

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: P249097

Luminaire Tested: **LSR8B150D010 EC8B150830 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249097
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: LSR8B150D010 EC8B150830 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15834.0 lumens
Efficiency: N/A
Efficacy: 99.9 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

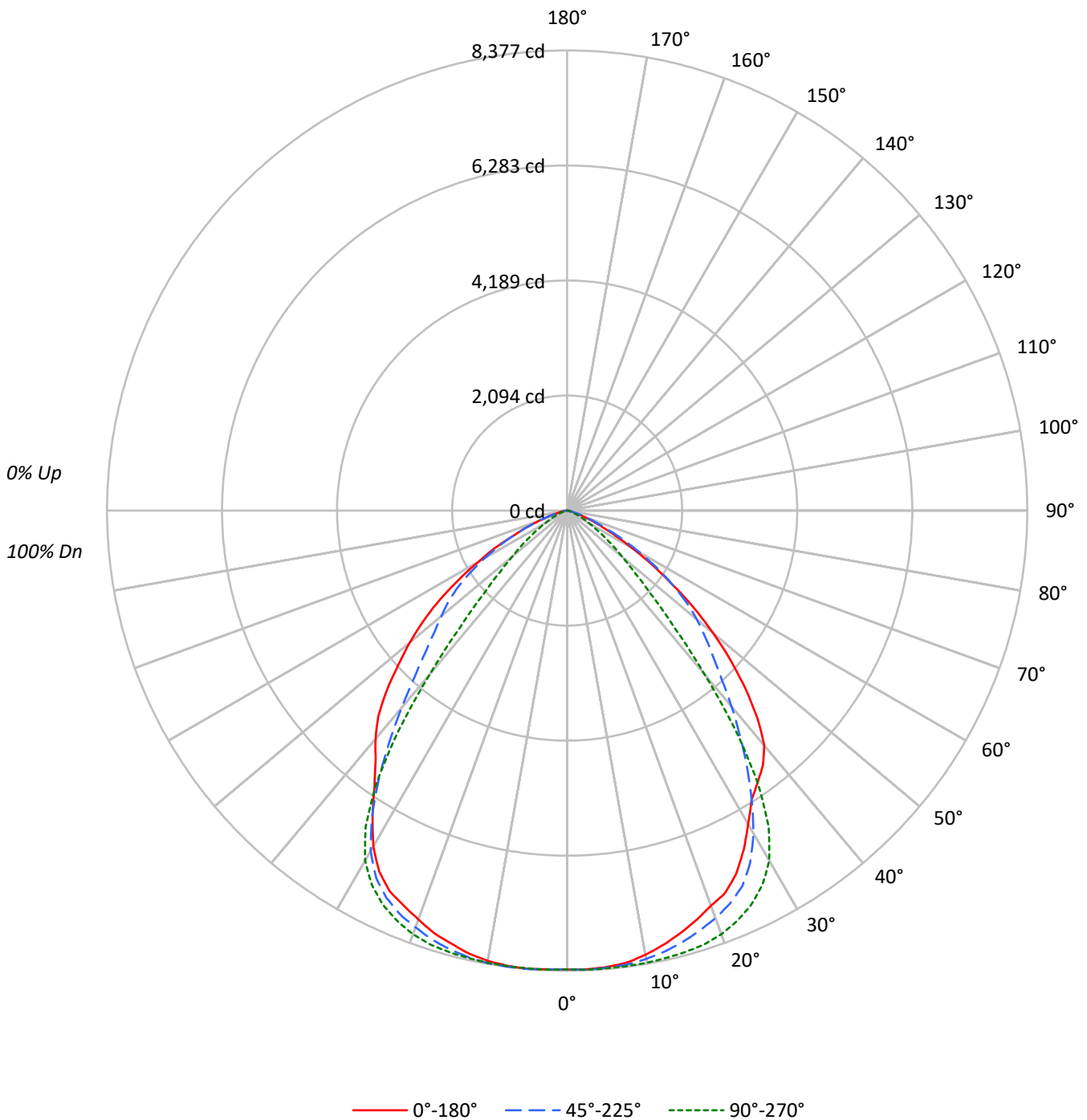
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	257616	257616	257616
5°	258182	258878	259157
10°	257097	261731	260607
15°	254250	265561	260549
20°	251195	269292	259878
25°	247934	269604	260142
30°	234559	262023	251326
35°	227559	227721	230089
40°	224738	156684	218422
45°	200253	94065	202987
50°	166509	62604	179418
55°	124883	43154	152123
60°	84627	28758	114773
65°	51046	18657	78853
70°	28301	10107	48515
75°	12820	4277	25115
80°	11152	4777	17509
85°	12702	6333	17478



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	797.3	5.0
10°-20°	2315.5	14.6
20°-30°	3514.5	22.2
30°-40°	3691.2	23.3
40°-50°	2767.4	17.5
50°-60°	1775.7	11.2
60°-70°	759.6	4.8
70°-80°	179.5	1.1
80°-90°	33.4	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°	6627.2	41.9
0°-40°	10318.5	65.2
0°-60°	14861.6	93.9
0°-90°	15834.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15834.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8354	8354	8354	8354	8354	
5°	8341	8354	8363	8377	8372	792
15°	7964	8130	8318	8265	8162	2246
25°	7287	7543	7924	7780	7646	3329
35°	6045	5708	6049	5978	6112	3794
45°	4592	3753	2157	3646	4655	3517
55°	2323	2323	803	2422	2830	2107
65°	700	825	256	1063	1081	747
75°	108	126	36	215	211	157
85°	36	22	18	36	49	38
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°	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3
2.5°	8358.8	8367.8	8363.3	8363.3	8358.8	8363.3	8363.3	8372.3	8372.3	8363.3	8358.8
5°	8340.8	8349.8	8349.8	8340.8	8340.8	8363.3	8349.8	8358.8	8358.8	8354.3	8354.3
7.5°	8300.6	8300.6	8318.5	8305.1	8305.1	8318.5	8314.0	8322.9	8331.9	8336.4	8336.4
10°	8210.8	8219.8	8224.3	8224.3	8228.8	8242.2	8251.2	8269.2	8278.1	8287.1	8291.6
12.5°	8098.8	8112.2	8116.7	8112.2	8125.7	8143.5	8166.0	8188.4	8201.9	8219.8	8233.3
15°	7964.2	7964.2	7973.1	7986.6	7995.6	8022.5	8044.9	8071.8	8107.7	8130.2	8152.5
17.5°	7816.2	7825.2	7838.6	7838.6	7856.6	7901.4	7914.9	7955.3	7995.6	8018.0	8062.9
20°	7654.8	7663.7	7677.2	7686.2	7708.6	7744.5	7771.4	7807.2	7852.1	7892.5	7937.3
22.5°	7529.2	7511.3	7520.2	7529.2	7551.7	7583.1	7614.5	7659.2	7704.1	7744.5	7789.4
25°	7287.0	7291.5	7305.0	7313.9	7340.9	7367.8	7403.7	7457.4	7497.8	7542.7	7592.0
27.5°	6959.7	6964.2	6986.6	6986.6	7009.0	7053.9	7076.3	7121.1	7175.0	7219.8	7278.1
30°	6587.5	6596.4	6596.4	6614.4	6627.8	6650.3	6672.7	6717.6	6744.4	6784.8	6865.6
32.5°	6246.7	6255.6	6251.1	6246.7	6233.2	6228.7	6224.2	6233.2	6242.2	6255.6	6287.0
35°	6045.0	6022.5	6004.6	5973.2	5937.3	5892.4	5852.1	5798.3	5748.9	5708.5	5663.8
37.5°	5852.1	5847.6	5820.7	5775.8	5704.0	5623.4	5529.2	5412.6	5296.0	5170.4	5049.4
40°	5583.0	5569.5	5547.1	5484.4	5403.6	5305.0	5179.4	5035.9	4847.5	4654.7	4457.5
42.5°	5125.6	5130.1	5103.2	5053.8	4977.7	4883.4	4753.4	4596.5	4394.7	4165.9	3910.4
45°	4592.0	4592.0	4583.0	4542.6	4488.8	4412.6	4313.9	4183.9	3986.6	3753.4	3479.8
47.5°	4035.9	4040.4	4026.9	4018.0	3995.5	3946.2	3874.5	3775.8	3636.8	3412.6	3139.0
50°	3470.9	3470.9	3493.3	3488.8	3488.8	3470.9	3439.5	3381.2	3260.1	3080.7	2825.2
52.5°	2905.8	2914.8	2928.3	2946.2	2968.6	3004.5	2968.6	2941.7	2865.5	2726.4	2506.8
55°	2322.9	2331.9	2354.3	2385.6	2412.6	2448.5	2457.4	2457.4	2417.0	2322.9	2157.0
57.5°	1825.2	1811.7	1829.7	1856.5	1892.4	1928.3	1955.2	1986.6	1982.1	1919.3	1784.8
60°	1372.2	1376.7	1390.1	1417.1	1444.0	1475.4	1511.2	1538.1	1551.6	1520.2	1435.0
62.5°	1000.0	1000.0	1017.9	1044.8	1058.3	1103.2	1125.6	1139.1	1152.4	1147.9	1094.2
65°	699.6	708.5	717.5	731.0	744.4	771.3	784.8	811.6	820.6	825.1	784.8
67.5°	493.3	479.8	488.8	497.7	511.2	529.2	556.1	556.1	569.5	569.5	542.6
70°	313.9	313.9	318.4	331.8	340.8	345.3	354.3	363.2	376.7	372.2	372.2
72.5°	210.8	206.3	210.8	215.3	219.8	233.2	233.2	237.7	246.7	251.2	233.2
75°	107.6	112.1	121.0	116.6	130.0	121.0	125.5	139.0	134.5	125.5	125.5
77.5°	89.6	89.6	89.6	85.3	94.1	94.1	89.6	98.6	94.1	94.1	89.6
80°	62.8	67.3	62.8	58.3	62.8	58.3	58.3	58.3	58.3	58.3	53.8
82.5°	49.4	40.4	44.9	40.4	44.9	44.9	40.4	35.9	35.9	40.4	35.9
85°	35.9	26.9	31.4	31.4	26.9	26.9	26.9	26.9	26.9	22.4	22.4
87.5°	22.4	13.5	13.5	13.5	17.9	17.9	17.9	13.5	17.9	17.9	9.0
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°	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3
2.5°	8367.8	8363.3	8372.3	8367.8	8367.8	8363.3	8367.8	8363.3	8372.3	8354.3	8358.8
5°	8367.8	8358.8	8363.3	8367.8	8372.3	8363.3	8363.3	8363.3	8372.3	8363.3	8367.8
7.5°	8349.8	8345.3	8358.8	8367.8	8363.3	8358.8	8367.8	8363.3	8372.3	8367.8	8376.7
10°	8314.0	8318.5	8327.4	8340.8	8345.3	8349.8	8358.8	8358.8	8372.3	8354.3	8363.3
12.5°	8260.2	8278.1	8300.6	8309.5	8327.4	8327.4	8336.4	8340.8	8349.8	8345.3	8358.8
15°	8192.9	8215.3	8242.2	8264.7	8287.1	8300.6	8314.0	8318.5	8331.9	8318.5	8322.9
17.5°	8112.2	8139.1	8179.4	8206.3	8242.2	8255.7	8273.6	8282.6	8296.1	8287.1	8291.6
20°	8000.0	8031.5	8076.3	8116.7	8139.1	8170.4	8192.9	8206.3	8215.3	8206.3	8210.8
22.5°	7843.1	7888.0	7946.3	7977.6	8022.5	8049.4	8053.9	8085.3	8107.7	8085.3	8094.3
25°	7659.2	7704.1	7749.0	7816.2	7856.6	7888.0	7919.4	7923.9	7946.3	7941.8	7937.3
27.5°	7354.3	7412.7	7488.8	7542.7	7596.5	7645.8	7681.7	7690.6	7713.1	7704.1	7708.6
30°	6937.2	7000.1	7071.9	7157.0	7233.3	7282.5	7327.4	7358.8	7381.2	7367.8	7363.3
32.5°	6345.4	6408.1	6484.4	6569.5	6659.3	6731.0	6784.8	6825.2	6852.1	6843.1	6820.7
35°	5668.3	5686.2	5735.5	5802.8	5878.9	5955.2	6004.6	6049.3	6080.7	6089.7	6089.7
37.5°	4973.2	4914.9	4879.0	4879.0	4923.8	4955.2	5000.0	5026.9	5076.3	5094.2	5107.7
40°	4300.4	4165.9	4040.4	3946.2	3883.5	3879.0	3879.0	3892.4	3937.3	3995.5	4049.4
42.5°	3699.6	3484.3	3291.5	3116.6	2991.1	2919.3	2888.0	2892.5	2928.3	2982.1	3071.7
45°	3219.8	2950.7	2708.6	2497.8	2327.4	2215.2	2161.5	2157.0	2183.9	2246.6	2345.4
47.5°	2847.6	2560.5	2287.0	2044.8	1861.0	1739.9	1677.1	1659.3	1677.1	1735.4	1852.0
50°	2538.2	2242.2	1959.7	1708.5	1511.2	1385.7	1327.3	1305.0	1327.3	1376.7	1493.2
52.5°	2251.1	1946.2	1681.6	1439.5	1228.7	1121.1	1058.3	1044.8	1058.3	1116.6	1210.8
55°	1919.3	1659.3	1399.1	1156.9	973.1	865.5	816.1	802.7	816.1	870.0	968.6
57.5°	1592.0	1367.7	1139.1	919.3	762.4	668.1	623.3	605.4	636.7	672.6	789.2
60°	1287.0	1107.7	914.8	722.0	592.0	506.7	470.8	466.3	475.3	520.2	600.9
62.5°	1009.0	861.0	708.5	551.6	443.9	408.1	363.2	358.8	367.7	394.6	457.4
65°	726.5	632.3	515.7	403.6	318.4	269.0	251.2	255.7	264.5	282.5	340.8
67.5°	506.7	439.4	358.8	282.5	219.8	197.3	179.4	174.9	179.4	210.8	242.2
70°	340.8	300.4	242.2	215.3	152.5	121.0	125.5	112.1	130.0	130.0	156.9
72.5°	224.2	197.3	161.4	125.5	107.6	85.3	85.3	80.8	89.6	94.1	116.6
75°	116.6	89.6	89.6	62.8	44.9	22.4	40.4	35.9	31.4	35.9	44.9
77.5°	80.8	67.3	62.8	49.4	44.9	35.9	35.9	35.9	35.9	40.4	44.9
80°	49.4	49.4	35.9	31.4	26.9	22.4	26.9	26.9	26.9	26.9	31.4
82.5°	31.4	26.9	26.9	22.4	22.4	17.9	17.9	17.9	17.9	17.9	26.9
85°	26.9	17.9	17.9	13.5	17.9	31.4	13.5	17.9	17.9	17.9	13.5
87.5°	9.0	13.5	13.5	13.5	9.0	4.5	9.0	13.5	13.5	22.4	17.9
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°	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3	8354.3
2.5°	8367.8	8372.3	8372.3	8367.8	8367.8	8358.8	8376.7	8363.3	8367.8	8385.7	8372.3
5°	8376.7	8381.2	8381.2	8376.7	8376.7	8376.7	8381.2	8381.2	8376.7	8372.3	8381.2
7.5°	8394.7	8390.2	8390.2	8381.2	8381.2	8372.3	8381.2	8367.8	8376.7	8367.8	8381.2
10°	8372.3	8376.7	8372.3	8367.8	8367.8	8363.3	8363.3	8349.8	8354.3	8340.8	8349.8
12.5°	8358.8	8354.3	8354.3	8345.3	8336.4	8327.4	8322.9	8309.5	8309.5	8278.1	8291.6
15°	8322.9	8327.4	8314.0	8296.1	8287.1	8264.7	8255.7	8237.7	8219.8	8197.4	8201.9
17.5°	8291.6	8278.1	8260.2	8242.2	8206.3	8188.4	8170.4	8143.5	8134.6	8107.7	8098.8
20°	8197.4	8188.4	8166.0	8134.6	8112.2	8071.8	8053.9	8027.0	8004.5	7977.6	7964.2
22.5°	8076.3	8067.3	8040.4	8009.0	7973.1	7955.3	7937.3	7888.0	7865.5	7838.6	7834.1
25°	7923.9	7910.4	7883.5	7847.6	7829.6	7780.4	7762.4	7726.5	7717.6	7690.6	7686.2
27.5°	7690.6	7672.7	7641.3	7596.5	7565.1	7533.7	7515.8	7488.8	7479.9	7452.9	7448.5
30°	7340.9	7318.4	7255.7	7237.8	7183.9	7152.5	7152.5	7116.6	7121.1	7103.2	7103.2
32.5°	6789.3	6753.4	6704.1	6668.2	6632.3	6614.4	6614.4	6600.9	6609.9	6609.9	6618.9
35°	6058.3	6009.1	5982.1	5959.7	5959.7	5977.6	6031.5	6045.0	6071.8	6094.2	6112.2
37.5°	5121.1	5116.7	5148.1	5174.9	5242.2	5318.5	5412.6	5493.4	5569.5	5623.4	5677.2
40°	4107.7	4219.8	4309.4	4435.1	4538.1	4686.1	4856.5	4995.5	5125.6	5219.8	5318.5
42.5°	3206.3	3349.8	3538.2	3722.0	3905.9	4107.7	4331.9	4524.7	4695.1	4825.1	4928.3
45°	2497.8	2695.1	2923.8	3157.0	3394.7	3645.8	3879.0	4076.3	4255.7	4390.2	4493.3
47.5°	2013.4	2228.7	2488.8	2744.4	3013.5	3278.0	3538.2	3708.6	3856.5	3964.1	4058.4
50°	1663.6	1892.4	2166.0	2457.4	2726.4	2991.1	3215.3	3381.2	3502.3	3596.4	3654.7
52.5°	1390.1	1632.3	1923.8	2215.2	2484.3	2726.4	2928.3	3053.9	3152.5	3219.8	3273.5
55°	1147.9	1381.2	1654.8	1928.3	2192.8	2421.5	2587.4	2681.7	2757.8	2798.2	2829.6
57.5°	937.3	1152.4	1403.6	1654.8	1883.4	2071.8	2201.8	2296.0	2331.9	2363.3	2358.8
60°	735.5	937.3	1165.9	1381.2	1578.5	1730.9	1825.2	1878.9	1905.8	1919.3	1910.3
62.5°	578.5	762.4	937.3	1125.6	1269.1	1399.1	1488.9	1488.9	1502.2	1506.7	1520.2
65°	430.5	569.5	722.0	861.0	977.5	1062.8	1112.2	1125.6	1143.5	1139.1	1130.1
67.5°	318.4	421.6	533.6	636.7	717.5	771.3	807.1	838.6	834.1	825.1	820.6
70°	219.8	287.0	385.7	448.4	506.7	560.6	569.5	574.0	578.5	583.0	574.0
72.5°	152.5	201.8	255.7	309.4	345.3	367.7	390.2	394.6	394.6	394.6	390.2
75°	76.3	103.1	152.5	174.9	206.3	215.3	233.2	233.2	246.7	228.7	224.2
77.5°	67.3	80.8	107.6	125.5	139.0	152.5	156.9	170.4	165.9	156.9	161.4
80°	40.4	49.4	67.3	76.3	94.1	98.6	103.1	107.6	103.1	107.6	107.6
82.5°	31.4	35.9	44.9	44.9	58.3	58.3	62.8	62.8	67.3	67.3	67.3
85°	17.9	31.4	26.9	53.8	35.9	35.9	44.9	53.8	44.9	44.9	53.8
87.5°	17.9	17.9	13.5	17.9	17.9	17.9	22.4	26.9	26.9	31.4	26.9
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: P249097

CATALOG NUMBER: LSR8B150D010 EC8B150830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8354.3	8354.3	8354.3	8354.3
2.5°	8367.8	8376.7	8363.3	8358.8
5°	8381.2	8381.2	8372.3	8372.3
7.5°	8381.2	8381.2	8367.8	8358.8
10°	8345.3	8345.3	8331.9	8322.9
12.5°	8278.1	8278.1	8273.6	8260.2
15°	8192.9	8192.9	8174.9	8161.5
17.5°	8076.3	8085.3	8062.9	8062.9
20°	7950.8	7946.3	7928.4	7919.4
22.5°	7820.7	7811.7	7807.2	7780.4
25°	7681.7	7672.7	7659.2	7645.8
27.5°	7444.1	7439.6	7426.1	7408.2
30°	7080.8	7076.3	7058.4	7058.4
32.5°	6609.9	6605.4	6587.5	6592.0
35°	6121.1	6139.1	6130.1	6112.2
37.5°	5713.0	5726.5	5735.5	5726.5
40°	5372.2	5412.6	5417.1	5426.1
42.5°	5009.0	5062.8	5080.8	5089.7
45°	4574.0	4623.4	4663.7	4654.7
47.5°	4130.0	4165.9	4201.8	4174.9
50°	3704.1	3726.5	3740.0	3740.0
52.5°	3300.5	3300.5	3296.0	3300.5
55°	2838.6	2838.6	2820.7	2829.6
57.5°	2354.3	2363.3	2349.8	2327.4
60°	1905.8	1883.4	1874.4	1861.0
62.5°	1484.4	1484.4	1453.0	1493.2
65°	1112.2	1098.7	1085.2	1080.7
67.5°	807.1	802.7	789.2	784.8
70°	569.5	551.6	547.1	538.1
72.5°	381.2	381.2	372.2	372.2
75°	233.2	210.8	206.3	210.8
77.5°	161.4	156.9	156.9	152.5
80°	107.6	103.1	112.1	98.6
82.5°	67.3	71.8	67.3	71.8
85°	44.9	53.8	49.4	49.4
87.5°	26.9	26.9	26.9	26.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)