

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: P244646

Luminaire Tested: **LSR8B20D010 EC8B20950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244646
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2051.0 lumens
Efficiency: N/A
Efficacy: 96.3 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

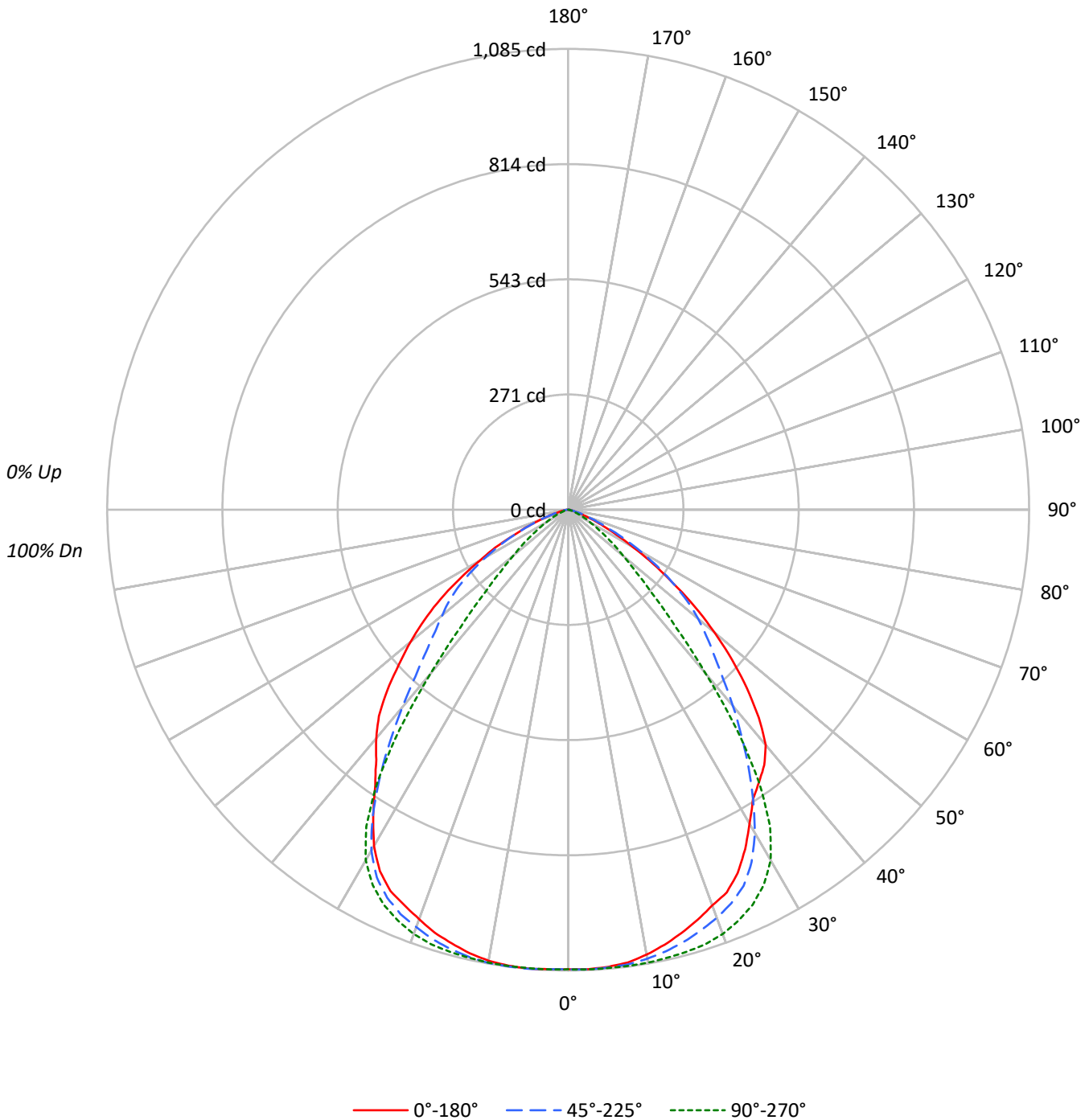
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244646

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0H

Luminous Intensity Polar Plot





TEST NUMBER: P244646

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0H

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°	33368	33368	33368
5°	33443	33533	33570
10°	33303	33902	33757
15°	32933	34398	33750
20°	32536	34883	33662
25°	32115	34922	33697
30°	30383	33940	32555
35°	29475	29498	29803
40°	29112	20296	28295
45°	25939	12184	26292
50°	21569	8107	23238
55°	16177	5591	19704
60°	10959	3725	14869
65°	6611	2415	10215
70°	3669	1307	6284
75°	1656	548	3253
80°	1438	622	2273
85°	1628	814	2264



TEST NUMBER: P244646

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	5.0
10°-20°	299.9	14.6
20°-30°	455.2	22.2
30°-40°	478.1	23.3
40°-50°	358.5	17.5
50°-60°	230.0	11.2
60°-70°	98.4	4.8
70°-80°	23.2	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°	858.4	41.9
0°-40°	1336.6	65.2
0°-60°	1925.0	93.9
0°-90°	2051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2051.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1082	1082	1082	1082	1082	
5°	1080	1082	1083	1085	1084	103
15°	1032	1053	1078	1070	1057	291
25°	944	977	1026	1008	990	431
35°	783	739	784	774	792	491
45°	595	486	279	472	603	456
55°	301	301	104	314	366	273
65°	91	107	33	138	140	97
75°	14	16	5	28	27	20
85°	5	3	2	5	6	5
90°	0	0	0	0	0	



TEST NUMBER: P244646

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1
2.5°	1082.7	1083.9	1083.3	1083.3	1082.7	1083.3	1083.3	1084.5	1084.5	1083.3	1082.7
5°	1080.4	1081.6	1081.6	1080.4	1080.4	1083.3	1081.6	1082.7	1082.7	1082.1	1082.1
7.5°	1075.2	1075.2	1077.5	1075.8	1075.8	1077.5	1076.9	1078.1	1079.2	1079.8	1079.8
10°	1063.6	1064.7	1065.3	1065.3	1065.9	1067.6	1068.8	1071.1	1072.3	1073.4	1074.0
12.5°	1049.0	1050.8	1051.4	1050.8	1052.5	1054.8	1057.8	1060.7	1062.4	1064.7	1066.5
15°	1031.6	1031.6	1032.8	1034.5	1035.7	1039.2	1042.1	1045.6	1050.2	1053.1	1056.0
17.5°	1012.4	1013.6	1015.3	1015.3	1017.7	1023.5	1025.2	1030.5	1035.7	1038.6	1044.4
20°	991.5	992.7	994.4	995.6	998.5	1003.2	1006.6	1011.3	1017.1	1022.3	1028.1
22.5°	975.3	973.0	974.1	975.3	978.2	982.2	986.3	992.1	997.9	1003.2	1009.0
25°	943.9	944.5	946.2	947.4	950.9	954.4	959.0	966.0	971.2	977.0	983.4
27.5°	901.5	902.1	905.0	905.0	907.9	913.7	916.6	922.4	929.4	935.2	942.7
30°	853.3	854.4	854.4	856.8	858.5	861.4	864.3	870.1	873.6	878.8	889.3
32.5°	809.1	810.3	809.7	809.1	807.4	806.8	806.2	807.4	808.6	810.3	814.4
35°	783.0	780.1	777.8	773.7	769.1	763.3	758.0	751.1	744.7	739.4	733.6
37.5°	758.0	757.4	754.0	748.1	738.9	728.4	716.2	701.1	686.0	669.7	654.1
40°	723.2	721.4	718.5	710.4	699.9	687.2	670.9	652.3	627.9	602.9	577.4
42.5°	663.9	664.5	661.0	654.6	644.8	632.6	615.7	595.4	569.3	539.6	506.5
45°	594.8	594.8	593.6	588.4	581.4	571.6	558.8	541.9	516.4	486.2	450.7
47.5°	522.8	523.4	521.6	520.5	517.5	511.2	501.9	489.1	471.1	442.0	406.6
50°	449.6	449.6	452.5	451.9	451.9	449.6	445.5	438.0	422.3	399.1	366.0
52.5°	376.4	377.6	379.3	381.6	384.5	389.2	384.5	381.0	371.2	353.2	324.7
55°	300.9	302.1	304.9	309.0	312.5	317.2	318.3	318.3	313.1	300.9	279.4
57.5°	236.4	234.7	237.0	240.5	245.1	249.8	253.3	257.3	256.7	248.6	231.2
60°	177.7	178.3	180.1	183.6	187.0	191.1	195.8	199.2	201.0	196.9	185.9
62.5°	129.5	129.5	131.9	135.3	137.1	142.9	145.8	147.5	149.3	148.7	141.7
65°	90.6	91.8	92.9	94.7	96.4	99.9	101.6	105.1	106.3	106.9	101.6
67.5°	63.9	62.2	63.3	64.5	66.2	68.5	72.0	72.0	73.8	73.8	70.3
70°	40.7	40.7	41.2	43.0	44.1	44.7	45.9	47.0	48.8	48.2	48.2
72.5°	27.3	26.7	27.3	27.9	28.5	30.2	30.2	30.8	32.0	32.5	30.2
75°	13.9	14.5	15.7	15.1	16.8	15.7	16.3	18.0	17.4	16.3	16.3
77.5°	11.6	11.6	11.6	11.0	12.2	12.2	11.6	12.8	12.2	12.2	11.6
80°	8.1	8.7	8.1	7.5	8.1	7.5	7.5	7.5	7.5	7.5	7.0
82.5°	6.4	5.2	5.8	5.2	5.8	5.8	5.2	4.6	4.6	5.2	4.6
85°	4.6	3.5	4.1	4.1	3.5	3.5	3.5	3.5	3.5	2.9	2.9
87.5°	2.9	1.7	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



TEST NUMBER: P244646

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1
2.5°	1083.9	1083.3	1084.5	1083.9	1083.9	1083.3	1083.9	1083.3	1084.5	1082.1	1082.7
5°	1083.9	1082.7	1083.3	1083.9	1084.5	1083.3	1083.3	1083.3	1084.5	1083.3	1083.9
7.5°	1081.6	1081.0	1082.7	1083.9	1083.3	1082.7	1083.9	1083.3	1084.5	1083.9	1085.0
10°	1076.9	1077.5	1078.7	1080.4	1081.0	1081.6	1082.7	1082.7	1084.5	1082.1	1083.3
12.5°	1070.0	1072.3	1075.2	1076.3	1078.7	1078.7	1079.8	1080.4	1081.6	1081.0	1082.7
15°	1061.2	1064.1	1067.6	1070.5	1073.4	1075.2	1076.9	1077.5	1079.2	1077.5	1078.1
17.5°	1050.8	1054.3	1059.5	1063.0	1067.6	1069.4	1071.7	1072.9	1074.6	1073.4	1074.0
20°	1036.3	1040.3	1046.1	1051.4	1054.3	1058.3	1061.2	1063.0	1064.1	1063.0	1063.6
22.5°	1015.9	1021.7	1029.3	1033.4	1039.2	1042.7	1043.2	1047.3	1050.2	1047.3	1048.5
25°	992.1	997.9	1003.7	1012.4	1017.7	1021.7	1025.8	1026.4	1029.3	1028.7	1028.1
27.5°	952.6	960.2	970.0	977.0	984.0	990.4	995.0	996.2	999.1	997.9	998.5
30°	898.6	906.7	916.0	927.1	936.9	943.3	949.1	953.2	956.1	954.4	953.8
32.5°	821.9	830.1	839.9	851.0	862.6	871.9	878.8	884.1	887.6	886.4	883.5
35°	734.2	736.5	742.9	751.6	761.5	771.4	777.8	783.6	787.6	788.8	788.8
37.5°	644.2	636.6	632.0	632.0	637.8	641.8	647.7	651.1	657.5	659.9	661.6
40°	557.0	539.6	523.4	511.2	503.0	502.5	502.5	504.2	510.0	517.5	524.5
42.5°	479.2	451.3	426.4	403.7	387.4	378.1	374.1	374.7	379.3	386.3	397.9
45°	417.1	382.2	350.8	323.5	301.5	286.9	280.0	279.4	282.9	291.0	303.8
47.5°	368.9	331.7	296.2	264.9	241.1	225.4	217.2	214.9	217.2	224.8	239.9
50°	328.8	290.4	253.8	221.3	195.8	179.5	171.9	169.0	171.9	178.3	193.4
52.5°	291.6	252.1	217.8	186.5	159.2	145.2	137.1	135.3	137.1	144.6	156.8
55°	248.6	214.9	181.2	149.9	126.1	112.1	105.7	104.0	105.7	112.7	125.5
57.5°	206.2	177.2	147.5	119.1	98.8	86.5	80.7	78.4	82.5	87.1	102.2
60°	166.7	143.5	118.5	93.5	76.7	65.6	61.0	60.4	61.6	67.4	77.8
62.5°	130.7	111.5	91.8	71.4	57.5	52.9	47.0	46.5	47.6	51.1	59.3
65°	94.1	81.9	66.8	52.3	41.2	34.8	32.5	33.1	34.3	36.6	44.1
67.5°	65.6	56.9	46.5	36.6	28.5	25.6	23.2	22.7	23.2	27.3	31.4
70°	44.1	38.9	31.4	27.9	19.8	15.7	16.3	14.5	16.8	16.8	20.3
72.5°	29.0	25.6	20.9	16.3	13.9	11.0	11.0	10.5	11.6	12.2	15.1
75°	15.1	11.6	11.6	8.1	5.8	2.9	5.2	4.6	4.1	4.6	5.8
77.5°	10.5	8.7	8.1	6.4	5.8	4.6	4.6	4.6	4.6	5.2	5.8
80°	6.4	6.4	4.6	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	1.7	2.3	4.1	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



TEST NUMBER: P244646

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1
2.5°	1083.9	1084.5	1084.5	1083.9	1083.9	1082.7	1085.0	1083.3	1083.9	1086.2	1084.5
5°	1085.0	1085.6	1085.6	1085.0	1085.0	1085.0	1085.6	1085.6	1085.0	1084.5	1085.6
7.5°	1087.4	1086.8	1086.8	1085.6	1085.6	1084.5	1085.6	1083.9	1085.0	1083.9	1085.6
10°	1084.5	1085.0	1084.5	1083.9	1083.9	1083.3	1083.3	1081.6	1082.1	1080.4	1081.6
12.5°	1082.7	1082.1	1082.1	1081.0	1079.8	1078.7	1078.1	1076.3	1076.3	1072.3	1074.0
15°	1078.1	1078.7	1076.9	1074.6	1073.4	1070.5	1069.4	1067.0	1064.7	1061.8	1062.4
17.5°	1074.0	1072.3	1070.0	1067.6	1063.0	1060.7	1058.3	1054.8	1053.7	1050.2	1049.0
20°	1061.8	1060.7	1057.8	1053.7	1050.8	1045.6	1043.2	1039.8	1036.8	1033.4	1031.6
22.5°	1046.1	1045.0	1041.5	1037.4	1032.8	1030.5	1028.1	1021.7	1018.8	1015.3	1014.8
25°	1026.4	1024.6	1021.2	1016.5	1014.2	1007.8	1005.5	1000.8	999.7	996.2	995.6
27.5°	996.2	993.9	989.8	984.0	979.9	975.9	973.5	970.0	968.9	965.4	964.8
30°	950.9	948.0	939.8	937.5	930.5	926.5	926.5	921.8	922.4	920.1	920.1
32.5°	879.4	874.8	868.4	863.7	859.1	856.8	856.8	855.0	856.2	856.2	857.4
35°	784.7	778.4	774.9	772.0	772.0	774.3	781.3	783.0	786.5	789.4	791.7
37.5°	663.3	662.8	666.8	670.3	679.0	688.9	701.1	711.6	721.4	728.4	735.4
40°	532.1	546.6	558.2	574.5	587.8	607.0	629.1	647.1	663.9	676.1	688.9
42.5°	415.3	433.9	458.3	482.1	505.9	532.1	561.1	586.1	608.2	625.0	638.4
45°	323.5	349.1	378.7	408.9	439.7	472.2	502.5	528.0	551.2	568.7	582.0
47.5°	260.8	288.7	322.4	355.5	390.3	424.6	458.3	480.4	499.5	513.5	525.7
50°	215.5	245.1	280.6	318.3	353.2	387.4	416.5	438.0	453.7	465.9	473.4
52.5°	180.1	211.4	249.2	286.9	321.8	353.2	379.3	395.6	408.3	417.1	424.0
55°	148.7	178.9	214.3	249.8	284.0	313.7	335.2	347.4	357.2	362.5	366.5
57.5°	121.4	149.3	181.8	214.3	244.0	268.4	285.2	297.4	302.1	306.1	305.5
60°	95.3	121.4	151.0	178.9	204.5	224.2	236.4	243.4	246.9	248.6	247.4
62.5°	74.9	98.8	121.4	145.8	164.4	181.2	192.9	192.9	194.6	195.2	196.9
65°	55.8	73.8	93.5	111.5	126.6	137.7	144.1	145.8	148.1	147.5	146.4
67.5°	41.2	54.6	69.1	82.5	92.9	99.9	104.5	108.6	108.0	106.9	106.3
70°	28.5	37.2	50.0	58.1	65.6	72.6	73.8	74.3	74.9	75.5	74.3
72.5°	19.8	26.1	33.1	40.1	44.7	47.6	50.5	51.1	51.1	51.1	50.5
75°	9.9	13.4	19.8	22.7	26.7	27.9	30.2	30.2	32.0	29.6	29.0
77.5°	8.7	10.5	13.9	16.3	18.0	19.8	20.3	22.1	21.5	20.3	20.9
80°	5.2	6.4	8.7	9.9	12.2	12.8	13.4	13.9	13.4	13.9	13.9
82.5°	4.1	4.6	5.8	5.8	7.5	7.5	8.1	8.1	8.7	8.7	8.7
85°	2.3	4.1	3.5	7.0	4.6	4.6	5.8	7.0	5.8	5.8	7.0
87.5°	2.3	2.3	1.7	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: P244646

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1082.1	1082.1	1082.1	1082.1
2.5°	1083.9	1085.0	1083.3	1082.7
5°	1085.6	1085.6	1084.5	1084.5
7.5°	1085.6	1085.6	1083.9	1082.7
10°	1081.0	1081.0	1079.2	1078.1
12.5°	1072.3	1072.3	1071.7	1070.0
15°	1061.2	1061.2	1058.9	1057.2
17.5°	1046.1	1047.3	1044.4	1044.4
20°	1029.9	1029.3	1027.0	1025.8
22.5°	1013.0	1011.9	1011.3	1007.8
25°	995.0	993.9	992.1	990.4
27.5°	964.2	963.7	961.9	959.6
30°	917.2	916.6	914.3	914.3
32.5°	856.2	855.6	853.3	853.9
35°	792.9	795.2	794.0	791.7
37.5°	740.0	741.8	742.9	741.8
40°	695.9	701.1	701.7	702.9
42.5°	648.8	655.8	658.1	659.3
45°	592.5	598.9	604.1	602.9
47.5°	535.0	539.6	544.3	540.8
50°	479.8	482.7	484.4	484.4
52.5°	427.5	427.5	426.9	427.5
55°	367.7	367.7	365.4	366.5
57.5°	304.9	306.1	304.4	301.5
60°	246.9	244.0	242.8	241.1
62.5°	192.3	192.3	188.2	193.4
65°	144.1	142.3	140.6	140.0
67.5°	104.5	104.0	102.2	101.6
70°	73.8	71.4	70.9	69.7
72.5°	49.4	49.4	48.2	48.2
75°	30.2	27.3	26.7	27.3
77.5°	20.9	20.3	20.3	19.8
80°	13.9	13.4	14.5	12.8
82.5°	8.7	9.3	8.7	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)