

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: P246122

Luminaire Tested: **LSR8B20D010 EC8B20840 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246122
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 EC8B20840 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1956.0 lumens
Efficiency: N/A
Efficacy: 91.8 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

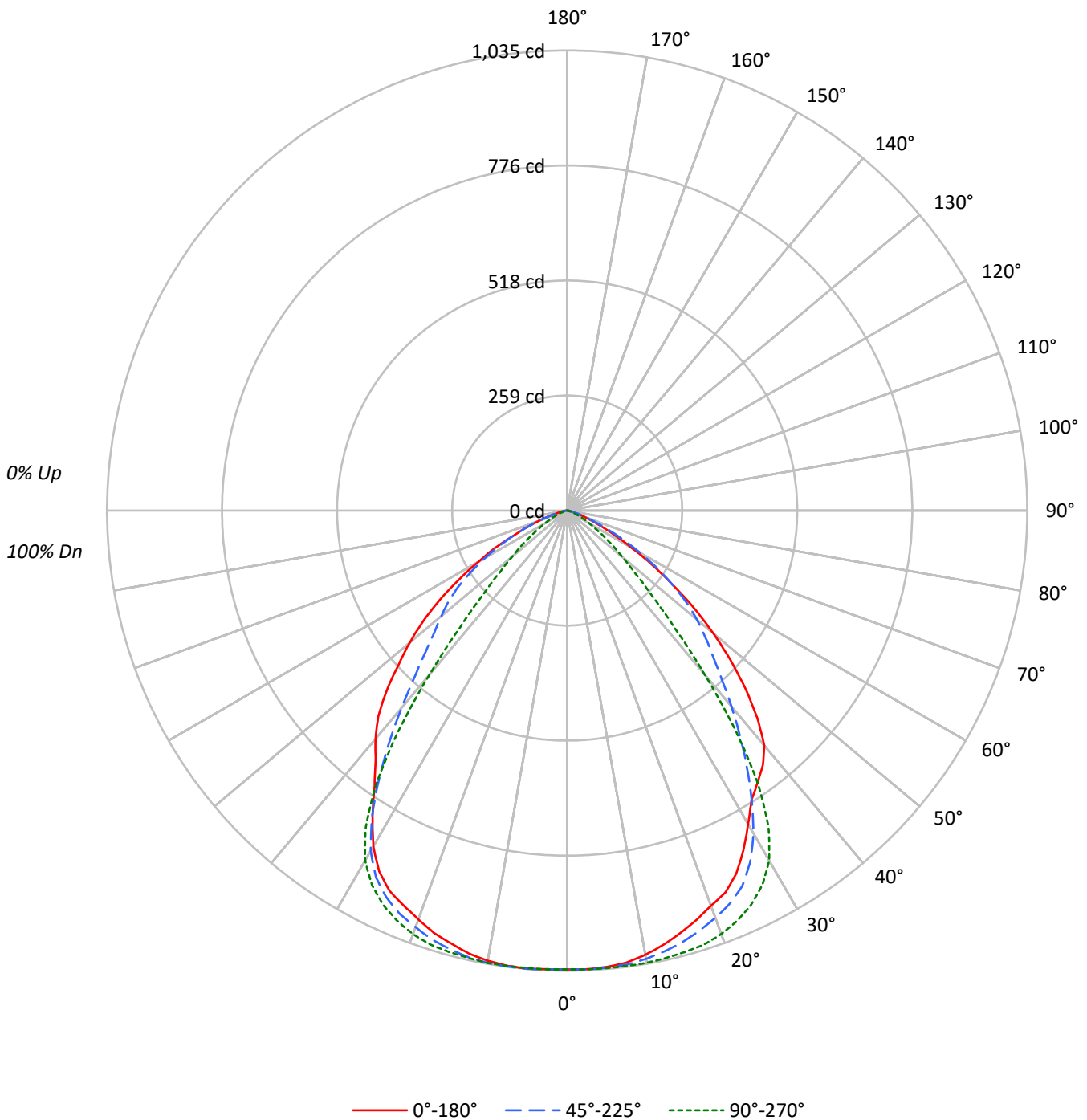
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	31823	31823	31823
5°	31895	31979	32013
10°	31760	32333	32192
15°	31407	32805	32186
20°	31030	33265	32103
25°	30629	33303	32136
30°	28977	32366	31045
35°	28109	28132	28425
40°	27763	19354	26982
45°	24739	11622	25075
50°	20571	7733	22163
55°	15424	5333	18790
60°	10454	3552	14179
65°	6304	2306	9741
70°	3498	1253	5996
75°	1585	524	3098
80°	1385	586	2166
85°	1557	778	2158



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	5.0
10°-20°	286.0	14.6
20°-30°	434.1	22.2
30°-40°	456.0	23.3
40°-50°	341.9	17.5
50°-60°	219.4	11.2
60°-70°	93.8	4.8
70°-80°	22.2	1.1
80°-90°	4.1	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°	818.7	41.9
0°-40°	1274.7	65.2
0°-60°	1835.9	93.9
0°-90°	1956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1956.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1032	1032	1032	1032	1032	
5°	1030	1032	1033	1035	1034	98
15°	984	1004	1028	1021	1008	277
25°	900	932	979	961	944	411
35°	747	705	747	738	755	469
45°	567	464	266	450	575	434
55°	287	287	99	299	350	260
65°	86	102	32	131	134	92
75°	13	16	4	27	26	19
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°	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0
2.5°	1032.6	1033.7	1033.1	1033.1	1032.6	1033.1	1033.1	1034.2	1034.2	1033.1	1032.6
5°	1030.4	1031.5	1031.5	1030.4	1030.4	1033.1	1031.5	1032.6	1032.6	1032.0	1032.0
7.5°	1025.4	1025.4	1027.6	1025.9	1025.9	1027.6	1027.0	1028.1	1029.3	1029.8	1029.8
10°	1014.3	1015.4	1016.0	1016.0	1016.5	1018.2	1019.3	1021.5	1022.6	1023.7	1024.3
12.5°	1000.5	1002.1	1002.7	1002.1	1003.8	1006.0	1008.8	1011.5	1013.2	1015.4	1017.1
15°	983.8	983.8	984.9	986.6	987.7	991.0	993.8	997.1	1001.6	1004.3	1007.1
17.5°	965.6	966.7	968.3	968.3	970.5	976.1	977.7	982.7	987.7	990.5	996.0
20°	945.6	946.7	948.4	949.5	952.3	956.7	960.0	964.4	970.0	975.0	980.5
22.5°	930.1	927.9	929.0	930.1	932.9	936.7	940.6	946.2	951.7	956.7	962.2
25°	900.2	900.7	902.4	903.5	906.8	910.2	914.6	921.2	926.2	931.8	937.8
27.5°	859.7	860.3	863.1	863.1	865.8	871.4	874.1	879.7	886.3	891.9	899.1
30°	813.8	814.9	814.9	817.1	818.7	821.5	824.3	829.8	833.2	838.1	848.1
32.5°	771.7	772.8	772.2	771.7	770.0	769.4	768.9	770.0	771.1	772.8	776.6
35°	746.7	744.0	741.8	737.9	733.4	727.9	722.9	716.3	710.2	705.2	699.7
37.5°	722.9	722.4	719.0	713.5	704.6	694.7	683.0	668.6	654.2	638.7	623.8
40°	689.7	688.0	685.2	677.5	667.5	655.3	639.8	622.1	598.8	575.0	550.6
42.5°	633.2	633.7	630.4	624.3	614.9	603.3	587.2	567.8	542.9	514.6	483.1
45°	567.3	567.3	566.1	561.2	554.5	545.1	532.9	516.8	492.5	463.7	429.9
47.5°	498.6	499.1	497.4	496.4	493.6	487.5	478.6	466.4	449.3	421.6	387.8
50°	428.8	428.8	431.5	431.0	431.0	428.8	424.9	417.7	402.7	380.6	349.0
52.5°	359.0	360.1	361.7	364.0	366.7	371.1	366.7	363.4	354.0	336.8	309.7
55°	286.9	288.1	290.8	294.7	298.0	302.5	303.6	303.6	298.6	286.9	266.5
57.5°	225.5	223.8	226.0	229.3	233.8	238.2	241.5	245.4	244.8	237.1	220.5
60°	169.5	170.1	171.7	175.1	178.4	182.3	186.7	190.0	191.7	187.8	177.3
62.5°	123.5	123.5	125.7	129.1	130.7	136.3	139.0	140.7	142.4	141.8	135.2
65°	86.4	87.5	88.6	90.3	92.0	95.3	96.9	100.3	101.4	101.9	96.9
67.5°	60.9	59.3	60.4	61.5	63.2	65.4	68.7	68.7	70.3	70.3	67.0
70°	38.8	38.8	39.3	41.0	42.1	42.7	43.8	44.9	46.5	46.0	46.0
72.5°	26.0	25.5	26.0	26.6	27.1	28.8	28.8	29.4	30.5	31.0	28.8
75°	13.3	13.9	15.0	14.4	16.1	15.0	15.5	17.2	16.6	15.5	15.5
77.5°	11.1	11.1	11.1	10.5	11.6	11.6	11.1	12.2	11.6	11.6	11.1
80°	7.8	8.3	7.8	7.2	7.8	7.2	7.2	7.2	7.2	7.2	6.6
82.5°	6.1	5.0	5.5	5.0	5.5	5.5	5.0	4.4	4.4	5.0	4.4
85°	4.4	3.3	3.9	3.9	3.3	3.3	3.3	3.3	3.3	2.8	2.8
87.5°	2.8	1.7	1.7	1.7	2.2	2.2	2.2	1.7	2.2	2.2	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°	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0
2.5°	1033.7	1033.1	1034.2	1033.7	1033.7	1033.1	1033.7	1033.1	1034.2	1032.0	1032.6
5°	1033.7	1032.6	1033.1	1033.7	1034.2	1033.1	1033.1	1033.1	1034.2	1033.1	1033.7
7.5°	1031.5	1030.9	1032.6	1033.7	1033.1	1032.6	1033.7	1033.1	1034.2	1033.7	1034.8
10°	1027.0	1027.6	1028.7	1030.4	1030.9	1031.5	1032.6	1032.6	1034.2	1032.0	1033.1
12.5°	1020.4	1022.6	1025.4	1026.5	1028.7	1028.7	1029.8	1030.4	1031.5	1030.9	1032.6
15°	1012.1	1014.9	1018.2	1020.9	1023.7	1025.4	1027.0	1027.6	1029.3	1027.6	1028.1
17.5°	1002.1	1005.4	1010.4	1013.7	1018.2	1019.8	1022.0	1023.2	1024.8	1023.7	1024.3
20°	988.3	992.1	997.7	1002.7	1005.4	1009.3	1012.1	1013.7	1014.9	1013.7	1014.3
22.5°	968.9	974.4	981.6	985.5	991.0	994.4	994.9	998.8	1001.6	998.8	999.9
25°	946.2	951.7	957.2	965.6	970.5	974.4	978.3	978.8	981.6	981.1	980.5
27.5°	908.5	915.7	925.1	931.8	938.4	944.5	948.9	950.0	952.8	951.7	952.3
30°	857.0	864.7	873.6	884.1	893.5	899.6	905.2	909.0	911.8	910.2	909.6
32.5°	783.9	791.6	801.0	811.5	822.6	831.5	838.1	843.1	846.4	845.3	842.6
35°	700.2	702.4	708.5	716.8	726.2	735.7	741.8	747.3	751.2	752.3	752.3
37.5°	614.3	607.1	602.7	602.7	608.2	612.1	617.7	621.0	627.1	629.3	631.0
40°	531.2	514.6	499.1	487.5	479.7	479.2	479.2	480.8	486.4	493.6	500.2
42.5°	457.0	430.4	406.6	385.0	369.5	360.6	356.8	357.3	361.7	368.4	379.5
45°	397.7	364.5	334.6	308.6	287.5	273.7	267.0	266.5	269.8	277.5	289.7
47.5°	351.8	316.3	282.5	252.6	229.9	214.9	207.2	205.0	207.2	214.4	228.8
50°	313.5	277.0	242.1	211.1	186.7	171.2	164.0	161.2	164.0	170.1	184.5
52.5°	278.1	240.4	207.7	177.8	151.8	138.5	130.7	129.1	130.7	137.9	149.6
55°	237.1	205.0	172.8	142.9	120.2	106.9	100.8	99.2	100.8	107.5	119.7
57.5°	196.7	169.0	140.7	113.6	94.2	82.5	77.0	74.8	78.7	83.1	97.5
60°	159.0	136.8	113.0	89.2	73.1	62.6	58.2	57.6	58.7	64.3	74.2
62.5°	124.6	106.4	87.5	68.1	54.8	50.4	44.9	44.3	45.4	48.7	56.5
65°	89.7	78.1	63.7	49.9	39.3	33.2	31.0	31.6	32.7	34.9	42.1
67.5°	62.6	54.3	44.3	34.9	27.1	24.4	22.2	21.6	22.2	26.0	29.9
70°	42.1	37.1	29.9	26.6	18.8	15.0	15.5	13.9	16.1	16.1	19.4
72.5°	27.7	24.4	19.9	15.5	13.3	10.5	10.5	10.0	11.1	11.6	14.4
75°	14.4	11.1	11.1	7.8	5.5	2.8	5.0	4.4	3.9	4.4	5.5
77.5°	10.0	8.3	7.8	6.1	5.5	4.4	4.4	4.4	4.4	5.0	5.5
80°	6.1	6.1	4.4	3.9	3.3	2.8	3.3	3.3	3.3	3.3	3.9
82.5°	3.9	3.3	3.3	2.8	2.8	2.2	2.2	2.2	2.2	2.2	3.3
85°	3.3	2.2	2.2	1.7	2.2	3.9	1.7	2.2	2.2	2.2	1.7
87.5°	1.1	1.7	1.7	1.7	1.1	0.6	1.1	1.7	1.7	2.8	2.2
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°	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0
2.5°	1033.7	1034.2	1034.2	1033.7	1033.7	1032.6	1034.8	1033.1	1033.7	1035.9	1034.2
5°	1034.8	1035.3	1035.3	1034.8	1034.8	1034.8	1035.3	1035.3	1034.8	1034.2	1035.3
7.5°	1037.0	1036.5	1036.5	1035.3	1035.3	1034.2	1035.3	1033.7	1034.8	1033.7	1035.3
10°	1034.2	1034.8	1034.2	1033.7	1033.7	1033.1	1033.1	1031.5	1032.0	1030.4	1031.5
12.5°	1032.6	1032.0	1032.0	1030.9	1029.8	1028.7	1028.1	1026.5	1026.5	1022.6	1024.3
15°	1028.1	1028.7	1027.0	1024.8	1023.7	1020.9	1019.8	1017.6	1015.4	1012.6	1013.2
17.5°	1024.3	1022.6	1020.4	1018.2	1013.7	1011.5	1009.3	1006.0	1004.9	1001.6	1000.5
20°	1012.6	1011.5	1008.8	1004.9	1002.1	997.1	994.9	991.6	988.8	985.5	983.8
22.5°	997.7	996.6	993.2	989.4	984.9	982.7	980.5	974.4	971.6	968.3	967.8
25°	978.8	977.2	973.9	969.4	967.2	961.1	958.9	954.5	953.4	950.0	949.5
27.5°	950.0	947.8	943.9	938.4	934.5	930.7	928.4	925.1	924.0	920.7	920.1
30°	906.8	904.1	896.3	894.1	887.4	883.6	883.6	879.1	879.7	877.5	877.5
32.5°	838.7	834.3	828.2	823.7	819.3	817.1	817.1	815.4	816.5	816.5	817.6
35°	748.4	742.3	739.0	736.2	736.2	738.4	745.1	746.7	750.1	752.8	755.1
37.5°	632.6	632.1	635.9	639.3	647.6	657.0	668.6	678.6	688.0	694.7	701.3
40°	507.4	521.3	532.4	547.9	560.6	578.9	599.9	617.1	633.2	644.8	657.0
42.5°	396.1	413.8	437.1	459.8	482.5	507.4	535.1	558.9	580.0	596.1	608.8
45°	308.6	332.9	361.2	390.0	419.3	450.4	479.2	503.5	525.7	542.3	555.1
47.5°	248.7	275.3	307.4	339.0	372.3	404.9	437.1	458.1	476.4	489.7	501.3
50°	205.5	233.8	267.6	303.6	336.8	369.5	397.2	417.7	432.6	444.3	451.5
52.5°	171.7	201.6	237.7	273.7	306.9	336.8	361.7	377.2	389.4	397.7	404.4
55°	141.8	170.6	204.4	238.2	270.9	299.1	319.6	331.3	340.7	345.7	349.5
57.5°	115.8	142.4	173.4	204.4	232.7	255.9	272.0	283.6	288.1	291.9	291.4
60°	90.9	115.8	144.0	170.6	195.0	213.8	225.5	232.1	235.4	237.1	236.0
62.5°	71.5	94.2	115.8	139.0	156.8	172.8	183.9	183.9	185.6	186.1	187.8
65°	53.2	70.3	89.2	106.4	120.8	131.3	137.4	139.0	141.3	140.7	139.6
67.5°	39.3	52.1	65.9	78.7	88.6	95.3	99.7	103.6	103.0	101.9	101.4
70°	27.1	35.5	47.6	55.4	62.6	69.2	70.3	70.9	71.5	72.0	70.9
72.5°	18.8	24.9	31.6	38.2	42.7	45.4	48.2	48.7	48.7	48.7	48.2
75°	9.4	12.7	18.8	21.6	25.5	26.6	28.8	28.8	30.5	28.2	27.7
77.5°	8.3	10.0	13.3	15.5	17.2	18.8	19.4	21.1	20.5	19.4	19.9
80°	5.0	6.1	8.3	9.4	11.6	12.2	12.7	13.3	12.7	13.3	13.3
82.5°	3.9	4.4	5.5	5.5	7.2	7.2	7.8	7.8	8.3	8.3	8.3
85°	2.2	3.9	3.3	6.6	4.4	4.4	5.5	6.6	5.5	5.5	6.6
87.5°	2.2	2.2	1.7	2.2	2.2	2.2	2.8	3.3	3.3	3.9	3.3
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: P246122

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1032.0	1032.0	1032.0	1032.0
2.5°	1033.7	1034.8	1033.1	1032.6
5°	1035.3	1035.3	1034.2	1034.2
7.5°	1035.3	1035.3	1033.7	1032.6
10°	1030.9	1030.9	1029.3	1028.1
12.5°	1022.6	1022.6	1022.0	1020.4
15°	1012.1	1012.1	1009.9	1008.2
17.5°	997.7	998.8	996.0	996.0
20°	982.2	981.6	979.4	978.3
22.5°	966.1	965.0	964.4	961.1
25°	948.9	947.8	946.2	944.5
27.5°	919.6	919.0	917.4	915.1
30°	874.7	874.1	871.9	871.9
32.5°	816.5	816.0	813.8	814.3
35°	756.2	758.4	757.3	755.1
37.5°	705.7	707.4	708.5	707.4
40°	663.6	668.6	669.2	670.3
42.5°	618.8	625.4	627.6	628.7
45°	565.0	571.1	576.1	575.0
47.5°	510.2	514.6	519.1	515.7
50°	457.6	460.3	462.0	462.0
52.5°	407.7	407.7	407.2	407.7
55°	350.7	350.7	348.4	349.5
57.5°	290.8	291.9	290.3	287.5
60°	235.4	232.7	231.6	229.9
62.5°	183.4	183.4	179.5	184.5
65°	137.4	135.7	134.1	133.5
67.5°	99.7	99.2	97.5	96.9
70°	70.3	68.1	67.6	66.5
72.5°	47.1	47.1	46.0	46.0
75°	28.8	26.0	25.5	26.0
77.5°	19.9	19.4	19.4	18.8
80°	13.3	12.7	13.9	12.2
82.5°	8.3	8.9	8.3	8.9
85°	5.5	6.6	6.1	6.1
87.5°	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)