

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: P246230

Luminaire Tested: **LSR8B20D010 EC8B20950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246230
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 EC8B20950 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2028.0 lumens
Efficiency: N/A
Efficacy: 95.2 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

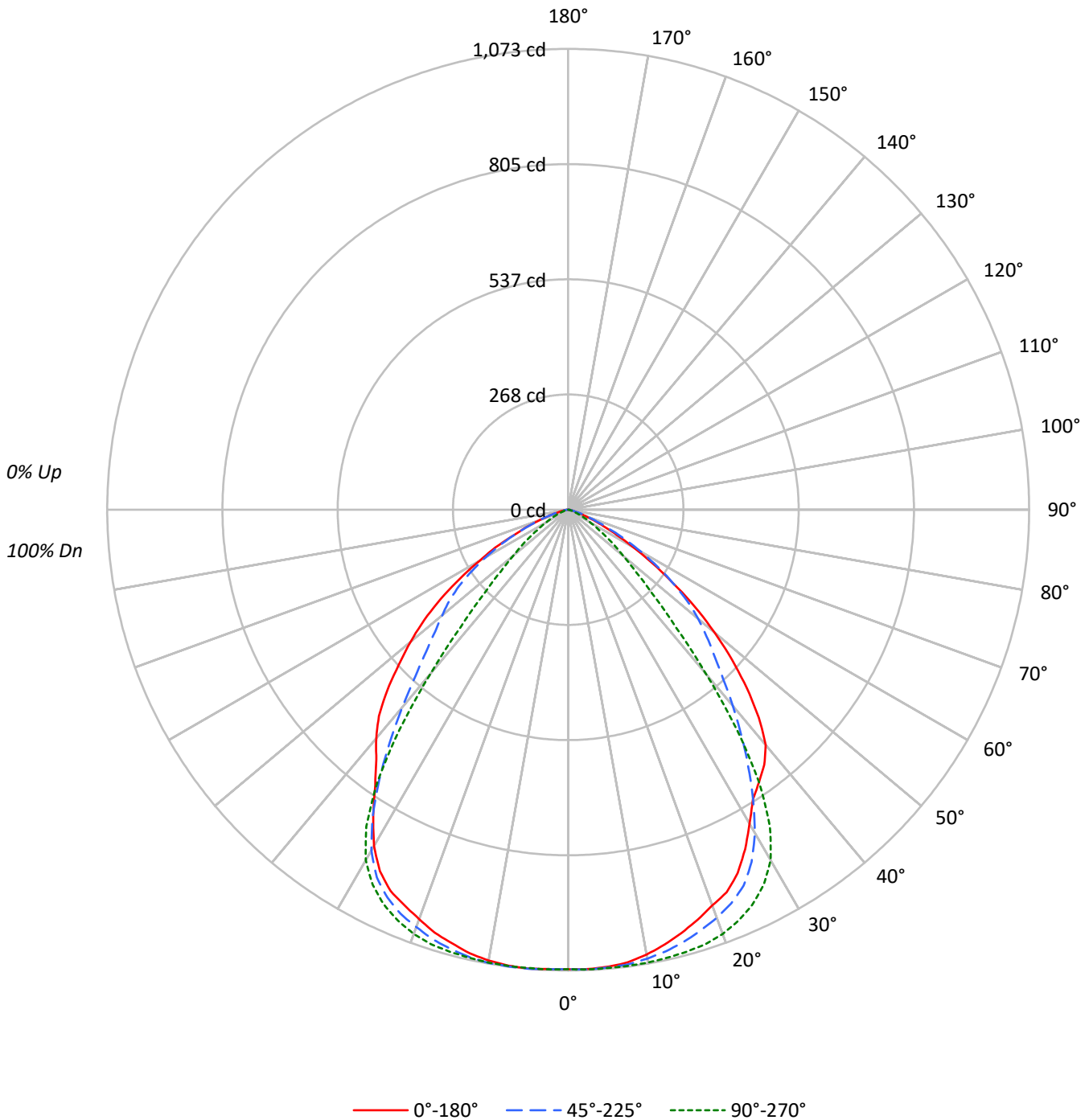
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	32995	32995	32995
5°	33068	33158	33192
10°	32928	33523	33379
15°	32563	34012	33370
20°	32172	34492	33285
25°	31755	34531	33320
30°	30041	33559	32188
35°	29144	29167	29468
40°	28786	20067	27976
45°	25647	12049	26000
50°	21329	8016	22979
55°	15994	5527	19483
60°	10842	3682	14703
65°	6538	2386	10098
70°	3624	1298	6212
75°	1644	548	3217
80°	1421	604	2237
85°	1628	814	2229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.1	5.0
10°-20°	296.6	14.6
20°-30°	450.1	22.2
30°-40°	472.8	23.3
40°-50°	354.5	17.5
50°-60°	227.4	11.2
60°-70°	97.3	4.8
70°-80°	23.0	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°	848.8	41.9
0°-40°	1321.6	65.2
0°-60°	1903.5	93.9
0°-90°	2028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2028.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1070	1070	1070	1070	1070	
5°	1068	1070	1071	1073	1072	101
15°	1020	1041	1065	1058	1045	288
25°	933	966	1015	996	979	426
35°	774	731	775	766	783	486
45°	588	481	276	467	596	450
55°	298	298	103	310	362	270
65°	90	106	33	136	138	96
75°	14	16	5	28	27	20
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°	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0
2.5°	1070.6	1071.7	1071.2	1071.2	1070.6	1071.2	1071.2	1072.3	1072.3	1071.2	1070.6
5°	1068.3	1069.4	1069.4	1068.3	1068.3	1071.2	1069.4	1070.6	1070.6	1070.0	1070.0
7.5°	1063.1	1063.1	1065.4	1063.7	1063.7	1065.4	1064.8	1066.0	1067.1	1067.7	1067.7
10°	1051.6	1052.8	1053.4	1053.4	1053.9	1055.7	1056.8	1059.1	1060.2	1061.4	1062.0
12.5°	1037.3	1039.0	1039.6	1039.0	1040.7	1043.0	1045.9	1048.8	1050.5	1052.8	1054.5
15°	1020.0	1020.0	1021.2	1022.9	1024.1	1027.5	1030.4	1033.8	1038.4	1041.3	1044.2
17.5°	1001.1	1002.2	1004.0	1004.0	1006.3	1012.0	1013.7	1018.9	1024.1	1026.9	1032.7
20°	980.4	981.6	983.3	984.4	987.3	991.9	995.3	999.9	1005.7	1010.9	1016.6
22.5°	964.3	962.0	963.2	964.3	967.2	971.2	975.3	981.0	986.7	991.9	997.7
25°	933.3	933.9	935.6	936.8	940.2	943.7	948.3	955.1	960.3	966.1	972.4
27.5°	891.4	892.0	894.8	894.8	897.7	903.5	906.3	912.1	919.0	924.7	932.2
30°	843.7	844.9	844.9	847.2	848.9	851.8	854.6	860.4	863.8	869.0	879.3
32.5°	800.1	801.2	800.6	800.1	798.3	797.8	797.2	798.3	799.5	801.2	805.2
35°	774.2	771.3	769.1	765.0	760.4	754.7	749.5	742.6	736.3	731.1	725.4
37.5°	749.5	748.9	745.5	739.8	730.6	720.2	708.2	693.2	678.3	662.2	646.7
40°	715.1	713.3	710.5	702.4	692.1	679.5	663.4	645.0	620.9	596.2	570.9
42.5°	656.5	657.1	653.6	647.3	637.5	625.5	608.8	588.7	562.9	533.6	500.8
45°	588.1	588.1	587.0	581.8	574.9	565.2	552.5	535.9	510.6	480.7	445.7
47.5°	516.9	517.5	515.8	514.6	511.7	505.4	496.2	483.6	465.8	437.1	402.0
50°	444.6	444.6	447.4	446.8	446.8	444.6	440.5	433.1	417.6	394.6	361.8
52.5°	372.2	373.3	375.1	377.3	380.2	384.8	380.2	376.8	367.0	349.2	321.1
55°	297.5	298.7	301.5	305.5	309.0	313.6	314.7	314.7	309.6	297.5	276.3
57.5°	233.8	232.0	234.3	237.8	242.4	247.0	250.4	254.4	253.9	245.8	228.6
60°	175.8	176.3	178.0	181.5	184.9	189.0	193.6	197.0	198.7	194.7	183.8
62.5°	128.1	128.1	130.4	133.8	135.5	141.3	144.2	145.9	147.6	147.0	140.1
65°	89.6	90.7	91.9	93.6	95.3	98.8	100.5	104.0	105.1	105.7	100.5
67.5°	63.2	61.5	62.6	63.7	65.5	67.8	71.2	71.2	72.9	72.9	69.5
70°	40.2	40.2	40.8	42.5	43.6	44.2	45.4	46.5	48.2	47.7	47.7
72.5°	27.0	26.4	27.0	27.6	28.1	29.9	29.9	30.4	31.6	32.2	29.9
75°	13.8	14.4	15.5	14.9	16.7	15.5	16.1	17.8	17.2	16.1	16.1
77.5°	11.5	11.5	11.5	10.9	12.1	12.1	11.5	12.6	12.1	12.1	11.5
80°	8.0	8.6	8.0	7.5	8.0	7.5	7.5	7.5	7.5	7.5	6.9
82.5°	6.3	5.2	5.7	5.2	5.7	5.7	5.2	4.6	4.6	5.2	4.6
85°	4.6	3.4	4.0	4.0	3.4	3.4	3.4	3.4	3.4	2.9	2.9
87.5°	2.9	1.7	1.7	1.7	2.3	2.3	2.3	1.7	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°	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0
2.5°	1071.7	1071.2	1072.3	1071.7	1071.7	1071.2	1071.7	1071.2	1072.3	1070.0	1070.6
5°	1071.7	1070.6	1071.2	1071.7	1072.3	1071.2	1071.2	1071.2	1072.3	1071.2	1071.7
7.5°	1069.4	1068.9	1070.6	1071.7	1071.2	1070.6	1071.7	1071.2	1072.3	1071.7	1072.9
10°	1064.8	1065.4	1066.6	1068.3	1068.9	1069.4	1070.6	1070.6	1072.3	1070.0	1071.2
12.5°	1058.0	1060.2	1063.1	1064.3	1066.6	1066.6	1067.7	1068.3	1069.4	1068.9	1070.6
15°	1049.3	1052.2	1055.7	1058.5	1061.4	1063.1	1064.8	1065.4	1067.1	1065.4	1066.0
17.5°	1039.0	1042.4	1047.6	1051.1	1055.7	1057.4	1059.7	1060.8	1062.6	1061.4	1062.0
20°	1024.6	1028.7	1034.4	1039.6	1042.4	1046.5	1049.3	1051.1	1052.2	1051.1	1051.6
22.5°	1004.5	1010.3	1017.7	1021.8	1027.5	1031.0	1031.5	1035.6	1038.4	1035.6	1036.7
25°	981.0	986.7	992.5	1001.1	1006.3	1010.3	1014.3	1014.9	1017.7	1017.2	1016.6
27.5°	941.9	949.4	959.2	966.1	972.9	979.3	983.9	985.0	987.9	986.7	987.3
30°	888.5	896.6	905.8	916.7	926.4	932.7	938.5	942.5	945.4	943.7	943.1
32.5°	812.7	820.7	830.5	841.4	852.9	862.1	869.0	874.2	877.6	876.5	873.6
35°	726.0	728.3	734.6	743.2	753.0	762.7	769.1	774.8	778.8	780.0	780.0
37.5°	637.0	629.5	624.9	624.9	630.6	634.7	640.4	643.8	650.2	652.5	654.2
40°	550.8	533.6	517.5	505.4	497.4	496.8	496.8	498.5	504.3	511.7	518.6
42.5°	473.8	446.3	421.6	399.2	383.1	373.9	369.9	370.5	375.1	381.9	393.4
45°	412.4	377.9	346.9	319.9	298.1	283.7	276.8	276.3	279.7	287.7	300.4
47.5°	364.7	328.0	292.9	261.9	238.4	222.8	214.8	212.5	214.8	222.3	237.2
50°	325.1	287.2	251.0	218.8	193.6	177.5	170.0	167.1	170.0	176.3	191.3
52.5°	288.3	249.3	215.4	184.4	157.4	143.6	135.5	133.8	135.5	143.0	155.1
55°	245.8	212.5	179.2	148.2	124.6	110.9	104.5	102.8	104.5	111.4	124.1
57.5°	203.9	175.2	145.9	117.7	97.6	85.6	79.8	77.5	81.6	86.1	101.1
60°	164.8	141.9	117.2	92.5	75.8	64.9	60.3	59.7	60.9	66.6	77.0
62.5°	129.2	110.3	90.7	70.6	56.9	52.3	46.5	46.0	47.1	50.5	58.6
65°	93.0	81.0	66.1	51.7	40.8	34.5	32.2	32.7	33.9	36.2	43.6
67.5°	64.9	56.3	46.0	36.2	28.1	25.3	23.0	22.4	23.0	27.0	31.0
70°	43.6	38.5	31.0	27.6	19.5	15.5	16.1	14.4	16.7	16.7	20.1
72.5°	28.7	25.3	20.7	16.1	13.8	10.9	10.9	10.3	11.5	12.1	14.9
75°	14.9	11.5	11.5	8.0	5.7	2.9	5.2	4.6	4.0	4.6	5.7
77.5°	10.3	8.6	8.0	6.3	5.7	4.6	4.6	4.6	4.6	5.2	5.7
80°	6.3	6.3	4.6	4.0	3.4	2.9	3.4	3.4	3.4	3.4	4.0
82.5°	4.0	3.4	3.4	2.9	2.9	2.3	2.3	2.3	2.3	2.3	3.4
85°	3.4	2.3	2.3	1.7	2.3	4.0	1.7	2.3	2.3	2.3	1.7
87.5°	1.2	1.7	1.7	1.7	1.2	0.6	1.2	1.7	1.7	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°	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0
2.5°	1071.7	1072.3	1072.3	1071.7	1071.7	1070.6	1072.9	1071.2	1071.7	1074.0	1072.3
5°	1072.9	1073.5	1073.5	1072.9	1072.9	1072.9	1073.5	1073.5	1072.9	1072.3	1073.5
7.5°	1075.2	1074.6	1074.6	1073.5	1073.5	1072.3	1073.5	1071.7	1072.9	1071.7	1073.5
10°	1072.3	1072.9	1072.3	1071.7	1071.7	1071.2	1071.2	1069.4	1070.0	1068.3	1069.4
12.5°	1070.6	1070.0	1070.0	1068.9	1067.7	1066.6	1066.0	1064.3	1064.3	1060.2	1062.0
15°	1066.0	1066.6	1064.8	1062.6	1061.4	1058.5	1057.4	1055.1	1052.8	1049.9	1050.5
17.5°	1062.0	1060.2	1058.0	1055.7	1051.1	1048.8	1046.5	1043.0	1041.9	1038.4	1037.3
20°	1049.9	1048.8	1045.9	1041.9	1039.0	1033.8	1031.5	1028.1	1025.2	1021.8	1020.0
22.5°	1034.4	1033.2	1029.8	1025.8	1021.2	1018.9	1016.6	1010.3	1007.4	1004.0	1003.4
25°	1014.9	1013.2	1009.7	1005.1	1002.8	996.5	994.2	989.6	988.5	985.0	984.4
27.5°	985.0	982.7	978.7	972.9	968.9	964.9	962.6	959.2	958.0	954.6	954.0
30°	940.2	937.3	929.3	927.0	920.1	916.1	916.1	911.5	912.1	909.8	909.8
32.5°	869.6	865.0	858.6	854.1	849.5	847.2	847.2	845.4	846.6	846.6	847.7
35°	775.9	769.6	766.2	763.3	763.3	765.6	772.5	774.2	777.7	780.5	782.8
37.5°	655.9	655.3	659.4	662.8	671.4	681.2	693.2	703.6	713.3	720.2	727.1
40°	526.1	540.5	551.9	568.0	581.2	600.2	622.0	639.8	656.5	668.5	681.2
42.5°	410.7	429.0	453.2	476.7	500.3	526.1	554.8	579.5	601.3	618.0	631.2
45°	319.9	345.2	374.5	404.3	434.8	467.0	496.8	522.1	545.1	562.3	575.5
47.5°	257.9	285.5	318.8	351.5	386.0	419.8	453.2	475.0	493.9	507.7	519.8
50°	213.1	242.4	277.4	314.7	349.2	383.1	411.8	433.1	448.6	460.6	468.1
52.5°	178.0	209.1	246.4	283.7	318.2	349.2	375.1	391.1	403.8	412.4	419.3
55°	147.0	176.9	211.9	247.0	280.9	310.1	331.4	343.5	353.2	358.4	362.4
57.5°	120.0	147.6	179.8	211.9	241.2	265.4	282.0	294.1	298.7	302.7	302.1
60°	94.2	120.0	149.3	176.9	202.2	221.7	233.8	240.7	244.1	245.8	244.7
62.5°	74.1	97.6	120.0	144.2	162.5	179.2	190.7	190.7	192.4	193.0	194.7
65°	55.1	72.9	92.5	110.3	125.2	136.1	142.4	144.2	146.5	145.9	144.7
67.5°	40.8	54.0	68.3	81.6	91.9	98.8	103.4	107.4	106.8	105.7	105.1
70°	28.1	36.8	49.4	57.4	64.9	71.8	72.9	73.5	74.1	74.7	73.5
72.5°	19.5	25.8	32.7	39.6	44.2	47.1	50.0	50.5	50.5	50.5	50.0
75°	9.8	13.2	19.5	22.4	26.4	27.6	29.9	29.9	31.6	29.3	28.7
77.5°	8.6	10.3	13.8	16.1	17.8	19.5	20.1	21.8	21.2	20.1	20.7
80°	5.2	6.3	8.6	9.8	12.1	12.6	13.2	13.8	13.2	13.8	13.8
82.5°	4.0	4.6	5.7	5.7	7.5	7.5	8.0	8.0	8.6	8.6	8.6
85°	2.3	4.0	3.4	6.9	4.6	4.6	5.7	6.9	5.7	5.7	6.9
87.5°	2.3	2.3	1.7	2.3	2.3	2.3	2.9	3.4	3.4	4.0	3.4
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: P246230

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1070.0	1070.0	1070.0	1070.0
2.5°	1071.7	1072.9	1071.2	1070.6
5°	1073.5	1073.5	1072.3	1072.3
7.5°	1073.5	1073.5	1071.7	1070.6
10°	1068.9	1068.9	1067.1	1066.0
12.5°	1060.2	1060.2	1059.7	1058.0
15°	1049.3	1049.3	1047.0	1045.3
17.5°	1034.4	1035.6	1032.7	1032.7
20°	1018.3	1017.7	1015.5	1014.3
22.5°	1001.7	1000.5	999.9	996.5
25°	983.9	982.7	981.0	979.3
27.5°	953.4	952.8	951.1	948.8
30°	906.9	906.3	904.0	904.0
32.5°	846.6	846.0	843.7	844.3
35°	784.0	786.3	785.1	782.8
37.5°	731.7	733.4	734.6	733.4
40°	688.1	693.2	693.8	695.0
42.5°	641.6	648.4	650.7	651.9
45°	585.8	592.2	597.3	596.2
47.5°	529.0	533.6	538.2	534.7
50°	474.4	477.3	479.0	479.0
52.5°	422.7	422.7	422.2	422.7
55°	363.6	363.6	361.3	362.4
57.5°	301.5	302.7	301.0	298.1
60°	244.1	241.2	240.1	238.4
62.5°	190.1	190.1	186.1	191.3
65°	142.4	140.7	139.0	138.4
67.5°	103.4	102.8	101.1	100.5
70°	72.9	70.6	70.1	68.9
72.5°	48.8	48.8	47.7	47.7
75°	29.9	27.0	26.4	27.0
77.5°	20.7	20.1	20.1	19.5
80°	13.8	13.2	14.4	12.6
82.5°	8.6	9.2	8.6	9.2
85°	5.7	6.9	6.3	6.3
87.5°	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)