

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: P245510

Luminaire Tested: **LSR8B20D010 EC8B20950 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245510
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20950 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2067.0 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

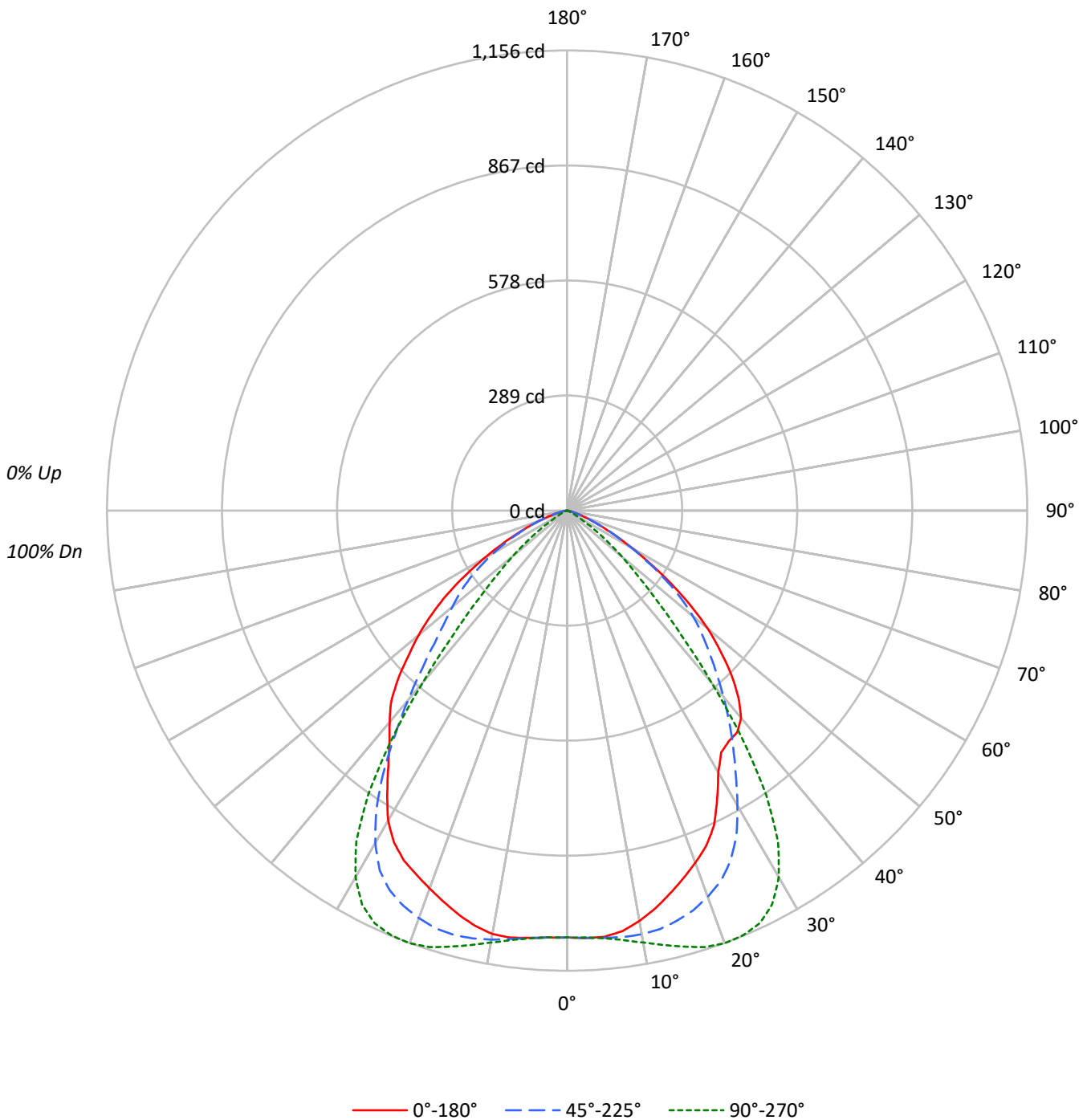
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33066	33066	33066
5°	33263	33387	33350
10°	32774	34503	33826
15°	31816	36212	33559
20°	30892	37951	33153
25°	29706	38924	32997
30°	27036	37857	32021
35°	26633	32803	29460
40°	27357	22752	27928
45°	25468	13750	26261
50°	22087	8491	23401
55°	16951	4435	19859
60°	11551	1789	14986
65°	7187	912	10339
70°	3904	568	6311
75°	2037	274	3729
80°	906	302	2024
85°	601	212	1804



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	5.0
10°-20°	305.5	14.8
20°-30°	466.0	22.5
30°-40°	486.3	23.5
40°-50°	365.3	17.7
50°-60°	224.8	10.9
60°-70°	91.5	4.4
70°-80°	21.6	1.0
80°-90°	3.0	0.1
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°	874.6	42.3
0°-40°	1361.0	65.8
0°-60°	1951.0	94.4
0°-90°	2067.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2067.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1072	1072	1072	1072	1072	
5°	1075	1077	1079	1077	1077	102
15°	997	1067	1134	1103	1051	281
25°	873	971	1144	1054	970	397
35°	708	727	871	805	783	447
45°	584	505	315	471	602	446
55°	315	299	82	299	369	283
65°	98	100	12	134	142	103
75°	17	17	2	30	31	21
85°	2	2	1	4	5	2
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°	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1075.1	1073.4	1075.1	1075.1	1075.7	1074.6	1075.1	1075.7	1074.6	1074.6	1074.6
5°	1074.6	1073.4	1074.6	1074.0	1075.1	1075.1	1076.3	1076.3	1077.4	1077.4	1079.1
7.5°	1065.5	1063.2	1065.5	1067.2	1068.3	1070.6	1073.4	1075.7	1078.0	1080.3	1083.1
10°	1046.7	1046.7	1048.4	1051.8	1055.2	1059.2	1064.3	1070.0	1075.7	1080.8	1085.9
12.5°	1023.3	1021.6	1025.0	1029.6	1034.7	1041.0	1049.0	1057.5	1066.6	1076.8	1084.8
15°	996.6	994.9	998.9	1003.4	1009.7	1018.8	1028.5	1039.9	1052.9	1066.6	1079.7
17.5°	969.3	968.7	972.7	979.0	984.1	993.7	1006.3	1019.9	1034.7	1052.9	1070.0
20°	941.4	940.8	944.8	949.9	956.8	965.9	978.4	994.3	1012.0	1032.5	1052.4
22.5°	912.4	912.9	916.3	922.0	927.7	937.4	950.5	966.4	985.8	1008.0	1030.2
25°	873.1	870.2	874.8	880.5	890.2	898.1	910.7	927.7	947.6	971.0	997.2
27.5°	816.2	815.6	819.6	824.7	833.2	842.9	856.6	874.2	895.3	920.9	946.5
30°	759.3	760.4	762.1	767.2	772.9	782.6	796.3	811.1	831.0	855.4	882.8
32.5°	720.5	720.5	722.8	726.2	730.2	735.4	745.0	755.8	771.2	788.3	808.2
35°	707.5	705.2	707.5	708.0	708.6	709.7	711.4	714.9	720.0	727.4	734.8
37.5°	701.8	700.1	700.1	697.8	694.9	691.5	687.0	681.8	676.2	668.8	663.1
40°	679.6	678.4	677.3	675.0	668.8	661.9	654.5	642.6	629.5	611.3	593.1
42.5°	636.9	635.8	635.2	630.6	624.9	617.0	608.4	595.9	579.4	556.1	529.9
45°	584.0	581.7	580.0	576.0	572.0	565.2	557.2	545.8	529.3	505.4	474.1
47.5°	522.5	521.3	520.8	519.1	515.1	511.1	506.0	496.9	482.1	459.3	426.9
50°	460.4	458.2	459.3	458.7	457.0	454.2	450.8	444.5	433.1	412.6	383.0
52.5°	389.3	389.3	388.7	390.4	391.0	390.4	391.0	384.2	374.5	359.1	334.1
55°	315.3	315.3	317.0	319.3	321.6	322.1	321.6	318.7	311.9	299.4	277.2
57.5°	245.9	244.7	248.2	251.6	253.8	256.1	254.4	252.1	248.2	237.9	220.8
60°	187.3	187.3	189.5	191.8	194.1	196.4	195.8	195.2	191.8	185.0	171.3
62.5°	137.7	138.3	138.3	140.0	142.3	144.6	146.3	144.6	142.9	138.3	129.2
65°	98.5	97.9	98.5	100.2	101.9	104.2	105.3	104.7	103.0	99.6	92.8
67.5°	66.0	65.5	67.7	68.3	69.4	71.7	71.1	71.7	71.1	68.3	62.6
70°	43.3	42.1	43.3	42.7	44.4	45.0	46.1	46.7	46.1	44.4	42.7
72.5°	26.8	26.2	26.8	27.3	27.9	28.5	29.6	29.6	29.0	27.9	25.6
75°	17.1	15.4	15.9	14.8	15.9	15.9	17.1	17.6	17.1	17.1	15.9
77.5°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.8	11.4	10.2	9.7
80°	5.1	5.1	5.7	5.7	5.7	6.3	5.7	5.7	5.7	6.3	4.6
82.5°	4.0	3.4	3.4	3.4	4.0	3.4	3.4	3.4	3.4	3.4	3.4
85°	1.7	2.3	1.7	1.1	1.7	1.7	2.3	1.7	1.7	1.7	2.3
87.5°	0.6	0.6	0.0	0.0	0.0	0.6	0.0	0.6	0.6	1.1	0.0
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°	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1075.1	1074.0	1074.0	1073.4	1074.6	1073.4	1074.0	1073.4	1073.4	1074.6	1073.4
5°	1079.1	1079.7	1078.6	1078.0	1079.7	1079.7	1079.7	1078.6	1078.6	1079.1	1078.6
7.5°	1084.8	1085.9	1086.5	1087.1	1088.2	1088.8	1088.8	1088.2	1087.7	1089.4	1087.1
10°	1091.1	1092.8	1096.2	1097.9	1100.8	1100.8	1101.9	1101.9	1100.8	1101.9	1101.3
12.5°	1088.8	1099.0	1104.7	1108.7	1112.7	1116.1	1117.3	1117.8	1117.3	1119.5	1117.3
15°	1092.8	1101.3	1110.4	1117.3	1124.6	1128.6	1129.8	1134.3	1135.5	1136.0	1132.6
17.5°	1086.5	1101.9	1111.6	1121.8	1132.6	1140.0	1146.8	1149.7	1150.3	1151.4	1146.8
20°	1072.3	1089.4	1104.2	1119.0	1131.5	1142.9	1148.6	1156.5	1154.3	1158.8	1152.5
22.5°	1052.9	1072.3	1091.1	1110.4	1123.5	1137.2	1149.1	1154.8	1157.7	1157.7	1150.8
25°	1022.2	1045.0	1065.5	1085.4	1105.3	1121.8	1135.5	1144.0	1145.7	1145.1	1137.2
27.5°	974.4	998.9	1022.8	1045.5	1070.0	1089.4	1105.3	1115.5	1118.4	1118.4	1109.9
30°	908.4	934.6	957.9	985.2	1010.3	1031.9	1054.1	1063.2	1068.3	1068.3	1058.6
32.5°	829.8	852.0	873.7	900.4	927.7	952.2	973.3	985.8	992.0	991.5	982.9
35°	744.5	755.3	771.8	791.7	816.2	838.9	859.4	871.4	882.2	881.6	873.7
37.5°	659.1	656.2	657.9	665.3	680.7	696.7	712.6	724.0	733.1	737.1	735.4
40°	575.4	560.6	546.4	541.3	542.4	548.1	556.6	565.2	575.4	580.5	582.8
42.5°	500.3	475.3	450.2	431.4	420.6	417.2	421.2	424.0	430.3	437.7	445.1
45°	440.0	406.4	373.4	344.3	326.1	315.3	313.0	315.3	318.7	326.1	335.8
47.5°	390.4	351.2	314.2	281.7	255.0	240.8	236.8	235.6	239.0	245.9	259.0
50°	346.6	307.3	266.4	228.8	200.9	185.0	179.3	177.0	181.0	186.1	198.1
52.5°	298.8	260.1	218.0	181.6	152.5	136.0	129.8	126.4	128.6	135.5	147.4
55°	247.0	211.2	173.0	135.5	107.6	92.2	84.8	82.5	84.8	92.2	104.2
57.5°	195.2	165.1	133.2	97.9	72.8	57.5	50.1	47.8	54.1	56.9	69.4
60°	152.5	128.1	100.7	71.7	50.1	38.1	30.7	29.0	31.9	37.0	47.2
62.5°	114.4	99.0	77.4	51.2	37.0	24.5	20.5	18.8	20.5	24.5	32.4
65°	83.1	71.1	54.1	37.6	25.0	18.2	13.7	12.5	14.2	17.1	23.9
67.5°	56.9	47.8	37.6	26.2	17.1	11.4	9.7	9.7	10.2	12.5	17.6
70°	37.0	31.3	23.9	17.1	11.4	8.5	7.4	6.3	7.4	9.1	11.9
72.5°	23.3	19.9	15.4	11.9	8.5	6.3	5.1	4.6	5.7	6.8	9.1
75°	14.2	10.8	8.0	6.3	4.6	4.6	4.6	2.3	2.8	4.6	5.7
77.5°	8.5	7.4	6.3	5.1	4.0	2.3	2.3	2.3	2.8	3.4	5.1
80°	4.6	4.0	2.8	2.8	2.3	1.7	2.3	1.7	1.1	2.8	3.4
82.5°	2.8	2.3	2.3	2.3	2.8	1.1	1.7	1.1	1.7	2.3	1.7
85°	1.7	1.7	1.7	1.1	2.8	1.1	1.1	0.6	0.6	1.1	1.1
87.5°	0.0	0.6	0.6	0.0	0.6	0.0	0.6	0.6	0.6	0.6	0.6
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°	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1074.0	1073.4	1074.0	1073.4	1073.4	1073.4	1074.0	1074.0	1073.4	1073.4	1074.6
5°	1078.6	1078.6	1078.6	1078.0	1077.4	1077.4	1078.6	1078.6	1076.8	1078.6	1078.6
7.5°	1088.2	1086.5	1088.2	1085.9	1084.8	1085.4	1085.9	1084.8	1083.7	1084.2	1084.2
10°	1100.8	1099.0	1099.0	1097.3	1095.6	1094.5	1093.4	1090.5	1087.7	1087.1	1084.8
12.5°	1115.5	1112.7	1111.0	1107.6	1104.7	1100.8	1097.3	1092.8	1087.1	1083.1	1079.1
15°	1130.3	1125.8	1121.8	1116.1	1109.9	1103.0	1095.6	1088.2	1079.1	1071.2	1064.3
17.5°	1142.3	1136.0	1128.6	1119.5	1110.4	1100.2	1089.4	1078.6	1065.5	1055.2	1047.2
20°	1146.3	1137.2	1127.5	1115.5	1103.6	1089.4	1075.7	1061.5	1046.7	1035.9	1026.8
22.5°	1141.2	1130.3	1118.4	1105.9	1089.9	1074.6	1058.6	1042.1	1029.0	1014.2	1005.7
25°	1126.9	1113.8	1100.8	1085.9	1070.6	1053.5	1036.4	1019.4	1003.4	995.5	984.6
27.5°	1097.9	1083.7	1069.4	1054.1	1036.4	1019.4	1001.7	985.2	971.6	960.7	954.5
30°	1046.7	1030.2	1013.7	997.2	981.8	964.1	947.6	934.0	920.3	911.8	905.5
32.5°	968.1	953.3	936.8	920.9	906.7	891.9	878.2	866.3	856.6	850.9	846.3
35°	862.3	847.5	835.0	823.6	811.6	805.4	796.8	790.0	786.0	783.7	783.2
37.5°	729.1	720.5	716.6	714.3	712.0	710.3	711.4	714.3	716.6	720.5	725.1
40°	586.8	594.2	596.5	604.4	611.8	621.5	632.3	644.9	655.1	668.2	677.3
42.5°	457.0	470.7	486.6	503.7	521.9	539.6	561.2	581.1	599.3	615.8	630.1
45°	351.2	372.2	396.1	420.6	445.1	470.7	496.9	521.3	543.0	560.6	575.4
47.5°	273.8	297.1	327.8	358.0	387.6	417.8	446.8	472.4	490.6	507.7	520.8
50°	216.8	243.6	277.2	311.9	344.3	376.2	406.9	430.9	449.1	462.7	472.4
52.5°	167.9	199.8	233.9	270.4	305.1	339.8	368.2	390.4	405.2	417.2	424.6
55°	125.2	156.5	192.9	230.5	265.8	299.4	326.1	345.5	358.6	365.4	369.4
57.5°	90.5	119.0	155.4	192.9	224.8	256.7	278.3	296.0	303.4	307.3	309.1
60°	66.0	92.2	124.6	157.1	187.3	212.9	231.7	243.6	249.3	251.6	251.0
62.5°	48.4	71.1	99.0	126.4	150.8	171.9	186.7	194.6	197.5	198.6	196.9
65°	37.0	54.6	78.5	99.6	118.4	133.7	144.6	149.7	151.4	150.8	149.7
67.5°	27.3	41.0	58.6	74.6	88.2	100.2	105.9	110.4	111.6	109.9	108.1
70°	19.4	30.2	42.7	53.5	63.7	70.6	76.8	77.4	77.4	76.8	75.7
72.5°	13.7	21.1	29.0	36.4	42.7	47.8	50.1	51.8	51.2	50.7	49.5
75°	9.1	13.1	21.1	22.8	28.5	30.2	32.4	32.4	33.0	31.3	31.3
77.5°	5.7	9.1	12.5	14.8	17.1	19.4	20.5	20.5	21.1	20.5	20.5
80°	3.4	5.7	6.8	10.2	10.2	11.9	12.5	13.1	11.9	13.7	11.9
82.5°	2.3	3.4	5.1	5.1	6.3	7.4	7.4	8.0	8.0	7.4	7.4
85°	1.7	2.3	2.8	3.4	3.4	4.0	3.4	3.4	4.0	4.6	4.0
87.5°	0.6	1.1	0.6	1.1	1.1	2.3	1.7	1.7	1.7	2.3	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



TEST NUMBER: P245510

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1072.3	1072.3	1072.3	1072.3
2.5°	1073.4	1074.0	1073.4	1073.4
5°	1078.6	1078.0	1078.6	1077.4
7.5°	1082.5	1082.5	1082.0	1082.0
10°	1082.5	1080.3	1080.3	1080.3
12.5°	1074.0	1071.2	1069.4	1068.3
15°	1059.2	1054.1	1051.8	1051.2
17.5°	1039.9	1035.3	1032.5	1030.7
20°	1017.7	1013.1	1009.7	1010.3
22.5°	998.3	993.2	990.9	989.8
25°	979.0	972.7	971.0	969.8
27.5°	947.6	944.2	942.5	940.8
30°	899.8	898.1	895.3	899.3
32.5°	844.6	841.8	839.5	841.2
35°	783.7	782.0	783.7	782.6
37.5°	728.0	729.7	731.9	733.1
40°	684.1	690.4	692.7	693.8
42.5°	640.3	647.7	652.3	655.1
45°	586.2	593.6	598.7	602.2
47.5°	530.5	536.7	541.8	541.3
50°	479.8	483.2	485.5	487.8
52.5°	428.6	428.6	429.1	429.1
55°	370.5	369.4	368.8	369.4
57.5°	306.8	305.6	305.1	303.4
60°	248.7	245.3	243.0	243.0
62.5°	194.6	190.7	189.0	188.4
65°	146.3	145.7	142.3	141.7
67.5°	105.9	103.6	101.3	101.9
70°	74.6	71.1	71.1	70.0
72.5°	48.4	46.7	46.1	46.1
75°	30.2	30.2	29.0	31.3
77.5°	19.9	19.9	19.4	19.9
80°	11.9	11.9	11.9	11.4
82.5°	7.4	8.0	7.4	7.4
85°	4.0	4.6	3.4	5.1
87.5°	2.3	2.8	2.3	2.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)