

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: P249528

Luminaire Tested: **LSR8B120D010 EC8B120830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249528
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: LSR8B120D010 EC8B120830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11888.0 lumens
Efficiency: N/A
Efficacy: 100.5 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

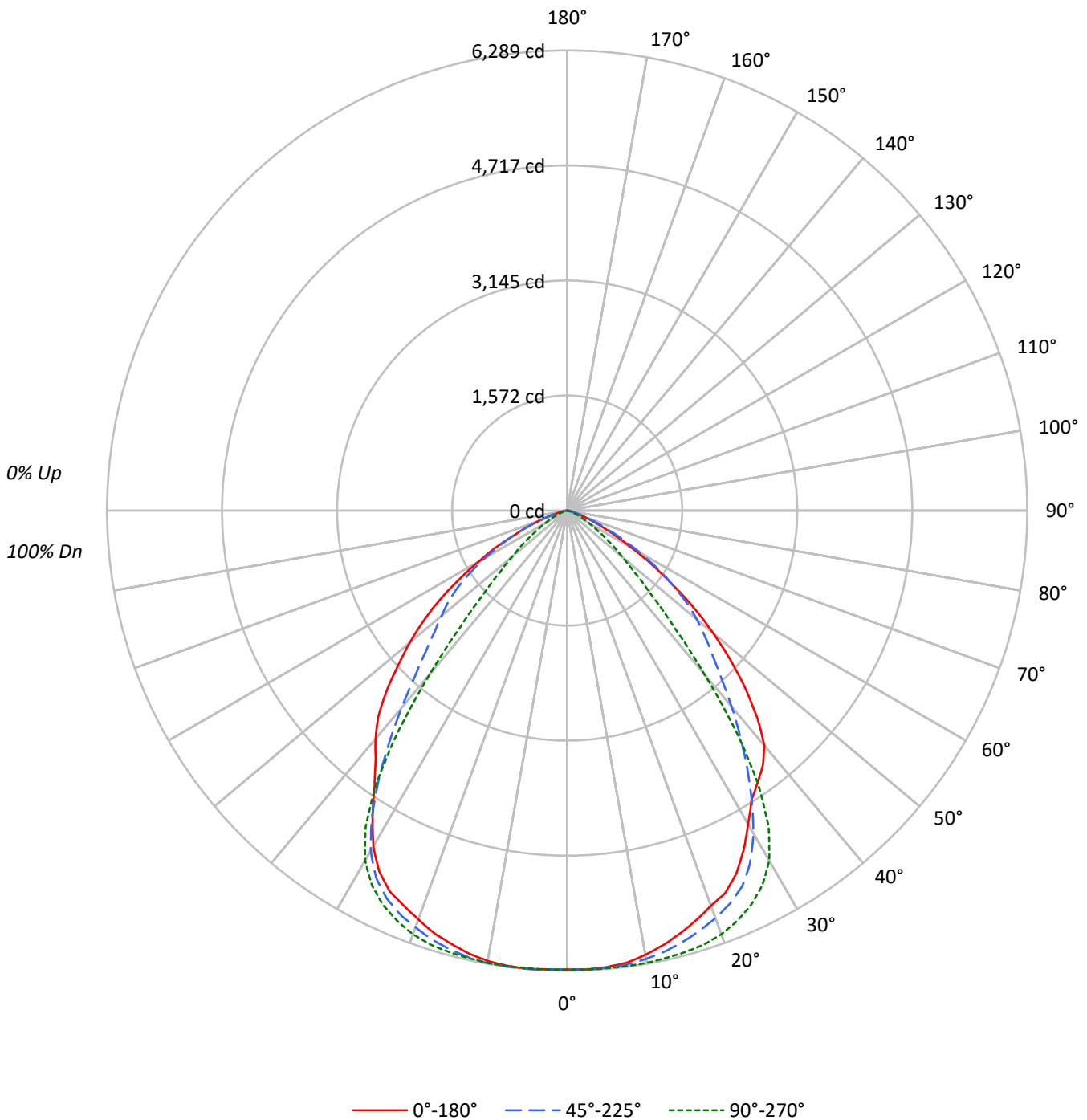
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	193415	193415	193415
5°	193841	194364	194574
10°	193026	196505	195663
15°	190887	199379	195618
20°	188596	202182	195113
25°	186146	202416	195312
30°	176107	196724	188694
35°	170848	170972	172749
40°	168732	117638	163991
45°	150347	70621	152401
50°	125012	46999	134703
55°	93760	32402	114211
60°	63535	21592	86169
65°	38328	14002	59204
70°	21251	7591	36424
75°	9627	3205	18860
80°	8364	3587	13159
85°	9517	4741	13126



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	598.6	5.0
10°-20°	1738.4	14.6
20°-30°	2638.6	22.2
30°-40°	2771.3	23.3
40°-50°	2077.8	17.5
50°-60°	1333.1	11.2
60°-70°	570.3	4.8
70°-80°	134.7	1.1
80°-90°	25.1	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°	4975.7	41.9
0°-40°	7747.0	65.2
0°-60°	11157.9	93.9
0°-90°	11888.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11888.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6272	6272	6272	6272	6272	
5°	6262	6272	6279	6289	6286	595
15°	5979	6104	6245	6205	6128	1687
25°	5471	5663	5949	5841	5740	2499
35°	4538	4286	4542	4488	4589	2848
45°	3448	2818	1619	2737	3495	2640
55°	1744	1744	603	1818	2124	1582
65°	525	620	192	798	811	561
75°	81	94	27	162	158	118
85°	27	17	13	27	37	28
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°	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3
2.5°	6275.7	6282.5	6279.1	6279.1	6275.7	6279.1	6279.1	6285.9	6285.9	6279.1	6275.7
5°	6262.2	6269.0	6269.0	6262.2	6262.2	6279.1	6269.0	6275.7	6275.7	6272.3	6272.3
7.5°	6232.0	6232.0	6245.4	6235.4	6235.4	6245.4	6242.0	6248.8	6255.5	6258.9	6258.9
10°	6164.6	6171.3	6174.7	6174.7	6178.1	6188.2	6194.9	6208.4	6215.1	6221.8	6225.2
12.5°	6080.5	6090.5	6093.9	6090.5	6100.7	6114.1	6131.0	6147.8	6157.9	6171.3	6181.5
15°	5979.4	5979.4	5986.2	5996.3	6003.0	6023.2	6040.0	6060.2	6087.2	6104.0	6120.8
17.5°	5868.3	5875.1	5885.2	5885.2	5898.7	5932.3	5942.4	5972.7	6003.0	6019.8	6053.5
20°	5747.2	5753.8	5764.0	5770.7	5787.5	5814.5	5834.7	5861.6	5895.3	5925.6	5959.2
22.5°	5652.8	5639.4	5646.1	5652.8	5669.7	5693.3	5716.9	5750.5	5784.2	5814.5	5848.2
25°	5471.0	5474.4	5484.5	5491.2	5511.5	5531.7	5558.6	5599.0	5629.3	5663.0	5700.0
27.5°	5225.3	5228.7	5245.5	5245.5	5262.3	5296.0	5312.8	5346.5	5386.9	5420.5	5464.4
30°	4945.9	4952.5	4952.5	4966.0	4976.1	4993.0	5009.8	5043.5	5063.7	5094.0	5154.6
32.5°	4690.0	4696.7	4693.3	4690.0	4679.9	4676.5	4673.1	4679.9	4686.6	4696.7	4720.2
35°	4538.5	4521.6	4508.2	4484.6	4457.7	4424.0	4393.7	4353.3	4316.2	4285.9	4252.3
37.5°	4393.7	4390.3	4370.1	4336.4	4282.5	4222.0	4151.3	4063.7	3976.2	3881.9	3791.1
40°	4191.7	4181.5	4164.7	4117.6	4057.0	3982.9	3888.7	3780.9	3639.5	3494.7	3346.6
42.5°	3848.2	3851.6	3831.4	3794.3	3737.2	3666.4	3568.8	3451.0	3299.5	3127.7	2935.9
45°	3447.6	3447.6	3440.9	3410.5	3370.2	3312.9	3238.9	3141.2	2993.1	2818.0	2612.6
47.5°	3030.1	3033.5	3023.4	3016.7	2999.8	2962.8	2908.9	2834.9	2730.5	2562.1	2356.7
50°	2605.9	2605.9	2622.7	2619.4	2619.4	2605.9	2582.4	2538.5	2447.7	2313.0	2121.1
52.5°	2181.7	2188.4	2198.6	2212.0	2228.8	2255.7	2228.8	2208.6	2151.4	2047.0	1882.1
55°	1744.0	1750.7	1767.5	1791.1	1811.4	1838.3	1845.0	1845.0	1814.7	1744.0	1619.4
57.5°	1370.3	1360.2	1373.7	1393.9	1420.8	1447.7	1467.9	1491.5	1488.1	1441.0	1340.0
60°	1030.2	1033.6	1043.7	1063.9	1084.1	1107.7	1134.6	1154.8	1164.9	1141.4	1077.4
62.5°	750.8	750.8	764.2	784.4	794.6	828.2	845.1	855.2	865.2	861.9	821.5
65°	525.3	531.9	538.7	548.8	558.9	579.1	589.2	609.4	616.1	619.5	589.2
67.5°	370.4	360.2	367.0	373.7	383.8	397.3	417.5	417.5	427.6	427.6	407.4
70°	235.7	235.7	239.1	249.1	255.9	259.3	266.0	272.7	282.8	279.4	279.4
72.5°	158.3	154.9	158.3	161.6	165.0	175.1	175.1	178.4	185.2	188.6	175.1
75°	80.8	84.2	90.9	87.6	97.6	90.9	94.2	104.4	101.0	94.2	94.2
77.5°	67.3	67.3	67.3	64.0	70.7	70.7	67.3	74.1	70.7	70.7	67.3
80°	47.1	50.5	47.1	43.7	47.1	43.7	43.7	43.7	43.7	43.7	40.4
82.5°	37.1	30.3	33.7	30.3	33.7	33.7	30.3	26.9	26.9	30.3	26.9
85°	26.9	20.2	23.6	23.6	20.2	20.2	20.2	20.2	20.2	16.8	16.8
87.5°	16.8	10.1	10.1	10.1	13.4	13.4	13.4	10.1	13.4	13.4	6.8
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°	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3
2.5°	6282.5	6279.1	6285.9	6282.5	6282.5	6279.1	6282.5	6279.1	6285.9	6272.3	6275.7
5°	6282.5	6275.7	6279.1	6282.5	6285.9	6279.1	6279.1	6279.1	6285.9	6279.1	6282.5
7.5°	6269.0	6265.6	6275.7	6282.5	6279.1	6275.7	6282.5	6279.1	6285.9	6282.5	6289.1
10°	6242.0	6245.4	6252.2	6262.2	6265.6	6269.0	6275.7	6275.7	6285.9	6272.3	6279.1
12.5°	6201.7	6215.1	6232.0	6238.7	6252.2	6252.2	6258.9	6262.2	6269.0	6265.6	6275.7
15°	6151.2	6168.0	6188.2	6205.0	6221.8	6232.0	6242.0	6245.4	6255.5	6245.4	6248.8
17.5°	6090.5	6110.7	6141.0	6161.2	6188.2	6198.3	6211.7	6218.5	6228.6	6221.8	6225.2
20°	6006.3	6030.0	6063.6	6093.9	6110.7	6134.3	6151.2	6161.2	6168.0	6161.2	6164.6
22.5°	5888.5	5922.2	5966.0	5989.5	6023.2	6043.4	6046.8	6070.3	6087.2	6070.3	6077.1
25°	5750.5	5784.2	5817.9	5868.3	5898.7	5922.2	5945.8	5949.2	5966.0	5962.6	5959.2
27.5°	5521.5	5565.4	5622.5	5663.0	5703.3	5740.4	5767.4	5774.0	5790.9	5784.2	5787.5
30°	5208.4	5255.6	5309.5	5373.4	5430.7	5467.7	5501.3	5524.9	5541.7	5531.7	5528.3
32.5°	4764.0	4811.2	4868.4	4932.3	4999.7	5053.5	5094.0	5124.3	5144.5	5137.7	5120.9
35°	4255.7	4269.1	4306.2	4356.7	4413.8	4471.1	4508.2	4541.8	4565.3	4572.1	4572.1
37.5°	3733.8	3690.1	3663.1	3663.1	3696.7	3720.3	3754.0	3774.2	3811.2	3824.7	3834.8
40°	3228.7	3127.7	3033.5	2962.8	2915.7	2912.3	2912.3	2922.4	2956.0	2999.8	3040.2
42.5°	2777.6	2616.0	2471.2	2339.9	2245.7	2191.8	2168.2	2171.6	2198.6	2238.9	2306.2
45°	2417.4	2215.4	2033.6	1875.3	1747.4	1663.2	1622.8	1619.4	1639.6	1686.7	1760.9
47.5°	2137.9	1922.4	1717.1	1535.2	1397.2	1306.3	1259.2	1245.8	1259.2	1302.9	1390.5
50°	1905.6	1683.4	1471.3	1282.7	1134.6	1040.4	996.6	979.7	996.6	1033.6	1121.1
52.5°	1690.1	1461.2	1262.6	1080.7	922.5	841.7	794.6	784.4	794.6	838.3	909.1
55°	1441.0	1245.8	1050.4	868.6	730.6	649.8	612.7	602.7	612.7	653.2	727.3
57.5°	1195.3	1026.9	855.2	690.2	572.4	501.6	468.0	454.5	478.1	505.0	592.6
60°	966.2	831.6	686.8	542.1	444.4	380.4	353.5	350.1	356.9	390.6	451.1
62.5°	757.6	646.4	531.9	414.1	333.3	306.4	272.7	269.4	276.1	296.2	343.4
65°	545.4	474.8	387.2	303.0	239.1	202.0	188.6	191.9	198.6	212.1	255.9
67.5°	380.4	329.9	269.4	212.1	165.0	148.1	134.7	131.3	134.7	158.3	181.8
70°	255.9	225.6	181.8	161.6	114.5	90.9	94.2	84.2	97.6	97.6	117.8
72.5°	168.3	148.1	121.2	94.2	80.8	64.0	64.0	60.6	67.3	70.7	87.6
75°	87.6	67.3	67.3	47.1	33.7	16.8	30.3	26.9	23.6	26.9	33.7
77.5°	60.6	50.5	47.1	37.1	33.7	26.9	26.9	26.9	26.9	30.3	33.7
80°	37.1	37.1	26.9	23.6	20.2	16.8	20.2	20.2	20.2	20.2	23.6
82.5°	23.6	20.2	20.2	16.8	16.8	13.4	13.4	13.4	13.4	13.4	20.2
85°	20.2	13.4	13.4	10.1	13.4	23.6	10.1	13.4	13.4	13.4	10.1
87.5°	6.8	10.1	10.1	10.1	6.8	3.4	6.8	10.1	10.1	16.8	13.4
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°	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3
2.5°	6282.5	6285.9	6285.9	6282.5	6282.5	6275.7	6289.1	6279.1	6282.5	6295.9	6285.9
5°	6289.1	6292.5	6292.5	6289.1	6289.1	6289.1	6292.5	6292.5	6289.1	6285.9	6292.5
7.5°	6302.7	6299.3	6299.3	6292.5	6292.5	6285.9	6292.5	6282.5	6289.1	6282.5	6292.5
10°	6285.9	6289.1	6285.9	6282.5	6282.5	6279.1	6279.1	6269.0	6272.3	6262.2	6269.0
12.5°	6275.7	6272.3	6272.3	6265.6	6258.9	6252.2	6248.8	6238.7	6238.7	6215.1	6225.2
15°	6248.8	6252.2	6242.0	6228.6	6221.8	6205.0	6198.3	6184.8	6171.3	6154.5	6157.9
17.5°	6225.2	6215.1	6201.7	6188.2	6161.2	6147.8	6134.3	6114.1	6107.3	6087.2	6080.5
20°	6154.5	6147.8	6131.0	6107.3	6090.5	6060.2	6046.8	6026.6	6009.7	5989.5	5979.4
22.5°	6063.6	6056.8	6036.7	6013.1	5986.2	5972.7	5959.2	5922.2	5905.3	5885.2	5881.8
25°	5949.2	5939.0	5918.8	5891.9	5878.4	5841.4	5827.9	5801.0	5794.3	5774.0	5770.7
27.5°	5774.0	5760.6	5737.0	5703.3	5679.8	5656.2	5642.8	5622.5	5615.9	5595.6	5592.3
30°	5511.5	5494.6	5447.5	5434.0	5393.6	5370.0	5370.0	5343.1	5346.5	5333.0	5333.0
32.5°	5097.4	5070.4	5033.3	5006.4	4979.5	4966.0	4966.0	4955.9	4962.7	4962.7	4969.4
35°	4548.5	4511.5	4491.3	4474.5	4474.5	4487.9	4528.4	4538.5	4558.7	4575.5	4589.0
37.5°	3844.8	3841.5	3865.1	3885.3	3935.8	3993.0	4063.7	4124.4	4181.5	4222.0	4262.4
40°	3084.0	3168.2	3235.5	3329.8	3407.2	3518.3	3646.2	3750.6	3848.2	3919.0	3993.0
42.5°	2407.2	2515.0	2656.4	2794.4	2932.5	3084.0	3252.4	3397.1	3525.0	3622.7	3700.1
45°	1875.3	2023.4	2195.2	2370.2	2548.7	2737.2	2912.3	3060.4	3195.1	3296.1	3373.5
47.5°	1511.7	1673.3	1868.5	2060.5	2262.5	2461.1	2656.4	2784.4	2895.4	2976.2	3047.0
50°	1249.0	1420.8	1626.2	1845.0	2047.0	2245.7	2414.0	2538.5	2629.5	2700.2	2743.9
52.5°	1043.7	1225.5	1444.4	1663.2	1865.2	2047.0	2198.6	2292.8	2366.9	2417.4	2457.7
55°	861.9	1037.0	1242.4	1447.7	1646.4	1818.0	1942.6	2013.4	2070.5	2100.9	2124.4
57.5°	703.7	865.2	1053.8	1242.4	1414.1	1555.5	1653.1	1723.8	1750.7	1774.3	1770.9
60°	552.2	703.7	875.4	1037.0	1185.1	1299.5	1370.3	1410.7	1430.9	1441.0	1434.2
62.5°	434.3	572.4	703.7	845.1	952.8	1050.4	1117.8	1117.8	1127.9	1131.2	1141.4
65°	323.2	427.6	542.1	646.4	733.9	797.9	835.0	845.1	858.6	855.2	848.4
67.5°	239.1	316.5	400.6	478.1	538.7	579.1	606.0	629.6	626.3	619.5	616.1
70°	165.0	215.5	289.6	336.7	380.4	420.9	427.6	430.9	434.3	437.7	430.9
72.5°	114.5	151.5	191.9	232.3	259.3	276.1	292.9	296.2	296.2	296.2	292.9
75°	57.3	77.4	114.5	131.3	154.9	161.6	175.1	175.1	185.2	171.7	168.3
77.5°	50.5	60.6	80.8	94.2	104.4	114.5	117.8	127.9	124.6	117.8	121.2
80°	30.3	37.1	50.5	57.3	70.7	74.1	77.4	80.8	77.4	80.8	80.8
82.5°	23.6	26.9	33.7	33.7	43.7	43.7	47.1	47.1	50.5	50.5	50.5
85°	13.4	23.6	20.2	40.4	26.9	26.9	33.7	40.4	33.7	33.7	40.4
87.5°	13.4	13.4	10.1	13.4	13.4	13.4	16.8	20.2	20.2	23.6	20.2
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: P249528

CATALOG NUMBER: LSR8B120D010 EC8B120830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6272.3	6272.3	6272.3	6272.3
2.5°	6282.5	6289.1	6279.1	6275.7
5°	6292.5	6292.5	6285.9	6285.9
7.5°	6292.5	6292.5	6282.5	6275.7
10°	6265.6	6265.6	6255.5	6248.8
12.5°	6215.1	6215.1	6211.7	6201.7
15°	6151.2	6151.2	6137.7	6127.6
17.5°	6063.6	6070.3	6053.5	6053.5
20°	5969.3	5966.0	5952.5	5945.8
22.5°	5871.7	5865.0	5861.6	5841.4
25°	5767.4	5760.6	5750.5	5740.4
27.5°	5588.9	5585.5	5575.4	5562.0
30°	5316.2	5312.8	5299.4	5299.4
32.5°	4962.7	4959.3	4945.9	4949.2
35°	4595.7	4609.2	4602.4	4589.0
37.5°	4289.3	4299.4	4306.2	4299.4
40°	4033.4	4063.7	4067.1	4073.9
42.5°	3760.7	3801.1	3814.6	3821.3
45°	3434.1	3471.2	3501.5	3494.7
47.5°	3100.8	3127.7	3154.7	3134.5
50°	2781.0	2797.8	2807.9	2807.9
52.5°	2478.0	2478.0	2474.6	2478.0
55°	2131.2	2131.2	2117.7	2124.4
57.5°	1767.5	1774.3	1764.2	1747.4
60°	1430.9	1414.1	1407.3	1397.2
62.5°	1114.4	1114.4	1090.9	1121.1
65°	835.0	824.9	814.7	811.4
67.5°	606.0	602.7	592.6	589.2
70°	427.6	414.1	410.7	404.0
72.5°	286.2	286.2	279.4	279.4
75°	175.1	158.3	154.9	158.3
77.5°	121.2	117.8	117.8	114.5
80°	80.8	77.4	84.2	74.1
82.5°	50.5	53.9	50.5	53.9
85°	33.7	40.4	37.1	37.1
87.5°	20.2	20.2	20.2	20.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)