

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: P246146

Luminaire Tested: **LSR8B20D010 EC8B20935 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246146
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 EC8B20935 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1679.0 lumens
Efficiency: N/A
Efficacy: 78.8 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

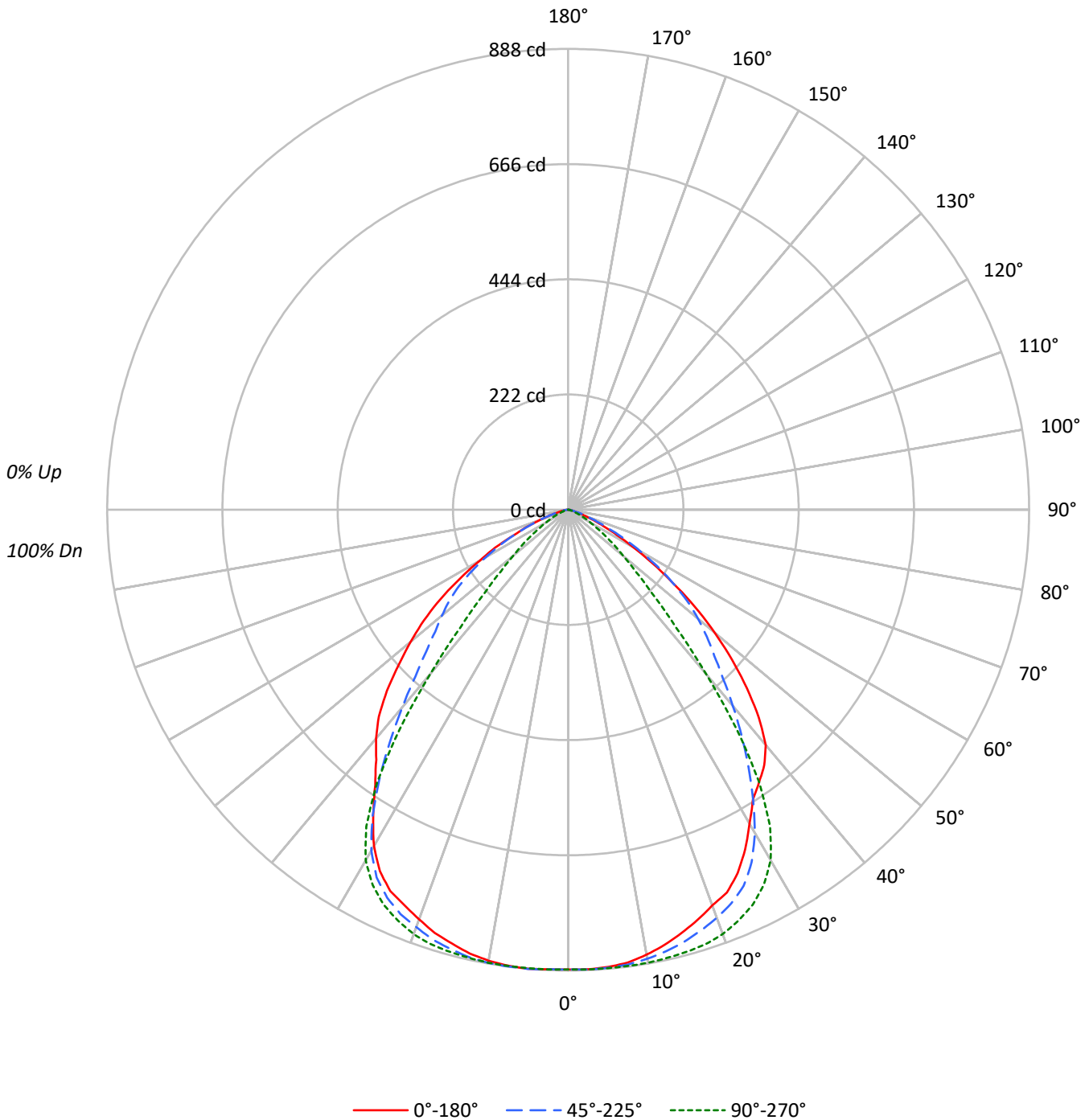
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P246146

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0B

Luminous Intensity Polar Plot





TEST NUMBER: P246146

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0B

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°	27318	27318	27318
5°	27376	27450	27481
10°	27263	27755	27633
15°	26960	28160	27627
20°	26636	28556	27558
25°	26290	28587	27583
30°	24871	27784	26652
35°	24130	24149	24397
40°	23830	16613	23162
45°	21233	9973	21525
50°	17654	6639	19026
55°	13241	4575	16128
60°	8973	3047	12168
65°	5414	1977	8362
70°	3002	1073	5148
75°	1358	453	2669
80°	1190	515	1865
85°	1344	672	1840



TEST NUMBER: P246146

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	5.0
10°-20°	245.5	14.6
20°-30°	372.7	22.2
30°-40°	391.4	23.3
40°-50°	293.4	17.5
50°-60°	188.3	11.2
60°-70°	80.5	4.8
70°-80°	19.0	1.1
80°-90°	3.5	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°	702.7	41.9
0°-40°	1094.1	65.2
0°-60°	1575.9	93.9
0°-90°	1679.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1679.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	886	886	886	886	886	
5°	884	886	887	888	888	84
15°	844	862	882	876	865	238
25°	773	800	840	825	811	353
35°	641	605	642	634	648	402
45°	487	398	229	387	494	373
55°	246	246	85	257	300	223
65°	74	88	27	113	115	79
75°	11	13	4	23	22	17
85°	4	2	2	4	5	4
90°	0	0	0	0	0	



TEST NUMBER: P246146

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9
2.5°	886.4	887.3	886.8	886.8	886.4	886.8	886.8	887.8	887.8	886.8	886.4
5°	884.4	885.4	885.4	884.4	884.4	886.8	885.4	886.4	886.4	885.9	885.9
7.5°	880.2	880.2	882.1	880.6	880.6	882.1	881.6	882.5	883.5	884.0	884.0
10°	870.7	871.6	872.1	872.1	872.6	874.0	874.9	876.8	877.8	878.7	879.2
12.5°	858.8	860.2	860.7	860.2	861.6	863.5	865.9	868.3	869.7	871.6	873.0
15°	844.5	844.5	845.5	846.9	847.8	850.7	853.1	855.9	859.7	862.1	864.5
17.5°	828.8	829.8	831.2	831.2	833.1	837.8	839.3	843.6	847.8	850.2	855.0
20°	811.7	812.6	814.1	815.0	817.4	821.2	824.1	827.9	832.6	836.9	841.6
22.5°	798.4	796.5	797.4	798.4	800.8	804.1	807.4	812.2	816.9	821.2	826.0
25°	772.7	773.2	774.6	775.6	778.4	781.3	785.1	790.8	795.1	799.8	805.0
27.5°	738.0	738.5	740.8	740.8	743.2	748.0	750.3	755.1	760.8	765.6	771.8
30°	698.5	699.5	699.5	701.4	702.8	705.2	707.6	712.3	715.2	719.4	728.0
32.5°	662.4	663.3	662.9	662.4	661.0	660.5	660.0	661.0	661.9	663.3	666.7
35°	641.0	638.6	636.7	633.4	629.6	624.8	620.5	614.8	609.6	605.3	600.6
37.5°	620.5	620.1	617.2	612.5	604.8	596.3	586.3	573.9	561.6	548.3	535.4
40°	592.0	590.6	588.2	581.5	573.0	562.5	549.2	534.0	514.0	493.6	472.7
42.5°	543.5	544.0	541.1	535.9	527.8	517.8	504.0	487.4	466.0	441.7	414.6
45°	486.9	486.9	486.0	481.7	476.0	467.9	457.4	443.7	422.7	398.0	369.0
47.5°	428.0	428.4	427.0	426.1	423.7	418.5	410.8	400.4	385.6	361.9	332.9
50°	368.0	368.0	370.4	369.9	369.9	368.0	364.7	358.5	345.7	326.7	299.6
52.5°	308.1	309.1	310.5	312.4	314.8	318.6	314.8	311.9	303.8	289.1	265.8
55°	246.3	247.3	249.6	253.0	255.8	259.6	260.6	260.6	256.3	246.3	228.7
57.5°	193.5	192.1	194.0	196.9	200.7	204.5	207.3	210.7	210.2	203.5	189.3
60°	145.5	146.0	147.4	150.3	153.1	156.4	160.2	163.1	164.5	161.2	152.2
62.5°	106.0	106.0	107.9	110.8	112.2	117.0	119.4	120.8	122.2	121.7	116.0
65°	74.2	75.1	76.1	77.5	78.9	81.8	83.2	86.1	87.0	87.5	83.2
67.5°	52.3	50.9	51.8	52.8	54.2	56.1	59.0	59.0	60.4	60.4	57.5
70°	33.3	33.3	33.8	35.2	36.1	36.6	37.6	38.5	39.9	39.5	39.5
72.5°	22.4	21.9	22.4	22.8	23.3	24.7	24.7	25.2	26.2	26.6	24.7
75°	11.4	11.9	12.8	12.4	13.8	12.8	13.3	14.7	14.3	13.3	13.3
77.5°	9.5	9.5	9.5	9.0	10.0	10.0	9.5	10.5	10.0	10.0	9.5
80°	6.7	7.1	6.7	6.2	6.7	6.2	6.2	6.2	6.2	6.2	5.7
82.5°	5.2	4.3	4.8	4.3	4.8	4.8	4.3	3.8	3.8	4.3	3.8
85°	3.8	2.9	3.3	3.3	2.9	2.9	2.9	2.9	2.9	2.4	2.4
87.5°	2.4	1.4	1.4	1.4	1.9	1.9	1.9	1.4	1.9	1.9	1.0
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: P246146

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9
2.5°	887.3	886.8	887.8	887.3	887.3	886.8	887.3	886.8	887.8	885.9	886.4
5°	887.3	886.4	886.8	887.3	887.8	886.8	886.8	886.8	887.8	886.8	887.3
7.5°	885.4	884.9	886.4	887.3	886.8	886.4	887.3	886.8	887.8	887.3	888.2
10°	881.6	882.1	883.0	884.4	884.9	885.4	886.4	886.4	887.8	885.9	886.8
12.5°	875.9	877.8	880.2	881.1	883.0	883.0	884.0	884.4	885.4	884.9	886.4
15°	868.8	871.1	874.0	876.4	878.7	880.2	881.6	882.1	883.5	882.1	882.5
17.5°	860.2	863.0	867.3	870.2	874.0	875.4	877.3	878.3	879.7	878.7	879.2
20°	848.3	851.6	856.4	860.7	863.0	866.4	868.8	870.2	871.1	870.2	870.7
22.5°	831.7	836.4	842.6	845.9	850.7	853.5	854.0	857.3	859.7	857.3	858.3
25°	812.2	816.9	821.7	828.8	833.1	836.4	839.8	840.2	842.6	842.1	841.6
27.5°	779.8	786.0	794.1	799.8	805.5	810.7	814.6	815.5	817.9	816.9	817.4
30°	735.6	742.3	749.9	758.9	767.0	772.2	777.0	780.3	782.7	781.3	780.8
32.5°	672.8	679.5	687.6	696.6	706.1	713.7	719.4	723.7	726.6	725.6	723.3
35°	601.0	602.9	608.2	615.3	623.4	631.5	636.7	641.5	644.8	645.7	645.7
37.5°	527.3	521.2	517.4	517.4	522.1	525.4	530.2	533.0	538.3	540.2	541.6
40°	456.0	441.7	428.4	418.5	411.8	411.3	411.3	412.7	417.5	423.7	429.4
42.5°	392.3	369.5	349.0	330.5	317.2	309.6	306.2	306.7	310.5	316.2	325.7
45°	341.4	312.9	287.2	264.9	246.8	234.9	229.2	228.7	231.6	238.2	248.7
47.5°	302.0	271.5	242.5	216.8	197.3	184.5	177.8	175.9	177.8	184.0	196.4
50°	269.1	237.8	207.8	181.2	160.2	146.9	140.7	138.4	140.7	146.0	158.3
52.5°	238.7	206.4	178.3	152.6	130.3	118.9	112.2	110.8	112.2	118.4	128.4
55°	203.5	175.9	148.4	122.7	103.2	91.8	86.5	85.1	86.5	92.3	102.7
57.5°	168.8	145.0	120.8	97.5	80.8	70.8	66.1	64.2	67.5	71.3	83.7
60°	136.5	117.5	97.0	76.6	62.8	53.7	49.9	49.4	50.4	55.2	63.7
62.5°	107.0	91.3	75.1	58.5	47.1	43.3	38.5	38.0	39.0	41.8	48.5
65°	77.0	67.1	54.7	42.8	33.8	28.5	26.6	27.1	28.1	30.0	36.1
67.5°	53.7	46.6	38.0	30.0	23.3	20.9	19.0	18.5	19.0	22.4	25.7
70°	36.1	31.9	25.7	22.8	16.2	12.8	13.3	11.9	13.8	13.8	16.6
72.5°	23.8	20.9	17.1	13.3	11.4	9.0	9.0	8.6	9.5	10.0	12.4
75°	12.4	9.5	9.5	6.7	4.8	2.4	4.3	3.8	3.3	3.8	4.8
77.5°	8.6	7.1	6.7	5.2	4.8	3.8	3.8	3.8	3.8	4.3	4.8
80°	5.2	5.2	3.8	3.3	2.9	2.4	2.9	2.9	2.9	2.9	3.3
82.5°	3.3	2.9	2.9	2.4	2.4	1.9	1.9	1.9	1.9	1.9	2.9
85°	2.9	1.9	1.9	1.4	1.9	3.3	1.4	1.9	1.9	1.9	1.4
87.5°	1.0	1.4	1.4	1.4	1.0	0.5	1.0	1.4	1.4	2.4	1.9
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: P246146

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9	885.9
2.5°	887.3	887.8	887.8	887.3	887.3	886.4	888.2	886.8	887.3	889.2	887.8
5°	888.2	888.7	888.7	888.2	888.2	888.2	888.7	888.7	888.2	887.8	888.7
7.5°	890.2	889.7	889.7	888.7	888.7	887.8	888.7	887.3	888.2	887.3	888.7
10°	887.8	888.2	887.8	887.3	887.3	886.8	886.8	885.4	885.9	884.4	885.4
12.5°	886.4	885.9	885.9	884.9	884.0	883.0	882.5	881.1	881.1	877.8	879.2
15°	882.5	883.0	881.6	879.7	878.7	876.4	875.4	873.5	871.6	869.2	869.7
17.5°	879.2	877.8	875.9	874.0	870.2	868.3	866.4	863.5	862.6	859.7	858.8
20°	869.2	868.3	865.9	862.6	860.2	855.9	854.0	851.2	848.8	845.9	844.5
22.5°	856.4	855.4	852.6	849.3	845.5	843.6	841.6	836.4	834.0	831.2	830.7
25°	840.2	838.8	835.9	832.1	830.2	825.0	823.1	819.3	818.4	815.5	815.0
27.5°	815.5	813.6	810.3	805.5	802.2	798.9	797.0	794.1	793.2	790.3	789.8
30°	778.4	776.0	769.4	767.5	761.8	758.4	758.4	754.6	755.1	753.2	753.2
32.5°	719.9	716.1	710.9	707.1	703.3	701.4	701.4	699.9	700.9	700.9	701.9
35°	642.4	637.2	634.3	632.0	632.0	633.8	639.6	641.0	643.8	646.2	648.1
37.5°	543.0	542.6	545.9	548.7	555.9	564.0	573.9	582.5	590.6	596.3	602.0
40°	435.6	447.5	457.0	470.3	481.2	496.9	515.0	529.7	543.5	553.5	564.0
42.5°	340.0	355.2	375.2	394.7	414.2	435.6	459.3	479.8	497.9	511.6	522.6
45°	264.9	285.8	310.0	334.8	360.0	386.6	411.3	432.2	451.3	465.5	476.5
47.5°	213.5	236.3	263.9	291.0	319.5	347.6	375.2	393.2	408.9	420.3	430.3
50°	176.4	200.7	229.7	260.6	289.1	317.2	340.9	358.5	371.4	381.4	387.5
52.5°	147.4	173.1	204.0	234.9	263.4	289.1	310.5	323.8	334.3	341.4	347.1
55°	121.7	146.5	175.5	204.5	232.5	256.8	274.4	284.4	292.4	296.7	300.0
57.5°	99.4	122.2	148.8	175.5	199.7	219.7	233.5	243.5	247.3	250.6	250.1
60°	78.0	99.4	123.6	146.5	167.4	183.5	193.5	199.2	202.1	203.5	202.6
62.5°	61.3	80.8	99.4	119.4	134.6	148.4	157.9	157.9	159.3	159.8	161.2
65°	45.6	60.4	76.6	91.3	103.7	112.7	117.9	119.4	121.3	120.8	119.8
67.5°	33.8	44.7	56.6	67.5	76.1	81.8	85.6	88.9	88.4	87.5	87.0
70°	23.3	30.4	40.9	47.6	53.7	59.4	60.4	60.9	61.3	61.8	60.9
72.5°	16.2	21.4	27.1	32.8	36.6	39.0	41.4	41.8	41.8	41.8	41.4
75°	8.1	10.9	16.2	18.5	21.9	22.8	24.7	24.7	26.2	24.2	23.8
77.5°	7.1	8.6	11.4	13.3	14.7	16.2	16.6	18.1	17.6	16.6	17.1
80°	4.3	5.2	7.1	8.1	10.0	10.5	10.9	11.4	10.9	11.4	11.4
82.5°	3.3	3.8	4.8	4.8	6.2	6.2	6.7	6.7	7.1	7.1	7.1
85°	1.9	3.3	2.9	5.7	3.8	3.8	4.8	5.7	4.8	4.8	5.7
87.5°	1.9	1.9	1.4	1.9	1.9	1.9	2.4	2.9	2.9	3.3	2.9
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: P246146

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	885.9	885.9	885.9	885.9
2.5°	887.3	888.2	886.8	886.4
5°	888.7	888.7	887.8	887.8
7.5°	888.7	888.7	887.3	886.4
10°	884.9	884.9	883.5	882.5
12.5°	877.8	877.8	877.3	875.9
15°	868.8	868.8	866.9	865.4
17.5°	856.4	857.3	855.0	855.0
20°	843.1	842.6	840.7	839.8
22.5°	829.3	828.3	827.9	825.0
25°	814.6	813.6	812.2	810.7
27.5°	789.3	788.9	787.4	785.5
30°	750.8	750.3	748.5	748.5
32.5°	700.9	700.4	698.5	699.0
35°	649.1	651.0	650.0	648.1
37.5°	605.8	607.2	608.2	607.2
40°	569.7	573.9	574.4	575.4
42.5°	531.1	536.8	538.8	539.7
45°	485.0	490.3	494.5	493.6
47.5°	437.9	441.7	445.5	442.7
50°	392.8	395.1	396.6	396.6
52.5°	350.0	350.0	349.5	350.0
55°	301.0	301.0	299.1	300.0
57.5°	249.6	250.6	249.2	246.8
60°	202.1	199.7	198.8	197.3
62.5°	157.4	157.4	154.1	158.3
65°	117.9	116.5	115.1	114.6
67.5°	85.6	85.1	83.7	83.2
70°	60.4	58.5	58.0	57.1
72.5°	40.4	40.4	39.5	39.5
75°	24.7	22.4	21.9	22.4
77.5°	17.1	16.6	16.6	16.2
80°	11.4	10.9	11.9	10.5
82.5°	7.1	7.6	7.1	7.6
85°	4.8	5.7	5.2	5.2
87.5°	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)