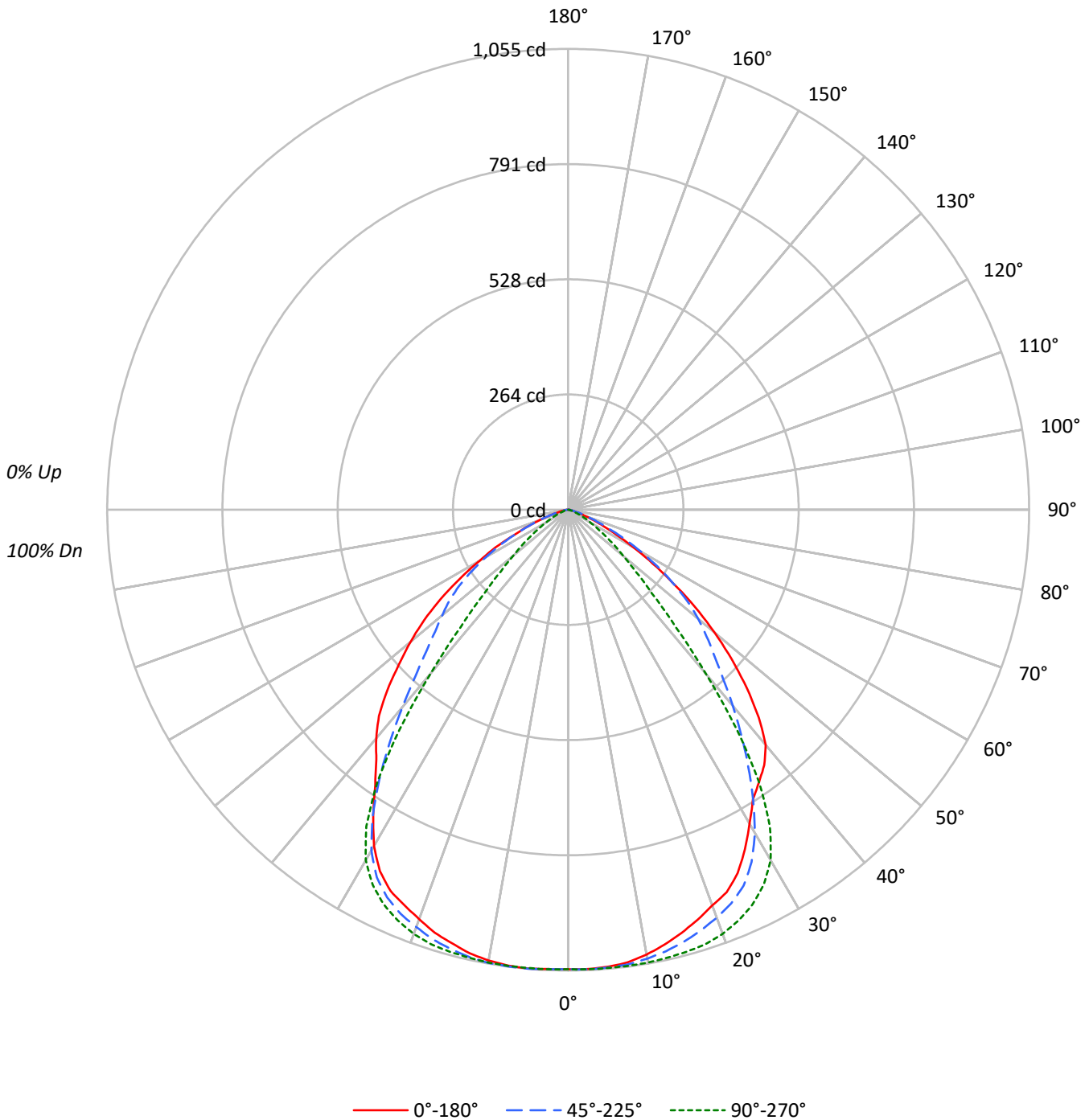
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	32443	32443	32443
5°	32514	32601	32635
10°	32377	32959	32818
15°	32017	33444	32812
20°	31634	33911	32727
25°	31224	33953	32762
30°	29539	32997	31651
35°	28659	28677	28975
40°	28303	19732	27506
45°	25219	11844	25564
50°	20969	7882	22595
55°	15725	5435	19155
60°	10657	3620	14456
65°	6428	2349	9931
70°	3561	1271	6113
75°	1620	536	3157
80°	1403	604	2202
85°	1592	814	2194



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	5.0
10°-20°	291.6	14.6
20°-30°	442.6	22.2
30°-40°	464.8	23.3
40°-50°	348.5	17.5
50°-60°	223.6	11.2
60°-70°	95.7	4.8
70°-80°	22.6	1.1
80°-90°	4.2	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°	834.6	41.9
0°-40°	1299.4	65.2
0°-60°	1871.5	93.9
0°-90°	1994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1994.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1052	1052	1052	1052	1052	
5°	1050	1052	1053	1055	1054	100
15°	1003	1024	1048	1041	1028	283
25°	918	950	998	980	963	419
35°	761	719	762	753	770	478
45°	578	473	272	459	586	443
55°	292	292	101	305	356	265
65°	88	104	32	134	136	94
75°	14	16	4	27	26	20
85°	4	3	2	4	6	5
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°	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1
2.5°	1052.6	1053.8	1053.2	1053.2	1052.6	1053.2	1053.2	1054.3	1054.3	1053.2	1052.6
5°	1050.4	1051.5	1051.5	1050.4	1050.4	1053.2	1051.5	1052.6	1052.6	1052.1	1052.1
7.5°	1045.3	1045.3	1047.6	1045.9	1045.9	1047.6	1047.0	1048.1	1049.3	1049.8	1049.8
10°	1034.0	1035.1	1035.7	1035.7	1036.3	1038.0	1039.1	1041.4	1042.5	1043.6	1044.2
12.5°	1019.9	1021.6	1022.1	1021.6	1023.3	1025.5	1028.4	1031.2	1032.9	1035.1	1036.8
15°	1002.9	1002.9	1004.1	1005.8	1006.9	1010.3	1013.1	1016.5	1021.0	1023.8	1026.7
17.5°	984.3	985.4	987.1	987.1	989.4	995.0	996.7	1001.8	1006.9	1009.7	1015.4
20°	964.0	965.1	966.8	967.9	970.8	975.3	978.7	983.2	988.8	993.9	999.6
22.5°	948.2	945.9	947.0	948.2	951.0	954.9	958.9	964.5	970.2	975.3	980.9
25°	917.7	918.2	919.9	921.1	924.5	927.8	932.4	939.1	944.2	949.9	956.1
27.5°	876.4	877.0	879.8	879.8	882.7	888.3	891.1	896.8	903.6	909.2	916.5
30°	829.6	830.7	830.7	833.0	834.7	837.5	840.3	846.0	849.3	854.4	864.6
32.5°	786.7	787.8	787.2	786.7	785.0	784.4	783.8	785.0	786.1	787.8	791.7
35°	761.3	758.4	756.2	752.2	747.7	742.0	737.0	730.2	724.0	718.9	713.2
37.5°	737.0	736.4	733.0	727.4	718.3	708.2	696.3	681.6	666.9	651.1	635.9
40°	703.1	701.4	698.6	690.7	680.5	668.1	652.3	634.2	610.5	586.2	561.3
42.5°	645.5	646.0	642.7	636.4	626.8	615.0	598.6	578.8	553.4	524.6	492.4
45°	578.3	578.3	577.1	572.1	565.3	555.7	543.3	526.9	502.0	472.7	438.2
47.5°	508.2	508.8	507.1	506.0	503.2	497.0	487.9	475.5	458.0	429.7	395.3
50°	437.1	437.1	439.9	439.4	439.4	437.1	433.1	425.8	410.6	388.0	355.8
52.5°	365.9	367.1	368.8	371.0	373.8	378.4	373.8	370.5	360.9	343.3	315.7
55°	292.5	293.7	296.5	300.4	303.8	308.3	309.5	309.5	304.4	292.5	271.6
57.5°	229.8	228.1	230.4	233.8	238.3	242.8	246.2	250.2	249.6	241.7	224.8
60°	172.8	173.4	175.1	178.5	181.8	185.8	190.3	193.7	195.4	191.4	180.7
62.5°	125.9	125.9	128.2	131.6	133.3	138.9	141.7	143.4	145.1	144.6	137.8
65°	88.1	89.2	90.4	92.1	93.7	97.1	98.8	102.2	103.3	103.9	98.8
67.5°	62.1	60.4	61.6	62.7	64.4	66.6	70.0	70.0	71.7	71.7	68.3
70°	39.5	39.5	40.1	41.8	42.9	43.5	44.6	45.7	47.4	46.9	46.9
72.5°	26.5	26.0	26.5	27.1	27.7	29.4	29.4	29.9	31.1	31.6	29.4
75°	13.6	14.1	15.2	14.7	16.4	15.2	15.8	17.5	16.9	15.8	15.8
77.5°	11.3	11.3	11.3	10.7	11.9	11.9	11.3	12.4	11.9	11.9	11.3
80°	7.9	8.5	7.9	7.3	7.9	7.3	7.3	7.3	7.3	7.3	6.8
82.5°	6.2	5.1	5.7	5.1	5.7	5.7	5.1	4.5	4.5	5.1	4.5
85°	4.5	3.4	4.0	4.0	3.4	3.4	3.4	3.4	3.4	2.8	2.8
87.5°	2.8	1.7	1.7	1.7	2.3	2.3	2.3	1.7	2.3	2.3	1.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1
2.5°	1053.8	1053.2	1054.3	1053.8	1053.8	1053.2	1053.8	1053.2	1054.3	1052.1	1052.6
5°	1053.8	1052.6	1053.2	1053.8	1054.3	1053.2	1053.2	1053.2	1054.3	1053.2	1053.8
7.5°	1051.5	1050.9	1052.6	1053.8	1053.2	1052.6	1053.8	1053.2	1054.3	1053.8	1054.9
10°	1047.0	1047.6	1048.7	1050.4	1050.9	1051.5	1052.6	1052.6	1054.3	1052.1	1053.2
12.5°	1040.2	1042.5	1045.3	1046.4	1048.7	1048.7	1049.8	1050.4	1051.5	1050.9	1052.6
15°	1031.7	1034.6	1038.0	1040.8	1043.6	1045.3	1047.0	1047.6	1049.3	1047.6	1048.1
17.5°	1021.6	1025.0	1030.0	1033.4	1038.0	1039.7	1041.9	1043.0	1044.7	1043.6	1044.2
20°	1007.5	1011.4	1017.1	1022.1	1025.0	1028.9	1031.7	1033.4	1034.6	1033.4	1034.0
22.5°	987.7	993.3	1000.7	1004.6	1010.3	1013.7	1014.2	1018.2	1021.0	1018.2	1019.3
25°	964.5	970.2	975.8	984.3	989.4	993.3	997.3	997.9	1000.7	1000.1	999.6
27.5°	926.1	933.5	943.1	949.9	956.6	962.9	967.4	968.5	971.3	970.2	970.8
30°	873.6	881.5	890.6	901.3	910.9	917.1	922.8	926.7	929.5	927.8	927.3
32.5°	799.1	807.0	816.6	827.3	838.6	847.6	854.4	859.5	862.9	861.8	858.9
35°	713.8	716.1	722.3	730.8	740.3	749.9	756.2	761.8	765.8	766.9	766.9
37.5°	626.3	618.9	614.4	614.4	620.1	624.0	629.7	633.0	639.3	641.5	643.2
40°	541.6	524.6	508.8	497.0	489.1	488.5	488.5	490.2	495.8	503.2	509.9
42.5°	465.9	438.8	414.5	392.5	376.7	367.6	363.7	364.3	368.8	375.5	386.8
45°	405.5	371.6	341.1	314.5	293.1	279.0	272.2	271.6	275.0	282.9	295.4
47.5°	358.6	322.5	288.0	257.5	234.4	219.1	211.2	209.0	211.2	218.5	233.2
50°	319.6	282.4	246.8	215.2	190.3	174.5	167.2	164.3	167.2	173.4	188.0
52.5°	283.5	245.1	211.8	181.3	154.7	141.2	133.3	131.6	133.3	140.6	152.5
55°	241.7	209.0	176.2	145.7	122.5	109.0	102.8	101.1	102.8	109.6	122.0
57.5°	200.5	172.2	143.4	115.8	96.0	84.1	78.5	76.2	80.2	84.7	99.4
60°	162.1	139.5	115.2	90.9	74.5	63.8	59.3	58.7	59.9	65.5	75.7
62.5°	127.1	108.4	89.2	69.5	55.9	51.4	45.7	45.2	46.3	49.7	57.6
65°	91.5	79.6	64.9	50.8	40.1	33.9	31.6	32.2	33.3	35.6	42.9
67.5°	63.8	55.3	45.2	35.6	27.7	24.8	22.6	22.0	22.6	26.5	30.5
70°	42.9	37.8	30.5	27.1	19.2	15.2	15.8	14.1	16.4	16.4	19.8
72.5°	28.2	24.8	20.3	15.8	13.6	10.7	10.7	10.2	11.3	11.9	14.7
75°	14.7	11.3	11.3	7.9	5.7	2.8	5.1	4.5	4.0	4.5	5.7
77.5°	10.2	8.5	7.9	6.2	5.7	4.5	4.5	4.5	4.5	5.1	5.7
80°	6.2	6.2	4.5	4.0	3.4	2.8	3.4	3.4	3.4	3.4	4.0
82.5°	4.0	3.4	3.4	2.8	2.8	2.3	2.3	2.3	2.3	2.3	3.4
85°	3.4	2.3	2.3	1.7	2.3	4.0	1.7	2.3	2.3	2.3	1.7
87.5°	1.1	1.7	1.7	1.7	1.1	0.6	1.1	1.7	1.7	2.8	2.3
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°	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1	1052.1
2.5°	1053.8	1054.3	1054.3	1053.8	1053.8	1052.6	1054.9	1053.2	1053.8	1056.0	1054.3
5°	1054.9	1055.5	1055.5	1054.9	1054.9	1054.9	1055.5	1055.5	1054.9	1054.3	1055.5
7.5°	1057.2	1056.6	1056.6	1055.5	1055.5	1054.3	1055.5	1053.8	1054.9	1053.8	1055.5
10°	1054.3	1054.9	1054.3	1053.8	1053.8	1053.2	1053.2	1051.5	1052.1	1050.4	1051.5
12.5°	1052.6	1052.1	1052.1	1050.9	1049.8	1048.7	1048.1	1046.4	1046.4	1042.5	1044.2
15°	1048.1	1048.7	1047.0	1044.7	1043.6	1040.8	1039.7	1037.4	1035.1	1032.3	1032.9
17.5°	1044.2	1042.5	1040.2	1038.0	1033.4	1031.2	1028.9	1025.5	1024.4	1021.0	1019.9
20°	1032.3	1031.2	1028.4	1024.4	1021.6	1016.5	1014.2	1010.9	1008.0	1004.6	1002.9
22.5°	1017.1	1015.9	1012.5	1008.6	1004.1	1001.8	999.6	993.3	990.5	987.1	986.6
25°	997.9	996.2	992.8	988.3	986.0	979.8	977.5	973.0	971.9	968.5	967.9
27.5°	968.5	966.2	962.3	956.6	952.7	948.7	946.5	943.1	942.0	938.6	938.0
30°	924.5	921.6	913.7	911.5	904.7	900.7	900.7	896.2	896.8	894.5	894.5
32.5°	855.0	850.5	844.3	839.7	835.2	833.0	833.0	831.3	832.4	832.4	833.5
35°	762.9	756.7	753.3	750.5	750.5	752.8	759.6	761.3	764.6	767.5	769.7
37.5°	644.9	644.4	648.3	651.7	660.2	669.8	681.6	691.8	701.4	708.2	714.9
40°	517.3	531.4	542.7	558.5	571.5	590.1	611.6	629.1	645.5	657.3	669.8
42.5°	403.8	421.8	445.6	468.7	491.9	517.3	545.5	569.8	591.3	607.6	620.6
45°	314.5	339.4	368.2	397.6	427.5	459.1	488.5	513.3	535.9	552.9	565.9
47.5°	253.6	280.7	313.4	345.6	379.5	412.8	445.6	467.0	485.7	499.2	511.1
50°	209.5	238.3	272.8	309.5	343.3	376.7	404.9	425.8	441.1	452.9	460.2
52.5°	175.1	205.6	242.3	279.0	312.8	343.3	368.8	384.6	397.0	405.5	412.2
55°	144.6	173.9	208.4	242.8	276.1	304.9	325.8	337.7	347.3	352.4	356.3
57.5°	118.0	145.1	176.8	208.4	237.2	260.9	277.3	289.1	293.7	297.6	297.0
60°	92.6	118.0	146.8	173.9	198.8	218.0	229.8	236.6	240.0	241.7	240.6
62.5°	72.8	96.0	118.0	141.7	159.8	176.2	187.5	187.5	189.2	189.7	191.4
65°	54.2	71.7	90.9	108.4	123.1	133.8	140.1	141.7	144.0	143.4	142.3
67.5°	40.1	53.1	67.2	80.2	90.4	97.1	101.6	105.6	105.0	103.9	103.3
70°	27.7	36.1	48.6	56.5	63.8	70.6	71.7	72.3	72.8	73.4	72.3
72.5°	19.2	25.4	32.2	39.0	43.5	46.3	49.1	49.7	49.7	49.7	49.1
75°	9.6	13.0	19.2	22.0	26.0	27.1	29.4	29.4	31.1	28.8	28.2
77.5°	8.5	10.2	13.6	15.8	17.5	19.2	19.8	21.5	20.9	19.8	20.3
80°	5.1	6.2	8.5	9.6	11.9	12.4	13.0	13.6	13.0	13.6	13.6
82.5°	4.0	4.5	5.7	5.7	7.3	7.3	7.9	7.9	8.5	8.5	8.5
85°	2.3	4.0	3.4	6.8	4.5	4.5	5.7	6.8	5.7	5.7	6.8
87.5°	2.3	2.3	1.7	2.3	2.3	2.3	2.8	3.4	3.4	4.0	3.4
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: P246128

CATALOG NUMBER: LSR8B20D010 EC8B20850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1052.1	1052.1	1052.1	1052.1
2.5°	1053.8	1054.9	1053.2	1052.6
5°	1055.5	1055.5	1054.3	1054.3
7.5°	1055.5	1055.5	1053.8	1052.6
10°	1050.9	1050.9	1049.3	1048.1
12.5°	1042.5	1042.5	1041.9	1040.2
15°	1031.7	1031.7	1029.5	1027.8
17.5°	1017.1	1018.2	1015.4	1015.4
20°	1001.3	1000.7	998.4	997.3
22.5°	984.9	983.7	983.2	979.8
25°	967.4	966.2	964.5	962.9
27.5°	937.4	936.9	935.2	932.9
30°	891.7	891.1	888.9	888.9
32.5°	832.4	831.8	829.6	830.1
35°	770.8	773.1	772.0	769.7
37.5°	719.5	721.2	722.3	721.2
40°	676.5	681.6	682.2	683.3
42.5°	630.8	637.6	639.8	641.0
45°	576.0	582.2	587.3	586.2
47.5°	520.1	524.6	529.1	525.8
50°	466.5	469.3	471.0	471.0
52.5°	415.6	415.6	415.1	415.6
55°	357.5	357.5	355.2	356.3
57.5°	296.5	297.6	295.9	293.1
60°	240.0	237.2	236.0	234.4
62.5°	186.9	186.9	183.0	188.0
65°	140.1	138.4	136.7	136.1
67.5°	101.6	101.1	99.4	98.8
70°	71.7	69.5	68.9	67.8
72.5°	48.0	48.0	46.9	46.9
75°	29.4	26.5	26.0	26.5
77.5°	20.3	19.8	19.8	19.2
80°	13.6	13.0	14.1	12.4
82.5°	8.5	9.0	8.5	9.0
85°	5.7	6.8	6.2	6.2
87.5°	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)