

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: P246218

Luminaire Tested: **LSR8B20D010 EC8B20935 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246218
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 EC8B20935 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1876.0 lumens
Efficiency: N/A
Efficacy: 88.1 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

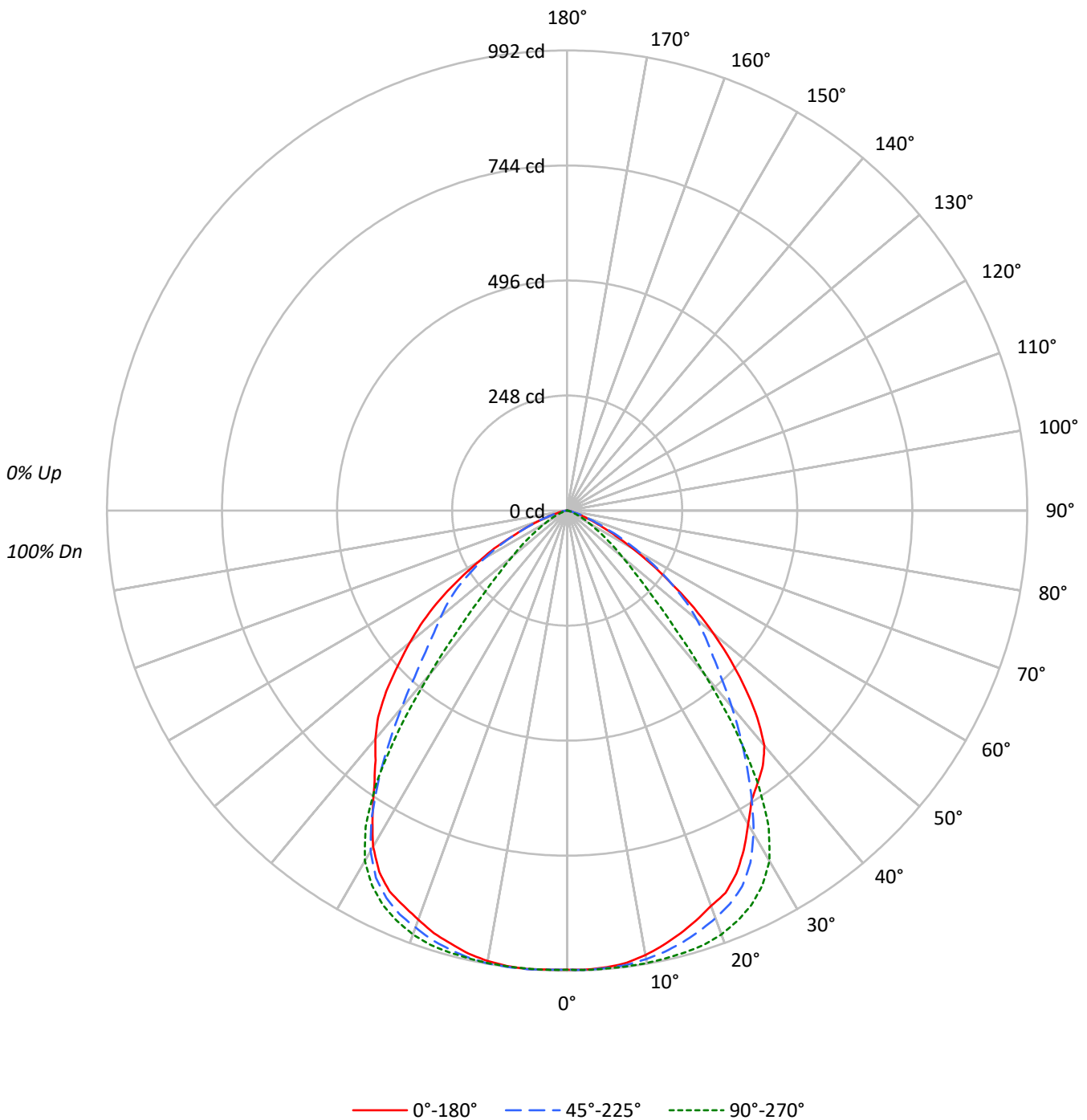
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P246218

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0MW

Luminous Intensity Polar Plot





TEST NUMBER: P246218

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0MW

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°	30522	30522	30522
5°	30589	30672	30703
10°	30460	31008	30877
15°	30124	31464	30871
20°	29760	31906	30791
25°	29376	31942	30822
30°	27791	31045	29778
35°	26961	26980	27262
40°	26628	18565	25879
45°	23728	11146	24050
50°	19726	7417	21257
55°	14795	5113	18021
60°	10028	3410	13599
65°	6049	2211	9340
70°	3354	1199	5752
75°	1525	512	2979
80°	1314	568	2078
85°	1521	743	2052



TEST NUMBER: P246218

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	5.0
10°-20°	274.3	14.6
20°-30°	416.4	22.2
30°-40°	437.3	23.3
40°-50°	327.9	17.5
50°-60°	210.4	11.2
60°-70°	90.0	4.8
70°-80°	21.3	1.1
80°-90°	4.0	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°	785.2	41.9
0°-40°	1222.5	65.2
0°-60°	1760.8	93.9
0°-90°	1876.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1876.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	990	990	990	990	990	
5°	988	990	991	992	992	94
15°	944	963	986	979	967	266
25°	863	894	939	922	906	394
35°	716	676	717	708	724	449
45°	544	445	256	432	552	417
55°	275	275	95	287	335	250
65°	83	98	30	126	128	88
75°	13	15	4	26	25	19
85°	4	3	2	4	6	4
90°	0	0	0	0	0	



TEST NUMBER: P246218

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8
2.5°	990.3	991.4	990.9	990.9	990.3	990.9	990.9	991.9	991.9	990.9	990.3
5°	988.2	989.3	989.3	988.2	988.2	990.9	989.3	990.3	990.3	989.8	989.8
7.5°	983.4	983.4	985.6	984.0	984.0	985.6	985.0	986.1	987.2	987.7	987.7
10°	972.8	973.9	974.4	974.4	974.9	976.5	977.6	979.7	980.8	981.8	982.4
12.5°	959.5	961.1	961.7	961.1	962.7	964.8	967.5	970.2	971.8	973.9	975.5
15°	943.6	943.6	944.7	946.3	947.3	950.5	953.2	956.3	960.6	963.3	965.9
17.5°	926.1	927.1	928.7	928.7	930.8	936.2	937.7	942.5	947.3	950.0	955.3
20°	906.9	908.0	909.6	910.7	913.3	917.6	920.7	925.0	930.3	935.1	940.4
22.5°	892.1	889.9	891.0	892.1	894.7	898.4	902.2	907.5	912.8	917.6	922.9
25°	863.4	863.9	865.5	866.5	869.7	872.9	877.2	883.6	888.3	893.7	899.5
27.5°	824.6	825.1	827.8	827.8	830.4	835.7	838.4	843.7	850.1	855.4	862.3
30°	780.5	781.5	781.5	783.7	785.3	787.9	790.6	795.9	799.1	803.9	813.4
32.5°	740.1	741.2	740.6	740.1	738.5	738.0	737.4	738.5	739.6	741.2	744.9
35°	716.2	713.5	711.4	707.7	703.4	698.1	693.3	687.0	681.1	676.3	671.0
37.5°	693.3	692.8	689.6	684.3	675.8	666.3	655.1	641.3	627.5	612.6	598.3
40°	661.5	659.9	657.2	649.8	640.2	628.5	613.7	596.7	574.3	551.5	528.1
42.5°	607.3	607.8	604.6	598.8	589.7	578.6	563.2	544.6	520.7	493.6	463.3
45°	544.1	544.1	543.0	538.2	531.8	522.8	511.1	495.7	472.3	444.7	412.3
47.5°	478.2	478.7	477.1	476.1	473.4	467.5	459.0	447.4	430.9	404.3	371.9
50°	411.2	411.2	413.9	413.4	413.4	411.2	407.5	400.6	386.3	365.0	334.7
52.5°	344.3	345.3	346.9	349.1	351.7	356.0	351.7	348.5	339.5	323.0	297.0
55°	275.2	276.3	278.9	282.6	285.8	290.1	291.2	291.2	286.4	275.2	255.6
57.5°	216.2	214.6	216.8	220.0	224.2	228.5	231.6	235.4	234.8	227.4	211.5
60°	162.6	163.1	164.7	167.9	171.1	174.8	179.1	182.2	183.8	180.1	170.0
62.5°	118.5	118.5	120.6	123.8	125.4	130.7	133.4	135.0	136.5	136.0	129.6
65°	82.9	83.9	85.0	86.6	88.2	91.4	93.0	96.2	97.2	97.8	93.0
67.5°	58.4	56.8	57.9	59.0	60.6	62.7	65.9	65.9	67.5	67.5	64.3
70°	37.2	37.2	37.7	39.3	40.4	40.9	42.0	43.0	44.6	44.1	44.1
72.5°	25.0	24.4	25.0	25.5	26.0	27.6	27.6	28.2	29.2	29.8	27.6
75°	12.8	13.3	14.3	13.8	15.4	14.3	14.9	16.5	15.9	14.9	14.9
77.5°	10.6	10.6	10.6	10.1	11.2	11.2	10.6	11.7	11.2	11.2	10.6
80°	7.4	8.0	7.4	6.9	7.4	6.9	6.9	6.9	6.9	6.9	6.4
82.5°	5.8	4.8	5.3	4.8	5.3	5.3	4.8	4.3	4.3	4.8	4.3
85°	4.3	3.2	3.7	3.7	3.2	3.2	3.2	3.2	3.2	2.7	2.7
87.5°	2.7	1.6	1.6	1.6	2.1	2.1	2.1	1.6	2.1	2.1	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



TEST NUMBER: P246218

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8
2.5°	991.4	990.9	991.9	991.4	991.4	990.9	991.4	990.9	991.9	989.8	990.3
5°	991.4	990.3	990.9	991.4	991.9	990.9	990.9	990.9	991.9	990.9	991.4
7.5°	989.3	988.7	990.3	991.4	990.9	990.3	991.4	990.9	991.9	991.4	992.5
10°	985.0	985.6	986.6	988.2	988.7	989.3	990.3	990.3	991.9	989.8	990.9
12.5°	978.7	980.8	983.4	984.5	986.6	986.6	987.7	988.2	989.3	988.7	990.3
15°	970.7	973.3	976.5	979.2	981.8	983.4	985.0	985.6	987.2	985.6	986.1
17.5°	961.1	964.3	969.1	972.3	976.5	978.1	980.2	981.3	982.9	981.8	982.4
20°	947.8	951.6	956.9	961.7	964.3	968.0	970.7	972.3	973.3	972.3	972.8
22.5°	929.2	934.6	941.5	945.2	950.5	953.7	954.2	957.9	960.6	957.9	959.0
25°	907.5	912.8	918.1	926.1	930.8	934.6	938.3	938.8	941.5	940.9	940.4
27.5°	871.3	878.2	887.3	893.7	900.0	905.9	910.1	911.2	913.8	912.8	913.3
30°	821.9	829.4	837.9	848.0	857.0	862.8	868.1	871.9	874.5	872.9	872.4
32.5°	751.8	759.2	768.3	778.4	789.0	797.5	803.9	808.6	811.8	810.8	808.1
35°	671.6	673.7	679.5	687.5	696.5	705.6	711.4	716.7	720.4	721.5	721.5
37.5°	589.2	582.3	578.1	578.1	583.4	587.1	592.4	595.6	601.4	603.6	605.2
40°	509.5	493.6	478.7	467.5	460.1	459.6	459.6	461.2	466.5	473.4	479.8
42.5°	438.3	412.8	390.0	369.3	354.4	345.9	342.2	342.7	346.9	353.3	363.9
45°	381.5	349.6	320.9	295.9	275.7	262.5	256.1	255.6	258.7	266.2	277.9
47.5°	337.4	303.4	271.0	242.3	220.5	206.1	198.7	196.6	198.7	205.6	219.4
50°	300.7	265.7	232.2	202.4	179.1	164.2	157.3	154.6	157.3	163.1	176.9
52.5°	266.7	230.6	199.2	170.5	145.6	132.8	125.4	123.8	125.4	132.3	143.5
55°	227.4	196.6	165.8	137.1	115.3	102.5	96.7	95.1	96.7	103.1	114.8
57.5°	188.6	162.0	135.0	108.9	90.3	79.2	73.9	71.7	75.4	79.7	93.5
60°	152.5	131.2	108.4	85.5	70.1	60.0	55.8	55.3	56.3	61.6	71.2
62.5°	119.5	102.0	83.9	65.4	52.6	48.3	43.0	42.5	43.6	46.7	54.2
65°	86.1	74.9	61.1	47.8	37.7	31.9	29.8	30.3	31.3	33.5	40.4
67.5°	60.0	52.1	42.5	33.5	26.0	23.4	21.3	20.7	21.3	25.0	28.7
70°	40.4	35.6	28.7	25.5	18.1	14.3	14.9	13.3	15.4	15.4	18.6
72.5°	26.6	23.4	19.1	14.9	12.8	10.1	10.1	9.6	10.6	11.2	13.8
75°	13.8	10.6	10.6	7.4	5.3	2.7	4.8	4.3	3.7	4.3	5.3
77.5°	9.6	8.0	7.4	5.8	5.3	4.3	4.3	4.3	4.3	4.8	5.3
80°	5.8	5.8	4.3	3.7	3.2	2.7	3.2	3.2	3.2	3.2	3.7
82.5°	3.7	3.2	3.2	2.7	2.7	2.1	2.1	2.1	2.1	2.1	3.2
85°	3.2	2.1	2.1	1.6	2.1	3.7	1.6	2.1	2.1	2.1	1.6
87.5°	1.1	1.6	1.6	1.6	1.1	0.5	1.1	1.6	1.6	2.7	2.1
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: P246218

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8
2.5°	991.4	991.9	991.9	991.4	991.4	990.3	992.5	990.9	991.4	993.5	991.9
5°	992.5	993.0	993.0	992.5	992.5	992.5	993.0	993.0	992.5	991.9	993.0
7.5°	994.6	994.1	994.1	993.0	993.0	991.9	993.0	991.4	992.5	991.4	993.0
10°	991.9	992.5	991.9	991.4	991.4	990.9	990.9	989.3	989.8	988.2	989.3
12.5°	990.3	989.8	989.8	988.7	987.7	986.6	986.1	984.5	984.5	980.8	982.4
15°	986.1	986.6	985.0	982.9	981.8	979.2	978.1	976.0	973.9	971.2	971.8
17.5°	982.4	980.8	978.7	976.5	972.3	970.2	968.0	964.8	963.8	960.6	959.5
20°	971.2	970.2	967.5	963.8	961.1	956.3	954.2	951.0	948.4	945.2	943.6
22.5°	956.9	955.8	952.6	948.9	944.7	942.5	940.4	934.6	931.9	928.7	928.2
25°	938.8	937.2	934.0	929.8	927.6	921.8	919.7	915.4	914.4	911.2	910.7
27.5°	911.2	909.1	905.3	900.0	896.3	892.6	890.5	887.3	886.2	883.0	882.5
30°	869.7	867.1	859.6	857.5	851.1	847.4	847.4	843.2	843.7	841.6	841.6
32.5°	804.4	800.1	794.3	790.0	785.8	783.7	783.7	782.1	783.1	783.1	784.2
35°	717.8	712.0	708.8	706.1	706.1	708.2	714.6	716.2	719.4	722.0	724.2
37.5°	606.7	606.2	609.9	613.1	621.1	630.1	641.3	650.8	659.9	666.3	672.6
40°	486.7	500.0	510.6	525.5	537.7	555.2	575.4	591.9	607.3	618.4	630.1
42.5°	379.9	396.9	419.2	441.0	462.8	486.7	513.2	536.1	556.3	571.7	583.9
45°	295.9	319.3	346.4	374.0	402.2	432.0	459.6	483.0	504.2	520.1	532.4
47.5°	238.6	264.1	294.9	325.2	357.0	388.4	419.2	439.4	456.9	469.7	480.8
50°	197.1	224.2	256.6	291.2	323.0	354.4	380.9	400.6	414.9	426.1	433.0
52.5°	164.7	193.4	227.9	262.5	294.3	323.0	346.9	361.8	373.5	381.5	387.8
55°	136.0	163.6	196.1	228.5	259.8	286.9	306.6	317.7	326.7	331.5	335.2
57.5°	111.0	136.5	166.3	196.1	223.1	245.5	260.9	272.0	276.3	280.0	279.5
60°	87.1	111.0	138.1	163.6	187.0	205.1	216.2	222.6	225.8	227.4	226.3
62.5°	68.5	90.3	111.0	133.4	150.4	165.8	176.4	176.4	178.0	178.5	180.1
65°	51.0	67.5	85.5	102.0	115.8	125.9	131.8	133.4	135.5	135.0	133.9
67.5°	37.7	49.9	63.2	75.4	85.0	91.4	95.6	99.4	98.8	97.8	97.2
70°	26.0	34.0	45.7	53.1	60.0	66.4	67.5	68.0	68.5	69.1	68.0
72.5°	18.1	23.9	30.3	36.7	40.9	43.6	46.2	46.7	46.7	46.7	46.2
75°	9.0	12.2	18.1	20.7	24.4	25.5	27.6	27.6	29.2	27.1	26.6
77.5°	8.0	9.6	12.8	14.9	16.5	18.1	18.6	20.2	19.7	18.6	19.1
80°	4.8	5.8	8.0	9.0	11.2	11.7	12.2	12.8	12.2	12.8	12.8
82.5°	3.7	4.3	5.3	5.3	6.9	6.9	7.4	7.4	8.0	8.0	8.0
85°	2.1	3.7	3.2	6.4	4.3	4.3	5.3	6.4	5.3	5.3	6.4
87.5°	2.1	2.1	1.6	2.1	2.1	2.1	2.7	3.2	3.2	3.7	3.2
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: P246218

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	989.8	989.8	989.8	989.8
2.5°	991.4	992.5	990.9	990.3
5°	993.0	993.0	991.9	991.9
7.5°	993.0	993.0	991.4	990.3
10°	988.7	988.7	987.2	986.1
12.5°	980.8	980.8	980.2	978.7
15°	970.7	970.7	968.6	967.0
17.5°	956.9	957.9	955.3	955.3
20°	942.0	941.5	939.3	938.3
22.5°	926.6	925.5	925.0	921.8
25°	910.1	909.1	907.5	905.9
27.5°	882.0	881.4	879.8	877.7
30°	838.9	838.4	836.3	836.3
32.5°	783.1	782.6	780.5	781.0
35°	725.2	727.4	726.3	724.2
37.5°	676.9	678.5	679.5	678.5
40°	636.5	641.3	641.8	642.9
42.5°	593.5	599.8	602.0	603.0
45°	541.9	547.8	552.6	551.5
47.5°	489.3	493.6	497.8	494.6
50°	438.9	441.5	443.1	443.1
52.5°	391.0	391.0	390.5	391.0
55°	336.3	336.3	334.2	335.2
57.5°	278.9	280.0	278.4	275.7
60°	225.8	223.1	222.1	220.5
62.5°	175.9	175.9	172.1	176.9
65°	131.8	130.2	128.6	128.0
67.5°	95.6	95.1	93.5	93.0
70°	67.5	65.4	64.8	63.8
72.5°	45.2	45.2	44.1	44.1
75°	27.6	25.0	24.4	25.0
77.5°	19.1	18.6	18.6	18.1
80°	12.8	12.2	13.3	11.7
82.5°	8.0	8.5	8.0	8.5
85°	5.3	6.4	5.8	5.8
87.5°	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)