

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: P245024

Luminaire Tested: **LSR8B20D010 EC8B20827 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245024
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2076.0 lumens
Efficiency: N/A
Efficacy: 97.5 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

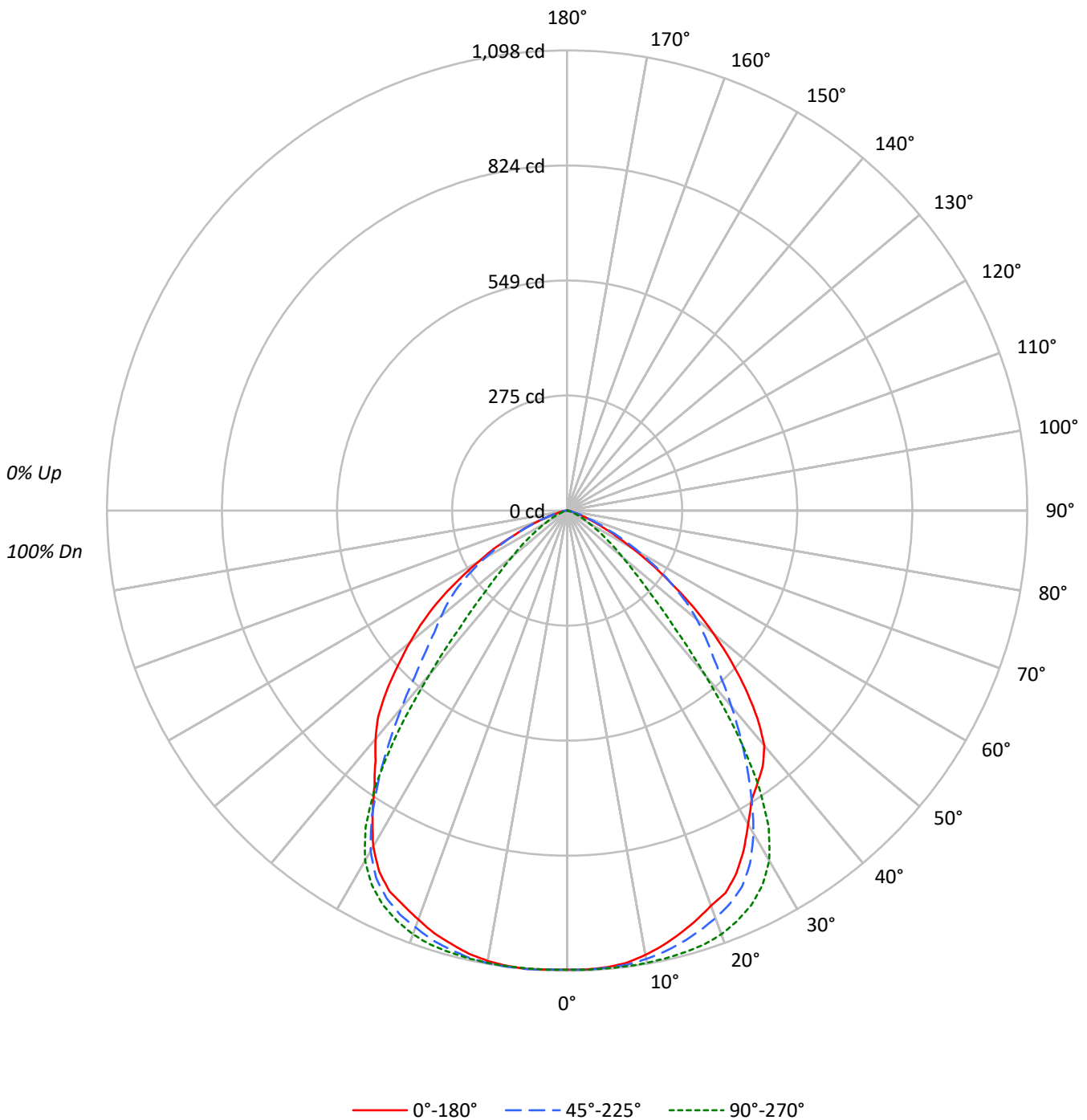
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	52	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°	33775	33775	33775
5°	33851	33941	33978
10°	33707	34315	34168
15°	33335	34816	34162
20°	32933	35306	34072
25°	32507	35348	34106
30°	30754	34353	32950
35°	29837	29856	30168
40°	29466	20542	28637
45°	26257	12333	26615
50°	21832	8208	23521
55°	16376	5656	19946
60°	11095	3768	15048
65°	6691	2444	10339
70°	3715	1325	6356
75°	1680	560	3288
80°	1456	622	2291
85°	1663	814	2300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.5	5.0
10°-20°	303.6	14.6
20°-30°	460.8	22.2
30°-40°	484.0	23.3
40°-50°	362.8	17.5
50°-60°	232.8	11.2
60°-70°	99.6	4.8
70°-80°	23.5	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°	868.9	41.9
0°-40°	1352.9	65.2
0°-60°	1948.5	93.9
0°-90°	2076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2076.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1095	1095	1095	1095	1095	
5°	1094	1095	1096	1098	1098	104
15°	1044	1066	1091	1084	1070	295
25°	955	989	1039	1020	1002	436
35°	793	748	793	784	801	497
45°	602	492	283	478	610	461
55°	305	305	105	318	371	276
65°	92	108	34	139	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°	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3
2.5°	1095.9	1097.1	1096.5	1096.5	1095.9	1096.5	1096.5	1097.7	1097.7	1096.5	1095.9
5°	1093.6	1094.7	1094.7	1093.6	1093.6	1096.5	1094.7	1095.9	1095.9	1095.3	1095.3
7.5°	1088.3	1088.3	1090.6	1088.9	1088.9	1090.6	1090.0	1091.2	1092.4	1093.0	1093.0
10°	1076.5	1077.7	1078.3	1078.3	1078.9	1080.6	1081.8	1084.2	1085.3	1086.5	1087.1
12.5°	1061.8	1063.6	1064.2	1063.6	1065.4	1067.7	1070.7	1073.6	1075.4	1077.7	1079.5
15°	1044.2	1044.2	1045.4	1047.1	1048.3	1051.8	1054.8	1058.3	1063.0	1065.9	1068.9
17.5°	1024.8	1026.0	1027.7	1027.7	1030.1	1036.0	1037.7	1043.0	1048.3	1051.2	1057.1
20°	1003.6	1004.8	1006.6	1007.7	1010.7	1015.4	1018.9	1023.6	1029.5	1034.8	1040.7
22.5°	987.2	984.8	986.0	987.2	990.1	994.2	998.3	1004.2	1010.1	1015.4	1021.3
25°	955.4	956.0	957.8	958.9	962.5	966.0	970.7	977.7	983.0	988.9	995.4
27.5°	912.5	913.1	916.0	916.0	919.0	924.8	927.8	933.7	940.7	946.6	954.2
30°	863.7	864.9	864.9	867.2	869.0	871.9	874.9	880.7	884.3	889.6	900.1
32.5°	819.0	820.2	819.6	819.0	817.2	816.7	816.1	817.2	818.4	820.2	824.3
35°	792.6	789.6	787.3	783.1	778.4	772.6	767.3	760.2	753.7	748.4	742.6
37.5°	767.3	766.7	763.2	757.3	747.9	737.3	724.9	709.6	694.4	677.9	662.0
40°	732.0	730.2	727.3	719.1	708.5	695.5	679.1	660.3	635.6	610.3	584.4
42.5°	672.0	672.6	669.1	662.6	652.6	640.3	623.2	602.6	576.2	546.2	512.7
45°	602.1	602.1	600.9	595.6	588.5	578.5	565.6	548.6	522.7	492.1	456.2
47.5°	529.1	529.7	528.0	526.8	523.9	517.4	508.0	495.1	476.8	447.4	411.6
50°	455.1	455.1	458.0	457.4	457.4	455.1	451.0	443.3	427.4	403.9	370.4
52.5°	381.0	382.2	383.9	386.3	389.2	393.9	389.2	385.7	375.7	357.5	328.7
55°	304.6	305.7	308.7	312.8	316.3	321.0	322.2	322.2	316.9	304.6	282.8
57.5°	239.3	237.5	239.9	243.4	248.1	252.8	256.3	260.5	259.9	251.6	234.0
60°	179.9	180.5	182.3	185.8	189.3	193.4	198.1	201.7	203.4	199.3	188.1
62.5°	131.1	131.1	133.5	137.0	138.8	144.6	147.6	149.3	151.1	150.5	143.5
65°	91.7	92.9	94.1	95.8	97.6	101.1	102.9	106.4	107.6	108.2	102.9
67.5°	64.7	62.9	64.1	65.3	67.0	69.4	72.9	72.9	74.7	74.7	71.1
70°	41.2	41.2	41.7	43.5	44.7	45.3	46.5	47.6	49.4	48.8	48.8
72.5°	27.6	27.0	27.6	28.2	28.8	30.6	30.6	31.2	32.3	32.9	30.6
75°	14.1	14.7	15.9	15.3	17.0	15.9	16.5	18.2	17.6	16.5	16.5
77.5°	11.8	11.8	11.8	11.2	12.3	12.3	11.8	12.9	12.3	12.3	11.8
80°	8.2	8.8	8.2	7.6	8.2	7.6	7.6	7.6	7.6	7.6	7.0
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	2.9	2.9
87.5°	2.9	1.8	1.8	1.8	2.3	2.3	2.3	1.8	2.3	2.3	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°	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3
2.5°	1097.1	1096.5	1097.7	1097.1	1097.1	1096.5	1097.1	1096.5	1097.7	1095.3	1095.9
5°	1097.1	1095.9	1096.5	1097.1	1097.7	1096.5	1096.5	1096.5	1097.7	1096.5	1097.1
7.5°	1094.7	1094.2	1095.9	1097.1	1096.5	1095.9	1097.1	1096.5	1097.7	1097.1	1098.3
10°	1090.0	1090.6	1091.8	1093.6	1094.2	1094.7	1095.9	1095.9	1097.7	1095.3	1096.5
12.5°	1083.0	1085.3	1088.3	1089.5	1091.8	1091.8	1093.0	1093.6	1094.7	1094.2	1095.9
15°	1074.2	1077.1	1080.6	1083.6	1086.5	1088.3	1090.0	1090.6	1092.4	1090.6	1091.2
17.5°	1063.6	1067.1	1072.4	1075.9	1080.6	1082.4	1084.8	1085.9	1087.7	1086.5	1087.1
20°	1048.9	1053.0	1058.9	1064.2	1067.1	1071.2	1074.2	1075.9	1077.1	1075.9	1076.5
22.5°	1028.3	1034.2	1041.8	1046.0	1051.8	1055.4	1055.9	1060.1	1063.0	1060.1	1061.2
25°	1004.2	1010.1	1016.0	1024.8	1030.1	1034.2	1038.3	1038.9	1041.8	1041.2	1040.7
27.5°	964.2	971.9	981.9	988.9	996.0	1002.4	1007.2	1008.3	1011.3	1010.1	1010.7
30°	909.5	917.8	927.2	938.4	948.4	954.8	960.7	964.8	967.7	966.0	965.4
32.5°	831.9	840.2	850.2	861.3	873.1	882.5	889.6	894.9	898.4	897.2	894.3
35°	743.2	745.5	752.0	760.8	770.8	780.8	787.3	793.1	797.2	798.4	798.4
37.5°	652.0	644.4	639.7	639.7	645.6	649.7	655.6	659.1	665.6	667.9	669.7
40°	563.8	546.2	529.7	517.4	509.2	508.6	508.6	510.3	516.2	523.9	530.9
42.5°	485.1	456.8	431.6	408.6	392.2	382.8	378.6	379.2	383.9	391.0	402.7
45°	422.1	386.9	355.1	327.5	305.1	290.4	283.4	282.8	286.3	294.6	307.5
47.5°	373.3	335.7	299.8	268.1	244.0	228.1	219.9	217.5	219.9	227.5	242.8
50°	332.8	294.0	256.9	224.0	198.1	181.7	174.0	171.1	174.0	180.5	195.8
52.5°	295.1	255.2	220.5	188.7	161.1	147.0	138.8	137.0	138.8	146.4	158.7
55°	251.6	217.5	183.4	151.7	127.6	113.5	107.0	105.2	107.0	114.1	127.0
57.5°	208.7	179.3	149.3	120.5	100.0	87.6	81.7	79.4	83.5	88.2	103.5
60°	168.7	145.2	119.9	94.7	77.6	66.4	61.7	61.1	62.3	68.2	78.8
62.5°	132.3	112.9	92.9	72.3	58.2	53.5	47.6	47.0	48.2	51.7	60.0
65°	95.2	82.9	67.6	52.9	41.7	35.3	32.9	33.5	34.7	37.0	44.7
67.5°	66.4	57.6	47.0	37.0	28.8	25.9	23.5	22.9	23.5	27.6	31.7
70°	44.7	39.4	31.7	28.2	20.0	15.9	16.5	14.7	17.0	17.0	20.6
72.5°	29.4	25.9	21.2	16.5	14.1	11.2	11.2	10.6	11.8	12.3	15.3
75°	15.3	11.8	11.8	8.2	5.9	2.9	5.3	4.7	4.1	4.7	5.9
77.5°	10.6	8.8	8.2	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	2.9	3.5	3.5	3.5	3.5	4.1
82.5°	4.1	3.5	3.5	2.9	2.9	2.3	2.3	2.3	2.3	2.3	3.5
85°	3.5	2.3	2.3	1.8	2.3	4.1	1.8	2.3	2.3	2.3	1.8
87.5°	1.2	1.8	1.8	1.8	1.2	0.6	1.2	1.8	1.8	2.9	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°	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3	1095.3
2.5°	1097.1	1097.7	1097.7	1097.1	1097.1	1095.9	1098.3	1096.5	1097.1	1099.5	1097.7
5°	1098.3	1098.9	1098.9	1098.3	1098.3	1098.3	1098.9	1098.9	1098.3	1097.7	1098.9
7.5°	1100.6	1100.0	1100.0	1098.9	1098.9	1097.7	1098.9	1097.1	1098.3	1097.1	1098.9
10°	1097.7	1098.3	1097.7	1097.1	1097.1	1096.5	1096.5	1094.7	1095.3	1093.6	1094.7
12.5°	1095.9	1095.3	1095.3	1094.2	1093.0	1091.8	1091.2	1089.5	1089.5	1085.3	1087.1
15°	1091.2	1091.8	1090.0	1087.7	1086.5	1083.6	1082.4	1080.0	1077.7	1074.8	1075.4
17.5°	1087.1	1085.3	1083.0	1080.6	1075.9	1073.6	1071.2	1067.7	1066.5	1063.0	1061.8
20°	1074.8	1073.6	1070.7	1066.5	1063.6	1058.3	1055.9	1052.4	1049.5	1046.0	1044.2
22.5°	1058.9	1057.7	1054.2	1050.1	1045.4	1043.0	1040.7	1034.2	1031.2	1027.7	1027.1
25°	1038.9	1037.1	1033.6	1028.9	1026.5	1020.1	1017.7	1013.0	1011.9	1008.3	1007.7
27.5°	1008.3	1006.0	1001.9	996.0	991.9	987.7	985.4	981.9	980.7	977.2	976.6
30°	962.5	959.5	951.3	948.9	941.9	937.8	937.8	933.1	933.7	931.3	931.3
32.5°	890.2	885.4	879.0	874.3	869.6	867.2	867.2	865.4	866.6	866.6	867.8
35°	794.3	787.9	784.3	781.4	781.4	783.7	790.8	792.6	796.1	799.0	801.4
37.5°	671.4	670.8	675.0	678.5	687.3	697.3	709.6	720.2	730.2	737.3	744.3
40°	538.6	553.3	565.0	581.5	595.0	614.4	636.7	655.0	672.0	684.4	697.3
42.5°	420.4	439.2	463.9	488.0	512.1	538.6	568.0	593.2	615.6	632.6	646.1
45°	327.5	353.4	383.3	413.9	445.1	478.0	508.6	534.4	558.0	575.6	589.1
47.5°	264.0	292.2	326.3	359.8	395.1	429.8	463.9	486.2	505.6	519.7	532.1
50°	218.1	248.1	284.0	322.2	357.5	392.2	421.6	443.3	459.2	471.5	479.2
52.5°	182.3	214.0	252.2	290.4	325.7	357.5	383.9	400.4	413.3	422.1	429.2
55°	150.5	181.1	217.0	252.8	287.5	317.5	339.2	351.6	361.6	366.9	371.0
57.5°	122.9	151.1	184.0	217.0	246.9	271.6	288.7	301.0	305.7	309.8	309.3
60°	96.4	122.9	152.9	181.1	207.0	226.9	239.3	246.3	249.9	251.6	250.5
62.5°	75.8	100.0	122.9	147.6	166.4	183.4	195.2	195.2	197.0	197.5	199.3
65°	56.4	74.7	94.7	112.9	128.2	139.3	145.8	147.6	149.9	149.3	148.2
67.5°	41.7	55.3	70.0	83.5	94.1	101.1	105.8	110.0	109.4	108.2	107.6
70°	28.8	37.6	50.6	58.8	66.4	73.5	74.7	75.3	75.8	76.4	75.3
72.5°	20.0	26.5	33.5	40.6	45.3	48.2	51.2	51.7	51.7	51.7	51.2
75°	10.0	13.5	20.0	22.9	27.0	28.2	30.6	30.6	32.3	30.0	29.4
77.5°	8.8	10.6	14.1	16.5	18.2	20.0	20.6	22.3	21.8	20.6	21.2
80°	5.3	6.5	8.8	10.0	12.3	12.9	13.5	14.1	13.5	14.1	14.1
82.5°	4.1	4.7	5.9	5.9	7.6	7.6	8.2	8.2	8.8	8.8	8.8
85°	2.3	4.1	3.5	7.0	4.7	4.7	5.9	7.0	5.9	5.9	7.0
87.5°	2.3	2.3	1.8	2.3	2.3	2.3	2.9	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: P245024

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1095.3	1095.3	1095.3	1095.3
2.5°	1097.1	1098.3	1096.5	1095.9
5°	1098.9	1098.9	1097.7	1097.7
7.5°	1098.9	1098.9	1097.1	1095.9
10°	1094.2	1094.2	1092.4	1091.2
12.5°	1085.3	1085.3	1084.8	1083.0
15°	1074.2	1074.2	1071.8	1070.1
17.5°	1058.9	1060.1	1057.1	1057.1
20°	1042.4	1041.8	1039.5	1038.3
22.5°	1025.4	1024.2	1023.6	1020.1
25°	1007.2	1006.0	1004.2	1002.4
27.5°	976.0	975.4	973.6	971.3
30°	928.4	927.8	925.4	925.4
32.5°	866.6	866.0	863.7	864.3
35°	802.5	804.9	803.7	801.4
37.5°	749.0	750.8	752.0	750.8
40°	704.4	709.6	710.2	711.4
42.5°	656.7	663.8	666.1	667.3
45°	599.7	606.2	611.5	610.3
47.5°	541.5	546.2	550.9	547.4
50°	485.6	488.6	490.3	490.3
52.5°	432.7	432.7	432.1	432.7
55°	372.2	372.2	369.8	371.0
57.5°	308.7	309.8	308.1	305.1
60°	249.9	246.9	245.8	244.0
62.5°	194.6	194.6	190.5	195.8
65°	145.8	144.0	142.3	141.7
67.5°	105.8	105.2	103.5	102.9
70°	74.7	72.3	71.7	70.5
72.5°	50.0	50.0	48.8	48.8
75°	30.6	27.6	27.0	27.6
77.5°	21.2	20.6	20.6	20.0
80°	14.1	13.5	14.7	12.9
82.5°	8.8	9.4	8.8	9.4
85°	5.9	7.0	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)