

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: P246176

Luminaire Tested: **LSR8B20D010 EC8B20827 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246176
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2063.0 lumens
Efficiency: N/A
Efficacy: 96.9 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

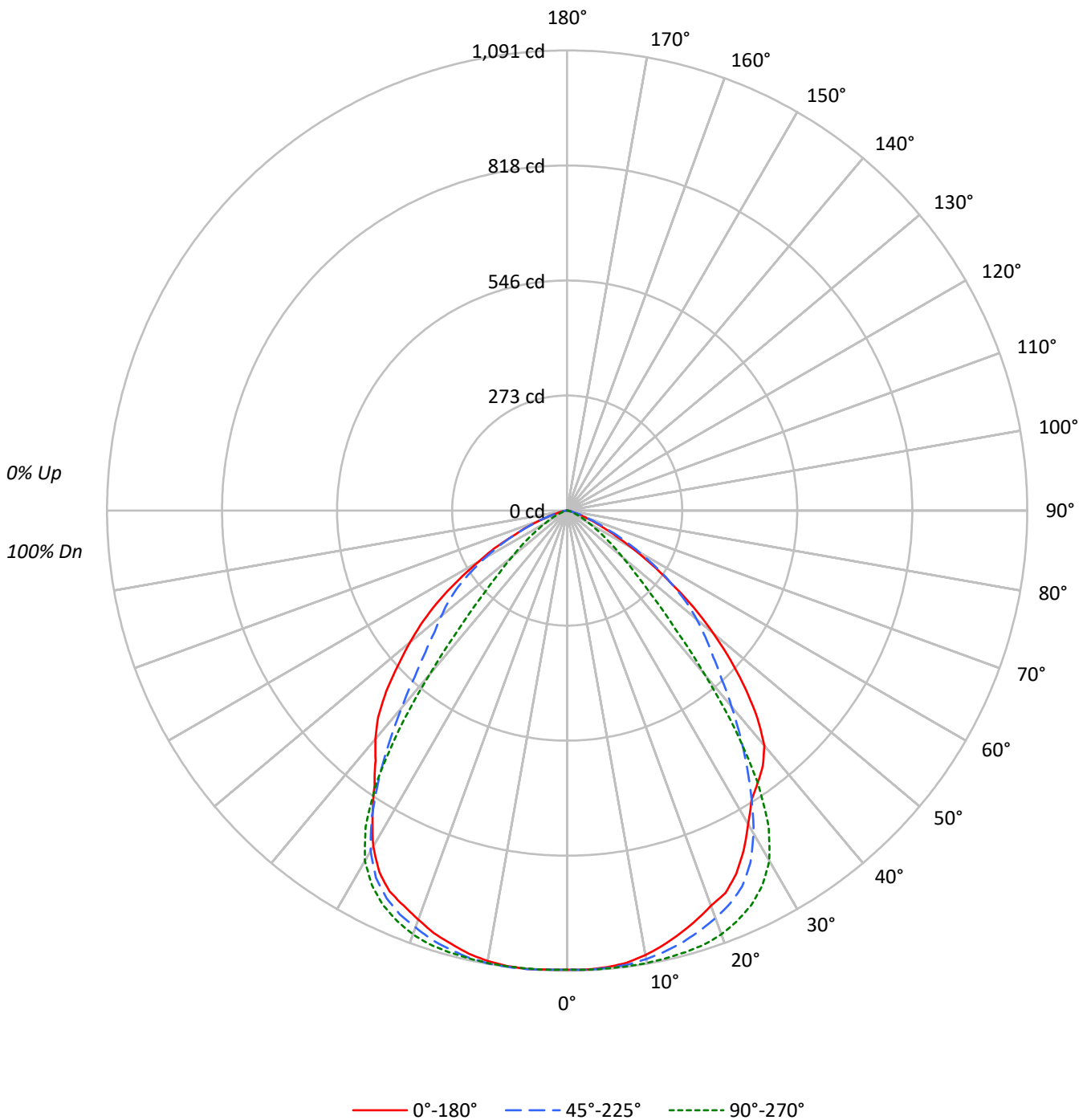
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P246176

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0MW

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°	33565	33565	33565
5°	33638	33731	33765
10°	33498	34102	33955
15°	33124	34599	33948
20°	32727	35086	33859
25°	32302	35126	33895
30°	30561	34140	32744
35°	29649	29671	29980
40°	29281	20413	28460
45°	26091	12254	26449
50°	21693	8155	23377
55°	16268	5623	19822
60°	11027	3750	14956
65°	6654	2430	10273
70°	3688	1316	6320
75°	1668	560	3276
80°	1456	622	2291
85°	1663	814	2264



TEST NUMBER: P246176

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.9	5.0
10°-20°	301.7	14.6
20°-30°	457.9	22.2
30°-40°	480.9	23.3
40°-50°	360.6	17.5
50°-60°	231.3	11.2
60°-70°	99.0	4.8
70°-80°	23.4	1.1
80°-90°	4.3	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°	863.5	41.9
0°-40°	1344.4	65.2
0°-60°	1936.3	93.9
0°-90°	2063.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2063.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1088	1088	1088	1088	1088	
5°	1087	1088	1090	1091	1091	103
15°	1038	1059	1084	1077	1063	293
25°	949	983	1032	1014	996	434
35°	788	744	788	779	796	494
45°	598	489	281	475	606	458
55°	303	303	105	316	369	275
65°	91	108	33	138	141	97
75°	14	16	5	28	28	20
85°	5	3	2	5	6	5
90°	0	0	0	0	0	



TEST NUMBER: P246176

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5
2.5°	1089.1	1090.2	1089.7	1089.7	1089.1	1089.7	1089.7	1090.8	1090.8	1089.7	1089.1
5°	1086.7	1087.9	1087.9	1086.7	1086.7	1089.7	1087.9	1089.1	1089.1	1088.5	1088.5
7.5°	1081.5	1081.5	1083.8	1082.1	1082.1	1083.8	1083.2	1084.4	1085.6	1086.1	1086.1
10°	1069.8	1071.0	1071.5	1071.5	1072.1	1073.9	1075.0	1077.4	1078.5	1079.7	1080.3
12.5°	1055.2	1056.9	1057.5	1056.9	1058.7	1061.0	1063.9	1066.9	1068.6	1071.0	1072.7
15°	1037.6	1037.6	1038.8	1040.6	1041.7	1045.2	1048.2	1051.7	1056.3	1059.3	1062.2
17.5°	1018.4	1019.5	1021.3	1021.3	1023.6	1029.5	1031.2	1036.5	1041.7	1044.7	1050.5
20°	997.3	998.5	1000.3	1001.4	1004.3	1009.0	1012.5	1017.2	1023.0	1028.3	1034.1
22.5°	981.0	978.6	979.8	981.0	983.9	988.0	992.1	997.9	1003.8	1009.0	1014.9
25°	949.4	950.0	951.8	952.9	956.4	959.9	964.6	971.6	976.9	982.7	989.2
27.5°	906.8	907.4	910.3	910.3	913.2	919.0	922.0	927.8	934.8	940.7	948.3
30°	858.3	859.4	859.4	861.8	863.5	866.5	869.4	875.2	878.7	884.0	894.5
32.5°	813.9	815.0	814.5	813.9	812.1	811.5	811.0	812.1	813.3	815.0	819.1
35°	787.6	784.7	782.3	778.2	773.6	767.7	762.5	755.5	749.0	743.8	737.9
37.5°	762.5	761.9	758.4	752.5	743.2	732.7	720.4	705.2	690.0	673.7	657.9
40°	727.4	725.6	722.7	714.6	704.0	691.2	674.8	656.1	631.6	606.5	580.8
42.5°	667.8	668.4	664.9	658.5	648.5	636.3	619.3	598.9	572.6	542.8	509.5
45°	598.3	598.3	597.1	591.9	584.8	574.9	562.1	545.1	519.4	489.0	453.4
47.5°	525.8	526.4	524.7	523.5	520.6	514.2	504.8	492.0	473.8	444.6	409.0
50°	452.2	452.2	455.1	454.6	454.6	452.2	448.1	440.5	424.8	401.4	368.1
52.5°	378.6	379.8	381.5	383.9	386.8	391.5	386.8	383.3	373.3	355.2	326.6
55°	302.6	303.8	306.7	310.8	314.3	319.0	320.2	320.2	314.9	302.6	281.0
57.5°	237.8	236.0	238.4	241.9	246.6	251.2	254.7	258.8	258.2	250.1	232.5
60°	178.8	179.4	181.1	184.6	188.1	192.2	196.9	200.4	202.2	198.1	187.0
62.5°	130.3	130.3	132.6	136.1	137.9	143.7	146.6	148.4	150.2	149.6	142.6
65°	91.2	92.3	93.5	95.2	97.0	100.5	102.2	105.7	106.9	107.5	102.2
67.5°	64.3	62.5	63.7	64.8	66.6	68.9	72.5	72.5	74.2	74.2	70.7
70°	40.9	40.9	41.5	43.2	44.4	45.0	46.2	47.3	49.1	48.5	48.5
72.5°	27.5	26.9	27.5	28.0	28.6	30.4	30.4	31.0	32.1	32.7	30.4
75°	14.0	14.6	15.8	15.2	16.9	15.8	16.4	18.1	17.5	16.4	16.4
77.5°	11.7	11.7	11.7	11.1	12.3	12.3	11.7	12.9	12.3	12.3	11.7
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°	6.4	5.3	5.8	5.3	5.8	5.8	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



TEST NUMBER: P246176

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5
2.5°	1090.2	1089.7	1090.8	1090.2	1090.2	1089.7	1090.2	1089.7	1090.8	1088.5	1089.1
5°	1090.2	1089.1	1089.7	1090.2	1090.8	1089.7	1089.7	1089.7	1090.8	1089.7	1090.2
7.5°	1087.9	1087.3	1089.1	1090.2	1089.7	1089.1	1090.2	1089.7	1090.8	1090.2	1091.4
10°	1083.2	1083.8	1085.0	1086.7	1087.3	1087.9	1089.1	1089.1	1090.8	1088.5	1089.7
12.5°	1076.2	1078.5	1081.5	1082.6	1085.0	1085.0	1086.1	1086.7	1087.9	1087.3	1089.1
15°	1067.4	1070.4	1073.9	1076.8	1079.7	1081.5	1083.2	1083.8	1085.6	1083.8	1084.4
17.5°	1056.9	1060.4	1065.7	1069.2	1073.9	1075.6	1078.0	1079.1	1080.9	1079.7	1080.3
20°	1042.3	1046.4	1052.3	1057.5	1060.4	1064.5	1067.4	1069.2	1070.4	1069.2	1069.8
22.5°	1021.9	1027.7	1035.3	1039.4	1045.2	1048.8	1049.3	1053.4	1056.3	1053.4	1054.6
25°	997.9	1003.8	1009.6	1018.4	1023.6	1027.7	1031.8	1032.4	1035.3	1034.7	1034.1
27.5°	958.2	965.8	975.7	982.7	989.7	996.2	1000.8	1002.0	1004.9	1003.8	1004.3
30°	903.8	912.0	921.4	932.5	942.4	948.8	954.7	958.8	961.7	959.9	959.4
32.5°	826.7	834.9	844.8	855.9	867.6	877.0	884.0	889.3	892.8	891.6	888.7
35°	738.5	740.8	747.3	756.0	766.0	775.9	782.3	788.2	792.3	793.4	793.4
37.5°	647.9	640.4	635.7	635.7	641.5	645.6	651.5	655.0	661.4	663.7	665.5
40°	560.3	542.8	526.4	514.2	506.0	505.4	505.4	507.1	513.0	520.6	527.6
42.5°	482.0	454.0	428.8	406.1	389.7	380.4	376.3	376.9	381.5	388.5	400.2
45°	419.5	384.4	352.9	325.4	303.2	288.6	281.6	281.0	284.5	292.7	305.6
47.5°	371.0	333.6	298.0	266.4	242.5	226.7	218.5	216.2	218.5	226.1	241.3
50°	330.7	292.1	255.3	222.6	196.9	180.5	172.9	170.0	172.9	179.4	194.6
52.5°	293.3	253.6	219.1	187.5	160.1	146.1	137.9	136.1	137.9	145.5	157.8
55°	250.1	216.2	182.3	150.7	126.8	112.8	106.3	104.6	106.3	113.4	126.2
57.5°	207.4	178.2	148.4	119.8	99.3	87.0	81.2	78.9	83.0	87.6	102.8
60°	167.7	144.3	119.2	94.1	77.1	66.0	61.3	60.8	61.9	67.8	78.3
62.5°	131.5	112.2	92.3	71.9	57.8	53.2	47.3	46.7	47.9	51.4	59.6
65°	94.7	82.4	67.2	52.6	41.5	35.1	32.7	33.3	34.5	36.8	44.4
67.5°	66.0	57.3	46.7	36.8	28.6	25.7	23.4	22.8	23.4	27.5	31.6
70°	44.4	39.1	31.6	28.0	19.9	15.8	16.4	14.6	16.9	16.9	20.4
72.5°	29.2	25.7	21.0	16.4	14.0	11.1	11.1	10.5	11.7	12.3	15.2
75°	15.2	11.7	11.7	8.2	5.8	2.9	5.3	4.7	4.1	4.7	5.8
77.5°	10.5	8.8	8.2	6.4	5.8	4.7	4.7	4.7	4.7	5.3	5.8
80°	6.4	6.4	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



TEST NUMBER: P246176

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5	1088.5
2.5°	1090.2	1090.8	1090.8	1090.2	1090.2	1089.1	1091.4	1089.7	1090.2	1092.6	1090.8
5°	1091.4	1092.0	1092.0	1091.4	1091.4	1091.4	1092.0	1092.0	1091.4	1090.8	1092.0
7.5°	1093.7	1093.2	1093.2	1092.0	1092.0	1090.8	1092.0	1090.2	1091.4	1090.2	1092.0
10°	1090.8	1091.4	1090.8	1090.2	1090.2	1089.7	1089.7	1087.9	1088.5	1086.7	1087.9
12.5°	1089.1	1088.5	1088.5	1087.3	1086.1	1085.0	1084.4	1082.6	1082.6	1078.5	1080.3
15°	1084.4	1085.0	1083.2	1080.9	1079.7	1076.8	1075.6	1073.3	1071.0	1068.0	1068.6
17.5°	1080.3	1078.5	1076.2	1073.9	1069.2	1066.9	1064.5	1061.0	1059.8	1056.3	1055.2
20°	1068.0	1066.9	1063.9	1059.8	1056.9	1051.7	1049.3	1045.8	1042.9	1039.4	1037.6
22.5°	1052.3	1051.1	1047.6	1043.5	1038.8	1036.5	1034.1	1027.7	1024.8	1021.3	1020.7
25°	1032.4	1030.6	1027.1	1022.5	1020.1	1013.7	1011.4	1006.7	1005.5	1002.0	1001.4
27.5°	1002.0	999.7	995.6	989.7	985.6	981.6	979.2	975.7	974.6	971.0	970.5
30°	956.4	953.5	945.3	943.0	936.0	931.9	931.9	927.2	927.8	925.5	925.5
32.5°	884.6	879.9	873.5	868.8	864.1	861.8	861.8	860.0	861.2	861.2	862.4
35°	789.3	782.9	779.4	776.5	776.5	778.8	785.8	787.6	791.1	794.0	796.4
37.5°	667.2	666.6	670.7	674.2	683.0	692.9	705.2	715.7	725.6	732.7	739.7
40°	535.2	549.8	561.5	577.8	591.3	610.6	632.8	650.9	667.8	680.1	692.9
42.5°	417.7	436.4	461.0	484.9	508.9	535.2	564.4	589.5	611.7	628.7	642.1
45°	325.4	351.1	380.9	411.3	442.3	475.0	505.4	531.1	554.5	572.0	585.4
47.5°	262.3	290.4	324.3	357.6	392.6	427.1	461.0	483.2	502.5	516.5	528.8
50°	216.8	246.6	282.2	320.2	355.2	389.7	418.9	440.5	456.3	468.6	476.2
52.5°	181.1	212.7	250.7	288.6	323.7	355.2	381.5	397.9	410.7	419.5	426.5
55°	149.6	180.0	215.6	251.2	285.7	315.5	337.1	349.4	359.3	364.6	368.7
57.5°	122.1	150.2	182.9	215.6	245.4	269.9	286.9	299.1	303.8	307.9	307.3
60°	95.8	122.1	151.9	180.0	205.7	225.5	237.8	244.8	248.3	250.1	248.9
62.5°	75.4	99.3	122.1	146.6	165.3	182.3	194.0	194.0	195.7	196.3	198.1
65°	56.1	74.2	94.1	112.2	127.4	138.5	144.9	146.6	149.0	148.4	147.2
67.5°	41.5	54.9	69.5	83.0	93.5	100.5	105.2	109.3	108.7	107.5	106.9
70°	28.6	37.4	50.3	58.4	66.0	73.0	74.2	74.8	75.4	76.0	74.8
72.5°	19.9	26.3	33.3	40.3	45.0	47.9	50.8	51.4	51.4	51.4	50.8
75°	9.9	13.4	19.9	22.8	26.9	28.0	30.4	30.4	32.1	29.8	29.2
77.5°	8.8	10.5	14.0	16.4	18.1	19.9	20.4	22.2	21.6	20.4	21.0
80°	5.3	6.4	8.8	9.9	12.3	12.9	13.4	14.0	13.4	14.0	14.0
82.5°	4.1	4.7	5.8	5.8	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	5.8	7.0	5.8	5.8	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: P246176

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1088.5	1088.5	1088.5	1088.5
2.5°	1090.2	1091.4	1089.7	1089.1
5°	1092.0	1092.0	1090.8	1090.8
7.5°	1092.0	1092.0	1090.2	1089.1
10°	1087.3	1087.3	1085.6	1084.4
12.5°	1078.5	1078.5	1078.0	1076.2
15°	1067.4	1067.4	1065.1	1063.4
17.5°	1052.3	1053.4	1050.5	1050.5
20°	1035.9	1035.3	1033.0	1031.8
22.5°	1019.0	1017.8	1017.2	1013.7
25°	1000.8	999.7	997.9	996.2
27.5°	969.9	969.3	967.5	965.2
30°	922.5	922.0	919.6	919.6
32.5°	861.2	860.6	858.3	858.9
35°	797.5	799.9	798.7	796.4
37.5°	744.3	746.1	747.3	746.1
40°	699.9	705.2	705.8	707.0
42.5°	652.6	659.6	662.0	663.1
45°	595.9	602.4	607.6	606.5
47.5°	538.1	542.8	547.4	543.9
50°	482.6	485.5	487.3	487.3
52.5°	430.0	430.0	429.4	430.0
55°	369.8	369.8	367.5	368.7
57.5°	306.7	307.9	306.1	303.2
60°	248.3	245.4	244.2	242.5
62.5°	193.4	193.4	189.3	194.6
65°	144.9	143.1	141.4	140.8
67.5°	105.2	104.6	102.8	102.2
70°	74.2	71.9	71.3	70.1
72.5°	49.7	49.7	48.5	48.5
75°	30.4	27.5	26.9	27.5
77.5°	21.0	20.4	20.4	19.9
80°	14.0	13.4	14.6	12.9
82.5°	8.8	9.3	8.8	9.3
85°	5.8	7.0	6.4	6.4
87.5°	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)