

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: P244592

Luminaire Tested: **LSR8B20D010 EC8B20827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244592
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 EC8B20827 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2087.0 lumens
Efficiency: N/A
Efficacy: 98.0 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

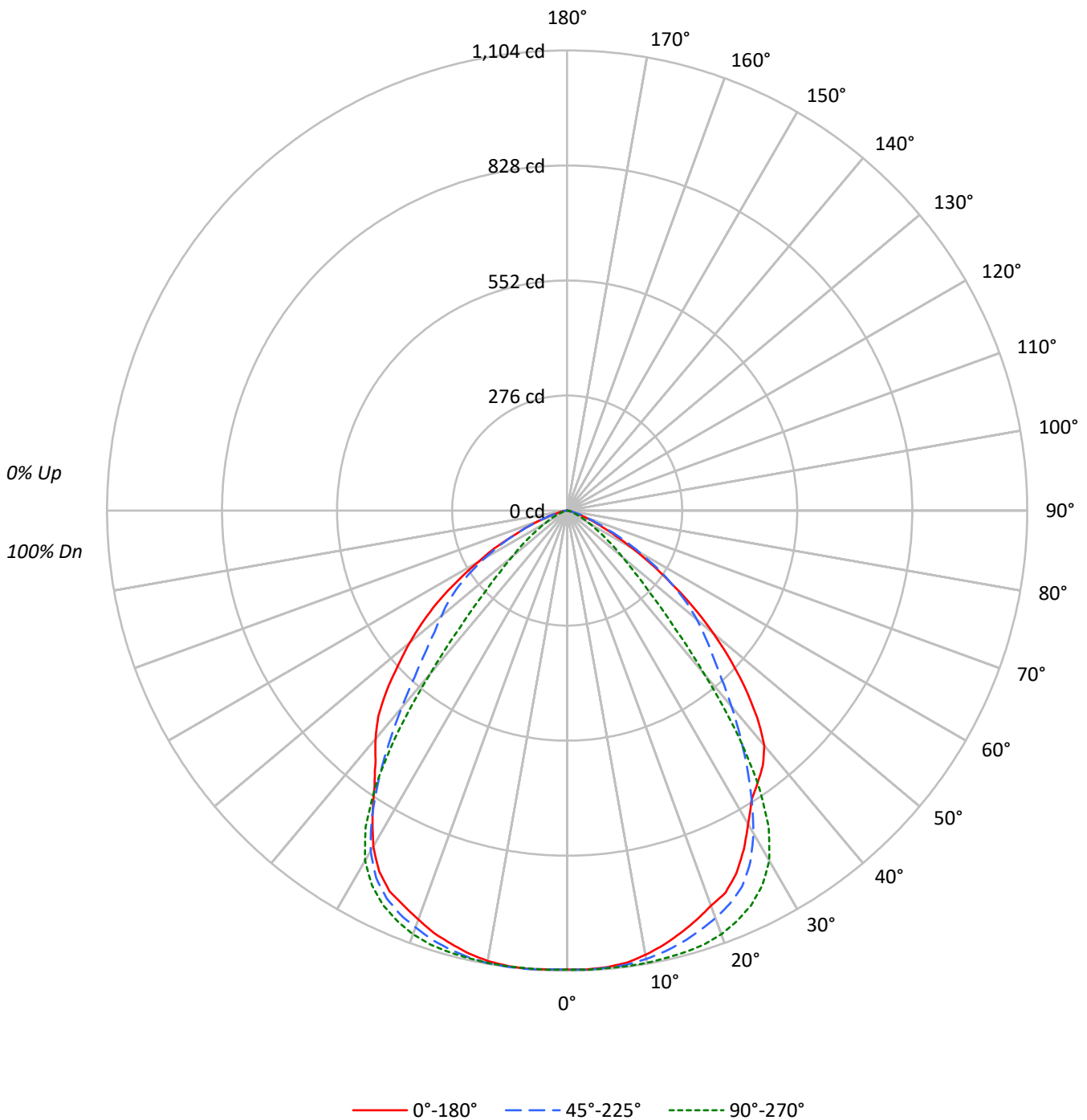
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	33954	33954	33954
5°	34031	34121	34158
10°	33886	34496	34349
15°	33511	35002	34341
20°	33107	35493	34253
25°	32680	35535	34289
30°	30917	34535	33125
35°	29995	30014	30326
40°	29623	20650	28790
45°	26392	12398	26754
50°	21948	8251	23646
55°	16462	5688	20053
60°	11157	3793	15128
65°	6727	2459	10390
70°	3733	1334	6392
75°	1692	560	3312
80°	1474	622	2309
85°	1663	849	2300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.1	5.0
10°-20°	305.2	14.6
20°-30°	463.2	22.2
30°-40°	486.5	23.3
40°-50°	364.8	17.5
50°-60°	234.0	11.2
60°-70°	100.1	4.8
70°-80°	23.6	1.1
80°-90°	4.4	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°	873.5	41.9
0°-40°	1360.0	65.2
0°-60°	1958.8	93.9
0°-90°	2087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2087.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1101	1101	1101	1101	1101	
5°	1099	1101	1102	1104	1104	104
15°	1050	1072	1096	1089	1076	296
25°	960	994	1044	1026	1008	439
35°	797	752	797	788	806	500
45°	605	495	284	480	614	464
55°	306	306	106	319	373	278
65°	92	109	34	140	142	98
75°	14	16	5	28	28	21
85°	5	3	2	5	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°	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1
2.5°	1101.7	1102.9	1102.3	1102.3	1101.7	1102.3	1102.3	1103.5	1103.5	1102.3	1101.7
5°	1099.4	1100.5	1100.5	1099.4	1099.4	1102.3	1100.5	1101.7	1101.7	1101.1	1101.1
7.5°	1094.1	1094.1	1096.4	1094.6	1094.6	1096.4	1095.8	1097.0	1098.2	1098.8	1098.8
10°	1082.2	1083.4	1084.0	1084.0	1084.6	1086.4	1087.5	1089.9	1091.1	1092.3	1092.9
12.5°	1067.5	1069.2	1069.8	1069.2	1071.0	1073.4	1076.3	1079.3	1081.1	1083.4	1085.2
15°	1049.7	1049.7	1050.9	1052.7	1053.9	1057.4	1060.4	1063.9	1068.6	1071.6	1074.5
17.5°	1030.2	1031.4	1033.2	1033.2	1035.5	1041.4	1043.2	1048.5	1053.9	1056.8	1062.7
20°	1008.9	1010.1	1011.9	1013.1	1016.0	1020.8	1024.3	1029.0	1034.9	1040.3	1046.2
22.5°	992.4	990.0	991.2	992.4	995.4	999.5	1003.6	1009.5	1015.4	1020.8	1026.7
25°	960.5	961.1	962.8	964.0	967.6	971.1	975.8	982.9	988.2	994.2	1000.7
27.5°	917.3	917.9	920.9	920.9	923.8	929.7	932.7	938.6	945.7	951.6	959.3
30°	868.3	869.4	869.4	871.8	873.6	876.5	879.5	885.4	889.0	894.3	904.9
32.5°	823.4	824.5	823.9	823.4	821.6	821.0	820.4	821.6	822.8	824.5	828.7
35°	796.8	793.8	791.4	787.3	782.6	776.7	771.3	764.2	757.7	752.4	746.5
37.5°	771.3	770.7	767.2	761.3	751.8	741.2	728.8	713.4	698.0	681.5	665.5
40°	735.9	734.1	731.1	722.9	712.2	699.2	682.7	663.8	638.9	613.5	587.5
42.5°	675.6	676.2	672.6	666.1	656.1	643.7	626.5	605.8	579.2	549.1	515.4
45°	605.2	605.2	604.1	598.7	591.7	581.6	568.6	551.5	525.5	494.7	458.7
47.5°	532.0	532.5	530.8	529.6	526.6	520.1	510.7	497.7	479.4	449.8	413.7
50°	457.5	457.5	460.4	459.8	459.8	457.5	453.3	445.7	429.7	406.1	372.4
52.5°	383.0	384.2	386.0	388.3	391.3	396.0	391.3	387.7	377.7	359.4	330.4
55°	306.2	307.4	310.3	314.4	318.0	322.7	323.9	323.9	318.6	306.2	284.3
57.5°	240.6	238.8	241.2	244.7	249.4	254.2	257.7	261.8	261.2	253.0	235.2
60°	180.9	181.5	183.2	186.8	190.3	194.5	199.2	202.7	204.5	200.4	189.1
62.5°	131.8	131.8	134.2	137.7	139.5	145.4	148.4	150.1	151.9	151.3	144.2
65°	92.2	93.4	94.6	96.3	98.1	101.7	103.4	107.0	108.2	108.8	103.4
67.5°	65.0	63.2	64.4	65.6	67.4	69.8	73.3	73.3	75.1	75.1	71.5
70°	41.4	41.4	42.0	43.7	44.9	45.5	46.7	47.9	49.6	49.1	49.1
72.5°	27.8	27.2	27.8	28.4	29.0	30.7	30.7	31.3	32.5	33.1	30.7
75°	14.2	14.8	16.0	15.4	17.1	16.0	16.5	18.3	17.7	16.5	16.5
77.5°	11.8	11.8	11.8	11.2	12.4	12.4	11.8	13.0	12.4	12.4	11.8
80°	8.3	8.9	8.3	7.7	8.3	7.7	7.7	7.7	7.7	7.7	7.1
82.5°	6.5	5.3	5.9	5.3	5.9	5.9	5.3	4.7	4.7	5.3	4.7
85°	4.7	3.5	4.1	4.1	3.5	3.5	3.5	3.5	3.5	3.0	3.0
87.5°	3.0	1.8	1.8	1.8	2.4	2.4	2.4	1.8	2.4	2.4	1.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1
2.5°	1102.9	1102.3	1103.5	1102.9	1102.9	1102.3	1102.9	1102.3	1103.5	1101.1	1101.7
5°	1102.9	1101.7	1102.3	1102.9	1103.5	1102.3	1102.3	1102.3	1103.5	1102.3	1102.9
7.5°	1100.5	1100.0	1101.7	1102.9	1102.3	1101.7	1102.9	1102.3	1103.5	1102.9	1104.1
10°	1095.8	1096.4	1097.6	1099.4	1100.0	1100.5	1101.7	1101.7	1103.5	1101.1	1102.3
12.5°	1088.7	1091.1	1094.1	1095.2	1097.6	1097.6	1098.8	1099.4	1100.5	1100.0	1101.7
15°	1079.9	1082.8	1086.4	1089.3	1092.3	1094.1	1095.8	1096.4	1098.2	1096.4	1097.0
17.5°	1069.2	1072.8	1078.1	1081.6	1086.4	1088.1	1090.5	1091.7	1093.5	1092.3	1092.9
20°	1054.4	1058.6	1064.5	1069.8	1072.8	1076.9	1079.9	1081.6	1082.8	1081.6	1082.2
22.5°	1033.8	1039.7	1047.4	1051.5	1057.4	1061.0	1061.5	1065.7	1068.6	1065.7	1066.9
25°	1009.5	1015.4	1021.4	1030.2	1035.5	1039.7	1043.8	1044.4	1047.4	1046.8	1046.2
27.5°	969.3	977.0	987.1	994.2	1001.3	1007.8	1012.5	1013.7	1016.6	1015.4	1016.0
30°	914.4	922.6	932.1	943.3	953.4	959.9	965.8	969.9	972.9	971.1	970.5
32.5°	836.4	844.6	854.7	865.9	877.7	887.2	894.3	899.6	903.1	902.0	899.0
35°	747.1	749.5	756.0	764.8	774.9	784.9	791.4	797.3	801.5	802.7	802.7
37.5°	655.5	647.8	643.1	643.1	649.0	653.1	659.0	662.6	669.1	671.4	673.2
40°	566.8	549.1	532.5	520.1	511.9	511.3	511.3	513.0	518.9	526.6	533.7
42.5°	487.6	459.2	433.8	410.8	394.2	384.8	380.6	381.2	386.0	393.1	404.9
45°	424.4	388.9	357.0	329.2	306.8	292.0	284.9	284.3	287.8	296.1	309.1
47.5°	375.3	337.5	301.4	269.5	245.3	229.3	221.1	218.7	221.1	228.7	244.1
50°	334.5	295.5	258.3	225.2	199.2	182.6	175.0	172.0	175.0	181.5	196.8
52.5°	296.7	256.5	221.6	189.7	161.9	147.8	139.5	137.7	139.5	147.2	159.6
55°	253.0	218.7	184.4	152.5	128.3	114.1	107.6	105.8	107.6	114.7	127.7
57.5°	209.8	180.3	150.1	121.2	100.5	88.1	82.2	79.8	83.9	88.7	104.0
60°	169.6	146.0	120.6	95.2	78.0	66.8	62.1	61.5	62.7	68.6	79.2
62.5°	133.0	113.5	93.4	72.7	58.5	53.8	47.9	47.3	48.5	52.0	60.3
65°	95.8	83.3	68.0	53.2	42.0	35.5	33.1	33.7	34.9	37.2	44.9
67.5°	66.8	57.9	47.3	37.2	29.0	26.0	23.6	23.1	23.6	27.8	31.9
70°	44.9	39.6	31.9	28.4	20.1	16.0	16.5	14.8	17.1	17.1	20.7
72.5°	29.5	26.0	21.3	16.5	14.2	11.2	11.2	10.6	11.8	12.4	15.4
75°	15.4	11.8	11.8	8.3	5.9	3.0	5.3	4.7	4.1	4.7	5.9
77.5°	10.6	8.9	8.3	6.5	5.9	4.7	4.7	4.7	4.7	5.3	5.9
80°	6.5	6.5	4.7	4.1	3.5	3.0	3.5	3.5	3.5	3.5	4.1
82.5°	4.1	3.5	3.5	3.0	3.0	2.4	2.4	2.4	2.4	2.4	3.5
85°	3.5	2.4	2.4	1.8	2.4	4.1	1.8	2.4	2.4	2.4	1.8
87.5°	1.2	1.8	1.8	1.8	1.2	0.6	1.2	1.8	1.8	3.0	2.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1	1101.1
2.5°	1102.9	1103.5	1103.5	1102.9	1102.9	1101.7	1104.1	1102.3	1102.9	1105.3	1103.5
5°	1104.1	1104.7	1104.7	1104.1	1104.1	1104.1	1104.7	1104.7	1104.1	1103.5	1104.7
7.5°	1106.5	1105.9	1105.9	1104.7	1104.7	1103.5	1104.7	1102.9	1104.1	1102.9	1104.7
10°	1103.5	1104.1	1103.5	1102.9	1102.9	1102.3	1102.3	1100.5	1101.1	1099.4	1100.5
12.5°	1101.7	1101.1	1101.1	1100.0	1098.8	1097.6	1097.0	1095.2	1095.2	1091.1	1092.9
15°	1097.0	1097.6	1095.8	1093.5	1092.3	1089.3	1088.1	1085.8	1083.4	1080.5	1081.1
17.5°	1092.9	1091.1	1088.7	1086.4	1081.6	1079.3	1076.9	1073.4	1072.2	1068.6	1067.5
20°	1080.5	1079.3	1076.3	1072.2	1069.2	1063.9	1061.5	1058.0	1055.0	1051.5	1049.7
22.5°	1064.5	1063.3	1059.8	1055.6	1050.9	1048.5	1046.2	1039.7	1036.7	1033.2	1032.6
25°	1044.4	1042.6	1039.1	1034.4	1032.0	1025.5	1023.1	1018.4	1017.2	1013.7	1013.1
27.5°	1013.7	1011.3	1007.2	1001.3	997.1	993.0	990.6	987.1	985.9	982.3	981.8
30°	967.6	964.6	956.3	954.0	946.9	942.7	942.7	938.0	938.6	936.2	936.2
32.5°	894.9	890.1	883.6	878.9	874.2	871.8	871.8	870.0	871.2	871.2	872.4
35°	798.5	792.0	788.5	785.5	785.5	787.9	795.0	796.8	800.3	803.2	805.6
37.5°	675.0	674.4	678.5	682.1	690.9	701.0	713.4	724.1	734.1	741.2	748.3
40°	541.4	556.2	568.0	584.6	598.1	617.7	640.1	658.4	675.6	688.0	701.0
42.5°	422.6	441.5	466.3	490.6	514.8	541.4	571.0	596.4	618.8	636.0	649.6
45°	329.2	355.2	385.4	416.1	447.4	480.5	511.3	537.3	560.9	578.6	592.2
47.5°	265.4	293.8	328.0	361.7	397.2	432.1	466.3	488.8	508.3	522.5	534.9
50°	219.3	249.4	285.5	323.9	359.4	394.2	423.8	445.7	461.6	474.0	481.7
52.5°	183.2	215.1	253.6	292.0	327.4	359.4	386.0	402.5	415.5	424.4	431.5
55°	151.3	182.1	218.1	254.2	289.0	319.2	341.0	353.5	363.5	368.8	373.0
57.5°	123.5	151.9	185.0	218.1	248.2	273.1	290.2	302.6	307.4	311.5	310.9
60°	96.9	123.5	153.7	182.1	208.1	228.1	240.6	247.7	251.2	253.0	251.8
62.5°	76.2	100.5	123.5	148.4	167.3	184.4	196.2	196.2	198.0	198.6	200.4
65°	56.7	75.1	95.2	113.5	128.8	140.1	146.6	148.4	150.7	150.1	148.9
67.5°	42.0	55.6	70.3	83.9	94.6	101.7	106.4	110.5	109.9	108.8	108.2
70°	29.0	37.8	50.8	59.1	66.8	73.9	75.1	75.7	76.2	76.8	75.7
72.5°	20.1	26.6	33.7	40.8	45.5	48.5	51.4	52.0	52.0	52.0	51.4
75°	10.1	13.6	20.1	23.1	27.2	28.4	30.7	30.7	32.5	30.1	29.5
77.5°	8.9	10.6	14.2	16.5	18.3	20.1	20.7	22.5	21.9	20.7	21.3
80°	5.3	6.5	8.9	10.1	12.4	13.0	13.6	14.2	13.6	14.2	14.2
82.5°	4.1	4.7	5.9	5.9	7.7	7.7	8.3	8.3	8.9	8.9	8.9
85°	2.4	4.1	3.5	7.1	4.7	4.7	5.9	7.1	5.9	5.9	7.1
87.5°	2.4	2.4	1.8	2.4	2.4	2.4	3.0	3.5	3.5	4.1	3.5
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: P244592

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1101.1	1101.1	1101.1	1101.1
2.5°	1102.9	1104.1	1102.3	1101.7
5°	1104.7	1104.7	1103.5	1103.5
7.5°	1104.7	1104.7	1102.9	1101.7
10°	1100.0	1100.0	1098.2	1097.0
12.5°	1091.1	1091.1	1090.5	1088.7
15°	1079.9	1079.9	1077.5	1075.7
17.5°	1064.5	1065.7	1062.7	1062.7
20°	1047.9	1047.4	1045.0	1043.8
22.5°	1030.8	1029.6	1029.0	1025.5
25°	1012.5	1011.3	1009.5	1007.8
27.5°	981.2	980.6	978.8	976.4
30°	933.3	932.7	930.3	930.3
32.5°	871.2	870.6	868.3	868.9
35°	806.8	809.2	808.0	805.6
37.5°	753.0	754.8	756.0	754.8
40°	708.1	713.4	714.0	715.2
42.5°	660.2	667.3	669.7	670.8
45°	602.9	609.4	614.7	613.5
47.5°	544.4	549.1	553.8	550.3
50°	488.2	491.2	492.9	492.9
52.5°	435.0	435.0	434.4	435.0
55°	374.1	374.1	371.8	373.0
57.5°	310.3	311.5	309.7	306.8
60°	251.2	248.2	247.1	245.3
62.5°	195.6	195.6	191.5	196.8
65°	146.6	144.8	143.0	142.4
67.5°	106.4	105.8	104.0	103.4
70°	75.1	72.7	72.1	70.9
72.5°	50.2	50.2	49.1	49.1
75°	30.7	27.8	27.2	27.8
77.5°	21.3	20.7	20.7	20.1
80°	14.2	13.6	14.8	13.0
82.5°	8.9	9.5	8.9	9.5
85°	5.9	7.1	6.5	6.5
87.5°	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)